Periodic Review Report

January 31, 2023 – January 31, 2024

The Bulova Watch Factory
15 Church Street
Sag Harbor, New York

June 17, 2024

Prepared for:

Watchcase Factory Condominium

Prepared by:

Roux Environmental Engineering and Geology, D.P.C.
209 Shafter Street
Islandia, New York 11749

2802.0001Y143/CV

Environmental Consulting
& Management
+1.800.322.ROUX
rouxinc.com

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Executive Summary

This Periodic Review Report (PRR) is being submitted for the reporting period January 31, 2023, to January 31, 2024, to document the compliance with the Bulova Watch Factory Site Management Plan (SMP). The Bulova Watch Factory (the Site) was remediated in accordance with Order on Consent Index No. W1-1130-08-12, which was executed on December 31, 2008, effective January 10, 2009, for the development and implementation of a remedial program for the Site. The New York State Department of Environmental Conservation (NYSDEC) entered into an Addendum to Order on Consent Index No. W1-1175-13-10 with Bulova Corporation, Sag Development Partners, LLC (SDP), The Watchcase Factory Condominium (WFC), and The Condominium Board of The Watchcase Factory Condominium, on March 5, 2014. The Site is located at 15 Church Street in the City of Sag Harbor, New York. The site is under the New York State (NYS) Inactive Hazardous Waste Disposal Site Remedial Program, administered by the NYSDEC. Site No. 1-52-139 is defined in the December 1996 Record of Decision (ROD) issued by the NYSDEC.

The remedial activities summarized below were completed in phases at the Site from 1993 to 2006:

- Development and implementation of an Interim Remedial Measure (IRM) Program for the Site which consisted of the installation and operation of onsite air sparging (AS) and soil vapor extraction (SVE) systems and ancillary equipment occurred in 1994.
- Sumps and drywells were closed in 1993, two air sparging/soil vapor extraction (AS/SVE) systems were constructed and began operation in 1994. Impacted soil was excavated from the interior courtyard in 1996. In March 1999, the two AS/SVE systems were deactivated with NYSDEC approval. From October 22 through November 9, 2001, additional soil was removed from the western portion of the interior courtyard using a vacuum truck. Deeper impacted soil was addressed by reactivating, reconfiguring, and operating one of the AS/SVE systems. The AS/SVE system was run in four major periods of operation and controlled shutdown for two years, commencing in March 2002 and ending in April 2004. The AS/SVE system was shut down in June 2005 with the NYSDEC's approval because contaminants in groundwater had reached asymptotic levels.
- In October and November 2001, approximately 110 cubic yards of soil were removed from the western portion of the interior courtyard to a depth of 6 to 8 feet below ground surface (ft bgs). The remaining impacted soils in the courtyard were subsequently addressed by operation of the reconfigured AS/SVE system.
- As the result of the operation of the reconfigured AS/SVE system, concentrations of VOCs in groundwater decreased by 89 to 98 percent by April 2004.
- The relatively low rates of rebound in VOC concentrations following AS/SVE system shutdown demonstrate that significant VOC source material removal has occurred and that there is no indication of the presence of a dense, non-aqueous phase liquid source for VOCs in groundwater.
- Because the continued operation of the AS/SVE system was no longer effective in further contaminant reduction, as the levels present in the groundwater had reached asymptotic conditions, the NYSDEC agreed to system shutdown in June 2005.
- Although the remedial actions (excavation, AS/SVE) have significantly reduced the amount of contamination in the subsurface, both impacted groundwater and soil vapor still remained beneath the Site.

In January 2006, the Site was purchased by SDP with the intention of redeveloping the Site for residential use in accordance with the prior zoning variance that permitted such use on the Site.

Since contaminated soil, soil vapor and groundwater remain beneath the Site after completion of the Remedial Action, institutional controls (ICs) and engineering controls (ECs) are required to protect human health and the environment. The original SMP, dated January 2009, was prepared by Roux on behalf of SDP. The objective of the SMP was to set guidelines for the management of the Site during construction/excavation activities, for the management of any post-construction soil or onsite soil vapor issues with ECs and for post-remediation monitoring of soil vapor and groundwater. The construction/excavation activities for Site redevelopment were completed in 2015 and included:

- Installation of ECs (sub-slab depressurizations systems [SSDSs] below the existing factory building and the new garage);
- Utility installation;
- Demolition of existing structures that were not part of the redevelopment;
- Construction of 46 residential units in the existing four-story building; and
- Construction of 17 residential units in the townhouses, above and below-ground parking areas, pool, auxiliary structures, and landscaped areas.

The soil sampling and handling requirements for construction/excavation work at the Site was incorporated into construction design plans. The Site is subject to an Environmental Easement that requires compliance with the SMP and identifies the post-construction ECs/ICs. The actions under the SMP were consistent with the ROD and Explanation of Significant Differences (ESD).

Design / construction plans that described construction details for implementation of the ESD and SMP were submitted to the NYSDEC and the New York State Department of Health (NYSDOH) for review and approval. Construction for redevelopment of the Site for restricted residential use was completed in 2015, and included the installation, startup, and testing of the ECs specified in the SMP (i.e., SSDSs, venting systems, soil cover system and vapor barriers). The SMP has been updated three times (SMP Addendums, 1, 2 and 3) at the request of NYSDEC.

1. Introduction

On behalf of Watchcase Factory Condominium (WFC), Roux Environmental Engineering and Geology, D.P.C. (Roux) have prepared this Periodic Review Report (PRR) to document the compliance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP) for the Bulova Watch Factory (Site) located in Sag Harbor, New York (Figure 1). The PRR reporting period is from January 31, 2023, to January 31, 2024.

The Site was remediated in accordance with Order on Consent Index No. W1-1130-08-12, which was executed on December 31, 2008, effective January 10, 2009, for the development and implementation of a remedial program for the Site. The NYSDEC entered into an Addendum to Order on Consent Index No. W1-1175-13-10 with Bulova Corporation, Sag Development Partners, LLC (SDP), The WFC, and The Condominium Board of The Watchcase Factory Condominium, on March 5, 2014. The Site is located at 15 Church Street in the City of Sag Harbor, New York. The site is under the New York State (NYS) Inactive Hazardous Waste Disposal Site Remedial Program, administered by the NYSDEC. Site No. 1-52-139 is defined in the December 1996 Record of Decision (ROD) issued by the NYSDEC and the June 2007 Explanation of Significant Differences (ESD).

The purpose of this report is to document the implementation of, and compliance with, this last phase of the remedial program (Site Management) in accordance with DER-10 Technical Guidance for Site Investigation and Remediation, dated May 3, 2010 (NYSDEC, 2010), and the guidelines provided by the NYSDEC. A completed Institutional and Engineering Controls (ECs) Certification Form is included in Appendix A.

Several environmental investigations conducted at the Site from 1993 through 2009 identified soil beneath the Site that was impacted by chlorinated volatile organic compounds (CVOCs). Details of previous environmental investigations, remedial actions and results, and compliance with site management items are provided in Section 2.0.

2. Site Overview

This section includes a description of the Site, its operational history, previous environmental investigations, and a summary of remedial actions.

2.1 Site Description

The Site is located in Sag Harbor, Suffolk County, New York and is identified as Section 3 Block 4 and Lot 14, District 0903 on the Suffolk County Tax Map (see Figure 2). The Site is an approximately 2.3-acre area and is bounded by Washington Street to the north, Sage Street to the south, Division Street to the east, and Church Street to the west (see Figure 2).

2.2 Site Operational History

The factory building was built in 1881. The building was used as a watch factory from 1881 to 1936. Prior to 1881, the Site was used as a cotton mill. The Site was purchased by Bulova Corporation (Bulova) in 1936 and was used for the manufacture of watchcases from 1936 to 1981. Bulova owned the Site until 1987. The building is considered to be of significant local historical value. According to the June 14, 2007 ESD, between 1936 and 1981, unknown quantities of 1,1,1-Trichloroethane (TCA) wastes, semi-volatile organic compounds (SVOCs) and metals were released into the environment.

2.3 Summary of Previous Investigations and Remediation

An environmental investigation was conducted in 1987 by Chesner Engineering, P.C. on behalf of the then-owner of the Site, Watch Case Factory Associates, in connection with Watch Case's intended redevelopment of the Site for residential use. Following the 1987 environmental investigation, the Site was classified as a Class 2 Inactive Hazardous Waste Disposal Site by the NYSDEC in January 1993 due to soil and groundwater contamination by volatile organic compounds (VOCs). An Order on Consent (Index No. W1 0674-94-01) (NYSDEC, 1994) was entered into by the NYSDEC and Bulova, as the respondent, in July 1994 requiring the development and implementation of an Interim Remedial Measure Program (IRM) for the Site consisting of installation and operation of onsite air sparging (AS) and soil vapor extraction (SVE) systems and ancillary equipment. A second Order on Consent (NYSDEC, 1995) was entered into by the NYSDEC and Bulova in September 1995, requiring the development and implementation of a remedial program for the Site.

Between 1993 and 1998, soil and groundwater remediation to address the VOC contamination was performed in several phases at the Site. Sumps and drywells were closed in 1993. Two air sparging/soil vapor extraction (AS/SVE) systems were constructed and began operation in 1994. Impacted soil was excavated from the interior courtyard in 1996. In March 1999, the two AS/SVE systems were deactivated with NYSDEC approval. From October 22 through November 9, 2001, additional soil was removed from the western portion of the interior courtyard using a vacuum truck. Deeper impacted soil was addressed by reactivating, reconfiguring, and operating one of the AS/SVE systems. The AS/SVE system was run in four major periods of operation and controlled shutdown for two years, commencing in March 2002 and ending in April 2004. The AS/SVE system was shut down in June 2005 with the NYSDEC's approval because contaminants in groundwater had reached asymptotic levels. The remedial activities are

described in more detail in the Final Remedial Action Report prepared by Shaw Environmental & Infrastructure, Inc. (Shaw, formerly IT Corporation) on behalf of Bulova (Shaw, 2006).

In June 1999, a soil vapor survey (IT Corporation, 1999) indicated the presence of VOC-impacted soil vapor beneath the interior courtyard area. A subsequent soil vapor survey performed in 2000 (IT Corporation, 2000) confirmed the results of the 1999 soil vapor survey. In 2001, a confirmatory soil boring program was completed within the interior courtyard area. Results of the investigation identified an area of the interior courtyard outside the radius of influence of the original AS/SVE systems, which had elevated levels of VOCs in soil and groundwater. The main constituents were chlorinated solvents (1,1,1-TCA, trichloroethene (TCE) and tetrachloroethene (PCE)). Soils impacted with these VOCs were detected in both shallow-depth soils (2-6 feet below ground surface [ft bgs]) and deeper-depth soils (8-14 ft bgs). Results of this investigation were submitted in a report entitled Interior Courtyard Confirmatory Soil Boring Assessment Report (Shaw, 2001).

In October and November 2001, approximately 110 cubic yards of soil were removed from the western portion of the interior courtyard to a depth of 6 to 8 ft bgs. The remaining impacted soils in the courtyard were subsequently addressed by operation of the reconfigured AS/SVE system.

In addition, as the result of the operation of the reconfigured AS/SVE system, concentrations of VOCs in groundwater decreased by 89 to 98 percent by April 2004 (Shaw, 2006). Some rebound of VOC concentrations in groundwater was observed during shutdown periods of the AS/SVE system. However, the magnitude of the rebound decreased with each subsequent shutdown period. Even accounting for the rebound effect, most groundwater sampling locations exhibited decreases in VOC concentrations of greater than 90 percent. Moreover, VOC concentrations in groundwater had leveled off and further reductions were not being realized through continued operation of the system (i.e., an asymptotic limit of decreasing VOC concentrations in groundwater versus time was reached in response to continued operation of the AS/SVE system). The relatively low rates of rebound in VOC concentrations following AS/SVE system shutdown demonstrate that significant VOC source material removal has occurred and that there is no indication of the presence of a dense, non-aqueous phase liquid source for VOCs in groundwater.

Because the continued operation of the AS/SVE system was no longer effective in further contaminant reduction, as the levels present in the groundwater had reached asymptotic conditions, the NYSDEC agreed to system shutdown in June 2005.

A review of soil vapor data obtained in March through April 2004 (Shaw, 2006) indicated that elevated concentrations of VOCs persisted in soil vapor beneath the Site. These detections were related to the same VOCs that were observed in soil and groundwater throughout the remedial program. Additional soil vapor sampling was conducted onsite in May 2005 (Shaw, 2005a) and July 2005 (Shaw, 2005b). In the Final Remedial Action Report (Shaw, 2006), equilibrium partitioning calculations demonstrated that source area soils (i.e., grossly impacted soils) are no longer present, although residual soil impacts may remain.

Although the remedial actions (excavation, AS/SVE) have significantly reduced the amount of contamination in the subsurface, both impacted groundwater and soil vapor still remained beneath the Site.

In January 2006, the Site was purchased by SDP with the intention of redeveloping the Site for residential use in accordance with the prior zoning variance obtained by Watch Case to permit such use on the Site.

The NYSDEC and SDP entered into a Consent Order No. W1-1130-08-12 on December 31, 2008, effective January 10, 2009, for the development and implementation of a remedial program for the Site.

The original SMP, dated January 2009, was prepared by Roux on behalf of SDP. The objective of the SMP was to set guidelines for the management of the Site during construction/excavation activities and for the management of any post-construction soil or onsite soil vapor issues with ECs. The construction/excavation activities for Site redevelopment were completed in 2015 and included:

- Installation of ECs (sub-slab depressurizations systems [SSDSs] below the existing factory building and the new garage);
- Utility installation;
- Demolition of existing structures that were not part of the redevelopment;
- Construction of 46 residential units in the existing four-story building; and
- Construction of 17 residential units in the townhouses, above and below-ground parking areas, pool, auxiliary structures, and landscaped areas.

The soil sampling and handling requirements for construction/excavation work at the Site was incorporated into construction design plans. The Site is subject to an Environmental Easement requiring compliance with the SMP and identifying the post-construction ECs and institutional controls (/ICs) in the SMP. The actions under the SMP were consistent with the ROD and ESD.

Design / construction plans that described construction details for implementation of the ESD and SMP were submitted to the NYSDEC and the New York State Department of Health (NYSDOH) for review and approval. Construction for redevelopment of the Site for restricted residential use was completed in 2015, and included the installation, startup, and testing of the ECs specified in the SMP (i.e., SSDSs, venting systems, soil cover system and vapor barriers). The SMP has been updated three times (SMP Addendums, 1, 2 and 3) at the request of NYSDEC.

Following site remediation, a Construction Completion Report (Final Engineering Report [FER]) (January 26, 2022) was prepared and submitted to the NYSDEC to document the remedial activities completed. On September 2, 2022, the FER was approved by the NYSDEC. The March 2021 SMP Addendum 3 was approved by the NYSDEC, in consultation with the NYSDOH. The SMP documents the ECs/ICs for the Site and this PRR will summarize the documentation, monitoring and inspections completed during the reporting period (January 31, 2023, to January 31, 2024) to demonstrate compliance with the SMP. Details of previous environmental investigations, remedial actions and results, and compliance with site management items are provided in Section 2.0.

Design / construction plans that described construction details for implementation of the ESD and SMP were submitted to the NYSDEC and the NYSDOH for review and approval. Construction for redevelopment of the Site for restricted residential use was completed in 2015, and included the installation, startup, and testing of the ECs specified in the SMP (i.e., SSDSs, venting systems, soil cover system and vapor barriers). The SMP has been updated three times at the request of NYSDEC:

- SMP Addendum #1: Submitted May 7, 2012. Approved July 8, 2012.
- SMP Addendum #2: Submitted October 12, 2017. Approved November 17, 2017.
- SMP Addendum #3: Submitted March 5, 2021. Approved March 9, 2021.

2.4 Remaining Contamination

Since contaminated soil, soil vapor and groundwater remain beneath the Site after completion of the Remedial Action, ECs/ICs are required to protect human health and the environment. ECs/ICs are described in Section 4. Long-term management of these EC/ICs and residual contamination will be performed under the SMP approved by the NYSDEC.

2.4.1 Soil

Table 10 in the SMP summarizes the results of all soil samples remaining at the Site after completion of Remedial Action. All post-excavation endpoint soil samples are depicted on Figures 5 and 6, attached to the SMP. Only one post-excavation soil sampling location, PESS-19 (see Figure 6 in the SMP) was identified to contain TCE at a concentration exceeding unrestricted use soil cleanup objectives (UUSCOs), 0.48 mg/kg compared to its applicable UUSCO of 0.47 mg/kg. All other post-excavation soil sampling locations beneath both the factory building, and the parking garage were in compliance with UUSCOs.

2.4.2 Soil Vapor

Historical soil vapor sampling results obtained by Shaw and Louis Berger are depicted on Figure 7 in the SMP. Areas of soil vapor intrusion concern are depicted on Figure 8 in the SMP. Remaining concentrations of VOCs collected from the SSDS effluents in 2019 are attached as Table 11 in the SMP.

During the soil vapor investigation, soil vapor containing VOCs was determined to have migrated off-Site to a limited extent to the north, southeast, and southwest. Although soil vapor intrusion (SVI) testing completed at structures in those directions confirm that vapor intrusion has not occurred, monitoring of the soil vapor at the Site boundary was required by the 2009 version of the SMP. Initially, soil vapor monitoring was required at five locations (SVMP-1 through SVMP-5) surrounding the Site (Figure 7 in the SMP). At each location, soil vapor samples were to be collected in accordance with the NYSDOH October 2006, Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, at a depth of eight ft bgs. Monitoring of the soil vapor was required to commence on or before May 15, 2009, and to occur on a semi-annual basis for the first year commencing in the Spring of 2009, after which the need for continued sampling and the sampling frequency was to be re-evaluated by the NYSDEC. During this time, soil vapor monitoring was performed by Louis Berger on behalf of Bulova. Since the 2009 SMP, the following modifications to the monitoring program have occurred:

1. On February 27, 2012, sampling at soil vapor monitoring points SVMP-1, SVMP-2 and SVMP-5 was discontinued and the NYSDEC directed two (2) additional rounds of soil vapor sampling from soil vapor monitoring locations SVMP-3 and SVMP-4, to be conducted around December 2012 and December 2013;
2. On March 19, 2013, the NYSDEC directed the collection of an additional round of soil vapor samples at SVMP-4 during July 2013. As a result of Site redevelopment activities, and in particular the construction of a retaining wall, soil vapor monitoring point SVMP-4's location had to be moved approximately 40 feet to the north, which delayed the December 2013 sampling event until March 2014; and
3. On March 6, 2015, following activation of the Site's SSDS system, the NYSDEC directed the collection of an additional round of soil vapor samples from soil vapor monitoring points SVMP-3 and SVMP-4. This sampling event occurred in April 2015. As of February 29, 2016, the soil vapor monitoring program has been terminated, based on the following:
    a. SVMP-3, located at the northern Site boundary: During the April 2, 2015 sampling event, only minimal concentrations of Site-related contaminants were observed, consistent with the decreasing trend at this location that has been observed since initiation of monitoring in 2009; and

b. SVMP-4, located proximate to the southeast corner of the Site: While SVMP-4's soil vapor concentrations have not decreased over time, it has been determined that the soil vapors remaining at this location do not pose a public health impact at this time, based on the following:

   - Prior to Site redevelopment, an off-Site soil vapor investigation determined that soil vapor intrusion was not a concern at nearby residences. Following that investigation, extensive source control activities have taken place at the Site, including the removal of over 20,000 cubic yards of contaminated soil, thus reducing further the likelihood of off-Site soil vapor impacts. In addition, a new retaining wall has been constructed at the Site boundary adjacent to the nearest offsite residence, and all of the new residential units at the Site are protected by vapor barriers and the two operational SSDSs. Under all these circumstances, soil vapor monitoring is no longer necessary at the Site. However, in the event that future changes in Site conditions were to present new concerns about potential pathways of human exposure from residual soil vapors in the vicinity of SVMP-4, the NYSDEC, in consultation with NYSDOH, would at that time evaluate the need for additional soil vapor monitoring.

2.4.3 Groundwater

Historical groundwater sampling results obtained by Shaw and Louis Berger are shown on Figure 9 in the SMP. A review of Figure 9 indicated that, as of 2011, three (3) VOCs in groundwater beneath the Site exceeded ambient water-quality standards and guidance values (AWQSGVs) at MW-11R including 1,1,1-TCA, cis-1,2-DCE, and TCE. However, as of 2015, VOCs in groundwater downgradient of the Site were either non-detect or below the applicable AWQSGV. On February 29, 2016, NYSDEC approved termination of the offsite VOC groundwater monitoring program.

3. Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site as listed in the ROD dated December 1996 are as follows:

Groundwater

RAOs for Public Health Protection:

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.

RAOs for Environmental Protection:

- Restore groundwater aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection:

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection:

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

Soil Vapor

RAOs for Public Health Protection:

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a Site.

4. Site Management Plan Compliance

This section details the requirements of the SMP, and whether these requirements were met. The elements of the SMP, ECs/ICs, SSDS monitoring, SSDS effluent sampling, Site inspection, site maintenance and regulatory reporting requirements, are described in the subsections below.

4.1 Engineering Control Compliance

The ECs at the Site include both the soil cover system and the two SSDSs. The SSDSs, as described in Section 4.1.1, are operational and designed to prevent soil vapor intrusion into above grade residential structures. The results of the SSDSs monitoring and performance data and soil cover system inspection are described in the following sections.

4.1.1 Sub-Slab Depressurization Systems

This section evaluates the performance of the SSDSs, summarizes the results of performance monitoring, and evaluates the effectiveness of the SSDSs in accordance with the Objective and Goals of the SSDSs, as outlined in the Operation, Maintenance, and Maintenance (OM&M) Plan (SMP – Appendix G).

Since remaining contaminated soil and soil vapor exists beneath the Site, ECs are required to protect human health and the environment. The Site has two SSDS that were installed to prevent soil vapor intrusion into above grade residential structures: one above the pre-existing slab for the existing factory building and the second below the new slab for new construction (i.e., the new apartments and garage/town houses). A 10-mil polyethylene vapor barrier, protective geotextile fabric, and new concrete slab were installed above the two SSDS to further prevent soil vapor intrusion into above-grade residential structures. The SSDS design is in accordance with NYSDOH October 2006, Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. All mitigation systems were tested in accordance with the SMP (January 2009) and Factory/Garage Sub-Slab Depressurization System Start-Up and Monitoring Plan (November 2014) prior to occupation of the Site.

For the existing factory building, the ECs to prevent soil vapor intrusion into the building and prevent direct contact with soil beneath the building consists of an SSDS (Factory Building SSDS) between the first floor living area (i.e., raised floor) and the existing foundation slab (i.e., sub-floor), and a vapor barrier covered by a 3-inch concrete mud slab (Figures 10 and 12 in the SMP Addendum #3).

The Factory Building SSDS was installed between the pre-existing slab and a new concrete slab below the first floor living space to prevent soil vapor intrusion into any residential spaces in the existing building and will be maintained and operated at all times in accordance with the OM&M Plan (Appendix G of the SMP). The active Factory Building SSDS consists of five connected networks of vapor collection piping (i.e., legs) set in an eight-inch-thick sand layer installed above the pre-existing foundation slab. A 10-mil vapor barrier sandwiched between two geotextile layers lies above the sand layer, and a new 3-inch-thick concrete slab lies on top of the upper geotextile layer. Each leg of the system is equipped with a digital micromanometer vacuum gauge capable of reading vacuum as low as 0.001 inches of water column (in. w.c.) and a data logger.

An as-built process and instrumentation diagram for the Factory Building SSDS is attached as Figure 11 in the SMP. The five legs of the Factory Building SSDS were routed to a blower room and piped together to connect to two 5.5 horsepower (Hp) Rotron EN-757 Blowers, capable of 310 cubic feet per minute (cfm) and 80 in. w.c. The blowers were installed in the mechanical room on the main floor and are housed in a

sound-dampening enclosure. The enclosure has a ventilation fan and thermostat. A knock-out tank was also installed at the inlet to the blower to prevent water from being drawn into the blower. The knock-out tank has a high-level switch to shut down the blower if the knock-out tank fills with water. A dilution valve was installed at the inlet to the blower to control the vacuum and flow rate. Vacuum gauges were installed at the knock-out tank and the inlet to the blower. A pressure gauge was installed on the discharge of the blower. The Factory Building SSDS also includes an autodialer, which will automatically contact the environmental consultant and the building supervisor in the event of a system failure.

The pipe manifold consists of five 2-inch polyvinyl chloride (PVC) ball valves that allow each leg of the factory SSDS to be adjusted to achieve optimal vacuum results across the factory building (Figures 12 and 13 in the SMP). The two blowers are connected to a common 6-inch PVC discharge (riser) pipe that conveys air flow from beneath the factory building to the atmosphere. The discharge from the blower is conveyed through a 6-inch PVC pipe mounted to the inside of the existing 7.5 foot by 7.5-foot (cross-section) chimney that is approximately 82-feet high and a minimum of 15 feet away from any roof air intakes.

A vapor barrier membrane was installed across the entire Factory Building SSDS, thereby providing a secondary layer of protection against any vapor migration into the residential spaces. The vapor barrier membrane consists of 10-mil thick solvent-resistant polyethylene.

As part of the factory construction, a permeable demarcation layer was placed at the bottom of all excavations beneath landscaped areas prior to the placement of clean fill or topsoil and above any subsurface areas where Site soil was left undisturbed or was re-graded but left in place (Figure 10 in the SMP).

For areas of new construction (e.g., new buildings/structures, apartments, pools, landscaped areas, roads, walkways, and the garage), the ECs to prevent soil vapor intrusion into residential spaces and prevent direct contact with Site soil consist of the following:

1. An SSDS (hereinafter "Garage SSDS" and formerly referred to as the new construction SSDS) and vapor barrier beneath the proposed garage foundation slab and along town home soil-contact sidewalls;
2. A vapor barrier installed between the garage roof and each town home foundation slab;
3. A demarcation layer placed at the bottom of all excavations beneath landscaped areas and above all subsurface areas of undisturbed, re-graded, or re-used Site soil, with the exception of beneath the garage; and
4. The new garage floor concrete slab.

The new town homes were built on top of the garage. To address any vehicular exhaust, a venting system was installed and will be operated at all times in the garage below the apartment units in accordance with applicable local building codes. Self-closing doors and/or vented stairwells will be used in the garage elevator shafts and stairwells to prevent migration of vehicular exhaust from the garage space into the residential spaces.

The Garage SSDS (Figures 14 and 15 in the SMP) was constructed below the proposed garage floor slab and along the new town home perimeter where the soil comes in contact with the sidewalls and will be maintained and operated at all times in accordance with the OM&M Plan (Appendix G in the SMP). The Garage SSDS prevents accumulation and lateral/vertical migration of soil vapors from below the garage slab and along the town home foundation sidewalls. The Garage SSDS consists of 6-inch PVC 20-

slot collection pipe, encapsulated in a 24-inch by 12-inch gravel pack, and wrapped in 10-ounce non-woven geotextile fabric. The garage floor slab serves as an EC to prevent direct contact with Site soil beneath it.

The town home perimeter piping consists of a horizontal run of collection pipe, encapsulated in similar gravel pack and geotextile fabric four ft bgs, along the foundation sidewalls of the town houses. The perimeter piping was run along the Sage Street and Church Street perimeter, between the town homes and the street. In addition, all vertical soil-contact foundation sidewalls were sealed with a vapor barrier membrane.

An as-built process and instrumentation diagram of the Garage SSDS is provided on Figure 11 in the SMP. The two legs of the Garage SSDS (garage and perimeter piping) were routed to the blower room and piped together to connect to a 7 Hp Rotron EN-808 Blower, capable of 360 cfm and 90 in. w.c. The blower was installed in a mechanical room in the garage and is housed in a sound dampening enclosure. The enclosure has a ventilation fan and thermostat. A knock-out tank was also installed at the inlet to the blower to prevent water from being drawn into the blower. The knock-out tank has a high-level switch to shut down the blower if the knock-out tank fills with water. A dilution valve has been installed at the inlet to the blower to control the vacuum and flow rate. Vacuum gauges have been installed at the knock-out tank and the inlet to the blower. A pressure gauge was installed on the discharge of the blower. An autodialer connected to the blower will automatically contact the environmental consultant and the building supervisor in the event of a system failure.

The pipe manifold consists of two 2-inch PVC ball valves to allow each leg of the Garage SSDS to be adjusted to achieve optimal vacuum (Figures 14 and 15 in the SMP). The blower is connected to a 6-inch PVC discharge (riser) pipe that conveys air flow from beneath the new construction to the atmosphere above the roofline of the pool house building and a minimum of 15 feet away from any roof air intakes.

A vapor barrier membrane was installed across the entire Garage SSDS, thereby providing a secondary layer of protection against any vapor migration into the garage and residential spaces. The vapor barrier membrane consists of 10-mil thick solvent-resistant polyethylene.

A vapor barrier was also installed between the garage roof and the new apartment foundation slab as a control to prevent any soil vapor migration into the town homes.

As part of the new construction, a permeable demarcation layer was placed at the bottom of all excavations beneath landscaped areas, prior to the placement of clean fill or topsoil and above any subsurface areas where Site soil was left undisturbed or was re-graded but left in place. The garage floor slab will serve as an EC to prevent direct contact for Site soil beneath it.

Procedures for monitoring, operating, and maintaining the SSDS systems are provided in the OM&M Plan, amended on June 3, 2020, and attached as Appendix G in the SMP Addendum #3. The OM&M Plan also addresses inspection procedures that must occur after any severe weather condition has taken place that may affect on-site ECs. A Contingency Plan is included within the OM&M Plan, which presents the action steps to implement if an SSDS at the Site shuts down.

4.1.1.1 SSDS Monitoring and SSDS Vapor Effluent Sampling and Results

Monitoring of the SSDSs was performed quarterly, as is specified in the SMP. A visual inspection, as well as a quantitative inspection, of the complete system was conducted during each of the monitoring events. The factory and garage SSDSs were monitored for vacuum and pressure readings at the blower, vacuum readings at the sub-slab vapor monitoring points, photoionization detector (PID) readings of the blower

effluent and a visual inspection of the SSDS mechanical and above grade piping components. During the reporting period, quarterly monitoring of the SSDSs was performed in June, September and November 2023 and January 2024. The SSDS monitoring data is submitted to NYSDEC on a quarterly basis in letter reports entitled SSDS Vacuum Monitoring Summary (with appropriate quarter identified). SSDS Vacuum Monitoring Summary reports submitted for the reporting period are included in Appendix B. Vacuum monitoring results from SSDS start-up through January 2024 are summarized in Table 1.

SSDS Monitoring

SSDS inspection and monitoring activities were performed on June 30, 2023, September 27, 2023, November 13, 2023, and January 25, 2024. In addition to visual inspections of the SSDS mechanical and above-grade piping components, the following parameters were monitored:

- Vacuum/pressure and air flow readings at the blower inlet and outlet;
- Vacuum readings at the moisture separator tank;
- Vacuum readings at the SSDS monitoring points; and
- PID readings at the blower outlets.

During the Site visits, vacuum readings were collected at each SSDS monitoring point using a handheld micromanometer. Table 1 indicates that the Factory Building and Garage SSDSs were operating properly (i.e., maintaining a minimum vacuum of 0.004 in. w.c. at each monitoring point, with the exception of MP2-1 on November 13, 2023). The reading at MP2-1 was 0.000 in. w.c. on November 13, 2023. All readings before November 2023 met the vacuum goal of 0.004 in. w.c. or greater vacuum. Furthermore, the vacuum reading at MP2-1 on January 25, 2024, was 0.006 in. w.c., which meets the vacuum requirement. The reading at MP2-1 in November 2023 appears to be an anomaly based upon the historical and current monitoring data and not an indication of an issue with the system operation.

SSDS Vapor Effluent Sampling

SSDS vapor effluent sampling took place in 2019, 2020 and 2023 (as a note, June 2023 SSDS effluent sample results were also included in the Revised 2023 PRR since they were included in that original submittal). The SSDS vapor effluent sampling results can be found in Appendix C. A Data Usability Summary Report (DUSR) prepared by a third party data validator, Data Validation Services, is included in Appendix D. In Fall of 2019, NYSDEC required annual sampling of the SSDS vapor effluent from both systems. As per the NYSDEC, since the soil vapor monitoring program has been discontinued, sampling of the SSDS vapor effluents will provide data representative of the current soil vapor conditions beneath the Site. A total of two vapor samples have been collected on an annual basis with the exception of 2021 and 2022, one from the Factory Building SSDS and one from the garage SSDS. The vapor samples were collected from each system using a batch-certified summa canister and flow controller. Each summa canister was connected to a sampling tap located at the effluent of the SSDSs to collect a vapor sample over a two-hour period. The vapor samples were sent to a NYSDOH Environmental Laboratory Approval Program-certified (ELAP) laboratory for the analysis of VOCs via USEPA Method TO-15.

The analytical results of the SSDS vapor effluent samples can be found in Table 2. Chlorinated VOCs and some petroleum related VOCs are still present in the SSDS vapor effluent samples.

4.1.1.2 Groundwater Monitoring for Emerging Contaminants at Off-site Monitoring Well Results

In Spring of 2018, the NYSDEC directed the collection of one round of groundwater samples from off-site monitoring wells, to be analyzed for emerging contaminants of concern such as Per-and Polyfluoroalkyl Substances (PFAS) and 1,4-dioxane. Roux completed sampling of three off-site wells MW-2, MW-11N, and WCF-10 on May 25, 2018. Monitoring well locations are shown on Plate 3. Monitoring wells WCF-3S and WCF-3D could not be located during the 2018 sampling event. The following results were obtained:

- MW-2 contained the following concentrations of Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA).
  - PFOS was detected at 1.61 J+ nanograms per liter (ng/L), which does not exceed the NYSDEC AWQSGV of 2.7 ng/L
    - The qualifier J+ indicates that this is an estimated value, high bias
  - PFOA was detected at 20.3 ng/L, exceeding the NYSDEC AWQSGV of 6.7 ng/L
- MW-11N contained the following concentrations of PFOS and PFOA.
  - PFOS was detected at 17.5 ng/L, exceeding the NYSDEC AWQSGV of 2.7 ng/L
  - PFOA was detected at 19.6 ng/L, exceeding the NYSDEC AWQSGV of 6.7 ng/L
- WCF-10 contained the following concentrations of PFOS and PFOA.
  - PFOS was detected at 6.72 J+ ng/L, exceeding the NYSDEC AWQSGV of 2.7 ng/L
    - The qualifier J+ indicates that this is an estimated value, high bias
  - PFOA was detected at 69.2 ng/L, exceeding the NYSDEC AWQSGV of 6.7 ng/L
- There were no detections of 1,4-dioxane in any of the three monitoring wells.

In Summer of 2020, MW-2, MW-11N, WCF-10 and WCF-3D were sampled for PFAS in accordance with the draft SMP Addendum #3 submitted to NYSDEC in January 2020 (note that the draft and final SMP Addendum #3 did not include sampling for 1, 4-Dioxane).

Prior to the 2020 sampling round, Roux contacted the prior consultant (Louis Berger), who had previously sampled WCF-3S and WCF-3D for VOCs, for information that might help in locating these wells. WCF-3S and WCF-3D had not been sampled in a number of years after sampling for VOCs was discontinued with the approval of NYSDEC in February 2016. Roux was informed by Louis Berger that though identified as being a “nested well” in past reports, there are actually two separate wells located a few feet apart, both located in the grassed area adjacent to the parking spaces. Roux was able to locate WCF-3D, which was buried under about 3 inches of soil and grass using a metal detector. Roux made several attempts to find WCF-3S by excavating to a depth of approximately 12 inches in a few other areas identified as containing metal, however monitoring well WCF-3S could not be located during the sampling event. The following results were obtained:

- MW-2 contained the following concentrations of PFOS and PFOA.
  - PFOS was detected at 2.15 ng/L, which does not exceed the NYSDEC AWQSGV of 2.7 ng/L
  - PFOA was detected at 15.8 ng/L, exceeding the NYSDEC AWQSGV of 6.7 ng/L
- MW-11N contained the following concentrations of PFOS and PFOA.
  - PFOS was detected at 12.9 ng/L, exceeding the NYSDEC AWQSGV of 2.7 ng/L
  - PFOA was detected at 33.4 ng/L, exceeding the NYSDEC AWQSGV of 6.7 ng/L

- WCF-10 contained the following concentrations of PFOS and PFOA.
  - PFOS was detected at 50.0 ng/L, exceeding the NYSDEC AWQSGV of 2.7 ng/L
  - PFOA was detected at 31.7 ng/L, exceeding the NYSDEC AWQSGV of 6.7 ng/L
- WCF-3D contained the following concentrations of PFOS and PFOA.
  - PFOS was detected at 8.88 ng/L, exceeding the NYSDEC AWQSGV of 2.7 ng/L
  - PFOA was detected at 67.6 ng/L, exceeding the NYSDEC AWQSGV of 6.7 ng/L

In 2023, Roux completed sampling of two off-site wells, MW-2 and WCF-10 on November 13, 2023. Monitoring well MW-11N was dry with a depth to bottom noted as 11.54 ft bgs. In 2018, the depth to bottom at this well was 17.37 ft bgs. This indicated that either there was an obstruction in the well or the well had collapsed. Though outside the reporting period, in April 2024 Roux was able to remove the obstruction from well 11N so that it can be sampled during the 2024 annual sampling round in July 2024.

Monitoring wells WCF-3S and WCF-3D could not be located during the 2023 sampling event. Though outside the reporting period, Roux was able to use a metal detector and shovel to locate WCF-3S and WCF-3D in the landscaped area behind the parking spaces so they can be sampled during the 2024 annual sampling round in July 2024.

The two wells that were sampled in November 2023 are the nearest to (MW-2) and furthest from (MW-10) the Site, so they bracket the offsite conditions well.

Each well was purged at a low-flow rate to minimize drawdown, and field parameters (e.g., pH, temperature, turbidity, conductivity) were collected concurrently. Once drawdown and field parameters stabilized, a groundwater sample was collected from each monitoring well. A duplicate sample was collected from MW-2 and matrix spike/matrix spike duplicate samples were collected from WCF-10. Each groundwater sample was analyzed by a NYSDOH ELAP laboratory for PFAS via USEPA method 1633 (which is the current method in the NYSDEC PFAS Guidance). The Category B laboratory report is provided in Appendix C. A DUSR prepared by a third party data validator, Data Validation Services, is included in Appendix D.

The following results were obtained:

- MW-2 contained the following concentrations of PFOS and PFOA.
  - PFOS was detected at 4.84 nanograms per liter (ng/L) in the parent sample and 4.57 ng/L in the duplicate sample, which exceed the NYSDEC AWQSGV of 2.7 ng/L
  - PFOA was detected at 28.8 ng/L in the parent sample and 27.6 ng/L in the duplicate sample, which exceed the NYSDEC AWQSGV of 6.7 ng/L
- WCF-10 contained the following concentrations of PFOS and PFOA.
  - PFOS was detected at 2.43 ng/L, which does not exceed the NYSDEC AWQSGV of 2.7 ng/L
  - PFOA was detected at 21 ng/L, which exceed the NYSDEC AWQSGV of 6.7 ng/L

Analytical results of the May 2018, June 2020, and November 13, 2023 sampling events can be found in Table 3.

Acceptable materials for PFAS sampling include stainless-steel, high-density polyethylene (HDPE), PVC, silicone, acetate, and polypropylene. Additional materials may be acceptable if pre-approved by NYSDEC's Division of Environmental Remediation. No sampling equipment components or sample containers came in contact with aluminum foil, low density polyethylene, glass, or polytetrafluoroethylene (PTFE, Teflon™)

materials including plumbers' tape and sample bottle cap liners with a PTFE layer. For sampling, Level D PPE is appropriate. The sampler wore nitrile gloves when performing sampling and handling equipment, and considered the clothing being worn during all sampling activities. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFAS materials were avoided. All clothing worn by sampling personnel was laundered multiple times. Appropriate rain gear (PVC, polyurethane, or rubber rain gear are acceptable), bug spray, and sunscreen were used that does not contain PFAS.

Per the 2021 SMP Addendum No. 3, offsite monitoring wells MW-2, MW-11N, WCF-3S, WCF-3D and WCF-10 will continue to be sampled on an annual basis for PFAS. The next sampling round is scheduled for July 2024.

4.1.2 Soil Cover System

The Soil Cover System was monitored in accordance with the inspection schedule. The Site inspection form completed during the annual Site cover inspection conducted on November 13, 2023, is included as Appendix E. The soil cover system was in good condition.

4.2 Institutional Control Compliance

An IC in the form of an Environmental Easement was imposed that requires (a) limiting the use and development of the property to restricted residential, commercial and industrial use; (b) compliance with the approved SMP; (c) restricting the use of groundwater as a source of potable or processed water without the necessary water quality treatment as determined by NYSDOH; and (d) the property owner to complete and submit to the Department a periodic certification of ECs/ICs. Adherence to these ICs on the Site is required by the Environmental Easement and is implemented under the NYSDEC-approved SMP Addendum #3. The ICs and Site restrictions that apply to the Site are:

- Compliance with the Environmental Easement and the SMP by the Grantor and the Grantor's successors and assigns.
- All ECs must be operated and maintained as specified in the SMP.
- All ECs on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP.
- Groundwater and other environmental or public health monitoring must be performed as defined in the SMP.
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP.

ICs identified in the Environmental Easement may not be discontinued without an amendment to, or extinguishment of, the Deed Restriction.

The Site has a series of ICs in the form of site restrictions. Adherence to these ICs is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

- The property may only be used for Restricted Residential, Commercial and Industrial use provided that the long-term ECs/ICs included in the SMP are employed.
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP.
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use.
- Vegetable gardens and farming on the property are prohibited.

- The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

The Site is in compliance with the ICs as noted above and described in further detail in the following sections.

4.2.1 Excavation Work Plan Compliance

The site has been remediated for Restricted Residential use. Any future intrusive work that will penetrate the soil cover or cap, or encounter or disturb the remaining contamination, including any modifications or repairs to the existing cover system, will be performed in compliance with the Excavation Work Plan (EWP) in Appendix D of the SMP.

4.3 Notifications

4.3.1 Notification Compliance

Notifications will be submitted by the property owner to the NYSDEC as needed for the following reasons:

- 60-day advance notice of any proposed changes in Site use that are required under the terms of the Order on Consent, Title 6, New York Codes, Rules and Regulations (6NYCRR) Part 375, and/or Environmental Conservation Law.
- 7-day advance notice of any proposed ground-intrusive activities pursuant to the EWP.
- Notice within 48 hours of any damage or defect to the foundations or structures that reduces or has the potential to reduce the effectiveness of other ECs and likewise any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of ECs in place at the site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the site or the responsibility for implementing the SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the Order on Consent, and all approved work plans and reports, including the SMP.
- Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing.

4.4 Certification of Engineering and Institutional Controls

After the last inspection of the reporting period, a qualified environmental professional will prepare the following certification:

- For each IC or EC identified for the site, I certify that all of the following statements are true:
  - The inspection of the site to confirm the effectiveness of the ECs and ICs required by the remedial program was performed under my direction;
  - The IC and/or EC employed at this site is unchanged from the date the control was put in place, or last approved by the Department;
  - Nothing has occurred that would impair the ability of the control to protect the public health and environment;
  - Nothing has occurred that would constitute a violation or failure to comply with any SMP for this control;
  - Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
  - If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;
  - Use of the site is compliant with the deed restriction;
  - The EC systems are performing as designed and are effective;
  - To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program; and
  - The information presented in this report is accurate and complete.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class “A” misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Noelle Clarke, P.E., of Roux Environmental Engineering and Geology D.P.C., am certifying as Owner’s Designated Representative Rendering Certification for the Site.

The completed Institutional and ECs Certification Form is provided in Appendix A.

5. Overall PRR Conclusions

The following section presents conclusions from inspections and monitoring activities.

- The ECs/ICs are performing as designed, are effective, and are compliant with specifications described in the SMP Addendum #3. No changes to the monitoring plan are recommended at this time.

Respectfully submitted,

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY D.P.C.

Rachel Fenwick
Project Engineer

Noelle Clarke, P.E.
Principal Engineer

TABLES

1. SSDS Monitoring Summary
2. Summary of Volatile Organic Compounds in SSDS Effluent Vapor
3. Summary of Emerging Contaminants in Groundwater

Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

	Factory Building SSDS														
	SSDS Zones Inside Blower Room					Blower 1					Blower 2				
Date	Zone 1 (in. w.c.)	Zone 2 (in. w.c.)	Zone 3 (in. w.c.)	Zone 4 (in. w.c.)	Zone 5 (in. w.c.)	Runtime (hours)	Influent (in. w.c.)	K.O (in. w.c.)	Effluent (in. w.c.)	PID (ppm)	Runtime (hours)	Influent (in. w.c.)	K.O (in. w.c.)	Effluent (in. w.c.)	PID (ppm)
March 6, 2015	2.50	2.40	1.90	5.80	6.50	--	25	31	--	--	--	20	8	--	--
March 12, 2015	2.58	2.06	3.24	5.93	6.73	--	--	--	--	--	--	--	--	--	--
March 19, 2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
March 24, 2015	6.38	5.76	3.15	5.77	6.46	--	--	--	--	--	--	--	--	--	--
April 2, 2015	2.51	2.06	3.21	5.81	6.52	2,750.6	22	31	20	0.0	1,943.8	20	10	19	0.0
April 7, 2015	2.44	2.06	3.3	5.64	6.47	2,871.4	25	32	20	0.0	2,064.4	20	19	20	0.0
April 14, 2015	2.59	1.97	3.51	5.38	6.73	3,040.2	32	30	20	0.0	2,033.2	20	20	20	0.0
April 22, 2015	2.48	2.02	3.24	5.53	6.46	3,231.2	25	31	20	0.0	2,424.1	21	10	18	0.0
May 5, 2015	2.52	2.03	3.19	5.78	6.42	3,512.8	18	32	20	0.0	2,705.7	21	9	18	0.0
May 11, 2015	2.54	1.98	3.28	5.72	6.53	3,621.5	25	31	20	0.0	2,814.4	21	10	17	0.0
May 27, 2015	2.78	2.26	3.37	0.31	0.46	3,821.9	Blower 1 down since May 23, 2015				3,112.8	29	32	6	0.0
June 2, 2015	2.78	2.26	3.4	0.31	0.43	3,821.9	Blower 1 down since May 23, 2015				3,256.6	29	38	6	0.0
June 9, 2015	2.44	2.07	3.24	5.66	6.5	3,833.0	20	10	15	--	3,485.2	24	30	20	--
July 29, 2015	2.61	2.07	3.24	3.82	6.59	4,853.2	21	10	19	0.0	4,288.2	25	20	20	0.0
August 6, 2015	2.63	2.17	3.31	5.72	6.46	5,048.4	21	9	18	0.0	4,483.5	25	20	20	0.0
September 11, 2015	2.62	2.14	3.3	5.74	6.55	5,910.9	21	10	19	0.0	5,340.0	24	20	19	0.0
December 31, 2015	2.68	2.02	3.3	5.76	6.48	8,576.6	22	10	18	0.2	8,011.3	21	20	20	0.1
January 21, 2016	2.62	2.04	3.25	5.67	6.45	9,078.4	22	10	18	0.2	8,513.5	22	19	19	0.1
March 22, 2016	2.66	1.98	3.31	5.78	6.42	10,543.2	25	20	20	0.0	9,979.0	21	10	18	0.1
April 22, 2016	2.6	2.04	3.26	5.62	6.37	11,286.5	22	20	20	0.1	10,721.4	21	9	18	0.0
May 27, 2016	2.63	2.05	3.24	5.61	6.44	12,195.4	22	20	20	0.0	11,463.2	21	10	18	0.0
June 21, 2016	2.68	2.07	3.2	5.65	6.42	12,724.4	23	20	20	0.0	12,159.4	21	9	18	0.0
March 22, 2017	2.63	2.09	3.29	5.69	6.43	19,046.5	--	20	20	0.0	18,481.0	21	--	--	--
May 5, 2017	2.62	2.03	2.99	5.79	6.47	20,105.3	21	--	18	0.0	19,540.3	27	20	20	0.0
July 21, 2017	2.68	1.93	3.01	5.79	5.72	21,953.8	27	10	18	0.0	21,388.1	21	20	19	0.0
December 13, 2017	2.66	1.96	2.41	5.62	6.37	25,433.2	25	10	18	0.1	24,868.2	25	20	18	0.0
February 12, 2018	2.60	2.20	3.29	5.75	6.46	--	20	10	18	0.1	--	25	20	20	0.0
May 15, 2018	2.66	2.01	2.41	5.82	6.53	29,104.8	24	10	18	0.0	28,539.7	25	20	19	0.0
August 16, 2018	2.63	2.08	2.49	5.81	6.58	31,273.0	26	9	18	0.0	30,707.0	22	20	18	0.0
October 3, 2018	2.64	1.98	2.66	5.75	6.52	32,427.7	24	10	18	0.0	31,861.0	22	20	18	0.0
January 16, 2019	2.51	1.98	2.69	5.75	6.46	34,947.8	22	8	18	0.0	34,381.6	24	18	20	0.0
April 5, 2019	2.71	2.14	2.71	5.77	6.65	36,839.8	22	10	19	0.0	36,274.5	24	20	19	0.0
August 2, 2019	2.63	2.20	2.98	5.73	6.58	39,672.0	22	10	19	0.0	39,106.7	24	20	19	0.0
December 23, 2019	2.69	2.10	2.45	5.79	6.52	43,131.3	26	10	16	0.0	42,565.8	19	20	18	0.0
March 31, 2020	2.66	2.10	2.05	5.78	6.54	45,505.2	24	8	10	0.0	44,939.6	19	20	18	0.0
June 17, 2020	2.64	2.04	2.26	5.79	6.58	47,375.8	26	8	14	0.0	46,810.2	20	20	18	0.0
September 16, 2020	2.12	2.53	2.34	5.87	6.57	49,669.6	26	6	8	0.0	48,994.1	20	18	20	0.0
December 8, 2020	2.76	2.31	2.11	5.55	6.59	51,555.6	26	14	8	0.0	50,990.6	30	22	16	0.0
December 9, 2020	5.09	5.20	3.22	2.72	3.21	51,580.1	25	15	8	0.0	51,014.6	35	26	16	0.0
December 15, 2020	5.17	5.16	3.05	2.42	4.07	51,721.5	25	14	8	0.0	51,155.9	35	26	16	0.0
March 29, 2021	5.26	5.37	2.98	2.36	4.00	54,058.2	21	13	10	0.0	53,492.7	24	21	18	0.0
June 30, 2021	5.19	5.23	3.00	2.41	3.99	56,290.0	21	12	10	0.0	55,725.3	25	21	18	0.0
September 30, 2021	5.27	5.36	3.09	2.45	4.08	58,498.1	22	12	10	0.0	57,932.6	24	20	18	0.0
December 28, 2021	5.27	5.36	3.03	2.43	4.03	60,635.4	21	12	10	0.0	60,069.8	24	22	18	0.0
March 24, 2022	5.18	5.30	3.10	2.52	4.27	62,698.0	21	12	10	0.0	62,132.4	25	21	18	0.0
June 30, 2022	5.17	5.32	3.06	2.45	4.11	65,050.0	21	12	10	0.0	64,484.4	25	21	18	0.0
December 16, 2022	5.30	5.23	3.08	2.61	4.30	69,109.1	26	12	10	0.0	68,543.5	25	25	18	0.0
January 25, 2023	5.55	5.32	3.08	2.5	4.32	70,067.10	25	12	10	0.0	69,501.40	36	27	12	0.0
June 30, 2023	5.48	5.34	3.13	2.5	4.25	73,809.80	25	12	10	0.0	73,244.10	35	25	12	0.0
September 27, 2023	5.82	5.53	3.14	2.61	4.46	75,995.60	27	14	10	0.0	75,379.30	31	22	12	0.0
November 13, 2023	5.72	5.44	3.04	2.63	4.31	77,073.7	28	15	15	0.0	76,507.9	29	24	16	0.0
January 25, 2024	5.65	5.42	3.12	2.54	4.33	78826.8	28	15	11	0	78261.1	30	20	13	0

Notes:

Blower 1: Rotron EN808, 7.5Hp, located in factory building blower room
Blower 2: Rotron EN808, 7.5Hp, located in factory building blower room
Garage Blower: Rotron EN909 15Hp, located in garage blower room
Zone 1: SSDS Green Line, Blower 2
Zone 2: SSDS Purple Line, Blower 2
Zone 3: SSDS Orange Line, Blower 2
Zone 4: SSDS Red Line, Blower 1
Zone 5: SSDS Blue Line, Blower 1
Perm. E.: SSDS Perimeter East Line, Garage Blower
Perm. W.: SSDS Perimeter West Line, Garage Blower
Garage: SSDS Garage Line, Garage Blower
Influent: Blower Influent Vacuum Gauge
K.O.: Blower Knockout Tank/Moisture Separator Vacuum Gauge
Effluent: Blower Effluent Pressure Gauge
PID: Photoionization Detector
in. w.c.: inches of water column
ppm: parts per million
--: measurement was not collected

Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

	Garage & Perimeter SSDS							
	SSDS Zones Inside Blower Room			Garage Blower				
Date	Perm. E. (in. w.c.)	Perm. W. (in. w.c.)	Garage (in. w.c.)	Runtime (hours)	Influent (in. w.c.)	K.O. (in. w.c.)	Effluent (in. w.c.)	PID (ppm)
March 6, 2015	2.20	2.00	0.90	--	28	19	--	--
March 12, 2015	2.63	2.34	0.52	--	--	--	--	--
March 19, 2015	2.57	2.23	0.56	--	--	--	--	--
March 24, 2015	2.61	2.17	0.51	--	--	--	--	--
April 2, 2015	2.52	2.20	0.51	2,859.4	24	11	2.2	0.0
April 7, 2015	2.67	2.24	0.53	2,980.0	24	27	2.5	0.0
April 14, 2015	2.88	2.39	0.57	3,148.8	27	18	2	0.0
April 22, 2015	2.89	2.48	0.58	3,340.4	27	18	2	0.0
May 5, 2015	2.72	2.23	0.61	3,651.1	27	19	2	0.0
May 11, 2015	2.61	2.18	0.51	3,796.6	27	19	2	0.0
May 27, 2015	2.59	2.16	0.57	4,179.4	27	19	2	0.0
June 2, 2015	2.7	2.28	0.68	4,323.1	28	18	2	0.0
June 9, 2015	2.72	2.12	0.57	4,492.1	28	18	2	--
July 29, 2015	2.48	2.02	0.66	5,502.1	27	19	2	0.0
August 6, 2015	2.45	1.95	0.56	5,698.0	27	18	2	0.0
September 11, 2015	2.88	2.34	0.52	6,559.7	27	19	2	0.0
December 31, 2015	2.94	2.52	0.64	9,226.1	27	19	2	0.0
January 21, 2016	2.68	2.24	0.56	9,727.9	27	19	2	0.2
March 22, 2016	2.79	2.33	0.62	11,192.6	27	19	2	0.1
April 22, 2016	2.68	2.17	0.57	11,836.2	27	18	2	0.0
May 27, 2016	2.72	2.14	0.63	12,482.2	27	18	2	0.0
June 21, 2016	2.65	2.26	0.59	13,373.5	27	19	2	0.0
March 22, 2017	2.71	2.21	0.61	--	28	18	2	0.0
May 5, 2017	2.96	2.55	0.59	--	27	19	2	0.0
July 21, 2017	2.62	2.14	0.68	22,856.7	25	18	2	0.0
December 13, 2017	2.59	2.17	0.53	26,335.8	25	18	2	0.0
February 12, 2018	2.52	1.97	0.54	--	25	18	2	0.0
May 15, 2018	2.70	2.24	0.52	30,007.3	26	18	2	0.0
August 16, 2018	2.51	2.06	0.60	32,115.6	27	19	2	0.0
October 3, 2018	2.29	2.69	0.58	33,329.5	27	18	2	0.1
January 16, 2019	2.57	2.14	0.53	35,849.1	27	18	2	0.0
April 5, 2019	2.49	1.99	0.56	37,741.0	27	18	2	0.0
August 2, 2019	2.68	2.34	0.54	40,573.2	27	18	2	0.0
December 23, 2019	2.26	1.77	0.53	44,034.1	25	15	2	0.0
March 31, 2020	2.39	1.77	0.45	46,406.5	23	16	2	0.0
June 17, 2020	2.15	1.75	0.61	48,278.5	25	16	3	0.0
September 16, 2020	2.06	1.52	0.53	50,461.1	25	10	2	0.0
December 8, 2020	1.45	1.82	0.83	52,457.5	25	15	2	0.0
December 9, 2020	1.45	1.80	0.85	52,482.0	21	10	2	0.0
December 15, 2020	--	--	--	52,482.0	--	--	2	--
March 29, 2021	1.91	1.65	0.94	55,113.9	20	10	10	0.0
June 30, 2021	1.37	1.74	0.83	57,346.4	21	10	10	0.0
September 30, 2021	1.69	1.35	0.92	59,554.1	20	10	10	0.0
December 28, 2021	1.75	1.40	0.88	61,691.3	20	10	10	0.0
March 24, 2022	2.10	1.69	0.93	63,753.9	20	10	10	0.0
June 30, 2022	2.05	1.62	0.90	66,106.9	20	10	10	0.0
December 16, 2022	2.06	1.55	0.96	70,164.8	21	10	10	0.0
January 25, 2023	1.76	1.38	0.77	71,123.40	19	11	10	0.0
June 30, 2023	1.5	1.21	0.96	74,865.60	22	10	10	0.0
September 27, 2023	1.72	1.3	0.92	77,001.20	20	10	10	0.0
November 13, 2023	1.55	1.18	0.82	78,129.7	20	11	10	0.0
January 25, 2024	1.45	1.81	0.89	79882.6	21	10	10	0

Notes:

Blower 1: Rotron EN808, 7.5Hp, located in factory building blower room
Blower 2: Rotron EN808, 7.5Hp, located in factory building blower room
Garage Blower: Rotron EN909 15Hp, located in garage blower room
Zone 1: SSDS Green Line, Blower 2
Zone 2: SSDS Purple Line, Blower 2
Zone 3: SSDS Orange Line, Blower 2
Zone 4: SSDS Red Line, Blower 1
Zone 5: SSDS Blue Line, Blower 1
Perm. E.: SSDS Perimeter East Line, Garage Blower
Perm. W.: SSDS Perimeter West Line, Garage Blower
Garage: SSDS Garage Line, Garage Blower
Influent: Blower Influent Vacuum Gauge
K.O.: Blower Knockout Tank/Moisture Separator Vacuum Gauge
Effluent: Blower Effluent Pressure Gauge
PID: Photoionization Detector
in. w.c.: inches of water column
ppm: parts per million
--: measurement was not collected

Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

	SSDS Monitoring Points													
	Factory Building										Garage & Perimeter			
Date	MP1-1 (in. w.c.)	MP1-2 (in. w.c.)	MP2-1 (in. w.c.)	MP2-2 (in. w.c.)	MP3-1 (in. w.c.)	MP3-2 (in. w.c.)	MP4-1 (in. w.c.)	MP4-2 (in. w.c.)	MP5-1 (in. w.c.)	MP5-2 (in. w.c.)	MP6-1 (in. w.c.)	MP6-2 (in. w.c.)	MP6-3 (in. w.c.)	MP7-1 (in. w.c.)
June 9, 2015	N/A	0.03	0.000	0.367	0.11	N/A	0.007	1.155	0.017	0.01	0.164	0.084	N/A	1.978
July 29, 2015	0.042	0.042	0.009	0.135	0.034	0.019	N/A	1.178	N/A	0.012	0.129	0.094	0.038	1.838
August 6, 2015	0.119	0.041	0.009	0.386	0.032	0.008	0.030	1.168	0.021	0.118	0.131	0.092	0.039	1.808
September 11, 2015	0.111	0.049	0.008	0.393	0.035	0.010	0.035	1.177	0.019	0.120	0.129	0.040	0.090	1.799
December 31, 2015	0.123	0.031	0.008	N/A	0.024	0.010	0.025	0.991	0.008	0.189	0.124	0.266	0.011	2.259
January 21, 2016	0.112	0.020	0.008	N/A	0.013	0.013	0.023	0.915	0.021	0.278	0.105	0.230	0.066	1.963
March 22, 2016	0.104	0.024	0.007	0.025	0.023	0.014	0.020	0.891	0.011	0.375	0.114	0.252	0.075	2.112
April 22, 2016	0.155	0.026	0.004	0.759	0.015	0.012	0.017	0.898	0.017	0.098	0.117	0.258	0.076	5.733
May 27, 2016	0.109	0.034	0.006	0.549	0.021	0.010	0.025	0.912	0.022	0.205	0.131	0.267	0.081	2.064
June 21, 2016	0.122	0.030	0.009	0.261	0.019	0.012	0.022	0.940	0.014	0.240	0.128	0.269	0.086	2.021
March 22, 2017	0.087	0.019	0.021	0.219	0.007	0.010	0.014	0.847	0.004	0.401	0.125	0.246	0.083	2.014
May 5, 2017	0.101	0.021	0.006	0.205	0.005	0.011	0.019	0.889	0.026	0.071	0.191	0.254	N/A	2.309
July 21, 2017	0.118	0.036	0.012	0.236	0.007	0.014	0.020	0.938	0.008	0.101	0.128	0.244	0.082	1.944
December 13, 2017	0.086	0.022	0.006	0.194	0.011	0.011	0.016	0.877	0.012	0.329	0.129	0.248	0.080	1.933
February 12, 2018	0.118	0.040	0.009	0.089	0.031	0.010	0.032	1.155	0.027	0.118	0.134	0.035	0.091	1.808
May 15, 2018	0.104	0.023	0.009	0.195	0.008	0.014	0.019	0.883	0.012	0.015	0.129	1.950	0.080	2.080
August 16, 2018	0.110	0.032	0.005	0.229	0.007	0.009	0.023	0.937	0.011	0.010	0.127	0.222	0.085	1.883
October 3, 2018	0.109	0.028	0.006	0.253	0.008	0.010	0.044	0.927	0.010	0.010	0.124	0.244	0.078	2.123
January 16, 2019	0.121	0.022	0.009	0.180	0.008	0.009	0.019	0.860	0.012	0.119	0.128	0.235	0.095	1.969
April 5, 2019	0.119	0.020	0.004	0.191	0.007	0.010	0.015	0.850	0.004	0.008	0.109	0.228	0.068	1.845
August 2, 2019	0.108	0.022	0.006	0.196	0.008	0.010	0.022	0.910	0.009	0.008	0.120	0.221	0.082	2.070
December 23, 2019	0.119	0.025	0.007	0.182	0.007	0.012	0.019	0.854	0.010	0.006	0.112	0.192	0.068	1.745
March 31, 2020	0.135	0.026	0.008	0.190	0.006	0.009	0.023	0.852	0.010	0.007	0.115	0.192	0.073	1.871
June 17, 2020	0.109	0.024	0.008	0.214	0.008	0.013	0.020	0.904	0.011	0.011	0.112	0.201	0.081	1.591
September 16, 2020	0.105	0.021	0.020	0.210	0.010	0.010	0.040	0.922	0.013	0.009	0.118	0.190	0.104	1.370
December 8, 2020	--	0.022	0.005	0.214	0.007	0.007	0.016	0.872	0.010	0.014	0.161	0.258	--	1.371
December 9, 2020	--	0.030	0.013	0.331	0.015	0.012	0.013	0.504	0.023	0.011	0.162	0.252	0.103	1.335
December 15, 2020	0.147	--	--	--	--	--	--	--	--	--	--	--	--	--
March 29, 2021	0.167	0.028	0.066	0.298	0.010	0.011	0.012	0.459	0.021	0.009	0.156	0.231	0.120	1.392
June 30, 2021	0.159	0.032	0.059	0.303	0.011	0.013	0.012	0.472	0.024	0.008	0.149	0.241	0.117	1.399
September 30, 2021	0.144	0.032	0.065	0.314	0.013	0.012	0.011	0.489	0.029	0.008	0.152	0.233	0.121	1.389
December 28, 2021	0.136	0.037	0.061	0.285	0.015	0.013	0.012	0.482	0.025	0.009	0.150	0.227	0.126	1.390
March 24, 2022	0.148	0.039	0.058	0.278	0.017	0.015	0.013	0.411	0.021	0.009	0.179	0.254	0.127	1.407
June 30, 2022	0.144	0.034	0.056	0.272	0.016	0.013	0.012	0.428	0.024	0.009	0.168	0.232	0.122	1.398
December 16, 2022	0.145	0.026	0.005	0.335	0.005	0.012	0.006	0.500	0.009	0.010	0.220	0.220	0.121	1.420
January 25, 2023	0.145	0.031	0.006	0.332	0.005	0.007	0.012	0.504	0.006	0.016	0.153	0.215	0.11	1.287
June 30, 2023	0.150	0.028	0.005	0.330	0.007	0.008	0.010	0.489	0.007	0.012	0.202	0.217	0.162	1.201
September 27, 2023	0.139	0.037	0.021	0.297	0.016	0.018	0.013	0.445	0.020	0.010	0.166	0.240	0.171	1.481
November 13, 2023	0.148	0.031	0.000[1]	0.367	0.004	0.020	0.011	0.513	0.008	0.005	0.159	0.219	0.104	1.046
January 25, 2024	0.148	0.029	0.008	0.322	0.005	0.025	0.019	0.491	0.015	0.005	0.172	0.204	0.098	1.127

Notes:

Zone 1: SSDS Green Line, Blower 2
Zone 2: SSDS Purple Line, Blower 2
Zone 3: SSDS Orange Line, Blower 2
Zone 4: SSDS Red Line, Blower 1
Zone 5: SSDS Blue Line, Blower 1
Zone 6: SSDS Garage Line, Garage Blower
Zone 7: SSDS Perimeter East/West Line, Garage Blower
MP2-1 installed incorrectly. Corrected on July 7, 2015
N/A: measurement was not collected, point inaccessible
Vacuum readings were previously reported in negative pressure (shown as negative value). This was corrected by reporting vacuum readings as postive values.
SSDS Zones, SSDS Monitoring Points, Influent, and K.O. reported in terms of vacuum. Effluent reported in terms of pressure.

[1]On November 13, 2023, the reading at MP2-1 was 0.000 in. wc.. All readtings before November 2023 met the minimum vacuum of 0.004 in. wc. Furthermore, the vacuum reading at MP2-1 on January 25, 2024 was 0.006 in. w.c, which meets the minimum requirement. The reading at MP2-1 in November 2023 appears to be an anomaly based upon the historical and current operating data and not an indication of an issue with the system operation.

Table 2. Summary of Volatile Organic Compounds in SSDS Effluent, 15 Church Street, Sag Harbor, New York

Sample Designation:		FB_EFF_1	FB_EFF_1	FB_EFF_2	FB_EFF_2	FB_EFF_2	GAR_EFF	GAR_EFF	GAR_EFF
Sample Date:		12/23/2019	12/09/2020	12/23/2019	12/09/2020	06/30/2023	12/23/2019	12/09/2020	06/30/2023
Parameters	Units								
1,1,1-Trichloroethane (TCA)	UG/M3	1.09 U	**1.44**	**1.61**	**1.28**	1.1 U	1.09 U	1.09 U	**0.31 J**
1,1,2,2-Tetrachloroethane	UG/M3	1.37 U	1.37 U	1.37 U	1.37 U	1.4 U	1.37 U	1.37 U	1.4 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/M3	1.53 U	1.53 U	1.53 U	1.53 U	**0.42 J**	1.53 U	1.53 U	**0.44 J**
1,1,2-Trichloroethane	UG/M3	1.09 U	1.09 U	1.09 U	1.09 U	1.1 U	1.09 U	1.09 U	1.1 U
1,1-Dichloroethane	UG/M3	0.809 U	0.809 U	0.809 U	0.809 U	0.81 U	0.809 U	0.809 U	0.81 U
1,1-Dichloroethene	UG/M3	0.793 U	0.793 U	0.793 U	0.793 U	0.2 U	0.793 U	0.793 U	0.2 U
1,2,4-Trichlorobenzene	UG/M3	1.48 U	1.48 U	1.48 U	1.48 U	3.7 U	1.48 U	1.48 U	3.7 U
1,2,4-Trimethylbenzene	UG/M3	0.983 U	0.983 U	**0.988**	0.983 U	**0.93 J**	0.983 U	0.983 U	**0.94 J**
1,2-Dibromoethane (Ethylene Dibromide)	UG/M3	1.54 U	1.54 U	1.54 U	1.54 U	1.5 U	1.54 U	1.54 U	1.5 U
1,2-Dichlorobenzene	UG/M3	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dichloroethane	UG/M3	0.809 U	0.809 U	0.809 U	0.809 U	0.81 U	0.809 U	0.809 U	0.81 U
1,2-Dichloropropane	UG/M3	0.924 U	0.924 U	0.924 U	0.924 U	0.92 U	0.924 U	0.924 U	0.92 U
1,2-Dichlorotetrafluoroethane	UG/M3	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	0.983 U	0.983 U	0.983 U	0.983 U	0.98 U	0.983 U	0.983 U	0.98 U
1,3-Butadiene	UG/M3	0.442 U	0.442 U	0.442 U	0.442 U	**0.19 J**	0.442 U	0.442 U	0.44 U
1,3-Dichlorobenzene	UG/M3	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dichlorobenzene	UG/M3	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dioxane (P-Dioxane)	UG/M3	0.721 U	0.721 U	0.721 U	0.721 U	18 U	0.721 U	0.721 U	18 U
2,2,4-Trimethylpentane	UG/M3	0.934 U	0.934 U	**1.56**	0.934 U	**0.96**	0.934 U	0.934 U	**0.98**
2-Chlorotoluene	UG/M3	NA	NA	NA	NA	1 U	NA	NA	1 U
2-Hexanone	UG/M3	0.82 U	0.82 U	0.82 U	0.82 U	2 U	0.82 U	0.82 U	2 U
4-Ethyltoluene	UG/M3	0.983 U	0.983 U	0.983 U	0.983 U	0.98 U	0.983 U	0.983 U	0.98 U
Acetone	UG/M3	**15**	**17.7**	**13.6**	**10.3**	**36**	2.38 U	**3.71**	**9.4 J**
Allyl Chloride (3-Chloropropene)	UG/M3	0.626 U	0.626 U	0.626 U	0.626 U	1.6 U	0.626 U	0.626 U	1.6 U
Benzene	UG/M3	**0.811**	0.639 U	**1.11**	**0.674**	**1.6**	0.639 U	0.639 U	**0.75**
Benzyl Chloride	UG/M3	1.04 U	1.04 U	1.04 U	1.04 U	1 U	1.04 U	1.04 U	1 U
Bromodichloromethane	UG/M3	1.34 U	1.34 U	1.34 U	1.34 U	1.3 U	1.34 U	1.34 U	1.3 U
Bromoform	UG/M3	2.07 U	2.07 U	2.07 U	2.07 U	2.1 U	2.07 U	2.07 U	2.1 U
Bromomethane	UG/M3	0.777 U	0.777 U	0.777 U	0.777 U	0.78 U	0.777 U	0.777 U	0.78 U
Butane	UG/M3	NA	NA	NA	NA	**6.5**	NA	NA	**3.6**
Carbon Disulfide	UG/M3	0.623 U	0.623 U	0.623 U	0.623 U	**0.75 J**	0.623 U	0.623 U	**0.45 J**
Carbon Tetrachloride	UG/M3	1.26 U	1.26 U	1.26 U	**1.32**	**0.36**	**1.26**	1.26 U	**1.4**
Chlorobenzene	UG/M3	0.921 U	0.921 U	0.921 U	0.921 U	0.92 U	0.921 U	0.921 U	0.92 U
Chlorodifluoromethane	UG/M3	NA	NA	NA	NA	**2.2**	NA	NA	**0.92 J**
Chloroethane	UG/M3	0.528 U	0.528 U	0.528 U	0.528 U	1.3 U	0.528 U	0.528 U	1.3 U
Chloroform	UG/M3	**1.29**	**1.29**	**1.68**	0.977 U	**0.3 J**	**1.53**	**2.29**	**2.2**
Chloromethane	UG/M3	**0.717**	**0.805**	**0.638**	**0.688**	**1.3**	0.413 U	0.413 U	**0.5 J**
Cis-1,2-Dichloroethylene	UG/M3	0.793 U	**8.41**	**6.66**	0.793 U	0.2 U	0.793 U	0.793 U	**0.77**

Table 2. Summary of Volatile Organic Compounds in Soil Vapor, 15 Church Street, Sag Harbor, New York

Sample Designation:		FB_EFF_1	FB_EFF_1	FB_EFF_2	FB_EFF_2	FB_EFF_2	GAR_EFF	GAR_EFF	GAR_EFF
Sample Date:		12/23/2019	12/09/2020	12/23/2019	12/09/2020	06/30/2023	12/23/2019	12/09/2020	06/30/2023
Parameters	Units								
Cis-1,3-Dichloropropene	UG/M3	0.908 U	0.908 U	0.908 U	0.908 U	0.91 U	0.908 U	0.908 U	0.91 U
Cyclohexane	UG/M3	0.688 U	0.688 U	0.688 U	0.688 U	**1.6**	0.688 U	0.688 U	0.69 U
Cymene	UG/M3	NA	NA	NA	NA	**0.39 J**	NA	NA	1.1 U
Dibromochloromethane	UG/M3	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Dichlorodifluoromethane	UG/M3	**2.41**	**2.2**	**2.38**	**2.04**	**2.4 J**	**2.41**	**2.06**	**2.2 J**
Ethanol	UG/M3	**54.5**	**130**	**64.6**	**52.6**	NA	9.42 U	**11.9**	NA
Ethyl Acetate	UG/M3	1.8 U	1.8 U	1.8 U	1.8 U	NA	1.8 U	1.8 U	NA
Ethylbenzene	UG/M3	0.869 U	0.869 U	**0.938**	0.869 U	**2**	0.869 U	0.869 U	**0.37 J**
Hexachlorobutadiene	UG/M3	2.13 U	2.13 U	2.13 U	2.13 U	2.1 U	2.13 U	2.13 U	2.1 U
Isopropanol	UG/M3	**3.59**	**3.49**	**2.2**	**2.9**	**61**	1.23 U	1.23 U	12 U
Isopropylbenzene (Cumene)	UG/M3	NA	NA	NA	NA	0.98 U	NA	NA	0.98 U
m,p-Xylene	UG/M3	**1.84**	**2.17**	**5**	1.74 U	**6.5**	**2.14**	**1.86**	**1.2 J**
Methyl Ethyl Ketone (2-Butanone)	UG/M3	**1.72**	**2.24**	**1.91**	**1.55**	**3**	1.47 U	1.47 U	1.5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	UG/M3	2.05 U	2.05 U	2.05 U	2.05 U	2 U	2.05 U	**2.29**	2 U
Methyl Methacrylate	UG/M3	NA	NA	NA	NA	**0.64 J**	NA	NA	2 U
Methylene Chloride	UG/M3	1.74 U	1.74 U	1.74 U	1.74 U	**1.6 J**	1.74 U	**2.26**	1.7 U
Naphthalene	UG/M3	NA	NA	NA	NA	2.6 U	NA	NA	2.6 U
N-Butylbenzene	UG/M3	NA	NA	NA	NA	1.1 U	NA	NA	1.1 U
N-Heptane	UG/M3	0.82 U	0.82 U	**1.31**	0.82 U	**1.8**	0.82 U	0.82 U	**0.35 J**
N-Hexane	UG/M3	**0.878**	**4.72**	**1.71**	**1.82**	**1.4 J**	0.705 U	**5.43**	**0.4 J**
N-Propylbenzene	UG/M3	NA	NA	NA	NA	0.98 U	NA	NA	0.98 U
O-Xylene (1,2-Dimethylbenzene)	UG/M3	0.869 U	0.869 U	**1.44**	0.869 U	**2.8**	0.869 U	0.869 U	**0.44 J**
Sec-Butylbenzene	UG/M3	NA	NA	NA	NA	1.1 U	NA	NA	1.1 U
Styrene	UG/M3	0.852 U	0.852 U	0.852 U	0.852 U	**0.69 J**	0.852 U	0.852 U	0.85 U
T-Butylbenzene	UG/M3	NA	NA	NA	NA	1.1 U	NA	NA	1.1 U
Tert-Butyl Alcohol	UG/M3	1.52 U	1.52 U	1.52 U	1.52 U	15 U	1.52 U	1.52 U	15 U
Tert-Butyl Methyl Ether	UG/M3	0.721 U	0.721 U	0.721 U	0.721 U	**0.17 J**	0.721 U	0.721 U	0.72 U
Tetrachloroethylene (PCE)	UG/M3	1.36 U	**1.8**	**5.28**	**9.02**	**1.1 J**	**1.67**	1.36 U	**3**
Tetrahydrofuran	UG/M3	1.47 U	1.47 U	1.47 U	1.47 U	15 U	1.47 U	1.47 U	15 U
Toluene	UG/M3	**1.74**	**2.12**	**2.43**	**2.18**	**12**	**1.09**	**4.18**	**2.1**
Trans-1,2-Dichloroethene	UG/M3	0.793 U	0.793 U	0.793 U	0.793 U	**0.23 J**	0.793 U	0.793 U	0.79 U
Trans-1,3-Dichloropropene	UG/M3	0.908 U	0.908 U	0.908 U	0.908 U	0.91 U	0.908 U	0.908 U	0.91 U
Trichloroethylene (TCE)	UG/M3	**12.4**	**58**	**120**	**152**	0.2 U	**55.9**	**42.2**	**78**
Trichlorofluoromethane	UG/M3	**1.51**	**1.2**	**1.49**	1.12 U	**1.2**	**1.51**	**1.17**	**1.1**
Vinyl Bromide	UG/M3	0.874 U	0.874 U	0.874 U	0.874 U	0.87 U	0.874 U	0.874 U	0.87 U
Vinyl Chloride	UG/M3	0.511 U	0.511 U	0.511 U	0.511 U	0.2 U	0.511 U	0.511 U	0.2 U

Notes Utilized Throughout Tables
Soil Vapor/Ambient Air
J - Estimated value
U - The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit
NA - Compound was not analyzed for by laboratory
ug/m3 - Micrograms per cubic meter
Bold data indicates that parameter was detected

Table 3. Summary of Dioxane and Per- and Polyfluoroalkyl Substances in Groundwater, 15 Church Street, Sag Harbor, New York

Sample Designation:			MW-2	MW-2	MW-2	MW-2	MW-11 N	MW-11 N	MW-11 N	MW-11 N	WCF-10	WCF-10	WCF-10	WCF-3D
Sample Date:			05/25/2018	06/17/2020	11/13/2023	11/13/2023	05/25/2018	05/25/2018	06/17/2020	06/17/2020	05/25/2018	06/17/2020	11/13/2023	06/17/2020
Normal Sample or Field Duplicate:			N	N	N	FD	N	FD	N	FD	N	N	N	N
Parameters	NYSDEC Ambient Water Quality Guidance Values	Units												
1,4-Dioxane (P-Dioxane)	0.35	UG/L	0.142 U	NA	NA	NA	0.144 U	0.144 U	NA	NA	0.144 U	NA	NA	NA
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	--	NG/L	NA	NA	17.8 U	18.1 U	NA	NA	NA	NA	NA	NA	18 U	NA
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	--	NG/L	NA	NA	17.8 U	18.1 U	NA	NA	NA	NA	NA	NA	18 U	NA
2-(N-methyl perfluorooctanesulfonamido) acetic acid	--	NG/L	1.78 U	1.76 U	3.57 U	3.61 U	1.78 U	1.78 U	1.76 U	1.76 U	1.72 UJ	1.84 U	3.59 U	1.76 U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	--	NG/L	NA	NA	44.6 U	45.2 U	NA	NA	NA	NA	NA	NA	44.9 U	NA
3-Perfluoroheptyl propanoic acid (7:3FTCA)	--	NG/L	NA	NA	44.6 U	45.2 U	NA	NA	NA	NA	NA	NA	44.9 U	NA
3-Perfluoropropyl propanoic acid (3:3 FTCA)	--	NG/L	NA	NA	8.92 U	9.03 U	NA	NA	NA	NA	NA	NA	8.98 U	NA
N-ethyl perfluoro-1-octanesulfonamide	--	NG/L	NA	NA	1.78 U	1.81 U	NA	NA	NA	NA	NA	NA	1.8 U	NA
N-ethyl perfluorooctanesulfonamidoacetic acid	--	NG/L	1.78 U	1.76 U	1.78 U	1.81 U	1.78 U	1.78 U	1.76 U	1.76 U	1.72 UJ	1.84 U	1.8 U	1.76 U
N-methyl perfluoro-1-octanesulfonamide	--	NG/L	NA	NA	1.78 U	1.81 U	NA	NA	NA	NA	NA	NA	1.8 U	NA
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	--	NG/L	NA	NA	3.57 U	3.61 U	NA	NA	NA	NA	NA	NA	3.59 U	NA
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	--	NG/L	NA	NA	3.57 U	3.61 U	NA	NA	NA	NA	NA	NA	3.59 U	NA
Perfluoro-3-methoxypropanoic acid (PFMPA)	--	NG/L	NA	NA	3.57 U	3.61 U	NA	NA	NA	NA	NA	NA	3.59 U	NA
Perfluoro-4-methoxybutanoic acid (PFMBA)	--	NG/L	NA	NA	3.57 U	3.61 U	NA	NA	NA	NA	NA	NA	3.59 U	NA
Perfluorobutanesulfonic acid (PFBS)	--	NG/L	2.29	3.24	5.56	5.99	1.77 J	1.64 J	1.12 J	1.06 J	4.16	3.5	5.09	1.88
Perfluorobutanoic Acid	--	NG/L	141	5.95	18.3	17.4	5.34	5.32	8.57	8.2	42.6	10.5	13	16.6
Perfluorodecane Sulfonic Acid	--	NG/L	1.78 U	1.76 U	1.78 U	1.81 U	1.78 U	1.78 U	1.76 U	1.76 U	1.72 U	1.84 U	1.8 U	1.76 U
Perfluorodecanoic acid (PFDA)	--	NG/L	7.7	4.31	18	17.4	1.92	1.52 J	1.48 J	1.63 J	13.2	11.5	7.5	41
Perfluorododecanoic acid (PFDoA)	--	NG/L	0.436 J	1.76 U	0.91 J	0.86 J	1.78 U	1.78 U	1.76 U	1.76 U	1.72 U	1.84 U	2.2	1.52 J
Perfluoroheptane Sulfonate (PFHPS)	--	NG/L	1.78 U	1.76 U	1.78 U	1.81 U	1.78 U	1.78 U	1.76 U	1.76 U	1.72 U	1.84 U	1.8 U	1.76 U
Perfluoroheptanoic acid (PFHpA)	--	NG/L	13.4	6.71	20.8	19.4	7.12	6.99	11	10.2	42	14.1	14.7	31.3
Perfluorohexanesulfonic acid (PFHxS)	--	NG/L	1.78 U	1.76 U	0.75 J	0.7 J	0.357 J	0.339 J	1.76 U	1.76 U	1.29 J	4.93	1.03 J	0.822 J
Perfluorohexanoic acid (PFHxA)	--	NG/L	23.8	11.3	35.6	35.6	17.1	17.4	20.9	20.7	150	27.3	36.5	59.9
Perfluorononanesulfonic Acid (PFNS)	--	NG/L	NA	NA	1.78 U	1.81 U	NA	NA	NA	NA	NA	NA	1.8 U	NA
Perfluorononanoic acid (PFNA)	--	NG/L	4.78	4.34	12.1	11.7	4.07	3.67	2.87	2.84	10.4	5.25	5.24	16.5
Perfluorooctane Sulfonamide (FOSA)	--	NG/L	1.78 U	1.76 U	1.78 U	1.81 U	1.78 R	1.78 R	1.76 U	1.76 U	1.72 UJ	1.84 U	1.8 U	1.76 U
Perfluorooctanesulfonic acid (PFOS)	**2.7**	NG/L	1.61 J+	2.15	**4.84**	**4.57**	**17.5**	**17.3**	**12.9**	**12.5**	**6.72 J+**	**50**	2.43	**8.88**
Perfluorooctanoic acid (PFOA)	**6.7**	NG/L	**20.3**	**15.8**	**28.8**	**27.6**	**19.6**	**19.8**	**33.4**	**31.9**	**69.2**	**31.7**	**25**	**67.6**
Perfluoropentanesulfonic Acid (PFPeS)	--	NG/L	NA	NA	1.78 U	1.81 U	NA	NA	NA	NA	NA	NA	1.8 U	NA
Perfluoropentanoic Acid (PFPeA)	--	NG/L	17.4	11.8	53.3	48	17.4	17.5	33.3	32.1	226	30	34.5	77.6
Perfluorotetradecanoic acid (PFTA)	--	NG/L	1.78 U	1.76 U	1.78 U	1.81 U	1.78 U	1.78 U	1.76 U	1.76 U	1.72 U	1.84 U	1.8 U	0.289 J
Perfluorotridecanoic Acid (PFTriA)	--	NG/L	1.78 U	1.76 U	1.78 U	1.81 U	1.78 U	1.78 U	1.76 U	1.76 U	1.72 U	1.84 U	1.8 U	0.307 J
Perfluoroundecanoic Acid (PFUnA)	--	NG/L	3.24	2.06	4.39	4.18	1.78 U	1.78 U	1.76 U	1.76 U	1.89	1.18 J	3.41	5.27
Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	--	NG/L	1.78 U	1.76 U	7.14 U	7.22 U	1.78 UJ	1.78 UJ	1.76 U	1.76 U	1.72 U	1.84 U	7.18 U	1.76 U
Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	--	NG/L	15.3 J	2.32	7.14 U	7.22 U	1.78 U	1.78 U	1.76 U	1.76 U	9.55	1.84 U	7.18 U	14.4
TOTAL PFOA AND PFOS	--	NG/L	NA	18	NA	NA	NA	NA	46.3	44.4	NA	81.7	NA	76.5

Notes Utilized Throughout Tables	
Groundwater Tables	
J -	Estimated Value
U -	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit
FD -	Duplicate
ng/L -	Nanogram per liter
NYSDEC -	New York State Department of Environmental Conservation
--	No NYSDEC Ambient Water Quality Guidance Values available
PFAS -	Per- and Polyfluoroalkyl Substances
2018, 2020 Results analyzed using the PFAS EPA SIM-isotope dilution method 537 / 1,4 Dioxane EPA method 8270D-SIM	
2023 Resultsanalyzed using method 1633	
Bold data indicates that parameter exceeded the NYSDEC January 2021 PFAS Guidance Values	

FIGURES

1. Site Location Map
2. Facility Map
3. PFAS Detections in Groundwater



QUADRANGLE LOCATION



SOURCE:
USGS; 1956, Greenport, NY
USGS; 1956, SAG Harbor, NY
7.5 Minute Topographic Quadrangles

N

0 2000'

Title:

SITE LOCATION MAP

SITE MANAGEMENT PLAN - SITE NO. 152139
FORMER BULOVA WATCHCASE FACILITY
SAG HARBOR, NEW YORK

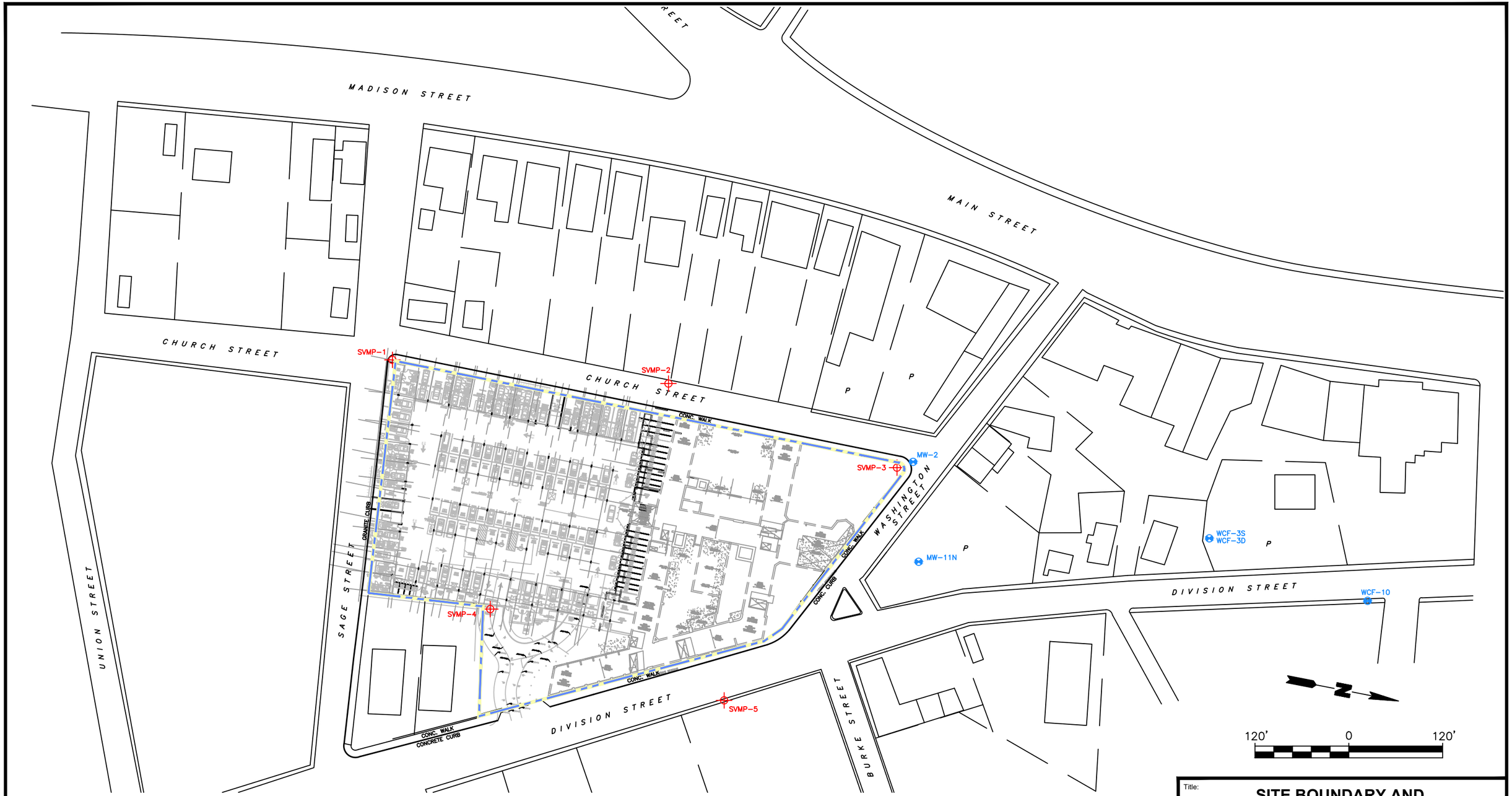
Prepared for:

WATCHCASE FACTORY CONDOMINIUM

ROUX

Compiled by: R.F.	Date: 11JAN24	FIGURE
Prepared by: B.H.C.	Scale: AS SHOWN	1
Project Mgr: R.F.	Project: 2802.0001Y000	
File: 2802.0001Y132.01.CDR		

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LEGEND

SVMP-1 SOIL VAPOR MONITORING POINT

MW-2 MONITORING WELL

SITE BOUNDARY

P PARKING LOT

SOURCE

YOUNG & YOUNG 400 OSTRANDER AVENUE, RIVERHEAD, N.Y. DATE: APRIL 4, 1994

Title:

SITE BOUNDARY AND SOIL VAPOR AND GROUNDWATER MONITOR LOCATIONS

SITE MANAGE,MENT PLAN - SITE NO. 152139
FORMER BULOVA WATCHCASE FACILITY
SAG HARBOR, NEW YORK

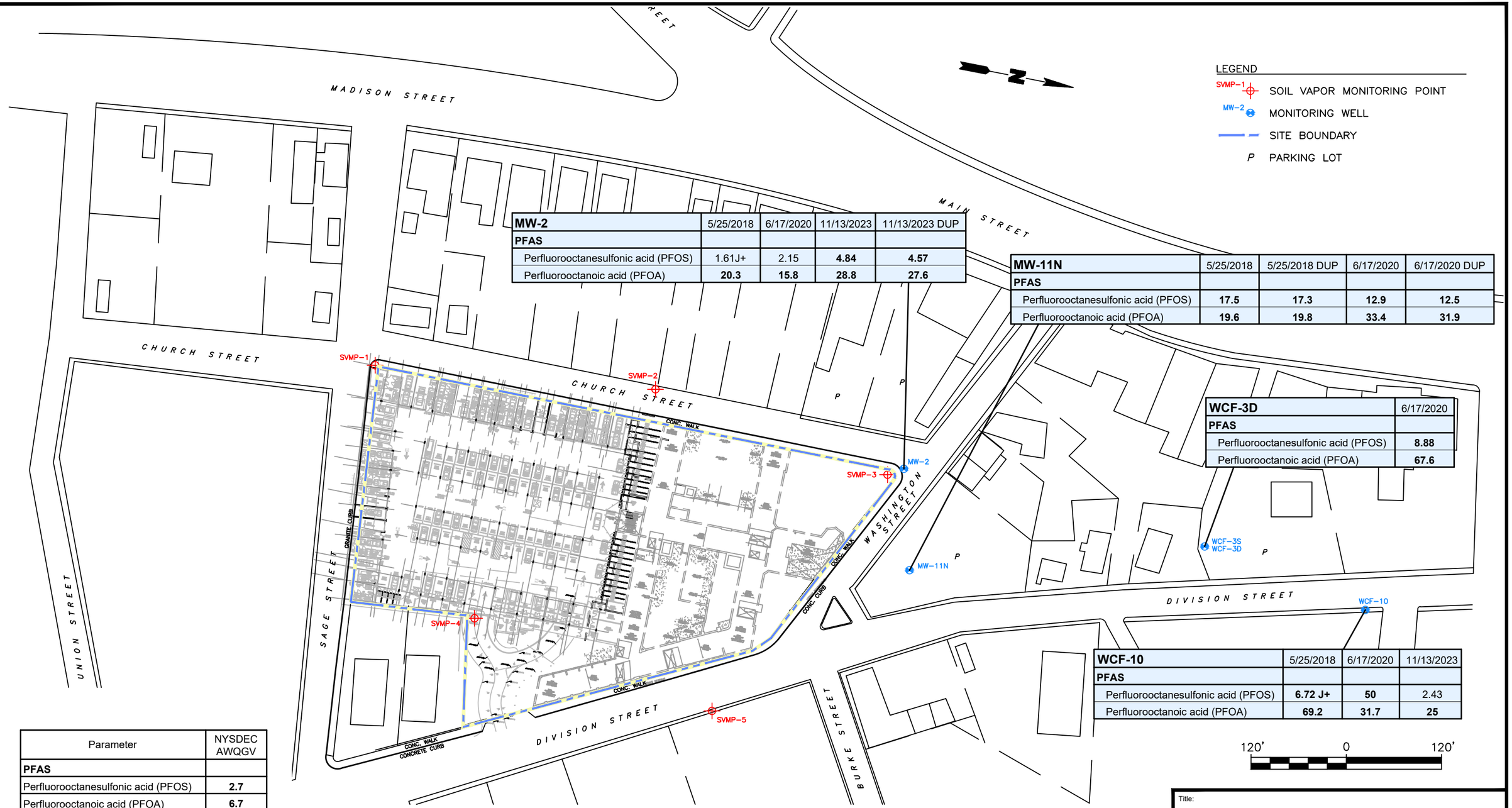
Prepared for:

WATCHCASE FACTORY CONDOMINIUM

ROUX

Compiled by: R.F.	Date: 09JAN24	FIGURE
Prepared by: B.H.C.	Scale: AS SHOWN	2
Project Mgr: R.F.	Project: 2802.0001Y000	
File: 2802.0001Y132.02.DWG		

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MW-2	5/25/2018	6/17/2020	11/13/2023	11/13/2023 DUP
PFAS				
Perfluorooctanesulfonic acid (PFOS)	1.61J+	2.15	**4.84**	**4.57**
Perfluorooctanoic acid (PFOA)	**20.3**	**15.8**	**28.8**	**27.6**

MW-11N	5/25/2018	5/25/2018 DUP	6/17/2020	6/17/2020 DUP
PFAS				
Perfluorooctanesulfonic acid (PFOS)	**17.5**	**17.3**	**12.9**	**12.5**
Perfluorooctanoic acid (PFOA)	**19.6**	**19.8**	**33.4**	**31.9**

WCF-3D	6/17/2020
PFAS	
Perfluorooctanesulfonic acid (PFOS)	**8.88**
Perfluorooctanoic acid (PFOA)	**67.6**

WCF-10	5/25/2018	6/17/2020	11/13/2023
PFAS			
Perfluorooctanesulfonic acid (PFOS)	**6.72 J+**	**50**	2.43
Perfluorooctanoic acid (PFOA)	**69.2**	**31.7**	**25**

Parameter	NYSDEC AWQGV
PFAS	
Perfluorooctanesulfonic acid (PFOS)	**2.7**
Perfluorooctanoic acid (PFOA)	**6.7**

Concentrations in ng/L

ng/L - Nanograms per liter
NYSDEC - New York State Department of Environmental Conservation
AWQGVs - Ambient Water-Quality Guidance Values
DUP - Duplicate Sample
PFAS - Per- and Polyfluoroalkyl Substances
J+ - Estimated value, high bias

Bold data indicates that parameter exceeded the NYSDEC January 2021 PFAS Guidance Values

TYPICAL DATA BOX INFORMATION

SAMPLE ID# → WCF-3D	6/17/2020 ← SAMPLE DATE
ANALYTES — PFAS	
Perfluorooctanesulfonic acid (PFOS)	**8.88**
Perfluorooctanoic acid (PFOA)	**67.6** — CONCENTRATIONS (ng/L)

BASE MAP SOURCE

YOUNG & YOUNG 400 OSTRANDER AVENUE, RIVERHEAD, N.Y. DATE: APRIL 4, 1994

Title:

PFAS DETECTIONS IN GROUNDWATER

SITE MANAGE,MENT PLAN - SITE NO. 152139
FORMER BULOVA WATCHCASE FACILITY
SAG HARBOR, NEW YORK

Prepared for:

WATCHCASE FACTORY CONDOMINIUM

ROUX

Compiled by: R.F.	Date: 31MAY24	FIGURE 3
Prepared by: B.H.C.	Scale: AS SHOWN	
Project Mgr: R.F.	Project: 2802.0001Y000	
File: 2802.0001Y141.02.DWG		

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APPENDICES

A. Institutional and Engineering Controls Certification Form
B. SSDS Vacuum Monitoring Summary Reports
C. Analytical Results
D. DUSRs for SSDS Effluent and Groundwater Results
E. Annual Inspection Form
F. Photo Log

APPENDIX A

Institutional and Engineering Controls Certification Form

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. 152139

Site Name Bulova Watch Factory

Site Address: 15 Church Street Zip Code: 11963
City/Town: Sag Harbor
County: Suffolk
Site Acreage: 2.300

Reporting Period: January 31, 2023 to January 31, 2024

	YES	NO
1. Is the information above correct?	X	
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?		X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	X	
7. Are all ICs in place and functioning as designed?	X	

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. 152139 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
003-04-014	The Board of Managers of the Watchcase	Ground Water Use Restriction Soil Management Plan Landuse Restriction Building Use Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan

The environmental easement restricts future use of the Bulova Watch Factory Site to restricted residential, commercial or industrial uses. The environmental easement incorporates the site management plan (SMP) which sets forth the institutional and engineering controls required to be in place at the site. All site development plan activities must be performed in accordance with the SMP. The site may not be used for residential purposes. The use of groundwater is prohibited without prior approval from the Department. All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with SMP.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
003-04-014	Vapor Mitigation Cover System

Engineering controls are required to prevent soil vapor intrusion into residential structures and to prevent direct contact with soils that present a potential exposure concern.

1. An active sub-floor depressurization system in the existing building will be maintained and operated in accordance with the SMP. A vapor barrier membrane over the entire sub-floor depressurization system in the existing building will be maintained.

2. An active sub-slab depressurization system (SSD) below the garage foundation slab and soil-contact sidewalls of the new condominium buildings will be maintained and operated in accordance with the SMP. A vapor barrier between the garage roof and the floor and soil-contact sidewalls of the condominium buildings will be maintained in accordance with the SMP.

3. The garage below the condominium buildings will be vented in accordance with the applicable local building codes. The garage vehicular exhaust venting system will operate at all times.

4. A demarcation layer must be placed and maintained at the bottom of all excavations beneath all landscaped areas and above all sub-surface areas of undisturbed, regraded, or reused Site soil in accordance with the SMP. Any proposed soil excavation on the property below the demarcation layer, or below the new garage slab, or below the existing building foundation slab, will be conducted in accordance with the SMP. The excavated soil and construction wastewater must be managed, characterized, and properly disposed in accordance with the SMP. Non-landscaped areas (buildings, roadways, parking lots, etc.) will be covered by a paving system or concrete at least 6 inches thick. These actions will eliminate the potential risk of direct contact to soils that exceed residential SCG levels.

All Engineering Controls must be operated and maintained as specified in SMP. All Engineering Controls must be inspected at a frequency and in manner defined in SMP. Groundwater and other environmental or public health monitoring must be performed as defined in the SMP. Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP. Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in SMP.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
X	☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____

Signature of Owner, Remedial Party or Designated Representative Date

IC CERTIFICATIONS
SITE NO. 152139

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Noelle Clarke (print name) at 209 Shafter Street, Islandia, New York (print business address),

am certifying as Owner's Designated Representative (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

June 14, 2024
Date

EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Noelle Clarke (print name) at 209 Shafter Street, Islandia, New York (print business address),

am certifying as a Professional Engineer for the Owner (Owner or Remedial Party)



Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

June 14, 2024
Date

APPENDIX B

SSDS Vacuum Monitoring Summary Reports

October 3, 2023

Christopher Grady
New York State Department of Environmental Conservation
50 Circle Road
Stony Brook, New York 11790

Re: SSDS Vacuum Monitoring Summary
Second Quarter 2023
Bulova Watch Factory Site No. 152139
15 Church Street, Village of Sag Harbor, New York

Dear Mr. Grady:

On behalf of the Watchcase Factory Condominium, Roux Environmental Engineering and Geology, D.P.C. (Roux), is submitting this letter report summarizing the results of the sub-slab depressurization system (SSDS) monitoring activities performed at the Bulova Watch Factory Site No. 152139, 15 Church Street, Village of Sag Harbor, New York (Site), during the Second Quarter of 2023. SSDS monitoring activities were conducted to confirm that the system is performing as designed in accordance with the January 27, 2009 Site Management Plan (SMP), the May 7, 2012 SMP Addendum No. 1, the October 2017 SMP Addendum No. 2, the March 2021 SMP Addendum No. 3, and the January 20, 2015 Operation, Maintenance, and Monitoring (OM&M) Plan submitted to the New York State Department of Environmental Conservation (NYSDEC). A brief description of SSDS operations and monitoring results during the Second Quarter 2023 reporting period are provided below.

SSDS

The SSDS consists of a two-blower system in the former factory building and a separate one-blower system beneath the garage. The SSDS consists of five vapor-collection piping legs beneath the factory building, one vapor-collection piping leg beneath the garage, and one vapor-collection piping leg around the perimeter of the garage adjacent to the retaining wall. Vacuum readings for each piping leg were collected at the SSDS monitoring points. There are two monitoring points for each piping leg in the factory building, three monitoring points for the garage piping leg, and one monitoring point for the perimeter piping leg (Plates 1 and 2).

The factory and garage SSDSs are required to maintain a minimum vacuum of 0.004 inches of water column (in. w.c.). The SSDSs are equipped with visual and electronic monitoring devices to verify performance within the required range of vacuum. Each individual SSDS leg is equipped with a vacuum gauge and a data logger, which are designed to record vacuum readings down to 0.001 in. w.c. Each data logger displays a digital readout to provide real-time indications that the system is operating properly and records the most recent three months of vacuum readings for reference, if necessary. An electronic auto-dialer will automatically contact Roux personnel, building management, and/or maintenance staff if a system interruption occurs.

209 Shafter Street ■ Islandia, New York 11749 ■ +1.631.232.2600 ■ www.rouxinc.com
California ■ Illinois ■ Massachusetts ■ New Jersey ■ New York ■ Texas

Quarterly SSDS Inspection and Monitoring

Second Quarter 2023 SSDS inspection and monitoring activities were performed on June 30, 2023. In addition to visual inspections of the SSDS mechanical and above-grade piping components, the following parameters were monitored:

- Vacuum/pressure and air flow readings at the blower inlet and outlet;
- Vacuum readings at the moisture separator tank;
- Vacuum readings at the SSDS monitoring points; and
- Photoionization detector (PID) readings at the blower outlets.

During the Site visit, vacuum readings were collected at each SSDS monitoring point using a handheld micromanometer. Vacuum monitoring results from SSDS start-up through the Second Quarter of 2023 are summarized in Table 1 (attached). A review of Table 1 indicates that the SSDS was operating properly at each leg (i.e., maintaining a minimum vacuum of 0.004 in. w.c.).

If you have any questions or require additional information regarding this monitoring summary, please feel free to contact the undersigned at 631-232-2600.

Sincerely,

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY, D.P.C.

Brice Lynch
Senior Geologist

Attachments

1. SSDS Monitoring Summary Tables
2. Factory Building SSDS As-Builts
3. Garage SSDS As-Builts

ATTACHMENTS

1. SSDS Monitoring Summary Tables
2. Factory Building SSDS As-Builts
3. Garage SSDS As-Builts

ATTACHMENT 1

SSDS Monitoring Summary Tables

Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

	Factory Building SSDS														
	SSDS Zones Inside Blower Room					Blower 1					Blower 2				
Date	Zone 1 (in. w.c.)	Zone 2 (in. w.c.)	Zone 3 (in. w.c.)	Zone 4 (in. w.c.)	Zone 5 (in. w.c.)	Runtime (hours)	Influent (in. w.c.)	K.O (in. w.c.)	Effluent (in. w.c.)	PID (ppm)	Runtime (hours)	Influent (in. w.c.)	K.O (in. w.c.)	Effluent (in. w.c.)	PID (ppm)
March 6, 2015	2.50	2.40	1.90	5.80	6.50	--	25	31	--	--	--	20	8	--	--
March 12, 2015	2.58	2.06	3.24	5.93	6.73	--	--	--	--	--	--	--	--	--	--
March 19, 2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
March 24, 2015	6.38	5.76	3.15	5.77	6.46	--	--	--	--	--	--	--	--	--	--
April 2, 2015	2.51	2.06	3.21	5.81	6.52	2,750.6	22	31	20	0.0	1,943.8	20	10	19	0.0
April 7, 2015	2.44	2.06	3.3	5.64	6.47	2,871.4	25	32	20	0.0	2,064.4	20	19	20	0.0
April 14, 2015	2.59	1.97	3.51	5.38	6.73	3,040.2	32	30	20	0.0	2,033.2	20	20	20	0.0
April 22, 2015	2.48	2.02	3.24	5.53	6.46	3,231.2	25	31	20	0.0	2,424.1	21	10	18	0.0
May 5, 2015	2.52	2.03	3.19	5.78	6.42	3,512.8	18	32	20	0.0	2,705.7	21	9	18	0.0
May 11, 2015	2.54	1.98	3.28	5.72	6.53	3,621.5	25	31	20	0.0	2,814.4	21	10	17	0.0
May 27, 2015	2.78	2.26	3.37	0.31	0.46	3,821.9	Blower 1 down since May 23, 2015				3,112.8	29	32	6	0.0
June 2, 2015	2.78	2.26	3.4	0.31	0.43	3,821.9	Blower 1 down since May 23, 2015				3,256.6	29	38	6	0.0
June 9, 2015	2.44	2.07	3.24	5.66	6.5	3,833.0	20	10	15	--	3,485.2	24	30	20	--
July 29, 2015	2.61	2.07	3.24	3.82	6.59	4,853.2	21	10	19	0.0	4,288.2	25	20	20	0.0
August 6, 2015	2.63	2.17	3.31	5.72	6.46	5,048.4	21	9	18	0.0	4,483.5	25	20	20	0.0
September 11, 2015	2.62	2.14	3.3	5.74	6.55	5,910.9	21	10	19	0.0	5,340.0	24	20	19	0.0
December 31, 2015	2.68	2.02	3.3	5.76	6.48	8,576.6	22	10	18	0.2	8,011.3	21	20	20	0.1
January 21, 2016	2.62	2.04	3.25	5.67	6.45	9,078.4	22	10	18	0.2	8,513.5	22	19	19	0.1
March 22, 2016	2.66	1.98	3.31	5.78	6.42	10,543.2	25	20	20	0.0	9,979.0	21	10	18	0.1
April 22, 2016	2.6	2.04	3.26	5.62	6.37	11,286.5	22	20	20	0.1	10,721.4	21	9	18	0.0
May 27, 2016	2.63	2.05	3.24	5.61	6.44	12,195.4	22	20	20	0.0	11,463.2	21	10	18	0.0
June 21, 2016	2.68	2.07	3.2	5.65	6.42	12,724.4	23	20	20	0.0	12,159.4	21	9	18	0.0
March 22, 2017	2.63	2.09	3.29	5.69	6.43	19,046.5	--	20	20	0.0	18,481.0	21	--	--	--
May 5, 2017	2.62	2.03	2.99	5.79	6.47	20,105.3	21	--	18	0.0	19,540.3	27	20	20	0.0
July 21, 2017	2.68	1.93	3.01	5.79	5.72	21,953.8	27	10	18	0.0	21,388.1	21	20	19	0.0
December 13, 2017	2.66	1.96	2.41	5.62	6.37	25,433.2	25	10	18	0.1	24,868.2	25	20	18	0.0
February 12, 2018	2.60	2.20	3.29	5.75	6.46	--	20	10	18	0.1	--	25	20	20	0.0
May 15, 2018	2.66	2.01	2.41	5.82	6.53	29,104.8	24	10	18	0.0	28,539.7	25	20	19	0.0
August 16, 2018	2.63	2.08	2.49	5.81	6.58	31,273.0	26	9	18	0.0	30,707.0	22	20	18	0.0
October 3, 2018	2.64	1.98	2.66	5.75	6.52	32,427.7	24	10	18	0.0	31,861.0	22	20	18	0.0
January 16, 2019	2.51	1.98	2.69	5.75	6.46	34,947.8	22	8	18	0.0	34,381.6	24	18	20	0.0
April 5, 2019	2.71	2.14	2.71	5.77	6.65	36,839.8	22	10	19	0.0	36,274.5	24	20	19	0.0
August 2, 2019	2.63	2.20	2.98	5.73	6.58	39,672.0	22	10	19	0.0	39,106.7	24	20	19	0.0
December 23, 2019	2.69	2.10	2.45	5.79	6.52	43,131.3	26	10	16	0.0	42,565.8	19	20	18	0.0
March 31, 2020	2.66	2.10	2.05	5.78	6.54	45,505.2	24	8	10	0.0	44,939.6	19	20	18	0.0
June 17, 2020	2.64	2.04	2.26	5.79	6.58	47,375.8	26	8	14	0.0	46,810.2	20	20	18	0.0
September 16, 2020	2.12	2.53	2.34	5.87	6.57	49,669.6	26	6	8	0.0	48,994.1	20	18	20	0.0
December 8, 2020	2.76	2.31	2.11	5.55	6.59	51,555.6	26	14	8	0.0	50,990.6	30	22	16	0.0
December 9, 2020	5.09	5.20	3.22	2.72	3.21	51,580.1	25	15	8	0.0	51,014.6	35	26	16	0.0
December 15, 2020	5.17	5.16	3.05	2.42	4.07	51,721.5	25	14	8	0.0	51,155.9	35	26	16	0.0
March 29, 2021	5.26	5.37	2.98	2.36	4.00	54,058.2	21	13	10	0.0	53,492.7	24	21	18	0.0
June 30, 2021	5.19	5.23	3.00	2.41	3.99	56,290.0	21	12	10	0.0	55,725.3	25	21	18	0.0
September 30, 2021	5.27	5.36	3.09	2.45	4.08	58,498.1	22	12	10	0.0	57,932.6	24	20	18	0.0
December 28, 2021	5.27	5.36	3.03	2.43	4.03	60,635.4	21	12	10	0.0	60,069.8	24	22	18	0.0
March 24, 2022	5.18	5.30	3.10	2.52	4.27	62,698.0	21	12	10	0.0	62,132.4	25	21	18	0.0
June 30, 2022	5.17	5.32	3.06	2.45	4.11	65,050.0	21	12	10	0.0	64,484.4	25	21	18	0.0
December 16, 2022	5.30	5.23	3.08	2.61	4.30	69,109.1	26	12	10	0.0	68,543.5	25	25	18	0.0
January 25, 2023	5.55	5.32	3.08	2.5	4.32	70,067.10	25	12	10	0.0	69,501.40	36	27	12	0.0
June 30, 2023	5.48	5.34	3.13	2.5	4.25	73,809.80	25	12	10	0.0	73,244.10	35	25	12	0.0

Notes:

Blower 1: Rotron EN808, 7.5Hp, located in factory building blower room
Blower 2: Rotron EN808, 7.5Hp, located in factory building blower room
Garage Blower: Rotron EN909 15Hp, located in garage blower room
Zone 1: SSDS Green Line, Blower 2
Zone 2: SSDS Purple Line, Blower 2
Zone 3: SSDS Orange Line, Blower 2
Zone 4: SSDS Red Line, Blower 1
Zone 5: SSDS Blue Line, Blower 1
Perm. E.: SSDS Perimeter East Line, Garage Blower
Perm. W.: SSDS Perimeter West Line, Garage Blower
Garage: SSDS Garage Line, Garage Blower
Influent: Blower Influent Vacuum Gauge
K.O.: Blower Knockout Tank/Moisture Separator Vacuum Gauge
Effluent: Blower Effluent Pressure Gauge
PID: Photoionization Detector
in. w.c.: inches of water column
ppm: parts per million
--: measurement was not collected

Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

	Garage & Perimeter SSDS							
	SSDS Zones Inside Blower Room			Garage Blower				
Date	Perm. E. (in. w.c.)	Perm. W. (in. w.c.)	Garage (in. w.c.)	Runtime (hours)	Influent (in. w.c.)	K.O. (in. w.c.)	Effluent (in. w.c.)	PID (ppm)
March 6, 2015	2.20	2.00	0.90	--	28	19	--	--
March 12, 2015	2.63	2.34	0.52	--	--	--	--	--
March 19, 2015	2.57	2.23	0.56	--	--	--	--	--
March 24, 2015	2.61	2.17	0.51	--	--	--	--	--
April 2, 2015	2.52	2.20	0.51	2,859.4	24	11	2.2	0.0
April 7, 2015	2.67	2.24	0.53	2,980.0	24	27	2.5	0.0
April 14, 2015	2.88	2.39	0.57	3,148.8	27	18	2	0.0
April 22, 2015	2.89	2.48	0.58	3,340.4	27	18	2	0.0
May 5, 2015	2.72	2.23	0.61	3,651.1	27	19	2	0.0
May 11, 2015	2.61	2.18	0.51	3,796.6	27	19	2	0.0
May 27, 2015	2.59	2.16	0.57	4,179.4	27	19	2	0.0
June 2, 2015	2.7	2.28	0.68	4,323.1	28	18	2	0.0
June 9, 2015	2.72	2.12	0.57	4,492.1	28	18	2	--
July 29, 2015	2.48	2.02	0.66	5,502.1	27	19	2	0.0
August 6, 2015	2.45	1.95	0.56	5,698.0	27	18	2	0.0
September 11, 2015	2.88	2.34	0.52	6,559.7	27	19	2	0.0
December 31, 2015	2.94	2.52	0.64	9,226.1	27	19	2	0.0
January 21, 2016	2.68	2.24	0.56	9,727.9	27	19	2	0.2
March 22, 2016	2.79	2.33	0.62	11,192.6	27	19	2	0.1
April 22, 2016	2.68	2.17	0.57	11,836.2	27	18	2	0.0
May 27, 2016	2.72	2.14	0.63	12,482.2	27	18	2	0.0
June 21, 2016	2.65	2.26	0.59	13,373.5	27	19	2	0.0
March 22, 2017	2.71	2.21	0.61	--	28	18	2	0.0
May 5, 2017	2.96	2.55	0.59	--	27	19	2	0.0
July 21, 2017	2.62	2.14	0.68	22,856.7	25	18	2	0.0
December 13, 2017	2.59	2.17	0.53	26,335.8	25	18	2	0.0
February 12, 2018	2.52	1.97	0.54	--	25	18	2	0.0
May 15, 2018	2.70	2.24	0.52	30,007.3	26	18	2	0.0
August 16, 2018	2.51	2.06	0.60	32,115.6	27	19	2	0.0
October 3, 2018	2.29	2.69	0.58	33,329.5	27	18	2	0.1
January 16, 2019	2.57	2.14	0.53	35,849.1	27	18	2	0.0
April 5, 2019	2.49	1.99	0.56	37,741.0	27	18	2	0.0
August 2, 2019	2.68	2.34	0.54	40,573.2	27	18	2	0.0
December 23, 2019	2.26	1.77	0.53	44,034.1	25	15	2	0.0
March 31, 2020	2.39	1.77	0.45	46,406.5	23	16	2	0.0
June 17, 2020	2.15	1.75	0.61	48,278.5	25	16	3	0.0
September 16, 2020	2.06	1.52	0.53	50,461.1	25	10	2	0.0
December 8, 2020	1.45	1.82	0.83	52,457.5	25	15	2	0.0
December 9, 2020	1.45	1.80	0.85	52,482.0	21	10	2	0.0
December 15, 2020	--	--	--	52,482.0	--	--	2	--
March 29, 2021	1.91	1.65	0.94	55,113.9	20	10	10	0.0
June 30, 2021	1.37	1.74	0.83	57,346.4	21	10	10	0.0
September 30, 2021	1.69	1.35	0.92	59,554.1	20	10	10	0.0
December 28, 2021	1.75	1.40	0.88	61,691.3	20	10	10	0.0
March 24, 2022	2.10	1.69	0.93	63,753.9	20	10	10	0.0
June 30, 2022	2.05	1.62	0.90	66,106.9	20	10	10	0.0
December 16, 2022	2.06	1.55	0.96	70,164.8	21	10	10	0.0
January 25, 2023	1.76	1.38	0.77	71,123.40	19	11	10	0.0
June 30, 2023	1.5	1.21	0.96	74,865.60	22	10	10	0.0

Notes:

Blower 1: Rotron EN808, 7.5Hp, located in factory building blower room
Blower 2: Rotron EN808, 7.5Hp, located in factory building blower room
Garage Blower: Rotron EN909 15Hp, located in garage blower room
Zone 1: SSDS Green Line, Blower 2
Zone 2: SSDS Purple Line, Blower 2
Zone 3: SSDS Orange Line, Blower 2
Zone 4: SSDS Red Line, Blower 1
Zone 5: SSDS Blue Line, Blower 1
Perm. E.: SSDS Perimeter East Line, Garage Blower
Perm. W.: SSDS Perimeter West Line, Garage Blower
Garage: SSDS Garage Line, Garage Blower
Influent: Blower Influent Vacuum Gauge
K.O.: Blower Knockout Tank/Moisture Separator Vacuum Gauge
Effluent: Blower Effluent Pressure Gauge
PID: Photoionization Detector
in. w.c.: inches of water column
ppm: parts per million
--: measurement was not collected

Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

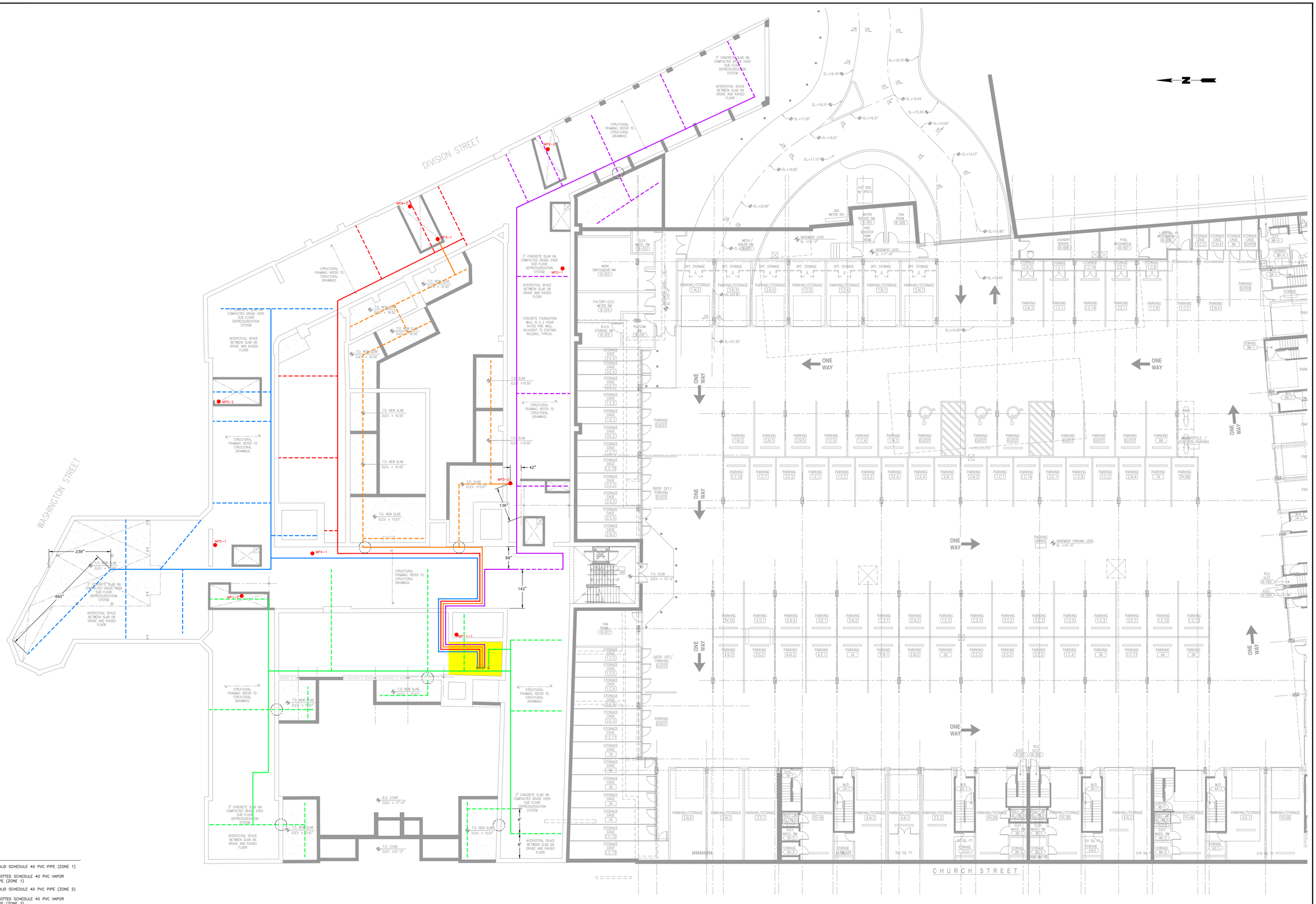
	SSDS Monitoring Points													
	Factory Building										Garage & Perimeter			
Date	MP1-1 (in. w.c.)	MP1-2 (in. w.c.)	MP2-1 (in. w.c.)	MP2-2 (in. w.c.)	MP3-1 (in. w.c.)	MP3-2 (in. w.c.)	MP4-1 (in. w.c.)	MP4-2 (in. w.c.)	MP5-1 (in. w.c.)	MP5-2 (in. w.c.)	MP6-1 (in. w.c.)	MP6-2 (in. w.c.)	MP6-3 (in. w.c.)	MP7-1 (in. w.c.)
June 9, 2015	N/A	0.03	0.000	0.367	0.11	N/A	0.007	1.155	0.017	0.01	0.164	0.084	N/A	1.978
July 29, 2015	0.042	0.042	0.009	0.135	0.034	0.019	N/A	1.178	N/A	0.012	0.129	0.094	0.038	1.838
August 6, 2015	0.119	0.041	0.009	0.386	0.032	0.008	0.030	1.168	0.021	0.118	0.131	0.092	0.039	1.808
September 11, 2015	0.111	0.049	0.008	0.393	0.035	0.010	0.035	1.177	0.019	0.120	0.129	0.040	0.090	1.799
December 31, 2015	0.123	0.031	0.008	N/A	0.024	0.010	0.025	0.991	0.008	0.189	0.124	0.266	0.011	2.259
January 21, 2016	0.112	0.020	0.008	N/A	0.013	0.013	0.023	0.915	0.021	0.278	0.105	0.230	0.066	1.963
March 22, 2016	0.104	0.024	0.007	0.025	0.023	0.014	0.020	0.891	0.011	0.375	0.114	0.252	0.075	2.112
April 22, 2016	0.155	0.026	0.004	0.759	0.015	0.012	0.017	0.898	0.017	0.098	0.117	0.258	0.076	5.733
May 27, 2016	0.109	0.034	0.006	0.549	0.021	0.010	0.025	0.912	0.022	0.205	0.131	0.267	0.081	2.064
June 21, 2016	0.122	0.030	0.009	0.261	0.019	0.012	0.022	0.940	0.014	0.240	0.128	0.269	0.086	2.021
March 22, 2017	0.087	0.019	0.021	0.219	0.007	0.010	0.014	0.847	0.004	0.401	0.125	0.246	0.083	2.014
May 5, 2017	0.101	0.021	0.006	0.205	0.005	0.011	0.019	0.889	0.026	0.071	0.191	0.254	N/A	2.309
July 21, 2017	0.118	0.036	0.012	0.236	0.007	0.014	0.020	0.938	0.008	0.101	0.128	0.244	0.082	1.944
December 13, 2017	0.086	0.022	0.006	0.194	0.011	0.011	0.016	0.877	0.012	0.329	0.129	0.248	0.080	1.933
February 12, 2018	0.118	0.040	0.009	0.089	0.031	0.010	0.032	1.155	0.027	0.118	0.134	0.035	0.091	1.808
May 15, 2018	0.104	0.023	0.009	0.195	0.008	0.014	0.019	0.883	0.012	0.015	0.129	1.950	0.080	2.080
August 16, 2018	0.110	0.032	0.005	0.229	0.007	0.009	0.023	0.937	0.011	0.010	0.127	0.222	0.085	1.883
October 3, 2018	0.109	0.028	0.006	0.253	0.008	0.010	0.044	0.927	0.010	0.010	0.124	0.244	0.078	2.123
January 16, 2019	0.121	0.022	0.009	0.180	0.008	0.009	0.019	0.860	0.012	0.119	0.128	0.235	0.095	1.969
April 5, 2019	0.119	0.020	0.004	0.191	0.007	0.010	0.015	0.850	0.004	0.008	0.109	0.228	0.068	1.845
August 2, 2019	0.108	0.022	0.006	0.196	0.008	0.010	0.022	0.910	0.009	0.008	0.120	0.221	0.082	2.070
December 23, 2019	0.119	0.025	0.007	0.182	0.007	0.012	0.019	0.854	0.010	0.006	0.112	0.192	0.068	1.745
March 31, 2020	0.135	0.026	0.008	0.190	0.006	0.009	0.023	0.852	0.010	0.007	0.115	0.192	0.073	1.871
June 17, 2020	0.109	0.024	0.008	0.214	0.008	0.013	0.020	0.904	0.011	0.011	0.112	0.201	0.081	1.591
September 16, 2020	0.105	0.021	0.020	0.210	0.010	0.010	0.040	0.922	0.013	0.009	0.118	0.190	0.104	1.370
December 8, 2020	--	0.022	0.005	0.214	0.007	0.007	0.016	0.872	0.010	0.014	0.161	0.258	--	1.371
December 9, 2020	--	0.030	0.013	0.331	0.015	0.012	0.013	0.504	0.023	0.011	0.162	0.252	0.103	1.335
December 15, 2020	0.147	--	--	--	--	--	--	--	--	--	--	--	--	--
March 29, 2021	0.167	0.028	0.066	0.298	0.010	0.011	0.012	0.459	0.021	0.009	0.156	0.231	0.120	1.392
June 30, 2021	0.159	0.032	0.059	0.303	0.011	0.013	0.012	0.472	0.024	0.008	0.149	0.241	0.117	1.399
September 30, 2021	0.144	0.032	0.065	0.314	0.013	0.012	0.011	0.489	0.029	0.008	0.152	0.233	0.121	1.389
December 28, 2021	0.136	0.037	0.061	0.285	0.015	0.013	0.012	0.482	0.025	0.009	0.150	0.227	0.126	1.390
March 24, 2022	0.148	0.039	0.058	0.278	0.017	0.015	0.013	0.411	0.021	0.009	0.179	0.254	0.127	1.407
June 30, 2022	0.144	0.034	0.056	0.272	0.016	0.013	0.012	0.428	0.024	0.009	0.168	0.232	0.122	1.398
December 16, 2022	0.145	0.026	0.005	0.335	0.005	0.012	0.006	0.500	0.009	0.010	0.220	0.220	0.121	1.420
January 25, 2023	0.145	0.031	0.006	0.332	0.005	0.007	0.012	0.504	0.006	0.016	0.153	0.215	0.11	1.287
June 30, 2023	0.150	0.028	0.005	0.330	0.007	0.008	0.010	0.489	0.007	0.120	0.202	0.217	0.162	1.201

Notes:

Zone 1: SSDS Green Line, Blower 2
Zone 2: SSDS Purple Line, Blower 2
Zone 3: SSDS Orange Line, Blower 2
Zone 4: SSDS Red Line, Blower 1
Zone 5: SSDS Blue Line, Blower 1
Zone 6: SSDS Garage Line, Garage Blower
Zone 7: SSDS Perimeter East/West Line, Garage Blower
MP2-1 installed incorrectly. Corrected on July 7, 2015
N/A: measurement was not collected, point inaccessible
Vacuum readings were previously reported in negative pressure (shown as negative value). This was corrected by reporting vacuum readings as postive values.
Vacuum readings were previously reported in negative pressure (shown as negative value). This was corrected by reporting vacuum readings as postive values.
SSDS Zones, SSDS Monitoring Points, Influent, and K.O. reported in terms of vacuum. Effluent reported in terms of pressure.
Vacuum readings were previously reported in negative pressure (shown as negative value). This was corrected by reporting vacuum readings as postive values.
SSDS Zones, SSDS Monitoring Points, Influent, and K.O. reported in terms of vacuum. Effluent reported in terms of pressure.

ATTACHMENT 2

Factory Building SSDS As-Builts



LEGEND

- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 1)
- EXISTING 4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 1)
- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 2)
- EXISTING 4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 2)
- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 3)
- EXISTING 4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 3)
- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 4)
- EXISTING 4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 4)
- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 5)
- EXISTING4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 5)
- MP4-1 EXISTING VACUUM MONITORING POINT
- BLOWER LOCATION

AS-BUILT DRAWINGS

10' 0 10'

NO.	DATE	REVISION DESCRIPTION	INT.
2	11/25/14	AS-BUILTS	C.P.
1	2/13/13	REVISED TO SHOW NEW SYSTEM LAYOUT	C.P.

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(631) 232-2600

PROJECT NAME:
FINAL ENGINEERING REPORT
BULOVA WATCH CASE FACTORY SITE NO. 152139

PROJECT FOR:
WATCHCASE FACTORY CONDOMINIUM
SAG HARBOR, NEW YORK

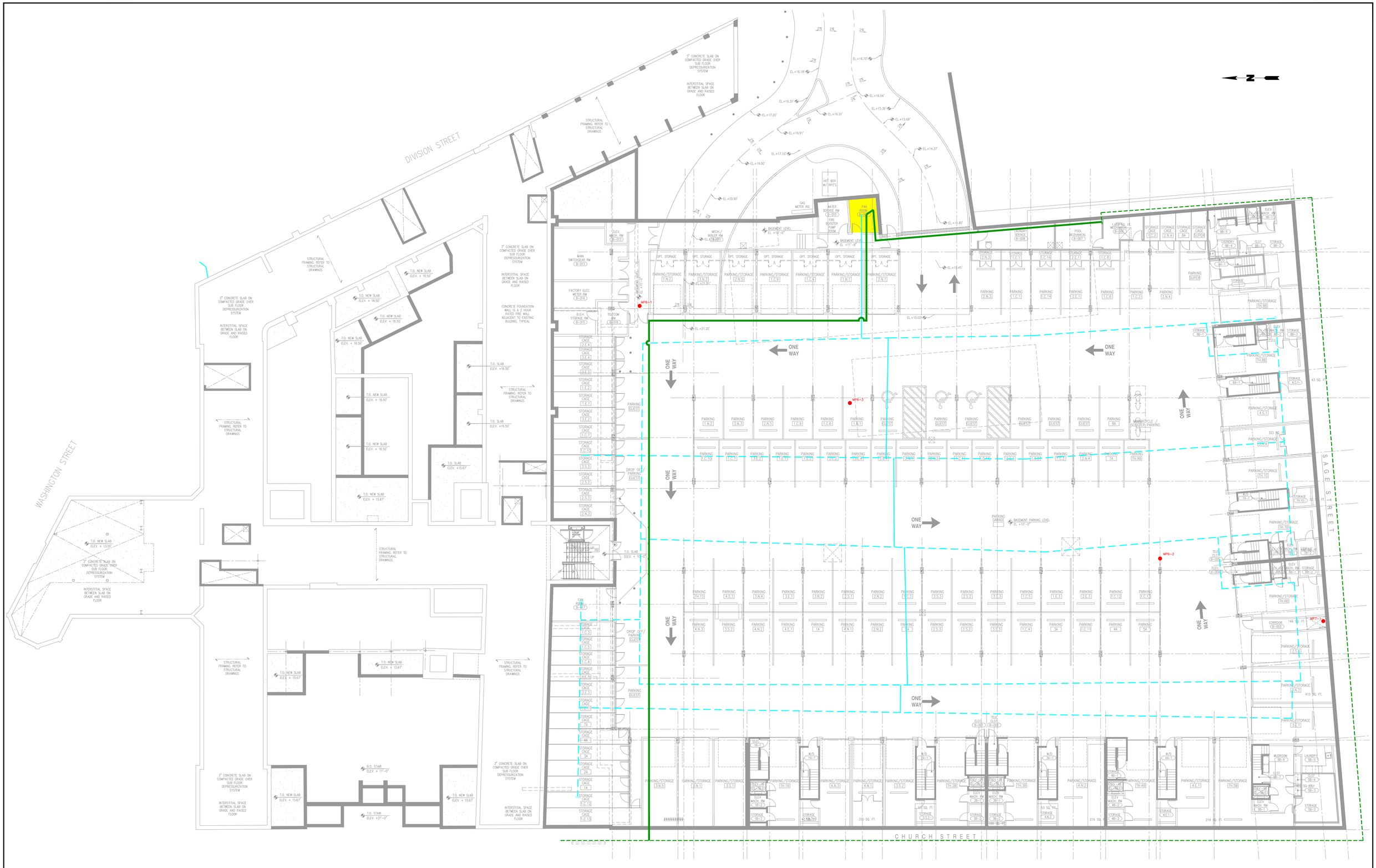
TITLE:
FACTORY BUILDING SSDS
AS-BUILTS

PLATE
1

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ATTACHMENT 3

Garage SSDS As-Builts



LEGEND

- EXISTING 6" SUB-SLAB VAPOR COLLECTION PIPE
- EXISTING 6" SOLID SUB-SLAB HEADER PIPE
- EXISTING 6" EXTERNAL VAPOR COLLECTION PIPE
- EXISTING 6" SOLID VAPOR COLLECTION PIPE HUNG FROM GARAGE CEILING
- MP6-1 EXISTING VACUUM MONITORING POINT
- BLOWER LOCATION

AS-BUILT DRAWINGS

10' 0 10'

NO.	DATE	REVISION DESCRIPTION	INT.
2	11/25/14	AS-BUILTS	C.P.
1	2/13/12	REVISED TO SHOW NEW SYSTEM LAYOUT	C.P.

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Roux Environmental Engineering and Geology, D.P.C.
209 SHAFTER STREET ISLANDIA NEW YORK 11749
(631) 232-2600

PROJECT NAME:
FINAL ENGINERING REPORT
BULOVA WATCH CASE FACTORY SITE NO. 152139

PROJECT FOR:
WATCHCASE FACTORY CONDOMINIUM
SAG HARBOR, NEW YORK

TITLE:
GARAGE SSDS AS-BUILTS

PLATE
2

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January 19, 2024

Mr. Christopher Grady
New York State Department of Environmental Conservation
50 Circle Road
Stony Brook, New York 11790

Re: SSDS Vacuum Monitoring Summary
Third Quarter 2023
Bulova Watch Factory Site No. 152139
15 Church Street, Village of Sag Harbor, New York

Dear Mr. Grady:

On behalf of the Watchcase Factory Condominium, Roux Environmental Engineering and Geology, D.P.C. (Roux), is submitting this letter report summarizing the results of the sub-slab depressurization system (SSDS) monitoring activities performed at the Bulova Watch Factory Site No. 152139, 15 Church Street, Village of Sag Harbor, New York (Site) during the Third Quarter of 2023. SSDS monitoring activities were conducted to confirm that the system is performing as designed in accordance with the January 27, 2009 Site Management Plan (SMP), the May 7, 2012 SMP Addendum No. 1, the October 2017 SMP Addendum No. 2, the March 2021 SMP Addendum No. 3, and the January 20, 2015 Operation, Maintenance, and Monitoring (OM&M) Plan submitted to the New York State Department of Environmental Conservation (NYSDEC). A brief description of SSDS operations and monitoring results during the Third Quarter 2023 reporting period are provided below.

SSDS

The SSDS consists of a two-blower system in the former factory building (Factory Building SSDS) and a separate one-blower system beneath the garage (Garage SSDS). The SSDS consists of five vapor-collection piping legs beneath the factory building, one vapor-collection piping leg beneath the garage, and one vapor-collection piping leg around the perimeter of the garage adjacent to the retaining wall. Vacuum readings for each piping leg were collected at the SSDS monitoring points. There are two monitoring points for each piping leg in the factory building, three monitoring points for the garage piping leg, and one monitoring point for the perimeter piping leg (Plates 1 and 2).

The Factory Building and Garage SSDSs are required to maintain a minimum vacuum of 0.004 inches of water column (in. w.c.) at the monitoring points. The SSDSs are equipped with visual and electronic monitoring devices to verify performance within the required range of vacuum. Each individual SSDS leg is equipped with a vacuum gauge and a data logger, which are designed to record vacuum readings down to 0.001 in. w.c. Each data logger displays a digital readout to provide real-time indications that the system is operating properly and records the most recent three months of vacuum readings for reference, if necessary. An electronic auto-dialer will automatically contact Roux personnel, building management, and/or maintenance staff if a system interruption occurs.

209 Shafter Street ■ Islandia, New York 11749 ■ +1.631.232.2600 ■ www.rouxinc.com
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Quarterly SSDS Inspection and Monitoring

Third Quarter 2023 SSDS inspection and monitoring activities were performed on September 27, 2023. In addition to visual inspections of the SSDS mechanical and above-grade piping components, the following parameters were monitored:

- Vacuum/pressure and air flow readings at the blower inlet and outlet;
- Vacuum readings at the moisture separator tank;
- Vacuum readings at the SSDS monitoring points; and
- Photoionization detector (PID) readings at the blower outlets.

During the Site visit, vacuum readings were collected at each SSDS monitoring point using a handheld micromanometer. Vacuum monitoring results from SSDS start-up through the Third Quarter of 2023 are summarized in Table 1 (attached). A review of Table 1 indicates that the Factory Building and Garage SSDSs were operating properly (i.e., maintaining a minimum vacuum of 0.004 in. w.c. at each monitoring point).

If you have any questions or require additional information regarding this monitoring summary, please feel free to contact the undersigned at 631-232-2600.

Sincerely,

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY, D.P.C.

Rachel Fenwick

Rachel Fenwick
Project Engineer

Attachments

1. SSDS Monitoring Summary Tables
2. Factory Building SSDS As-Builts
3. Garage SSDS As-Builts

ATTACHMENTS

1. SSDS Monitoring Summary Tables
2. Factory Building SSDS As-Builts
3. Garage SSDS As-Builts

ATTACHMENT 1

SSDS Monitoring Summary Tables

Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

	Factory Building SSDS														
	SSDS Zones Inside Blower Room					Blower 1					Blower 2				
Date	Zone 1 (in. w.c.)	Zone 2 (in. w.c.)	Zone 3 (in. w.c.)	Zone 4 (in. w.c.)	Zone 5 (in. w.c.)	Runtime (hours)	Influent (in. w.c.)	K.O (in. w.c.)	Effluent (in. w.c.)	PID (ppm)	Runtime (hours)	Influent (in. w.c.)	K.O (in. w.c.)	Effluent (in. w.c.)	PID (ppm)
March 6, 2015	2.50	2.40	1.90	5.80	6.50	--	25	31	--	--	--	20	8	--	--
March 12, 2015	2.58	2.06	3.24	5.93	6.73	--	--	--	--	--	--	--	--	--	--
March 19, 2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
March 24, 2015	6.38	5.76	3.15	5.77	6.46	--	--	--	--	--	--	--	--	--	--
April 2, 2015	2.51	2.06	3.21	5.81	6.52	2,750.6	22	31	20	0.0	1,943.8	20	10	19	0.0
April 7, 2015	2.44	2.06	3.3	5.64	6.47	2,871.4	25	32	20	0.0	2,064.4	20	19	20	0.0
April 14, 2015	2.59	1.97	3.51	5.38	6.73	3,040.2	32	30	20	0.0	2,033.2	20	20	20	0.0
April 22, 2015	2.48	2.02	3.24	5.53	6.46	3,231.2	25	31	20	0.0	2,424.1	21	10	18	0.0
May 5, 2015	2.52	2.03	3.19	5.78	6.42	3,512.8	18	32	20	0.0	2,705.7	21	9	18	0.0
May 11, 2015	2.54	1.98	3.28	5.72	6.53	3,621.5	25	31	20	0.0	2,814.4	21	10	17	0.0
May 27, 2015	2.78	2.26	3.37	0.31	0.46	3,821.9	Blower 1 down since May 23, 2015				3,112.8	29	32	6	0.0
June 2, 2015	2.78	2.26	3.4	0.31	0.43	3,821.9	Blower 1 down since May 23, 2015				3,256.6	29	38	6	0.0
June 9, 2015	2.44	2.07	3.24	5.66	6.5	3,833.0	20	10	15	--	3,485.2	24	30	20	--
July 29, 2015	2.61	2.07	3.24	3.82	6.59	4,853.2	21	10	19	0.0	4,288.2	25	20	20	0.0
August 6, 2015	2.63	2.17	3.31	5.72	6.46	5,048.4	21	9	18	0.0	4,483.5	25	20	20	0.0
September 11, 2015	2.62	2.14	3.3	5.74	6.55	5,910.9	21	10	19	0.0	5,340.0	24	20	19	0.0
December 31, 2015	2.68	2.02	3.3	5.76	6.48	8,576.6	22	10	18	0.2	8,011.3	21	20	20	0.1
January 21, 2016	2.62	2.04	3.25	5.67	6.45	9,078.4	22	10	18	0.2	8,513.5	22	19	19	0.1
March 22, 2016	2.66	1.98	3.31	5.78	6.42	10,543.2	25	20	20	0.0	9,979.0	21	10	18	0.1
April 22, 2016	2.6	2.04	3.26	5.62	6.37	11,286.5	22	20	20	0.1	10,721.4	21	9	18	0.0
May 27, 2016	2.63	2.05	3.24	5.61	6.44	12,195.4	22	20	20	0.0	11,463.2	21	10	18	0.0
June 21, 2016	2.68	2.07	3.2	5.65	6.42	12,724.4	23	20	20	0.0	12,159.4	21	9	18	0.0
March 22, 2017	2.63	2.09	3.29	5.69	6.43	19,046.5	--	20	20	0.0	18,481.0	21	--	--	--
May 5, 2017	2.62	2.03	2.99	5.79	6.47	20,105.3	21	--	18	0.0	19,540.3	27	20	20	0.0
July 21, 2017	2.68	1.93	3.01	5.79	5.72	21,953.8	27	10	18	0.0	21,388.1	21	20	19	0.0
December 13, 2017	2.66	1.96	2.41	5.62	6.37	25,433.2	25	10	18	0.1	24,868.2	25	20	18	0.0
February 12, 2018	2.60	2.20	3.29	5.75	6.46	--	20	10	18	0.1	--	25	20	20	0.0
May 15, 2018	2.66	2.01	2.41	5.82	6.53	29,104.8	24	10	18	0.0	28,539.7	25	20	19	0.0
August 16, 2018	2.63	2.08	2.49	5.81	6.58	31,273.0	26	9	18	0.0	30,707.0	22	20	18	0.0
October 3, 2018	2.64	1.98	2.66	5.75	6.52	32,427.7	24	10	18	0.0	31,861.0	22	20	18	0.0
January 16, 2019	2.51	1.98	2.69	5.75	6.46	34,947.8	22	8	18	0.0	34,381.6	24	18	20	0.0
April 5, 2019	2.71	2.14	2.71	5.77	6.65	36,839.8	22	10	19	0.0	36,274.5	24	20	19	0.0
August 2, 2019	2.63	2.20	2.98	5.73	6.58	39,672.0	22	10	19	0.0	39,106.7	24	20	19	0.0
December 23, 2019	2.69	2.10	2.45	5.79	6.52	43,131.3	26	10	16	0.0	42,565.8	19	20	18	0.0
March 31, 2020	2.66	2.10	2.05	5.78	6.54	45,505.2	24	8	10	0.0	44,939.6	19	20	18	0.0
June 17, 2020	2.64	2.04	2.26	5.79	6.58	47,375.8	26	8	14	0.0	46,810.2	20	20	18	0.0
September 16, 2020	2.12	2.53	2.34	5.87	6.57	49,669.6	26	6	8	0.0	48,994.1	20	18	20	0.0
December 8, 2020	2.76	2.31	2.11	5.55	6.59	51,555.6	26	14	8	0.0	50,990.6	30	22	16	0.0
December 9, 2020	5.09	5.20	3.22	2.72	3.21	51,580.1	25	15	8	0.0	51,014.6	35	26	16	0.0
December 15, 2020	5.17	5.16	3.05	2.42	4.07	51,721.5	25	14	8	0.0	51,155.9	35	26	16	0.0
March 29, 2021	5.26	5.37	2.98	2.36	4.00	54,058.2	21	13	10	0.0	53,492.7	24	21	18	0.0
June 30, 2021	5.19	5.23	3.00	2.41	3.99	56,290.0	21	12	10	0.0	55,725.3	25	21	18	0.0
September 30, 2021	5.27	5.36	3.09	2.45	4.08	58,498.1	22	12	10	0.0	57,932.6	24	20	18	0.0
December 28, 2021	5.27	5.36	3.03	2.43	4.03	60,635.4	21	12	10	0.0	60,069.8	24	22	18	0.0
March 24, 2022	5.18	5.30	3.10	2.52	4.27	62,698.0	21	12	10	0.0	62,132.4	25	21	18	0.0
June 30, 2022	5.17	5.32	3.06	2.45	4.11	65,050.0	21	12	10	0.0	64,484.4	25	21	18	0.0
December 16, 2022	5.30	5.23	3.08	2.61	4.30	69,109.1	26	12	10	0.0	68,543.5	25	25	18	0.0
January 25, 2023	5.55	5.32	3.08	2.5	4.32	70,067.10	25	12	10	0.0	69,501.40	36	27	12	0.0
June 30, 2023	5.48	5.34	3.13	2.5	4.25	73,809.80	25	12	10	0.0	73,244.10	35	25	12	0.0
September 27, 2023	5.82	5.53	3.14	2.61	4.46	75,995.60	27	14	10	0.0	75,379.30	31	22	12	0.0

Notes:

Blower 1: Rotron EN808, 7.5Hp, located in factory building blower room
Blower 2: Rotron EN808, 7.5Hp, located in factory building blower room
Garage Blower: Rotron EN909 15Hp, located in garage blower room
Zone 1: SSDS Green Line, Blower 2
Zone 2: SSDS Purple Line, Blower 2
Zone 3: SSDS Orange Line, Blower 2
Zone 4: SSDS Red Line, Blower 1
Zone 5: SSDS Blue Line, Blower 1
Perm. E.: SSDS Perimeter East Line, Garage Blower
Perm. W.: SSDS Perimeter West Line, Garage Blower
Garage: SSDS Garage Line, Garage Blower
Influent: Blower Influent Vacuum Gauge
K.O.: Blower Knockout Tank/Moisture Separator Vacuum Gauge
Effluent: Blower Effluent Pressure Gauge
PID: Photoionization Detector
in. w.c.: inches of water column
ppm: parts per million
--: measurement was not collected

Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

	Garage & Perimeter SSDS							
	SSDS Zones Inside Blower Room			Garage Blower				
Date	Perm. E. (in. w.c.)	Perm. W. (in. w.c.)	Garage (in. w.c.)	Runtime (hours)	Influent (in. w.c.)	K.O. (in. w.c.)	Effluent (in. w.c.)	PID (ppm)
March 6, 2015	2.20	2.00	0.90	--	28	19	--	--
March 12, 2015	2.63	2.34	0.52	--	--	--	--	--
March 19, 2015	2.57	2.23	0.56	--	--	--	--	--
March 24, 2015	2.61	2.17	0.51	--	--	--	--	--
April 2, 2015	2.52	2.20	0.51	2,859.4	24	11	2.2	0.0
April 7, 2015	2.67	2.24	0.53	2,980.0	24	27	2.5	0.0
April 14, 2015	2.88	2.39	0.57	3,148.8	27	18	2	0.0
April 22, 2015	2.89	2.48	0.58	3,340.4	27	18	2	0.0
May 5, 2015	2.72	2.23	0.61	3,651.1	27	19	2	0.0
May 11, 2015	2.61	2.18	0.51	3,796.6	27	19	2	0.0
May 27, 2015	2.59	2.16	0.57	4,179.4	27	19	2	0.0
June 2, 2015	2.7	2.28	0.68	4,323.1	28	18	2	0.0
June 9, 2015	2.72	2.12	0.57	4,492.1	28	18	2	--
July 29, 2015	2.48	2.02	0.66	5,502.1	27	19	2	0.0
August 6, 2015	2.45	1.95	0.56	5,698.0	27	18	2	0.0
September 11, 2015	2.88	2.34	0.52	6,559.7	27	19	2	0.0
December 31, 2015	2.94	2.52	0.64	9,226.1	27	19	2	0.0
January 21, 2016	2.68	2.24	0.56	9,727.9	27	19	2	0.2
March 22, 2016	2.79	2.33	0.62	11,192.6	27	19	2	0.1
April 22, 2016	2.68	2.17	0.57	11,836.2	27	18	2	0.0
May 27, 2016	2.72	2.14	0.63	12,482.2	27	18	2	0.0
June 21, 2016	2.65	2.26	0.59	13,373.5	27	19	2	0.0
March 22, 2017	2.71	2.21	0.61	--	28	18	2	0.0
May 5, 2017	2.96	2.55	0.59	--	27	19	2	0.0
July 21, 2017	2.62	2.14	0.68	22,856.7	25	18	2	0.0
December 13, 2017	2.59	2.17	0.53	26,335.8	25	18	2	0.0
February 12, 2018	2.52	1.97	0.54	--	25	18	2	0.0
May 15, 2018	2.70	2.24	0.52	30,007.3	26	18	2	0.0
August 16, 2018	2.51	2.06	0.60	32,115.6	27	19	2	0.0
October 3, 2018	2.29	2.69	0.58	33,329.5	27	18	2	0.1
January 16, 2019	2.57	2.14	0.53	35,849.1	27	18	2	0.0
April 5, 2019	2.49	1.99	0.56	37,741.0	27	18	2	0.0
August 2, 2019	2.68	2.34	0.54	40,573.2	27	18	2	0.0
December 23, 2019	2.26	1.77	0.53	44,034.1	25	15	2	0.0
March 31, 2020	2.39	1.77	0.45	46,406.5	23	16	2	0.0
June 17, 2020	2.15	1.75	0.61	48,278.5	25	16	3	0.0
September 16, 2020	2.06	1.52	0.53	50,461.1	25	10	2	0.0
December 8, 2020	1.45	1.82	0.83	52,457.5	25	15	2	0.0
December 9, 2020	1.45	1.80	0.85	52,482.0	21	10	2	0.0
December 15, 2020	--	--	--	52,482.0	--	--	2	--
March 29, 2021	1.91	1.65	0.94	55,113.9	20	10	10	0.0
June 30, 2021	1.37	1.74	0.83	57,346.4	21	10	10	0.0
September 30, 2021	1.69	1.35	0.92	59,554.1	20	10	10	0.0
December 28, 2021	1.75	1.40	0.88	61,691.3	20	10	10	0.0
March 24, 2022	2.10	1.69	0.93	63,753.9	20	10	10	0.0
June 30, 2022	2.05	1.62	0.90	66,106.9	20	10	10	0.0
December 16, 2022	2.06	1.55	0.96	70,164.8	21	10	10	0.0
January 25, 2023	1.76	1.38	0.77	71,123.40	19	11	10	0.0
June 30, 2023	1.5	1.21	0.96	74,865.60	22	10	10	0.0
September 27, 2023	1.72	1.3	0.92	77,001.20	20	10	10	0.0

Notes:

Blower 1: Rotron EN808, 7.5Hp, located in factory building blower room
Blower 2: Rotron EN808, 7.5Hp, located in factory building blower room
Garage Blower: Rotron EN909 15Hp, located in garage blower room
Zone 1: SSDS Green Line, Blower 2
Zone 2: SSDS Purple Line, Blower 2
Zone 3: SSDS Orange Line, Blower 2
Zone 4: SSDS Red Line, Blower 1
Zone 5: SSDS Blue Line, Blower 1
Perm. E.: SSDS Perimeter East Line, Garage Blower
Perm. W.: SSDS Perimeter West Line, Garage Blower
Garage: SSDS Garage Line, Garage Blower
Influent: Blower Influent Vacuum Gauge
K.O.: Blower Knockout Tank/Moisture Separator Vacuum Gauge
Effluent: Blower Effluent Pressure Gauge
PID: Photoionization Detector
in. w.c.: inches of water column
ppm: parts per million
--: measurement was not collected

Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

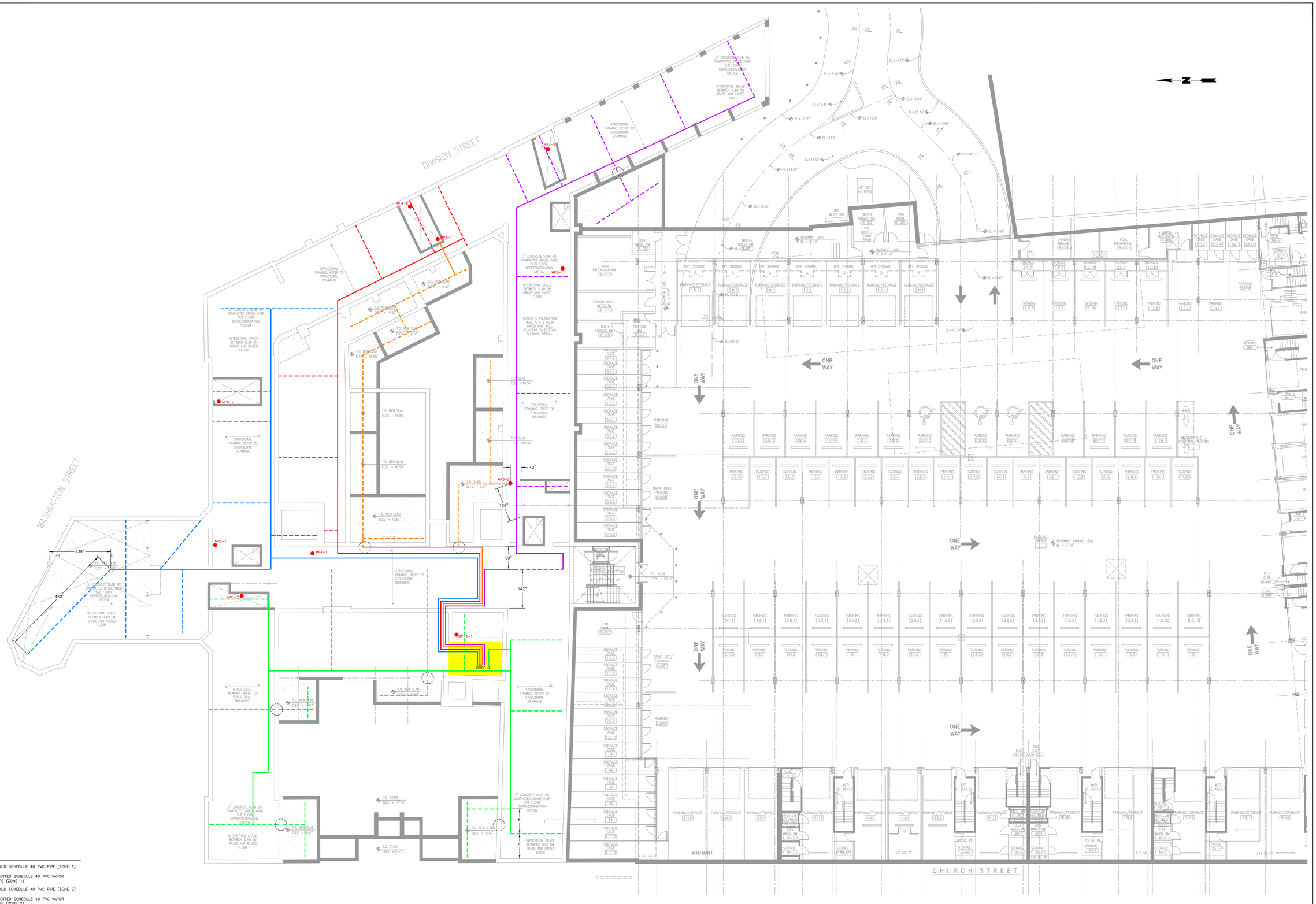
	SSDS Monitoring Points													
	Factory Building										Garage & Perimeter			
Date	MP1-1 (in. w.c.)	MP1-2 (in. w.c.)	MP2-1 (in. w.c.)	MP2-2 (in. w.c.)	MP3-1 (in. w.c.)	MP3-2 (in. w.c.)	MP4-1 (in. w.c.)	MP4-2 (in. w.c.)	MP5-1 (in. w.c.)	MP5-2 (in. w.c.)	MP6-1 (in. w.c.)	MP6-2 (in. w.c.)	MP6-3 (in. w.c.)	MP7-1 (in. w.c.)
June 9, 2015	N/A	0.03	0.000	0.367	0.11	N/A	0.007	1.155	0.017	0.01	0.164	0.084	N/A	1.978
July 29, 2015	0.042	0.042	0.009	0.135	0.034	0.019	N/A	1.178	N/A	0.012	0.129	0.094	0.038	1.838
August 6, 2015	0.119	0.041	0.009	0.386	0.032	0.008	0.030	1.168	0.021	0.118	0.131	0.092	0.039	1.808
September 11, 2015	0.111	0.049	0.008	0.393	0.035	0.010	0.035	1.177	0.019	0.120	0.129	0.040	0.090	1.799
December 31, 2015	0.123	0.031	0.008	N/A	0.024	0.010	0.025	0.991	0.008	0.189	0.124	0.266	0.011	2.259
January 21, 2016	0.112	0.020	0.008	N/A	0.013	0.013	0.023	0.915	0.021	0.278	0.105	0.230	0.066	1.963
March 22, 2016	0.104	0.024	0.007	0.025	0.023	0.014	0.020	0.891	0.011	0.375	0.114	0.252	0.075	2.112
April 22, 2016	0.155	0.026	0.004	0.759	0.015	0.012	0.017	0.898	0.017	0.098	0.117	0.258	0.076	5.733
May 27, 2016	0.109	0.034	0.006	0.549	0.021	0.010	0.025	0.912	0.022	0.205	0.131	0.267	0.081	2.064
June 21, 2016	0.122	0.030	0.009	0.261	0.019	0.012	0.022	0.940	0.014	0.240	0.128	0.269	0.086	2.021
March 22, 2017	0.087	0.019	0.021	0.219	0.007	0.010	0.014	0.847	0.004	0.401	0.125	0.246	0.083	2.014
May 5, 2017	0.101	0.021	0.006	0.205	0.005	0.011	0.019	0.889	0.026	0.071	0.191	0.254	N/A	2.309
July 21, 2017	0.118	0.036	0.012	0.236	0.007	0.014	0.020	0.938	0.008	0.101	0.128	0.244	0.082	1.944
December 13, 2017	0.086	0.022	0.006	0.194	0.011	0.011	0.016	0.877	0.012	0.329	0.129	0.248	0.080	1.933
February 12, 2018	0.118	0.040	0.009	0.089	0.031	0.010	0.032	1.155	0.027	0.118	0.134	0.035	0.091	1.808
May 15, 2018	0.104	0.023	0.009	0.195	0.008	0.014	0.019	0.883	0.012	0.015	0.129	1.950	0.080	2.080
August 16, 2018	0.110	0.032	0.005	0.229	0.007	0.009	0.023	0.937	0.011	0.010	0.127	0.222	0.085	1.883
October 3, 2018	0.109	0.028	0.006	0.253	0.008	0.010	0.044	0.927	0.010	0.010	0.124	0.244	0.078	2.123
January 16, 2019	0.121	0.022	0.009	0.180	0.008	0.009	0.019	0.860	0.012	0.119	0.128	0.235	0.095	1.969
April 5, 2019	0.119	0.020	0.004	0.191	0.007	0.010	0.015	0.850	0.004	0.008	0.109	0.228	0.068	1.845
August 2, 2019	0.108	0.022	0.006	0.196	0.008	0.010	0.022	0.910	0.009	0.008	0.120	0.221	0.082	2.070
December 23, 2019	0.119	0.025	0.007	0.182	0.007	0.012	0.019	0.854	0.010	0.006	0.112	0.192	0.068	1.745
March 31, 2020	0.135	0.026	0.008	0.190	0.006	0.009	0.023	0.852	0.010	0.007	0.115	0.192	0.073	1.871
June 17, 2020	0.109	0.024	0.008	0.214	0.008	0.013	0.020	0.904	0.011	0.011	0.112	0.201	0.081	1.591
September 16, 2020	0.105	0.021	0.020	0.210	0.010	0.010	0.040	0.922	0.013	0.009	0.118	0.190	0.104	1.370
December 8, 2020	--	0.022	0.005	0.214	0.007	0.007	0.016	0.872	0.010	0.014	0.161	0.258	--	1.371
December 9, 2020	--	0.030	0.013	0.331	0.015	0.012	0.013	0.504	0.023	0.011	0.162	0.252	0.103	1.335
December 15, 2020	0.147	--	--	--	--	--	--	--	--	--	--	--	--	--
March 29, 2021	0.167	0.028	0.066	0.298	0.010	0.011	0.012	0.459	0.021	0.009	0.156	0.231	0.120	1.392
June 30, 2021	0.159	0.032	0.059	0.303	0.011	0.013	0.012	0.472	0.024	0.008	0.149	0.241	0.117	1.399
September 30, 2021	0.144	0.032	0.065	0.314	0.013	0.012	0.011	0.489	0.029	0.008	0.152	0.233	0.121	1.389
December 28, 2021	0.136	0.037	0.061	0.285	0.015	0.013	0.012	0.482	0.025	0.009	0.150	0.227	0.126	1.390
March 24, 2022	0.148	0.039	0.058	0.278	0.017	0.015	0.013	0.411	0.021	0.009	0.179	0.254	0.127	1.407
June 30, 2022	0.144	0.034	0.056	0.272	0.016	0.013	0.012	0.428	0.024	0.009	0.168	0.232	0.122	1.398
December 16, 2022	0.145	0.026	0.005	0.335	0.005	0.012	0.006	0.500	0.009	0.010	0.220	0.220	0.121	1.420
January 25, 2023	0.145	0.031	0.006	0.332	0.005	0.007	0.012	0.504	0.006	0.016	0.153	0.215	0.11	1.287
June 30, 2023	0.150	0.028	0.005	0.330	0.007	0.008	0.010	0.489	0.007	0.012	0.202	0.217	0.162	1.201
September 27, 2023	0.139	0.037	0.021	0.297	0.016	0.018	0.013	0.445	0.020	0.010	0.166	0.240	0.171	1.481

Notes:

Zone 1: SSDS Green Line, Blower 2
Zone 2: SSDS Purple Line, Blower 2
Zone 3: SSDS Orange Line, Blower 2
Zone 4: SSDS Red Line, Blower 1
Zone 5: SSDS Blue Line, Blower 1
Zone 6: SSDS Garage Line, Garage Blower
Zone 7: SSDS Perimeter East/West Line, Garage Blower
MP2-1 installed incorrectly. Corrected on July 7, 2015
N/A: measurement was not collected, point inaccessible
Vacuum readings were previously reported in negative pressure (shown as negative value). This was corrected by reporting vacuum readings as postive values.
Vacuum readings were previously reported in negative pressure (shown as negative value). This was corrected by reporting vacuum readings as postive values.
SSDS Zones, SSDS Monitoring Points, Influent, and K.O. reported in terms of vacuum. Effluent reported in terms of pressure.
Vacuum readings were previously reported in negative pressure (shown as negative value). This was corrected by reporting vacuum readings as postive values.
SSDS Zones, SSDS Monitoring Points, Influent, and K.O. reported in terms of vacuum. Effluent reported in terms of pressure.

ATTACHMENT 2

Factory Building SSDS As-Builts



LEGEND

- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 1)
- EXISTING 4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 1)
- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 2)
- EXISTING 4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 2)
- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 3)
- EXISTING 4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 3)
- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 4)
- EXISTING 4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 4)
- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 5)
- EXISTING4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 5)
- MP4-1 EXISTING VACUUM MONITORING POINT
- BLOWER LOCATION

AS-BUILT DRAWINGS

10' 0 10'

NO.	DATE	REVISION DESCRIPTION	INT.
2	11/25/14	AS-BUILTS	C.P.
1	2/13/13	REVISED TO SHOW NEW SYSTEM LAYOUT	C.P.

STATE OF NEW YORK · CHARLES J. MCHUGH · 069109 · LICENSED PROFESSIONAL ENGINEER

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ROUX
Roux Environmental Engineering and Geology, D.P.C.
209 SHAFTER STREET ISLANDIA NEW YORK 11749
(631) 232-2600

PROJECT NAME:
FINAL ENGINEERING REPORT
BULOVA WATCH CASE FACTORY SITE NO. 152139

PROJECT FOR:
WATCHCASE FACTORY CONDOMINIUM
SAG HARBOR, NEW YORK

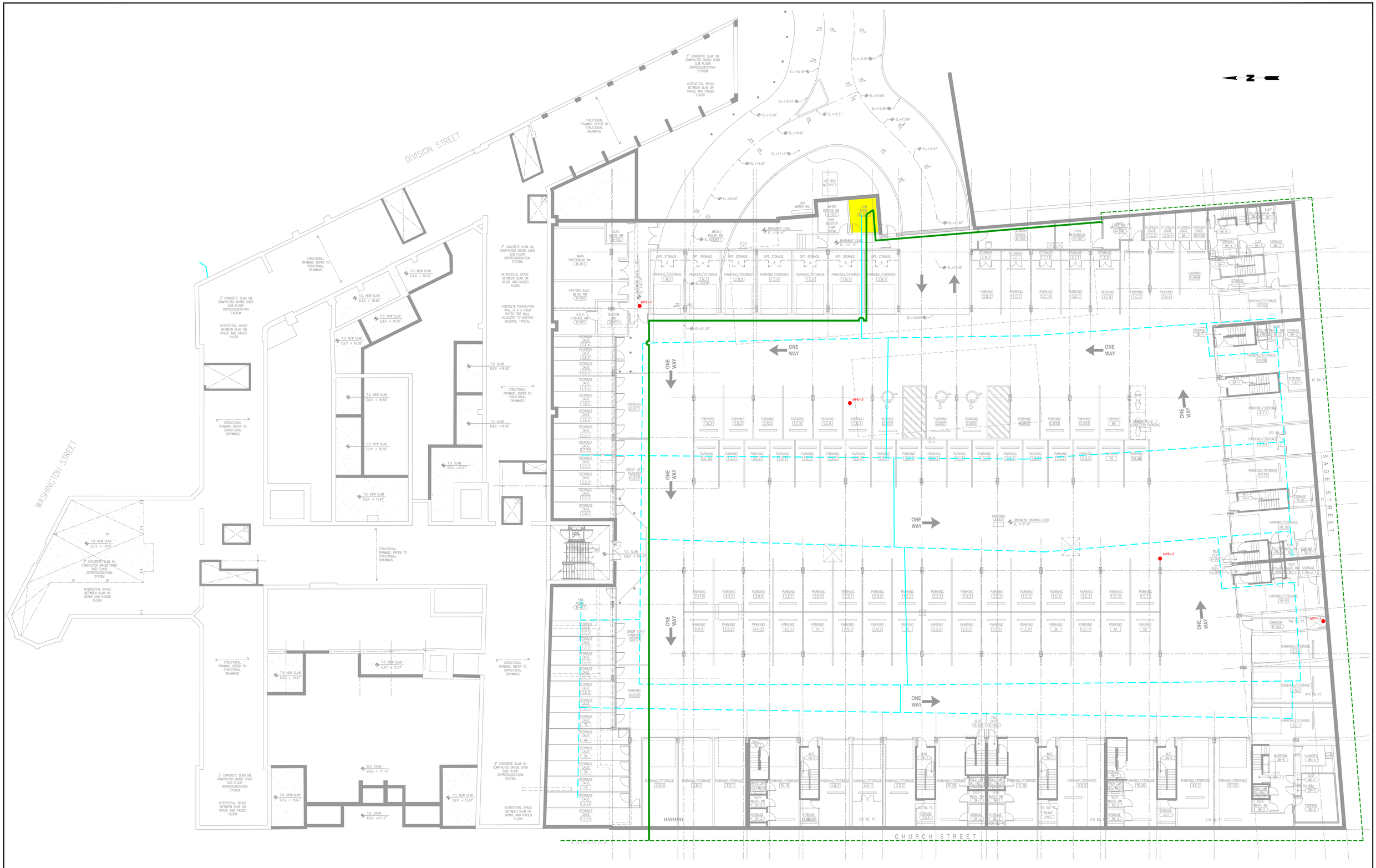
TITLE:
FACTORY BUILDING SSDS
AS-BUILTS

PLATE
1

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ATTACHMENT 3

Garage SSDS As-Builts



LEGEND

- EXISTING 6" SUB-SLAB VAPOR COLLECTION PIPE
- EXISTING 6" SOLID SUB-SLAB HEADER PIPE
- EXISTING 6" EXTERNAL VAPOR COLLECTION PIPE
- EXISTING 6" SOLID VAPOR COLLECTION PIPE HUNG FROM GARAGE CEILING
- MP6-1 EXISTING VACUUM MONITORING POINT
- BLOWER LOCATION

AS-BUILT DRAWINGS

10' 0 10'

NO.	DATE	REVISION DESCRIPTION	INT.
2	11/25/14	AS-BUILTS	C.P.
1	2/13/12	REVISED TO SHOW NEW SYSTEM LAYOUT	C.P.

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DRAWING FILE: 2802.0001Y106.11.DWG	

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Roux Environmental Engineering and Geology, D.P.C.
209 SHAFTER STREET ISLANDIA NEW YORK 11749
(631) 232-2600

PROJECT NAME:
FINAL ENGINERING REPORT
BULOVA WATCH CASE FACTORY SITE NO. 152139

PROJECT FOR:
WATCHCASE FACTORY CONDOMINIUM
SAG HARBOR, NEW YORK

TITLE:
GARAGE SSDS AS-BUILTS

PLATE
2

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February 13, 2024

Mr. Christopher Grady
New York State Department of Environmental Conservation
50 Circle Road
Stony Brook, New York 11790

Re: SSDS Vacuum Monitoring Summary
Fourth Quarter 2023
Bulova Watch Factory Site No. 152139
15 Church Street, Village of Sag Harbor, New York

Dear Mr. Grady:

On behalf of the Watchcase Factory Condominium, Roux Environmental Engineering and Geology, D.P.C. (Roux), is submitting this letter report summarizing the results of the sub-slab depressurization system (SSDS) monitoring activities performed at the Bulova Watch Factory Site No. 152139, 15 Church Street, Village of Sag Harbor, New York (Site), during the Fourth Quarter of 2023. SSDS monitoring activities were conducted to confirm that the system is performing as designed in accordance with the January 27, 2009 Site Management Plan (SMP), the May 7, 2012 SMP Addendum No. 1, the October 2017 SMP Addendum No. 2, the March 2021 SMP Addendum No. 3, and the January 20, 2015 Operation, Maintenance, and Monitoring (OM&M) Plan submitted to the New York State Department of Environmental Conservation (NYSDEC). A brief description of SSDS operations and monitoring results during the Fourth Quarter 2023 reporting period are provided below.

SSDS

The SSDS consists of a two-blower system in the former factory building (Factory Building SSDS) and a separate one-blower system beneath the garage (Garage SSDS). The SSDS consists of five vapor-collection piping legs beneath the factory building, one vapor-collection piping leg beneath the garage, and one vapor-collection piping leg around the perimeter of the garage adjacent to the retaining wall. Vacuum readings for each piping leg were collected at the SSDS monitoring points. There are two monitoring points for each piping leg in the factory building, three monitoring points for the garage piping leg, and one monitoring point for the perimeter piping leg (Plates 1 and 2).

The Factory Building and Garage SSDSs are required to maintain a vacuum of 0.004 inches of water column (in. w.c.) or greater vacuum at the monitoring points. The SSDSs are equipped with visual and electronic monitoring devices to verify performance within the required range of vacuum. Each individual SSDS leg is equipped with a vacuum gauge and a data logger, which are designed to record vacuum readings to 0.001 in. w.c. Each data logger displays a digital readout to provide real-time indications that the system is operating properly and records the most recent three months of vacuum readings for reference, if necessary. An electronic auto-dialer will automatically contact Roux personnel, building management, and/or maintenance staff if a system interruption occurs.

Quarterly SSDS Inspection and Monitoring

Fourth Quarter 2023 SSDS inspection and monitoring activities were performed on November 13, 2023. In addition to visual inspections of the SSDS mechanical and above-grade piping components, the following parameters were monitored:

- Vacuum/pressure and air flow readings at the blower inlet and outlet;

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California ■ Illinois ■ Massachusetts ■ New Jersey ■ New York ■ Texas ■ Virginia

- Vacuum readings at the moisture separator tank;
- Vacuum readings at the SSDS monitoring points; and
- Photoionization detector (PID) readings at the blower outlets.

During the Site visit, vacuum readings were collected at each SSDS monitoring point using a handheld micromanometer. Vacuum monitoring results from SSDS start-up through the Fourth Quarter of 2023 are summarized in Table 1 (attached). It should be noted that the reading at MP2-1 was 0.000 in. w.c. on November 13, 2023. All readings before November 2023 met the vacuum goal of 0.004 in. w.c. or greater vacuum. Furthermore, the vacuum reading at MP2-1 on January 25, 2024, was 0.006 in. w.c., which meets the vacuum requirement. The reading at MP2-1 in November 2023 appears to be an anomaly based upon the historical and current monitoring data and not an indication of an issue with the system operation. A review of Table 1 indicates that the Factory Building and Garage SSDSs were operating properly (i.e., maintaining a vacuum of 0.004 in. w.c. or greater vacuum at each monitoring point, with the exception of MP2-1 on November 13, 2023).

If you have any questions or require additional information regarding this monitoring summary, please feel free to contact the undersigned at 631-232-2600.

Sincerely,

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY, D.P.C.

Rachel Fenwick

Rachel Fenwick
Project Engineer

Noelle Clarke, P.E.
Principal Engineer

Attachments

1. SSDS Monitoring Summary Tables
2. Factory Building SSDS As-Builts
3. Garage SSDS As-Builts

ATTACHMENTS

1. SSDS Monitoring Summary Tables
2. Factory Building SSDS As-Builts
3. Garage SSDS As-Builts

ATTACHMENT 1

SSDS Monitoring Summary Tables

Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

	Factory Building SSDS														
	SSDS Zones Inside Blower Room					Blower 1					Blower 2				
Date	Zone 1 (in. w.c.)	Zone 2 (in. w.c.)	Zone 3 (in. w.c.)	Zone 4 (in. w.c.)	Zone 5 (in. w.c.)	Runtime (hours)	Influent (in. w.c.)	K.O (in. w.c.)	Effluent (in. w.c.)	PID (ppm)	Runtime (hours)	Influent (in. w.c.)	K.O (in. w.c.)	Effluent (in. w.c.)	PID (ppm)
March 6, 2015	2.50	2.40	1.90	5.80	6.50	--	25	31	--	--	--	20	8	--	--
March 12, 2015	2.58	2.06	3.24	5.93	6.73	--	--	--	--	--	--	--	--	--	--
March 19, 2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
March 24, 2015	6.38	5.76	3.15	5.77	6.46	--	--	--	--	--	--	--	--	--	--
April 2, 2015	2.51	2.06	3.21	5.81	6.52	2,750.6	22	31	20	0.0	1,943.8	20	10	19	0.0
April 7, 2015	2.44	2.06	3.3	5.64	6.47	2,871.4	25	32	20	0.0	2,064.4	20	19	20	0.0
April 14, 2015	2.59	1.97	3.51	5.38	6.73	3,040.2	32	30	20	0.0	2,033.2	20	20	20	0.0
April 22, 2015	2.48	2.02	3.24	5.53	6.46	3,231.2	25	31	20	0.0	2,424.1	21	10	18	0.0
May 5, 2015	2.52	2.03	3.19	5.78	6.42	3,512.8	18	32	20	0.0	2,705.7	21	9	18	0.0
May 11, 2015	2.54	1.98	3.28	5.72	6.53	3,621.5	25	31	20	0.0	2,814.4	21	10	17	0.0
May 27, 2015	2.78	2.26	3.37	0.31	0.46	3,821.9	Blower 1 down since May 23, 2015				3,112.8	29	32	6	0.0
June 2, 2015	2.78	2.26	3.4	0.31	0.43	3,821.9	Blower 1 down since May 23, 2015				3,256.6	29	38	6	0.0
June 9, 2015	2.44	2.07	3.24	5.66	6.5	3,833.0	20	10	15	--	3,485.2	24	30	20	--
July 29, 2015	2.61	2.07	3.24	3.82	6.59	4,853.2	21	10	19	0.0	4,288.2	25	20	20	0.0
August 6, 2015	2.63	2.17	3.31	5.72	6.46	5,048.4	21	9	18	0.0	4,483.5	25	20	20	0.0
September 11, 2015	2.62	2.14	3.3	5.74	6.55	5,910.9	21	10	19	0.0	5,340.0	24	20	19	0.0
December 31, 2015	2.68	2.02	3.3	5.76	6.48	8,576.6	22	10	18	0.2	8,011.3	21	20	20	0.1
January 21, 2016	2.62	2.04	3.25	5.67	6.45	9,078.4	22	10	18	0.2	8,513.5	22	19	19	0.1
March 22, 2016	2.66	1.98	3.31	5.78	6.42	10,543.2	25	20	20	0.0	9,979.0	21	10	18	0.1
April 22, 2016	2.6	2.04	3.26	5.62	6.37	11,286.5	22	20	20	0.1	10,721.4	21	9	18	0.0
May 27, 2016	2.63	2.05	3.24	5.61	6.44	12,195.4	22	20	20	0.0	11,463.2	21	10	18	0.0
June 21, 2016	2.68	2.07	3.2	5.65	6.42	12,724.4	23	20	20	0.0	12,159.4	21	9	18	0.0
March 22, 2017	2.63	2.09	3.29	5.69	6.43	19,046.5	--	20	20	0.0	18,481.0	21	--	--	--
May 5, 2017	2.62	2.03	2.99	5.79	6.47	20,105.3	21	--	18	0.0	19,540.3	27	20	20	0.0
July 21, 2017	2.68	1.93	3.01	5.79	5.72	21,953.8	27	10	18	0.0	21,388.1	21	20	19	0.0
December 13, 2017	2.66	1.96	2.41	5.62	6.37	25,433.2	25	10	18	0.1	24,868.2	25	20	18	0.0
February 12, 2018	2.60	2.20	3.29	5.75	6.46	--	20	10	18	0.1	--	25	20	20	0.0
May 15, 2018	2.66	2.01	2.41	5.82	6.53	29,104.8	24	10	18	0.0	28,539.7	25	20	19	0.0
August 16, 2018	2.63	2.08	2.49	5.81	6.58	31,273.0	26	9	18	0.0	30,707.0	22	20	18	0.0
October 3, 2018	2.64	1.98	2.66	5.75	6.52	32,427.7	24	10	18	0.0	31,861.0	22	20	18	0.0
January 16, 2019	2.51	1.98	2.69	5.75	6.46	34,947.8	22	8	18	0.0	34,381.6	24	18	20	0.0
April 5, 2019	2.71	2.14	2.71	5.77	6.65	36,839.8	22	10	19	0.0	36,274.5	24	20	19	0.0
August 2, 2019	2.63	2.20	2.98	5.73	6.58	39,672.0	22	10	19	0.0	39,106.7	24	20	19	0.0
December 23, 2019	2.69	2.10	2.45	5.79	6.52	43,131.3	26	10	16	0.0	42,565.8	19	20	18	0.0
March 31, 2020	2.66	2.10	2.05	5.78	6.54	45,505.2	24	8	10	0.0	44,939.6	19	20	18	0.0
June 17, 2020	2.64	2.04	2.26	5.79	6.58	47,375.8	26	8	14	0.0	46,810.2	20	20	18	0.0
September 16, 2020	2.12	2.53	2.34	5.87	6.57	49,669.6	26	6	8	0.0	48,994.1	20	18	20	0.0
December 8, 2020	2.76	2.31	2.11	5.55	6.59	51,555.6	26	14	8	0.0	50,990.6	30	22	16	0.0
December 9, 2020	5.09	5.20	3.22	2.72	3.21	51,580.1	25	15	8	0.0	51,014.6	35	26	16	0.0
December 15, 2020	5.17	5.16	3.05	2.42	4.07	51,721.5	25	14	8	0.0	51,155.9	35	26	16	0.0
March 29, 2021	5.26	5.37	2.98	2.36	4.00	54,058.2	21	13	10	0.0	53,492.7	24	21	18	0.0
June 30, 2021	5.19	5.23	3.00	2.41	3.99	56,290.0	21	12	10	0.0	55,725.3	25	21	18	0.0
September 30, 2021	5.27	5.36	3.09	2.45	4.08	58,498.1	22	12	10	0.0	57,932.6	24	20	18	0.0
December 28, 2021	5.27	5.36	3.03	2.43	4.03	60,635.4	21	12	10	0.0	60,069.8	24	22	18	0.0
March 24, 2022	5.18	5.30	3.10	2.52	4.27	62,698.0	21	12	10	0.0	62,132.4	25	21	18	0.0
June 30, 2022	5.17	5.32	3.06	2.45	4.11	65,050.0	21	12	10	0.0	64,484.4	25	21	18	0.0
December 16, 2022	5.30	5.23	3.08	2.61	4.30	69,109.1	26	12	10	0.0	68,543.5	25	25	18	0.0
January 25, 2023	5.55	5.32	3.08	2.5	4.32	70,067.10	25	12	10	0.0	69,501.40	36	27	12	0.0
June 30, 2023	5.48	5.34	3.13	2.5	4.25	73,809.80	25	12	10	0.0	73,244.10	35	25	12	0.0
September 27, 2023	5.82	5.53	3.14	2.61	4.46	75,995.60	27	14	10	0.0	75,379.30	31	22	12	0.0
November 13, 2023	5.72	5.44	3.04	2.63	4.31	77,073.7	28	15	15	0.0	76,507.9	29	24	16	0.0

Notes:

Blower 1: Rotron EN808, 7.5Hp, located in factory building blower room
Blower 2: Rotron EN808, 7.5Hp, located in factory building blower room
Garage Blower: Rotron EN909 15Hp, located in garage blower room
Zone 1: SSDS Green Line, Blower 2
Zone 2: SSDS Purple Line, Blower 2
Zone 3: SSDS Orange Line, Blower 2
Zone 4: SSDS Red Line, Blower 1
Zone 5: SSDS Blue Line, Blower 1
Perm. E.: SSDS Perimeter East Line, Garage Blower
Perm. W.: SSDS Perimeter West Line, Garage Blower
Garage: SSDS Garage Line, Garage Blower
Influent: Blower Influent Vacuum Gauge
K.O.: Blower Knockout Tank/Moisture Separator Vacuum Gauge
Effluent: Blower Effluent Pressure Gauge
PID: Photoionization Detector
in. w.c.: inches of water column
ppm: parts per million
--: measurement was not collected

Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

	Garage & Perimeter SSDS							
	SSDS Zones Inside Blower Room			Garage Blower				
Date	Perm. E. (in. w.c.)	Perm. W. (in. w.c.)	Garage (in. w.c.)	Runtime (hours)	Influent (in. w.c.)	K.O. (in. w.c.)	Effluent (in. w.c.)	PID (ppm)
March 6, 2015	2.20	2.00	0.90	--	28	19	--	--
March 12, 2015	2.63	2.34	0.52	--	--	--	--	--
March 19, 2015	2.57	2.23	0.56	--	--	--	--	--
March 24, 2015	2.61	2.17	0.51	--	--	--	--	--
April 2, 2015	2.52	2.20	0.51	2,859.4	24	11	2.2	0.0
April 7, 2015	2.67	2.24	0.53	2,980.0	24	27	2.5	0.0
April 14, 2015	2.88	2.39	0.57	3,148.8	27	18	2	0.0
April 22, 2015	2.89	2.48	0.58	3,340.4	27	18	2	0.0
May 5, 2015	2.72	2.23	0.61	3,651.1	27	19	2	0.0
May 11, 2015	2.61	2.18	0.51	3,796.6	27	19	2	0.0
May 27, 2015	2.59	2.16	0.57	4,179.4	27	19	2	0.0
June 2, 2015	2.7	2.28	0.68	4,323.1	28	18	2	0.0
June 9, 2015	2.72	2.12	0.57	4,492.1	28	18	2	--
July 29, 2015	2.48	2.02	0.66	5,502.1	27	19	2	0.0
August 6, 2015	2.45	1.95	0.56	5,698.0	27	18	2	0.0
September 11, 2015	2.88	2.34	0.52	6,559.7	27	19	2	0.0
December 31, 2015	2.94	2.52	0.64	9,226.1	27	19	2	0.0
January 21, 2016	2.68	2.24	0.56	9,727.9	27	19	2	0.2
March 22, 2016	2.79	2.33	0.62	11,192.6	27	19	2	0.1
April 22, 2016	2.68	2.17	0.57	11,836.2	27	18	2	0.0
May 27, 2016	2.72	2.14	0.63	12,482.2	27	18	2	0.0
June 21, 2016	2.65	2.26	0.59	13,373.5	27	19	2	0.0
March 22, 2017	2.71	2.21	0.61	--	28	18	2	0.0
May 5, 2017	2.96	2.55	0.59	--	27	19	2	0.0
July 21, 2017	2.62	2.14	0.68	22,856.7	25	18	2	0.0
December 13, 2017	2.59	2.17	0.53	26,335.8	25	18	2	0.0
February 12, 2018	2.52	1.97	0.54	--	25	18	2	0.0
May 15, 2018	2.70	2.24	0.52	30,007.3	26	18	2	0.0
August 16, 2018	2.51	2.06	0.60	32,115.6	27	19	2	0.0
October 3, 2018	2.29	2.69	0.58	33,329.5	27	18	2	0.1
January 16, 2019	2.57	2.14	0.53	35,849.1	27	18	2	0.0
April 5, 2019	2.49	1.99	0.56	37,741.0	27	18	2	0.0
August 2, 2019	2.68	2.34	0.54	40,573.2	27	18	2	0.0
December 23, 2019	2.26	1.77	0.53	44,034.1	25	15	2	0.0
March 31, 2020	2.39	1.77	0.45	46,406.5	23	16	2	0.0
June 17, 2020	2.15	1.75	0.61	48,278.5	25	16	3	0.0
September 16, 2020	2.06	1.52	0.53	50,461.1	25	10	2	0.0
December 8, 2020	1.45	1.82	0.83	52,457.5	25	15	2	0.0
December 9, 2020	1.45	1.80	0.85	52,482.0	21	10	2	0.0
December 15, 2020	--	--	--	52,482.0	--	--	2	--
March 29, 2021	1.91	1.65	0.94	55,113.9	20	10	10	0.0
June 30, 2021	1.37	1.74	0.83	57,346.4	21	10	10	0.0
September 30, 2021	1.69	1.35	0.92	59,554.1	20	10	10	0.0
December 28, 2021	1.75	1.40	0.88	61,691.3	20	10	10	0.0
March 24, 2022	2.10	1.69	0.93	63,753.9	20	10	10	0.0
June 30, 2022	2.05	1.62	0.90	66,106.9	20	10	10	0.0
December 16, 2022	2.06	1.55	0.96	70,164.8	21	10	10	0.0
January 25, 2023	1.76	1.38	0.77	71,123.40	19	11	10	0.0
June 30, 2023	1.5	1.21	0.96	74,865.60	22	10	10	0.0
September 27, 2023	1.72	1.3	0.92	77,001.20	20	10	10	0.0
November 13, 2023	1.55	1.18	0.82	78,129.7	20	11	10	0.0

Notes:

Blower 1: Rotron EN808, 7.5Hp, located in factory building blower room
Blower 2: Rotron EN808, 7.5Hp, located in factory building blower room
Garage Blower: Rotron EN909 15Hp, located in garage blower room
Zone 1: SSDS Green Line, Blower 2
Zone 2: SSDS Purple Line, Blower 2
Zone 3: SSDS Orange Line, Blower 2
Zone 4: SSDS Red Line, Blower 1
Zone 5: SSDS Blue Line, Blower 1
Perm. E.: SSDS Perimeter East Line, Garage Blower
Perm. W.: SSDS Perimeter West Line, Garage Blower
Garage: SSDS Garage Line, Garage Blower
Influent: Blower Influent Vacuum Gauge
K.O.: Blower Knockout Tank/Moisture Separator Vacuum Gauge
Effluent: Blower Effluent Pressure Gauge
PID: Photoionization Detector
in. w.c.: inches of water column
ppm: parts per million
--: measurement was not collected

Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

	SSDS Monitoring Points													
	Factory Building										Garage & Perimeter			
Date	MP1-1 (in. w.c.)	MP1-2 (in. w.c.)	MP2-1 (in. w.c.)	MP2-2 (in. w.c.)	MP3-1 (in. w.c.)	MP3-2 (in. w.c.)	MP4-1 (in. w.c.)	MP4-2 (in. w.c.)	MP5-1 (in. w.c.)	MP5-2 (in. w.c.)	MP6-1 (in. w.c.)	MP6-2 (in. w.c.)	MP6-3 (in. w.c.)	MP7-1 (in. w.c.)
June 9, 2015	N/A	0.03	0.000	0.367	0.11	N/A	0.007	1.155	0.017	0.01	0.164	0.084	N/A	1.978
July 29, 2015	0.042	0.042	0.009	0.135	0.034	0.019	N/A	1.178	N/A	0.012	0.129	0.094	0.038	1.838
August 6, 2015	0.119	0.041	0.009	0.386	0.032	0.008	0.030	1.168	0.021	0.118	0.131	0.092	0.039	1.808
September 11, 2015	0.111	0.049	0.008	0.393	0.035	0.010	0.035	1.177	0.019	0.120	0.129	0.040	0.090	1.799
December 31, 2015	0.123	0.031	0.008	N/A	0.024	0.010	0.025	0.991	0.008	0.189	0.124	0.266	0.011	2.259
January 21, 2016	0.112	0.020	0.008	N/A	0.013	0.013	0.023	0.915	0.021	0.278	0.105	0.230	0.066	1.963
March 22, 2016	0.104	0.024	0.007	0.025	0.023	0.014	0.020	0.891	0.011	0.375	0.114	0.252	0.075	2.112
April 22, 2016	0.155	0.026	0.004	0.759	0.015	0.012	0.017	0.898	0.017	0.098	0.117	0.258	0.076	5.733
May 27, 2016	0.109	0.034	0.006	0.549	0.021	0.010	0.025	0.912	0.022	0.205	0.131	0.267	0.081	2.064
June 21, 2016	0.122	0.030	0.009	0.261	0.019	0.012	0.022	0.940	0.014	0.240	0.128	0.269	0.086	2.021
March 22, 2017	0.087	0.019	0.021	0.219	0.007	0.010	0.014	0.847	0.004	0.401	0.125	0.246	0.083	2.014
May 5, 2017	0.101	0.021	0.006	0.205	0.005	0.011	0.019	0.889	0.026	0.071	0.191	0.254	N/A	2.309
July 21, 2017	0.118	0.036	0.012	0.236	0.007	0.014	0.020	0.938	0.008	0.101	0.128	0.244	0.082	1.944
December 13, 2017	0.086	0.022	0.006	0.194	0.011	0.011	0.016	0.877	0.012	0.329	0.129	0.248	0.080	1.933
February 12, 2018	0.118	0.040	0.009	0.089	0.031	0.010	0.032	1.155	0.027	0.118	0.134	0.035	0.091	1.808
May 15, 2018	0.104	0.023	0.009	0.195	0.008	0.014	0.019	0.883	0.012	0.015	0.129	1.950	0.080	2.080
August 16, 2018	0.110	0.032	0.005	0.229	0.007	0.009	0.023	0.937	0.011	0.010	0.127	0.222	0.085	1.883
October 3, 2018	0.109	0.028	0.006	0.253	0.008	0.010	0.044	0.927	0.010	0.010	0.124	0.244	0.078	2.123
January 16, 2019	0.121	0.022	0.009	0.180	0.008	0.009	0.019	0.860	0.012	0.119	0.128	0.235	0.095	1.969
April 5, 2019	0.119	0.020	0.004	0.191	0.007	0.010	0.015	0.850	0.004	0.008	0.109	0.228	0.068	1.845
August 2, 2019	0.108	0.022	0.006	0.196	0.008	0.010	0.022	0.910	0.009	0.008	0.120	0.221	0.082	2.070
December 23, 2019	0.119	0.025	0.007	0.182	0.007	0.012	0.019	0.854	0.010	0.006	0.112	0.192	0.068	1.745
March 31, 2020	0.135	0.026	0.008	0.190	0.006	0.009	0.023	0.852	0.010	0.007	0.115	0.192	0.073	1.871
June 17, 2020	0.109	0.024	0.008	0.214	0.008	0.013	0.020	0.904	0.011	0.011	0.112	0.201	0.081	1.591
September 16, 2020	0.105	0.021	0.020	0.210	0.010	0.010	0.040	0.922	0.013	0.009	0.118	0.190	0.104	1.370
December 8, 2020	--	0.022	0.005	0.214	0.007	0.007	0.016	0.872	0.010	0.014	0.161	0.258	--	1.371
December 9, 2020	--	0.030	0.013	0.331	0.015	0.012	0.013	0.504	0.023	0.011	0.162	0.252	0.103	1.335
December 15, 2020	0.147	--	--	--	--	--	--	--	--	--	--	--	--	--
March 29, 2021	0.167	0.028	0.066	0.298	0.010	0.011	0.012	0.459	0.021	0.009	0.156	0.231	0.120	1.392
June 30, 2021	0.159	0.032	0.059	0.303	0.011	0.013	0.012	0.472	0.024	0.008	0.149	0.241	0.117	1.399
September 30, 2021	0.144	0.032	0.065	0.314	0.013	0.012	0.011	0.489	0.029	0.008	0.152	0.233	0.121	1.389
December 28, 2021	0.136	0.037	0.061	0.285	0.015	0.013	0.012	0.482	0.025	0.009	0.150	0.227	0.126	1.390
March 24, 2022	0.148	0.039	0.058	0.278	0.017	0.015	0.013	0.411	0.021	0.009	0.179	0.254	0.127	1.407
June 30, 2022	0.144	0.034	0.056	0.272	0.016	0.013	0.012	0.428	0.024	0.009	0.168	0.232	0.122	1.398
December 16, 2022	0.145	0.026	0.005	0.335	0.005	0.012	0.006	0.500	0.009	0.010	0.220	0.220	0.121	1.420
January 25, 2023	0.145	0.031	0.006	0.332	0.005	0.007	0.012	0.504	0.006	0.016	0.153	0.215	0.11	1.287
June 30, 2023	0.150	0.028	0.005	0.330	0.007	0.008	0.010	0.489	0.007	0.012	0.202	0.217	0.162	1.201
September 27, 2023	0.139	0.037	0.021	0.297	0.016	0.018	0.013	0.445	0.020	0.010	0.166	0.240	0.171	1.481
November 13, 2023	0.148	0.031	0.000[1]	0.367	0.004	0.020	0.011	0.513	0.008	0.005	0.159	0.219	0.104	1.046

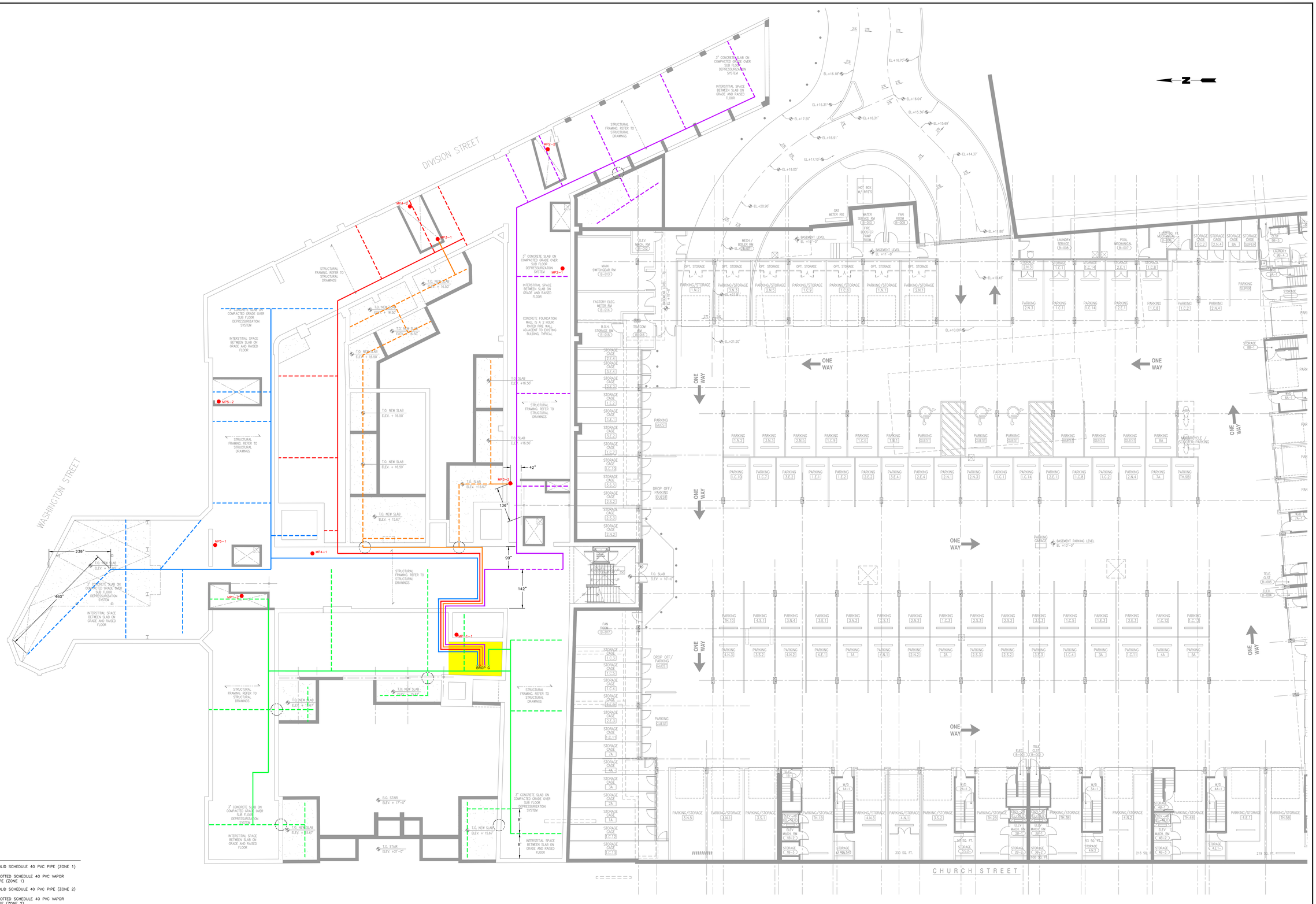
Notes:

Zone 1: SSDS Green Line, Blower 2
Zone 2: SSDS Purple Line, Blower 2
Zone 3: SSDS Orange Line, Blower 2
Zone 4: SSDS Red Line, Blower 1
Zone 5: SSDS Blue Line, Blower 1
Zone 6: SSDS Garage Line, Garage Blower
Zone 7: SSDS Perimeter East/West Line, Garage Blower
MP2-1 installed incorrectly. Corrected on July 7, 2015
N/A: measurement was not collected, point inaccessible
Vacuum readings were previously reported in negative pressure (shown as negative value). This was corrected by reporting vacuum readings as postive values.
SSDS Zones, SSDS Monitoring Points, Influent, and K.O. reported in terms of vacuum. Effluent reported in terms of pressure.

[1]On November 13, 2023, the reading at MP2-1 was 0.000 in. wc.. All readtings before November 2023 met the minimum vacuum of 0.004 in. wc. Furthermore, the vacuum reading at MP2-1 on January 25, 2024 was 0.006 in. w.c, which meets the minimum requirement. The reading at MP2-1 in November 2023 appears to be an anomaly based upon the historical and current operating data and not an indication of an issue with the system operation.

ATTACHMENT 2

Factory Building SSDS As-Builts



LEGEND

- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 1)
- EXISTING 4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 1)
- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 2)
- EXISTING 4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 2)
- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 3)
- EXISTING 4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 3)
- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 4)
- EXISTING 4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 4)
- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 5)
- EXISTING4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 5)
- MP4-1 EXISTING VACUUM MONITORING POINT
- BLOWER LOCATION

AS-BUILT DRAWINGS

10' 0 10'

NO.	DATE	REVISION DESCRIPTION	INT.
2	11/25/14	AS-BUILTS	C.P.
1	2/13/13	REVISED TO SHOW NEW SYSTEM LAYOUT	C.P.

STATE OF NEW YORK · CHARLES J. MCHUGH · 069109 · LICENSED PROFESSIONAL ENGINEER

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ROUX
Roux Environmental Engineering and Geology, D.P.C.
209 SHAFTER STREET ISLANDIA NEW YORK 11749
(631) 232-2600

PROJECT NAME:
FINAL ENGINEERING REPORT
BULOVA WATCH CASE FACTORY SITE NO. 152139

PROJECT FOR:
WATCHCASE FACTORY CONDOMINIUM
SAG HARBOR, NEW YORK

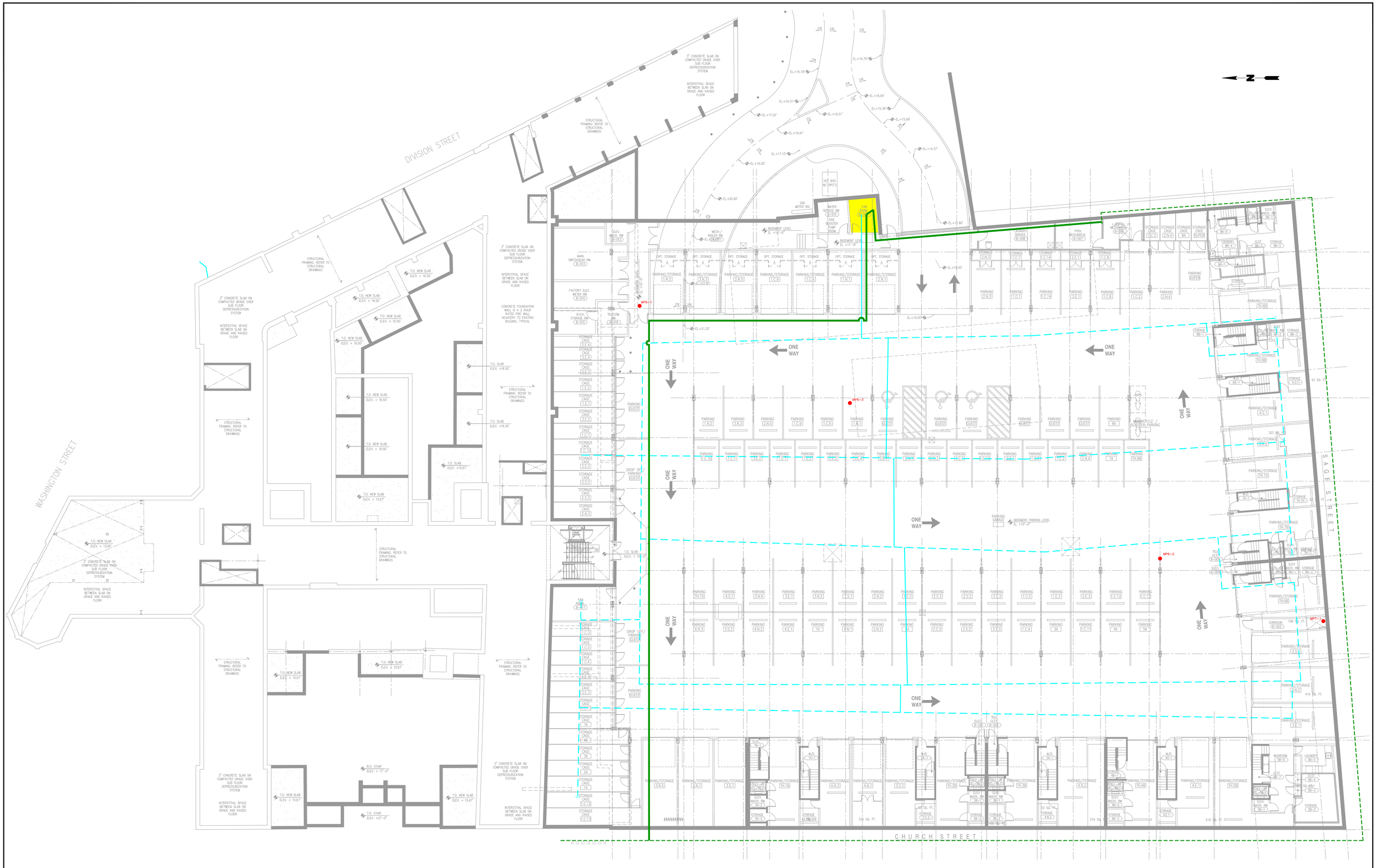
TITLE:
FACTORY BUILDING SSDS
AS-BUILTS

PLATE
1

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ATTACHMENT 3

Garage SSDS As-Builts



LEGEND

- EXISTING 6" SUB-SLAB VAPOR COLLECTION PIPE
- EXISTING 6" SOLID SUB-SLAB HEADER PIPE
- EXISTING 6" EXTERNAL VAPOR COLLECTION PIPE
- EXISTING 6" SOLID VAPOR COLLECTION PIPE HUNG FROM GARAGE CEILING
- MP6-1 EXISTING VACUUM MONITORING POINT
- BLOWER LOCATION

AS-BUILT DRAWINGS

10' 0 10'

NO.	DATE	REVISION DESCRIPTION	INT.
2	11/25/14	AS-BUILTS	C.P.
1	2/13/12	REVISED TO SHOW NEW SYSTEM LAYOUT	C.P.

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(631) 232-2600

PROJECT NAME:
FINAL ENGINERING REPORT
BULOVA WATCH CASE FACTORY SITE NO. 152139

PROJECT FOR:
WATCHCASE FACTORY CONDOMINIUM
SAG HARBOR, NEW YORK

TITLE:
GARAGE SSDS AS-BUILTS

PLATE
2

X:\CAD PROJECTS\2802\Y\000\Y106\2802.0001Y106.11.DWG

March 25, 2024

Mr. Christopher Grady
New York State Department of Environmental Conservation
50 Circle Road
Stony Brook, New York 11790

Re: SSDS Vacuum Monitoring Summary
First Quarter 2024
Bulova Watch Factory Site No. 152139
15 Church Street, Village of Sag Harbor, New York

Dear Mr. Grady:

On behalf of the Watchcase Factory Condominium, Roux Environmental Engineering and Geology, D.P.C. (Roux), is submitting this letter report summarizing the results of the sub-slab depressurization system (SSDS) monitoring activities performed at the Bulova Watch Factory Site No. 152139, 15 Church Street, Village of Sag Harbor, New York (Site), during the First Quarter of 2024. SSDS monitoring activities were conducted to confirm that the system is performing as designed in accordance with the January 27, 2009 Site Management Plan (SMP), the May 7, 2012 SMP Addendum No. 1, the October 2017 SMP Addendum No. 2, the March 2021 SMP Addendum No. 3, and the January 20, 2015 Operation, Maintenance, and Monitoring (OM&M) Plan submitted to the New York State Department of Environmental Conservation (NYSDEC). A brief description of SSDS operations and monitoring results during the First Quarter 2024 reporting period are provided below.

SSDS

The SSDS consists of a two-blower system in the former factory building (Factory Building SSDS) and a separate one-blower system beneath the garage (Garage SSDS). The SSDS consists of five vapor-collection piping legs beneath the factory building, one vapor-collection piping leg beneath the garage, and one vapor-collection piping leg around the perimeter of the garage adjacent to the retaining wall. Vacuum readings for each piping leg were collected at the SSDS monitoring points. There are two monitoring points for each piping leg in the factory building, three monitoring points for the garage piping leg, and one monitoring point for the perimeter piping leg (Plates 1 and 2).

The Factory Building and Garage SSDSs are required to maintain a vacuum of 0.004 inches of water column (in. w.c.) or greater vacuum at the monitoring points. The SSDSs are equipped with visual and electronic monitoring devices to verify performance within the required range of vacuum. Each individual SSDS leg is equipped with a vacuum gauge and a data logger, which are designed to record vacuum readings to 0.001 in. w.c. Each data logger displays a digital readout to provide real-time indications that the system is operating properly and records the most recent three months of vacuum readings for reference, if necessary. An electronic auto-dialer will automatically contact Roux personnel, building management, and/or maintenance staff if a system interruption occurs.

Quarterly SSDS Inspection and Monitoring

First Quarter 2024 SSDS inspection and monitoring activities were performed on January 25, 2024. In addition to visual inspections of the SSDS mechanical and above-grade piping components, the following parameters were monitored:

- Vacuum/pressure and air flow readings at the blower inlet and outlet;

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California ■ Illinois ■ Massachusetts ■ New Jersey ■ New York ■ Texas ■ Virginia

- Vacuum readings at the moisture separator tank;
- Vacuum readings at the SSDS monitoring points; and
- Photoionization detector (PID) readings at the blower outlets.

During the Site visit, vacuum readings were collected at each SSDS monitoring point using a handheld micromanometer. Vacuum monitoring results from SSDS start-up through the First Quarter of 2024 are summarized in Table 1 (attached). It should be noted that the reading at MP2-1 was 0.000 in. w.c. on November 13, 2023. Given that all readings before November 2023 met the vacuum goal of 0.004 in. w.c. or greater vacuum, and the vacuum reading at MP2-1 on January 25, 2024, was 0.006 in. w.c., the reading at MP2-1 in November 2023 appears to be an anomaly based upon the historical and current monitoring data and not an indication of an issue with the system operation. A review of Table 1 indicates that the Factory Building and Garage SSDSs were operating properly (i.e., maintaining a vacuum of 0.004 in. w.c. or greater vacuum at each monitoring point).

If you have any questions or require additional information regarding this monitoring summary, please feel free to contact the undersigned at 631-232-2600.

Sincerely,

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY, D.P.C.

Rachel Fenwick
Project Engineer

Noelle Clarke, P.E.
Principal Engineer

Attachments

1. SSDS Monitoring Summary Table
2. Factory Building SSDS As-Builts
3. Garage SSDS As-Builts

ATTACHMENTS

1. SSDS Monitoring Summary Tables
2. Factory Building SSDS As-Builts
3. Garage SSDS As-Builts

ATTACHMENT 1

SSDS Monitoring Summary Tables

Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

	Factory Building SSDS														
	SSDS Zones Inside Blower Room					Blower 1					Blower 2				
Date	Zone 1 (in. w.c.)	Zone 2 (in. w.c.)	Zone 3 (in. w.c.)	Zone 4 (in. w.c.)	Zone 5 (in. w.c.)	Runtime (hours)	Influent (in. w.c.)	K.O (in. w.c.)	Effluent (in. w.c.)	PID (ppm)	Runtime (hours)	Influent (in. w.c.)	K.O (in. w.c.)	Effluent (in. w.c.)	PID (ppm)
March 6, 2015	2.50	2.40	1.90	5.80	6.50	--	25	31	--	--	--	20	8	--	--
March 12, 2015	2.58	2.06	3.24	5.93	6.73	--	--	--	--	--	--	--	--	--	--
March 19, 2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
March 24, 2015	6.38	5.76	3.15	5.77	6.46	--	--	--	--	--	--	--	--	--	--
April 2, 2015	2.51	2.06	3.21	5.81	6.52	2,750.6	22	31	20	0.0	1,943.8	20	10	19	0.0
April 7, 2015	2.44	2.06	3.3	5.64	6.47	2,871.4	25	32	20	0.0	2,064.4	20	19	20	0.0
April 14, 2015	2.59	1.97	3.51	5.38	6.73	3,040.2	32	30	20	0.0	2,033.2	20	20	20	0.0
April 22, 2015	2.48	2.02	3.24	5.53	6.46	3,231.2	25	31	20	0.0	2,424.1	21	10	18	0.0
May 5, 2015	2.52	2.03	3.19	5.78	6.42	3,512.8	18	32	20	0.0	2,705.7	21	9	18	0.0
May 11, 2015	2.54	1.98	3.28	5.72	6.53	3,621.5	25	31	20	0.0	2,814.4	21	10	17	0.0
May 27, 2015	2.78	2.26	3.37	0.31	0.46	3,821.9	Blower 1 down since May 23, 2015				3,112.8	29	32	6	0.0
June 2, 2015	2.78	2.26	3.4	0.31	0.43	3,821.9	Blower 1 down since May 23, 2015				3,256.6	29	38	6	0.0
June 9, 2015	2.44	2.07	3.24	5.66	6.5	3,833.0	20	10	15	--	3,485.2	24	30	20	--
July 29, 2015	2.61	2.07	3.24	3.82	6.59	4,853.2	21	10	19	0.0	4,288.2	25	20	20	0.0
August 6, 2015	2.63	2.17	3.31	5.72	6.46	5,048.4	21	9	18	0.0	4,483.5	25	20	20	0.0
September 11, 2015	2.62	2.14	3.3	5.74	6.55	5,910.9	21	10	19	0.0	5,340.0	24	20	19	0.0
December 31, 2015	2.68	2.02	3.3	5.76	6.48	8,576.6	22	10	18	0.2	8,011.3	21	20	20	0.1
January 21, 2016	2.62	2.04	3.25	5.67	6.45	9,078.4	22	10	18	0.2	8,513.5	22	19	19	0.1
March 22, 2016	2.66	1.98	3.31	5.78	6.42	10,543.2	25	20	20	0.0	9,979.0	21	10	18	0.1
April 22, 2016	2.6	2.04	3.26	5.62	6.37	11,286.5	22	20	20	0.1	10,721.4	21	9	18	0.0
May 27, 2016	2.63	2.05	3.24	5.61	6.44	12,195.4	22	20	20	0.0	11,463.2	21	10	18	0.0
June 21, 2016	2.68	2.07	3.2	5.65	6.42	12,724.4	23	20	20	0.0	12,159.4	21	9	18	0.0
March 22, 2017	2.63	2.09	3.29	5.69	6.43	19,046.5	--	20	20	0.0	18,481.0	21	--	--	--
May 5, 2017	2.62	2.03	2.99	5.79	6.47	20,105.3	21	--	18	0.0	19,540.3	27	20	20	0.0
July 21, 2017	2.68	1.93	3.01	5.79	5.72	21,953.8	27	10	18	0.0	21,388.1	21	20	19	0.0
December 13, 2017	2.66	1.96	2.41	5.62	6.37	25,433.2	25	10	18	0.1	24,868.2	25	20	18	0.0
February 12, 2018	2.60	2.20	3.29	5.75	6.46	--	20	10	18	0.1	--	25	20	20	0.0
May 15, 2018	2.66	2.01	2.41	5.82	6.53	29,104.8	24	10	18	0.0	28,539.7	25	20	19	0.0
August 16, 2018	2.63	2.08	2.49	5.81	6.58	31,273.0	26	9	18	0.0	30,707.0	22	20	18	0.0
October 3, 2018	2.64	1.98	2.66	5.75	6.52	32,427.7	24	10	18	0.0	31,861.0	22	20	18	0.0
January 16, 2019	2.51	1.98	2.69	5.75	6.46	34,947.8	22	8	18	0.0	34,381.6	24	18	20	0.0
April 5, 2019	2.71	2.14	2.71	5.77	6.65	36,839.8	22	10	19	0.0	36,274.5	24	20	19	0.0
August 2, 2019	2.63	2.20	2.98	5.73	6.58	39,672.0	22	10	19	0.0	39,106.7	24	20	19	0.0
December 23, 2019	2.69	2.10	2.45	5.79	6.52	43,131.3	26	10	16	0.0	42,565.8	19	20	18	0.0
March 31, 2020	2.66	2.10	2.05	5.78	6.54	45,505.2	24	8	10	0.0	44,939.6	19	20	18	0.0
June 17, 2020	2.64	2.04	2.26	5.79	6.58	47,375.8	26	8	14	0.0	46,810.2	20	20	18	0.0
September 16, 2020	2.12	2.53	2.34	5.87	6.57	49,669.6	26	6	8	0.0	48,994.1	20	18	20	0.0
December 8, 2020	2.76	2.31	2.11	5.55	6.59	51,555.6	26	14	8	0.0	50,990.6	30	22	16	0.0
December 9, 2020	5.09	5.20	3.22	2.72	3.21	51,580.1	25	15	8	0.0	51,014.6	35	26	16	0.0
December 15, 2020	5.17	5.16	3.05	2.42	4.07	51,721.5	25	14	8	0.0	51,155.9	35	26	16	0.0
March 29, 2021	5.26	5.37	2.98	2.36	4.00	54,058.2	21	13	10	0.0	53,492.7	24	21	18	0.0
June 30, 2021	5.19	5.23	3.00	2.41	3.99	56,290.0	21	12	10	0.0	55,725.3	25	21	18	0.0
September 30, 2021	5.27	5.36	3.09	2.45	4.08	58,498.1	22	12	10	0.0	57,932.6	24	20	18	0.0
December 28, 2021	5.27	5.36	3.03	2.43	4.03	60,635.4	21	12	10	0.0	60,069.8	24	22	18	0.0
March 24, 2022	5.18	5.30	3.10	2.52	4.27	62,698.0	21	12	10	0.0	62,132.4	25	21	18	0.0
June 30, 2022	5.17	5.32	3.06	2.45	4.11	65,050.0	21	12	10	0.0	64,484.4	25	21	18	0.0
December 16, 2022	5.30	5.23	3.08	2.61	4.30	69,109.1	26	12	10	0.0	68,543.5	25	25	18	0.0
January 25, 2023	5.55	5.32	3.08	2.5	4.32	70,067.10	25	12	10	0.0	69,501.40	36	27	12	0.0
June 30, 2023	5.48	5.34	3.13	2.5	4.25	73,809.80	25	12	10	0.0	73,244.10	35	25	12	0.0
September 27, 2023	5.82	5.53	3.14	2.61	4.46	75,995.60	27	14	10	0.0	75,379.30	31	22	12	0.0
November 13, 2023	5.72	5.44	3.04	2.63	4.31	77,073.7	28	15	15	0.0	76,507.9	29	24	16	0.0
January 25, 2024	5.65	5.42	3.12	2.54	4.33	78826.8	28	15	11	0	78261.1	30	20	13	0

Notes:

Blower 1: Rotron EN808, 7.5Hp, located in factory building blower room
Blower 2: Rotron EN808, 7.5Hp, located in factory building blower room
Garage Blower: Rotron EN909 15Hp, located in garage blower room
Zone 1: SSDS Green Line, Blower 2
Zone 2: SSDS Purple Line, Blower 2
Zone 3: SSDS Orange Line, Blower 2
Zone 4: SSDS Red Line, Blower 1
Zone 5: SSDS Blue Line, Blower 1
Perm. E.: SSDS Perimeter East Line, Garage Blower
Perm. W.: SSDS Perimeter West Line, Garage Blower
Garage: SSDS Garage Line, Garage Blower
Influent: Blower Influent Vacuum Gauge
K.O.: Blower Knockout Tank/Moisture Separator Vacuum Gauge
Effluent: Blower Effluent Pressure Gauge
PID: Photoionization Detector
in. w.c.: inches of water column
ppm: parts per million
--: measurement was not collected

Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

	Garage & Perimeter SSDS							
	SSDS Zones Inside Blower Room			Garage Blower				
Date	Perm. E. (in. w.c.)	Perm. W. (in. w.c.)	Garage (in. w.c.)	Runtime (hours)	Influent (in. w.c.)	K.O. (in. w.c.)	Effluent (in. w.c.)	PID (ppm)
March 6, 2015	2.20	2.00	0.90	--	28	19	--	--
March 12, 2015	2.63	2.34	0.52	--	--	--	--	--
March 19, 2015	2.57	2.23	0.56	--	--	--	--	--
March 24, 2015	2.61	2.17	0.51	--	--	--	--	--
April 2, 2015	2.52	2.20	0.51	2,859.4	24	11	2.2	0.0
April 7, 2015	2.67	2.24	0.53	2,980.0	24	27	2.5	0.0
April 14, 2015	2.88	2.39	0.57	3,148.8	27	18	2	0.0
April 22, 2015	2.89	2.48	0.58	3,340.4	27	18	2	0.0
May 5, 2015	2.72	2.23	0.61	3,651.1	27	19	2	0.0
May 11, 2015	2.61	2.18	0.51	3,796.6	27	19	2	0.0
May 27, 2015	2.59	2.16	0.57	4,179.4	27	19	2	0.0
June 2, 2015	2.7	2.28	0.68	4,323.1	28	18	2	0.0
June 9, 2015	2.72	2.12	0.57	4,492.1	28	18	2	--
July 29, 2015	2.48	2.02	0.66	5,502.1	27	19	2	0.0
August 6, 2015	2.45	1.95	0.56	5,698.0	27	18	2	0.0
September 11, 2015	2.88	2.34	0.52	6,559.7	27	19	2	0.0
December 31, 2015	2.94	2.52	0.64	9,226.1	27	19	2	0.0
January 21, 2016	2.68	2.24	0.56	9,727.9	27	19	2	0.2
March 22, 2016	2.79	2.33	0.62	11,192.6	27	19	2	0.1
April 22, 2016	2.68	2.17	0.57	11,836.2	27	18	2	0.0
May 27, 2016	2.72	2.14	0.63	12,482.2	27	18	2	0.0
June 21, 2016	2.65	2.26	0.59	13,373.5	27	19	2	0.0
March 22, 2017	2.71	2.21	0.61	--	28	18	2	0.0
May 5, 2017	2.96	2.55	0.59	--	27	19	2	0.0
July 21, 2017	2.62	2.14	0.68	22,856.7	25	18	2	0.0
December 13, 2017	2.59	2.17	0.53	26,335.8	25	18	2	0.0
February 12, 2018	2.52	1.97	0.54	--	25	18	2	0.0
May 15, 2018	2.70	2.24	0.52	30,007.3	26	18	2	0.0
August 16, 2018	2.51	2.06	0.60	32,115.6	27	19	2	0.0
October 3, 2018	2.29	2.69	0.58	33,329.5	27	18	2	0.1
January 16, 2019	2.57	2.14	0.53	35,849.1	27	18	2	0.0
April 5, 2019	2.49	1.99	0.56	37,741.0	27	18	2	0.0
August 2, 2019	2.68	2.34	0.54	40,573.2	27	18	2	0.0
December 23, 2019	2.26	1.77	0.53	44,034.1	25	15	2	0.0
March 31, 2020	2.39	1.77	0.45	46,406.5	23	16	2	0.0
June 17, 2020	2.15	1.75	0.61	48,278.5	25	16	3	0.0
September 16, 2020	2.06	1.52	0.53	50,461.1	25	10	2	0.0
December 8, 2020	1.45	1.82	0.83	52,457.5	25	15	2	0.0
December 9, 2020	1.45	1.80	0.85	52,482.0	21	10	2	0.0
December 15, 2020	--	--	--	52,482.0	--	--	2	--
March 29, 2021	1.91	1.65	0.94	55,113.9	20	10	10	0.0
June 30, 2021	1.37	1.74	0.83	57,346.4	21	10	10	0.0
September 30, 2021	1.69	1.35	0.92	59,554.1	20	10	10	0.0
December 28, 2021	1.75	1.40	0.88	61,691.3	20	10	10	0.0
March 24, 2022	2.10	1.69	0.93	63,753.9	20	10	10	0.0
June 30, 2022	2.05	1.62	0.90	66,106.9	20	10	10	0.0
December 16, 2022	2.06	1.55	0.96	70,164.8	21	10	10	0.0
January 25, 2023	1.76	1.38	0.77	71,123.40	19	11	10	0.0
June 30, 2023	1.5	1.21	0.96	74,865.60	22	10	10	0.0
September 27, 2023	1.72	1.3	0.92	77,001.20	20	10	10	0.0
November 13, 2023	1.55	1.18	0.82	78,129.7	20	11	10	0.0
January 25, 2024	1.45	1.81	0.89	79882.6	21	10	10	0

Notes:

Blower 1: Rotron EN808, 7.5Hp, located in factory building blower room
Blower 2: Rotron EN808, 7.5Hp, located in factory building blower room
Garage Blower: Rotron EN909 15Hp, located in garage blower room
Zone 1: SSDS Green Line, Blower 2
Zone 2: SSDS Purple Line, Blower 2
Zone 3: SSDS Orange Line, Blower 2
Zone 4: SSDS Red Line, Blower 1
Zone 5: SSDS Blue Line, Blower 1
Perm. E.: SSDS Perimeter East Line, Garage Blower
Perm. W.: SSDS Perimeter West Line, Garage Blower
Garage: SSDS Garage Line, Garage Blower
Influent: Blower Influent Vacuum Gauge
K.O.: Blower Knockout Tank/Moisture Separator Vacuum Gauge
Effluent: Blower Effluent Pressure Gauge
PID: Photoionization Detector
in. w.c.: inches of water column
ppm: parts per million
--: measurement was not collected

Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

	SSDS Monitoring Points													
	Factory Building										Garage & Perimeter			
Date	MP1-1 (in. w.c.)	MP1-2 (in. w.c.)	MP2-1 (in. w.c.)	MP2-2 (in. w.c.)	MP3-1 (in. w.c.)	MP3-2 (in. w.c.)	MP4-1 (in. w.c.)	MP4-2 (in. w.c.)	MP5-1 (in. w.c.)	MP5-2 (in. w.c.)	MP6-1 (in. w.c.)	MP6-2 (in. w.c.)	MP6-3 (in. w.c.)	MP7-1 (in. w.c.)
June 9, 2015	N/A	0.03	0.000	0.367	0.11	N/A	0.007	1.155	0.017	0.01	0.164	0.084	N/A	1.978
July 29, 2015	0.042	0.042	0.009	0.135	0.034	0.019	N/A	1.178	N/A	0.012	0.129	0.094	0.038	1.838
August 6, 2015	0.119	0.041	0.009	0.386	0.032	0.008	0.030	1.168	0.021	0.118	0.131	0.092	0.039	1.808
September 11, 2015	0.111	0.049	0.008	0.393	0.035	0.010	0.035	1.177	0.019	0.120	0.129	0.040	0.090	1.799
December 31, 2015	0.123	0.031	0.008	N/A	0.024	0.010	0.025	0.991	0.008	0.189	0.124	0.266	0.011	2.259
January 21, 2016	0.112	0.020	0.008	N/A	0.013	0.013	0.023	0.915	0.021	0.278	0.105	0.230	0.066	1.963
March 22, 2016	0.104	0.024	0.007	0.025	0.023	0.014	0.020	0.891	0.011	0.375	0.114	0.252	0.075	2.112
April 22, 2016	0.155	0.026	0.004	0.759	0.015	0.012	0.017	0.898	0.017	0.098	0.117	0.258	0.076	5.733
May 27, 2016	0.109	0.034	0.006	0.549	0.021	0.010	0.025	0.912	0.022	0.205	0.131	0.267	0.081	2.064
June 21, 2016	0.122	0.030	0.009	0.261	0.019	0.012	0.022	0.940	0.014	0.240	0.128	0.269	0.086	2.021
March 22, 2017	0.087	0.019	0.021	0.219	0.007	0.010	0.014	0.847	0.004	0.401	0.125	0.246	0.083	2.014
May 5, 2017	0.101	0.021	0.006	0.205	0.005	0.011	0.019	0.889	0.026	0.071	0.191	0.254	N/A	2.309
July 21, 2017	0.118	0.036	0.012	0.236	0.007	0.014	0.020	0.938	0.008	0.101	0.128	0.244	0.082	1.944
December 13, 2017	0.086	0.022	0.006	0.194	0.011	0.011	0.016	0.877	0.012	0.329	0.129	0.248	0.080	1.933
February 12, 2018	0.118	0.040	0.009	0.089	0.031	0.010	0.032	1.155	0.027	0.118	0.134	0.035	0.091	1.808
May 15, 2018	0.104	0.023	0.009	0.195	0.008	0.014	0.019	0.883	0.012	0.015	0.129	1.950	0.080	2.080
August 16, 2018	0.110	0.032	0.005	0.229	0.007	0.009	0.023	0.937	0.011	0.010	0.127	0.222	0.085	1.883
October 3, 2018	0.109	0.028	0.006	0.253	0.008	0.010	0.044	0.927	0.010	0.010	0.124	0.244	0.078	2.123
January 16, 2019	0.121	0.022	0.009	0.180	0.008	0.009	0.019	0.860	0.012	0.119	0.128	0.235	0.095	1.969
April 5, 2019	0.119	0.020	0.004	0.191	0.007	0.010	0.015	0.850	0.004	0.008	0.109	0.228	0.068	1.845
August 2, 2019	0.108	0.022	0.006	0.196	0.008	0.010	0.022	0.910	0.009	0.008	0.120	0.221	0.082	2.070
December 23, 2019	0.119	0.025	0.007	0.182	0.007	0.012	0.019	0.854	0.010	0.006	0.112	0.192	0.068	1.745
March 31, 2020	0.135	0.026	0.008	0.190	0.006	0.009	0.023	0.852	0.010	0.007	0.115	0.192	0.073	1.871
June 17, 2020	0.109	0.024	0.008	0.214	0.008	0.013	0.020	0.904	0.011	0.011	0.112	0.201	0.081	1.591
September 16, 2020	0.105	0.021	0.020	0.210	0.010	0.010	0.040	0.922	0.013	0.009	0.118	0.190	0.104	1.370
December 8, 2020	--	0.022	0.005	0.214	0.007	0.007	0.016	0.872	0.010	0.014	0.161	0.258	--	1.371
December 9, 2020	--	0.030	0.013	0.331	0.015	0.012	0.013	0.504	0.023	0.011	0.162	0.252	0.103	1.335
December 15, 2020	0.147	--	--	--	--	--	--	--	--	--	--	--	--	--
March 29, 2021	0.167	0.028	0.066	0.298	0.010	0.011	0.012	0.459	0.021	0.009	0.156	0.231	0.120	1.392
June 30, 2021	0.159	0.032	0.059	0.303	0.011	0.013	0.012	0.472	0.024	0.008	0.149	0.241	0.117	1.399
September 30, 2021	0.144	0.032	0.065	0.314	0.013	0.012	0.011	0.489	0.029	0.008	0.152	0.233	0.121	1.389
December 28, 2021	0.136	0.037	0.061	0.285	0.015	0.013	0.012	0.482	0.025	0.009	0.150	0.227	0.126	1.390
March 24, 2022	0.148	0.039	0.058	0.278	0.017	0.015	0.013	0.411	0.021	0.009	0.179	0.254	0.127	1.407
June 30, 2022	0.144	0.034	0.056	0.272	0.016	0.013	0.012	0.428	0.024	0.009	0.168	0.232	0.122	1.398
December 16, 2022	0.145	0.026	0.005	0.335	0.005	0.012	0.006	0.500	0.009	0.010	0.220	0.220	0.121	1.420
January 25, 2023	0.145	0.031	0.006	0.332	0.005	0.007	0.012	0.504	0.006	0.016	0.153	0.215	0.11	1.287
June 30, 2023	0.150	0.028	0.005	0.330	0.007	0.008	0.010	0.489	0.007	0.012	0.202	0.217	0.162	1.201
September 27, 2023	0.139	0.037	0.021	0.297	0.016	0.018	0.013	0.445	0.020	0.010	0.166	0.240	0.171	1.481
November 13, 2023	0.148	0.031	0.000[1]	0.367	0.004	0.020	0.011	0.513	0.008	0.005	0.159	0.219	0.104	1.046
January 25, 2024	0.148	0.029	0.008	0.322	0.005	0.025	0.019	0.491	0.015	0.005	0.172	0.204	0.098	1.127

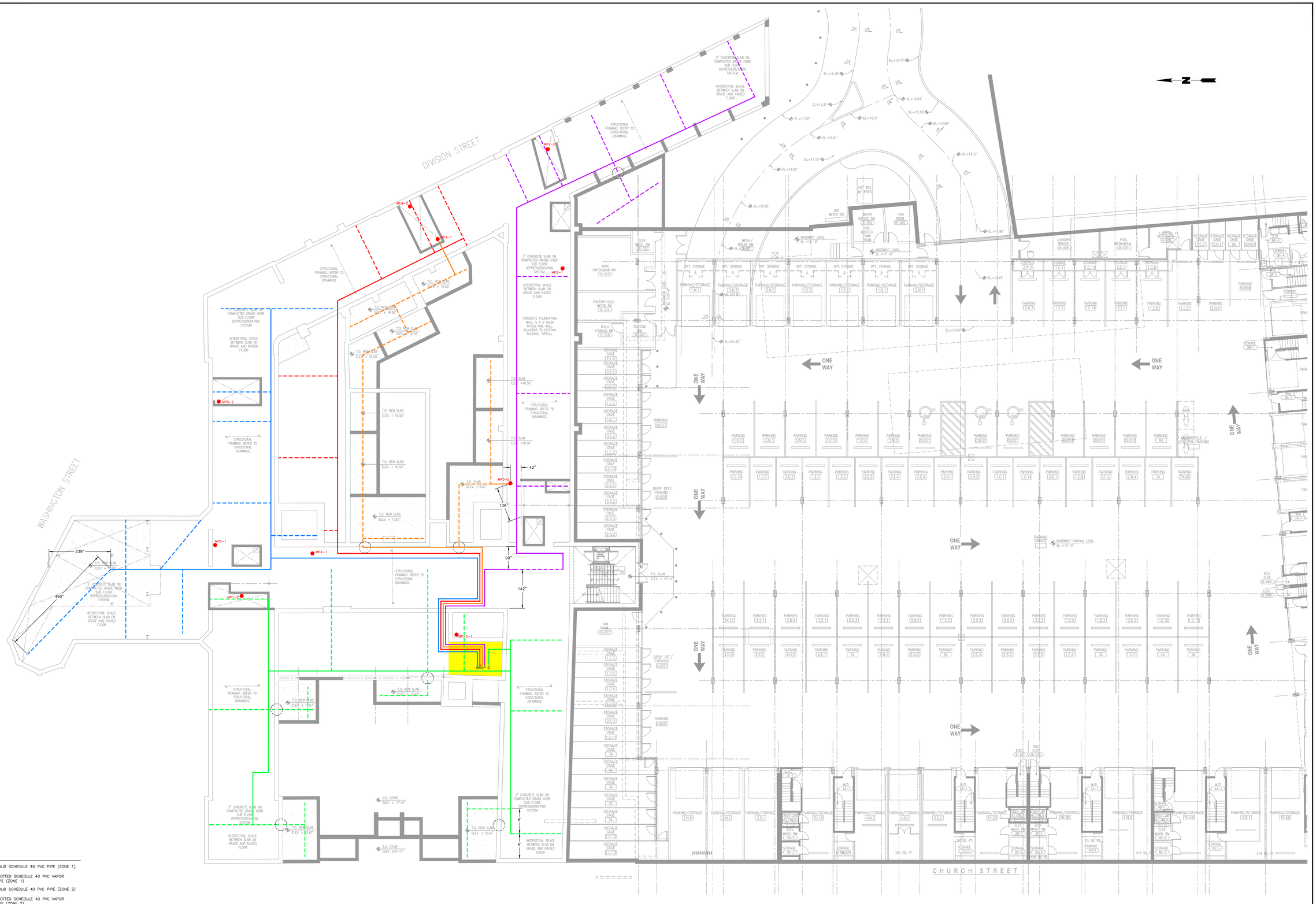
Notes:

Zone 1: SSDS Green Line, Blower 2
Zone 2: SSDS Purple Line, Blower 2
Zone 3: SSDS Orange Line, Blower 2
Zone 4: SSDS Red Line, Blower 1
Zone 5: SSDS Blue Line, Blower 1
Zone 6: SSDS Garage Line, Garage Blower
Zone 7: SSDS Perimeter East/West Line, Garage Blower
MP2-1 installed incorrectly. Corrected on July 7, 2015
N/A: measurement was not collected, point inaccessible
Vacuum readings were previously reported in negative pressure (shown as negative value). This was corrected by reporting vacuum readings as postive values.
SSDS Zones, SSDS Monitoring Points, Influent, and K.O. reported in terms of vacuum. Effluent reported in terms of pressure.

[1]On November 13, 2023, the reading at MP2-1 was 0.000 in. wc.. All readtings before November 2023 met the minimum vacuum of 0.004 in. wc. Furthermore, the vacuum reading at MP2-1 on January 25, 2024 was 0.006 in. w.c, which meets the minimum requirement. The reading at MP2-1 in November 2023 appears to be an anomaly based upon the historical and current operating data and not an indication of an issue with the system operation.

ATTACHMENT 2

Factory Building SSDS As-Builts



LEGEND

- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 1)
- EXISTING 4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 1)
- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 2)
- EXISTING 4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 2)
- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 3)
- EXISTING 4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 3)
- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 4)
- EXISTING 4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 4)
- EXISTING 4" SOLID SCHEDULE 40 PVC PIPE (ZONE 5)
- EXISTING4" SLOTTED SCHEDULE 40 PVC VAPOR COLLECTION PIPE (ZONE 5)
- MP4-1 EXISTING VACUUM MONITORING POINT
- BLOWER LOCATION

AS-BUILT DRAWINGS

10' 0 10'

NO.	DATE	REVISION DESCRIPTION	INT.
2	11/25/14	AS-BUILTS	C.P.
1	2/13/13	REVISED TO SHOW NEW SYSTEM LAYOUT	C.P.

STATE OF NEW YORK · CHARLES J. MCHUGH · 069109 · LICENSED PROFESSIONAL ENGINEER

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DESIGNED BY: C.P.	CHECKED BY: C.J.M.
DRAWING SCALE: AS SHOWN	PLOT SCALE: 1:1
DRAWING DATE: 06APR21	PRINT TYPE: COLOR
OFFICE: NY	PAPER SIZE: ARCH E
PROJECT NO.: 2802.0001Y000	
DRAWING FILE: 2802.0001Y106.11.DWG	

ROUX
Roux Environmental Engineering and Geology, D.P.C.
209 SHAFTER STREET ISLANDIA NEW YORK 11749
(631) 232-2600

PROJECT NAME:
FINAL ENGINEERING REPORT
BULOVA WATCH CASE FACTORY SITE NO. 152139

PROJECT FOR:
WATCHCASE FACTORY CONDOMINIUM
SAG HARBOR, NEW YORK

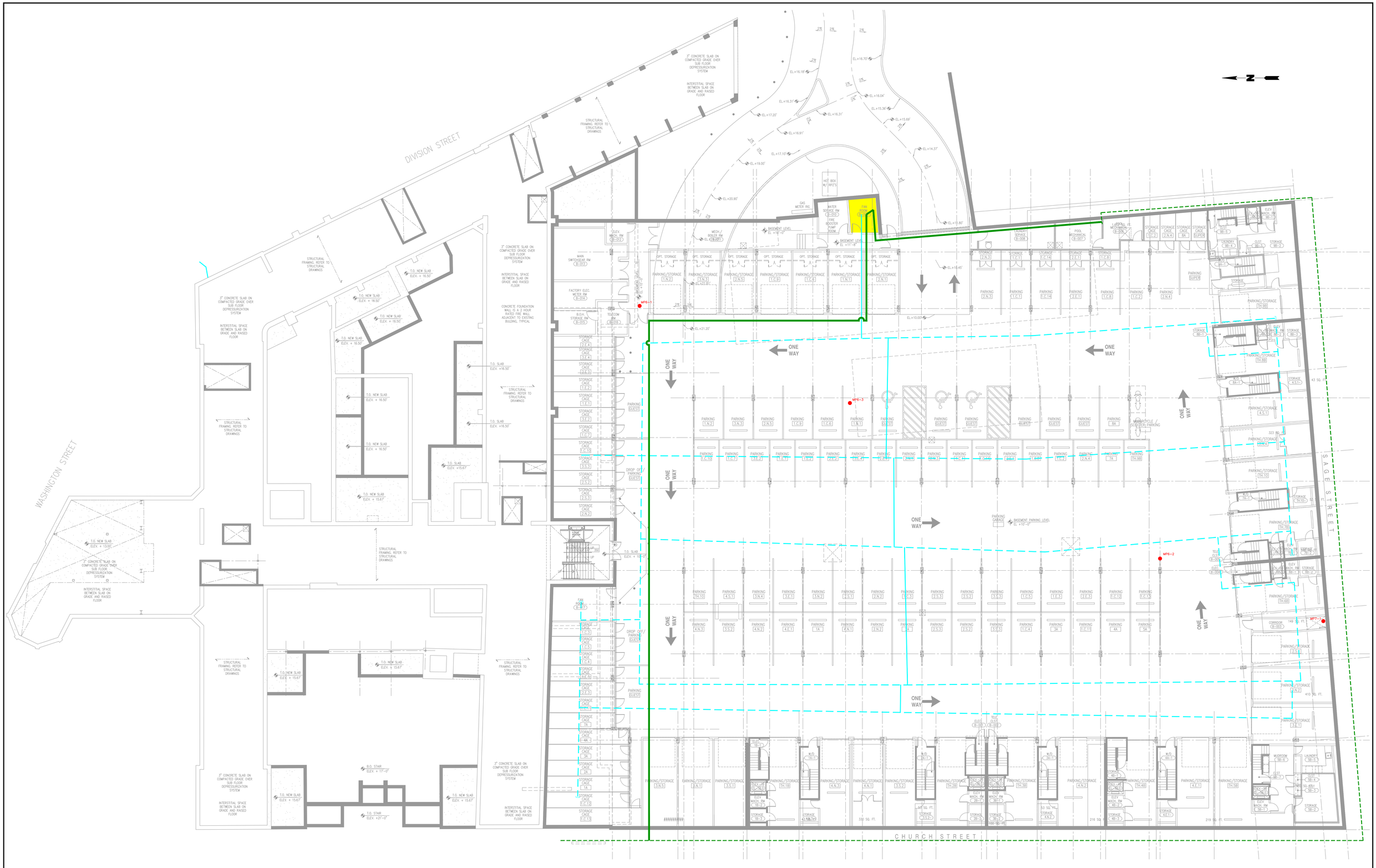
TITLE:
FACTORY BUILDING SSDS
AS-BUILTS

PLATE
1

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ATTACHMENT 3

Garage SSDS As-Builts



LEGEND

- EXISTING 6" SUB-SLAB VAPOR COLLECTION PIPE
- EXISTING 6" SOLID SUB-SLAB HEADER PIPE
- EXISTING 6" EXTERNAL VAPOR COLLECTION PIPE
- EXISTING 6" SOLID VAPOR COLLECTION PIPE HUNG FROM GARAGE CEILING
- MP6-1 EXISTING VACUUM MONITORING POINT
- BLOWER LOCATION

AS-BUILT DRAWINGS

10' 0 10'

NO.	DATE	REVISION DESCRIPTION	INT.
2	11/25/14	AS-BUILTS	C.P.
1	2/13/12	REVISED TO SHOW NEW SYSTEM LAYOUT	C.P.

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DRAWING DATE: 06APR21	PRINT TYPE: COLOR
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DRAWING FILE: 2802.0001Y106.11.DWG	

ROUX
Roux Environmental Engineering and Geology, D.P.C.
209 SHAFTER STREET ISLANDIA NEW YORK 11749
(631) 232-2600

PROJECT NAME:
FINAL ENGINERING REPORT
BULOVA WATCH CASE FACTORY SITE NO. 152139

PROJECT FOR:
WATCHCASE FACTORY CONDOMINIUM
SAG HARBOR, NEW YORK

TITLE:
GARAGE SSDS AS-BUILTS

PLATE
2

X:\CAD PROJECTS\2802\Y\000\Y106\2802.0001Y106.11.DWG

APPENDIX C

Analytical Results

ANALYTICAL REPORT

Lab Number:	L1961522
Client:	Roux Env. Eng. & Geology, DPC 209 Shafter Street Islandia, NY 11749-5074
ATTN:	Nicholas Palumbo
Phone:	(631) 630-2433
Project Name:	WATCHCASE FACTORY
Project Number:	2802.0001Y000
Report Date:	01/02/20

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Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

Six Park Row, Mansfield, MA 02048
508-261-7467 (Fax) -- -- - emccarter@mansfieldma.com

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000

Lab Number: L1961522
Report Date: 01/02/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1961522-01	FB_EFF_1	SOIL_VAPOR	SAG HARBOR, NY	12/23/19 14:43	12/23/19
L1961522-02	FB_EFF_2	SOIL_VAPOR	SAG HARBOR, NY	12/23/19 14:36	12/23/19
L1961522-03	GAR_EFF	SOIL_VAPOR	SAG HARBOR, NY	12/23/19 14:55	12/23/19

Project Name:	WATCHCASE FACTORY	**Lab Number:**	L1961522
Project Number:	2802.0001Y000	**Report Date:**	01/02/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	WATCHCASE FACTORY	**Lab Number:**	L1961522
Project Number:	2802.0001Y000	**Report Date:**	01/02/20

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on December 20, 2019. The canister certification results are provided as an addendum.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 01/02/20

AIR

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L1961522
Report Date: 01/02/20

SAMPLE RESULTS

Lab ID: L1961522-01
Client ID: FB_EFF_1
Sample Location: SAG HARBOR, NY

Date Collected: 12/23/19 14:43
Date Received: 12/23/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 12/29/19 06:04
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.488	0.200	--	2.41	0.989	--		1
Chloromethane	0.347	0.200	--	0.717	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	28.9	5.00	--	54.5	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	6.31	1.00	--	15.0	2.38	--		1
Trichlorofluoromethane	0.269	0.200	--	1.51	1.12	--		1
Isopropanol	1.46	0.500	--	3.59	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.583	0.500	--	1.72	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000

Lab Number: L1961522
Report Date: 01/02/20

SAMPLE RESULTS

Lab ID: L1961522-01
Client ID: FB_EFF_1
Sample Location: SAG HARBOR, NY

Date Collected: 12/23/19 14:43
Date Received: 12/23/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.264	0.200	--	1.29	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.249	0.200	--	0.878	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.254	0.200	--	0.811	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	2.30	0.200	--	12.4	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.463	0.200	--	1.74	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L1961522
Report Date: 01/02/20

SAMPLE RESULTS

Lab ID: L1961522-01
Client ID: FB_EFF_1
Sample Location: SAG HARBOR, NY

Date Collected: 12/23/19 14:43
Date Received: 12/23/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.423	0.400	--	1.84	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	97		60-140

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L1961522
Report Date: 01/02/20

SAMPLE RESULTS

Lab ID: L1961522-02
Client ID: FB_EFF_2
Sample Location: SAG HARBOR, NY

Date Collected: 12/23/19 14:36
Date Received: 12/23/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 12/29/19 07:23
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.481	0.200	--	2.38	0.989	--		1
Chloromethane	0.309	0.200	--	0.638	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	34.3	5.00	--	64.6	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.71	1.00	--	13.6	2.38	--		1
Trichlorofluoromethane	0.266	0.200	--	1.49	1.12	--		1
Isopropanol	0.896	0.500	--	2.20	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.648	0.500	--	1.91	1.47	--		1
cis-1,2-Dichloroethene	1.68	0.200	--	6.66	0.793	--		1

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L1961522
Report Date: 01/02/20

SAMPLE RESULTS

Lab ID: L1961522-02
Client ID: FB_EFF_2
Sample Location: SAG HARBOR, NY

Date Collected: 12/23/19 14:36
Date Received: 12/23/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.345	0.200	--	1.68	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.486	0.200	--	1.71	0.705	--		1
1,1,1-Trichloroethane	0.295	0.200	--	1.61	1.09	--		1
Benzene	0.348	0.200	--	1.11	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	22.3	0.200	--	120	1.07	--		1
2,2,4-Trimethylpentane	0.335	0.200	--	1.56	0.934	--		1
Heptane	0.320	0.200	--	1.31	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.646	0.200	--	2.43	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.778	0.200	--	5.28	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.216	0.200	--	0.938	0.869	--		1

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L1961522
Report Date: 01/02/20

SAMPLE RESULTS

Lab ID: L1961522-02
Client ID: FB_EFF_2
Sample Location: SAG HARBOR, NY

Date Collected: 12/23/19 14:36
Date Received: 12/23/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	1.15	0.400	--	5.00	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.332	0.200	--	1.44	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.201	0.200	--	0.988	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	98		60-140

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L1961522
Report Date: 01/02/20

SAMPLE RESULTS

Lab ID: L1961522-03
Client ID: GAR_EFF
Sample Location: SAG HARBOR, NY

Date Collected: 12/23/19 14:55
Date Received: 12/23/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 12/29/19 08:03
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.488	0.200	--	2.41	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	0.269	0.200	--	1.51	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000

Lab Number: L1961522
Report Date: 01/02/20

SAMPLE RESULTS

Lab ID: L1961522-03
Client ID: GAR_EFF
Sample Location: SAG HARBOR, NY

Date Collected: 12/23/19 14:55
Date Received: 12/23/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.313	0.200	--	1.53	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	0.201	0.200	--	1.26	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	10.4	0.200	--	55.9	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.289	0.200	--	1.09	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.247	0.200	--	1.67	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L1961522
Report Date: 01/02/20

SAMPLE RESULTS

Lab ID: L1961522-03
Client ID: GAR_EFF
Sample Location: SAG HARBOR, NY

Date Collected: 12/23/19 14:55
Date Received: 12/23/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.492	0.400	--	2.14	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	94		60-140

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L1961522
Report Date: 01/02/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/28/19 15:00

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1325572-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L1961522
Report Date: 01/02/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/28/19 15:00

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1325572-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L1961522
Report Date: 01/02/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/28/19 15:00

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1325572-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Lab Control Sample Analysis
Batch Quality Control

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000

Lab Number: L1961522
Report Date: 01/02/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1325572-3								
Dichlorodifluoromethane	95		-		70-130	-		
Chloromethane	78		-		70-130	-		
Freon-114	90		-		70-130	-		
Vinyl chloride	96		-		70-130	-		
1,3-Butadiene	85		-		70-130	-		
Bromomethane	99		-		70-130	-		
Chloroethane	99		-		70-130	-		
Ethanol	77		-		40-160	-		
Vinyl bromide	96		-		70-130	-		
Acetone	83		-		40-160	-		
Trichlorofluoromethane	122		-		70-130	-		
Isopropanol	82		-		40-160	-		
1,1-Dichloroethene	104		-		70-130	-		
Tertiary butyl Alcohol	86		-		70-130	-		
Methylene chloride	85		-		70-130	-		
3-Chloropropene	91		-		70-130	-		
Carbon disulfide	78		-		70-130	-		
Freon-113	104		-		70-130	-		
trans-1,2-Dichloroethene	100		-		70-130	-		
1,1-Dichloroethane	102		-		70-130	-		
Methyl tert butyl ether	96		-		70-130	-		
2-Butanone	101		-		70-130	-		
cis-1,2-Dichloroethene	104		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000

Lab Number: L1961522
Report Date: 01/02/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1325572-3								
Ethyl Acetate	114		-		70-130	-		
Chloroform	107		-		70-130	-		
Tetrahydrofuran	93		-		70-130	-		
1,2-Dichloroethane	117		-		70-130	-		
n-Hexane	93		-		70-130	-		
1,1,1-Trichloroethane	108		-		70-130	-		
Benzene	87		-		70-130	-		
Carbon tetrachloride	114		-		70-130	-		
Cyclohexane	93		-		70-130	-		
1,2-Dichloropropane	92		-		70-130	-		
Bromodichloromethane	100		-		70-130	-		
1,4-Dioxane	101		-		70-130	-		
Trichloroethene	97		-		70-130	-		
2,2,4-Trimethylpentane	97		-		70-130	-		
Heptane	84		-		70-130	-		
cis-1,3-Dichloropropene	91		-		70-130	-		
4-Methyl-2-pentanone	90		-		70-130	-		
trans-1,3-Dichloropropene	81		-		70-130	-		
1,1,2-Trichloroethane	97		-		70-130	-		
Toluene	87		-		70-130	-		
2-Hexanone	76		-		70-130	-		
Dibromochloromethane	100		-		70-130	-		
1,2-Dibromoethane	86		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: WATCHCASE FACTORY

Project Number: 2802.0001Y000

Lab Number: L1961522

Report Date: 01/02/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1325572-3								
Tetrachloroethene	89		-		70-130	-		
Chlorobenzene	88		-		70-130	-		
Ethylbenzene	92		-		70-130	-		
p/m-Xylene	92		-		70-130	-		
Bromoform	100		-		70-130	-		
Styrene	87		-		70-130	-		
1,1,2,2-Tetrachloroethane	98		-		70-130	-		
o-Xylene	95		-		70-130	-		
4-Ethyltoluene	95		-		70-130	-		
1,3,5-Trimethylbenzene	98		-		70-130	-		
1,2,4-Trimethylbenzene	102		-		70-130	-		
Benzyl chloride	120		-		70-130	-		
1,3-Dichlorobenzene	99		-		70-130	-		
1,4-Dichlorobenzene	100		-		70-130	-		
1,2-Dichlorobenzene	104		-		70-130	-		
1,2,4-Trichlorobenzene	112		-		70-130	-		
Hexachlorobutadiene	111		-		70-130	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000

Lab Number: L1961522
Report Date: 01/02/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1325572-5 QC Sample: L1961522-01 Client ID: FB_EFF_1						
Dichlorodifluoromethane	0.488	0.491	ppbV	1		25
Chloromethane	0.347	0.360	ppbV	4		25
Freon-114	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	28.9	29.2	ppbV	1		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	6.31	6.73	ppbV	6		25
Trichlorofluoromethane	0.269	0.267	ppbV	1		25
Isopropanol	1.46	1.53	ppbV	5		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000

Lab Number: L1961522
Report Date: 01/02/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1325572-5 QC Sample: L1961522-01 Client ID: FB_EFF_1						
2-Butanone	0.583	0.590	ppbV	1		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25
Chloroform	0.264	0.258	ppbV	2		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.249	0.244	ppbV	2		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Benzene	0.254	0.255	ppbV	0		25
Carbon tetrachloride	ND	ND	ppbV	NC		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
Trichloroethene	2.30	2.32	ppbV	1		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000

Lab Number: L1961522
Report Date: 01/02/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1325572-5 QC Sample: L1961522-01 Client ID: FB_EFF_1						
Toluene	0.463	0.469	ppbV	1		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Tetrachloroethene	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	ND	ND	ppbV	NC		25
p/m-Xylene	0.423	0.416	ppbV	2		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	ND	ND	ppbV	NC		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Project Name: WATCHCASE FACTORY

Lab Number: L1961522

Project Number: 2802.0001Y000

Report Date: 01/02/20

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1961522-01	FB_EFF_1	01347	SV20	12/20/19	310219		-	-	-	Pass	17.5	15.4	13
L1961522-01	FB_EFF_1	2024	2.7L Can	12/20/19	310219	L1960550-06	Pass	-29.2	-6.0	-	-	-	-
L1961522-02	FB_EFF_2	01335	SV20	12/20/19	310219		-	-	-	Pass	18.3	16.2	12
L1961522-02	FB_EFF_2	2856	2.7L Can	12/20/19	310219	L1960550-06	Pass	-29.2	-4.7	-	-	-	-
L1961522-03	GAR_EFF	01338	SV20	12/20/19	310219		-	-	-	Pass	17.1	15.1	12
L1961522-03	GAR_EFF	2598	2.7L Can	12/20/19	310219	L1960550-06	Pass	-29.4	-7.3	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1960550
Report Date: 01/02/20

Air Canister Certification Results

Lab ID: L1960550-06
Client ID: CAN 103 SHELF 8
Sample Location:

Date Collected: 12/18/19 09:00
Date Received: 12/18/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 12/18/19 20:59
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1960550

Project Number: CANISTER QC BAT **Report Date:** 01/02/20

Air Canister Certification Results

Lab ID: L1960550-06
Client ID: CAN 103 SHELF 8
Sample Location:

Date Collected: 12/18/19 09:00
Date Received: 12/18/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1960550
Report Date: 01/02/20

Air Canister Certification Results

Lab ID: L1960550-06
Client ID: CAN 103 SHELF 8
Sample Location:

Date Collected: 12/18/19 09:00
Date Received: 12/18/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1960550
Report Date: 01/02/20

Air Canister Certification Results

Lab ID: L1960550-06
Client ID: CAN 103 SHELF 8
Sample Location:

Date Collected: 12/18/19 09:00
Date Received: 12/18/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1960550

Project Number: CANISTER QC BAT **Report Date:** 01/02/20

Air Canister Certification Results

Lab ID: L1960550-06
Client ID: CAN 103 SHELF 8
Sample Location:

Date Collected: 12/18/19 09:00
Date Received: 12/18/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	96		60-140

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1960550

Project Number: CANISTER QC BAT **Report Date:** 01/02/20

Air Canister Certification Results

Lab ID: L1960550-06
Client ID: CAN 103 SHELF 8
Sample Location:

Date Collected: 12/18/19 09:00
Date Received: 12/18/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/18/19 20:59
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1960550

Project Number: CANISTER QC BAT **Report Date:** 01/02/20

Air Canister Certification Results

Lab ID: L1960550-06
Client ID: CAN 103 SHELF 8
Sample Location:

Date Collected: 12/18/19 09:00
Date Received: 12/18/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1960550

Project Number: CANISTER QC BAT **Report Date:** 01/02/20

Air Canister Certification Results

Lab ID: L1960550-06
Client ID: CAN 103 SHELF 8
Sample Location:

Date Collected: 12/18/19 09:00
Date Received: 12/18/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	96		60-140
bromochloromethane	101		60-140
chlorobenzene-d5	96		60-140

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000

Lab Number: L1961522
Report Date: 01/02/20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1961522-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L1961522-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L1961522-03A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name:	WATCHCASE FACTORY	**Lab Number:**	L1961522
Project Number:	2802.0001Y000	**Report Date:**	01/02/20

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: Data Usability Report

Project Name:	WATCHCASE FACTORY	**Lab Number:**	L1961522
Project Number:	2802.0001Y000	**Report Date:**	01/02/20

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

Report Format: Data Usability Report

Project Name:	WATCHCASE FACTORY	**Lab Number:**	L1961522
Project Number:	2802.0001Y000	**Report Date:**	01/02/20

Data Qualifiers

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

AIR ANALYSIS

PAGE 2 OF 1

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/24/19

ALPHA Job #: L1961522

Client Information

Client: RWK Environmental D.P.C.
Address: 209 Shafter St
Islandia, NY 11749
Phone: 631-232-2600
Fax: 631-630-9898
Email: npalumbo@rwkinc.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Watchhouse Factory
Project Location: Bay Harbor, NY
Project #: 2802.0021Y000
Project Manager: Nick Palumbo
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

ANALYSIS

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH (Select Non-petroleum HCs ☐)	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
L1922-01	FB_Eff_1	12/23/19	1243	1443	-29.35	-5.76	SV	NP	2.7	2024	01347	X					
02	FB_Eff_2	12/23/19	1236	1436	-29.59	-4.24	SV	NP	2.7	2356	01335	X					
03	Gar_Eff	12/23/19	1255	1455	-29.92	-7.59	SV	NP	2.7	2598	01338	X					

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type: 5 5

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
MD MGAR	12/23/19 12-23-19 2100	MD MGAR (AAL)	12-23-19 1740
	12/24 0230		12/24/19 0230

ANALYTICAL REPORT

Lab Number:	L2055076
Client:	Roux Env. Eng. & Geology, DPC 209 Shafter Street Islandia, NY 11749-5074
ATTN:	Nicholas Palumbo
Phone:	(631) 630-2433
Project Name:	WATCHCASE FACTORY
Project Number:	2802.0001Y000
Report Date:	12/16/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000

Lab Number: L2055076
Report Date: 12/16/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2055076-01	GAR_EFF	SOIL_VAPOR	SAG HARBOR, NY	12/09/20 15:09	12/10/20
L2055076-02	FB_EFF_2	SOIL_VAPOR	SAG HARBOR, NY	12/09/20 14:59	12/10/20
L2055076-03	FB_EFF_1	SOIL_VAPOR	SAG HARBOR, NY	12/09/20 15:02	12/10/20

Project Name:	WATCHCASE FACTORY	**Lab Number:**	L2055076
Project Number:	2802.0001Y000	**Report Date:**	12/16/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	WATCHCASE FACTORY	**Lab Number:**	L2055076
Project Number:	2802.0001Y000	**Report Date:**	12/16/20

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on December 8, 2020. The canister certification results are provided as an addendum.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 12/16/20

AIR

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L2055076
Report Date: 12/16/20

SAMPLE RESULTS

Lab ID: L2055076-01
Client ID: GAR_EFF
Sample Location: SAG HARBOR, NY

Date Collected: 12/09/20 15:09
Date Received: 12/10/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 12/16/20 05:34
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.416	0.200	--	2.06	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	6.29	5.00	--	11.9	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	1.56	1.00	--	3.71	2.38	--		1
Trichlorofluoromethane	0.209	0.200	--	1.17	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.651	0.500	--	2.26	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000

Lab Number: L2055076
Report Date: 12/16/20

SAMPLE RESULTS

Lab ID: L2055076-01
Client ID: GAR_EFF
Sample Location: SAG HARBOR, NY

Date Collected: 12/09/20 15:09
Date Received: 12/10/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.468	0.200	--	2.29	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	1.54	0.200	--	5.43	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	7.85	0.200	--	42.2	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	0.560	0.500	--	2.29	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.11	0.200	--	4.18	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L2055076
Report Date: 12/16/20

SAMPLE RESULTS

Lab ID: L2055076-01
Client ID: GAR_EFF
Sample Location: SAG HARBOR, NY

Date Collected: 12/09/20 15:09
Date Received: 12/10/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.428	0.400	--	1.86	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	96		60-140

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L2055076
Report Date: 12/16/20

SAMPLE RESULTS

Lab ID: L2055076-02
Client ID: FB_EFF_2
Sample Location: SAG HARBOR, NY

Date Collected: 12/09/20 14:59
Date Received: 12/10/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 12/16/20 06:16
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.412	0.200	--	2.04	0.989	--		1
Chloromethane	0.333	0.200	--	0.688	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	27.9	5.00	--	52.6	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.34	1.00	--	10.3	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	1.18	0.500	--	2.90	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.524	0.500	--	1.55	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L2055076
Report Date: 12/16/20

SAMPLE RESULTS

Lab ID: L2055076-02
Client ID: FB_EFF_2
Sample Location: SAG HARBOR, NY

Date Collected: 12/09/20 14:59
Date Received: 12/10/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.515	0.200	--	1.82	0.705	--		1
1,1,1-Trichloroethane	0.234	0.200	--	1.28	1.09	--		1
Benzene	0.211	0.200	--	0.674	0.639	--		1
Carbon tetrachloride	0.210	0.200	--	1.32	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	28.2	0.200	--	152	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.578	0.200	--	2.18	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	1.33	0.200	--	9.02	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L2055076
Report Date: 12/16/20

SAMPLE RESULTS

Lab ID: L2055076-02
Client ID: FB_EFF_2
Sample Location: SAG HARBOR, NY

Date Collected: 12/09/20 14:59
Date Received: 12/10/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	94		60-140

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L2055076
Report Date: 12/16/20

SAMPLE RESULTS

Lab ID: L2055076-03
Client ID: FB_EFF_1
Sample Location: SAG HARBOR, NY

Date Collected: 12/09/20 15:02
Date Received: 12/10/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 12/16/20 06:57
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.445	0.200	--	2.20	0.989	--		1
Chloromethane	0.390	0.200	--	0.805	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	69.2	5.00	--	130	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	7.45	1.00	--	17.7	2.38	--		1
Trichlorofluoromethane	0.213	0.200	--	1.20	1.12	--		1
Isopropanol	1.42	0.500	--	3.49	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.758	0.500	--	2.24	1.47	--		1
cis-1,2-Dichloroethene	2.12	0.200	--	8.41	0.793	--		1

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000

Lab Number: L2055076
Report Date: 12/16/20

SAMPLE RESULTS

Lab ID: L2055076-03
Client ID: FB_EFF_1
Sample Location: SAG HARBOR, NY

Date Collected: 12/09/20 15:02
Date Received: 12/10/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.265	0.200	--	1.29	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	1.34	0.200	--	4.72	0.705	--		1
1,1,1-Trichloroethane	0.264	0.200	--	1.44	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	10.8	0.200	--	58.0	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.562	0.200	--	2.12	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.265	0.200	--	1.80	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L2055076
Report Date: 12/16/20

SAMPLE RESULTS

Lab ID: L2055076-03
Client ID: FB_EFF_1
Sample Location: SAG HARBOR, NY

Date Collected: 12/09/20 15:02
Date Received: 12/10/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.500	0.400	--	2.17	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	89		60-140

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L2055076
Report Date: 12/16/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/15/20 16:29

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1445531-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L2055076
Report Date: 12/16/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/15/20 16:29

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1445531-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000
Lab Number: L2055076
Report Date: 12/16/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/15/20 16:29

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1445531-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Lab Control Sample Analysis
Batch Quality Control

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000

Lab Number: L2055076
Report Date: 12/16/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1445531-3								
Dichlorodifluoromethane	98		-		70-130	-		
Chloromethane	102		-		70-130	-		
Freon-114	98		-		70-130	-		
Vinyl chloride	90		-		70-130	-		
1,3-Butadiene	100		-		70-130	-		
Bromomethane	86		-		70-130	-		
Chloroethane	89		-		70-130	-		
Ethanol	85		-		40-160	-		
Vinyl bromide	100		-		70-130	-		
Acetone	77		-		40-160	-		
Trichlorofluoromethane	102		-		70-130	-		
Isopropanol	82		-		40-160	-		
1,1-Dichloroethene	91		-		70-130	-		
Tertiary butyl Alcohol	89		-		70-130	-		
Methylene chloride	106		-		70-130	-		
3-Chloropropene	96		-		70-130	-		
Carbon disulfide	90		-		70-130	-		
Freon-113	100		-		70-130	-		
trans-1,2-Dichloroethene	84		-		70-130	-		
1,1-Dichloroethane	85		-		70-130	-		
Methyl tert butyl ether	95		-		70-130	-		
2-Butanone	96		-		70-130	-		
cis-1,2-Dichloroethene	85		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000

Lab Number: L2055076
Report Date: 12/16/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1445531-3								
Ethyl Acetate	85		-		70-130	-		
Chloroform	90		-		70-130	-		
Tetrahydrofuran	90		-		70-130	-		
1,2-Dichloroethane	89		-		70-130	-		
n-Hexane	93		-		70-130	-		
1,1,1-Trichloroethane	109		-		70-130	-		
Benzene	91		-		70-130	-		
Carbon tetrachloride	107		-		70-130	-		
Cyclohexane	92		-		70-130	-		
1,2-Dichloropropane	96		-		70-130	-		
Bromodichloromethane	102		-		70-130	-		
1,4-Dioxane	96		-		70-130	-		
Trichloroethene	100		-		70-130	-		
2,2,4-Trimethylpentane	96		-		70-130	-		
Heptane	109		-		70-130	-		
cis-1,3-Dichloropropene	108		-		70-130	-		
4-Methyl-2-pentanone	112		-		70-130	-		
trans-1,3-Dichloropropene	96		-		70-130	-		
1,1,2-Trichloroethane	107		-		70-130	-		
Toluene	91		-		70-130	-		
2-Hexanone	107		-		70-130	-		
Dibromochloromethane	106		-		70-130	-		
1,2-Dibromoethane	103		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000

Lab Number: L2055076
Report Date: 12/16/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1445531-3								
Tetrachloroethene	94		-		70-130	-		
Chlorobenzene	97		-		70-130	-		
Ethylbenzene	98		-		70-130	-		
p/m-Xylene	101		-		70-130	-		
Bromoform	106		-		70-130	-		
Styrene	103		-		70-130	-		
1,1,2,2-Tetrachloroethane	101		-		70-130	-		
o-Xylene	104		-		70-130	-		
4-Ethyltoluene	103		-		70-130	-		
1,3,5-Trimethylbenzene	106		-		70-130	-		
1,2,4-Trimethylbenzene	112		-		70-130	-		
Benzyl chloride	107		-		70-130	-		
1,3-Dichlorobenzene	109		-		70-130	-		
1,4-Dichlorobenzene	104		-		70-130	-		
1,2-Dichlorobenzene	106		-		70-130	-		
1,2,4-Trichlorobenzene	126		-		70-130	-		
Hexachlorobutadiene	123		-		70-130	-		

Project Name: WATCHCASE FACTORY

Lab Number: L2055076

Project Number: 2802.0001Y000

Report Date: 12/16/20

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2055076-01	GAR_EFF	01090	SV20	12/08/20	337785		-	-	-	Pass	17.6	16.4	7
L2055076-01	GAR_EFF	481	2.7L Can	12/08/20	337785	L2054339-02	Pass	-29.3	-7.1	-	-	-	-
L2055076-02	FB_EFF_2	0901	SV20	12/08/20	337785		-	-	-	Pass	17.8	16.6	7
L2055076-02	FB_EFF_2	2863	2.7L Can	12/08/20	337785	L2054339-02	Pass	-29.2	-6.1	-	-	-	-
L2055076-03	FB_EFF_1	01935	SV20	12/08/20	337785		-	-	-	Pass	18.0	17.6	2
L2055076-03	FB_EFF_1	3442	2.7L Can	12/08/20	337785	L2054339-02	Pass	-29.3	-5.9	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2054339
Report Date: 12/16/20

Air Canister Certification Results

Lab ID: L2054339-02
Client ID: CAN 326 SHELF 15
Sample Location:

Date Collected: 12/04/20 16:00
Date Received: 12/05/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 12/05/20 19:41
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2054339
Report Date: 12/16/20

Air Canister Certification Results

Lab ID: L2054339-02
Client ID: CAN 326 SHELF 15
Sample Location:

Date Collected: 12/04/20 16:00
Date Received: 12/05/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2054339
Report Date: 12/16/20

Air Canister Certification Results

Lab ID: L2054339-02
Client ID: CAN 326 SHELF 15
Sample Location:

Date Collected: 12/04/20 16:00
Date Received: 12/05/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2054339
Report Date: 12/16/20

Air Canister Certification Results

Lab ID: L2054339-02
Client ID: CAN 326 SHELF 15
Sample Location:

Date Collected: 12/04/20 16:00
Date Received: 12/05/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,3-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2054339

Project Number: CANISTER QC BAT **Report Date:** 12/16/20

Air Canister Certification Results

Lab ID: L2054339-02
Client ID: CAN 326 SHELF 15
Sample Location:

Date Collected: 12/04/20 16:00
Date Received: 12/05/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	107		60-140
Bromochloromethane	112		60-140
chlorobenzene-d5	103		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2054339
Report Date: 12/16/20

Air Canister Certification Results

Lab ID: L2054339-02
Client ID: CAN 326 SHELF 15
Sample Location:

Date Collected: 12/04/20 16:00
Date Received: 12/05/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/05/20 19:41
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2054339
Report Date: 12/16/20

Air Canister Certification Results

Lab ID: L2054339-02
Client ID: CAN 326 SHELF 15
Sample Location:

Date Collected: 12/04/20 16:00
Date Received: 12/05/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2054339
Report Date: 12/16/20

Air Canister Certification Results

Lab ID: L2054339-02
Client ID: CAN 326 SHELF 15
Sample Location:

Date Collected: 12/04/20 16:00
Date Received: 12/05/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	119		60-140
bromochloromethane	126		60-140
chlorobenzene-d5	118		60-140

Project Name: WATCHCASE FACTORY
Project Number: 2802.0001Y000

Lab Number: L2055076
Report Date: 12/16/20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2055076-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2055076-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2055076-03A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name:	WATCHCASE FACTORY	**Lab Number:**	L2055076
Project Number:	2802.0001Y000	**Report Date:**	12/16/20

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	WATCHCASE FACTORY	**Lab Number:**	L2055076
Project Number:	2802.0001Y000	**Report Date:**	12/16/20

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: Data Usability Report

Project Name:	WATCHCASE FACTORY	**Lab Number:**	L2055076
Project Number:	2802.0001Y000	**Report Date:**	12/16/20

Data Qualifiers

the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
EPA TO-12 Non-methane organics
EPA 3C Fixed gases
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

AIR ANALYSIS

PAGE 1 OF 1

Date Rec'd in Lab: 12/11/2020

ALPHA Job #: L2055676

ALPHA ANALYTICAL — CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Roux Environmental D.P.C.
Address: 209 Shafter St
Islandia, NY 11749
Phone: 631-232-2600
Fax: 631-630-9898
Email: npalumbo@rouxinc.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Watchcase Factory
Project Location: Sag Harbor, NY
Project #: 2302.0001Y000
Project Manager: Nick Palumbo
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	ANALYSIS TO-15	TO-15 SIM	APH (Target Non-Petroleum HCs) ☐	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
55076-01	~~FB_Eff_1~~ Gar_Eff	12/9/20	1309	1509	-29.8	-7.9	SV	NP	2.7	431	0490	X					
-02	FB_Eff_2	12/9/20	1259	1459	-30.4	-6.5	SV	NP	2.7	2863	0901	X					
-03	~~Gar~~ FB_Eff_1	12/9/20	1302	1502	-29.5	-6.1	SV	NP	2.7	3442	01935	X					

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type: S

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
Nick Palumbo Roux	12/9/20/1922	Paul Decker - AHL	12/10/20 9:15
Paul Decker - AHL	12/10/20 12:15		
	12/11 0900		12/11/20 0900

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Brice Lynch
Roux Environmental Eng & Geology DPC
209 Shafter St
Islandia NY 11749

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JOB DESCRIPTION

Bulova Watchcase Factory Condominium

JOB NUMBER

200-68952-1

Eurofins Burlington
530 Community Drive
Suite 11
South Burlington VT 05403

See page two for job notes and contact information.

my EOL

Eurofins Burlington

Job Notes

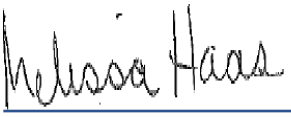
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I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Authorization



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Authorized for release by
Melissa Haas, Senior Project Manager
Melissa.Haas@et.eurofinsus.com
203 308-0880

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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.
U	Indicates the analyte was analyzed for but not detected.

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

CASE NARRATIVE

Client: Roux Environmental Eng & Geology DPC

Project: Bulova Watchcase Factory Condominium

Report Number: 200-68952-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

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 7/1/2023 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANICS (AMBIENT AIR)
Samples Garage Blower Effluent (200-68952-1) and Factory Blower Effluent (FB-2) (200-68952-2) were analyzed for Volatile Organics (Ambient Air) in accordance with EPA Method TO15. The samples were analyzed on 07/06/2023.

No difficulties were encountered during the VOCs analysis.

All quality control parameters were within the acceptance limits.

Client Sample ID: Garage Blower Effluent
Lab Sample ID: 200-68952-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	2.2	J	2.5	0.54	ug/m3	1		TO-15	Total/NA
Chlorodifluoromethane	0.92	J	1.8	0.42	ug/m3	1		TO-15	Total/NA
Chloromethane	0.50	J	1.0	0.31	ug/m3	1		TO-15	Total/NA
n-Butane	3.6		1.2	0.48	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.1		1.1	0.28	ug/m3	1		TO-15	Total/NA
1,1,2-Trichlorotrifluoroethane	0.44	J	1.5	0.41	ug/m3	1		TO-15	Total/NA
Acetone	9.4	J	12	3.8	ug/m3	1		TO-15	Total/NA
Carbon disulfide	0.45	J	1.6	0.40	ug/m3	1		TO-15	Total/NA
n-Hexane	0.40	J	1.8	0.39	ug/m3	1		TO-15	Total/NA
cis-1,2-Dichloroethene	0.77		0.20	0.083	ug/m3	1		TO-15	Total/NA
Chloroform	2.2		0.98	0.20	ug/m3	1		TO-15	Total/NA
1,1,1-Trichloroethane	0.31	J	1.1	0.24	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	1.4		0.22	0.14	ug/m3	1		TO-15	Total/NA
2,2,4-Trimethylpentane	0.98		0.93	0.18	ug/m3	1		TO-15	Total/NA
Benzene	0.75		0.64	0.14	ug/m3	1		TO-15	Total/NA
n-Heptane	0.35	J	0.82	0.23	ug/m3	1		TO-15	Total/NA
Trichloroethene	78		0.20	0.13	ug/m3	1		TO-15	Total/NA
Toluene	2.1		0.75	0.16	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	3.0		1.4	0.14	ug/m3	1		TO-15	Total/NA
Ethylbenzene	0.37	J	0.87	0.23	ug/m3	1		TO-15	Total/NA
m,p-Xylene	1.2	J	2.2	0.41	ug/m3	1		TO-15	Total/NA
o-Xylene	0.44	J	0.87	0.23	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.94	J	0.98	0.39	ug/m3	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.45	J	0.50	0.11	ppb v/v	1		TO-15	Total/NA
Chlorodifluoromethane	0.26	J	0.50	0.12	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.24	J	0.50	0.15	ppb v/v	1		TO-15	Total/NA
n-Butane	1.5		0.50	0.20	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.20		0.20	0.050	ppb v/v	1		TO-15	Total/NA
1,1,2-Trichlorotrifluoroethane	0.057	J	0.20	0.053	ppb v/v	1		TO-15	Total/NA
Acetone	4.0	J	5.0	1.6	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	0.15	J	0.50	0.13	ppb v/v	1		TO-15	Total/NA
n-Hexane	0.11	J	0.50	0.11	ppb v/v	1		TO-15	Total/NA
cis-1,2-Dichloroethene	0.19		0.050	0.021	ppb v/v	1		TO-15	Total/NA
Chloroform	0.44		0.20	0.041	ppb v/v	1		TO-15	Total/NA
1,1,1-Trichloroethane	0.057	J	0.20	0.044	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.22		0.035	0.022	ppb v/v	1		TO-15	Total/NA
2,2,4-Trimethylpentane	0.21		0.20	0.038	ppb v/v	1		TO-15	Total/NA
Benzene	0.24		0.20	0.044	ppb v/v	1		TO-15	Total/NA
n-Heptane	0.085	J	0.20	0.055	ppb v/v	1		TO-15	Total/NA
Trichloroethene	14		0.037	0.025	ppb v/v	1		TO-15	Total/NA
Toluene	0.56		0.20	0.042	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.45		0.20	0.021	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.085	J	0.20	0.052	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	0.28	J	0.50	0.095	ppb v/v	1		TO-15	Total/NA
o-Xylene	0.10	J	0.20	0.052	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.19	J	0.20	0.080	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: Factory Blower Effluent (FB-2)
Lab Sample ID: 200-68952-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	2.4	J	2.5	0.54	ug/m3	1		TO-15	Total/NA
Chlorodifluoromethane	2.2		1.8	0.42	ug/m3	1		TO-15	Total/NA
Chloromethane	1.3		1.0	0.31	ug/m3	1		TO-15	Total/NA
n-Butane	6.5		1.2	0.48	ug/m3	1		TO-15	Total/NA
1,3-Butadiene	0.19	J	0.44	0.086	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.2		1.1	0.28	ug/m3	1		TO-15	Total/NA
1,1,2-Trichlorotrifluoroethane	0.42	J	1.5	0.41	ug/m3	1		TO-15	Total/NA
Acetone	36		12	3.8	ug/m3	1		TO-15	Total/NA
Isopropyl alcohol	61		12	3.9	ug/m3	1		TO-15	Total/NA
Carbon disulfide	0.75	J	1.6	0.40	ug/m3	1		TO-15	Total/NA
Methylene Chloride	1.6	J	1.7	0.63	ug/m3	1		TO-15	Total/NA
Methyl tert-butyl ether	0.17	J	0.72	0.13	ug/m3	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.23	J	0.79	0.091	ug/m3	1		TO-15	Total/NA
n-Hexane	1.4	J	1.8	0.39	ug/m3	1		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone)	3.0		1.5	1.4	ug/m3	1		TO-15	Total/NA
Chloroform	0.30	J	0.98	0.20	ug/m3	1		TO-15	Total/NA
Cyclohexane	1.6		0.69	0.20	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.36		0.22	0.14	ug/m3	1		TO-15	Total/NA
2,2,4-Trimethylpentane	0.96		0.93	0.18	ug/m3	1		TO-15	Total/NA
Benzene	1.6		0.64	0.14	ug/m3	1		TO-15	Total/NA
n-Heptane	1.8		0.82	0.23	ug/m3	1		TO-15	Total/NA
Methyl methacrylate	0.64	J	2.0	0.57	ug/m3	1		TO-15	Total/NA
Toluene	12		0.75	0.16	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	1.1	J	1.4	0.14	ug/m3	1		TO-15	Total/NA
Ethylbenzene	2.0		0.87	0.23	ug/m3	1		TO-15	Total/NA
m,p-Xylene	6.5		2.2	0.41	ug/m3	1		TO-15	Total/NA
o-Xylene	2.8		0.87	0.23	ug/m3	1		TO-15	Total/NA
Styrene	0.69	J	0.85	0.25	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.93	J	0.98	0.39	ug/m3	1		TO-15	Total/NA
4-Isopropyltoluene	0.39	J	1.1	0.33	ug/m3	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.49	J	0.50	0.11	ppb v/v	1		TO-15	Total/NA
Chlorodifluoromethane	0.62		0.50	0.12	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.65		0.50	0.15	ppb v/v	1		TO-15	Total/NA
n-Butane	2.7		0.50	0.20	ppb v/v	1		TO-15	Total/NA
1,3-Butadiene	0.084	J	0.20	0.039	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.21		0.20	0.050	ppb v/v	1		TO-15	Total/NA
1,1,2-Trichlorotrifluoroethane	0.055	J	0.20	0.053	ppb v/v	1		TO-15	Total/NA
Acetone	15		5.0	1.6	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	25		5.0	1.6	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	0.24	J	0.50	0.13	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.45	J	0.50	0.18	ppb v/v	1		TO-15	Total/NA
Methyl tert-butyl ether	0.047	J	0.20	0.036	ppb v/v	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.057	J	0.20	0.023	ppb v/v	1		TO-15	Total/NA
n-Hexane	0.39	J	0.50	0.11	ppb v/v	1		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone)	1.0		0.50	0.49	ppb v/v	1		TO-15	Total/NA
Chloroform	0.062	J	0.20	0.041	ppb v/v	1		TO-15	Total/NA
Cyclohexane	0.47		0.20	0.058	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.057		0.035	0.022	ppb v/v	1		TO-15	Total/NA
2,2,4-Trimethylpentane	0.21		0.20	0.038	ppb v/v	1		TO-15	Total/NA
Benzene	0.50		0.20	0.044	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: Factory Blower Effluent (FB-2) (Continued)
Lab Sample ID: 200-68952-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
n-Heptane	0.44		0.20	0.055	ppb v/v	1		TO-15	Total/NA
Methyl methacrylate	0.16	J	0.50	0.14	ppb v/v	1		TO-15	Total/NA
Toluene	3.3		0.20	0.042	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.16	J	0.20	0.021	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.47		0.20	0.052	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	1.5		0.50	0.095	ppb v/v	1		TO-15	Total/NA
o-Xylene	0.65		0.20	0.052	ppb v/v	1		TO-15	Total/NA
Styrene	0.16	J	0.20	0.059	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.19	J	0.20	0.080	ppb v/v	1		TO-15	Total/NA
4-Isopropyltoluene	0.071	J	0.20	0.061	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: Garage Blower Effluent
Lab Sample ID: 200-68952-1

Date Collected: 06/30/23 09:00
Matrix: Air
Date Received: 07/01/23 09:40
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
Dichlorodifluoromethane	**2.2**	**J**	2.5	0.54	ug/m3			07/06/23 20:28	1
Chlorodifluoromethane	**0.92**	**J**	1.8	0.42	ug/m3			07/06/23 20:28	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.34	ug/m3			07/06/23 20:28	1
Chloromethane	**0.50**	**J**	1.0	0.31	ug/m3			07/06/23 20:28	1
n-Butane	**3.6**		1.2	0.48	ug/m3			07/06/23 20:28	1
Vinyl chloride	0.20	U	0.20	0.054	ug/m3			07/06/23 20:28	1
1,3-Butadiene	0.44	U	0.44	0.086	ug/m3			07/06/23 20:28	1
Bromomethane	0.78	U	0.78	0.28	ug/m3			07/06/23 20:28	1
Chloroethane	1.3	U	1.3	0.47	ug/m3			07/06/23 20:28	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.22	ug/m3			07/06/23 20:28	1
Trichlorofluoromethane	**1.1**		1.1	0.28	ug/m3			07/06/23 20:28	1
1,1,2-Trichlorotrifluoroethane	**0.44**	**J**	1.5	0.41	ug/m3			07/06/23 20:28	1
1,1-Dichloroethene	0.20	U	0.20	0.10	ug/m3			07/06/23 20:28	1
Acetone	**9.4**	**J**	12	3.8	ug/m3			07/06/23 20:28	1
Isopropyl alcohol	12	U	12	3.9	ug/m3			07/06/23 20:28	1
Carbon disulfide	**0.45**	**J**	1.6	0.40	ug/m3			07/06/23 20:28	1
3-Chloropropene	1.6	U	1.6	0.38	ug/m3			07/06/23 20:28	1
Methylene Chloride	1.7	U	1.7	0.63	ug/m3			07/06/23 20:28	1
tert-Butyl alcohol	15	U	15	3.6	ug/m3			07/06/23 20:28	1
Methyl tert-butyl ether	0.72	U	0.72	0.13	ug/m3			07/06/23 20:28	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.091	ug/m3			07/06/23 20:28	1
n-Hexane	**0.40**	**J**	1.8	0.39	ug/m3			07/06/23 20:28	1
1,1-Dichloroethane	0.81	U	0.81	0.10	ug/m3			07/06/23 20:28	1
Methyl Ethyl Ketone (2-Butanone)	1.5	U	1.5	1.4	ug/m3			07/06/23 20:28	1
cis-1,2-Dichloroethene	**0.77**		0.20	0.083	ug/m3			07/06/23 20:28	1
Chloroform	**2.2**		0.98	0.20	ug/m3			07/06/23 20:28	1
Tetrahydrofuran	15	U	15	3.8	ug/m3			07/06/23 20:28	1
1,1,1-Trichloroethane	**0.31**	**J**	1.1	0.24	ug/m3			07/06/23 20:28	1
Cyclohexane	0.69	U	0.69	0.20	ug/m3			07/06/23 20:28	1
Carbon tetrachloride	**1.4**		0.22	0.14	ug/m3			07/06/23 20:28	1
2,2,4-Trimethylpentane	**0.98**		0.93	0.18	ug/m3			07/06/23 20:28	1
Benzene	**0.75**		0.64	0.14	ug/m3			07/06/23 20:28	1
1,2-Dichloroethane	0.81	U	0.81	0.38	ug/m3			07/06/23 20:28	1
n-Heptane	**0.35**	**J**	0.82	0.23	ug/m3			07/06/23 20:28	1
Trichloroethene	**78**		0.20	0.13	ug/m3			07/06/23 20:28	1
Methyl methacrylate	2.0	U	2.0	0.57	ug/m3			07/06/23 20:28	1
1,2-Dichloropropane	0.92	U	0.92	0.43	ug/m3			07/06/23 20:28	1
1,4-Dioxane	18	U	18	4.7	ug/m3			07/06/23 20:28	1
Bromodichloromethane	1.3	U	1.3	0.34	ug/m3			07/06/23 20:28	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.20	ug/m3			07/06/23 20:28	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	2.0	U	2.0	0.53	ug/m3			07/06/23 20:28	1
Toluene	**2.1**		0.75	0.16	ug/m3			07/06/23 20:28	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.25	ug/m3			07/06/23 20:28	1
1,1,2-Trichloroethane	1.1	U	1.1	0.40	ug/m3			07/06/23 20:28	1
Tetrachloroethene	**3.0**		1.4	0.14	ug/m3			07/06/23 20:28	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	0.61	ug/m3			07/06/23 20:28	1
Dibromochloromethane	1.7	U	1.7	0.54	ug/m3			07/06/23 20:28	1
1,2-Dibromoethane	1.5	U	1.5	0.32	ug/m3			07/06/23 20:28	1

Client Sample ID: Garage Blower Effluent
Lab Sample ID: 200-68952-1

Date Collected: 06/30/23 09:00
Matrix: Air
Date Received: 07/01/23 09:40
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
Chlorobenzene	0.92	U	0.92	0.20	ug/m3			07/06/23 20:28	1
Ethylbenzene	**0.37**	**J**	0.87	0.23	ug/m3			07/06/23 20:28	1
m,p-Xylene	**1.2**	**J**	2.2	0.41	ug/m3			07/06/23 20:28	1
o-Xylene	**0.44**	**J**	0.87	0.23	ug/m3			07/06/23 20:28	1
Styrene	0.85	U	0.85	0.25	ug/m3			07/06/23 20:28	1
Bromoform	2.1	U	2.1	1.2	ug/m3			07/06/23 20:28	1
Cumene	0.98	U	0.98	0.20	ug/m3			07/06/23 20:28	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.30	ug/m3			07/06/23 20:28	1
n-Propylbenzene	0.98	U	0.98	0.23	ug/m3			07/06/23 20:28	1
4-Ethyltoluene	0.98	U	0.98	0.24	ug/m3			07/06/23 20:28	1
1,3,5-Trimethylbenzene	0.98	U	0.98	0.23	ug/m3			07/06/23 20:28	1
2-Chlorotoluene	1.0	U	1.0	0.24	ug/m3			07/06/23 20:28	1
tert-Butylbenzene	1.1	U	1.1	0.26	ug/m3			07/06/23 20:28	1
1,2,4-Trimethylbenzene	**0.94**	**J**	0.98	0.39	ug/m3			07/06/23 20:28	1
sec-Butylbenzene	1.1	U	1.1	0.25	ug/m3			07/06/23 20:28	1
4-Isopropyltoluene	1.1	U	1.1	0.33	ug/m3			07/06/23 20:28	1
1,3-Dichlorobenzene	1.2	U	1.2	0.44	ug/m3			07/06/23 20:28	1
1,4-Dichlorobenzene	1.2	U	1.2	0.54	ug/m3			07/06/23 20:28	1
Benzyl chloride	1.0	U	1.0	0.46	ug/m3			07/06/23 20:28	1
n-Butylbenzene	1.1	U	1.1	0.60	ug/m3			07/06/23 20:28	1
1,2-Dichlorobenzene	1.2	U	1.2	0.40	ug/m3			07/06/23 20:28	1
1,2,4-Trichlorobenzene	3.7	U	3.7	2.4	ug/m3			07/06/23 20:28	1
Hexachlorobutadiene	2.1	U	2.1	1.2	ug/m3			07/06/23 20:28	1
Naphthalene	2.6	U	2.6	1.6	ug/m3			07/06/23 20:28	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**0.45**	**J**	0.50	0.11	ppb v/v			07/06/23 20:28	1
Chlorodifluoromethane	**0.26**	**J**	0.50	0.12	ppb v/v			07/06/23 20:28	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.048	ppb v/v			07/06/23 20:28	1
Chloromethane	**0.24**	**J**	0.50	0.15	ppb v/v			07/06/23 20:28	1
n-Butane	**1.5**		0.50	0.20	ppb v/v			07/06/23 20:28	1
Vinyl chloride	0.078	U	0.078	0.021	ppb v/v			07/06/23 20:28	1
1,3-Butadiene	0.20	U	0.20	0.039	ppb v/v			07/06/23 20:28	1
Bromomethane	0.20	U	0.20	0.071	ppb v/v			07/06/23 20:28	1
Chloroethane	0.50	U	0.50	0.18	ppb v/v			07/06/23 20:28	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.050	ppb v/v			07/06/23 20:28	1
Trichlorofluoromethane	**0.20**		0.20	0.050	ppb v/v			07/06/23 20:28	1
1,1,2-Trichlorotrifluoroethane	**0.057**	**J**	0.20	0.053	ppb v/v			07/06/23 20:28	1
1,1-Dichloroethene	0.050	U	0.050	0.026	ppb v/v			07/06/23 20:28	1
Acetone	**4.0**	**J**	5.0	1.6	ppb v/v			07/06/23 20:28	1
Isopropyl alcohol	5.0	U	5.0	1.6	ppb v/v			07/06/23 20:28	1
Carbon disulfide	**0.15**	**J**	0.50	0.13	ppb v/v			07/06/23 20:28	1
3-Chloropropene	0.50	U	0.50	0.12	ppb v/v			07/06/23 20:28	1
Methylene Chloride	0.50	U	0.50	0.18	ppb v/v			07/06/23 20:28	1
tert-Butyl alcohol	5.0	U	5.0	1.2	ppb v/v			07/06/23 20:28	1
Methyl tert-butyl ether	0.20	U	0.20	0.036	ppb v/v			07/06/23 20:28	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.023	ppb v/v			07/06/23 20:28	1
n-Hexane	**0.11**	**J**	0.50	0.11	ppb v/v			07/06/23 20:28	1
1,1-Dichloroethane	0.20	U	0.20	0.025	ppb v/v			07/06/23 20:28	1

Client Sample ID: Garage Blower Effluent
Lab Sample ID: 200-68952-1

Date Collected: 06/30/23 09:00
Matrix: Air
Date Received: 07/01/23 09:40
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
Methyl Ethyl Ketone (2-Butanone)	0.50	U	0.50	0.49	ppb v/v			07/06/23 20:28	1
cis-1,2-Dichloroethene	**0.19**		0.050	0.021	ppb v/v			07/06/23 20:28	1
Chloroform	**0.44**		0.20	0.041	ppb v/v			07/06/23 20:28	1
Tetrahydrofuran	5.0	U	5.0	1.3	ppb v/v			07/06/23 20:28	1
1,1,1-Trichloroethane	**0.057**	**J**	0.20	0.044	ppb v/v			07/06/23 20:28	1
Cyclohexane	0.20	U	0.20	0.058	ppb v/v			07/06/23 20:28	1
Carbon tetrachloride	**0.22**		0.035	0.022	ppb v/v			07/06/23 20:28	1
2,2,4-Trimethylpentane	**0.21**		0.20	0.038	ppb v/v			07/06/23 20:28	1
Benzene	**0.24**		0.20	0.044	ppb v/v			07/06/23 20:28	1
1,2-Dichloroethane	0.20	U	0.20	0.093	ppb v/v			07/06/23 20:28	1
n-Heptane	**0.085**	**J**	0.20	0.055	ppb v/v			07/06/23 20:28	1
Trichloroethene	**14**		0.037	0.025	ppb v/v			07/06/23 20:28	1
Methyl methacrylate	0.50	U	0.50	0.14	ppb v/v			07/06/23 20:28	1
1,2-Dichloropropane	0.20	U	0.20	0.094	ppb v/v			07/06/23 20:28	1
1,4-Dioxane	5.0	U	5.0	1.3	ppb v/v			07/06/23 20:28	1
Bromodichloromethane	0.20	U	0.20	0.050	ppb v/v			07/06/23 20:28	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.045	ppb v/v			07/06/23 20:28	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	0.50	U	0.50	0.13	ppb v/v			07/06/23 20:28	1
Toluene	**0.56**		0.20	0.042	ppb v/v			07/06/23 20:28	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.054	ppb v/v			07/06/23 20:28	1
1,1,2-Trichloroethane	0.20	U	0.20	0.074	ppb v/v			07/06/23 20:28	1
Tetrachloroethene	**0.45**		0.20	0.021	ppb v/v			07/06/23 20:28	1
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.15	ppb v/v			07/06/23 20:28	1
Dibromochloromethane	0.20	U	0.20	0.063	ppb v/v			07/06/23 20:28	1
1,2-Dibromoethane	0.20	U	0.20	0.042	ppb v/v			07/06/23 20:28	1
Chlorobenzene	0.20	U	0.20	0.044	ppb v/v			07/06/23 20:28	1
Ethylbenzene	**0.085**	**J**	0.20	0.052	ppb v/v			07/06/23 20:28	1
m,p-Xylene	**0.28**	**J**	0.50	0.095	ppb v/v			07/06/23 20:28	1
o-Xylene	**0.10**	**J**	0.20	0.052	ppb v/v			07/06/23 20:28	1
Styrene	0.20	U	0.20	0.059	ppb v/v			07/06/23 20:28	1
Bromoform	0.20	U	0.20	0.12	ppb v/v			07/06/23 20:28	1
Cumene	0.20	U	0.20	0.041	ppb v/v			07/06/23 20:28	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.043	ppb v/v			07/06/23 20:28	1
n-Propylbenzene	0.20	U	0.20	0.047	ppb v/v			07/06/23 20:28	1
4-Ethyltoluene	0.20	U	0.20	0.049	ppb v/v			07/06/23 20:28	1
1,3,5-Trimethylbenzene	0.20	U	0.20	0.047	ppb v/v			07/06/23 20:28	1
2-Chlorotoluene	0.20	U	0.20	0.046	ppb v/v			07/06/23 20:28	1
tert-Butylbenzene	0.20	U	0.20	0.047	ppb v/v			07/06/23 20:28	1
1,2,4-Trimethylbenzene	**0.19**	**J**	0.20	0.080	ppb v/v			07/06/23 20:28	1
sec-Butylbenzene	0.20	U	0.20	0.045	ppb v/v			07/06/23 20:28	1
4-Isopropyltoluene	0.20	U	0.20	0.061	ppb v/v			07/06/23 20:28	1
1,3-Dichlorobenzene	0.20	U	0.20	0.074	ppb v/v			07/06/23 20:28	1
1,4-Dichlorobenzene	0.20	U	0.20	0.089	ppb v/v			07/06/23 20:28	1
Benzyl chloride	0.20	U	0.20	0.088	ppb v/v			07/06/23 20:28	1
n-Butylbenzene	0.20	U	0.20	0.11	ppb v/v			07/06/23 20:28	1
1,2-Dichlorobenzene	0.20	U	0.20	0.066	ppb v/v			07/06/23 20:28	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.33	ppb v/v			07/06/23 20:28	1
Hexachlorobutadiene	0.20	U	0.20	0.11	ppb v/v			07/06/23 20:28	1

Client Sample ID: Garage Blower Effluent
Lab Sample ID: 200-68952-1

Date Collected: 06/30/23 09:00
Matrix: Air
Date Received: 07/01/23 09:40
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
Naphthalene	0.50	U	0.50	0.30	ppb v/v			07/06/23 20:28	1

Client Sample ID: Factory Blower Effluent (FB-2)
Lab Sample ID: 200-68952-2

Date Collected: 06/30/23 10:00
Matrix: Air
Date Received: 07/01/23 09:40
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
Dichlorodifluoromethane	**2.4**	**J**	2.5	0.54	ug/m3			07/06/23 21:21	1
Chlorodifluoromethane	**2.2**		1.8	0.42	ug/m3			07/06/23 21:21	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.34	ug/m3			07/06/23 21:21	1
Chloromethane	**1.3**		1.0	0.31	ug/m3			07/06/23 21:21	1
n-Butane	**6.5**		1.2	0.48	ug/m3			07/06/23 21:21	1
Vinyl chloride	0.20	U	0.20	0.054	ug/m3			07/06/23 21:21	1
1,3-Butadiene	**0.19**	**J**	0.44	0.086	ug/m3			07/06/23 21:21	1
Bromomethane	0.78	U	0.78	0.28	ug/m3			07/06/23 21:21	1
Chloroethane	1.3	U	1.3	0.47	ug/m3			07/06/23 21:21	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.22	ug/m3			07/06/23 21:21	1
Trichlorofluoromethane	**1.2**		1.1	0.28	ug/m3			07/06/23 21:21	1
1,1,2-Trichlorotrifluoroethane	**0.42**	**J**	1.5	0.41	ug/m3			07/06/23 21:21	1
1,1-Dichloroethene	0.20	U	0.20	0.10	ug/m3			07/06/23 21:21	1
Acetone	**36**		12	3.8	ug/m3			07/06/23 21:21	1
Isopropyl alcohol	**61**		12	3.9	ug/m3			07/06/23 21:21	1
Carbon disulfide	**0.75**	**J**	1.6	0.40	ug/m3			07/06/23 21:21	1
3-Chloropropene	1.6	U	1.6	0.38	ug/m3			07/06/23 21:21	1
Methylene Chloride	**1.6**	**J**	1.7	0.63	ug/m3			07/06/23 21:21	1
tert-Butyl alcohol	15	U	15	3.6	ug/m3			07/06/23 21:21	1
Methyl tert-butyl ether	**0.17**	**J**	0.72	0.13	ug/m3			07/06/23 21:21	1
trans-1,2-Dichloroethene	**0.23**	**J**	0.79	0.091	ug/m3			07/06/23 21:21	1
n-Hexane	**1.4**	**J**	1.8	0.39	ug/m3			07/06/23 21:21	1
1,1-Dichloroethane	0.81	U	0.81	0.10	ug/m3			07/06/23 21:21	1
Methyl Ethyl Ketone (2-Butanone)	**3.0**		1.5	1.4	ug/m3			07/06/23 21:21	1
cis-1,2-Dichloroethene	0.20	U	0.20	0.083	ug/m3			07/06/23 21:21	1
Chloroform	**0.30**	**J**	0.98	0.20	ug/m3			07/06/23 21:21	1
Tetrahydrofuran	15	U	15	3.8	ug/m3			07/06/23 21:21	1
1,1,1-Trichloroethane	1.1	U	1.1	0.24	ug/m3			07/06/23 21:21	1
Cyclohexane	**1.6**		0.69	0.20	ug/m3			07/06/23 21:21	1
Carbon tetrachloride	**0.36**		0.22	0.14	ug/m3			07/06/23 21:21	1
2,2,4-Trimethylpentane	**0.96**		0.93	0.18	ug/m3			07/06/23 21:21	1
Benzene	**1.6**		0.64	0.14	ug/m3			07/06/23 21:21	1
1,2-Dichloroethane	0.81	U	0.81	0.38	ug/m3			07/06/23 21:21	1
n-Heptane	**1.8**		0.82	0.23	ug/m3			07/06/23 21:21	1
Trichloroethene	0.20	U	0.20	0.13	ug/m3			07/06/23 21:21	1
Methyl methacrylate	**0.64**	**J**	2.0	0.57	ug/m3			07/06/23 21:21	1
1,2-Dichloropropane	0.92	U	0.92	0.43	ug/m3			07/06/23 21:21	1
1,4-Dioxane	18	U	18	4.7	ug/m3			07/06/23 21:21	1
Bromodichloromethane	1.3	U	1.3	0.34	ug/m3			07/06/23 21:21	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.20	ug/m3			07/06/23 21:21	1

Client Sample ID: Factory Blower Effluent (FB-2)
Lab Sample ID: 200-68952-2

Date Collected: 06/30/23 10:00
Matrix: Air
Date Received: 07/01/23 09:40
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
4-Methyl-2-pentanone (Methyl isobutyl ketone)	2.0	U	2.0	0.53	ug/m3			07/06/23 21:21	1
Toluene	**12**		0.75	0.16	ug/m3			07/06/23 21:21	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.25	ug/m3			07/06/23 21:21	1
1,1,2-Trichloroethane	1.1	U	1.1	0.40	ug/m3			07/06/23 21:21	1
Tetrachloroethene	**1.1**	**J**	1.4	0.14	ug/m3			07/06/23 21:21	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	0.61	ug/m3			07/06/23 21:21	1
Dibromochloromethane	1.7	U	1.7	0.54	ug/m3			07/06/23 21:21	1
1,2-Dibromoethane	1.5	U	1.5	0.32	ug/m3			07/06/23 21:21	1
Chlorobenzene	0.92	U	0.92	0.20	ug/m3			07/06/23 21:21	1
Ethylbenzene	**2.0**		0.87	0.23	ug/m3			07/06/23 21:21	1
m,p-Xylene	**6.5**		2.2	0.41	ug/m3			07/06/23 21:21	1
o-Xylene	**2.8**		0.87	0.23	ug/m3			07/06/23 21:21	1
Styrene	**0.69**	**J**	0.85	0.25	ug/m3			07/06/23 21:21	1
Bromoform	2.1	U	2.1	1.2	ug/m3			07/06/23 21:21	1
Cumene	0.98	U	0.98	0.20	ug/m3			07/06/23 21:21	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.30	ug/m3			07/06/23 21:21	1
n-Propylbenzene	0.98	U	0.98	0.23	ug/m3			07/06/23 21:21	1
4-Ethyltoluene	0.98	U	0.98	0.24	ug/m3			07/06/23 21:21	1
1,3,5-Trimethylbenzene	0.98	U	0.98	0.23	ug/m3			07/06/23 21:21	1
2-Chlorotoluene	1.0	U	1.0	0.24	ug/m3			07/06/23 21:21	1
tert-Butylbenzene	1.1	U	1.1	0.26	ug/m3			07/06/23 21:21	1
1,2,4-Trimethylbenzene	**0.93**	**J**	0.98	0.39	ug/m3			07/06/23 21:21	1
sec-Butylbenzene	1.1	U	1.1	0.25	ug/m3			07/06/23 21:21	1
4-Isopropyltoluene	**0.39**	**J**	1.1	0.33	ug/m3			07/06/23 21:21	1
1,3-Dichlorobenzene	1.2	U	1.2	0.44	ug/m3			07/06/23 21:21	1
1,4-Dichlorobenzene	1.2	U	1.2	0.54	ug/m3			07/06/23 21:21	1
Benzyl chloride	1.0	U	1.0	0.46	ug/m3			07/06/23 21:21	1
n-Butylbenzene	1.1	U	1.1	0.60	ug/m3			07/06/23 21:21	1
1,2-Dichlorobenzene	1.2	U	1.2	0.40	ug/m3			07/06/23 21:21	1
1,2,4-Trichlorobenzene	3.7	U	3.7	2.4	ug/m3			07/06/23 21:21	1
Hexachlorobutadiene	2.1	U	2.1	1.2	ug/m3			07/06/23 21:21	1
Naphthalene	2.6	U	2.6	1.6	ug/m3			07/06/23 21:21	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**0.49**	**J**	0.50	0.11	ppb v/v			07/06/23 21:21	1
Chlorodifluoromethane	**0.62**		0.50	0.12	ppb v/v			07/06/23 21:21	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.048	ppb v/v			07/06/23 21:21	1
Chloromethane	**0.65**		0.50	0.15	ppb v/v			07/06/23 21:21	1
n-Butane	**2.7**		0.50	0.20	ppb v/v			07/06/23 21:21	1
Vinyl chloride	0.078	U	0.078	0.021	ppb v/v			07/06/23 21:21	1
1,3-Butadiene	**0.084**	**J**	0.20	0.039	ppb v/v			07/06/23 21:21	1
Bromomethane	0.20	U	0.20	0.071	ppb v/v			07/06/23 21:21	1
Chloroethane	0.50	U	0.50	0.18	ppb v/v			07/06/23 21:21	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.050	ppb v/v			07/06/23 21:21	1
Trichlorofluoromethane	**0.21**		0.20	0.050	ppb v/v			07/06/23 21:21	1
1,1,2-Trichlorotrifluoroethane	**0.055**	**J**	0.20	0.053	ppb v/v			07/06/23 21:21	1
1,1-Dichloroethene	0.050	U	0.050	0.026	ppb v/v			07/06/23 21:21	1
Acetone	**15**		5.0	1.6	ppb v/v			07/06/23 21:21	1

Client Sample ID: Factory Blower Effluent (FB-2)
Lab Sample ID: 200-68952-2

Date Collected: 06/30/23 10:00
Matrix: Air
Date Received: 07/01/23 09:40
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
Isopropyl alcohol	**25**		5.0	1.6	ppb v/v			07/06/23 21:21	1
Carbon disulfide	**0.24**	**J**	0.50	0.13	ppb v/v			07/06/23 21:21	1
3-Chloropropene	0.50	U	0.50	0.12	ppb v/v			07/06/23 21:21	1
Methylene Chloride	**0.45**	**J**	0.50	0.18	ppb v/v			07/06/23 21:21	1
tert-Butyl alcohol	5.0	U	5.0	1.2	ppb v/v			07/06/23 21:21	1
Methyl tert-butyl ether	**0.047**	**J**	0.20	0.036	ppb v/v			07/06/23 21:21	1
trans-1,2-Dichloroethene	**0.057**	**J**	0.20	0.023	ppb v/v			07/06/23 21:21	1
n-Hexane	**0.39**	**J**	0.50	0.11	ppb v/v			07/06/23 21:21	1
1,1-Dichloroethane	0.20	U	0.20	0.025	ppb v/v			07/06/23 21:21	1
Methyl Ethyl Ketone (2-Butanone)	**1.0**		0.50	0.49	ppb v/v			07/06/23 21:21	1
cis-1,2-Dichloroethene	0.050	U	0.050	0.021	ppb v/v			07/06/23 21:21	1
Chloroform	**0.062**	**J**	0.20	0.041	ppb v/v			07/06/23 21:21	1
Tetrahydrofuran	5.0	U	5.0	1.3	ppb v/v			07/06/23 21:21	1
1,1,1-Trichloroethane	0.20	U	0.20	0.044	ppb v/v			07/06/23 21:21	1
Cyclohexane	**0.47**		0.20	0.058	ppb v/v			07/06/23 21:21	1
Carbon tetrachloride	**0.057**		0.035	0.022	ppb v/v			07/06/23 21:21	1
2,2,4-Trimethylpentane	**0.21**		0.20	0.038	ppb v/v			07/06/23 21:21	1
Benzene	**0.50**		0.20	0.044	ppb v/v			07/06/23 21:21	1
1,2-Dichloroethane	0.20	U	0.20	0.093	ppb v/v			07/06/23 21:21	1
n-Heptane	**0.44**		0.20	0.055	ppb v/v			07/06/23 21:21	1
Trichloroethene	0.037	U	0.037	0.025	ppb v/v			07/06/23 21:21	1
Methyl methacrylate	**0.16**	**J**	0.50	0.14	ppb v/v			07/06/23 21:21	1
1,2-Dichloropropane	0.20	U	0.20	0.094	ppb v/v			07/06/23 21:21	1
1,4-Dioxane	5.0	U	5.0	1.3	ppb v/v			07/06/23 21:21	1
Bromodichloromethane	0.20	U	0.20	0.050	ppb v/v			07/06/23 21:21	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.045	ppb v/v			07/06/23 21:21	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	0.50	U	0.50	0.13	ppb v/v			07/06/23 21:21	1
Toluene	**3.3**		0.20	0.042	ppb v/v			07/06/23 21:21	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.054	ppb v/v			07/06/23 21:21	1
1,1,2-Trichloroethane	0.20	U	0.20	0.074	ppb v/v			07/06/23 21:21	1
Tetrachloroethene	**0.16**	**J**	0.20	0.021	ppb v/v			07/06/23 21:21	1
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.15	ppb v/v			07/06/23 21:21	1
Dibromochloromethane	0.20	U	0.20	0.063	ppb v/v			07/06/23 21:21	1
1,2-Dibromoethane	0.20	U	0.20	0.042	ppb v/v			07/06/23 21:21	1
Chlorobenzene	0.20	U	0.20	0.044	ppb v/v			07/06/23 21:21	1
Ethylbenzene	**0.47**		0.20	0.052	ppb v/v			07/06/23 21:21	1
m,p-Xylene	**1.5**		0.50	0.095	ppb v/v			07/06/23 21:21	1
o-Xylene	**0.65**		0.20	0.052	ppb v/v			07/06/23 21:21	1
Styrene	**0.16**	**J**	0.20	0.059	ppb v/v			07/06/23 21:21	1
Bromoform	0.20	U	0.20	0.12	ppb v/v			07/06/23 21:21	1
Cumene	0.20	U	0.20	0.041	ppb v/v			07/06/23 21:21	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.043	ppb v/v			07/06/23 21:21	1
n-Propylbenzene	0.20	U	0.20	0.047	ppb v/v			07/06/23 21:21	1
4-Ethyltoluene	0.20	U	0.20	0.049	ppb v/v			07/06/23 21:21	1
1,3,5-Trimethylbenzene	0.20	U	0.20	0.047	ppb v/v			07/06/23 21:21	1
2-Chlorotoluene	0.20	U	0.20	0.046	ppb v/v			07/06/23 21:21	1
tert-Butylbenzene	0.20	U	0.20	0.047	ppb v/v			07/06/23 21:21	1
1,2,4-Trimethylbenzene	**0.19**	**J**	0.20	0.080	ppb v/v			07/06/23 21:21	1

Client Sample ID: Factory Blower Effluent (FB-2)
Lab Sample ID: 200-68952-2

Date Collected: 06/30/23 10:00
Matrix: Air
Date Received: 07/01/23 09:40
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
sec-Butylbenzene	0.20	U	0.20	0.045	ppb v/v			07/06/23 21:21	1
4-Isopropyltoluene	**0.071**	**J**	0.20	0.061	ppb v/v			07/06/23 21:21	1
1,3-Dichlorobenzene	0.20	U	0.20	0.074	ppb v/v			07/06/23 21:21	1
1,4-Dichlorobenzene	0.20	U	0.20	0.089	ppb v/v			07/06/23 21:21	1
Benzyl chloride	0.20	U	0.20	0.088	ppb v/v			07/06/23 21:21	1
n-Butylbenzene	0.20	U	0.20	0.11	ppb v/v			07/06/23 21:21	1
1,2-Dichlorobenzene	0.20	U	0.20	0.066	ppb v/v			07/06/23 21:21	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.33	ppb v/v			07/06/23 21:21	1
Hexachlorobutadiene	0.20	U	0.20	0.11	ppb v/v			07/06/23 21:21	1
Naphthalene	0.50	U	0.50	0.30	ppb v/v			07/06/23 21:21	1

Default Detection Limits

Client: Roux Environmental Eng & Geology DPC
Job ID: 200-68952-1
Project/Site: Bulova Watchcase Factory Condominium

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

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	1.1	0.24	ug/m3
1,1,1-Trichloroethane	0.20	0.044	ppb v/v
1,1,2,2-Tetrachloroethane	1.4	0.30	ug/m3
1,1,2,2-Tetrachloroethane	0.20	0.043	ppb v/v
1,1,2-Trichloroethane	1.1	0.40	ug/m3
1,1,2-Trichloroethane	0.20	0.074	ppb v/v
1,1,2-Trichlorotrifluoroethane	1.5	0.41	ug/m3
1,1,2-Trichlorotrifluoroethane	0.20	0.053	ppb v/v
1,1-Dichloroethane	0.81	0.10	ug/m3
1,1-Dichloroethane	0.20	0.025	ppb v/v
1,1-Dichloroethene	0.20	0.10	ug/m3
1,1-Dichloroethene	0.050	0.026	ppb v/v
1,2,4-Trichlorobenzene	3.7	2.4	ug/m3
1,2,4-Trichlorobenzene	0.50	0.33	ppb v/v
1,2,4-Trimethylbenzene	0.98	0.39	ug/m3
1,2,4-Trimethylbenzene	0.20	0.080	ppb v/v
1,2-Dibromoethane	1.5	0.32	ug/m3
1,2-Dibromoethane	0.20	0.042	ppb v/v
1,2-Dichlorobenzene	1.2	0.40	ug/m3
1,2-Dichlorobenzene	0.20	0.066	ppb v/v
1,2-Dichloroethane	0.81	0.38	ug/m3
1,2-Dichloroethane	0.20	0.093	ppb v/v
1,2-Dichloropropane	0.92	0.43	ug/m3
1,2-Dichloropropane	0.20	0.094	ppb v/v
1,2-Dichlorotetrafluoroethane	1.4	0.34	ug/m3
1,2-Dichlorotetrafluoroethane	0.20	0.048	ppb v/v
1,3,5-Trimethylbenzene	0.98	0.23	ug/m3
1,3,5-Trimethylbenzene	0.20	0.047	ppb v/v
1,3-Butadiene	0.44	0.086	ug/m3
1,3-Butadiene	0.20	0.039	ppb v/v
1,3-Dichlorobenzene	1.2	0.44	ug/m3
1,3-Dichlorobenzene	0.20	0.074	ppb v/v
1,4-Dichlorobenzene	1.2	0.54	ug/m3
1,4-Dichlorobenzene	0.20	0.089	ppb v/v
1,4-Dioxane	18	4.7	ug/m3
1,4-Dioxane	5.0	1.3	ppb v/v
2,2,4-Trimethylpentane	0.93	0.18	ug/m3
2,2,4-Trimethylpentane	0.20	0.038	ppb v/v
2-Chlorotoluene	1.0	0.24	ug/m3
2-Chlorotoluene	0.20	0.046	ppb v/v
3-Chloropropene	1.6	0.38	ug/m3
3-Chloropropene	0.50	0.12	ppb v/v
4-Ethyltoluene	0.98	0.24	ug/m3
4-Ethyltoluene	0.20	0.049	ppb v/v
4-Isopropyltoluene	1.1	0.33	ug/m3
4-Isopropyltoluene	0.20	0.061	ppb v/v
4-Methyl-2-pentanone (Methyl isobutyl ketone)	2.0	0.53	ug/m3
4-Methyl-2-pentanone (Methyl isobutyl ketone)	0.50	0.13	ppb v/v
Acetone	12	3.8	ug/m3
Acetone	5.0	1.6	ppb v/v
Benzene	0.64	0.14	ug/m3
Benzene	0.20	0.044	ppb v/v
Benzyl chloride	1.0	0.46	ug/m3

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

Analyte	RL	MDL	Units
Benzyl chloride	0.20	0.088	ppb v/v
Bromodichloromethane	1.3	0.34	ug/m3
Bromodichloromethane	0.20	0.050	ppb v/v
Bromoethene(Vinyl Bromide)	0.87	0.22	ug/m3
Bromoethene(Vinyl Bromide)	0.20	0.050	ppb v/v
Bromoform	2.1	1.2	ug/m3
Bromoform	0.20	0.12	ppb v/v
Bromomethane	0.78	0.28	ug/m3
Bromomethane	0.20	0.071	ppb v/v
Carbon disulfide	1.6	0.40	ug/m3
Carbon disulfide	0.50	0.13	ppb v/v
Carbon tetrachloride	0.22	0.14	ug/m3
Carbon tetrachloride	0.035	0.022	ppb v/v
Chlorobenzene	0.92	0.20	ug/m3
Chlorobenzene	0.20	0.044	ppb v/v
Chlorodifluoromethane	1.8	0.42	ug/m3
Chlorodifluoromethane	0.50	0.12	ppb v/v
Chloroethane	1.3	0.47	ug/m3
Chloroethane	0.50	0.18	ppb v/v
Chloroform	0.98	0.20	ug/m3
Chloroform	0.20	0.041	ppb v/v
Chloromethane	1.0	0.31	ug/m3
Chloromethane	0.50	0.15	ppb v/v
cis-1,2-Dichloroethene	0.20	0.083	ug/m3
cis-1,2-Dichloroethene	0.050	0.021	ppb v/v
cis-1,3-Dichloropropene	0.91	0.20	ug/m3
cis-1,3-Dichloropropene	0.20	0.045	ppb v/v
Cumene	0.98	0.20	ug/m3
Cumene	0.20	0.041	ppb v/v
Cyclohexane	0.69	0.20	ug/m3
Cyclohexane	0.20	0.058	ppb v/v
Dibromochloromethane	1.7	0.54	ug/m3
Dibromochloromethane	0.20	0.063	ppb v/v
Dichlorodifluoromethane	2.5	0.54	ug/m3
Dichlorodifluoromethane	0.50	0.11	ppb v/v
Ethylbenzene	0.87	0.23	ug/m3
Ethylbenzene	0.20	0.052	ppb v/v
Hexachlorobutadiene	2.1	1.2	ug/m3
Hexachlorobutadiene	0.20	0.11	ppb v/v
Isopropyl alcohol	12	3.9	ug/m3
Isopropyl alcohol	5.0	1.6	ppb v/v
m,p-Xylene	2.2	0.41	ug/m3
m,p-Xylene	0.50	0.095	ppb v/v
Methyl Butyl Ketone (2-Hexanone)	2.0	0.61	ug/m3
Methyl Butyl Ketone (2-Hexanone)	0.50	0.15	ppb v/v
Methyl Ethyl Ketone (2-Butanone)	1.5	1.4	ug/m3
Methyl Ethyl Ketone (2-Butanone)	0.50	0.49	ppb v/v
Methyl methacrylate	2.0	0.57	ug/m3
Methyl methacrylate	0.50	0.14	ppb v/v
Methyl tert-butyl ether	0.72	0.13	ug/m3
Methyl tert-butyl ether	0.20	0.036	ppb v/v
Methylene Chloride	1.7	0.63	ug/m3
Methylene Chloride	0.50	0.18	ppb v/v

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

Analyte	RL	MDL	Units
Naphthalene	2.6	1.6	ug/m3
Naphthalene	0.50	0.30	ppb v/v
n-Butane	1.2	0.48	ug/m3
n-Butane	0.50	0.20	ppb v/v
n-Butylbenzene	1.1	0.60	ug/m3
n-Butylbenzene	0.20	0.11	ppb v/v
n-Heptane	0.82	0.23	ug/m3
n-Heptane	0.20	0.055	ppb v/v
n-Hexane	1.8	0.39	ug/m3
n-Hexane	0.50	0.11	ppb v/v
n-Propylbenzene	0.98	0.23	ug/m3
n-Propylbenzene	0.20	0.047	ppb v/v
o-Xylene	0.87	0.23	ug/m3
o-Xylene	0.20	0.052	ppb v/v
sec-Butylbenzene	1.1	0.25	ug/m3
sec-Butylbenzene	0.20	0.045	ppb v/v
Styrene	0.85	0.25	ug/m3
Styrene	0.20	0.059	ppb v/v
tert-Butyl alcohol	15	3.6	ug/m3
tert-Butyl alcohol	5.0	1.2	ppb v/v
tert-Butylbenzene	1.1	0.26	ug/m3
tert-Butylbenzene	0.20	0.047	ppb v/v
Tetrachloroethene	1.4	0.14	ug/m3
Tetrachloroethene	0.20	0.021	ppb v/v
Tetrahydrofuran	15	3.8	ug/m3
Tetrahydrofuran	5.0	1.3	ppb v/v
Toluene	0.75	0.16	ug/m3
Toluene	0.20	0.042	ppb v/v
trans-1,2-Dichloroethene	0.79	0.091	ug/m3
trans-1,2-Dichloroethene	0.20	0.023	ppb v/v
trans-1,3-Dichloropropene	0.91	0.25	ug/m3
trans-1,3-Dichloropropene	0.20	0.054	ppb v/v
Trichloroethene	0.20	0.13	ug/m3
Trichloroethene	0.037	0.025	ppb v/v
Trichlorofluoromethane	1.1	0.28	ug/m3
Trichlorofluoromethane	0.20	0.050	ppb v/v
Vinyl chloride	0.20	0.054	ug/m3
Vinyl chloride	0.078	0.021	ppb v/v

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

Lab Sample ID: MB 200-193264/4
Matrix: Air
Analysis Batch: 193264

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	2.5	U	2.5	0.54	ug/m3			07/06/23 09:49	1
Chlorodifluoromethane	1.8	U	1.8	0.42	ug/m3			07/06/23 09:49	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.34	ug/m3			07/06/23 09:49	1
Chloromethane	1.0	U	1.0	0.31	ug/m3			07/06/23 09:49	1
n-Butane	1.2	U	1.2	0.48	ug/m3			07/06/23 09:49	1
Vinyl chloride	0.20	U	0.20	0.054	ug/m3			07/06/23 09:49	1
1,3-Butadiene	0.44	U	0.44	0.086	ug/m3			07/06/23 09:49	1
Bromomethane	0.78	U	0.78	0.28	ug/m3			07/06/23 09:49	1
Chloroethane	1.3	U	1.3	0.47	ug/m3			07/06/23 09:49	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.22	ug/m3			07/06/23 09:49	1
Trichlorofluoromethane	1.1	U	1.1	0.28	ug/m3			07/06/23 09:49	1
1,1,2-Trichlorotrifluoroethane	1.5	U	1.5	0.41	ug/m3			07/06/23 09:49	1
1,1-Dichloroethene	0.20	U	0.20	0.10	ug/m3			07/06/23 09:49	1
Acetone	12	U	12	3.8	ug/m3			07/06/23 09:49	1
Isopropyl alcohol	12	U	12	3.9	ug/m3			07/06/23 09:49	1
Carbon disulfide	1.6	U	1.6	0.40	ug/m3			07/06/23 09:49	1
3-Chloropropene	1.6	U	1.6	0.38	ug/m3			07/06/23 09:49	1
Methylene Chloride	1.7	U	1.7	0.63	ug/m3			07/06/23 09:49	1
tert-Butyl alcohol	15	U	15	3.6	ug/m3			07/06/23 09:49	1
Methyl tert-butyl ether	0.72	U	0.72	0.13	ug/m3			07/06/23 09:49	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.091	ug/m3			07/06/23 09:49	1
n-Hexane	1.8	U	1.8	0.39	ug/m3			07/06/23 09:49	1
1,1-Dichloroethane	0.81	U	0.81	0.10	ug/m3			07/06/23 09:49	1
Methyl Ethyl Ketone (2-Butanone)	1.5	U	1.5	1.4	ug/m3			07/06/23 09:49	1
cis-1,2-Dichloroethene	0.20	U	0.20	0.083	ug/m3			07/06/23 09:49	1
Chloroform	0.98	U	0.98	0.20	ug/m3			07/06/23 09:49	1
Tetrahydrofuran	15	U	15	3.8	ug/m3			07/06/23 09:49	1
1,1,1-Trichloroethane	1.1	U	1.1	0.24	ug/m3			07/06/23 09:49	1
Cyclohexane	0.69	U	0.69	0.20	ug/m3			07/06/23 09:49	1
Carbon tetrachloride	0.22	U	0.22	0.14	ug/m3			07/06/23 09:49	1
2,2,4-Trimethylpentane	0.93	U	0.93	0.18	ug/m3			07/06/23 09:49	1
Benzene	0.64	U	0.64	0.14	ug/m3			07/06/23 09:49	1
1,2-Dichloroethane	0.81	U	0.81	0.38	ug/m3			07/06/23 09:49	1
n-Heptane	0.82	U	0.82	0.23	ug/m3			07/06/23 09:49	1
Trichloroethene	0.20	U	0.20	0.13	ug/m3			07/06/23 09:49	1
Methyl methacrylate	2.0	U	2.0	0.57	ug/m3			07/06/23 09:49	1
1,2-Dichloropropane	0.92	U	0.92	0.43	ug/m3			07/06/23 09:49	1
1,4-Dioxane	18	U	18	4.7	ug/m3			07/06/23 09:49	1
Bromodichloromethane	1.3	U	1.3	0.34	ug/m3			07/06/23 09:49	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.20	ug/m3			07/06/23 09:49	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	2.0	U	2.0	0.53	ug/m3			07/06/23 09:49	1
Toluene	0.75	U	0.75	0.16	ug/m3			07/06/23 09:49	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.25	ug/m3			07/06/23 09:49	1
1,1,2-Trichloroethane	1.1	U	1.1	0.40	ug/m3			07/06/23 09:49	1
Tetrachloroethene	1.4	U	1.4	0.14	ug/m3			07/06/23 09:49	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	0.61	ug/m3			07/06/23 09:49	1
Dibromochloromethane	1.7	U	1.7	0.54	ug/m3			07/06/23 09:49	1
1,2-Dibromoethane	1.5	U	1.5	0.32	ug/m3			07/06/23 09:49	1

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

Lab Sample ID: MB 200-193264/4
Matrix: Air
Analysis Batch: 193264

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	0.92	U	0.92	0.20	ug/m3			07/06/23 09:49	1
Ethylbenzene	0.87	U	0.87	0.23	ug/m3			07/06/23 09:49	1
m,p-Xylene	2.2	U	2.2	0.41	ug/m3			07/06/23 09:49	1
o-Xylene	0.87	U	0.87	0.23	ug/m3			07/06/23 09:49	1
Styrene	0.85	U	0.85	0.25	ug/m3			07/06/23 09:49	1
Bromoform	2.1	U	2.1	1.2	ug/m3			07/06/23 09:49	1
Cumene	0.98	U	0.98	0.20	ug/m3			07/06/23 09:49	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.30	ug/m3			07/06/23 09:49	1
n-Propylbenzene	0.98	U	0.98	0.23	ug/m3			07/06/23 09:49	1
4-Ethyltoluene	0.98	U	0.98	0.24	ug/m3			07/06/23 09:49	1
1,3,5-Trimethylbenzene	0.98	U	0.98	0.23	ug/m3			07/06/23 09:49	1
2-Chlorotoluene	1.0	U	1.0	0.24	ug/m3			07/06/23 09:49	1
tert-Butylbenzene	1.1	U	1.1	0.26	ug/m3			07/06/23 09:49	1
1,2,4-Trimethylbenzene	0.98	U	0.98	0.39	ug/m3			07/06/23 09:49	1
sec-Butylbenzene	1.1	U	1.1	0.25	ug/m3			07/06/23 09:49	1
4-Isopropyltoluene	1.1	U	1.1	0.33	ug/m3			07/06/23 09:49	1
1,3-Dichlorobenzene	1.2	U	1.2	0.44	ug/m3			07/06/23 09:49	1
1,4-Dichlorobenzene	1.2	U	1.2	0.54	ug/m3			07/06/23 09:49	1
Benzyl chloride	1.0	U	1.0	0.46	ug/m3			07/06/23 09:49	1
n-Butylbenzene	1.1	U	1.1	0.60	ug/m3			07/06/23 09:49	1
1,2-Dichlorobenzene	1.2	U	1.2	0.40	ug/m3			07/06/23 09:49	1
1,2,4-Trichlorobenzene	3.7	U	3.7	2.4	ug/m3			07/06/23 09:49	1
Hexachlorobutadiene	2.1	U	2.1	1.2	ug/m3			07/06/23 09:49	1
Naphthalene	2.6	U	2.6	1.6	ug/m3			07/06/23 09:49	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.50	U	0.50	0.11	ppb v/v			07/06/23 09:49	1
Chlorodifluoromethane	0.50	U	0.50	0.12	ppb v/v			07/06/23 09:49	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.048	ppb v/v			07/06/23 09:49	1
Chloromethane	0.50	U	0.50	0.15	ppb v/v			07/06/23 09:49	1
n-Butane	0.50	U	0.50	0.20	ppb v/v			07/06/23 09:49	1
Vinyl chloride	0.078	U	0.078	0.021	ppb v/v			07/06/23 09:49	1
1,3-Butadiene	0.20	U	0.20	0.039	ppb v/v			07/06/23 09:49	1
Bromomethane	0.20	U	0.20	0.071	ppb v/v			07/06/23 09:49	1
Chloroethane	0.50	U	0.50	0.18	ppb v/v			07/06/23 09:49	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.050	ppb v/v			07/06/23 09:49	1
Trichlorofluoromethane	0.20	U	0.20	0.050	ppb v/v			07/06/23 09:49	1
1,1,2-Trichlorotrifluoroethane	0.20	U	0.20	0.053	ppb v/v			07/06/23 09:49	1
1,1-Dichloroethene	0.050	U	0.050	0.026	ppb v/v			07/06/23 09:49	1
Acetone	5.0	U	5.0	1.6	ppb v/v			07/06/23 09:49	1
Isopropyl alcohol	5.0	U	5.0	1.6	ppb v/v			07/06/23 09:49	1
Carbon disulfide	0.50	U	0.50	0.13	ppb v/v			07/06/23 09:49	1
3-Chloropropene	0.50	U	0.50	0.12	ppb v/v			07/06/23 09:49	1
Methylene Chloride	0.50	U	0.50	0.18	ppb v/v			07/06/23 09:49	1
tert-Butyl alcohol	5.0	U	5.0	1.2	ppb v/v			07/06/23 09:49	1
Methyl tert-butyl ether	0.20	U	0.20	0.036	ppb v/v			07/06/23 09:49	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.023	ppb v/v			07/06/23 09:49	1
n-Hexane	0.50	U	0.50	0.11	ppb v/v			07/06/23 09:49	1
1,1-Dichloroethane	0.20	U	0.20	0.025	ppb v/v			07/06/23 09:49	1

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

Lab Sample ID: MB 200-193264/4
Matrix: Air
Analysis Batch: 193264

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone (2-Butanone)	0.50	U	0.50	0.49	ppb v/v			07/06/23 09:49	1
cis-1,2-Dichloroethene	0.050	U	0.050	0.021	ppb v/v			07/06/23 09:49	1
Chloroform	0.20	U	0.20	0.041	ppb v/v			07/06/23 09:49	1
Tetrahydrofuran	5.0	U	5.0	1.3	ppb v/v			07/06/23 09:49	1
1,1,1-Trichloroethane	0.20	U	0.20	0.044	ppb v/v			07/06/23 09:49	1
Cyclohexane	0.20	U	0.20	0.058	ppb v/v			07/06/23 09:49	1
Carbon tetrachloride	0.035	U	0.035	0.022	ppb v/v			07/06/23 09:49	1
2,2,4-Trimethylpentane	0.20	U	0.20	0.038	ppb v/v			07/06/23 09:49	1
Benzene	0.20	U	0.20	0.044	ppb v/v			07/06/23 09:49	1
1,2-Dichloroethane	0.20	U	0.20	0.093	ppb v/v			07/06/23 09:49	1
n-Heptane	0.20	U	0.20	0.055	ppb v/v			07/06/23 09:49	1
Trichloroethene	0.037	U	0.037	0.025	ppb v/v			07/06/23 09:49	1
Methyl methacrylate	0.50	U	0.50	0.14	ppb v/v			07/06/23 09:49	1
1,2-Dichloropropane	0.20	U	0.20	0.094	ppb v/v			07/06/23 09:49	1
1,4-Dioxane	5.0	U	5.0	1.3	ppb v/v			07/06/23 09:49	1
Bromodichloromethane	0.20	U	0.20	0.050	ppb v/v			07/06/23 09:49	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.045	ppb v/v			07/06/23 09:49	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	0.50	U	0.50	0.13	ppb v/v			07/06/23 09:49	1
Toluene	0.20	U	0.20	0.042	ppb v/v			07/06/23 09:49	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.054	ppb v/v			07/06/23 09:49	1
1,1,2-Trichloroethane	0.20	U	0.20	0.074	ppb v/v			07/06/23 09:49	1
Tetrachloroethene	0.20	U	0.20	0.021	ppb v/v			07/06/23 09:49	1
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.15	ppb v/v			07/06/23 09:49	1
Dibromochloromethane	0.20	U	0.20	0.063	ppb v/v			07/06/23 09:49	1
1,2-Dibromoethane	0.20	U	0.20	0.042	ppb v/v			07/06/23 09:49	1
Chlorobenzene	0.20	U	0.20	0.044	ppb v/v			07/06/23 09:49	1
Ethylbenzene	0.20	U	0.20	0.052	ppb v/v			07/06/23 09:49	1
m,p-Xylene	0.50	U	0.50	0.095	ppb v/v			07/06/23 09:49	1
o-Xylene	0.20	U	0.20	0.052	ppb v/v			07/06/23 09:49	1
Styrene	0.20	U	0.20	0.059	ppb v/v			07/06/23 09:49	1
Bromoform	0.20	U	0.20	0.12	ppb v/v			07/06/23 09:49	1
Cumene	0.20	U	0.20	0.041	ppb v/v			07/06/23 09:49	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.043	ppb v/v			07/06/23 09:49	1
n-Propylbenzene	0.20	U	0.20	0.047	ppb v/v			07/06/23 09:49	1
4-Ethyltoluene	0.20	U	0.20	0.049	ppb v/v			07/06/23 09:49	1
1,3,5-Trimethylbenzene	0.20	U	0.20	0.047	ppb v/v			07/06/23 09:49	1
2-Chlorotoluene	0.20	U	0.20	0.046	ppb v/v			07/06/23 09:49	1
tert-Butylbenzene	0.20	U	0.20	0.047	ppb v/v			07/06/23 09:49	1
1,2,4-Trimethylbenzene	0.20	U	0.20	0.080	ppb v/v			07/06/23 09:49	1
sec-Butylbenzene	0.20	U	0.20	0.045	ppb v/v			07/06/23 09:49	1
4-Isopropyltoluene	0.20	U	0.20	0.061	ppb v/v			07/06/23 09:49	1
1,3-Dichlorobenzene	0.20	U	0.20	0.074	ppb v/v			07/06/23 09:49	1
1,4-Dichlorobenzene	0.20	U	0.20	0.089	ppb v/v			07/06/23 09:49	1
Benzyl chloride	0.20	U	0.20	0.088	ppb v/v			07/06/23 09:49	1
n-Butylbenzene	0.20	U	0.20	0.11	ppb v/v			07/06/23 09:49	1
1,2-Dichlorobenzene	0.20	U	0.20	0.066	ppb v/v			07/06/23 09:49	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.33	ppb v/v			07/06/23 09:49	1
Hexachlorobutadiene	0.20	U	0.20	0.11	ppb v/v			07/06/23 09:49	1

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

Lab Sample ID: MB 200-193264/4
Matrix: Air
Analysis Batch: 193264

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.50	U	0.50	0.30	ppb v/v			07/06/23 09:49	1

Lab Sample ID: LCS 200-193264/3
Matrix: Air
Analysis Batch: 193264

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	49.4	54.8		ug/m3		111	61 - 142
Chlorodifluoromethane	35.4	37.8		ug/m3		107	60 - 147
1,2-Dichlorotetrafluoroethane	69.9	76.7		ug/m3		110	71 - 141
Chloromethane	20.6	22.1		ug/m3		107	56 - 141
n-Butane	23.8	23.1		ug/m3		97	53 - 151
Vinyl chloride	25.6	22.8		ug/m3		89	61 - 135
1,3-Butadiene	22.1	19.3		ug/m3		87	58 - 139
Bromomethane	38.8	42.3		ug/m3		109	72 - 124
Chloroethane	26.4	27.4		ug/m3		104	68 - 130
Bromoethene(Vinyl Bromide)	43.7	46.8		ug/m3		107	75 - 125
Trichlorofluoromethane	56.2	58.2		ug/m3		104	70 - 129
1,1,2-Trichlorotrifluoroethane	76.6	76.2		ug/m3		99	70 - 121
1,1-Dichloroethene	39.6	39.5		ug/m3		100	68 - 120
Acetone	23.7	24.7		ug/m3		104	54 - 154
Isopropyl alcohol	24.6	23.8		ug/m3		97	53 - 142
Carbon disulfide	31.1	31.0		ug/m3		100	71 - 138
3-Chloropropene	31.3	30.9		ug/m3		99	50 - 150
Methylene Chloride	34.7	33.1		ug/m3		95	59 - 137
tert-Butyl alcohol	30.3	31.1		ug/m3		102	66 - 132
Methyl tert-butyl ether	36.0	35.1		ug/m3		97	70 - 127
trans-1,2-Dichloroethene	39.6	37.3		ug/m3		94	69 - 137
n-Hexane	35.2	33.9		ug/m3		96	63 - 138
1,1-Dichloroethane	40.5	37.8		ug/m3		93	66 - 130
Methyl Ethyl Ketone (2-Butanone)	29.5	28.5		ug/m3		97	72 - 124
cis-1,2-Dichloroethene	39.6	37.7		ug/m3		95	72 - 121
Chloroform	48.8	46.9		ug/m3		96	73 - 124
Tetrahydrofuran	29.5	29.4		ug/m3		100	60 - 149
1,1,1-Trichloroethane	54.6	52.6		ug/m3		96	72 - 127
Cyclohexane	34.4	33.0		ug/m3		96	76 - 124
Carbon tetrachloride	62.9	61.8		ug/m3		98	71 - 133
2,2,4-Trimethylpentane	46.7	44.5		ug/m3		95	68 - 131
Benzene	31.9	30.3		ug/m3		95	73 - 119
1,2-Dichloroethane	40.5	38.2		ug/m3		94	68 - 135
n-Heptane	41.0	38.8		ug/m3		95	60 - 142
Trichloroethene	53.7	50.9		ug/m3		95	73 - 122
Methyl methacrylate	40.9	40.3		ug/m3		98	73 - 129
1,2-Dichloropropane	46.2	43.7		ug/m3		95	69 - 128
1,4-Dioxane	36.0	34.8		ug/m3		97	66 - 129
Bromodichloromethane	67.0	64.9		ug/m3		97	75 - 127
cis-1,3-Dichloropropene	45.4	44.4		ug/m3		98	74 - 125

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

Lab Sample ID: LCS 200-193264/3
Matrix: Air
Analysis Batch: 193264

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Methyl-2-pentanone (Methyl isobutyl ketone)	41.0	39.8		ug/m3		97	58 - 144
Toluene	37.7	36.4		ug/m3		97	75 - 122
trans-1,3-Dichloropropene	45.4	45.3		ug/m3		100	74 - 128
1,1,2-Trichloroethane	54.6	52.3		ug/m3		96	75 - 126
Tetrachloroethene	67.8	64.0		ug/m3		94	70 - 125
Methyl Butyl Ketone (2-Hexanone)	41.0	40.3		ug/m3		98	57 - 143
Dibromochloromethane	85.2	85.9		ug/m3		101	73 - 125
1,2-Dibromoethane	76.8	74.8		ug/m3		97	78 - 122
Chlorobenzene	46.0	43.8		ug/m3		95	76 - 119
Ethylbenzene	43.4	42.1		ug/m3		97	74 - 122
m,p-Xylene	86.8	83.8		ug/m3		97	76 - 121
o-Xylene	43.4	42.0		ug/m3		97	73 - 123
Styrene	42.6	42.2		ug/m3		99	74 - 125
Bromoform	103	109		ug/m3		106	53 - 149
Cumene	49.1	48.0		ug/m3		98	73 - 123
1,1,2,2-Tetrachloroethane	68.6	65.5		ug/m3		95	74 - 126
n-Propylbenzene	49.1	47.9		ug/m3		97	73 - 127
4-Ethyltoluene	49.2	47.9		ug/m3		97	75 - 129
1,3,5-Trimethylbenzene	49.2	47.7		ug/m3		97	72 - 126
2-Chlorotoluene	51.8	49.5		ug/m3		96	74 - 126
tert-Butylbenzene	54.9	52.8		ug/m3		96	71 - 125
1,2,4-Trimethylbenzene	49.2	47.0		ug/m3		96	71 - 129
sec-Butylbenzene	54.9	53.5		ug/m3		97	70 - 128
4-Isopropyltoluene	54.9	53.7		ug/m3		98	68 - 130
1,3-Dichlorobenzene	60.1	56.4		ug/m3		94	69 - 131
1,4-Dichlorobenzene	60.1	56.7		ug/m3		94	67 - 132
Benzyl chloride	51.8	52.6		ug/m3		102	60 - 136
n-Butylbenzene	54.9	53.5		ug/m3		97	65 - 137
1,2-Dichlorobenzene	60.1	56.0		ug/m3		93	68 - 129
1,2,4-Trichlorobenzene	74.2	68.4		ug/m3		92	50 - 150
Hexachlorobutadiene	107	97.9		ug/m3		92	58 - 130
Naphthalene	52.4	48.6		ug/m3		93	50 - 150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	10	11.1		ppb v/v		111	61 - 142
Chlorodifluoromethane	10	10.7		ppb v/v		107	60 - 147
1,2-Dichlorotetrafluoroethane	10	11.0		ppb v/v		110	71 - 141
Chloromethane	10	10.7		ppb v/v		107	56 - 141
n-Butane	10	9.71		ppb v/v		97	53 - 151
Vinyl chloride	10	8.90		ppb v/v		89	61 - 135
1,3-Butadiene	10	8.72		ppb v/v		87	58 - 139
Bromomethane	10	10.9		ppb v/v		109	72 - 124
Chloroethane	10	10.4		ppb v/v		104	68 - 130
Bromoethene(Vinyl Bromide)	10	10.7		ppb v/v		107	75 - 125
Trichlorofluoromethane	10	10.4		ppb v/v		104	70 - 129
1,1,2-Trichlorotrifluoroethane	10	9.94		ppb v/v		99	70 - 121
1,1-Dichloroethene	10	9.96		ppb v/v		100	68 - 120

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

Lab Sample ID: LCS 200-193264/3
Matrix: Air
Analysis Batch: 193264

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	10	10.4		ppb v/v		104	54 - 154
Isopropyl alcohol	10	9.68		ppb v/v		97	53 - 142
Carbon disulfide	10	9.95		ppb v/v		100	71 - 138
3-Chloropropene	10	9.88		ppb v/v		99	50 - 150
Methylene Chloride	10	9.54		ppb v/v		95	59 - 137
tert-Butyl alcohol	10	10.2		ppb v/v		102	66 - 132
Methyl tert-butyl ether	10	9.74		ppb v/v		97	70 - 127
trans-1,2-Dichloroethene	10	9.41		ppb v/v		94	69 - 137
n-Hexane	10	9.61		ppb v/v		96	63 - 138
1,1-Dichloroethane	10	9.34		ppb v/v		93	66 - 130
Methyl Ethyl Ketone (2-Butanone)	10	9.67		ppb v/v		97	72 - 124
cis-1,2-Dichloroethene	10	9.51		ppb v/v		95	72 - 121
Chloroform	10	9.60		ppb v/v		96	73 - 124
Tetrahydrofuran	10	9.97		ppb v/v		100	60 - 149
1,1,1-Trichloroethane	10	9.64		ppb v/v		96	72 - 127
Cyclohexane	10	9.58		ppb v/v		96	76 - 124
Carbon tetrachloride	10	9.83		ppb v/v		98	71 - 133
2,2,4-Trimethylpentane	10	9.53		ppb v/v		95	68 - 131
Benzene	10	9.48		ppb v/v		95	73 - 119
1,2-Dichloroethane	10	9.44		ppb v/v		94	68 - 135
n-Heptane	10	9.46		ppb v/v		95	60 - 142
Trichloroethene	10	9.47		ppb v/v		95	73 - 122
Methyl methacrylate	10	9.83		ppb v/v		98	73 - 129
1,2-Dichloropropane	10	9.46		ppb v/v		95	69 - 128
1,4-Dioxane	10	9.65		ppb v/v		97	66 - 129
Bromodichloromethane	10	9.68		ppb v/v		97	75 - 127
cis-1,3-Dichloropropene	10	9.78		ppb v/v		98	74 - 125
4-Methyl-2-pentanone (Methyl isobutyl ketone)	10	9.72		ppb v/v		97	58 - 144
Toluene	10	9.65		ppb v/v		97	75 - 122
trans-1,3-Dichloropropene	10	9.98		ppb v/v		100	74 - 128
1,1,2-Trichloroethane	10	9.59		ppb v/v		96	75 - 126
Tetrachloroethene	10	9.44		ppb v/v		94	70 - 125
Methyl Butyl Ketone (2-Hexanone)	10	9.83		ppb v/v		98	57 - 143
Dibromochloromethane	10	10.1		ppb v/v		101	73 - 125
1,2-Dibromoethane	10	9.74		ppb v/v		97	78 - 122
Chlorobenzene	10	9.51		ppb v/v		95	76 - 119
Ethylbenzene	10	9.70		ppb v/v		97	74 - 122
m,p-Xylene	20	19.3		ppb v/v		97	76 - 121
o-Xylene	10	9.68		ppb v/v		97	73 - 123
Styrene	10	9.91		ppb v/v		99	74 - 125
Bromoform	10	10.6		ppb v/v		106	53 - 149
Cumene	10	9.77		ppb v/v		98	73 - 123
1,1,2,2-Tetrachloroethane	10	9.54		ppb v/v		95	74 - 126
n-Propylbenzene	10	9.74		ppb v/v		97	73 - 127
4-Ethyltoluene	10	9.74		ppb v/v		97	75 - 129
1,3,5-Trimethylbenzene	10	9.71		ppb v/v		97	72 - 126

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

Lab Sample ID: LCS 200-193264/3
Matrix: Air
Analysis Batch: 193264

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chlorotoluene	10	9.56		ppb v/v		96	74 - 126
tert-Butylbenzene	10	9.62		ppb v/v		96	71 - 125
1,2,4-Trimethylbenzene	10	9.56		ppb v/v		96	71 - 129
sec-Butylbenzene	10	9.74		ppb v/v		97	70 - 128
4-Isopropyltoluene	10	9.77		ppb v/v		98	68 - 130
1,3-Dichlorobenzene	10	9.38		ppb v/v		94	69 - 131
1,4-Dichlorobenzene	10	9.42		ppb v/v		94	67 - 132
Benzyl chloride	10	10.2		ppb v/v		102	60 - 136
n-Butylbenzene	10	9.75		ppb v/v		97	65 - 137
1,2-Dichlorobenzene	10	9.31		ppb v/v		93	68 - 129
1,2,4-Trichlorobenzene	10	9.22		ppb v/v		92	50 - 150
Hexachlorobutadiene	10	9.18		ppb v/v		92	58 - 130
Naphthalene	10	9.26		ppb v/v		93	50 - 150

QC Association Summary

Client: Roux Environmental Eng & Geology DPC
Job ID: 200-68952-1
Project/Site: Bulova Watchcase Factory Condominium

Air - GC/MS VOA

Analysis Batch: 193264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-68952-1	Garage Blower Effluent	Total/NA	Air	TO-15	
200-68952-2	Factory Blower Effluent (FB-2)	Total/NA	Air	TO-15	
MB 200-193264/4	Method Blank	Total/NA	Air	TO-15	
LCS 200-193264/3	Lab Control Sample	Total/NA	Air	TO-15	

Lab Chronicle

Client: Roux Environmental Eng & Geology DPC
Job ID: 200-68952-1
Project/Site: Bulova Watchcase Factory Condominium

Client Sample ID: Garage Blower Effluent
Lab Sample ID: 200-68952-1
Date Collected: 06/30/23 09:00
Matrix: Air
Date Received: 07/01/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	193264	K1P	EET BUR	07/06/23 20:28

Client Sample ID: Factory Blower Effluent (FB-2)
Lab Sample ID: 200-68952-2
Date Collected: 06/30/23 10:00
Matrix: Air
Date Received: 07/01/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	193264	K1P	EET BUR	07/06/23 21:21

Laboratory References:

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

Accreditation/Certification Summary

Client: Roux Environmental Eng & Geology DPC
Job ID: 200-68952-1
Project/Site: Bulova Watchcase Factory Condominium

Laboratory: Eurofins Burlington

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10391	03-31-24

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	4-Ethyltoluene
TO-15		Air	4-Isopropyltoluene
TO-15		Air	Chlorodifluoromethane
TO-15		Air	Methyl Butyl Ketone (2-Hexanone)
TO-15		Air	n-Butane
TO-15		Air	n-Butylbenzene
TO-15		Air	n-Propylbenzene
TO-15		Air	sec-Butylbenzene
TO-15		Air	tert-Butylbenzene
TO-15		Air	Tetrahydrofuran

Method Summary

Client: Roux Environmental Eng & Geology DPC
Job ID: 200-68952-1
Project/Site: Bulova Watchcase Factory Condominium

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: Roux Environmental Eng & Geology DPC
Project/Site: Bulova Watchcase Factory Condominium

Job ID: 200-68952-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
200-68952-1	Garage Blower Effluent	Air	06/30/23 09:00	07/01/23 09:40	Air Canister (6-Liter) #3220
200-68952-2	Factory Blower Effluent (FB-2)	Air	06/30/23 10:00	07/01/23 09:40	Air Canister (6-Liter) #9272

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Instrument ID: CHAN.i Analysis Batch Number: 191713

Lab Sample ID: IC 200-191713/4 Client Sample ID:

Date Analyzed: 05/22/23 16:33 Lab File ID: 55613_004.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	11.28	Assign Peak	bunmaa	05/23/23 09:29

Lab Sample ID: IC 200-191713/6 Client Sample ID:

Date Analyzed: 05/22/23 18:16 Lab File ID: 55613_006.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethanol	7.41	Assign Peak	bunmaa	05/23/23 09:31
Acetone	8.18	Assign Peak	bunmaa	05/23/23 09:32
Acetonitrile	8.69	Assign Peak	bunmaa	05/23/23 09:33
3-Chloropropene	8.77	Assign Peak	bunmaa	05/23/23 09:33
Acrylonitrile	9.44	Assign Peak	bunmaa	05/23/23 09:33
Vinyl acetate	10.29	Assign Peak	bunmaa	05/23/23 09:34
Tetrahydrofuran	11.74	Assign Peak	bunmaa	05/23/23 09:35
Styrene	20.32	Assign Peak	bunmaa	05/23/23 09:37

Lab Sample ID: IC 200-191713/7 Client Sample ID:

Date Analyzed: 05/22/23 19:08 Lab File ID: 55613_007.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrylonitrile	9.43	Assign Peak	bunmaa	05/23/23 09:40

Lab Sample ID: IC 200-191713/8 Client Sample ID:

Date Analyzed: 05/22/23 19:59 Lab File ID: 55613_008.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrylonitrile	9.43	Assign Peak	bunmaa	05/23/23 09:44

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Instrument ID: CHAN.i Analysis Batch Number: 193264

Lab Sample ID: 200-68952-1 Client Sample ID: Garage Blower Effluent

Date Analyzed: 07/06/23 20:28 Lab File ID: 56210_016.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorodifluoromethane	4.55	Assign Peak	puangmalek	07/07/23 10:04
1,1,2,2-Tetrachloroethane		Invalid Compound ID	puangmalek	07/07/23 10:05
1,2-Dichlorotetrafluoroethane		Invalid Compound ID	puangmalek	07/07/23 10:04
3-Chloropropene		Invalid Compound ID	puangmalek	07/07/23 10:04
trans-1,3-Dichloropropene		Invalid Compound ID	puangmalek	07/07/23 10:05
1,1,1-Trichloroethane	12.16	Assign Peak	puangmalek	07/07/23 10:04
Cyclohexane	12.30	Assign Peak	puangmalek	07/07/23 10:05

Lab Sample ID: 200-68952-2 Client Sample ID: Factory Blower Effluent (FB-2)

Date Analyzed: 07/06/23 21:21 Lab File ID: 56210_017.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl tert-butyl ether	9.49	Assign Peak	puangmalek	07/07/23 10:06
trans-1,2-Dichloroethene	9.49	Assign Peak	puangmalek	07/07/23 10:06
2-Chlorotoluene		Invalid Compound ID	puangmalek	07/07/23 10:07
tert-Butylbenzene		Invalid Compound ID	puangmalek	07/07/23 10:07

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
ATTO15CAL1w_00255	06/19/23	05/19/23	Nitrogen, Lot 12	15.463 L	ATTO15CAL6w_00221	155 mL	1,1,1-Trichloroethane	0.20044 ppb v/v
							1,1,2,2-Tetrachloroethane	0.20044 ppb v/v
							1,1,2-Trichloroethane	0.20044 ppb v/v
							1,1,2-Trichlorotrifluoroethane	0.20044 ppb v/v
							1,1-Dichloroethane	0.20044 ppb v/v
							1,1-Dichloroethene	0.20044 ppb v/v
							1,2,3-Trichlorobenzene	0.20044 ppb v/v
							1,2,3-Trichloropropane	0.20044 ppb v/v
							1,2,4-Trichlorobenzene	0.20044 ppb v/v
							1,2,4-Trimethylbenzene	0.20044 ppb v/v
							1,2-Dibromoethane	0.20044 ppb v/v
							1,2-Dichlorobenzene	0.20044 ppb v/v
							1,2-Dichloroethane	0.20044 ppb v/v
							1,2-Dichloropropane	0.20044 ppb v/v
							1,2-Dichlorotetrafluoroethane	0.20044 ppb v/v
							1,3,5-Trimethylbenzene	0.20044 ppb v/v
							1,3-Butadiene	0.20044 ppb v/v
							1,3-Dichlorobenzene	0.20044 ppb v/v
							1,4-Dichlorobenzene	0.20044 ppb v/v
							1,4-Dioxane	0.20044 ppb v/v
							2,2,4-Trimethylpentane	0.20044 ppb v/v
							2-Chlorotoluene	0.20044 ppb v/v
							2-Methylbutane	0.20044 ppb v/v
							3-Chloropropene	0.20044 ppb v/v
							4-Ethyltoluene	0.20044 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Isopropyltoluene	0.20044 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	0.20044 ppb v/v
							Acetone	0.20044 ppb v/v
							Acetonitrile	0.20044 ppb v/v
							Acrolein	0.20044 ppb v/v
							Acrylonitrile	0.20044 ppb v/v
							Alpha Methyl Styrene	0.20044 ppb v/v
							Benzene	0.20044 ppb v/v
							Benzyl chloride	0.20044 ppb v/v
							Bromodichloromethane	0.20044 ppb v/v
							Bromoethene(Vinyl Bromide)	0.20044 ppb v/v
							Bromoform	0.20044 ppb v/v
							Bromomethane	0.20044 ppb v/v
							Carbon disulfide	0.20044 ppb v/v
							Carbon tetrachloride	0.20044 ppb v/v
							Chlorobenzene	0.20044 ppb v/v
							Chlorodifluoromethane	0.20044 ppb v/v
							Chloroethane	0.20044 ppb v/v
							Chloroform	0.20044 ppb v/v
							Chloromethane	0.20044 ppb v/v
							cis-1,2-Dichloroethene	0.20044 ppb v/v
							cis-1,3-Dichloropropene	0.20044 ppb v/v
							Cumene	0.20044 ppb v/v
							Cyclohexane	0.20044 ppb v/v
							Dibromochloromethane	0.20044 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromomethane	0.20044 ppb v/v
							Dichlorodifluoromethane	0.20044 ppb v/v
							Dodecane	0.20044 ppb v/v
							Ethyl acetate	0.20044 ppb v/v
							Ethyl ether	0.20044 ppb v/v
							Ethylbenzene	0.20044 ppb v/v
							Hexachlorobutadiene	0.20044 ppb v/v
							Isopropyl alcohol	0.20044 ppb v/v
							m,p-Xylene	0.400879 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	0.20044 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	0.20044 ppb v/v
							Methyl methacrylate	0.20044 ppb v/v
							Methyl tert-butyl ether	0.20044 ppb v/v
							Methylene Chloride	0.20044 ppb v/v
							n-Butane	0.20044 ppb v/v
							n-Butanol	0.20044 ppb v/v
							n-Butylbenzene	0.20044 ppb v/v
							n-Decane	0.20044 ppb v/v
							n-Heptane	0.20044 ppb v/v
							n-Hexane	0.20044 ppb v/v
							n-Nonane	0.20044 ppb v/v
							n-Octane	0.20044 ppb v/v
							n-Propylbenzene	0.20044 ppb v/v
							Naphthalene	0.20044 ppb v/v
							o-Xylene	0.20044 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentane	0.20044 ppb v/v
							Propene	0.20044 ppb v/v
							sec-Butylbenzene	0.20044 ppb v/v
							Styrene	0.20044 ppb v/v
							tert-Butyl alcohol	0.20044 ppb v/v
							tert-Butylbenzene	0.20044 ppb v/v
							Tetrachloroethene	0.20044 ppb v/v
							Tetrahydrofuran	0.20044 ppb v/v
							Toluene	0.20044 ppb v/v
							trans-1,2-Dichloroethene	0.20044 ppb v/v
							trans-1,3-Dichloropropene	0.20044 ppb v/v
							Trichloroethene	0.20044 ppb v/v
							Trichlorofluoromethane	0.20044 ppb v/v
							Undecane	0.20044 ppb v/v
							Vinyl acetate	0.20044 ppb v/v
							Vinyl chloride	0.20044 ppb v/v
							Ethanol	0.400944 ppb v/v
.ATTO15CAL6w_00221	06/19/23	05/19/23	Nitrogen, Lot 1	15.463 L	ATTO15CALSTKi_00169	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1,2-Trichlorotrifluoroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	19.9961 ppb v/v
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dibromoethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v
							1,2-Dichloropropane	19.9961 ppb v/v
							1,2-Dichlorotetrafluoroethane	19.9961 ppb v/v
							1,3,5-Trimethylbenzene	19.9961 ppb v/v
							1,3-Butadiene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dioxane	19.9961 ppb v/v
							2,2,4-Trimethylpentane	19.9961 ppb v/v
							2-Chlorotoluene	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloropropene	19.9961 ppb v/v
							4-Ethyltoluene	19.9961 ppb v/v
							4-Isopropyltoluene	19.9961 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v
							Acetonitrile	19.9961 ppb v/v
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzyl chloride	19.9961 ppb v/v
							Bromodichloromethane	19.9961 ppb v/v
							Bromoethene(Vinyl Bromide)	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chlorodifluoromethane	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cumene	19.9961 ppb v/v
							Cyclohexane	19.9961 ppb v/v
							Dibromochloromethane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v
							Ethyl ether	19.9961 ppb v/v
							Ethylbenzene	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							m,p-Xylene	39.9922 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	19.9961 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	19.9961 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butane	19.9961 ppb v/v
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v
							n-Heptane	19.9961 ppb v/v
							n-Hexane	19.9961 ppb v/v
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							n-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v
							o-Xylene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v
							Propene	19.9961 ppb v/v
							sec-Butylbenzene	19.9961 ppb v/v
							Styrene	19.9961 ppb v/v
							tert-Butyl alcohol	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene	19.9961 ppb v/v
							trans-1,2-Dichloroethene	19.9961 ppb v/v
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl chloride	19.9961 ppb v/v
					ATTO15EthCALw_00155	1237 mL	Ethanol	39.9987 ppb v/v
..ATTO15CALSTKi_00169	10/15/23	05/19/23	Nitrogen, Lot 13	37.5 L	ATTO15CALs_00046	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1,2-Trichlorotrifluoroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							o-Xylene	200 ppb v/v
							Pentane	200 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
...ATTO15CALs_00046	10/15/23		Linde, Lot CC-237336		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1,2-Trichlorotrifluoroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone (2-Butanone)	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							o-Xylene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
..ATTO15EthCALw_00155	08/01/23	05/22/23	Nitrogen, Lot 12	37.5 ppb	1gEthanol_00005	18.75 uL	Ethanol	500 ppb v/v
...1gEthanol_00005	08/30/25	ChemService, Lot 12173500			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL2w_00335	06/19/23	05/19/23	Nitrogen, Lot 12	15.463 L	ATTO15CAL6w_00221	387 mL	1,1,1-Trichloroethane	0.500453 ppb v/v
							1,1,2,2-Tetrachloroethane	0.500453 ppb v/v
							1,1,2-Trichloroethane	0.500453 ppb v/v
							1,1,2-Trichlorotrifluoroethane	0.500453 ppb v/v
							1,1-Dichloroethane	0.500453 ppb v/v
							1,1-Dichloroethene	0.500453 ppb v/v
							1,2,3-Trichlorobenzene	0.500453 ppb v/v
							1,2,3-Trichloropropane	0.500453 ppb v/v
							1,2,4-Trichlorobenzene	0.500453 ppb v/v
							1,2,4-Trimethylbenzene	0.500453 ppb v/v
							1,2-Dibromoethane	0.500453 ppb v/v
							1,2-Dichlorobenzene	0.500453 ppb v/v
							1,2-Dichloroethane	0.500453 ppb v/v
							1,2-Dichloropropane	0.500453 ppb v/v
							1,2-Dichlorotetrafluoroethane	0.500453 ppb v/v
							1,3,5-Trimethylbenzene	0.500453 ppb v/v
							1,3-Butadiene	0.500453 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	0.500453 ppb v/v
							1,4-Dichlorobenzene	0.500453 ppb v/v
							1,4-Dioxane	0.500453 ppb v/v
							2,2,4-Trimethylpentane	0.500453 ppb v/v
							2-Chlorotoluene	0.500453 ppb v/v
							2-Methylbutane	0.500453 ppb v/v
							3-Chloropropene	0.500453 ppb v/v
							4-Ethyltoluene	0.500453 ppb v/v
							4-Isopropyltoluene	0.500453 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	0.500453 ppb v/v
							Acetone	0.500453 ppb v/v
							Acetonitrile	0.500453 ppb v/v
							Acrolein	0.500453 ppb v/v
							Acrylonitrile	0.500453 ppb v/v
							Alpha Methyl Styrene	0.500453 ppb v/v
							Benzene	0.500453 ppb v/v
							Benzyl chloride	0.500453 ppb v/v
							Bromodichloromethane	0.500453 ppb v/v
							Bromoethene(Vinyl Bromide)	0.500453 ppb v/v
							Bromoform	0.500453 ppb v/v
							Bromomethane	0.500453 ppb v/v
							Carbon disulfide	0.500453 ppb v/v
							Carbon tetrachloride	0.500453 ppb v/v
							Chlorobenzene	0.500453 ppb v/v
							Chlorodifluoromethane	0.500453 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	0.500453 ppb v/v
							Chloroform	0.500453 ppb v/v
							Chloromethane	0.500453 ppb v/v
							cis-1,2-Dichloroethene	0.500453 ppb v/v
							cis-1,3-Dichloropropene	0.500453 ppb v/v
							Cumene	0.500453 ppb v/v
							Cyclohexane	0.500453 ppb v/v
							Dibromochloromethane	0.500453 ppb v/v
							Dibromomethane	0.500453 ppb v/v
							Dichlorodifluoromethane	0.500453 ppb v/v
							Dodecane	0.500453 ppb v/v
							Ethyl acetate	0.500453 ppb v/v
							Ethyl ether	0.500453 ppb v/v
							Ethylbenzene	0.500453 ppb v/v
							Hexachlorobutadiene	0.500453 ppb v/v
							Isopropyl alcohol	0.500453 ppb v/v
							m,p-Xylene	1.00091 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	0.500453 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	0.500453 ppb v/v
							Methyl methacrylate	0.500453 ppb v/v
							Methyl tert-butyl ether	0.500453 ppb v/v
							Methylene Chloride	0.500453 ppb v/v
							n-Butane	0.500453 ppb v/v
							n-Butanol	0.500453 ppb v/v
							n-Butylbenzene	0.500453 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Decane	0.500453 ppb v/v
							n-Heptane	0.500453 ppb v/v
							n-Hexane	0.500453 ppb v/v
							n-Nonane	0.500453 ppb v/v
							n-Octane	0.500453 ppb v/v
							n-Propylbenzene	0.500453 ppb v/v
							Naphthalene	0.500453 ppb v/v
							o-Xylene	0.500453 ppb v/v
							Pentane	0.500453 ppb v/v
							Propene	0.500453 ppb v/v
							sec-Butylbenzene	0.500453 ppb v/v
							Styrene	0.500453 ppb v/v
							tert-Butyl alcohol	0.500453 ppb v/v
							tert-Butylbenzene	0.500453 ppb v/v
							Tetrachloroethene	0.500453 ppb v/v
							Tetrahydrofuran	0.500453 ppb v/v
							Toluene	0.500453 ppb v/v
							trans-1,2-Dichloroethene	0.500453 ppb v/v
							trans-1,3-Dichloropropene	0.500453 ppb v/v
							Trichloroethene	0.500453 ppb v/v
							Trichlorofluoromethane	0.500453 ppb v/v
							Undecane	0.500453 ppb v/v
							Vinyl acetate	0.500453 ppb v/v
							Vinyl chloride	0.500453 ppb v/v
							Ethanol	5.01064 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					ATTO15EthCALw_00155	124 mL	Ethanol	5.01064 ppb v/v
.ATTO15CAL6w_00221	06/19/23	05/19/23	Nitrogen, Lot 1	15.463 L	ATTO15CALSTKi_00169	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1,2-Trichlorotrifluoroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v
							1,2,4-Trichlorobenzene	19.9961 ppb v/v
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dibromoethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v
							1,2-Dichloropropane	19.9961 ppb v/v
							1,2-Dichlorotetrafluoroethane	19.9961 ppb v/v
							1,3,5-Trimethylbenzene	19.9961 ppb v/v
							1,3-Butadiene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dioxane	19.9961 ppb v/v
							2,2,4-Trimethylpentane	19.9961 ppb v/v
							2-Chlorotoluene	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloropropene	19.9961 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Ethyltoluene	19.9961 ppb v/v
							4-Isopropyltoluene	19.9961 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v
							Acetonitrile	19.9961 ppb v/v
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v
							Benzyl chloride	19.9961 ppb v/v
							Bromodichloromethane	19.9961 ppb v/v
							Bromoethene(Vinyl Bromide)	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chlorodifluoromethane	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cumene	19.9961 ppb v/v
							Cyclohexane	19.9961 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromochloromethane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v
							Ethyl ether	19.9961 ppb v/v
							Ethylbenzene	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v
							m,p-Xylene	39.9922 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	19.9961 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	19.9961 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butane	19.9961 ppb v/v
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v
							n-Heptane	19.9961 ppb v/v
							n-Hexane	19.9961 ppb v/v
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							n-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o-Xylene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v
							Propene	19.9961 ppb v/v
							sec-Butylbenzene	19.9961 ppb v/v
							Styrene	19.9961 ppb v/v
							tert-Butyl alcohol	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v
							Toluene	19.9961 ppb v/v
							trans-1,2-Dichloroethene	19.9961 ppb v/v
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl chloride	19.9961 ppb v/v
					ATTO15EthCALw_00155	1237 mL	Ethanol	39.9987 ppb v/v
..ATTO15CALSTKi_00169	10/15/23	05/19/23	Nitrogen, Lot 13	37.5 L	ATTO15CALs_00046	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1,2-Trichlorotrifluoroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl Ethyl Ketone (2-Butanone)	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							o-Xylene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
...ATTO15CALs_00046	10/15/23		Linde, Lot CC-237336		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1,2-Trichlorotrifluoroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone (2-Butanone)	1 ppm v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							o-Xylene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
..ATTO15EthCALw_00155	08/01/23	05/22/23	Nitrogen, Lot 12	37.5 ppb	1gEthanol_00005	18.75 uL	Ethanol	500 ppb v/v
...1gEthanol_00005	08/30/25	ChemService, Lot 12173500			(Purchased Reagent)		Ethanol	1 mL/mL
.ATTO15EthCALw_00155	08/01/23	05/22/23	Nitrogen, Lot 12	37.5 ppb	1gEthanol_00005	18.75 uL	Ethanol	500 ppb v/v
..1gEthanol_00005	08/30/25	ChemService, Lot 12173500			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL3w_00264	06/19/23	05/19/23	Nitrogen, Lot 12	15.463 L	ATTO15CALSTKi_00169	386 mL	1,1,1-Trichloroethane	4.99256 ppb v/v
							1,1,2,2-Tetrachloroethane	4.99256 ppb v/v
							1,1,2-Trichloroethane	4.99256 ppb v/v
							1,1,2-Trichlorotrifluoroethane	4.99256 ppb v/v
							1,1-Dichloroethane	4.99256 ppb v/v
							1,1-Dichloroethene	4.99256 ppb v/v
							1,2,3-Trichlorobenzene	4.99256 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,3-Trichloropropane	4.99256 ppb v/v
							1,2,4-Trichlorobenzene	4.99256 ppb v/v
							1,2,4-Trimethylbenzene	4.99256 ppb v/v
							1,2-Dibromoethane	4.99256 ppb v/v
							1,2-Dichlorobenzene	4.99256 ppb v/v
							1,2-Dichloroethane	4.99256 ppb v/v
							1,2-Dichloropropane	4.99256 ppb v/v
							1,2-Dichlorotetrafluoroethane	4.99256 ppb v/v
							1,3,5-Trimethylbenzene	4.99256 ppb v/v
							1,3-Butadiene	4.99256 ppb v/v
							1,3-Dichlorobenzene	4.99256 ppb v/v
							1,4-Dichlorobenzene	4.99256 ppb v/v
							1,4-Dioxane	4.99256 ppb v/v
							2,2,4-Trimethylpentane	4.99256 ppb v/v
							2-Chlorotoluene	4.99256 ppb v/v
							2-Methylbutane	4.99256 ppb v/v
							3-Chloropropene	4.99256 ppb v/v
							4-Ethyltoluene	4.99256 ppb v/v
							4-Isopropyltoluene	4.99256 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	4.99256 ppb v/v
							Acetone	4.99256 ppb v/v
							Acetonitrile	4.99256 ppb v/v
							Acrolein	4.99256 ppb v/v
							Acrylonitrile	4.99256 ppb v/v
							Alpha Methyl Styrene	4.99256 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	4.99256 ppb v/v
							Benzyl chloride	4.99256 ppb v/v
							Bromodichloromethane	4.99256 ppb v/v
							Bromoethene(Vinyl Bromide)	4.99256 ppb v/v
							Bromoform	4.99256 ppb v/v
							Bromomethane	4.99256 ppb v/v
							Carbon disulfide	4.99256 ppb v/v
							Carbon tetrachloride	4.99256 ppb v/v
							Chlorobenzene	4.99256 ppb v/v
							Chlorodifluoromethane	4.99256 ppb v/v
							Chloroethane	4.99256 ppb v/v
							Chloroform	4.99256 ppb v/v
							Chloromethane	4.99256 ppb v/v
							cis-1,2-Dichloroethene	4.99256 ppb v/v
							cis-1,3-Dichloropropene	4.99256 ppb v/v
							Cumene	4.99256 ppb v/v
							Cyclohexane	4.99256 ppb v/v
							Dibromochloromethane	4.99256 ppb v/v
							Dibromomethane	4.99256 ppb v/v
							Dichlorodifluoromethane	4.99256 ppb v/v
							Dodecane	4.99256 ppb v/v
							Ethyl acetate	4.99256 ppb v/v
							Ethyl ether	4.99256 ppb v/v
							Ethylbenzene	4.99256 ppb v/v
							Hexachlorobutadiene	4.99256 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropyl alcohol	4.99256 ppb v/v
							m,p-Xylene	9.98513 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	4.99256 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	4.99256 ppb v/v
							Methyl methacrylate	4.99256 ppb v/v
							Methyl tert-butyl ether	4.99256 ppb v/v
							Methylene Chloride	4.99256 ppb v/v
							n-Butane	4.99256 ppb v/v
							n-Butanol	4.99256 ppb v/v
							n-Butylbenzene	4.99256 ppb v/v
							n-Decane	4.99256 ppb v/v
							n-Heptane	4.99256 ppb v/v
							n-Hexane	4.99256 ppb v/v
							n-Nonane	4.99256 ppb v/v
							n-Octane	4.99256 ppb v/v
							n-Propylbenzene	4.99256 ppb v/v
							Naphthalene	4.99256 ppb v/v
							o-Xylene	4.99256 ppb v/v
							Pentane	4.99256 ppb v/v
							Propene	4.99256 ppb v/v
							sec-Butylbenzene	4.99256 ppb v/v
							Styrene	4.99256 ppb v/v
							tert-Butyl alcohol	4.99256 ppb v/v
							tert-Butylbenzene	4.99256 ppb v/v
							Tetrachloroethene	4.99256 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrahydrofuran	4.99256 ppb v/v
							Toluene	4.99256 ppb v/v
							trans-1,2-Dichloroethene	4.99256 ppb v/v
							trans-1,3-Dichloropropene	4.99256 ppb v/v
							Trichloroethene	4.99256 ppb v/v
							Trichlorofluoromethane	4.99256 ppb v/v
							Undecane	4.99256 ppb v/v
							Vinyl acetate	4.99256 ppb v/v
							Vinyl chloride	4.99256 ppb v/v
					ATTO15EthCALw_00155	309 mL	Ethanol	9.99159 ppb v/v
.ATTO15CALSTKi_00169	10/15/23	05/19/23	Nitrogen, Lot 13	37.5 L	ATTO15CALs_00046	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1,2-Trichlorotrifluoroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	200 ppb v/v
							Acetone	200 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o-Xylene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
..ATTO15CALs_00046	10/15/23		Linde, Lot CC-237336		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1,2-Trichlorotrifluoroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone (2-Butanone)	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							o-Xylene	1 ppm v/v
							Pentane	1 ppm v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
.ATTO15EthCALw_00155	08/01/23	05/22/23	Nitrogen, Lot 12	37.5 ppb	1gEthanol_00005	18.75 uL	Ethanol	500 ppb v/v
..1gEthanol_00005	08/30/25		ChemService, Lot 12173500		(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL4w_00807	06/19/23	05/19/23	Nitrogen, Lot 12	15.463 L	ATTO15CALSTKi_00169	773 mL	1,1,1-Trichloroethane	9.99806 ppb v/v
							1,1,2,2-Tetrachloroethane	9.99806 ppb v/v
							1,1,2-Trichloroethane	9.99806 ppb v/v
							1,1,2-Trichlorotrifluoroethane	9.99806 ppb v/v
							1,1-Dichloroethane	9.99806 ppb v/v
							1,1-Dichloroethene	9.99806 ppb v/v
							1,2,3-Trichlorobenzene	9.99806 ppb v/v
							1,2,3-Trichloropropane	9.99806 ppb v/v
							1,2,4-Trichlorobenzene	9.99806 ppb v/v
							1,2,4-Trimethylbenzene	9.99806 ppb v/v
							1,2-Dibromoethane	9.99806 ppb v/v
							1,2-Dichlorobenzene	9.99806 ppb v/v
							1,2-Dichloroethane	9.99806 ppb v/v
							1,2-Dichloropropane	9.99806 ppb v/v
							1,2-Dichlorotetrafluoroethane	9.99806 ppb v/v
							1,3,5-Trimethylbenzene	9.99806 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Butadiene	9.99806 ppb v/v
							1,3-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dioxane	9.99806 ppb v/v
							2,2,4-Trimethylpentane	9.99806 ppb v/v
							2-Chlorotoluene	9.99806 ppb v/v
							2-Methylbutane	9.99806 ppb v/v
							3-Chloropropene	9.99806 ppb v/v
							4-Ethyltoluene	9.99806 ppb v/v
							4-Isopropyltoluene	9.99806 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	9.99806 ppb v/v
							Acetone	9.99806 ppb v/v
							Acetonitrile	9.99806 ppb v/v
							Acrolein	9.99806 ppb v/v
							Acrylonitrile	9.99806 ppb v/v
							Alpha Methyl Styrene	9.99806 ppb v/v
							Benzene	9.99806 ppb v/v
							Benzyl chloride	9.99806 ppb v/v
							Bromodichloromethane	9.99806 ppb v/v
							Bromoethene(Vinyl Bromide)	9.99806 ppb v/v
							Bromoform	9.99806 ppb v/v
							Bromomethane	9.99806 ppb v/v
							Carbon disulfide	9.99806 ppb v/v
							Carbon tetrachloride	9.99806 ppb v/v
							Chlorobenzene	9.99806 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorodifluoromethane	9.99806 ppb v/v
							Chloroethane	9.99806 ppb v/v
							Chloroform	9.99806 ppb v/v
							Chloromethane	9.99806 ppb v/v
							cis-1,2-Dichloroethene	9.99806 ppb v/v
							cis-1,3-Dichloropropene	9.99806 ppb v/v
							Cumene	9.99806 ppb v/v
							Cyclohexane	9.99806 ppb v/v
							Dibromochloromethane	9.99806 ppb v/v
							Dibromomethane	9.99806 ppb v/v
							Dichlorodifluoromethane	9.99806 ppb v/v
							Dodecane	9.99806 ppb v/v
							Ethyl acetate	9.99806 ppb v/v
							Ethyl ether	9.99806 ppb v/v
							Ethylbenzene	9.99806 ppb v/v
							Hexachlorobutadiene	9.99806 ppb v/v
							Isopropyl alcohol	9.99806 ppb v/v
							m,p-Xylene	19.9961 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	9.99806 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	9.99806 ppb v/v
							Methyl methacrylate	9.99806 ppb v/v
							Methyl tert-butyl ether	9.99806 ppb v/v
							Methylene Chloride	9.99806 ppb v/v
							n-Butane	9.99806 ppb v/v
							n-Butanol	9.99806 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Butylbenzene	9.99806 ppb v/v
							n-Decane	9.99806 ppb v/v
							n-Heptane	9.99806 ppb v/v
							n-Hexane	9.99806 ppb v/v
							n-Nonane	9.99806 ppb v/v
							n-Octane	9.99806 ppb v/v
							n-Propylbenzene	9.99806 ppb v/v
							Naphthalene	9.99806 ppb v/v
							o-Xylene	9.99806 ppb v/v
							Pentane	9.99806 ppb v/v
							Propene	9.99806 ppb v/v
							sec-Butylbenzene	9.99806 ppb v/v
							Styrene	9.99806 ppb v/v
							tert-Butyl alcohol	9.99806 ppb v/v
							tert-Butylbenzene	9.99806 ppb v/v
							Tetrachloroethene	9.99806 ppb v/v
							Tetrahydrofuran	9.99806 ppb v/v
							Toluene	9.99806 ppb v/v
							trans-1,2-Dichloroethene	9.99806 ppb v/v
							trans-1,3-Dichloropropene	9.99806 ppb v/v
							Trichloroethene	9.99806 ppb v/v
							Trichlorofluoromethane	9.99806 ppb v/v
							Undecane	9.99806 ppb v/v
							Vinyl acetate	9.99806 ppb v/v
							Vinyl chloride	9.99806 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					ATTO15EthCALw_00155	464 mL	Ethanol	15.0036 ppb v/v
.ATTO15CALSTKi_00169	10/15/23	05/19/23	Nitrogen, Lot 13	37.5 L	ATTO15CALs_00046	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1,2-Trichlorotrifluoroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							o-Xylene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..ATTO15CALs_00046	10/15/23		Linde, Lot CC-237336		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1,2-Trichlorotrifluoroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone (2-Butanone)	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							o-Xylene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
.ATTO15EthCALw_00155	08/01/23	05/22/23	Nitrogen, Lot 12	37.5 ppb	1gEthanol_00005	18.75 uL	Ethanol	500 ppb v/v
..1gEthanol_00005	08/30/25	ChemService, Lot 12173500			(Purchased Reagent)		Ethanol	1 mL/mL

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
ATTO15CAL4w_00808	07/19/23	06/19/23	Nitrogen, Lot 12	15.463 L	ATTO15CALSTKi_00169	773 mL	1,1,1-Trichloroethane	9.99806 ppb v/v
							1,1,2,2-Tetrachloroethane	9.99806 ppb v/v
							1,1,2-Trichloroethane	9.99806 ppb v/v
							1,1,2-Trichlorotrifluoroethane	9.99806 ppb v/v
							1,1-Dichloroethane	9.99806 ppb v/v
							1,1-Dichloroethene	9.99806 ppb v/v
							1,2,4-Trichlorobenzene	9.99806 ppb v/v
							1,2,4-Trimethylbenzene	9.99806 ppb v/v
							1,2-Dibromoethane	9.99806 ppb v/v
							1,2-Dichlorobenzene	9.99806 ppb v/v
							1,2-Dichloroethane	9.99806 ppb v/v
							1,2-Dichloropropane	9.99806 ppb v/v
							1,2-Dichlorotetrafluoroethane	9.99806 ppb v/v
							1,3,5-Trimethylbenzene	9.99806 ppb v/v
							1,3-Butadiene	9.99806 ppb v/v
							1,3-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dioxane	9.99806 ppb v/v
							2,2,4-Trimethylpentane	9.99806 ppb v/v
							2-Chlorotoluene	9.99806 ppb v/v
							3-Chloropropene	9.99806 ppb v/v
							4-Ethyltoluene	9.99806 ppb v/v
							4-Isopropyltoluene	9.99806 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	9.99806 ppb v/v
							Acetone	9.99806 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	9.99806 ppb v/v
							Benzyl chloride	9.99806 ppb v/v
							Bromodichloromethane	9.99806 ppb v/v
							Bromoethene(Vinyl Bromide)	9.99806 ppb v/v
							Bromoform	9.99806 ppb v/v
							Bromomethane	9.99806 ppb v/v
							Carbon disulfide	9.99806 ppb v/v
							Carbon tetrachloride	9.99806 ppb v/v
							Chlorobenzene	9.99806 ppb v/v
							Chlorodifluoromethane	9.99806 ppb v/v
							Chloroethane	9.99806 ppb v/v
							Chloroform	9.99806 ppb v/v
							Chloromethane	9.99806 ppb v/v
							cis-1,2-Dichloroethene	9.99806 ppb v/v
							cis-1,3-Dichloropropene	9.99806 ppb v/v
							Cumene	9.99806 ppb v/v
							Cyclohexane	9.99806 ppb v/v
							Dibromochloromethane	9.99806 ppb v/v
							Dichlorodifluoromethane	9.99806 ppb v/v
							Ethylbenzene	9.99806 ppb v/v
							Hexachlorobutadiene	9.99806 ppb v/v
							Isopropyl alcohol	9.99806 ppb v/v
							m,p-Xylene	19.9961 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	9.99806 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	9.99806 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methacrylate	9.99806 ppb v/v
							Methyl tert-butyl ether	9.99806 ppb v/v
							Methylene Chloride	9.99806 ppb v/v
							n-Butane	9.99806 ppb v/v
							n-Butylbenzene	9.99806 ppb v/v
							n-Heptane	9.99806 ppb v/v
							n-Hexane	9.99806 ppb v/v
							n-Propylbenzene	9.99806 ppb v/v
							Naphthalene	9.99806 ppb v/v
							o-Xylene	9.99806 ppb v/v
							sec-Butylbenzene	9.99806 ppb v/v
							Styrene	9.99806 ppb v/v
							tert-Butyl alcohol	9.99806 ppb v/v
							tert-Butylbenzene	9.99806 ppb v/v
							Tetrachloroethene	9.99806 ppb v/v
							Tetrahydrofuran	9.99806 ppb v/v
							Toluene	9.99806 ppb v/v
							trans-1,2-Dichloroethene	9.99806 ppb v/v
							trans-1,3-Dichloropropene	9.99806 ppb v/v
							Trichloroethene	9.99806 ppb v/v
							Trichlorofluoromethane	9.99806 ppb v/v
							Vinyl chloride	9.99806 ppb v/v
.ATTO15CALSTKi_00169	10/15/23	05/19/23	Nitrogen, Lot 13	37.5 L	ATTO15CALs_00046	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1,2-Trichlorotrifluoroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	200 ppb v/v
							Acetone	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	200 ppb v/v
							Methyl methacrylate	200 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							o-Xylene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Vinyl chloride	200 ppb v/v
..ATTO15CALs_00046	10/15/23		Linde, Lot CC-237336		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1,2-Trichlorotrifluoroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	1 ppm v/v
							Acetone	1 ppm v/v
							Benzene	1 ppm v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone (2-Butanone)	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							o-Xylene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Vinyl chloride	1 ppm v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
ATTO15CAL5w_00132	06/19/23	05/19/23	Nitrogen, Lot 12	15.463 L	ATTO15CALSTKi_00169	1160 mL	1,1,1-Trichloroethane	15.0036 ppb v/v
							1,1,2,2-Tetrachloroethane	15.0036 ppb v/v
							1,1,2-Trichloroethane	15.0036 ppb v/v
							1,1,2-Trichlorotrifluoroethane	15.0036 ppb v/v
							1,1-Dichloroethane	15.0036 ppb v/v
							1,1-Dichloroethene	15.0036 ppb v/v
							1,2,3-Trichlorobenzene	15.0036 ppb v/v
							1,2,3-Trichloropropane	15.0036 ppb v/v
							1,2,4-Trichlorobenzene	15.0036 ppb v/v
							1,2,4-Trimethylbenzene	15.0036 ppb v/v
							1,2-Dibromoethane	15.0036 ppb v/v
							1,2-Dichlorobenzene	15.0036 ppb v/v
							1,2-Dichloroethane	15.0036 ppb v/v
							1,2-Dichloropropane	15.0036 ppb v/v
							1,2-Dichlorotetrafluoroethane	15.0036 ppb v/v
							1,3,5-Trimethylbenzene	15.0036 ppb v/v
							1,3-Butadiene	15.0036 ppb v/v
							1,3-Dichlorobenzene	15.0036 ppb v/v
							1,4-Dichlorobenzene	15.0036 ppb v/v
							1,4-Dioxane	15.0036 ppb v/v
							2,2,4-Trimethylpentane	15.0036 ppb v/v
							2-Chlorotoluene	15.0036 ppb v/v
							2-Methylbutane	15.0036 ppb v/v
							3-Chloropropene	15.0036 ppb v/v
							4-Ethyltoluene	15.0036 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Isopropyltoluene	15.0036 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	15.0036 ppb v/v
							Acetone	15.0036 ppb v/v
							Acetonitrile	15.0036 ppb v/v
							Acrolein	15.0036 ppb v/v
							Acrylonitrile	15.0036 ppb v/v
							Alpha Methyl Styrene	15.0036 ppb v/v
							Benzene	15.0036 ppb v/v
							Benzyl chloride	15.0036 ppb v/v
							Bromodichloromethane	15.0036 ppb v/v
							Bromoethene(Vinyl Bromide)	15.0036 ppb v/v
							Bromoform	15.0036 ppb v/v
							Bromomethane	15.0036 ppb v/v
							Carbon disulfide	15.0036 ppb v/v
							Carbon tetrachloride	15.0036 ppb v/v
							Chlorobenzene	15.0036 ppb v/v
							Chlorodifluoromethane	15.0036 ppb v/v
							Chloroethane	15.0036 ppb v/v
							Chloroform	15.0036 ppb v/v
							Chloromethane	15.0036 ppb v/v
							cis-1,2-Dichloroethene	15.0036 ppb v/v
							cis-1,3-Dichloropropene	15.0036 ppb v/v
							Cumene	15.0036 ppb v/v
							Cyclohexane	15.0036 ppb v/v
							Dibromochloromethane	15.0036 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromomethane	15.0036 ppb v/v
							Dichlorodifluoromethane	15.0036 ppb v/v
							Dodecane	15.0036 ppb v/v
							Ethyl acetate	15.0036 ppb v/v
							Ethyl ether	15.0036 ppb v/v
							Ethylbenzene	15.0036 ppb v/v
							Hexachlorobutadiene	15.0036 ppb v/v
							Isopropyl alcohol	15.0036 ppb v/v
							m,p-Xylene	30.0071 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	15.0036 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	15.0036 ppb v/v
							Methyl methacrylate	15.0036 ppb v/v
							Methyl tert-butyl ether	15.0036 ppb v/v
							Methylene Chloride	15.0036 ppb v/v
							n-Butane	15.0036 ppb v/v
							n-Butanol	15.0036 ppb v/v
							n-Butylbenzene	15.0036 ppb v/v
							n-Decane	15.0036 ppb v/v
							n-Heptane	15.0036 ppb v/v
							n-Hexane	15.0036 ppb v/v
							n-Nonane	15.0036 ppb v/v
							n-Octane	15.0036 ppb v/v
							n-Propylbenzene	15.0036 ppb v/v
							Naphthalene	15.0036 ppb v/v
							o-Xylene	15.0036 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentane	15.0036 ppb v/v
							Propene	15.0036 ppb v/v
							sec-Butylbenzene	15.0036 ppb v/v
							Styrene	15.0036 ppb v/v
							tert-Butyl alcohol	15.0036 ppb v/v
							tert-Butylbenzene	15.0036 ppb v/v
							Tetrachloroethene	15.0036 ppb v/v
							Tetrahydrofuran	15.0036 ppb v/v
							Toluene	15.0036 ppb v/v
							trans-1,2-Dichloroethene	15.0036 ppb v/v
							trans-1,3-Dichloropropene	15.0036 ppb v/v
							Trichloroethene	15.0036 ppb v/v
							Trichlorofluoromethane	15.0036 ppb v/v
							Undecane	15.0036 ppb v/v
							Vinyl acetate	15.0036 ppb v/v
							Vinyl chloride	15.0036 ppb v/v
					ATTO15EthCALw_00155	620 mL	Ethanol	20.0479 ppb v/v
.ATTO15CALSTKi_00169	10/15/23	05/19/23	Nitrogen, Lot 13	37.5 L	ATTO15CALs_00046	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1,2-Trichlorotrifluoroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	200 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							o-Xylene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
..ATTO15CALs_00046	10/15/23		Linde, Lot CC-237336		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1,2-Trichlorotrifluoroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone (2-Butanone)	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							o-Xylene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
.ATTO15EthCALw_00155	08/01/23	05/22/23	Nitrogen, Lot 12	37.5 ppb	1gEthanol_00005	18.75 uL	Ethanol	500 ppb v/v
..1gEthanol_00005	08/30/25	ChemService, Lot 12173500			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL6w_00221	06/19/23	05/19/23	Nitrogen, Lot 1	15.463 L	ATTO15CALSTKi_00169	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1,2-Trichlorotrifluoroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v
							1,2,4-Trichlorobenzene	19.9961 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dibromoethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v
							1,2-Dichloropropane	19.9961 ppb v/v
							1,2-Dichlorotetrafluoroethane	19.9961 ppb v/v
							1,3,5-Trimethylbenzene	19.9961 ppb v/v
							1,3-Butadiene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dioxane	19.9961 ppb v/v
							2,2,4-Trimethylpentane	19.9961 ppb v/v
							2-Chlorotoluene	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloropropene	19.9961 ppb v/v
							4-Ethyltoluene	19.9961 ppb v/v
							4-Isopropyltoluene	19.9961 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v
							Acetonitrile	19.9961 ppb v/v
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v
							Benzyl chloride	19.9961 ppb v/v

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromodichloromethane	19.9961 ppb v/v
							Bromoethene(Vinyl Bromide)	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chlorodifluoromethane	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cumene	19.9961 ppb v/v
							Cyclohexane	19.9961 ppb v/v
							Dibromochloromethane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v
							Ethyl ether	19.9961 ppb v/v
							Ethylbenzene	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v
							m,p-Xylene	39.9922 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl Butyl Ketone (2-Hexanone)	19.9961 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	19.9961 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butane	19.9961 ppb v/v
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v
							n-Heptane	19.9961 ppb v/v
							n-Hexane	19.9961 ppb v/v
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							n-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v
							o-Xylene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v
							Propene	19.9961 ppb v/v
							sec-Butylbenzene	19.9961 ppb v/v
							Styrene	19.9961 ppb v/v
							tert-Butyl alcohol	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v
							Toluene	19.9961 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	19.9961 ppb v/v
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl chloride	19.9961 ppb v/v
					ATTO15EthCALw_00155	1237 mL	Ethanol	39.9987 ppb v/v
.ATTO15CALSTKi_00169	10/15/23	05/19/23	Nitrogen, Lot 13	37.5 L	ATTO15CALs_00046	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1,2-Trichlorotrifluoroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							o-Xylene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
..ATTO15CALs_00046	10/15/23		Linde, Lot CC-237336		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1,2-Trichlorotrifluoroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone (2-Butanone)	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							o-Xylene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
.ATTO15EthCALw_00155	08/01/23	05/22/23	Nitrogen, Lot 12	37.5 ppb	1gEthanol_00005	18.75 uL	Ethanol	500 ppb v/v
..1gEthanol_00005	08/30/25		ChemService, Lot 12173500		(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL7w_00132	06/19/23	05/19/23	Nitrogen, Lot 12	15.463 L	ATTO15CALSTKi_00169	3092 mL	1,1,1-Trichloroethane	39.9922 ppb v/v
							1,1,2,2-Tetrachloroethane	39.9922 ppb v/v
							1,1,2-Trichloroethane	39.9922 ppb v/v
							1,1,2-Trichlorotrifluoroethane	39.9922 ppb v/v
							1,1-Dichloroethane	39.9922 ppb v/v
							1,1-Dichloroethene	39.9922 ppb v/v
							1,2,3-Trichlorobenzene	39.9922 ppb v/v
							1,2,3-Trichloropropane	39.9922 ppb v/v
							1,2,4-Trichlorobenzene	39.9922 ppb v/v
							1,2,4-Trimethylbenzene	39.9922 ppb v/v
							1,2-Dibromoethane	39.9922 ppb v/v
							1,2-Dichlorobenzene	39.9922 ppb v/v
							1,2-Dichloroethane	39.9922 ppb v/v
							1,2-Dichloropropane	39.9922 ppb v/v
							1,2-Dichlorotetrafluoroethane	39.9922 ppb v/v
							1,3,5-Trimethylbenzene	39.9922 ppb v/v
							1,3-Butadiene	39.9922 ppb v/v
							1,3-Dichlorobenzene	39.9922 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	39.9922 ppb v/v
							1,4-Dioxane	39.9922 ppb v/v
							2,2,4-Trimethylpentane	39.9922 ppb v/v
							2-Chlorotoluene	39.9922 ppb v/v
							2-Methylbutane	39.9922 ppb v/v
							3-Chloropropene	39.9922 ppb v/v
							4-Ethyltoluene	39.9922 ppb v/v
							4-Isopropyltoluene	39.9922 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	39.9922 ppb v/v
							Acetone	39.9922 ppb v/v
							Acetonitrile	39.9922 ppb v/v
							Acrolein	39.9922 ppb v/v
							Acrylonitrile	39.9922 ppb v/v
							Alpha Methyl Styrene	39.9922 ppb v/v
							Benzene	39.9922 ppb v/v
							Benzyl chloride	39.9922 ppb v/v
							Bromodichloromethane	39.9922 ppb v/v
							Bromoethene(Vinyl Bromide)	39.9922 ppb v/v
							Bromoform	39.9922 ppb v/v
							Bromomethane	39.9922 ppb v/v
							Carbon disulfide	39.9922 ppb v/v
							Carbon tetrachloride	39.9922 ppb v/v
							Chlorobenzene	39.9922 ppb v/v
							Chlorodifluoromethane	39.9922 ppb v/v
							Chloroethane	39.9922 ppb v/v

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroform	39.9922 ppb v/v
							Chloromethane	39.9922 ppb v/v
							cis-1,2-Dichloroethene	39.9922 ppb v/v
							cis-1,3-Dichloropropene	39.9922 ppb v/v
							Cumene	39.9922 ppb v/v
							Cyclohexane	39.9922 ppb v/v
							Dibromochloromethane	39.9922 ppb v/v
							Dibromomethane	39.9922 ppb v/v
							Dichlorodifluoromethane	39.9922 ppb v/v
							Dodecane	39.9922 ppb v/v
							Ethyl acetate	39.9922 ppb v/v
							Ethyl ether	39.9922 ppb v/v
							Ethylbenzene	39.9922 ppb v/v
							Hexachlorobutadiene	39.9922 ppb v/v
							Isopropyl alcohol	39.9922 ppb v/v
							m,p-Xylene	79.9845 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	39.9922 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	39.9922 ppb v/v
							Methyl methacrylate	39.9922 ppb v/v
							Methyl tert-butyl ether	39.9922 ppb v/v
							Methylene Chloride	39.9922 ppb v/v
							n-Butane	39.9922 ppb v/v
							n-Butanol	39.9922 ppb v/v
							n-Butylbenzene	39.9922 ppb v/v
							n-Decane	39.9922 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Heptane	39.9922 ppb v/v
							n-Hexane	39.9922 ppb v/v
							n-Nonane	39.9922 ppb v/v
							n-Octane	39.9922 ppb v/v
							n-Propylbenzene	39.9922 ppb v/v
							Naphthalene	39.9922 ppb v/v
							o-Xylene	39.9922 ppb v/v
							Pentane	39.9922 ppb v/v
							Propene	39.9922 ppb v/v
							sec-Butylbenzene	39.9922 ppb v/v
							Styrene	39.9922 ppb v/v
							tert-Butyl alcohol	39.9922 ppb v/v
							tert-Butylbenzene	39.9922 ppb v/v
							Tetrachloroethene	39.9922 ppb v/v
							Tetrahydrofuran	39.9922 ppb v/v
							Toluene	39.9922 ppb v/v
							trans-1,2-Dichloroethene	39.9922 ppb v/v
							trans-1,3-Dichloropropene	39.9922 ppb v/v
							Trichloroethene	39.9922 ppb v/v
							Trichlorofluoromethane	39.9922 ppb v/v
							Undecane	39.9922 ppb v/v
							Vinyl acetate	39.9922 ppb v/v
							Vinyl chloride	39.9922 ppb v/v
					ATTO15EthCALw_00155	3092 mL	Ethanol	99.9806 ppb v/v
.ATTO15CALSTKi_00169	10/15/23	05/19/23	Nitrogen, Lot 13	37.5 L	ATTO15CALs_00046	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichlorotrifluoroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							o-Xylene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
..ATTO15CALs_00046	10/15/23		Linde, Lot CC-237336		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1,2-Trichlorotrifluoroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone (2-Butanone)	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							o-Xylene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
.ATTO15EthCALw_00155	08/01/23	05/22/23	Nitrogen, Lot 12	37.5 ppb	1gEthanol_00005	18.75 uL	Ethanol	500 ppb v/v
..1gEthanol_00005	08/30/25	ChemService, Lot 12173500			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CISs_00012							1,2-Dichloroethene, Total	
							1,4-Difluorobenzene	100 ppb v/v
							BFB	100 ppb v/v
							Chlorobenzene-d5	100 ppb v/v
							Chlorobromomethane	100 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tentatively Identified Compound	
							Total Alkanes	
							Xylenes, Total	
ATTO15LCSW_00861	06/08/23	05/08/23	Nitrogen, Lot 13	15.463 L	ATTO15LCSSTKi_00138	773 mL	1,1,1-Trichloroethane	9.99806 ppb v/v
							1,1,2,2-Tetrachloroethane	9.99806 ppb v/v
							1,1,2-Trichloroethane	9.99806 ppb v/v
							1,1,2-Trichlorotrifluoroethane	9.99806 ppb v/v
							1,1-Dichloroethane	9.99806 ppb v/v
							1,1-Dichloroethene	9.99806 ppb v/v
							1,2,4-Trichlorobenzene	9.99806 ppb v/v
							1,2,4-Trimethylbenzene	9.99806 ppb v/v
							1,2-Dibromoethane	9.99806 ppb v/v
							1,2-Dichlorobenzene	9.99806 ppb v/v
							1,2-Dichloroethane	9.99806 ppb v/v
							1,2-Dichloropropane	9.99806 ppb v/v
							1,2-Dichlorotetrafluoroethane	9.99806 ppb v/v
							1,3,5-Trimethylbenzene	9.99806 ppb v/v
							1,3-Butadiene	9.99806 ppb v/v
							1,3-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dioxane	9.99806 ppb v/v
							2,2,4-Trimethylpentane	9.99806 ppb v/v
							2-Chlorotoluene	9.99806 ppb v/v
							3-Chloropropene	9.99806 ppb v/v
							4-Ethyltoluene	9.99806 ppb v/v
							4-Isopropyltoluene	9.99806 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	9.99806 ppb v/v
							Acetone	9.99806 ppb v/v
							Benzene	9.99806 ppb v/v
							Benzyl chloride	9.99806 ppb v/v
							Bromodichloromethane	9.99806 ppb v/v
							Bromoethene(Vinyl Bromide)	9.99806 ppb v/v
							Bromoform	9.99806 ppb v/v
							Bromomethane	9.99806 ppb v/v
							Carbon disulfide	9.99806 ppb v/v
							Carbon tetrachloride	9.99806 ppb v/v
							Chlorobenzene	9.99806 ppb v/v
							Chlorodifluoromethane	9.99806 ppb v/v
							Chloroethane	9.99806 ppb v/v
							Chloroform	9.99806 ppb v/v
							Chloromethane	9.99806 ppb v/v
							cis-1,2-Dichloroethene	9.99806 ppb v/v
							cis-1,3-Dichloropropene	9.99806 ppb v/v
							Cumene	9.99806 ppb v/v
							Cyclohexane	9.99806 ppb v/v
							Dibromochloromethane	9.99806 ppb v/v
							Dichlorodifluoromethane	9.99806 ppb v/v
							Ethylbenzene	9.99806 ppb v/v
							Hexachlorobutadiene	9.99806 ppb v/v
							Isopropyl alcohol	9.99806 ppb v/v
							m,p-Xylene	19.9961 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl Butyl Ketone (2-Hexanone)	9.99806 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	9.99806 ppb v/v
							Methyl methacrylate	9.99806 ppb v/v
							Methyl tert-butyl ether	9.99806 ppb v/v
							Methylene Chloride	9.99806 ppb v/v
							n-Butane	9.99806 ppb v/v
							n-Butylbenzene	9.99806 ppb v/v
							n-Heptane	9.99806 ppb v/v
							n-Hexane	9.99806 ppb v/v
							n-Propylbenzene	9.99806 ppb v/v
							Naphthalene	9.99806 ppb v/v
							o-Xylene	9.99806 ppb v/v
							sec-Butylbenzene	9.99806 ppb v/v
							Styrene	9.99806 ppb v/v
							tert-Butyl alcohol	9.99806 ppb v/v
							tert-Butylbenzene	9.99806 ppb v/v
							Tetrachloroethene	9.99806 ppb v/v
							Tetrahydrofuran	9.99806 ppb v/v
							Toluene	9.99806 ppb v/v
							trans-1,2-Dichloroethene	9.99806 ppb v/v
							trans-1,3-Dichloropropene	9.99806 ppb v/v
							Trichloroethene	9.99806 ppb v/v
							Trichlorofluoromethane	9.99806 ppb v/v
							Vinyl chloride	9.99806 ppb v/v
.ATTO15LCSSTKi_00138	08/05/23	05/05/23	Nitrogen, Lot 12	37.5 L	ATTO15CALs_00047	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichlorotrifluoroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	200 ppb v/v
							Acetone	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl Ethyl Ketone (2-Butanone)	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							o-Xylene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Vinyl chloride	200 ppb v/v
..ATTO15CALs_00047	10/15/23		Linde, Lot CC-133603		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1,2-Trichlorotrifluoroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	1 ppm v/v
							Acetone	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone (2-Butanone)	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							o-Xylene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Vinyl chloride	1 ppm v/v
ATTO15LCSW_00862	07/07/23	06/07/23	Nitrogen, Lot 13	15.463 L	ATTO15LCSSTKi_00138	773 mL	1,1,1-Trichloroethane	9.99806 ppb v/v
							1,1,2,2-Tetrachloroethane	9.99806 ppb v/v
							1,1,2-Trichloroethane	9.99806 ppb v/v
							1,1,2-Trichlorotrifluoroethane	9.99806 ppb v/v
							1,1-Dichloroethane	9.99806 ppb v/v
							1,1-Dichloroethene	9.99806 ppb v/v
							1,2,4-Trichlorobenzene	9.99806 ppb v/v
							1,2,4-Trimethylbenzene	9.99806 ppb v/v
							1,2-Dibromoethane	9.99806 ppb v/v
							1,2-Dichlorobenzene	9.99806 ppb v/v
							1,2-Dichloroethane	9.99806 ppb v/v
							1,2-Dichloropropane	9.99806 ppb v/v
							1,2-Dichlorotetrafluoroethane	9.99806 ppb v/v
							1,3,5-Trimethylbenzene	9.99806 ppb v/v
							1,3-Butadiene	9.99806 ppb v/v
							1,3-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dioxane	9.99806 ppb v/v
							2,2,4-Trimethylpentane	9.99806 ppb v/v
							2-Chlorotoluene	9.99806 ppb v/v
							3-Chloropropene	9.99806 ppb v/v
							4-Ethyltoluene	9.99806 ppb v/v
							4-Isopropyltoluene	9.99806 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	9.99806 ppb v/v
							Acetone	9.99806 ppb v/v
							Benzene	9.99806 ppb v/v
							Benzyl chloride	9.99806 ppb v/v
							Bromodichloromethane	9.99806 ppb v/v
							Bromoethene(Vinyl Bromide)	9.99806 ppb v/v
							Bromoform	9.99806 ppb v/v
							Bromomethane	9.99806 ppb v/v
							Carbon disulfide	9.99806 ppb v/v
							Carbon tetrachloride	9.99806 ppb v/v
							Chlorobenzene	9.99806 ppb v/v
							Chlorodifluoromethane	9.99806 ppb v/v
							Chloroethane	9.99806 ppb v/v
							Chloroform	9.99806 ppb v/v
							Chloromethane	9.99806 ppb v/v
							cis-1,2-Dichloroethene	9.99806 ppb v/v
							cis-1,3-Dichloropropene	9.99806 ppb v/v
							Cumene	9.99806 ppb v/v
							Cyclohexane	9.99806 ppb v/v
							Dibromochloromethane	9.99806 ppb v/v
							Dichlorodifluoromethane	9.99806 ppb v/v
							Ethylbenzene	9.99806 ppb v/v
							Hexachlorobutadiene	9.99806 ppb v/v
							Isopropyl alcohol	9.99806 ppb v/v
							m,p-Xylene	19.9961 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl Butyl Ketone (2-Hexanone)	9.99806 ppb v/v
							Methyl Ethyl Ketone (2-Butanone)	9.99806 ppb v/v
							Methyl methacrylate	9.99806 ppb v/v
							Methyl tert-butyl ether	9.99806 ppb v/v
							Methylene Chloride	9.99806 ppb v/v
							n-Butane	9.99806 ppb v/v
							n-Butylbenzene	9.99806 ppb v/v
							n-Heptane	9.99806 ppb v/v
							n-Hexane	9.99806 ppb v/v
							n-Propylbenzene	9.99806 ppb v/v
							Naphthalene	9.99806 ppb v/v
							o-Xylene	9.99806 ppb v/v
							sec-Butylbenzene	9.99806 ppb v/v
							Styrene	9.99806 ppb v/v
							tert-Butyl alcohol	9.99806 ppb v/v
							tert-Butylbenzene	9.99806 ppb v/v
							Tetrachloroethene	9.99806 ppb v/v
							Tetrahydrofuran	9.99806 ppb v/v
							Toluene	9.99806 ppb v/v
							trans-1,2-Dichloroethene	9.99806 ppb v/v
							trans-1,3-Dichloropropene	9.99806 ppb v/v
							Trichloroethene	9.99806 ppb v/v
							Trichlorofluoromethane	9.99806 ppb v/v
							Vinyl chloride	9.99806 ppb v/v
.ATTO15LCSSTKi_00138	08/05/23	05/05/23	Nitrogen, Lot 12	37.5 L	ATTO15CALs_00047	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichlorotrifluoroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	200 ppb v/v
							Acetone	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl Ethyl Ketone (2-Butanone)	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							o-Xylene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Vinyl chloride	200 ppb v/v
..ATTO15CALs_00047	10/15/23		Linde, Lot CC-133603		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1,2-Trichlorotrifluoroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone (Methyl isobutyl ketone)	1 ppm v/v
							Acetone	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone (2-Butanone)	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							o-Xylene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Vinyl chloride	1 ppm v/v

Reagent

1gEthanol_00005

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
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CERTIFICATE OF ANALYSIS

Ethyl alcohol

CATALOG NUMBER	N-11885-1G
LOT NUMBER	12173500
DATE CERTIFIED	08/21/19
EXPIRATION DATE	08/30/25
CAS NUMBER	64-17-5
MOLECULAR FORMULA	C2H6O
MOLECULAR WEIGHT	46.07
STORAGE	Store at room temperature (20 - 25 °C).
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.

Analytical Test	Value
% PURITY (GC/TCD)	99.5
% PURITY (GC/FID)	100.0
FT-IR SPECTROSCOPY	CONFORMS TO STRUCTURE
PHYSICAL APPEARANCE	COLORLESS LIQUID
% PURITY	99.8
ISO 17034:2016	CERTIFIED REFERENCE MATERIAL

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info@chemservice.com • www.chemservice.com

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

PJLA Testing
Accreditation #0529

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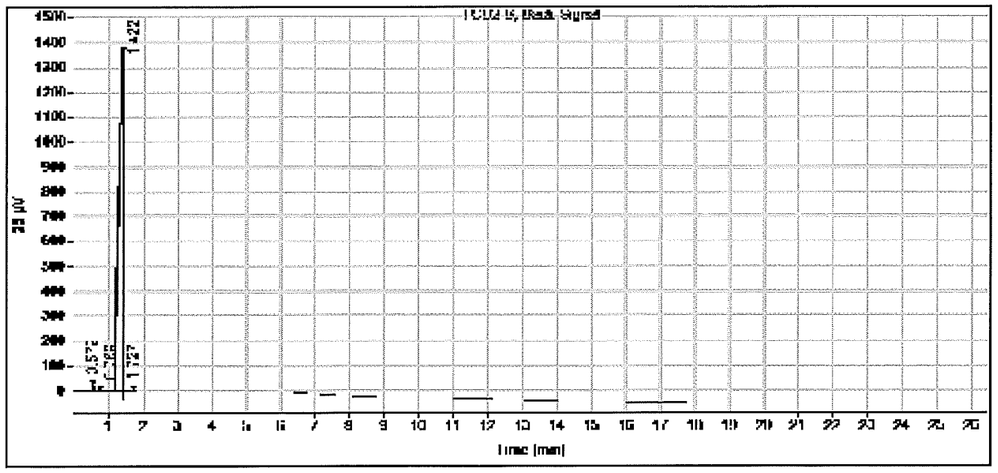
CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\2019 DATA\0718\SIG2022556.D

Sample name: N-11885 NEAT TCD

Instrument:	GC 1	**Sample type:**	Sample
Injection date:	7/31/2019 11:37:41 AM	**Location:**	Vial 101
Acq. method:	N-11885 TCD.M	**Injection volume:**	1.0uL
Column name:	DB-624 (30m x 0.53mm x 3.0um)		



Signal: TCD2 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
0.572	BB	0.0212	35.3817	25.4750	0.3006
0.769	BB	0.0375	16.7108	5.8171	0.1420
1.422	BB	0.1103	11708.3486	1361.3082	99.4587
1.727	BB	0.0260	11.6247	7.1305	0.0987
		Sum	11772.0658		

PJLA Testing

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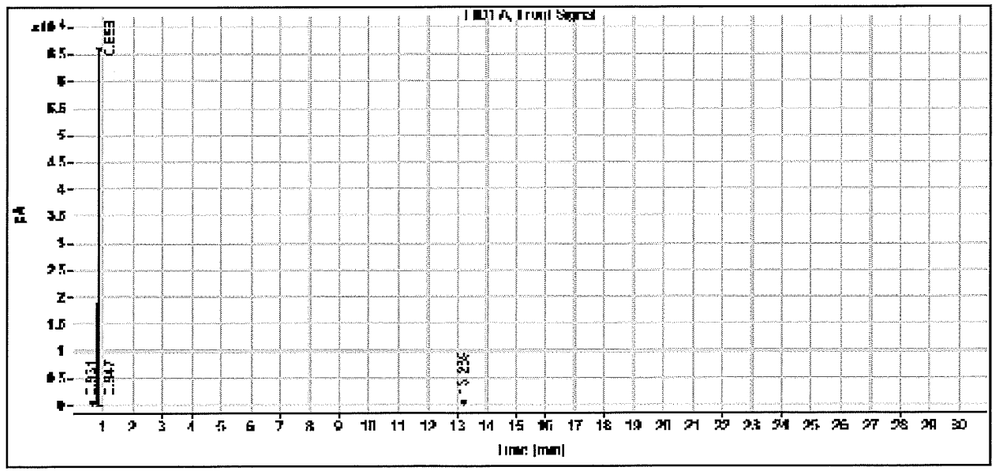
CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\2019 DATA\073019\073019B 2019-07-30 16-13-42 \101F0403.D

Sample name: N-11885 neat

Instrument:	GC 1	**Sample type:**	Sample
Injection date:	7/31/2019 3:39:30 AM	**Location:**	Vial 101
Acq. method:	N-11885.M	**Injection volume:**	1.0uL
Column name:	DB-624 (30m x 0.53mm x 3.0um)		



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
0.631	BV	0.0075	0.2668	0.5372	0.0002
0.647	VB	0.0112	27.4219	37.6672	0.0185
0.868	BB S	0.0287	148490.7656	65443.6719	99.9813
13.239	BB	0.0025	0.0186	0.1089	0.0000
		Sum	148518.4729		

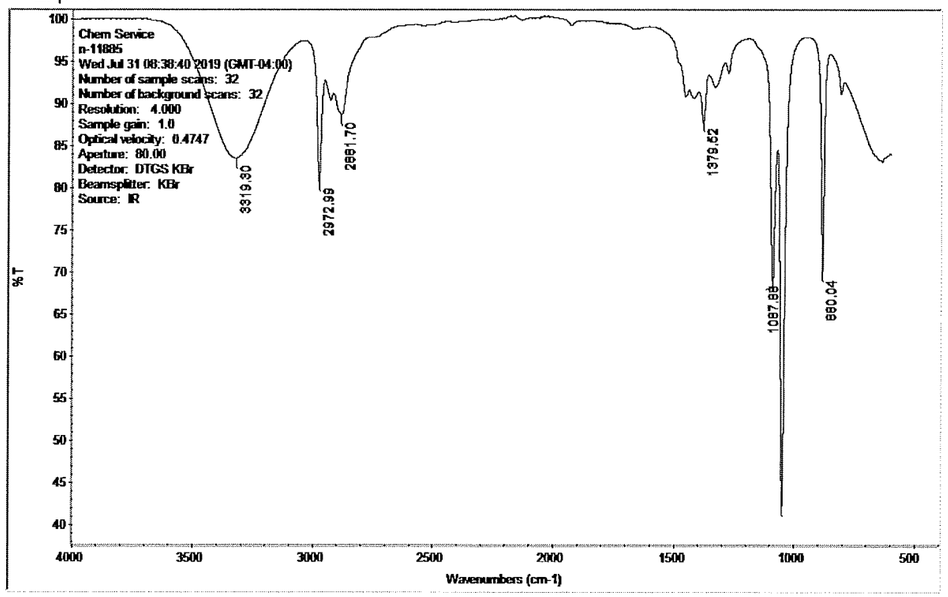
PJLA Testing

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CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-11885-1G
Description:	Ethyl alcohol
Lot Number:	12173500
Expiration Date:	08/30/25



PJLA Testing

Reagent

ATTO15CALs_00046

Preliminary Report

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHX.i\20221208-53599.b\53599-09.D
Lims ID: burl_40
Client ID:
Sample Type: Client
Inject. Date: 08-Dec-2022 14:10:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0053599-009
Misc. Info.: bur_40
Operator ID: vtp Instrument ID: CHX.i

Method: \\chromfs\Burlington\ChromData\CHX.i\20221208-53599.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 08-Dec-2022 12:57:33 Calib Date: 23-Nov-2022 00:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHX.i\20221122-53429.b\53429-13.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1623

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41	4.332	4.339	0.000	99	3732920	45.4	E
T 2 Difluoroethane TIC	1		4.375				ND	1
3 Dichlorodifluoromethane	85	4.429	4.435	0.000	99	8712313	43.1	E
4 Chlorodifluoromethane	51	4.461	4.472	-0.005	97	5219582	37.7	
5 1,2-Dichloro-1,1,2,2-tetrafluoro	85	4.787	4.789	0.005	97	7210344	36.4	
6 Chloromethane	50	4.894	4.901	0.000	99	2956794	37.3	
7 Vinyl chloride	62	5.204	5.206	0.005	99	2055038	36.8	
8 Butane	43	5.215	5.217	0.005	96	2939137	39.7	
9 Butadiene	54	5.322	5.324	0.005	96	1685223	36.3	
10 Bromomethane	94	6.018	6.021	0.006	99	2364637	39.2	
12 Chloroethane	64	6.285	6.283	0.011	100	1334093	39.1	
13 2-Methylbutane	43	6.499	6.503	0.005	90	2712668	34.9	
14 Vinyl bromide	106	6.697	6.701	0.005	98	2229757	40.8	E
15 Trichlorofluoromethane	101	6.863	6.862	0.011	100	7067596	42.1	E
16 Pentane	43	7.071	7.071	0.010	96	3782193	39.5	
17 Ethanol	45		7.200				ND	
18 Ethyl ether	59	7.473	7.505	-0.021	95	1507112	41.3	E
19 Acrolein	56	7.681	7.697	-0.006	98	807520	41.5	E
20 1,1-Dichloroethene	96	7.901	7.906	0.006	97	1789972	35.6	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	7.943	7.939	0.016	96	3732130	36.4	
22 Acetone	43	7.954	7.981	-0.016	99	2705409	39.0	
23 Isopropyl alcohol	45	8.243	8.292	-0.038	99	3428925	45.8	E
24 Carbon disulfide	76	8.318	8.324	0.005	100	4806350	39.4	
25 Acetonitrile	41	8.425	8.437	0.000	97	1094246	40.1	E
27 3-Chloro-1-propene	41	8.580	8.587	0.005	96	2169403	40.1	E
28 Methylene Chloride	49	8.805	8.806	0.011	92	1791186	39.7	
T 26 Methyl Acetate TIC	43	9.008	8.908	0.112	1	692410	26.4	9p
29 2-Methyl-2-propanol	59	9.008	9.096	-0.075	95	4492485	50.3	Ep
30 Acrylonitrile	53	9.174	9.181	0.005	93	1176319	46.3	E
32 trans-1,2-Dichloroethene	61	9.313	9.315	0.011	97	2669892	43.1	E
31 Methyl tert-butyl ether	73	9.318	9.348	-0.016	96	6130288	44.8	E

Preliminary Report

Data File: \\chromfs\Burlington\ChromData\CHX.i\20221208-53599.b\53599-09.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
S 33 1,2-Dichloroethene, Total	61				0		86.3	E
34 Hexane	57	9.821	9.824	0.010	90	2750573	44.6	E
36 1,1-Dichloroethane	63	10.057	10.065	0.006	80	3255178	43.0	E
35 Vinyl acetate	43	10.062	10.076	0.000	99	4427456	47.3	E
37 2-Butanone (MEK)	72	10.993	11.019	-0.011	99	978139	48.9	E
38 cis-1,2-Dichloroethene	96	11.036	11.040	0.011	94	2012414	43.2	E
39 Ethyl acetate	88	11.089	11.115	-0.011	100	184556	49.2	E
* 40 Chlorobromomethane	128	11.453	11.437	0.016	83	262116	10.0	
41 Tetrahydrofuran	42	11.496	11.522	-0.021	87	1967435	55.6	E
42 Chloroform	83	11.619	11.624	0.011	97	4488303	45.5	E
43 1,1,1-Trichloroethane	97	11.940	11.934	0.011	95	5278055	52.5	E
44 Cyclohexane	84	12.095	12.094	0.005	94	2672426	51.4	E
45 Carbon tetrachloride	117	12.223	12.223	0.005	99	5691875	53.0	E
46 Benzene	78	12.560	12.555	0.010	97	5218217	45.3	E
47 1,2-Dichloroethane	62	12.624	12.619	0.010	99	3068642	48.5	E
48 Isooctane	57	12.785	12.779	0.011	97	7693004	44.6	E
49 n-Heptane	43	13.090	13.090	0.005	88	2769622	45.4	E
* 50 1,4-Difluorobenzene	114	13.282	13.277	0.005	95	1162114	10.0	
51 n-Butanol	56	13.486	13.523	-0.032	90	1230793	52.5	E
52 Trichloroethene	95	13.721	13.721	0.005	99	2578262	45.3	E
A 53 GRO	1	14.133	(6.484-21.783)		0	875541475	0	g
55 1,2-Dichloropropane	63	14.171	14.166	0.011	83	1691147	43.4	E
T 54 Methyl cyclohexane TIC	55	14.176	14.176	0.000	87	3204140	27.6	p
56 Methyl methacrylate	69	14.245	14.251	0.000	93	1899071	49.2	Ep
58 Dibromomethane	174	14.320	14.326	0.000	92	2565583	48.6	E
57 1,4-Dioxane	88	14.294	14.337	-0.037	93	1257014	63.5	E
59 Dichlorobromomethane	83	14.631	14.631	0.006	99	4497918	48.8	E
60 cis-1,3-Dichloropropene	75	15.428	15.423	0.011	97	3532979	47.7	E
A 61 TVOC as Toluene	92	15.484	(4.322-26.645)		0	1395081813	0	g
62 4-Methyl-2-pentanone (MIBK)	43	15.674	15.707	-0.027	95	3850351	52.2	E
63 Toluene	92	16.075	16.074	0.005	94	3541537	42.0	E
A 64 Toluene Range	1	16.070	(16.000-16.139)		0	14473641	NC	g
A 65 C8 Range	1	16.326	(16.252-16.401)		0	14577739	NC	g
66 n-Octane	43	16.332	16.333	0.006	85	3322291	38.7	
67 trans-1,3-Dichloropropene	75	16.471	16.472	0.005	98	3068515	44.5	E
68 1,1,2-Trichloroethane	83	16.851	16.850	0.006	98	1847356	47.0	E
69 Tetrachloroethene	166	17.070	17.070	0.005	96	3912789	48.1	E
70 2-Hexanone	43	17.252	17.385	-0.128	95	3867631	62.4	E
71 Chlorodibromomethane	129	17.594	17.594	0.005	97	4903689	51.9	E
72 Ethylene Dibromide	107	17.840	17.835	0.010	98	3738037	49.3	E
* 73 Chlorobenzene-d5	117	18.739	18.734	0.005	88	1025824	10.0	
74 Chlorobenzene	112	18.803	18.803	0.005	94	5693690	47.2	E
75 Ethylbenzene	91	18.996	18.996	0.005	98	9330748	48.5	E
76 m-Xylene & p-Xylene	106	19.263	19.258	0.010	0	7331265	95.5	E
77 n-Nonane	57	19.328	19.322	0.011	83	3851870	47.5	E
S 78 Xylenes, Total	106				0		143.1	E
79 o-Xylene	106	20.028	20.023	0.010	98	3576290	47.6	E
80 Styrene	104	20.061	20.061	0.006	99	5928477	54.0	E
81 Bromoform	173	20.414	20.409	0.011	97	5034850	52.4	E
82 Isopropylbenzene	105	20.729	20.730	0.005	97	11109480	48.0	E
83 1,1,2,2-Tetrachloroethane	83	21.232	21.233	0.005	98	4558785	44.7	E

Preliminary Report

Data File: \\chromfs\Burlington\ChromData\CHX.i\20221208-53599.b\53599-09.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
84 1,2,3-Trichloropropane	75	21.334	21.335	0.006	96	4120695	46.4	E
85 N-Propylbenzene	91	21.446	21.452	0.000	99	11695771	44.0	E
86 2-Chlorotoluene	91	21.596	21.597	0.005	97	8005277	47.2	E
87 4-Ethyltoluene	105	21.644	21.650	0.000	98	10841533	47.7	E
88 1,3,5-Trimethylbenzene	105	21.740	21.741	0.005	93	9524904	47.7	E
89 n-Decane	57	21.778	21.779	0.006	95	4743507	45.1	E
90 Alpha Methyl Styrene	118	22.067	22.073	0.000	89	4986115	54.1	E
91 tert-Butylbenzene	119	22.222	22.228	0.000	94	9332676	45.9	E
92 1,2,4-Trimethylbenzene	105	22.313	22.314	0.006	98	9539182	47.4	E
93 sec-Butylbenzene	105	22.548	22.555	0.000	97	12846114	44.4	E
94 1,3-Dichlorobenzene	146	22.725	22.726	0.006	99	6213228	47.6	E
95 4-Isopropyltoluene	119	22.768	22.769	0.006	96	11211416	44.1	E
96 1,4-Dichlorobenzene	146	22.864	22.870	0.000	95	6585341	51.1	E
97 Benzyl chloride	91	23.003	23.009	0.000	98	8509340	53.3	E
98 n-Butylbenzene	91	23.319	23.325	0.000	98	10026078	46.1	E
99 1,2-Dichlorobenzene	146	23.345	23.352	0.000	95	6249664	48.3	E
100 Undecane	57	23.474	23.475	0.006	90	5455494	46.3	E
101 Dodecane	57	25.041	25.048	0.000	95	2348454	21.8	
102 1,2,4-Trichlorobenzene	180	25.769	25.771	0.006	94	5957983	53.9	E
103 Hexachlorobutadiene	225	26.015	26.017	0.006	98	6375409	45.4	E
104 Naphthalene	128	26.239	26.242	0.005	99	12440741	50.8	E
105 1,2,3-Trichlorobenzene	180	26.641	26.643	0.006	95	3829935	36.5	
T 106 Chlorotrifluoroethene TIC	1		0.000				ND	1
T 107 Methyl acetylene TIC	1		0.000				ND	1
T 108 1,1,1-Trifluoro-2,2-dichloroetha	1		0.000				ND	1
T 110 1,2-Dibromo-3-Chloropropane TIC	1		0.000				ND	1
T 111 1,1,1,2-Tetrachloroethane TIC	1		0.000				ND	1
113 Total Alkanes TIC	1		0.000				ND	
114 Methylcyclohexane	83		0.000				ND	g
115 1,2,3-Trimethylbenzene TIC	1		0.000				ND	i
T 109 Freon 115 TIC	1		4.760				ND	1
T 112 1,3-Dichloropropane TIC	1	17.161	17.166	-0.005	83	16903	0	6

QC Flag Legend

Processing Flags

NC - Not Calibrated
1 - Missing Peaks
E - Exceeded Maximum Amount
6 - Missing Quant Standard
9 - Failed A Reference Spectral Test
i - Failed Initial Calibration Limits
p - Peak ID'ed as Multiple Compounds
g - Not in Limit Group or Failed to Calibrate

Reagents:

ATTO15XISs_00003 Amount Added: 20.00 Units: mL Run Reagent

Preliminary Report

Eurofins Burlington

Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHX.i\20221208-53599.b\53599-08.D
Lims ID: knox_40
Client ID:
Sample Type: Client
Inject. Date: 08-Dec-2022 13:18:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0053599-008
Misc. Info.: knox_40
Operator ID: vtp Instrument ID: CHX.i

Method: \\chromfs\Burlington\ChromData\CHX.i\20221208-53599.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 08-Dec-2022 12:05:12 Calib Date: 23-Nov-2022 00:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHX.i\20221122-53429.b\53429-13.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1623

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41	4.338	4.337	0.006	99	3290761	42.4	E
T 2 Difluoroethane TIC	1		4.375				ND	1
3 Dichlorodifluoromethane	85	4.434	4.433	0.005	99	7637851	40.0	
4 Chlorodifluoromethane	51	4.472	4.470	0.006	97	4549969	34.8	
5 1,2-Dichloro-1,1,2,2-tetrafluoro	85	4.793	4.786	0.011	93	6260703	33.5	
6 Chloromethane	50	4.900	4.899	0.006	99	2297787	30.6	
7 Vinyl chloride	62	5.210	5.204	0.011	99	1637463	31.1	
8 Butane	43	5.221	5.215	0.011	96	2337792	33.4	
9 Butadiene	54	5.322	5.322	0.005	97	1325977	30.2	
10 Bromomethane	94	6.023	6.018	0.011	99	2067162	36.3	
12 Chloroethane	64	6.285	6.280	0.011	100	1168145	36.3	
13 2-Methylbutane	43	6.505	6.500	0.011	92	2539231	34.6	
14 Vinyl bromide	106	6.702	6.698	0.010	98	1903556	36.9	
15 Trichlorofluoromethane	101	6.863	6.859	0.011	100	6192981	39.1	
16 Pentane	43	7.072	7.067	0.011	96	3392948	37.5	
17 Ethanol	45		7.200				ND	
18 Ethyl ether	59	7.473	7.501	-0.021	96	1303327	37.8	
19 Acrolein	56	7.687	7.694	0.000	98	638052	34.7	
20 1,1-Dichloroethene	96	7.906	7.903	0.011	97	1784578	37.6	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	7.944	7.935	0.017	96	3741629	38.6	
22 Acetone	43	7.960	7.978	-0.010	99	2699063	41.2	E
23 Isopropyl alcohol	45	8.243	8.288	-0.038	100	3313055	46.8	Ep
24 Carbon disulfide	76	8.323	8.320	0.010	100	4866969	42.2	E
25 Acetonitrile	41	8.425	8.433	0.000	97	1205613	46.7	Ep
27 3-Chloro-1-propene	41	8.586	8.583	0.011	96	2057643	40.3	E
28 Methylene Chloride	49	8.805	8.802	0.011	92	1554468	36.5	
T 26 Methyl Acetate TIC	43	8.901	8.904	0.005	34	6719	0.2713	9
29 2-Methyl-2-propanol	59	9.008	9.092	-0.075	95	3775464	44.8	E
30 Acrylonitrile	53	9.174	9.177	0.005	93	890731	37.1	
32 trans-1,2-Dichloroethene	61	9.313	9.311	0.011	97	2044400	34.9	
31 Methyl tert-butyl ether	73	9.318	9.343	-0.016	95	4672731	36.2	

Preliminary Report

Data File: \\chromfs\Burlington\ChromData\CHX.i\20221208-53599.b\53599-08.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
S 33 1,2-Dichloroethene, Total	61				0		74.6	
34 Hexane	57	9.821	9.820	0.010	89	2072084	35.6	
36 1,1-Dichloroethane	63	10.062	10.061	0.011	81	2648696	37.1	
35 Vinyl acetate	43	10.062	10.071	0.000	99	3503580	39.6	
37 2-Butanone (MEK)	72	10.998	11.014	-0.006	99	838076	44.4	E
38 cis-1,2-Dichloroethene	96	11.036	11.035	0.011	94	1744235	39.6	
39 Ethyl acetate	88	11.089	11.110	-0.011	100	156491	44.2	E
* 40 Chlorobromomethane	128	11.448	11.437	0.011	84	247658	10.0	
41 Tetrahydrofuran	42	11.496	11.522	-0.021	88	1729683	51.6	E
42 Chloroform	83	11.619	11.619	0.011	97	3955231	42.4	E
43 1,1,1-Trichloroethane	97	11.940	11.934	0.011	95	4582961	48.2	E
44 Cyclohexane	84	12.095	12.094	0.005	94	2264817	46.1	E
45 Carbon tetrachloride	117	12.229	12.223	0.011	99	4899580	48.2	E
46 Benzene	78	12.555	12.555	0.005	97	5035077	46.2	E
47 1,2-Dichloroethane	62	12.625	12.619	0.011	99	3010981	50.3	E
48 Isooctane	57	12.785	12.779	0.011	97	7656784	46.9	E
49 n-Heptane	43	13.090	13.090	0.005	88	2575829	44.7	E
* 50 1,4-Difluorobenzene	114	13.283	13.277	0.006	95	1099597	10.0	
51 n-Butanol	56	13.486	13.523	-0.032	90	1166209	52.6	E
52 Trichloroethene	95	13.721	13.721	0.005	98	2151659	39.9	
A 53 GRO	1	14.133	(6.484-21.783)		0	739774188	0	g
55 1,2-Dichloropropane	63	14.165	14.166	0.005	88	1554399	42.1	E
T 54 Methyl cyclohexane TIC	55	14.246	14.182	0.070	28	143697	1.31	9p
56 Methyl methacrylate	69	14.246	14.251	0.001	93	1595362	43.7	Ep
58 Dibromomethane	174	14.326	14.326	0.006	93	2160012	43.3	E
57 1,4-Dioxane	88	14.294	14.337	-0.037	93	1102737	58.9	E
59 Dichlorobromomethane	83	14.625	14.631	0.000	99	3768429	43.2	E
60 cis-1,3-Dichloropropene	75	15.422	15.423	0.005	97	2797193	39.9	
A 61 TVOC as Toluene	92	15.484	(4.322-26.645)		0	1191639090	0	g
62 4-Methyl-2-pentanone (MIBK)	43	15.674	15.707	-0.027	95	3321829	47.6	E
63 Toluene	92	16.075	16.070	0.005	94	2984068	36.2	
A 64 Toluene Range	1	16.070	(16.000-16.139)		0	12248970	NC	g
A 65 C8 Range	1	16.326	(16.252-16.401)		0	12402319	NC	g
66 n-Octane	43	16.332	16.333	0.006	85	2829718	34.8	
67 trans-1,3-Dichloropropene	75	16.471	16.472	0.005	98	2530558	38.8	
68 1,1,2-Trichloroethane	83	16.851	16.845	0.006	98	1488866	38.8	
69 Tetrachloroethene	166	17.070	17.065	0.005	96	3342940	42.1	E
70 2-Hexanone	43	17.252	17.380	-0.128	95	3344584	55.3	E
71 Chlorodibromomethane	129	17.594	17.589	0.005	98	4177323	45.3	E
72 Ethylene Dibromide	107	17.841	17.830	0.011	98	3079843	41.6	E
* 73 Chlorobenzene-d5	117	18.734	18.734	0.000	89	1001984	10.0	
74 Chlorobenzene	112	18.798	18.798	0.000	94	4715968	40.0	E
75 Ethylbenzene	91	18.991	18.991	0.000	99	6986736	37.2	
76 m-Xylene & p-Xylene	106	19.258	19.253	0.005	0	5522029	73.6	
77 n-Nonane	57	19.328	19.317	0.011	84	2846411	35.9	
S 78 Xylenes, Total	106				0		113.2	
79 o-Xylene	106	20.023	20.018	0.005	99	2901952	39.6	
80 Styrene	104	20.061	20.055	0.006	99	4764854	44.4	E
81 Bromoform	173	20.414	20.403	0.011	97	4434819	47.3	E
82 Isopropylbenzene	105	20.724	20.724	0.000	97	9372358	41.5	E
83 1,1,2,2-Tetrachloroethane	83	21.232	21.227	0.005	98	4068329	40.8	E

Preliminary Report

Data File: \\chromfs\Burlington\ChromData\CHX.i\20221208-53599.b\53599-08.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
84 1,2,3-Trichloropropane	75	21.334	21.329	0.006	96	3642747	42.0	E
85 N-Propylbenzene	91	21.446	21.446	0.000	99	10768043	41.5	E
86 2-Chlorotoluene	91	21.596	21.591	0.005	97	6917841	41.7	E
87 4-Ethyltoluene	105	21.644	21.644	0.000	98	9467274	42.6	E
88 1,3,5-Trimethylbenzene	105	21.740	21.735	0.005	93	8202063	42.0	E
89 n-Decane	57	21.778	21.773	0.006	95	4079002	39.7	
90 Alpha Methyl Styrene	118	22.067	22.067	0.000	89	4224784	46.9	E
91 tert-Butylbenzene	119	22.222	22.222	0.000	92	7895740	39.8	
92 1,2,4-Trimethylbenzene	105	22.308	22.308	0.001	98	7754955	39.5	
93 sec-Butylbenzene	105	22.548	22.548	0.000	97	11304974	40.0	
94 1,3-Dichlorobenzene	146	22.725	22.719	0.006	98	5323285	41.8	E
95 4-Isopropyltoluene	119	22.768	22.762	0.006	96	10239248	41.2	E
96 1,4-Dichlorobenzene	146	22.864	22.864	0.000	95	5378257	42.7	E
97 Benzyl chloride	91	23.003	23.003	0.000	98	6912032	44.3	E
98 n-Butylbenzene	91	23.319	23.319	0.000	97	8890971	41.9	E
99 1,2-Dichlorobenzene	146	23.345	23.345	0.000	95	5418210	42.8	E
100 Undecane	57	23.474	23.468	0.006	91	4699890	40.8	E
101 Dodecane	57	25.041	25.041	0.000	95	2953753	28.1	
102 1,2,4-Trichlorobenzene	180	25.769	25.763	0.006	94	4358297	40.4	E
103 Hexachlorobutadiene	225	26.015	26.010	0.006	98	5457537	39.8	
104 Naphthalene	128	26.234	26.234	0.000	99	10731919	44.9	E
105 1,2,3-Trichlorobenzene	180	26.641	26.635	0.006	96	4322694	42.1	E
T 106 Chlorotrifluoroethene TIC	1		0.000				ND	1
T 107 Methyl acetylene TIC	1		0.000				ND	1
T 108 1,1,1-Trifluoro-2,2-dichloroetha	1		0.000				ND	1
T 110 1,2-Dibromo-3-Chloropropane TIC	75		0.000				ND	1
T 111 1,1,1,2-Tetrachloroethane TIC	1	18.969	0.000	18.969	80	16317	0	36
113 Total Alkanes TIC	1		0.000				ND	
114 Methylcyclohexane	83		0.000				ND	g
115 1,2,3-Trimethylbenzene TIC	1		0.000				ND	i
T 109 Freon 115 TIC	1		4.760				ND	1
T 112 1,3-Dichloropropane TIC	1	17.161	17.166	-0.005	83	18057	0	36

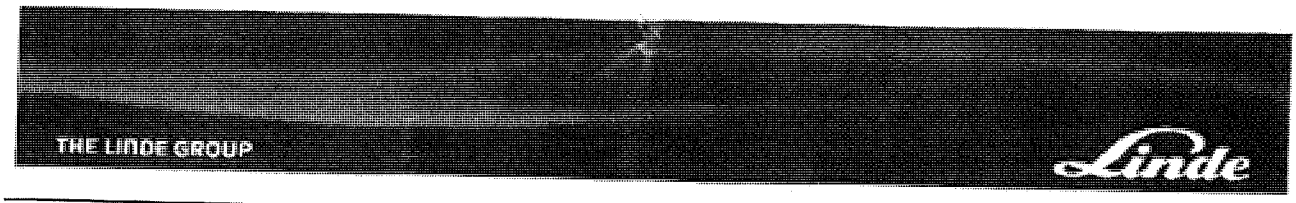
QC Flag Legend

Processing Flags

NC - Not Calibrated
1 - Missing Peaks
3 - Failed RT Window Test
E - Exceeded Maximum Amount
6 - Missing Quant Standard
9 - Failed A Reference Spectral Test
i - Failed Initial Calibration Limits
p - Peak ID'ed as Multiple Compounds
g - Not in Limit Group or Failed to Calibrate

Reagents:

ATTO15XISs_00003 Amount Added: 20.00 Units: mL Run Reagent



SHIPPED TO: Test America Inc
5815 Middlebrook Pike
Knoxville, TN 37921

ANALYSIS REPORT

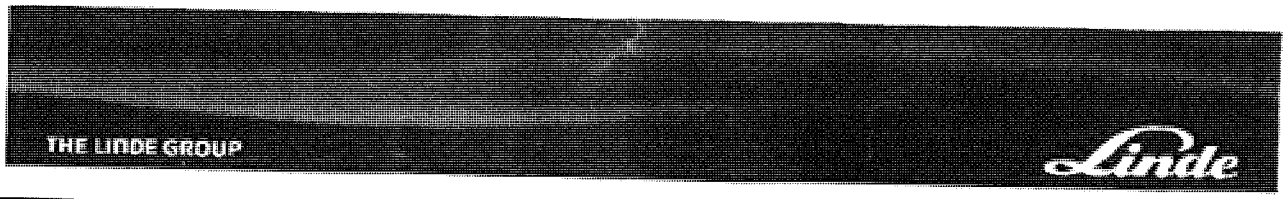
Sales#: 117455931
Production#: 1572737
Report Date: Oct-15-2022
P.O.# : US1132235310
Blend Type: QUALIFIED
Material#: 24106776
Traceability: NIST by weight
Expiration Date: Oct-15-2023
Do NOT use under: 150 psig

Cylinder Size: 152 (8" X 47.5")
Cylinder # : CC-118524
Cylinder Pressure: 1600 psig
Cylinder Valve: CGA 350 / Steel
Cylinder Volume: 29.5 Liter
Cylinder Material: Aluminum
Gas Volume: 3200 Liters
Blend Tolerance: 10% Relative
Analytical Accuracy: 5% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	QUALIFIED CONC
Propylene	115-07-1	1.00 ppm	1.04 ppm
Chlorodifluoromethane	75-45-6	1.00 ppm	1.07 ppm
Freon-12	75-71-8	1.00 ppm	1.03 ppm
Chloromethane	74-87-3	1.00 ppm	1.05 ppm
Freon-114	76-14-2	1.00 ppm	1.04 ppm
Vinyl Chloride	75-01-4	1.00 ppm	1.04 ppm
1,3-Butadiene	106-99-0	1.00 ppm	1.05 ppm
Methanol (No Stability Guarantee)	67-56-1	1.00 ppm	0.87 ppm
n-Butane	106-97-8	1.00 ppm	1.06 ppm
Bromomethane	74-83-9	1.00 ppm	1.04 ppm
Chloroethane	75-00-3	1.00 ppm	1.05 ppm
Vinyl Bromide	593-60-2	1.00 ppm	1.04 ppm
Acetonitrile (No Stability Guarantee)	75-05-8	1.00 ppm	1.02 ppm
Acrolein	107-02-8	1.00 ppm	0.99 ppm
Isopentane	78-78-4	1.00 ppm	1.03 ppm
Acetone	67-64-1	1.00 ppm	1.02 ppm
Freon-11	75-69-4	1.00 ppm	1.04 ppm
Isopropyl Alcohol	67-63-0	1.00 ppm	1.04 ppm
Acrylonitrile	107-13-1	1.00 ppm	1.04 ppm
n-Pentane	109-66-0	1.00 ppm	1.05 ppm
Ethyl Ether	60-29-7	1.00 ppm	1.04 ppm
1,1-Dichloroethene	75-35-4	1.00 ppm	1.06 ppm
Carbon Disulfide	75-15-0	1.00 ppm	1.04 ppm
Methylene Chloride	75-09-2	1.00 ppm	1.03 ppm
Tert-Butanol	75-65-0	1.00 ppm	1.10 ppm
3-Chloropropene	107-05-1	1.00 ppm	1.03 ppm
Freon-113	76-13-1	1.00 ppm	1.05 ppm
Trans-1,2-Dichloroethene	156-60-5	1.00 ppm	1.06 ppm
1,1-Dichloroethane	75-34-3	1.00 ppm	1.05 ppm
Methyl Tert Butyl Ether	1634-04-4	1.00 ppm	1.05 ppm

Linde Gas North America LLC

(908) 329-9700 Main (908) 329-9740 Fax
www.Lindeus.com



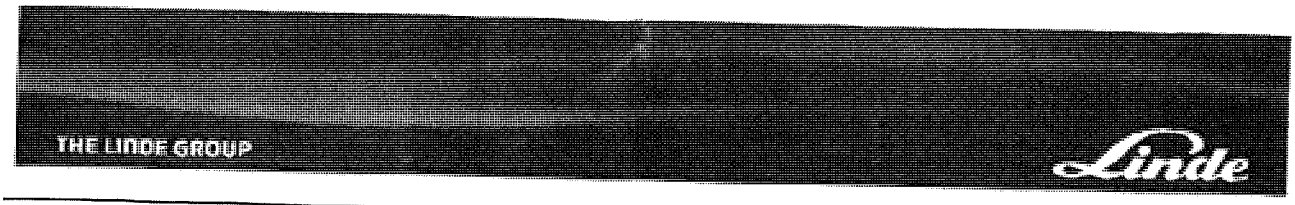
SHIPPED TO: Test America Inc
5815 Middlebrook Pike
Knoxville, TN 37921

ANALYSIS REPORT

Sales#: 117455931
Production#: 1572737
Report Date: Oct-15-2022
P.O.# : US1132235310
Blend Type: QUALIFIED
Material#: 24106776
Traceability: NIST by weight
Expiration Date: Oct-15-2023
Do NOT use under: 150 psig

Cylinder Size: 152 (8" X 47.5")
Cylinder # : CC-118524
Cylinder Pressure: 1600 psig
Cylinder Valve: CGA 350 / Steel
Cylinder Volume: 29.5 Liter
Cylinder Material: Aluminum
Gas Volume: 3200 Liters
Blend Tolerance: 10% Relative
Analytical Accuracy: 5% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	QUALIFIED CONC
Vinyl Acetate	108-05-4	1.00 ppm	1.10 ppm
Methyl Ethyl Ketone	78-93-3	1.00 ppm	1.04 ppm
Cis-1,2-Dichloroethene	156-59-2	1.00 ppm	1.04 ppm
Hexane	110-54-3	1.00 ppm	1.04 ppm
Chloroform	67-66-3	1.00 ppm	1.05 ppm
Ethyl Acetate	141-78-6	1.00 ppm	1.05 ppm
Tetrahydrofuran	109-99-9	1.00 ppm	1.03 ppm
1,2-Dichloroethane	107-06-2	1.00 ppm	1.05 ppm
1,1,1-Trichloroethane	71-55-6	1.00 ppm	1.04 ppm
Benzene	71-43-2	1.00 ppm	1.06 ppm
1-Butanol	71-36-3	1.00 ppm	0.93 ppm
Carbon Tetrachloride	56-23-5	1.00 ppm	1.05 ppm
Cyclohexane	110-82-7	1.00 ppm	1.04 ppm
Dibromomethane	74-95-3	1.00 ppm	1.05 ppm
1,2-Dichloropropane	78-87-5	1.00 ppm	1.05 ppm
Trichloroethylene	79-01-6	1.00 ppm	1.04 ppm
Bromodichloromethane	75-27-4	1.00 ppm	1.04 ppm
1,4-Dioxane	123-91-1	1.00 ppm	1.04 ppm
2,2,4-Trimethylpentane	540-84-1	1.00 ppm	1.04 ppm
Methyl Methacrylate	80-62-6	1.00 ppm	1.03 ppm
Heptane	142-82-5	1.00 ppm	1.02 ppm
Cis-1,3-Dichloropropene	10061-01-5	1.00 ppm	1.03 ppm
Methyl Isobutyl Ketone	108-10-1	1.00 ppm	1.05 ppm
Trans-1,3-Dichloropropene	10061-02-6	1.00 ppm	1.00 ppm
1,1,2-Trichloroethane	79-00-5	1.00 ppm	1.05 ppm
Toluene	108-88-3	1.00 ppm	1.05 ppm
Methyl Butyl Ketone	591-78-6	1.00 ppm	1.04 ppm
Dibromochloromethane	124-48-1	1.00 ppm	1.05 ppm
1,2-Dibromoethane	106-93-4	1.00 ppm	1.05 ppm
n-Octane	111-65-9	1.00 ppm	1.01 ppm



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Knoxville, TN 37921

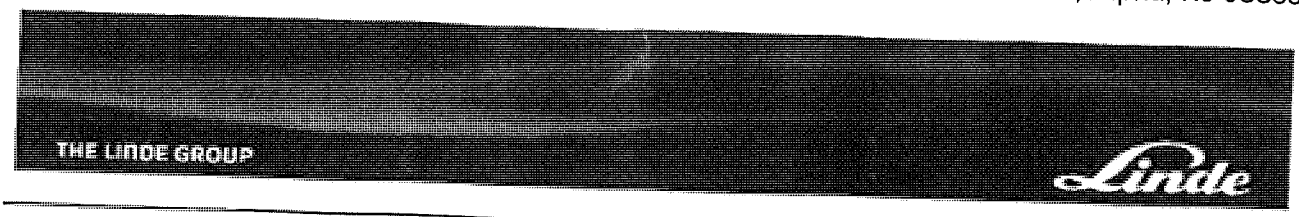
ANALYSIS REPORT

Sales#: 117455931
Production#: 1572737
Report Date: Oct-15-2022
P.O.# : US1132235310
Blend Type: QUALIFIED
Material#: 24106776
Traceability: NIST by weight
Expiration Date: Oct-15-2023
Do NOT use under: 150 psig

Cylinder Size: 152 (8" X 47.5")
Cylinder # : CC-118524
Cylinder Pressure: 1600 psig
Cylinder Valve: CGA 350 / Steel
Cylinder Volume: 29.5 Liter
Cylinder Material: Aluminum
Gas Volume: 3200 Liters
Blend Tolerance: 10% Relative
Analytical Accuracy: 5% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	QUALIFIED CONC
Tetrachloroethylene	127-18-4	1.00 ppm	1.06 ppm
Chlorobenzene	108-90-7	1.00 ppm	1.03 ppm
Ethylbenzene	100-41-4	1.00 ppm	1.03 ppm
p-xylene	106-42-3	1.00 ppm	1.03 ppm
m-xylene	108-38-3	1.00 ppm	1.03 ppm
Bromoform	75-25-2	1.00 ppm	1.03 ppm
Styrene	100-42-5	1.00 ppm	1.02 ppm
o-xylene	95-47-6	1.00 ppm	1.03 ppm
1,1,2,2-Tetrachloroethane	79-34-5	1.00 ppm	1.03 ppm
1,2,3-Trichloropropane	96-18-4	1.00 ppm	1.00 ppm
Nonane	111-84-2	1.00 ppm	1.01 ppm
Cumene	98-82-8	1.00 ppm	1.02 ppm
2-Chlorotoluene	95-49-8	1.00 ppm	1.01 ppm
n-Propylbenzene	103-65-1	1.00 ppm	1.02 ppm
4-Ethyltoluene	622-96-8	1.00 ppm	1.02 ppm
1,3,5-Trimethylbenzene	108-67-8	1.00 ppm	1.04 ppm
alpha-Methyl Styrene (No Stability Guarantee)	98-83-9	1.00 ppm	0.98 ppm
Tert-Butyl Benzene	98-06-6	1.00 ppm	1.02 ppm
1,2,4-Trimethylbenzene	95-63-6	1.00 ppm	1.02 ppm
1,3-Dichlorobenzene	541-73-1	1.00 ppm	1.03 ppm
Benzyl Chloride	100-44-7	1.00 ppm	1.03 ppm
n-Decane	124-18-5	1.00 ppm	1.00 ppm
1,4-Dichlorobenzene	106-46-7	1.00 ppm	1.01 ppm
Sec-Butyl Benzene	135-98-8	1.00 ppm	1.02 ppm
4-Isopropyltoluene	99-87-6	1.00 ppm	1.03 ppm
1,2-Dichlorobenzene	95-50-1	1.00 ppm	1.02 ppm
n-Butyl Benzene	104-51-8	1.00 ppm	1.02 ppm
n-Undecane (No Stability Guarantee)	1120-21-4	1.00 ppm	1.01 ppm

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5815 Middlebrook Pike
Knoxville, TN 37921

ANALYSIS REPORT

Sales#:	117455931
Production#:	1572737
Report Date:	Oct-15-2022
P.O.# :	US1132235310
Blend Type:	QUALIFIED
Material#:	24106776
Traceability:	NIST by weight
Expiration Date:	Oct-15-2023
Do NOT use under:	150 psig

Cylinder Size:	152 (8" X 47.5")
Cylinder # :	CC-118524
Cylinder Pressure:	1600 psig
Cylinder Valve:	CGA 350 / Steel
Cylinder Volume:	29.5 Liter
Cylinder Material:	Aluminum
Gas Volume:	3200 Liters
Blend Tolerance:	10% Relative
Analytical Accuracy:	5% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	QUALIFIED CONC
1,2,4-Trichlorobenzene (No Stability Guarantee)	120-82-1	1.00 ppm	0.95 ppm
Naphthalene (No Stability Guarantee)	91-20-3	1.00 ppm	0.98 ppm
n-Dodecane (No Stability Guarantee)	112-40-3	1.00 ppm	0.97 ppm
1,2,3-Trichlorobenzene (No Stability Guarantee)	87-61-6	1.00 ppm	0.96 ppm
Hexachloro-1,3-Butadiene (No Stability Guarantee)	87-68-3	1.00 ppm	1.00 ppm
Nitrogen	7727-37-9	Balance	Balance

ANALYST: Lou Lorenzetti

DATE: Oct-15-2022

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ANALYSIS REPORT

Sales#:	117425259	**Cylinder Size:**	152 (8" X 47.5")
Production#:	1545375	**Cylinder # :**	CC-237336
Report Date:	Oct-25-2021	**Cylinder Pressure:**	1700 psig
P.O.# :	74005680	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	QUALIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	24106776	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	3400 Liters
Expiration Date:	Oct-25-2022	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	5% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	QUALIFIED CONC
Propylene	115-07-1	1.00 ppm	1.03 ppm
Chlorodifluoromethane	75-45-6	1.00 ppm	1.05 ppm
Freon-12	75-71-8	1.00 ppm	1.04 ppm
Chloromethane	74-87-3	1.00 ppm	1.07 ppm
Freon-114	76-14-2	1.00 ppm	1.04 ppm
Vinyl Chloride	75-01-4	1.00 ppm	1.03 ppm
1,3-Butadiene	106-99-0	1.00 ppm	1.04 ppm
Methanol (No Stability Guarantee)	67-56-1	1.00 ppm	0.86 ppm
n-Butane	106-97-8	1.00 ppm	1.04 ppm
Bromomethane	74-83-9	1.00 ppm	1.03 ppm
Chloroethane	75-00-3	1.00 ppm	1.03 ppm
Vinyl Bromide	593-60-2	1.00 ppm	1.04 ppm
Acetonitrile	75-05-8	1.00 ppm	0.95 ppm
Acrolein	107-02-8	1.00 ppm	1.01 ppm
Isopentane	78-78-4	1.00 ppm	1.05 ppm
Acetone	67-64-1	1.00 ppm	0.99 ppm
Freon-11	75-69-4	1.00 ppm	1.06 ppm
n-Pentane	109-66-0	1.00 ppm	1.05 ppm
Isopropyl Alcohol	67-63-0	1.00 ppm	0.98 ppm
Acrylonitrile	107-13-1	1.00 ppm	0.98 ppm
Ethyl Ether	60-29-7	1.00 ppm	1.04 ppm
1,1-Dichloroethene	75-35-4	1.00 ppm	1.03 ppm
Carbon Disulfide	75-15-0	1.00 ppm	1.02 ppm
Methylene Chloride	75-09-2	1.00 ppm	1.03 ppm
Tert-Butanol	75-65-0	1.00 ppm	1.02 ppm
Allyl Chloride	107-05-1	1.00 ppm	1.07 ppm
Freon-113	76-13-1	1.00 ppm	1.05 ppm
Trans-1,2-Dichloroethene	156-60-5	1.00 ppm	1.03 ppm
1,1-Dichloroethane	75-34-3	1.00 ppm	1.01 ppm
Methyl Tert Butyl Ether	1634-04-4	1.00 ppm	1.02 ppm

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South Burlington, VT 05403-6834

ANALYSIS REPORT

Sales#:	117425259	**Cylinder Size:**	152 (8" X 47.5")
Production#:	1545375	**Cylinder # :**	CC-237336
Report Date:	Oct-25-2021	**Cylinder Pressure:**	1700 psig
P.O.# :	74005680	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	QUALIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	24106776	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	3400 Liters
Expiration Date:	Oct-25-2022	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	5% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	QUALIFIED CONC
Vinyl Acetate	108-05-4	1.00 ppm	1.05 ppm
Methyl Ethyl Ketone	78-93-3	1.00 ppm	1.02 ppm
Cis-1,2-Dichloroethene	156-59-2	1.00 ppm	1.01 ppm
Hexane	110-54-3	1.00 ppm	1.04 ppm
Chloroform	67-66-3	1.00 ppm	1.01 ppm
Ethyl Acetate	141-78-6	1.00 ppm	1.01 ppm
Tetrahydrofuran	109-99-9	1.00 ppm	0.96 ppm
1,2-Dichloroethane	107-06-2	1.00 ppm	1.02 ppm
1,1,1-Trichloroethane	71-55-6	1.00 ppm	1.03 ppm
Benzene	71-43-2	1.00 ppm	1.03 ppm
1-Butanol	71-36-3	1.00 ppm	0.92 ppm
Carbon Tetrachloride	56-23-5	1.00 ppm	1.03 ppm
Cyclohexane	110-82-7	1.00 ppm	1.05 ppm
Dibromomethane	74-95-3	1.00 ppm	1.03 ppm
1,2-Dichloropropane	78-87-5	1.00 ppm	1.03 ppm
Trichloroethylene	79-01-6	1.00 ppm	1.03 ppm
Bromodichloromethane	75-27-4	1.00 ppm	1.03 ppm
1,4-Dioxane	123-91-1	1.00 ppm	1.02 ppm
2,2,4-Trimethylpentane	540-84-1	1.00 ppm	1.05 ppm
Methyl Methacrylate	80-62-6	1.00 ppm	0.97 ppm
Heptane	142-82-5	1.00 ppm	1.05 ppm
Cis-1,3-Dichloropropene	10061-01-5	1.00 ppm	1.03 ppm
Methylcyclohexane	108-87-2	1.00 ppm	1.04 ppm
Methyl Isobutyl Ketone	108-10-1	1.00 ppm	1.03 ppm
Trans-1,3-Dichloropropene	10061-02-6	1.00 ppm	0.97 ppm
1,1,2-Trichloroethane	79-00-5	1.00 ppm	1.03 ppm
Toluene	108-88-3	1.00 ppm	1.01 ppm
Methyl Butyl Ketone	591-78-6	1.00 ppm	0.98 ppm
Dibromochloromethane	124-48-1	1.00 ppm	0.97 ppm
1,2-Dibromoethane	106-93-4	1.00 ppm	1.05 ppm

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PAGE: 3 of 4

ANALYSIS REPORT

Sales#:	117425259	**Cylinder Size:**	152 (8" X 47.5")
Production#:	1545375	**Cylinder # :**	CC-237336
Report Date:	Oct-25-2021	**Cylinder Pressure:**	1700 psig
P.O.# :	74005680	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	QUALIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	24106776	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	3400 Liters
Expiration Date:	Oct-25-2022	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	5% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	QUALIFIED CONC
n-Octane	111-65-9	1.00 ppm	1.03 ppm
Tetrachloroethylene	127-18-4	1.00 ppm	1.05 ppm
Chlorobenzene	108-90-7	1.00 ppm	1.02 ppm
Ethylbenzene	100-41-4	1.00 ppm	1.01 ppm
p-xylene	106-42-3	1.00 ppm	1.02 ppm
m-xylene	108-38-3	1.00 ppm	1.02 ppm
Bromoform	75-25-2	1.00 ppm	1.02 ppm
Styrene	100-42-5	1.00 ppm	1.00 ppm
o-xylene	95-47-6	1.00 ppm	1.03 ppm
1,1,2,2-Tetrachloroethane	79-34-5	1.00 ppm	1.03 ppm
1,2,3-Trichloropropane	96-18-4	1.00 ppm	1.05 ppm
Nonane	111-84-2	1.00 ppm	1.05 ppm
Cumene	98-82-8	1.00 ppm	1.04 ppm
2-Chlorotoluene	95-49-8	1.00 ppm	1.04 ppm
n-Propylbenzene	103-65-1	1.00 ppm	1.04 ppm
4-Ethyltoluene	622-96-8	1.00 ppm	1.03 ppm
1,3,5-Trimethylbenzene	108-67-8	1.00 ppm	1.04 ppm
alpha-Methyl Styrene (No Stability Guarantee)	98-83-9	1.00 ppm	1.02 ppm
Tert-Butyl Benzene	98-06-6	1.00 ppm	1.04 ppm
1,2,4-Trimethylbenzene	95-63-6	1.00 ppm	1.04 ppm
1,3-Dichlorobenzene	541-73-1	1.00 ppm	1.06 ppm
Benzyl Chloride	100-44-7	1.00 ppm	1.06 ppm
n-Decane	124-18-5	1.00 ppm	1.02 ppm
1,4-Dichlorobenzene	106-46-7	1.00 ppm	1.02 ppm
Sec-Butyl Benzene	135-98-8	1.00 ppm	1.02 ppm
4-Isopropyltoluene	99-87-6	1.00 ppm	1.01 ppm
1,2-Dichlorobenzene	95-50-1	1.00 ppm	1.02 ppm
n-Butyl Benzene	104-51-8	1.00 ppm	1.02 ppm

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PAGE: 4 of 4

ANALYSIS REPORT

Sales#:	117425259	**Cylinder Size:**	152 (8" X 47.5")
Production#:	1545375	**Cylinder # :**	CC-237336
Report Date:	Oct-25-2021	**Cylinder Pressure:**	1700 psig
P.O.# :	74005680	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	QUALIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	24106776	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	3400 Liters
Expiration Date:	Oct-25-2022	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	5% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	QUALIFIED CONC
n-Undecane	1120-21-4	1.00 ppm	1.03 ppm
1,2,4-Trichlorobenzene	120-82-1	1.00 ppm	1.05 ppm
Naphthalene	91-20-3	1.00 ppm	0.95 ppm
n-Dodecane	112-40-3	1.00 ppm	0.93 ppm
1,2,3-Trichlorobenzene	87-61-6	1.00 ppm	0.92 ppm
Hexachloro-1,3-Butadiene	87-68-3	1.00 ppm	1.02 ppm
Nitrogen	7727-37-9	Balance	Balance

ANALYST: Lou Lorenzetti **DATE:** Oct-25-2021

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Reagent

ATTO15CALs_00047



1253600
ID: ATTO15CALs_00033
Desc: TO15 Calibration Source Tank
Exp: 1/22/2020 Prpd/Rcvd: 1/31/2019
Sol: Prpd: desjardinsb Op: 1/31/2019
TO15 Calibration Source Tank

ISO 17025 Certificate

Certificate of Analysis

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South Burlington, VT 05403

PAGE: 1 of 6
Report ID: 26909
Revision: 0

Sales#:	117033285	**Cylinder Size:**	152 (8" X 47.5")
Production#:	3168520	**Cylinder # :**	CC-133603
Certification Date:	Jan-22-2019	**Cylinder Pressure:**	1900 psig
P.O.#:	3018313-ISO17025	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	ISO-17025	**Cylinder Volume:**	29.5 Liter
Material#:	14004551	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	3800 Liters
Expiration Date:	Jan-22-2020	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Method of Analysis:**	GC-FID

Primary Reference Material intended for the calibration of gas analyzers or instrumentation. General instructions for proper use of gas mixtures are found in "ISO 16664: Gas analysis – handling of calibration gases and gas mixtures".

Contents under pressure, store in secure area and do not expose to temperatures greater than 150 °F.

Recommended Operating temperature within 32°F (0°C) and 125°F (52°C).

Recommended minimum sample size 10 mL.

Except where noted, results are reported in mole/mole ppm as determined by Gas Chromatography using qualified reference standards under ANA-50-741-ALP and ANA-50-742-ALP and meets ISO 17025 requirements. Every cylinder is analyzed and represents one unique lot.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor providing a level of confidence of 95% and has been carried out in accordance with ANAB (ANSI-ASQ National Accreditation Board) and ISO 17025 requirements.

This certificate is issued in accordance with the laboratory accreditation requirements of ANAB. It provides traceability of measurement to recognized national standards, and to units of measurement realized by the National Institute of Standards and Technology (NIST).

Linde Spectra Environmental Gases

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ISO 17025 Certificate

ANAB ACCREDITED TESTING LABORATORY

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Report ID: 26909
Revision: 0

Sales#:	117033285	**Cylinder Size:**	152 (8" X 47.5")
Production#:	3168520	**Cylinder # :**	CC-133603
Certification Date:	Jan-22-2019	**Cylinder Pressure:**	1900 psig
P.O.#:	3018313-ISO17025	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	ISO-17025	**Cylinder Volume:**	29.5 Liter
Material#:	14004551	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	3800 Liters
Expiration Date:	Jan-22-2020	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Method of Analysis:**	GC-FID

COMPONENT	CAS Number	Requested Conc	Reported Conc	Uncertainty (k=2.447 @ 95%)
Propylene	115-07-1	1.000 ppm	1.013 ppm	± 0.039 ppm
Chlorodifluoromethane	75-45-6	1.000 ppm	1.058 ppm	± 0.033 ppm
Freon-12	75-71-8	1.000 ppm	1.058 ppm	± 0.014 ppm
Chloromethane	74-87-3	1.000 ppm	0.994 ppm	± 0.034 ppm
Freon-114	76-14-2	1.000 ppm	1.059 ppm	± 0.024 ppm
Vinyl Chloride	75-01-4	1.000 ppm	0.999 ppm	± 0.036 ppm
1,3-Butadiene	106-99-0	1.000 ppm	0.970 ppm	± 0.024 ppm
Methanol (No Stability Guarantee)	67-56-1	1.000 ppm	0.941 ppm	± 0.094 ppm
n-Butane	106-97-8	1.000 ppm	1.030 ppm	± 0.014 ppm
Bromomethane	74-83-9	1.000 ppm	1.040 ppm	± 0.041 ppm
Chloroethane	75-00-3	1.000 ppm	1.057 ppm	± 0.031 ppm
Vinyl Bromide	593-60-2	1.000 ppm	1.005 ppm	± 0.018 ppm
Acetonitrile	75-05-8	1.000 ppm	0.972 ppm	± 0.010 ppm
Acrolein	107-02-8	1.000 ppm	0.971 ppm	± 0.094 ppm
Isopentane	78-78-4	1.000 ppm	1.045 ppm	± 0.010 ppm
Acetone	67-64-1	1.000 ppm	1.043 ppm	± 0.010 ppm
Freon-11	75-69-4	1.000 ppm	1.041 ppm	± 0.029 ppm
Isopropyl Alcohol	67-63-0	1.000 ppm	1.017 ppm	± 0.010 ppm
Acrylonitrile	107-13-1	1.000 ppm	1.019 ppm	± 0.010 ppm
n-Pentane	109-66-0	1.000 ppm	1.021 ppm	± 0.009 ppm
Ethyl Ether	60-29-7	1.000 ppm	1.023 ppm	± 0.009 ppm
1,1-Dichloroethene	75-35-4	1.000 ppm	1.019 ppm	± 0.009 ppm
Carbon Disulfide	75-15-0	1.000 ppm	1.036 ppm	± 0.009 ppm
Methylene Chloride	75-09-2	1.000 ppm	1.025 ppm	± 0.009 ppm
Tert-Butanol	75-65-0	1.000 ppm	1.080 ppm	± 0.011 ppm
3-Chloropropene	107-05-1	1.000 ppm	1.073 ppm	± 0.011 ppm
Freon-113	76-13-1	1.000 ppm	1.068 ppm	± 0.009 ppm

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Certificate of Analysis

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South Burlington, VT 05403

Report ID: 26909
Revision: 0

Sales#:	117033285	**Cylinder Size:**	152 (8" X 47.5")
Production#:	3168520	**Cylinder # :**	CC-133603
Certification Date:	Jan-22-2019	**Cylinder Pressure:**	1900 psig
P.O.#:	3018313-ISO17025	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	ISO-17025	**Cylinder Volume:**	29.5 Liter
Material#:	14004551	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	3800 Liters
Expiration Date:	Jan-22-2020	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Method of Analysis:**	GC-FID

COMPONENT	CAS Number	Requested Conc	Reported Conc	Uncertainty (k=2.447 @ 95%)
Trans-1,2-Dichloroethene	156-60-5	1.000 ppm	1.033 ppm	± 0.009 ppm
1,1-Dichloroethane	75-34-3	1.000 ppm	1.027 ppm	± 0.010 ppm
Methyl Tert Butyl Ether	1634-04-4	1.000 ppm	1.056 ppm	± 0.010 ppm
Vinyl Acetate	108-05-4	1.000 ppm	1.007 ppm	± 0.010 ppm
Methyl Ethyl Ketone	78-93-3	1.000 ppm	1.036 ppm	± 0.009 ppm
Cis-1,2-Dichloroethene	156-59-2	1.000 ppm	1.037 ppm	± 0.009 ppm
Hexane	110-54-3	1.000 ppm	1.047 ppm	± 0.009 ppm
Chloroform	67-66-3	1.000 ppm	1.032 ppm	± 0.009 ppm
Ethyl Acetate	141-78-6	1.000 ppm	1.021 ppm	± 0.009 ppm
Tetrahydrofuran	109-99-9	1.000 ppm	0.981 ppm	± 0.009 ppm
1,2-Dichloroethane	107-06-2	1.000 ppm	1.046 ppm	± 0.009 ppm
1,1,1-Trichloroethane	71-55-6	1.000 ppm	1.032 ppm	± 0.009 ppm
Benzene	71-43-2	1.000 ppm	1.039 ppm	± 0.010 ppm
1-Butanol	71-36-3	1.000 ppm	0.911 ppm	± 0.028 ppm
Carbon Tetrachloride	56-23-5	1.000 ppm	1.005 ppm	± 0.009 ppm
Cyclohexane	110-82-7	1.000 ppm	1.022 ppm	± 0.009 ppm
Dibromomethane	74-95-3	1.000 ppm	1.034 ppm	± 0.009 ppm
1,2-Dichloropropane	78-87-5	1.000 ppm	1.035 ppm	± 0.009 ppm
Trichloroethylene	79-01-6	1.000 ppm	1.029 ppm	± 0.009 ppm
Bromodichloromethane	75-27-4	1.000 ppm	1.029 ppm	± 0.009 ppm
1,4-Dioxane	123-91-1	1.000 ppm	1.029 ppm	± 0.009 ppm
2,2,4-Trimethylpentane	540-84-1	1.000 ppm	1.014 ppm	± 0.009 ppm
Methyl Methacrylate	80-62-6	1.000 ppm	1.021 ppm	± 0.010 ppm
Heptane	142-82-5	1.000 ppm	1.031 ppm	± 0.009 ppm
Methylcyclohexane	108-87-2	1.000 ppm	1.048 ppm	± 0.009 ppm
Cis-1,3-Dichloropropene	10061-01-5	1.000 ppm	0.994 ppm	± 0.027 ppm
Methyl Isobutyl Ketone	108-10-1	1.000 ppm	1.019 ppm	± 0.009 ppm

Linde Spectra Environmental Gases

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Linde North America, Inc.

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THE LINDE GROUP

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ISO 17025 Certificate

ANAB ACCREDITED

Certificate of Analysis

SHIPPED TO:
Test America Inc
30 Community Drive Suite 11
South Burlington, VT 05403

Report ID: 26909
Revision: 0

Sales#:	117033285	**Cylinder Size:**	152 (8" X 47.5")
Production#:	3168520	**Cylinder # :**	CC-133603
Certification Date:	Jan-22-2019	**Cylinder Pressure:**	1900 psig
P.O.#:	3018313-ISO17025	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	ISO-17025	**Cylinder Volume:**	29.5 Liter
Material#:	14004551	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	3800 Liters
Expiration Date:	Jan-22-2020	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Method of Analysis:**	GC-FID

COMPONENT	CAS Number	Requested Conc	Reported Conc	Uncertainty (k=2.447 @ 95%)
Trans-1,3-Dichloropropene	10061-02-6	1.000 ppm	0.985 ppm	± 0.028 ppm
1,1,2-Trichloroethane	79-00-5	1.000 ppm	1.049 ppm	± 0.009 ppm
Toluene	108-88-3	1.000 ppm	1.020 ppm	± 0.009 ppm
Methyl Butyl Ketone	591-78-6	1.000 ppm	1.011 ppm	± 0.009 ppm
Dibromochloromethane	124-48-1	1.000 ppm	1.060 ppm	± 0.009 ppm
1,2-Dibromoethane	106-93-4	1.000 ppm	1.066 ppm	± 0.009 ppm
n-Octane	111-65-9	1.000 ppm	1.030 ppm	± 0.009 ppm
Tetrachloroethylene	127-18-4	1.000 ppm	1.047 ppm	± 0.009 ppm
Chlorobenzene	108-90-7	1.000 ppm	1.050 ppm	± 0.009 ppm
Ethylbenzene	100-41-4	1.000 ppm	1.023 ppm	± 0.009 ppm
p-xylene	106-42-3	1.000 ppm	1.027 ppm	± 0.009 ppm
m-xylene	108-38-3	1.000 ppm	1.031 ppm	± 0.009 ppm
Bromoform	75-25-2	1.000 ppm	1.030 ppm	± 0.009 ppm
Styrene	100-42-5	1.000 ppm	1.028 ppm	± 0.009 ppm
o-xylene	95-47-6	1.000 ppm	1.037 ppm	± 0.009 ppm
1,1,2,2-Tetrachloroethane	79-34-5	1.000 ppm	1.035 ppm	± 0.009 ppm
1,2,3-Trichloropropane	96-18-4	1.000 ppm	1.064 ppm	± 0.010 ppm
Nonane	111-84-2	1.000 ppm	1.047 ppm	± 0.009 ppm
Cumene	98-82-8	1.000 ppm	1.046 ppm	± 0.009 ppm
2-Chlorotoluene	95-49-8	1.000 ppm	1.043 ppm	± 0.009 ppm
n-Propylbenzene	103-65-1	1.000 ppm	1.036 ppm	± 0.009 ppm
4-Ethyltoluene	622-96-8	1.000 ppm	1.025 ppm	± 0.009 ppm
1,3,5-Trimethylbenzene	108-67-8	1.000 ppm	1.049 ppm	± 0.009 ppm
alpha-Methyl Styrene (No Stability Guarantee)	98-83-9	1.000 ppm	1.016 ppm	± 0.009 ppm
Tert-Butyl Benzene	98-06-6	1.000 ppm	1.040 ppm	± 0.009 ppm
1,2,4-Trimethylbenzene	95-63-6	1.000 ppm	1.044 ppm	± 0.009 ppm
1,3-Dichlorobenzene	541-73-1	1.000 ppm	1.017 ppm	± 0.009 ppm

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Certificate of Analysis

SHIPPED TO:
Test America Inc
30 Community Drive Suite 11
South Burlington, VT 05403

PAGE: **5 of 6**
Report ID: 26909
Revision: 0

Sales#:	117033285	**Cylinder Size:**	152 (8" X 47.5")
Production#:	3168520	**Cylinder # :**	CC-133603
Certification Date:	Jan-22-2019	**Cylinder Pressure:**	1900 psig
P.O.#:	3018313-ISO17025	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	ISO-17025	**Cylinder Volume:**	29.5 Liter
Material#:	14004551	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	3800 Liters
Expiration Date:	Jan-22-2020	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Method of Analysis:**	GC-FID

COMPONENT	CAS Number	Requested Conc	Reported Conc	Uncertainty (k=2.447 @ 95%)
Benzyl Chloride	100-44-7	1.000 ppm	1.016 ppm	± 0.009 ppm
n-Decane	124-18-5	1.000 ppm	1.034 ppm	± 0.009 ppm
1,4-Dichlorobenzene	106-46-7	1.000 ppm	1.040 ppm	± 0.009 ppm
Sec-Butyl Benzene	135-98-8	1.000 ppm	1.046 ppm	± 0.009 ppm
4-Isopropyltoluene	99-87-6	1.000 ppm	1.050 ppm	± 0.009 ppm
1,2-Dichlorobenzene	95-50-1	1.000 ppm	1.076 ppm	± 0.010 ppm
n-Butyl Benzene	104-51-8	1.000 ppm	1.051 ppm	± 0.009 ppm
n-Undecane	1120-21-4	1.000 ppm	1.072 ppm	± 0.010 ppm
1,2,4-Trichlorobenzene	120-82-1	1.000 ppm	1.098 ppm	± 0.040 ppm
Naphthalene	91-20-3	1.000 ppm	1.050 ppm	± 0.010 ppm
n-Dodecane	112-40-3	1.000 ppm	1.064 ppm	± 0.010 ppm

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PAGE: **6 of 6**
Report ID: 26909
Revision: 0

Sales#:	117033285	**Cylinder Size:**	152 (8" X 47.5")
Production#:	3168520	**Cylinder # :**	CC-133603
Certification Date:	Jan-22-2019	**Cylinder Pressure:**	1900 psig
P.O.#:	3018313-ISO17025	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	ISO-17025	**Cylinder Volume:**	29.5 Liter
Material#:	14004551	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	3800 Liters
Expiration Date:	Jan-22-2020	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Method of Analysis:**	GC-FID

COMPONENT	CAS Number	Requested Conc	Reported Conc	Uncertainty (k=2.447 @ 95%)
1,2,3-Trichlorobenzene	87-61-6	1.000 ppm	1.086 ppm	± 0.010 ppm
Hexachloro-1,3-Butadiene	87-68-3	1.000 ppm	1.085 ppm	± 0.040 ppm
Nitrogen	7727-37-9	Balance	Balance	

ANALYST: Lou Lorenzetti

DATE: Jan-22-2019

Linde Spectra Environmental Gases

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Preliminary Report

Eurofins Burlington

Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHX.i\20221214-53671.b\53671-10.D
Lims ID: test lcs
Client ID:
Sample Type: Client
Inject. Date: 14-Dec-2022 14:58:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0053671-010
Misc. Info.: test lcs
Operator ID: vtp Instrument ID: CHX.i

Method: \\chromfs\Burlington\ChromData\CHX.i\20221214-53671.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 14-Dec-2022 13:46:06 Calib Date: 23-Nov-2022 00:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHX.i\20221122-53429.b\53429-13.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1661

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41	4.327	4.337	-0.006	98	3802182	36.2	
T	2 Difluoroethane TIC	1		4.375				ND	1
	3 Dichlorodifluoromethane	85	4.423	4.433	-0.006	99	9190997	35.5	
	4 Chlorodifluoromethane	51	4.461	4.470	-0.005	97	6160565	34.8	
	5 1,2-Dichloro-1,1,2,2-tetrafluoro	85	4.782	4.786	0.000	95	8822938	34.8	
	6 Chloromethane	50	4.894	4.899	0.000	99	3641269	35.9	
	7 Vinyl chloride	62	5.199	5.204	0.000	99	2344715	32.9	
	8 Butane	43	5.210	5.215	0.000	97	3244386	34.3	
	9 Butadiene	54	5.317	5.322	0.000	95	1747977	29.4	
	10 Bromomethane	94	6.012	6.018	0.000	99	2719094	35.2	
	12 Chloroethane	64	6.280	6.280	0.006	100	1652704	37.9	
	13 2-Methylbutane	43	6.499	6.500	0.005	92	3633236	36.6	
	14 Vinyl bromide	106	6.692	6.693	0.006	99	2476806	35.5	
	15 Trichlorofluoromethane	101	6.857	6.859	0.005	100	7305712	34.0	
	16 Pentane	43	7.066	7.067	0.005	97	4907637	40.1	E
	17 Ethanol	45		7.200				ND	
	18 Ethyl ether	59	7.467	7.496	-0.022	96	1824337	39.1	
	19 Acrolein	56	7.681	7.694	-0.006	97	920944	37.0	
	20 1,1-Dichloroethene	96	7.895	7.897	0.005	98	2376108	37.0	
	21 1,1,2-Trichloro-1,2,2-trifluoroe	101	7.938	7.940	0.005	97	4854466	37.0	
	22 Acetone	43	7.949	7.978	-0.021	99	3539250	39.9	
	23 Isopropyl alcohol	45	8.238	8.288	-0.043	100	4121927	43.1	Ep
	24 Carbon disulfide	76	8.318	8.320	0.005	100	6462900	41.4	E
	25 Acetonitrile	41	8.414	8.433	-0.011	98	1618242	46.3	Ep
	27 3-Chloro-1-propene	41	8.580	8.583	0.005	98	2849783	41.2	E
	28 Methylene Chloride	49	8.799	8.802	0.005	92	2379589	41.2	E
T	26 Methyl Acetate TIC	43	8.564	8.896	-0.332	80	308730	9.21	3
	29 2-Methyl-2-propanol	59	9.003	9.091	-0.080	94	5241049	45.9	E
	30 Acrylonitrile	53	9.169	9.177	0.000	94	1427467	43.9	E
	32 trans-1,2-Dichloroethene	61	9.308	9.311	0.006	98	2971543	37.5	
	31 Methyl tert-butyl ether	73	9.313	9.349	-0.027	96	6642302	38.0	

Preliminary Report

Data File: \\chromfs\Burlington\ChromData\CHX.i\20221214-53671.b\53671-10.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
S 33 1,2-Dichloroethene, Total	61				0		75.7	
34 Hexane	57	9.816	9.820	0.005	91	3113079	39.5	
36 1,1-Dichloroethane	63	10.057	10.055	0.011	95	3750276	38.8	
35 Vinyl acetate	43	10.057	10.071	-0.005	99	3715339	31.0	
37 2-Butanone (MEK)	72	10.993	11.019	-0.016	99	1090418	42.6	E
38 cis-1,2-Dichloroethene	96	11.030	11.035	0.005	94	2277466	38.2	
39 Ethyl acetate	88	11.089	11.110	-0.011	100	200047	41.7	E
* 40 Chlorobromomethane	128	11.448	11.437	0.011	90	335234	10.0	
41 Tetrahydrofuran	42	11.490	11.516	-0.022	89	2183819	41.2	E
42 Chloroform	83	11.619	11.619	0.011	97	4905165	38.9	
43 1,1,1-Trichloroethane	97	11.934	11.934	0.005	95	5546621	36.8	
44 Cyclohexane	84	12.089	12.089	0.005	95	3016299	38.7	
45 Carbon tetrachloride	117	12.223	12.223	0.005	99	5848095	36.3	
46 Benzene	78	12.555	12.555	0.005	96	6722437	38.9	
47 1,2-Dichloroethane	62	12.619	12.619	0.005	99	3625025	38.3	
48 Isooctane	57	12.780	12.779	0.006	98	9972506	38.6	
49 n-Heptane	43	13.085	13.084	0.006	89	3528532	38.6	
* 50 1,4-Difluorobenzene	114	13.282	13.277	0.005	95	1741747	10.0	
51 n-Butanol	56	13.480	13.523	-0.038	89	1273100	36.2	
52 Trichloroethene	95	13.716	13.716	0.005	98	3152116	36.9	
A 53 GRO	1	14.133	(6.484-21.783)		0	1069570383	0	g
55 1,2-Dichloropropane	63	14.165	14.166	0.005	84	2221117	38.0	
T 54 Methyl cyclohexane TIC	55	14.176	14.176	0.000	88	4084772	23.5	p
56 Methyl methacrylate	69	14.245	14.251	-0.001	95	2441000	42.2	Ep
58 Dibromomethane	174	14.320	14.321	0.005	95	2942050	37.2	
57 1,4-Dioxane	88	14.294	14.337	-0.037	93	1598360	53.9	E
59 Dichlorobromomethane	83	14.625	14.626	0.005	99	5411375	39.2	
60 cis-1,3-Dichloropropene	75	15.422	15.423	0.005	95	4240934	38.2	
A 61 TVOC as Toluene	92	15.484	(4.323-26.645)		0	1717604565	0	g
62 4-Methyl-2-pentanone (MIBK)	43	15.668	15.712	-0.038	95	4905744	44.4	E
63 Toluene	92	16.070	16.069	0.006	94	5105378	38.5	
A 64 Toluene Range	1	16.083	(15.995-16.171)		0	20233168	NC	g
A 65 C8 Range	1	16.321	(16.241-16.401)		0	20440093	NC	g
66 n-Octane	43	16.332	16.333	0.005	87	4819646	37.5	
67 trans-1,3-Dichloropropene	75	16.471	16.472	0.005	98	4156317	40.2	E
68 1,1,2-Trichloroethane	83	16.845	16.845	0.005	99	2401338	38.8	
69 Tetrachloroethene	166	17.065	17.064	0.006	97	4515054	35.3	
70 2-Hexanone	43	17.487	17.385	0.107	75	1535722	15.8	
71 Chlorodibromomethane	129	17.589	17.589	0.005	98	5763965	38.8	
72 Ethylene Dibromide	107	17.835	17.835	0.005	98	4655546	39.0	
* 73 Chlorobenzene-d5	117	18.739	18.734	0.005	90	1614325	10.0	
74 Chlorobenzene	112	18.798	18.798	0.005	94	7111679	37.5	
75 Ethylbenzene	91	18.991	18.991	0.006	98	11523284	38.0	
76 m-Xylene & p-Xylene	106	19.258	19.258	0.005	0	9102745	75.3	
77 n-Nonane	57	19.322	19.328	0.000	84	4978173	39.0	
S 78 Xylenes, Total	106				0		113.2	
79 o-Xylene	106	20.023	20.023	0.005	99	4475629	37.9	
80 Styrene	104	20.061	20.061	0.006	99	7275832	42.1	E
81 Bromoform	173	20.408	20.414	0.000	99	5878905	38.9	
82 Isopropylbenzene	105	20.724	20.730	0.000	96	13336709	36.6	
83 1,1,2,2-Tetrachloroethane	83	21.227	21.233	0.000	99	6150327	38.3	

Preliminary Report

Data File: \\chromfs\Burlington\ChromData\CHX.i\20221214-53671.b\53671-10.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
84 1,2,3-Trichloropropane	75	21.334	21.334	0.005	97	5347634	38.3	
85 N-Propylbenzene	91	21.446	21.447	0.005	99	15135454	36.2	
86 2-Chlorotoluene	91	21.591	21.597	0.000	97	9960272	37.3	
87 4-Ethyltoluene	105	21.644	21.650	0.000	97	13009274	36.3	
88 1,3,5-Trimethylbenzene	105	21.740	21.741	0.005	93	11441572	36.4	
89 n-Decane	57	21.778	21.779	0.005	94	6181510	37.3	
90 Alpha Methyl Styrene	118	22.067	22.068	0.006	89	5978737	41.2	E
91 tert-Butylbenzene	119	22.222	22.223	0.005	93	11116469	34.8	
92 1,2,4-Trimethylbenzene	105	22.307	22.314	-0.001	98	11512155	36.4	
93 sec-Butylbenzene	105	22.548	22.549	0.005	97	15627610	34.3	
94 1,3-Dichlorobenzene	146	22.719	22.726	0.000	99	7887073	38.4	
95 4-Isopropyltoluene	119	22.762	22.769	0.000	96	14019332	35.0	
96 1,4-Dichlorobenzene	146	22.864	22.870	0.000	94	7888652	38.9	
97 Benzyl chloride	91	23.003	23.004	0.005	99	10243492	40.7	E
98 n-Butylbenzene	91	23.319	23.325	0.000	98	12376742	36.2	
99 1,2-Dichlorobenzene	146	23.345	23.352	0.000	95	7566301	37.1	
100 Undecane	57	23.474	23.475	0.006	91	7078874	38.1	
101 Dodecane	57	25.041	25.048	0.000	95	6872178	40.5	E
102 1,2,4-Trichlorobenzene	180	25.769	25.771	0.006	94	6783940	39.0	
103 Hexachlorobutadiene	225	26.009	26.017	-0.001	99	7064102	32.0	
104 Naphthalene	128	26.234	26.242	0.000	99	15848475	41.2	E
105 1,2,3-Trichlorobenzene	180	26.641	26.643	0.006	96	6733943	40.8	E
T 106 Chlorotrifluoroethene TIC	1		0.000				ND	1
T 107 Methyl acetylene TIC	1		0.000				ND	1
T 108 1,1,1-Trifluoro-2,2-dichloroetha	1		0.000				ND	1
T 110 1,2-Dibromo-3-Chloropropane TIC	75		0.000				ND	1
T 111 1,1,1,2-Tetrachloroethane TIC	1		0.000				ND	1
113 Total Alkanes TIC	1		0.000				ND	
114 Methylcyclohexane	83		0.000				ND	g
115 1,2,3-Trimethylbenzene TIC	1		0.000				ND	i
T 109 Freon 115 TIC	1		4.760				ND	1
T 112 1,3-Dichloropropane TIC	1	17.161	17.166	-0.005	91	27844	0	6

QC Flag Legend

Processing Flags

- NC - Not Calibrated
- 1 - Missing Peaks
- 3 - Failed RT Window Test
- E - Exceeded Maximum Amount
- 6 - Missing Quant Standard
- i - Failed Initial Calibration Limits
- p - Peak ID'ed as Multiple Compounds
- g - Not in Limit Group or Failed to Calibrate

Reagents:

ATTO15XISs_00003 Amount Added: 20.00 Units: mL Run Reagent

Preliminary Report

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHX.i\20221214-53671.b\53671-08.D
Lims ID: test knox
Client ID:
Sample Type: Client
Inject. Date: 14-Dec-2022 13:12:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0053671-008
Misc. Info.: test_knox
Operator ID: vtp Instrument ID: CHX.i

Method: \\chromfs\Burlington\ChromData\CHX.i\20221214-53671.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 14-Dec-2022 11:59:47 Calib Date: 23-Nov-2022 00:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHX.i\20221122-53429.b\53429-13.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1661

First Level Reviewer: V0FK Date: 14-Dec-2022 14:01:25

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41	4.332	4.337	-0.001	99	4186740	39.9	
T	2 Difluoroethane TIC	1		4.375				ND	1
	3 Dichlorodifluoromethane	85	4.423	4.433	-0.006	99	9797477	38.0	
	4 Chlorodifluoromethane	51	4.461	4.470	-0.005	97	6615746	37.5	
	5 1,2-Dichloro-1,1,2,2-tetrafluoro	85	4.782	4.786	0.000	98	9433689	37.4	
	6 Chloromethane	50	4.894	4.899	0.000	99	3870664	38.3	
	7 Vinyl chloride	62	5.199	5.204	0.000	99	2547349	35.8	
	8 Butane	43	5.210	5.215	0.000	97	3641504	38.6	
	9 Butadiene	54	5.317	5.322	0.000	96	2054618	34.7	
	10 Bromomethane	94	6.012	6.018	0.000	99	2803631	36.4	
	12 Chloroethane	64	6.280	6.280	0.006	100	1717427	39.5	
	13 2-Methylbutane	43	6.499	6.500	0.005	93	3991457	40.3	E
	14 Vinyl bromide	106	6.692	6.693	0.006	98	2636119	37.9	
	15 Trichlorofluoromethane	101	6.857	6.859	0.005	100	8085944	37.8	
	16 Pentane	43	7.066	7.067	0.005	97	5321666	43.6	E
	17 Ethanol	45		7.200				ND	
	18 Ethyl ether	59	7.467	7.496	-0.022	96	1959723	42.1	E
	19 Acrolein	56	7.681	7.694	-0.006	97	980713	39.5	
	20 1,1-Dichloroethene	96	7.895	7.897	0.005	97	2556853	39.9	
	21 1,1,2-Trichloro-1,2,2-trifluoroe	101	7.938	7.940	0.005	97	5219768	39.9	
	22 Acetone	43	7.949	7.978	-0.021	99	3751725	42.4	E
	23 Isopropyl alcohol	45	8.238	8.288	-0.043	100	4956445	51.9	Ep
	24 Carbon disulfide	76	8.318	8.320	0.005	100	7060454	45.4	E
	25 Acetonitrile	41	8.414	8.433	-0.011	98	1855260	53.3	Ep
	27 3-Chloro-1-propene	41	8.580	8.583	0.005	98	3177950	46.1	E
	28 Methylene Chloride	49	8.799	8.802	0.005	92	2606337	45.3	E
T	26 Methyl Acetate TIC	43	8.890	8.904	-0.006	33	11681	0.3496	9
	29 2-Methyl-2-propanol	59	9.003	9.091	-0.080	94	6107237	53.7	E
	30 Acrylonitrile	53	9.169	9.177	-0.001	94	1541309	47.6	E
	32 trans-1,2-Dichloroethene	61	9.308	9.311	0.006	98	3251149	41.1	E

Preliminary Report

Data File: \\chromfs\Burlington\ChromData\CHX.i\20221214-53671.b\53671-08.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
31 Methyl tert-butyl ether	73	9.313	9.348	-0.027	96	7208675	41.4	E
S 33 1,2-Dichloroethene, Total	61				0		83.0	E
34 Hexane	57	9.816	9.820	0.005	91	3442607	43.8	E
36 1,1-Dichloroethane	63	10.057	10.055	0.011	100	4144237	43.0	E
35 Vinyl acetate	43	10.057	10.071	-0.005	99	5321245	44.6	E
37 2-Butanone (MEK)	72	10.993	11.019	-0.016	99	1209765	47.5	E
38 cis-1,2-Dichloroethene	96	11.030	11.035	0.005	94	2483094	41.8	E
39 Ethyl acetate	88	11.084	11.110	-0.016	100	224803	47.0	E
* 40 Chlorobromomethane	128	11.447	11.437	0.010	87	334167	10.0	
41 Tetrahydrofuran	42	11.490	11.516	-0.022	88	2562508	49.3	E
42 Chloroform	83	11.619	11.619	0.011	97	5438559	43.2	E
43 1,1,1-Trichloroethane	97	11.934	11.934	0.005	95	6106209	41.4	E
44 Cyclohexane	84	12.089	12.089	0.005	96	3256632	42.7	E
45 Carbon tetrachloride	117	12.223	12.223	0.005	99	6436236	40.9	E
46 Benzene	78	12.555	12.555	0.005	96	7295427	43.2	E
47 1,2-Dichloroethane	62	12.619	12.619	0.005	99	4024117	43.4	E
48 Isooctane	57	12.780	12.779	0.006	98	11089709	43.8	E
49 n-Heptane	43	13.084	13.084	0.005	90	3966781	44.4	E
* 50 1,4-Difluorobenzene	114	13.282	13.277	0.005	95	1704687	10.0	
51 n-Butanol	56	13.480	13.523	-0.038	88	2051650	59.7	E
52 Trichloroethene	95	13.716	13.716	0.005	98	3443816	41.2	E
A 53 GRO	1	14.133	(6.484-21.783)		0	1148303557	0	g
55 1,2-Dichloropropane	63	14.165	14.165	0.005	84	2635139	46.1	E
T 54 Methyl cyclohexane TIC	55		14.176				ND	79
56 Methyl methacrylate	69	14.240	14.251	-0.006	95	2704647	47.7	E
58 Dibromomethane	174	14.326	14.321	0.011	95	3251084	42.0	E
57 1,4-Dioxane	88	14.294	14.337	-0.037	93	1846797	63.6	E
59 Dichlorobromomethane	83	14.625	14.626	0.005	99	6056007	44.8	E
60 cis-1,3-Dichloropropene	75	15.422	15.423	0.005	96	4638649	42.7	E
A 61 TVOC as Toluene	92	15.484	(4.323-26.645)		0	1842518753	0	g
62 4-Methyl-2-pentanone (MIBK)	43	15.668	15.712	-0.038	95	5566013	51.4	E
63 Toluene	92	16.070	16.069	0.006	94	5607718	42.9	E
A 64 Toluene Range	1	16.083	(15.995-16.171)		0	22261648	NC	g
A 65 C8 Range	1	16.321	(16.241-16.401)		0	22769337	NC	g
66 n-Octane	43	16.332	16.333	0.005	87	5379409	42.7	E
67 trans-1,3-Dichloropropene	75	16.471	16.472	0.005	98	4572359	45.2	E
68 1,1,2-Trichloroethane	83	16.845	16.845	0.005	99	2656224	43.6	E
69 Tetrachloroethene	166	17.065	17.064	0.006	97	4936105	39.1	
70 2-Hexanone	43	17.247	17.385	-0.133	95	5723828	59.6	E
71 Chlorodibromomethane	129	17.589	17.589	0.005	98	6411680	43.8	E
72 Ethylene Dibromide	107	17.835	17.835	0.005	98	5151847	43.8	E
* 73 Chlorobenzene-d5	117	18.739	18.734	0.005	88	1590359	10.0	
74 Chlorobenzene	112	18.798	18.798	0.005	94	7718256	41.3	E
75 Ethylbenzene	91	18.991	18.991	0.006	98	12808287	42.9	E
76 m-Xylene & p-Xylene	106	19.258	19.258	0.005	0	10019687	84.2	E
77 n-Nonane	57	19.328	19.328	0.006	84	5468655	43.5	E
S 78 Xylenes, Total	106				0		126.8	E
79 o-Xylene	106	20.023	20.023	0.005	99	4968876	42.7	E
80 Styrene	104	20.061	20.061	0.005	99	7924562	46.5	E
81 Bromoform	173	20.414	20.414	0.006	99	6547601	44.0	E
82 Isopropylbenzene	105	20.724	20.730	0.000	97	14414132	40.2	E

Preliminary Report

Data File: \\chromfs\Burlington\ChromData\CHX.i\20221214-53671.b\53671-08.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
83 1,1,2,2-Tetrachloroethane	83	21.227	21.233	0.000	99	6758336	42.7	E
84 1,2,3-Trichloropropane	75	21.334	21.334	0.005	97	5812225	42.2	E
85 N-Propylbenzene	91	21.446	21.447	0.005	99	16458001	39.9	
86 2-Chlorotoluene	91	21.596	21.597	0.005	97	10793468	41.0	E
87 4-Ethyltoluene	105	21.644	21.650	0.000	97	14411386	40.9	E
88 1,3,5-Trimethylbenzene	105	21.740	21.741	0.005	93	12444696	40.2	E
89 n-Decane	57	21.778	21.779	0.005	94	6672655	40.9	E
90 Alpha Methyl Styrene	118	22.067	22.068	0.006	89	6643418	46.5	E
91 tert-Butylbenzene	119	22.222	22.223	0.005	92	12206632	38.8	
92 1,2,4-Trimethylbenzene	105	22.307	22.314	-0.001	98	12520312	40.1	E
93 sec-Butylbenzene	105	22.548	22.549	0.005	96	16805750	37.4	
94 1,3-Dichlorobenzene	146	22.725	22.726	0.006	99	8489588	42.0	E
95 4-Isopropyltoluene	119	22.767	22.769	0.005	96	15094334	38.3	
96 1,4-Dichlorobenzene	146	22.864	22.870	0.000	94	8531028	42.7	E
97 Benzyl chloride	91	23.003	23.004	0.005	98	11254467	45.4	E
98 n-Butylbenzene	91	23.318	23.325	-0.001	98	13349823	39.6	
99 1,2-Dichlorobenzene	146	23.345	23.352	0.000	95	8180583	40.8	E
100 Undecane	57	23.474	23.475	0.006	91	7612870	41.6	E
101 Dodecane	57	25.041	25.048	0.000	95	6524107	39.1	
102 1,2,4-Trichlorobenzene	180	25.769	25.771	0.006	94	6996348	40.9	E
103 Hexachlorobutadiene	225	26.009	26.017	-0.001	99	7460637	34.3	
104 Naphthalene	128	26.234	26.241	0.000	99	16474902	43.4	E
105 1,2,3-Trichlorobenzene	180	26.641	26.643	0.006	95	6971254	42.8	E
T 106 Chlorotrifluoroethene TIC	1		0.000				ND	1
T 107 Methyl acetylene TIC	1		0.000				ND	1
T 108 1,1,1-Trifluoro-2,2-dichloroetha	1		0.000				ND	1
T 110 1,2-Dibromo-3-Chloropropane TIC	75		0.000				ND	1
T 111 1,1,1,2-Tetrachloroethane TIC	1		0.000				ND	1
113 Total Alkanes TIC	1		0.000				ND	
114 Methylcyclohexane	83		0.000				ND	g
115 1,2,3-Trimethylbenzene TIC	1		0.000				ND	i
T 109 Freon 115 TIC	1		4.760				ND	1
T 112 1,3-Dichloropropane TIC	1	17.161	17.166	-0.005	83	30090	0	36

Preliminary Report

QC Flag Legend

Processing Flags

NC - Not Calibrated
1 - Missing Peaks
3 - Failed RT Window Test
E - Exceeded Maximum Amount
6 - Missing Quant Standard
7 - Failed Limit of Detection
9 - Failed A Reference Spectral Test
i - Failed Initial Calibration Limits
p - Peak ID'ed as Multiple Compounds
g - Not in Limit Group or Failed to Calibrate

Reagents:

ATTO15XISs_00003	Amount Added: 20.00	Units: mL	Run Reagent

Reagent

ATTO15CISs_00012

THE LINDE GROUP

SHIPPED TO: Test America Inc.
30 Community Dr. Ste. 11
Suoth Burlington, VT 05403-6834

PAGE: **1 of 1**

ANALYSIS REPORT

Sales#:	117424982	**Cylinder Size:**	152 (8" X 47.5")
Production#:	1543553	**Cylinder # :**	CC-106829
Report Date:	Sep-22-2021	**Cylinder Pressure:**	2000 psig
P.O.# :	74003137	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	QUALIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	24088974	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	4000 Liters
Expiration Date:	Sep-22-2022	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	10% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	QUALIFIED CONC
Bromochloromethane	74-97-5	100 ppb	96 ppb
1,4-Difluorobenzene	540-36-3	100 ppb	98 ppb
Chlorobenzene-d5	3114-55-4	100 ppb	94 ppb
4-Bromofluorobenzene	460-00-4	100 ppb	92 ppb
Nitrogen	7727-37-9	Balance	Balance

ANALYST: _____
Brian Bramkamp

DATE: Sep-22-2021

Linde Gas North America LLC

(908) 329-9700 Main (908) 329-9740 Fax
www.Lindeus.com

Method TO15

Volatile Organic Compounds (GC/MS) by Method TO15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 56210_003.D

Lab ID: LCS 200-193264/3 Client ID:

COMPOUND	SPIKE ADDED (ug/m3)	LCS CONCENTRATION (ug/m3)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	49.4	54.8	111	61-142	
Chlorodifluoromethane	35.4	37.8	107	60-147	
1,2-Dichlorotetrafluoroethane	69.9	76.7	110	71-141	
Chloromethane	20.6	22.1	107	56-141	
n-Butane	23.8	23.1	97	53-151	
Vinyl chloride	25.6	22.8	89	61-135	
1,3-Butadiene	22.1	19.3	87	58-139	
Bromomethane	38.8	42.3	109	72-124	
Chloroethane	26.4	27.4	104	68-130	
Bromoethene(Vinyl Bromide)	43.7	46.8	107	75-125	
Trichlorofluoromethane	56.2	58.2	104	70-129	
1,1,2-Trichlorotrifluoroethane	76.6	76.2	99	70-121	
1,1-Dichloroethene	39.6	39.5	100	68-120	
Acetone	23.7	24.7	104	54-154	
Isopropyl alcohol	24.6	23.8	97	53-142	
Carbon disulfide	31.1	31.0	100	71-138	
3-Chloropropene	31.3	30.9	99	50-150	
Methylene Chloride	34.7	33.1	95	59-137	
tert-Butyl alcohol	30.3	31.1	102	66-132	
Methyl tert-butyl ether	36.0	35.1	97	70-127	
trans-1,2-Dichloroethene	39.6	37.3	94	69-137	
n-Hexane	35.2	33.9	96	63-138	
1,1-Dichloroethane	40.5	37.8	93	66-130	
Methyl Ethyl Ketone (2-Butanone)	29.5	28.5	97	72-124	
cis-1,2-Dichloroethene	39.6	37.7	95	72-121	
Chloroform	48.8	46.9	96	73-124	
Tetrahydrofuran	29.5	29.4	100	60-149	
1,1,1-Trichloroethane	54.6	52.6	96	72-127	
Cyclohexane	34.4	33.0	96	76-124	
Carbon tetrachloride	62.9	61.8	98	71-133	
2,2,4-Trimethylpentane	46.7	44.5	95	68-131	
Benzene	31.9	30.3	95	73-119	
1,2-Dichloroethane	40.5	38.2	94	68-135	
n-Heptane	41.0	38.8	95	60-142	
Trichloroethene	53.7	50.9	95	73-122	
Methyl methacrylate	40.9	40.3	98	73-129	
1,2-Dichloropropane	46.2	43.7	95	69-128	
1,4-Dioxane	36.0	34.8	97	66-129	
Bromodichloromethane	67.0	64.9	97	75-127	
cis-1,3-Dichloropropene	45.4	44.4	98	74-125	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 56210_003.D

Lab ID: LCS 200-193264/3 Client ID:

COMPOUND	SPIKE ADDED (ug/m3)	LCS CONCENTRATION (ug/m3)	LCS % REC	QC LIMITS REC	#
4-Methyl-2-pentanone (Methyl isobutyl ketone)	41.0	39.8	97	58-144	
Toluene	37.7	36.4	97	75-122	
trans-1,3-Dichloropropene	45.4	45.3	100	74-128	
1,1,2-Trichloroethane	54.6	52.3	96	75-126	
Tetrachloroethene	67.8	64.0	94	70-125	
Methyl Butyl Ketone (2-Hexanone)	41.0	40.3	98	57-143	
Dibromochloromethane	85.2	85.9	101	73-125	
1,2-Dibromoethane	76.8	74.8	97	78-122	
Chlorobenzene	46.0	43.8	95	76-119	
Ethylbenzene	43.4	42.1	97	74-122	
m,p-Xylene	86.8	83.8	97	76-121	
o-Xylene	43.4	42.0	97	73-123	
Styrene	42.6	42.2	99	74-125	
Bromoform	103	109	106	53-149	
Cumene	49.1	48.0	98	73-123	
1,1,2,2-Tetrachloroethane	68.6	65.5	95	74-126	
n-Propylbenzene	49.1	47.9	97	73-127	
4-Ethyltoluene	49.2	47.9	97	75-129	
1,3,5-Trimethylbenzene	49.2	47.7	97	72-126	
2-Chlorotoluene	51.8	49.5	96	74-126	
tert-Butylbenzene	54.9	52.8	96	71-125	
1,2,4-Trimethylbenzene	49.2	47.0	96	71-129	
sec-Butylbenzene	54.9	53.5	97	70-128	
4-Isopropyltoluene	54.9	53.7	98	68-130	
1,3-Dichlorobenzene	60.1	56.4	94	69-131	
1,4-Dichlorobenzene	60.1	56.7	94	67-132	
Benzyl chloride	51.8	52.6	102	60-136	
n-Butylbenzene	54.9	53.5	97	65-137	
1,2-Dichlorobenzene	60.1	56.0	93	68-129	
1,2,4-Trichlorobenzene	74.2	68.4	92	50-150	
Hexachlorobutadiene	107	97.9	92	58-130	
Naphthalene	52.4	48.6	93	50-150	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Lab File ID: 56210_004.D Lab Sample ID: MB 200-193264/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHAN.i Date Analyzed: 07/06/2023 09:49

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-193264/3	56210_003.D	07/06/2023 08:56
Garage Blower Effluent	200-68952-1	56210_016.D	07/06/2023 20:28
Factory Blower Effluent (FB-2)	200-68952-2	56210_017.D	07/06/2023 21:21

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Lab File ID: 55638_001a.D BFB Injection Date: 05/22/2023

Instrument ID: CHAN.i BFB Injection Time: 14:02

Analysis Batch No.: 191713

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	22.6	
75	30.0 - 66.0% of mass 95	53.8	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	55.0	
175	4.0 - 9.0 % of mass 174	4.3	(7.7) 1
176	93.0 - 101.0% of mass 174	52.8	(95.9) 1
177	5.0 - 9.0% of mass 176	3.5	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-191713/4	55613_004.D	05/22/2023	16:33
	IC 200-191713/6	55613_006.D	05/22/2023	18:16
	IC 200-191713/7	55613_007.D	05/22/2023	19:08
	IC 200-191713/8	55613_008.D	05/22/2023	19:59
	ICIS 200-191713/9	55613_009.D	05/22/2023	20:50
	IC 200-191713/10	55613_010.D	05/22/2023	21:42
	IC 200-191713/14	55613_014.D	05/23/2023	1:07
	IC 200-191713/15	55613_015.D	05/23/2023	1:58
	ICV 200-191713/20	55613_020.D	05/23/2023	6:16

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Lab File ID: 56210_001.D BFB Injection Date: 07/06/2023

Instrument ID: CHAN.i BFB Injection Time: 07:11

Analysis Batch No.: 193264

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	21.6	
75	30.0 - 66.0% of mass 95	52.1	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	56.5	
175	4.0 - 9.0 % of mass 174	4.3	(7.6) 1
176	93.0 - 101.0% of mass 174	54.4	(96.4) 1
177	5.0 - 9.0% of mass 176	3.6	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-193264/2	56210_002.D	07/06/2023	8:03
	LCS 200-193264/3	56210_003.D	07/06/2023	8:56
	MB 200-193264/4	56210_004.D	07/06/2023	9:49
Garage Blower Effluent	200-68952-1	56210_016.D	07/06/2023	20:28
Factory Blower Effluent (FB-2)	200-68952-2	56210_017.D	07/06/2023	21:21

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Sample No.: ICIS 200-191713/9 Date Analyzed: 05/22/2023 20:50

Instrument ID: CHAN.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 55613_009.D Heated Purge: (Y/N) N

Calibration ID: 50299

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		242688	11.69	1212907	13.53	1084033	19.01
UPPER LIMIT		339763	12.02	1698070	13.86	1517646	19.34
LOWER LIMIT		145613	11.36	727744	13.20	650420	18.68
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-191713/20		264840	11.69	1331411	13.53	1170834	19.01

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Sample No.: CCVIS 200-193264/2 Date Analyzed: 07/06/2023 08:03

Instrument ID: CHAN.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 56210_002.D Heated Purge: (Y/N) N

Calibration ID: 50299

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		185637	11.68	932161	13.52	824398	19.00
UPPER LIMIT		259892	12.01	1305025	13.85	1154157	19.33
LOWER LIMIT		111382	11.35	559297	13.19	494639	18.67
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-193264/3		177958	11.69	897158	13.52	791848	19.00
MB 200-193264/4		177242	11.68	900996	13.52	787215	19.00
200-68952-1	Garage Blower Effluent	161086	11.68	818041	13.52	716819	19.00
200-68952-2	Factory Blower Effluent (FB-2)	161999	11.68	829453	13.52	728242	19.00

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

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

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Client Sample ID: Garage Blower Effluent Lab Sample ID: 200-68952-1

Matrix: Air Lab File ID: 56210_016.D

Analysis Method: TO-15 Date Collected: 06/30/2023 09:00

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2023 20:28

Soil Aliquot Vol: Dilution Factor: 1

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.: 193264 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	2.2	J	2.5	0.54
75-45-6	Chlorodifluoromethane	86.47	0.92	J	1.8	0.42
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4	0.34
74-87-3	Chloromethane	50.49	0.50	J	1.0	0.31
106-97-8	n-Butane	58.12	3.6		1.2	0.48
75-01-4	Vinyl chloride	62.50	0.20	U	0.20	0.054
106-99-0	1,3-Butadiene	54.09	0.44	U	0.44	0.086
74-83-9	Bromomethane	94.94	0.78	U	0.78	0.28
75-00-3	Chloroethane	64.52	1.3	U	1.3	0.47
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.87	U	0.87	0.22
75-69-4	Trichlorofluoromethane	137.37	1.1		1.1	0.28
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	0.44	J	1.5	0.41
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	0.10
67-64-1	Acetone	58.08	9.4	J	12	3.8
67-63-0	Isopropyl alcohol	60.10	12	U	12	3.9
75-15-0	Carbon disulfide	76.14	0.45	J	1.6	0.40
107-05-1	3-Chloropropene	76.53	1.6	U	1.6	0.38
75-09-2	Methylene Chloride	84.93	1.7	U	1.7	0.63
75-65-0	tert-Butyl alcohol	74.12	15	U	15	3.6
1634-04-4	Methyl tert-butyl ether	88.15	0.72	U	0.72	0.13
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	U	0.79	0.091
110-54-3	n-Hexane	86.17	0.40	J	1.8	0.39
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81	0.10
78-93-3	Methyl Ethyl Ketone (2-Butanone)	72.11	1.5	U	1.5	1.4
156-59-2	cis-1,2-Dichloroethene	96.94	0.77		0.20	0.083
67-66-3	Chloroform	119.38	2.2		0.98	0.20
109-99-9	Tetrahydrofuran	72.11	15	U	15	3.8
71-55-6	1,1,1-Trichloroethane	133.41	0.31	J	1.1	0.24
110-82-7	Cyclohexane	84.16	0.69	U	0.69	0.20
56-23-5	Carbon tetrachloride	153.81	1.4		0.22	0.14
540-84-1	2,2,4-Trimethylpentane	114.23	0.98		0.93	0.18
71-43-2	Benzene	78.11	0.75		0.64	0.14

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

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Client Sample ID: Garage Blower Effluent Lab Sample ID: 200-68952-1

Matrix: Air Lab File ID: 56210_016.D

Analysis Method: TO-15 Date Collected: 06/30/2023 09:00

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2023 20:28

Soil Aliquot Vol: Dilution Factor: 1

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.: 193264 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
107-06-2	1,2-Dichloroethane	98.96	0.81	U	0.81	0.38
142-82-5	n-Heptane	100.21	0.35	J	0.82	0.23
79-01-6	Trichloroethene	131.39	78		0.20	0.13
80-62-6	Methyl methacrylate	100.12	2.0	U	2.0	0.57
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92	0.43
123-91-1	1,4-Dioxane	88.11	18	U	18	4.7
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3	0.34
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91	0.20
108-10-1	4-Methyl-2-pentanone (Methyl isobutyl ketone)	100.16	2.0	U	2.0	0.53
108-88-3	Toluene	92.14	2.1		0.75	0.16
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91	0.25
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1	0.40
127-18-4	Tetrachloroethene	165.83	3.0		1.4	0.14
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.0	U	2.0	0.61
124-48-1	Dibromochloromethane	208.28	1.7	U	1.7	0.54
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5	0.32
108-90-7	Chlorobenzene	112.56	0.92	U	0.92	0.20
100-41-4	Ethylbenzene	106.17	0.37	J	0.87	0.23
179601-23-1	m,p-Xylene	106.17	1.2	J	2.2	0.41
95-47-6	o-Xylene	106.17	0.44	J	0.87	0.23
100-42-5	Styrene	104.15	0.85	U	0.85	0.25
75-25-2	Bromoform	252.75	2.1	U	2.1	1.2
98-82-8	Cumene	120.19	0.98	U	0.98	0.20
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4	0.30
103-65-1	n-Propylbenzene	120.19	0.98	U	0.98	0.23
622-96-8	4-Ethyltoluene	120.20	0.98	U	0.98	0.24
108-67-8	1,3,5-Trimethylbenzene	120.20	0.98	U	0.98	0.23
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	0.24
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1	0.26
95-63-6	1,2,4-Trimethylbenzene	120.20	0.94	J	0.98	0.39
135-98-8	sec-Butylbenzene	134.22	1.1	U	1.1	0.25
99-87-6	4-Isopropyltoluene	134.22	1.1	U	1.1	0.33

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

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Client Sample ID: Garage Blower Effluent Lab Sample ID: 200-68952-1

Matrix: Air Lab File ID: 56210_016.D

Analysis Method: TO-15 Date Collected: 06/30/2023 09:00

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2023 20:28

Soil Aliquot Vol: Dilution Factor: 1

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.: 193264 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	0.44
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	0.54
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	0.46
104-51-8	n-Butylbenzene	134.22	1.1	U	1.1	0.60
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	0.40
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7	2.4
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1	1.2
91-20-3	Naphthalene	128.17	2.6	U	2.6	1.6

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

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Client Sample ID: Garage Blower Effluent Lab Sample ID: 200-68952-1

Matrix: Air Lab File ID: 56210_016.D

Analysis Method: TO-15 Date Collected: 06/30/2023 09:00

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2023 20:28

Soil Aliquot Vol: Dilution Factor: 1

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.: 193264 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	0.45	J	0.50	0.11
75-45-6	Chlorodifluoromethane	86.47	0.26	J	0.50	0.12
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	0.048
74-87-3	Chloromethane	50.49	0.24	J	0.50	0.15
106-97-8	n-Butane	58.12	1.5		0.50	0.20
75-01-4	Vinyl chloride	62.50	0.078	U	0.078	0.021
106-99-0	1,3-Butadiene	54.09	0.20	U	0.20	0.039
74-83-9	Bromomethane	94.94	0.20	U	0.20	0.071
75-00-3	Chloroethane	64.52	0.50	U	0.50	0.18
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.20	U	0.20	0.050
75-69-4	Trichlorofluoromethane	137.37	0.20		0.20	0.050
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	0.057	J	0.20	0.053
75-35-4	1,1-Dichloroethene	96.94	0.050	U	0.050	0.026
67-64-1	Acetone	58.08	4.0	J	5.0	1.6
67-63-0	Isopropyl alcohol	60.10	5.0	U	5.0	1.6
75-15-0	Carbon disulfide	76.14	0.15	J	0.50	0.13
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	0.12
75-09-2	Methylene Chloride	84.93	0.50	U	0.50	0.18
75-65-0	tert-Butyl alcohol	74.12	5.0	U	5.0	1.2
1634-04-4	Methyl tert-butyl ether	88.15	0.20	U	0.20	0.036
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.20	0.023
110-54-3	n-Hexane	86.17	0.11	J	0.50	0.11
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	0.025
78-93-3	Methyl Ethyl Ketone (2-Butanone)	72.11	0.50	U	0.50	0.49
156-59-2	cis-1,2-Dichloroethene	96.94	0.19		0.050	0.021
67-66-3	Chloroform	119.38	0.44		0.20	0.041
109-99-9	Tetrahydrofuran	72.11	5.0	U	5.0	1.3
71-55-6	1,1,1-Trichloroethane	133.41	0.057	J	0.20	0.044
110-82-7	Cyclohexane	84.16	0.20	U	0.20	0.058
56-23-5	Carbon tetrachloride	153.81	0.22		0.035	0.022
540-84-1	2,2,4-Trimethylpentane	114.23	0.21		0.20	0.038
71-43-2	Benzene	78.11	0.24		0.20	0.044

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

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Client Sample ID: Garage Blower Effluent Lab Sample ID: 200-68952-1

Matrix: Air Lab File ID: 56210_016.D

Analysis Method: TO-15 Date Collected: 06/30/2023 09:00

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2023 20:28

Soil Aliquot Vol: Dilution Factor: 1

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.: 193264 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
107-06-2	1,2-Dichloroethane	98.96	0.20	U	0.20	0.093
142-82-5	n-Heptane	100.21	0.085	J	0.20	0.055
79-01-6	Trichloroethene	131.39	14		0.037	0.025
80-62-6	Methyl methacrylate	100.12	0.50	U	0.50	0.14
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20	0.094
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0	1.3
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20	0.050
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20	0.045
108-10-1	4-Methyl-2-pentanone (Methyl isobutyl ketone)	100.16	0.50	U	0.50	0.13
108-88-3	Toluene	92.14	0.56		0.20	0.042
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20	0.054
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20	0.074
127-18-4	Tetrachloroethene	165.83	0.45		0.20	0.021
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.50	U	0.50	0.15
124-48-1	Dibromochloromethane	208.28	0.20	U	0.20	0.063
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20	0.042
108-90-7	Chlorobenzene	112.56	0.20	U	0.20	0.044
100-41-4	Ethylbenzene	106.17	0.085	J	0.20	0.052
179601-23-1	m,p-Xylene	106.17	0.28	J	0.50	0.095
95-47-6	o-Xylene	106.17	0.10	J	0.20	0.052
100-42-5	Styrene	104.15	0.20	U	0.20	0.059
75-25-2	Bromoform	252.75	0.20	U	0.20	0.12
98-82-8	Cumene	120.19	0.20	U	0.20	0.041
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20	0.043
103-65-1	n-Propylbenzene	120.19	0.20	U	0.20	0.047
622-96-8	4-Ethyltoluene	120.20	0.20	U	0.20	0.049
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.20	0.047
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20	0.046
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20	0.047
95-63-6	1,2,4-Trimethylbenzene	120.20	0.19	J	0.20	0.080
135-98-8	sec-Butylbenzene	134.22	0.20	U	0.20	0.045
99-87-6	4-Isopropyltoluene	134.22	0.20	U	0.20	0.061

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

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Client Sample ID: Garage Blower Effluent Lab Sample ID: 200-68952-1

Matrix: Air Lab File ID: 56210_016.D

Analysis Method: TO-15 Date Collected: 06/30/2023 09:00

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2023 20:28

Soil Aliquot Vol: Dilution Factor: 1

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.: 193264 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20	0.074
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20	0.089
100-44-7	Benzyl chloride	126.58	0.20	U	0.20	0.088
104-51-8	n-Butylbenzene	134.22	0.20	U	0.20	0.11
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20	0.066
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	0.33
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	0.11
91-20-3	Naphthalene	128.17	0.50	U	0.50	0.30

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_016.D
Lims ID: 200-68952-A-1
Client ID: Garage Blower Effluent
Sample Type: Client
Inject. Date: 06-Jul-2023 20:28:34 ALS Bottle#: 0 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0056210-016
Misc. Info.: 68952-1
Operator ID: Instrument ID: CHAN.i

Method: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\TO15_TO3_Master_Method_AN.m
Limit Group: AI_TO15_ICAL
Last Update: 07-Jul-2023 10:05:53 Calib Date: 23-May-2023 01:58:58
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1610

First Level Reviewer: puangmaleek Date: 07-Jul-2023 10:05:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	4.492	4.492	0.000	99	23139	0.4498	
3 Chlorodifluoromethane	51	4.546	4.546	0.006	97	8333	0.2607	M
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.861				ND	MU
5 Chloromethane	50	4.984	4.990	-0.006	96	4541	0.2417	
7 Butane	43	5.295	5.294	0.001	99	78761	1.51	
6 Vinyl chloride	62		5.294				ND	
8 Butadiene	54		5.407				ND	7
9 Bromomethane	94		6.140				ND	
10 Chloroethane	64		6.413				ND	
13 Vinyl bromide	106		6.835				ND	
14 Trichlorofluoromethane	101	6.996	6.996	0.000	98	12752	0.2024	
20 1,1-Dichloroethene	96		8.060				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	8.092	8.098	-0.006	79	3311	0.0572	
22 Acetone	43	8.157	8.146	0.011	98	186830	3.98	
23 Isopropyl alcohol	45	8.456	8.435	0.021	93	13268	0.2387	
24 Carbon disulfide	76	8.462	8.462	0.000	99	12557	0.1458	
26 3-Chloro-1-propene	41		8.766				ND	MU
27 Methylene Chloride	49		9.002				ND	7
28 2-Methyl-2-propanol	59	9.227	9.205	0.022	98	4859	0.0758	
31 Methyl tert-butyl ether	73		9.489				ND	
30 trans-1,2-Dichloroethene	61	9.489	9.489	0.000	82	947	0.0185	
32 Hexane	57	9.992	9.997	-0.005	93	5955	0.1122	
33 1,1-Dichloroethane	63		10.270				ND	
36 2-Butanone (MEK)	72	11.265	11.243	0.022	100	7234	0.4296	
37 cis-1,2-Dichloroethene	96	11.270	11.276	-0.005	97	6207	0.1937	
* 39 Chlorobromomethane	128	11.682	11.682	0.000	95	161086	10.0	
40 Tetrahydrofuran	42	11.730	11.709	0.021	92	14272	0.3764	
41 Chloroform	83	11.864	11.864	0.000	96	29854	0.4431	
42 1,1,1-Trichloroethane	97	12.164	12.164	0.000	37	3642	0.0565	M
43 Cyclohexane	84	12.297	12.297	0.010	91	1397	0.0329	M
44 Carbon tetrachloride	117	12.436	12.431	0.005	95	13544	0.2215	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	45 Benzene	78	12.790	12.789	0.001	98	24261	0.2352	
	46 1,2-Dichloroethane	62		12.870				ND	
	47 Isooctane	57	12.993	12.993	0.000	98	36389	0.2090	
	48 n-Heptane	43	13.303	13.298	0.005	95	5697	0.0854	
*	49 1,4-Difluorobenzene	114	13.523	13.522	0.000	97	818041	10.0	
	51 Trichloroethene	95	13.956	13.950	0.006	90	633296	14.4	
	53 1,2-Dichloropropane	63		14.421				ND	
	54 Methyl methacrylate	69		14.496				ND	
	55 1,4-Dioxane	88		14.534				ND	
	58 Dichlorobromomethane	83		14.887				ND	
	59 cis-1,3-Dichloropropene	75		15.684				ND	
	61 4-Methyl-2-pentanone (MIBK)	43		15.951				ND	7
	62 Toluene	92	16.320	16.320	0.000	93	37512	0.5573	
	66 trans-1,3-Dichloropropene	75		16.743				ND	MU
	67 1,1,2-Trichloroethane	83		17.117				ND	
	68 Tetrachloroethene	166	17.305	17.299	0.006	86	19186	0.4451	
	69 2-Hexanone	43		17.529				ND	7
	70 Chlorodibromomethane	129		17.850				ND	
	71 Ethylene Dibromide	107		18.091				ND	
*	73 Chlorobenzene-d5	117	19.001	19.001	0.000	93	716819	10.0	
	74 Chlorobenzene	112		19.059				ND	
	75 Ethylbenzene	91	19.241	19.247	-0.006	99	12787	0.0855	
	76 m-Xylene & p-Xylene	106	19.493	19.509	-0.016	0	14909	0.2764	
	78 o-Xylene	106	20.279	20.279	0.000	96	5277	0.1016	
	79 Styrene	104	20.317	20.311	0.006	93	4348	0.0521	
	81 Bromoform	173		20.654				ND	
	82 Isopropylbenzene	105	20.948	20.948	0.000	55	3584	0.0232	
	83 1,1,2,2-Tetrachloroethane	83		21.467				ND	MU
	85 N-Propylbenzene	91	21.649	21.649	0.000	96	3756	0.0187	
	86 2-Chlorotoluene	91		21.799				ND	7
	87 4-Ethyltoluene	105	21.847	21.847	0.000	97	4547	0.0295	
	88 1,3,5-Trimethylbenzene	105	21.938	21.938	0.000	91	3567	0.0275	
	91 tert-Butylbenzene	119		22.414				ND	
	92 1,2,4-Trimethylbenzene	105	22.505	22.499	0.006	91	25100	0.1913	
	93 sec-Butylbenzene	105		22.735				ND	
	94 1,3-Dichlorobenzene	146		22.906				ND	
	95 4-Isopropyltoluene	119	22.943	22.943	0.000	96	4899	0.0332	
	96 1,4-Dichlorobenzene	146	23.050	23.045	0.005	85	1979	0.0247	
	97 Benzyl chloride	91		23.195				ND	7
	98 n-Butylbenzene	91	23.500	23.500	0.000	83	2536	0.0152	
	99 1,2-Dichlorobenzene	146		23.543				ND	
	102 1,2,4-Trichlorobenzene	180		26.014				ND	
	103 Hexachlorobutadiene	225		26.255				ND	
	104 Naphthalene	128	26.506	26.501	0.005	97	10858	0.0659	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags
M - Manually Integrated
U - Marked Undetected

Reagents:

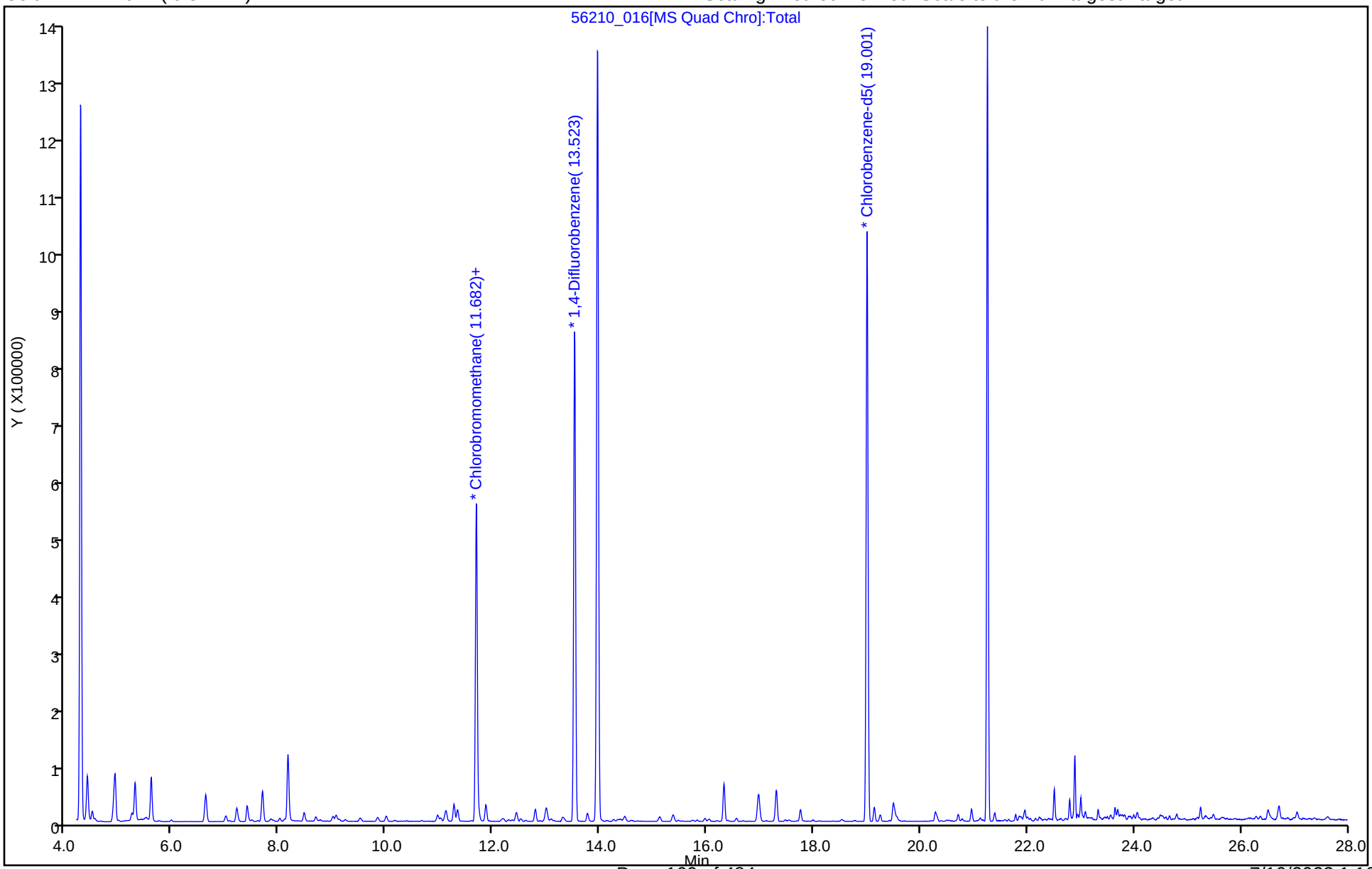
ATTO15CISs_00012 Amount Added: 20.00 Units: mL Run Reagent

Report Date: 07-Jul-2023 10:05:53 Chrom Revision: 2.3 21-Jun-2023 17:36:34

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_016.D				
Injection Date:	06-Jul-2023 20:28:34	Instrument ID:	CHAN.i	Operator ID:	
Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1	Worklist Smp#:	16
Client ID:	Garage Blower Effluent				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		

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

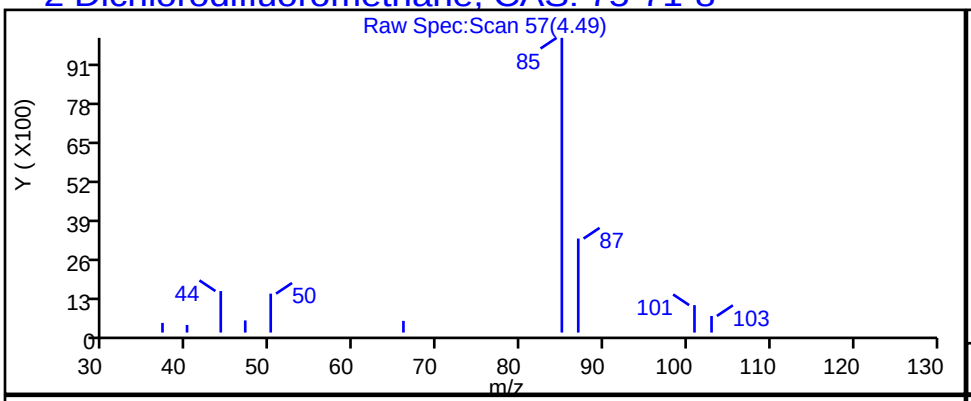


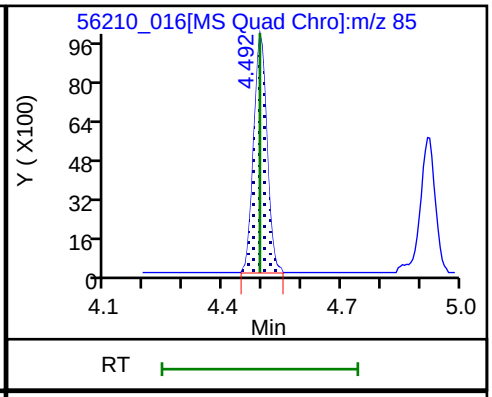
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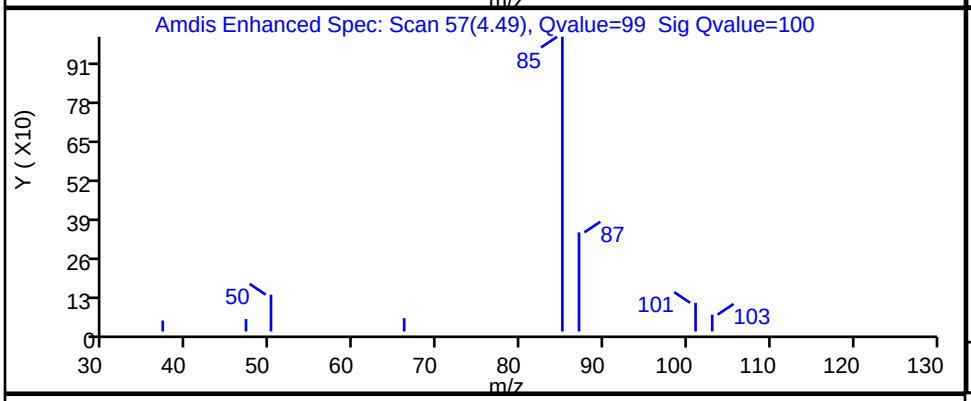
Eurofins Burlington

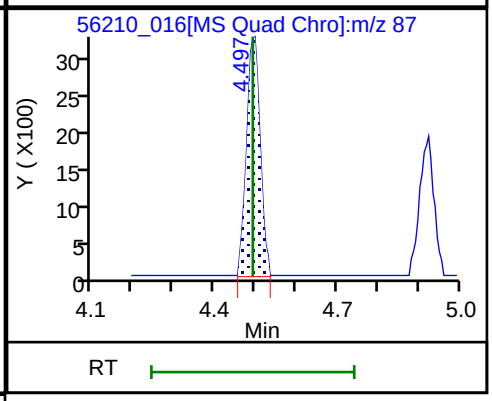
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Injection Date:	06-Jul-2023 20:28:34	Instrument ID:	CHAN.i
Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1
Client ID:	Garage Blower Effluent		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN

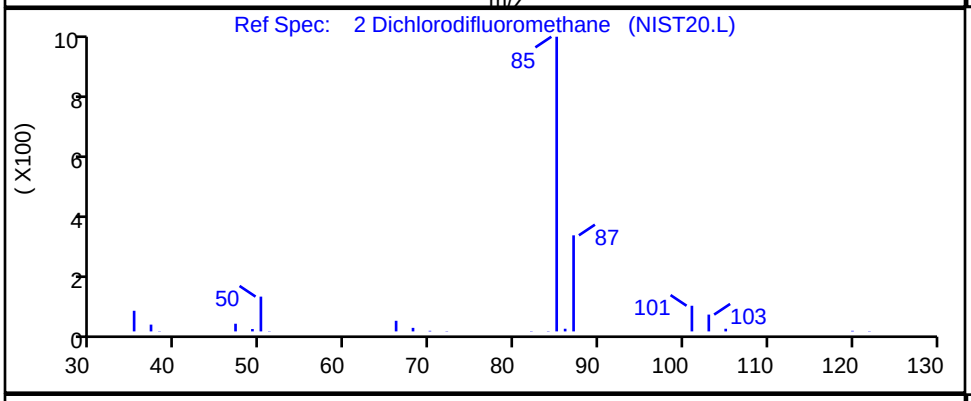
2 Dichlorodifluoromethane, CAS: 75-71-8

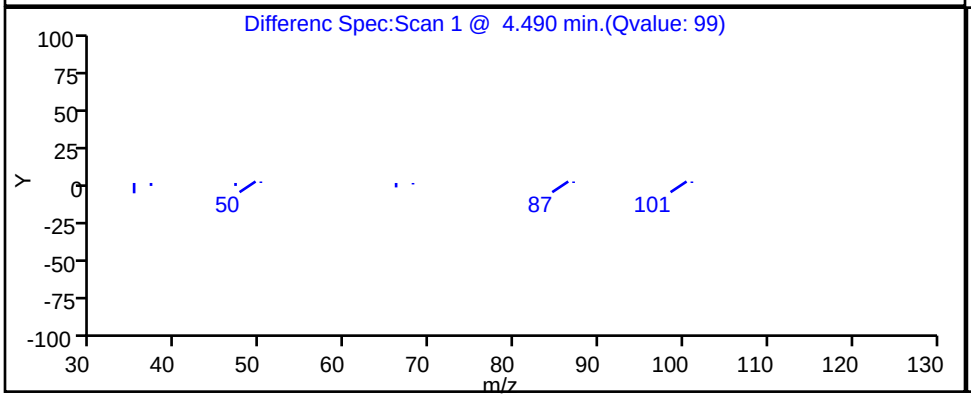


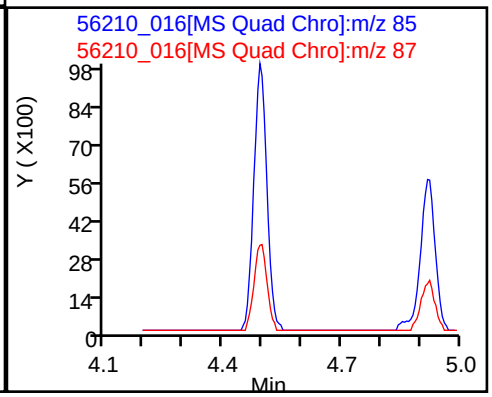








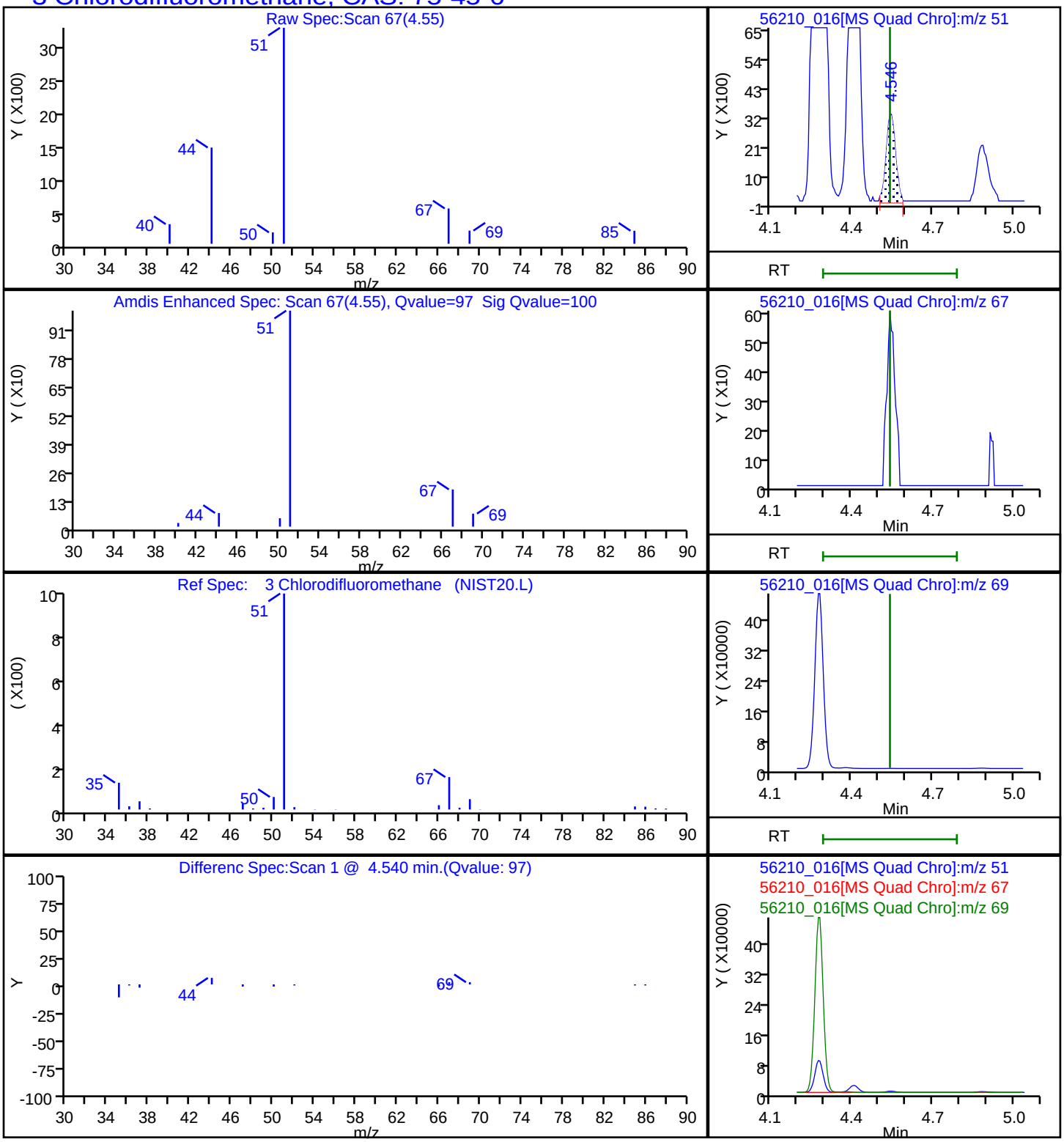




Eurofins Burlington

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Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1		
Client ID:	Garage Blower Effluent				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

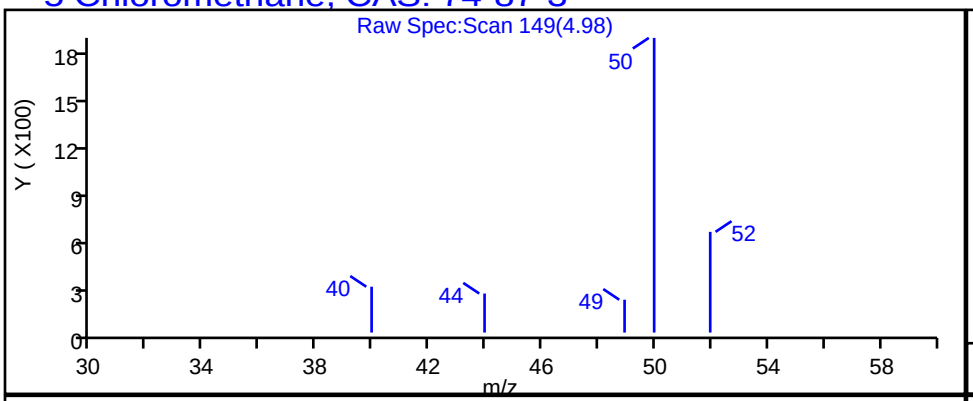
3 Chlorodifluoromethane, CAS: 75-45-6

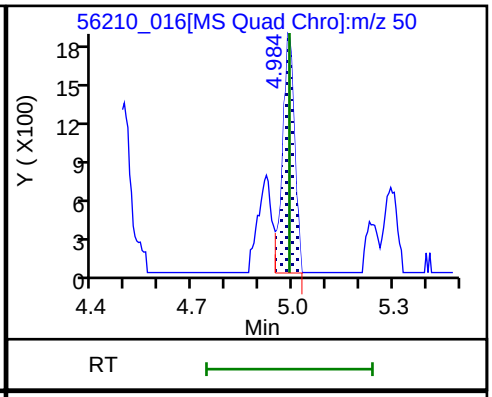


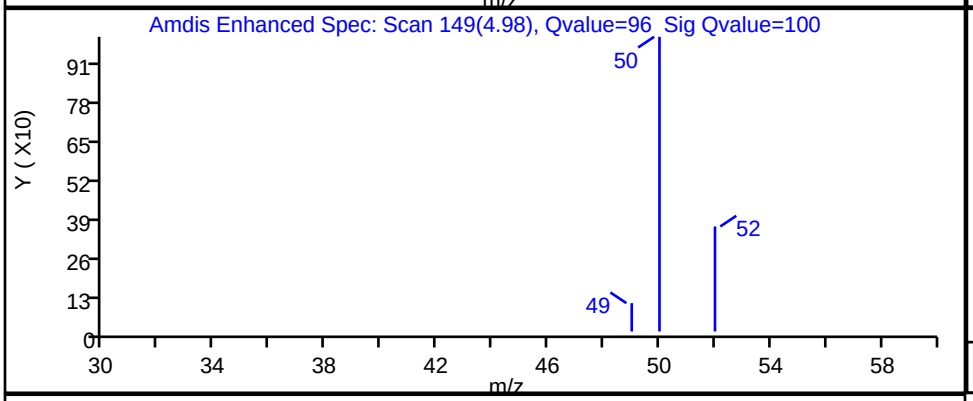
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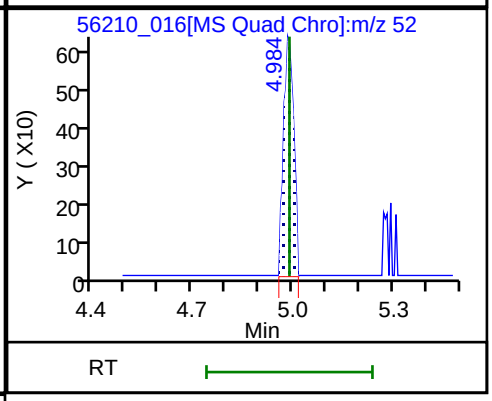
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Injection Date:	06-Jul-2023 20:28:34	Instrument ID:	CHAN.i
Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1
Client ID:	Garage Blower Effluent		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN

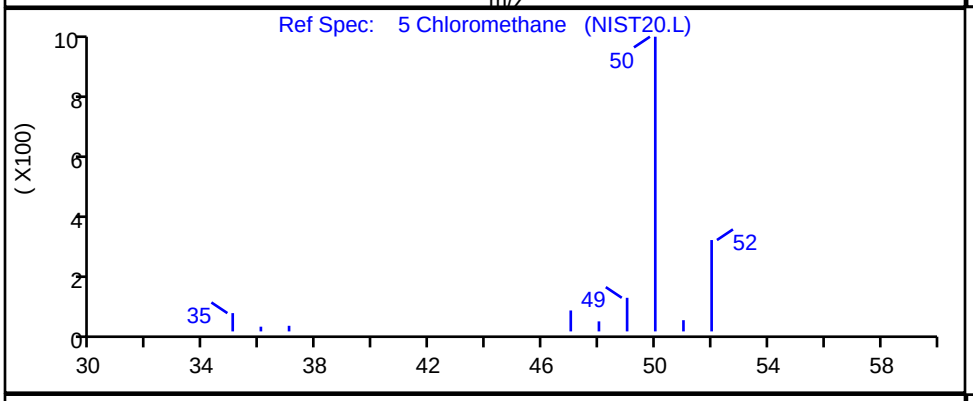
5 Chloromethane, CAS: 74-87-3

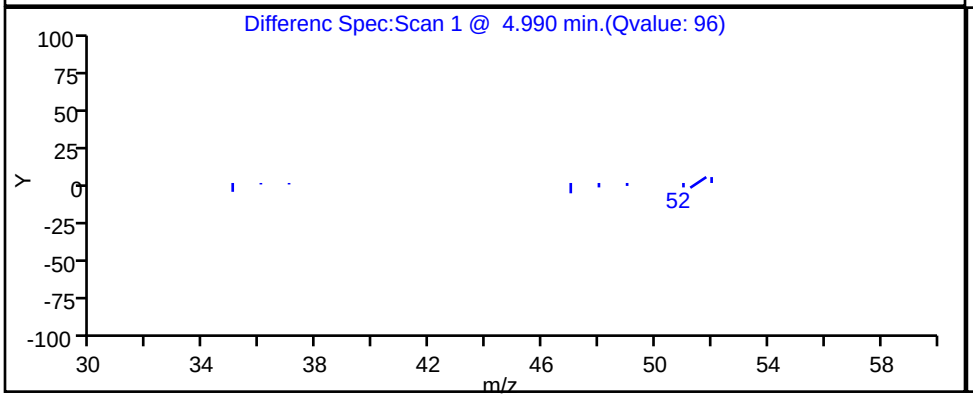


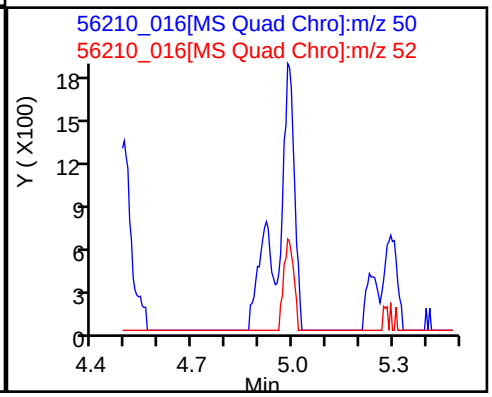








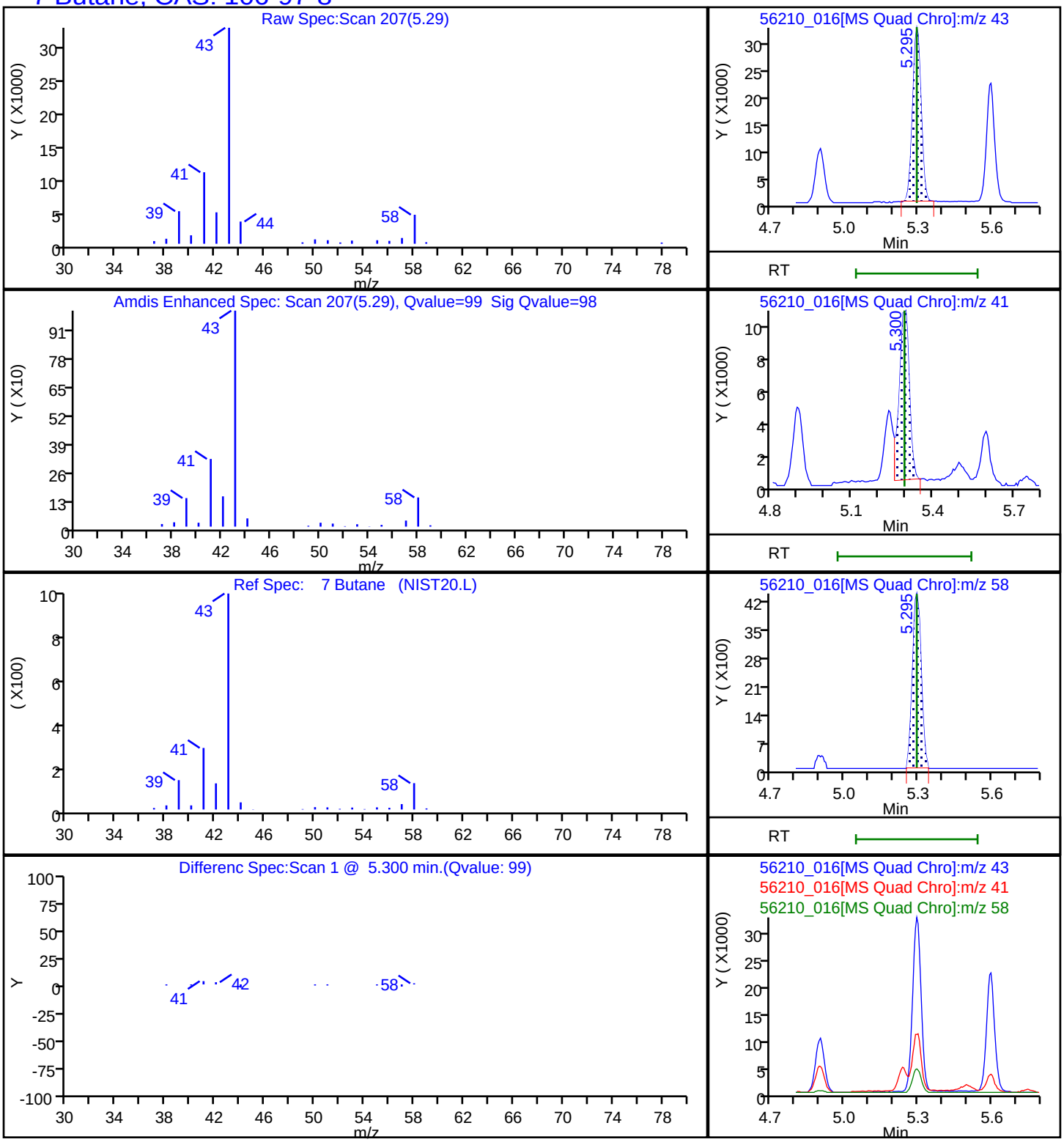




Eurofins Burlington

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Injection Date: 06-Jul-2023 20:28:34 Instrument ID: CHAN.i
Lims ID: 200-68952-A-1 Lab Sample ID: 200-68952-1
Client ID: Garage Blower Effluent
Operator ID: ALS Bottle#: 0 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

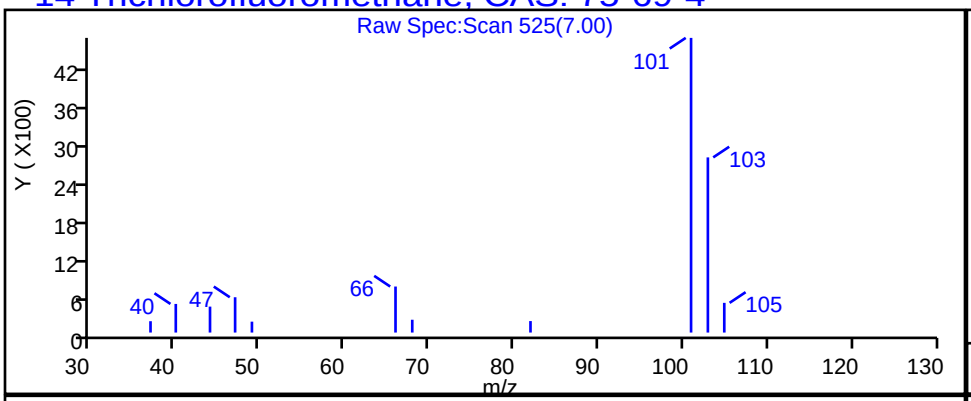
7 Butane, CAS: 106-97-8

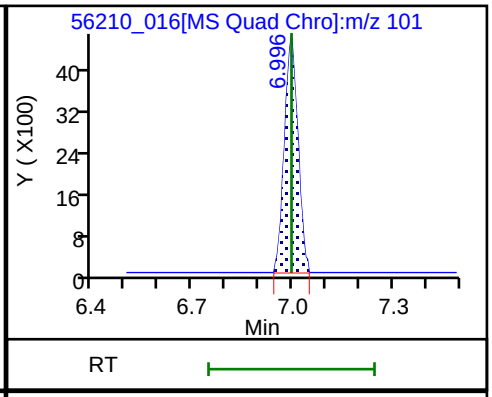


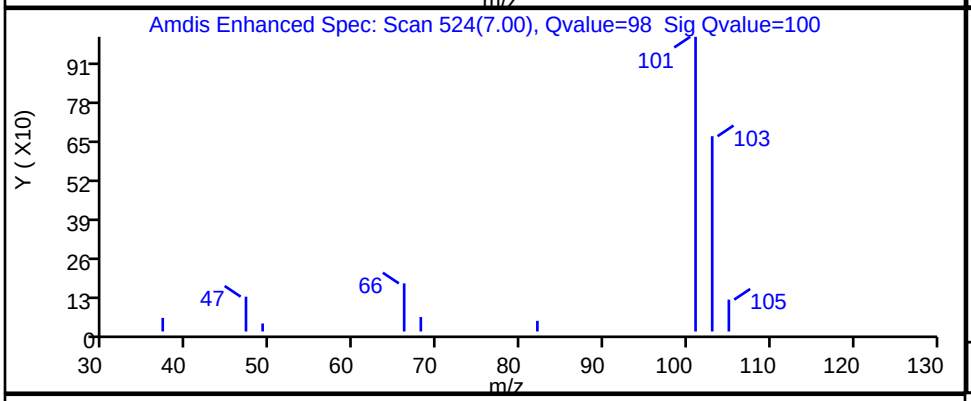
Eurofins Burlington

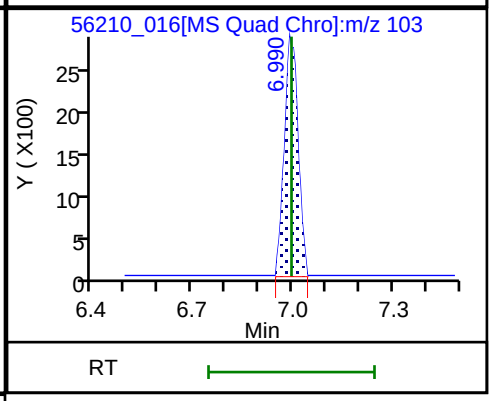
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Injection Date: 06-Jul-2023 20:28:34 Instrument ID: CHAN.i
Lims ID: 200-68952-A-1 Lab Sample ID: 200-68952-1
Client ID: Garage Blower Effluent
Operator ID: ALS Bottle#: 0 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

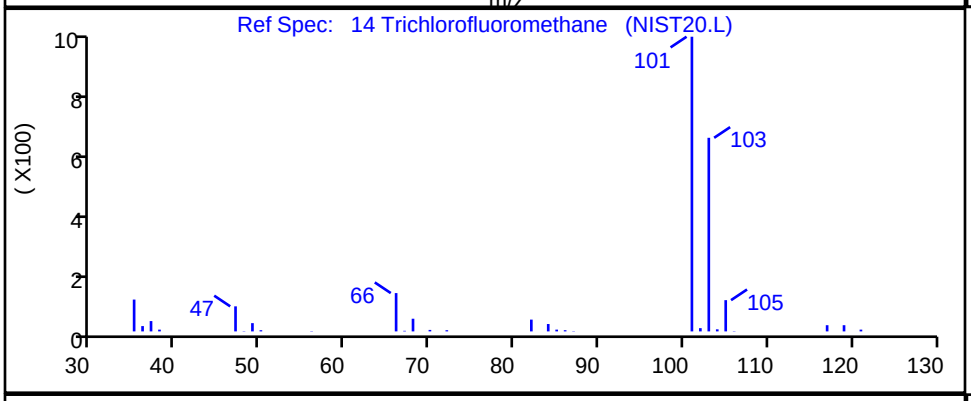
14 Trichlorofluoromethane, CAS: 75-69-4

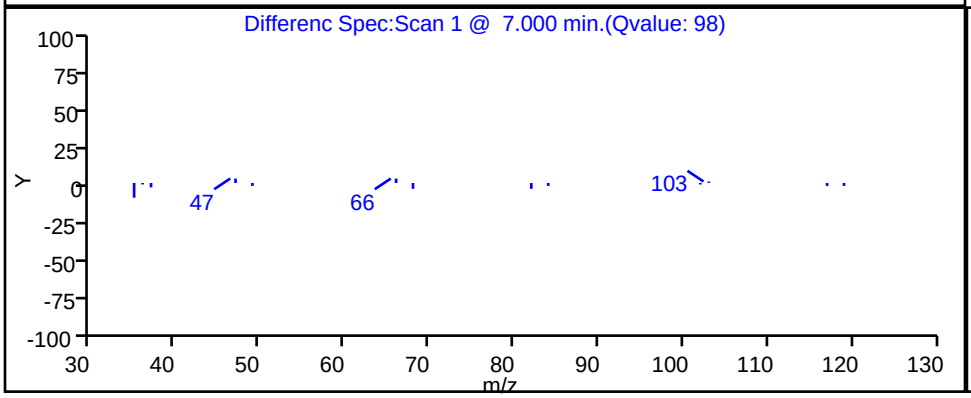


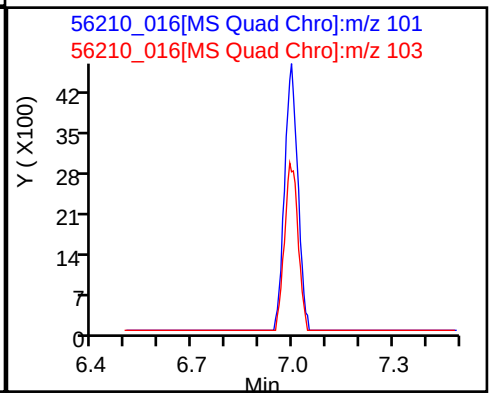












Report Date: 07-Jul-2023 10:05:53 Chrom Revision: 2.3 21-Jun-2023 17:36:34

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_016.D

Injection Date: 06-Jul-2023 20:28:34 Instrument ID: CHAN.i

Lims ID: 200-68952-A-1 Lab Sample ID: 200-68952-1

Client ID: Garage Blower Effluent

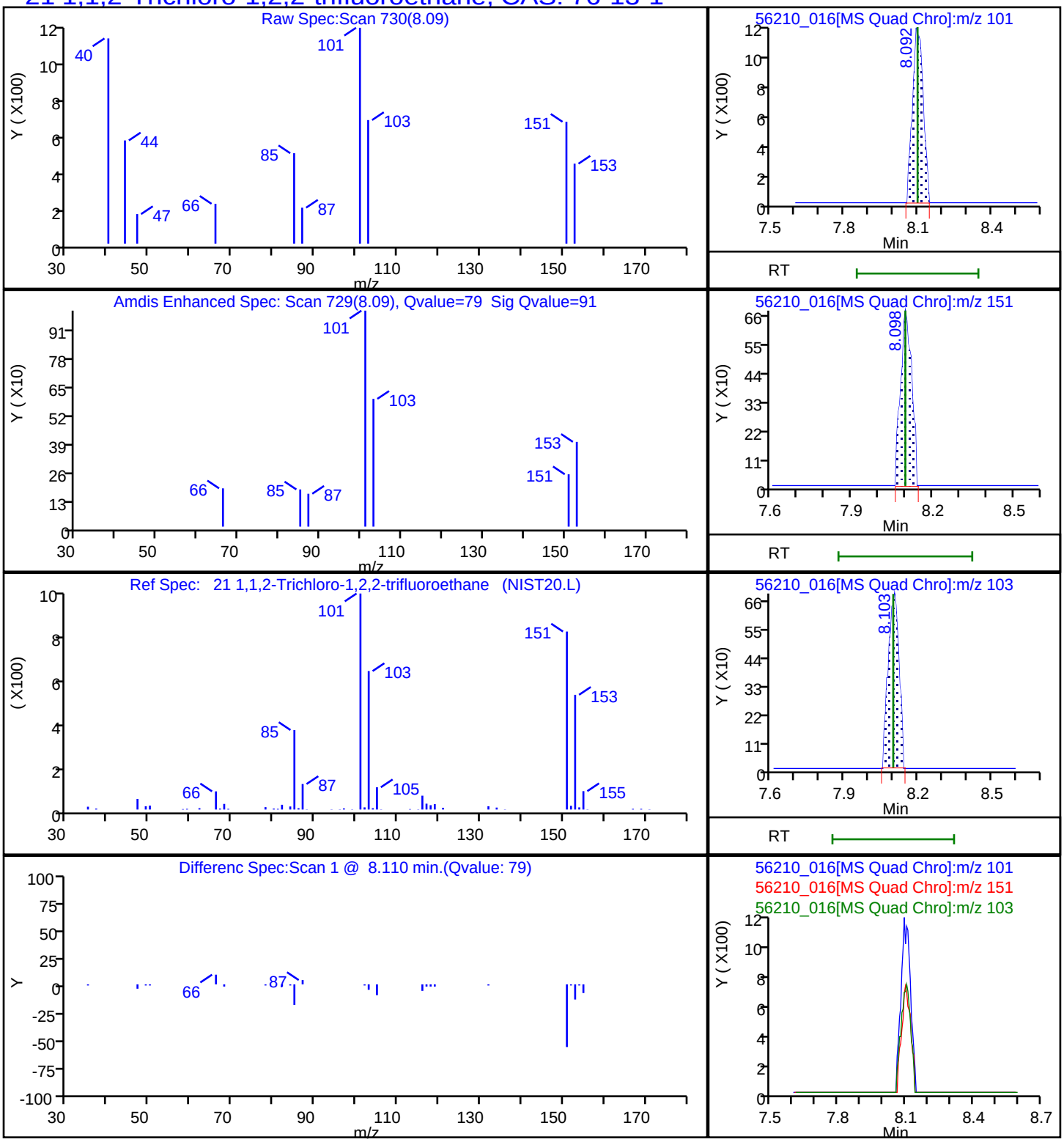
Operator ID: ALS Bottle#: 0 Worklist Smp#: 16

Purge Vol: 200.000 mL Dil. Factor: 1.0000

Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL

Column: RTX-624 (0.32 mm) Detector MS SCAN

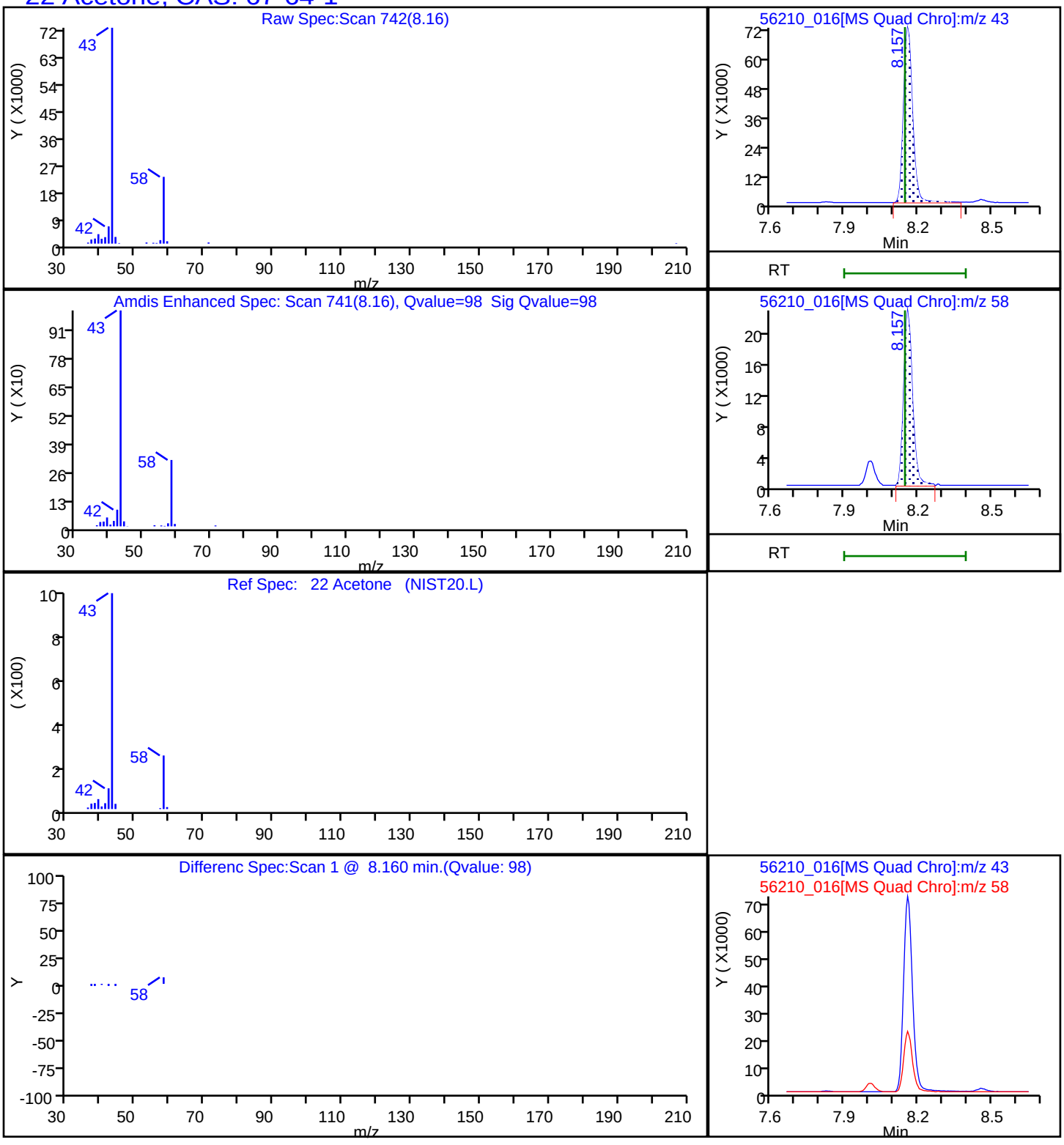
21 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_016.D
Injection Date: 06-Jul-2023 20:28:34 Instrument ID: CHAN.i
Lims ID: 200-68952-A-1 Lab Sample ID: 200-68952-1
Client ID: Garage Blower Effluent
Operator ID: ALS Bottle#: 0 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

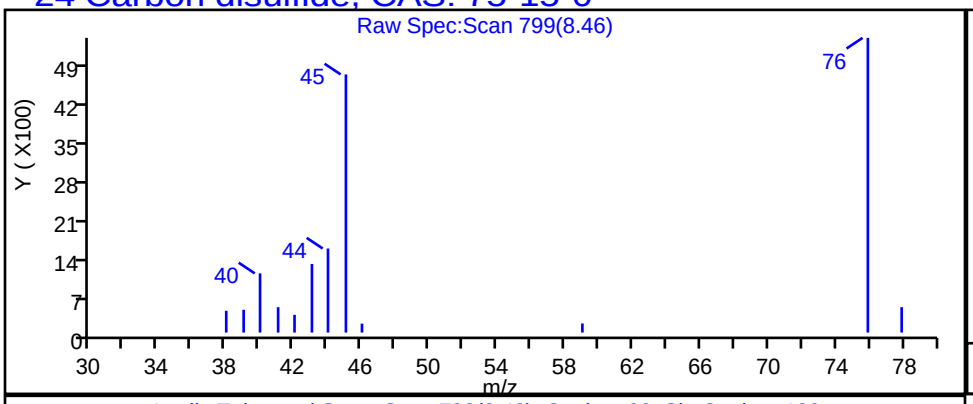
22 Acetone, CAS: 67-64-1

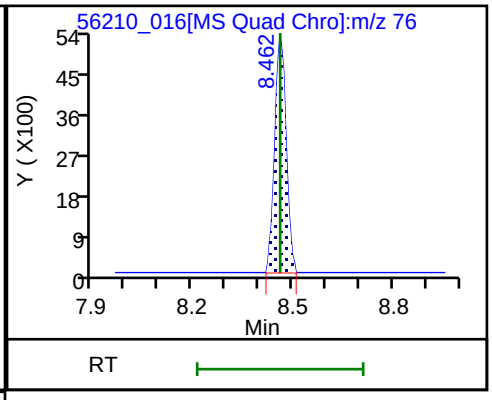


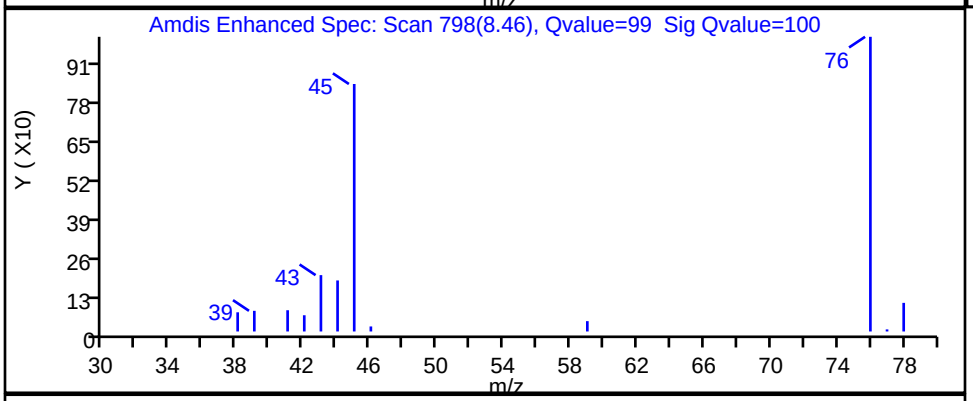
Eurofins Burlington

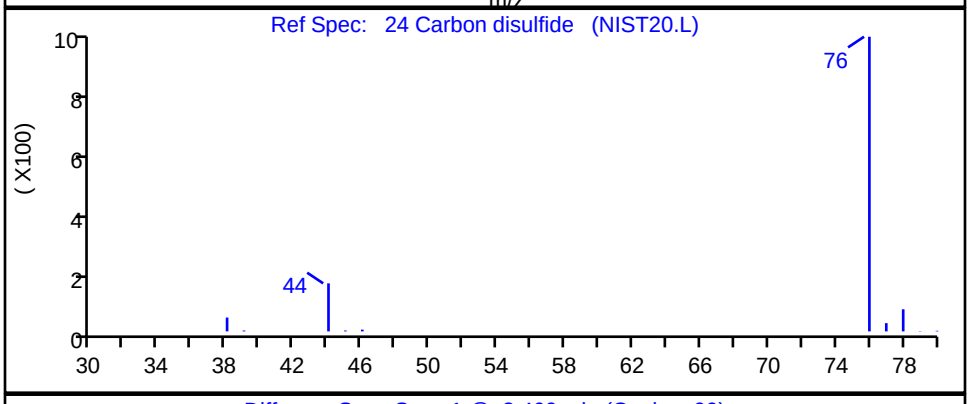
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Injection Date:	06-Jul-2023 20:28:34	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1		
Client ID:	Garage Blower Effluent				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

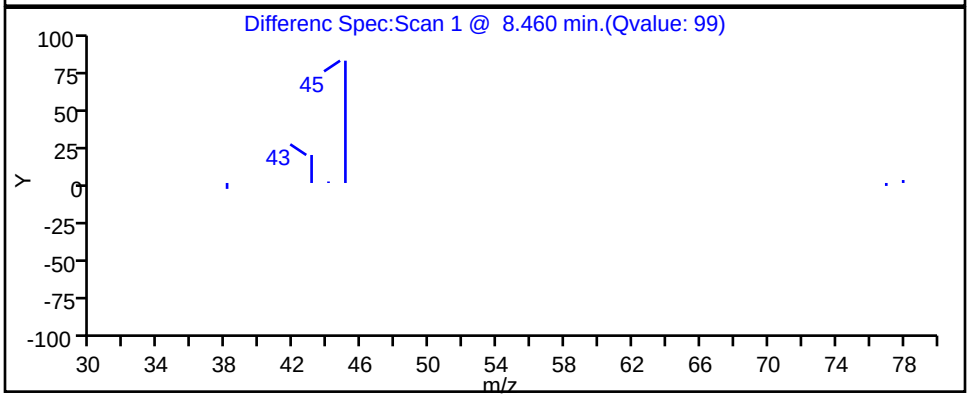
24 Carbon disulfide, CAS: 75-15-0







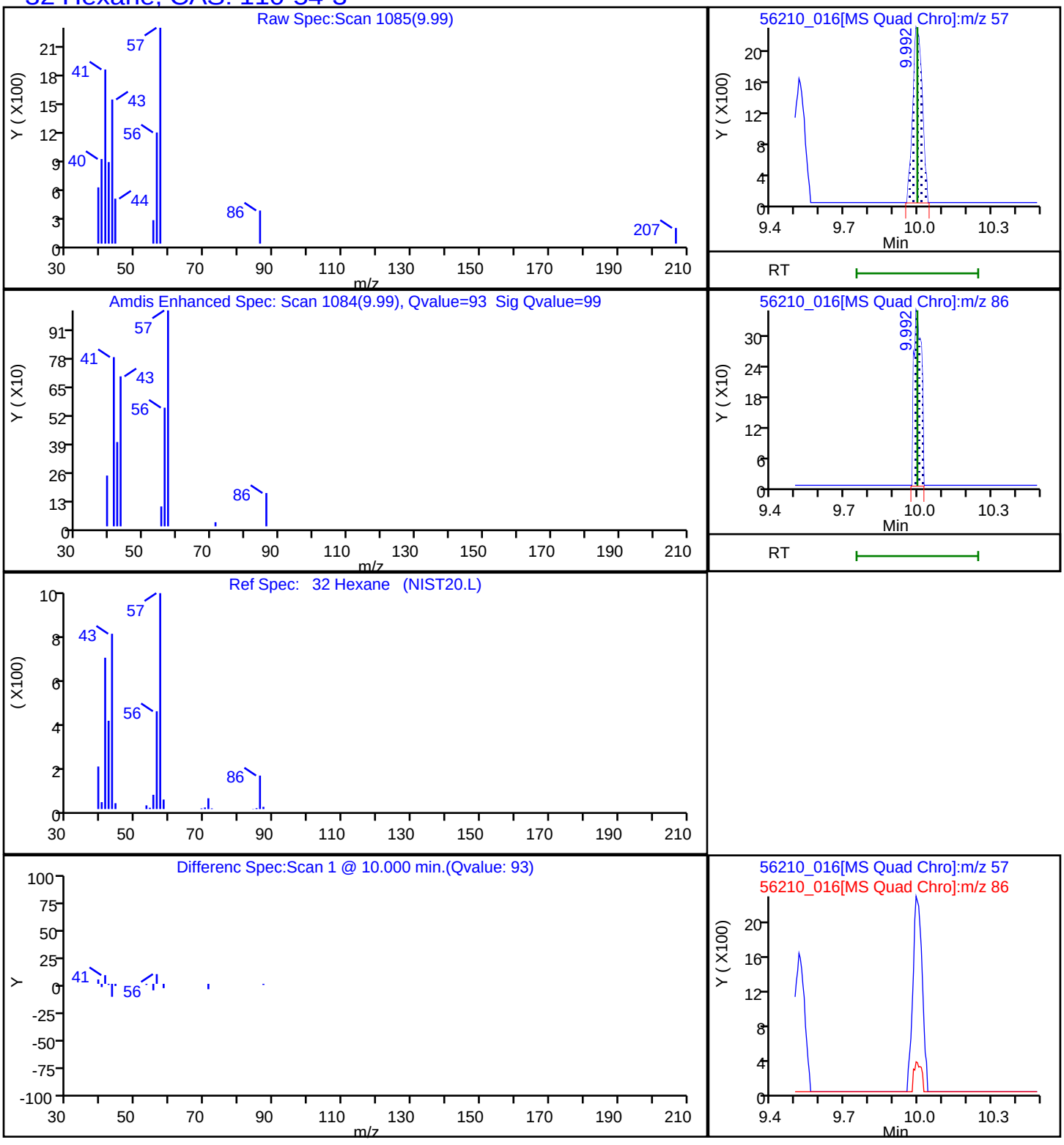




Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_016.D
Injection Date: 06-Jul-2023 20:28:34 Instrument ID: CHAN.i
Lims ID: 200-68952-A-1 Lab Sample ID: 200-68952-1
Client ID: Garage Blower Effluent
Operator ID: ALS Bottle#: 0 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

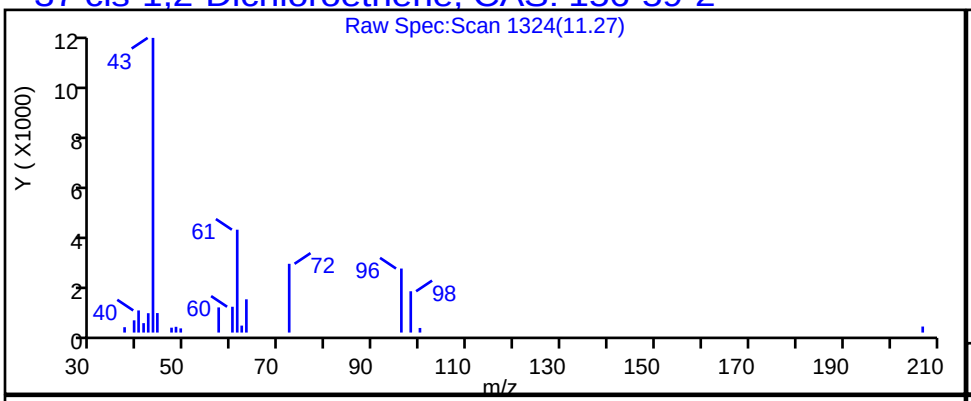
32 Hexane, CAS: 110-54-3

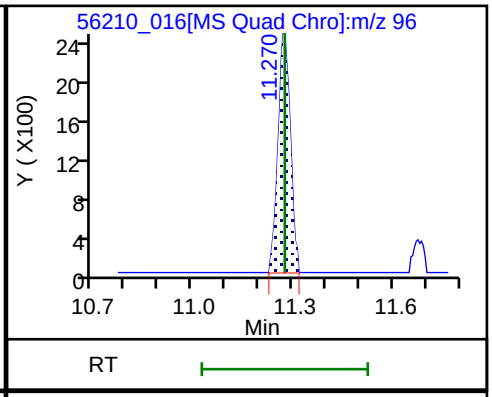


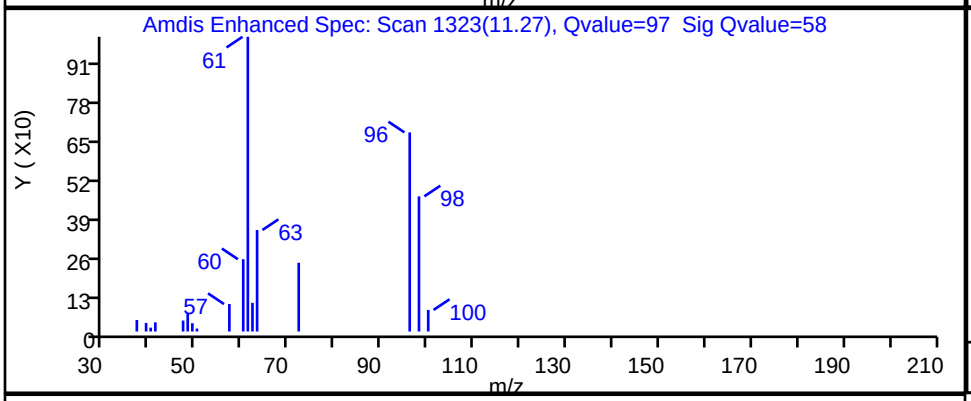
Eurofins Burlington

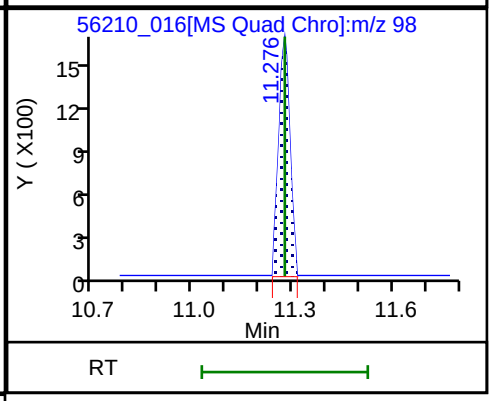
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Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1		
Client ID:	Garage Blower Effluent				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

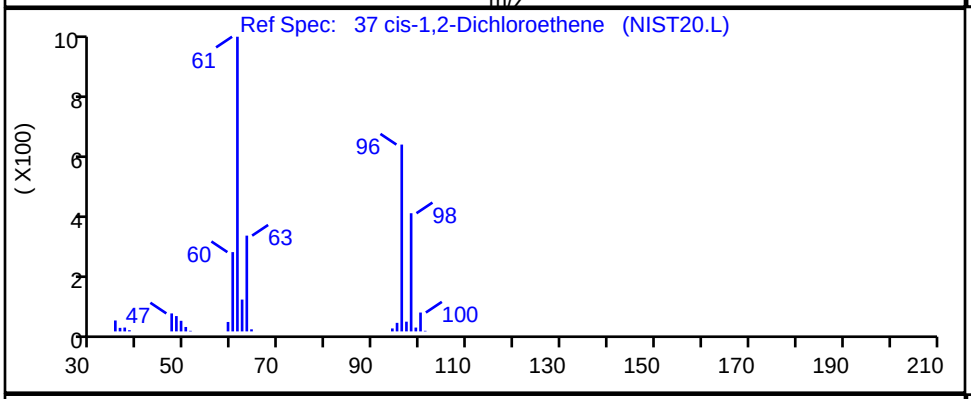
37 cis-1,2-Dichloroethene, CAS: 156-59-2

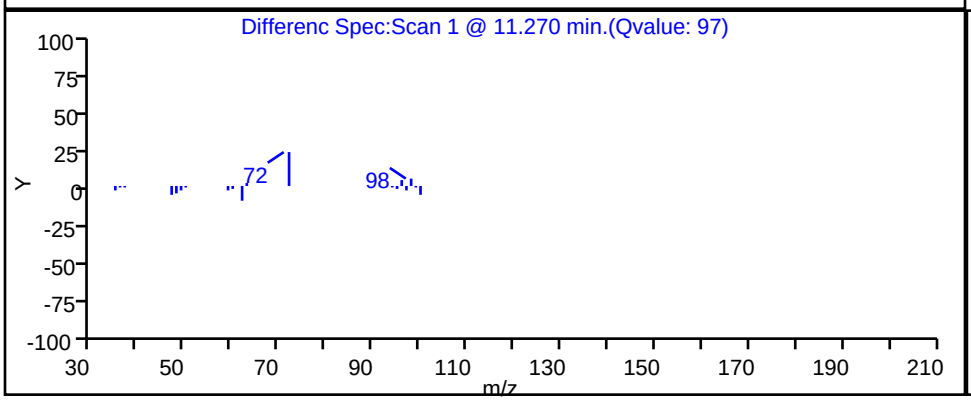


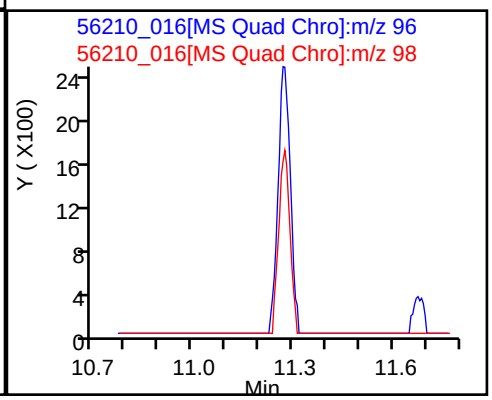








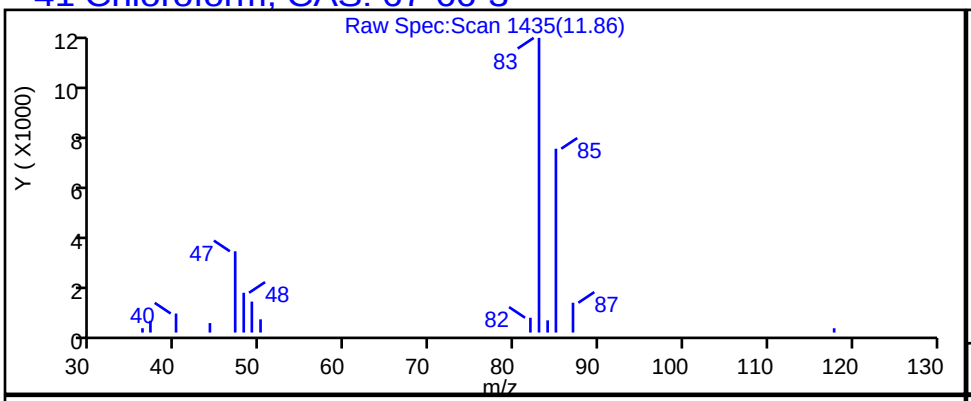


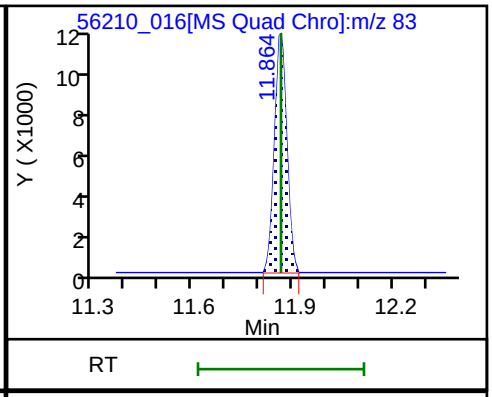


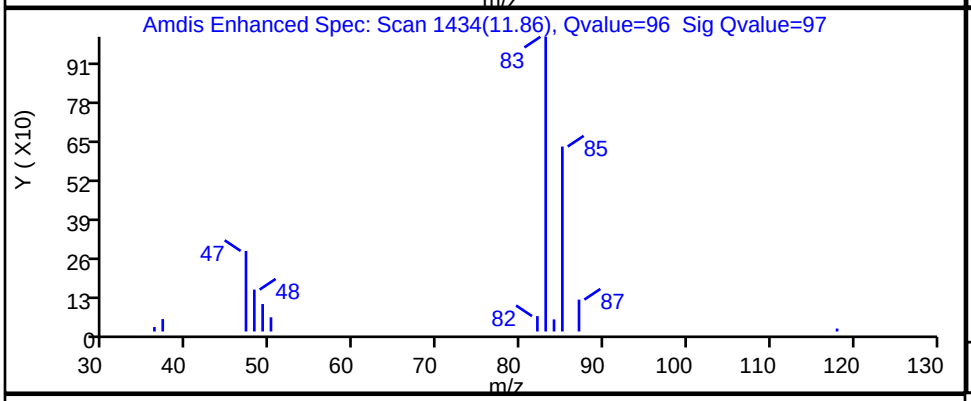
Eurofins Burlington

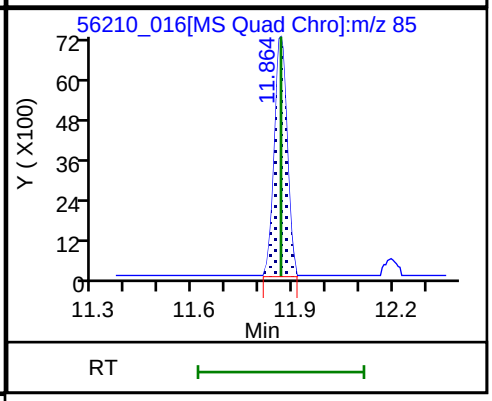
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Injection Date:	06-Jul-2023 20:28:34	Instrument ID:	CHAN.i
Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1
Client ID:	Garage Blower Effluent		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN

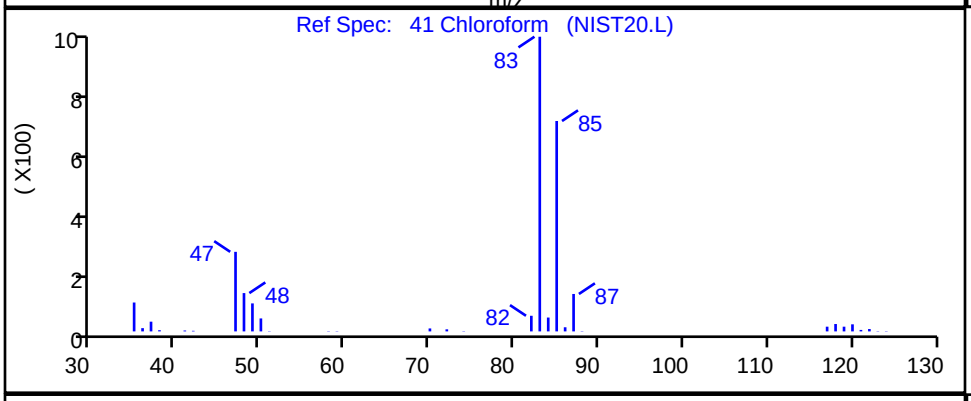
41 Chloroform, CAS: 67-66-3

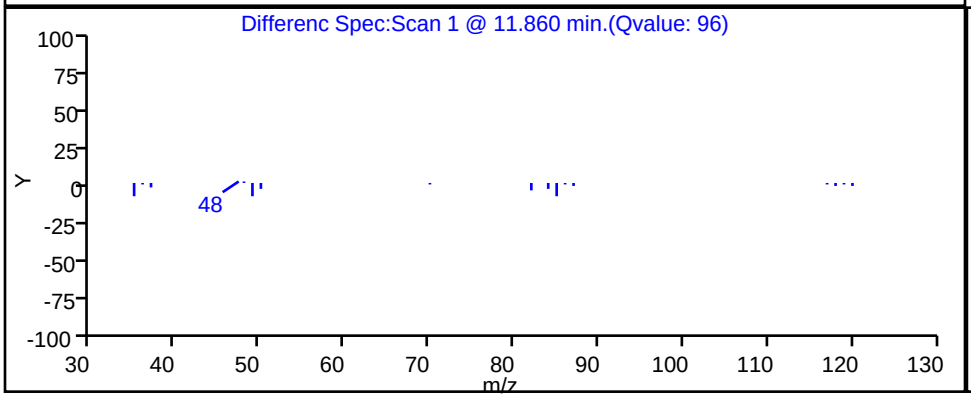


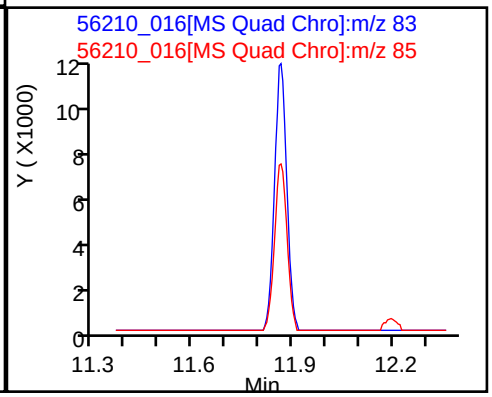








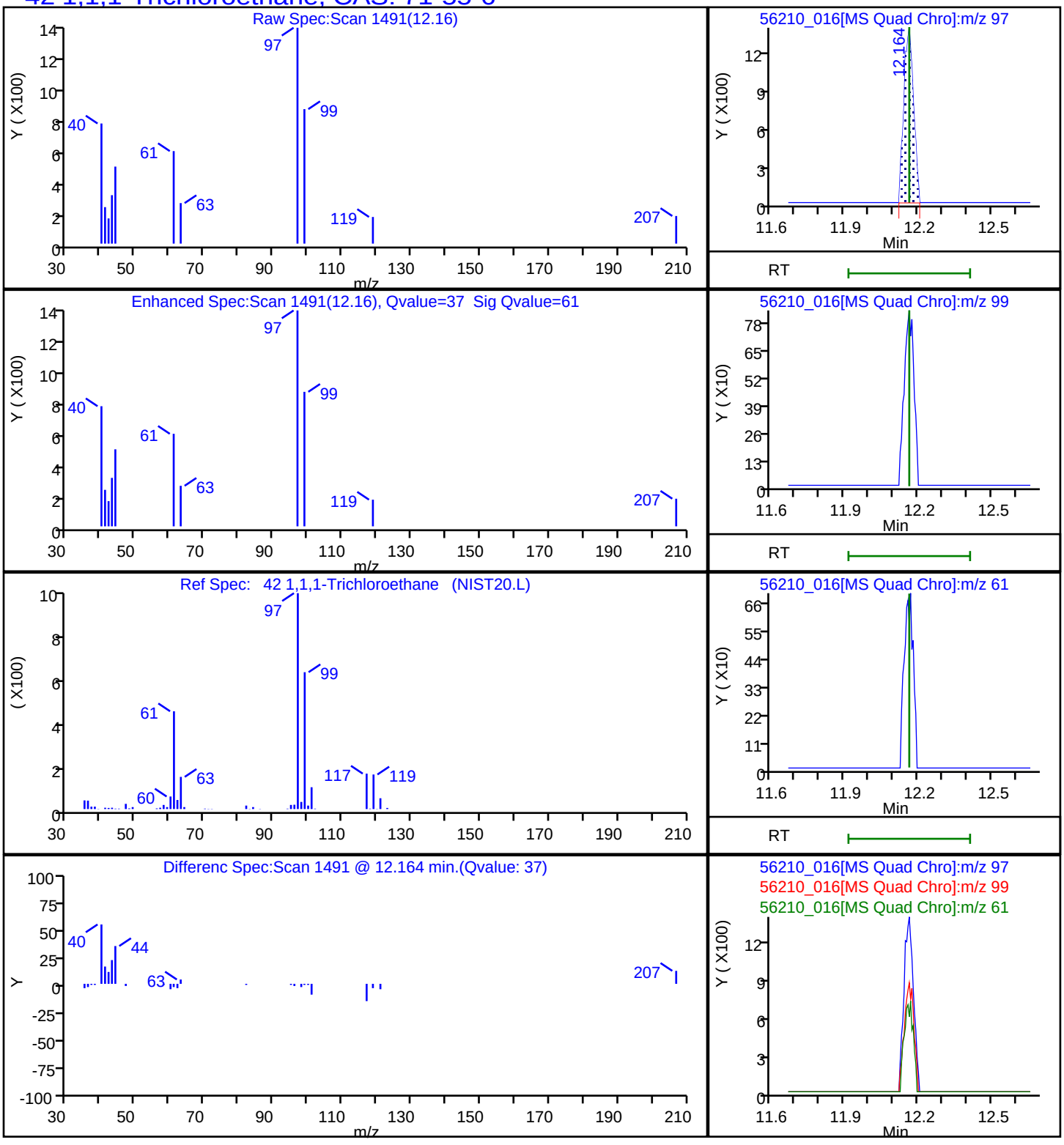




Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_016.D				
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Client ID:	Garage Blower Effluent				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

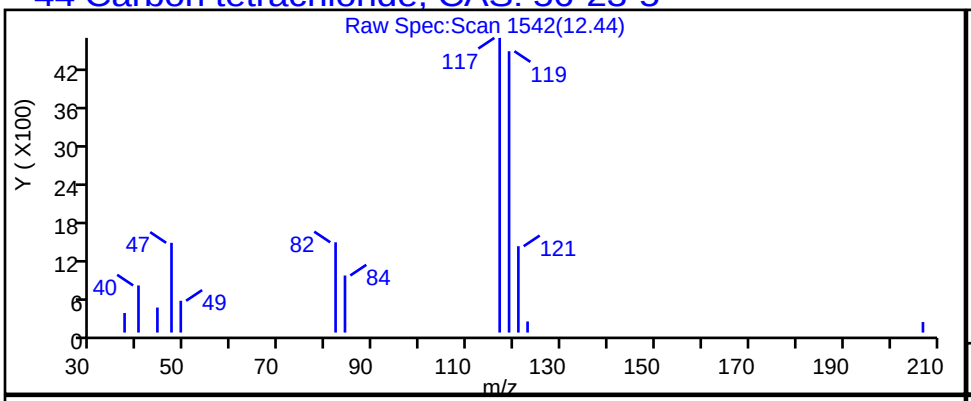
42 1,1,1-Trichloroethane, CAS: 71-55-6

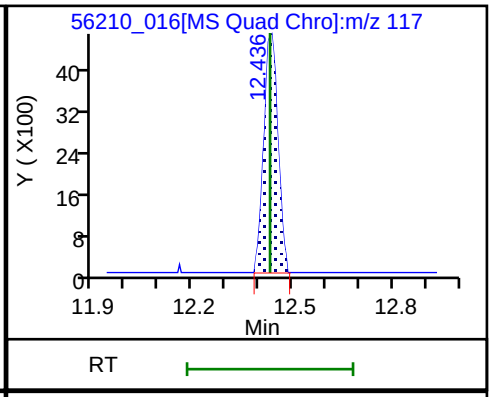


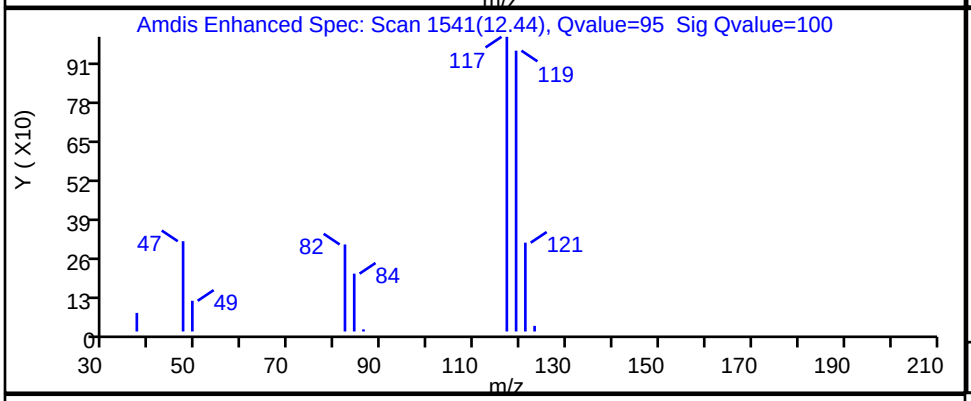
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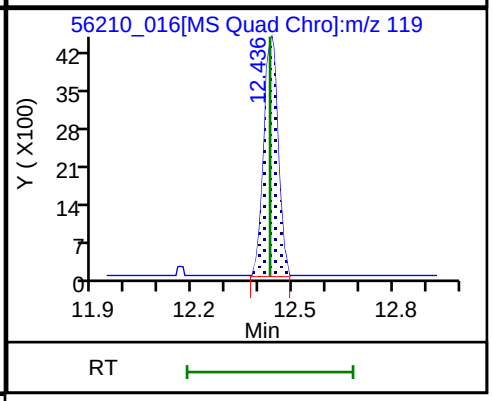
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Lims ID: 200-68952-A-1 Lab Sample ID: 200-68952-1
Client ID: Garage Blower Effluent
Operator ID: ALS Bottle#: 0 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

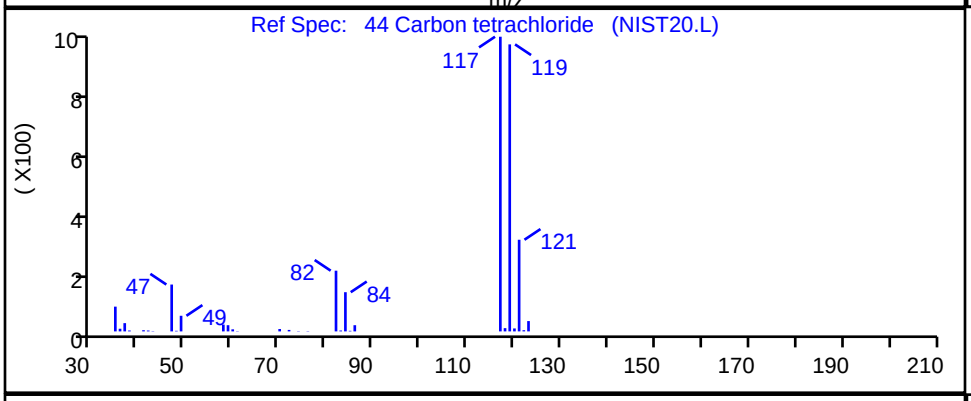
44 Carbon tetrachloride, CAS: 56-23-5

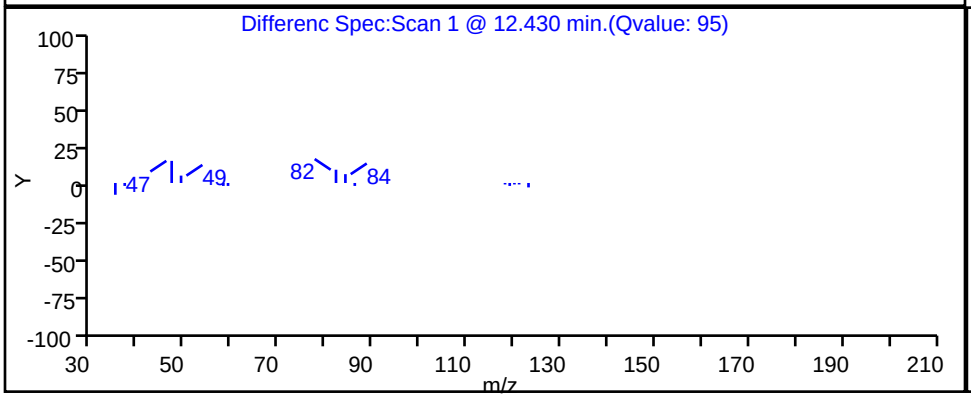


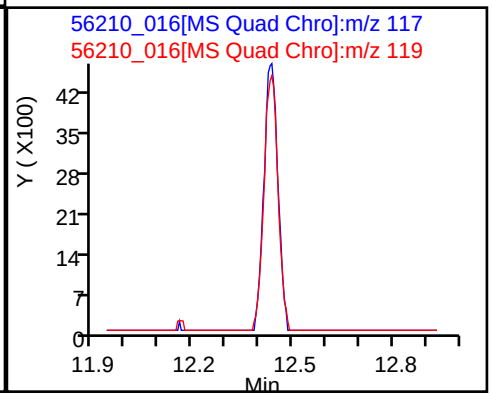








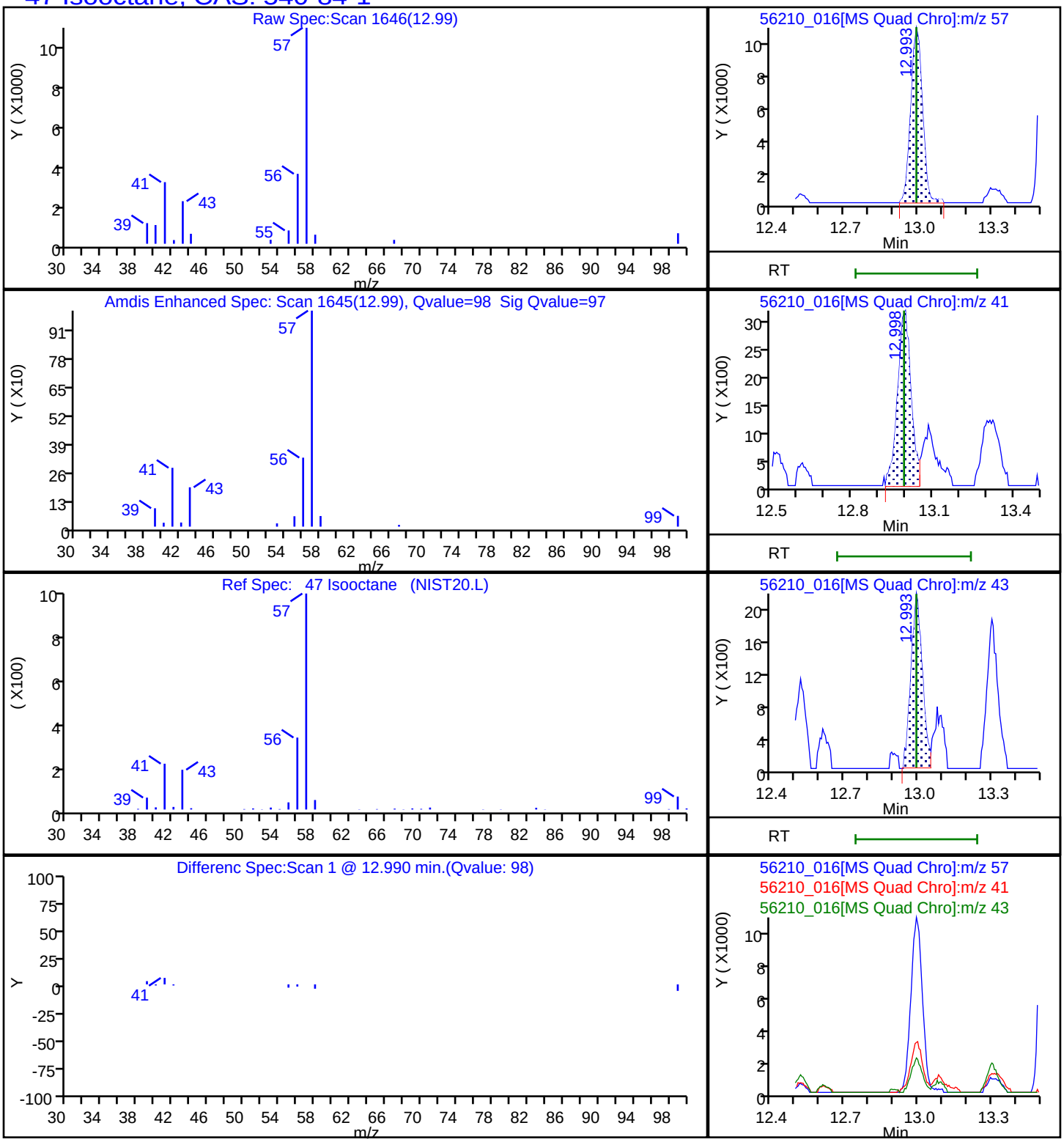




Eurofins Burlington

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Injection Date: 06-Jul-2023 20:28:34 Instrument ID: CHAN.i
Lims ID: 200-68952-A-1 Lab Sample ID: 200-68952-1
Client ID: Garage Blower Effluent
Operator ID: ALS Bottle#: 0 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

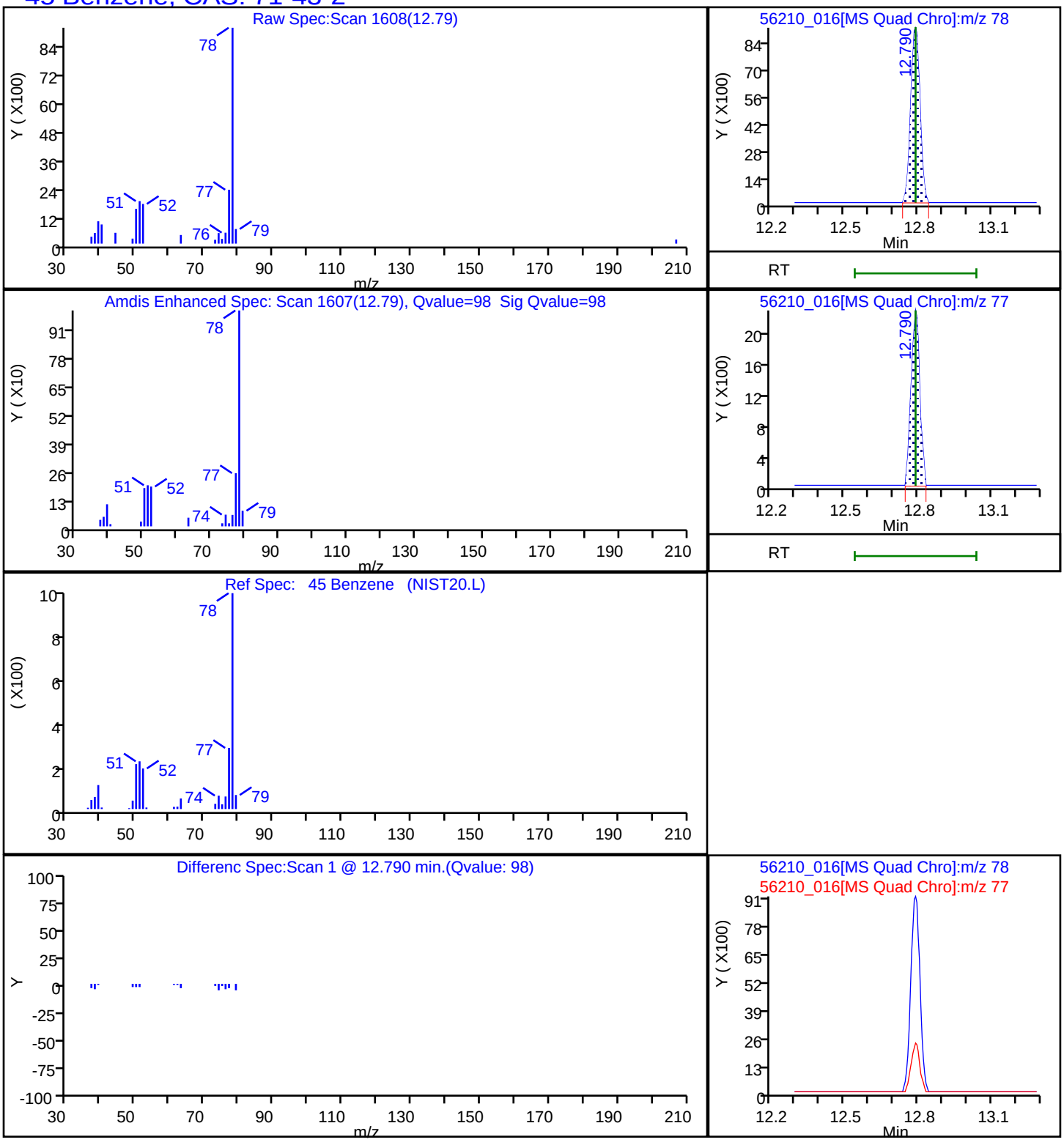
47 Isooctane, CAS: 540-84-1



Eurofins Burlington

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Injection Date: 06-Jul-2023 20:28:34 Instrument ID: CHAN.i
Lims ID: 200-68952-A-1 Lab Sample ID: 200-68952-1
Client ID: Garage Blower Effluent
Operator ID: ALS Bottle#: 0 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

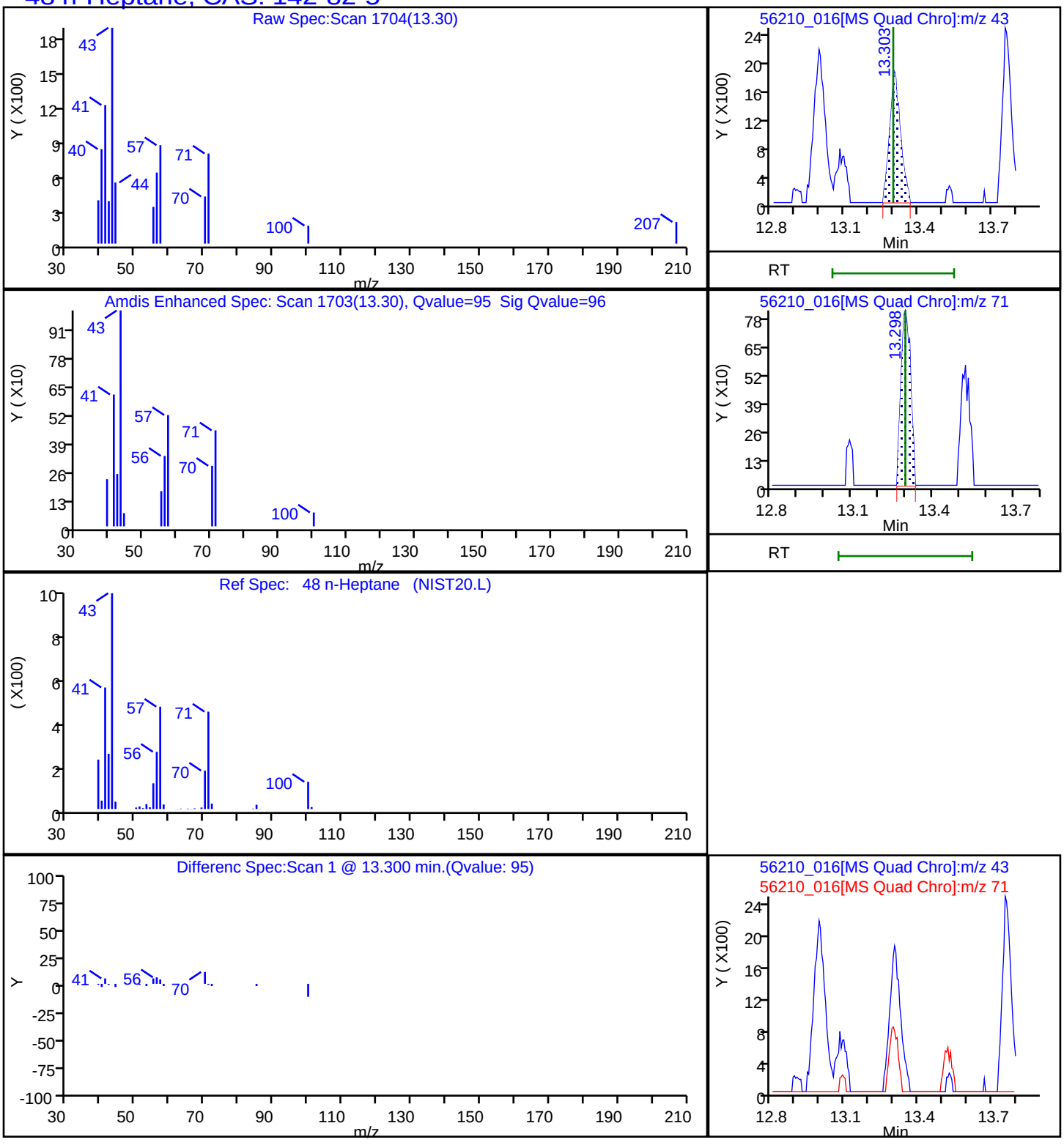
45 Benzene, CAS: 71-43-2



Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_016.D		
Injection Date:	06-Jul-2023 20:28:34	Instrument ID:	CHAN.i
Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1
Client ID:	Garage Blower Effluent		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN

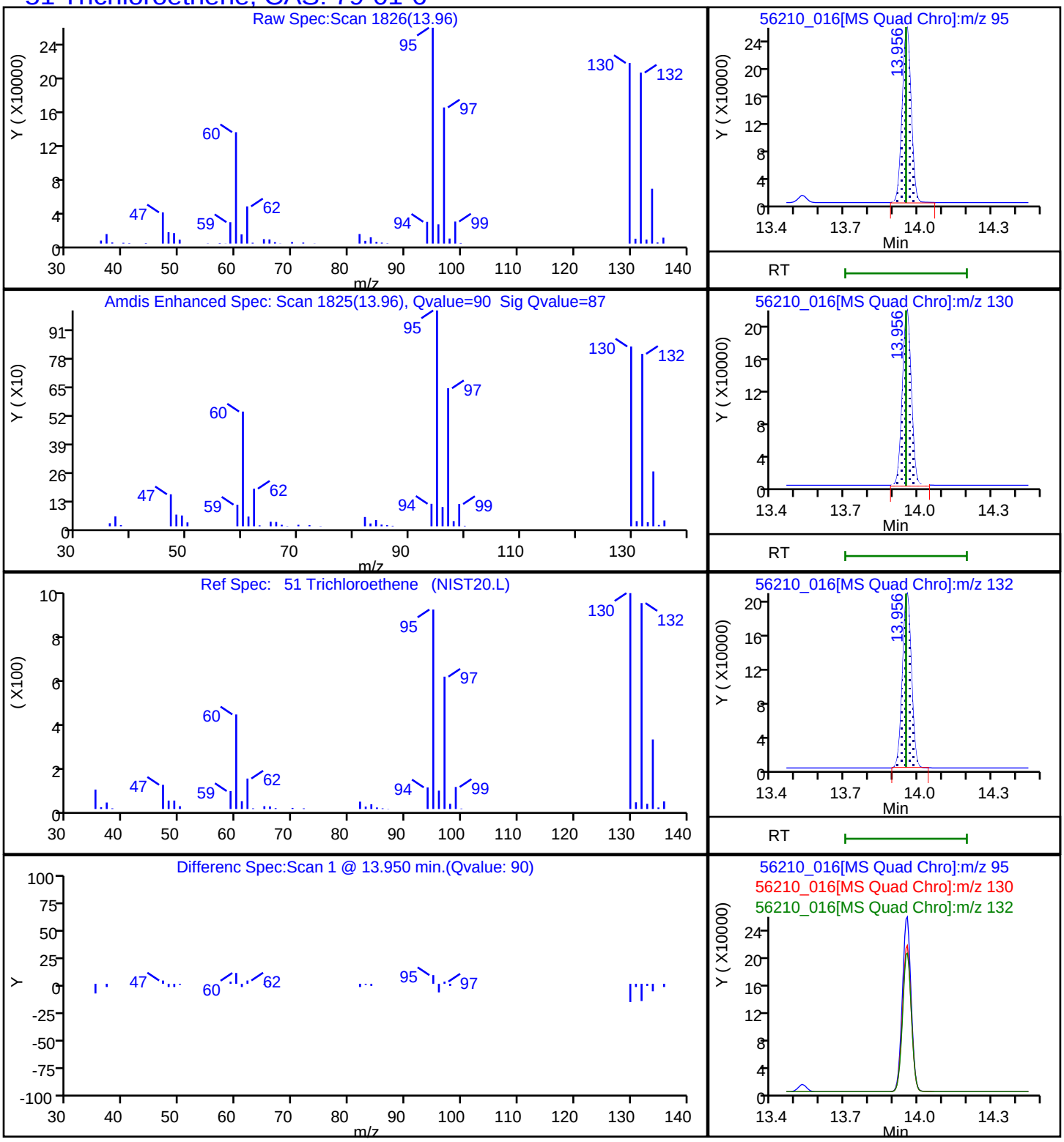
48 n-Heptane, CAS: 142-82-5



Eurofins Burlington

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Injection Date: 06-Jul-2023 20:28:34 Instrument ID: CHAN.i
Lims ID: 200-68952-A-1 Lab Sample ID: 200-68952-1
Client ID: Garage Blower Effluent
Operator ID: ALS Bottle#: 0 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

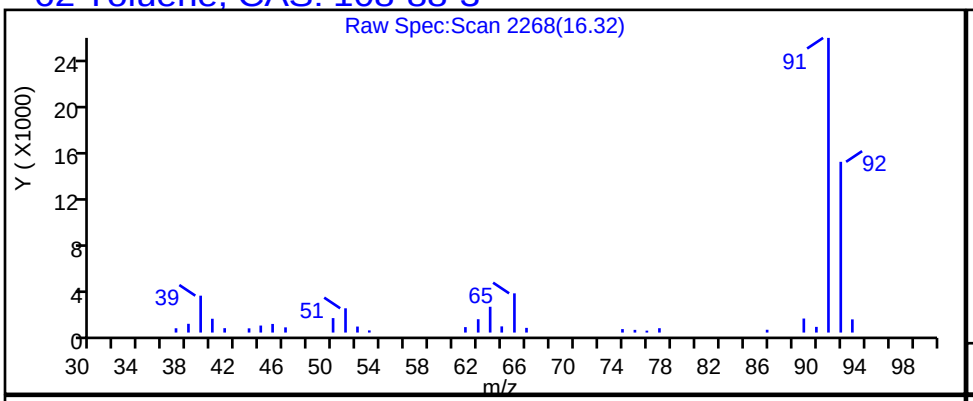
51 Trichloroethene, CAS: 79-01-6

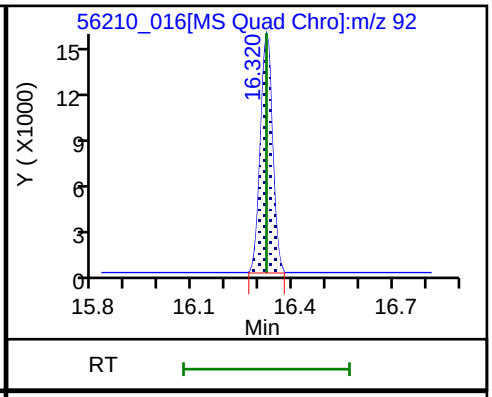


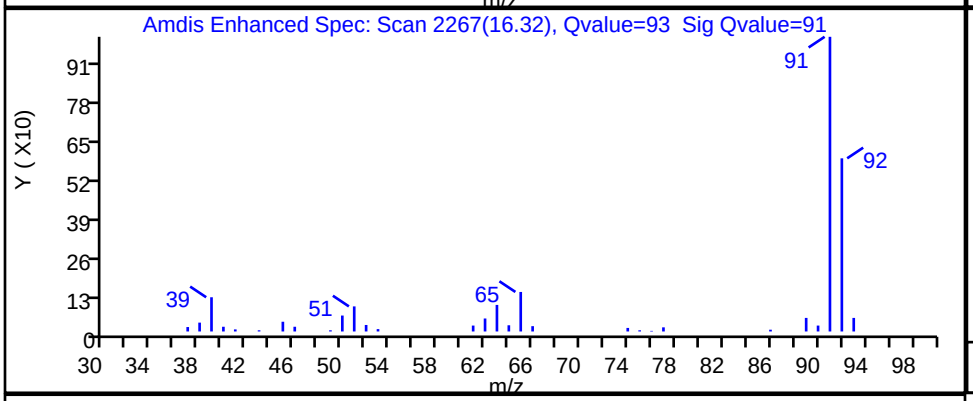
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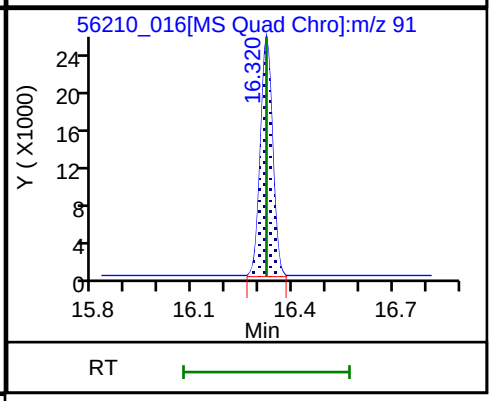
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Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1		
Client ID:	Garage Blower Effluent				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

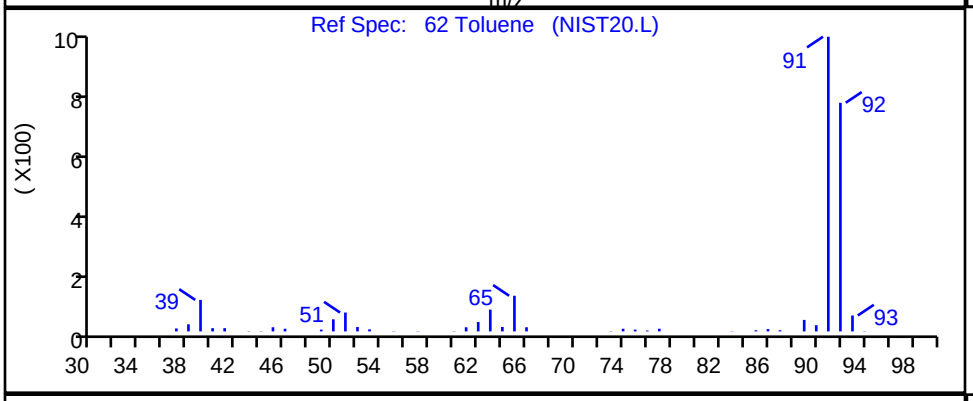
62 Toluene, CAS: 108-88-3

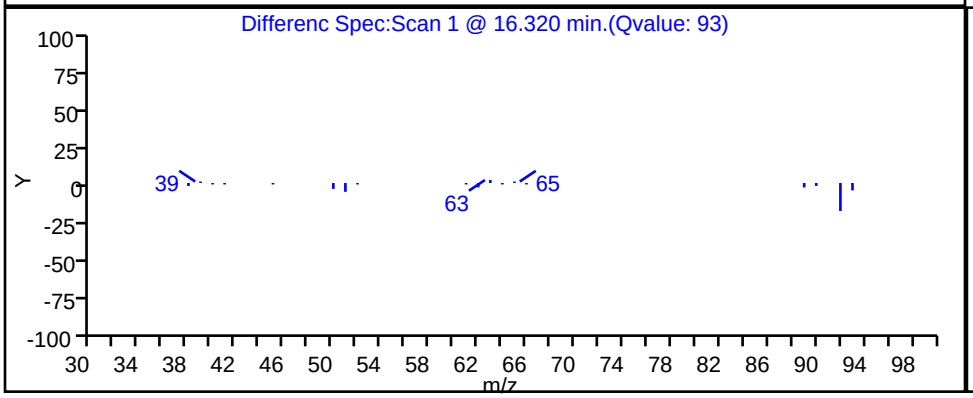


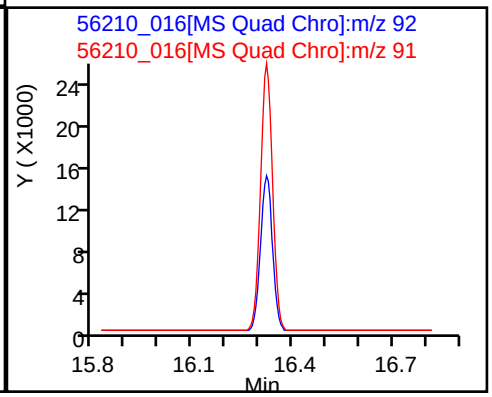








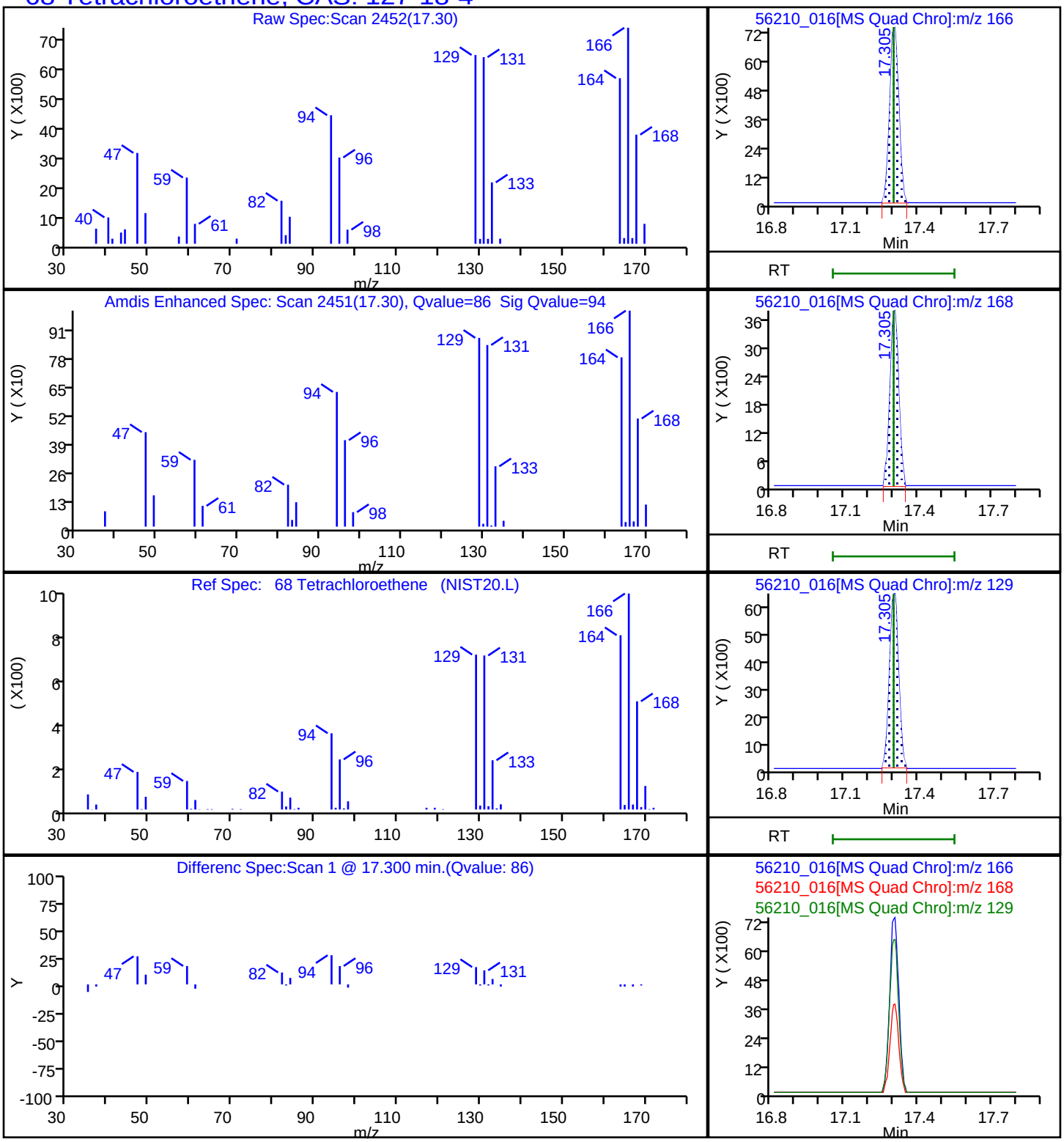




Eurofins Burlington

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Injection Date: 06-Jul-2023 20:28:34 Instrument ID: CHAN.i
Lims ID: 200-68952-A-1 Lab Sample ID: 200-68952-1
Client ID: Garage Blower Effluent
Operator ID: ALS Bottle#: 0 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

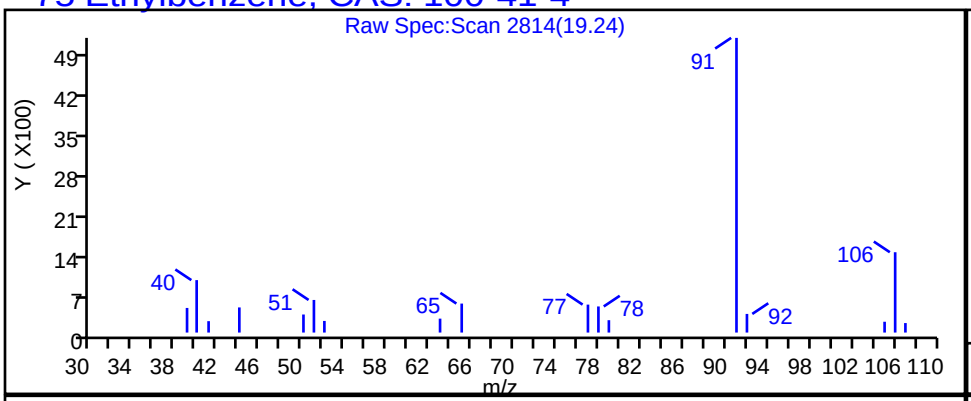
68 Tetrachloroethene, CAS: 127-18-4

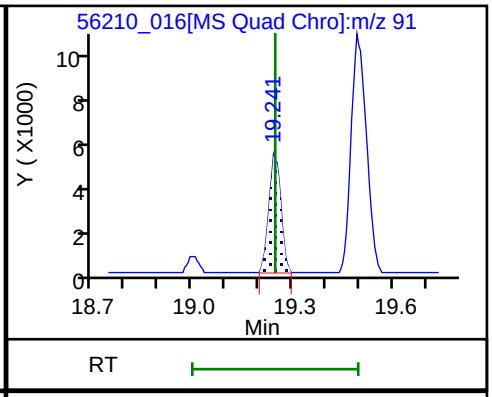


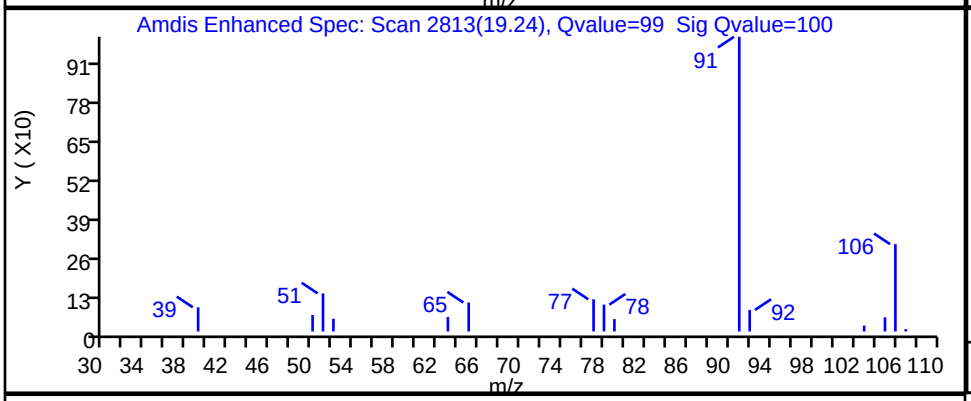
Eurofins Burlington

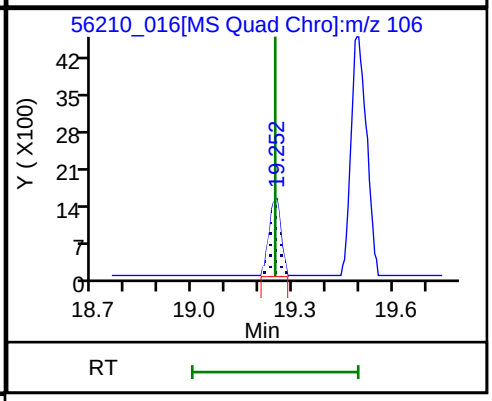
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Lims ID: 200-68952-A-1 Lab Sample ID: 200-68952-1
Client ID: Garage Blower Effluent
Operator ID: ALS Bottle#: 0 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

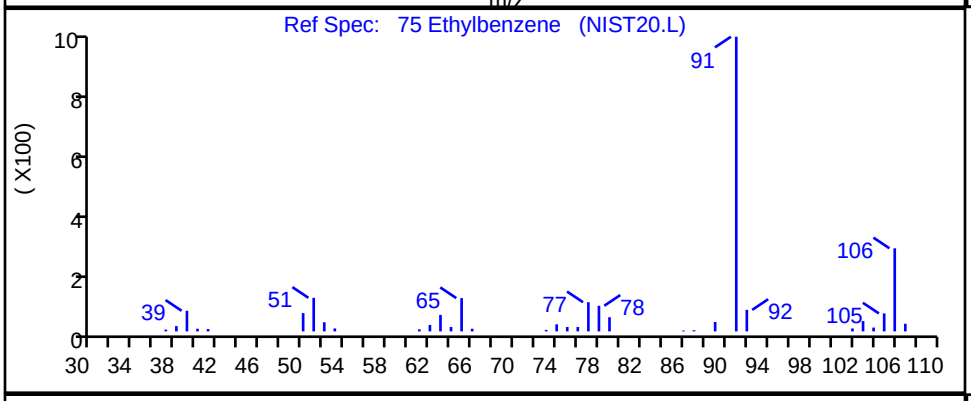
75 Ethylbenzene, CAS: 100-41-4

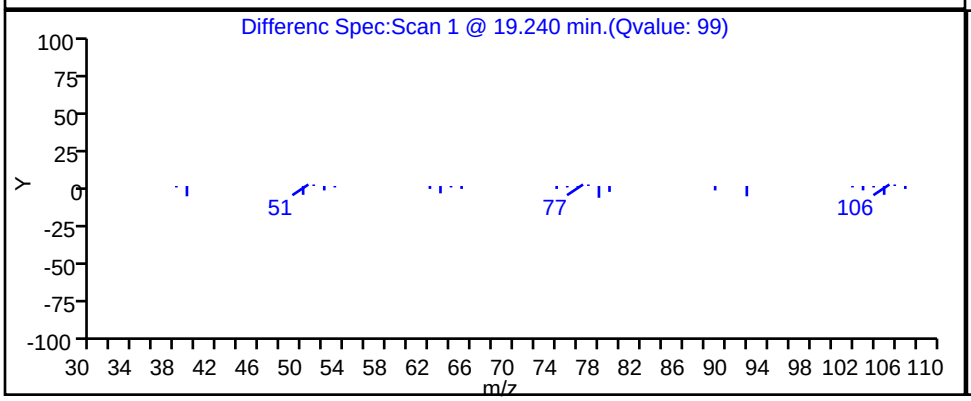


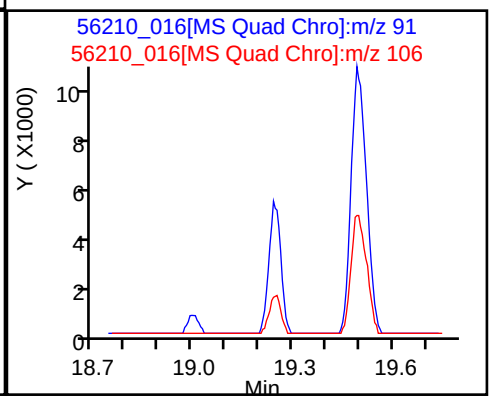








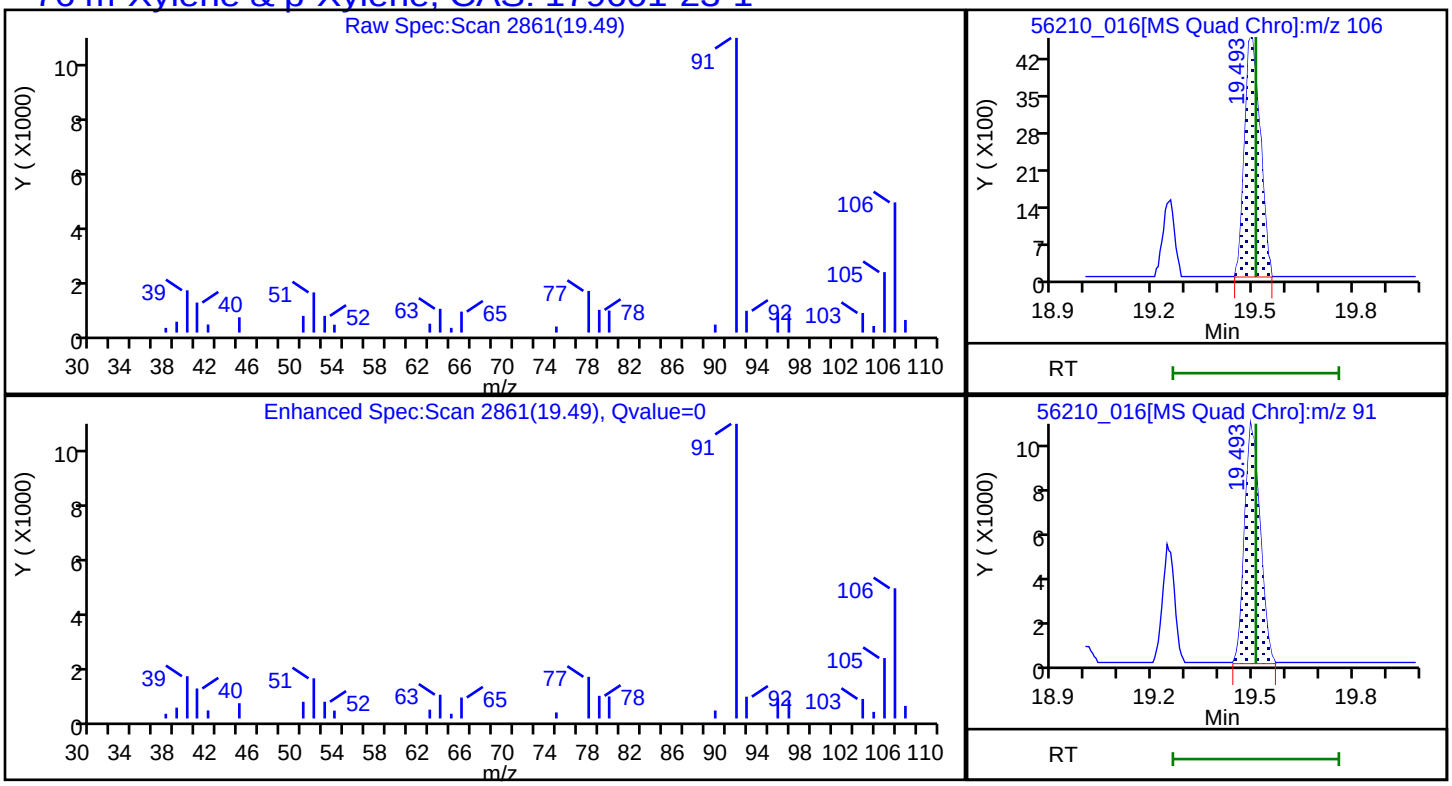


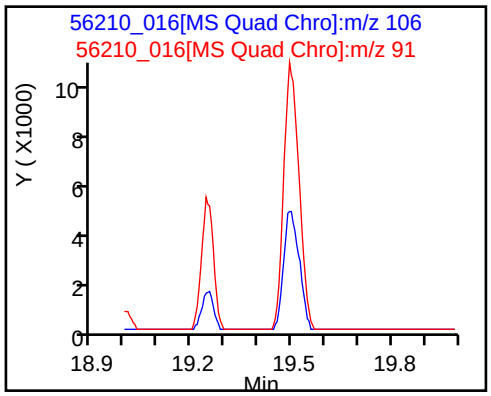


Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_016.D				
Injection Date:	06-Jul-2023 20:28:34	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1		
Client ID:	Garage Blower Effluent				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 m-Xylene & p-Xylene, CAS: 179601-23-1

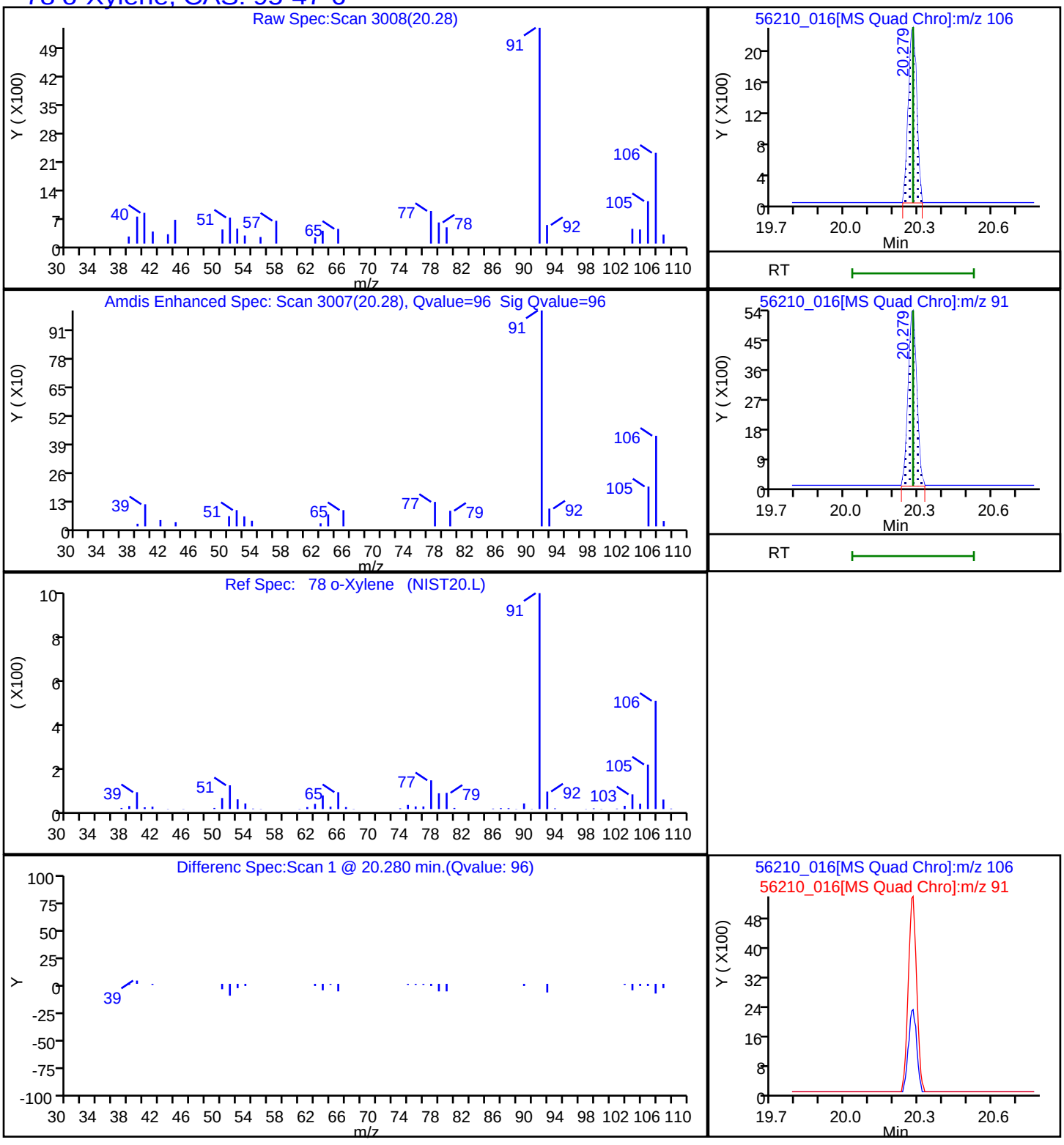




Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_016.D				
Injection Date:	06-Jul-2023 20:28:34	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1		
Client ID:	Garage Blower Effluent				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

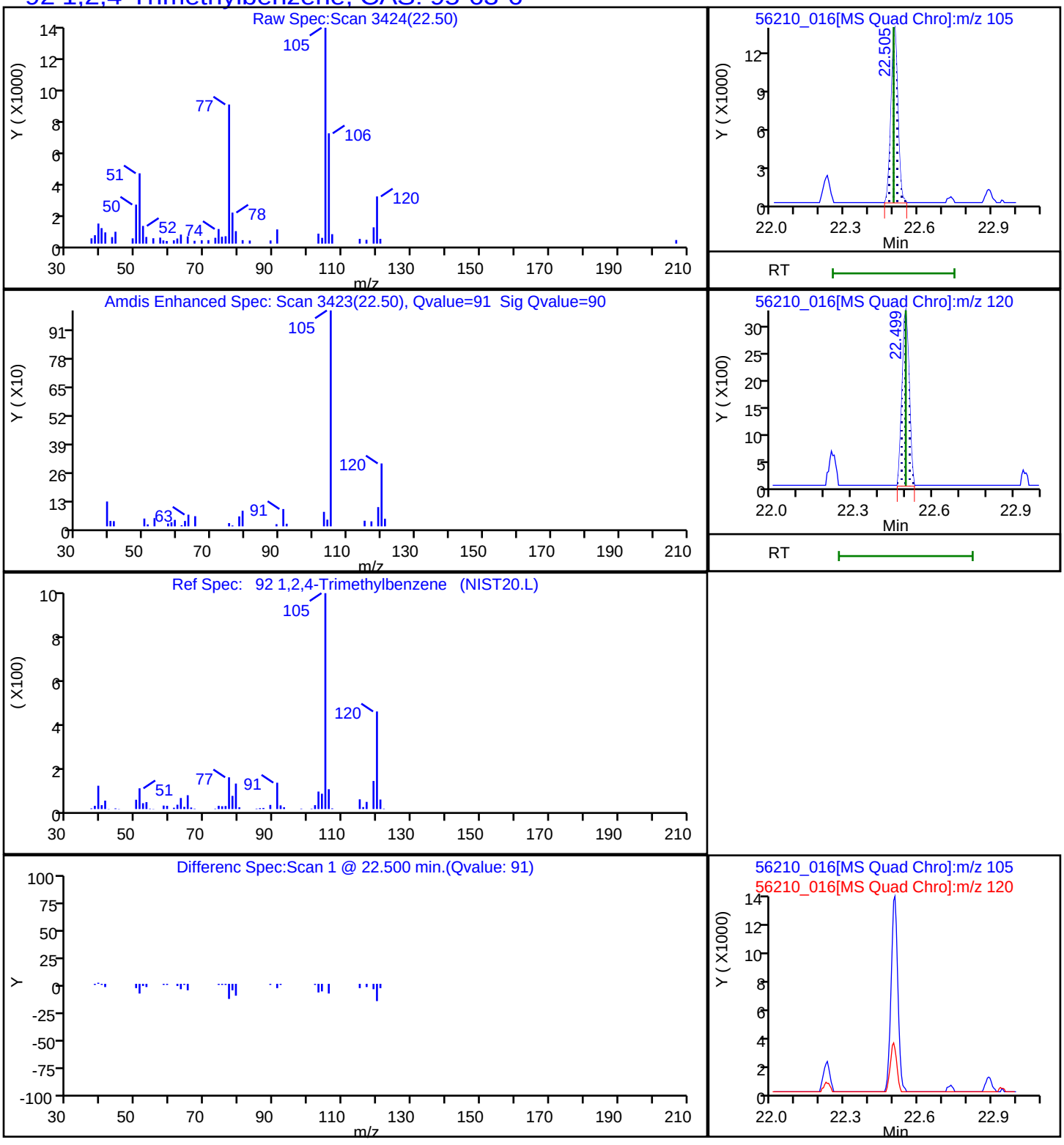
78 o-Xylene, CAS: 95-47-6



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_016.D
Injection Date: 06-Jul-2023 20:28:34 Instrument ID: CHAN.i
Lims ID: 200-68952-A-1 Lab Sample ID: 200-68952-1
Client ID: Garage Blower Effluent
Operator ID: ALS Bottle#: 0 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

92 1,2,4-Trimethylbenzene, CAS: 95-63-6



Manual Integration/User Assign Peak Report

Eurofins Burlington

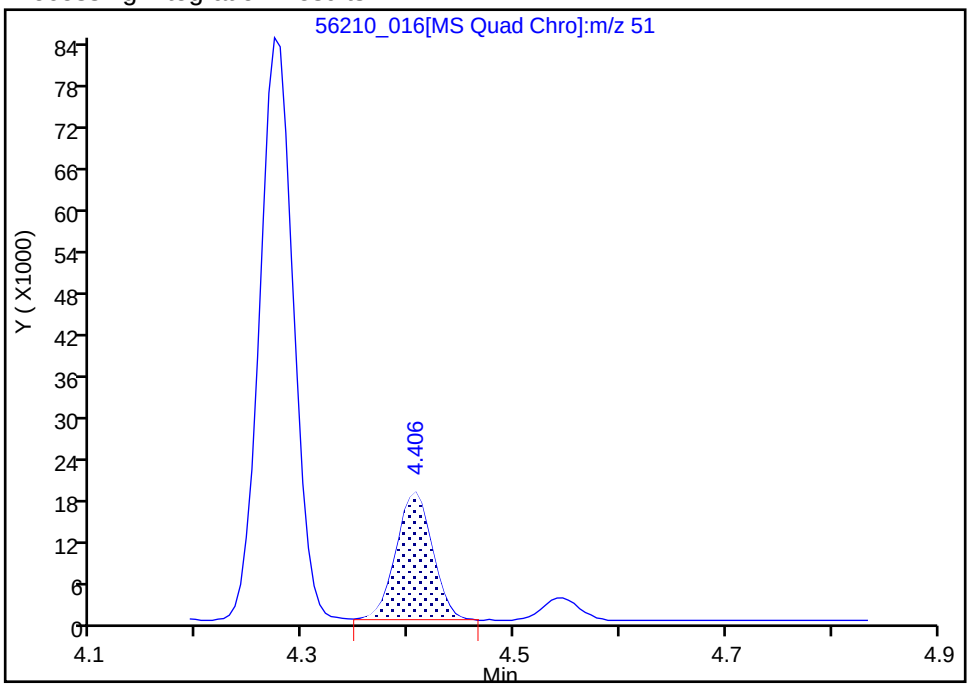
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Injection Date:	06-Jul-2023 20:28:34	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1		
Client ID:	Garage Blower Effluent				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

3 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

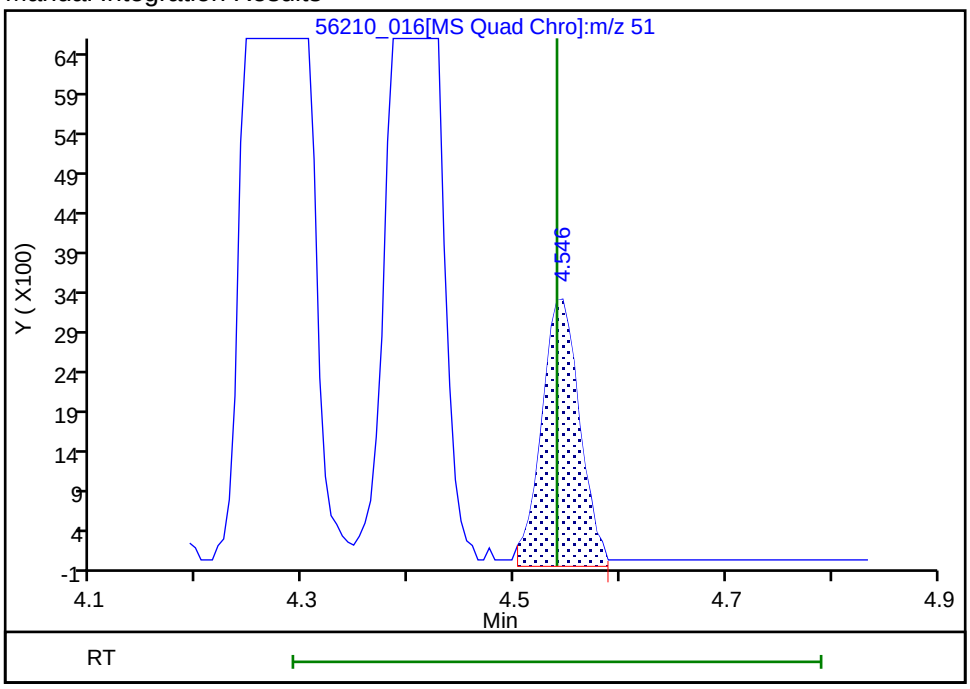
Processing Integration Results

RT: 4.41
Area: 44927
Amount: 1.405775
Amount Units: ppb v/v



Manual Integration Results

RT: 4.55
Area: 8333
Amount: 0.260741
Amount Units: ppb v/v



Reviewer: puangmaleek, 07-Jul-2023 10:04:20 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Assign Peak

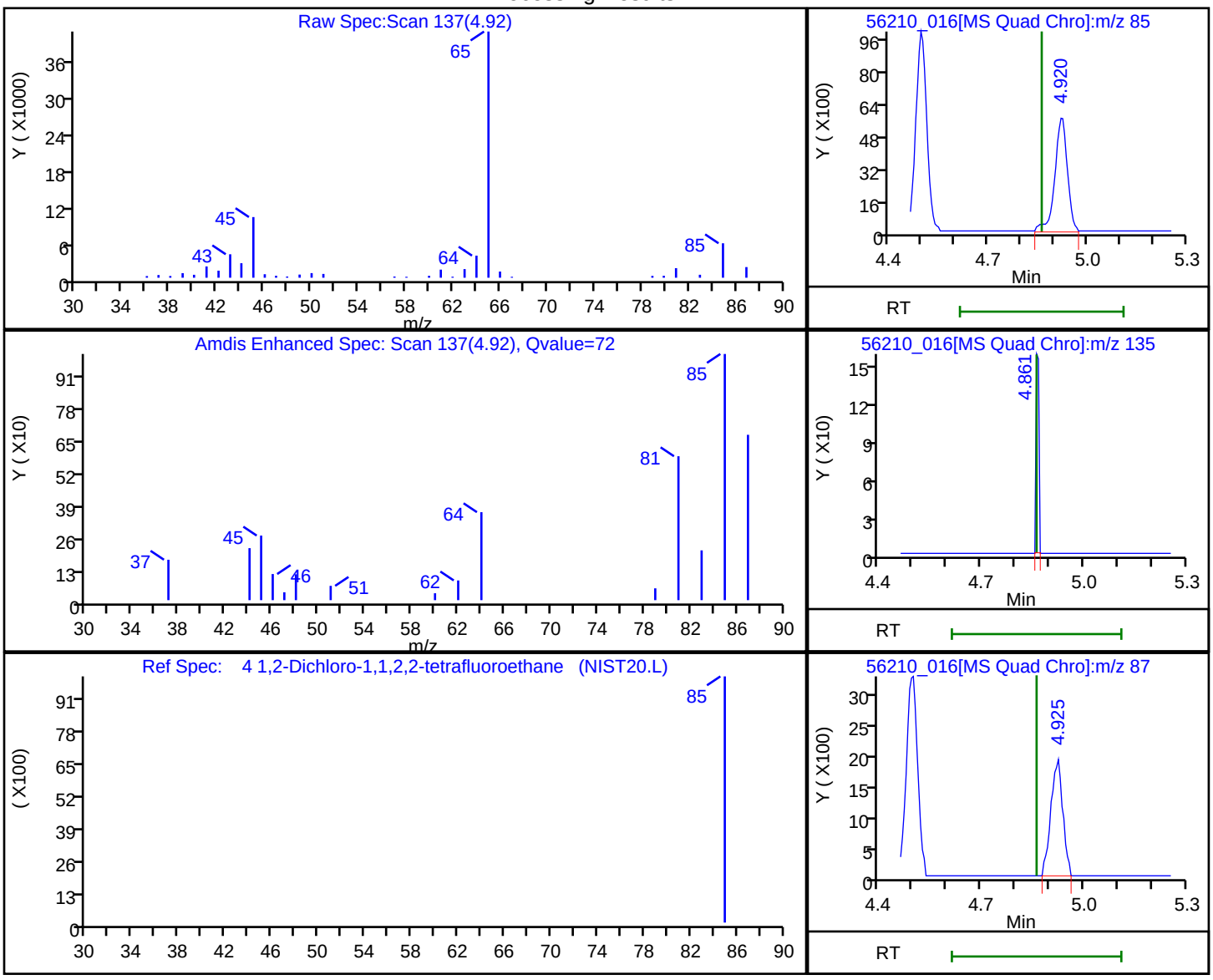
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_016.D				
Injection Date:	06-Jul-2023 20:28:34	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1		
Client ID:	Garage Blower Effluent				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

4 1,2-Dichloro-1,1,2,2-tetrafluoroethane, CAS: 76-14-2

Processing Results



RT	Mass	Response	Amount
4.92	85.00	14996	0.263454
4.86	135.00	101	
4.93	87.00	4571	

Reviewer: puangmaleek, 07-Jul-2023 10:04:23 07:00:00 (UTC)

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

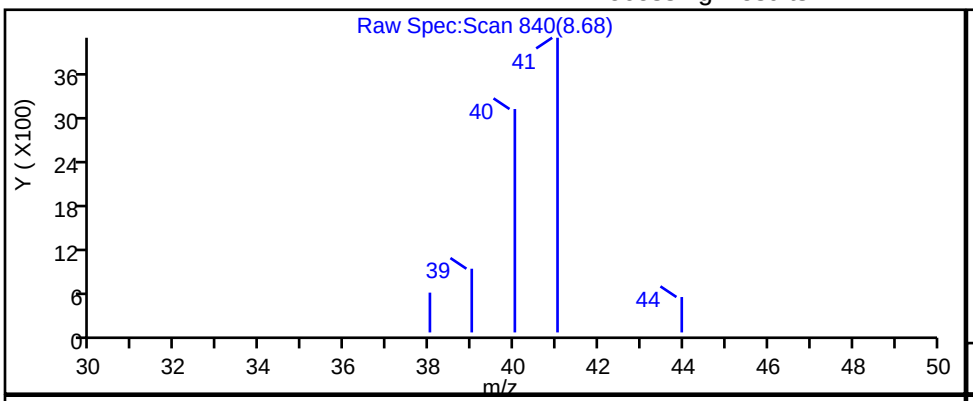
User Disabled Compound Report

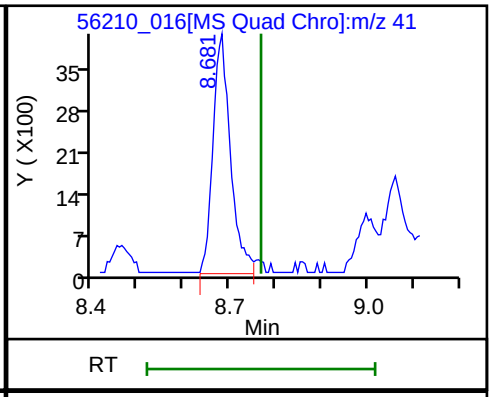
Eurofins Burlington

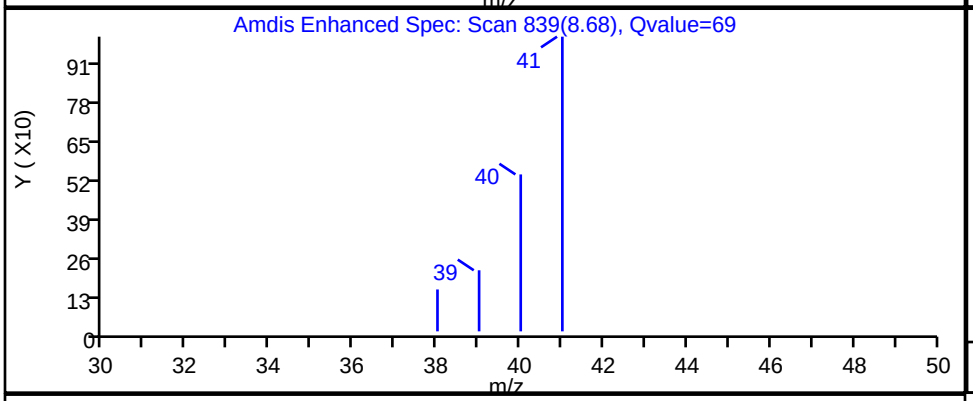
Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_016.D				
Injection Date:	06-Jul-2023 20:28:34	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1		
Client ID:	Garage Blower Effluent				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

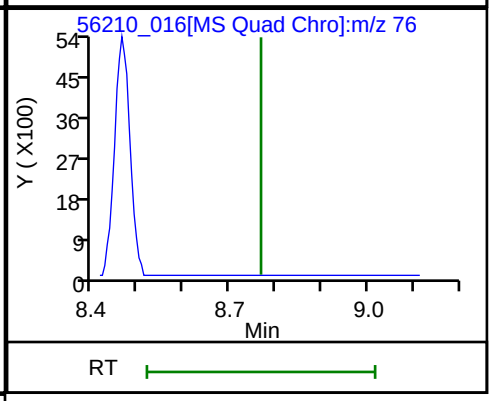
26 3-Chloro-1-propene, CAS: 107-05-1

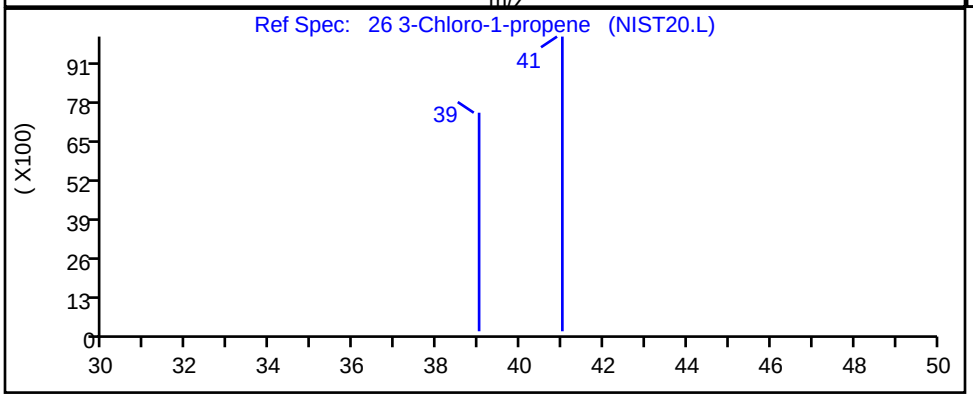
Processing Results











RT	Mass	Response	Amount
8.68	41.00	10783	0.261532
8.77	76.00	0	

Reviewer: puangmaleek, 07-Jul-2023 10:04:33 07:00:00 (UTC)

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

Manual Integration/User Assign Peak Report

Eurofins Burlington

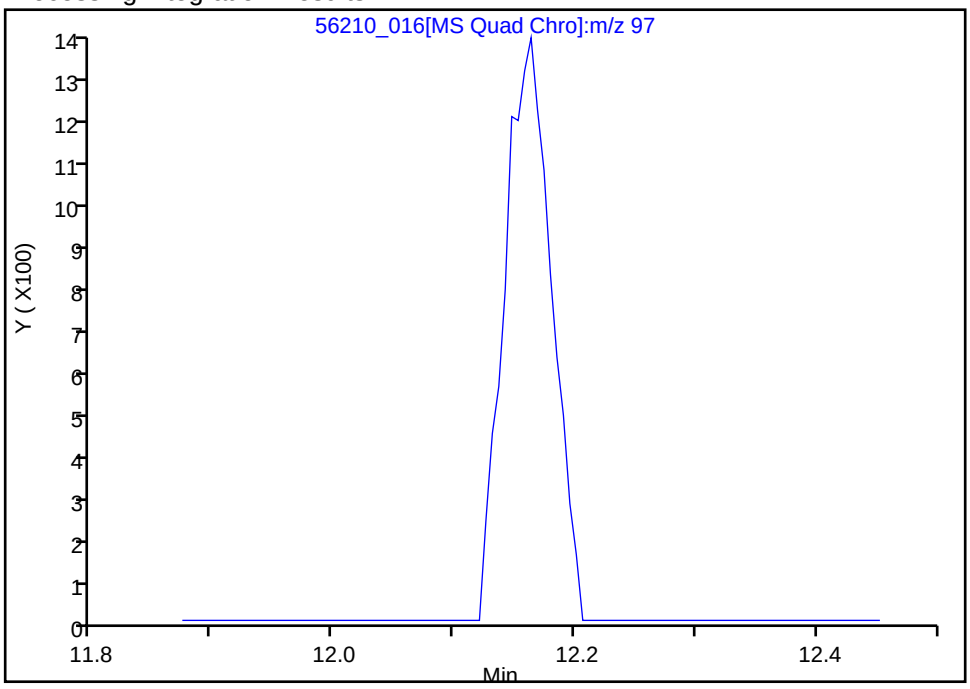
Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_016.D				
Injection Date:	06-Jul-2023 20:28:34	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1		
Client ID:	Garage Blower Effluent				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

42 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 1

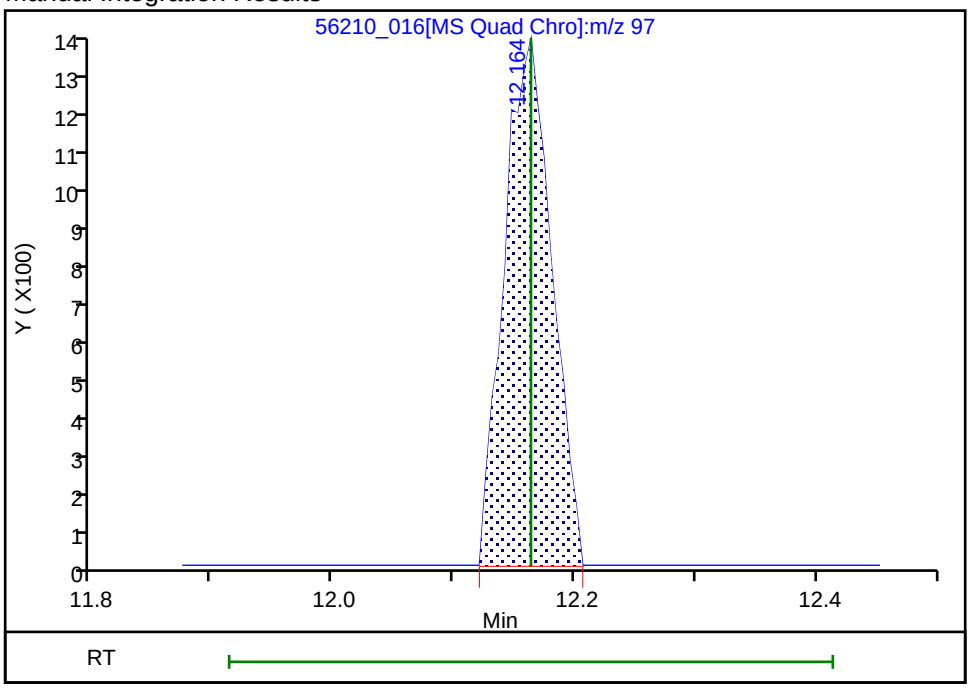
Not Detected
Expected RT: 12.16

Processing Integration Results



Manual Integration Results

RT: 12.16
Area: 3642
Amount: 0.056533
Amount Units: ppb v/v



Reviewer: puangmaleek, 07-Jul-2023 10:04:57 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

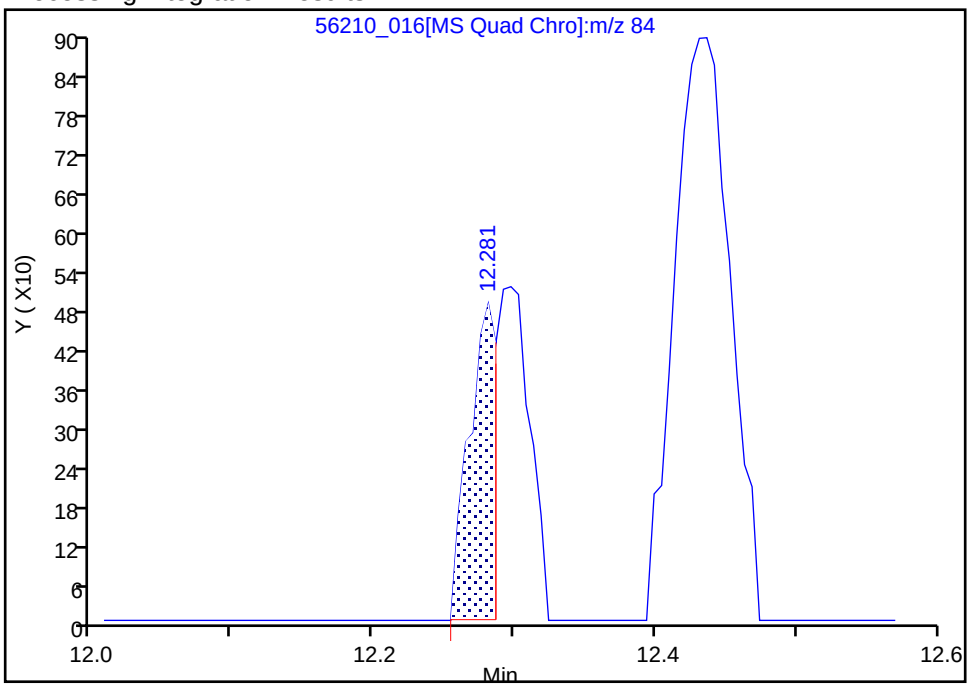
Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_016.D				
Injection Date:	06-Jul-2023 20:28:34	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1		
Client ID:	Garage Blower Effluent				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

43 Cyclohexane, CAS: 110-82-7

Signal: 1

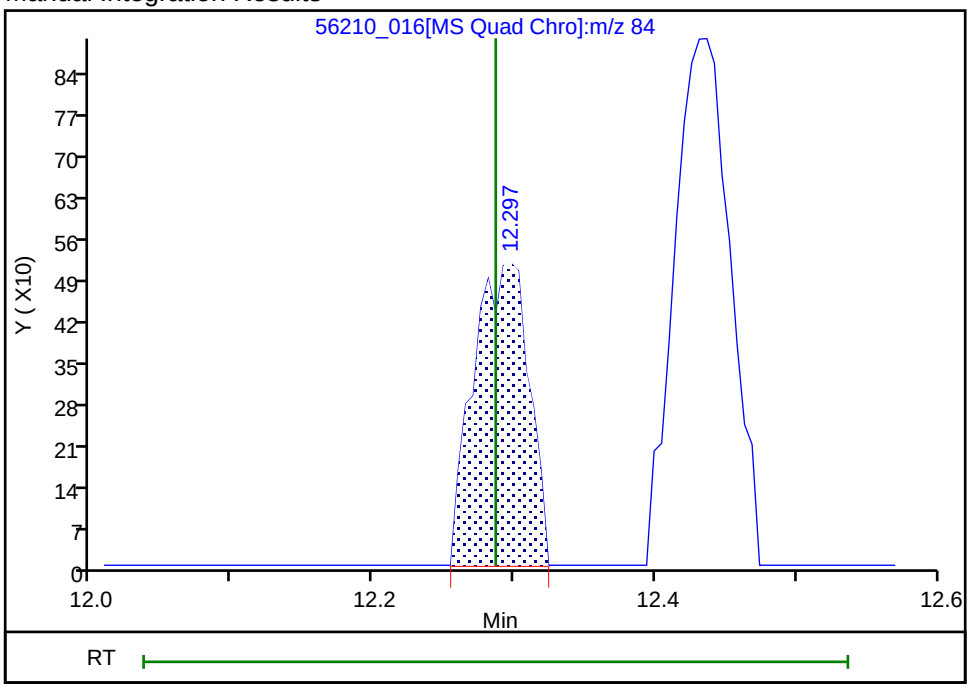
Processing Integration Results

RT: 12.28
Area: 665
Amount: 0.015683
Amount Units: ppb v/v



Manual Integration Results

RT: 12.30
Area: 1397
Amount: 0.032946
Amount Units: ppb v/v



Reviewer: puangmaleek, 07-Jul-2023 10:05:08 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Assign Peak

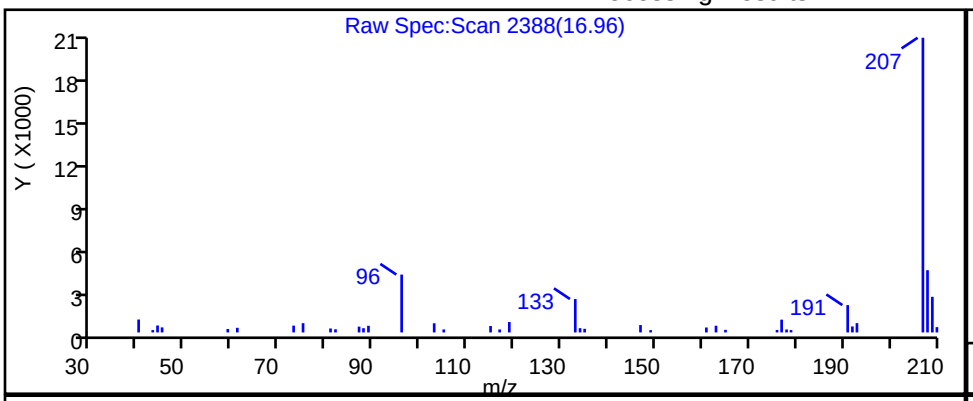
User Disabled Compound Report

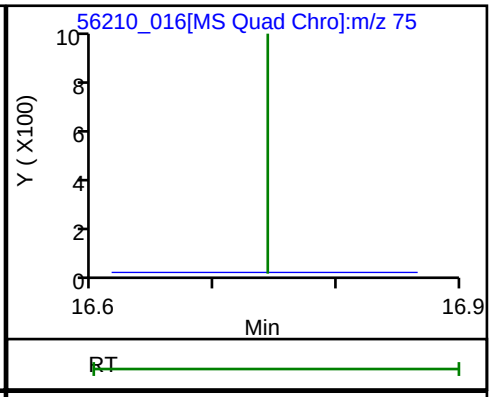
Eurofins Burlington

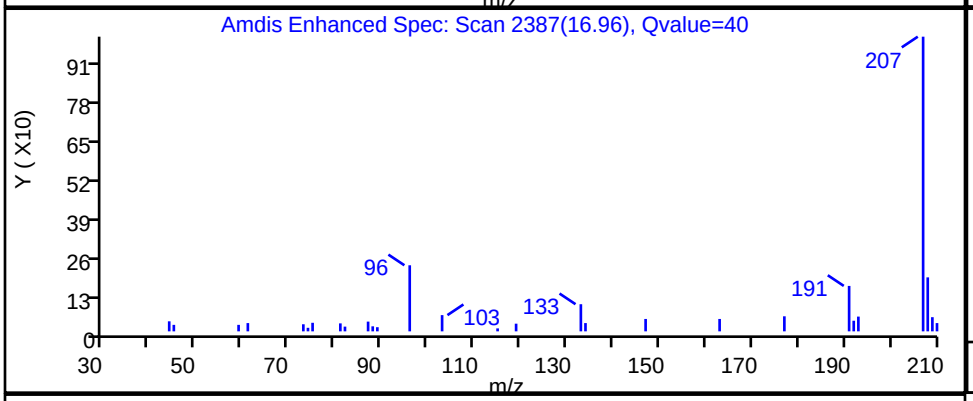
Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_016.D				
Injection Date:	06-Jul-2023 20:28:34	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1		
Client ID:	Garage Blower Effluent				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

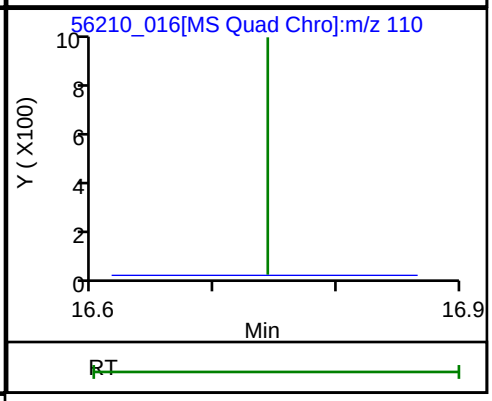
66 trans-1,3-Dichloropropene, CAS: 10061-02-6

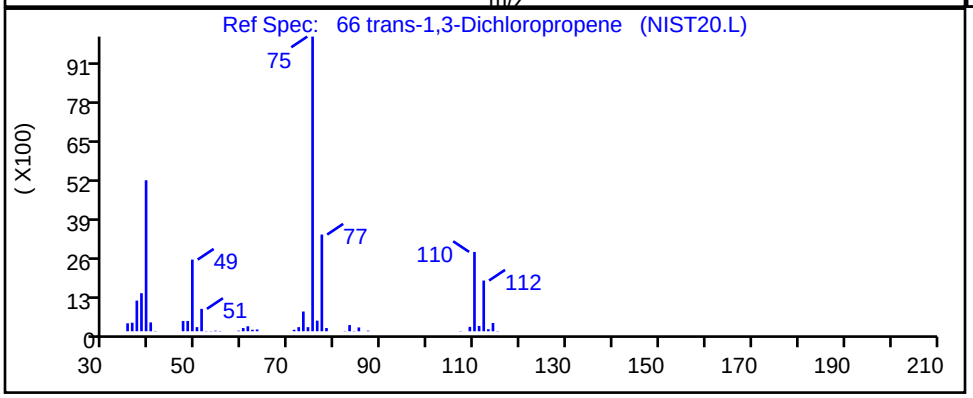
Processing Results











RT	Mass	Response	Amount
16.96	75.00	1015	0.018161
16.74	110.00	0	

Reviewer: puangmaleek, 07-Jul-2023 10:05:18 07:00:00 (UTC)

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

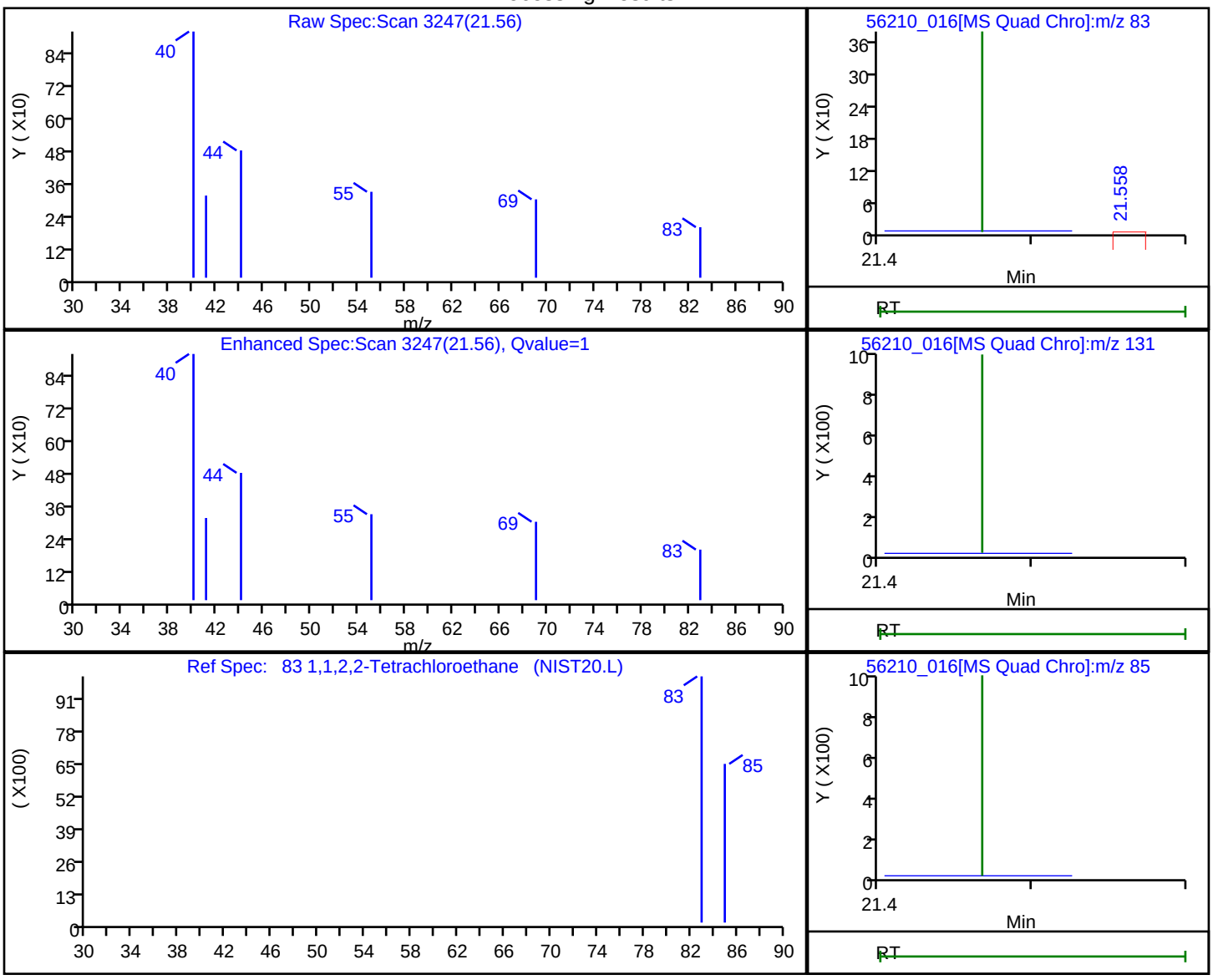
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_016.D				
Injection Date:	06-Jul-2023 20:28:34	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-1	Lab Sample ID:	200-68952-1		
Client ID:	Garage Blower Effluent				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

83 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
21.56	83.00	232	0.002419
21.47	131.00	0	
21.47	85.00	0	

Reviewer: puangmaleek, 07-Jul-2023 10:05:31 07:00:00 (UTC)

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.: 200-68952-1

SDG No.:

Client Sample ID: Factory Blower Effluent (FB-2) | Lab Sample ID: 200-68952-2

Matrix: Air | Lab File ID: 56210_017.D

Analysis Method: TO-15 | Date Collected: 06/30/2023 10:00

Sample wt/vol: 200(mL) | Date Analyzed: 07/06/2023 21:21

Soil Aliquot Vol: | Dilution Factor: 1

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.: 193264 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	2.4	J	2.5	0.54
75-45-6	Chlorodifluoromethane	86.47	2.2		1.8	0.42
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4	0.34
74-87-3	Chloromethane	50.49	1.3		1.0	0.31
106-97-8	n-Butane	58.12	6.5		1.2	0.48
75-01-4	Vinyl chloride	62.50	0.20	U	0.20	0.054
106-99-0	1,3-Butadiene	54.09	0.19	J	0.44	0.086
74-83-9	Bromomethane	94.94	0.78	U	0.78	0.28
75-00-3	Chloroethane	64.52	1.3	U	1.3	0.47
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.87	U	0.87	0.22
75-69-4	Trichlorofluoromethane	137.37	1.2		1.1	0.28
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	0.42	J	1.5	0.41
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	0.10
67-64-1	Acetone	58.08	36		12	3.8
67-63-0	Isopropyl alcohol	60.10	61		12	3.9
75-15-0	Carbon disulfide	76.14	0.75	J	1.6	0.40
107-05-1	3-Chloropropene	76.53	1.6	U	1.6	0.38
75-09-2	Methylene Chloride	84.93	1.6	J	1.7	0.63
75-65-0	tert-Butyl alcohol	74.12	15	U	15	3.6
1634-04-4	Methyl tert-butyl ether	88.15	0.17	J	0.72	0.13
156-60-5	trans-1,2-Dichloroethene	96.94	0.23	J	0.79	0.091
110-54-3	n-Hexane	86.17	1.4	J	1.8	0.39
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81	0.10
78-93-3	Methyl Ethyl Ketone (2-Butanone)	72.11	3.0		1.5	1.4
156-59-2	cis-1,2-Dichloroethene	96.94	0.20	U	0.20	0.083
67-66-3	Chloroform	119.38	0.30	J	0.98	0.20
109-99-9	Tetrahydrofuran	72.11	15	U	15	3.8
71-55-6	1,1,1-Trichloroethane	133.41	1.1	U	1.1	0.24
110-82-7	Cyclohexane	84.16	1.6		0.69	0.20
56-23-5	Carbon tetrachloride	153.81	0.36		0.22	0.14
540-84-1	2,2,4-Trimethylpentane	114.23	0.96		0.93	0.18

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

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Client Sample ID: Factory Blower Effluent (FB-2) Lab Sample ID: 200-68952-2

Matrix: Air Lab File ID: 56210_017.D

Analysis Method: TO-15 Date Collected: 06/30/2023 10:00

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2023 21:21

Soil Aliquot Vol: Dilution Factor: 1

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.: 193264 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.6		0.64	0.14
107-06-2	1,2-Dichloroethane	98.96	0.81	U	0.81	0.38
142-82-5	n-Heptane	100.21	1.8		0.82	0.23
79-01-6	Trichloroethene	131.39	0.20	U	0.20	0.13
80-62-6	Methyl methacrylate	100.12	0.64	J	2.0	0.57
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92	0.43
123-91-1	1,4-Dioxane	88.11	18	U	18	4.7
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3	0.34
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91	0.20
108-10-1	4-Methyl-2-pentanone (Methyl isobutyl ketone)	100.16	2.0	U	2.0	0.53
108-88-3	Toluene	92.14	12		0.75	0.16
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91	0.25
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1	0.40
127-18-4	Tetrachloroethene	165.83	1.1	J	1.4	0.14
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.0	U	2.0	0.61
124-48-1	Dibromochloromethane	208.28	1.7	U	1.7	0.54
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5	0.32
108-90-7	Chlorobenzene	112.56	0.92	U	0.92	0.20
100-41-4	Ethylbenzene	106.17	2.0		0.87	0.23
179601-23-1	m,p-Xylene	106.17	6.5		2.2	0.41
95-47-6	o-Xylene	106.17	2.8		0.87	0.23
100-42-5	Styrene	104.15	0.69	J	0.85	0.25
75-25-2	Bromoform	252.75	2.1	U	2.1	1.2
98-82-8	Cumene	120.19	0.98	U	0.98	0.20
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4	0.30
103-65-1	n-Propylbenzene	120.19	0.98	U	0.98	0.23
622-96-8	4-Ethyltoluene	120.20	0.98	U	0.98	0.24
108-67-8	1,3,5-Trimethylbenzene	120.20	0.98	U	0.98	0.23
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	0.24
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1	0.26
95-63-6	1,2,4-Trimethylbenzene	120.20	0.93	J	0.98	0.39

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

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Client Sample ID: Factory Blower Effluent (FB-2) Lab Sample ID: 200-68952-2

Matrix: Air Lab File ID: 56210_017.D

Analysis Method: TO-15 Date Collected: 06/30/2023 10:00

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2023 21:21

Soil Aliquot Vol: Dilution Factor: 1

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.: 193264 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
135-98-8	sec-Butylbenzene	134.22	1.1	U	1.1	0.25
99-87-6	4-Isopropyltoluene	134.22	0.39	J	1.1	0.33
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	0.44
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	0.54
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	0.46
104-51-8	n-Butylbenzene	134.22	1.1	U	1.1	0.60
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	0.40
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7	2.4
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1	1.2
91-20-3	Naphthalene	128.17	2.6	U	2.6	1.6

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

Lab Name: Eurofins Burlington | Job No.: 200-68952-1

SDG No.:

Client Sample ID: Factory Blower Effluent (FB-2) | Lab Sample ID: 200-68952-2

Matrix: Air | Lab File ID: 56210_017.D

Analysis Method: TO-15 | Date Collected: 06/30/2023 10:00

Sample wt/vol: 200(mL) | Date Analyzed: 07/06/2023 21:21

Soil Aliquot Vol: | Dilution Factor: 1

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.: 193264 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	0.49	J	0.50	0.11
75-45-6	Chlorodifluoromethane	86.47	0.62		0.50	0.12
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	0.048
74-87-3	Chloromethane	50.49	0.65		0.50	0.15
106-97-8	n-Butane	58.12	2.7		0.50	0.20
75-01-4	Vinyl chloride	62.50	0.078	U	0.078	0.021
106-99-0	1,3-Butadiene	54.09	0.084	J	0.20	0.039
74-83-9	Bromomethane	94.94	0.20	U	0.20	0.071
75-00-3	Chloroethane	64.52	0.50	U	0.50	0.18
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.20	U	0.20	0.050
75-69-4	Trichlorofluoromethane	137.37	0.21		0.20	0.050
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	0.055	J	0.20	0.053
75-35-4	1,1-Dichloroethene	96.94	0.050	U	0.050	0.026
67-64-1	Acetone	58.08	15		5.0	1.6
67-63-0	Isopropyl alcohol	60.10	25		5.0	1.6
75-15-0	Carbon disulfide	76.14	0.24	J	0.50	0.13
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	0.12
75-09-2	Methylene Chloride	84.93	0.45	J	0.50	0.18
75-65-0	tert-Butyl alcohol	74.12	5.0	U	5.0	1.2
1634-04-4	Methyl tert-butyl ether	88.15	0.047	J	0.20	0.036
156-60-5	trans-1,2-Dichloroethene	96.94	0.057	J	0.20	0.023
110-54-3	n-Hexane	86.17	0.39	J	0.50	0.11
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	0.025
78-93-3	Methyl Ethyl Ketone (2-Butanone)	72.11	1.0		0.50	0.49
156-59-2	cis-1,2-Dichloroethene	96.94	0.050	U	0.050	0.021
67-66-3	Chloroform	119.38	0.062	J	0.20	0.041
109-99-9	Tetrahydrofuran	72.11	5.0	U	5.0	1.3
71-55-6	1,1,1-Trichloroethane	133.41	0.20	U	0.20	0.044
110-82-7	Cyclohexane	84.16	0.47		0.20	0.058
56-23-5	Carbon tetrachloride	153.81	0.057		0.035	0.022
540-84-1	2,2,4-Trimethylpentane	114.23	0.21		0.20	0.038

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

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Client Sample ID: Factory Blower Effluent (FB-2) Lab Sample ID: 200-68952-2

Matrix: Air Lab File ID: 56210_017.D

Analysis Method: TO-15 Date Collected: 06/30/2023 10:00

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2023 21:21

Soil Aliquot Vol: Dilution Factor: 1

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.: 193264 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.50		0.20	0.044
107-06-2	1,2-Dichloroethane	98.96	0.20	U	0.20	0.093
142-82-5	n-Heptane	100.21	0.44		0.20	0.055
79-01-6	Trichloroethene	131.39	0.037	U	0.037	0.025
80-62-6	Methyl methacrylate	100.12	0.16	J	0.50	0.14
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20	0.094
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0	1.3
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20	0.050
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20	0.045
108-10-1	4-Methyl-2-pentanone (Methyl isobutyl ketone)	100.16	0.50	U	0.50	0.13
108-88-3	Toluene	92.14	3.3		0.20	0.042
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20	0.054
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20	0.074
127-18-4	Tetrachloroethene	165.83	0.16	J	0.20	0.021
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.50	U	0.50	0.15
124-48-1	Dibromochloromethane	208.28	0.20	U	0.20	0.063
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20	0.042
108-90-7	Chlorobenzene	112.56	0.20	U	0.20	0.044
100-41-4	Ethylbenzene	106.17	0.47		0.20	0.052
179601-23-1	m,p-Xylene	106.17	1.5		0.50	0.095
95-47-6	o-Xylene	106.17	0.65		0.20	0.052
100-42-5	Styrene	104.15	0.16	J	0.20	0.059
75-25-2	Bromoform	252.75	0.20	U	0.20	0.12
98-82-8	Cumene	120.19	0.20	U	0.20	0.041
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20	0.043
103-65-1	n-Propylbenzene	120.19	0.20	U	0.20	0.047
622-96-8	4-Ethyltoluene	120.20	0.20	U	0.20	0.049
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.20	0.047
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20	0.046
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20	0.047
95-63-6	1,2,4-Trimethylbenzene	120.20	0.19	J	0.20	0.080

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

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Client Sample ID: Factory Blower Effluent (FB-2) Lab Sample ID: 200-68952-2

Matrix: Air Lab File ID: 56210_017.D

Analysis Method: TO-15 Date Collected: 06/30/2023 10:00

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2023 21:21

Soil Aliquot Vol: Dilution Factor: 1

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.: 193264 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
135-98-8	sec-Butylbenzene	134.22	0.20	U	0.20	0.045
99-87-6	4-Isopropyltoluene	134.22	0.071	J	0.20	0.061
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20	0.074
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20	0.089
100-44-7	Benzyl chloride	126.58	0.20	U	0.20	0.088
104-51-8	n-Butylbenzene	134.22	0.20	U	0.20	0.11
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20	0.066
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	0.33
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	0.11
91-20-3	Naphthalene	128.17	0.50	U	0.50	0.30

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D
Lims ID: 200-68952-A-2
Client ID: Factory Blower Effluent (FB-2)
Sample Type: Client
Inject. Date: 06-Jul-2023 21:21:26 ALS Bottle#: 0 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0056210-017
Misc. Info.: 68952-2
Operator ID: Instrument ID: CHAN.i

Method: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\TO15_TO3_Master_Method_AN.m
Limit Group: AI_TO15_ICAL
Last Update: 07-Jul-2023 10:07:24 Calib Date: 23-May-2023 01:58:58
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1610

First Level Reviewer: puangmaleek Date: 07-Jul-2023 10:07:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	4.492	4.492	0.000	99	25410	0.4912	
3 Chlorodifluoromethane	51	4.546	4.546	0.006	97	19826	0.6169	
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.861				ND	
5 Chloromethane	50	4.990	4.990	0.000	98	12312	0.6515	
7 Butane	43	5.294	5.294	0.000	99	143604	2.73	
6 Vinyl chloride	62		5.294				ND	
8 Butadiene	54	5.412	5.407	0.005	86	2491	0.0839	
9 Bromomethane	94		6.140				ND	
10 Chloroethane	64		6.413				ND	
13 Vinyl bromide	106		6.835				ND	
14 Trichlorofluoromethane	101	6.996	6.996	0.000	98	13354	0.2107	
20 1,1-Dichloroethene	96		8.060				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	8.098	8.098	0.000	88	3187	0.0548	
22 Acetone	43	8.146	8.146	0.000	98	706775	15.0	
23 Isopropyl alcohol	45	8.440	8.435	0.005	100	1392707	24.9	
24 Carbon disulfide	76	8.462	8.462	0.000	95	20758	0.2397	
26 3-Chloro-1-propene	41		8.766				ND	
27 Methylene Chloride	49	8.997	9.002	-0.005	98	17680	0.4545	
28 2-Methyl-2-propanol	59	9.227	9.205	0.022	98	22182	0.3442	
31 Methyl tert-butyl ether	73	9.494	9.494	0.005	18	4260	0.0466	M
30 trans-1,2-Dichloroethene	61	9.489	9.489	0.000	24	2942	0.0570	M
32 Hexane	57	9.997	9.997	0.000	93	20797	0.3896	
33 1,1-Dichloroethane	63		10.270				ND	
36 2-Butanone (MEK)	72	11.249	11.243	0.006	99	17137	1.01	
37 cis-1,2-Dichloroethene	96		11.275				ND	
* 39 Chlorobromomethane	128	11.682	11.682	0.000	95	161999	10.0	
40 Tetrahydrofuran	42		11.709				ND	
41 Chloroform	83	11.864	11.864	0.000	95	4225	0.0624	
42 1,1,1-Trichloroethane	97		12.164				ND	
43 Cyclohexane	84	12.292	12.297	0.005	97	20222	0.4703	
44 Carbon tetrachloride	117	12.436	12.431	0.005	94	3519	0.0568	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	45 Benzene	78	12.790	12.789	0.001	98	52249	0.4996	
	46 1,2-Dichloroethane	62		12.870				ND	
	47 Isooctane	57	12.998	12.993	0.005	98	36310	0.2057	
	48 n-Heptane	43	13.298	13.298	0.000	96	29944	0.4425	
*	49 1,4-Difluorobenzene	114	13.522	13.522	0.000	97	829453	10.0	
	51 Trichloroethene	95	13.950	13.950	0.000	85	881	0.0198	
	53 1,2-Dichloropropane	63		14.421				ND	
	54 Methyl methacrylate	69	14.501	14.496	0.005	93	5855	0.1566	
	55 1,4-Dioxane	88		14.534				ND	
	58 Dichlorobromomethane	83		14.887				ND	
	59 cis-1,3-Dichloropropene	75		15.684				ND	
	61 4-Methyl-2-pentanone (MIBK)	43		15.951				ND	7
	62 Toluene	92	16.320	16.320	0.000	93	225368	3.30	
	66 trans-1,3-Dichloropropene	75		16.743				ND	
	67 1,1,2-Trichloroethane	83		17.117				ND	
	68 Tetrachloroethene	166	17.299	17.299	0.000	82	6966	0.1591	
	69 2-Hexanone	43		17.529				ND	7
	70 Chlorodibromomethane	129		17.850				ND	
	71 Ethylene Dibromide	107		18.091				ND	
*	73 Chlorobenzene-d5	117	19.001	19.001	0.000	93	728242	10.0	
	74 Chlorobenzene	112		19.059				ND	7
	75 Ethylbenzene	91	19.247	19.247	0.000	99	70707	0.4653	
	76 m-Xylene & p-Xylene	106	19.493	19.509	-0.016	0	82101	1.50	
	78 o-Xylene	106	20.274	20.279	-0.005	97	34544	0.6549	
	79 Styrene	104	20.311	20.311	0.000	84	13808	0.1628	
	81 Bromoform	173		20.654				ND	
	82 Isopropylbenzene	105	20.953	20.948	0.005	59	5472	0.0349	
	83 1,1,2,2-Tetrachloroethane	83		21.467				ND	7
	85 N-Propylbenzene	91	21.654	21.649	0.005	97	7300	0.0357	
	86 2-Chlorotoluene	91		21.799				ND	MU
	87 4-Ethyltoluene	105	21.841	21.847	-0.006	96	5935	0.0379	
	88 1,3,5-Trimethylbenzene	105	21.938	21.938	0.000	90	5063	0.0384	
	91 tert-Butylbenzene	119		22.414				ND	MU
	92 1,2,4-Trimethylbenzene	105	22.505	22.499	0.006	94	25156	0.1888	
	93 sec-Butylbenzene	105		22.735				ND	
	94 1,3-Dichlorobenzene	146		22.906				ND	7
	95 4-Isopropyltoluene	119	22.943	22.943	0.000	95	10684	0.0712	
	96 1,4-Dichlorobenzene	146		23.045				ND	7
	97 Benzyl chloride	91		23.195				ND	7
	98 n-Butylbenzene	91		23.500				ND	7
	99 1,2-Dichlorobenzene	146		23.543				ND	
	102 1,2,4-Trichlorobenzene	180		26.014				ND	
	103 Hexachlorobutadiene	225		26.255				ND	
	104 Naphthalene	128		26.501				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags
M - Manually Integrated
U - Marked Undetected

Reagents:

ATTO15CISs_00012 Amount Added: 20.00 Units: mL Run Reagent

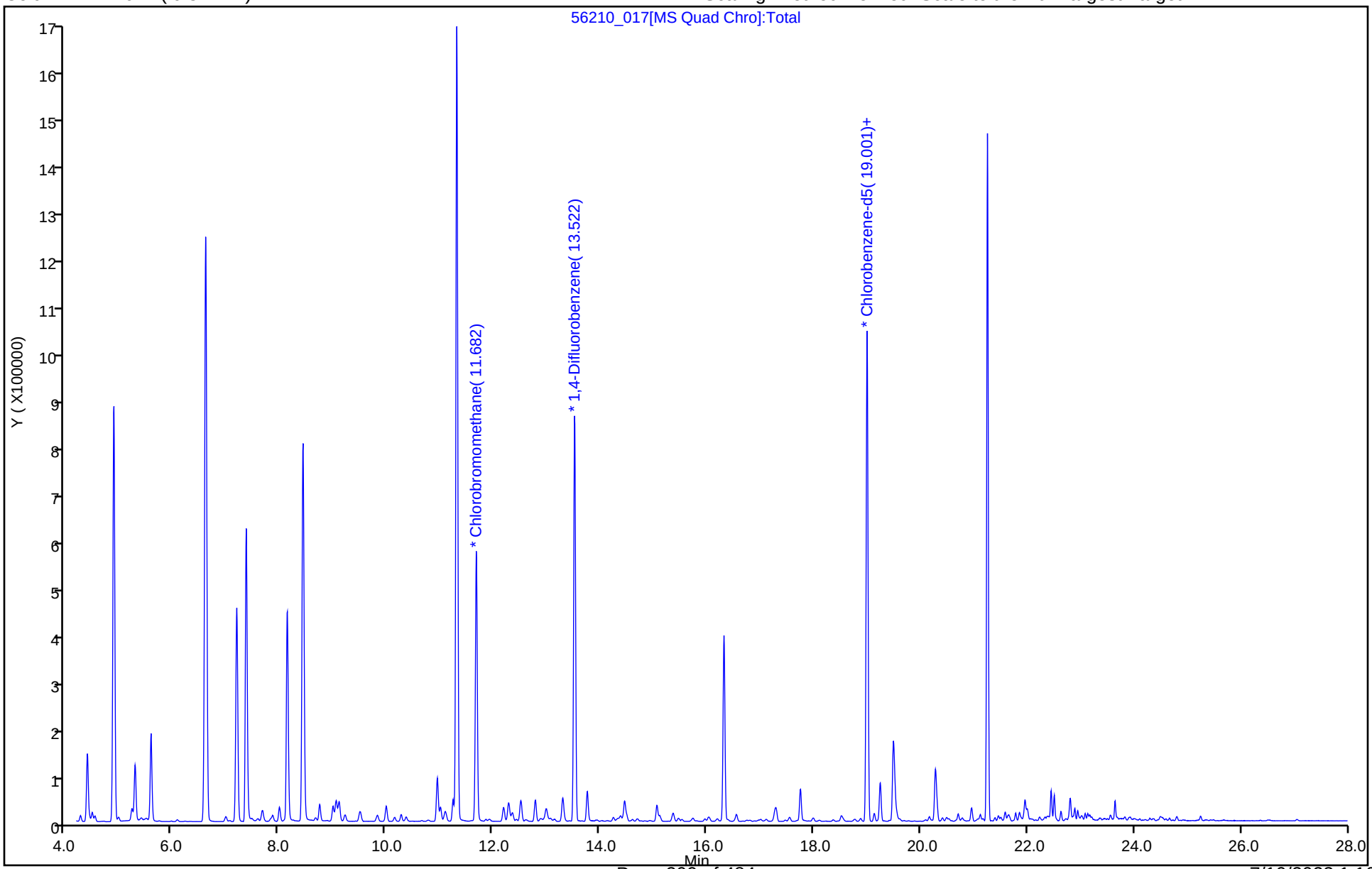
Report Date: 07-Jul-2023 10:07:24 Chrom Revision: 2.3 21-Jun-2023 17:36:34

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D

Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i	Operator ID:	
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2	Worklist Smp#:	17
Client ID:	Factory Blower Effluent (FB-2)				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		

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

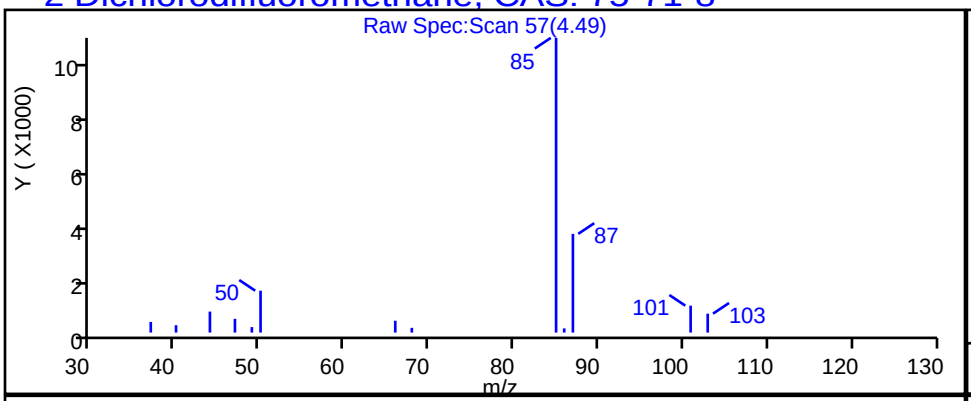


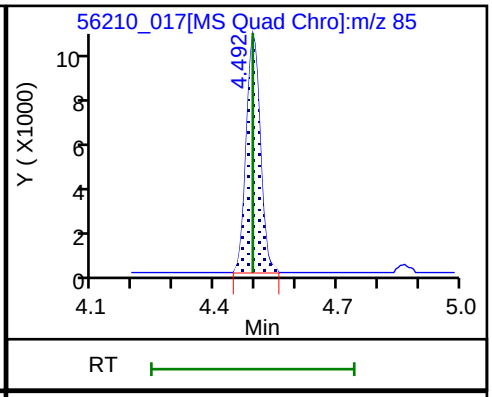
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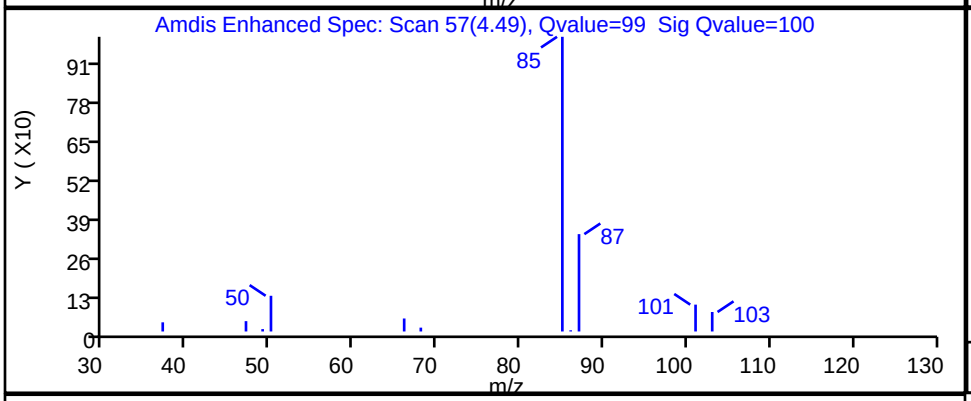
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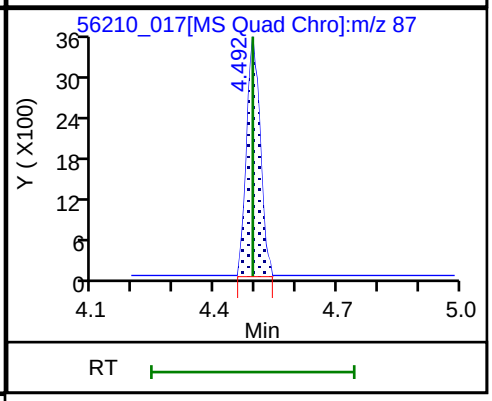
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Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

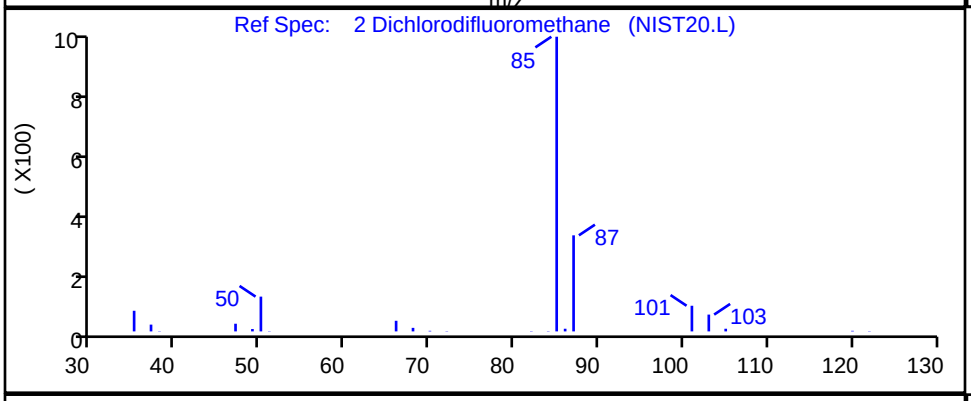
2 Dichlorodifluoromethane, CAS: 75-71-8

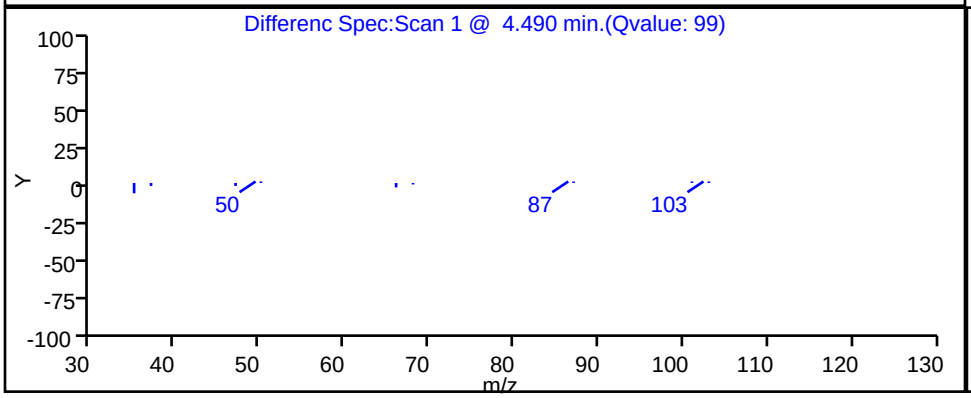


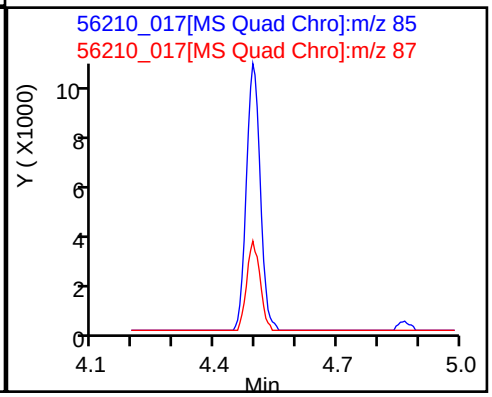








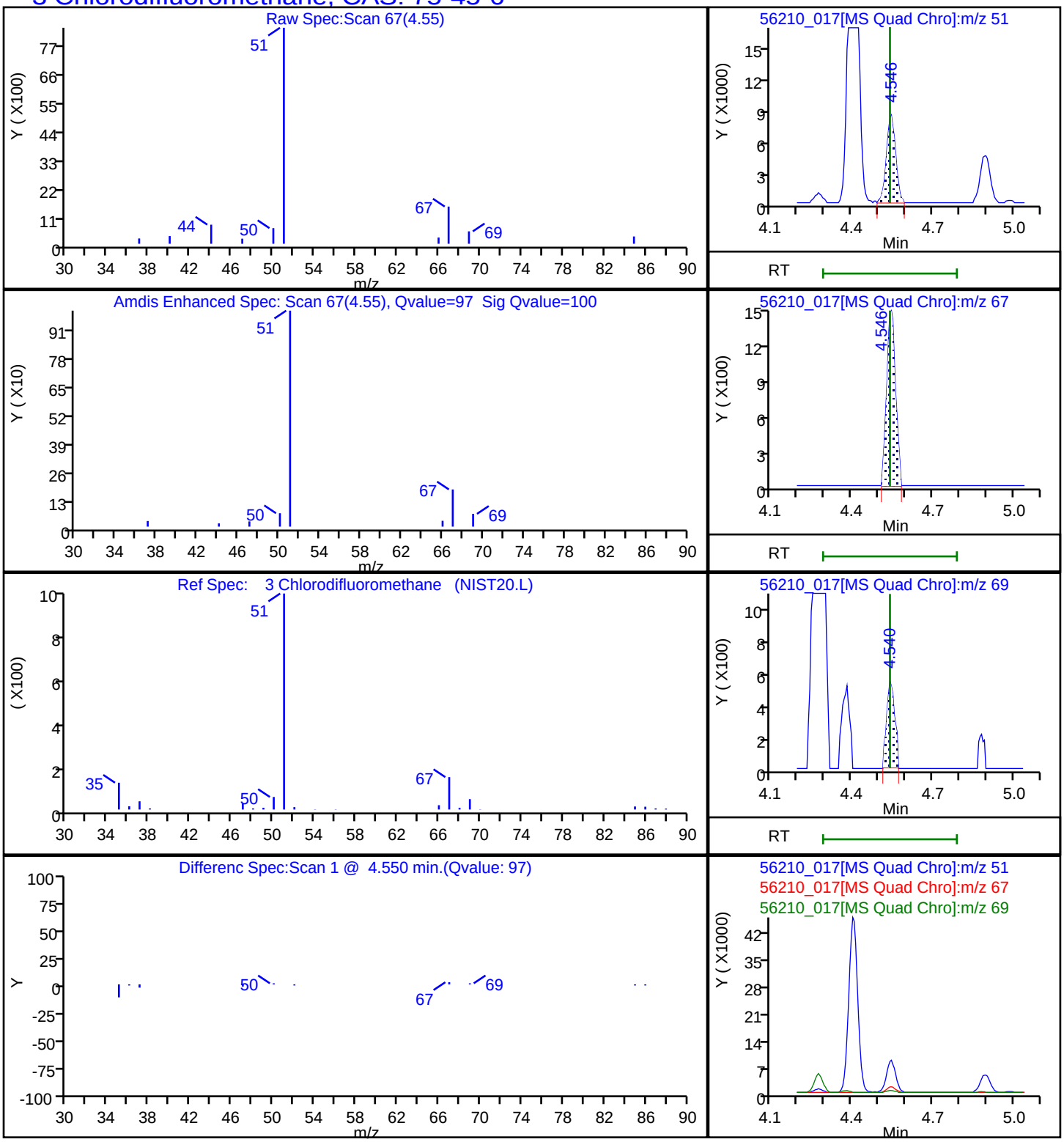




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Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

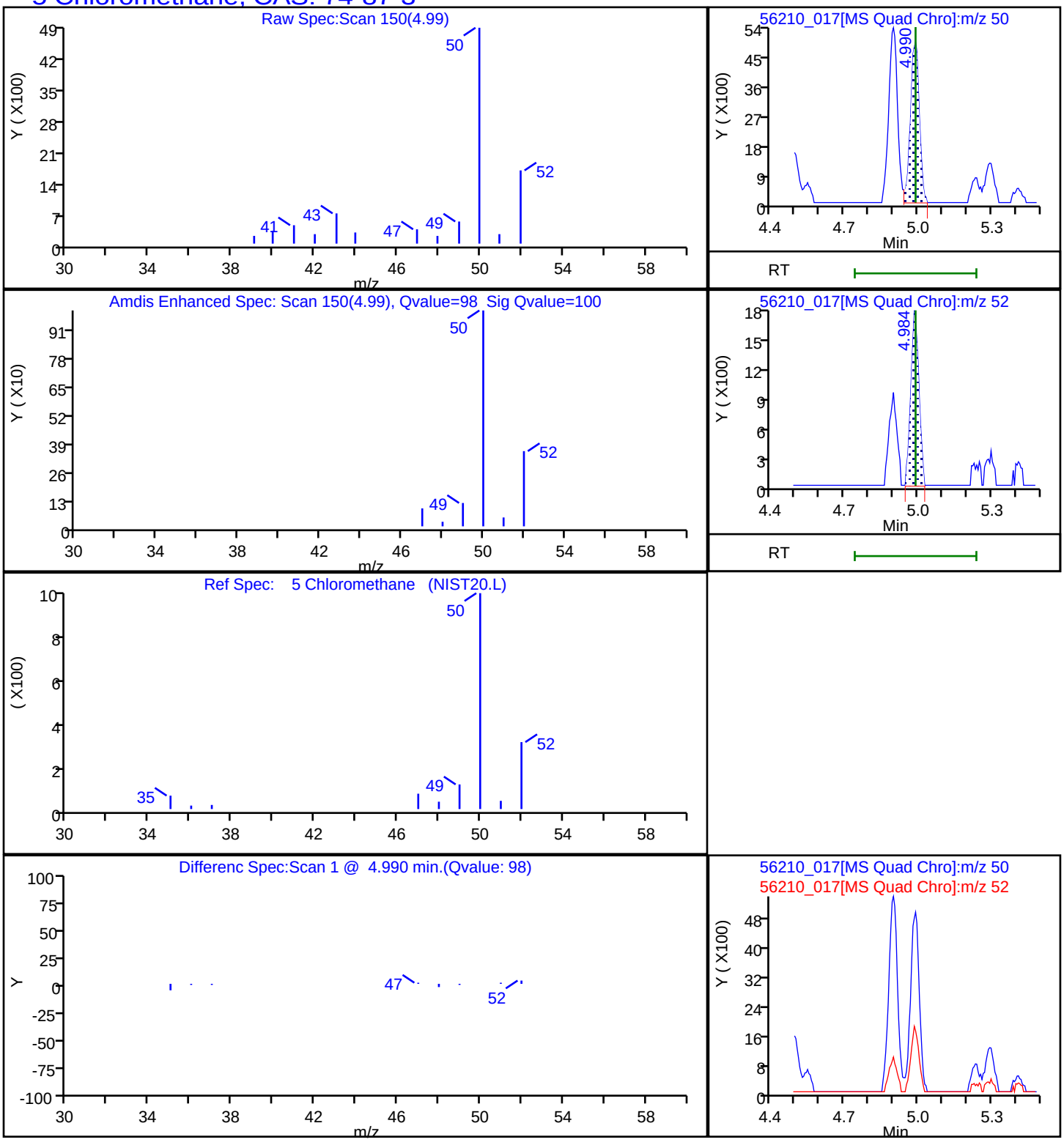
3 Chlorodifluoromethane, CAS: 75-45-6



Eurofins Burlington

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Injection Date: 06-Jul-2023 21:21:26 Instrument ID: CHAN.i
Lims ID: 200-68952-A-2 Lab Sample ID: 200-68952-2
Client ID: Factory Blower Effluent (FB-2)
Operator ID: ALS Bottle#: 0 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

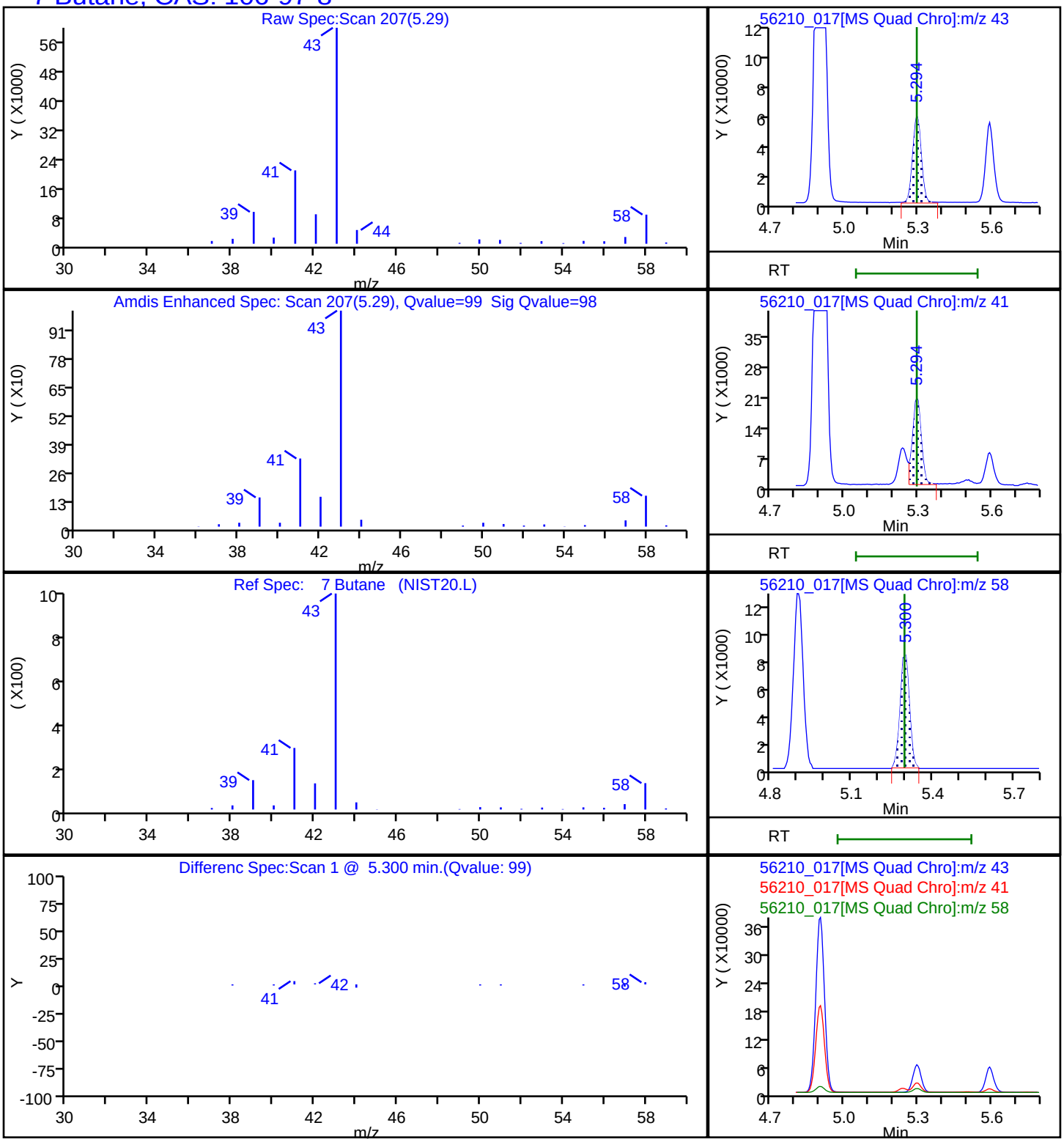
5 Chloromethane, CAS: 74-87-3



Eurofins Burlington

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Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

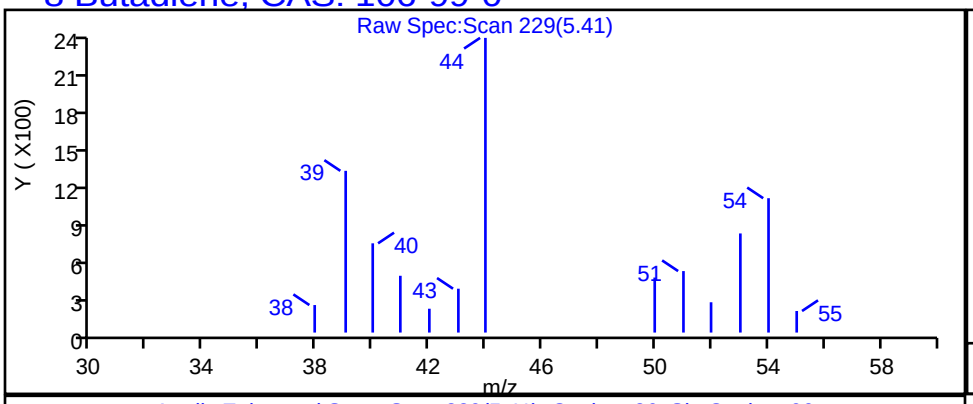
7 Butane, CAS: 106-97-8

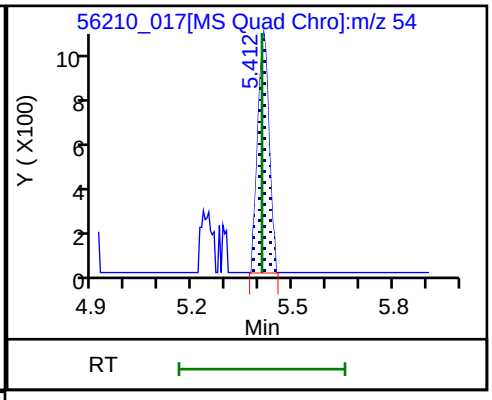


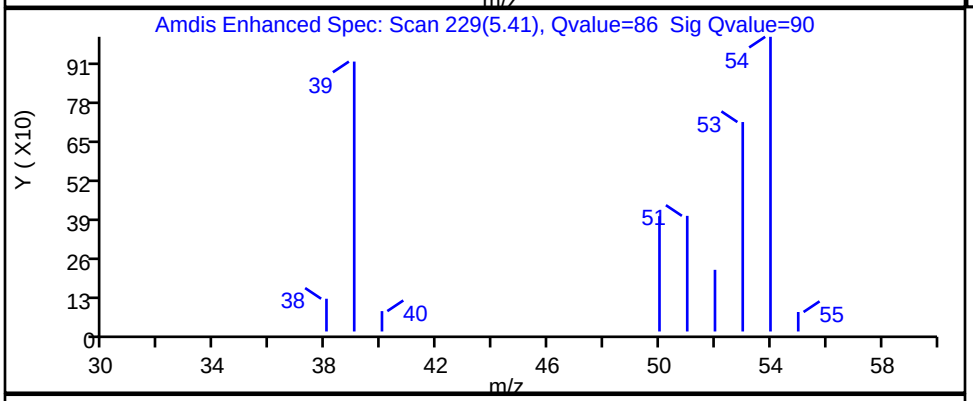
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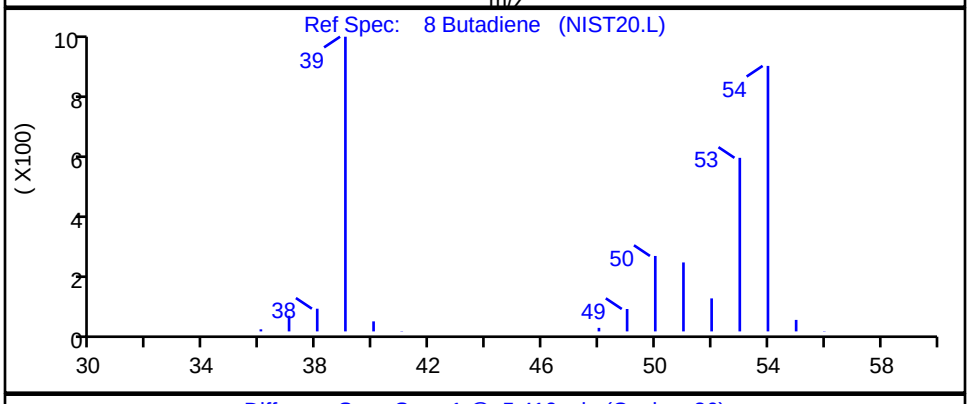
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Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

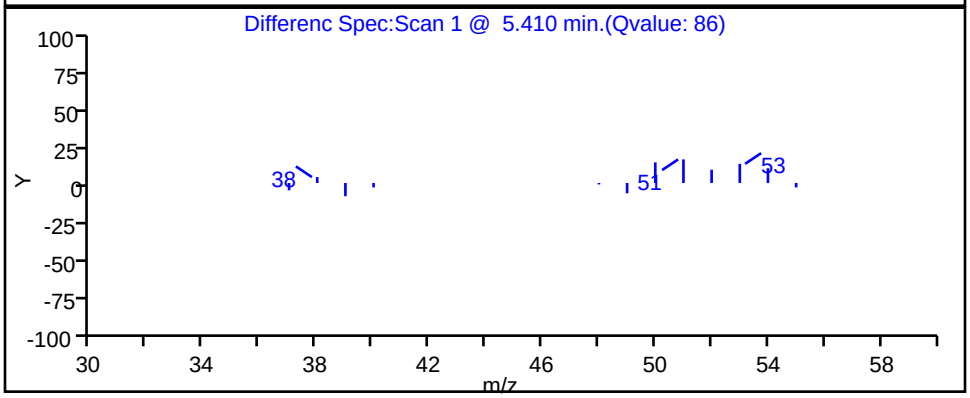
8 Butadiene, CAS: 106-99-0







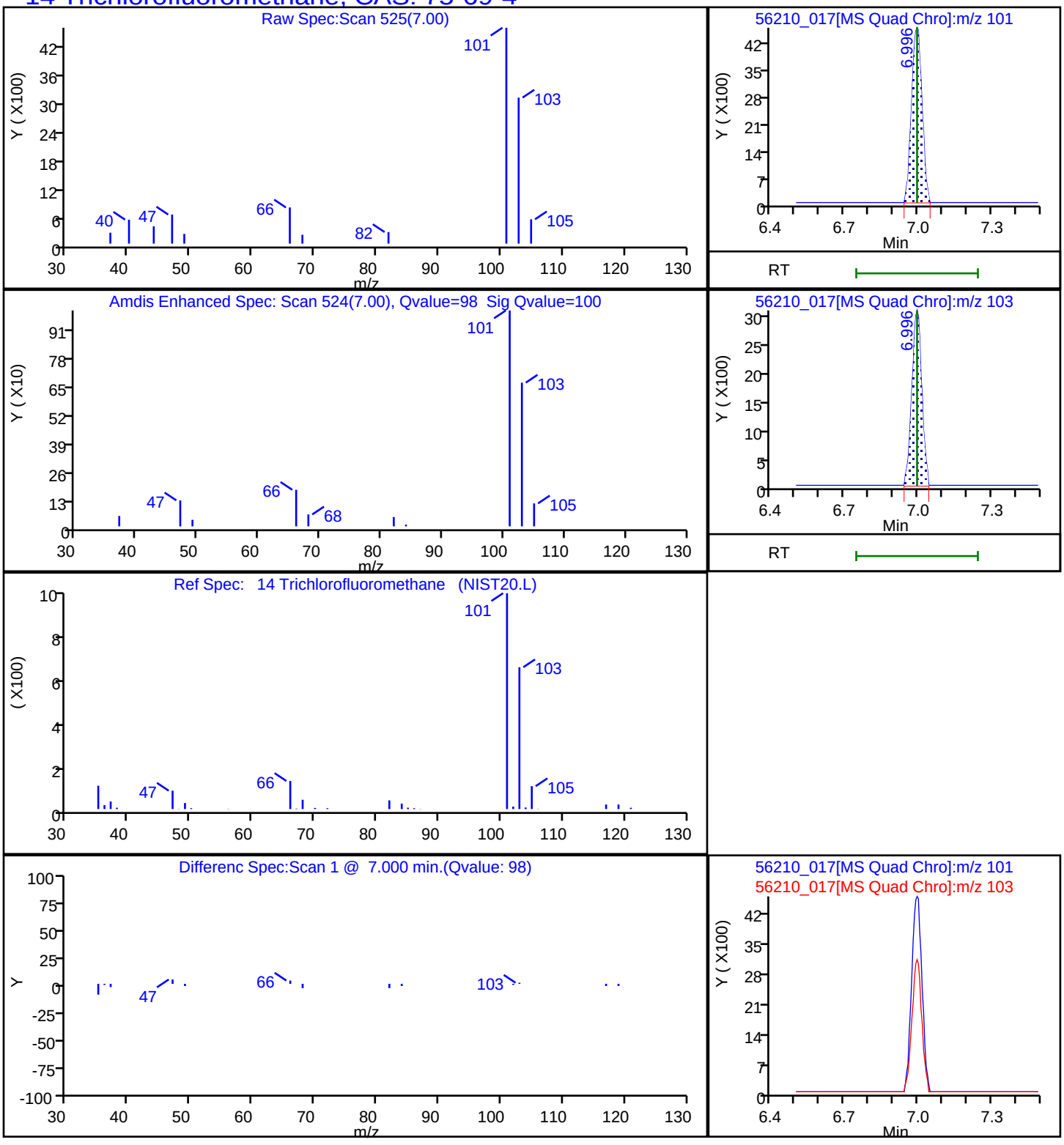




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Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D
Injection Date: 06-Jul-2023 21:21:26 Instrument ID: CHAN.i
Lims ID: 200-68952-A-2 Lab Sample ID: 200-68952-2
Client ID: Factory Blower Effluent (FB-2)
Operator ID: ALS Bottle#: 0 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

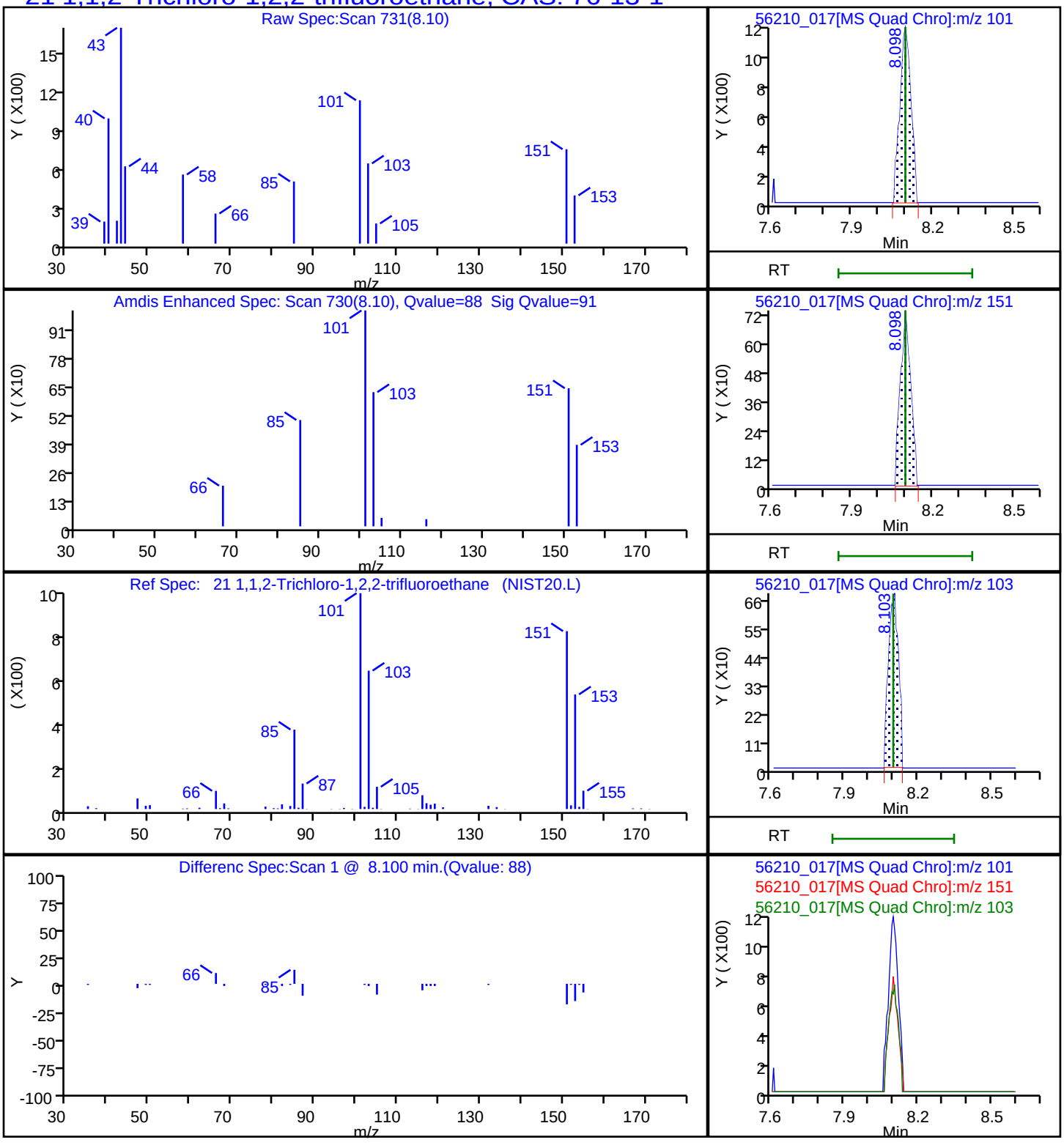
14 Trichlorofluoromethane, CAS: 75-69-4



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D
Injection Date: 06-Jul-2023 21:21:26 Instrument ID: CHAN.i
Lims ID: 200-68952-A-2 Lab Sample ID: 200-68952-2
Client ID: Factory Blower Effluent (FB-2)
Operator ID: ALS Bottle#: 0 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

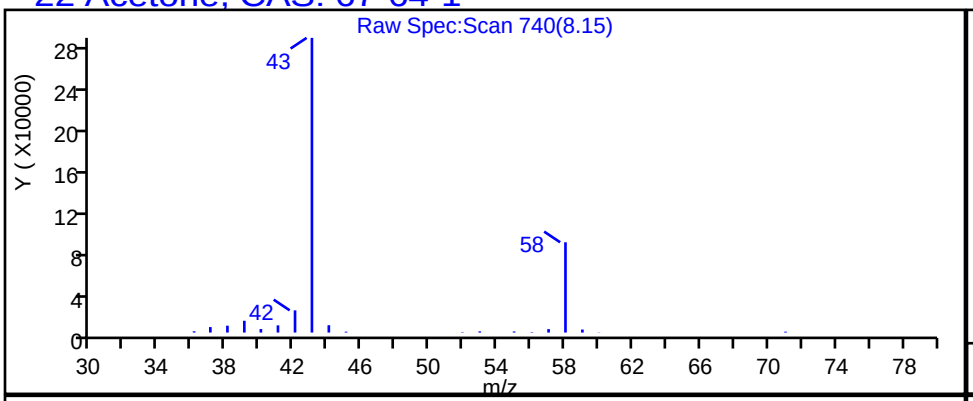
21 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

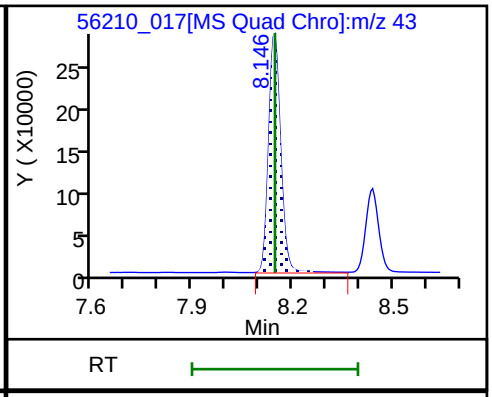


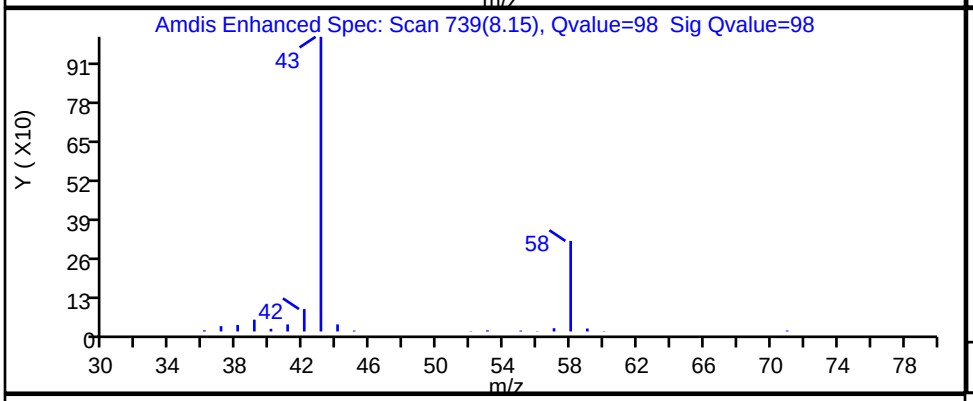
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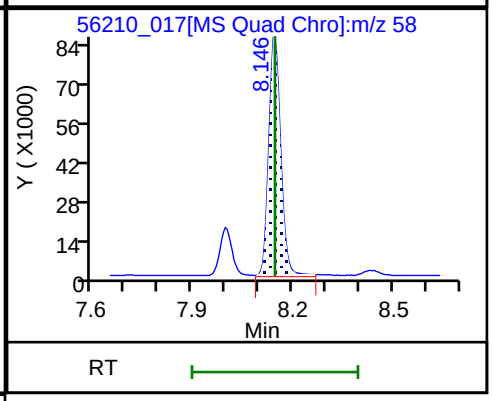
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Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

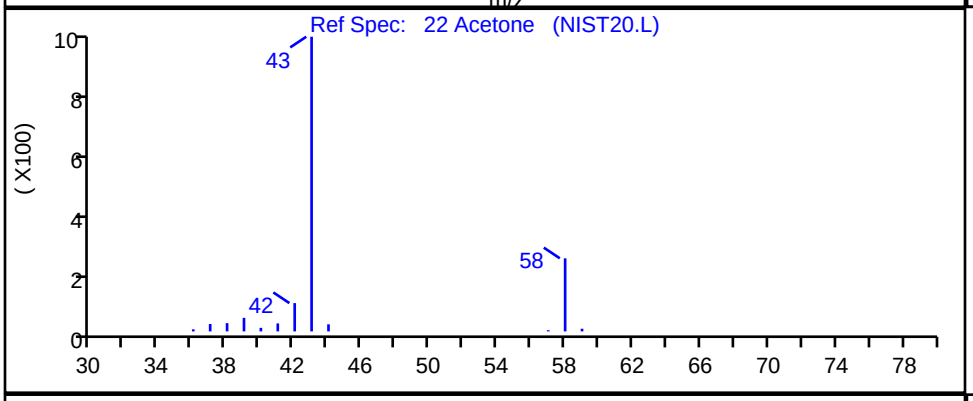
22 Acetone, CAS: 67-64-1

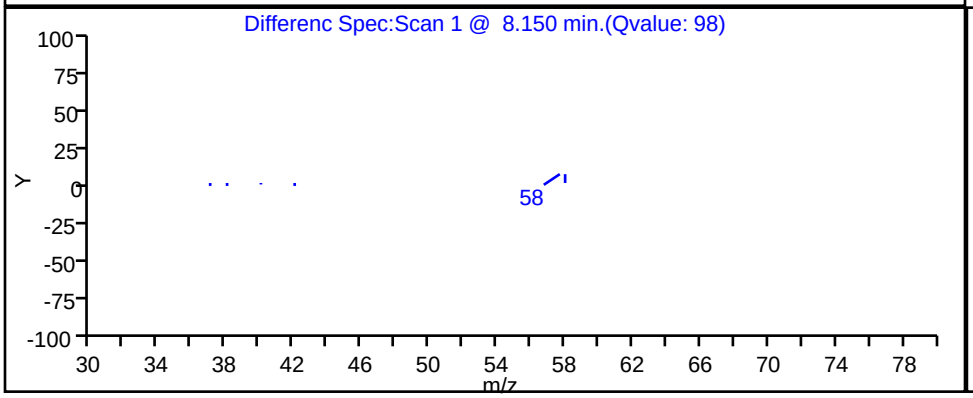


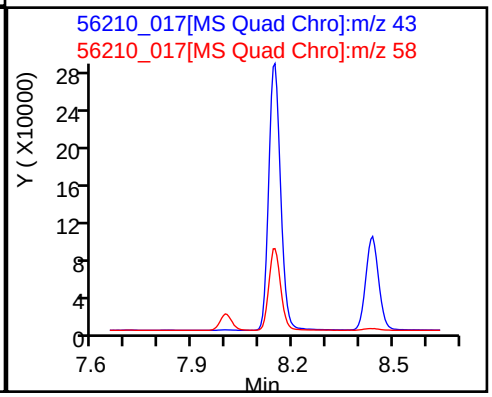








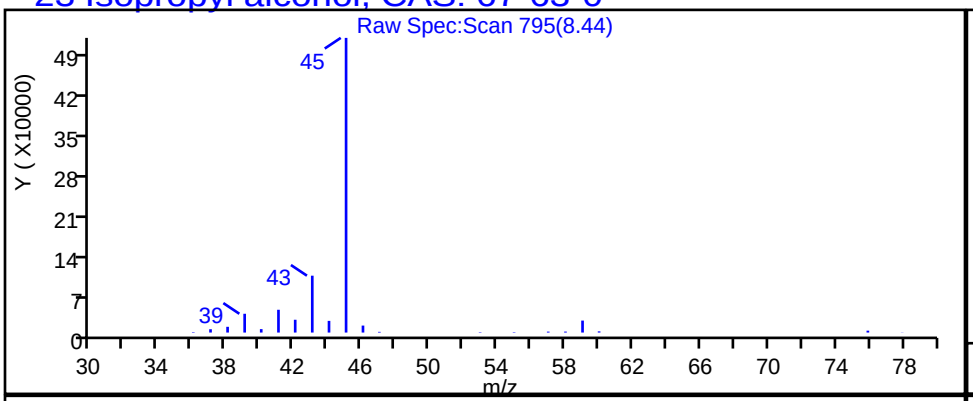


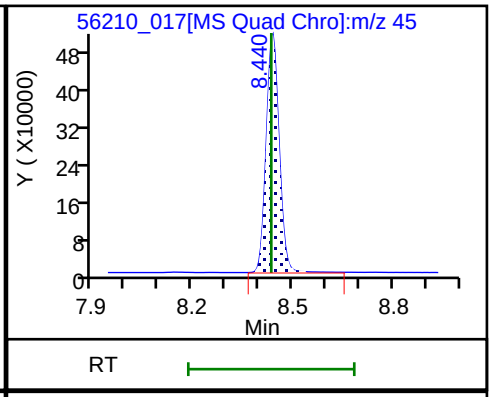


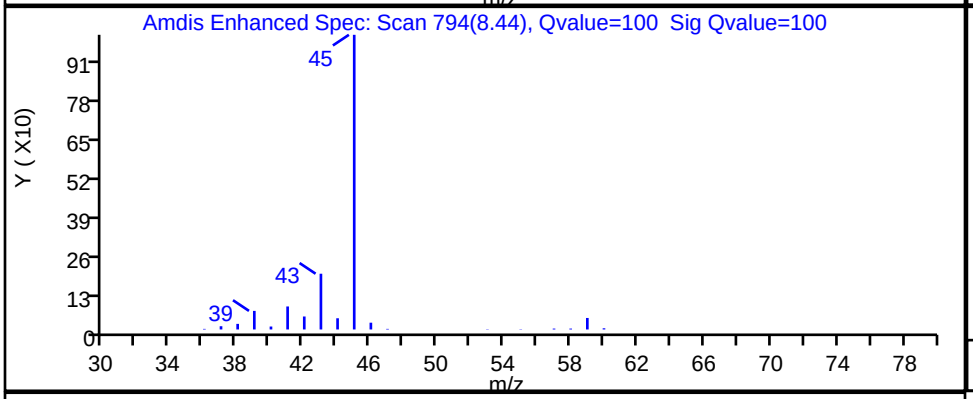
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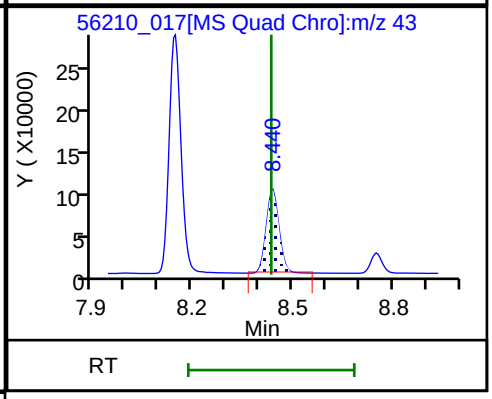
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Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

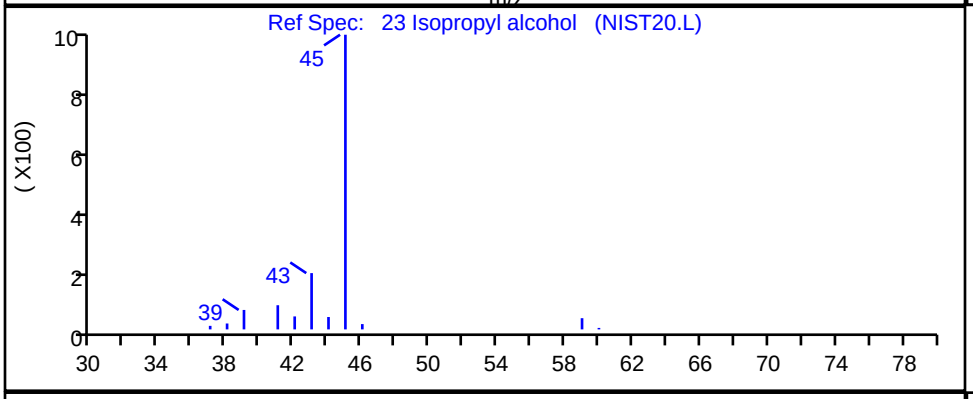
23 Isopropyl alcohol, CAS: 67-63-0

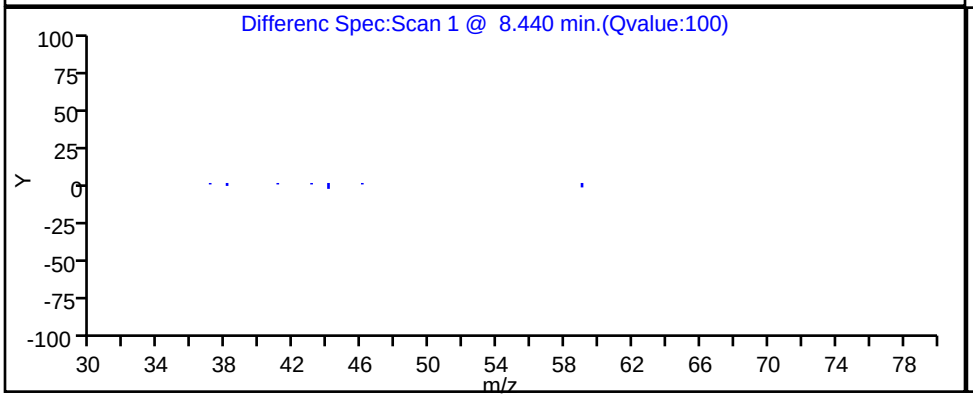


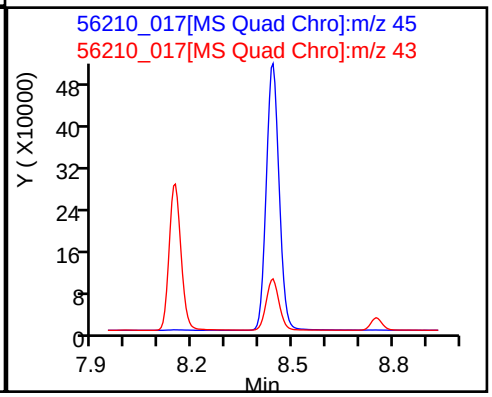








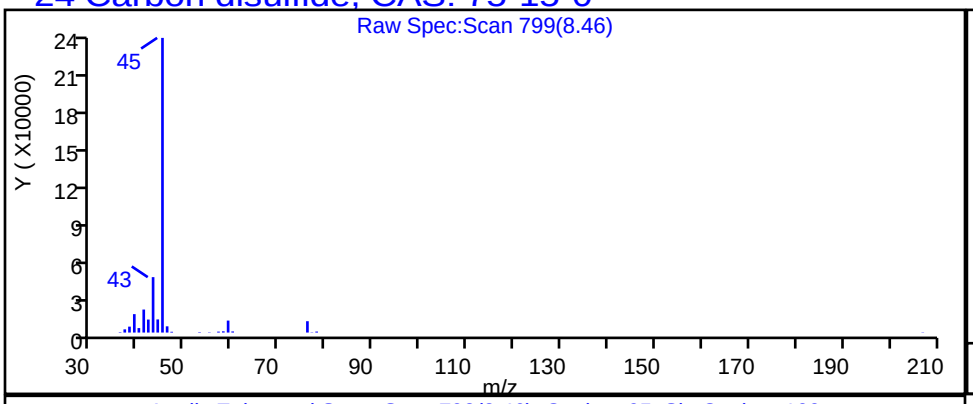


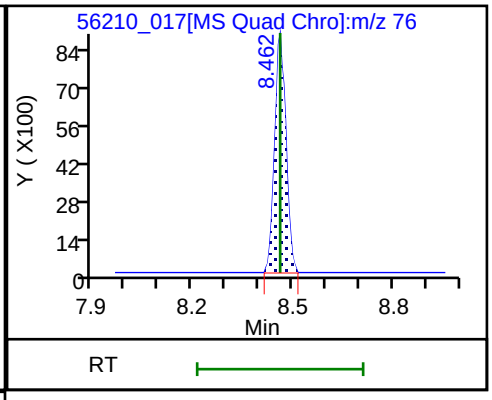


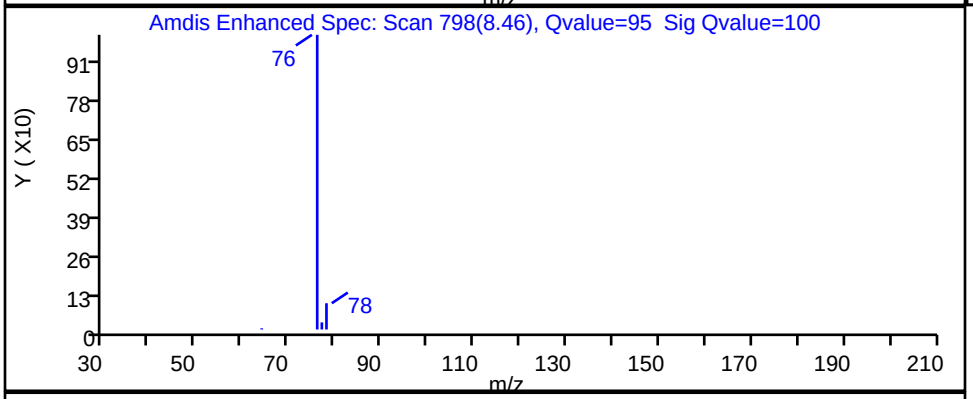
Eurofins Burlington

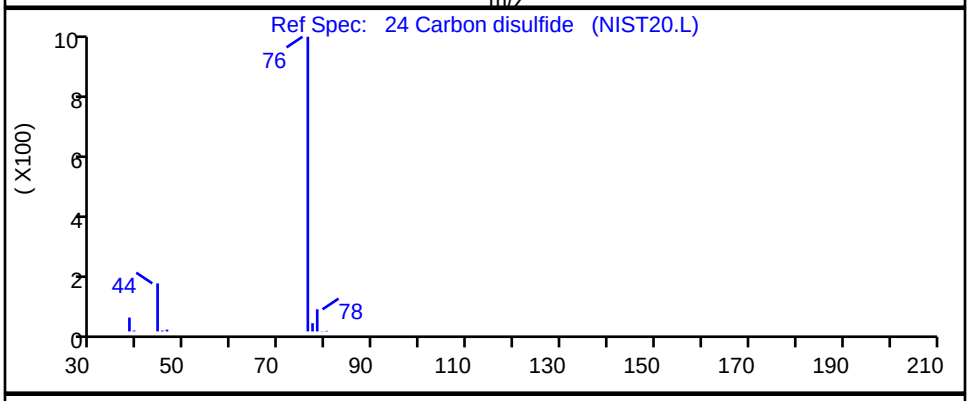
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Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

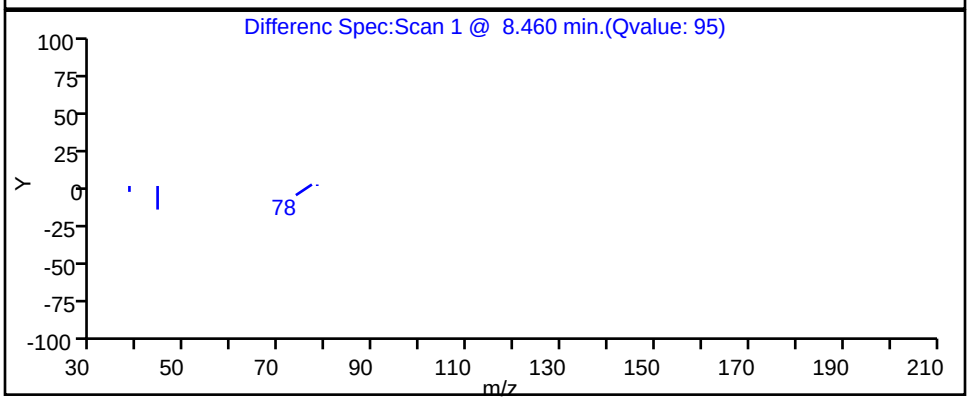
24 Carbon disulfide, CAS: 75-15-0







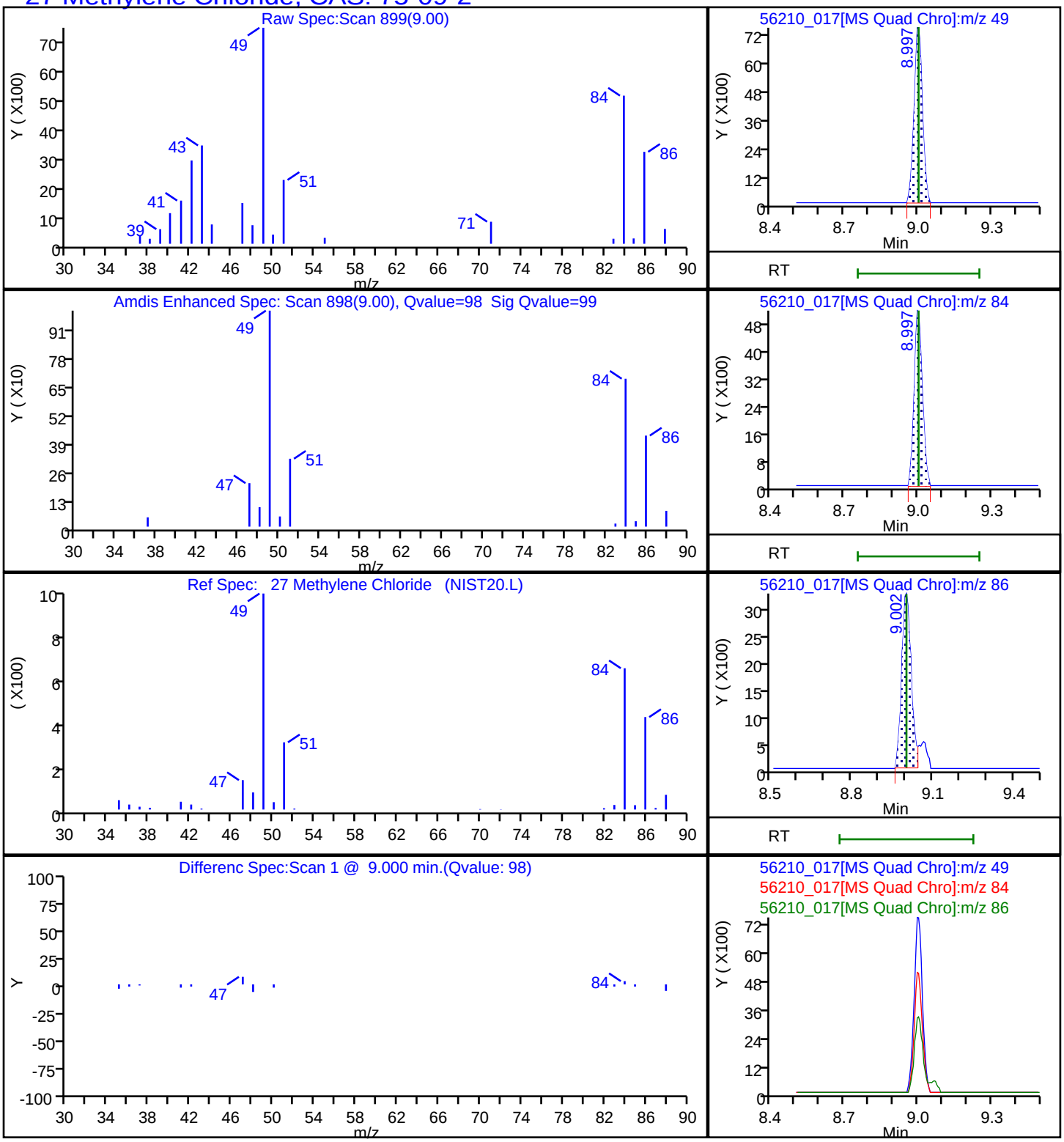




Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D
Injection Date: 06-Jul-2023 21:21:26 Instrument ID: CHAN.i
Lims ID: 200-68952-A-2 Lab Sample ID: 200-68952-2
Client ID: Factory Blower Effluent (FB-2)
Operator ID: ALS Bottle#: 0 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

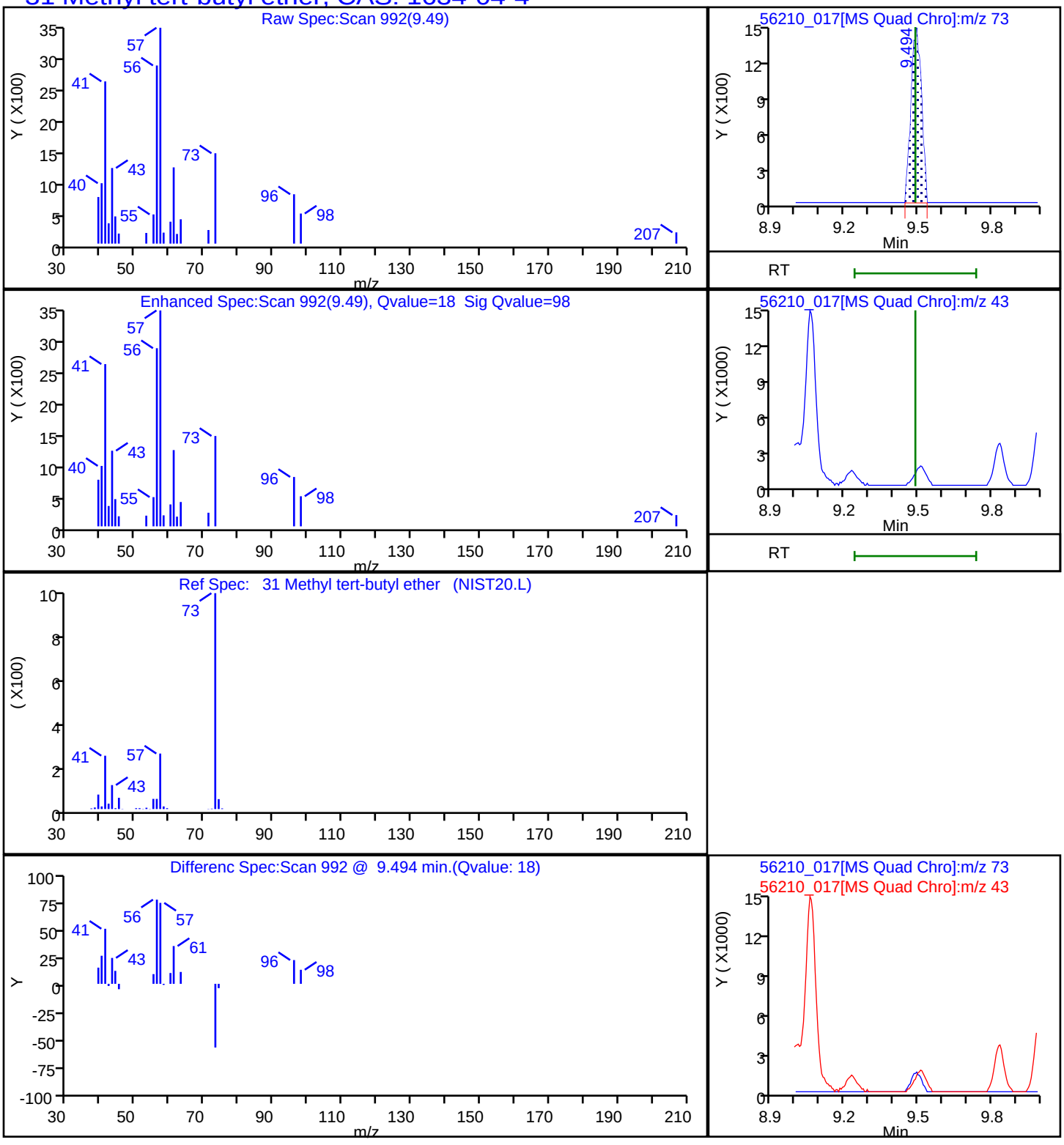
27 Methylene Chloride, CAS: 75-09-2



Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D				
Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

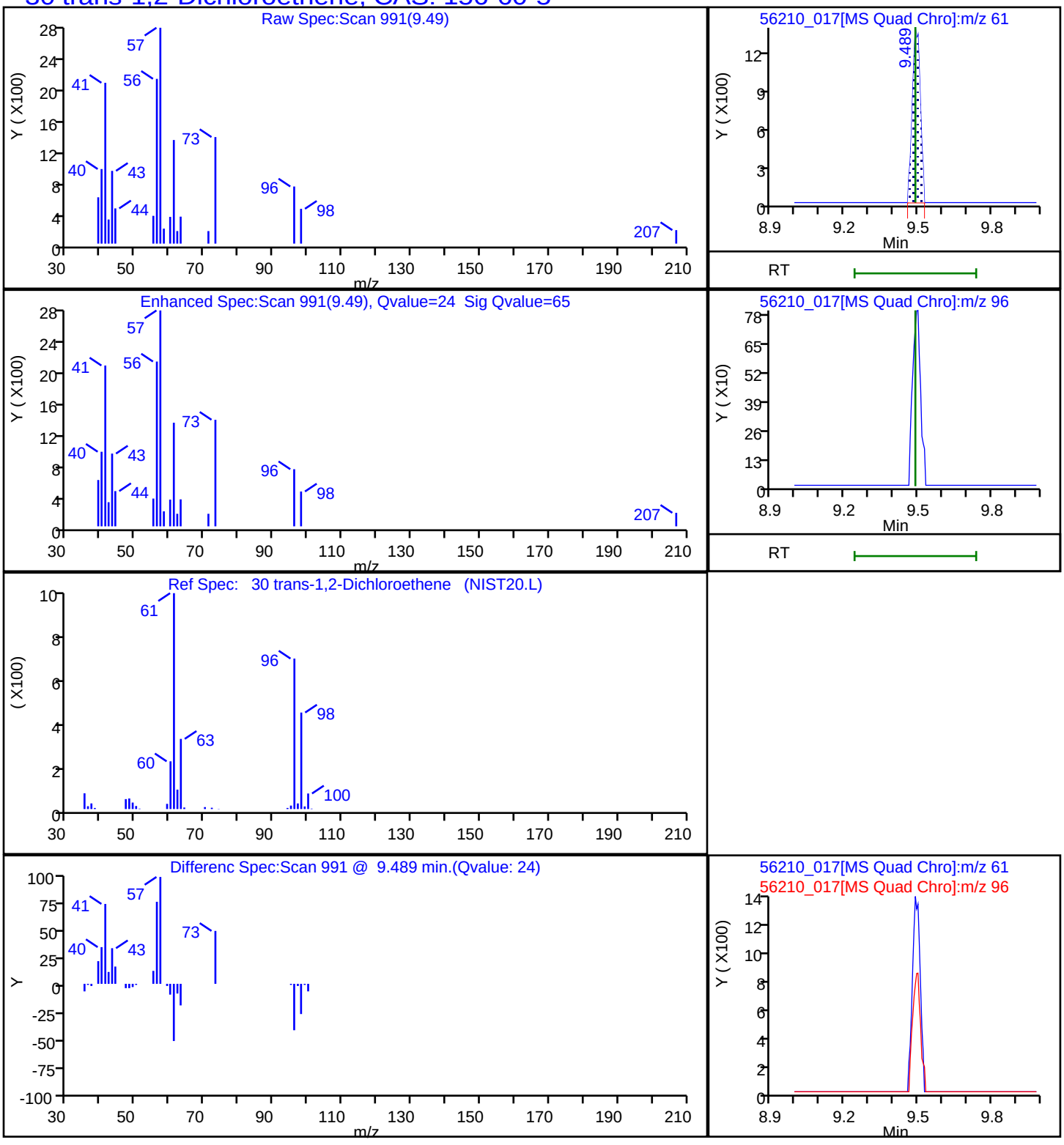
31 Methyl tert-butyl ether, CAS: 1634-04-4



Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D				
Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

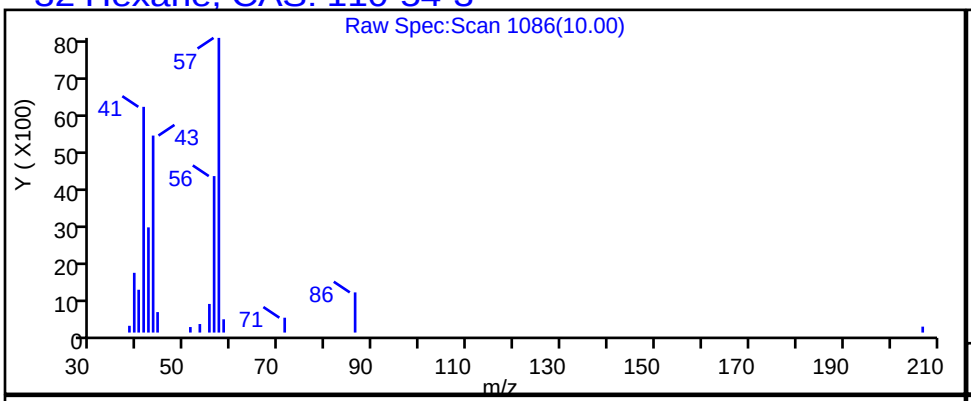
30 trans-1,2-Dichloroethene, CAS: 156-60-5

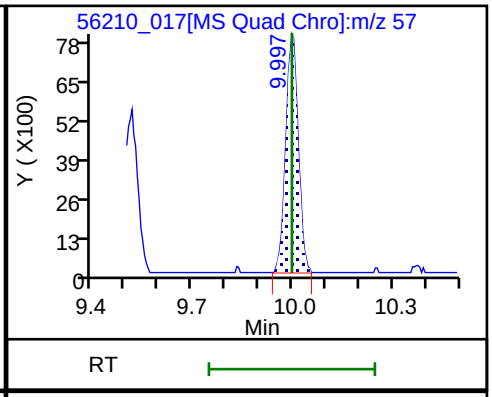


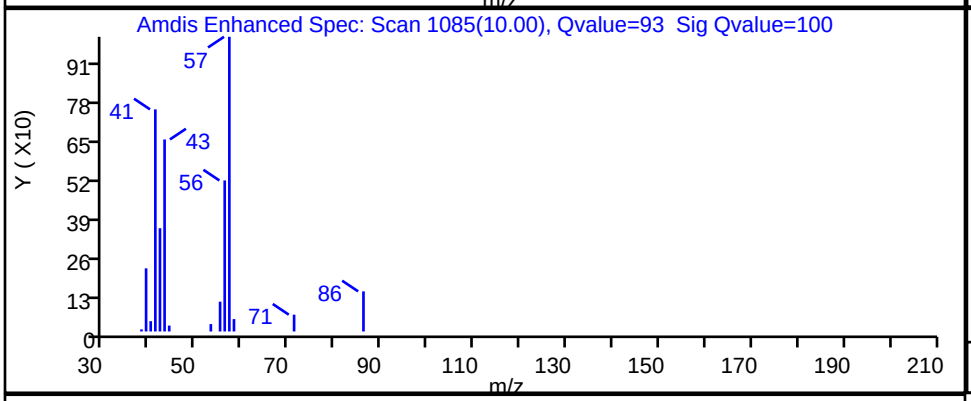
Eurofins Burlington

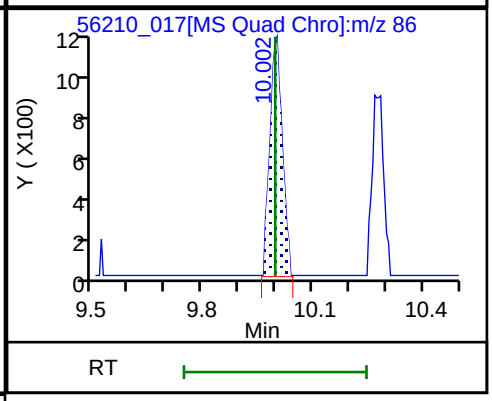
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Injection Date: 06-Jul-2023 21:21:26 Instrument ID: CHAN.i
Lims ID: 200-68952-A-2 Lab Sample ID: 200-68952-2
Client ID: Factory Blower Effluent (FB-2)
Operator ID: ALS Bottle#: 0 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

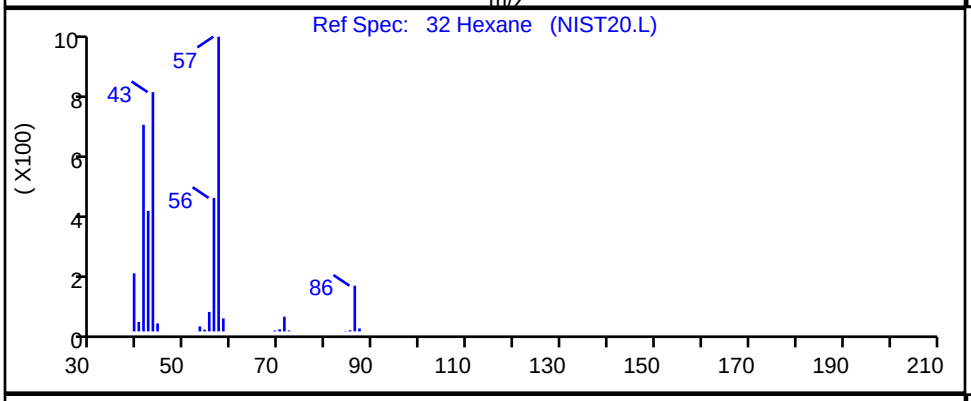
32 Hexane, CAS: 110-54-3

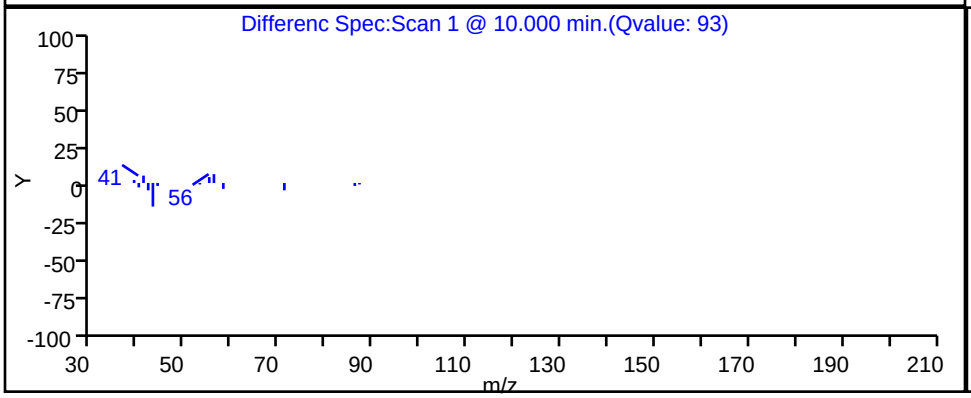


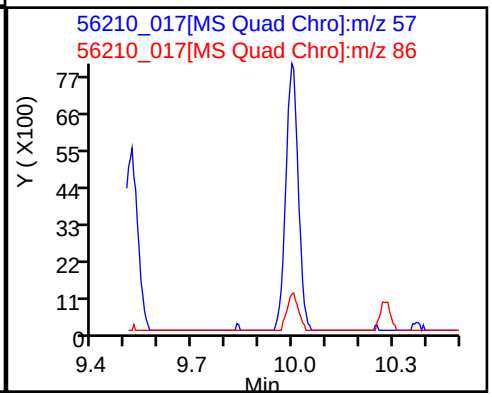








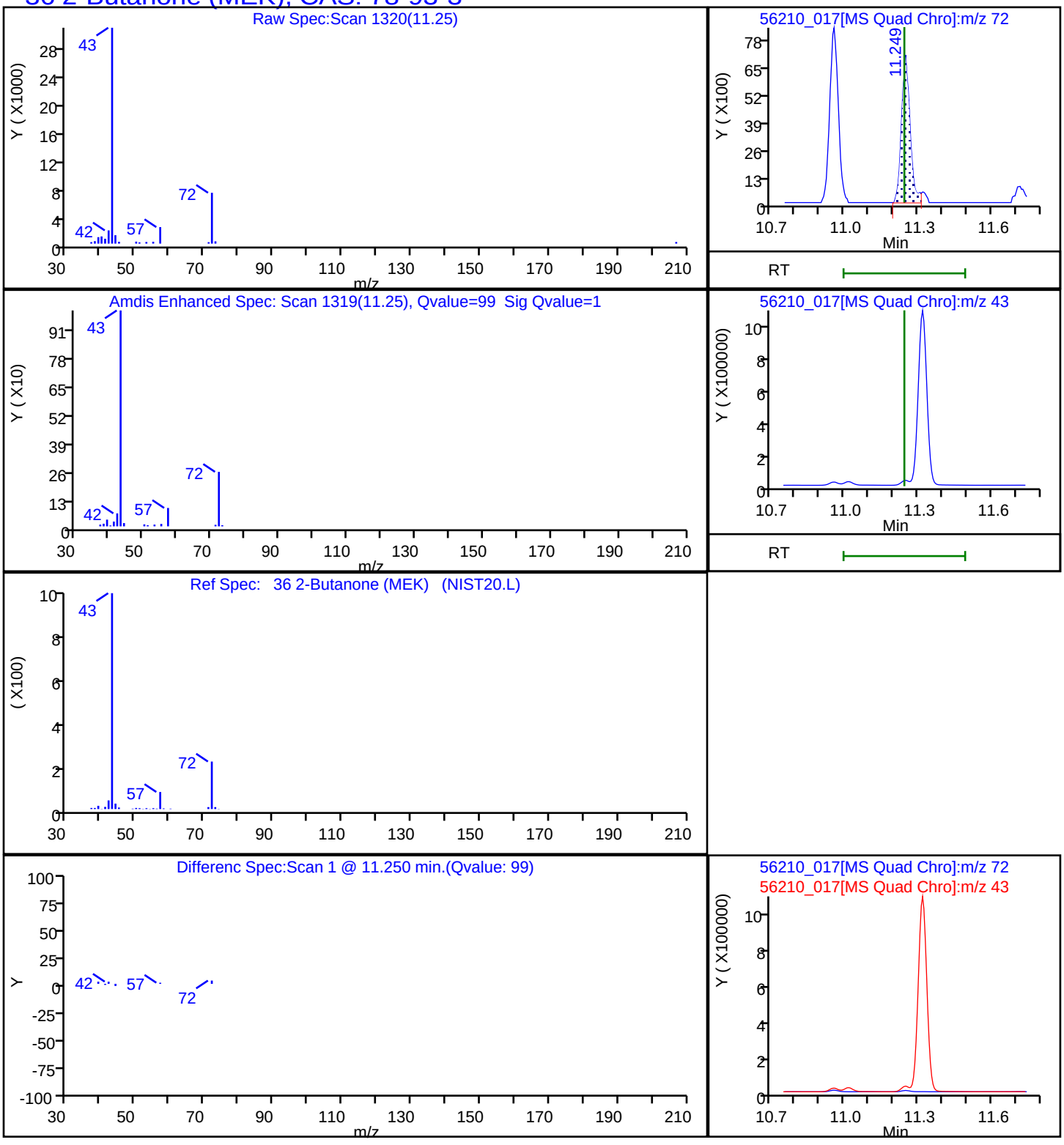




Eurofins Burlington

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Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

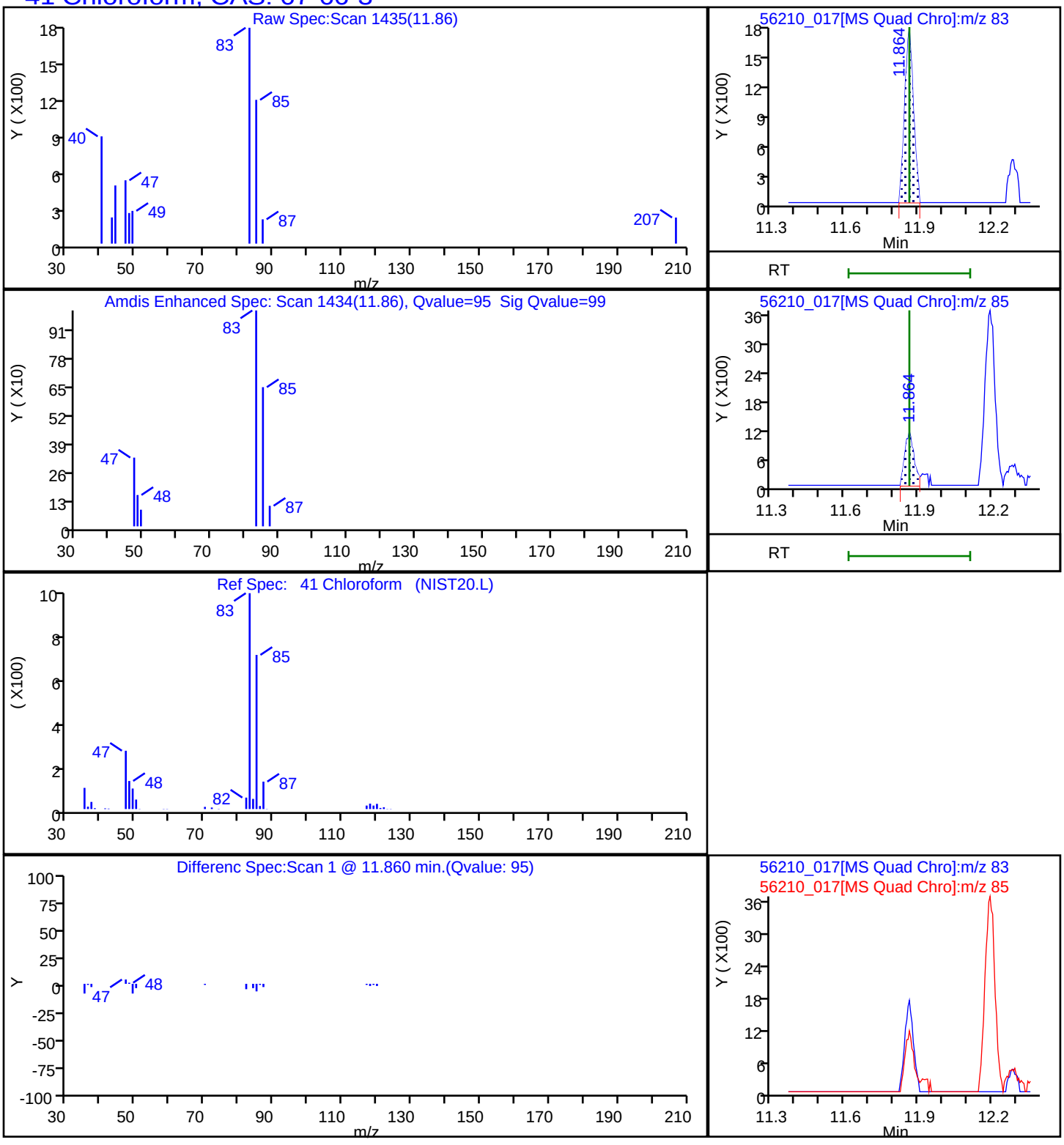
36 2-Butanone (MEK), CAS: 78-93-3



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D
Injection Date: 06-Jul-2023 21:21:26 Instrument ID: CHAN.i
Lims ID: 200-68952-A-2 Lab Sample ID: 200-68952-2
Client ID: Factory Blower Effluent (FB-2)
Operator ID: ALS Bottle#: 0 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

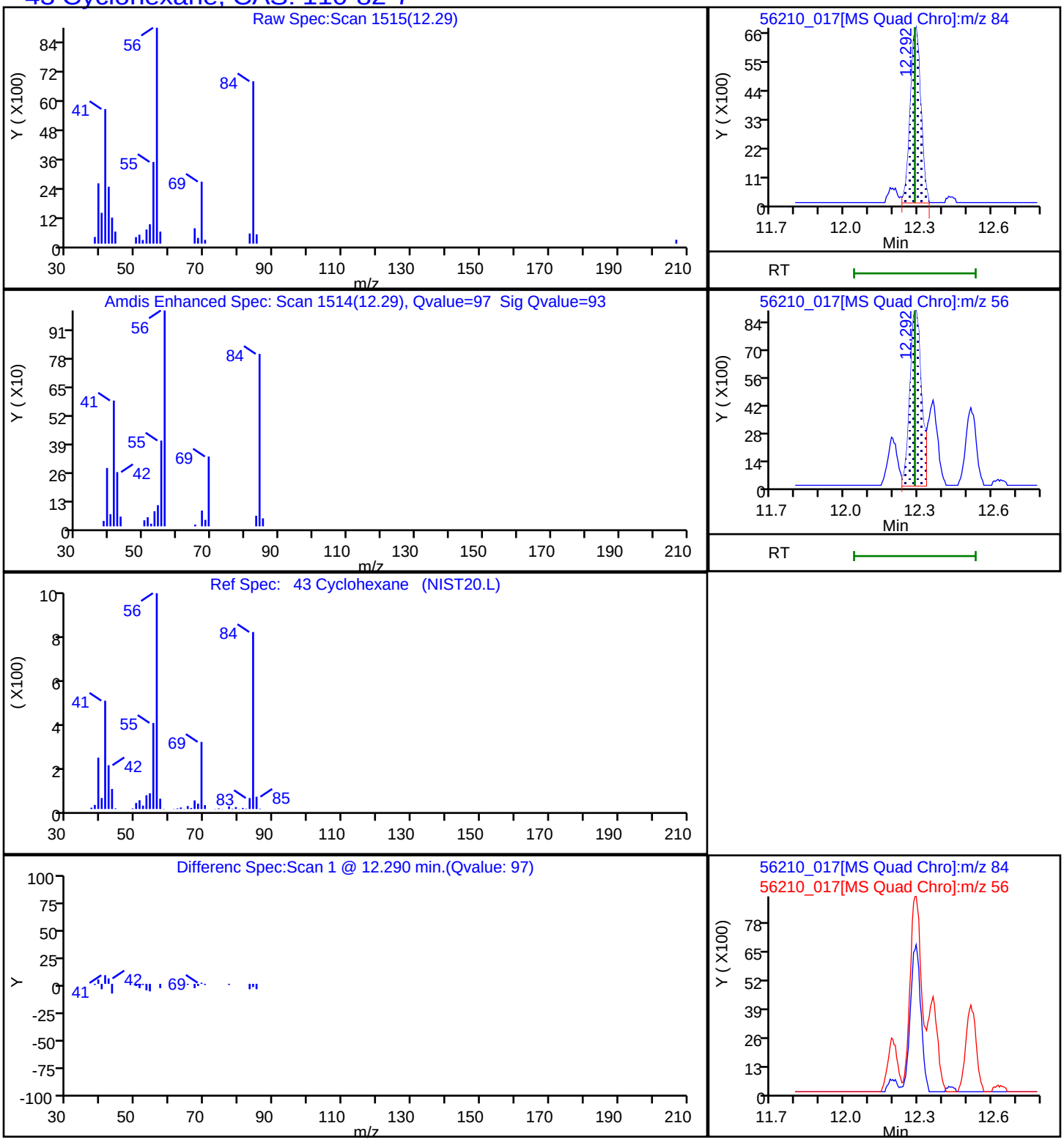
41 Chloroform, CAS: 67-66-3



Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D				
Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

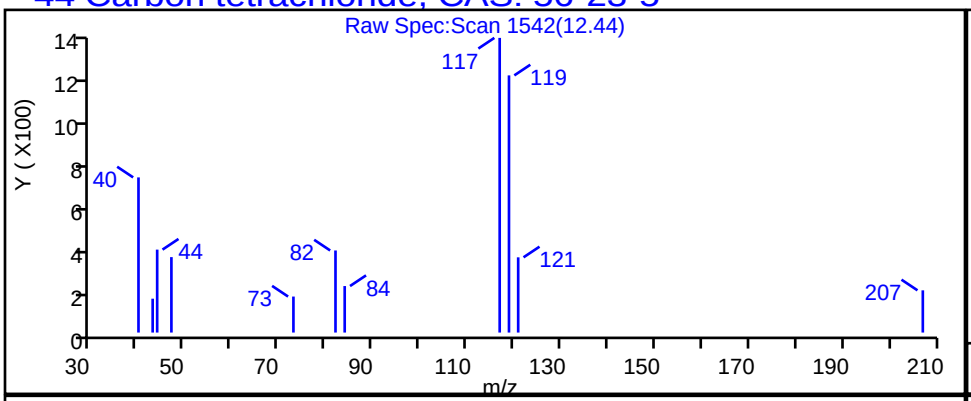
43 Cyclohexane, CAS: 110-82-7

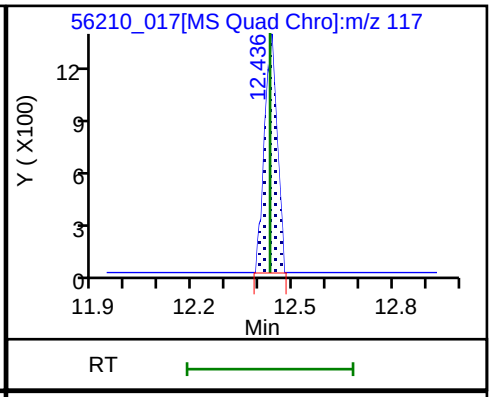


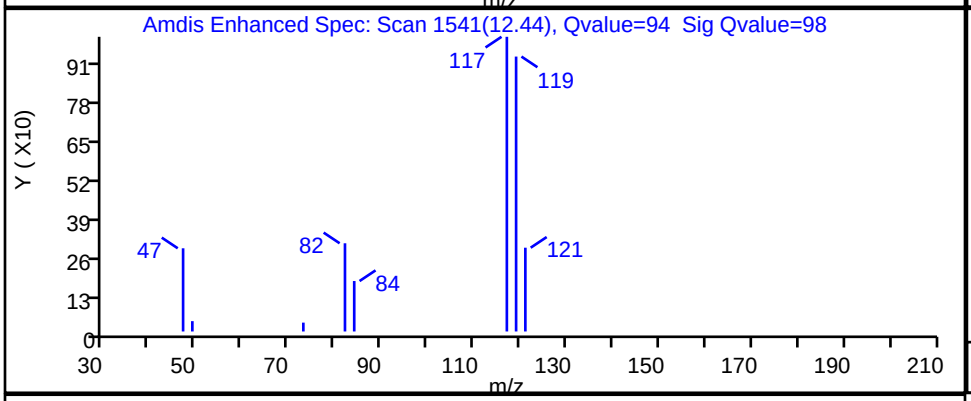
Eurofins Burlington

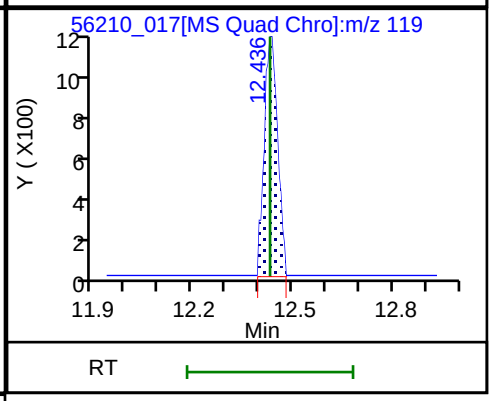
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Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

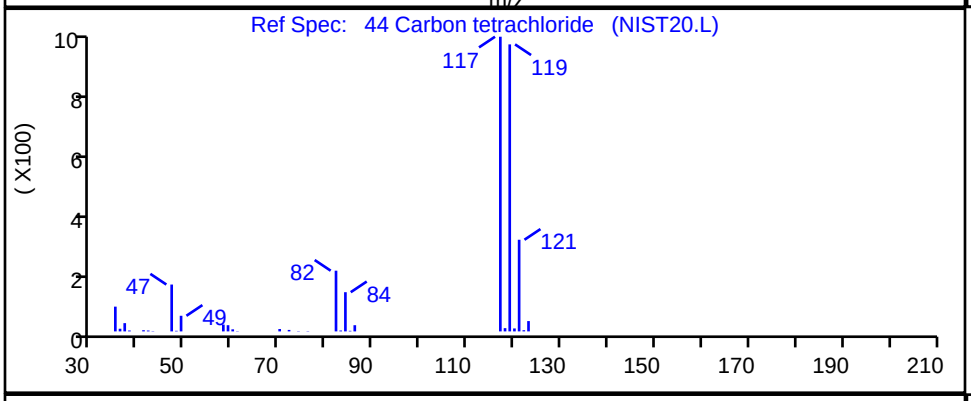
44 Carbon tetrachloride, CAS: 56-23-5

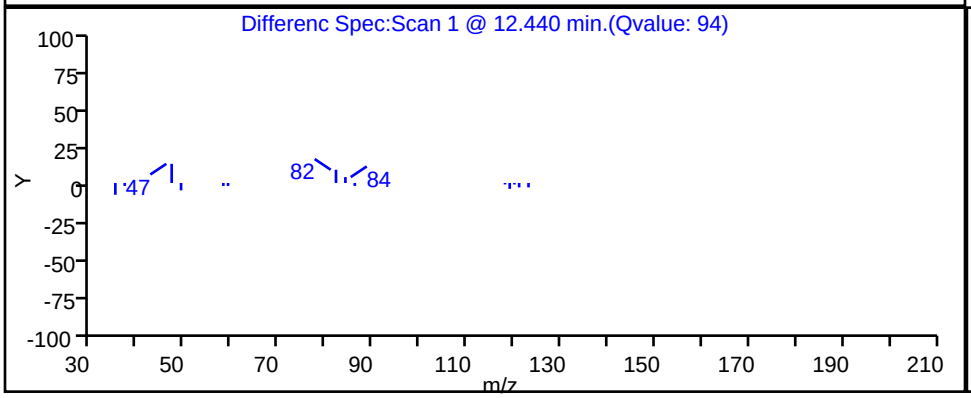


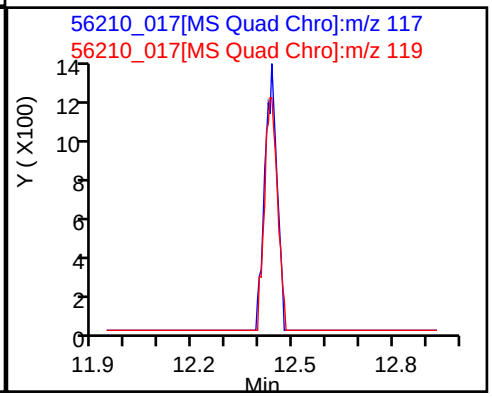








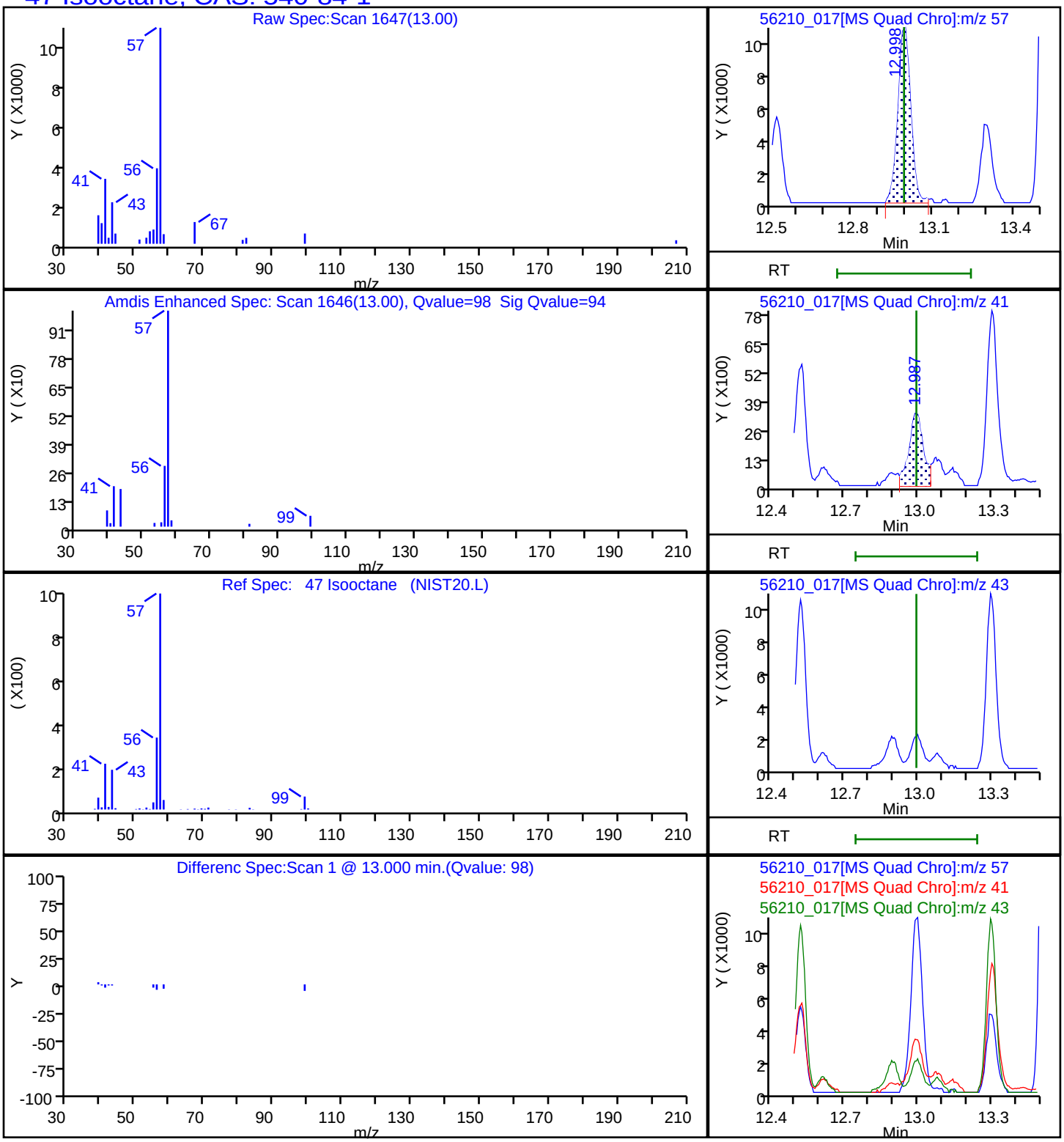




Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D		
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Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2
Client ID:	Factory Blower Effluent (FB-2)		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN

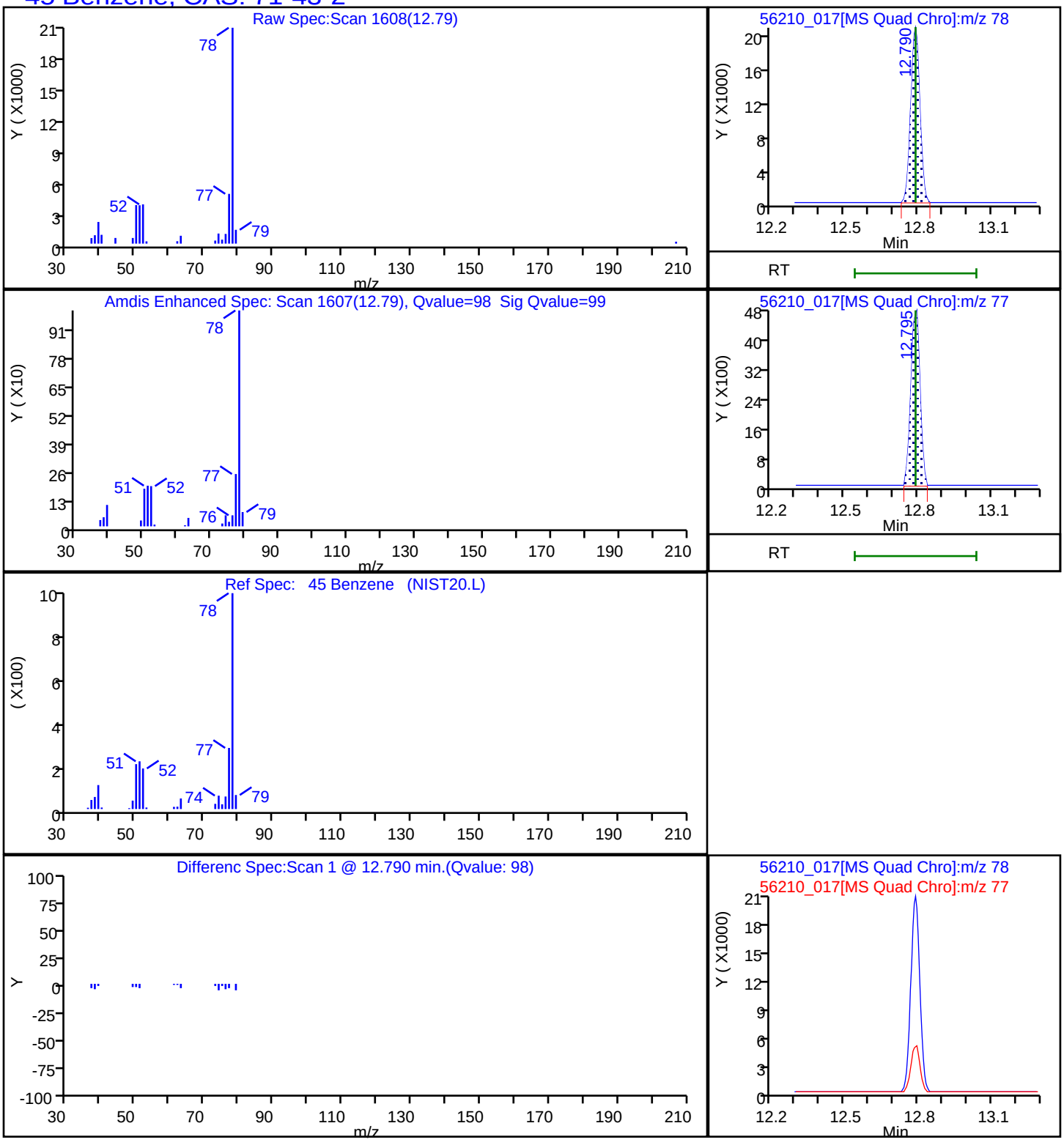
47 Isooctane, CAS: 540-84-1



Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D				
Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

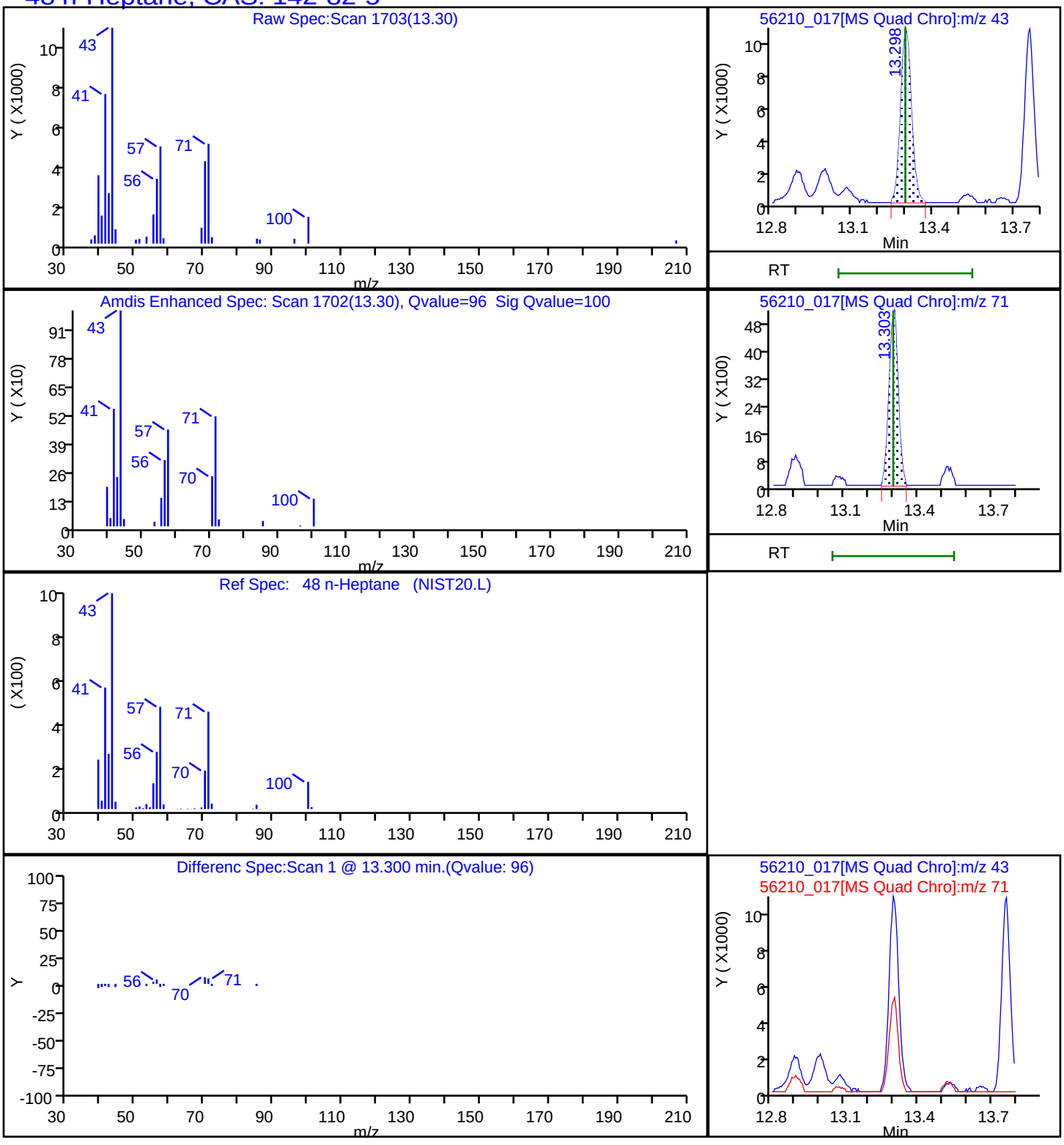
45 Benzene, CAS: 71-43-2



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D
Injection Date: 06-Jul-2023 21:21:26 Instrument ID: CHAN.i
Lims ID: 200-68952-A-2 Lab Sample ID: 200-68952-2
Client ID: Factory Blower Effluent (FB-2)
Operator ID: ALS Bottle#: 0 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

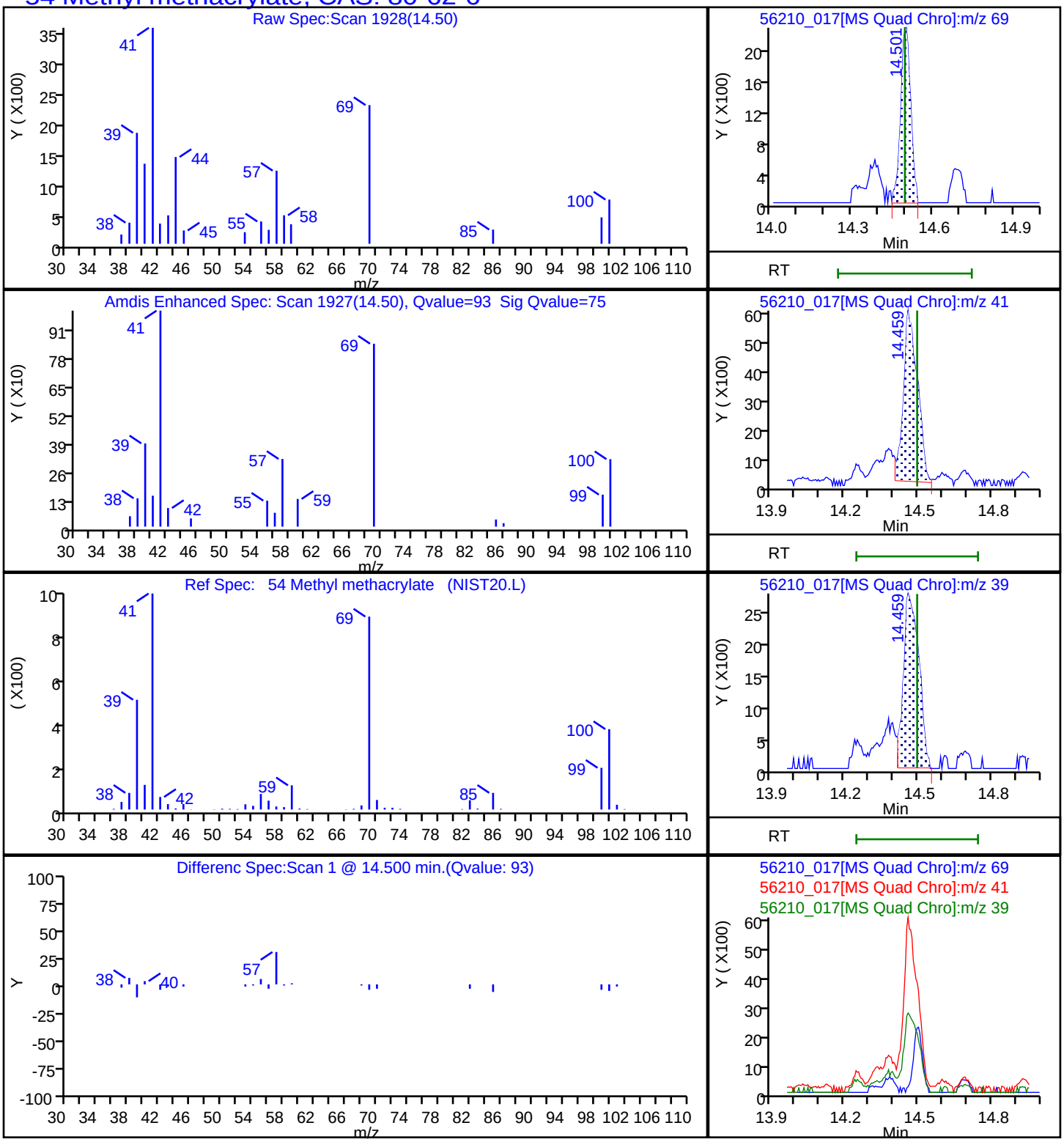
48 n-Heptane, CAS: 142-82-5



Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D				
Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

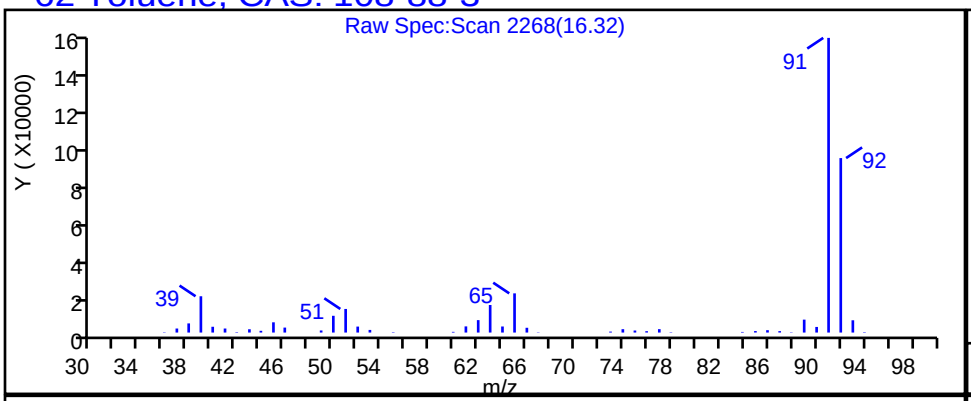
54 Methyl methacrylate, CAS: 80-62-6

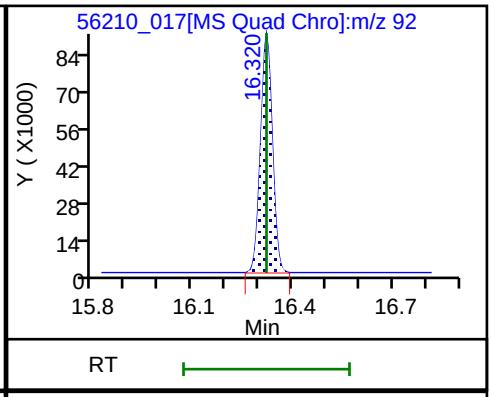


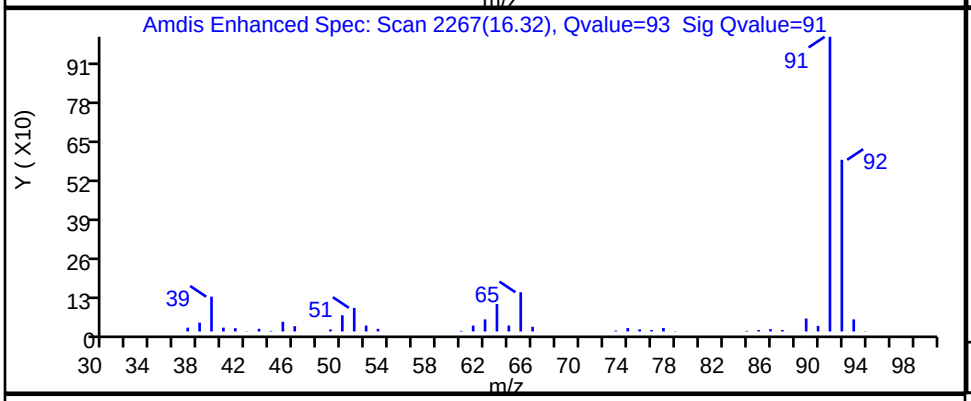
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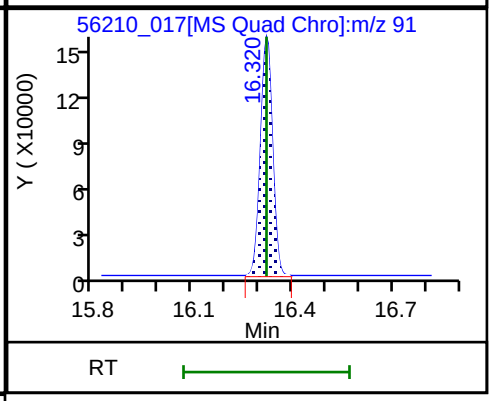
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Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

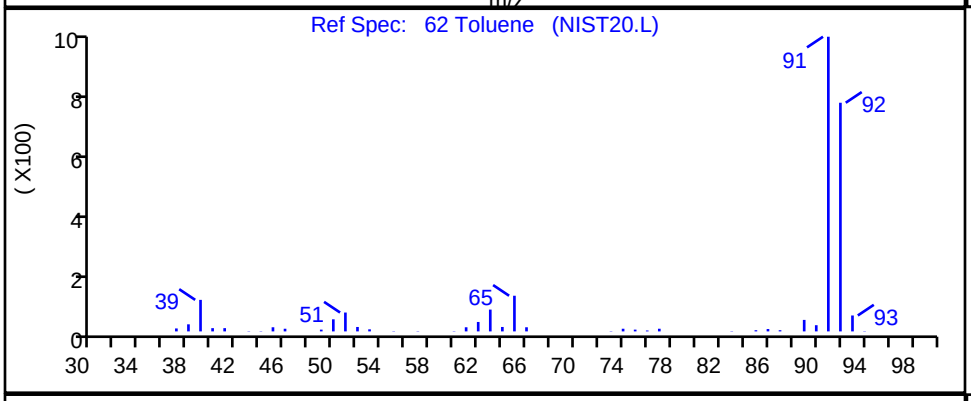
62 Toluene, CAS: 108-88-3

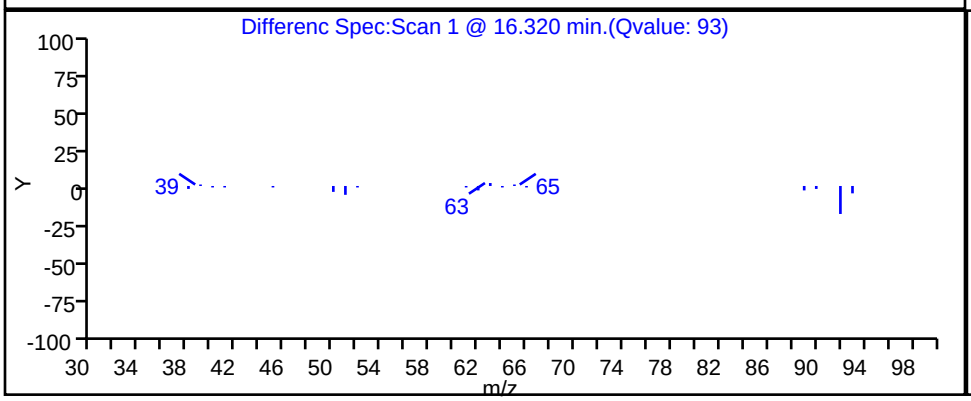


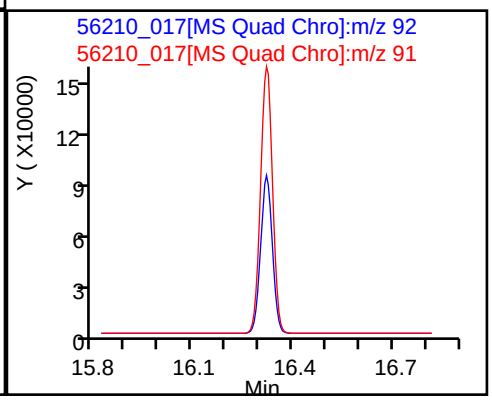








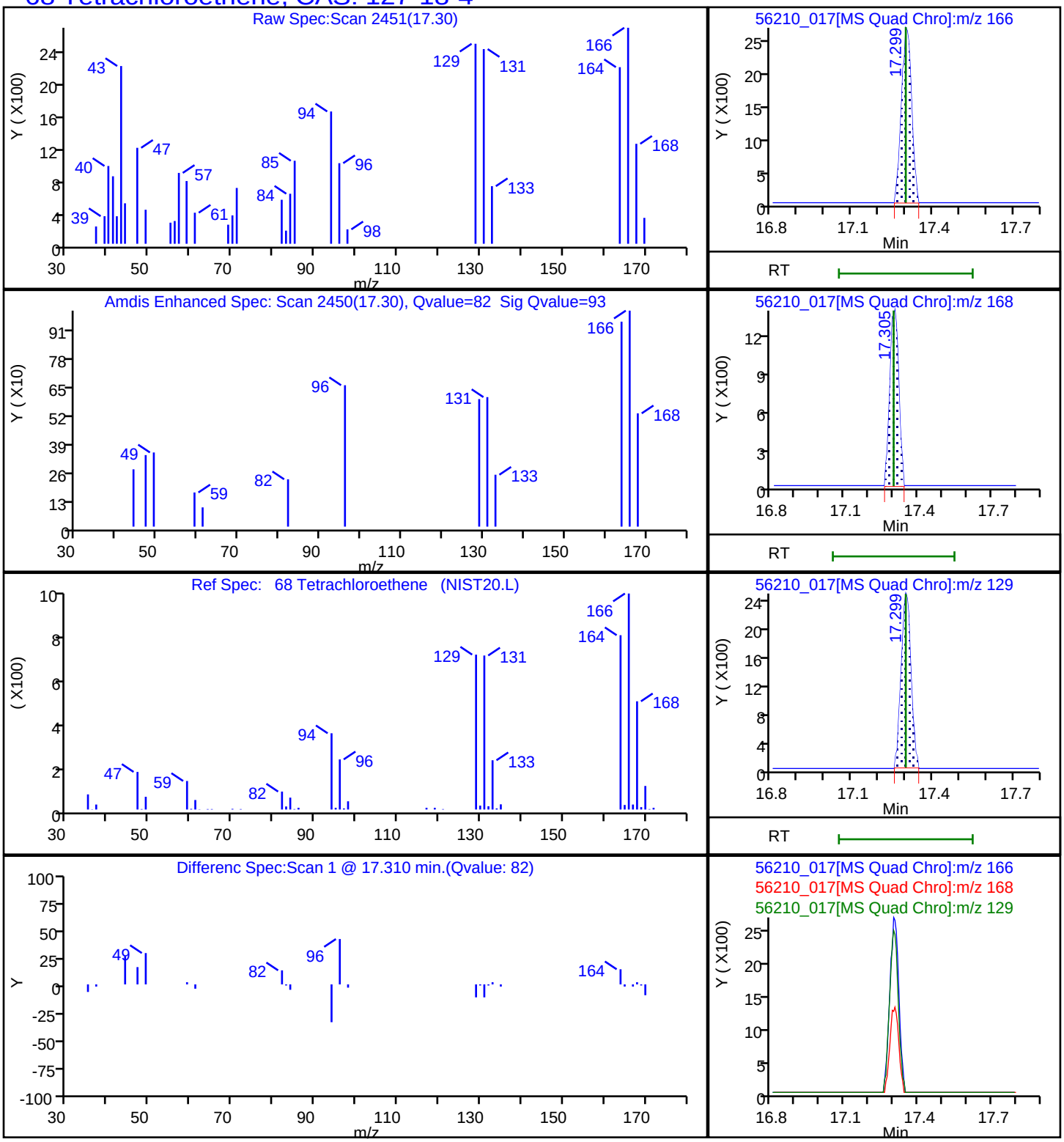




Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D		
Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2
Client ID:	Factory Blower Effluent (FB-2)		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN

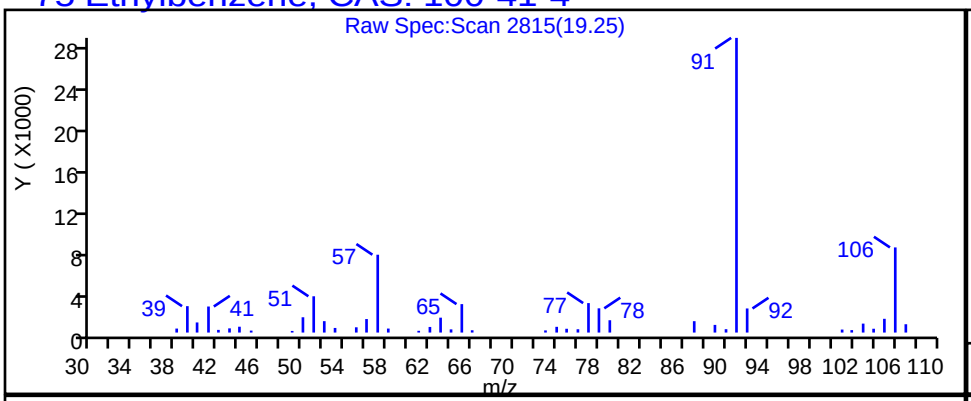
68 Tetrachloroethene, CAS: 127-18-4

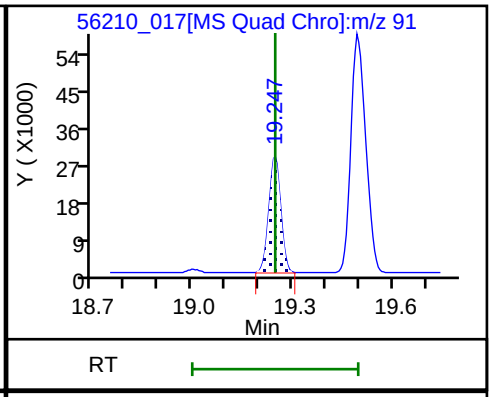


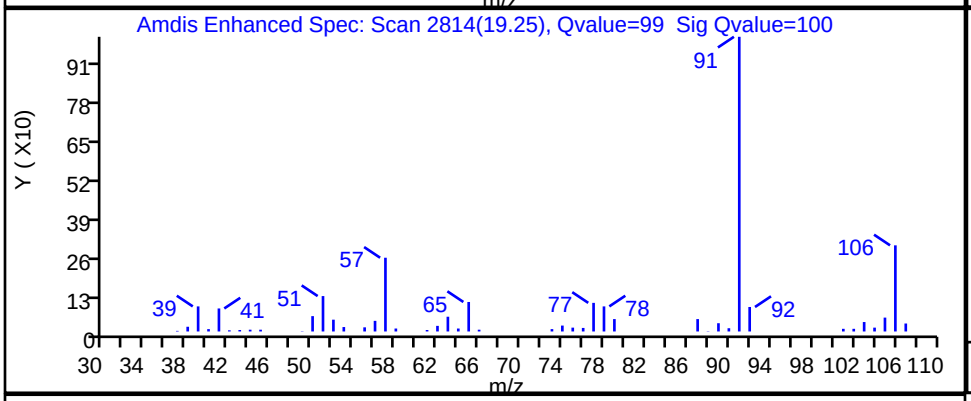
Eurofins Burlington

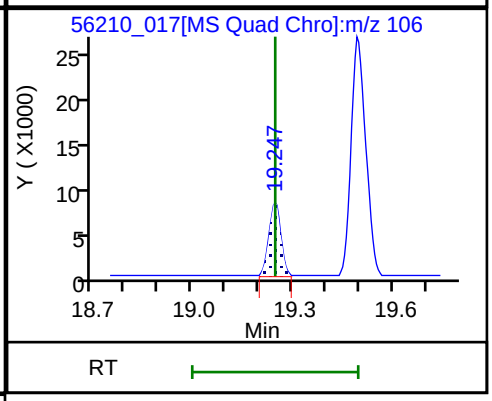
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Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

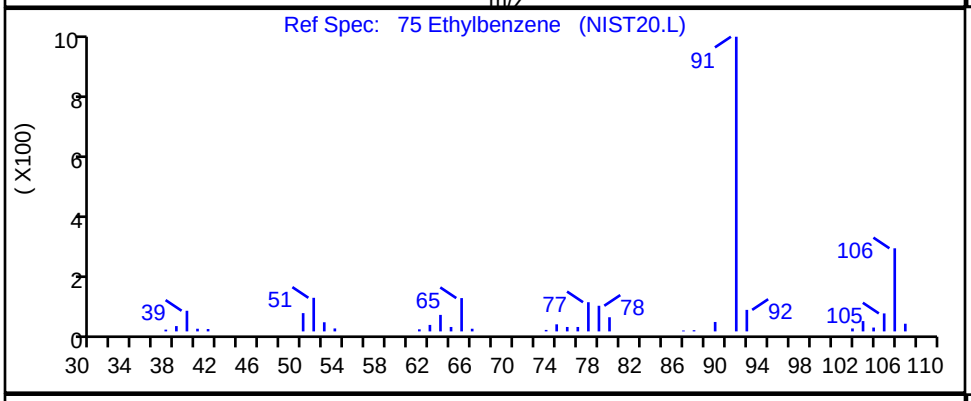
75 Ethylbenzene, CAS: 100-41-4

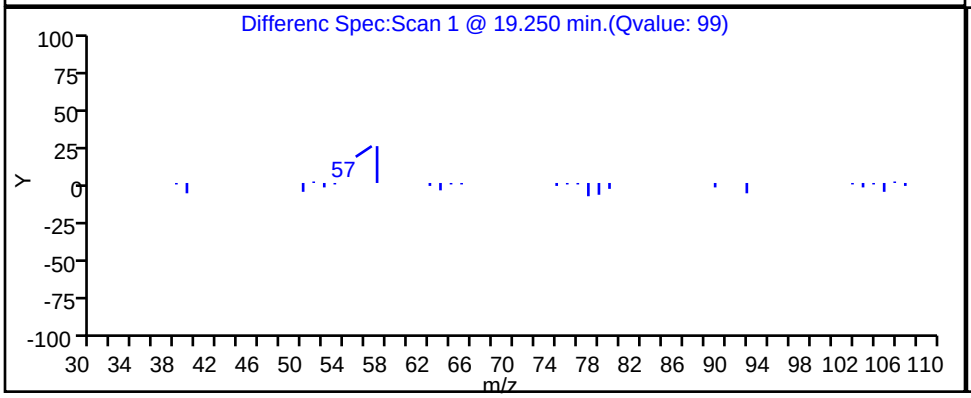


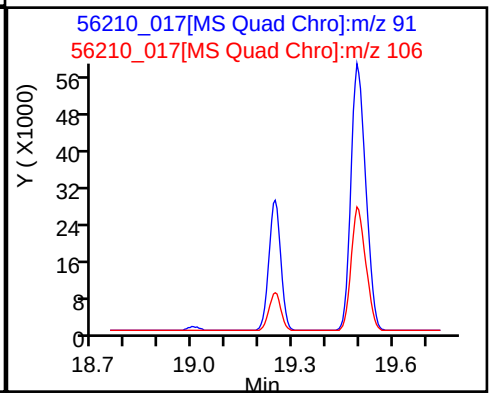








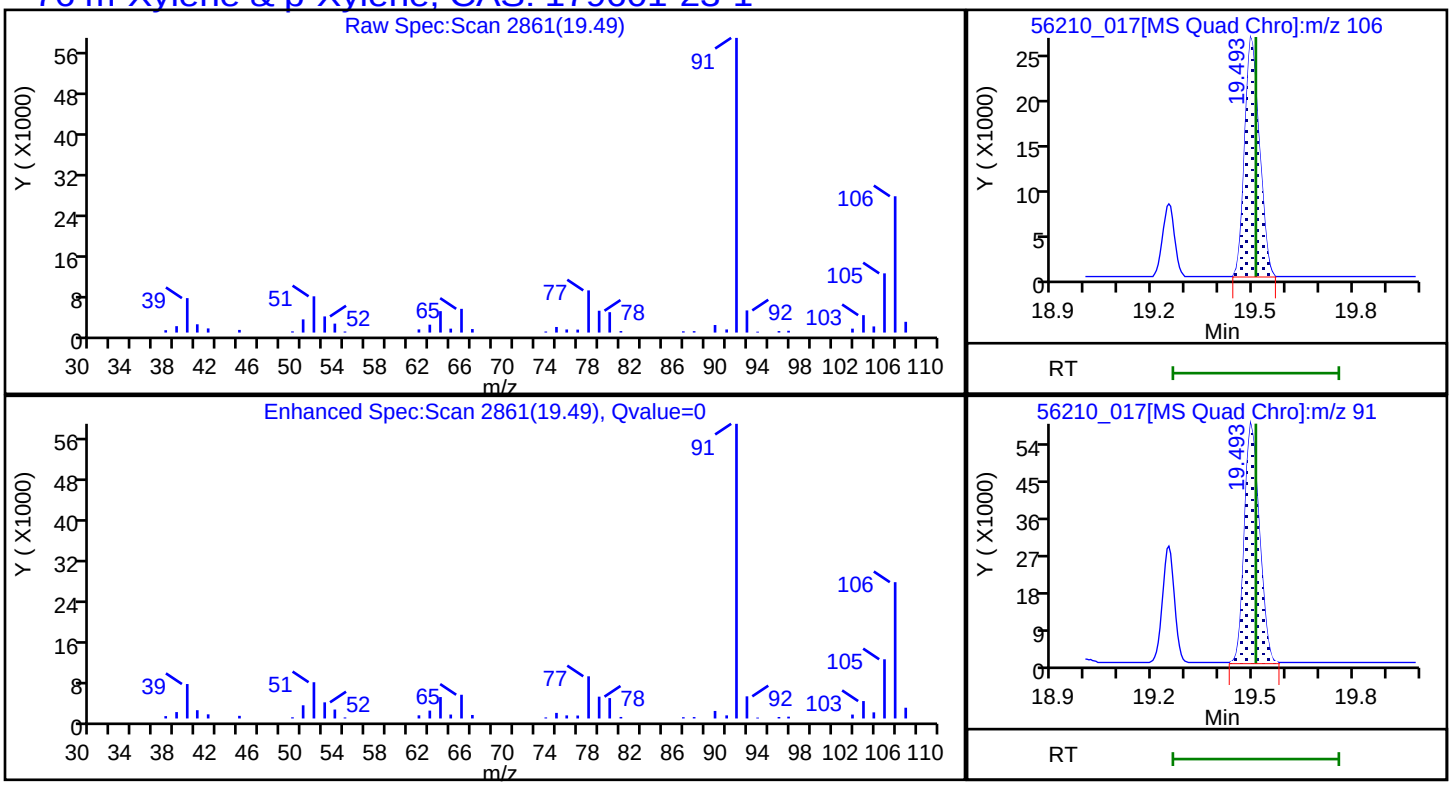


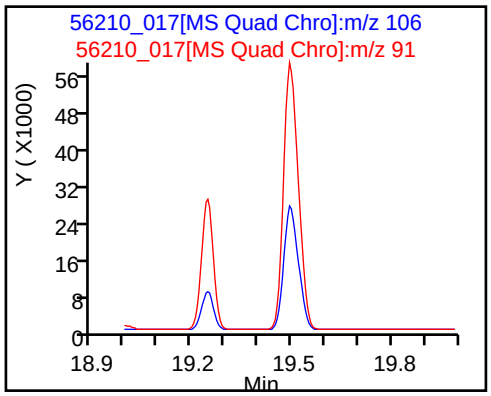


Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D				
Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 m-Xylene & p-Xylene, CAS: 179601-23-1

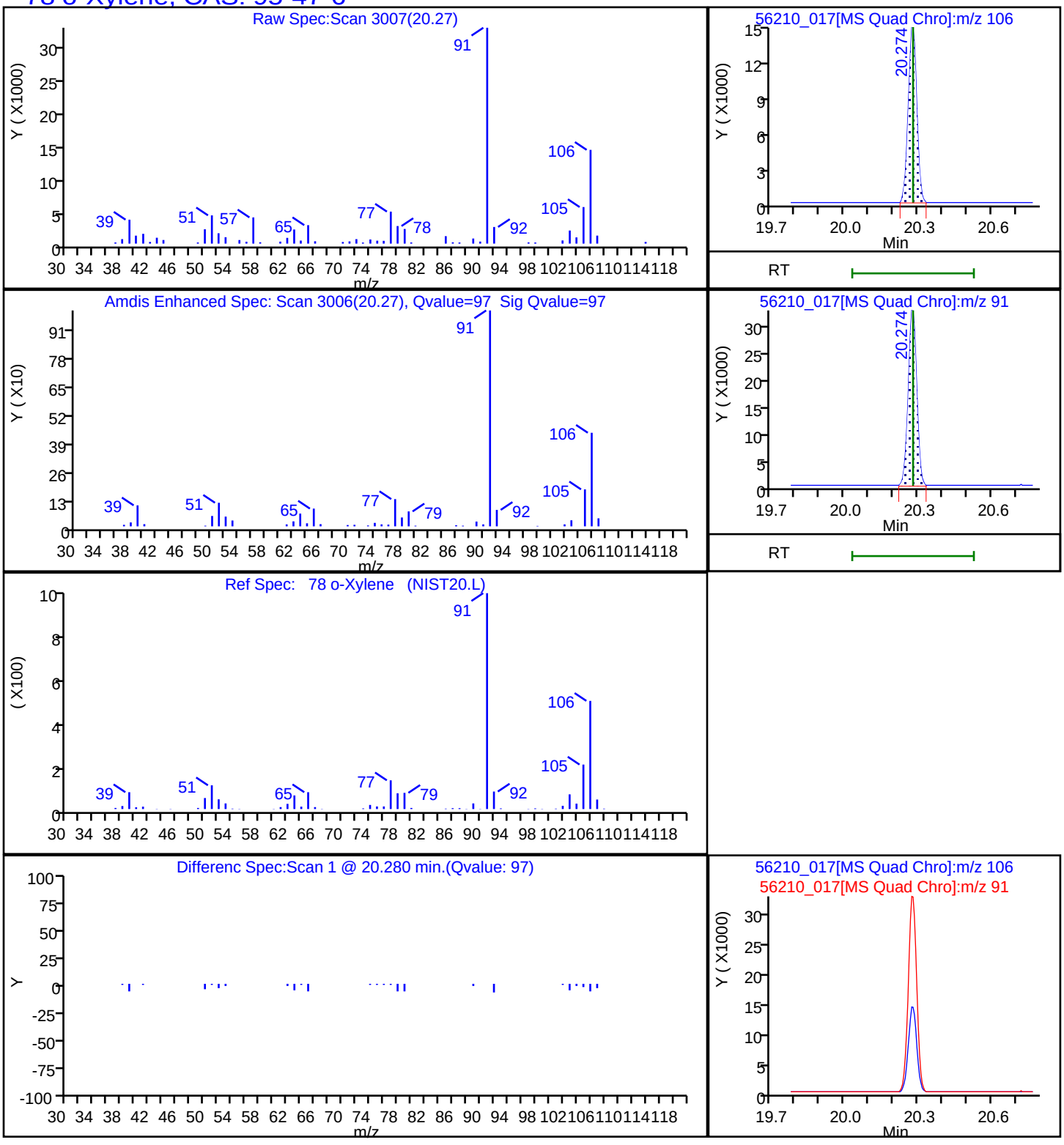




Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D		
Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2
Client ID:	Factory Blower Effluent (FB-2)		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN

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



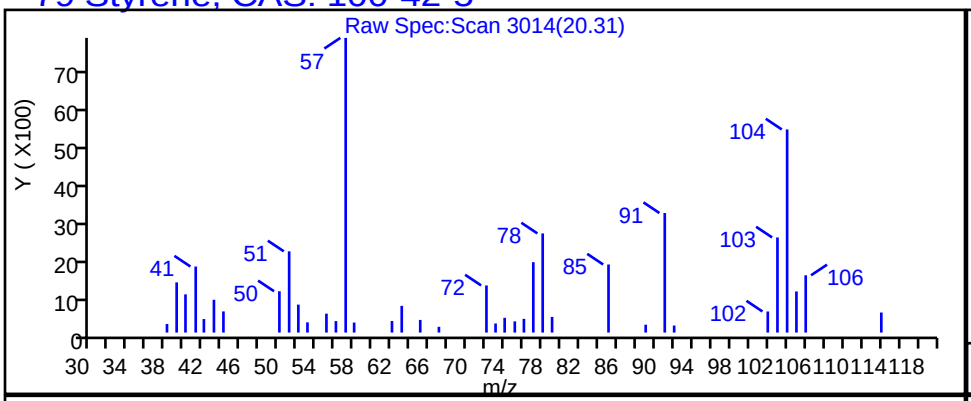
Report Date: 07-Jul-2023 10:07:25 Chrom Revision: 2.3 21-Jun-2023 17:36:34

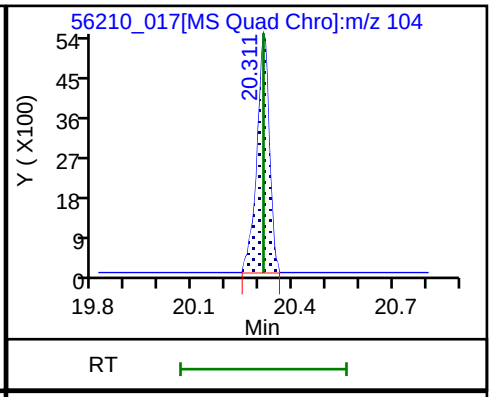
Eurofins Burlington

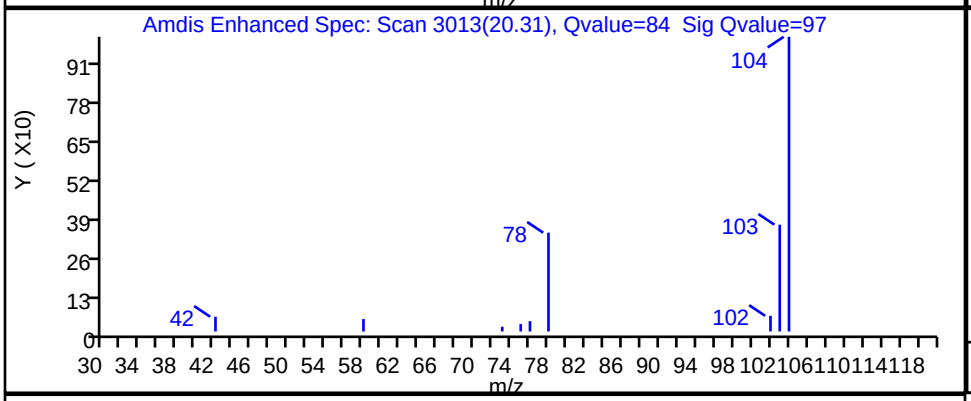
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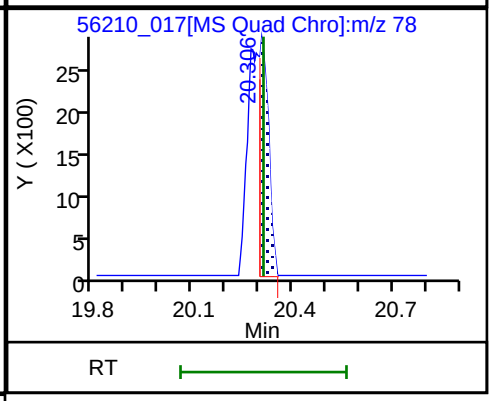
Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

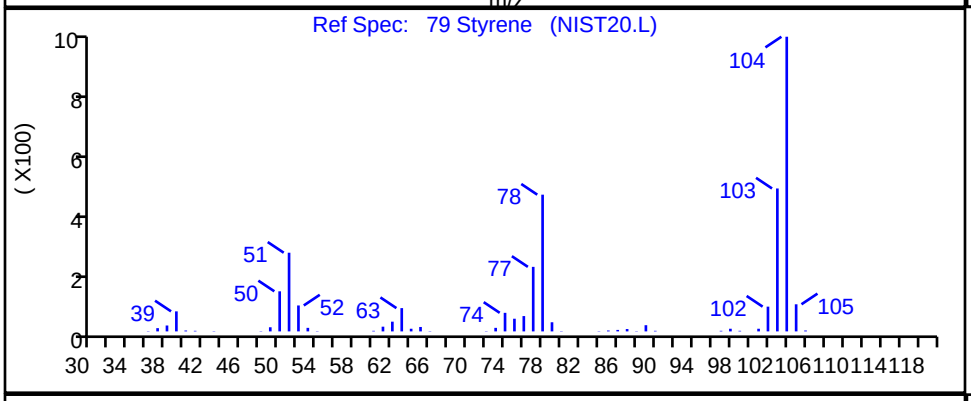
79 Styrene, CAS: 100-42-5

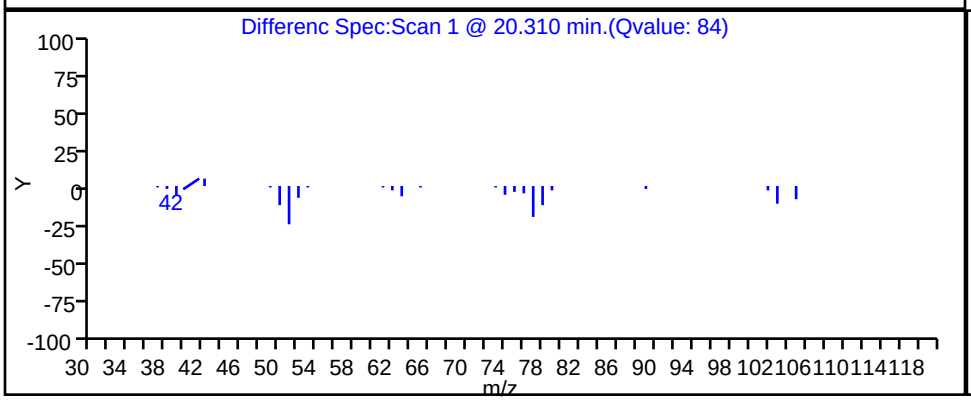


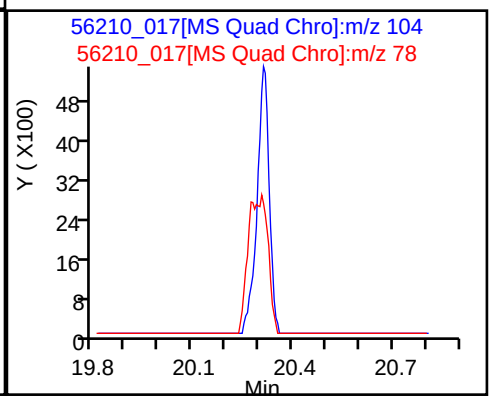










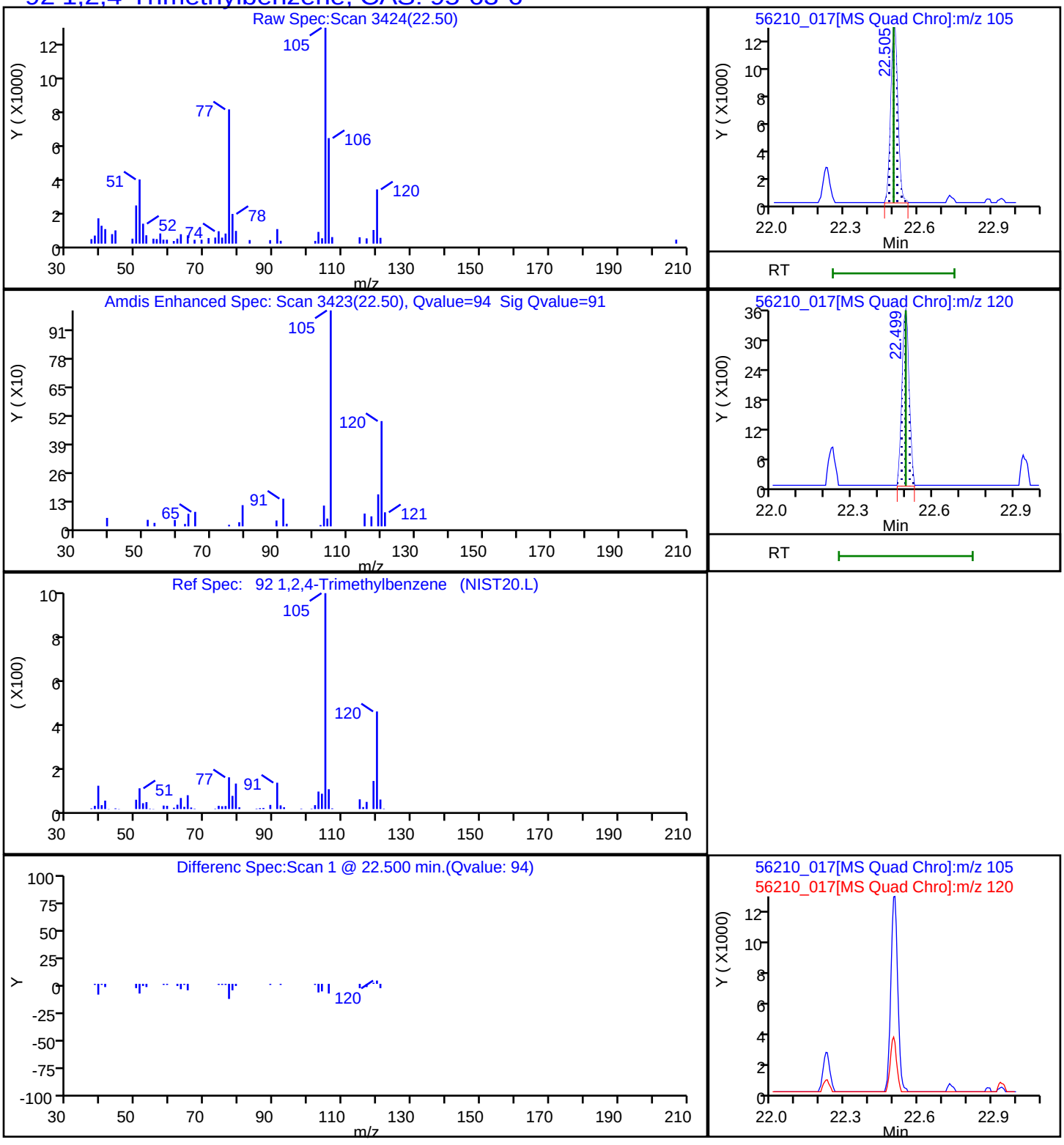


7/10/2023 1:16 PM

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D				
Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

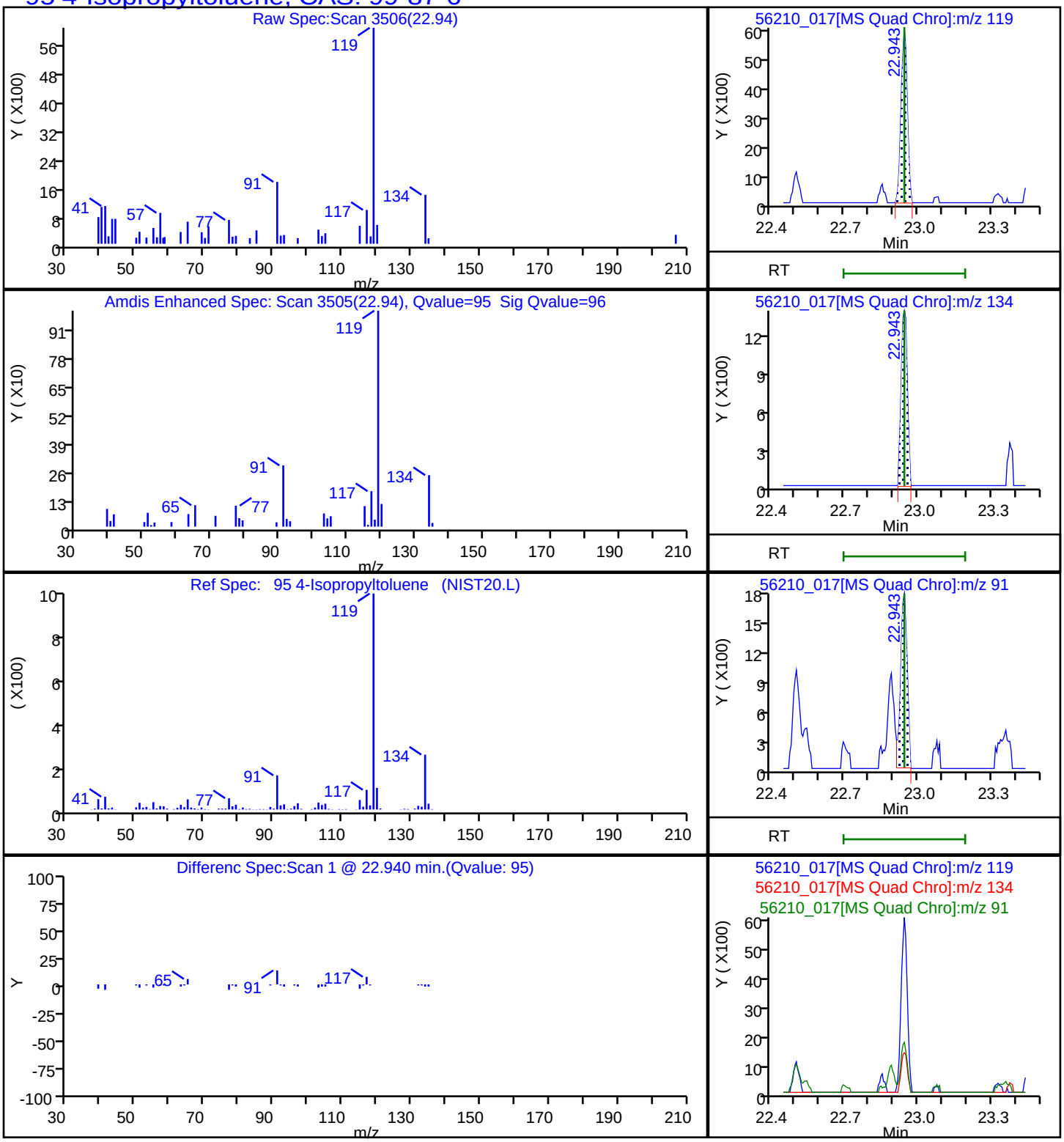
92 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D				
Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

95 4-Isopropyltoluene, CAS: 99-87-6



Manual Integration/User Assign Peak Report

Eurofins Burlington

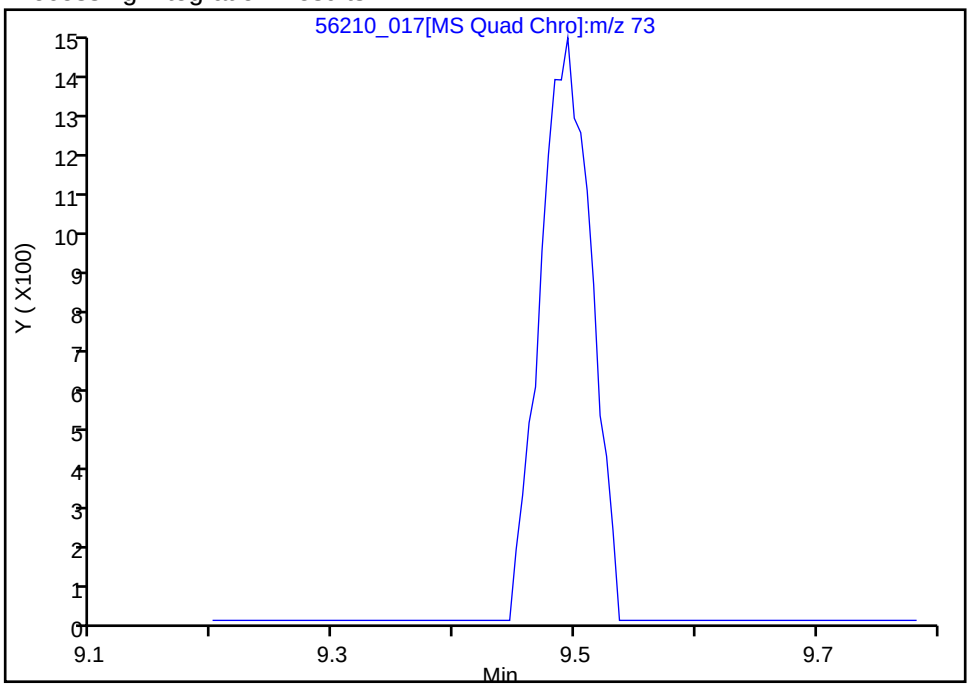
Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D				
Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

31 Methyl tert-butyl ether, CAS: 1634-04-4

Signal: 1

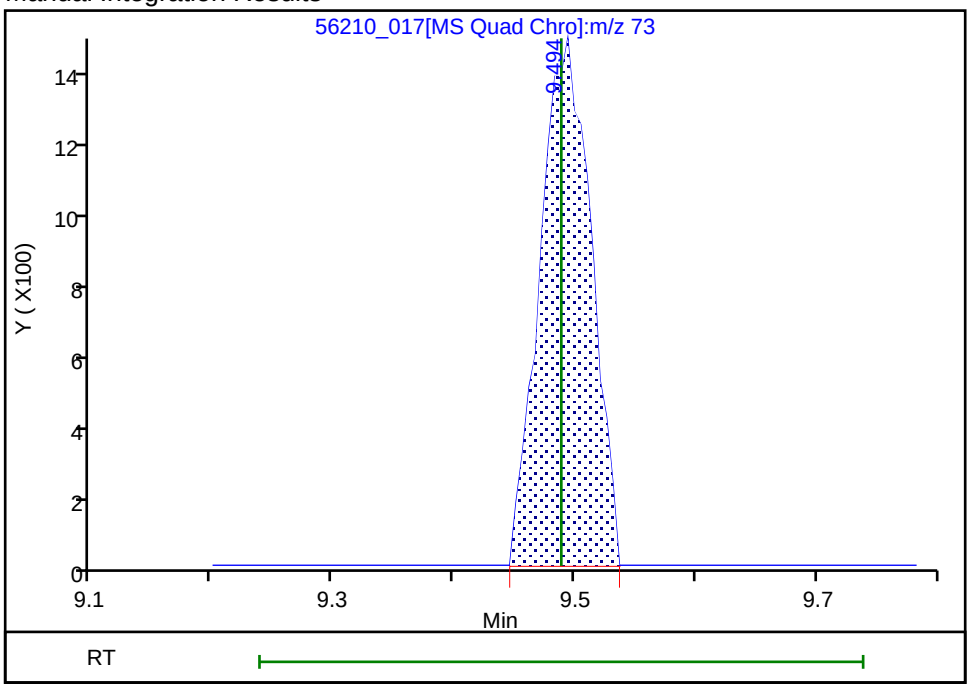
Not Detected
Expected RT: 9.49

Processing Integration Results



Manual Integration Results

RT: 9.49
Area: 4260
Amount: 0.046593
Amount Units: ppb v/v



Reviewer: puangmaleek, 07-Jul-2023 10:06:23 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

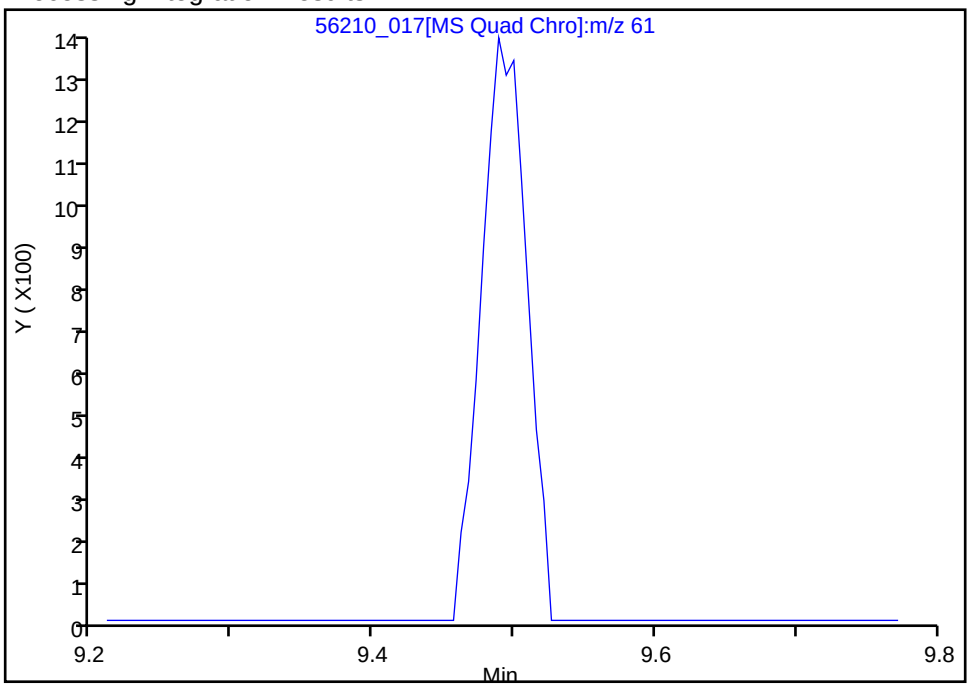
Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D				
Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

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

Signal: 1

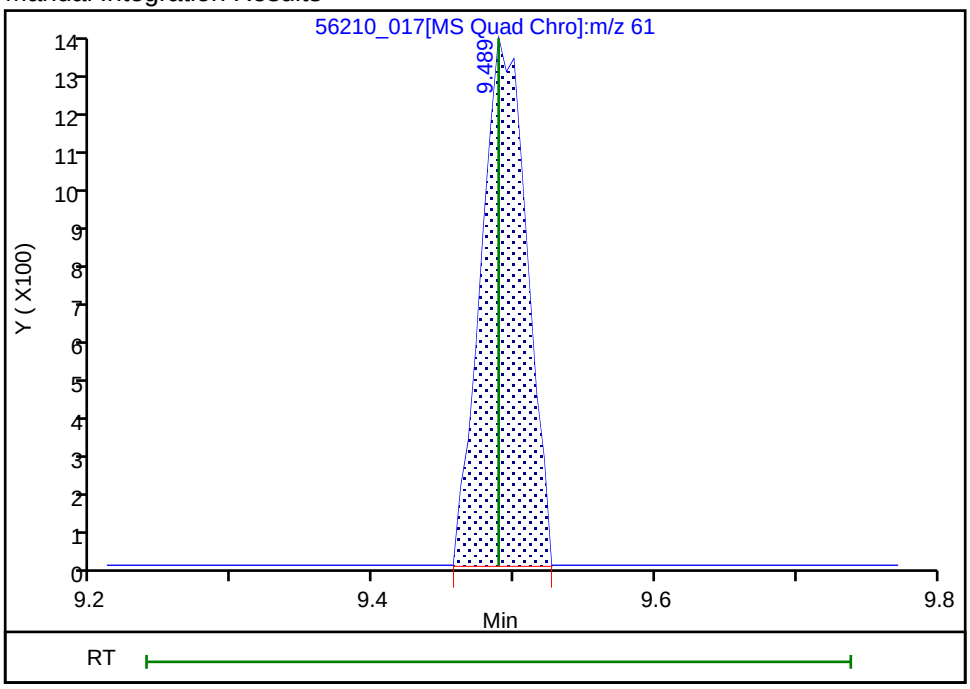
Not Detected
Expected RT: 9.49

Processing Integration Results



Manual Integration Results

RT: 9.49
Area: 2942
Amount: 0.057029
Amount Units: ppb v/v



Reviewer: puangmaleek, 07-Jul-2023 10:06:31 07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Assign Peak

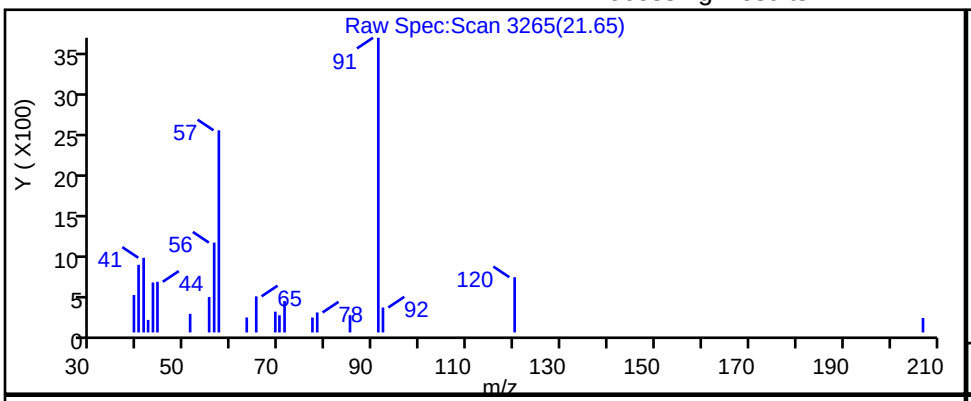
User Disabled Compound Report

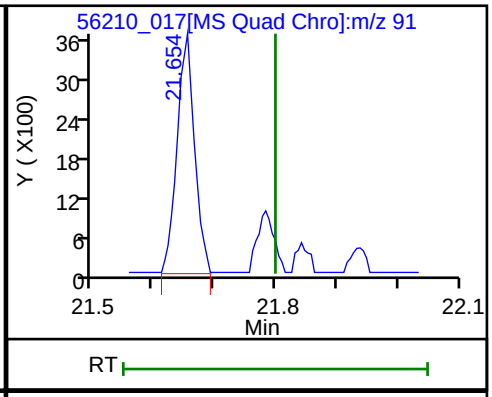
Eurofins Burlington

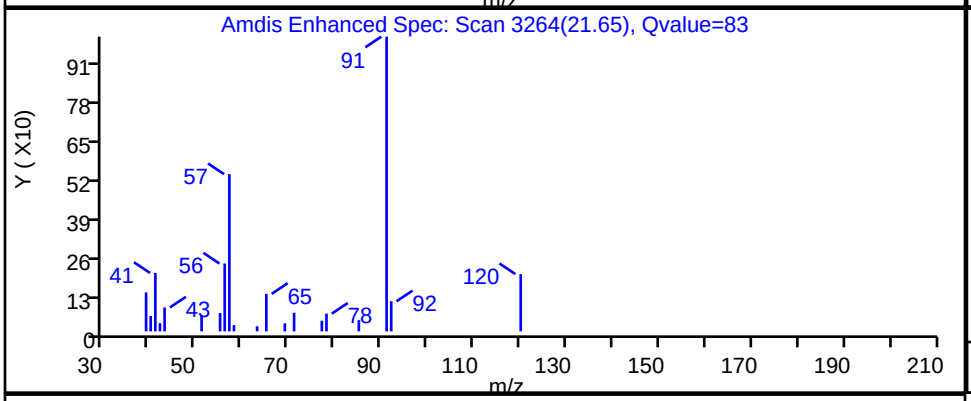
Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D				
Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

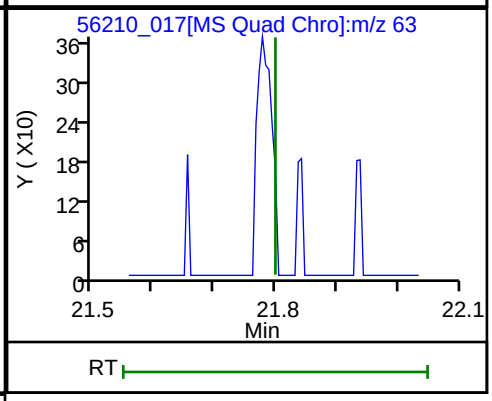
86 2-Chlorotoluene, CAS: 95-49-8

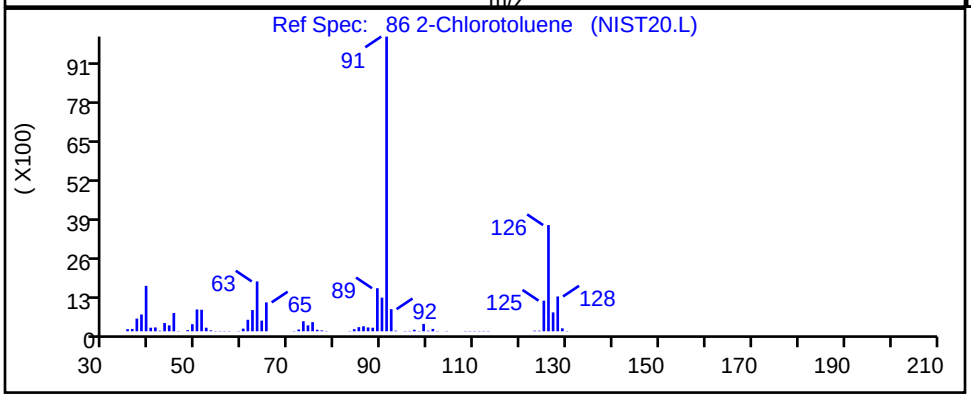
Processing Results











RT	Mass	Response	Amount
21.65	91.00	7300	0.055980
21.80	63.00	0	

Reviewer: puangmaleek, 07-Jul-2023 10:07:08 07:00:00 (UTC)

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

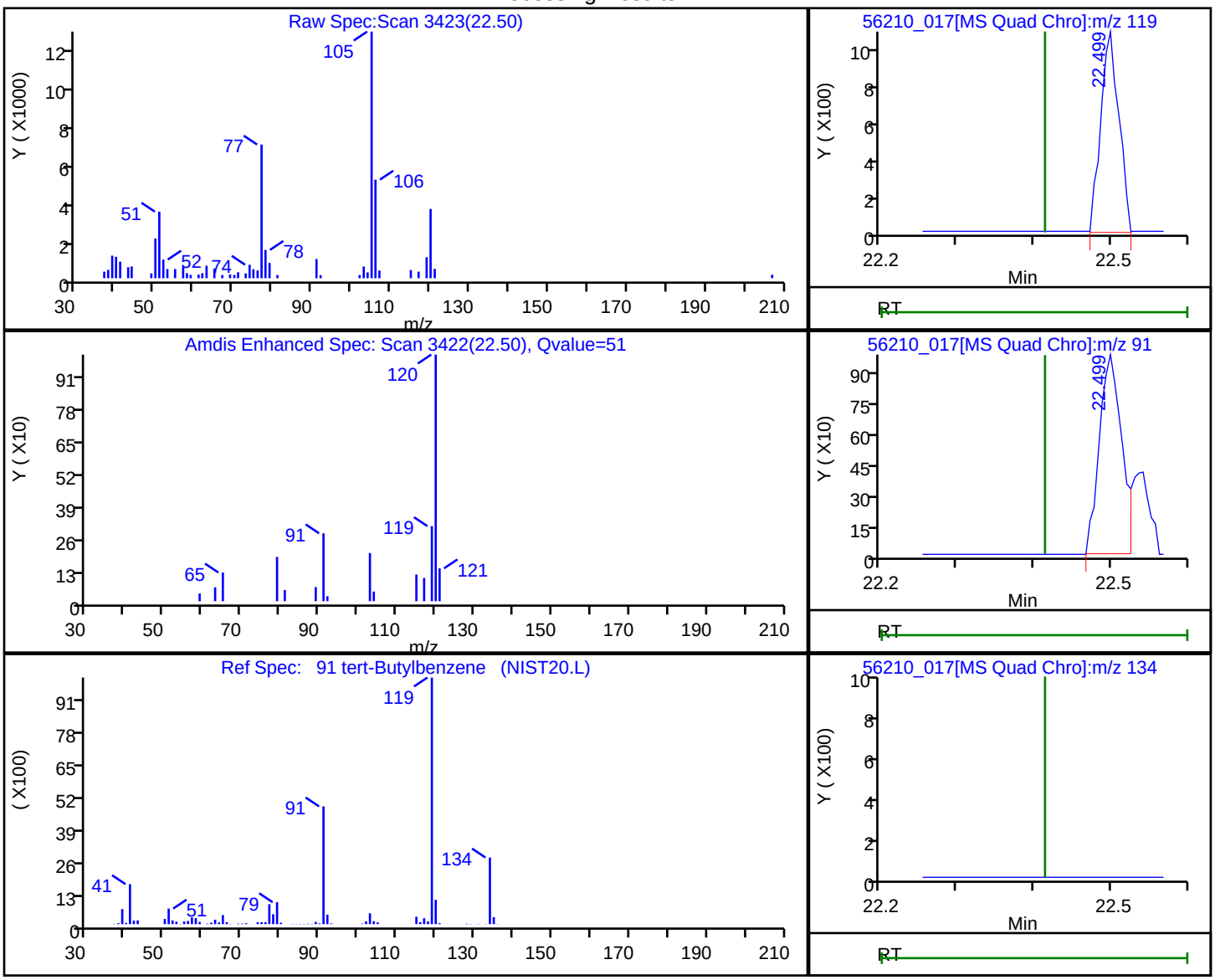
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_017.D				
Injection Date:	06-Jul-2023 21:21:26	Instrument ID:	CHAN.i		
Lims ID:	200-68952-A-2	Lab Sample ID:	200-68952-2		
Client ID:	Factory Blower Effluent (FB-2)				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	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
22.50	119.00	1752	0.014711
22.50	91.00	2008	
22.41	134.00	0	

Reviewer: puangmaleek, 07-Jul-2023 10:07:13 07:00:00 (UTC)

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

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 200-68952-1 Analy Batch No.: 191713

SDG No.:

Instrument ID: CHAN.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2023 16:33 Calibration End Date: 05/23/2023 01:58 Calibration ID: 50299

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-191713/4	55613_004.D
Level 2	IC 200-191713/6	55613_006.D
Level 3	IC 200-191713/7	55613_007.D
Level 4	IC 200-191713/8	55613_008.D
Level 5	ICIS 200-191713/9	55613_009.D
Level 6	IC 200-191713/10	55613_010.D
Level 7	IC 200-191713/14	55613_014.D
Level 8	IC 200-191713/15	55613_015.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.8768	+++++ 0.8637	+++++ 0.8814	0.8817	0.8757	Ave		0.8759				0.8		30.0			
Dichlorodifluoromethane	+++++ 3.0303	+++++ 3.1666	3.5371 3.2192	3.1181	3.0889	Ave		3.1934				5.6		30.0			
Chlorodifluoromethane	+++++ 1.9199	+++++ 1.9056	2.2903 1.9253	1.9508	1.9118	Ave		1.9840				7.6		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 3.3585	3.9299 3.3890	3.8967 3.5084	3.3549	3.2976	Ave		3.5336				7.6		30.0			
Chloromethane	+++++ 1.1230	+++++ 1.1074	1.3899 1.1094	1.1534	1.1158	Ave		1.1665				9.5		30.0			
n-Butane	+++++ 3.0722	+++++ 2.9515	4.0154 2.8333	3.4056	3.1716	Ave		3.2416				13.2		30.0			
Vinyl chloride	2.5529 2.0960	2.7106 2.0419	2.7196 1.9705	2.3117	2.1540	Ave		2.3197				13.1		30.0			
1,3-Butadiene	2.2226 1.6316	2.0937 1.5802	2.1289 1.5221	1.8106	1.6770	Ave		1.8333				15.1		30.0			
Bromomethane	+++++ 1.2942	1.5289 1.3169	1.5111 1.3548	1.3068	1.2788	Ave		1.3702				7.7		30.0			
Chloroethane	+++++ 0.8222	+++++ 0.8113	1.0011 0.8187	0.8459	0.8168	Ave		0.8527				8.6		30.0			
Isopentane	+++++ 1.8398	2.2115 1.7903	2.2485 1.7564	1.9120	1.8401	Ave		1.9427				10.4		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.3494	1.5488 1.3744	1.5679 1.4085	1.3428	1.3179	Ave		1.4157				7.2		30.0			
Trichlorofluoromethane	+++++ 3.7141	4.4147 3.7663	4.3147 3.7699	3.7606	3.6408	Ave		3.9116				8.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 200-68952-1 Analy Batch No.: 191713

SDG No.:

Instrument ID: CHAN.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2023 16:33 Calibration End Date: 05/23/2023 01:58 Calibration ID: 50299

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Pentane	+++++ 2.9095	+++++ 2.8070	3.4944 2.6929	3.0785	2.9544	Ave		2.9894				9.4		30.0			
Ethanol	+++++ 0.8593	+++++ 0.8174	1.2085 0.8048	0.9292	0.8554	Ave		0.9125				16.6		30.0			
Ethyl ether	+++++ 1.2326	1.4034 1.2055	1.4578 1.1913	1.2921	1.2416	Ave		1.2892				8.0		30.0			
Acrolein	+++++ 0.7618	+++++ 0.7445	+++++ 0.7212	0.7835	0.7416	Ave		0.7505				3.1		30.0			
1,1-Dichloroethene	1.7731 1.6386	1.9033 1.6425	1.8763 1.6533	1.6383	1.6170	Ave		1.7178				6.8		30.0			
1,1,2-Trichlorotrifluoroethane	+++++ 3.4057	4.0222 3.4102	4.0442 3.4368	3.4520	3.3710	Ave		3.5917				8.4		30.0			
Acetone	+++++ 2.8689	+++++ 2.7788	+++++ 2.7001	3.2053	3.0277	Ave		2.9161				6.9		30.0			
Isopropyl alcohol	+++++ 3.2877	+++++ 3.1780	+++++ 3.0665	3.6615	4.0600	Ave		3.4507				11.8		30.0			
Carbon disulfide	+++++ 5.1597	+++++ 5.0356	6.2654 4.9205	5.5197	5.1675	Ave		5.3447				9.2		30.0			
Acetonitrile	+++++ 1.3584	+++++ 1.2999	+++++ 1.2668	1.5164	1.4145	Ave		1.3712				7.2		30.0			
3-Chloropropene	+++++ 2.3809	3.1741 2.3167	3.0008 2.2704	2.6141	2.1596	Ave		2.5595				15.2		30.0			
Methylene Chloride	+++++ 2.2514	+++++ 2.1822	3.0493 2.1261	2.4906	2.3074	Ave		2.4012				14.2		30.0			
tert-Butyl alcohol	+++++ 3.9488	+++++ 3.8642	+++++ 3.7735	4.1936	4.1127	Ave		3.9785				4.4		30.0			
Acrylonitrile	+++++ 1.4766	+++++ 1.4250	1.8312 1.4033	1.5883	1.4815	Ave		1.5343				10.4		30.0			
trans-1,2-Dichloroethene	3.4587 2.9350	3.6175 2.8845	3.6580 2.8640	3.1015	2.9565	Ave		3.1845				10.6		30.0			
Methyl tert-butyl ether	+++++ 5.3401	6.2818 5.3093	6.3733 5.2689	5.5800	5.3532	Ave		5.6438				8.5		30.0			
n-Hexane	+++++ 3.0603	3.8289 2.9864	3.8357 2.9427	3.3097	3.1045	Ave		3.2955				11.7		30.0			
1,1-Dichloroethane	4.2723 3.5207	4.3806 3.4485	4.4283 3.4001	3.7780	3.5663	Ave		3.8494				11.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 200-68952-1 Analy Batch No.: 191713

SDG No.:

Instrument ID: CHAN.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2023 16:33 Calibration End Date: 05/23/2023 01:58 Calibration ID: 50299

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Vinyl acetate	+++++ 5.2822	+++++ 5.1256	+++++ 5.1367	5.4138	4.9916	Ave		5.1900				3.1		30.0			
Methyl Ethyl Ketone (2-Butanone)	+++++ 0.9889	+++++ 0.9753	1.2984 0.9749	1.0348	0.9993	Ave		1.0453				12.0		30.0			
cis-1,2-Dichloroethene	2.1875 1.8475	2.2023 1.8423	2.2258 1.8290	1.9314	1.8474	Ave		1.9891				9.1		30.0			
Ethyl acetate	+++++ 0.1655	+++++ 0.1647	+++++ 0.1649	0.1702	0.1653	Ave		0.1661				1.4		30.0			
Tetrahydrofuran	+++++ 0.4621	+++++ 0.4495	+++++ 0.4400	0.4945	0.4713	Ave		0.4635				4.5		30.0			
Chloroform	+++++ 3.8992	4.7887 3.8759	4.8484 3.8109	4.1414	3.9146	Ave		4.1827				10.7		30.0			
1,1,1-Trichloroethane	+++++ 0.7437	0.8825 0.7492	0.8759 0.7563	0.7639	0.7411	Ave		0.7875				8.0		30.0			
Cyclohexane	+++++ 0.4890	0.5881 0.4890	0.5785 0.4876	0.5065	0.4897	Ave		0.5183				8.7		30.0			
Carbon tetrachloride	0.7360 0.7152	0.8046 0.7302	0.8125 0.7455	0.7231	0.7126	Ave		0.7475				5.2		30.0			
Benzene	+++++ 1.1773	1.4589 1.1674	1.4561 1.1420	1.2359	1.1893	Ave		1.2610				10.9		30.0			
1,2-Dichloroethane	+++++ 0.5456	0.6674 0.5412	0.6746 0.5386	0.5720	0.5490	Ave		0.5841				10.3		30.0			
2,2,4-Trimethylpentane	+++++ 2.0023	2.4193 1.9586	2.4630 1.8957	2.1283	2.0315	Ave		2.1284				10.6		30.0			
n-Heptane	+++++ 0.7641	0.9320 0.7469	0.9436 0.7383	0.8089	0.7765	Ave		0.8158				10.6		30.0			
n-Butanol	+++++ 0.3006	+++++ 0.2976	+++++ 0.2952	0.3053	0.3191	Ave		0.3036				3.1		30.0			
Trichloroethene	0.5552 0.5078	0.5846 0.5120	0.5904 0.5174	0.5184	0.5063	Ave		0.5365				6.5		30.0			
1,2-Dichloropropane	+++++ 0.4827	0.5775 0.4758	0.5782 0.4751	0.5061	0.4869	Ave		0.5118				9.0		30.0			
Methyl methacrylate	+++++ 0.4498	+++++ 0.4473	0.4621 0.4509	0.4500	0.4450	Ave		0.4509				1.3		30.0			
1,4-Dioxane	+++++ 0.2305	0.2763 0.2291	0.2699 0.2221	0.2500	0.2549	Ave		0.2475				8.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 200-68952-1 Analy Batch No.: 191713

SDG No.:

Instrument ID: CHAN.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2023 16:33 Calibration End Date: 05/23/2023 01:58 Calibration ID: 50299

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibromomethane	+++++ 0.3456	0.3996 0.3504	0.3913 0.3600	0.3481	0.3414	Ave		0.3623				6.5		30.0			
Bromodichloromethane	+++++ 0.8753	0.9736 0.8734	0.9755 0.8806	0.8892	0.8661	Ave		0.9048				5.3		30.0			
cis-1,3-Dichloropropene	+++++ 0.7749	0.8318 0.7691	0.8405 0.7745	0.7822	0.7677	Ave		0.7915				3.9		30.0			
4-Methyl-2-pentanone (Methyl isobutyl ketone)	+++++ 1.0390	+++++ 1.0171	1.1564 1.0033	1.0774	1.0473	Ave		1.0567				5.2		30.0			
Toluene	+++++ 0.8930	1.0426 0.8870	1.0612 0.8833	0.9175	0.8882	Ave		0.9390				8.3		30.0			
n-Octane	+++++ 1.0614	1.2461 1.0378	1.2689 1.0236	1.1285	1.0808	Ave		1.1210				8.9		30.0			
trans-1,3-Dichloropropene	+++++ 0.6743	0.6946 0.6743	0.7191 0.6832	0.6750	0.6620	Ave		0.6832				2.7		30.0			
1,1,2-Trichloroethane	+++++ 0.4934	0.5672 0.4890	0.5802 0.4908	0.5093	0.4896	Ave		0.5171				7.6		30.0			
Tetrachloroethene	0.6188 0.5706	0.6648 0.5769	0.6547 0.5934	0.5708	0.5601	Ave		0.6013				6.7		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 1.1312	+++++ 1.0925	1.1935 1.0847	1.1570	1.1222	Ave		1.1302				3.6		30.0			
Dibromochloromethane	+++++ 0.8399	0.8156 0.8469	0.8141 0.8714	0.8182	0.8024	Ave		0.8298				2.9		30.0			
1,2-Dibromoethane	+++++ 0.8062	0.8929 0.8040	0.8954 0.8124	0.8111	0.7922	Ave		0.8306				5.3		30.0			
Chlorobenzene	+++++ 1.1269	1.3419 1.1179	1.3437 1.1147	1.1502	1.1131	Ave		1.1869				9.0		30.0			
Ethylbenzene	+++++ 2.0054	2.2962 1.9813	2.3238 1.9246	2.0711	2.0039	Ave		2.0866				7.6		30.0			
m,p-Xylene	+++++ 0.7301	0.7948 0.7291	0.8260 0.7322	0.7362	0.7190	Ave		0.7525				5.4		30.0			
n-Nonane	+++++ 1.1227	1.2712 1.1010	1.3199 1.0991	1.1651	1.1160	Ave		1.1707				7.6		30.0			
o-Xylene	+++++ 0.7075	0.7576 0.7069	0.7821 0.7119	0.7107	0.6932	Ave		0.7243				4.5		30.0			
Styrene	+++++ 1.1786	1.1209 1.1785	1.1694 1.1744	1.1715	1.1575	Ave		1.1644				1.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 200-68952-1 Analy Batch No.: 191713

SDG No.:

Instrument ID: CHAN.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2023 16:33 Calibration End Date: 05/23/2023 01:58 Calibration ID: 50299

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Bromoform	+++++ 0.7345	0.6058 0.7465	0.5530 0.7846	0.6864	0.6604	Ave		0.6816				12.0		30.0			
Cumene	+++++ 2.0949	2.2921 2.0824	2.3799 1.9979	2.1549	2.0749	Ave		2.1538				6.3		30.0			
1,1,2,2-Tetrachloroethane	+++++ 1.2897	1.4537 1.2777	1.4809 1.2568	1.3250	1.2827	Ave		1.3381				6.8		30.0			
1,2,3-Trichloropropane	+++++ 1.0157	+++++ 1.0047	1.2021 0.9992	1.0483	1.0122	Ave		1.0470				7.4		30.0			
n-Propylbenzene	+++++ 2.7316	3.0796 2.6625	3.1689 2.4334	2.8449	2.7230	Ave		2.8062				9.0		30.0			
2-Chlorotoluene	+++++ 1.7088	2.0036 1.6895	1.9866 1.6865	1.7674	1.6922	Ave		1.7907				8.0		30.0			
4-Ethyltoluene	+++++ 2.1030	2.3058 2.0827	2.3536 1.9664	2.1588	2.0794	Ave		2.1499				6.3		30.0			
1,3,5-Trimethylbenzene	+++++ 1.7958	1.8470 1.7848	1.9643 1.7163	1.8110	1.7502	Ave		1.8099				4.4		30.0			
n-Decane	+++++ 1.4990	+++++ 1.4607	1.7210 1.4110	1.5301	1.4366	Ave		1.5097				7.4		30.0			
Alpha Methyl Styrene	+++++ 0.8843	0.7649 0.8893	0.8010 0.8933	0.8629	0.8557	Ave		0.8502				5.8		30.0			
tert-Butylbenzene	+++++ 1.5920	1.7430 1.5861	1.7996 1.5488	1.6126	1.5657	Ave		1.6354				5.9		30.0			
1,2,4-Trimethylbenzene	+++++ 1.7794	1.9016 1.7596	2.1179 1.6846	1.8197	1.7473	Ave		1.8300				7.8		30.0			
sec-Butylbenzene	+++++ 2.5993	2.8531 2.5489	2.9621 2.3192	2.7031	2.5821	Ave		2.6526				8.0		30.0			
1,3-Dichlorobenzene	+++++ 1.0833	1.1996 1.0785	1.1771 1.0754	1.0777	1.0557	Ave		1.1068				5.1		30.0			
4-Isopropyltoluene	+++++ 2.0576	2.1036 2.0291	2.2288 1.9045	2.0807	2.0186	Ave		2.0604				4.8		30.0			
1,4-Dichlorobenzene	+++++ 1.0944	1.1973 1.0950	1.1889 1.0813	1.0906	1.0671	Ave		1.1164				4.8		30.0			
Benzyl chloride	+++++ 1.7149	1.6174 1.7173	1.5729 1.6680	1.7375	1.6360	Ave		1.6663				3.6		30.0			
n-Butylbenzene	+++++ 2.3172	2.4621 2.2700	2.4713 2.0956	2.3960	2.2700	Ave		2.3260				5.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 200-68952-1 Analy Batch No.: 191713

SDG No.:

Instrument ID: CHAN.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2023 16:33 Calibration End Date: 05/23/2023 01:58 Calibration ID: 50299

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	+++++ 1.0355	1.1731 1.0289	1.1413 1.0201	1.0430	1.0112	Ave		1.0647				6.1		30.0			
n-Undecane	+++++ 1.6536	+++++ 1.6217	+++++ 1.5528	1.7021	1.3213	Ave		1.5703				9.5		30.0			
n-Dodecane	+++++ 1.7076	+++++ 1.6867	+++++ 1.6541	1.7404	1.1649	Ave		1.5907				15.1		30.0			
1,2,4-Trichlorobenzene	+++++ 0.9573	+++++ 0.9803	0.8318 0.9895	0.9161	0.8205	Ave		0.9159				8.1		30.0			
Hexachlorobutadiene	+++++ 0.7270	0.6945 0.7514	0.6862 0.7786	0.6908	0.6502	Ave		0.7112				6.1		30.0			
Naphthalene	+++++ 2.4014	+++++ 2.3991	2.4326 2.2530	2.3810	1.9279	Ave		2.2992				8.4		30.0			
1,2,3-Trichlorobenzene	+++++ 0.8061	+++++ 0.8159	0.7098 0.8318	0.7824	0.6674	Ave		0.7689				8.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 200-68952-1 Analy Batch No.: 191713

SDG No.:

Instrument ID: CHAN.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2023 16:33 Calibration End Date: 05/23/2023 01:58 Calibration ID: 50299

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-191713/4	55613_004.D
Level 2	IC 200-191713/6	55613_006.D
Level 3	IC 200-191713/7	55613_007.D
Level 4	IC 200-191713/8	55613_008.D
Level 5	ICIS 200-191713/9	55613_009.D
Level 6	IC 200-191713/10	55613_010.D
Level 7	IC 200-191713/14	55613_014.D
Level 8	IC 200-191713/15	55613_015.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++	+++++	+++++	103631	212480	+++++	+++++	+++++	4.99	10.00
			338424	451561	962385			15.0	20.0	40.0		
Dichlorodifluoromethane	BCM	Ave	+++++	+++++	41062	366473	749494	+++++	+++++	0.500	4.99	10.00
			1169664	1655512	3514812			15.0	20.0	40.0		
Chlorodifluoromethane	BCM	Ave	+++++	+++++	26588	229275	463873	+++++	+++++	0.500	4.99	10.00
			741067	996266	2102127			15.0	20.0	40.0		
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++	18703	45236	394298	800121	+++++	0.200	0.500	4.99	10.00
			1296319	1771740	3830603			15.0	20.0	40.0		
Chloromethane	BCM	Ave	+++++	+++++	16135	135554	270730	+++++	+++++	0.500	4.99	10.00
			433453	578947	1211258			15.0	20.0	40.0		
n-Butane	BCM	Ave	+++++	+++++	46614	400255	769572	+++++	+++++	0.500	4.99	10.00
			1185809	1543010	3093437			15.0	20.0	40.0		
Vinyl chloride	BCM	Ave	2187	12900	31572	271697	522655	0.0351	0.200	0.500	4.99	10.00
			809040	1067508	2151453			15.0	20.0	40.0		
1,3-Butadiene	BCM	Ave	1904	9964	24714	212803	406917	0.0351	0.200	0.500	4.99	10.00
			629770	826113	1661818			15.0	20.0	40.0		
Bromomethane	BCM	Ave	+++++	7276	17542	153589	310287	+++++	0.200	0.500	4.99	10.00
			499556	688474	1479194			15.0	20.0	40.0		
Chloroethane	BCM	Ave	+++++	+++++	11622	99420	198190	+++++	+++++	0.500	4.99	10.00
			317340	424169	893856			15.0	20.0	40.0		
Isopentane	BCM	Ave	+++++	10525	26102	224716	446481	+++++	0.200	0.500	4.99	10.00
			710127	935976	1917655			15.0	20.0	40.0		
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++	7371	18202	157816	319778	+++++	0.200	0.500	4.99	10.00
			520860	718521	1537792			15.0	20.0	40.0		
Trichlorofluoromethane	BCM	Ave	+++++	21010	50089	441983	883408	+++++	0.200	0.500	4.99	10.00
			1433599	1968990	4116123			15.0	20.0	40.0		

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 200-68952-1 Analy Batch No.: 191713

SDG No.:

Instrument ID: CHAN.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2023 16:33 Calibration End Date: 05/23/2023 01:58 Calibration ID: 50299

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
n-Pentane	BCM	Ave	+++++ 1123045	+++++ 1467501	40566 2940135	361810	716856	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 443211	+++++ 854853	140462 2196841	218564	311469	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0
Ethyl ether	BCM	Ave	+++++ 475764	6679 630226	16923 1300668	151862	301270	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 294062	+++++ 389247	+++++ 787433	92089	179943	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	1519 632478	9058 858685	21782 1805113	192544	392352	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichlorotrifluoroethane	BCM	Ave	+++++ 1314551	19142 1782828	46949 3752417	405707	817941	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 1107359	+++++ 1452737	+++++ 2948021	376715	734634	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 1269000	+++++ 1661424	+++++ 3348105	430336	985115	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1991569	+++++ 2632611	72734 5372341	648732	1253847	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 524315	+++++ 679603	+++++ 1383134	178224	343207	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 918979	15106 1211147	34836 2478881	307237	524008	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 869017	+++++ 1140838	35399 2321384	292720	559868	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 1524187	+++++ 2020174	+++++ 4119988	492870	997909	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 569930	+++++ 744989	21258 1532189	186674	359464	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	2963 1132880	17216 1507992	42465 3126983	364523	717377	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 2061215	29896 2775698	73987 5752751	655815	1298912	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 1181242	18222 1561265	44528 3212962	388984	753290	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	3660 1358931	20848 1802847	51408 3712369	444022	865330	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 200-68952-1 Analy Batch No.: 191713

SDG No.:

Instrument ID: CHAN.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2023 16:33 Calibration End Date: 05/23/2023 01:58 Calibration ID: 50299

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Vinyl acetate	BCM	Ave	+++++ 2038868	+++++ 2679628	+++++ 5608346	636278	1211161	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl Ethyl Ketone (2-Butanone)	BCM	Ave	+++++ 381717	+++++ 509900	15073 1064473	121623	242464	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	1874 713097	10481 963135	25839 1996914	227001	448258	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 63899	+++++ 86110	+++++ 180011	20003	40105	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 891872	+++++ 1167144	+++++ 2363424	295126	571539	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Chloroform	BCM	Ave	+++++ 1505050	22790 2026303	56284 4160858	486734	949835	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 1435312	21380 1945566	51537 4062876	455870	898745	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 943717	14248 1269875	34036 2619126	302260	593903	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	3223 1380314	19492 1896214	47808 4005055	431519	864175	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 2272065	35343 3031475	85673 6134664	737549	1442178	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 1053030	16168 1405407	39694 2893424	341363	665708	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 3864430	58609 5085795	144920 10183821	1270124	2463563	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1474673	22578 1939605	55520 3966003	482762	941585	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 580212	+++++ 772676	+++++ 1585614	182205	386999	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	2431 979964	14163 1329423	34737 2779539	309355	614013	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 931679	13991 1235512	34023 2552341	302051	590474	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 868077	+++++ 1161497	27189 2422420	268566	539634	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 444875	6693 594796	15880 1193055	149217	309142	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 200-68952-1 Analy Batch No.: 191713

SDG No.:

Instrument ID: CHAN.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2023 16:33 Calibration End Date: 05/23/2023 01:58 Calibration ID: 50299

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dibromomethane	DFBZ	Ave	+++++ 666925	9680 909916	23021 1933724	207743	413954	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1689228	23586 2267957	57395 4730574	530636	1050304	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 1495453	20152 1997034	49455 4160794	466824	930981	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Methyl-2-pentanone (Methyl isobutyl ketone)	DFBZ	Ave	+++++ 2005266	+++++ 2641004	68042 5389821	642975	1269987	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1530743	22122 2062083	54636 4251127	485996	962689	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 2048389	30187 2694795	74660 5498909	673494	1310621	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 1301333	16828 1750855	42313 3669994	402833	802782	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 845748	12035 1136959	29874 2362087	269796	530650	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Tetrachloroethene	CBNZ d5	Ave	2403 978085	14106 1341310	33706 2855582	302387	607101	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1939114	+++++ 2540022	61449 5220390	612873	1216288	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 1439802	17305 1969007	41917 4193596	433404	869644	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1382014	18945 1869117	46103 3909550	429653	858599	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1931711	28472 2599056	69183 5364871	609305	1206382	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++	48719	119647	1097093	2171881	+++++	0.200	0.500	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 200-68952-1 Analy Batch No.: 191713

SDG No.:

Instrument ID: CHAN.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2023 16:33 Calibration End Date: 05/23/2023 01:58 Calibration ID: 50299

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			3437631	4606211	9262357			15.0	20.0	40.0		
m,p-Xylene	CBNZ d5	Ave	+++++	33727	85055	779945	1558593	+++++	0.401	1.00	9.99	20.0
			2503207	3390323	7047813			30.0	40.0	80.0		
n-Nonane	CBNZ d5	Ave	+++++	26972	67957	617155	1209550	+++++	0.200	0.500	4.99	10.00
			1924544	2559793	5289525			15.0	20.0	40.0		
o-Xylene	CBNZ d5	Ave	+++++	16075	40268	376488	751278	+++++	0.200	0.500	4.99	10.00
			1212810	1643573	3426328			15.0	20.0	40.0		
Styrene	CBNZ d5	Ave	+++++	23783	60209	620562	1254499	+++++	0.200	0.500	4.99	10.00
			2020361	2739999	5651903			15.0	20.0	40.0		
Bromoform	CBNZ d5	Ave	+++++	12854	28474	363626	715780	+++++	0.200	0.500	4.99	10.00
			1259055	1735554	3775880			15.0	20.0	40.0		
Cumene	CBNZ d5	Ave	+++++	48633	122534	1141478	2248786	+++++	0.200	0.500	4.99	10.00
			3591018	4841306	9614964			15.0	20.0	40.0		
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++	30843	76245	701878	1390221	+++++	0.200	0.500	4.99	10.00
			2210822	2970479	6048516			15.0	20.0	40.0		
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++	+++++	61892	555291	1097031	+++++	+++++	0.500	4.99	10.00
			1741062	2335819	4808764			15.0	20.0	40.0		
n-Propylbenzene	CBNZ d5	Ave	+++++	65341	163155	1507007	2951220	+++++	0.200	0.500	4.99	10.00
			4682391	6189997	11710842			15.0	20.0	40.0		
2-Chlorotoluene	CBNZ d5	Ave	+++++	42511	102285	936226	1834026	+++++	0.200	0.500	4.99	10.00
			2929234	3927905	8116521			15.0	20.0	40.0		
4-Ethyltoluene	CBNZ d5	Ave	+++++	48922	121179	1143556	2253739	+++++	0.200	0.500	4.99	10.00
			3604873	4841960	9463552			15.0	20.0	40.0		
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++	39188	101135	959322	1896928	+++++	0.200	0.500	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 200-68952-1 Analy Batch No.: 191713

SDG No.:

Instrument ID: CHAN.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2023 16:33 Calibration End Date: 05/23/2023 01:58 Calibration ID: 50299

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			3078264	4149514	8259808			15.0	20.0	40.0		
n-Decane	CBNZ d5	Ave	+++++	+++++	88609	810530	1556992	+++++	+++++	0.500	4.99	10.00
			2569614	3396007	6790755			15.0	20.0	40.0		
Alpha Methyl Styrene	CBNZ d5	Ave	+++++	16230	41241	457071	927433	+++++	0.200	0.500	4.99	10.00
			1515873	2067635	4299061			15.0	20.0	40.0		
tert-Butylbenzene	CBNZ d5	Ave	+++++	36982	92654	854256	1696927	+++++	0.200	0.500	4.99	10.00
			2728975	3687428	7453900			15.0	20.0	40.0		
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++	40346	109044	963959	1893737	+++++	0.200	0.500	4.99	10.00
			3050142	4090828	8107230			15.0	20.0	40.0		
sec-Butylbenzene	CBNZ d5	Ave	+++++	60535	152509	1431905	2798554	+++++	0.200	0.500	4.99	10.00
			4455746	5925868	11161475			15.0	20.0	40.0		
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++	25453	60605	570906	1144196	+++++	0.200	0.500	4.99	10.00
			1856896	2507484	5175466			15.0	20.0	40.0		
4-Isopropyltoluene	CBNZ d5	Ave	+++++	44633	114751	1102214	2187824	+++++	0.200	0.500	4.99	10.00
			3527150	4717475	9165503			15.0	20.0	40.0		
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++	25403	61214	577734	1156535	+++++	0.200	0.500	4.99	10.00
			1876073	2545772	5203798			15.0	20.0	40.0		
Benzyl chloride	CBNZ d5	Ave	+++++	34318	80985	920384	1773086	+++++	0.200	0.500	4.99	10.00
			2939625	3992466	8027576			15.0	20.0	40.0		
n-Butylbenzene	CBNZ d5	Ave	+++++	52239	127238	1269232	2460315	+++++	0.200	0.500	4.99	10.00
			3972075	5277528	10085244			15.0	20.0	40.0		
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++	24891	58763	552517	1095940	+++++	0.200	0.500	4.99	10.00
			1774951	2391981	4909555			15.0	20.0	40.0		
n-Undecane	CBNZ d5	Ave	+++++	+++++	+++++	901665	1432103	+++++	+++++	+++++	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 200-68952-1 Analy Batch No.: 191713

SDG No.:

Instrument ID: CHAN.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2023 16:33 Calibration End Date: 05/23/2023 01:58 Calibration ID: 50299

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			2834638	3770249	7473004			15.0	20.0	40.0		
n-Dodecane	CBNZ d5	Ave	+++++	+++++	+++++	921905	1262592	+++++	+++++	+++++	4.99	10.00
			2927058	3921455	7960681			15.0	20.0	40.0		
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++	+++++	42825	485258	889319	+++++	+++++	0.500	4.99	10.00
			1641049	2279096	4762005			15.0	20.0	40.0		
Hexachlorobutadiene	CBNZ d5	Ave	+++++	14736	35329	365932	704682	+++++	0.200	0.500	4.99	10.00
			1246291	1746903	3747218			15.0	20.0	40.0		
Naphthalene	CBNZ d5	Ave	+++++	+++++	125248	1261273	2089522	+++++	+++++	0.500	4.99	10.00
			4116405	5577659	10842864			15.0	20.0	40.0		
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++	+++++	36545	414475	723298	+++++	+++++	0.500	4.99	10.00
			1381801	1896950	4003374			15.0	20.0	40.0		

Curve Type Legend
Ave = Average ISTD

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_004.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 22-May-2023 16:33:19 ALS Bottle#: 0 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0055638-004
Operator ID: Instrument ID: CHAN.i
Sublist: chrom-TO15_TO3_Master_Method_AN*sub1

Method: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\TO15_TO3_Master_Method_AN.m
Limit Group: AI_TO15_ICAL
Last Update: 23-May-2023 08:56:43 Calib Date: 23-May-2023 01:58:58
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: V0FK Date: 23-May-2023 08:56:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	4.401	4.396	0.005	89	1279	0.0351	0.0598	
2 Dichlorodifluoromethane	85	4.498	4.492	0.006	96	2764	0.0351	0.0354	
3 Chlorodifluoromethane	51	4.551	4.546	0.005	94	1875	0.0351	0.0387	
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85	4.867	4.861	0.006	96	3197	0.0351	0.0370	
5 Chloromethane	50	4.990	4.990	0.000	96	1125	0.0351	0.0395	
7 Butane	43	5.295	5.295	0.000	98	5167	0.0351	0.0653	
6 Vinyl chloride	62	5.305	5.300	0.005	76	2187	0.0351	0.0386	
8 Butadiene	54	5.412	5.412	0.000	90	1904	0.0351	0.0425	
9 Bromomethane	94	6.145	6.140	0.005	89	1228	0.0351	0.0367	
10 Chloroethane	64	6.418	6.418	0.000	84	820	0.0351	0.0394	
12 2-Methylbutane	43	6.632	6.616	0.016	90	1948	0.0351	0.0411	
13 Vinyl bromide	106	6.851	6.841	0.010	98	1306	0.0351	0.0378	
14 Trichlorofluoromethane	101	6.991	6.996	-0.006	95	3640	0.0351	0.0381	
15 Pentane	43	7.204	7.199	0.005	91	3122	0.0351	0.0428	
16 Ethanol	45	7.418	7.386	0.032	96	2161	0.0702	0.0970	
18 Ethyl ether	59	7.632	7.616	0.016	91	1128	0.0351	0.0358	
19 Acrolein	56	7.879	7.873	0.006	1	659	0.0351	0.0360	
20 1,1-Dichloroethene	96	8.071	8.066	0.005	94	1519	0.0351	0.0362	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	8.098	8.103	-0.005	88	3261	0.0351	0.0372	
22 Acetone	43	8.184	8.151	0.033	97	6710	0.0351	0.0942	
23 Isopropyl alcohol	45	8.472	8.440	0.032	97	6769	0.0351	0.0803	
24 Carbon disulfide	76	8.462	8.467	-0.005	96	5455	0.0351	0.0418	
25 Acetonitrile	41	8.692	8.676	0.016	98	1667	0.0351	0.0498	
26 3-Chloro-1-propene	41	8.767	8.767	0.000	95	3322	0.0351	0.0531	
27 Methylene Chloride	49	9.007	9.007	0.000	98	3455	0.0351	0.0589	
28 2-Methyl-2-propanol	59	9.237	9.211	0.026	94	3707	0.0351	0.0382	
29 Acrylonitrile	53	9.441	9.425	0.016	85	1241	0.0351	0.0331	
31 Methyl tert-butyl ether	73	9.521	9.494	0.027	96	5354	0.0351	0.0388	
30 trans-1,2-Dichloroethene	61	9.494	9.494	0.000	93	2963	0.0351	0.0381	
32 Hexane	57	9.997	10.002	-0.005	92	3388	0.0351	0.0421	
S 35 1,2-Dichloroethene, Total	61				0		0.0702	0.0767	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 1,1-Dichloroethane	63	10.275	10.281	-0.006	96	3660	0.0351	0.0389	
34 Vinyl acetate	43	10.291	10.281	0.010	99	4672	0.0351	0.0369	
36 2-Butanone (MEK)	72	11.276	11.254	0.022	98	912	0.0351	0.0357	
37 cis-1,2-Dichloroethene	96	11.276	11.281	-0.005	79	1874	0.0351	0.0386	M
38 Ethyl acetate	88		11.324				ND	ND	
* 39 Chlorobromomethane	128	11.693	11.693	0.000	96	244227	10.0	10.0	
40 Tetrahydrofuran	42	11.741	11.714	0.027	49	2406	0.0351	0.0416	
41 Chloroform	83	11.875	11.870	0.005	94	4095	0.0351	0.0401	
42 1,1,1-Trichloroethane	97	12.169	12.169	0.000	94	2657	0.0351	0.0270	
43 Cyclohexane	84	12.297	12.292	0.005	92	2416	0.0351	0.0373	
44 Carbon tetrachloride	117	12.437	12.437	0.000	94	3223	0.0351	0.0345	
45 Benzene	78	12.790	12.795	-0.005	97	6705	0.0351	0.0426	
46 1,2-Dichloroethane	62	12.875	12.875	0.000	90	2682	0.0351	0.0368	
47 Isooctane	57	12.998	12.998	0.000	97	10056	0.0351	0.0378	
48 n-Heptane	43	13.303	13.303	0.000	89	4179	0.0351	0.0410	
* 49 1,4-Difluorobenzene	114	13.528	13.528	0.000	97	1248362	10.0	10.0	
50 n-Butanol	56	13.779	13.763	0.016	92	1346	0.0351	0.0355	
51 Trichloroethene	95	13.961	13.956	0.005	89	2431	0.0351	0.0363	
53 1,2-Dichloropropane	63	14.432	14.427	0.005	87	2460	0.0351	0.0385	
54 Methyl methacrylate	69		14.507				ND	ND	
55 1,4-Dioxane	88	14.566	14.539	0.027	79	1129	0.0351	0.0365	
57 Dibromomethane	174	14.576	14.582	-0.006	86	2038	0.0351	0.0451	
58 Dichlorobromomethane	83	14.897	14.892	0.005	94	4099	0.0351	0.0363	
59 cis-1,3-Dichloropropene	75	15.689	15.695	-0.006	95	3423	0.0351	0.0346	
61 4-Methyl-2-pentanone (MIBK)	43	15.978	15.962	0.016	98	4462	0.0351	0.0338	
62 Toluene	92	16.326	16.326	0.000	93	4490	0.0351	0.0432	
A 63 Toluene Range	1	16.331	(16.256-16.406)		0	17215	NC	NC	
64 n-Octane	43	16.556	16.556	0.000	91	5228	0.0351	0.0374	
A 65 C8 Range	1	16.567	(16.476-16.658)		0	18773	NC	NC	
66 trans-1,3-Dichloropropene	75	16.749	16.748	0.000	29	1753	0.0351	0.0206	
67 1,1,2-Trichloroethane	83		17.128				ND	ND	
68 Tetrachloroethene	166	17.310	17.305	0.005	87	2403	0.0351	0.0361	
69 2-Hexanone	43	17.551	17.535	0.016	91	4286	0.0351	0.0343	
70 Chlorodibromomethane	129	17.861	17.861	0.000	93	2915	0.0351	0.0317	
71 Ethylene Dibromide	107	18.102	18.102	0.000	95	3204	0.0351	0.0348	
* 73 Chlorobenzene-d5	117	19.006	19.006	0.000	93	1107047	10.0	10.0	
74 Chlorobenzene	112	19.070	19.065	0.005	90	4929	0.0351	0.0375	
75 Ethylbenzene	91	19.247	19.252	-0.005	98	8437	0.0351	0.0365	
76 m-Xylene & p-Xylene	106	19.509	19.509	0.000	0	5912	0.0702	0.0710	
77 n-Nonane	57	19.557	19.557	0.000	90	4695	0.0351	0.0362	
S 80 Xylenes, Total	106				0		0.1052	0.1042	
78 o-Xylene	106	20.274	20.285	-0.011	94	2665	0.0351	0.0332	
79 Styrene	104	20.317	20.317	0.000	96	3891	0.0351	0.0302	
81 Bromoform	173	20.665	20.659	0.006	76	1209	0.0351	0.0160	
82 Isopropylbenzene	105	20.959	20.953	0.006	98	8140	0.0351	0.0341	
83 1,1,2,2-Tetrachloroethane	83	21.478	21.478	0.000	95	5334	0.0351	0.0360	
84 1,2,3-Trichloropropane	75	21.569	21.574	-0.005	96	4504	0.0351	0.0389	
85 N-Propylbenzene	91	21.660	21.654	0.006	97	11285	0.0351	0.0363	
86 2-Chlorotoluene	91	21.804	21.804	0.000	96	7303	0.0351	0.0368	
87 4-Ethyltoluene	105	21.852	21.847	0.005	97	7949	0.0351	0.0334	
88 1,3,5-Trimethylbenzene	105	21.943	21.943	0.000	89	6512	0.0351	0.0325	
89 n-Decane	57	21.959	21.959	0.000	93	5745	0.0351	0.0344	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 Alpha Methyl Styrene	118	22.264	22.264	0.000	85	2536	0.0351	0.0269	
91 tert-Butylbenzene	119	22.419	22.419	0.000	91	6198	0.0351	0.0342	
92 1,2,4-Trimethylbenzene	105	22.505	22.505	0.000	98	6569	0.0351	0.0324	
93 sec-Butylbenzene	105	22.735	22.740	-0.005	97	10384	0.0351	0.0354	
94 1,3-Dichlorobenzene	146	22.911	22.911	0.000	95	4200	0.0351	0.0343	
95 4-Isopropyltoluene	119	22.949	22.949	0.000	96	7513	0.0351	0.0329	
96 1,4-Dichlorobenzene	146	23.051	23.051	0.000	84	4176	0.0351	0.0338	
97 Benzyl chloride	91	23.200	23.200	0.000	97	5363	0.0351	0.0291	
98 n-Butylbenzene	91	23.505	23.505	0.000	97	8671	0.0351	0.0337	
99 1,2-Dichlorobenzene	146	23.548	23.548	0.000	89	4242	0.0351	0.0360	
100 Undecane	57	23.650	23.644	0.006	93	5408	0.0351	0.0311	
101 Dodecane	57	25.249	25.249	0.000	93	4869	0.0351	0.0276	
102 1,2,4-Trichlorobenzene	180	26.020	26.020	0.000	89	3286	0.0351	0.0324	
103 Hexachlorobutadiene	225	26.260	26.260	0.000	88	2481	0.0351	0.0315	
104 Naphthalene	128	26.512	26.512	0.000	96	8038	0.0351	0.0316	
105 1,2,3-Trichlorobenzene	180	26.934	26.934	0.000	90	2803	0.0351	0.0329	
114 Methylcyclohexane	83		0.000				ND	ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

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ATTO15CISs_00012	Amount Added: 20.00	Units: mL	Run Reagent

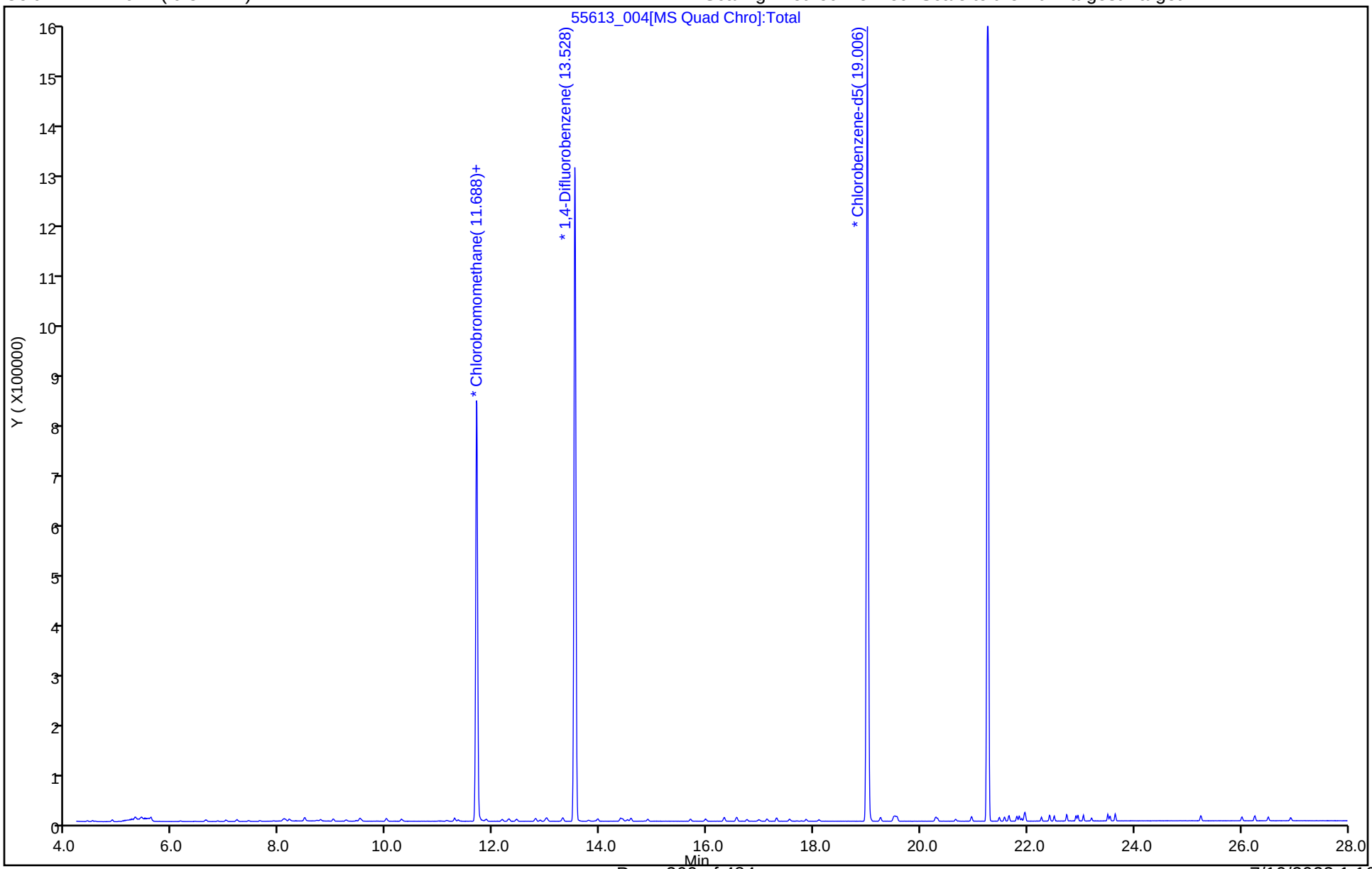
Report Date: 23-May-2023 08:56:43 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_004.D

Injection Date:	22-May-2023 16:33:19	Instrument ID:	CHAN.i	Operator ID:	
Lims ID:	ic			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		

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



7/10/2023 1:16 PM

Manual Integration/User Assign Peak Report

Eurofins Burlington

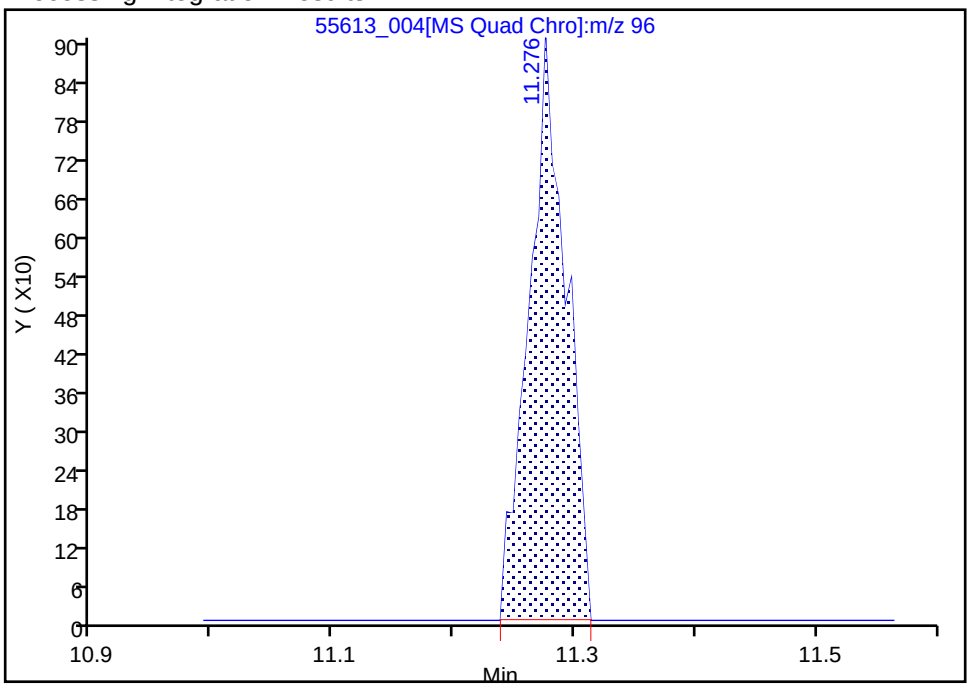
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Injection Date:	22-May-2023 16:33:19	Instrument ID:	CHAN.i		
Lims ID:	ic				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

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

Signal: 1

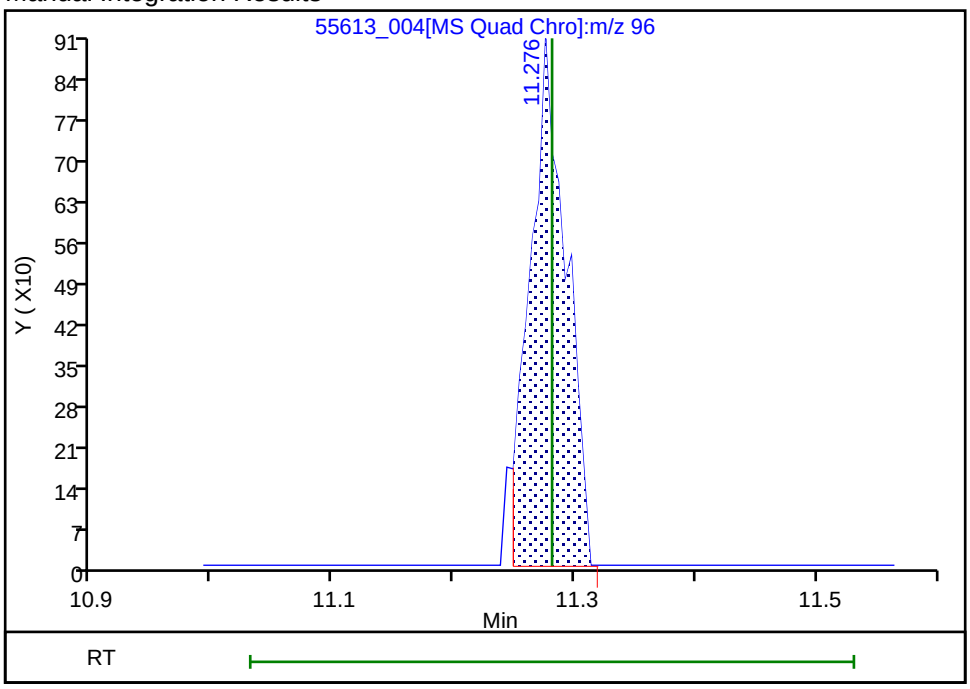
Processing Integration Results

RT: 11.28
Area: 1928
Amount: 0.037745
Amount Units: ppb v/v



Manual Integration Results

RT: 11.28
Area: 1874
Amount: 0.038575
Amount Units: ppb v/v



Reviewer: bunmaa, 23-May-2023 09:29:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Assign Peak

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_006.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 22-May-2023 18:16:25 ALS Bottle#: 0 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0055638-006
Operator ID: Instrument ID: CHAN.i
Sublist: chrom-TO15_TO3_Master_Method_AN*sub1

Method: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\TO15_TO3_Master_Method_AN.m
Limit Group: AI_TO15_ICAL
Last Update: 23-May-2023 08:56:10 Calib Date: 23-May-2023 01:58:58
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: V0FK Date: 23-May-2023 08:43:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	4.406	4.396	0.010	96	5342	0.2004	0.2569	
2 Dichlorodifluoromethane	85	4.497	4.492	0.005	99	16674	0.2004	0.2199	
3 Chlorodifluoromethane	51	4.551	4.546	0.005	97	10990	0.2004	0.2333	
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85	4.867	4.861	0.006	98	18703	0.2004	0.2229	
5 Chloromethane	50	4.984	4.990	-0.006	97	6598	0.2004	0.2382	
7 Butane	43	5.300	5.295	0.005	98	19533	0.2004	0.2538	
6 Vinyl chloride	62	5.300	5.300	0.000	76	12900	0.2004	0.2342	
8 Butadiene	54	5.418	5.412	0.006	91	9964	0.2004	0.2289	
9 Bromomethane	94	6.140	6.140	0.000	97	7276	0.2004	0.2236	
10 Chloroethane	64	6.423	6.418	0.005	98	4674	0.2004	0.2309	
12 2-Methylbutane	43	6.616	6.616	0.000	93	10525	0.2004	0.2282	
13 Vinyl bromide	106	6.841	6.841	0.000	95	7371	0.2004	0.2193	
14 Trichlorofluoromethane	101	6.996	6.996	0.000	96	21010	0.2004	0.2262	
15 Pentane	43	7.199	7.199	0.000	95	17004	0.2004	0.2396	
16 Ethanol	45	7.413	7.386	0.027	98	10982	0.4009	0.5069	M
18 Ethyl ether	59	7.632	7.616	0.016	94	6679	0.2004	0.2182	
19 Acrolein	56	7.884	7.873	0.011	95	4492	0.2004	0.2521	
20 1,1-Dichloroethene	96	8.071	8.066	0.005	94	9058	0.2004	0.2221	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	8.109	8.103	0.006	90	19142	0.2004	0.2245	
22 Acetone	43	8.178	8.151	0.027	99	23923	0.2004	0.3455	M
23 Isopropyl alcohol	45	8.472	8.440	0.032	72	20713	0.2004	0.2528	
24 Carbon disulfide	76	8.467	8.467	0.000	100	29743	0.2004	0.2344	
25 Acetonitrile	41	8.692	8.676	0.016	99	8428	0.2004	0.2589	M
26 3-Chloro-1-propene	41	8.772	8.767	0.005	96	15106	0.2004	0.2486	M
27 Methylene Chloride	49	9.007	9.007	0.000	97	15033	0.2004	0.2637	
28 2-Methyl-2-propanol	59	9.243	9.211	0.032	97	20584	0.2004	0.2179	
29 Acrylonitrile	53	9.435	9.425	0.010	95	8069	0.2004	0.2215	M
31 Methyl tert-butyl ether	73	9.516	9.494	0.022	98	29896	0.2004	0.2231	
30 trans-1,2-Dichloroethene	61	9.494	9.494	0.000	94	17216	0.2004	0.2277	
32 Hexane	57	10.002	10.002	0.000	94	18222	0.2004	0.2329	
S 35 1,2-Dichloroethene, Total	61				0		0.4009	0.4496	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 1,1-Dichloroethane	63	10.275	10.281	-0.006	99	20848	0.2004	0.2281	
34 Vinyl acetate	43	10.291	10.281	0.010	100	26223	0.2004	0.2128	M
36 2-Butanone (MEK)	72	11.276	11.254	0.022	100	5792	0.2004	0.2334	
37 cis-1,2-Dichloroethene	96	11.281	11.281	0.000	98	10481	0.2004	0.2219	
38 Ethyl acetate	88	11.334	11.324	0.010	98	727	0.2004	0.1843	
* 39 Chlorobromomethane	128	11.693	11.693	0.000	95	237434	10.0	10.0	
40 Tetrahydrofuran	42	11.736	11.714	0.022	95	13809	0.2004	0.2465	M
41 Chloroform	83	11.869	11.870	-0.001	97	22790	0.2004	0.2295	
42 1,1,1-Trichloroethane	97	12.164	12.169	-0.005	95	21380	0.2004	0.2246	
43 Cyclohexane	84	12.287	12.292	-0.005	96	14248	0.2004	0.2274	
44 Carbon tetrachloride	117	12.431	12.437	-0.006	95	19492	0.2004	0.2158	
45 Benzene	78	12.795	12.795	0.000	97	35343	0.2004	0.2319	
46 1,2-Dichloroethane	62	12.875	12.875	0.000	93	16168	0.2004	0.2290	
47 Isooctane	57	12.998	12.998	0.000	98	58609	0.2004	0.2278	
48 n-Heptane	43	13.303	13.303	0.000	95	22578	0.2004	0.2290	
* 49 1,4-Difluorobenzene	114	13.528	13.528	0.000	97	1208645	10.0	10.0	
50 n-Butanol	56	13.779	13.763	0.016	91	8985	0.2004	0.2449	
51 Trichloroethene	95	13.956	13.956	0.000	89	14163	0.2004	0.2184	
53 1,2-Dichloropropane	63	14.421	14.427	-0.006	92	13991	0.2004	0.2262	
54 Methyl methacrylate	69	14.507	14.507	0.000	93	11165	0.2004	0.2049	
55 1,4-Dioxane	88	14.560	14.539	0.021	98	6693	0.2004	0.2237	
57 Dibromomethane	174	14.576	14.582	-0.006	85	9680	0.2004	0.2210	
58 Dichlorobromomethane	83	14.892	14.892	0.000	97	23586	0.2004	0.2157	
59 cis-1,3-Dichloropropene	75	15.689	15.695	-0.006	96	20152	0.2004	0.2106	
61 4-Methyl-2-pentanone (MIBK)	43	15.973	15.962	0.011	97	26527	0.2004	0.2077	
62 Toluene	92	16.326	16.326	0.000	92	22122	0.2004	0.2226	
A 63 Toluene Range	1	16.331	(16.256-16.406)		0	94659	NC	NC	
64 n-Octane	43	16.556	16.556	0.000	93	30187	0.2004	0.2228	
A 65 C8 Range	1	16.567	(16.476-16.658)		0	112868	NC	NC	
66 trans-1,3-Dichloropropene	75	16.748	16.748	0.000	97	16828	0.2004	0.2038	
67 1,1,2-Trichloroethane	83	17.128	17.128	0.000	95	12035	0.2004	0.2199	
68 Tetrachloroethene	166	17.305	17.305	0.000	88	14106	0.2004	0.2216	
69 2-Hexanone	43	17.546	17.535	0.011	92	25503	0.2004	0.2132	
70 Chlorodibromomethane	129	17.861	17.861	0.000	95	17305	0.2004	0.1970	
71 Ethylene Dibromide	107	18.097	18.102	-0.005	97	18945	0.2004	0.2155	
* 73 Chlorobenzene-d5	117	19.006	19.006	0.000	92	1058542	10.0	10.0	
74 Chlorobenzene	112	19.065	19.065	0.000	90	28472	0.2004	0.2266	
75 Ethylbenzene	91	19.252	19.252	0.000	99	48719	0.2004	0.2206	
76 m-Xylene & p-Xylene	106	19.509	19.509	0.000	0	33727	0.4009	0.4234	
77 n-Nonane	57	19.557	19.557	0.000	93	26972	0.2004	0.2176	
S 80 Xylenes, Total	106				0		0.6013	0.6331	
78 o-Xylene	106	20.279	20.285	-0.006	97	16075	0.2004	0.2097	
79 Styrene	104	20.317	20.317	0.000	98	23783	0.2004	0.1930	M
81 Bromoform	173	20.659	20.659	0.000	89	12854	0.2004	0.1782	
82 Isopropylbenzene	105	20.959	20.953	0.006	99	48633	0.2004	0.2133	
83 1,1,2,2-Tetrachloroethane	83	21.478	21.478	0.000	98	30843	0.2004	0.2178	
84 1,2,3-Trichloropropane	75	21.569	21.574	-0.005	98	26073	0.2004	0.2352	
85 N-Propylbenzene	91	21.654	21.654	0.000	98	65341	0.2004	0.2200	
86 2-Chlorotoluene	91	21.804	21.804	0.000	96	42511	0.2004	0.2243	
87 4-Ethyltoluene	105	21.847	21.847	0.000	98	48922	0.2004	0.2150	
88 1,3,5-Trimethylbenzene	105	21.938	21.943	-0.005	90	39188	0.2004	0.2045	
89 n-Decane	57	21.959	21.959	0.000	91	35331	0.2004	0.2211	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 Alpha Methyl Styrene	118	22.264	22.264	0.000	84	16230	0.2004	0.1803	
91 tert-Butylbenzene	119	22.419	22.419	0.000	90	36982	0.2004	0.2136	
92 1,2,4-Trimethylbenzene	105	22.499	22.505	-0.006	98	40346	0.2004	0.2083	
93 sec-Butylbenzene	105	22.740	22.740	0.000	98	60535	0.2004	0.2156	
94 1,3-Dichlorobenzene	146	22.911	22.911	0.000	97	25453	0.2004	0.2173	
95 4-Isopropyltoluene	119	22.949	22.949	0.000	96	44633	0.2004	0.2046	
96 1,4-Dichlorobenzene	146	23.050	23.051	-0.001	89	25403	0.2004	0.2150	
97 Benzyl chloride	91	23.200	23.200	0.000	97	34318	0.2004	0.1946	
98 n-Butylbenzene	91	23.505	23.505	0.000	97	52239	0.2004	0.2122	
99 1,2-Dichlorobenzene	146	23.548	23.548	0.000	94	24891	0.2004	0.2208	
100 Undecane	57	23.644	23.644	0.000	95	36476	0.2004	0.2194	
101 Dodecane	57	25.249	25.249	0.000	94	32485	0.2004	0.1929	
102 1,2,4-Trichlorobenzene	180	26.014	26.020	-0.006	92	19666	0.2004	0.2028	
103 Hexachlorobutadiene	225	26.260	26.260	0.000	88	14736	0.2004	0.1957	
104 Naphthalene	128	26.512	26.512	0.000	98	48801	0.2004	0.2005	
105 1,2,3-Trichlorobenzene	180	26.929	26.934	-0.005	84	16782	0.2004	0.2062	
114 Methylcyclohexane	83		0.000				ND	ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated

Reagents:

ATTO15CAL1w_00255	Amount Added: 200.00	Units: mL	
ATTO15CISs_00012	Amount Added: 20.00	Units: mL	Run Reagent

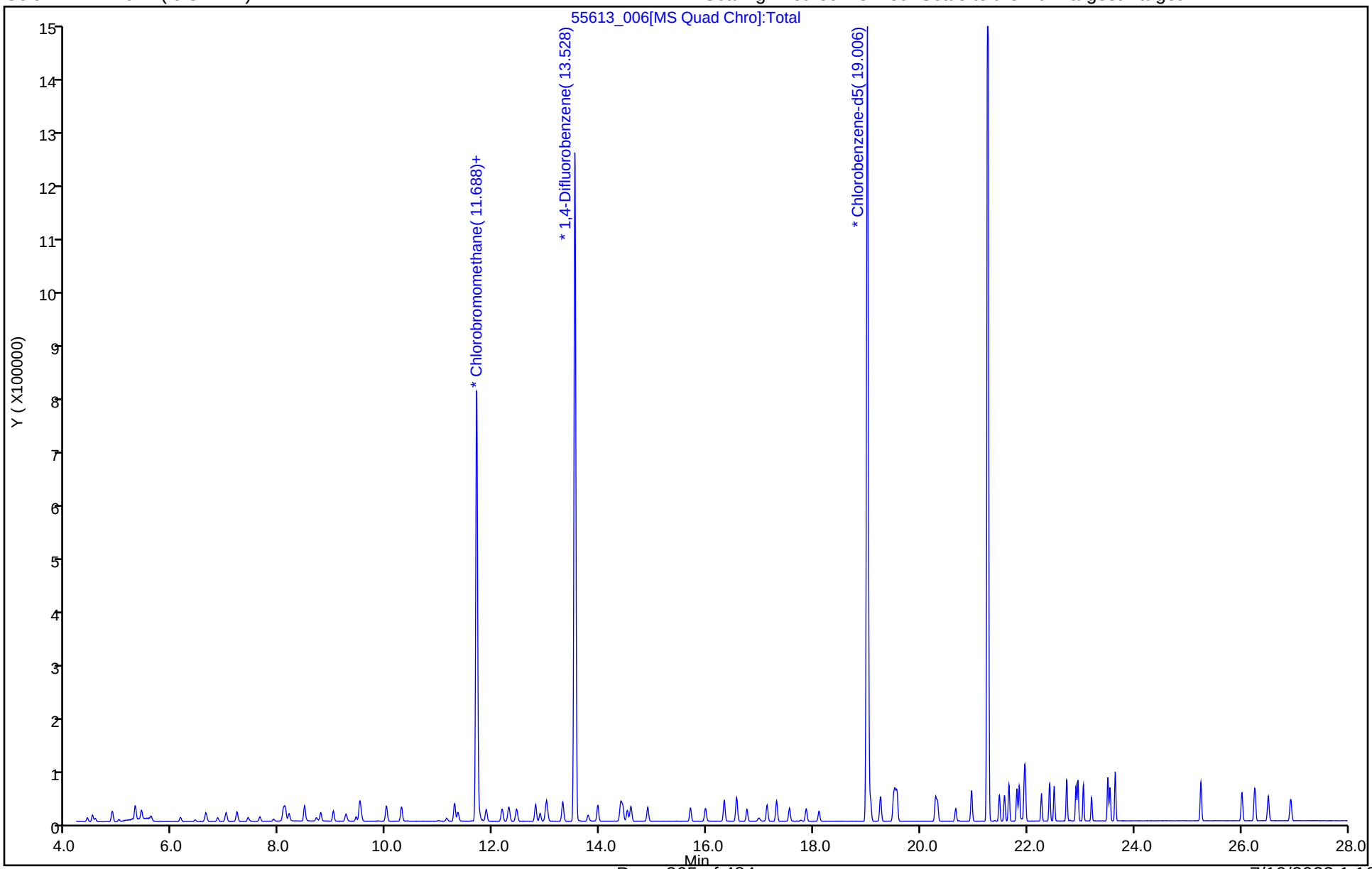
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Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_006.D

Injection Date:	22-May-2023 18:16:25	Instrument ID:	CHAN.i	Operator ID:	
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		

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



Manual Integration/User Assign Peak Report

Eurofins Burlington

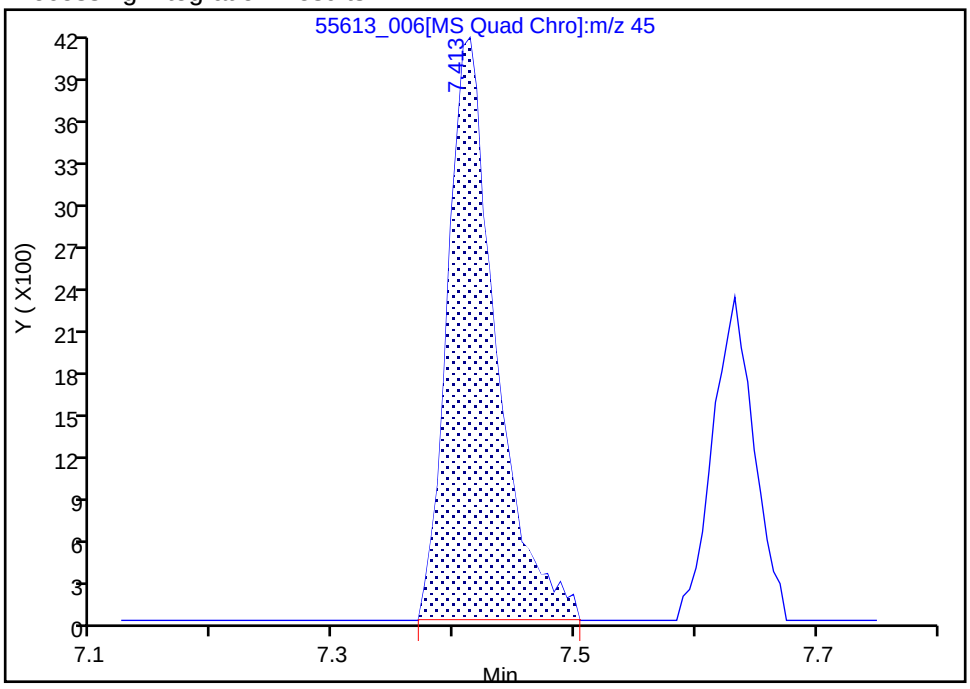
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Injection Date:	22-May-2023 18:16:25	Instrument ID:	CHAN.i		
Lims ID:	ic				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

16 Ethanol, CAS: 64-17-5

Signal: 1

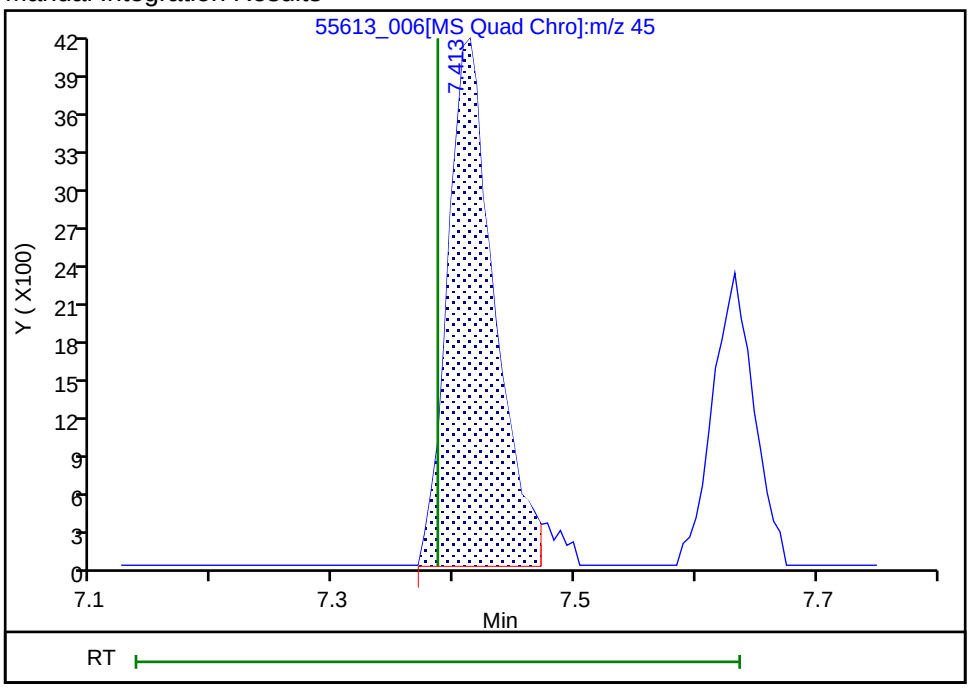
Processing Integration Results

RT: 7.41
Area: 11345
Amount: 0.438693
Amount Units: ppb v/v



Manual Integration Results

RT: 7.41
Area: 10982
Amount: 0.506906
Amount Units: ppb v/v



Reviewer: bunmaa, 23-May-2023 09:31:39 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

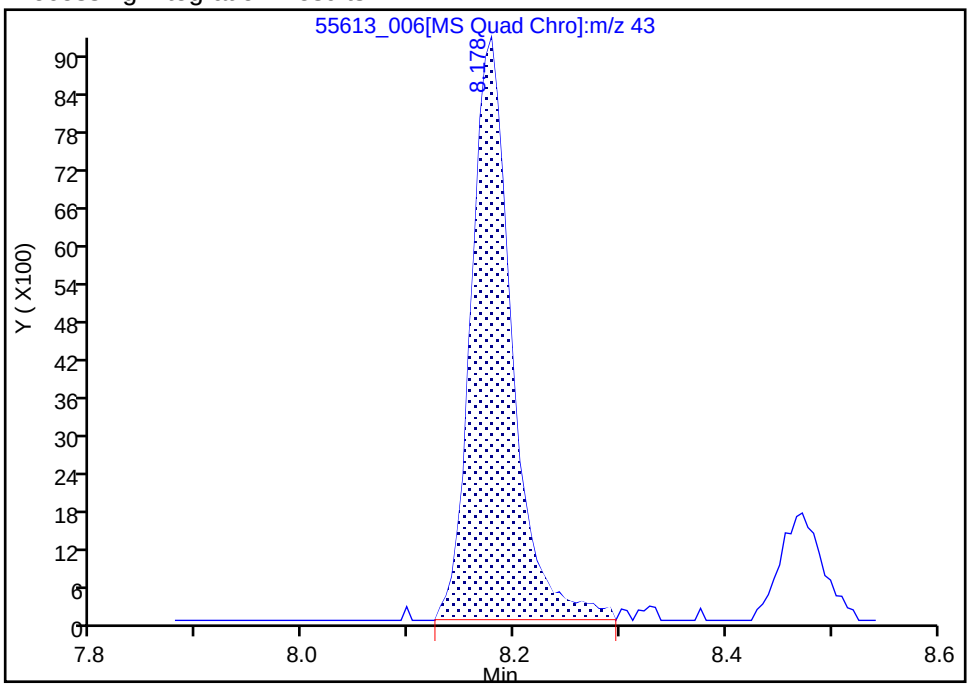
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Injection Date:	22-May-2023 18:16:25	Instrument ID:	CHAN.i		
Lims ID:	ic				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

22 Acetone, CAS: 67-64-1

Signal: 1

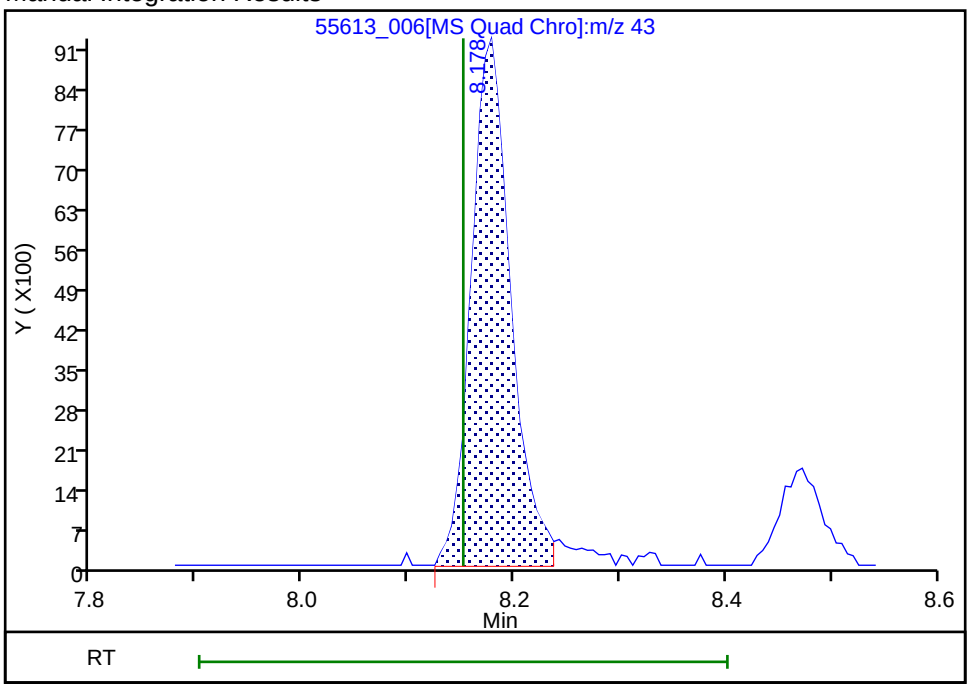
Processing Integration Results

RT: 8.18
Area: 24811
Amount: 0.194808
Amount Units: ppb v/v



Manual Integration Results

RT: 8.18
Area: 23923
Amount: 0.345513
Amount Units: ppb v/v



Reviewer: bunmaa, 23-May-2023 09:32:30 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

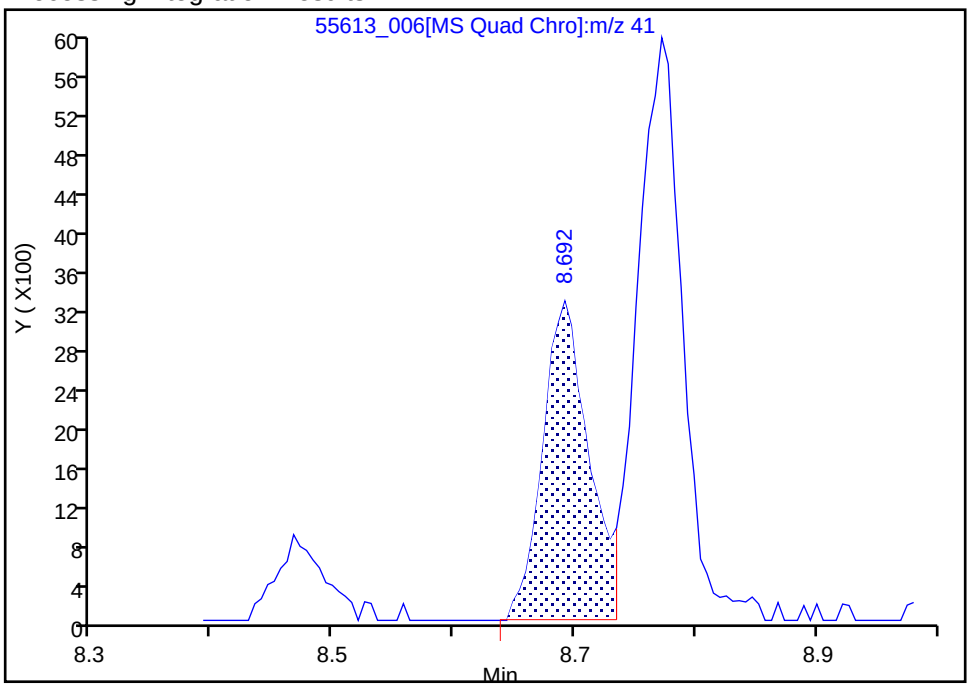
Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_006.D				
Injection Date:	22-May-2023 18:16:25	Instrument ID:	CHAN.i		
Lims ID:	ic				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

25 Acetonitrile, CAS: 75-05-8

Signal: 1

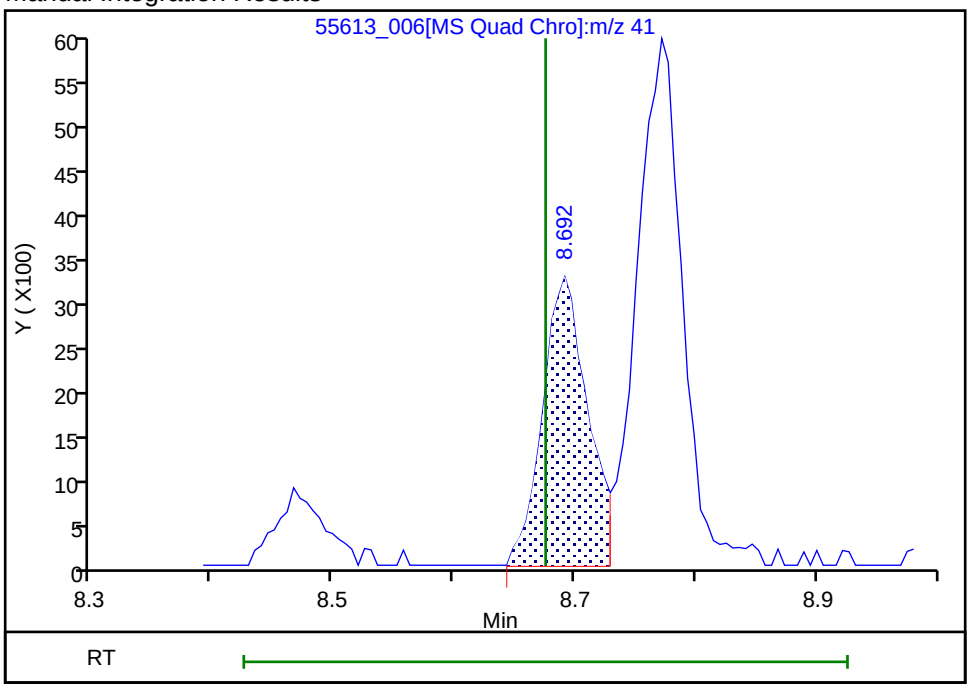
Processing Integration Results

RT: 8.69
Area: 8730
Amount: 0.216087
Amount Units: ppb v/v



Manual Integration Results

RT: 8.69
Area: 8428
Amount: 0.258869
Amount Units: ppb v/v



Reviewer: bunmaa, 23-May-2023 09:33:00 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

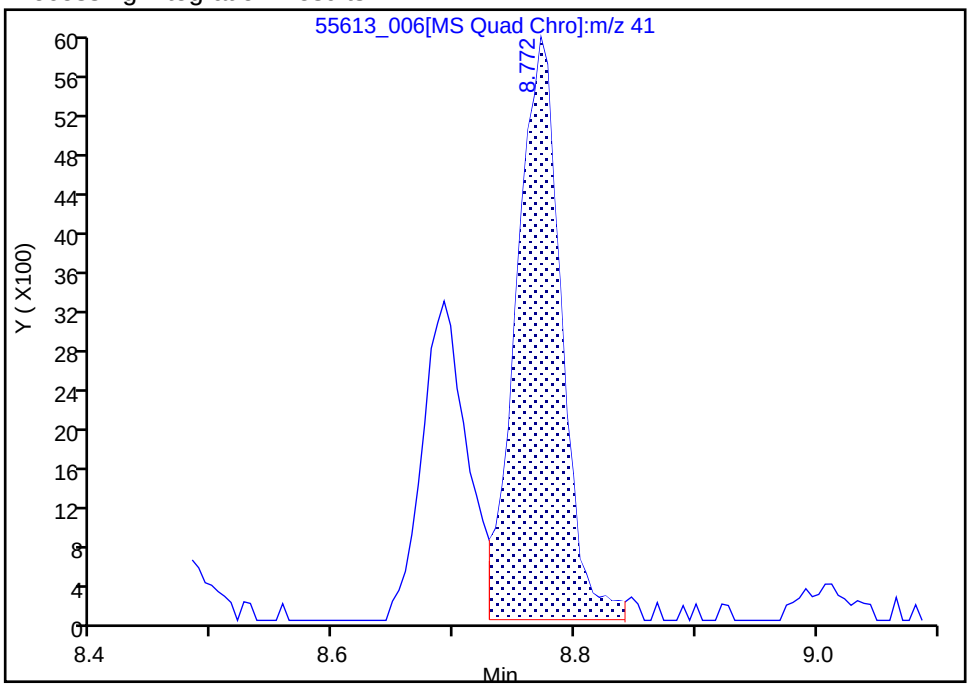
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Injection Date:	22-May-2023 18:16:25	Instrument ID:	CHAN.i		
Lims ID:	ic				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

26 3-Chloro-1-propene, CAS: 107-05-1

Signal: 1

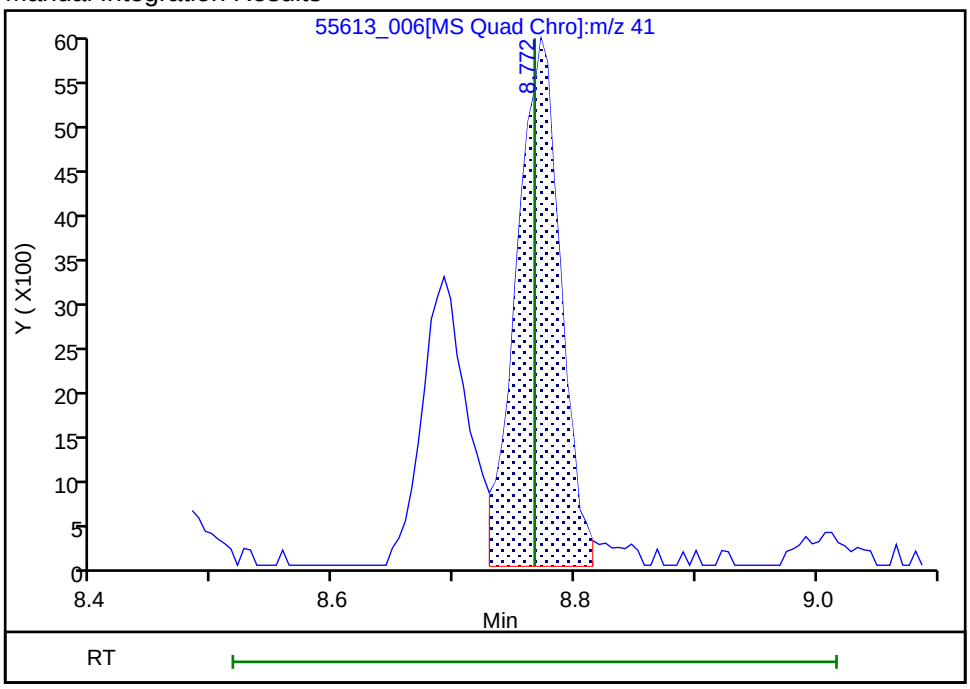
Processing Integration Results

RT: 8.77
Area: 15447
Amount: 0.218343
Amount Units: ppb v/v



Manual Integration Results

RT: 8.77
Area: 15106
Amount: 0.248570
Amount Units: ppb v/v



Reviewer: bunmaa, 23-May-2023 09:33:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

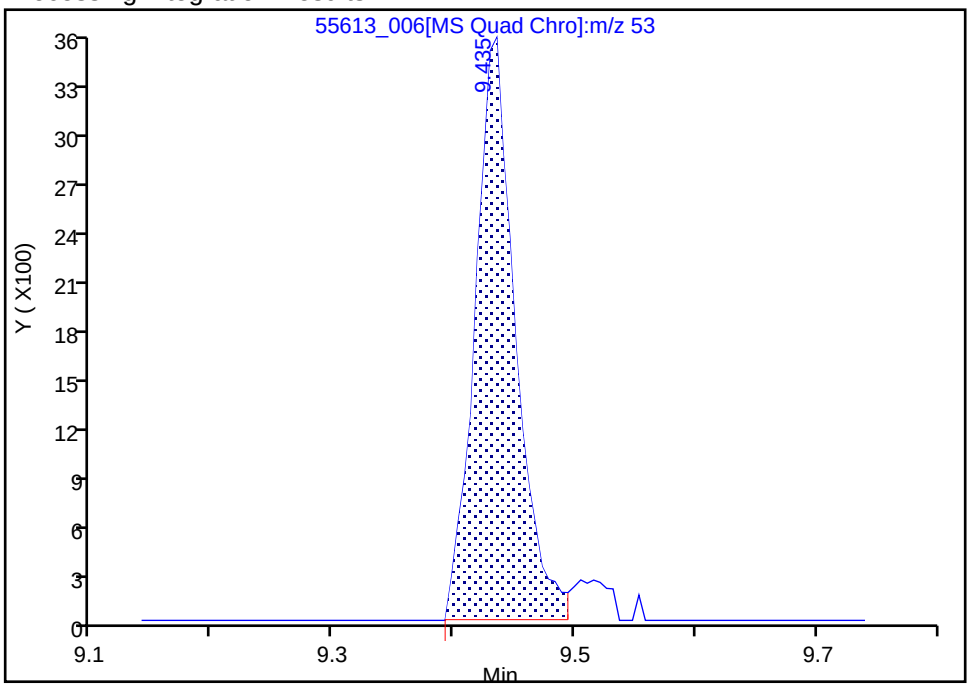
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Injection Date:	22-May-2023 18:16:25	Instrument ID:	CHAN.i		
Lims ID:	ic				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

29 Acrylonitrile, CAS: 107-13-1

Signal: 1

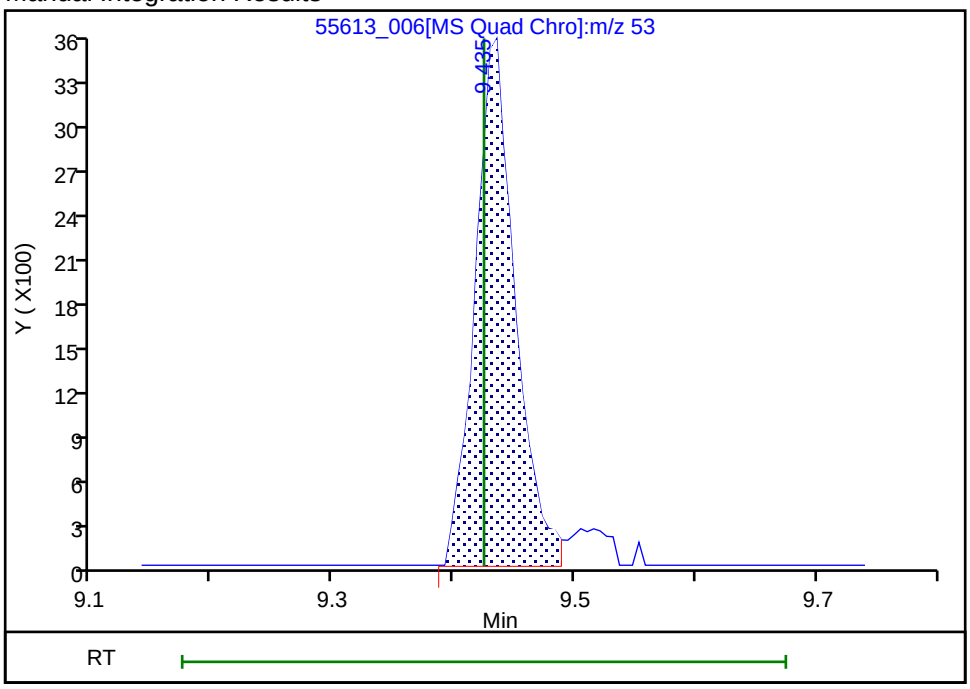
Processing Integration Results

RT: 9.44
Area: 8123
Amount: 0.216854
Amount Units: ppb v/v



Manual Integration Results

RT: 9.44
Area: 8069
Amount: 0.221495
Amount Units: ppb v/v



Reviewer: bunmaa, 23-May-2023 09:33:45 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

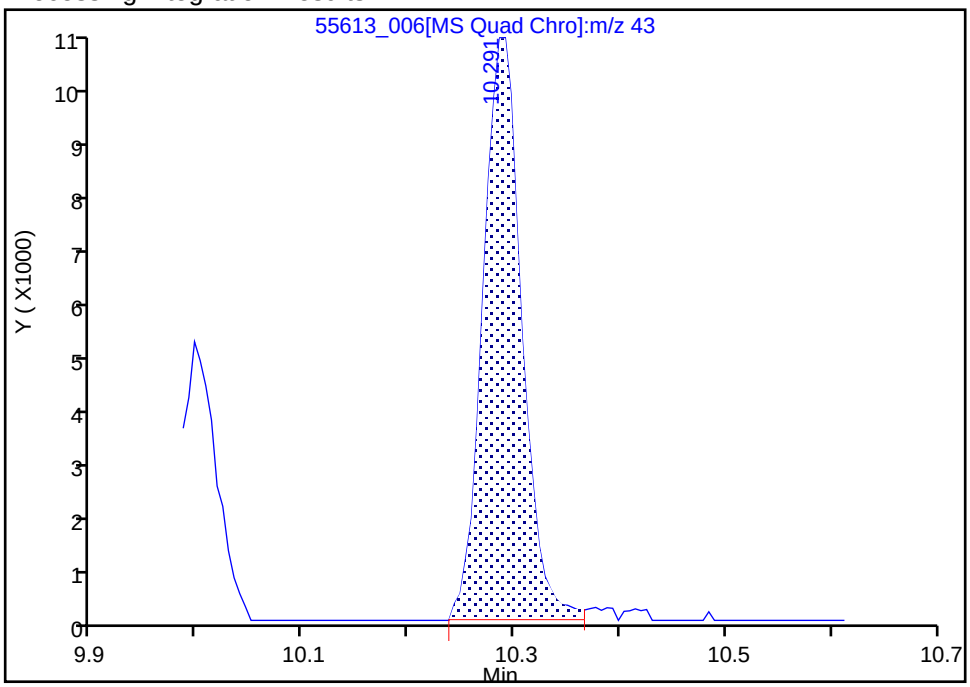
Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_006.D				
Injection Date:	22-May-2023 18:16:25	Instrument ID:	CHAN.i		
Lims ID:	ic				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

34 Vinyl acetate, CAS: 108-05-4

Signal: 1

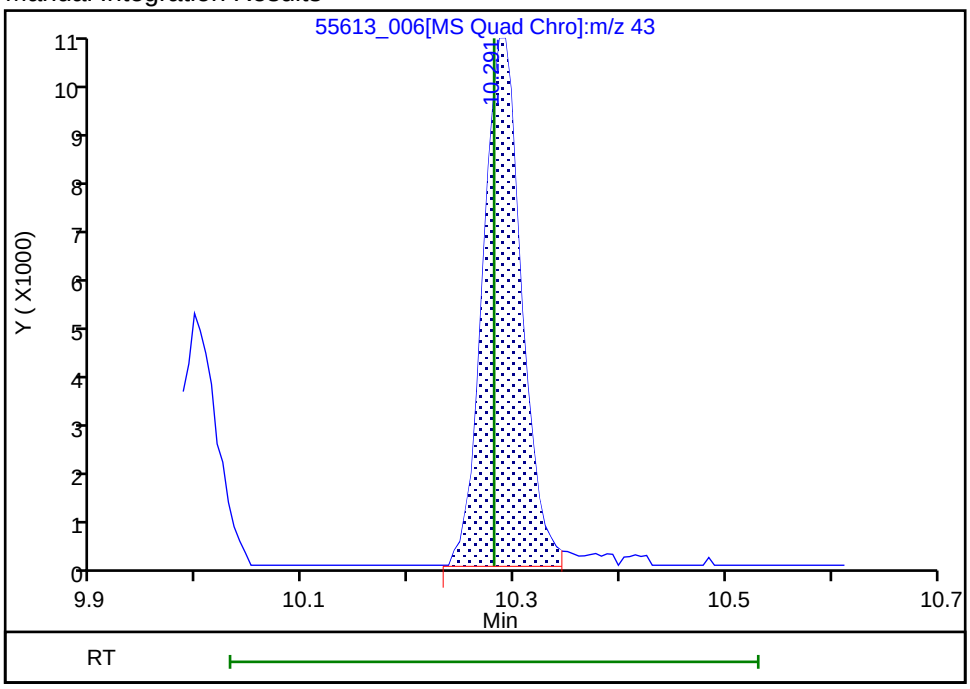
Processing Integration Results

RT: 10.29
Area: 26500
Amount: 0.207444
Amount Units: ppb v/v



Manual Integration Results

RT: 10.29
Area: 26223
Amount: 0.212802
Amount Units: ppb v/v



Reviewer: bunmaa, 23-May-2023 09:34:28 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

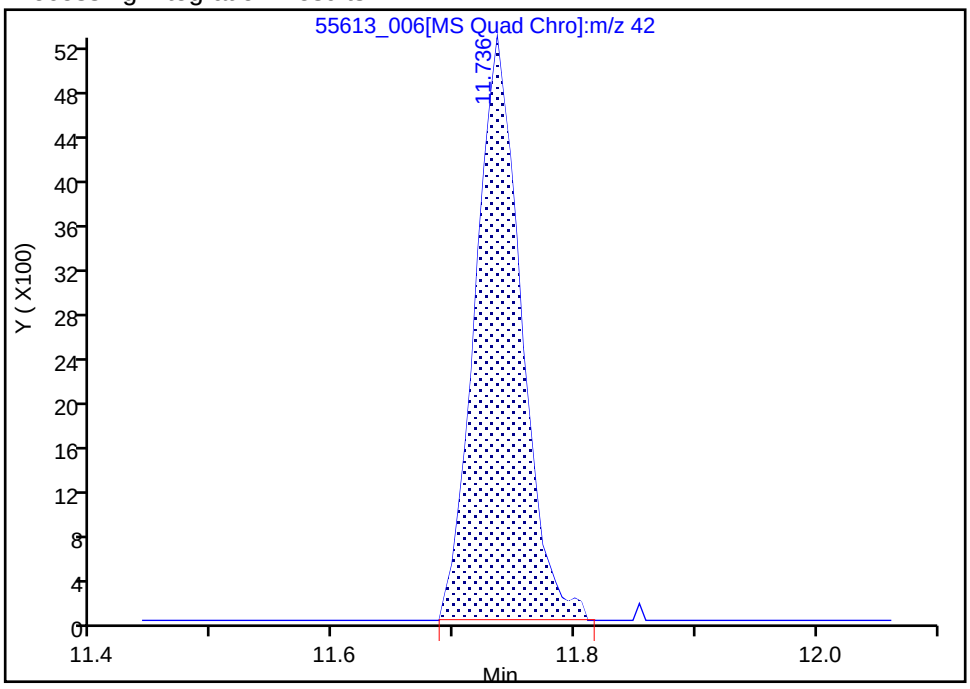
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Injection Date:	22-May-2023 18:16:25	Instrument ID:	CHAN.i		
Lims ID:	ic				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

40 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

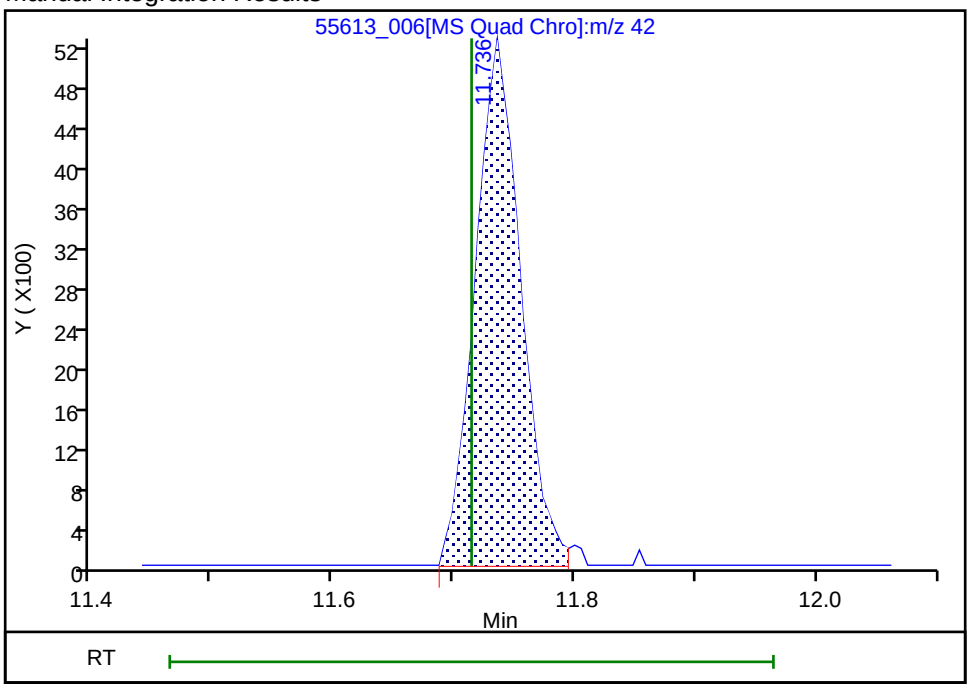
Processing Integration Results

RT: 11.74
Area: 13927
Amount: 0.216392
Amount Units: ppb v/v



Manual Integration Results

RT: 11.74
Area: 13809
Amount: 0.246511
Amount Units: ppb v/v



Reviewer: bunmaa, 23-May-2023 09:35:16 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

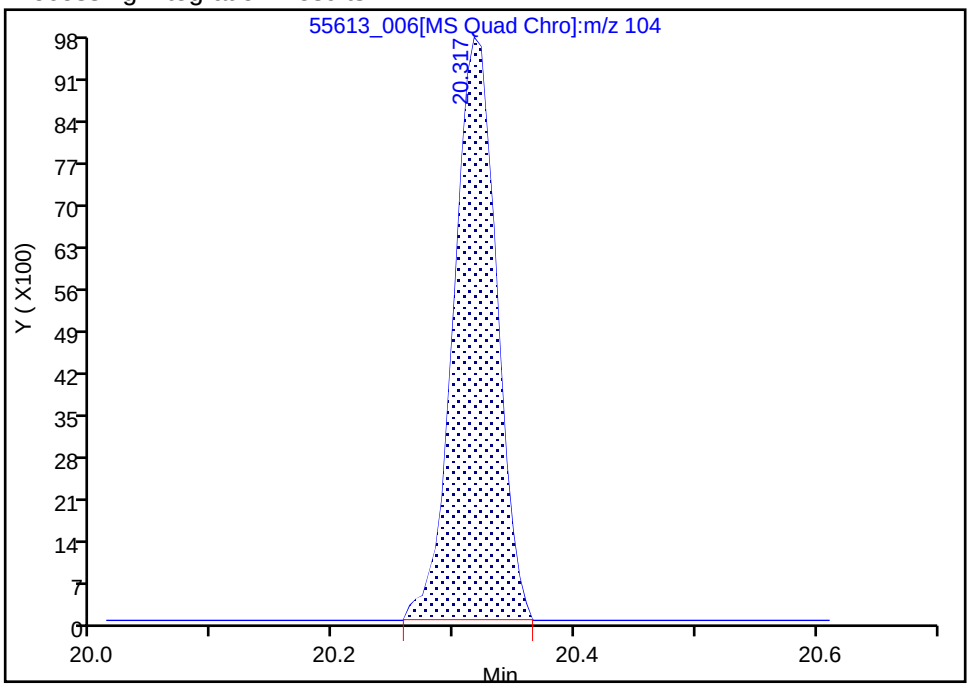
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Injection Date:	22-May-2023 18:16:25	Instrument ID:	CHAN.i		
Lims ID:	ic				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

79 Styrene, CAS: 100-42-5

Signal: 1

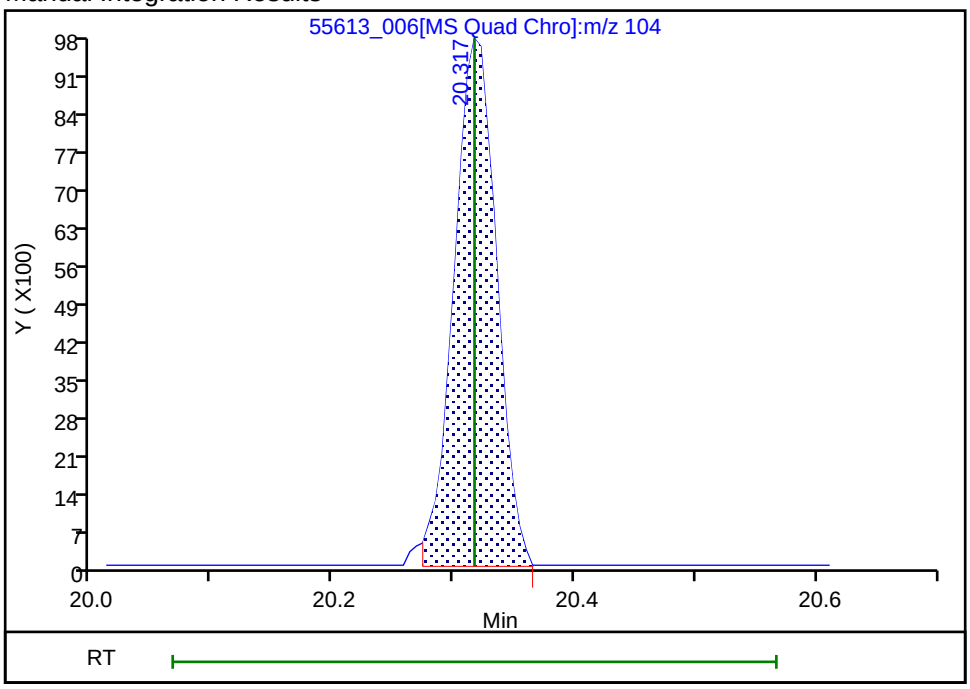
Processing Integration Results

RT: 20.32
Area: 23977
Amount: 0.201147
Amount Units: ppb v/v



Manual Integration Results

RT: 20.32
Area: 23783
Amount: 0.192954
Amount Units: ppb v/v



Reviewer: bunmaa, 23-May-2023 09:37:25 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Assign Peak

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_007.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 22-May-2023 19:08:01 ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0055638-007
Operator ID: Instrument ID: CHAN.i
Sublist: chrom-TO15_TO3_Master_Method_AN*sub1

Method: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\TO15_TO3_Master_Method_AN.m
Limit Group: AI_TO15_ICAL
Last Update: 23-May-2023 08:56:12 Calib Date: 23-May-2023 01:58:58
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: bunmaa Date: 23-May-2023 09:43:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	4.396	4.396	0.000	97	12737	0.5005	0.6269	
2 Dichlorodifluoromethane	85	4.497	4.492	0.005	99	41062	0.5005	0.5543	
3 Chlorodifluoromethane	51	4.551	4.546	0.005	97	26588	0.5005	0.5777	
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85	4.866	4.861	0.005	99	45236	0.5005	0.5519	
5 Chloromethane	50	4.990	4.990	0.000	99	16135	0.5005	0.5963	
7 Butane	43	5.294	5.295	-0.001	98	46614	0.5005	0.6199	
6 Vinyl chloride	62	5.300	5.300	0.000	76	31572	0.5005	0.5867	
8 Butadiene	54	5.412	5.412	0.000	96	24714	0.5005	0.5811	
9 Bromomethane	94	6.145	6.140	0.005	98	17542	0.5005	0.5519	
10 Chloroethane	64	6.413	6.418	-0.005	100	11622	0.5005	0.5876	
12 2-Methylbutane	43	6.621	6.616	0.005	94	26102	0.5005	0.5792	
13 Vinyl bromide	106	6.841	6.841	0.000	97	18202	0.5005	0.5543	
14 Trichlorofluoromethane	101	7.001	6.996	0.005	97	50089	0.5005	0.5520	
15 Pentane	43	7.204	7.199	0.005	95	40566	0.5005	0.5850	
16 Ethanol	45	7.397	7.386	0.011	97	140462	5.01	6.64	
18 Ethyl ether	59	7.627	7.616	0.011	95	16923	0.5005	0.5659	
19 Acrolein	56	7.884	7.873	0.011	97	9808	0.5005	0.5633	
20 1,1-Dichloroethene	96	8.066	8.066	0.000	93	21782	0.5005	0.5466	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	8.098	8.103	-0.005	92	46949	0.5005	0.5635	
22 Acetone	43	8.167	8.151	0.016	98	87547	0.5005	1.29	
23 Isopropyl alcohol	45	8.462	8.440	0.022	91	49914	0.5005	0.6236	
24 Carbon disulfide	76	8.467	8.467	0.000	100	72734	0.5005	0.5867	
25 Acetonitrile	41	8.686	8.676	0.010	98	20856	0.5005	0.6557	
26 3-Chloro-1-propene	41	8.772	8.767	0.005	98	34836	0.5005	0.5867	
27 Methylene Chloride	49	9.007	9.007	0.000	98	35399	0.5005	0.6355	
28 2-Methyl-2-propanol	59	9.237	9.211	0.026	98	50488	0.5005	0.5471	
29 Acrylonitrile	53	9.430	9.425	0.005	93	21258	0.5005	0.5973	M
31 Methyl tert-butyl ether	73	9.515	9.494	0.021	98	73987	0.5005	0.5651	
30 trans-1,2-Dichloroethene	61	9.494	9.494	0.000	94	42465	0.5005	0.5749	
32 Hexane	57	10.002	10.002	0.000	93	44528	0.5005	0.5825	
S 35 1,2-Dichloroethene, Total	61				0		1.00	1.13	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 1,1-Dichloroethane	63	10.275	10.281	-0.006	99	51408	0.5005	0.5757	
34 Vinyl acetate	43	10.286	10.281	0.005	100	63546	0.5005	0.5278	
36 2-Butanone (MEK)	72	11.265	11.254	0.011	100	15073	0.5005	0.6216	
37 cis-1,2-Dichloroethene	96	11.281	11.281	0.000	97	25839	0.5005	0.5600	
38 Ethyl acetate	88	11.340	11.324	0.016	98	2192	0.5005	0.5688	
* 39 Chlorobromomethane	128	11.693	11.693	0.000	95	231967	10.0	10.0	
40 Tetrahydrofuran	42	11.736	11.714	0.022	94	33674	0.5005	0.6180	
41 Chloroform	83	11.869	11.870	-0.001	96	56284	0.5005	0.5801	
42 1,1,1-Trichloroethane	97	12.169	12.169	0.000	97	51537	0.5005	0.5566	
43 Cyclohexane	84	12.292	12.292	0.000	96	34036	0.5005	0.5585	
44 Carbon tetrachloride	117	12.436	12.437	-0.001	95	47808	0.5005	0.5440	
45 Benzene	78	12.795	12.795	0.000	97	85673	0.5005	0.5779	
46 1,2-Dichloroethane	62	12.880	12.875	0.005	93	39694	0.5005	0.5781	
47 Isooctane	57	12.998	12.998	0.000	98	144920	0.5005	0.5791	
48 n-Heptane	43	13.303	13.303	0.000	95	55520	0.5005	0.5789	
* 49 1,4-Difluorobenzene	114	13.528	13.528	0.000	97	1175702	10.0	10.0	
50 n-Butanol	56	13.769	13.763	0.005	93	23023	0.5005	0.6451	
51 Trichloroethene	95	13.961	13.956	0.005	90	34737	0.5005	0.5507	
53 1,2-Dichloropropane	63	14.427	14.427	0.000	92	34023	0.5005	0.5654	
54 Methyl methacrylate	69	14.512	14.507	0.005	93	27189	0.5005	0.5129	
55 1,4-Dioxane	88	14.555	14.539	0.016	98	15880	0.5005	0.5456	
57 Dibromomethane	174	14.582	14.582	0.000	85	23021	0.5005	0.5404	
58 Dichlorobromomethane	83	14.892	14.892	0.000	97	57395	0.5005	0.5395	
59 cis-1,3-Dichloropropene	75	15.694	15.695	-0.001	97	49455	0.5005	0.5314	
61 4-Methyl-2-pentanone (MIBK)	43	15.973	15.962	0.011	97	68042	0.5005	0.5477	
62 Toluene	92	16.326	16.326	0.000	93	54636	0.5005	0.5656	
A 63 Toluene Range	1	16.331	(16.256-16.406)		0	235770	NC	NC	
64 n-Octane	43	16.556	16.556	0.000	94	74660	0.5005	0.5665	
A 65 C8 Range	1	16.567	(16.476-16.658)		0	278812	NC	NC	
66 trans-1,3-Dichloropropene	75	16.748	16.748	0.000	98	42313	0.5005	0.5268	
67 1,1,2-Trichloroethane	83	17.128	17.128	0.000	96	29874	0.5005	0.5616	
68 Tetrachloroethene	166	17.305	17.305	0.000	89	33706	0.5005	0.5449	
69 2-Hexanone	43	17.545	17.535	0.010	92	61449	0.5005	0.5285	
70 Chlorodibromomethane	129	17.861	17.861	0.000	96	41917	0.5005	0.4910	
71 Ethylene Dibromide	107	18.096	18.102	-0.006	97	46103	0.5005	0.5395	
* 73 Chlorobenzene-d5	117	19.006	19.006	0.000	92	1028802	10.0	10.0	
74 Chlorobenzene	112	19.065	19.065	0.000	90	69183	0.5005	0.5666	
75 Ethylbenzene	91	19.252	19.252	0.000	100	119647	0.5005	0.5574	
76 m-Xylene & p-Xylene	106	19.514	19.509	0.005	0	85055	1.00	1.10	
77 n-Nonane	57	19.557	19.557	0.000	93	67957	0.5005	0.5642	
S 80 Xylenes, Total	106				0		1.50	1.64	
78 o-Xylene	106	20.279	20.285	-0.006	97	40268	0.5005	0.5404	
79 Styrene	104	20.317	20.317	0.000	98	60209	0.5005	0.5026	
81 Bromoform	173	20.659	20.659	0.000	90	28474	0.5005	0.4060	
82 Isopropylbenzene	105	20.953	20.953	0.000	99	122534	0.5005	0.5530	
83 1,1,2,2-Tetrachloroethane	83	21.478	21.478	0.000	98	76245	0.5005	0.5539	
84 1,2,3-Trichloropropane	75	21.574	21.574	0.000	97	61892	0.5005	0.5746	
85 N-Propylbenzene	91	21.654	21.654	0.000	97	163155	0.5005	0.5651	
86 2-Chlorotoluene	91	21.804	21.804	0.000	95	102285	0.5005	0.5552	
87 4-Ethyltoluene	105	21.847	21.847	0.000	98	121179	0.5005	0.5479	
88 1,3,5-Trimethylbenzene	105	21.943	21.943	0.000	91	101135	0.5005	0.5431	
89 n-Decane	57	21.959	21.959	0.000	91	88609	0.5005	0.5705	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 Alpha Methyl Styrene	118	22.264	22.264	0.000	85	41241	0.5005	0.4715	
91 tert-Butylbenzene	119	22.419	22.419	0.000	89	92654	0.5005	0.5507	
92 1,2,4-Trimethylbenzene	105	22.505	22.505	0.000	97	109044	0.5005	0.5792	
93 sec-Butylbenzene	105	22.740	22.740	0.000	98	152509	0.5005	0.5589	
94 1,3-Dichlorobenzene	146	22.911	22.911	0.000	97	60605	0.5005	0.5323	
95 4-Isopropyltoluene	119	22.949	22.949	0.000	96	114751	0.5005	0.5413	
96 1,4-Dichlorobenzene	146	23.050	23.051	-0.001	89	61214	0.5005	0.5330	
97 Benzyl chloride	91	23.200	23.200	0.000	97	80985	0.5005	0.4724	
98 n-Butylbenzene	91	23.505	23.505	0.000	98	127238	0.5005	0.5317	
99 1,2-Dichlorobenzene	146	23.548	23.548	0.000	91	58763	0.5005	0.5365	
100 Undecane	57	23.644	23.644	0.000	96	90677	0.5005	0.5613	
101 Dodecane	57	25.249	25.249	0.000	95	80526	0.5005	0.4920	
102 1,2,4-Trichlorobenzene	180	26.020	26.020	0.000	91	42825	0.5005	0.4545	
103 Hexachlorobutadiene	225	26.260	26.260	0.000	89	35329	0.5005	0.4828	
104 Naphthalene	128	26.512	26.512	0.000	98	125248	0.5005	0.5295	
105 1,2,3-Trichlorobenzene	180	26.934	26.934	0.000	92	36545	0.5005	0.4620	
114 Methylcyclohexane	83		0.000				ND	ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL2w_00335	Amount Added: 200.00	Units: mL	
ATTO15CISs_00012	Amount Added: 20.00	Units: mL	Run Reagent

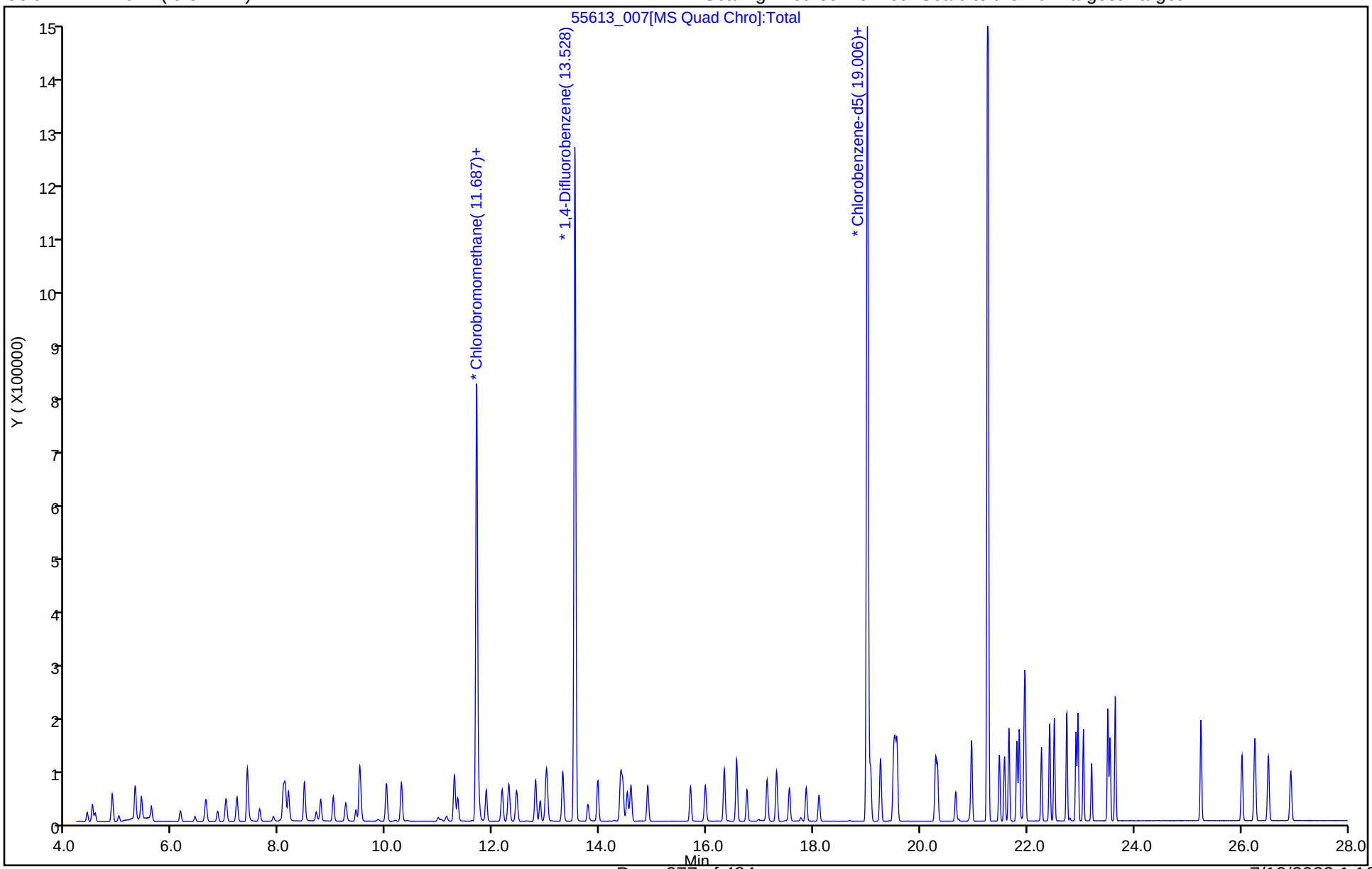
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Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_007.D

Injection Date:	22-May-2023 19:08:01	Instrument ID:	CHAN.i	Operator ID:	
Lims ID:	ic			Worklist Smp#:	7
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		

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



7/10/2023 1:16 PM

Manual Integration/User Assign Peak Report

Eurofins Burlington

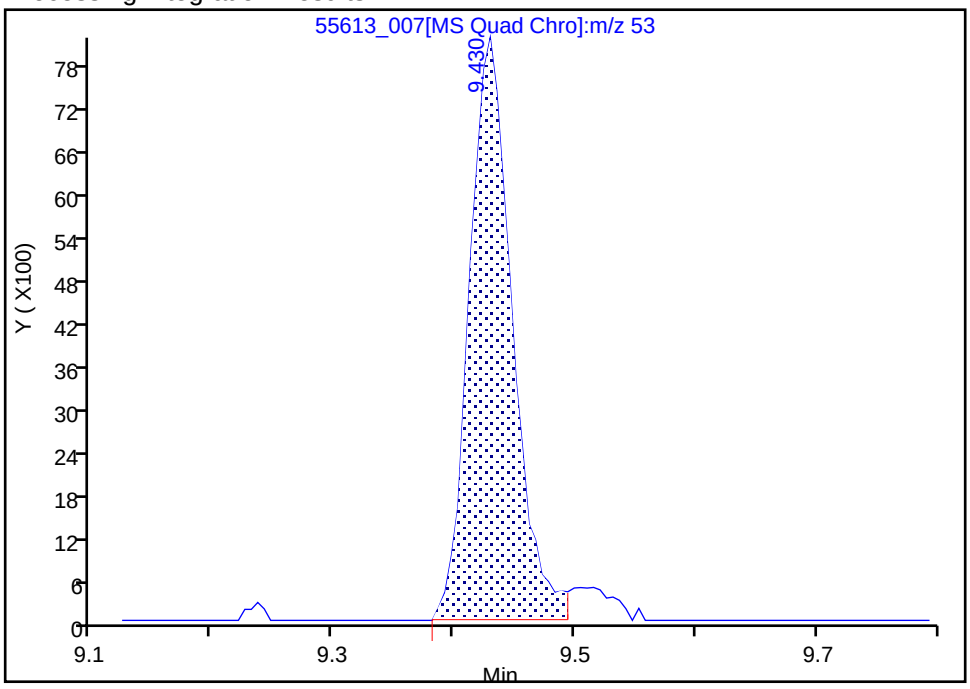
Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_007.D				
Injection Date:	22-May-2023 19:08:01	Instrument ID:	CHAN.i		
Lims ID:	ic				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	7
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

29 Acrylonitrile, CAS: 107-13-1

Signal: 1

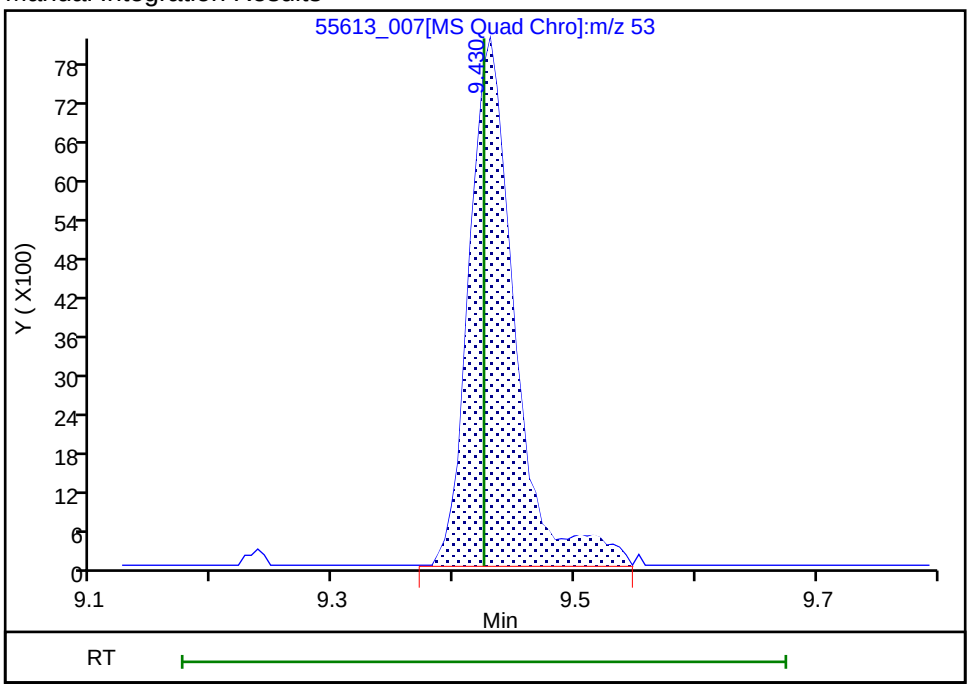
Processing Integration Results

RT: 9.43
Area: 20188
Amount: 0.552442
Amount Units: ppb v/v



Manual Integration Results

RT: 9.43
Area: 21258
Amount: 0.597287
Amount Units: ppb v/v



Reviewer: bunmaa, 23-May-2023 09:40:33 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Assign Peak

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_008.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 22-May-2023 19:59:30 ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0055638-008
Operator ID: Instrument ID: CHAN.i
Sublist: chrom-TO15_TO3_Master_Method_AN*sub1

Method: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\TO15_TO3_Master_Method_AN.m
Limit Group: AI_TO15_ICAL
Last Update: 23-May-2023 08:56:14 Calib Date: 23-May-2023 01:58:58
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: V0FK Date: 23-May-2023 08:55:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	4.396	4.396	0.000	98	103631	4.99	5.03	
2 Dichlorodifluoromethane	85	4.497	4.492	0.005	99	366473	4.99	4.87	
3 Chlorodifluoromethane	51	4.546	4.546	0.000	97	229275	4.99	4.91	
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85	4.867	4.861	0.006	98	394298	4.99	4.74	
5 Chloromethane	50	4.990	4.990	0.000	99	135554	4.99	4.94	
7 Butane	43	5.295	5.295	0.000	98	400255	4.99	5.25	
6 Vinyl chloride	62	5.295	5.300	-0.005	76	271697	4.99	4.98	
8 Butadiene	54	5.412	5.412	0.000	93	212803	4.99	4.93	
9 Bromomethane	94	6.145	6.140	0.005	99	153589	4.99	4.76	
10 Chloroethane	64	6.418	6.418	0.000	100	99420	4.99	4.95	
12 2-Methylbutane	43	6.621	6.616	0.005	93	224716	4.99	4.91	
13 Vinyl bromide	106	6.841	6.841	0.000	98	157816	4.99	4.74	
14 Trichlorofluoromethane	101	6.996	6.996	0.000	98	441983	4.99	4.80	
15 Pentane	43	7.204	7.199	0.005	96	361810	4.99	5.14	
16 Ethanol	45	7.392	7.386	0.006	98	218564	10.0	10.2	
18 Ethyl ether	59	7.616	7.616	0.000	95	151862	4.99	5.00	
19 Acrolein	56	7.879	7.873	0.005	96	92089	4.99	5.21	
20 1,1-Dichloroethene	96	8.066	8.066	0.000	93	192544	4.99	4.76	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	8.103	8.103	0.000	90	405707	4.99	4.80	
22 Acetone	43	8.157	8.151	0.006	98	376715	4.99	5.49	
23 Isopropyl alcohol	45	8.451	8.440	0.011	100	430336	4.99	5.30	
24 Carbon disulfide	76	8.467	8.467	0.000	100	648732	4.99	5.16	
25 Acetonitrile	41	8.681	8.676	0.005	99	178224	4.99	5.52	
26 3-Chloro-1-propene	41	8.767	8.767	0.000	97	307237	4.99	5.10	
27 Methylene Chloride	49	9.007	9.007	0.000	99	292720	4.99	5.18	
28 2-Methyl-2-propanol	59	9.221	9.211	0.010	99	492870	4.99	5.26	
29 Acrylonitrile	53	9.425	9.425	0.000	95	186674	4.99	5.17	M
31 Methyl tert-butyl ether	73	9.499	9.494	0.005	98	655815	4.99	4.94	
30 trans-1,2-Dichloroethene	61	9.494	9.494	0.000	83	364523	4.99	4.86	
32 Hexane	57	10.002	10.002	0.000	94	388984	4.99	5.01	
S 35 1,2-Dichloroethene, Total	61				0		9.99	9.71	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 1,1-Dichloroethane	63	10.275	10.281	-0.006	99	444022	4.99	4.90	
34 Vinyl acetate	43	10.281	10.281	0.000	100	636278	4.99	5.21	
36 2-Butanone (MEK)	72	11.254	11.254	0.000	100	121623	4.99	4.94	
37 cis-1,2-Dichloroethene	96	11.276	11.281	-0.005	98	227001	4.99	4.85	
38 Ethyl acetate	88	11.324	11.324	0.000	99	20003	4.99	5.11	
* 39 Chlorobromomethane	128	11.693	11.693	0.000	95	235409	10.0	10.0	
40 Tetrahydrofuran	42	11.720	11.714	0.006	94	295126	4.99	5.33	
41 Chloroform	83	11.869	11.870	-0.001	96	486734	4.99	4.94	
42 1,1,1-Trichloroethane	97	12.169	12.169	0.000	97	455870	4.99	4.84	
43 Cyclohexane	84	12.292	12.292	0.000	96	302260	4.99	4.88	
44 Carbon tetrachloride	117	12.437	12.437	-0.001	95	431519	4.99	4.83	
45 Benzene	78	12.795	12.795	0.000	97	737549	4.99	4.89	
46 1,2-Dichloroethane	62	12.881	12.875	0.006	93	341363	4.99	4.89	
47 Isooctane	57	12.998	12.998	0.000	99	1270124	4.99	4.99	
48 n-Heptane	43	13.303	13.303	0.000	95	482762	4.99	4.95	
* 49 1,4-Difluorobenzene	114	13.528	13.528	0.000	97	1195343	10.0	10.0	
50 n-Butanol	56	13.763	13.763	0.000	91	182205	4.99	5.02	
51 Trichloroethene	95	13.956	13.956	0.000	91	309355	4.99	4.82	
53 1,2-Dichloropropane	63	14.427	14.427	0.000	92	302051	4.99	4.94	
54 Methyl methacrylate	69	14.507	14.507	0.000	93	268566	4.99	4.98	
55 1,4-Dioxane	88	14.544	14.539	0.005	98	149217	4.99	5.04	
57 Dibromomethane	174	14.582	14.582	0.000	86	207743	4.99	4.80	
58 Dichlorobromomethane	83	14.892	14.892	0.000	98	530636	4.99	4.91	
59 cis-1,3-Dichloropropene	75	15.695	15.695	0.000	96	466824	4.99	4.93	
61 4-Methyl-2-pentanone (MIBK)	43	15.962	15.962	0.000	97	642975	4.99	5.09	
62 Toluene	92	16.326	16.326	0.000	93	485996	4.99	4.88	
A 63 Toluene Range	1	16.331	(16.256-16.406)		0	2089627	NC	NC	
64 n-Octane	43	16.556	16.556	0.000	94	673494	4.99	5.03	
A 65 C8 Range	1	16.567	(16.476-16.658)		0	2484565	NC	NC	
66 trans-1,3-Dichloropropene	75	16.748	16.748	0.000	98	402833	4.99	4.93	
67 1,1,2-Trichloroethane	83	17.128	17.128	0.000	97	269796	4.99	4.92	
68 Tetrachloroethene	166	17.305	17.305	0.000	89	302387	4.99	4.74	
69 2-Hexanone	43	17.540	17.535	0.005	93	612873	4.99	5.11	
70 Chlorodibromomethane	129	17.861	17.861	0.000	96	433404	4.99	4.92	
71 Ethylene Dibromide	107	18.097	18.102	-0.005	98	429653	4.99	4.88	
* 73 Chlorobenzene-d5	117	19.006	19.006	0.000	91	1061022	10.0	10.0	
74 Chlorobenzene	112	19.065	19.065	0.000	90	609305	4.99	4.84	
75 Ethylbenzene	91	19.252	19.252	0.000	100	1097093	4.99	4.96	
76 m-Xylene & p-Xylene	106	19.509	19.509	0.000	0	779945	9.99	9.77	
77 n-Nonane	57	19.557	19.557	0.000	92	617155	4.99	4.97	
S 80 Xylenes, Total	106				0		15.0	14.7	
78 o-Xylene	106	20.285	20.285	0.000	97	376488	4.99	4.90	
79 Styrene	104	20.317	20.317	0.000	99	620562	4.99	5.02	
81 Bromoform	173	20.659	20.659	0.000	91	363626	4.99	5.03	
82 Isopropylbenzene	105	20.953	20.953	0.000	99	1141478	4.99	4.99	
83 1,1,2,2-Tetrachloroethane	83	21.478	21.478	0.000	98	701878	4.99	4.94	
84 1,2,3-Trichloropropane	75	21.574	21.574	0.000	98	555291	4.99	5.00	
85 N-Propylbenzene	91	21.654	21.654	0.000	98	1507007	4.99	5.06	
86 2-Chlorotoluene	91	21.804	21.804	0.000	96	936226	4.99	4.93	
87 4-Ethyltoluene	105	21.847	21.847	0.000	98	1143556	4.99	5.01	
88 1,3,5-Trimethylbenzene	105	21.943	21.943	0.000	91	959322	4.99	5.00	
89 n-Decane	57	21.959	21.959	0.000	91	810530	4.99	5.06	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 Alpha Methyl Styrene	118	22.264	22.264	0.000	84	457071	4.99	5.07	
91 tert-Butylbenzene	119	22.419	22.419	0.000	96	854256	4.99	4.92	
92 1,2,4-Trimethylbenzene	105	22.505	22.505	0.000	99	963959	4.99	4.96	
93 sec-Butylbenzene	105	22.735	22.740	-0.005	98	1431905	4.99	5.09	
94 1,3-Dichlorobenzene	146	22.911	22.911	0.000	97	570906	4.99	4.86	
95 4-Isopropyltoluene	119	22.949	22.949	0.000	96	1102214	4.99	5.04	
96 1,4-Dichlorobenzene	146	23.050	23.051	-0.001	90	577734	4.99	4.88	
97 Benzyl chloride	91	23.206	23.200	0.006	97	920384	4.99	5.21	
98 n-Butylbenzene	91	23.505	23.505	0.000	97	1269232	4.99	5.14	
99 1,2-Dichlorobenzene	146	23.548	23.548	0.000	91	552517	4.99	4.89	
100 Undecane	57	23.644	23.644	0.000	96	901665	4.99	5.41	
101 Dodecane	57	25.249	25.249	0.000	96	921905	4.99	5.46	
102 1,2,4-Trichlorobenzene	180	26.020	26.020	0.000	92	485258	4.99	4.99	
103 Hexachlorobutadiene	225	26.260	26.260	0.000	96	365932	4.99	4.85	
104 Naphthalene	128	26.512	26.512	0.000	98	1261273	4.99	5.17	
105 1,2,3-Trichlorobenzene	180	26.934	26.934	0.000	93	414475	4.99	5.08	
114 Methylcyclohexane	83		0.000				ND	ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated

Reagents:

ATTO15CAL3w_00264	Amount Added: 200.00	Units: mL	
ATTO15CISs_00012	Amount Added: 20.00	Units: mL	Run Reagent

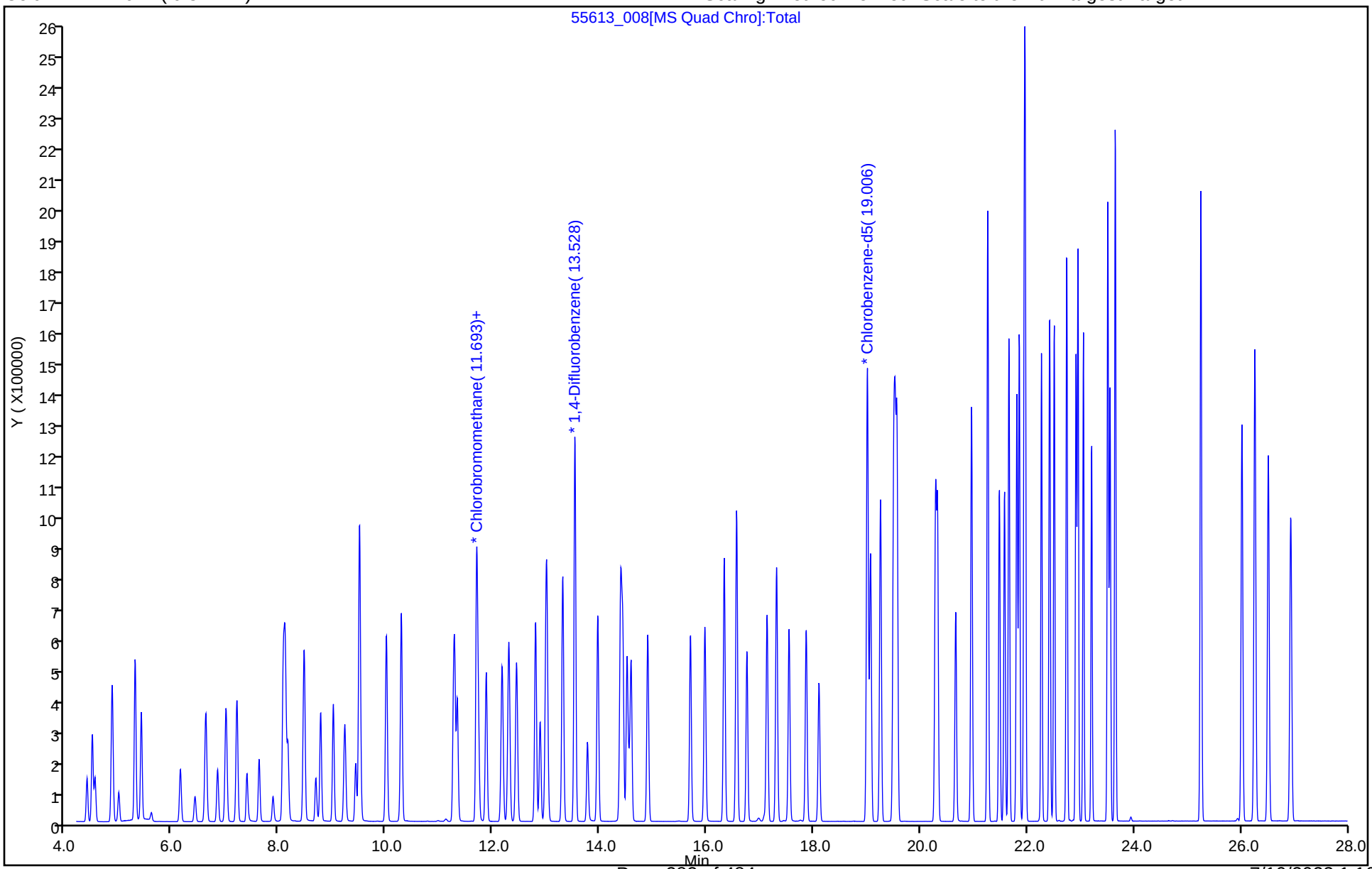
Report Date: 23-May-2023 08:56:14 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_008.D

Injection Date:	22-May-2023 19:59:30	Instrument ID:	CHAN.i	Operator ID:	
Lims ID:	ic			Worklist Smp#:	8
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		

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



7/10/2023 1:16 PM

Manual Integration/User Assign Peak Report

Eurofins Burlington

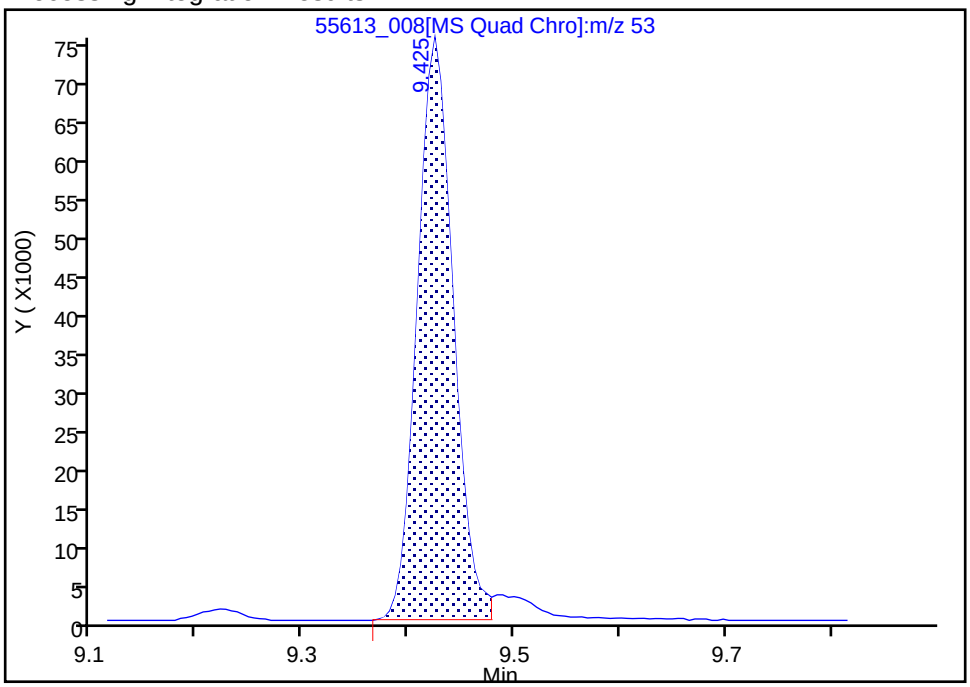
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Injection Date:	22-May-2023 19:59:30	Instrument ID:	CHAN.i		
Lims ID:	ic				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

29 Acrylonitrile, CAS: 107-13-1

Signal: 1

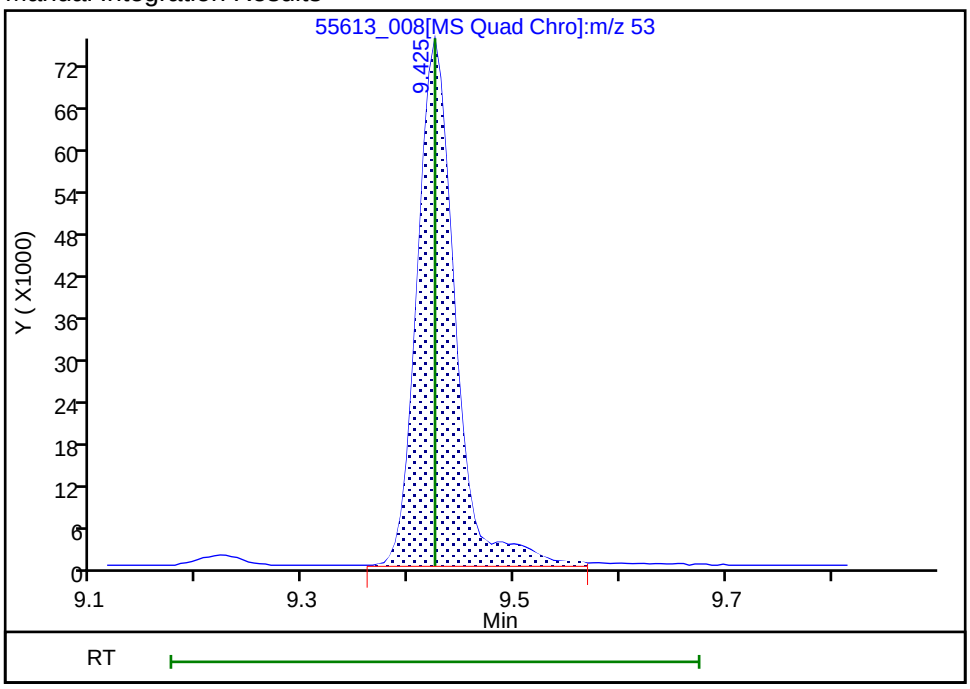
Processing Integration Results

RT: 9.42
Area: 177730
Amount: 4.737017
Amount Units: ppb v/v



Manual Integration Results

RT: 9.42
Area: 186674
Amount: 5.168300
Amount Units: ppb v/v



Reviewer: bunmaa, 23-May-2023 09:44:46 07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Assign Peak

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_009.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 22-May-2023 20:50:58 ALS Bottle#: 0 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0055638-009
Operator ID: Instrument ID: CHAN.i
Sublist: chrom-TO15_TO3_Master_Method_AN*sub1

Method: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\TO15_TO3_Master_Method_AN.m
Limit Group: AI_TO15_ICAL
Last Update: 23-May-2023 08:56:16 Calib Date: 23-May-2023 01:58:58
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: bunmaa Date: 23-May-2023 09:25:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	4.396	4.396	0.000	98	212480	10.0	10.0	
2 Dichlorodifluoromethane	85	4.492	4.492	0.000	99	749494	10.0	9.67	
3 Chlorodifluoromethane	51	4.546	4.546	0.000	97	463873	10.0	9.63	
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85	4.861	4.861	0.000	98	800121	10.0	9.33	
5 Chloromethane	50	4.990	4.990	0.000	99	270730	10.0	9.56	
7 Butane	43	5.295	5.295	0.000	98	769572	10.0	9.78	
6 Vinyl chloride	62	5.300	5.300	0.000	100	522655	10.0	9.28	
8 Butadiene	54	5.412	5.412	0.000	93	406917	10.0	9.15	
9 Bromomethane	94	6.140	6.140	0.000	98	310287	10.0	9.33	
10 Chloroethane	64	6.418	6.418	0.000	100	198190	10.0	9.58	
12 2-Methylbutane	43	6.616	6.616	0.000	93	446481	10.0	9.47	
13 Vinyl bromide	106	6.841	6.841	0.000	98	319778	10.0	9.31	
14 Trichlorofluoromethane	101	6.996	6.996	0.000	98	883408	10.0	9.31	
15 Pentane	43	7.199	7.199	0.000	96	716856	10.0	9.88	
16 Ethanol	45	7.386	7.386	0.000	98	311469	15.0	14.1	
18 Ethyl ether	59	7.616	7.616	0.000	95	301270	10.0	9.63	
19 Acrolein	56	7.873	7.873	0.000	96	179943	10.0	9.88	
20 1,1-Dichloroethene	96	8.066	8.066	0.000	93	392352	10.0	9.41	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	8.103	8.103	0.000	90	817941	10.0	9.38	
22 Acetone	43	8.151	8.151	0.000	98	734634	10.0	10.4	
23 Isopropyl alcohol	45	8.440	8.440	0.000	100	985115	10.0	11.8	
24 Carbon disulfide	76	8.467	8.467	0.000	100	1253847	10.0	9.67	
25 Acetonitrile	41	8.676	8.676	0.000	99	343207	10.0	10.3	
26 3-Chloro-1-propene	41	8.767	8.767	0.000	98	524008	10.0	8.44	
27 Methylene Chloride	49	9.007	9.007	0.000	98	559868	10.0	9.61	
28 2-Methyl-2-propanol	59	9.211	9.211	0.000	99	997909	10.0	10.3	
29 Acrylonitrile	53	9.425	9.425	0.000	94	359464	10.0	9.65	
31 Methyl tert-butyl ether	73	9.494	9.494	0.000	98	1298912	10.0	9.48	
30 trans-1,2-Dichloroethene	61	9.494	9.494	0.000	95	717377	10.0	9.28	
32 Hexane	57	10.002	10.002	0.000	93	753290	10.0	9.42	
S 35 1,2-Dichloroethene, Total	61				0		20.0	18.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 1,1-Dichloroethane	63	10.281	10.281	0.000	100	865330	10.0	9.26	
34 Vinyl acetate	43	10.281	10.281	0.000	100	1211161	10.0	9.62	
36 2-Butanone (MEK)	72	11.254	11.254	0.000	100	242464	10.0	9.56	
37 cis-1,2-Dichloroethene	96	11.281	11.281	0.000	95	448258	10.0	9.29	
38 Ethyl acetate	88	11.324	11.324	0.000	99	40105	10.0	9.95	
* 39 Chlorobromomethane	128	11.693	11.693	0.000	96	242688	10.0	10.0	
40 Tetrahydrofuran	42	11.714	11.714	0.000	94	571539	10.0	10.2	
41 Chloroform	83	11.870	11.870	0.000	97	949835	10.0	9.36	
42 1,1,1-Trichloroethane	97	12.169	12.169	0.000	97	898745	10.0	9.41	
43 Cyclohexane	84	12.292	12.292	0.000	96	593903	10.0	9.45	
44 Carbon tetrachloride	117	12.437	12.437	0.000	95	864175	10.0	9.53	
45 Benzene	78	12.795	12.795	0.000	97	1442178	10.0	9.43	
46 1,2-Dichloroethane	62	12.875	12.875	0.000	93	665708	10.0	9.40	
47 Isooctane	57	12.998	12.998	0.000	99	2463563	10.0	9.54	
48 n-Heptane	43	13.303	13.303	0.000	95	941585	10.0	9.52	
* 49 1,4-Difluorobenzene	114	13.528	13.528	0.000	97	1212907	10.0	10.0	
50 n-Butanol	56	13.763	13.763	0.000	91	386999	10.0	10.5	
51 Trichloroethene	95	13.956	13.956	0.000	91	614013	10.0	9.44	
53 1,2-Dichloropropane	63	14.427	14.427	0.000	92	590474	10.0	9.51	
54 Methyl methacrylate	69	14.507	14.507	0.000	93	539634	10.0	9.87	
55 1,4-Dioxane	88	14.539	14.539	0.000	99	309142	10.0	10.3	
57 Dibromomethane	174	14.582	14.582	0.000	86	413954	10.0	9.42	
58 Dichlorobromomethane	83	14.892	14.892	0.000	98	1050304	10.0	9.57	
59 cis-1,3-Dichloropropene	75	15.695	15.695	0.000	96	930981	10.0	9.70	
61 4-Methyl-2-pentanone (MIBK)	43	15.962	15.962	0.000	97	1269987	10.0	9.91	
62 Toluene	92	16.326	16.326	0.000	93	962689	10.0	9.46	
A 63 Toluene Range	1	16.331	(16.256-16.406)		0	4105303	NC	NC	
64 n-Octane	43	16.556	16.556	0.000	94	1310621	10.0	9.64	
A 65 C8 Range	1	16.567	(16.476-16.658)		0	4858106	NC	NC	
66 trans-1,3-Dichloropropene	75	16.748	16.748	0.000	98	802782	10.0	9.69	
67 1,1,2-Trichloroethane	83	17.128	17.128	0.000	97	530650	10.0	9.47	
68 Tetrachloroethene	166	17.305	17.305	0.000	89	607101	10.0	9.31	
69 2-Hexanone	43	17.535	17.535	0.000	93	1216288	10.0	9.93	
70 Chlorodibromomethane	129	17.861	17.861	0.000	97	869644	10.0	9.67	
71 Ethylene Dibromide	107	18.102	18.102	0.000	98	858599	10.0	9.54	
* 73 Chlorobenzene-d5	117	19.006	19.006	0.000	91	1084033	10.0	10.0	
74 Chlorobenzene	112	19.065	19.065	0.000	90	1206382	10.0	9.38	
75 Ethylbenzene	91	19.252	19.252	0.000	100	2171881	10.0	9.60	
76 m-Xylene & p-Xylene	106	19.509	19.509	0.000	0	1558593	20.0	19.1	
77 n-Nonane	57	19.557	19.557	0.000	92	1209550	10.0	9.53	
S 80 Xylenes, Total	106				0		30.0	28.7	
78 o-Xylene	106	20.285	20.285	0.000	97	751278	10.0	9.57	
79 Styrene	104	20.317	20.317	0.000	99	1254499	10.0	9.94	
81 Bromoform	173	20.659	20.659	0.000	91	715780	10.0	9.69	
82 Isopropylbenzene	105	20.953	20.953	0.000	98	2248786	10.0	9.63	
83 1,1,2,2-Tetrachloroethane	83	21.478	21.478	0.000	98	1390221	10.0	9.58	
84 1,2,3-Trichloropropane	75	21.574	21.574	0.000	98	1097031	10.0	9.67	
85 N-Propylbenzene	91	21.654	21.654	0.000	98	2951220	10.0	9.70	
86 2-Chlorotoluene	91	21.804	21.804	0.000	96	1834026	10.0	9.45	
87 4-Ethyltoluene	105	21.847	21.847	0.000	98	2253739	10.0	9.67	
88 1,3,5-Trimethylbenzene	105	21.943	21.943	0.000	91	1896928	10.0	9.67	
89 n-Decane	57	21.959	21.959	0.000	91	1556992	10.0	9.51	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 Alpha Methyl Styrene	118	22.264	22.264	0.000	84	927433	10.0	10.1	
91 tert-Butylbenzene	119	22.419	22.419	0.000	90	1696927	10.0	9.57	
92 1,2,4-Trimethylbenzene	105	22.505	22.505	0.000	99	1893737	10.0	9.55	
93 sec-Butylbenzene	105	22.740	22.740	0.000	98	2798554	10.0	9.73	
94 1,3-Dichlorobenzene	146	22.911	22.911	0.000	97	1144196	10.0	9.54	
95 4-Isopropyltoluene	119	22.949	22.949	0.000	96	2187824	10.0	9.80	
96 1,4-Dichlorobenzene	146	23.051	23.051	0.000	89	1156535	10.0	9.56	
97 Benzyl chloride	91	23.200	23.200	0.000	97	1773086	10.0	9.82	
98 n-Butylbenzene	91	23.505	23.505	0.000	98	2460315	10.0	9.76	
99 1,2-Dichlorobenzene	146	23.548	23.548	0.000	91	1095940	10.0	9.50	
100 Undecane	57	23.644	23.644	0.000	96	1432103	10.0	8.41	
101 Dodecane	57	25.249	25.249	0.000	96	1262592	10.0	7.32	
102 1,2,4-Trichlorobenzene	180	26.020	26.020	0.000	92	889319	10.0	8.96	
103 Hexachlorobutadiene	225	26.260	26.260	0.000	91	704682	10.0	9.14	
104 Naphthalene	128	26.512	26.512	0.000	98	2089522	10.0	8.38	
105 1,2,3-Trichlorobenzene	180	26.934	26.934	0.000	96	723298	10.0	8.68	
114 Methylcyclohexane	83		0.000				ND	ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

ATTO15CAL4w_00807	Amount Added: 200.00	Units: mL	
ATTO15CISs_00012	Amount Added: 20.00	Units: mL	Run Reagent

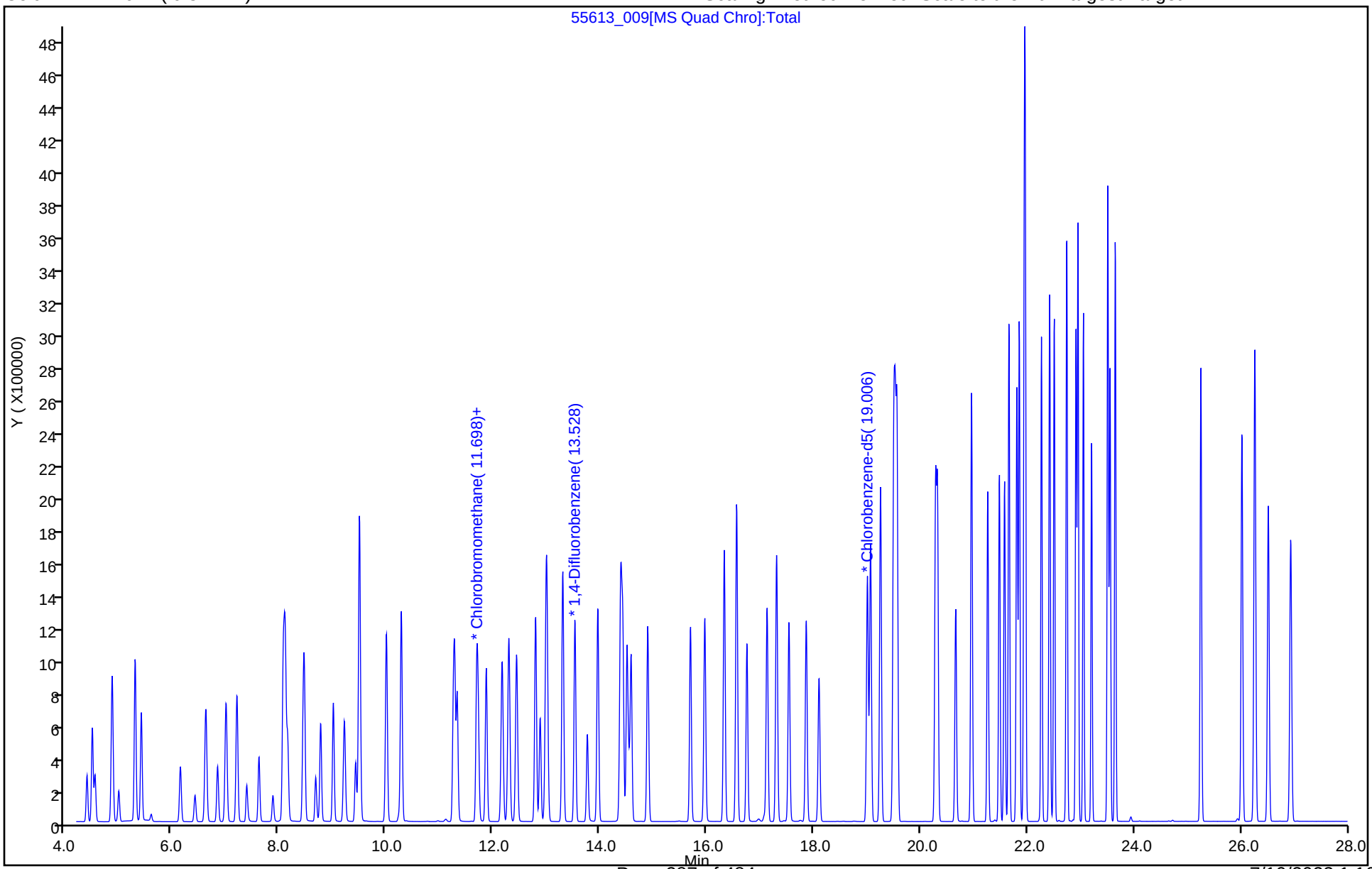
Report Date: 23-May-2023 08:56:16 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_009.D

Injection Date:	22-May-2023 20:50:58	Instrument ID:	CHAN.i	Operator ID:	
Lims ID:	icis			Worklist Smp#:	9
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		

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



7/10/2023 1:16 PM

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_010.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 22-May-2023 21:42:19 ALS Bottle#: 0 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0055638-010
Operator ID: Instrument ID: CHAN.i
Sublist: chrom-TO15_TO3_Master_Method_AN*sub1

Method: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\TO15_TO3_Master_Method_AN.m
Limit Group: AI_TO15_ICAL
Last Update: 23-May-2023 08:56:18 Calib Date: 23-May-2023 01:58:58
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: bunmaa Date: 23-May-2023 09:46:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	4.396	4.396	0.000	98	338424	15.0	15.0	
2 Dichlorodifluoromethane	85	4.497	4.492	0.005	99	1169664	15.0	14.2	
3 Chlorodifluoromethane	51	4.546	4.546	0.000	97	741067	15.0	14.5	
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85	4.867	4.861	0.006	98	1296319	15.0	14.3	
5 Chloromethane	50	4.990	4.990	0.000	99	433453	15.0	14.4	
7 Butane	43	5.295	5.295	0.000	98	1185809	15.0	14.2	
6 Vinyl chloride	62	5.300	5.300	0.000	77	809040	15.0	13.6	
8 Butadiene	54	5.412	5.412	0.000	93	629770	15.0	13.4	
9 Bromomethane	94	6.145	6.140	0.005	99	499556	15.0	14.2	
10 Chloroethane	64	6.418	6.418	0.000	100	317340	15.0	14.5	
12 2-Methylbutane	43	6.621	6.616	0.005	93	710127	15.0	14.2	
13 Vinyl bromide	106	6.841	6.841	0.000	99	520860	15.0	14.3	
14 Trichlorofluoromethane	101	6.996	6.996	0.000	98	1433599	15.0	14.2	
15 Pentane	43	7.204	7.199	0.005	96	1123045	15.0	14.6	
16 Ethanol	45	7.381	7.386	-0.005	98	443211	20.0	18.9	
18 Ethyl ether	59	7.611	7.616	-0.005	94	475764	15.0	14.3	
19 Acrolein	56	7.873	7.873	0.000	97	294062	15.0	15.2	
20 1,1-Dichloroethene	96	8.066	8.066	0.000	94	632478	15.0	14.3	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	8.103	8.103	0.000	91	1314551	15.0	14.2	
22 Acetone	43	8.151	8.151	0.000	98	1107359	15.0	14.8	
23 Isopropyl alcohol	45	8.440	8.440	0.000	100	1269000	15.0	14.3	
24 Carbon disulfide	76	8.467	8.467	0.000	100	1991569	15.0	14.5	
25 Acetonitrile	41	8.676	8.676	0.000	98	524315	15.0	14.9	
26 3-Chloro-1-propene	41	8.772	8.767	0.005	98	918979	15.0	14.0	
27 Methylene Chloride	49	9.007	9.007	0.000	98	869017	15.0	14.1	
28 2-Methyl-2-propanol	59	9.211	9.211	0.000	99	1524187	15.0	14.9	
29 Acrylonitrile	53	9.425	9.425	0.000	94	569930	15.0	14.4	
31 Methyl tert-butyl ether	73	9.494	9.494	0.000	98	2061215	15.0	14.2	
30 trans-1,2-Dichloroethene	61	9.494	9.494	0.000	96	1132880	15.0	13.8	
32 Hexane	57	10.002	10.002	0.000	93	1181242	15.0	13.9	
S 35 1,2-Dichloroethene, Total	61				0		30.0	27.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 1,1-Dichloroethane	63	10.281	10.281	0.000	99	1358931	15.0	13.7	
34 Vinyl acetate	43	10.281	10.281	0.000	100	2038868	15.0	15.3	
36 2-Butanone (MEK)	72	11.254	11.254	0.000	100	381717	15.0	14.2	
37 cis-1,2-Dichloroethene	96	11.281	11.281	0.000	95	713097	15.0	13.9	
38 Ethyl acetate	88	11.324	11.324	0.000	99	63899	15.0	15.0	
* 39 Chlorobromomethane	128	11.693	11.693	0.000	97	257263	10.0	10.0	
40 Tetrahydrofuran	42	11.714	11.714	0.000	94	891872	15.0	15.0	
41 Chloroform	83	11.869	11.870	-0.001	97	1505050	15.0	14.0	
42 1,1,1-Trichloroethane	97	12.169	12.169	0.000	98	1435312	15.0	14.2	
43 Cyclohexane	84	12.292	12.292	0.000	96	943717	15.0	14.2	
44 Carbon tetrachloride	117	12.437	12.437	0.000	96	1380314	15.0	14.4	
45 Benzene	78	12.795	12.795	0.000	97	2272065	15.0	14.0	
46 1,2-Dichloroethane	62	12.881	12.875	0.006	93	1053030	15.0	14.0	
47 Isooctane	57	12.998	12.998	0.000	99	3864430	15.0	14.1	
48 n-Heptane	43	13.303	13.303	0.000	94	1474673	15.0	14.1	
* 49 1,4-Difluorobenzene	114	13.533	13.528	0.005	97	1286332	10.0	10.0	
50 n-Butanol	56	13.763	13.763	0.000	90	580212	15.0	14.9	
51 Trichloroethene	95	13.961	13.956	0.005	91	979964	15.0	14.2	
53 1,2-Dichloropropane	63	14.427	14.427	0.000	91	931679	15.0	14.2	
54 Methyl methacrylate	69	14.507	14.507	0.000	94	868077	15.0	15.0	
55 1,4-Dioxane	88	14.539	14.539	0.000	98	444875	15.0	14.0	
57 Dibromomethane	174	14.582	14.582	0.000	87	666925	15.0	14.3	
58 Dichlorobromomethane	83	14.892	14.892	0.000	98	1689228	15.0	14.5	
59 cis-1,3-Dichloropropene	75	15.695	15.695	0.000	96	1495453	15.0	14.7	
61 4-Methyl-2-pentanone (MIBK)	43	15.962	15.962	0.000	98	2005266	15.0	14.8	
62 Toluene	92	16.326	16.326	0.000	93	1530743	15.0	14.3	
A 63 Toluene Range	1	16.331	(16.256-16.406)		0	6511282	NC	NC	
64 n-Octane	43	16.556	16.556	0.000	94	2048389	15.0	14.2	
A 65 C8 Range	1	16.567	(16.476-16.658)		0	7660320	NC	NC	
66 trans-1,3-Dichloropropene	75	16.748	16.748	0.000	98	1301333	15.0	14.8	
67 1,1,2-Trichloroethane	83	17.128	17.128	0.000	97	845748	15.0	14.3	
68 Tetrachloroethene	166	17.305	17.305	0.000	89	978085	15.0	14.2	
69 2-Hexanone	43	17.535	17.535	0.000	93	1939114	15.0	15.0	
70 Chlorodibromomethane	129	17.861	17.861	0.000	97	1439802	15.0	15.2	
71 Ethylene Dibromide	107	18.102	18.102	0.000	98	1382014	15.0	14.6	
* 73 Chlorobenzene-d5	117	19.006	19.006	0.000	92	1142517	10.0	10.0	
74 Chlorobenzene	112	19.065	19.065	0.000	90	1931711	15.0	14.2	
75 Ethylbenzene	91	19.252	19.252	0.000	99	3437631	15.0	14.4	
76 m-Xylene & p-Xylene	106	19.514	19.509	0.005	0	2503207	30.0	29.1	
77 n-Nonane	57	19.557	19.557	0.000	92	1924544	15.0	14.4	
S 80 Xylenes, Total	106				0		45.0	43.8	
78 o-Xylene	106	20.285	20.285	0.000	98	1212810	15.0	14.7	
79 Styrene	104	20.322	20.317	0.005	99	2020361	15.0	15.2	
81 Bromoform	173	20.659	20.659	0.000	91	1259055	15.0	16.2	
82 Isopropylbenzene	105	20.959	20.953	0.006	98	3591018	15.0	14.6	
83 1,1,2,2-Tetrachloroethane	83	21.478	21.478	0.000	98	2210822	15.0	14.5	
84 1,2,3-Trichloropropane	75	21.574	21.574	0.000	99	1741062	15.0	14.6	
85 N-Propylbenzene	91	21.654	21.654	0.000	98	4682391	15.0	14.6	
86 2-Chlorotoluene	91	21.804	21.804	0.000	96	2929234	15.0	14.3	
87 4-Ethyltoluene	105	21.852	21.847	0.005	98	3604873	15.0	14.7	
88 1,3,5-Trimethylbenzene	105	21.943	21.943	0.000	91	3078264	15.0	14.9	
89 n-Decane	57	21.959	21.959	0.000	91	2569614	15.0	14.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 Alpha Methyl Styrene	118	22.264	22.264	0.000	83	1515873	15.0	15.6	
91 tert-Butylbenzene	119	22.419	22.419	0.000	89	2728975	15.0	14.6	
92 1,2,4-Trimethylbenzene	105	22.505	22.505	0.000	99	3050142	15.0	14.6	
93 sec-Butylbenzene	105	22.735	22.740	-0.005	98	4455746	15.0	14.7	
94 1,3-Dichlorobenzene	146	22.911	22.911	0.000	97	1856896	15.0	14.7	
95 4-Isopropyltoluene	119	22.949	22.949	0.000	96	3527150	15.0	15.0	
96 1,4-Dichlorobenzene	146	23.051	23.051	0.000	90	1876073	15.0	14.7	
97 Benzyl chloride	91	23.200	23.200	0.000	97	2939625	15.0	15.4	
98 n-Butylbenzene	91	23.505	23.505	0.000	98	3972075	15.0	14.9	
99 1,2-Dichlorobenzene	146	23.548	23.548	0.000	91	1774951	15.0	14.6	
100 Undecane	57	23.644	23.644	0.000	96	2834638	15.0	15.8	
101 Dodecane	57	25.249	25.249	0.000	96	2927058	15.0	16.1	
102 1,2,4-Trichlorobenzene	180	26.020	26.020	0.000	92	1641049	15.0	15.7	
103 Hexachlorobutadiene	225	26.260	26.260	0.000	97	1246291	15.0	15.3	
104 Naphthalene	128	26.512	26.512	0.000	98	4116405	15.0	15.7	
105 1,2,3-Trichlorobenzene	180	26.934	26.934	0.000	93	1381801	15.0	15.7	
114 Methylcyclohexane	83		0.000				ND	ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

ATTO15CAL5w_00132	Amount Added: 200.00	Units: mL	
ATTO15CISs_00012	Amount Added: 20.00	Units: mL	Run Reagent

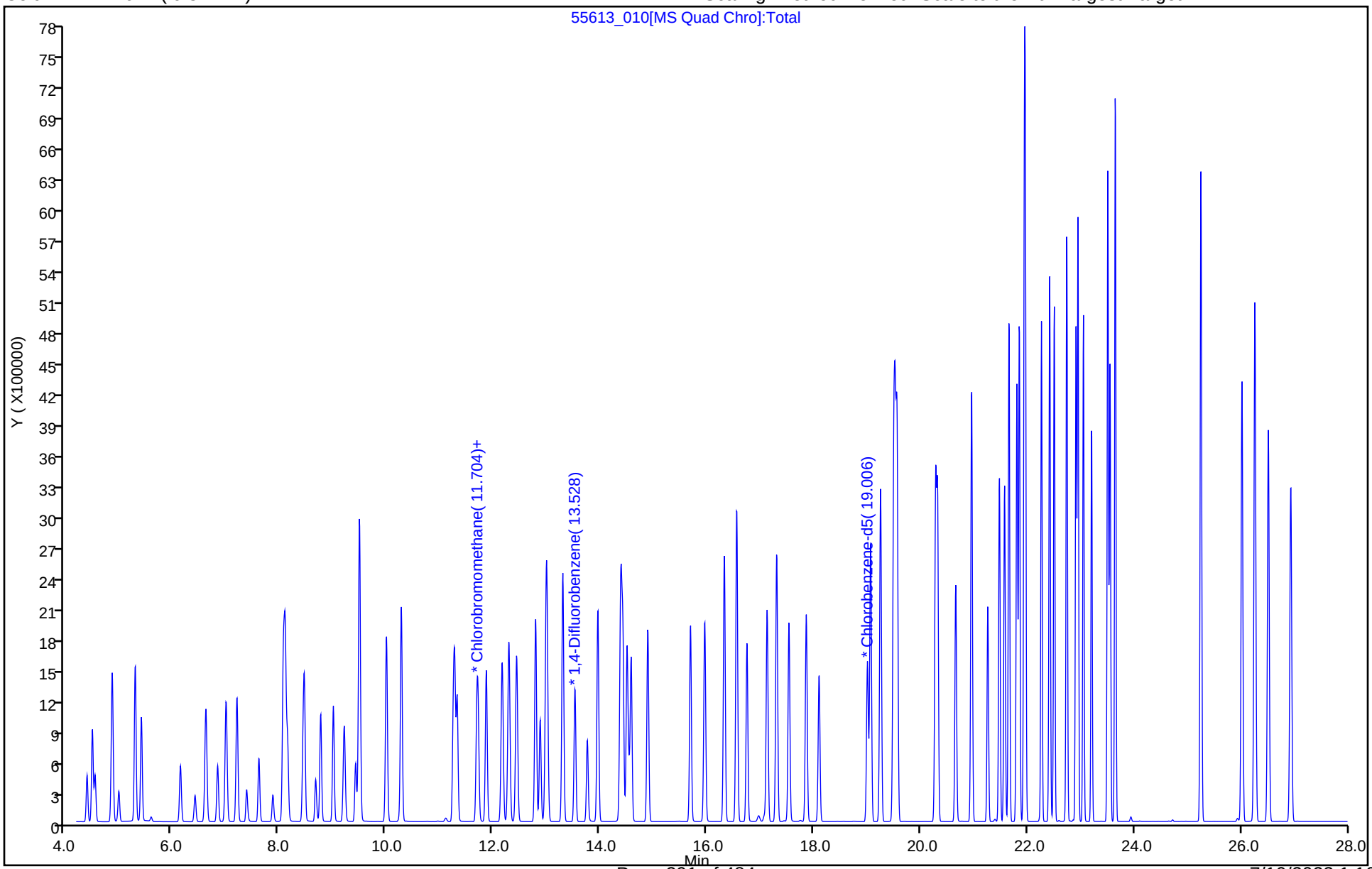
Report Date: 23-May-2023 08:56:18 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_010.D

Injection Date:	22-May-2023 21:42:19	Instrument ID:	CHAN.i	Operator ID:	
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		

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



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_014.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 23-May-2023 01:07:36 ALS Bottle#: 0 Worklist Smp#: 14
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0055638-014
Operator ID: Instrument ID: CHAN.i
Sublist: chrom-TO15_TO3_Master_Method_AN*sub1

Method: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\TO15_TO3_Master_Method_AN.m
Limit Group: AI_TO15_ICAL
Last Update: 23-May-2023 08:56:20 Calib Date: 23-May-2023 01:58:58
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: bunmaa Date: 23-May-2023 13:04:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	4.396	4.396	0.000	98	451561	20.0	19.7	
2 Dichlorodifluoromethane	85	4.498	4.492	0.006	99	1655512	20.0	19.8	
3 Chlorodifluoromethane	51	4.546	4.546	0.000	97	996266	20.0	19.2	
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85	4.867	4.861	0.006	98	1771740	20.0	19.2	
5 Chloromethane	50	4.990	4.990	0.000	99	578947	20.0	19.0	
7 Butane	43	5.295	5.295	0.000	98	1543010	20.0	18.2	
6 Vinyl chloride	62	5.300	5.300	0.000	78	1067508	20.0	17.6	
8 Butadiene	54	5.412	5.412	0.000	92	826113	20.0	17.2	
9 Bromomethane	94	6.145	6.140	0.005	99	688474	20.0	19.2	
10 Chloroethane	64	6.418	6.418	0.000	100	424169	20.0	19.0	
12 2-Methylbutane	43	6.621	6.616	0.005	92	935976	20.0	18.4	
13 Vinyl bromide	106	6.841	6.841	0.000	99	718521	20.0	19.4	
14 Trichlorofluoromethane	101	6.996	6.996	0.000	98	1968990	20.0	19.3	
15 Pentane	43	7.205	7.199	0.006	96	1467501	20.0	18.8	
16 Ethanol	45	7.381	7.386	-0.005	98	854853	40.0	35.8	
18 Ethyl ether	59	7.611	7.616	-0.005	93	630226	20.0	18.7	
19 Acrolein	56	7.873	7.873	0.000	96	389247	20.0	19.8	
20 1,1-Dichloroethene	96	8.066	8.066	0.000	95	858685	20.0	19.1	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	8.103	8.103	0.000	93	1782828	20.0	19.0	
22 Acetone	43	8.151	8.151	0.000	98	1452737	20.0	19.1	
23 Isopropyl alcohol	45	8.440	8.440	0.000	100	1661424	20.0	18.4	
24 Carbon disulfide	76	8.467	8.467	0.000	100	2632611	20.0	18.8	
25 Acetonitrile	41	8.676	8.676	0.000	98	679603	20.0	19.0	
26 3-Chloro-1-propene	41	8.772	8.767	0.005	98	1211147	20.0	18.1	
27 Methylene Chloride	49	9.007	9.007	0.000	97	1140838	20.0	18.2	
28 2-Methyl-2-propanol	59	9.205	9.211	-0.006	99	2020174	20.0	19.4	
29 Acrylonitrile	53	9.425	9.425	0.000	94	744989	20.0	18.6	
31 Methyl tert-butyl ether	73	9.494	9.494	0.000	97	2775698	20.0	18.8	
30 trans-1,2-Dichloroethene	61	9.494	9.494	0.000	96	1507992	20.0	18.1	
32 Hexane	57	10.002	10.002	0.000	93	1561265	20.0	18.1	
S 35 1,2-Dichloroethene, Total	61				0		40.0	36.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 1,1-Dichloroethane	63	10.275	10.281	-0.006	99	1802847	20.0	17.9	
34 Vinyl acetate	43	10.281	10.281	0.000	100	2679628	20.0	19.7	
36 2-Butanone (MEK)	72	11.254	11.254	0.000	100	509900	20.0	18.7	
37 cis-1,2-Dichloroethene	96	11.281	11.281	0.000	95	963135	20.0	18.5	
38 Ethyl acetate	88	11.324	11.324	0.000	99	86110	20.0	19.8	
* 39 Chlorobromomethane	128	11.693	11.693	0.000	97	261449	10.0	10.0	
40 Tetrahydrofuran	42	11.714	11.714	0.000	93	1167144	20.0	19.4	
41 Chloroform	83	11.870	11.870	0.000	97	2026303	20.0	18.5	
42 1,1,1-Trichloroethane	97	12.169	12.169	0.000	97	1945566	20.0	19.0	
43 Cyclohexane	84	12.292	12.292	0.000	98	1269875	20.0	18.9	
44 Carbon tetrachloride	117	12.437	12.437	0.000	96	1896214	20.0	19.5	
45 Benzene	78	12.795	12.795	0.000	97	3031475	20.0	18.5	
46 1,2-Dichloroethane	62	12.881	12.875	0.006	93	1405407	20.0	18.5	
47 Isooctane	57	12.998	12.998	0.000	99	5085795	20.0	18.4	
48 n-Heptane	43	13.303	13.303	0.000	94	1939605	20.0	18.3	
* 49 1,4-Difluorobenzene	114	13.533	13.528	0.005	96	1298602	10.0	10.0	
50 n-Butanol	56	13.763	13.763	0.000	90	772676	20.0	19.6	
51 Trichloroethene	95	13.961	13.956	0.005	91	1329423	20.0	19.1	
53 1,2-Dichloropropane	63	14.427	14.427	0.000	91	1235512	20.0	18.6	
54 Methyl methacrylate	69	14.502	14.507	-0.005	95	1161497	20.0	19.8	
55 1,4-Dioxane	88	14.539	14.539	0.000	97	594796	20.0	18.5	
57 Dibromomethane	174	14.582	14.582	0.000	87	909916	20.0	19.3	
58 Dichlorobromomethane	83	14.892	14.892	0.000	98	2267957	20.0	19.3	
59 cis-1,3-Dichloropropene	75	15.695	15.695	0.000	95	1997034	20.0	19.4	
61 4-Methyl-2-pentanone (MIBK)	43	15.957	15.962	-0.005	98	2641004	20.0	19.2	
62 Toluene	92	16.326	16.326	0.000	93	2062083	20.0	18.9	
A 63 Toluene Range	1	16.331	(16.256-16.406)		0	8695649	NC	NC	
64 n-Octane	43	16.556	16.556	0.000	94	2694795	20.0	18.5	
A 65 C8 Range	1	16.567	(16.476-16.658)		0	10170643	NC	NC	
66 trans-1,3-Dichloropropene	75	16.749	16.748	0.001	98	1750855	20.0	19.7	
67 1,1,2-Trichloroethane	83	17.128	17.128	0.000	97	1136959	20.0	18.9	
68 Tetrachloroethene	166	17.310	17.305	0.005	89	1341310	20.0	19.2	
69 2-Hexanone	43	17.535	17.535	0.000	94	2540022	20.0	19.3	
70 Chlorodibromomethane	129	17.861	17.861	0.000	97	1969007	20.0	20.4	
71 Ethylene Dibromide	107	18.102	18.102	0.000	98	1869117	20.0	19.4	
* 73 Chlorobenzene-d5	117	19.006	19.006	0.000	91	1162673	10.0	10.0	
74 Chlorobenzene	112	19.065	19.065	0.000	90	2599056	20.0	18.8	
75 Ethylbenzene	91	19.252	19.252	0.000	99	4606211	20.0	19.0	
76 m-Xylene & p-Xylene	106	19.514	19.509	0.005	0	3390323	40.0	38.8	
77 n-Nonane	57	19.563	19.557	0.006	91	2559793	20.0	18.8	
S 80 Xylenes, Total	106				0		60.0	58.3	
78 o-Xylene	106	20.285	20.285	0.000	97	1643573	20.0	19.5	
79 Styrene	104	20.317	20.317	0.000	98	2739999	20.0	20.2	
81 Bromoform	173	20.659	20.659	0.000	91	1735554	20.0	21.9	
82 Isopropylbenzene	105	20.959	20.953	0.006	98	4841306	20.0	19.3	
83 1,1,2,2-Tetrachloroethane	83	21.478	21.478	0.000	98	2970479	20.0	19.1	
84 1,2,3-Trichloropropane	75	21.574	21.574	0.000	98	2335819	20.0	19.2	
85 N-Propylbenzene	91	21.660	21.654	0.006	98	6189997	20.0	19.0	
86 2-Chlorotoluene	91	21.804	21.804	0.000	96	3927905	20.0	18.9	
87 4-Ethyltoluene	105	21.847	21.847	0.000	98	4841960	20.0	19.4	
88 1,3,5-Trimethylbenzene	105	21.943	21.943	0.000	91	4149514	20.0	19.7	
89 n-Decane	57	21.959	21.959	0.000	91	3396007	20.0	19.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 Alpha Methyl Styrene	118	22.264	22.264	0.000	83	2067635	20.0	20.9	
91 tert-Butylbenzene	119	22.419	22.419	0.000	89	3687428	20.0	19.4	
92 1,2,4-Trimethylbenzene	105	22.505	22.505	0.000	99	4090828	20.0	19.2	
93 sec-Butylbenzene	105	22.740	22.740	0.000	97	5925868	20.0	19.2	
94 1,3-Dichlorobenzene	146	22.911	22.911	0.000	97	2507484	20.0	19.5	
95 4-Isopropyltoluene	119	22.949	22.949	0.000	96	4717475	20.0	19.7	
96 1,4-Dichlorobenzene	146	23.051	23.051	0.000	90	2545772	20.0	19.6	
97 Benzyl chloride	91	23.206	23.200	0.006	97	3992466	20.0	20.6	
98 n-Butylbenzene	91	23.505	23.505	0.000	98	5277528	20.0	19.5	
99 1,2-Dichlorobenzene	146	23.548	23.548	0.000	91	2391981	20.0	19.3	
100 Undecane	57	23.644	23.644	0.000	96	3770249	20.0	20.7	
101 Dodecane	57	25.249	25.249	0.000	96	3921455	20.0	21.2	
102 1,2,4-Trichlorobenzene	180	26.020	26.020	0.000	92	2279096	20.0	21.4	
103 Hexachlorobutadiene	225	26.260	26.260	0.000	97	1746903	20.0	21.1	
104 Naphthalene	128	26.512	26.512	0.000	98	5577659	20.0	20.9	
105 1,2,3-Trichlorobenzene	180	26.935	26.934	0.001	93	1896950	20.0	21.2	
114 Methylcyclohexane	83		0.000				ND	ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

ATTO15CAL6w_00221	Amount Added: 200.00	Units: mL	
ATTO15CISs_00012	Amount Added: 20.00	Units: mL	Run Reagent

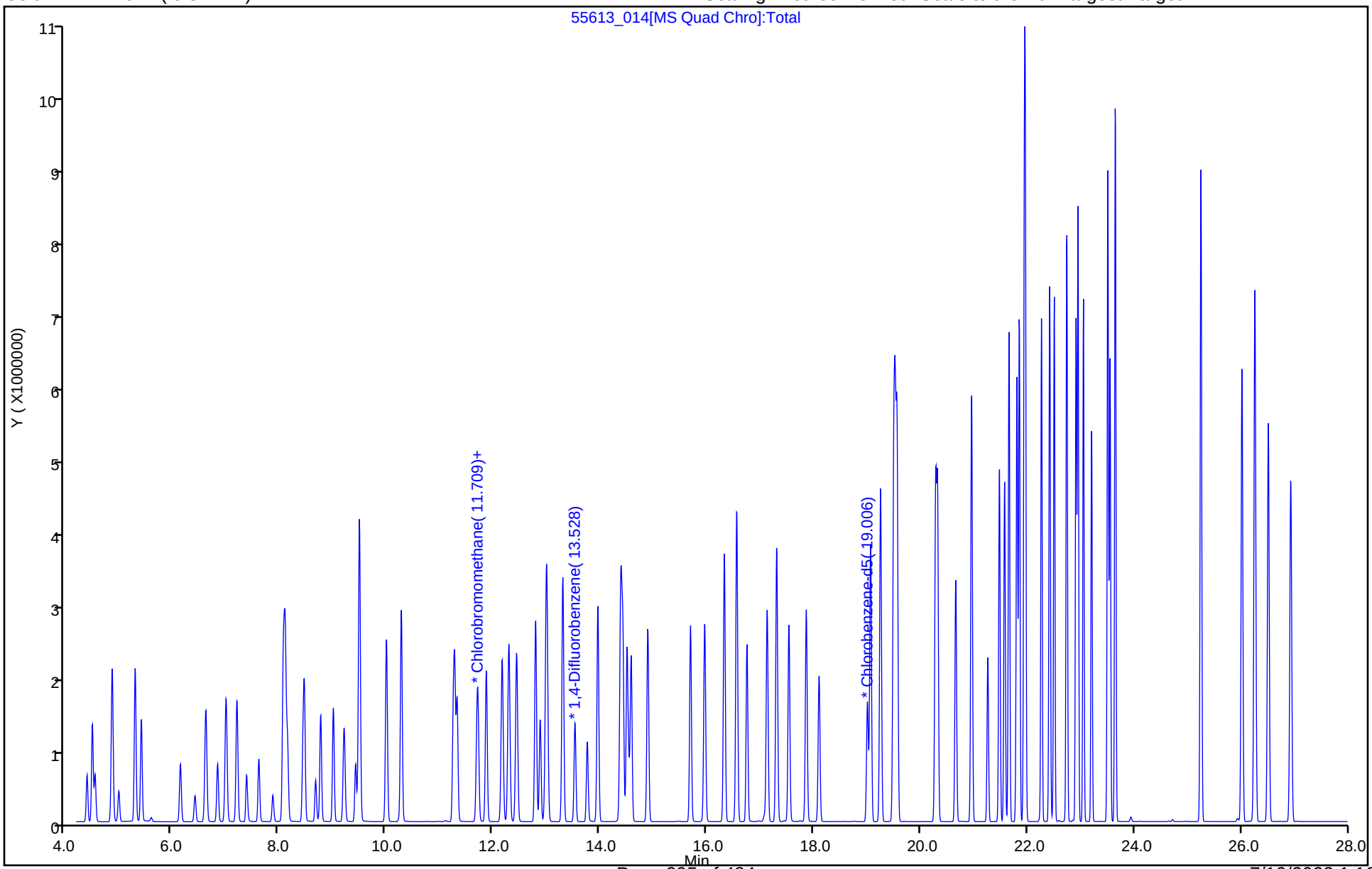
Report Date: 23-May-2023 08:56:20 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_014.D

Injection Date:	23-May-2023 01:07:36	Instrument ID:	CHAN.i	Operator ID:	
Lims ID:	ic			Worklist Smp#:	14
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		

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



7/10/2023 1:16 PM

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 23-May-2023 01:58:58 ALS Bottle#: 0 Worklist Smp#: 15
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0055638-015
Operator ID: Instrument ID: CHAN.i
Sublist: chrom-TO15_TO3_Master_Method_AN*sub1

Method: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\TO15_TO3_Master_Method_AN.m
Limit Group: AI_TO15_ICAL
Last Update: 23-May-2023 08:56:21 Calib Date: 23-May-2023 01:58:58
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: bunmaa Date: 23-May-2023 15:32:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	4.396	4.396	0.000	98	962385	40.0	40.2	
2 Dichlorodifluoromethane	85	4.492	4.492	0.000	99	3514812	40.0	40.3	
3 Chlorodifluoromethane	51	4.546	4.546	0.000	97	2102127	40.0	38.8	
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85	4.867	4.861	0.006	97	3830603	40.0	39.7	
5 Chloromethane	50	4.990	4.990	0.000	99	1211258	40.0	38.0	
7 Butane	43	5.295	5.295	0.000	98	3093437	40.0	35.0	
6 Vinyl chloride	62	5.295	5.300	-0.005	100	2151453	40.0	34.0	
8 Butadiene	54	5.412	5.412	0.000	92	1661818	40.0	33.2	
9 Bromomethane	94	6.145	6.140	0.005	99	1479194	40.0	39.5	
10 Chloroethane	64	6.418	6.418	0.000	100	893856	40.0	38.4	
12 2-Methylbutane	43	6.621	6.616	0.005	92	1917655	40.0	36.2	
13 Vinyl bromide	106	6.841	6.841	0.000	99	1537792	40.0	39.8	
14 Trichlorofluoromethane	101	6.996	6.996	0.000	98	4116123	40.0	38.5	
15 Pentane	43	7.199	7.199	0.000	95	2940135	40.0	36.0	
16 Ethanol	45	7.381	7.386	-0.005	98	2196841	100.0	88.2	
18 Ethyl ether	59	7.611	7.616	-0.005	93	1300668	40.0	37.0	
19 Acrolein	56	7.873	7.873	0.000	97	787433	40.0	38.4	
20 1,1-Dichloroethene	96	8.066	8.066	0.000	95	1805113	40.0	38.5	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	8.103	8.103	0.000	92	3752417	40.0	38.3	
22 Acetone	43	8.146	8.151	-0.005	98	2948021	40.0	37.0	
23 Isopropyl alcohol	45	8.440	8.440	0.000	100	3348105	40.0	35.5	
24 Carbon disulfide	76	8.467	8.467	0.000	100	5372341	40.0	36.8	
25 Acetonitrile	41	8.676	8.676	0.000	98	1383134	40.0	36.9	
26 3-Chloro-1-propene	41	8.772	8.767	0.005	98	2478881	40.0	35.5	
27 Methylene Chloride	49	9.007	9.007	0.000	96	2321384	40.0	35.4	
28 2-Methyl-2-propanol	59	9.205	9.211	-0.006	100	4119988	40.0	37.9	
29 Acrylonitrile	53	9.425	9.425	0.000	94	1532189	40.0	36.6	
31 Methyl tert-butyl ether	73	9.489	9.494	-0.005	97	5752751	40.0	37.3	
30 trans-1,2-Dichloroethene	61	9.500	9.494	0.006	97	3126983	40.0	36.0	
32 Hexane	57	10.002	10.002	0.000	93	3212962	40.0	35.7	
S 35 1,2-Dichloroethene, Total	61				0		80.0	72.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 1,1-Dichloroethane	63	10.281	10.281	0.000	99	3712369	40.0	35.3	
34 Vinyl acetate	43	10.281	10.281	0.000	100	5608346	40.0	39.6	
36 2-Butanone (MEK)	72	11.254	11.254	0.000	99	1064473	40.0	37.3	
37 cis-1,2-Dichloroethene	96	11.281	11.281	0.000	98	1996914	40.0	36.8	
38 Ethyl acetate	88	11.324	11.324	0.000	99	180011	40.0	39.7	
* 39 Chlorobromomethane	128	11.693	11.693	0.000	97	273010	10.0	10.0	
40 Tetrahydrofuran	42	11.714	11.714	0.000	92	2363424	40.0	38.0	
41 Chloroform	83	11.869	11.870	-0.001	97	4160858	40.0	36.4	
42 1,1,1-Trichloroethane	97	12.169	12.169	0.000	97	4062876	40.0	38.4	
43 Cyclohexane	84	12.297	12.292	0.005	97	2619126	40.0	37.6	
44 Carbon tetrachloride	117	12.437	12.437	0.000	96	4005055	40.0	39.9	
45 Benzene	78	12.795	12.795	0.000	98	6134664	40.0	36.2	
46 1,2-Dichloroethane	62	12.881	12.875	0.006	93	2893424	40.0	36.9	
47 Isooctane	57	12.998	12.998	0.000	98	10183821	40.0	35.6	
48 n-Heptane	43	13.303	13.303	0.000	94	3966003	40.0	36.2	
* 49 1,4-Difluorobenzene	114	13.533	13.528	0.005	96	1343252	10.0	10.0	
50 n-Butanol	56	13.758	13.763	-0.005	90	1585614	40.0	38.9	
51 Trichloroethene	95	13.961	13.956	0.005	91	2779539	40.0	38.6	
53 1,2-Dichloropropane	63	14.427	14.427	0.000	91	2552341	40.0	37.1	
54 Methyl methacrylate	69	14.507	14.507	0.000	95	2422420	40.0	40.0	
55 1,4-Dioxane	88	14.539	14.539	0.000	97	1193055	40.0	35.9	
57 Dibromomethane	174	14.587	14.582	0.005	89	1933724	40.0	39.7	
58 Dichlorobromomethane	83	14.897	14.892	0.005	98	4730574	40.0	38.9	
59 cis-1,3-Dichloropropene	75	15.695	15.695	0.000	95	4160794	40.0	39.1	
61 4-Methyl-2-pentanone (MIBK)	43	15.957	15.962	-0.005	98	5389821	40.0	38.0	
62 Toluene	92	16.331	16.326	0.005	94	4251127	40.0	37.6	
A 63 Toluene Range	1	16.331	(16.256-16.406)		0	17835497	NC	NC	
64 n-Octane	43	16.561	16.556	0.005	93	5498909	40.0	36.5	
A 65 C8 Range	1	16.567	(16.476-16.658)		0	20991935	NC	NC	
66 trans-1,3-Dichloropropene	75	16.754	16.748	0.006	98	3669994	40.0	40.0	
67 1,1,2-Trichloroethane	83	17.128	17.128	0.000	97	2362087	40.0	38.0	
68 Tetrachloroethene	166	17.310	17.305	0.005	95	2855582	40.0	39.5	
69 2-Hexanone	43	17.535	17.535	0.000	94	5220390	40.0	38.4	
70 Chlorodibromomethane	129	17.861	17.861	0.000	97	4193596	40.0	42.0	
71 Ethylene Dibromide	107	18.102	18.102	0.000	98	3909550	40.0	39.1	
* 73 Chlorobenzene-d5	117	19.006	19.006	0.000	91	1203393	10.0	10.0	
74 Chlorobenzene	112	19.065	19.065	0.000	89	5364871	40.0	37.6	
75 Ethylbenzene	91	19.252	19.252	0.000	99	9262357	40.0	36.9	
76 m-Xylene & p-Xylene	106	19.520	19.509	0.011	0	7047813	80.0	77.8	
77 n-Nonane	57	19.562	19.557	0.005	92	5289525	40.0	37.5	
S 80 Xylenes, Total	106				0		120.0	117.1	
78 o-Xylene	106	20.285	20.285	0.000	98	3426328	40.0	39.3	
79 Styrene	104	20.322	20.317	0.005	98	5651903	40.0	40.3	
81 Bromoform	173	20.659	20.659	0.000	95	3775880	40.0	46.0	
82 Isopropylbenzene	105	20.959	20.953	0.006	98	9614964	40.0	37.1	
83 1,1,2,2-Tetrachloroethane	83	21.478	21.478	0.000	98	6048516	40.0	37.6	
84 1,2,3-Trichloropropane	75	21.574	21.574	0.000	98	4808764	40.0	38.2	
85 N-Propylbenzene	91	21.660	21.654	0.006	98	11710842	40.0	34.7	
86 2-Chlorotoluene	91	21.809	21.804	0.005	97	8116521	40.0	37.7	
87 4-Ethyltoluene	105	21.852	21.847	0.005	96	9463552	40.0	36.6	
88 1,3,5-Trimethylbenzene	105	21.943	21.943	0.000	93	8259808	40.0	37.9	
89 n-Decane	57	21.965	21.959	0.006	92	6790755	40.0	37.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 Alpha Methyl Styrene	118	22.264	22.264	0.000	82	4299061	40.0	42.0	
91 tert-Butylbenzene	119	22.419	22.419	0.000	91	7453900	40.0	37.9	
92 1,2,4-Trimethylbenzene	105	22.505	22.505	0.000	98	8107230	40.0	36.8	
93 sec-Butylbenzene	105	22.740	22.740	0.000	95	11161475	40.0	35.0	
94 1,3-Dichlorobenzene	146	22.911	22.911	0.000	96	5175466	40.0	38.9	
95 4-Isopropyltoluene	119	22.949	22.949	0.000	94	9165503	40.0	37.0	
96 1,4-Dichlorobenzene	146	23.051	23.051	0.000	88	5203798	40.0	38.7	
97 Benzyl chloride	91	23.206	23.200	0.006	97	8027576	40.0	40.0	
98 n-Butylbenzene	91	23.505	23.505	0.000	98	10085244	40.0	36.0	
99 1,2-Dichlorobenzene	146	23.548	23.548	0.000	90	4909555	40.0	38.3	
100 Undecane	57	23.650	23.644	0.006	94	7473004	40.0	39.5	
101 Dodecane	57	25.249	25.249	0.000	96	7960681	40.0	41.6	
102 1,2,4-Trichlorobenzene	180	26.020	26.020	0.000	92	4762005	40.0	43.2	
103 Hexachlorobutadiene	225	26.266	26.260	0.006	93	3747218	40.0	43.8	
104 Naphthalene	128	26.517	26.512	0.005	97	10842864	40.0	39.2	
105 1,2,3-Trichlorobenzene	180	26.934	26.934	0.000	93	4003374	40.0	43.3	
114 Methylcyclohexane	83		0.000				ND	ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

ATTO15CAL7w_00132	Amount Added: 200.00	Units: mL	
ATTO15CISs_00012	Amount Added: 20.00	Units: mL	Run Reagent

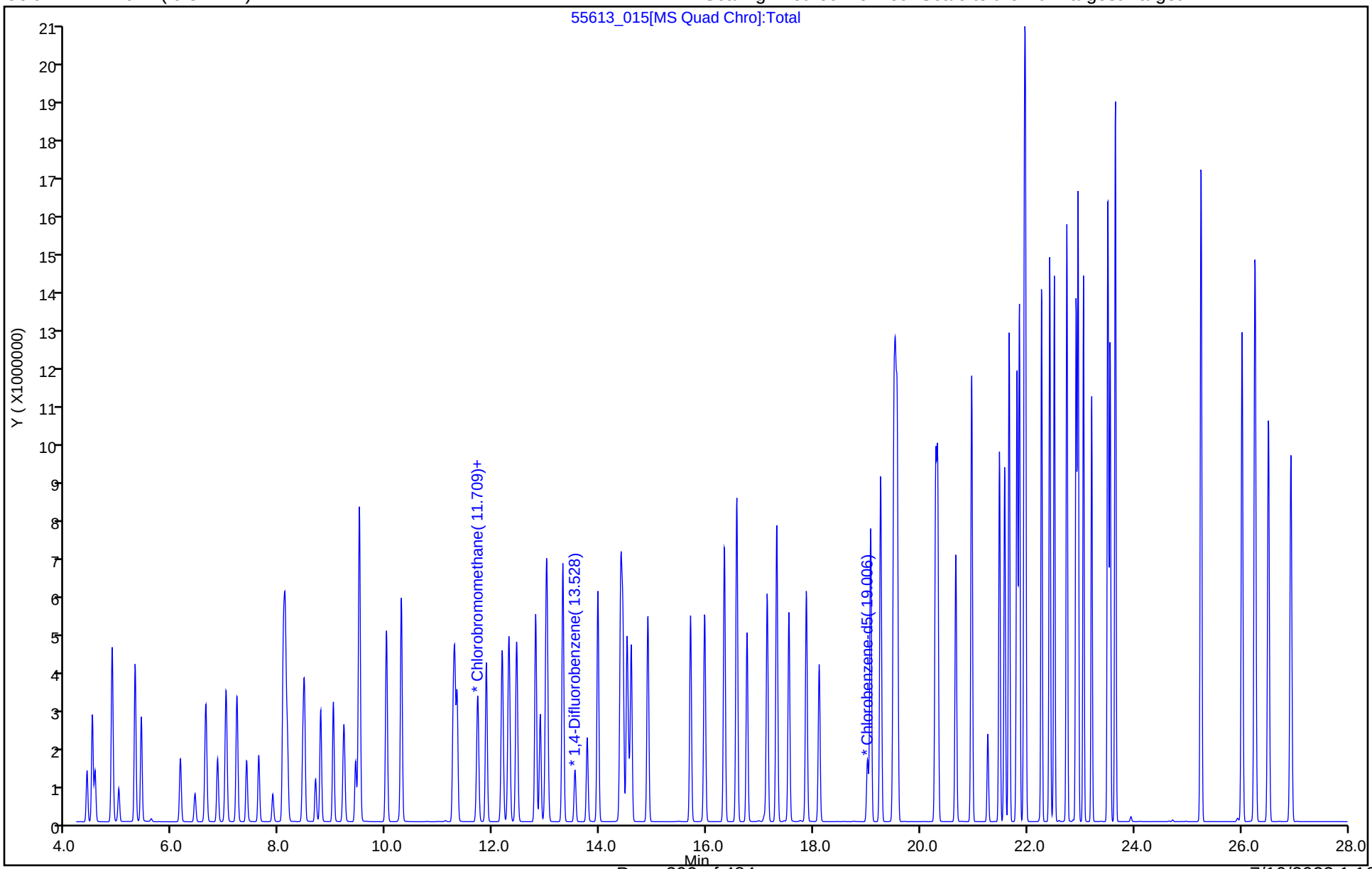
Report Date: 23-May-2023 08:56:22 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D

Injection Date:	23-May-2023 01:58:58	Instrument ID:	CHAN.i	Operator ID:	
Lims ID:	ic			Worklist Smp#:	15
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		

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



7/10/2023 1:16 PM

Calibration / Propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

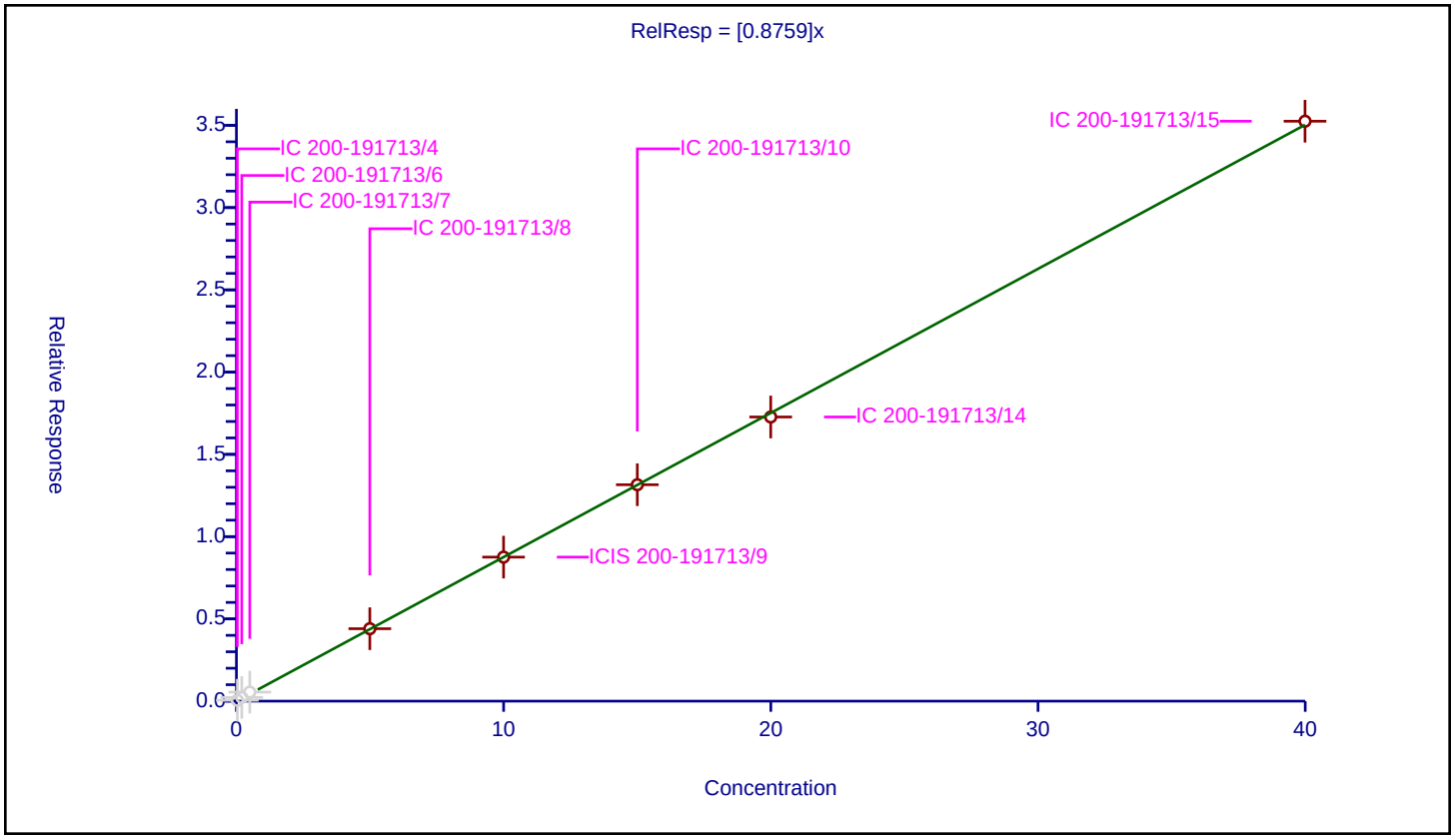
Curve Coefficients

Intercept:	0
Slope:	0.8759

Error Coefficients

Standard Error:	570000
Relative Standard Error:	0.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.052369	10.0	244227.0	1.492984	N
2	IC 200-191713/6	0.20044	0.224989	10.0	237434.0	1.122477	N
3	IC 200-191713/7	0.500453	0.549087	10.0	231967.0	1.09718	N
4	IC 200-191713/8	4.992563	4.402168	10.0	235409.0	0.881745	Y
5	ICIS 200-191713/9	9.99806	8.755274	10.0	242688.0	0.875697	Y
6	IC 200-191713/10	15.003557	13.154787	10.0	257263.0	0.876778	Y
7	IC 200-191713/14	19.99612	17.271476	10.0	261449.0	0.863741	Y
8	IC 200-191713/15	39.99224	35.250907	10.0	273010.0	0.881444	Y



Calibration / Dichlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

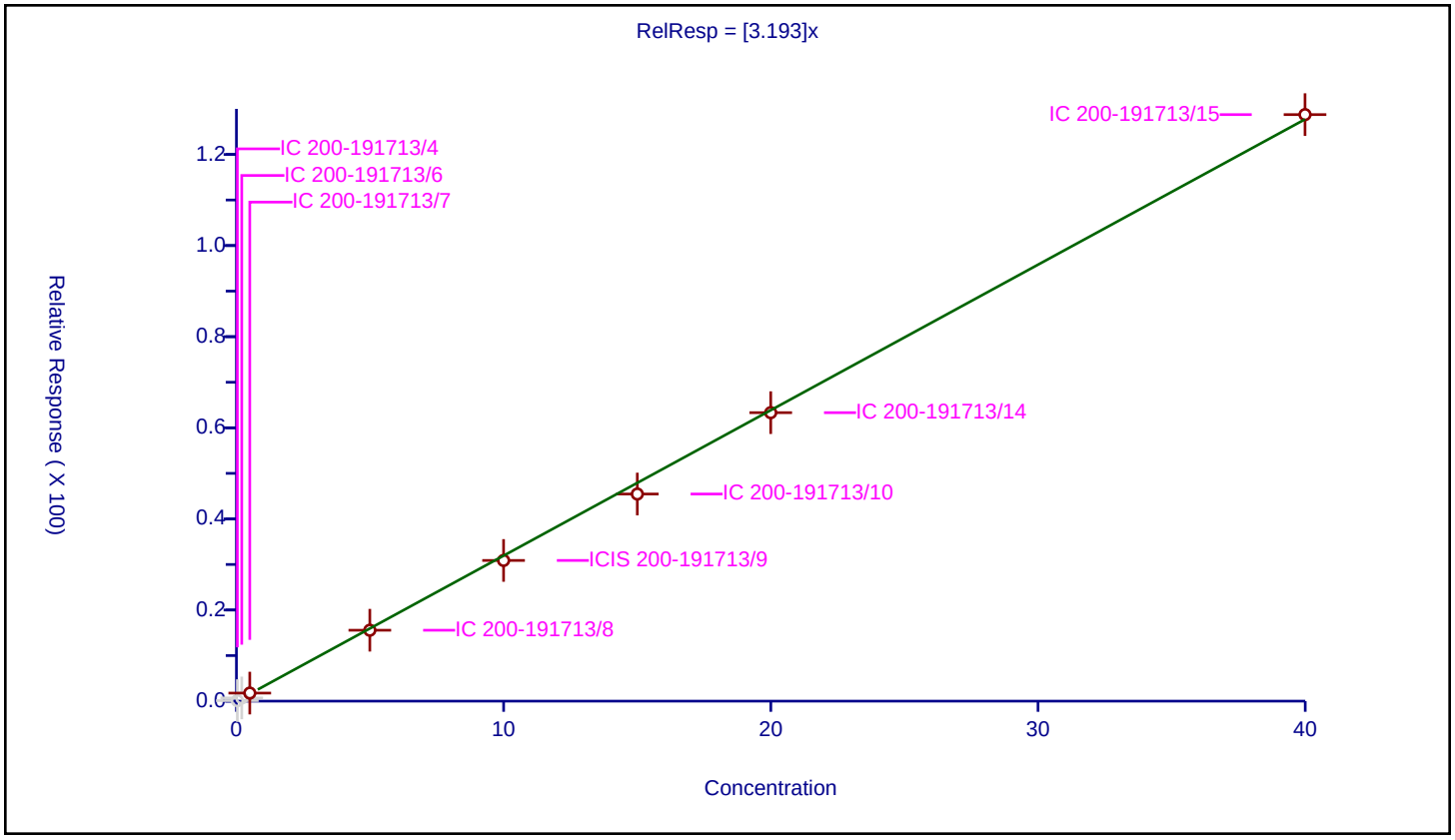
Curve Coefficients

Intercept:	0
Slope:	3.193

Error Coefficients

Standard Error:	1850000
Relative Standard Error:	5.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.113173	10.0	244227.0	3.226433	N
2	IC 200-191713/6	0.20044	0.702258	10.0	237434.0	3.50359	N
3	IC 200-191713/7	0.500453	1.770166	10.0	231967.0	3.537129	Y
4	IC 200-191713/8	4.992563	15.567502	10.0	235409.0	3.118138	Y
5	ICIS 200-191713/9	9.99806	30.883027	10.0	242688.0	3.088902	Y
6	IC 200-191713/10	15.003557	45.465691	10.0	257263.0	3.030327	Y
7	IC 200-191713/14	19.99612	63.320648	10.0	261449.0	3.166647	Y
8	IC 200-191713/15	39.99224	128.742976	10.0	273010.0	3.219199	Y



Calibration / Chlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

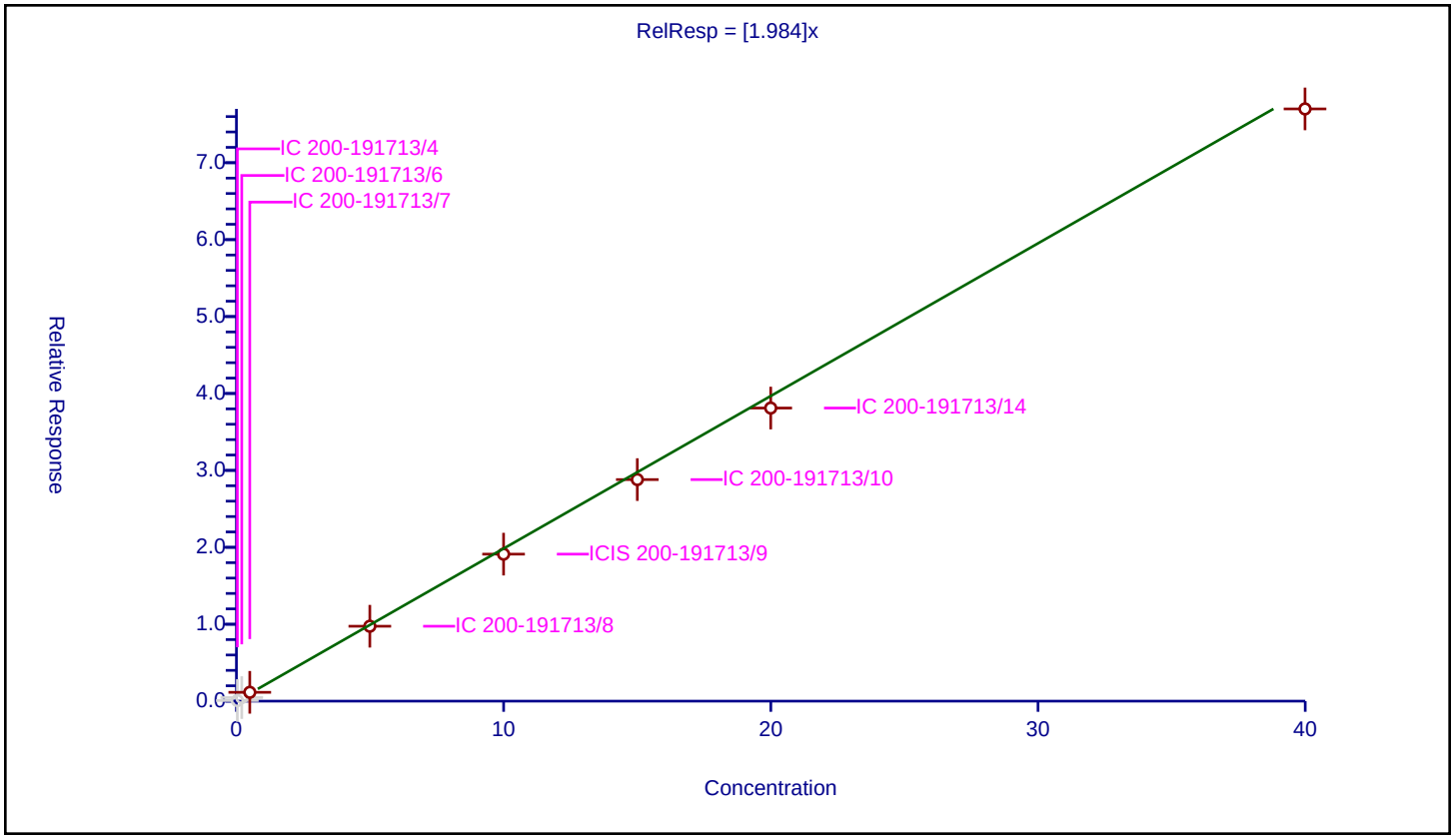
Curve Coefficients

Intercept:	0
Slope:	1.984

Error Coefficients

Standard Error:	1120000
Relative Standard Error:	7.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.076773	10.0	244227.0	2.188698	N
2	IC 200-191713/6	0.20044	0.462865	10.0	237434.0	2.309251	N
3	IC 200-191713/7	0.500453	1.146198	10.0	231967.0	2.290322	Y
4	IC 200-191713/8	4.992563	9.739432	10.0	235409.0	1.950788	Y
5	ICIS 200-191713/9	9.99806	19.113965	10.0	242688.0	1.911767	Y
6	IC 200-191713/10	15.003557	28.805814	10.0	257263.0	1.919932	Y
7	IC 200-191713/14	19.99612	38.105558	10.0	261449.0	1.905648	Y
8	IC 200-191713/15	39.99224	76.998169	10.0	273010.0	1.925328	Y



Calibration / 1,2-Dichloro-1,1,2,2-tetrafluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

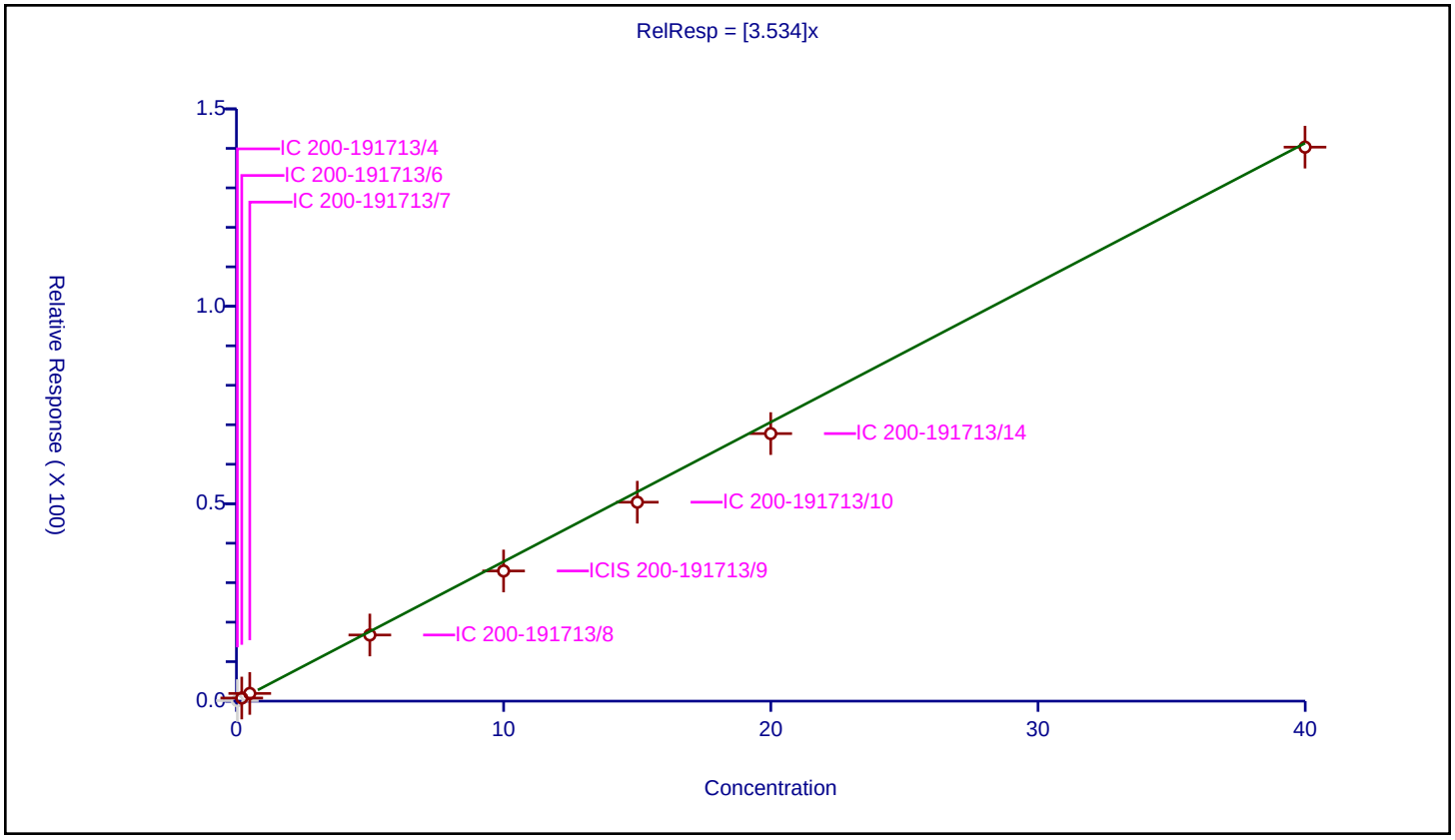
Curve Coefficients

Intercept:	0
Slope:	3.534

Error Coefficients

Standard Error:	1840000
Relative Standard Error:	7.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.130903	10.0	244227.0	3.731876	N
2	IC 200-191713/6	0.20044	0.787714	10.0	237434.0	3.929929	Y
3	IC 200-191713/7	0.500453	1.950105	10.0	231967.0	3.896683	Y
4	IC 200-191713/8	4.992563	16.749487	10.0	235409.0	3.354888	Y
5	ICIS 200-191713/9	9.99806	32.969121	10.0	242688.0	3.297552	Y
6	IC 200-191713/10	15.003557	50.388863	10.0	257263.0	3.358461	Y
7	IC 200-191713/14	19.99612	67.76618	10.0	261449.0	3.388966	Y
8	IC 200-191713/15	39.99224	140.309989	10.0	273010.0	3.50843	Y



Calibration / Chloromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

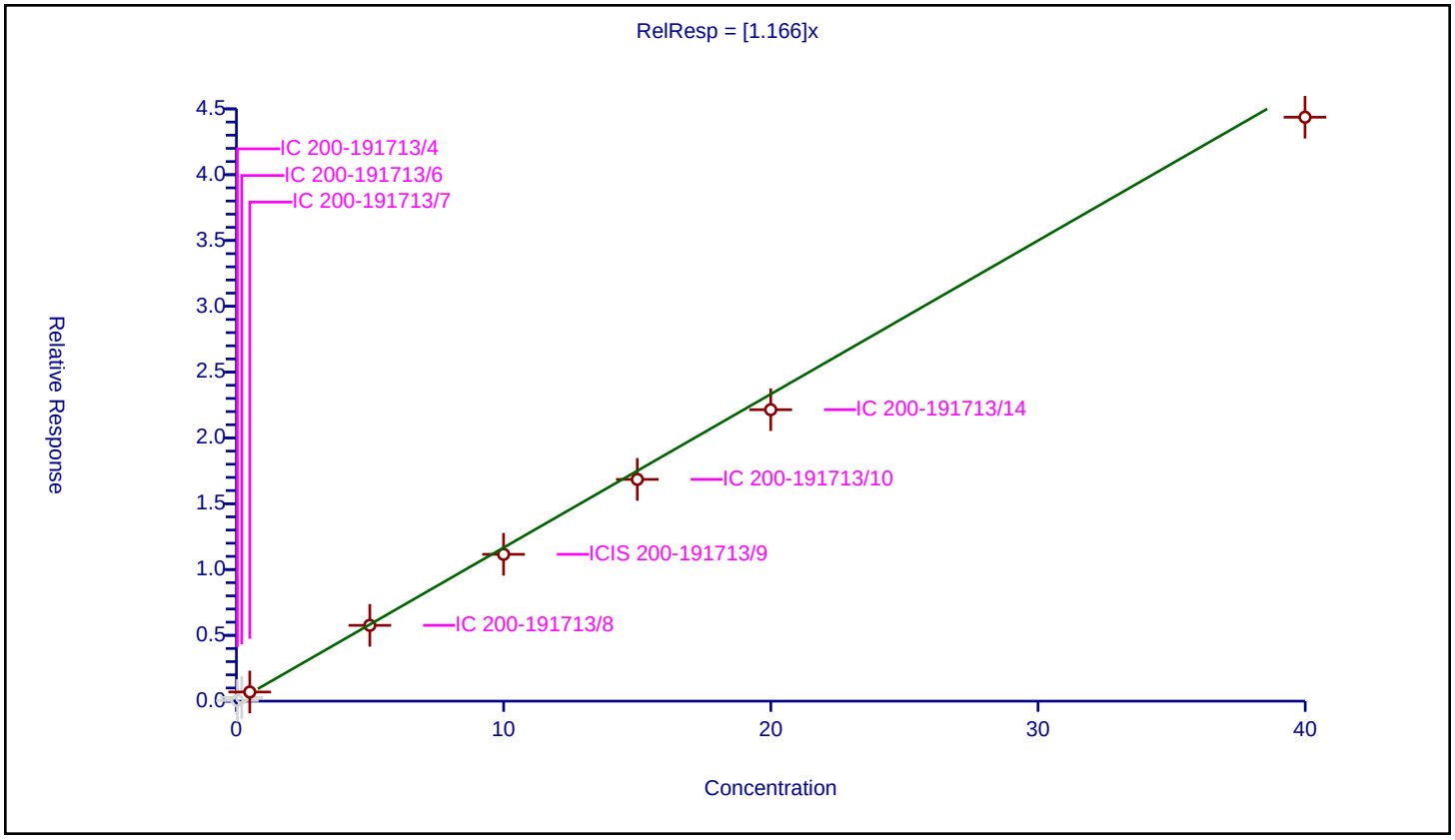
Curve Coefficients

Intercept:	0
Slope:	1.166

Error Coefficients

Standard Error:	645000
Relative Standard Error:	9.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.046064	10.0	244227.0	1.313219	N
2	IC 200-191713/6	0.20044	0.277888	10.0	237434.0	1.386391	N
3	IC 200-191713/7	0.500453	0.695573	10.0	231967.0	1.389888	Y
4	IC 200-191713/8	4.992563	5.758234	10.0	235409.0	1.153362	Y
5	ICIS 200-191713/9	9.99806	11.155475	10.0	242688.0	1.115764	Y
6	IC 200-191713/10	15.003557	16.848633	10.0	257263.0	1.122976	Y
7	IC 200-191713/14	19.99612	22.143783	10.0	261449.0	1.107404	Y
8	IC 200-191713/15	39.99224	44.3668	10.0	273010.0	1.109385	Y



Calibration / Butane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

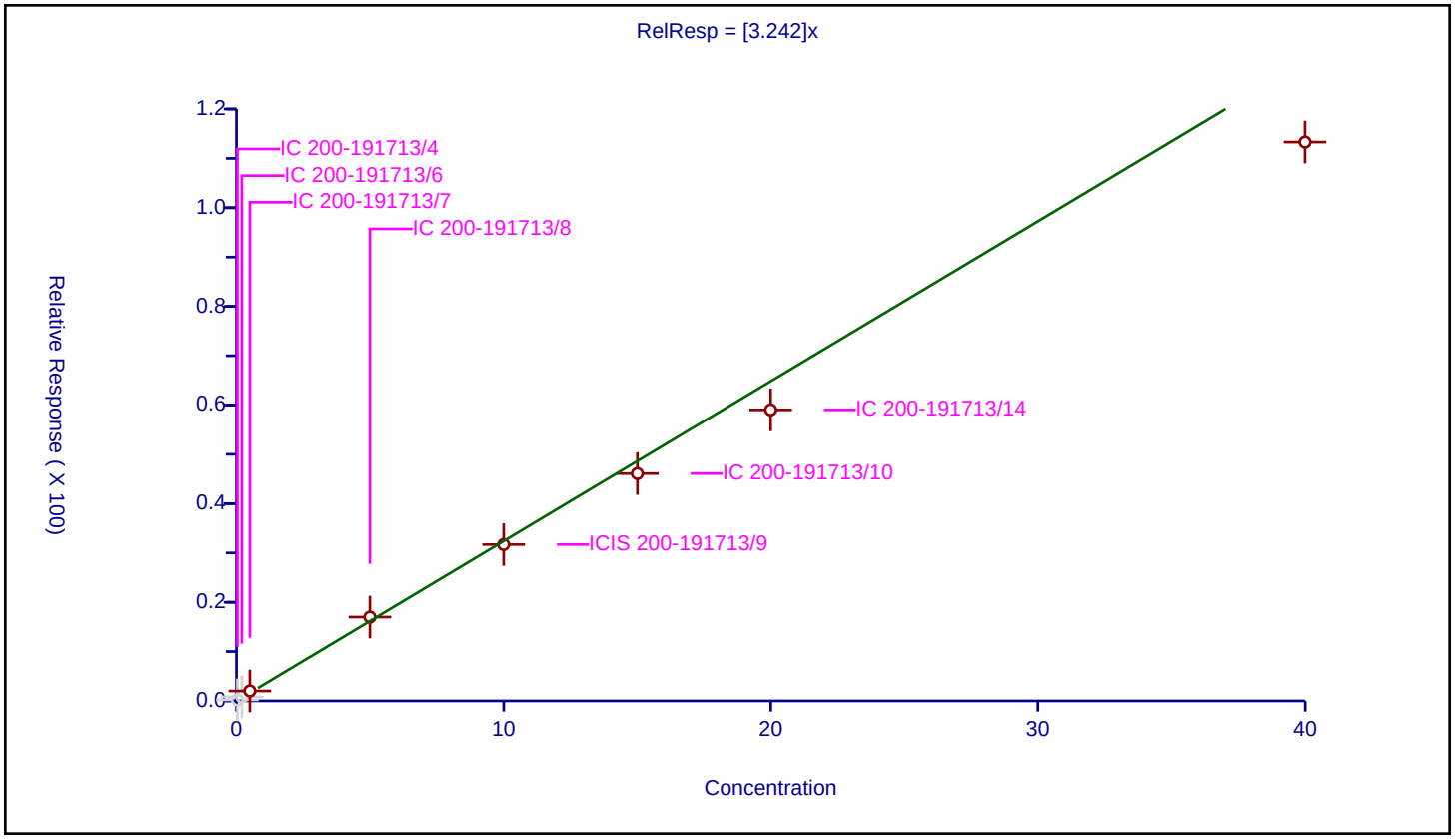
Curve Coefficients

Intercept:	0
Slope:	3.242

Error Coefficients

Standard Error:	1680000
Relative Standard Error:	13.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.211565	10.0	244227.0	6.031469	N
2	IC 200-191713/6	0.20044	0.822671	10.0	237434.0	4.104331	N
3	IC 200-191713/7	0.500453	2.00951	10.0	231967.0	4.015385	Y
4	IC 200-191713/8	4.992563	17.002536	10.0	235409.0	3.405573	Y
5	ICIS 200-191713/9	9.99806	31.710344	10.0	242688.0	3.17165	Y
6	IC 200-191713/10	15.003557	46.093259	10.0	257263.0	3.072155	Y
7	IC 200-191713/14	19.99612	59.017629	10.0	261449.0	2.951454	Y
8	IC 200-191713/15	39.99224	113.30856	10.0	273010.0	2.833264	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

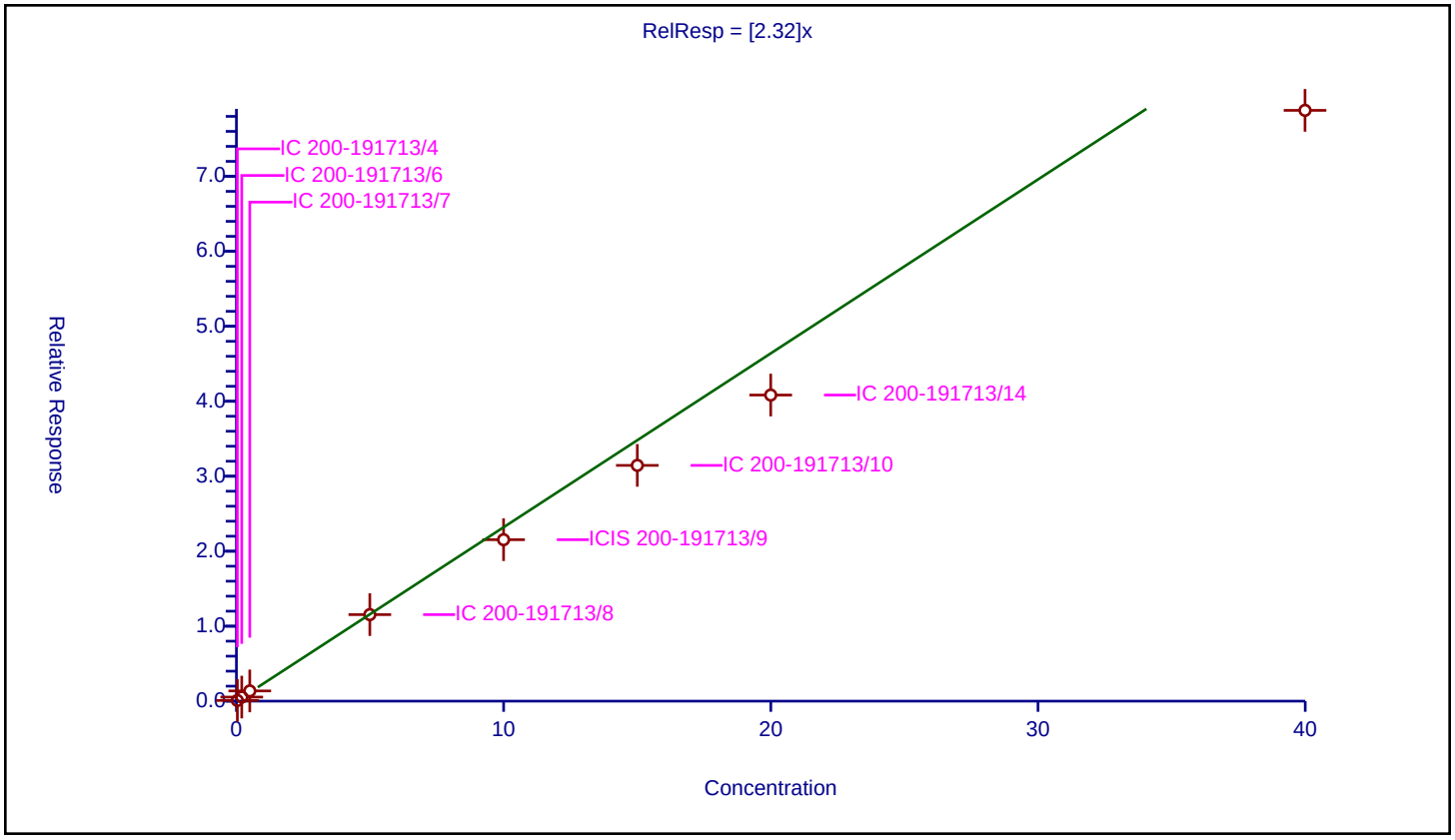
Curve Coefficients

Intercept:	0
Slope:	2.32

Error Coefficients

Standard Error:	983000
Relative Standard Error:	13.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.089548	10.0	244227.0	2.552898	Y
2	IC 200-191713/6	0.20044	0.543309	10.0	237434.0	2.710586	Y
3	IC 200-191713/7	0.500453	1.361056	10.0	231967.0	2.71965	Y
4	IC 200-191713/8	4.992563	11.541487	10.0	235409.0	2.311736	Y
5	ICIS 200-191713/9	9.99806	21.536087	10.0	242688.0	2.154027	Y
6	IC 200-191713/10	15.003557	31.447973	10.0	257263.0	2.096035	Y
7	IC 200-191713/14	19.99612	40.830449	10.0	261449.0	2.041919	Y
8	IC 200-191713/15	39.99224	78.804916	10.0	273010.0	1.970505	Y



Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

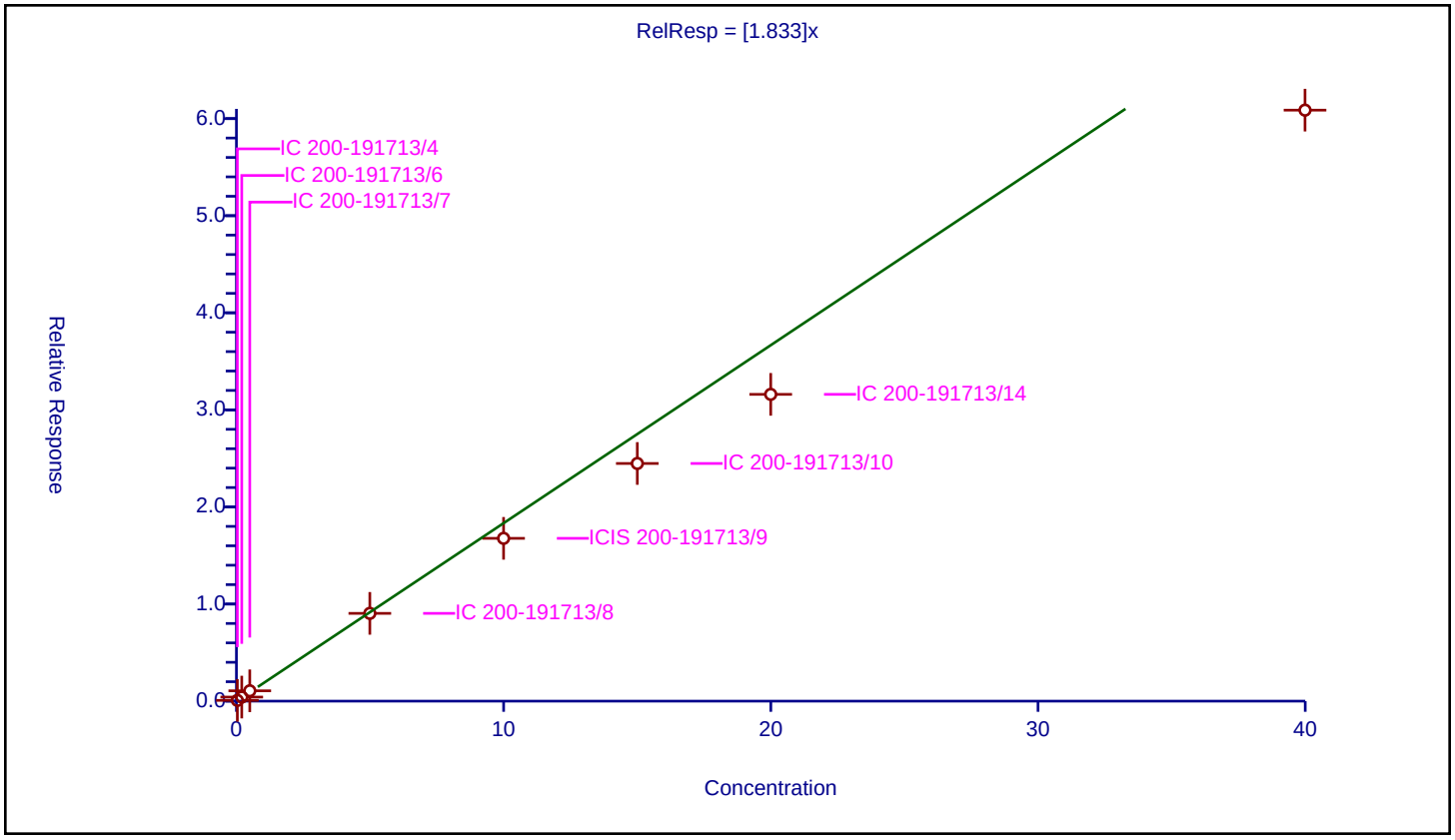
Curve Coefficients

Intercept:	0
Slope:	1.833

Error Coefficients

Standard Error:	761000
Relative Standard Error:	15.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.07796	10.0	244227.0	2.22255	Y
2	IC 200-191713/6	0.20044	0.419653	10.0	237434.0	2.093665	Y
3	IC 200-191713/7	0.500453	1.06541	10.0	231967.0	2.128893	Y
4	IC 200-191713/8	4.992563	9.039714	10.0	235409.0	1.810636	Y
5	ICIS 200-191713/9	9.99806	16.767084	10.0	242688.0	1.677034	Y
6	IC 200-191713/10	15.003557	24.479618	10.0	257263.0	1.631588	Y
7	IC 200-191713/14	19.99612	31.597482	10.0	261449.0	1.580181	Y
8	IC 200-191713/15	39.99224	60.870225	10.0	273010.0	1.522051	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

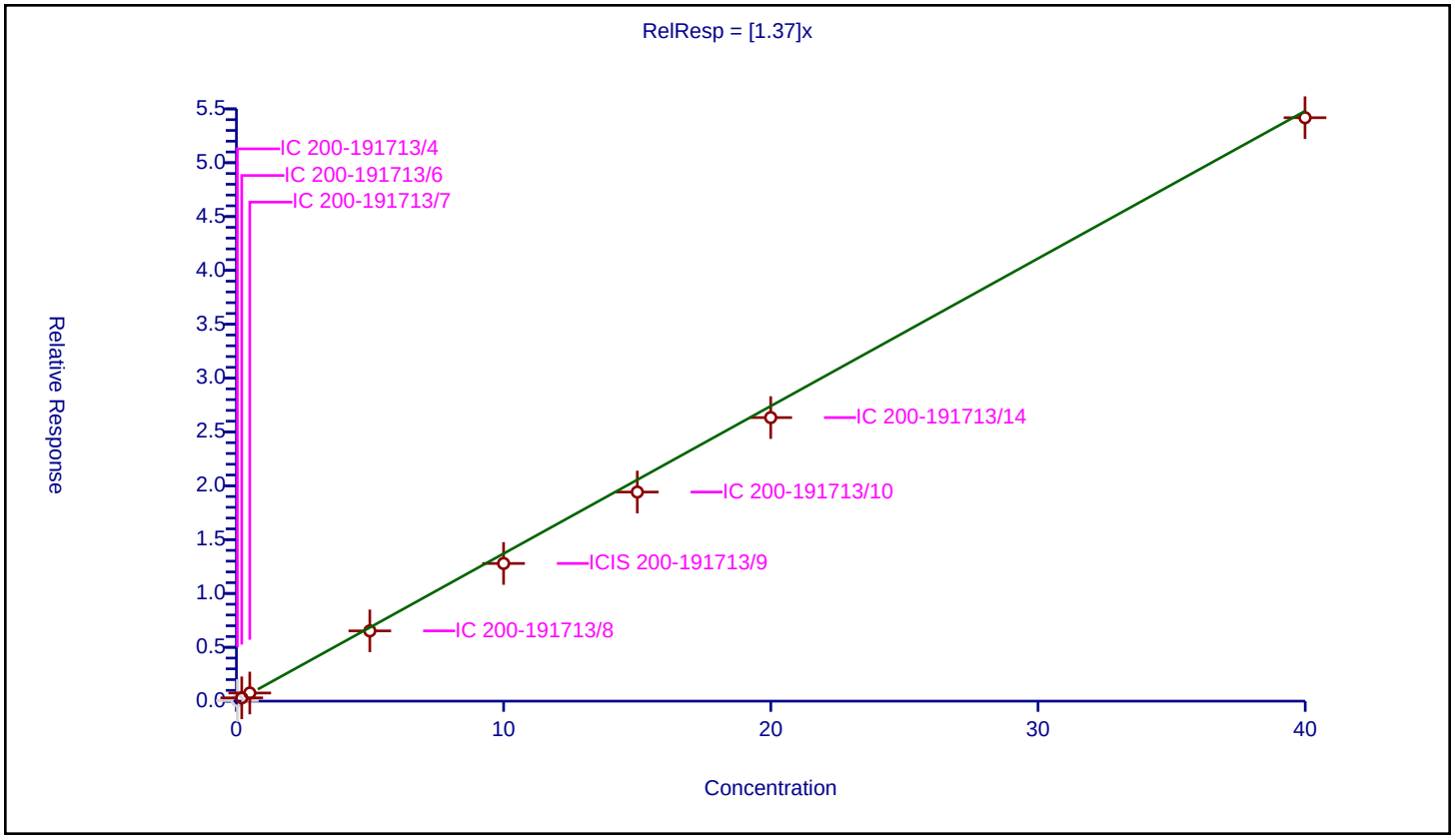
Curve Coefficients

Intercept:	0
Slope:	1.37

Error Coefficients

Standard Error:	711000
Relative Standard Error:	7.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.050281	10.0	244227.0	1.433451	N
2	IC 200-191713/6	0.20044	0.306443	10.0	237434.0	1.528854	Y
3	IC 200-191713/7	0.500453	0.756228	10.0	231967.0	1.511089	Y
4	IC 200-191713/8	4.992563	6.524347	10.0	235409.0	1.306813	Y
5	ICIS 200-191713/9	9.99806	12.785428	10.0	242688.0	1.278791	Y
6	IC 200-191713/10	15.003557	19.418105	10.0	257263.0	1.294233	Y
7	IC 200-191713/14	19.99612	26.333013	10.0	261449.0	1.316906	Y
8	IC 200-191713/15	39.99224	54.180946	10.0	273010.0	1.354786	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

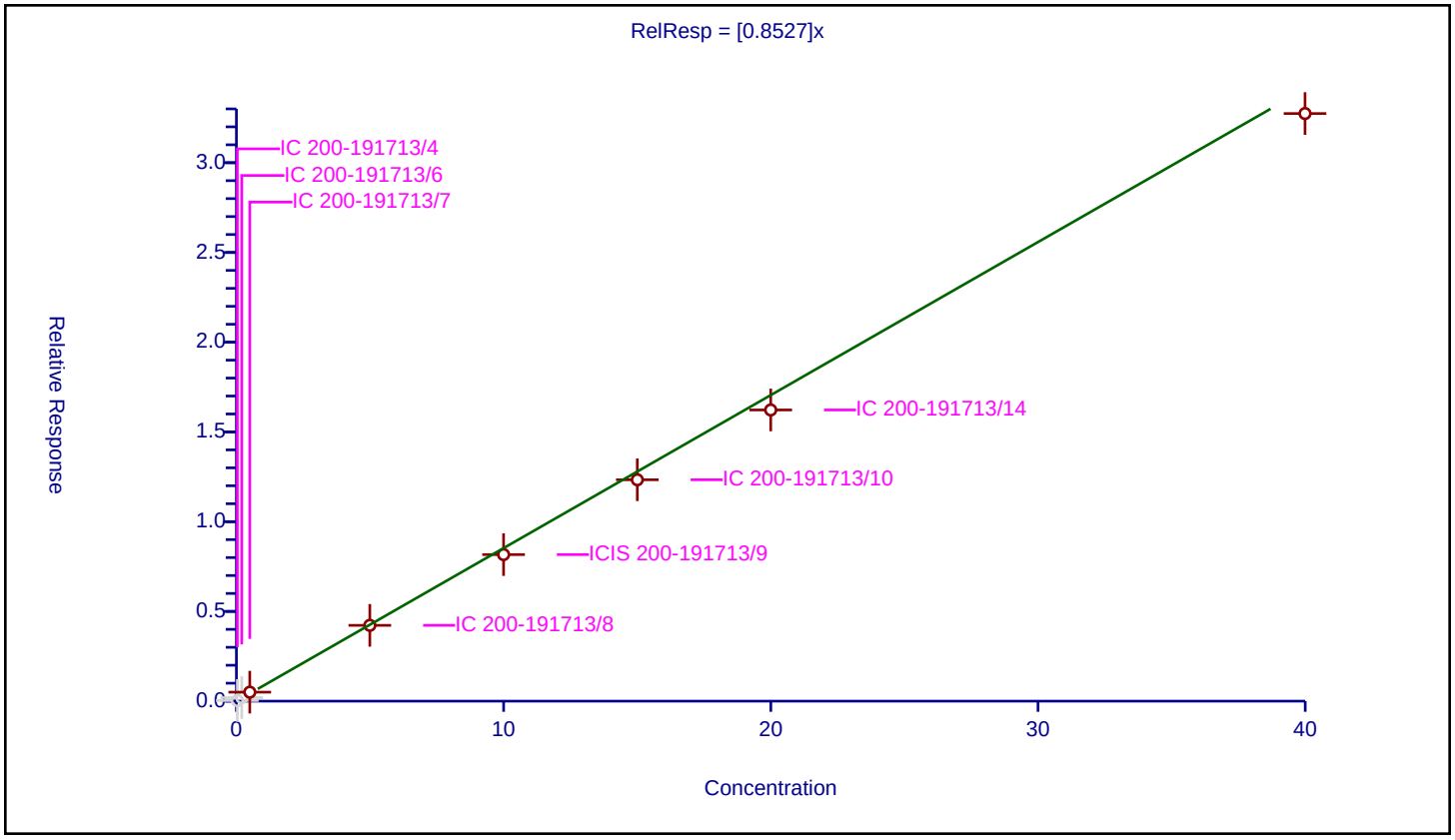
Curve Coefficients

Intercept:	0
Slope:	0.8527

Error Coefficients

Standard Error:	475000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.033575	10.0	244227.0	0.957191	N
2	IC 200-191713/6	0.20044	0.196855	10.0	237434.0	0.982115	N
3	IC 200-191713/7	0.500453	0.50102	10.0	231967.0	1.001133	Y
4	IC 200-191713/8	4.992563	4.223288	10.0	235409.0	0.845916	Y
5	ICIS 200-191713/9	9.99806	8.166452	10.0	242688.0	0.816804	Y
6	IC 200-191713/10	15.003557	12.335237	10.0	257263.0	0.822154	Y
7	IC 200-191713/14	19.99612	16.223776	10.0	261449.0	0.811346	Y
8	IC 200-191713/15	39.99224	32.740779	10.0	273010.0	0.818678	Y



Calibration / 2-Methylbutane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

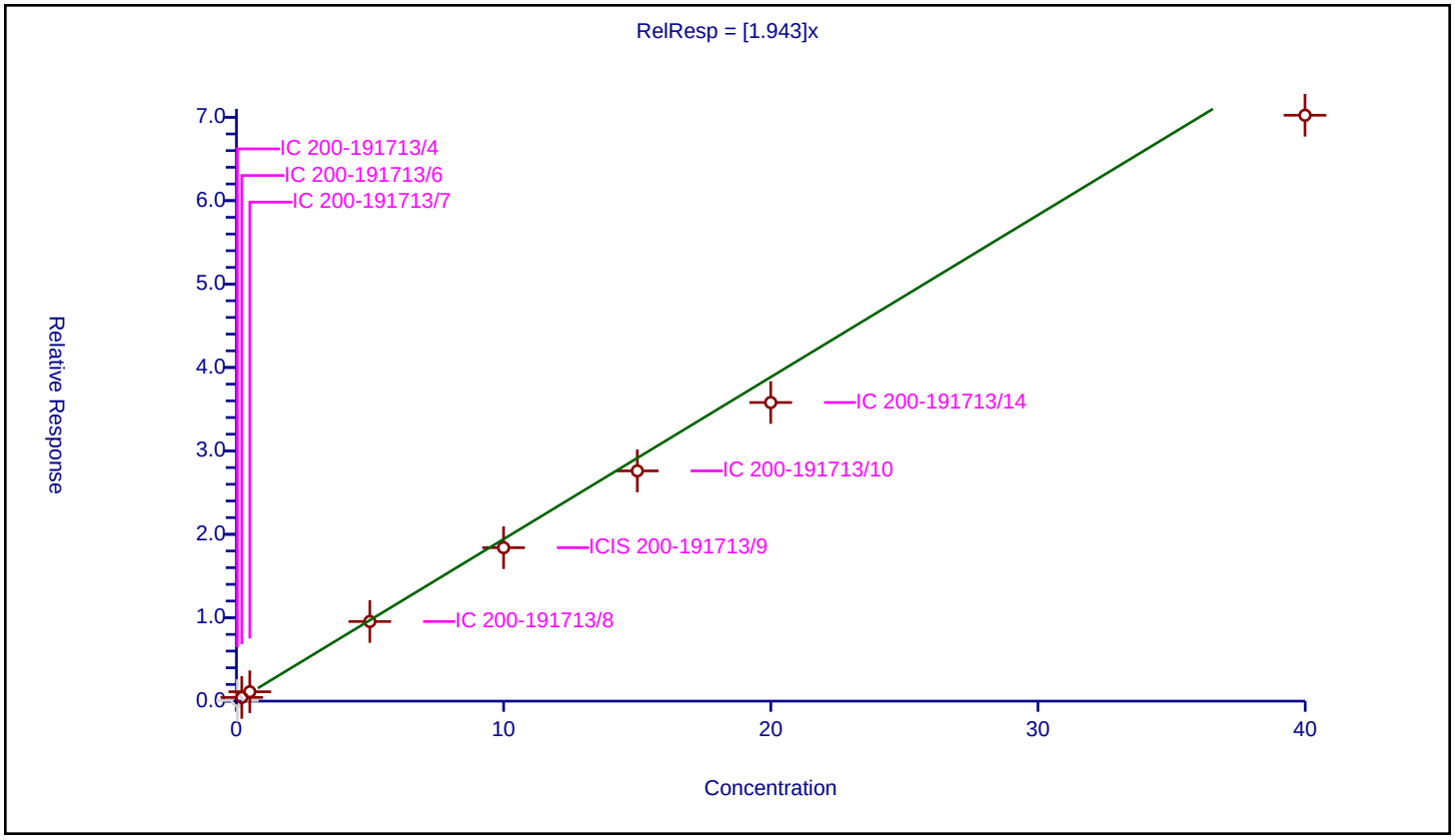
Curve Coefficients

Intercept:	0
Slope:	1.943

Error Coefficients

Standard Error:	941000
Relative Standard Error:	10.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.079762	10.0	244227.0	2.273911	N
2	IC 200-191713/6	0.20044	0.443281	10.0	237434.0	2.211544	Y
3	IC 200-191713/7	0.500453	1.125246	10.0	231967.0	2.248457	Y
4	IC 200-191713/8	4.992563	9.545769	10.0	235409.0	1.911998	Y
5	ICIS 200-191713/9	9.99806	18.397325	10.0	242688.0	1.840089	Y
6	IC 200-191713/10	15.003557	27.603153	10.0	257263.0	1.839774	Y
7	IC 200-191713/14	19.99612	35.799563	10.0	261449.0	1.790326	Y
8	IC 200-191713/15	39.99224	70.2412	10.0	273010.0	1.756371	Y



Calibration / Vinyl bromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

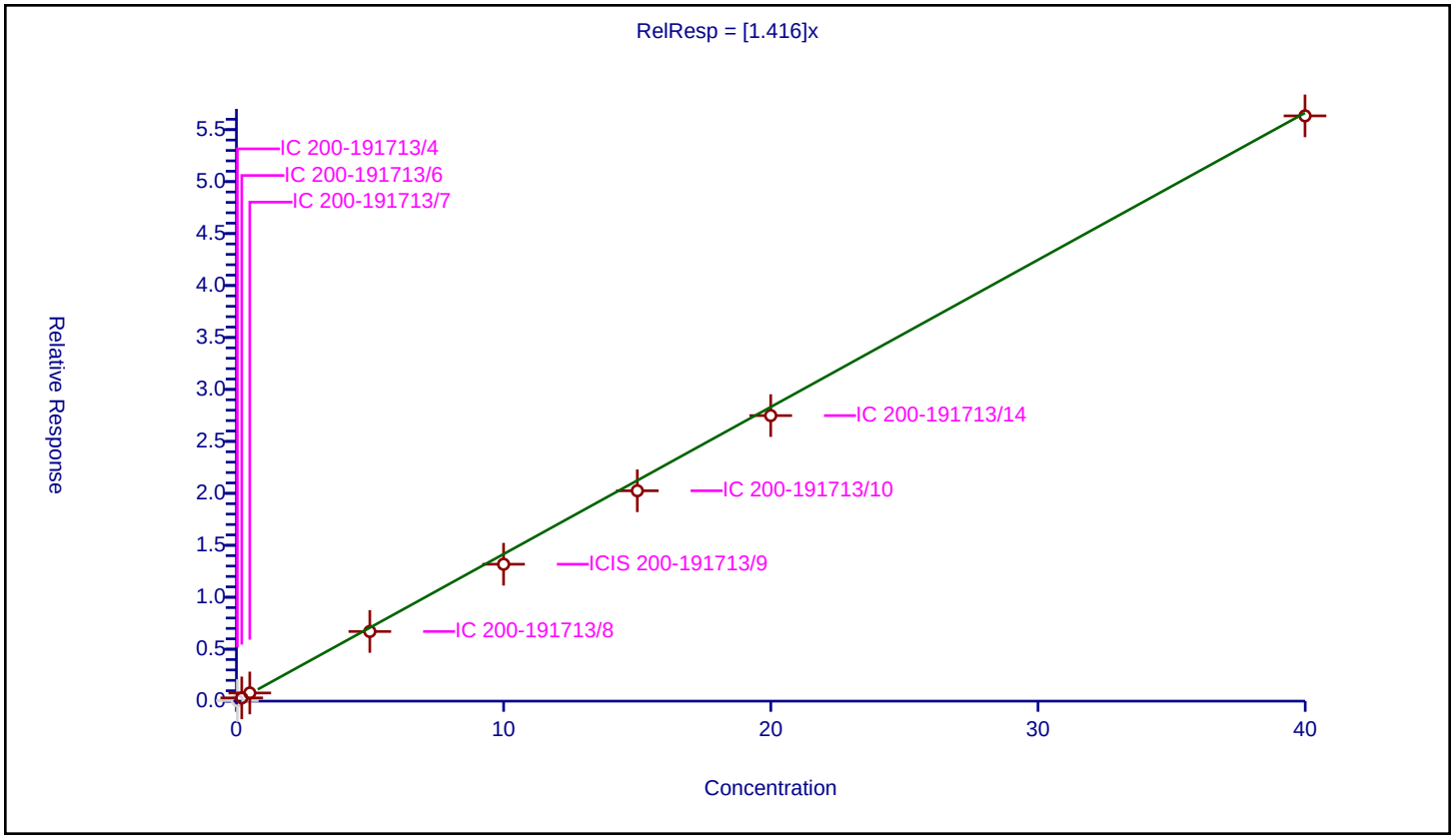
Curve Coefficients

Intercept:	0
Slope:	1.416

Error Coefficients

Standard Error:	739000
Relative Standard Error:	7.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.053475	10.0	244227.0	1.524501	N
2	IC 200-191713/6	0.20044	0.310444	10.0	237434.0	1.548816	Y
3	IC 200-191713/7	0.500453	0.784681	10.0	231967.0	1.567942	Y
4	IC 200-191713/8	4.992563	6.703907	10.0	235409.0	1.342779	Y
5	ICIS 200-191713/9	9.99806	13.176506	10.0	242688.0	1.317906	Y
6	IC 200-191713/10	15.003557	20.246207	10.0	257263.0	1.349427	Y
7	IC 200-191713/14	19.99612	27.482262	10.0	261449.0	1.37438	Y
8	IC 200-191713/15	39.99224	56.327314	10.0	273010.0	1.408456	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

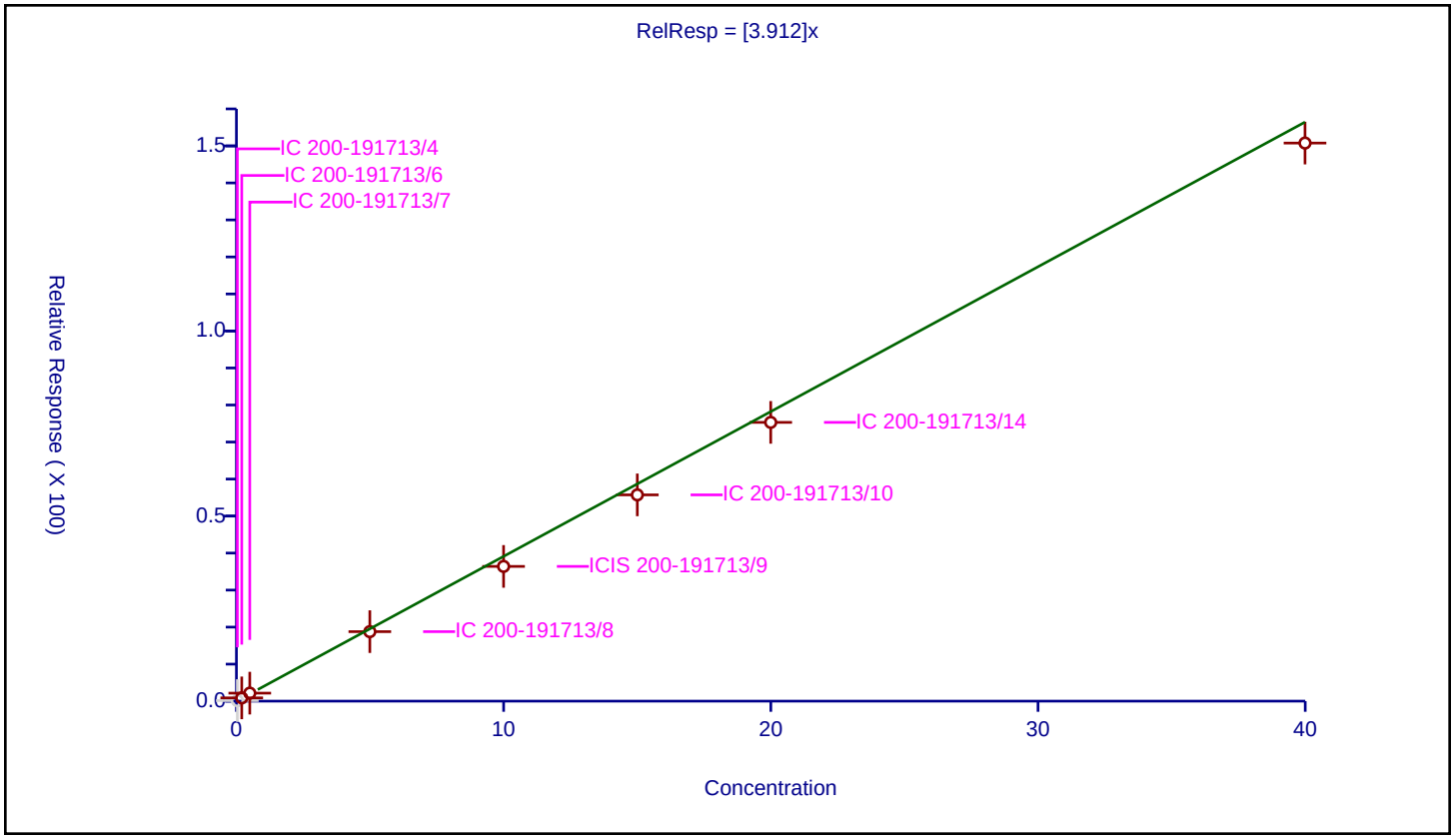
Curve Coefficients

Intercept:	0
Slope:	3.912

Error Coefficients

Standard Error:	1990000
Relative Standard Error:	8.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.149042	10.0	244227.0	4.248993	N
2	IC 200-191713/6	0.20044	0.884877	10.0	237434.0	4.414682	Y
3	IC 200-191713/7	0.500453	2.159316	10.0	231967.0	4.314726	Y
4	IC 200-191713/8	4.992563	18.775111	10.0	235409.0	3.760616	Y
5	ICIS 200-191713/9	9.99806	36.400976	10.0	242688.0	3.640804	Y
6	IC 200-191713/10	15.003557	55.725036	10.0	257263.0	3.714122	Y
7	IC 200-191713/14	19.99612	75.310672	10.0	261449.0	3.766264	Y
8	IC 200-191713/15	39.99224	150.768214	10.0	273010.0	3.769937	Y



Calibration / Pentane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

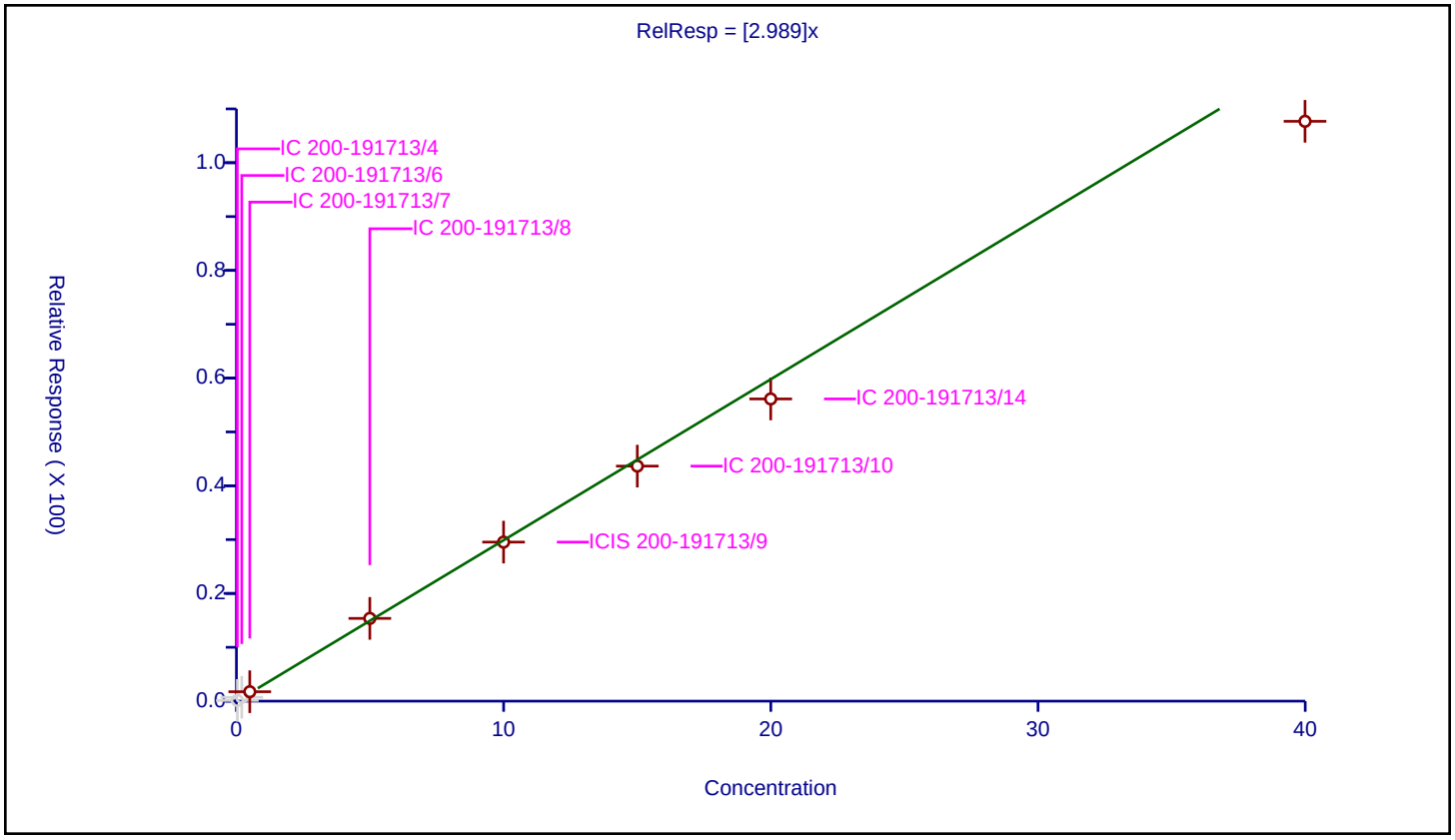
Curve Coefficients

Intercept:	0
Slope:	2.989

Error Coefficients

Standard Error:	1590000
Relative Standard Error:	9.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.127832	10.0	244227.0	3.644328	N
2	IC 200-191713/6	0.20044	0.716157	10.0	237434.0	3.57293	N
3	IC 200-191713/7	0.500453	1.748783	10.0	231967.0	3.494403	Y
4	IC 200-191713/8	4.992563	15.369421	10.0	235409.0	3.078463	Y
5	ICIS 200-191713/9	9.99806	29.538172	10.0	242688.0	2.95439	Y
6	IC 200-191713/10	15.003557	43.653576	10.0	257263.0	2.909548	Y
7	IC 200-191713/14	19.99612	56.129532	10.0	261449.0	2.807021	Y
8	IC 200-191713/15	39.99224	107.693308	10.0	273010.0	2.692855	Y



Calibration / Ethanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

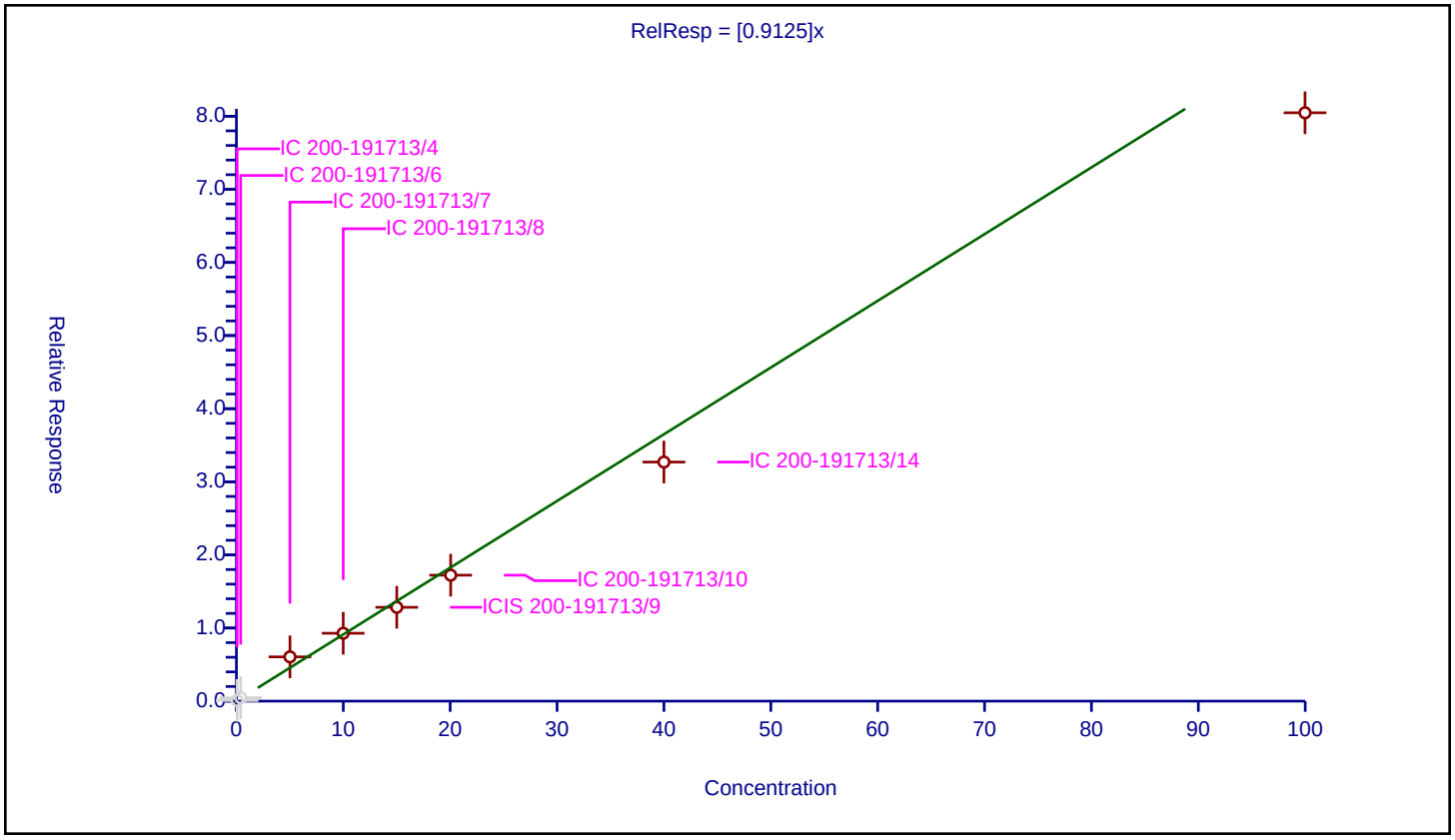
Curve Coefficients

Intercept:	0
Slope:	0.9125

Error Coefficients

Standard Error:	1090000
Relative Standard Error:	16.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.918

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.070165	0.088483	10.0	244227.0	1.26107	N
2	IC 200-191713/6	0.400944	0.462529	10.0	237434.0	1.153598	N
3	IC 200-191713/7	5.010638	6.055258	10.0	231967.0	1.20848	Y
4	IC 200-191713/8	9.991593	9.284437	10.0	235409.0	0.929225	Y
5	ICIS 200-191713/9	15.003557	12.834133	10.0	242688.0	0.855406	Y
6	IC 200-191713/10	20.047856	17.227934	10.0	257263.0	0.85934	Y
7	IC 200-191713/14	39.998707	32.69674	10.0	261449.0	0.817445	Y
8	IC 200-191713/15	99.980599	80.467419	10.0	273010.0	0.80483	Y



Calibration / Ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

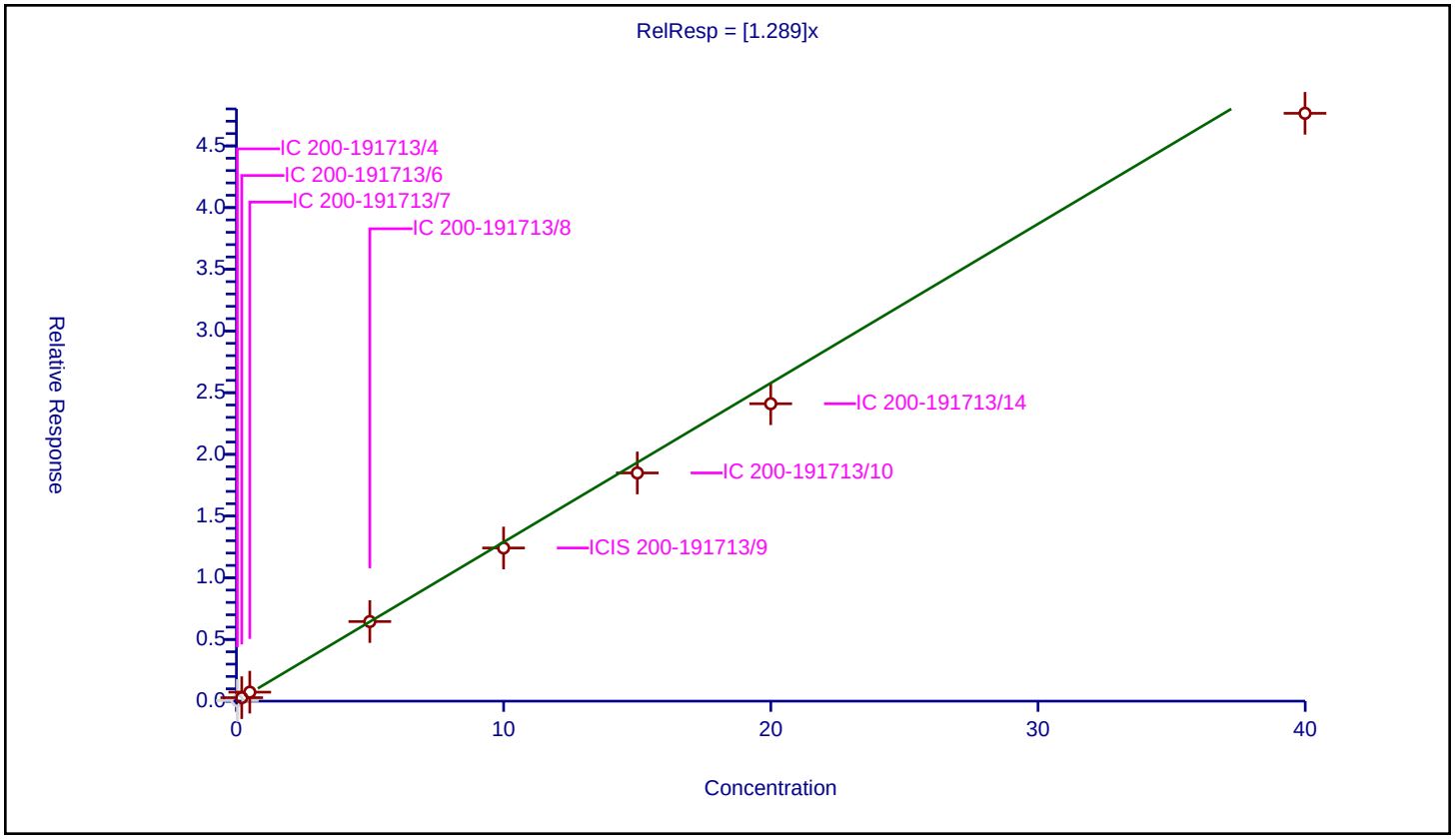
Curve Coefficients

Intercept:	0
Slope:	1.289

Error Coefficients

Standard Error:	636000
Relative Standard Error:	8.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.046187	10.0	244227.0	1.316721	N
2	IC 200-191713/6	0.20044	0.281299	10.0	237434.0	1.403411	Y
3	IC 200-191713/7	0.500453	0.729543	10.0	231967.0	1.457767	Y
4	IC 200-191713/8	4.992563	6.450985	10.0	235409.0	1.292119	Y
5	ICIS 200-191713/9	9.99806	12.413881	10.0	242688.0	1.241629	Y
6	IC 200-191713/10	15.003557	18.493293	10.0	257263.0	1.232594	Y
7	IC 200-191713/14	19.99612	24.105122	10.0	261449.0	1.20549	Y
8	IC 200-191713/15	39.99224	47.641771	10.0	273010.0	1.191275	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

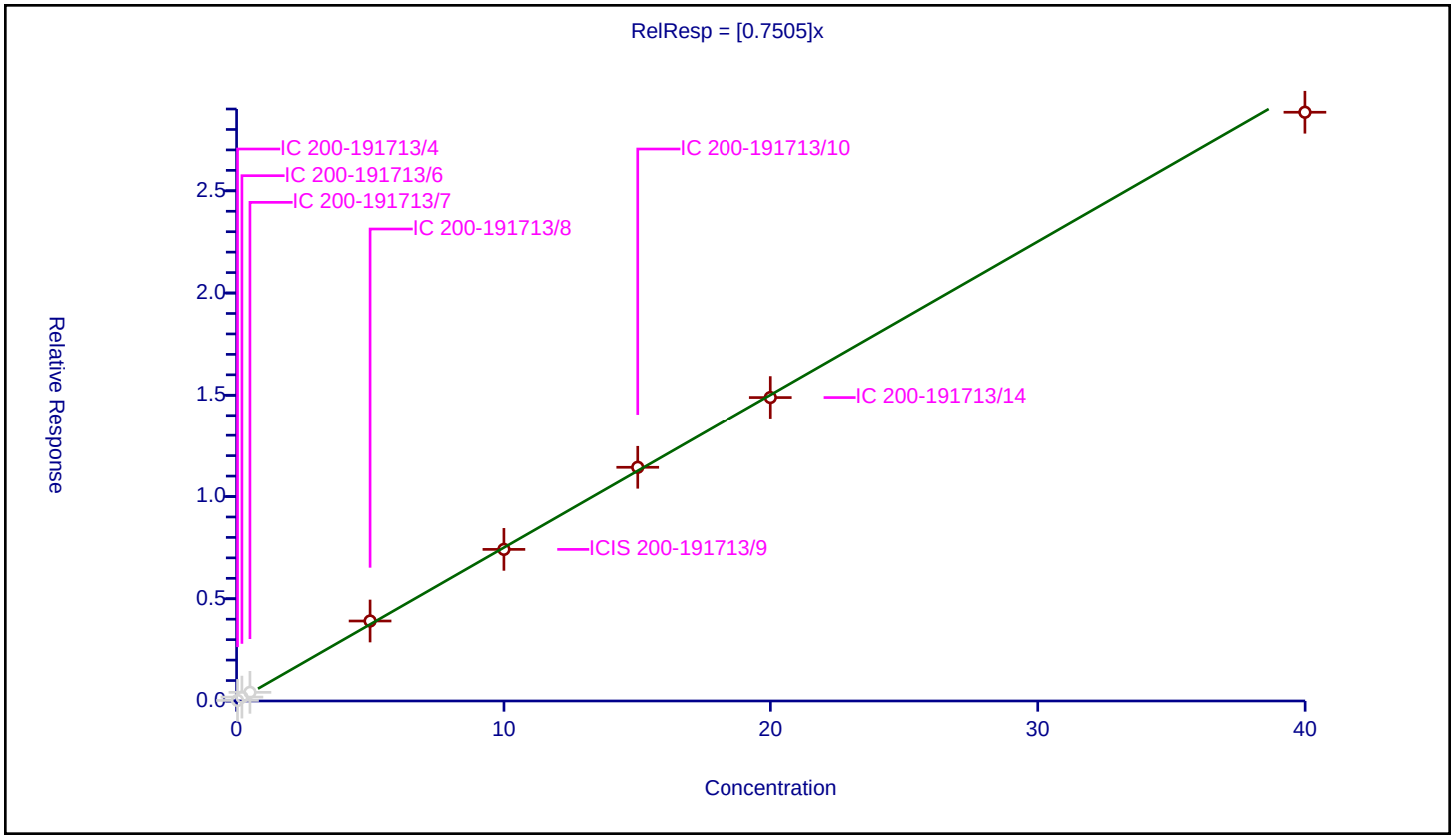
Curve Coefficients

Intercept:	0
Slope:	0.7505

Error Coefficients

Standard Error:	474000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.026983	10.0	244227.0	0.769254	N
2	IC 200-191713/6	0.20044	0.189189	10.0	237434.0	0.943872	N
3	IC 200-191713/7	0.500453	0.422819	10.0	231967.0	0.844873	N
4	IC 200-191713/8	4.992563	3.911873	10.0	235409.0	0.78354	Y
5	ICIS 200-191713/9	9.99806	7.414582	10.0	242688.0	0.741602	Y
6	IC 200-191713/10	15.003557	11.430404	10.0	257263.0	0.761846	Y
7	IC 200-191713/14	19.99612	14.888066	10.0	261449.0	0.744548	Y
8	IC 200-191713/15	39.99224	28.842643	10.0	273010.0	0.721206	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

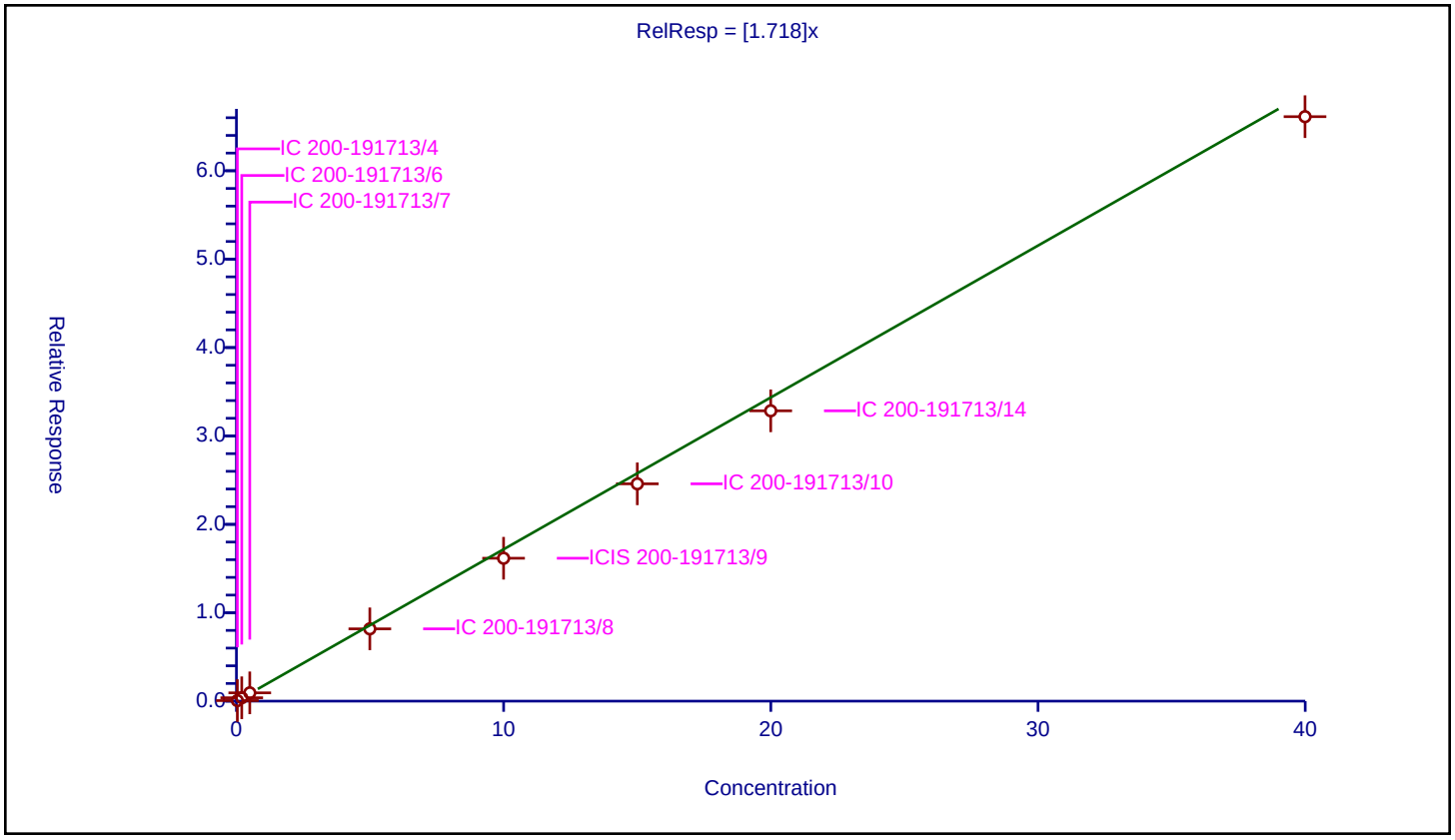
Curve Coefficients

Intercept:	0
Slope:	1.718

Error Coefficients

Standard Error:	809000
Relative Standard Error:	6.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.062196	10.0	244227.0	1.773137	Y
2	IC 200-191713/6	0.20044	0.381495	10.0	237434.0	1.903293	Y
3	IC 200-191713/7	0.500453	0.939013	10.0	231967.0	1.876327	Y
4	IC 200-191713/8	4.992563	8.179127	10.0	235409.0	1.638262	Y
5	ICIS 200-191713/9	9.99806	16.16693	10.0	242688.0	1.617007	Y
6	IC 200-191713/10	15.003557	24.58488	10.0	257263.0	1.638603	Y
7	IC 200-191713/14	19.99612	32.843308	10.0	261449.0	1.642484	Y
8	IC 200-191713/15	39.99224	66.118933	10.0	273010.0	1.653294	Y



Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

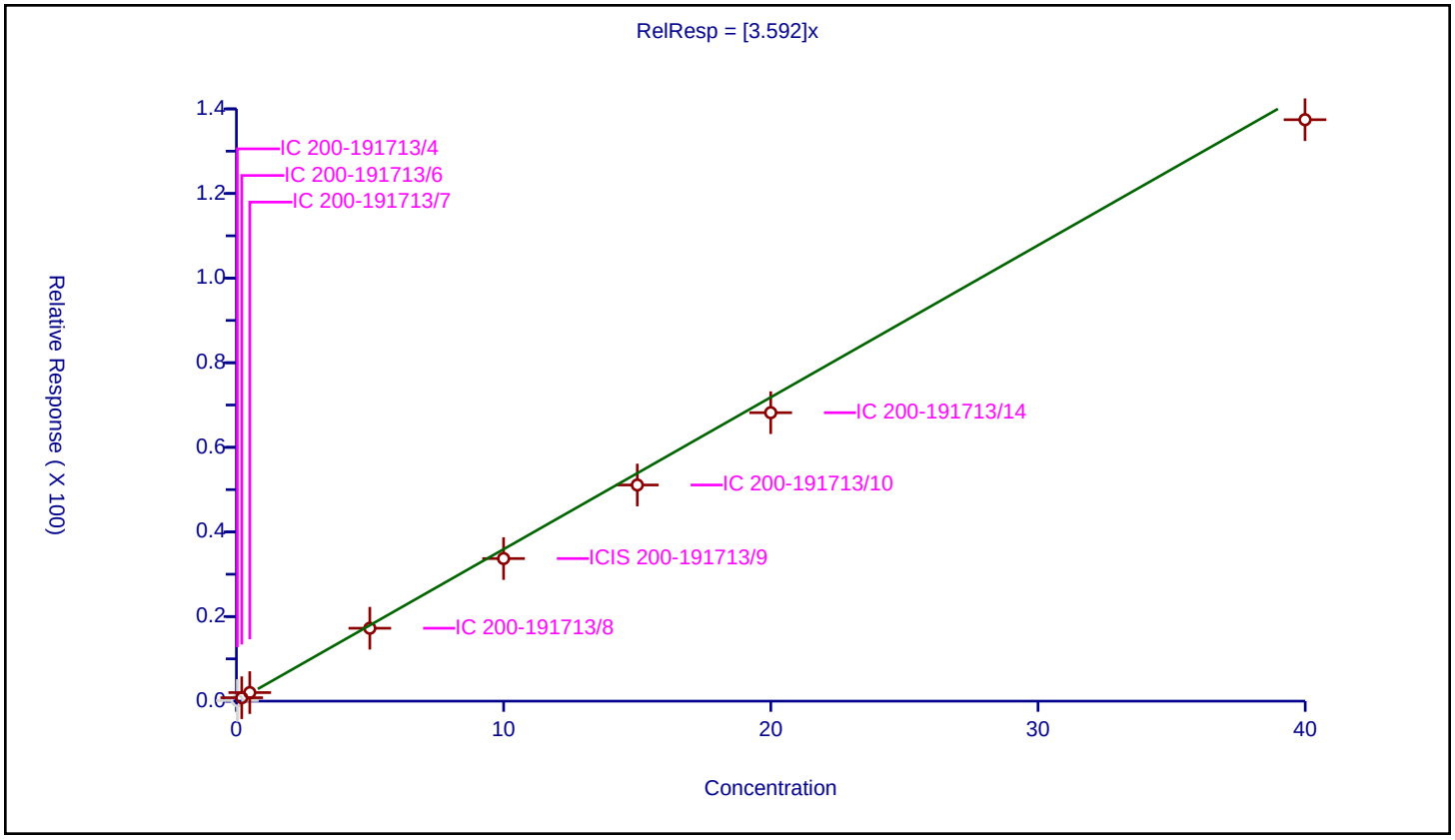
Curve Coefficients

Intercept:	0
Slope:	3.592

Error Coefficients

Standard Error:	1820000
Relative Standard Error:	8.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.133523	10.0	244227.0	3.806584	N
2	IC 200-191713/6	0.20044	0.806203	10.0	237434.0	4.022173	Y
3	IC 200-191713/7	0.500453	2.023952	10.0	231967.0	4.044243	Y
4	IC 200-191713/8	4.992563	17.234133	10.0	235409.0	3.451961	Y
5	ICIS 200-191713/9	9.99806	33.703397	10.0	242688.0	3.370994	Y
6	IC 200-191713/10	15.003557	51.097554	10.0	257263.0	3.405696	Y
7	IC 200-191713/14	19.99612	68.190278	10.0	261449.0	3.410176	Y
8	IC 200-191713/15	39.99224	137.446138	10.0	273010.0	3.43682	Y



Calibration / Acetone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

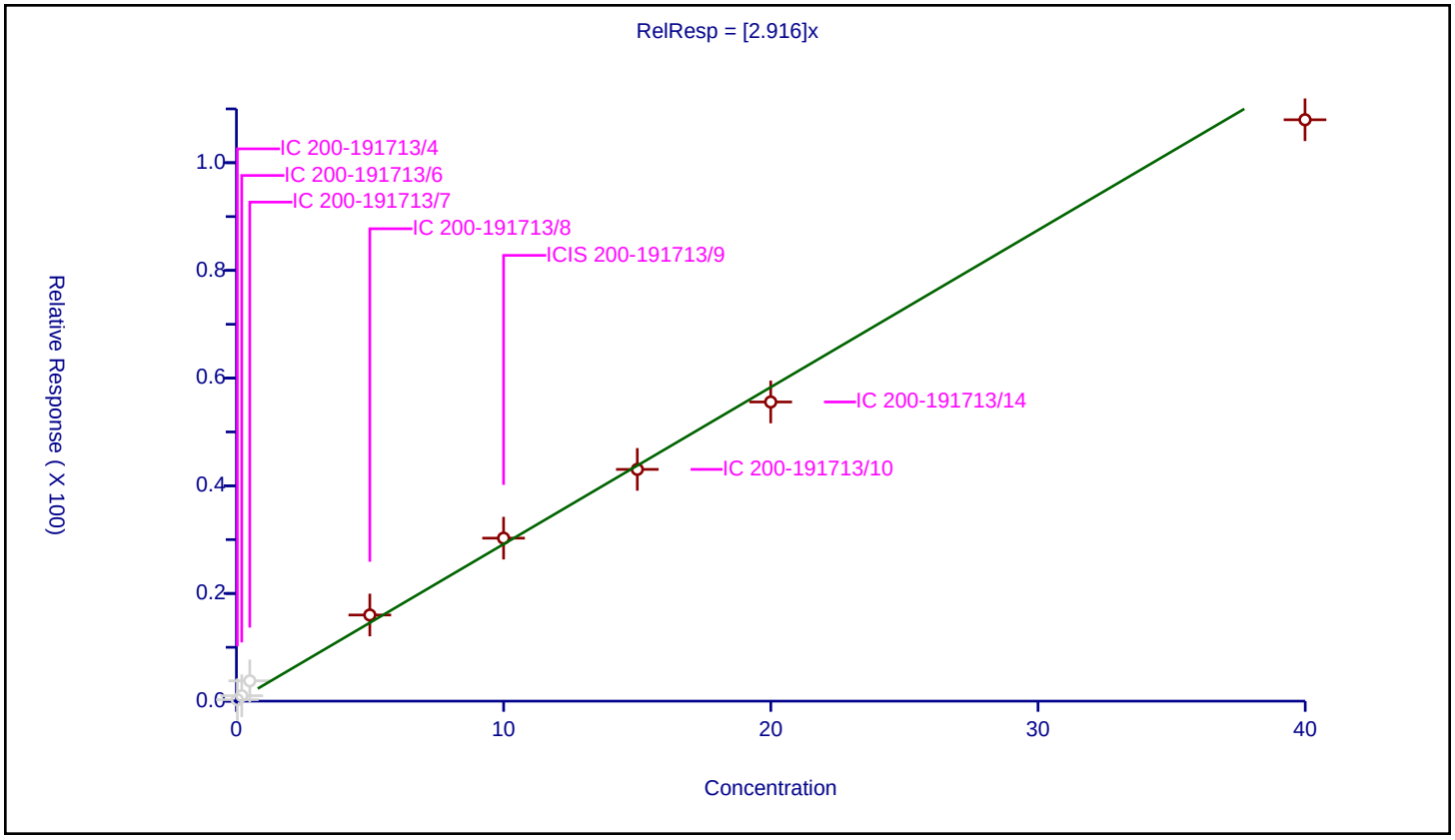
Curve Coefficients

Intercept:	0
Slope:	2.916

Error Coefficients

Standard Error:	1780000
Relative Standard Error:	6.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.274744	10.0	244227.0	7.832621	N
2	IC 200-191713/6	0.20044	1.007564	10.0	237434.0	5.026771	N
3	IC 200-191713/7	0.500453	3.774114	10.0	231967.0	7.541403	N
4	IC 200-191713/8	4.992563	16.002574	10.0	235409.0	3.205282	Y
5	ICIS 200-191713/9	9.99806	30.270718	10.0	242688.0	3.027659	Y
6	IC 200-191713/10	15.003557	43.04385	10.0	257263.0	2.86891	Y
7	IC 200-191713/14	19.99612	55.564833	10.0	261449.0	2.778781	Y
8	IC 200-191713/15	39.99224	107.982162	10.0	273010.0	2.700078	Y



Calibration / Isopropyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

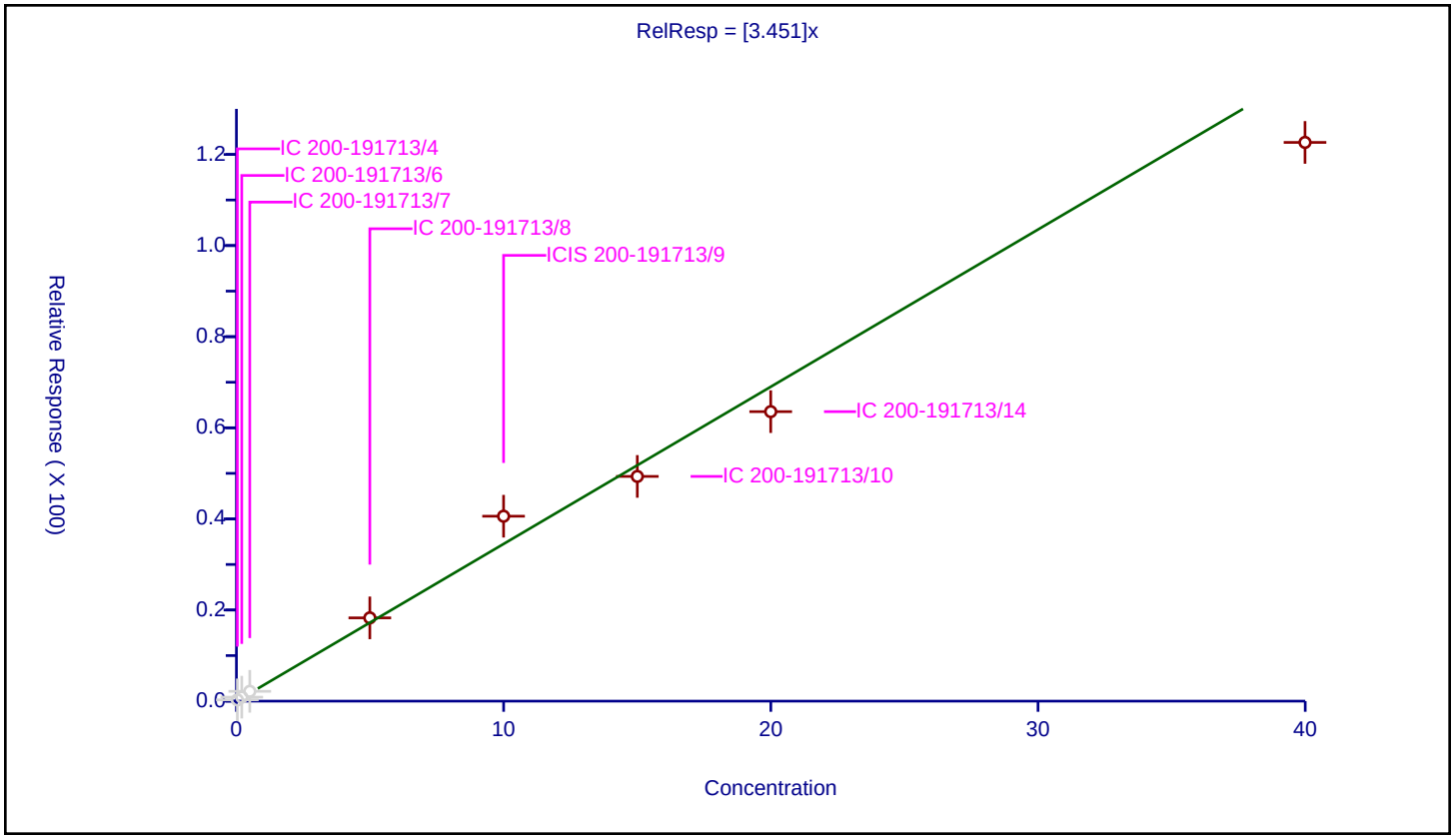
Curve Coefficients

Intercept:	0
Slope:	3.451

Error Coefficients

Standard Error:	2050000
Relative Standard Error:	11.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.959

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.27716	10.0	244227.0	7.901492	N
2	IC 200-191713/6	0.20044	0.872369	10.0	237434.0	4.352276	N
3	IC 200-191713/7	0.500453	2.151772	10.0	231967.0	4.299651	N
4	IC 200-191713/8	4.992563	18.280355	10.0	235409.0	3.661517	Y
5	ICIS 200-191713/9	9.99806	40.59183	10.0	242688.0	4.059971	Y
6	IC 200-191713/10	15.003557	49.326953	10.0	257263.0	3.287684	Y
7	IC 200-191713/14	19.99612	63.546772	10.0	261449.0	3.177955	Y
8	IC 200-191713/15	39.99224	122.636717	10.0	273010.0	3.066513	Y



Calibration / Carbon disulfide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

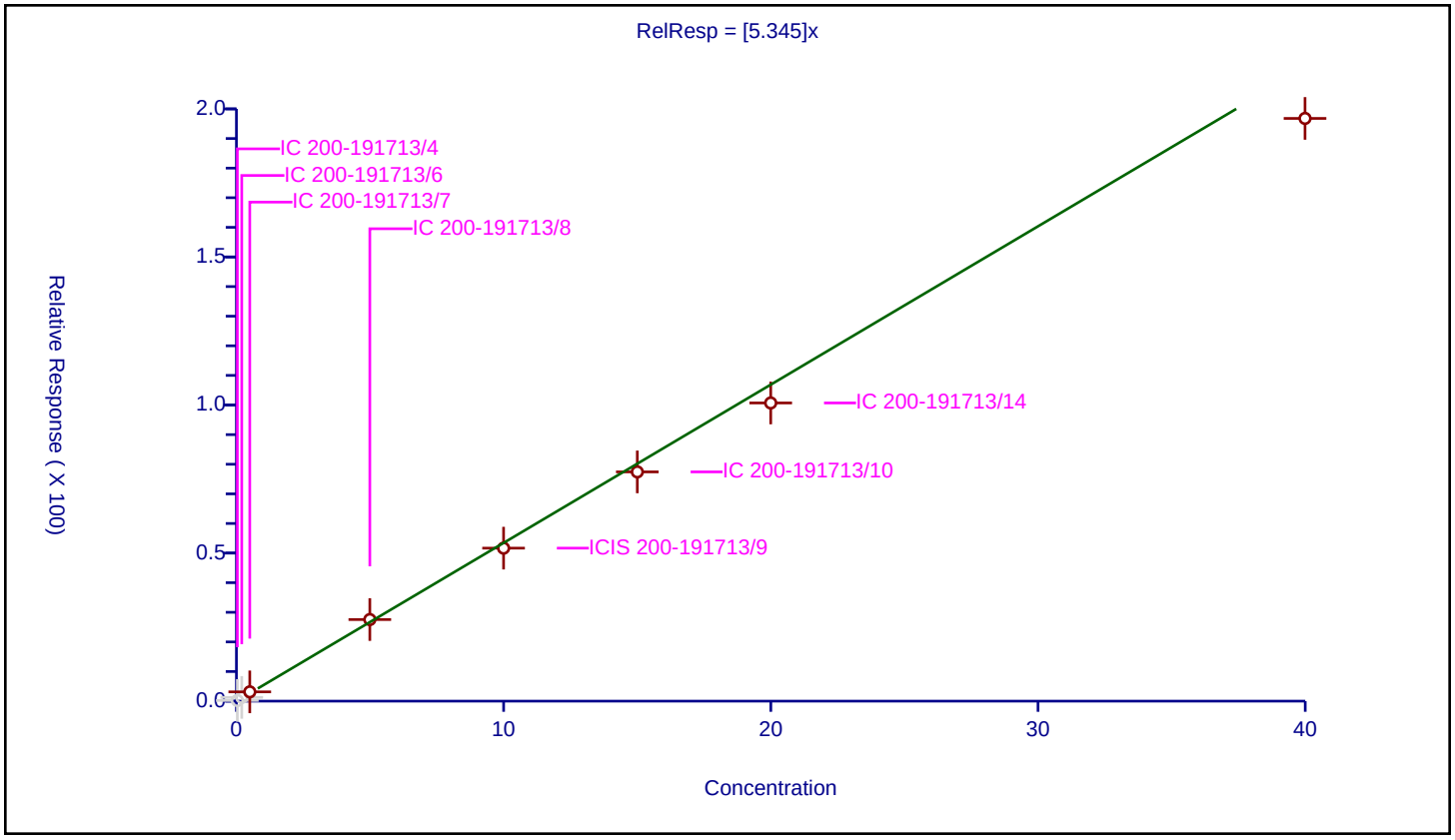
Curve Coefficients

Intercept:	0
Slope:	5.345

Error Coefficients

Standard Error:	2890000
Relative Standard Error:	9.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.223358	10.0	244227.0	6.367653	N
2	IC 200-191713/6	0.20044	1.252685	10.0	237434.0	6.249686	N
3	IC 200-191713/7	0.500453	3.135532	10.0	231967.0	6.265393	Y
4	IC 200-191713/8	4.992563	27.557655	10.0	235409.0	5.519741	Y
5	ICIS 200-191713/9	9.99806	51.664977	10.0	242688.0	5.1675	Y
6	IC 200-191713/10	15.003557	77.413736	10.0	257263.0	5.159692	Y
7	IC 200-191713/14	19.99612	100.693099	10.0	261449.0	5.035632	Y
8	IC 200-191713/15	39.99224	196.781839	10.0	273010.0	4.920501	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

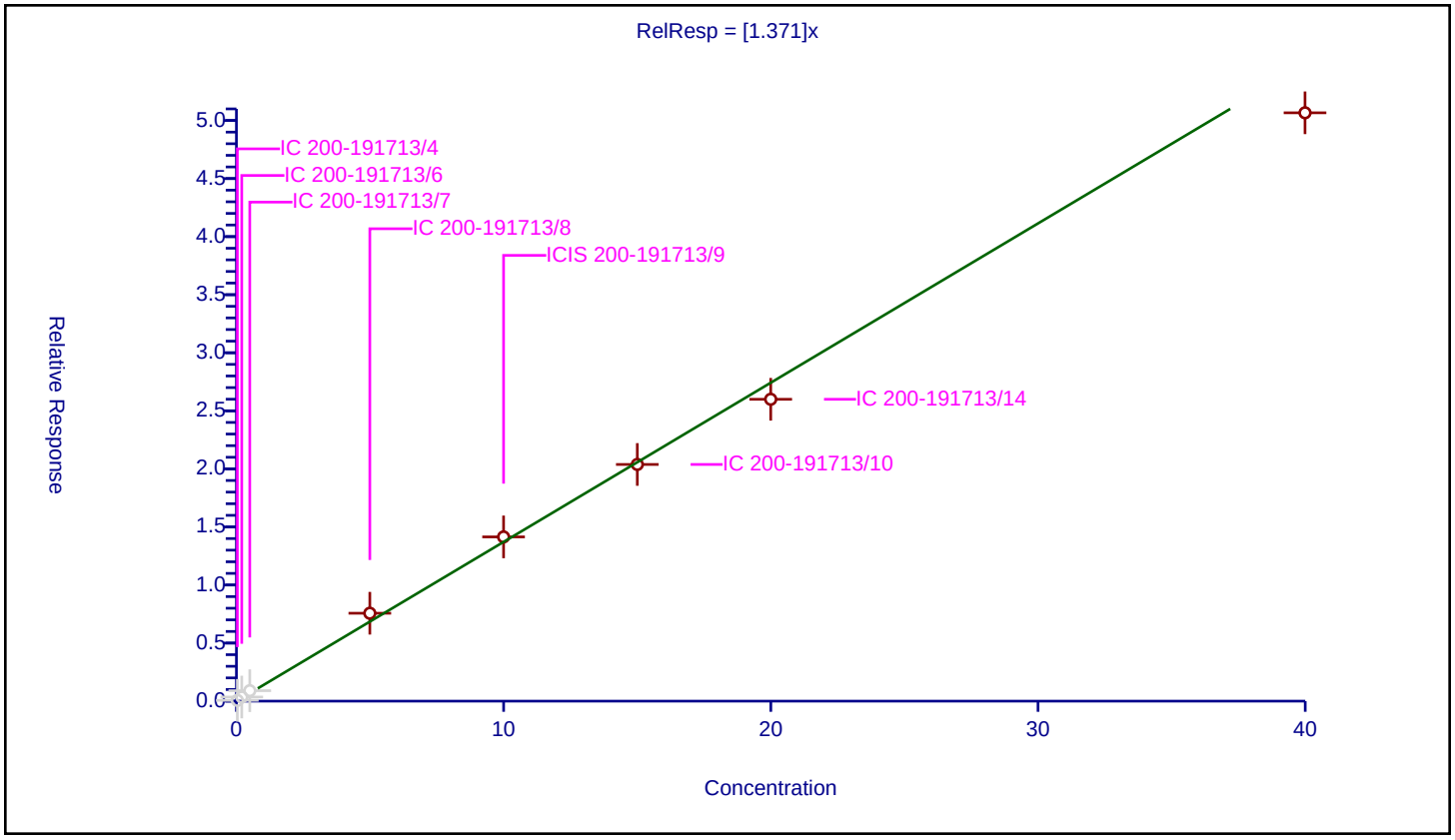
Curve Coefficients

Intercept:	0
Slope:	1.371

Error Coefficients

Standard Error:	837000
Relative Standard Error:	7.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.068256	10.0	244227.0	1.945899	N
2	IC 200-191713/6	0.20044	0.354962	10.0	237434.0	1.770916	N
3	IC 200-191713/7	0.500453	0.899093	10.0	231967.0	1.796561	N
4	IC 200-191713/8	4.992563	7.570824	10.0	235409.0	1.51642	Y
5	ICIS 200-191713/9	9.99806	14.141902	10.0	242688.0	1.414465	Y
6	IC 200-191713/10	15.003557	20.380506	10.0	257263.0	1.358378	Y
7	IC 200-191713/14	19.99612	25.993712	10.0	261449.0	1.299938	Y
8	IC 200-191713/15	39.99224	50.662393	10.0	273010.0	1.266806	Y



Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

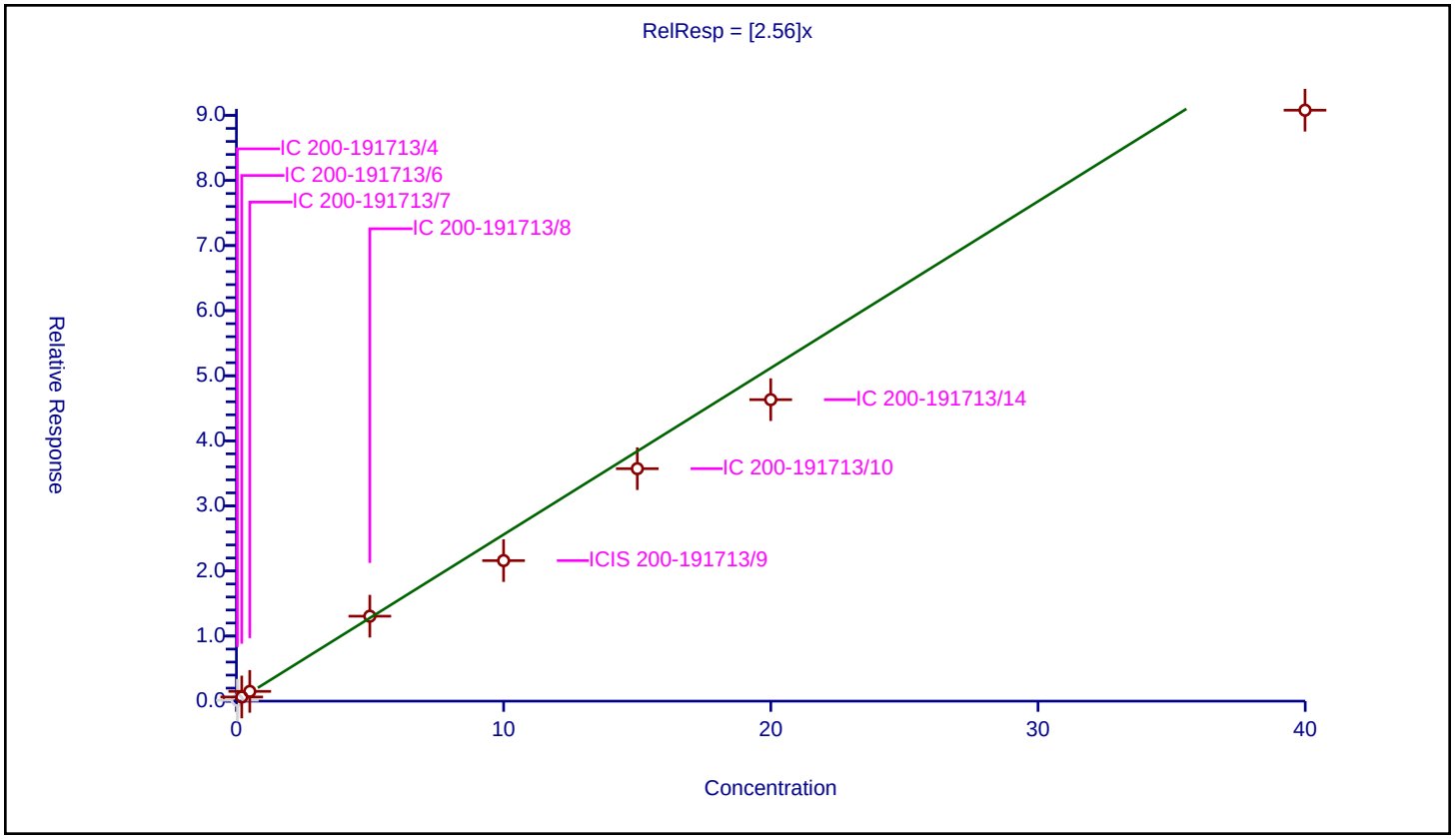
Curve Coefficients

Intercept:	0
Slope:	2.56

Error Coefficients

Standard Error:	1210000
Relative Standard Error:	15.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.968

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.136021	10.0	244227.0	3.87779	N
2	IC 200-191713/6	0.20044	0.636219	10.0	237434.0	3.174117	Y
3	IC 200-191713/7	0.500453	1.501765	10.0	231967.0	3.000814	Y
4	IC 200-191713/8	4.992563	13.0512	10.0	235409.0	2.614128	Y
5	ICIS 200-191713/9	9.99806	21.591838	10.0	242688.0	2.159603	Y
6	IC 200-191713/10	15.003557	35.721382	10.0	257263.0	2.380861	Y
7	IC 200-191713/14	19.99612	46.324407	10.0	261449.0	2.31667	Y
8	IC 200-191713/15	39.99224	90.798176	10.0	273010.0	2.270395	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

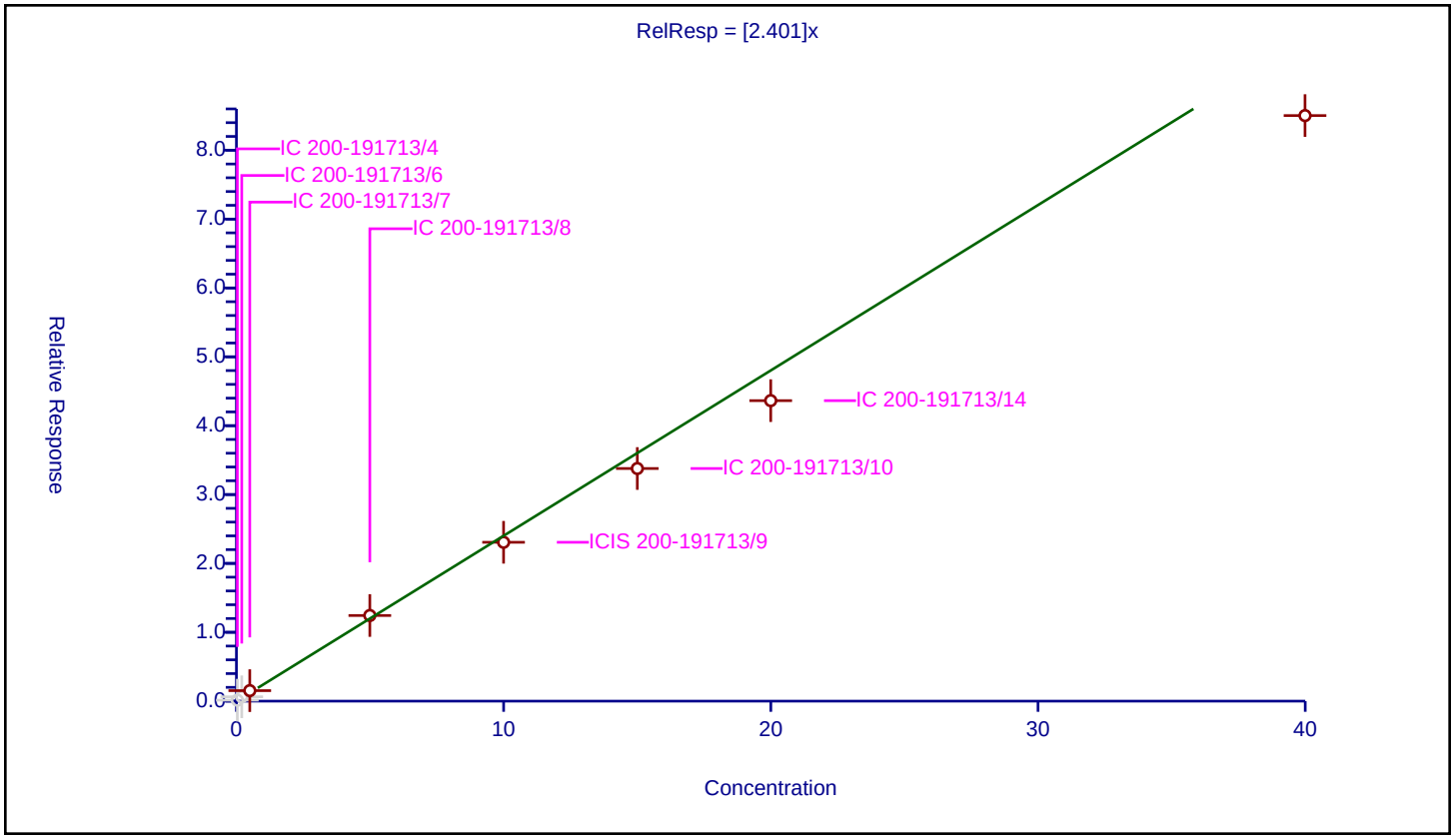
Curve Coefficients

Intercept:	0
Slope:	2.401

Error Coefficients

Standard Error:	1250000
Relative Standard Error:	14.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.141467	10.0	244227.0	4.033041	N
2	IC 200-191713/6	0.20044	0.633144	10.0	237434.0	3.158778	N
3	IC 200-191713/7	0.500453	1.526036	10.0	231967.0	3.049312	Y
4	IC 200-191713/8	4.992563	12.434529	10.0	235409.0	2.49061	Y
5	ICIS 200-191713/9	9.99806	23.069455	10.0	242688.0	2.307393	Y
6	IC 200-191713/10	15.003557	33.779323	10.0	257263.0	2.251421	Y
7	IC 200-191713/14	19.99612	43.635202	10.0	261449.0	2.182183	Y
8	IC 200-191713/15	39.99224	85.029266	10.0	273010.0	2.126144	Y



Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

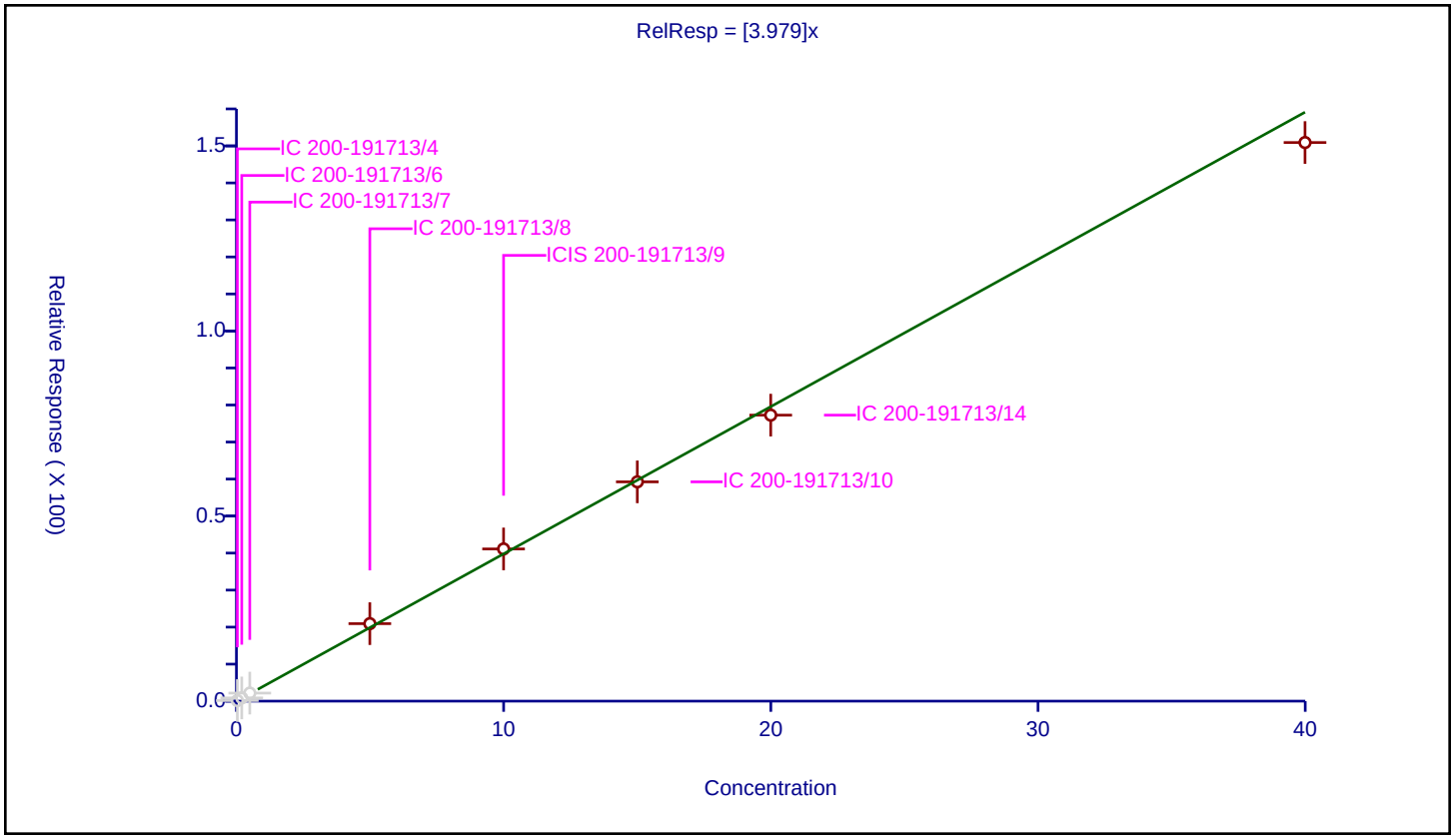
Curve Coefficients

Intercept:	0
Slope:	3.979

Error Coefficients

Standard Error:	2480000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.151785	10.0	244227.0	4.327202	N
2	IC 200-191713/6	0.20044	0.866936	10.0	237434.0	4.32517	N
3	IC 200-191713/7	0.500453	2.176516	10.0	231967.0	4.349096	N
4	IC 200-191713/8	4.992563	20.936753	10.0	235409.0	4.193588	Y
5	ICIS 200-191713/9	9.99806	41.119009	10.0	242688.0	4.112699	Y
6	IC 200-191713/10	15.003557	59.246258	10.0	257263.0	3.948814	Y
7	IC 200-191713/14	19.99612	77.268377	10.0	261449.0	3.864169	Y
8	IC 200-191713/15	39.99224	150.909784	10.0	273010.0	3.773477	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

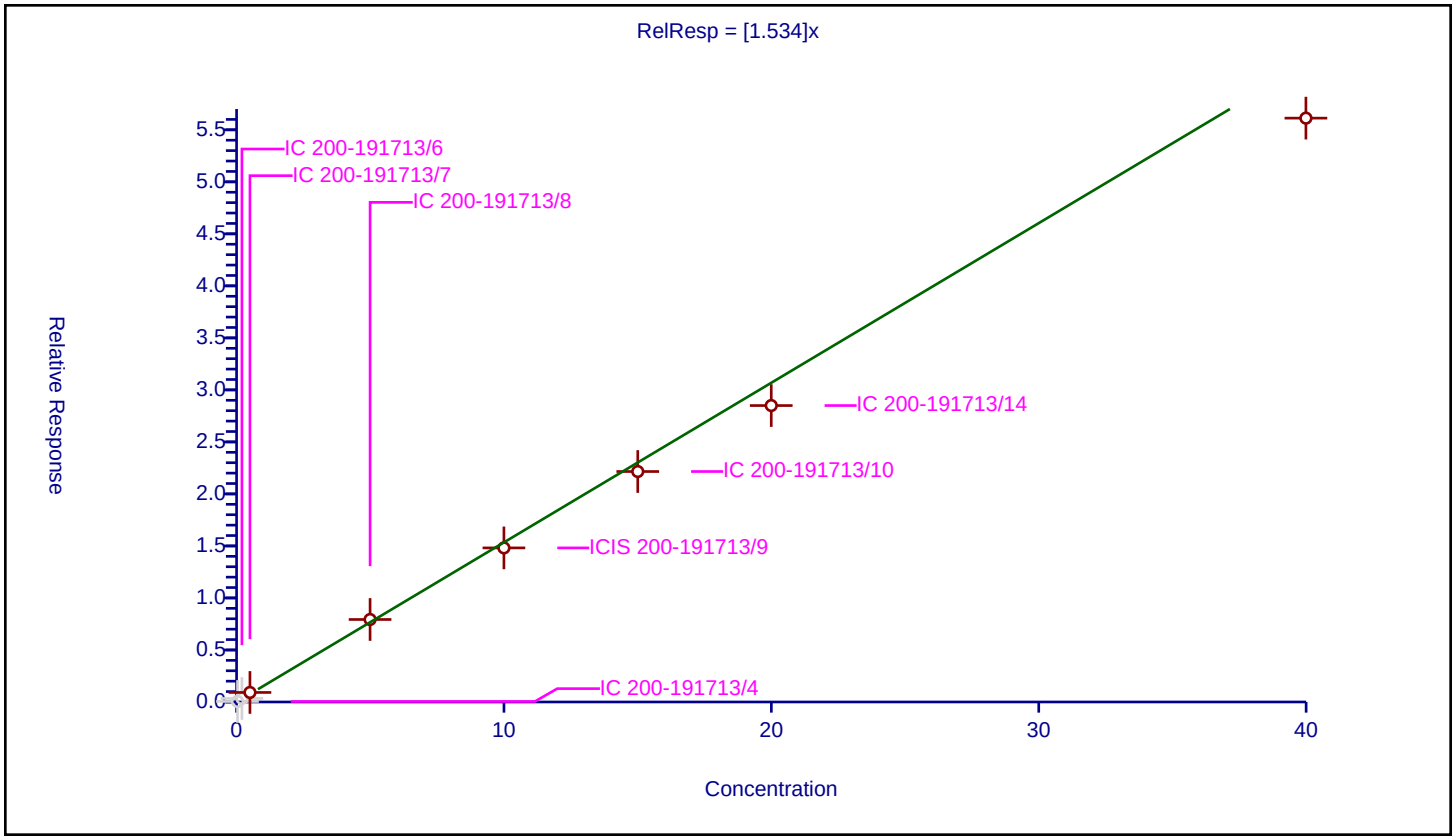
Curve Coefficients

Intercept:	0
Slope:	1.534

Error Coefficients

Standard Error:	824000
Relative Standard Error:	10.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.050813	10.0	244227.0	1.448626	N
2	IC 200-191713/6	0.20044	0.339842	10.0	237434.0	1.695482	N
3	IC 200-191713/7	0.500453	0.916423	10.0	231967.0	1.831189	Y
4	IC 200-191713/8	4.992563	7.929773	10.0	235409.0	1.588317	Y
5	ICIS 200-191713/9	9.99806	14.811775	10.0	242688.0	1.481465	Y
6	IC 200-191713/10	15.003557	22.153594	10.0	257263.0	1.476556	Y
7	IC 200-191713/14	19.99612	28.49462	10.0	261449.0	1.425007	Y
8	IC 200-191713/15	39.99224	56.122083	10.0	273010.0	1.403324	Y



Calibration / Methyl tert-butyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

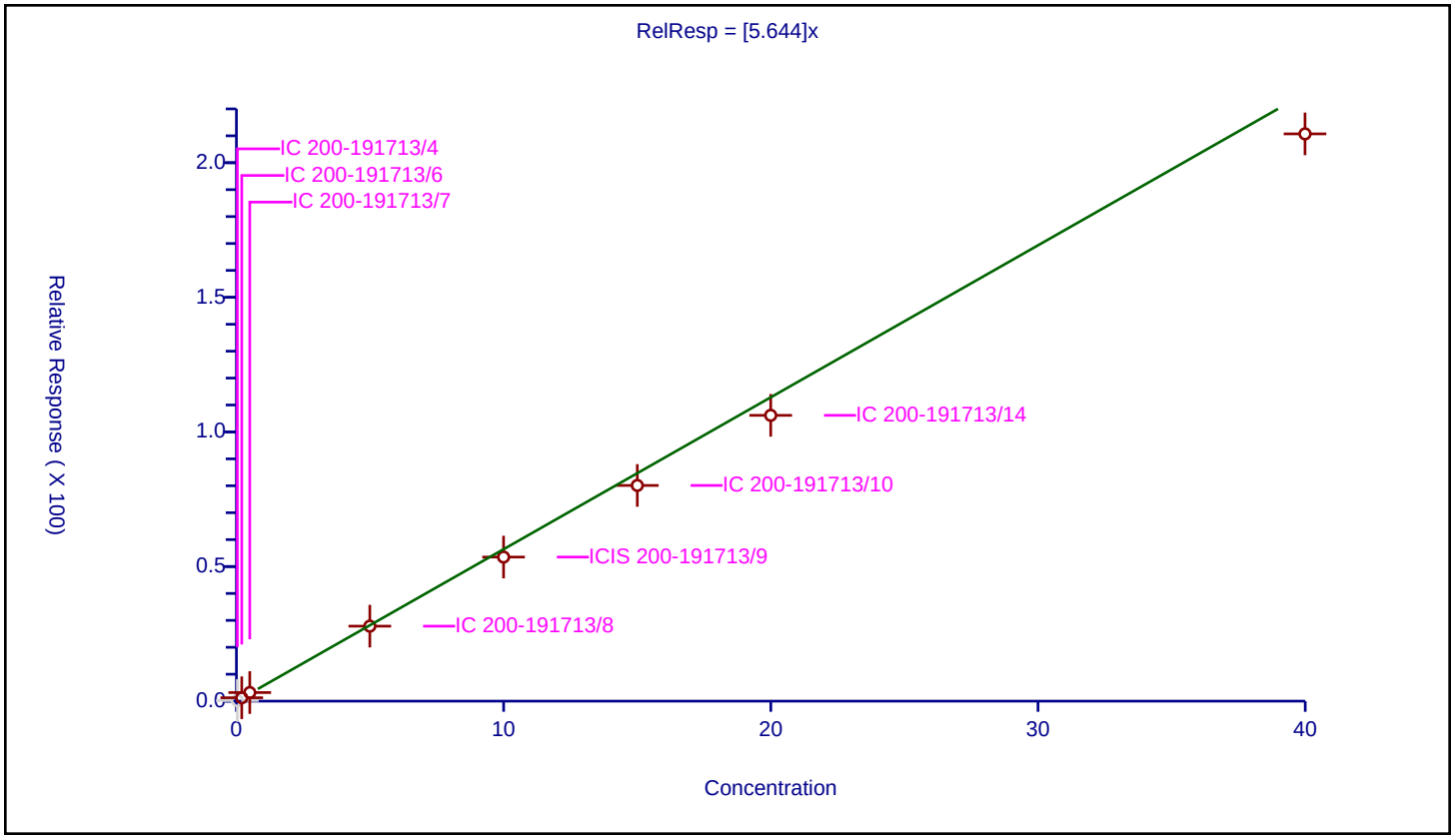
Curve Coefficients

Intercept:	0
Slope:	5.644

Error Coefficients

Standard Error:	2800000
Relative Standard Error:	8.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.219222	10.0	244227.0	6.249755	N
2	IC 200-191713/6	0.20044	1.259129	10.0	237434.0	6.281835	Y
3	IC 200-191713/7	0.500453	3.189549	10.0	231967.0	6.373328	Y
4	IC 200-191713/8	4.992563	27.858536	10.0	235409.0	5.580007	Y
5	ICIS 200-191713/9	9.99806	53.521888	10.0	242688.0	5.353227	Y
6	IC 200-191713/10	15.003557	80.120927	10.0	257263.0	5.340129	Y
7	IC 200-191713/14	19.99612	106.165944	10.0	261449.0	5.309327	Y
8	IC 200-191713/15	39.99224	210.715761	10.0	273010.0	5.268916	Y



Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

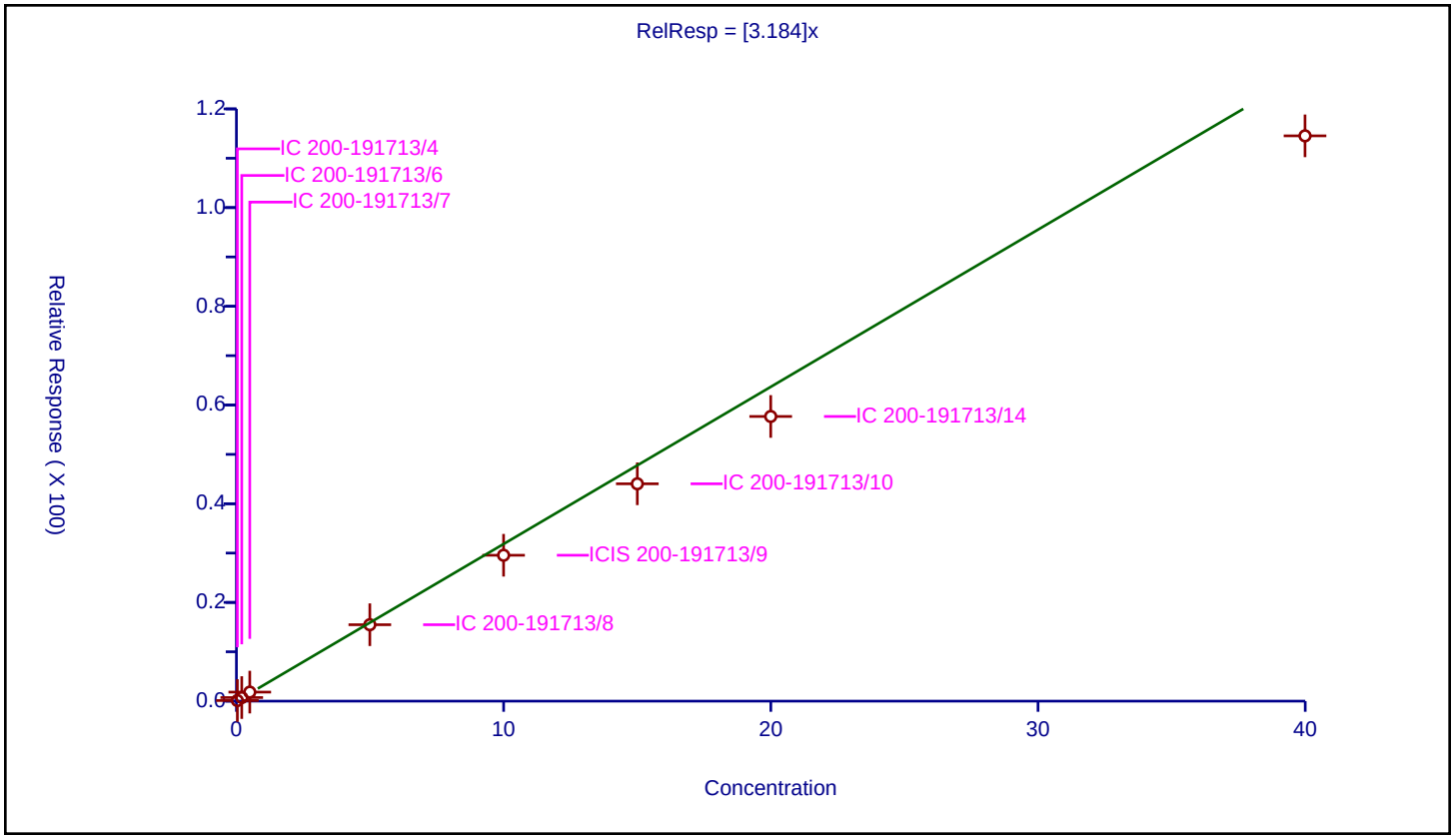
Curve Coefficients

Intercept:	0
Slope:	3.184

Error Coefficients

Standard Error:	1410000
Relative Standard Error:	10.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.121322	10.0	244227.0	3.458727	Y
2	IC 200-191713/6	0.20044	0.725086	10.0	237434.0	3.617476	Y
3	IC 200-191713/7	0.500453	1.830648	10.0	231967.0	3.657986	Y
4	IC 200-191713/8	4.992563	15.484667	10.0	235409.0	3.101547	Y
5	ICIS 200-191713/9	9.99806	29.55964	10.0	242688.0	2.956538	Y
6	IC 200-191713/10	15.003557	44.03587	10.0	257263.0	2.935029	Y
7	IC 200-191713/14	19.99612	57.678247	10.0	261449.0	2.884472	Y
8	IC 200-191713/15	39.99224	114.537306	10.0	273010.0	2.863988	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

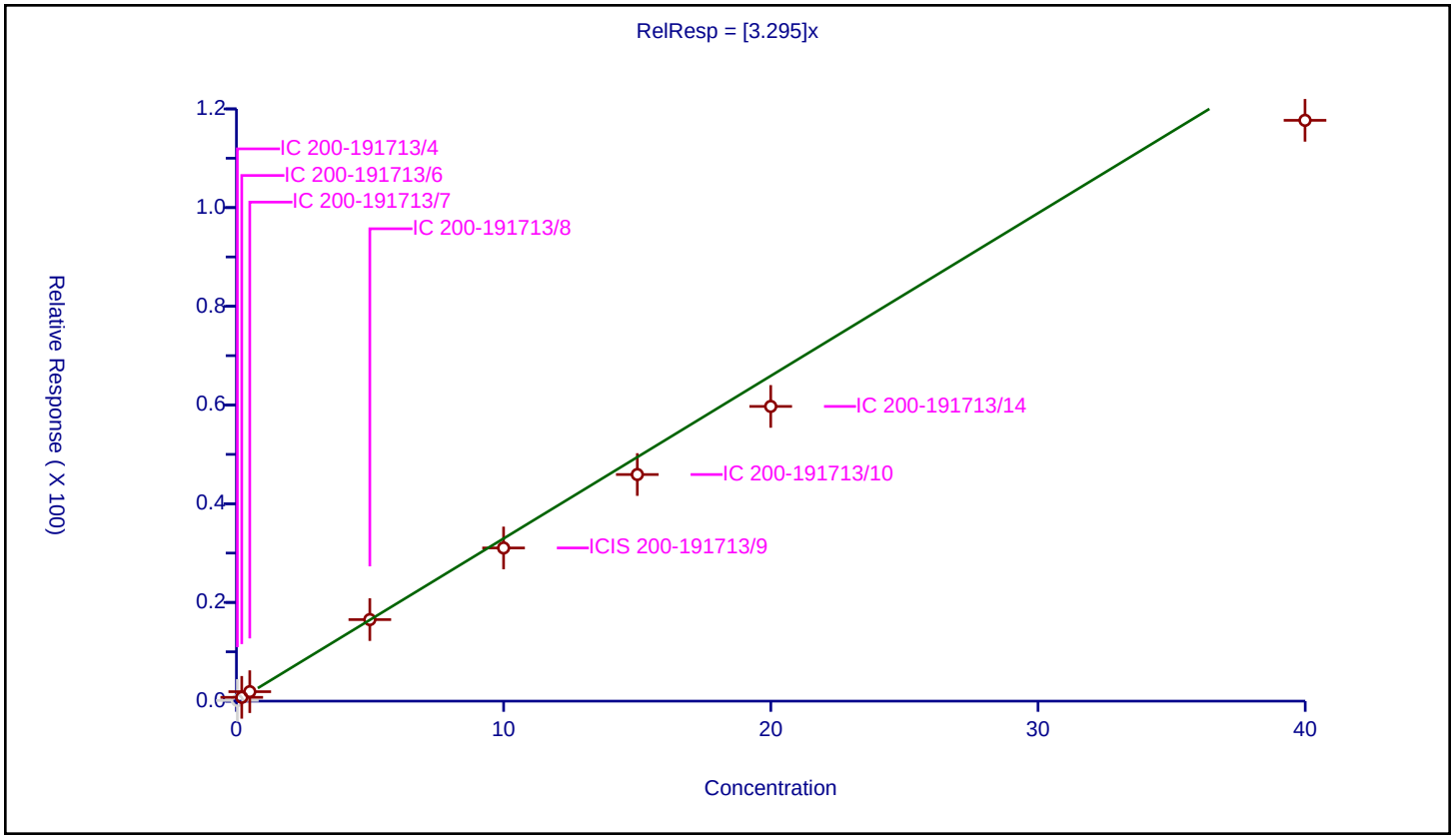
Curve Coefficients

Intercept:	0
Slope:	3.295

Error Coefficients

Standard Error:	1570000
Relative Standard Error:	11.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.138723	10.0	244227.0	3.954832	N
2	IC 200-191713/6	0.20044	0.767455	10.0	237434.0	3.82886	Y
3	IC 200-191713/7	0.500453	1.919583	10.0	231967.0	3.835695	Y
4	IC 200-191713/8	4.992563	16.523752	10.0	235409.0	3.309673	Y
5	ICIS 200-191713/9	9.99806	31.039442	10.0	242688.0	3.104546	Y
6	IC 200-191713/10	15.003557	45.915736	10.0	257263.0	3.060323	Y
7	IC 200-191713/14	19.99612	59.715853	10.0	261449.0	2.986372	Y
8	IC 200-191713/15	39.99224	117.686605	10.0	273010.0	2.942736	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

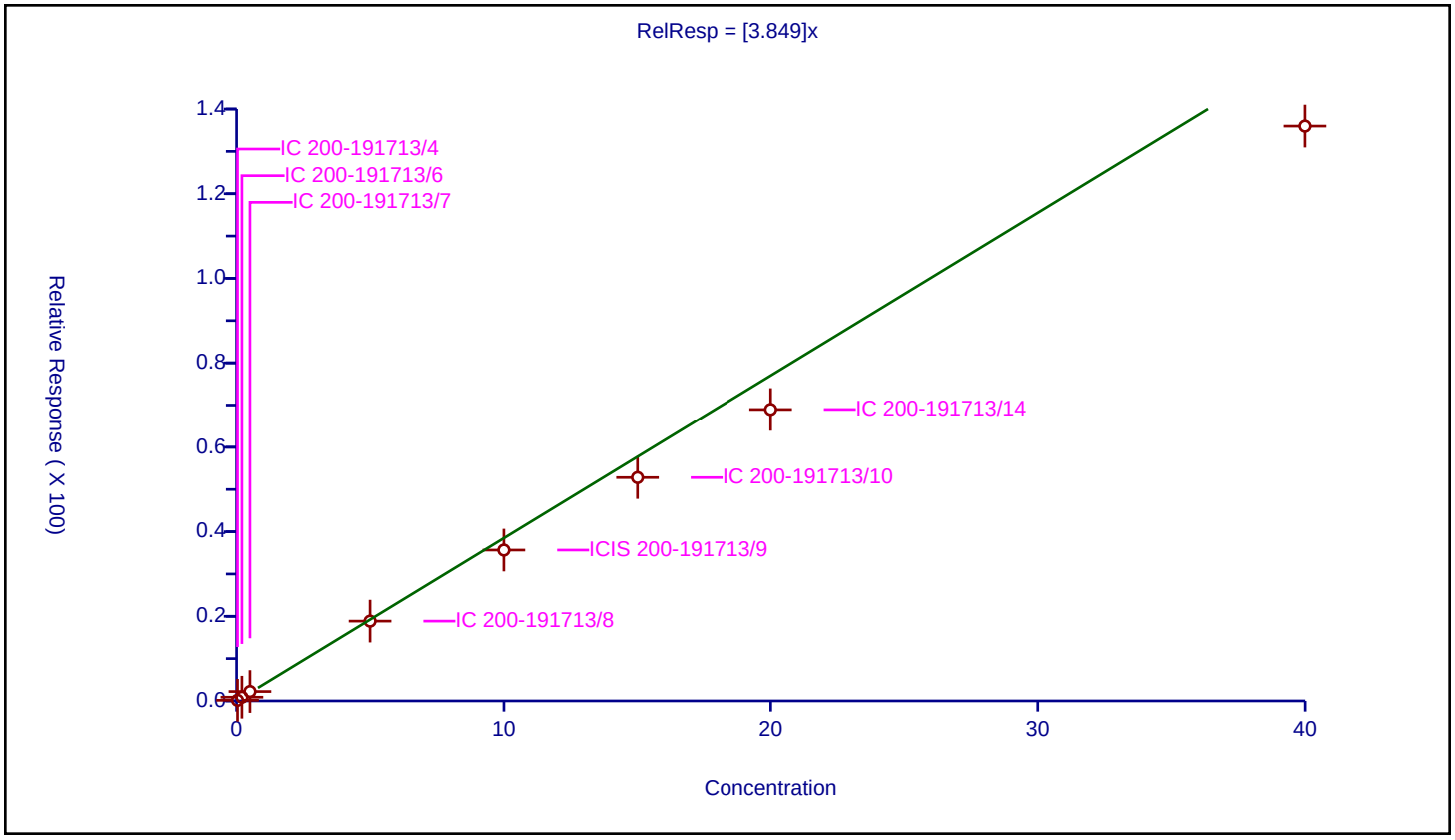
Curve Coefficients

Intercept:	0
Slope:	3.849

Error Coefficients

Standard Error:	1680000
Relative Standard Error:	11.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.149861	10.0	244227.0	4.272339	Y
2	IC 200-191713/6	0.20044	0.878055	10.0	237434.0	4.380643	Y
3	IC 200-191713/7	0.500453	2.216177	10.0	231967.0	4.428346	Y
4	IC 200-191713/8	4.992563	18.861726	10.0	235409.0	3.777965	Y
5	ICIS 200-191713/9	9.99806	35.656069	10.0	242688.0	3.566299	Y
6	IC 200-191713/10	15.003557	52.822637	10.0	257263.0	3.520674	Y
7	IC 200-191713/14	19.99612	68.955972	10.0	261449.0	3.448468	Y
8	IC 200-191713/15	39.99224	135.979232	10.0	273010.0	3.40014	Y



Calibration / Vinyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

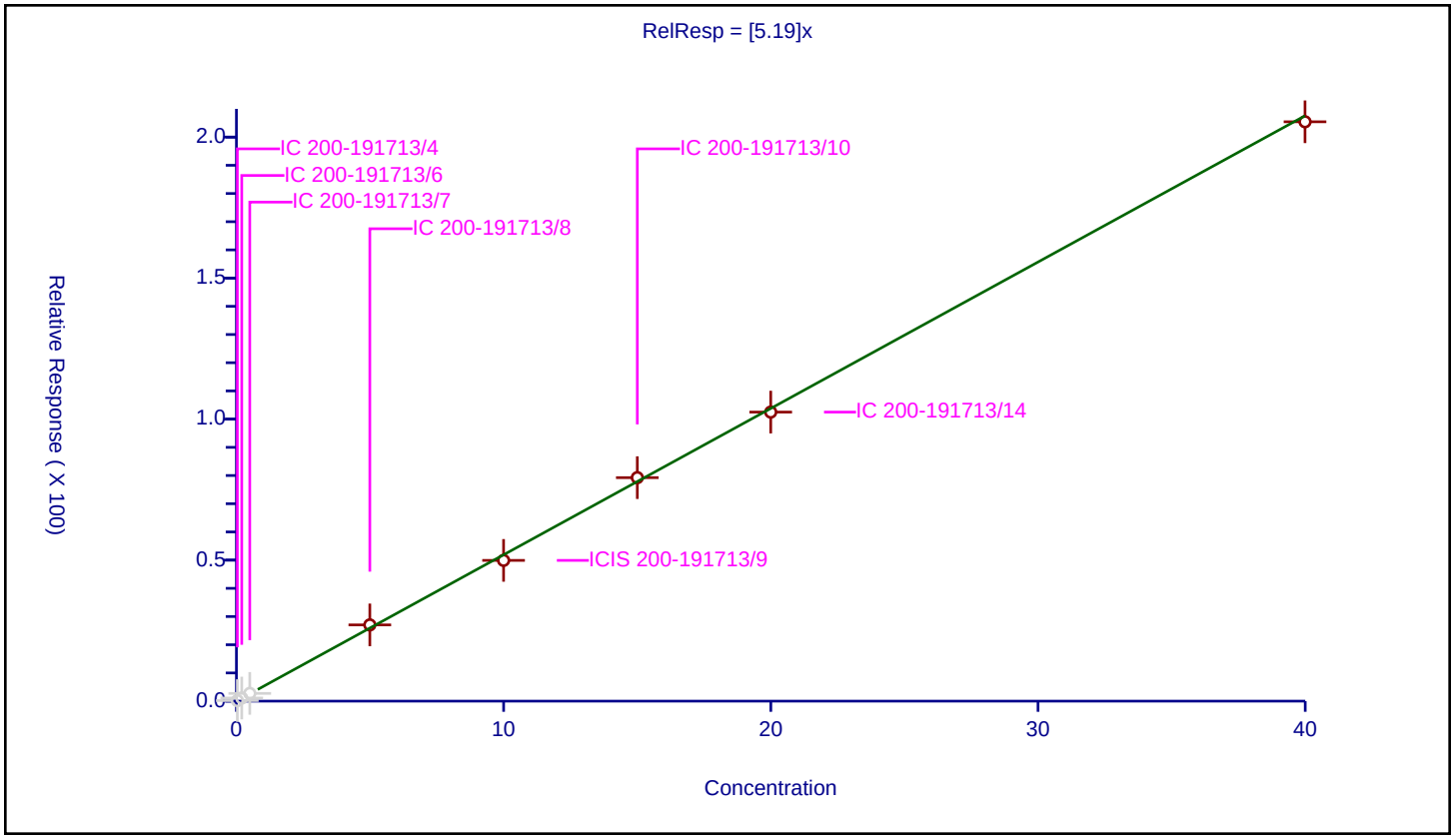
Curve Coefficients

Intercept:	0
Slope:	5.19

Error Coefficients

Standard Error:	3340000
Relative Standard Error:	3.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.191297	10.0	244227.0	5.453652	N
2	IC 200-191713/6	0.20044	1.104433	10.0	237434.0	5.510053	N
3	IC 200-191713/7	0.500453	2.739441	10.0	231967.0	5.473928	N
4	IC 200-191713/8	4.992563	27.028618	10.0	235409.0	5.413776	Y
5	ICIS 200-191713/9	9.99806	49.906093	10.0	242688.0	4.991578	Y
6	IC 200-191713/10	15.003557	79.252283	10.0	257263.0	5.282233	Y
7	IC 200-191713/14	19.99612	102.491423	10.0	261449.0	5.125566	Y
8	IC 200-191713/15	39.99224	205.426395	10.0	273010.0	5.136656	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

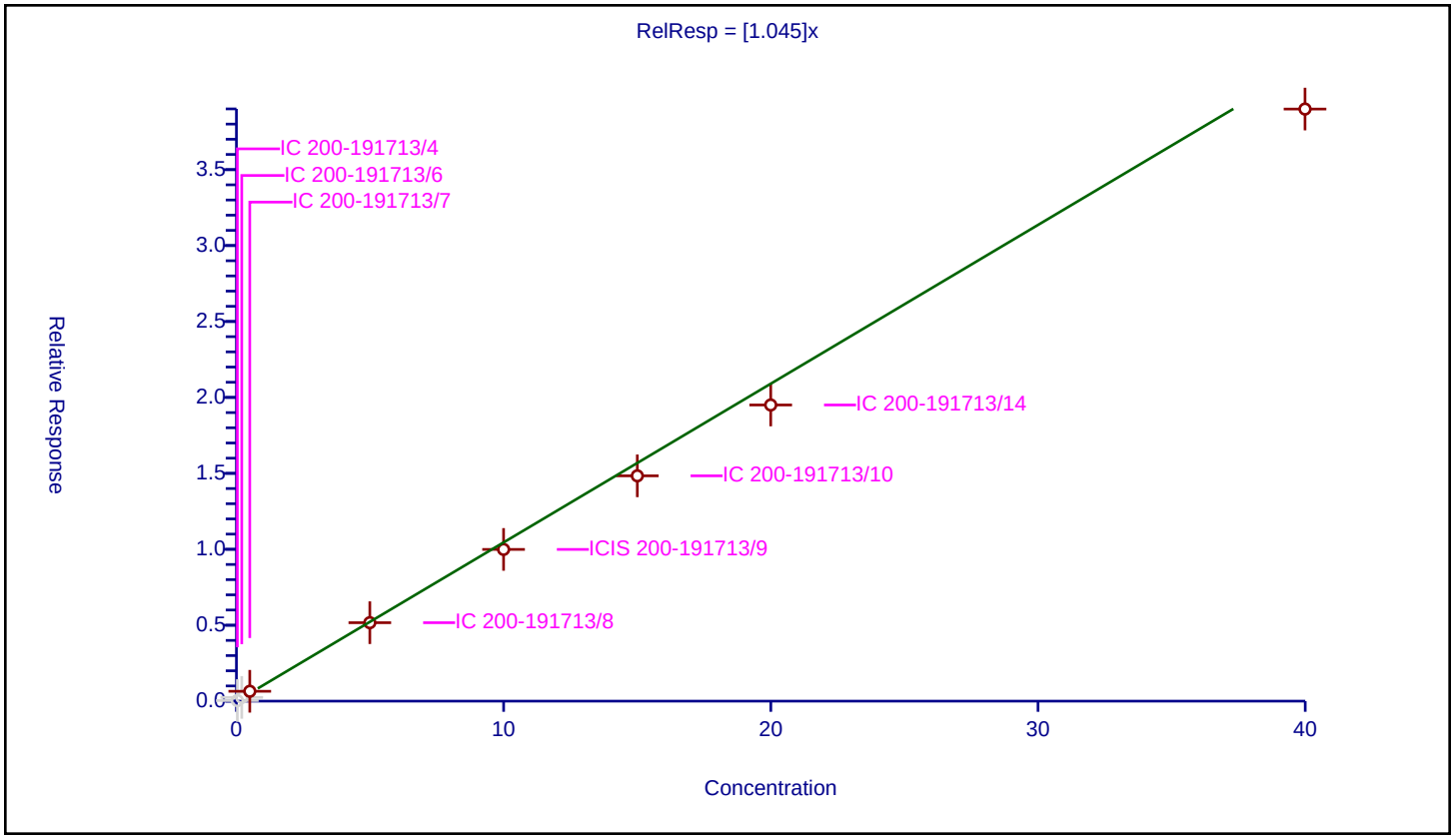
Curve Coefficients

Intercept:	0
Slope:	1.045

Error Coefficients

Standard Error:	568000
Relative Standard Error:	12.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.037342	10.0	244227.0	1.064583	N
2	IC 200-191713/6	0.20044	0.243941	10.0	237434.0	1.217032	N
3	IC 200-191713/7	0.500453	0.649791	10.0	231967.0	1.298406	Y
4	IC 200-191713/8	4.992563	5.166455	10.0	235409.0	1.03483	Y
5	ICIS 200-191713/9	9.99806	9.99077	10.0	242688.0	0.999271	Y
6	IC 200-191713/10	15.003557	14.837618	10.0	257263.0	0.98894	Y
7	IC 200-191713/14	19.99612	19.502848	10.0	261449.0	0.975332	Y
8	IC 200-191713/15	39.99224	38.990257	10.0	273010.0	0.974946	Y



Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

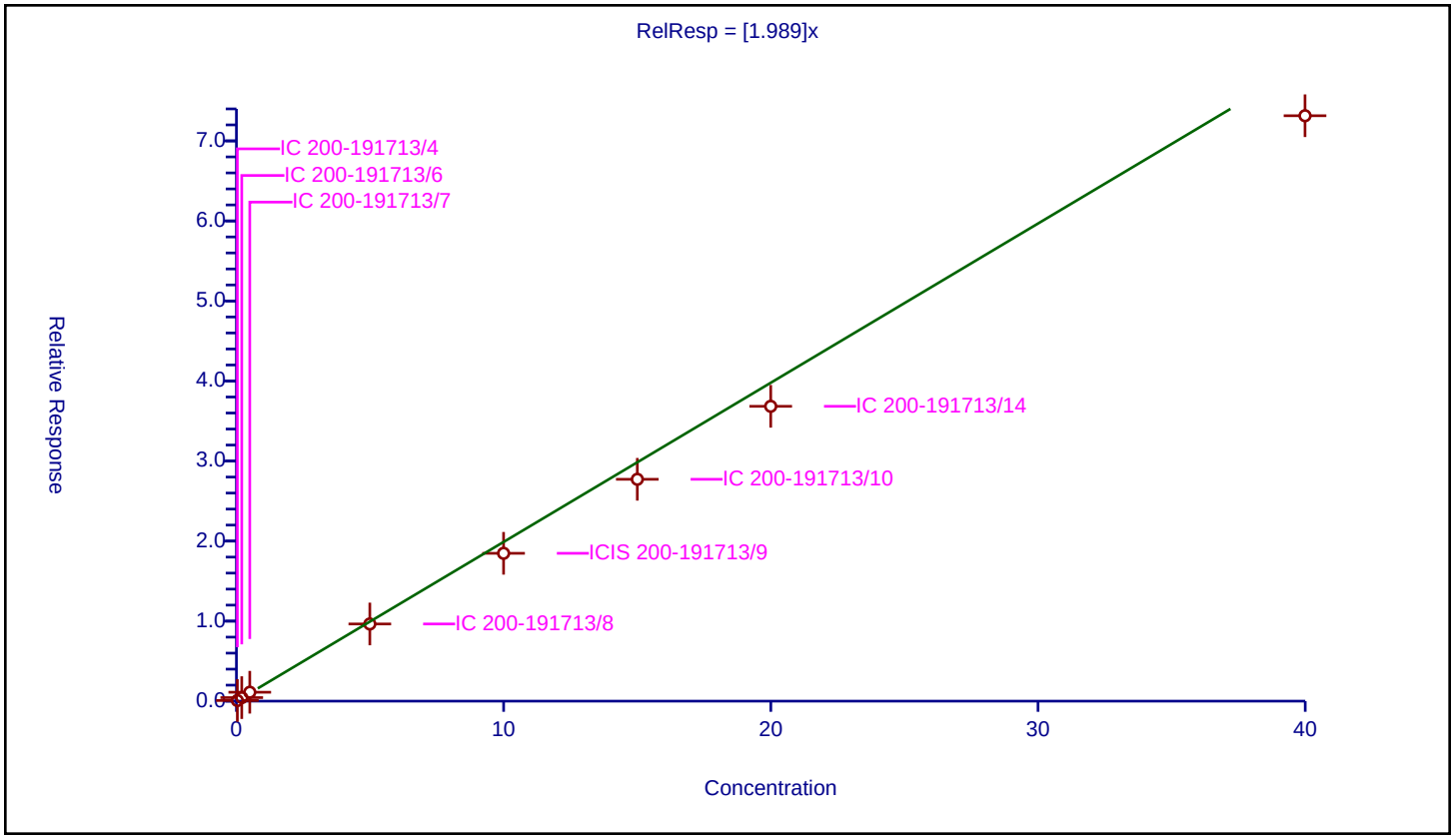
Curve Coefficients

Intercept:	0
Slope:	1.989

Error Coefficients

Standard Error:	901000
Relative Standard Error:	9.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.076732	10.0	244227.0	2.187531	Y
2	IC 200-191713/6	0.20044	0.441428	10.0	237434.0	2.202298	Y
3	IC 200-191713/7	0.500453	1.113908	10.0	231967.0	2.225802	Y
4	IC 200-191713/8	4.992563	9.642834	10.0	235409.0	1.93144	Y
5	ICIS 200-191713/9	9.99806	18.470547	10.0	242688.0	1.847413	Y
6	IC 200-191713/10	15.003557	27.718599	10.0	257263.0	1.847469	Y
7	IC 200-191713/14	19.99612	36.838351	10.0	261449.0	1.842275	Y
8	IC 200-191713/15	39.99224	73.144354	10.0	273010.0	1.828964	Y



Calibration / Ethyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

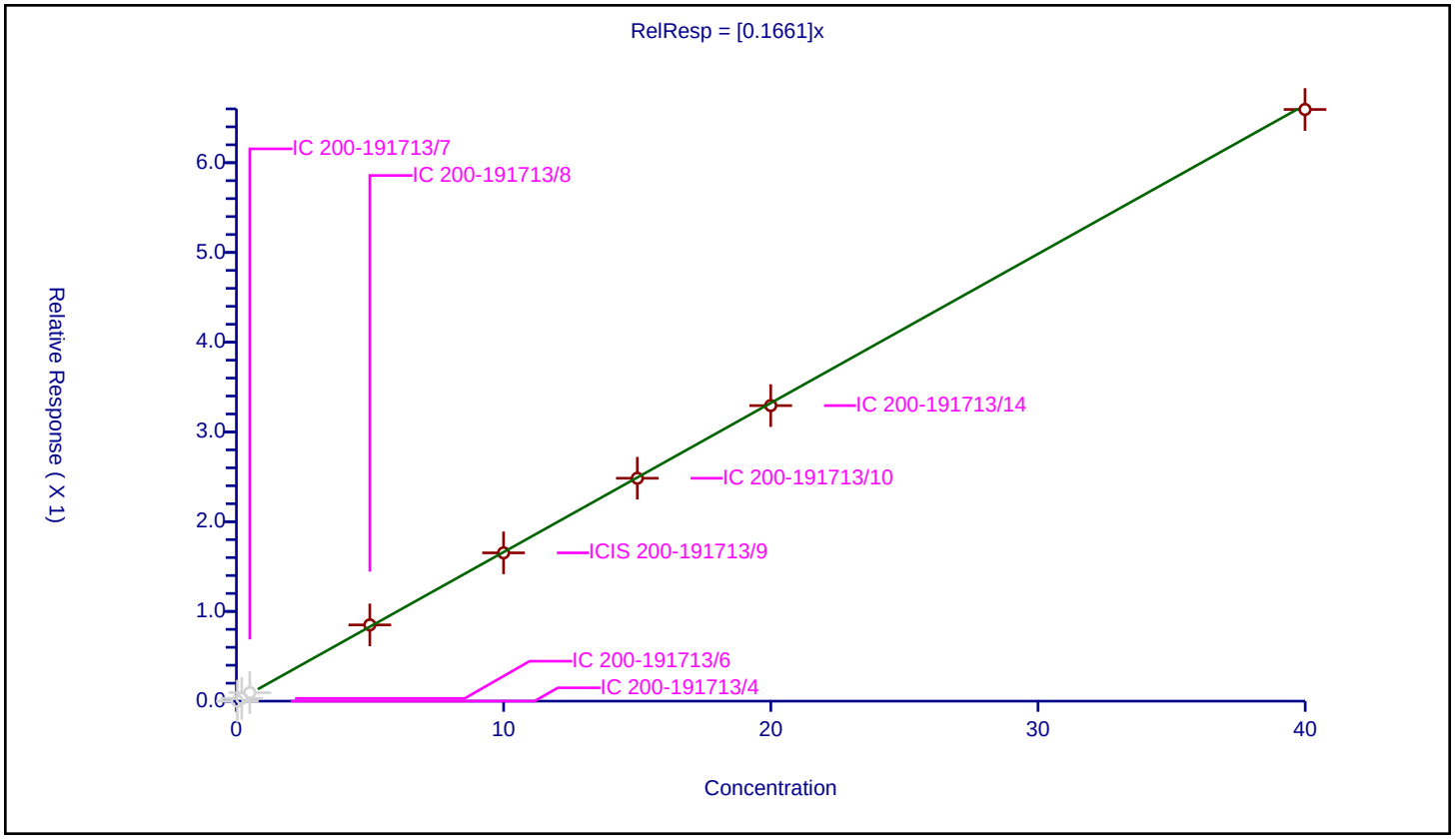
Curve Coefficients

Intercept:	0
Slope:	0.1661

Error Coefficients

Standard Error:	107000
Relative Standard Error:	1.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.0	10.0	244227.0	0.0	N
2	IC 200-191713/6	0.20044	0.030619	10.0	237434.0	0.152759	N
3	IC 200-191713/7	0.500453	0.094496	10.0	231967.0	0.188821	N
4	IC 200-191713/8	4.992563	0.849713	10.0	235409.0	0.170196	Y
5	ICIS 200-191713/9	9.99806	1.652533	10.0	242688.0	0.165285	Y
6	IC 200-191713/10	15.003557	2.483801	10.0	257263.0	0.165547	Y
7	IC 200-191713/14	19.99612	3.293568	10.0	261449.0	0.16471	Y
8	IC 200-191713/15	39.99224	6.593568	10.0	273010.0	0.164871	Y



Calibration / Tetrahydrofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

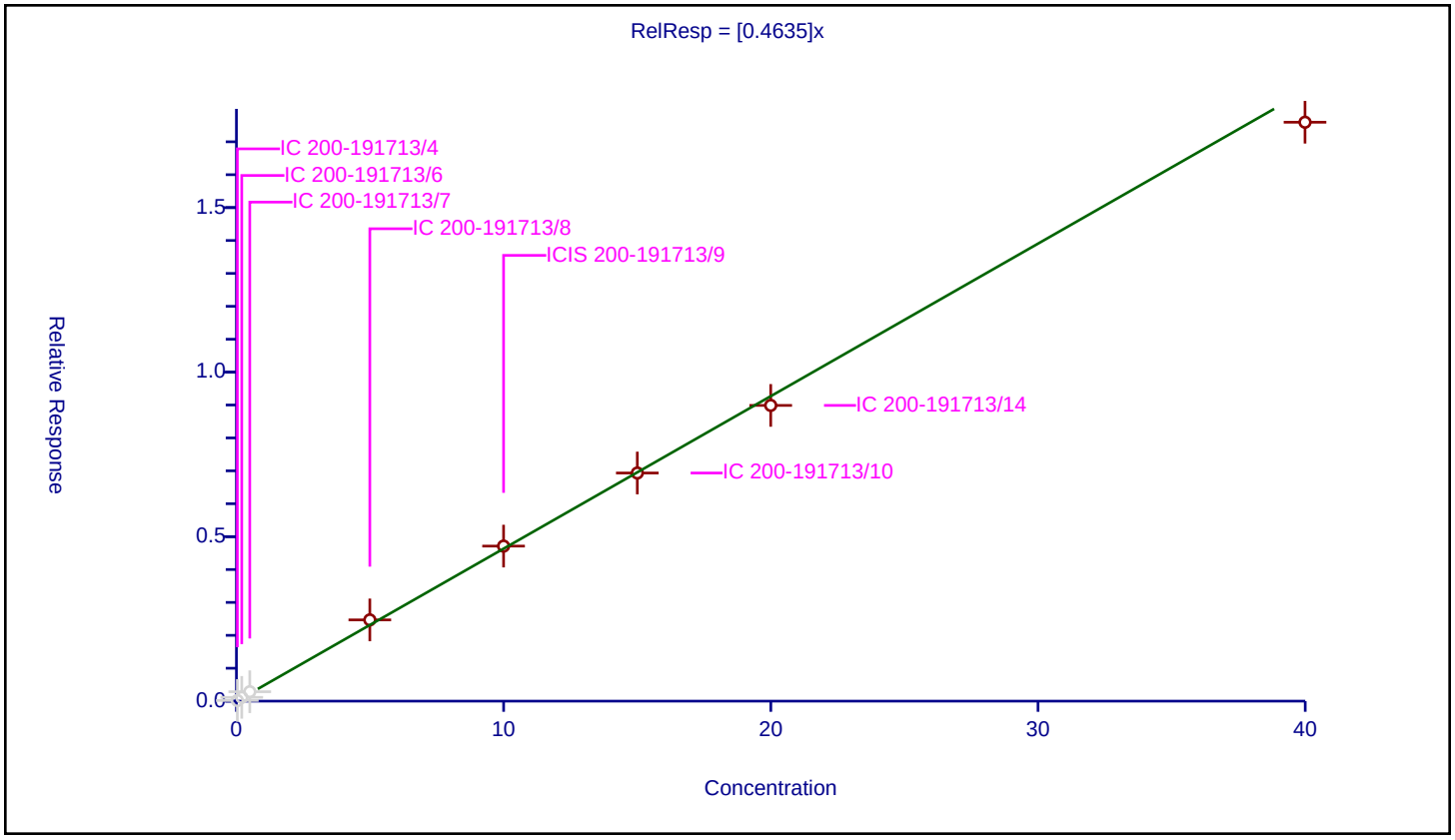
Curve Coefficients

Intercept:	0
Slope:	0.4635

Error Coefficients

Standard Error:	1430000
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.019273	10.0	1248362.0	0.549457	N
2	IC 200-191713/6	0.20044	0.114252	10.0	1208645.0	0.570006	N
3	IC 200-191713/7	0.500453	0.286416	10.0	1175702.0	0.572314	N
4	IC 200-191713/8	4.992563	2.468965	10.0	1195343.0	0.494529	Y
5	ICIS 200-191713/9	9.99806	4.712142	10.0	1212907.0	0.471306	Y
6	IC 200-191713/10	15.003557	6.933451	10.0	1286332.0	0.46212	Y
7	IC 200-191713/14	19.99612	8.987696	10.0	1298602.0	0.449472	Y
8	IC 200-191713/15	39.99224	17.594792	10.0	1343252.0	0.439955	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

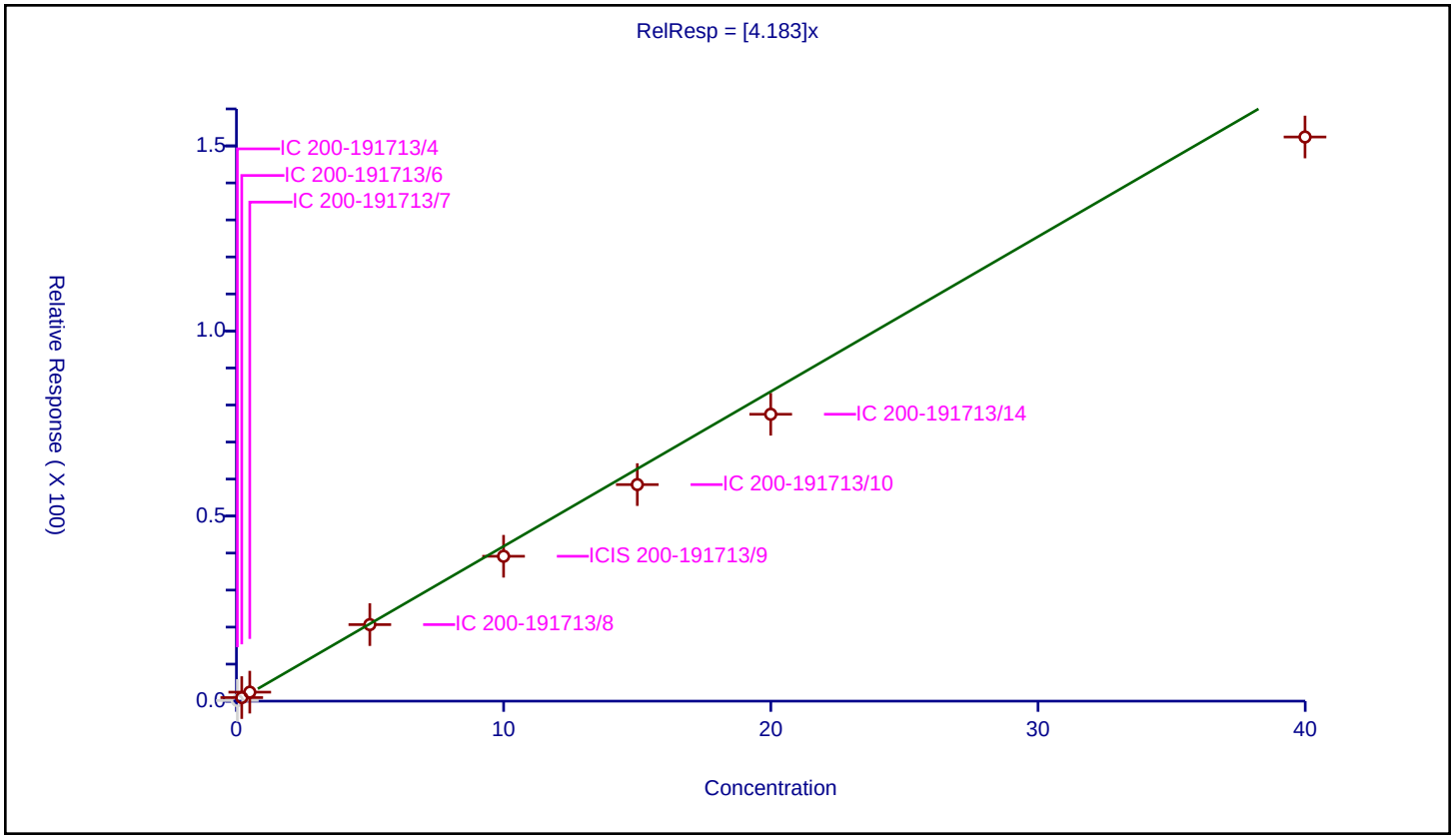
Curve Coefficients

Intercept:	0
Slope:	4.183

Error Coefficients

Standard Error:	2030000
Relative Standard Error:	10.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.167672	10.0	244227.0	4.780117	N
2	IC 200-191713/6	0.20044	0.959846	10.0	237434.0	4.788701	Y
3	IC 200-191713/7	0.500453	2.42638	10.0	231967.0	4.848371	Y
4	IC 200-191713/8	4.992563	20.6761	10.0	235409.0	4.14138	Y
5	ICIS 200-191713/9	9.99806	39.138111	10.0	242688.0	3.914571	Y
6	IC 200-191713/10	15.003557	58.502389	10.0	257263.0	3.899235	Y
7	IC 200-191713/14	19.99612	77.502802	10.0	261449.0	3.875892	Y
8	IC 200-191713/15	39.99224	152.406798	10.0	273010.0	3.810909	Y



Calibration / 1,1,1-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

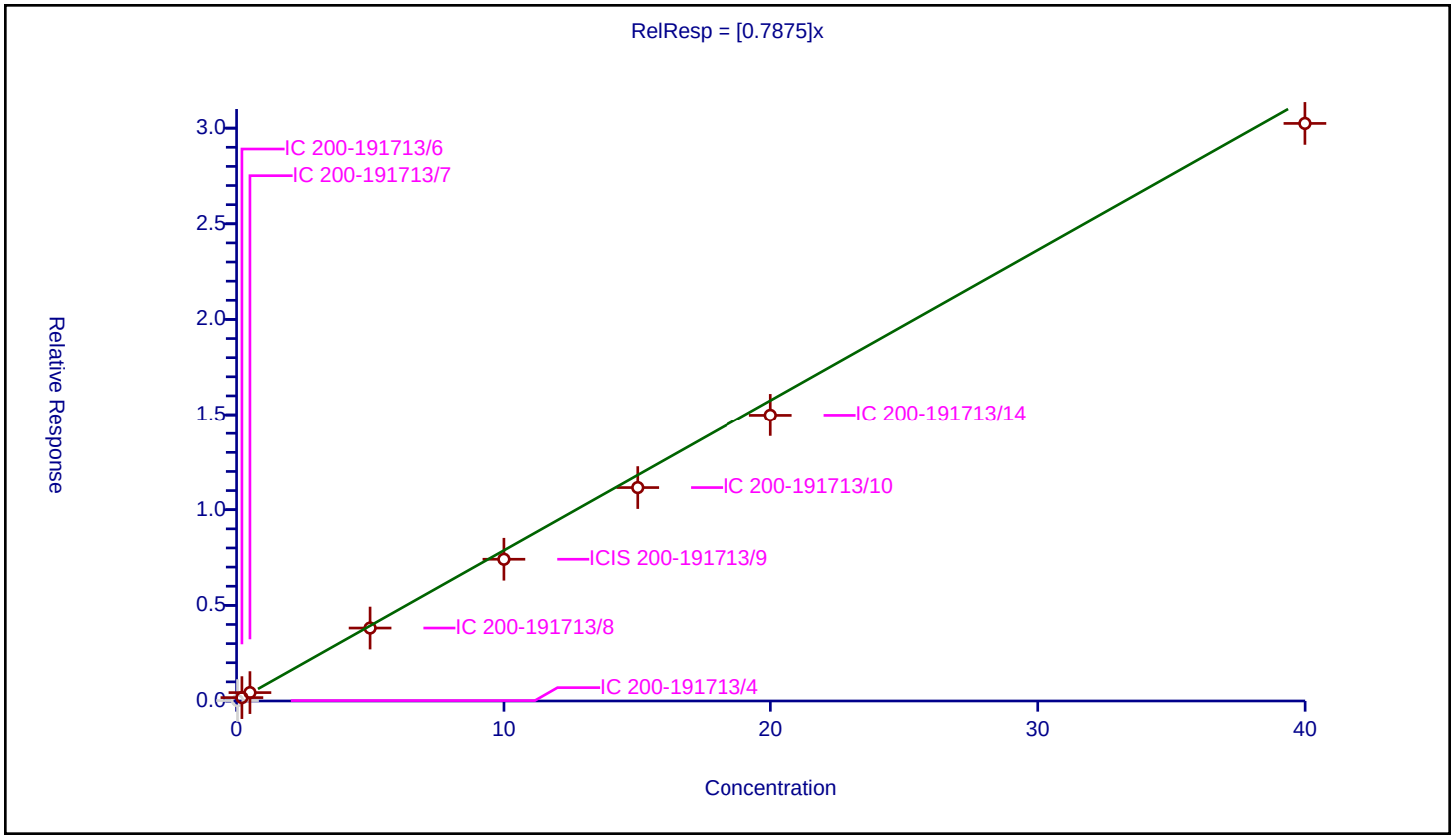
Curve Coefficients

Intercept:	0
Slope:	0.7875

Error Coefficients

Standard Error:	1970000
Relative Standard Error:	8.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.021284	10.0	1248362.0	0.606777	N
2	IC 200-191713/6	0.20044	0.176892	10.0	1208645.0	0.882521	Y
3	IC 200-191713/7	0.500453	0.438351	10.0	1175702.0	0.875909	Y
4	IC 200-191713/8	4.992563	3.813717	10.0	1195343.0	0.76388	Y
5	ICIS 200-191713/9	9.99806	7.409843	10.0	1212907.0	0.741128	Y
6	IC 200-191713/10	15.003557	11.158177	10.0	1286332.0	0.743702	Y
7	IC 200-191713/14	19.99612	14.982004	10.0	1298602.0	0.749246	Y
8	IC 200-191713/15	39.99224	30.246566	10.0	1343252.0	0.756311	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

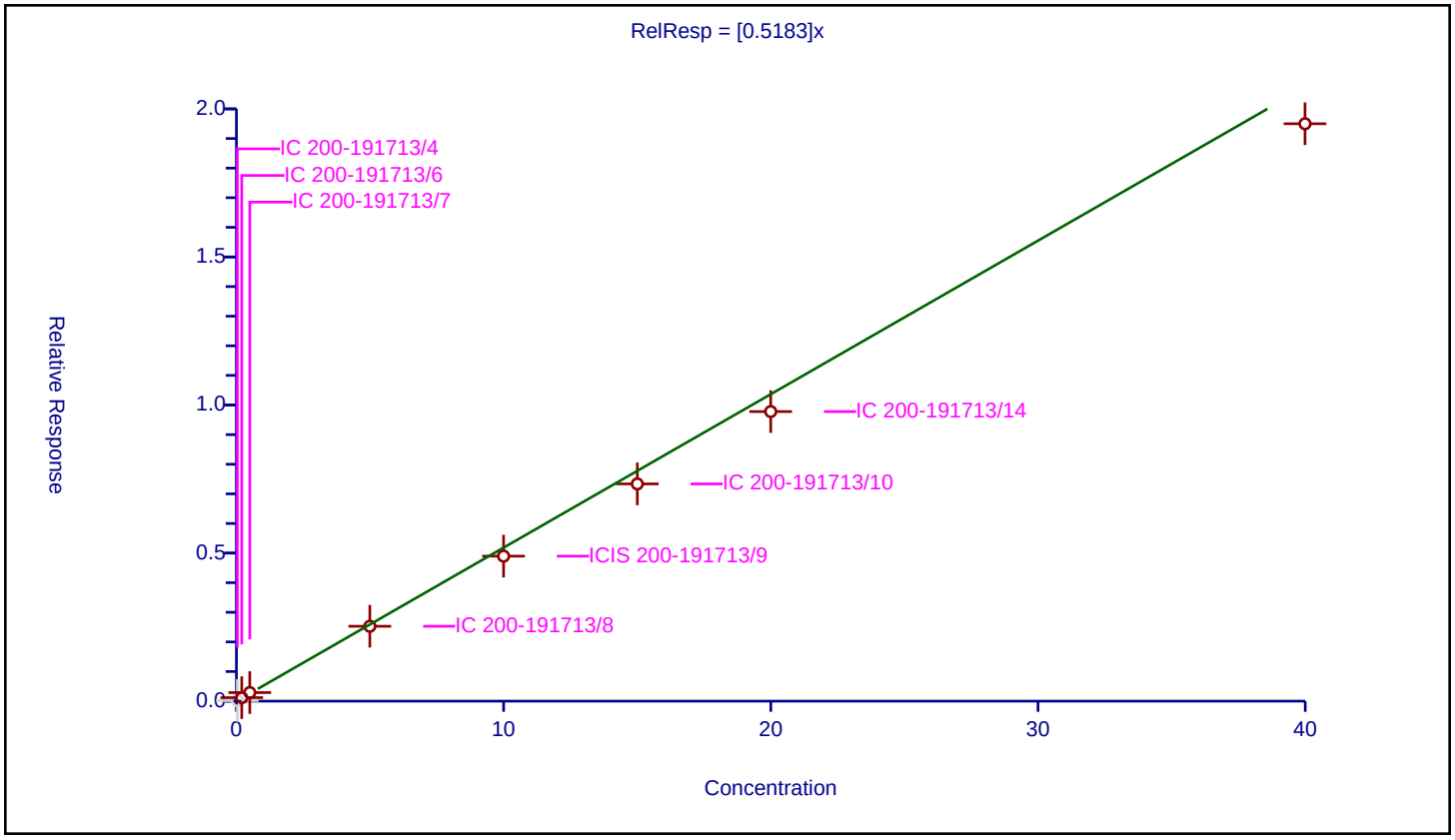
Curve Coefficients

Intercept:	0
Slope:	0.5183

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	8.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.019353	10.0	1248362.0	0.55174	N
2	IC 200-191713/6	0.20044	0.117884	10.0	1208645.0	0.588127	Y
3	IC 200-191713/7	0.500453	0.289495	10.0	1175702.0	0.578467	Y
4	IC 200-191713/8	4.992563	2.528647	10.0	1195343.0	0.506483	Y
5	ICIS 200-191713/9	9.99806	4.896525	10.0	1212907.0	0.489748	Y
6	IC 200-191713/10	15.003557	7.336496	10.0	1286332.0	0.488984	Y
7	IC 200-191713/14	19.99612	9.778785	10.0	1298602.0	0.489034	Y
8	IC 200-191713/15	39.99224	19.498396	10.0	1343252.0	0.487555	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

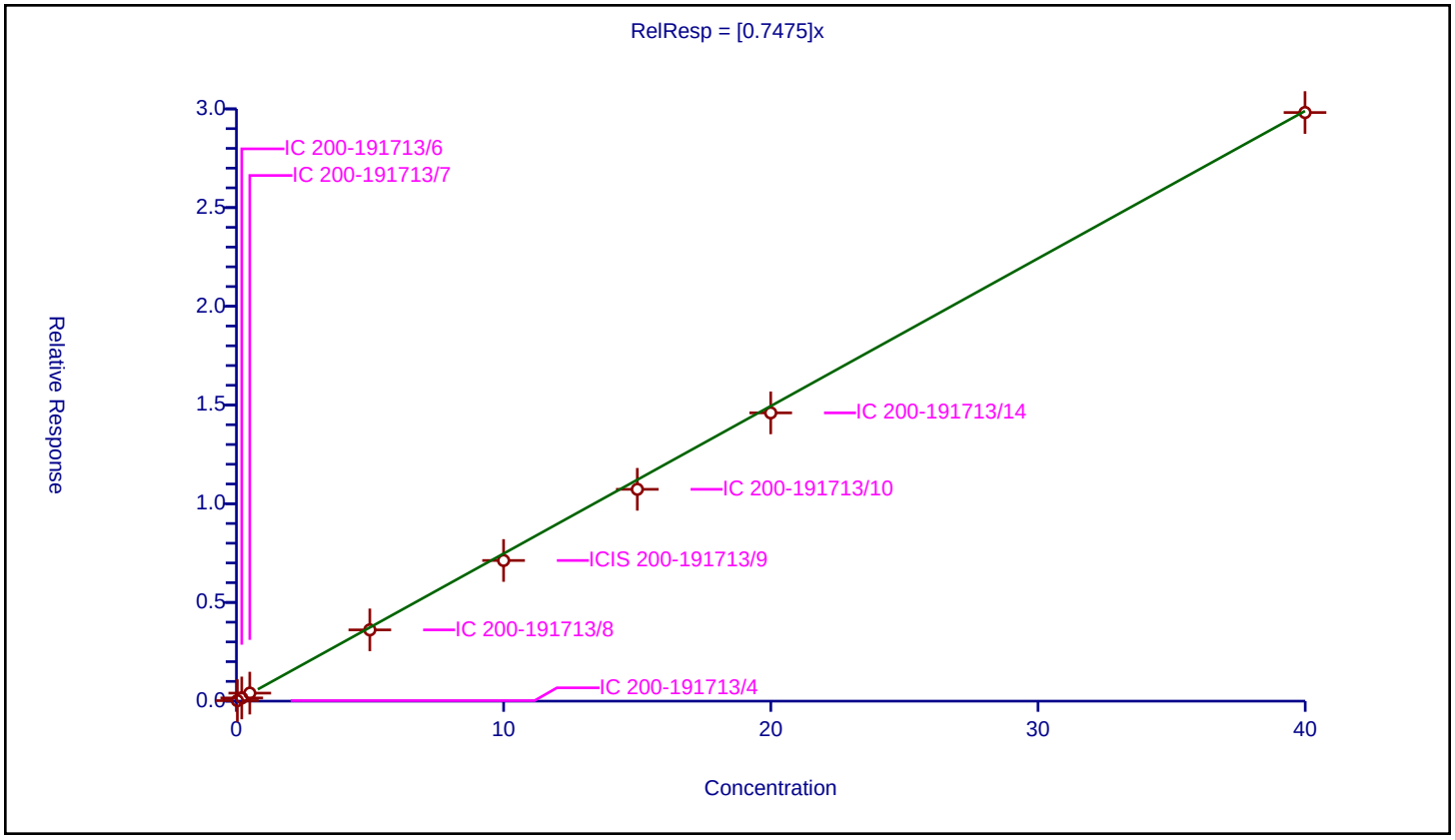
Curve Coefficients

Intercept:	0
Slope:	0.7475

Error Coefficients

Standard Error:	1790000
Relative Standard Error:	5.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.025818	10.0	1248362.0	0.736034	Y
2	IC 200-191713/6	0.20044	0.161272	10.0	1208645.0	0.804589	Y
3	IC 200-191713/7	0.500453	0.406634	10.0	1175702.0	0.812532	Y
4	IC 200-191713/8	4.992563	3.610001	10.0	1195343.0	0.723076	Y
5	ICIS 200-191713/9	9.99806	7.124825	10.0	1212907.0	0.712621	Y
6	IC 200-191713/10	15.003557	10.73062	10.0	1286332.0	0.715205	Y
7	IC 200-191713/14	19.99612	14.601964	10.0	1298602.0	0.73024	Y
8	IC 200-191713/15	39.99224	29.81611	10.0	1343252.0	0.745547	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

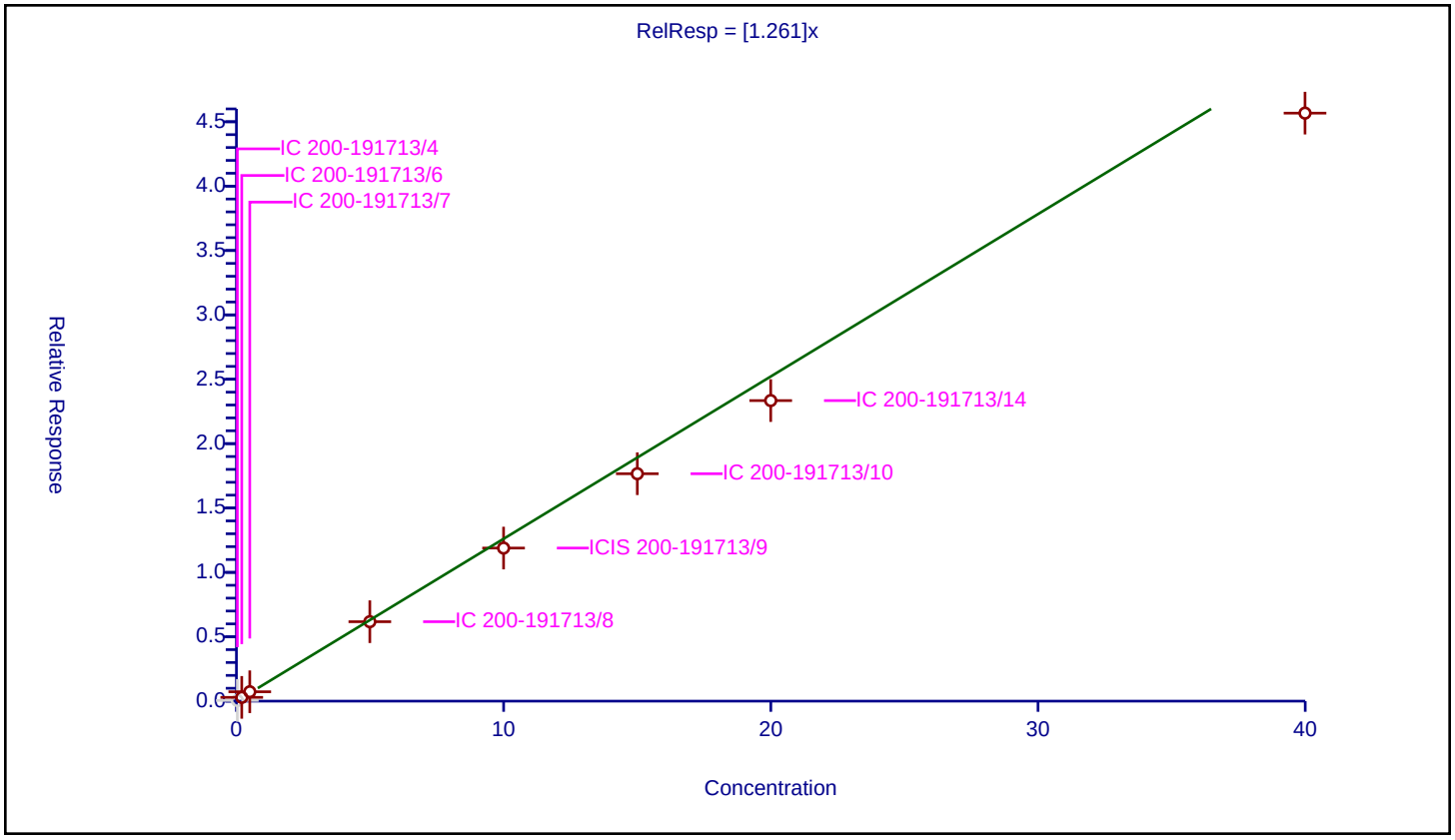
Curve Coefficients

Intercept:	0
Slope:	1.261

Error Coefficients

Standard Error:	3020000
Relative Standard Error:	10.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.05371	10.0	1248362.0	1.531216	N
2	IC 200-191713/6	0.20044	0.292418	10.0	1208645.0	1.458885	Y
3	IC 200-191713/7	0.500453	0.728697	10.0	1175702.0	1.456075	Y
4	IC 200-191713/8	4.992563	6.170187	10.0	1195343.0	1.235876	Y
5	ICIS 200-191713/9	9.99806	11.89026	10.0	1212907.0	1.189257	Y
6	IC 200-191713/10	15.003557	17.663131	10.0	1286332.0	1.177263	Y
7	IC 200-191713/14	19.99612	23.344142	10.0	1298602.0	1.167434	Y
8	IC 200-191713/15	39.99224	45.670239	10.0	1343252.0	1.141978	Y



Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

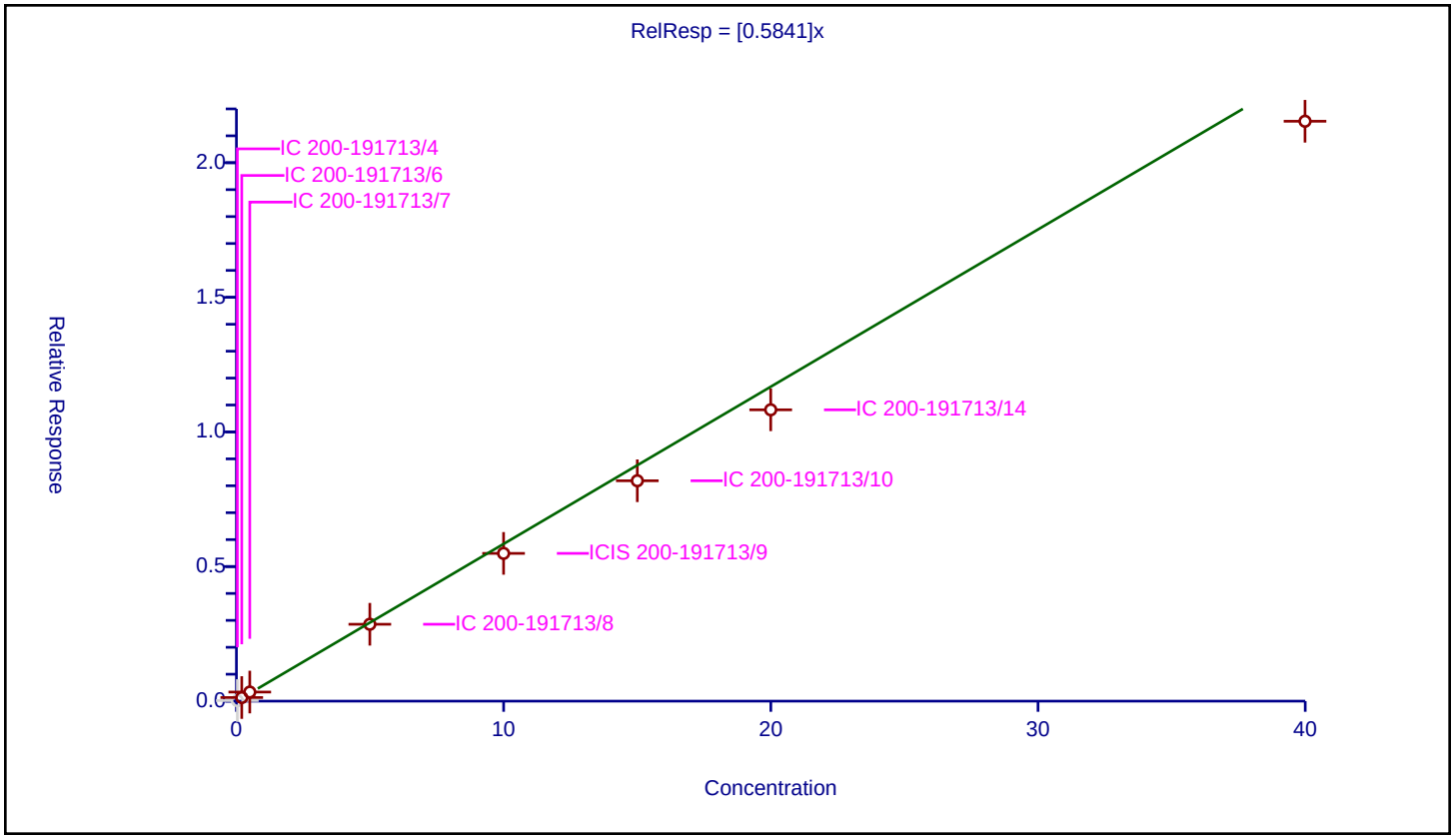
Curve Coefficients

Intercept:	0
Slope:	0.5841

Error Coefficients

Standard Error:	1420000
Relative Standard Error:	10.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.021484	10.0	1248362.0	0.612486	N
2	IC 200-191713/6	0.20044	0.13377	10.0	1208645.0	0.667381	Y
3	IC 200-191713/7	0.500453	0.33762	10.0	1175702.0	0.674628	Y
4	IC 200-191713/8	4.992563	2.855774	10.0	1195343.0	0.572006	Y
5	ICIS 200-191713/9	9.99806	5.488533	10.0	1212907.0	0.54896	Y
6	IC 200-191713/10	15.003557	8.1863	10.0	1286332.0	0.545624	Y
7	IC 200-191713/14	19.99612	10.822461	10.0	1298602.0	0.541228	Y
8	IC 200-191713/15	39.99224	21.540441	10.0	1343252.0	0.538616	Y



Calibration / Isooctane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

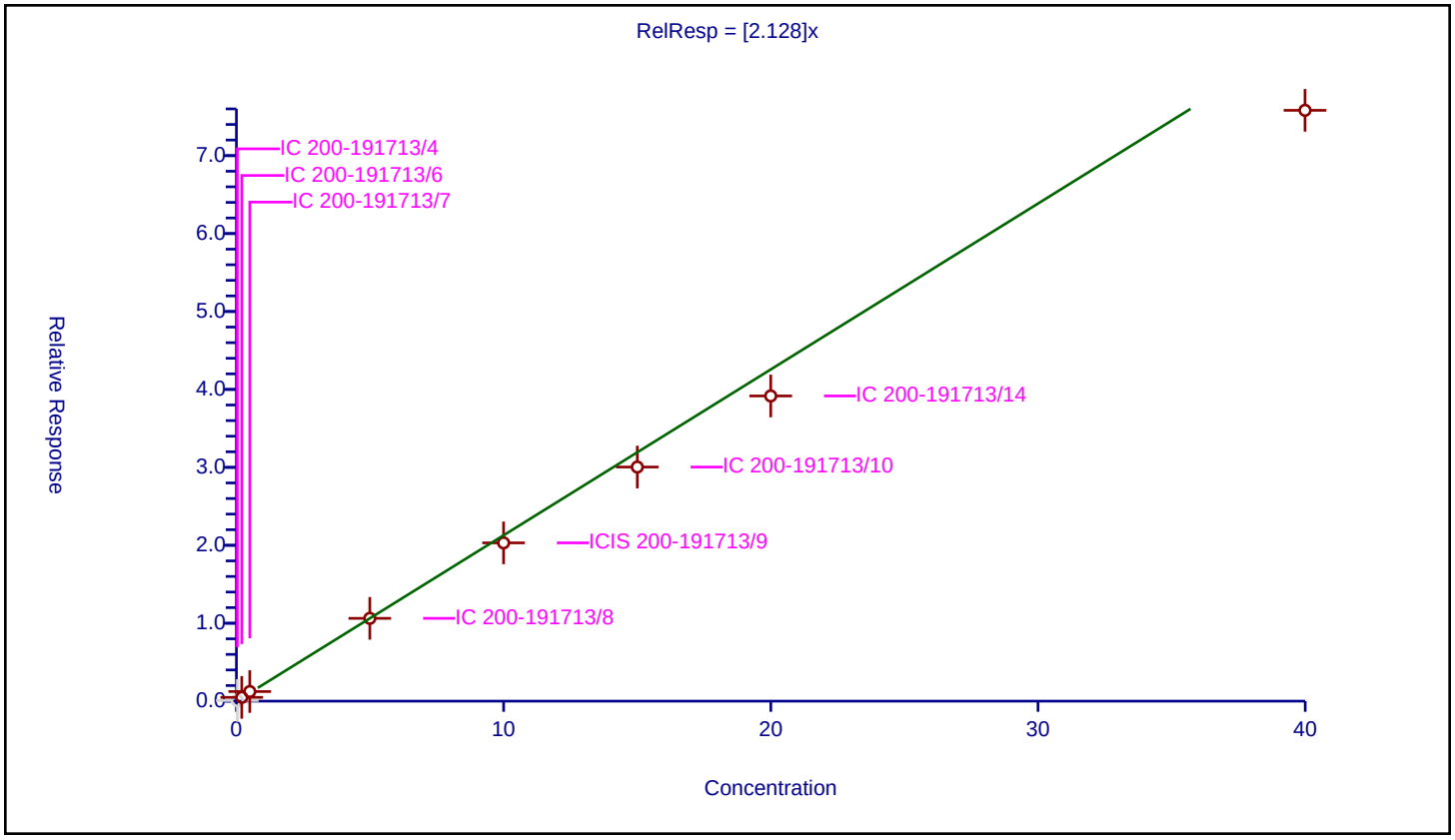
Curve Coefficients

Intercept:	0
Slope:	2.128

Error Coefficients

Standard Error:	5040000
Relative Standard Error:	10.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.080554	10.0	1248362.0	2.296482	N
2	IC 200-191713/6	0.20044	0.484915	10.0	1208645.0	2.419256	Y
3	IC 200-191713/7	0.500453	1.232625	10.0	1175702.0	2.463021	Y
4	IC 200-191713/8	4.992563	10.625603	10.0	1195343.0	2.128286	Y
5	ICIS 200-191713/9	9.99806	20.311227	10.0	1212907.0	2.031517	Y
6	IC 200-191713/10	15.003557	30.042244	10.0	1286332.0	2.002341	Y
7	IC 200-191713/14	19.99612	39.163616	10.0	1298602.0	1.958561	Y
8	IC 200-191713/15	39.99224	75.814672	10.0	1343252.0	1.895735	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

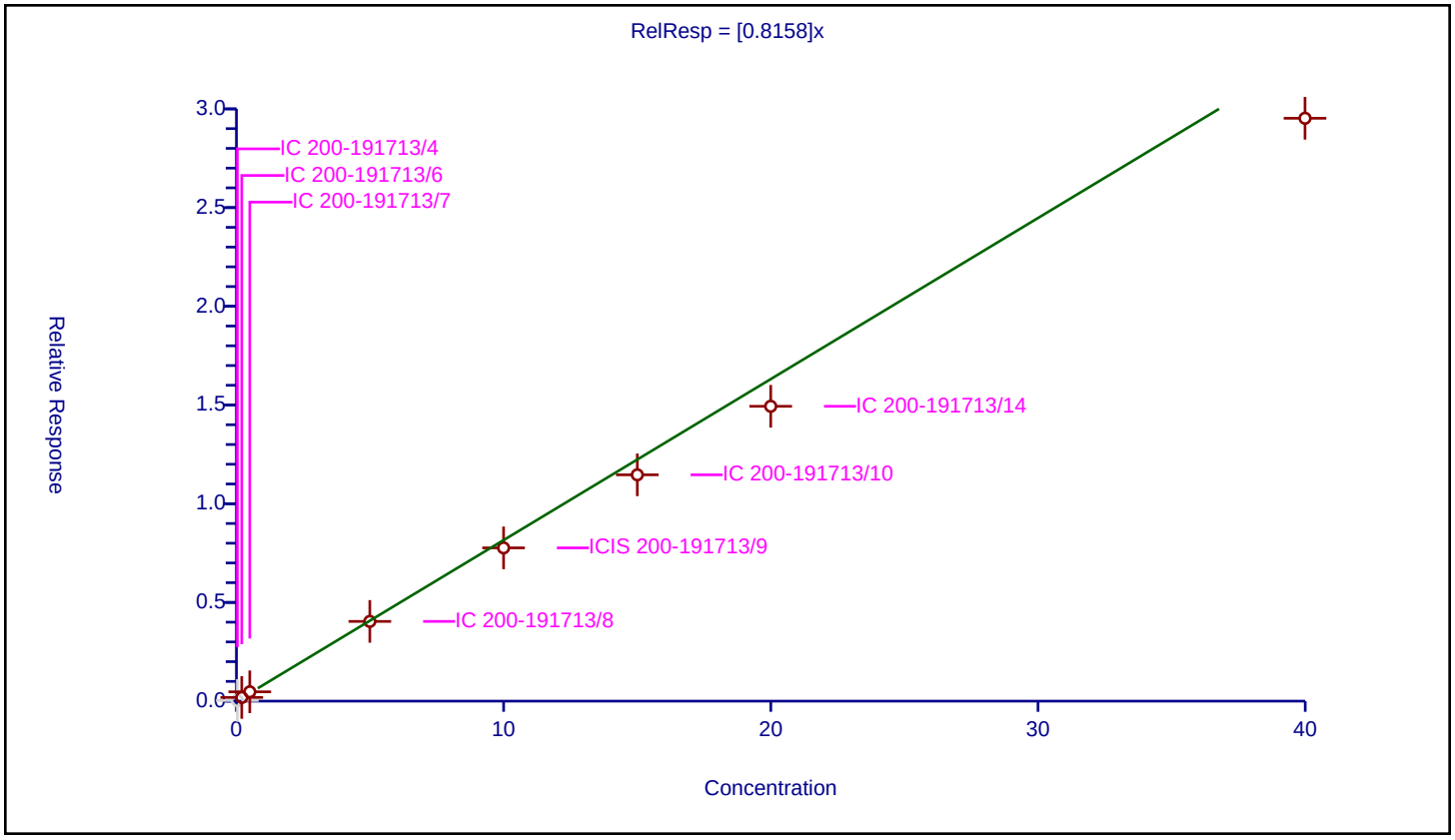
Curve Coefficients

Intercept:	0
Slope:	0.8158

Error Coefficients

Standard Error:	1950000
Relative Standard Error:	10.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.033476	10.0	1248362.0	0.954355	N
2	IC 200-191713/6	0.20044	0.186804	10.0	1208645.0	0.931972	Y
3	IC 200-191713/7	0.500453	0.472229	10.0	1175702.0	0.943603	Y
4	IC 200-191713/8	4.992563	4.03869	10.0	1195343.0	0.808941	Y
5	ICIS 200-191713/9	9.99806	7.763044	10.0	1212907.0	0.776455	Y
6	IC 200-191713/10	15.003557	11.464171	10.0	1286332.0	0.764097	Y
7	IC 200-191713/14	19.99612	14.936101	10.0	1298602.0	0.74695	Y
8	IC 200-191713/15	39.99224	29.525383	10.0	1343252.0	0.738278	Y



Calibration / n-Butanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

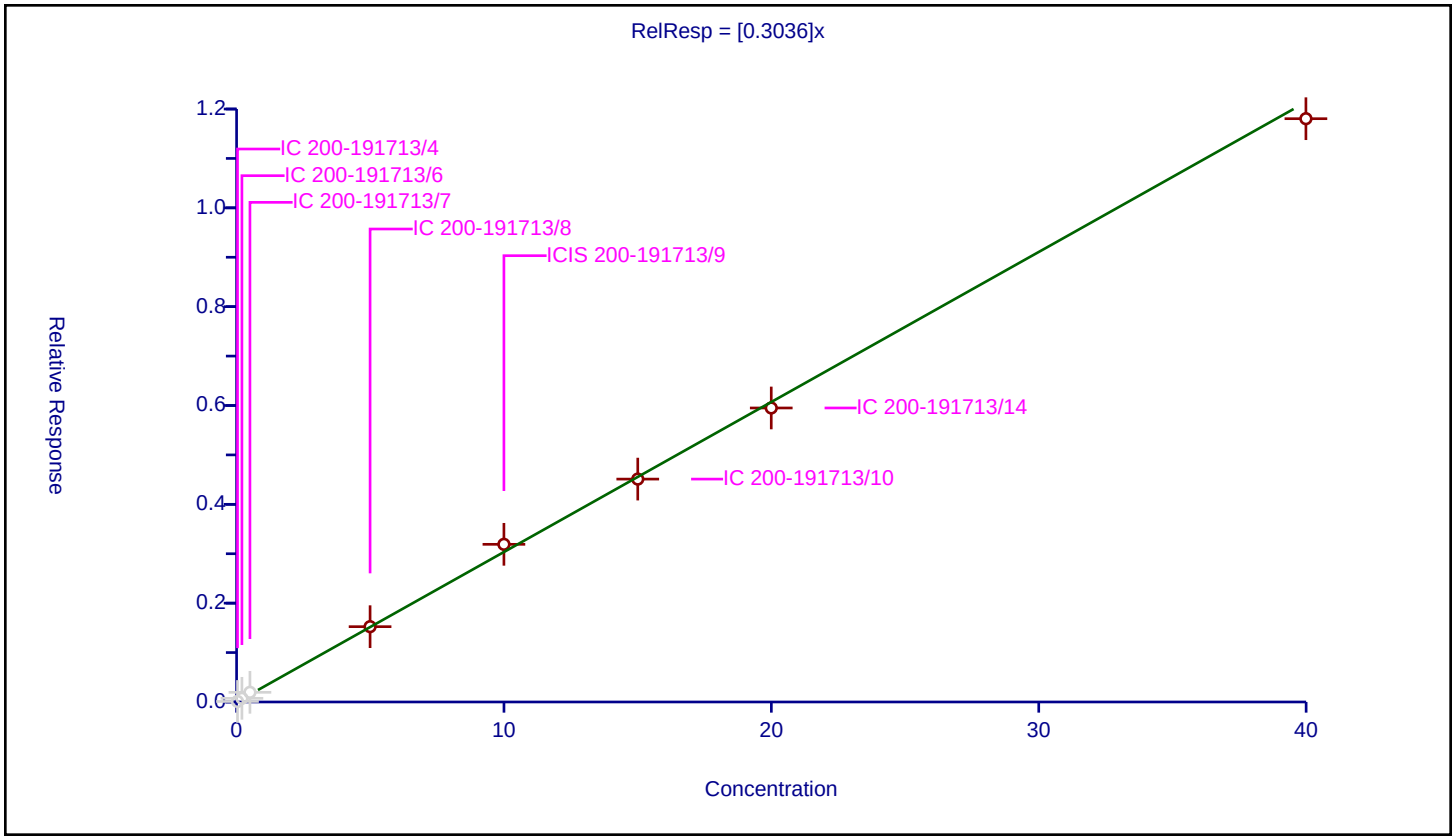
Curve Coefficients

Intercept:	0
Slope:	0.3036

Error Coefficients

Standard Error:	953000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.010782	10.0	1248362.0	0.307385	N
2	IC 200-191713/6	0.20044	0.074339	10.0	1208645.0	0.370882	N
3	IC 200-191713/7	0.500453	0.195823	10.0	1175702.0	0.391293	N
4	IC 200-191713/8	4.992563	1.524291	10.0	1195343.0	0.305312	Y
5	ICIS 200-191713/9	9.99806	3.190673	10.0	1212907.0	0.319129	Y
6	IC 200-191713/10	15.003557	4.510593	10.0	1286332.0	0.300635	Y
7	IC 200-191713/14	19.99612	5.95006	10.0	1298602.0	0.297561	Y
8	IC 200-191713/15	39.99224	11.804293	10.0	1343252.0	0.295165	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

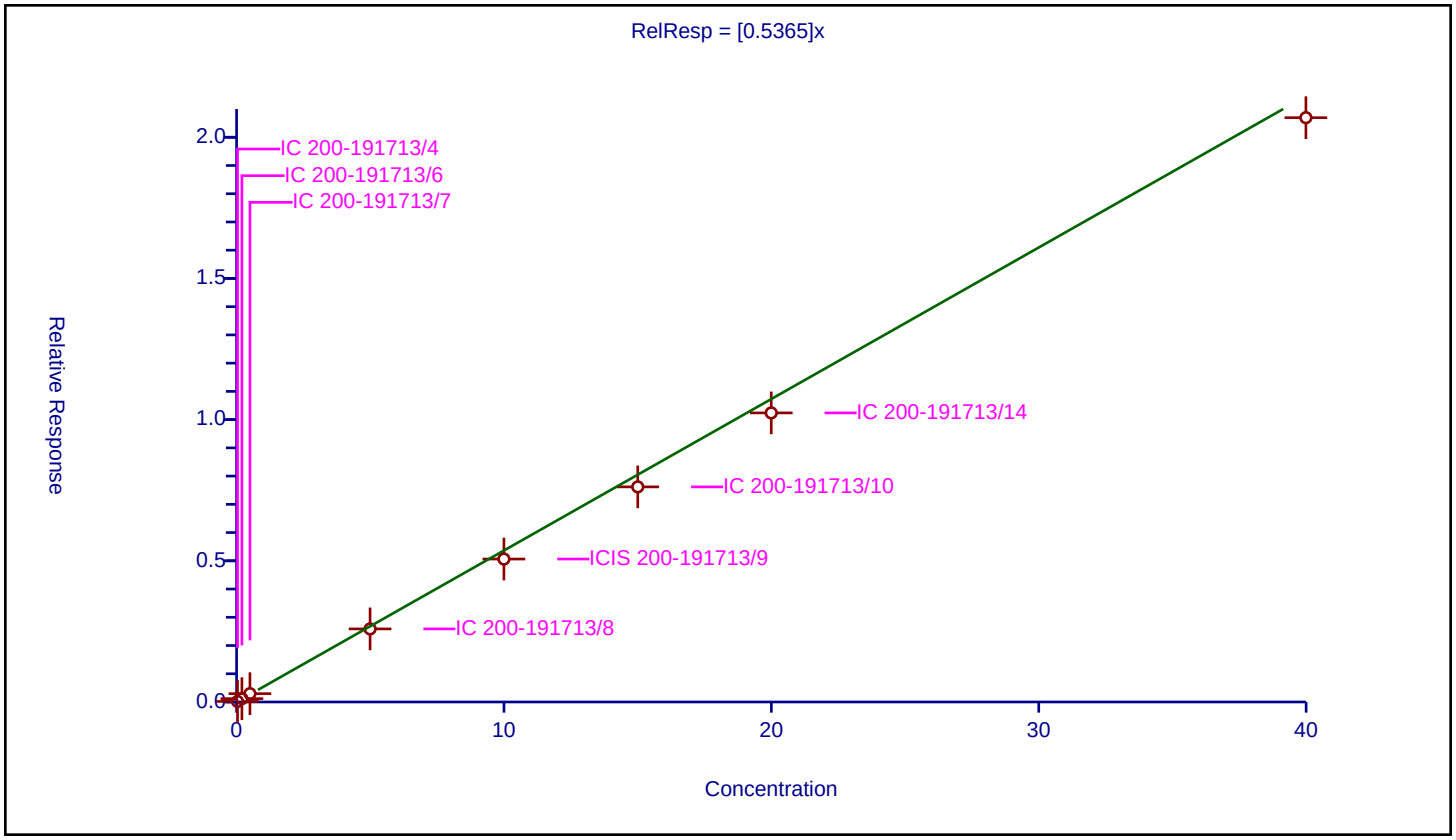
Curve Coefficients

Intercept:	0
Slope:	0.5365

Error Coefficients

Standard Error:	1250000
Relative Standard Error:	6.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.019474	10.0	1248362.0	0.555166	Y
2	IC 200-191713/6	0.20044	0.117181	10.0	1208645.0	0.584619	Y
3	IC 200-191713/7	0.500453	0.295458	10.0	1175702.0	0.590381	Y
4	IC 200-191713/8	4.992563	2.588002	10.0	1195343.0	0.518371	Y
5	ICIS 200-191713/9	9.99806	5.062325	10.0	1212907.0	0.506331	Y
6	IC 200-191713/10	15.003557	7.618282	10.0	1286332.0	0.507765	Y
7	IC 200-191713/14	19.99612	10.23734	10.0	1298602.0	0.511966	Y
8	IC 200-191713/15	39.99224	20.69261	10.0	1343252.0	0.517416	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

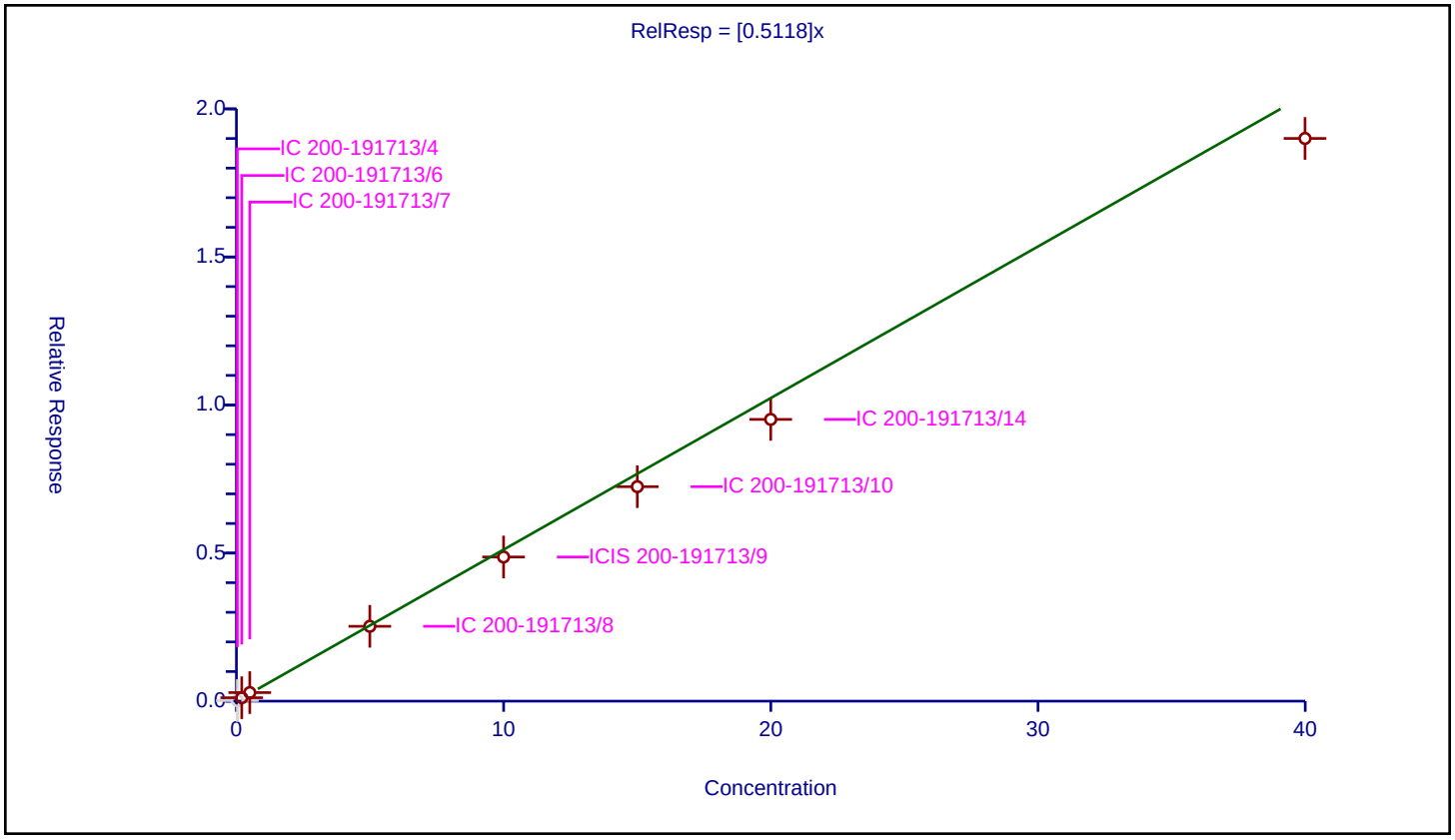
Curve Coefficients

Intercept:	0
Slope:	0.5118

Error Coefficients

Standard Error:	1250000
Relative Standard Error:	9.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.019706	10.0	1248362.0	0.561789	N
2	IC 200-191713/6	0.20044	0.115758	10.0	1208645.0	0.577519	Y
3	IC 200-191713/7	0.500453	0.289385	10.0	1175702.0	0.578246	Y
4	IC 200-191713/8	4.992563	2.526898	10.0	1195343.0	0.506132	Y
5	ICIS 200-191713/9	9.99806	4.868255	10.0	1212907.0	0.48692	Y
6	IC 200-191713/10	15.003557	7.242912	10.0	1286332.0	0.482746	Y
7	IC 200-191713/14	19.99612	9.51417	10.0	1298602.0	0.475801	Y
8	IC 200-191713/15	39.99224	19.001208	10.0	1343252.0	0.475122	Y



Calibration / Methyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

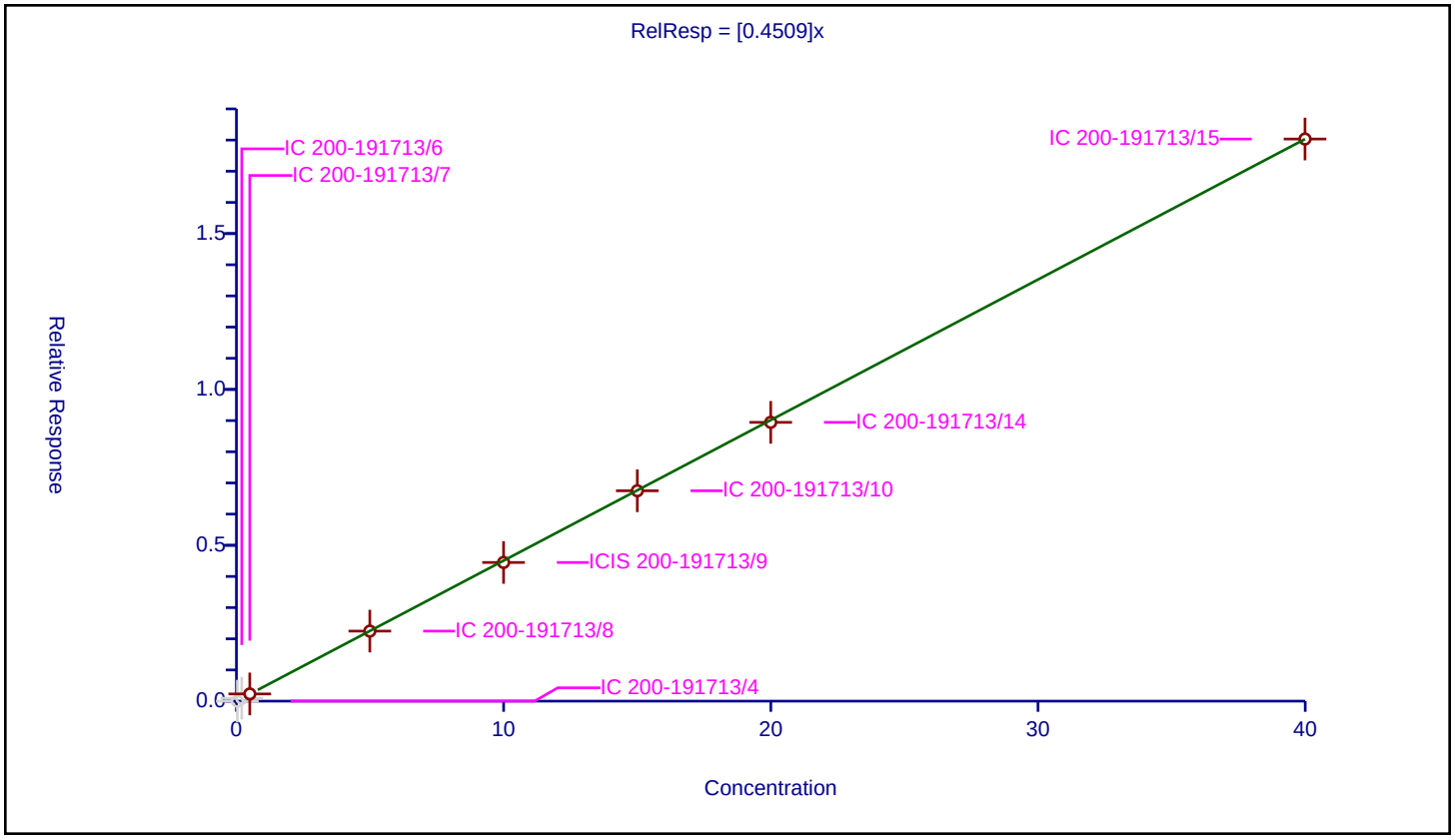
Curve Coefficients

Intercept:	0
Slope:	0.4509

Error Coefficients

Standard Error:	1290000
Relative Standard Error:	1.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.0	10.0	1248362.0	0.0	N
2	IC 200-191713/6	0.20044	0.092376	10.0	1208645.0	0.460868	N
3	IC 200-191713/7	0.500453	0.231258	10.0	1175702.0	0.462097	Y
4	IC 200-191713/8	4.992563	2.246769	10.0	1195343.0	0.450023	Y
5	ICIS 200-191713/9	9.99806	4.449096	10.0	1212907.0	0.444996	Y
6	IC 200-191713/10	15.003557	6.748468	10.0	1286332.0	0.449791	Y
7	IC 200-191713/14	19.99612	8.944211	10.0	1298602.0	0.447297	Y
8	IC 200-191713/15	39.99224	18.033995	10.0	1343252.0	0.450937	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

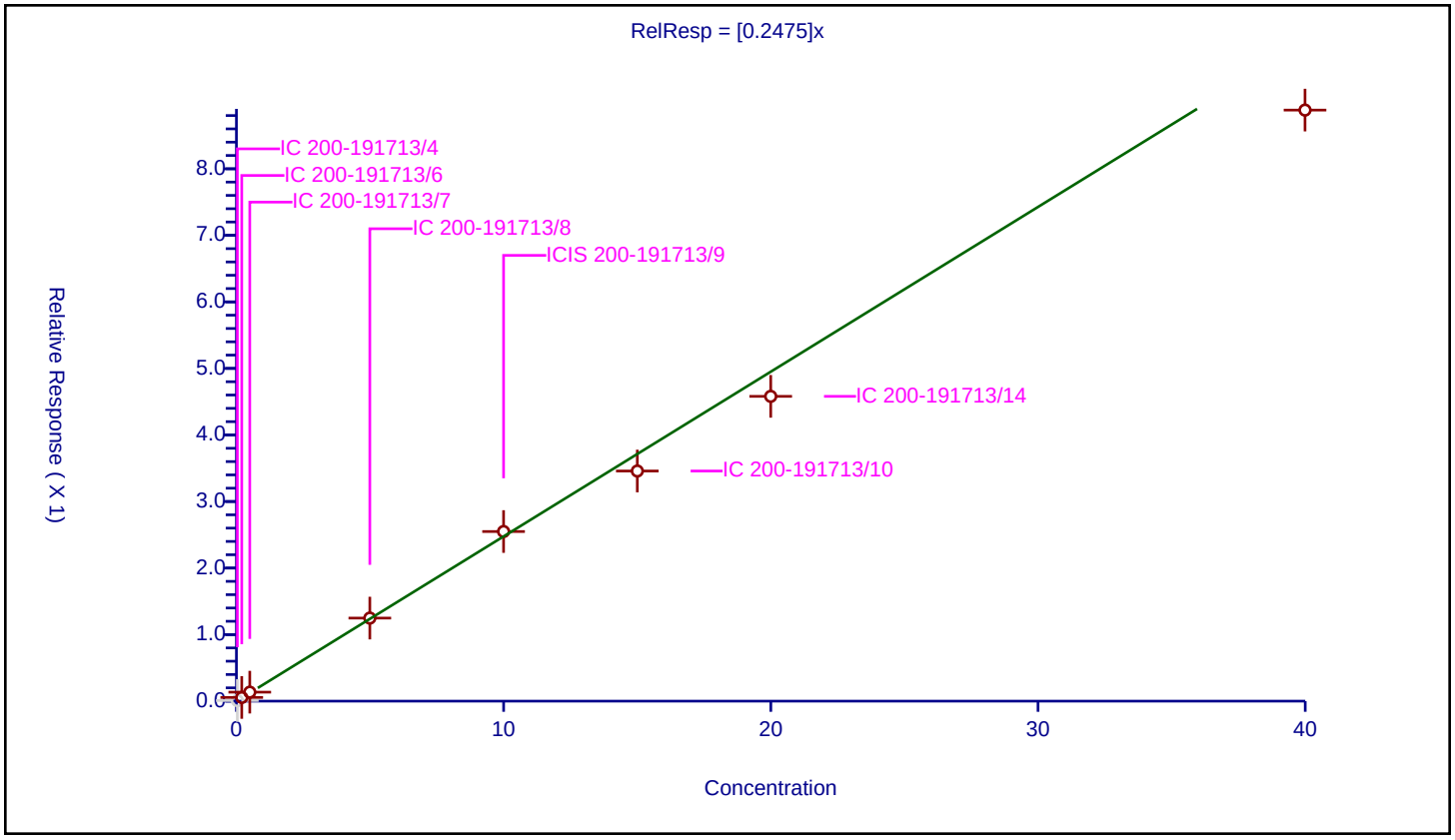
Curve Coefficients

Intercept:	0
Slope:	0.2475

Error Coefficients

Standard Error:	591000
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.009044	10.0	1248362.0	0.257829	N
2	IC 200-191713/6	0.20044	0.055376	10.0	1208645.0	0.276273	Y
3	IC 200-191713/7	0.500453	0.135068	10.0	1175702.0	0.269892	Y
4	IC 200-191713/8	4.992563	1.24832	10.0	1195343.0	0.250036	Y
5	ICIS 200-191713/9	9.99806	2.548769	10.0	1212907.0	0.254926	Y
6	IC 200-191713/10	15.003557	3.458477	10.0	1286332.0	0.23051	Y
7	IC 200-191713/14	19.99612	4.580279	10.0	1298602.0	0.229058	Y
8	IC 200-191713/15	39.99224	8.88184	10.0	1343252.0	0.222089	Y



Calibration / Dibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

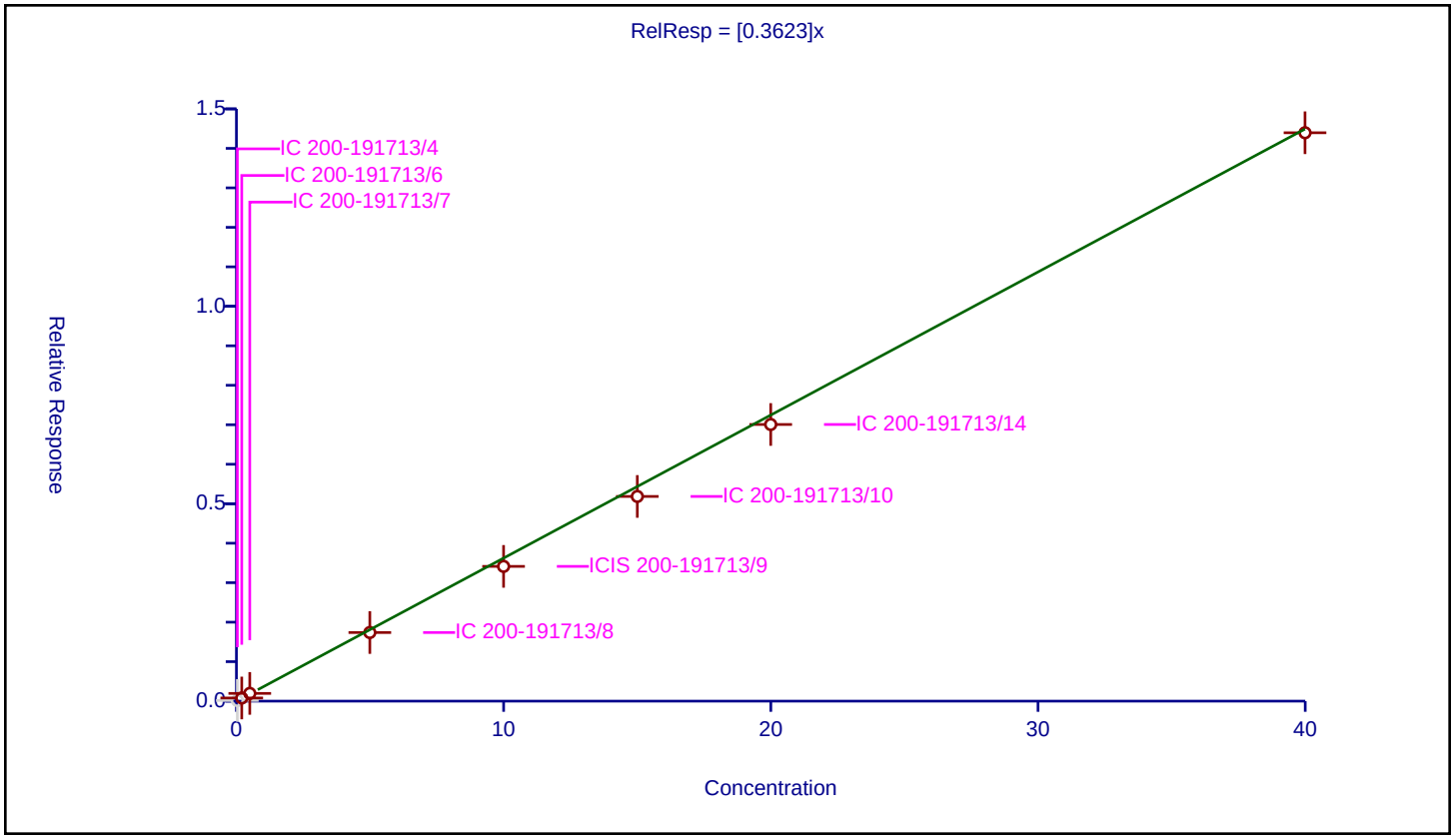
Curve Coefficients

Intercept:	0
Slope:	0.3623

Error Coefficients

Standard Error:	933000
Relative Standard Error:	6.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.016325	10.0	1248362.0	0.465417	N
2	IC 200-191713/6	0.20044	0.08009	10.0	1208645.0	0.39957	Y
3	IC 200-191713/7	0.500453	0.195806	10.0	1175702.0	0.391259	Y
4	IC 200-191713/8	4.992563	1.737936	10.0	1195343.0	0.348105	Y
5	ICIS 200-191713/9	9.99806	3.412908	10.0	1212907.0	0.341357	Y
6	IC 200-191713/10	15.003557	5.184703	10.0	1286332.0	0.345565	Y
7	IC 200-191713/14	19.99612	7.006889	10.0	1298602.0	0.350412	Y
8	IC 200-191713/15	39.99224	14.395839	10.0	1343252.0	0.359966	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

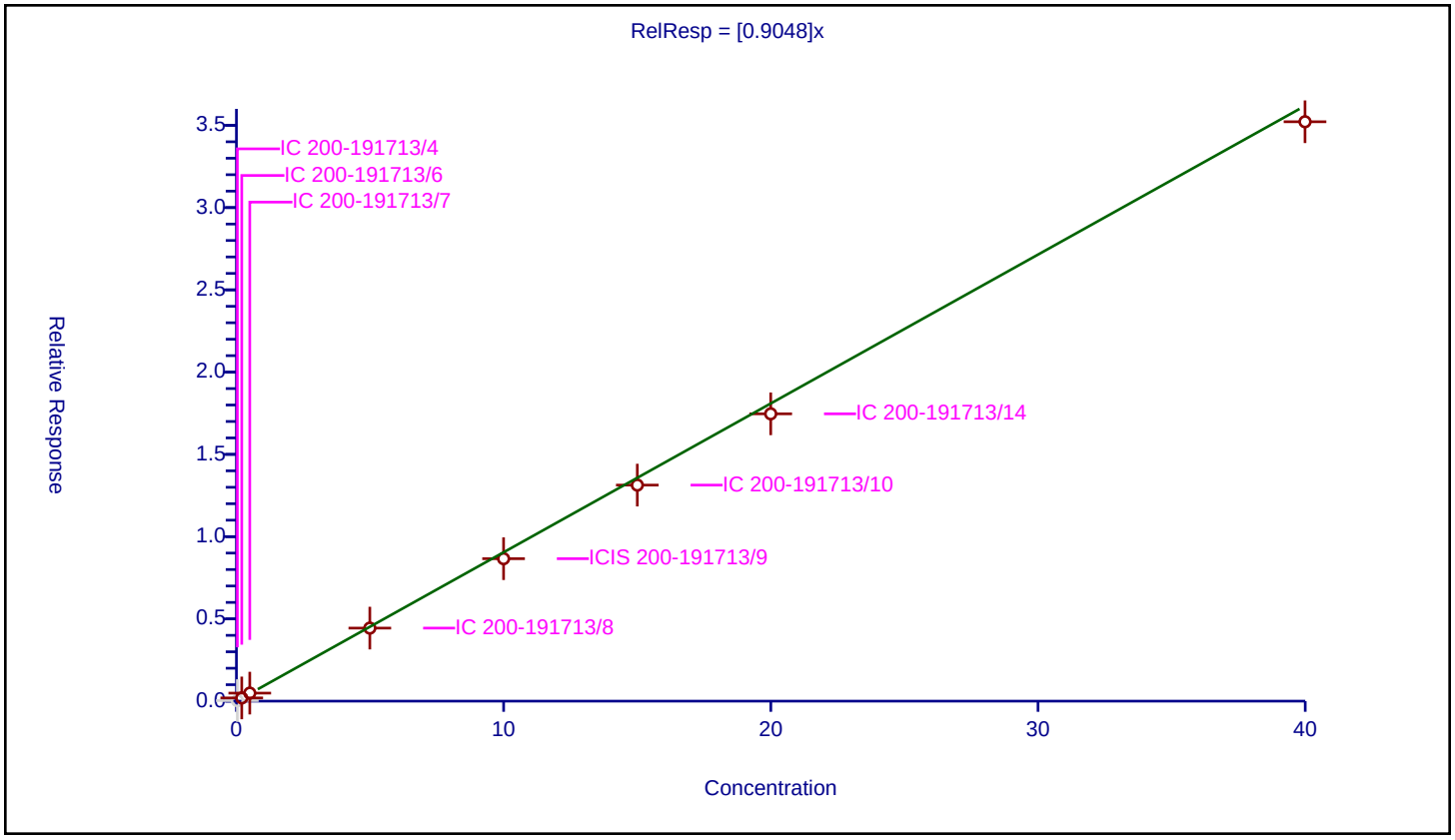
Curve Coefficients

Intercept:	0
Slope:	0.9048

Error Coefficients

Standard Error:	2300000
Relative Standard Error:	5.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.032835	10.0	1248362.0	0.936086	N
2	IC 200-191713/6	0.20044	0.195144	10.0	1208645.0	0.97358	Y
3	IC 200-191713/7	0.500453	0.488176	10.0	1175702.0	0.97547	Y
4	IC 200-191713/8	4.992563	4.439194	10.0	1195343.0	0.889161	Y
5	ICIS 200-191713/9	9.99806	8.659394	10.0	1212907.0	0.866107	Y
6	IC 200-191713/10	15.003557	13.132131	10.0	1286332.0	0.875268	Y
7	IC 200-191713/14	19.99612	17.464604	10.0	1298602.0	0.8734	Y
8	IC 200-191713/15	39.99224	35.217323	10.0	1343252.0	0.880604	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

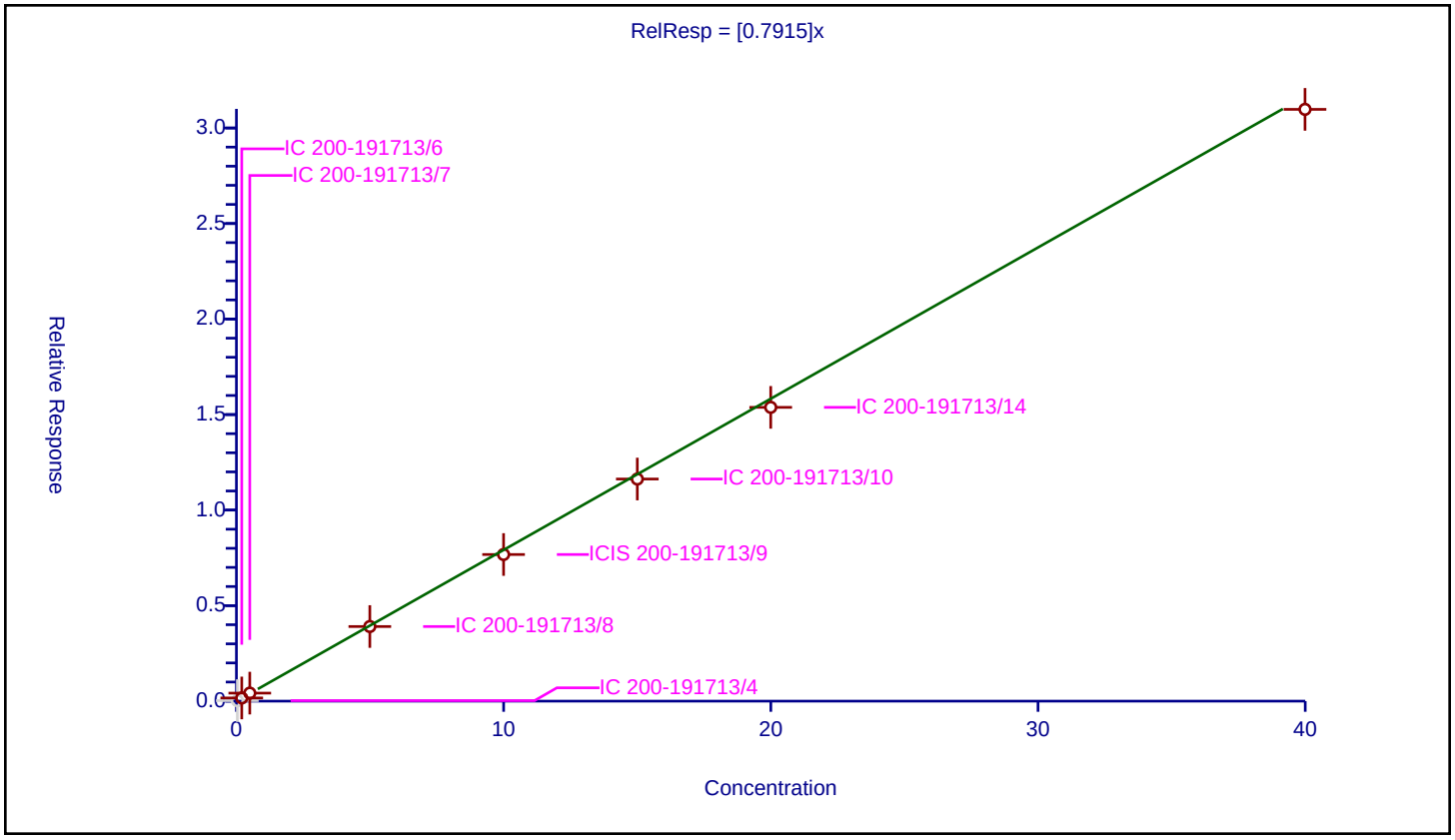
Curve Coefficients

Intercept:	0
Slope:	0.7915

Error Coefficients

Standard Error:	2030000
Relative Standard Error:	3.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.02742	10.0	1248362.0	0.781708	N
2	IC 200-191713/6	0.20044	0.166732	10.0	1208645.0	0.831832	Y
3	IC 200-191713/7	0.500453	0.420642	10.0	1175702.0	0.840524	Y
4	IC 200-191713/8	4.992563	3.905356	10.0	1195343.0	0.782235	Y
5	ICIS 200-191713/9	9.99806	7.675617	10.0	1212907.0	0.767711	Y
6	IC 200-191713/10	15.003557	11.625716	10.0	1286332.0	0.774864	Y
7	IC 200-191713/14	19.99612	15.378338	10.0	1298602.0	0.769066	Y
8	IC 200-191713/15	39.99224	30.975528	10.0	1343252.0	0.774538	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

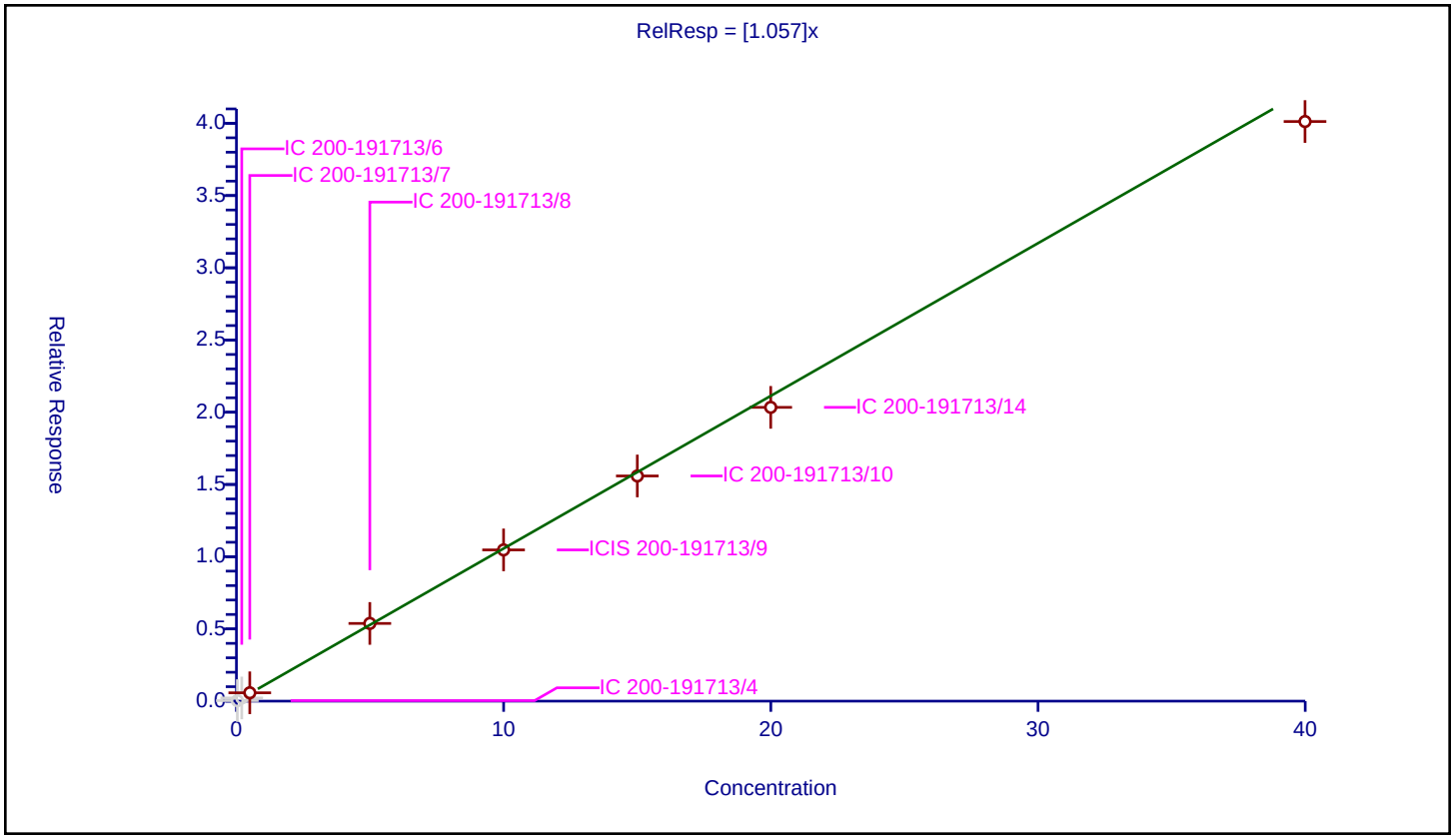
Curve Coefficients

Intercept:	0
Slope:	1.057

Error Coefficients

Standard Error:	2900000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.035743	10.0	1248362.0	1.018984	N
2	IC 200-191713/6	0.20044	0.219477	10.0	1208645.0	1.094979	N
3	IC 200-191713/7	0.500453	0.578735	10.0	1175702.0	1.156423	Y
4	IC 200-191713/8	4.992563	5.379	10.0	1195343.0	1.077403	Y
5	ICIS 200-191713/9	9.99806	10.470605	10.0	1212907.0	1.047264	Y
6	IC 200-191713/10	15.003557	15.589024	10.0	1286332.0	1.039022	Y
7	IC 200-191713/14	19.99612	20.337286	10.0	1298602.0	1.017062	Y
8	IC 200-191713/15	39.99224	40.125166	10.0	1343252.0	1.003324	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

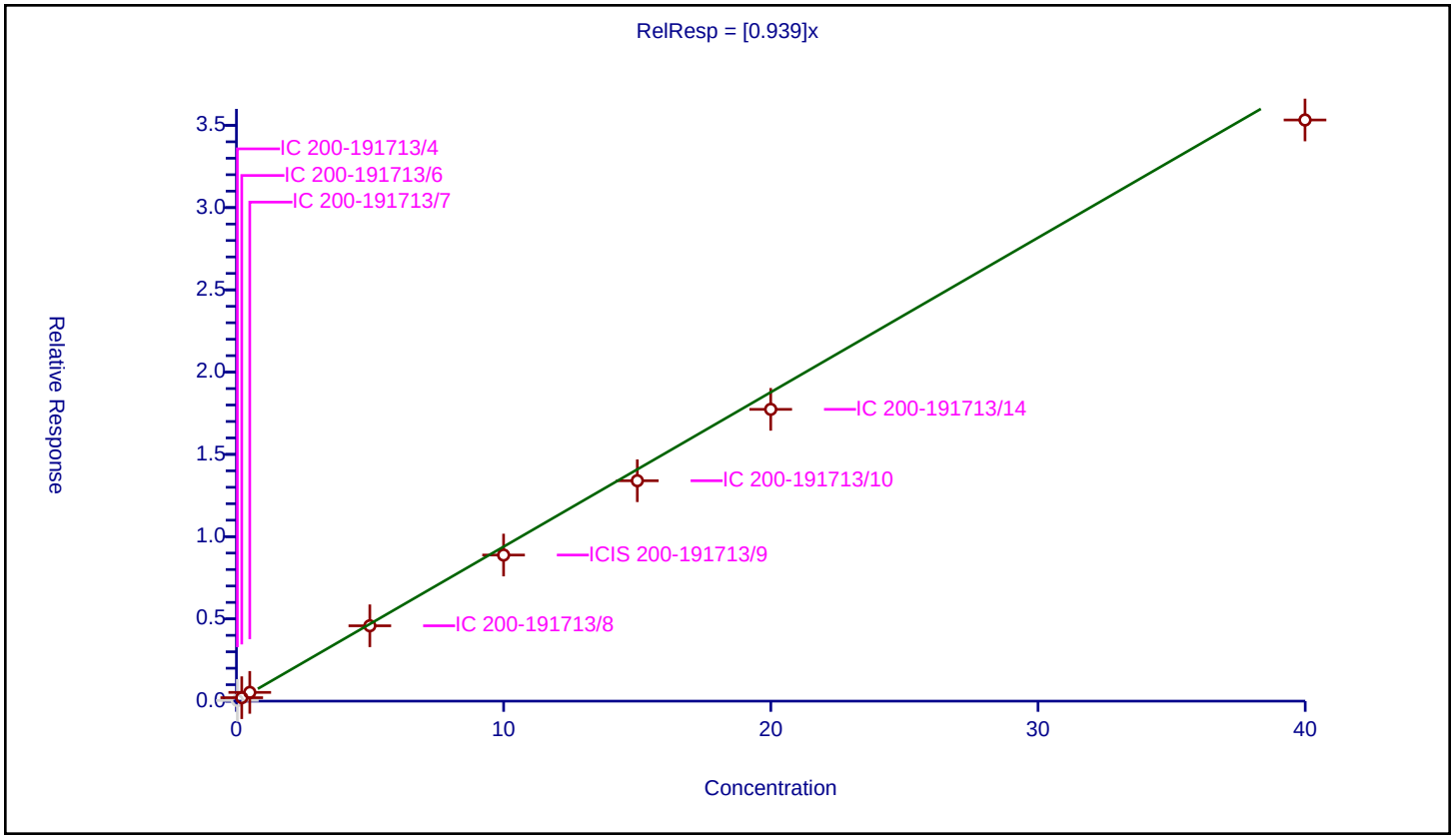
Curve Coefficients

Intercept:	0
Slope:	0.939

Error Coefficients

Standard Error:	2070000
Relative Standard Error:	8.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.040558	10.0	1107047.0	1.156268	N
2	IC 200-191713/6	0.20044	0.208986	10.0	1058542.0	1.042636	Y
3	IC 200-191713/7	0.500453	0.531064	10.0	1028802.0	1.061168	Y
4	IC 200-191713/8	4.992563	4.580452	10.0	1061022.0	0.917455	Y
5	ICIS 200-191713/9	9.99806	8.880624	10.0	1084033.0	0.888235	Y
6	IC 200-191713/10	15.003557	13.397989	10.0	1142517.0	0.892988	Y
7	IC 200-191713/14	19.99612	17.735709	10.0	1162673.0	0.886958	Y
8	IC 200-191713/15	39.99224	35.326174	10.0	1203393.0	0.883326	Y



Calibration / n-Octane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

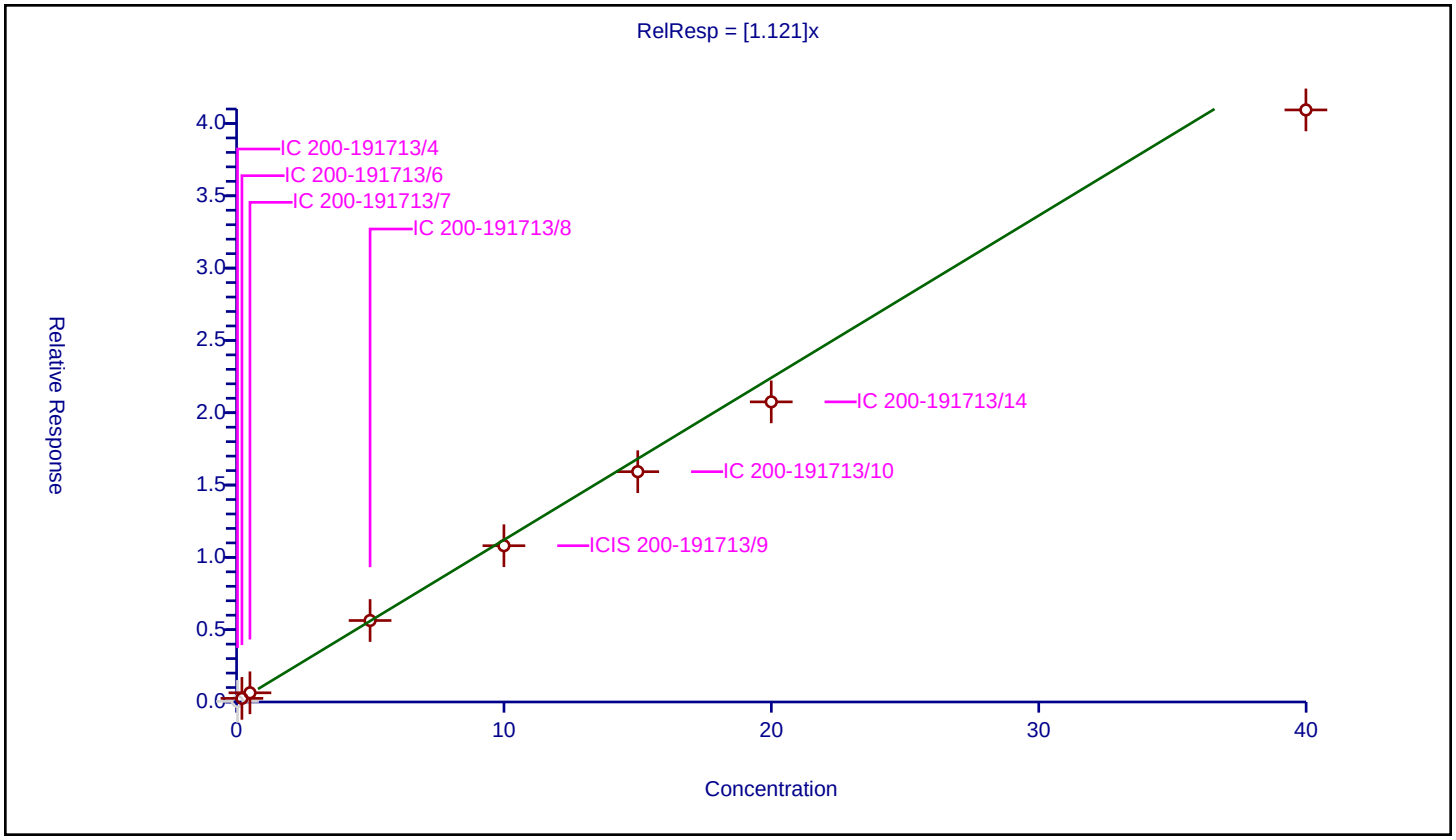
Curve Coefficients

Intercept:	0
Slope:	1.121

Error Coefficients

Standard Error:	2700000
Relative Standard Error:	8.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.041879	10.0	1248362.0	1.193915	N
2	IC 200-191713/6	0.20044	0.249759	10.0	1208645.0	1.246056	Y
3	IC 200-191713/7	0.500453	0.635025	10.0	1175702.0	1.268901	Y
4	IC 200-191713/8	4.992563	5.634316	10.0	1195343.0	1.128542	Y
5	ICIS 200-191713/9	9.99806	10.805618	10.0	1212907.0	1.080772	Y
6	IC 200-191713/10	15.003557	15.924264	10.0	1286332.0	1.061366	Y
7	IC 200-191713/14	19.99612	20.751508	10.0	1298602.0	1.037777	Y
8	IC 200-191713/15	39.99224	40.937285	10.0	1343252.0	1.023631	Y



Calibration / trans-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

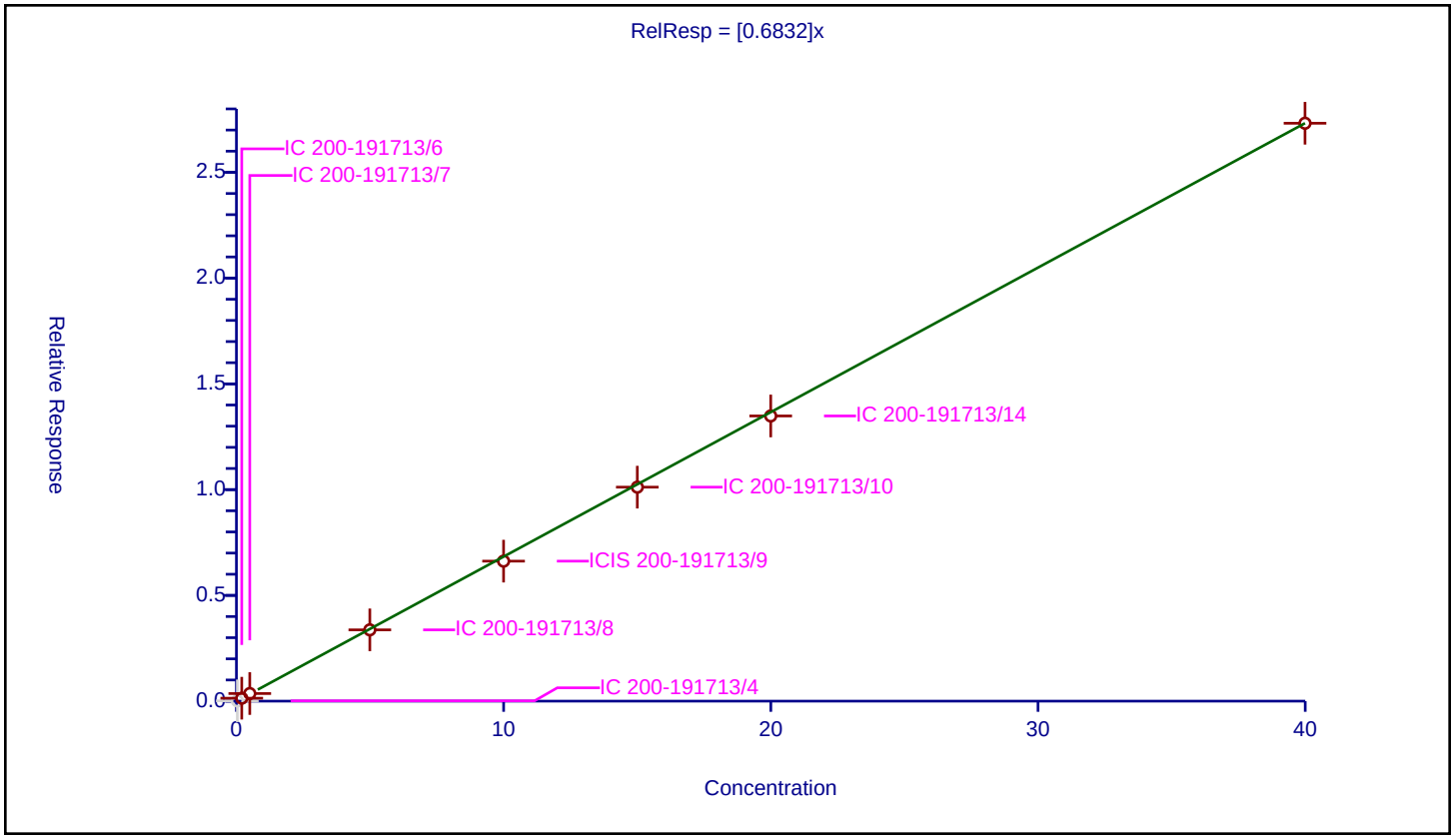
Curve Coefficients

Intercept:	0
Slope:	0.6832

Error Coefficients

Standard Error:	1780000
Relative Standard Error:	2.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.014042	10.0	1248362.0	0.400331	N
2	IC 200-191713/6	0.20044	0.13923	10.0	1208645.0	0.694624	Y
3	IC 200-191713/7	0.500453	0.359896	10.0	1175702.0	0.71914	Y
4	IC 200-191713/8	4.992563	3.37002	10.0	1195343.0	0.675008	Y
5	ICIS 200-191713/9	9.99806	6.618661	10.0	1212907.0	0.661995	Y
6	IC 200-191713/10	15.003557	10.116618	10.0	1286332.0	0.674281	Y
7	IC 200-191713/14	19.99612	13.482614	10.0	1298602.0	0.674262	Y
8	IC 200-191713/15	39.99224	27.321709	10.0	1343252.0	0.683175	Y



Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

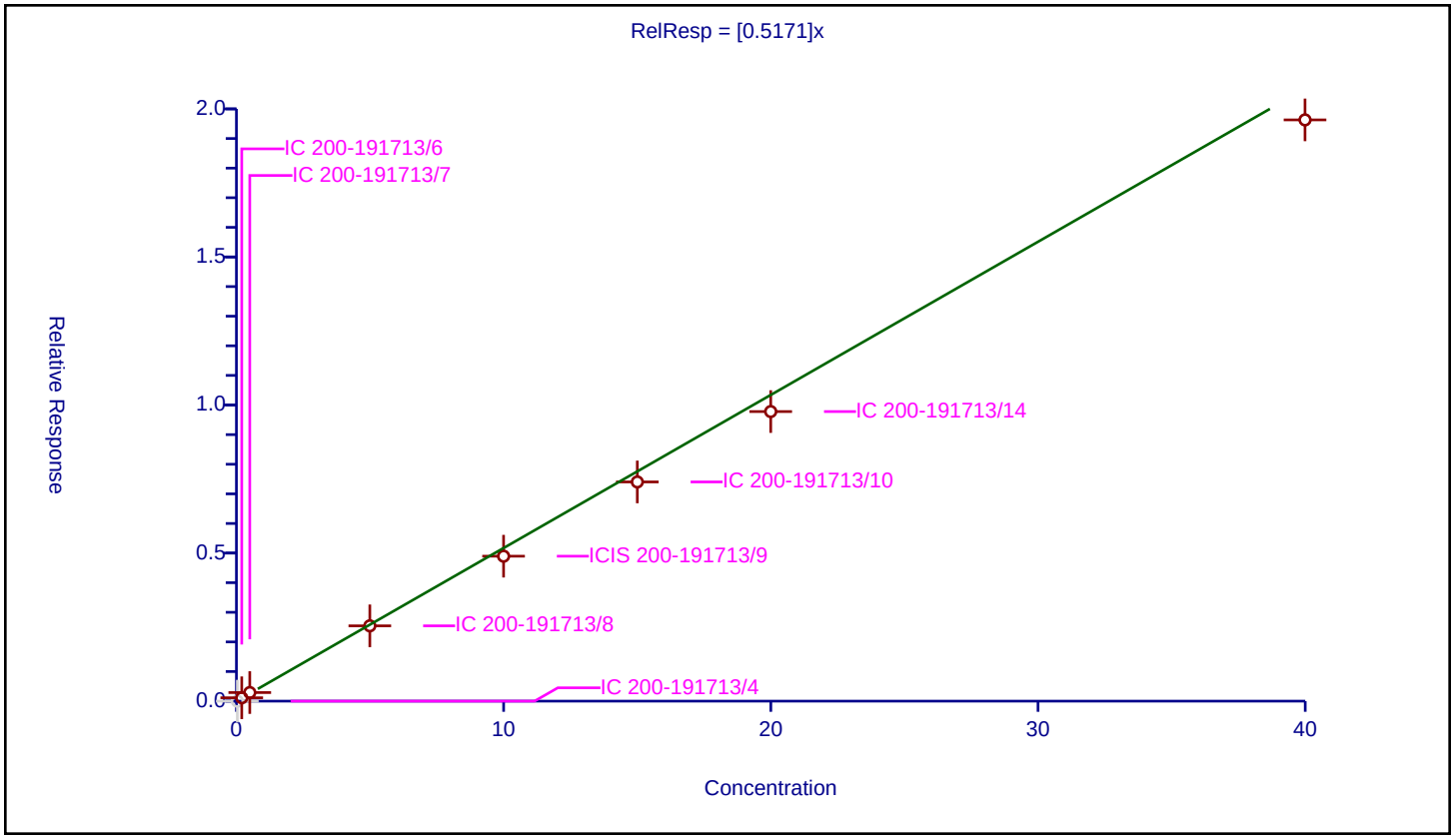
Curve Coefficients

Intercept:	0
Slope:	0.5171

Error Coefficients

Standard Error:	1150000
Relative Standard Error:	7.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.0	10.0	1107047.0	0.0	N
2	IC 200-191713/6	0.20044	0.113694	10.0	1058542.0	0.567224	Y
3	IC 200-191713/7	0.500453	0.290377	10.0	1028802.0	0.580228	Y
4	IC 200-191713/8	4.992563	2.542794	10.0	1061022.0	0.509316	Y
5	ICIS 200-191713/9	9.99806	4.895146	10.0	1084033.0	0.48961	Y
6	IC 200-191713/10	15.003557	7.402498	10.0	1142517.0	0.493383	Y
7	IC 200-191713/14	19.99612	9.778837	10.0	1162673.0	0.489037	Y
8	IC 200-191713/15	39.99224	19.628559	10.0	1203393.0	0.490809	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

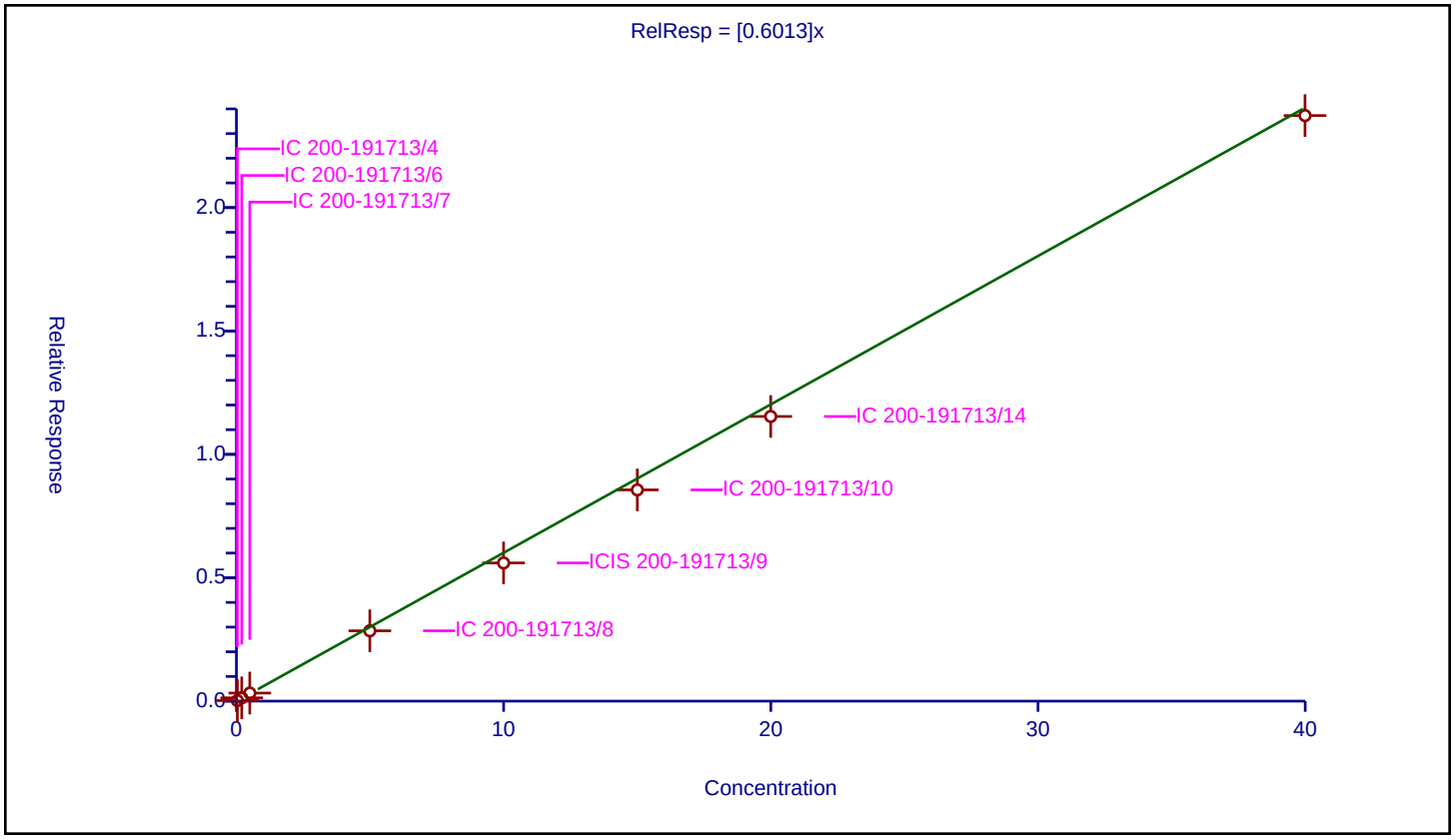
Curve Coefficients

Intercept:	0
Slope:	0.6013

Error Coefficients

Standard Error:	1270000
Relative Standard Error:	6.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.021706	10.0	1107047.0	0.618822	Y
2	IC 200-191713/6	0.20044	0.133259	10.0	1058542.0	0.664832	Y
3	IC 200-191713/7	0.500453	0.327624	10.0	1028802.0	0.654655	Y
4	IC 200-191713/8	4.992563	2.84996	10.0	1061022.0	0.570841	Y
5	ICIS 200-191713/9	9.99806	5.600392	10.0	1084033.0	0.560148	Y
6	IC 200-191713/10	15.003557	8.560792	10.0	1142517.0	0.570584	Y
7	IC 200-191713/14	19.99612	11.536434	10.0	1162673.0	0.576934	Y
8	IC 200-191713/15	39.99224	23.729422	10.0	1203393.0	0.593351	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

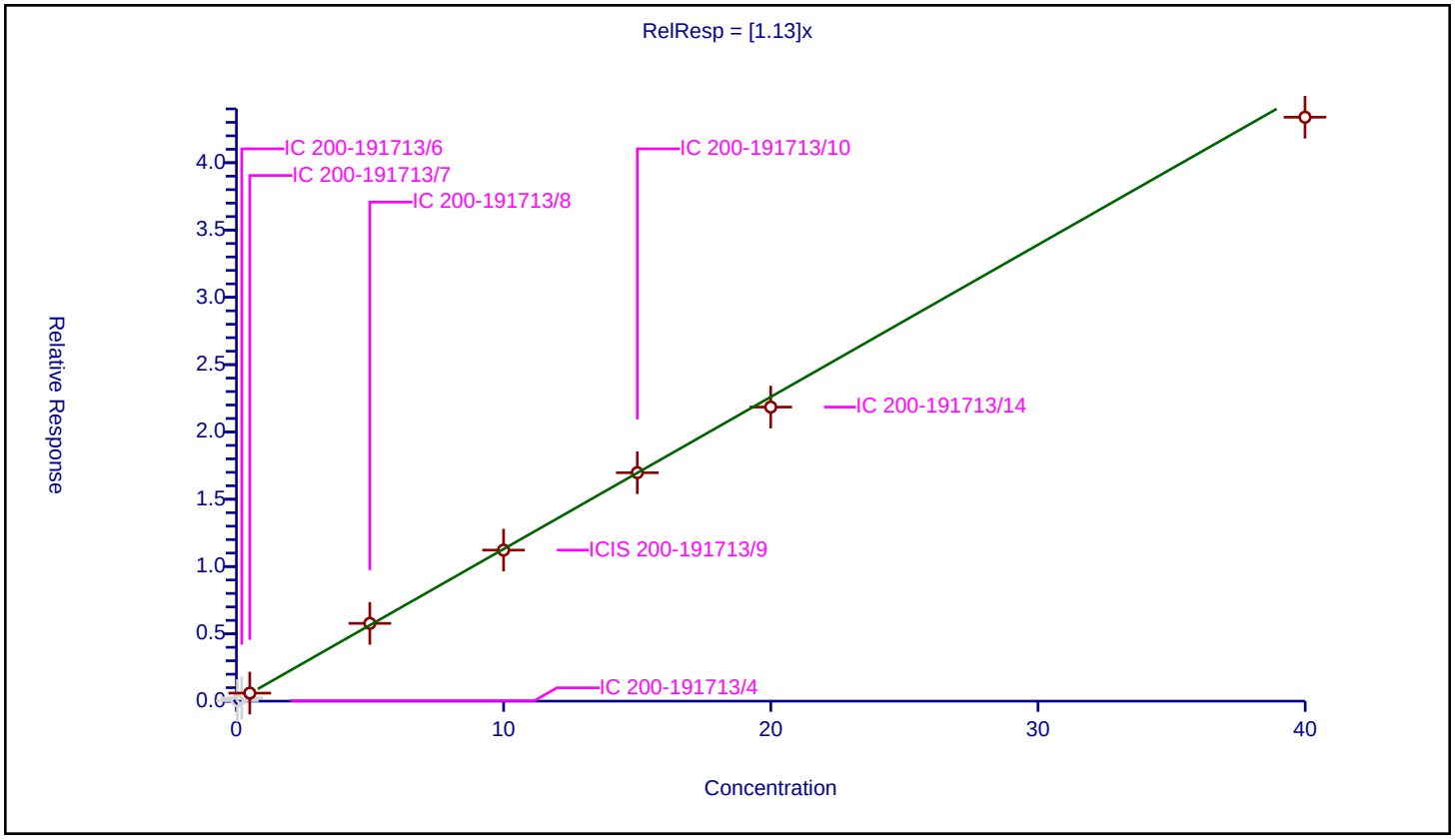
Curve Coefficients

Intercept:	0
Slope:	1.13

Error Coefficients

Standard Error:	2800000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.038716	10.0	1107047.0	1.103734	N
2	IC 200-191713/6	0.20044	0.240926	10.0	1058542.0	1.201986	N
3	IC 200-191713/7	0.500453	0.597287	10.0	1028802.0	1.193494	Y
4	IC 200-191713/8	4.992563	5.776252	10.0	1061022.0	1.156971	Y
5	ICIS 200-191713/9	9.99806	11.220027	10.0	1084033.0	1.12222	Y
6	IC 200-191713/10	15.003557	16.972299	10.0	1142517.0	1.131218	Y
7	IC 200-191713/14	19.99612	21.8464	10.0	1162673.0	1.092532	Y
8	IC 200-191713/15	39.99224	43.380591	10.0	1203393.0	1.084725	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

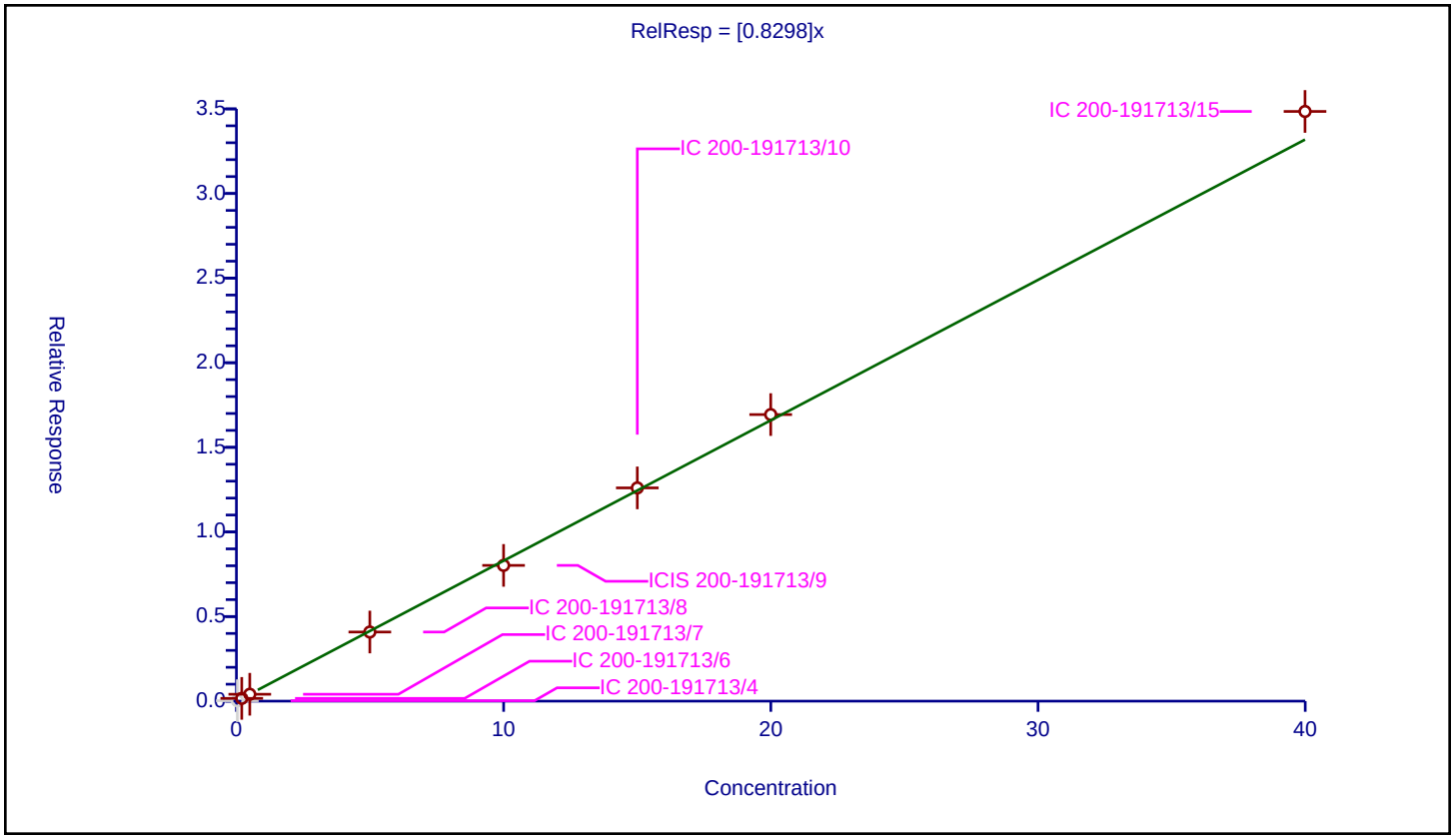
Curve Coefficients

Intercept:	0
Slope:	0.8298

Error Coefficients

Standard Error:	2020000
Relative Standard Error:	2.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.026331	10.0	1107047.0	0.750673	N
2	IC 200-191713/6	0.20044	0.16348	10.0	1058542.0	0.815605	Y
3	IC 200-191713/7	0.500453	0.407435	10.0	1028802.0	0.814133	Y
4	IC 200-191713/8	4.992563	4.084779	10.0	1061022.0	0.818173	Y
5	ICIS 200-191713/9	9.99806	8.022302	10.0	1084033.0	0.802386	Y
6	IC 200-191713/10	15.003557	12.602018	10.0	1142517.0	0.839935	Y
7	IC 200-191713/14	19.99612	16.935174	10.0	1162673.0	0.846923	Y
8	IC 200-191713/15	39.99224	34.8481	10.0	1203393.0	0.871372	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

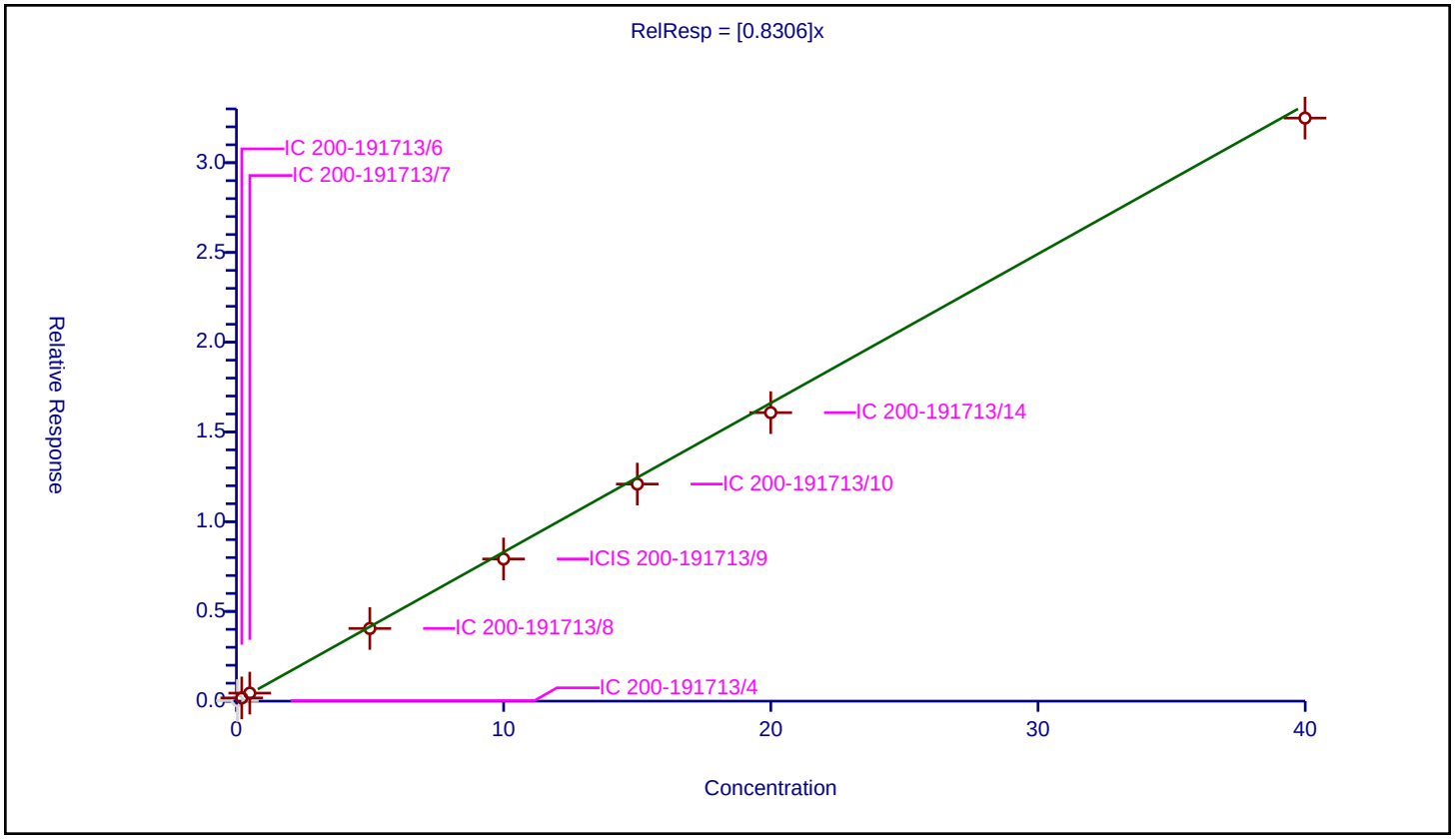
Curve Coefficients

Intercept:	0
Slope:	0.8306

Error Coefficients

Standard Error:	1900000
Relative Standard Error:	5.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.028942	10.0	1107047.0	0.825096	N
2	IC 200-191713/6	0.20044	0.178973	10.0	1058542.0	0.8929	Y
3	IC 200-191713/7	0.500453	0.448123	10.0	1028802.0	0.895436	Y
4	IC 200-191713/8	4.992563	4.049426	10.0	1061022.0	0.811092	Y
5	ICIS 200-191713/9	9.99806	7.920414	10.0	1084033.0	0.792195	Y
6	IC 200-191713/10	15.003557	12.096223	10.0	1142517.0	0.806224	Y
7	IC 200-191713/14	19.99612	16.076033	10.0	1162673.0	0.803958	Y
8	IC 200-191713/15	39.99224	32.487724	10.0	1203393.0	0.812351	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

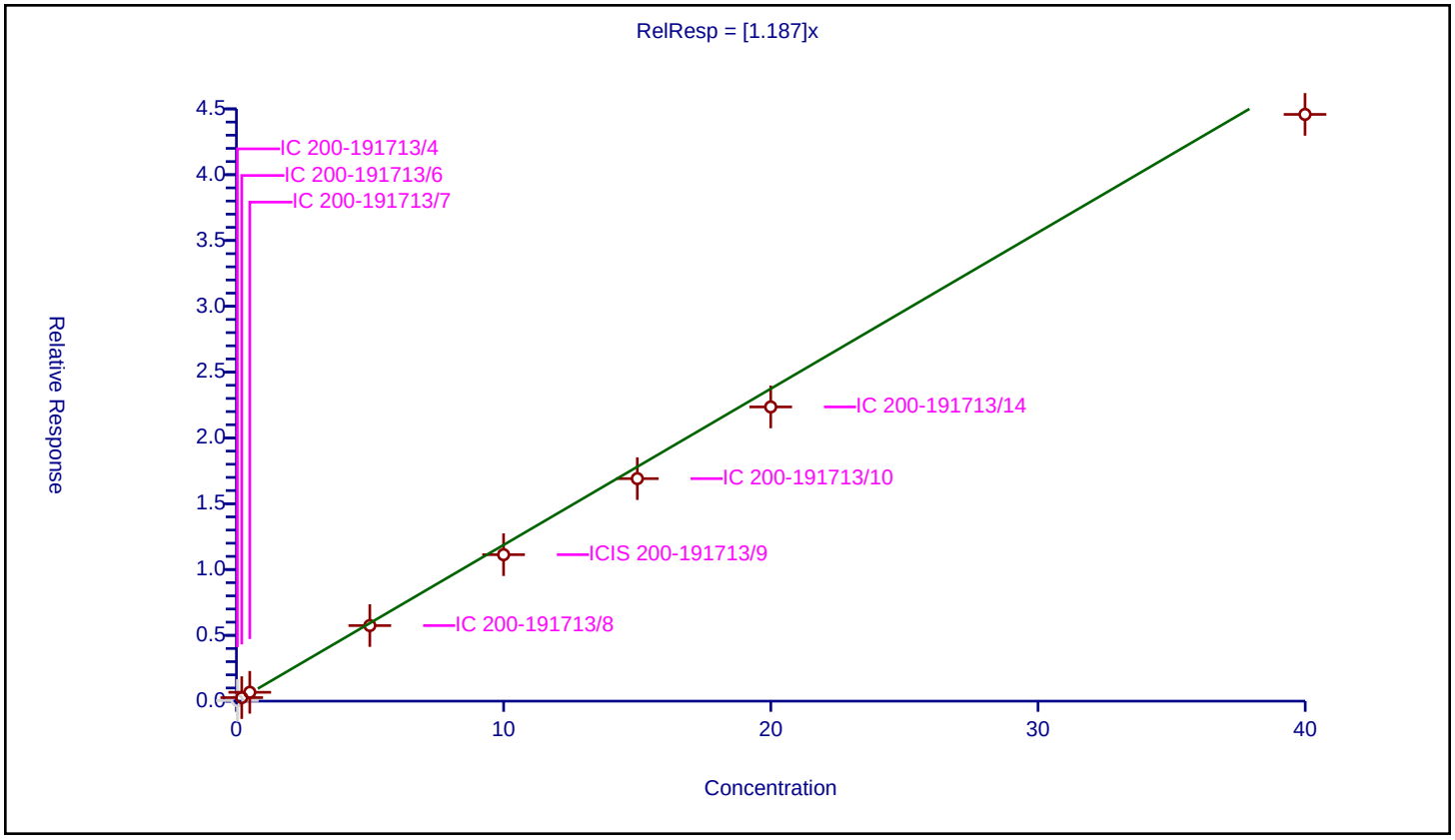
Curve Coefficients

Intercept:	0
Slope:	1.187

Error Coefficients

Standard Error:	2620000
Relative Standard Error:	9.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.044524	10.0	1107047.0	1.26932	N
2	IC 200-191713/6	0.20044	0.268974	10.0	1058542.0	1.341919	Y
3	IC 200-191713/7	0.500453	0.672462	10.0	1028802.0	1.343707	Y
4	IC 200-191713/8	4.992563	5.742624	10.0	1061022.0	1.150236	Y
5	ICIS 200-191713/9	9.99806	11.128646	10.0	1084033.0	1.113081	Y
6	IC 200-191713/10	15.003557	16.907503	10.0	1142517.0	1.1269	Y
7	IC 200-191713/14	19.99612	22.354144	10.0	1162673.0	1.117924	Y
8	IC 200-191713/15	39.99224	44.581205	10.0	1203393.0	1.114746	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

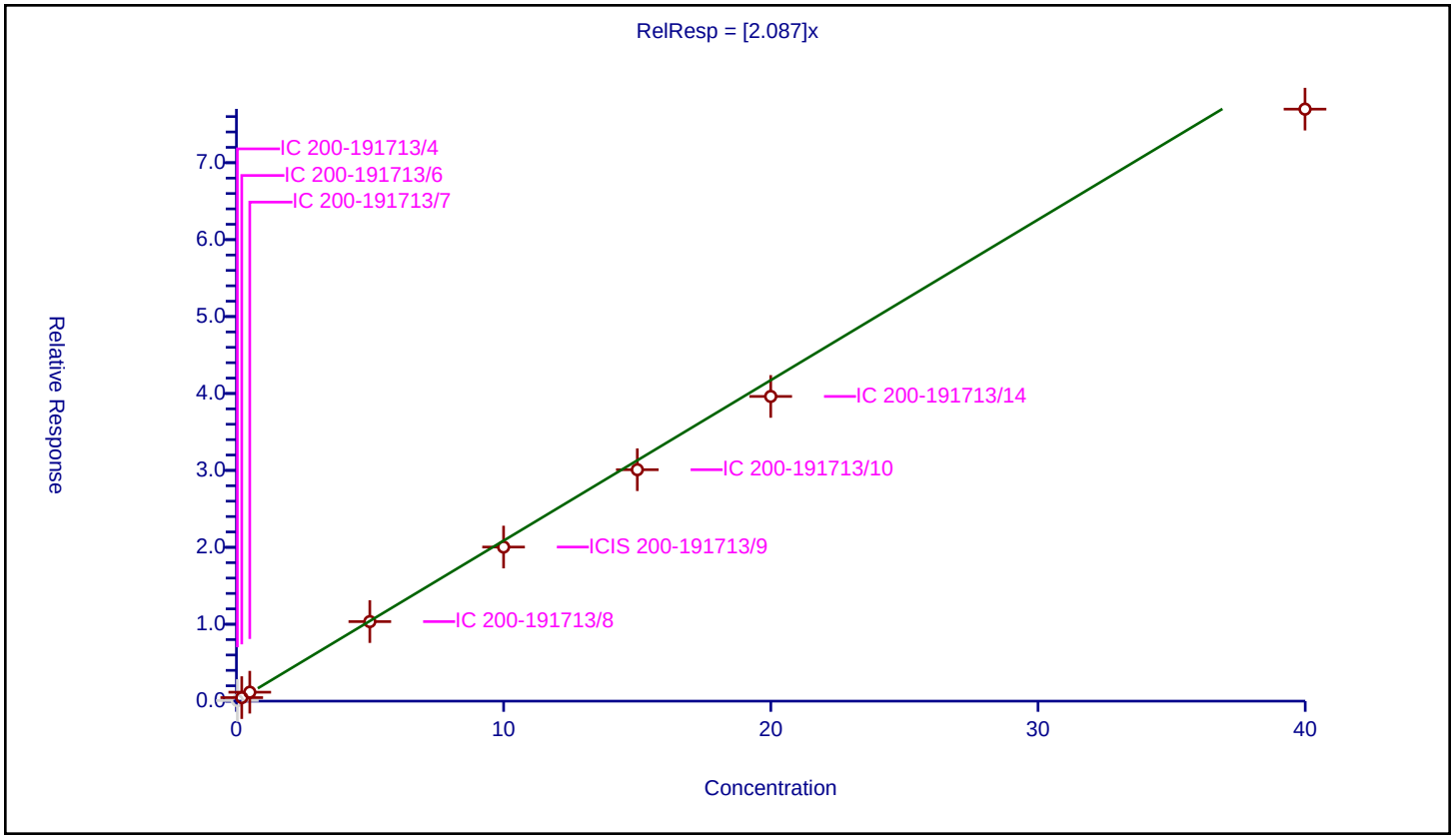
Curve Coefficients

Intercept:	0
Slope:	2.087

Error Coefficients

Standard Error:	4560000
Relative Standard Error:	7.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.076212	10.0	1107047.0	2.172703	N
2	IC 200-191713/6	0.20044	0.460246	10.0	1058542.0	2.296184	Y
3	IC 200-191713/7	0.500453	1.162974	10.0	1028802.0	2.323845	Y
4	IC 200-191713/8	4.992563	10.339965	10.0	1061022.0	2.071073	Y
5	ICIS 200-191713/9	9.99806	20.035193	10.0	1084033.0	2.003908	Y
6	IC 200-191713/10	15.003557	30.088226	10.0	1142517.0	2.005406	Y
7	IC 200-191713/14	19.99612	39.617425	10.0	1162673.0	1.981256	Y
8	IC 200-191713/15	39.99224	76.968679	10.0	1203393.0	1.92459	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

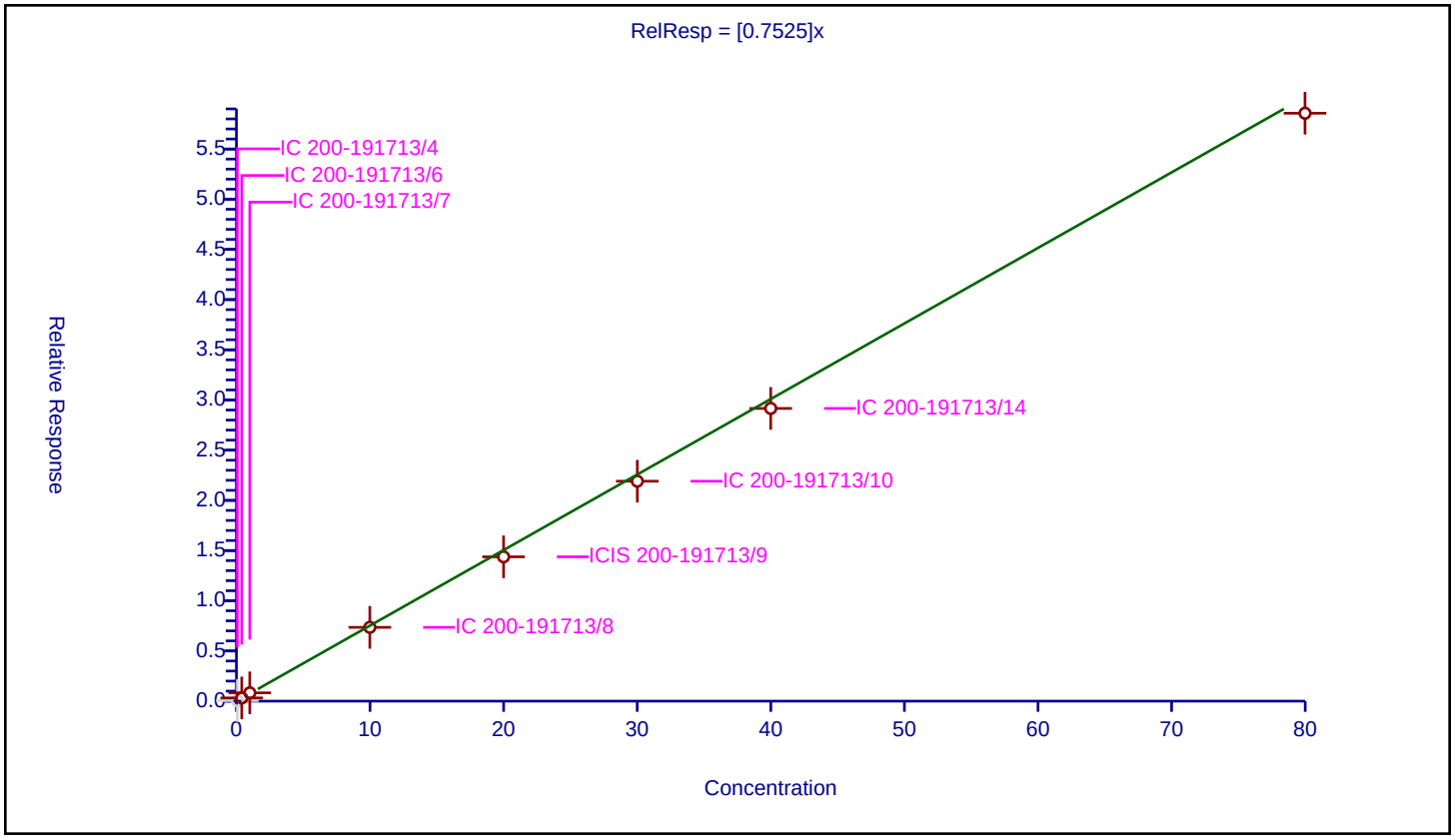
Curve Coefficients

Intercept:	0
Slope:	0.7525

Error Coefficients

Standard Error:	3430000
Relative Standard Error:	5.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.070154	0.053403	10.0	1107047.0	0.761231	N
2	IC 200-191713/6	0.400879	0.318617	10.0	1058542.0	0.794797	Y
3	IC 200-191713/7	1.000905	0.826738	10.0	1028802.0	0.825991	Y
4	IC 200-191713/8	9.985126	7.350884	10.0	1061022.0	0.736183	Y
5	ICIS 200-191713/9	19.99612	14.377727	10.0	1084033.0	0.719026	Y
6	IC 200-191713/10	30.007114	21.909582	10.0	1142517.0	0.730146	Y
7	IC 200-191713/14	39.99224	29.159729	10.0	1162673.0	0.729135	Y
8	IC 200-191713/15	79.984479	58.566179	10.0	1203393.0	0.732219	Y



Calibration / n-Nonane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

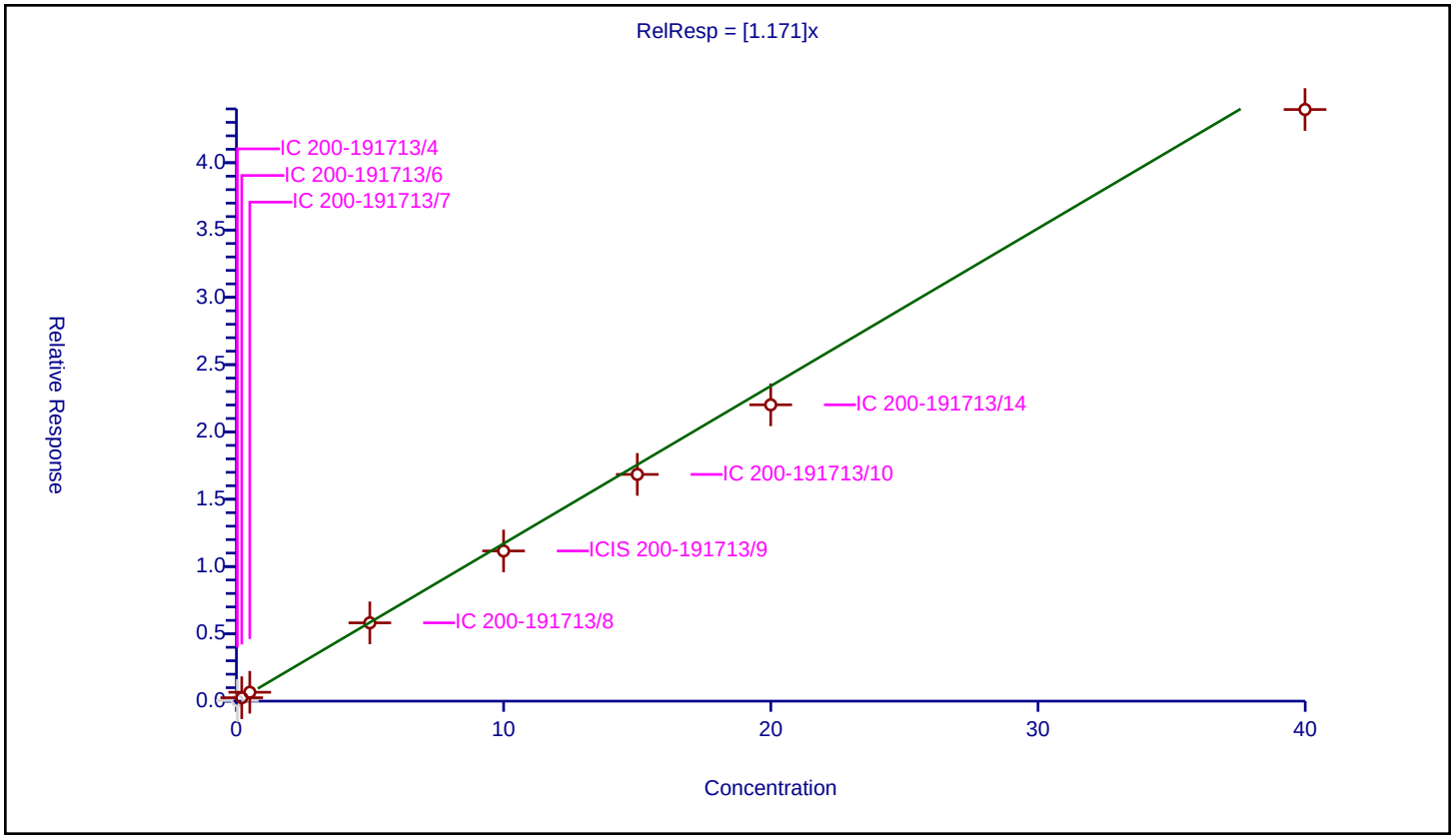
Curve Coefficients

Intercept:	0
Slope:	1.171

Error Coefficients

Standard Error:	2580000
Relative Standard Error:	7.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.04241	10.0	1107047.0	1.20906	N
2	IC 200-191713/6	0.20044	0.254803	10.0	1058542.0	1.271222	Y
3	IC 200-191713/7	0.500453	0.660545	10.0	1028802.0	1.319895	Y
4	IC 200-191713/8	4.992563	5.816609	10.0	1061022.0	1.165055	Y
5	ICIS 200-191713/9	9.99806	11.157871	10.0	1084033.0	1.116004	Y
6	IC 200-191713/10	15.003557	16.844773	10.0	1142517.0	1.122719	Y
7	IC 200-191713/14	19.99612	22.016448	10.0	1162673.0	1.101036	Y
8	IC 200-191713/15	39.99224	43.955092	10.0	1203393.0	1.099091	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

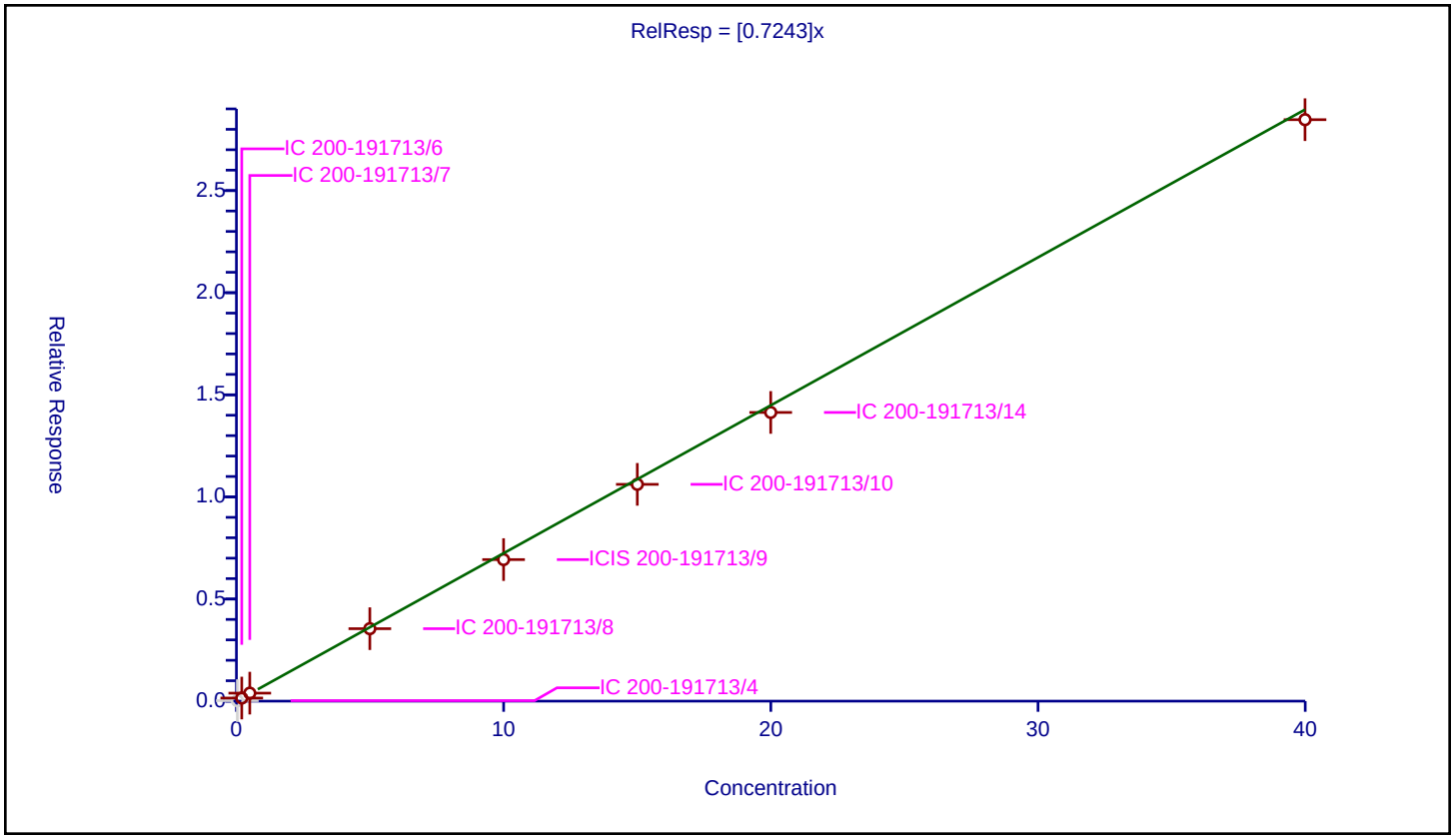
Curve Coefficients

Intercept:	0
Slope:	0.7243

Error Coefficients

Standard Error:	1660000
Relative Standard Error:	4.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.024073	10.0	1107047.0	0.686293	N
2	IC 200-191713/6	0.20044	0.15186	10.0	1058542.0	0.757634	Y
3	IC 200-191713/7	0.500453	0.391407	10.0	1028802.0	0.782105	Y
4	IC 200-191713/8	4.992563	3.548352	10.0	1061022.0	0.710728	Y
5	ICIS 200-191713/9	9.99806	6.930398	10.0	1084033.0	0.693174	Y
6	IC 200-191713/10	15.003557	10.615247	10.0	1142517.0	0.707515	Y
7	IC 200-191713/14	19.99612	14.136159	10.0	1162673.0	0.706945	Y
8	IC 200-191713/15	39.99224	28.472228	10.0	1203393.0	0.711944	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

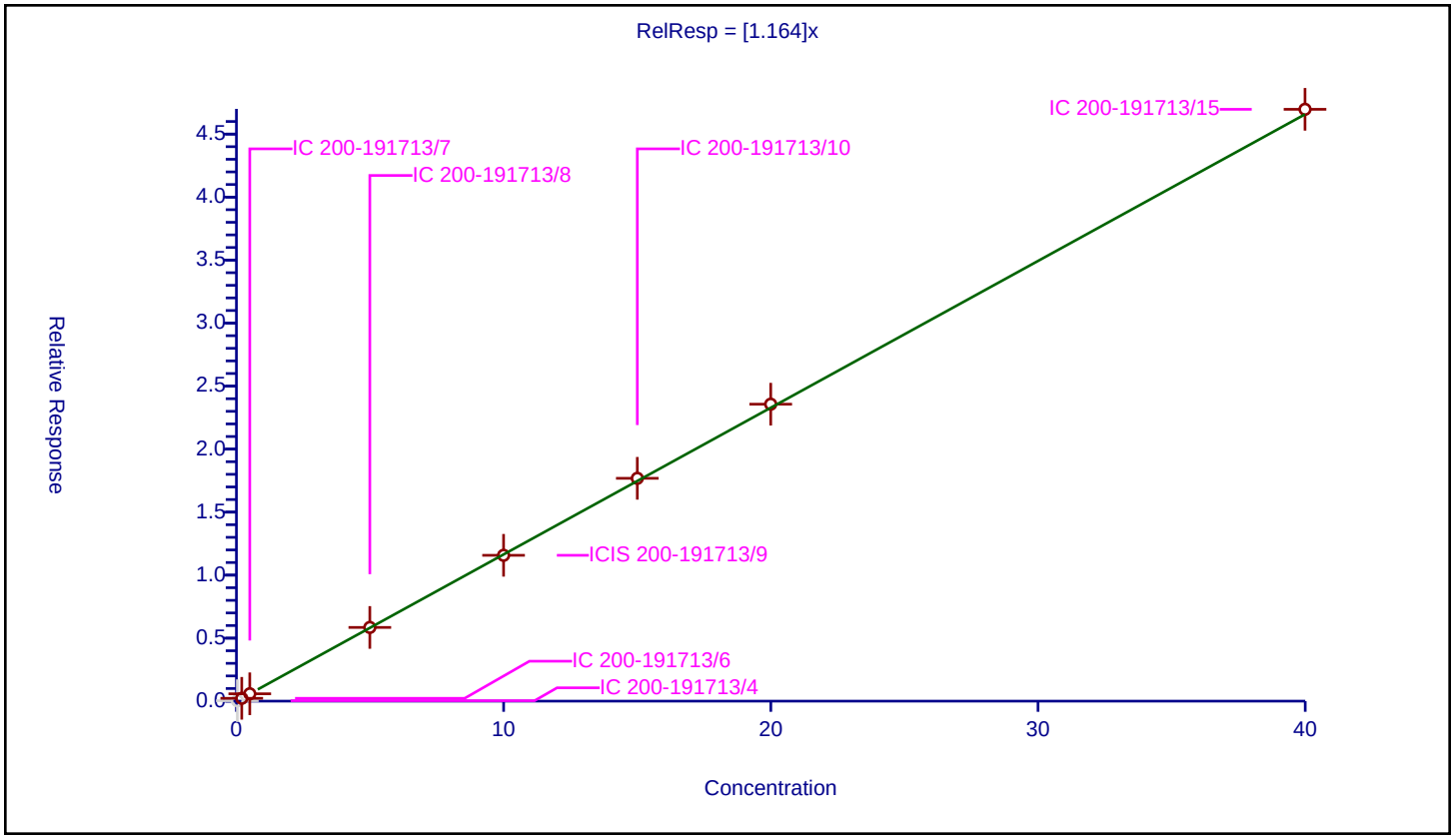
Curve Coefficients

Intercept:	0
Slope:	1.164

Error Coefficients

Standard Error:	2750000
Relative Standard Error:	1.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.035148	10.0	1107047.0	1.002013	N
2	IC 200-191713/6	0.20044	0.224677	10.0	1058542.0	1.120921	Y
3	IC 200-191713/7	0.500453	0.585234	10.0	1028802.0	1.16941	Y
4	IC 200-191713/8	4.992563	5.848719	10.0	1061022.0	1.171486	Y
5	ICIS 200-191713/9	9.99806	11.572517	10.0	1084033.0	1.157476	Y
6	IC 200-191713/10	15.003557	17.683422	10.0	1142517.0	1.178615	Y
7	IC 200-191713/14	19.99612	23.566377	10.0	1162673.0	1.178547	Y
8	IC 200-191713/15	39.99224	46.966394	10.0	1203393.0	1.174388	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

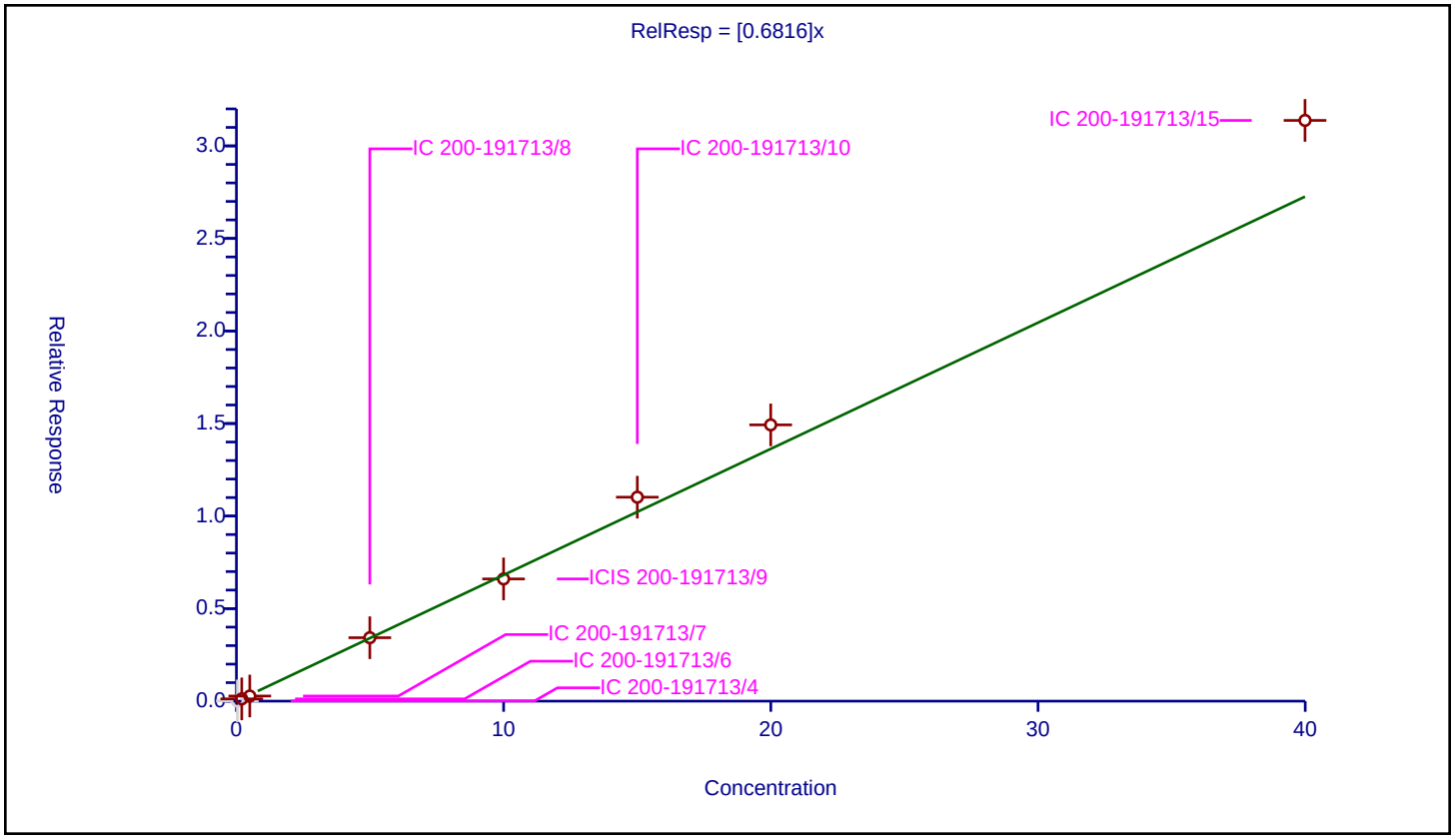
Curve Coefficients

Intercept:	0
Slope:	0.6816

Error Coefficients

Standard Error:	1800000
Relative Standard Error:	12.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.010921	10.0	1107047.0	0.311343	N
2	IC 200-191713/6	0.20044	0.121431	10.0	1058542.0	0.605824	Y
3	IC 200-191713/7	0.500453	0.276769	10.0	1028802.0	0.553036	Y
4	IC 200-191713/8	4.992563	3.42713	10.0	1061022.0	0.686447	Y
5	ICIS 200-191713/9	9.99806	6.602936	10.0	1084033.0	0.660422	Y
6	IC 200-191713/10	15.003557	11.020011	10.0	1142517.0	0.734493	Y
7	IC 200-191713/14	19.99612	14.927275	10.0	1162673.0	0.746509	Y
8	IC 200-191713/15	39.99224	31.376948	10.0	1203393.0	0.784576	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

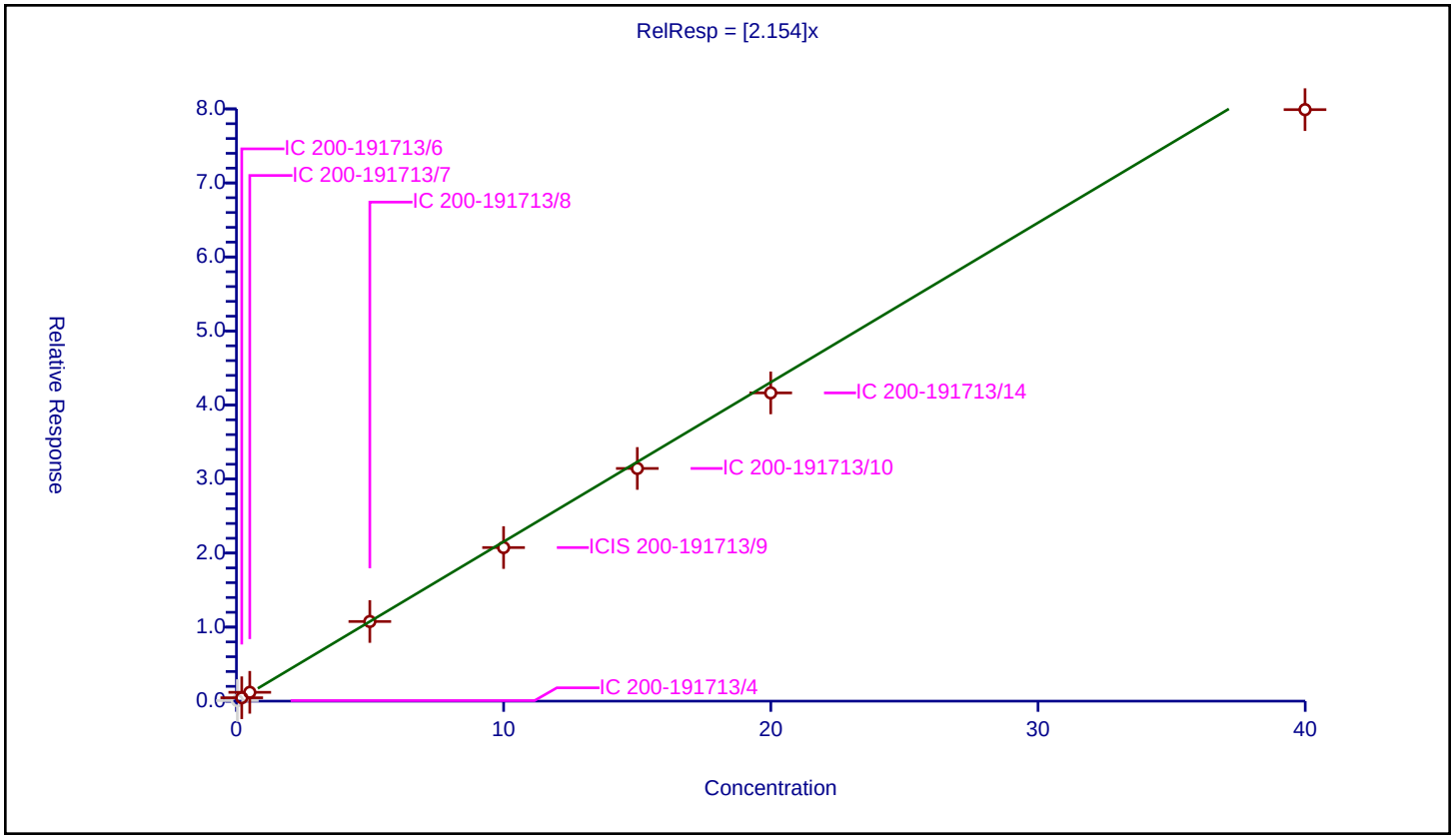
Curve Coefficients

Intercept:	0
Slope:	2.154

Error Coefficients

Standard Error:	4750000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.073529	10.0	1107047.0	2.096219	N
2	IC 200-191713/6	0.20044	0.459434	10.0	1058542.0	2.29213	Y
3	IC 200-191713/7	0.500453	1.191036	10.0	1028802.0	2.379917	Y
4	IC 200-191713/8	4.992563	10.758288	10.0	1061022.0	2.154863	Y
5	ICIS 200-191713/9	9.99806	20.744627	10.0	1084033.0	2.074865	Y
6	IC 200-191713/10	15.003557	31.430762	10.0	1142517.0	2.094887	Y
7	IC 200-191713/14	19.99612	41.639446	10.0	1162673.0	2.082376	Y
8	IC 200-191713/15	39.99224	79.898786	10.0	1203393.0	1.997857	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

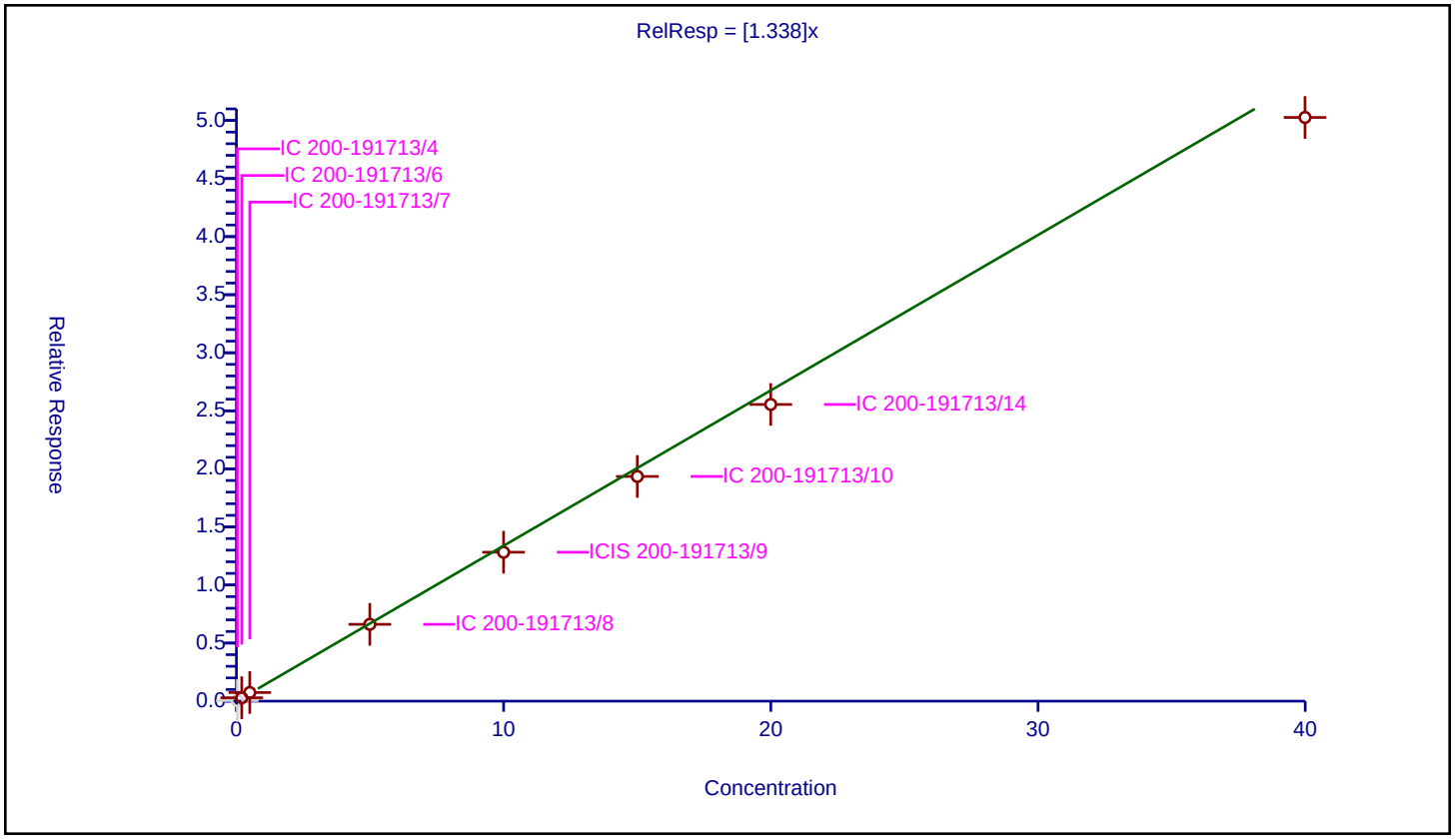
Curve Coefficients

Intercept:	0
Slope:	1.338

Error Coefficients

Standard Error:	2960000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.048182	10.0	1107047.0	1.373616	N
2	IC 200-191713/6	0.20044	0.291372	10.0	1058542.0	1.453667	Y
3	IC 200-191713/7	0.500453	0.741105	10.0	1028802.0	1.480869	Y
4	IC 200-191713/8	4.992563	6.615113	10.0	1061022.0	1.324993	Y
5	ICIS 200-191713/9	9.99806	12.824527	10.0	1084033.0	1.282702	Y
6	IC 200-191713/10	15.003557	19.350452	10.0	1142517.0	1.289724	Y
7	IC 200-191713/14	19.99612	25.548705	10.0	1162673.0	1.277683	Y
8	IC 200-191713/15	39.99224	50.262184	10.0	1203393.0	1.256798	Y



Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

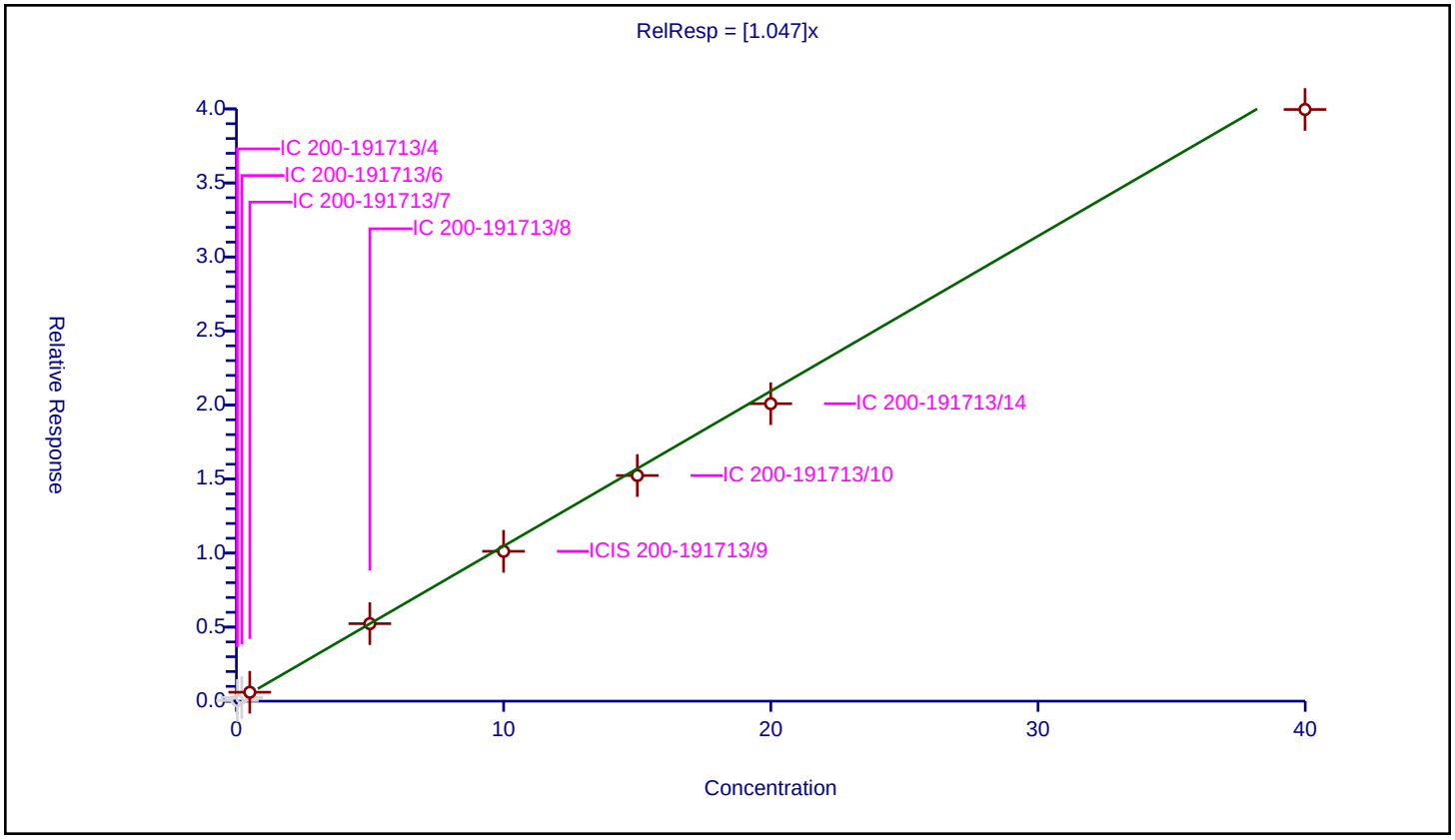
Curve Coefficients

Intercept:	0
Slope:	1.047

Error Coefficients

Standard Error:	2570000
Relative Standard Error:	7.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.040685	10.0	1107047.0	1.159873	N
2	IC 200-191713/6	0.20044	0.24631	10.0	1058542.0	1.228851	N
3	IC 200-191713/7	0.500453	0.601593	10.0	1028802.0	1.202098	Y
4	IC 200-191713/8	4.992563	5.233548	10.0	1061022.0	1.048269	Y
5	ICIS 200-191713/9	9.99806	10.119904	10.0	1084033.0	1.012187	Y
6	IC 200-191713/10	15.003557	15.238828	10.0	1142517.0	1.015681	Y
7	IC 200-191713/14	19.99612	20.090077	10.0	1162673.0	1.004699	Y
8	IC 200-191713/15	39.99224	39.960046	10.0	1203393.0	0.999195	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

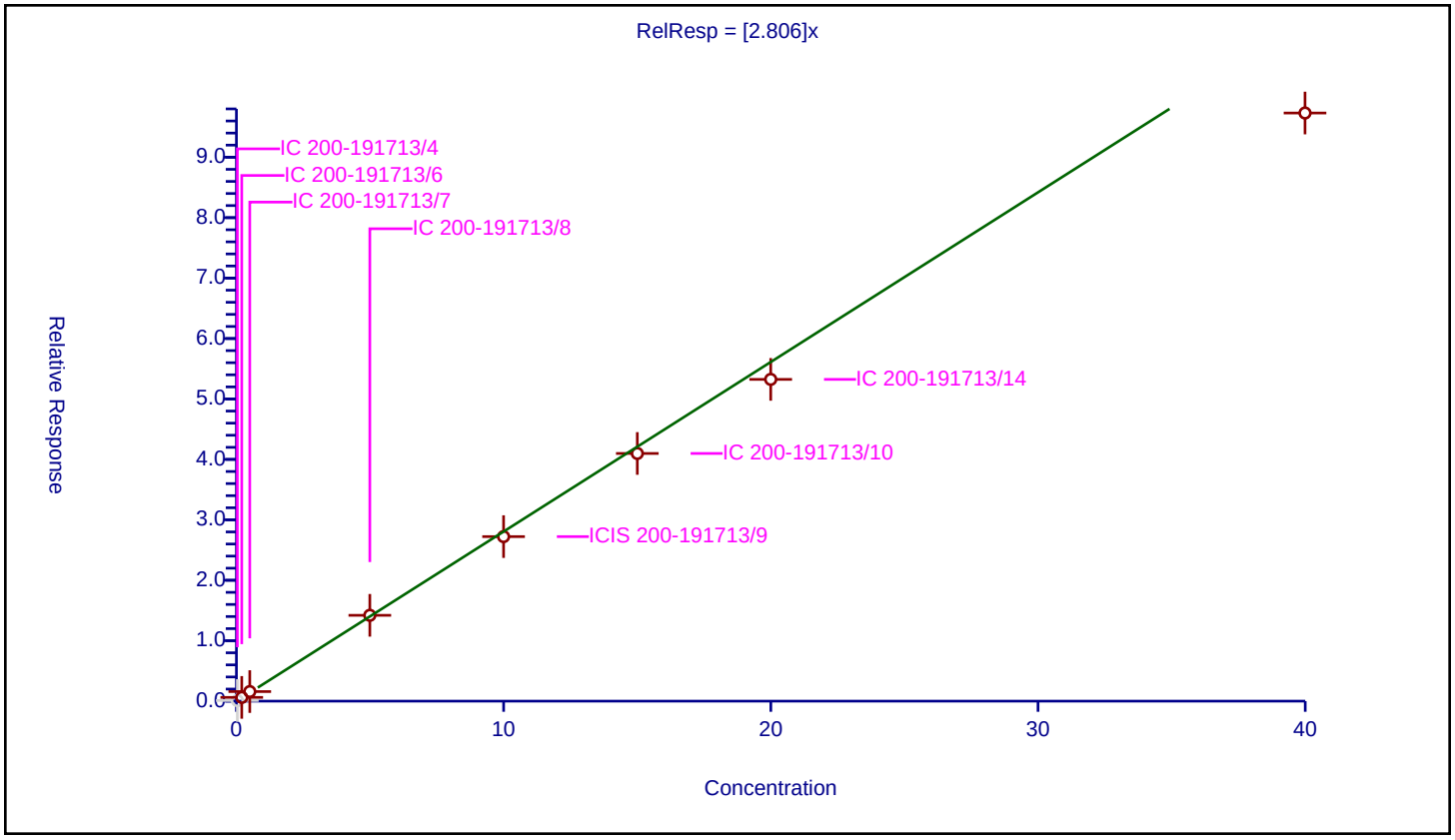
Curve Coefficients

Intercept:	0
Slope:	2.806

Error Coefficients

Standard Error:	5890000
Relative Standard Error:	9.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.101938	10.0	1107047.0	2.906122	N
2	IC 200-191713/6	0.20044	0.617274	10.0	1058542.0	3.079598	Y
3	IC 200-191713/7	0.500453	1.585874	10.0	1028802.0	3.168879	Y
4	IC 200-191713/8	4.992563	14.203353	10.0	1061022.0	2.844902	Y
5	ICIS 200-191713/9	9.99806	27.224448	10.0	1084033.0	2.722973	Y
6	IC 200-191713/10	15.003557	40.983119	10.0	1142517.0	2.73156	Y
7	IC 200-191713/14	19.99612	53.239363	10.0	1162673.0	2.662485	Y
8	IC 200-191713/15	39.99224	97.315191	10.0	1203393.0	2.433352	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

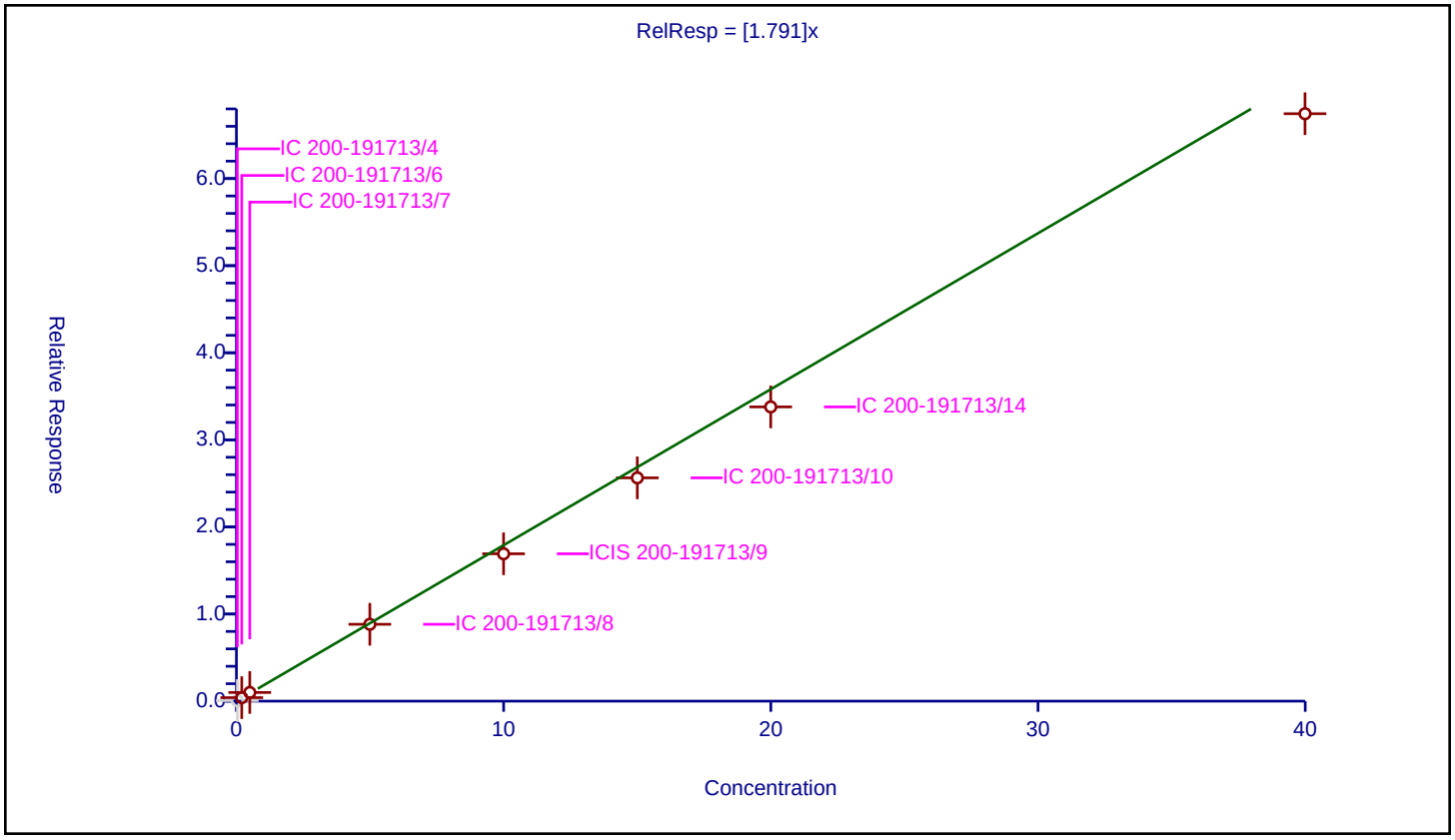
Curve Coefficients

Intercept:	0
Slope:	1.791

Error Coefficients

Standard Error:	3960000
Relative Standard Error:	8.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.065968	10.0	1107047.0	1.880674	N
2	IC 200-191713/6	0.20044	0.4016	10.0	1058542.0	2.003593	Y
3	IC 200-191713/7	0.500453	0.994215	10.0	1028802.0	1.986631	Y
4	IC 200-191713/8	4.992563	8.823813	10.0	1061022.0	1.767392	Y
5	ICIS 200-191713/9	9.99806	16.918544	10.0	1084033.0	1.692183	Y
6	IC 200-191713/10	15.003557	25.638428	10.0	1142517.0	1.708823	Y
7	IC 200-191713/14	19.99612	33.783403	10.0	1162673.0	1.689498	Y
8	IC 200-191713/15	39.99224	67.446969	10.0	1203393.0	1.686501	Y



Calibration / 4-Ethyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

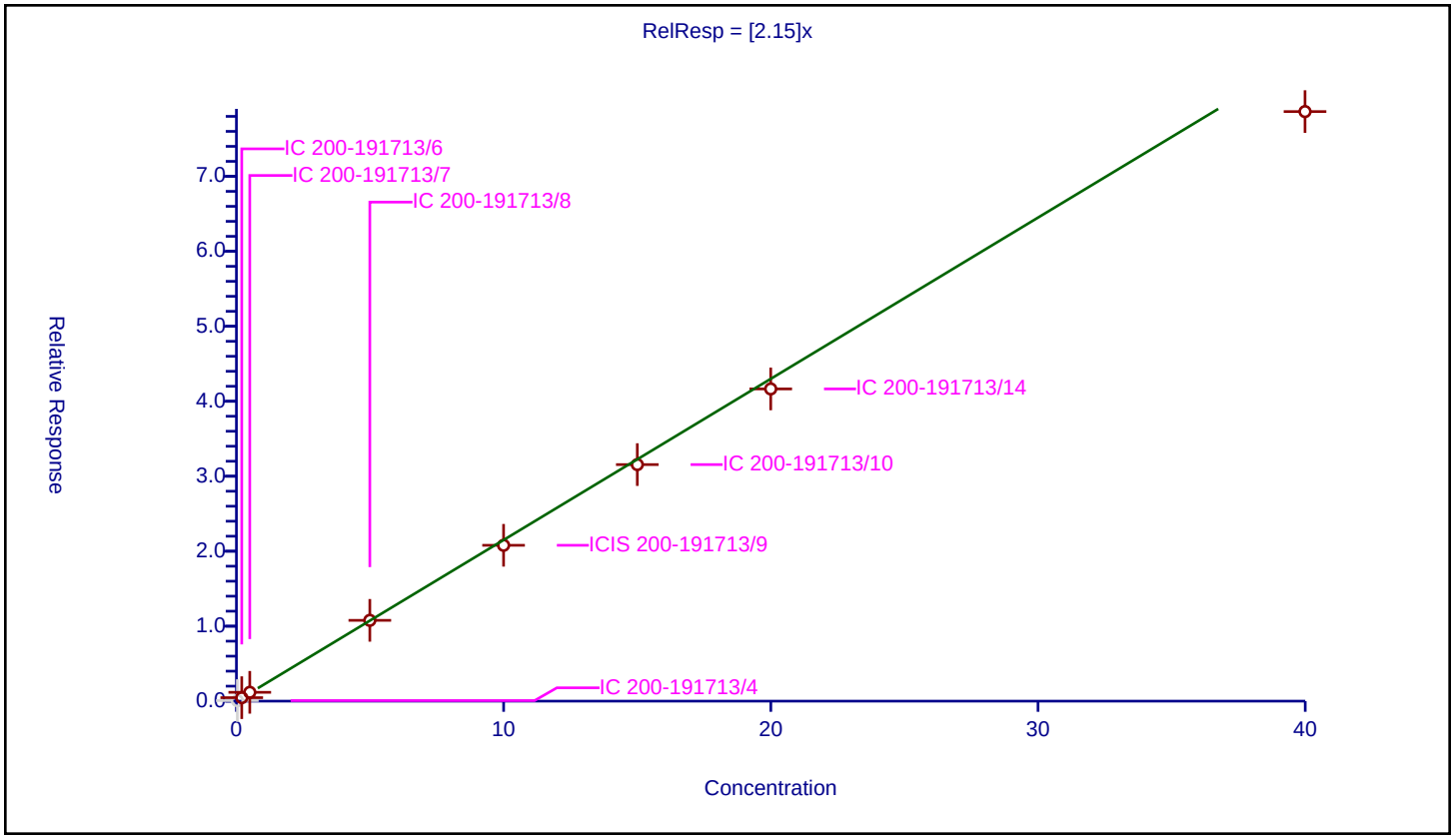
Curve Coefficients

Intercept:	0
Slope:	2.15

Error Coefficients

Standard Error:	4700000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.071804	10.0	1107047.0	2.047032	N
2	IC 200-191713/6	0.20044	0.462164	10.0	1058542.0	2.305751	Y
3	IC 200-191713/7	0.500453	1.177865	10.0	1028802.0	2.3536	Y
4	IC 200-191713/8	4.992563	10.777873	10.0	1061022.0	2.158786	Y
5	ICIS 200-191713/9	9.99806	20.790317	10.0	1084033.0	2.079435	Y
6	IC 200-191713/10	15.003557	31.552029	10.0	1142517.0	2.10297	Y
7	IC 200-191713/14	19.99612	41.645071	10.0	1162673.0	2.082658	Y
8	IC 200-191713/15	39.99224	78.640577	10.0	1203393.0	1.966396	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

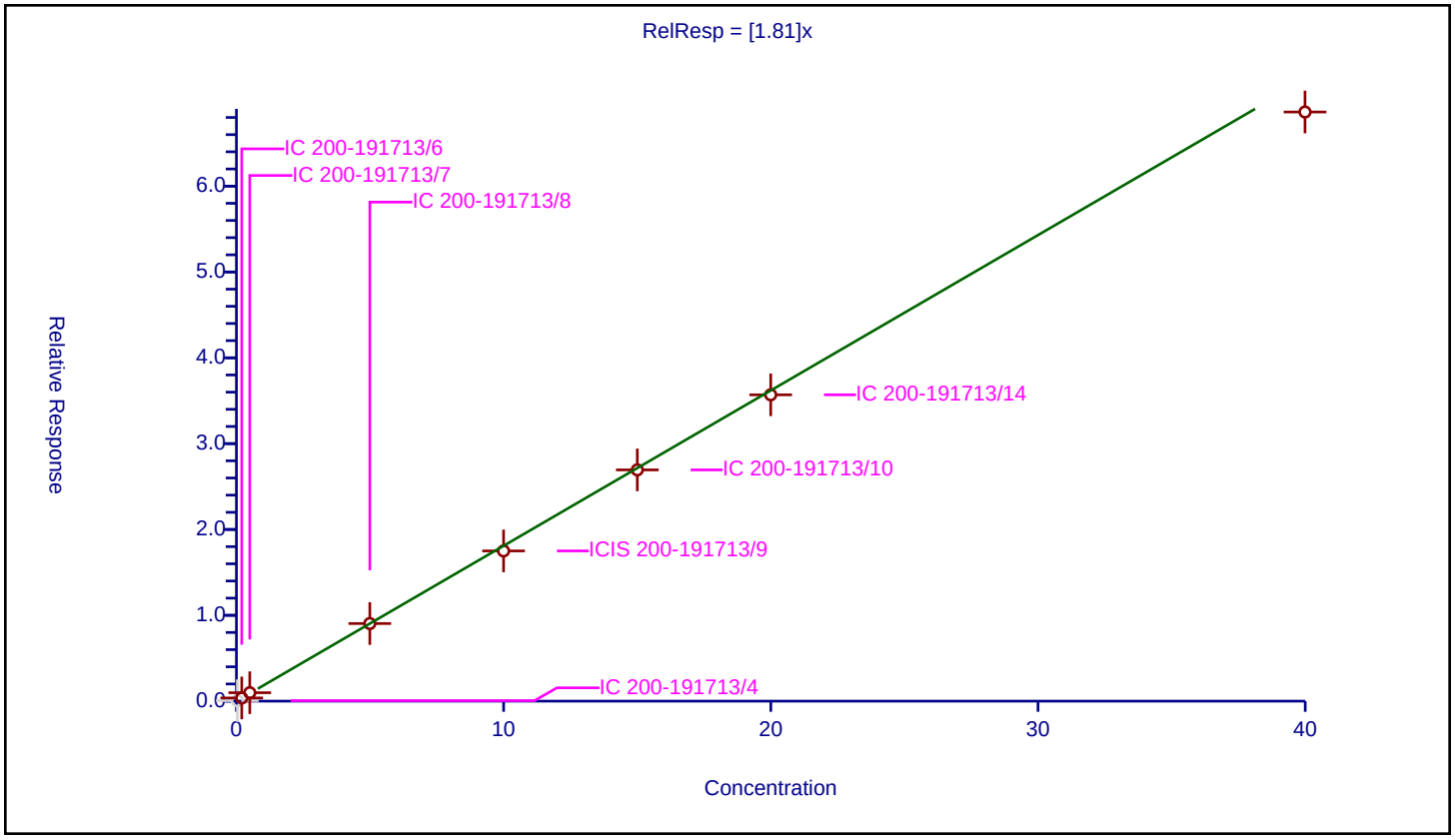
Curve Coefficients

Intercept:	0
Slope:	1.81

Error Coefficients

Standard Error:	4070000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.058823	10.0	1107047.0	1.676975	N
2	IC 200-191713/6	0.20044	0.370207	10.0	1058542.0	1.846976	Y
3	IC 200-191713/7	0.500453	0.983037	10.0	1028802.0	1.964295	Y
4	IC 200-191713/8	4.992563	9.04149	10.0	1061022.0	1.810992	Y
5	ICIS 200-191713/9	9.99806	17.498803	10.0	1084033.0	1.75022	Y
6	IC 200-191713/10	15.003557	26.942829	10.0	1142517.0	1.795763	Y
7	IC 200-191713/14	19.99612	35.689433	10.0	1162673.0	1.784818	Y
8	IC 200-191713/15	39.99224	68.63766	10.0	1203393.0	1.716274	Y



Calibration / n-Decane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

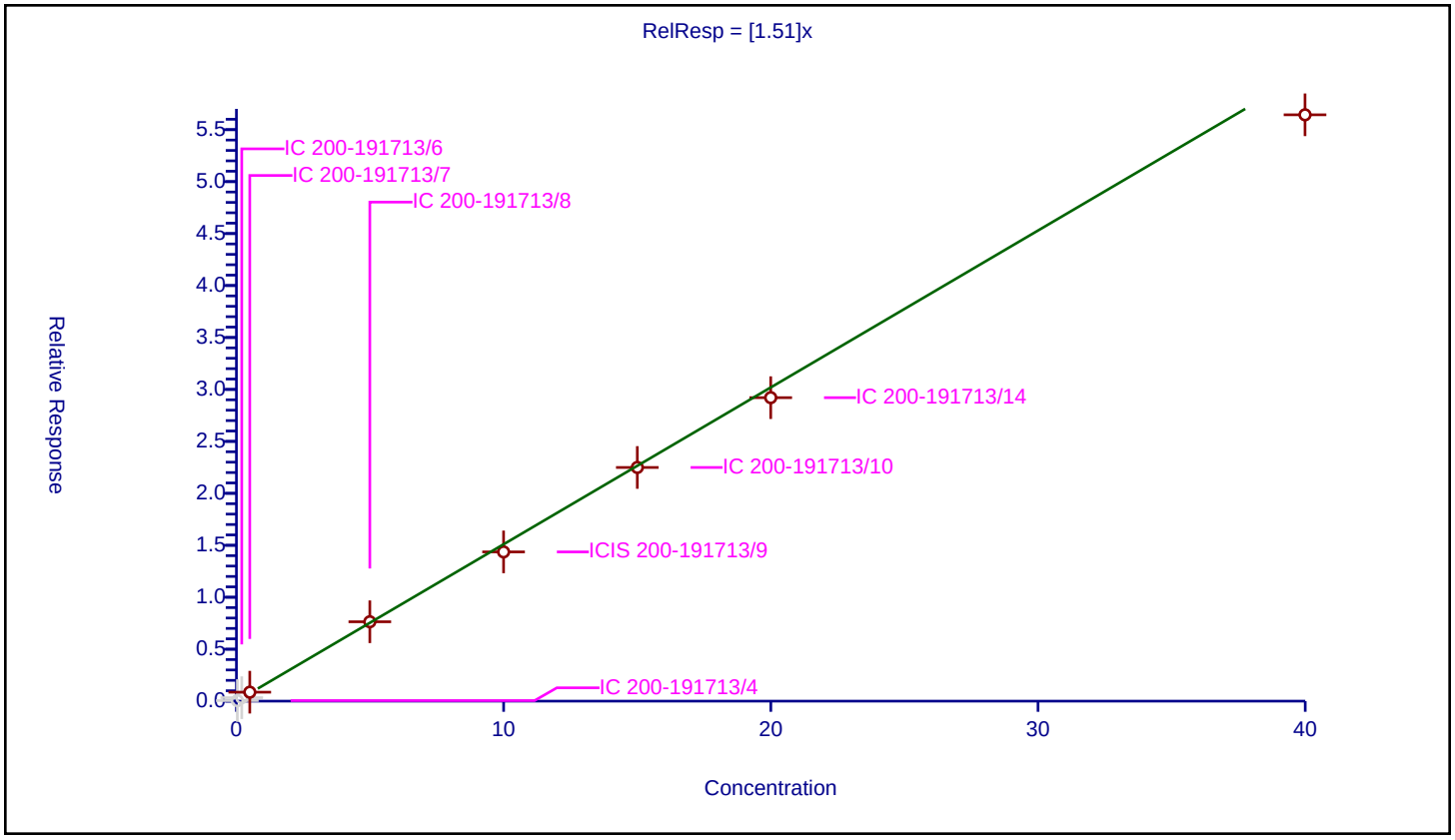
Curve Coefficients

Intercept:	0
Slope:	1.51

Error Coefficients

Standard Error:	3670000
Relative Standard Error:	7.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.051895	10.0	1107047.0	1.479457	N
2	IC 200-191713/6	0.20044	0.33377	10.0	1058542.0	1.665191	N
3	IC 200-191713/7	0.500453	0.861283	10.0	1028802.0	1.721009	Y
4	IC 200-191713/8	4.992563	7.639144	10.0	1061022.0	1.530105	Y
5	ICIS 200-191713/9	9.99806	14.362958	10.0	1084033.0	1.436574	Y
6	IC 200-191713/10	15.003557	22.490816	10.0	1142517.0	1.499032	Y
7	IC 200-191713/14	19.99612	29.208617	10.0	1162673.0	1.460714	Y
8	IC 200-191713/15	39.99224	56.430069	10.0	1203393.0	1.411025	Y



Calibration / Alpha Methyl Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

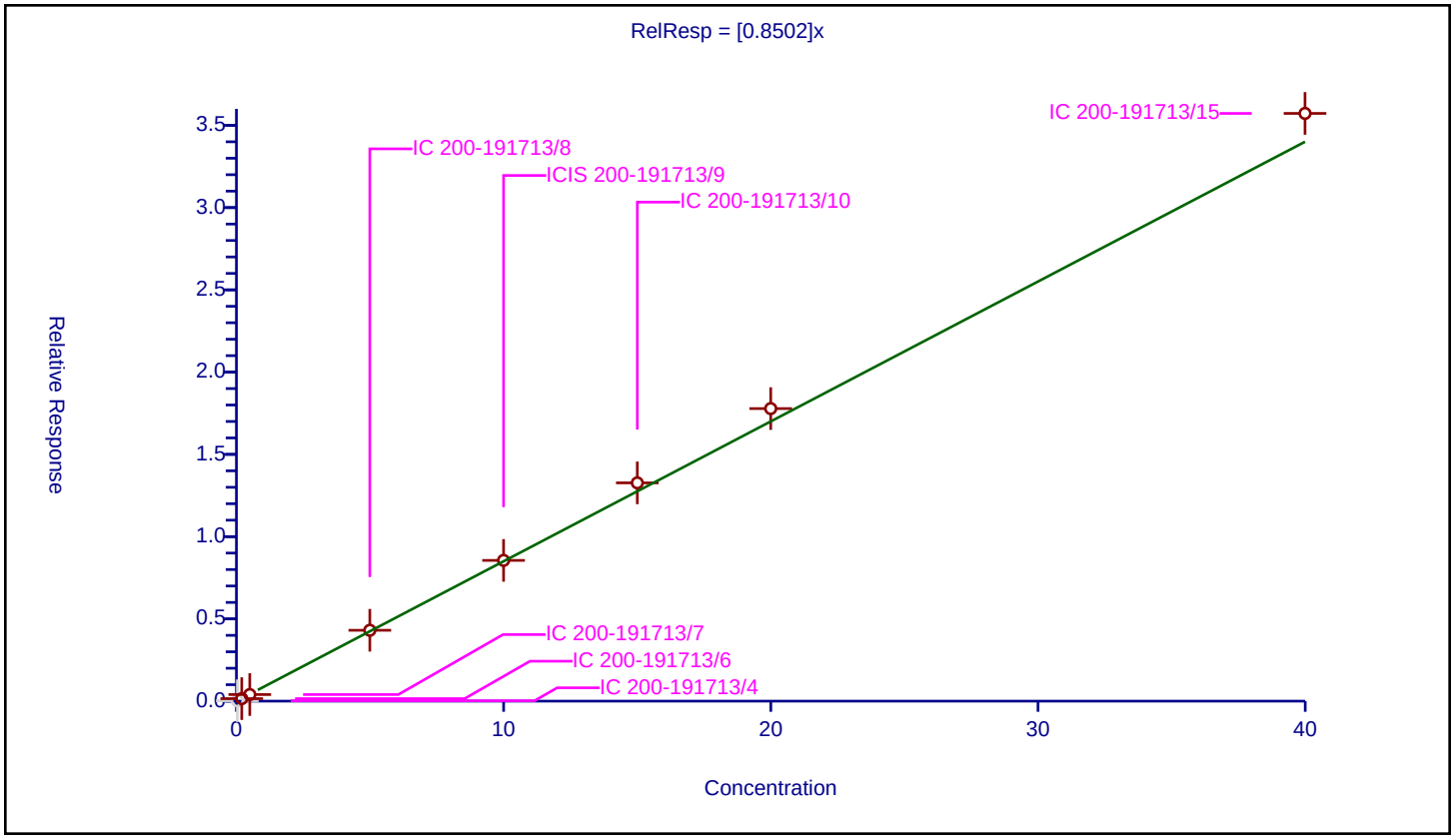
Curve Coefficients

Intercept:	0
Slope:	0.8502

Error Coefficients

Standard Error:	2090000
Relative Standard Error:	5.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.022908	10.0	1107047.0	0.653073	N
2	IC 200-191713/6	0.20044	0.153324	10.0	1058542.0	0.764939	Y
3	IC 200-191713/7	0.500453	0.400864	10.0	1028802.0	0.801004	Y
4	IC 200-191713/8	4.992563	4.307837	10.0	1061022.0	0.862851	Y
5	ICIS 200-191713/9	9.99806	8.555395	10.0	1084033.0	0.855705	Y
6	IC 200-191713/10	15.003557	13.267838	10.0	1142517.0	0.884313	Y
7	IC 200-191713/14	19.99612	17.783461	10.0	1162673.0	0.889346	Y
8	IC 200-191713/15	39.99224	35.724497	10.0	1203393.0	0.893286	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

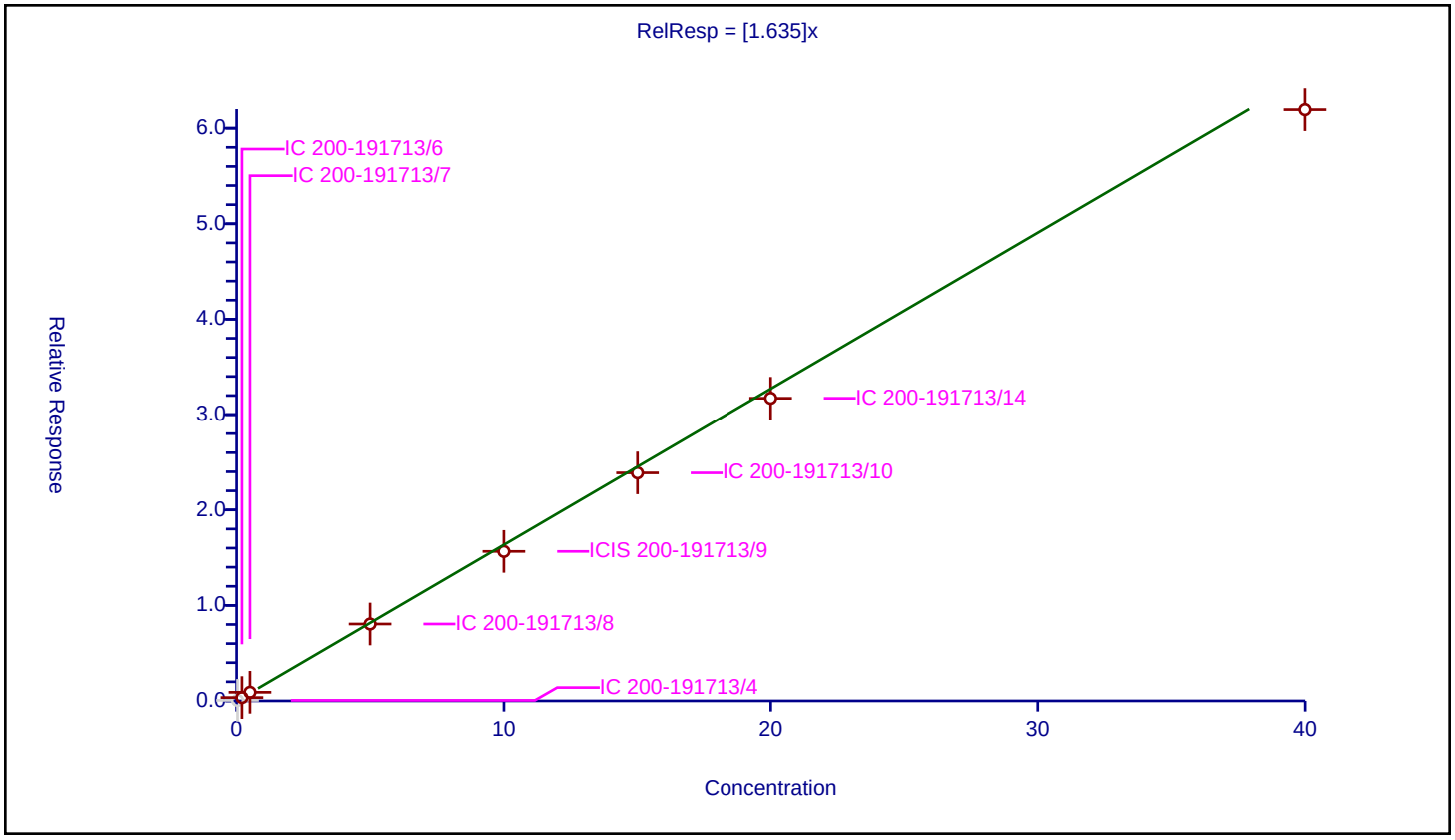
Curve Coefficients

Intercept:	0
Slope:	1.635

Error Coefficients

Standard Error:	3660000
Relative Standard Error:	5.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.055987	10.0	1107047.0	1.596114	N
2	IC 200-191713/6	0.20044	0.349367	10.0	1058542.0	1.743005	Y
3	IC 200-191713/7	0.500453	0.900601	10.0	1028802.0	1.799573	Y
4	IC 200-191713/8	4.992563	8.051256	10.0	1061022.0	1.61265	Y
5	ICIS 200-191713/9	9.99806	15.653832	10.0	1084033.0	1.565687	Y
6	IC 200-191713/10	15.003557	23.88564	10.0	1142517.0	1.591999	Y
7	IC 200-191713/14	19.99612	31.715091	10.0	1162673.0	1.586062	Y
8	IC 200-191713/15	39.99224	61.940696	10.0	1203393.0	1.548818	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

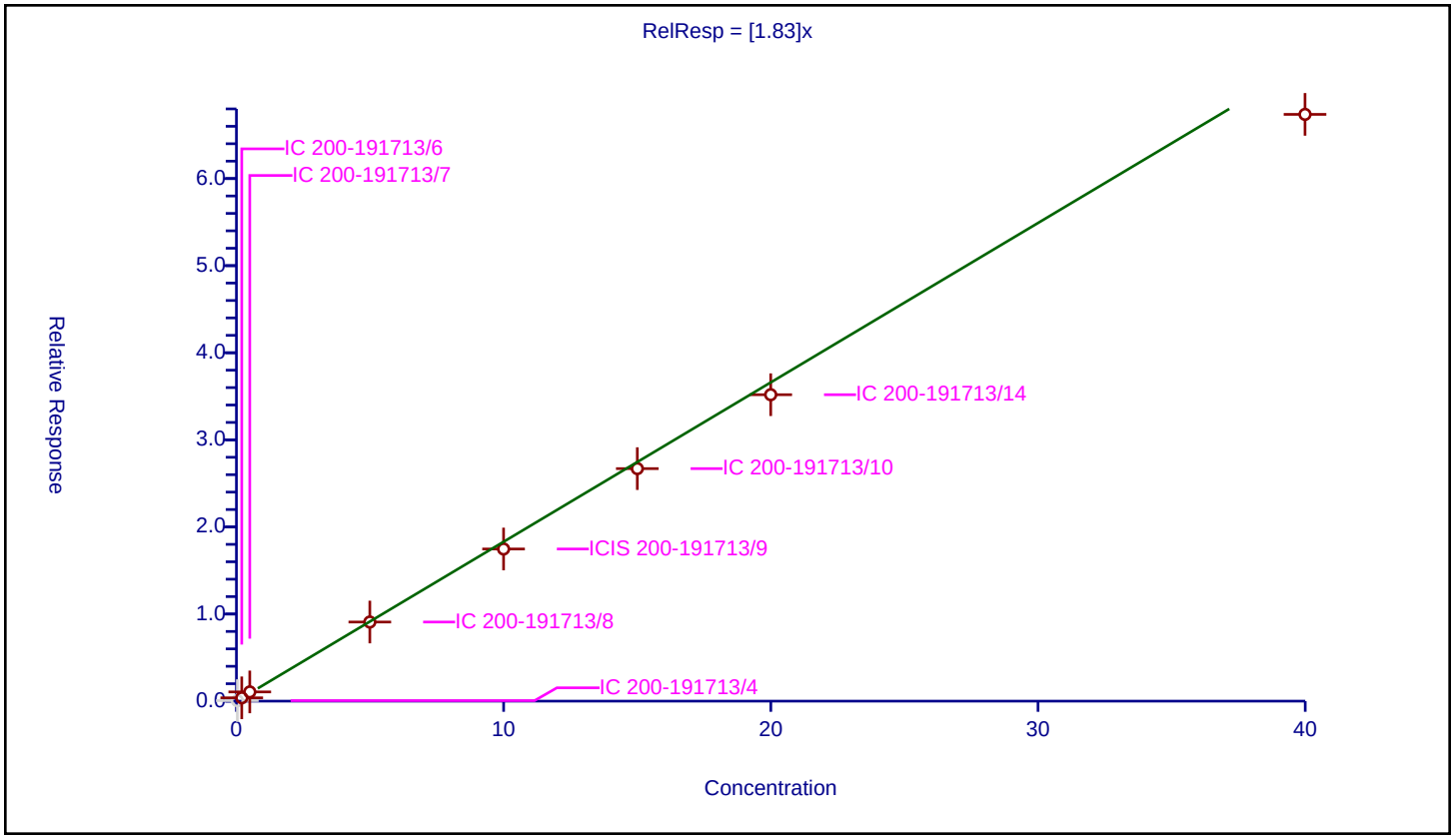
Curve Coefficients

Intercept:	0
Slope:	1.83

Error Coefficients

Standard Error:	4010000
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.059338	10.0	1107047.0	1.691654	N
2	IC 200-191713/6	0.20044	0.381147	10.0	1058542.0	1.901554	Y
3	IC 200-191713/7	0.500453	1.059912	10.0	1028802.0	2.117908	Y
4	IC 200-191713/8	4.992563	9.085193	10.0	1061022.0	1.819745	Y
5	ICIS 200-191713/9	9.99806	17.469367	10.0	1084033.0	1.747276	Y
6	IC 200-191713/10	15.003557	26.696688	10.0	1142517.0	1.779357	Y
7	IC 200-191713/14	19.99612	35.184682	10.0	1162673.0	1.759575	Y
8	IC 200-191713/15	39.99224	67.369762	10.0	1203393.0	1.684571	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

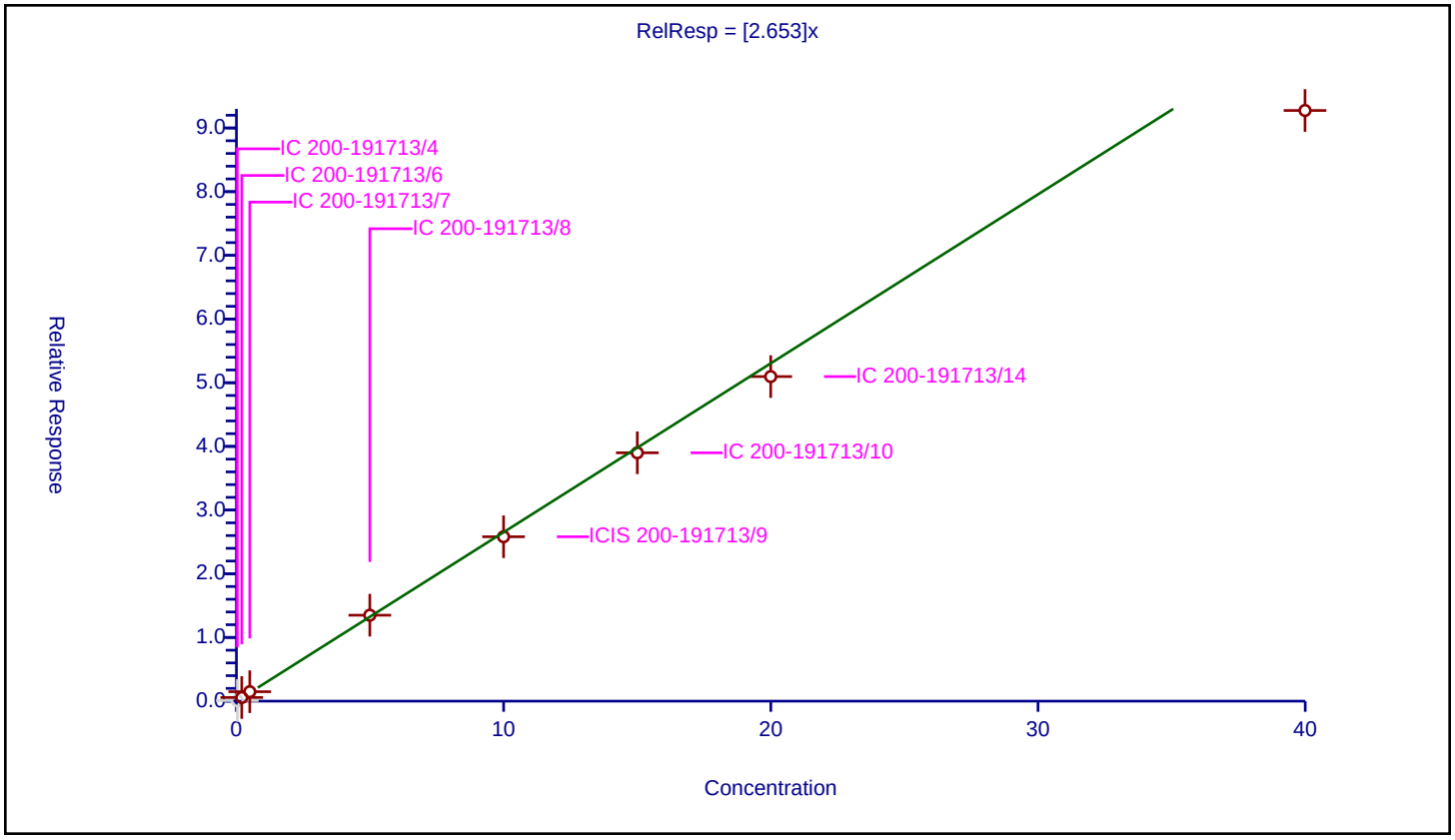
Curve Coefficients

Intercept:	0
Slope:	2.653

Error Coefficients

Standard Error:	5620000
Relative Standard Error:	8.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.093799	10.0	1107047.0	2.674095	N
2	IC 200-191713/6	0.20044	0.571871	10.0	1058542.0	2.853085	Y
3	IC 200-191713/7	0.500453	1.482394	10.0	1028802.0	2.962107	Y
4	IC 200-191713/8	4.992563	13.495526	10.0	1061022.0	2.703126	Y
5	ICIS 200-191713/9	9.99806	25.816133	10.0	1084033.0	2.582114	Y
6	IC 200-191713/10	15.003557	38.999385	10.0	1142517.0	2.599343	Y
7	IC 200-191713/14	19.99612	50.967624	10.0	1162673.0	2.548876	Y
8	IC 200-191713/15	39.99224	92.750041	10.0	1203393.0	2.319201	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

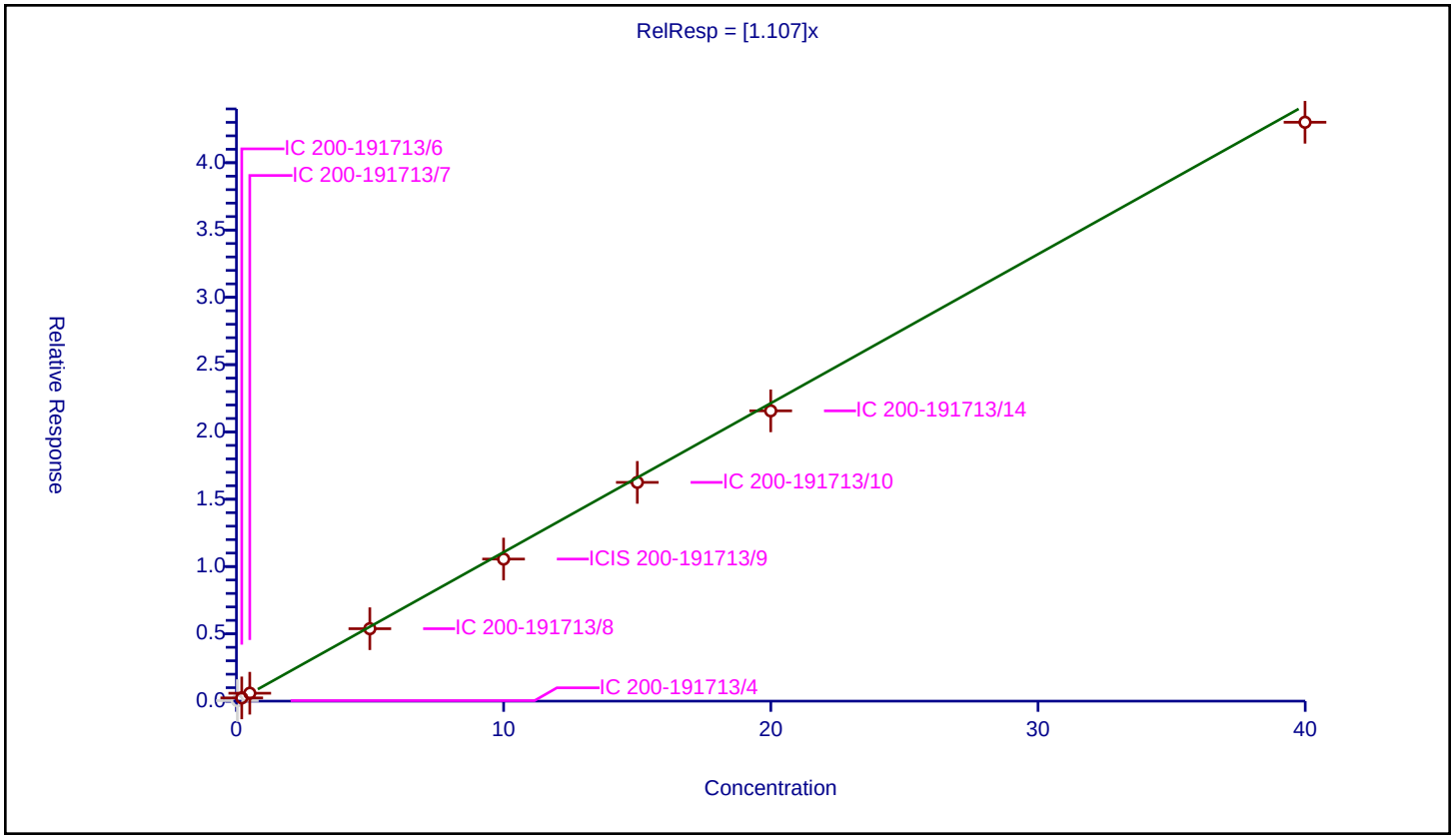
Curve Coefficients

Intercept:	0
Slope:	1.107

Error Coefficients

Standard Error:	2520000
Relative Standard Error:	5.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.037939	10.0	1107047.0	1.081587	N
2	IC 200-191713/6	0.20044	0.240453	10.0	1058542.0	1.19963	Y
3	IC 200-191713/7	0.500453	0.589083	10.0	1028802.0	1.177101	Y
4	IC 200-191713/8	4.992563	5.380718	10.0	1061022.0	1.077747	Y
5	ICIS 200-191713/9	9.99806	10.554992	10.0	1084033.0	1.055704	Y
6	IC 200-191713/10	15.003557	16.252677	10.0	1142517.0	1.083255	Y
7	IC 200-191713/14	19.99612	21.566545	10.0	1162673.0	1.078537	Y
8	IC 200-191713/15	39.99224	43.00728	10.0	1203393.0	1.075391	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

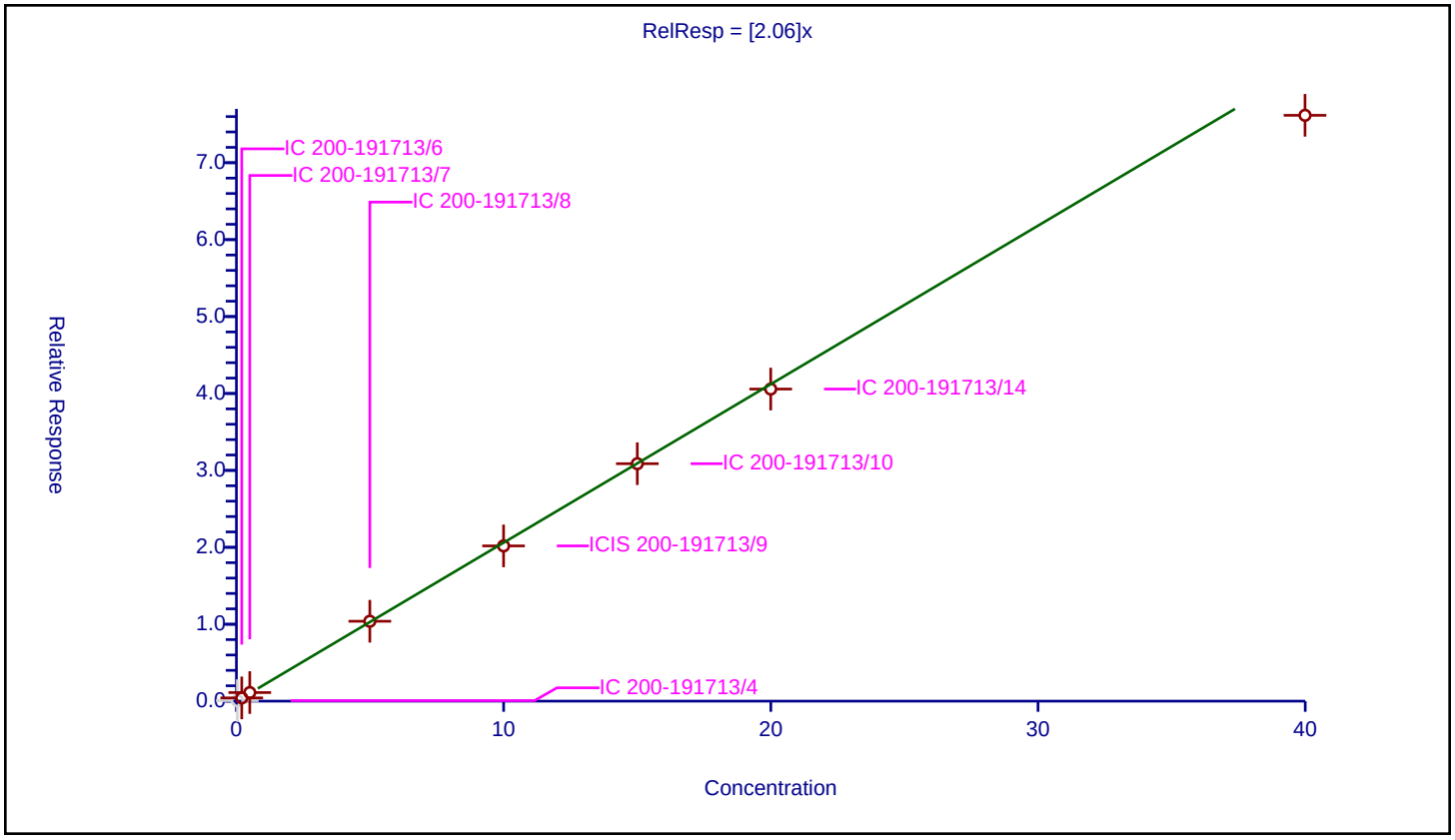
Curve Coefficients

Intercept:	0
Slope:	2.06

Error Coefficients

Standard Error:	4560000
Relative Standard Error:	4.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.067865	10.0	1107047.0	1.934753	N
2	IC 200-191713/6	0.20044	0.421646	10.0	1058542.0	2.103606	Y
3	IC 200-191713/7	0.500453	1.115385	10.0	1028802.0	2.228752	Y
4	IC 200-191713/8	4.992563	10.388229	10.0	1061022.0	2.080741	Y
5	ICIS 200-191713/9	9.99806	20.182264	10.0	1084033.0	2.018618	Y
6	IC 200-191713/10	15.003557	30.871751	10.0	1142517.0	2.057629	Y
7	IC 200-191713/14	19.99612	40.574392	10.0	1162673.0	2.029113	Y
8	IC 200-191713/15	39.99224	76.163838	10.0	1203393.0	1.904465	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

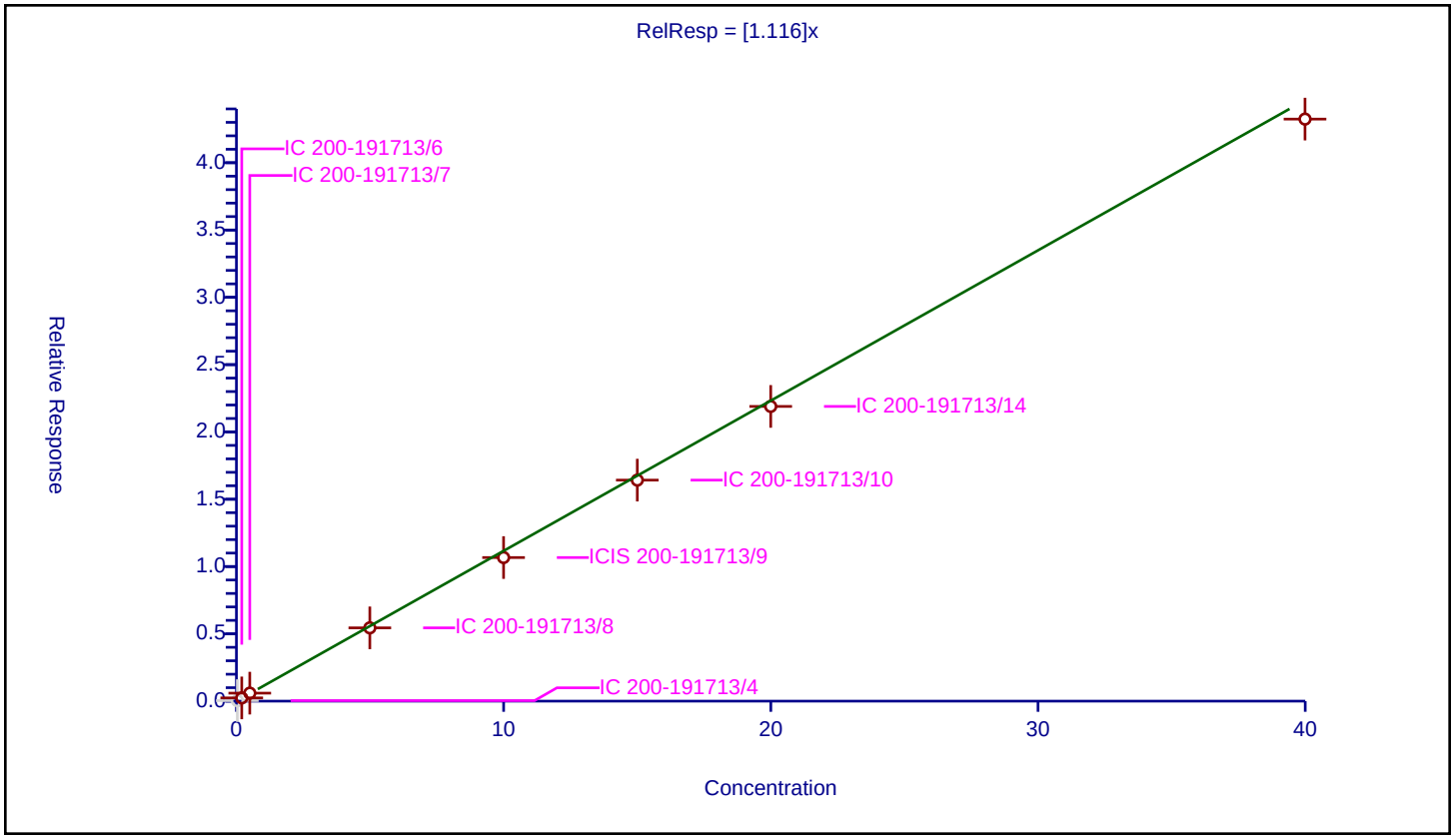
Curve Coefficients

Intercept:	0
Slope:	1.116

Error Coefficients

Standard Error:	2540000
Relative Standard Error:	4.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.037722	10.0	1107047.0	1.075407	N
2	IC 200-191713/6	0.20044	0.239981	10.0	1058542.0	1.197273	Y
3	IC 200-191713/7	0.500453	0.595003	10.0	1028802.0	1.188929	Y
4	IC 200-191713/8	4.992563	5.445071	10.0	1061022.0	1.090636	Y
5	ICIS 200-191713/9	9.99806	10.668817	10.0	1084033.0	1.067089	Y
6	IC 200-191713/10	15.003557	16.420526	10.0	1142517.0	1.094442	Y
7	IC 200-191713/14	19.99612	21.895855	10.0	1162673.0	1.095005	Y
8	IC 200-191713/15	39.99224	43.242715	10.0	1203393.0	1.081278	Y



Calibration / Benzyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

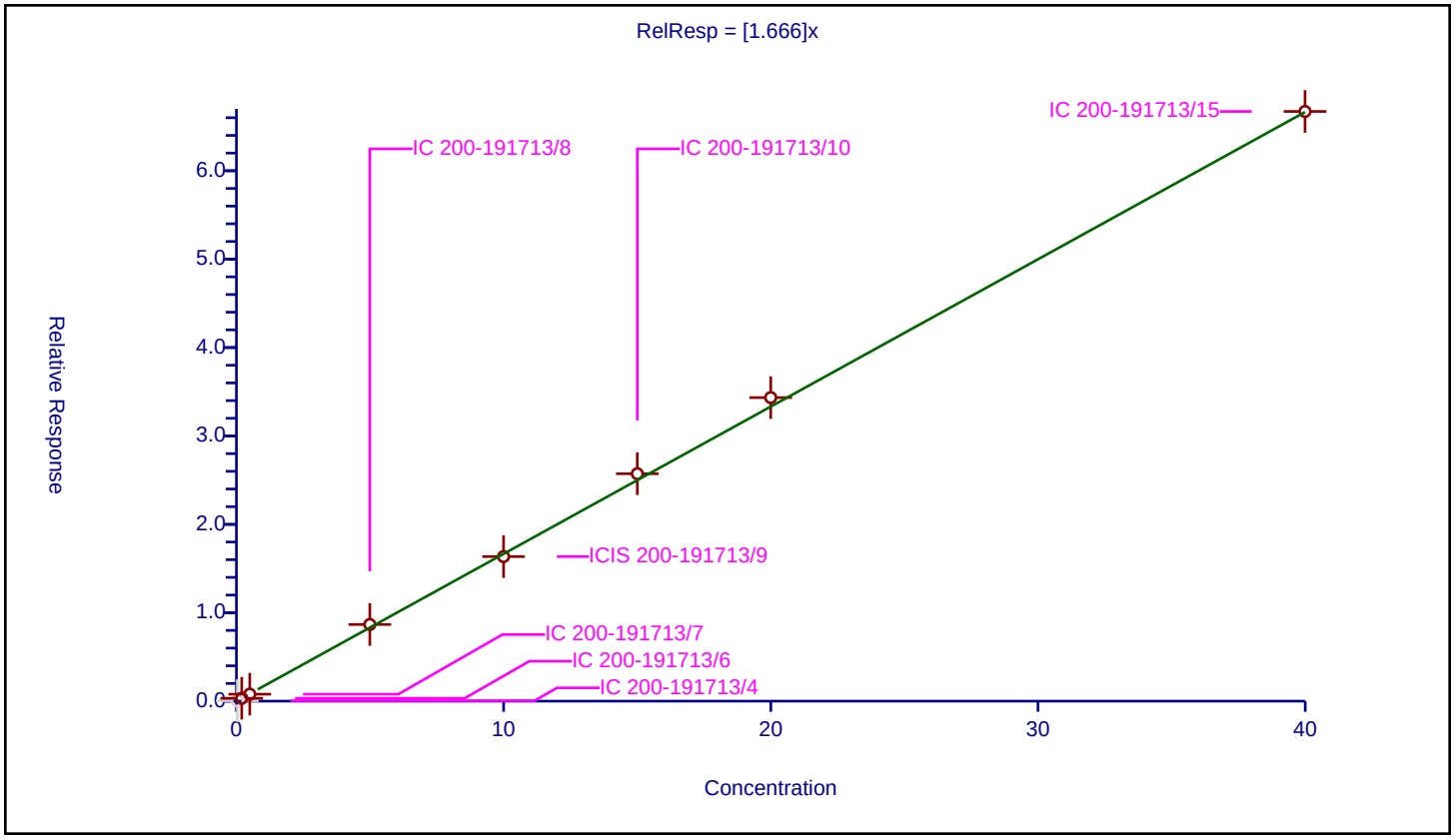
Curve Coefficients

Intercept:	0
Slope:	1.666

Error Coefficients

Standard Error:	3940000
Relative Standard Error:	3.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.048444	10.0	1107047.0	1.381084	N
2	IC 200-191713/6	0.20044	0.324201	10.0	1058542.0	1.617448	Y
3	IC 200-191713/7	0.500453	0.787178	10.0	1028802.0	1.572932	Y
4	IC 200-191713/8	4.992563	8.674504	10.0	1061022.0	1.737485	Y
5	ICIS 200-191713/9	9.99806	16.356384	10.0	1084033.0	1.635956	Y
6	IC 200-191713/10	15.003557	25.729376	10.0	1142517.0	1.714885	Y
7	IC 200-191713/14	19.99612	34.338683	10.0	1162673.0	1.717267	Y
8	IC 200-191713/15	39.99224	66.70785	10.0	1203393.0	1.66802	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

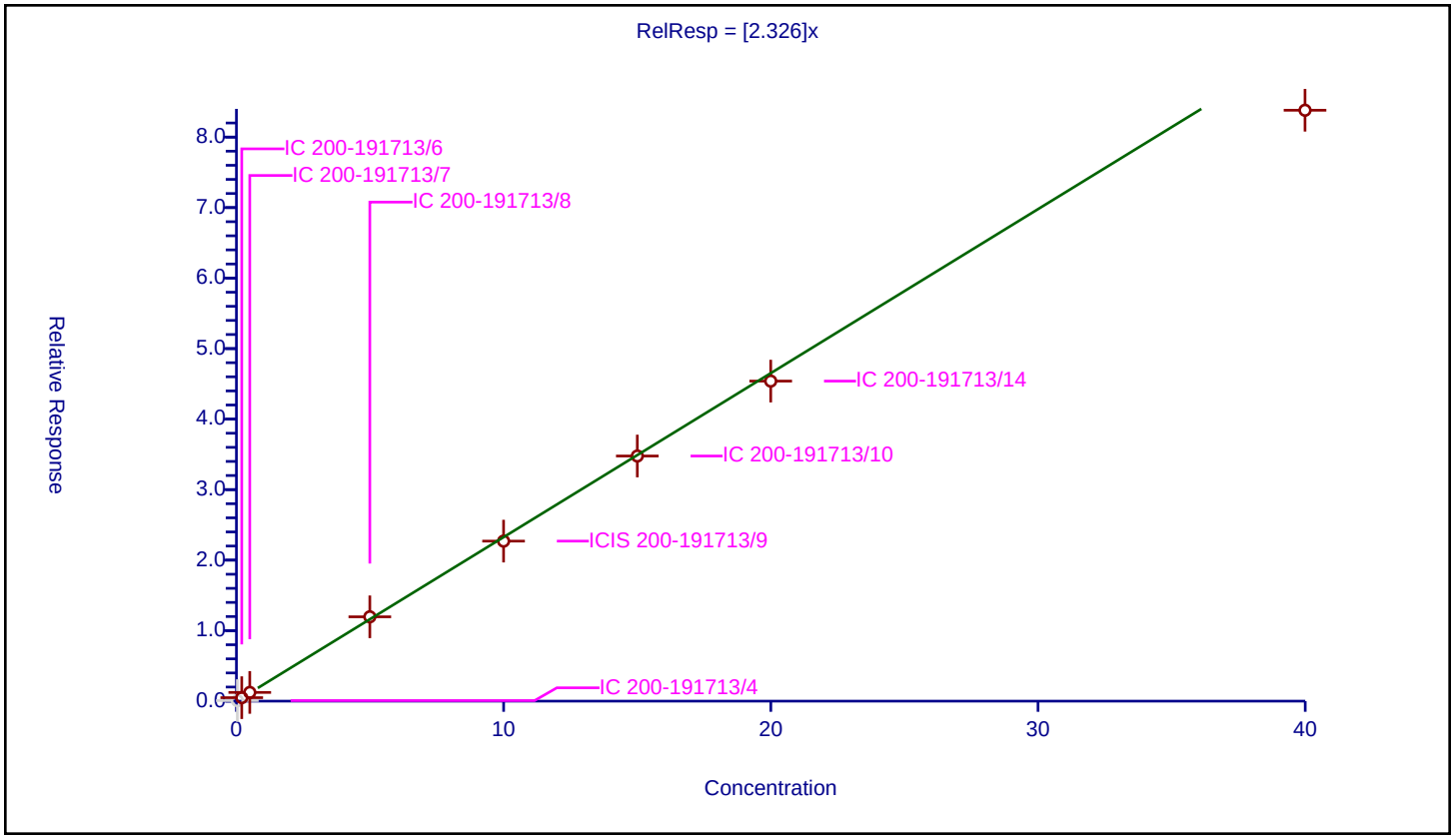
Curve Coefficients

Intercept:	0
Slope:	2.326

Error Coefficients

Standard Error:	5050000
Relative Standard Error:	5.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.078325	10.0	1107047.0	2.232962	N
2	IC 200-191713/6	0.20044	0.4935	10.0	1058542.0	2.462085	Y
3	IC 200-191713/7	0.500453	1.236759	10.0	1028802.0	2.471281	Y
4	IC 200-191713/8	4.992563	11.962353	10.0	1061022.0	2.396035	Y
5	ICIS 200-191713/9	9.99806	22.695942	10.0	1084033.0	2.270035	Y
6	IC 200-191713/10	15.003557	34.766003	10.0	1142517.0	2.317184	Y
7	IC 200-191713/14	19.99612	45.391335	10.0	1162673.0	2.270007	Y
8	IC 200-191713/15	39.99224	83.806736	10.0	1203393.0	2.095575	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

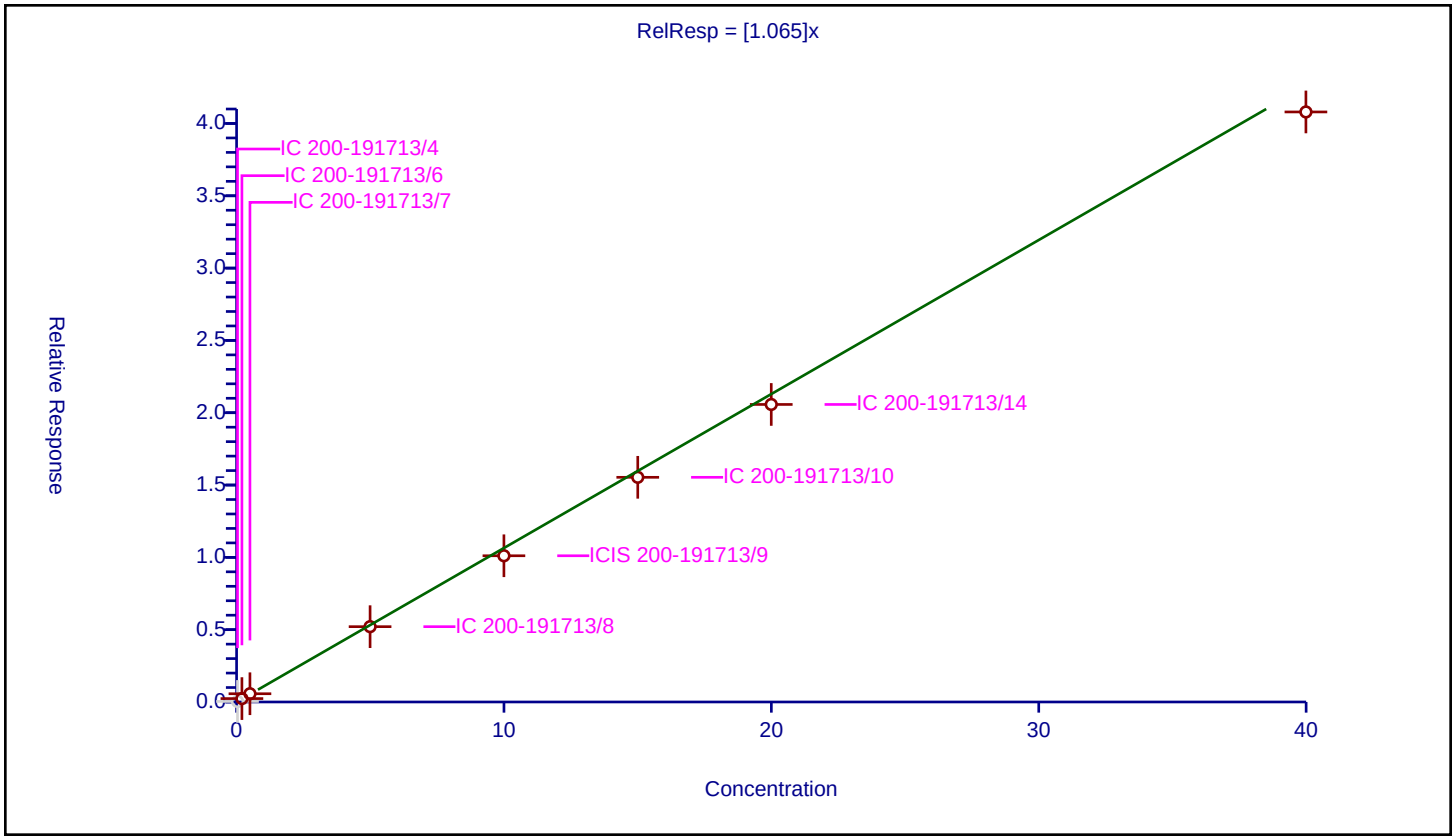
Curve Coefficients

Intercept:	0
Slope:	1.065

Error Coefficients

Standard Error:	2400000
Relative Standard Error:	6.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.038318	10.0	1107047.0	1.092403	N
2	IC 200-191713/6	0.20044	0.235144	10.0	1058542.0	1.173142	Y
3	IC 200-191713/7	0.500453	0.571179	10.0	1028802.0	1.141325	Y
4	IC 200-191713/8	4.992563	5.207404	10.0	1061022.0	1.043032	Y
5	ICIS 200-191713/9	9.99806	10.10984	10.0	1084033.0	1.01118	Y
6	IC 200-191713/10	15.003557	15.535445	10.0	1142517.0	1.035451	Y
7	IC 200-191713/14	19.99612	20.573119	10.0	1162673.0	1.028856	Y
8	IC 200-191713/15	39.99224	40.797603	10.0	1203393.0	1.020138	Y



Calibration / Undecane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

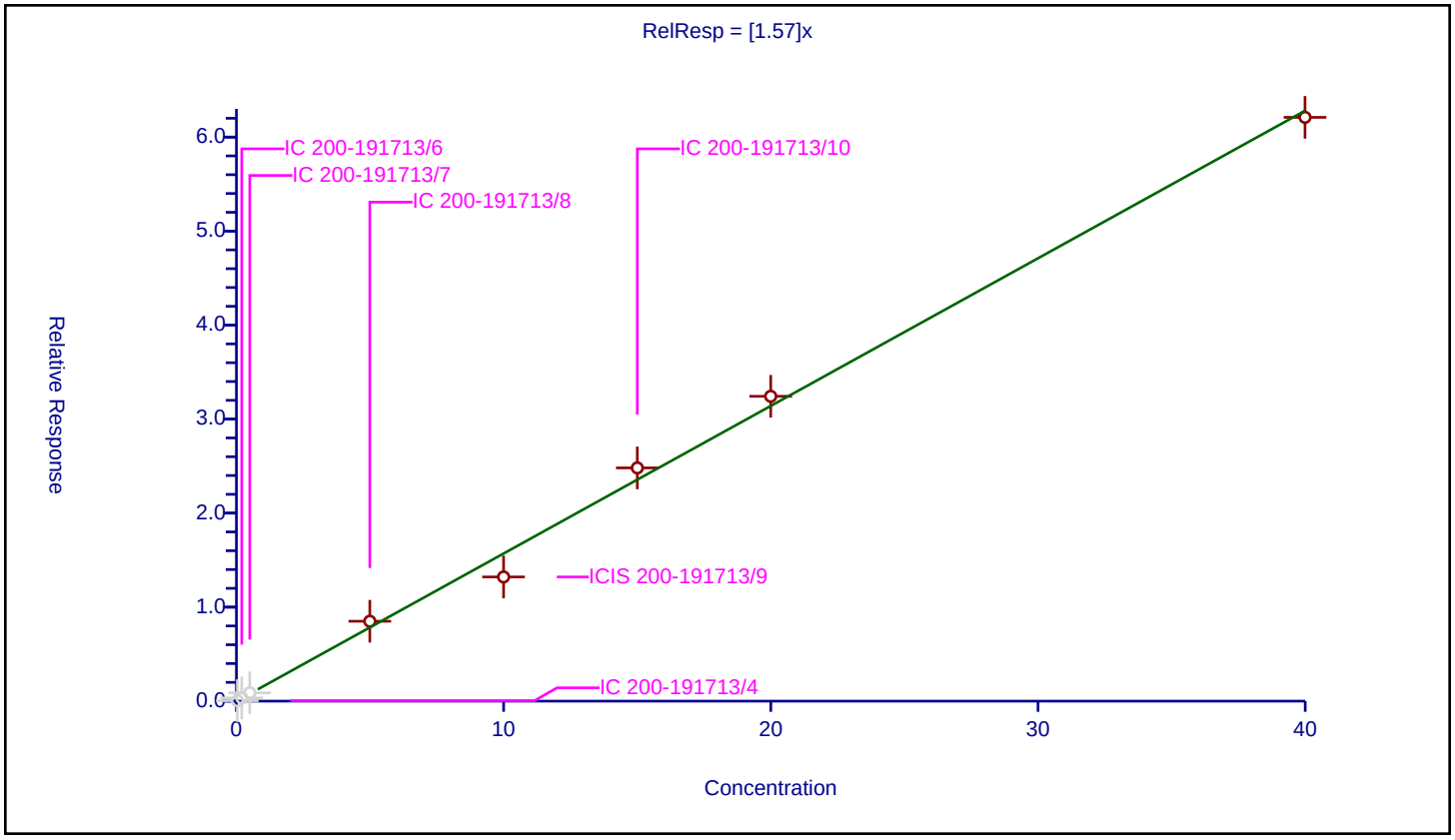
Curve Coefficients

Intercept:	0
Slope:	1.57

Error Coefficients

Standard Error:	4500000
Relative Standard Error:	9.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.048851	10.0	1107047.0	1.392672	N
2	IC 200-191713/6	0.20044	0.344587	10.0	1058542.0	1.719157	N
3	IC 200-191713/7	0.500453	0.881384	10.0	1028802.0	1.761175	N
4	IC 200-191713/8	4.992563	8.49808	10.0	1061022.0	1.702148	Y
5	ICIS 200-191713/9	9.99806	13.21088	10.0	1084033.0	1.321344	Y
6	IC 200-191713/10	15.003557	24.810467	10.0	1142517.0	1.653639	Y
7	IC 200-191713/14	19.99612	32.427424	10.0	1162673.0	1.621686	Y
8	IC 200-191713/15	39.99224	62.099447	10.0	1203393.0	1.552787	Y



Calibration / Dodecane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

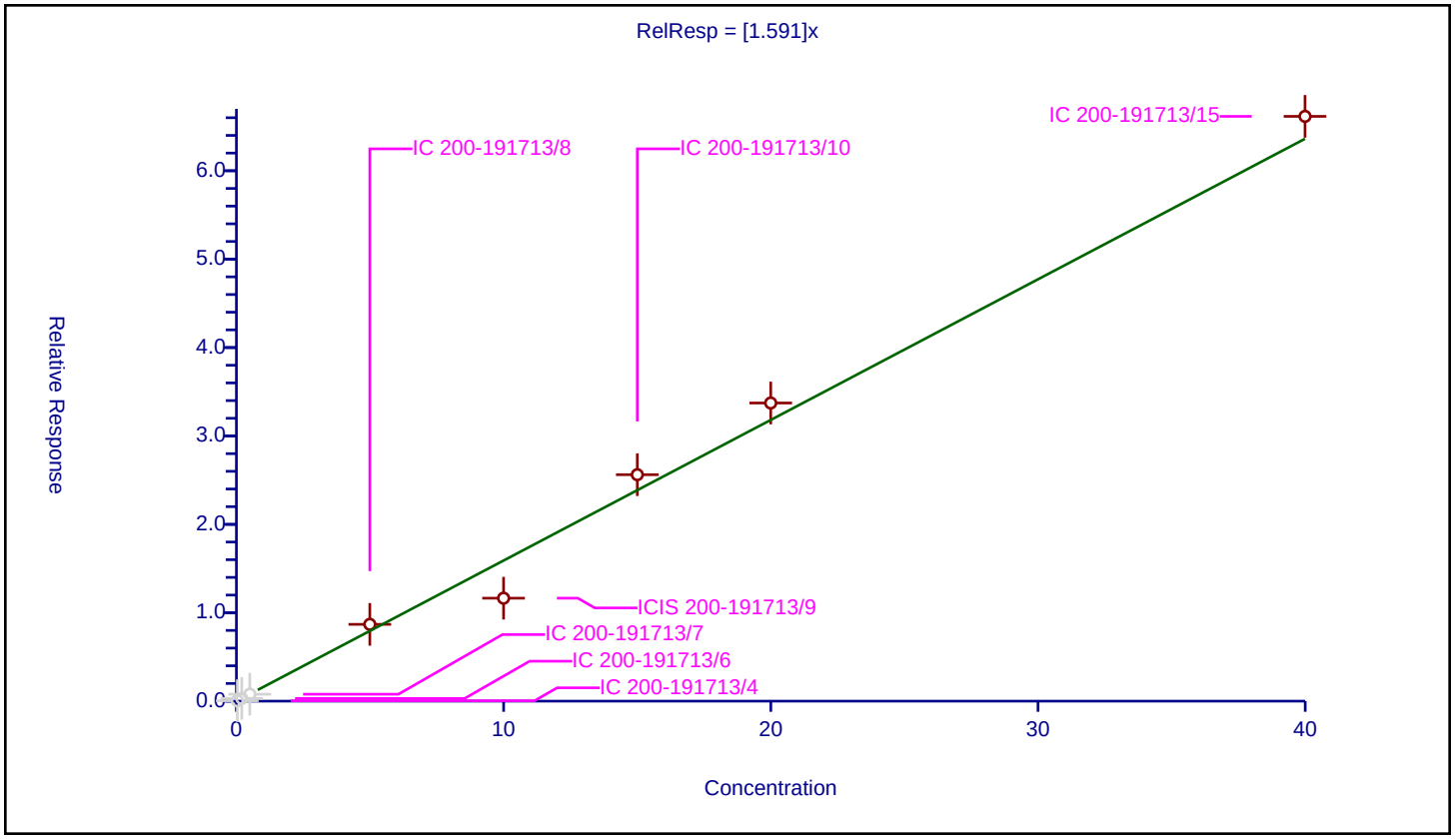
Curve Coefficients

Intercept:	0
Slope:	1.591

Error Coefficients

Standard Error:	4740000
Relative Standard Error:	15.1
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.946

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.043982	10.0	1107047.0	1.253869	N
2	IC 200-191713/6	0.20044	0.306884	10.0	1058542.0	1.531056	N
3	IC 200-191713/7	0.500453	0.782716	10.0	1028802.0	1.564017	N
4	IC 200-191713/8	4.992563	8.68884	10.0	1061022.0	1.740357	Y
5	ICIS 200-191713/9	9.99806	11.647173	10.0	1084033.0	1.164943	Y
6	IC 200-191713/10	15.003557	25.619382	10.0	1142517.0	1.707554	Y
7	IC 200-191713/14	19.99612	33.727927	10.0	1162673.0	1.686724	Y
8	IC 200-191713/15	39.99224	66.151964	10.0	1203393.0	1.65412	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

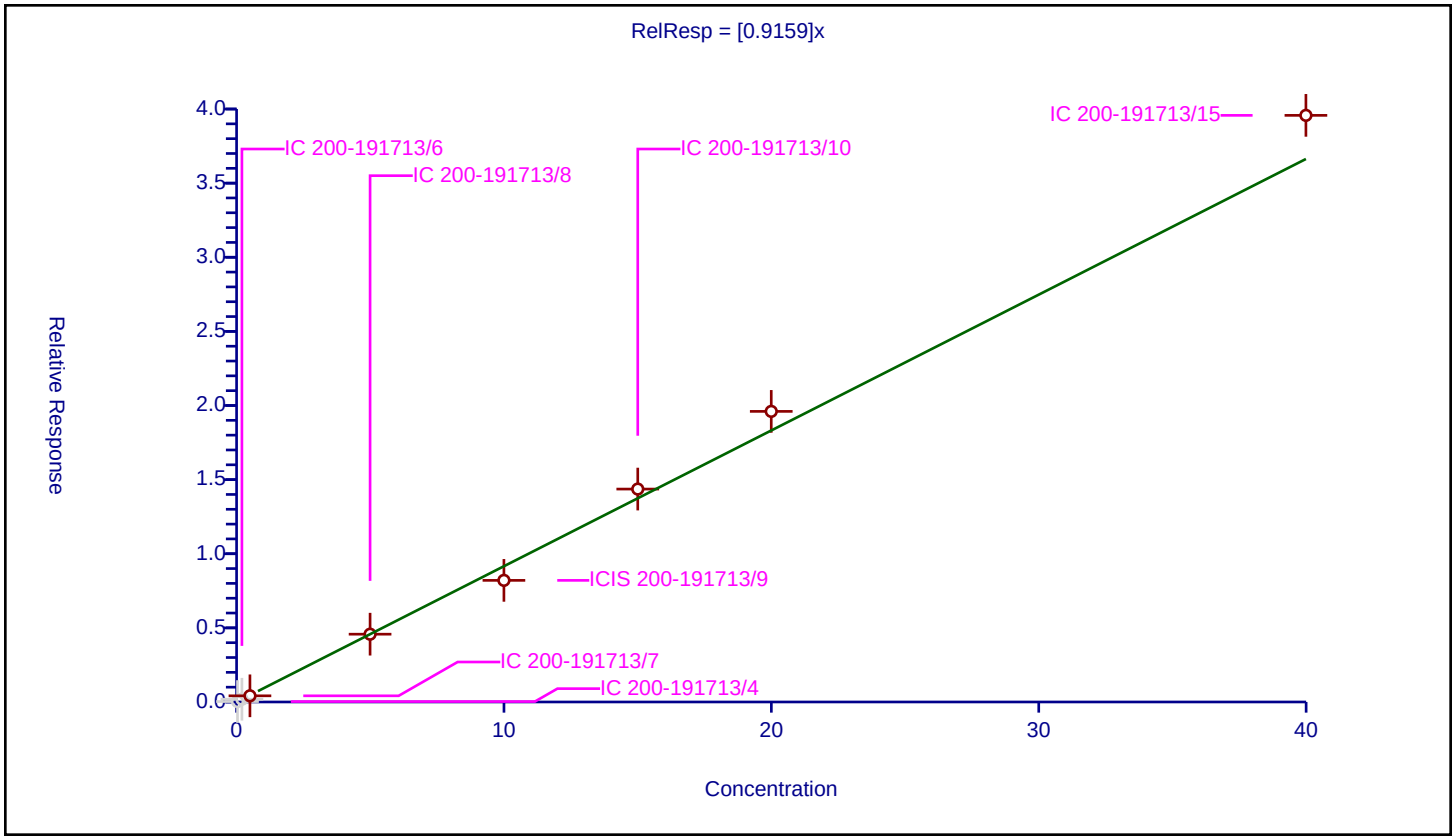
Curve Coefficients

Intercept:	0
Slope:	0.9159

Error Coefficients

Standard Error:	2510000
Relative Standard Error:	8.1
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.029683	10.0	1107047.0	0.846213	N
2	IC 200-191713/6	0.20044	0.185784	10.0	1058542.0	0.926882	N
3	IC 200-191713/7	0.500453	0.416261	10.0	1028802.0	0.831769	Y
4	IC 200-191713/8	4.992563	4.573496	10.0	1061022.0	0.916062	Y
5	ICIS 200-191713/9	9.99806	8.2038	10.0	1084033.0	0.820539	Y
6	IC 200-191713/10	15.003557	14.363454	10.0	1142517.0	0.957337	Y
7	IC 200-191713/14	19.99612	19.60221	10.0	1162673.0	0.980301	Y
8	IC 200-191713/15	39.99224	39.571487	10.0	1203393.0	0.989479	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

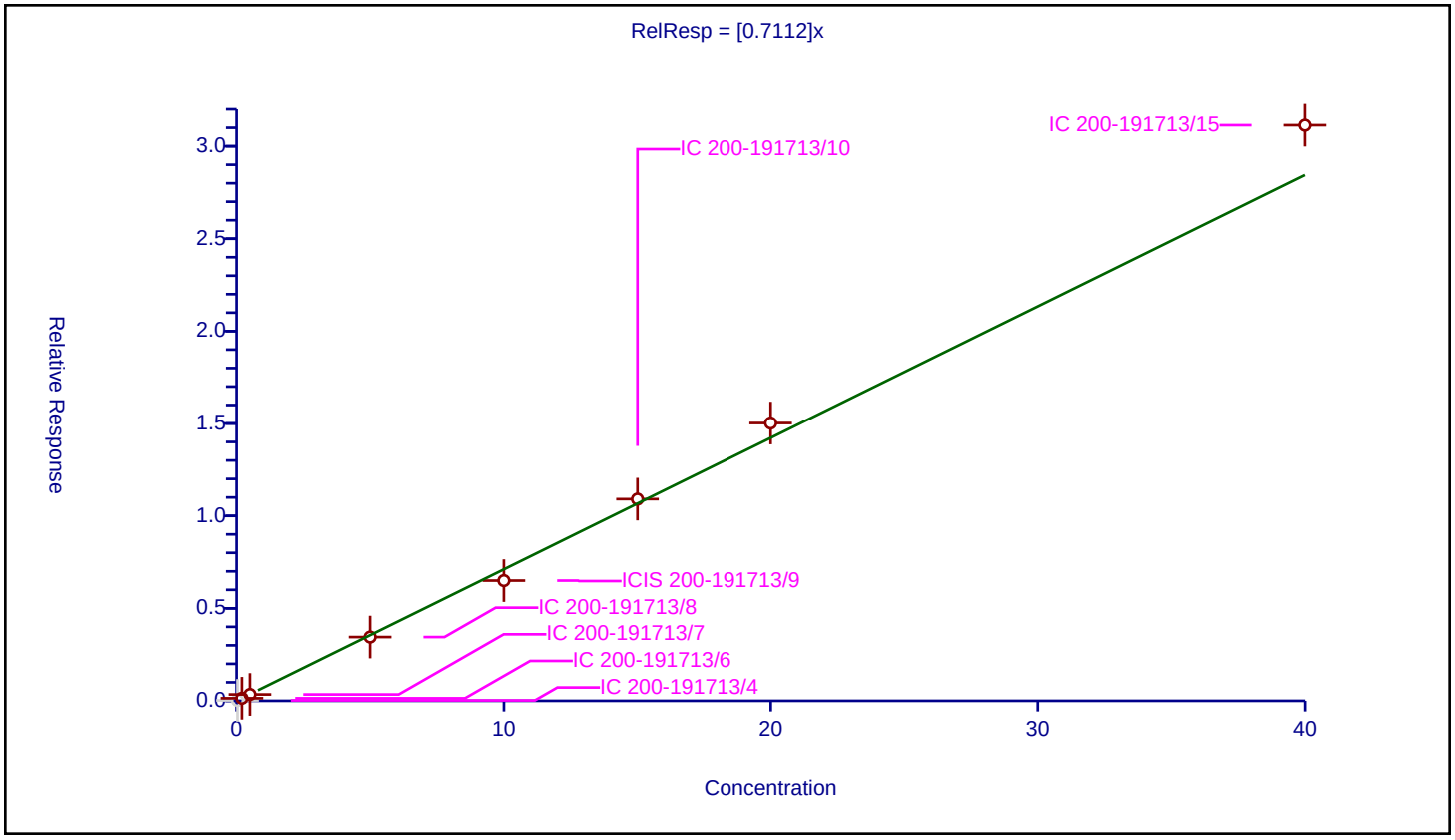
Curve Coefficients

Intercept:	0
Slope:	0.7112

Error Coefficients

Standard Error:	1790000
Relative Standard Error:	6.1
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.022411	10.0	1107047.0	0.638909	N
2	IC 200-191713/6	0.20044	0.13921	10.0	1058542.0	0.694525	Y
3	IC 200-191713/7	0.500453	0.343399	10.0	1028802.0	0.686178	Y
4	IC 200-191713/8	4.992563	3.448863	10.0	1061022.0	0.6908	Y
5	ICIS 200-191713/9	9.99806	6.500559	10.0	1084033.0	0.650182	Y
6	IC 200-191713/10	15.003557	10.908293	10.0	1142517.0	0.727047	Y
7	IC 200-191713/14	19.99612	15.024887	10.0	1162673.0	0.75139	Y
8	IC 200-191713/15	39.99224	31.138772	10.0	1203393.0	0.77862	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

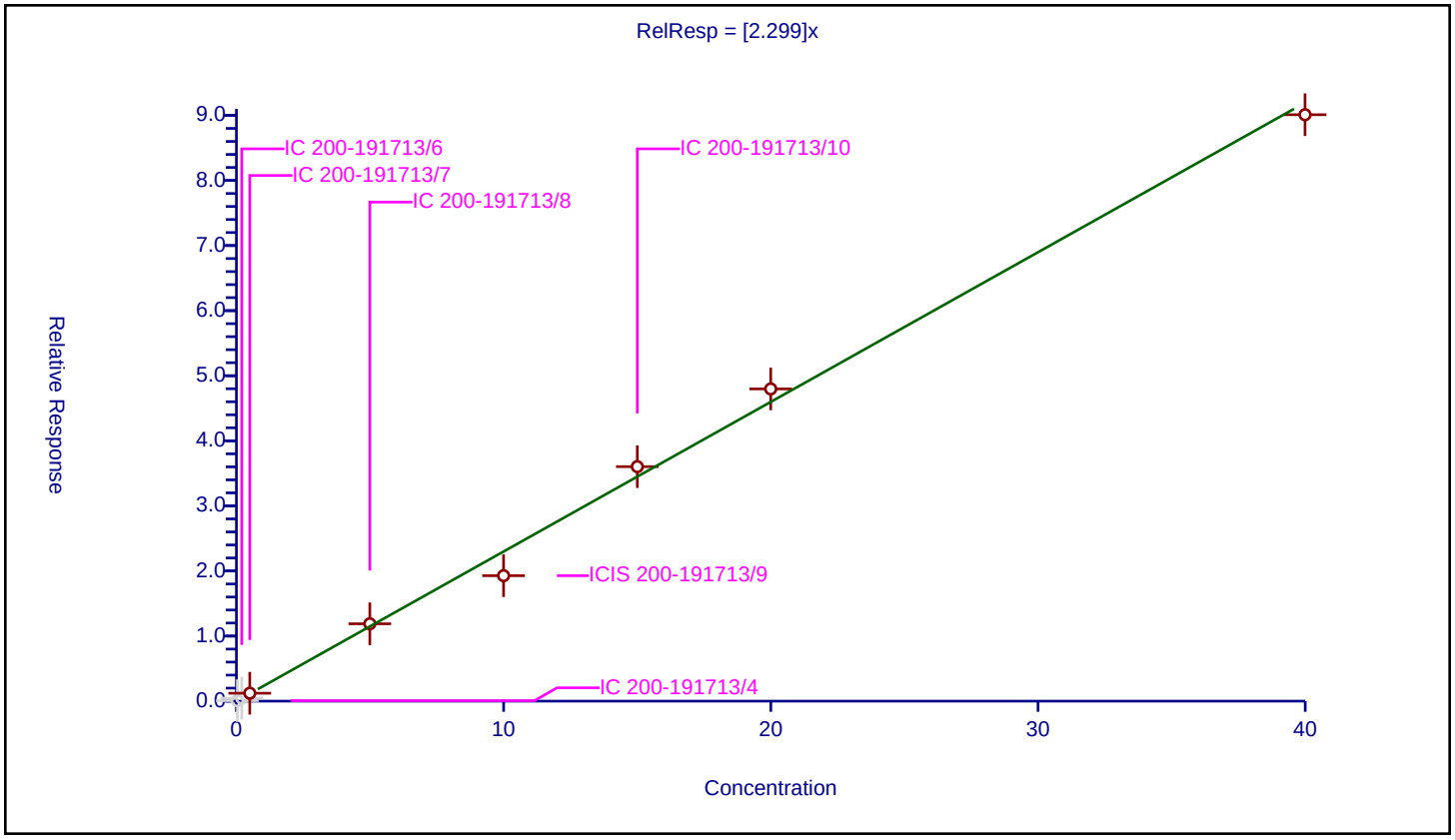
Curve Coefficients

Intercept:	0
Slope:	2.299

Error Coefficients

Standard Error:	5860000
Relative Standard Error:	8.4
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.072608	10.0	1107047.0	2.069952	N
2	IC 200-191713/6	0.20044	0.461021	10.0	1058542.0	2.300048	N
3	IC 200-191713/7	0.500453	1.217416	10.0	1028802.0	2.43263	Y
4	IC 200-191713/8	4.992563	11.887341	10.0	1061022.0	2.38101	Y
5	ICIS 200-191713/9	9.99806	19.275446	10.0	1084033.0	1.927919	Y
6	IC 200-191713/10	15.003557	36.029267	10.0	1142517.0	2.401382	Y
7	IC 200-191713/14	19.99612	47.972723	10.0	1162673.0	2.399102	Y
8	IC 200-191713/15	39.99224	90.102435	10.0	1203393.0	2.252998	Y



Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

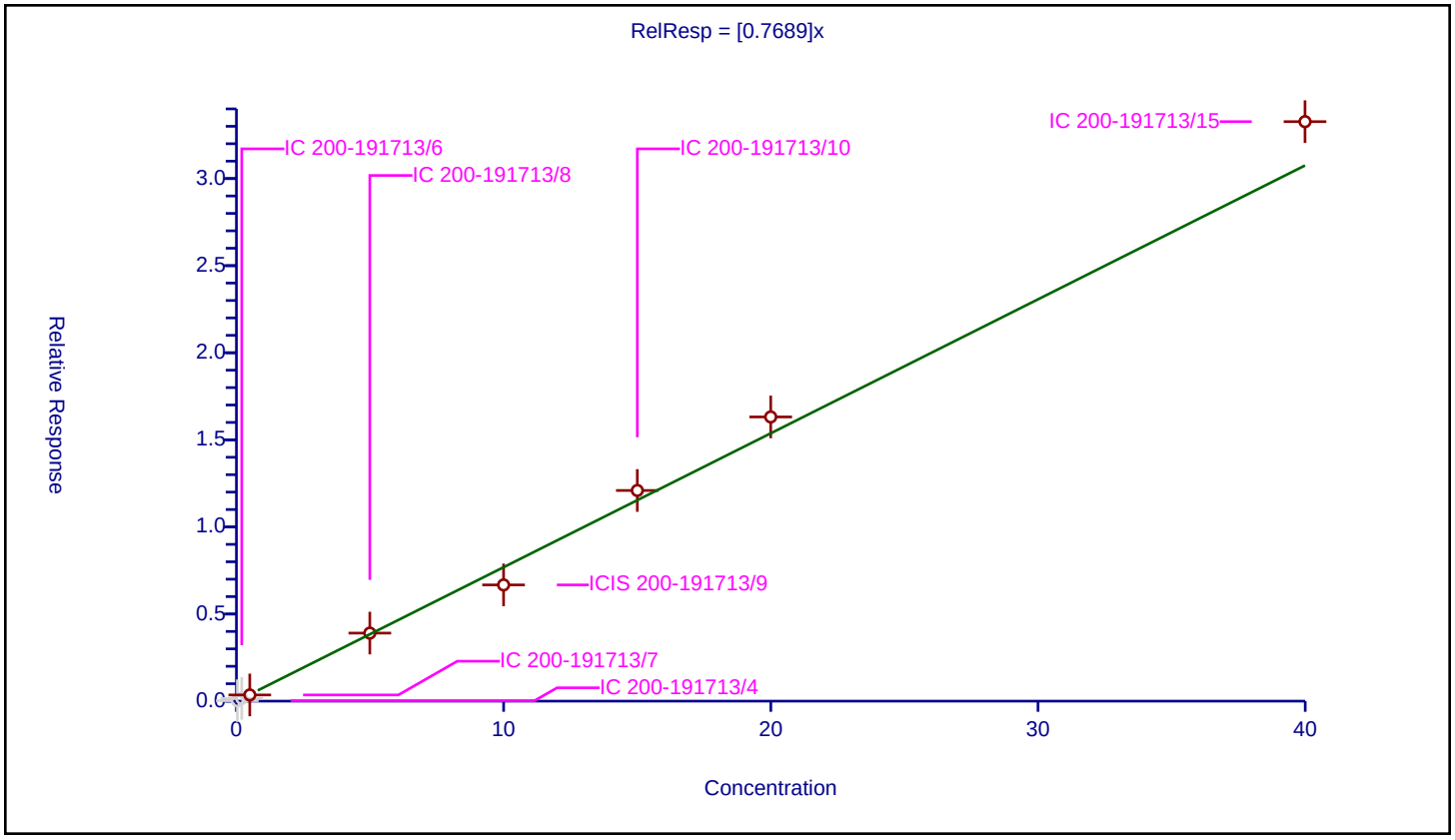
Curve Coefficients

Intercept:	0
Slope:	0.7689

Error Coefficients

Standard Error:	2110000
Relative Standard Error:	8.5
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-191713/4	0.035077	0.02532	10.0	1107047.0	0.721831	N
2	IC 200-191713/6	0.20044	0.158539	10.0	1058542.0	0.790955	N
3	IC 200-191713/7	0.500453	0.355219	10.0	1028802.0	0.709795	Y
4	IC 200-191713/8	4.992563	3.906375	10.0	1061022.0	0.782439	Y
5	ICIS 200-191713/9	9.99806	6.672288	10.0	1084033.0	0.667358	Y
6	IC 200-191713/10	15.003557	12.094358	10.0	1142517.0	0.806099	Y
7	IC 200-191713/14	19.99612	16.315421	10.0	1162673.0	0.815929	Y
8	IC 200-191713/15	39.99224	33.267386	10.0	1203393.0	0.831846	Y



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Lab Sample ID: ICV 200-191713/20 Calibration Date: 05/23/2023 06:16

Instrument ID: CHAN.i Calib Start Date: 05/22/2023 16:33

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 05/23/2023 01:58

Lab File ID: 55613_020.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.8759	0.9270		10.6	10.0	5.8	30.0
Dichlorodifluoromethane	Ave	3.193	3.416		10.7	10.0	7.0	30.0
Chlorodifluoromethane	Ave	1.984	2.071		10.4	10.0	4.4	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.534	3.705		10.5	10.0	4.9	30.0
Chloromethane	Ave	1.166	1.203		10.3	10.0	3.1	30.0
n-Butane	Ave	3.242	3.109		9.59	10.0	-4.1	30.0
Vinyl chloride	Ave	2.320	2.147		9.25	10.0	-7.4	30.0
1,3-Butadiene	Ave	1.833	1.652		9.01	10.0	-9.9	30.0
Bromomethane	Ave	1.370	1.448		10.6	10.0	5.7	30.0
Chloroethane	Ave	0.8527	0.8859		10.4	10.0	3.9	30.0
Isopentane	Ave	1.943	1.923		9.90	10.0	-1.0	30.0
Bromoethene(Vinyl Bromide)	Ave	1.416	1.510		10.7	10.0	6.7	30.0
Trichlorofluoromethane	Ave	3.912	4.131		10.6	10.0	5.6	30.0
n-Pentane	Ave	2.989	2.979		9.96	10.0	-0.4	30.0
Ethanol	Ave	0.9125	0.7708		12.4	14.7	-15.5	30.0
Ethyl ether	Ave	1.289	1.291		10.0	10.0	0.1	30.0
Acrolein	Ave	0.7505	0.7730		10.3	10.0	3.0	30.0
1,1-Dichloroethene	Ave	1.718	1.757		10.2	10.0	2.3	30.0
1,1,2-Trichlorotrifluoroethane	Ave	3.592	3.670		10.2	10.0	2.2	30.0
Acetone	Ave	2.916	3.008		10.3	10.0	3.2	30.0
Isopropyl alcohol	Ave	3.451	3.510		10.2	10.0	1.7	30.0
Carbon disulfide	Ave	5.345	5.447		10.2	10.0	1.9	30.0
Acetonitrile	Ave	1.371	1.433		10.5	10.0	4.5	30.0
3-Chloropropene	Ave	2.560	2.468		9.64	10.0	-3.6	30.0
Methylene Chloride	Ave	2.401	2.330		9.70	10.0	-3.0	30.0
tert-Butyl alcohol	Ave	3.979	4.237		10.6	10.0	6.5	30.0
Acrylonitrile	Ave	1.534	1.538		10.0	10.0	0.2	30.0
Methyl tert-butyl ether	Ave	5.644	5.711		10.1	10.0	1.2	30.0
trans-1,2-Dichloroethene	Ave	3.184	3.064		9.62	10.0	-3.8	30.0
n-Hexane	Ave	3.295	3.202		9.72	10.0	-2.8	30.0
1,1-Dichloroethane	Ave	3.849	3.689		9.58	10.0	-4.2	30.0
Vinyl acetate	Ave	5.190	5.307		10.2	10.0	2.2	30.0
Methyl Ethyl Ketone (2-Butanone)	Ave	1.045	1.045		10.0	10.0	0.0	30.0
cis-1,2-Dichloroethene	Ave	1.989	2.005		10.1	10.0	0.8	30.0
Ethyl acetate	Ave	0.1661	0.1769		10.6	10.0	6.5	30.0
Tetrahydrofuran	Ave	0.4635	0.4691		10.1	10.0	1.2	30.0
Chloroform	Ave	4.183	4.174		9.98	10.0	-0.2	30.0
1,1,1-Trichloroethane	Ave	0.7875	0.7997		10.2	10.0	1.5	30.0
Cyclohexane	Ave	0.5183	0.5198		10.0	10.0	0.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Lab Sample ID: ICV 200-191713/20 Calibration Date: 05/23/2023 06:16

Instrument ID: CHAN.i Calib Start Date: 05/22/2023 16:33

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 05/23/2023 01:58

Lab File ID: 55613_020.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon tetrachloride	Ave	0.7475	0.7714		10.3	10.0	3.2	30.0
Benzene	Ave	1.261	1.244		9.87	10.0	-1.3	30.0
1,2-Dichloroethane	Ave	0.5841	0.5768		9.87	10.0	-1.2	30.0
2,2,4-Trimethylpentane	Ave	2.128	2.084		9.79	10.0	-2.1	30.0
n-Heptane	Ave	0.8158	0.7759		9.51	10.0	-4.9	30.0
n-Butanol	Ave	0.3036	0.3186		10.5	10.0	5.0	30.0
Trichloroethene	Ave	0.5365	0.5435		10.1	10.0	1.3	30.0
1,2-Dichloropropane	Ave	0.5118	0.4998		9.76	10.0	-2.3	30.0
Methyl methacrylate	Ave	0.4509	0.4636		10.3	10.0	2.8	30.0
1,4-Dioxane	Ave	0.2475	0.2528		10.2	10.0	2.1	30.0
Dibromomethane	Ave	0.3623	0.3759		10.4	10.0	3.7	30.0
Bromodichloromethane	Ave	0.9048	0.9228		10.2	10.0	2.0	30.0
cis-1,3-Dichloropropene	Ave	0.7915	0.8129		10.3	10.0	2.7	30.0
4-Methyl-2-pentanone (Methyl isobutyl ketone)	Ave	1.057	1.041		9.85	10.0	-1.5	30.0
Toluene	Ave	0.9390	0.9602		10.2	10.0	2.3	30.0
n-Octane	Ave	1.121	1.083		9.66	10.0	-3.4	30.0
trans-1,3-Dichloropropene	Ave	0.6832	0.7125		10.4	10.0	4.3	30.0
1,1,2-Trichloroethane	Ave	0.5171	0.5232		10.1	10.0	1.2	30.0
Tetrachloroethene	Ave	0.6013	0.6319		10.5	10.0	5.1	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	1.130	1.121		9.91	10.0	-0.9	30.0
Dibromochloromethane	Ave	0.8298	0.8973		10.8	10.0	8.1	30.0
1,2-Dibromoethane	Ave	0.8306	0.8645		10.4	10.0	4.1	30.0
Chlorobenzene	Ave	1.187	1.215		10.2	10.0	2.3	30.0
Ethylbenzene	Ave	2.087	2.144		10.3	10.0	2.8	30.0
m,p-Xylene	Ave	0.7525	0.7814		20.8	20.0	3.8	30.0
n-Nonane	Ave	1.171	1.161		9.91	10.0	-0.8	30.0
o-Xylene	Ave	0.7243	0.7505		10.4	10.0	3.6	30.0
Styrene	Ave	1.164	1.250		10.7	10.0	7.3	30.0
Bromoform	Ave	0.6816	0.7780		11.4	10.0	14.1	30.0
Cumene	Ave	2.154	2.255		10.5	10.0	4.7	30.0
1,1,2,2-Tetrachloroethane	Ave	1.338	1.342		10.0	10.0	0.3	30.0
1,2,3-Trichloropropane	Ave	1.047	1.065		10.2	10.0	1.7	30.0
n-Propylbenzene	Ave	2.806	2.898		10.3	10.0	3.3	30.0
2-Chlorotoluene	Ave	1.791	1.822		10.2	10.0	1.7	30.0
4-Ethyltoluene	Ave	2.150	2.246		10.4	10.0	4.5	30.0
1,3,5-Trimethylbenzene	Ave	1.810	1.901		10.5	10.0	5.0	30.0
n-Decane	Ave	1.510	1.529		10.1	10.0	1.3	30.0
Alpha Methyl Styrene	Ave	0.8502	0.9335		11.0	10.0	9.8	30.0
tert-Butylbenzene	Ave	1.635	1.708		10.4	10.0	4.4	30.0
1,2,4-Trimethylbenzene	Ave	1.830	1.885		10.3	10.0	3.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Lab Sample ID: ICV 200-191713/20 Calibration Date: 05/23/2023 06:16

Instrument ID: CHAN.i Calib Start Date: 05/22/2023 16:33

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 05/23/2023 01:58

Lab File ID: 55613_020.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
sec-Butylbenzene	Ave	2.653	2.795		10.5	10.0	5.4	30.0
1,3-Dichlorobenzene	Ave	1.107	1.148		10.4	10.0	3.7	30.0
4-Isopropyltoluene	Ave	2.060	2.190		10.6	10.0	6.3	30.0
1,4-Dichlorobenzene	Ave	1.116	1.153		10.3	10.0	3.3	30.0
Benzyl chloride	Ave	1.666	1.763		10.6	10.0	5.8	30.0
n-Butylbenzene	Ave	2.326	2.424		10.4	10.0	4.2	30.0
1,2-Dichlorobenzene	Ave	1.065	1.088		10.2	10.0	2.2	30.0
n-Undecane	Ave	1.570	1.699		10.8	10.0	8.2	30.0
n-Dodecane	Ave	1.591	1.747		11.0	10.0	9.8	30.0
1,2,4-Trichlorobenzene	Ave	0.9159	0.9858		10.8	10.0	7.6	30.0
Hexachlorobutadiene	Ave	0.7112	0.7833		11.0	10.0	10.1	30.0
Naphthalene	Ave	2.299	2.439		10.6	10.0	6.1	30.0
1,2,3-Trichlorobenzene	Ave	0.7689	0.8530		11.1	10.0	10.9	30.0

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_020.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 23-May-2023 06:16:08 ALS Bottle#: 0 Worklist Smp#: 20
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0055638-020
Operator ID: Instrument ID: CHAN.i
Sublist:

Method: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\TO15_TO3_Master_Method_AN.m
Limit Group: AI_TO15_ICAL
Last Update: 23-May-2023 08:56:21 Calib Date: 23-May-2023 01:58:58
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: V0FK Date: 23-May-2023 08:42:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	4.396	4.396	0.000	98	245447	10.0	10.6	
2 Dichlorodifluoromethane	85	4.497	4.492	0.005	99	904486	10.0	10.7	
3 Chlorodifluoromethane	51	4.546	4.546	0.000	97	548424	10.0	10.4	
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85	4.867	4.861	0.006	97	981055	10.0	10.5	
11 BFB									
5 Chloromethane	50	4.990	4.990	0.000	99	318572	10.0	10.3	
7 Butane	43	5.295	5.295	0.000	98	823177	10.0	9.59	
6 Vinyl chloride	62	5.300	5.300	0.000	100	568509	10.0	9.25	
8 Butadiene	54	5.412	5.412	0.000	92	437352	10.0	9.01	
9 Bromomethane	94	6.145	6.140	0.005	98	383530	10.0	10.6	
10 Chloroethane	64	6.418	6.418	0.000	100	234588	10.0	10.4	
12 2-Methylbutane	43	6.621	6.616	0.005	93	509279	10.0	9.90	
13 Vinyl bromide	106	6.841	6.841	0.000	99	399925	10.0	10.7	
14 Trichlorofluoromethane	101	7.001	6.996	0.005	98	1093886	10.0	10.6	
15 Pentane	43	7.204	7.199	0.005	96	788728	10.0	9.96	
16 Ethanol	45	7.386	7.386	0.000	98	299693	14.7	12.4	
18 Ethyl ether	59	7.616	7.616	0.000	93	341730	10.0	10.0	
19 Acrolein	56	7.878	7.873	0.005	96	204687	10.0	10.3	
20 1,1-Dichloroethene	96	8.071	8.066	0.005	95	465232	10.0	10.2	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	8.103	8.103	0.000	92	971874	10.0	10.2	
22 Acetone	43	8.151	8.151	0.000	98	796498	10.0	10.3	
23 Isopropyl alcohol	45	8.446	8.440	0.006	100	929480	10.0	10.2	
24 Carbon disulfide	76	8.467	8.467	0.000	100	1442331	10.0	10.2	
25 Acetonitrile	41	8.676	8.676	0.000	98	379569	10.0	10.5	
26 3-Chloro-1-propene	41	8.772	8.767	0.005	98	653508	10.0	9.64	
27 Methylene Chloride	49	9.007	9.007	0.000	96	616962	10.0	9.70	
28 2-Methyl-2-propanol	59	9.216	9.211	0.005	99	1121943	10.0	10.6	
29 Acrylonitrile	53	9.425	9.425	0.000	94	407264	10.0	10.0	
31 Methyl tert-butyl ether	73	9.494	9.494	0.000	97	1512164	10.0	10.1	
30 trans-1,2-Dichloroethene	61	9.499	9.494	0.005	96	811358	10.0	9.62	
32 Hexane	57	10.002	10.002	0.000	93	847906	10.0	9.72	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
S 35 1,2-Dichloroethene, Total	61				0		20.0	19.7	
33 1,1-Dichloroethane	63	10.275	10.281	-0.006	99	976923	10.0	9.58	
34 Vinyl acetate	43	10.281	10.281	0.000	100	1405142	10.0	10.2	
36 2-Butanone (MEK)	72	11.254	11.254	0.000	100	276770	10.0	10.0	
37 cis-1,2-Dichloroethene	96	11.281	11.281	0.000	94	530909	10.0	10.1	
38 Ethyl acetate	88	11.324	11.324	0.000	99	46846	10.0	10.6	
* 39 Chlorobromomethane	128	11.693	11.693	0.000	98	264840	10.0	10.0	
40 Tetrahydrofuran	42	11.720	11.714	0.006	92	624495	10.0	10.1	
41 Chloroform	83	11.869	11.870	-0.001	97	1105232	10.0	9.98	
42 1,1,1-Trichloroethane	97	12.164	12.169	-0.005	98	1064491	10.0	10.2	
43 Cyclohexane	84	12.297	12.292	0.005	97	691877	10.0	10.0	
44 Carbon tetrachloride	117	12.442	12.437	0.005	96	1026850	10.0	10.3	
45 Benzene	78	12.795	12.795	0.000	97	1656211	10.0	9.87	
46 1,2-Dichloroethane	62	12.881	12.875	0.006	93	767779	10.0	9.87	
47 Isooctane	57	12.998	12.998	0.000	99	2773871	10.0	9.79	
48 n-Heptane	43	13.303	13.303	0.000	94	1032816	10.0	9.51	
* 49 1,4-Difluorobenzene	114	13.533	13.528	0.005	96	1331411	10.0	10.0	
50 n-Butanol	56	13.763	13.763	0.000	90	424156	10.0	10.5	
51 Trichloroethene	95	13.956	13.956	0.000	92	723508	10.0	10.1	
A 52 GRO	1	14.288	(6.606-21.969)		0	239717234	649.9	0	
53 1,2-Dichloropropane	63	14.427	14.427	0.000	92	665301	10.0	9.76	
54 Methyl methacrylate	69	14.507	14.507	0.000	96	617065	10.0	10.3	
55 1,4-Dioxane	88	14.539	14.539	0.000	97	336504	10.0	10.2	
57 Dibromomethane	174	14.582	14.582	0.000	88	500383	10.0	10.4	
58 Dichlorobromomethane	83	14.892	14.892	0.000	98	1228388	10.0	10.2	
A 60 TVOC as Toluene	1	15.665	(4.386-26.944)		0	363935674	899.8	0	
59 cis-1,3-Dichloropropene	75	15.695	15.695	-0.001	95	1082092	10.0	10.3	
61 4-Methyl-2-pentanone (MIBK)	43	15.962	15.962	0.000	98	1385720	10.0	9.85	
62 Toluene	92	16.326	16.326	0.000	93	1124053	10.0	10.2	
A 63 Toluene Range	1	16.331	(16.256-16.406)		0	4736112	NC	NC	
64 n-Octane	43	16.556	16.556	0.000	94	1441124	10.0	9.66	
A 65 C8 Range	1	16.567	(16.476-16.658)		0	5461507	NC	NC	
66 trans-1,3-Dichloropropene	75	16.748	16.748	0.000	98	948504	10.0	10.4	
67 1,1,2-Trichloroethane	83	17.128	17.128	0.000	97	612520	10.0	10.1	
68 Tetrachloroethene	166	17.305	17.305	0.000	90	739662	10.0	10.5	
69 2-Hexanone	43	17.535	17.535	0.000	93	1311738	10.0	9.91	
70 Chlorodibromomethane	129	17.861	17.861	0.000	97	1050407	10.0	10.8	
71 Ethylene Dibromide	107	18.102	18.102	0.000	98	1011944	10.0	10.4	
* 73 Chlorobenzene-d5	117	19.006	19.006	0.000	90	1170834	10.0	10.0	
74 Chlorobenzene	112	19.065	19.065	0.000	90	1421889	10.0	10.2	
75 Ethylbenzene	91	19.252	19.252	0.000	99	2509865	10.0	10.3	
76 m-Xylene & p-Xylene	106	19.514	19.509	0.005	0	1829473	20.0	20.8	
77 n-Nonane	57	19.557	19.557	0.000	91	1358843	10.0	9.91	
S 80 Xylenes, Total	106				0		30.0	31.1	
78 o-Xylene	106	20.285	20.285	0.000	97	878591	10.0	10.4	
79 Styrene	104	20.317	20.317	0.000	99	1462859	10.0	10.7	
81 Bromoform	173	20.659	20.659	0.000	92	910750	10.0	11.4	
82 Isopropylbenzene	105	20.953	20.953	0.000	98	2639634	10.0	10.5	
83 1,1,2,2-Tetrachloroethane	83	21.478	21.478	0.000	98	1570735	10.0	10.0	
84 1,2,3-Trichloropropane	75	21.574	21.574	0.000	99	1246276	10.0	10.2	
85 N-Propylbenzene	91	21.654	21.654	0.000	98	3392728	10.0	10.3	
86 2-Chlorotoluene	91	21.804	21.804	0.000	96	2132421	10.0	10.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 4-Ethyltoluene	105	21.847	21.847	0.000	98	2628741	10.0	10.4	
88 1,3,5-Trimethylbenzene	105	21.943	21.943	0.000	91	2225565	10.0	10.5	
89 n-Decane	57	21.959	21.959	0.000	91	1789723	10.0	10.1	
90 Alpha Methyl Styrene	118	22.264	22.264	0.000	84	1092818	10.0	11.0	
91 tert-Butylbenzene	119	22.419	22.419	0.000	90	1999291	10.0	10.4	
92 1,2,4-Trimethylbenzene	105	22.505	22.505	0.000	99	2206103	10.0	10.3	
93 sec-Butylbenzene	105	22.735	22.740	-0.005	98	3271559	10.0	10.5	
94 1,3-Dichlorobenzene	146	22.911	22.911	0.000	98	1343440	10.0	10.4	
95 4-Isopropyltoluene	119	22.949	22.949	0.000	97	2563195	10.0	10.6	
96 1,4-Dichlorobenzene	146	23.050	23.051	-0.001	90	1349655	10.0	10.3	
97 Benzyl chloride	91	23.200	23.200	0.000	97	2063255	10.0	10.6	
98 n-Butylbenzene	91	23.505	23.505	0.000	98	2837739	10.0	10.4	
99 1,2-Dichlorobenzene	146	23.548	23.548	0.000	92	1273733	10.0	10.2	
100 Undecane	57	23.644	23.644	0.000	95	1988313	10.0	10.8	
101 Dodecane	57	25.249	25.249	0.000	96	2045394	10.0	11.0	
102 1,2,4-Trichlorobenzene	180	26.020	26.020	0.000	92	1153951	10.0	10.8	
103 Hexachlorobutadiene	225	26.260	26.260	0.000	92	916902	10.0	11.0	
104 Naphthalene	128	26.512	26.512	0.000	99	2854775	10.0	10.6	
105 1,2,3-Trichlorobenzene	180	26.929	26.934	-0.005	93	998481	10.0	11.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15LCSW_00861	Amount Added: 200.00	Units: mL	
ATTO15CISs_00012	Amount Added: 20.00	Units: mL	Run Reagent

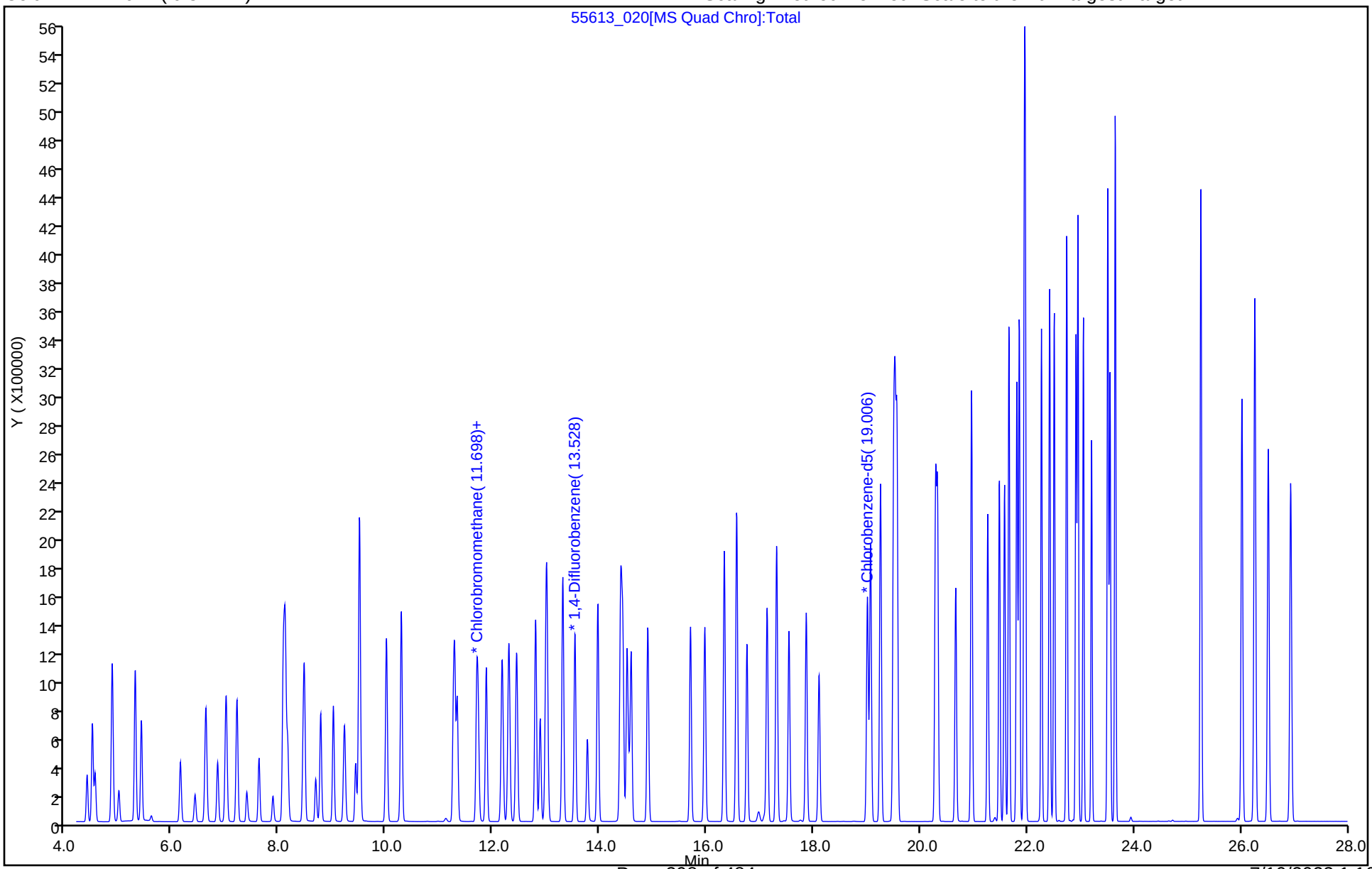
Report Date: 23-May-2023 08:56:33 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_020.D

Injection Date:	23-May-2023 06:16:08	Instrument ID:	CHAN.i	Operator ID:	
Lims ID:	icv			Worklist Smp#:	20
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		

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



7/10/2023 1:16 PM

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Lab Sample ID: CCVIS 200-193264/2 Calibration Date: 07/06/2023 08:03

Instrument ID: CHAN.i Calib Start Date: 05/22/2023 16:33

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 05/23/2023 01:58

Lab File ID: 56210_002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.8759	0.9117		10.4	10.0	4.1	30.0
Dichlorodifluoromethane	Ave	3.193	3.498		11.0	10.0	9.5	30.0
Chlorodifluoromethane	Ave	1.984	2.041		10.3	10.0	2.9	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.534	3.749		10.6	10.0	6.1	30.0
Chloromethane	Ave	1.166	1.213		10.4	10.0	4.0	30.0
n-Butane	Ave	3.242	2.990		9.22	10.0	-7.8	30.0
Vinyl chloride	Ave	2.320	2.025		8.73	10.0	-12.7	30.0
1,3-Butadiene	Ave	1.833	1.565		8.53	10.0	-14.6	30.0
Bromomethane	Ave	1.370	1.463		10.7	10.0	6.8	30.0
Chloroethane	Ave	0.8527	0.8595		10.1	10.0	0.8	30.0
Isopentane	Ave	1.943	1.832		9.43	10.0	-5.7	30.0
Bromoethene(Vinyl Bromide)	Ave	1.416	1.486		10.5	10.0	5.0	30.0
Trichlorofluoromethane	Ave	3.912	3.987		10.2	10.0	1.9	30.0
n-Pentane	Ave	2.989	2.872		9.60	10.0	-3.9	30.0
Ethanol	Ave	0.9125	0.8200		13.5	15.0	-10.1	30.0
Ethyl ether	Ave	1.289	1.236		9.58	10.0	-4.2	30.0
Acrolein	Ave	0.7505	0.7423		9.89	10.0	-1.1	30.0
1,1-Dichloroethene	Ave	1.718	1.667		9.70	10.0	-2.9	30.0
1,1,2-Trichlorotrifluoroethane	Ave	3.592	3.496		9.73	10.0	-2.7	30.0
Acetone	Ave	2.916	3.283		11.3	10.0	12.6	30.0
Isopropyl alcohol	Ave	3.451	3.331		9.65	10.0	-3.5	30.0
Carbon disulfide	Ave	5.345	5.197		9.72	10.0	-2.8	30.0
Acetonitrile	Ave	1.371	1.311		9.56	10.0	-4.4	30.0
3-Chloropropene	Ave	2.560	2.371		9.26	10.0	-7.4	30.0
Methylene Chloride	Ave	2.401	2.237		9.32	10.0	-6.8	30.0
tert-Butyl alcohol	Ave	3.979	4.007		10.1	10.0	0.7	30.0
Acrylonitrile	Ave	1.534	1.445		9.42	10.0	-5.8	30.0
Methyl tert-butyl ether	Ave	5.644	5.367		9.51	10.0	-4.9	30.0
trans-1,2-Dichloroethene	Ave	3.184	2.921		9.17	10.0	-8.3	30.0
n-Hexane	Ave	3.295	3.060		9.28	10.0	-7.2	30.0
1,1-Dichloroethane	Ave	3.849	3.519		9.14	10.0	-8.6	30.0
Vinyl acetate	Ave	5.190	5.050		9.73	10.0	-2.7	30.0
Methyl Ethyl Ketone (2-Butanone)	Ave	1.045	1.116		10.7	10.0	6.8	30.0
cis-1,2-Dichloroethene	Ave	1.989	1.855		9.33	10.0	-6.7	30.0
Ethyl acetate	Ave	0.1661	0.1654		9.95	10.0	-0.4	30.0
Tetrahydrofuran	Ave	0.4635	0.4513		9.73	10.0	-2.6	30.0
Chloroform	Ave	4.183	3.923		9.38	10.0	-6.2	30.0
1,1,1-Trichloroethane	Ave	0.7875	0.7441		9.45	10.0	-5.5	30.0
Cyclohexane	Ave	0.5183	0.4903		9.46	10.0	-5.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Lab Sample ID: CCVIS 200-193264/2 Calibration Date: 07/06/2023 08:03

Instrument ID: CHAN.i Calib Start Date: 05/22/2023 16:33

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 05/23/2023 01:58

Lab File ID: 56210_002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon tetrachloride	Ave	0.7475	0.7234		9.68	10.0	-3.2	30.0
Benzene	Ave	1.261	1.171		9.28	10.0	-7.2	30.0
1,2-Dichloroethane	Ave	0.5841	0.5396		9.24	10.0	-7.6	30.0
2,2,4-Trimethylpentane	Ave	2.128	1.986		9.33	10.0	-6.7	30.0
n-Heptane	Ave	0.8158	0.7497		9.19	10.0	-8.1	30.0
n-Butanol	Ave	0.3036	0.3135		10.3	10.0	3.3	30.0
Trichloroethene	Ave	0.5365	0.5038		9.39	10.0	-6.1	30.0
1,2-Dichloropropane	Ave	0.5118	0.4761		9.30	10.0	-7.0	30.0
Methyl methacrylate	Ave	0.4509	0.4312		9.56	10.0	-4.4	30.0
1,4-Dioxane	Ave	0.2475	0.2340		9.45	10.0	-5.5	30.0
Dibromomethane	Ave	0.3623	0.3349		9.24	10.0	-7.6	30.0
Bromodichloromethane	Ave	0.9048	0.8606		9.51	10.0	-4.9	30.0
cis-1,3-Dichloropropene	Ave	0.7915	0.7603		9.60	10.0	-3.9	30.0
4-Methyl-2-pentanone (Methyl isobutyl ketone)	Ave	1.057	0.9874		9.34	10.0	-6.6	30.0
Toluene	Ave	0.9390	0.8888		9.46	10.0	-5.3	30.0
n-Octane	Ave	1.121	1.038		9.26	10.0	-7.4	30.0
trans-1,3-Dichloropropene	Ave	0.6832	0.6630		9.70	10.0	-3.0	30.0
1,1,2-Trichloroethane	Ave	0.5171	0.4865		9.41	10.0	-5.9	30.0
Tetrachloroethene	Ave	0.6013	0.5553		9.23	10.0	-7.6	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	1.130	1.067		9.44	10.0	-5.6	30.0
Dibromochloromethane	Ave	0.8298	0.8183		9.86	10.0	-1.4	30.0
1,2-Dibromoethane	Ave	0.8306	0.7885		9.49	10.0	-5.1	30.0
Chlorobenzene	Ave	1.187	1.102		9.28	10.0	-7.2	30.0
Ethylbenzene	Ave	2.087	1.981		9.49	10.0	-5.1	30.0
m,p-Xylene	Ave	0.7525	0.7112		18.9	20.0	-5.5	30.0
n-Nonane	Ave	1.171	1.096		9.36	10.0	-6.4	30.0
o-Xylene	Ave	0.7243	0.6849		9.45	10.0	-5.4	30.0
Styrene	Ave	1.164	1.124		9.65	10.0	-3.5	30.0
Bromoform	Ave	0.6816	0.6943		10.2	10.0	1.9	30.0
Cumene	Ave	2.154	2.068		9.60	10.0	-4.0	30.0
1,1,2,2-Tetrachloroethane	Ave	1.338	1.240		9.27	10.0	-7.3	30.0
1,2,3-Trichloropropane	Ave	1.047	0.9831		9.39	10.0	-6.1	30.0
n-Propylbenzene	Ave	2.806	2.667		9.50	10.0	-5.0	30.0
2-Chlorotoluene	Ave	1.791	1.662		9.28	10.0	-7.2	30.0
4-Ethyltoluene	Ave	2.150	2.036		9.47	10.0	-5.3	30.0
1,3,5-Trimethylbenzene	Ave	1.810	1.732		9.57	10.0	-4.3	30.0
n-Decane	Ave	1.510	1.432		9.48	10.0	-5.2	30.0
Alpha Methyl Styrene	Ave	0.8502	0.8065		9.48	10.0	-5.1	30.0
tert-Butylbenzene	Ave	1.635	1.549		9.47	10.0	-5.3	30.0
1,2,4-Trimethylbenzene	Ave	1.830	1.716		9.37	10.0	-6.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Lab Sample ID: CCVIS 200-193264/2 Calibration Date: 07/06/2023 08:03

Instrument ID: CHAN.i Calib Start Date: 05/22/2023 16:33

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 05/23/2023 01:58

Lab File ID: 56210_002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
sec-Butylbenzene	Ave	2.653	2.543		9.59	10.0	-4.1	30.0
1,3-Dichlorobenzene	Ave	1.107	1.008		9.11	10.0	-8.9	30.0
4-Isopropyltoluene	Ave	2.060	1.975		9.58	10.0	-4.1	30.0
1,4-Dichlorobenzene	Ave	1.116	1.017		9.11	10.0	-8.9	30.0
Benzyl chloride	Ave	1.666	1.637		9.82	10.0	-1.8	30.0
n-Butylbenzene	Ave	2.326	2.206		9.48	10.0	-5.1	30.0
1,2-Dichlorobenzene	Ave	1.065	0.9595		9.01	10.0	-9.9	30.0
n-Undecane	Ave	1.570	1.554		9.89	10.0	-1.1	30.0
n-Dodecane	Ave	1.591	1.429		8.98	10.0	-10.2	30.0
1,2,4-Trichlorobenzene	Ave	0.9159	0.7984		8.72	10.0	-12.8	30.0
Hexachlorobutadiene	Ave	0.7112	0.6410		9.01	10.0	-9.9	30.0
Naphthalene	Ave	2.299	2.004		8.71	10.0	-12.8	30.0
1,2,3-Trichlorobenzene	Ave	0.7689	0.6598		8.58	10.0	-14.2	30.0

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_002.D
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 06-Jul-2023 08:03:48 ALS Bottle#: 0 Worklist Smp#: 2
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0056210-002
Operator ID: Instrument ID: CHAN.i
Sublist: chrom-TO15_TO3_Master_Method_AN*sub1

Method: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\TO15_TO3_Master_Method_AN.m
Limit Group: AI_TO15_ICAL
Last Update: 07-Jul-2023 06:54:27 Calib Date: 23-May-2023 01:58:58
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: puangmaleek Date: 07-Jul-2023 06:54:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	4.390	4.390	0.000	98	169214	10.0	10.4	
2 Dichlorodifluoromethane	85	4.492	4.492	0.000	100	649277	10.0	11.0	
3 Chlorodifluoromethane	51	4.540	4.540	0.000	97	378788	10.0	10.3	
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85	4.861	4.861	0.000	98	695814	10.0	10.6	
11 BFB									
5 Chloromethane	50	4.990	4.990	0.000	99	225187	10.0	10.4	
7 Butane	43	5.294	5.294	0.000	98	554893	10.0	9.22	
6 Vinyl chloride	62	5.294	5.294	0.000	76	375752	10.0	8.73	
8 Butadiene	54	5.407	5.407	0.000	93	290453	10.0	8.53	
9 Bromomethane	94	6.140	6.140	0.000	99	271515	10.0	10.7	
10 Chloroethane	64	6.413	6.413	0.000	100	159532	10.0	10.1	
12 2-Methylbutane	43	6.616	6.616	0.000	96	340109	10.0	9.43	
13 Vinyl bromide	106	6.835	6.835	0.000	98	275876	10.0	10.5	
14 Trichlorofluoromethane	101	6.996	6.996	0.000	98	740019	10.0	10.2	
15 Pentane	43	7.199	7.199	0.000	96	532978	10.0	9.60	
16 Ethanol	45	7.376	7.376	0.000	98	228397	15.0	13.5	
18 Ethyl ether	59	7.611	7.611	0.000	93	229332	10.0	9.58	
19 Acrolein	56	7.868	7.868	0.000	97	137773	10.0	9.89	
20 1,1-Dichloroethene	96	8.060	8.060	0.000	95	309423	10.0	9.70	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	8.098	8.098	0.000	91	648847	10.0	9.73	
22 Acetone	43	8.146	8.146	0.000	98	609404	10.0	11.3	
23 Isopropyl alcohol	45	8.435	8.435	0.000	100	618325	10.0	9.65	
24 Carbon disulfide	76	8.462	8.462	0.000	100	964650	10.0	9.72	
25 Acetonitrile	41	8.665	8.665	0.000	99	243412	10.0	9.56	
26 3-Chloro-1-propene	41	8.766	8.766	0.000	98	440106	10.0	9.26	
27 Methylene Chloride	49	9.002	9.002	0.000	97	415234	10.0	9.32	
28 2-Methyl-2-propanol	59	9.205	9.205	0.000	99	743750	10.0	10.1	
29 Acrylonitrile	53	9.414	9.414	0.000	94	268179	10.0	9.42	
31 Methyl tert-butyl ether	73	9.489	9.489	0.000	97	996076	10.0	9.51	
30 trans-1,2-Dichloroethene	61	9.489	9.489	0.000	95	542070	10.0	9.17	
32 Hexane	57	9.997	9.997	0.000	94	567906	10.0	9.28	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
S 35 1,2-Dichloroethene, Total	61				0		20.0	18.5	
33 1,1-Dichloroethane	63	10.270	10.270	0.000	99	653216	10.0	9.14	
34 Vinyl acetate	43	10.275	10.275	0.000	100	937344	10.0	9.73	
36 2-Butanone (MEK)	72	11.243	11.243	0.000	100	207200	10.0	10.7	
37 cis-1,2-Dichloroethene	96	11.275	11.275	0.000	98	344367	10.0	9.33	
38 Ethyl acetate	88	11.318	11.318	0.000	100	30695	10.0	9.95	
* 39 Chlorobromomethane	128	11.682	11.682	0.000	98	185637	10.0	10.0	
40 Tetrahydrofuran	42	11.709	11.709	0.000	93	420568	10.0	9.73	
41 Chloroform	83	11.864	11.864	0.000	96	728037	10.0	9.38	
42 1,1,1-Trichloroethane	97	12.164	12.164	0.000	97	693488	10.0	9.45	
43 Cyclohexane	84	12.287	12.287	0.000	97	456914	10.0	9.46	
44 Carbon tetrachloride	117	12.431	12.431	0.000	96	674233	10.0	9.68	
45 Benzene	78	12.789	12.789	0.000	97	1091155	10.0	9.28	
46 1,2-Dichloroethane	62	12.870	12.870	0.000	93	502915	10.0	9.24	
47 Isooctane	57	12.993	12.993	0.000	99	1850544	10.0	9.33	
48 n-Heptane	43	13.298	13.298	0.000	94	698697	10.0	9.19	
* 49 1,4-Difluorobenzene	114	13.522	13.522	0.000	96	932161	10.0	10.0	
50 n-Butanol	56	13.752	13.752	0.000	91	292156	10.0	10.3	
51 Trichloroethene	95	13.950	13.950	0.000	91	469532	10.0	9.39	
A 52 GRO	1	14.287	(6.606-21.969)		0	157172547	649.9	0	
53 1,2-Dichloropropane	63	14.421	14.421	0.000	92	443735	10.0	9.30	
54 Methyl methacrylate	69	14.496	14.496	0.000	94	401878	10.0	9.56	
55 1,4-Dioxane	88	14.534	14.534	0.000	98	218058	10.0	9.45	
57 Dibromomethane	174	14.576	14.576	0.000	87	312128	10.0	9.24	
58 Dichlorobromomethane	83	14.887	14.887	0.000	98	802084	10.0	9.51	
A 60 TVOC as Toluene	1	15.657	(4.380-26.934)		0	234702129	899.8	0	
59 cis-1,3-Dichloropropene	75	15.684	15.684	0.000	95	708577	10.0	9.60	
61 4-Methyl-2-pentanone (MIBK)	43	15.951	15.951	0.000	97	920277	10.0	9.34	
62 Toluene	92	16.320	16.320	0.000	93	732572	10.0	9.46	
A 63 Toluene Range	1	16.323	(16.251-16.395)		0	3105903	NC	NC	
64 n-Octane	43	16.550	16.550	0.000	94	967319	10.0	9.26	
A 65 C8 Range	1	16.556	(16.470-16.641)		0	3612894	NC	NC	
66 trans-1,3-Dichloropropene	75	16.743	16.743	0.000	98	617947	10.0	9.70	
67 1,1,2-Trichloroethane	83	17.117	17.117	0.000	97	400988	10.0	9.41	
68 Tetrachloroethene	166	17.299	17.299	0.000	89	457728	10.0	9.23	
69 2-Hexanone	43	17.529	17.529	0.000	93	879662	10.0	9.44	
70 Chlorodibromomethane	129	17.850	17.850	0.000	97	674447	10.0	9.86	
71 Ethylene Dibromide	107	18.091	18.091	0.000	98	649948	10.0	9.49	
* 73 Chlorobenzene-d5	117	19.001	19.001	0.000	91	824398	10.0	10.0	
74 Chlorobenzene	112	19.059	19.059	0.000	90	908086	10.0	9.28	
75 Ethylbenzene	91	19.247	19.247	0.000	99	1632725	10.0	9.49	
76 m-Xylene & p-Xylene	106	19.509	19.509	0.000	0	1172315	20.0	18.9	
77 n-Nonane	57	19.552	19.552	0.000	92	903442	10.0	9.36	
S 80 Xylenes, Total	106				0		30.0	28.4	
78 o-Xylene	106	20.279	20.279	0.000	97	564489	10.0	9.45	
79 Styrene	104	20.311	20.311	0.000	98	926098	10.0	9.65	
81 Bromoform	173	20.654	20.654	0.000	92	572289	10.0	10.2	
82 Isopropylbenzene	105	20.948	20.948	0.000	99	1704217	10.0	9.60	
83 1,1,2,2-Tetrachloroethane	83	21.467	21.467	0.000	98	1022305	10.0	9.27	
84 1,2,3-Trichloropropane	75	21.563	21.563	0.000	98	810275	10.0	9.39	
85 N-Propylbenzene	91	21.649	21.649	0.000	98	2198488	10.0	9.50	
86 2-Chlorotoluene	91	21.799	21.799	0.000	96	1369790	10.0	9.28	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 4-Ethyltoluene	105	21.847	21.847	0.000	98	1678401	10.0	9.47	
88 1,3,5-Trimethylbenzene	105	21.938	21.938	0.000	91	1427629	10.0	9.57	
89 n-Decane	57	21.959	21.959	0.000	91	1180188	10.0	9.48	
90 Alpha Methyl Styrene	118	22.259	22.259	0.000	84	664780	10.0	9.48	
91 tert-Butylbenzene	119	22.414	22.414	0.000	90	1276480	10.0	9.47	
92 1,2,4-Trimethylbenzene	105	22.499	22.499	0.000	99	1413988	10.0	9.37	
93 sec-Butylbenzene	105	22.735	22.735	0.000	98	2096336	10.0	9.59	
94 1,3-Dichlorobenzene	146	22.906	22.906	0.000	97	830977	10.0	9.11	
95 4-Isopropyltoluene	119	22.943	22.943	0.000	96	1627968	10.0	9.58	
96 1,4-Dichlorobenzene	146	23.045	23.045	0.000	90	838099	10.0	9.11	
97 Benzyl chloride	91	23.195	23.195	0.000	97	1349261	10.0	9.82	
98 n-Butylbenzene	91	23.500	23.500	0.000	98	1818613	10.0	9.48	
99 1,2-Dichlorobenzene	146	23.543	23.543	0.000	91	790867	10.0	9.01	
100 Undecane	57	23.644	23.644	0.000	96	1280479	10.0	9.89	
101 Dodecane	57	25.244	25.244	0.000	96	1177548	10.0	8.98	
102 1,2,4-Trichlorobenzene	180	26.014	26.014	0.000	92	658051	10.0	8.72	
103 Hexachlorobutadiene	225	26.255	26.255	0.000	91	528312	10.0	9.01	
104 Naphthalene	128	26.501	26.501	0.000	98	1651769	10.0	8.71	
105 1,2,3-Trichlorobenzene	180	26.924	26.924	0.000	95	543807	10.0	8.58	
114 Methylcyclohexane	83		0.000				ND	ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

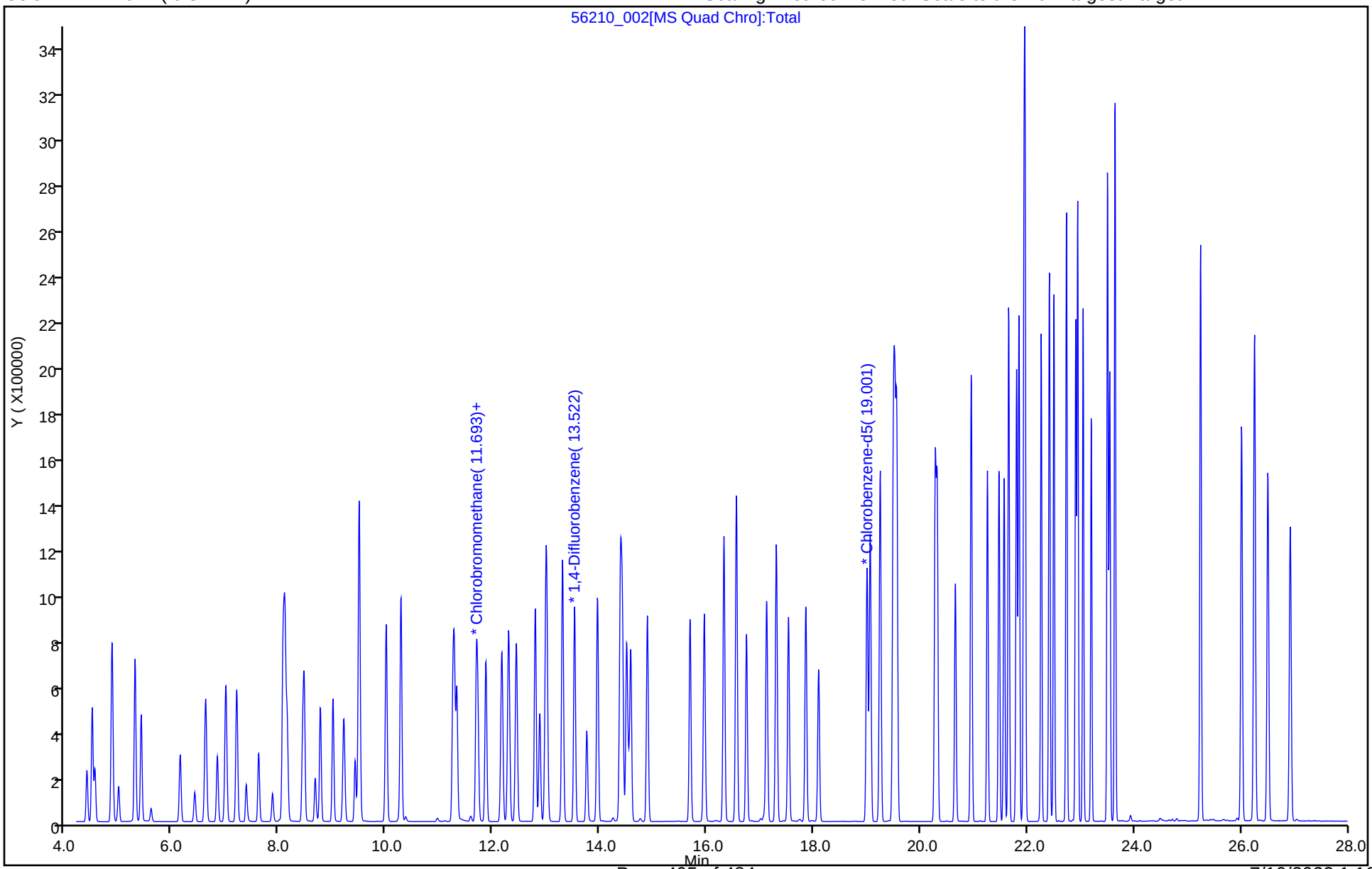
ATTO15CAL4w_00808	Amount Added: 200.00	Units: mL	
ATTO15CISs_00012	Amount Added: 20.00	Units: mL	Run Reagent

Report Date: 07-Jul-2023 06:54:27 Chrom Revision: 2.3 21-Jun-2023 17:36:34

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_002.D				
Injection Date:	06-Jul-2023 08:03:48	Instrument ID:	CHAN.i	Operator ID:	
Lims ID:	ccvis			Worklist Smp#:	2
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		

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



7/10/2023 1:16 PM

Eurofins Burlington
Target Compound Quantitation Report

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55638_001a.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	22-May-2023 14:02:24	ALS Bottle#:	0	Worklist Smp#:	1
Injection Vol:	200.0	Dil. Factor:	1.0000		
Sample Info:	200-0055638-001				
Misc. Info.:	bfb				
Operator ID:		Instrument ID:	CHAN.i		
Method:	\\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\TO15_TO3_Master_Method_AN.m				
Limit Group:	AI_TO15_ICAL				
Last Update:	23-May-2023 08:56:35	Calib Date:	23-May-2023 01:58:58		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D				
Column 1 :	RTX-624 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1670				
First Level Reviewer: bunmaa		Date:	23-May-2023 09:18:01		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
11 BFB									
* 39 Chlorobromomethane	128		11.693				10.0	ND	
* 49 1,4-Difluorobenzene	114		13.528				10.0	ND	
* 73 Chlorobenzene-d5	117		19.006				10.0	ND	

QC Flag Legend

Processing Flags

Reagents:

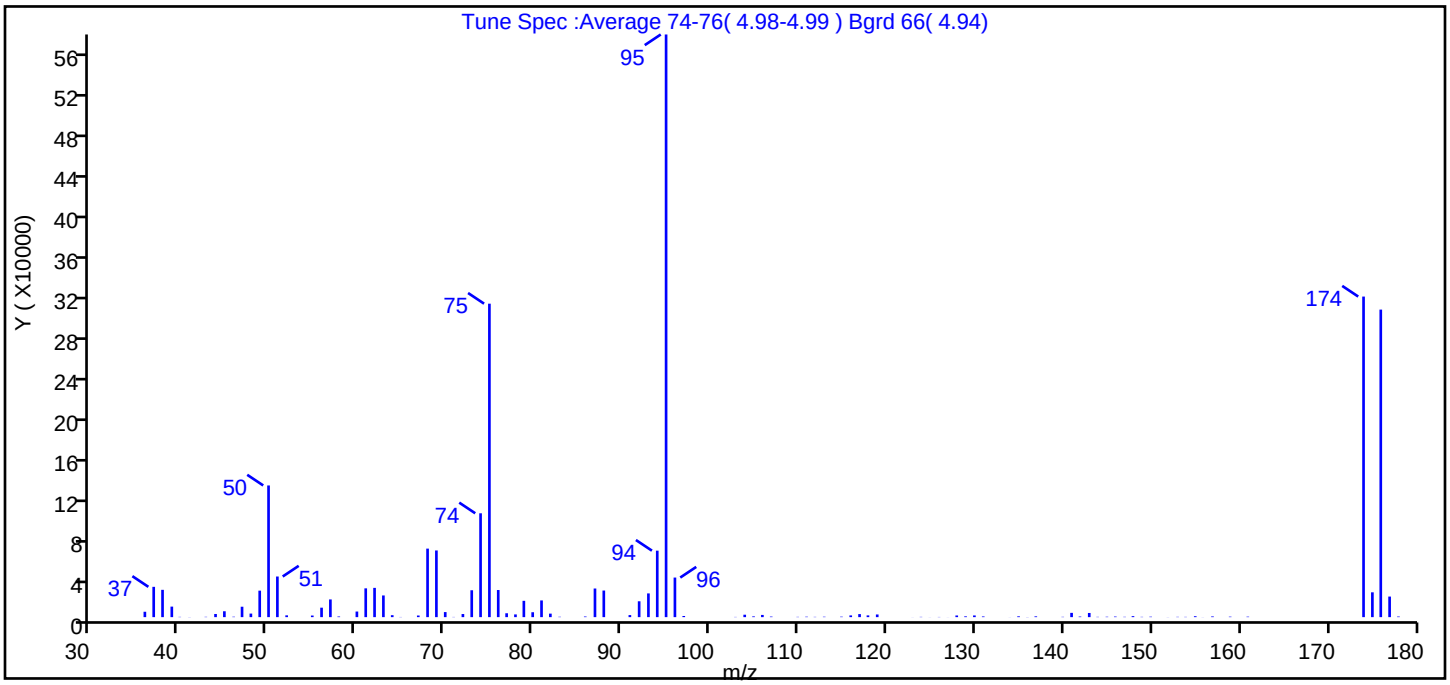
ATTO15CISs_00012 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55638_001a.D				
Injection Date:	22-May-2023 14:02:24	Instrument ID:	CHAN.i		
Lims ID:	bfb				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	1
Injection Vol:	200.0	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		
Tune Method:	BFB Method TO-15				

11 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	22.6
75	30.0 to 66.0 Percent of m/e 95	53.8
96	5.0 to 9.0 Percent of m/e 95	6.8
173	Less than 2.0 Percent of m/e 174	0.0 (0.0)
174	50.0 to 120.0 Percent of m/e 95	55.0
175	4.0 to 9.0 Percent of m/e 174	4.3 (7.7)
176	93.0 to 101.0 Percent of m/e 174	52.8 (95.9)
177	5.0 to 9.0 Percent of m/e 176	3.5 (6.7)

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55638_001a.D\TO15_TO3_Master_Method_
Injection Date: 22-May-2023 14:02:24
Spectrum: Tune Spec :Average 74-76(4.98-4.99) Bgrd 66(4.94)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5288	67.00	1602	97.00	1120	136.00	122
37.00	29744	68.00	67248	103.00	217	137.00	770
38.00	26808	69.00	65440	104.00	2383	140.00	305
39.00	10333	70.00	4967	105.00	739	141.00	4205
40.00	267	71.00	203	106.00	2173	142.00	571
41.00	116	72.00	3061	107.00	550	143.00	4092
43.00	312	73.00	26392	110.00	273	144.00	288
44.00	3096	74.00	101928	111.00	438	145.00	402
45.00	5774	75.00	307648	112.00	269	146.00	572
46.00	414	76.00	26616	113.00	410	147.00	316
47.00	10223	77.00	3816	115.00	474	148.00	966
48.00	3496	78.00	2681	116.00	1702	149.00	287
49.00	26000	79.00	16017	117.00	2997	150.00	446
50.00	129240	80.00	4817	118.00	1719	152.00	83
51.00	39880	81.00	16408	119.00	2617	153.00	296
52.00	1764	82.00	3447	123.00	55	154.00	268
55.00	1581	83.00	352	124.00	265	155.00	890
56.00	9296	86.00	617	125.00	63	156.00	72
57.00	17384	87.00	28104	126.00	193	157.00	685
58.00	642	88.00	26112	127.00	53	159.00	471
60.00	5507	91.00	2012	128.00	1631	161.00	469
61.00	28264	92.00	15576	129.00	780	174.00	314624
62.00	28728	93.00	23296	130.00	1664	175.00	24360
63.00	21288	94.00	65240	131.00	671	176.00	301824
64.00	1922	95.00	571840	134.00	62	177.00	20200
65.00	175	96.00	38848	135.00	790	178.00	595

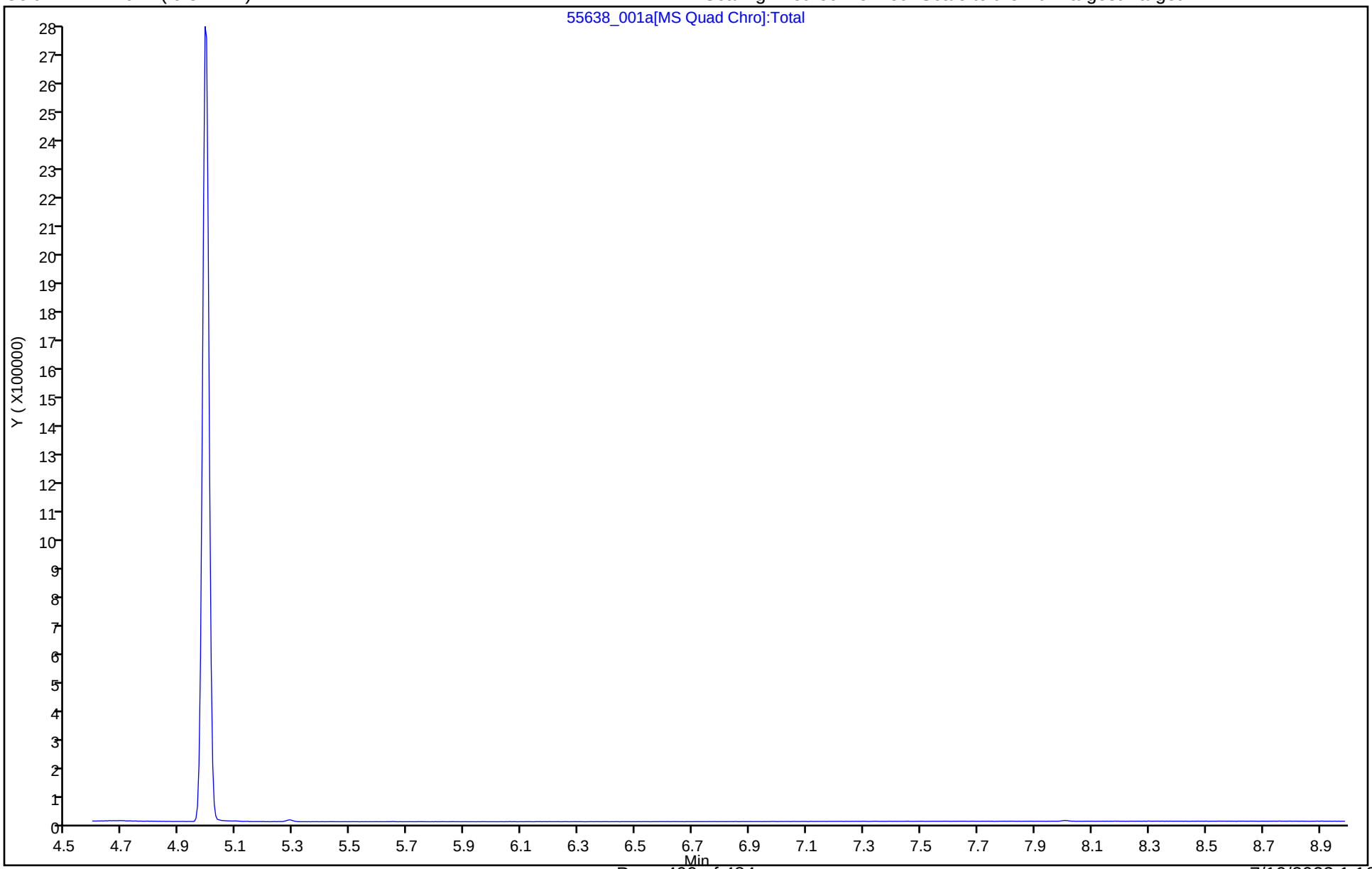
Report Date: 23-May-2023 08:56:36 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55638_001a.D

Injection Date:	22-May-2023 14:02:24	Instrument ID:	CHAN.i	Operator ID:	
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	200.0	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		

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



Eurofins Burlington
Target Compound Quantitation Report

Data File:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_001.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	06-Jul-2023 07:11:08	ALS Bottle#:	0	Worklist Smp#:	1
Injection Vol:	200.0	Dil. Factor:	1.0000		
Sample Info:	200-0056210-001				
Misc. Info.:	bfb				
Operator ID:		Instrument ID:	CHAN.i		
Method:	\\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\TO15_TO3_Master_Method_AN.m				
Limit Group:	AI_TO15_ICAL				
Last Update:	07-Jul-2023 06:53:52	Calib Date:	23-May-2023 01:58:58		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D				
Column 1 :	RTX-624 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1607				
First Level Reviewer: puangmaleek		Date:	07-Jul-2023 06:53:52		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
11 BFB									
* 39 Chlorobromomethane	128		11.682				10.0	ND	
* 49 1,4-Difluorobenzene	114		13.522				10.0	ND	
* 73 Chlorobenzene-d5	117		19.001				10.0	ND	

QC Flag Legend

Processing Flags

Reagents:

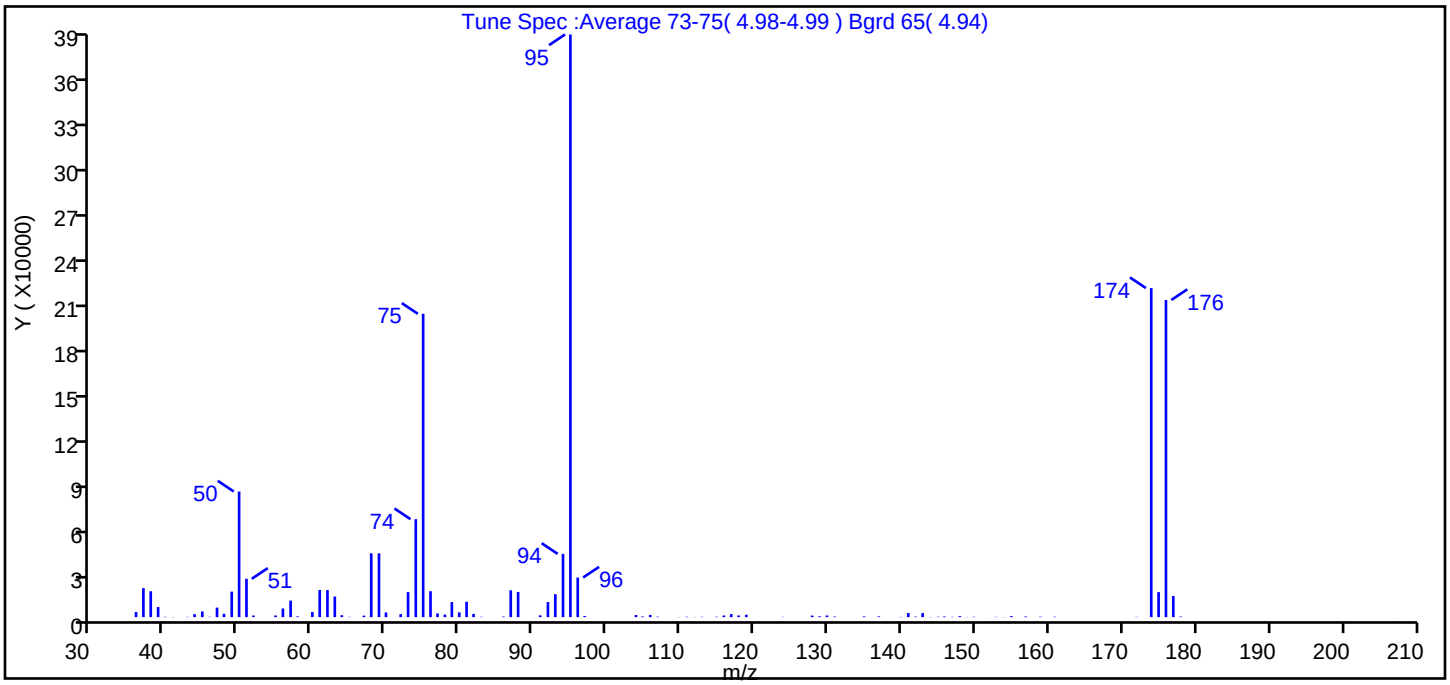
ATTO15CISs_00012 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_001.D
Injection Date: 06-Jul-2023 07:11:08 Instrument ID: CHAN.i
Lims ID: bfb
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 200.0 Dil. Factor: 1.0000
Method: TO15_TO3_Master_Method_AN Limit Group: AI_TO15_ICAL
Tune Method: BFB Method TO-15

11 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	21.6
75	30.0 to 66.0 Percent of m/e 95	52.1
96	5.0 to 9.0 Percent of m/e 95	6.8
173	Less than 2.0 Percent of m/e 174	0.0 (0.0)
174	50.0 to 120.0 Percent of m/e 95	56.5
175	4.0 to 9.0 Percent of m/e 174	4.3 (7.6)
176	93.0 to 101.0 Percent of m/e 174	54.4 (96.4)
177	5.0 to 9.0 Percent of m/e 176	3.6 (6.7)

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_001.D\TO15_TO3_Master_Method_A
Injection Date: 06-Jul-2023 07:11:08
Spectrum: Tune Spec :Average 73-75(4.98-4.99) Bgrd 65(4.94)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 97

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3361	65.00	198	96.00	25928	143.00	2629
37.00	18992	67.00	1006	97.00	780	144.00	142
38.00	16944	68.00	41808	104.00	1382	145.00	252
39.00	6602	69.00	41776	105.00	443	146.00	441
40.00	238	70.00	3067	106.00	1458	147.00	213
41.00	109	72.00	1960	107.00	298	148.00	660
43.00	194	73.00	16384	110.00	113	149.00	139
44.00	1960	74.00	64144	111.00	267	150.00	253
45.00	3735	75.00	198592	112.00	117	152.00	52
46.00	215	76.00	16968	113.00	235	153.00	180
47.00	6268	77.00	2416	115.00	292	154.00	111
48.00	2213	78.00	1671	116.00	1081	155.00	658
49.00	16720	79.00	9866	117.00	1981	157.00	447
50.00	82248	80.00	3109	118.00	1098	159.00	300
51.00	25112	81.00	10058	119.00	1540	161.00	287
52.00	1065	82.00	2113	124.00	176	172.00	188
55.00	1072	83.00	216	128.00	1031	174.00	215424
56.00	5660	86.00	404	129.00	538	175.00	16384
57.00	10829	87.00	17592	130.00	1093	176.00	207616
58.00	490	88.00	16504	131.00	412	177.00	13883
60.00	3339	91.00	1162	135.00	487	178.00	365
61.00	17792	92.00	9841	137.00	496	207.00	38
62.00	17720	93.00	15046	140.00	182		
63.00	13497	94.00	41416	141.00	2666		
64.00	1260	95.00	381440	142.00	349		

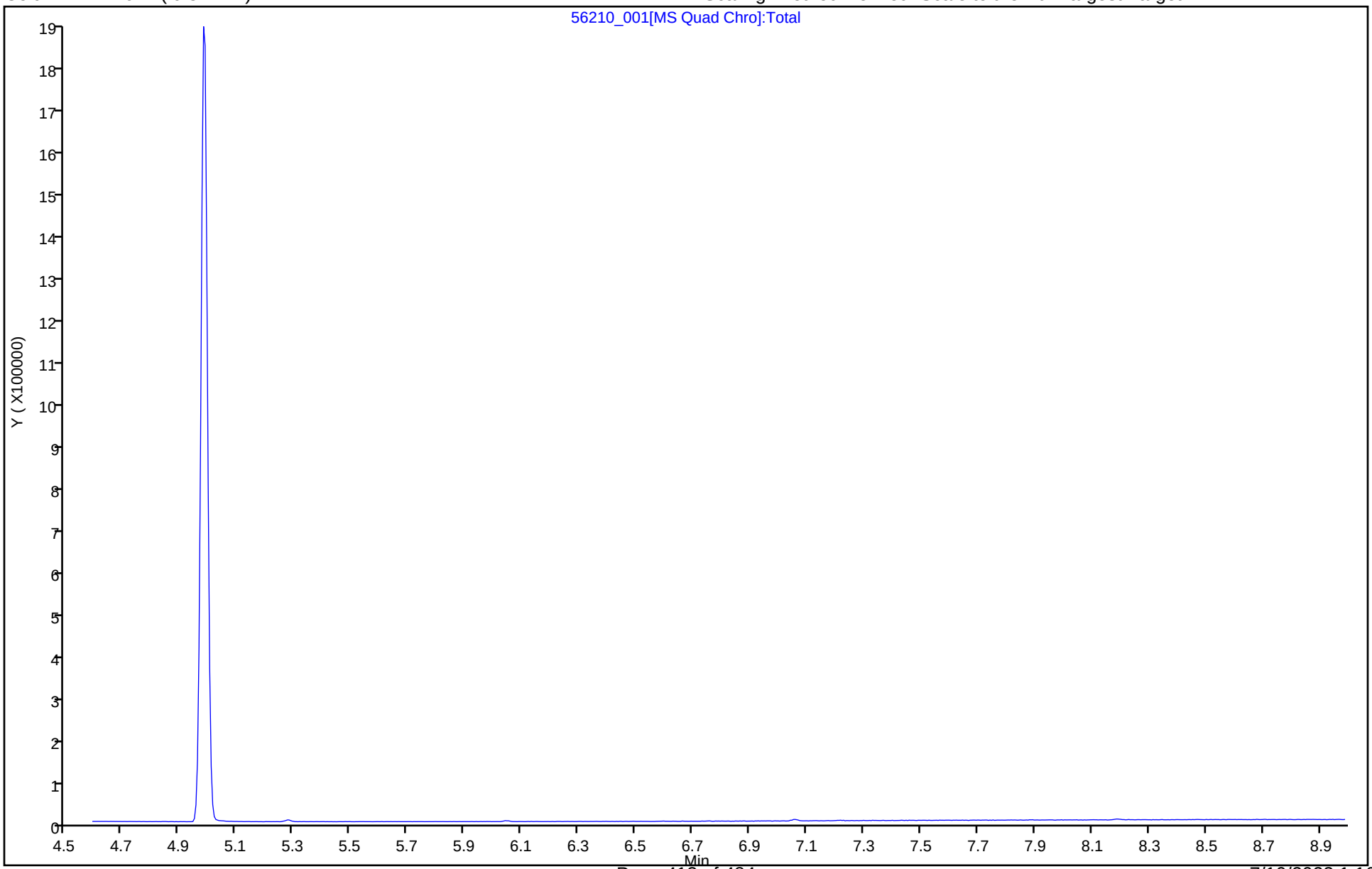
Report Date: 07-Jul-2023 06:53:53 Chrom Revision: 2.3 21-Jun-2023 17:36:34

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_001.D

Injection Date:	06-Jul-2023 07:11:08	Instrument ID:	CHAN.i	Operator ID:	
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	200.0	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AN	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.: 200-68952-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-193264/4

Matrix: Air Lab File ID: 56210_004.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2023 09:49

Soil Aliquot Vol: Dilution Factor: 1

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.: 193264 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	2.5	U	2.5	0.54
75-45-6	Chlorodifluoromethane	86.47	1.8	U	1.8	0.42
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4	0.34
74-87-3	Chloromethane	50.49	1.0	U	1.0	0.31
106-97-8	n-Butane	58.12	1.2	U	1.2	0.48
75-01-4	Vinyl chloride	62.50	0.20	U	0.20	0.054
106-99-0	1,3-Butadiene	54.09	0.44	U	0.44	0.086
74-83-9	Bromomethane	94.94	0.78	U	0.78	0.28
75-00-3	Chloroethane	64.52	1.3	U	1.3	0.47
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.87	U	0.87	0.22
75-69-4	Trichlorofluoromethane	137.37	1.1	U	1.1	0.28
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	1.5	U	1.5	0.41
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	0.10
67-64-1	Acetone	58.08	12	U	12	3.8
67-63-0	Isopropyl alcohol	60.10	12	U	12	3.9
75-15-0	Carbon disulfide	76.14	1.6	U	1.6	0.40
107-05-1	3-Chloropropene	76.53	1.6	U	1.6	0.38
75-09-2	Methylene Chloride	84.93	1.7	U	1.7	0.63
75-65-0	tert-Butyl alcohol	74.12	15	U	15	3.6
1634-04-4	Methyl tert-butyl ether	88.15	0.72	U	0.72	0.13
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	U	0.79	0.091
110-54-3	n-Hexane	86.17	1.8	U	1.8	0.39
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81	0.10
78-93-3	Methyl Ethyl Ketone (2-Butanone)	72.11	1.5	U	1.5	1.4
156-59-2	cis-1,2-Dichloroethene	96.94	0.20	U	0.20	0.083
67-66-3	Chloroform	119.38	0.98	U	0.98	0.20
109-99-9	Tetrahydrofuran	72.11	15	U	15	3.8
71-55-6	1,1,1-Trichloroethane	133.41	1.1	U	1.1	0.24
110-82-7	Cyclohexane	84.16	0.69	U	0.69	0.20
56-23-5	Carbon tetrachloride	153.81	0.22	U	0.22	0.14
540-84-1	2,2,4-Trimethylpentane	114.23	0.93	U	0.93	0.18
71-43-2	Benzene	78.11	0.64	U	0.64	0.14

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

Lab Name: Eurofins Burlington | Job No.: 200-68952-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-193264/4

Matrix: Air | Lab File ID: 56210_004.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 07/06/2023 09:49

Soil Aliquot Vol: | Dilution Factor: 1

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.: 193264 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
107-06-2	1,2-Dichloroethane	98.96	0.81	U	0.81	0.38
142-82-5	n-Heptane	100.21	0.82	U	0.82	0.23
79-01-6	Trichloroethene	131.39	0.20	U	0.20	0.13
80-62-6	Methyl methacrylate	100.12	2.0	U	2.0	0.57
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92	0.43
123-91-1	1,4-Dioxane	88.11	18	U	18	4.7
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3	0.34
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91	0.20
108-10-1	4-Methyl-2-pentanone (Methyl isobutyl ketone)	100.16	2.0	U	2.0	0.53
108-88-3	Toluene	92.14	0.75	U	0.75	0.16
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91	0.25
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1	0.40
127-18-4	Tetrachloroethene	165.83	1.4	U	1.4	0.14
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.0	U	2.0	0.61
124-48-1	Dibromochloromethane	208.28	1.7	U	1.7	0.54
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5	0.32
108-90-7	Chlorobenzene	112.56	0.92	U	0.92	0.20
100-41-4	Ethylbenzene	106.17	0.87	U	0.87	0.23
179601-23-1	m,p-Xylene	106.17	2.2	U	2.2	0.41
95-47-6	o-Xylene	106.17	0.87	U	0.87	0.23
100-42-5	Styrene	104.15	0.85	U	0.85	0.25
75-25-2	Bromoform	252.75	2.1	U	2.1	1.2
98-82-8	Cumene	120.19	0.98	U	0.98	0.20
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4	0.30
103-65-1	n-Propylbenzene	120.19	0.98	U	0.98	0.23
622-96-8	4-Ethyltoluene	120.20	0.98	U	0.98	0.24
108-67-8	1,3,5-Trimethylbenzene	120.20	0.98	U	0.98	0.23
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	0.24
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1	0.26
95-63-6	1,2,4-Trimethylbenzene	120.20	0.98	U	0.98	0.39
135-98-8	sec-Butylbenzene	134.22	1.1	U	1.1	0.25
99-87-6	4-Isopropyltoluene	134.22	1.1	U	1.1	0.33

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

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-193264/4

Matrix: Air Lab File ID: 56210_004.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2023 09:49

Soil Aliquot Vol: Dilution Factor: 1

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.: 193264 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	0.44
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	0.54
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	0.46
104-51-8	n-Butylbenzene	134.22	1.1	U	1.1	0.60
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	0.40
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7	2.4
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1	1.2
91-20-3	Naphthalene	128.17	2.6	U	2.6	1.6

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

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-193264/4

Matrix: Air Lab File ID: 56210_004.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2023 09:49

Soil Aliquot Vol: Dilution Factor: 1

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.: 193264 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	0.50	U	0.50	0.11
75-45-6	Chlorodifluoromethane	86.47	0.50	U	0.50	0.12
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	0.048
74-87-3	Chloromethane	50.49	0.50	U	0.50	0.15
106-97-8	n-Butane	58.12	0.50	U	0.50	0.20
75-01-4	Vinyl chloride	62.50	0.078	U	0.078	0.021
106-99-0	1,3-Butadiene	54.09	0.20	U	0.20	0.039
74-83-9	Bromomethane	94.94	0.20	U	0.20	0.071
75-00-3	Chloroethane	64.52	0.50	U	0.50	0.18
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.20	U	0.20	0.050
75-69-4	Trichlorofluoromethane	137.37	0.20	U	0.20	0.050
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	0.20	U	0.20	0.053
75-35-4	1,1-Dichloroethene	96.94	0.050	U	0.050	0.026
67-64-1	Acetone	58.08	5.0	U	5.0	1.6
67-63-0	Isopropyl alcohol	60.10	5.0	U	5.0	1.6
75-15-0	Carbon disulfide	76.14	0.50	U	0.50	0.13
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	0.12
75-09-2	Methylene Chloride	84.93	0.50	U	0.50	0.18
75-65-0	tert-Butyl alcohol	74.12	5.0	U	5.0	1.2
1634-04-4	Methyl tert-butyl ether	88.15	0.20	U	0.20	0.036
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.20	0.023
110-54-3	n-Hexane	86.17	0.50	U	0.50	0.11
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	0.025
78-93-3	Methyl Ethyl Ketone (2-Butanone)	72.11	0.50	U	0.50	0.49
156-59-2	cis-1,2-Dichloroethene	96.94	0.050	U	0.050	0.021
67-66-3	Chloroform	119.38	0.20	U	0.20	0.041
109-99-9	Tetrahydrofuran	72.11	5.0	U	5.0	1.3
71-55-6	1,1,1-Trichloroethane	133.41	0.20	U	0.20	0.044
110-82-7	Cyclohexane	84.16	0.20	U	0.20	0.058
56-23-5	Carbon tetrachloride	153.81	0.035	U	0.035	0.022
540-84-1	2,2,4-Trimethylpentane	114.23	0.20	U	0.20	0.038
71-43-2	Benzene	78.11	0.20	U	0.20	0.044

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

Lab Name: Eurofins Burlington | Job No.: 200-68952-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-193264/4

Matrix: Air | Lab File ID: 56210_004.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 07/06/2023 09:49

Soil Aliquot Vol: | Dilution Factor: 1

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.: 193264 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
107-06-2	1,2-Dichloroethane	98.96	0.20	U	0.20	0.093
142-82-5	n-Heptane	100.21	0.20	U	0.20	0.055
79-01-6	Trichloroethene	131.39	0.037	U	0.037	0.025
80-62-6	Methyl methacrylate	100.12	0.50	U	0.50	0.14
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20	0.094
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0	1.3
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20	0.050
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20	0.045
108-10-1	4-Methyl-2-pentanone (Methyl isobutyl ketone)	100.16	0.50	U	0.50	0.13
108-88-3	Toluene	92.14	0.20	U	0.20	0.042
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20	0.054
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20	0.074
127-18-4	Tetrachloroethene	165.83	0.20	U	0.20	0.021
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.50	U	0.50	0.15
124-48-1	Dibromochloromethane	208.28	0.20	U	0.20	0.063
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20	0.042
108-90-7	Chlorobenzene	112.56	0.20	U	0.20	0.044
100-41-4	Ethylbenzene	106.17	0.20	U	0.20	0.052
179601-23-1	m,p-Xylene	106.17	0.50	U	0.50	0.095
95-47-6	o-Xylene	106.17	0.20	U	0.20	0.052
100-42-5	Styrene	104.15	0.20	U	0.20	0.059
75-25-2	Bromoform	252.75	0.20	U	0.20	0.12
98-82-8	Cumene	120.19	0.20	U	0.20	0.041
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20	0.043
103-65-1	n-Propylbenzene	120.19	0.20	U	0.20	0.047
622-96-8	4-Ethyltoluene	120.20	0.20	U	0.20	0.049
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.20	0.047
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20	0.046
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20	0.047
95-63-6	1,2,4-Trimethylbenzene	120.20	0.20	U	0.20	0.080
135-98-8	sec-Butylbenzene	134.22	0.20	U	0.20	0.045
99-87-6	4-Isopropyltoluene	134.22	0.20	U	0.20	0.061

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

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-193264/4

Matrix: Air Lab File ID: 56210_004.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2023 09:49

Soil Aliquot Vol: Dilution Factor: 1

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.: 193264 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20	0.074
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20	0.089
100-44-7	Benzyl chloride	126.58	0.20	U	0.20	0.088
104-51-8	n-Butylbenzene	134.22	0.20	U	0.20	0.11
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20	0.066
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	0.33
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	0.11
91-20-3	Naphthalene	128.17	0.50	U	0.50	0.30

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_004.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 06-Jul-2023 09:49:02 ALS Bottle#: 0 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0056210-004
Operator ID: Instrument ID: CHAN.i

Method: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\TO15_TO3_Master_Method_AN.m
Limit Group: AI_TO15_ICAL
Last Update: 07-Jul-2023 06:54:27 Calib Date: 23-May-2023 01:58:58
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: puangmaleek Date: 07-Jul-2023 06:57:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		4.390					ND	
2 Dichlorodifluoromethane	85		4.492					ND	
3 Chlorodifluoromethane	51		4.540					ND	
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.861					ND	
5 Chloromethane	50		4.990					ND	
7 Butane	43		5.294					ND	7
6 Vinyl chloride	62		5.294					ND	
8 Butadiene	54		5.407					ND	
9 Bromomethane	94		6.140					ND	
10 Chloroethane	64		6.413					ND	
12 2-Methylbutane	43		6.616					ND	
13 Vinyl bromide	106		6.835					ND	
14 Trichlorofluoromethane	101		6.996					ND	
15 Pentane	43		7.199					ND	
16 Ethanol	45		7.376					ND	
18 Ethyl ether	59		7.611					ND	
19 Acrolein	56		7.868					ND	
20 1,1-Dichloroethene	96		8.060					ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		8.098					ND	
22 Acetone	43		8.146					ND	7
23 Isopropyl alcohol	45		8.435					ND	7
24 Carbon disulfide	76		8.462					ND	7
25 Acetonitrile	41		8.665					ND	
26 3-Chloro-1-propene	41		8.766					ND	
27 Methylene Chloride	49		9.002					ND	7
28 2-Methyl-2-propanol	59		9.205					ND	
29 Acrylonitrile	53		9.414					ND	
31 Methyl tert-butyl ether	73		9.489					ND	
30 trans-1,2-Dichloroethene	61		9.489					ND	
32 Hexane	57		9.997					ND	
S 35 1,2-Dichloroethene, Total	61		10.200					ND	7
33 1,1-Dichloroethane	63		10.270					ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
	34 Vinyl acetate	43		10.275					ND	
	36 2-Butanone (MEK)	72		11.243					ND	
	37 cis-1,2-Dichloroethene	96		11.275					ND	
	38 Ethyl acetate	88		11.318					ND	
*	39 Chlorobromomethane	128	11.682	11.682	0.000	97	177242	10.0	10.0	
	40 Tetrahydrofuran	42		11.709					ND	
	41 Chloroform	83		11.864					ND	
	42 1,1,1-Trichloroethane	97		12.164					ND	
	43 Cyclohexane	84		12.287					ND	
	44 Carbon tetrachloride	117		12.431					ND	
	45 Benzene	78		12.789					ND	
	46 1,2-Dichloroethane	62		12.870					ND	
	47 Isooctane	57		12.993					ND	
	48 n-Heptane	43		13.298					ND	7
*	49 1,4-Difluorobenzene	114	13.523	13.522	0.001	97	900996	10.0	10.0	
	50 n-Butanol	56		13.752					ND	7
	51 Trichloroethene	95		13.950					ND	
A	52 GRO	1	14.287	(6.606-21.969)		0	2998216		0	
	53 1,2-Dichloropropane	63		14.421					ND	
	54 Methyl methacrylate	69		14.496					ND	
	55 1,4-Dioxane	88		14.534					ND	
	57 Dibromomethane	174		14.576					ND	7
	58 Dichlorobromomethane	83		14.887					ND	
A	60 TVOC as Toluene	1	15.657	(4.380-26.934)		0	3074652		0	
	59 cis-1,3-Dichloropropene	75		15.684					ND	
	61 4-Methyl-2-pentanone (MIBK)	43		15.951					ND	
	62 Toluene	92		16.320					ND	
A	63 Toluene Range	1	16.323	(16.251-16.395)		0	6125		NC	
	64 n-Octane	43		16.550					ND	
A	65 C8 Range	1	16.556	(16.470-16.641)		0	3838		NC	
	66 trans-1,3-Dichloropropene	75		16.743					ND	
	67 1,1,2-Trichloroethane	83		17.117					ND	
	68 Tetrachloroethene	166		17.299					ND	
	69 2-Hexanone	43		17.529					ND	
	70 Chlorodibromomethane	129		17.850					ND	
	71 Ethylene Dibromide	107		18.091					ND	
*	73 Chlorobenzene-d5	117	19.001	19.001	0.000	94	787215	10.0	10.0	
	74 Chlorobenzene	112		19.059					ND	
	75 Ethylbenzene	91		19.247					ND	
	76 m-Xylene & p-Xylene	106		19.509					ND	
	77 n-Nonane	57		19.552					ND	
S	80 Xylenes, Total	106		20.100					ND	7
	78 o-Xylene	106		20.279					ND	
	79 Styrene	104		20.311					ND	
	81 Bromoform	173		20.654					ND	
	82 Isopropylbenzene	105		20.948					ND	
	83 1,1,2,2-Tetrachloroethane	83		21.467					ND	7
	84 1,2,3-Trichloropropane	75		21.563					ND	
	85 N-Propylbenzene	91		21.649					ND	
	86 2-Chlorotoluene	91		21.799					ND	
	87 4-Ethyltoluene	105		21.847					ND	7
	88 1,3,5-Trimethylbenzene	105		21.938					ND	7

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 n-Decane	57		21.959					ND	
90 Alpha Methyl Styrene	118		22.259					ND	
91 tert-Butylbenzene	119		22.414					ND	
92 1,2,4-Trimethylbenzene	105		22.499					ND	7
93 sec-Butylbenzene	105		22.735					ND	7
94 1,3-Dichlorobenzene	146		22.906					ND	7
95 4-Isopropyltoluene	119		22.943					ND	
96 1,4-Dichlorobenzene	146		23.045					ND	7
97 Benzyl chloride	91		23.195					ND	7
98 n-Butylbenzene	91		23.500					ND	7
99 1,2-Dichlorobenzene	146		23.543					ND	7
100 Undecane	57		23.644					ND	7
101 Dodecane	57		25.244					ND	7
102 1,2,4-Trichlorobenzene	180		26.014					ND	7
103 Hexachlorobutadiene	225		26.255					ND	
104 Naphthalene	128		26.501					ND	7
105 1,2,3-Trichlorobenzene	180		26.924					ND	7
109 Chlorotrifluoroethene TIC	1		0.000					ND	
110 Difluoroethane TIC	1		0.000					ND	
111 Total Alkanes TIC	1		0.000					ND	
112 Freon 115 TIC	1		0.000					ND	
113 1,1,1-Trifluoro-2,2-dichloroetha	1		0.000					ND	
114 Methylcyclohexane	83		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

ATTO15CISs_00012 Amount Added: 20.00 Units: mL Run Reagent

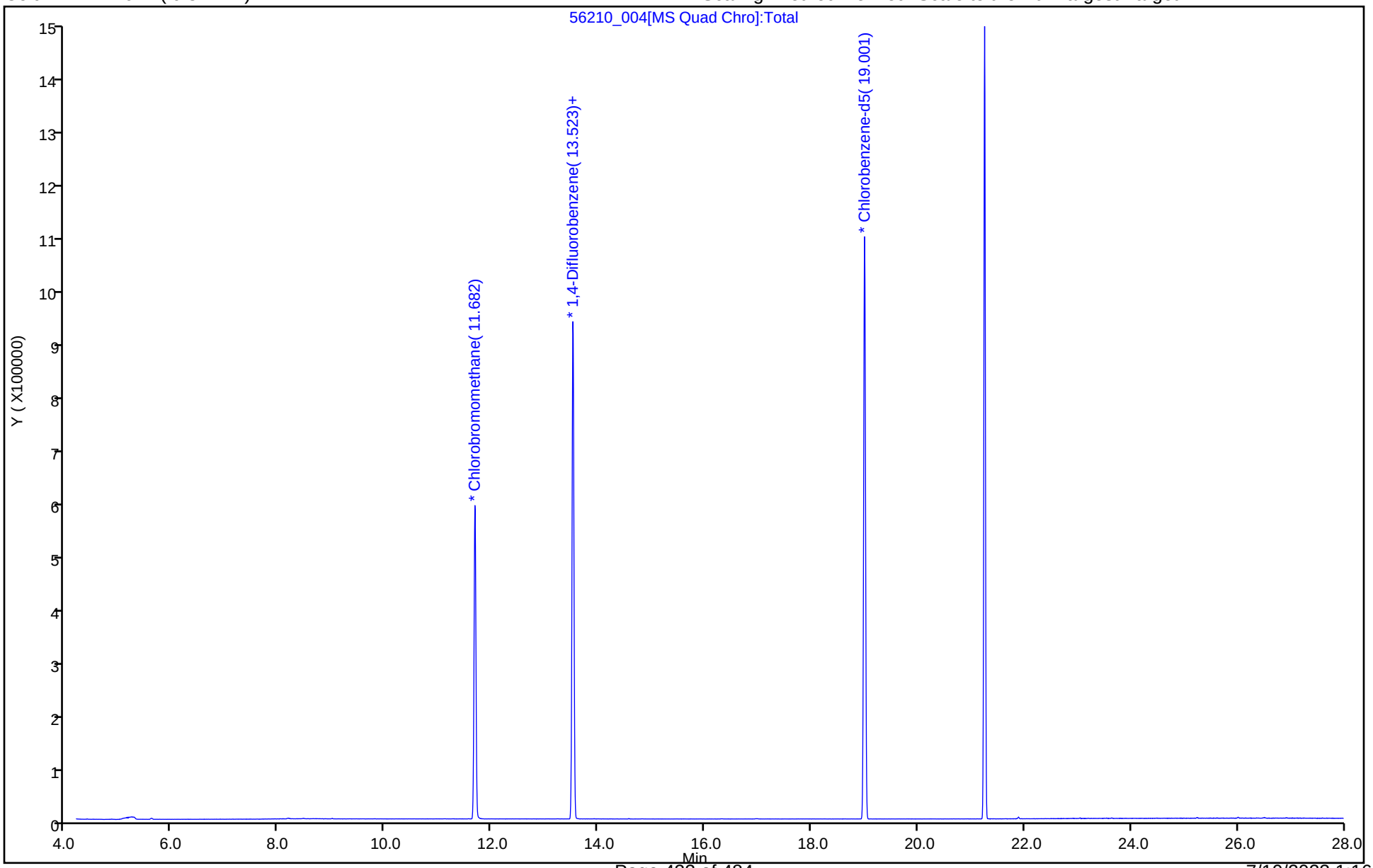
Report Date: 07-Jul-2023 06:57:24 Chrom Revision: 2.3 21-Jun-2023 17:36:34

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_004.D

Injection Date:	06-Jul-2023 09:49:02	Instrument ID:	CHAN.i	Operator ID:	
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		

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



7/10/2023 1:16 PM

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

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-193264/3

Matrix: Air Lab File ID: 56210_003.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2023 08:56

Soil Aliquot Vol: Dilution Factor: 1

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.: 193264 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	54.8		2.5	0.54
75-45-6	Chlorodifluoromethane	86.47	37.8		1.8	0.42
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	76.7		1.4	0.34
74-87-3	Chloromethane	50.49	22.1		1.0	0.31
106-97-8	n-Butane	58.12	23.1		1.2	0.48
75-01-4	Vinyl chloride	62.50	22.8		0.20	0.054
106-99-0	1,3-Butadiene	54.09	19.3		0.44	0.086
74-83-9	Bromomethane	94.94	42.3		0.78	0.28
75-00-3	Chloroethane	64.52	27.4		1.3	0.47
593-60-2	Bromoethene(Vinyl Bromide)	106.96	46.8		0.87	0.22
75-69-4	Trichlorofluoromethane	137.37	58.2		1.1	0.28
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	76.2		1.5	0.41
75-35-4	1,1-Dichloroethene	96.94	39.5		0.20	0.10
67-64-1	Acetone	58.08	24.7		12	3.8
67-63-0	Isopropyl alcohol	60.10	23.8		12	3.9
75-15-0	Carbon disulfide	76.14	31.0		1.6	0.40
107-05-1	3-Chloropropene	76.53	30.9		1.6	0.38
75-09-2	Methylene Chloride	84.93	33.1		1.7	0.63
75-65-0	tert-Butyl alcohol	74.12	31.1		15	3.6
1634-04-4	Methyl tert-butyl ether	88.15	35.1		0.72	0.13
156-60-5	trans-1,2-Dichloroethene	96.94	37.3		0.79	0.091
110-54-3	n-Hexane	86.17	33.9		1.8	0.39
75-34-3	1,1-Dichloroethane	98.96	37.8		0.81	0.10
78-93-3	Methyl Ethyl Ketone (2-Butanone)	72.11	28.5		1.5	1.4
156-59-2	cis-1,2-Dichloroethene	96.94	37.7		0.20	0.083
67-66-3	Chloroform	119.38	46.9		0.98	0.20
109-99-9	Tetrahydrofuran	72.11	29.4		15	3.8
71-55-6	1,1,1-Trichloroethane	133.41	52.6		1.1	0.24
110-82-7	Cyclohexane	84.16	33.0		0.69	0.20
56-23-5	Carbon tetrachloride	153.81	61.8		0.22	0.14
540-84-1	2,2,4-Trimethylpentane	114.23	44.5		0.93	0.18
71-43-2	Benzene	78.11	30.3		0.64	0.14

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

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-193264/3

Matrix: Air Lab File ID: 56210_003.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2023 08:56

Soil Aliquot Vol: Dilution Factor: 1

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.: 193264 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
107-06-2	1,2-Dichloroethane	98.96	38.2		0.81	0.38
142-82-5	n-Heptane	100.21	38.8		0.82	0.23
79-01-6	Trichloroethene	131.39	50.9		0.20	0.13
80-62-6	Methyl methacrylate	100.12	40.3		2.0	0.57
78-87-5	1,2-Dichloropropane	112.99	43.7		0.92	0.43
123-91-1	1,4-Dioxane	88.11	34.8		18	4.7
75-27-4	Bromodichloromethane	163.83	64.9		1.3	0.34
10061-01-5	cis-1,3-Dichloropropene	110.97	44.4		0.91	0.20
108-10-1	4-Methyl-2-pentanone (Methyl isobutyl ketone)	100.16	39.8		2.0	0.53
108-88-3	Toluene	92.14	36.4		0.75	0.16
10061-02-6	trans-1,3-Dichloropropene	110.97	45.3		0.91	0.25
79-00-5	1,1,2-Trichloroethane	133.41	52.3		1.1	0.40
127-18-4	Tetrachloroethene	165.83	64.0		1.4	0.14
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	40.3		2.0	0.61
124-48-1	Dibromochloromethane	208.28	85.9		1.7	0.54
106-93-4	1,2-Dibromoethane	187.87	74.8		1.5	0.32
108-90-7	Chlorobenzene	112.56	43.8		0.92	0.20
100-41-4	Ethylbenzene	106.17	42.1		0.87	0.23
179601-23-1	m,p-Xylene	106.17	83.8		2.2	0.41
95-47-6	o-Xylene	106.17	42.0		0.87	0.23
100-42-5	Styrene	104.15	42.2		0.85	0.25
75-25-2	Bromoform	252.75	109		2.1	1.2
98-82-8	Cumene	120.19	48.0		0.98	0.20
79-34-5	1,1,2,2-Tetrachloroethane	167.85	65.5		1.4	0.30
103-65-1	n-Propylbenzene	120.19	47.9		0.98	0.23
622-96-8	4-Ethyltoluene	120.20	47.9		0.98	0.24
108-67-8	1,3,5-Trimethylbenzene	120.20	47.7		0.98	0.23
95-49-8	2-Chlorotoluene	126.59	49.5		1.0	0.24
98-06-6	tert-Butylbenzene	134.22	52.8		1.1	0.26
95-63-6	1,2,4-Trimethylbenzene	120.20	47.0		0.98	0.39
135-98-8	sec-Butylbenzene	134.22	53.5		1.1	0.25
99-87-6	4-Isopropyltoluene	134.22	53.7		1.1	0.33

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

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-193264/3

Matrix: Air Lab File ID: 56210_003.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2023 08:56

Soil Aliquot Vol: Dilution Factor: 1

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.: 193264 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
541-73-1	1,3-Dichlorobenzene	147.00	56.4		1.2	0.44
106-46-7	1,4-Dichlorobenzene	147.00	56.7		1.2	0.54
100-44-7	Benzyl chloride	126.58	52.6		1.0	0.46
104-51-8	n-Butylbenzene	134.22	53.5		1.1	0.60
95-50-1	1,2-Dichlorobenzene	147.00	56.0		1.2	0.40
120-82-1	1,2,4-Trichlorobenzene	181.45	68.4		3.7	2.4
87-68-3	Hexachlorobutadiene	260.76	97.9		2.1	1.2
91-20-3	Naphthalene	128.17	48.6		2.6	1.6

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_003.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 06-Jul-2023 08:56:30 ALS Bottle#: 0 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0056210-003
Operator ID: Instrument ID: CHAN.i

Method: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\TO15_TO3_Master_Method_AN.m
Limit Group: AI_TO15_ICAL
Last Update: 07-Jul-2023 06:54:27 Calib Date: 23-May-2023 01:58:58
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHAN.i\20230522-55638.b\55613_015.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: puangmaleek Date: 07-Jul-2023 06:56:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	4.396	4.390	0.006	98	175894	10.0	11.3	
2 Dichlorodifluoromethane	85	4.492	4.492	0.000	99	630285	10.0	11.1	
3 Chlorodifluoromethane	51	4.545	4.540	0.005	97	377833	10.0	10.7	
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85	4.861	4.861	0.000	96	690125	10.0	11.0	
5 Chloromethane	50	4.989	4.990	-0.001	99	222451	10.0	10.7	
7 Butane	43	5.294	5.294	0.000	98	560078	10.0	9.71	
6 Vinyl chloride	62	5.300	5.294	0.006	75	367393	10.0	8.90	
8 Butadiene	54	5.412	5.407	0.005	93	284406	10.0	8.72	
11 BFB									
9 Bromomethane	94	6.140	6.140	0.000	99	265453	10.0	10.9	
10 Chloroethane	64	6.412	6.413	-0.001	100	157712	10.0	10.4	
12 2-Methylbutane	43	6.616	6.616	0.000	92	339508	10.0	9.82	
13 Vinyl bromide	106	6.835	6.835	0.000	99	269551	10.0	10.7	
14 Trichlorofluoromethane	101	6.996	6.996	0.000	98	721418	10.0	10.4	
15 Pentane	43	7.199	7.199	0.000	96	536216	10.0	10.1	
16 Ethanol	45	7.375	7.376	-0.001	98	246706	14.7	15.2	
18 Ethyl ether	59	7.611	7.611	0.000	93	226610	10.0	9.88	
19 Acrolein	56	7.868	7.868	0.000	96	139722	10.0	10.5	
20 1,1-Dichloroethene	96	8.065	8.060	0.005	94	304573	10.0	9.96	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	8.098	8.098	0.000	91	635281	10.0	9.94	
22 Acetone	43	8.146	8.146	0.000	98	539595	10.0	10.4	
23 Isopropyl alcohol	45	8.435	8.435	0.000	100	594155	10.0	9.68	
24 Carbon disulfide	76	8.461	8.462	-0.001	100	946582	10.0	9.95	
25 Acetonitrile	41	8.670	8.665	0.005	98	235248	10.0	9.64	
26 3-Chloro-1-propene	41	8.766	8.766	0.000	97	449911	10.0	9.88	
27 Methylene Chloride	49	9.002	9.002	0.000	97	407515	10.0	9.54	
28 2-Methyl-2-propanol	59	9.205	9.205	0.000	99	725565	10.0	10.2	
29 Acrylonitrile	53	9.414	9.414	0.000	94	251778	10.0	9.22	
31 Methyl tert-butyl ether	73	9.489	9.489	0.000	97	977996	10.0	9.74	
30 trans-1,2-Dichloroethene	61	9.494	9.489	0.005	95	533119	10.0	9.41	
32 Hexane	57	9.997	9.997	0.000	93	563421	10.0	9.61	
S 35 1,2-Dichloroethene, Total	61				0		20.0	18.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 1,1-Dichloroethane	63	10.270	10.270	0.000	99	639656	10.0	9.34	
34 Vinyl acetate	43	10.275	10.275	0.000	100	965021	10.0	10.4	
36 2-Butanone (MEK)	72	11.249	11.243	0.006	100	179922	10.0	9.67	
37 cis-1,2-Dichloroethene	96	11.275	11.275	0.000	98	336515	10.0	9.51	
38 Ethyl acetate	88	11.318	11.318	0.000	99	29728	10.0	10.1	
* 39 Chlorobromomethane	128	11.687	11.682	0.005	97	177958	10.0	10.0	
40 Tetrahydrofuran	42	11.714	11.709	0.005	93	414717	10.0	9.97	
41 Chloroform	83	11.864	11.864	0.000	97	714451	10.0	9.60	
42 1,1,1-Trichloroethane	97	12.163	12.164	-0.001	98	680988	10.0	9.64	
43 Cyclohexane	84	12.292	12.287	0.005	97	445640	10.0	9.58	
44 Carbon tetrachloride	117	12.436	12.431	0.005	96	658924	10.0	9.83	
45 Benzene	78	12.789	12.789	0.000	97	1072923	10.0	9.48	
46 1,2-Dichloroethane	62	12.870	12.870	0.000	93	494890	10.0	9.44	
47 Isooctane	57	12.993	12.993	0.000	99	1820314	10.0	9.53	
48 n-Heptane	43	13.298	13.298	0.000	95	692499	10.0	9.46	
* 49 1,4-Difluorobenzene	114	13.522	13.522	0.000	97	897158	10.0	10.0	
50 n-Butanol	56	13.752	13.752	0.000	90	254288	10.0	9.34	
51 Trichloroethene	95	13.950	13.950	0.000	91	455935	10.0	9.47	
A 52 GRO	1	14.287	(6.606-21.969)		0	154157823	649.9	0	
53 1,2-Dichloropropane	63	14.421	14.421	0.000	93	434372	10.0	9.46	
54 Methyl methacrylate	69	14.496	14.496	0.000	94	397814	10.0	9.83	
55 1,4-Dioxane	88	14.533	14.534	-0.001	98	214394	10.0	9.65	
57 Dibromomethane	174	14.576	14.576	0.000	87	304559	10.0	9.37	
58 Dichlorobromomethane	83	14.886	14.887	-0.001	98	786128	10.0	9.68	
A 60 TVOC as Toluene	1	15.657	(4.380-26.934)		0	232187170	899.8	0	
59 cis-1,3-Dichloropropene	75	15.684	15.684	0.000	95	694536	10.0	9.78	
61 4-Methyl-2-pentanone (MIBK)	43	15.951	15.951	0.000	98	921930	10.0	9.72	
62 Toluene	92	16.320	16.320	0.000	93	717626	10.0	9.65	
A 63 Toluene Range	1	16.323	(16.251-16.395)		0	3025190	NC	NC	
64 n-Octane	43	16.550	16.550	0.000	94	959351	10.0	9.54	
A 65 C8 Range	1	16.556	(16.470-16.641)		0	3572132	NC	NC	
66 trans-1,3-Dichloropropene	75	16.743	16.743	0.000	98	611828	10.0	9.98	
67 1,1,2-Trichloroethane	83	17.117	17.117	0.000	97	392571	10.0	9.59	
68 Tetrachloroethene	166	17.299	17.299	0.000	89	449270	10.0	9.44	
69 2-Hexanone	43	17.529	17.529	0.000	93	879574	10.0	9.83	
70 Chlorodibromomethane	129	17.856	17.850	0.006	97	662290	10.0	10.1	
71 Ethylene Dibromide	107	18.091	18.091	0.000	98	640513	10.0	9.74	
* 73 Chlorobenzene-d5	117	19.000	19.001	-0.001	91	791848	10.0	10.0	
74 Chlorobenzene	112	19.059	19.059	0.000	90	894233	10.0	9.51	
75 Ethylbenzene	91	19.247	19.247	0.000	99	1602819	10.0	9.70	
76 m-Xylene & p-Xylene	106	19.503	19.509	-0.006	0	1150165	20.0	19.3	
77 n-Nonane	57	19.551	19.552	-0.001	92	894766	10.0	9.65	
S 80 Xylenes, Total	106				0		30.0	29.0	
78 o-Xylene	106	20.279	20.279	0.000	97	555312	10.0	9.68	
79 Styrene	104	20.311	20.311	0.000	99	913624	10.0	9.91	
81 Bromoform	173	20.654	20.654	0.000	91	571451	10.0	10.6	
82 Isopropylbenzene	105	20.953	20.948	0.005	99	1665550	10.0	9.77	
83 1,1,2,2-Tetrachloroethane	83	21.472	21.467	0.005	98	1011198	10.0	9.54	
84 1,2,3-Trichloropropane	75	21.568	21.563	0.005	98	803251	10.0	9.69	
85 N-Propylbenzene	91	21.649	21.649	0.000	98	2164255	10.0	9.74	
86 2-Chlorotoluene	91	21.798	21.799	0.000	96	1355335	10.0	9.56	
87 4-Ethyltoluene	105	21.847	21.847	0.000	98	1657794	10.0	9.74	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 1,3,5-Trimethylbenzene	105	21.937	21.938	-0.001	91	1391425	10.0	9.71	
89 n-Decane	57	21.959	21.959	0.000	91	1166414	10.0	9.76	
90 Alpha Methyl Styrene	118	22.258	22.259	-0.001	84	671256	10.0	9.97	
91 tert-Butylbenzene	119	22.414	22.414	0.000	91	1246418	10.0	9.62	
92 1,2,4-Trimethylbenzene	105	22.499	22.499	0.000	98	1385691	10.0	9.56	
93 sec-Butylbenzene	105	22.735	22.735	0.000	98	2046841	10.0	9.74	
94 1,3-Dichlorobenzene	146	22.906	22.906	0.000	97	822303	10.0	9.38	
95 4-Isopropyltoluene	119	22.943	22.943	0.000	96	1594570	10.0	9.77	
96 1,4-Dichlorobenzene	146	23.045	23.045	0.000	90	833113	10.0	9.42	
97 Benzyl chloride	91	23.195	23.195	0.000	97	1340204	10.0	10.2	
98 n-Butylbenzene	91	23.500	23.500	0.000	98	1795250	10.0	9.75	
99 1,2-Dichlorobenzene	146	23.542	23.543	-0.001	91	784839	10.0	9.31	
100 Undecane	57	23.644	23.644	0.000	96	1291190	10.0	10.4	
101 Dodecane	57	25.244	25.244	0.000	97	1240190	10.0	9.85	
102 1,2,4-Trichlorobenzene	180	26.009	26.014	-0.005	92	668434	10.0	9.22	
103 Hexachlorobutadiene	225	26.255	26.255	0.000	92	517165	10.0	9.18	
104 Naphthalene	128	26.501	26.501	0.000	98	1686478	10.0	9.26	
105 1,2,3-Trichlorobenzene	180	26.923	26.924	-0.001	93	554080	10.0	9.10	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15LCSW_00862	Amount Added: 200.00	Units: mL	
ATTO15CISs_00012	Amount Added: 20.00	Units: mL	Run Reagent

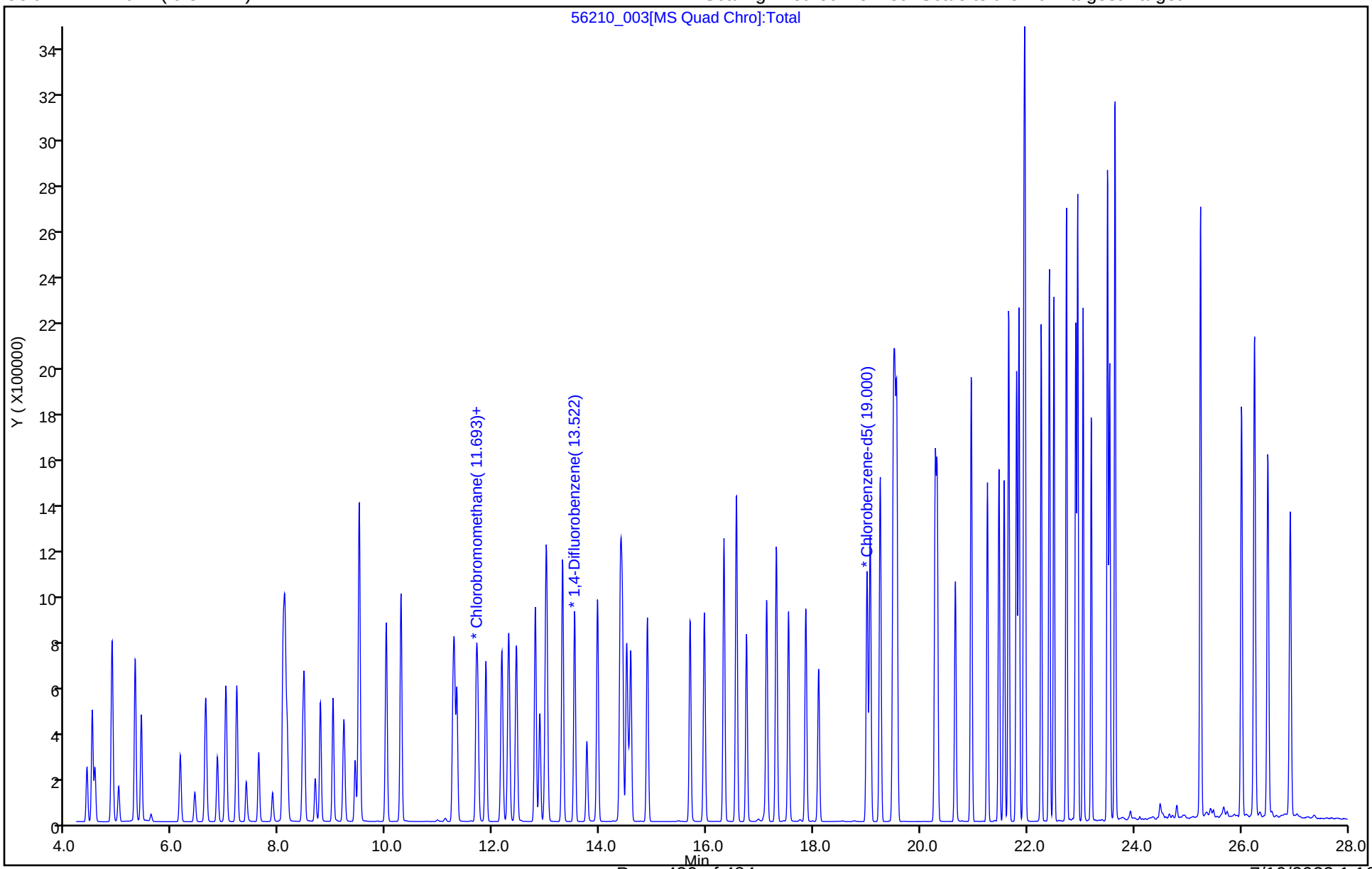
Report Date: 07-Jul-2023 06:56:33 Chrom Revision: 2.3 21-Jun-2023 17:36:34

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAN.i\20230706-56210.b\56210_003.D

Injection Date:	06-Jul-2023 08:56:30	Instrument ID:	CHAN.i	Operator ID:	
Lims ID:	lcs			Worklist Smp#:	3
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AN	Limit Group:	AI_TO15_ICAL		

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



7/10/2023 1:16 PM

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Instrument ID: CHAN.i Start Date: 05/22/2023 14:02

Analysis Batch Number: 191713 End Date: 05/23/2023 07:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-191713/1		05/22/2023 14:02	1	55638_001a.D	RTX-624 0.32(mm)
IC 200-191713/4		05/22/2023 16:33	1	55613_004.D	RTX-624 0.32(mm)
ZZZZZ		05/22/2023 16:33	1		RTX-624 0.32(mm)
ZZZZZ		05/22/2023 16:33	1		RTX-624 0.32(mm)
IC 200-191713/6		05/22/2023 18:16	1	55613_006.D	RTX-624 0.32(mm)
IC 200-191713/7		05/22/2023 19:08	1	55613_007.D	RTX-624 0.32(mm)
IC 200-191713/8		05/22/2023 19:59	1	55613_008.D	RTX-624 0.32(mm)
ICIS 200-191713/9		05/22/2023 20:50	1	55613_009.D	RTX-624 0.32(mm)
IC 200-191713/10		05/22/2023 21:42	1	55613_010.D	RTX-624 0.32(mm)
IC 200-191713/14		05/23/2023 01:07	1	55613_014.D	RTX-624 0.32(mm)
IC 200-191713/15		05/23/2023 01:58	1	55613_015.D	RTX-624 0.32(mm)
ICV 200-191713/20		05/23/2023 06:16	1	55613_020.D	RTX-624 0.32(mm)
ZZZZZ		05/23/2023 07:07	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Instrument ID: CHAN.i Start Date: 07/06/2023 07:11

Analysis Batch Number: 193264 End Date: 07/07/2023 06:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-193264/1		07/06/2023 07:11	1	56210_001.D	RTX-624 0.32(mm)
CCVIS 200-193264/2		07/06/2023 08:03	1	56210_002.D	RTX-624 0.32(mm)
LCS 200-193264/3		07/06/2023 08:56	1	56210_003.D	RTX-624 0.32(mm)
MB 200-193264/4		07/06/2023 09:49	1	56210_004.D	RTX-624 0.32(mm)
ZZZZZ		07/06/2023 10:42	1		RTX-624 0.32(mm)
ZZZZZ		07/06/2023 11:35	1		RTX-624 0.32(mm)
ZZZZZ		07/06/2023 12:28	1		RTX-624 0.32(mm)
ZZZZZ		07/06/2023 13:21	1		RTX-624 0.32(mm)
ZZZZZ		07/06/2023 14:14	1		RTX-624 0.32(mm)
ZZZZZ		07/06/2023 15:08	2		RTX-624 0.32(mm)
ZZZZZ		07/06/2023 16:02	1		RTX-624 0.32(mm)
ZZZZZ		07/06/2023 16:56	2		RTX-624 0.32(mm)
ZZZZZ		07/06/2023 17:49	10		RTX-624 0.32(mm)
ZZZZZ		07/06/2023 18:42	10		RTX-624 0.32(mm)
ZZZZZ		07/06/2023 19:35	20		RTX-624 0.32(mm)
200-68952-1	Garage Blower Effluent	07/06/2023 20:28	1	56210_016.D	RTX-624 0.32(mm)
200-68952-2	Factory Blower Effluent (FB-2)	07/06/2023 21:21	1	56210_017.D	RTX-624 0.32(mm)
ZZZZZ		07/06/2023 22:14	1		RTX-624 0.32(mm)
ZZZZZ		07/06/2023 23:06	1		RTX-624 0.32(mm)
ZZZZZ		07/06/2023 23:59	1		RTX-624 0.32(mm)
ZZZZZ		07/07/2023 00:52	1		RTX-624 0.32(mm)
ZZZZZ		07/07/2023 01:45	5		RTX-624 0.32(mm)
ZZZZZ		07/07/2023 02:37	5		RTX-624 0.32(mm)
ZZZZZ		07/07/2023 03:30	1		RTX-624 0.32(mm)
ZZZZZ		07/07/2023 04:23	1		RTX-624 0.32(mm)
ZZZZZ		07/07/2023 05:16	1		RTX-624 0.32(mm)
ZZZZZ		07/07/2023 06:09	5		RTX-624 0.32(mm)

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Batch Number: 191713 Batch Start Date: 05/22/23 14:02 Batch Analyst: Pham, Vu T

Batch Method: TO-15 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ATTO15CAL1w 00255	ATTO15CAL2w 00335	ATTO15CAL3w 00264	ATTO15CAL4w 00807
BFB 200-191713/1		TO-15		200	200				
IC 200-191713/4		TO-15		200 mL	200 mL	35 mL			
IC 200-191713/6		TO-15		200 mL	200 mL	200 mL			
IC 200-191713/7		TO-15		200 mL	200 mL		200 mL		
IC 200-191713/8		TO-15		200 mL	200 mL			200 mL	
ICIS 200-191713/9		TO-15		200 mL	200 mL				200 mL
IC 200-191713/10		TO-15		200 mL	200 mL				
IC 200-191713/14		TO-15		200 mL	200 mL				
IC 200-191713/15		TO-15		200 mL	200 mL				
ICV 200-191713/20		TO-15		200 mL	200 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	ATTO15CAL5w 00132	ATTO15CAL6w 00221	ATTO15CAL7w 00132	ATTO15CISs 00012	ATTO15LCSW 00861	
BFB 200-191713/1		TO-15					20 mL		
IC 200-191713/4		TO-15					20 mL		
IC 200-191713/6		TO-15					20 mL		
IC 200-191713/7		TO-15					20 mL		
IC 200-191713/8		TO-15					20 mL		
ICIS 200-191713/9		TO-15					20 mL		
IC 200-191713/10		TO-15		200 mL			20 mL		
IC 200-191713/14		TO-15			200 mL		20 mL		
IC 200-191713/15		TO-15				200 mL	20 mL		
ICV 200-191713/20		TO-15					20 mL	200 mL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Batch Number: 191713 Batch Start Date: 05/22/23 14:02 Batch Analyst: Pham, Vu T

Batch Method: TO-15 Batch End Date:

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 200-68952-1

SDG No.:

Batch Number: 193264 Batch Start Date: 07/06/23 07:11 Batch Analyst: Puangmalee, Kesanee 1

Batch Method: TO-15 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ATTO15CAL4w 00808	ATTO15CISs 00012	ATTO15LCSW 00862	
BFB 200-193264/1		TO-15		200	200		20 mL		
CCVIS 200-193264/2		TO-15		200 mL	200 mL	200 mL	20 mL		
LCS 200-193264/3		TO-15		200 mL	200 mL		20 mL	200 mL	
MB 200-193264/4		TO-15		200 mL	200 mL		20 mL		
200-68952-A-1	Garage Blower Effluent	TO-15	T	200 mL	200 mL		20 mL		
200-68952-A-2	Factory Blower Effluent (FB-2)	TO-15	T	200 mL	200 mL		20 mL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Post-Sampling Air Canister Pressure Check Record

Login # (w/ Location Code)	Date	Time (Military)	Lab BP ("Hg)	Lab Temp (°C)	Pressure Gauge ID	Analyst
200-68952	07/05/23	10:00	29.6	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
200-68952-A-1	3220	0.0	N	N/A	N/A	N/A	5055-55711	GRAB
200-68952-A-2	9272	0.0	N	N/A	N/A	N/A	5055-55711	GRAB

[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

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	5/26/2023	1452	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	4331	0.04	0.04	0	29.7	G26	5/28/23	1036	←	22.0	G26	6/3/23	1025	←	22.0
2	3220	↓	0.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
3	5055	0.04	0.04	0	29.7	G26	6/3/23	1103	←	22.0	G26	6/10/23	1245	←	22.0
4	5155	0.04	0.04	0	29.7	G26	5/28/23	1036	←	22.0	G26	6/3/23	1025	←	22.0
5	9267	↓	0.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
6	5648	↓	0.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
7	9272	↓	0.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
8	9214	↓	0.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
9	4924	↓	0.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
10	4555	↓	0.17	0.13	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
11	5042	↓	0.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
12	8151	↓	0.04	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
5055	5/31/23	55711	AHS		XXXXXXX				5/31/23	JJ

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.

Comments:

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

TestAmerica Burlington

200-68405-A-3
5055
Location: Air-Storage
Bottle: Summa Canister 6L
Sampled: 5/26/2023 12:00 AM 200-1749892
Loc: 200
68405
#3 A
Air-Storag
5/16/2023 1:36:26 PM

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 55711_004.D

Lab ID: LCS 200-191920/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	9.25	93	50-158	
Dichlorodifluoromethane	10.0	7.25	73	61-142	
Freon 22	10.0	8.86	89	60-147	
1,2-Dichlorotetrafluoroethane	10.0	8.70	87	71-141	
Chloromethane	10.0	9.60	96	56-141	
n-Butane	10.0	11.1	111	53-151	
Vinyl chloride	10.0	10.1	101	61-135	
1,3-Butadiene	10.0	9.64	96	58-139	
Bromomethane	10.0	8.81	88	72-124	
Chloroethane	10.0	9.43	94	68-130	
Bromoethene(Vinyl Bromide)	10.0	8.73	87	75-125	
Trichlorofluoromethane	10.0	8.57	86	70-129	
Ethanol	14.7	11.8	80	50-150	
Freon TF	10.0	9.02	90	70-121	
1,1-Dichloroethene	10.0	8.62	86	68-120	
Acetone	10.0	10.2	102	54-154	
Isopropyl alcohol	10.0	9.90	99	53-142	
Carbon disulfide	10.0	9.78	98	71-138	
3-Chloropropene	10.0	9.46	95	50-150	
Methylene Chloride	10.0	9.99	100	59-137	
tert-Butyl alcohol	10.0	9.87	99	66-132	
Methyl tert-butyl ether	10.0	9.31	93	70-127	
trans-1,2-Dichloroethene	10.0	9.58	96	69-137	
n-Hexane	10.0	9.59	96	63-138	
1,1-Dichloroethane	10.0	9.58	96	66-130	
Vinyl acetate	10.0	8.86	89	59-149	
Ethyl acetate	10.0	9.48	95	70-131	
Methyl Ethyl Ketone	10.0	9.71	97	72-124	
cis-1,2-Dichloroethene	10.0	8.75	88	72-121	
Chloroform	10.0	9.34	93	73-124	
Tetrahydrofuran	10.0	10.2	102	60-149	
1,1,1-Trichloroethane	10.0	8.92	89	72-127	
Cyclohexane	10.0	9.34	93	76-124	
Carbon tetrachloride	10.0	8.95	90	71-133	
2,2,4-Trimethylpentane	10.0	9.89	99	68-131	
Benzene	10.0	9.34	93	73-119	
1,2-Dichloroethane	10.0	9.42	94	68-135	
n-Heptane	10.0	9.89	99	60-142	
Trichloroethene	10.0	9.09	91	73-122	
Methyl methacrylate	10.0	9.39	94	73-129	
1,2-Dichloropropane	10.0	9.84	98	69-128	
1,4-Dioxane	10.0	9.09	91	66-129	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 55711_004.D

Lab ID: LCS 200-191920/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	9.49	95	75-127	
cis-1,3-Dichloropropene	10.0	9.32	93	74-125	
methyl isobutyl ketone	10.0	10.1	101	58-144	
Toluene	10.0	8.85	88	75-122	
trans-1,3-Dichloropropene	10.0	9.35	94	74-128	
1,1,2-Trichloroethane	10.0	9.22	92	75-126	
Tetrachloroethene	10.0	8.02	80	70-125	
Methyl Butyl Ketone (2-Hexanone)	10.0	9.31	93	57-143	
Dibromochloromethane	10.0	9.16	92	73-125	
1,2-Dibromoethane	10.0	8.81	88	78-122	
Chlorobenzene	10.0	8.64	86	76-119	
Ethylbenzene	10.0	8.90	89	74-122	
m,p-Xylene	20.0	17.5	87	76-121	
Xylene, o-	10.0	8.62	86	73-123	
Styrene	10.0	8.69	87	74-125	
Bromoform	10.0	9.37	94	53-149	
Cumene	10.0	8.76	88	73-123	
1,1,2,2-Tetrachloroethane	10.0	9.11	91	74-126	
n-Propylbenzene	10.0	9.07	91	73-127	
4-Ethyltoluene	10.0	8.83	88	75-129	
1,3,5-Trimethylbenzene	10.0	8.92	89	72-126	
2-Chlorotoluene	10.0	8.90	89	74-126	
tert-Butylbenzene	10.0	8.68	87	71-125	
1,2,4-Trimethylbenzene	10.0	8.61	86	71-129	
sec-Butylbenzene	10.0	8.96	90	70-128	
4-Isopropyltoluene	10.0	8.77	88	68-130	
1,3-Dichlorobenzene	10.0	8.38	84	69-131	
1,4-Dichlorobenzene	10.0	8.39	84	67-132	
Benzyl chloride	10.0	8.50	85	60-136	
n-Butylbenzene	10.0	9.01	90	65-137	
1,2-Dichlorobenzene	10.0	8.31	83	68-129	
1,2,4-Trichlorobenzene	10.0	7.85	79	50-150	
Hexachlorobutadiene	10.0	8.01	80	58-130	
Naphthalene	10.0	8.15	81	50-150	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Lab File ID: 55711_005.D Lab Sample ID: MB 200-191920/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHAM.i Date Analyzed: 05/30/2023 10:10

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-191920/4	55711_004.D	05/30/2023 09:18
5055	200-68405-3	55711_008.D	05/30/2023 13:13

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

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-191920/5

Matrix: Air Lab File ID: 55711_005.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 05/30/2023 10:10

Soil Aliquot Vol: Dilution Factor: 1

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.: 191920 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.50	U	0.50	0.50
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20

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

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-191920/5

Matrix: Air Lab File ID: 55711_005.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 05/30/2023 10:10

Soil Aliquot Vol: Dilution Factor: 1

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.: 191920 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20

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

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-191920/5

Matrix: Air Lab File ID: 55711_005.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 05/30/2023 10:10

Soil Aliquot Vol: Dilution Factor: 1

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.: 191920 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAM.i\20230530-55711.b\55711_005.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 30-May-2023 10:10:12 ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0055711-005
Operator ID: wrd Instrument ID: CHAM.i

Method: \\chromfs\Burlington\ChromData\CHAM.i\20230530-55711.b\TO15_TO3_Master_Method_AM.m
Limit Group: AI_TO15_ICAL
Last Update: 31-May-2023 13:44:24 Calib Date: 05-Apr-2023 00:34:15
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHAM.i\20230404-54971.b\54971_010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1632

First Level Reviewer: puangmaleek Date: 31-May-2023 13:44:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		4.316					ND	7
2 Dichlorodifluoromethane	85		4.417					ND	
3 Chlorodifluoromethane	51		4.471					ND	
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.792					ND	
5 Chloromethane	50		4.920					ND	
7 Butane	43		5.220					ND	7
6 Vinyl chloride	62		5.225					ND	
8 Butadiene	54		5.343					ND	
9 Bromomethane	94		6.081					ND	
10 Chloroethane	64		6.365					ND	
12 2-Methylbutane	43		6.568					ND	
13 Vinyl bromide	106		6.798					ND	
14 Trichlorofluoromethane	101		6.958					ND	
15 Pentane	43		7.162					ND	
16 Ethanol	45		7.392					ND	
18 Ethyl ether	59		7.600					ND	
19 Acrolein	56		7.868					ND	
20 1,1-Dichloroethene	96		8.050					ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		8.087					ND	
22 Acetone	43		8.157					ND	7
24 Carbon disulfide	76		8.451					ND	7
23 Isopropyl alcohol	45		8.467					ND	7
25 Acetonitrile	41		8.692					ND	
26 3-Chloro-1-propene	41		8.767					ND	
27 Methylene Chloride	49	9.013	9.013	0.000	86	7136		0.1632	
28 2-Methyl-2-propanol	59		9.248					ND	
29 Acrylonitrile	53		9.446					ND	
30 trans-1,2-Dichloroethene	61		9.505					ND	
31 Methyl tert-butyl ether	73		9.510					ND	
32 Hexane	57		10.008					ND	
S 35 1,2-Dichloroethene, Total	61		10.200					ND	7
33 1,1-Dichloroethane	63		10.297					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 Vinyl acetate	43		10.307					ND	
36 2-Butanone (MEK)	72		11.297					ND	
37 cis-1,2-Dichloroethene	96		11.313					ND	
38 Ethyl acetate	88		11.367					ND	
* 39 Chlorobromomethane	128	11.730	11.730	0.000	79	340065	10.0	10.0	
40 Tetrahydrofuran	42		11.757					ND	
41 Chloroform	83		11.912					ND	
42 1,1,1-Trichloroethane	97		12.207					ND	
43 Cyclohexane	84		12.330					ND	
44 Carbon tetrachloride	117		12.474					ND	
45 Benzene	78		12.838					ND	
46 1,2-Dichloroethane	62		12.929					ND	
47 Isooctane	57		13.036					ND	
48 n-Heptane	43		13.346					ND	7
* 49 1,4-Difluorobenzene	114	13.581	13.587	-0.006	94	1698523	10.0	10.0	
50 n-Butanol	56		13.838					ND	
51 Trichloroethene	95		14.009					ND	
A 52 GRO	1	14.296	(6.558-22.033)		0	5221667		0	
53 1,2-Dichloropropane	63		14.486					ND	
54 Methyl methacrylate	69		14.566					ND	
55 1,4-Dioxane	88		14.609					ND	
57 Dibromomethane	174		14.646					ND	7
58 Dichlorobromomethane	83		14.956					ND	
A 60 TVOC as Toluene	1	15.692	(4.306-27.078)		0	5325838		0	
59 cis-1,3-Dichloropropene	75		15.764					ND	
61 4-Methyl-2-pentanone (MIBK)	43		16.037					ND	
62 Toluene	92		16.395					ND	
A 63 Toluene Range	1	16.398	(16.326-16.470)		0	4131		NC	
64 n-Octane	43		16.620					ND	
A 65 C8 Range	1	16.625	(16.551-16.700)		0	4131		NC	
66 trans-1,3-Dichloropropene	75		16.829					ND	
67 1,1,2-Trichloroethane	83		17.209					ND	
68 Tetrachloroethene	166		17.374					ND	
69 2-Hexanone	43		17.620					ND	
70 Chlorodibromomethane	129		17.941					ND	
71 Ethylene Dibromide	107		18.177					ND	
* 73 Chlorobenzene-d5	117	19.086	19.086	0.000	85	1502375	10.0	10.0	
74 Chlorobenzene	112		19.145					ND	
75 Ethylbenzene	91		19.332					ND	MU
76 m-Xylene & p-Xylene	106		19.595					ND	
77 n-Nonane	57		19.637					ND	
S 80 Xylenes, Total	106		20.100					ND	7
78 o-Xylene	106		20.365					ND	
79 Styrene	104		20.397					ND	
81 Bromoform	173		20.739					ND	
82 Isopropylbenzene	105		21.028					ND	
83 1,1,2,2-Tetrachloroethane	83		21.553					ND	7
84 1,2,3-Trichloropropane	75		21.649					ND	
85 N-Propylbenzene	91		21.724					ND	
86 2-Chlorotoluene	91		21.874					ND	
87 4-Ethyltoluene	105		21.916					ND	
88 1,3,5-Trimethylbenzene	105		22.007					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 n-Decane	57		22.023					ND	
90 Alpha Methyl Styrene	118		22.328					ND	
91 tert-Butylbenzene	119		22.483					ND	
92 1,2,4-Trimethylbenzene	105		22.569					ND	7
93 sec-Butylbenzene	105		22.799					ND	7
94 1,3-Dichlorobenzene	146		22.976					ND	7
95 4-Isopropyltoluene	119		23.008					ND	
96 1,4-Dichlorobenzene	146		23.115					ND	7
97 Benzyl chloride	91		23.270					ND	7
98 n-Butylbenzene	91		23.575					ND	7
99 1,2-Dichlorobenzene	146		23.623					ND	7
100 Undecane	57		23.714					ND	
101 Dodecane	57		25.346					ND	7
102 1,2,4-Trichlorobenzene	180		26.132					ND	7
103 Hexachlorobutadiene	225		26.378					ND	
104 Naphthalene	128		26.640					ND	7
105 1,2,3-Trichlorobenzene	180		27.068					ND	7
109 Chlorotrifluoroethene TIC	1		0.000					ND	
110 Difluoroethane TIC	1		0.000					ND	
111 Total Alkanes TIC	1		0.000					ND	
112 Freon 115 TIC	1		0.000					ND	
113 1,1,1-Trifluoro-2,2-dichloroetha	1		0.000					ND	
114 Methylcyclohexane	83		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

ATTO15AHISs_00003 Amount Added: 20.00 Units: mL Run Reagent

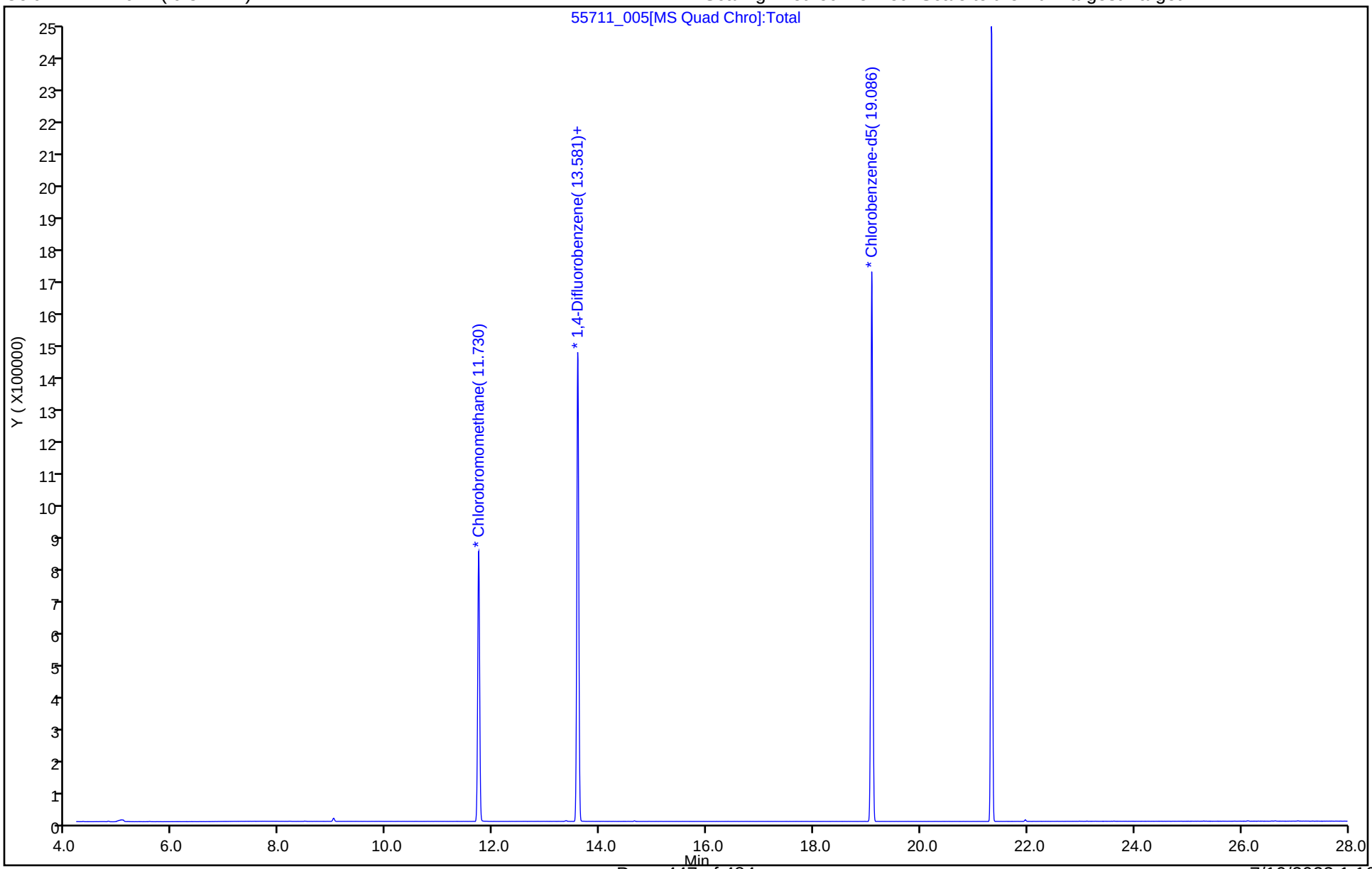
Report Date: 31-May-2023 13:44:24 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAM.i\20230530-55711.b\55711_005.D

Injection Date:	30-May-2023 10:10:12	Instrument ID:	CHAM.i	Operator ID:	wrd
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AM	Limit Group:	AI_TO15_ICAL		

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



7/10/2023 1:16 PM

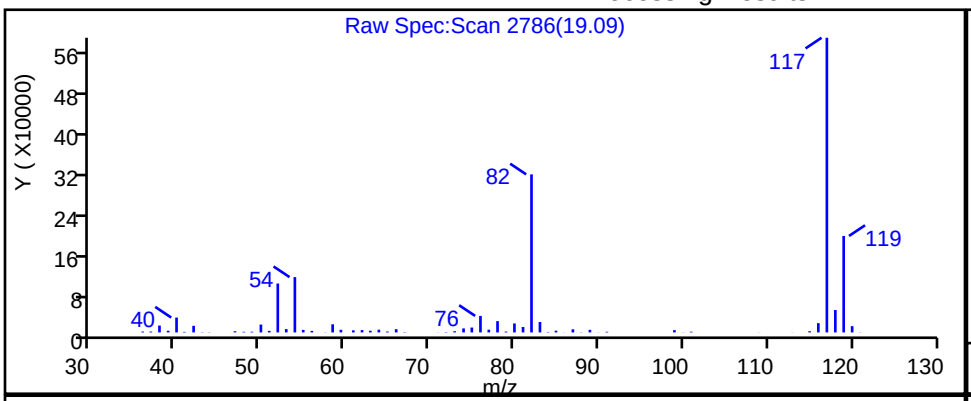
User Disabled Compound Report

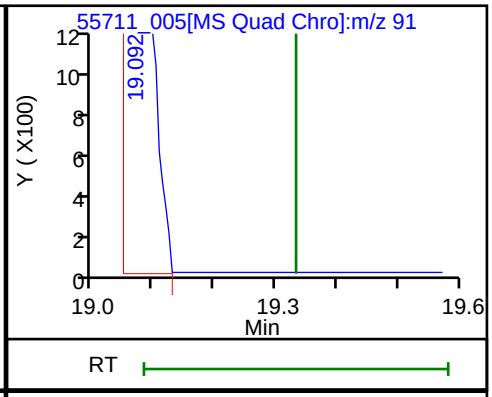
Eurofins Burlington

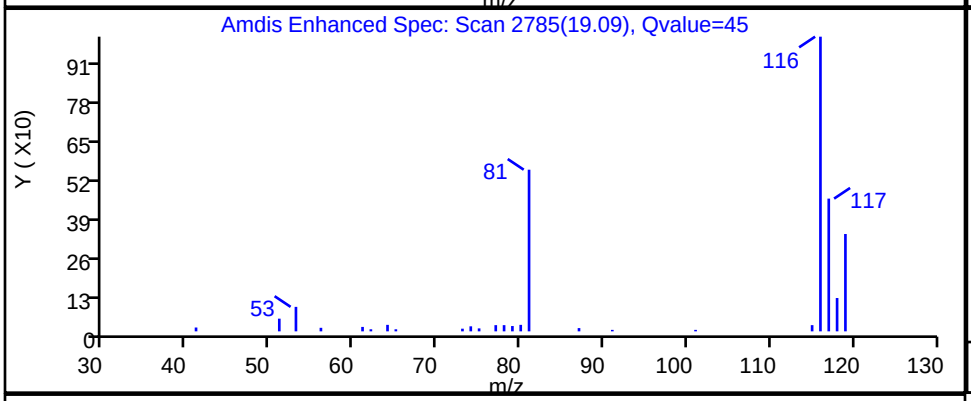
Data File:	\\chromfs\Burlington\ChromData\CHAM.i\20230530-55711.b\55711_005.D				
Injection Date:	30-May-2023 10:10:12	Instrument ID:	CHAM.i		
Lims ID:	mb				
Client ID:					
Operator ID:	wrd	ALS Bottle#:	0	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_TO3_Master_Method_AM	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

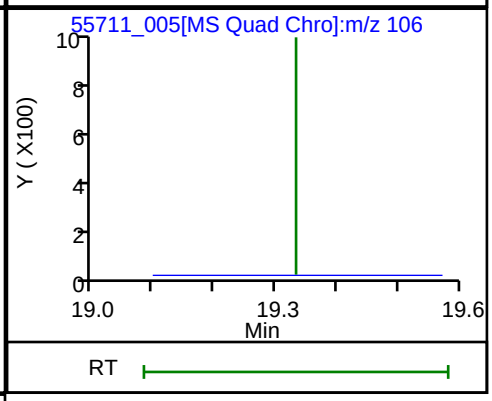
75 Ethylbenzene, CAS: 100-41-4

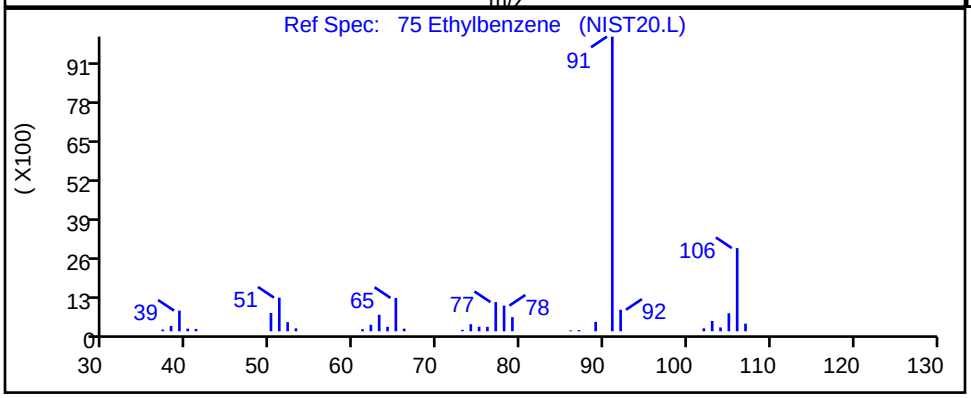
Processing Results











RT	Mass	Response	Amount
19.09	91.00	3183	0.012317
19.33	106.00	0	

Reviewer: puangmaleek, 31-May-2023 13:44:14 07:00:00 (UTC)

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

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Lab File ID: 54971_001.D BFB Injection Date: 04/04/2023

Instrument ID: CHAM.i BFB Injection Time: 16:36

Analysis Batch No.: 189999

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	14.2	
75	30.0 - 66.0% of mass 95	44.9	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.7	
173	Less than 2.0% of mass 174	0.4	(0.5) 1
174	50.0 - 120.0% of mass 95	82.9	
175	4.0 - 9.0 % of mass 174	6.1	(7.3) 1
176	93.0 - 101.0% of mass 174	80.4	(97.0) 1
177	5.0 - 9.0% of mass 176	5.4	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-189999/3	54971_003.D	04/04/2023	18:36
	IC 200-189999/4	54971_004.D	04/04/2023	19:27
	IC 200-189999/5	54971_005.D	04/04/2023	20:18
	IC 200-189999/6	54971_006.D	04/04/2023	21:09
	ICIS 200-189999/7	54971_007.D	04/04/2023	22:00
	IC 200-189999/8	54971_008.D	04/04/2023	22:52
	IC 200-189999/9	54971_009.D	04/04/2023	23:43
	IC 200-189999/10	54971_010.D	04/05/2023	0:34
	ICV 200-189999/12	54971_012.D	04/05/2023	2:16

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Lab File ID: 55711_001.D BFB Injection Date: 05/30/2023

Instrument ID: CHAM.i BFB Injection Time: 06:48

Analysis Batch No.: 191920

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	15.7	
75	30.0 - 66.0% of mass 95	46.3	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.4	(0.5) 1
174	50.0 - 120.0% of mass 95	76.7	
175	4.0 - 9.0 % of mass 174	5.7	(7.4) 1
176	93.0 - 101.0% of mass 174	75.2	(98.0) 1
177	5.0 - 9.0% of mass 176	4.9	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-191920/3	55711_003.D	05/30/2023	8:27
	LCS 200-191920/4	55711_004.D	05/30/2023	9:18
	MB 200-191920/5	55711_005.D	05/30/2023	10:10
5055	200-68405-3	55711_008.D	05/30/2023	13:13

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Sample No.: ICIS 200-189999/7 Date Analyzed: 04/04/2023 22:00

Instrument ID: CHAM.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 54971_007.D Heated Purge: (Y/N) N

Calibration ID: 50053

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		397081	11.74	1961593	13.60	1680265	19.10
UPPER LIMIT		555913	12.07	2746230	13.93	2352371	19.43
LOWER LIMIT		238249	11.41	1176956	13.27	1008159	18.77
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-189999/12		414206	11.74	2054146	13.60	1778631	19.10

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Sample No.: CCVIS 200-191920/3 Date Analyzed: 05/30/2023 08:27

Instrument ID: CHAM.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 55711_003.D Heated Purge: (Y/N) N

Calibration ID: 50053

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		341075	11.73	1688602	13.59	1500506	19.09
UPPER LIMIT		477505	12.06	2364043	13.92	2100708	19.42
LOWER LIMIT		204645	11.40	1013161	13.26	900304	18.76
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-191920/4		334365	11.73	1663539	13.58	1473763	19.09
MB 200-191920/5		340065	11.73	1698523	13.58	1502375	19.09
200-68405-3	5055	328914	11.73	1623743	13.58	1430762	19.09

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

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

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Client Sample ID: 5055 Lab Sample ID: 200-68405-3

Matrix: Air Lab File ID: 55711_008.D

Analysis Method: TO-15 Date Collected: 05/26/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/30/2023 13:13

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.: 191920 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.: 200-68405-1

SDG No.:

Client Sample ID: 5055 Lab Sample ID: 200-68405-3

Matrix: Air Lab File ID: 55711_008.D

Analysis Method: TO-15 Date Collected: 05/26/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/30/2023 13:13

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.: 191920 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.: 200-68405-1

SDG No.:

Client Sample ID: 5055 Lab Sample ID: 200-68405-3

Matrix: Air Lab File ID: 55711_008.D

Analysis Method: TO-15 Date Collected: 05/26/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/30/2023 13:13

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.: 191920 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\CHAM.i\20230530-55711.b\55711_008.D
Lims ID: 200-68405-A-3
Client ID: 5055
Sample Type: Client
Inject. Date: 30-May-2023 13:13:36 ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0055711-008
Misc. Info.: 68405-3
Operator ID: wrd Instrument ID: CHAM.i

Method: \\chromfs\Burlington\ChromData\CHAM.i\20230530-55711.b\TO15_TO3_Master_Method_AM.m
Limit Group: AI_TO15_ICAL
Last Update: 31-May-2023 13:46:00 Calib Date: 05-Apr-2023 00:34:15
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHAM.i\20230404-54971.b\54971_010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1632

First Level Reviewer: puangmaleek Date: 31-May-2023 13:46:00

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41		4.316				ND	7
	2 Dichlorodifluoromethane	85		4.417				ND	
	3 Chlorodifluoromethane	51		4.471				ND	
	4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.792				ND	
	5 Chloromethane	50		4.920				ND	
	7 Butane	43		5.220				ND	7
	6 Vinyl chloride	62		5.225				ND	
	8 Butadiene	54		5.343				ND	
	9 Bromomethane	94		6.081				ND	
	10 Chloroethane	64		6.365				ND	
	13 Vinyl bromide	106		6.798				ND	
	14 Trichlorofluoromethane	101		6.958				ND	
	16 Ethanol	45		7.392				ND	
	20 1,1-Dichloroethene	96		8.050				ND	
	21 1,1,2-Trichloro-1,2,2-trifluoroe	101		8.087				ND	
	22 Acetone	43		8.157				ND	7
	24 Carbon disulfide	76		8.451				ND	7
	23 Isopropyl alcohol	45		8.467				ND	7
	26 3-Chloro-1-propene	41		8.767				ND	
	27 Methylene Chloride	49	9.013	9.013	0.000	85	6799	0.1608	
	28 2-Methyl-2-propanol	59		9.248				ND	
	30 trans-1,2-Dichloroethene	61		9.505				ND	
	31 Methyl tert-butyl ether	73		9.510				ND	
	32 Hexane	57		10.008				ND	
S	35 1,2-Dichloroethene, Total	61		10.200				ND	7
	33 1,1-Dichloroethane	63		10.297				ND	
	34 Vinyl acetate	43		10.307				ND	
	36 2-Butanone (MEK)	72		11.297				ND	
	37 cis-1,2-Dichloroethene	96		11.313				ND	
	38 Ethyl acetate	88		11.367				ND	
*	39 Chlorobromomethane	128	11.725	11.730	-0.005	79	328914	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	40 Tetrahydrofuran	42		11.757				ND	
	41 Chloroform	83		11.912				ND	
	42 1,1,1-Trichloroethane	97		12.207				ND	
	43 Cyclohexane	84		12.330				ND	
	44 Carbon tetrachloride	117		12.474				ND	
	45 Benzene	78		12.838				ND	7
	46 1,2-Dichloroethane	62		12.929				ND	
	47 Isooctane	57		13.036				ND	
	48 n-Heptane	43		13.346				ND	7
*	49 1,4-Difluorobenzene	114	13.581	13.587	-0.006	94	1623743	10.0	
	51 Trichloroethene	95		14.009				ND	
	53 1,2-Dichloropropane	63		14.486				ND	
	54 Methyl methacrylate	69		14.566				ND	
	55 1,4-Dioxane	88		14.609				ND	
	57 Dibromomethane	174		14.646				ND	7
	58 Dichlorobromomethane	83		14.956				ND	
	59 cis-1,3-Dichloropropene	75		15.764				ND	
	61 4-Methyl-2-pentanone (MIBK)	43		16.037				ND	
	62 Toluene	92		16.395				ND	
	66 trans-1,3-Dichloropropene	75		16.829				ND	
	67 1,1,2-Trichloroethane	83		17.209				ND	
	68 Tetrachloroethene	166		17.374				ND	7
	69 2-Hexanone	43		17.620				ND	
	70 Chlorodibromomethane	129		17.941				ND	
	71 Ethylene Dibromide	107		18.177				ND	
*	73 Chlorobenzene-d5	117	19.086	19.086	0.000	85	1430762	10.0	
	74 Chlorobenzene	112		19.145				ND	
	75 Ethylbenzene	91		19.332				ND	MU
	76 m-Xylene & p-Xylene	106		19.595				ND	
S	80 Xylenes, Total	106		20.100				ND	7
	78 o-Xylene	106		20.365				ND	
	79 Styrene	104		20.397				ND	
	81 Bromoform	173		20.739				ND	
	82 Isopropylbenzene	105		21.028				ND	
	83 1,1,2,2-Tetrachloroethane	83		21.553				ND	7
	85 N-Propylbenzene	91		21.724				ND	
	86 2-Chlorotoluene	91		21.874				ND	
	87 4-Ethyltoluene	105		21.916				ND	
	88 1,3,5-Trimethylbenzene	105		22.007				ND	
	91 tert-Butylbenzene	119		22.483				ND	
	92 1,2,4-Trimethylbenzene	105		22.569				ND	
	93 sec-Butylbenzene	105		22.799				ND	
	94 1,3-Dichlorobenzene	146		22.976				ND	
	95 4-Isopropyltoluene	119		23.008				ND	
	96 1,4-Dichlorobenzene	146		23.115				ND	
	97 Benzyl chloride	91		23.270				ND	
	98 n-Butylbenzene	91		23.575				ND	
	99 1,2-Dichlorobenzene	146		23.623				ND	
	102 1,2,4-Trichlorobenzene	180		26.132				ND	
	103 Hexachlorobutadiene	225		26.378				ND	
	104 Naphthalene	128		26.640				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

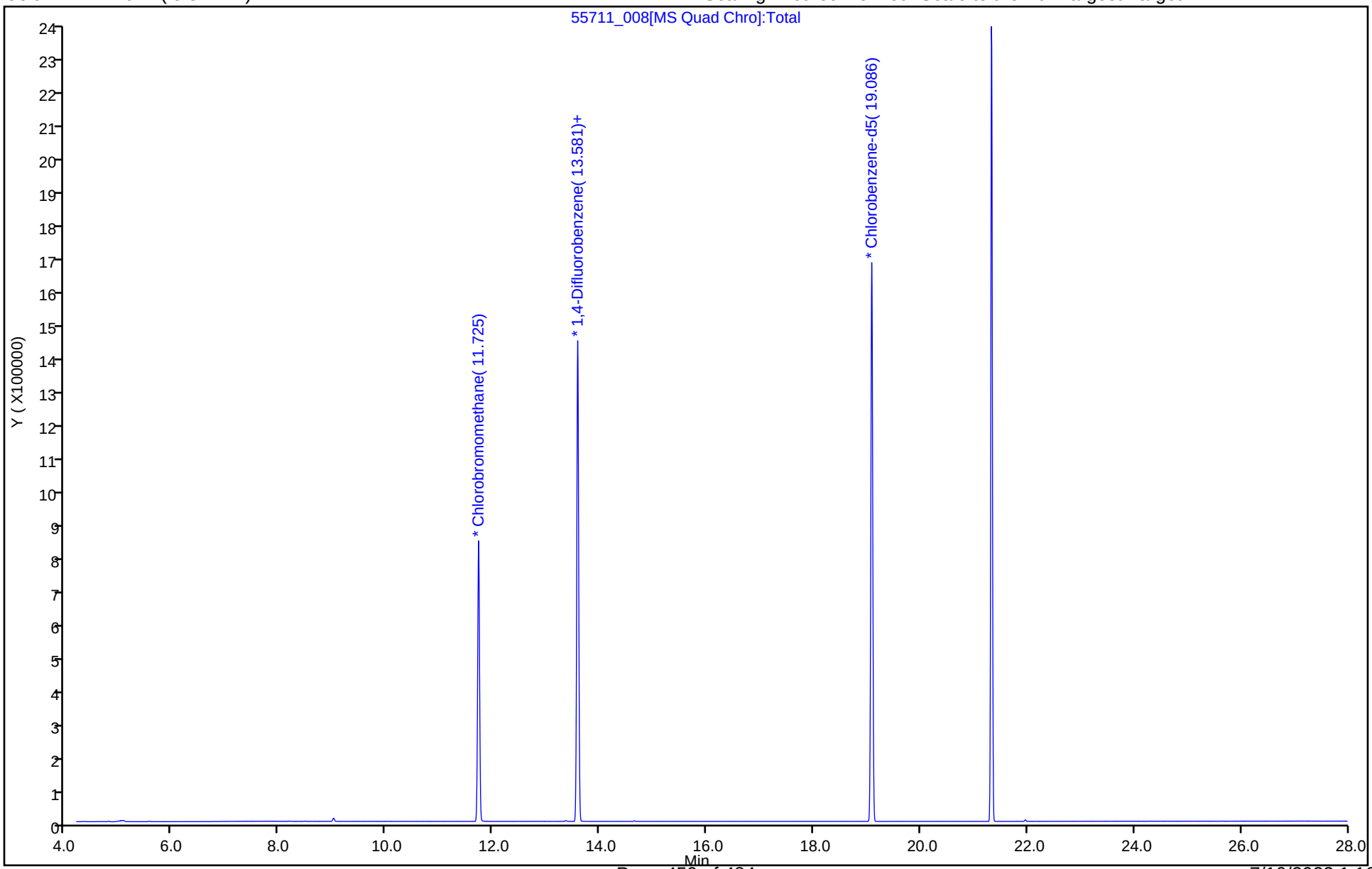
ATTO15AHISs_00003 Amount Added: 20.00 Units: mL Run Reagent

Report Date: 31-May-2023 13:46:00 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAM.i\20230530-55711.b\55711_008.D				
Injection Date:	30-May-2023 13:13:36	Instrument ID:	CHAM.i	Operator ID:	wrd
Lims ID:	200-68405-A-3	Lab Sample ID:	200-68405-3	Worklist Smp#:	8
Client ID:	5055				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	0
Method:	TO15_TO3_Master_Method_AM	Limit Group:	AI_TO15_ICAL		

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



7/10/2023 1:16 PM

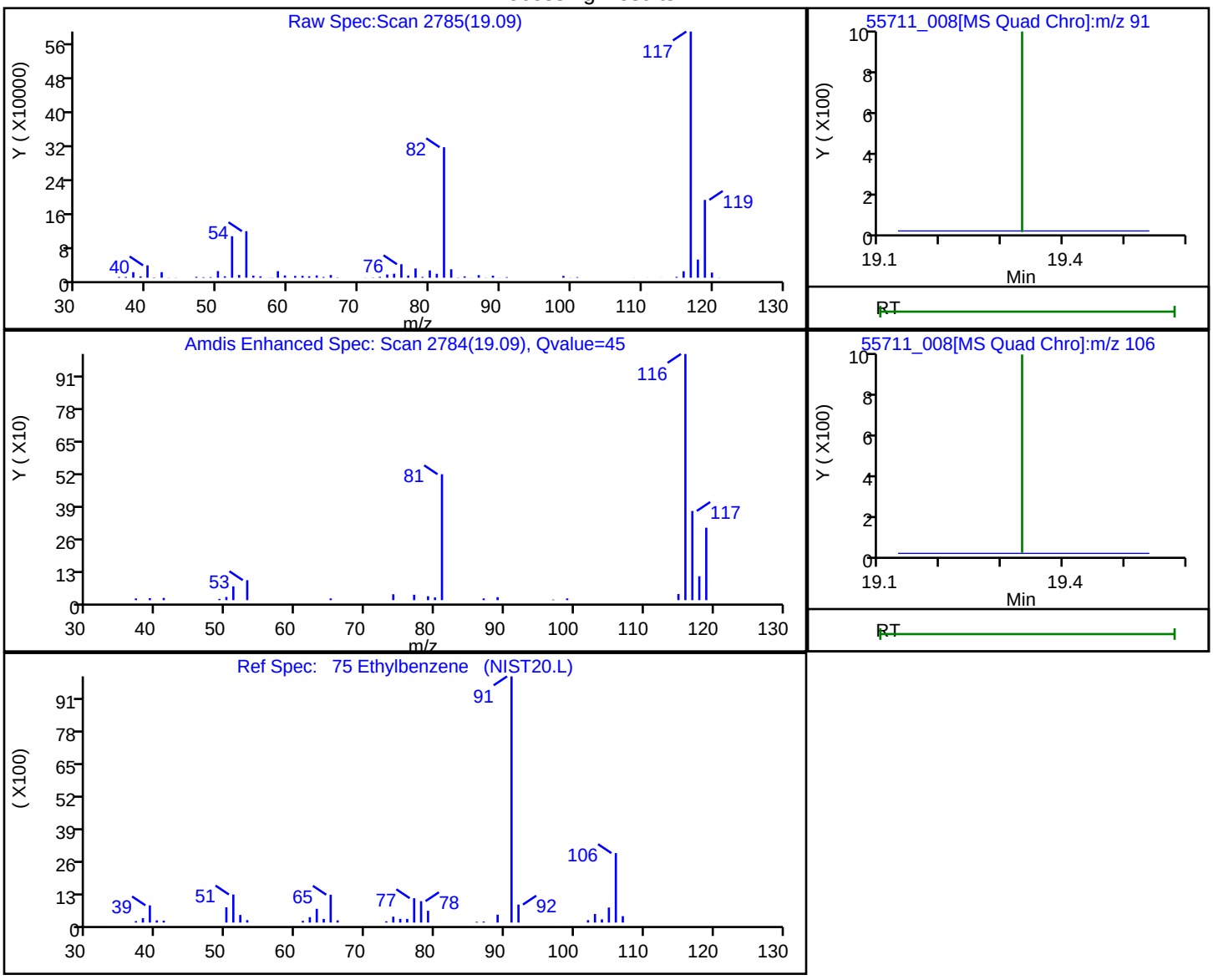
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHAM.i\20230530-55711.b\55711_008.D				
Injection Date:	30-May-2023 13:13:36	Instrument ID:	CHAM.i		
Lims ID:	200-68405-A-3	Lab Sample ID:	200-68405-3		
Client ID:	5055				
Operator ID:	wrd	ALS Bottle#:	0	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_Master_Method_AM	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
19.09	91.00	2928	0.011897
19.33	106.00	0	

Reviewer: puangmaleek, 31-May-2023 13:45:54 07:00:00 (UTC)

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

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 200-68405-1 Analy Batch No.: 189999

SDG No.:

Instrument ID: CHAM.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2023 18:36 Calibration End Date: 04/05/2023 00:34 Calibration ID: 50053

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-189999/3	54971_003.D
Level 2	IC 200-189999/4	54971_004.D
Level 3	IC 200-189999/5	54971_005.D
Level 4	IC 200-189999/6	54971_006.D
Level 5	ICIS 200-189999/7	54971_007.D
Level 6	IC 200-189999/8	54971_008.D
Level 7	IC 200-189999/9	54971_009.D
Level 8	IC 200-189999/10	54971_010.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.5809	+++++ 0.5763	+++++ 0.5535	0.5585	0.5311	Ave		0.5601				3.6		30.0			
Dichlorodifluoromethane	+++++ 3.0783	+++++ 2.9909	3.3729 2.8682	2.9911	2.7673	Ave		3.0114				6.9		30.0			
Freon 22	+++++ 1.4249	+++++ 1.4032	1.5597 1.3393	1.3805	1.3008	Ave		1.4014				6.4		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 3.1843	3.6018 3.1379	3.4955 2.9753	3.0903	2.9054	Ave		3.1986				8.1		30.0			
Chloromethane	+++++ 0.7545	+++++ 0.7399	0.8794 0.7016	0.7420	0.6899	Ave		0.7512				9.0		30.0			
n-Butane	+++++ 1.3507	+++++ 1.2951	1.6541 1.1914	1.3893	1.2727	Ave		1.3589				11.8		30.0			
Vinyl chloride	1.4208 1.1059	1.3768 1.0657	1.2961 0.9770	1.1400	1.0419	Ave		1.1780				14.0		30.0			
1,3-Butadiene	1.2425 0.8124	1.0790 0.7819	0.9818 0.7211	0.8283	0.7616	Ave		0.9011				20.3		30.0			
Bromomethane	+++++ 1.2297	1.4399 1.2103	1.3642 1.1434	1.2069	1.1315	Ave		1.2465				9.2		30.0			
Chloroethane	+++++ 0.5722	+++++ 0.5596	0.6488 0.5304	0.5670	0.5281	Ave		0.5677				7.7		30.0			
Isopentane	+++++ 1.0223	1.3315 0.9979	1.1900 0.9351	1.0168	0.9492	Ave		1.0633				13.6		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.3689	1.5946 1.3427	1.5169 1.2686	1.3434	1.2590	Ave		1.3849				9.1		30.0			
Trichlorofluoromethane	+++++ 3.7769	4.4294 3.7084	4.2103 3.4636	3.7367	3.4835	Ave		3.8298				9.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 200-68405-1 Analy Batch No.: 189999

SDG No.:

Instrument ID: CHAM.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2023 18:36 Calibration End Date: 04/05/2023 00:34 Calibration ID: 50053

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Pentane	+++++ 1.5449	+++++ 1.5014	1.8405 1.3919	1.5649	1.4472	Ave		1.5485				10.1		30.0			
Ethanol	+++++ 0.4535	+++++ 0.4521	0.4732 0.4327	0.4617	0.5353	Ave		0.4681				7.6		30.0			
Ethyl ether	+++++ 0.7732	0.8792 0.7531	0.8501 0.7081	0.7678	0.7161	Ave		0.7782				8.3		30.0			
Acrolein	+++++ 0.4754	+++++ 0.4607	+++++ 0.4258	0.4726	0.4121	Ave		0.4493				6.4		30.0			
1,1-Dichloroethene	1.9368 1.4204	1.7103 1.3812	1.6264 1.2921	1.4102	1.3139	Ave		1.5114				14.9		30.0			
Freon TF	+++++ 3.0915	3.6865 3.0124	3.4746 2.7961	3.0958	2.8654	Ave		3.1461				10.3		30.0			
Acetone	+++++ 1.5942	+++++ 1.5223	+++++ 1.3946	1.7763	1.5987	Ave		1.5772				8.8		30.0			
Carbon disulfide	+++++ 3.6942	+++++ 3.5898	4.2615 3.2934	3.7478	3.4723	Ave		3.6765				9.0		30.0			
Isopropyl alcohol	+++++ 1.7615	+++++ 1.6718	+++++ 1.5441	1.8389	2.4036	Ave		1.8440				18.0		30.0			
Acetonitrile	+++++ 0.6506	+++++ 0.6319	+++++ 0.5920	0.6628	0.6708	Ave		0.6416				4.9		30.0			
3-Chloropropene	+++++ 1.2897	1.6322 1.2450	1.4990 1.1646	1.2970	1.0931	Ave		1.3172				14.3		30.0			
Methylene Chloride	+++++ 1.2259	+++++ 1.1877	1.7650 1.1000	1.2719	1.1623	Ave		1.2855				18.8		30.0			
tert-Butyl alcohol	+++++ 2.5267	+++++ 2.4332	+++++ 2.2490	2.5576	2.5137	Ave		2.4560				5.1		30.0			
Acrylonitrile	+++++ 0.8185	+++++ 0.7956	0.8991 0.7458	0.8305	0.7785	Ave		0.8113				6.5		30.0			
trans-1,2-Dichloroethene	2.1084 1.8318	2.2197 1.7708	2.0877 1.6384	1.8630	1.7147	Ave		1.9043				11.0		30.0			
Methyl tert-butyl ether	+++++ 3.8547	4.4609 3.7370	4.2971 3.4479	3.8560	3.5938	Ave		3.8925				9.4		30.0			
n-Hexane	+++++ 1.7834	2.3734 1.7370	2.0654 1.6151	1.8090	1.6707	Ave		1.8648				14.3		30.0			
1,1-Dichloroethane	2.6222 2.2295	2.6848 2.1569	2.5473 2.0023	2.2484	2.0854	Ave		2.3221				11.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 200-68405-1 Analy Batch No.: 189999

SDG No.:

Instrument ID: CHAM.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2023 18:36 Calibration End Date: 04/05/2023 00:34 Calibration ID: 50053

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Vinyl acetate	+++++ 2.7650	+++++ 2.7052	+++++ 2.5124	2.6657	2.5151	Ave		2.6327				4.3		30.0			
Methyl Ethyl Ketone	+++++ 0.6757	+++++ 0.6582	0.7663 0.6150	0.6776	0.6431	Ave		0.6727				7.6		30.0			
cis-1,2-Dichloroethene	2.1975 1.5605	1.8947 1.5139	1.7802 1.4097	1.5714	1.4493	Ave		1.6721				16.0		30.0			
Ethyl acetate	+++++ 0.1323	+++++ 0.1301	+++++ 0.1225	0.1284	0.1238	Ave		0.1274				3.3		30.0			
Tetrahydrofuran	+++++ 0.2247	+++++ 0.2183	0.2722 0.2042	0.2302	0.2150	Ave		0.2274				10.4		30.0			
Chloroform	+++++ 3.0584	3.6966 2.9688	3.5190 2.7412	3.0749	2.8446	Ave		3.1291				11.2		30.0			
1,1,1-Trichloroethane	+++++ 0.6720	0.8029 0.6604	0.7505 0.6123	0.6724	0.6254	Ave		0.6851				10.0		30.0			
Cyclohexane	+++++ 0.3759	0.4536 0.3703	0.4206 0.3454	0.3794	0.3511	Ave		0.3852				10.1		30.0			
Carbon tetrachloride	0.7418 0.7335	0.7778 0.7225	0.7667 0.6733	0.7136	0.6725	Ave		0.7252				5.3		30.0			
Benzene	+++++ 0.8531	1.0690 0.8301	0.9821 0.7631	0.8682	0.8027	Ave		0.8812				12.2		30.0			
1,2-Dichloroethane	+++++ 0.3724	0.4593 0.3650	0.4292 0.3384	0.3809	0.3527	Ave		0.3854				11.2		30.0			
2,2,4-Trimethylpentane	+++++ 1.1630	1.4293 1.1286	1.3321 1.0352	1.1909	1.0963	Ave		1.1965				11.5		30.0			
n-Heptane	+++++ 0.3778	0.5079 0.3680	0.4425 0.3445	0.3865	0.3576	Ave		0.3978				14.5		30.0			
n-Butanol	+++++ 0.1695	+++++ 0.1661	+++++ 0.1552	0.1686	0.1931	Ave		0.1705				8.1		30.0			
Trichloroethene	0.4872 0.4298	0.5270 0.4213	0.4875 0.3920	0.4311	0.4070	Ave		0.4478				10.5		30.0			
1,2-Dichloropropane	+++++ 0.2950	0.3613 0.2878	0.3344 0.2687	0.2991	0.2771	Ave		0.3033				10.9		30.0			
Methyl methacrylate	+++++ 0.3037	0.3414 0.2986	0.3237 0.2806	0.3015	0.2844	Ave		0.3048				7.0		30.0			
1,4-Dioxane	+++++ 0.1849	0.2671 0.1768	0.2245 0.1636	0.1935	0.1993	Ave		0.2014				17.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 200-68405-1 Analy Batch No.: 189999

SDG No.:

Instrument ID: CHAM.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2023 18:36 Calibration End Date: 04/05/2023 00:34 Calibration ID: 50053

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibromomethane	+++++ 0.4450	0.5887 0.4382	0.5138 0.3991	0.4478	0.4239	Ave		0.4652				13.9		30.0			
Bromodichloromethane	+++++ 0.6842	0.7562 0.6718	0.7237 0.6214	0.6788	0.6323	Ave		0.6812				7.0		30.0			
cis-1,3-Dichloropropene	+++++ 0.5559	0.6351 0.5465	0.5953 0.5101	0.5518	0.5192	Ave		0.5591				7.8		30.0			
methyl isobutyl ketone	+++++ 0.5243	+++++ 0.5150	0.5807 0.4778	0.5316	0.4963	Ave		0.5209				6.8		30.0			
Toluene	+++++ 0.7531	0.9134 0.7401	0.8605 0.6791	0.7672	0.7144	Ave		0.7754				10.7		30.0			
n-Octane	+++++ 0.5244	0.6837 0.5110	0.6032 0.4751	0.5357	0.4962	Ave		0.5470				13.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.5001	0.5462 0.4925	0.5230 0.4602	0.4919	0.4650	Ave		0.4970				6.1		30.0			
1,1,2-Trichloroethane	+++++ 0.3768	0.4504 0.3717	0.4285 0.3453	0.3827	0.3586	Ave		0.3877				9.8		30.0			
Tetrachloroethene	0.8638 0.7326	0.9155 0.7246	0.8367 0.6482	0.7455	0.6922	Ave		0.7699				12.0		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.5960	0.7131 0.5900	0.6702 0.5448	0.6037	0.5677	Ave		0.6122				9.6		30.0			
Dibromochloromethane	+++++ 0.9037	0.7900 0.8964	0.8543 0.8192	0.8728	0.8157	Ave		0.8503				5.1		30.0			
1,2-Dibromoethane	+++++ 0.7549	0.8756 0.7477	0.8404 0.6808	0.7632	0.7187	Ave		0.7688				8.8		30.0			
Chlorobenzene	+++++ 1.0909	1.3333 1.0730	1.2599 0.9674	1.1063	1.0395	Ave		1.1243				11.4		30.0			
Ethylbenzene	+++++ 1.6772	2.0311 1.6371	1.9237 1.4495	1.7204	1.6020	Ave		1.7201				11.5		30.0			
m,p-Xylene	+++++ 0.6750	0.7961 0.6591	0.7570 0.5849	0.6850	0.6434	Ave		0.6858				10.3		30.0			
n-Nonane	+++++ 0.6733	0.8449 0.6614	0.7653 0.6126	0.6862	0.6413	Ave		0.6978				11.5		30.0			
Xylene, o-	+++++ 0.6577	0.7672 0.6472	0.7318 0.5872	0.6622	0.6243	Ave		0.6682				9.2		30.0			
Styrene	+++++ 1.0971	1.1994 1.0764	1.1610 0.9619	1.1031	1.0458	Ave		1.0921				7.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 200-68405-1 Analy Batch No.: 189999

SDG No.:

Instrument ID: CHAM.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2023 18:36 Calibration End Date: 04/05/2023 00:34 Calibration ID: 50053

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Bromoform	+++++ 0.9394	0.5789 0.9350	0.7970 0.8388	0.8654	0.7852	Ave		0.8200				14.9		30.0			
Cumene	+++++ 1.9259	2.2960 1.8721	2.2136 1.6007	1.9876	1.8459	Ave		1.9631				11.9		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.9749	1.1612 0.9550	1.1049 0.8555	1.0013	0.9392	Ave		0.9988				10.4		30.0			
1,2,3-Trichloropropane	+++++ 0.7482	+++++ 0.7342	0.8565 0.6685	0.7591	0.7207	Ave		0.7478				8.3		30.0			
n-Propylbenzene	+++++ 2.2305	2.7281 2.1546	2.5977 1.7708	2.3342	2.1729	Ave		2.2841				13.8		30.0			
2-Chlorotoluene	+++++ 1.4724	1.7525 1.4356	1.6530 1.2484	1.5061	1.4196	Ave		1.4982				11.0		30.0			
4-Ethyltoluene	+++++ 1.9267	2.3155 1.8624	2.2027 1.5498	1.9942	1.8685	Ave		1.9600				12.7		30.0			
1,3,5-Trimethylbenzene	+++++ 1.6281	1.9070 1.5703	1.8480 1.3064	1.6762	1.5812	Ave		1.6453				12.0		30.0			
n-Decane	+++++ 0.8803	+++++ 0.8598	1.0075 0.7645	0.8977	0.8461	Ave		0.8760				9.0		30.0			
Alpha Methyl Styrene	+++++ 0.9002	0.9628 0.8834	0.9285 0.7835	0.8978	0.8578	Ave		0.8877				6.4		30.0			
tert-Butylbenzene	+++++ 1.5991	1.9017 1.5547	1.8157 1.3228	1.6325	1.5321	Ave		1.6227				11.8		30.0			
1,2,4-Trimethylbenzene	+++++ 1.6488	2.1078 1.6059	1.9538 1.3573	1.6955	1.6127	Ave		1.7117				14.4		30.0			
sec-Butylbenzene	+++++ 2.3418	2.8652 2.2442	2.7500 1.7949	2.4709	2.2908	Ave		2.3940				14.8		30.0			
1,3-Dichlorobenzene	+++++ 1.2280	1.4674 1.1940	1.4153 1.0090	1.2552	1.2038	Ave		1.2532				12.1		30.0			
4-Isopropyltoluene	+++++ 2.0180	2.4128 1.9457	2.3267 1.5706	2.1053	1.9785	Ave		2.0511				13.5		30.0			
1,4-Dichlorobenzene	+++++ 1.2500	1.4863 1.2172	1.4397 1.0370	1.2734	1.2302	Ave		1.2762				11.7		30.0			
Benzyl chloride	+++++ 1.5613	1.4769 1.5303	1.4883 1.3308	1.4961	1.4171	Ave		1.4715				5.2		30.0			
n-Butylbenzene	+++++ 1.8922	2.2683 1.8240	2.2032 1.5110	1.9653	1.8652	Ave		1.9327				13.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 200-68405-1 Analy Batch No.: 189999

SDG No.:

Instrument ID: CHAM.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2023 18:36 Calibration End Date: 04/05/2023 00:34 Calibration ID: 50053

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	+++++ 1.1878	1.4156 1.1607	1.3573 0.9963	1.2150	1.1754	Ave		1.2154				11.3		30.0			
n-Undecane	+++++ 1.0007	+++++ 0.9833	+++++ 0.8857	1.0174	0.9740	Ave		0.9722				5.3		30.0			
n-Dodecane	+++++ 1.0835	+++++ 1.0526	+++++ 0.9579	1.0903	1.0812	Ave		1.0531				5.2		30.0			
1,2,4-Trichlorobenzene	+++++ 1.2845	+++++ 1.2528	1.4577 1.0773	1.2941	1.3438	Ave		1.2850				9.7		30.0			
Hexachlorobutadiene	+++++ 1.0819	1.2451 1.0555	1.2052 0.8903	1.0885	1.0843	Ave		1.0930				10.5		30.0			
Naphthalene	+++++ 2.5709	+++++ 2.4871	3.0201 2.0708	2.6318	2.8403	Ave		2.6035				12.5		30.0			
1,2,3-Trichlorobenzene	+++++ 1.1194	+++++ 1.0989	1.2684 0.9696	1.1084	1.1953	Ave		1.1267				8.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington | Job No.: 200-68405-1 | Analy Batch No.: 189999

SDG No.:

Instrument ID: CHAM.i | GC Column: RTX-624 | ID: 0.32(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2023 18:36 | Calibration End Date: 04/05/2023 00:34 | Calibration ID: 50053

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-189999/3	54971_003.D
Level 2	IC 200-189999/4	54971_004.D
Level 3	IC 200-189999/5	54971_005.D
Level 4	IC 200-189999/6	54971_006.D
Level 5	ICIS 200-189999/7	54971_007.D
Level 6	IC 200-189999/8	54971_008.D
Level 7	IC 200-189999/9	54971_009.D
Level 8	IC 200-189999/10	54971_010.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 347738	+++++ 467666	+++++ 934819	107922	210866	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1842761	+++++ 2426974	64288 4844516	577998	1098645	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 853008	+++++ 1138617	29728 2262135	266778	516434	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 1906197	27851 2546208	66625 5025492	597181	1153466	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 451664	+++++ 600387	16761 1185032	143385	273906	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 808578	+++++ 1050936	31527 2012397	268475	505263	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1897 662008	10646 864729	24705 1650247	220292	413626	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	1659 486346	8343 634470	18713 1217970	160054	302352	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 736112	11134 982072	26002 1931229	233231	449207	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 342518	+++++ 454099	12367 895839	109562	209664	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 611954	10296 809731	22681 1579471	196493	376845	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 819442	12330 1089490	28912 2142768	259597	499828	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 2260943	34250 3009177	80251 5850161	722080	1382974	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 924794	+++++ 1218327	35080 2351044	302411	574550	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 362719	+++++ 733809	90303 1827352	178542	318935	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 200-68405-1 Analy Batch No.: 189999

SDG No.:

Instrument ID: CHAM.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2023 18:36 Calibration End Date: 04/05/2023 00:34 Calibration ID: 50053

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 462879	6798 611075	16204 1196059	148379	284308	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 284579	+++++ 373870	+++++ 719211	91327	163595	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	2586 850260	13225 1120801	31000 2182400	272516	521604	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 1850665	28506 2444370	66228 4722784	598235	1137585	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 954333	+++++ 1235280	+++++ 2355623	343259	634709	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 2211422	+++++ 2912951	81226 5562722	724238	1378513	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 1054467	+++++ 1356560	+++++ 2608077	355345	954251	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 389442	+++++ 512789	+++++ 999905	128083	266322	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 772050	12621 1010264	28571 1967163	250626	433973	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 733884	+++++ 963755	33642 1858004	245793	461435	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 1512538	+++++ 1974409	+++++ 3798631	494244	997944	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 489989	+++++ 645547	17137 1259651	160479	309077	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	2815 1096562	17164 1436924	39793 2767426	360006	680748	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 2307507	34494 3032377	81904 5823705	745143	1426769	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 1067577	18352 1409441	39367 2727933	349578	663271	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	3501 1334659	20760 1750217	48553 3382073	434476	827917	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1655224	+++++ 2195102	+++++ 4243539	515123	998516	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 404513	+++++ 534056	14606 1038816	130950	255331	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	2934 934135	14651 1228474	33931 2381027	303662	575374	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 79204	+++++ 105533	+++++ 206941	24813	49154	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++	+++++	25806	219959	421746	+++++	+++++	0.500	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 200-68405-1 Analy Batch No.: 189999

SDG No.:

Instrument ID: CHAM.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2023 18:36 Calibration End Date: 04/05/2023 00:34 Calibration ID: 50053

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			669111	873750	1703123			15.0	20.0	40.0		
Chloroform	BCM	Ave	+++++ 1830854	28584 2409056	67073 4630069	594198	1129302	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 2001359	30090 2643439	71152 5107339	642446	1226499	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 1119502	17000 1482018	39876 2881062	362480	688541	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	4781 2184464	29149 2891898	72691 5615771	681820	1318871	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 2540656	40062 3322509	93107 6365219	829490	1574280	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 1109197	17213 1461174	40695 2823058	363926	691700	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 3463740	53567 4517239	126287 8634608	1137801	2150106	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1125184	19036 1473045	41955 2873357	369243	701410	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 504782	+++++ 664816	+++++ 1294345	161091	378636	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	3140 1280130	19751 1686193	46213 3270079	411858	798138	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 878548	13539 1151789	31703 2241282	285744	543374	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 904454	12796 1195073	30686 2340156	288097	557681	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 550773	10011 707727	21280 1364329	184864	390865	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 1325249	22064 1754025	48708 3329263	427854	831321	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 2037748	28339 2688941	68606 5183301	648511	1240096	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 1655531	23802 2187466	56441 4254704	527172	1018268	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1561574	+++++ 2061573	55053 3985005	507870	973334	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZd5	Ave	+++++ 1938904	29796 2546069	69765 4898339	628986	1200121	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1561748	25622 2045304	57185 3962908	511842	973177	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++	20471	49583	469946	912009	+++++	0.200	0.500	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington | Job No.: 200-68405-1 | Analy Batch No.: 189999

SDG No.:

Instrument ID: CHAM.i | GC Column: RTX-624 | ID: 0.32(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2023 18:36 | Calibration End Date: 04/05/2023 00:34 | Calibration ID: 50053

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			1489332	1971121	3838947			15.0	20.0	40.0		
1,1,2-Trichloroethane	CBNZd5	Ave	+++++ 970053	14692 1278787	34741 2490929	313727	602353	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Tetrachloroethene	CBNZd5	Ave	5009 1886045	29866 2492693	67830 4675619	611173	1162865	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZd5	Ave	+++++ 1534455	23263 2029606	54338 3929610	494911	953627	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZd5	Ave	+++++ 2326628	25771 3083499	69258 5909100	715562	1370405	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZd5	Ave	+++++ 1943482	28562 2572112	68135 4911033	625708	1207436	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZd5	Ave	+++++ 2808688	43494 3690964	102138 6978539	906984	1746249	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZd5	Ave	+++++ 4317974	66256 5631660	155959 10455856	1410447	2691182	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZd5	Ave	+++++ 3475718	51939 4534577	122742 8438859	1123107	2161900	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
n-Nonane	CBNZd5	Ave	+++++ 1733416	27563 2275343	62040 4418611	562544	1077261	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Xylene, o-	CBNZd5	Ave	+++++ 1693326	25028 2226377	59325 4236053	542865	1048824	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZd5	Ave	+++++ 2824622	39126 3702751	94126 6938971	904345	1756812	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZd5	Ave	+++++ 2418633	18885 3216407	64616 6050597	709435	1319094	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZd5	Ave	+++++ 4958426	74897 6440060	179458 11546591	1629467	3100954	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZd5	Ave	+++++ 2510016	37880 3285070	89572 6170947	820846	1577830	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 200-68405-1 Analy Batch No.: 189999

SDG No.:

Instrument ID: CHAM.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2023 18:36 Calibration End Date: 04/05/2023 00:34 Calibration ID: 50053

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,3-Trichloropropane	CBNZd5	Ave	+++++	+++++	69437	622293	1210724	+++++	+++++	0.500	4.99	10.00
			1926238	2525534	4821921			15.0	20.0	40.0		
n-Propylbenzene	CBNZd5	Ave	+++++	88995	210598	1913614	3650260	+++++	0.200	0.500	4.99	10.00
			5742441	7411732	12773486			15.0	20.0	40.0		
2-Chlorotoluene	CBNZd5	Ave	+++++	57169	134009	1234720	2384806	+++++	0.200	0.500	4.99	10.00
			3790901	4938371	9005422			15.0	20.0	40.0		
4-Ethyltoluene	CBNZd5	Ave	+++++	75535	178573	1634880	3138911	+++++	0.200	0.500	4.99	10.00
			4960458	6406547	11179710			15.0	20.0	40.0		
1,3,5-Trimethylbenzene	CBNZd5	Ave	+++++	62210	149816	1374136	2656236	+++++	0.200	0.500	4.99	10.00
			4191755	5401772	9423867			15.0	20.0	40.0		
n-Decane	CBNZd5	Ave	+++++	+++++	81681	735949	1421436	+++++	+++++	0.500	4.99	10.00
			2266509	2957726	5514700			15.0	20.0	40.0		
Alpha Methyl Styrene	CBNZd5	Ave	+++++	31407	75277	736069	1441099	+++++	0.200	0.500	4.99	10.00
			2317672	3038786	5651722			15.0	20.0	40.0		
tert-Butylbenzene	CBNZd5	Ave	+++++	62037	147203	1338383	2573819	+++++	0.200	0.500	4.99	10.00
			4117114	5348261	9542107			15.0	20.0	40.0		
1,2,4-Trimethylbenzene	CBNZd5	Ave	+++++	68759	158399	1390016	2709266	+++++	0.200	0.500	4.99	10.00
			4244971	5524302	9791082			15.0	20.0	40.0		
sec-Butylbenzene	CBNZd5	Ave	+++++	93467	222945	2025660	3848412	+++++	0.200	0.500	4.99	10.00
			6029065	7719981	12947142			15.0	20.0	40.0		
1,3-Dichlorobenzene	CBNZd5	Ave	+++++	47868	114740	1029008	2022247	+++++	0.200	0.500	4.99	10.00
			3161512	4107355	7278177			15.0	20.0	40.0		
4-Isopropyltoluene	CBNZd5	Ave	+++++	78708	188626	1725991	3323732	+++++	0.200	0.500	4.99	10.00
			5195373	6693349	11329478			15.0	20.0	40.0		
1,4-Dichlorobenzene	CBNZd5	Ave	+++++	48484	116719	1043945	2066693	+++++	0.200	0.500	4.99	10.00
			3218205	4187103	7480123			15.0	20.0	40.0		
Benzyl chloride	CBNZd5	Ave	+++++	48177	120657	1226530	2380575	+++++	0.200	0.500	4.99	10.00
			4019581	5264198	9599836			15.0	20.0	40.0		

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 200-68405-1 Analy Batch No.: 189999

SDG No.:

Instrument ID: CHAM.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2023 18:36 Calibration End Date: 04/05/2023 00:34 Calibration ID: 50053

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
n-Butylbenzene	CBNZd5	Ave	+++++ 4871584	73993 6274488	178618 10899662	1611147	3133459	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZd5	Ave	+++++ 3058125	46178 3992826	110034 7186555	996093	1974636	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZd5	Ave	+++++ 2576390	+++++ 3382635	+++++ 6389256	834083	1636320	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
n-Dodecane	CBNZd5	Ave	+++++ 2789521	+++++ 3620913	+++++ 6909898	893833	1816272	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZd5	Ave	+++++ 3307059	+++++ 4309516	118180 7770910	1060942	2257476	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZd5	Ave	+++++ 2785378	40616 3630802	97710 6422054	892376	1821554	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZd5	Ave	+++++ 6618927	+++++ 8555801	244841 14937615	2157568	4771459	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZd5	Ave	+++++ 2881923	+++++ 3780259	102833 6994091	908679	2008029	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Lab Sample ID: ICV 200-189999/12 Calibration Date: 04/05/2023 02:16

Instrument ID: CHAM.i Calib Start Date: 04/04/2023 18:36

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 04/05/2023 00:34

Lab File ID: 54971_012.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.5601	0.5586		9.97	10.0	-0.3	30.0
Dichlorodifluoromethane	Ave	3.011	2.961		9.83	10.0	-1.7	30.0
Freon 22	Ave	1.401	1.372		9.79	10.0	-2.1	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.199	3.061		9.57	10.0	-4.3	30.0
Chloromethane	Ave	0.7512	0.7219		9.61	10.0	-3.9	30.0
n-Butane	Ave	1.359	1.241		9.13	10.0	-8.7	30.0
Vinyl chloride	Ave	1.178	1.015		8.62	10.0	-13.8	30.0
1,3-Butadiene	Ave	0.9011	0.7393		8.20	10.0	-18.0	30.0
Bromomethane	Ave	1.247	1.180		9.46	10.0	-5.3	30.0
Chloroethane	Ave	0.5677	0.5454		9.61	10.0	-3.9	30.0
Isopentane	Ave	1.063	0.9627		9.05	10.0	-9.5	30.0
Bromoethene(Vinyl Bromide)	Ave	1.385	1.307		9.43	10.0	-5.7	30.0
Trichlorofluoromethane	Ave	3.830	3.649		9.53	10.0	-4.7	30.0
n-Pentane	Ave	1.548	1.446		9.34	10.0	-6.6	30.0
Ethanol	Ave	0.4681	0.5360		16.8	14.7	14.5	30.0
Ethyl ether	Ave	0.7782	0.7226		9.28	10.0	-7.1	30.0
Acrolein	Ave	0.4493	0.4370		9.72	10.0	-2.7	30.0
1,1-Dichloroethene	Ave	1.511	1.336		8.84	10.0	-11.6	30.0
Freon TF	Ave	3.146	2.928		9.31	10.0	-6.9	30.0
Acetone	Ave	1.577	1.473		9.34	10.0	-6.6	30.0
Carbon disulfide	Ave	3.677	3.463		9.42	10.0	-5.8	30.0
Isopropyl alcohol	Ave	1.844	1.648		8.93	10.0	-10.6	30.0
Acetonitrile	Ave	0.6416	0.6311		9.83	10.0	-1.6	30.0
3-Chloropropene	Ave	1.317	1.175		8.92	10.0	-10.8	30.0
Methylene Chloride	Ave	1.285	1.136		8.84	10.0	-11.6	30.0
tert-Butyl alcohol	Ave	2.456	2.351		9.57	10.0	-4.3	30.0
Acrylonitrile	Ave	0.8113	0.7647		9.42	10.0	-5.7	30.0
trans-1,2-Dichloroethene	Ave	1.904	1.693		8.89	10.0	-11.1	30.0
Methyl tert-butyl ether	Ave	3.892	3.597		9.24	10.0	-7.6	30.0
n-Hexane	Ave	1.865	1.645		8.82	10.0	-11.8	30.0
1,1-Dichloroethane	Ave	2.322	2.064		8.89	10.0	-11.1	30.0
Vinyl acetate	Ave	2.633	2.456		9.33	10.0	-6.7	30.0
Methyl Ethyl Ketone	Ave	0.6727	0.6270		9.32	10.0	-6.8	30.0
cis-1,2-Dichloroethene	Ave	1.672	1.455		8.70	10.0	-13.0	30.0
Ethyl acetate	Ave	0.1274	0.1237		9.70	10.0	-2.9	30.0
Tetrahydrofuran	Ave	0.2274	0.2044		8.99	10.0	-10.1	30.0
Chloroform	Ave	3.129	2.872		9.18	10.0	-8.2	30.0
1,1,1-Trichloroethane	Ave	0.6851	0.6356		9.28	10.0	-7.2	30.0
Cyclohexane	Ave	0.3852	0.3545		9.20	10.0	-8.0	30.0
Carbon tetrachloride	Ave	0.7252	0.6957		9.59	10.0	-4.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Lab Sample ID: ICV 200-189999/12 Calibration Date: 04/05/2023 02:16

Instrument ID: CHAM.i Calib Start Date: 04/04/2023 18:36

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 04/05/2023 00:34

Lab File ID: 54971_012.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzene	Ave	0.8812	0.7973		9.05	10.0	-9.5	30.0
1,2-Dichloroethane	Ave	0.3854	0.3495		9.07	10.0	-9.3	30.0
2,2,4-Trimethylpentane	Ave	1.196	1.081		9.03	10.0	-9.6	30.0
n-Heptane	Ave	0.3978	0.3483		8.75	10.0	-12.5	30.0
n-Butanol	Ave	0.1705	0.1665		9.77	10.0	-2.3	30.0
Trichloroethene	Ave	0.4478	0.4054		9.05	10.0	-9.5	30.0
1,2-Dichloropropane	Ave	0.3033	0.2722		8.97	10.0	-10.2	30.0
Methyl methacrylate	Ave	0.3048	0.2780		9.12	10.0	-8.8	30.0
1,4-Dioxane	Ave	0.2014	0.1704		8.46	10.0	-15.4	30.0
Dibromomethane	Ave	0.4652	0.4288		9.22	10.0	-7.8	30.0
Bromodichloromethane	Ave	0.6812	0.6382		9.37	10.0	-6.3	30.0
cis-1,3-Dichloropropene	Ave	0.5591	0.5186		9.27	10.0	-7.2	30.0
methyl isobutyl ketone	Ave	0.5209	0.4720		9.06	10.0	-9.4	30.0
Toluene	Ave	0.7754	0.7072		9.12	10.0	-8.8	30.0
n-Octane	Ave	0.5470	0.4837		8.84	10.0	-11.6	30.0
trans-1,3-Dichloropropene	Ave	0.4970	0.4672		9.40	10.0	-6.0	30.0
1,1,2-Trichloroethane	Ave	0.3877	0.3510		9.05	10.0	-9.5	30.0
Tetrachloroethene	Ave	0.7699	0.7027		9.13	10.0	-8.7	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.6122	0.5172		8.45	10.0	-15.5	30.0
Dibromochloromethane	Ave	0.8503	0.8477		9.97	10.0	-0.3	30.0
1,2-Dibromoethane	Ave	0.7688	0.7115		9.25	10.0	-7.4	30.0
Chlorobenzene	Ave	1.124	1.029		9.15	10.0	-8.5	30.0
Ethylbenzene	Ave	1.720	1.585		9.21	10.0	-7.8	30.0
m,p-Xylene	Ave	0.6858	0.6331		18.5	20.0	-7.7	30.0
n-Nonane	Ave	0.6978	0.6199		8.88	10.0	-11.2	30.0
Xylene, o-	Ave	0.6682	0.6204		9.28	10.0	-7.2	30.0
Styrene	Ave	1.092	1.021		9.35	10.0	-6.5	30.0
Bromoform	Ave	0.8200	0.8718		10.6	10.0	6.3	30.0
Cumene	Ave	1.963	1.834		9.34	10.0	-6.6	30.0
1,1,2,2-Tetrachloroethane	Ave	0.999	0.9067		9.08	10.0	-9.2	30.0
1,2,3-Trichloropropane	Ave	0.7478	0.6907		9.23	10.0	-7.6	30.0
n-Propylbenzene	Ave	2.284	2.125		9.30	10.0	-7.0	30.0
2-Chlorotoluene	Ave	1.498	1.388		9.26	10.0	-7.3	30.0
4-Ethyltoluene	Ave	1.960	1.832		9.34	10.0	-6.5	30.0
1,3,5-Trimethylbenzene	Ave	1.645	1.549		9.41	10.0	-5.9	30.0
n-Decane	Ave	0.8760	0.8148		9.30	10.0	-7.0	30.0
Alpha Methyl Styrene	Ave	0.8877	0.8372		9.43	10.0	-5.7	30.0
tert-Butylbenzene	Ave	1.623	1.531		9.43	10.0	-5.7	30.0
1,2,4-Trimethylbenzene	Ave	1.712	1.559		9.11	10.0	-8.9	30.0
sec-Butylbenzene	Ave	2.394	2.254		9.41	10.0	-5.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Lab Sample ID: ICV 200-189999/12 Calibration Date: 04/05/2023 02:16

Instrument ID: CHAM.i Calib Start Date: 04/04/2023 18:36

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 04/05/2023 00:34

Lab File ID: 54971_012.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3-Dichlorobenzene	Ave	1.253	1.163		9.28	10.0	-7.2	30.0
4-Isopropyltoluene	Ave	2.051	1.940		9.46	10.0	-5.4	30.0
1,4-Dichlorobenzene	Ave	1.276	1.180		9.25	10.0	-7.5	30.0
Benzyl chloride	Ave	1.472	1.424		9.68	10.0	-3.2	30.0
n-Butylbenzene	Ave	1.933	1.783		9.22	10.0	-7.8	30.0
1,2-Dichlorobenzene	Ave	1.215	1.120		9.21	10.0	-7.8	30.0
n-Undecane	Ave	0.9722	0.9239		9.50	10.0	-5.0	30.0
n-Dodecane	Ave	1.053	0.9905		9.40	10.0	-5.9	30.0
1,2,4-Trichlorobenzene	Ave	1.285	1.193		9.28	10.0	-7.2	30.0
Hexachlorobutadiene	Ave	1.093	1.050		9.60	10.0	-3.9	30.0
Naphthalene	Ave	2.603	2.362		9.07	10.0	-9.3	30.0
1,2,3-Trichlorobenzene	Ave	1.127	1.055		9.36	10.0	-6.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Lab Sample ID: CCVIS 200-191920/3 Calibration Date: 05/30/2023 08:27

Instrument ID: CHAM.i Calib Start Date: 04/04/2023 18:36

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 04/05/2023 00:34

Lab File ID: 55711_003.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.5601	0.5243		9.36	10.0	-6.4	30.0
Dichlorodifluoromethane	Ave	3.011	2.241		7.44	10.0	-25.6	30.0
Freon 22	Ave	1.401	1.256		8.96	10.0	-10.4	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.199	2.813		8.79	10.0	-12.1	30.0
Chloromethane	Ave	0.7512	0.7296		9.71	10.0	-2.9	30.0
n-Butane	Ave	1.359	1.546		11.4	10.0	13.8	30.0
Vinyl chloride	Ave	1.178	1.215		10.3	10.0	3.1	30.0
1,3-Butadiene	Ave	0.9011	0.8872		9.84	10.0	-1.5	30.0
Bromomethane	Ave	1.247	1.111		8.91	10.0	-10.9	30.0
Chloroethane	Ave	0.5677	0.5432		9.57	10.0	-4.3	30.0
Isopentane	Ave	1.063	0.9920		9.33	10.0	-6.7	30.0
Bromoethene(Vinyl Bromide)	Ave	1.385	1.221		8.81	10.0	-11.8	30.0
Trichlorofluoromethane	Ave	3.830	3.329		8.69	10.0	-13.1	30.0
n-Pentane	Ave	1.548	1.540		9.94	10.0	-0.6	30.0
Ethanol	Ave	0.4681	0.3732		12.0	15.0	-20.3	30.0
Ethyl ether	Ave	0.7782	0.7600		9.76	10.0	-2.3	30.0
Acrolein	Ave	0.4493	0.4614		10.3	10.0	2.7	30.0
1,1-Dichloroethene	Ave	1.511	1.328		8.78	10.0	-12.1	30.0
Freon TF	Ave	3.146	2.886		9.17	10.0	-8.3	30.0
Acetone	Ave	1.577	1.620		10.3	10.0	2.7	30.0
Carbon disulfide	Ave	3.677	3.659		9.95	10.0	-0.5	30.0
Isopropyl alcohol	Ave	1.844	1.850		10.0	10.0	0.3	30.0
Acetonitrile	Ave	0.6416	0.7322		11.4	10.0	14.1	30.0
3-Chloropropene	Ave	1.317	1.276		9.69	10.0	-3.1	30.0
Methylene Chloride	Ave	1.285	1.310		10.2	10.0	1.9	30.0
tert-Butyl alcohol	Ave	2.456	2.480		10.1	10.0	1.0	30.0
Acrylonitrile	Ave	0.8113	0.8660		10.7	10.0	6.7	30.0
trans-1,2-Dichloroethene	Ave	1.904	1.874		9.84	10.0	-1.6	30.0
Methyl tert-butyl ether	Ave	3.892	3.699		9.50	10.0	-5.0	30.0
n-Hexane	Ave	1.865	1.821		9.76	10.0	-2.4	30.0
1,1-Dichloroethane	Ave	2.322	2.278		9.81	10.0	-1.9	30.0
Vinyl acetate	Ave	2.633	2.460		9.34	10.0	-6.6	30.0
Methyl Ethyl Ketone	Ave	0.6727	0.6686		9.94	10.0	-0.6	30.0
cis-1,2-Dichloroethene	Ave	1.672	1.497		8.95	10.0	-10.4	30.0
Ethyl acetate	Ave	0.1274	0.1233		9.67	10.0	-3.2	30.0
Tetrahydrofuran	Ave	0.2274	0.2386		10.5	10.0	4.9	30.0
Chloroform	Ave	3.129	2.986		9.54	10.0	-4.6	30.0
1,1,1-Trichloroethane	Ave	0.6851	0.6258		9.13	10.0	-8.7	30.0
Cyclohexane	Ave	0.3852	0.3689		9.57	10.0	-4.2	30.0
Carbon tetrachloride	Ave	0.7252	0.6610		9.11	10.0	-8.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Lab Sample ID: CCVIS 200-191920/3 Calibration Date: 05/30/2023 08:27

Instrument ID: CHAM.i Calib Start Date: 04/04/2023 18:36

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 04/05/2023 00:34

Lab File ID: 55711_003.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzene	Ave	0.8812	0.8460		9.60	10.0	-4.0	30.0
1,2-Dichloroethane	Ave	0.3854	0.3710		9.62	10.0	-3.7	30.0
2,2,4-Trimethylpentane	Ave	1.196	1.209		10.1	10.0	1.0	30.0
n-Heptane	Ave	0.3978	0.4028		10.1	10.0	1.2	30.0
n-Butanol	Ave	0.1705	0.1833		10.7	10.0	7.5	30.0
Trichloroethene	Ave	0.4478	0.4173		9.32	10.0	-6.8	30.0
1,2-Dichloropropane	Ave	0.3033	0.3066		10.1	10.0	1.1	30.0
Methyl methacrylate	Ave	0.3048	0.2944		9.66	10.0	-3.4	30.0
1,4-Dioxane	Ave	0.2014	0.1876		9.31	10.0	-6.9	30.0
Dibromomethane	Ave	0.4652	0.3992		8.58	10.0	-14.2	30.0
Bromodichloromethane	Ave	0.6812	0.6615		9.71	10.0	-2.9	30.0
cis-1,3-Dichloropropene	Ave	0.5591	0.5359		9.58	10.0	-4.2	30.0
methyl isobutyl ketone	Ave	0.5209	0.5463		10.5	10.0	4.9	30.0
Toluene	Ave	0.7754	0.6986		9.01	10.0	-9.9	30.0
n-Octane	Ave	0.5470	0.5619		10.3	10.0	2.7	30.0
trans-1,3-Dichloropropene	Ave	0.4970	0.4767		9.59	10.0	-4.1	30.0
1,1,2-Trichloroethane	Ave	0.3877	0.3629		9.36	10.0	-6.4	30.0
Tetrachloroethene	Ave	0.7699	0.6294		8.17	10.0	-18.2	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.6122	0.5875		9.60	10.0	-4.0	30.0
Dibromochloromethane	Ave	0.8503	0.7961		9.36	10.0	-6.4	30.0
1,2-Dibromoethane	Ave	0.7688	0.6928		9.01	10.0	-9.9	30.0
Chlorobenzene	Ave	1.124	0.9900		8.80	10.0	-11.9	30.0
Ethylbenzene	Ave	1.720	1.562		9.08	10.0	-9.2	30.0
m,p-Xylene	Ave	0.6858	0.6154		17.9	20.0	-10.3	30.0
n-Nonane	Ave	0.6978	0.6777		9.71	10.0	-2.9	30.0
Xylene, o-	Ave	0.6682	0.5897		8.82	10.0	-11.8	30.0
Styrene	Ave	1.092	0.9730		8.91	10.0	-10.9	30.0
Bromoform	Ave	0.8200	0.7831		9.55	10.0	-4.5	30.0
Cumene	Ave	1.963	1.757		8.95	10.0	-10.5	30.0
1,1,2,2-Tetrachloroethane	Ave	0.999	0.9350		9.36	10.0	-6.4	30.0
1,2,3-Trichloropropane	Ave	0.7478	0.7176		9.59	10.0	-4.0	30.0
n-Propylbenzene	Ave	2.284	2.122		9.29	10.0	-7.1	30.0
2-Chlorotoluene	Ave	1.498	1.362		9.09	10.0	-9.1	30.0
4-Ethyltoluene	Ave	1.960	1.779		9.07	10.0	-9.3	30.0
1,3,5-Trimethylbenzene	Ave	1.645	1.511		9.18	10.0	-8.2	30.0
n-Decane	Ave	0.8760	0.8996		10.3	10.0	2.7	30.0
Alpha Methyl Styrene	Ave	0.8877	0.7693		8.66	10.0	-13.3	30.0
tert-Butylbenzene	Ave	1.623	1.441		8.88	10.0	-11.2	30.0
1,2,4-Trimethylbenzene	Ave	1.712	1.510		8.82	10.0	-11.8	30.0
sec-Butylbenzene	Ave	2.394	2.201		9.19	10.0	-8.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Lab Sample ID: CCVIS 200-191920/3 Calibration Date: 05/30/2023 08:27

Instrument ID: CHAM.i Calib Start Date: 04/04/2023 18:36

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 04/05/2023 00:34

Lab File ID: 55711_003.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3-Dichlorobenzene	Ave	1.253	1.080		8.62	10.0	-13.8	30.0
4-Isopropyltoluene	Ave	2.051	1.847		9.01	10.0	-9.9	30.0
1,4-Dichlorobenzene	Ave	1.276	1.101		8.63	10.0	-13.7	30.0
Benzyl chloride	Ave	1.472	1.290		8.77	10.0	-12.3	30.0
n-Butylbenzene	Ave	1.933	1.786		9.24	10.0	-7.6	30.0
1,2-Dichlorobenzene	Ave	1.215	1.036		8.52	10.0	-14.8	30.0
n-Undecane	Ave	0.9722	1.017		10.5	10.0	4.6	30.0
n-Dodecane	Ave	1.053	1.062		10.1	10.0	0.9	30.0
1,2,4-Trichlorobenzene	Ave	1.285	1.037		8.07	10.0	-19.3	30.0
Hexachlorobutadiene	Ave	1.093	0.9082		8.31	10.0	-16.9	30.0
Naphthalene	Ave	2.603	2.189		8.41	10.0	-15.9	30.0
1,2,3-Trichlorobenzene	Ave	1.127	0.9191		8.16	10.0	-18.4	30.0

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Instrument ID: CHAM.i Start Date: 04/04/2023 16:36

Analysis Batch Number: 189999 End Date: 04/05/2023 04:49

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-189999/1		04/04/2023 16:36	1	54971_001.D	RTX-624 0.32(mm)
IC 200-189999/3		04/04/2023 18:36	1	54971_003.D	RTX-624 0.32(mm)
IC 200-189999/4		04/04/2023 19:27	1	54971_004.D	RTX-624 0.32(mm)
IC 200-189999/5		04/04/2023 20:18	1	54971_005.D	RTX-624 0.32(mm)
IC 200-189999/6		04/04/2023 21:09	1	54971_006.D	RTX-624 0.32(mm)
ICIS 200-189999/7		04/04/2023 22:00	1	54971_007.D	RTX-624 0.32(mm)
IC 200-189999/8		04/04/2023 22:52	1	54971_008.D	RTX-624 0.32(mm)
IC 200-189999/9		04/04/2023 23:43	1	54971_009.D	RTX-624 0.32(mm)
IC 200-189999/10		04/05/2023 00:34	1	54971_010.D	RTX-624 0.32(mm)
ICV 200-189999/12		04/05/2023 02:16	1	54971_012.D	RTX-624 0.32(mm)
ZZZZZ		04/05/2023 03:07	1		RTX-624 0.32(mm)
ZZZZZ		04/05/2023 03:58	1		RTX-624 0.32(mm)
ZZZZZ		04/05/2023 04:49	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 200-68405-1

SDG No.:

Instrument ID: CHAM.i Start Date: 05/30/2023 06:48

Analysis Batch Number: 191920 End Date: 05/31/2023 05:31

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-191920/1		05/30/2023 06:48	1	55711_001.D	RTX-624 0.32(mm)
CCVIS 200-191920/3		05/30/2023 08:27	1	55711_003.D	RTX-624 0.32(mm)
LCS 200-191920/4		05/30/2023 09:18	1	55711_004.D	RTX-624 0.32(mm)
MB 200-191920/5		05/30/2023 10:10	1	55711_005.D	RTX-624 0.32(mm)
ZZZZZ		05/30/2023 11:11	0.2		RTX-624 0.32(mm)
ZZZZZ		05/30/2023 12:12	0.2		RTX-624 0.32(mm)
200-68405-3	5055	05/30/2023 13:13	0.2	55711_008.D	RTX-624 0.32(mm)
ZZZZZ		05/30/2023 14:05	1		RTX-624 0.32(mm)
ZZZZZ		05/30/2023 14:56	1		RTX-624 0.32(mm)
ZZZZZ		05/30/2023 15:47	10		RTX-624 0.32(mm)
ZZZZZ		05/30/2023 16:39	10		RTX-624 0.32(mm)
ZZZZZ		05/30/2023 17:30	10		RTX-624 0.32(mm)
ZZZZZ		05/30/2023 18:22	10		RTX-624 0.32(mm)
ZZZZZ		05/30/2023 19:13	10		RTX-624 0.32(mm)
ZZZZZ		05/30/2023 20:05	10		RTX-624 0.32(mm)
ZZZZZ		05/30/2023 20:56	1		RTX-624 0.32(mm)
ZZZZZ		05/30/2023 21:48	1		RTX-624 0.32(mm)
ZZZZZ		05/30/2023 22:40	1		RTX-624 0.32(mm)
ZZZZZ		05/30/2023 23:31	20		RTX-624 0.32(mm)
ZZZZZ		05/31/2023 00:22	20		RTX-624 0.32(mm)
ZZZZZ		05/31/2023 01:14	5		RTX-624 0.32(mm)
ZZZZZ		05/31/2023 02:05	10		RTX-624 0.32(mm)
ZZZZZ		05/31/2023 02:56	1		RTX-624 0.32(mm)
ZZZZZ		05/31/2023 03:48	1		RTX-624 0.32(mm)
ZZZZZ		05/31/2023 04:39	1		RTX-624 0.32(mm)
ZZZZZ		05/31/2023 05:31	5		RTX-624 0.32(mm)

Shipping and Receiving Documents

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

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

200-68952 Chain of Custody

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

Client Contact Information	**Client Project Manager:** Brice Lynch	**Samples Collected By:** M. Sarni	COC No:
Company Name: Roux Envir Eng + Geology DPC	**Phone:** 631 232 2300		1 of 1 COCs
Address: 209 Shafter St	**Email:** Blynch@Rouxinc.com		TALS Project #:
City/State/Zip Islandia NY 11749			**For Lab Use Only:**
Phone: 631 232 2300	**Site Contact:**		Walk-in Client:
FAX:	**Tel/Fax**		Lab Sampling:
Project Name: Bulova Watchcase Factory Condominiu	**Analysis Turnaround Time**		
Site/Location: Sag Harbor NY	Standard (Specific):		Job / SDG No.:
P O #	Rush (Specify):		(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)	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
GARAGE BLOWER Effluent	6-30-23	0900	6-30-23	0900	-29.7			3220		X												Grab
Factory Blower Effluent (FB-2)	6-30-23	1000	6-30-23	1000	-29.7			9272		X												Grab

NYC 222

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

Special Instructions/QC Requirements & Comments:

Samples Shipped by: M. Sarni	**Date / Time:** 6-30-23 1200	**Samples Received by:**
Samples Relinquished by: M. Sarni	**Date / Time:** 6-30-23 1200	**Received by:**
Relinquished by: FedEx	**Date / Time:** 6/30/23 1600	**Received by:** ETABUR 7/1/23 940

Lab Use Only Shipped Airbill: Opened by: Condition:

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7/10/2023 1:16 PM

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Login Sample Receipt Checklist

Client: Roux Environmental Eng & Geology DPC

Job Number: 200-68952-1

Login Number: 68952
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.	N/A	Not present
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.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Rachel Fenwick
Roux Environmental Eng & Geology DPC
209 Shafter St
Islandia NY 11749

Generated 11/30/2023 6:34 PM

JOB DESCRIPTION

Watchcase Factory Condominium

JOB NUMBER

460-292594-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

myEOL

Eurofins Edison

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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 Environment Testing Northeast, LLC Project Manager.

Compliance Statement

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Authorization



Generated
11/30/2023 6:34 PM

Authorized for release by
Warleny M Infante, Project Management Assistant I
Warleny.Infante@et.eurofinsus.com
Designee for
Melissa Haas, Senior Project Manager
Melissa.Haas@et.eurofinsus.com
203 308-0880

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CASE NARRATIVE

Client: Roux Environmental Eng & Geology DPC

Project: Watchcase Factory Condominium

Report Number: 460-292594-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

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 11/13/2023 6:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.2º C.

Receipt Exceptions

The COC was incorrectly completed, Samples were not marked for analysis.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

PFAS

Samples MW-2 (460-292594-1), DUP_111323 (460-292594-2) and WCF-10 (460-292594-3) were analyzed for PFAS in accordance with EPA 1633. The samples were prepared on 11/27/2023 and analyzed on 11/28/2023.

The following sample was decanted about 10 mL in order to add spike standards to the sample bottle without said sample bottle overflowing: WCF-10 (460-292594-3[MSD]). In preparation batch 280-635120 for method 1633_SPE/163_B24.

In preparation batch 280-635120, when samples MW-2 (460-292594-1) and DUP_111323 (460-292594-2) were eluted, the resulting elute had a yellow color. Method 1633_SPE/1633_B24.

No difficulties were encountered during the PFAS analysis.

All quality control parameters were within the acceptance limits.

Sample Summary

Client: Roux Environmental Eng & Geology DPC
Project/Site: Watchcase Factory Condominium

Job ID: 460-292594-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-292594-1	MW-2	Water	11/13/23 10:45	11/13/23 18:00
460-292594-2	DUP_111323	Water	11/13/23 11:30	11/13/23 18:00
460-292594-3	WCF-10	Water	11/13/23 12:00	11/13/23 18:00

Detection Summary

Client: Roux Environmental Eng & Geology DPC
Job ID: 460-292594-1
Project/Site: Watchcase Factory Condominium

Client Sample ID: MW-2
Lab Sample ID: 460-292594-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	18.3		7.14	1.78	ng/L	1		Draft 1633	Total/NA
Perfluoropentanoic acid (PFPeA)	53.3		3.57	0.89	ng/L	1		Draft 1633	Total/NA
Perfluorohexanoic acid (PFHxA)	35.6		1.78	0.45	ng/L	1		Draft 1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	20.8		1.78	0.46	ng/L	1		Draft 1633	Total/NA
Perfluorooctanoic acid (PFOA)	28.8		1.78	0.57	ng/L	1		Draft 1633	Total/NA
Perfluorononanoic acid (PFNA)	12.1		1.78	0.45	ng/L	1		Draft 1633	Total/NA
Perfluorodecanoic acid (PFDA)	18.0		1.78	0.45	ng/L	1		Draft 1633	Total/NA
Perfluoroundecanoic acid (PFUnA)	4.39		1.78	0.45	ng/L	1		Draft 1633	Total/NA
Perfluorododecanoic acid (PFDoA)	0.91	J	1.78	0.45	ng/L	1		Draft 1633	Total/NA
Perfluorobutanesulfonic acid (PFBS)	5.56		1.78	0.27	ng/L	1		Draft 1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.75	J	1.78	0.51	ng/L	1		Draft 1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.84		1.78	0.45	ng/L	1		Draft 1633	Total/NA

Client Sample ID: DUP_111323
Lab Sample ID: 460-292594-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	17.4		7.22	1.81	ng/L	1		Draft 1633	Total/NA
Perfluoropentanoic acid (PFPeA)	48.0		3.61	0.90	ng/L	1		Draft 1633	Total/NA
Perfluorohexanoic acid (PFHxA)	35.6		1.81	0.45	ng/L	1		Draft 1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	19.4		1.81	0.47	ng/L	1		Draft 1633	Total/NA
Perfluorooctanoic acid (PFOA)	27.6		1.81	0.58	ng/L	1		Draft 1633	Total/NA
Perfluorononanoic acid (PFNA)	11.7		1.81	0.45	ng/L	1		Draft 1633	Total/NA
Perfluorodecanoic acid (PFDA)	17.4		1.81	0.45	ng/L	1		Draft 1633	Total/NA
Perfluoroundecanoic acid (PFUnA)	4.18		1.81	0.45	ng/L	1		Draft 1633	Total/NA
Perfluorododecanoic acid (PFDoA)	0.86	J	1.81	0.45	ng/L	1		Draft 1633	Total/NA
Perfluorobutanesulfonic acid (PFBS)	5.99		1.81	0.27	ng/L	1		Draft 1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.70	J	1.81	0.51	ng/L	1		Draft 1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.57		1.81	0.45	ng/L	1		Draft 1633	Total/NA

Client Sample ID: WCF-10
Lab Sample ID: 460-292594-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	13.0		7.18	1.80	ng/L	1		Draft 1633	Total/NA
Perfluoropentanoic acid (PFPeA)	34.5		3.59	0.90	ng/L	1		Draft 1633	Total/NA
Perfluorohexanoic acid (PFHxA)	36.5		1.80	0.45	ng/L	1		Draft 1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	14.7		1.80	0.47	ng/L	1		Draft 1633	Total/NA
Perfluorooctanoic acid (PFOA)	25.0		1.80	0.57	ng/L	1		Draft 1633	Total/NA
Perfluorononanoic acid (PFNA)	5.24		1.80	0.45	ng/L	1		Draft 1633	Total/NA
Perfluorodecanoic acid (PFDA)	7.50		1.80	0.45	ng/L	1		Draft 1633	Total/NA
Perfluoroundecanoic acid (PFUnA)	3.41		1.80	0.45	ng/L	1		Draft 1633	Total/NA
Perfluorododecanoic acid (PFDoA)	2.20		1.80	0.45	ng/L	1		Draft 1633	Total/NA
Perfluorobutanesulfonic acid (PFBS)	5.09		1.80	0.27	ng/L	1		Draft 1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.03	J	1.80	0.51	ng/L	1		Draft 1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.43		1.80	0.45	ng/L	1		Draft 1633	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Roux Environmental Eng & Geology DPC
Job ID: 460-292594-1
Project/Site: Watchcase Factory Condominium

Method	Method Description	Protocol	Laboratory
Draft 1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	EET DEN
1633	Solid-Phase Extraction (SPE)	EPA	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client Sample ID: MW-2
Date Collected: 11/13/23 10:45
Date Received: 11/13/23 18:00

Lab Sample ID: 460-292594-1
Matrix: Water

Method: EPA Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**18.3**		7.14	1.78	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluoropentanoic acid (PFPeA)	**53.3**		3.57	0.89	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluorohexanoic acid (PFHxA)	**35.6**		1.78	0.45	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluoroheptanoic acid (PFHpA)	**20.8**		1.78	0.46	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluorooctanoic acid (PFOA)	**28.8**		1.78	0.57	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluorononanoic acid (PFNA)	**12.1**		1.78	0.45	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluorodecanoic acid (PFDA)	**18.0**		1.78	0.45	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluoroundecanoic acid (PFUnA)	**4.39**		1.78	0.45	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluorododecanoic acid (PFDoA)	**0.91**	**J**	1.78	0.45	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluorotridecanoic acid (PFTriA)	1.78	U	1.78	0.45	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluorotetradecanoic acid (PFTeDA)	1.78	U	1.78	0.45	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluorobutanesulfonic acid (PFBS)	**5.56**		1.78	0.27	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluoropentanesulfonic acid (PFPeS)	1.78	U	1.78	0.45	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluorohexanesulfonic acid (PFHxS)	**0.75**	**J**	1.78	0.51	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluoroheptanesulfonic acid (PFHpS)	1.78	U	1.78	0.36	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluorooctanesulfonic acid (PFOS)	**4.84**		1.78	0.45	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluorononanesulfonic acid (PFNS)	1.78	U	1.78	0.36	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluorodecanesulfonic acid (PFDS)	1.78	U	1.78	0.45	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluorododecanesulfonic acid (PFDoS)	1.78	U	1.78	0.80	ng/L		11/27/23 11:00	11/28/23 16:05	1
4:2 FTS	7.14	U	7.14	1.52	ng/L		11/27/23 11:00	11/28/23 16:05	1
6:2 FTS	7.14	U	7.14	2.23	ng/L		11/27/23 11:00	11/28/23 16:05	1
8:2 FTS	7.14	U	7.14	2.32	ng/L		11/27/23 11:00	11/28/23 16:05	1
Perfluorooctanesulfonamide (PFOSA)	1.78	U	1.78	0.45	ng/L		11/27/23 11:00	11/28/23 16:05	1
NMeFOSA	1.78	U	1.78	0.45	ng/L		11/27/23 11:00	11/28/23 16:05	1
NEtFOSA	1.78	U	1.78	0.45	ng/L		11/27/23 11:00	11/28/23 16:05	1
NMeFOSAA	3.57	U	3.57	1.07	ng/L		11/27/23 11:00	11/28/23 16:05	1
NEtFOSAA	1.78	U	1.78	0.62	ng/L		11/27/23 11:00	11/28/23 16:05	1
NMeFOSE	17.8	U	17.8	4.46	ng/L		11/27/23 11:00	11/28/23 16:05	1
NEtFOSE	17.8	U	17.8	4.46	ng/L		11/27/23 11:00	11/28/23 16:05	1
HFPO-DA (GenX)	7.14	U	7.14	1.78	ng/L		11/27/23 11:00	11/28/23 16:05	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	7.14	U	7.14	1.34	ng/L		11/27/23 11:00	11/28/23 16:05	1
PFMBA	3.57	U	3.57	0.89	ng/L		11/27/23 11:00	11/28/23 16:05	1
NFDHA	3.57	U	3.57	0.89	ng/L		11/27/23 11:00	11/28/23 16:05	1
PFMPA	3.57	U	3.57	0.45	ng/L		11/27/23 11:00	11/28/23 16:05	1
9Cl-PF3ONS	7.14	U	7.14	0.89	ng/L		11/27/23 11:00	11/28/23 16:05	1
11Cl-PF3OUdS	7.14	U	7.14	1.78	ng/L		11/27/23 11:00	11/28/23 16:05	1
PFEESA	3.57	U	3.57	0.45	ng/L		11/27/23 11:00	11/28/23 16:05	1
3:3 FTCA	8.92	U	8.92	1.34	ng/L		11/27/23 11:00	11/28/23 16:05	1
5:3 FTCA	44.6	U	44.6	8.92	ng/L		11/27/23 11:00	11/28/23 16:05	1
7:3 FTCA	44.6	U	44.6	8.92	ng/L		11/27/23 11:00	11/28/23 16:05	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*95*		*10 - 130*	*11/27/23 11:00*	*11/28/23 16:05*	*1*

Client Sample ID: MW-2
Lab Sample ID: 460-292594-1

Date Collected: 11/13/23 10:45
Matrix: Water
Date Received: 11/13/23 18:00

Method: EPA Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C5 PFPeA	*74*		*35 - 150*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
13C5 PFHxA	*91*		*55 - 150*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
13C4 PFHpA	*89*		*55 - 150*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
13C8 PFOA	*94*		*60 - 140*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
13C9 PFNA	*95*		*55 - 140*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
13C6 PFDA	*98*		*50 - 140*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
13C7 PFUnA	*91*		*30 - 140*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
13C2 PFDoA	*75*		*10 - 150*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
13C2 PFTeDA	*54*		*10 - 130*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
13C3 PFBS	*95*		*55 - 150*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
13C3 PFHxS	*99*		*55 - 150*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
13C8 PFOS	*86*		*45 - 140*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
13C8 FOSA	*93*		*30 - 130*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
d3-NMeFOSAA	*85*		*45 - 200*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
d5-NEtFOSAA	*70*		*10 - 200*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
M2-4:2 FTS	*150*		*60 - 200*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
M2-6:2 FTS	*134*		*60 - 200*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
M2-8:2 FTS	*93*		*50 - 200*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
13C3 HFPO-DA	*92*		*25 - 160*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
d7-N-MeFOSE-M	*71*		*10 - 150*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
d9-N-EtFOSE-M	*66*		*10 - 150*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
d5-NEtPFOSA	*66*		*10 - 130*	*11/27/23 11:00*	*11/28/23 16:05*	*1*
d3-NMePFOSA	*61*		*15 - 130*	*11/27/23 11:00*	*11/28/23 16:05*	*1*

Client Sample ID: DUP_111323
Lab Sample ID: 460-292594-2

Date Collected: 11/13/23 11:30
Matrix: Water
Date Received: 11/13/23 18:00

Method: EPA Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**17.4**		7.22	1.81	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluoropentanoic acid (PFPeA)	**48.0**		3.61	0.90	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluorohexanoic acid (PFHxA)	**35.6**		1.81	0.45	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluoroheptanoic acid (PFHpA)	**19.4**		1.81	0.47	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluorooctanoic acid (PFOA)	**27.6**		1.81	0.58	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluorononanoic acid (PFNA)	**11.7**		1.81	0.45	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluorodecanoic acid (PFDA)	**17.4**		1.81	0.45	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluoroundecanoic acid (PFUnA)	**4.18**		1.81	0.45	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluorododecanoic acid (PFDoA)	**0.86**	**J**	1.81	0.45	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluorotridecanoic acid (PFTriA)	1.81	U	1.81	0.45	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluorotetradecanoic acid (PFTeDA)	1.81	U	1.81	0.45	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluorobutanesulfonic acid (PFBS)	**5.99**		1.81	0.27	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluoropentanesulfonic acid (PFPeS)	1.81	U	1.81	0.45	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluorohexanesulfonic acid (PFHxS)	**0.70**	**J**	1.81	0.51	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluoroheptanesulfonic acid (PFHpS)	1.81	U	1.81	0.36	ng/L		11/27/23 11:00	11/28/23 16:24	1

Client Sample ID: DUP_111323
Date Collected: 11/13/23 11:30
Date Received: 11/13/23 18:00

Lab Sample ID: 460-292594-2
Matrix: Water

Method: EPA Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	**4.57**		1.81	0.45	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluorononanesulfonic acid (PFNS)	1.81	U	1.81	0.36	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluorodecanesulfonic acid (PFDS)	1.81	U	1.81	0.45	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluorododecanesulfonic acid (PFDoS)	1.81	U	1.81	0.81	ng/L		11/27/23 11:00	11/28/23 16:24	1
4:2 FTS	7.22	U	7.22	1.54	ng/L		11/27/23 11:00	11/28/23 16:24	1
6:2 FTS	7.22	U	7.22	2.26	ng/L		11/27/23 11:00	11/28/23 16:24	1
8:2 FTS	7.22	U	7.22	2.35	ng/L		11/27/23 11:00	11/28/23 16:24	1
Perfluorooctanesulfonamide (PFOSA)	1.81	U	1.81	0.45	ng/L		11/27/23 11:00	11/28/23 16:24	1
NMeFOSA	1.81	U	1.81	0.45	ng/L		11/27/23 11:00	11/28/23 16:24	1
NEtFOSA	1.81	U	1.81	0.45	ng/L		11/27/23 11:00	11/28/23 16:24	1
NMeFOSAA	3.61	U	3.61	1.08	ng/L		11/27/23 11:00	11/28/23 16:24	1
NEtFOSAA	1.81	U	1.81	0.63	ng/L		11/27/23 11:00	11/28/23 16:24	1
NMeFOSE	18.1	U	18.1	4.52	ng/L		11/27/23 11:00	11/28/23 16:24	1
NEtFOSE	18.1	U	18.1	4.52	ng/L		11/27/23 11:00	11/28/23 16:24	1
HFPO-DA (GenX)	7.22	U	7.22	1.81	ng/L		11/27/23 11:00	11/28/23 16:24	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	7.22	U	7.22	1.35	ng/L		11/27/23 11:00	11/28/23 16:24	1
PFMBA	3.61	U	3.61	0.90	ng/L		11/27/23 11:00	11/28/23 16:24	1
NFDHA	3.61	U	3.61	0.90	ng/L		11/27/23 11:00	11/28/23 16:24	1
PFMPA	3.61	U	3.61	0.45	ng/L		11/27/23 11:00	11/28/23 16:24	1
9Cl-PF3ONS	7.22	U	7.22	0.90	ng/L		11/27/23 11:00	11/28/23 16:24	1
11Cl-PF3OUdS	7.22	U	7.22	1.81	ng/L		11/27/23 11:00	11/28/23 16:24	1
PFEESA	3.61	U	3.61	0.45	ng/L		11/27/23 11:00	11/28/23 16:24	1
3:3 FTCA	9.03	U	9.03	1.35	ng/L		11/27/23 11:00	11/28/23 16:24	1
5:3 FTCA	45.2	U	45.2	9.03	ng/L		11/27/23 11:00	11/28/23 16:24	1
7:3 FTCA	45.2	U	45.2	9.03	ng/L		11/27/23 11:00	11/28/23 16:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*102*		*10 - 130*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
13C5 PFPeA	*82*		*35 - 150*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
13C5 PFHxA	*100*		*55 - 150*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
13C4 PFHpA	*97*		*55 - 150*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
13C8 PFOA	*100*		*60 - 140*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
13C9 PFNA	*105*		*55 - 140*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
13C6 PFDA	*112*		*50 - 140*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
13C7 PFUnA	*104*		*30 - 140*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
13C2 PFDoA	*93*		*10 - 150*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
13C2 PFTeDA	*73*		*10 - 130*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
13C3 PFBS	*110*		*55 - 150*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
13C3 PFHxS	*109*		*55 - 150*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
13C8 PFOS	*104*		*45 - 140*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
13C8 FOSA	*113*		*30 - 130*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
d3-NMeFOSAA	*108*		*45 - 200*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
d5-NEtFOSAA	*89*		*10 - 200*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
M2-4:2 FTS	*185*		*60 - 200*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
M2-6:2 FTS	*141*		*60 - 200*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
M2-8:2 FTS	*104*		*50 - 200*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
13C3 HFPO-DA	*103*		*25 - 160*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
d7-N-MeFOSE-M	*96*		*10 - 150*	*11/27/23 11:00*	*11/28/23 16:24*	*1*

Client Sample ID: DUP_111323
Lab Sample ID: 460-292594-2

Date Collected: 11/13/23 11:30
Matrix: Water
Date Received: 11/13/23 18:00

Method: EPA Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d9-N-EtFOSE-M	*93*		*10 - 150*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
d5-NEtPFOSA	*81*		*10 - 130*	*11/27/23 11:00*	*11/28/23 16:24*	*1*
d3-NMePFOSA	*76*		*15 - 130*	*11/27/23 11:00*	*11/28/23 16:24*	*1*

Client Sample ID: WCF-10
Lab Sample ID: 460-292594-3

Date Collected: 11/13/23 12:00
Matrix: Water
Date Received: 11/13/23 18:00

Method: EPA Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**13.0**		7.18	1.80	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluoropentanoic acid (PFPeA)	**34.5**		3.59	0.90	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluorohexanoic acid (PFHxA)	**36.5**		1.80	0.45	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluoroheptanoic acid (PFHpA)	**14.7**		1.80	0.47	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluorooctanoic acid (PFOA)	**25.0**		1.80	0.57	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluorononanoic acid (PFNA)	**5.24**		1.80	0.45	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluorodecanoic acid (PFDA)	**7.50**		1.80	0.45	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluoroundecanoic acid (PFUnA)	**3.41**		1.80	0.45	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluorododecanoic acid (PFDoA)	**2.20**		1.80	0.45	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluorotridecanoic acid (PFTriA)	1.80	U	1.80	0.45	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluorotetradecanoic acid (PFTeDA)	1.80	U	1.80	0.45	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluorobutanesulfonic acid (PFBS)	**5.09**		1.80	0.27	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluoropentanesulfonic acid (PFPeS)	1.80	U	1.80	0.45	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluorohexanesulfonic acid (PFHxS)	**1.03**	**J**	1.80	0.51	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluoroheptanesulfonic acid (PFHpS)	1.80	U	1.80	0.36	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluorooctanesulfonic acid (PFOS)	**2.43**		1.80	0.45	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluorononanesulfonic acid (PFNS)	1.80	U	1.80	0.36	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluorodecanesulfonic acid (PFDS)	1.80	U	1.80	0.45	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluorododecanesulfonic acid (PFDoS)	1.80	U	1.80	0.81	ng/L		11/27/23 11:00	11/28/23 16:43	1
4:2 FTS	7.18	U	7.18	1.53	ng/L		11/27/23 11:00	11/28/23 16:43	1
6:2 FTS	7.18	U	7.18	2.24	ng/L		11/27/23 11:00	11/28/23 16:43	1
8:2 FTS	7.18	U	7.18	2.33	ng/L		11/27/23 11:00	11/28/23 16:43	1
Perfluorooctanesulfonamide (PFOSA)	1.80	U	1.80	0.45	ng/L		11/27/23 11:00	11/28/23 16:43	1
NMeFOSA	1.80	U	1.80	0.45	ng/L		11/27/23 11:00	11/28/23 16:43	1
NEtFOSA	1.80	U	1.80	0.45	ng/L		11/27/23 11:00	11/28/23 16:43	1
NMeFOSAA	3.59	U	3.59	1.08	ng/L		11/27/23 11:00	11/28/23 16:43	1
NEtFOSAA	1.80	U	1.80	0.63	ng/L		11/27/23 11:00	11/28/23 16:43	1
NMeFOSE	18.0	U	18.0	4.49	ng/L		11/27/23 11:00	11/28/23 16:43	1
NEtFOSE	18.0	U	18.0	4.49	ng/L		11/27/23 11:00	11/28/23 16:43	1
HFPO-DA (GenX)	7.18	U	7.18	1.80	ng/L		11/27/23 11:00	11/28/23 16:43	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	7.18	U	7.18	1.35	ng/L		11/27/23 11:00	11/28/23 16:43	1
PFMBA	3.59	U	3.59	0.90	ng/L		11/27/23 11:00	11/28/23 16:43	1
NFDHA	3.59	U	3.59	0.90	ng/L		11/27/23 11:00	11/28/23 16:43	1

Client Sample ID: WCF-10
Date Collected: 11/13/23 12:00
Date Received: 11/13/23 18:00

Lab Sample ID: 460-292594-3
Matrix: Water

Method: EPA Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PFMPA	3.59	U	3.59	0.45	ng/L		11/27/23 11:00	11/28/23 16:43	1
9Cl-PF3ONS	7.18	U	7.18	0.90	ng/L		11/27/23 11:00	11/28/23 16:43	1
11Cl-PF3OUdS	7.18	U	7.18	1.80	ng/L		11/27/23 11:00	11/28/23 16:43	1
PFEESA	3.59	U	3.59	0.45	ng/L		11/27/23 11:00	11/28/23 16:43	1
3:3 FTCA	8.98	U	8.98	1.35	ng/L		11/27/23 11:00	11/28/23 16:43	1
5:3 FTCA	44.9	U	44.9	8.98	ng/L		11/27/23 11:00	11/28/23 16:43	1
7:3 FTCA	44.9	U	44.9	8.98	ng/L		11/27/23 11:00	11/28/23 16:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*102*		*10 - 130*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
13C5 PFPeA	*93*		*35 - 150*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
13C5 PFHxA	*101*		*55 - 150*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
13C4 PFHpA	*96*		*55 - 150*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
13C8 PFOA	*104*		*60 - 140*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
13C9 PFNA	*107*		*55 - 140*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
13C6 PFDA	*112*		*50 - 140*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
13C7 PFUnA	*105*		*30 - 140*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
13C2 PFDoA	*95*		*10 - 150*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
13C2 PFTeDA	*82*		*10 - 130*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
13C3 PFBS	*100*		*55 - 150*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
13C3 PFHxS	*102*		*55 - 150*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
13C8 PFOS	*97*		*45 - 140*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
13C8 FOSA	*110*		*30 - 130*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
d3-NMeFOSAA	*93*		*45 - 200*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
d5-NEtFOSAA	*92*		*10 - 200*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
M2-4:2 FTS	*168*		*60 - 200*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
M2-6:2 FTS	*134*		*60 - 200*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
M2-8:2 FTS	*113*		*50 - 200*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
13C3 HFPO-DA	*111*		*25 - 160*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
d7-N-MeFOSE-M	*98*		*10 - 150*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
d9-N-EtFOSE-M	*95*		*10 - 150*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
d5-NEtPFOSA	*82*		*10 - 130*	*11/27/23 11:00*	*11/28/23 16:43*	*1*
d3-NMePFOSA	*72*		*15 - 130*	*11/27/23 11:00*	*11/28/23 16:43*	*1*

Isotope Dilution Summary

Client: Roux Environmental Eng & Geology DPC
Job ID: 460-292594-1
Project/Site: Watchcase Factory Condominium

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (10-130)	PFPeA (35-150)	13C5PHA (55-150)	C4PFHA (55-150)	C8PFOA (60-140)	C9PFNA (55-140)	C6PFDA (50-140)	13C7PUA (30-140)
460-292594-1	MW-2	95	74	91	89	94	95	98	91
460-292594-2	DUP_111323	102	82	100	97	100	105	112	104
460-292594-3	WCF-10	102	93	101	96	104	107	112	105
460-292594-3 MS	WCF-10	100	91	102	95	100	100	106	104
460-292594-3 MSD	WCF-10	99	88	95	96	106	96	110	100
LLCS 280-635120/2-A	Lab Control Sample	99	92	100	92	103	97	97	96
MB 280-635120/1-A	Method Blank	99	100	110	96	100	97	108	100

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (10-150)	PFTDA (10-130)	C3PFBS (55-150)	C3PFHS (55-150)	C8PFOS (45-140)	PFOSA (30-130)	d3NMFOS (45-200)	d5NEFOS (10-200)
460-292594-1	MW-2	75	54	95	99	86	93	85	70
460-292594-2	DUP_111323	93	73	110	109	104	113	108	89
460-292594-3	WCF-10	95	82	100	102	97	110	93	92
460-292594-3 MS	WCF-10	101	83	105	100	92	109	104	98
460-292594-3 MSD	WCF-10	94	85	103	101	95	103	87	87
LLCS 280-635120/2-A	Lab Control Sample	97	71	104	103	94	105	110	90
MB 280-635120/1-A	Method Blank	92	80	101	104	94	101	112	87

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M242FTS (60-200)	M262FTS (60-200)	M282FTS (50-200)	HFPODA (25-160)	NMFM (10-150)	NEFM (10-150)	d5NPFSA (10-130)	d3NMFSA (15-130)
460-292594-1	MW-2	150	134	93	92	71	66	66	61
460-292594-2	DUP_111323	185	141	104	103	96	93	81	76
460-292594-3	WCF-10	168	134	113	111	98	95	82	72
460-292594-3 MS	WCF-10	144	112	101	110	103	102	85	74
460-292594-3 MSD	WCF-10	158	115	92	108	93	92	77	69
LLCS 280-635120/2-A	Lab Control Sample	102	88	95	99	108	112	82	77
MB 280-635120/1-A	Method Blank	96	89	99	113	112	116	83	75

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
13C5PHA = 13C5 PFHxA
C4PFHA = 13C4 PFHpA
C8PFOA = 13C8 PFOA
C9PFNA = 13C9 PFNA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
C3PFHS = 13C3 PFHxS
C8PFOS = 13C8 PFOS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA

NMFM = d7-N-MeFOSE-M

NEFM = d9-N-EtFOSE-M

d5NPFSA = d5-NEtPFOSA

d3NMFSA = d3-NMePFOSA

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA	PFPeA	13C5PHA	C4PFHA	C8PFOA	C9PFNA	C6PFDA	13C7PUA
Lab Sample ID	Client Sample ID	(10-130)	(40-150)	(40-150)	(40-150)	(30-140)	(30-140)	(20-140)	(20-140)
LCS 280-635120/3-A	Lab Control Sample	92	100	104	106	100	90	96	92

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFDoA	PFTDA	C3PFBS	C3PFHS	C8PFOS	PFOSA	d3NMFOS	d5NEFOS
Lab Sample ID	Client Sample ID	(10-150)	(10-130)	(25-150)	(25-150)	(20-140)	(10-130)	(10-200)	(10-200)
LCS 280-635120/3-A	Lab Control Sample	89	69	95	95	87	94	85	68

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		M242FTS	M262FTS	M282FTS	HFPODA	NMFM	NEFM	d5NPFSA	d3NMFSA
Lab Sample ID	Client Sample ID	(25-200)	(25-200)	(25-200)	(25-160)	(10-150)	(10-150)	(10-130)	(10-130)
LCS 280-635120/3-A	Lab Control Sample	79	72	71	95	95	92	73	64

Surrogate Legend

PFBA = 13C4 PFBA

PFPeA = 13C5 PFPeA

13C5PHA = 13C5 PFHxA

C4PFHA = 13C4 PFHpA

C8PFOA = 13C8 PFOA

C9PFNA = 13C9 PFNA

C6PFDA = 13C6 PFDA

13C7PUA = 13C7 PFUnA

PFDoA = 13C2 PFDoA

PFTDA = 13C2 PFTeDA

C3PFBS = 13C3 PFBS

C3PFHS = 13C3 PFHxS

C8PFOS = 13C8 PFOS

PFOSA = 13C8 FOSA

d3NMFOS = d3-NMeFOSAA

d5NEFOS = d5-NEtFOSAA

M242FTS = M2-4:2 FTS

M262FTS = M2-6:2 FTS

M282FTS = M2-8:2 FTS

HFPODA = 13C3 HFPO-DA

NMFM = d7-N-MeFOSE-M

NEFM = d9-N-EtFOSE-M

d5NPFSA = d5-NEtPFOSA

d3NMFSA = d3-NMePFOSA

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 280-635120/1-A
Matrix: Water
Analysis Batch: 635316

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635120

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	8.00	U	8.00	2.00	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluoropentanoic acid (PFPeA)	4.00	U	4.00	1.00	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluorohexanoic acid (PFHxA)	2.00	U	2.00	0.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.52	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.64	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluorodecanoic acid (PFDA)	2.00	U	2.00	0.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluoroundecanoic acid (PFUnA)	2.00	U	2.00	0.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluorododecanoic acid (PFDoA)	2.00	U	2.00	0.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluorotridecanoic acid (PFTriA)	2.00	U	2.00	0.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluorotetradecanoic acid (PFTeDA)	2.00	U	2.00	0.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.30	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluoropentanesulfonic acid (PFPeS)	2.00	U	2.00	0.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.57	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluoroheptanesulfonic acid (PFHpS)	2.00	U	2.00	0.40	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	0.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluorononanesulfonic acid (PFNS)	2.00	U	2.00	0.40	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluorodecanesulfonic acid (PFDS)	2.00	U	2.00	0.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluorododecanesulfonic acid (PFDoS)	2.00	U	2.00	0.90	ng/L		11/27/23 11:00	11/28/23 14:08	1
4:2 FTS	8.00	U	8.00	1.70	ng/L		11/27/23 11:00	11/28/23 14:08	1
6:2 FTS	8.00	U	8.00	2.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
8:2 FTS	8.00	U	8.00	2.60	ng/L		11/27/23 11:00	11/28/23 14:08	1
Perfluorooctanesulfonamide (PFOSA)	2.00	U	2.00	0.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
NMeFOSA	2.00	U	2.00	0.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
NEtFOSA	2.00	U	2.00	0.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
NMeFOSAA	4.00	U	4.00	1.20	ng/L		11/27/23 11:00	11/28/23 14:08	1
NEtFOSAA	2.00	U	2.00	0.70	ng/L		11/27/23 11:00	11/28/23 14:08	1
NMeFOSE	20.0	U	20.0	5.00	ng/L		11/27/23 11:00	11/28/23 14:08	1
NEtFOSE	20.0	U	20.0	5.00	ng/L		11/27/23 11:00	11/28/23 14:08	1
HFPO-DA (GenX)	8.00	U	8.00	2.00	ng/L		11/27/23 11:00	11/28/23 14:08	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	8.00	U	8.00	1.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
PFMBA	4.00	U	4.00	1.00	ng/L		11/27/23 11:00	11/28/23 14:08	1
NFDHA	4.00	U	4.00	1.00	ng/L		11/27/23 11:00	11/28/23 14:08	1
PFMPA	4.00	U	4.00	0.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
9Cl-PF3ONS	8.00	U	8.00	1.00	ng/L		11/27/23 11:00	11/28/23 14:08	1
11Cl-PF3OUdS	8.00	U	8.00	2.00	ng/L		11/27/23 11:00	11/28/23 14:08	1
PFEESA	4.00	U	4.00	0.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
3:3 FTCA	10.0	U	10.0	1.50	ng/L		11/27/23 11:00	11/28/23 14:08	1
5:3 FTCA	50.0	U	50.0	10.0	ng/L		11/27/23 11:00	11/28/23 14:08	1
7:3 FTCA	50.0	U	50.0	10.0	ng/L		11/27/23 11:00	11/28/23 14:08	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*99*		*10 - 130*	*11/27/23 11:00*	*11/28/23 14:08*	*1*
13C5 PFPeA	*100*		*35 - 150*	*11/27/23 11:00*	*11/28/23 14:08*	*1*
13C5 PFHxA	*110*		*55 - 150*	*11/27/23 11:00*	*11/28/23 14:08*	*1*

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 280-635120/1-A
Matrix: Water
Analysis Batch: 635316

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635120

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFHpA	96		55 - 150	11/27/23 11:00	11/28/23 14:08	1
13C8 PFOA	100		60 - 140	11/27/23 11:00	11/28/23 14:08	1
13C9 PFNA	97		55 - 140	11/27/23 11:00	11/28/23 14:08	1
13C6 PFDA	108		50 - 140	11/27/23 11:00	11/28/23 14:08	1
13C7 PFUnA	100		30 - 140	11/27/23 11:00	11/28/23 14:08	1
13C2 PFDoA	92		10 - 150	11/27/23 11:00	11/28/23 14:08	1
13C2 PFTeDA	80		10 - 130	11/27/23 11:00	11/28/23 14:08	1
13C3 PFBS	101		55 - 150	11/27/23 11:00	11/28/23 14:08	1
13C3 PFHxS	104		55 - 150	11/27/23 11:00	11/28/23 14:08	1
13C8 PFOS	94		45 - 140	11/27/23 11:00	11/28/23 14:08	1
13C8 FOSA	101		30 - 130	11/27/23 11:00	11/28/23 14:08	1
d3-NMeFOSAA	112		45 - 200	11/27/23 11:00	11/28/23 14:08	1
d5-NEtFOSAA	87		10 - 200	11/27/23 11:00	11/28/23 14:08	1
M2-4:2 FTS	96		60 - 200	11/27/23 11:00	11/28/23 14:08	1
M2-6:2 FTS	89		60 - 200	11/27/23 11:00	11/28/23 14:08	1
M2-8:2 FTS	99		50 - 200	11/27/23 11:00	11/28/23 14:08	1
13C3 HFPO-DA	113		25 - 160	11/27/23 11:00	11/28/23 14:08	1
d7-N-MeFOSE-M	112		10 - 150	11/27/23 11:00	11/28/23 14:08	1
d9-N-EtFOSE-M	116		10 - 150	11/27/23 11:00	11/28/23 14:08	1
d5-NEtPFOSA	83		10 - 130	11/27/23 11:00	11/28/23 14:08	1
d3-NMePFOSA	75		15 - 130	11/27/23 11:00	11/28/23 14:08	1

Lab Sample ID: LCS 280-635120/3-A
Matrix: Water
Analysis Batch: 635316

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	32.0	30.81		ng/L		96	58 - 148
Perfluoropentanoic acid (PFPeA)	32.0	30.58		ng/L		96	54 - 152
Perfluorohexanoic acid (PFHxA)	32.0	29.09		ng/L		91	55 - 152
Perfluoroheptanoic acid (PFHpA)	32.0	27.49		ng/L		86	54 - 154
Perfluorooctanoic acid (PFOA)	32.0	29.58		ng/L		92	52 - 161
Perfluorononanoic acid (PFNA)	32.0	32.75		ng/L		102	59 - 149
Perfluorodecanoic acid (PFDA)	32.0	31.73		ng/L		99	52 - 147
Perfluoroundecanoic acid (PFUnA)	32.0	29.82		ng/L		93	48 - 159
Perfluorododecanoic acid (PFDoA)	32.0	29.91		ng/L		93	64 - 142
Perfluorotridecanoic acid (PFTriA)	32.0	28.83		ng/L		90	49 - 148
Perfluorotetradecanoic acid (PFTeDA)	32.0	29.67		ng/L		93	47 - 161
Perfluorobutanesulfonic acid (PFBS)	28.4	26.20		ng/L		92	62 - 144
Perfluoropentanesulfonic acid (PFPeS)	30.0	27.93		ng/L		93	59 - 151
Perfluorohexanesulfonic acid (PFHxS)	29.2	24.20		ng/L		83	57 - 146
Perfluoroheptanesulfonic acid (PFHpS)	30.5	30.39		ng/L		100	55 - 152

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 280-635120/3-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 635316
Prep Batch: 635120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanesulfonic acid (PFOS)	29.8	28.98		ng/L		97	58 - 149
Perfluorononanesulfonic acid (PFNS)	30.8	30.74		ng/L		100	52 - 148
Perfluorodecanesulfonic acid (PFDS)	30.8	29.41		ng/L		95	51 - 147
Perfluorododecanesulfonic acid (PFDoS)	31.0	25.23		ng/L		81	36 - 145
4:2 FTS	79.8	71.27		ng/L		89	67 - 146
6:2 FTS	121	123.1		ng/L		101	61 - 151
8:2 FTS	123	113.0		ng/L		92	63 - 152
Perfluorooctanesulfonamide (PFOSA)	32.0	28.17		ng/L		88	61 - 148
NMeFOSA	32.0	33.77		ng/L		106	63 - 145
NEtFOSA	32.0	30.66		ng/L		96	65 - 139
NMeFOSAA	32.0	28.84		ng/L		90	58 - 144
NEtFOSAA	32.0	30.58		ng/L		96	59 - 146
NMeFOSE	160	158.4		ng/L		99	71 - 136
NEtFOSE	320	322.5		ng/L		101	69 - 137
HFPO-DA (GenX)	32.0	32.97		ng/L		103	63 - 144
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	30.2	29.77		ng/L		99	68 - 146
PFMBA	64.0	61.76		ng/L		96	55 - 148
NFDHA	32.0	27.99		ng/L		87	48 - 161
PFMPA	64.0	58.58		ng/L		92	51 - 145
9Cl-PF3ONS	79.6	78.00		ng/L		98	56 - 156
11Cl-PF3OUdS	80.4	71.01		ng/L		88	46 - 156
PFEESA	57.1	51.74		ng/L		91	56 - 151
3:3 FTCA	160	132.3		ng/L		83	62 - 129
5:3 FTCA	320	250.8		ng/L		78	63 - 134
7:3 FTCA	320	256.6		ng/L		80	50 - 138

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*92*		*10 - 130*
13C5 PFPeA	*100*		*40 - 150*
13C5 PFHxA	*104*		*40 - 150*
13C4 PFHpA	*106*		*40 - 150*
13C8 PFOA	*100*		*30 - 140*
13C9 PFNA	*90*		*30 - 140*
13C6 PFDA	*96*		*20 - 140*
13C7 PFUnA	*92*		*20 - 140*
13C2 PFDoA	*89*		*10 - 150*
13C2 PFTeDA	*69*		*10 - 130*
13C3 PFBS	*95*		*25 - 150*
13C3 PFHxS	*95*		*25 - 150*
13C8 PFOS	*87*		*20 - 140*
13C8 FOSA	*94*		*10 - 130*
d3-NMeFOSAA	*85*		*10 - 200*
d5-NEtFOSAA	*68*		*10 - 200*
M2-4:2 FTS	*79*		*25 - 200*

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 280-635120/3-A
Matrix: Water
Analysis Batch: 635316

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635120

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
M2-6:2 FTS	*72*		*25 - 200*
M2-8:2 FTS	*71*		*25 - 200*
13C3 HFPO-DA	*95*		*25 - 160*
d7-N-MeFOSE-M	*95*		*10 - 150*
d9-N-EtFOSE-M	*92*		*10 - 150*
d5-NEtPFOSA	*73*		*10 - 130*
d3-NMePFOSA	*64*		*10 - 130*

Lab Sample ID: LLCS 280-635120/2-A
Matrix: Water
Analysis Batch: 635316

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635120

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	3.20	2.919	J	ng/L		91	44 - 157
Perfluoropentanoic acid (PFPeA)	3.20	2.973	J	ng/L		93	57 - 148
Perfluorohexanoic acid (PFHxA)	3.20	2.788		ng/L		87	62 - 149
Perfluoroheptanoic acid (PFHpA)	3.20	3.341		ng/L		104	56 - 150
Perfluorooctanoic acid (PFOA)	3.20	2.811		ng/L		88	57 - 161
Perfluorononanoic acid (PFNA)	3.20	2.753		ng/L		86	53 - 157
Perfluorodecanoic acid (PFDA)	3.20	2.982		ng/L		93	43 - 158
Perfluoroundecanoic acid (PFUnA)	3.20	2.912		ng/L		91	50 - 155
Perfluorododecanoic acid (PFDoA)	3.20	2.883		ng/L		90	60 - 141
Perfluorotridecanoic acid (PFTriA)	3.20	2.848		ng/L		89	52 - 140
Perfluorotetradecanoic acid (PFTeDA)	3.20	2.837		ng/L		89	52 - 156
Perfluorobutanesulfonic acid (PFBS)	2.84	2.337		ng/L		82	63 - 145
Perfluoropentanesulfonic acid (PFPeS)	3.00	2.738		ng/L		91	58 - 144
Perfluorohexanesulfonic acid (PFHxS)	2.92	2.757		ng/L		94	44 - 158
Perfluoroheptanesulfonic acid (PFHpS)	3.05	2.776		ng/L		91	51 - 150
Perfluorooctanesulfonic acid (PFOS)	2.98	2.808		ng/L		94	43 - 162
Perfluorononanesulfonic acid (PFNS)	3.08	2.787		ng/L		91	46 - 151
Perfluorodecanesulfonic acid (PFDS)	3.08	3.003		ng/L		97	50 - 144
Perfluorododecanesulfonic acid (PFDoS)	3.10	2.582		ng/L		83	30 - 138
4:2 FTS	7.98	5.776	J	ng/L		72	52 - 158
6:2 FTS	12.1	11.79		ng/L		97	48 - 158
8:2 FTS	12.3	10.44		ng/L		85	46 - 165
Perfluorooctanesulfonamide (PFOSA)	3.20	2.672		ng/L		84	47 - 163
NMeFOSA	3.20	2.732		ng/L		85	54 - 155
NEtFOSA	3.20	2.899		ng/L		91	49 - 156
NMeFOSAA	3.20	3.041	J	ng/L		95	32 - 160

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 280-635120/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 635316
Prep Batch: 635120

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
NEtFOSAA	3.20	2.933		ng/L		92	51 - 154
NMeFOSE	16.0	14.70	J	ng/L		92	56 - 151
NEtFOSE	32.0	28.48		ng/L		89	60 - 147
HFPO-DA (GenX)	3.20	2.882	J	ng/L		90	58 - 154
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	3.02	2.803	J	ng/L		93	61 - 148
PFMBA	6.40	6.117		ng/L		96	49 - 154
NFDHA	3.20	2.478	J	ng/L		77	47 - 160
PFMPA	6.40	5.942		ng/L		93	48 - 150
9Cl-PF3ONS	7.96	7.027	J	ng/L		88	44 - 167
11Cl-PF3OUdS	8.04	6.466	J	ng/L		80	36 - 158
PFEESA	5.71	4.847		ng/L		85	56 - 144
3:3 FTCA	16.0	13.14		ng/L		82	32 - 161
5:3 FTCA	32.0	25.01	J	ng/L		78	39 - 156
7:3 FTCA	32.0	23.99	J	ng/L		75	36 - 149

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C4 PFBA	*99*		*10 - 130*
13C5 PFPeA	*92*		*35 - 150*
13C5 PFHxA	*100*		*55 - 150*
13C4 PFHpA	*92*		*55 - 150*
13C8 PFOA	*103*		*60 - 140*
13C9 PFNA	*97*		*55 - 140*
13C6 PFDA	*97*		*50 - 140*
13C7 PFUnA	*96*		*30 - 140*
13C2 PFDoA	*97*		*10 - 150*
13C2 PFTeDA	*71*		*10 - 130*
13C3 PFBS	*104*		*55 - 150*
13C3 PFHxS	*103*		*55 - 150*
13C8 PFOS	*94*		*45 - 140*
13C8 FOSA	*105*		*30 - 130*
d3-NMeFOSAA	*110*		*45 - 200*
d5-NEtFOSAA	*90*		*10 - 200*
M2-4:2 FTS	*102*		*60 - 200*
M2-6:2 FTS	*88*		*60 - 200*
M2-8:2 FTS	*95*		*50 - 200*
13C3 HFPO-DA	*99*		*25 - 160*
d7-N-MeFOSE-M	*108*		*10 - 150*
d9-N-EtFOSE-M	*112*		*10 - 150*
d5-NEtPFOSA	*82*		*10 - 130*
d3-NMePFOSA	*77*		*15 - 130*

Lab Sample ID: 460-292594-3 MS
Client Sample ID: WCF-10
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 635316
Prep Batch: 635120

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	13.0		29.4	40.54		ng/L		94	58 - 148
Perfluoropentanoic acid (PFPeA)	34.5		29.4	62.24		ng/L		95	54 - 152

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 460-292594-3 MS
Client Sample ID: WCF-10
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 635316
Prep Batch: 635120

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorohexanoic acid (PFHxA)	36.5		29.4	65.68		ng/L		99	55 - 152
Perfluoroheptanoic acid (PFHpA)	14.7		29.4	43.33		ng/L		97	54 - 154
Perfluorooctanoic acid (PFOA)	25.0		29.4	57.69		ng/L		111	52 - 161
Perfluorononanoic acid (PFNA)	5.24		29.4	33.55		ng/L		96	59 - 149
Perfluorodecanoic acid (PFDA)	7.50		29.4	37.02		ng/L		100	52 - 147
Perfluoroundecanoic acid (PFUnA)	3.41		29.4	30.75		ng/L		93	48 - 159
Perfluorododecanoic acid (PFDoA)	2.20		29.4	27.06		ng/L		85	64 - 142
Perfluorotridecanoic acid (PFTriA)	1.80	U	29.4	25.24		ng/L		86	49 - 148
Perfluorotetradecanoic acid (PFTeDA)	1.80	U	29.4	26.80		ng/L		91	47 - 161
Perfluorobutanesulfonic acid (PFBS)	5.09		26.1	27.96		ng/L		88	62 - 144
Perfluoropentanesulfonic acid (PFPeS)	1.80	U	27.6	26.83		ng/L		97	59 - 151
Perfluorohexanesulfonic acid (PFHxS)	1.03	J	26.8	24.06		ng/L		86	57 - 146
Perfluoroheptanesulfonic acid (PFHpS)	1.80	U	28.0	28.82		ng/L		103	55 - 152
Perfluorooctanesulfonic acid (PFOS)	2.43		27.3	31.38		ng/L		106	58 - 149
Perfluorononanesulfonic acid (PFNS)	1.80	U	28.3	30.38		ng/L		107	52 - 148
Perfluorodecanesulfonic acid (PFDS)	1.80	U	28.3	28.31		ng/L		100	51 - 147
Perfluorododecanesulfonic acid (PFDoS)	1.80	U	28.5	25.27		ng/L		89	36 - 145
4:2 FTS	7.18	U	73.2	69.17		ng/L		94	67 - 146
6:2 FTS	7.18	U	111	107.8		ng/L		97	61 - 151
8:2 FTS	7.18	U	113	109.4		ng/L		97	63 - 152
Perfluorooctanesulfonamide (PFOSA)	1.80	U	29.4	26.01		ng/L		89	61 - 148
NMeFOSA	1.80	U	29.4	29.30		ng/L		100	63 - 145
NEtFOSA	1.80	U	29.4	27.61		ng/L		94	65 - 139
NMeFOSAA	3.59	U	29.4	26.58		ng/L		90	58 - 144
NEtFOSAA	1.80	U	29.4	26.48		ng/L		90	59 - 146
NMeFOSE	18.0	U	147	135.5		ng/L		92	71 - 136
NEtFOSE	18.0	U	294	271.0		ng/L		92	69 - 137
HFPO-DA (GenX)	7.18	U	29.4	24.34		ng/L		83	63 - 144
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	7.18	U	27.7	24.77		ng/L		89	68 - 146
PFMBA	3.59	U	58.8	56.41		ng/L		96	55 - 148
NFDHA	3.59	U	29.4	25.97		ng/L		88	48 - 161
PFMPA	3.59	U	58.8	56.45		ng/L		96	51 - 145
9Cl-PF3ONS	7.18	U	73.1	61.64		ng/L		84	56 - 156
11Cl-PF3OUdS	7.18	U	73.9	51.64		ng/L		70	46 - 156
PFEESA	3.59	U	52.4	46.08		ng/L		88	56 - 151
3:3 FTCA	8.98	U	147	134.4		ng/L		92	62 - 129
5:3 FTCA	44.9	U	294	240.8		ng/L		82	63 - 134
7:3 FTCA	44.9	U	294	229.9		ng/L		78	50 - 138

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C4 PFBA	100		10 - 130
13C5 PFPeA	91		35 - 150
13C5 PFHxA	102		55 - 150
13C4 PFHpA	95		55 - 150
13C8 PFOA	100		60 - 140
13C9 PFNA	100		55 - 140
13C6 PFDA	106		50 - 140
13C7 PFUnA	104		30 - 140
13C2 PFDoA	101		10 - 150
13C2 PFTeDA	83		10 - 130
13C3 PFBS	105		55 - 150
13C3 PFHxS	100		55 - 150
13C8 PFOS	92		45 - 140
13C8 FOSA	109		30 - 130
d3-NMeFOSAA	104		45 - 200
d5-NEtFOSAA	98		10 - 200
M2-4:2 FTS	144		60 - 200
M2-6:2 FTS	112		60 - 200
M2-8:2 FTS	101		50 - 200
13C3 HFPO-DA	110		25 - 160
d7-N-MeFOSE-M	103		10 - 150
d9-N-EtFOSE-M	102		10 - 150
d5-NEtPFOSA	85		10 - 130
d3-NMePFOSA	74		15 - 130

Lab Sample ID: 460-292594-3 MSD
Matrix: Water
Analysis Batch: 635316

Client Sample ID: WCF-10
Prep Type: Total/NA
Prep Batch: 635120

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	13.0		27.4	38.33		ng/L		92	58 - 148	6	30
Perfluoropentanoic acid (PFPeA)	34.5		27.4	63.66		ng/L		107	54 - 152	2	30
Perfluorohexanoic acid (PFHxA)	36.5		27.4	65.15		ng/L		105	55 - 152	1	30
Perfluoroheptanoic acid (PFHpA)	14.7		27.4	42.38		ng/L		101	54 - 154	2	30
Perfluorooctanoic acid (PFOA)	25.0		27.4	50.77		ng/L		94	52 - 161	13	30
Perfluorononanoic acid (PFNA)	5.24		27.4	30.60		ng/L		93	59 - 149	9	30
Perfluorodecanoic acid (PFDA)	7.50		27.4	32.99		ng/L		93	52 - 147	12	30
Perfluoroundecanoic acid (PFUnA)	3.41		27.4	27.92		ng/L		90	48 - 159	10	30
Perfluorododecanoic acid (PFDoA)	2.20		27.4	27.99		ng/L		94	64 - 142	3	30
Perfluorotridecanoic acid (PFTriA)	1.80	U	27.4	23.66		ng/L		86	49 - 148	6	30
Perfluorotetradecanoic acid (PFTeDA)	1.80	U	27.4	24.27		ng/L		89	47 - 161	10	30
Perfluorobutanesulfonic acid (PFBS)	5.09		24.3	26.30		ng/L		87	62 - 144	6	30
Perfluoropentanesulfonic acid (PFPeS)	1.80	U	25.7	22.86		ng/L		89	59 - 151	16	30
Perfluorohexanesulfonic acid (PFHxS)	1.03	J	25.0	21.72		ng/L		83	57 - 146	10	30
Perfluoroheptanesulfonic acid (PFHpS)	1.80	U	26.1	25.71		ng/L		99	55 - 152	11	30

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 460-292594-3 MSD
Matrix: Water
Analysis Batch: 635316

Client Sample ID: WCF-10
Prep Type: Total/NA
Prep Batch: 635120

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid (PFOS)	2.43		25.5	28.27		ng/L		102	58 - 149	10	30
Perfluorononanesulfonic acid (PFNS)	1.80	U	26.3	26.06		ng/L		99	52 - 148	15	30
Perfluorodecanesulfonic acid (PFDS)	1.80	U	26.4	25.58		ng/L		97	51 - 147	10	30
Perfluorododecanesulfonic acid (PFDoS)	1.80	U	26.6	22.49		ng/L		85	36 - 145	12	30
4:2 FTS	7.18	U	68.2	59.47		ng/L		87	67 - 146	15	30
6:2 FTS	7.18	U	104	103.4		ng/L		100	61 - 151	4	30
8:2 FTS	7.18	U	105	103.2		ng/L		98	63 - 152	6	30
Perfluorooctanesulfonamide (PFOSA)	1.80	U	27.4	24.72		ng/L		90	61 - 148	5	30
NMeFOSA	1.80	U	27.4	26.99		ng/L		99	63 - 145	8	30
NEtFOSA	1.80	U	27.4	26.56		ng/L		97	65 - 139	4	30
NMeFOSAA	3.59	U	27.4	26.66		ng/L		97	58 - 144	0	30
NEtFOSAA	1.80	U	27.4	25.68		ng/L		94	59 - 146	3	30
NMeFOSE	18.0	U	137	128.4		ng/L		94	71 - 136	5	30
NEtFOSE	18.0	U	274	259.5		ng/L		95	69 - 137	4	30
HFPO-DA (GenX)	7.18	U	27.4	24.01		ng/L		88	63 - 144	1	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	7.18	U	25.8	21.60		ng/L		84	68 - 146	14	30
PFMBA	3.59	U	54.7	54.88		ng/L		100	55 - 148	3	30
NFDHA	3.59	U	27.4	27.86		ng/L		102	48 - 161	7	30
PFMPA	3.59	U	54.7	55.17		ng/L		101	51 - 145	2	30
9Cl-PF3ONS	7.18	U	68.1	57.61		ng/L		85	56 - 156	7	30
11Cl-PF3OUdS	7.18	U	68.8	49.43		ng/L		72	46 - 156	4	30
PFEESA	3.59	U	48.8	44.42		ng/L		91	56 - 151	4	30
3:3 FTCA	8.98	U	137	131.4		ng/L		96	62 - 129	2	30
5:3 FTCA	44.9	U	274	264.5		ng/L		97	63 - 134	9	30
7:3 FTCA	44.9	U	274	245.8		ng/L		90	50 - 138	7	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFBA	*99*		*10 - 130*
13C5 PFPeA	*88*		*35 - 150*
13C5 PFHxA	*95*		*55 - 150*
13C4 PFHpA	*96*		*55 - 150*
13C8 PFOA	*106*		*60 - 140*
13C9 PFNA	*96*		*55 - 140*
13C6 PFDA	*110*		*50 - 140*
13C7 PFUnA	*100*		*30 - 140*
13C2 PFDoA	*94*		*10 - 150*
13C2 PFTeDA	*85*		*10 - 130*
13C3 PFBS	*103*		*55 - 150*
13C3 PFHxS	*101*		*55 - 150*
13C8 PFOS	*95*		*45 - 140*
13C8 FOSA	*103*		*30 - 130*
d3-NMeFOSAA	*87*		*45 - 200*
d5-NEtFOSAA	*87*		*10 - 200*
M2-4:2 FTS	*158*		*60 - 200*

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 460-292594-3 MSD
Matrix: Water
Analysis Batch: 635316

Client Sample ID: WCF-10
Prep Type: Total/NA
Prep Batch: 635120

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
M2-6:2 FTS	115		60 - 200
M2-8:2 FTS	92		50 - 200
13C3 HFPO-DA	108		25 - 160
d7-N-MeFOSE-M	93		10 - 150
d9-N-EtFOSE-M	92		10 - 150
d5-NEtPFOSA	77		10 - 130
d3-NMePFOSA	69		15 - 130

Qualifiers

LCMS

Qualifier	Qualifier Description
J	Indicates an estimated value.
U	Analyzed for but not detected.

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

LCMS

Prep Batch: 635120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-292594-1	MW-2	Total/NA	Water	1633	
460-292594-2	DUP_111323	Total/NA	Water	1633	
460-292594-3	WCF-10	Total/NA	Water	1633	
MB 280-635120/1-A	Method Blank	Total/NA	Water	1633	
LCS 280-635120/3-A	Lab Control Sample	Total/NA	Water	1633	
LLCS 280-635120/2-A	Lab Control Sample	Total/NA	Water	1633	
460-292594-3 MS	WCF-10	Total/NA	Water	1633	
460-292594-3 MSD	WCF-10	Total/NA	Water	1633	

Analysis Batch: 635316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-292594-1	MW-2	Total/NA	Water	Draft 1633	635120
460-292594-2	DUP_111323	Total/NA	Water	Draft 1633	635120
460-292594-3	WCF-10	Total/NA	Water	Draft 1633	635120
MB 280-635120/1-A	Method Blank	Total/NA	Water	Draft 1633	635120
LCS 280-635120/3-A	Lab Control Sample	Total/NA	Water	Draft 1633	635120
LLCS 280-635120/2-A	Lab Control Sample	Total/NA	Water	Draft 1633	635120
460-292594-3 MS	WCF-10	Total/NA	Water	Draft 1633	635120
460-292594-3 MSD	WCF-10	Total/NA	Water	Draft 1633	635120

Lab Chronicle

Client: Roux Environmental Eng & Geology DPC
Job ID: 460-292594-1
Project/Site: Watchcase Factory Condominium

Client Sample ID: MW-2
Lab Sample ID: 460-292594-1
Date Collected: 11/13/23 10:45
Matrix: Water
Date Received: 11/13/23 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			635120	MSJ	EET DEN	11/27/23 11:00
Total/NA	Analysis	Draft 1633		1	635316	CM	EET DEN	11/28/23 16:05

Client Sample ID: DUP_111323
Lab Sample ID: 460-292594-2
Date Collected: 11/13/23 11:30
Matrix: Water
Date Received: 11/13/23 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			635120	MSJ	EET DEN	11/27/23 11:00
Total/NA	Analysis	Draft 1633		1	635316	CM	EET DEN	11/28/23 16:24

Client Sample ID: WCF-10
Lab Sample ID: 460-292594-3
Date Collected: 11/13/23 12:00
Matrix: Water
Date Received: 11/13/23 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			635120	MSJ	EET DEN	11/27/23 11:00
Total/NA	Analysis	Draft 1633		1	635316	CM	EET DEN	11/28/23 16:43

Laboratory References:
EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Accreditation/Certification Summary

Client: Roux Environmental Eng & Geology DPC
Job ID: 460-292594-1
Project/Site: Watchcase Factory Condominium

Laboratory: Eurofins Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-24
A2LA	ISO/IEC 17025	2907.01	10-31-25
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-10-24
Arizona	State	AZ0713	12-20-23
Arkansas DEQ	State	19-047-0	05-31-23 *
California	State	2513	01-09-24
Connecticut	State	PH-0686	09-30-24
Florida	NELAP	E87667-57	06-30-24
Georgia	State	4025-011	01-08-24
Illinois	NELAP	2000172019-1	04-30-24
Iowa	State	370	12-01-24
Kansas	NELAP	E-10166	04-30-24
Kentucky (WW)	State	KY98047	12-31-23
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-23 *
Louisiana (All)	NELAP	30785	06-30-24
Minnesota	NELAP	1788752	12-31-23
Nevada	State	CO000262020-1	07-31-24
New Hampshire	NELAP	2053	04-28-24
New Jersey	NELAP	230001	06-30-24
New York	NELAP	59923	03-31-24
North Carolina (WW/SW)	State	358	12-31-23
North Dakota	State	R-034	01-08-24
Oklahoma	NELAP	8614	08-31-24
Oregon	NELAP	4025-019	01-08-24
Pennsylvania	NELAP	013	07-31-24
South Carolina	State	72002001	01-08-24
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-21-19	09-30-24
USDA	US Federal Programs	P330-20-00065	12-19-25
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-24
Virginia	NELAP	460232	06-14-24
Washington	State	C583	08-03-24
West Virginia DEP	State	354	11-30-23
Wisconsin	State	999615430	08-31-24
Wyoming (UST)	A2LA	2907.01	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

1633_B24

Per- and Polyfluoroalkyl Substances by LC/MS/MS, QSM Table B-24

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Gemini C18 ID: 3 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	M242FTS #	C3PFBS #	13C5PHA #	HFPODA #	C4PFHA #	M262FTS #
MW-2	460-292594-1	95	74	150	95	91	92	89	134
DUP_111323	460-292594-2	102	82	185	110	100	103	97	141
WCF-10	460-292594-3	102	93	168	100	101	111	96	134
	MB 280-635120/1-A	99	100	96	101	110	113	96	89
	LLCS 280-635120/2-A	99	92	102	104	100	99	92	88
WCF-10 MS	460-292594-3 MS	100	91	144	105	102	110	95	112
WCF-10 MSD	460-292594-3 MSD	99	88	158	103	95	108	96	115

	QC LIMITS
PFBA = 13C4 PFBA	10-130
PFPeA = 13C5 PFPeA	35-150
M242FTS = M2-4:2 FTS	60-200
C3PFBS = 13C3 PFBS	55-150
13C5PHA = 13C5 PFHxA	55-150
HFPODA = 13C3 HFPO-DA	25-160
C4PFHA = 13C4 PFHpA	55-150
M262FTS = M2-6:2 FTS	60-200

Column to be used to flag recovery values

FORM II Draft 1633

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Gemini C18 ID: 3 (mm)

Client Sample ID	Lab Sample ID	C8PFOA #	C3PFHS #	C9PFNA #	M282FTS #	d3NMFOS #	C6PFDA #	d5NEFOS #	C8PFOS #
MW-2	460-292594-1	94	99	95	93	85	98	70	86
DUP_111323	460-292594-2	100	109	105	104	108	112	89	104
WCF-10	460-292594-3	104	102	107	113	93	112	92	97
	MB 280-635120/1-A	100	104	97	99	112	108	87	94
	LLCS 280-635120/2-A	103	103	97	95	110	97	90	94
WCF-10 MS	460-292594-3 MS	100	100	100	101	104	106	98	92
WCF-10 MSD	460-292594-3 MSD	106	101	96	92	87	110	87	95

	QC LIMITS
C8PFOA = 13C8 PFOA	60-140
C3PFHS = 13C3 PFHxS	55-150
C9PFNA = 13C9 PFNA	55-140
M282FTS = M2-8:2 FTS	50-200
d3NMFOS = d3-NMeFOSAA	45-200
C6PFDA = 13C6 PFDA	50-140
d5NEFOS = d5-NEtFOSAA	10-200
C8PFOS = 13C8 PFOS	45-140

Column to be used to flag recovery values

FORM II Draft 1633

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Gemini C18 ID: 3 (mm)

Client Sample ID	Lab Sample ID	13C7PUA #	PFDoA #	PFOSA #	PFTDA #	NMFM #	d3NMFSA #	NEFM #	d5NPFSA #
MW-2	460-292594-1	91	75	93	54	71	61	66	66
DUP_111323	460-292594-2	104	93	113	73	96	76	93	81
WCF-10	460-292594-3	105	95	110	82	98	72	95	82
	MB 280-635120/1-A	100	92	101	80	112	75	116	83
	LLCS 280-635120/2-A	96	97	105	71	108	77	112	82
WCF-10 MS	460-292594-3 MS	104	101	109	83	103	74	102	85
WCF-10 MSD	460-292594-3 MSD	100	94	103	85	93	69	92	77

	QC LIMITS
13C7PUA = 13C7 PFUnA	30-140
PFDoA = 13C2 PFDoA	10-150
PFOSA = 13C8 FOSA	30-130
PFTDA = 13C2 PFTeDA	10-130
NMFM = d7-N-MeFOSE-M	10-150
d3NMFSA = d3-NMePFOSA	15-130
NEFM = d9-N-EtFOSE-M	10-150
d5NPFSA = d5-NEtPFOSA	10-130

Column to be used to flag recovery values

FORM II Draft 1633

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Gemini C18 ID: 3 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	M242FTS #	C3PFBS #	13C5PHA #	HFPODA #	C4PFHA #	M262FTS #
	LCS 280-635120/3-A	92	100	79	95	104	95	106	72

	QC LIMITS
PFBA = 13C4 PFBA	10-130
PFPeA = 13C5 PFPeA	40-150
M242FTS = M2-4:2 FTS	25-200
C3PFBS = 13C3 PFBS	25-150
13C5PHA = 13C5 PFHxA	40-150
HFPODA = 13C3 HFPO-DA	25-160
C4PFHA = 13C4 PFHpA	40-150
M262FTS = M2-6:2 FTS	25-200

Column to be used to flag recovery values

FORM II Draft 1633

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Gemini C18 ID: 3 (mm)

Client Sample ID	Lab Sample ID	C8PFOA #	C3PFHS #	C9PFNA #	M282FTS #	d3NMFOS #	C6PFDA #	d5NEFOS #	C8PFOS #
	LCS 280-635120/3-A	100	95	90	71	85	96	68	87

	QC LIMITS
C8PFOA = 13C8 PFOA	30-140
C3PFHS = 13C3 PFHxS	25-150
C9PFNA = 13C9 PFNA	30-140
M282FTS = M2-8:2 FTS	25-200
d3NMFOS = d3-NMeFOSAA	10-200
C6PFDA = 13C6 PFDA	20-140
d5NEFOS = d5-NEtFOSAA	10-200
C8PFOS = 13C8 PFOS	20-140

Column to be used to flag recovery values

FORM II Draft 1633

FORM II
PFAS SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Gemini C18 ID: 3 (mm)

Client Sample ID	Lab Sample ID	13C7PUA #	PFDoA #	PFOSA #	PFTDA #	NMFM #	d3NMFSA #	NEFM #	d5NPFSA #
	LCS 280-635120/3-A	92	89	94	69	95	64	92	73

	QC LIMITS
13C7PUA = 13C7 PFUnA	20-140
PFDoA = 13C2 PFDoA	10-150
PFOSA = 13C8 FOSA	10-130
PFTDA = 13C2 PFTeDA	10-130
NMFM = d7-N-MeFOSE-M	10-150
d3NMFSA = d3-NMePFOSA	10-130
NEFM = d9-N-EtFOSE-M	10-150
d5NPFSA = d5-NEtPFOSA	10-130

Column to be used to flag recovery values

FORM II Draft 1633

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2023.11.28a.014.d

Lab ID: LCS 280-635120/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	32.0	30.81	96	58-148	
Perfluoropentanoic acid (PFPeA)	32.0	30.58	96	54-152	
Perfluorohexanoic acid (PFHxA)	32.0	29.09	91	55-152	
Perfluoroheptanoic acid (PFHpA)	32.0	27.49	86	54-154	
Perfluorooctanoic acid (PFOA)	32.0	29.58	92	52-161	
Perfluorononanoic acid (PFNA)	32.0	32.75	102	59-149	
Perfluorodecanoic acid (PFDA)	32.0	31.73	99	52-147	
Perfluoroundecanoic acid (PFUnA)	32.0	29.82	93	48-159	
Perfluorododecanoic acid (PFDoA)	32.0	29.91	93	64-142	
Perfluorotridecanoic acid (PFTriA)	32.0	28.83	90	49-148	
Perfluorotetradecanoic acid (PFTeDA)	32.0	29.67	93	47-161	
Perfluorobutanesulfonic acid (PFBS)	28.4	26.20	92	62-144	
Perfluoropentanesulfonic acid (PFPeS)	30.0	27.93	93	59-151	
Perfluorohexanesulfonic acid (PFHxS)	29.2	24.20	83	57-146	
Perfluoroheptanesulfonic acid (PFHpS)	30.5	30.39	100	55-152	
Perfluorooctanesulfonic acid (PFOS)	29.8	28.98	97	58-149	
Perfluorononanesulfonic acid (PFNS)	30.8	30.74	100	52-148	
Perfluorodecanesulfonic acid (PFDS)	30.8	29.41	95	51-147	
Perfluorododecanesulfonic acid (PFDoS)	31.0	25.23	81	36-145	
4:2 FTS	79.8	71.27	89	67-146	
6:2 FTS	121	123.1	101	61-151	
8:2 FTS	123	113.0	92	63-152	
Perfluorooctanesulfonamide (PFOSA)	32.0	28.17	88	61-148	
NMeFOSA	32.0	33.77	106	63-145	
NEtFOSA	32.0	30.66	96	65-139	
NMeFOSAA	32.0	28.84	90	58-144	
NEtFOSAA	32.0	30.58	96	59-146	

Column to be used to flag recovery and RPD values

FORM III Draft 1633

FORM III
PFAS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2023.11.28a.014.d

Lab ID: LCS 280-635120/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
NMeFOSE	160	158.4	99	71-136	
NEtFOSE	320	322.5	101	69-137	
HFPO-DA (GenX)	32.0	32.97	103	63-144	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	30.2	29.77	99	68-146	
PFMBA	64.0	61.76	96	55-148	
NFDHA	32.0	27.99	87	48-161	
PFMPA	64.0	58.58	92	51-145	
9Cl-PF3ONS	79.6	78.00	98	56-156	
11Cl-PF3OUdS	80.4	71.01	88	46-156	
PFEESA	57.1	51.74	91	56-151	
3:3 FTCA	160	132.3	83	62-129	
5:3 FTCA	320	250.8	78	63-134	
7:3 FTCA	320	256.6	80	50-138	
13C4 PFBA	100	92.29	92	10-130	
13C5 PFPeA	50.0	50.20	100	40-150	
13C5 PFHxA	25.0	25.95	104	40-150	
13C4 PFHpA	25.0	26.45	106	40-150	
13C8 PFOA	25.0	24.90	100	30-140	
13C9 PFNA	12.5	11.28	90	30-140	
13C6 PFDA	12.5	11.94	96	20-140	
13C7 PFUnA	12.5	11.48	92	20-140	
13C2 PFDoA	12.5	11.12	89	10-150	
13C2 PFTeDA	12.5	8.651	69	10-130	
13C3 PFBS	23.3	22.01	95	25-150	
13C3 PFHxS	23.7	22.56	95	25-150	
13C8 PFOS	23.9	20.86	87	20-140	
13C8 FOSA	25.0	23.39	94	10-130	
d3-NMeFOSAA	50.0	42.28	85	10-200	
d5-NEtFOSAA	50.0	33.83	68	10-200	
M2-4:2 FTS	46.7	36.84	79	25-200	
M2-6:2 FTS	47.5	34.17	72	25-200	
M2-8:2 FTS	47.9	34.16	71	25-200	
13C3 HFPO-DA	100	95.42	95	25-160	
d7-N-MeFOSE-M	250	236.8	95	10-150	
d9-N-EtFOSE-M	250	230.9	92	10-150	
d5-NEtPFOSA	25.0	18.28	73	10-130	
d3-NMePFOSA	25.0	15.94	64	10-130	

Column to be used to flag recovery and RPD values

FORM III Draft 1633

FORM III
PFAS LOW LEVEL CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2023.11.28a.013.d

Lab ID: LLCS 280-635120/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LLCS CONCENTRATION (ng/L)	LLCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	3.20	2.919 J	91	44-157	
Perfluoropentanoic acid (PFPeA)	3.20	2.973 J	93	57-148	
Perfluorohexanoic acid (PFHxA)	3.20	2.788	87	62-149	
Perfluoroheptanoic acid (PFHpA)	3.20	3.341	104	56-150	
Perfluorooctanoic acid (PFOA)	3.20	2.811	88	57-161	
Perfluorononanoic acid (PFNA)	3.20	2.753	86	53-157	
Perfluorodecanoic acid (PFDA)	3.20	2.982	93	43-158	
Perfluoroundecanoic acid (PFUnA)	3.20	2.912	91	50-155	
Perfluorododecanoic acid (PFDoA)	3.20	2.883	90	60-141	
Perfluorotridecanoic acid (PFTriA)	3.20	2.848	89	52-140	
Perfluorotetradecanoic acid (PFTeDA)	3.20	2.837	89	52-156	
Perfluorobutanesulfonic acid (PFBS)	2.84	2.337	82	63-145	
Perfluoropentanesulfonic acid (PFPeS)	3.00	2.738	91	58-144	
Perfluorohexanesulfonic acid (PFHxS)	2.92	2.757	94	44-158	
Perfluoroheptanesulfonic acid (PFHpS)	3.05	2.776	91	51-150	
Perfluorooctanesulfonic acid (PFOS)	2.98	2.808	94	43-162	
Perfluorononanesulfonic acid (PFNS)	3.08	2.787	91	46-151	
Perfluorodecanesulfonic acid (PFDS)	3.08	3.003	97	50-144	
Perfluorododecanesulfonic acid (PFDoS)	3.10	2.582	83	30-138	
4:2 FTS	7.98	5.776 J	72	52-158	
6:2 FTS	12.1	11.79	97	48-158	
8:2 FTS	12.3	10.44	85	46-165	
Perfluorooctanesulfonamide (PFOSA)	3.20	2.672	84	47-163	
NMeFOSA	3.20	2.732	85	54-155	
NEtFOSA	3.20	2.899	91	49-156	
NMeFOSAA	3.20	3.041 J	95	32-160	
NEtFOSAA	3.20	2.933	92	51-154	

Column to be used to flag recovery and RPD values

FORM III Draft 1633

FORM III
PFAS LOW LEVEL CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2023.11.28a.013.d

Lab ID: LLCS 280-635120/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LLCS CONCENTRATION (ng/L)	LLCS % REC	QC LIMITS REC	#
NMeFOSE	16.0	14.70 J	92	56-151	
NEtFOSE	32.0	28.48	89	60-147	
HFPO-DA (GenX)	3.20	2.882 J	90	58-154	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	3.02	2.803 J	93	61-148	
PFMBA	6.40	6.117	96	49-154	
NFDHA	3.20	2.478 J	77	47-160	
PFMPA	6.40	5.942	93	48-150	
9Cl-PF3ONS	7.96	7.027 J	88	44-167	
11Cl-PF3OUdS	8.04	6.466 J	80	36-158	
PFEESA	5.71	4.847	85	56-144	
3:3 FTCA	16.0	13.14	82	32-161	
5:3 FTCA	32.0	25.01 J	78	39-156	
7:3 FTCA	32.0	23.99 J	75	36-149	
13C4 PFBA	100	98.57	99	10-130	
13C5 PFPeA	50.0	46.00	92	35-150	
13C5 PFHxA	25.0	24.91	100	55-150	
13C4 PFHpA	25.0	23.06	92	55-150	
13C8 PFOA	25.0	25.71	103	60-140	
13C9 PFNA	12.5	12.08	97	55-140	
13C6 PFDA	12.5	12.18	97	50-140	
13C7 PFUnA	12.5	12.05	96	30-140	
13C2 PFDoA	12.5	12.17	97	10-150	
13C2 PFTeDA	12.5	8.832	71	10-130	
13C3 PFBS	23.3	24.16	104	55-150	
13C3 PFHxS	23.7	24.36	103	55-150	
13C8 PFOS	23.9	22.50	94	45-140	
13C8 FOSA	25.0	26.22	105	30-130	
d3-NMeFOSAA	50.0	55.23	110	45-200	
d5-NEtFOSAA	50.0	44.77	90	10-200	
M2-4:2 FTS	46.7	47.68	102	60-200	
M2-6:2 FTS	47.5	42.01	88	60-200	
M2-8:2 FTS	47.9	45.50	95	50-200	
13C3 HFPO-DA	100	99.24	99	25-160	
d7-N-MeFOSE-M	250	270.0	108	10-150	
d9-N-EtFOSE-M	250	280.0	112	10-150	
d5-NEtPFOSA	25.0	20.54	82	10-130	
d3-NMePFOSA	25.0	19.13	77	15-130	

Column to be used to flag recovery and RPD values

FORM III Draft 1633

FORM III
PFAS MATRIX SPIKE RECOVERY

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2023.11.28a.021.d

Lab ID: 460-292594-3 MS Client ID: WCF-10 MS

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	29.4	13.0	40.54	94	58-148	
Perfluoropentanoic acid (PFPeA)	29.4	34.5	62.24	95	54-152	
Perfluorohexanoic acid (PFHxA)	29.4	36.5	65.68	99	55-152	
Perfluoroheptanoic acid (PFHpA)	29.4	14.7	43.33	97	54-154	
Perfluorooctanoic acid (PFOA)	29.4	25.0	57.69	111	52-161	
Perfluorononanoic acid (PFNA)	29.4	5.24	33.55	96	59-149	
Perfluorodecanoic acid (PFDA)	29.4	7.50	37.02	100	52-147	
Perfluoroundecanoic acid (PFUnA)	29.4	3.41	30.75	93	48-159	
Perfluorododecanoic acid (PFDoA)	29.4	2.20	27.06	85	64-142	
Perfluorotridecanoic acid (PFTriA)	29.4	1.80 U	25.24	86	49-148	
Perfluorotetradecanoic acid (PFTeDA)	29.4	1.80 U	26.80	91	47-161	
Perfluorobutanesulfonic acid (PFBS)	26.1	5.09	27.96	88	62-144	
Perfluoropentanesulfonic acid (PFPeS)	27.6	1.80 U	26.83	97	59-151	
Perfluorohexanesulfonic acid (PFHxS)	26.8	1.03 J	24.06	86	57-146	
Perfluoroheptanesulfonic acid (PFHpS)	28.0	1.80 U	28.82	103	55-152	
Perfluorooctanesulfonic acid (PFOS)	27.3	2.43	31.38	106	58-149	
Perfluorononanesulfonic acid (PFNS)	28.3	1.80 U	30.38	107	52-148	
Perfluorodecanesulfonic acid (PFDS)	28.3	1.80 U	28.31	100	51-147	
Perfluorododecanesulfonic acid (PFDoS)	28.5	1.80 U	25.27	89	36-145	
4:2 FTS	73.2	7.18 U	69.17	94	67-146	
6:2 FTS	111	7.18 U	107.8	97	61-151	
8:2 FTS	113	7.18 U	109.4	97	63-152	
Perfluorooctanesulfonamide (PFOSA)	29.4	1.80 U	26.01	89	61-148	
NMeFOSA	29.4	1.80 U	29.30	100	63-145	
NEtFOSA	29.4	1.80 U	27.61	94	65-139	
NMeFOSAA	29.4	3.59 U	26.58	90	58-144	
NEtFOSAA	29.4	1.80 U	26.48	90	59-146	

Column to be used to flag recovery and RPD values

FORM III Draft 1633

FORM III
PFAS MATRIX SPIKE RECOVERY

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2023.11.28a.021.d

Lab ID: 460-292594-3 MS Client ID: WCF-10 MS

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
NMeFOSE	147	18.0 U	135.5	92	71-136	
NEtFOSE	294	18.0 U	271.0	92	69-137	
HFPO-DA (GenX)	29.4	7.18 U	24.34	83	63-144	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	27.7	7.18 U	24.77	89	68-146	
PFMBA	58.8	3.59 U	56.41	96	55-148	
NFDHA	29.4	3.59 U	25.97	88	48-161	
PFMPA	58.8	3.59 U	56.45	96	51-145	
9Cl-PF3ONS	73.1	7.18 U	61.64	84	56-156	
11Cl-PF3OUdS	73.9	7.18 U	51.64	70	46-156	
PFEESA	52.4	3.59 U	46.08	88	56-151	
3:3 FTCA	147	8.98 U	134.4	92	62-129	
5:3 FTCA	294	44.9 U	240.8	82	63-134	
7:3 FTCA	294	44.9 U	229.9	78	50-138	
13C4 PFBA	91.8	91.3	91.84	100	10-130	
13C5 PFPeA	45.9	41.9	41.77	91	35-150	
13C5 PFHxA	23.0	22.6	23.34	102	55-150	
13C4 PFHpA	23.0	21.6	21.80	95	55-150	
13C8 PFOA	23.0	23.4	22.99	100	60-140	
13C9 PFNA	11.5	12.0	11.48	100	55-140	
13C6 PFDA	11.5	12.5	12.12	106	50-140	
13C7 PFUnA	11.5	11.7	11.92	104	30-140	
13C2 PFDoA	11.5	10.7	11.61	101	10-150	
13C2 PFTeDA	11.5	9.16	9.539	83	10-130	
13C3 PFBS	21.3	20.8	22.45	105	55-150	
13C3 PFHxS	21.7	21.7	21.68	100	55-150	
13C8 PFOS	21.9	20.9	20.28	92	45-140	
13C8 FOSA	23.0	24.7	25.06	109	30-130	
d3-NMeFOSAA	45.9	41.5	47.84	104	45-200	
d5-NEtFOSAA	45.9	41.3	44.85	98	10-200	
M2-4:2 FTS	42.9	70.3	61.55	144	60-200	
M2-6:2 FTS	43.6	57.1	48.76	112	60-200	
M2-8:2 FTS	44.0	48.7	44.20	101	50-200	
13C3 HFPO-DA	91.8	99.5	101.1	110	25-160	
d7-N-MeFOSE-M	230	220	235.7	103	10-150	
d9-N-EtFOSE-M	230	214	234.8	102	10-150	
d5-NEtPFOSA	23.0	18.4	19.47	85	10-130	
d3-NMePFOSA	23.0	16.2	17.04	74	15-130	

Column to be used to flag recovery and RPD values

FORM III Draft 1633

FORM III
PFAS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2023.11.28a.022.d

Lab ID: 460-292594-3 MSD Client ID: WCF-10 MSD

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	27.4	38.33	92	6	30	58-148	
Perfluoropentanoic acid (PFPeA)	27.4	63.66	107	2	30	54-152	
Perfluorohexanoic acid (PFHxA)	27.4	65.15	105	1	30	55-152	
Perfluoroheptanoic acid (PFHpA)	27.4	42.38	101	2	30	54-154	
Perfluorooctanoic acid (PFOA)	27.4	50.77	94	13	30	52-161	
Perfluorononanoic acid (PFNA)	27.4	30.60	93	9	30	59-149	
Perfluorodecanoic acid (PFDA)	27.4	32.99	93	12	30	52-147	
Perfluoroundecanoic acid (PFUnA)	27.4	27.92	90	10	30	48-159	
Perfluorododecanoic acid (PFDoA)	27.4	27.99	94	3	30	64-142	
Perfluorotridecanoic acid (PFTriA)	27.4	23.66	86	6	30	49-148	
Perfluorotetradecanoic acid (PFTeDA)	27.4	24.27	89	10	30	47-161	
Perfluorobutanesulfonic acid (PFBS)	24.3	26.30	87	6	30	62-144	
Perfluoropentanesulfonic acid (PFPeS)	25.7	22.86	89	16	30	59-151	
Perfluorohexanesulfonic acid (PFHxS)	25.0	21.72	83	10	30	57-146	
Perfluoroheptanesulfonic acid (PFHpS)	26.1	25.71	99	11	30	55-152	
Perfluorooctanesulfonic acid (PFOS)	25.5	28.27	102	10	30	58-149	
Perfluorononanesulfonic acid (PFNS)	26.3	26.06	99	15	30	52-148	
Perfluorodecanesulfonic acid (PFDS)	26.4	25.58	97	10	30	51-147	
Perfluorododecanesulfonic acid (PFDoS)	26.6	22.49	85	12	30	36-145	
4:2 FTS	68.2	59.47	87	15	30	67-146	
6:2 FTS	104	103.4	100	4	30	61-151	
8:2 FTS	105	103.2	98	6	30	63-152	
Perfluorooctanesulfonamide (PFOSA)	27.4	24.72	90	5	30	61-148	
NMeFOSA	27.4	26.99	99	8	30	63-145	
NEtFOSA	27.4	26.56	97	4	30	65-139	
NMeFOSAA	27.4	26.66	97	0	30	58-144	
NEtFOSAA	27.4	25.68	94	3	30	59-146	

Column to be used to flag recovery and RPD values

FORM III Draft 1633

FORM III
PFAS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2023.11.28a.022.d

Lab ID: 460-292594-3 MSD Client ID: WCF-10 MSD

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
NMeFOSE	137	128.4	94	5	30	71-136	
NEtFOSE	274	259.5	95	4	30	69-137	
HFPO-DA (GenX)	27.4	24.01	88	1	30	63-144	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	25.8	21.60	84	14	30	68-146	
PFMBA	54.7	54.88	100	3	30	55-148	
NFDHA	27.4	27.86	102	7	30	48-161	
PFMPA	54.7	55.17	101	2	30	51-145	
9Cl-PF3ONS	68.1	57.61	85	7	30	56-156	
11Cl-PF3OUdS	68.8	49.43	72	4	30	46-156	
PFEESA	48.8	44.42	91	4	30	56-151	
3:3 FTCA	137	131.4	96	2	30	62-129	
5:3 FTCA	274	264.5	97	9	30	63-134	
7:3 FTCA	274	245.8	90	7	30	50-138	
13C4 PFBA	85.5	84.95	99			10-130	
13C5 PFPeA	42.8	37.66	88			35-150	
13C5 PFHxA	21.4	20.35	95			55-150	
13C4 PFHpA	21.4	20.56	96			55-150	
13C8 PFOA	21.4	22.61	106			60-140	
13C9 PFNA	10.7	10.29	96			55-140	
13C6 PFDA	10.7	11.81	110			50-140	
13C7 PFUnA	10.7	10.67	100			30-140	
13C2 PFDoA	10.7	10.01	94			10-150	
13C2 PFTeDA	10.7	9.137	85			10-130	
13C3 PFBS	19.9	20.43	103			55-150	
13C3 PFHxS	20.2	20.37	101			55-150	
13C8 PFOS	20.4	19.42	95			45-140	
13C8 FOSA	21.4	22.07	103			30-130	
d3-NMeFOSAA	42.8	37.41	87			45-200	
d5-NEtFOSAA	42.8	37.08	87			10-200	
M2-4:2 FTS	39.9	63.18	158			60-200	
M2-6:2 FTS	40.6	46.73	115			60-200	
M2-8:2 FTS	41.0	37.87	92			50-200	
13C3 HFPO-DA	85.5	92.61	108			25-160	
d7-N-MeFOSE-M	214	199.4	93			10-150	
d9-N-EtFOSE-M	214	196.1	92			10-150	
d5-NEtPFOSA	21.4	16.48	77			10-130	
d3-NMePFOSA	21.4	14.77	69			15-130	

Column to be used to flag recovery and RPD values

FORM III Draft 1633

FORM IV
PFAS METHOD BLANK SUMMARY

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Lab File ID: 2023.11.28a.012.d | Lab Sample ID: MB 280-635120/1-A

Matrix: Water | Date Extracted: 11/27/2023 11:00

Instrument ID: LC_LCMS11 | Date Analyzed: 11/28/2023 14:08

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LLCS 280-635120/2-A	2023.11.28a.013.d	11/28/2023 14:27
	LCS 280-635120/3-A	2023.11.28a.014.d	11/28/2023 14:47
MW-2	460-292594-1	2023.11.28a.018.d	11/28/2023 16:05
DUP_111323	460-292594-2	2023.11.28a.019.d	11/28/2023 16:24
WCF-10	460-292594-3	2023.11.28a.020.d	11/28/2023 16:43
WCF-10 MS	460-292594-3 MS	2023.11.28a.021.d	11/28/2023 17:03
WCF-10 MSD	460-292594-3 MSD	2023.11.28a.022.d	11/28/2023 17:22

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Instrument I LC_LCMS11 Calibration Start Date: 11/20/2023 17:19

GC Column: Gemini C18 3X50 ID: 3(mm) Calibration End Date: 11/20/2023 19:16

Calibration ID: 87440

		13C3PFBA		PFHxA		PFOA	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		3048422	3.06	1832462	5.35	295378	6.70
UPPER LIMIT		6096844	3.46	3664924	5.75	590756	7.10
LOWER LIMIT		914527	2.66	549739	4.95	88613	6.30
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 280-634666/9		3188754	3.06	1895257	5.35	338931	6.71
ICV 280-634666/12		2654849	3.06	1791552	5.35	301841	6.69
CCVL 280-635316/3		2762227	3.05	1669545	5.37	306943	6.71
MB 280-635120/1-A		2760459	3.03	1703998	5.35	291454	6.71
LLCS 280-635120/2-A		2687258	3.03	1725858	5.35	277178	6.71
LCS 280-635120/3-A		2717032	3.05	1629768	5.35	270608	6.71
460-292594-1	MW-2	2360390	3.05	1782769	5.35	271849	6.71
460-292594-2	DUP_111323	2309422	3.05	1736535	5.35	277738	6.71
460-292594-3	WCF-10	2525703	3.05	1735935	5.35	254006	6.71
460-292594-3 MS	WCF-10 MS	2517925	3.05	1647787	5.35	248586	6.71
460-292594-3 MSD	WCF-10 MSD	2534354	3.05	1670700	5.35	254747	6.71
CCV 280-635316/21		2570768	3.03	1730892	5.35	263262	6.71
CCB 280-635316/22		2771570	3.03	1682132	5.35	296112	6.71

13C3PFBA = 13C3-PFBA
PFHxA = 13C2 PFHxA
PFOA = 13C4 PFOA

Area Limit = 30%-200% of internal standard area
RT Limit = ± 0.4 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Instrument I LC_LCMS11 Calibration Start Date: 11/20/2023 17:19

GC Column: Gemini C18 3X50 ID: 3(mm) Calibration End Date: 11/20/2023 19:16

Calibration ID: 87440

		PFHxS		PFNA		PFDA	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		586753	6.87	1232467	7.24	1158962	7.76
UPPER LIMIT		1173506	7.27	2464934	7.64	2317924	8.16
LOWER LIMIT		176026	6.47	369740	6.84	347689	7.36
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 280-634666/9		637455	6.87	1418023	7.26	1282384	7.76
ICV 280-634666/12		622799	6.86	1264205	7.24	1136076	7.74
CCVL 280-635316/3		547606	6.87	1140968	7.26	1149256	7.78
MB 280-635120/1-A		522077	6.87	1268601	7.26	1171822	7.76
LLCS 280-635120/2-A		506650	6.87	1230519	7.26	1106754	7.78
LCS 280-635120/3-A		533187	6.87	1177921	7.26	1090238	7.78
460-292594-1	MW-2	513279	6.87	1187509	7.26	1082713	7.78
460-292594-2	DUP_111323	473996	6.87	1145930	7.26	1013783	7.78
460-292594-3	WCF-10	506234	6.87	1191908	7.26	1031570	7.78
460-292594-3 MS	WCF-10 MS	482232	6.87	1103254	7.26	1004236	7.78
460-292594-3 MSD	WCF-10 MSD	501822	6.87	1167143	7.26	1033539	7.78
CCV 280-635316/21		523417	6.86	1124732	7.24	1010180	7.76
CCB 280-635316/22		588380	6.87	1207545	7.24	1159585	7.76

PFHxS = 18O2 PFHxS
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA

Area Limit = 30%-200% of internal standard area
RT Limit = ± 0.4 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Instrument I LC_LCMS11 Calibration Start Date: 11/20/2023 17:19

GC Column: Gemini C18 3X50 ID: 3(mm) Calibration End Date: 11/20/2023 19:16

Calibration ID: 87440

		PFOS					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		815745	7.99				
UPPER LIMIT		1631490	8.39				
LOWER LIMIT		244724	7.59				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 280-634666/9		867778	8.00				
ICV 280-634666/12		829930	7.99				
CCVL 280-635316/3		779115	8.02				
MB 280-635120/1-A		730365	8.00				
LLCS 280-635120/2-A		711799	8.00				
LCS 280-635120/3-A		747689	8.02				
460-292594-1	MW-2	728754	8.02				
460-292594-2	DUP_111323	643850	8.02				
460-292594-3	WCF-10	701778	8.00				
460-292594-3 MS	WCF-10 MS	647110	8.00				
460-292594-3 MSD	WCF-10 MSD	683485	8.02				
CCV 280-635316/21		676922	7.99				
CCB 280-635316/22		711932	8.00				

PFOS = 13C4 PFOS

Area Limit = 30%-200% of internal standard area
RT Limit = ± 0.4 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: MW-2 | Lab Sample ID: 460-292594-1

Matrix: Water | Lab File ID: 2023.11.28a.018.d

Analysis Method: Draft 1633 | Date Collected: 11/13/2023 10:45

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 560.5(mL) | Date Analyzed: 11/28/2023 16:05

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	18.3		7.14	1.78
2706-90-3	Perfluoropentanoic acid (PFPeA)	53.3		3.57	0.89
307-24-4	Perfluorohexanoic acid (PFHxA)	35.6		1.78	0.45
375-85-9	Perfluoroheptanoic acid (PFHpA)	20.8		1.78	0.46
335-67-1	Perfluorooctanoic acid (PFOA)	28.8		1.78	0.57
375-95-1	Perfluorononanoic acid (PFNA)	12.1		1.78	0.45
335-76-2	Perfluorodecanoic acid (PFDA)	18.0		1.78	0.45
2058-94-8	Perfluoroundecanoic acid (PFUnA)	4.39		1.78	0.45
307-55-1	Perfluorododecanoic acid (PFDoA)	0.91	J	1.78	0.45
72629-94-8	Perfluorotridecanoic acid (PFTriA)	1.78	U	1.78	0.45
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	1.78	U	1.78	0.45
375-73-5	Perfluorobutanesulfonic acid (PFBS)	5.56		1.78	0.27
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	1.78	U	1.78	0.45
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.75	J	1.78	0.51
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	1.78	U	1.78	0.36
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	4.84		1.78	0.45
68259-12-1	Perfluorononanesulfonic acid (PFNS)	1.78	U	1.78	0.36
335-77-3	Perfluorodecanesulfonic acid (PFDS)	1.78	U	1.78	0.45
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	1.78	U	1.78	0.80
757124-72-4	4:2 FTS	7.14	U	7.14	1.52
27619-97-2	6:2 FTS	7.14	U	7.14	2.23
39108-34-4	8:2 FTS	7.14	U	7.14	2.32
754-91-6	Perfluorooctanesulfonamide (PFOSA)	1.78	U	1.78	0.45
31506-32-8	NMeFOSA	1.78	U	1.78	0.45
4151-50-2	NEtFOSA	1.78	U	1.78	0.45
2355-31-9	NMeFOSAA	3.57	U	3.57	1.07
2991-50-6	NEtFOSAA	1.78	U	1.78	0.62
24448-09-7	NMeFOSE	17.8	U	17.8	4.46
1691-99-2	NEtFOSE	17.8	U	17.8	4.46
13252-13-6	HFPO-DA (GenX)	7.14	U	7.14	1.78

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: MW-2 | Lab Sample ID: 460-292594-1

Matrix: Water | Lab File ID: 2023.11.28a.018.d

Analysis Method: Draft 1633 | Date Collected: 11/13/2023 10:45

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 560.5(mL) | Date Analyzed: 11/28/2023 16:05

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	7.14	U	7.14	1.34
863090-89-5	PFMBA	3.57	U	3.57	0.89
151772-58-6	NFDHA	3.57	U	3.57	0.89
377-73-1	PFMPA	3.57	U	3.57	0.45
756426-58-1	9Cl-PF3ONS	7.14	U	7.14	0.89
763051-92-9	11Cl-PF3OUdS	7.14	U	7.14	1.78
113507-82-7	PFEESA	3.57	U	3.57	0.45
356-02-5	3:3 FTCA	8.92	U	8.92	1.34
914637-49-3	5:3 FTCA	44.6	U	44.6	8.92
812-70-4	7:3 FTCA	44.6	U	44.6	8.92

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: MW-2 | Lab Sample ID: 460-292594-1

Matrix: Water | Lab File ID: 2023.11.28a.018.d

Analysis Method: Draft 1633 | Date Collected: 11/13/2023 10:45

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 560.5(mL) | Date Analyzed: 11/28/2023 16:05

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	95		10-130
STL01893	13C5 PFPeA	74		35-150
STL02577	13C5 PFHxA	91		55-150
STL01892	13C4 PFHpA	89		55-150
STL01052	13C8 PFOA	94		60-140
STL02578	13C9 PFNA	95		55-140
STL02579	13C6 PFDA	98		50-140
STL02580	13C7 PFUnA	91		30-140
STL00998	13C2 PFDoA	75		10-150
STL02116	13C2 PFTeDA	54		10-130
STL02337	13C3 PFBS	95		55-150
STL02581	13C3 PFHxS	99		55-150
STL01054	13C8 PFOS	86		45-140
STL01056	13C8 FOSA	93		30-130
STL02118	d3-NMeFOSAA	85		45-200
STL02117	d5-NEtFOSAA	70		10-200
STL02395	M2-4:2 FTS	150		60-200
STL02279	M2-6:2 FTS	134		60-200
STL02280	M2-8:2 FTS	93		50-200
STL02255	13C3 HFPO-DA	92		25-160
STL02277	d7-N-MeFOSE-M	71		10-150
STL02278	d9-N-EtFOSE-M	66		10-150
STL02704	d5-NEtPFOSA	66		10-130
STL02705	d3-NMePFOSA	61		15-130

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.018.d
Lims ID: 460-292594-B-1-A
Client ID: MW-2
Sample Type: Client
Inject. Date: 28-Nov-2023 16:05:05 ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: 460-292594-B-1-A
Misc. Info.: Plate: 1 Rack: 1
Operator ID: B5QN Instrument ID: LC_LCMS11

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 29-Nov-2023 14:07:38 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1603

First Level Reviewer: B5QN Date: 29-Nov-2023 14:07:44
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.046	3.046	0.0	1.000	4556475	9.50		95.0	35551	
* 1 13C3PFBA										
216.00 > 172.00	3.046	3.046	0.0		2360390	5.00			5196	
2 PFBA										
212.80 > 168.90	3.046	3.046	0.0	1.000	834455	2.05			691	
D 7 13C5 PFPeA										
268.30 > 223.00	4.463	4.463	0.0	0.834	1319967	3.71		74.3	7469	
6 PFPA										
263.00 > 219.00	4.478	4.478	0.0	1.003	3163853	5.97	Target=212.56		564	
263.00 > 68.90	4.463	4.478	-0.015	1.000	13221		239.31(106.28-318.84)		158	
D 9 13C2-4:2FTS										
329.10 > 80.90	5.097	5.097	0.0	0.742	343045	7.03	Target=4.54	150	723	
329.10 > 309.00	5.097	5.097	0.0	0.742	73248		4.68(2.27-6.81)	150	2325	
D 16 13C3 PFBS										
302.10 > 79.90	5.353	5.354	-0.001	0.779	615644	2.22	Target=4.56	95.3	5742	
302.10 > 98.90	5.353	5.354	-0.001	0.779	132154		4.66(2.28-6.83)	95.3	5762	
15 PFBS										
298.70 > 79.90	5.353	5.354	-0.001	1.000	146913	0.6233	Target=2.16		956	
298.70 > 98.80	5.353	5.354	-0.001	1.000	68735		2.14(1.08-3.24)		1134	
* 14 13C2 PFHxA										
315.10 > 270.00	5.353	5.371	-0.018		1782769	2.50	Target=79.67		21172	
315.10 > 119.40	5.353	5.371	-0.018		21347		83.51(39.83-119.50)		353	
D 12 13C5 PFHxA										
318.00 > 273.00	5.353	5.371	-0.018	1.000	1817163	2.27	Target=53.27	90.9	18246	
318.00 > 120.30	5.353	5.371	-0.018	1.000	33635		54.03(26.63-79.90)	90.9	742	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 PFHxA										M
313.00 > 269.00	5.371	5.371	0.0	1.003	3191496	3.99	Target=18.64		599	M
313.00 > 118.90	5.353	5.371	-0.018	1.000	163346		19.54(9.32-27.96)		3059	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.682	5.682	0.0	1.061	1789270	9.15	Target=1.53	91.5	28634	
286.90 > 184.90	5.682	5.682	0.0	1.061	1011236		1.77(0.76-2.29)	91.5	11787	
19 HFPO-DA										
284.90 > 168.90	5.682	5.682	0.0	1.000	10311	0.0535	Target=1.75		450	
284.90 > 184.90	5.682	5.682	0.0	1.000	6046		1.71(0.87-2.62)		65.5	
D 22 13C4 PFHpA										
367.10 > 322.00	6.121	6.122	-0.001	1.143	1860666	2.22		89.0	32931	
17 PFHpA										
363.10 > 319.00	6.121	6.122	-0.001	1.000	1711313	2.34	Target=3.96		1031	
363.10 > 169.00	6.121	6.122	-0.001	1.000	401048		4.27(1.98-5.95)		4032	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.471	6.471	0.0	0.942	404645	6.35	Target=4.15	134	3389	
429.10 > 409.00	6.471	6.471	0.0	0.942	80146		5.05(2.07-6.22)	134	3803	
D 27 13C8 PFOA										
421.10 > 376.00	6.707	6.707	0.0	1.000	1666550	2.34		93.7	23096	
* 29 13C4 PFOA										
417.10 > 172.00	6.707	6.707	0.0		271849	2.50			7542	
28 PFOA										
413.00 > 369.00	6.707	6.724	-0.017	1.000	1719720	3.23	Target=2.30		1851	
413.00 > 169.00	6.707	6.724	-0.017	1.000	681778		2.52(1.15-3.45)		9292	
32 PFHxS										
398.70 > 79.90	6.871	6.871	0.0	1.000	9725	0.0842	Target=3.86		352	
398.70 > 98.90	6.888	6.871	0.017	1.002	2056		4.73(1.93-5.79)		94.0	
* 31 18O2 PFHxS										
403.00 > 83.90	6.871	6.871	0.0		513279	2.37			23413	
D 33 13C3 PFHxS										
402.10 > 79.90	6.871	6.888	-0.017	1.000	513094	2.33	Target=4.11	98.6	7843	
402.10 > 98.80	6.871	6.888	-0.017	1.000	117668		4.36(2.05-6.16)	98.6	4043	
D 34 13C9 PFNA										
472.10 > 427.00	7.259	7.261	-0.002	1.000	1063109	1.18		94.7	18854	
36 PFNA										
463.00 > 419.00	7.259	7.261	-0.002	1.000	1161181	1.36	Target=6.02		3135	
463.00 > 219.00	7.259	7.261	-0.002	1.000	177009		6.56(3.01-9.04)		4391	
* 35 13C5 PFNA										
468.00 > 423.00	7.259	7.261	-0.002		1187509	1.25			18383	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.522	7.522	0.0	1.095	344866	4.46	Target=5.49	93.2	4886	
529.10 > 509.00	7.522	7.522	0.0	1.095	48662		7.09(2.74-8.23)	93.2	1739	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.743	7.761	-0.018	0.965	435384	4.26		85.1	9732	
43 PFDA										
512.90 > 469.00	7.778	7.779	-0.001	1.000	1402648	2.01	Target=3.33		9002	
512.90 > 219.00	7.778	7.779	-0.001	1.000	358852		3.91(1.67-5.00)		8066	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
* 44 13C2 PFDA										
515.10 > 470.10	7.778	7.779	-0.001		1082713	1.25			24240	
D 40 13C6 PFDA										
519.10 > 474.10	7.778	7.779	-0.001	1.000	1059096	1.23		98.3	17788	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.969	7.969	0.0	0.994	415280	3.51		70.2	6138	
D 49 13C8 PFOS										
507.10 > 79.90	8.004	8.021	-0.017	0.998	224410	2.05	Target=2.95	85.9	2494	
507.10 > 98.90	8.004	8.021	-0.017	0.998	82752		2.71(1.47-4.42)	85.9	3701	
* 47 13C4 PFOS										
502.80 > 79.90	8.021	8.021	0.0		728754	2.40	Target=3.78		8158	
502.80 > 98.90	8.021	8.021	0.0		196006		3.72(1.89-5.67)		6525	
48 PFOS										
498.90 > 79.90	8.021	8.021	0.0	1.002	166065	0.5428	Target=4.86		1425	
498.90 > 98.80	8.021	8.021	0.0	1.002	34028		4.88(2.43-7.28)		1350	
D 53 13C7 PFUnA										
570.00 > 525.10	8.266	8.285	-0.018	1.063	1094710	1.14		91.2	23507	
52 PFUnA										
563.10 > 519.00	8.284	8.285	0.0	1.002	381218	0.4919	Target=5.72		2890	
563.10 > 269.10	8.284	8.285	0.0	1.002	61930		6.16(2.86-8.59)		1589	
D 50 13C8 FOSA										
506.10 > 77.80	8.756	8.756	0.0	1.092	1225905	2.32		92.7	22585	
D 56 13C2 PFDoA										
615.10 > 570.00	8.773	8.773	0.0	1.128	892166	0.9410		75.3	16972	
57 PFDoA										
613.10 > 569.00	8.773	8.773	0.0	1.000	73539	0.1025	Target=7.45		695	
613.10 > 319.00	8.773	8.773	0.0	1.000	9883		7.44(3.73-11.18)		342	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.756	9.774	-0.018	1.254	307391	0.6809		54.5	6810	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.910	9.910	0.0	1.236	6882533	17.7		70.8	26480	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.120	10.120	0.0	1.262	182781	1.52		61.0	3709	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.310	10.310	0.0	1.285	8055655	16.6		66.5	48213	
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.500	10.500	0.0	1.309	202602	1.65		65.9	3165	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

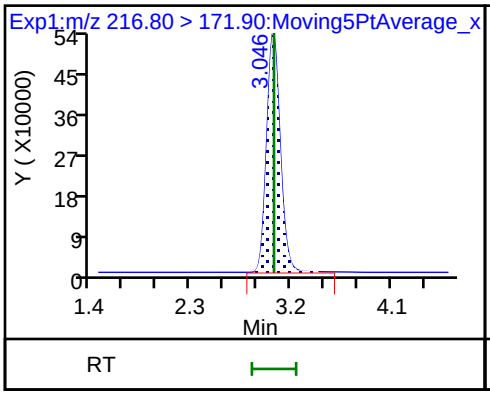
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Eurofins Denver

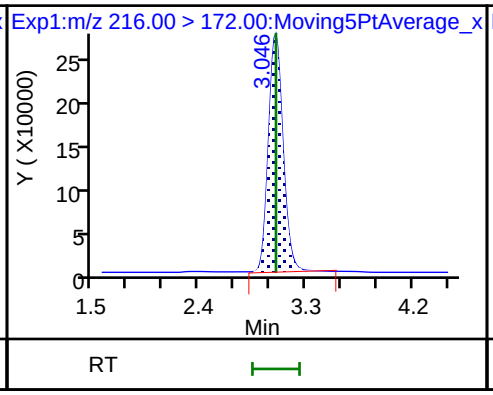
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Lims ID:	460-292594-B-1-A	Lab Sample ID:	280-292594-1		
Client ID:	MW-2				
Operator ID:	B5QN	ALS Bottle#:	12	Worklist Smp#:	14
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		

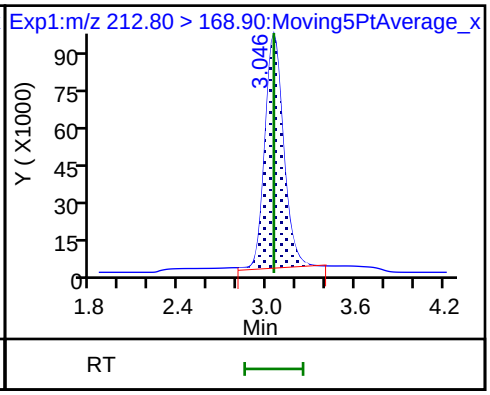
D 3 13C4-PFBA



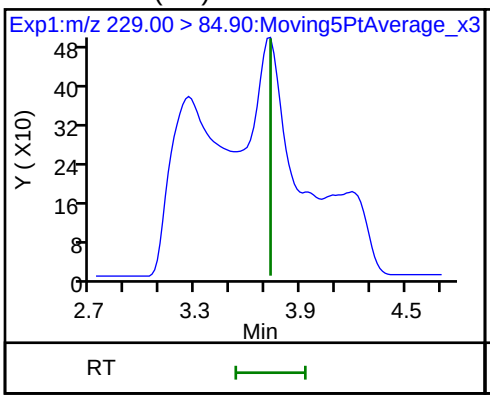
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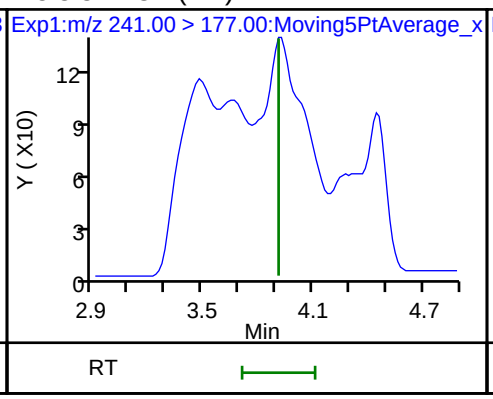
2 PFBA



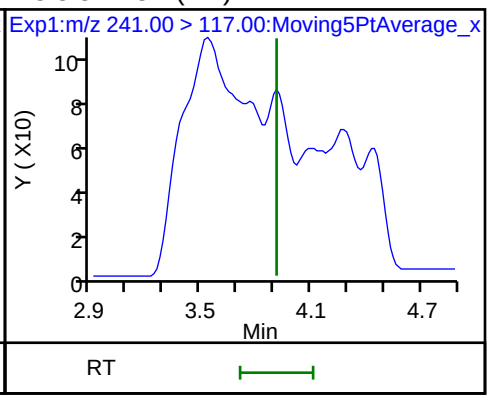
4 PFMPA (ND)



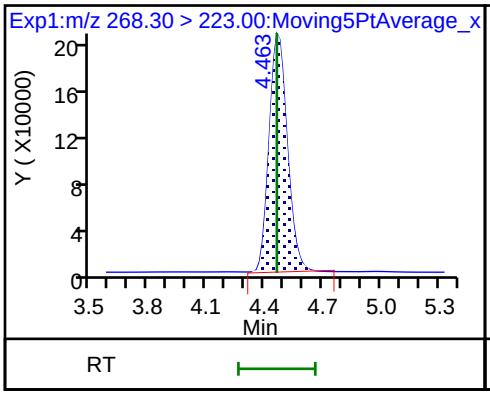
5 3:3 FTCA (ND)



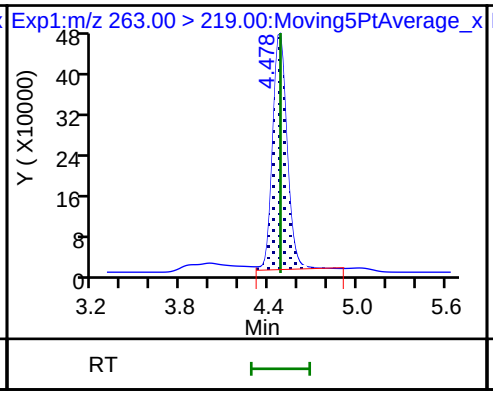
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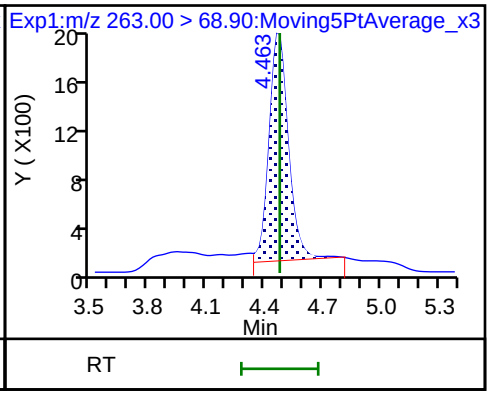
D 7 13C5 PFPeA



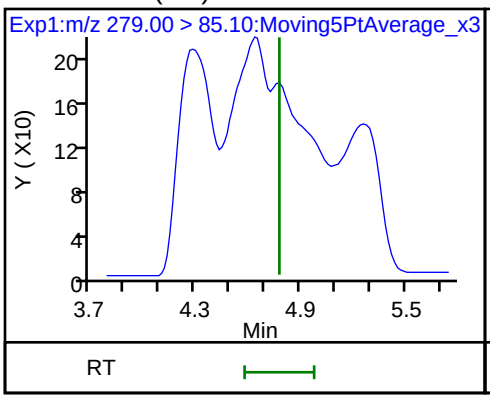
6 PFPA



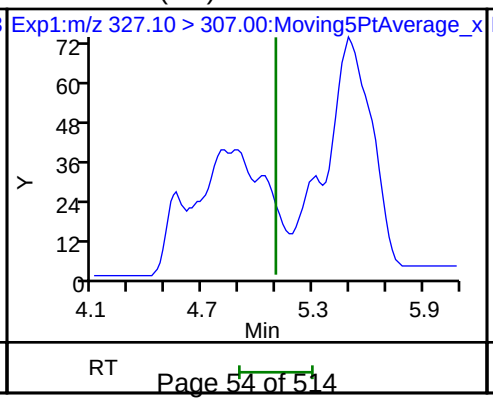
6 PFPA



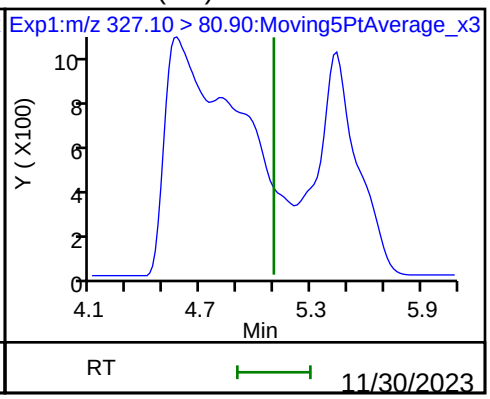
8 PFMBA (ND)



10 4:2FTS (ND)

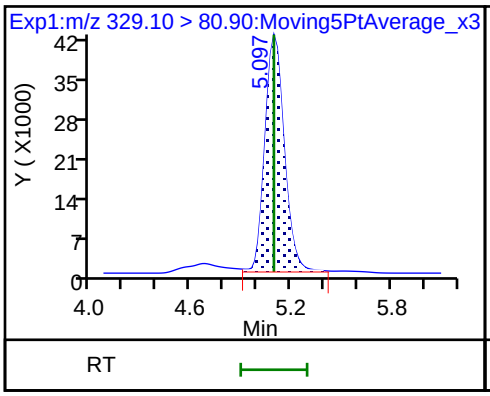


10 4:2FTS (ND)

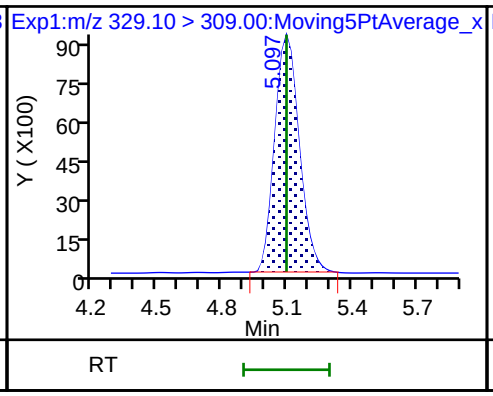


11/30/2023
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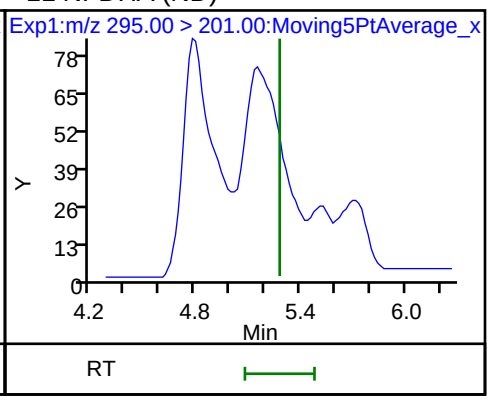
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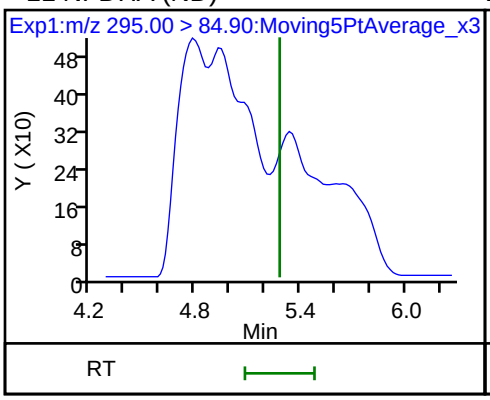
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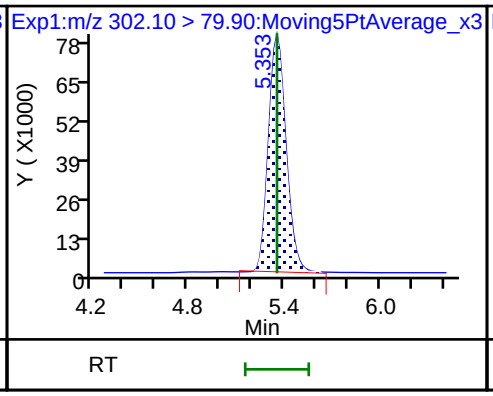
11 NFDHA (ND)



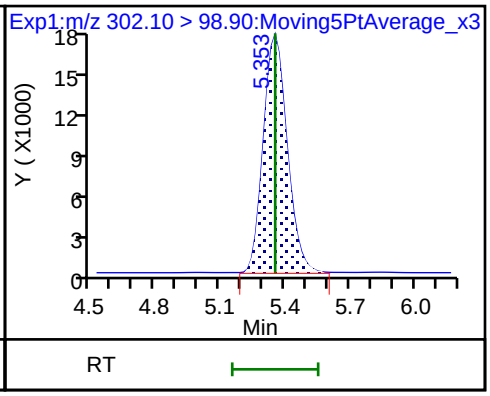
11 NFDHA (ND)



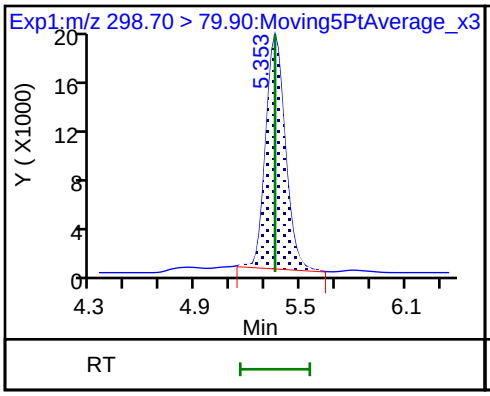
D 16 13C3 PFBS



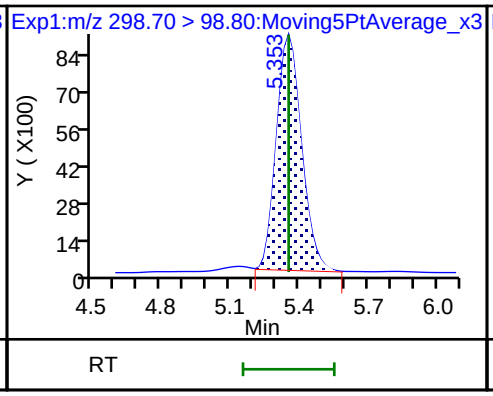
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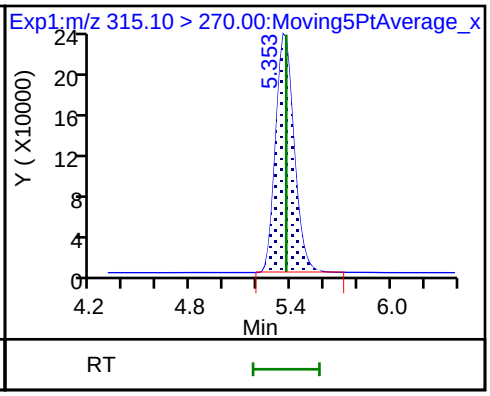
15 PFBS



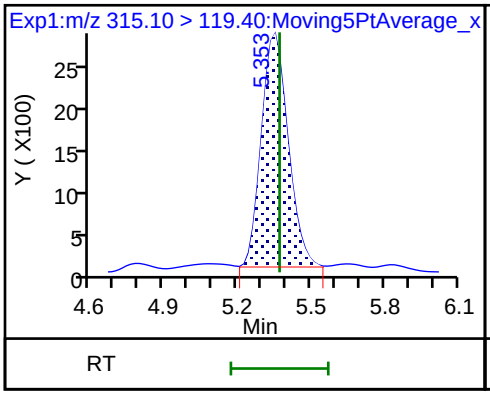
15 PFBS



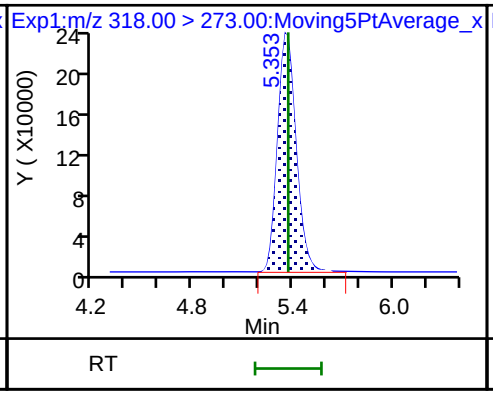
* 14 13C2 PFHxA



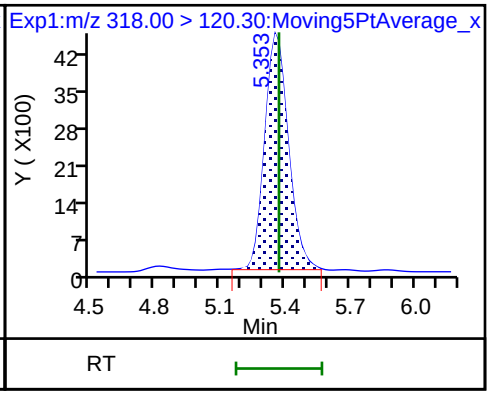
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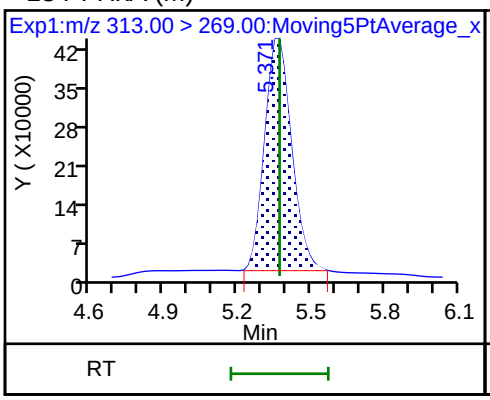
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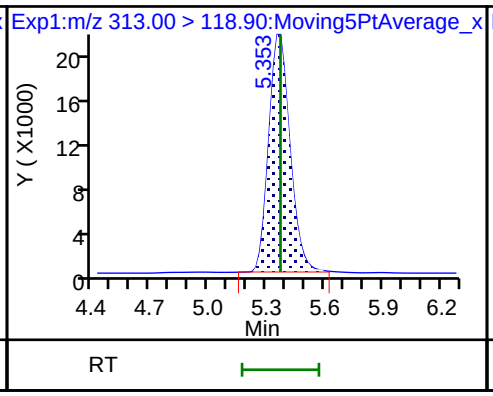
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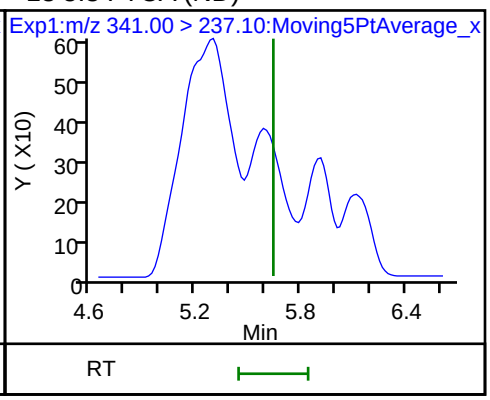
13 PFHxA (M)



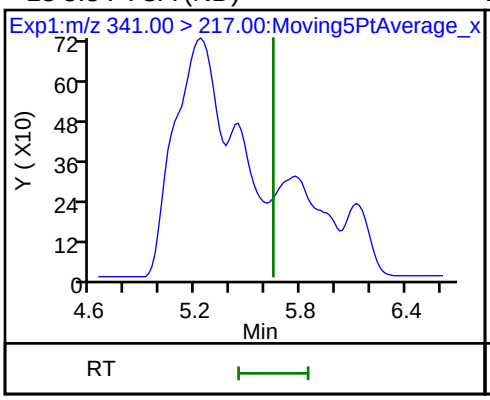
13 PFHxA



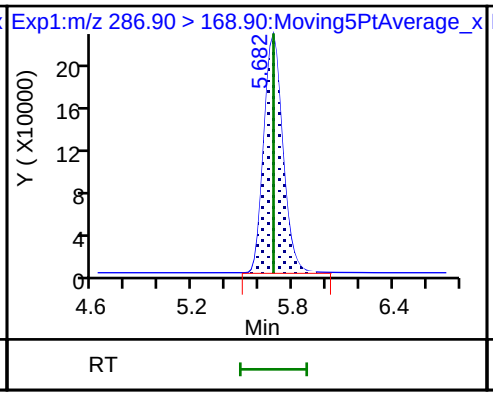
18 5:3 FTCA (ND)



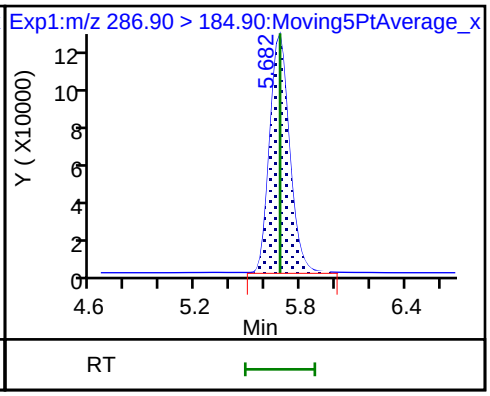
18 5:3 FTCA (ND)



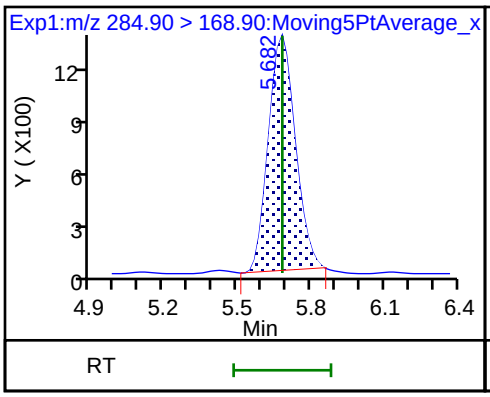
D 20 13C3 HFPO-DA



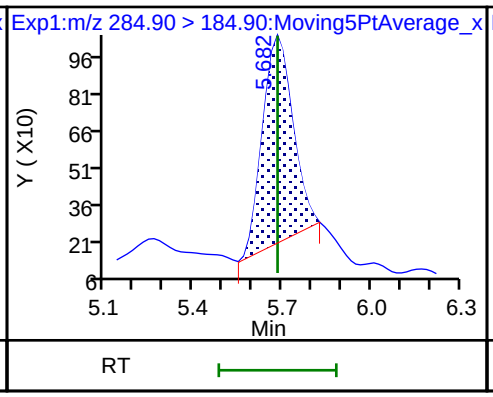
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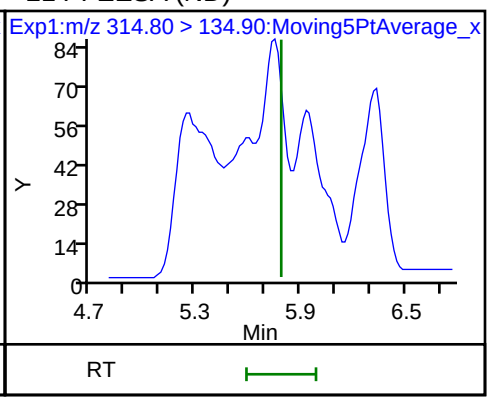
19 HFPO-DA



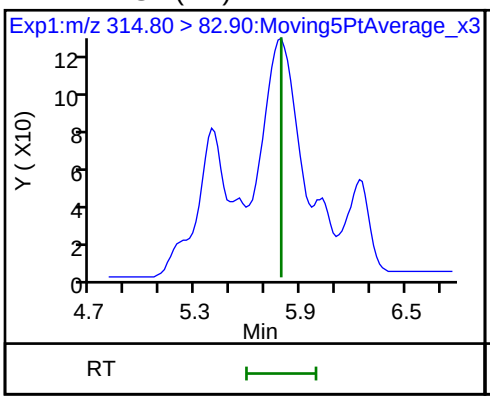
19 HFPO-DA



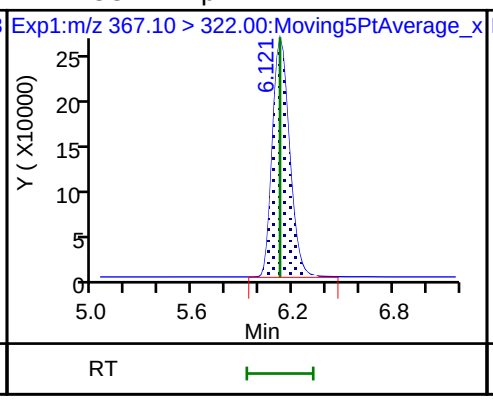
21 PFEESA (ND)



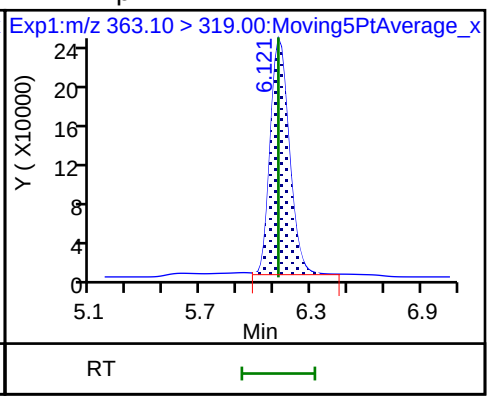
21 PFEESA (ND)



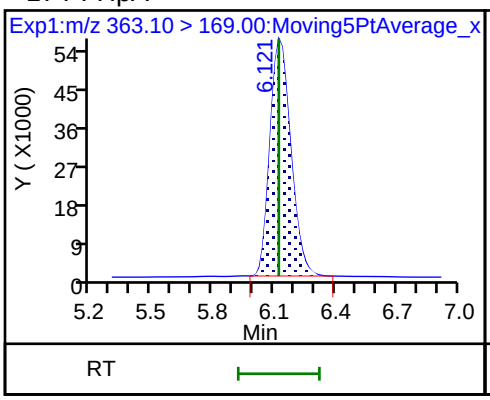
D 22 13C4 PFHpA



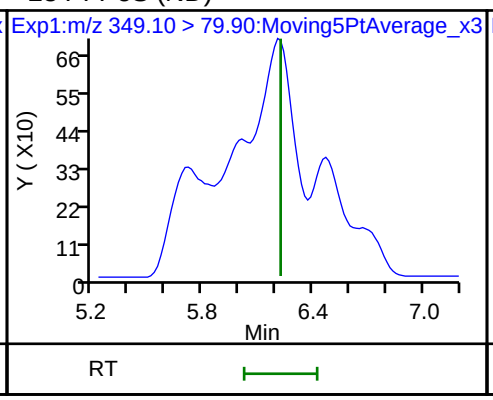
17 PFHpA



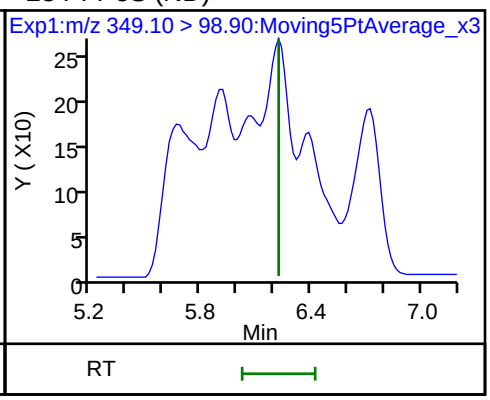
17 PFHpA



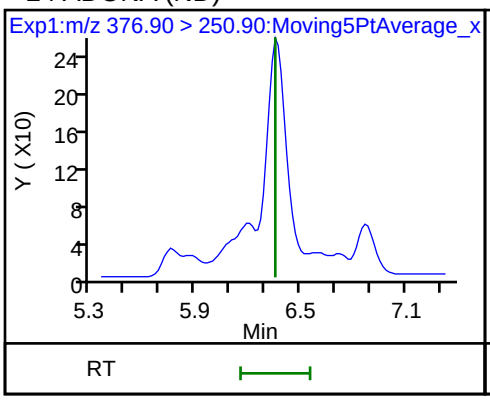
23 PFPeS (ND)



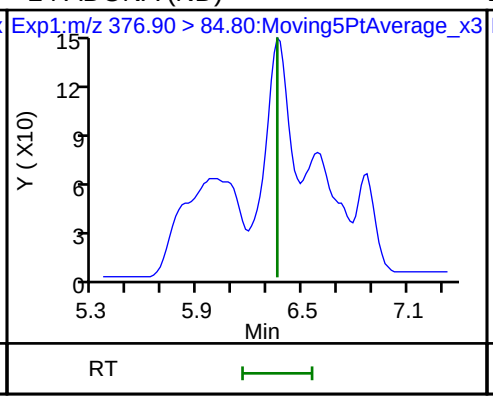
23 PFPeS (ND)



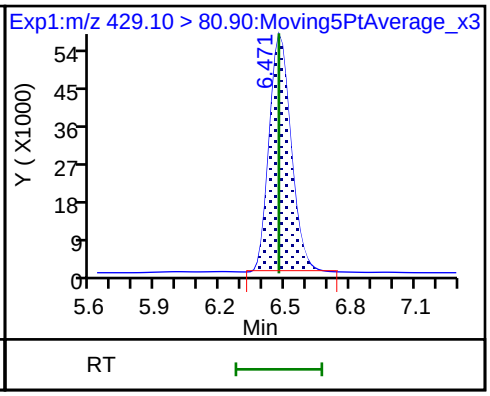
24 ADONA (ND)



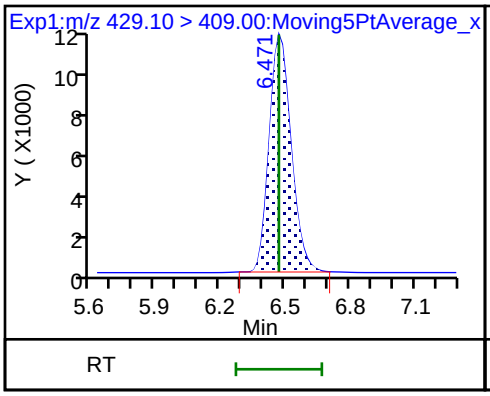
24 ADONA (ND)



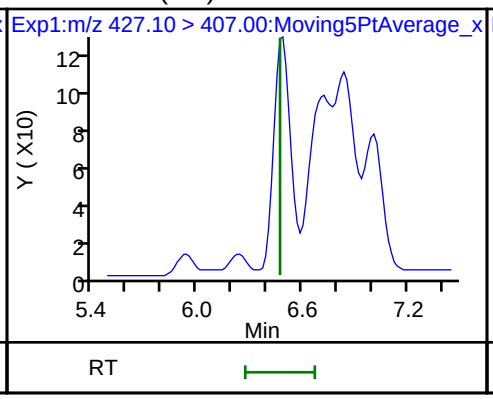
D 26 13C2-6:2FTS



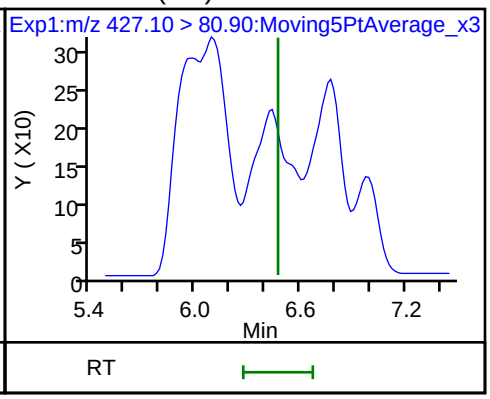
D 26 13C2-6:2FTS



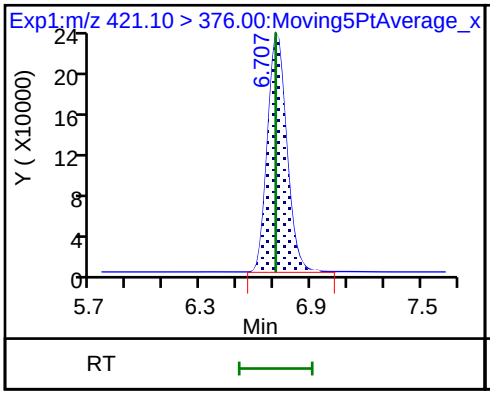
25 6:2FTS (ND)



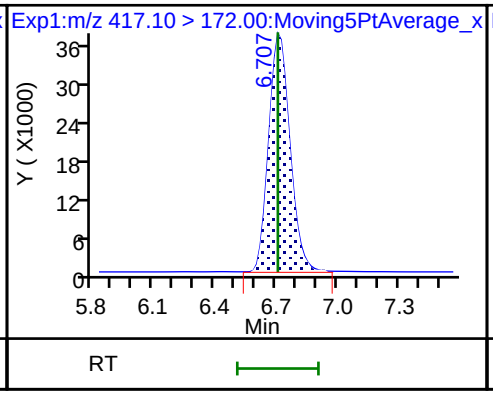
25 6:2FTS (ND)



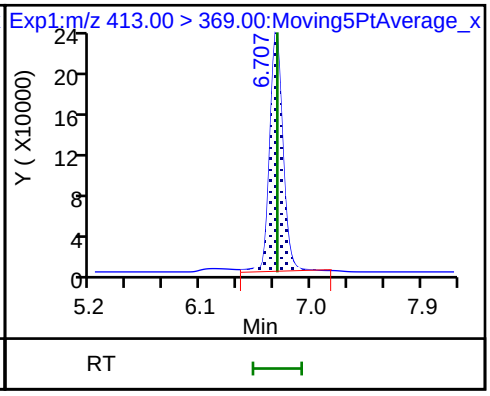
D 27 13C8 PFOA



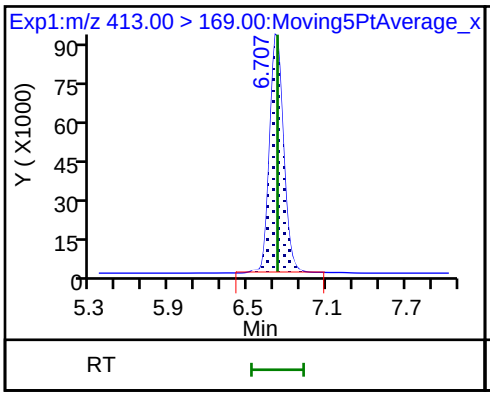
* 29 13C4 PFOA



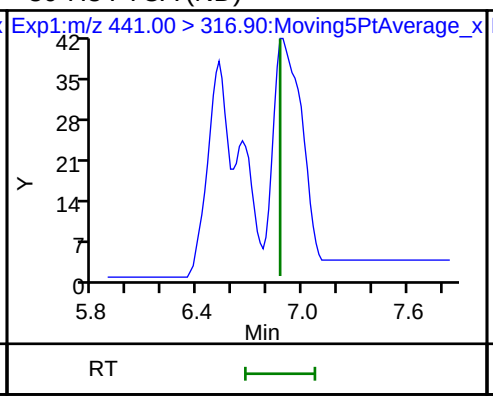
28 PFOA



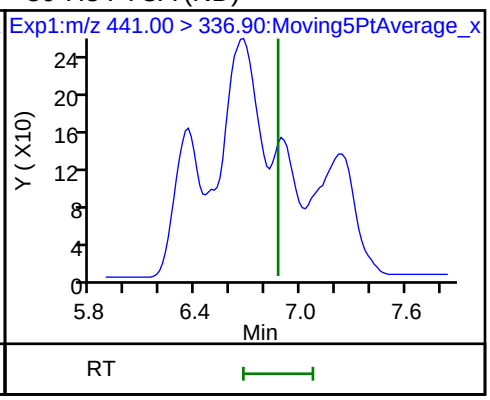
28 PFOA



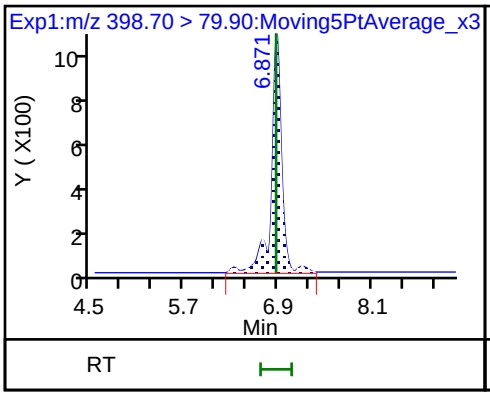
30 7:3 FTCA (ND)



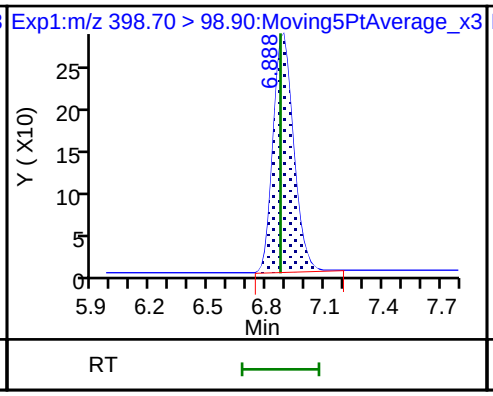
30 7:3 FTCA (ND)



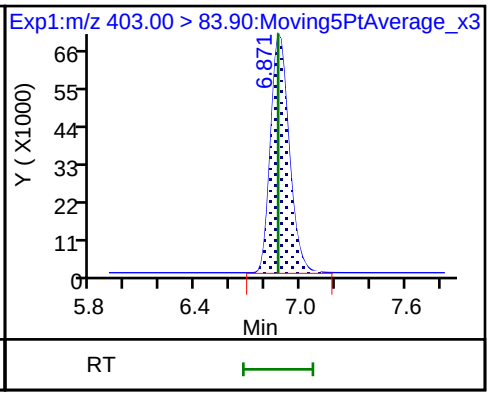
32 PFHxS



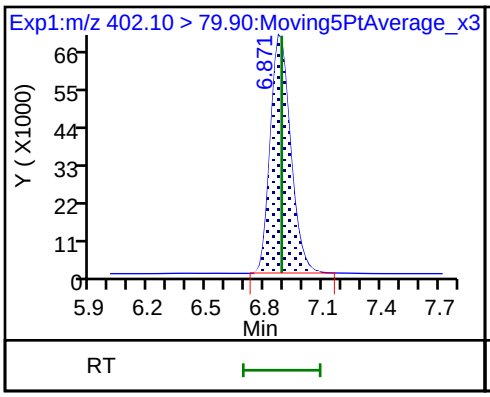
32 PFHxS



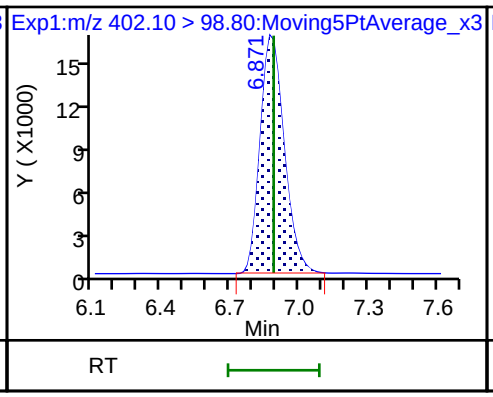
* 31 18O2 PFHxS



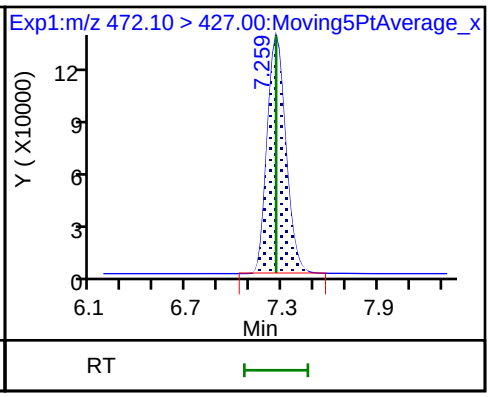
D 33 13C3 PFHxS



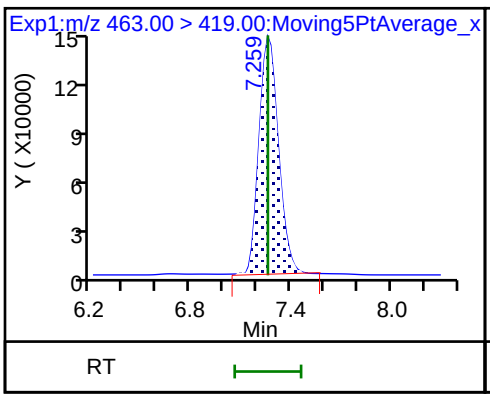
D 33 13C3 PFHxS



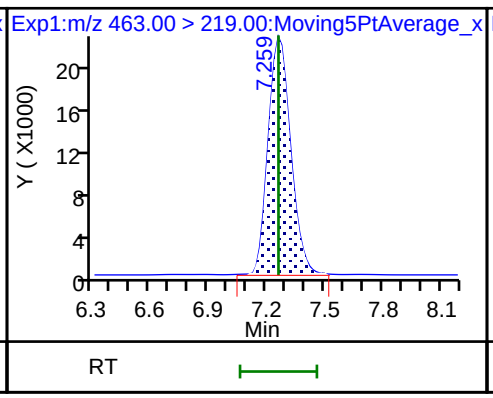
D 34 13C9 PFNA



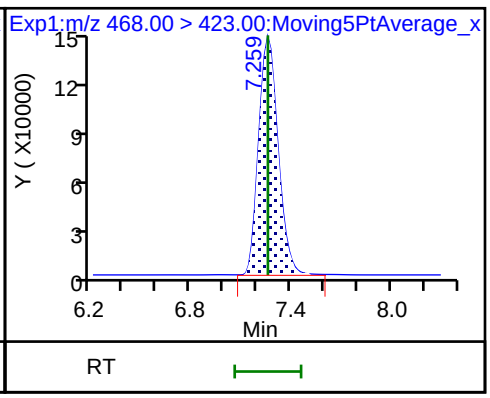
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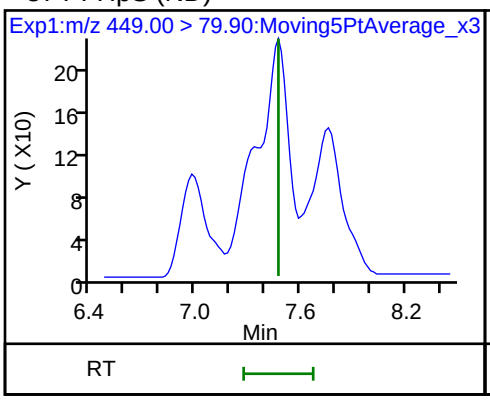
36 PFNA



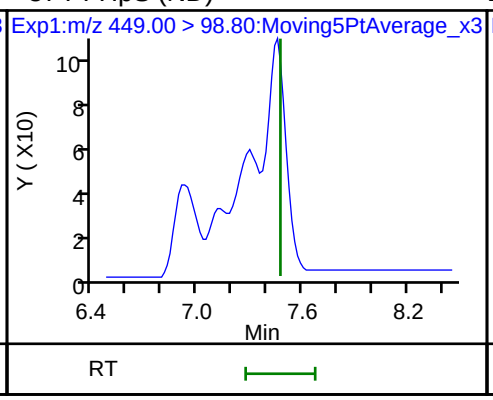
* 35 13C5 PFNA



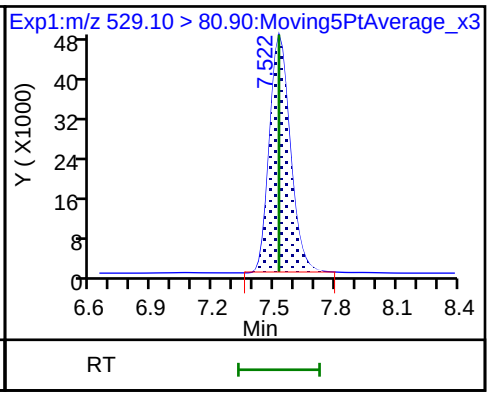
37 PFHpS (ND)



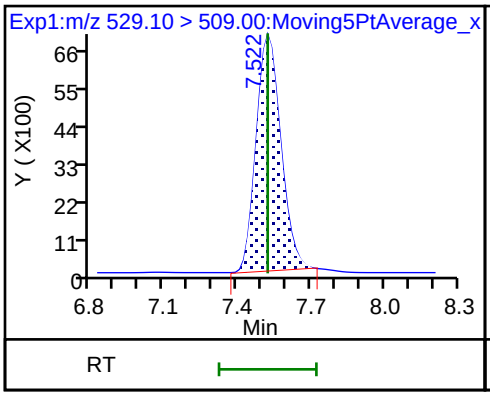
37 PFHpS (ND)



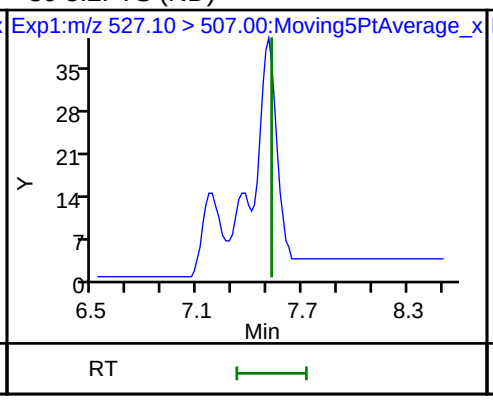
D 38 13C2-8:2FTS



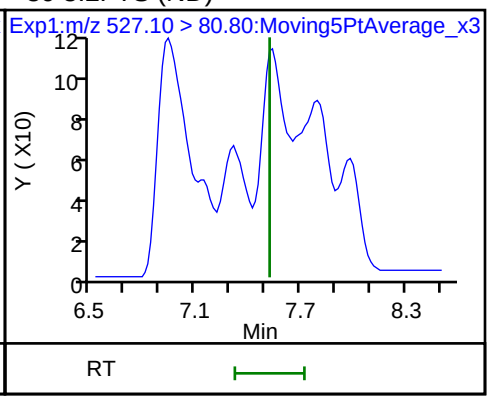
D 38 13C2-8:2FTS



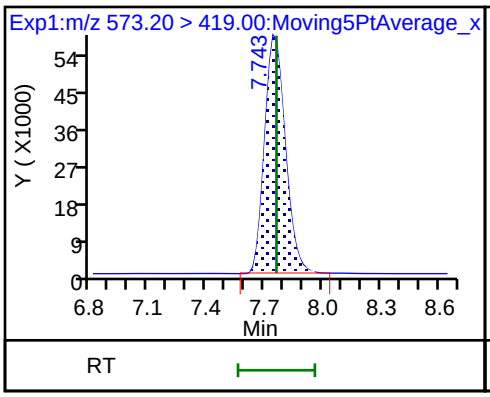
39 8:2FTS (ND)



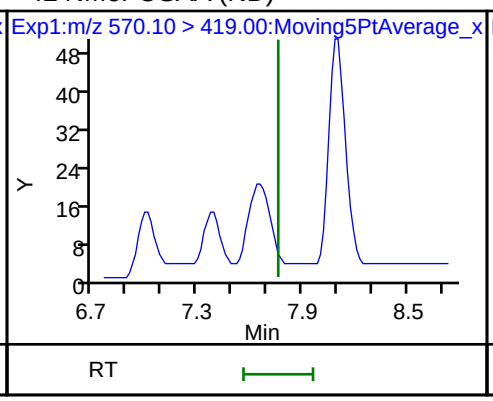
39 8:2FTS (ND)



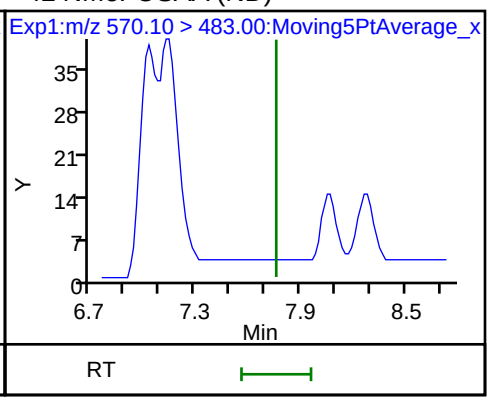
D 41 d3-NMeFOSAA



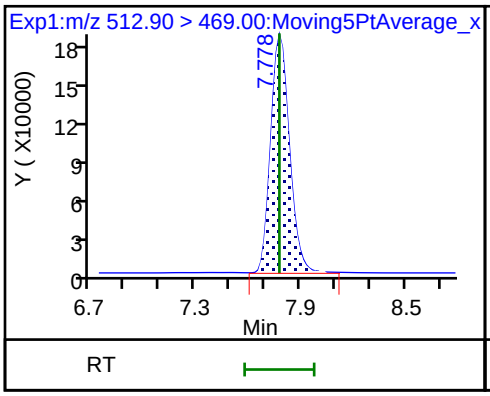
42 NMeFOSAA (ND)



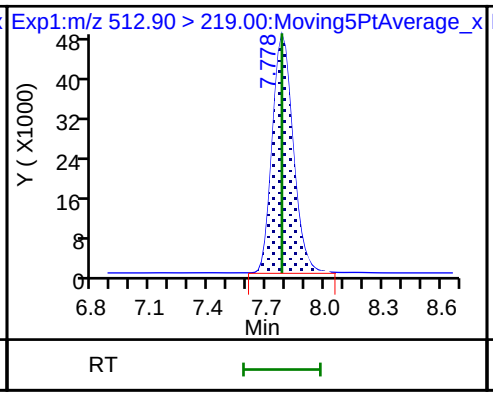
42 NMeFOSAA (ND)



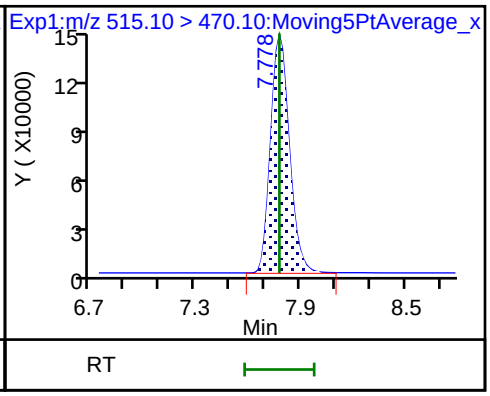
43 PFDA



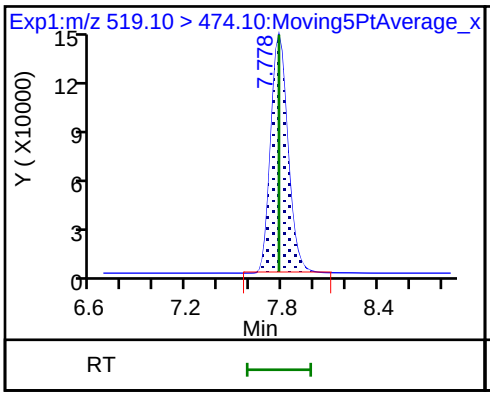
43 PFDA



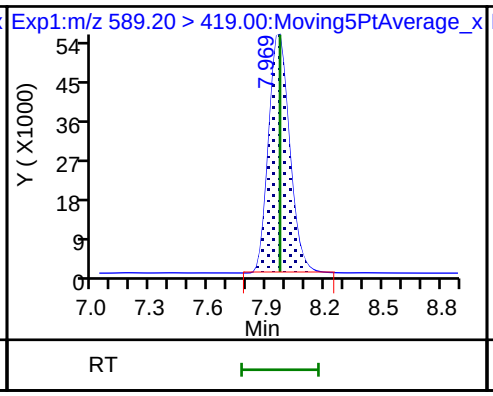
* 44 13C2 PFDA



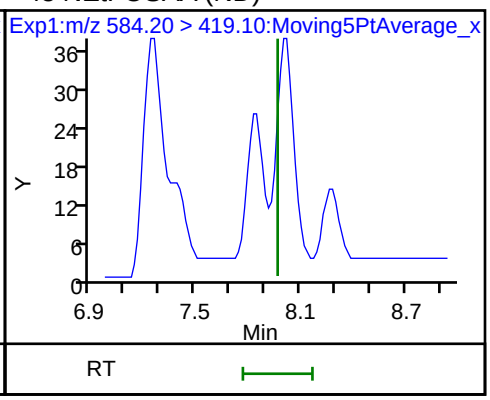
D 40 13C6 PFDA



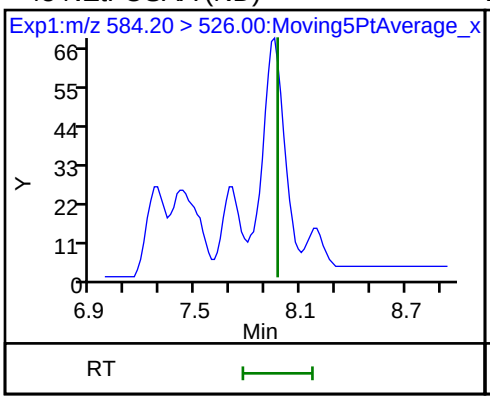
D 46 d5-NEtFOSAA



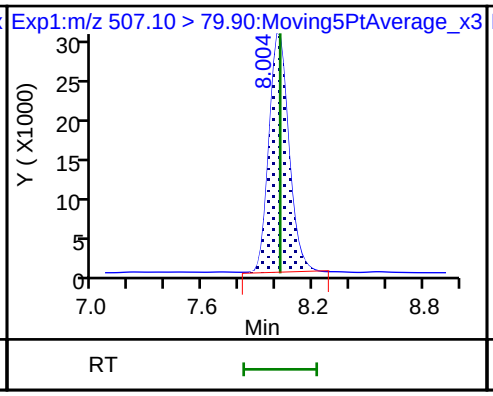
45 NEtFOSAA (ND)



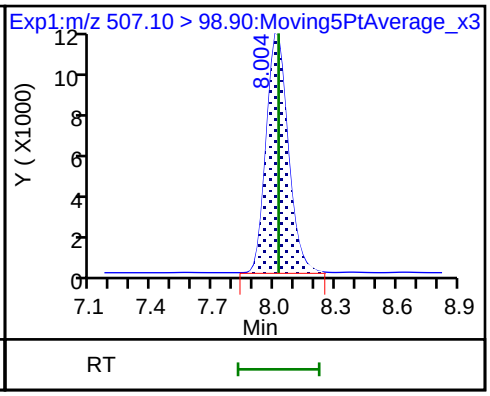
45 NEtFOSAA (ND)



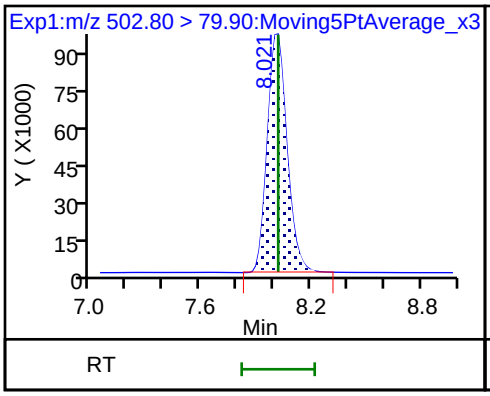
D 49 13C8 PFOS



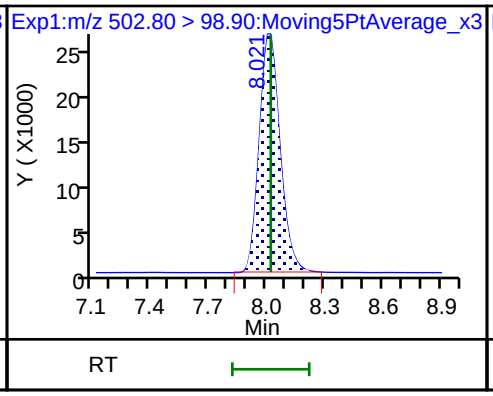
D 49 13C8 PFOS



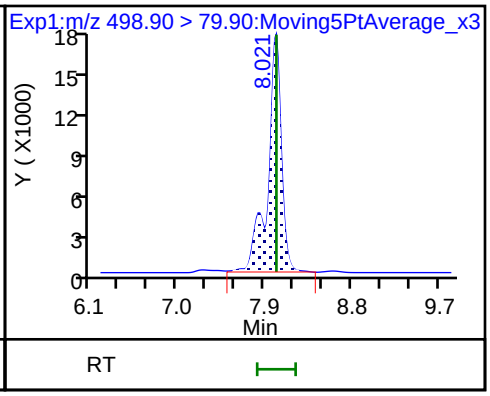
* 47 13C4 PFOS



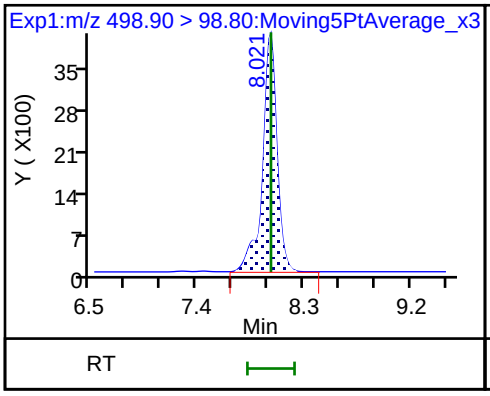
* 47 13C4 PFOS



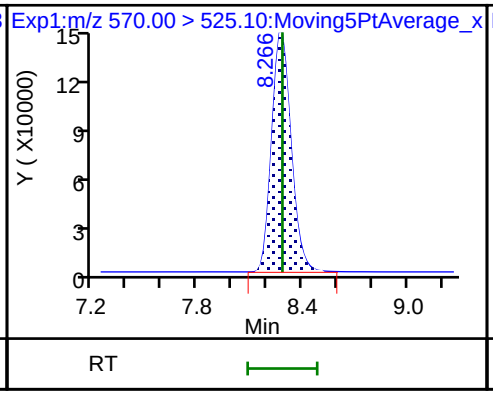
48 PFOS



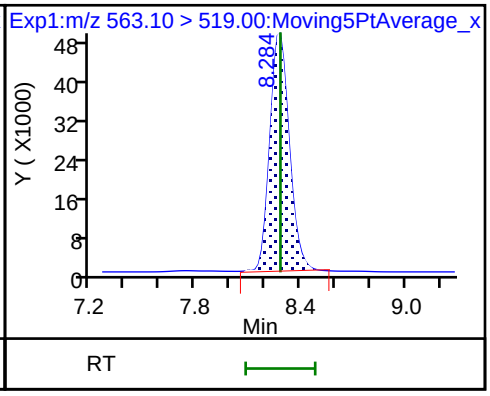
48 PFOS



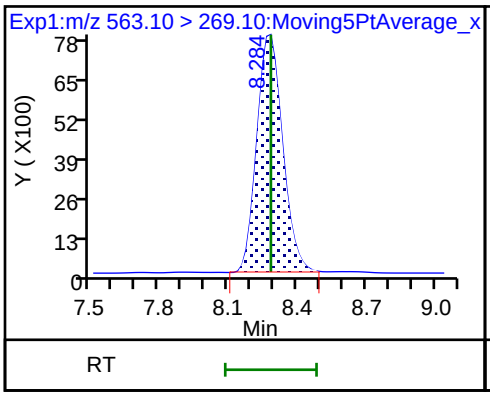
D 53 13C7 PFUnA



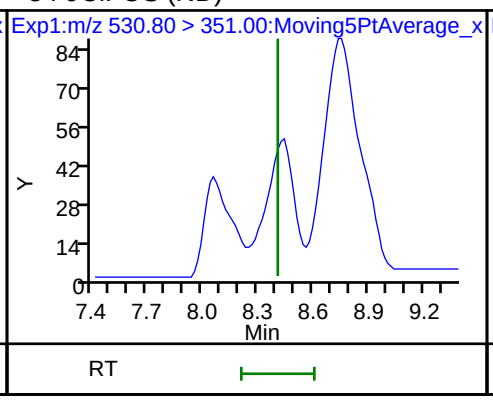
52 PFUnA



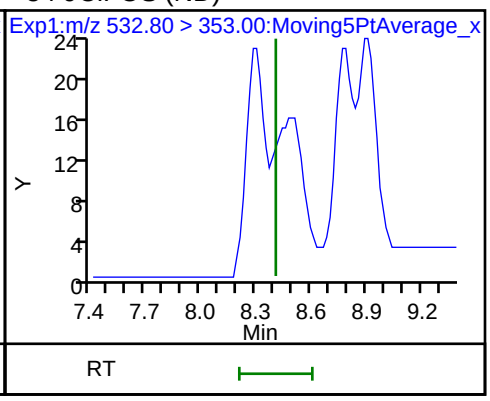
52 PFUnA



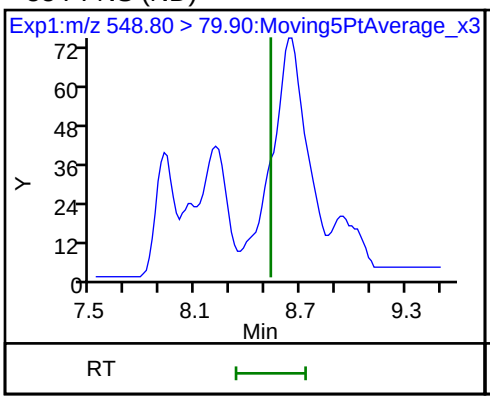
54 9ClFOS (ND)



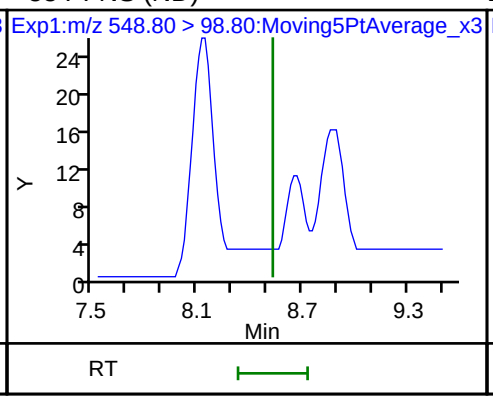
54 9ClFOS (ND)



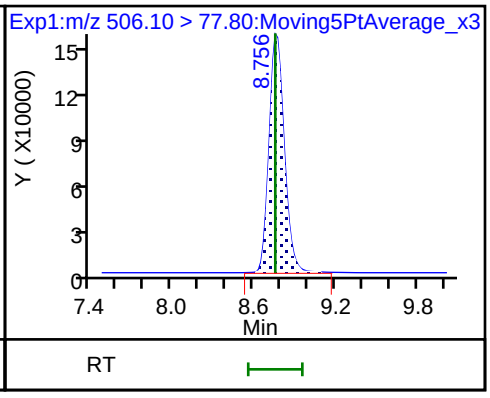
55 PFNS (ND)



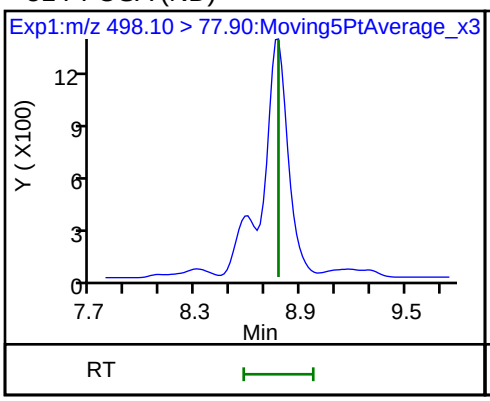
55 PFNS (ND)



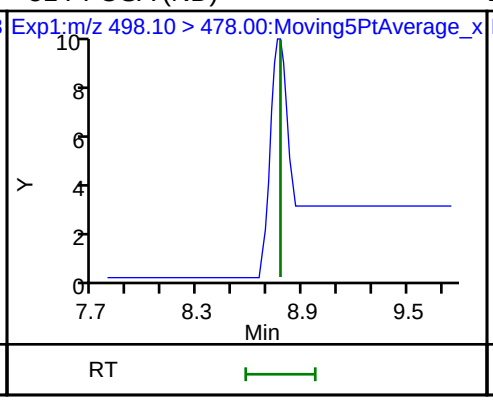
D 50 13C8 FOSA



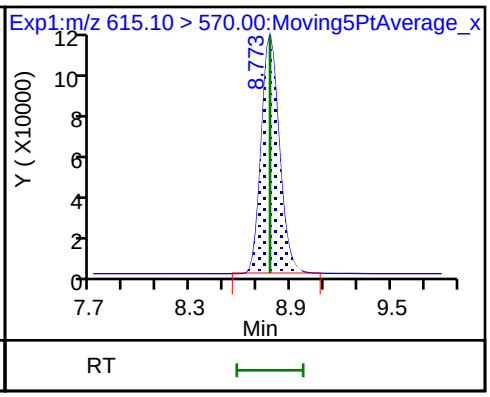
51 PFOSA (ND)



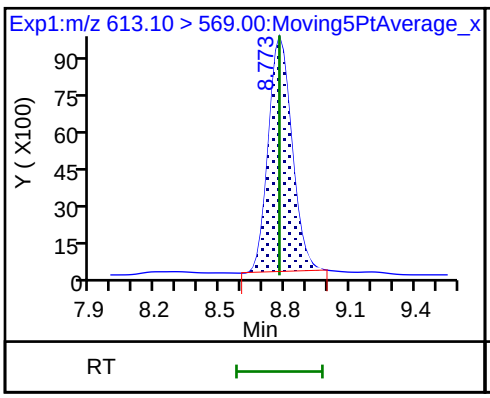
51 PFOSA (ND)



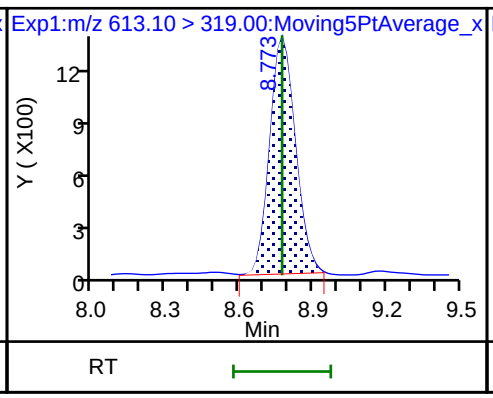
D 56 13C2 PFDoA



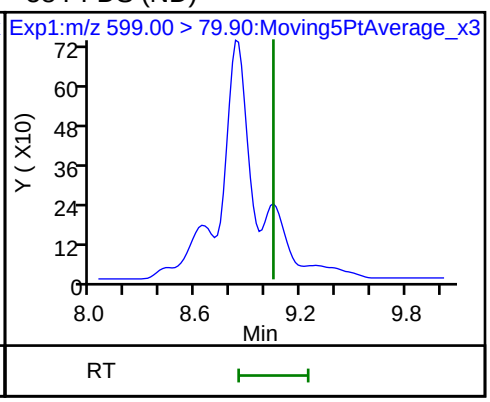
57 PFDoA



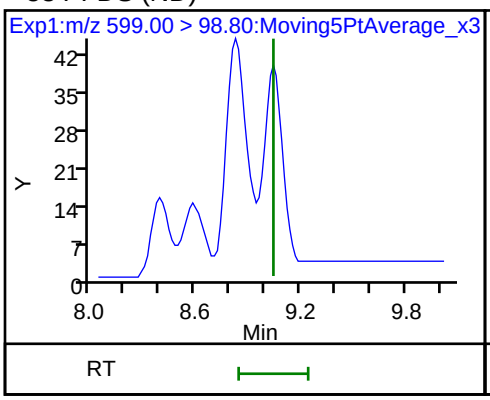
57 PFDoA



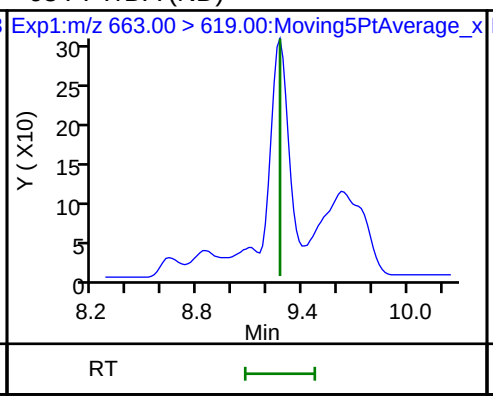
58 PFDS (ND)



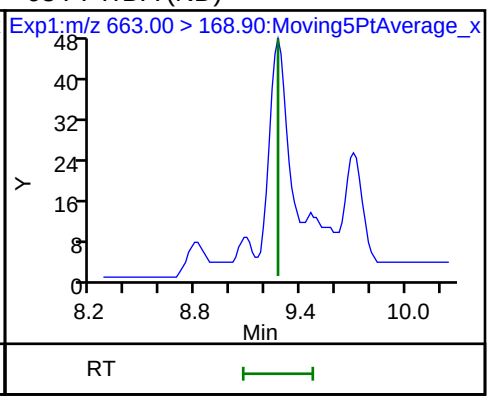
58 PFDS (ND)



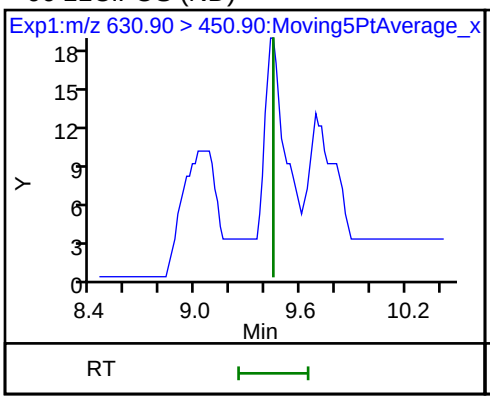
63 PFTrDA (ND)



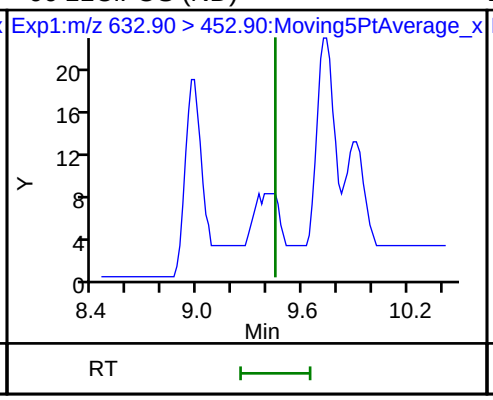
63 PFTrDA (ND)



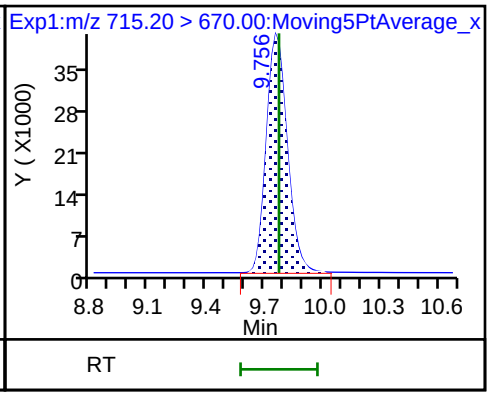
66 11ClFOS (ND)



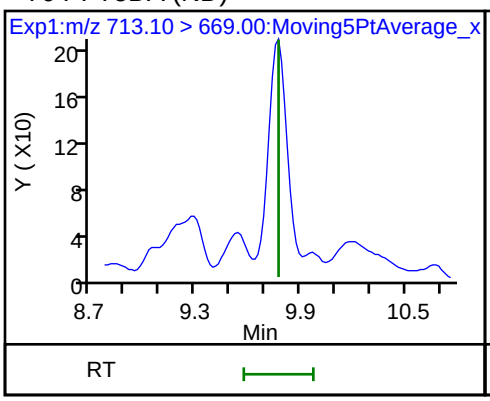
66 11ClFOS (ND)



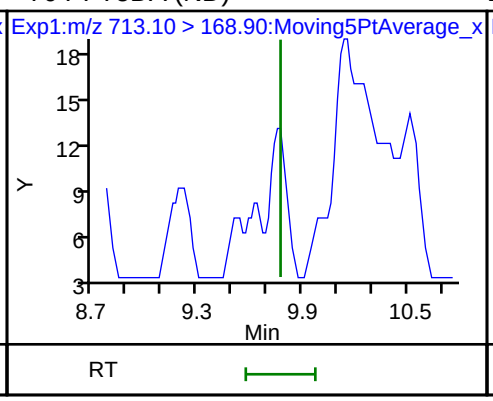
D 69 13C2 PFTeDA



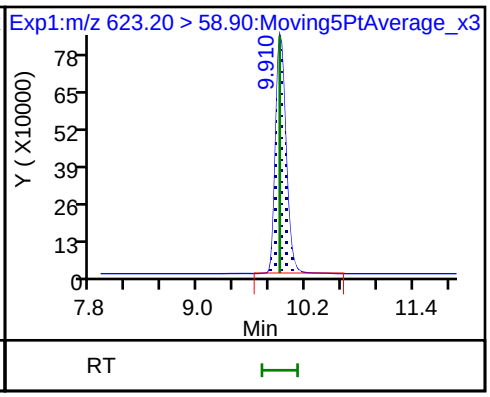
70 PFTeDA (ND)



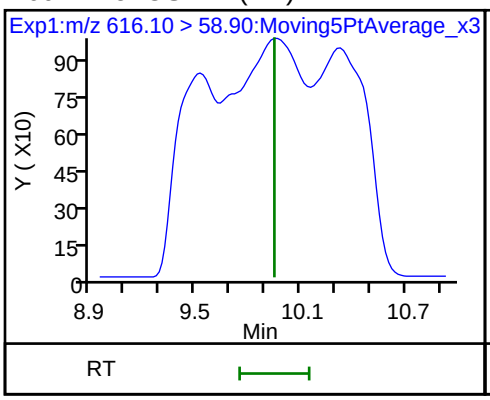
70 PFTeDA (ND)



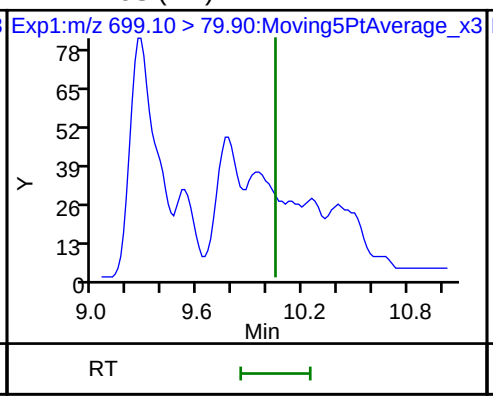
D 59 d7-N-Me-FOSE



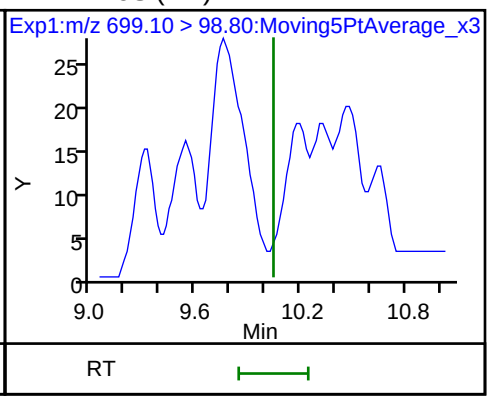
60 N-MeFOSE-M (ND)



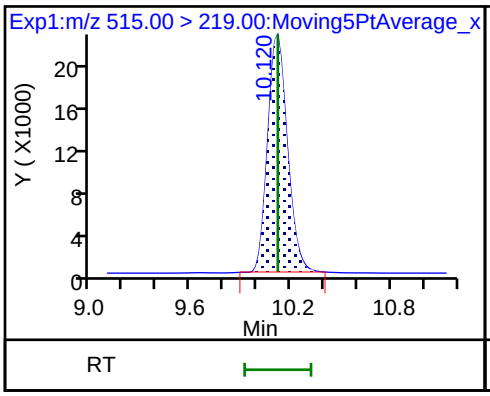
71 PFDoS (ND)



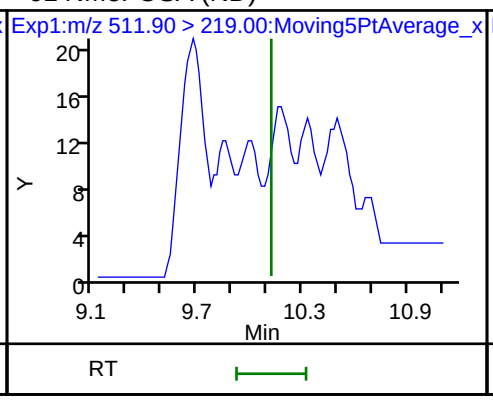
71 PFDoS (ND)



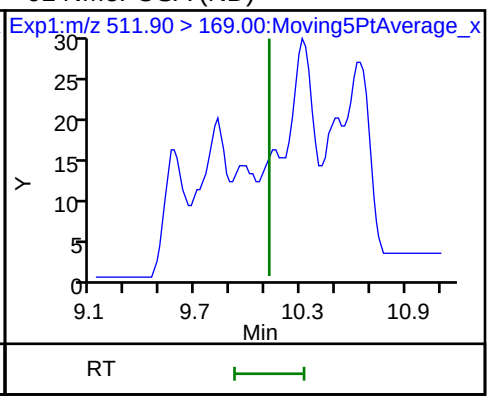
D 62 d3-NMePFOSA



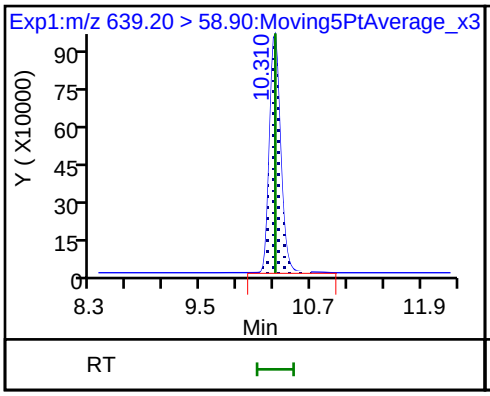
61 NMeFOSA (ND)



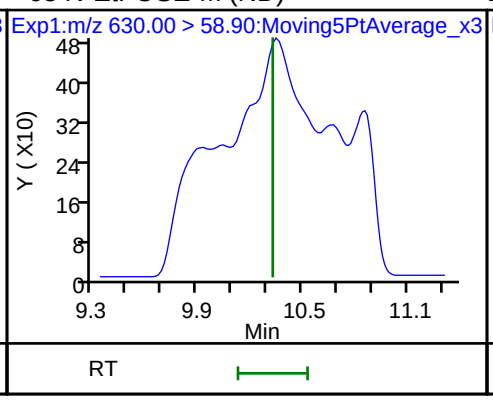
61 NMeFOSA (ND)



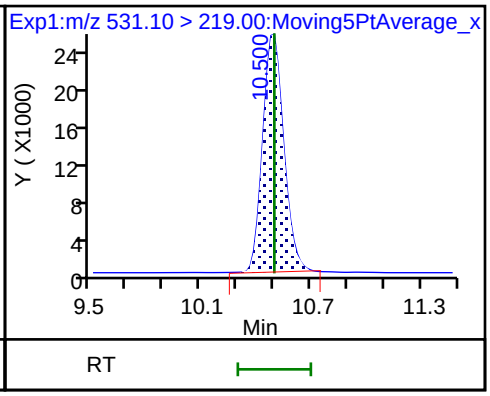
D 64 d9-N-EtFOSE



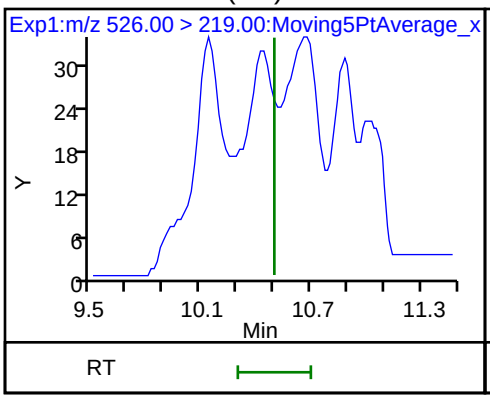
65 N-EtFOSE-M (ND)



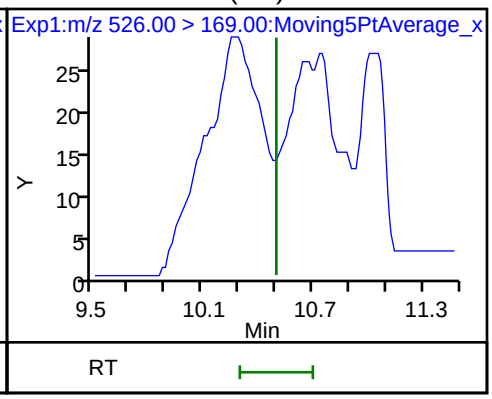
D 67 d5-NEtPFOSA



68 N-EtFOSA-M (ND)



68 N-EtFOSA-M (ND)



Manual Integration/User Assign Peak Report

Eurofins Denver

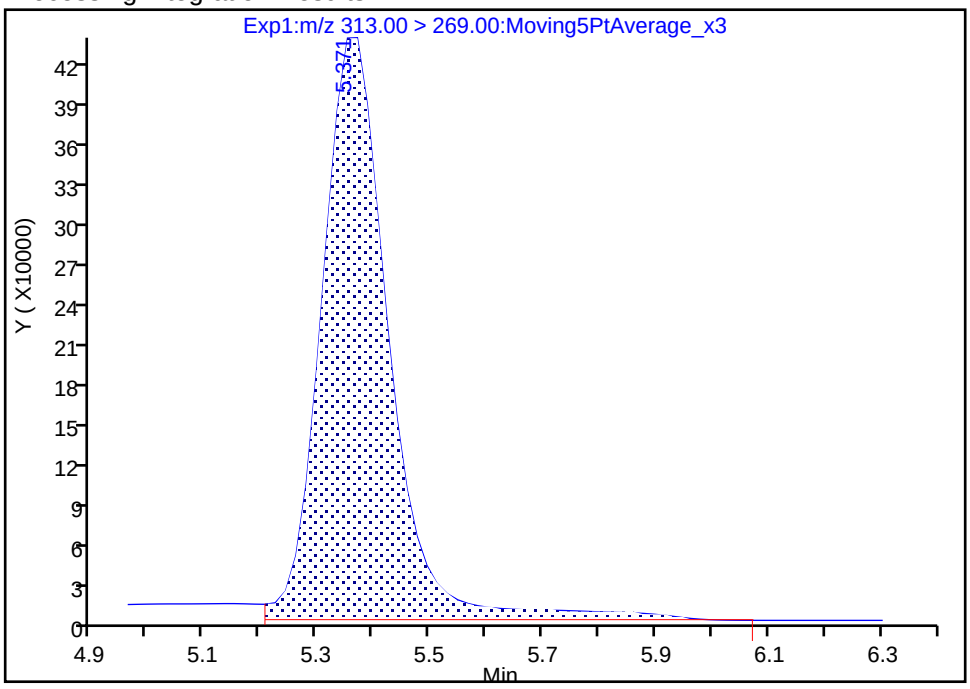
Data File:	\\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.018.d				
Injection Date:	28-Nov-2023 16:05:05	Instrument ID:	LC_LCMS11		
Lims ID:	460-292594-B-1-A	Lab Sample ID:	280-292594-1		
Client ID:	MW-2				
Operator ID:	B5QN	ALS Bottle#:	12	Worklist Smp#:	14
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

13 PFHxA, CAS: 307-24-4

Signal: 1

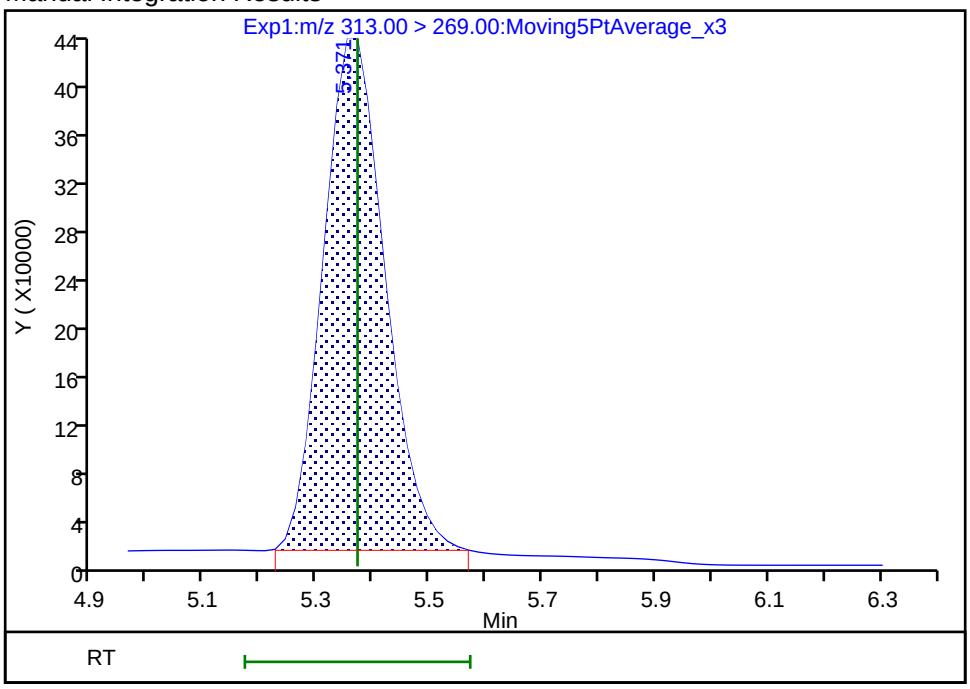
Processing Integration Results

RT: 5.37
Area: 3619561
Amount: 4.522106
Amount Units: ng/ml



Manual Integration Results

RT: 5.37
Area: 3191496
Amount: 3.987302
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 14:07:17 -07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Peak Tail

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: DUP_111323 | Lab Sample ID: 460-292594-2

Matrix: Water | Lab File ID: 2023.11.28a.019.d

Analysis Method: Draft 1633 | Date Collected: 11/13/2023 11:30

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 553.7(mL) | Date Analyzed: 11/28/2023 16:24

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	17.4		7.22	1.81
2706-90-3	Perfluoropentanoic acid (PFPeA)	48.0		3.61	0.90
307-24-4	Perfluorohexanoic acid (PFHxA)	35.6		1.81	0.45
375-85-9	Perfluoroheptanoic acid (PFHpA)	19.4		1.81	0.47
335-67-1	Perfluorooctanoic acid (PFOA)	27.6		1.81	0.58
375-95-1	Perfluorononanoic acid (PFNA)	11.7		1.81	0.45
335-76-2	Perfluorodecanoic acid (PFDA)	17.4		1.81	0.45
2058-94-8	Perfluoroundecanoic acid (PFUnA)	4.18		1.81	0.45
307-55-1	Perfluorododecanoic acid (PFDoA)	0.86	J	1.81	0.45
72629-94-8	Perfluorotridecanoic acid (PFTriA)	1.81	U	1.81	0.45
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	1.81	U	1.81	0.45
375-73-5	Perfluorobutanesulfonic acid (PFBS)	5.99		1.81	0.27
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	1.81	U	1.81	0.45
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.70	J	1.81	0.51
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	1.81	U	1.81	0.36
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	4.57		1.81	0.45
68259-12-1	Perfluorononanesulfonic acid (PFNS)	1.81	U	1.81	0.36
335-77-3	Perfluorodecanesulfonic acid (PFDS)	1.81	U	1.81	0.45
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	1.81	U	1.81	0.81
757124-72-4	4:2 FTS	7.22	U	7.22	1.54
27619-97-2	6:2 FTS	7.22	U	7.22	2.26
39108-34-4	8:2 FTS	7.22	U	7.22	2.35
754-91-6	Perfluorooctanesulfonamide (PFOSA)	1.81	U	1.81	0.45
31506-32-8	NMeFOSA	1.81	U	1.81	0.45
4151-50-2	NEtFOSA	1.81	U	1.81	0.45
2355-31-9	NMeFOSAA	3.61	U	3.61	1.08
2991-50-6	NEtFOSAA	1.81	U	1.81	0.63
24448-09-7	NMeFOSE	18.1	U	18.1	4.52
1691-99-2	NEtFOSE	18.1	U	18.1	4.52
13252-13-6	HFPO-DA (GenX)	7.22	U	7.22	1.81

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: DUP_111323 | Lab Sample ID: 460-292594-2

Matrix: Water | Lab File ID: 2023.11.28a.019.d

Analysis Method: Draft 1633 | Date Collected: 11/13/2023 11:30

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 553.7(mL) | Date Analyzed: 11/28/2023 16:24

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	7.22	U	7.22	1.35
863090-89-5	PFMBA	3.61	U	3.61	0.90
151772-58-6	NFDHA	3.61	U	3.61	0.90
377-73-1	PFMPA	3.61	U	3.61	0.45
756426-58-1	9Cl-PF3ONS	7.22	U	7.22	0.90
763051-92-9	11Cl-PF3OUdS	7.22	U	7.22	1.81
113507-82-7	PFEESA	3.61	U	3.61	0.45
356-02-5	3:3 FTCA	9.03	U	9.03	1.35
914637-49-3	5:3 FTCA	45.2	U	45.2	9.03
812-70-4	7:3 FTCA	45.2	U	45.2	9.03

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: DUP_111323 | Lab Sample ID: 460-292594-2

Matrix: Water | Lab File ID: 2023.11.28a.019.d

Analysis Method: Draft 1633 | Date Collected: 11/13/2023 11:30

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 553.7(mL) | Date Analyzed: 11/28/2023 16:24

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	102		10-130
STL01893	13C5 PFPeA	82		35-150
STL02577	13C5 PFHxA	100		55-150
STL01892	13C4 PFHpA	97		55-150
STL01052	13C8 PFOA	100		60-140
STL02578	13C9 PFNA	105		55-140
STL02579	13C6 PFDA	112		50-140
STL02580	13C7 PFUnA	104		30-140
STL00998	13C2 PFDoA	93		10-150
STL02116	13C2 PFTeDA	73		10-130
STL02337	13C3 PFBS	110		55-150
STL02581	13C3 PFHxS	109		55-150
STL01054	13C8 PFOS	104		45-140
STL01056	13C8 FOSA	113		30-130
STL02118	d3-NMeFOSAA	108		45-200
STL02117	d5-NEtFOSAA	89		10-200
STL02395	M2-4:2 FTS	185		60-200
STL02279	M2-6:2 FTS	141		60-200
STL02280	M2-8:2 FTS	104		50-200
STL02255	13C3 HFPO-DA	103		25-160
STL02277	d7-N-MeFOSE-M	96		10-150
STL02278	d9-N-EtFOSE-M	93		10-150
STL02704	d5-NEtPFOSA	81		10-130
STL02705	d3-NMePFOSA	76		15-130

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.019.d
Lims ID: 460-292594-B-2-A
Client ID: DUP_111323
Sample Type: Client
Inject. Date: 28-Nov-2023 16:24:29 ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: 460-292594-B-2-A
Misc. Info.: Plate: 1 Rack: 1
Operator ID: B5QN Instrument ID: LC_LCMS11

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 29-Nov-2023 14:09:32 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1603

First Level Reviewer: B5QN Date: 29-Nov-2023 14:09:32
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.046	3.046	0.0	1.000	4798248	10.2		102	35228	
* 1 13C3PFBA										
216.00 > 172.00	3.046	3.046	0.0		2309422	5.00			4633	
2 PFBA										
212.80 > 168.90	3.046	3.046	0.0	1.000	827492	1.93			692	
D 7 13C5 PFPeA										
268.30 > 223.00	4.463	4.463	-0.001	0.834	1411986	4.08		81.6	8042	
6 PFPA										M
263.00 > 219.00	4.463	4.478	-0.016	1.000	3010835	5.31	Target=212.56		527	
263.00 > 68.90	4.463	4.478	-0.016	1.000	11866		253.74(106.28-318.84)		125	M
D 9 13C2-4:2FTS										
329.10 > 80.90	5.097	5.097	0.0	0.742	389257	8.63	Target=4.54	185	855	
329.10 > 309.00	5.097	5.097	0.0	0.742	75021		5.19(2.27-6.81)	185	2399	
D 16 13C3 PFBS										
302.10 > 79.90	5.353	5.354	-0.001	0.779	656606	2.56	Target=4.56	110	4283	
302.10 > 98.90	5.353	5.354	-0.001	0.779	140050		4.69(2.28-6.83)	110	4572	
15 PFBS										
298.70 > 79.90	5.353	5.354	-0.001	1.000	166713	0.6632	Target=2.16		1008	
298.70 > 98.80	5.353	5.354	-0.001	1.000	72385		2.30(1.08-3.24)		1069	
* 14 13C2 PFHxA										
315.10 > 270.00	5.353	5.371	-0.018		1736535	2.50	Target=79.67		22813	
315.10 > 119.40	5.353	5.371	-0.018		22232		78.11(39.83-119.50)		332	
D 12 13C5 PFHxA										
318.00 > 273.00	5.353	5.371	-0.018	1.000	1939743	2.49	Target=53.27	99.7	18174	
318.00 > 120.30	5.353	5.371	-0.018	1.000	35464		54.70(26.63-79.90)	99.7	943	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 PFHxA										
313.00 > 269.00	5.353	5.371	-0.018	1.000	3369842	3.94	Target=18.64		824	
313.00 > 118.90	5.353	5.371	-0.018	1.000	166952		20.18(9.32-27.96)		2724	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.682	5.682	0.0	1.061	1966881	10.3	Target=1.53	103	20982	
286.90 > 184.90	5.682	5.682	0.0	1.061	1046316		1.88(0.76-2.29)	103	12142	
19 HFPO-DA										
284.90 > 168.90	5.682	5.682	0.0	1.000	9786	0.0462	Target=1.75		438	
284.90 > 184.90	5.682	5.682	0.0	1.000	5392		1.81(0.87-2.62)		56.0	
D 22 13C4 PFHpA										
367.10 > 322.00	6.121	6.122	-0.001	1.143	1968142	2.42		96.6	27887	
17 PFHpA										M
363.10 > 319.00	6.121	6.122	-0.001	1.000	1664935	2.15	Target=3.96		785	M
363.10 > 169.00	6.121	6.122	-0.001	1.000	415565		4.01(1.98-5.95)		4535	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.470	6.471	-0.001	0.942	395499	6.72	Target=4.15	141	3309	
429.10 > 409.00	6.470	6.471	-0.001	0.942	86701		4.56(2.07-6.22)	141	4171	
D 27 13C8 PFOA										
421.10 > 376.00	6.707	6.707	0.0	1.000	1811936	2.49		99.7	25052	
* 29 13C4 PFOA										
417.10 > 172.00	6.707	6.707	0.0		277738	2.50			7730	
28 PFOA										
413.00 > 369.00	6.707	6.724	-0.017	1.000	1769882	3.06	Target=2.30		1444	
413.00 > 169.00	6.707	6.724	-0.017	1.000	674918		2.62(1.15-3.45)		9243	
32 PFHxS										M
398.70 > 79.90	6.888	6.871	0.017	1.002	9106	0.0774	Target=3.86		362	M
398.70 > 98.90	6.888	6.871	0.017	1.002	2605		3.50(1.93-5.79)		96.0	M
* 31 18O2 PFHxS										
403.00 > 83.90	6.871	6.871	0.0		473996	2.37			16259	
D 33 13C3 PFHxS										
402.10 > 79.90	6.871	6.888	-0.017	1.000	522631	2.57	Target=4.11	109	8930	
402.10 > 98.80	6.871	6.888	-0.017	1.000	128495		4.07(2.05-6.16)	109	5925	
36 PFNA										
463.00 > 419.00	7.259	7.261	-0.002	1.000	1178195	1.29	Target=6.02		3543	
463.00 > 219.00	7.259	7.261	-0.002	1.000	194243		6.07(3.01-9.04)		6066	
* 35 13C5 PFNA										
468.00 > 423.00	7.259	7.261	-0.002		1145930	1.25			15798	
D 34 13C9 PFNA										
472.10 > 427.00	7.259	7.261	-0.002	1.000	1136154	1.31		105	17643	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.522	7.522	0.0	1.095	353770	4.96	Target=5.49	104	4969	
529.10 > 509.00	7.522	7.522	0.0	1.095	59680		5.93(2.74-8.23)	104	2836	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.743	7.761	-0.018	0.965	489442	5.42		108	13108	
* 44 13C2 PFDA										
515.10 > 470.10	7.778	7.779	-0.001		1013783	1.25			12347	
D 40 13C6 PFDA										
519.10 > 474.10	7.778	7.779	-0.001	1.000	1132838	1.40		112	25394	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
43 PFDA										
512.90 > 469.00	7.778	7.779	-0.001	1.000	1435216	1.93	Target=3.33		10752	
512.90 > 219.00	7.778	7.779	-0.001	1.000	357085		4.02(1.67-5.00)		8004	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.968	7.969	-0.001	0.994	467790	4.47		89.4	6181	
D 49 13C8 PFOS										
507.10 > 79.90	8.003	8.021	-0.018	0.998	240042	2.49	Target=2.95	104	2296	
507.10 > 98.90	8.003	8.021	-0.018	0.998	79563		3.02(1.47-4.42)	104	3562	
* 47 13C4 PFOS										
502.80 > 79.90	8.020	8.021	-0.001		643850	2.40	Target=3.78		6115	
502.80 > 98.90	8.003	8.021	-0.018		173888		3.70(1.89-5.67)		7737	
48 PFOS										
498.90 > 79.90	8.020	8.021	-0.001	1.002	165709	0.5064	Target=4.86		1095	
498.90 > 98.80	8.020	8.021	-0.001	1.002	31266		5.30(2.43-7.28)		1171	
D 53 13C7 PFUnA										
570.00 > 525.10	8.284	8.285	0.0	1.065	1171219	1.30		104	16747	
52 PFUnA										
563.10 > 519.00	8.284	8.285	0.0	1.000	384152	0.4633	Target=5.72		2766	
563.10 > 269.10	8.284	8.285	0.0	1.000	65818		5.84(2.86-8.59)		1435	
D 50 13C8 FOSA										
506.10 > 77.80	8.756	8.756	0.0	1.092	1320752	2.83		113	13227	
51 PFOSA										M
498.10 > 77.90	8.773	8.773	0.0	1.002	8230	0.0157	Target=41.88		122	M
498.10 > 478.00	8.773	8.773	0.0	1.002	372		22.12(20.94-62.83)		11.0	M
D 56 13C2 PFDoA										
615.10 > 570.00	8.773	8.773	0.0	1.128	1030320	1.16		92.8	15139	
57 PFDoA										
613.10 > 569.00	8.773	8.773	0.0	1.000	78718	0.0950	Target=7.45		811	
613.10 > 319.00	8.773	8.773	0.0	1.000	9989		7.88(3.73-11.18)		450	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.756	9.774	-0.018	1.254	387060	0.9157		73.3	10226	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.910	9.910	0.0	1.236	8240703	24.0		95.9	40612	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.120	10.120	0.0	1.262	202145	1.91		76.3	4920	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.310	10.310	0.0	1.285	9960358	23.3		93.0	62664	
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.499	10.500	-0.001	1.309	220142	2.02		81.0	3448	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

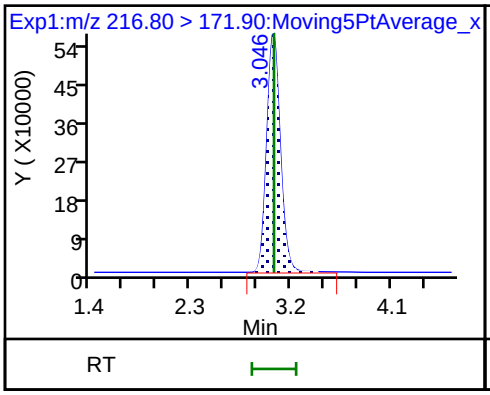
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Eurofins Denver

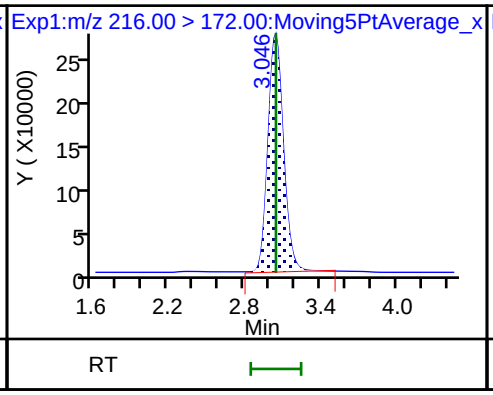
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Injection Date:	28-Nov-2023 16:24:29	Instrument ID:	LC_LCMS11		
Lims ID:	460-292594-B-2-A	Lab Sample ID:	280-292594-2		
Client ID:	DUP_111323				
Operator ID:	B5QN	ALS Bottle#:	13	Worklist Smp#:	15
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		

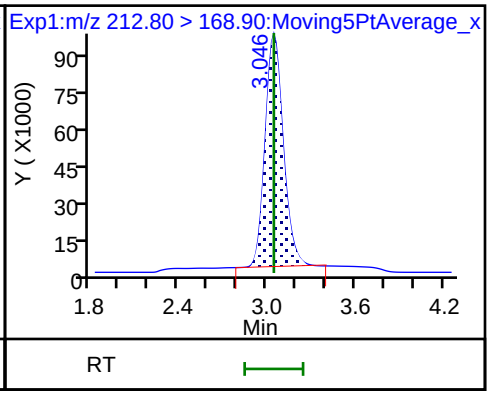
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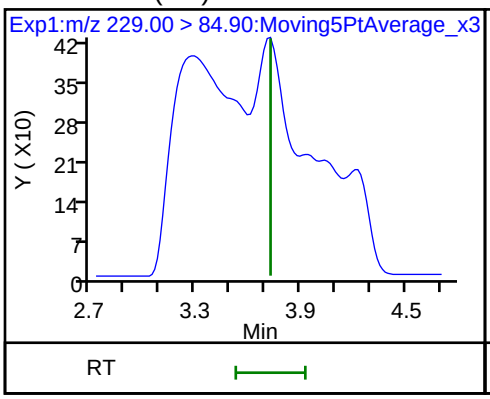
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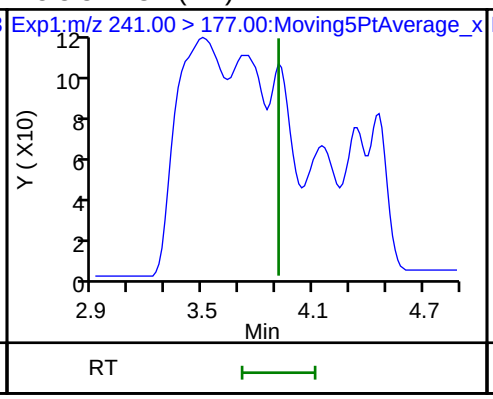
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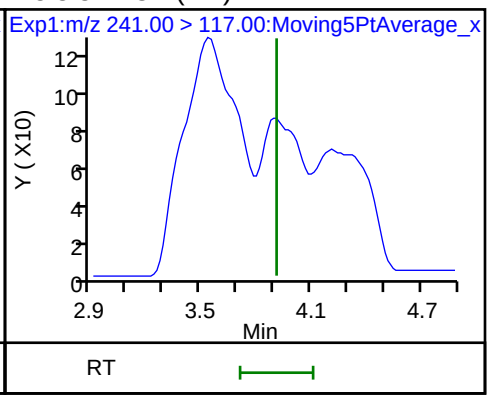
4 PFMPA (ND)



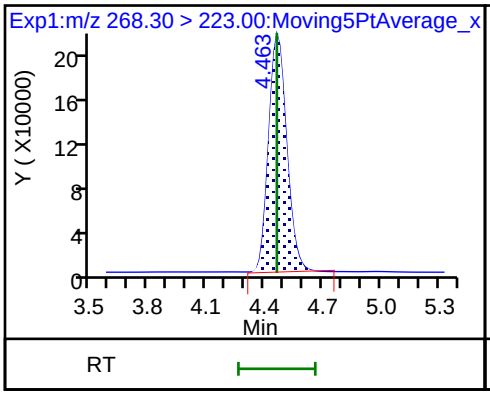
5 3:3 FTCA (ND)



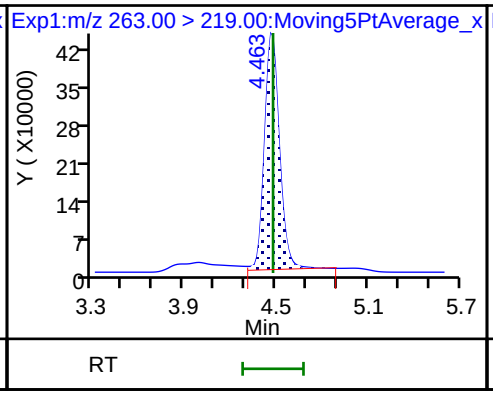
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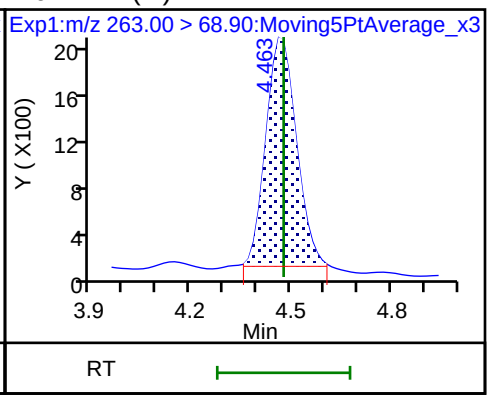
D 7 13C5 PFPeA



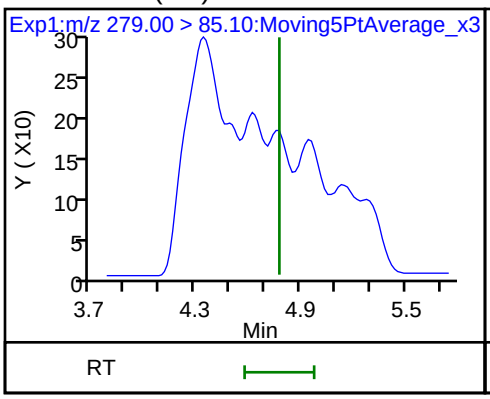
6 PFPA



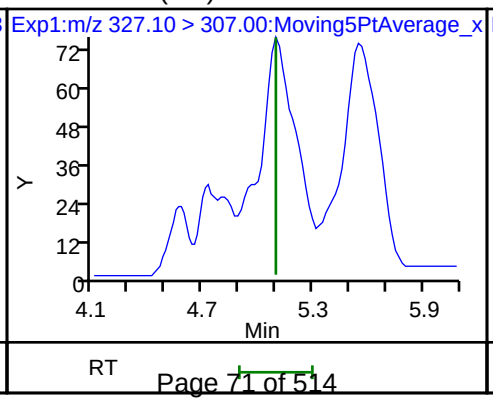
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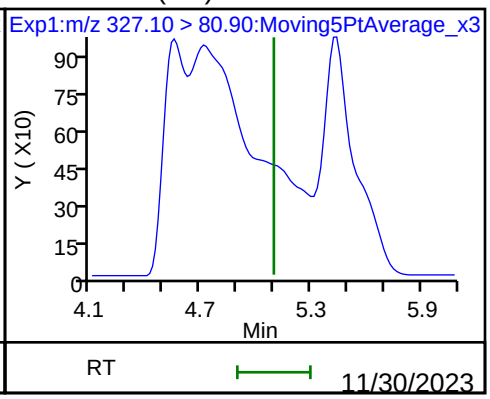
8 PFMBA (ND)



10 4:2FTS (ND)

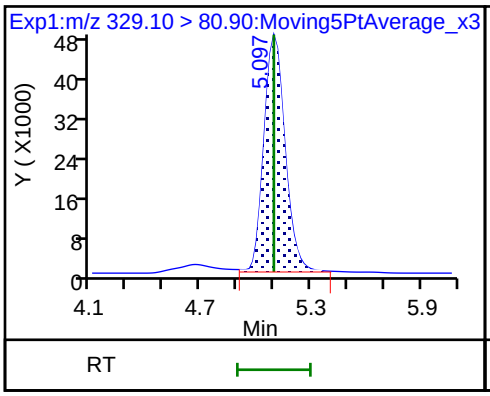


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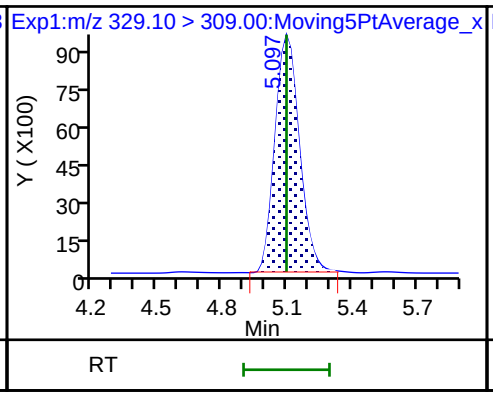


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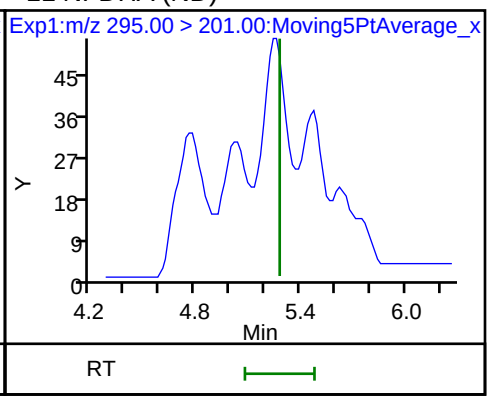
D 9 13C2-4:2FTS



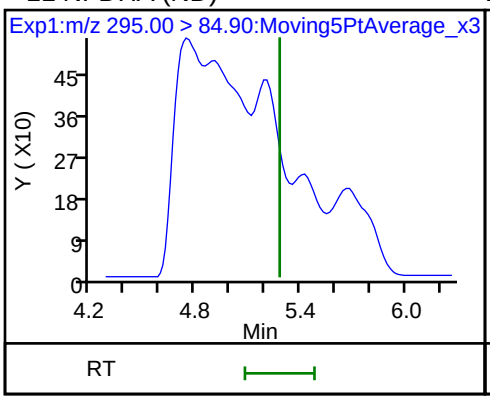
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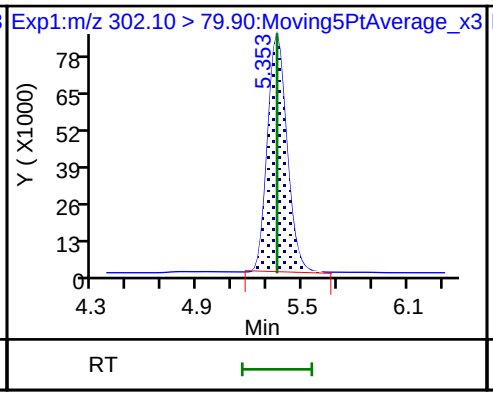
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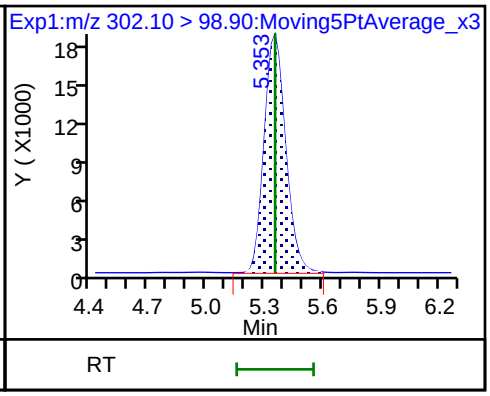
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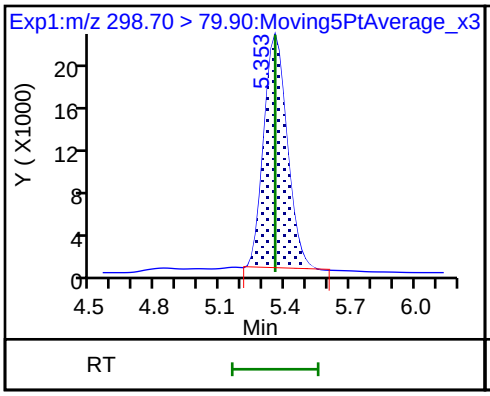
D 16 13C3 PFBS



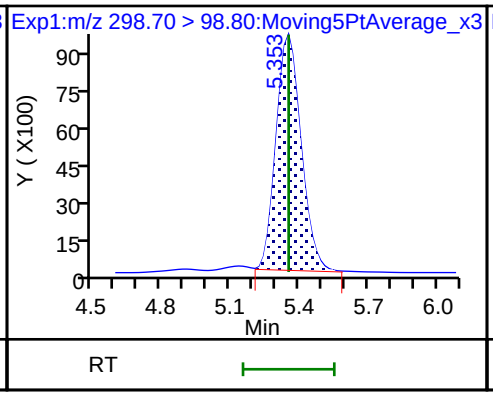
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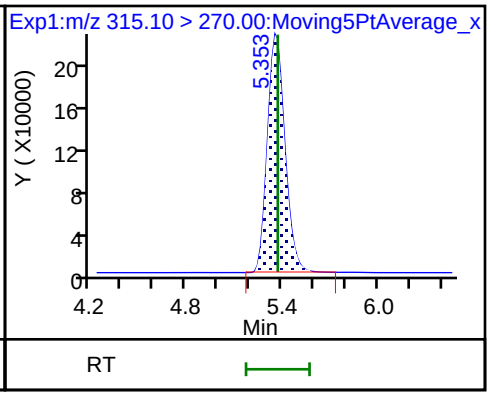
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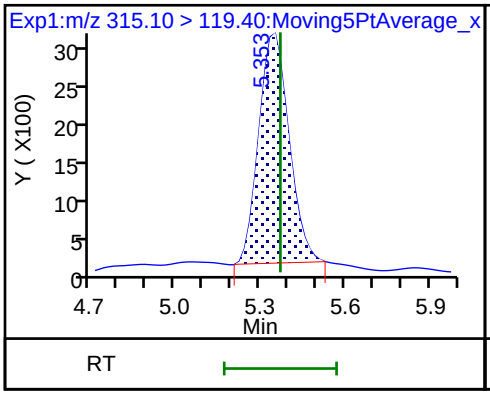
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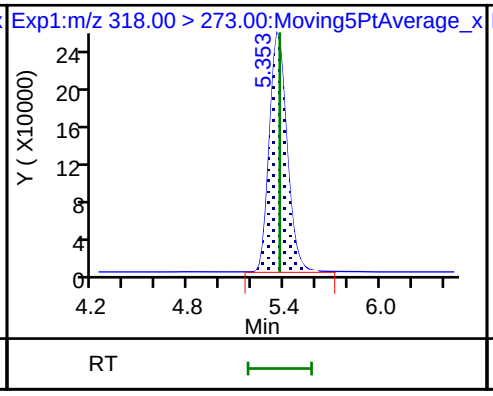
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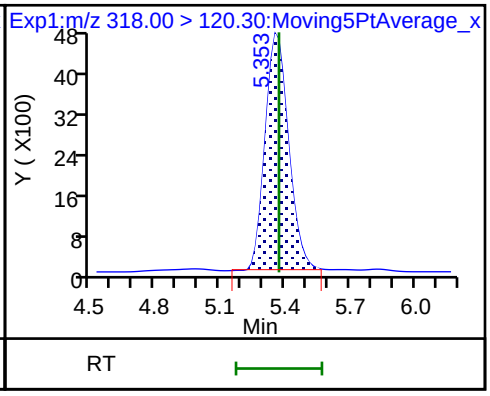
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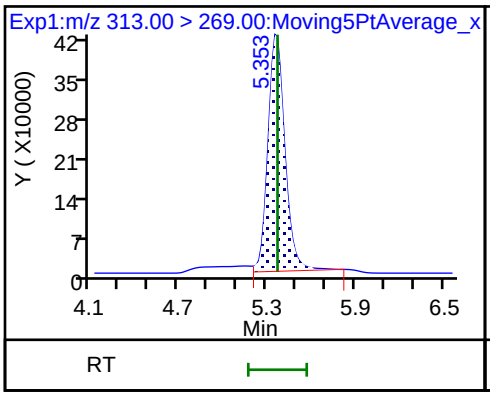
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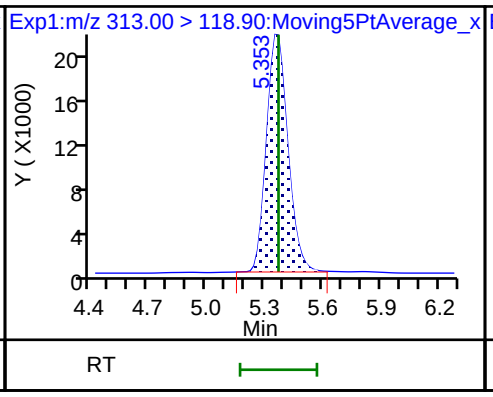
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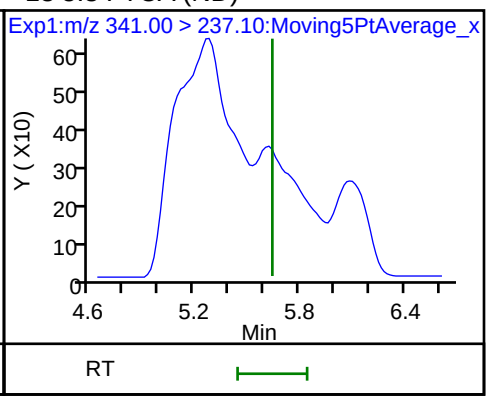
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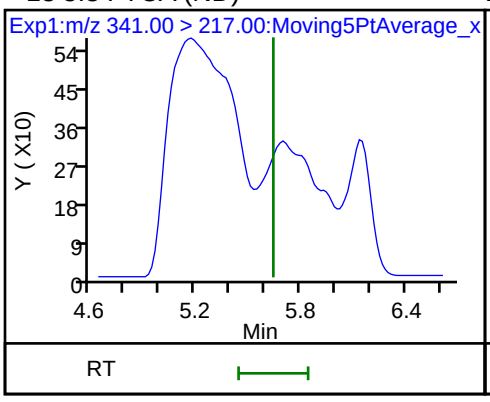
13 PFHxA



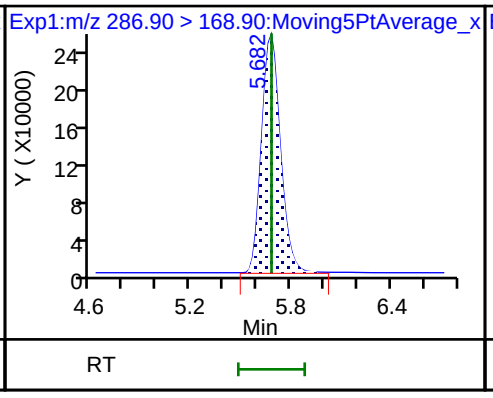
18 5:3 FTCA (ND)



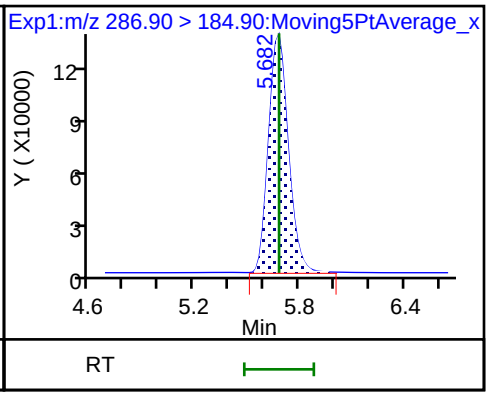
18 5:3 FTCA (ND)



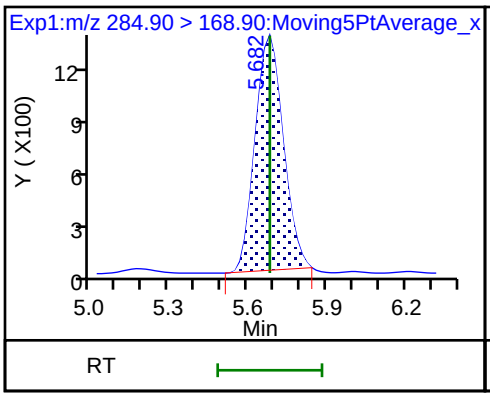
D 20 13C3 HFPO-DA



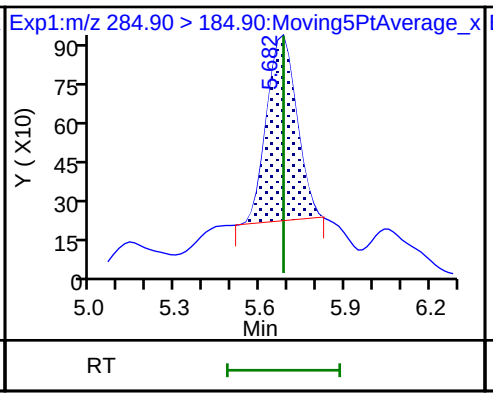
D 20 13C3 HFPO-DA



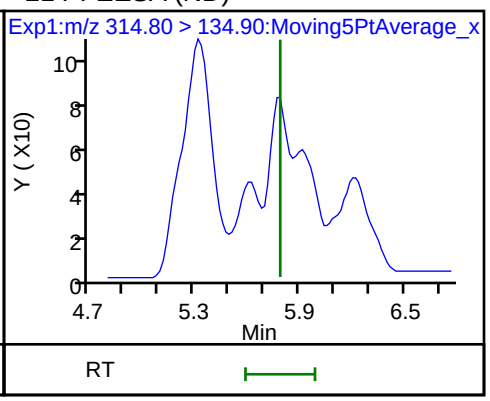
19 HFPO-DA



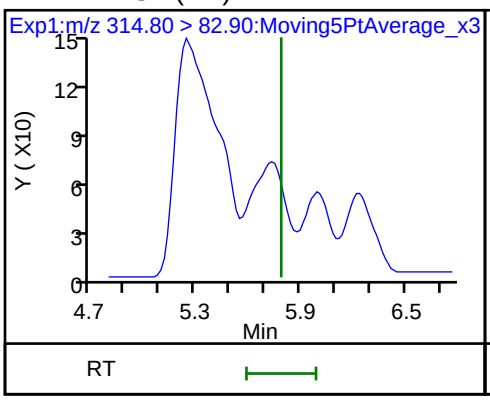
19 HFPO-DA



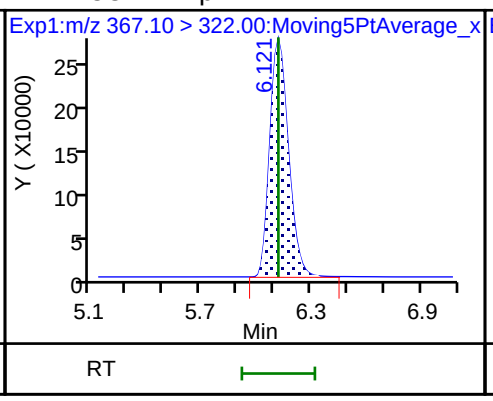
21 PFEESA (ND)



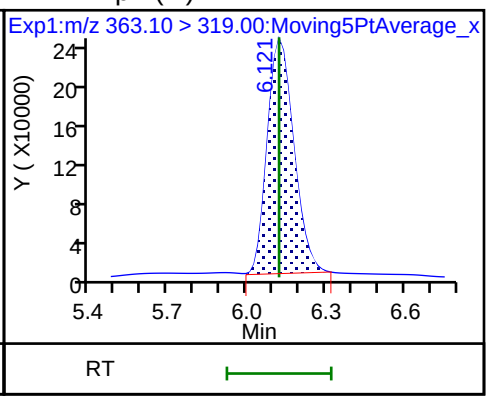
21 PFEESA (ND)



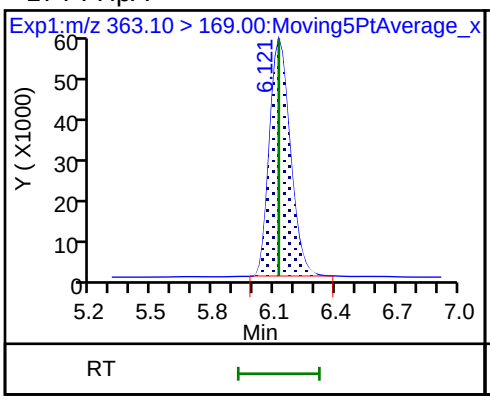
D 22 13C4 PFHpA



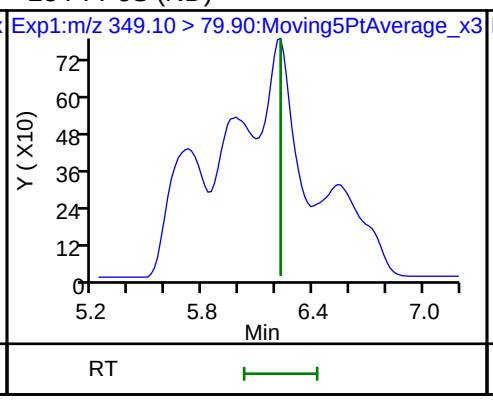
17 PFHpA (M)



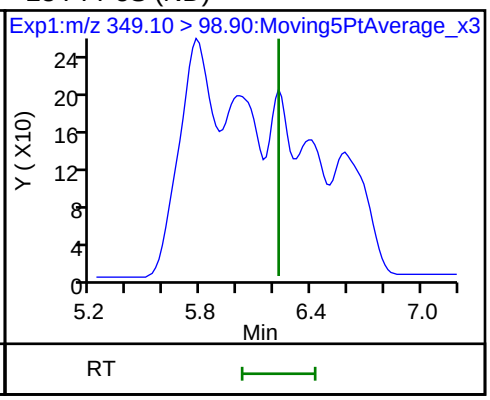
17 PFHpA



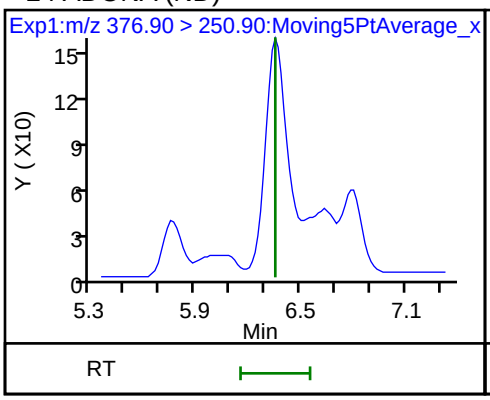
23 PFPeS (ND)



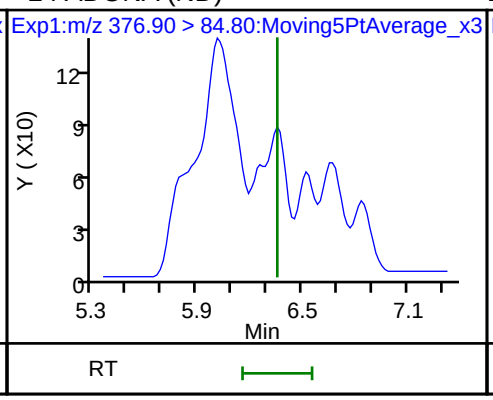
23 PFPeS (ND)



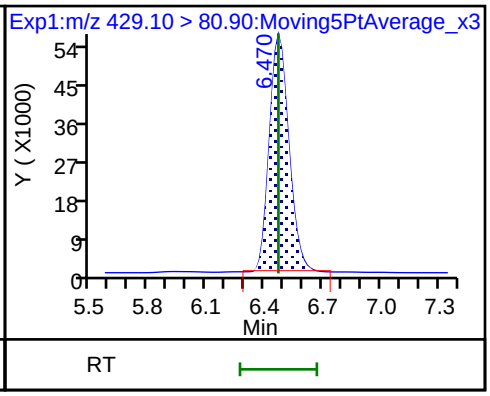
24 ADONA (ND)



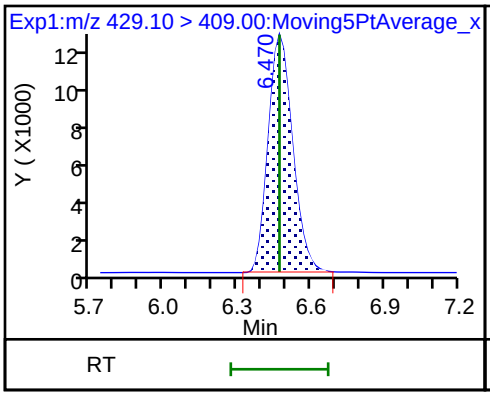
24 ADONA (ND)



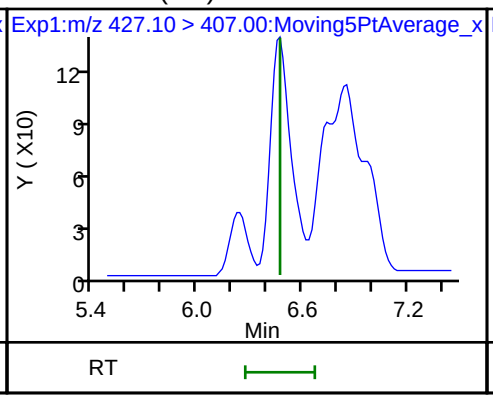
D 26 13C2-6:2FTS



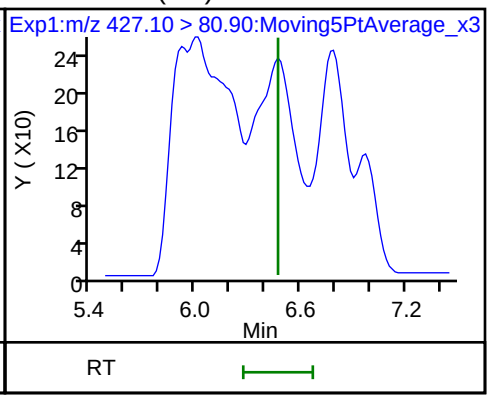
D 26 13C2-6:2FTS



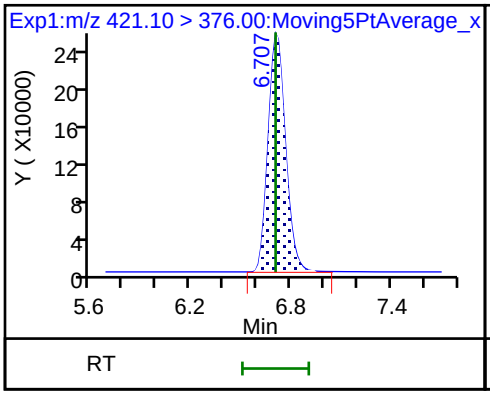
25 6:2FTS (ND)



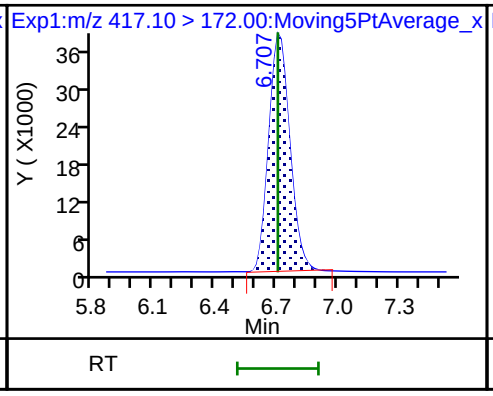
25 6:2FTS (ND)



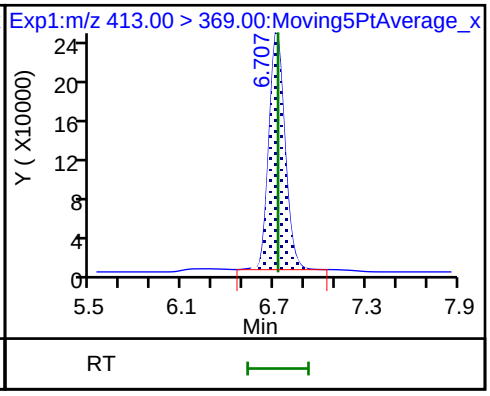
D 27 13C8 PFOA



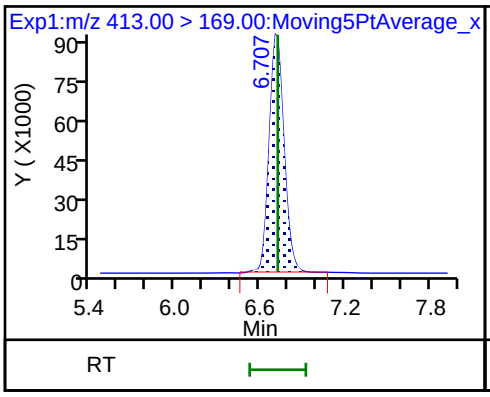
* 29 13C4 PFOA



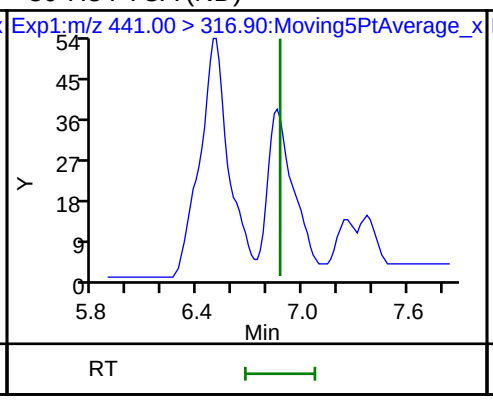
28 PFOA



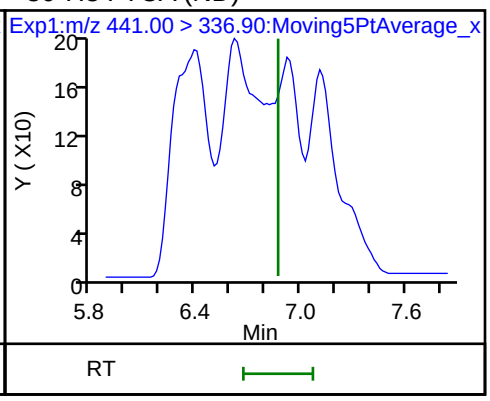
28 PFOA



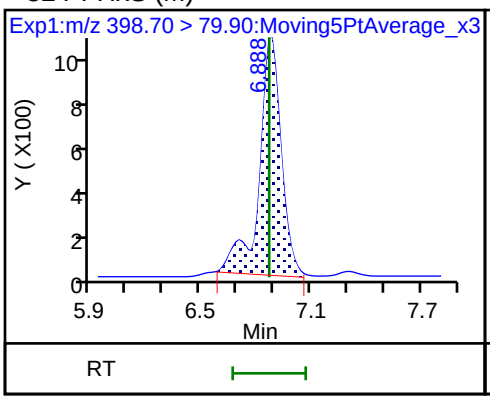
30 7:3 FTCA (ND)



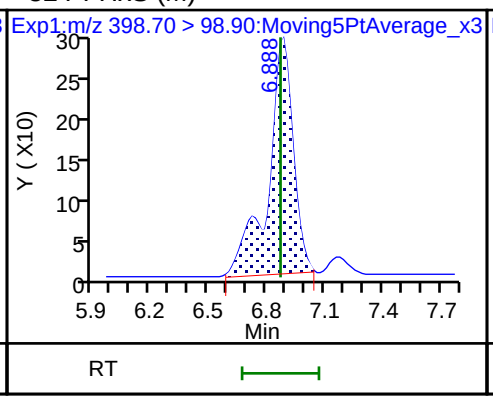
30 7:3 FTCA (ND)



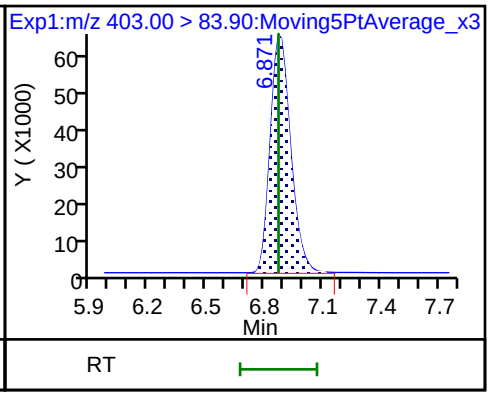
32 PFHxS (M)



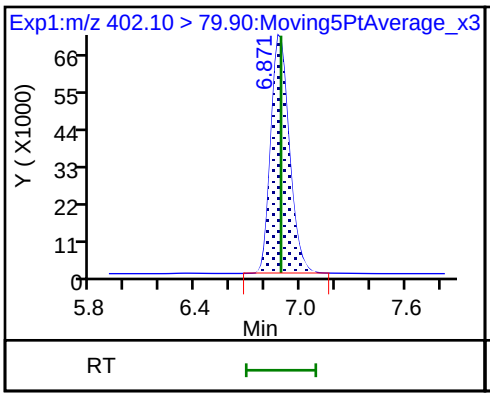
32 PFHxS (M)



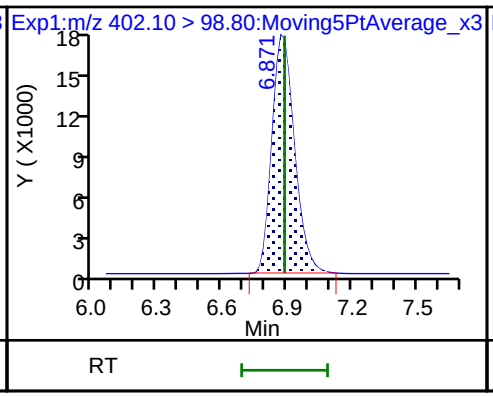
* 31 18O2 PFHxS



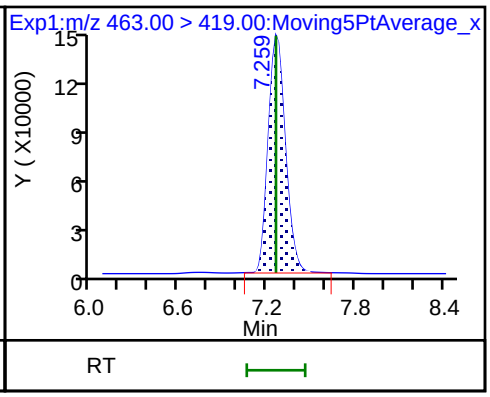
D 33 13C3 PFHxS



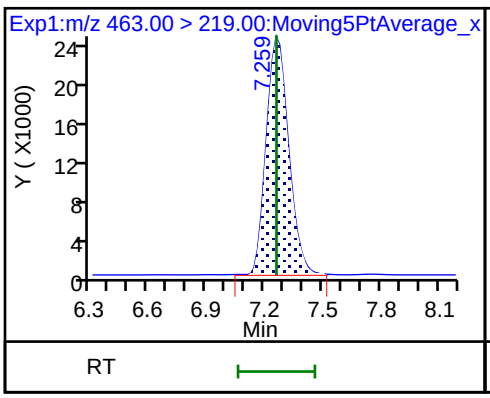
D 33 13C3 PFHxS



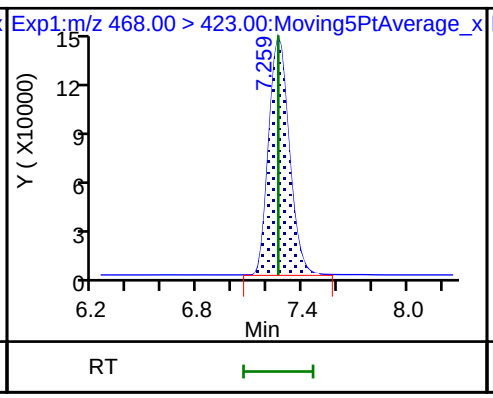
36 PFNA



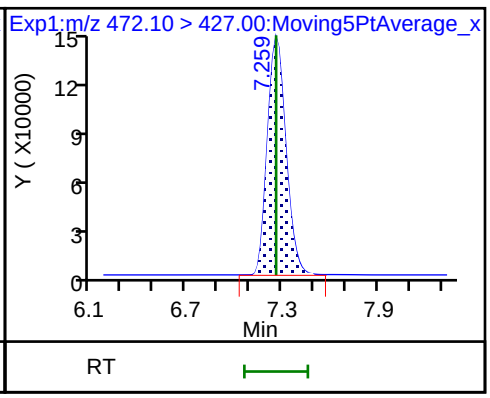
36 PFNA



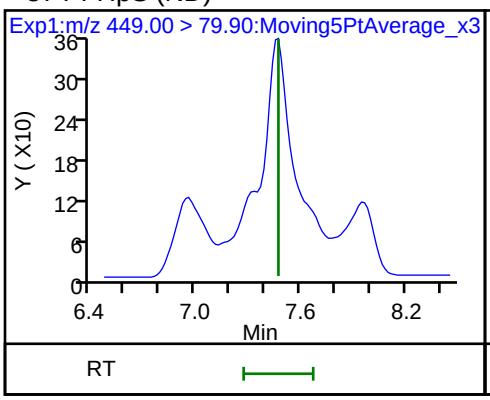
* 35 13C5 PFNA



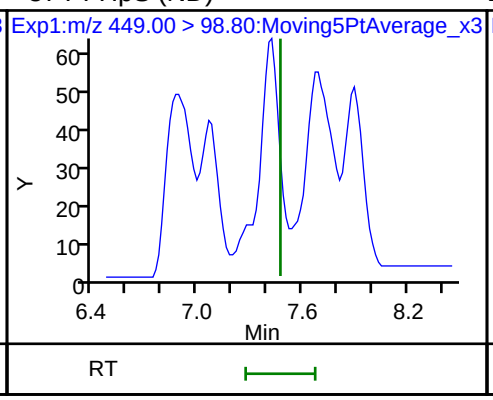
D 34 13C9 PFNA



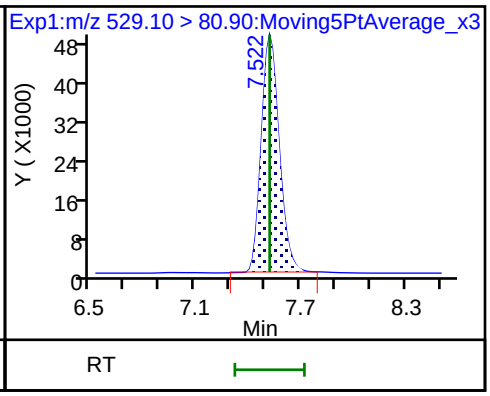
37 PFHpS (ND)



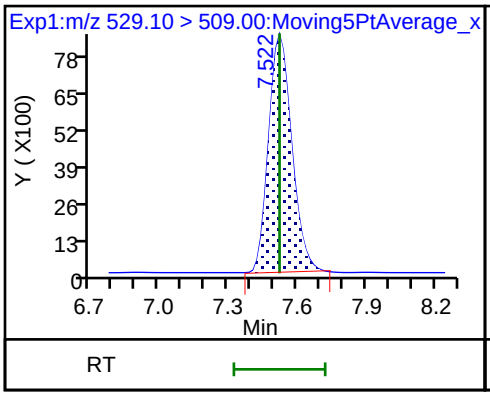
37 PFHpS (ND)



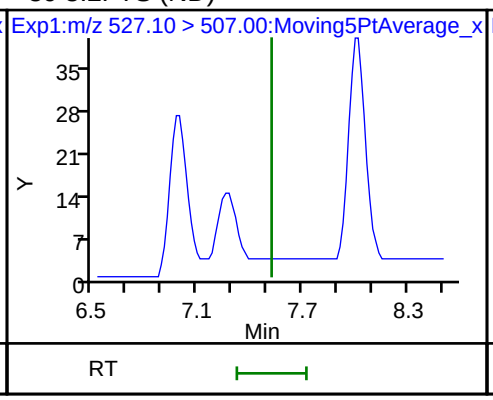
D 38 13C2-8:2FTS



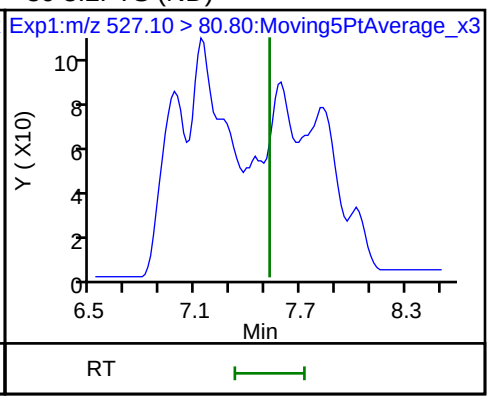
D 38 13C2-8:2FTS



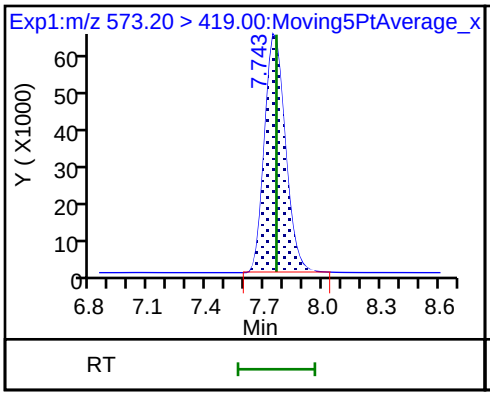
39 8:2FTS (ND)



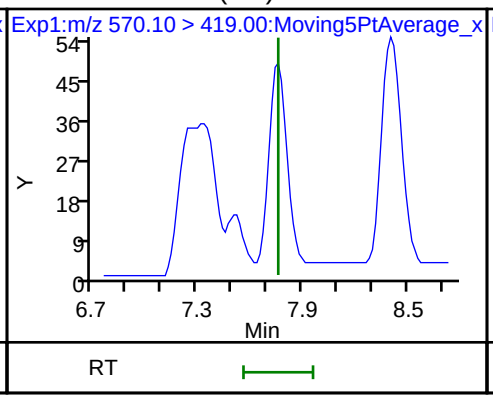
39 8:2FTS (ND)



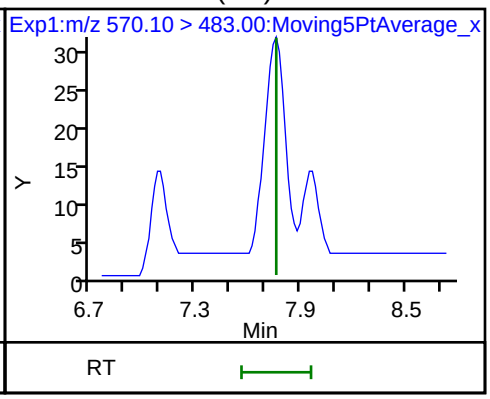
D 41 d3-NMeFOSAA



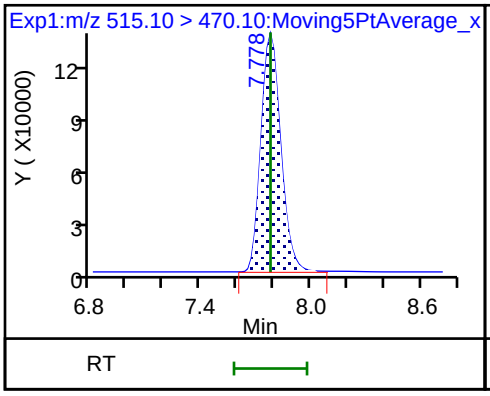
42 NMeFOSAA (ND)



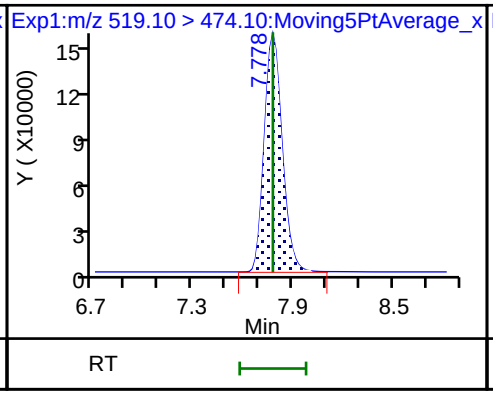
42 NMeFOSAA (ND)



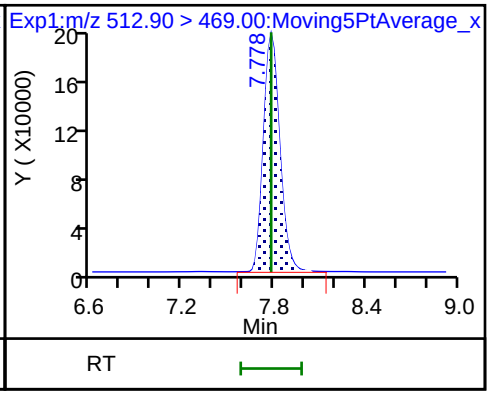
* 44 13C2 PFDA



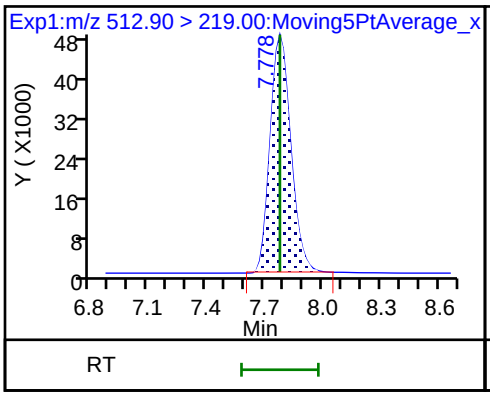
D 40 13C6 PFDA



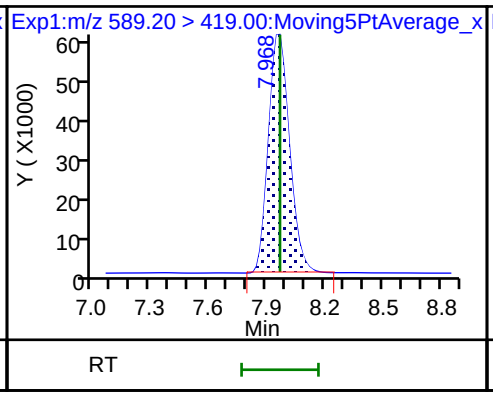
43 PFDA



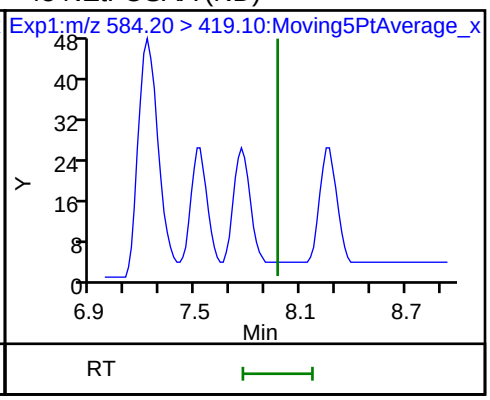
43 PFDA



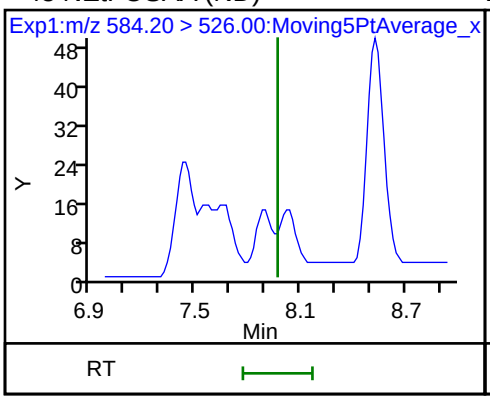
D 46 d5-NEtFOSAA



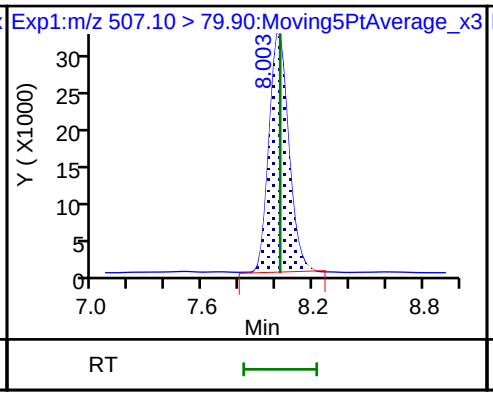
45 NEtFOSAA (ND)



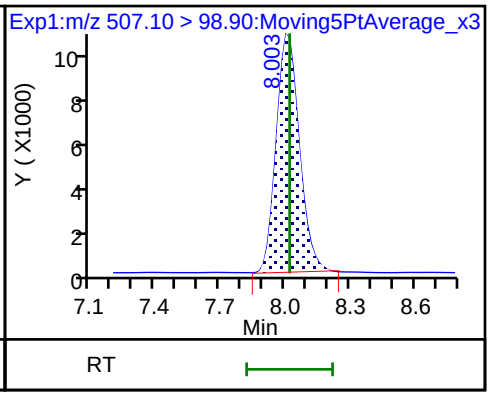
45 NEtFOSAA (ND)



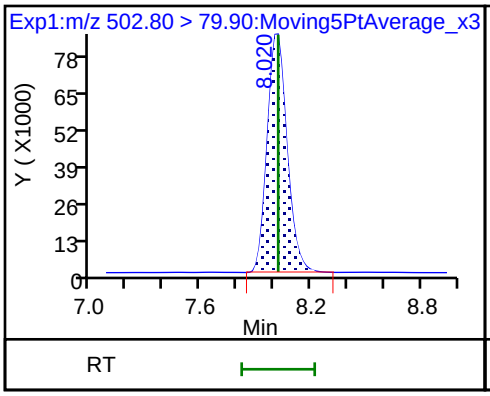
D 49 13C8 PFOS



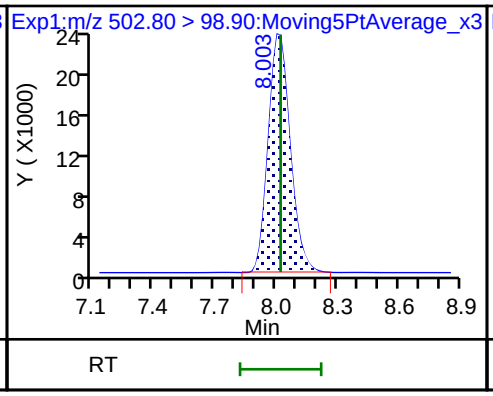
D 49 13C8 PFOS



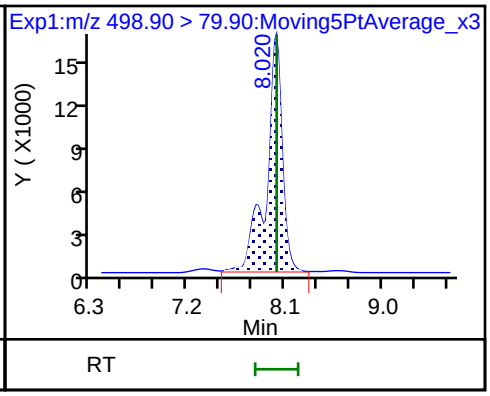
* 47 13C4 PFOS



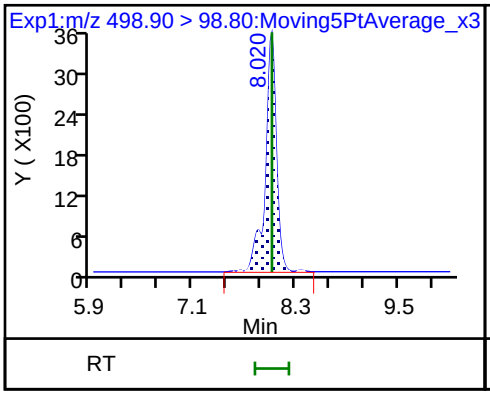
* 47 13C4 PFOS



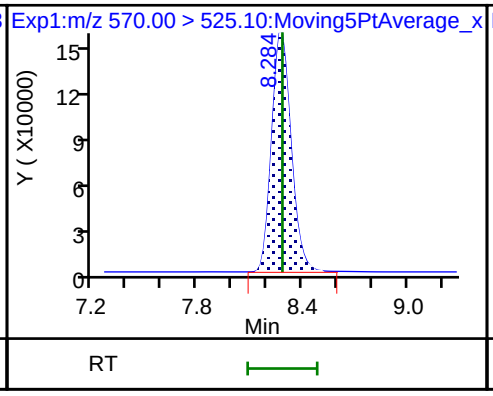
48 PFOS



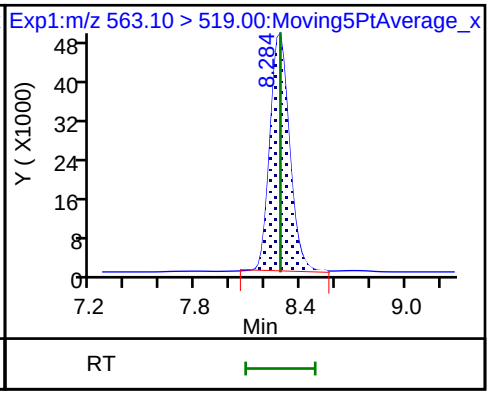
48 PFOS



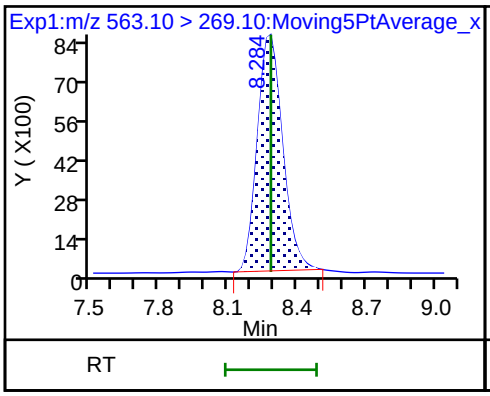
D 53 13C7 PFUnA



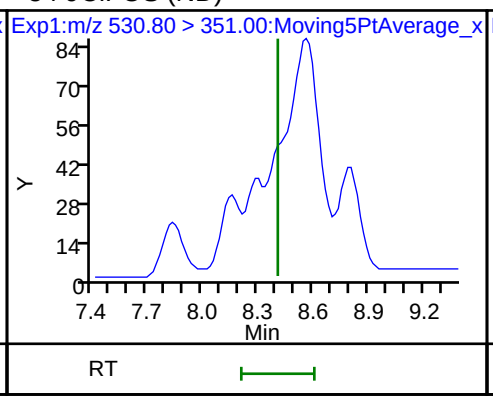
52 PFUnA



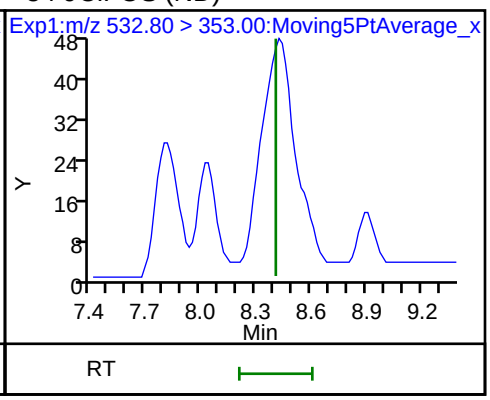
52 PFUnA



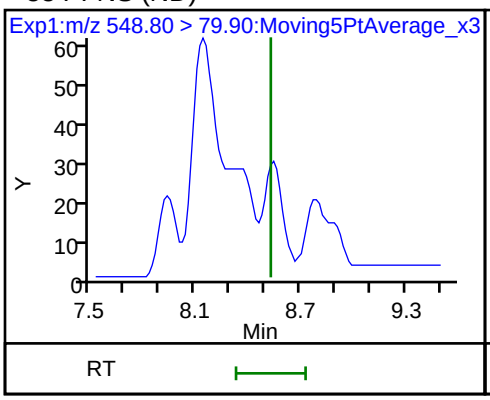
54 9ClFOS (ND)



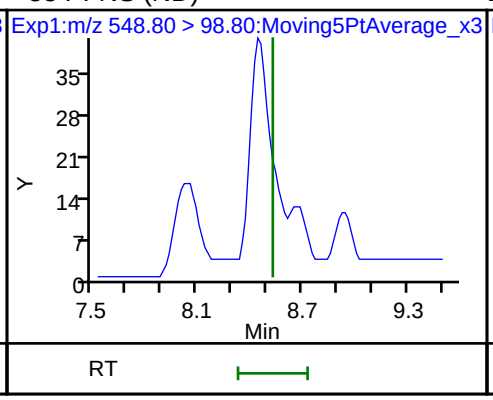
54 9ClFOS (ND)



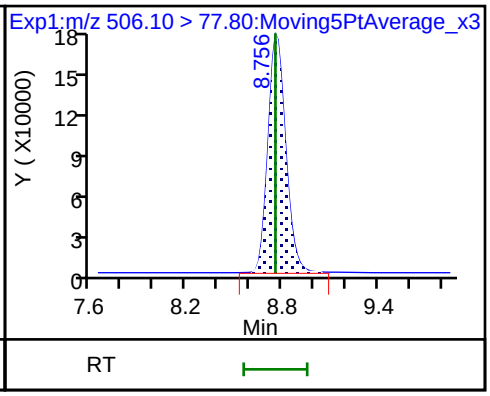
55 PFNS (ND)



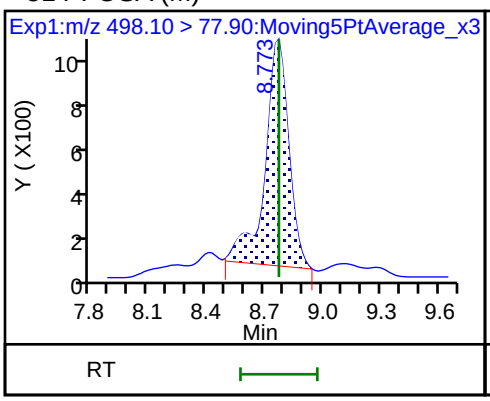
55 PFNS (ND)



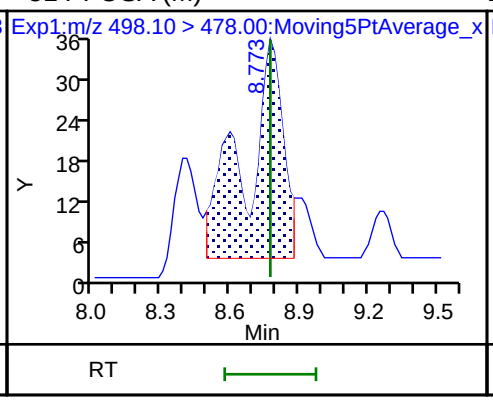
D 50 13C8 FOSA



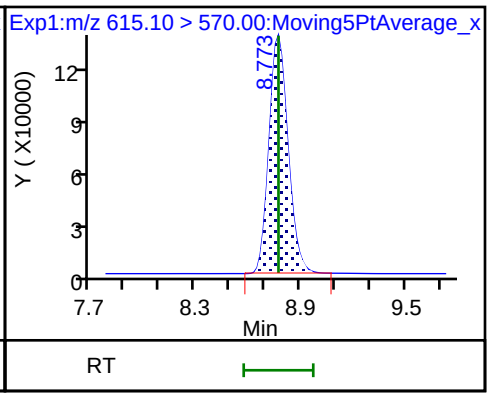
51 PFOSA (M)



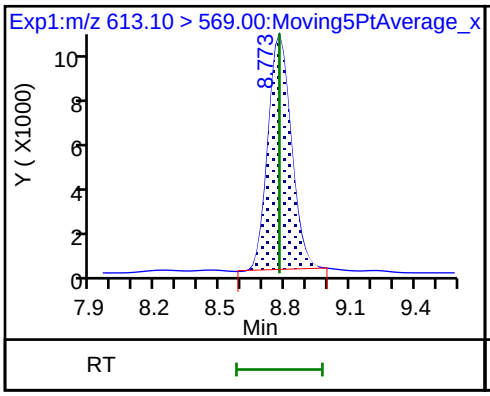
51 PFOSA (M)



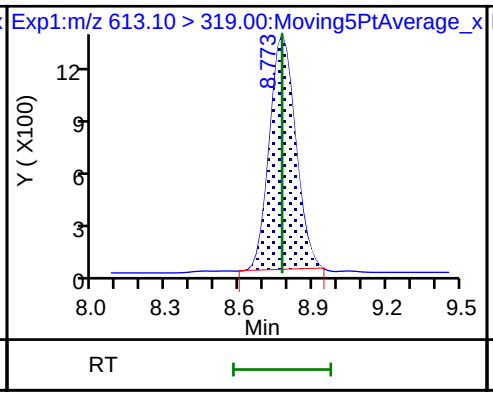
D 56 13C2 PFDoA



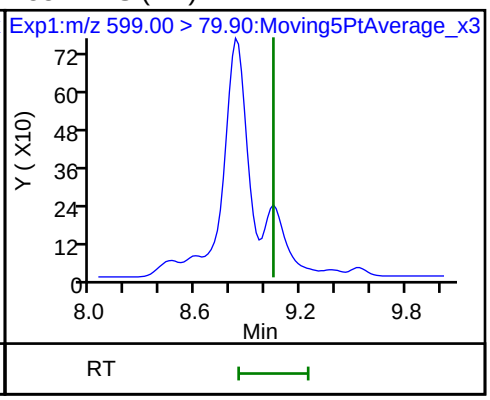
57 PFDoA



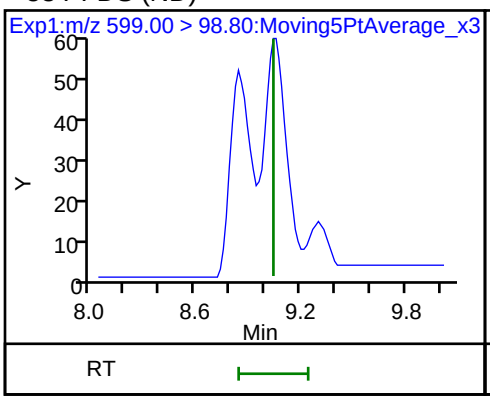
57 PFDoA



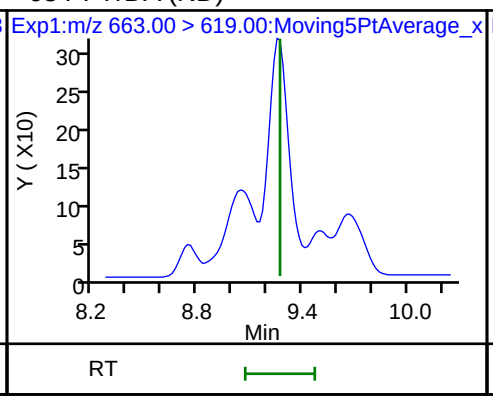
58 PFDS (ND)



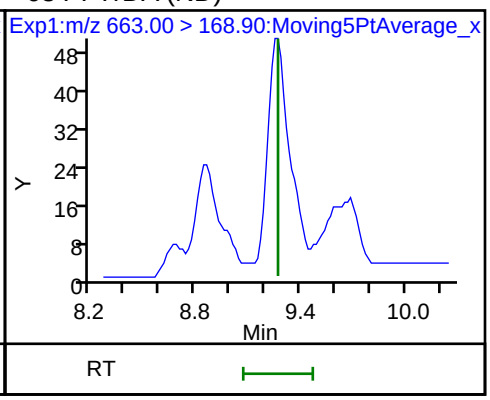
58 PFDS (ND)



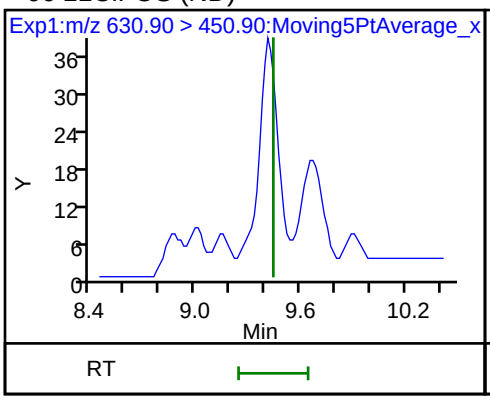
63 PFTrDA (ND)



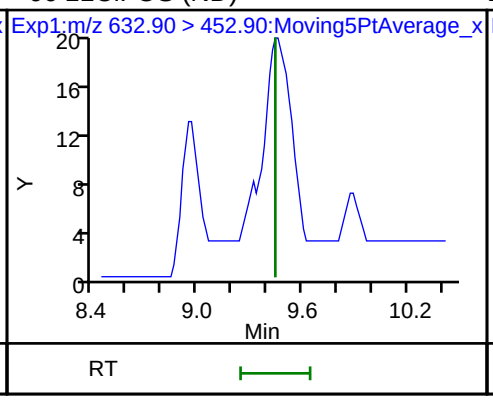
63 PFTrDA (ND)



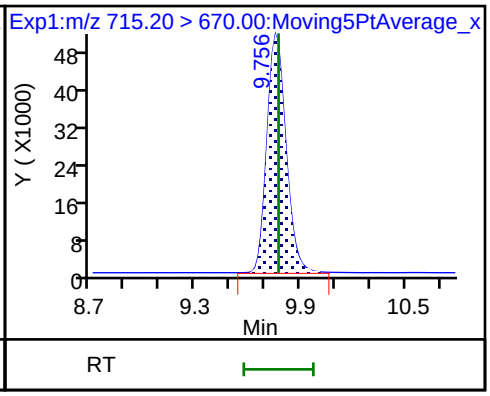
66 11ClFOS (ND)



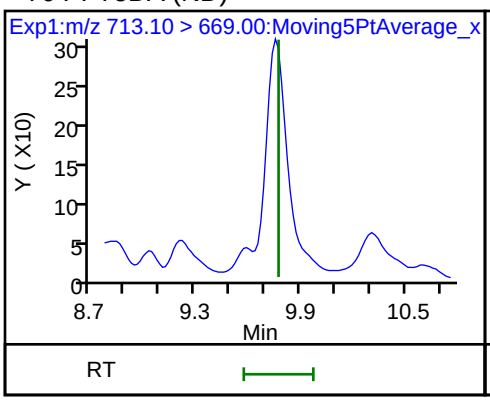
66 11ClFOS (ND)



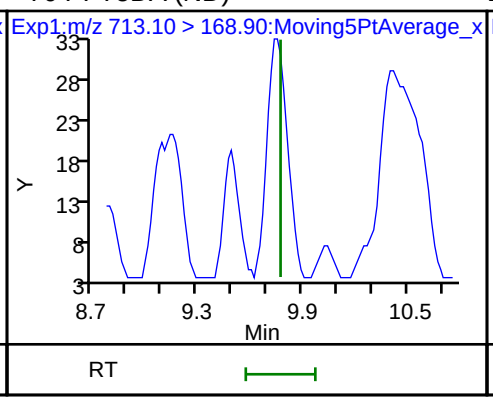
D 69 13C2 PFTeDA



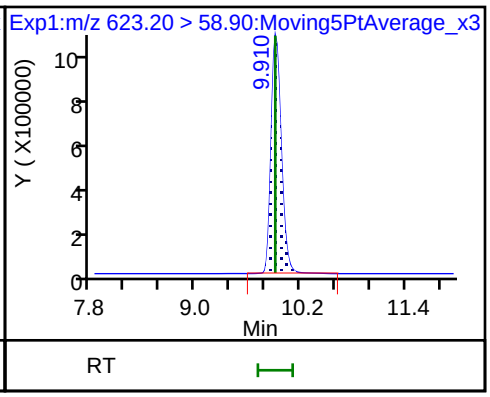
70 PFTeDA (ND)



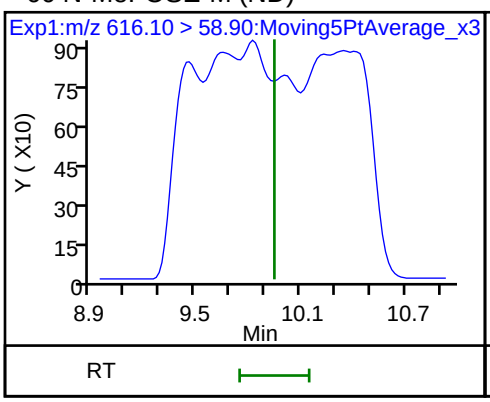
70 PFTeDA (ND)



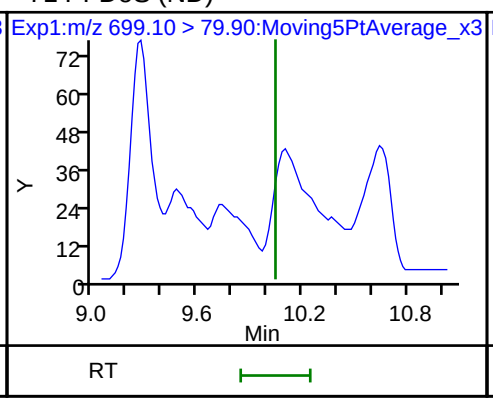
D 59 d7-N-Me-FOSE



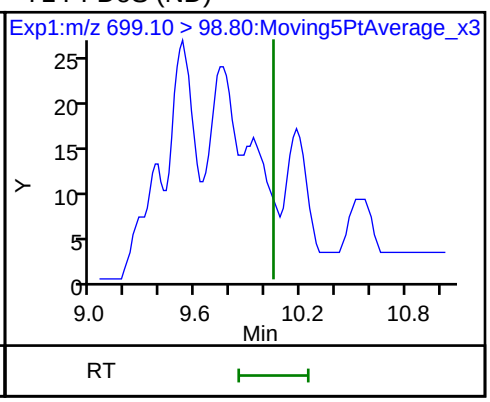
60 N-MeFOSE-M (ND)



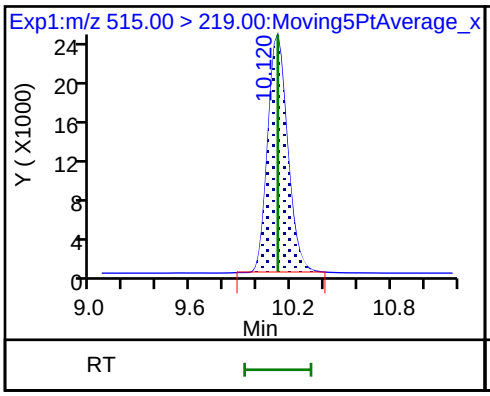
71 PFDoS (ND)



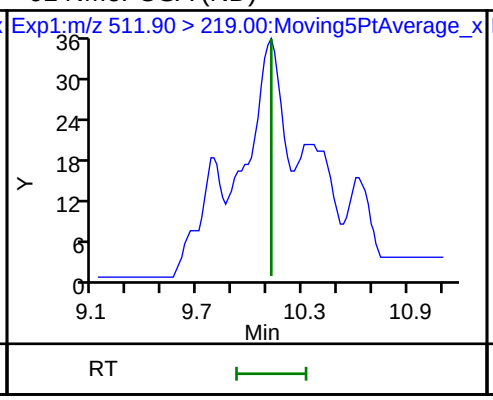
71 PFDoS (ND)



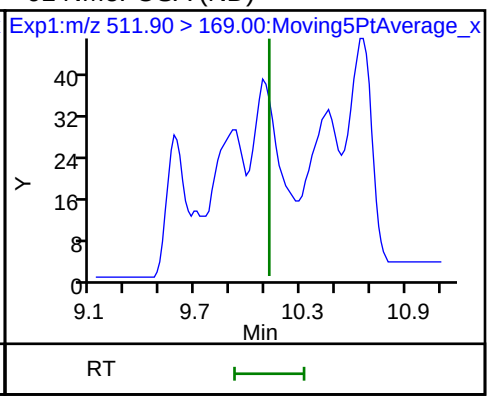
D 62 d3-NMePFOSA



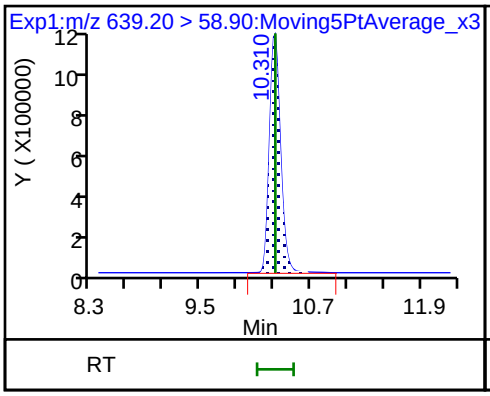
61 NMeFOSA (ND)



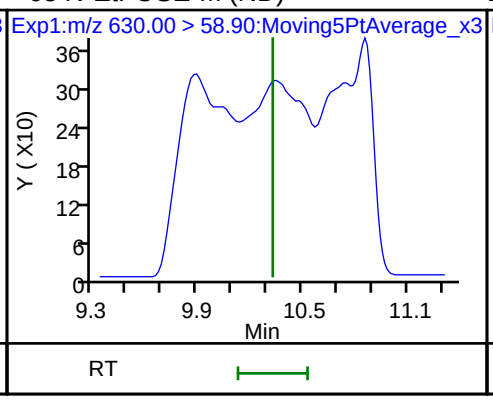
61 NMeFOSA (ND)



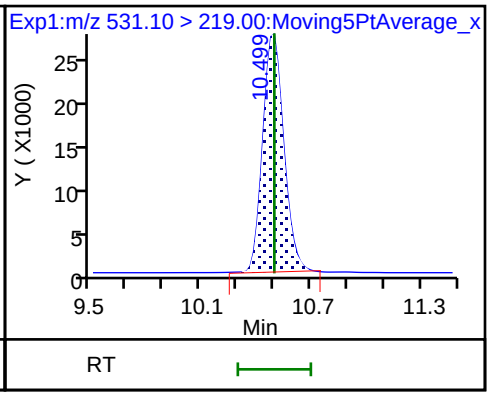
D 64 d9-N-EtFOSE



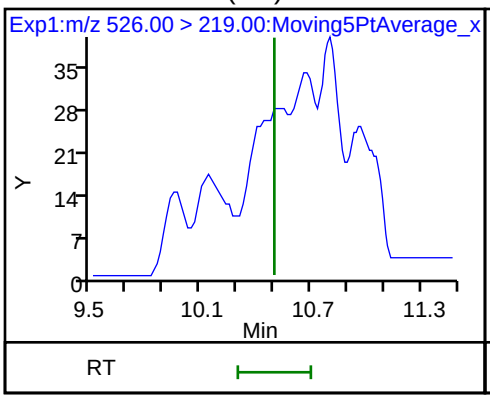
65 N-EtFOSE-M (ND)



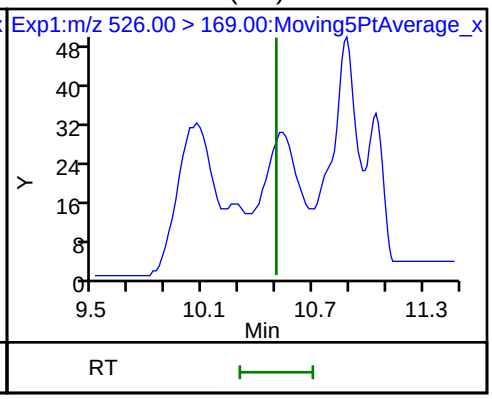
D 67 d5-NEtPFOSA



68 N-EtFOSA-M (ND)



68 N-EtFOSA-M (ND)



Manual Integration/User Assign Peak Report

Eurofins Denver

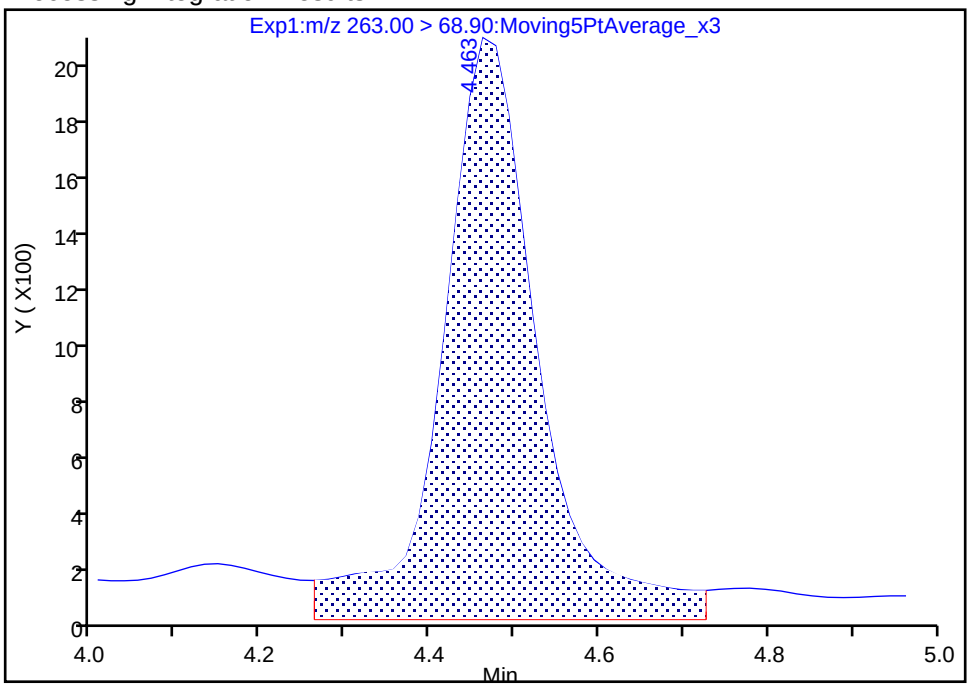
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Injection Date:	28-Nov-2023 16:24:29	Instrument ID:	LC_LCMS11		
Lims ID:	460-292594-B-2-A	Lab Sample ID:	280-292594-2		
Client ID:	DUP_111323				
Operator ID:	B5QN	ALS Bottle#:	13	Worklist Smp#:	15
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

6 PFPA, CAS: 2706-90-3

Signal: 2

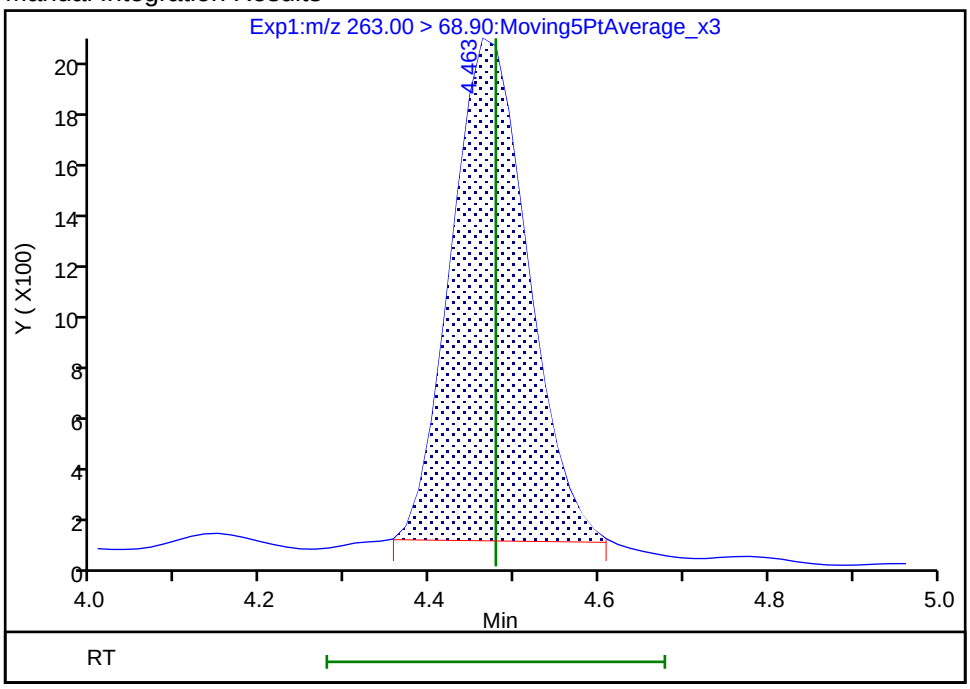
Processing Integration Results

RT: 4.46
Area: 16231
Amount: 5.314334
Amount Units: ng/ml



Manual Integration Results

RT: 4.46
Area: 11866
Amount: 5.314334
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 14:08:02 -07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins Denver

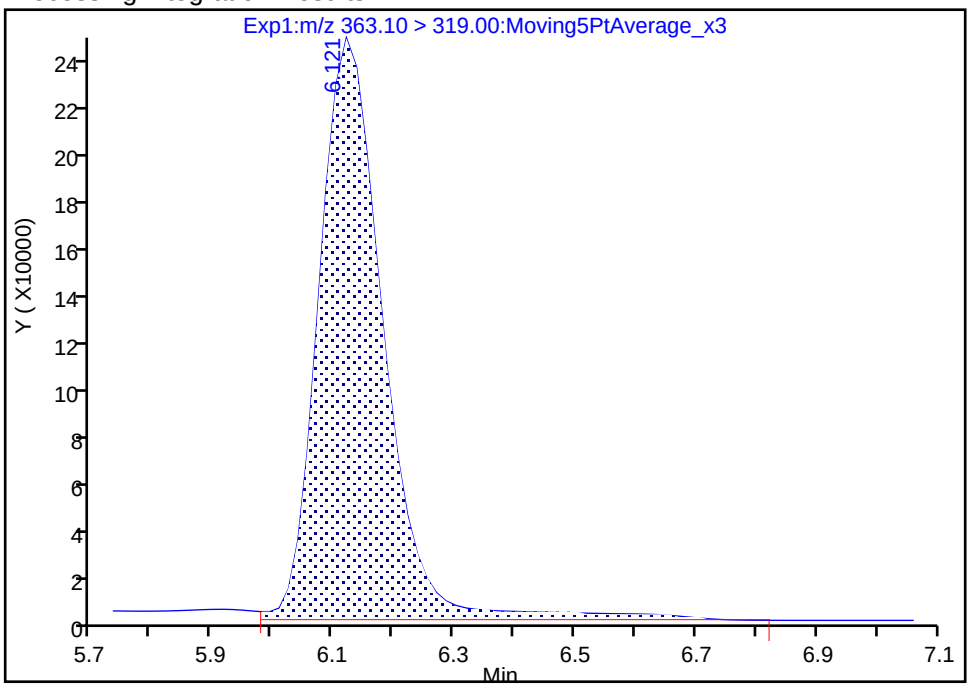
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Lims ID:	460-292594-B-2-A	Lab Sample ID:	280-292594-2		
Client ID:	DUP_111323				
Operator ID:	B5QN	ALS Bottle#:	13	Worklist Smp#:	15
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

17 PFHpA, CAS: 375-85-9

Signal: 1

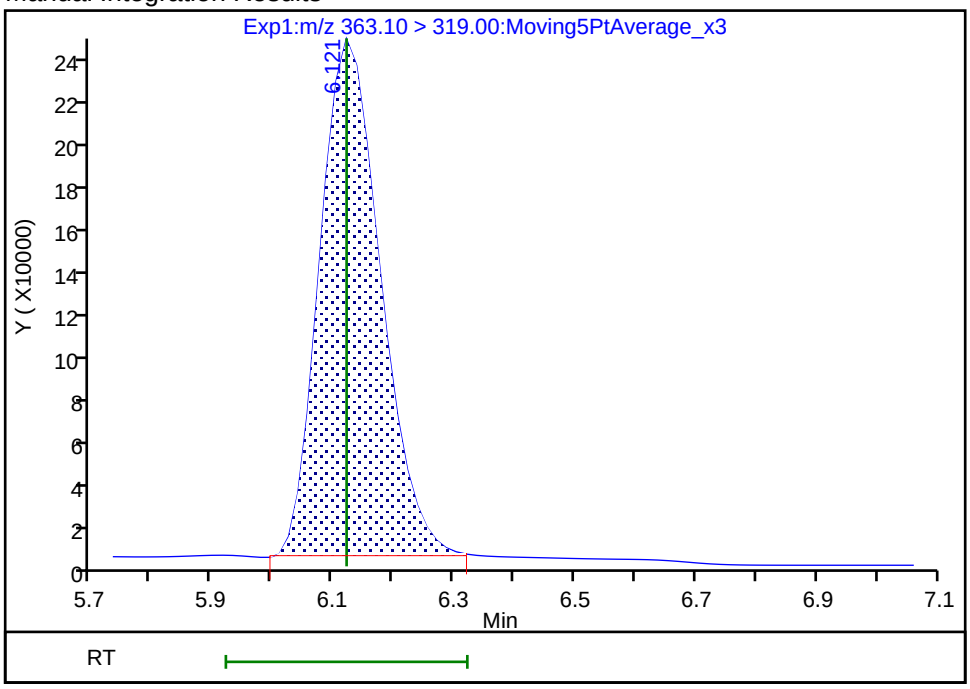
Processing Integration Results

RT: 6.12
Area: 1824416
Amount: 2.355050
Amount Units: ng/ml



Manual Integration Results

RT: 6.12
Area: 1664935
Amount: 2.149183
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 14:08:16 -07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

Eurofins Denver

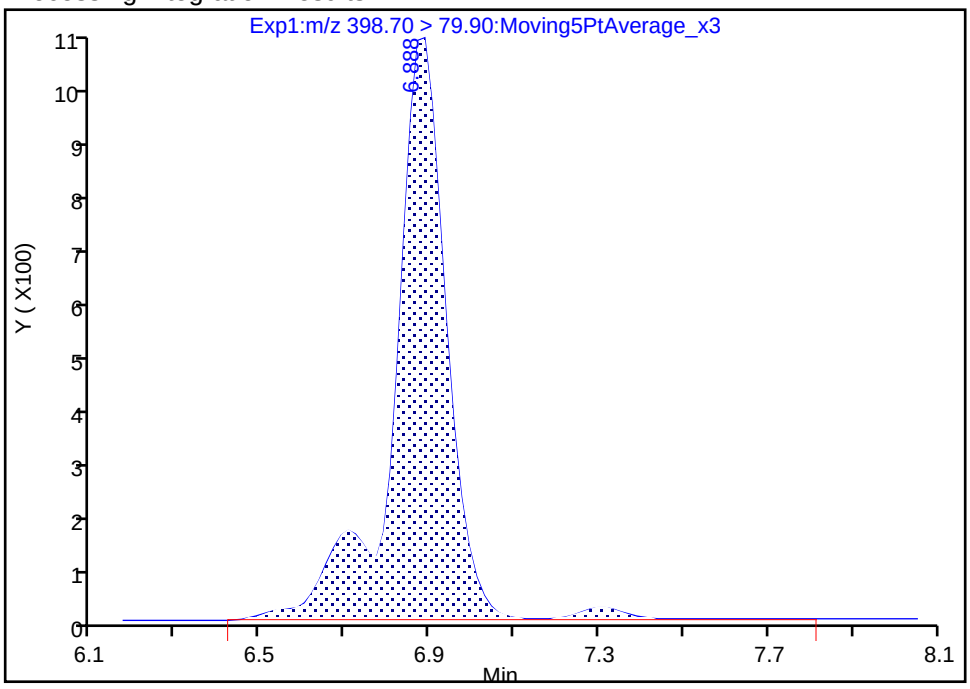
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Injection Date:	28-Nov-2023 16:24:29	Instrument ID:	LC_LCMS11		
Lims ID:	460-292594-B-2-A	Lab Sample ID:	280-292594-2		
Client ID:	DUP_111323				
Operator ID:	B5QN	ALS Bottle#:	13	Worklist Smp#:	15
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

32 PFHxS, CAS: 355-46-4

Signal: 1

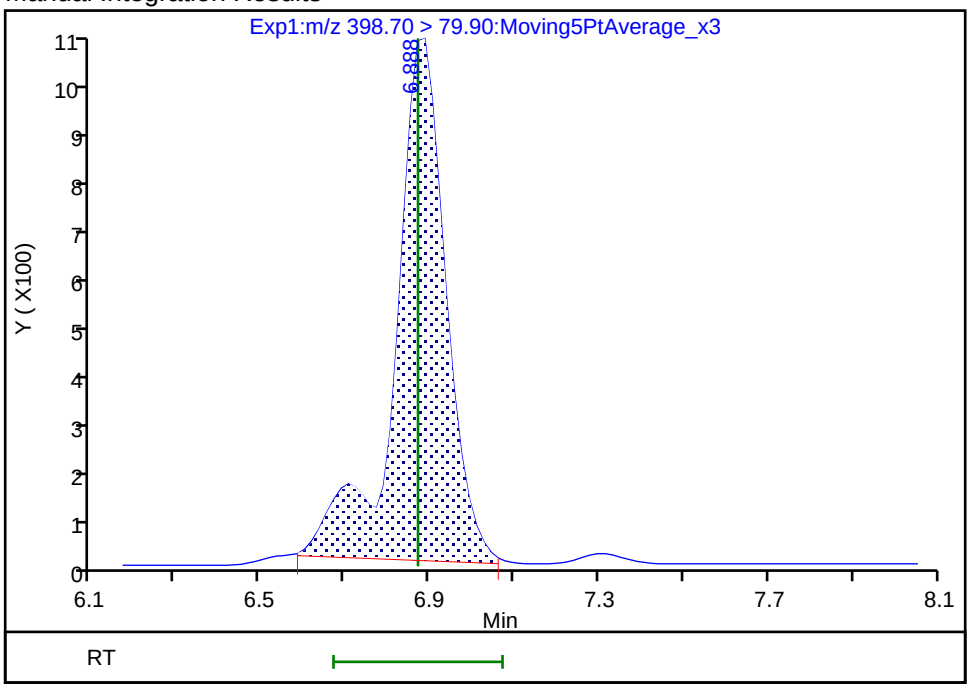
Processing Integration Results

RT: 6.89
Area: 9683
Amount: 0.082355
Amount Units: ng/ml



Manual Integration Results

RT: 6.89
Area: 9106
Amount: 0.077447
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 14:08:29 -07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

Eurofins Denver

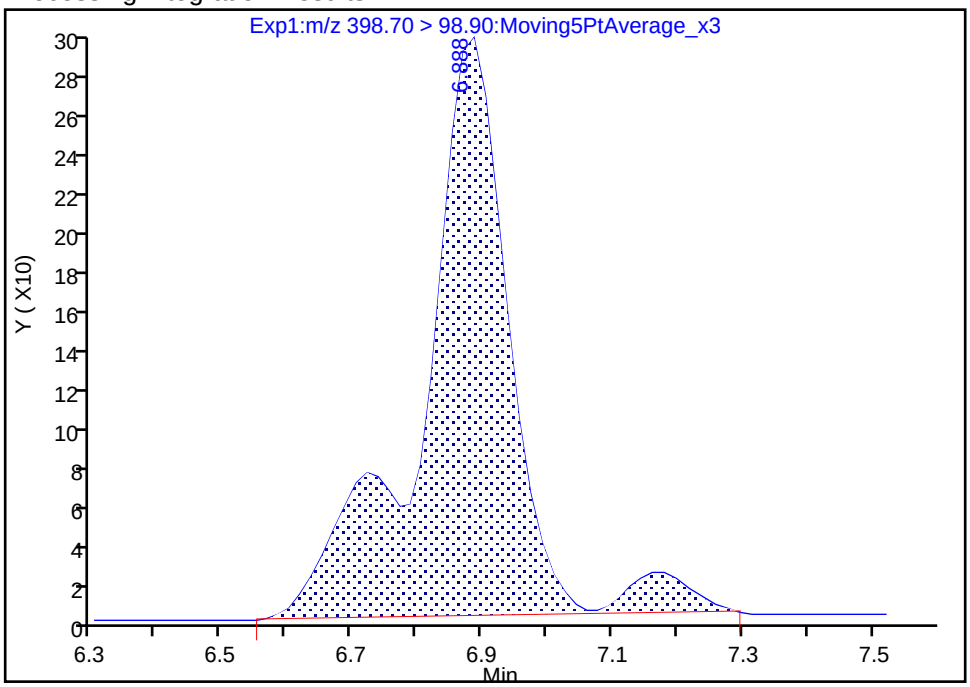
Data File:	\\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.019.d				
Injection Date:	28-Nov-2023 16:24:29	Instrument ID:	LC_LCMS11		
Lims ID:	460-292594-B-2-A	Lab Sample ID:	280-292594-2		
Client ID:	DUP_111323				
Operator ID:	B5QN	ALS Bottle#:	13	Worklist Smp#:	15
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

32 PFHxS, CAS: 355-46-4

Signal: 2

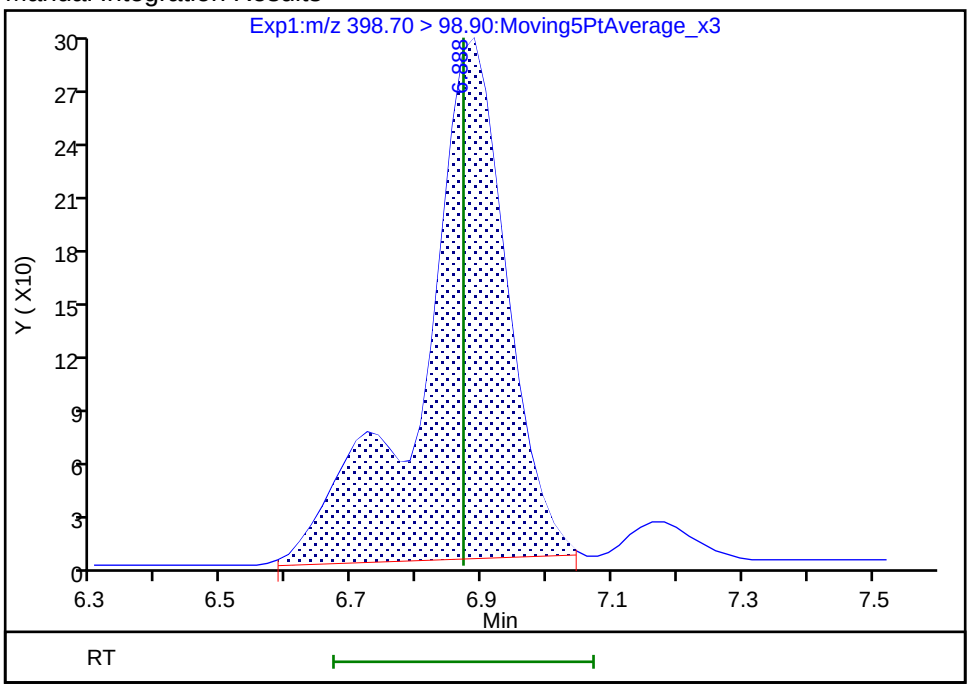
Processing Integration Results

RT: 6.89
Area: 2801
Amount: 0.082355
Amount Units: ng/ml



Manual Integration Results

RT: 6.89
Area: 2605
Amount: 0.077447
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 14:08:34 -07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Peak Tail

Eurofins Denver

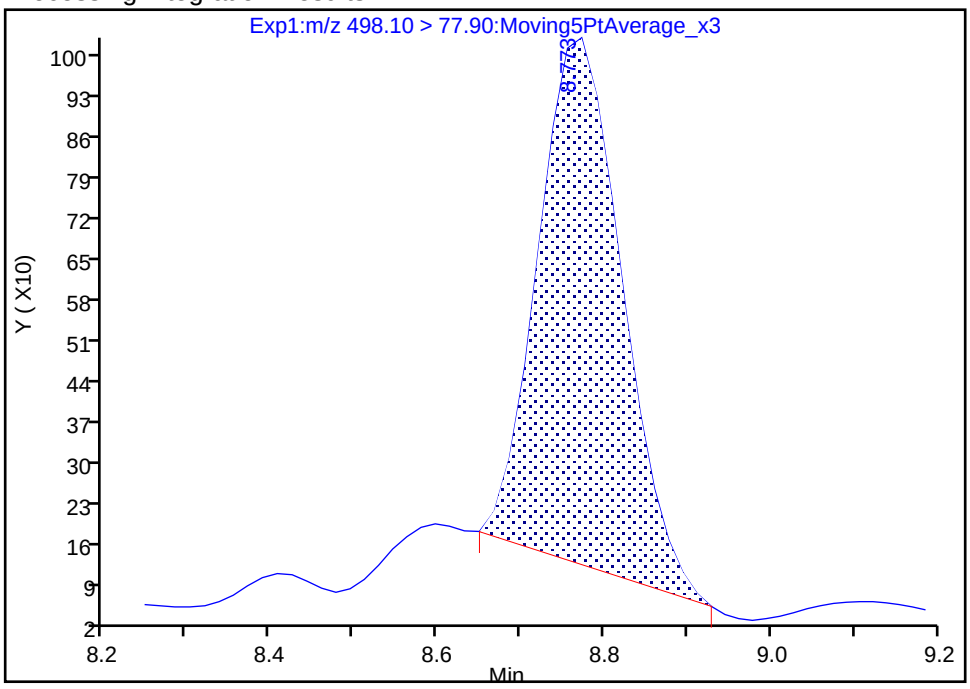
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Injection Date:	28-Nov-2023 16:24:29	Instrument ID:	LC_LCMS11		
Lims ID:	460-292594-B-2-A	Lab Sample ID:	280-292594-2		
Client ID:	DUP_111323				
Operator ID:	B5QN	ALS Bottle#:	13	Worklist Smp#:	15
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

51 PFOSA, CAS: 754-91-6

Signal: 1

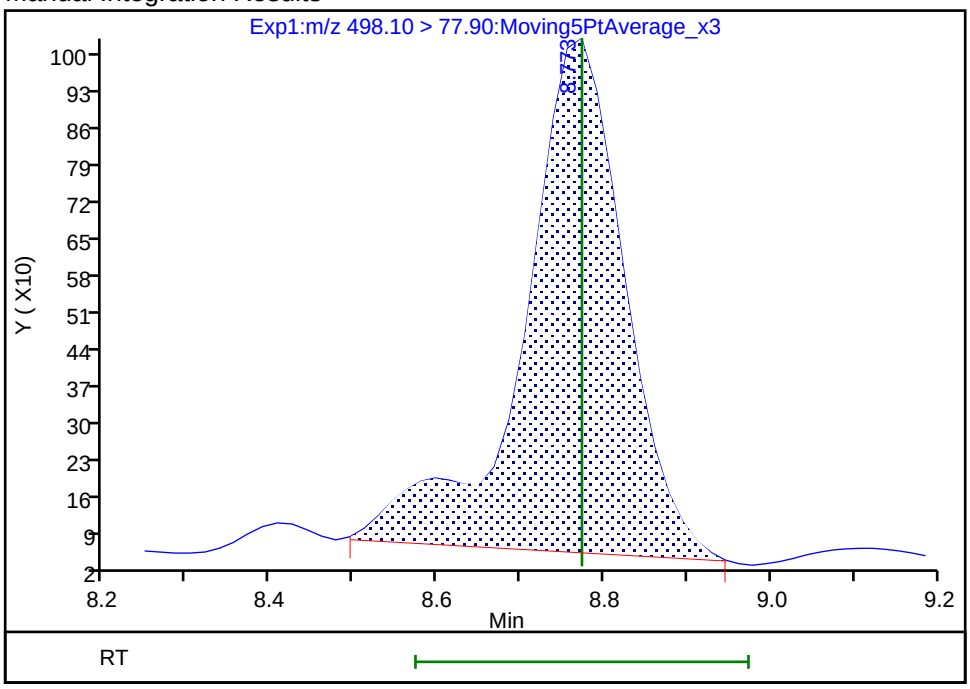
Processing Integration Results

RT: 8.77
Area: 6312
Amount: 0.012003
Amount Units: ng/ml



Manual Integration Results

RT: 8.77
Area: 8230
Amount: 0.015651
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 14:08:51 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

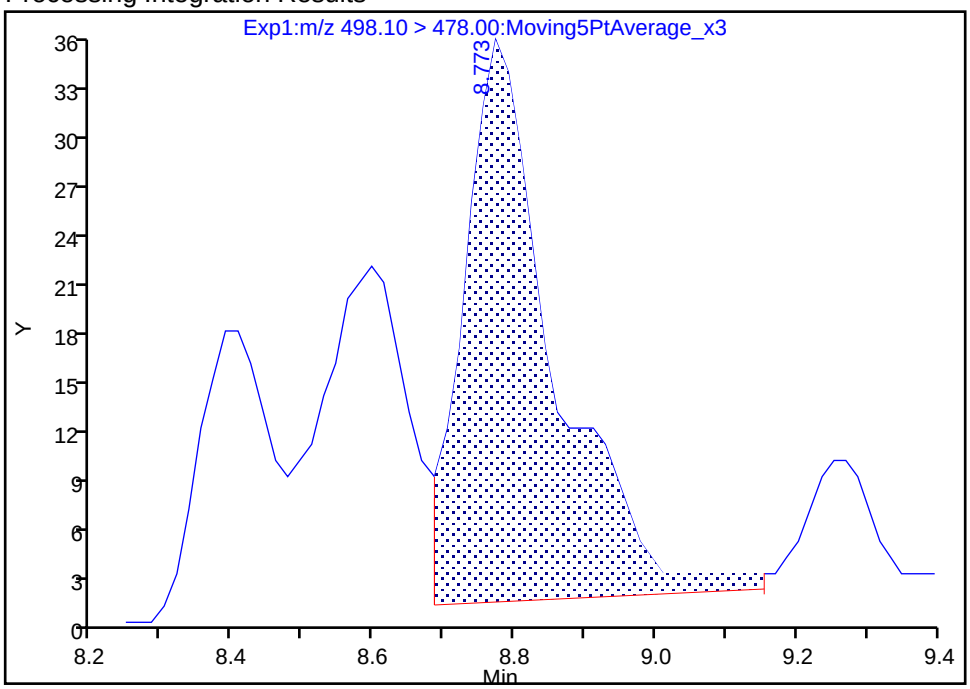
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Injection Date:	28-Nov-2023 16:24:29	Instrument ID:	LC_LCMS11		
Lims ID:	460-292594-B-2-A	Lab Sample ID:	280-292594-2		
Client ID:	DUP_111323				
Operator ID:	B5QN	ALS Bottle#:	13	Worklist Smp#:	15
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

51 PFOSA, CAS: 754-91-6

Signal: 2

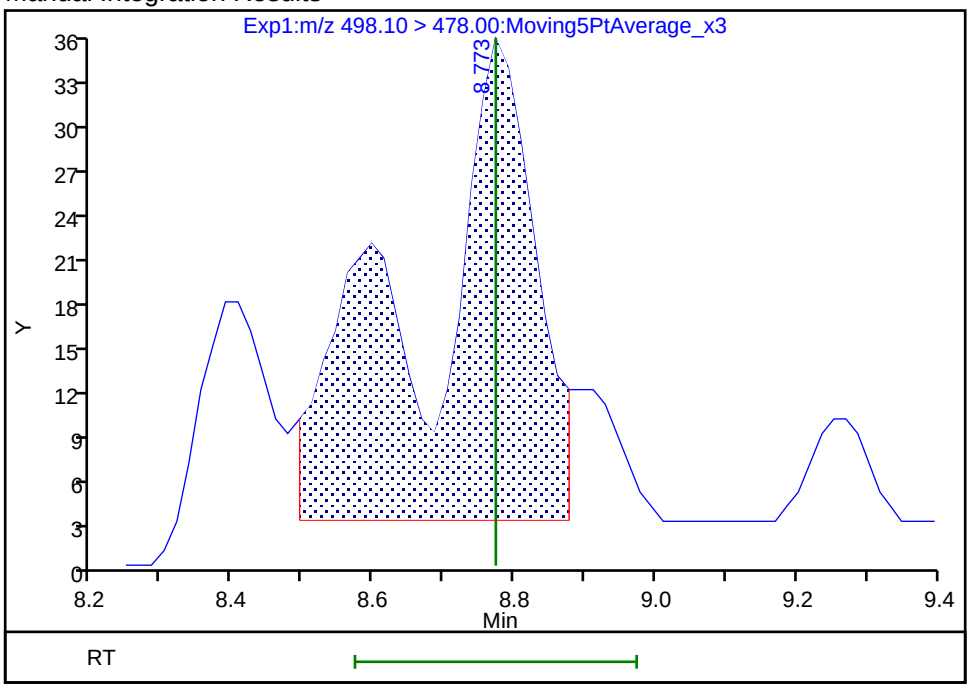
Processing Integration Results

RT: 8.77
Area: 311
Amount: 0.012003
Amount Units: ng/ml



Manual Integration Results

RT: 8.77
Area: 372
Amount: 0.015651
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 14:09:17 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: WCF-10 | Lab Sample ID: 460-292594-3

Matrix: Water | Lab File ID: 2023.11.28a.020.d

Analysis Method: Draft 1633 | Date Collected: 11/13/2023 12:00

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 556.9(mL) | Date Analyzed: 11/28/2023 16:43

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	13.0		7.18	1.80
2706-90-3	Perfluoropentanoic acid (PFPeA)	34.5		3.59	0.90
307-24-4	Perfluorohexanoic acid (PFHxA)	36.5		1.80	0.45
375-85-9	Perfluoroheptanoic acid (PFHpA)	14.7		1.80	0.47
335-67-1	Perfluorooctanoic acid (PFOA)	25.0		1.80	0.57
375-95-1	Perfluorononanoic acid (PFNA)	5.24		1.80	0.45
335-76-2	Perfluorodecanoic acid (PFDA)	7.50		1.80	0.45
2058-94-8	Perfluoroundecanoic acid (PFUnA)	3.41		1.80	0.45
307-55-1	Perfluorododecanoic acid (PFDoA)	2.20		1.80	0.45
72629-94-8	Perfluorotridecanoic acid (PFTriA)	1.80	U	1.80	0.45
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	1.80	U	1.80	0.45
375-73-5	Perfluorobutanesulfonic acid (PFBS)	5.09		1.80	0.27
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	1.80	U	1.80	0.45
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.03	J	1.80	0.51
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	1.80	U	1.80	0.36
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.43		1.80	0.45
68259-12-1	Perfluorononanesulfonic acid (PFNS)	1.80	U	1.80	0.36
335-77-3	Perfluorodecanesulfonic acid (PFDS)	1.80	U	1.80	0.45
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	1.80	U	1.80	0.81
757124-72-4	4:2 FTS	7.18	U	7.18	1.53
27619-97-2	6:2 FTS	7.18	U	7.18	2.24
39108-34-4	8:2 FTS	7.18	U	7.18	2.33
754-91-6	Perfluorooctanesulfonamide (PFOSA)	1.80	U	1.80	0.45
31506-32-8	NMeFOSA	1.80	U	1.80	0.45
4151-50-2	NEtFOSA	1.80	U	1.80	0.45
2355-31-9	NMeFOSAA	3.59	U	3.59	1.08
2991-50-6	NEtFOSAA	1.80	U	1.80	0.63
24448-09-7	NMeFOSE	18.0	U	18.0	4.49
1691-99-2	NEtFOSE	18.0	U	18.0	4.49
13252-13-6	HFPO-DA (GenX)	7.18	U	7.18	1.80

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: WCF-10 | Lab Sample ID: 460-292594-3

Matrix: Water | Lab File ID: 2023.11.28a.020.d

Analysis Method: Draft 1633 | Date Collected: 11/13/2023 12:00

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 556.9(mL) | Date Analyzed: 11/28/2023 16:43

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	7.18	U	7.18	1.35
863090-89-5	PFMBA	3.59	U	3.59	0.90
151772-58-6	NFDHA	3.59	U	3.59	0.90
377-73-1	PFMPA	3.59	U	3.59	0.45
756426-58-1	9Cl-PF3ONS	7.18	U	7.18	0.90
763051-92-9	11Cl-PF3OUdS	7.18	U	7.18	1.80
113507-82-7	PFEESA	3.59	U	3.59	0.45
356-02-5	3:3 FTCA	8.98	U	8.98	1.35
914637-49-3	5:3 FTCA	44.9	U	44.9	8.98
812-70-4	7:3 FTCA	44.9	U	44.9	8.98

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: WCF-10 | Lab Sample ID: 460-292594-3

Matrix: Water | Lab File ID: 2023.11.28a.020.d

Analysis Method: Draft 1633 | Date Collected: 11/13/2023 12:00

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 556.9(mL) | Date Analyzed: 11/28/2023 16:43

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	102		10-130
STL01893	13C5 PFPeA	93		35-150
STL02577	13C5 PFHxA	101		55-150
STL01892	13C4 PFHpA	96		55-150
STL01052	13C8 PFOA	104		60-140
STL02578	13C9 PFNA	107		55-140
STL02579	13C6 PFDA	112		50-140
STL02580	13C7 PFUnA	105		30-140
STL00998	13C2 PFDoA	95		10-150
STL02116	13C2 PFTeDA	82		10-130
STL02337	13C3 PFBS	100		55-150
STL02581	13C3 PFHxS	102		55-150
STL01054	13C8 PFOS	97		45-140
STL01056	13C8 FOSA	110		30-130
STL02118	d3-NMeFOSAA	93		45-200
STL02117	d5-NEtFOSAA	92		10-200
STL02395	M2-4:2 FTS	168		60-200
STL02279	M2-6:2 FTS	134		60-200
STL02280	M2-8:2 FTS	113		50-200
STL02255	13C3 HFPO-DA	111		25-160
STL02277	d7-N-MeFOSE-M	98		10-150
STL02278	d9-N-EtFOSE-M	95		10-150
STL02704	d5-NEtPFOSA	82		10-130
STL02705	d3-NMePFOSA	72		15-130

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.020.d
Lims ID: 460-292594-B-3-A
Client ID: WCF-10
Sample Type: Client
Inject. Date: 28-Nov-2023 16:43:57 ALS Bottle#: 14 Worklist Smp#: 16
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: 460-292594-B-3-A
Misc. Info.: Plate: 1 Rack: 1
Operator ID: B5QN Instrument ID: LC_LCMS11

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 29-Nov-2023 14:10:42 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1603

First Level Reviewer: B5QN Date: 29-Nov-2023 14:10:48
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.031	3.046	-0.015	0.995	5218284	10.2		102	36717	
* 1 13C3PFBA										
216.00 > 172.00	3.046	3.046	0.0		2525703	5.00			5464	
2 PFBA										M
212.80 > 168.90	3.046	3.046	0.0	1.005	676108	1.45			403	M
D 7 13C5 PFPeA										
268.30 > 223.00	4.463	4.463	0.0	0.834	1613606	4.66		93.3	9215	
6 PFPA										M
263.00 > 219.00	4.463	4.478	-0.015	1.000	2484701	3.84	Target=212.56		469	
263.00 > 68.90	4.463	4.478	-0.015	1.000	9105		272.89(106.28-318.84)		85.6	M
D 9 13C2-4:2FTS										
329.10 > 80.90	5.097	5.097	0.0	0.742	377073	7.83	Target=4.54	168	1020	
329.10 > 309.00	5.097	5.097	0.0	0.742	71865		5.25(2.27-6.81)	168	3049	
D 16 13C3 PFBS										
302.10 > 79.90	5.353	5.354	-0.001	0.779	635204	2.32	Target=4.56	99.7	5897	
302.10 > 98.90	5.353	5.354	-0.001	0.779	137901		4.61(2.28-6.83)	99.7	5978	
15 PFBS										
298.70 > 79.90	5.353	5.354	-0.001	1.000	137973	0.5673	Target=2.16		1003	
298.70 > 98.80	5.353	5.354	-0.001	1.000	58622		2.35(1.08-3.24)		1100	
* 14 13C2 PFHxA										
315.10 > 270.00	5.353	5.371	-0.018		1735935	2.50	Target=79.67		20868	
315.10 > 119.40	5.335	5.371	-0.036		22094		78.57(39.83-119.50)		360	
D 12 13C5 PFHxA										
318.00 > 273.00	5.353	5.371	-0.018	1.000	1955730	2.51	Target=53.27	101	21426	
318.00 > 120.30	5.353	5.371	-0.018	1.000	35260		55.47(26.63-79.90)	101	937	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 PFHxA										
313.00 > 269.00	5.353	5.371	-0.018	1.000	3506342	4.07	Target=18.64		1108	
313.00 > 118.90	5.353	5.371	-0.018	1.000	180129		19.47(9.32-27.96)		3403	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.682	5.682	0.0	1.061	2109344	11.1	Target=1.53	111	26795	
286.90 > 184.90	5.682	5.682	0.0	1.061	1097201		1.92(0.76-2.29)	111	12734	
19 HFPO-DA										
284.90 > 168.90	5.682	5.682	0.0	1.000	19903	0.0876	Target=1.75		642	
284.90 > 184.90	5.663	5.682	-0.019	0.997	15541		1.28(0.87-2.62)		132	
D 22 13C4 PFHpA										
367.10 > 322.00	6.121	6.122	-0.001	1.143	1957609	2.40		96.1	39497	
17 PFHpA										
363.10 > 319.00	6.121	6.122	-0.001	1.000	1261046	1.64	Target=3.96		975	
363.10 > 169.00	6.121	6.122	-0.001	1.000	305083		4.13(1.98-5.95)		3332	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.470	6.471	-0.001	0.942	399836	6.36	Target=4.15	134	4381	
429.10 > 409.00	6.470	6.471	-0.001	0.942	84436		4.74(2.07-6.22)	134	4059	
D 27 13C8 PFOA										
421.10 > 376.00	6.707	6.707	0.0	1.000	1733169	2.61		104	30061	
* 29 13C4 PFOA										
417.10 > 172.00	6.707	6.707	0.0		254006	2.50			7070	
28 PFOA										
413.00 > 369.00	6.707	6.724	-0.017	1.000	1542722	2.79	Target=2.30		1743	
413.00 > 169.00	6.707	6.724	-0.017	1.000	571208		2.70(1.15-3.45)		9715	
32 PFHxS										
398.70 > 79.90	6.871	6.871	0.0	1.000	13630	0.1152	Target=3.86		502	
398.70 > 98.90	6.871	6.871	0.0	1.000	2480		5.50(1.93-5.79)		105	
* 31 18O2 PFHxS										
403.00 > 83.90	6.871	6.871	0.0		506234	2.37			17565	
D 33 13C3 PFHxS										
402.10 > 79.90	6.871	6.888	-0.017	1.000	525867	2.42	Target=4.11	102	7283	
402.10 > 98.80	6.871	6.888	-0.017	1.000	136035		3.87(2.05-6.16)	102	6319	
* 35 13C5 PFNA										
468.00 > 423.00	7.259	7.261	-0.002		1191908	1.25			16513	
D 34 13C9 PFNA										
472.10 > 427.00	7.259	7.261	-0.002	1.000	1203064	1.33		107	24979	
36 PFNA										
463.00 > 419.00	7.259	7.261	-0.002	1.000	564247	0.5838	Target=6.02		2056	
463.00 > 219.00	7.259	7.261	-0.002	1.000	86520		6.52(3.01-9.04)		2147	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.522	7.522	0.0	1.095	412942	5.42	Target=5.49	113	6469	
529.10 > 509.00	7.522	7.522	0.0	1.095	60385		6.84(2.74-8.23)	113	2862	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.743	7.761	-0.018	0.967	455656	4.63		92.5	12177	
D 40 13C6 PFDA										
519.10 > 474.10	7.779	7.779	0.0	1.000	1145358	1.40		112	21945	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
43 PFDA										
512.90 > 469.00	7.779	7.779	0.0	1.000	628927	0.8353	Target=3.33		6506	
512.90 > 219.00	7.779	7.779	0.0	1.000	154659		4.07(1.67-5.00)		3502	
* 44 13C2 PFDA										
515.10 > 470.10	7.779	7.779	0.0		1031570	1.25			19768	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.951	7.969	-0.018	0.993	524843	4.60		92.1	6990	
D 49 13C8 PFOS										
507.10 > 79.90	8.004	8.021	-0.017	1.000	244648	2.32	Target=2.95	97.3	3677	
507.10 > 98.90	8.004	8.021	-0.017	1.000	82042		2.98(1.47-4.42)	97.3	3654	
* 47 13C4 PFOS										
502.80 > 79.90	8.004	8.021	-0.017		701778	2.40	Target=3.78		7830	
502.80 > 98.90	8.004	8.021	-0.017		173640		4.04(1.89-5.67)		5817	
48 PFOS										M
498.90 > 79.90	8.021	8.021	0.0	1.002	90384	0.2710	Target=4.86		369	M
498.90 > 98.80	8.021	8.021	0.0	1.002	19358		4.67(2.43-7.28)		533	M
D 53 13C7 PFUnA										
570.00 > 525.10	8.266	8.285	-0.018	1.063	1195561	1.31		105	25796	
52 PFUnA										
563.10 > 519.00	8.285	8.285	0.001	1.002	321263	0.3796	Target=5.72		2959	
563.10 > 269.10	8.285	8.285	0.001	1.002	59109		5.44(2.86-8.59)		1925	
D 50 13C8 FOSA										
506.10 > 77.80	8.756	8.756	0.0	1.094	1402132	2.75		110	14012	
D 56 13C2 PFDoA										
615.10 > 570.00	8.773	8.773	0.0	1.128	1073762	1.19		95.1	20170	
57 PFDoA										
613.10 > 569.00	8.773	8.773	0.0	1.000	211113	0.2446	Target=7.45		2168	
613.10 > 319.00	8.773	8.773	0.0	1.000	25478		8.29(3.73-11.18)		1155	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.756	9.774	-0.018	1.254	439010	1.02		81.7	11595	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.910	9.910	0.0	1.238	9180686	24.5		98.1	49138	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.120	10.120	0.0	1.264	208054	1.80		72.1	3593	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.310	10.310	0.0	1.288	11138489	23.9		95.4	82860	
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.481	10.500	-0.019	1.309	242551	2.05		81.9	3795	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

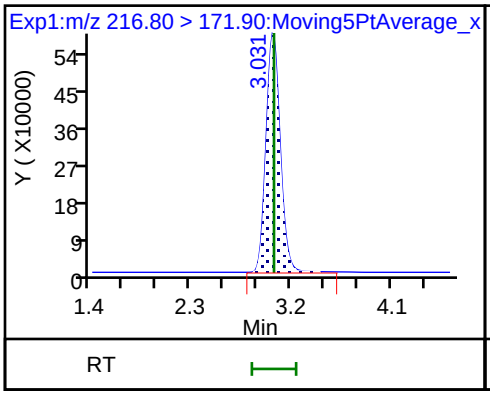
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Eurofins Denver

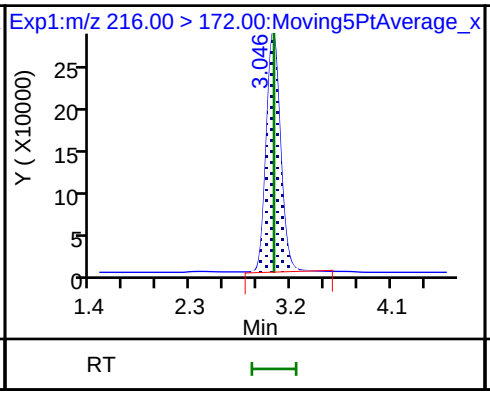
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Injection Date:	28-Nov-2023 16:43:57	Instrument ID:	LC_LCMS11		
Lims ID:	460-292594-B-3-A	Lab Sample ID:	280-292594-3		
Client ID:	WCF-10				
Operator ID:	B5QN	ALS Bottle#:	14	Worklist Smp#:	16
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		

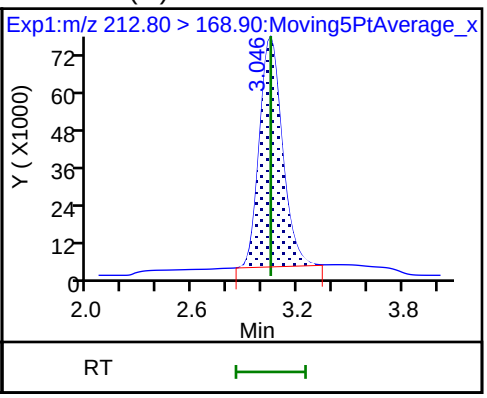
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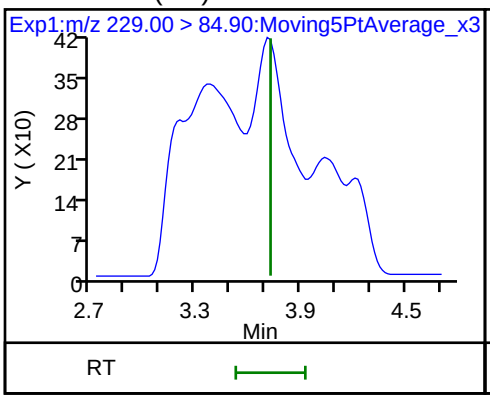
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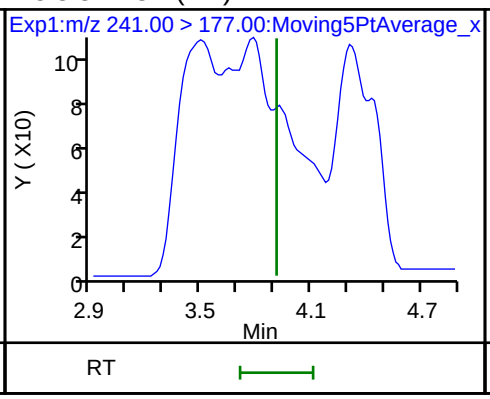
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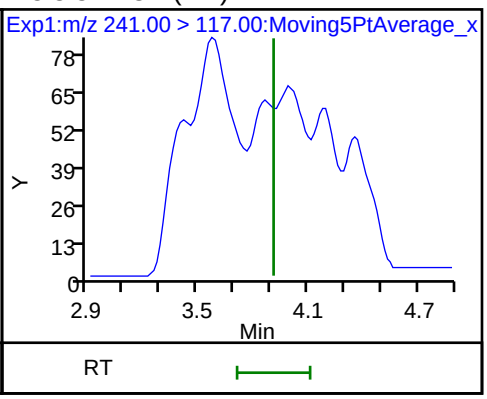
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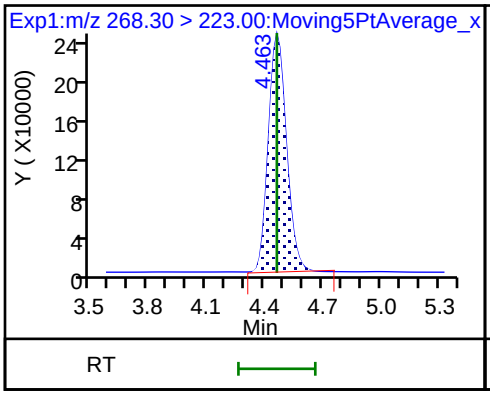
5 3:3 FTCA (ND)



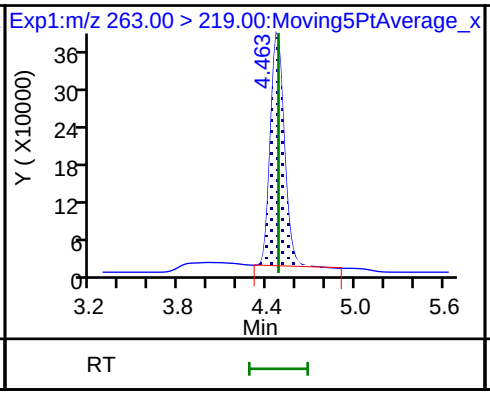
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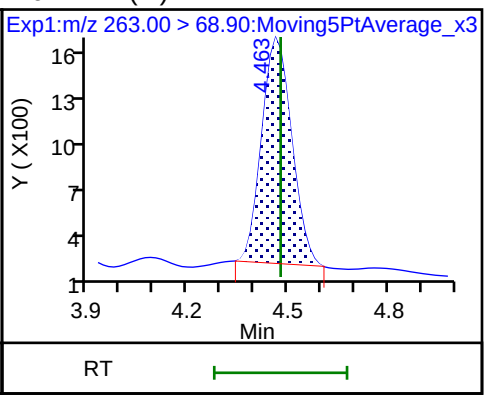
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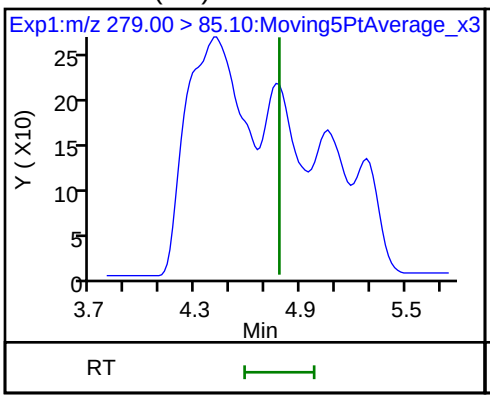
6 PFPA



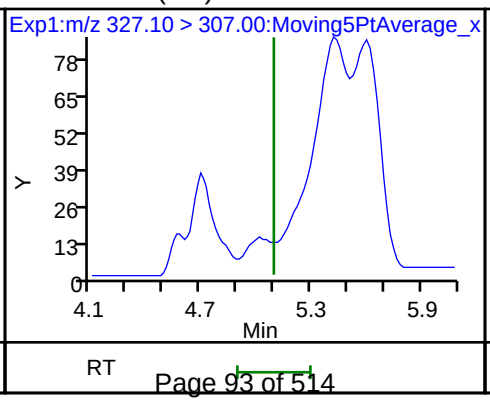
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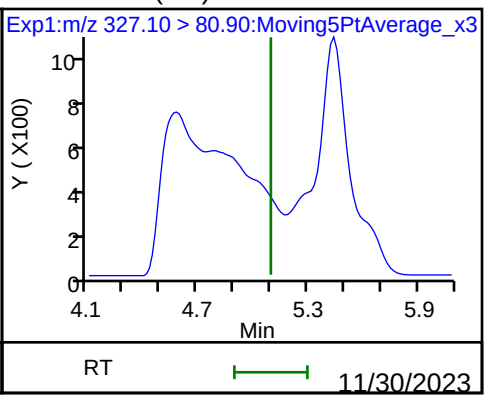
8 PFMBA (ND)



10 4:2FTS (ND)

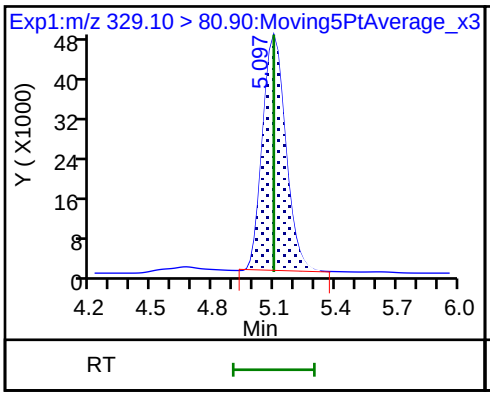


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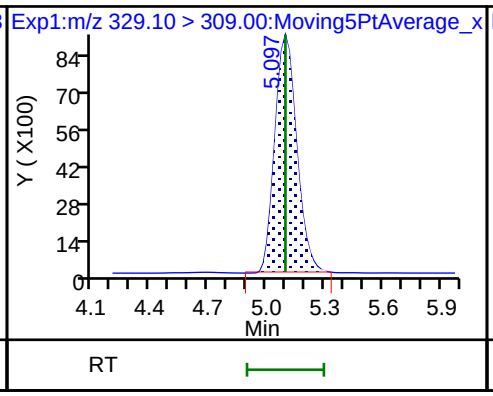


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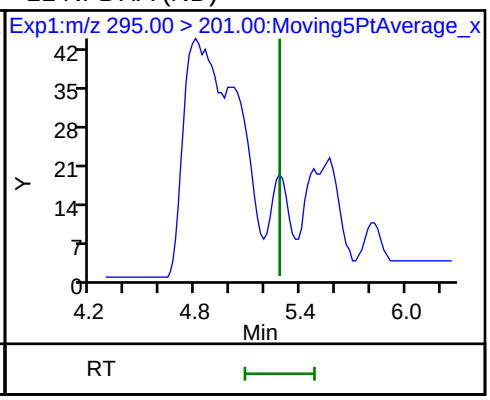
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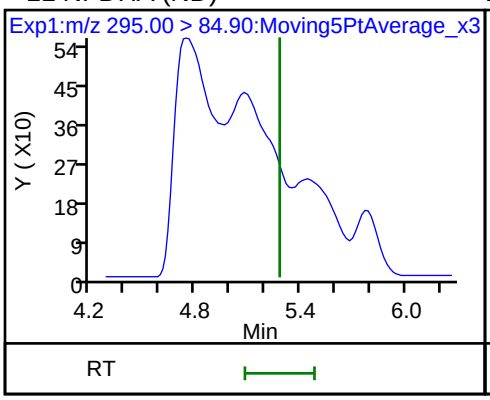
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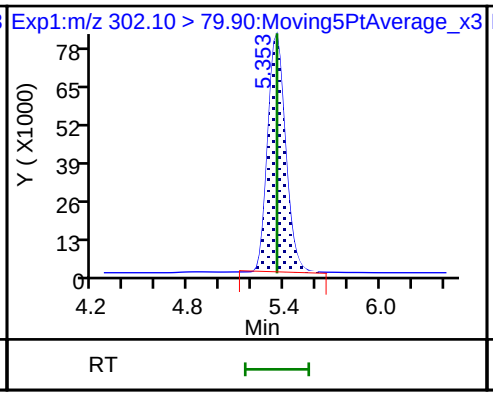
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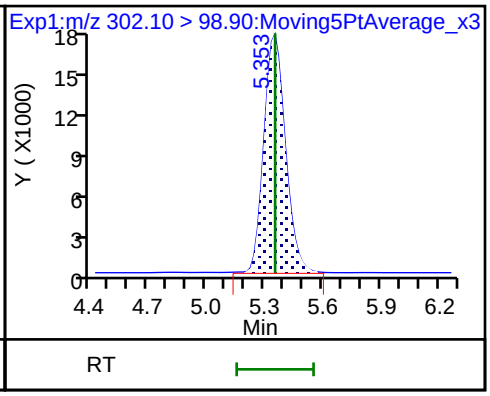
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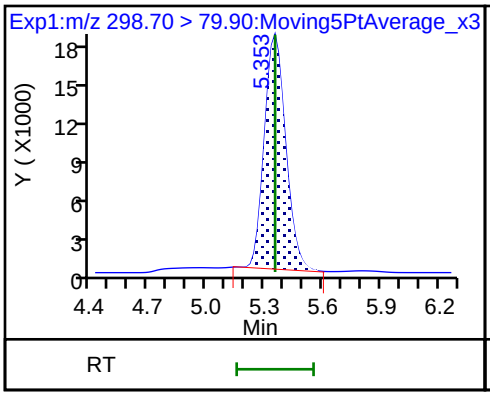
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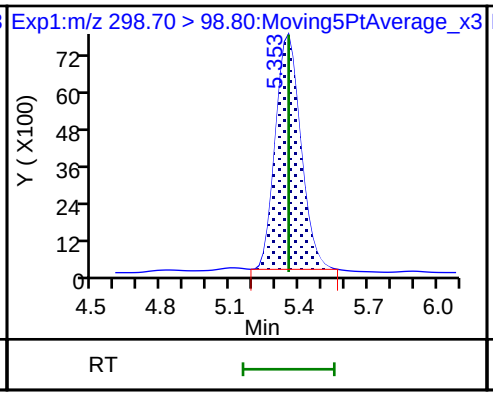
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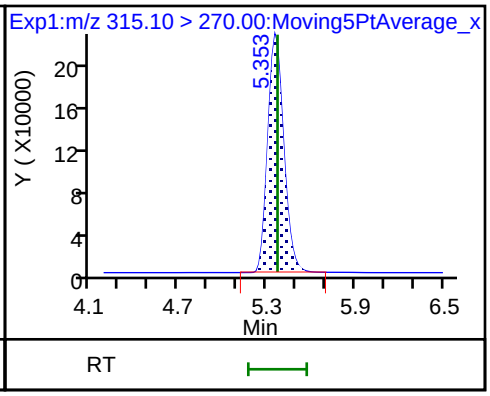
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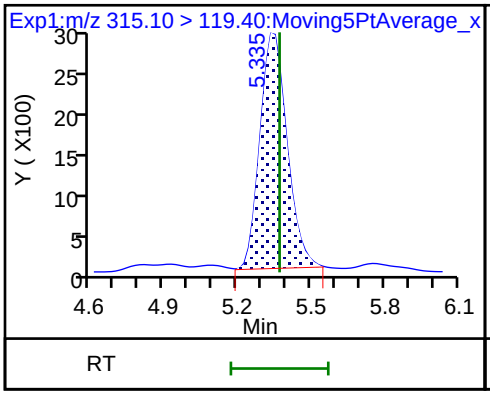
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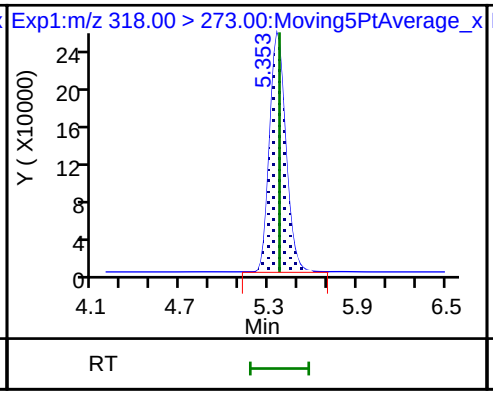
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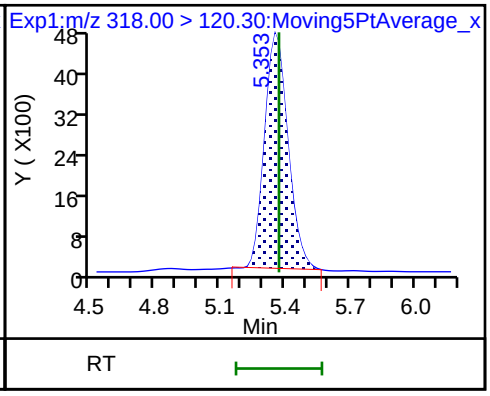
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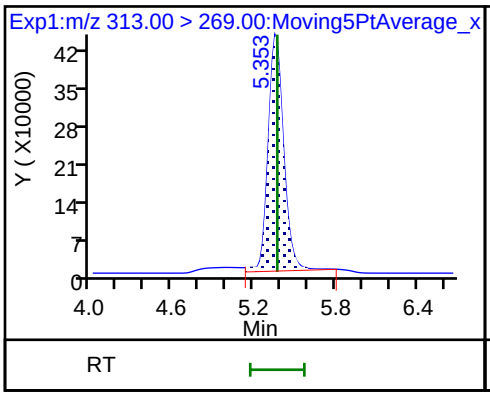
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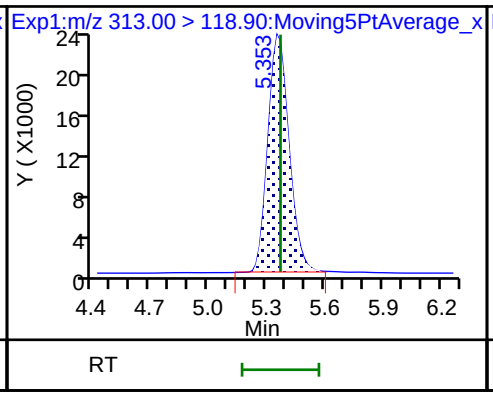
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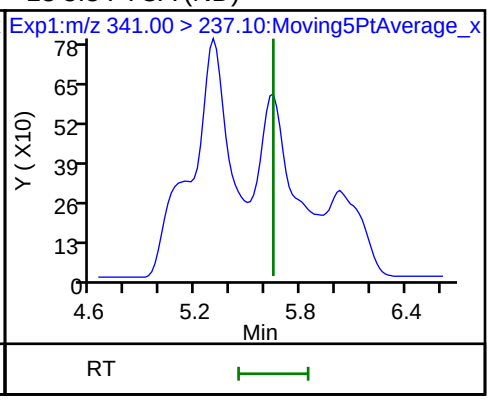
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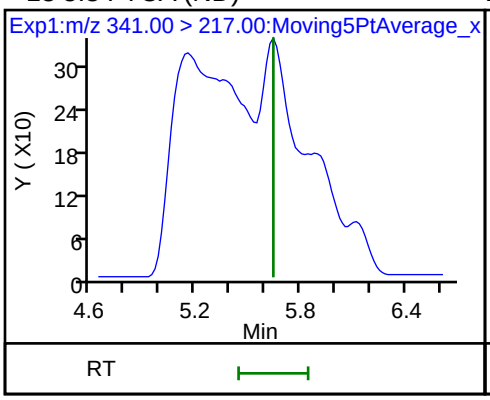
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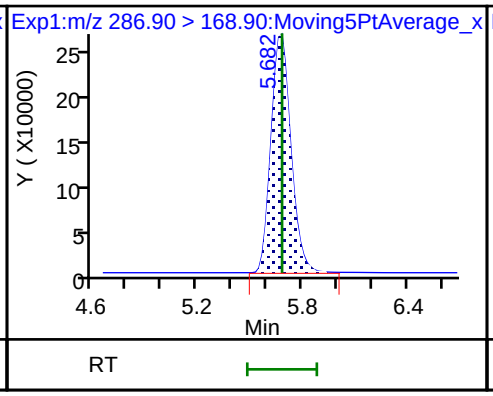
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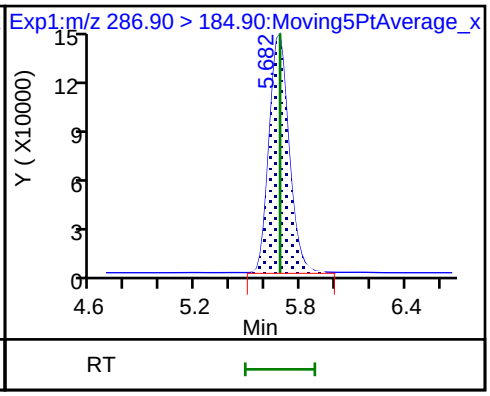
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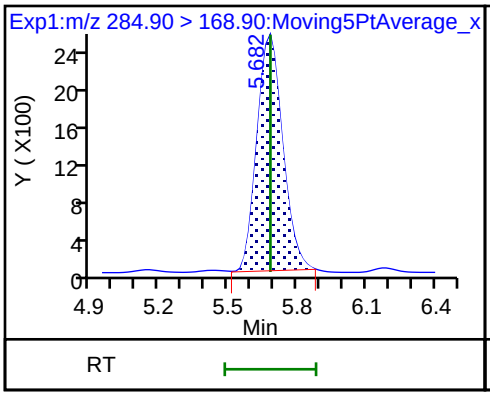
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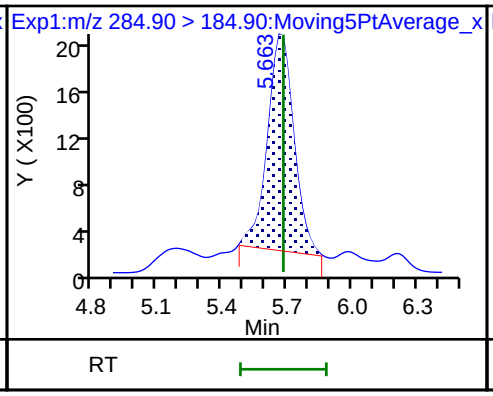
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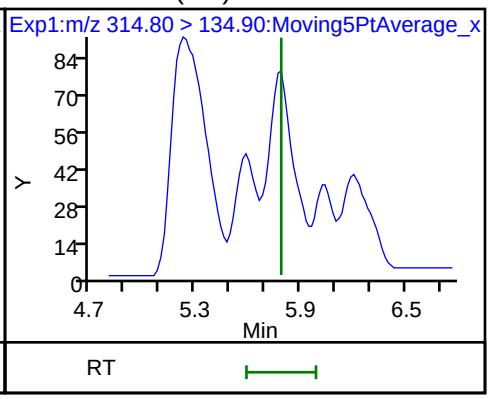
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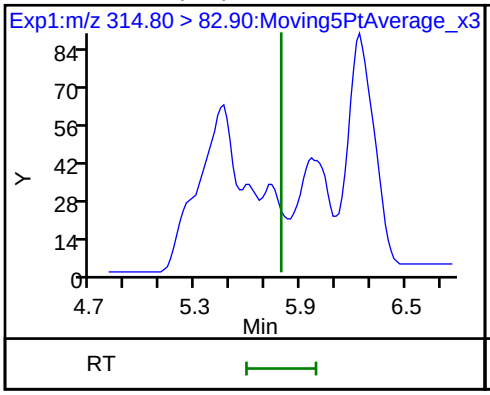
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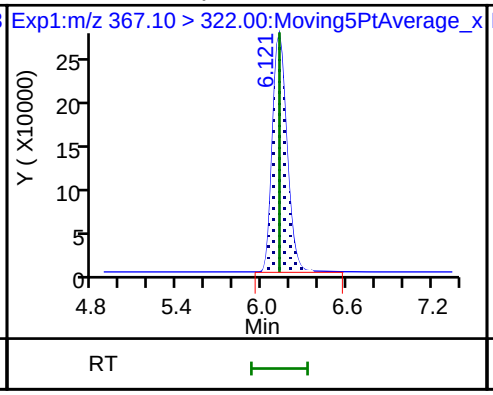
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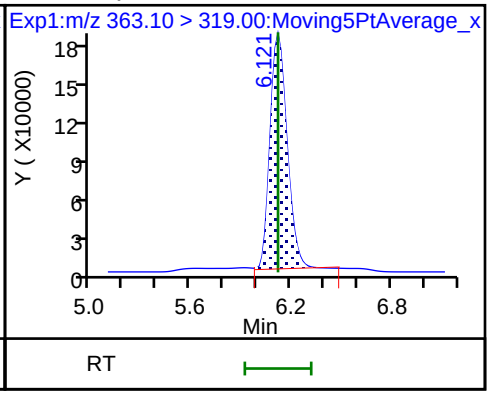
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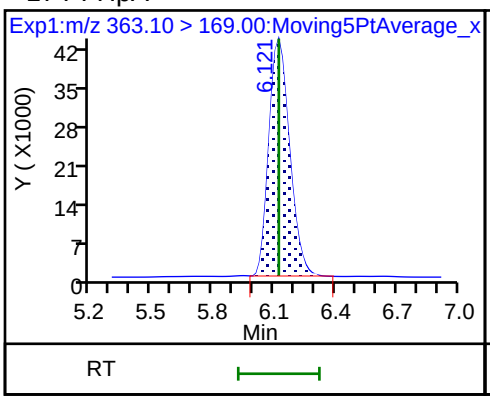
D 22 13C4 PFHpA



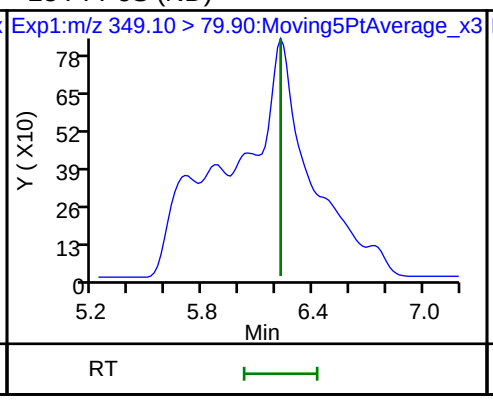
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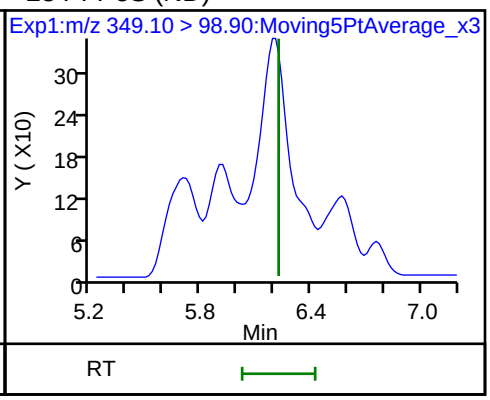
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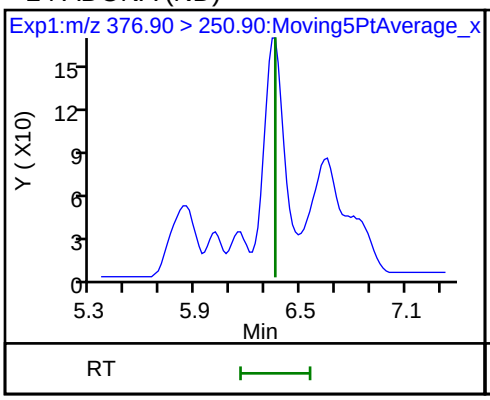
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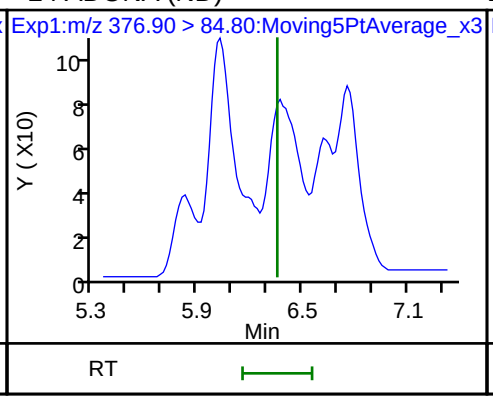
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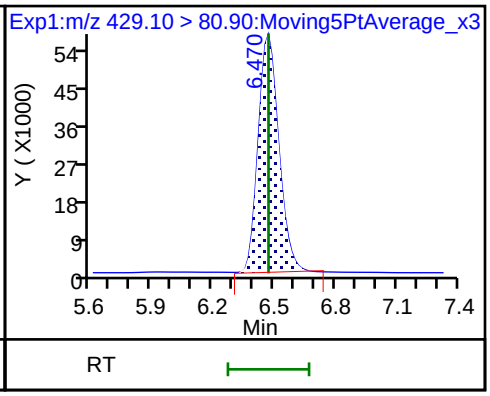
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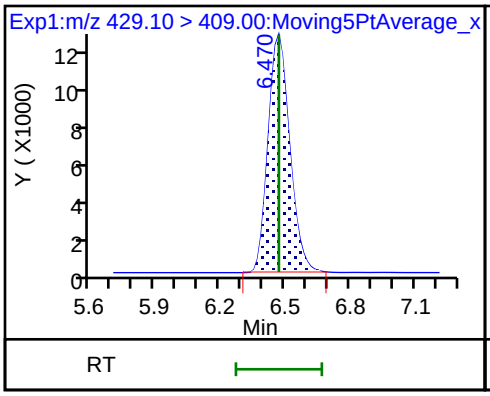
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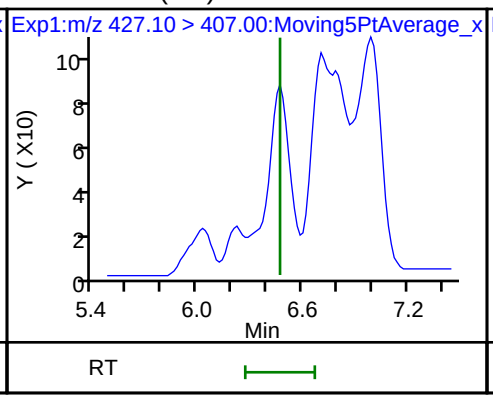
D 26 13C2-6:2FTS



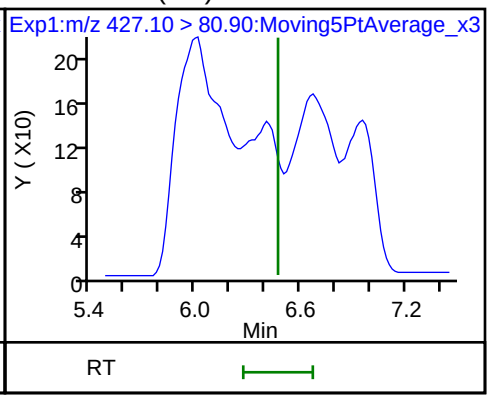
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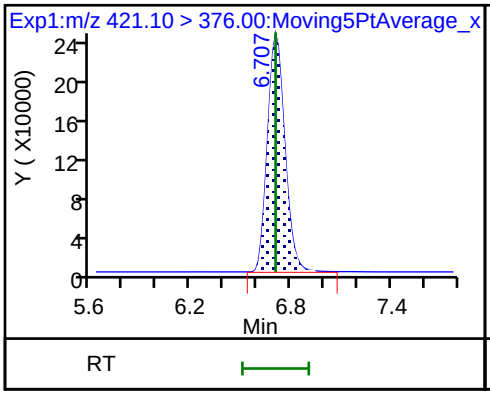
25 6:2FTS (ND)



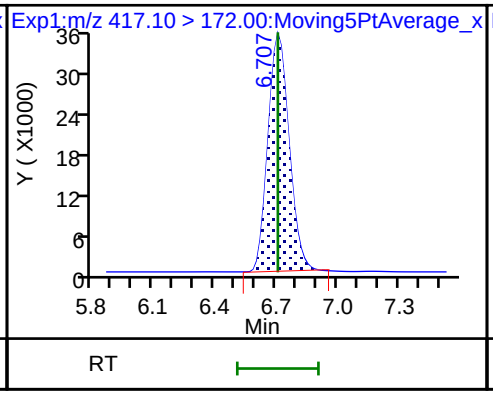
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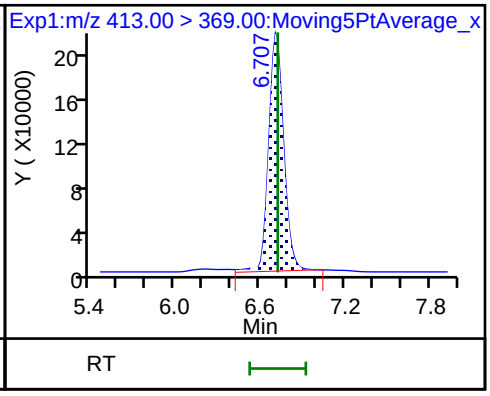
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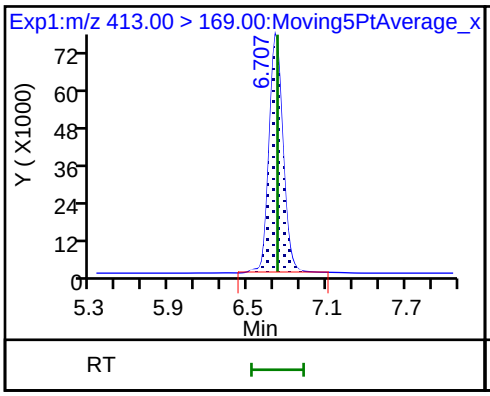
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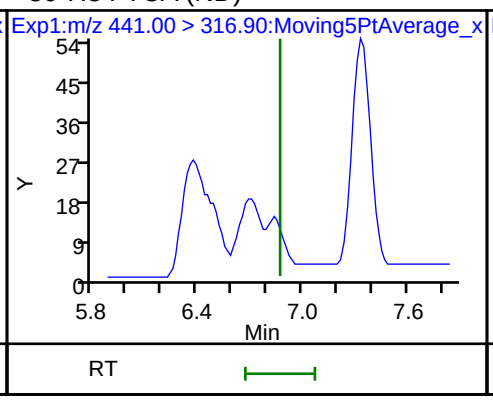
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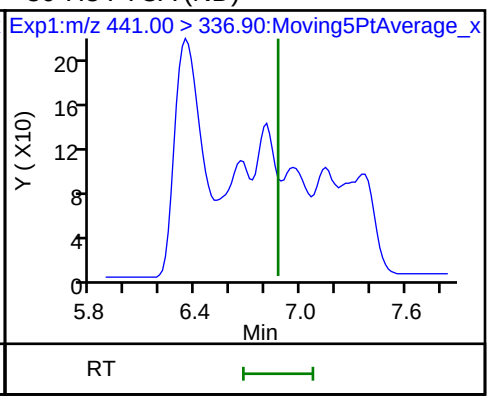
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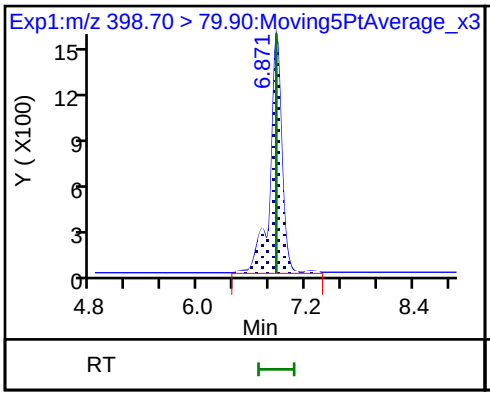
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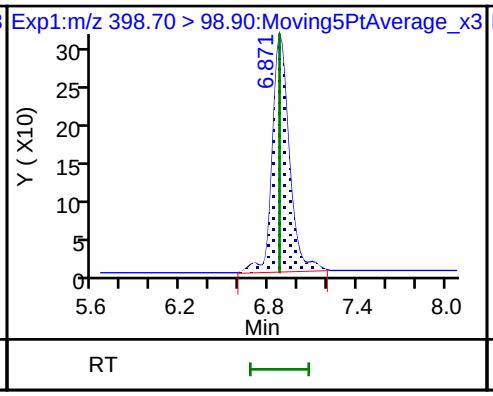
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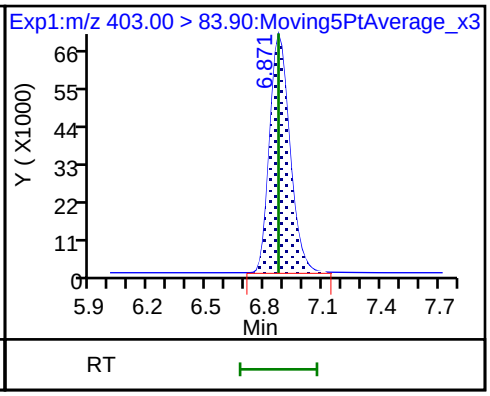
32 PFHxS



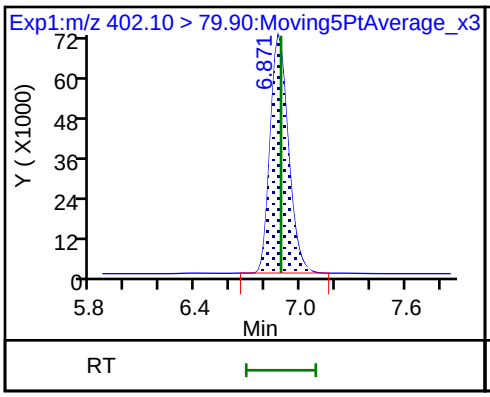
32 PFHxS



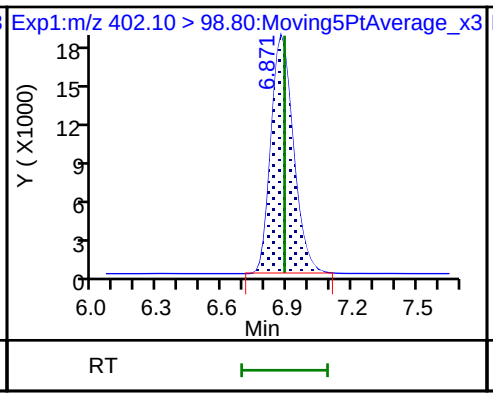
* 31 18O2 PFHxS



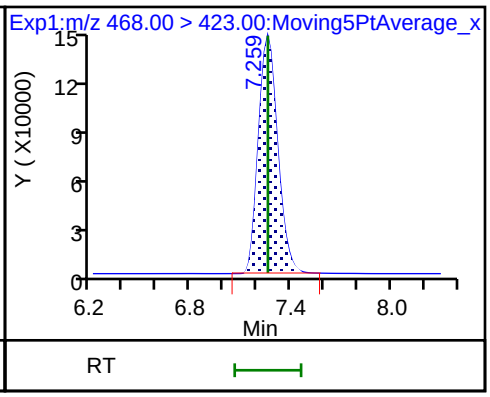
D 33 13C3 PFHxS



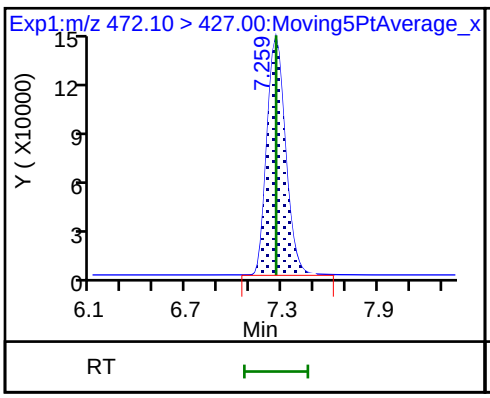
D 33 13C3 PFHxS



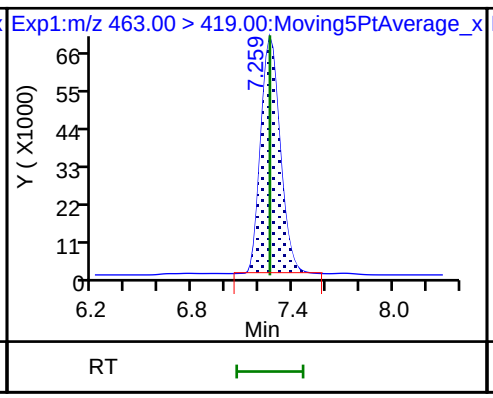
* 35 13C5 PFNA



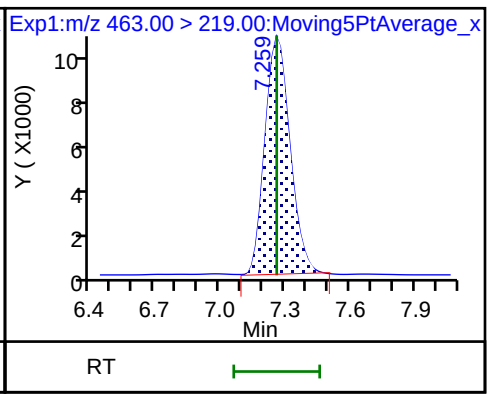
D 34 13C9 PFNA



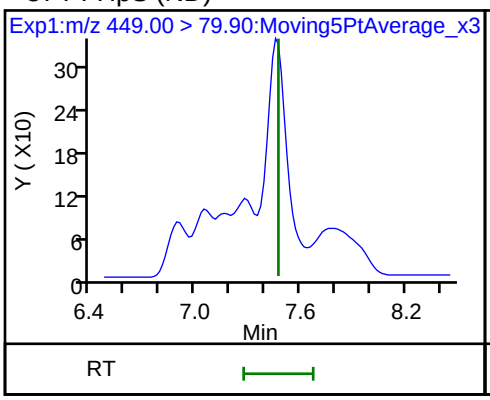
36 PFNA



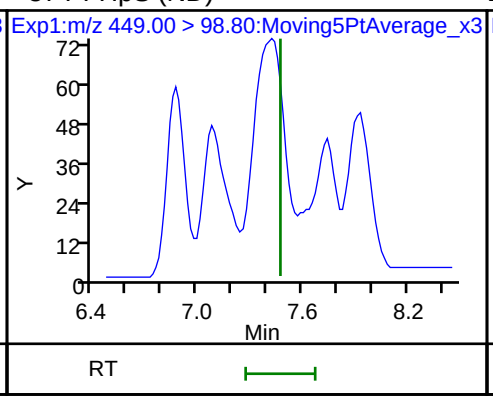
36 PFNA



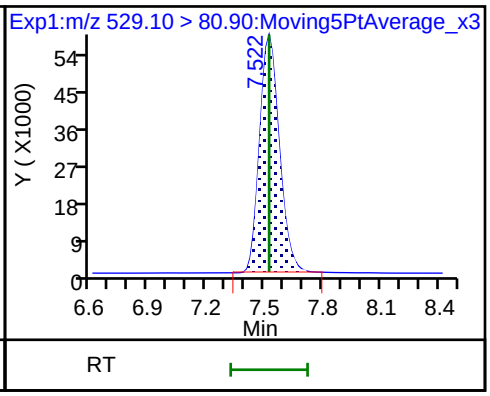
37 PFHpS (ND)



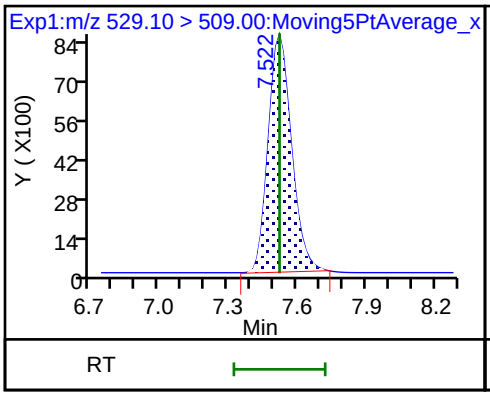
37 PFHpS (ND)



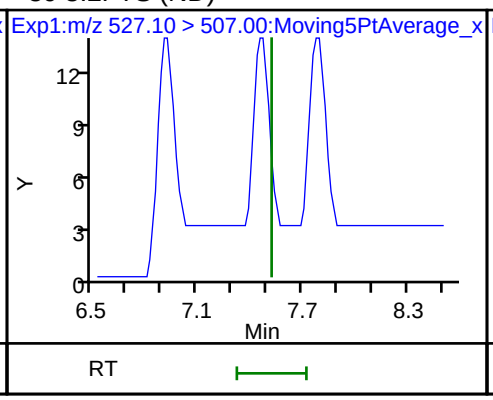
D 38 13C2-8:2FTS



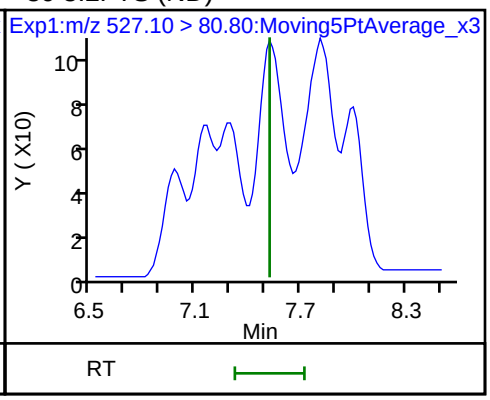
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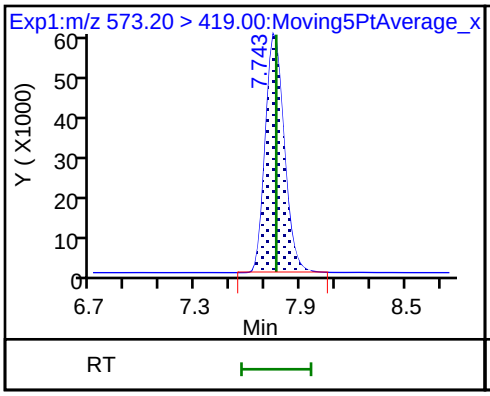
39 8:2FTS (ND)



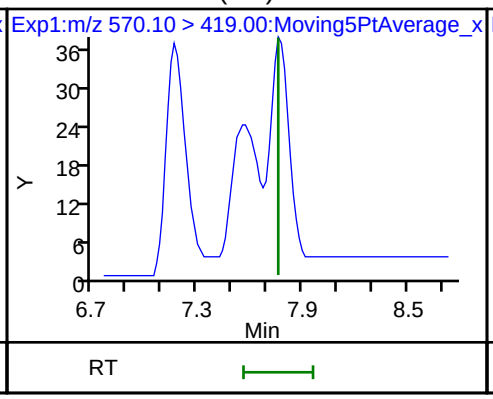
39 8:2FTS (ND)



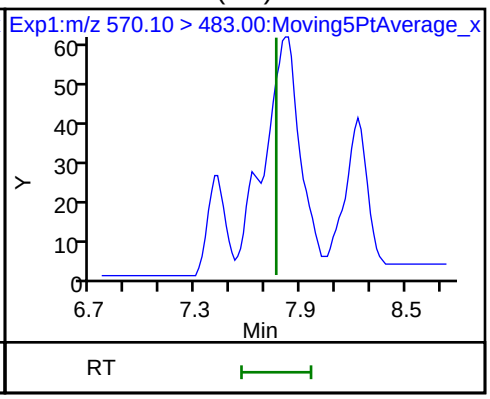
D 41 d3-NMeFOSAA



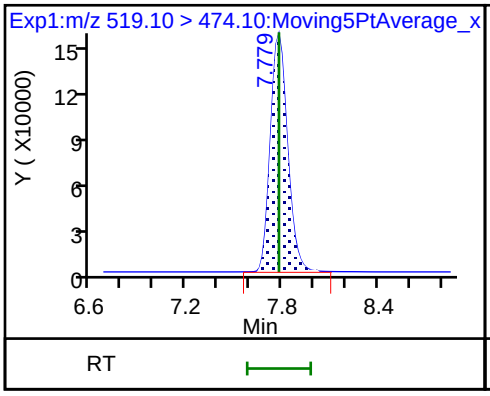
42 NMeFOSAA (ND)



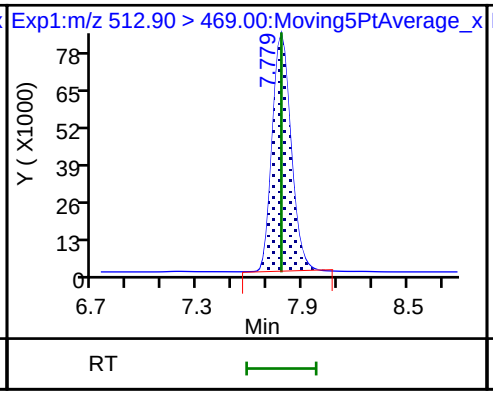
42 NMeFOSAA (ND)



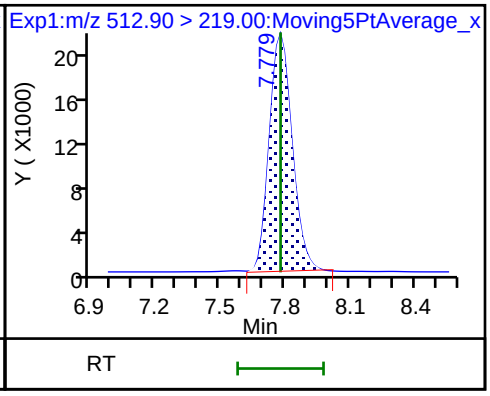
D 40 13C6 PFDA



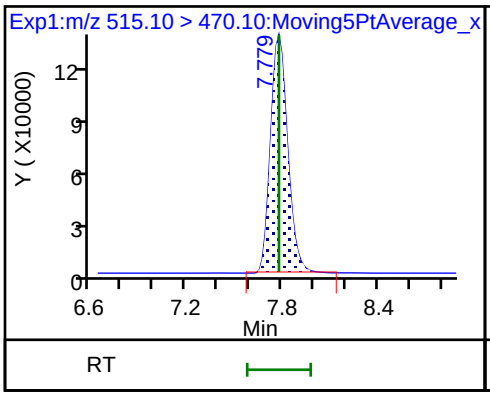
43 PFDA



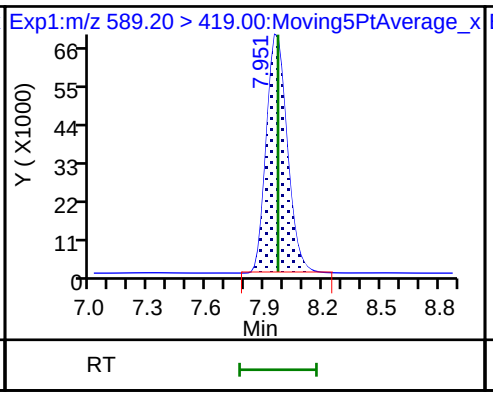
43 PFDA



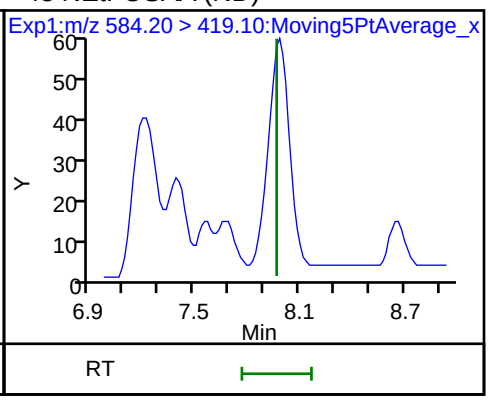
* 44 13C2 PFDA



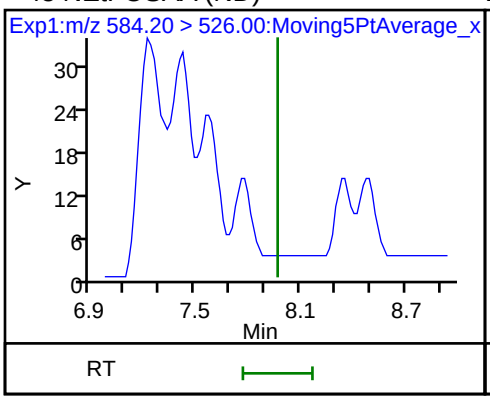
D 46 d5-NEtFOSAA



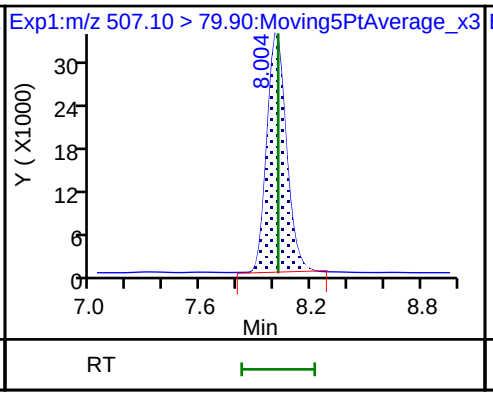
45 NEtFOSAA (ND)



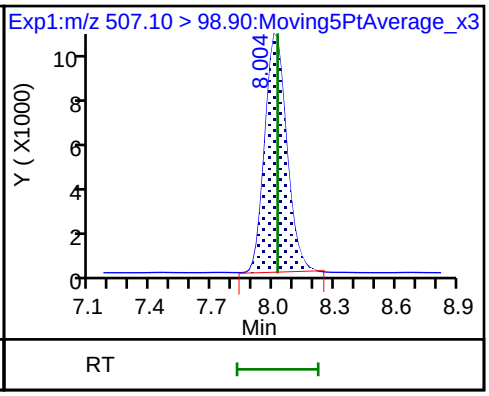
45 NEtFOSAA (ND)



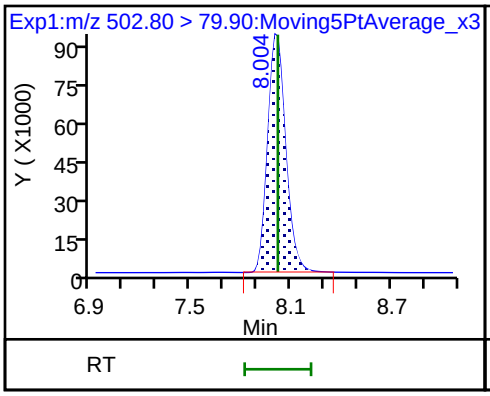
D 49 13C8 PFOS



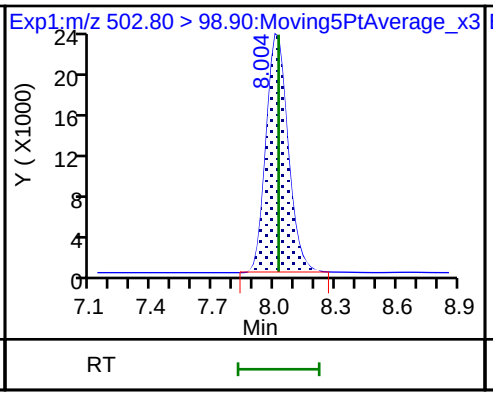
D 49 13C8 PFOS



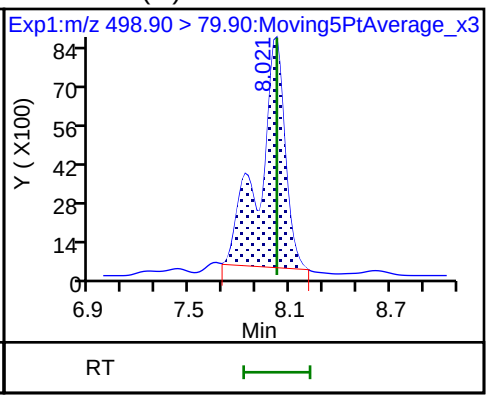
* 47 13C4 PFOS



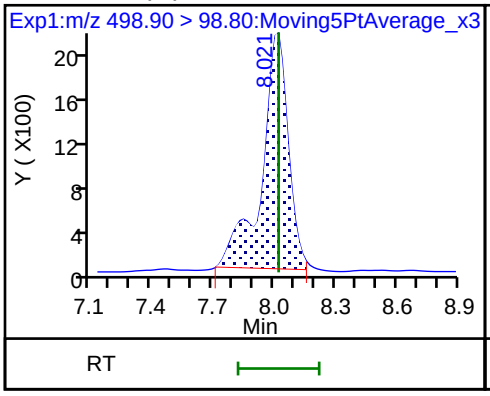
* 47 13C4 PFOS



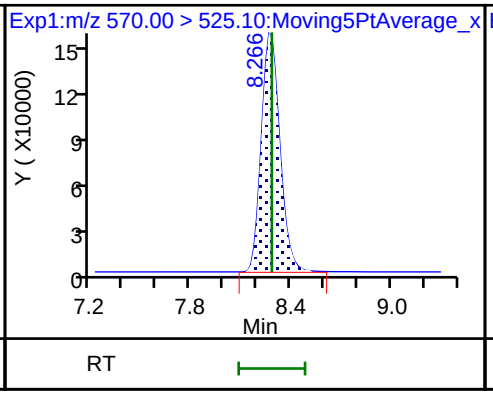
48 PFOS (M)



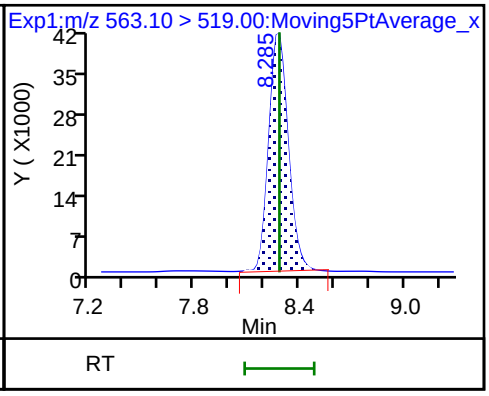
48 PFOS (M)



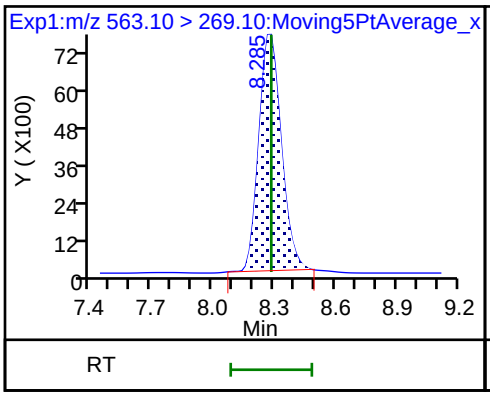
D 53 13C7 PFUnA



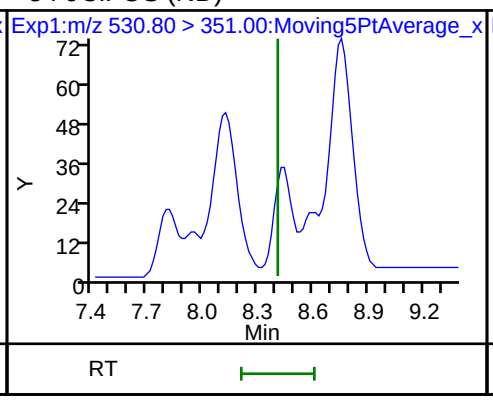
52 PFUnA



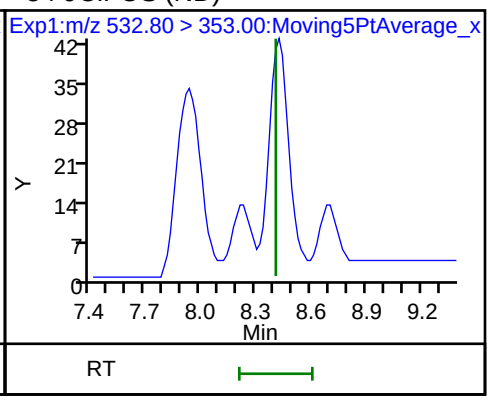
52 PFUnA



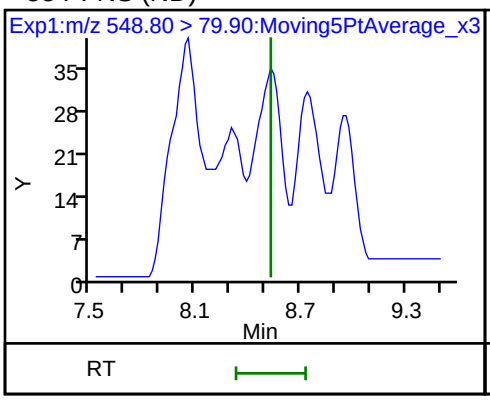
54 9ClFOS (ND)



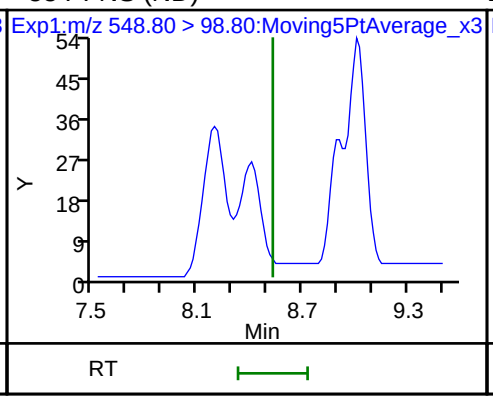
54 9ClFOS (ND)



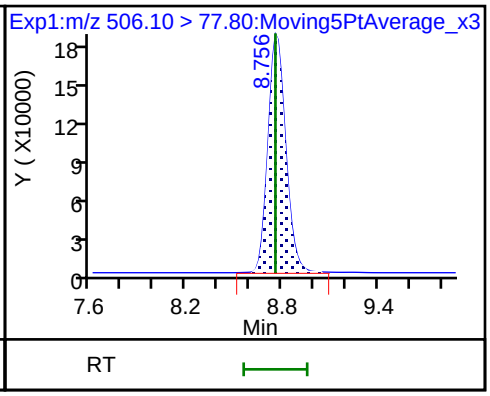
55 PFNS (ND)



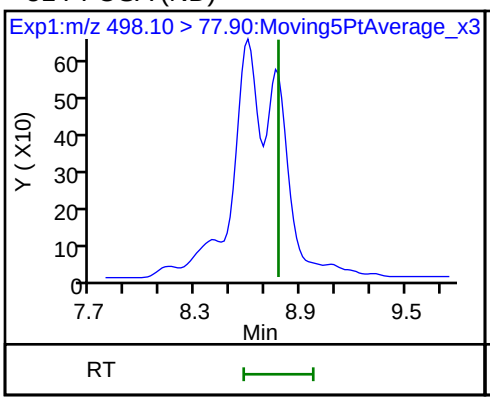
55 PFNS (ND)



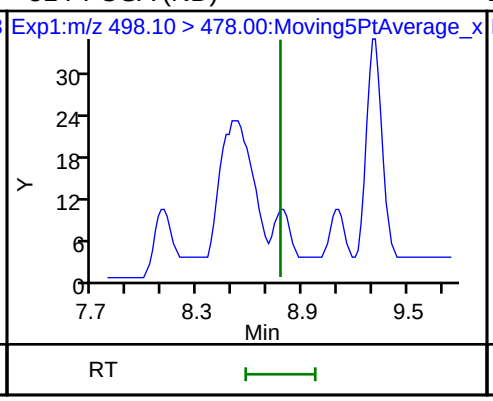
D 50 13C8 FOSA



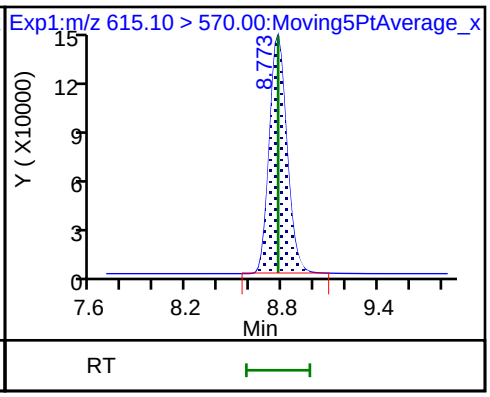
51 PFOSA (ND)



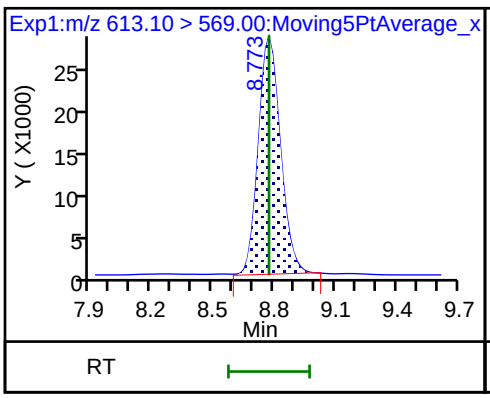
51 PFOSA (ND)



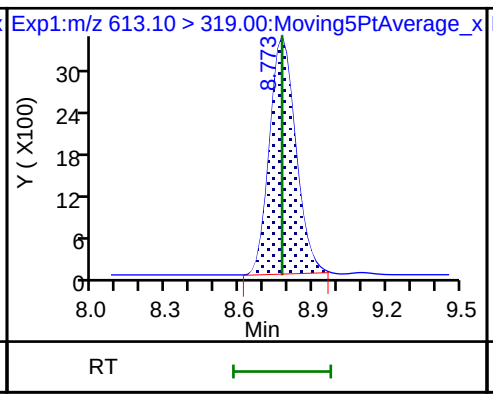
D 56 13C2 PFDoA



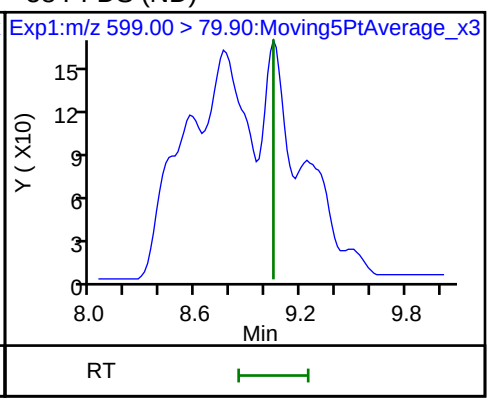
57 PFDoA



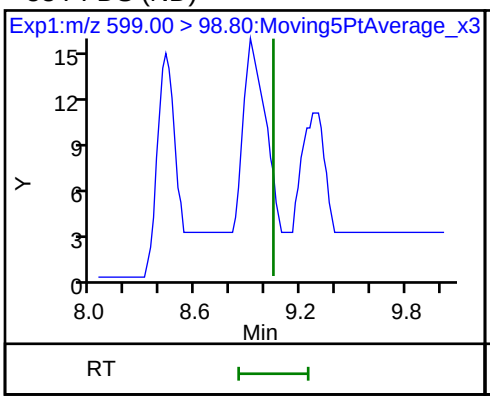
57 PFDoA



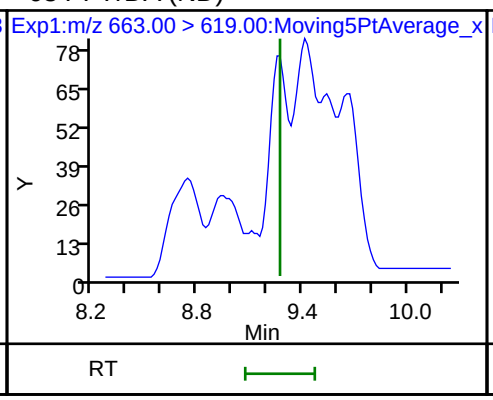
58 PFDS (ND)



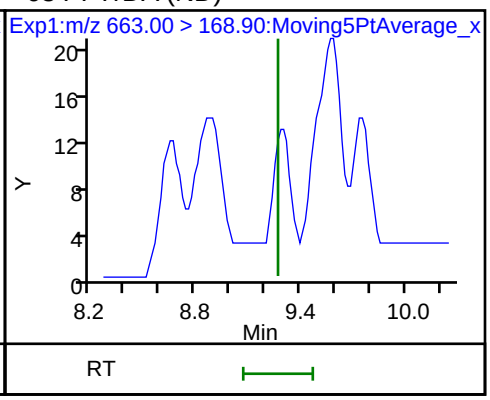
58 PFDS (ND)



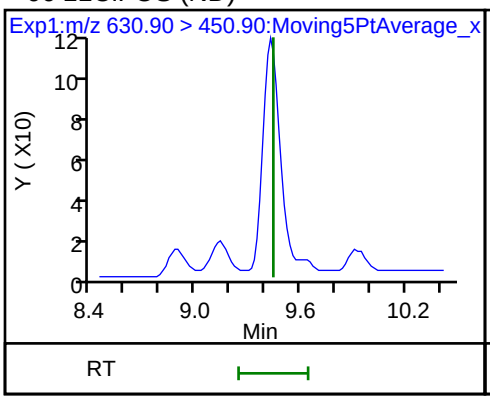
63 PFTrDA (ND)



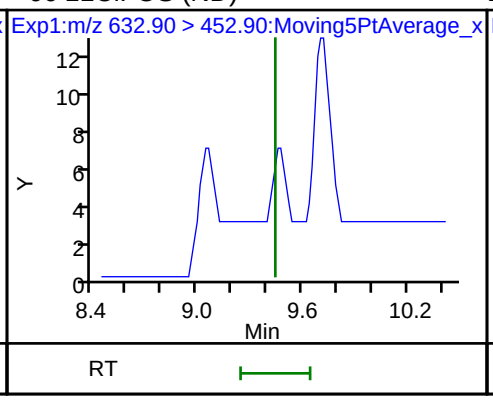
63 PFTrDA (ND)



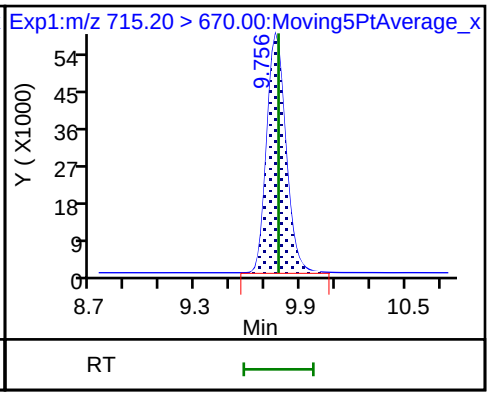
66 11ClFOS (ND)



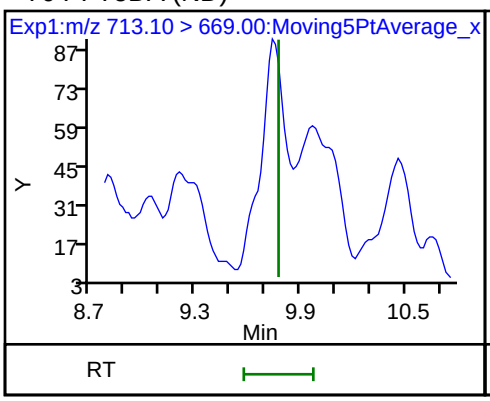
66 11ClFOS (ND)



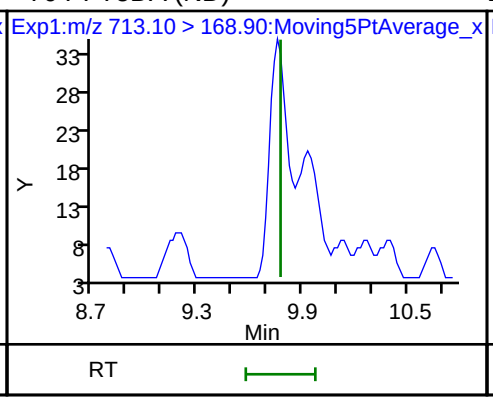
D 69 13C2 PFTeDA



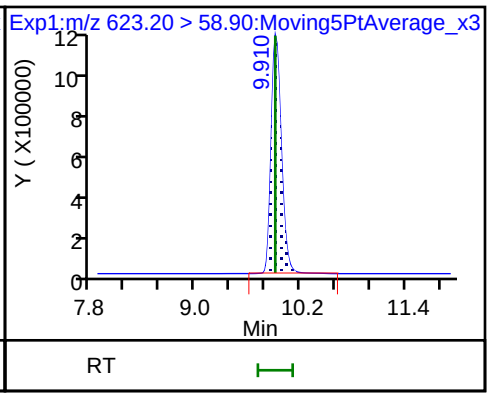
70 PFTeDA (ND)



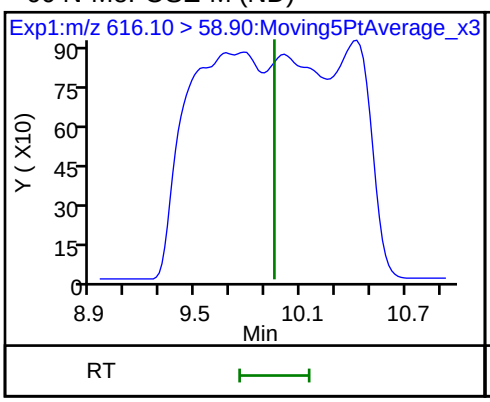
70 PFTeDA (ND)



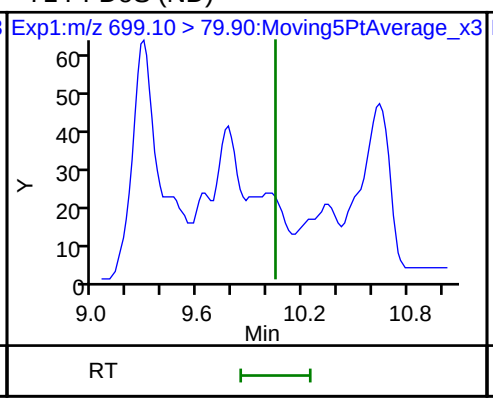
D 59 d7-N-Me-FOSE



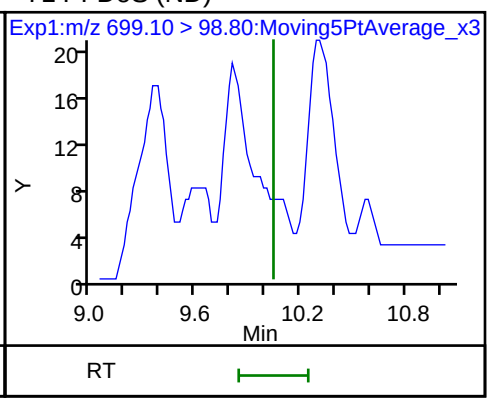
60 N-MeFOSE-M (ND)



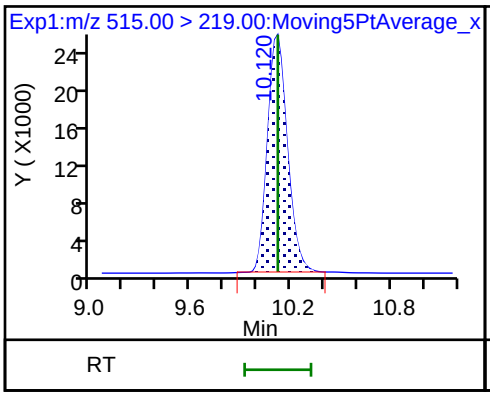
71 PFDoS (ND)



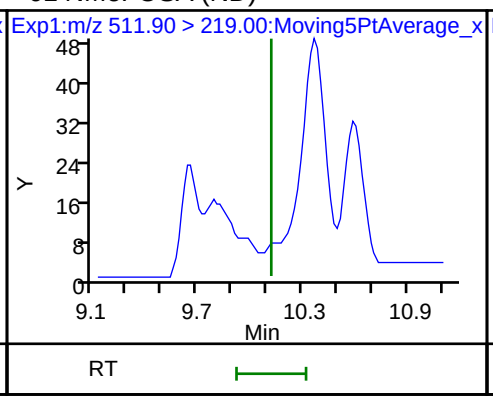
71 PFDoS (ND)



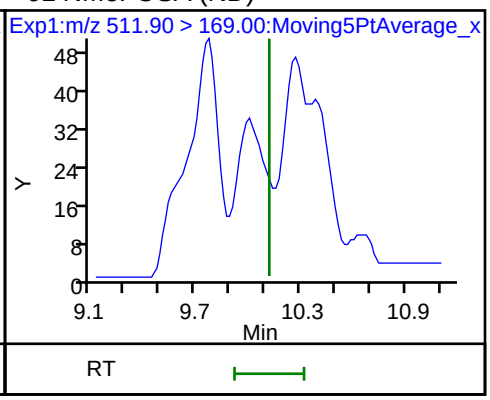
D 62 d3-NMePFOSA



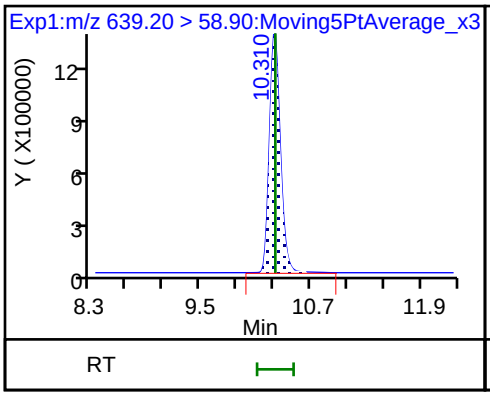
61 NMeFOSA (ND)



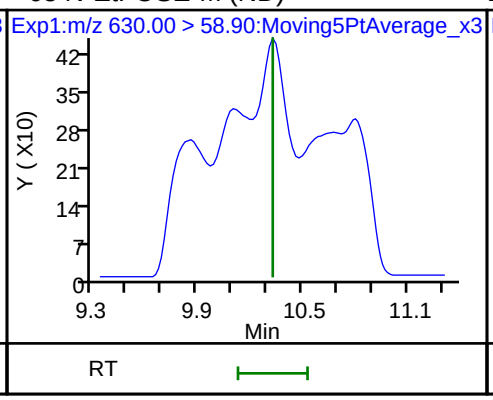
61 NMeFOSA (ND)



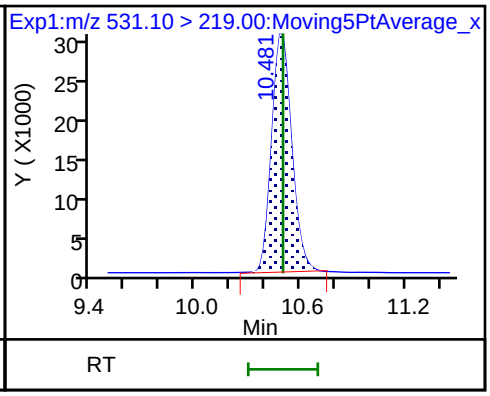
D 64 d9-N-EtFOSE



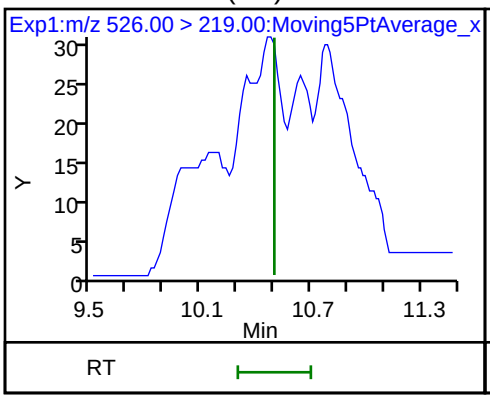
65 N-EtFOSE-M (ND)



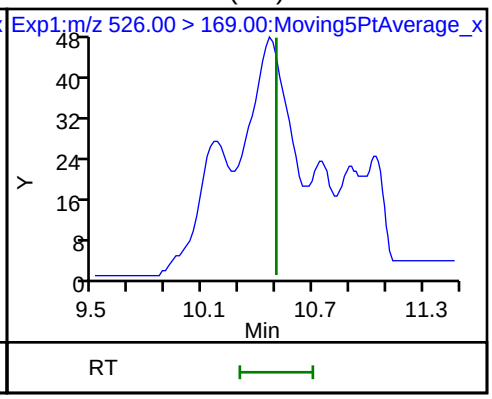
D 67 d5-NEtPFOSA



68 N-EtFOSA-M (ND)



68 N-EtFOSA-M (ND)



Manual Integration/User Assign Peak Report

Eurofins Denver

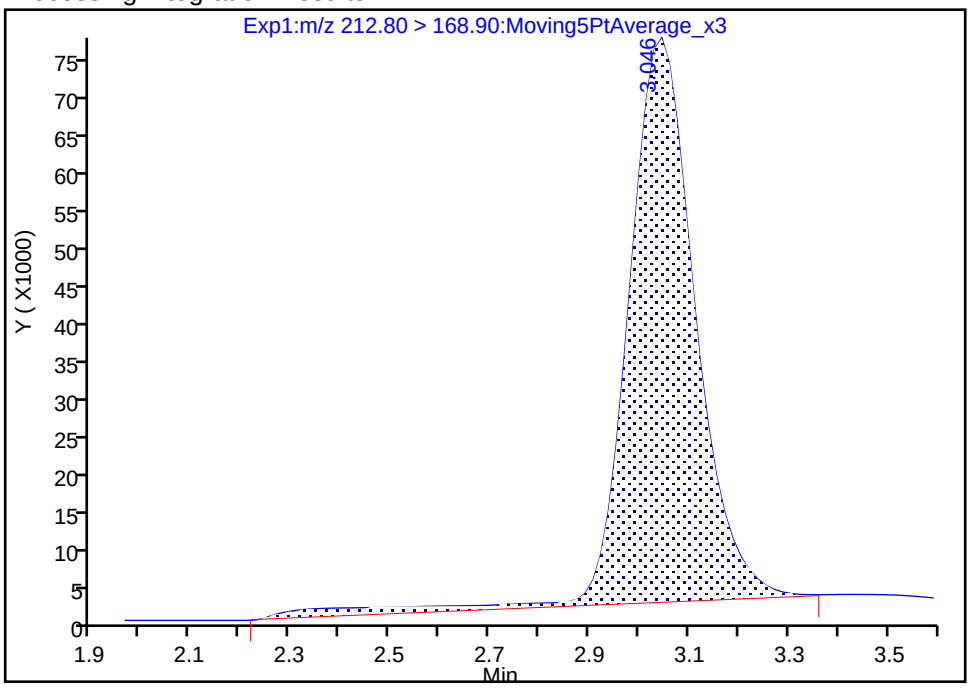
Data File:	\\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.020.d				
Injection Date:	28-Nov-2023 16:43:57	Instrument ID:	LC_LCMS11		
Lims ID:	460-292594-B-3-A	Lab Sample ID:	280-292594-3		
Client ID:	WCF-10				
Operator ID:	B5QN	ALS Bottle#:	14	Worklist Smp#:	16
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

2 PFBA, CAS: 375-22-4

Signal: 1

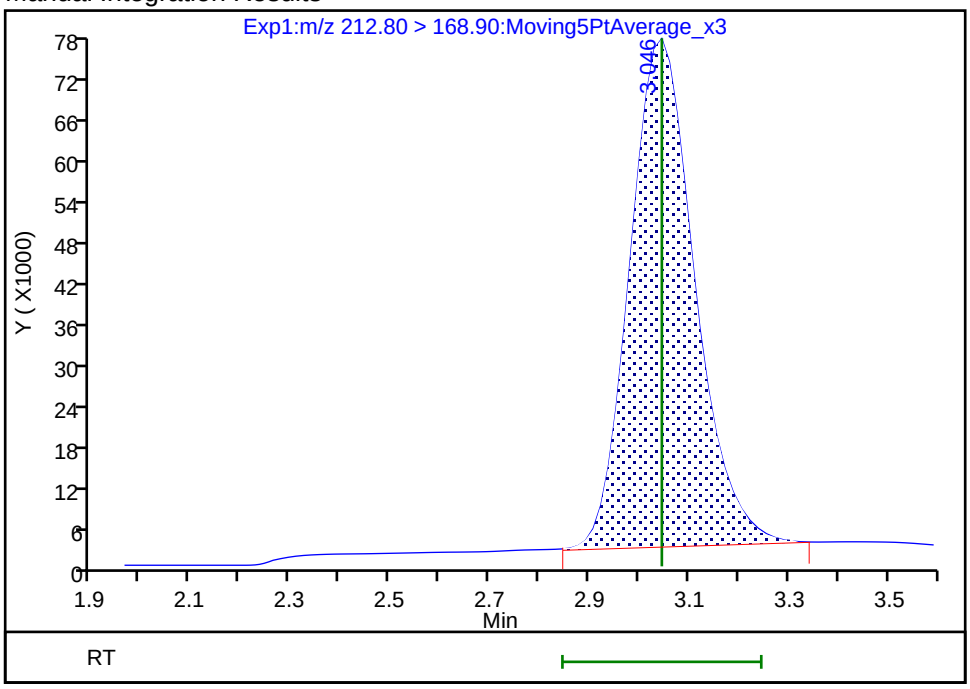
Processing Integration Results

RT: 3.05
Area: 711437
Amount: 1.524988
Amount Units: ng/ml



Manual Integration Results

RT: 3.05
Area: 676108
Amount: 1.449259
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 14:10:01 -07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins Denver

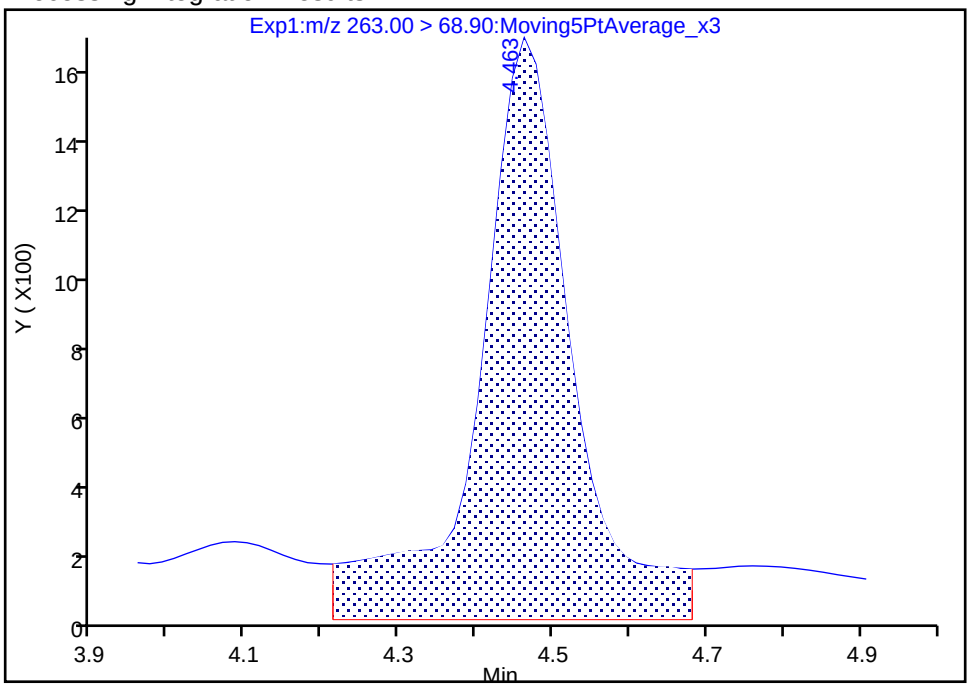
Data File:	\\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.020.d				
Injection Date:	28-Nov-2023 16:43:57	Instrument ID:	LC_LCMS11		
Lims ID:	460-292594-B-3-A	Lab Sample ID:	280-292594-3		
Client ID:	WCF-10				
Operator ID:	B5QN	ALS Bottle#:	14	Worklist Smp#:	16
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

6 PFPA, CAS: 2706-90-3

Signal: 2

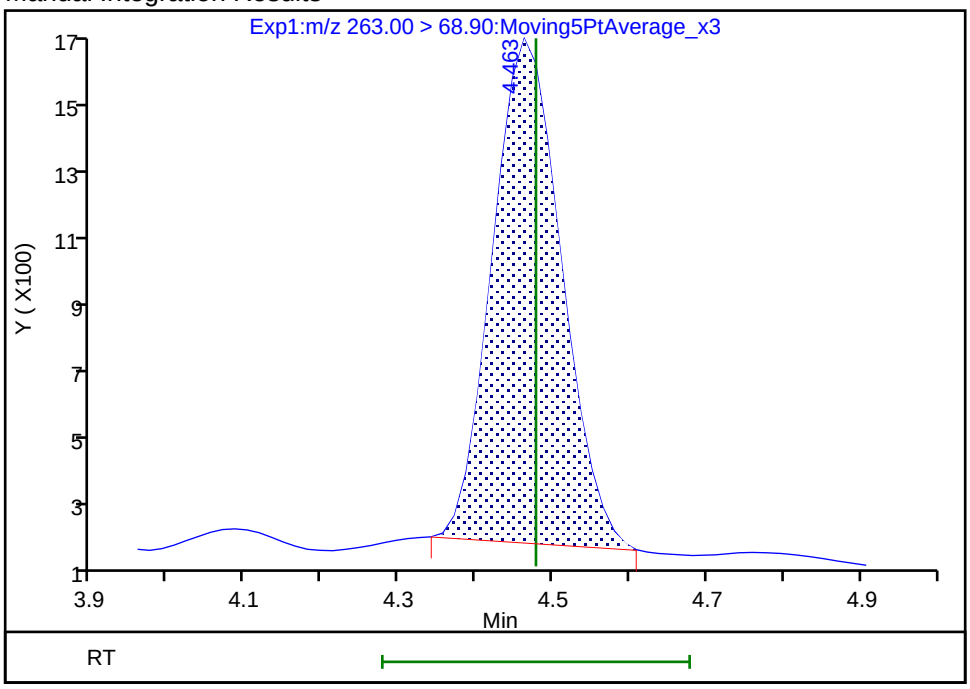
Processing Integration Results

RT: 4.46
Area: 13989
Amount: 3.837682
Amount Units: ng/ml



Manual Integration Results

RT: 4.46
Area: 9105
Amount: 3.837682
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 14:10:13 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins Denver

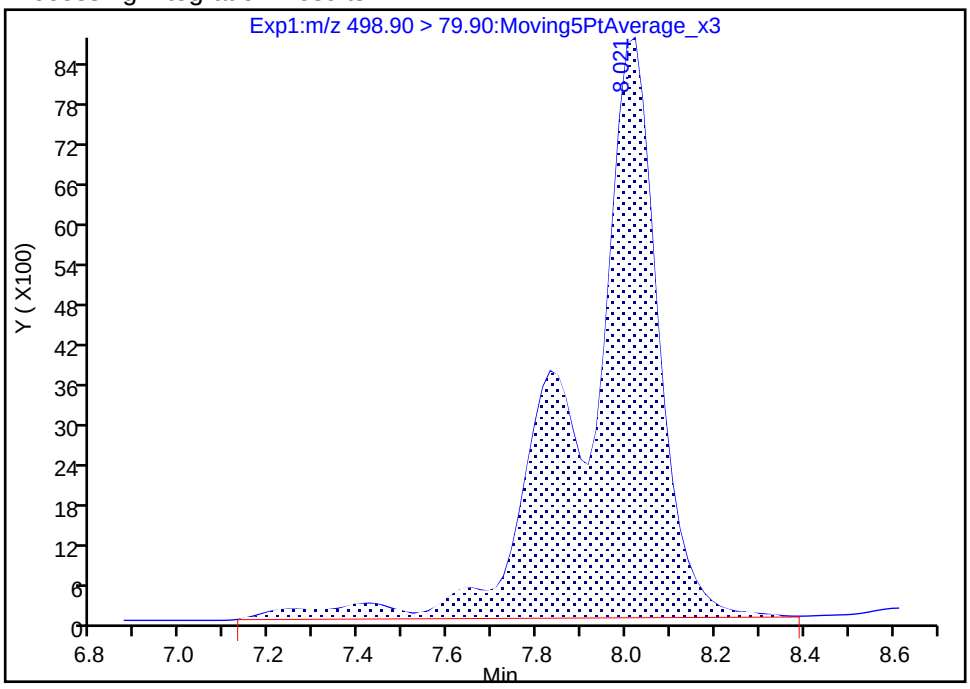
Data File:	\\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.020.d				
Injection Date:	28-Nov-2023 16:43:57	Instrument ID:	LC_LCMS11		
Lims ID:	460-292594-B-3-A	Lab Sample ID:	280-292594-3		
Client ID:	WCF-10				
Operator ID:	B5QN	ALS Bottle#:	14	Worklist Smp#:	16
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

48 PFOS, CAS: 1763-23-1

Signal: 1

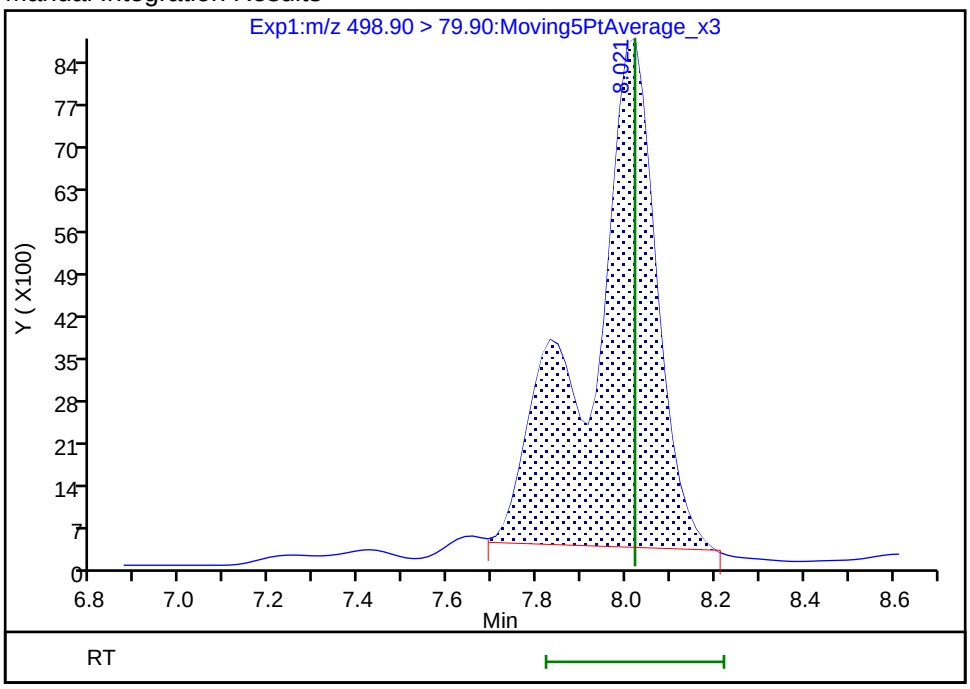
Processing Integration Results

RT: 8.02
Area: 105366
Amount: 0.315921
Amount Units: ng/ml



Manual Integration Results

RT: 8.02
Area: 90384
Amount: 0.271000
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 14:10:32 -07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

Eurofins Denver

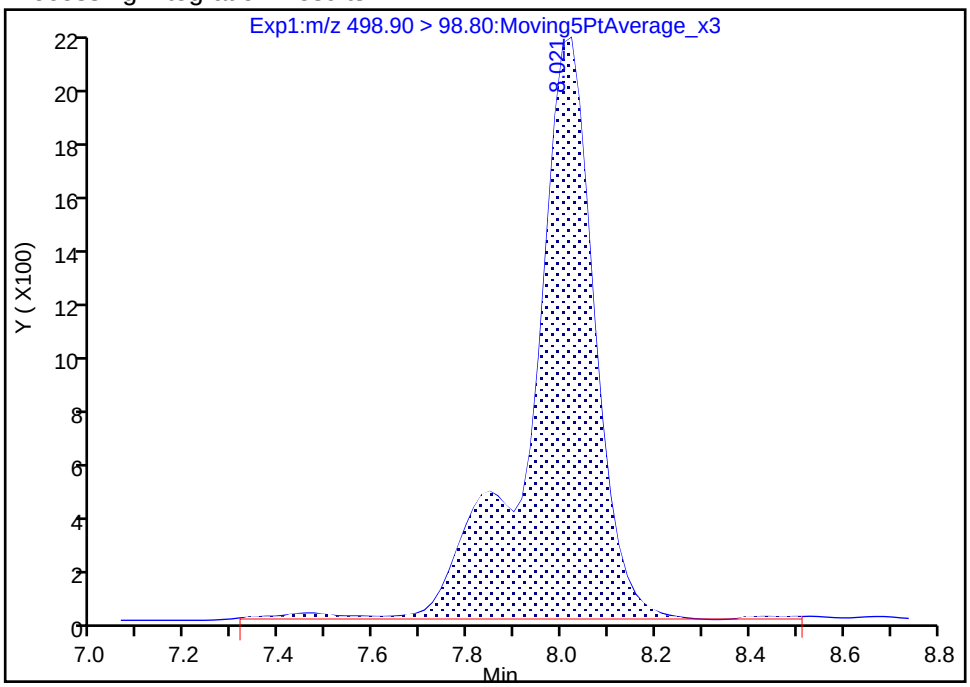
Data File:	\\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.020.d				
Injection Date:	28-Nov-2023 16:43:57	Instrument ID:	LC_LCMS11		
Lims ID:	460-292594-B-3-A	Lab Sample ID:	280-292594-3		
Client ID:	WCF-10				
Operator ID:	B5QN	ALS Bottle#:	14	Worklist Smp#:	16
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

48 PFOS, CAS: 1763-23-1

Signal: 2

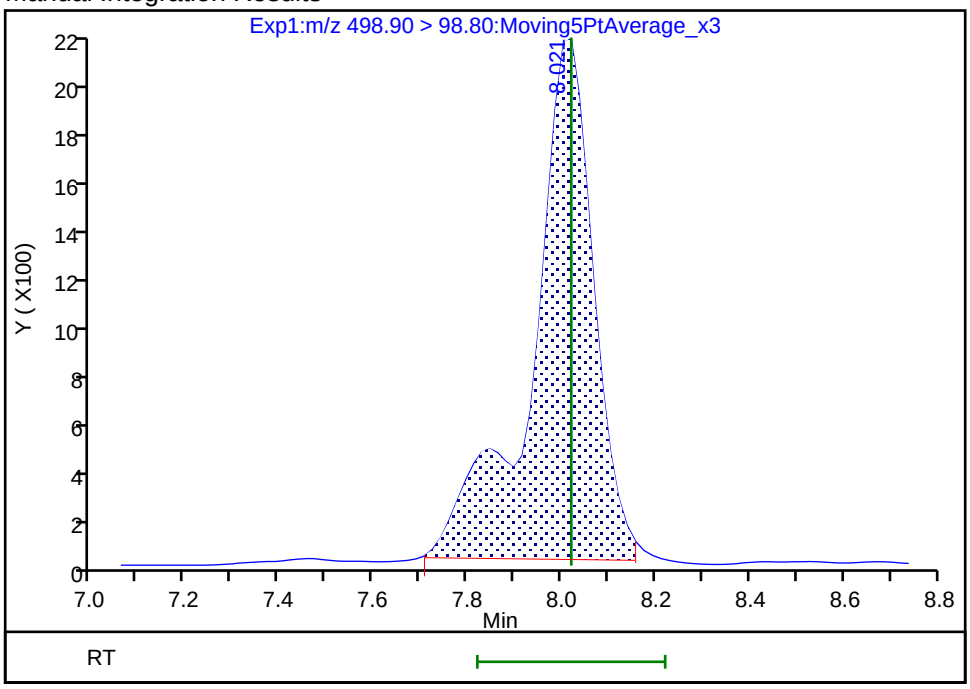
Processing Integration Results

RT: 8.02
Area: 20495
Amount: 0.315921
Amount Units: ng/ml



Manual Integration Results

RT: 8.02
Area: 19358
Amount: 0.271000
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 14:10:35 -07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Peak Tail

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 460-292594-1 Analy Batch No.: 634666

SDG No.:

Instrument ID: LC_LCMS11 GC Column: Gemini C18 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/20/2023 17:19 Calibration End Date: 11/20/2023 19:16 Calibration ID: 87440

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-634666/2	2023.11.20b.001.d
Level 2	IC 280-634666/3	2023.11.20b.002.d
Level 3	IC 280-634666/4	2023.11.20b.003.d
Level 4	IC 280-634666/5	2023.11.20b.004.d
Level 5	IC 280-634666/6	2023.11.20b.005.d
Level 6	IC 280-634666/7	2023.11.20b.006.d
Level 7	IC 280-634666/8	2023.11.20b.007.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid (PFBA)	0.8962 0.9141	0.8949 0.8810	0.8940	0.8991	0.8788	AveID		0.8940				1.3		20.0			
PFMPA	1.2864 1.2532	1.3151 1.2646	1.2927	1.2474	1.2831	AveID		1.2775				1.9		20.0			
3:3 FTCA	0.1545 0.1620	0.1588 0.1935	0.1636	0.1525	0.1592	AveID		0.1634				8.5		20.0			
Perfluoropentanoic acid (PFPeA)	2.0783 1.9398	2.0289 1.9995	2.0042	2.0042	1.9888	AveID		2.0062				2.1		20.0			
PFMBA	2.5998 2.4967	2.6427 2.2976	2.6275	2.5472	2.4720	AveID		2.5262				4.7		20.0			
4:2 FTS	2.6258 2.1902	2.5467 +++++	2.2427	2.1923	2.2951	AveID		2.3488				8.1		20.0			
NFDHA	0.2850 0.3074	0.3026 0.3736	0.3040	0.2961	0.3017	AveID		0.3101				9.3		20.0			
Perfluorobutanesulfonic acid (PFBS)	0.9514 0.9570	0.8345 0.8837	0.8376	0.8907	0.8762	AveID		0.8902				5.5		20.0			
Perfluorohexanoic acid (PFHxA)	1.1636 1.0812	1.1485 1.1419	1.1087	0.9955	1.0689	AveID		1.1012				5.3		20.0			
5:3 FTCA	0.1530 0.1871	0.1880 0.2195	0.1774	0.1716	0.1726	AveID		0.1813				11.3		20.0			
HFPO-DA (GenX)	1.1419 1.1028	1.0652 1.1061	0.9492	1.1070	1.0687	AveID		1.0773				5.8		20.0			
PFEESA	1.1358 1.1358	1.3017 1.2925	1.1756	1.2709	1.2124	AveID		1.2178				5.9		20.0			
Perfluoroheptanoic acid (PFHpA)	0.9259 1.0226	0.9901 0.9777	0.9569	0.9806	1.0343	AveID		0.9840				3.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 460-292594-1 Analy Batch No.: 634666

SDG No.:

Instrument ID: LC_LCMS11 GC Column: Gemini C18 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/20/2023 17:19 Calibration End Date: 11/20/2023 19:16 Calibration ID: 87440

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluoropentanesulfonic acid (PFPeS)	1.0780 1.1714	1.0769 1.0997	1.1352	1.1445	1.1534	AveID		1.1227				3.4		20.0			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	9.3892 9.0094	9.7248 7.8572	8.7409	9.2041	9.3550	AveID		9.0401				6.7		20.0			
6:2 FTS	1.9858 1.8985	1.7856 +++++	2.0449	1.9666	1.7503	AveID		1.9053				6.1		20.0			
Perfluorooctanoic acid (PFOA)	0.7485 0.8097	0.8167 0.8293	0.7692	0.7683	0.8459	AveID		0.7982				4.6		20.0			
7:3 FTCA	0.0826 0.0873	0.0822 0.0989	0.0820	0.0762	0.0773	AveID		0.0838				9.1		20.0			
Perfluorohexanesulfonic acid (PFHxS)	0.5910 0.5345	0.5155 0.5059	0.5374	0.5094	0.5307	AveID		0.5321				5.4		20.0			
Perfluorononanoic acid (PFNA)	1.0014 1.0229	1.0000 0.9925	1.0585	0.9507	1.0035	AveID		1.0042				3.2		20.0			
Perfluoroheptanesulfonic acid (PFHpS)	1.8905 1.8350	1.8600 1.7986	1.7551	1.6790	1.6950	AveID		1.7876				4.5		20.0			
8:2 FTS	1.5256 1.4175	1.4557 +++++	1.5254	1.3881	1.4060	AveID		1.4530				4.2		20.0			
NMeFOSAA	1.0981 0.9918	1.0798 0.9440	0.9489	0.9528	0.9930	AveID		1.0012				6.3		20.0			
Perfluorodecanoic acid (PFDA)	0.7870 0.8742	0.7288 0.9021	0.7943	0.8331	0.8327	AveID		0.8217				7.0		20.0			
NEtFOSAA	0.7534 0.7883	0.6655 0.6755	0.7677	0.7283	0.7125	AveID		0.7273				6.3		20.0			
Perfluorooctanesulfonic acid (PFOS)	3.6266 3.3959	2.9885 3.5862	3.0718	3.1275	3.0109	AveID		3.2582				8.4		20.0			
Perfluoroundecanoic acid (PFUnA)	0.8588 0.8397	0.9429 0.8893	0.8586	0.9178	0.8874	AveID		0.8849				4.1		20.0			
9Cl-PF3ONS	1.8521 1.8172	1.8154 1.5687	1.9193	1.8176	1.8696	AveID		1.8085				6.2		20.0			
Perfluorononanesulfonic acid (PFNS)	1.3149 1.3546	1.4276 1.3318	1.3085	1.3317	1.2521	AveID		1.3316				4.0		20.0			
Perfluorooctanesulfonamide (PFOSA)	0.9315 1.0635	1.0077 1.0400	0.9441	0.9842	0.9967	AveID		0.9954				4.8		20.0			
Perfluorododecanoic acid (PFDoA)	1.0565 1.0655	0.9544 0.8803	1.0165	1.0644	0.9962	AveID		1.0048				6.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 460-292594-1 Analy Batch No.: 634666

SDG No.:

Instrument ID: LC_LCMS11 GC Column: Gemini C18 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/20/2023 17:19 Calibration End Date: 11/20/2023 19:16 Calibration ID: 87440

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorodecanesulfonic acid (PFDS)	3.5038 3.1270	3.0386 3.1186	3.0487	2.8770	2.8232	AveID		3.0767				7.2		20.0			
Perfluorotridecanoic acid (PFTriA)	0.8859 0.9021	0.8483 0.8815	0.8289	0.8931	0.7922	AveID		0.8617				4.7		20.0			
11Cl-PF3OUdS	2.8448 2.5101	2.9415 1.9007	2.9290	2.8446	2.8481	Q2ID	0.0004	2.8834	-0.006438			4.3		20.0			
Perfluorotetradecanoic acid (PFTeDA)	1.1215 1.1156	1.1900 1.0460	1.2548	1.2007	1.2043	AveID		1.1618				6.1		20.0			
NMeFOSE	1.0528 1.1298	1.1130 1.0266	1.1082	1.1384	1.0893	AveID		1.0940				3.7		20.0			
Perfluorododecanesulfonic acid (PFDoS)	2.6004 2.4792	2.5670 2.5676	2.5124	2.2149	2.2927	AveID		2.4620				6.1		20.0			
NMeFOSA	0.9101 0.9586	1.0051 0.9475	0.9821	0.9802	0.9113	AveID		0.9564				3.8		20.0			
NEtFOSE	1.0519 1.0846	1.0333 0.9535	1.0705	1.0813	1.0296	AveID		1.0435				4.3		20.0			
NEtFOSA	1.0139 1.1118	1.1038 1.0972	1.0661	1.0676	1.0356	AveID		1.0709				3.4		20.0			
13C4 PFBA	1.0091 0.9926	1.0099 0.9952	1.0202	0.9957	1.0918	Ave		1.0164				3.4		20.0			
13C5 PFPeA	0.4778 0.5146	0.4940 0.4772	0.5055	0.4763	0.5434	Ave		0.4984				5.0		20.0			
M2-4:2 FTS	0.2136 0.2127	0.2395 +++++	0.2095	0.2414	0.2360	Ave		0.2255				6.6		20.0			
13C3 PFBS	1.2438 1.1948	1.4280 1.2061	1.2706	1.2759	1.3635	Ave		1.2832				6.6		20.0			
13C5 PFHxA	1.1412 1.1137	1.1049 0.9465	1.1653	1.1181	1.2568	Ave		1.1209				8.3		20.0			
13C3 HFPO-DA	0.2597 0.2803	0.2604 0.2948	0.2743	0.2601	0.2890	Ave		0.2741				5.3		20.0			
13C4 PFHpA	1.1890 1.1217	1.1214 1.1849	1.2323	1.1086	1.2535	Ave		1.1731				4.9		20.0			
M2-6:2 FTS	0.3054 0.2639	0.3165 +++++	0.2628	0.2916	0.3259	Ave		0.2943				9.0		20.0			
13C8 PFOA	6.4943 6.6768	6.3932 6.5225	6.0361	6.5861	7.0997	Ave		6.5441				4.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 460-292594-1 Analy Batch No.: 634666

SDG No.:

Instrument ID: LC_LCMS11 GC Column: Gemini C18 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/20/2023 17:19 Calibration End Date: 11/20/2023 19:16 Calibration ID: 87440

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
13C3 PFHxS	0.9939 0.9780	1.0686 1.0390	0.9643	1.0346	1.0358	Ave		1.0163				3.7		20.0			
13C9 PFNA	0.9345 0.9044	0.9721 0.9225	0.9154	0.9556	1.0122	Ave		0.9452				4.0		20.0			
M2-8:2 FTS	0.3416 0.3405	0.3837 +++++	0.3428	0.3616	0.3704	Ave		0.3568				5.1		20.0			
d3-NMeFOSAA	0.3445 0.3379	0.3164 0.3278	0.3212	0.3627	0.3425	Ave		0.3361				4.7		20.0			
13C6 PFDA	1.0215 0.9697	1.0043 0.9968	0.9412	0.9586	1.0717	Ave		0.9948				4.4		20.0			
d5-NEtFOSAA	0.3768 0.3810	0.3969 0.3959	0.3896	0.3771	0.4061	Ave		0.3891				2.9		20.0			
13C8 PFOS	0.3313 0.3600	0.3616 0.3312	0.3743	0.3719	0.3840	Ave		0.3592				5.8		20.0			
13C7 PFUnA	1.1688 1.1002	1.0712 1.0649	1.0883	1.0831	1.1868	Ave		1.1091				4.4		20.0			
13C8 FOSA	1.7183 1.8047	1.7020 1.8660	1.7241	1.6426	1.7139	Ave		1.7388				4.2		20.0			
13C2 PFDoA	1.0667 1.0382	1.1252 1.1323	1.0955	1.0198	1.1843	Ave		1.0946				5.3		20.0			
13C2 PFTeDA	0.5527 0.5092	0.5266 0.5398	0.4757	0.5035	0.5408	Ave		0.5212				5.1		20.0			
d7-N-MeFOSE-M	1.3036 1.2699	1.2516 1.4039	1.2529	1.1759	1.2879	Ave		1.2780				5.4		20.0			
d3-NMePFOSA	0.3817 0.4032	0.3797 0.4592	0.3780	0.3611	0.3953	Ave		0.3940				8.0		20.0			
d9-N-EtFOSE-M	1.6587 1.6041	1.5990 1.6425	1.5852	1.5196	1.5444	Ave		1.5934				3.1		20.0			
d5-NEtPFOSA	0.3892 0.4106	0.3909 0.4563	0.3926	0.3829	0.4084	Ave		0.4044				6.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 460-292594-1 | Analy Batch No.: 634666

SDG No.:

Instrument ID: LC_LCMS11 | GC Column: Gemini C18 ID: 3(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 11/20/2023 17:19 | Calibration End Date: 11/20/2023 19:16 | Calibration ID: 87440

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-634666/2	2023.11.20b.001.d
Level 2	IC 280-634666/3	2023.11.20b.002.d
Level 3	IC 280-634666/4	2023.11.20b.003.d
Level 4	IC 280-634666/5	2023.11.20b.004.d
Level 5	IC 280-634666/6	2023.11.20b.005.d
Level 6	IC 280-634666/7	2023.11.20b.006.d
Level 7	IC 280-634666/8	2023.11.20b.007.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid (PFBA)		AveID	117611 6981208	278570 31456865	659389	1487094	2692740	0.200 12.5	0.496 62.5	1.25	2.50	5.01
PFMPA		AveID	198346 11728006	481575 46446550	1176128	2449031	4784341	0.399 25.0	0.992 125	2.50	4.99	10.0
3:3 FTCA		AveID	59542 3790599	145385 17769308	372223	748564	1483624	0.998 62.5	2.48 312	6.24	12.5	25.0
Perfluoropentanoic acid (PFPeA)		AveID	160232 9076799	371469 36717604	911746	1967440	3707753	0.200 12.5	0.496 62.5	1.25	2.50	5.01
PFMBA		AveID	400865 23366150	967724 84384498	2390667	5001021	9217460	0.399 25.0	0.992 125	2.50	4.99	10.0
4:2 FTS		AveID	75422 3610225	185271 +++++	391062	880430	1600435	0.498 31.1	1.24 +++++	3.11	6.22	12.5
NFDHA		AveID	52477 3113530	123910 13608749	318871	682355	1301008	0.200 12.5	0.496 62.5	1.25	2.50	5.01
Perfluorobutanesulfonic acid (PFBS)		AveID	56678 3156559	128953 11636668	315512	673662	1257820	0.177 11.1	0.440 55.5	1.11	2.22	4.45
Perfluorohexanoic acid (PFHxA)		AveID	214271 10949455	470354 41594867	1162819	2294084	4608910	0.200 12.5	0.496 62.5	1.25	2.50	5.01
5:3 FTCA		AveID	281778 18943572	769716 79942960	1860318	3954621	7440700	2.00 125	4.96 625	12.5	25.0	50.1
HFPO-DA (GenX)		AveID	47855 2810670	102830 12550317	234337	593463	1059718	0.200 12.5	0.496 62.5	1.25	2.50	5.01
PFEESA		AveID	373124 20521571	951022 83995996	2199539	5224874	9325994	0.356 22.3	0.885 111	2.23	4.45	8.93
Perfluoroheptanoic acid (PFHpA)		AveID	177643 10430441	411526 44587906	1061232	2240746	4448078	0.200 12.5	0.496 62.5	1.25	2.50	5.01
Perfluoropentanesulfonic acid (PFPeS)		AveID	54211 3340345	131545 13176548	342828	741416	1328604	0.187 11.7	0.465 58.6	1.17	2.34	4.70
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)		AveID	371436	886226	2037010	4657853	8757236	0.188	0.468	1.18	2.36	4.73

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 460-292594-1 | Analy Batch No.: 634666

SDG No.:

Instrument ID: LC_LCMS11 | GC Column: Gemini C18 ID: 3(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 11/20/2023 17:19 | Calibration End Date: 11/20/2023 19:16 | Calibration ID: 87440

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			21675500	84155190				11.8	59.0			
6:2 FTS		AveID	124045 5906116	261138 +++++	680244	1451698	2564676	0.757 47.4	1.88 +++++	4.73	9.46	19.0
Perfluorooctanoic acid (PFOA)		AveID	126425 7693174	317624 31133464	761554	1618576	3266370	0.200 12.5	0.496 62.5	1.25	2.50	5.01
7:3 FTCA		AveID	152111 8840357	336809 36008698	859589	1757038	3332305	2.00 125	4.96 625	12.5	25.0	50.1
Perfluorohexanesulfonic acid (PFHxS)		AveID	28898 1482092	61221 5893559	157781	320859	594347	0.182 11.4	0.452 57.0	1.14	2.28	4.57
Perfluorononanoic acid (PFNA)		AveID	195016 11939038	474558 45575769	1168381	2521433	4916240	0.200 12.5	0.496 62.5	1.25	2.50	5.01
Perfluoroheptanesulfonic acid (PFHpS)		AveID	43273 2592379	109971 9738519	273528	562426	1056152	0.190 11.9	0.472 59.5	1.19	2.38	4.77
8:2 FTS		AveID	107726 5748934	260852 +++++	669100	1283979	2365783	0.765 47.9	1.90 +++++	4.78	9.56	19.2
NMeFOSAA		AveID	27455 1381773	58667 5312695	133284	327014	579679	0.200 12.5	0.496 62.5	1.25	2.50	5.01
Perfluorodecanoic acid (PFDA)		AveID	162852 9902882	342777 39884428	911845	2061298	3911620	0.200 12.5	0.496 62.5	1.25	2.50	5.01
NEtFOSAA		AveID	20606 1238244	45369 4592028	130790	259882	493094	0.200 12.5	0.496 62.5	1.25	2.50	5.01
Perfluorooctanesulfonic acid (PFOS)		AveID	81095 4686669	172610 18968511	467661	1023400	1832745	0.186 11.6	0.461 58.1	1.16	2.32	4.66
Perfluoroundecanoic acid (PFUnA)		AveID	203362 10793387	472981 42009668	1139799	2565734	4616480	0.200 12.5	0.496 62.5	1.25	2.50	5.01
9Cl-PF3ONS		AveID	193053 11519482	435892 44268430	1178490	2423533	4611237	0.497 31.1	1.23 155	3.10	6.21	12.5
Perfluorononanesulfonic acid (PFNS)		AveID	30414 1933742	85293 7286435	206057	450779	788377	0.192 12.0	0.477 60.1	1.20	2.40	4.82
Perfluorooctanesulfonamide (PFOSA)		AveID	116160 7912123	294570 33322505	711805	1529681	2911559	0.200 12.5	0.496 62.5	1.25	2.50	5.01
Perfluorododecanoic acid (PFDoA)		AveID	228314 12923983	502898 44212823	1358307	2801865	5171394	0.200 12.5	0.496 62.5	1.25	2.50	5.01
Perfluorodecanesulfonic acid (PFDS)		AveID	81213 4473223	181919 17098138	481115	975872	1781345	0.192 12.0	0.478 60.2	1.20	2.41	4.83
Perfluorotridecanoic acid (PFTriA)		AveID	145317 8154050	328102 32690686	794285	1755940	2995078	0.200 12.5	0.496 62.5	1.25	2.50	5.01
11Cl-PF3OUdS		Q2ID	299703 16082302	713858 54215445	1817766	3833661	7100258	0.502 31.4	1.25 157	3.14	6.27	12.6

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 460-292594-1 | Analy Batch No.: 634666

SDG No.:

Instrument ID: LC_LCMS11 | GC Column: Gemini C18 ID: 3(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 11/20/2023 17:19 | Calibration End Date: 11/20/2023 19:16 | Calibration ID: 87440

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorotetradecanoic acid (PFTeDA)		AveID	125573 6636697	293439 25043723	728120	1560522	2854761	0.200 12.5	0.496 62.5	1.25	2.50	5.01
NMeFOSE		AveID	498031 29575102	1196286 123737588	3036025	6333354	11955154	0.998 62.5	2.48 312	6.24	12.5	25.0
Perfluorododecanesulfonic acid (PFDoS)		AveID	60648 3568703	154640 14164726	398941	755959	1455588	0.194 12.1	0.481 60.6	1.21	2.42	4.86
NMeFOSA		AveID	25209 1593463	65545 7471151	162348	334938	613913	0.200 12.5	0.496 62.5	1.25	2.50	5.01
NEtFOSE		AveID	1266235 71722969	2837461 268929997	7421187	15547911	27100955	2.00 125	4.96 625	12.5	25.0	50.1
NEtFOSA		AveID	28636 1882121	74109 8596863	183061	386800	720845	0.200 12.5	0.496 62.5	1.25	2.50	5.01
13C4 PFBA	13C3PFBA	Ave	6571957 6111725	6275736 5713621	5910103	6626430	6118737	10.0 10.0	10.0 10.0	10.0	10.0	10.0
13C5 PFPeA	PFHxA	Ave	1930493 1872345	1845697 1469185	1822623	1966495	1861368	5.00 5.00	5.00 5.00	5.00	5.00	5.00
M2-4:2 FTS	PFHxS	Ave	269504 247140	274792 +++++	261775	301449	260878	4.67 4.67	4.67 +++++	4.67	4.67	4.67
13C3 PFBS	PFHxS	Ave	781140 691081	815734 551660	790282	793327	750482	2.33 2.33	2.33 2.33	2.33	2.33	2.33
13C5 PFHxA	PFHxA	Ave	2305489 2026140	2064136 1457154	2100957	2308198	2152413	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 HFPO-DA	PFHxA	Ave	2098701 2039532	1946292 1815473	1978108	2147776	1980106	10.0 10.0	10.0 10.0	10.0	10.0	10.0
13C4 PFHpA	PFHxA	Ave	2402023 2040613	2094950 1824262	2221680	2288673	2146804	2.50 2.50	2.50 2.50	2.50	2.50	2.50
M2-6:2 FTS	PFHxS	Ave	391866 311851	369333 +++++	333885	370468	366499	4.75 4.75	4.75 +++++	4.75	4.75	4.75
13C8 PFOA	PFOA	Ave	2114812 1900826	1960147 1501777	1983246	2110108	1927703	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 PFHxS	PFHxS	Ave	634969 575388	620949 483417	610123	654361	579920	2.37 2.37	2.37 2.37	2.37	2.37	2.37
13C9 PFNA	PFNA	Ave	1219134 1167517	1195936 918456	1105627	1328258	1222840	1.25 1.25	1.25 1.25	1.25	1.25	1.25
M2-8:2 FTS	PFHxS	Ave	442024 405704	451605 +++++	439328	463237	419998	4.79 4.79	4.79 +++++	4.79	4.79	4.79
d3-NMeFOSAA	PFOS	Ave	626049 557441	547691 450259	562776	687536	582847	5.00 5.00	5.00 5.00	5.00	5.00	5.00
13C6 PFDA	PFDA	Ave	1295451	1185279	1149883	1239096	1172566	1.25	1.25	1.25	1.25	1.25

FORM VI
PFAS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 460-292594-1 Analy Batch No.: 634666

SDG No.:

Instrument ID: LC_LCMS11 GC Column: Gemini C18 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/20/2023 17:19 Calibration End Date: 11/20/2023 19:16 Calibration ID: 87440

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			1133177	884359				1.25	1.25			
d5-NEtFOSAA	PFOS	Ave	684819 628489	687217 543911	682586	714806	690990	5.00 5.00	5.00 5.00	5.00	5.00	5.00
13C8 PFOS	PFOS	Ave	287787 283823	299258 217500	313498	336918	312365	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C7 PFUnA	PFDA	Ave	1482306 1285796	1264135 944820	1329701	1400067	1298445	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C8 FOSA	PFOS	Ave	1561249 1488481	1473317 1281734	1510364	1556750	1458243	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFDoA	PFDA	Ave	1352820 1213316	1327943 1004593	1338423	1318290	1295732	1.25 1.25	1.25 1.25	1.25	1.25	1.25
13C2 PFTeDA	PFDA	Ave	700937 595088	621429 478899	581181	650895	591696	1.25 1.25	1.25 1.25	1.25	1.25	1.25
d7-N-MeFOSE-M	PFOS	Ave	11845142 10474283	10834645 9643471	10976291	11144926	10957610	25.0 25.0	25.0 25.0	25.0	25.0	25.0
d3-NMePFOSA	PFOS	Ave	346781 332569	328676 315415	331136	342239	336308	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d9-N-EtFOSE-M	PFOS	Ave	15071545 13229967	13841253 11282322	13886982	14402209	13140094	25.0 25.0	25.0 25.0	25.0	25.0	25.0
d5-NEtPFOSA	PFOS	Ave	353597 338668	338400 313420	343967	362875	347487	2.50 2.50	2.50 2.50	2.50	2.50	2.50

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
Q2ID = Quadratic 1/conc^2 IsoDil

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.001.d
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 20-Nov-2023 17:19:37 ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: IC L3
Misc. Info.: Plate: 1 Rack: 1
Operator ID: DENLCMS Instrument ID: LC_LCMS11
Sublist: chrom-PFC_IDA_DEN11*sub5

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 21-Nov-2023 11:14:44 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1626

First Level Reviewer: B5QN Date: 21-Nov-2023 11:00:32
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.061	3.062	-0.001	1.000	6571957	9.93		99.3	42924	
* 1 13C3PFBA										
216.00 > 172.00	3.061	3.062	-0.001		3256482	5.00			11753	
2 PFBA										
212.80 > 168.90	3.061	3.062	-0.001	1.000	117611	0.2002		100	112	
4 PFMPA										
229.00 > 84.90	3.728	3.728	0.0	0.835	198346	0.4021		101	1281	
5 3:3 FTCA										
241.00 > 177.00	3.912	3.928	-0.016	0.877	59542	0.9435	Target=1.69	94.5	2180	
241.00 > 117.00	3.912	3.928	-0.016	0.877	35278		1.69(0.84-2.53)	94.5	863	
D 7 13C5 PFPeA										
268.30 > 223.00	4.462	4.478	-0.016	0.834	1930493	4.79		95.9	17571	
6 PFPA										
263.00 > 219.00	4.462	4.478	-0.016	1.000	160232	0.2069	Target=221.09	104	344	
263.00 > 68.90	4.462	4.478	-0.016	1.000	634		252.73(110.55-331.64)	104	23.3	
8 PFMBA										
279.00 > 85.10	4.778	4.778	0.0	1.071	400865	0.4110		103	4498	
10 4:2FTS										
327.10 > 307.00	5.097	5.097	0.0	1.000	75422	0.5564	Target=1.58	112	1914	
327.10 > 80.90	5.097	5.097	0.0	1.000	44311		1.70(0.79-2.38)	112	403	
D 9 13C2-4:2FTS										
329.10 > 80.90	5.097	5.097	0.0	0.744	269504	4.43	Target=4.29	94.8	4863	
329.10 > 309.00	5.097	5.097	0.0	0.744	57511		4.69(2.14-6.43)	94.8	2436	
11 NFDHA										
295.00 > 201.00	5.262	5.280	-0.018	0.983	52477	0.1835	Target=1.86	91.9	1375	
295.00 > 84.90	5.262	5.280	-0.018	0.983	31714		1.65(0.93-2.79)	91.9	590	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 16 13C3 PFBS										
302.10 > 79.90	5.353	5.354	-0.001	0.781	781140	2.25	Target=4.50	96.9	20101	
302.10 > 98.90	5.353	5.354	-0.001	0.781	190540		4.10(2.25-6.76)	96.9	8218	
15 PFBS										
298.70 > 79.90	5.353	5.354	-0.001	1.000	56678	0.1895	Target=2.27	107	1839	
298.70 > 98.80	5.353	5.354	-0.001	1.000	21893		2.59(1.13-3.40)	107	481	
* 14 13C2 PFHxA										
315.10 > 270.00	5.353	5.354	-0.001		2020230	2.50	Target=77.08		33405	
315.10 > 119.40	5.335	5.354	-0.019		24500		82.46(38.54-115.62)		815	
D 12 13C5 PFHxA										
318.00 > 273.00	5.353	5.354	-0.001	1.000	2305489	2.55	Target=50.64	102	33794	
318.00 > 120.30	5.353	5.354	-0.001	1.000	45799		50.34(25.32-75.97)	102	1223	
13 PFHxA										
313.00 > 269.00	5.353	5.371	-0.018	1.000	214271	0.2110	Target=20.05	106	915	
313.00 > 118.90	5.353	5.371	-0.018	1.000	8680		24.69(10.03-30.08)	106	303	
18 5:3 FTCA										
341.00 > 237.10	5.624	5.625	-0.001	1.051	281778	1.69	Target=1.13	84.4	4459	
341.00 > 217.00	5.624	5.625	-0.001	1.051	260495		1.08(0.57-1.70)	84.4	6581	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.663	5.682	-0.019	1.058	2098701	9.48	Target=1.57	94.8	22411	
286.90 > 184.90	5.663	5.682	-0.019	1.058	1339113		1.57(0.78-2.35)	94.8	19072	
19 HFPO-DA										
284.90 > 168.90	5.663	5.682	-0.019	1.000	47855	0.2117	Target=1.65	106	2072	
284.90 > 184.90	5.663	5.682	-0.019	1.000	29766		1.61(0.83-2.48)	106	563	
21 PFEESA										
314.80 > 134.90	5.789	5.789	0.0	1.081	373124	0.3322	Target=14.24	93.3	9651	
314.80 > 82.90	5.789	5.789	0.0	1.081	24192		15.42(7.12-21.36)	93.3	623	
D 22 13C4 PFHpA										
367.10 > 322.00	6.104	6.122	-0.018	1.140	2402023	2.53		101	31347	
17 PFHpA										
363.10 > 319.00	6.104	6.122	-0.018	1.000	177643	0.1879	Target=4.02	94.1	705	
363.10 > 169.00	6.104	6.122	-0.018	1.000	43564		4.08(2.01-6.04)	94.1	785	
23 PFPeS										
349.10 > 79.90	6.206	6.223	-0.017	0.905	54211	0.1798	Target=2.71	96.0	702	
349.10 > 98.90	6.206	6.223	-0.017	0.905	20744		2.61(1.35-4.06)	96.0	996	
24 ADONA										
376.90 > 250.90	6.337	6.355	-0.018	1.119	371436	0.1958	Target=3.01	104	5232	
376.90 > 84.80	6.337	6.355	-0.018	1.119	121867		3.05(1.51-4.52)	104	3452	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.454	6.471	-0.017	0.942	391866	4.93	Target=4.27	104	11249	
429.10 > 409.00	6.454	6.471	-0.017	0.942	79390		4.94(2.13-6.40)	104	3782	
25 6:2FTS										
427.10 > 407.00	6.454	6.471	-0.017	1.000	124045	0.7892	Target=1.91	104	2232	
427.10 > 80.90	6.454	6.471	-0.017	1.000	58205		2.13(0.96-2.87)	104	1389	
D 27 13C8 PFOA										
421.10 > 376.00	6.690	6.707	-0.017	1.000	2114812	2.48		99.2	73250	
* 29 13C4 PFOA										
417.10 > 172.00	6.690	6.707	-0.017		325643	2.50			15116	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 PFOA										
413.00 > 369.00	6.690	6.707	-0.017	1.000	126425	0.1872	Target=2.39	93.8	526	
413.00 > 169.00	6.690	6.707	-0.017	1.000	55208		2.29(1.19-3.58)	93.8	641	
30 7:3 FTCA										
441.00 > 316.90	6.838	6.855	-0.017	1.277	152111	1.97	Target=1.44	98.6	5349	
441.00 > 336.90	6.838	6.855	-0.017	1.277	95387		1.59(0.72-2.16)	98.6	3322	
* 31 18O2 PFHxS										
403.00 > 83.90	6.854	6.871	-0.017		640208	2.37			22430	
D 33 13C3 PFHxS										
402.10 > 79.90	6.854	6.871	-0.017	1.000	634969	2.31	Target=4.22	97.8	22293	
402.10 > 98.80	6.854	6.871	-0.017	1.000	150717		4.21(2.11-6.33)	97.8	7064	
32 PFHxS										
398.70 > 79.90	6.854	6.871	-0.017	1.000	28898	0.2023	Target=3.74	111	1081	
398.70 > 98.90	6.854	6.871	-0.017	1.000	8022		3.60(1.87-5.61)	111	500	
D 34 13C9 PFNA										
472.10 > 427.00	7.239	7.240	-0.001	1.000	1219134	1.24		98.9	16739	
36 PFNA										
463.00 > 419.00	7.239	7.240	-0.001	1.000	195016	0.1991	Target=5.99	99.7	1363	
463.00 > 219.00	7.239	7.240	-0.001	1.000	31540		6.18(3.00-8.99)	99.7	798	
* 35 13C5 PFNA										
468.00 > 423.00	7.239	7.240	-0.001		1304588	1.25			17955	
37 PFHpS										
449.00 > 79.90	7.440	7.456	-0.016	0.932	43273	0.2010	Target=5.05	106	1521	
449.00 > 98.80	7.440	7.456	-0.016	0.932	7496		5.77(2.53-7.58)	106	269	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.489	7.506	-0.017	1.093	442024	4.59	Target=5.22	95.8	12525	
529.10 > 509.00	7.489	7.506	-0.017	1.093	75535		5.85(2.61-7.83)	95.8	3602	
39 8:2FTS										
527.10 > 507.00	7.489	7.506	-0.017	1.000	107726	0.8034	Target=1.64	105	5144	
527.10 > 80.80	7.489	7.506	-0.017	1.000	66077		1.63(0.82-2.46)	105	3135	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.725	7.725	0.0	0.967	626049	5.12		102	10389	
42 NMeFOSAA										
570.10 > 419.00	7.725	7.743	-0.018	1.000	27455	0.2190	Target=1.12	110	1070	
570.10 > 483.00	7.725	7.743	-0.018	1.000	21939		1.25(0.56-1.68)	110	731	
43 PFDA										
512.90 > 469.00	7.743	7.761	-0.018	1.000	162852	0.1912	Target=3.52	95.8	2206	
512.90 > 219.00	7.743	7.761	-0.018	1.000	44696		3.64(1.76-5.28)	95.8	1202	
* 44 13C2 PFDA										
515.10 > 470.10	7.743	7.761	-0.018		1268216	1.25			18986	
D 40 13C6 PFDA										
519.10 > 474.10	7.743	7.761	-0.018	1.000	1295451	1.28		103	19444	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.933	7.934	-0.001	0.993	684819	4.84		96.9	13160	
45 NEtFOSAA										
584.20 > 419.10	7.933	7.951	-0.018	1.000	20606	0.2069	Target=1.52	104	850	
584.20 > 526.00	7.933	7.951	-0.018	1.000	14247		1.45(0.76-2.27)	104	451	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 49 13C8 PFOS										
507.10 > 79.90	7.986	7.986	0.0	1.000	287787	2.20	Target=3.01	92.2	1127	
507.10 > 98.90	7.986	7.986	0.0	1.000	109941		2.62(1.50-4.51)	92.2	4890	
* 47 13C4 PFOS										
502.80 > 79.90	7.986	8.004	-0.018		870454	2.40	Target=3.82		16664	
502.80 > 98.90	7.986	8.004	-0.018		229217		3.80(1.91-5.72)		7667	
48 PFOS										
498.90 > 79.90	7.986	8.004	-0.018	1.000	81095	0.2067	Target=4.59	111	1411	
498.90 > 98.80	7.986	8.004	-0.018	1.000	18773		4.32(2.29-6.88)	111	731	
D 53 13C7 PFUnA										
570.00 > 525.10	8.248	8.248	0.0	1.065	1482306	1.32		105	27528	
52 PFUnA										
563.10 > 519.00	8.248	8.266	-0.018	1.000	203362	0.1938	Target=5.53	97.1	2638	
563.10 > 269.10	8.248	8.266	-0.018	1.000	34256		5.94(2.77-8.30)	97.1	1506	
54 9ClFOS										
530.80 > 351.00	8.371	8.390	-0.019	1.478	193053	0.5086	Target=2.30	102	5157	
532.80 > 353.00	8.371	8.390	-0.019	1.478	92678		2.08(1.15-3.46)	102	4119	
55 PFNS										
548.80 > 79.90	8.495	8.512	-0.017	1.064	30414	0.1897	Target=4.01	98.7	1356	
548.80 > 98.80	8.495	8.512	-0.017	1.064	7283		4.18(2.01-6.02)	98.7	252	
51 PFOSA										M
498.10 > 77.90	8.722	8.722	0.0	1.002	116160	0.1869	Target=44.22	93.6	2455	M
498.10 > 478.00	8.705	8.722	-0.017	1.000	2980		38.98(22.11-66.32)	93.6	111	
D 50 13C8 FOSA										
506.10 > 77.80	8.705	8.722	-0.017	1.090	1561249	2.47		98.8	11160	
D 56 13C2 PFDoA										
615.10 > 570.00	8.739	8.756	-0.017	1.129	1352820	1.22		97.5	29765	
57 PFDoA										
613.10 > 569.00	8.739	8.756	-0.017	1.000	228314	0.2099	Target=7.62	105	2540	
613.10 > 319.00	8.739	8.756	-0.017	1.000	29016		7.87(3.81-11.43)	105	1289	
58 PFDS										
599.00 > 79.90	9.011	9.028	-0.017	1.128	81213	0.2192	Target=4.76	114	1420	
599.00 > 98.80	8.994	9.028	-0.034	1.126	14611		5.56(2.38-7.13)	114	701	
63 PFTrDA										
663.00 > 619.00	9.237	9.254	-0.017	0.950	145317	0.2053	Target=5.15	103	1668	
663.00 > 168.90	9.237	9.254	-0.017	0.950	26815		5.42(2.57-7.72)	103	740	
66 11ClFOS										
630.90 > 450.90	9.396	9.412	-0.016	1.659	299703	0.4957	Target=3.33	98.7	7255	
632.90 > 452.90	9.396	9.412	-0.016	1.659	88844		3.37(1.67-5.00)	98.7	3221	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.721	9.738	-0.017	1.255	700937	1.33		106	13559	
70 PFTeDA										
713.10 > 669.00	9.721	9.738	-0.017	1.000	125573	0.1927	Target=7.24	96.5	1323	
713.10 > 168.90	9.721	9.738	-0.017	1.000	17175		7.31(3.62-10.85)	96.5	786	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.892	9.910	-0.018	1.239	11845142	25.5		102	92406	
60 N-MeFOSE-M										M
616.10 > 58.90	9.929	9.930	-0.001	1.004	498031	0.9608		96.2	789	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
71 PFDoS										
699.10 > 79.90	9.987	10.007	-0.020	1.251	60648	0.2046	Target=4.39	106	934	
699.10 > 98.80	9.987	10.007	-0.020	1.251	13828		4.39(2.20-6.59)	106	574	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.101	10.101	0.0	1.265	346781	2.42		96.9	6025	
61 NMeFOSA										
511.90 > 219.00	10.101	10.120	-0.019	1.000	25209	0.1900	Target=0.99	95.2	786	
511.90 > 169.00	10.101	10.120	-0.019	1.000	27147		0.93(0.49-1.48)	95.2	543	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.291	10.291	0.0	1.289	15071545	26.0		104	151804	
65 N-EtFOSE-M										M
630.00 > 58.90	10.310	10.329	-0.019	1.002	1266235	2.01		101	3025	M
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.480	10.480	0.0	1.312	353597	2.41		96.2	4927	
68 N-EtFOSA-M										M
526.00 > 219.00	10.480	10.499	-0.019	1.000	28636	0.1891	Target=0.99	94.7	479	M
526.00 > 169.00	10.480	10.499	-0.019	1.000	31118		0.92(0.50-1.49)	94.7	564	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

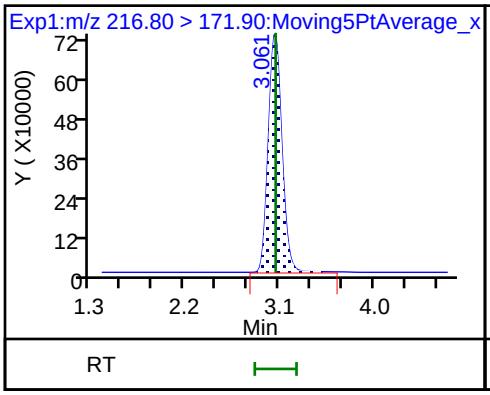
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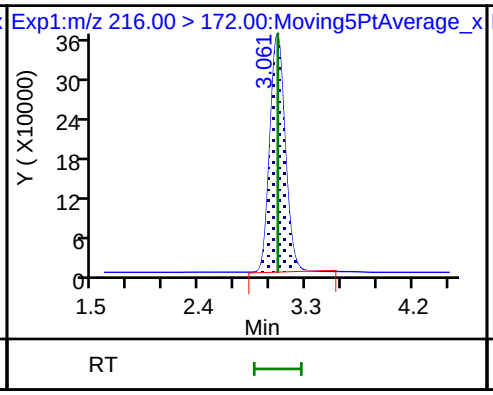
Eurofins Denver

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Lims ID: IC L3
Client ID:
Operator ID: DENLCMS ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5

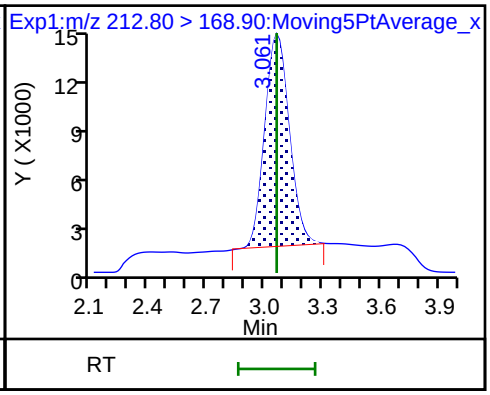
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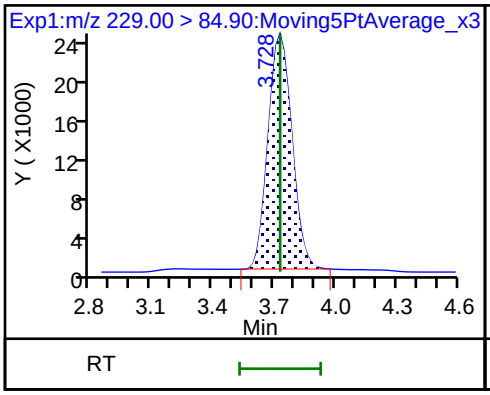
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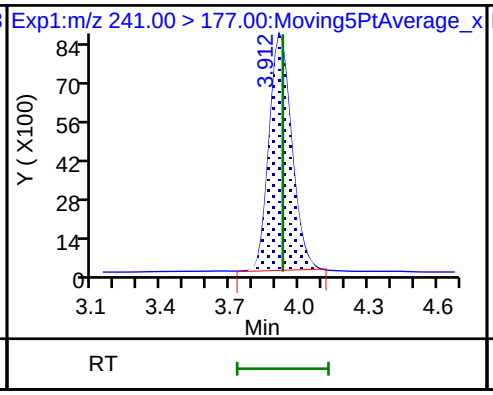
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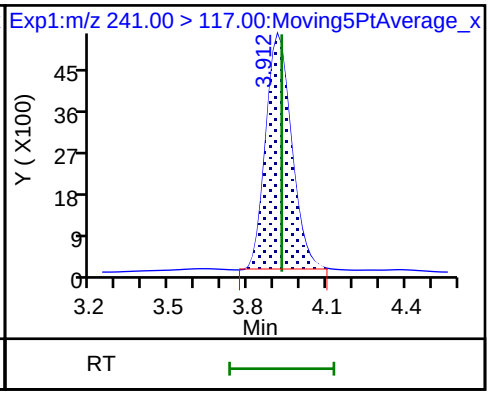
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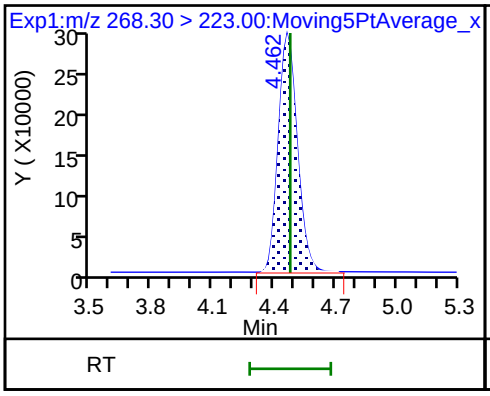
5 3:3 FTCA



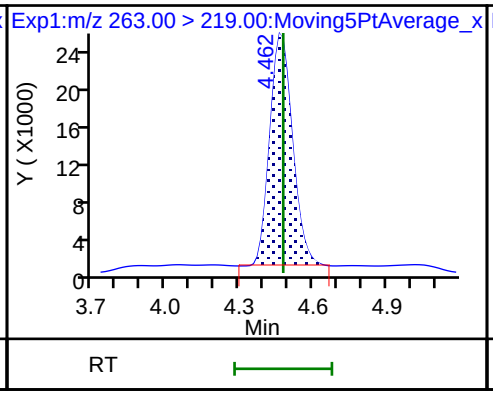
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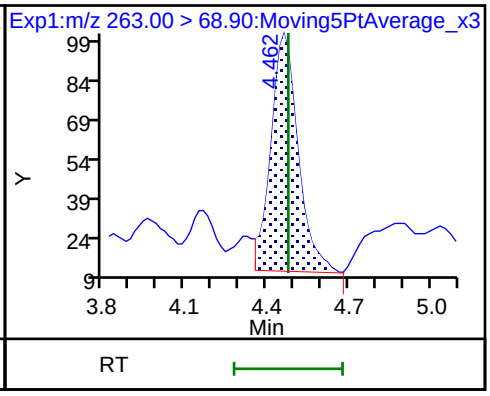
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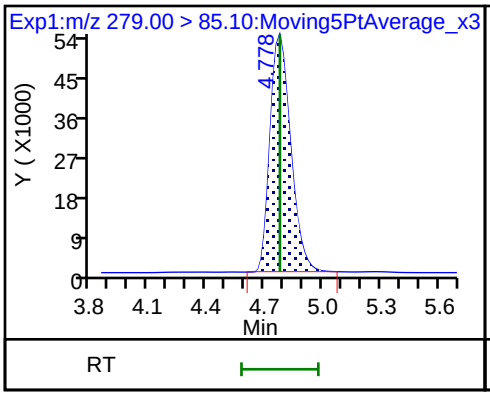
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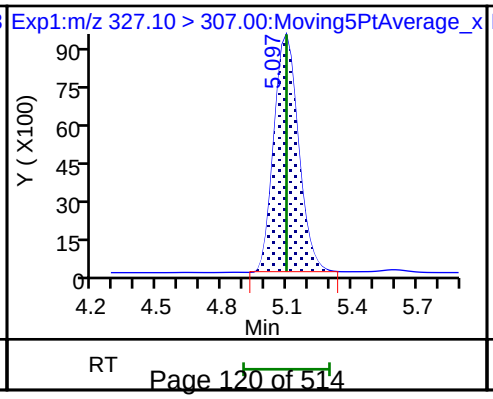
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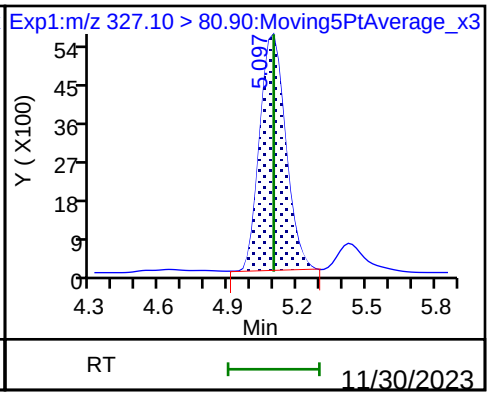
8 PFMBA



10 4:2FTS

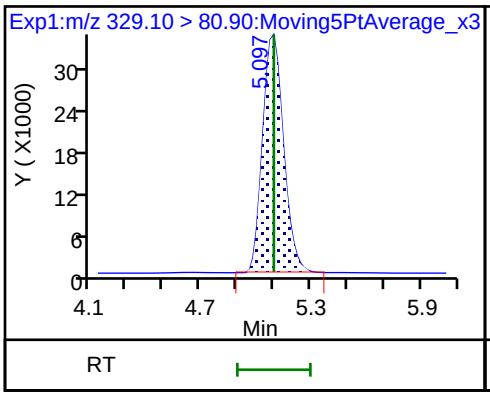


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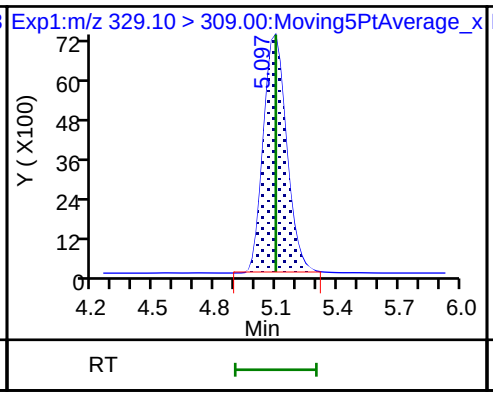


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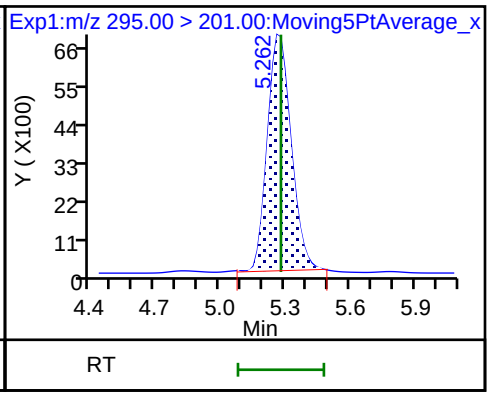
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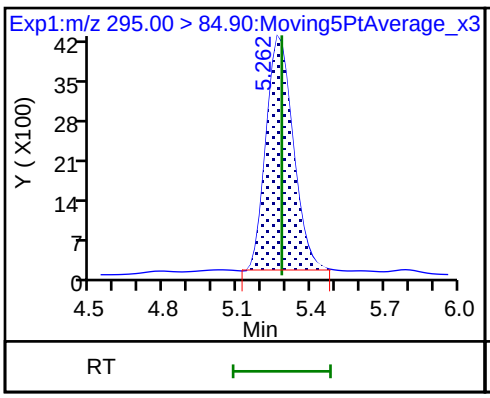
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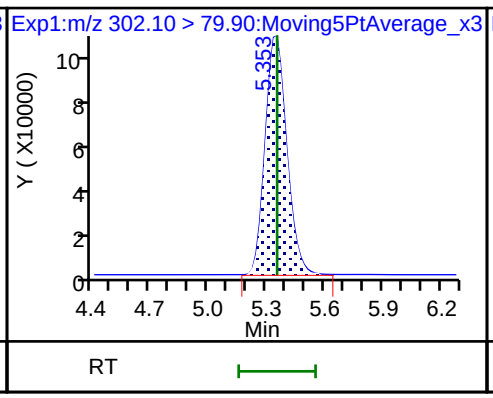
11 NFDHA



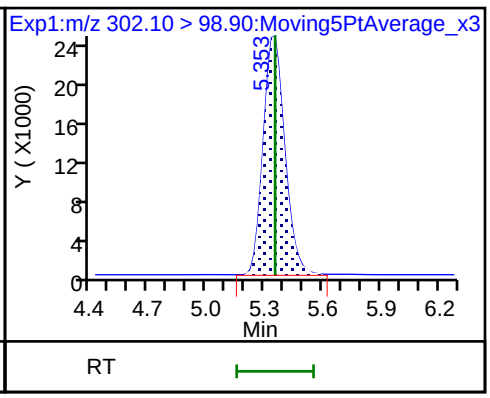
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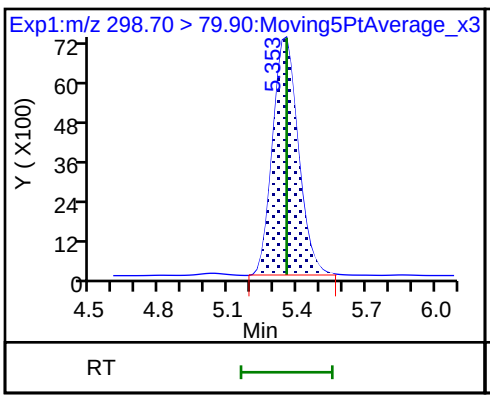
D 16 13C3 PFBS



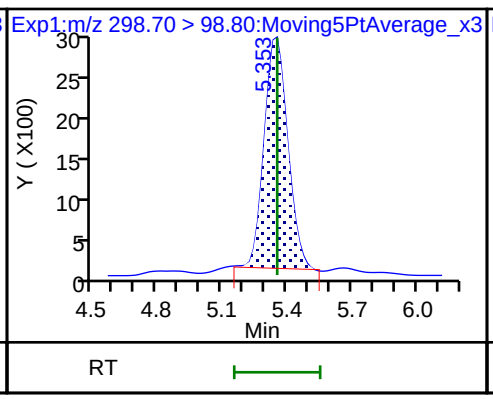
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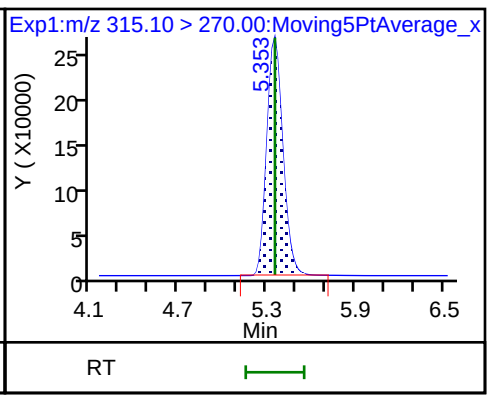
15 PFBS



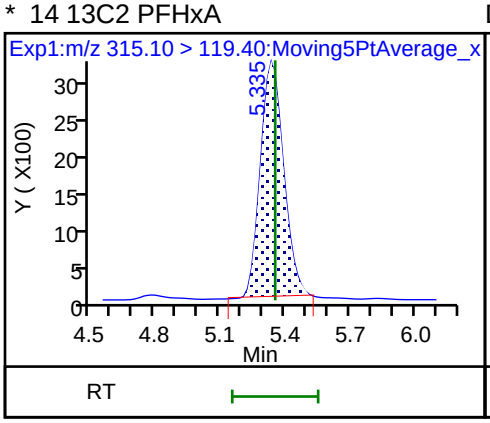
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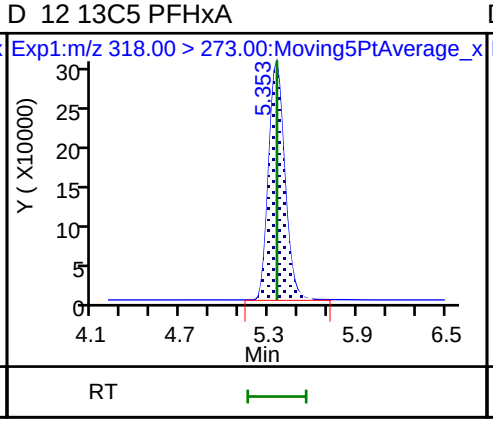
* 14 13C2 PFHxA



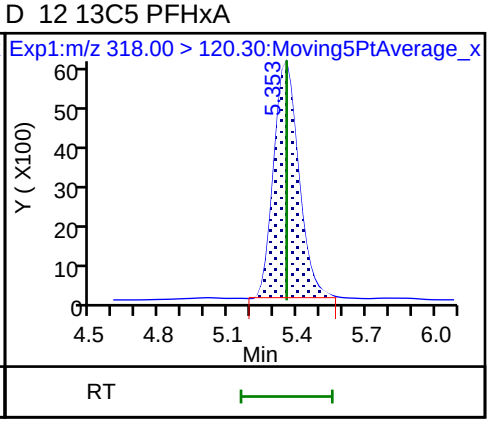
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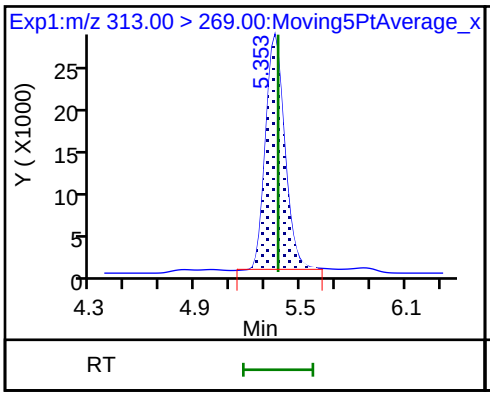
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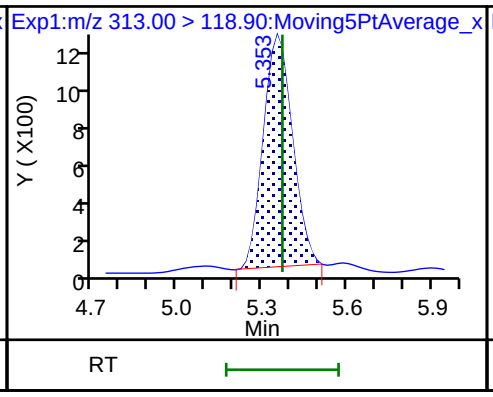
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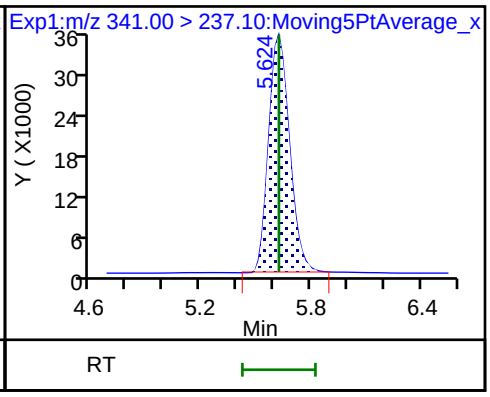
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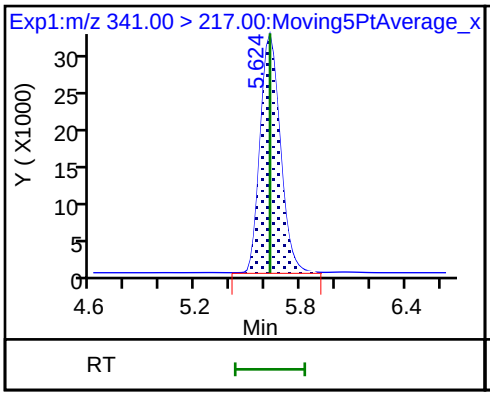
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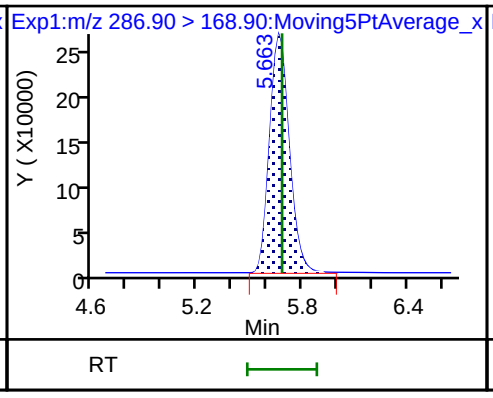
18 5:3 FTCA



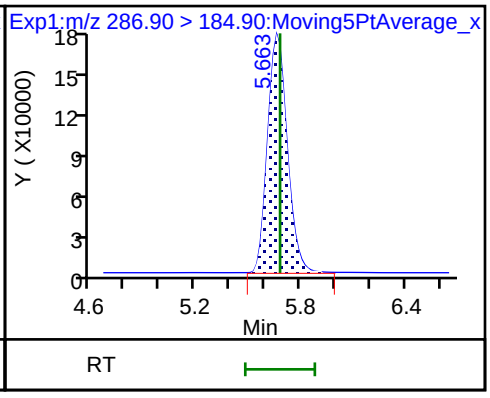
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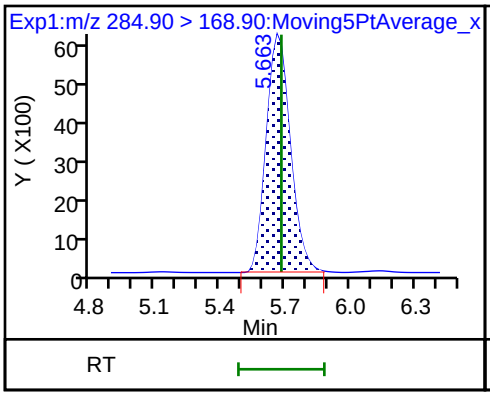
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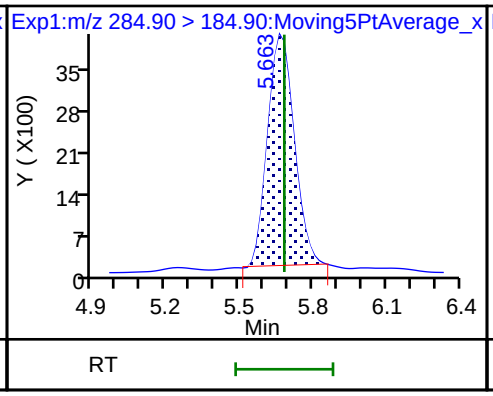
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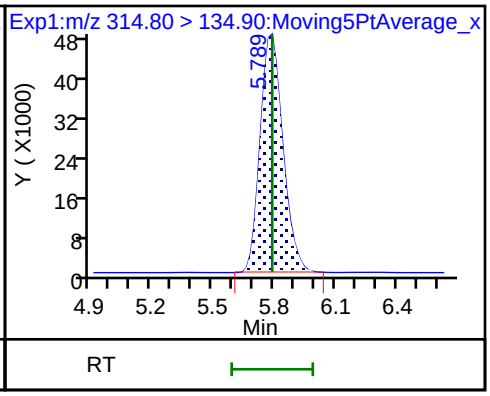
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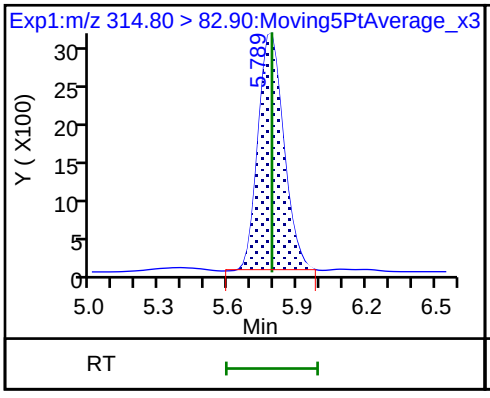
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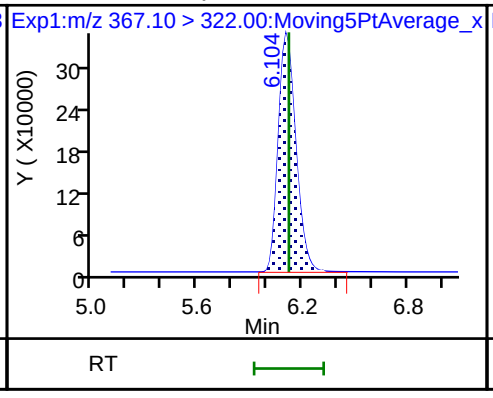
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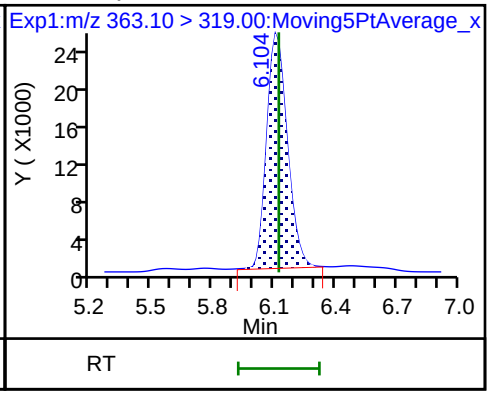
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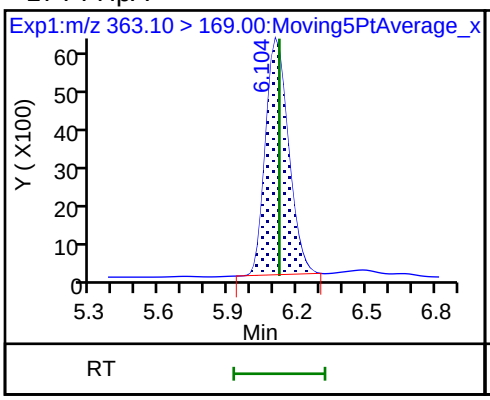
D 22 13C4 PFHpA



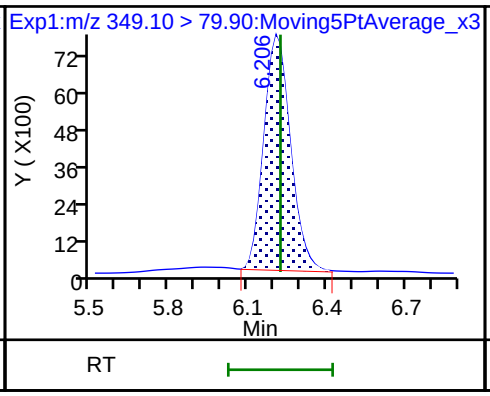
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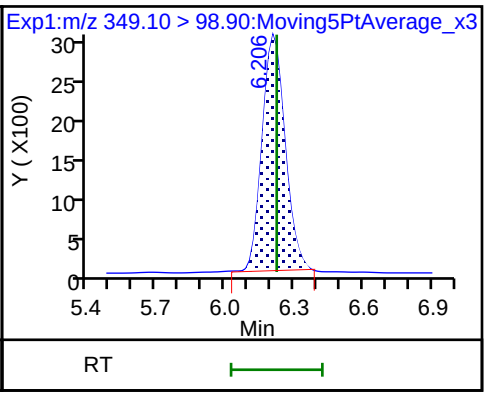
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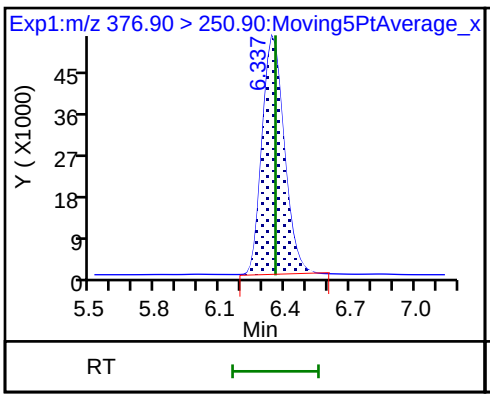
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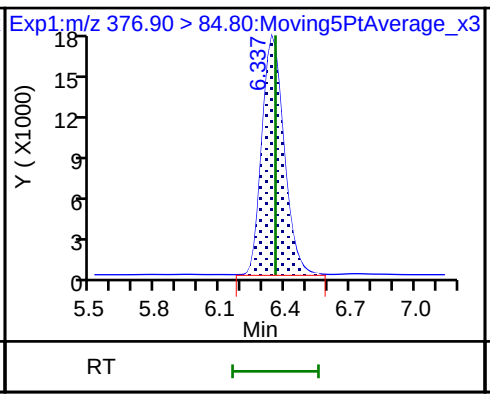
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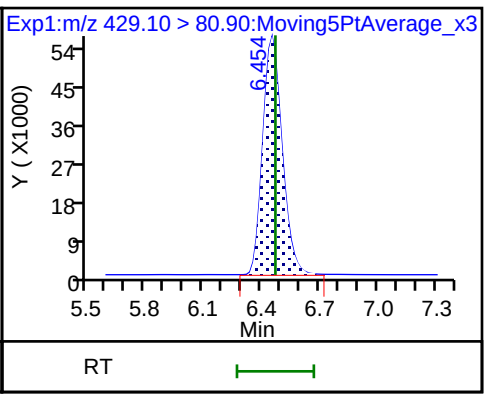
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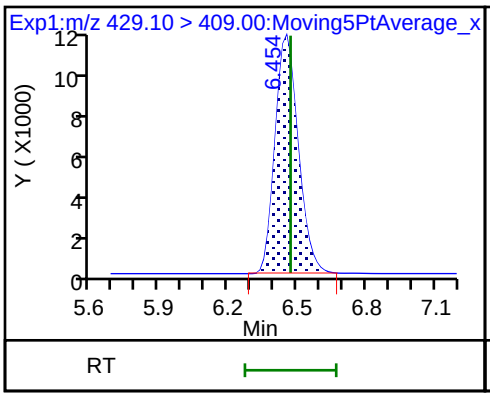
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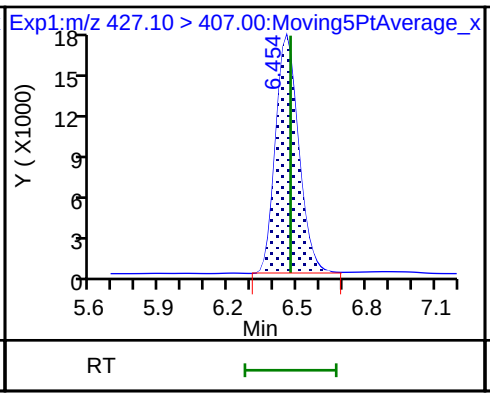
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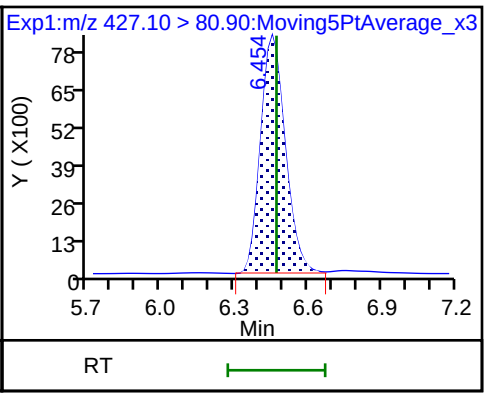
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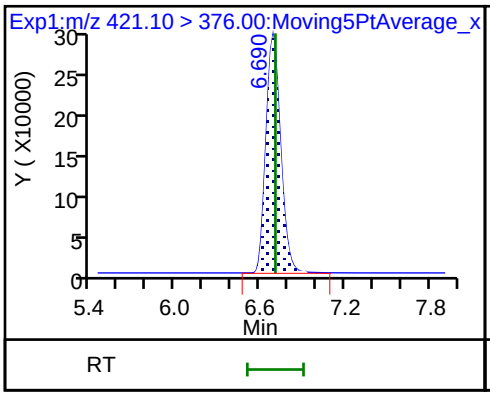
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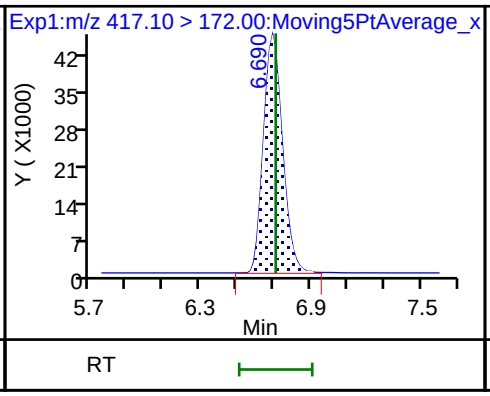
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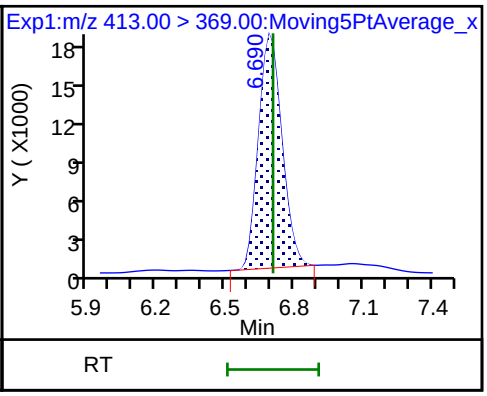
D 27 13C8 PFOA



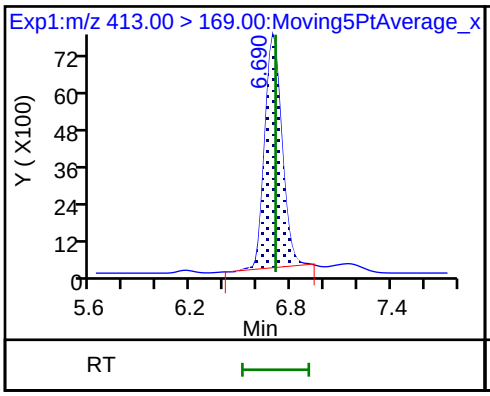
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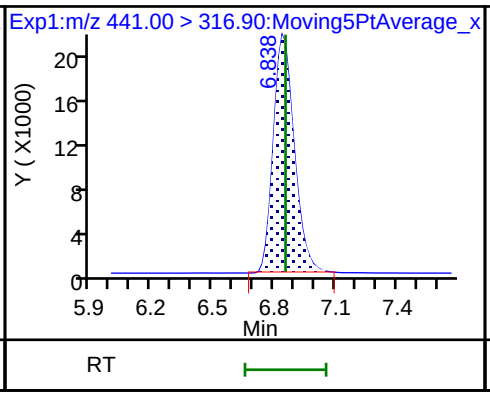
28 PFOA



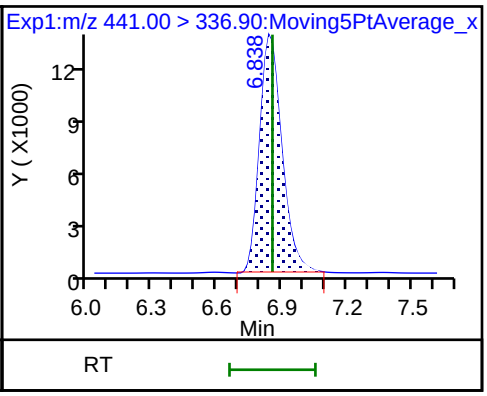
28 PFOA



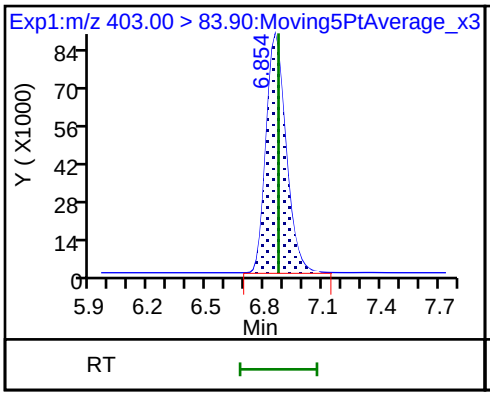
30 7:3 FTCA



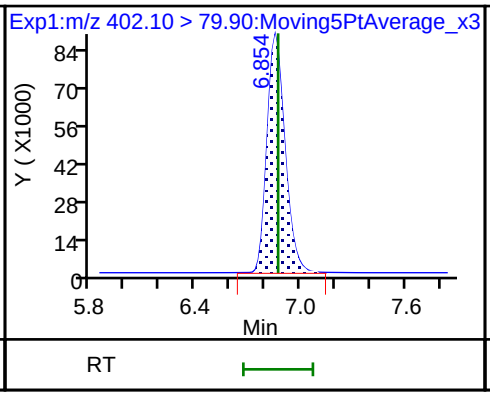
30 7:3 FTCA



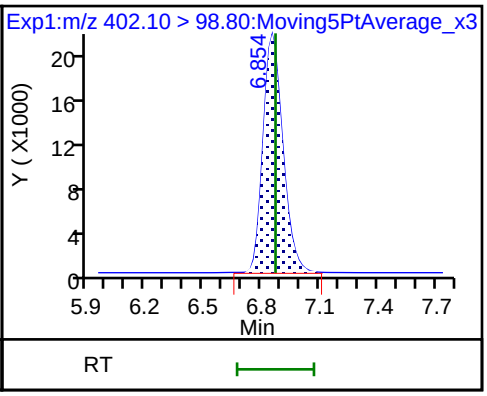
* 31 18O2 PFHxS



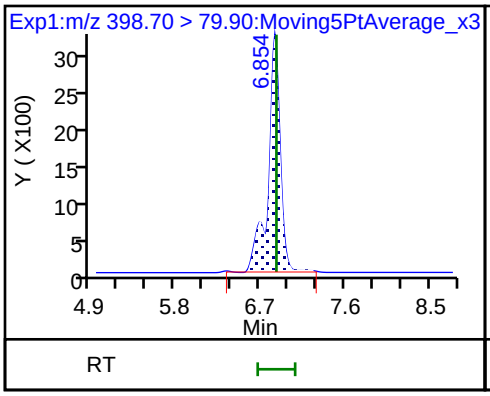
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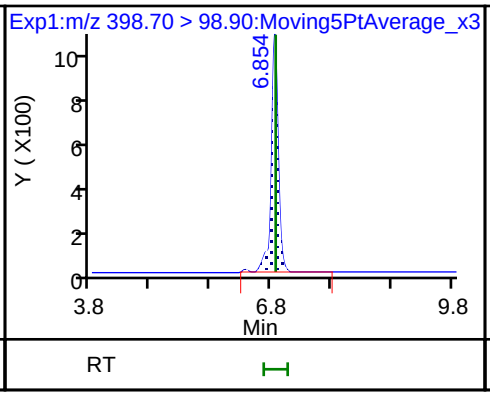
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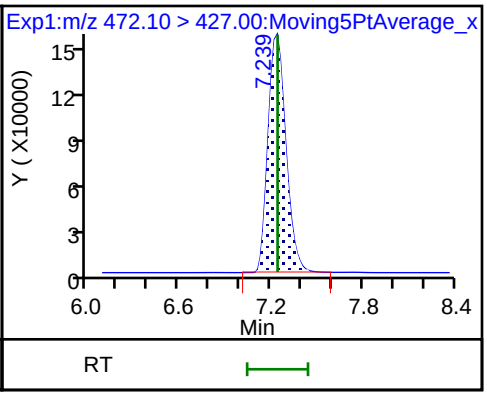
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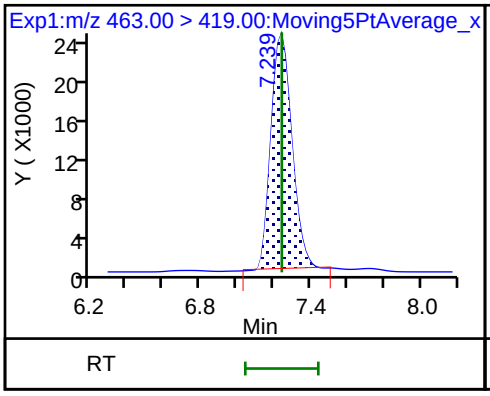
32 PFHxS



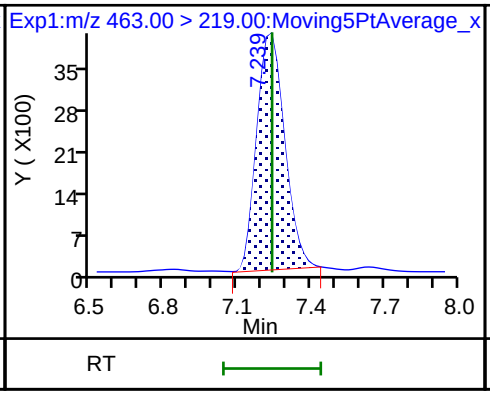
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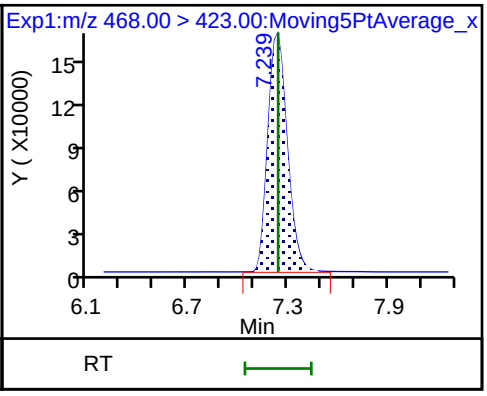
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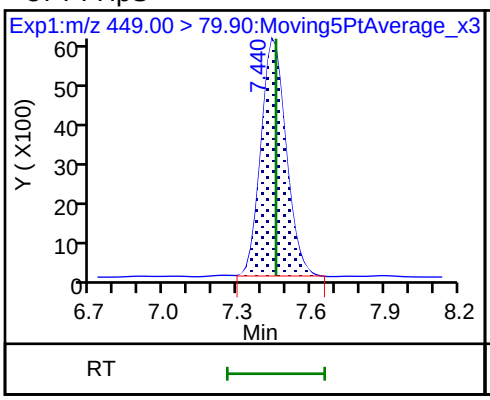
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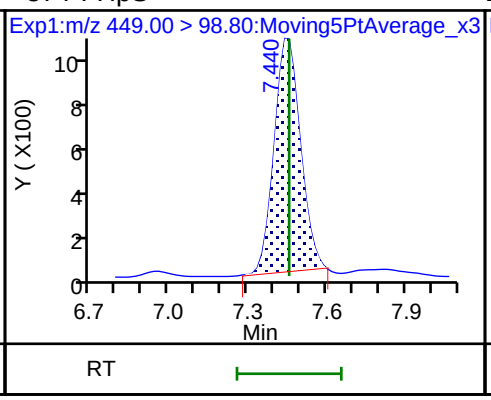
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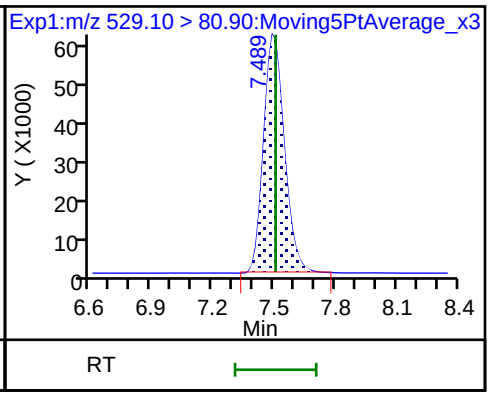
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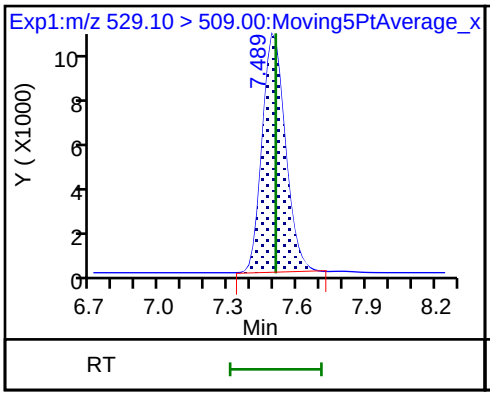
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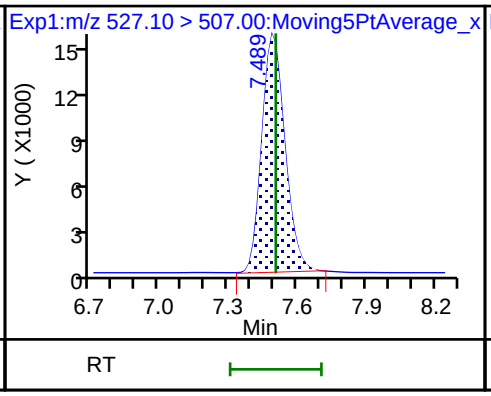
D 38 13C2-8:2FTS



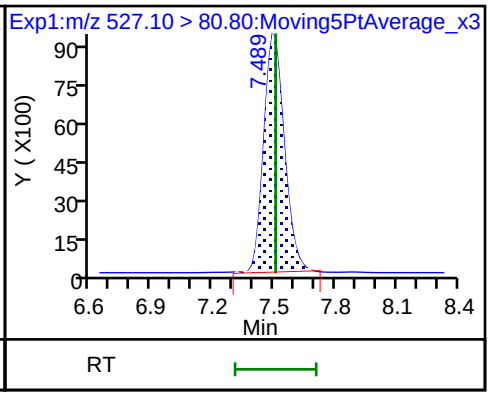
D 38 13C2-8:2FTS



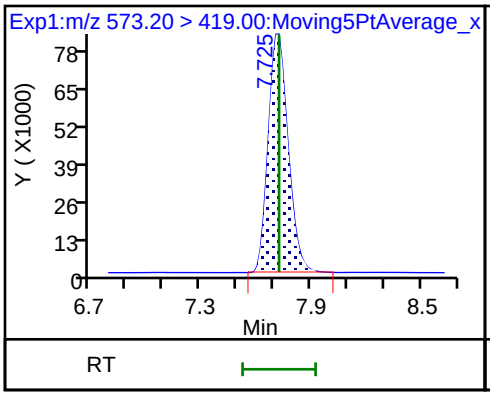
39 8:2FTS



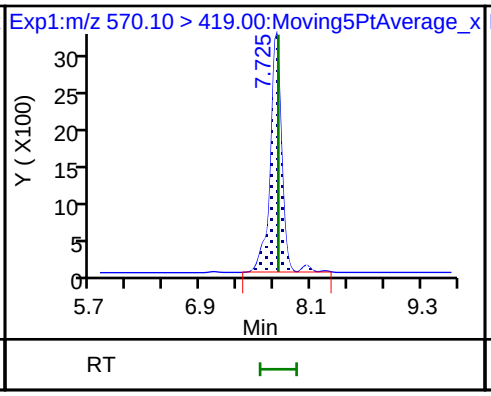
39 8:2FTS



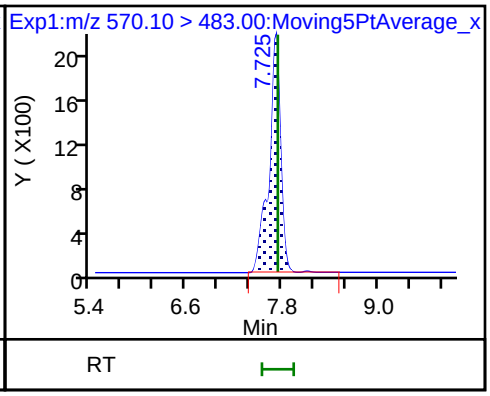
D 41 d3-NMeFOSAA



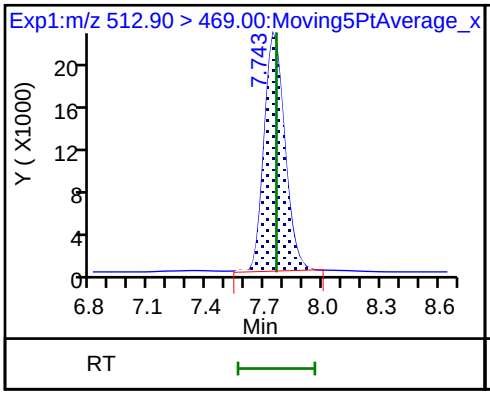
42 NMeFOSAA



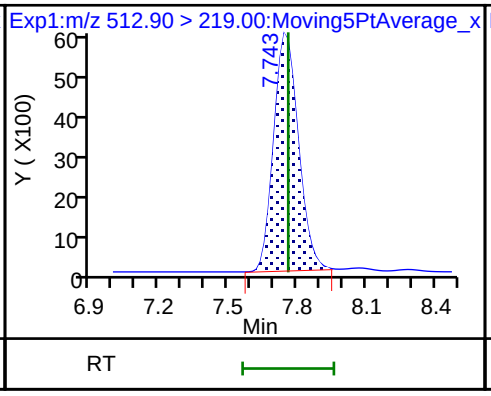
42 NMeFOSAA



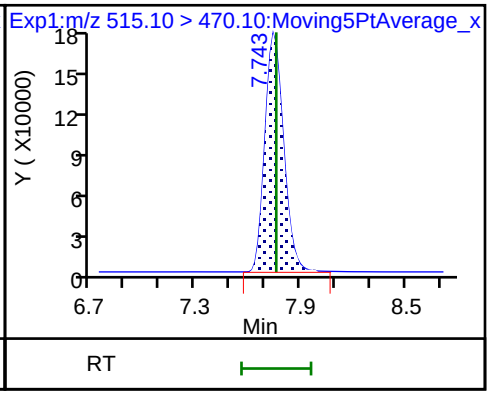
43 PFDA



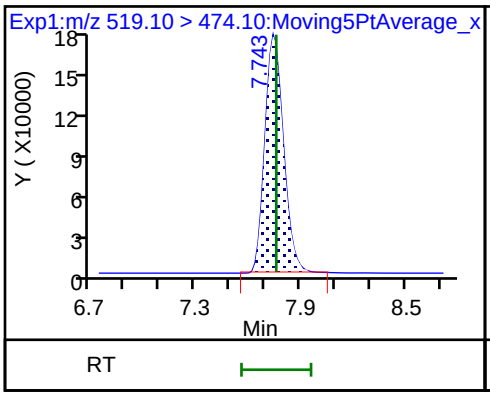
43 PFDA



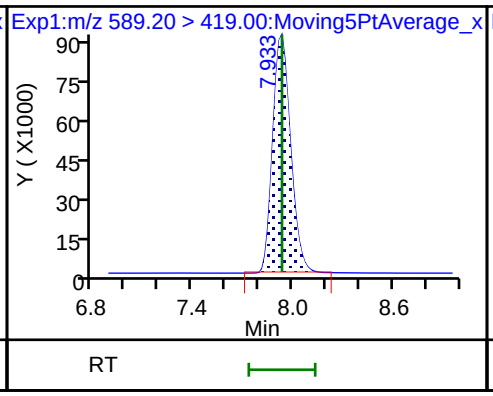
* 44 13C2 PFDA



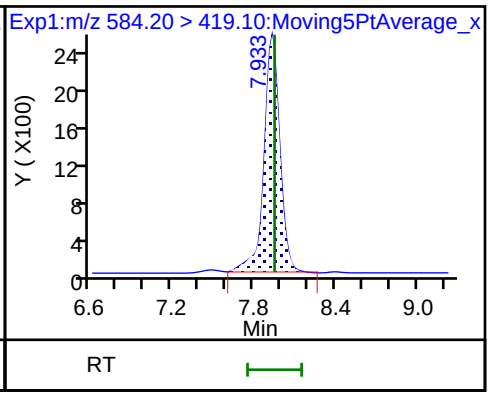
D 40 13C6 PFDA



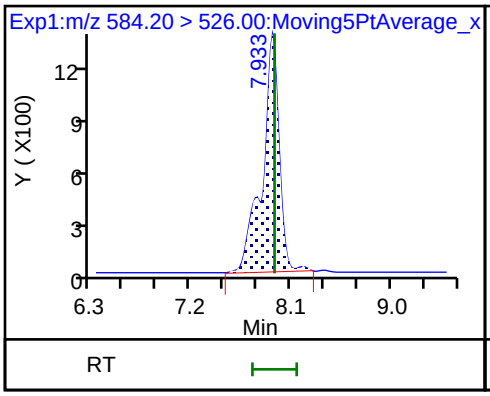
D 46 d5-NEtFOSAA



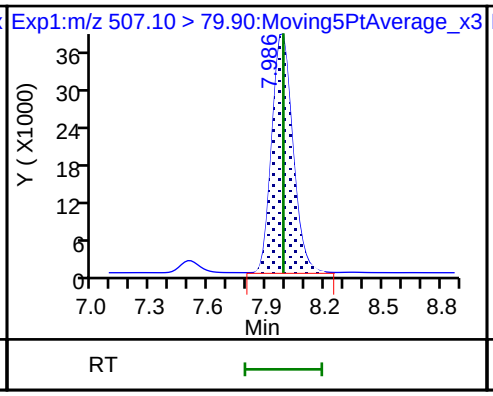
45 NEtFOSAA



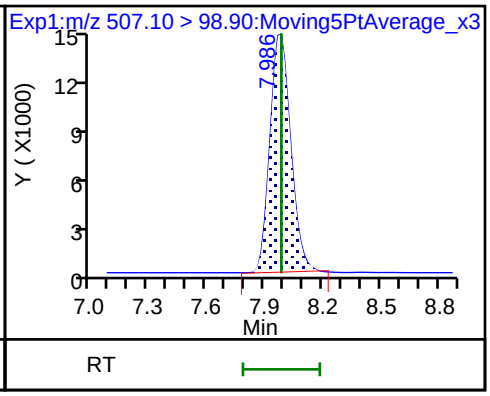
45 NEtFOSAA



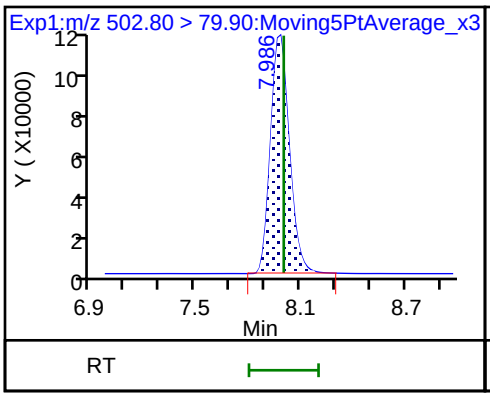
D 49 13C8 PFOS



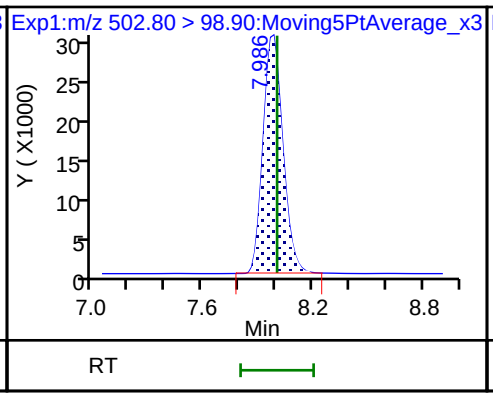
D 49 13C8 PFOS



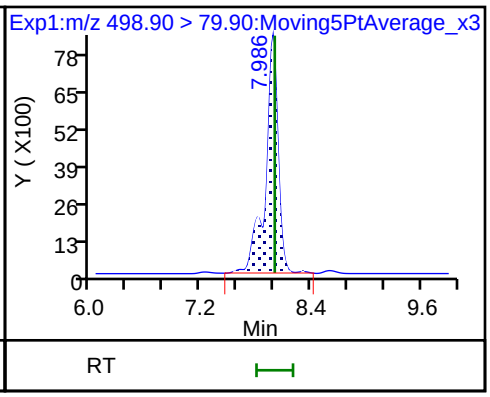
* 47 13C4 PFOS



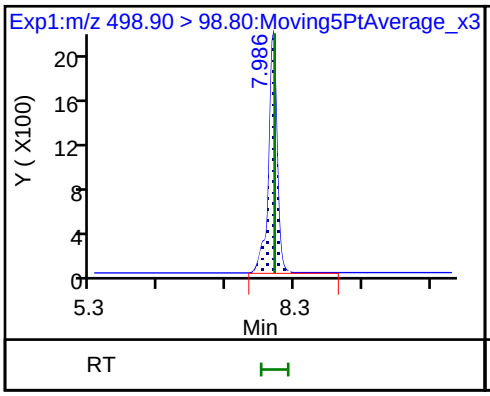
* 47 13C4 PFOS



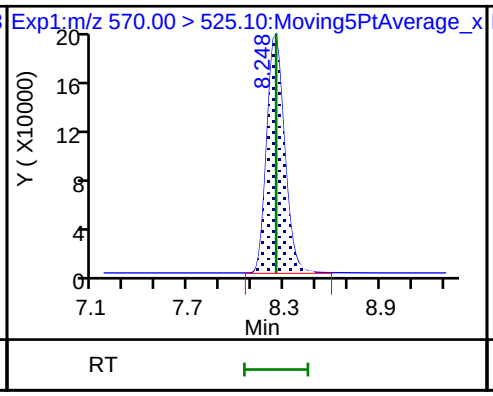
48 PFOS



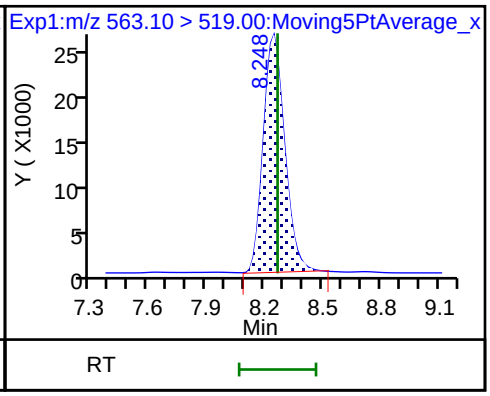
48 PFOS



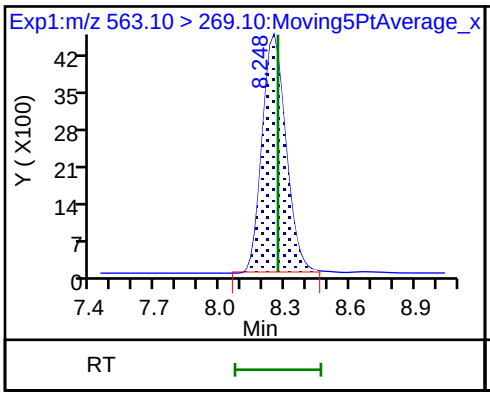
D 53 13C7 PFUnA



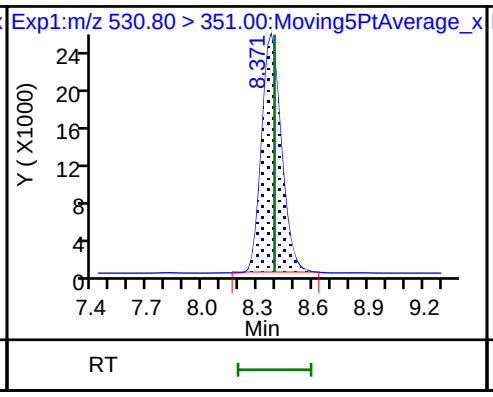
52 PFUnA



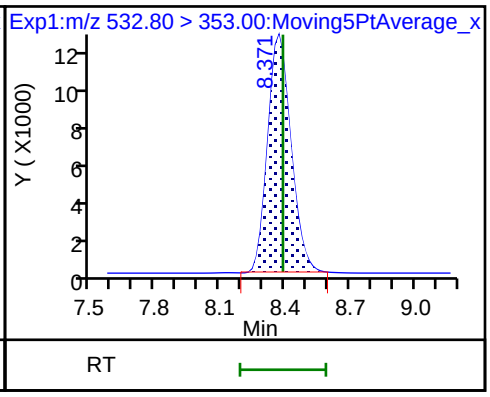
52 PFUnA



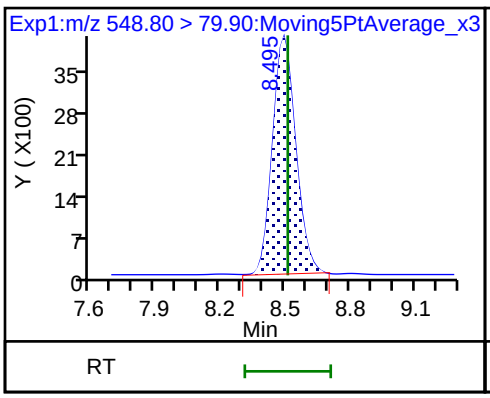
54 9ClFOS



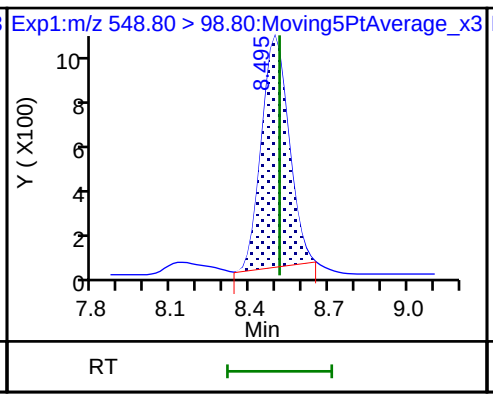
54 9ClFOS



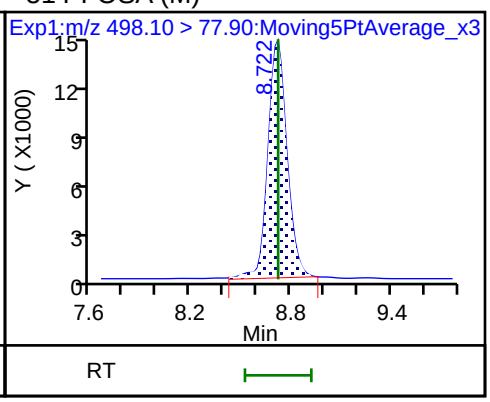
55 PFNS



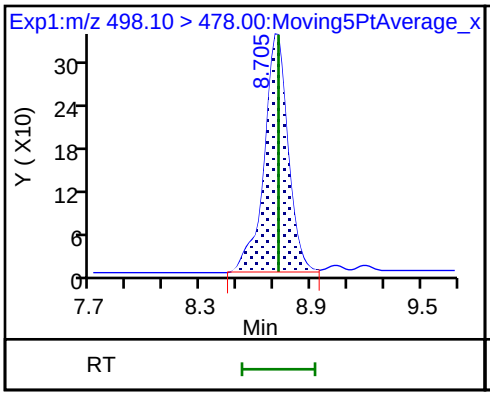
55 PFNS



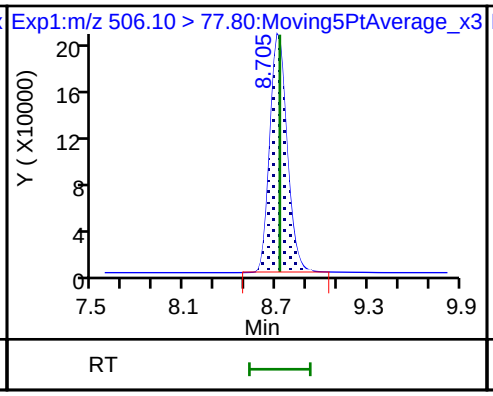
51 PFOSA (M)



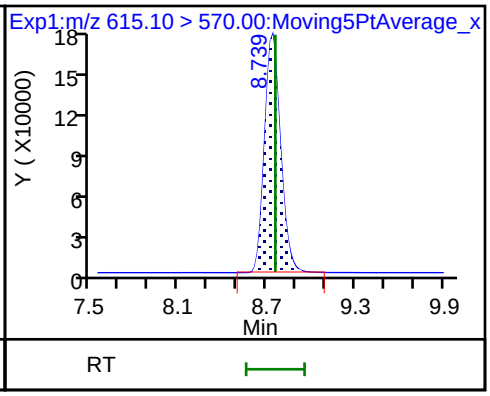
51 PFOSA



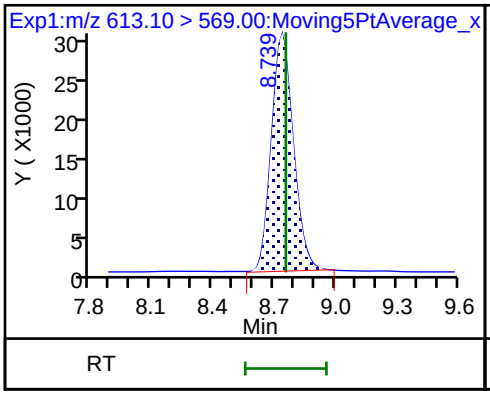
D 50 13C8 FOSA



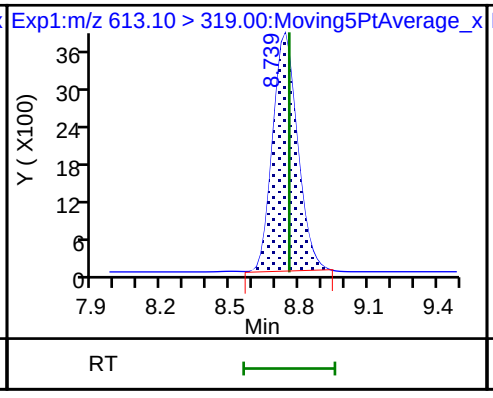
D 56 13C2 PFDoA



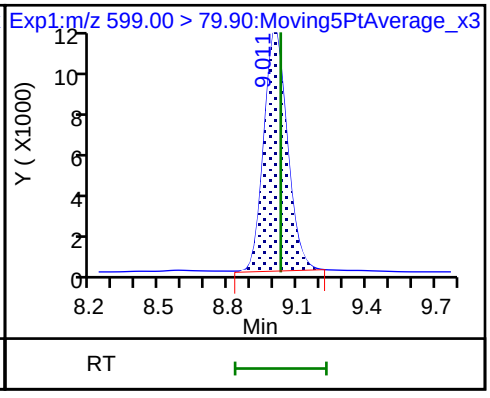
57 PFDoA



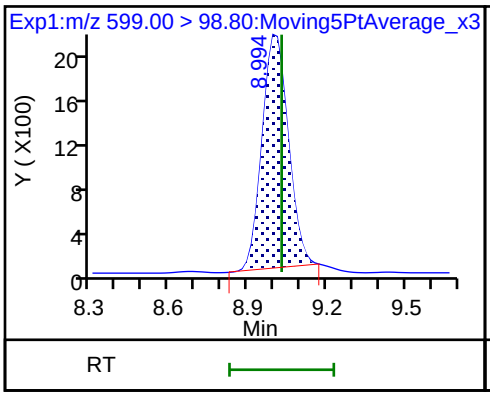
57 PFDoA



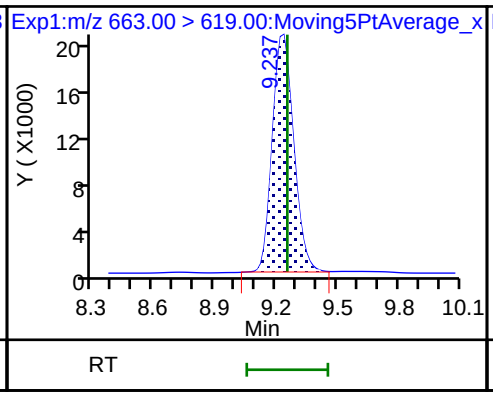
58 PFDS



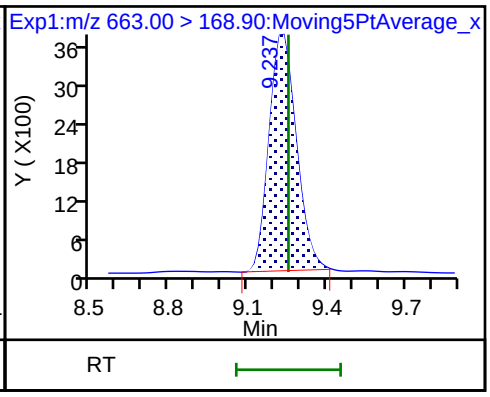
58 PFDS



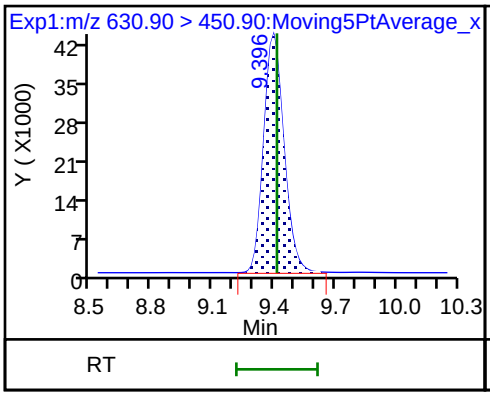
63 PFTrDA



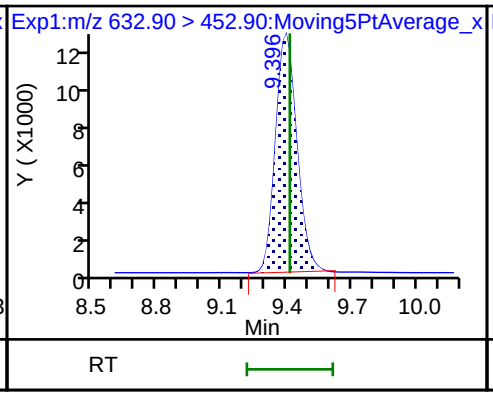
63 PFTrDA



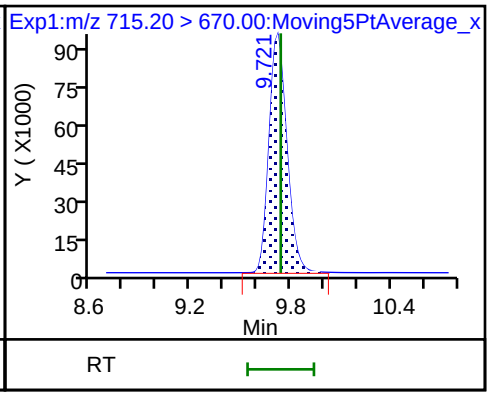
66 11ClFOS



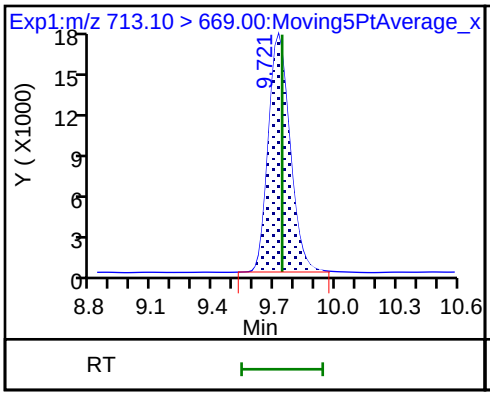
66 11ClFOS



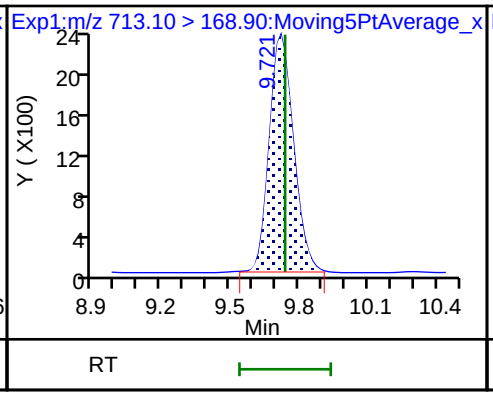
D 69 13C2 PFTeDA



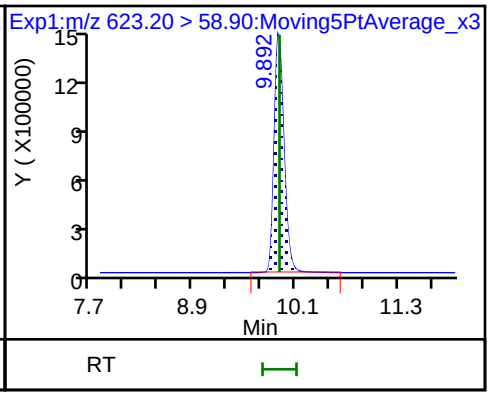
70 PFTeDA



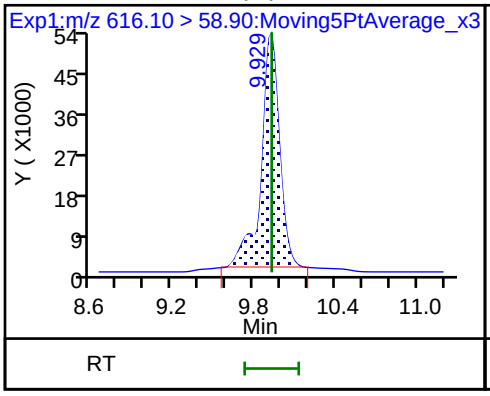
70 PFTeDA



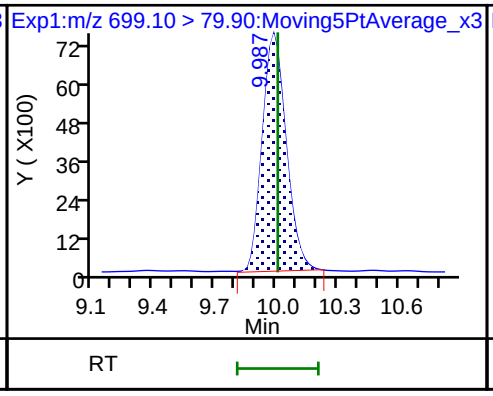
D 59 d7-N-Me-FOSE



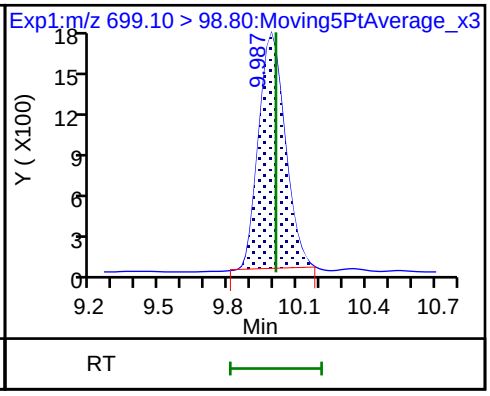
60 N-MeFOSE-M (M)



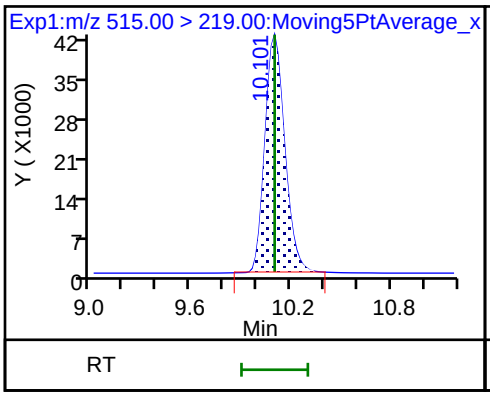
71 PFDoS



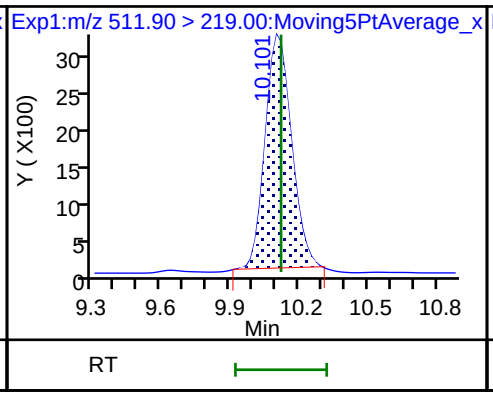
71 PFDoS



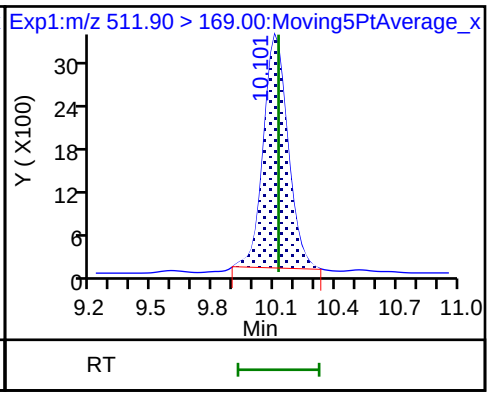
D 62 d3-NMePFOSA



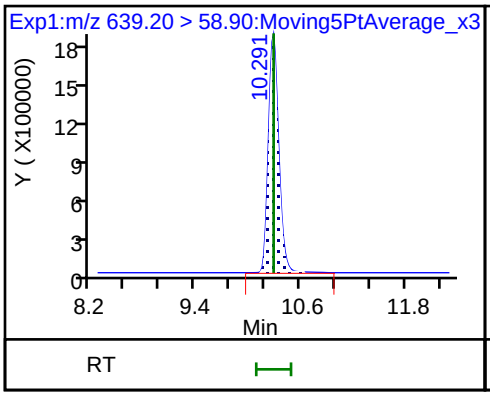
61 NMeFOSA



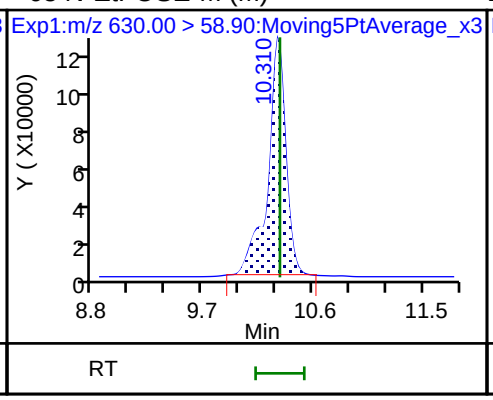
61 NMeFOSA



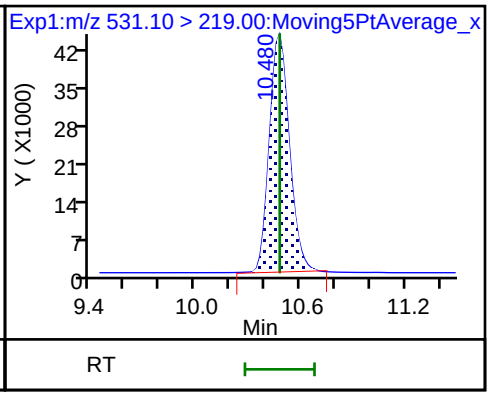
D 64 d9-N-EtFOSE



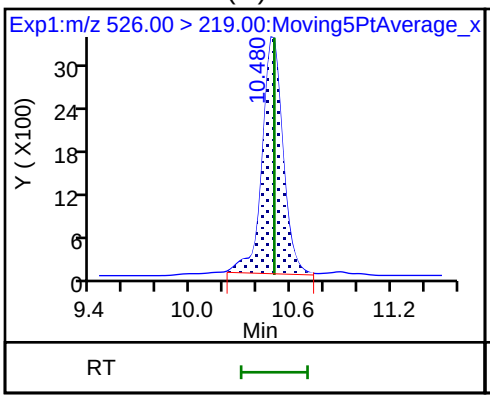
65 N-EtFOSE-M (M)



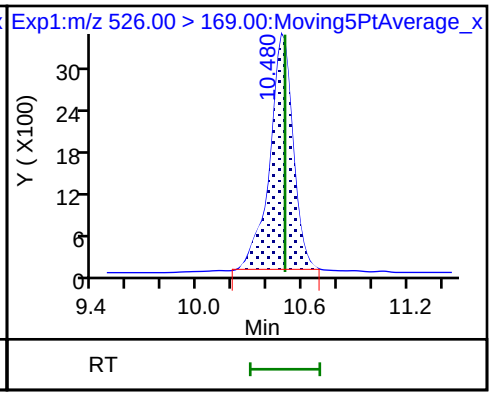
D 67 d5-NEtPFOSA



68 N-EtFOSA-M (M)



68 N-EtFOSA-M



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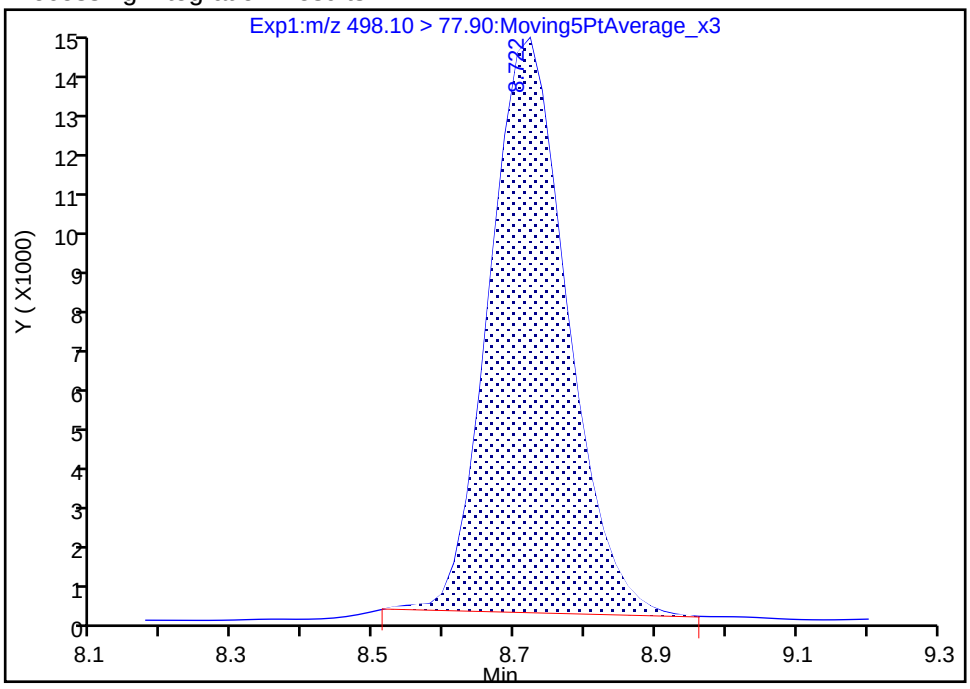
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.001.d
Injection Date: 20-Nov-2023 17:19:37 Instrument ID: LC_LCMS11
Lims ID: IC L3
Client ID:
Operator ID: DENLCMS ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

51 PFOSA, CAS: 754-91-6

Signal: 1

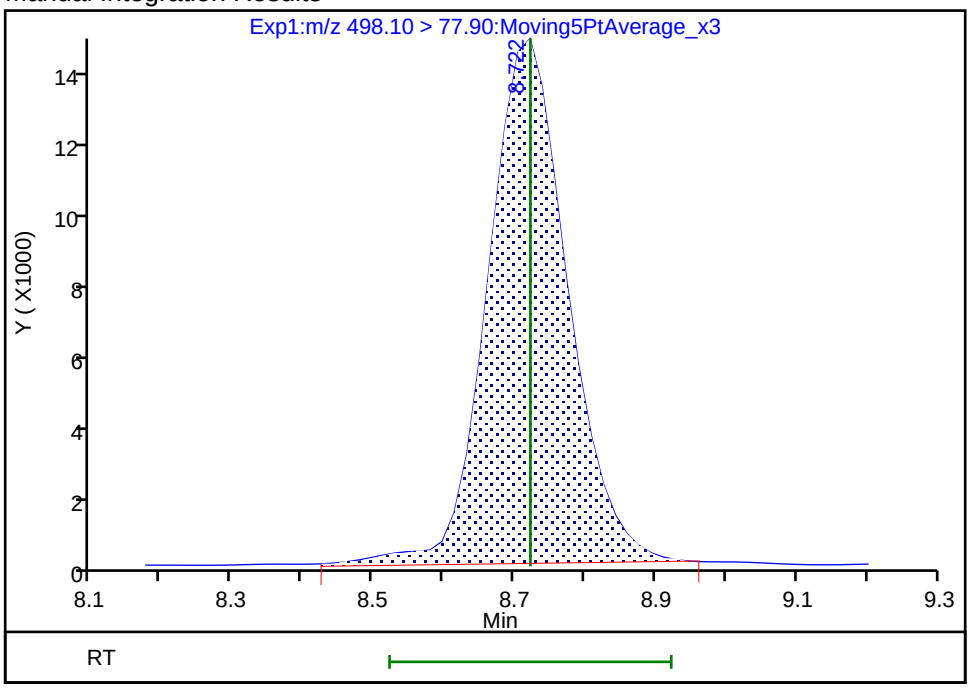
Processing Integration Results

RT: 8.72
Area: 112162
Amount: 0.181270
Amount Units: ng/ml



Manual Integration Results

RT: 8.72
Area: 116160
Amount: 0.186868
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 10:59:56 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

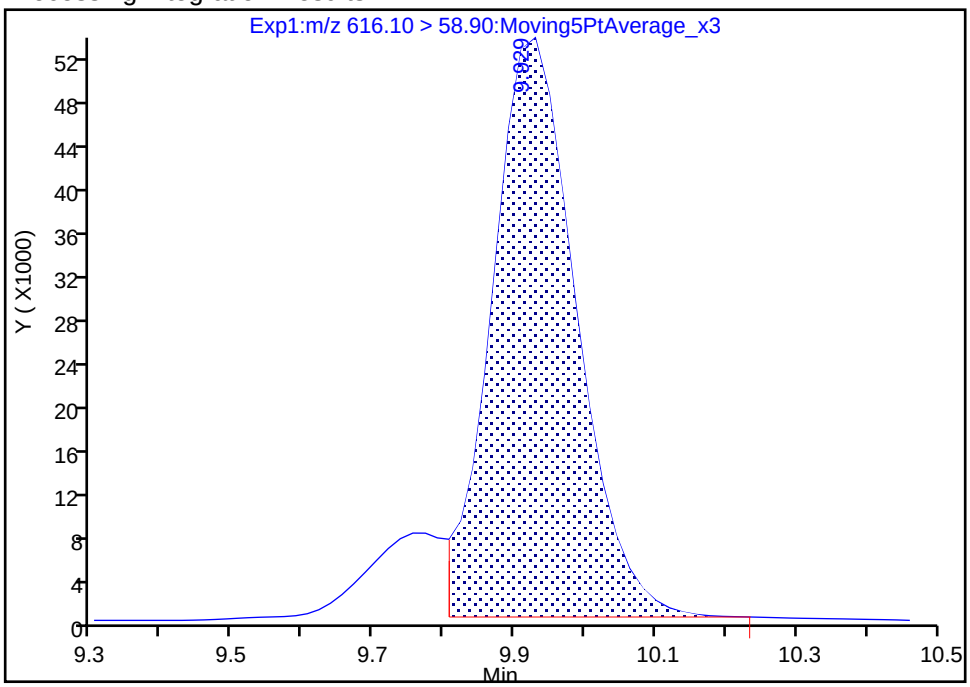
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Injection Date:	20-Nov-2023 17:19:37	Instrument ID:	LC_LCMS11		
Lims ID:	IC L3				
Client ID:					
Operator ID:	DENLCMS	ALS Bottle#:	3	Worklist Smp#:	2
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

60 N-MeFOSE-M, CAS: 24448-09-7

Signal: 1

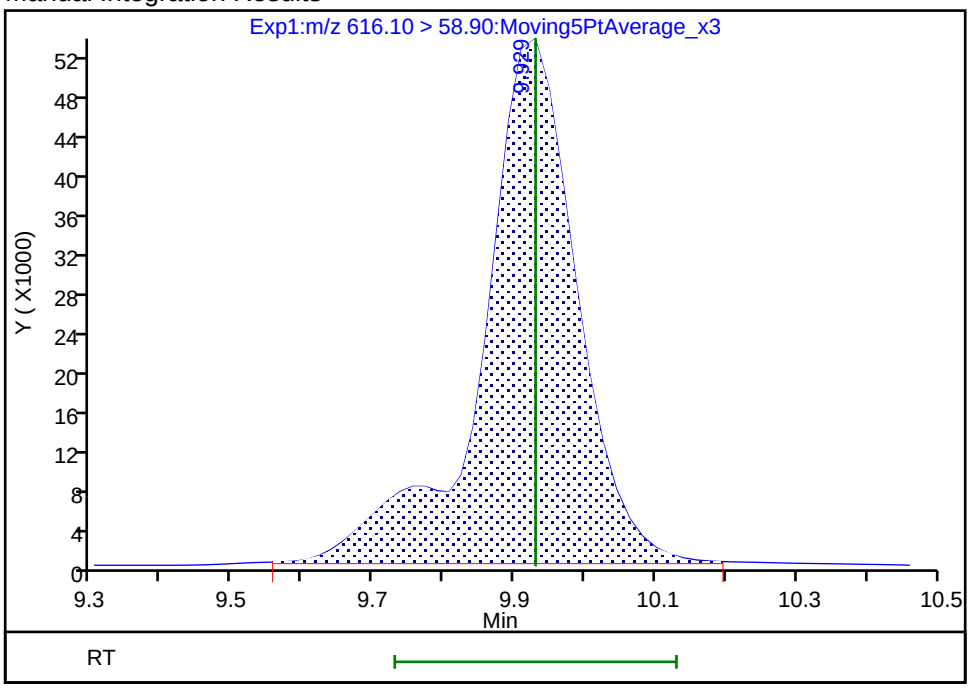
Processing Integration Results

RT: 9.93
Area: 439180
Amount: 0.905697
Amount Units: ng/ml



Manual Integration Results

RT: 9.93
Area: 498031
Amount: 0.960808
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 11:00:07 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

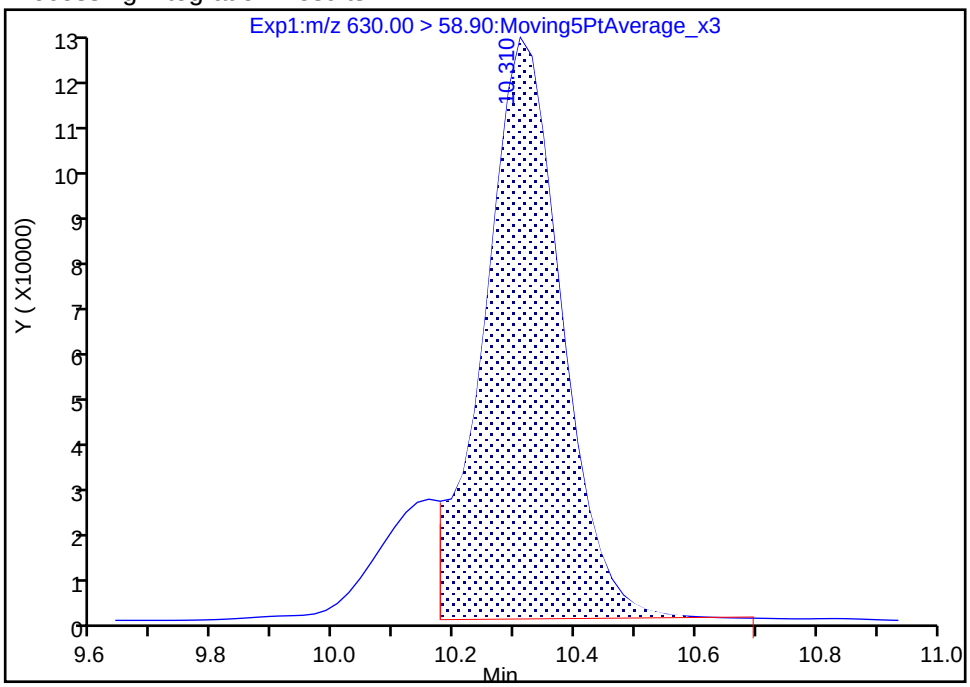
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.001.d
Injection Date: 20-Nov-2023 17:19:37 Instrument ID: LC_LCMS11
Lims ID: IC L3
Client ID:
Operator ID: DENLCMS ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

65 N-EtFOSE-M, CAS: 1691-99-2

Signal: 1

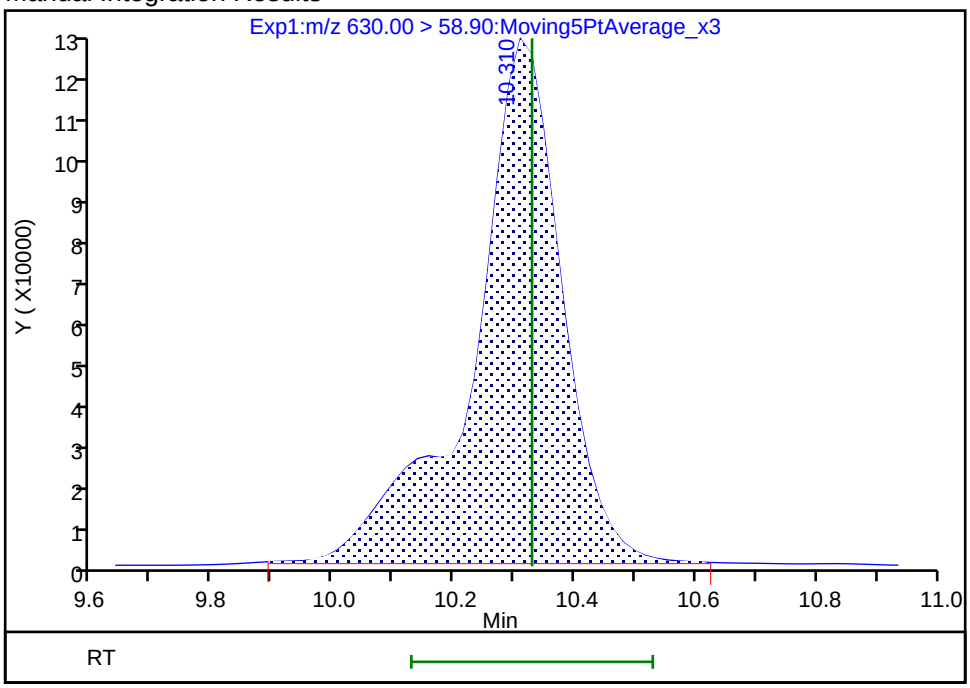
Processing Integration Results

RT: 10.31
Area: 1100813
Amount: 1.911204
Amount Units: ng/ml



Manual Integration Results

RT: 10.31
Area: 1266235
Amount: 2.012781
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 11:00:18 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver

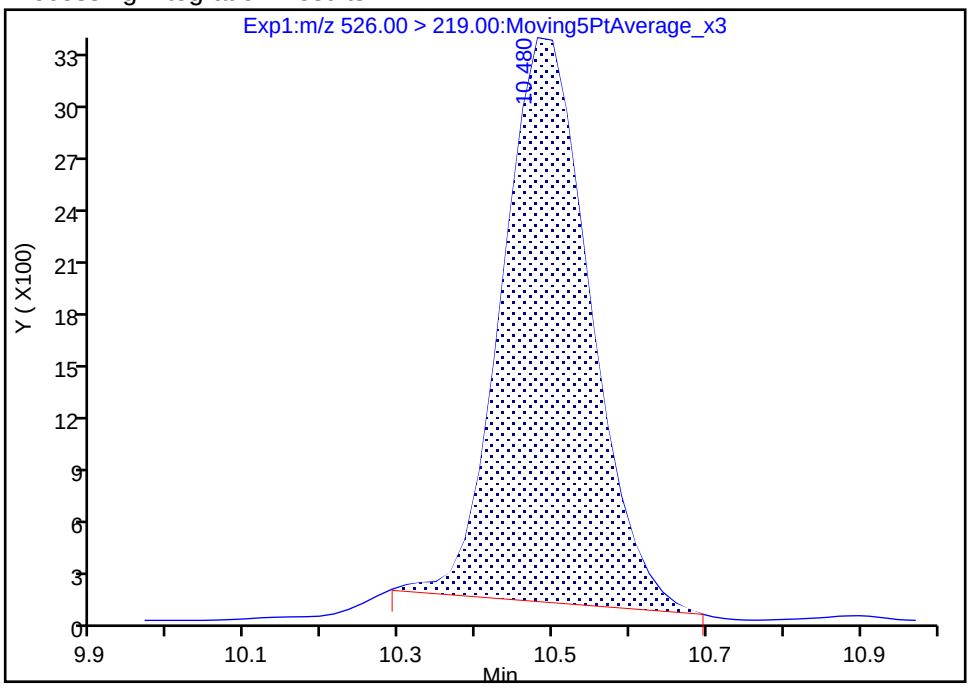
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.001.d
Injection Date: 20-Nov-2023 17:19:37 Instrument ID: LC_LCMS11
Lims ID: IC L3
Client ID:
Operator ID: DENLCMS ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

68 N-EtFOSA-M, CAS: 4151-50-2

Signal: 1

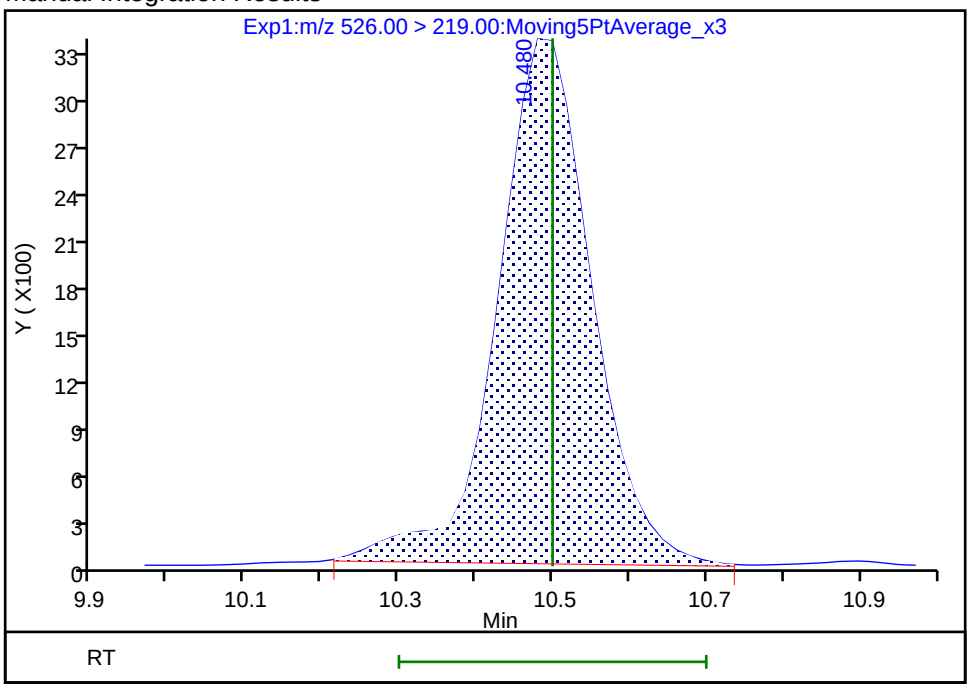
Processing Integration Results

RT: 10.48
Area: 25844
Amount: 0.172908
Amount Units: ng/ml



Manual Integration Results

RT: 10.48
Area: 28636
Amount: 0.189061
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 11:00:26 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.002.d
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 20-Nov-2023 17:39:05 ALS Bottle#: 4 Worklist Smp#: 3
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: IC L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: DENLCMS Instrument ID: LC_LCMS11
Sublist: chrom-PFC_IDA_DEN11*sub5

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 21-Nov-2023 11:14:49 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1626

First Level Reviewer: B5QN Date: 21-Nov-2023 10:59:14
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.062	3.062	0.0	1.000	6275736	9.94		99.4	139098	
* 1 13C3PFBA										
216.00 > 172.00	3.062	3.062	0.0		3107031	5.00			11274	
2 PFBA										
212.80 > 168.90	3.062	3.062	0.0	1.000	278570	0.4965		100	270	
4 PFMPA										
229.00 > 84.90	3.728	3.728	0.0	0.833	481575	1.02		103	2973	
5 3:3 FTCA										
241.00 > 177.00	3.928	3.928	0.0	0.877	145385	2.41	Target=1.69	97.2	5273	
241.00 > 117.00	3.928	3.928	0.0	0.877	85074		1.71(0.84-2.53)	97.2	2474	
D 7 13C5 PFPeA										
268.30 > 223.00	4.478	4.478	0.0	0.836	1845697	4.96		99.1	21777	
6 PFPA										
263.00 > 219.00	4.478	4.478	0.0	1.000	371469	0.5016	Target=221.09	101	810	
263.00 > 68.90	4.478	4.478	0.0	1.000	1877		197.91(110.55-331.64)	101	67.0	
8 PFMBA										
279.00 > 85.10	4.778	4.778	0.0	1.067	967724	1.04		105	10669	
10 4:2FTS										
327.10 > 307.00	5.097	5.097	0.0	1.000	185271	1.34	Target=1.58	108	5931	
327.10 > 80.90	5.097	5.097	0.0	1.000	105210		1.76(0.79-2.38)	108	958	
D 9 13C2-4:2FTS										
329.10 > 80.90	5.097	5.097	0.0	0.742	274792	4.96	Target=4.29	106	5824	
329.10 > 309.00	5.097	5.097	0.0	0.742	63109		4.35(2.14-6.43)	106	2681	
11 NFDHA										
295.00 > 201.00	5.280	5.280	0.0	0.986	123910	0.4840	Target=1.86	97.6	3249	
295.00 > 84.90	5.280	5.280	0.0	0.986	67611		1.83(0.93-2.79)	97.6	1266	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 16 13C3 PFBS										
302.10 > 79.90	5.354	5.354	0.0	0.779	815734	2.59	Target=4.50	111	21399	
302.10 > 98.90	5.354	5.354	0.0	0.779	174314		4.68(2.25-6.76)	111	7605	
15 PFBS										
298.70 > 79.90	5.354	5.354	0.0	1.000	128953	0.4129	Target=2.27	93.7	4242	
298.70 > 98.80	5.354	5.354	0.0	1.000	56370		2.29(1.13-3.40)	93.7	1488	
* 14 13C2 PFHxA										
315.10 > 270.00	5.354	5.354	0.0		1868213	2.50	Target=77.08		30643	
315.10 > 119.40	5.354	5.354	0.0		23615		79.11(38.54-115.62)		782	
D 12 13C5 PFHxA										
318.00 > 273.00	5.354	5.354	0.0	1.000	2064136	2.46	Target=50.64	98.6	33834	
318.00 > 120.30	5.354	5.354	0.0	1.000	41203		50.10(25.32-75.97)	98.6	1105	
13 PFHxA										
313.00 > 269.00	5.371	5.371	0.0	1.003	470354	0.5173	Target=20.05	104	1929	
313.00 > 118.90	5.371	5.371	0.0	1.003	24074		19.54(10.03-30.08)	104	795	
18 5:3 FTCA										
341.00 > 237.10	5.625	5.625	0.0	1.051	769716	5.14	Target=1.13	104	12057	
341.00 > 217.00	5.625	5.625	0.0	1.051	649225		1.19(0.57-1.70)	104	11622	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.682	5.682	0.0	1.061	1946292	9.50	Target=1.57	95.0	25041	
286.90 > 184.90	5.682	5.682	0.0	1.061	1315746		1.48(0.78-2.35)	95.0	18762	
19 HFPO-DA										
284.90 > 168.90	5.682	5.682	0.0	1.000	102830	0.4904	Target=1.65	98.9	3338	
284.90 > 184.90	5.682	5.682	0.0	1.000	67885		1.51(0.83-2.48)	98.9	1099	
21 PFEESA										
314.80 > 134.90	5.789	5.789	0.0	1.081	951022	0.9458	Target=14.24	107	24729	
314.80 > 82.90	5.789	5.789	0.0	1.081	62973		15.10(7.12-21.36)	107	2062	
D 22 13C4 PFHpA										
367.10 > 322.00	6.122	6.122	0.0	1.143	2094950	2.39		95.6	29768	
17 PFHpA										
363.10 > 319.00	6.122	6.122	0.0	1.000	411526	0.4991	Target=4.02	101	1725	
363.10 > 169.00	6.122	6.122	0.0	1.000	96810		4.25(2.01-6.04)	101	1731	
23 PFPeS										
349.10 > 79.90	6.223	6.223	0.0	0.906	131545	0.4462	Target=2.71	95.9	2349	
349.10 > 98.90	6.223	6.223	0.0	0.906	49387		2.66(1.35-4.06)	95.9	2354	
24 ADONA										
376.90 > 250.90	6.355	6.355	0.0	1.118	886226	0.5037	Target=3.01	108	14010	
376.90 > 84.80	6.355	6.355	0.0	1.118	300455		2.95(1.51-4.52)	108	8569	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.471	6.471	0.0	0.942	369333	5.11	Target=4.27	108	13002	
429.10 > 409.00	6.454	6.471	-0.017	0.939	77126		4.79(2.13-6.40)	108	3648	
25 6:2FTS										
427.10 > 407.00	6.471	6.471	0.0	1.000	261138	1.76	Target=1.91	93.7	9196	
427.10 > 80.90	6.471	6.471	0.0	1.000	136738		1.91(0.96-2.87)	93.7	3853	
D 27 13C8 PFOA										
421.10 > 376.00	6.707	6.707	0.0	1.000	1960147	2.44		97.7	30182	
* 29 13C4 PFOA										
417.10 > 172.00	6.707	6.707	0.0		306600	2.50			10708	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 PFOA										
413.00 > 369.00	6.707	6.707	0.0	1.000	317624	0.5075	Target=2.39	102	1543	
413.00 > 169.00	6.707	6.707	0.0	1.000	135227		2.35(1.19-3.58)	102	1579	
30 7:3 FTCA										
441.00 > 316.90	6.855	6.855	0.0	1.280	336809	4.87	Target=1.44	98.2	11827	
441.00 > 336.90	6.855	6.855	0.0	1.280	232962		1.45(0.72-2.16)	98.2	5448	
32 PFHxS										
398.70 > 79.90	6.871	6.871	0.0	1.000	61221	0.4382	Target=3.74	96.9	2428	
398.70 > 98.90	6.871	6.871	0.0	1.000	17640		3.47(1.87-5.61)	96.9	714	
* 31 18O2 PFHxS										
403.00 > 83.90	6.871	6.871	0.0		582303	2.37			27023	
D 33 13C3 PFHxS										
402.10 > 79.90	6.871	6.871	0.0	1.000	620949	2.49	Target=4.22	105	28863	
402.10 > 98.80	6.871	6.871	0.0	1.000	140475		4.42(2.11-6.33)	105	6527	
36 PFNA										
463.00 > 419.00	7.240	7.240	0.0	1.000	474558	0.4939	Target=5.99	99.6	2934	
463.00 > 219.00	7.240	7.240	0.0	1.000	73759		6.43(3.00-8.99)	99.6	2314	
* 35 13C5 PFNA										
468.00 > 423.00	7.240	7.240	0.0		1230222	1.25			21701	
D 34 13C9 PFNA										
472.10 > 427.00	7.240	7.240	0.0	1.000	1195936	1.29		103	24713	
37 PFHpS										
449.00 > 79.90	7.456	7.456	0.0	0.934	109971	0.4913	Target=5.05	104	3910	
449.00 > 98.80	7.456	7.456	0.0	0.934	21812		5.04(2.53-7.58)	104	1038	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.506	7.506	0.0	1.092	451605	5.15	Target=5.22	108	12836	
529.10 > 509.00	7.506	7.506	0.0	1.092	78155		5.78(2.61-7.83)	108	3685	
39 8:2FTS										
527.10 > 507.00	7.506	7.506	0.0	1.000	260852	1.90	Target=1.64	100	12340	
527.10 > 80.80	7.506	7.506	0.0	1.000	159914		1.63(0.82-2.46)	100	4546	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.725	7.725	0.0	0.965	547691	4.71		94.1	18371	
42 NMeFOSAA										
570.10 > 419.00	7.743	7.743	0.0	1.002	58667	0.5349	Target=1.12	108	2287	
570.10 > 483.00	7.725	7.743	-0.018	1.000	53218		1.10(0.56-1.68)	108	1984	
* 44 13C2 PFDA										
515.10 > 470.10	7.761	7.761	0.0		1180156	1.25			19907	
D 40 13C6 PFDA										
519.10 > 474.10	7.761	7.761	0.0	1.000	1185279	1.26		101	22813	
43 PFDA										
512.90 > 469.00	7.761	7.761	0.0	1.000	342777	0.4399	Target=3.52	88.7	3567	
512.90 > 219.00	7.761	7.761	0.0	1.000	105857		3.24(1.76-5.28)	88.7	3571	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.934	7.934	0.0	0.991	687217	5.10		102	13148	
45 NEtFOSAA										
584.20 > 419.10	7.951	7.951	0.0	1.002	45369	0.4539	Target=1.52	91.5	1759	
584.20 > 526.00	7.951	7.951	0.0	1.002	31859		1.42(0.76-2.27)	91.5	1109	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 49 13C8 PFOS										
507.10 > 79.90	7.986	7.986	0.0	0.998	299258	2.41	Target=3.01	101	456	
507.10 > 98.90	7.986	7.986	0.0	0.998	106340		2.81(1.50-4.51)	101	3565	
* 47 13C4 PFOS										
502.80 > 79.90	8.004	8.004	0.0		829283	2.40	Target=3.82		18534	
502.80 > 98.90	8.004	8.004	0.0		214551		3.87(1.91-5.72)		7233	
48 PFOS										
498.90 > 79.90	8.004	8.004	0.0	1.002	172610	0.4231	Target=4.59	91.7	3577	
498.90 > 98.80	8.004	8.004	0.0	1.002	37484		4.60(2.29-6.88)	91.7	1489	
D 53 13C7 PFUnA										
570.00 > 525.10	8.248	8.248	0.0	1.063	1264135	1.21		96.6	40663	
52 PFUnA										
563.10 > 519.00	8.266	8.266	0.0	1.002	472981	0.5285	Target=5.53	107	5567	
563.10 > 269.10	8.248	8.266	-0.018	1.000	84759		5.58(2.77-8.30)	107	3647	
54 9ClFOS										
530.80 > 351.00	8.390	8.390	0.0	1.476	435892	1.24	Target=2.30	100	11612	
532.80 > 353.00	8.390	8.390	0.0	1.476	206106		2.11(1.15-3.46)	100	6887	
55 PFNS										
548.80 > 79.90	8.512	8.512	0.0	1.066	85293	0.5116	Target=4.01	107	2324	
548.80 > 98.80	8.512	8.512	0.0	1.066	21188		4.03(2.01-6.02)	107	721	
51 PFOSA										M
498.10 > 77.90	8.722	8.722	0.0	1.000	294570	0.5022	Target=44.22	101	4619	M
498.10 > 478.00	8.722	8.722	0.0	1.000	5729		51.42(22.11-66.32)	101	221	M
D 50 13C8 FOSA										
506.10 > 77.80	8.722	8.722	0.0	1.090	1473317	2.45		97.9	11287	
D 56 13C2 PFDoA										
615.10 > 570.00	8.756	8.756	0.0	1.128	1327943	1.28		103	35068	
57 PFDoA										
613.10 > 569.00	8.756	8.756	0.0	1.000	502898	0.4711	Target=7.62	95.0	4770	
613.10 > 319.00	8.756	8.756	0.0	1.000	67300		7.47(3.81-11.43)	95.0	2990	
58 PFDS										
599.00 > 79.90	9.028	9.028	0.0	1.130	181919	0.4722	Target=4.76	98.8	3205	
599.00 > 98.80	9.011	9.028	-0.017	1.128	39268		4.63(2.38-7.13)	98.8	1841	
63 PFTrDA										
663.00 > 619.00	9.254	9.254	0.0	0.950	328102	0.4883	Target=5.15	98.4	4127	
663.00 > 168.90	9.254	9.254	0.0	0.950	68457		4.79(2.57-7.72)	98.4	2388	
66 11ClFOS										
630.90 > 450.90	9.412	9.412	0.0	1.656	713858	1.28	Target=3.33	102	17324	
632.90 > 452.90	9.412	9.412	0.0	1.656	213352		3.35(1.67-5.00)	102	7727	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.738	9.738	0.0	1.255	621429	1.26		101	11963	
70 PFTeDA										
713.10 > 669.00	9.738	9.738	0.0	1.000	293439	0.5080	Target=7.24	102	3292	
713.10 > 168.90	9.738	9.738	0.0	1.000	40180		7.30(3.62-10.85)	102	1359	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.910	9.910	0.0	1.238	10834645	24.5		97.9	89773	
60 N-MeFOSE-M										M
616.10 > 58.90	9.930	9.930	0.0	1.002	1196286	2.52		102	1981	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
71 PFDoS										
699.10 > 79.90	10.007	10.007	0.0	1.253	154640	0.5016	Target=4.39	104	2394	
699.10 > 98.80	10.007	10.007	0.0	1.253	33309		4.64(2.20-6.59)	104	1021	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.101	10.101	0.0	1.262	328676	2.41		96.4	4989	
61 NMeFOSA										M
511.90 > 219.00	10.120	10.120	0.0	1.002	65545	0.5213	Target=0.99	105	1559	M
511.90 > 169.00	10.120	10.120	0.0	1.002	66071		0.99(0.49-1.48)	105	1490	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.291	10.291	0.0	1.286	13841253	25.1		100	139287	
65 N-EtFOSE-M										M
630.00 > 58.90	10.329	10.329	0.0	1.004	2837461	4.91		99.0	3701	M
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.480	10.480	0.0	1.309	338400	2.42		96.7	5320	
68 N-EtFOSA-M										M
526.00 > 219.00	10.499	10.499	0.0	1.002	74109	0.5113	Target=0.99	103	1087	M
526.00 > 169.00	10.499	10.499	0.0	1.002	72689		1.02(0.50-1.49)	103	1132	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

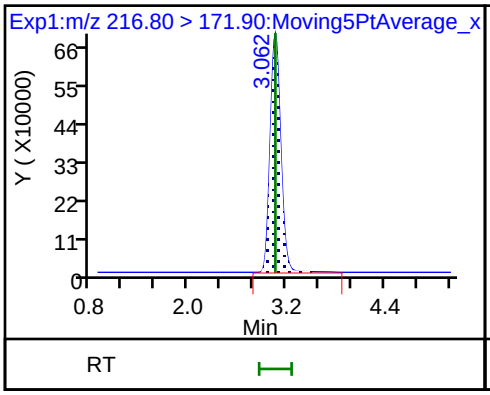
LC1633EPA_LL4_00012 Amount Added: 1.00 Units: mL

Report Date: 21-Nov-2023 11:14:50 Chrom Revision: 2.3 15-Nov-2023 20:54:34

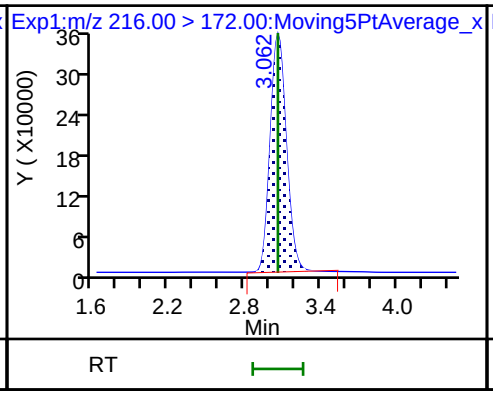
Eurofins Denver

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Injection Date: 20-Nov-2023 17:39:05 Instrument ID: LC_LCMS11
Lims ID: IC L4
Client ID:
Operator ID: DENLCMS ALS Bottle#: 4 Worklist Smp#: 3
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5

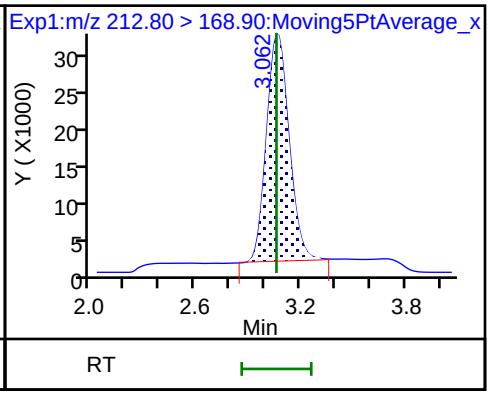
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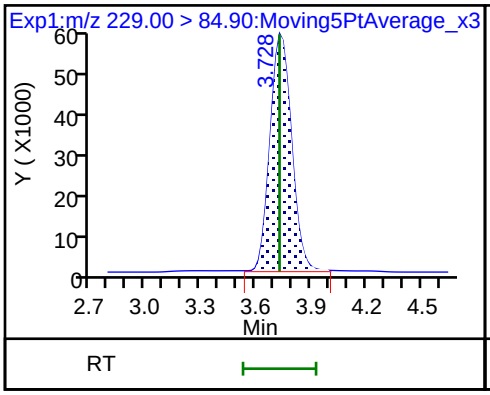
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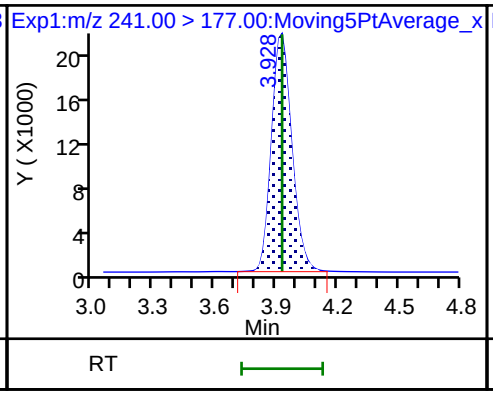
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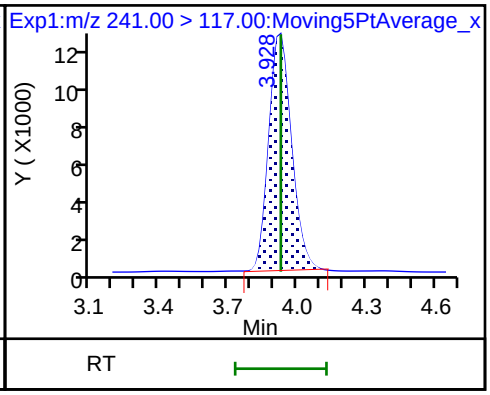
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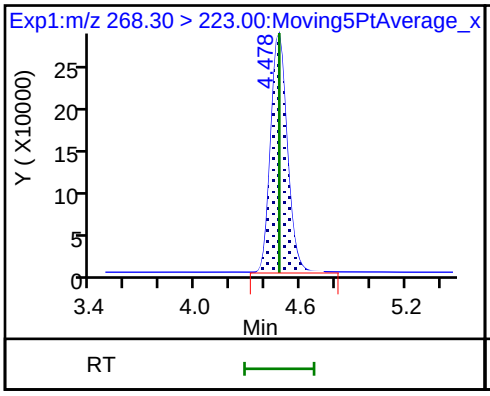
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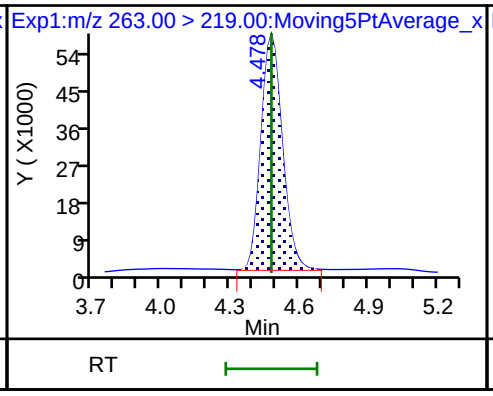
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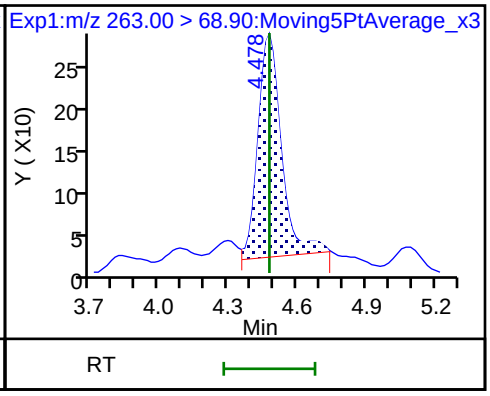
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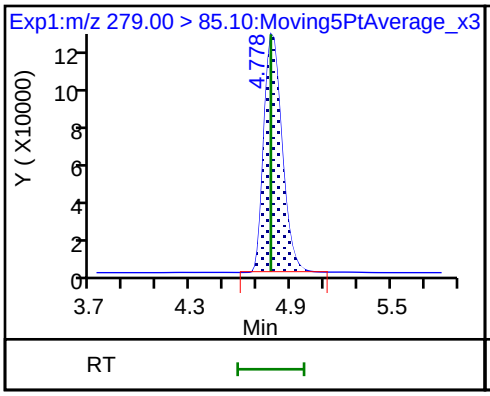
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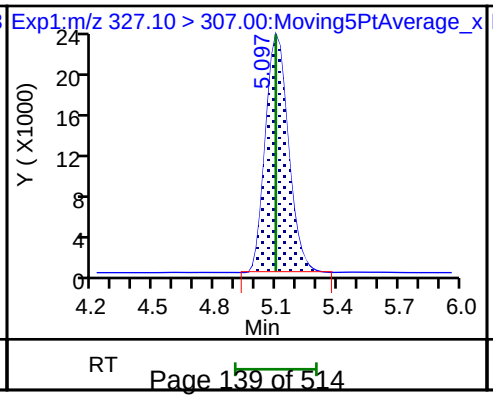
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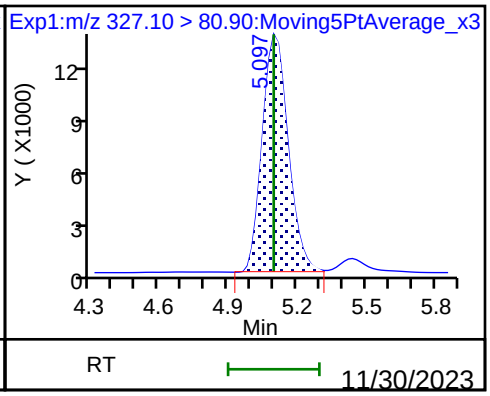
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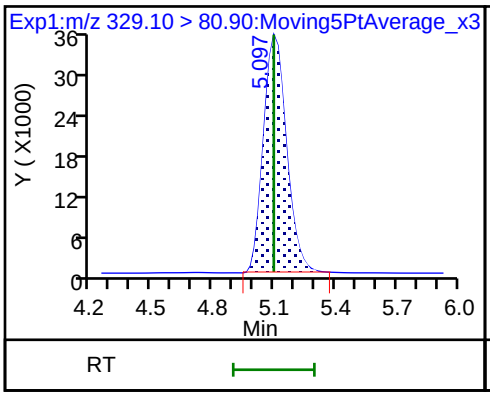


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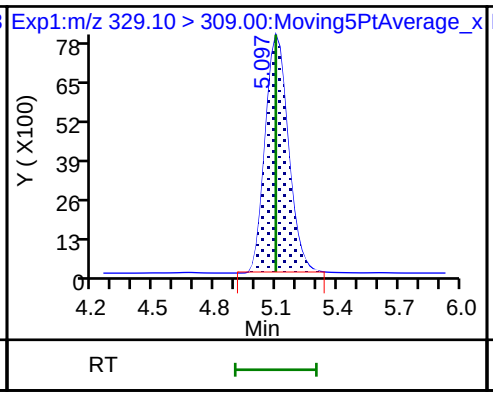


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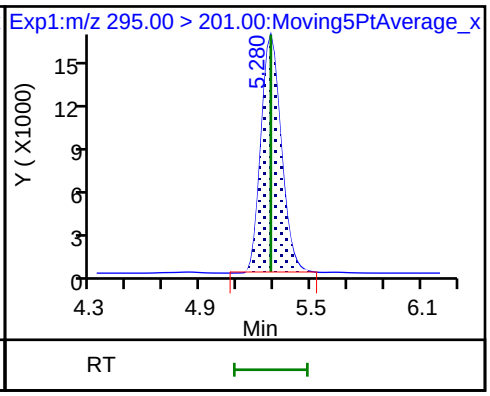
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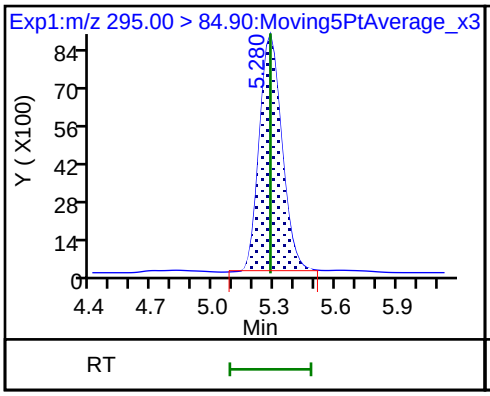
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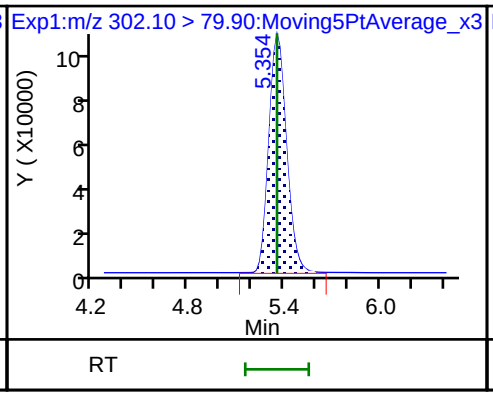
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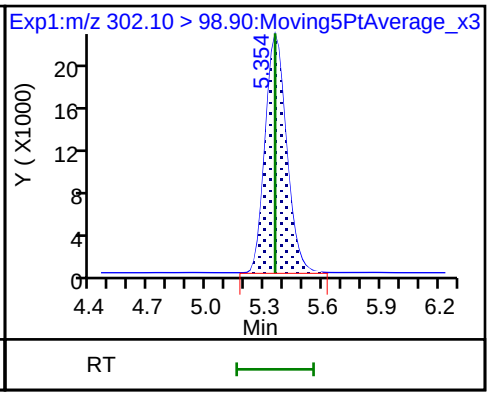
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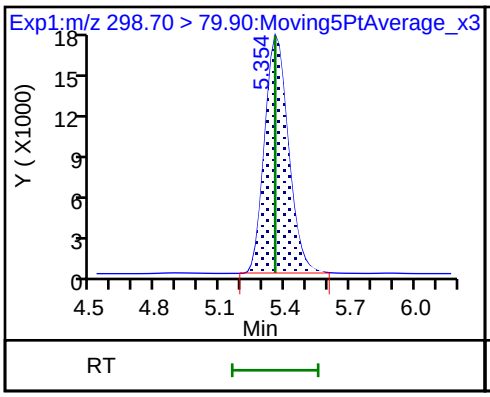
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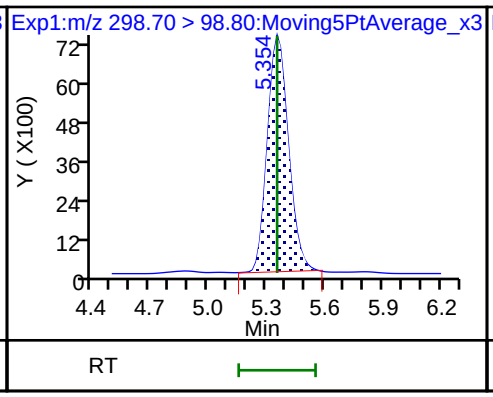
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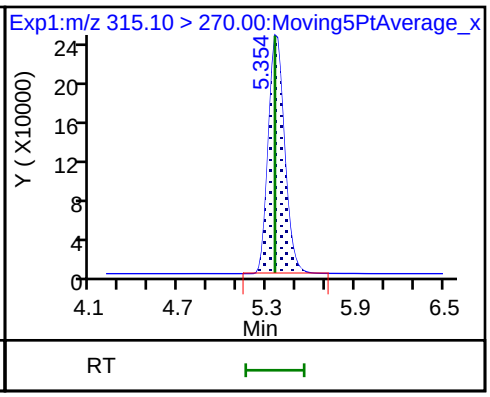
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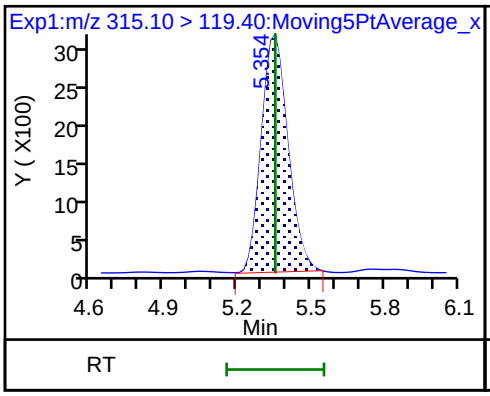
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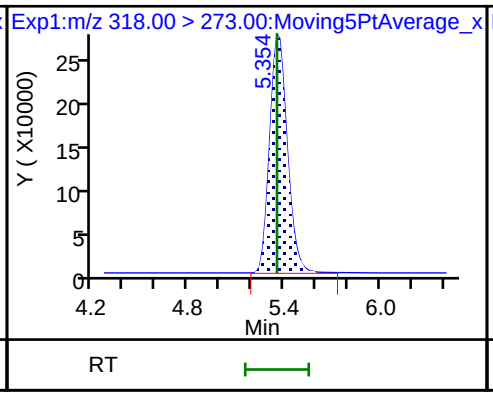
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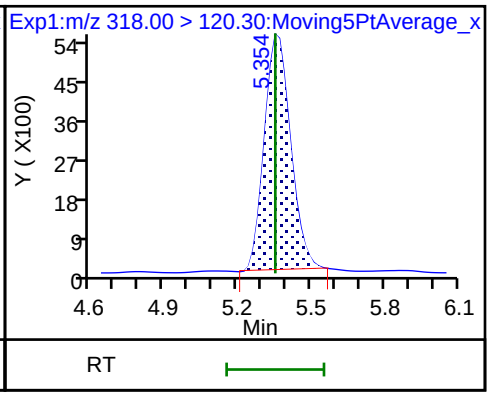
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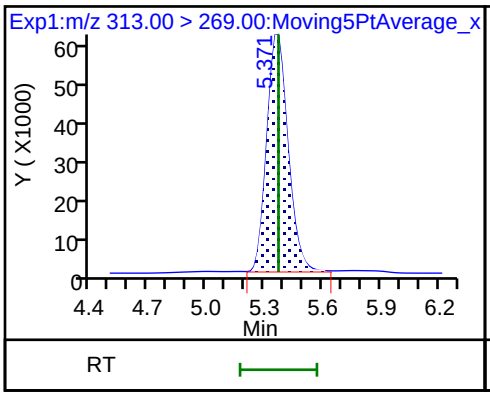
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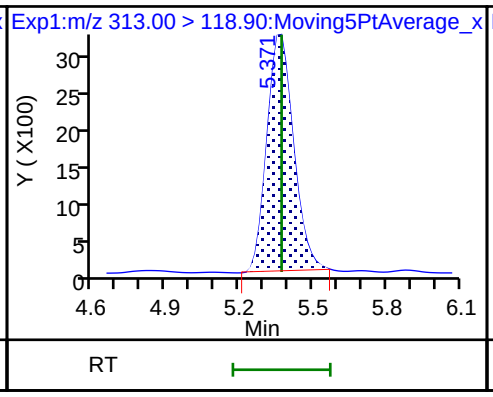
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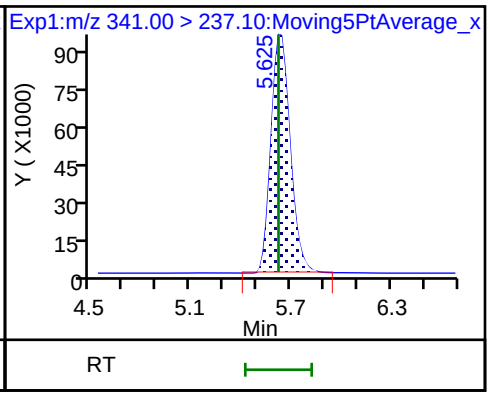
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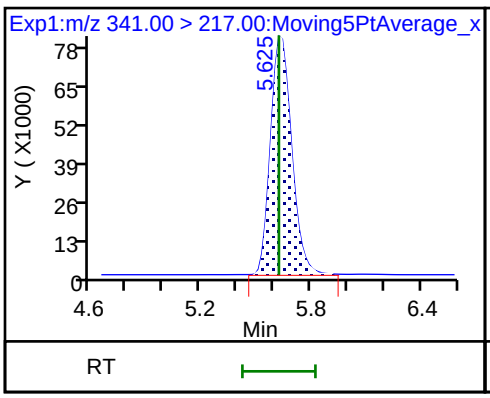
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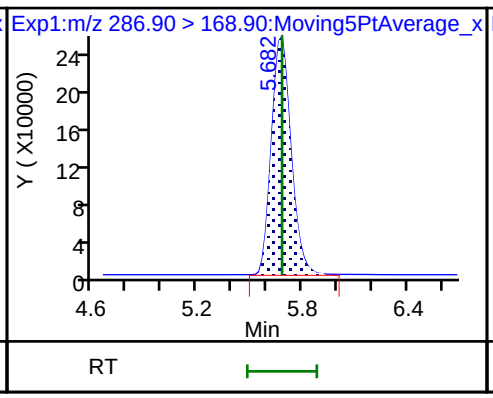
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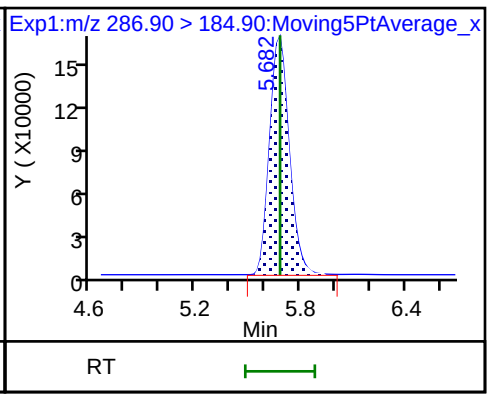
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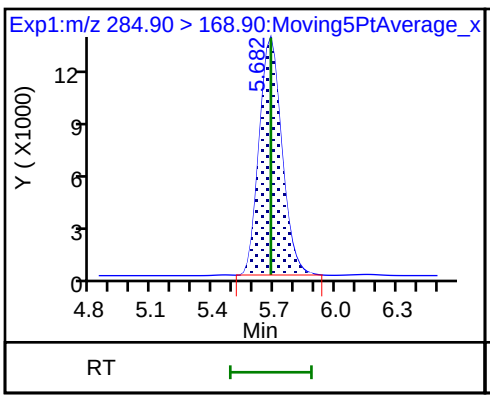
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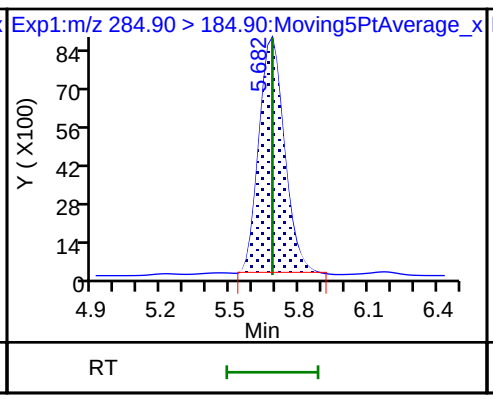
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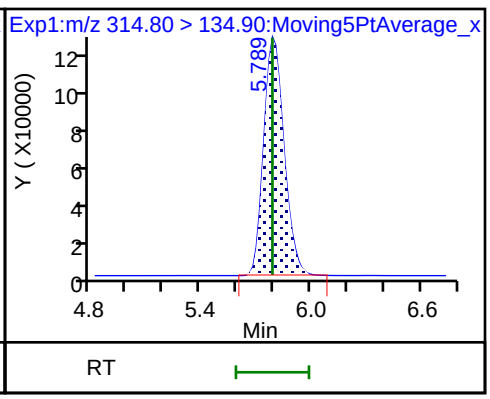
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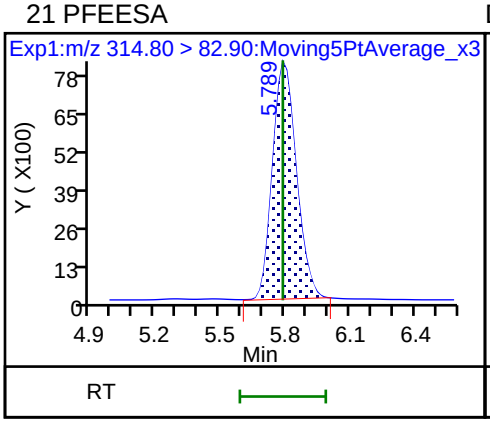
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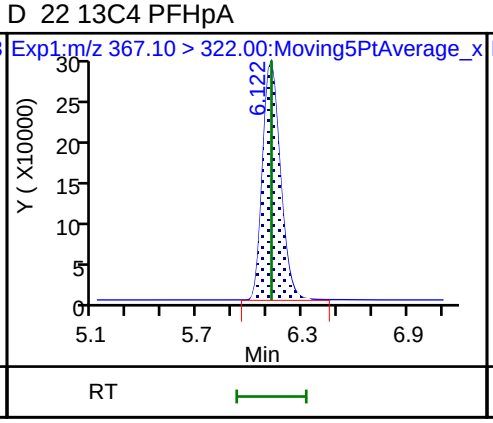
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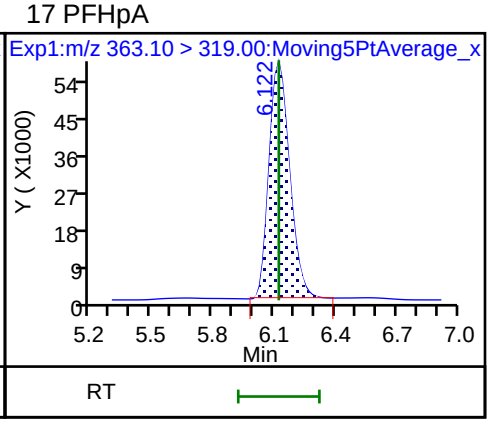
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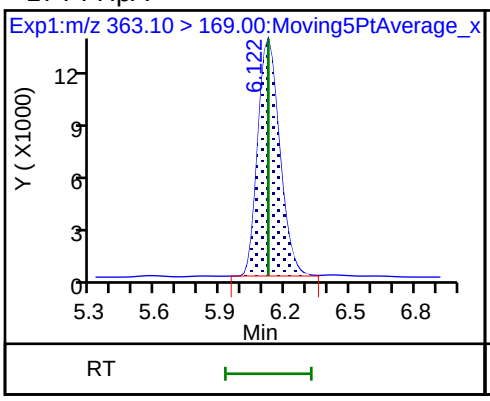
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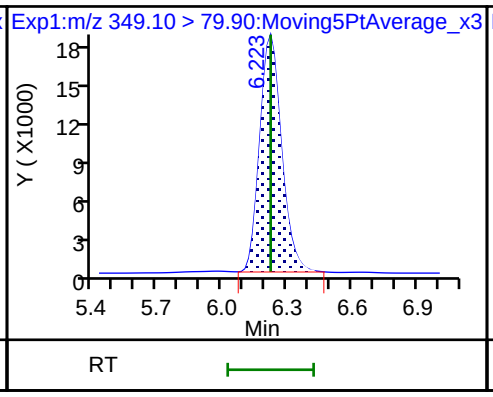
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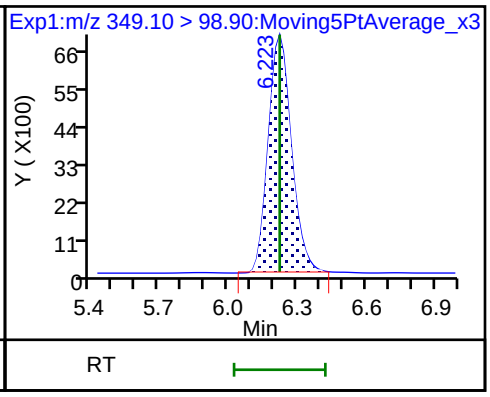
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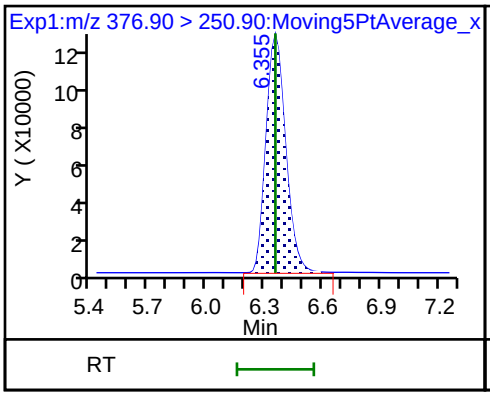
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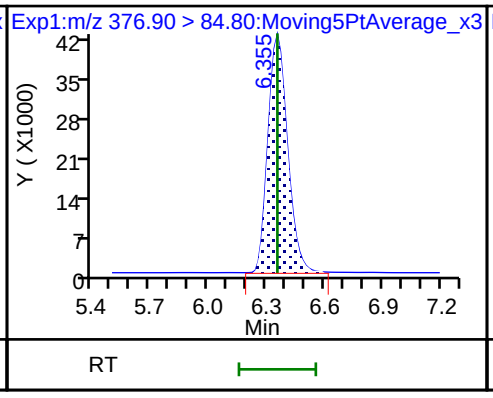
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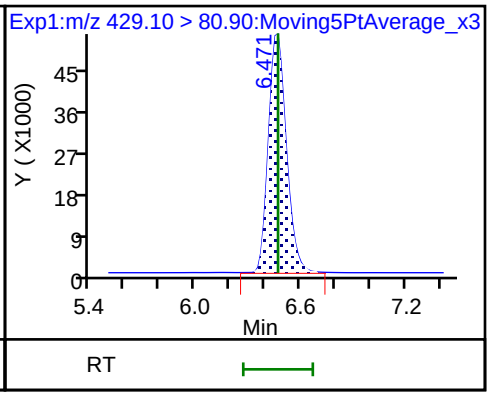
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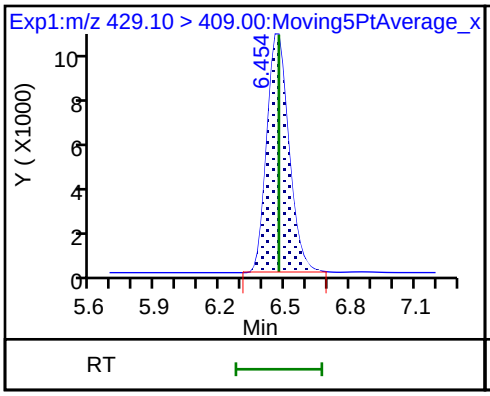
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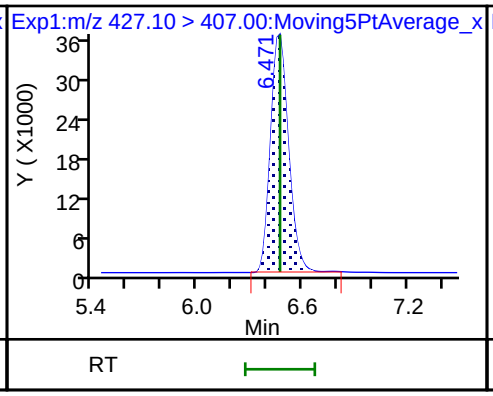
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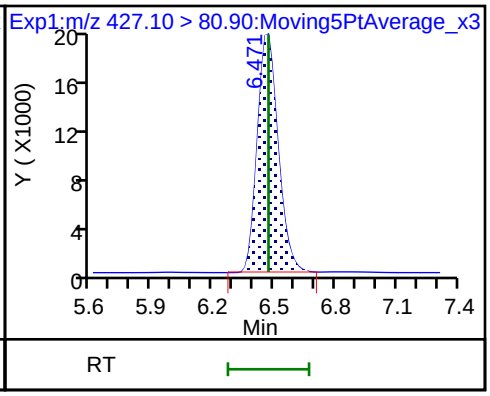
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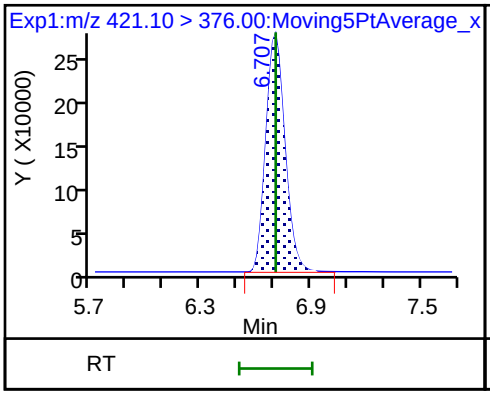
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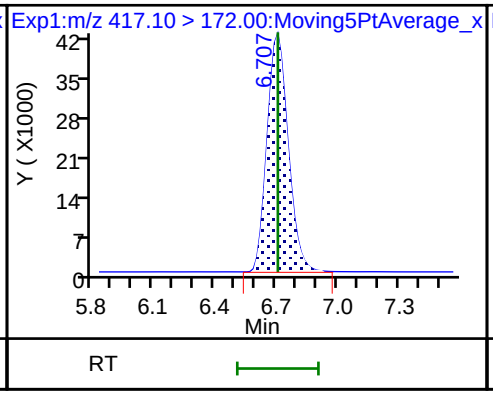
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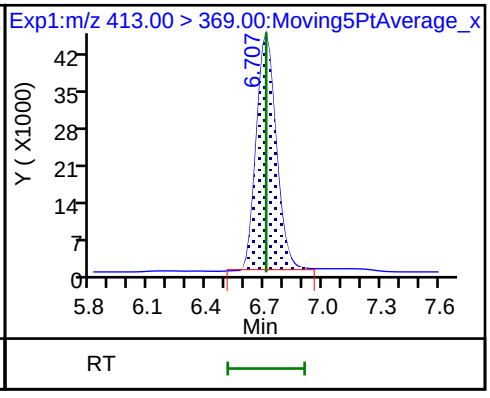
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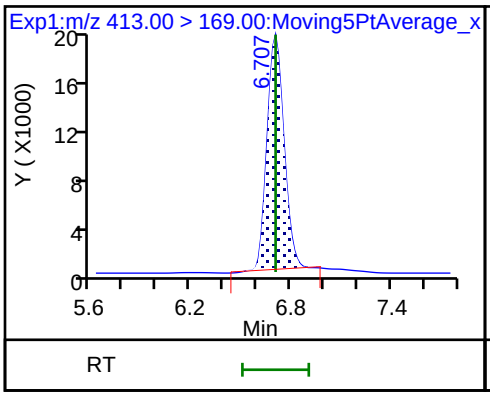
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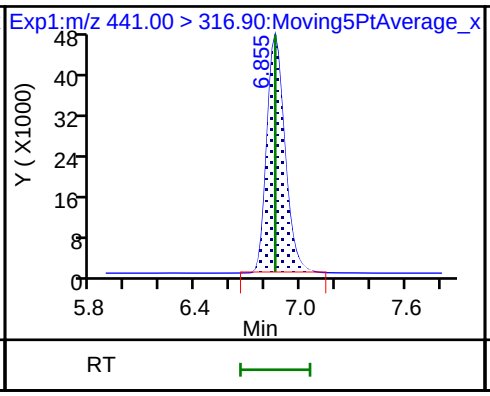
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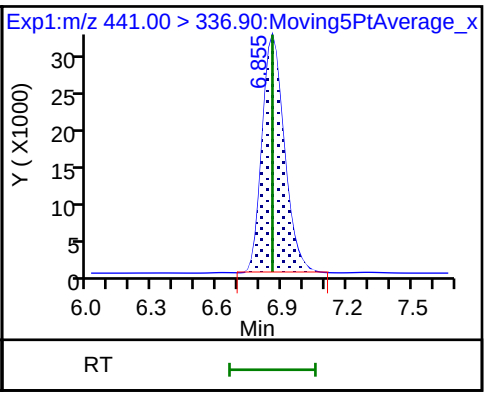
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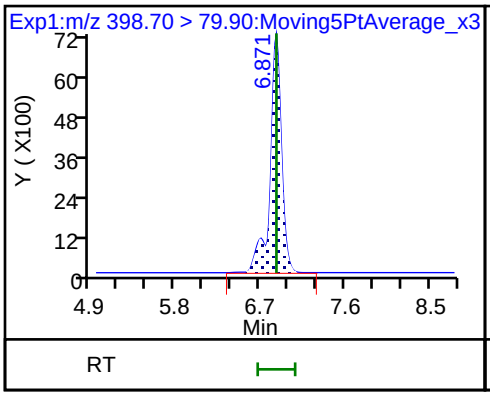
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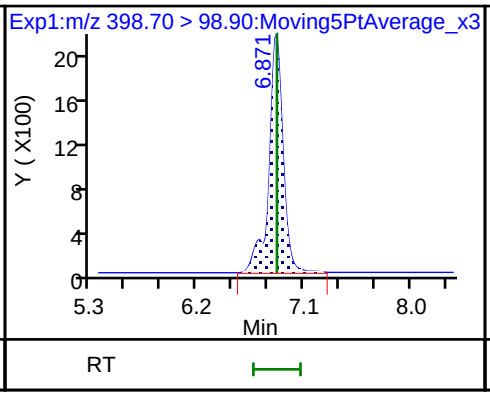
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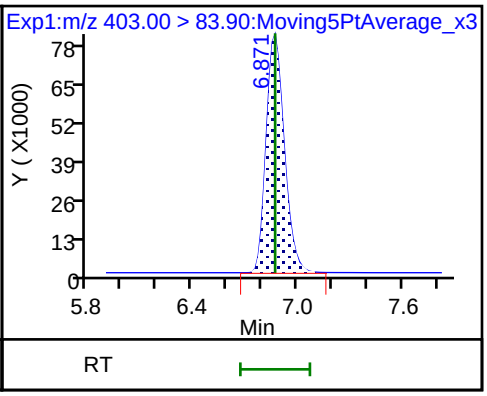
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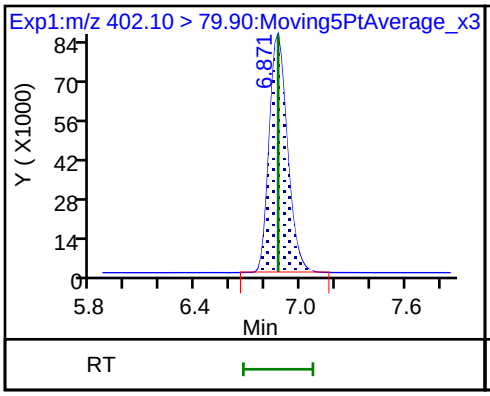
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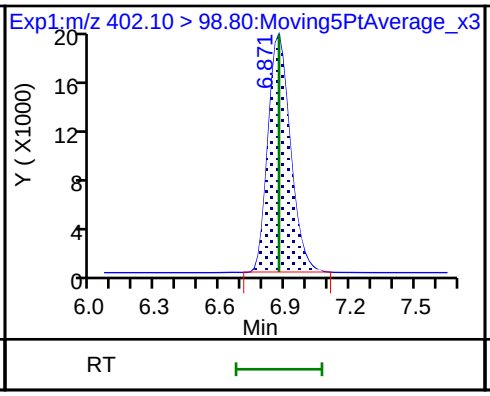
* 31 18O2 PFHxS



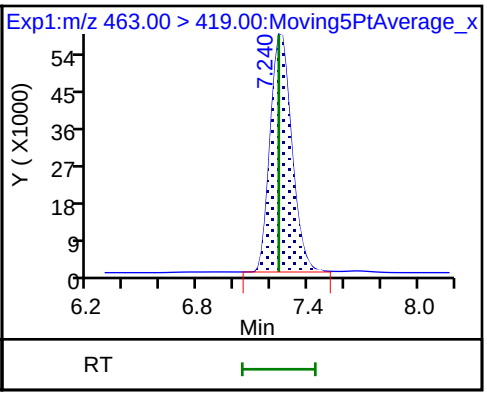
D 33 13C3 PFHxS



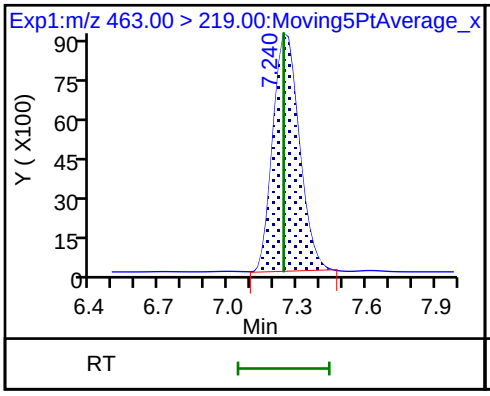
D 33 13C3 PFHxS



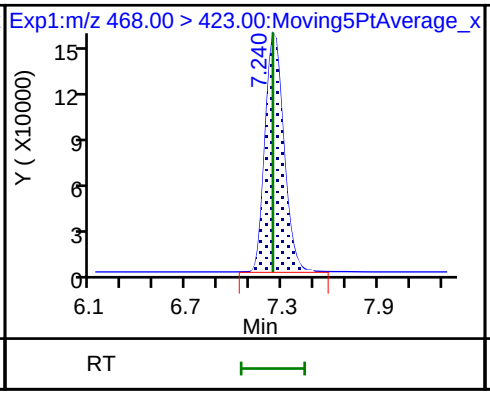
36 PFNA



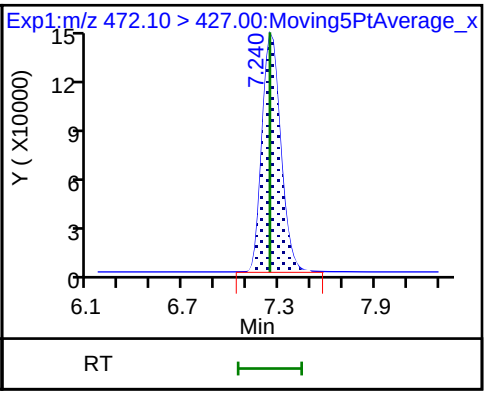
36 PFNA



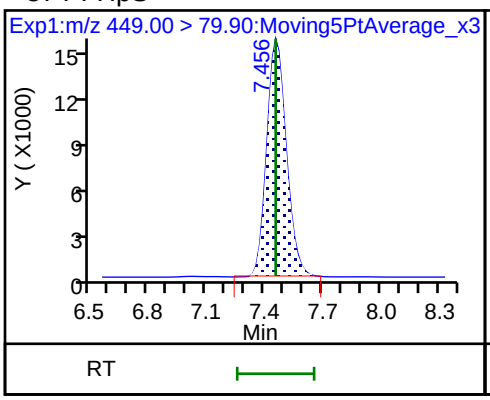
* 35 13C5 PFNA



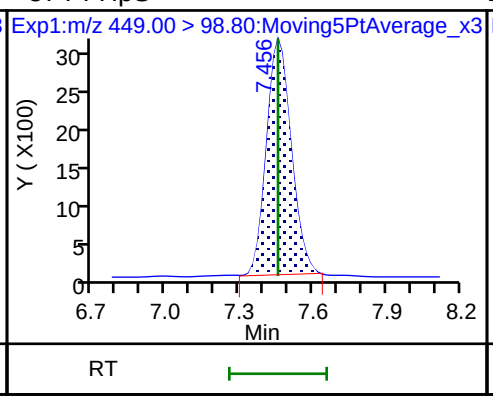
D 34 13C9 PFNA



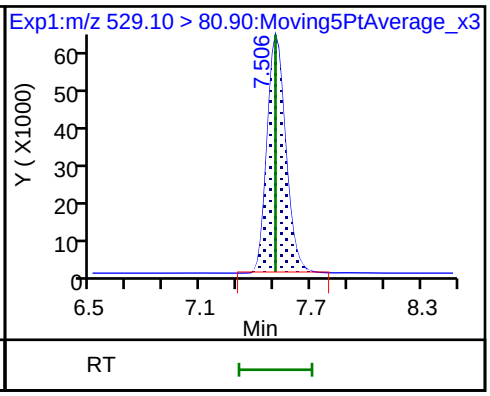
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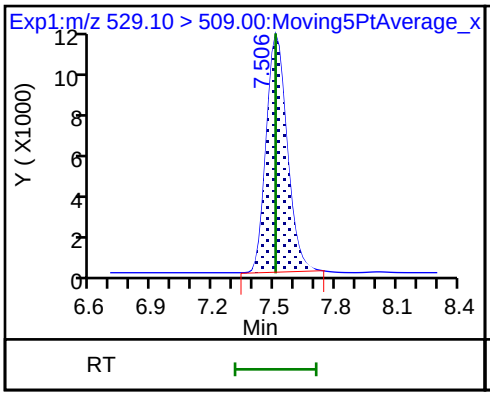
37 PFHpS



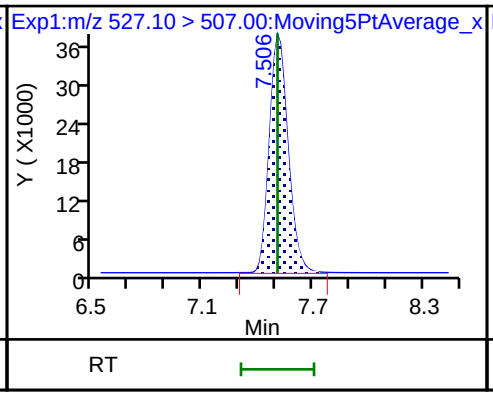
D 38 13C2-8:2FTS



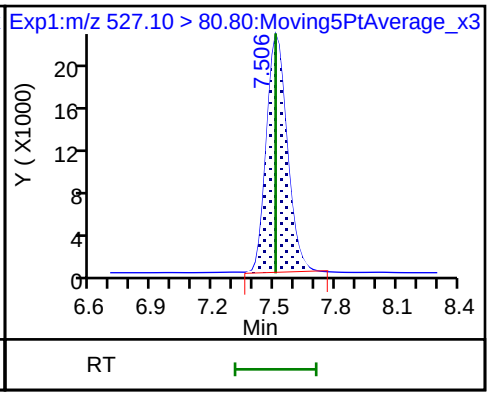
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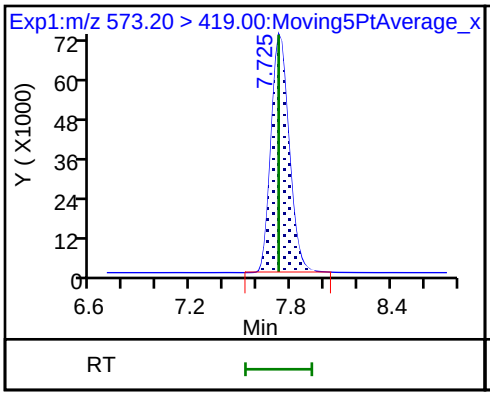
39 8:2FTS



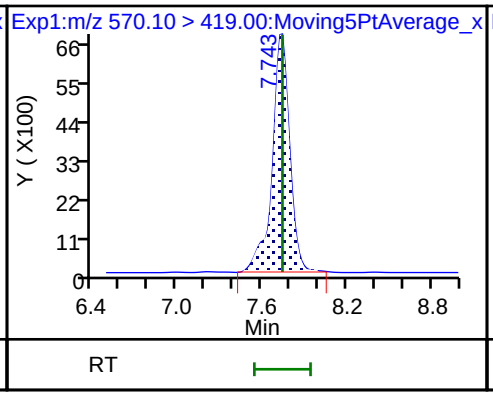
39 8:2FTS



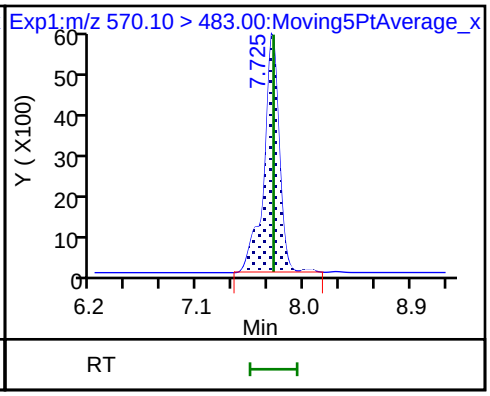
D 41 d3-NMeFOSAA



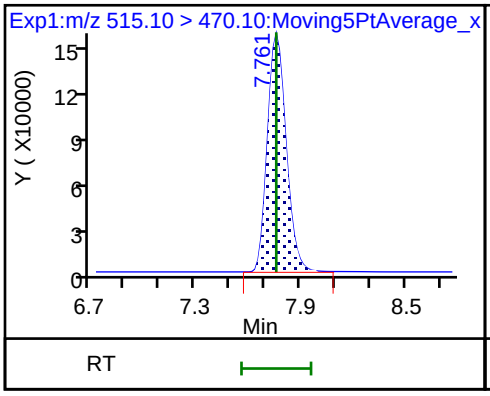
42 NMeFOSAA



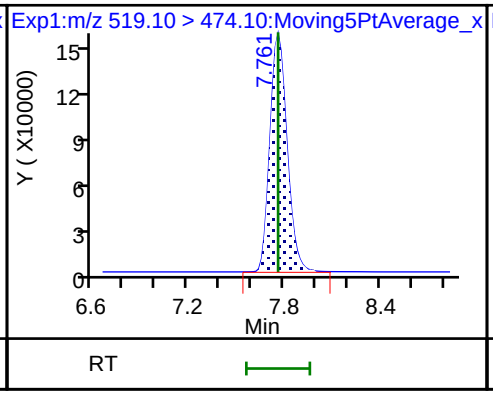
42 NMeFOSAA



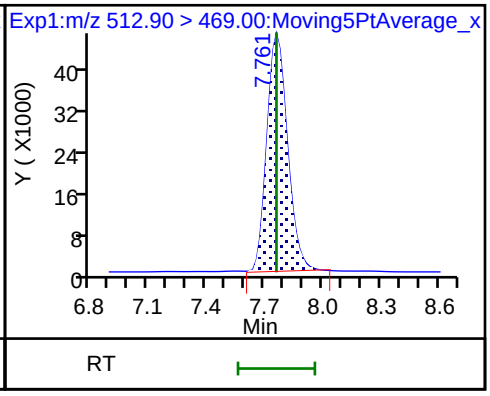
* 44 13C2 PFDA



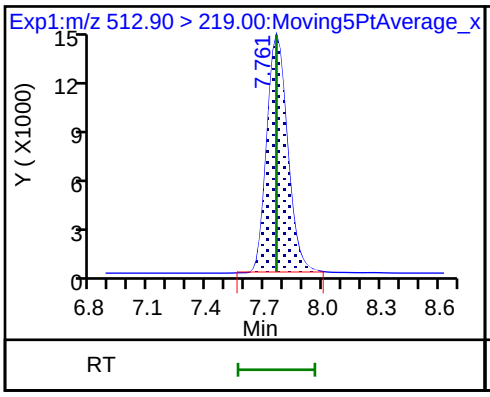
D 40 13C6 PFDA



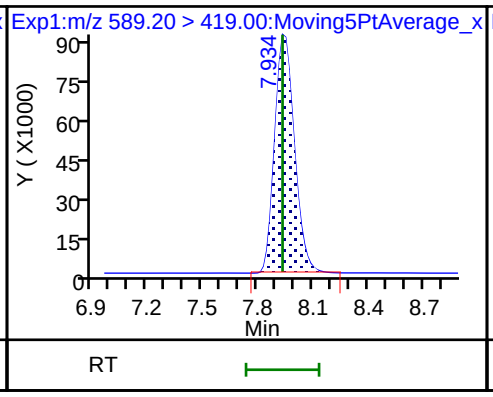
43 PFDA



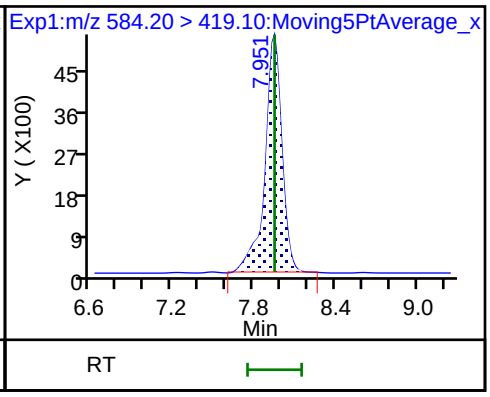
43 PFDA



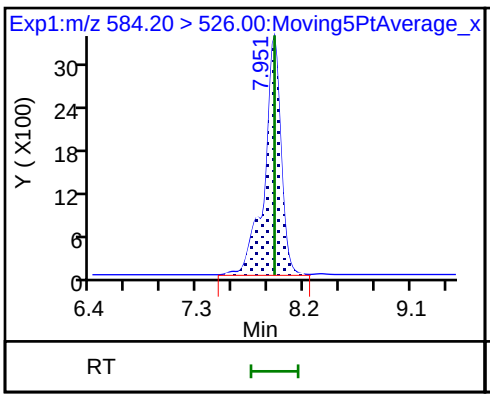
D 46 d5-NEtFOSAA



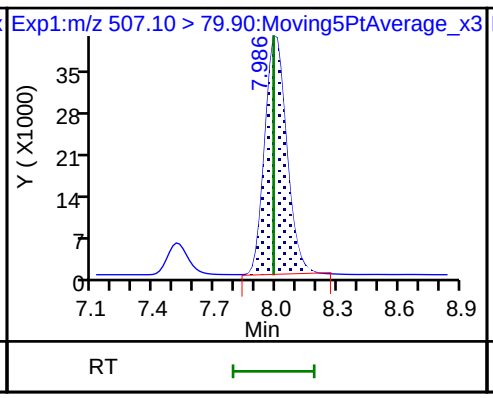
45 NEtFOSAA



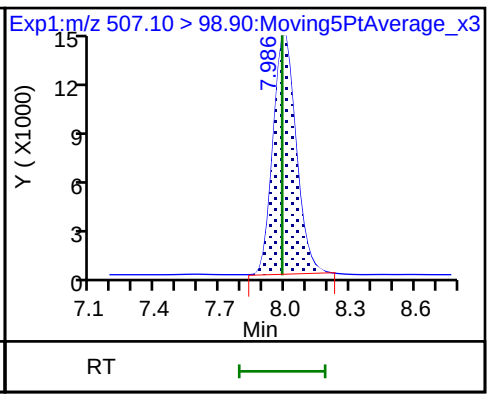
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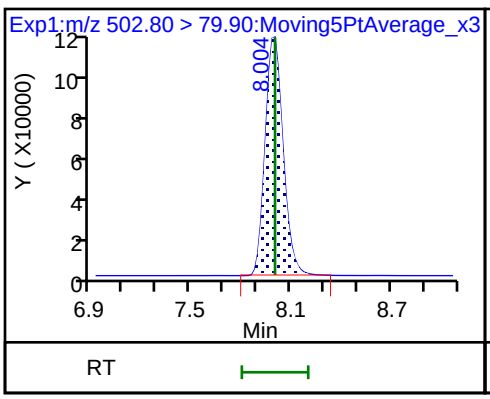
D 49 13C8 PFOS



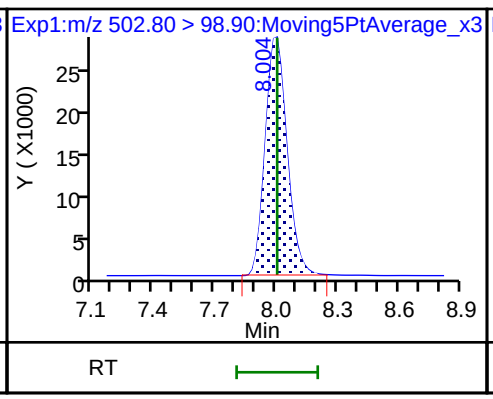
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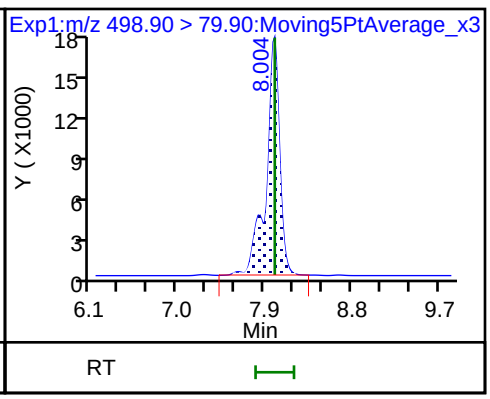
* 47 13C4 PFOS



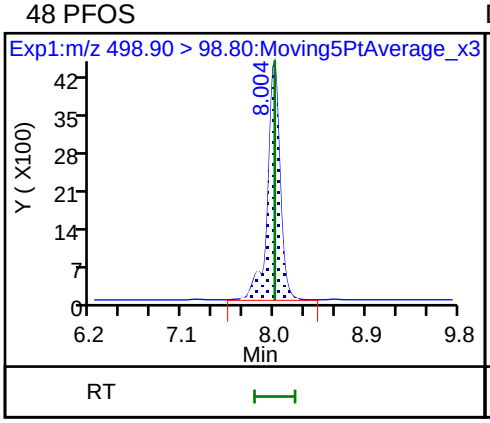
* 47 13C4 PFOS



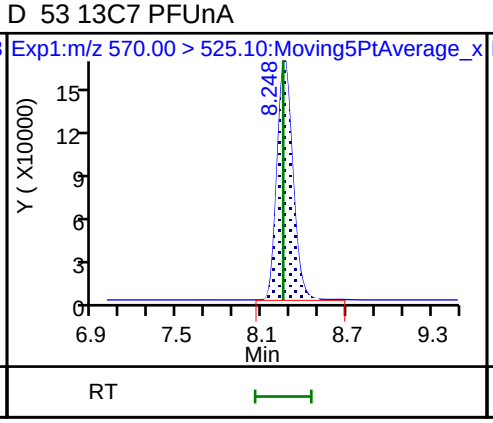
48 PFOS



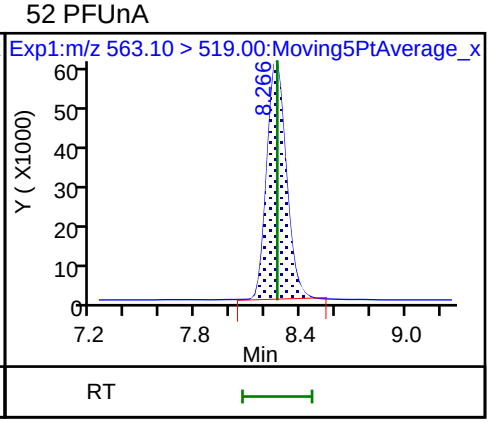
48 PFOS



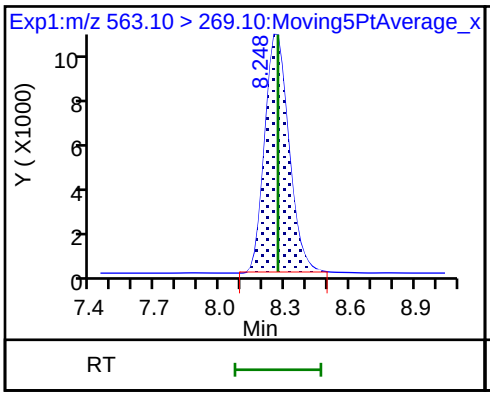
D 53 13C7 PFUnA



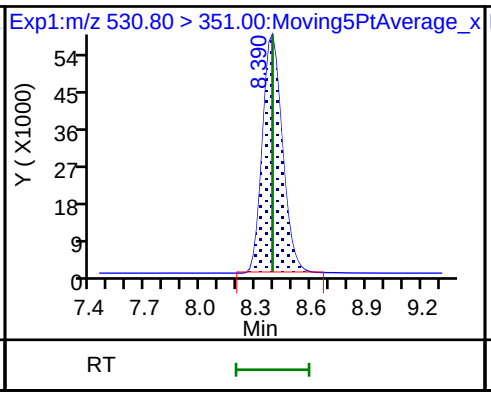
52 PFUnA



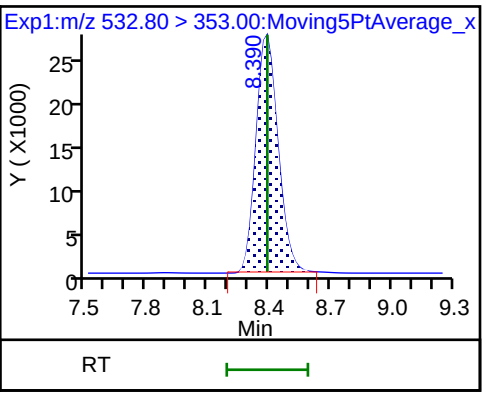
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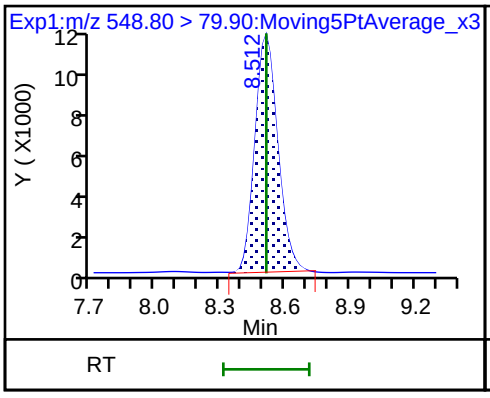
54 9ClFOS



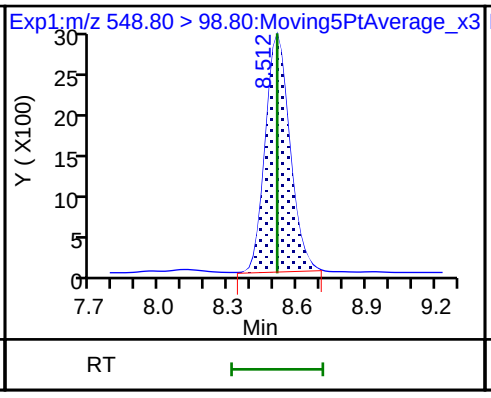
54 9ClFOS



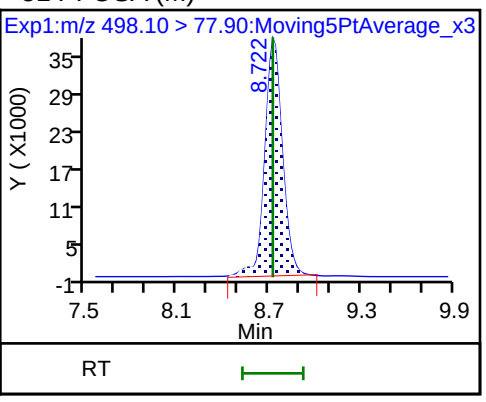
55 PFNS



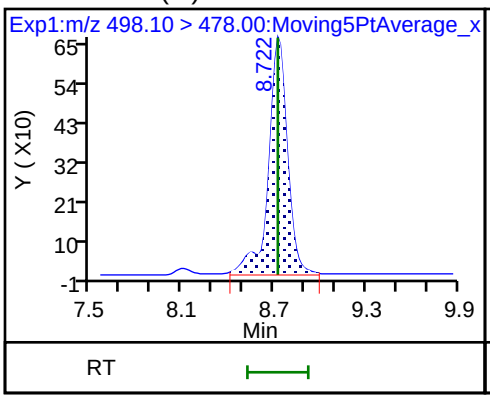
55 PFNS



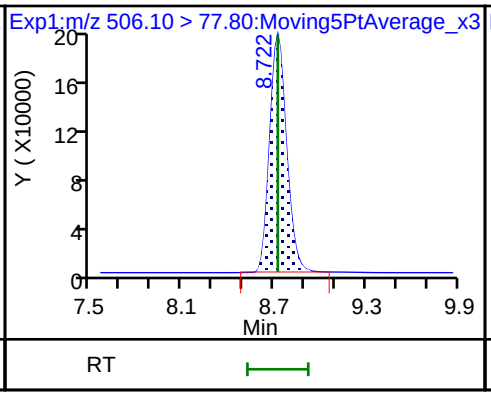
51 PFOSA (M)



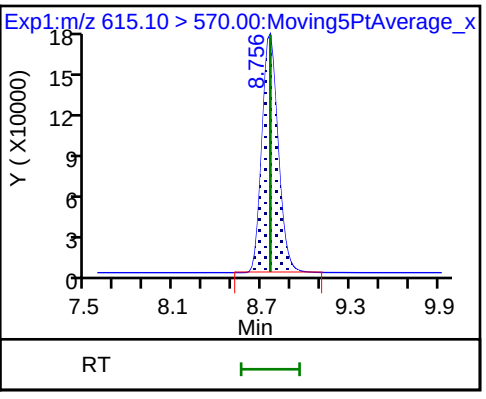
51 PFOSA (M)



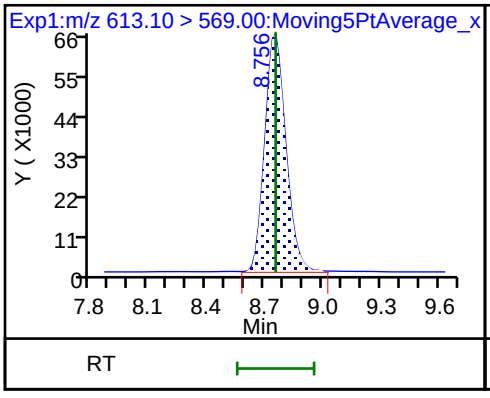
D 50 13C8 FOSA



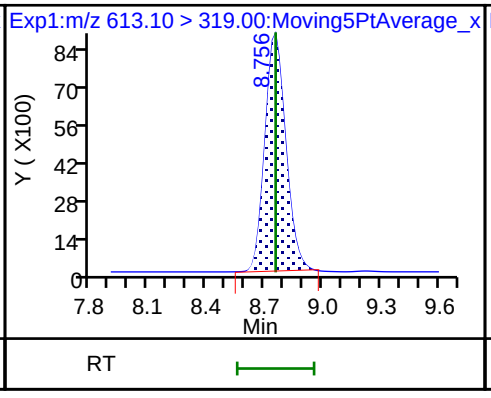
D 56 13C2 PFDoA



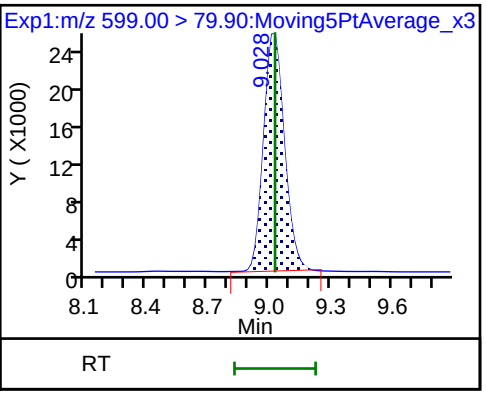
57 PFDoA



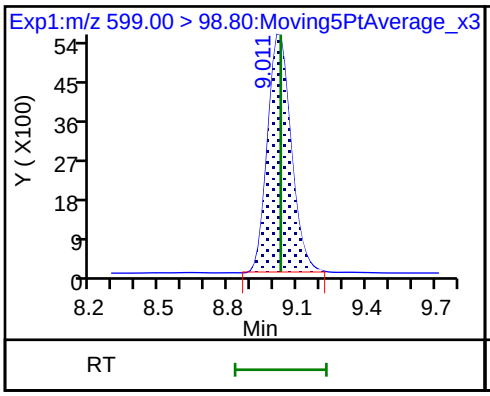
57 PFDoA



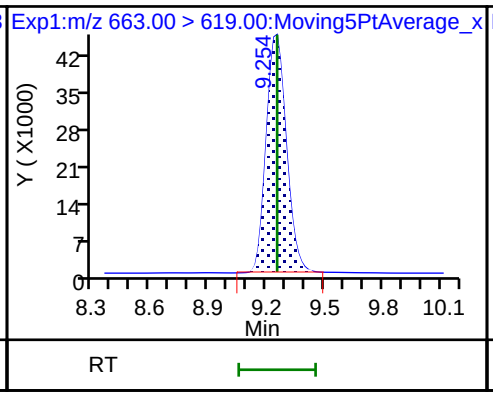
58 PFDS



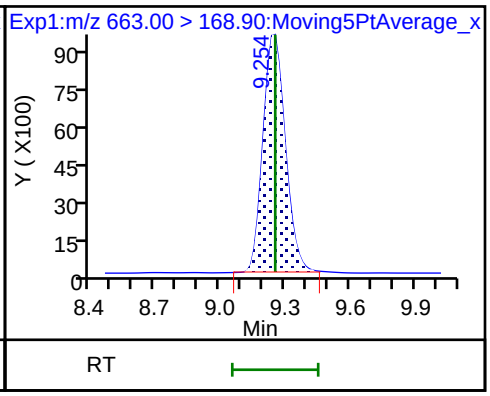
58 PFDS



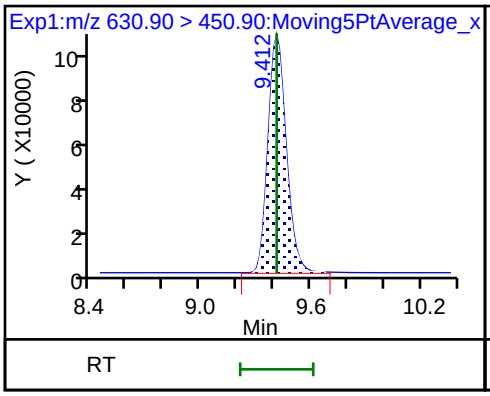
63 PFTrDA



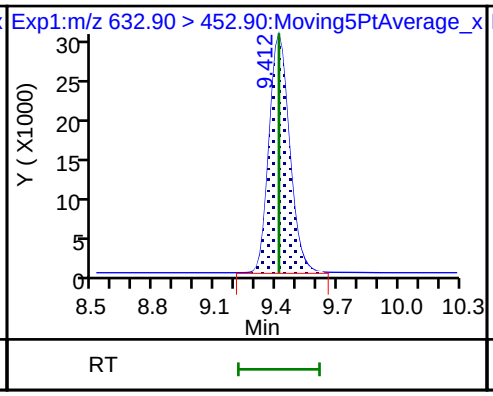
63 PFTrDA



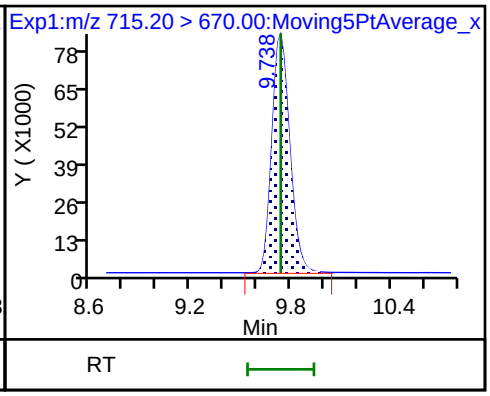
66 11ClFOS



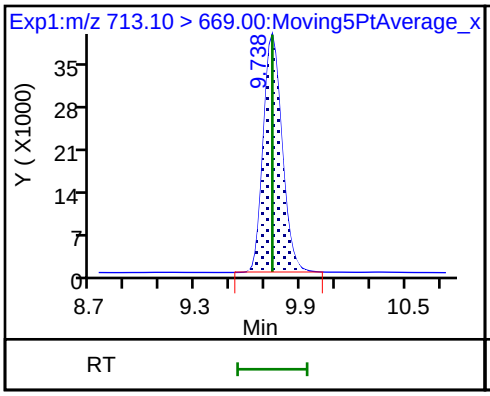
66 11ClFOS



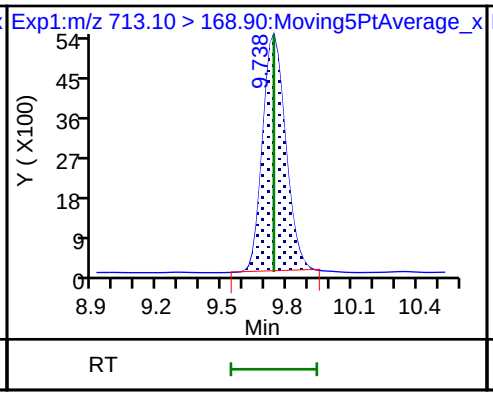
D 69 13C2 PFTeDA



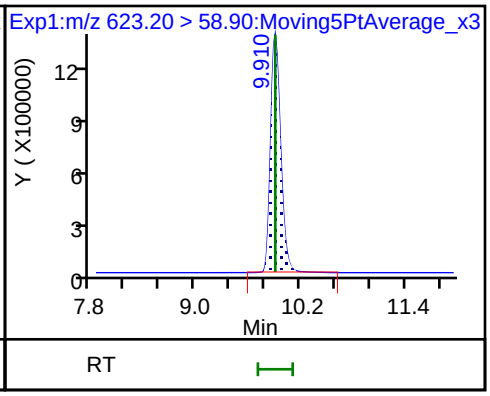
70 PFTeDA



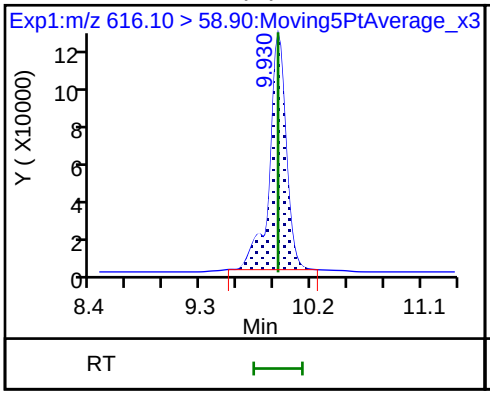
70 PFTeDA



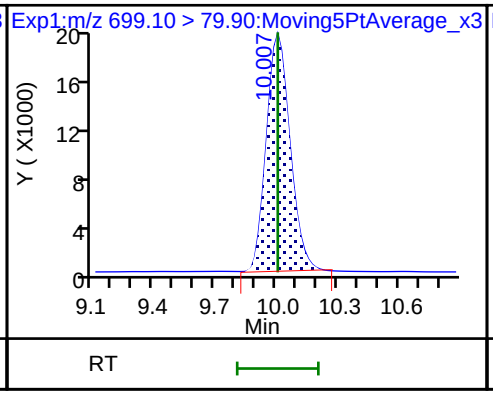
D 59 d7-N-Me-FOSE



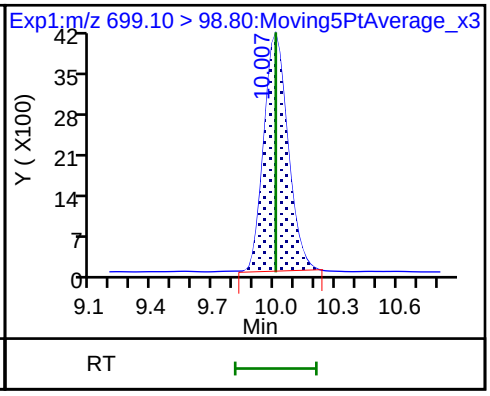
60 N-MeFOSE-M (M)



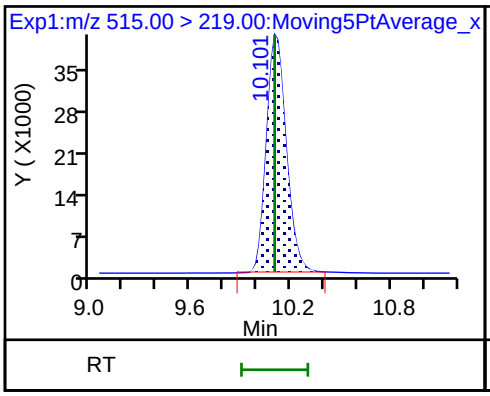
71 PFDoS



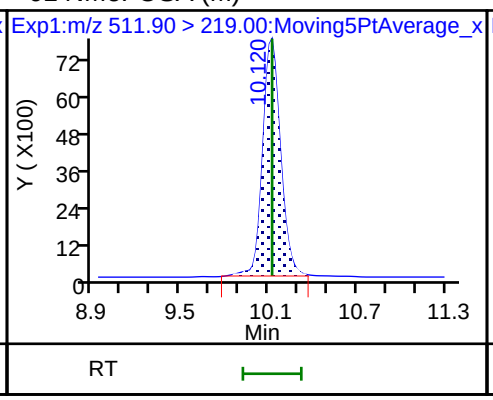
71 PFDoS



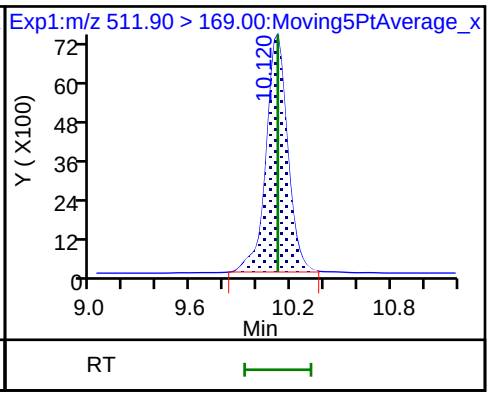
D 62 d3-NMePFOSA



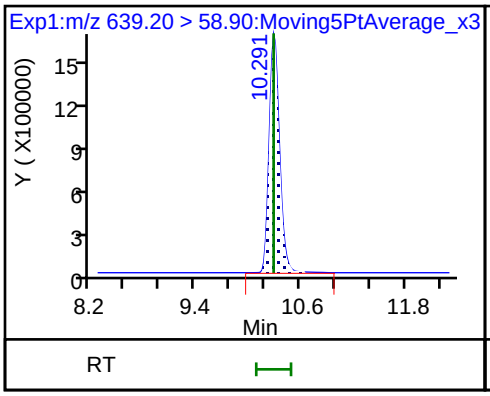
61 NMeFOSA (M)



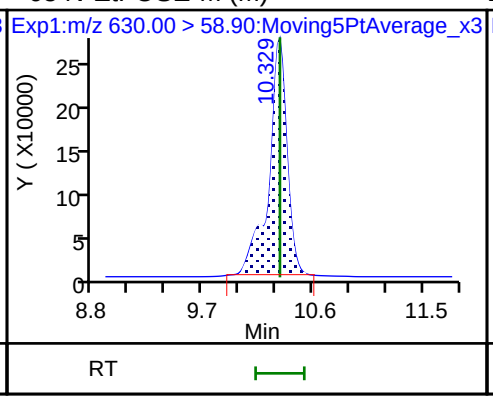
61 NMeFOSA



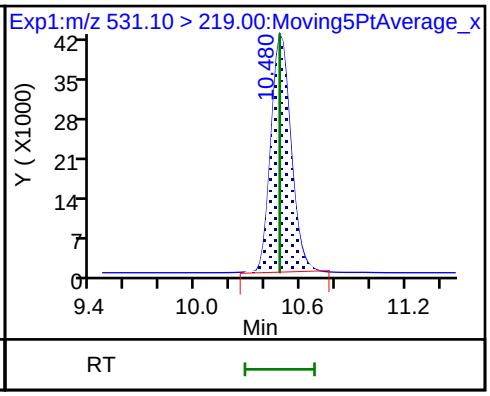
D 64 d9-N-EtFOSE



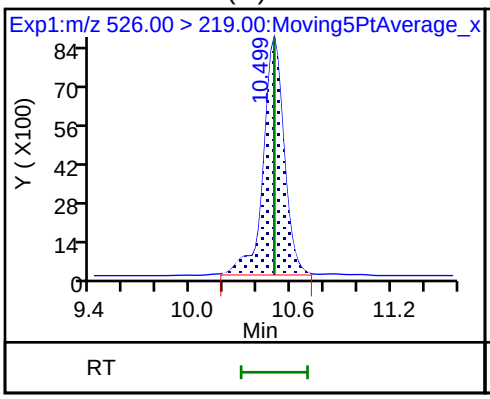
65 N-EtFOSE-M (M)



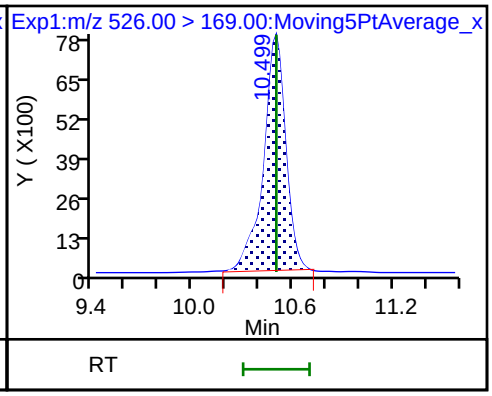
D 67 d5-NEtPFOSA



68 N-EtFOSA-M (M)



68 N-EtFOSA-M



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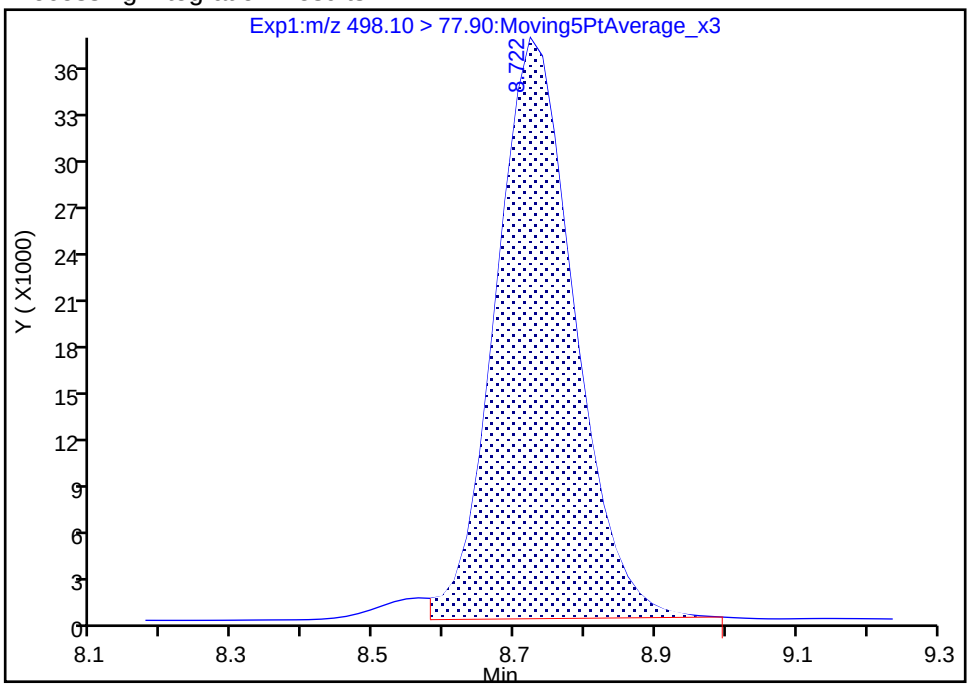
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.002.d
Injection Date: 20-Nov-2023 17:39:05 Instrument ID: LC_LCMS11
Lims ID: IC L4
Client ID:
Operator ID: DENLCMS ALS Bottle#: 4 Worklist Smp#: 3
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

51 PFOSA, CAS: 754-91-6

Signal: 1

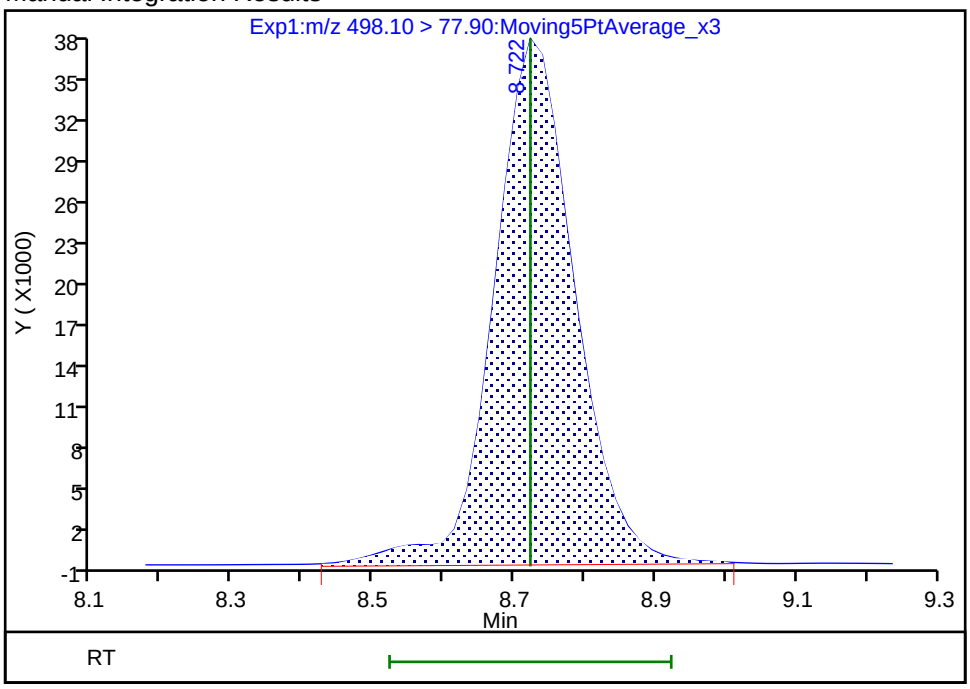
Processing Integration Results

RT: 8.72
Area: 285746
Amount: 0.491509
Amount Units: ng/ml



Manual Integration Results

RT: 8.72
Area: 294570
Amount: 0.502160
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 10:58:01 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

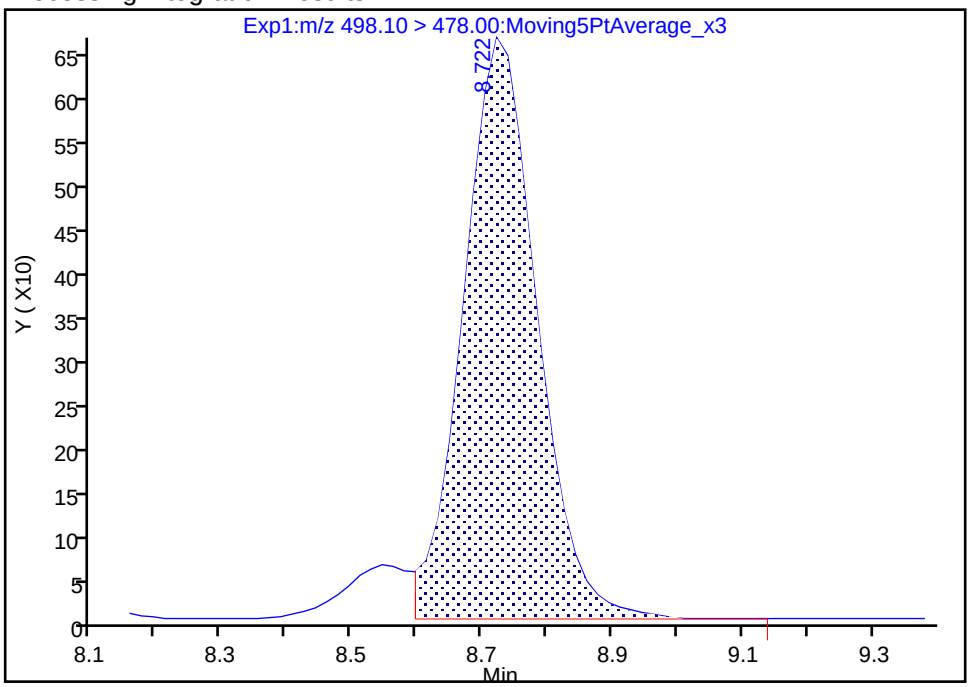
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.002.d
Injection Date: 20-Nov-2023 17:39:05 Instrument ID: LC_LCMS11
Lims ID: IC L4
Client ID:
Operator ID: DENLCMS ALS Bottle#: 4 Worklist Smp#: 3
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

51 PFOSA, CAS: 754-91-6

Signal: 2

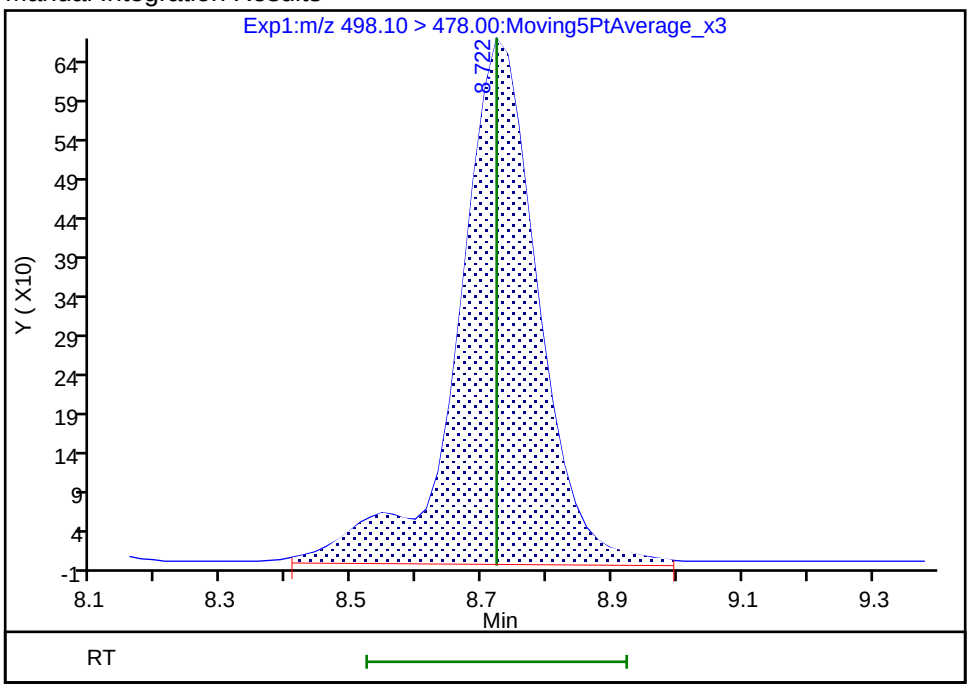
Processing Integration Results

RT: 8.72
Area: 5199
Amount: 0.491509
Amount Units: ng/ml



Manual Integration Results

RT: 8.72
Area: 5729
Amount: 0.502160
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 10:58:06 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver

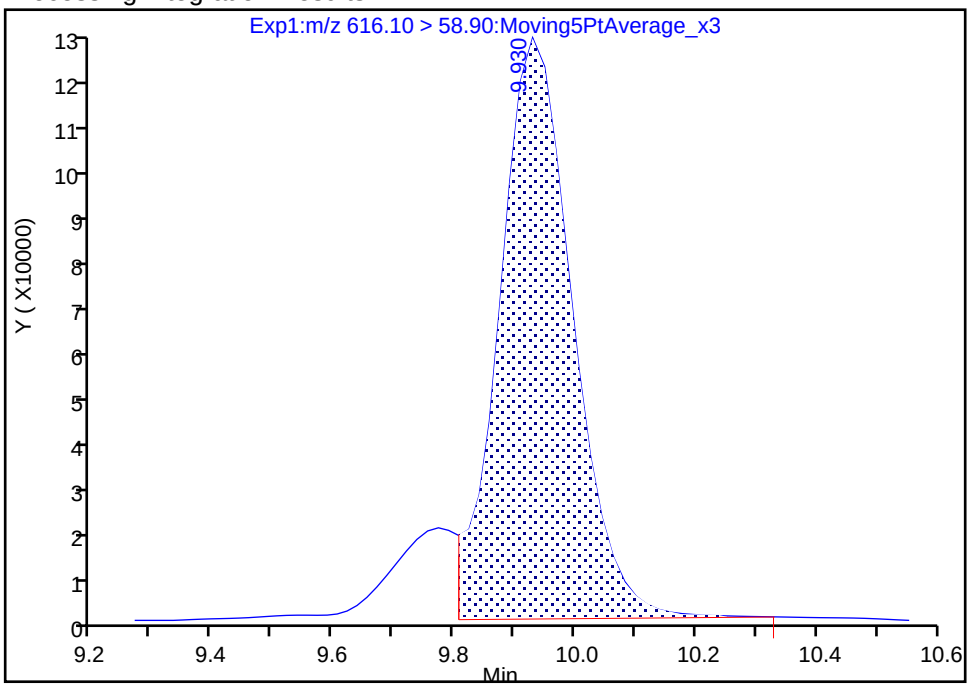
Data File:	\\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.002.d				
Injection Date:	20-Nov-2023 17:39:05	Instrument ID:	LC_LCMS11		
Lims ID:	IC L4				
Client ID:					
Operator ID:	DENLCMS	ALS Bottle#:	4	Worklist Smp#:	3
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

60 N-MeFOSE-M, CAS: 24448-09-7

Signal: 1

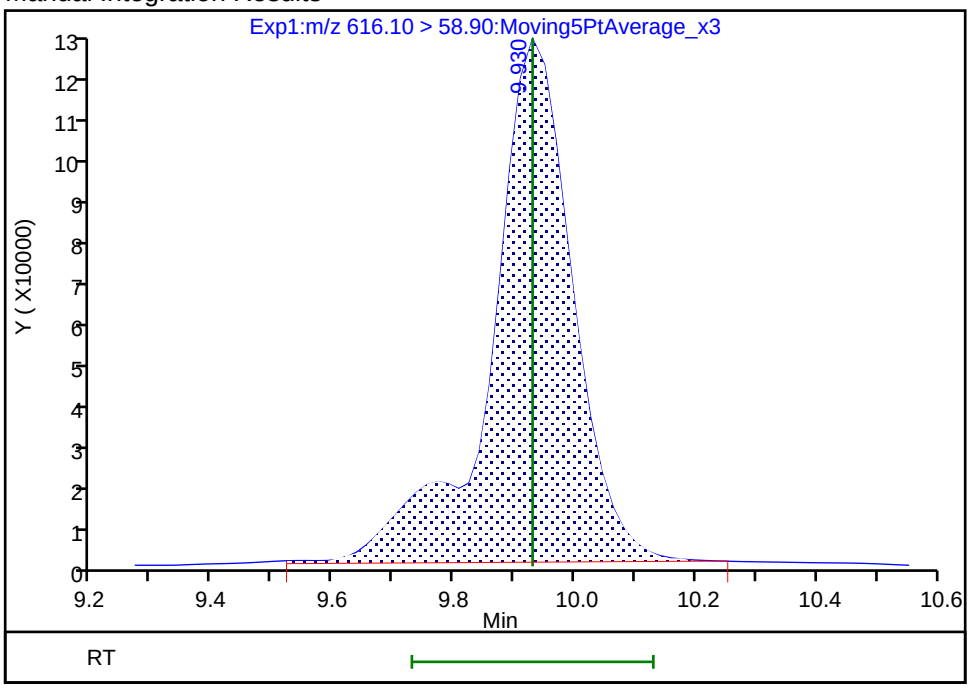
Processing Integration Results

RT: 9.93
Area: 1070369
Amount: 2.453355
Amount Units: ng/ml



Manual Integration Results

RT: 9.93
Area: 1196286
Amount: 2.523137
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 10:58:22 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver

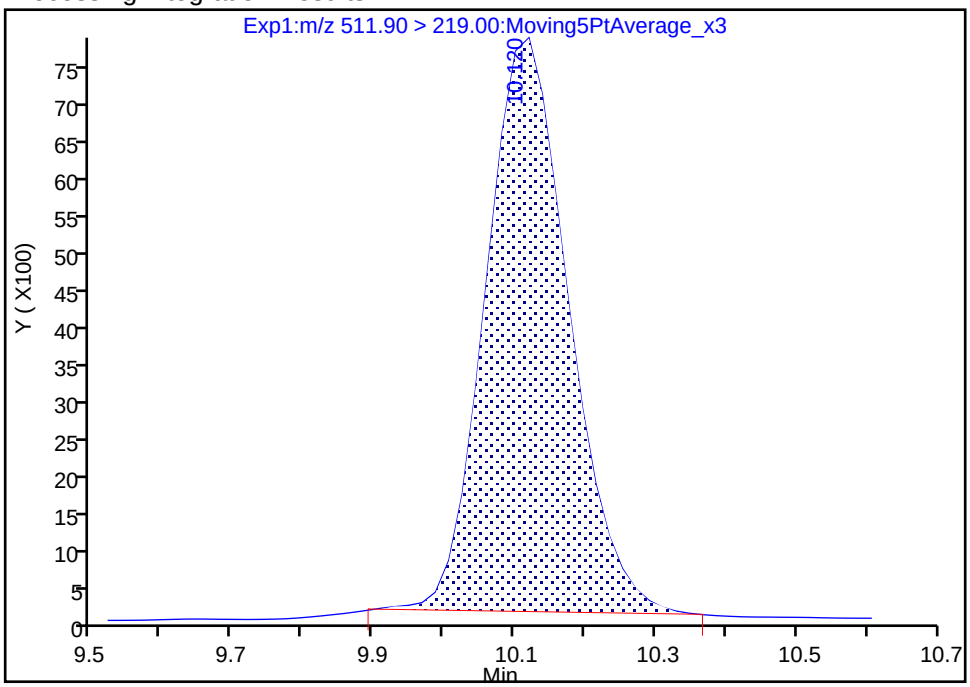
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.002.d
Injection Date: 20-Nov-2023 17:39:05 Instrument ID: LC_LCMS11
Lims ID: IC L4
Client ID:
Operator ID: DENLCMS ALS Bottle#: 4 Worklist Smp#: 3
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

61 NMeFOSA, CAS: 31506-32-8

Signal: 1

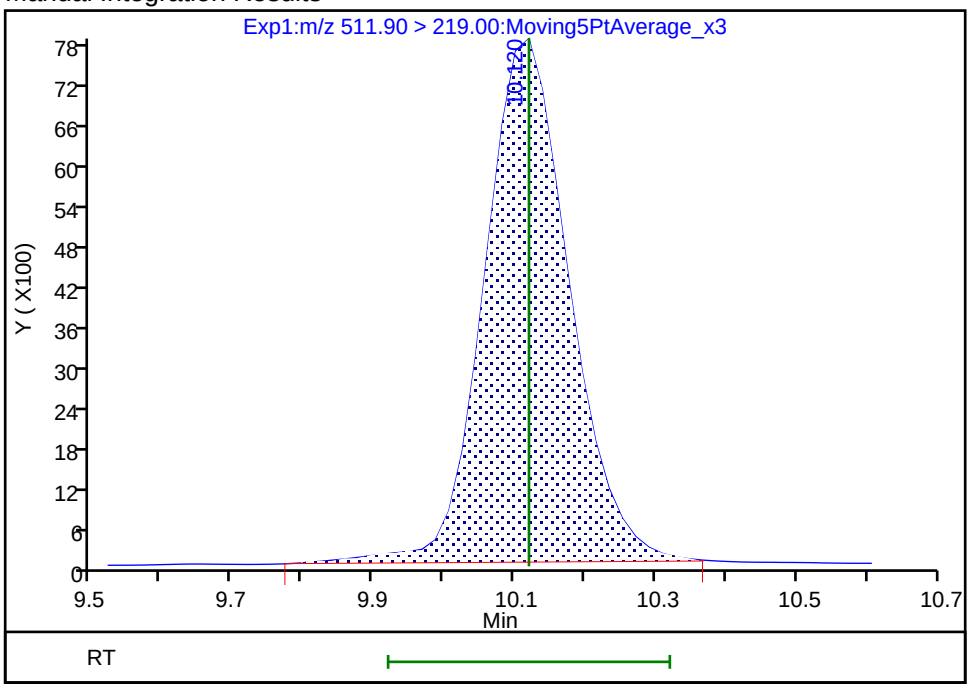
Processing Integration Results

RT: 10.12
Area: 63649
Amount: 0.508394
Amount Units: ng/ml



Manual Integration Results

RT: 10.12
Area: 65545
Amount: 0.521264
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 10:58:32 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

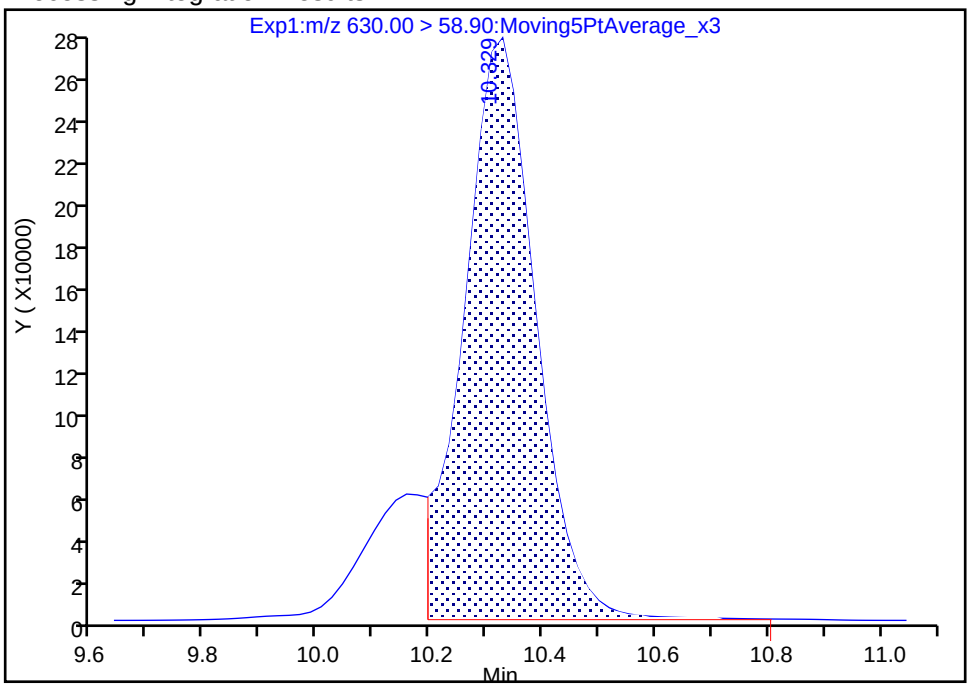
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.002.d
Injection Date: 20-Nov-2023 17:39:05 Instrument ID: LC_LCMS11
Lims ID: IC L4
Client ID:
Operator ID: DENLCMS ALS Bottle#: 4 Worklist Smp#: 3
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

65 N-EtFOSE-M, CAS: 1691-99-2

Signal: 1

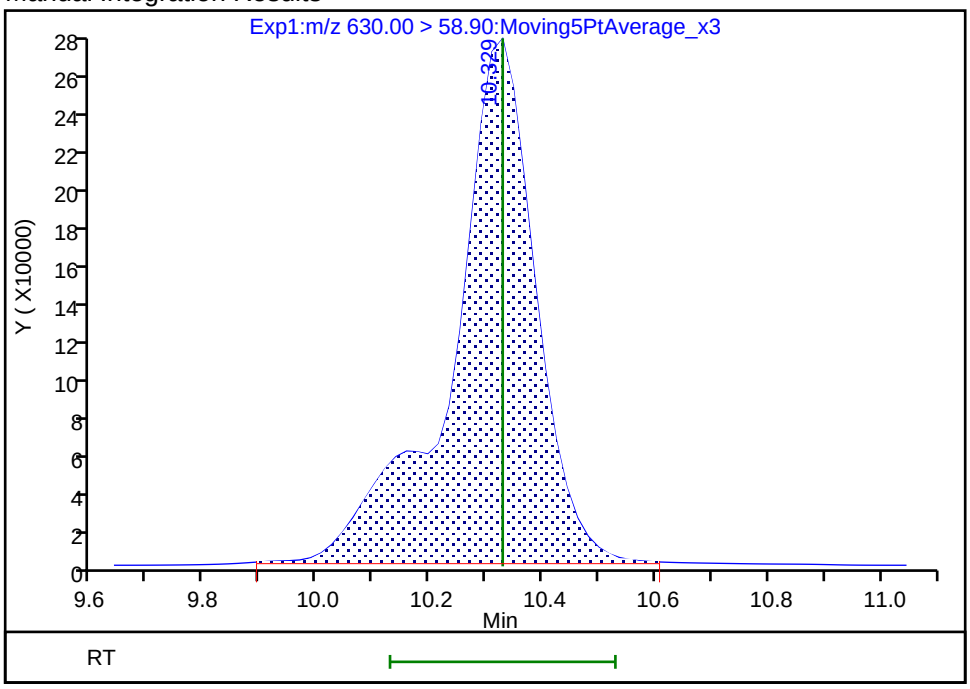
Processing Integration Results

RT: 10.33
Area: 2415513
Amount: 4.673902
Amount Units: ng/ml



Manual Integration Results

RT: 10.33
Area: 2837461
Amount: 4.911278
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 10:58:39 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver

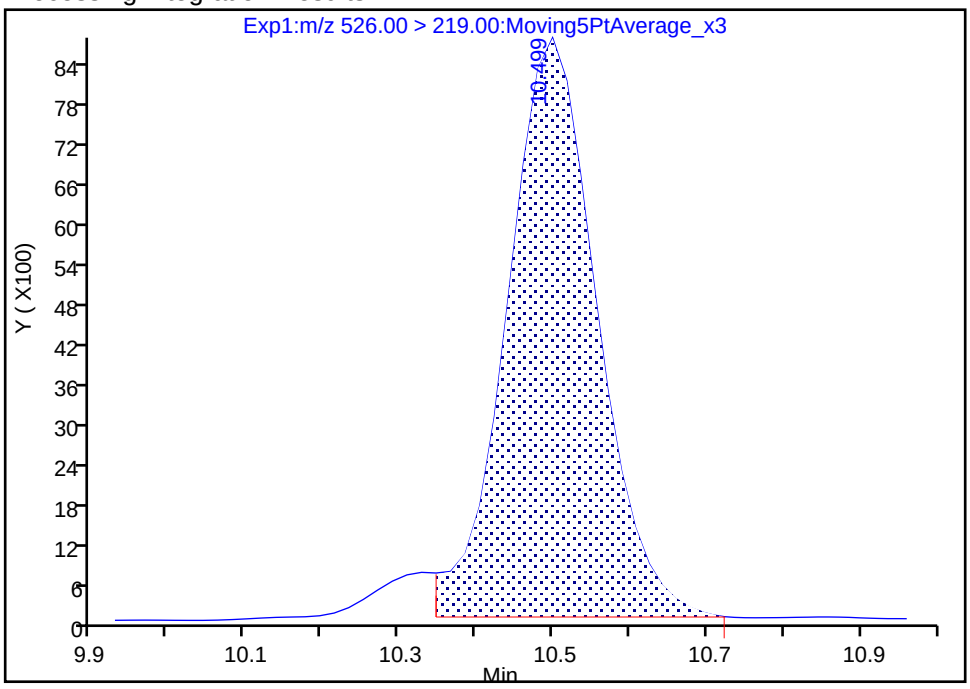
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.002.d
Injection Date: 20-Nov-2023 17:39:05 Instrument ID: LC_LCMS11
Lims ID: IC L4
Client ID:
Operator ID: DENLCMS ALS Bottle#: 4 Worklist Smp#: 3
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

68 N-EtFOSA-M, CAS: 4151-50-2

Signal: 1

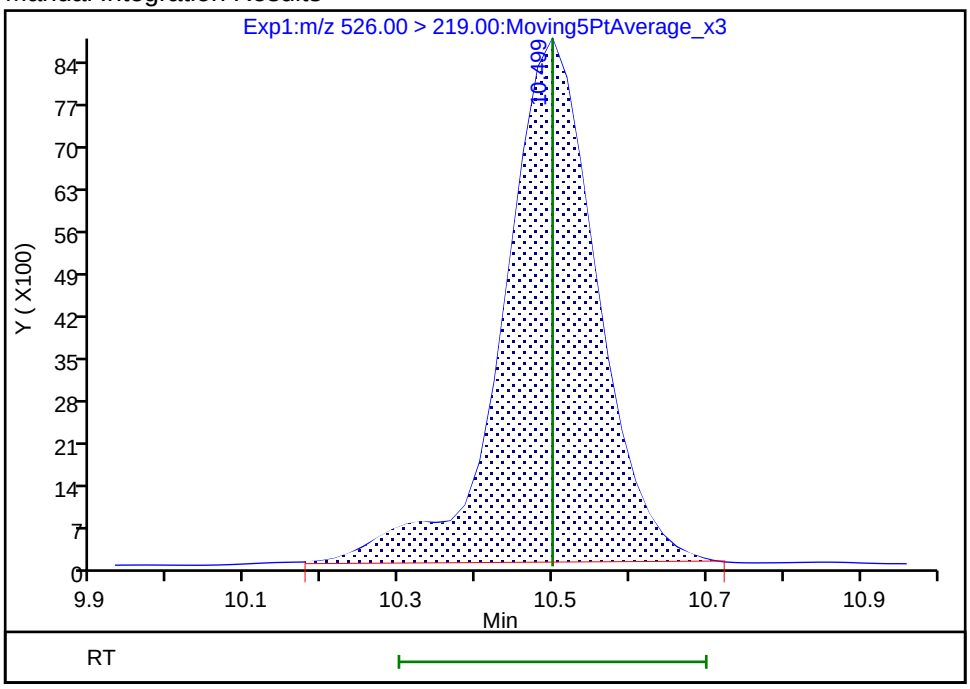
Processing Integration Results

RT: 10.50
Area: 70451
Amount: 0.496172
Amount Units: ng/ml



Manual Integration Results

RT: 10.50
Area: 74109
Amount: 0.511258
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 10:58:47 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.003.d
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 20-Nov-2023 17:58:32 ALS Bottle#: 5 Worklist Smp#: 4
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: IC L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: DENLCMS Instrument ID: LC_LCMS11
Sublist: chrom-PFC_IDA_DEN11*sub5

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 21-Nov-2023 11:14:54 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1626

First Level Reviewer: B5QN Date: 21-Nov-2023 10:57:37
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.061	3.062	-0.001	1.000	5910103	10.0		100	43652	
* 1 13C3PFBA										
216.00 > 172.00	3.061	3.062	-0.001		2896497	5.00			10136	
2 PFBA										
212.80 > 168.90	3.061	3.062	-0.001	1.000	659389	1.25		100	700	
4 PFMPA										
229.00 > 84.90	3.728	3.728	0.0	0.835	1176128	2.53		101	6880	
5 3:3 FTCA										
241.00 > 177.00	3.912	3.928	-0.016	0.877	372223	6.25	Target=1.69	100	13390	
241.00 > 117.00	3.912	3.928	-0.016	0.877	216302		1.72(0.84-2.53)	100	5213	
D 7 13C5 PFPeA										
268.30 > 223.00	4.462	4.478	-0.016	0.834	1822623	5.07		101	18571	
6 PFPA										
263.00 > 219.00	4.477	4.478	-0.001	1.003	911746	1.25	Target=221.09	99.9	2030	
263.00 > 68.90	4.477	4.478	-0.001	1.003	4653		195.95(110.55-331.65)	99.9	174	
8 PFMBA										
279.00 > 85.10	4.778	4.778	0.0	1.071	2390667	2.60		104	28953	
10 4:2FTS										
327.10 > 307.00	5.096	5.097	-0.001	1.000	391062	2.97	Target=1.58	95.5	9974	
327.10 > 80.90	5.096	5.097	-0.001	1.000	268756		1.46(0.79-2.38)	95.5	2285	
D 9 13C2-4:2FTS										
329.10 > 80.90	5.096	5.097	-0.001	0.742	261775	4.34	Target=4.29	92.9	4752	
329.10 > 309.00	5.096	5.097	-0.001	0.742	55675		4.70(2.14-6.43)	92.9	2368	
11 NFDHA										
295.00 > 201.00	5.280	5.280	0.0	0.986	318871	1.22	Target=1.86	98.1	6874	
295.00 > 84.90	5.280	5.280	0.0	0.986	150164		2.12(0.93-2.79)	98.1	3839	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 16 13C3 PFBS										
302.10 > 79.90	5.353	5.354	-0.001	0.779	790282	2.30	Target=4.50	99.0	20671	
302.10 > 98.90	5.353	5.354	-0.001	0.779	164185		4.81(2.25-6.76)	99.0	7198	
15 PFBS										
298.70 > 79.90	5.353	5.354	-0.001	1.000	315512	1.04	Target=2.27	94.1	10290	
298.70 > 98.80	5.353	5.354	-0.001	1.000	147702		2.14(1.13-3.40)	94.1	3868	
* 14 13C2 PFHxA										
315.10 > 270.00	5.353	5.354	-0.001		1802924	2.50	Target=77.08		26498	
315.10 > 119.40	5.335	5.354	-0.019		28381		63.53(38.54-115.62)		1251	
D 12 13C5 PFHxA										
318.00 > 273.00	5.353	5.354	-0.001	1.000	2100957	2.60	Target=50.64	104	46256	
318.00 > 120.30	5.353	5.354	-0.001	1.000	43544		48.25(25.32-75.97)	104	1446	
13 PFHxA										
313.00 > 269.00	5.353	5.371	-0.018	1.000	1162819	1.26	Target=20.05	101	6134	
313.00 > 118.90	5.353	5.371	-0.018	1.000	60818		19.12(10.03-30.08)	101	1624	
18 5:3 FTCA										
341.00 > 237.10	5.624	5.625	-0.001	1.051	1860318	12.2	Target=1.13	97.8	21367	
341.00 > 217.00	5.624	5.625	-0.001	1.051	1678086		1.11(0.57-1.70)	97.8	23560	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.663	5.682	-0.019	1.058	1978108	10.0	Target=1.57	100	22799	
286.90 > 184.90	5.663	5.682	-0.019	1.058	1312157		1.51(0.78-2.35)	100	18470	
19 HFPO-DA										
284.90 > 168.90	5.682	5.682	0.0	1.003	234337	1.10	Target=1.65	88.1	5955	
284.90 > 184.90	5.682	5.682	0.0	1.003	169179		1.39(0.83-2.48)	88.1	3077	
21 PFEESA										
314.80 > 134.90	5.789	5.789	0.0	1.081	2199539	2.15	Target=14.24	96.5	57230	
314.80 > 82.90	5.789	5.789	0.0	1.081	169882		12.95(7.12-21.36)	96.5	5571	
D 22 13C4 PFHpA										
367.10 > 322.00	6.121	6.122	-0.001	1.143	2221680	2.63		105	31369	
17 PFHpA										
363.10 > 319.00	6.121	6.122	-0.001	1.000	1061232	1.21	Target=4.02	97.2	5169	
363.10 > 169.00	6.121	6.122	-0.001	1.000	272752		3.89(2.01-6.04)	97.2	5535	
23 PFPeS										
349.10 > 79.90	6.223	6.223	0.0	0.906	342828	1.18	Target=2.71	101	5387	
349.10 > 98.90	6.223	6.223	0.0	0.906	118545		2.89(1.35-4.06)	101	4183	
24 ADONA										
376.90 > 250.90	6.355	6.355	0.0	1.122	2037010	1.14	Target=3.01	96.7	28554	
376.90 > 84.80	6.355	6.355	0.0	1.122	703749		2.89(1.51-4.52)	96.7	14102	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.454	6.471	-0.017	0.939	333885	4.24	Target=4.27	89.3	9511	
429.10 > 409.00	6.454	6.471	-0.017	0.939	72753		4.59(2.13-6.40)	89.3	2618	
25 6:2FTS										
427.10 > 407.00	6.454	6.471	-0.017	1.000	680244	5.08	Target=1.91	107	16090	
427.10 > 80.90	6.454	6.471	-0.017	1.000	350638		1.94(0.96-2.87)	107	8317	
D 27 13C8 PFOA										
421.10 > 376.00	6.690	6.707	-0.017	0.998	1983246	2.31		92.2	45218	
* 29 13C4 PFOA										
417.10 > 172.00	6.707	6.707	0.0		328562	2.50			11303	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 PFOA										
413.00 > 369.00	6.707	6.707	0.0	1.002	761554	1.20	Target=2.39	96.4	3755	
413.00 > 169.00	6.707	6.707	0.0	1.002	325901		2.34(1.19-3.58)	96.4	8870	
30 7:3 FTCA										
441.00 > 316.90	6.854	6.855	-0.001	1.280	859589	12.2	Target=1.44	97.8	17157	
441.00 > 336.90	6.854	6.855	-0.001	1.280	628698		1.37(0.72-2.16)	97.8	12531	
D 33 13C3 PFHxS										
402.10 > 79.90	6.871	6.871	0.0	1.000	610123	2.24	Target=4.22	94.9	16885	
402.10 > 98.80	6.854	6.871	-0.017	0.998	141312		4.32(2.11-6.33)	94.9	6506	
32 PFHxS										
398.70 > 79.90	6.871	6.871	0.0	1.000	157781	1.15	Target=3.74	101	5980	
398.70 > 98.90	6.871	6.871	0.0	1.000	39394		4.01(1.87-5.61)	101	1583	
* 31 18O2 PFHxS										
403.00 > 83.90	6.871	6.871	0.0		634020	2.37			29263	
* 35 13C5 PFNA										
468.00 > 423.00	7.239	7.240	-0.001		1207855	1.25			30062	
D 34 13C9 PFNA										
472.10 > 427.00	7.239	7.240	-0.001	1.000	1105627	1.21		96.8	17210	
36 PFNA										
463.00 > 419.00	7.239	7.240	-0.001	1.000	1168381	1.32	Target=5.99	105	6613	
463.00 > 219.00	7.239	7.240	-0.001	1.000	198375		5.89(3.00-8.99)	105	6180	
37 PFHpS										
449.00 > 79.90	7.456	7.456	0.0	0.934	273528	1.17	Target=5.05	98.2	7704	
449.00 > 98.80	7.456	7.456	0.0	0.934	56007		4.88(2.53-7.58)	98.2	2605	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.506	7.506	0.0	1.092	439328	4.60	Target=5.22	96.1	15527	
529.10 > 509.00	7.506	7.506	0.0	1.092	79982		5.49(2.61-7.83)	96.1	2889	
39 8:2FTS										
527.10 > 507.00	7.506	7.506	0.0	1.000	669100	5.02	Target=1.64	105	19041	
527.10 > 80.80	7.506	7.506	0.0	1.000	405037		1.65(0.82-2.46)	105	14373	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.725	7.725	0.0	0.967	562776	4.78		95.6	10835	
42 NMeFOSAA										
570.10 > 419.00	7.725	7.743	-0.018	1.000	133284	1.18	Target=1.12	94.8	5080	
570.10 > 483.00	7.725	7.743	-0.018	1.000	128218		1.04(0.56-1.68)	94.8	4522	
D 40 13C6 PFDA										
519.10 > 474.10	7.760	7.761	-0.001	1.000	1149883	1.18		94.6	17161	
43 PFDA										
512.90 > 469.00	7.760	7.761	-0.001	1.000	911845	1.21	Target=3.52	96.7	9446	
512.90 > 219.00	7.760	7.761	-0.001	1.000	272818		3.34(1.76-5.28)	96.7	7348	
* 44 13C2 PFDA										
515.10 > 470.10	7.760	7.761	-0.001		1221765	1.25			27314	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.933	7.934	-0.001	0.993	682586	5.01		100	15366	
45 NEtFOSAA										
584.20 > 419.10	7.951	7.951	0.0	1.002	130790	1.32	Target=1.52	106	3107	
584.20 > 526.00	7.951	7.951	0.0	1.002	83533		1.57(0.76-2.27)	106	2929	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 49 13C8 PFOS										
507.10 > 79.90	7.986	7.986	0.0	1.000	313498	2.49	Target=3.01	104	194	
507.10 > 98.90	7.986	7.986	0.0	1.000	102550		3.06(1.50-4.51)	104	4582	
* 47 13C4 PFOS										
502.80 > 79.90	7.986	8.004	-0.018		839257	2.40	Target=3.82		16183	
502.80 > 98.90	7.986	8.004	-0.018		224751		3.73(1.91-5.72)		7604	
48 PFOS										
498.90 > 79.90	7.986	8.004	-0.018	1.000	467661	1.09	Target=4.59	94.3	9719	
498.90 > 98.80	7.986	8.004	-0.018	1.000	99303		4.71(2.29-6.88)	94.3	3791	
D 53 13C7 PFUnA										
570.00 > 525.10	8.248	8.248	0.0	1.063	1329701	1.23		98.1	28882	
52 PFUnA										
563.10 > 519.00	8.248	8.266	-0.018	1.000	1139799	1.21	Target=5.53	97.0	12314	
563.10 > 269.10	8.248	8.266	-0.018	1.000	205648		5.54(2.77-8.30)	97.0	4485	
54 9ClFOS										
530.80 > 351.00	8.390	8.390	0.0	1.482	1178490	3.29	Target=2.30	106	19460	
532.80 > 353.00	8.372	8.390	-0.018	1.478	552949		2.13(1.15-3.46)	106	14549	
55 PFNS										
548.80 > 79.90	8.512	8.512	0.0	1.066	206057	1.18	Target=4.01	98.3	6987	
548.80 > 98.80	8.512	8.512	0.0	1.066	51909		3.97(2.01-6.02)	98.3	1403	
51 PFOSA										M
498.10 > 77.90	8.722	8.722	0.0	1.002	711805	1.18	Target=44.22	94.8	6435	
498.10 > 478.00	8.722	8.722	0.0	1.002	17581		40.49(22.11-66.32)	94.8	1096	M
D 50 13C8 FOSA										
506.10 > 77.80	8.705	8.722	-0.017	1.090	1510364	2.48		99.2	10760	
D 56 13C2 PFDoA										
615.10 > 570.00	8.739	8.756	-0.017	1.126	1338423	1.25		100	22042	
57 PFDoA										
613.10 > 569.00	8.739	8.756	-0.017	1.000	1358307	1.26	Target=7.62	101	11868	
613.10 > 319.00	8.739	8.756	-0.017	1.000	177709		7.64(3.81-11.43)	101	3908	
58 PFDS										
599.00 > 79.90	9.011	9.028	-0.017	1.128	481115	1.19	Target=4.76	99.1	6762	
599.00 > 98.80	9.011	9.028	-0.017	1.128	104538		4.60(2.38-7.13)	99.1	4929	
63 PFTrDA										
663.00 > 619.00	9.237	9.254	-0.017	0.949	794285	1.20	Target=5.15	96.2	8461	
663.00 > 168.90	9.237	9.254	-0.017	0.949	164957		4.82(2.57-7.72)	96.2	5711	
66 11ClFOS										
630.90 > 450.90	9.412	9.412	0.0	1.662	1817766	3.21	Target=3.33	102	37397	
632.90 > 452.90	9.412	9.412	0.0	1.662	553262		3.29(1.67-5.00)	102	13298	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.738	9.738	0.0	1.255	581181	1.14		91.3	11087	
70 PFTeDA										
713.10 > 669.00	9.738	9.738	0.0	1.000	728120	1.35	Target=7.24	108	6517	
713.10 > 168.90	9.738	9.738	0.0	1.000	96274		7.56(3.62-10.85)	108	2588	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.892	9.910	-0.018	1.239	10976291	24.5		98.0	75660	
60 N-MeFOSE-M										M
616.10 > 58.90	9.930	9.930	0.0	1.004	3036025	6.32		101	3282	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
71 PFDoS										
699.10 > 79.90	10.006	10.007	-0.001	1.253	398941	1.24	Target=4.39	102	6113	
699.10 > 98.80	10.006	10.007	-0.001	1.253	87897		4.54(2.20-6.59)	102	2148	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.101	10.101	0.0	1.265	331136	2.40		95.9	5796	
61 NMeFOSA										
511.90 > 219.00	10.101	10.120	-0.019	1.000	162348	1.28	Target=0.99	103	2189	
511.90 > 169.00	10.101	10.120	-0.019	1.000	161030		1.01(0.49-1.48)	103	3062	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.291	10.291	0.0	1.289	13886982	24.9		99.5	129404	
65 N-EtFOSE-M										M
630.00 > 58.90	10.310	10.329	-0.019	1.002	7421187	12.8		103	4518	M
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.480	10.480	0.0	1.312	343967	2.43		97.1	4329	
68 N-EtFOSA-M										M
526.00 > 219.00	10.499	10.499	0.0	1.002	183061	1.24	Target=0.99	99.6	2641	M
526.00 > 169.00	10.480	10.499	-0.019	1.000	189718		0.96(0.50-1.49)	99.6	2270	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

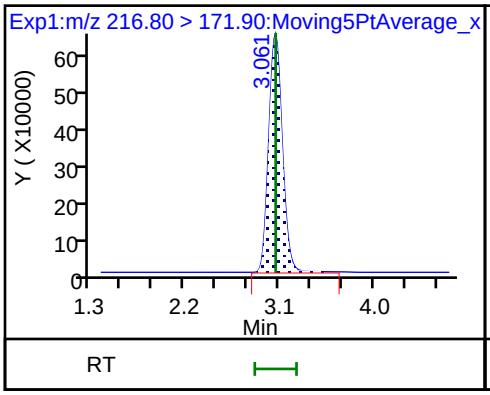
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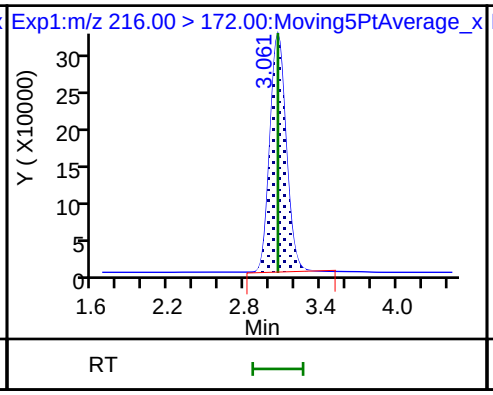
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.003.d
Injection Date: 20-Nov-2023 17:58:32 Instrument ID: LC_LCMS11
Lims ID: IC L5
Client ID:
Operator ID: DENLCMS ALS Bottle#: 5 Worklist Smp#: 4
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5

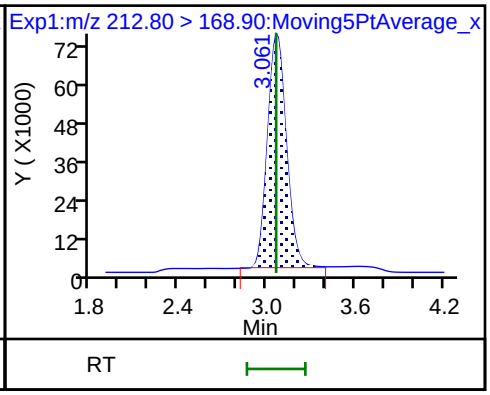
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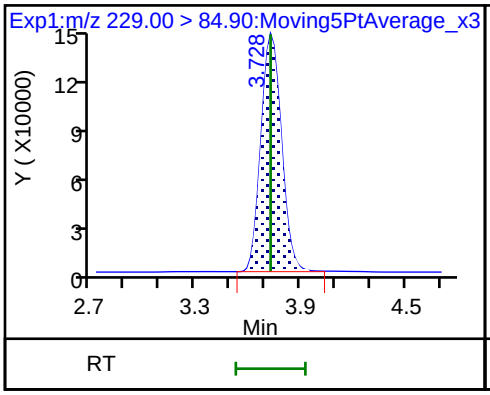
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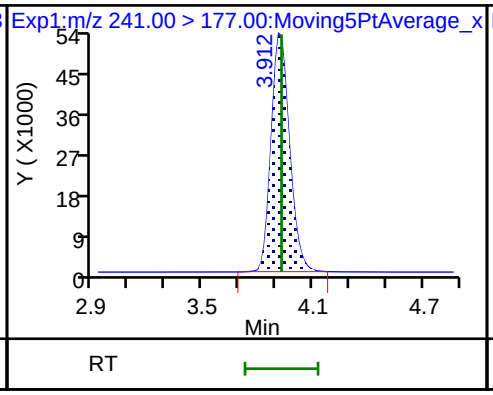
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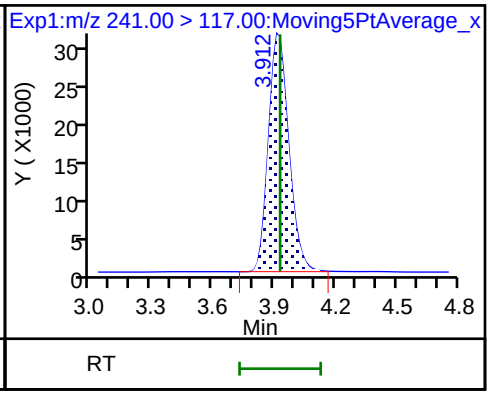
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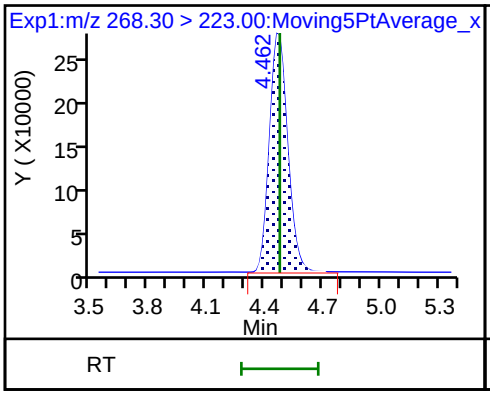
5 3:3 FTCA



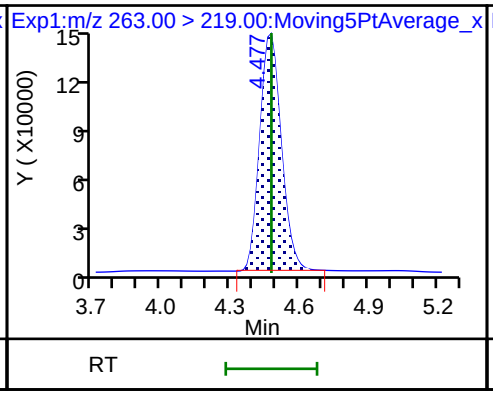
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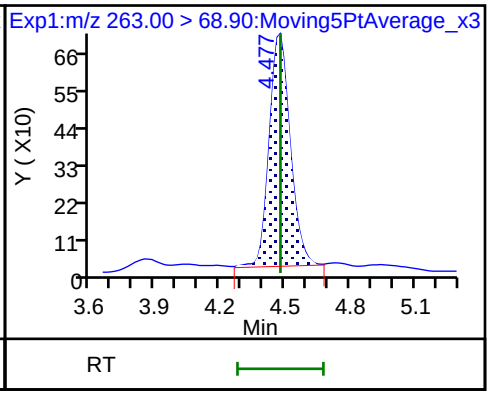
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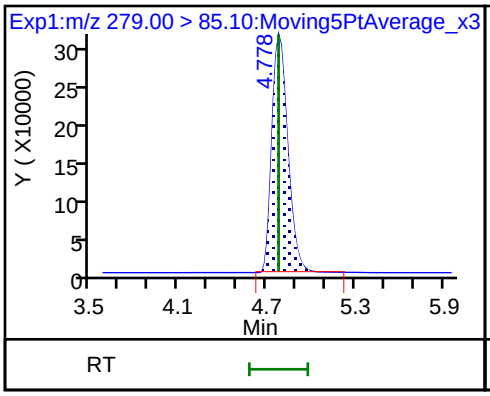
6 PFPA



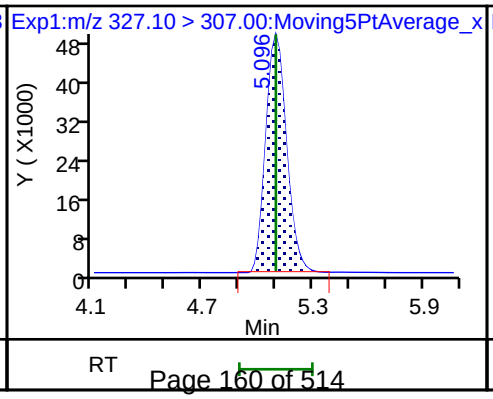
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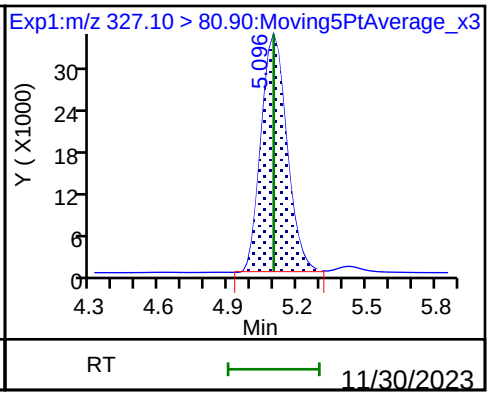
8 PFMBA



10 4:2FTS

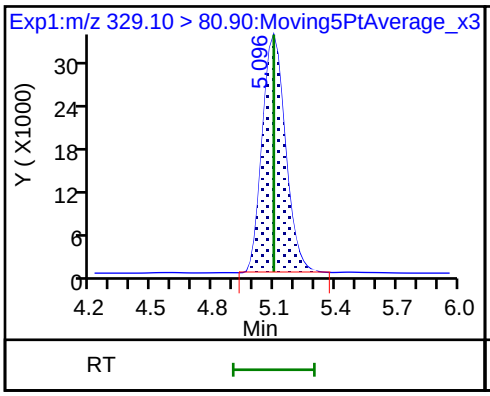


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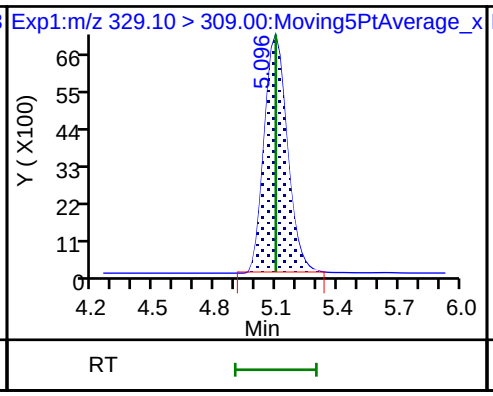


11/30/2023
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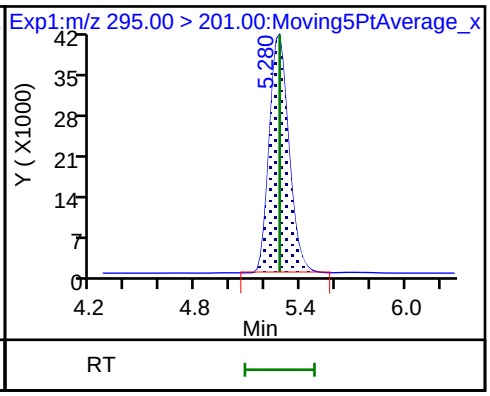
D 9 13C2-4:2FTS



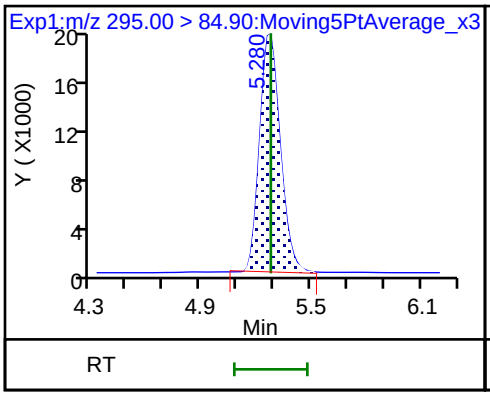
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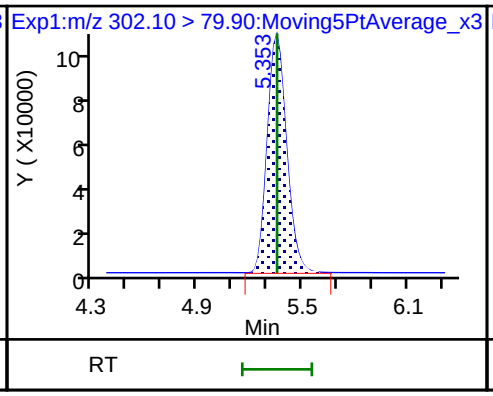
11 NFDHA



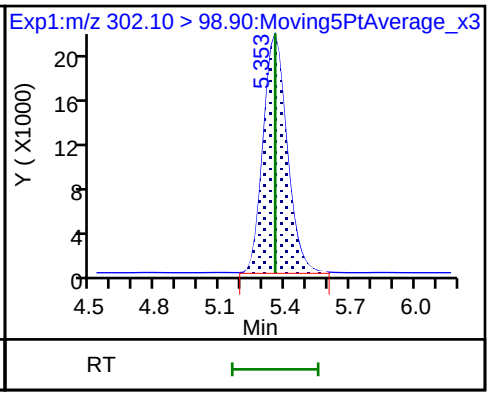
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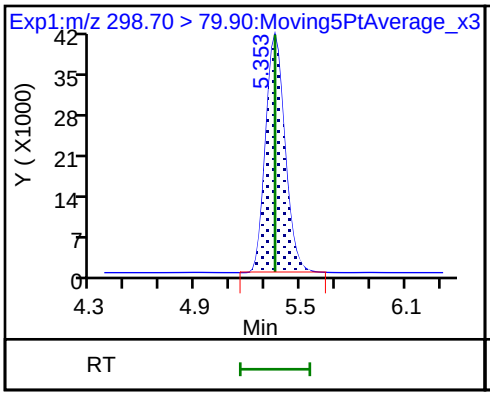
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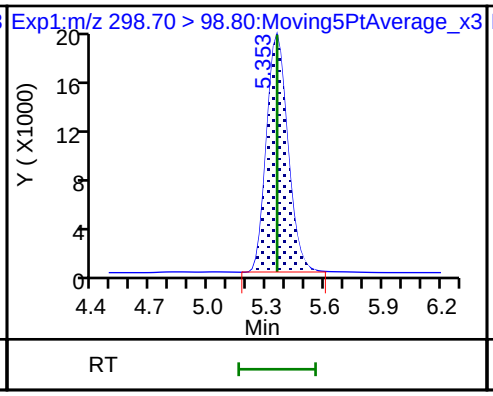
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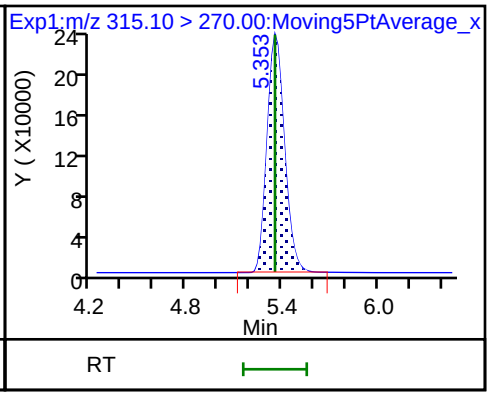
15 PFBS



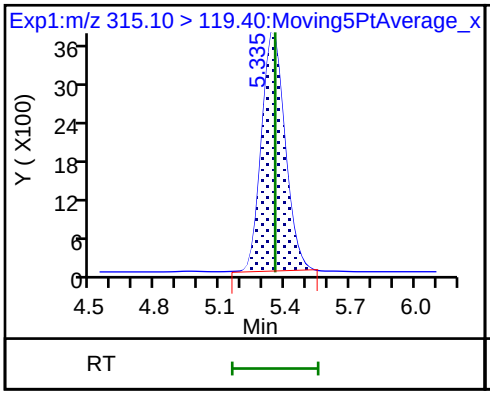
15 PFBS



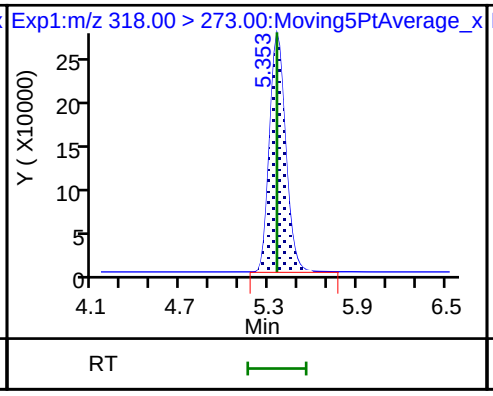
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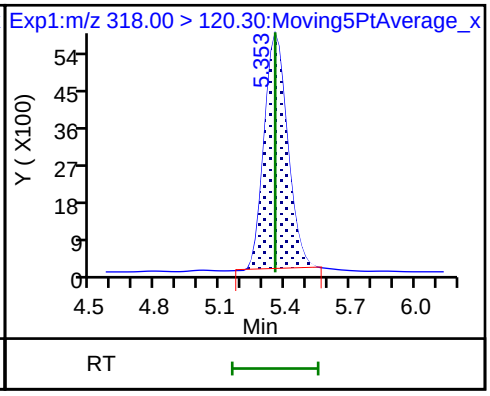
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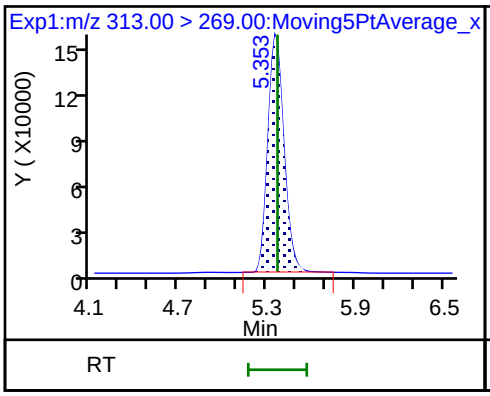
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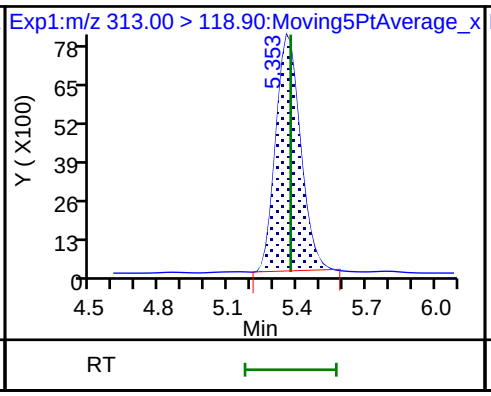
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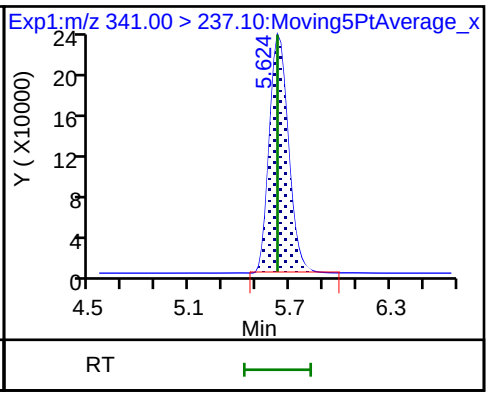
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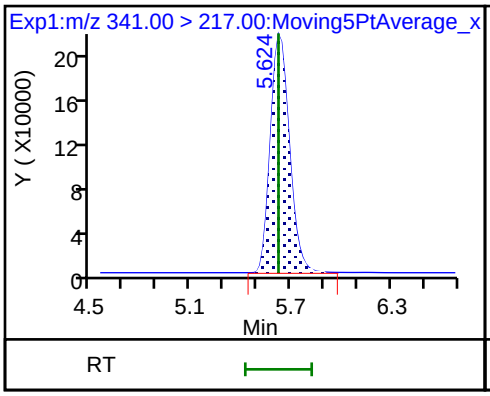
13 PFHxA



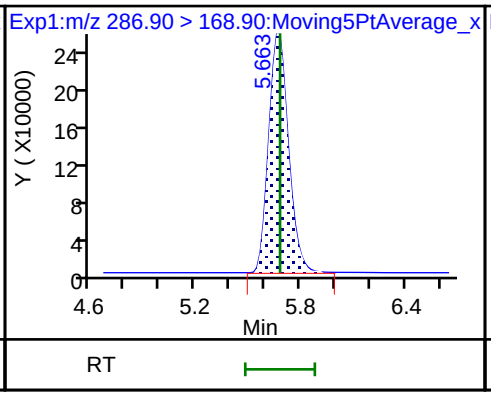
18 5:3 FTCA



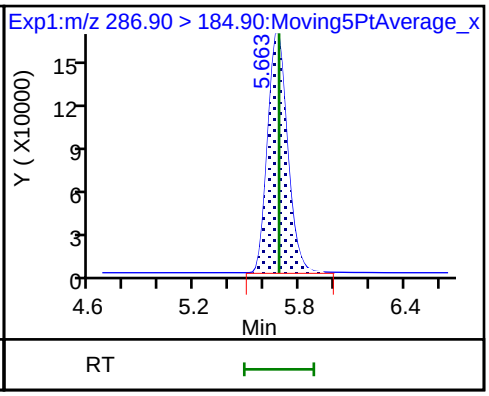
18 5:3 FTCA



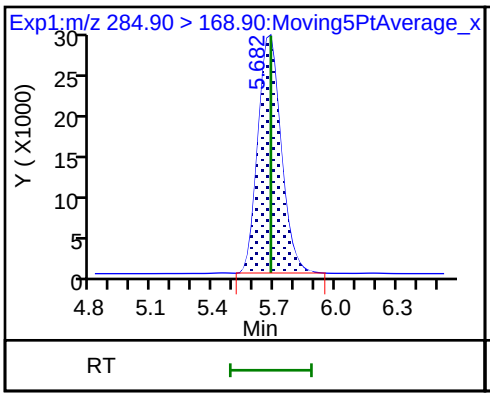
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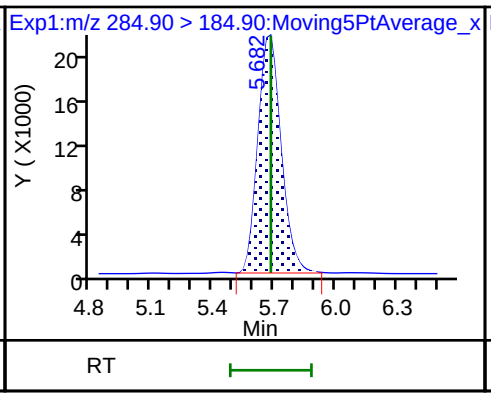
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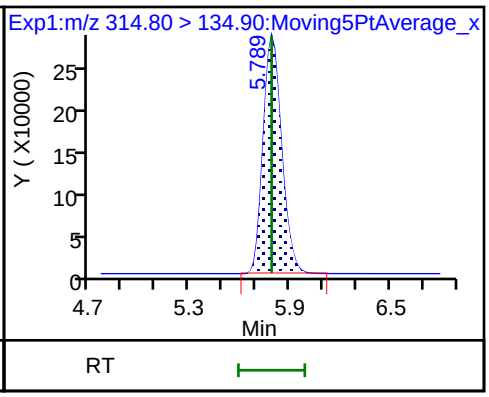
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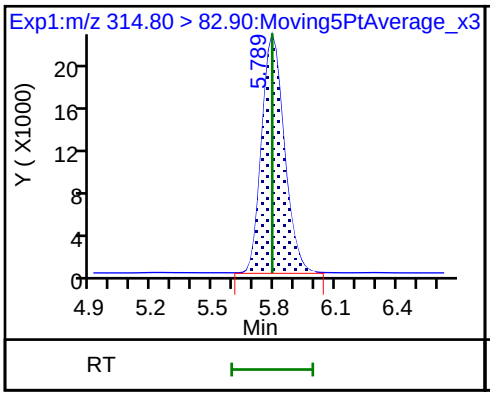
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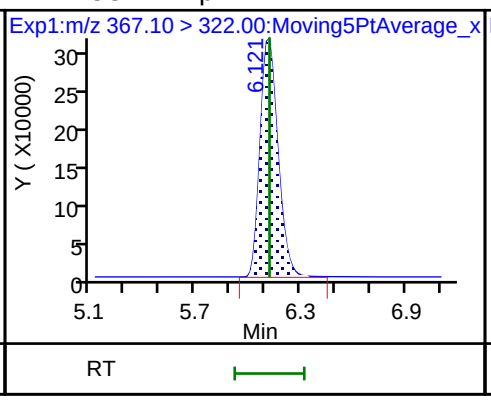
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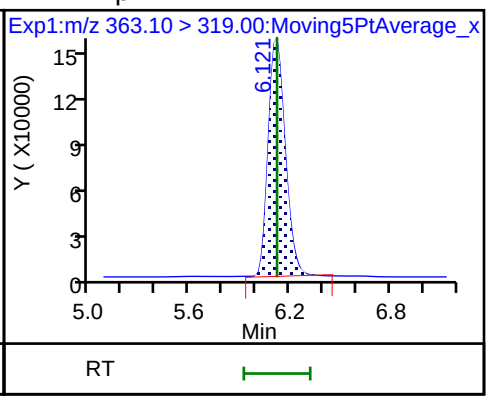
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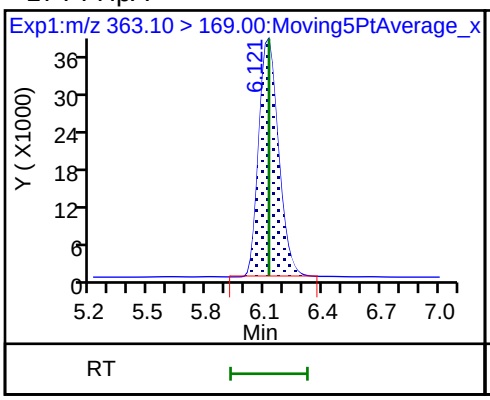
D 22 13C4 PFHpA



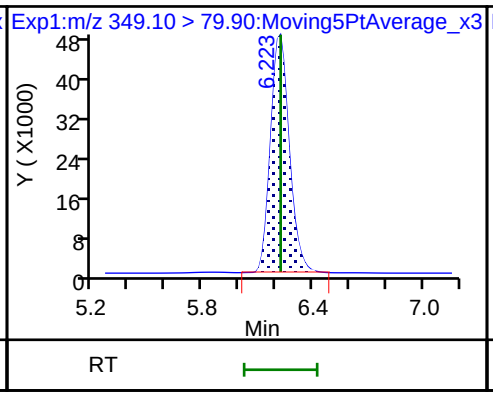
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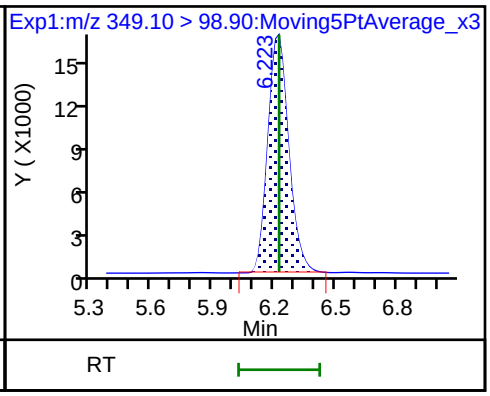
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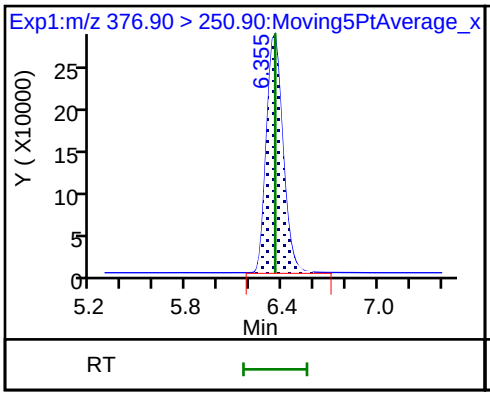
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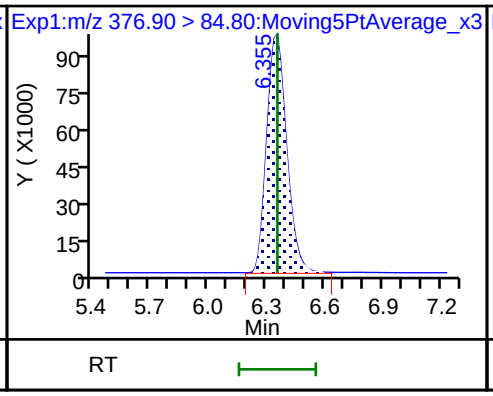
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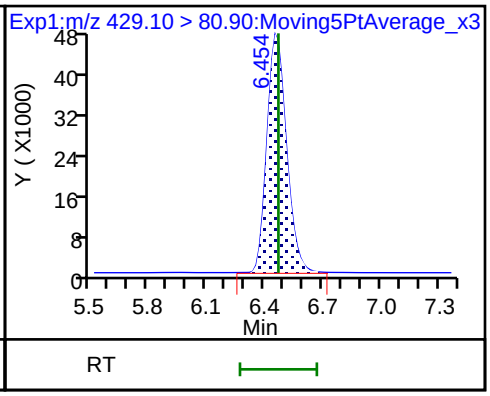
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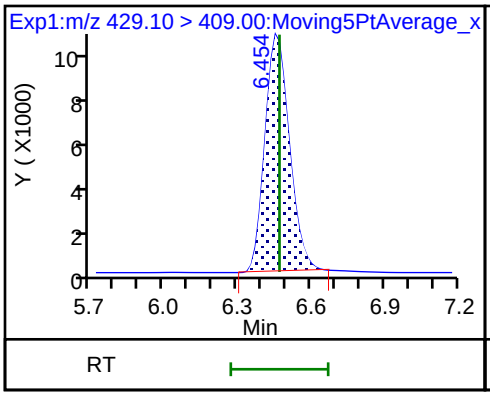
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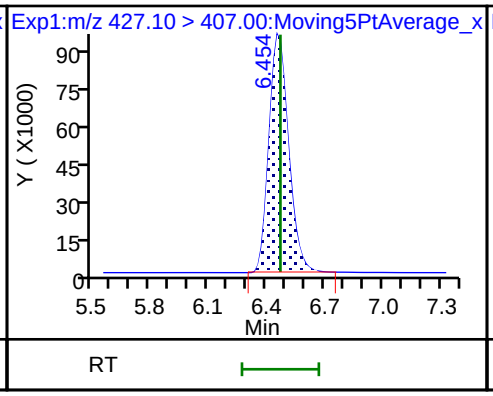
D 26 13C2-6:2FTS



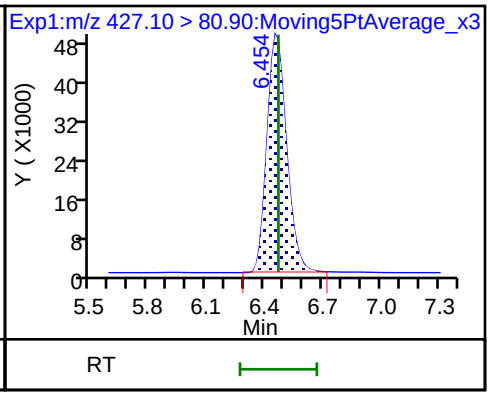
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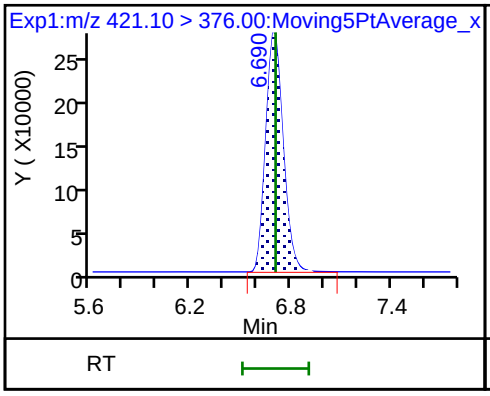
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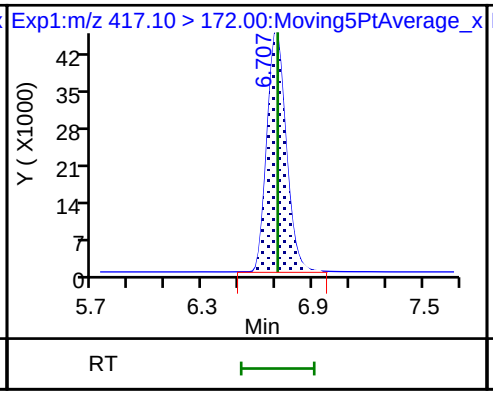
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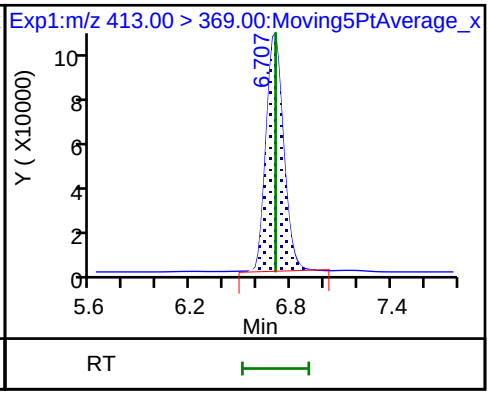
D 27 13C8 PFOA



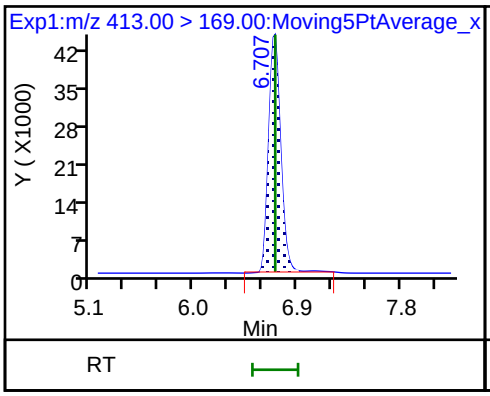
* 29 13C4 PFOA



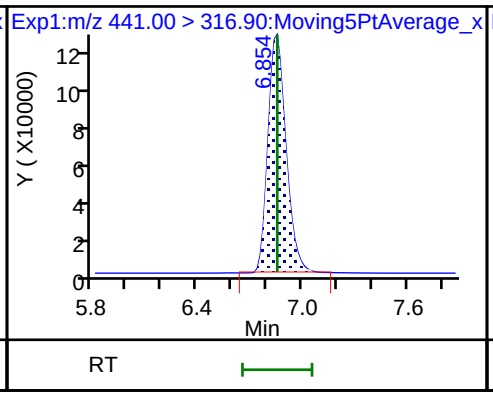
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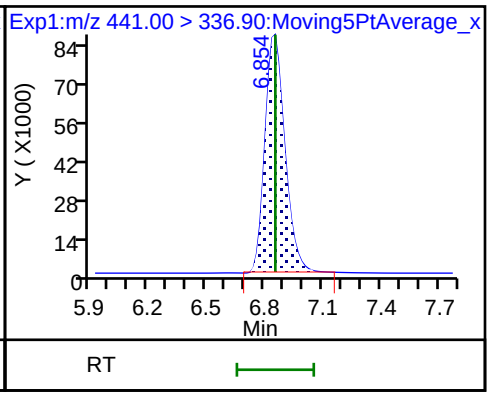
28 PFOA



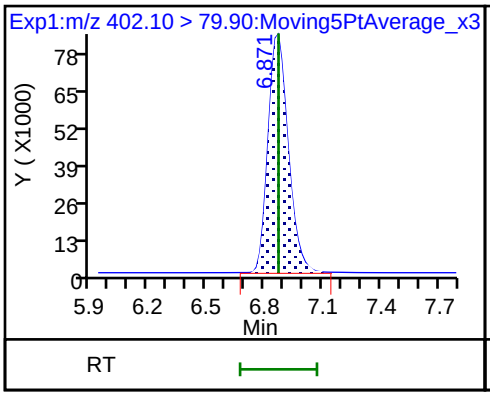
30 7:3 FTCA



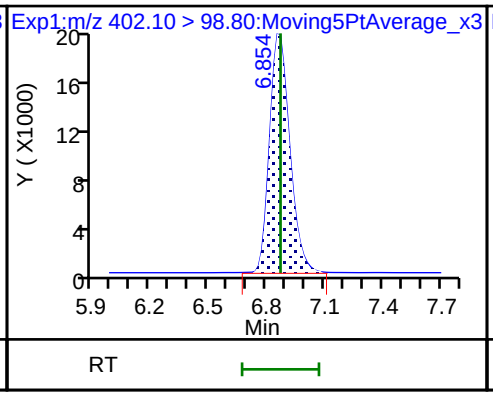
30 7:3 FTCA



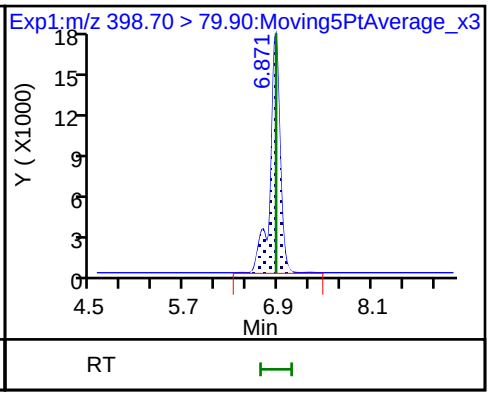
D 33 13C3 PFHxS



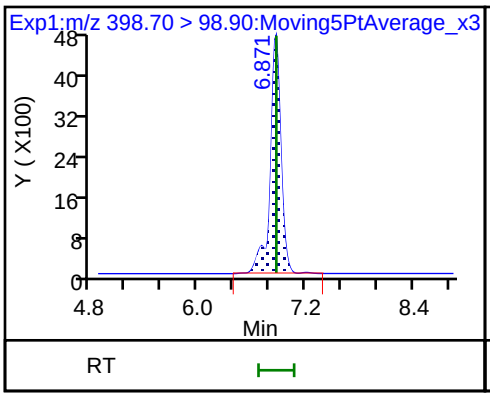
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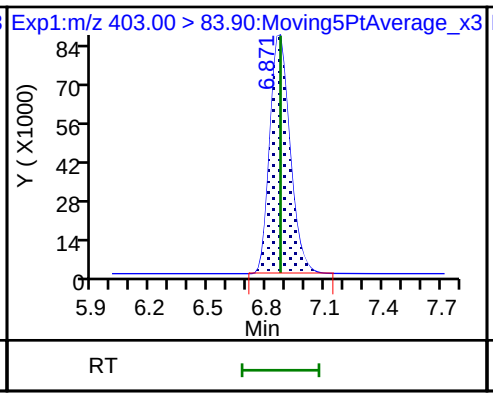
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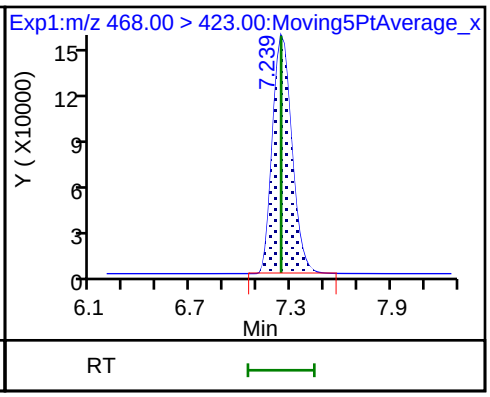
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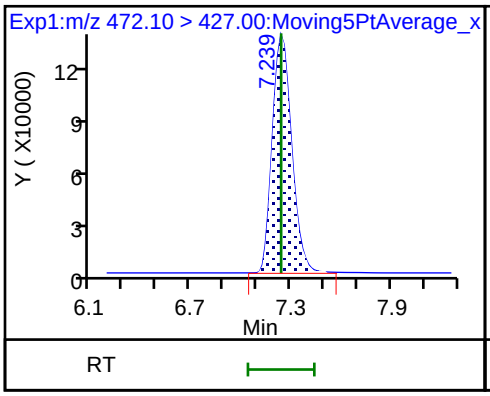
* 31 18O2 PFHxS



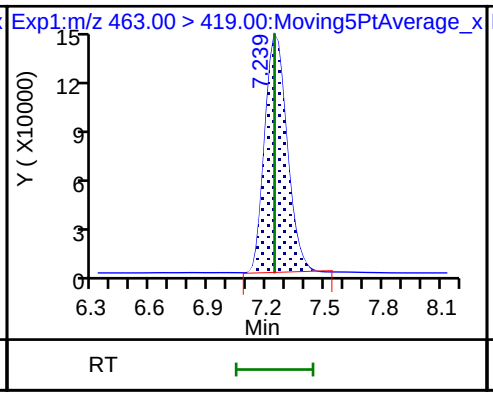
* 35 13C5 PFNA



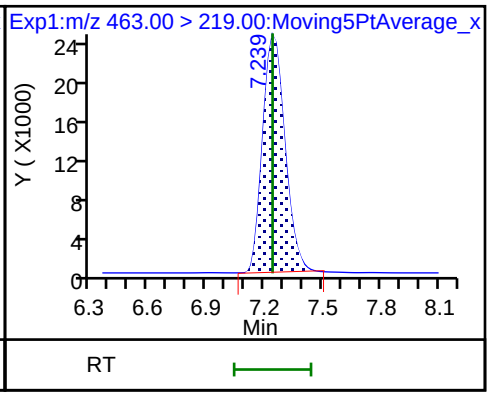
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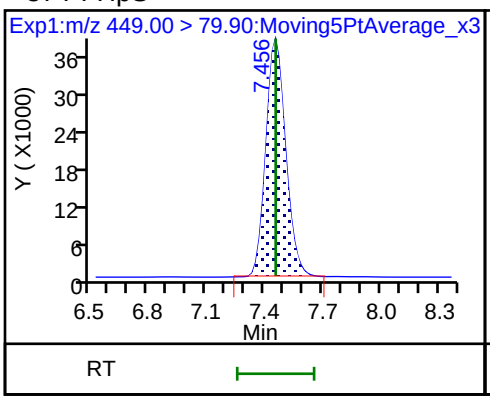
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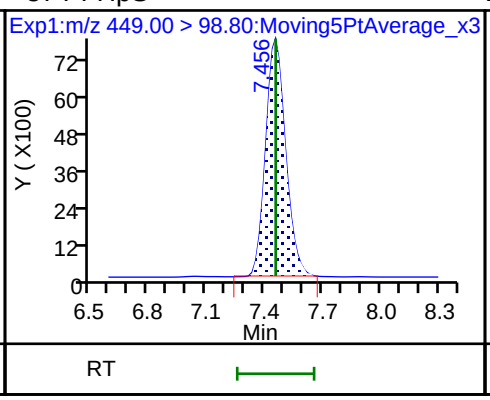
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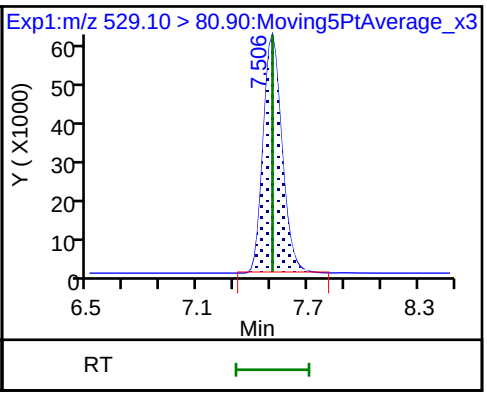
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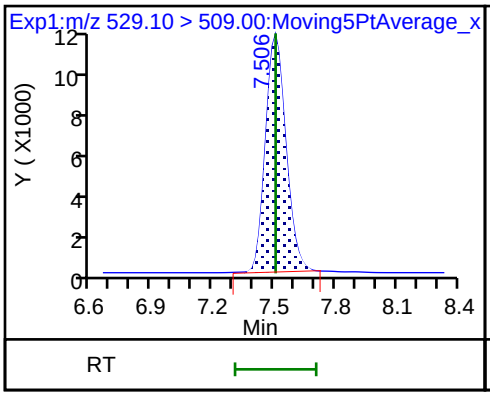
37 PFHpS



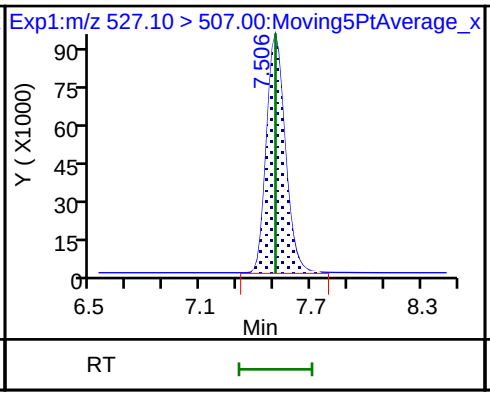
D 38 13C2-8:2FTS



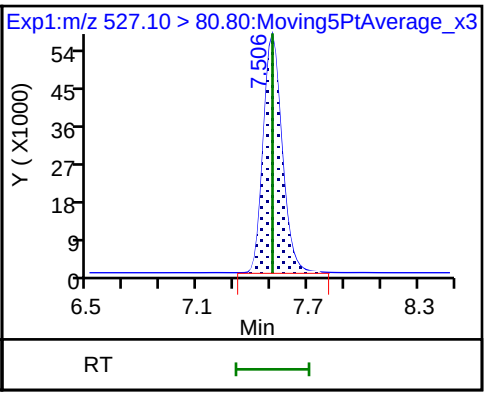
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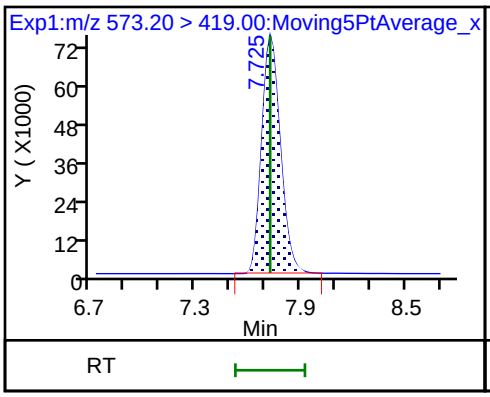
39 8:2FTS



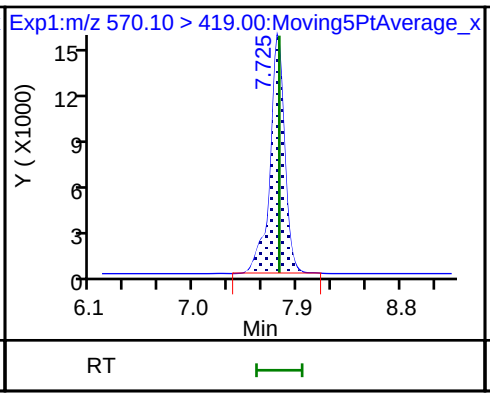
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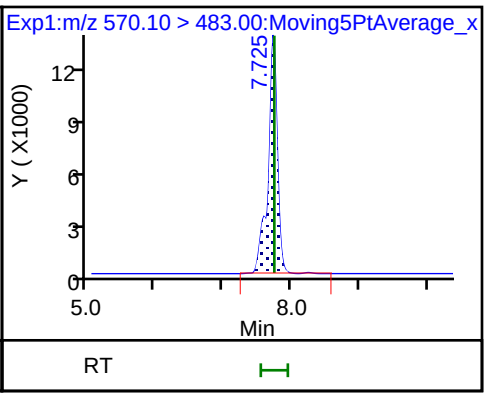
D 41 d3-NMeFOSAA



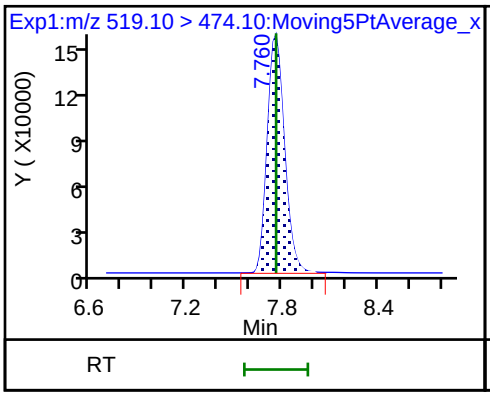
42 NMeFOSAA



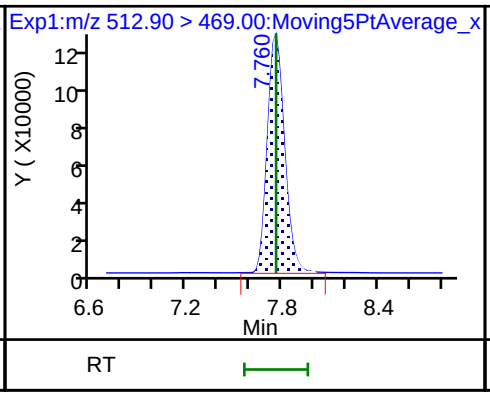
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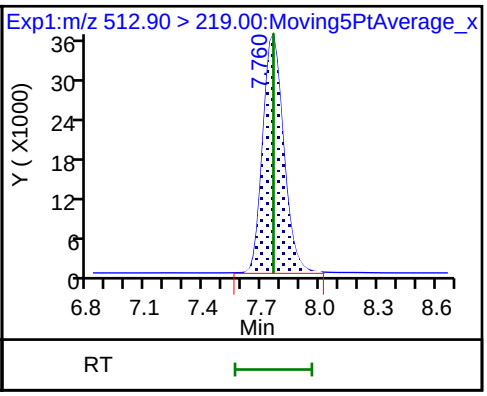
D 40 13C6 PFDA



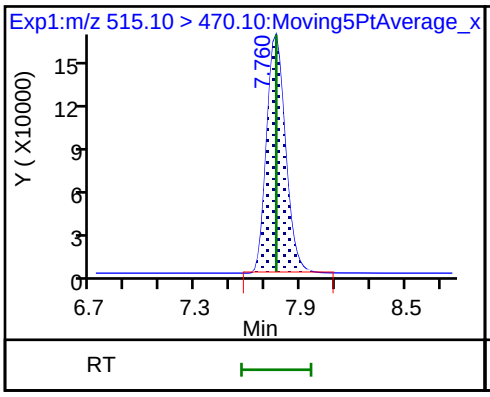
43 PFDA



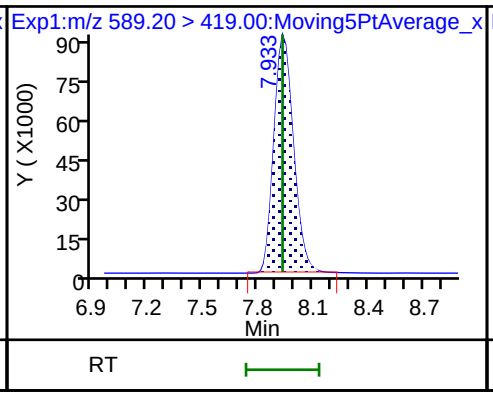
43 PFDA



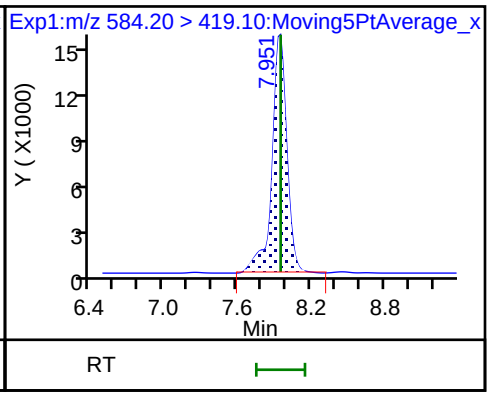
* 44 13C2 PFDA



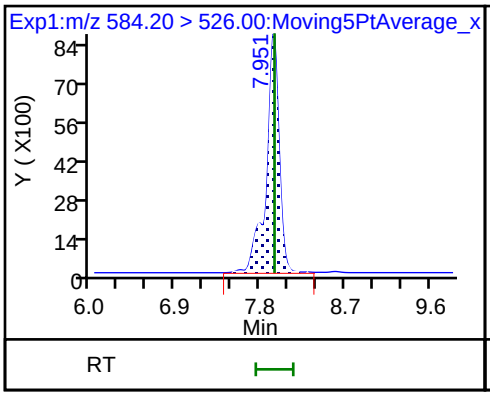
D 46 d5-NEtFOSAA



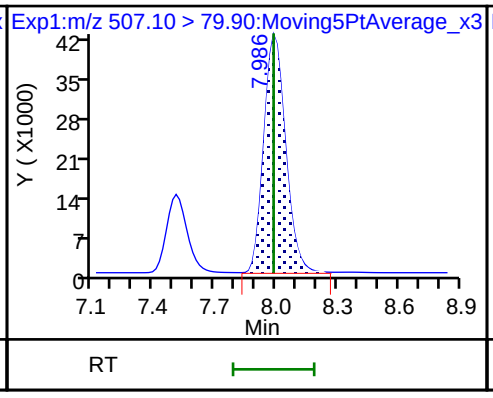
45 NEtFOSAA



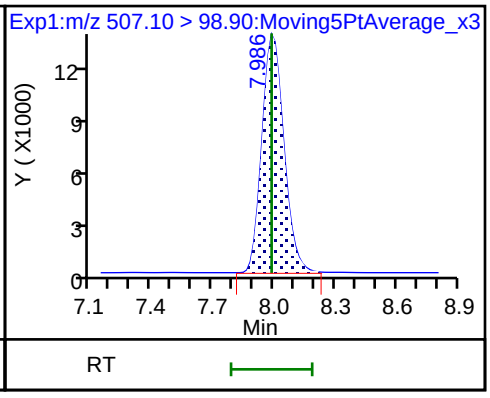
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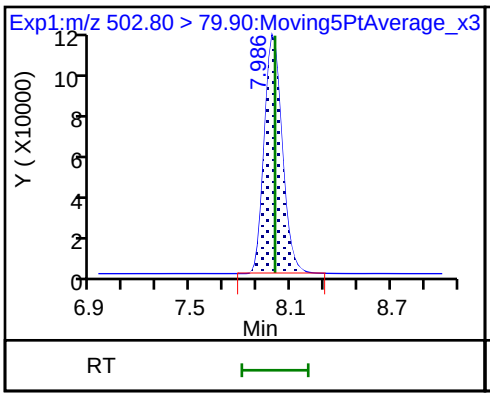
D 49 13C8 PFOS



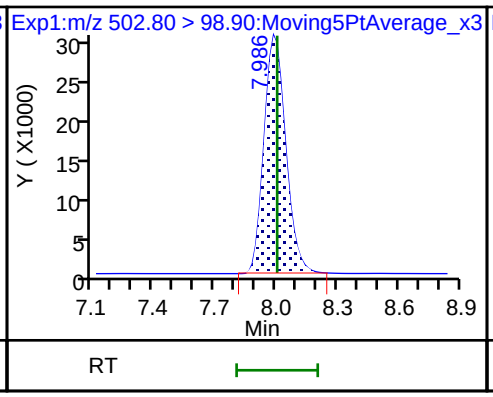
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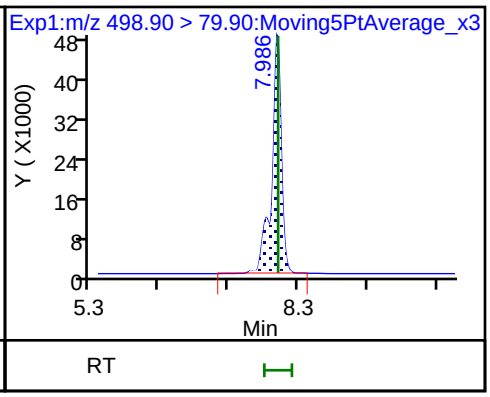
* 47 13C4 PFOS



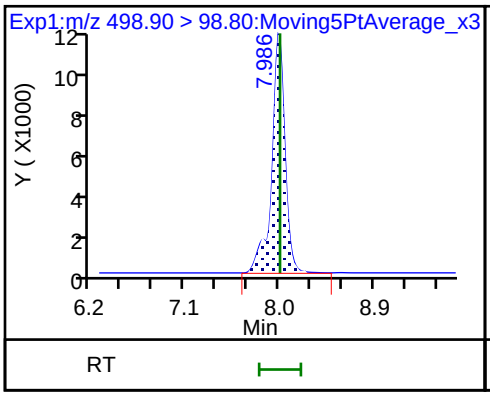
* 47 13C4 PFOS



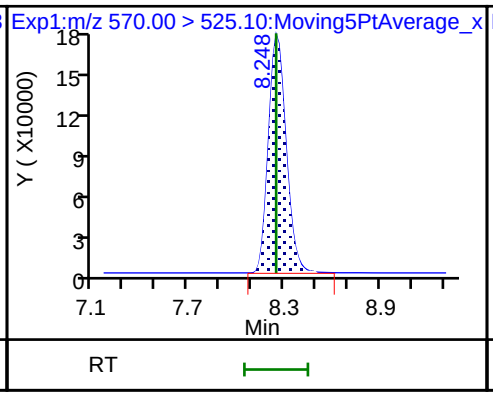
48 PFOS



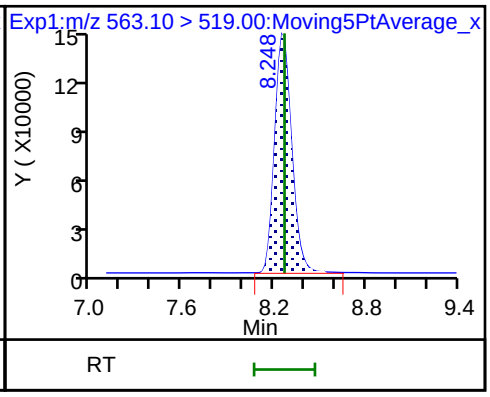
48 PFOS



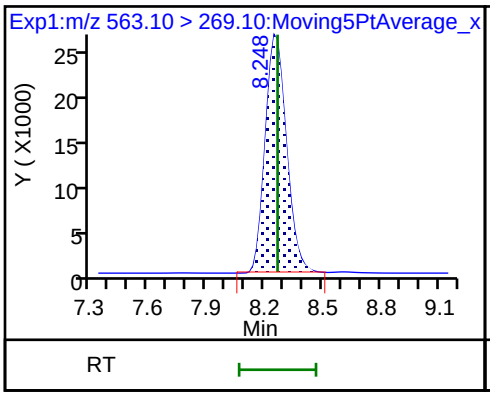
D 53 13C7 PFUnA



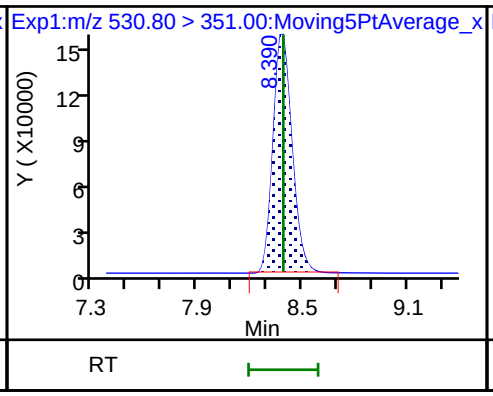
52 PFUnA



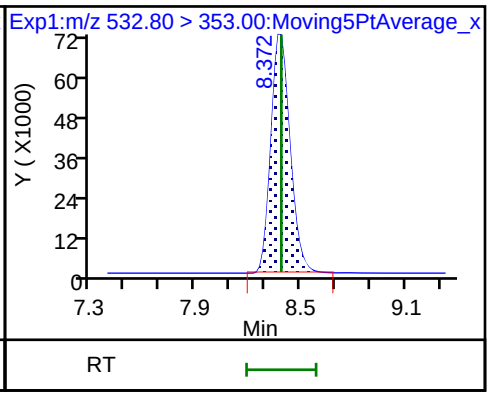
52 PFUnA



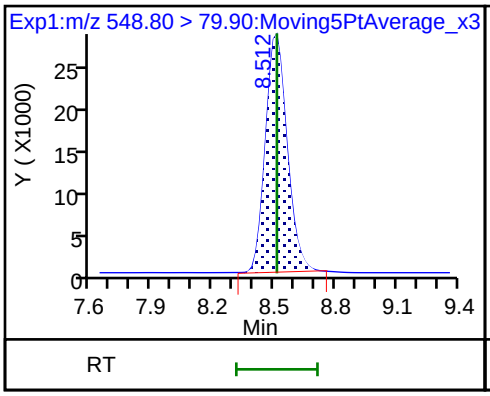
54 9ClFOS



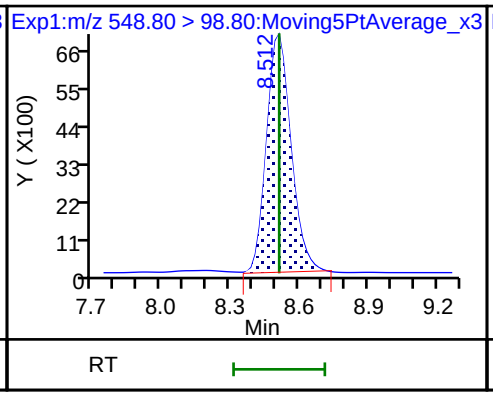
54 9ClFOS



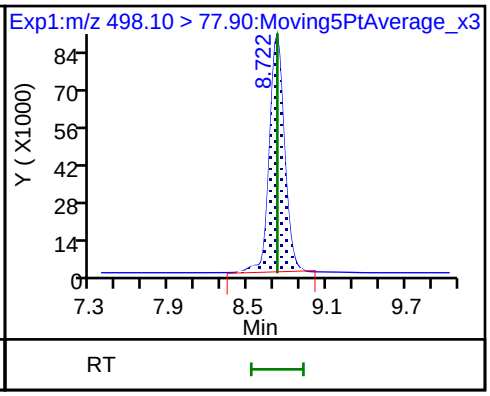
55 PFNS



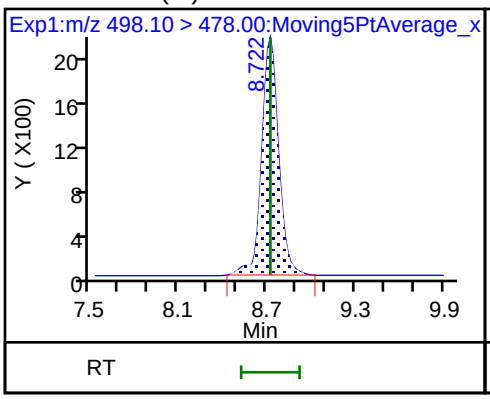
55 PFNS



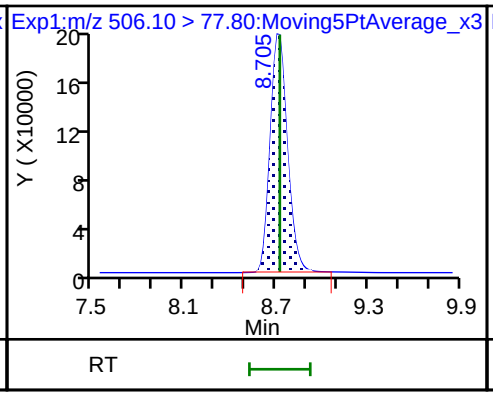
51 PFOSA



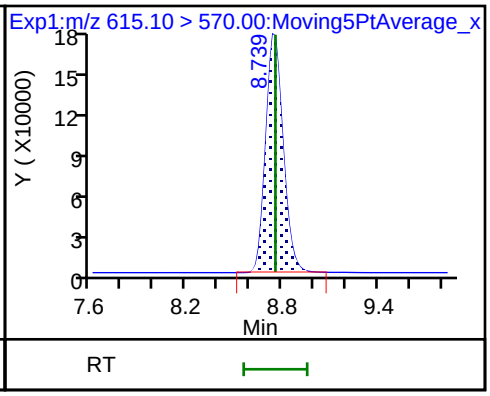
51 PFOSA (M)



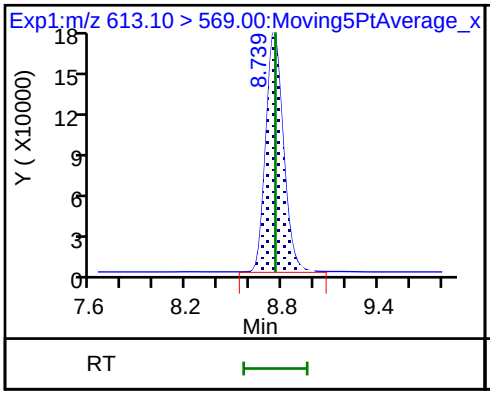
D 50 13C8 FOSA



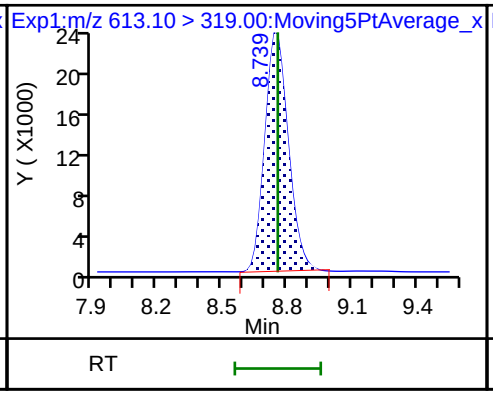
D 56 13C2 PFDoA



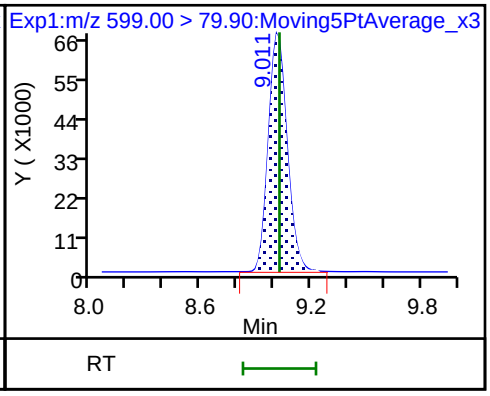
57 PFDoA



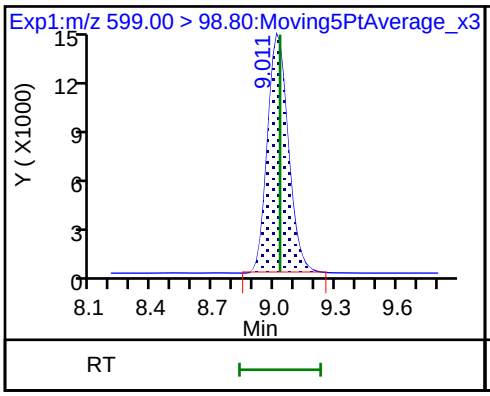
57 PFDoA



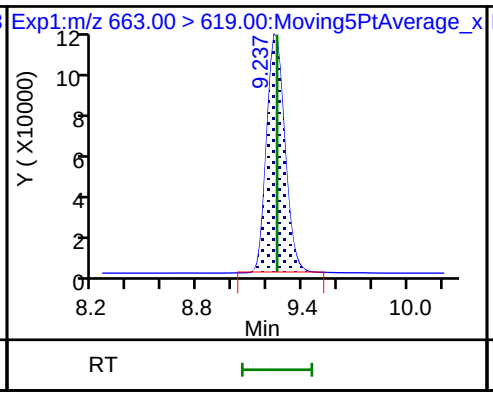
58 PFDS



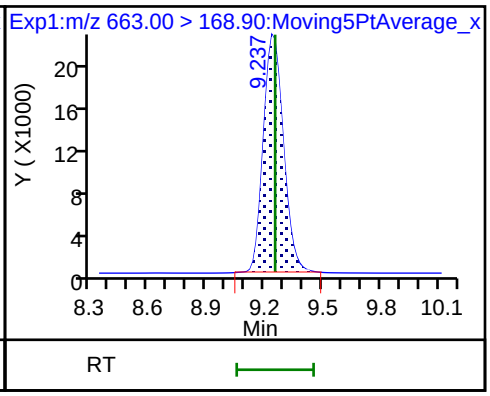
58 PFDS



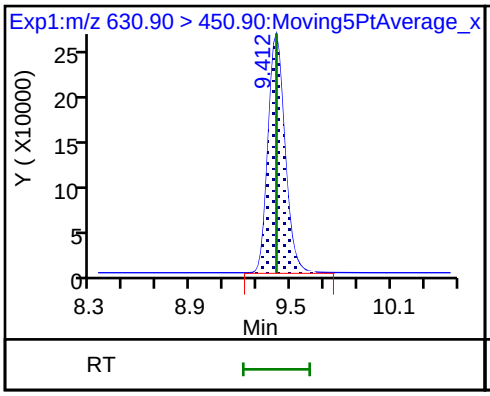
63 PFTrDA



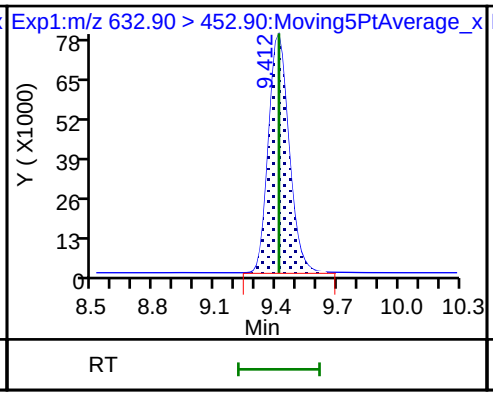
63 PFTrDA



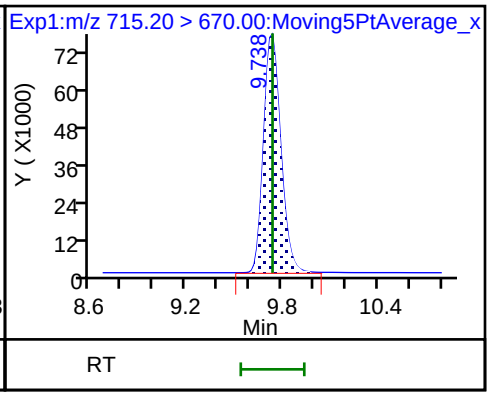
66 11ClFOS



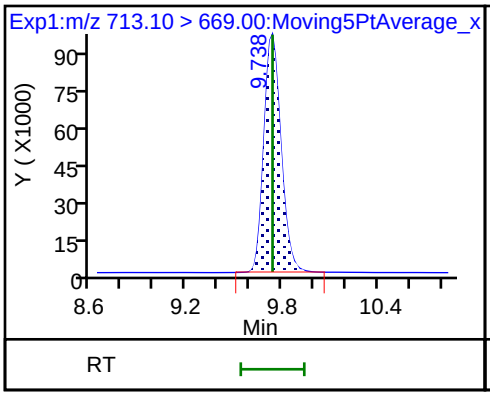
66 11ClFOS



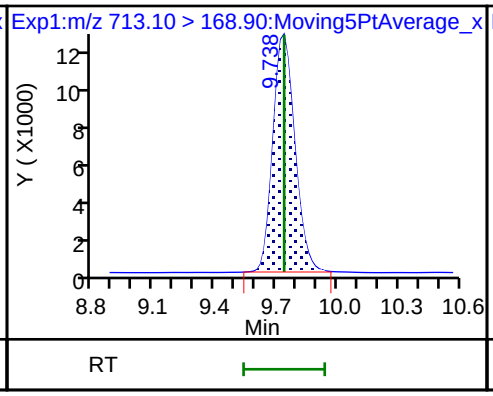
D 69 13C2 PFTeDA



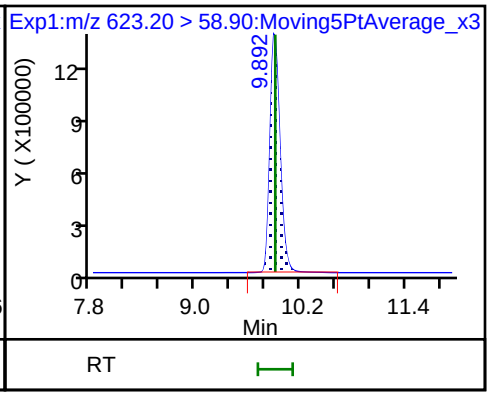
70 PFTeDA



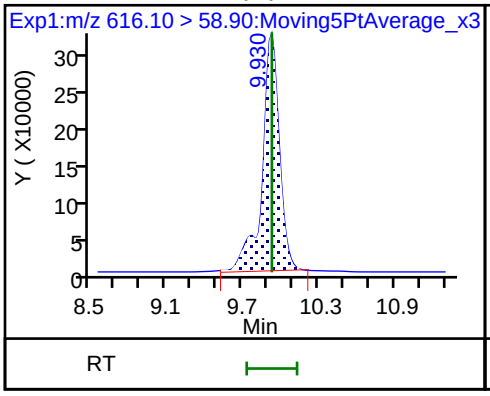
70 PFTeDA



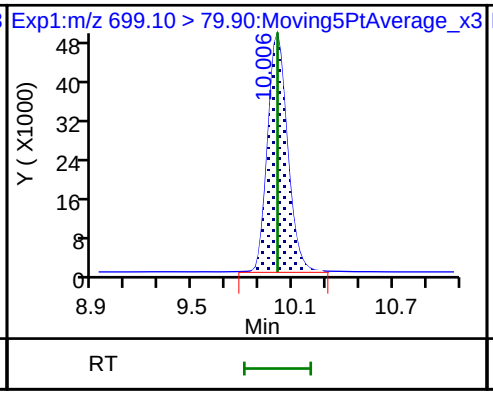
D 59 d7-N-Me-FOSE



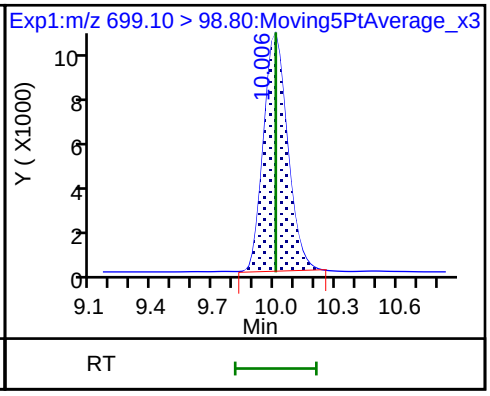
60 N-MeFOSE-M (M)



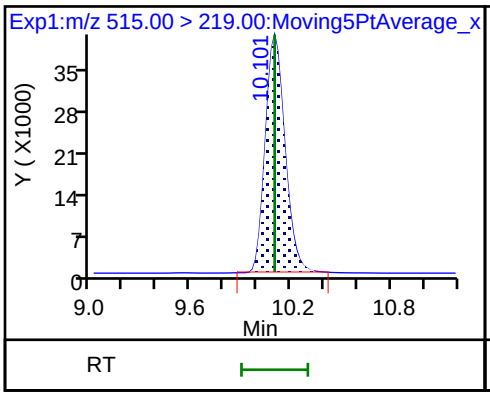
71 PFDoS



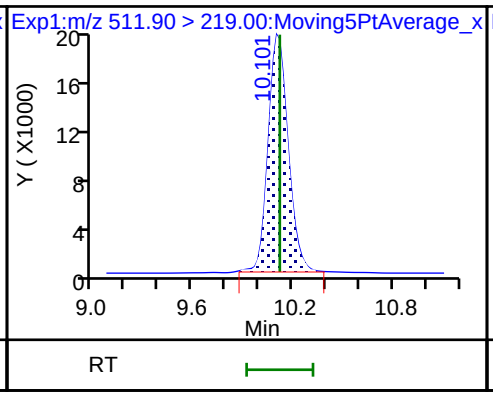
71 PFDoS



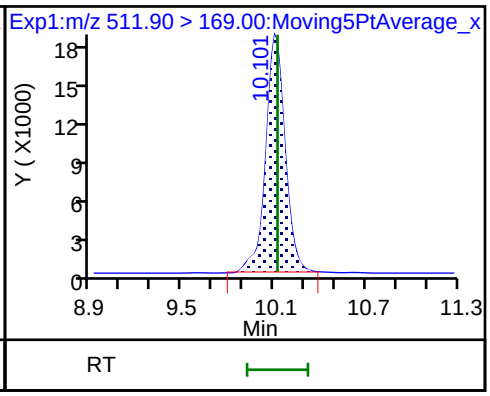
D 62 d3-NMePFOSA



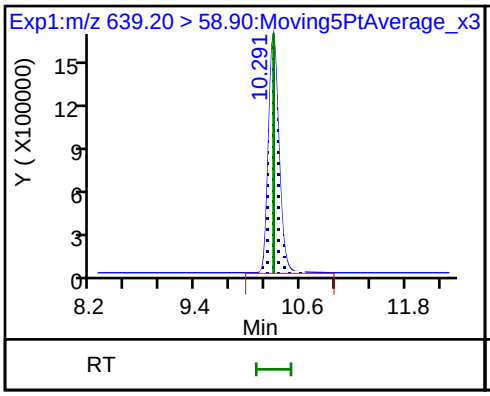
61 NMeFOSA



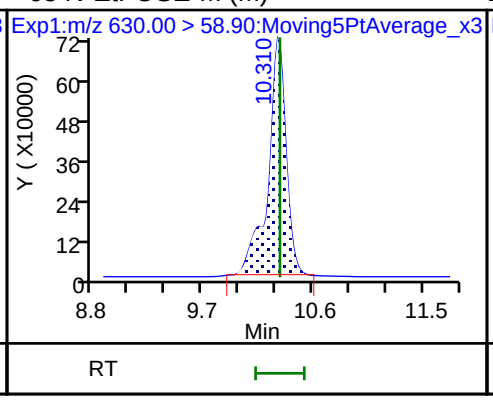
61 NMeFOSA



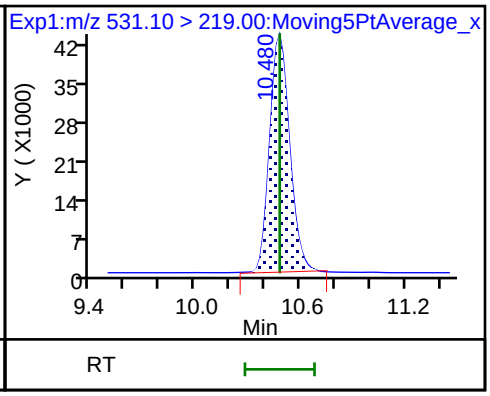
D 64 d9-N-EtFOSE



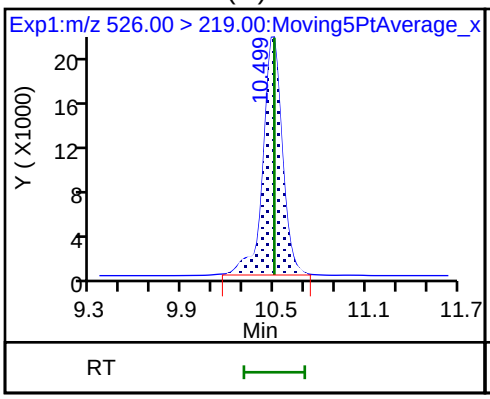
65 N-EtFOSE-M (M)



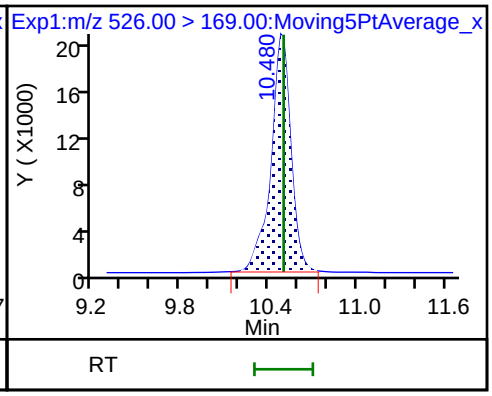
D 67 d5-NEtPFOSA



68 N-EtFOSA-M (M)



68 N-EtFOSA-M



Manual Integration/User Assign Peak Report

Eurofins Denver

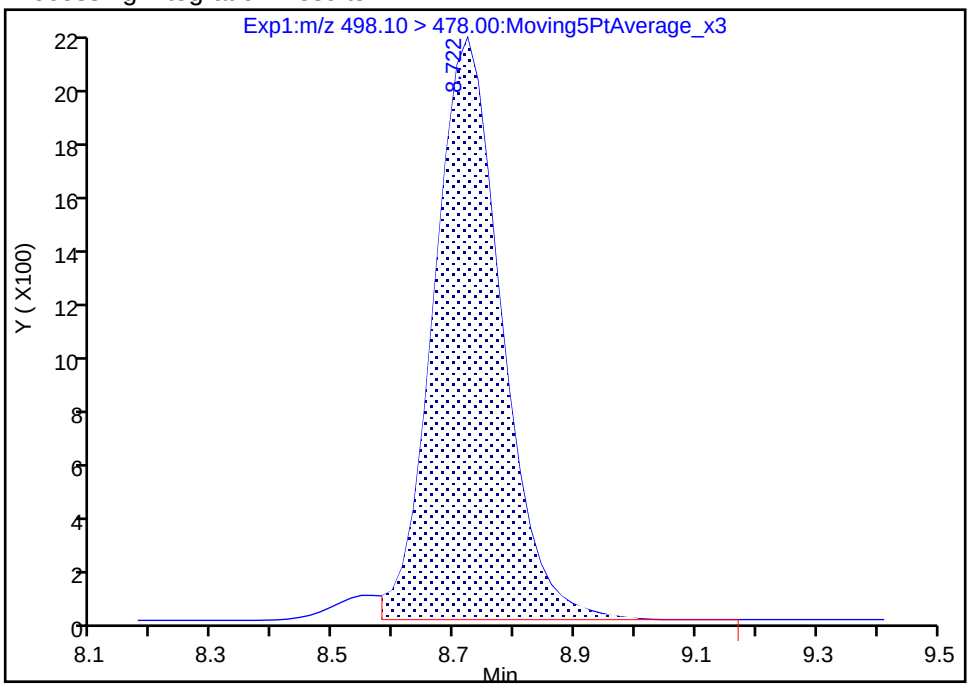
Data File:	\\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.003.d				
Injection Date:	20-Nov-2023 17:58:32	Instrument ID:	LC_LCMS11		
Lims ID:	IC L5				
Client ID:					
Operator ID:	DENLCMS	ALS Bottle#:	5	Worklist Smp#:	4
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

51 PFOSA, CAS: 754-91-6

Signal: 2

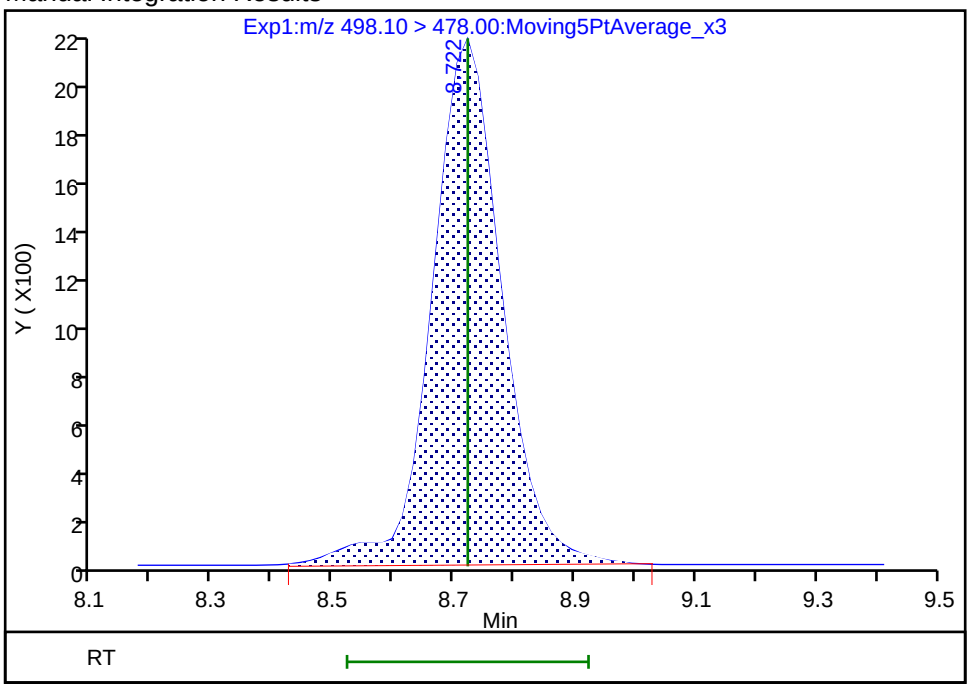
Processing Integration Results

RT: 8.72
Area: 17098
Amount: 1.194337
Amount Units: ng/ml



Manual Integration Results

RT: 8.72
Area: 17581
Amount: 1.183667
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 10:56:53 -07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver

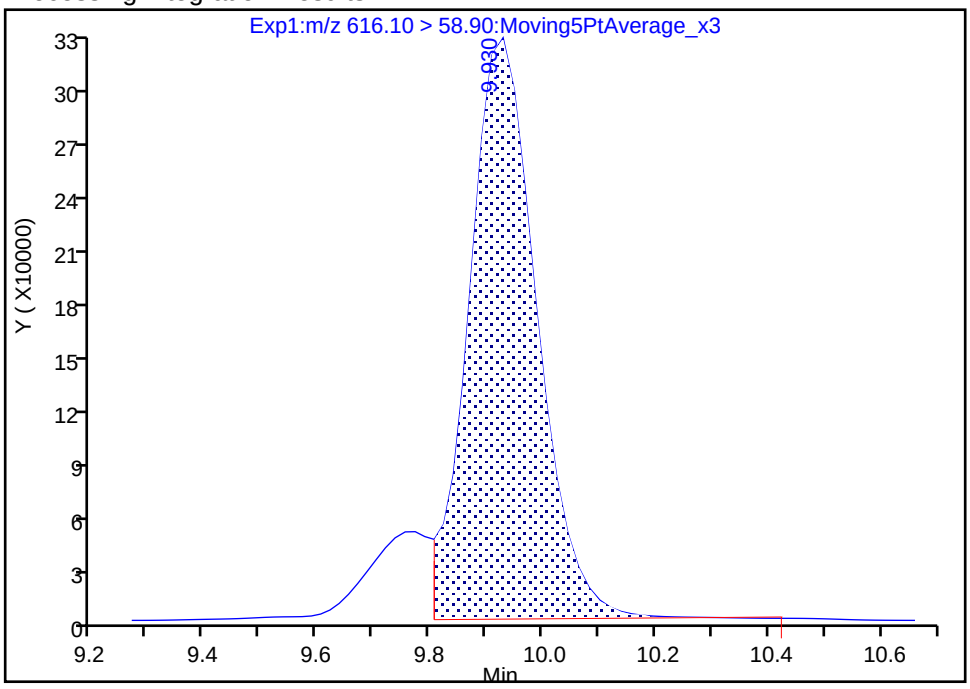
Data File:	\\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.003.d				
Injection Date:	20-Nov-2023 17:58:32	Instrument ID:	LC_LCMS11		
Lims ID:	IC L5				
Client ID:					
Operator ID:	DENLCMS	ALS Bottle#:	5	Worklist Smp#:	4
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

60 N-MeFOSE-M, CAS: 24448-09-7

Signal: 1

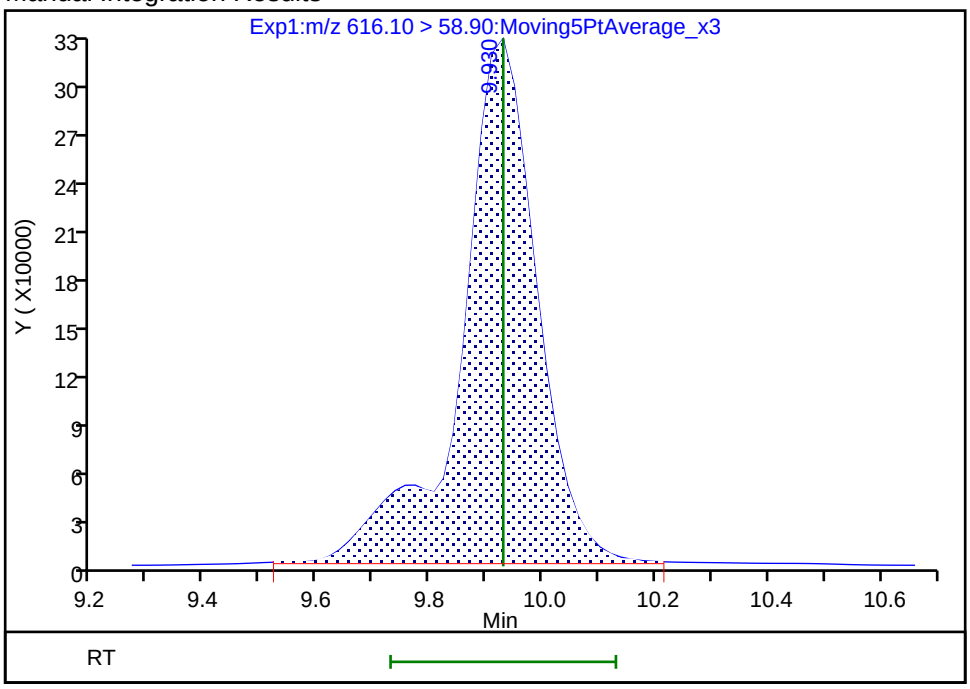
Processing Integration Results

RT: 9.93
Area: 2696808
Amount: 6.210613
Amount Units: ng/ml



Manual Integration Results

RT: 9.93
Area: 3036025
Amount: 6.320774
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 10:57:03 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

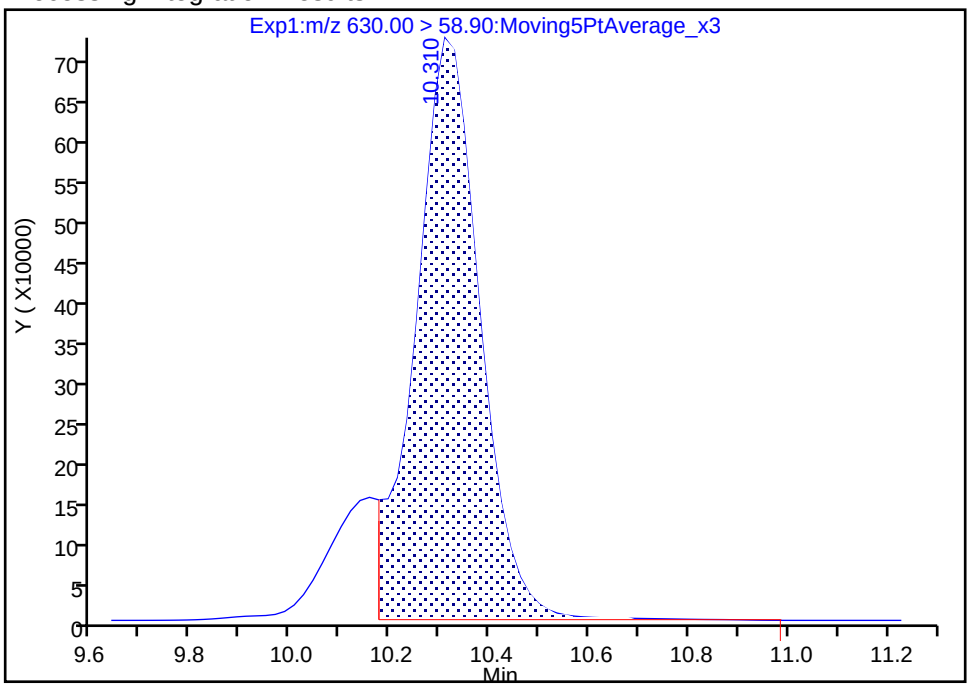
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.003.d
Injection Date: 20-Nov-2023 17:58:32 Instrument ID: LC_LCMS11
Lims ID: IC L5
Client ID:
Operator ID: DENLCMS ALS Bottle#: 5 Worklist Smp#: 4
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

65 N-EtFOSE-M, CAS: 1691-99-2

Signal: 1

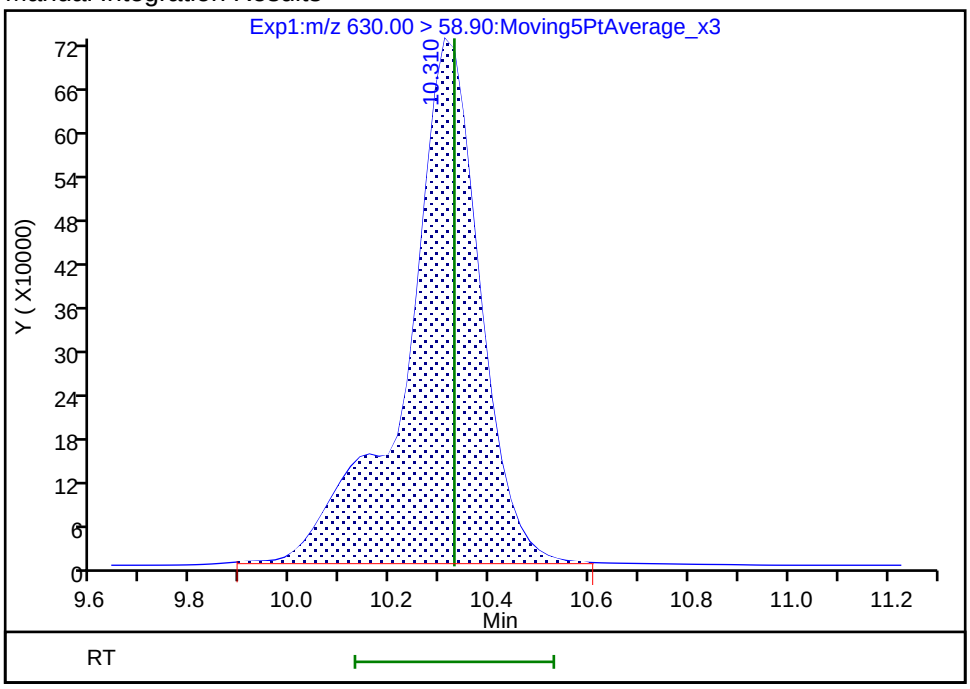
Processing Integration Results

RT: 10.31
Area: 6525512
Amount: 12.838840
Amount Units: ng/ml



Manual Integration Results

RT: 10.31
Area: 7421187
Amount: 12.802816
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 10:57:13 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver

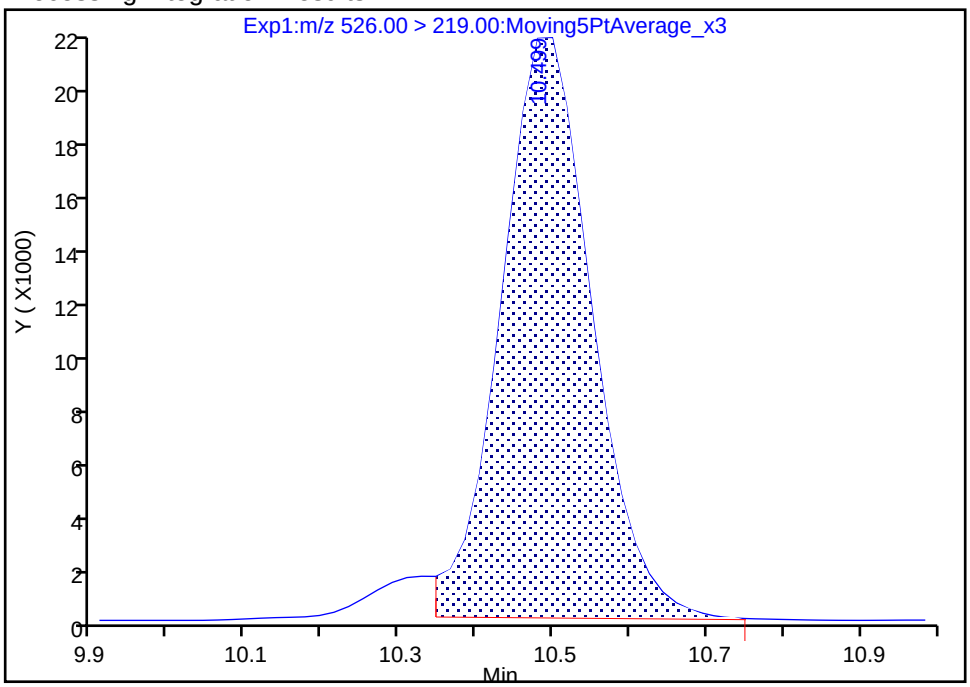
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.003.d
Injection Date: 20-Nov-2023 17:58:32 Instrument ID: LC_LCMS11
Lims ID: IC L5
Client ID:
Operator ID: DENLCMS ALS Bottle#: 5 Worklist Smp#: 4
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

68 N-EtFOSA-M, CAS: 4151-50-2

Signal: 1

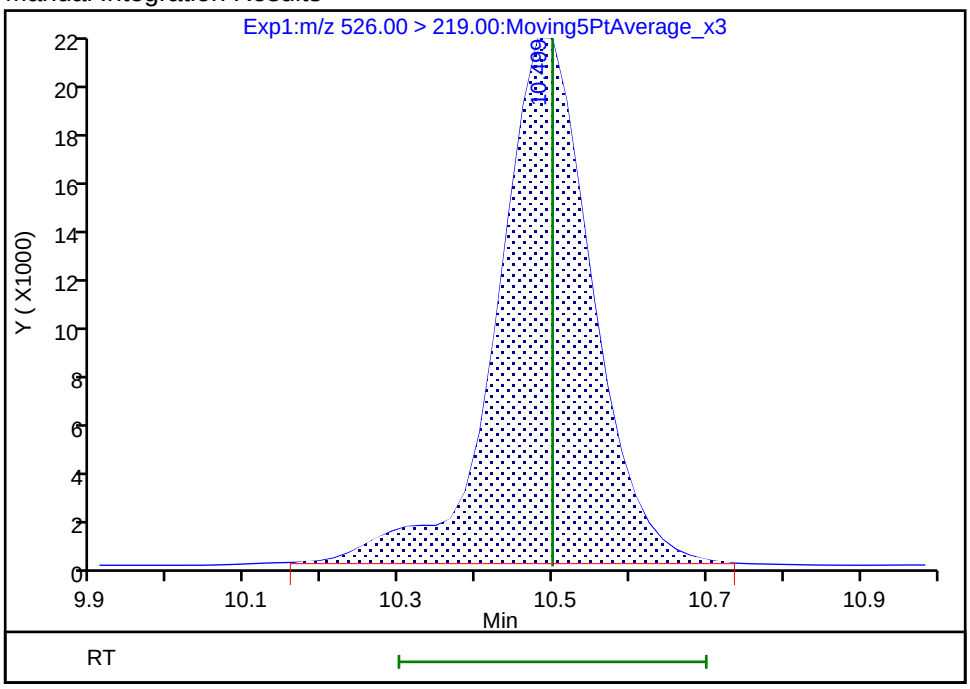
Processing Integration Results

RT: 10.50
Area: 174307
Amount: 1.216184
Amount Units: ng/ml



Manual Integration Results

RT: 10.50
Area: 183061
Amount: 1.242448
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 10:57:21 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.004.d
Lims ID: IC L6
Client ID:
Sample Type: ICISAV Calib Level: 4
Inject. Date: 20-Nov-2023 18:17:56 ALS Bottle#: 6 Worklist Smp#: 5
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: IC L6
Misc. Info.: Plate: 1 Rack: 1
Operator ID: DENLCMS Instrument ID: LC_LCMS11
Sublist: chrom-PFC_IDA_DEN11*sub5

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 21-Nov-2023 11:14:59 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1626

First Level Reviewer: B5QN Date: 21-Nov-2023 10:56:28
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.062	3.062	0.0	1.000	6626430	9.80		98.0	148139	
* 1 13C3PFBA										
216.00 > 172.00	3.062	3.062	0.0		3327500	5.00			14293	
2 PFBA										
212.80 > 168.90	3.077	3.077	0.0	1.005	1487094	2.51		101	1458	
4 PFMPA										
229.00 > 84.90	3.728	3.728	0.0	0.833	2449031	4.87		97.6	13575	
5 3:3 FTCA										
241.00 > 177.00	3.928	3.928	0.0	0.877	748564	11.6	Target=1.69	93.3	21496	
241.00 > 117.00	3.928	3.928	0.0	0.877	474714		1.58(0.84-2.53)	93.3	11349	
D 7 13C5 PFPeA										
268.30 > 223.00	4.478	4.478	0.0	0.836	1966495	4.78		95.6	20030	
6 PFPA										
263.00 > 219.00	4.478	4.478	0.0	1.000	1967440	2.49	Target=221.09	99.9	4108	
263.00 > 68.90	4.478	4.478	0.0	1.000	9256		212.56(110.55-331.64)	99.9	268	
8 PFMBA										
279.00 > 85.10	4.778	4.778	0.0	1.067	5001021	5.03		101	33157	
10 4:2FTS										
327.10 > 307.00	5.097	5.097	0.0	1.000	880430	5.81	Target=1.58	93.3	27995	
327.10 > 80.90	5.097	5.097	0.0	1.000	554780		1.59(0.79-2.38)	93.3	5473	
D 9 13C2-4:2FTS										
329.10 > 80.90	5.097	5.097	0.0	0.742	301449	5.00	Target=4.29	107	4810	
329.10 > 309.00	5.097	5.097	0.0	0.742	66373		4.54(2.14-6.43)	107	2834	
11 NFDHA										
295.00 > 201.00	5.280	5.280	0.0	0.986	682355	2.38	Target=1.86	95.5	22176	
295.00 > 84.90	5.280	5.280	0.0	0.986	350343		1.95(0.93-2.79)	95.5	6504	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 16 13C3 PFBS										
302.10 > 79.90	5.354	5.354	0.0	0.779	793327	2.31	Target=4.50	99.4	20757	
302.10 > 98.90	5.354	5.354	0.0	0.779	174108		4.56(2.25-6.76)	99.4	7641	
15 PFBS										
298.70 > 79.90	5.354	5.354	0.0	1.000	673662	2.22	Target=2.27	100	22031	
298.70 > 98.80	5.354	5.354	0.0	1.000	311581		2.16(1.13-3.40)	100	6822	
* 14 13C2 PFHxA										
315.10 > 270.00	5.354	5.354	0.0		2064457	2.50	Target=77.08		30240	
315.10 > 119.40	5.354	5.354	0.0		25914		79.67(38.54-115.62)		1141	
D 12 13C5 PFHxA										
318.00 > 273.00	5.354	5.354	0.0	1.000	2308198	2.49	Target=50.64	99.7	27744	
318.00 > 120.30	5.354	5.354	0.0	1.000	43332		53.27(25.32-75.97)	99.7	1160	
13 PFHxA										
313.00 > 269.00	5.354	5.354	0.0	1.000	2294084	2.26	Target=20.05	90.4	17596	
313.00 > 118.90	5.354	5.354	0.0	1.000	123083		18.64(10.03-30.08)	90.4	3255	
18 5:3 FTCA										
341.00 > 237.10	5.625	5.625	0.0	1.051	3954621	23.6	Target=1.13	94.7	49741	
341.00 > 217.00	5.625	5.625	0.0	1.051	3405239		1.16(0.57-1.70)	94.7	42898	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.682	5.682	0.0	1.061	2147776	9.49	Target=1.57	94.9	27496	
286.90 > 184.90	5.682	5.682	0.0	1.061	1406499		1.53(0.78-2.35)	94.9	17932	
19 HFPO-DA										
284.90 > 168.90	5.682	5.682	0.0	1.000	593463	2.56	Target=1.65	103	15249	
284.90 > 184.90	5.682	5.682	0.0	1.000	339335		1.75(0.83-2.48)	103	5466	
21 PFEESA										
314.80 > 134.90	5.789	5.789	0.0	1.081	5224874	4.65	Target=14.24	104	113395	
314.80 > 82.90	5.789	5.789	0.0	1.081	373880		13.97(7.12-21.36)	104	9747	
D 22 13C4 PFHpA										
367.10 > 322.00	6.122	6.122	0.0	1.143	2288673	2.36		94.5	35913	
17 PFHpA										
363.10 > 319.00	6.122	6.122	0.0	1.000	2240746	2.49	Target=4.02	99.7	9092	
363.10 > 169.00	6.122	6.122	0.0	1.000	565313		3.96(2.01-6.04)	99.7	10067	
23 PFPeS										
349.10 > 79.90	6.223	6.223	0.0	0.906	741416	2.39	Target=2.71	102	13084	
349.10 > 98.90	6.223	6.223	0.0	0.906	275103		2.70(1.35-4.06)	102	7787	
24 ADONA										
376.90 > 250.90	6.355	6.355	0.0	1.118	4657853	2.40	Target=3.01	102	50481	
376.90 > 84.80	6.355	6.355	0.0	1.118	1542858		3.02(1.51-4.52)	102	27214	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.454	6.454	0.0	0.939	370468	4.71	Target=4.27	99.1	10503	
429.10 > 409.00	6.454	6.454	0.0	0.939	89302		4.15(2.13-6.40)	99.1	4252	
25 6:2FTS										
427.10 > 407.00	6.454	6.454	0.0	1.000	1451698	9.77	Target=1.91	103	25604	
427.10 > 80.90	6.454	6.454	0.0	1.000	753938		1.93(0.96-2.87)	103	17709	
D 27 13C8 PFOA										
421.10 > 376.00	6.707	6.707	0.0	1.000	2110108	2.52		101	36154	
* 29 13C4 PFOA										
417.10 > 172.00	6.707	6.707	0.0		320389	2.50			11046	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 PFOA										
413.00 > 369.00	6.707	6.707	0.0	1.000	1618576	2.40	Target=2.39	96.2	7262	
413.00 > 169.00	6.707	6.707	0.0	1.000	703267		2.30(1.19-3.58)	96.2	24075	
30 7:3 FTCA										
441.00 > 316.90	6.855	6.855	0.0	1.280	1757038	22.7	Target=1.44	91.0	30418	
441.00 > 336.90	6.855	6.855	0.0	1.280	1225997		1.43(0.72-2.16)	91.0	21242	
* 31 18O2 PFHxS										
403.00 > 83.90	6.872	6.872	0.0		633837	2.37			21874	
D 33 13C3 PFHxS										
402.10 > 79.90	6.872	6.872	0.0	1.000	654361	2.41	Target=4.22	102	22676	
402.10 > 98.80	6.872	6.872	0.0	1.000	159265		4.11(2.11-6.33)	102	5544	
32 PFHxS										
398.70 > 79.90	6.872	6.872	0.0	1.000	320859	2.18	Target=3.74	95.7	12217	
398.70 > 98.90	6.872	6.872	0.0	1.000	83159		3.86(1.87-5.61)	95.7	3376	
D 34 13C9 PFNA										
472.10 > 427.00	7.241	7.241	0.0	1.000	1328258	1.26		101	23722	
36 PFNA										
463.00 > 419.00	7.241	7.241	0.0	1.000	2521433	2.36	Target=5.99	94.7	13028	
463.00 > 219.00	7.241	7.241	0.0	1.000	418541		6.02(3.00-8.99)	94.7	12945	
* 35 13C5 PFNA										
468.00 > 423.00	7.241	7.241	0.0		1389915	1.25			34615	
37 PFHpS										
449.00 > 79.90	7.457	7.457	0.0	0.934	562426	2.23	Target=5.05	93.9	13227	
449.00 > 98.80	7.457	7.457	0.0	0.934	114461		4.91(2.53-7.58)	93.9	3244	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.506	7.506	0.0	1.092	463237	4.85	Target=5.22	101	16409	
529.10 > 509.00	7.506	7.506	0.0	1.092	84454		5.49(2.61-7.83)	101	4028	
39 8:2FTS										
527.10 > 507.00	7.506	7.506	0.0	1.000	1283979	9.14	Target=1.64	95.5	30372	
527.10 > 80.80	7.506	7.506	0.0	1.000	824937		1.56(0.82-2.46)	95.5	19671	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.726	7.726	0.0	0.967	687536	5.40		108	15487	
42 NMeFOSAA										
570.10 > 419.00	7.726	7.726	0.0	1.000	327014	2.38	Target=1.12	95.2	7577	
570.10 > 483.00	7.726	7.726	0.0	1.000	283136		1.15(0.56-1.68)	95.2	7357	
43 PFDA										
512.90 > 469.00	7.761	7.761	0.0	1.000	2061298	2.53	Target=3.52	101	23211	
512.90 > 219.00	7.761	7.761	0.0	1.000	618728		3.33(1.76-5.28)	101	16673	
* 44 13C2 PFDA										
515.10 > 470.10	7.761	7.761	0.0		1292669	1.25			24945	
D 40 13C6 PFDA										
519.10 > 474.10	7.761	7.761	0.0	1.000	1239096	1.20		96.4	23834	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.934	7.934	0.0	0.993	714806	4.85		96.9	13649	
45 NEtFOSAA										
584.20 > 419.10	7.951	7.951	0.0	1.002	259882	2.50	Target=1.52	100	7479	
584.20 > 526.00	7.951	7.951	0.0	1.002	168105		1.55(0.76-2.27)	100	4463	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 49 13C8 PFOS										
507.10 > 79.90	7.986	7.986	0.0	1.000	336918	2.47	Target=3.01	104	106	
507.10 > 98.90	7.986	7.986	0.0	1.000	114317		2.95(1.50-4.51)	104	3808	
* 47 13C4 PFOS										
502.80 > 79.90	7.986	7.986	0.0		907941	2.40	Target=3.82		15229	
502.80 > 98.90	7.986	7.986	0.0		240362		3.78(1.91-5.72)		8041	
48 PFOS										
498.90 > 79.90	8.004	8.004	0.0	1.002	1023400	2.23	Target=4.59	96.0	17426	
498.90 > 98.80	8.004	8.004	0.0	1.002	210769		4.86(2.29-6.88)	96.0	8053	
D 53 13C7 PFUnA										
570.00 > 525.10	8.249	8.249	0.0	1.063	1400067	1.22		97.7	30047	
52 PFUnA										
563.10 > 519.00	8.267	8.267	0.0	1.002	2565734	2.59	Target=5.53	104	23697	
563.10 > 269.10	8.267	8.267	0.0	1.002	448271		5.72(2.77-8.30)	104	11577	
54 9ClFOS										
530.80 > 351.00	8.390	8.390	0.0	1.476	2423533	6.24	Target=2.30	100	35785	
532.80 > 353.00	8.390	8.390	0.0	1.476	1088140		2.23(1.15-3.46)	100	20678	
55 PFNS										
548.80 > 79.90	8.512	8.512	0.0	1.066	450779	2.40	Target=4.01	100	12193	
548.80 > 98.80	8.512	8.512	0.0	1.066	112788		4.00(2.01-6.02)	100	3832	
51 PFOSA										M
498.10 > 77.90	8.723	8.723	0.0	1.000	1529681	2.47	Target=44.22	98.9	9646	
498.10 > 478.00	8.723	8.723	0.0	1.000	36522		41.88(22.11-66.32)	98.9	1495	M
D 50 13C8 FOSA										
506.10 > 77.80	8.723	8.723	0.0	1.092	1556750	2.36		94.5	14151	
D 56 13C2 PFDoA										
615.10 > 570.00	8.757	8.757	0.0	1.128	1318290	1.16		93.2	34902	
57 PFDoA										
613.10 > 569.00	8.757	8.757	0.0	1.000	2801865	2.64	Target=7.62	106	28674	
613.10 > 319.00	8.757	8.757	0.0	1.000	375921		7.45(3.81-11.43)	106	10057	
58 PFDS										
599.00 > 79.90	9.028	9.028	0.0	1.130	975872	2.25	Target=4.76	93.5	12396	
599.00 > 98.80	9.028	9.028	0.0	1.130	214791		4.54(2.38-7.13)	93.5	6038	
63 PFTrDA										
663.00 > 619.00	9.254	9.254	0.0	0.950	1755940	2.59	Target=5.15	104	20312	
663.00 > 168.90	9.254	9.254	0.0	0.950	338552		5.19(2.57-7.72)	104	7849	
66 11ClFOS										
630.90 > 450.90	9.413	9.413	0.0	1.656	3833661	6.28	Target=3.33	100	91442	
632.90 > 452.90	9.413	9.413	0.0	1.656	1103402		3.47(1.67-5.00)	100	26283	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.738	9.738	0.0	1.255	650895	1.21		96.6	14513	
70 PFTeDA										
713.10 > 669.00	9.738	9.738	0.0	1.000	1560522	2.58	Target=7.24	103	13121	
713.10 > 168.90	9.738	9.738	0.0	1.000	226795		6.88(3.62-10.85)	103	6116	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.910	9.910	0.0	1.241	11144926	23.0		92.0	80868	
60 N-MeFOSE-M										M
616.10 > 58.90	9.930	9.930	0.0	1.002	6333354	13.0		104	5157	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
71 PFDoS										
699.10 > 79.90	10.007	10.007	0.0	1.253	755959	2.18	Target=4.39	90.0	10225	
699.10 > 98.80	10.007	10.007	0.0	1.253	182574		4.14(2.20-6.59)	90.0	4483	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.102	10.102	0.0	1.265	342239	2.29		91.6	6980	
61 NMeFOSA										
511.90 > 219.00	10.102	10.102	0.0	1.000	334938	2.56	Target=0.99	102	4969	
511.90 > 169.00	10.102	10.102	0.0	1.000	342736		0.98(0.49-1.48)	102	6525	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.291	10.291	0.0	1.289	14402209	23.8		95.4	158492	
65 N-EtFOSE-M										M
630.00 > 58.90	10.310	10.310	0.0	1.002	15547911	25.9		104	5578	M
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.481	10.481	0.0	1.312	362875	2.37		94.7	5081	
68 N-EtFOSA-M										
526.00 > 219.00	10.500	10.500	0.0	1.002	386800	2.49	Target=0.99	99.7	3720	
526.00 > 169.00	10.481	10.500	-0.019	1.000	389711		0.99(0.50-1.49)	99.7	4643	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

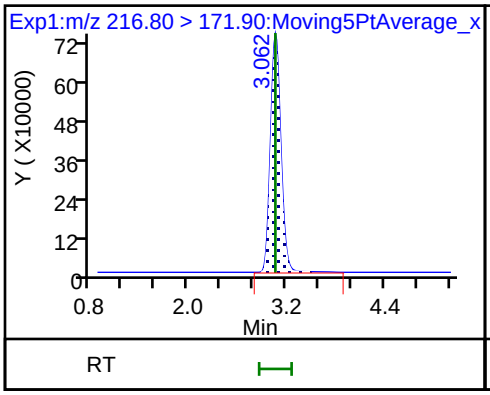
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Report Date: 21-Nov-2023 11:15:00 Chrom Revision: 2.3 15-Nov-2023 20:54:34

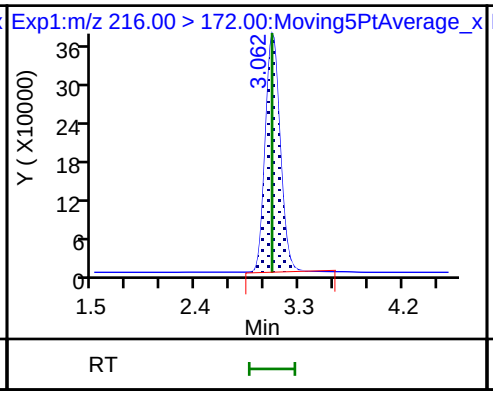
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.004.d
Injection Date: 20-Nov-2023 18:17:56 Instrument ID: LC_LCMS11
Lims ID: IC L6
Client ID:
Operator ID: DENLCMS ALS Bottle#: 6 Worklist Smp#: 5
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5

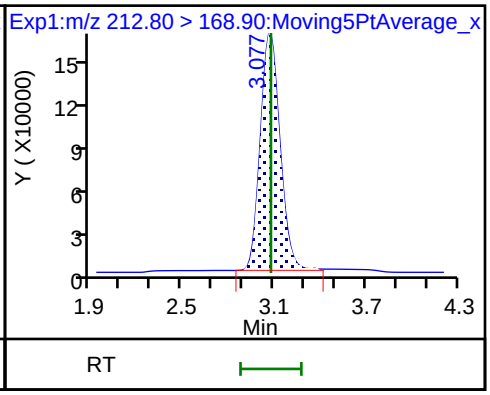
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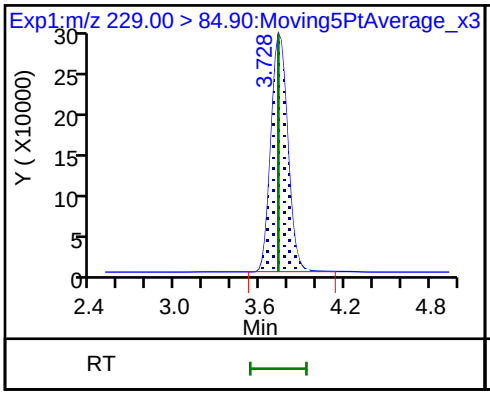
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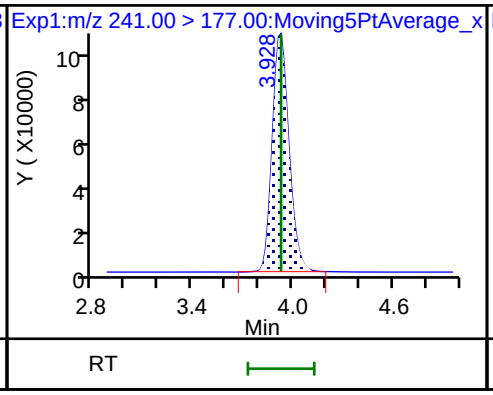
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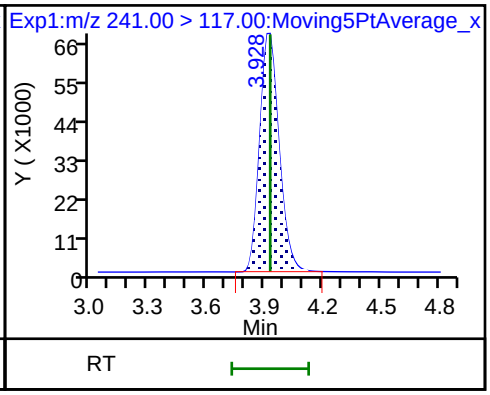
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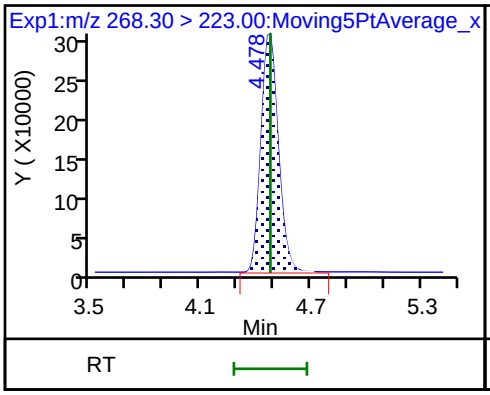
5 3:3 FTCA



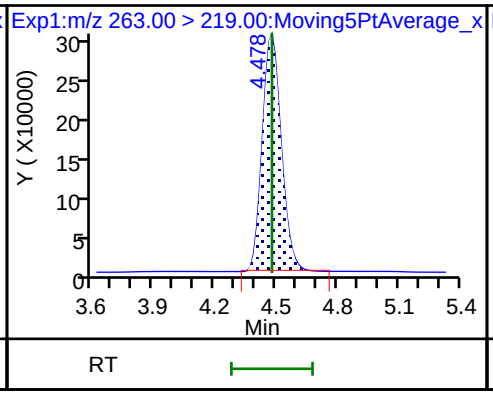
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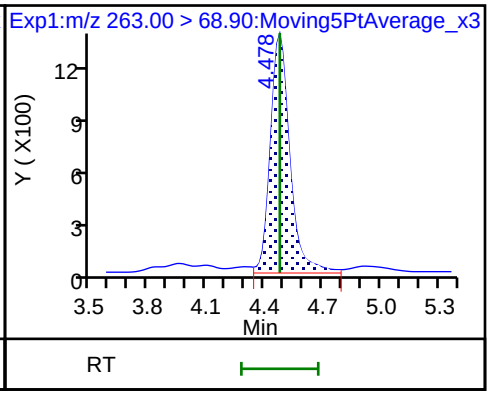
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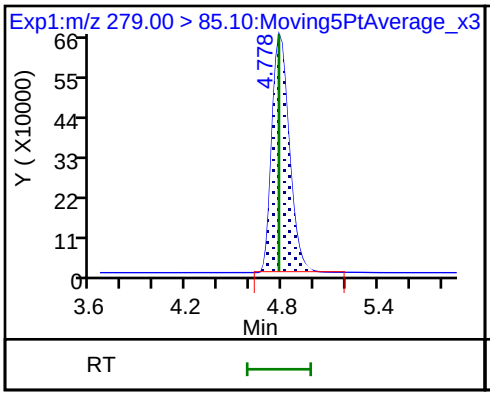
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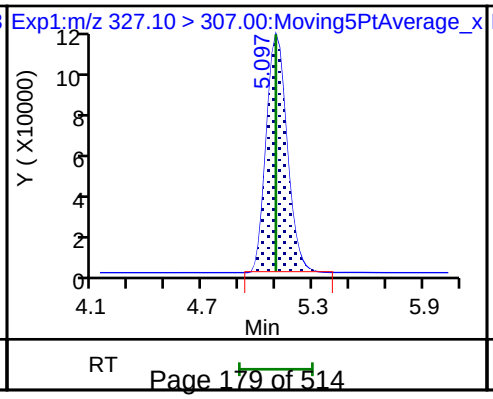
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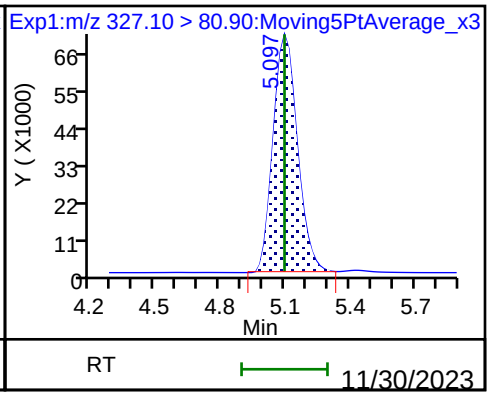
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10 4:2FTS

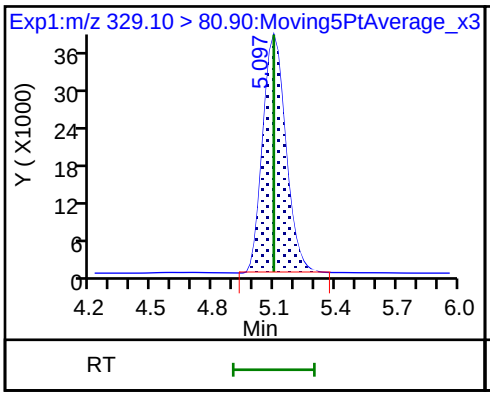


10 4:2FTS

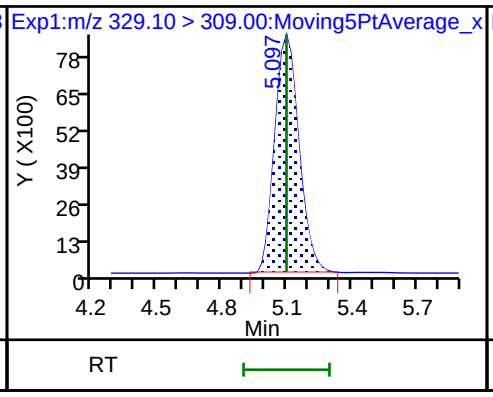


11/30/2023
6:34 PM

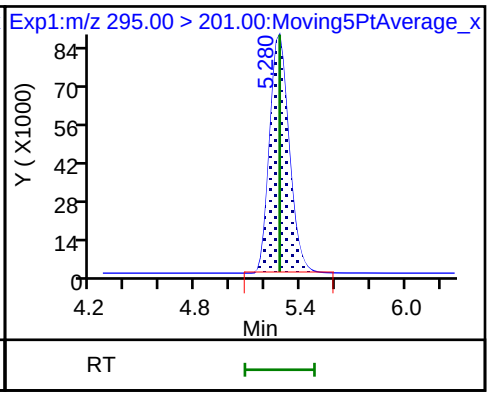
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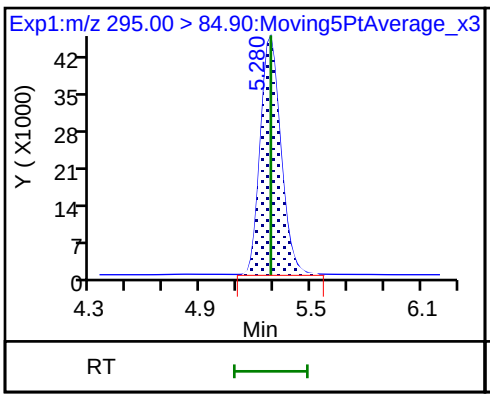
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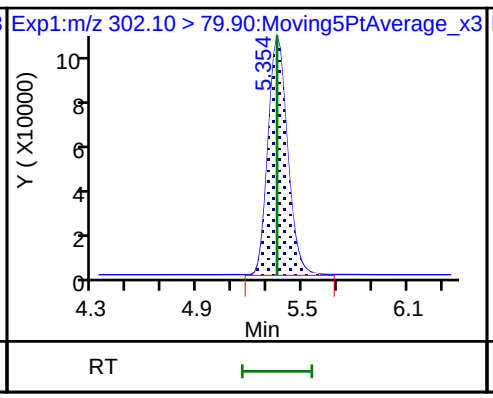
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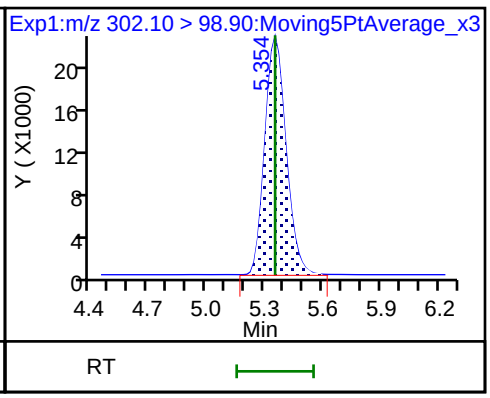
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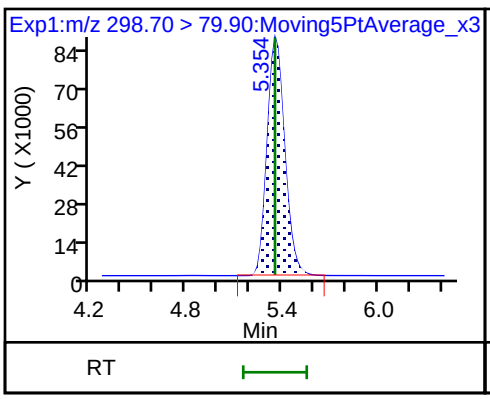
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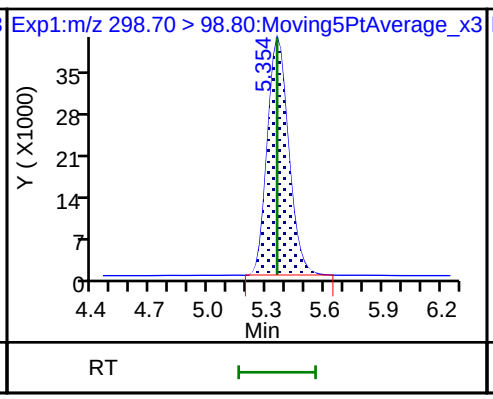
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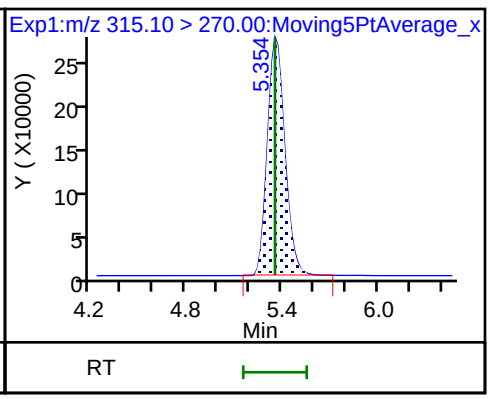
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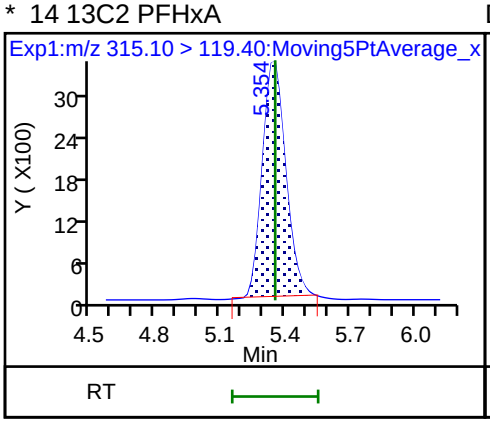
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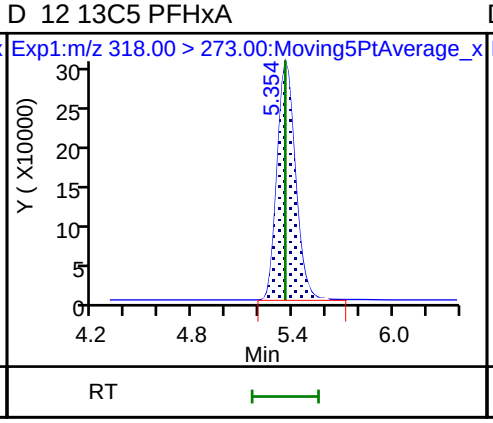
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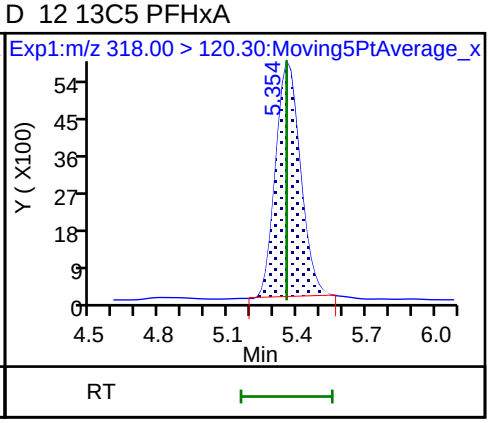
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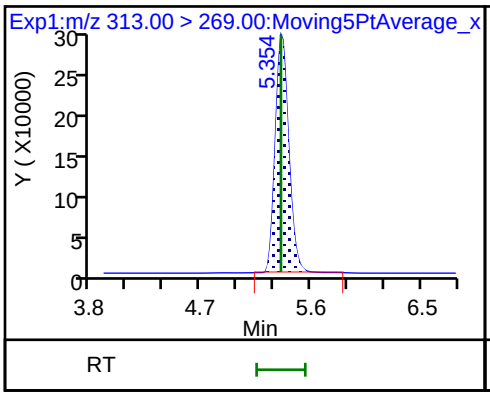
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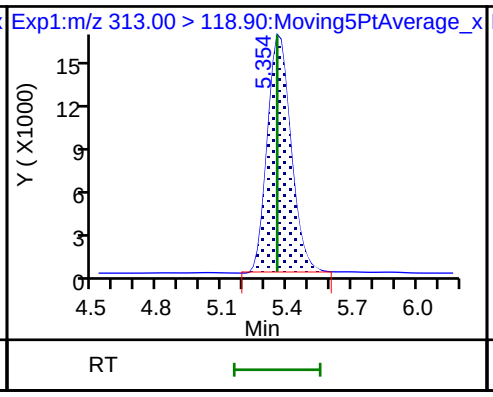
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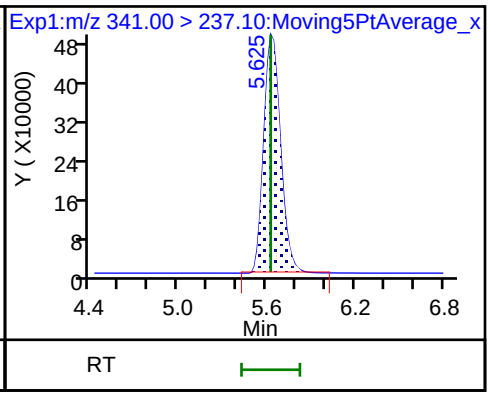
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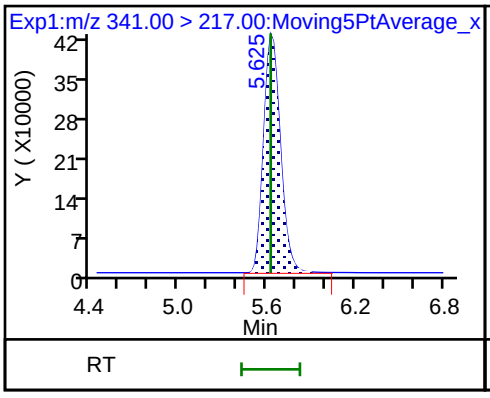
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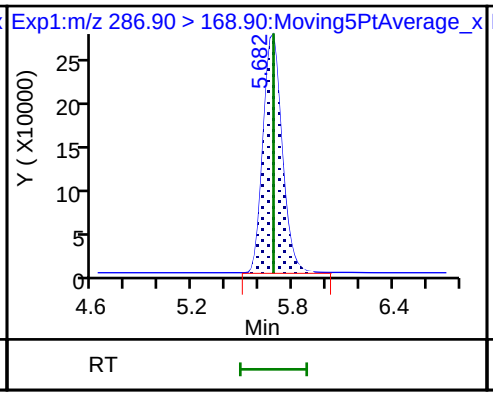
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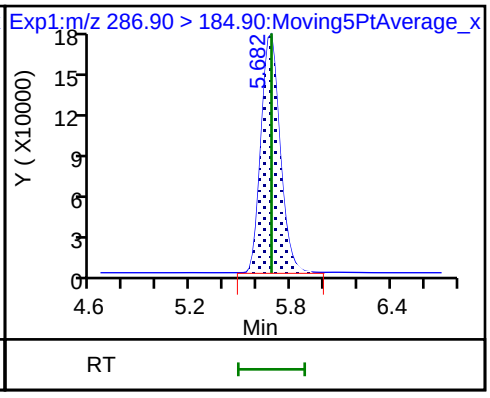
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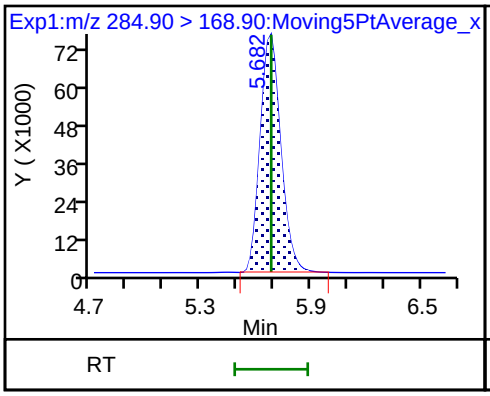
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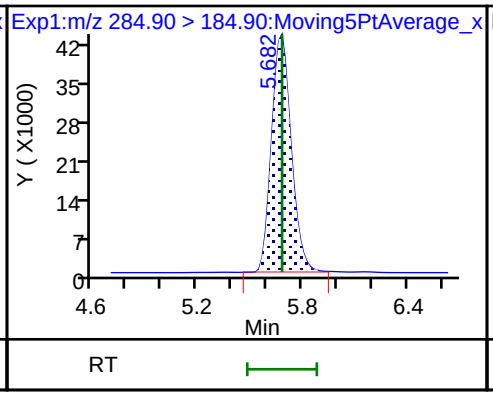
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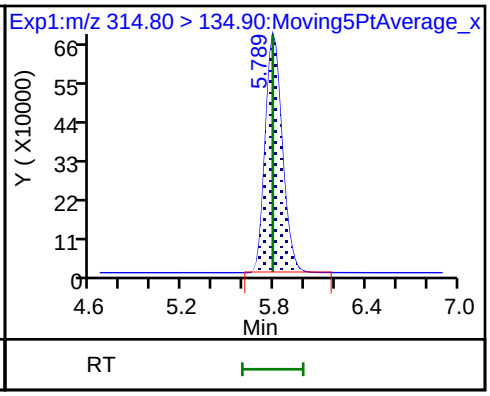
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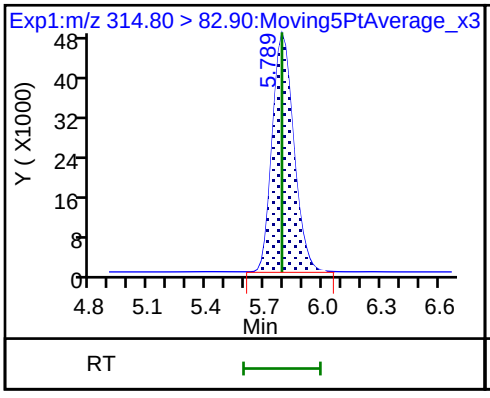
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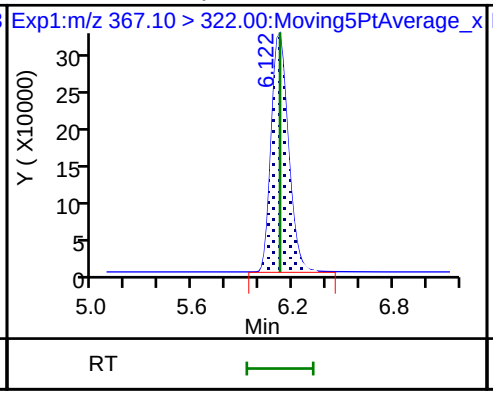
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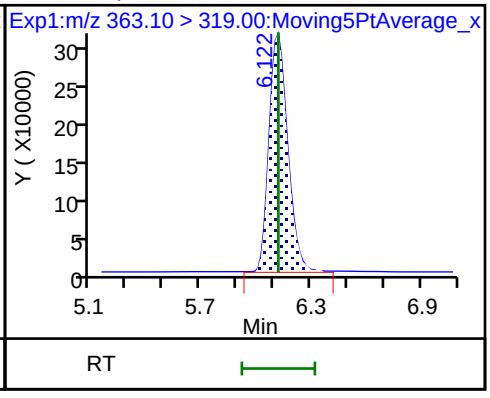
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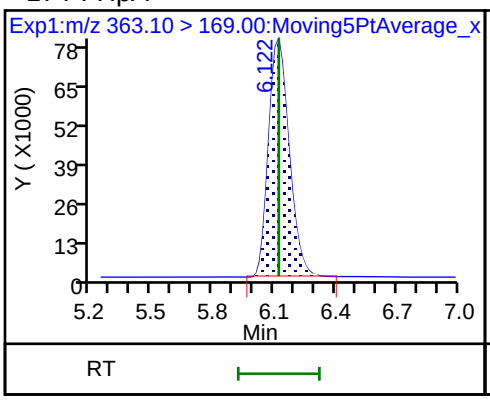
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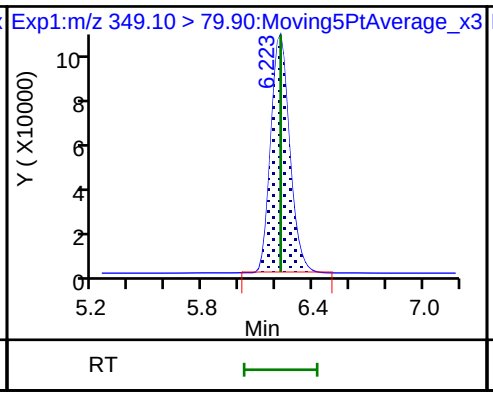
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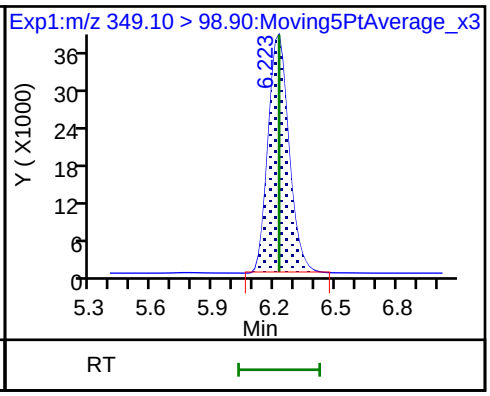
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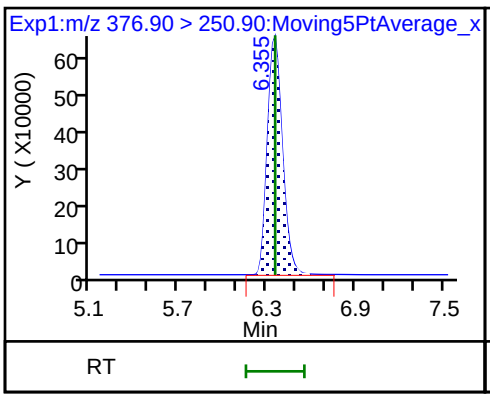
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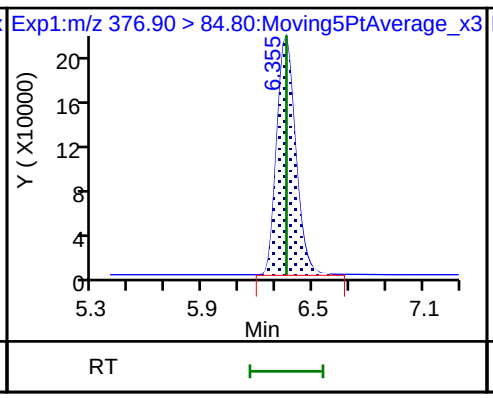
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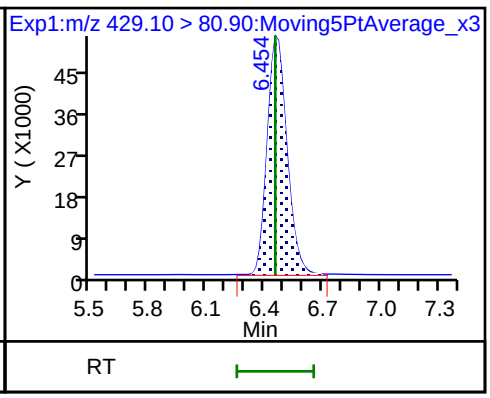
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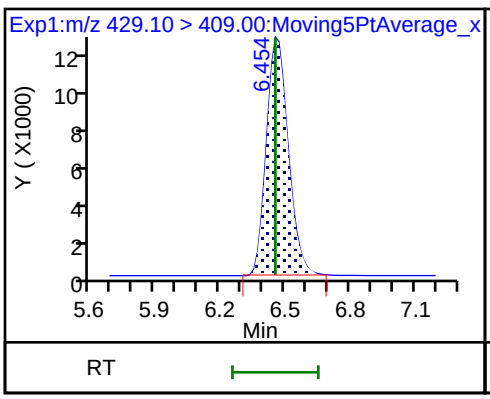
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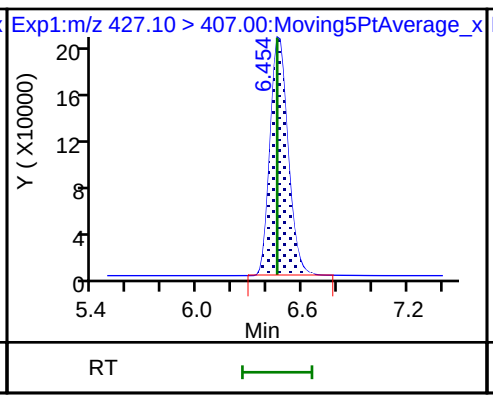
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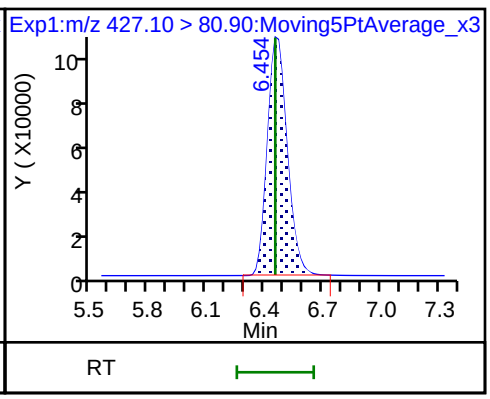
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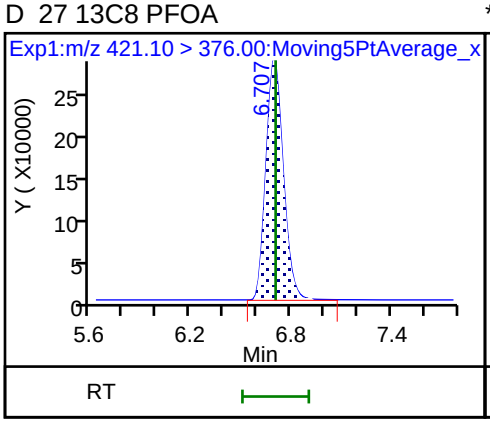
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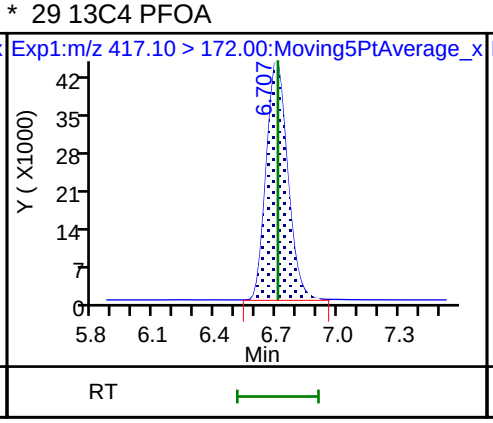
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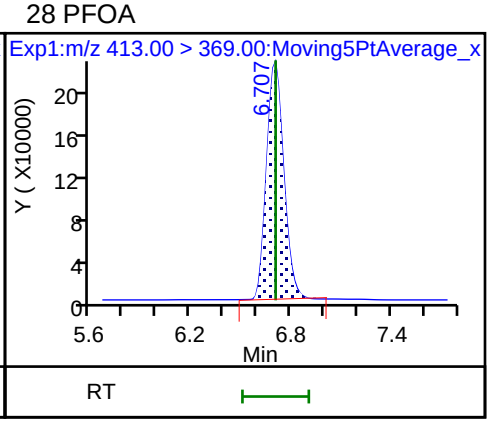
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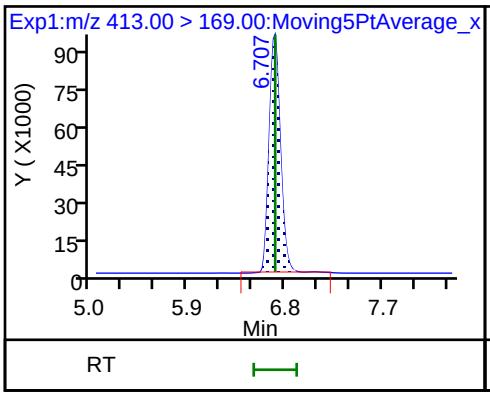
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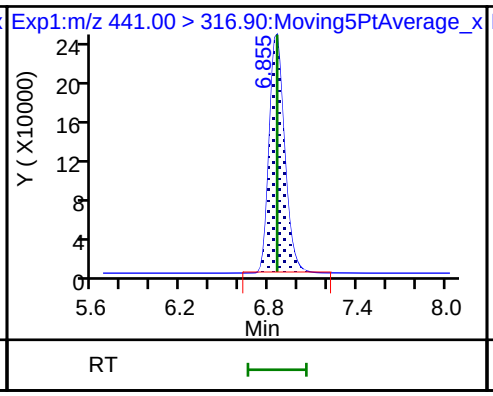
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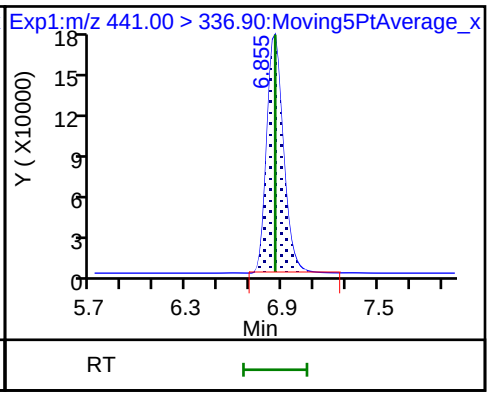
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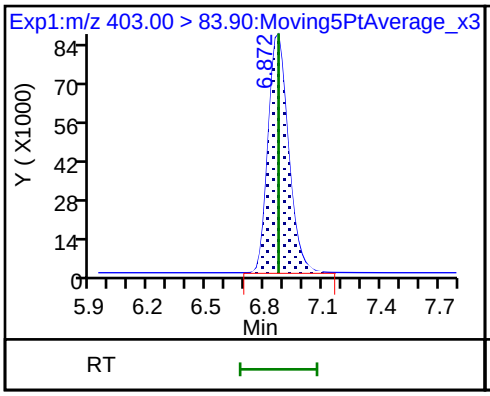
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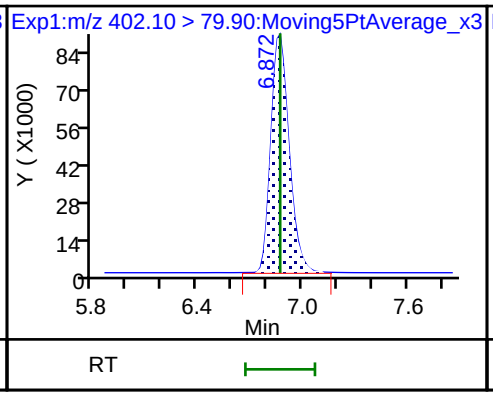
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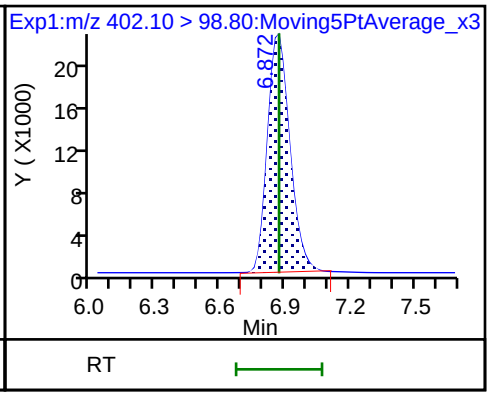
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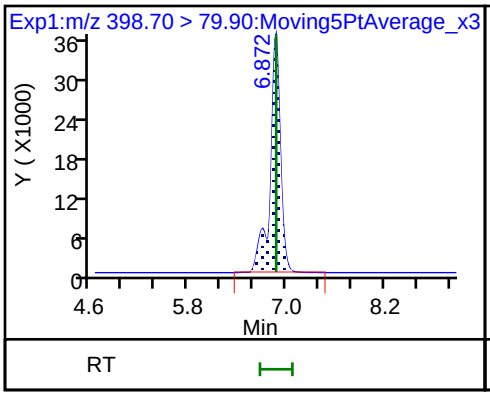
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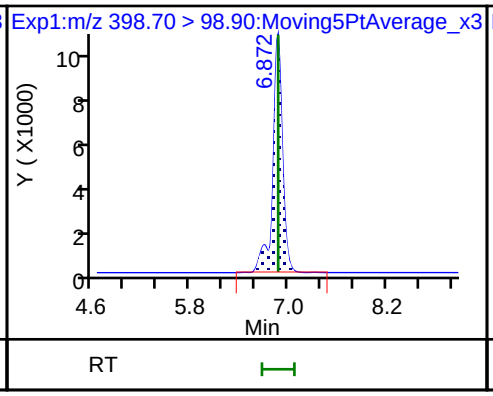
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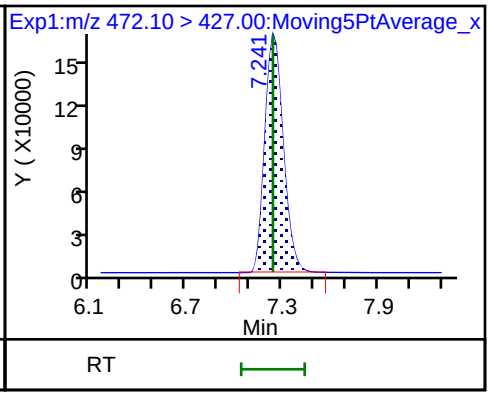
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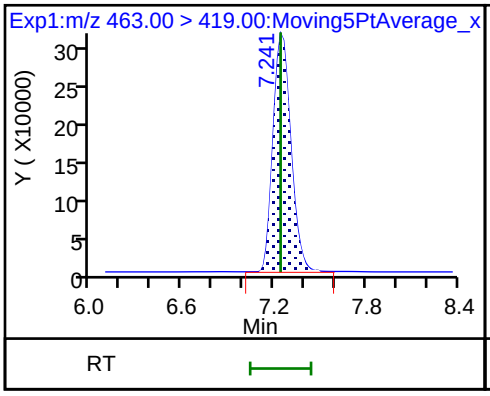
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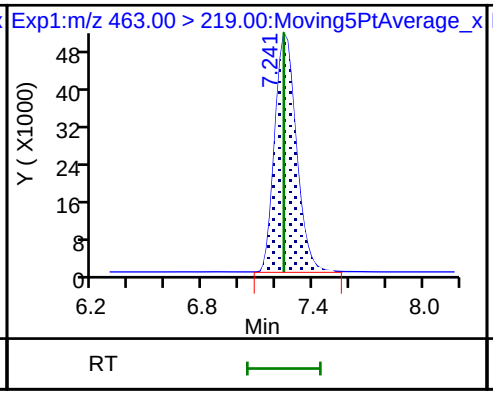
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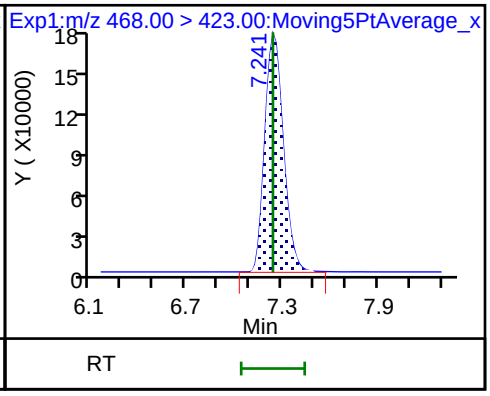
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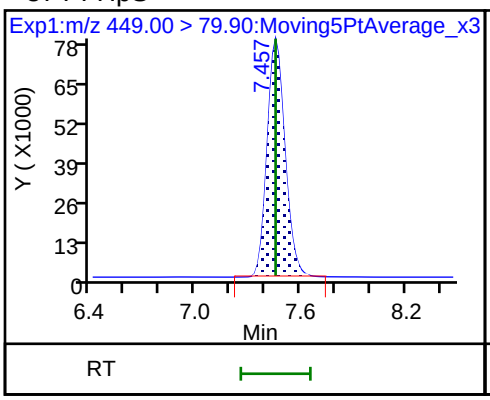
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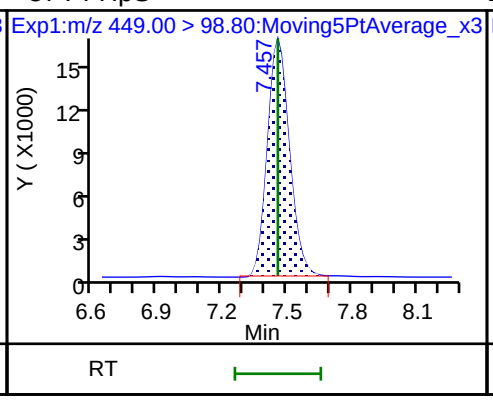
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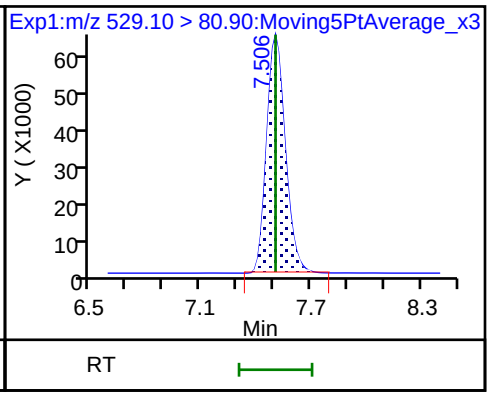
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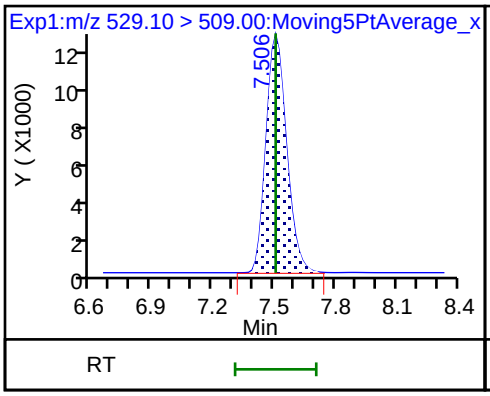
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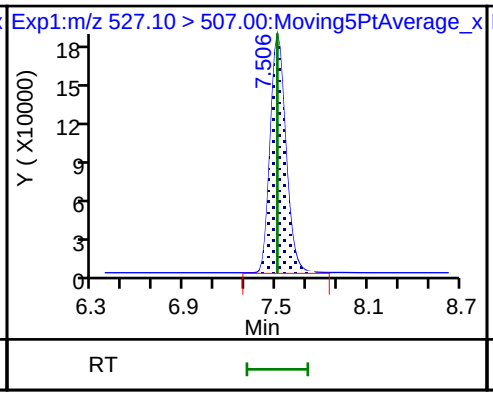
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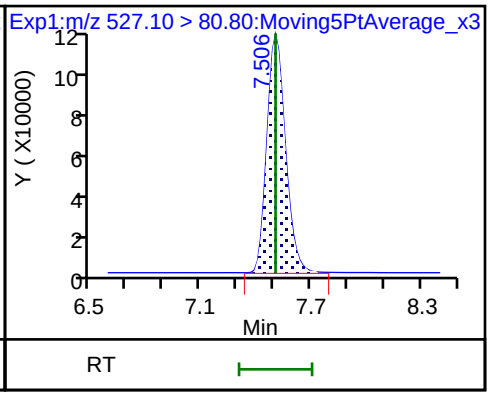
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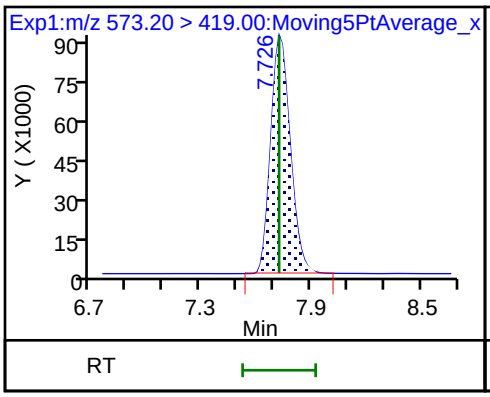
39 8:2FTS



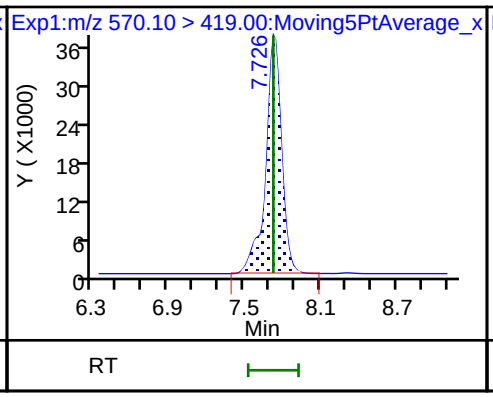
39 8:2FTS



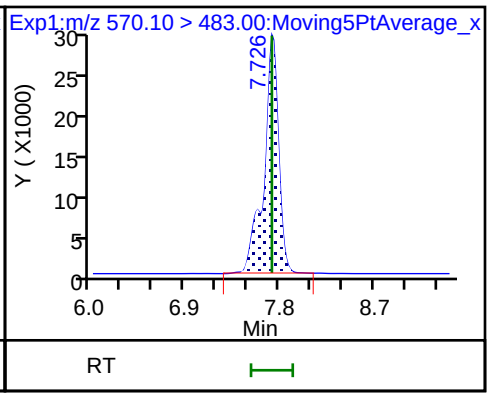
D 41 d3-NMeFOSAA



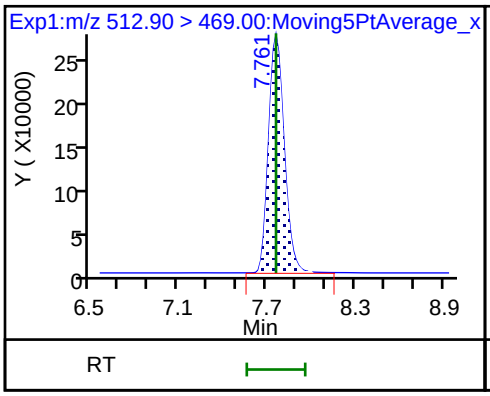
42 NMeFOSAA



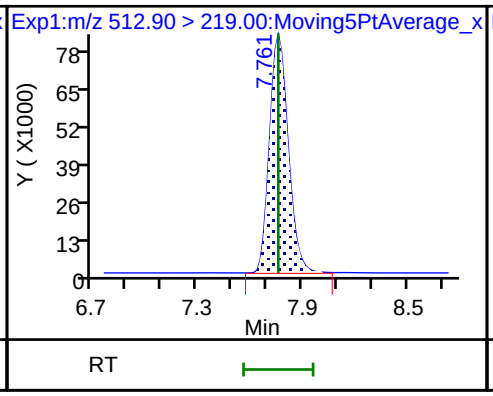
42 NMeFOSAA



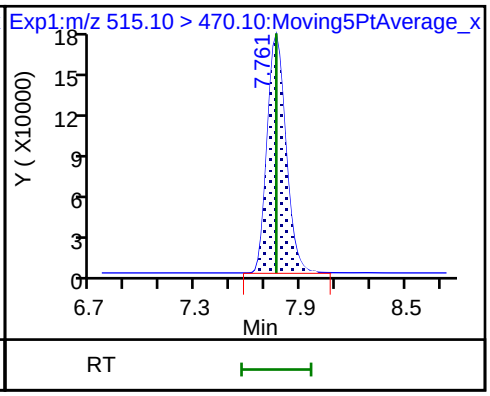
43 PFDA



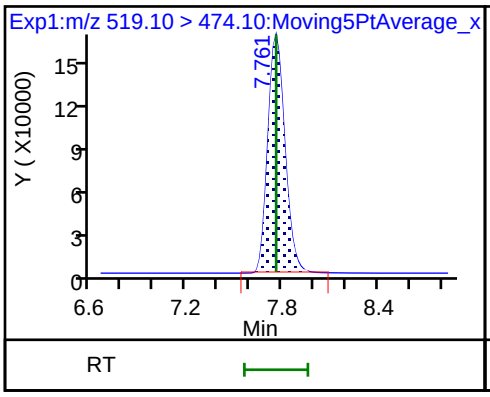
43 PFDA



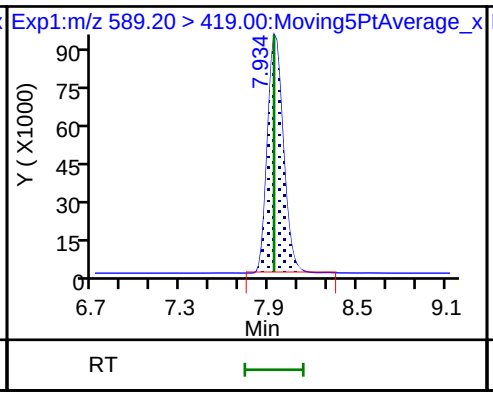
* 44 13C2 PFDA



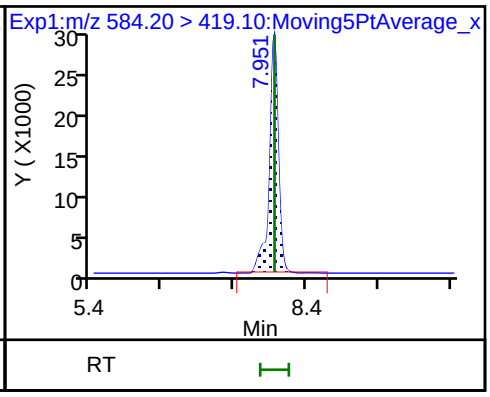
D 40 13C6 PFDA



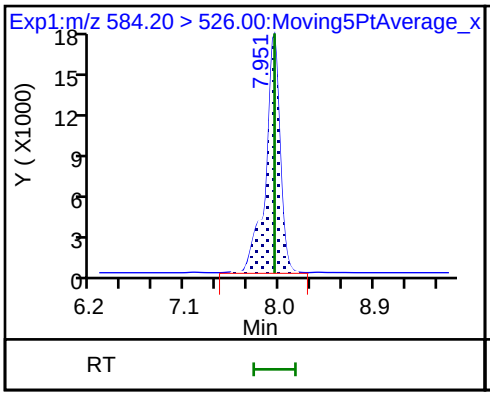
D 46 d5-NEtFOSAA



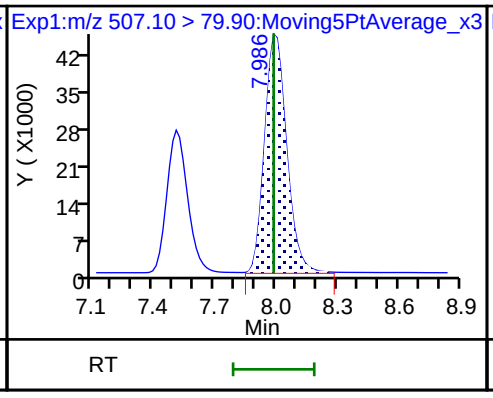
45 NEtFOSAA



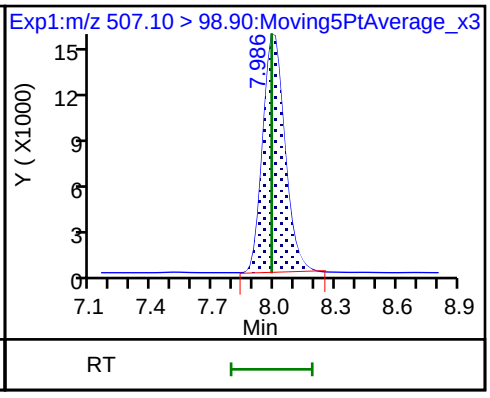
45 NEtFOSAA



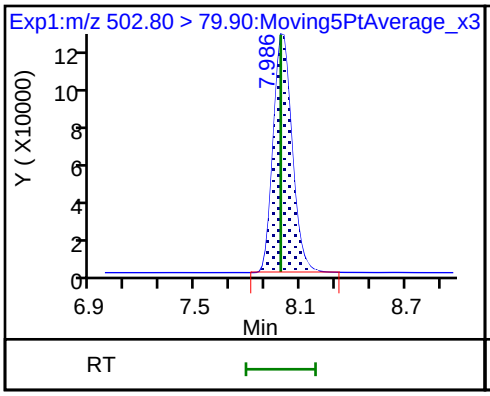
D 49 13C8 PFOS



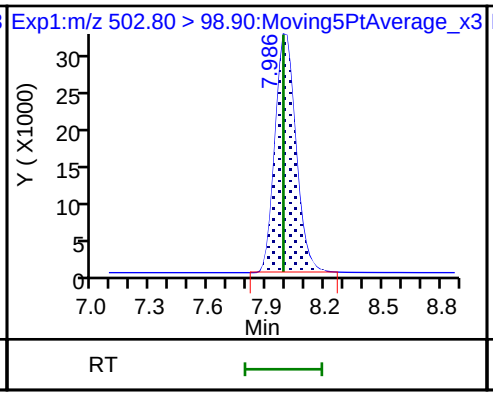
D 49 13C8 PFOS



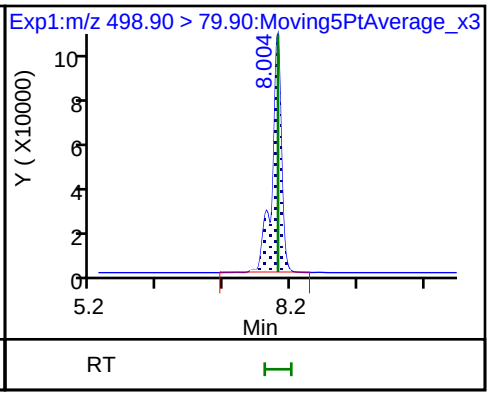
* 47 13C4 PFOS



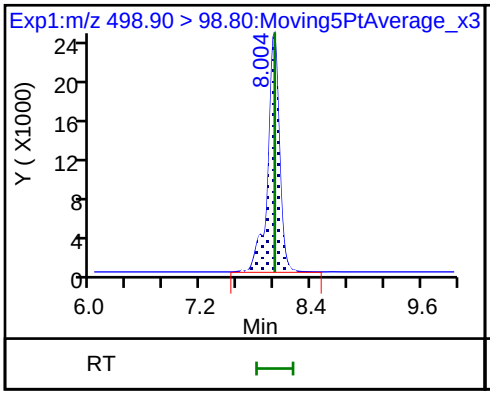
* 47 13C4 PFOS



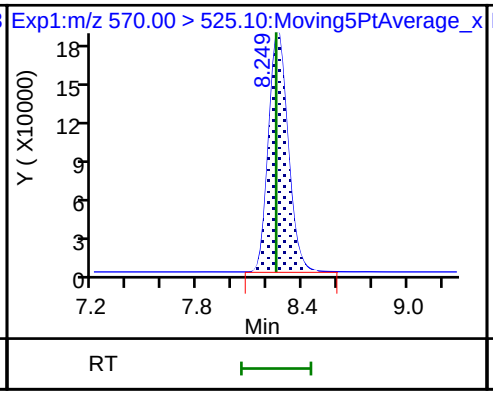
48 PFOS



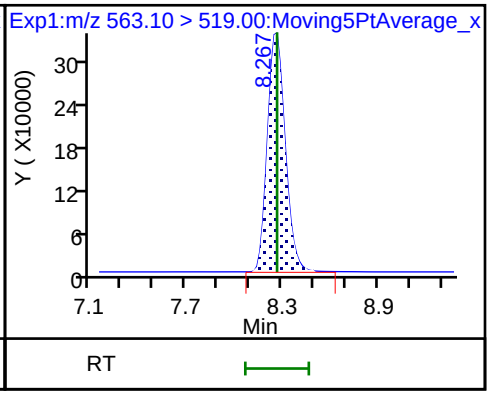
48 PFOS



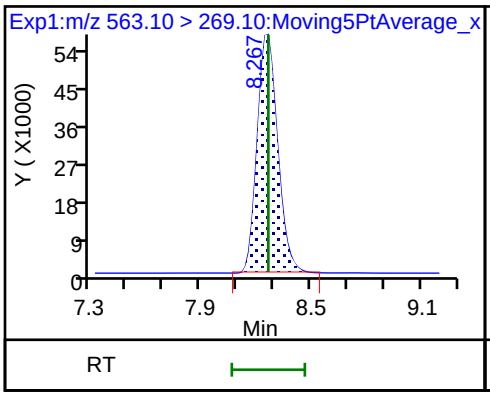
D 53 13C7 PFUnA



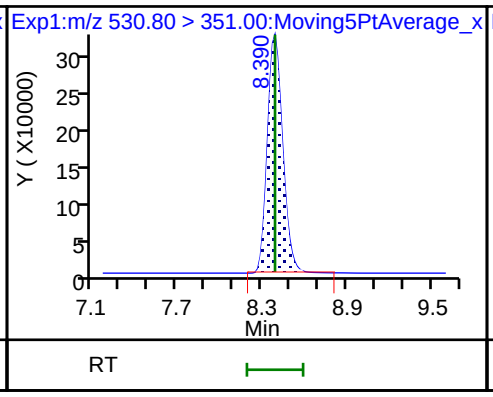
52 PFUnA



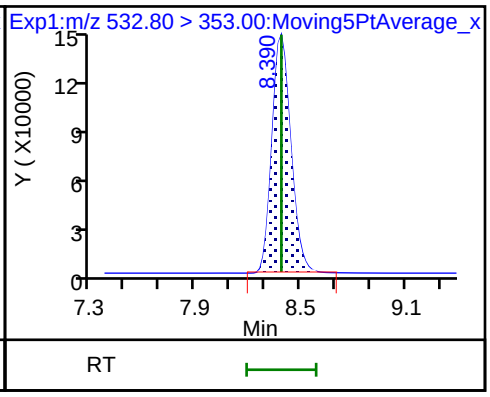
52 PFUnA



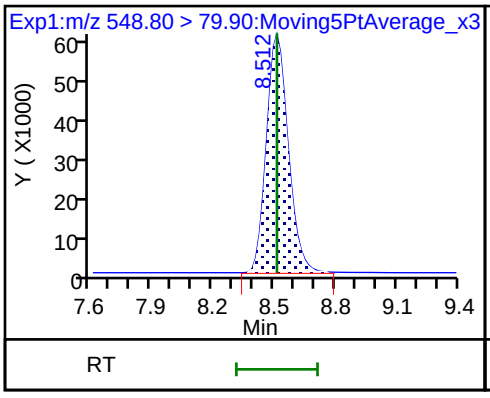
54 9ClFOS



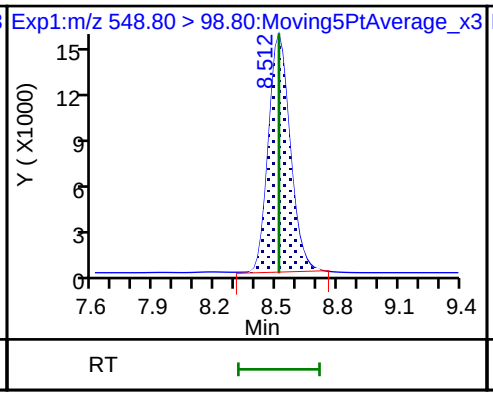
54 9ClFOS



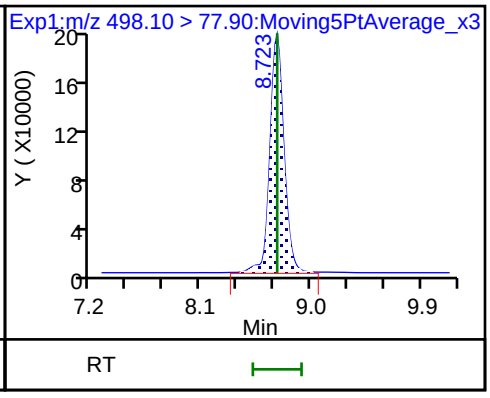
55 PFNS



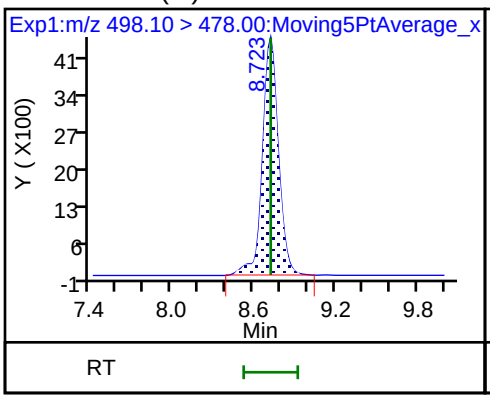
55 PFNS



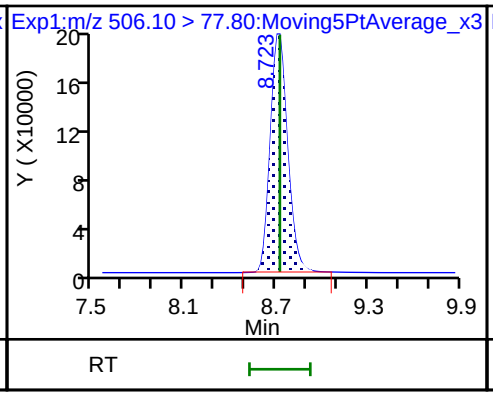
51 PFOSA



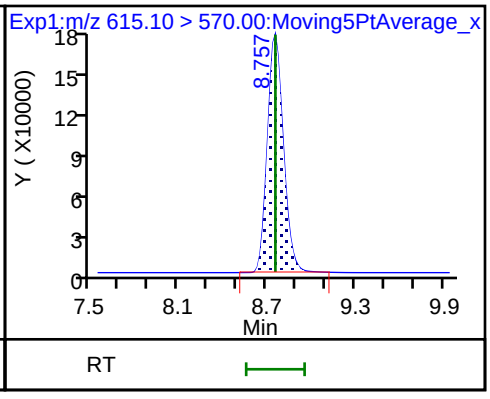
51 PFOSA (M)



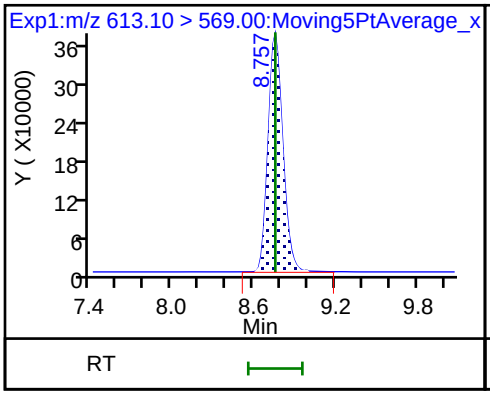
D 50 13C8 FOSA



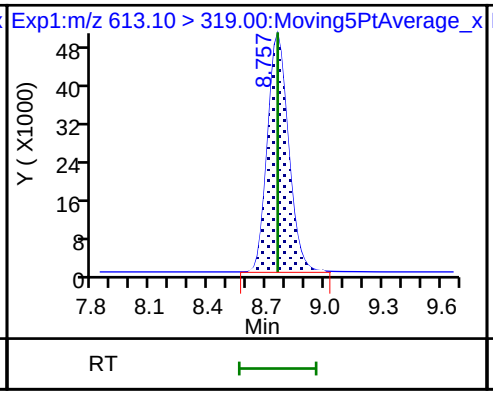
D 56 13C2 PFDoA



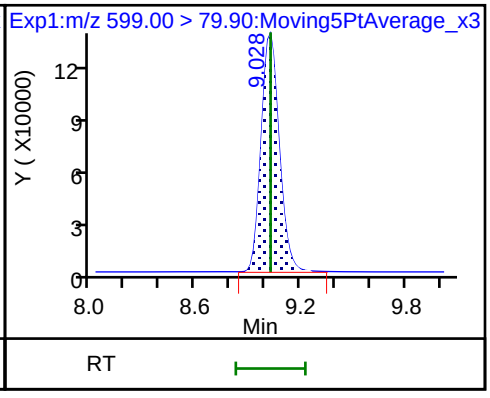
57 PFDoA



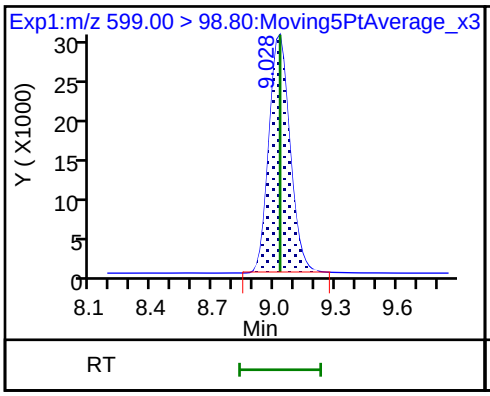
57 PFDoA



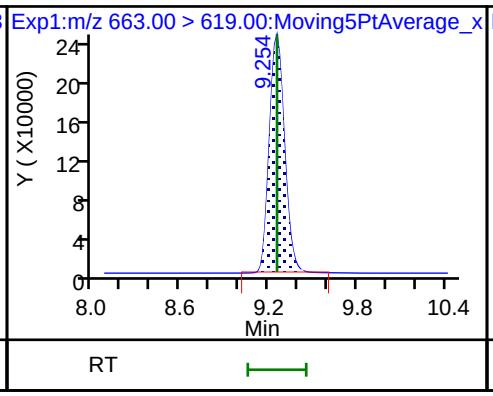
58 PFDS



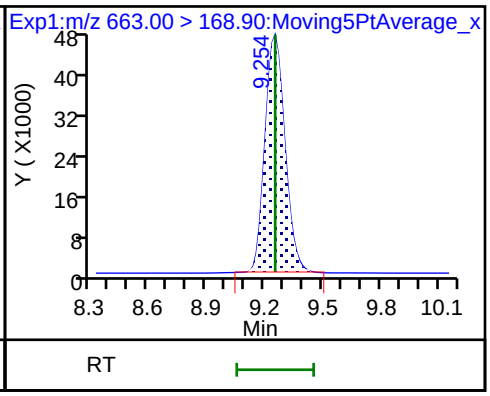
58 PFDS



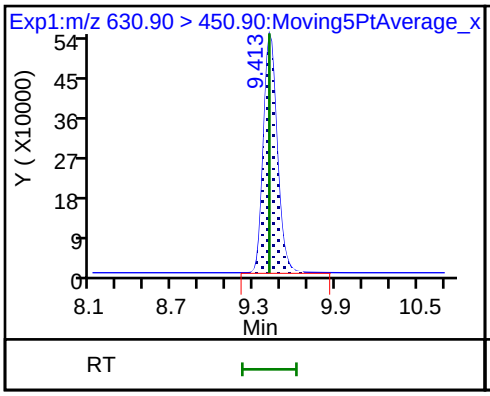
63 PFTrDA



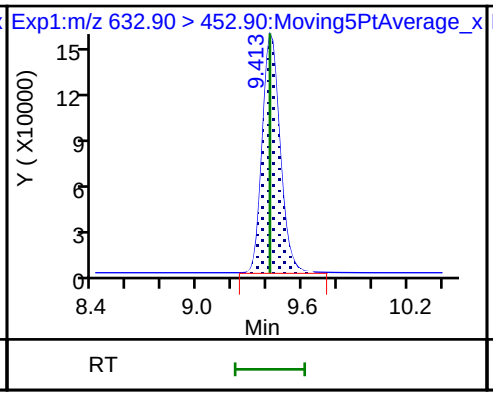
63 PFTrDA



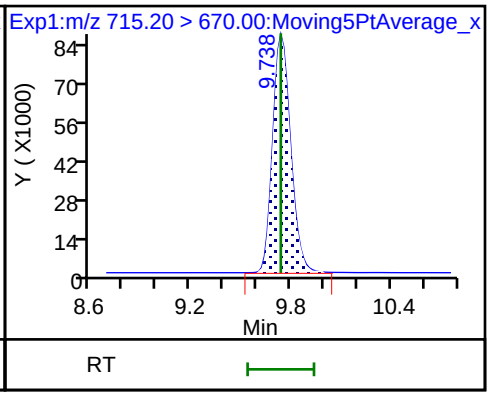
66 11ClFOS



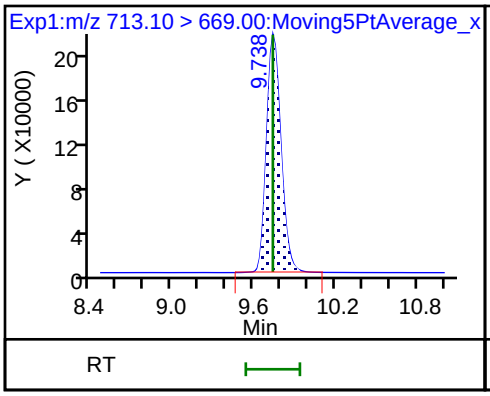
66 11ClFOS



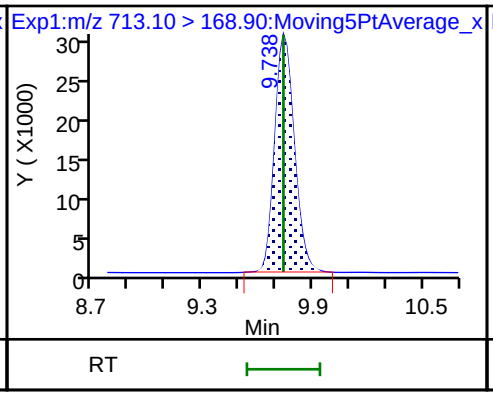
D 69 13C2 PFTeDA



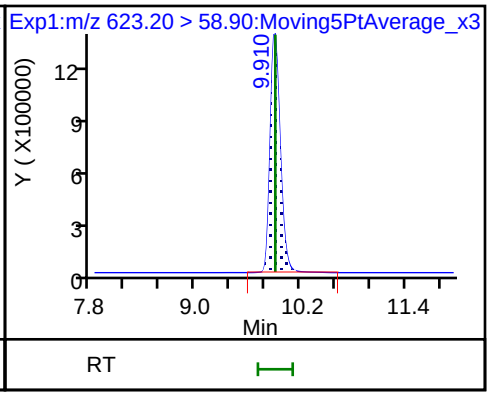
70 PFTeDA



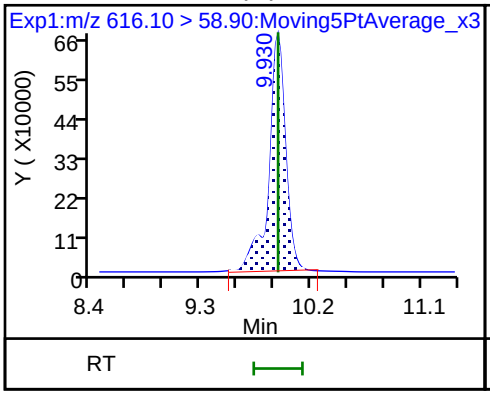
70 PFTeDA



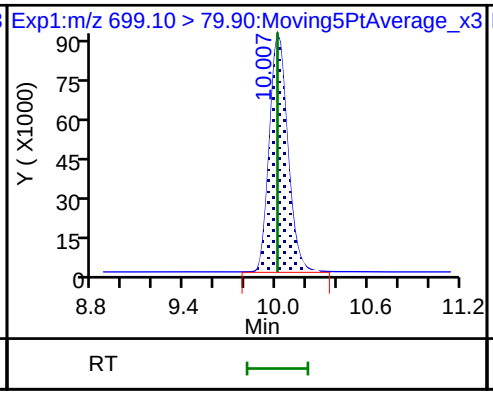
D 59 d7-N-Me-FOSE



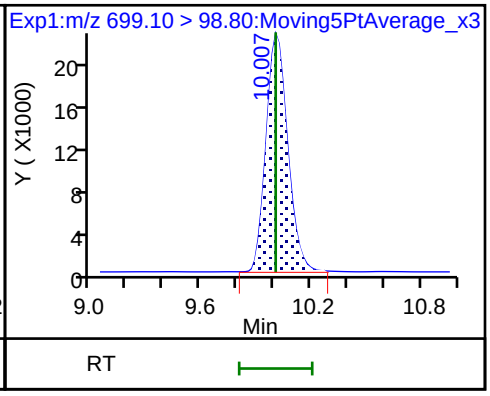
60 N-MeFOSE-M (M)



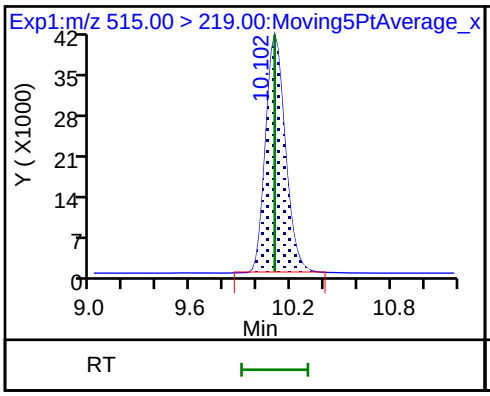
71 PFDoS



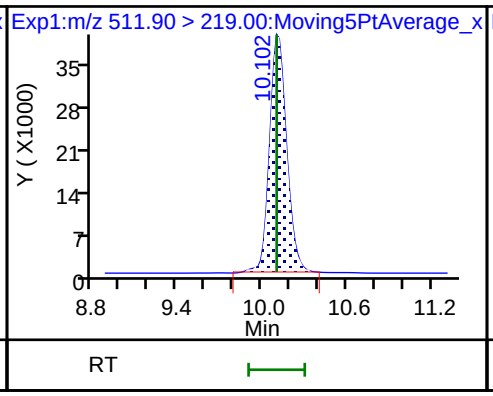
71 PFDoS



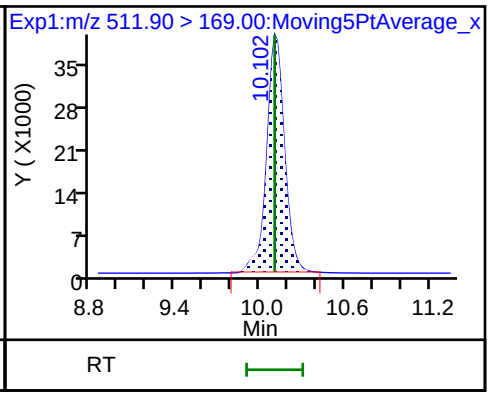
D 62 d3-NMePFOSA



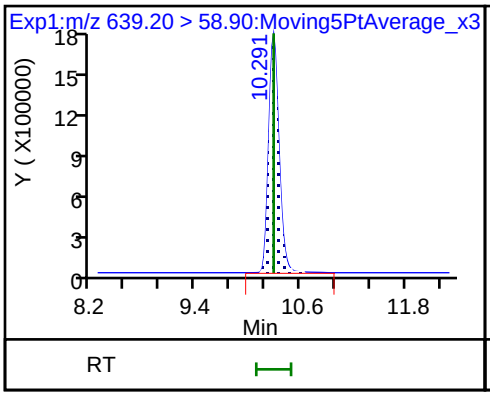
61 NMeFOSA



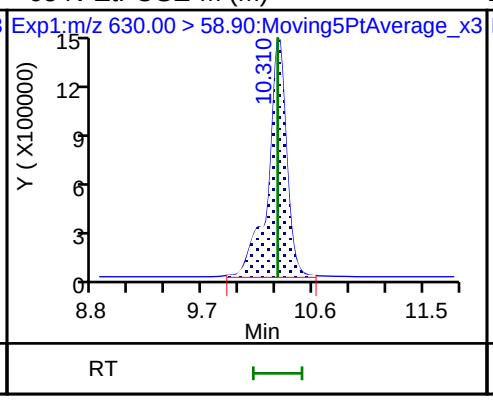
61 NMeFOSA



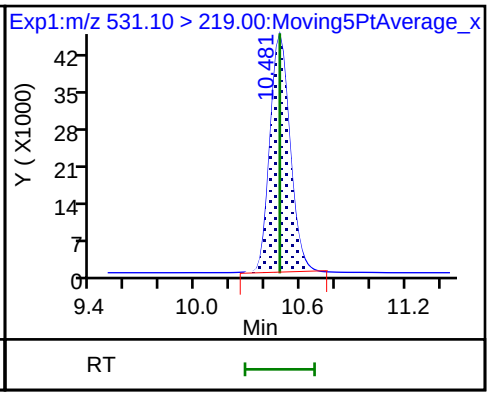
D 64 d9-N-EtFOSE



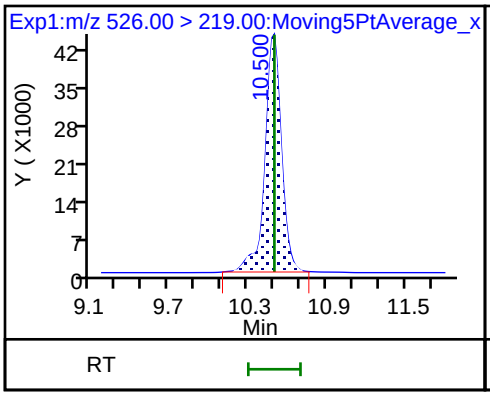
65 N-EtFOSE-M (M)



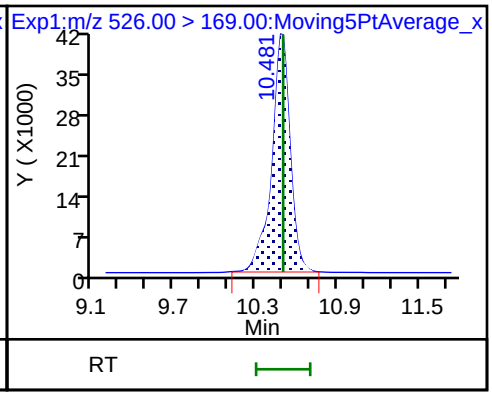
D 67 d5-NEtPFOSA



68 N-EtFOSA-M



68 N-EtFOSA-M



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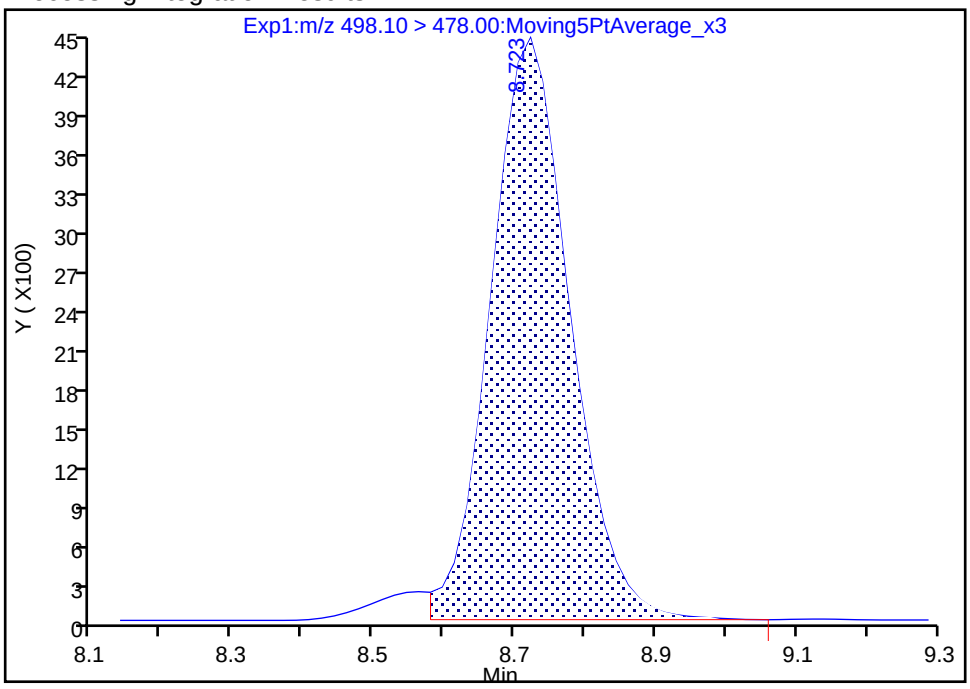
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.004.d
Injection Date: 20-Nov-2023 18:17:56 Instrument ID: LC_LCMS11
Lims ID: IC L6
Client ID:
Operator ID: DENLCMS ALS Bottle#: 6 Worklist Smp#: 5
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

51 PFOSA, CAS: 754-91-6

Signal: 2

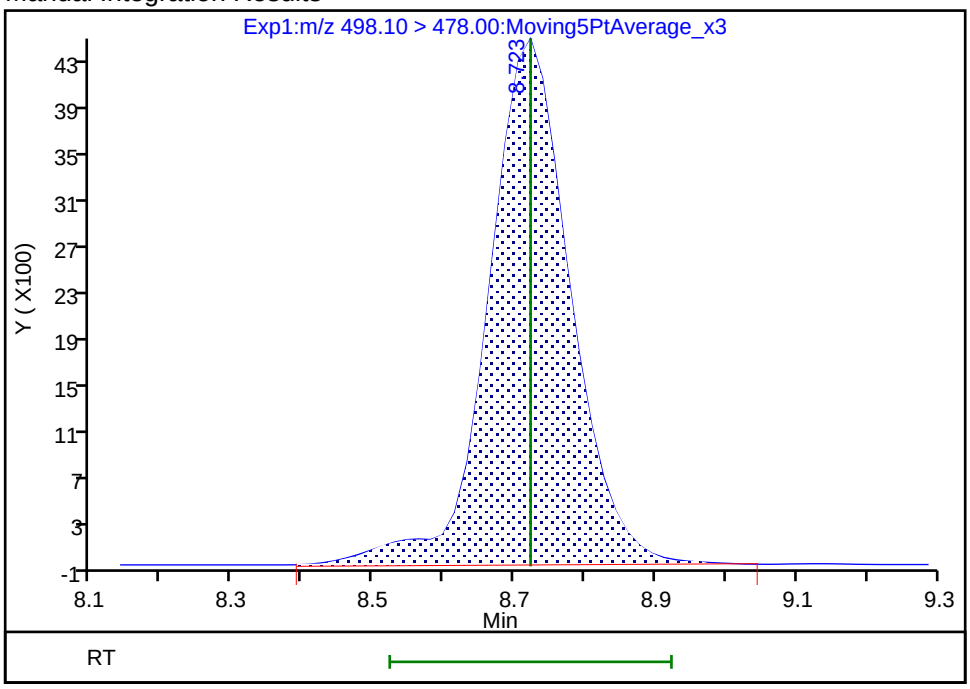
Processing Integration Results

RT: 8.72
Area: 35200
Amount: 2.490173
Amount Units: ng/ml



Manual Integration Results

RT: 8.72
Area: 36522
Amount: 2.467927
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 10:40:01 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

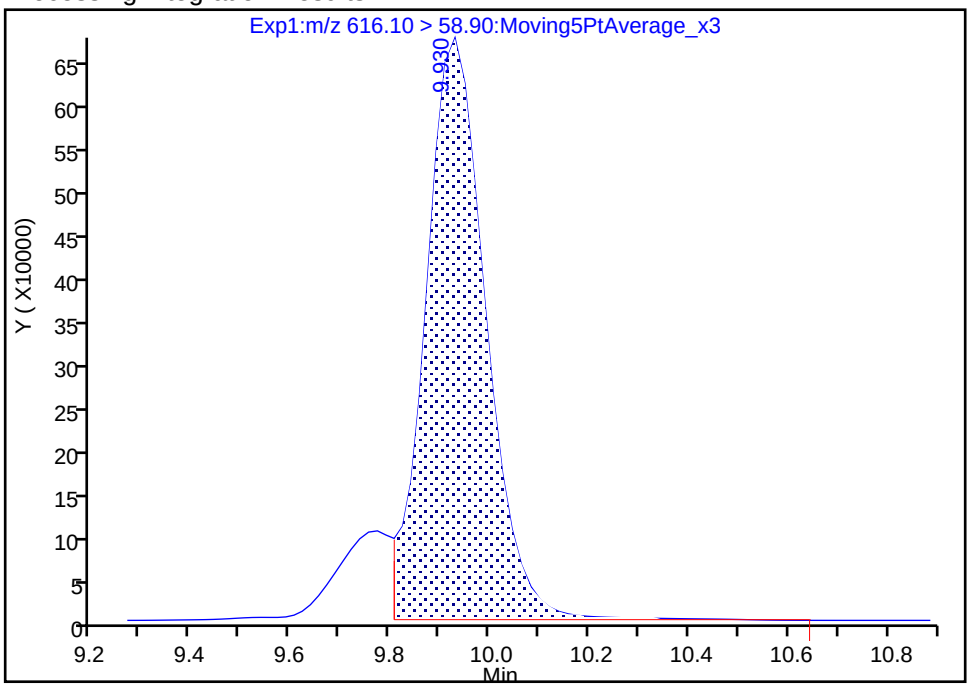
Data File:	\\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.004.d				
Injection Date:	20-Nov-2023 18:17:56	Instrument ID:	LC_LCMS11		
Lims ID:	IC L6				
Client ID:					
Operator ID:	DENLCMS	ALS Bottle#:	6	Worklist Smp#:	5
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

60 N-MeFOSE-M, CAS: 24448-09-7

Signal: 1

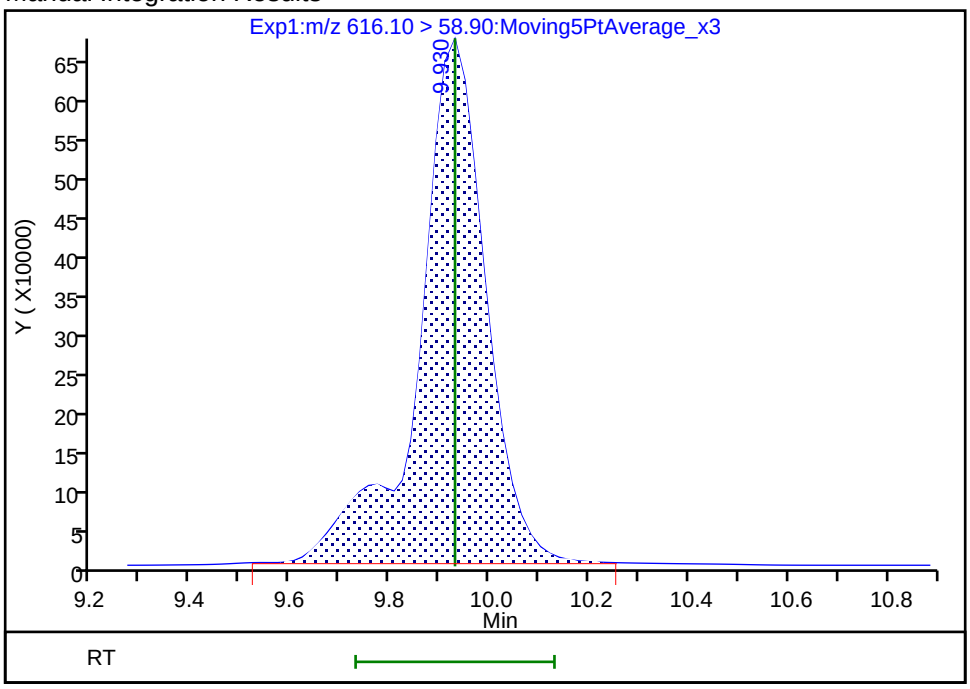
Processing Integration Results

RT: 9.93
Area: 5677730
Amount: 13.100675
Amount Units: ng/ml



Manual Integration Results

RT: 9.93
Area: 6333354
Amount: 12.986052
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 10:40:12 -07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

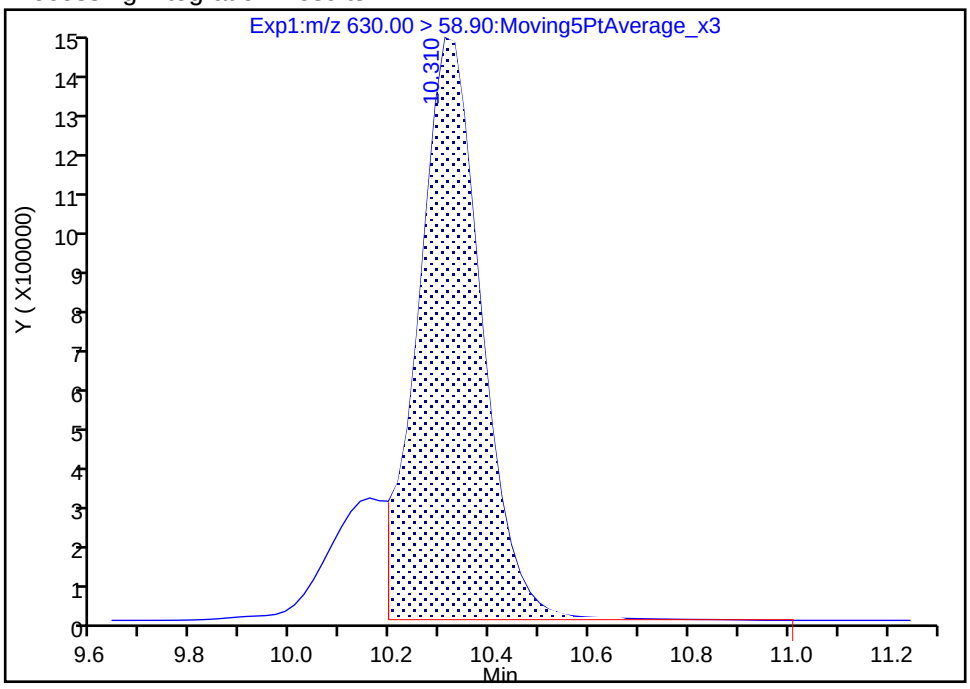
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.004.d
Injection Date: 20-Nov-2023 18:17:56 Instrument ID: LC_LCMS11
Lims ID: IC L6
Client ID:
Operator ID: DENLCMS ALS Bottle#: 6 Worklist Smp#: 5
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

65 N-EtFOSE-M, CAS: 1691-99-2

Signal: 1

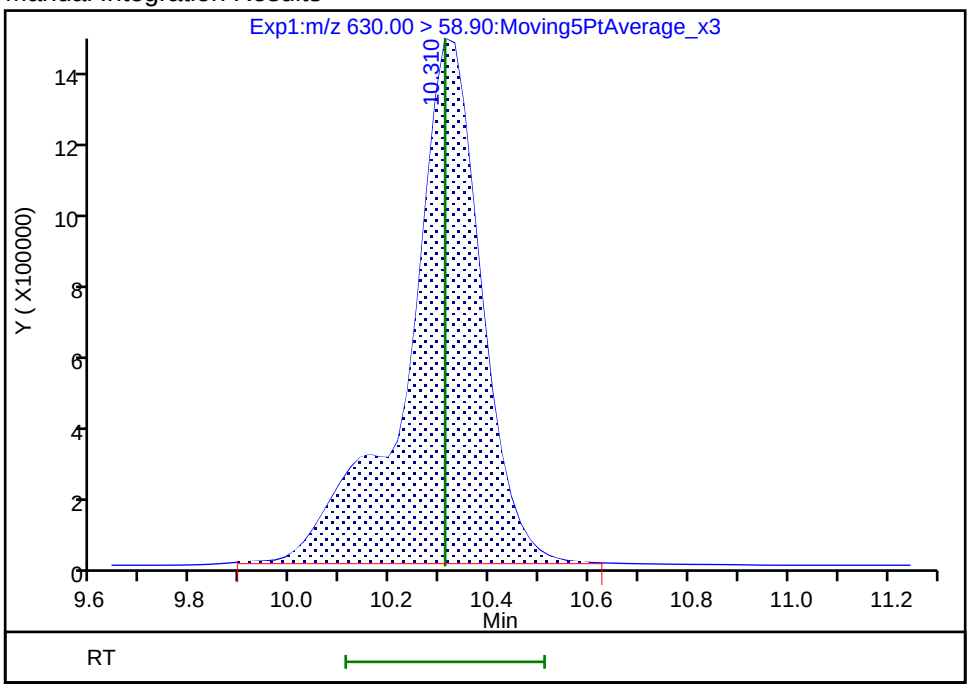
Processing Integration Results

RT: 10.31
Area: 13184954
Amount: 25.671818
Amount Units: ng/ml



Manual Integration Results

RT: 10.31
Area: 15547911
Amount: 25.863241
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 10:40:22 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.005.d
Lims ID: IC L7
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 20-Nov-2023 18:37:21 ALS Bottle#: 7 Worklist Smp#: 6
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: IC L7
Misc. Info.: Plate: 1 Rack: 1
Operator ID: DENLCMS Instrument ID: LC_LCMS11
Sublist: chrom-PFC_IDA_DEN11*sub5

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 21-Nov-2023 11:15:05 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1626

First Level Reviewer: B5QN Date: 21-Nov-2023 11:01:20
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.062	3.062	0.0	1.000	6118737	10.7		107	45318	
* 1 13C3PFBA										
216.00 > 172.00	3.062	3.062	0.0		2802122	5.00			10410	
2 PFBA										
212.80 > 168.90	3.062	3.077	-0.015	1.000	2692740	4.92		98.3	2928	
4 PFMPA										
229.00 > 84.90	3.728	3.728	0.0	0.835	4784341	10.1		100	26564	
5 3:3 FTCA										
241.00 > 177.00	3.912	3.928	-0.016	0.877	1483624	24.4	Target=1.69	97.4	42527	
241.00 > 117.00	3.912	3.928	-0.016	0.877	886892		1.67(0.84-2.53)	97.4	18283	
D 7 13C5 PFPeA										
268.30 > 223.00	4.463	4.478	-0.015	0.834	1861368	5.45		109	18978	
6 PFPA										
263.00 > 219.00	4.478	4.478	0.0	1.003	3707753	4.96	Target=221.09	99.1	6671	
263.00 > 68.90	4.478	4.478	0.0	1.003	15922		232.87(110.55-331.64)	99.1	487	
8 PFMBA										
279.00 > 85.10	4.778	4.778	0.0	1.071	9217460	9.80		97.9	152958	
10 4:2FTS										
327.10 > 307.00	5.097	5.097	0.0	1.000	1600435	12.2	Target=1.58	97.7	50645	
327.10 > 80.90	5.097	5.097	0.0	1.000	1043217		1.53(0.79-2.38)	97.7	8293	
D 9 13C2-4:2FTS										
329.10 > 80.90	5.097	5.097	0.0	0.742	260878	4.89	Target=4.29	105	4712	
329.10 > 309.00	5.097	5.097	0.0	0.742	65107		4.01(2.14-6.43)	105	2747	
11 NFDHA										
295.00 > 201.00	5.280	5.280	0.0	0.986	1301008	4.87	Target=1.86	97.3	24133	
295.00 > 84.90	5.280	5.280	0.0	0.986	704165		1.85(0.93-2.79)	97.3	9113	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 16 13C3 PFBS										
302.10 > 79.90	5.354	5.354	0.0	0.779	750482	2.47	Target=4.50	106	19563	
302.10 > 98.90	5.354	5.354	0.0	0.779	169754		4.42(2.25-6.76)	106	5561	
15 PFBS										
298.70 > 79.90	5.354	5.354	0.0	1.000	1257820	4.38	Target=2.27	98.4	41072	
298.70 > 98.80	5.354	5.354	0.0	1.000	547249		2.30(1.13-3.40)	98.4	10160	
* 14 13C2 PFHxA										
315.10 > 270.00	5.354	5.354	0.0		1712645	2.50	Target=77.08		25147	
315.10 > 119.40	5.335	5.354	-0.019		21829		78.46(38.54-115.62)		726	
D 12 13C5 PFHxA										
318.00 > 273.00	5.354	5.354	0.0	1.000	2152413	2.80	Target=50.64	112	31594	
318.00 > 120.30	5.354	5.354	0.0	1.000	40450		53.21(25.32-75.97)	112	1067	
13 PFHxA										
313.00 > 269.00	5.354	5.354	0.0	1.000	4608910	4.86	Target=20.05	97.1	23336	
313.00 > 118.90	5.354	5.354	0.0	1.000	250988		18.36(10.03-30.08)	97.1	8268	
18 5:3 FTCA										
341.00 > 237.10	5.625	5.625	0.0	1.051	7440700	47.7	Target=1.13	95.2	58660	
341.00 > 217.00	5.625	5.625	0.0	1.051	6916155		1.08(0.57-1.70)	95.2	109168	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.663	5.682	-0.019	1.058	1980106	10.5	Target=1.57	105	27857	
286.90 > 184.90	5.663	5.682	-0.019	1.058	1350923		1.47(0.78-2.35)	105	19081	
19 HFPO-DA										
284.90 > 168.90	5.682	5.682	0.0	1.003	1059718	4.97	Target=1.65	99.2	14976	
284.90 > 184.90	5.682	5.682	0.0	1.003	622108		1.70(0.83-2.48)	99.2	9799	
21 PFEESA										
314.80 > 134.90	5.789	5.789	0.0	1.081	9325994	8.89	Target=14.24	99.6	135541	
314.80 > 82.90	5.789	5.789	0.0	1.081	636250		14.66(7.12-21.36)	99.6	13871	
D 22 13C4 PFHpA										
367.10 > 322.00	6.105	6.122	-0.017	1.140	2146804	2.67		107	37749	
17 PFHpA										
363.10 > 319.00	6.122	6.122	0.0	1.003	4448078	5.26	Target=4.02	105	18337	
363.10 > 169.00	6.122	6.122	0.0	1.003	1074432		4.14(2.01-6.04)	105	16777	
23 PFPeS										
349.10 > 79.90	6.223	6.223	0.0	0.906	1328604	4.83	Target=2.71	103	26570	
349.10 > 98.90	6.223	6.223	0.0	0.906	478096		2.78(1.35-4.06)	103	13349	
24 ADONA										
376.90 > 250.90	6.355	6.355	0.0	1.122	8757236	4.89	Target=3.01	103	304023	
376.90 > 84.80	6.355	6.355	0.0	1.122	2871128		3.05(1.51-4.52)	103	39973	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.454	6.454	0.0	0.939	366499	5.26	Target=4.27	111	13011	
429.10 > 409.00	6.454	6.454	0.0	0.939	92114		3.98(2.13-6.40)	111	4378	
25 6:2FTS										
427.10 > 407.00	6.454	6.454	0.0	1.000	2564676	17.4	Target=1.91	91.9	72412	
427.10 > 80.90	6.454	6.454	0.0	1.000	1489020		1.72(0.96-2.87)	91.9	30154	
D 27 13C8 PFOA										
421.10 > 376.00	6.690	6.707	-0.017	1.000	1927703	2.71		108	37826	
* 29 13C4 PFOA										
417.10 > 172.00	6.690	6.707	-0.017		271518	2.50			9319	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 PFOA										
413.00 > 369.00	6.707	6.707	0.0	1.002	3266370	5.31	Target=2.39	106	28099	
413.00 > 169.00	6.707	6.707	0.0	1.002	1317128		2.48(1.19-3.58)	106	22603	
30 7:3 FTCA										
441.00 > 316.90	6.855	6.855	0.0	1.280	3332305	46.2	Target=1.44	92.2	91607	
441.00 > 336.90	6.855	6.855	0.0	1.280	2511461		1.33(0.72-2.16)	92.2	26708	
32 PFHxS										
398.70 > 79.90	6.871	6.872	-0.001	1.000	594347	4.56	Target=3.74	99.7	22702	
398.70 > 98.90	6.871	6.872	-0.001	1.000	161956		3.67(1.87-5.61)	99.7	6631	
* 31 18O2 PFHxS										
403.00 > 83.90	6.871	6.872	-0.001		561049	2.37			25627	
D 33 13C3 PFHxS										
402.10 > 79.90	6.871	6.872	-0.001	1.000	579920	2.41	Target=4.22	102	26623	
402.10 > 98.80	6.871	6.872	-0.001	1.000	154779		3.75(2.11-6.33)	102	7058	
36 PFNA										
463.00 > 419.00	7.240	7.241	-0.001	1.000	4916240	5.00	Target=5.99	99.9	21018	
463.00 > 219.00	7.240	7.241	-0.001	1.000	816594		6.02(3.00-8.99)	99.9	16917	
* 35 13C5 PFNA										
468.00 > 423.00	7.240	7.241	-0.001		1208053	1.25			18824	
D 34 13C9 PFNA										
472.10 > 427.00	7.240	7.241	-0.001	1.000	1222840	1.34		107	21780	
37 PFHpS										
449.00 > 79.90	7.456	7.457	-0.001	0.934	1056152	4.52	Target=5.05	94.8	29540	
449.00 > 98.80	7.456	7.457	-0.001	0.934	216355		4.88(2.53-7.58)	94.8	7597	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.506	7.506	0.0	1.092	419998	4.97	Target=5.22	104	11794	
529.10 > 509.00	7.506	7.506	0.0	1.092	84186		4.99(2.61-7.83)	104	3015	
39 8:2FTS										
527.10 > 507.00	7.506	7.506	0.0	1.000	2365783	18.6	Target=1.64	96.8	83470	
527.10 > 80.80	7.506	7.506	0.0	1.000	1407282		1.68(0.82-2.46)	96.8	22037	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.725	7.726	-0.001	0.967	582847	5.09		102	19615	
42 NMeFOSAA										
570.10 > 419.00	7.725	7.726	-0.001	1.000	579679	4.97	Target=1.12	99.2	16705	
570.10 > 483.00	7.725	7.726	-0.001	1.000	510613		1.14(0.56-1.68)	99.2	17599	
* 44 13C2 PFDA										
515.10 > 470.10	7.761	7.761	-0.001		1094086	1.25			21022	
D 40 13C6 PFDA										
519.10 > 474.10	7.761	7.761	-0.001	1.000	1172566	1.35		108	19568	
43 PFDA										
512.90 > 469.00	7.761	7.761	-0.001	1.000	3911620	5.07	Target=3.52	101	35156	
512.90 > 219.00	7.761	7.761	-0.001	1.000	1110695		3.52(1.76-5.28)	101	24825	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.934	7.934	0.0	0.993	690990	5.22		104	11613	
45 NEtFOSAA										
584.20 > 419.10	7.951	7.951	0.0	1.002	493094	4.91	Target=1.52	98.0	14224	
584.20 > 526.00	7.934	7.951	-0.017	1.000	328419		1.50(0.76-2.27)	98.0	11469	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 49 13C8 PFOS										
507.10 > 79.90	7.986	7.986	0.0	1.000	312365	2.56	Target=3.01	107	58.5	
507.10 > 98.90	7.986	7.986	0.0	1.000	105939		2.95(1.50-4.51)	107	2839	
* 47 13C4 PFOS										
502.80 > 79.90	7.986	7.986	0.0		815102	2.40	Target=3.82		18303	
502.80 > 98.90	7.986	7.986	0.0		223976		3.64(1.91-5.72)		7569	
48 PFOS										
498.90 > 79.90	7.986	8.004	-0.018	1.000	1832745	4.30	Target=4.59	92.4	26356	
498.90 > 98.80	7.986	8.004	-0.018	1.000	414569		4.42(2.29-6.88)	92.4	16196	
D 53 13C7 PFUnA										
570.00 > 525.10	8.248	8.249	-0.001	1.063	1298445	1.34		107	21068	
52 PFUnA										
563.10 > 519.00	8.248	8.267	-0.019	1.000	4616480	5.02	Target=5.53	100	66234	
563.10 > 269.10	8.248	8.267	-0.019	1.000	827086		5.58(2.77-8.30)	100	17837	
54 9ClFOS										
530.80 > 351.00	8.390	8.390	0.0	1.481	4611237	12.9	Target=2.30	103	46814	
532.80 > 353.00	8.390	8.390	0.0	1.481	2019442		2.28(1.15-3.46)	103	44245	
55 PFNS										
548.80 > 79.90	8.512	8.512	0.0	1.066	788377	4.53	Target=4.01	94.0	17686	
548.80 > 98.80	8.512	8.512	0.0	1.066	204458		3.86(2.01-6.02)	94.0	6910	
51 PFOSA										M
498.10 > 77.90	8.722	8.723	-0.001	1.002	2911559	5.01	Target=44.22	100	14514	
498.10 > 478.00	8.722	8.723	-0.001	1.002	65023		44.78(22.11-66.32)	100	2663	M
D 50 13C8 FOSA										
506.10 > 77.80	8.705	8.723	-0.018	1.090	1458243	2.46		98.6	13458	
D 56 13C2 PFDoA										
615.10 > 570.00	8.756	8.757	-0.001	1.128	1295732	1.35		108	16974	
57 PFDoA										
613.10 > 569.00	8.756	8.757	-0.001	1.000	5171394	4.96	Target=7.62	99.1	37706	
613.10 > 319.00	8.756	8.757	-0.001	1.000	673269		7.68(3.81-11.43)	99.1	17616	
58 PFDS										
599.00 > 79.90	9.011	9.028	-0.017	1.128	1781345	4.43	Target=4.76	91.8	20517	
599.00 > 98.80	9.011	9.028	-0.017	1.128	391053		4.56(2.38-7.13)	91.8	13591	
63 PFTrDA										
663.00 > 619.00	9.254	9.254	0.0	0.950	2995078	4.60	Target=5.15	91.9	29330	
663.00 > 168.90	9.254	9.254	0.0	0.950	606711		4.94(2.57-7.72)	91.9	11891	
66 11ClFOS										
630.90 > 450.90	9.412	9.413	-0.001	1.662	7100258	12.8	Target=3.33	102	101795	
632.90 > 452.90	9.412	9.413	-0.001	1.662	2112692		3.36(1.67-5.00)	102	50508	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.738	9.738	0.0	1.255	591696	1.30		104	11360	
70 PFTeDA										
713.10 > 669.00	9.738	9.738	0.0	1.000	2854761	5.19	Target=7.24	104	20153	
713.10 > 168.90	9.738	9.738	0.0	1.000	388878		7.34(3.62-10.85)	104	8671	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.892	9.910	-0.018	1.239	10957610	25.2		101	80226	
60 N-MeFOSE-M										M
616.10 > 58.90	9.930	9.930	0.0	1.004	11955154	24.9		99.6	5431	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
71 PFDoS										
699.10 > 79.90	10.007	10.007	0.0	1.253	1455588	4.52	Target=4.39	93.1	17825	
699.10 > 98.80	10.007	10.007	0.0	1.253	337117		4.32(2.20-6.59)	93.1	6906	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.101	10.102	-0.001	1.265	336308	2.51		100	8175	
61 NMeFOSA										
511.90 > 219.00	10.101	10.102	-0.001	1.000	613913	4.77	Target=0.99	95.3	10448	
511.90 > 169.00	10.101	10.102	-0.001	1.000	615472		1.00(0.49-1.48)	95.3	8784	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.291	10.291	0.0	1.289	13140094	24.2		96.9	175737	
65 N-EtFOSE-M										M
630.00 > 58.90	10.310	10.310	0.0	1.002	27100955	49.4		98.7	5287	M
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.481	10.481	0.0	1.312	347487	2.52		101	4360	
68 N-EtFOSA-M										
526.00 > 219.00	10.481	10.500	-0.019	1.000	720845	4.84	Target=0.99	96.7	6366	
526.00 > 169.00	10.481	10.500	-0.019	1.000	712418		1.01(0.50-1.49)	96.7	6380	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

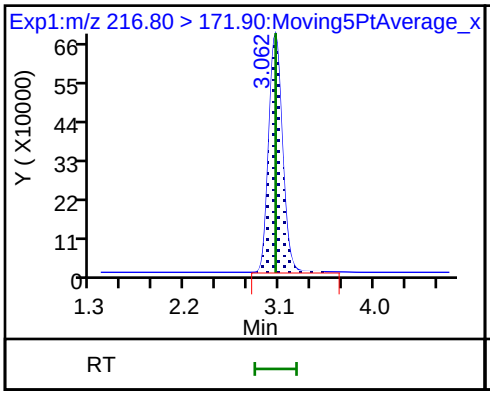
LC1633EPA_LL7_00010 Amount Added: 1.00 Units: mL

Report Date: 21-Nov-2023 11:15:06 Chrom Revision: 2.3 15-Nov-2023 20:54:34

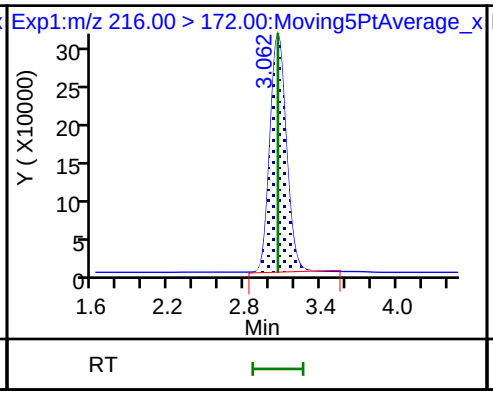
Eurofins Denver

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Lims ID: IC L7
Client ID:
Operator ID: DENLCMS ALS Bottle#: 7 Worklist Smp#: 6
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5

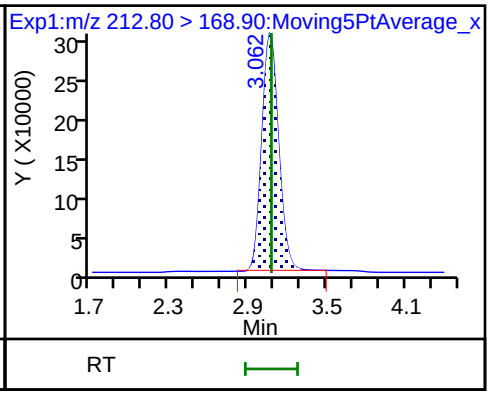
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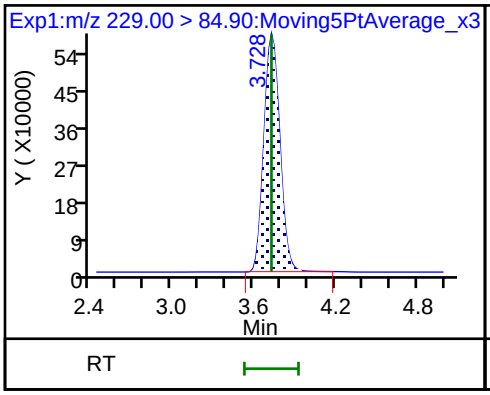
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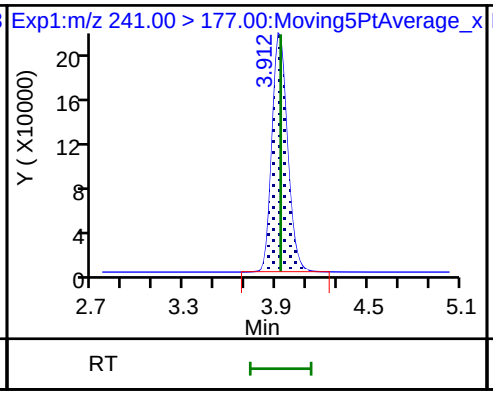
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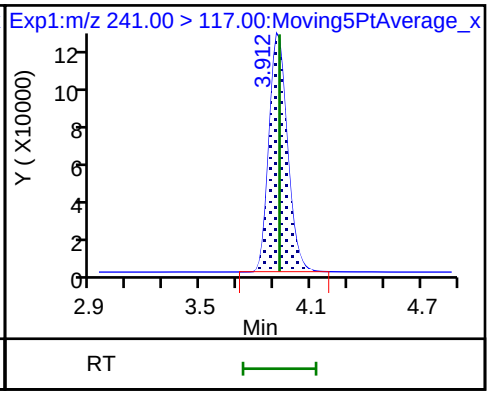
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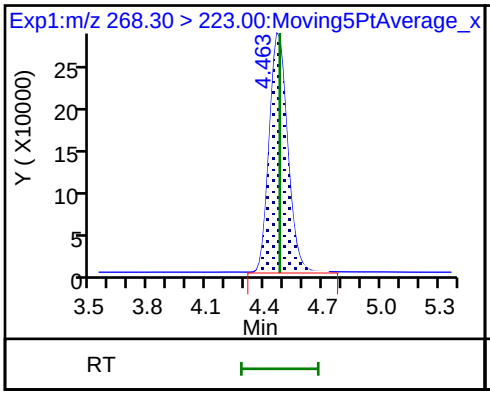
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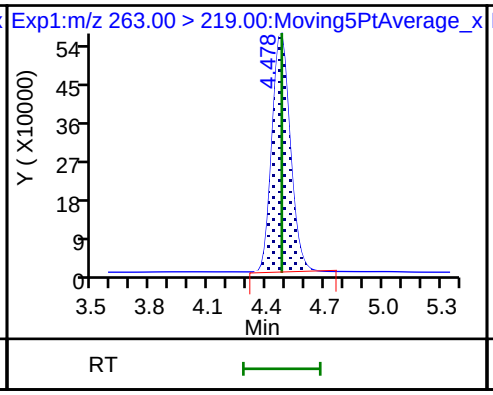
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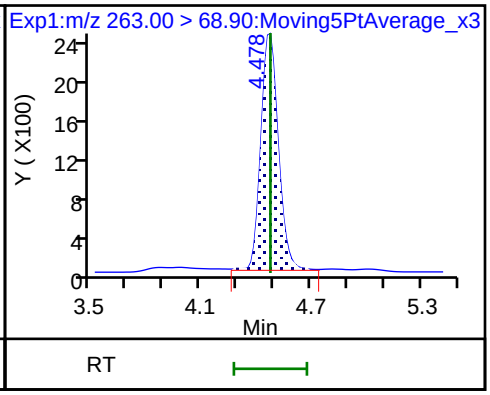
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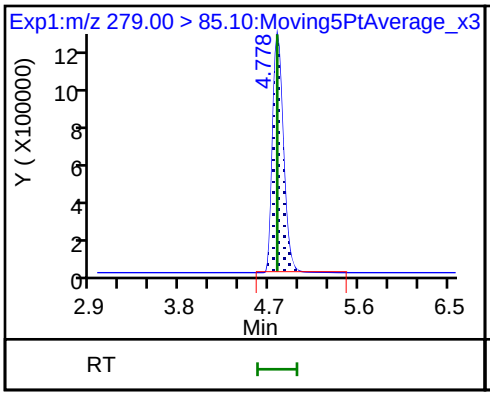
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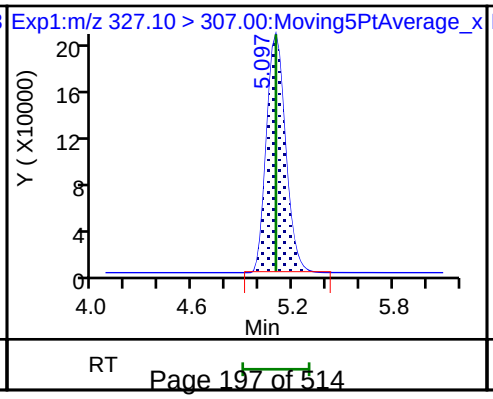
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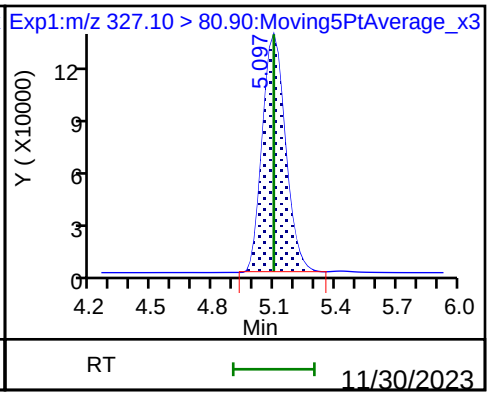
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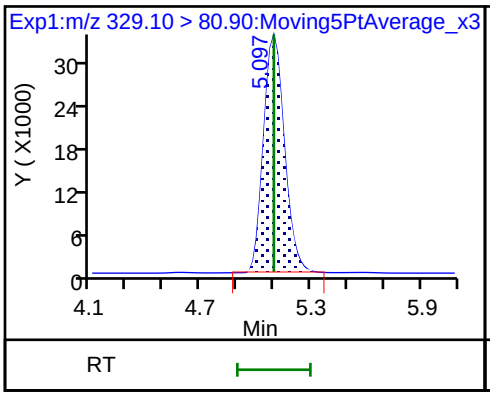
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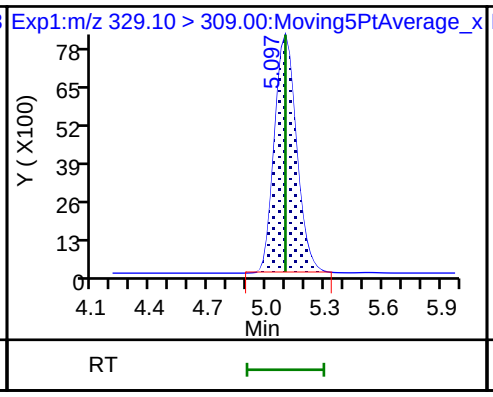
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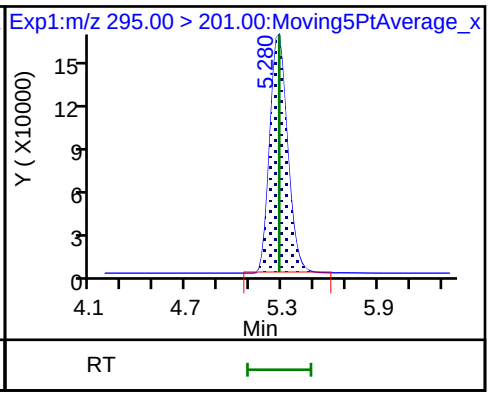
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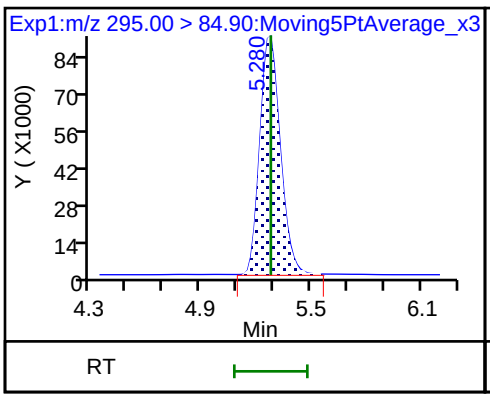
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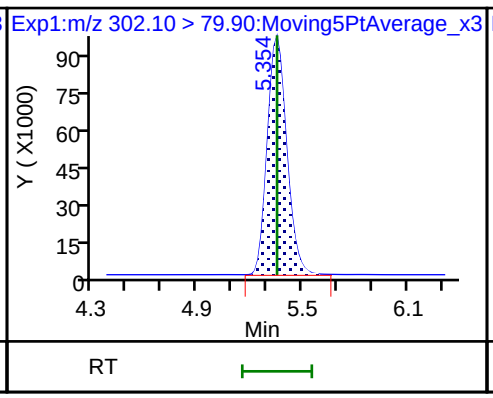
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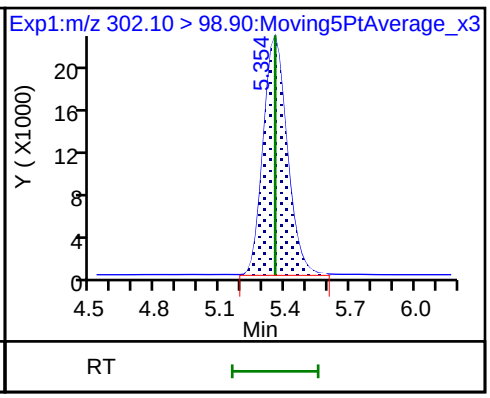
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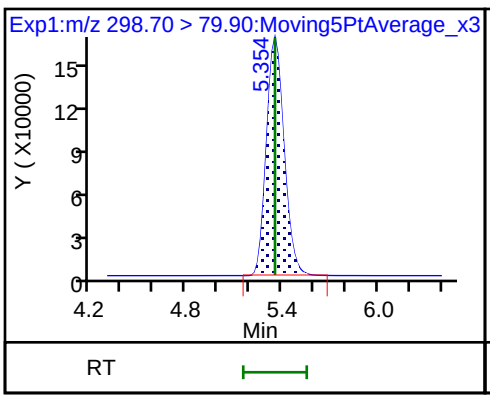
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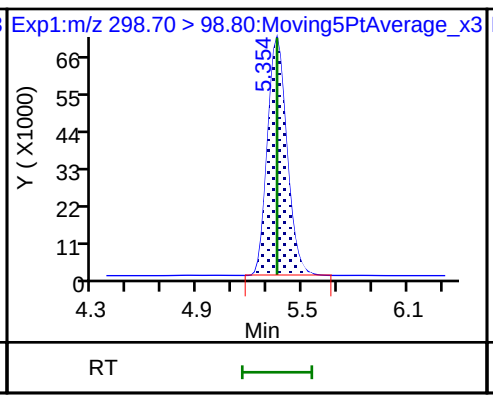
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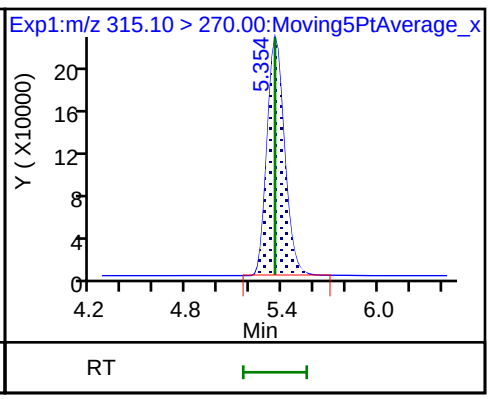
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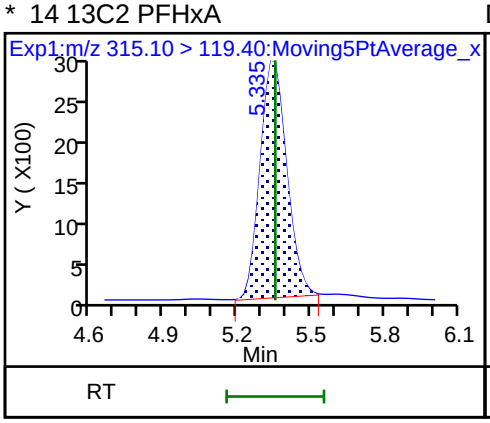
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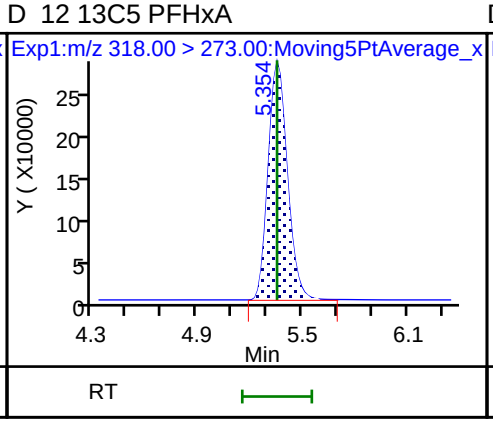
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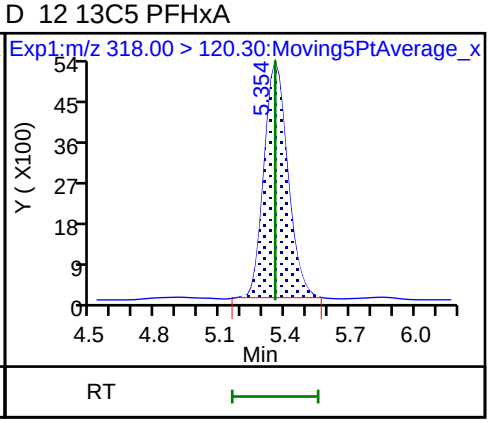
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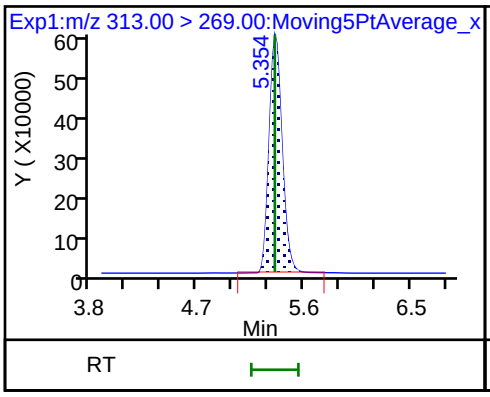
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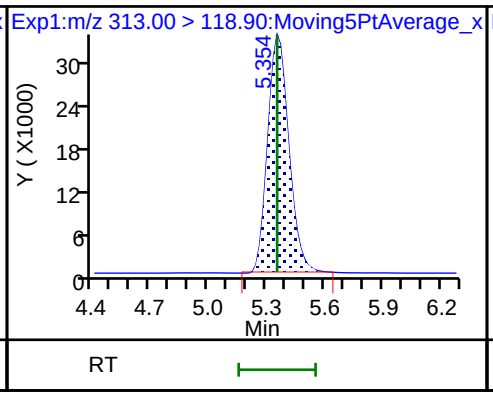
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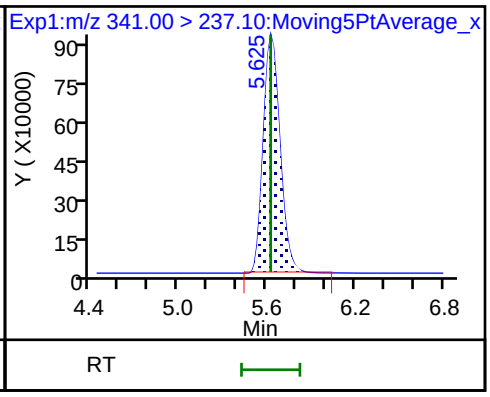
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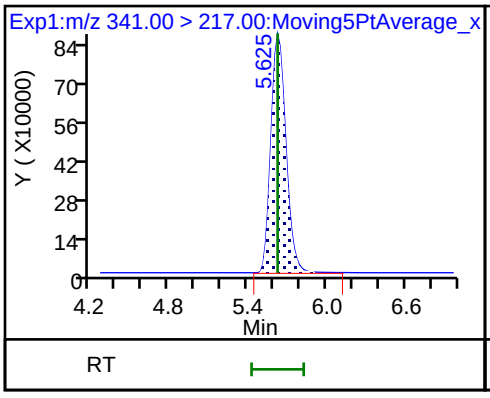
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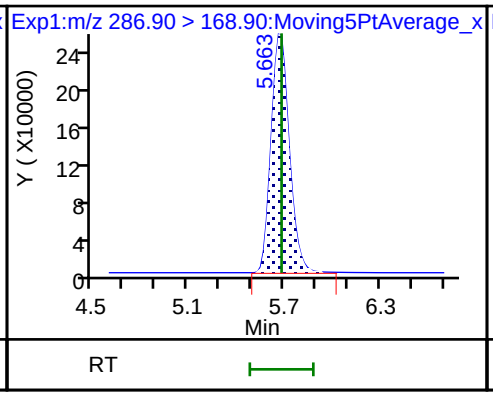
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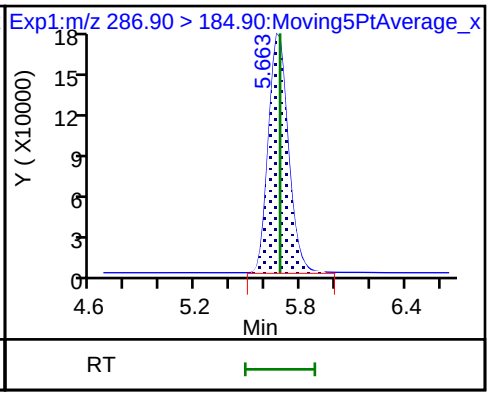
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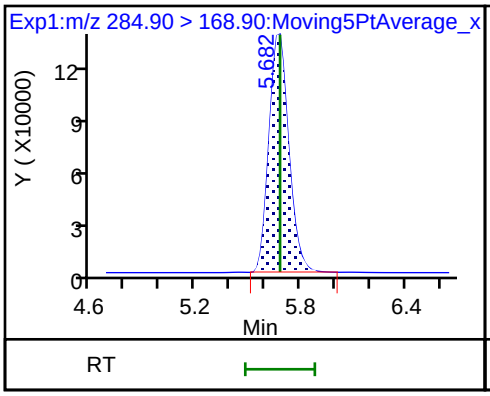
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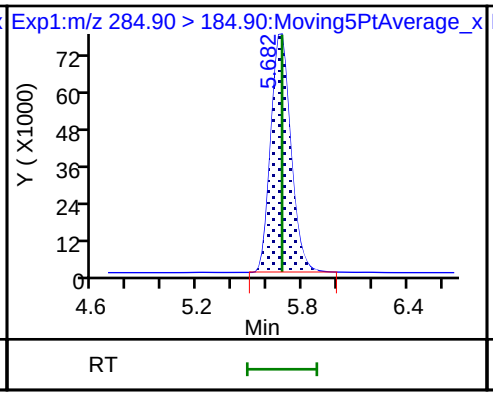
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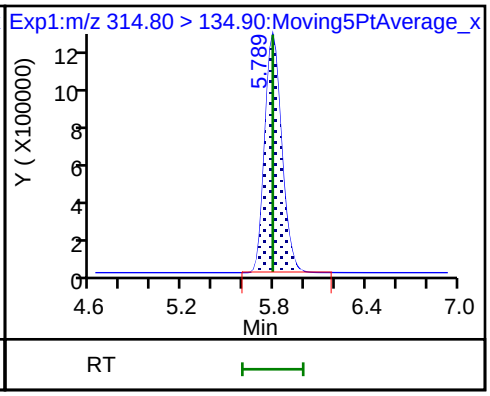
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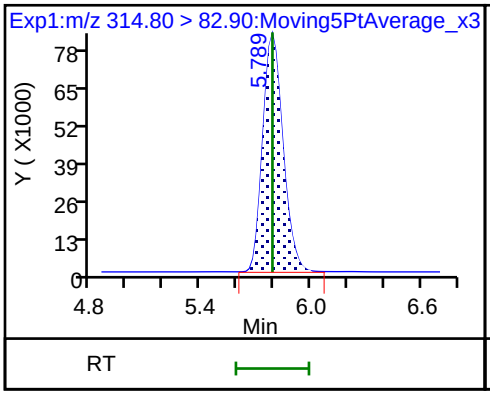
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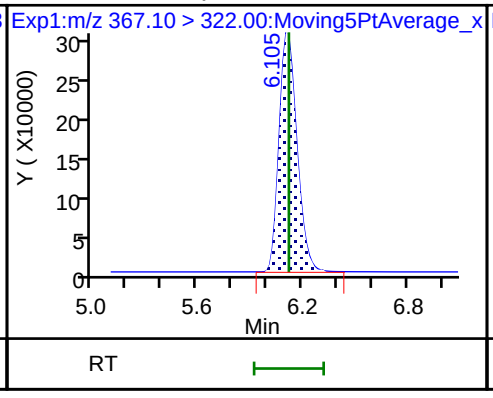
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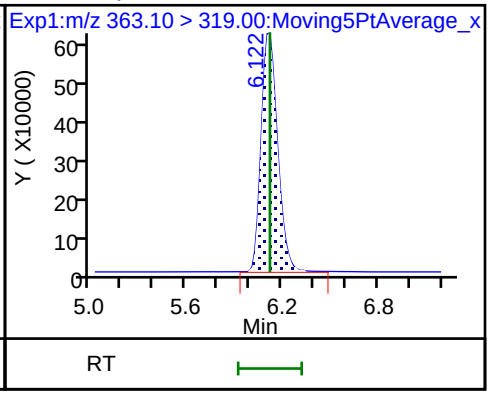
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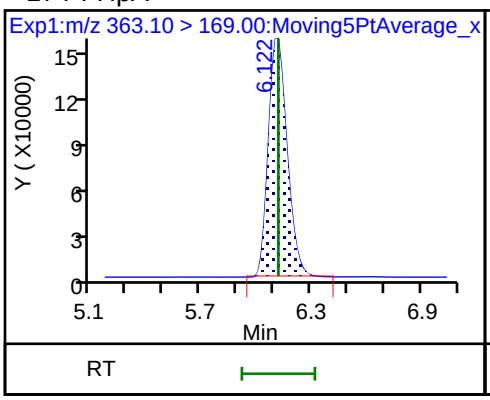
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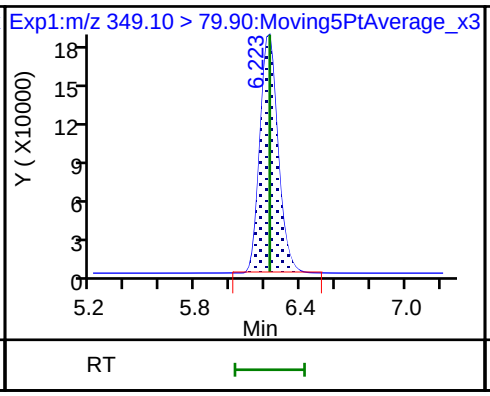
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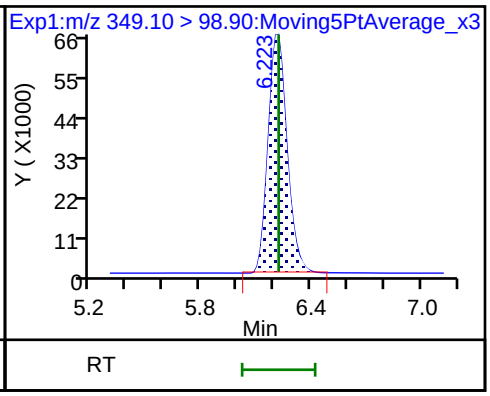
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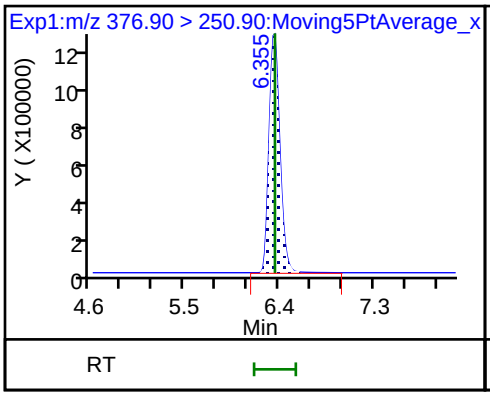
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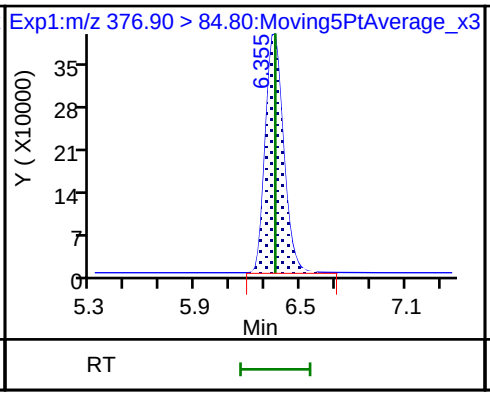
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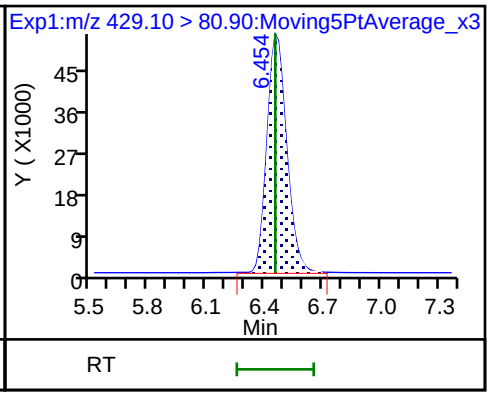
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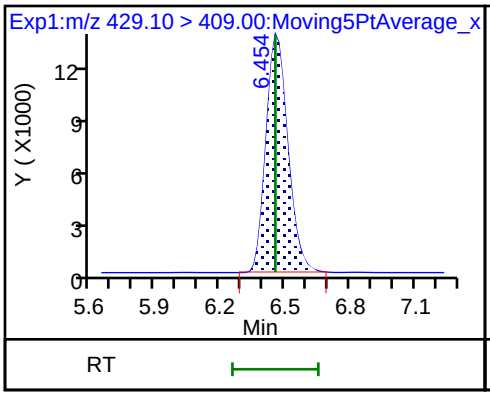
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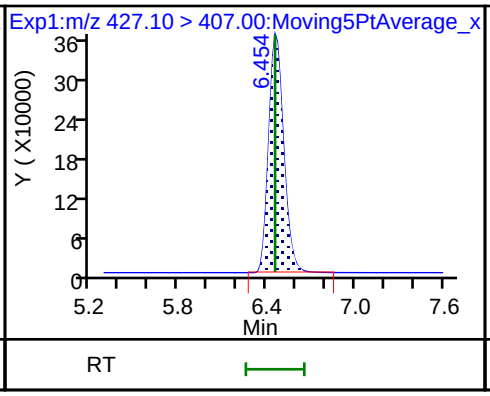
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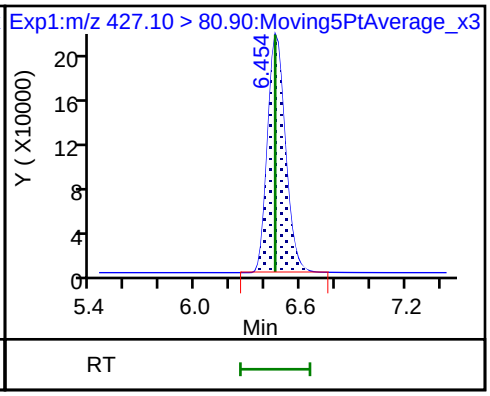
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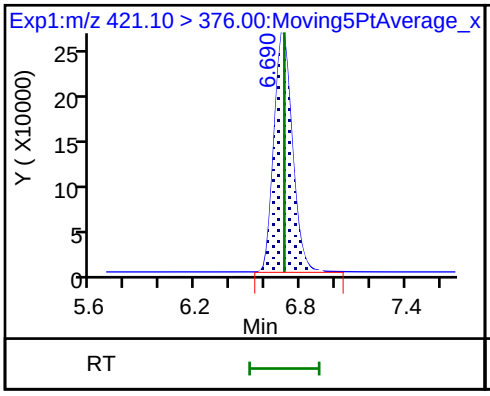
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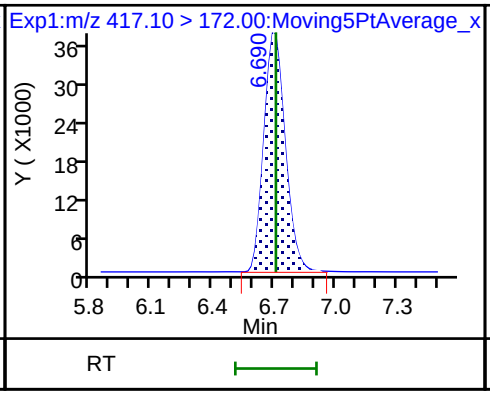
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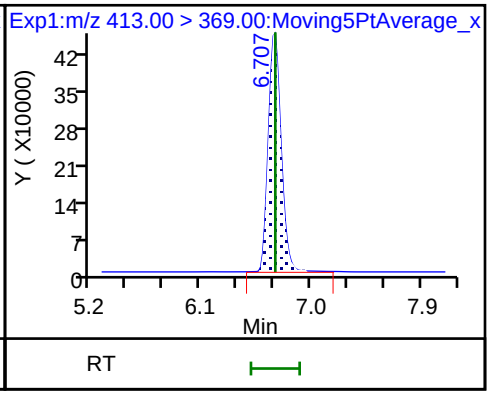
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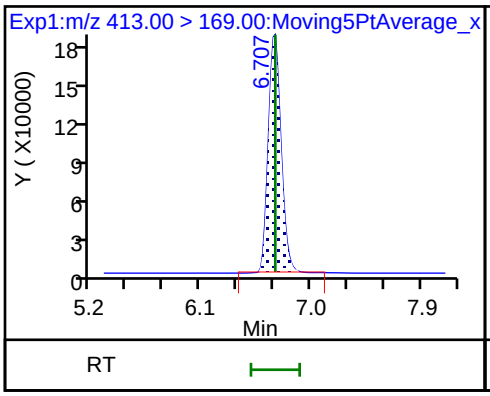
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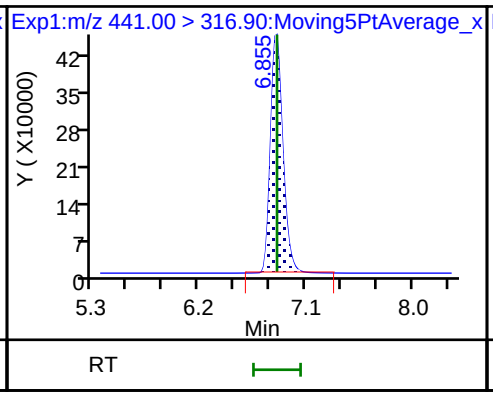
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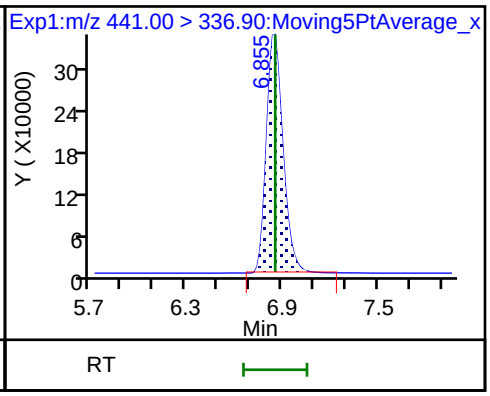
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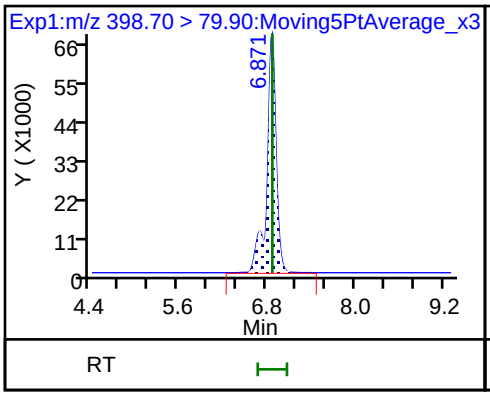
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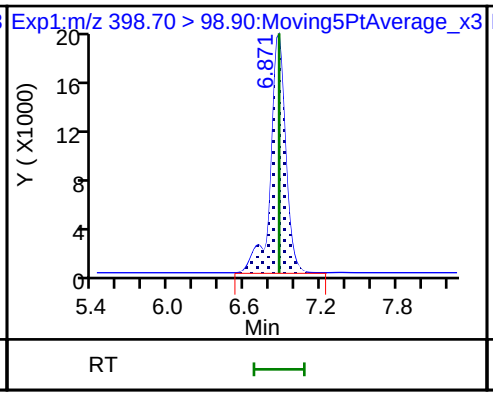
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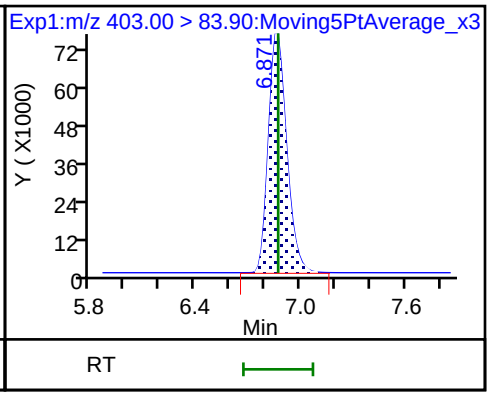
32 PFHxS



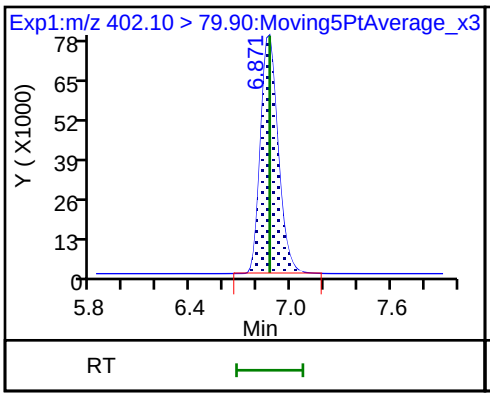
32 PFHxS



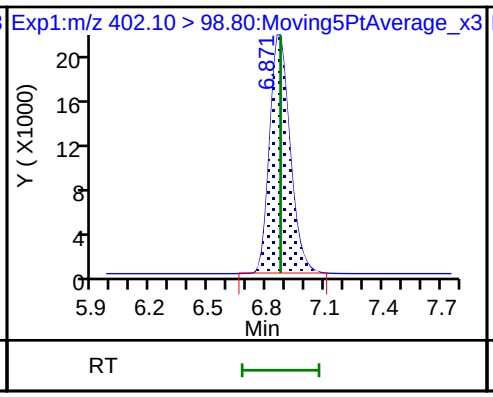
* 31 18O2 PFHxS



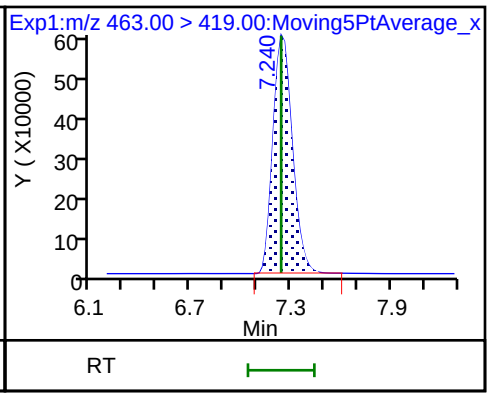
D 33 13C3 PFHxS



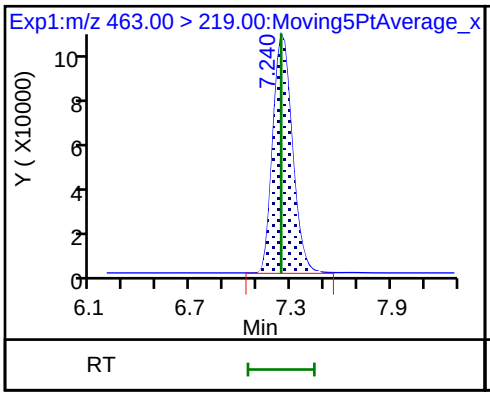
D 33 13C3 PFHxS



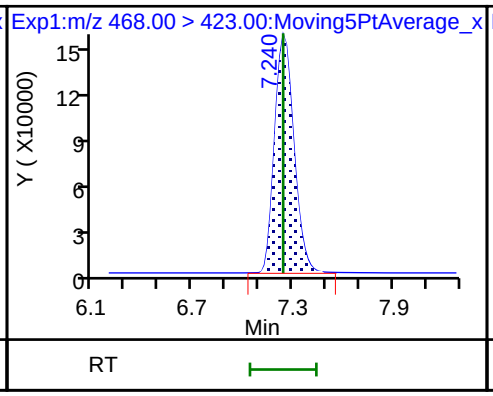
36 PFNA



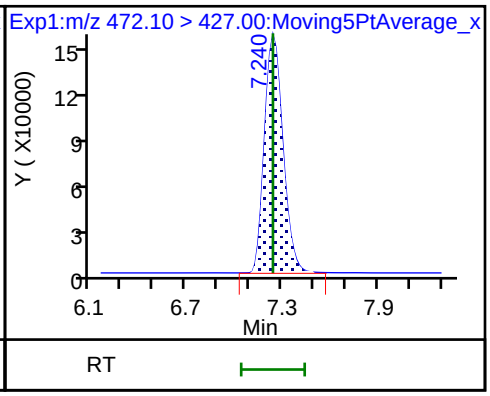
36 PFNA



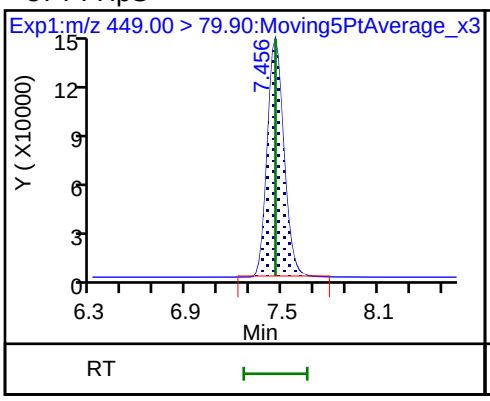
* 35 13C5 PFNA



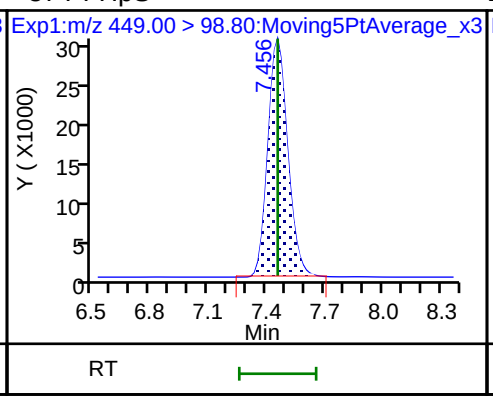
D 34 13C9 PFNA



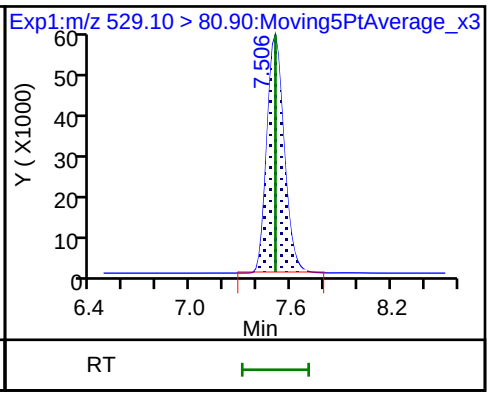
37 PFHpS



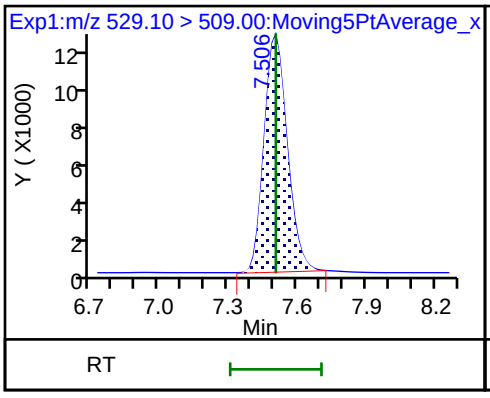
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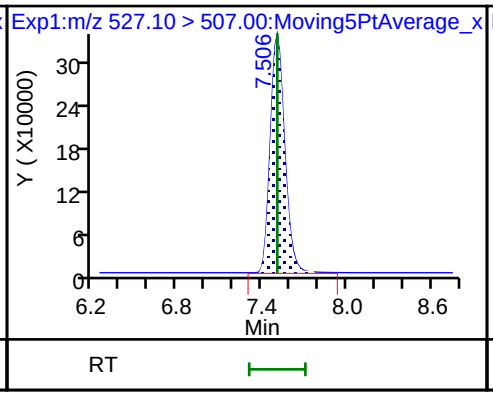
D 38 13C2-8:2FTS



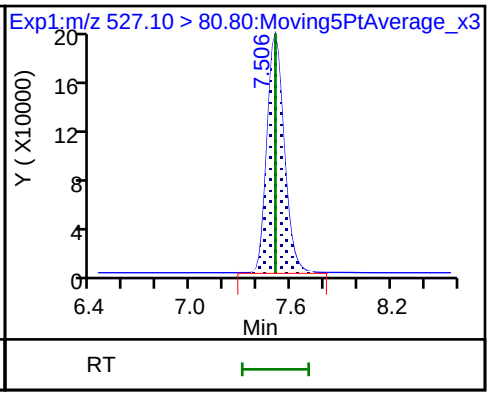
D 38 13C2-8:2FTS



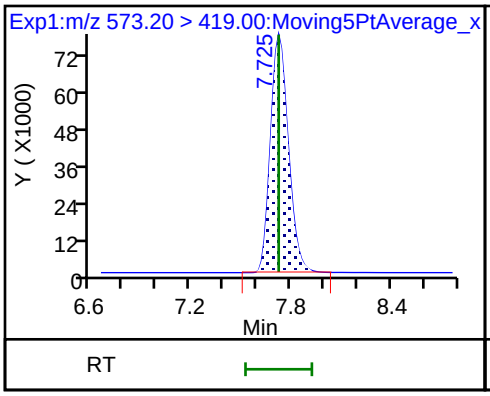
39 8:2FTS



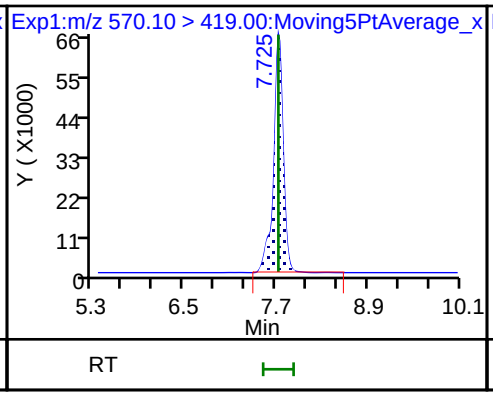
39 8:2FTS



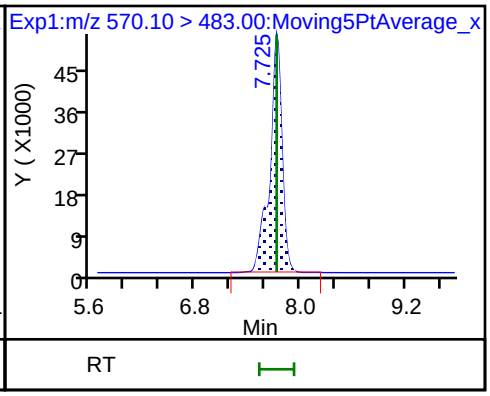
D 41 d3-NMeFOSAA



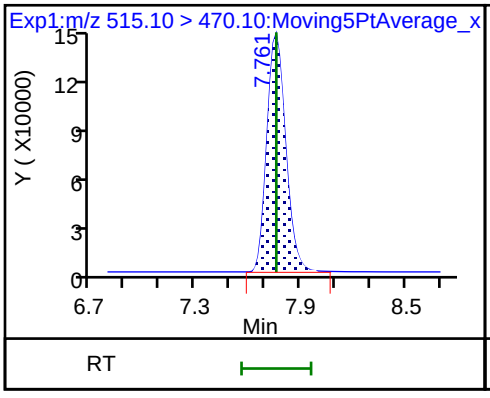
42 NMeFOSAA



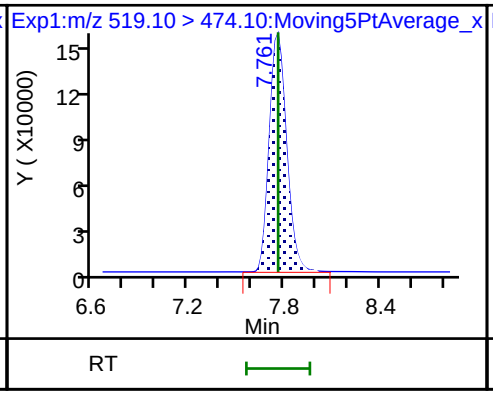
42 NMeFOSAA



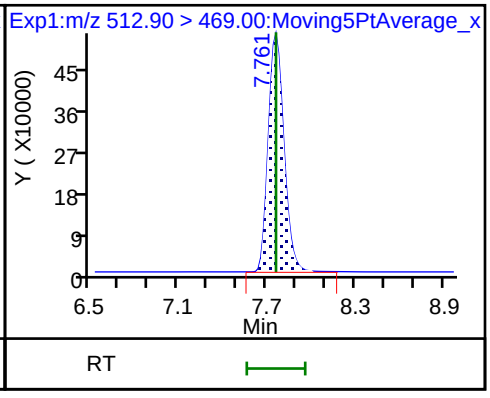
* 44 13C2 PFDA



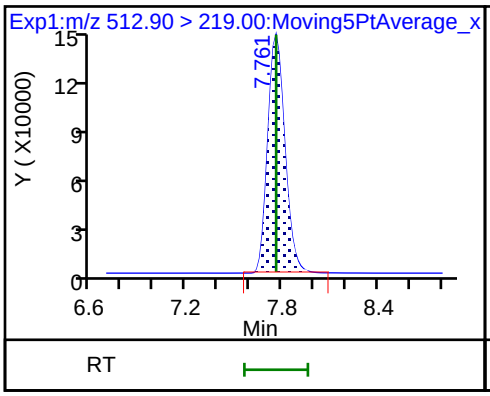
D 40 13C6 PFDA



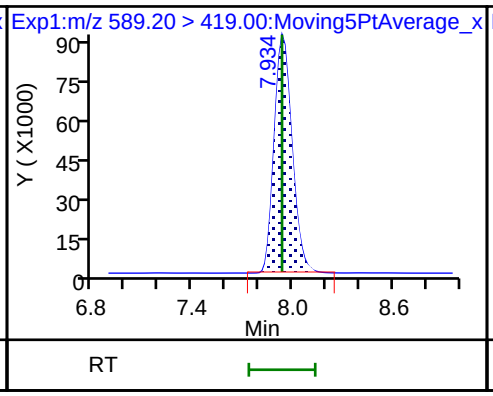
43 PFDA



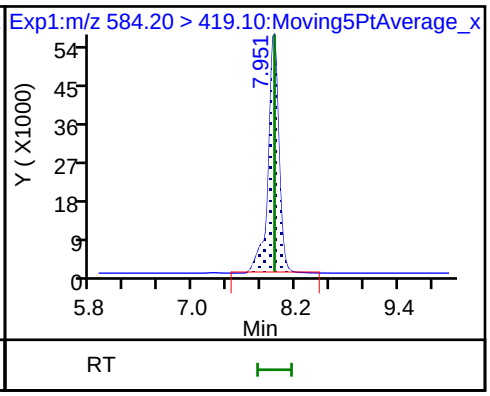
43 PFDA



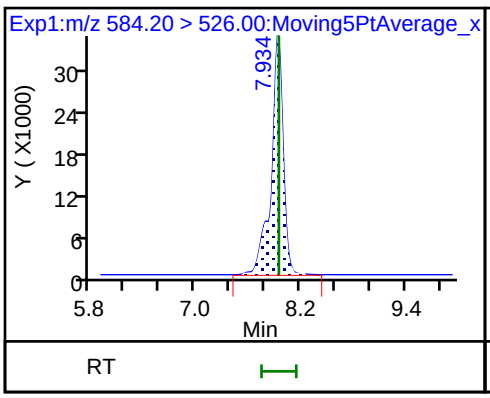
D 46 d5-NEtFOSAA



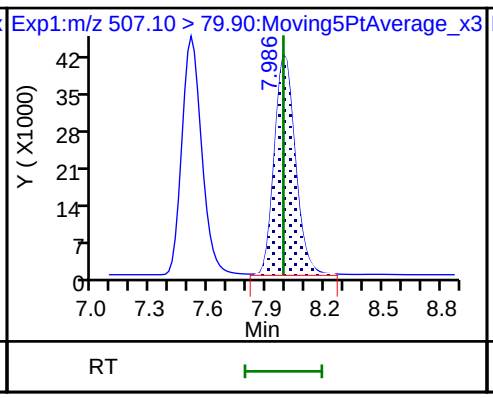
45 NEtFOSAA



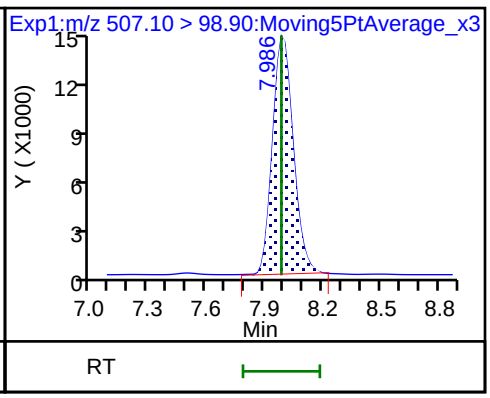
45 NEtFOSAA



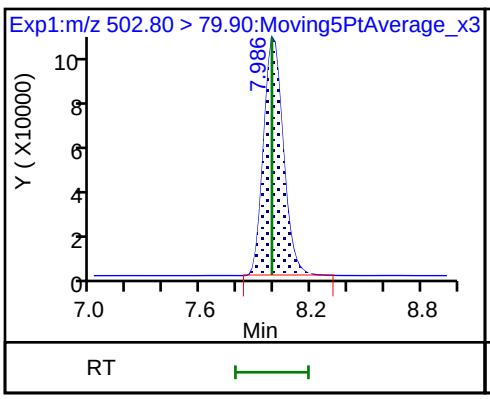
D 49 13C8 PFOS



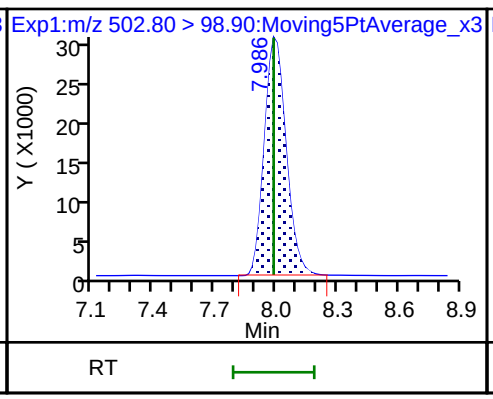
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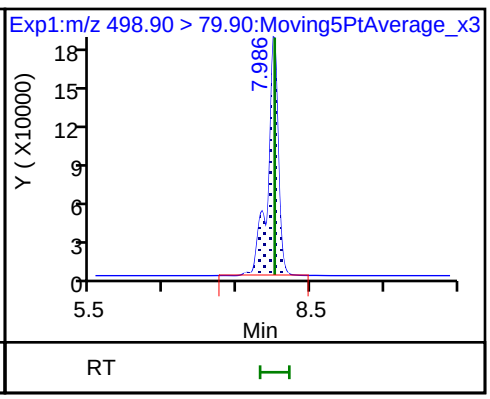
* 47 13C4 PFOS



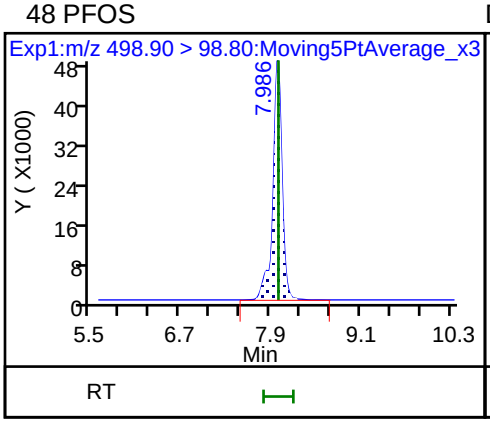
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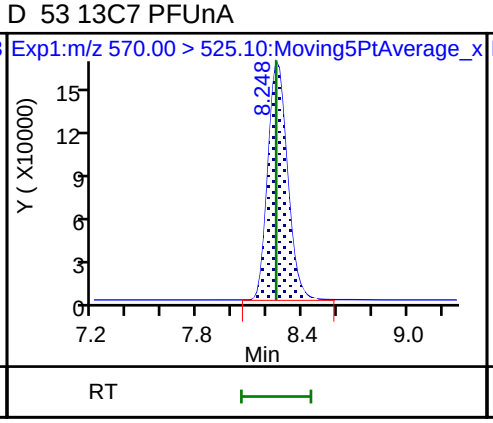
48 PFOS



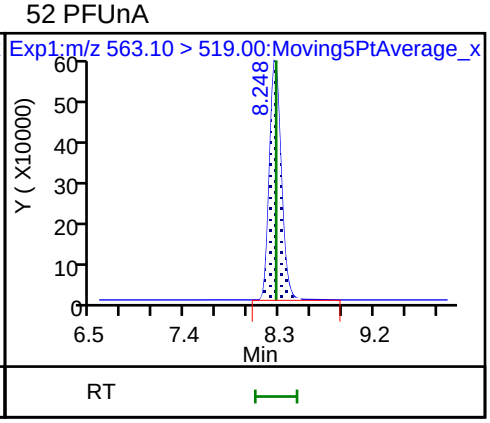
48 PFOS



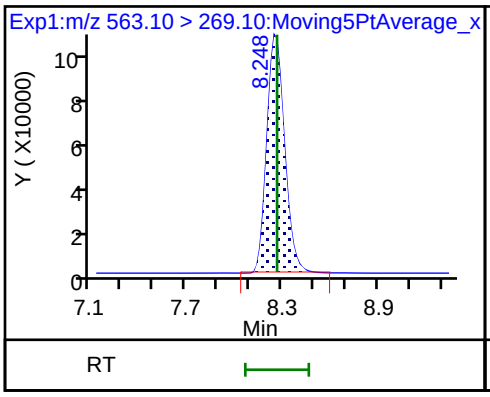
D 53 13C7 PFUnA



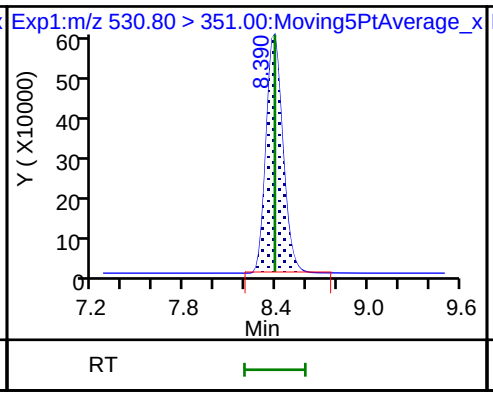
52 PFUnA



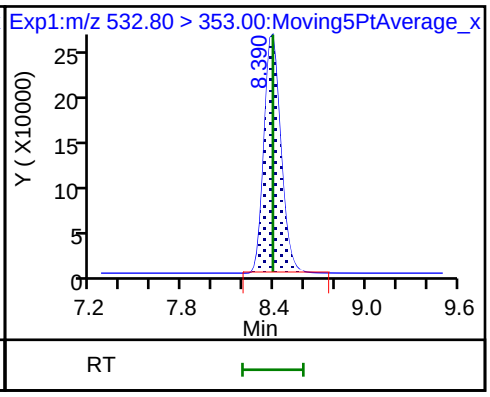
52 PFUnA



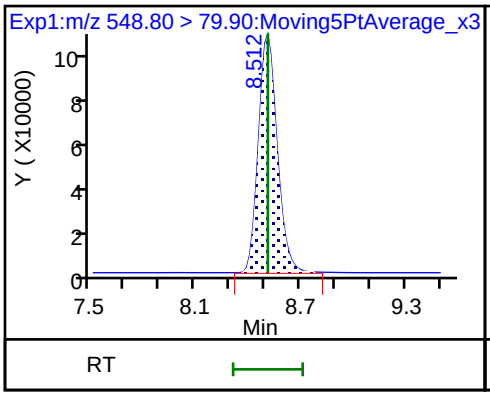
54 9ClFOS



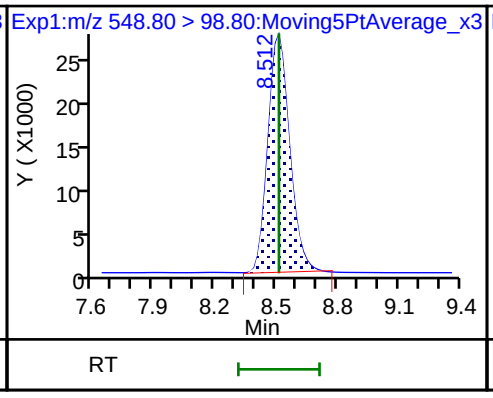
54 9ClFOS



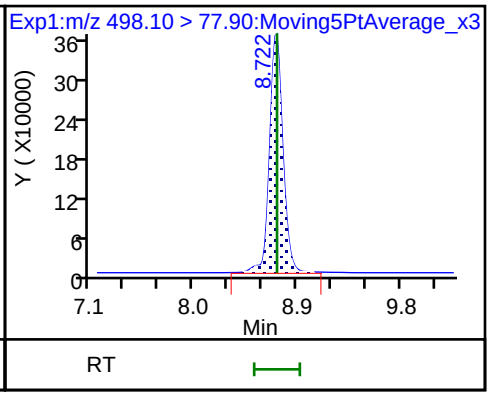
55 PFNS



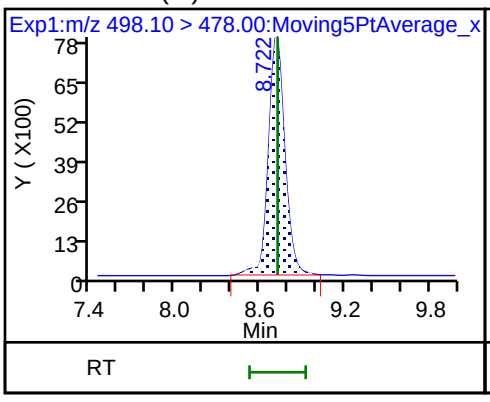
55 PFNS



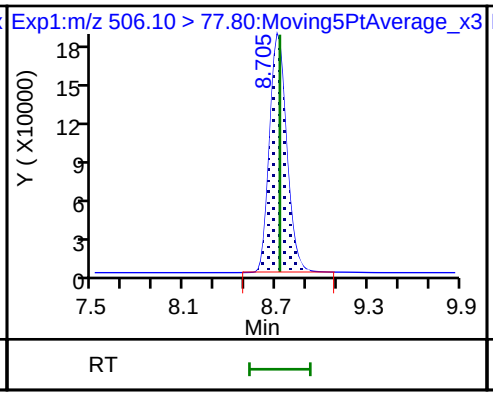
51 PFOSA



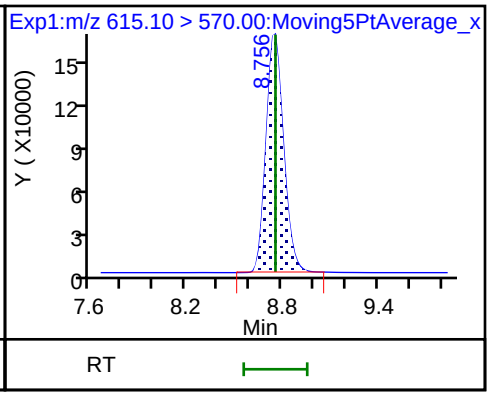
51 PFOSA (M)



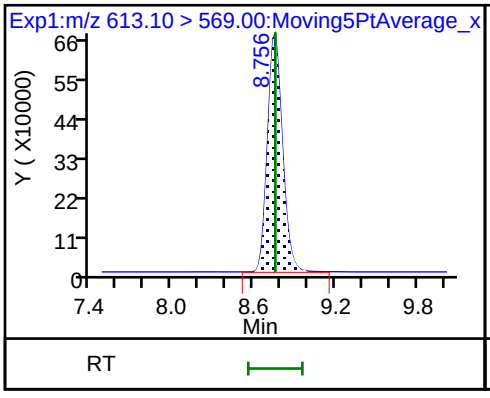
D 50 13C8 FOSA



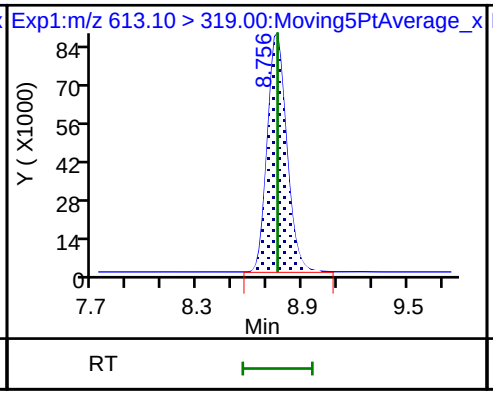
D 56 13C2 PFDoA



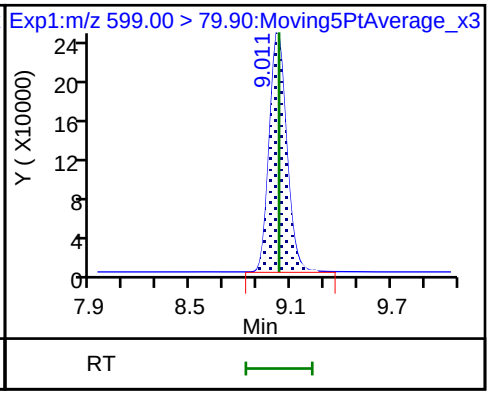
57 PFDoA



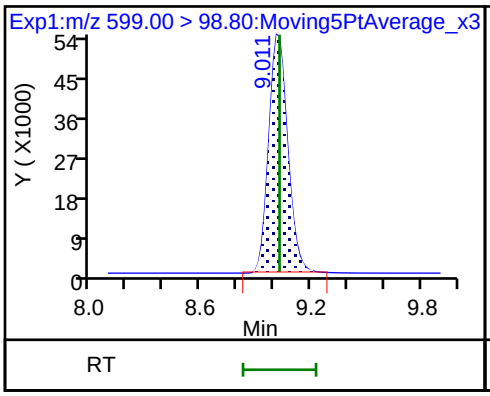
57 PFDoA



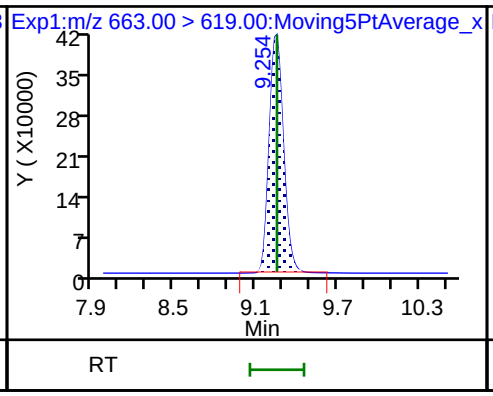
58 PFDS



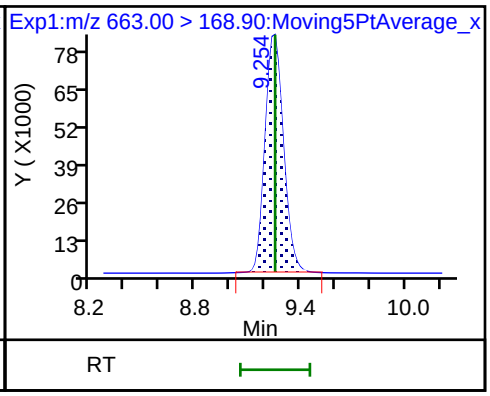
58 PFDS



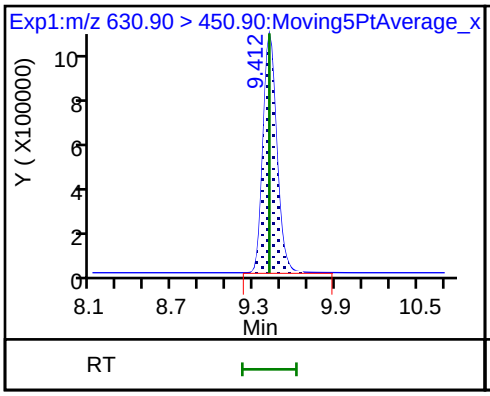
63 PFTrDA



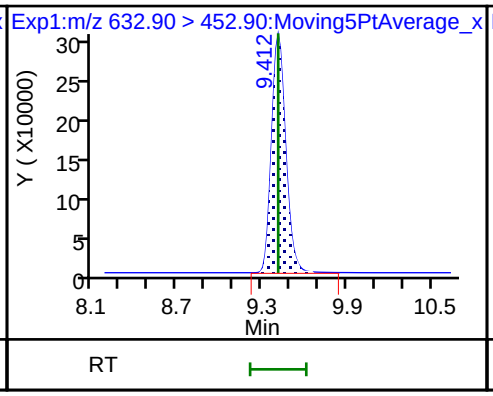
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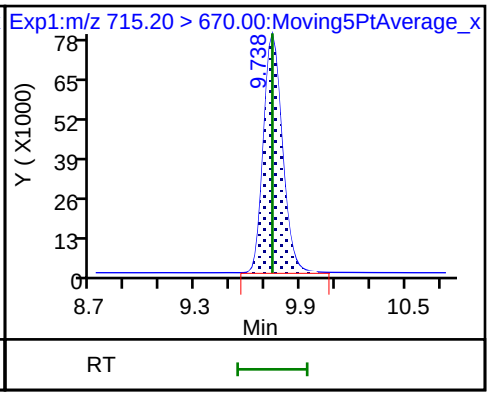
66 11ClFOS



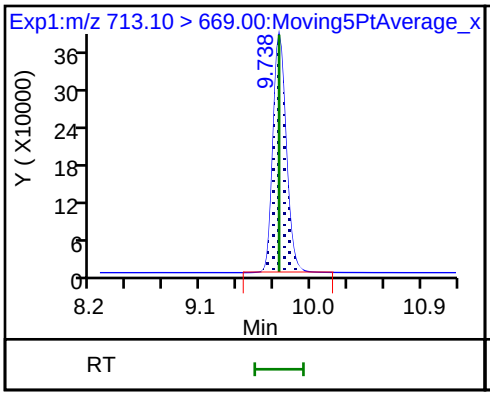
66 11ClFOS



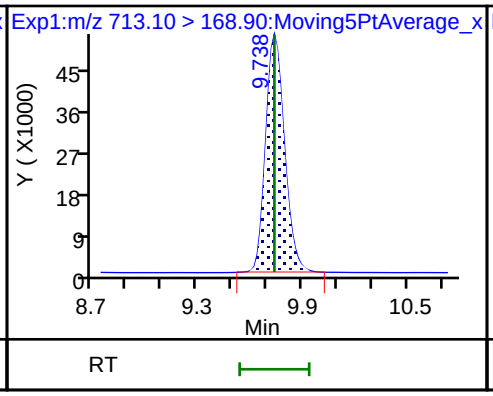
D 69 13C2 PFTeDA



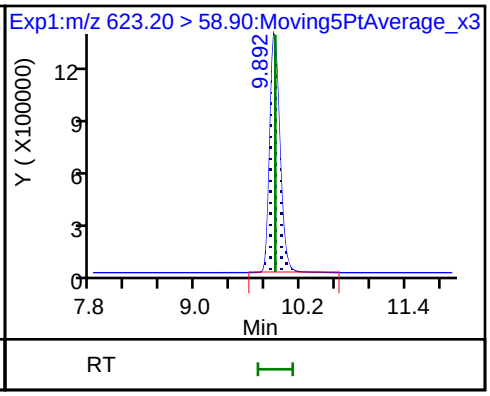
70 PFTeDA



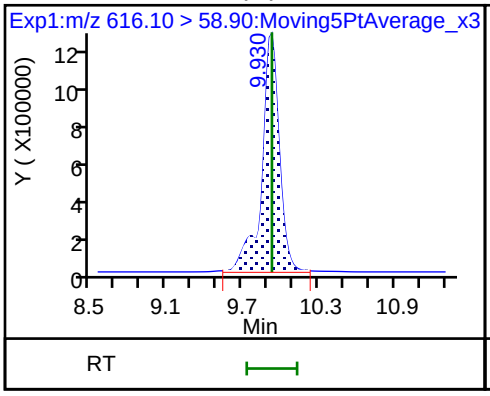
70 PFTeDA



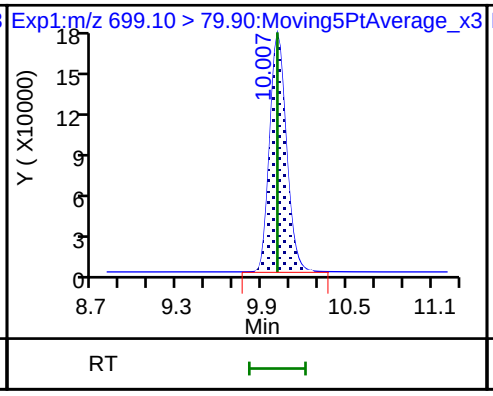
D 59 d7-N-Me-FOSE



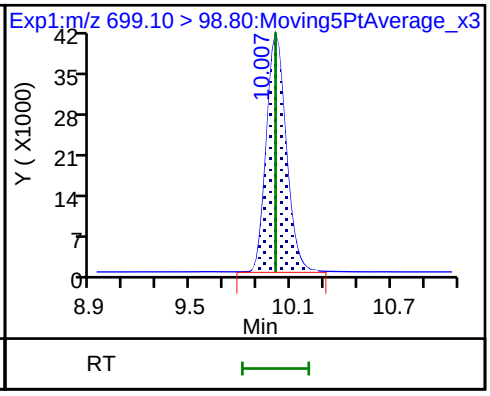
60 N-MeFOSE-M (M)



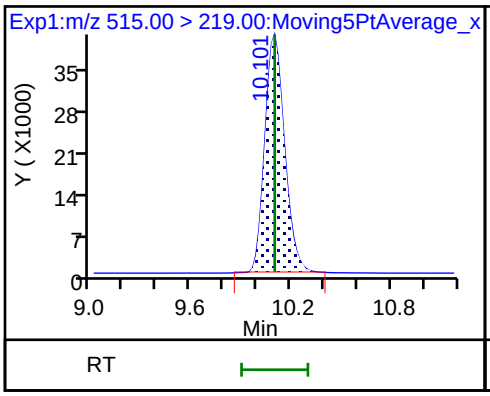
71 PFDoS



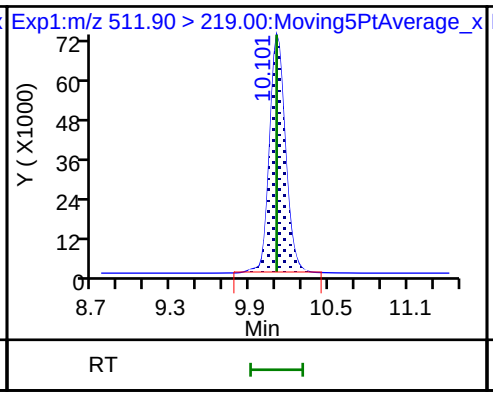
71 PFDoS



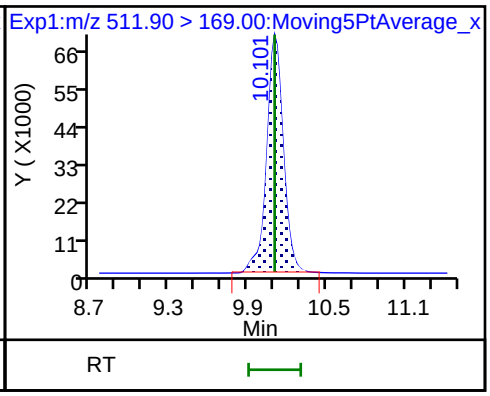
D 62 d3-NMePFOSA



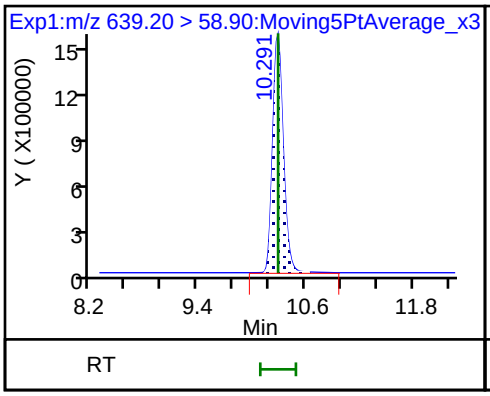
61 NMeFOSA



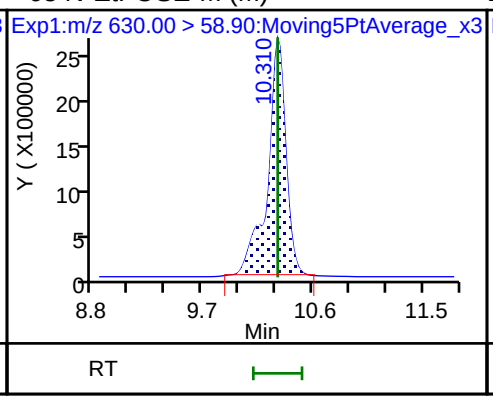
61 NMeFOSA



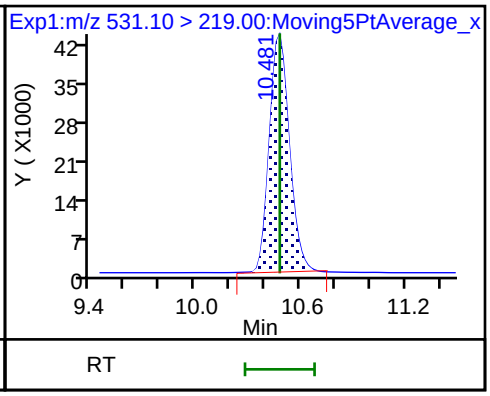
D 64 d9-N-EtFOSE



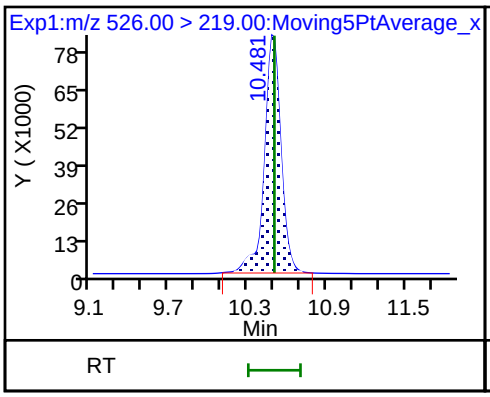
65 N-EtFOSE-M (M)



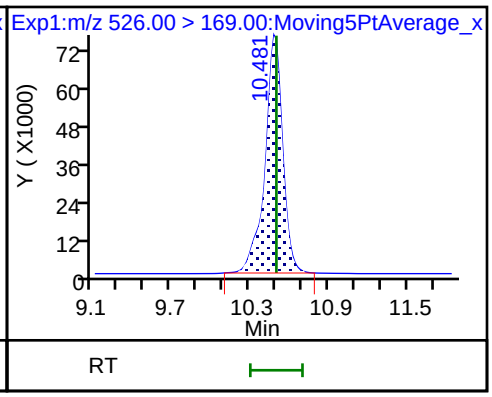
D 67 d5-NEtPFOSA



68 N-EtFOSA-M



68 N-EtFOSA-M



Eurofins Denver

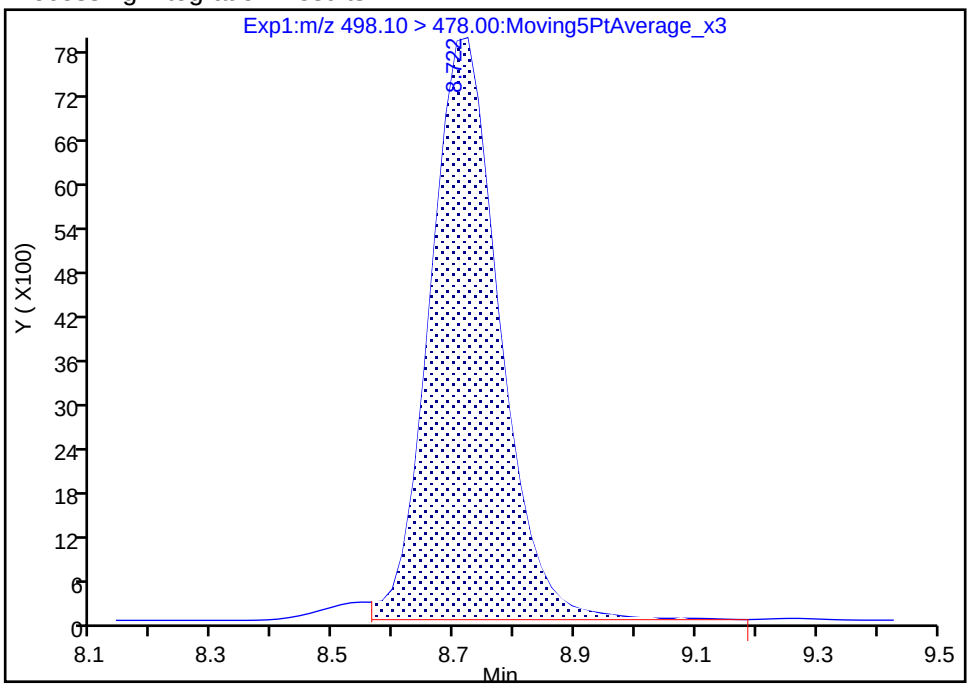
Data File:	\\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.005.d				
Injection Date:	20-Nov-2023 18:37:21	Instrument ID:	LC_LCMS11		
Lims ID:	IC L7				
Client ID:					
Operator ID:	DENLCMS	ALS Bottle#:	7	Worklist Smp#:	6
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

51 PFOSA, CAS: 754-91-6

Signal: 2

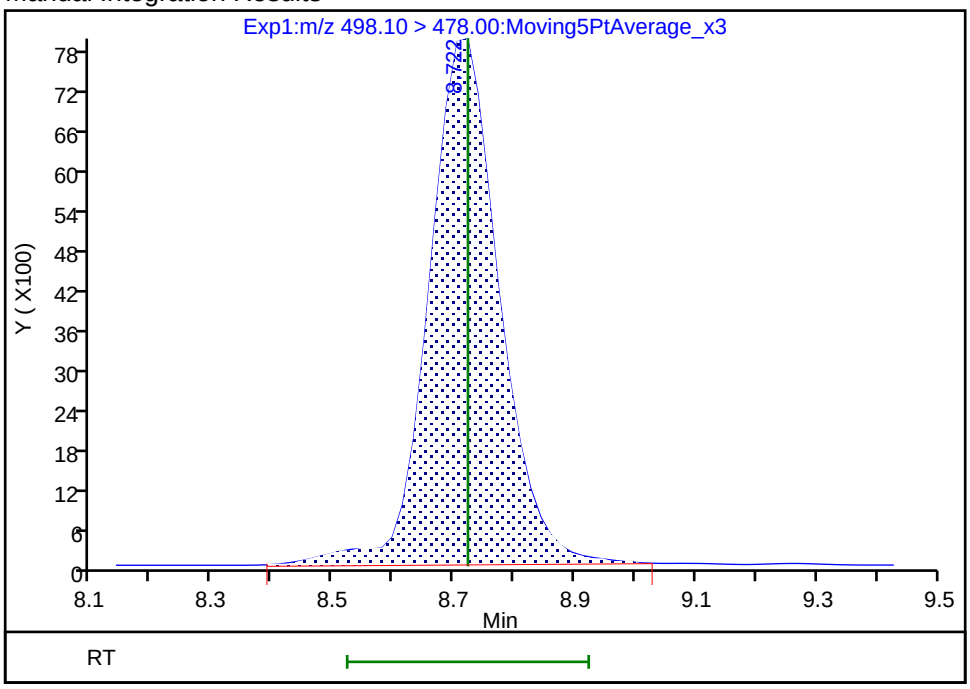
Processing Integration Results

RT: 8.72
Area: 64150
Amount: 5.014711
Amount Units: ng/ml



Manual Integration Results

RT: 8.72
Area: 65023
Amount: 5.014711
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 11:00:57 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

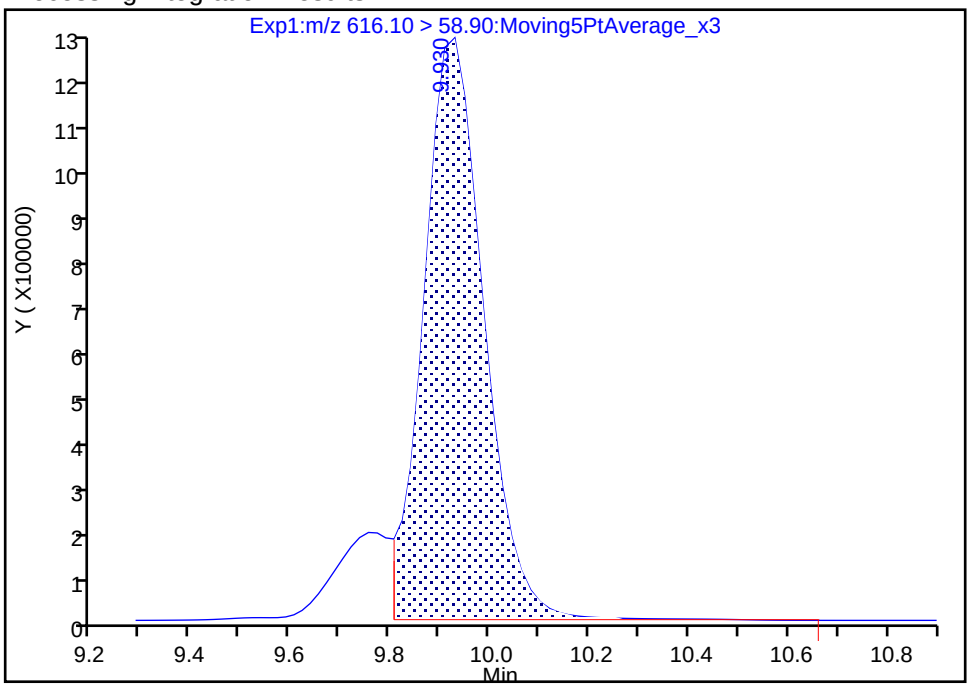
Data File:	\\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.005.d				
Injection Date:	20-Nov-2023 18:37:21	Instrument ID:	LC_LCMS11		
Lims ID:	IC L7				
Client ID:					
Operator ID:	DENLCMS	ALS Bottle#:	7	Worklist Smp#:	6
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

60 N-MeFOSE-M, CAS: 24448-09-7

Signal: 1

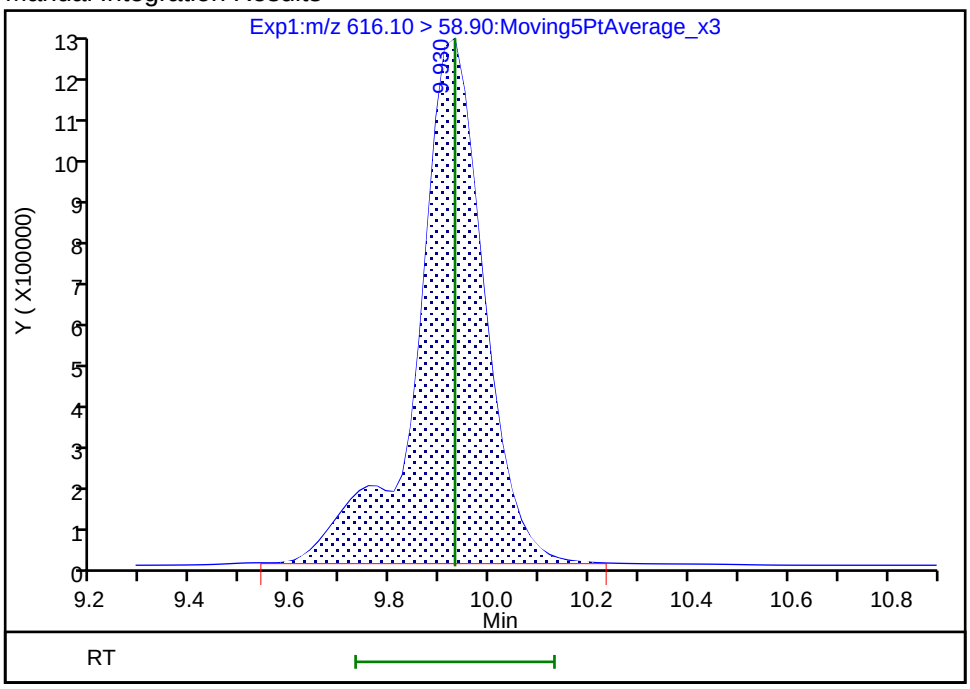
Processing Integration Results

RT: 9.93
Area: 10648973
Amount: 23.334339
Amount Units: ng/ml



Manual Integration Results

RT: 9.93
Area: 11955154
Amount: 24.932159
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 11:01:05 -07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

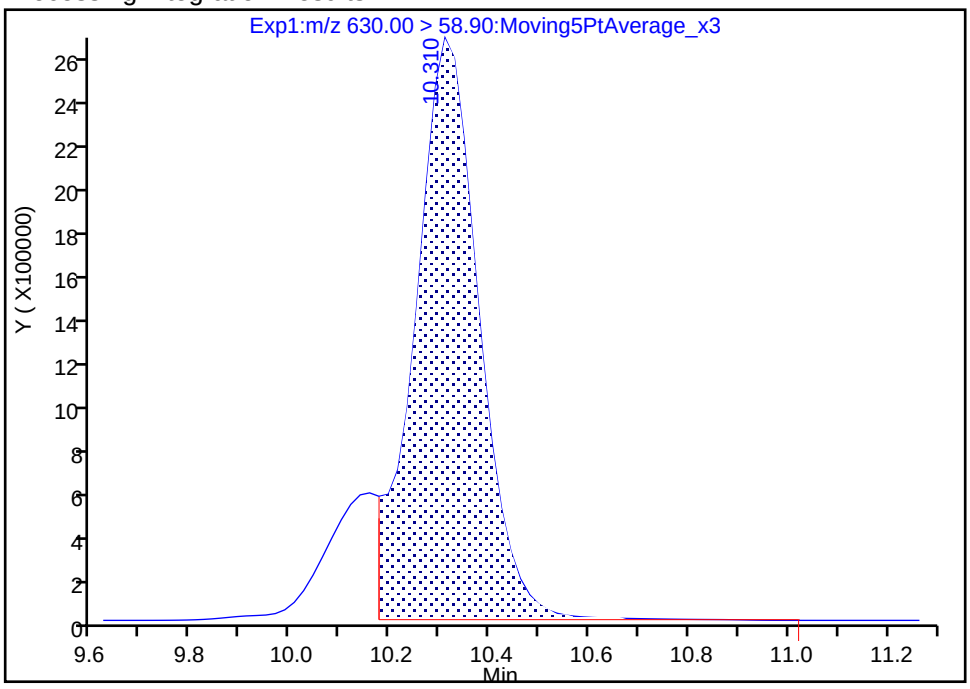
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.005.d
Injection Date: 20-Nov-2023 18:37:21 Instrument ID: LC_LCMS11
Lims ID: IC L7
Client ID:
Operator ID: DENLCMS ALS Bottle#: 7 Worklist Smp#: 6
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

65 N-EtFOSE-M, CAS: 1691-99-2

Signal: 1

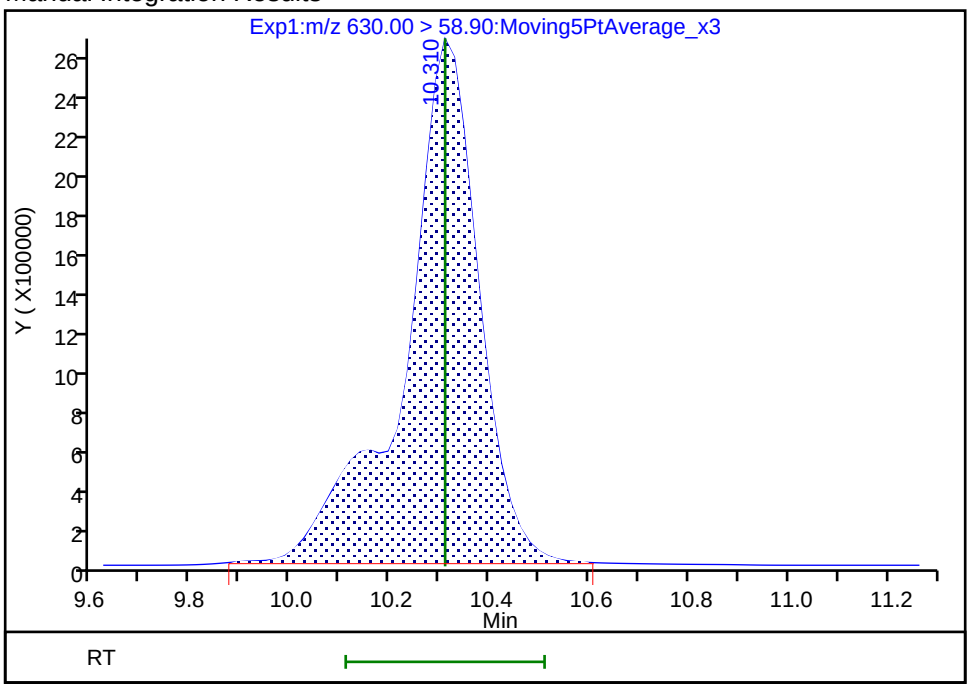
Processing Integration Results

RT: 10.31
Area: 23550141
Amount: 45.952935
Amount Units: ng/ml



Manual Integration Results

RT: 10.31
Area: 27100955
Amount: 49.411283
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 11:01:16 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.006.d
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 20-Nov-2023 18:56:45 ALS Bottle#: 8 Worklist Smp#: 7
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: IC L8
Misc. Info.: Plate: 1 Rack: 1
Operator ID: DENLCMS Instrument ID: LC_LCMS11
Sublist: chrom-PFC_IDA_DEN11*sub5

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 21-Nov-2023 11:15:10 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1626

First Level Reviewer: B5QN Date: 21-Nov-2023 11:02:22
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.063	3.062	0.001	1.000	6111725	9.77		97.7	112547	
* 1 13C3PFBA										
216.00 > 172.00	3.063	3.062	0.001		3078612	5.00			10093	
2 PFBA										
212.80 > 168.90	3.063	3.077	-0.014	1.000	6981208	12.8		102	12827	
4 PFMPA										
229.00 > 84.90	3.732	3.728	0.004	0.834	11728006	24.5		98.1	145234	
5 3:3 FTCA										
241.00 > 177.00	3.926	3.928	-0.002	0.877	3790599	61.9	Target=1.69	99.1	91079	
241.00 > 117.00	3.926	3.928	-0.002	0.877	2194805		1.73(0.84-2.53)	99.1	35197	
D 7 13C5 PFPeA										
268.30 > 223.00	4.476	4.478	-0.002	0.836	1872345	5.16		103	19205	
6 PFPA										
263.00 > 219.00	4.476	4.478	-0.002	1.000	9076799	12.1	Target=221.09	96.7	15866	
263.00 > 68.90	4.476	4.478	-0.002	1.000	40214		225.71(110.55-331.64)	96.7	1223	
8 PFMBA										
279.00 > 85.10	4.795	4.778	0.017	1.071	23366150	24.7		98.8	433673	
10 4:2FTS										
327.10 > 307.00	5.094	5.097	-0.003	1.000	3610225	29.0	Target=1.58	93.2	63990	
327.10 > 80.90	5.094	5.097	-0.003	1.000	2464247		1.47(0.79-2.38)	93.2	43795	
D 9 13C2-4:2FTS										
329.10 > 80.90	5.094	5.097	-0.003	0.741	247140	4.41	Target=4.29	94.4	4399	
329.10 > 309.00	5.094	5.097	-0.003	0.741	71652		3.45(2.14-6.43)	94.4	2969	
11 NFDHA										
295.00 > 201.00	5.280	5.280	0.0	0.986	3113530	12.4	Target=1.86	99.2	50797	
295.00 > 84.90	5.280	5.280	0.0	0.986	1746091		1.78(0.93-2.79)	99.2	28491	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 16 13C3 PFBS										
302.10 > 79.90	5.354	5.354	0.0	0.779	691081	2.16	Target=4.50	93.1	17944	
302.10 > 98.90	5.354	5.354	0.0	0.779	153961		4.49(2.25-6.76)	93.1	6678	
15 PFBS										
298.70 > 79.90	5.354	5.354	0.0	1.000	3156559	11.9	Target=2.27	108	82168	
298.70 > 98.80	5.354	5.354	0.0	1.000	1422473		2.22(1.13-3.40)	108	26483	
* 14 13C2 PFHxA										
315.10 > 270.00	5.354	5.354	0.0		1819233	2.50	Target=77.08		33795	
315.10 > 119.40	5.354	5.354	0.0		22822		79.71(38.54-115.62)		1009	
D 12 13C5 PFHxA										
318.00 > 273.00	5.354	5.354	0.0	1.000	2026140	2.48	Target=50.64	99.4	33005	
318.00 > 120.30	5.354	5.354	0.0	1.000	37432		54.13(25.32-75.97)	99.4	974	
13 PFHxA										
313.00 > 269.00	5.371	5.354	0.017	1.003	10949455	12.3	Target=20.05	98.2	95106	
313.00 > 118.90	5.371	5.354	0.017	1.003	534055		20.50(10.03-30.08)	98.2	11522	
18 5:3 FTCA										
341.00 > 237.10	5.644	5.625	0.019	1.054	18943572	128.9	Target=1.13	103	471402	
341.00 > 217.00	5.644	5.625	0.019	1.054	16373280		1.16(0.57-1.70)	103	506811	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.682	5.682	0.0	1.061	2039532	10.2	Target=1.57	102	29232	
286.90 > 184.90	5.682	5.682	0.0	1.061	1248619		1.63(0.78-2.35)	102	13444	
19 HFPO-DA										
284.90 > 168.90	5.682	5.682	0.0	1.000	2810670	12.8	Target=1.65	102	30163	
284.90 > 184.90	5.682	5.682	0.0	1.000	1647001		1.71(0.83-2.48)	102	17735	
21 PFEESA										
314.80 > 134.90	5.789	5.789	0.0	1.081	20521571	20.8	Target=14.24	93.3	876415	
314.80 > 82.90	5.789	5.789	0.0	1.081	1479461		13.87(7.12-21.36)	93.3	31715	
D 22 13C4 PFHpA										
367.10 > 322.00	6.122	6.122	0.0	1.143	2040613	2.39		95.6	22231	
17 PFHpA										
363.10 > 319.00	6.122	6.122	0.0	1.000	10430441	13.0	Target=4.02	104	81261	
363.10 > 169.00	6.122	6.122	0.0	1.000	2742255		3.80(2.01-6.04)	104	25940	
23 PFPeS										
349.10 > 79.90	6.223	6.223	0.0	0.906	3340345	12.2	Target=2.71	104	52542	
349.10 > 98.90	6.223	6.223	0.0	0.906	1278673		2.61(1.35-4.06)	104	36210	
24 ADONA										
376.90 > 250.90	6.355	6.355	0.0	1.118	21675500	11.8	Target=3.01	99.7	433965	
376.90 > 84.80	6.355	6.355	0.0	1.118	6818349		3.18(1.51-4.52)	99.7	238883	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.471	6.454	0.017	0.942	311851	4.26	Target=4.27	89.7	10939	
429.10 > 409.00	6.471	6.454	0.017	0.942	99070		3.15(2.13-6.40)	89.7	4706	
25 6:2FTS										
427.10 > 407.00	6.471	6.454	0.017	1.000	5906116	47.2	Target=1.91	99.6	92727	
427.10 > 80.90	6.471	6.454	0.017	1.000	3218760		1.83(0.96-2.87)	99.6	75594	
D 27 13C8 PFOA										
421.10 > 376.00	6.707	6.707	0.0	1.000	1900826	2.55		102	29257	
* 29 13C4 PFOA										
417.10 > 172.00	6.707	6.707	0.0		284690	2.50			9912	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 PFOA										
413.00 > 369.00	6.707	6.707	0.0	1.000	7693174	12.7	Target=2.39	101	96798	
413.00 > 169.00	6.707	6.707	0.0	1.000	3200963		2.40(1.19-3.58)	101	147460	
30 7:3 FTCA										
441.00 > 316.90	6.855	6.855	0.0	1.280	8840357	130.2	Target=1.44	104	407448	
441.00 > 336.90	6.855	6.855	0.0	1.280	6206739		1.42(0.72-2.16)	104	50751	
D 33 13C3 PFHxS										
402.10 > 79.90	6.871	6.872	-0.001	1.000	575388	2.28	Target=4.22	96.2	26549	
402.10 > 98.80	6.871	6.872	-0.001	1.000	135994		4.23(2.11-6.33)	96.2	6275	
32 PFHxS										
398.70 > 79.90	6.871	6.872	-0.001	1.000	1482092	11.4	Target=3.74	100	56507	
398.70 > 98.90	6.871	6.872	-0.001	1.000	393892		3.76(1.87-5.61)	100	15921	
* 31 18O2 PFHxS										
403.00 > 83.90	6.871	6.872	-0.001		589603	2.37			27299	
* 35 13C5 PFNA										
468.00 > 423.00	7.261	7.241	0.020		1290992	1.25			19921	
D 34 13C9 PFNA										
472.10 > 427.00	7.261	7.241	0.020	1.000	1167517	1.20		95.7	23919	
36 PFNA										
463.00 > 419.00	7.261	7.241	0.020	1.000	11939038	12.7	Target=5.99	102	113242	
463.00 > 219.00	7.261	7.241	0.020	1.000	2104777		5.67(3.00-8.99)	102	26177	
37 PFHpS										
449.00 > 79.90	7.473	7.457	0.016	0.934	2592379	12.2	Target=5.05	103	44834	
449.00 > 98.80	7.473	7.457	0.016	0.934	511007		5.07(2.53-7.58)	103	11794	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.522	7.506	0.016	1.095	405704	4.57	Target=5.22	95.4	7079	
529.10 > 509.00	7.506	7.506	0.0	1.092	108768		3.73(2.61-7.83)	95.4	3803	
39 8:2FTS										
527.10 > 507.00	7.522	7.506	0.016	1.000	5748934	46.7	Target=1.64	97.6	160161	
527.10 > 80.80	7.522	7.506	0.016	1.000	3444326		1.67(0.82-2.46)	97.6	53425	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.743	7.726	0.017	0.967	557441	5.03		101	12357	
42 NMeFOSAA										
570.10 > 419.00	7.743	7.726	0.017	1.000	1381773	12.4	Target=1.12	99.1	40043	
570.10 > 483.00	7.743	7.726	0.017	1.000	1253456		1.10(0.56-1.68)	99.1	42420	
D 40 13C6 PFDA										
519.10 > 474.10	7.760	7.761	-0.001	1.000	1133177	1.22		97.5	30197	
43 PFDA										
512.90 > 469.00	7.760	7.761	-0.001	1.000	9902882	13.3	Target=3.52	106	218113	
512.90 > 219.00	7.779	7.761	0.017	1.002	2738223		3.62(1.76-5.28)	106	45301	
* 44 13C2 PFDA										
515.10 > 470.10	7.760	7.761	-0.001		1168641	1.25			22152	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.951	7.934	0.017	0.993	628489	4.90		97.9	9414	
45 NEtFOSAA										
584.20 > 419.10	7.951	7.951	0.0	1.000	1238244	13.5	Target=1.52	108	13196	
584.20 > 526.00	7.951	7.951	0.0	1.000	753384		1.64(0.76-2.27)	108	19699	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 49 13C8 PFOS										
507.10 > 79.90	8.004	7.986	0.018	1.000	283823	2.40	Target=3.01	100	23.8	
507.10 > 98.90	8.004	7.986	0.018	1.000	90224		3.15(1.50-4.51)	100	3056	
* 47 13C4 PFOS										
502.80 > 79.90	8.004	7.986	0.018		790141	2.40	Target=3.82		15264	
502.80 > 98.90	8.004	7.986	0.018		200958		3.93(1.91-5.72)		6842	
48 PFOS										
498.90 > 79.90	8.004	8.004	0.0	1.000	4686669	12.1	Target=4.59	104	120604	
498.90 > 98.80	8.004	8.004	0.0	1.000	1027483		4.56(2.29-6.88)	104	40094	
D 53 13C7 PFUnA										
570.00 > 525.10	8.266	8.249	0.017	1.065	1285796	1.24		99.2	27982	
52 PFUnA										
563.10 > 519.00	8.266	8.267	-0.001	1.000	10793387	11.9	Target=5.53	94.9	174979	
563.10 > 269.10	8.266	8.267	-0.001	1.000	2100928		5.14(2.77-8.30)	94.9	34354	
54 9ClFOS										
530.80 > 351.00	8.390	8.390	0.0	1.476	11519482	31.2	Target=2.30	100	377856	
532.80 > 353.00	8.390	8.390	0.0	1.476	4582739		2.51(1.15-3.46)	100	100012	
55 PFNS										
548.80 > 79.90	8.529	8.512	0.017	1.066	1933742	12.2	Target=4.01	102	36659	
548.80 > 98.80	8.529	8.512	0.017	1.066	466639		4.14(2.01-6.02)	102	10290	
51 PFOSA										M
498.10 > 77.90	8.722	8.723	-0.001	1.000	7912123	13.4	Target=44.22	107	331795	
498.10 > 478.00	8.722	8.723	-0.001	1.000	165396		47.84(22.11-66.32)	107	5141	M
D 50 13C8 FOSA										
506.10 > 77.80	8.722	8.723	-0.001	1.090	1488481	2.59		104	12094	
D 56 13C2 PFDoA										
615.10 > 570.00	8.756	8.757	-0.001	1.128	1213316	1.19		94.9	19982	
57 PFDoA										
613.10 > 569.00	8.756	8.757	-0.001	1.000	12923983	13.3	Target=7.62	106	242122	
613.10 > 319.00	8.756	8.757	-0.001	1.000	1597166		8.09(3.81-11.43)	106	23344	
58 PFDS										
599.00 > 79.90	9.028	9.028	0.0	1.128	4473223	12.2	Target=4.76	102	51995	
599.00 > 98.80	9.028	9.028	0.0	1.128	941543		4.75(2.38-7.13)	102	26537	
63 PFTrDA										
663.00 > 619.00	9.254	9.254	0.0	0.949	8154050	13.1	Target=5.15	105	223904	
663.00 > 168.90	9.254	9.254	0.0	0.949	1523302		5.35(2.57-7.72)	105	19131	
66 11ClFOS										
630.90 > 450.90	9.428	9.413	0.015	1.659	16082302	29.3	Target=3.33	93.1	757696	
632.90 > 452.90	9.428	9.413	0.015	1.659	4964368		3.24(1.67-5.00)	93.1	234628	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.756	9.738	0.018	1.257	595088	1.22		97.7	8764	
70 PFTeDA										
713.10 > 669.00	9.756	9.738	0.018	1.000	6636697	12.0	Target=7.24	96.0	31232	
713.10 > 168.90	9.756	9.738	0.018	1.000	901120		7.36(3.62-10.85)	96.0	9904	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.910	9.910	0.0	1.238	10474283	24.8		99.4	80823	
60 N-MeFOSE-M										M
616.10 > 58.90	9.930	9.930	0.0	1.002	29575102	64.5		103	5512	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
71 PFDoS										
699.10 > 79.90	10.026	10.007	0.019	1.253	3568703	12.2	Target=4.39	101	36104	
699.10 > 98.80	10.026	10.007	0.019	1.253	821345		4.34(2.20-6.59)	101	16621	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.102	10.102	0.0	1.262	332569	2.56		102	6691	
61 NMeFOSA										
511.90 > 219.00	10.120	10.102	0.018	1.002	1593463	12.5	Target=0.99	100	18777	
511.90 > 169.00	10.120	10.102	0.018	1.002	1605793		0.99(0.49-1.48)	100	15047	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.291	10.291	0.0	1.286	13229967	25.2		101	145572	
65 N-EtFOSE-M										M
630.00 > 58.90	10.329	10.310	0.019	1.004	71722969	129.9		104	5582	M
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.481	10.481	0.0	1.309	338668	2.54		102	4268	
68 N-EtFOSA-M										
526.00 > 219.00	10.500	10.500	0.0	1.002	1882121	13.0	Target=0.99	104	12122	
526.00 > 169.00	10.500	10.500	0.0	1.002	1836409		1.02(0.50-1.49)	104	14069	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

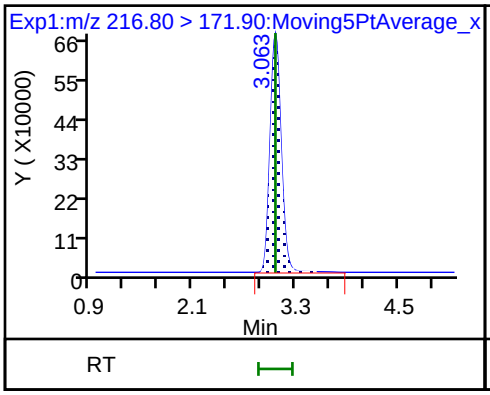
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Report Date: 21-Nov-2023 11:15:11 Chrom Revision: 2.3 15-Nov-2023 20:54:34

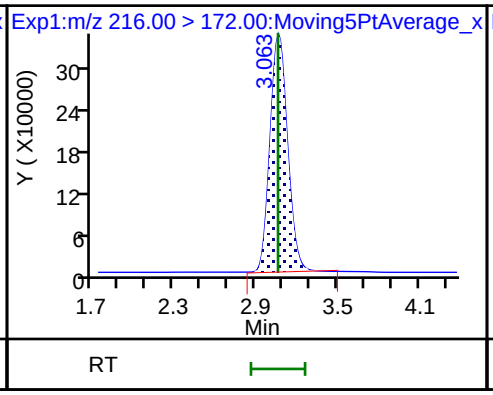
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.006.d
Injection Date: 20-Nov-2023 18:56:45 Instrument ID: LC_LCMS11
Lims ID: IC L8
Client ID:
Operator ID: DENLCMS ALS Bottle#: 8 Worklist Smp#: 7
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5

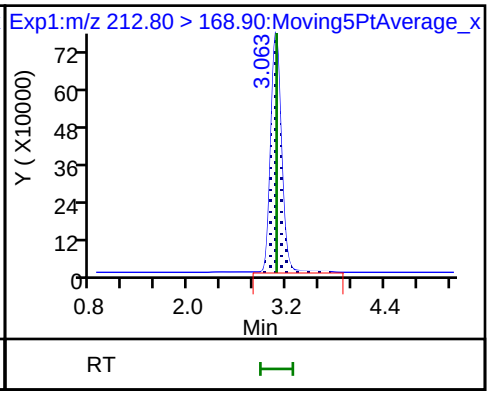
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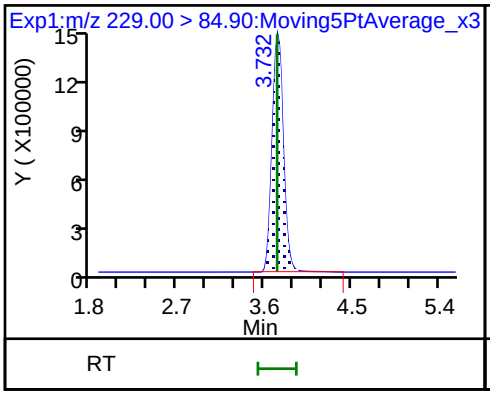
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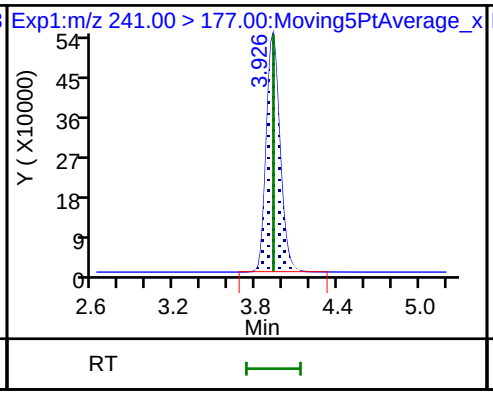
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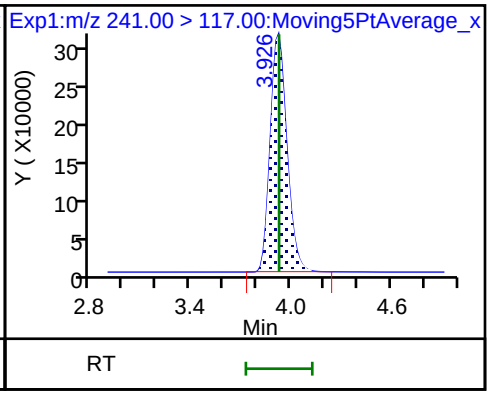
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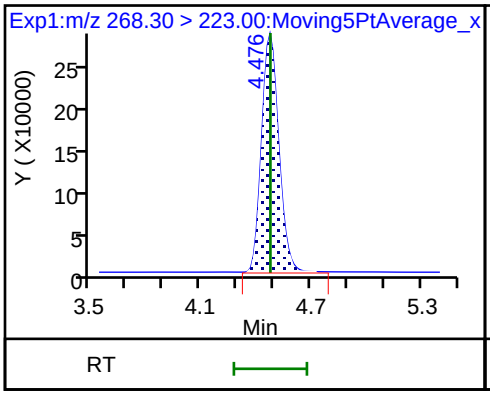
5 3:3 FTCA



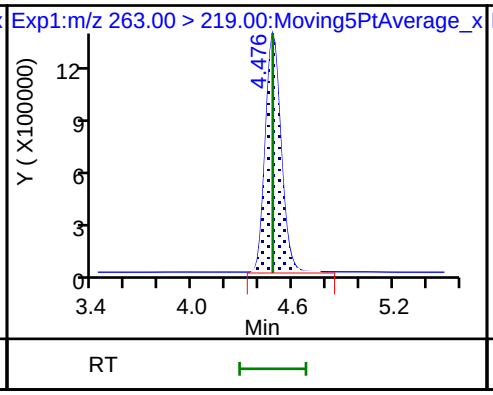
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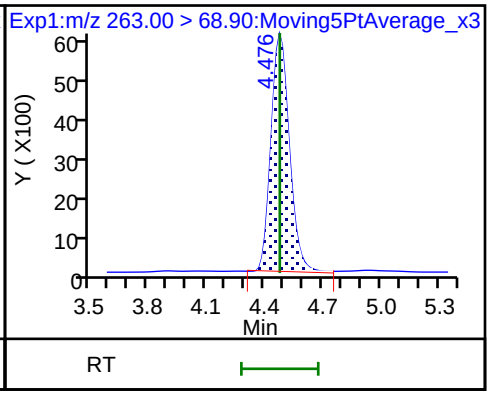
D 7 13C5 PFPeA



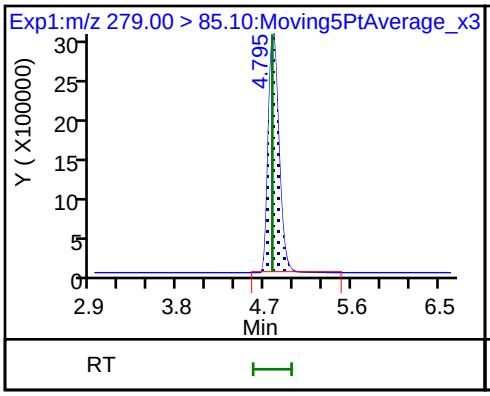
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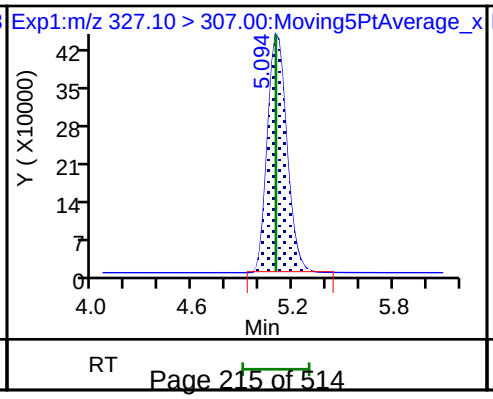
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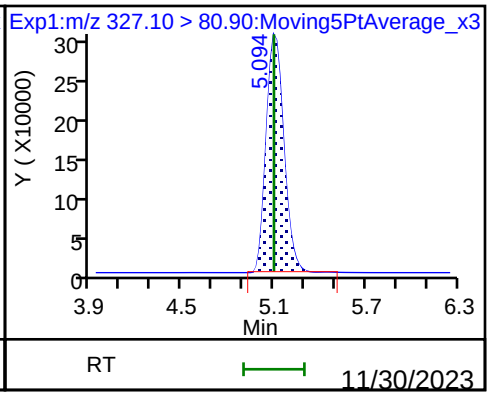
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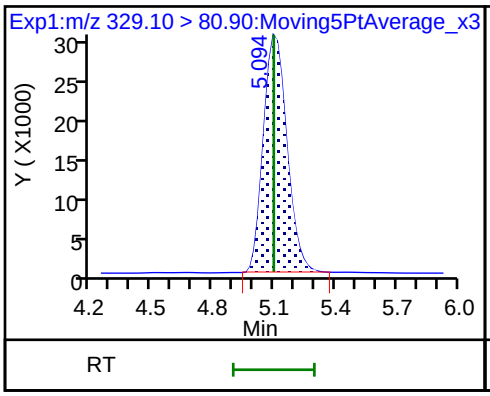


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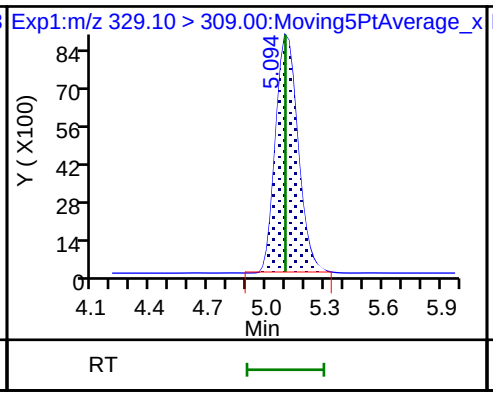


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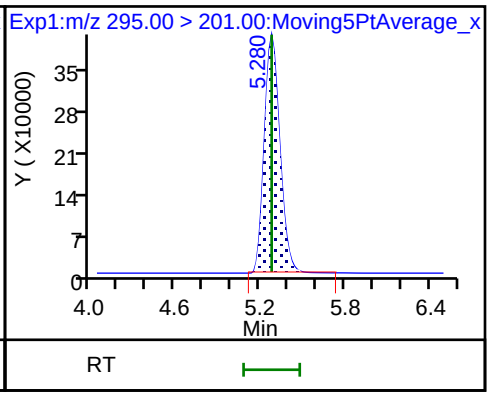
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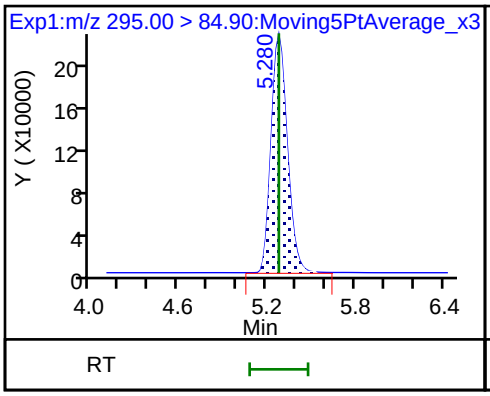
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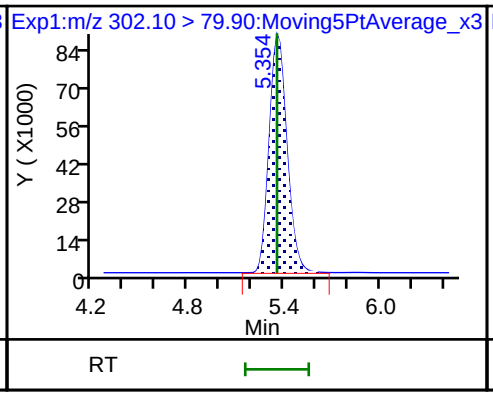
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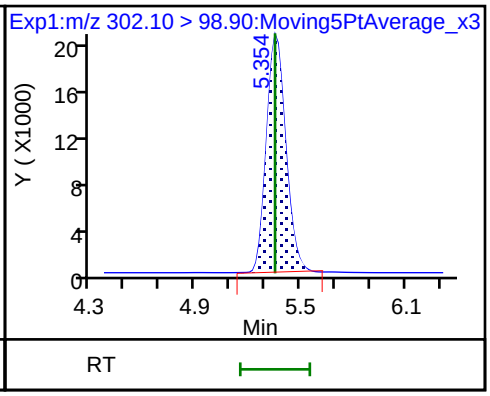
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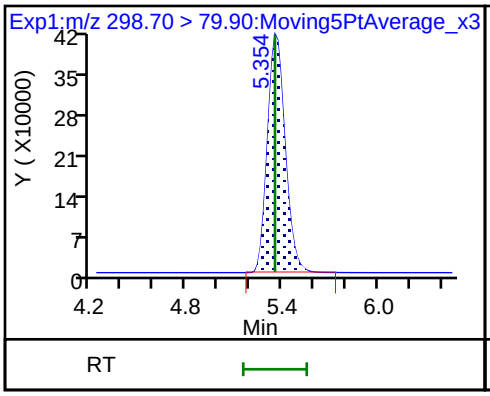
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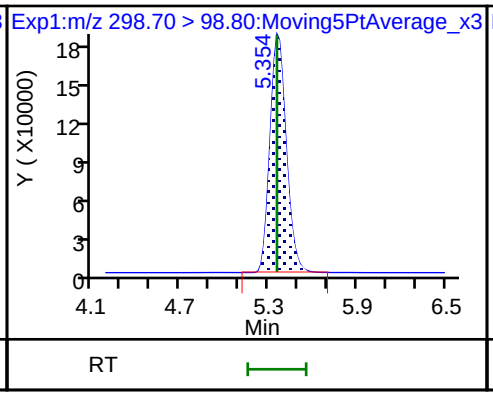
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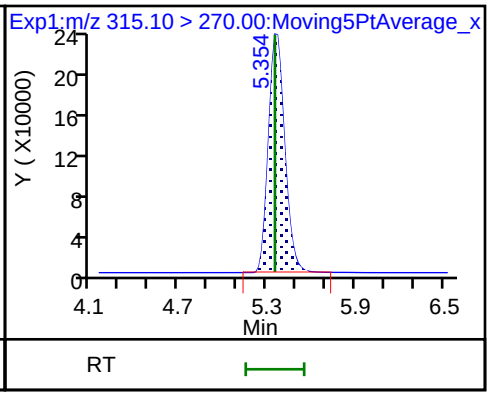
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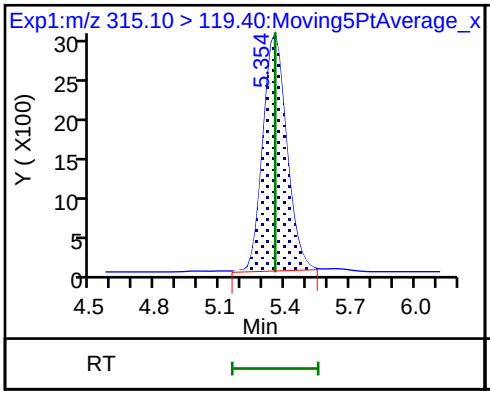
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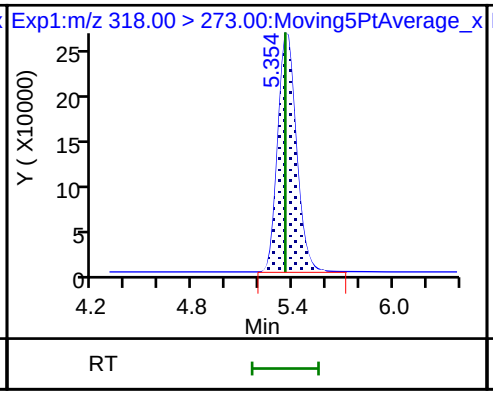
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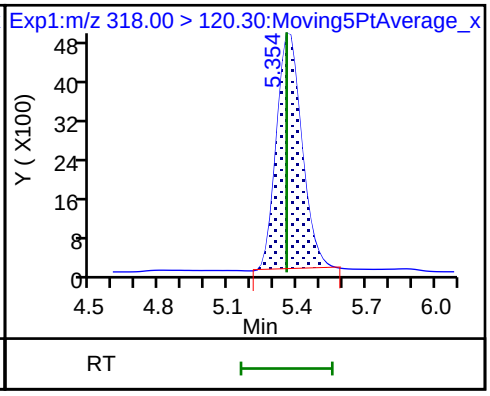
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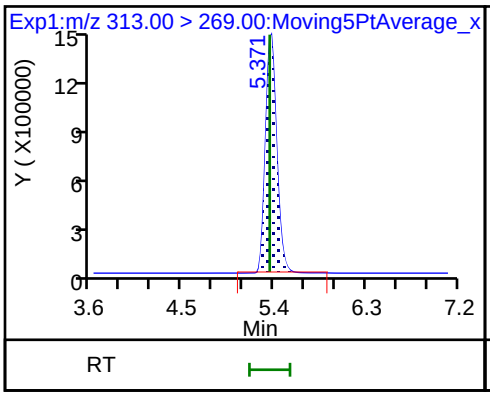
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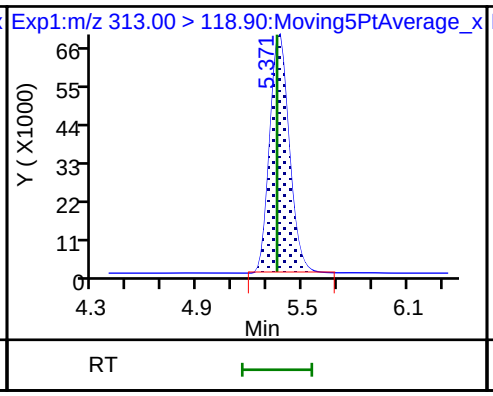
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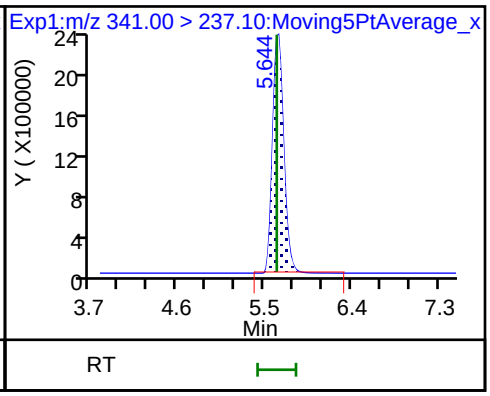
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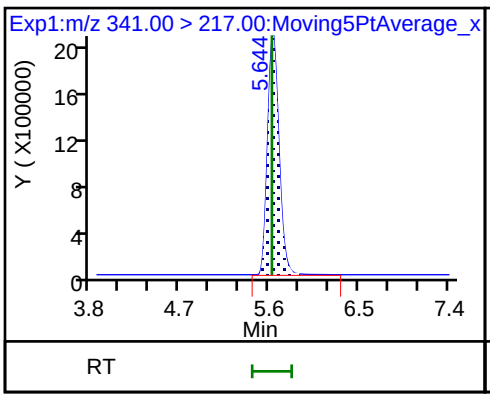
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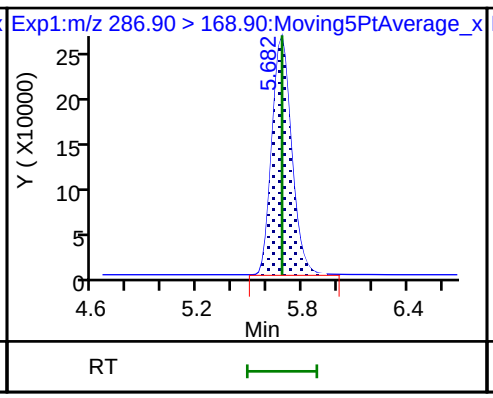
18 5:3 FTCA



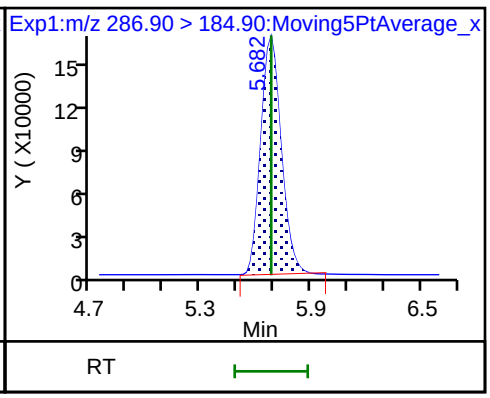
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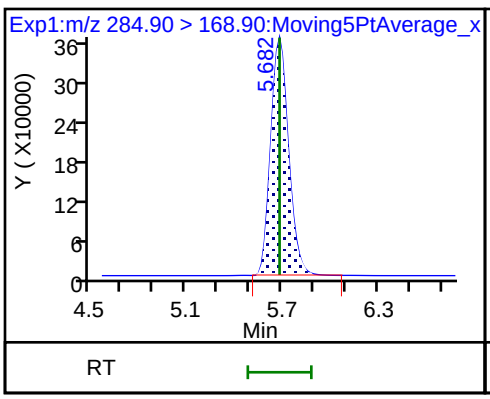
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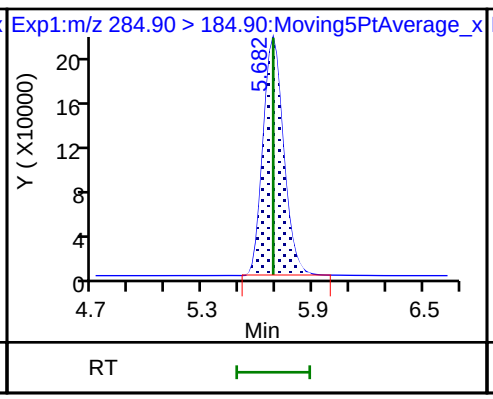
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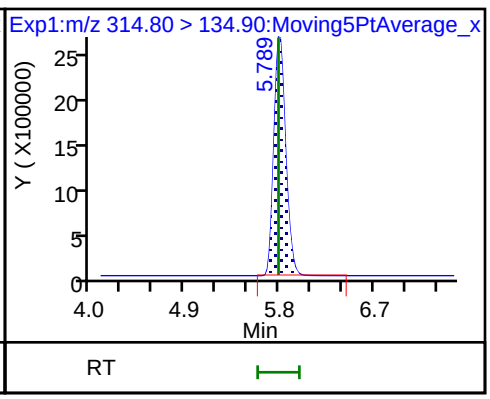
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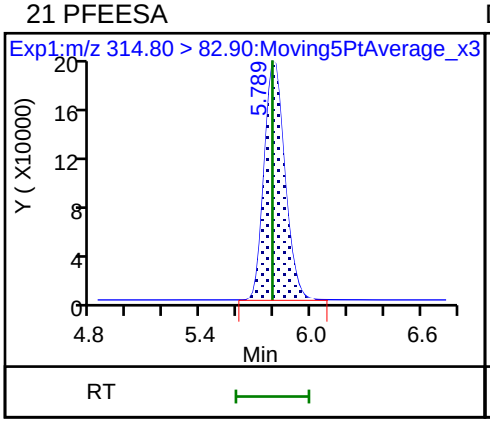
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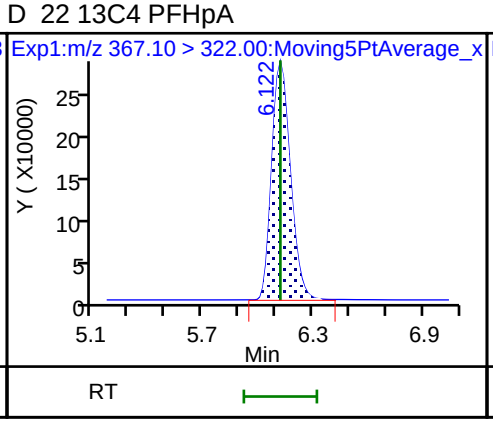
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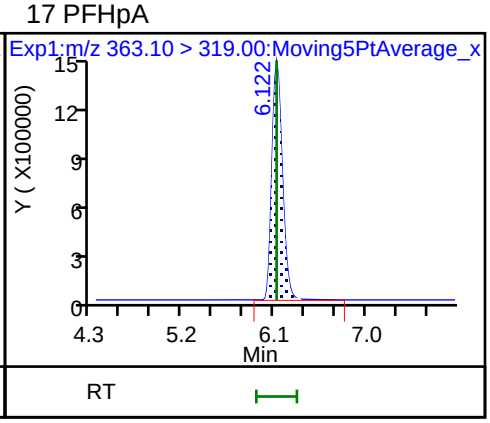
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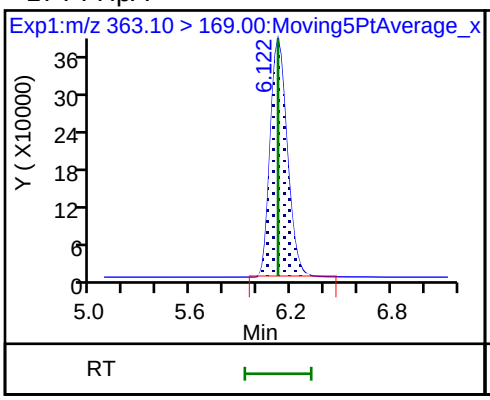
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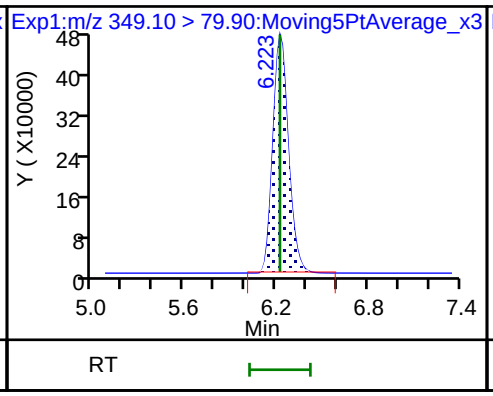
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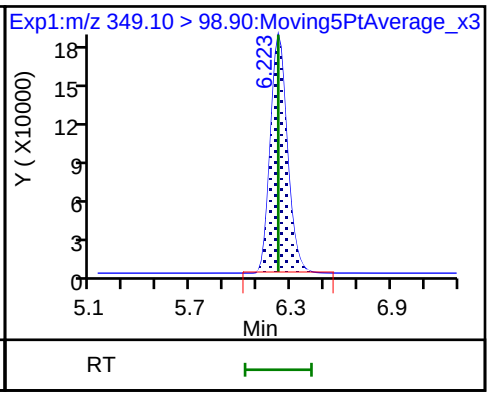
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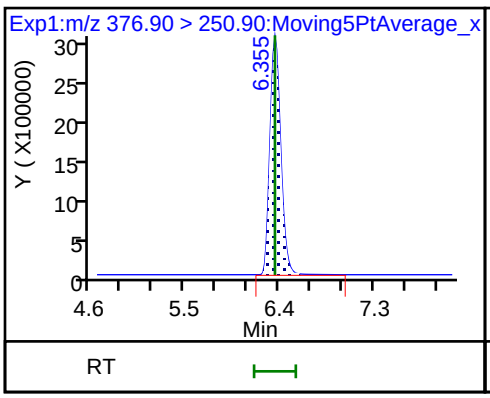
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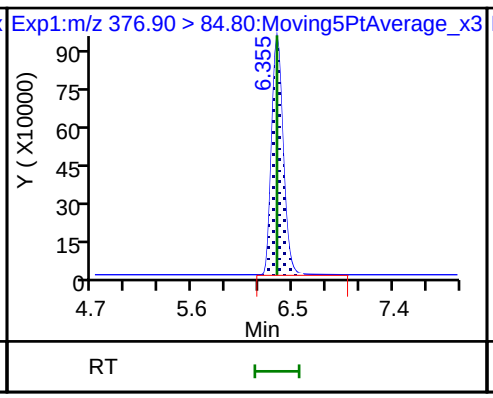
23 PFPeS



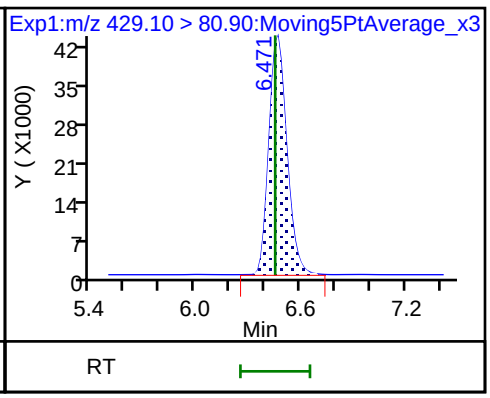
24 ADONA



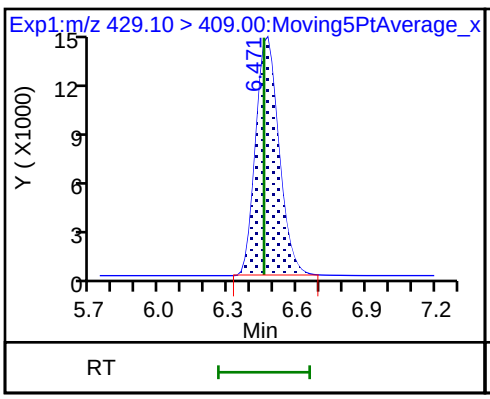
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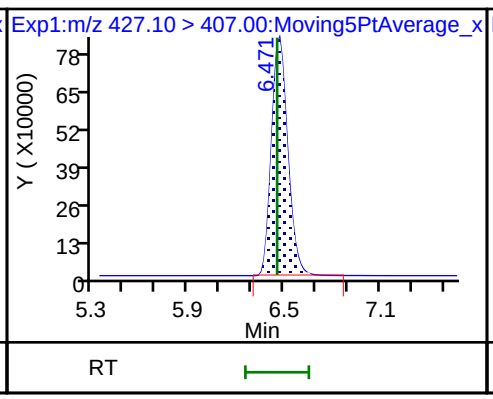
D 26 13C2-6:2FTS



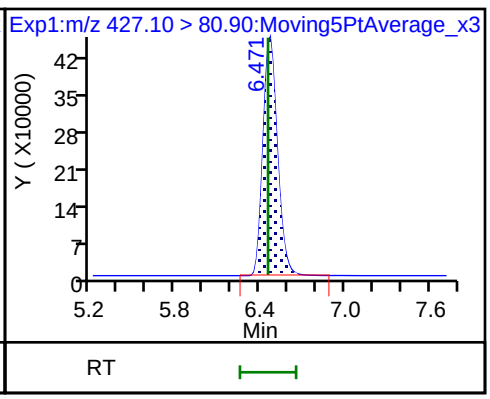
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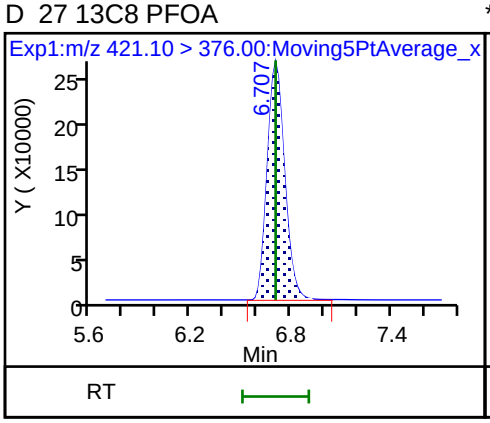
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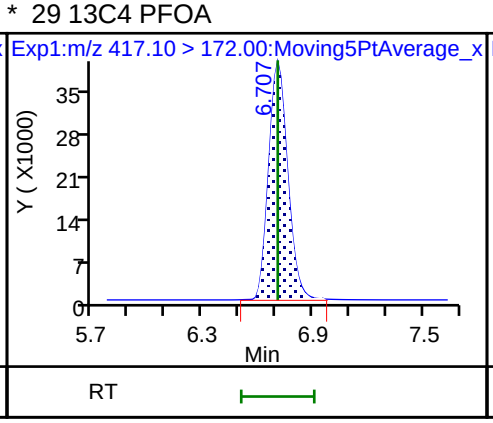
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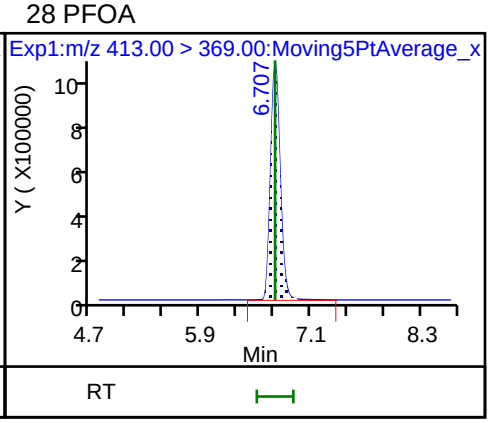
D 27 13C8 PFOA



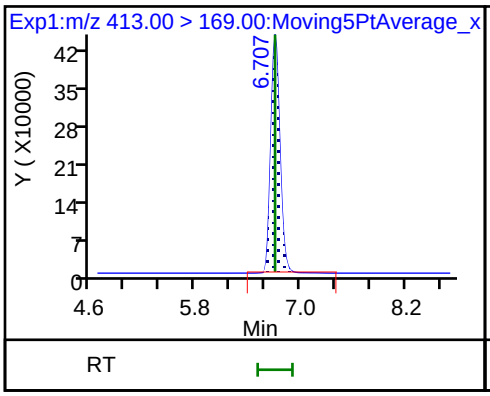
* 29 13C4 PFOA



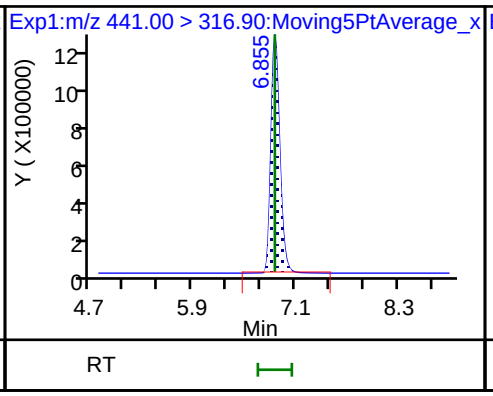
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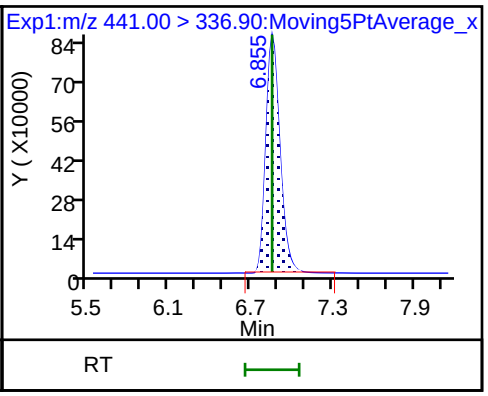
28 PFOA



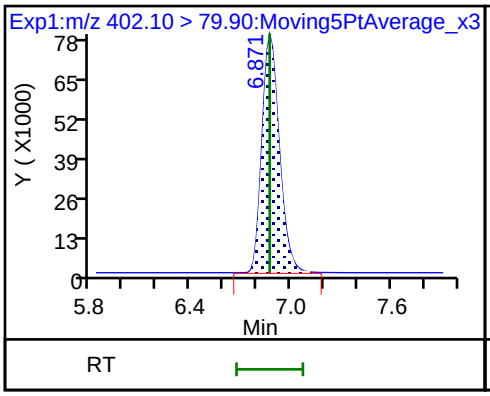
30 7:3 FTCA



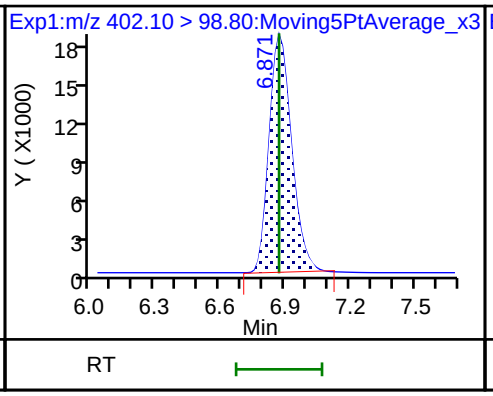
30 7:3 FTCA



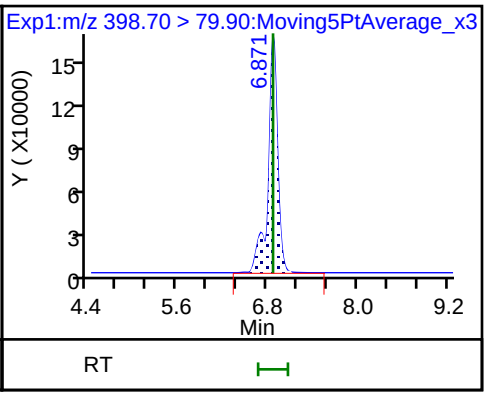
D 33 13C3 PFHxS



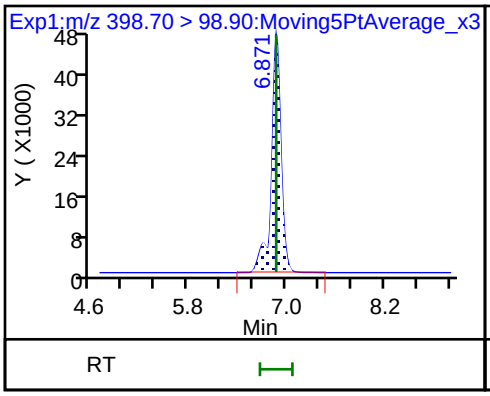
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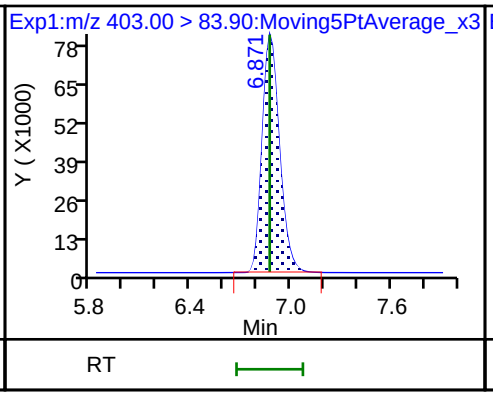
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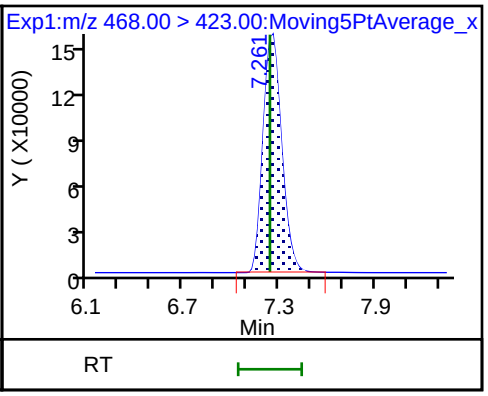
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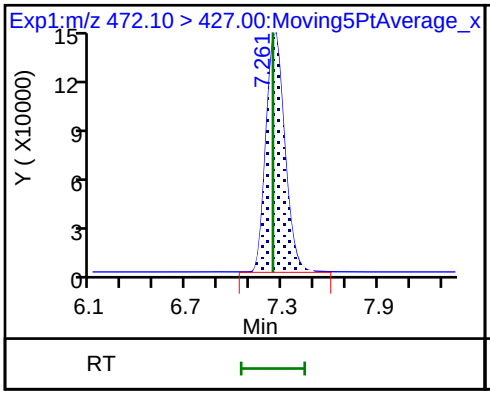
* 31 18O2 PFHxS



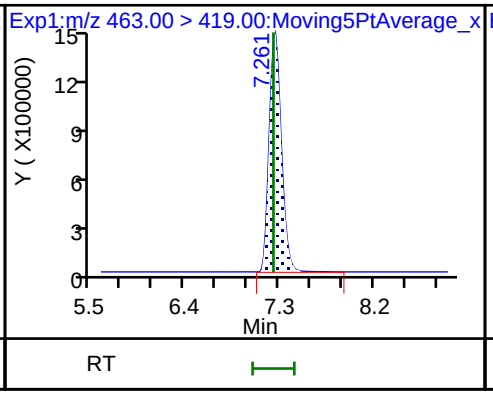
* 35 13C5 PFNA



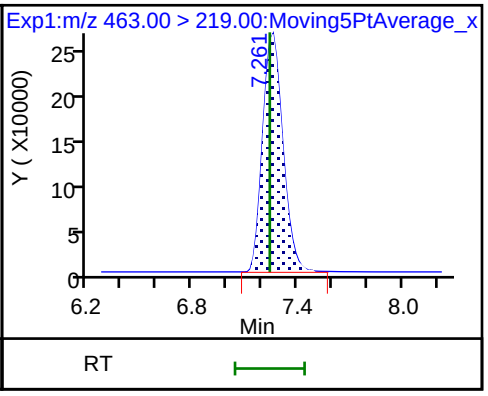
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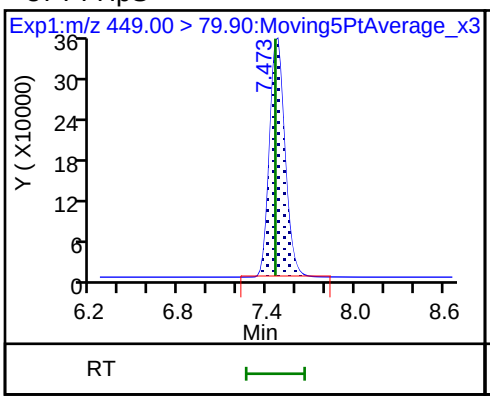
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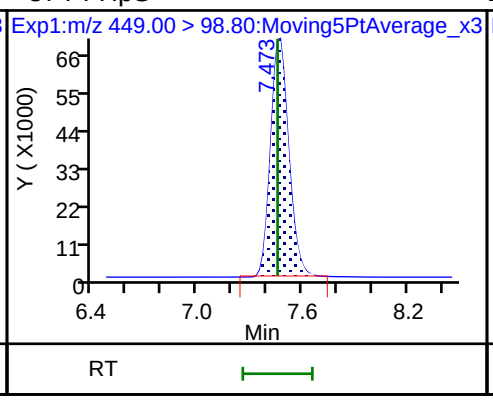
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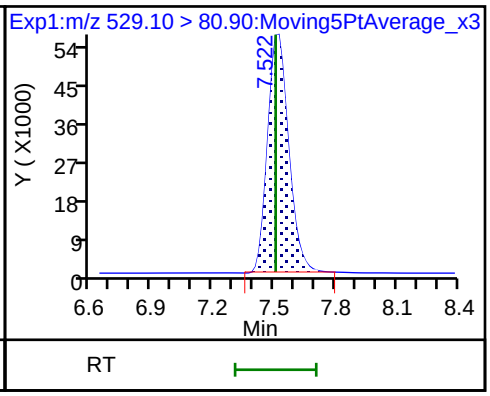
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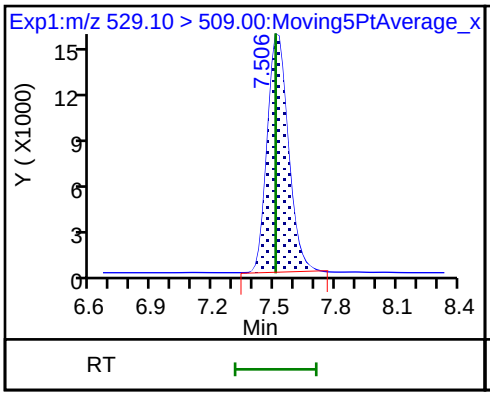
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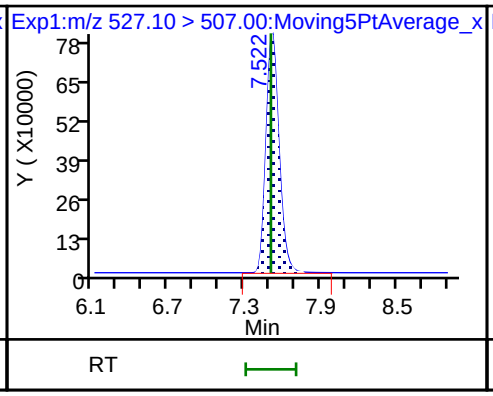
D 38 13C2-8:2FTS



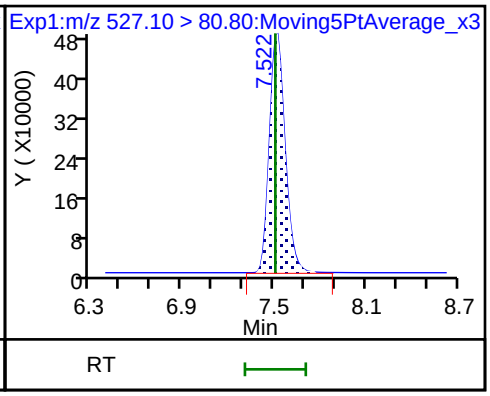
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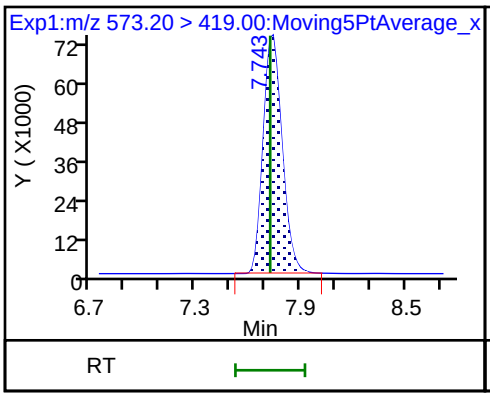
39 8:2FTS



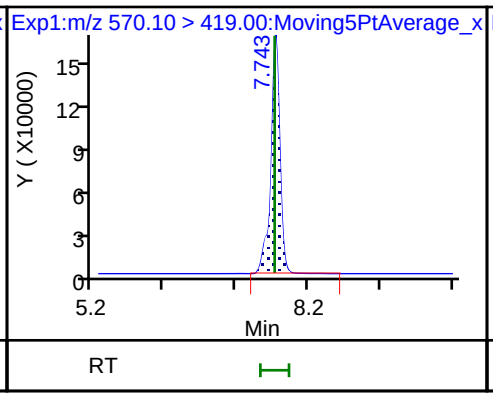
39 8:2FTS



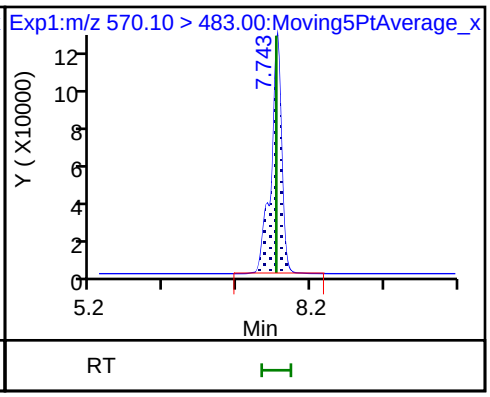
D 41 d3-NMeFOSAA



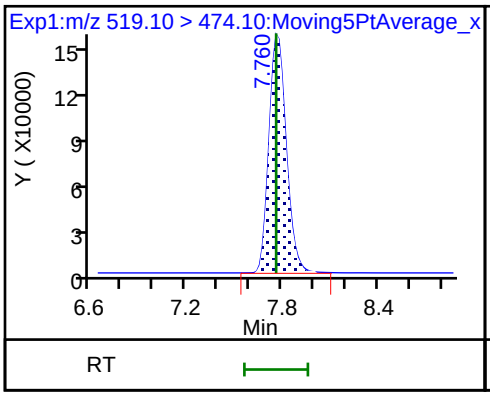
42 NMeFOSAA



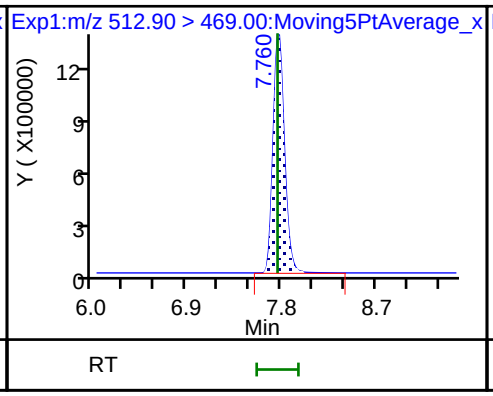
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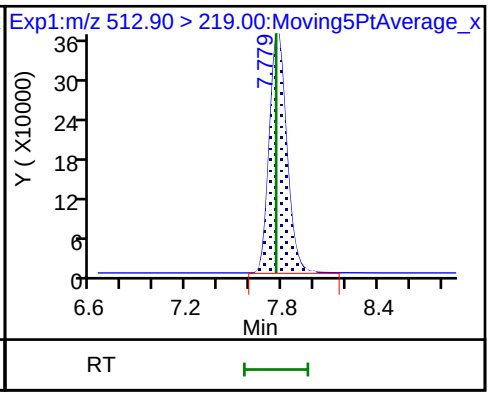
D 40 13C6 PFDA



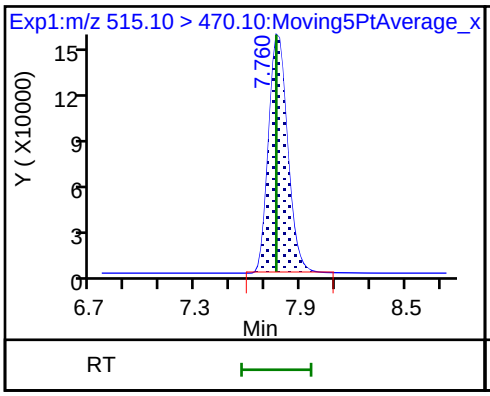
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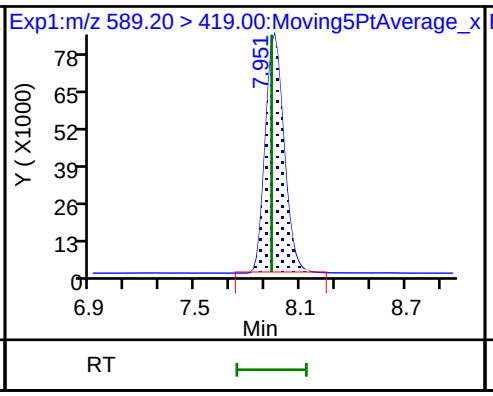
43 PFDA



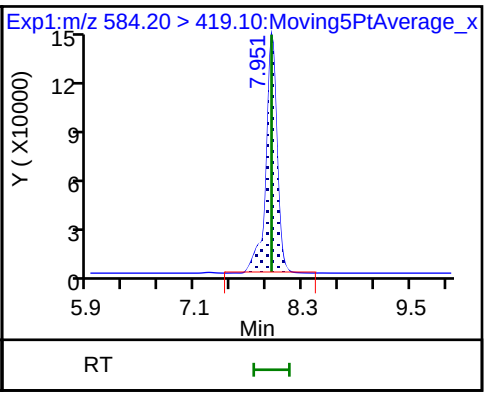
* 44 13C2 PFDA



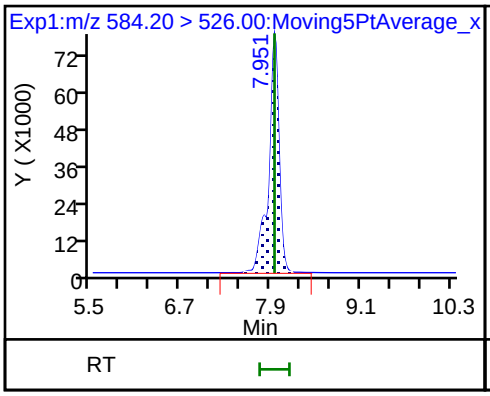
D 46 d5-NEtFOSAA



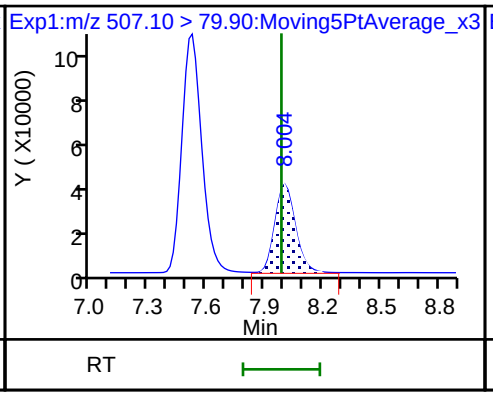
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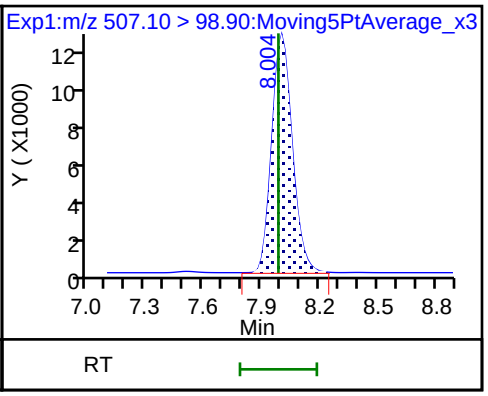
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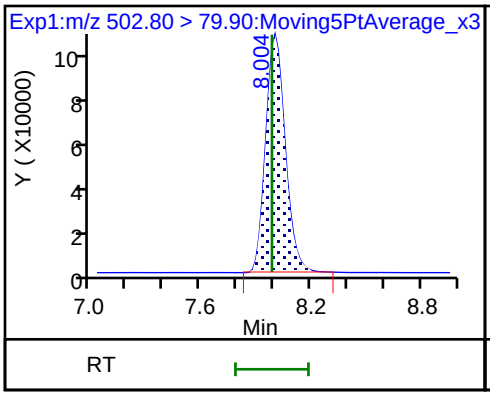
D 49 13C8 PFOS



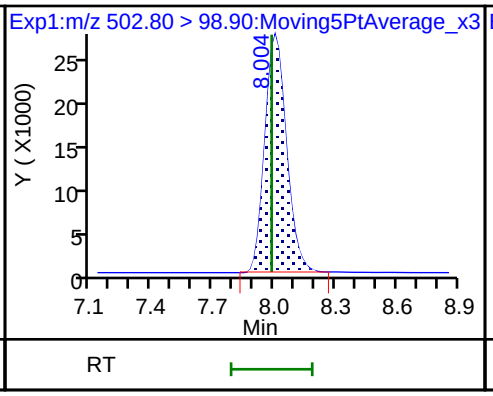
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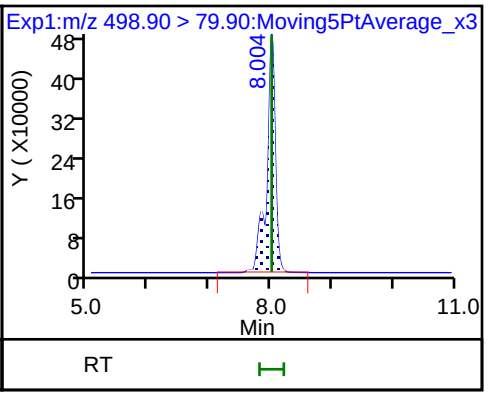
* 47 13C4 PFOS



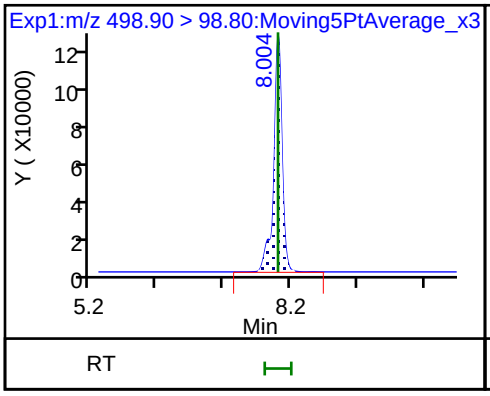
* 47 13C4 PFOS



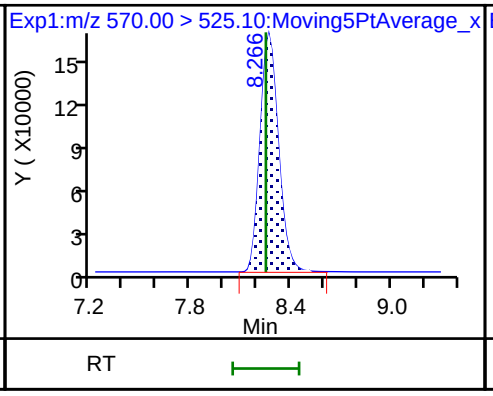
48 PFOS



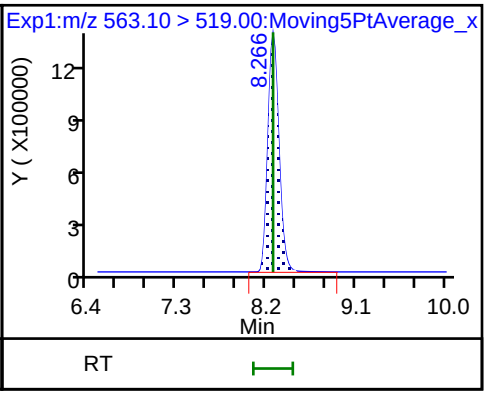
48 PFOS



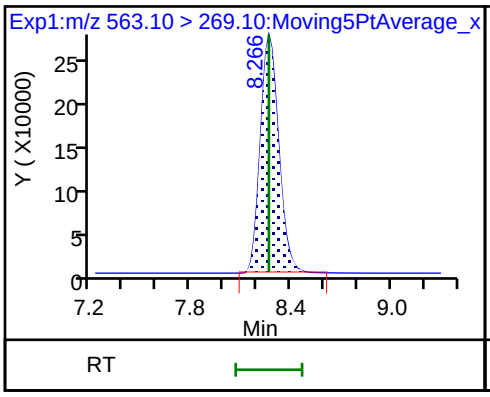
D 53 13C7 PFUnA



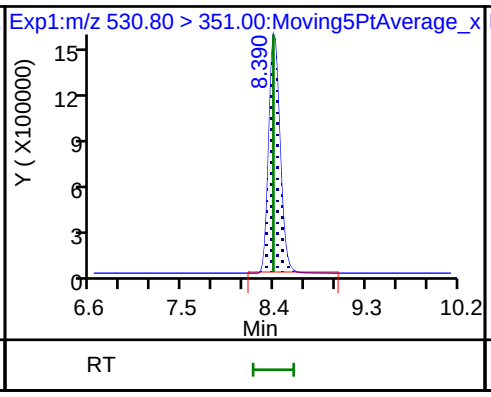
52 PFUnA



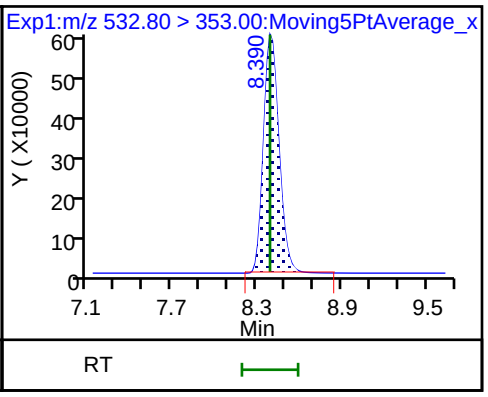
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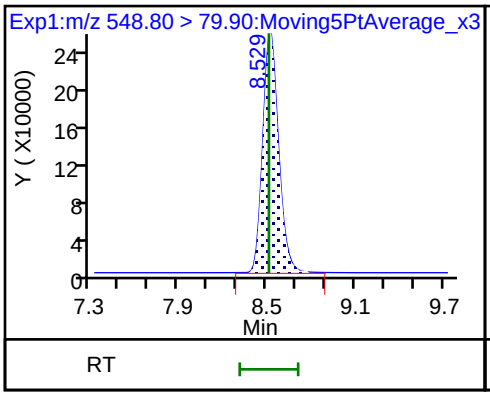
54 9ClFOS



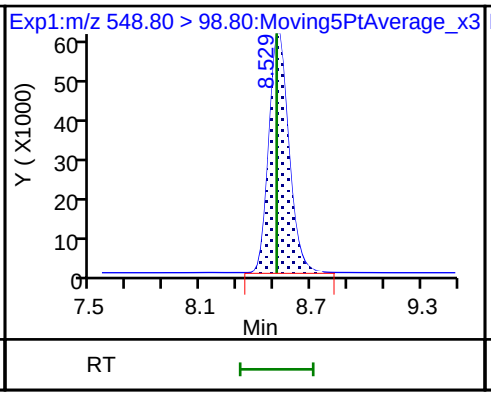
54 9ClFOS



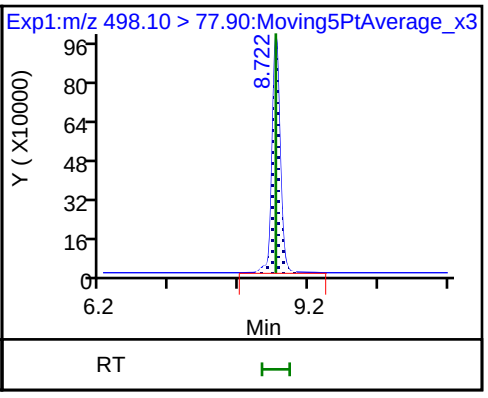
55 PFNS



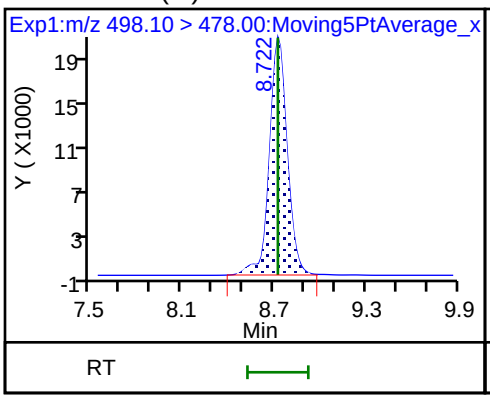
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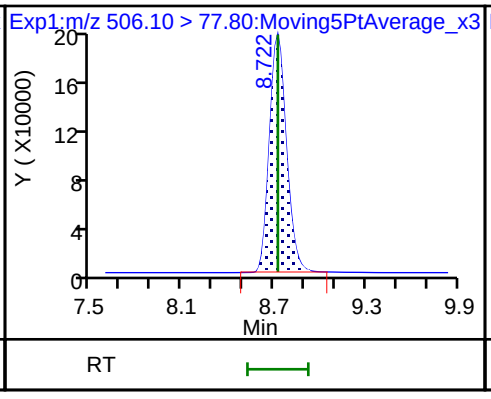
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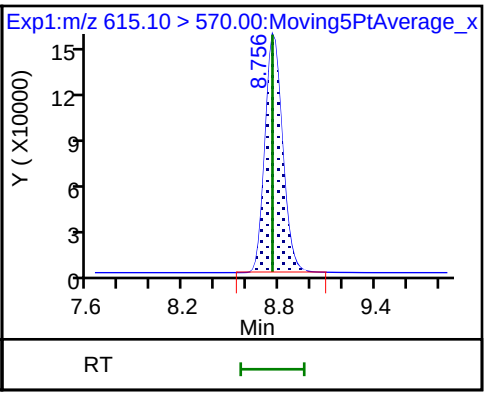
51 PFOSA (M)



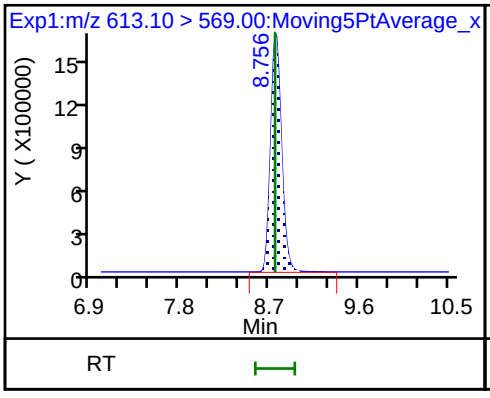
D 50 13C8 FOSA



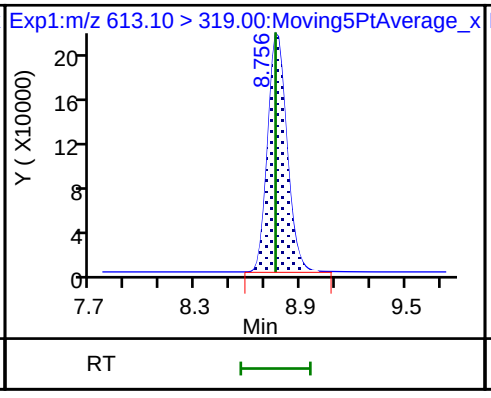
D 56 13C2 PFDoA



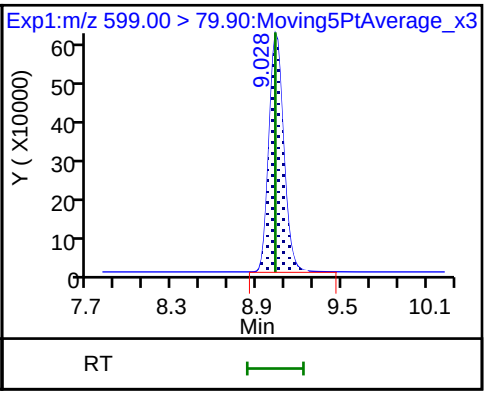
57 PFDoA



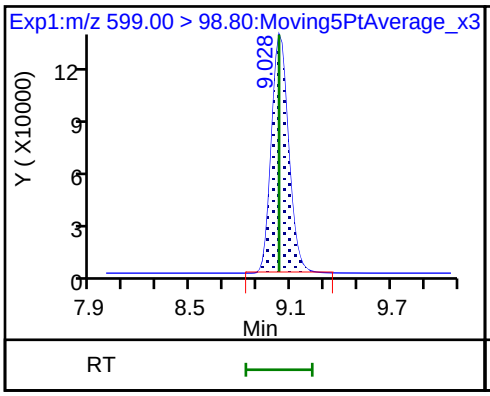
57 PFDoA



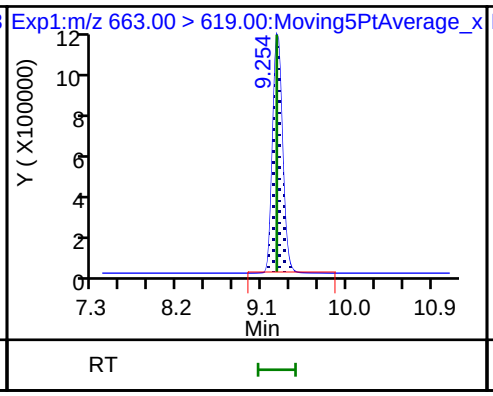
58 PFDS



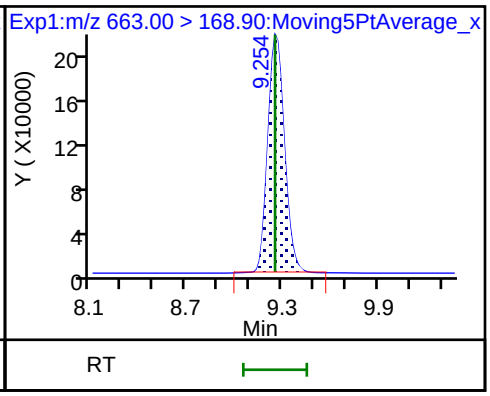
58 PFDS



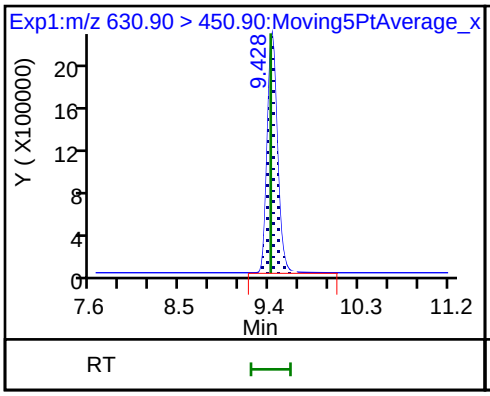
63 PFTrDA



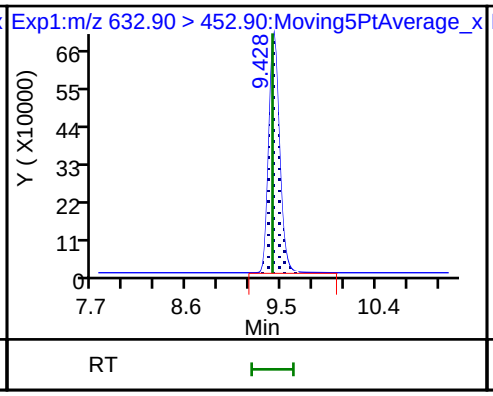
63 PFTrDA



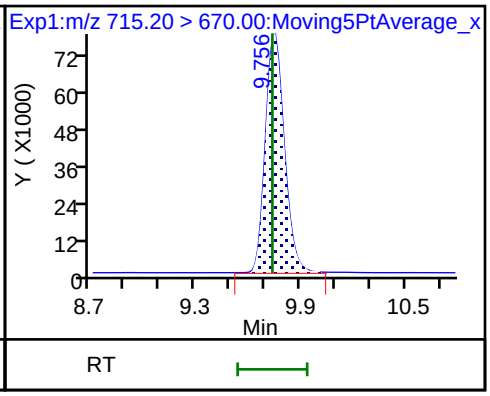
66 11ClFOS



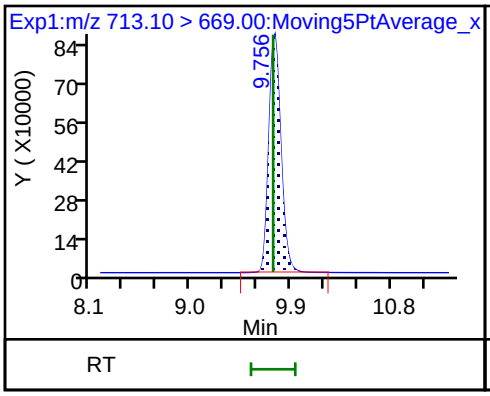
66 11ClFOS



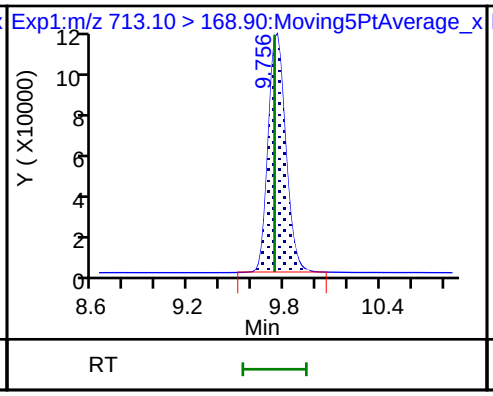
D 69 13C2 PFTeDA



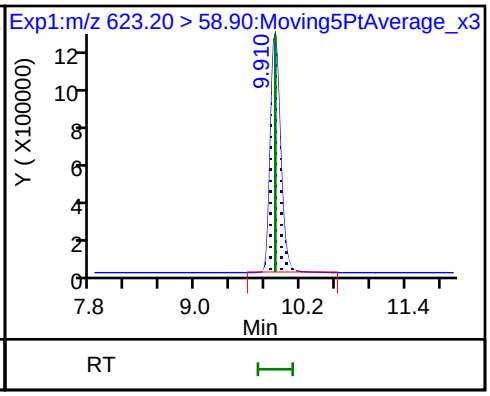
70 PFTeDA



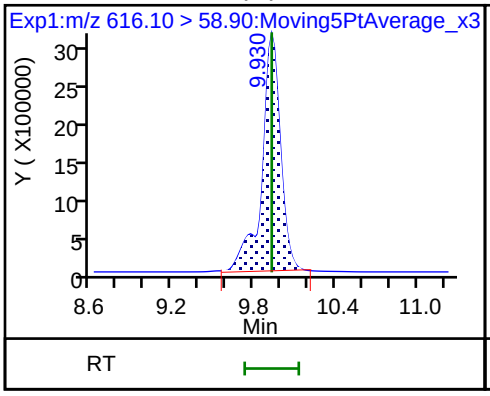
70 PFTeDA



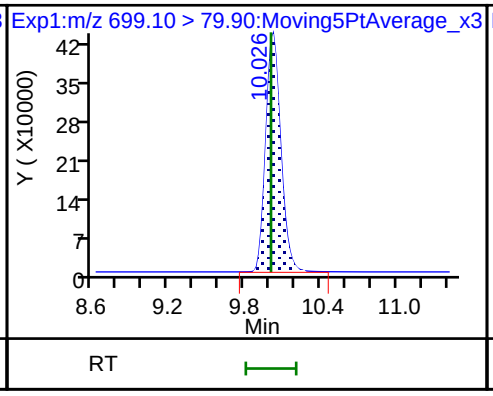
D 59 d7-N-Me-FOSE



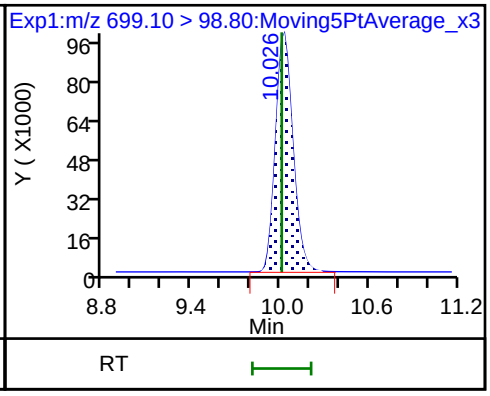
60 N-MeFOSE-M (M)



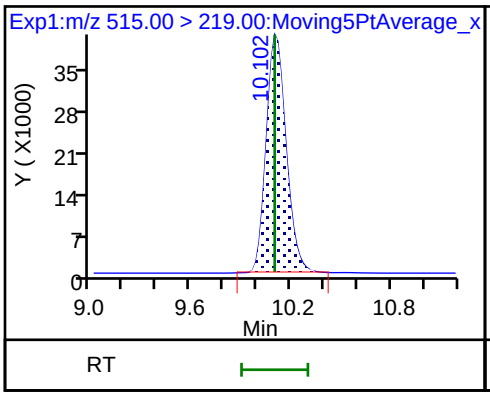
71 PFDoS



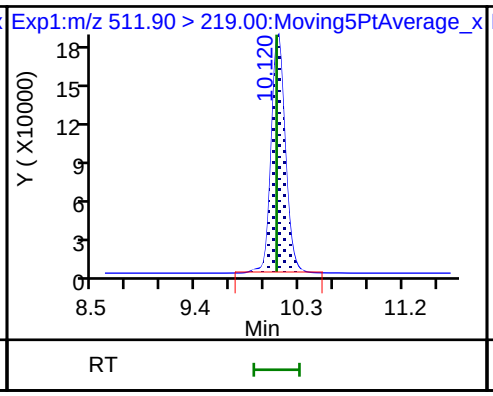
71 PFDoS



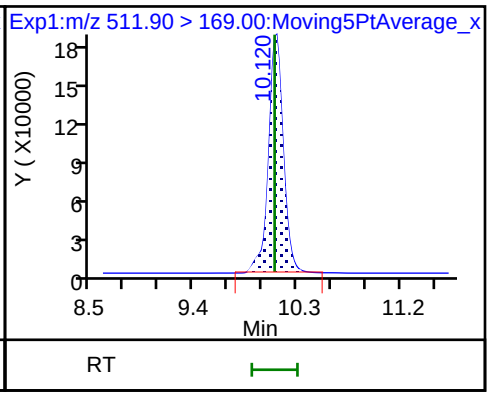
D 62 d3-NMePFOSA



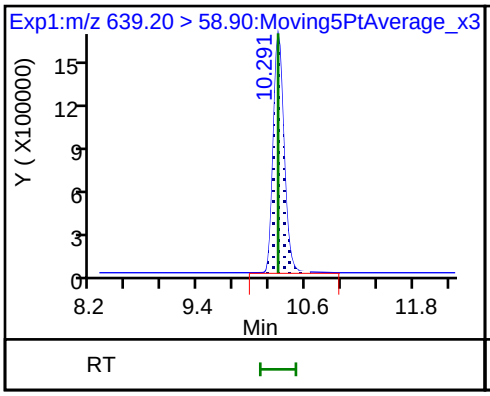
61 NMeFOSA



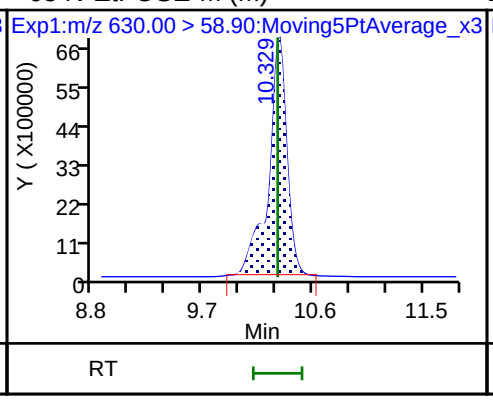
61 NMeFOSA



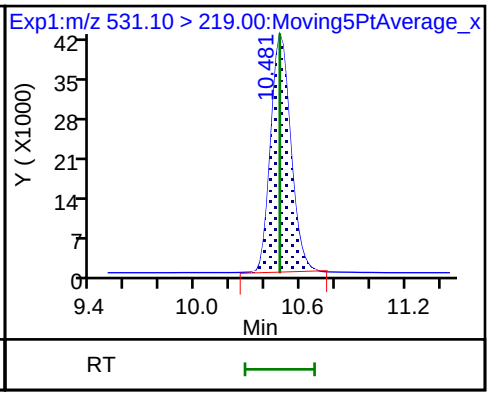
D 64 d9-N-EtFOSE



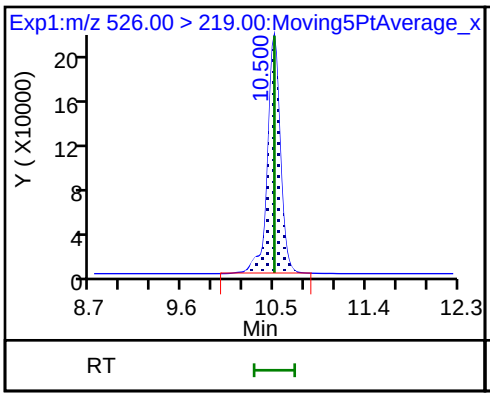
65 N-EtFOSE-M (M)



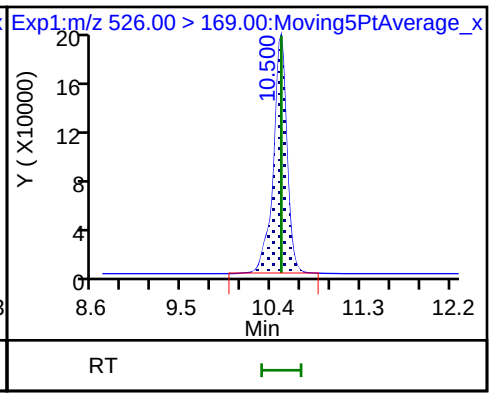
D 67 d5-NEtPFOSA



68 N-EtFOSA-M



68 N-EtFOSA-M



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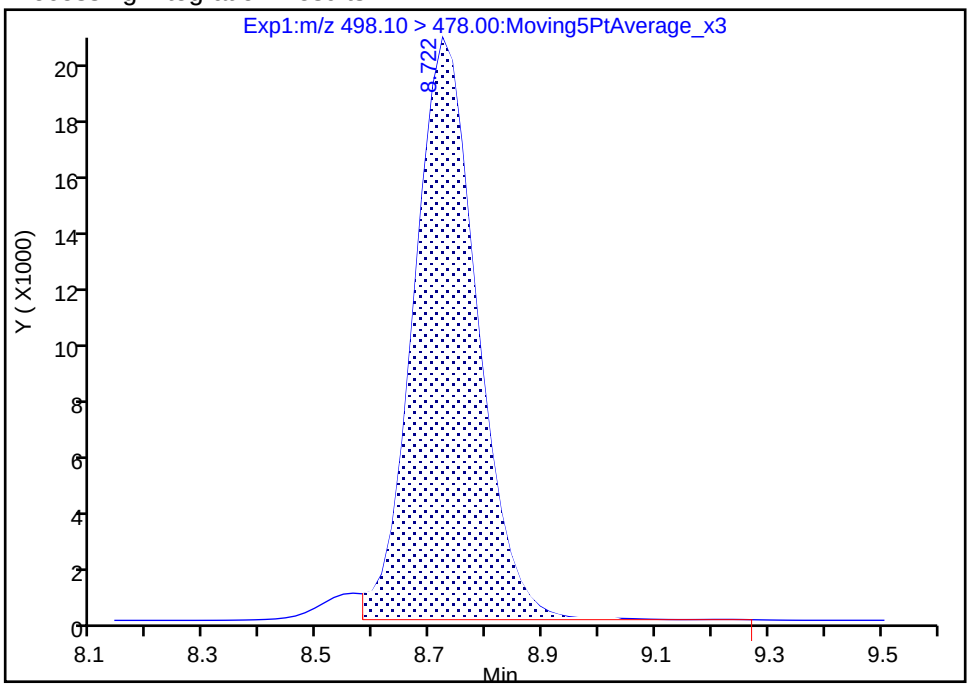
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.006.d
Injection Date: 20-Nov-2023 18:56:45 Instrument ID: LC_LCMS11
Lims ID: IC L8
Client ID:
Operator ID: DENLCMS ALS Bottle#: 8 Worklist Smp#: 7
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

51 PFOSA, CAS: 754-91-6

Signal: 2

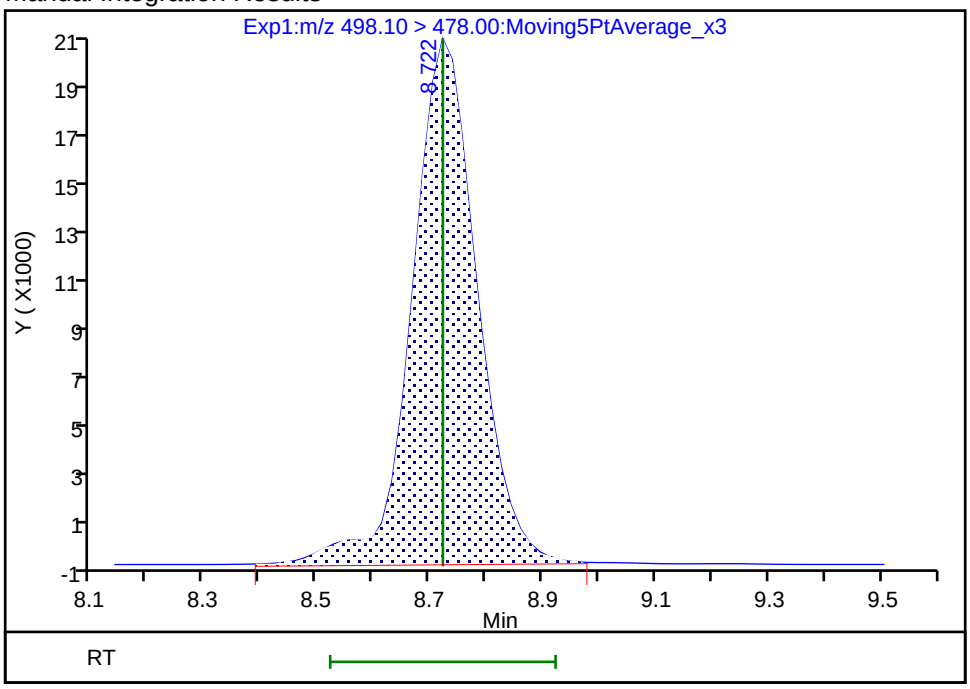
Processing Integration Results

RT: 8.72
Area: 160923
Amount: 13.350575
Amount Units: ng/ml



Manual Integration Results

RT: 8.72
Area: 165396
Amount: 13.350575
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 11:01:57 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

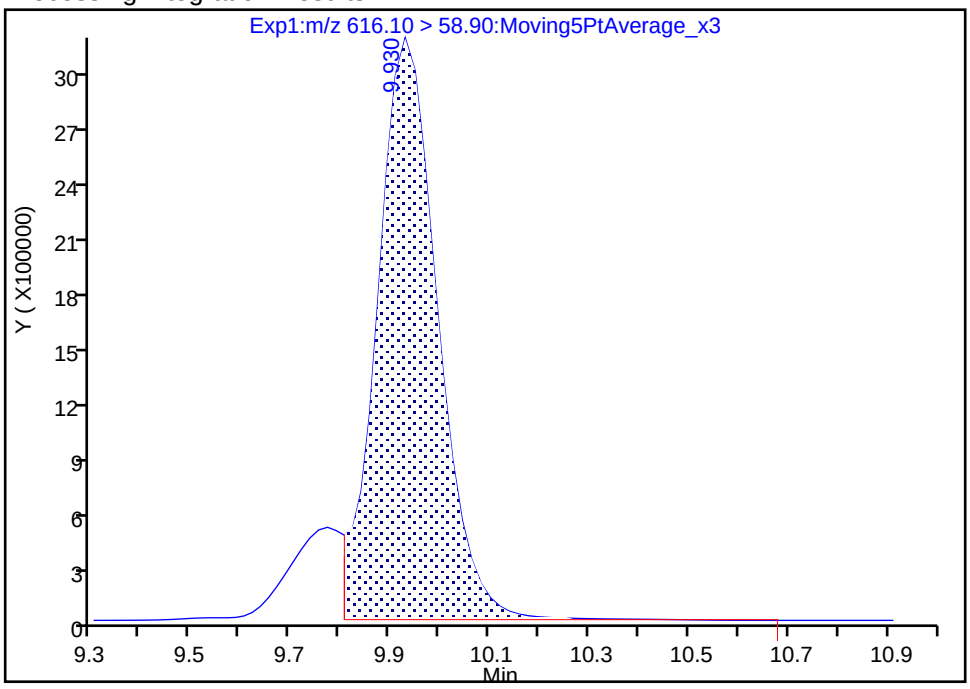
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.006.d
Injection Date: 20-Nov-2023 18:56:45 Instrument ID: LC_LCMS11
Lims ID: IC L8
Client ID:
Operator ID: DENLCMS ALS Bottle#: 8 Worklist Smp#: 7
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

60 N-MeFOSE-M, CAS: 24448-09-7

Signal: 1

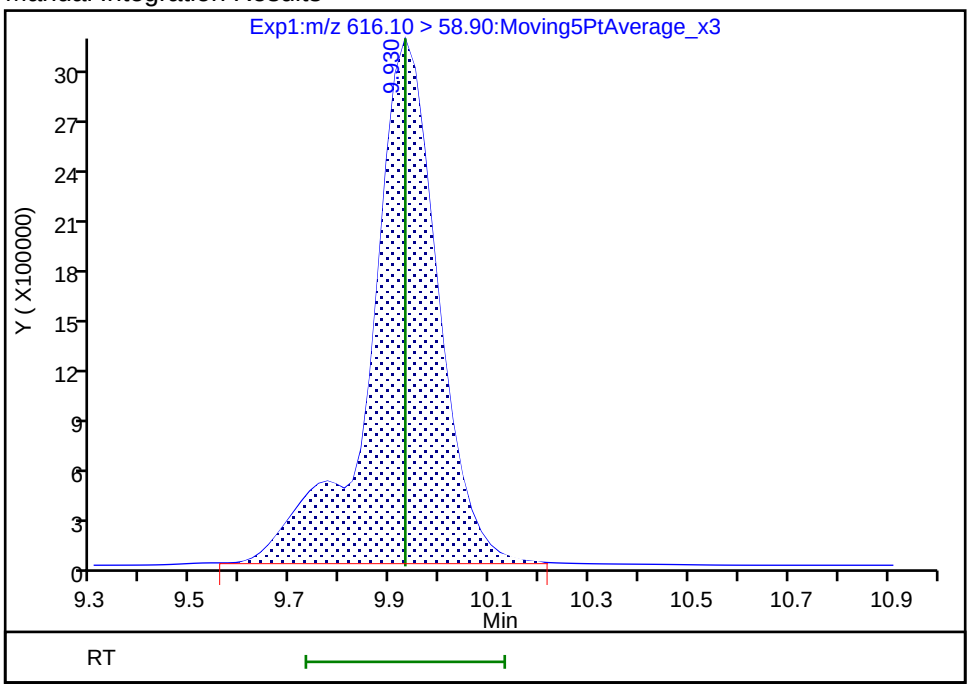
Processing Integration Results

RT: 9.93
Area: 26393082
Amount: 59.529895
Amount Units: ng/ml



Manual Integration Results

RT: 9.93
Area: 29575102
Amount: 64.524182
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 11:02:08 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

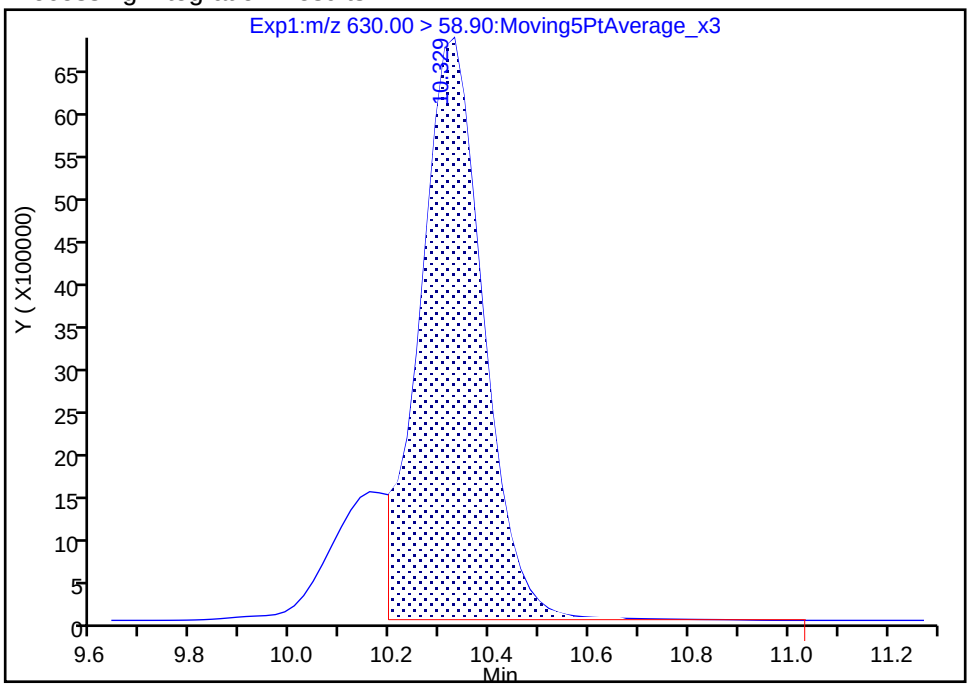
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.006.d
Injection Date: 20-Nov-2023 18:56:45 Instrument ID: LC_LCMS11
Lims ID: IC L8
Client ID:
Operator ID: DENLCMS ALS Bottle#: 8 Worklist Smp#: 7
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

65 N-EtFOSE-M, CAS: 1691-99-2

Signal: 1

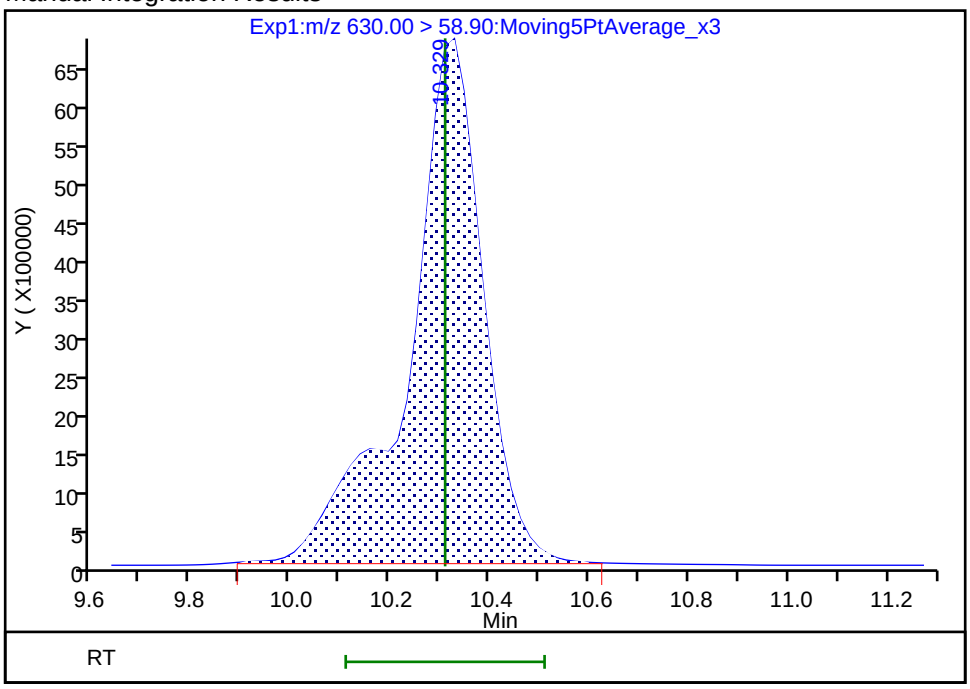
Processing Integration Results

RT: 10.33
Area: 61051442
Amount: 116.0260
Amount Units: ng/ml



Manual Integration Results

RT: 10.33
Area: 71722969
Amount: 129.8792
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 11:02:18 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 20-Nov-2023 19:16:12 ALS Bottle#: 9 Worklist Smp#: 8
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: IC L9
Misc. Info.: Plate: 1 Rack: 1
Operator ID: DENLCMS Instrument ID: LC_LCMS11
Sublist: chrom-PFC_IDA_DEN11*sub5

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 21-Nov-2023 11:15:16 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1626

First Level Reviewer: B5QN Date: 21-Nov-2023 11:09:52
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.061	3.062	-0.001	1.000	5713621	9.79		97.9	104495	
* 1 13C3PFBA										
216.00 > 172.00	3.061	3.062	-0.001		2870712	5.00			10961	
2 PFBA										
212.80 > 168.90	3.061	3.077	-0.016	1.000	31456865	61.6		98.5	55321	
4 PFMPA										
229.00 > 84.90	3.728	3.728	0.0	0.835	46446550	123.7		99.0	619022	
5 3:3 FTCA										
241.00 > 177.00	3.912	3.928	-0.016	0.877	17769308	370.0	Target=1.69	118	847696	
241.00 > 117.00	3.912	3.928	-0.016	0.877	10385119		1.71(0.84-2.53)	118	373552	
D 7 13C5 PFPeA										
268.30 > 223.00	4.463	4.478	-0.015	0.834	1469185	4.79		95.7	17076	
6 PFPA										
263.00 > 219.00	4.478	4.478	0.0	1.003	36717604	62.3	Target=221.09	99.7	27134	
263.00 > 68.90	4.463	4.478	-0.015	1.000	159702		229.91(110.55-331.64)	99.7	4770	
8 PFMBA										
279.00 > 85.10	4.779	4.778	0.001	1.071	84384498	113.7		90.9	1580720	
10 4:2FTS										
327.10 > 307.00	5.097	5.097	0.0	1.000	14056003	138.7	Target=1.58	89.0	589008	
327.10 > 80.90	5.097	5.097	0.0	1.000	8897906		1.58(0.79-2.38)	89.0	278790	
D 9 13C2-4:2FTS										R
329.10 > 80.90	5.097	5.097	0.0	0.742	201500	4.54	Target=4.29	97.3	3174	R
329.10 > 309.00	5.097	5.097	0.0	0.742	105164		1.92(2.14-6.43)	97.3	4438	
11 NFDHA										
295.00 > 201.00	5.280	5.280	0.0	0.986	13608749	75.3	Target=1.86	120	432987	
295.00 > 84.90	5.280	5.280	0.0	0.986	7446211		1.83(0.93-2.79)	120	158080	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 16 13C3 PFBS										
302.10 > 79.90	5.354	5.354	0.0	0.779	551660	2.19	Target=4.50	94.0	14188	
302.10 > 98.90	5.354	5.354	0.0	0.779	123474		4.47(2.25-6.76)	94.0	5259	
15 PFBS										
298.70 > 79.90	5.354	5.354	0.0	1.000	11636668	55.1	Target=2.27	99.3	249182	
298.70 > 98.80	5.354	5.354	0.0	1.000	5319313		2.19(1.13-3.40)	99.3	136748	
* 14 13C2 PFHxA										
315.10 > 270.00	5.354	5.354	0.0		1539531	2.50	Target=77.08		22408	
315.10 > 119.40	5.335	5.354	-0.019		20094		76.62(38.54-115.62)		647	
D 12 13C5 PFHxA										
318.00 > 273.00	5.354	5.354	0.0	1.000	1457154	2.11	Target=50.64	84.4	23719	
318.00 > 120.30	5.354	5.354	0.0	1.000	32228		45.21(25.32-75.97)	84.4	709	
13 PFHxA										
313.00 > 269.00	5.354	5.354	0.0	1.000	41594867	64.8	Target=20.05	104	595855	
313.00 > 118.90	5.354	5.354	0.0	1.000	2131509		19.51(10.03-30.08)	104	27690	
18 5:3 FTCA										
341.00 > 237.10	5.625	5.625	0.0	1.051	79942960	756.6	Target=1.13	121	1999792	
341.00 > 217.00	5.625	5.625	0.0	1.051	68810221		1.16(0.57-1.70)	121	2153893	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.663	5.682	-0.019	1.058	1815473	10.8	Target=1.57	108	25473	
286.90 > 184.90	5.663	5.682	-0.019	1.058	1005984		1.80(0.78-2.35)	108	10618	
19 HFPO-DA										
284.90 > 168.90	5.683	5.682	0.001	1.003	12550317	64.2	Target=1.65	103	58567	
284.90 > 184.90	5.683	5.682	0.001	1.003	6586566		1.91(0.83-2.48)	103	164878	
21 PFEESA										
314.80 > 134.90	5.789	5.789	0.0	1.081	83995996	118.3	Target=14.24	106	3595149	
314.80 > 82.90	5.789	5.789	0.0	1.081	6120567		13.72(7.12-21.36)	106	112449	
D 22 13C4 PFHpA										
367.10 > 322.00	6.105	6.122	-0.017	1.140	1824262	2.53		101	28221	
17 PFHpA										
363.10 > 319.00	6.122	6.122	0.0	1.003	44587906	62.1	Target=4.02	99.4	256667	
363.10 > 169.00	6.122	6.122	0.0	1.003	11045692		4.04(2.01-6.04)	99.4	382517	
23 PFPeS										
349.10 > 79.90	6.223	6.223	0.0	0.906	13176548	57.4	Target=2.71	97.9	303948	
349.10 > 98.90	6.223	6.223	0.0	0.906	4911076		2.68(1.35-4.06)	97.9	97183	
24 ADONA										
376.90 > 250.90	6.355	6.355	0.0	1.122	84155190	51.3	Target=3.01	86.9	608505	
376.90 > 84.80	6.355	6.355	0.0	1.122	28518261		2.95(1.51-4.52)	86.9	654068	
D 26 13C2-6:2FTS										R
429.10 > 80.90	6.454	6.454	0.0	0.939	285647	4.93	Target=4.27	104	9992	R
429.10 > 409.00	6.454	6.454	0.0	0.939	178188		1.60(2.13-6.40)	104	8323	
25 6:2FTS										
427.10 > 407.00	6.454	6.454	0.0	1.000	22150150	193.3	Target=1.91	81.6	1031885	
427.10 > 80.90	6.454	6.454	0.0	1.000	12878282		1.72(0.96-2.87)	81.6	601161	
D 27 13C8 PFOA										
421.10 > 376.00	6.690	6.707	-0.017	0.998	1501777	2.49		99.7	25445	
* 29 13C4 PFOA										
417.10 > 172.00	6.707	6.707	0.0		230247	2.50			6257	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 PFOA										
413.00 > 369.00	6.707	6.707	0.0	1.002	31133464	64.9	Target=2.39	104	528189	
413.00 > 169.00	6.707	6.707	0.0	1.002	12159018		2.56(1.19-3.58)	104	544733	
30 7:3 FTCA										
441.00 > 316.90	6.855	6.855	0.0	1.280	36008698	737.4	Target=1.44	118	1626868	
441.00 > 336.90	6.838	6.855	-0.017	1.277	24287439		1.48(0.72-2.16)	118	82037	
* 31 18O2 PFHxS										
403.00 > 83.90	6.871	6.872	-0.001		466249	2.37			15954	
D 33 13C3 PFHxS										
402.10 > 79.90	6.871	6.872	-0.001	1.000	483417	2.42	Target=4.22	102	16658	
402.10 > 98.80	6.871	6.872	-0.001	1.000	107548		4.49(2.11-6.33)	102	4923	
32 PFHxS										
398.70 > 79.90	6.871	6.872	-0.001	1.000	5893559	54.2	Target=3.74	95.1	217408	
398.70 > 98.90	6.871	6.872	-0.001	1.000	1556058		3.79(1.87-5.61)	95.1	60475	
D 34 13C9 PFNA										
472.10 > 427.00	7.241	7.241	0.0	1.000	918456	1.22		97.6	12565	
36 PFNA										
463.00 > 419.00	7.241	7.241	0.0	1.000	45575769	61.8	Target=5.99	98.8	553928	
463.00 > 219.00	7.241	7.241	0.0	1.000	7979984		5.71(3.00-8.99)	98.8	324115	
* 35 13C5 PFNA										
468.00 > 423.00	7.241	7.241	0.0		995647	1.25			20335	
37 PFHpS										
449.00 > 79.90	7.457	7.457	0.0	0.932	9738519	59.9	Target=5.05	101	268528	
449.00 > 98.80	7.457	7.457	0.0	0.932	2026573		4.81(2.53-7.58)	101	40127	
D 38 13C2-8:2FTS										R
529.10 > 80.90	7.506	7.506	0.0	1.092	355017	5.06	Target=5.22	106	9962	R
529.10 > 509.00	7.506	7.506	0.0	1.092	180237		1.97(2.61-7.83)	106	8433	
39 8:2FTS										
527.10 > 507.00	7.506	7.506	0.0	1.000	21760999	202.1	Target=1.64	84.4	1012314	
527.10 > 80.80	7.506	7.506	0.0	1.000	13075522		1.66(0.82-2.46)	84.4	609281	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.726	7.726	0.0	0.965	450259	4.88		97.5	7555	
42 NMeFOSAA										
570.10 > 419.00	7.726	7.726	0.0	1.000	5312695	58.9	Target=1.12	94.3	59577	
570.10 > 483.00	7.726	7.726	0.0	1.000	5071918		1.05(0.56-1.68)	94.3	167413	
43 PFDA										
512.90 > 469.00	7.761	7.761	0.0	1.000	39884428	68.6	Target=3.52	110	1323899	
512.90 > 219.00	7.761	7.761	0.0	1.000	10154540		3.93(1.76-5.28)	110	448241	
* 44 13C2 PFDA										
515.10 > 470.10	7.761	7.761	0.0		887203	1.25			19628	
D 40 13C6 PFDA										
519.10 > 474.10	7.761	7.761	0.0	1.000	884359	1.25		100	16813	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.934	7.934	0.0	0.991	543911	5.09		102	8090	
45 NEtFOSAA										
584.20 > 419.10	7.951	7.951	0.0	1.002	4592028	58.0	Target=1.52	92.9	14601	
584.20 > 526.00	7.951	7.951	0.0	1.002	3085562		1.49(0.76-2.27)	92.9	108349	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 49 13C8 PFOS										
507.10 > 79.90	8.004	7.986	0.018	1.000	217500	2.20	Target=3.01	92.2	5.0	
507.10 > 98.90	8.004	7.986	0.018	1.000	61478		3.54(1.50-4.51)	92.2	734	
* 47 13C4 PFOS										
502.80 > 79.90	8.004	7.986	0.018		658040	2.40	Target=3.82		12457	
502.80 > 98.90	8.004	7.986	0.018		166281		3.96(1.91-5.72)		7297	
48 PFOS										
498.90 > 79.90	8.004	8.004	0.0	1.000	18968511	64.0	Target=4.59	110	365652	
498.90 > 98.80	8.004	8.004	0.0	1.000	4097335		4.63(2.29-6.88)	110	154536	
D 53 13C7 PFUnA										
570.00 > 525.10	8.267	8.249	0.018	1.065	944820	1.20		96.0	17206	
52 PFUnA										
563.10 > 519.00	8.267	8.267	0.0	1.000	42009668	62.8	Target=5.53	100	888987	
563.10 > 269.10	8.267	8.267	0.0	1.000	8017913		5.24(2.77-8.30)	100	255371	
54 9ClFOS										
530.80 > 351.00	8.390	8.390	0.0	1.481	44268430	134.8	Target=2.30	86.7	1915306	
532.80 > 353.00	8.390	8.390	0.0	1.481	15944623		2.78(1.15-3.46)	86.7	684748	
55 PFNS										
548.80 > 79.90	8.512	8.512	0.0	1.064	7286435	60.1	Target=4.01	100	80173	
548.80 > 98.80	8.512	8.512	0.0	1.064	1863110		3.91(2.01-6.02)	100	35299	
51 PFOSA										
498.10 > 77.90	8.724	8.723	0.001	1.002	33322505	65.3	Target=44.22	104	1366588	
498.10 > 478.00	8.724	8.723	0.001	1.002	755083		44.13(22.11-66.32)	104	10249	
D 50 13C8 FOSA										
506.10 > 77.80	8.706	8.723	-0.017	1.088	1281734	2.68		107	13600	
D 56 13C2 PFDoA										
615.10 > 570.00	8.757	8.757	0.0	1.128	1004593	1.29		103	21734	
57 PFDoA										
613.10 > 569.00	8.757	8.757	0.0	1.000	44212823	54.7	Target=7.62	87.6	715136	
613.10 > 319.00	8.757	8.757	0.0	1.000	6189195		7.14(3.81-11.43)	87.6	268146	
58 PFDS										
599.00 > 79.90	9.029	9.028	0.001	1.128	17098138	61.1	Target=4.76	101	390008	
599.00 > 98.80	9.029	9.028	0.001	1.128	3676338		4.65(2.38-7.13)	101	56324	
63 PFTrDA										
663.00 > 619.00	9.255	9.254	0.001	0.950	32690686	63.9	Target=5.15	102	888807	
663.00 > 168.90	9.255	9.254	0.001	0.950	5931169		5.51(2.57-7.72)	102	200092	
66 11ClFOS										
630.90 > 450.90	9.414	9.413	0.001	1.662	54215445	162.6	Target=3.33	103	2492617	
632.90 > 452.90	9.414	9.413	0.001	1.662	16722305		3.24(1.67-5.00)	103	770536	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.739	9.738	0.001	1.255	478899	1.29		104	10526	
70 PFTeDA										
713.10 > 669.00	9.739	9.738	0.001	1.000	25043723	56.3	Target=7.24	90.0	155113	
713.10 > 168.90	9.739	9.738	0.001	1.000	3640393		6.88(3.62-10.85)	90.0	23650	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.893	9.910	-0.017	1.236	9643471	27.5		110	100169	
60 N-MeFOSE-M										M
616.10 > 58.90	9.931	9.930	0.001	1.004	123737588	293.2		93.8	5769	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
71 PFDoS										
699.10 > 79.90	10.008	10.007	0.001	1.250	14164726	63.2	Target=4.39	104	336857	
699.10 > 98.80	10.008	10.007	0.001	1.250	3227264		4.39(2.20-6.59)	104	31987	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.103	10.102	0.001	1.262	315415	2.91		117	6334	
61 NMeFOSA										
511.90 > 219.00	10.103	10.102	0.001	1.000	7471151	61.9	Target=0.99	99.1	176313	
511.90 > 169.00	10.103	10.102	0.001	1.000	7353523		1.02(0.49-1.48)	99.1	165542	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.292	10.291	0.001	1.286	11282322	25.8		103	103420	
65 N-EtFOSE-M										M
630.00 > 58.90	10.311	10.310	0.001	1.002	268929997	571.1		91.4	4036	M
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.482	10.481	0.001	1.310	313420	2.82		113	4338	
68 N-EtFOSA-M										
526.00 > 219.00	10.482	10.500	-0.018	1.000	8596863	64.0	Target=0.99	102	61094	
526.00 > 169.00	10.482	10.500	-0.018	1.000	8633858		1.00(0.50-1.49)	102	65848	

QC Flag Legend

Processing Flags
R - Failed Signal Ratio Test
Review Flags
M - Manually Integrated

Reagents:

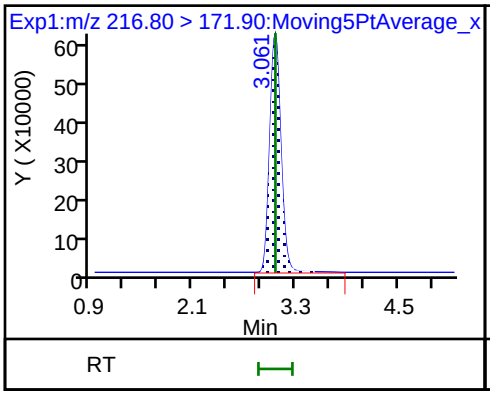
LC1633EPA_LL9_00001 Amount Added: 1.00 Units: mL

Report Date: 21-Nov-2023 11:15:16 Chrom Revision: 2.3 15-Nov-2023 20:54:34

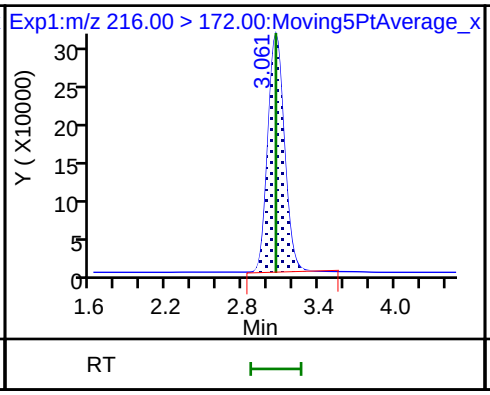
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d
Injection Date: 20-Nov-2023 19:16:12 Instrument ID: LC_LCMS11
Lims ID: IC L9
Client ID:
Operator ID: DENLCMS ALS Bottle#: 9 Worklist Smp#: 8
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5

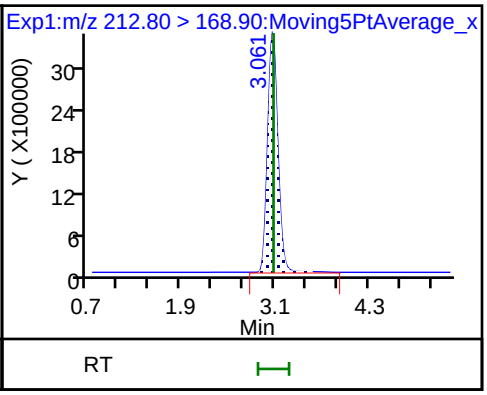
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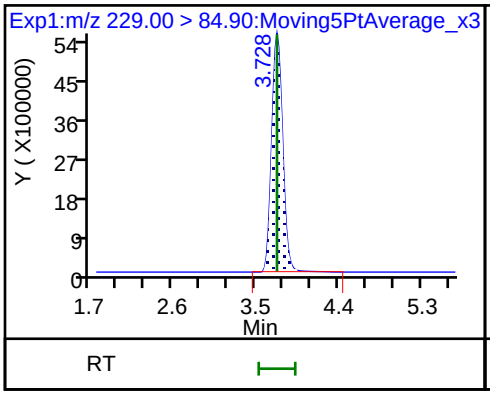
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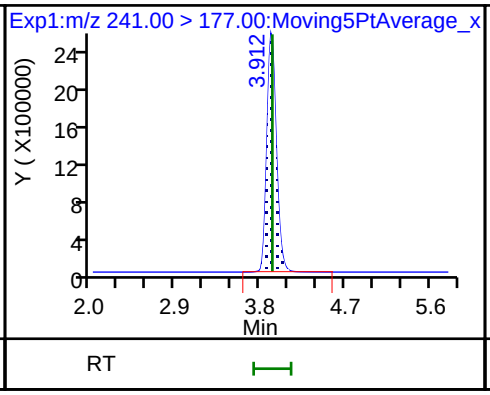
2 PFBA



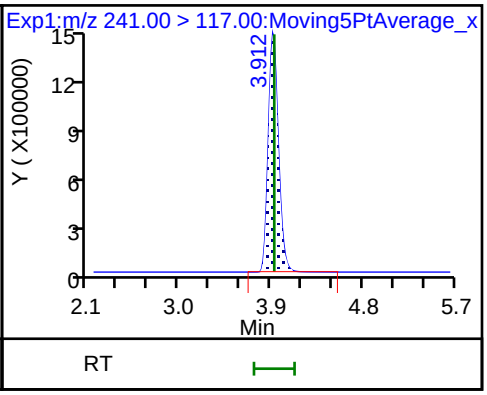
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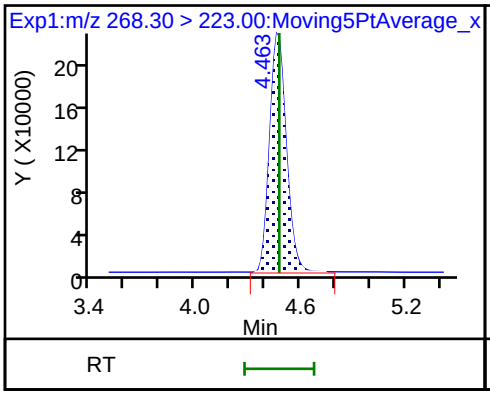
5 3:3 FTCA



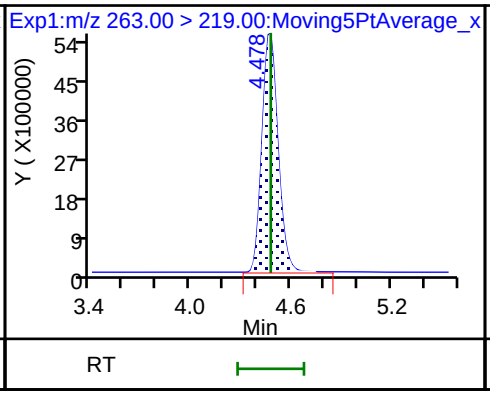
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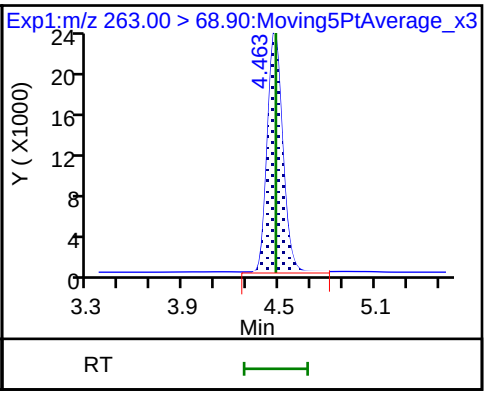
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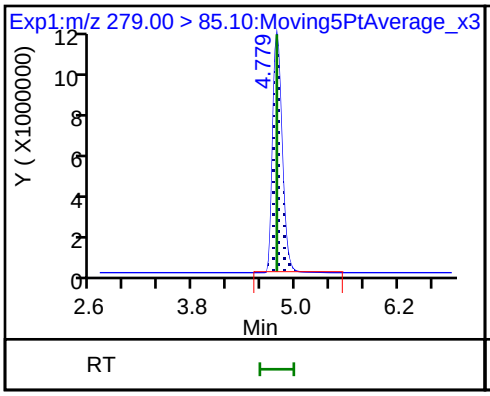
6 PFPA



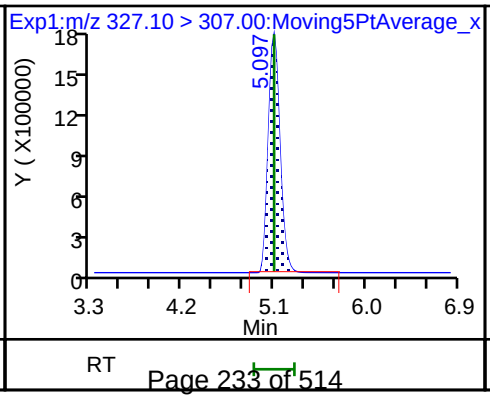
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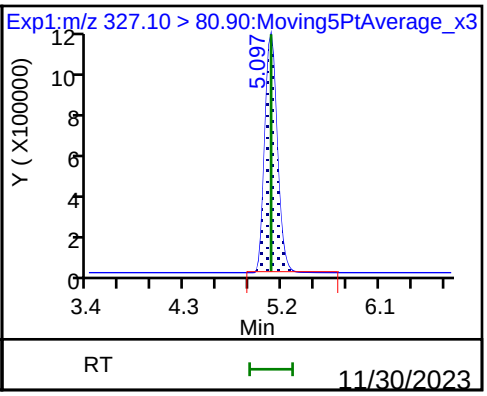
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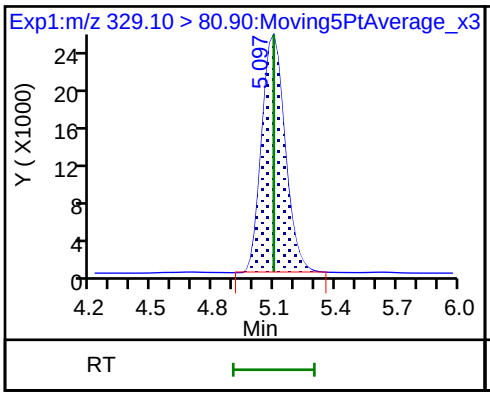
10 4:2FTS



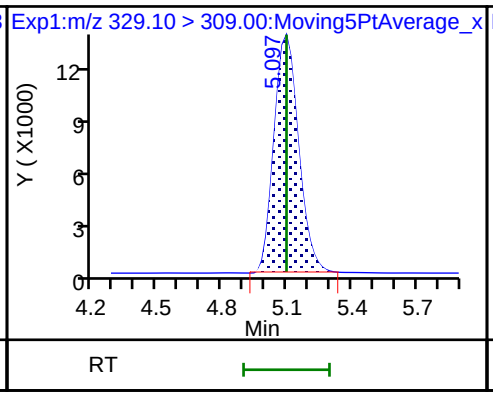
10 4:2FTS



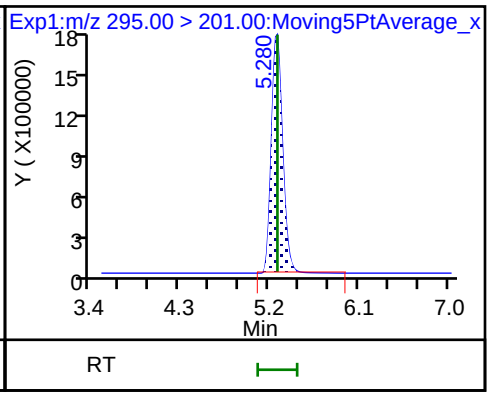
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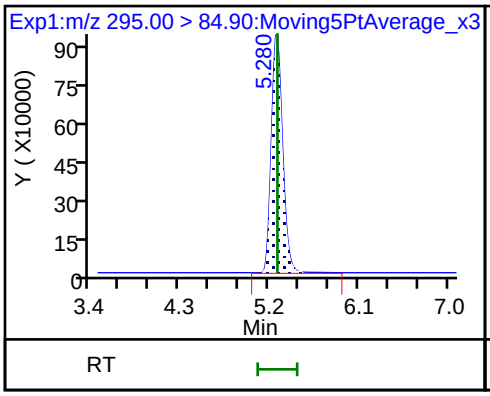
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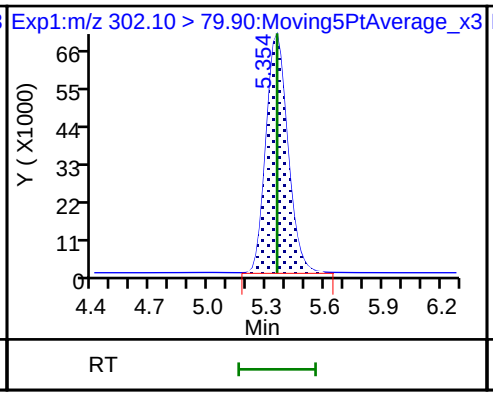
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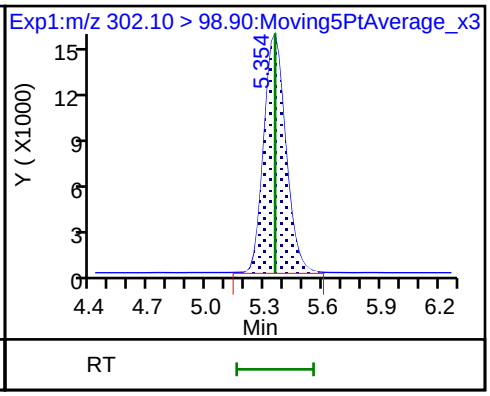
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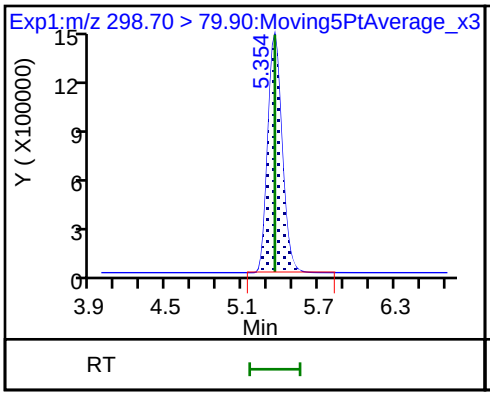
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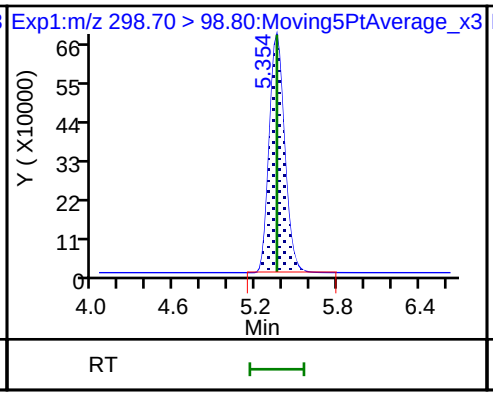
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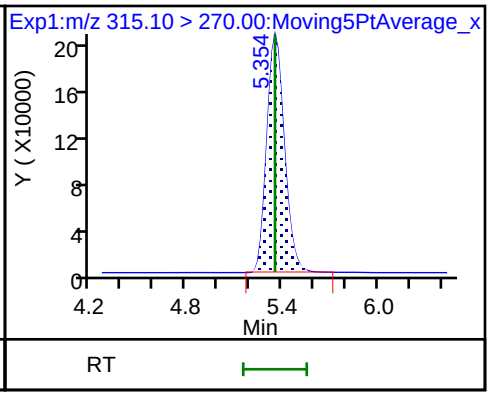
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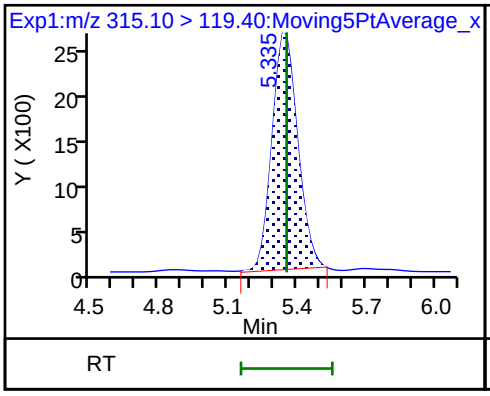
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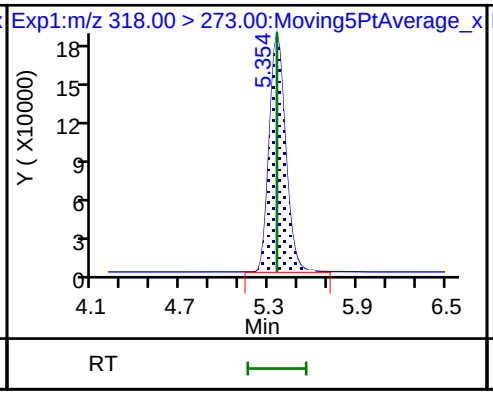
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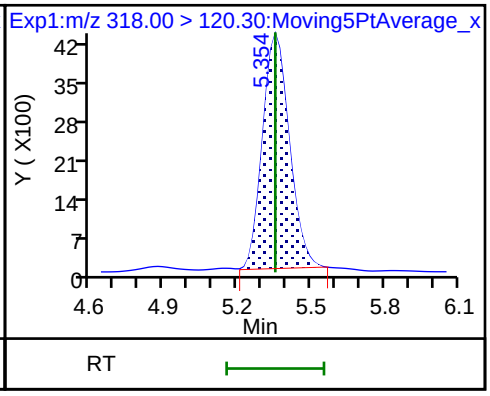
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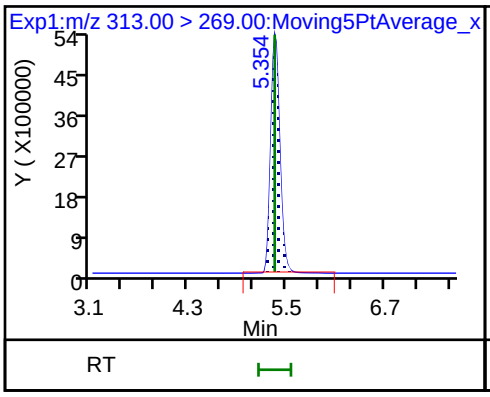
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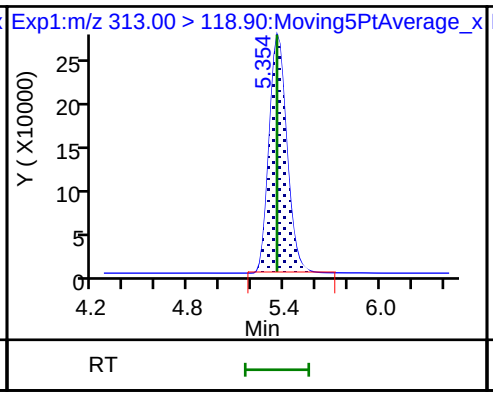
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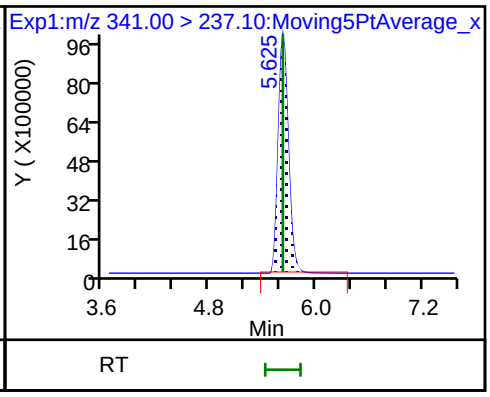
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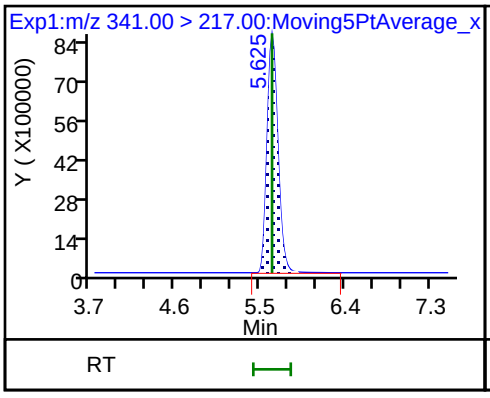
13 PFHxA



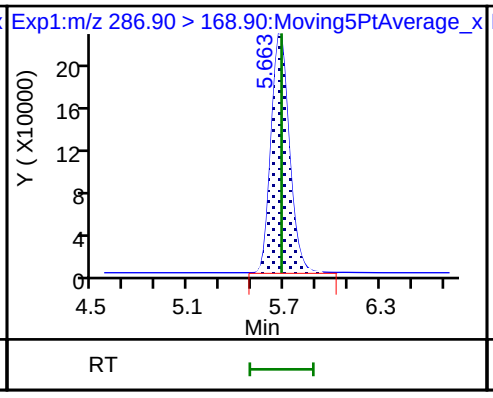
18 5:3 FTCA



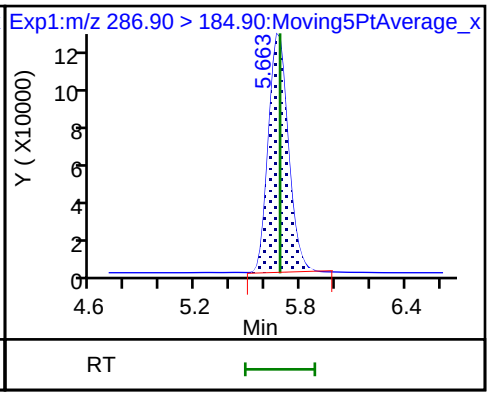
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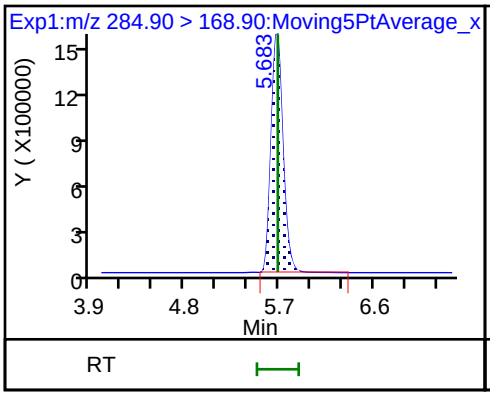
D 20 13C3 HFPO-DA



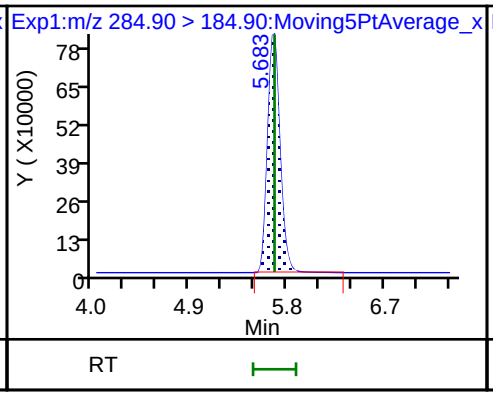
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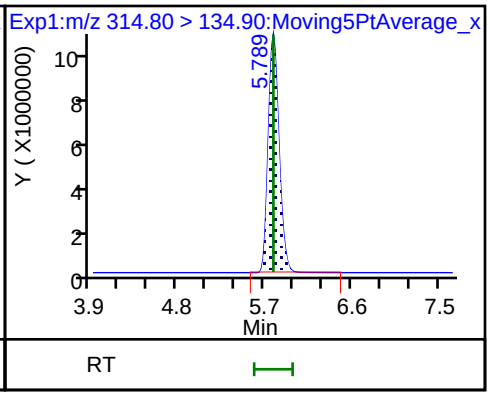
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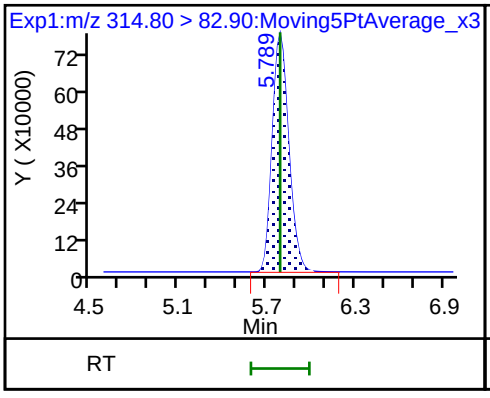
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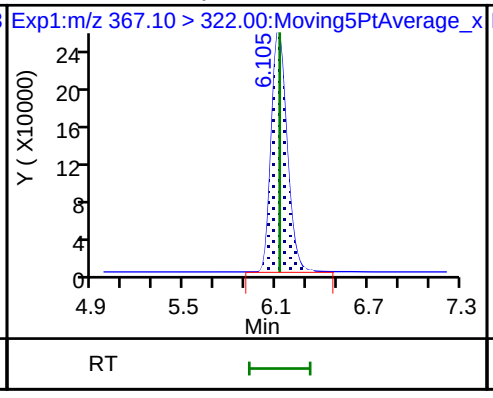
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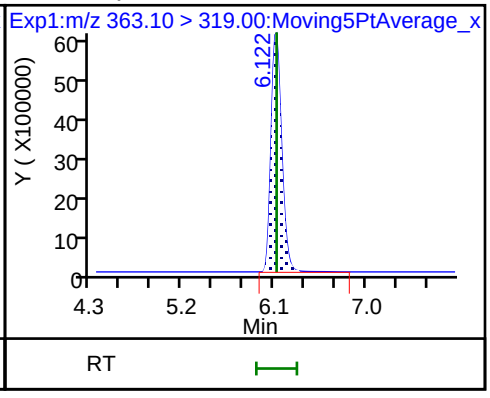
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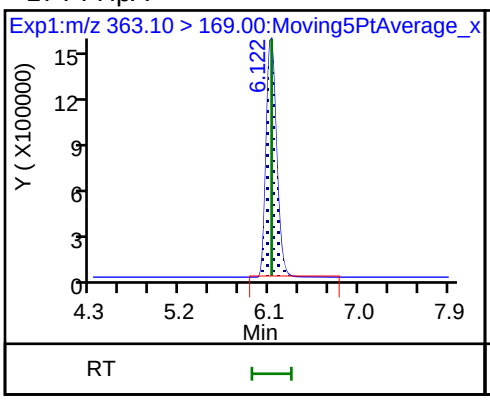
D 22 13C4 PFHpA



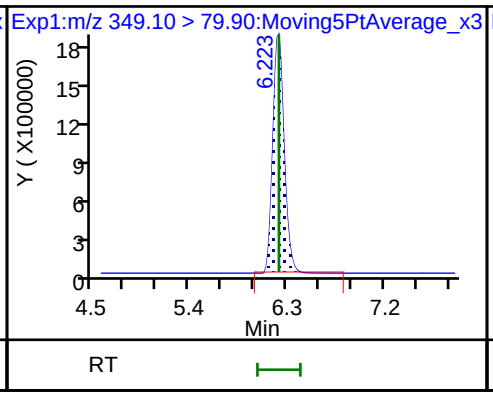
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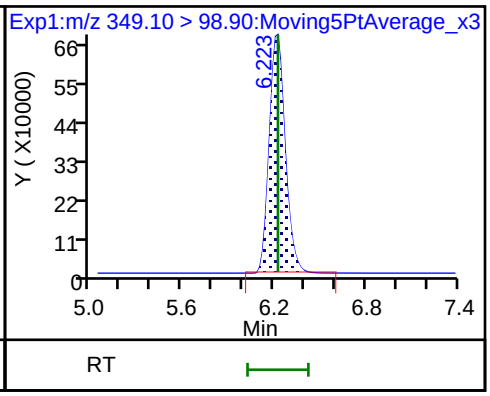
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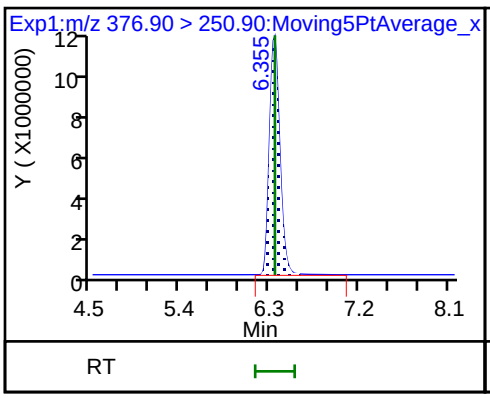
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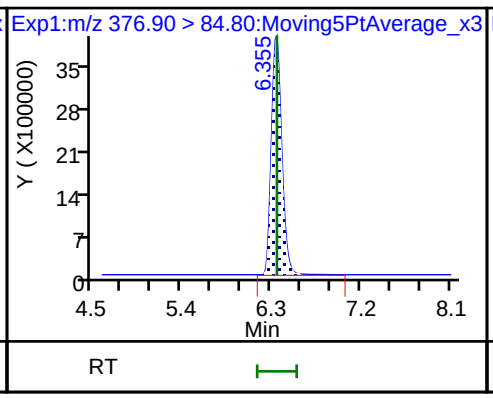
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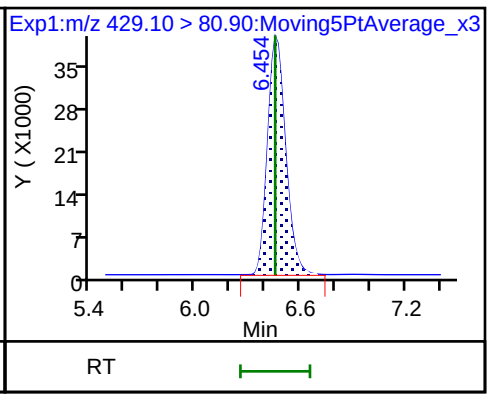
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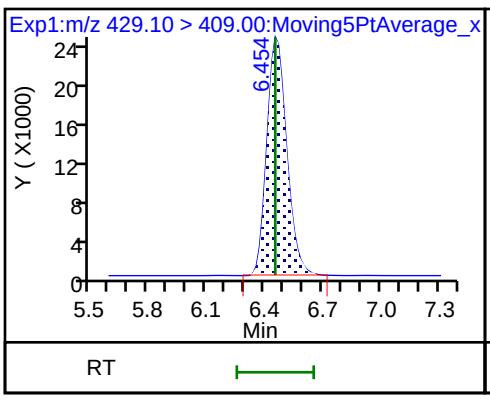
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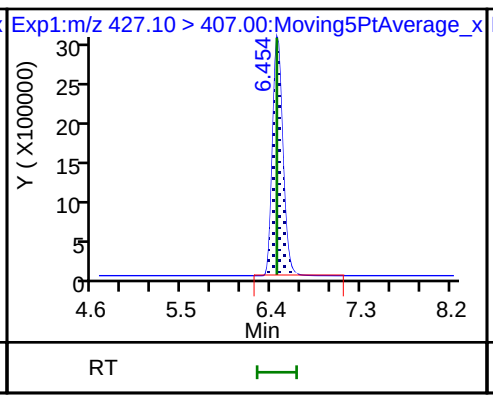
D 26 13C2-6:2FTS



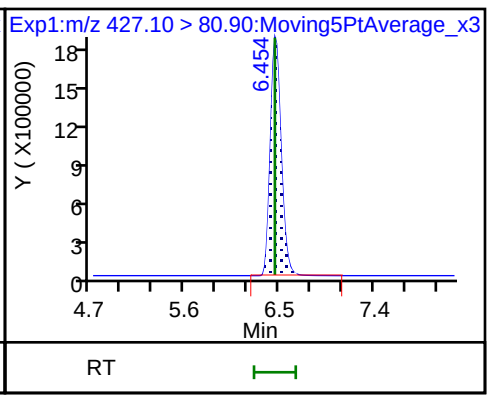
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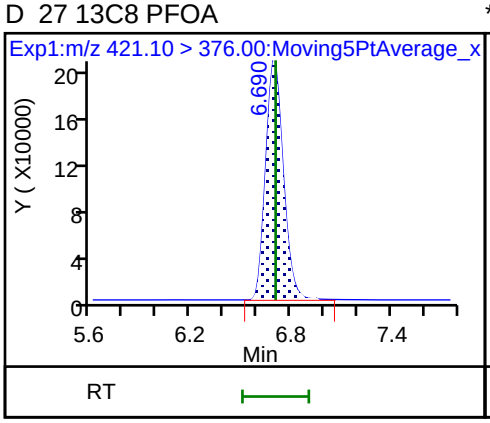
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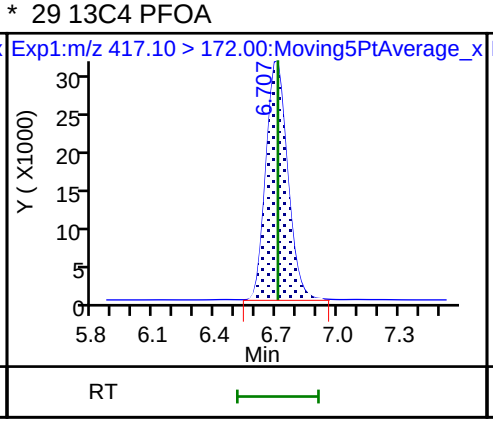
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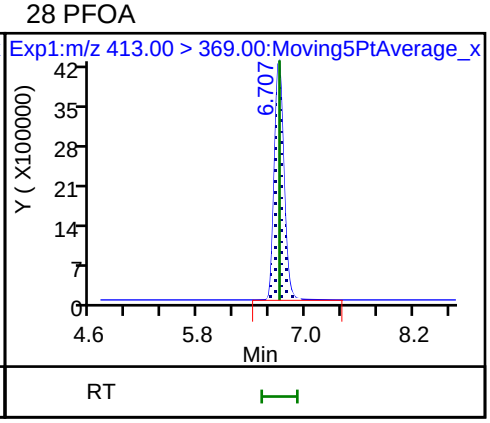
D 27 13C8 PFOA



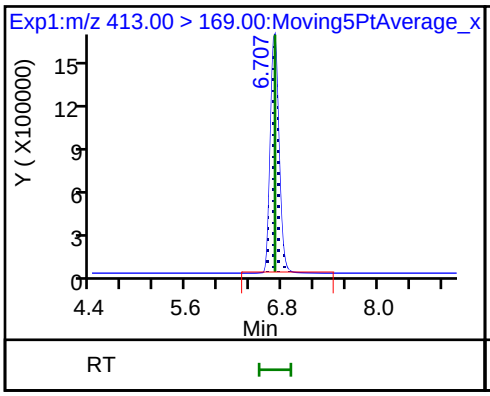
* 29 13C4 PFOA



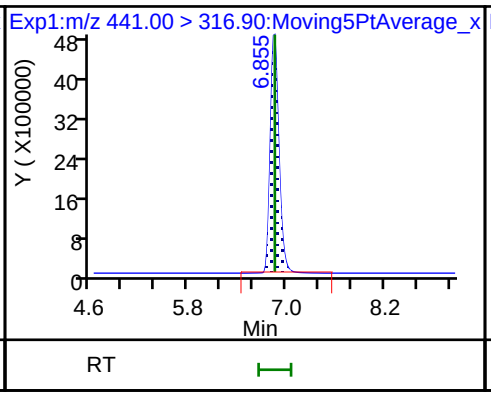
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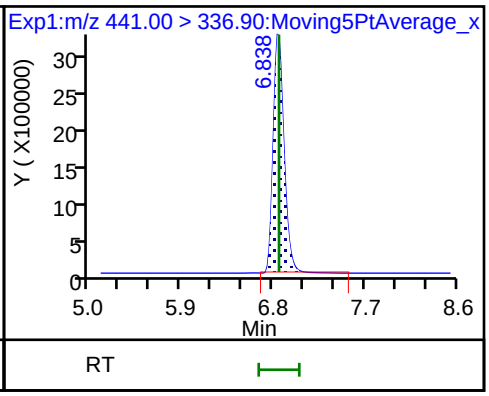
28 PFOA



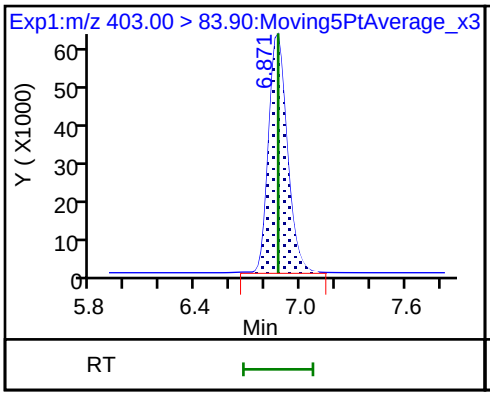
30 7:3 FTCA



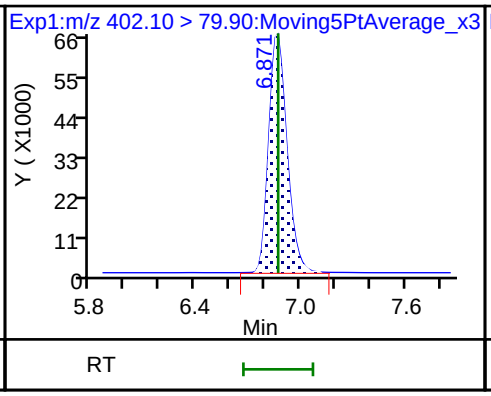
30 7:3 FTCA



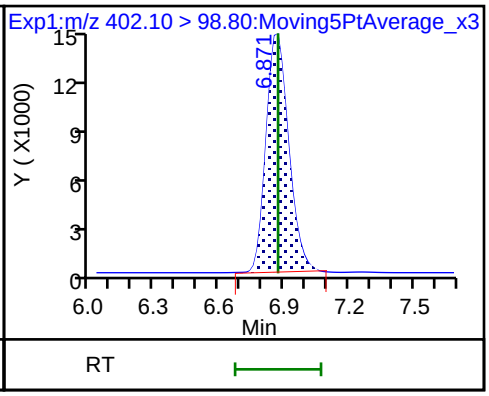
* 31 18O2 PFHxS



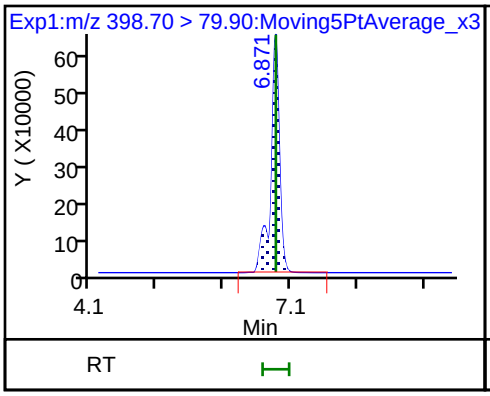
D 33 13C3 PFHxS



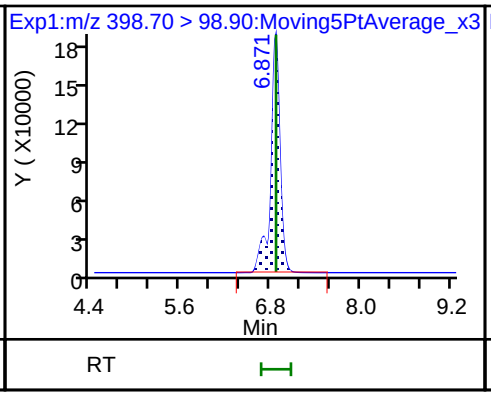
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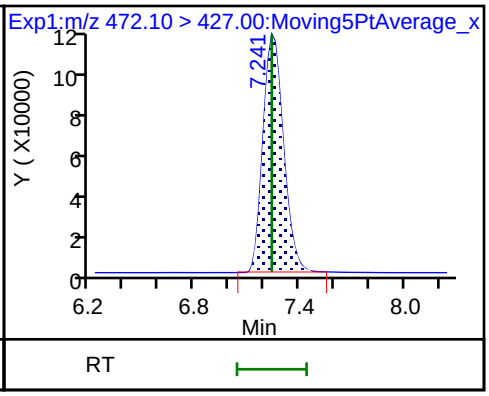
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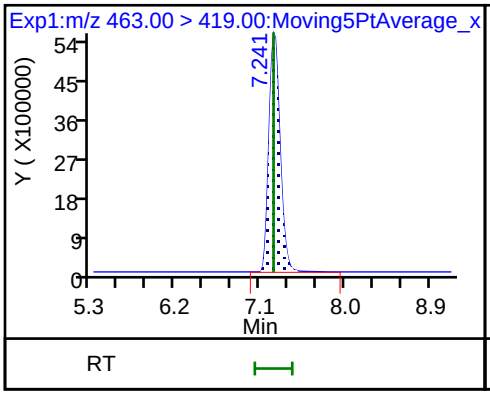
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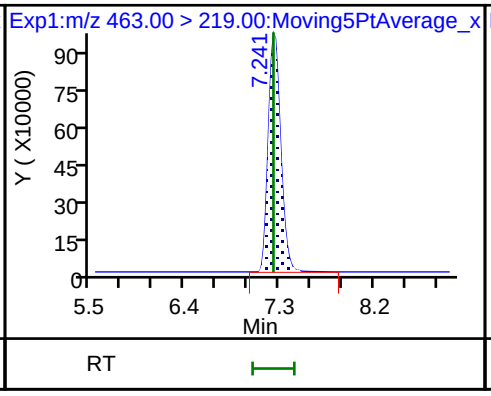
D 34 13C9 PFNA



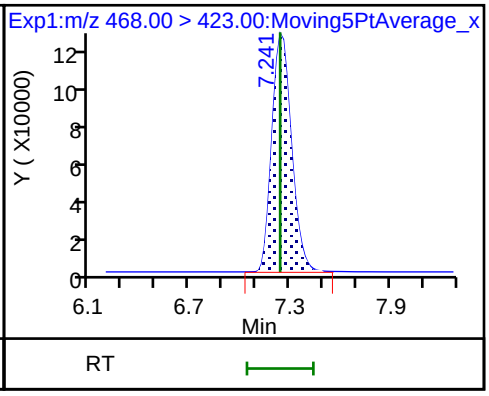
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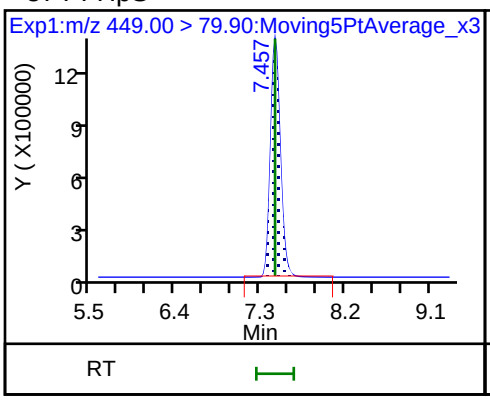
36 PFNA



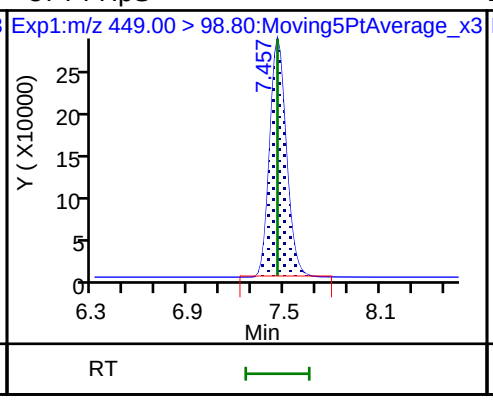
* 35 13C5 PFNA



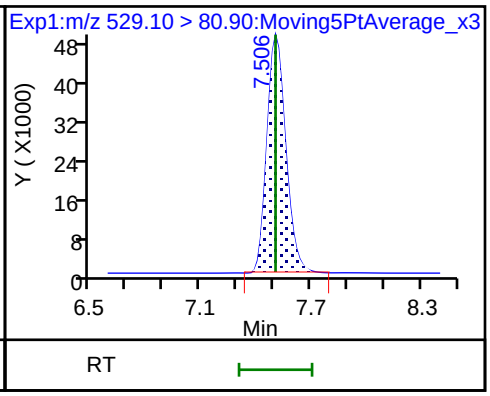
37 PFHpS



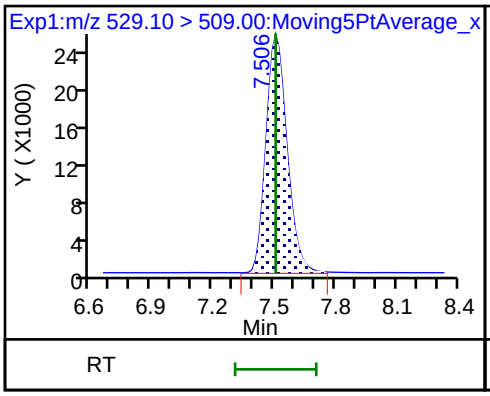
37 PFHpS



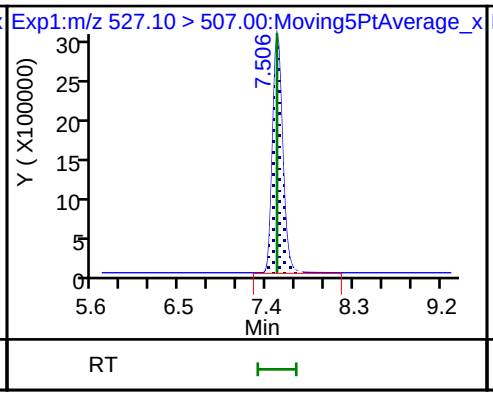
D 38 13C2-8:2FTS



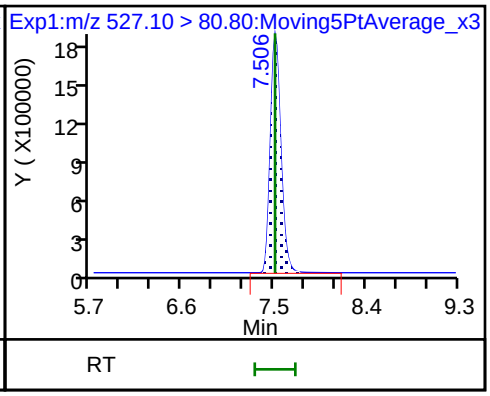
D 38 13C2-8:2FTS



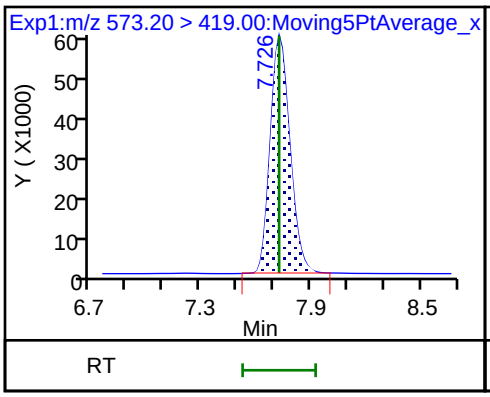
39 8:2FTS



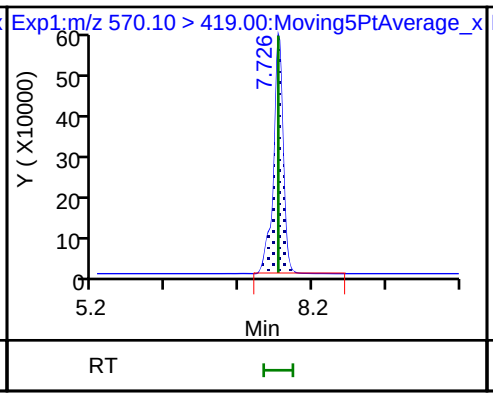
39 8:2FTS



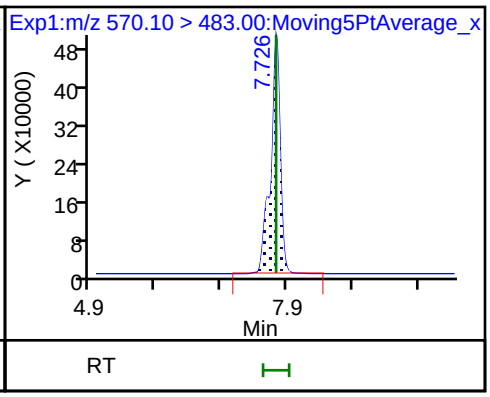
D 41 d3-NMeFOSAA



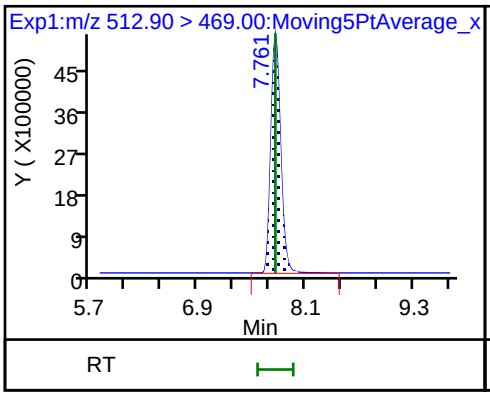
42 NMeFOSAA



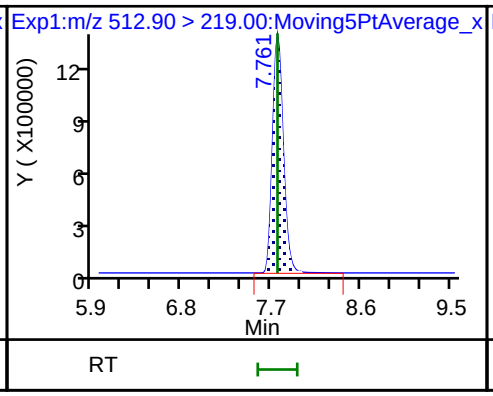
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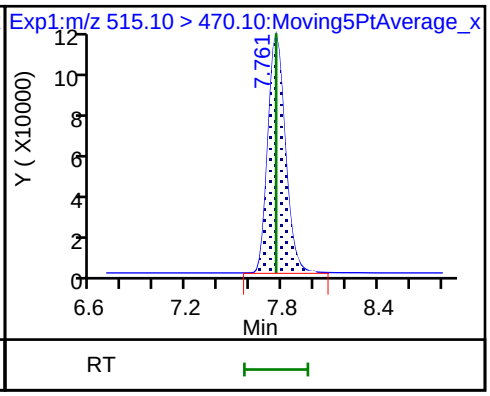
43 PFDA



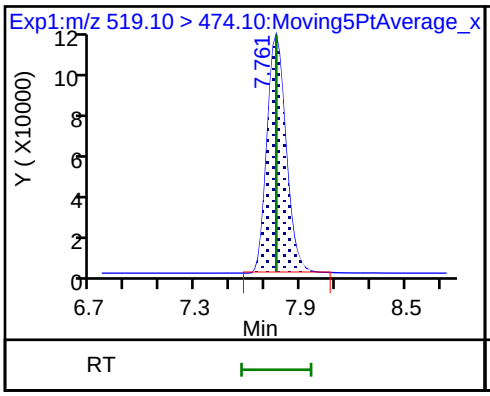
43 PFDA



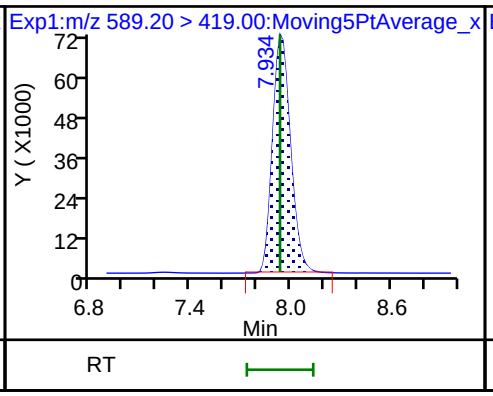
* 44 13C2 PFDA



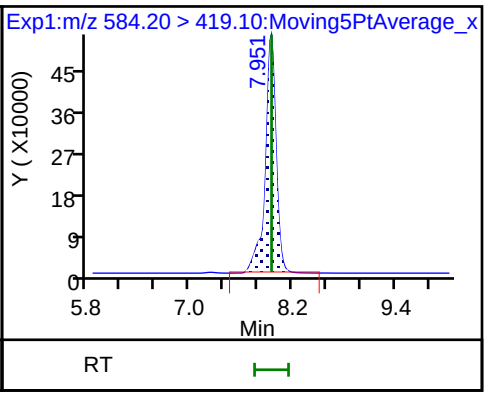
D 40 13C6 PFDA



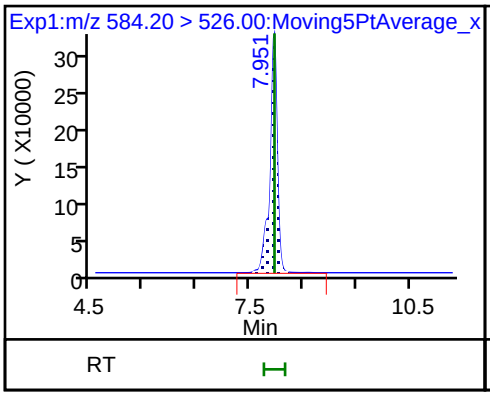
D 46 d5-NEtFOSAA



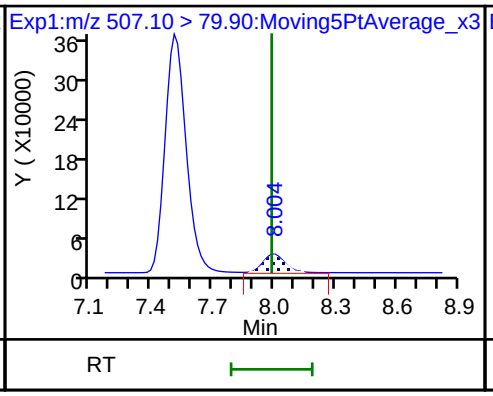
45 NEtFOSAA



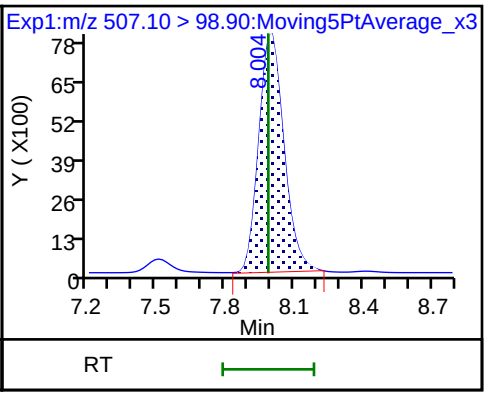
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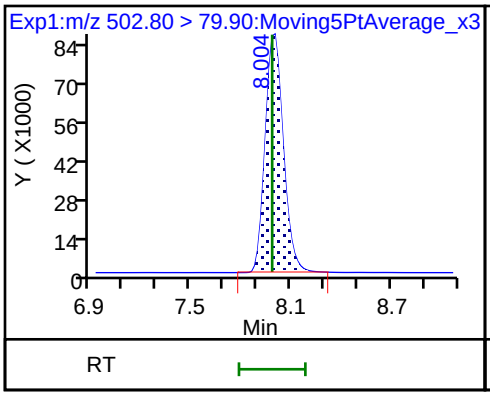
D 49 13C8 PFOS



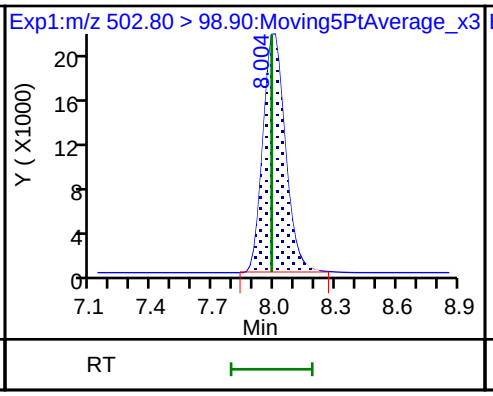
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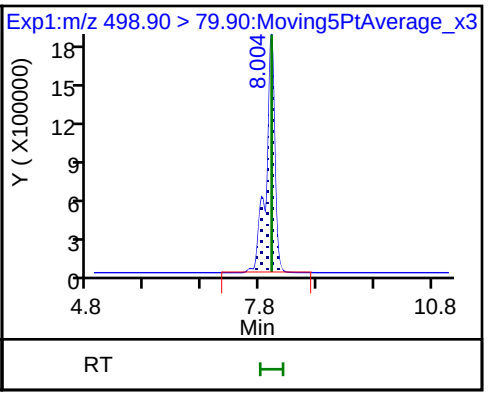
* 47 13C4 PFOS



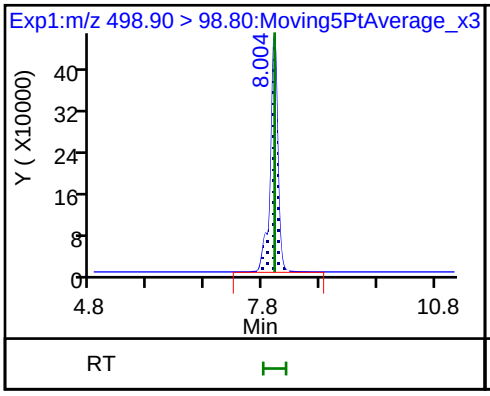
* 47 13C4 PFOS



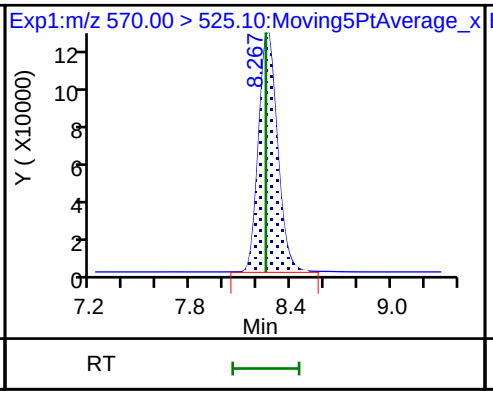
48 PFOS



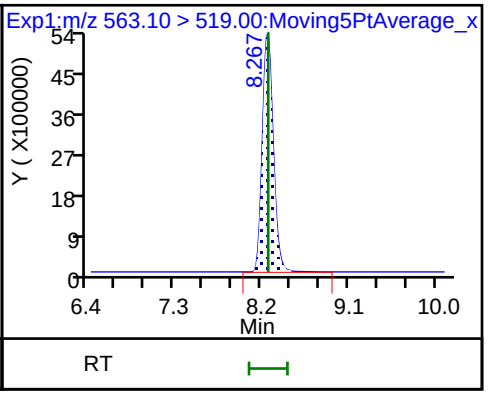
48 PFOS



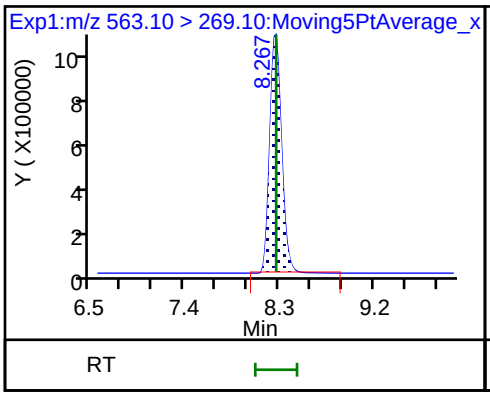
D 53 13C7 PFUnA



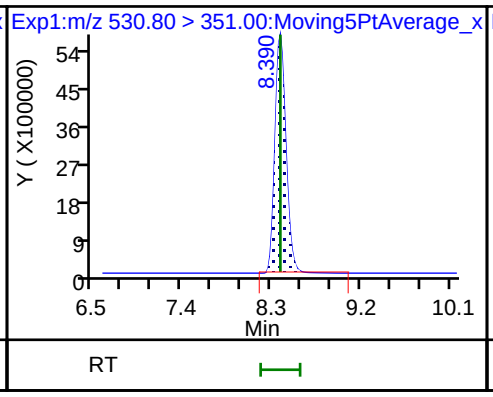
52 PFUnA



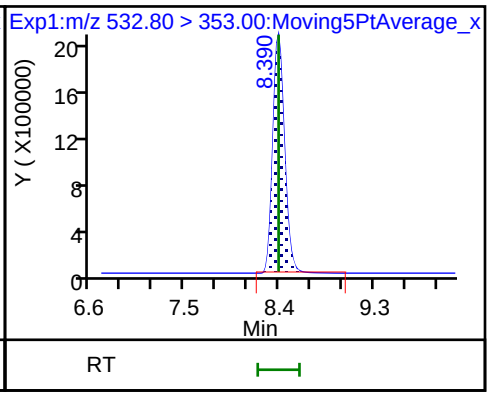
52 PFUnA



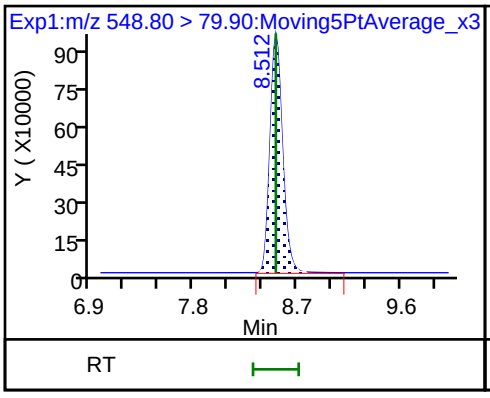
54 9ClFOS



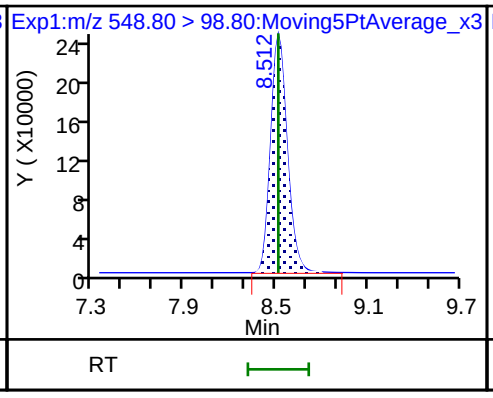
54 9ClFOS



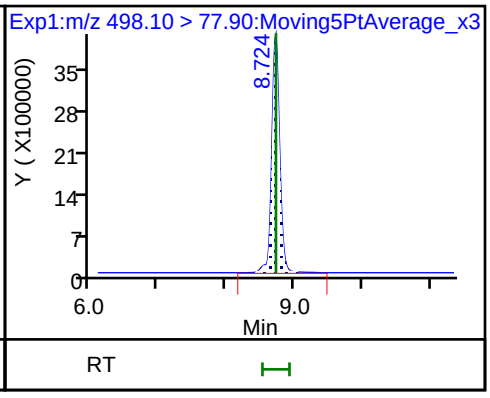
55 PFNS



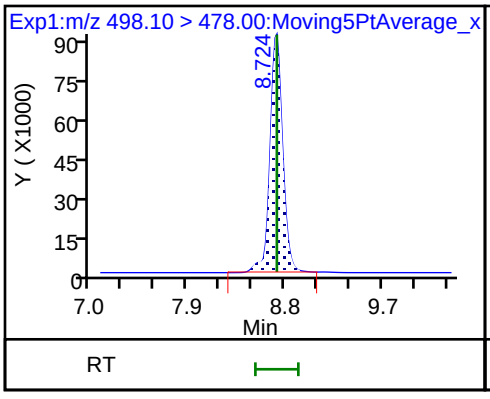
55 PFNS



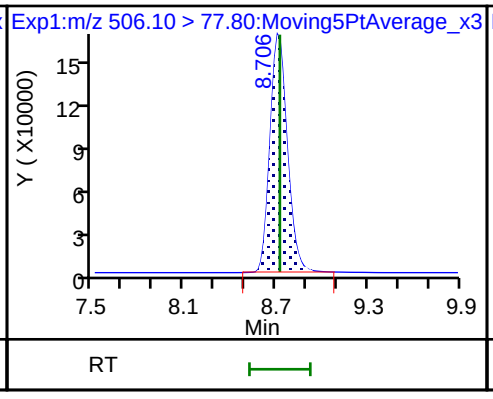
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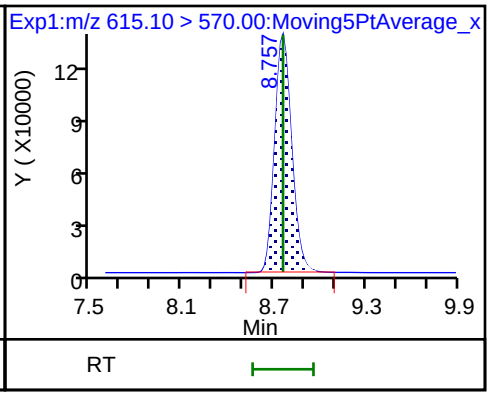
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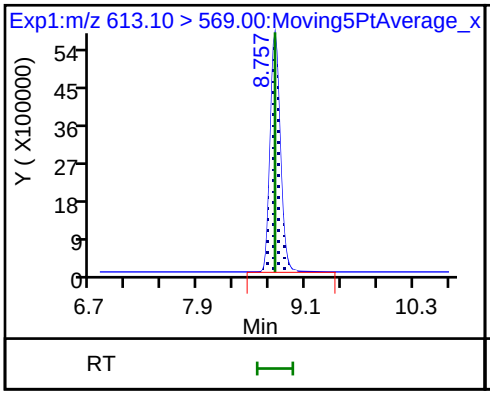
D 50 13C8 FOSA



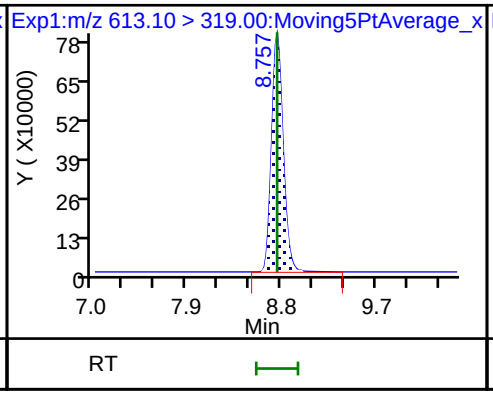
D 56 13C2 PFDoA



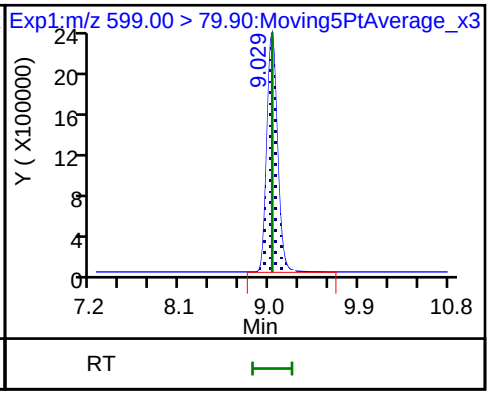
57 PFDoA



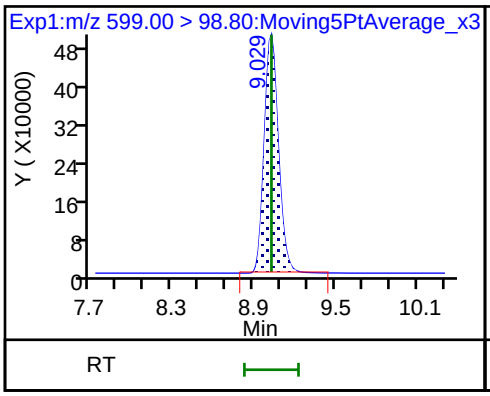
57 PFDoA



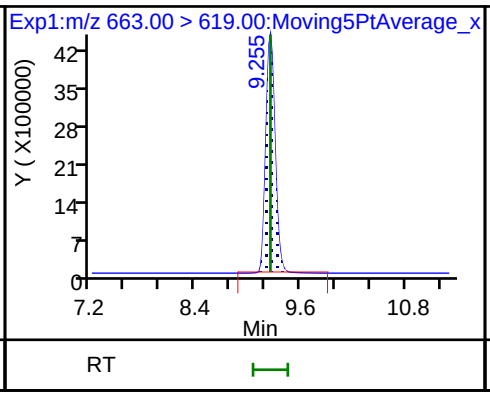
58 PFDS



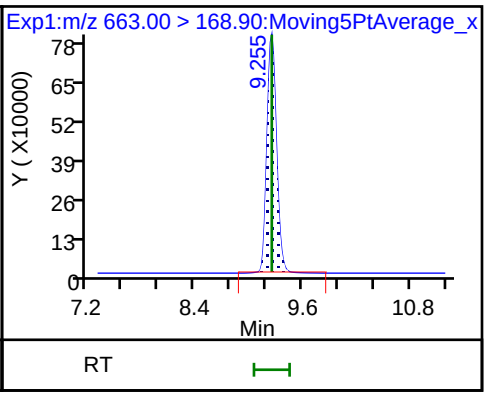
58 PFDS



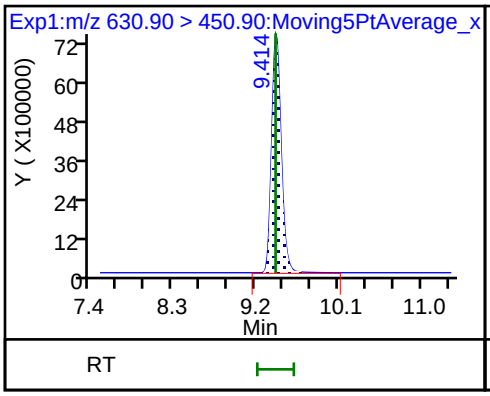
63 PFTrDA



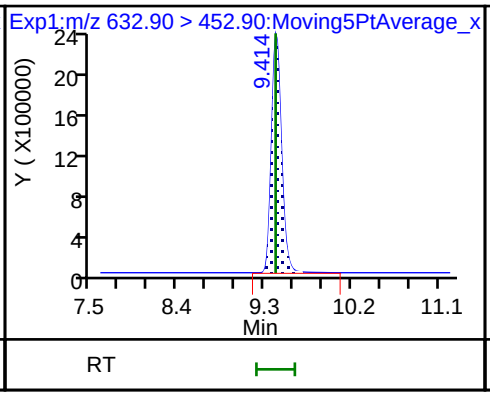
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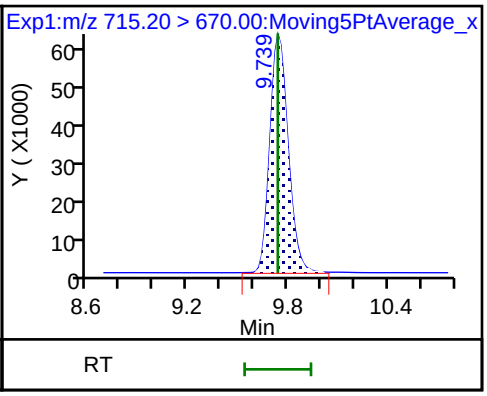
66 11ClFOS



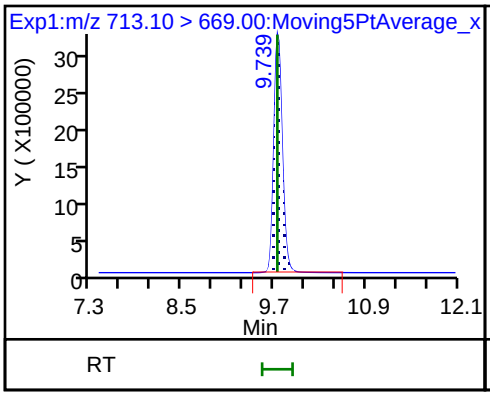
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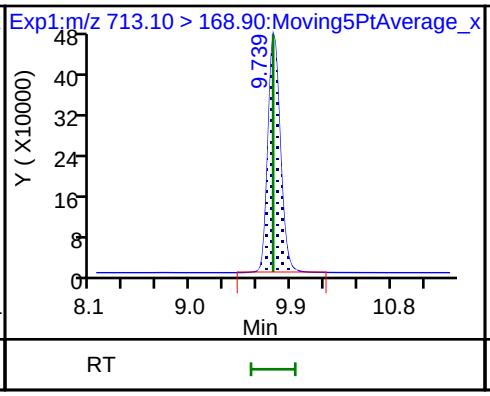
D 69 13C2 PFTeDA



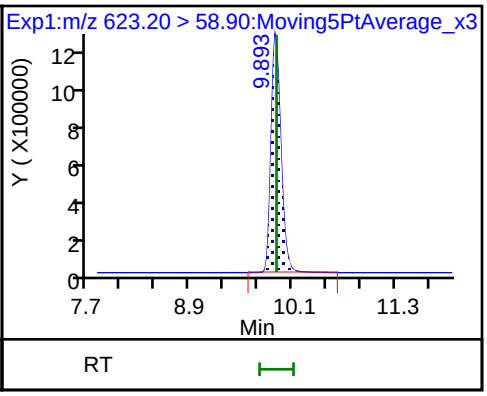
70 PFTeDA



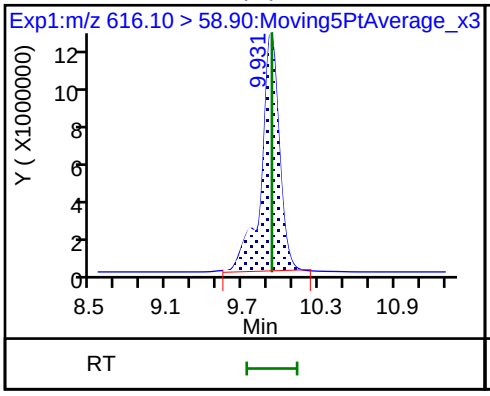
70 PFTeDA



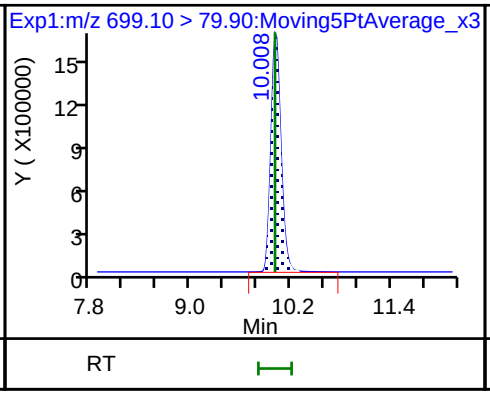
D 59 d7-N-Me-FOSE



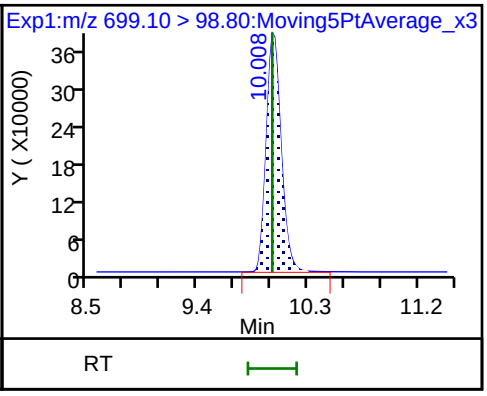
60 N-MeFOSE-M (M)



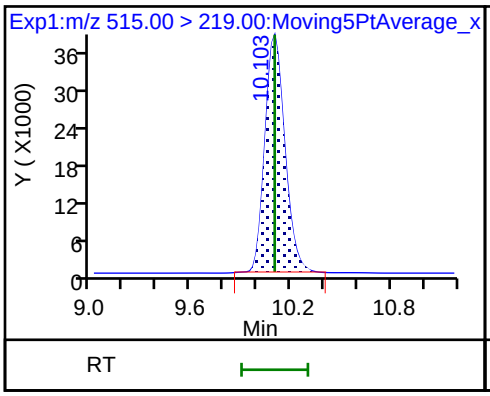
71 PFDoS



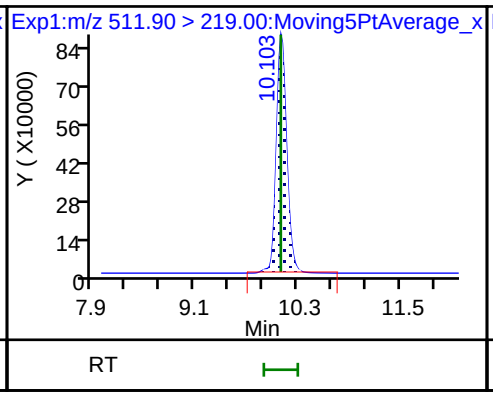
71 PFDoS



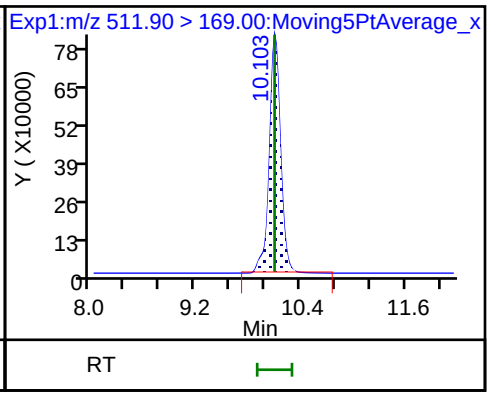
D 62 d3-NMePFOSA



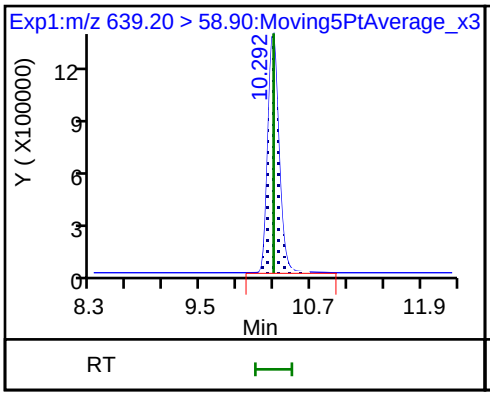
61 NMeFOSA



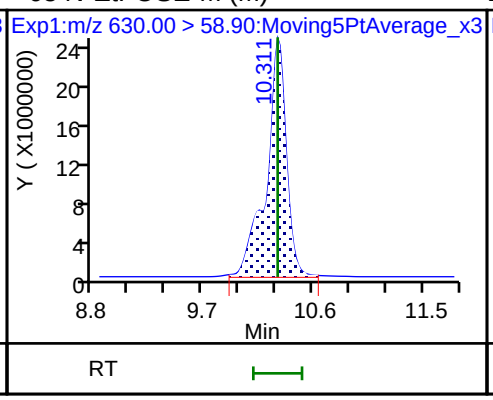
61 NMeFOSA



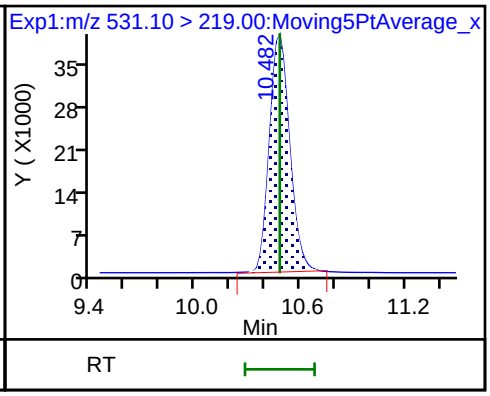
D 64 d9-N-EtFOSE



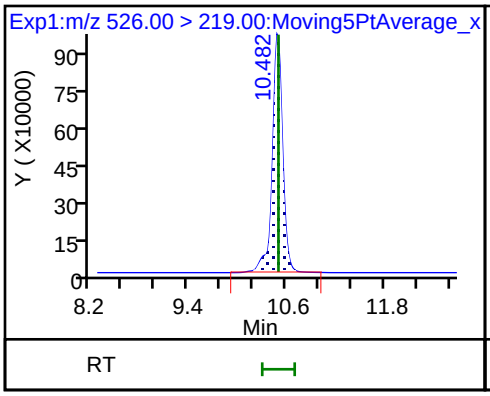
65 N-EtFOSE-M (M)



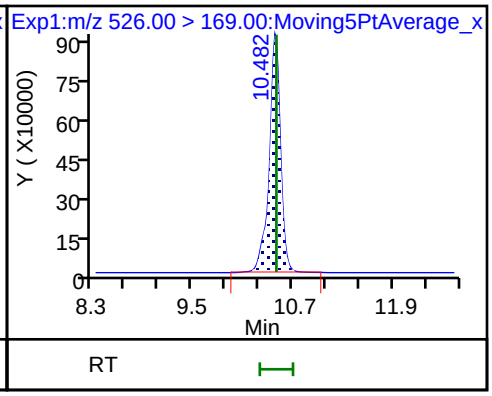
D 67 d5-NEtPFOSA



68 N-EtFOSA-M



68 N-EtFOSA-M



Manual Integration/User Assign Peak Report

Eurofins Denver

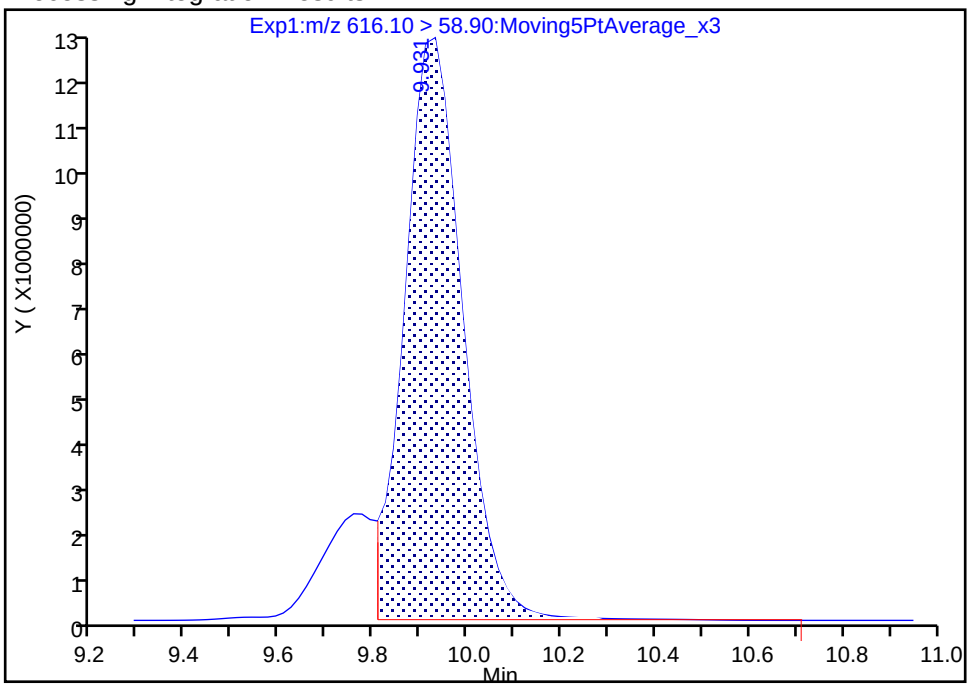
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d
Injection Date: 20-Nov-2023 19:16:12 Instrument ID: LC_LCMS11
Lims ID: IC L9
Client ID:
Operator ID: DENLCMS ALS Bottle#: 9 Worklist Smp#: 8
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

60 N-MeFOSE-M, CAS: 24448-09-7

Signal: 1

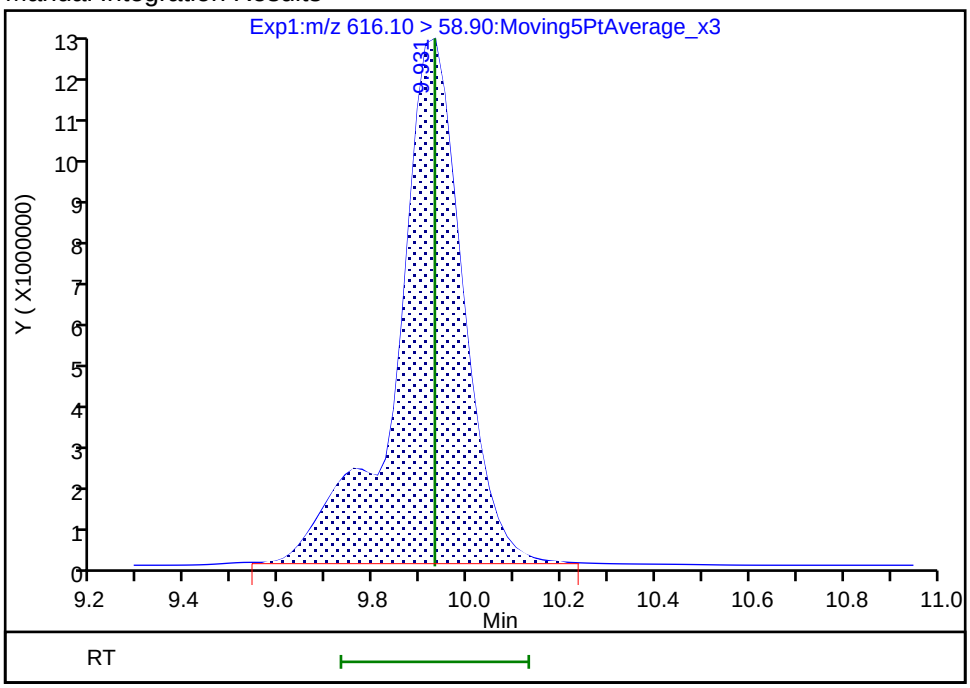
Processing Integration Results

RT: 9.93
Area: 108184744
Amount: 260.7552
Amount Units: ng/ml



Manual Integration Results

RT: 9.93
Area: 123737588
Amount: 293.2168
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 11:02:56 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

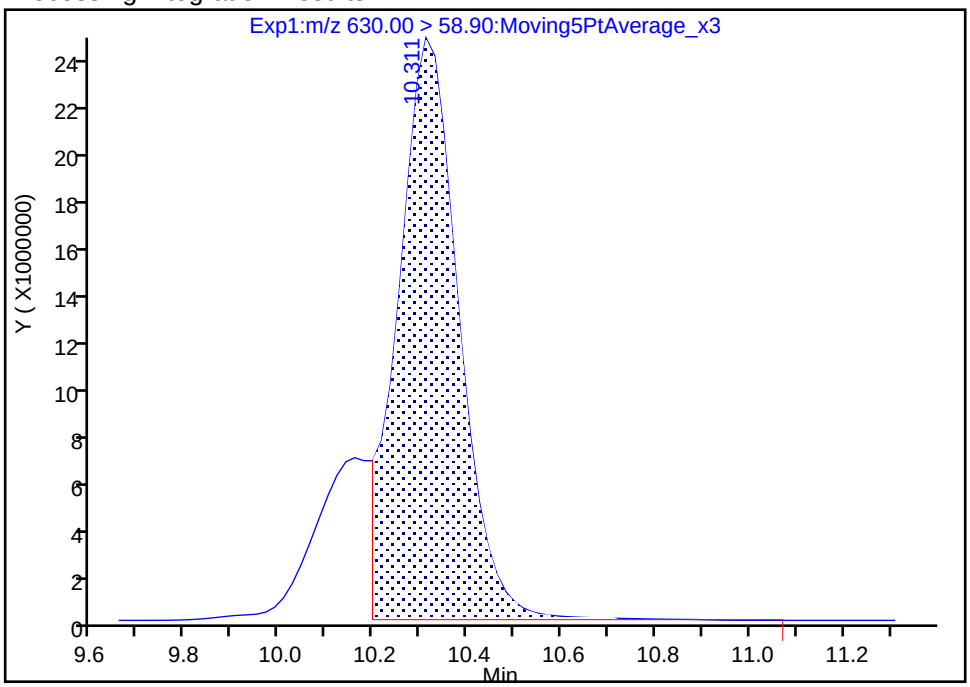
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Injection Date: 20-Nov-2023 19:16:12 Instrument ID: LC_LCMS11
Lims ID: IC L9
Client ID:
Operator ID: DENLCMS ALS Bottle#: 9 Worklist Smp#: 8
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

65 N-EtFOSE-M, CAS: 1691-99-2

Signal: 1

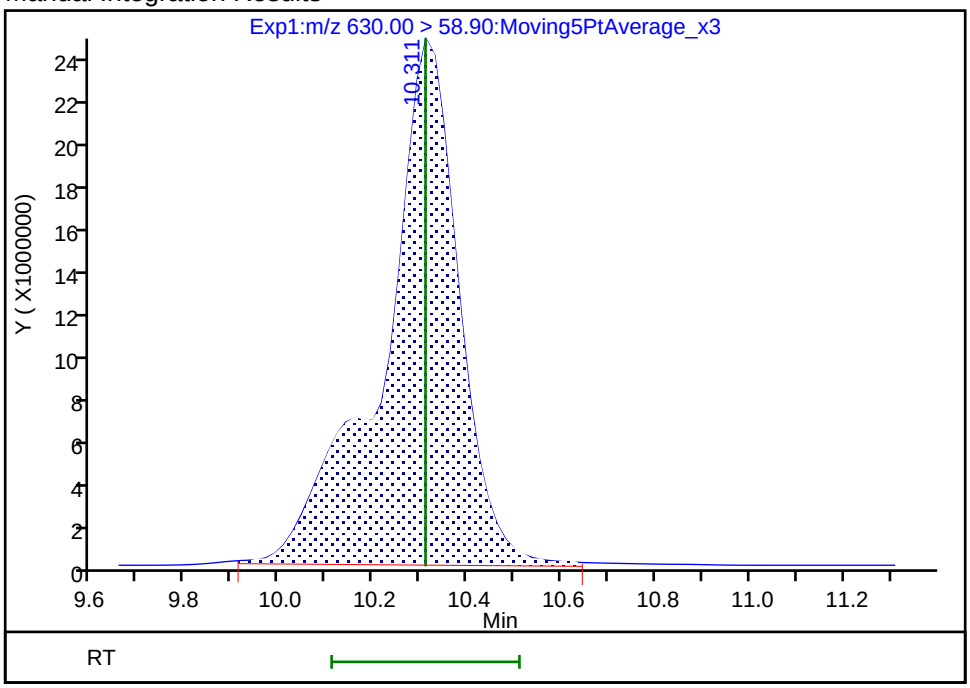
Processing Integration Results

RT: 10.31
Area: 217293029
Amount: 473.2725
Amount Units: ng/ml



Manual Integration Results

RT: 10.31
Area: 268929997
Amount: 571.0587
Amount Units: ng/ml



Reviewer: B5QN, 21-Nov-2023 11:03:07 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

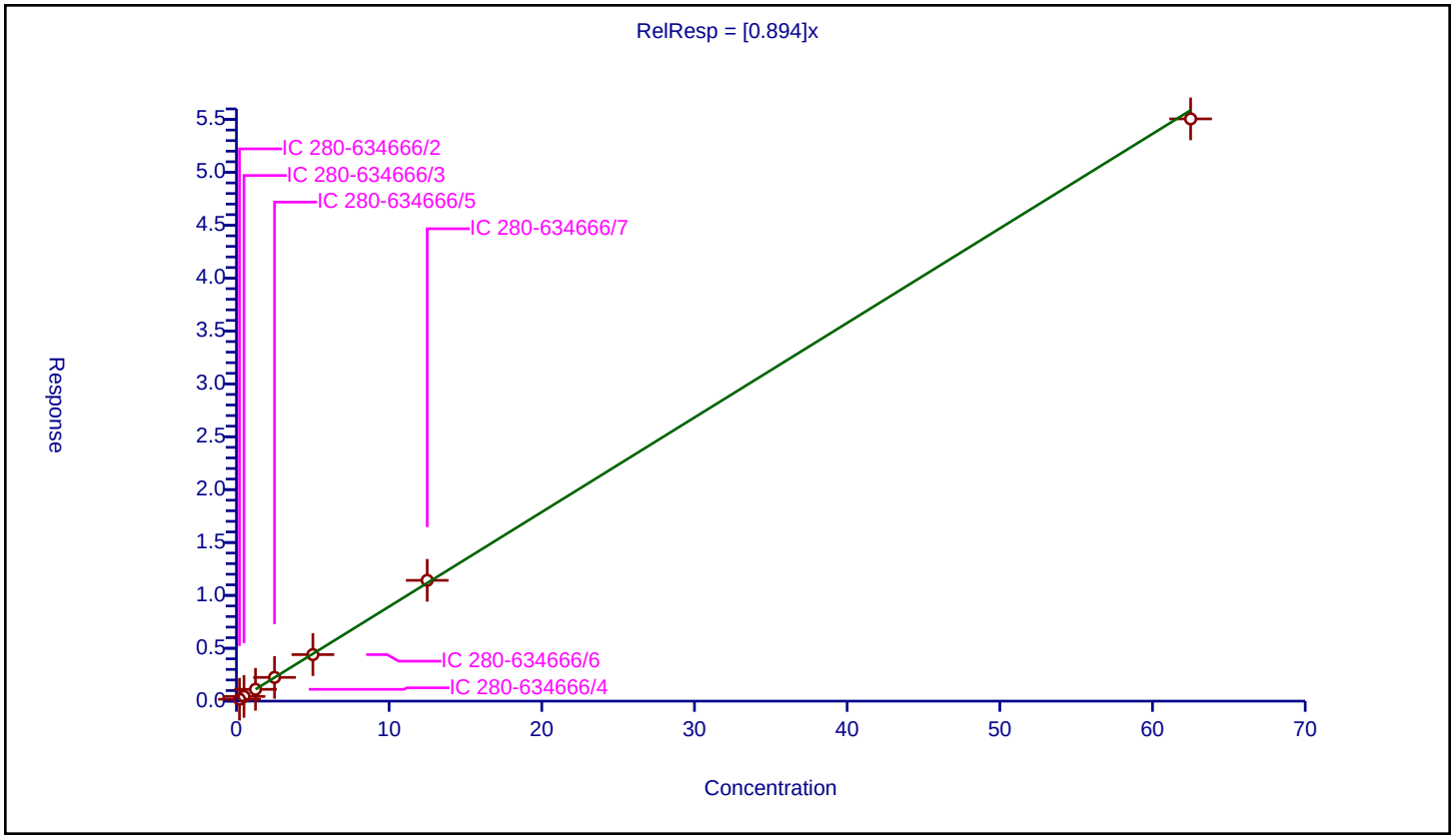
Curve Coefficients

Intercept:	0
Slope:	0.894

Error Coefficients

Standard Error:	13200000
Relative Standard Error:	1.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.178959	10.0	6571957.0	0.896228	Y
2	IC 280-634666/3	0.496	0.443884	10.0	6275736.0	0.894928	Y
3	IC 280-634666/4	1.248	1.115698	10.0	5910103.0	0.893989	Y
4	IC 280-634666/5	2.496	2.244186	10.0	6626430.0	0.899113	Y
5	IC 280-634666/6	5.008	4.40081	10.0	6118737.0	0.878756	Y
6	IC 280-634666/7	12.496	11.422647	10.0	6111725.0	0.914104	Y
7	IC 280-634666/8	62.496	55.055918	10.0	5713621.0	0.880951	Y



Calibration / Perfluoro-3-methoxypropanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

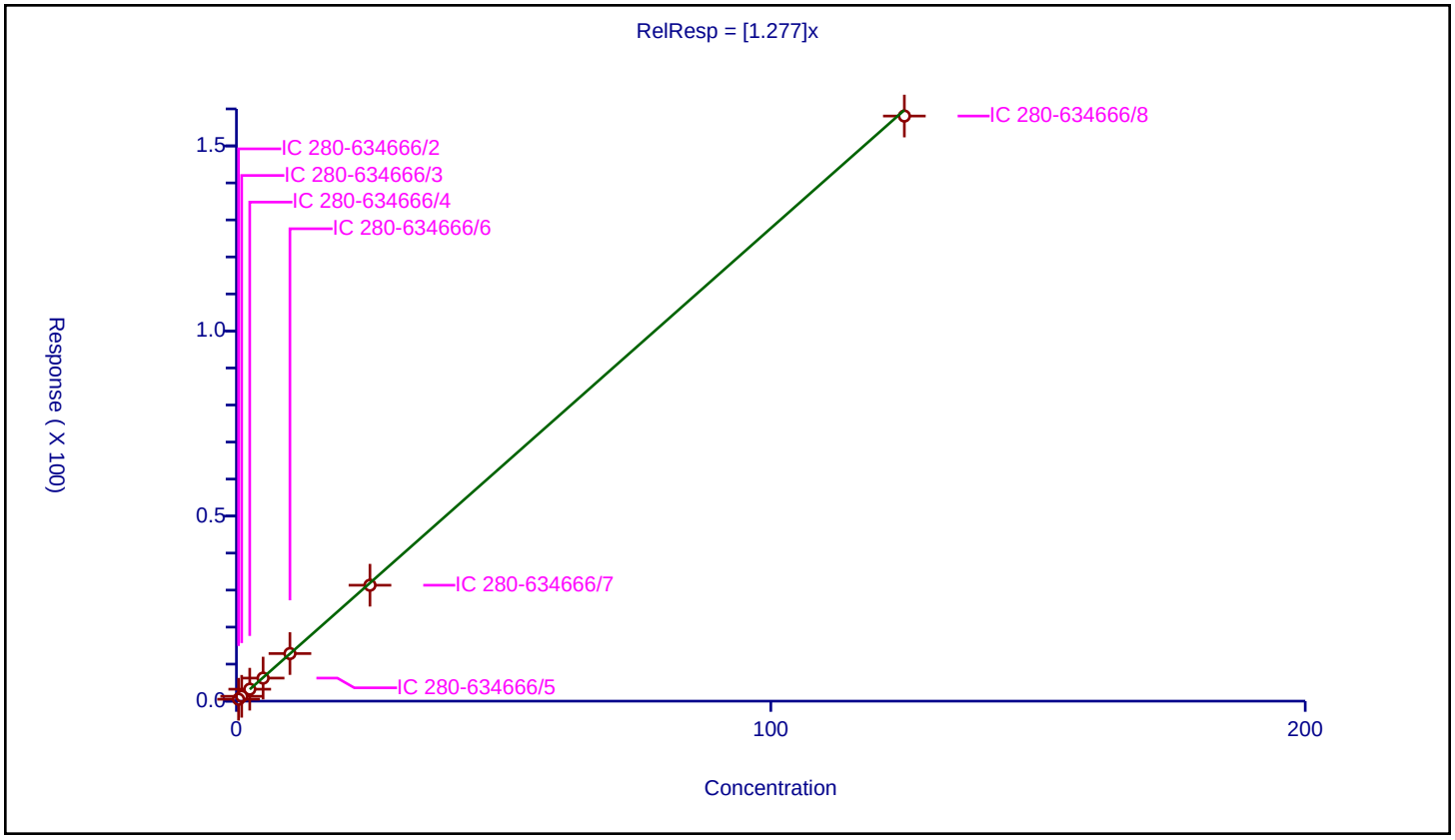
Curve Coefficients

Intercept:	0
Slope:	1.277

Error Coefficients

Standard Error:	19700000
Relative Standard Error:	1.9
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.39936	0.513719	5.0	1930493.0	1.286354	Y
2	IC 280-634666/3	0.992	1.304588	5.0	1845697.0	1.315109	Y
3	IC 280-634666/4	2.496	3.226471	5.0	1822623.0	1.292657	Y
4	IC 280-634666/5	4.992	6.226894	5.0	1966495.0	1.247375	Y
5	IC 280-634666/6	10.016	12.85168	5.0	1861368.0	1.283115	Y
6	IC 280-634666/7	24.992	31.31903	5.0	1872345.0	1.253162	Y
7	IC 280-634666/8	124.992	158.0691	5.0	1469185.0	1.264634	Y



11/30/2023
6:34 PM

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

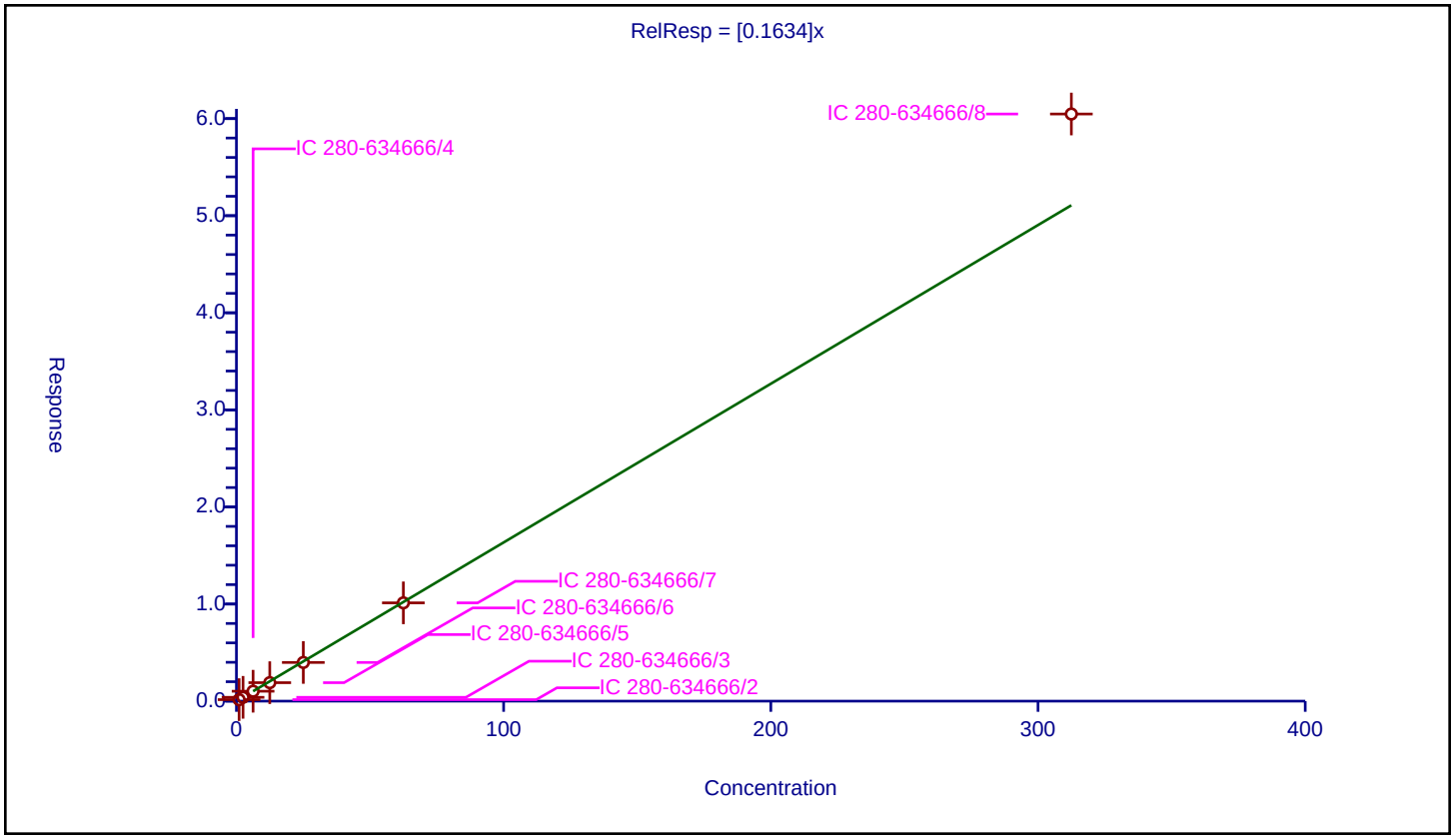
Curve Coefficients

Intercept:	0
Slope:	0.1634

Error Coefficients

Standard Error:	7450000
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.9984	0.154214	5.0	1930493.0	0.154462	Y
2	IC 280-634666/3	2.48	0.393849	5.0	1845697.0	0.15881	Y
3	IC 280-634666/4	6.24	1.021119	5.0	1822623.0	0.163641	Y
4	IC 280-634666/5	12.48	1.903295	5.0	1966495.0	0.152508	Y
5	IC 280-634666/6	25.04	3.985305	5.0	1861368.0	0.159158	Y
6	IC 280-634666/7	62.48	10.122598	5.0	1872345.0	0.162013	Y
7	IC 280-634666/8	312.48	60.473351	5.0	1469185.0	0.193527	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

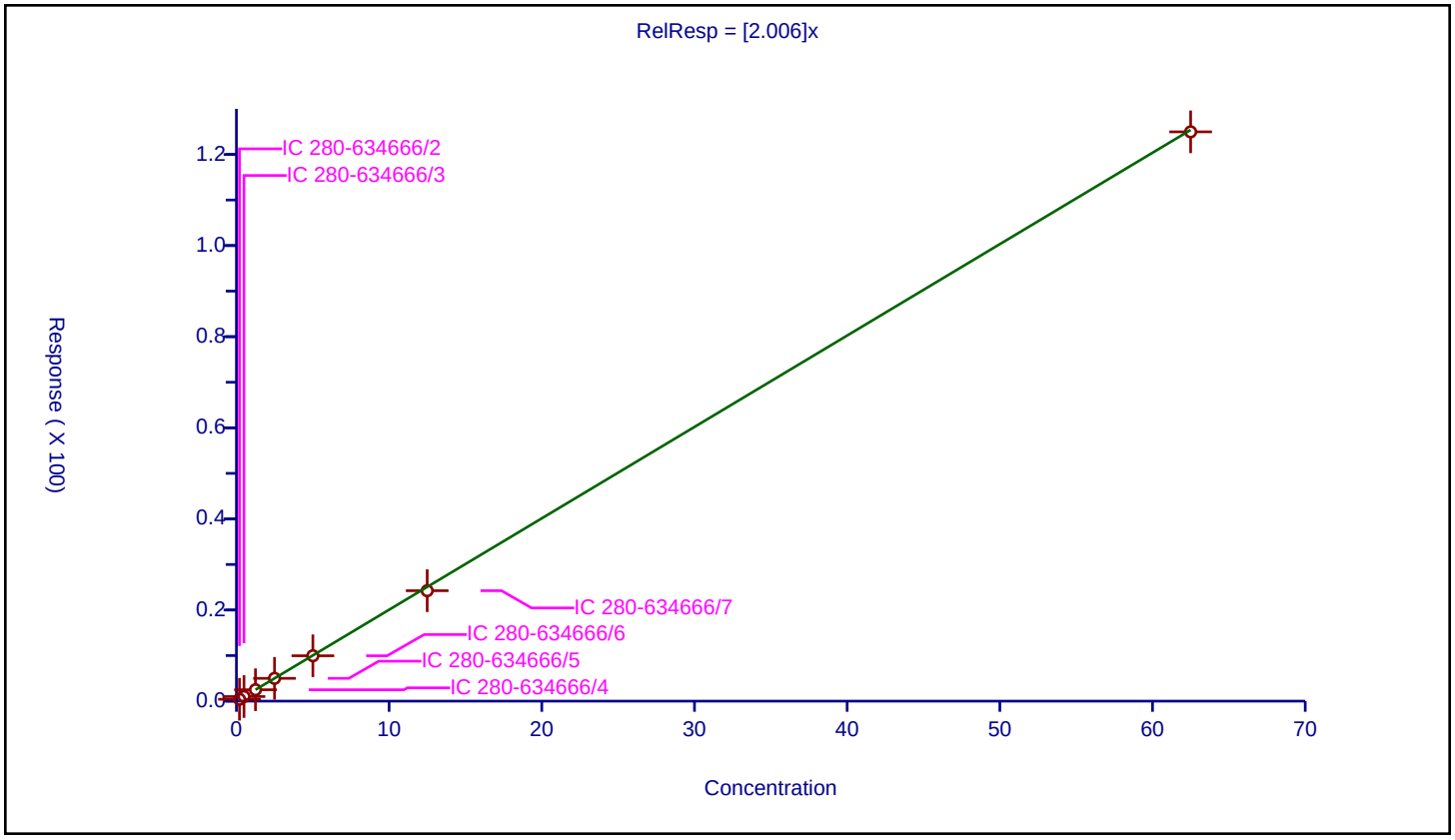
Curve Coefficients

Intercept:	0
Slope:	2.006

Error Coefficients

Standard Error:	15500000
Relative Standard Error:	2.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.415003	5.0	1930493.0	2.078339	Y
2	IC 280-634666/3	0.496	1.006311	5.0	1845697.0	2.028853	Y
3	IC 280-634666/4	1.248	2.501192	5.0	1822623.0	2.00416	Y
4	IC 280-634666/5	2.496	5.002403	5.0	1966495.0	2.004168	Y
5	IC 280-634666/6	5.008	9.959753	5.0	1861368.0	1.988769	Y
6	IC 280-634666/7	12.496	24.23912	5.0	1872345.0	1.93975	Y
7	IC 280-634666/8	62.496	124.95909	5.0	1469185.0	1.999473	Y



Calibration / Perfluoro(4-methoxybutanoic acid)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

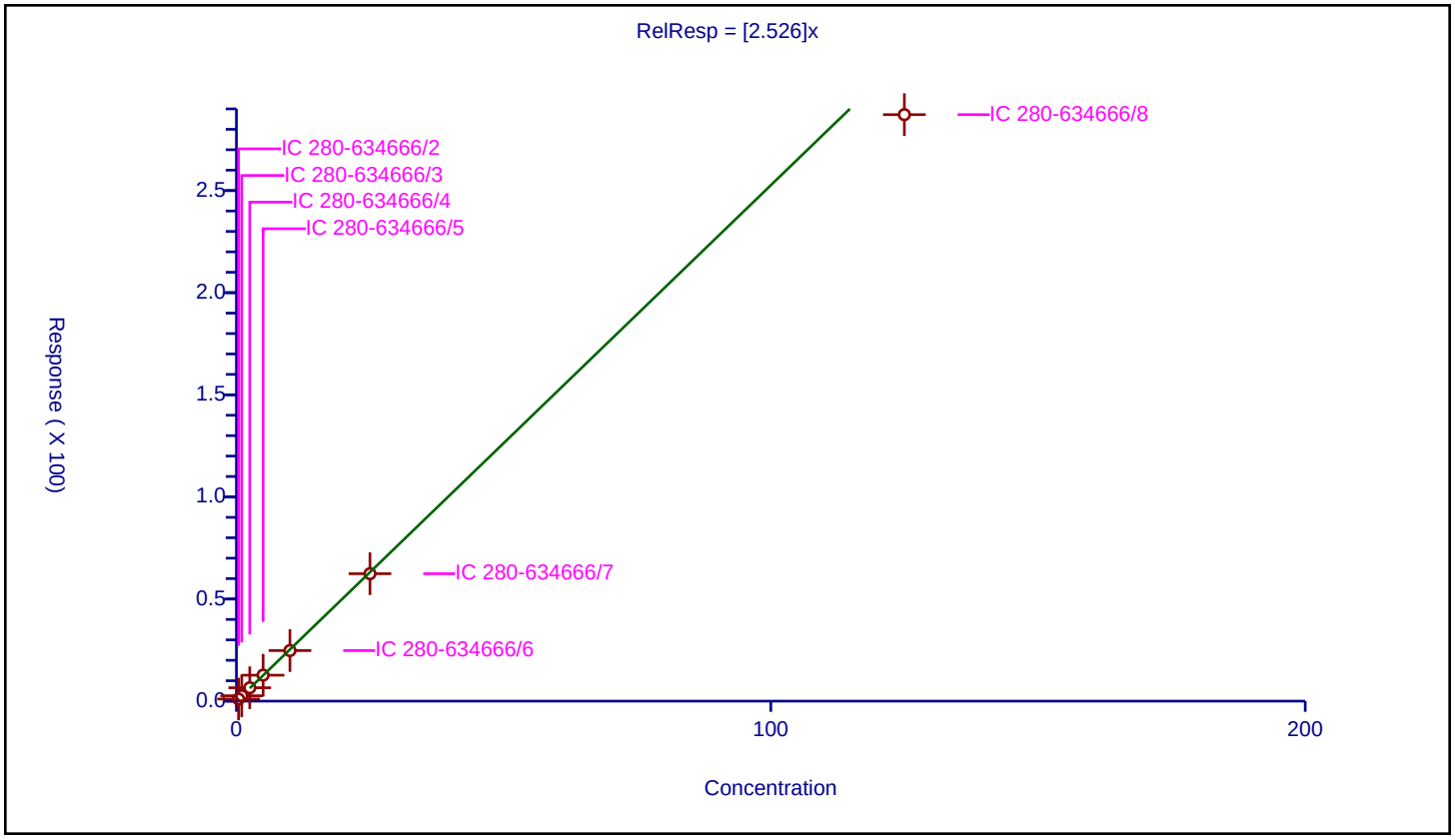
Curve Coefficients

Intercept:	0
Slope:	2.526

Error Coefficients

Standard Error:	36000000
Relative Standard Error:	4.7
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.39936	1.038245	5.0	1930493.0	2.599773	Y
2	IC 280-634666/3	0.992	2.621568	5.0	1845697.0	2.64271	Y
3	IC 280-634666/4	2.496	6.558315	5.0	1822623.0	2.62753	Y
4	IC 280-634666/5	4.992	12.71557	5.0	1966495.0	2.54719	Y
5	IC 280-634666/6	10.016	24.759908	5.0	1861368.0	2.472036	Y
6	IC 280-634666/7	24.992	62.398089	5.0	1872345.0	2.496723	Y
7	IC 280-634666/8	124.992	287.181322	5.0	1469185.0	2.297598	Y



Calibration / 1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

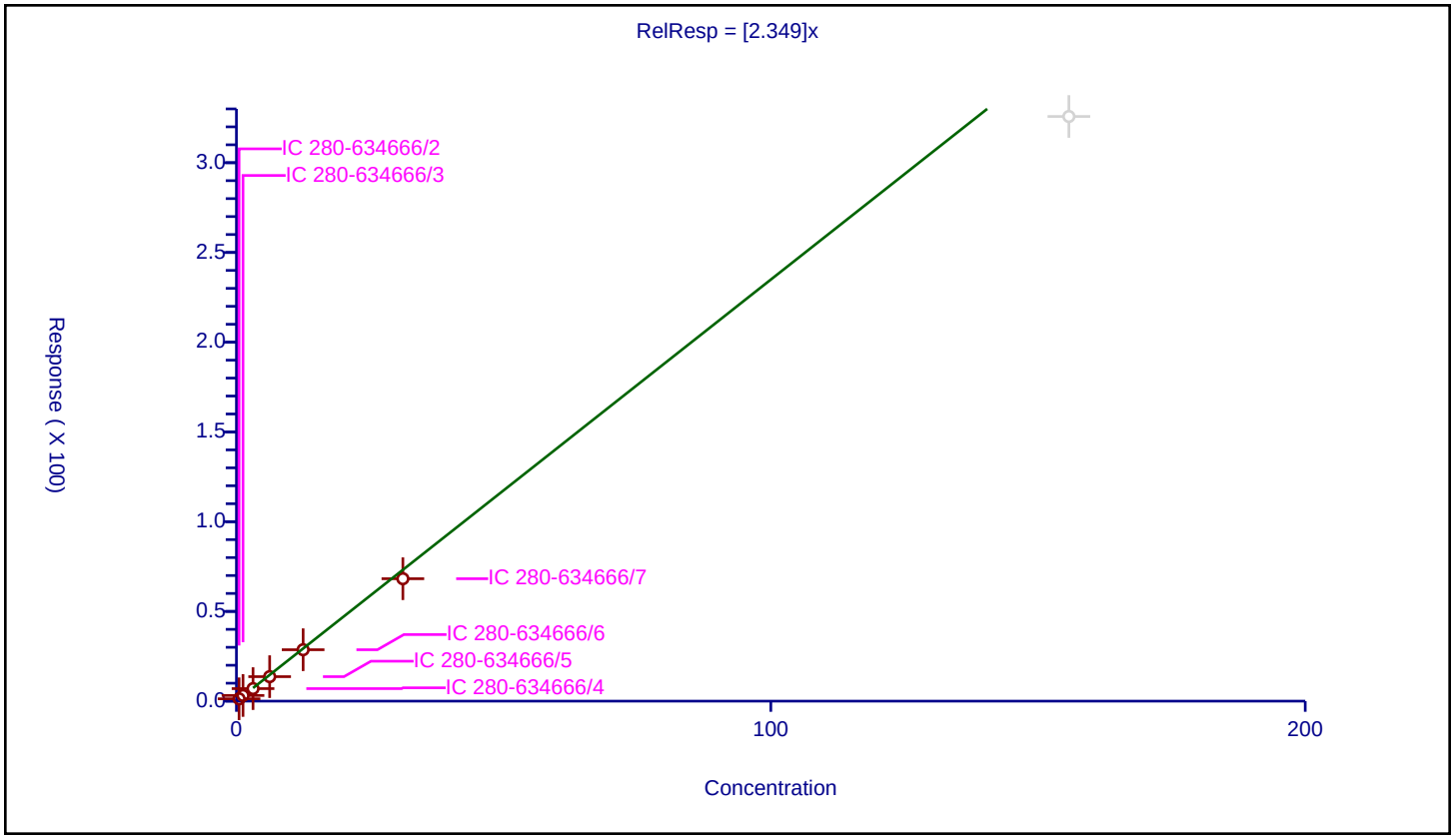
Curve Coefficients

Intercept:	0
Slope:	2.349

Error Coefficients

Standard Error:	1820000
Relative Standard Error:	8.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.497725	1.306922	4.67	269504.0	2.625792	Y
2	IC 280-634666/3	1.236336	3.14862	4.67	274792.0	2.546735	Y
3	IC 280-634666/4	3.11078	6.976447	4.67	261775.0	2.242668	Y
4	IC 280-634666/5	6.221561	13.639482	4.67	301449.0	2.192293	Y
5	IC 280-634666/6	12.483003	28.649528	4.67	260878.0	2.295083	Y
6	IC 280-634666/7	31.147686	68.219433	4.67	247140.0	2.190193	Y
7	IC 280-634666/8	155.778311	325.764437	4.67	201500.0	2.091205	N



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Calibration / Perfluoro-3,6-dioxaheptanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

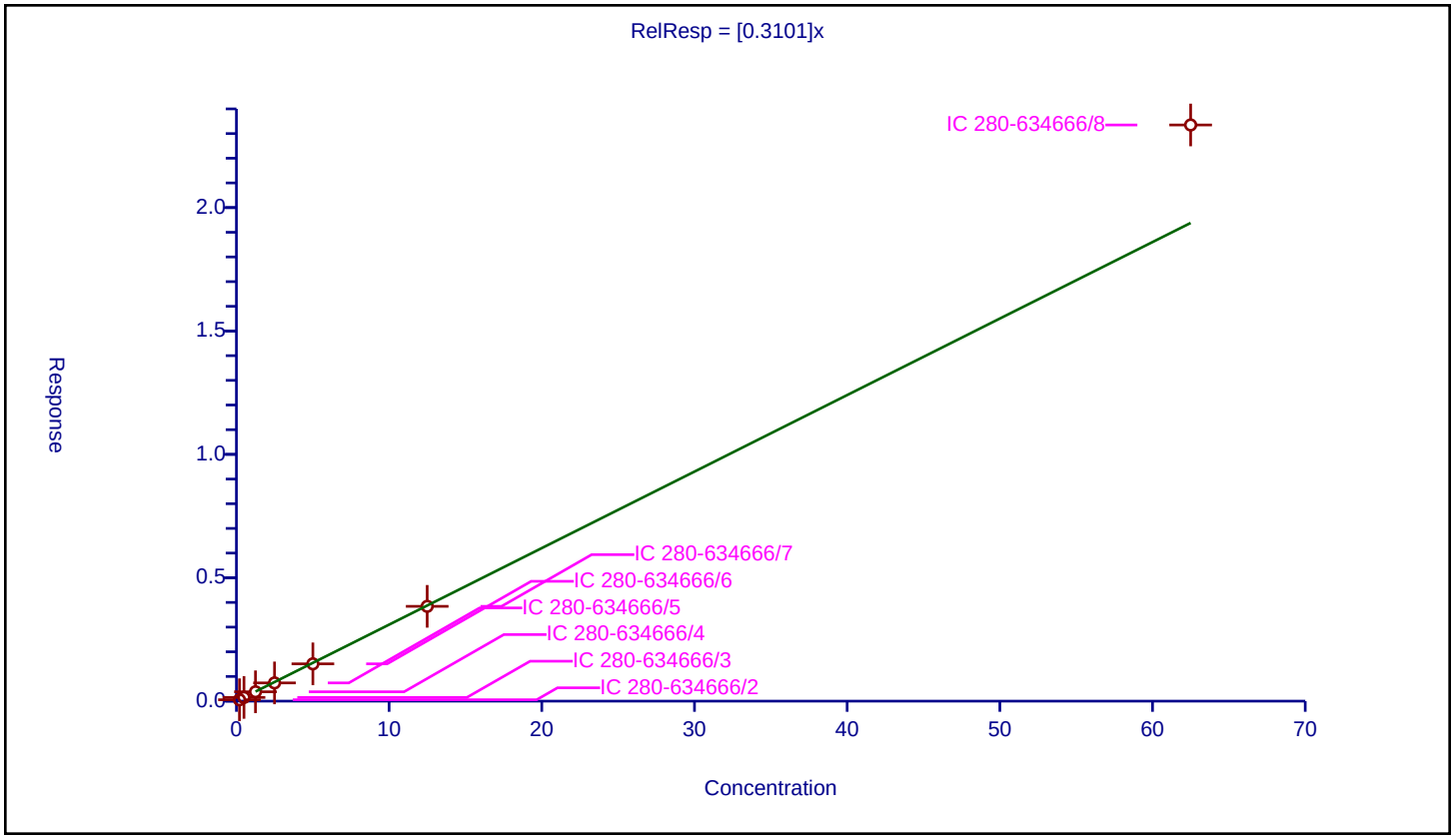
Curve Coefficients

Intercept:	0
Slope:	0.3101

Error Coefficients

Standard Error:	5730000
Relative Standard Error:	9.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.056904	2.5	2305489.0	0.284978	Y
2	IC 280-634666/3	0.496	0.150075	2.5	2064136.0	0.30257	Y
3	IC 280-634666/4	1.248	0.379435	2.5	2100957.0	0.304035	Y
4	IC 280-634666/5	2.496	0.739056	2.5	2308198.0	0.296096	Y
5	IC 280-634666/6	5.008	1.511104	2.5	2152413.0	0.301738	Y
6	IC 280-634666/7	12.496	3.841701	2.5	2026140.0	0.307434	Y
7	IC 280-634666/8	62.496	23.348165	2.5	1457154.0	0.373595	Y



Calibration / Perfluorobutanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

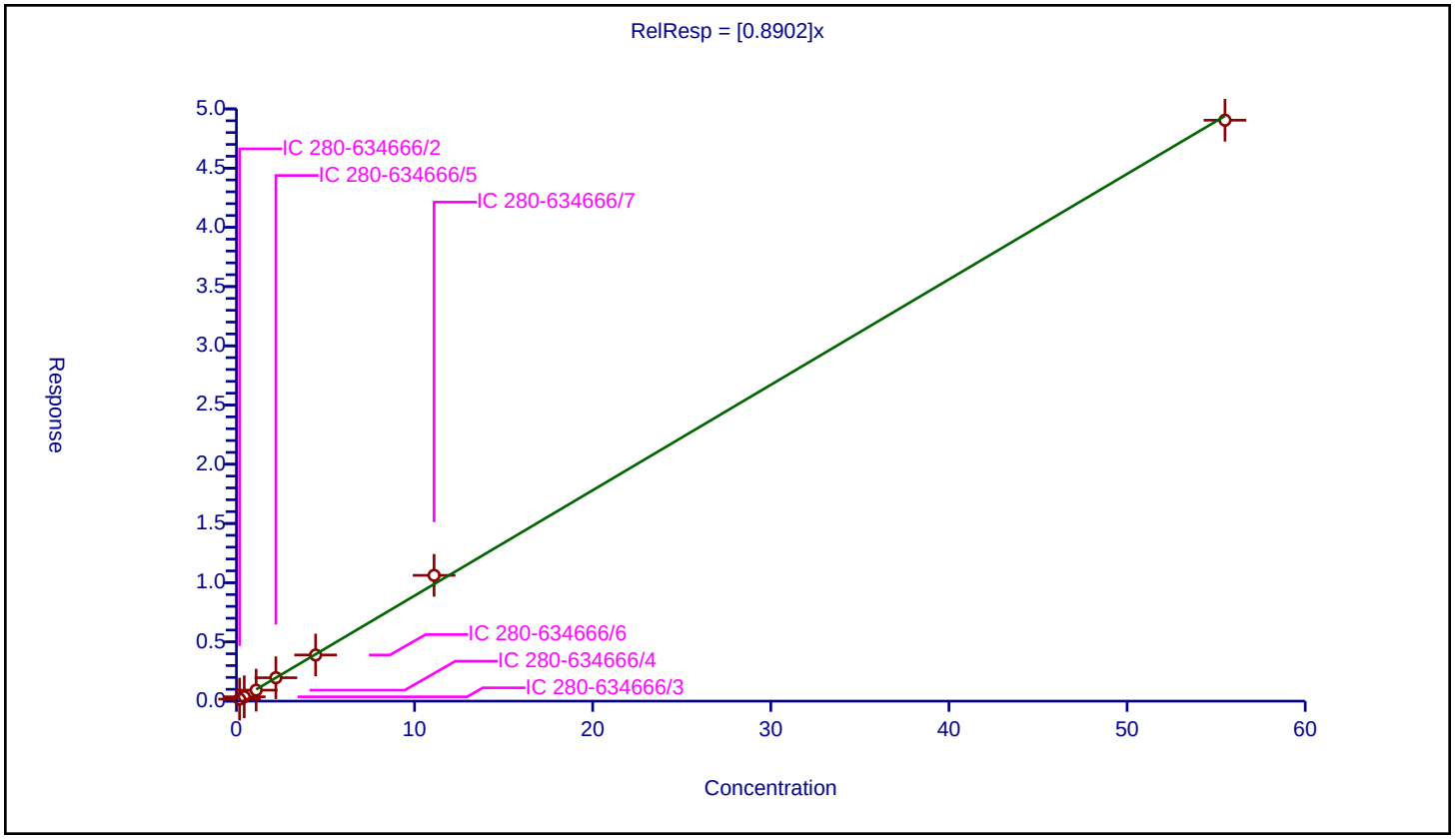
Curve Coefficients

Intercept:	0
Slope:	0.8902

Error Coefficients

Standard Error:	4960000
Relative Standard Error:	5.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.177316	0.168697	2.325	781140.0	0.951395	Y
2	IC 280-634666/3	0.440448	0.367541	2.325	815734.0	0.834471	Y
3	IC 280-634666/4	1.108224	0.928232	2.325	790282.0	0.837586	Y
4	IC 280-634666/5	2.216448	1.974298	2.325	793327.0	0.890749	Y
5	IC 280-634666/6	4.447104	3.896738	2.325	750482.0	0.876242	Y
6	IC 280-634666/7	11.096448	10.619594	2.325	691081.0	0.957026	Y
7	IC 280-634666/8	55.496448	49.043348	2.325	551660.0	0.88372	Y



Calibration / Perfluorohexanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

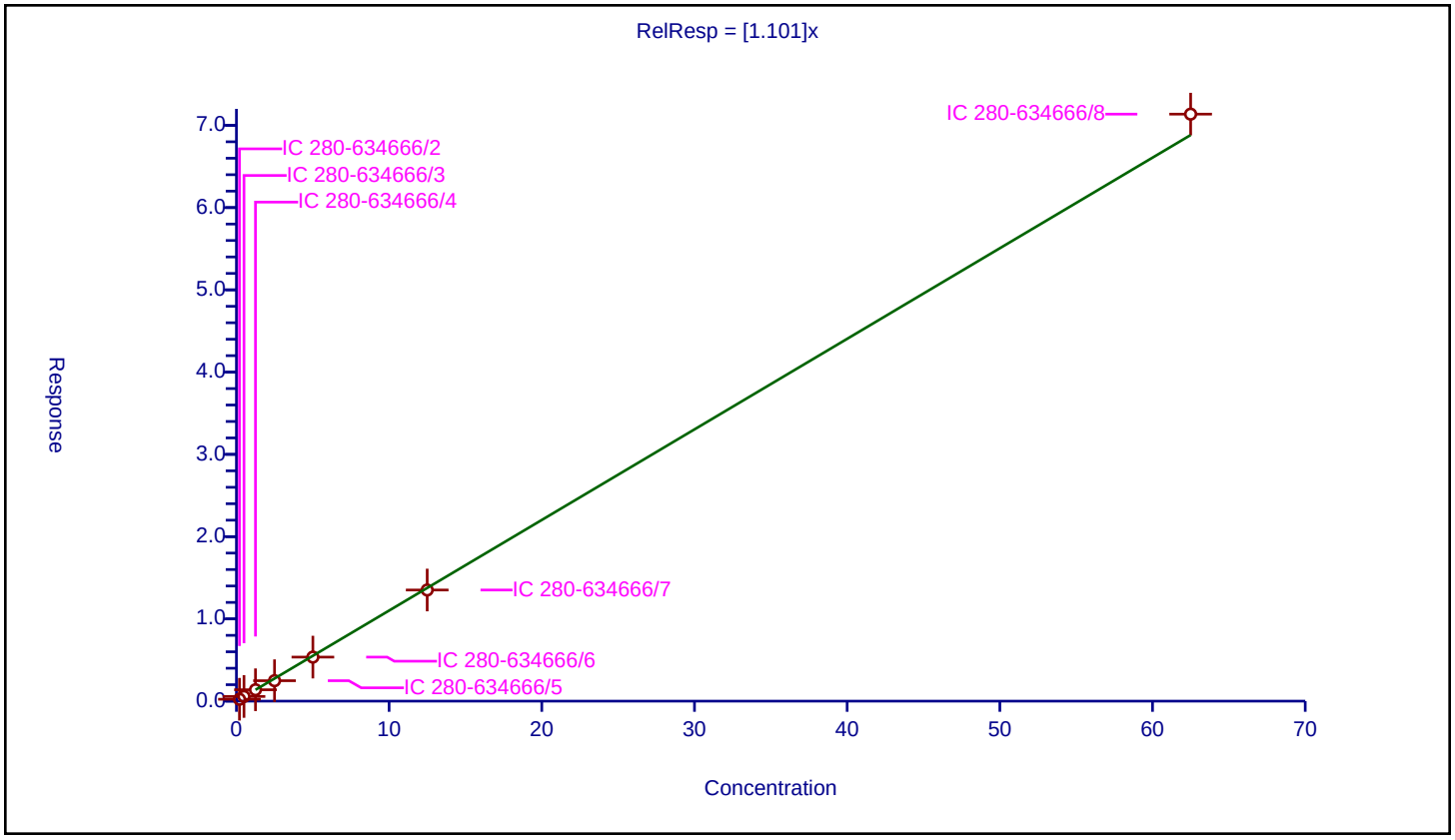
Curve Coefficients

Intercept:	0
Slope:	1.101

Error Coefficients

Standard Error:	17700000
Relative Standard Error:	5.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.232349	2.5	2305489.0	1.163606	Y
2	IC 280-634666/3	0.496	0.569674	2.5	2064136.0	1.148537	Y
3	IC 280-634666/4	1.248	1.383678	2.5	2100957.0	1.108716	Y
4	IC 280-634666/5	2.496	2.484713	2.5	2308198.0	0.995478	Y
5	IC 280-634666/6	5.008	5.35319	2.5	2152413.0	1.068928	Y
6	IC 280-634666/7	12.496	13.51024	2.5	2026140.0	1.081165	Y
7	IC 280-634666/8	62.496	71.363197	2.5	1457154.0	1.141884	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

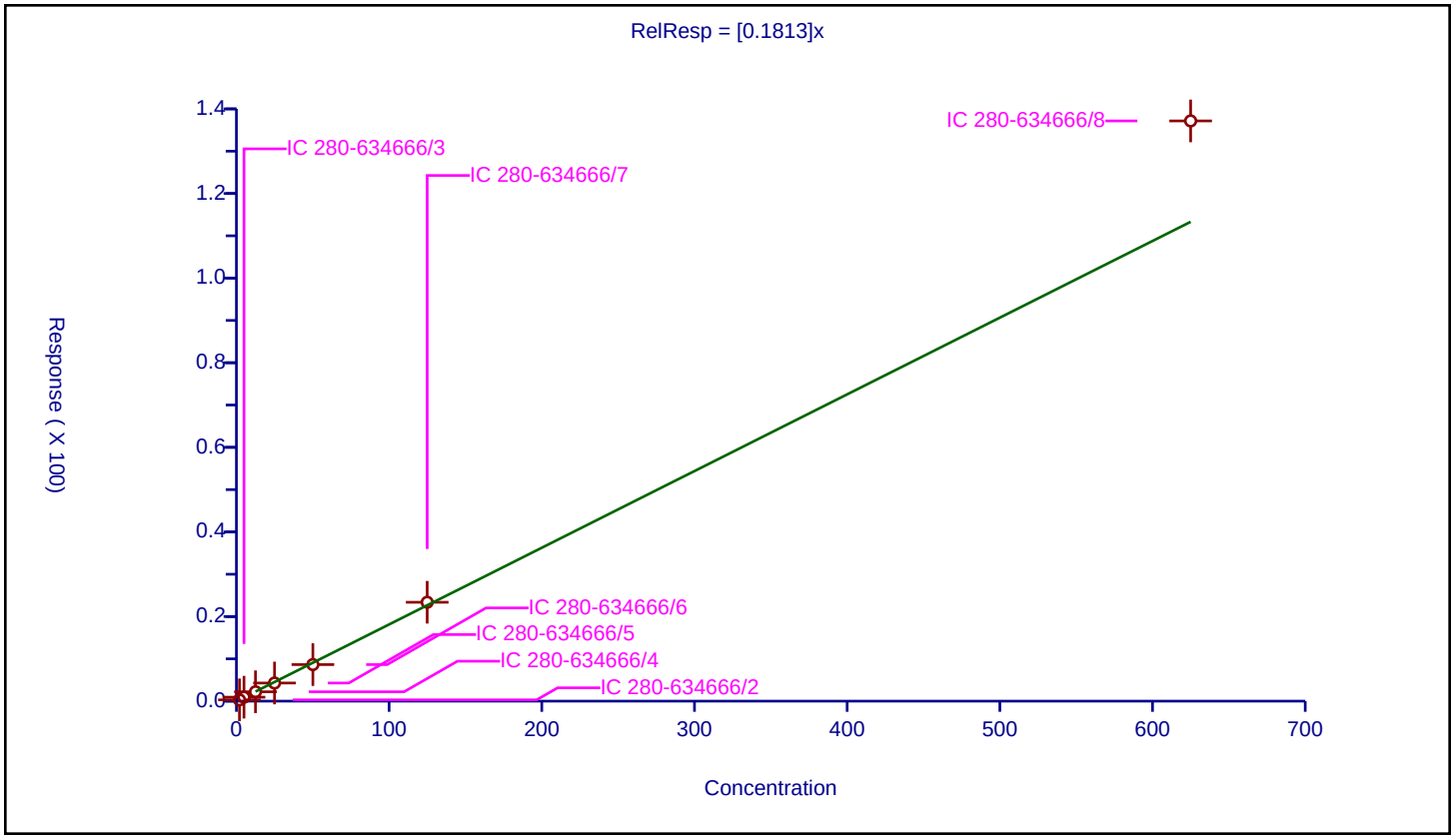
Curve Coefficients

Intercept:	0
Slope:	0.1813

Error Coefficients

Standard Error:	33700000
Relative Standard Error:	11.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	1.9968	0.305551	2.5	2305489.0	0.15302	Y
2	IC 280-634666/3	4.96	0.93225	2.5	2064136.0	0.187954	Y
3	IC 280-634666/4	12.48	2.213655	2.5	2100957.0	0.177376	Y
4	IC 280-634666/5	24.96	4.283234	2.5	2308198.0	0.171604	Y
5	IC 280-634666/6	50.08	8.642277	2.5	2152413.0	0.172569	Y
6	IC 280-634666/7	124.96	23.373967	2.5	2026140.0	0.187052	Y
7	IC 280-634666/8	624.96	137.15599	2.5	1457154.0	0.219464	Y



Calibration / Perfluoro(2-propoxypropanoic) acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

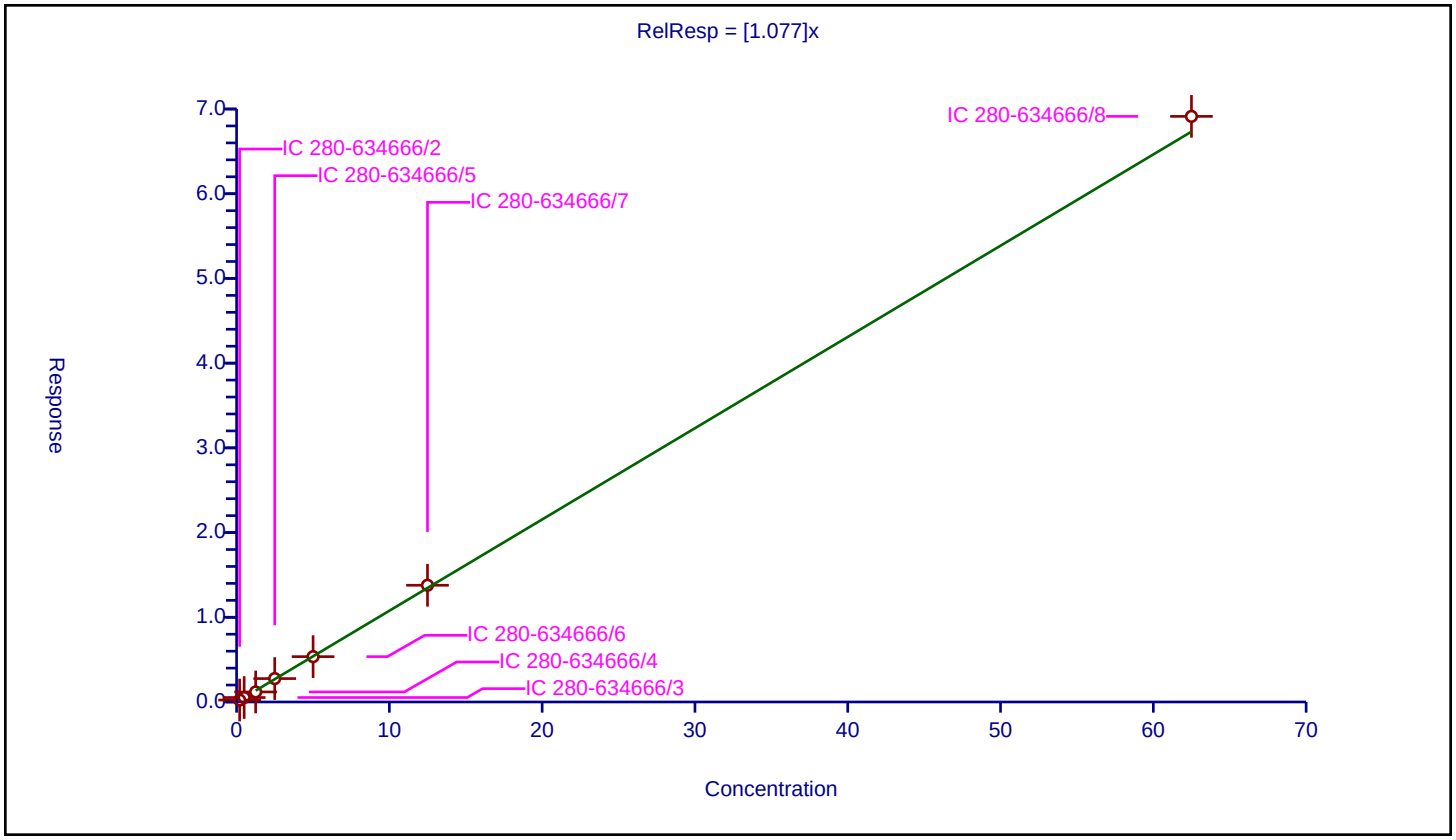
Curve Coefficients

Intercept:	0
Slope:	1.077

Error Coefficients

Standard Error:	5270000
Relative Standard Error:	5.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.228022	10.0	2098701.0	1.141937	Y
2	IC 280-634666/3	0.496	0.528338	10.0	1946292.0	1.065198	Y
3	IC 280-634666/4	1.248	1.184652	10.0	1978108.0	0.949241	Y
4	IC 280-634666/5	2.496	2.763151	10.0	2147776.0	1.107032	Y
5	IC 280-634666/6	5.008	5.351825	10.0	1980106.0	1.068655	Y
6	IC 280-634666/7	12.496	13.780956	10.0	2039532.0	1.102829	Y
7	IC 280-634666/8	62.496	69.129736	10.0	1815473.0	1.106147	Y



Calibration / Perfluoro (2-ethoxyethane) sulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

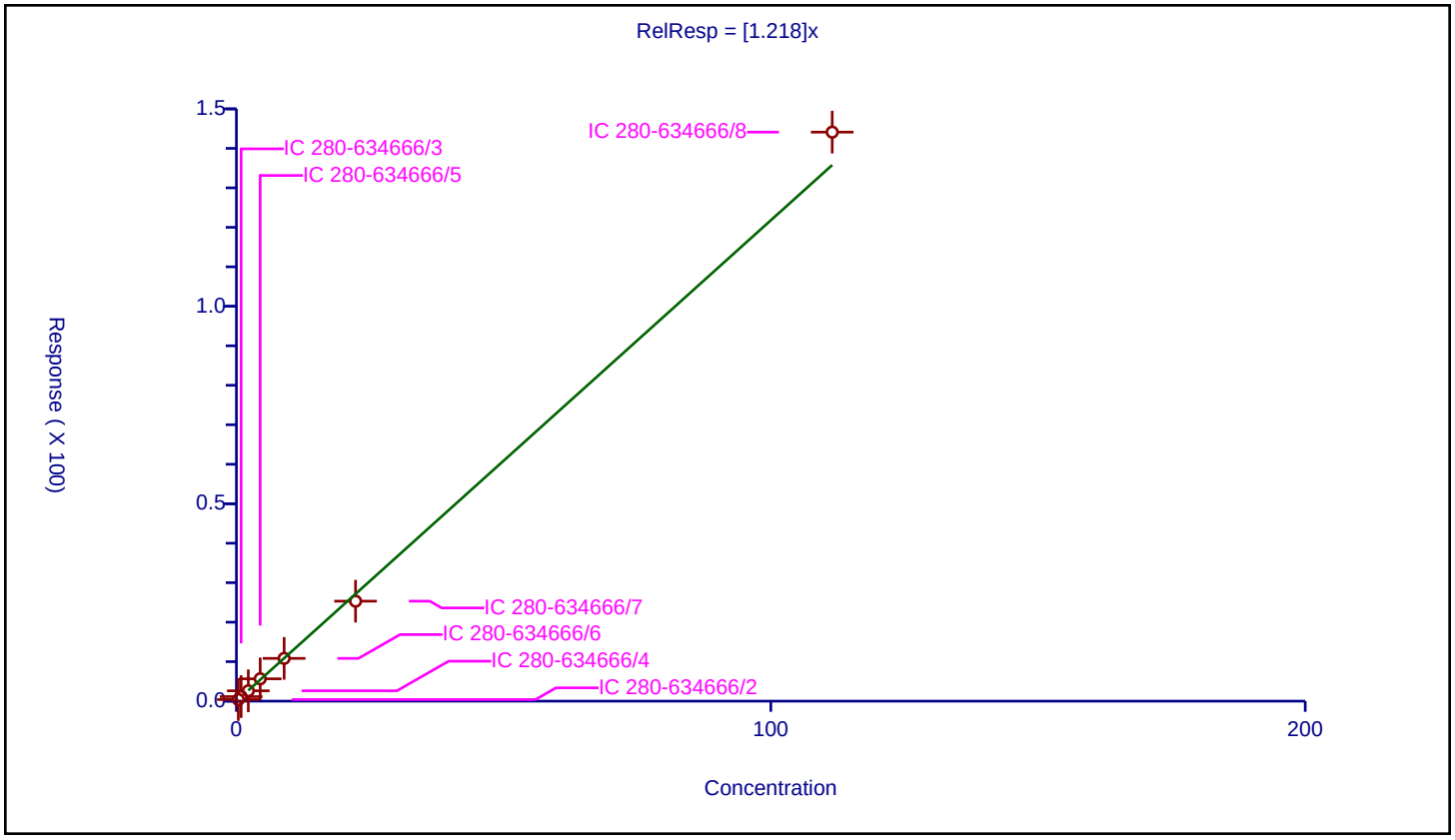
Curve Coefficients

Intercept:	0
Slope:	1.218

Error Coefficients

Standard Error:	35600000
Relative Standard Error:	5.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.356229	0.404604	2.5	2305489.0	1.135797	Y
2	IC 280-634666/3	0.884864	1.15184	2.5	2064136.0	1.301714	Y
3	IC 280-634666/4	2.226432	2.617306	2.5	2100957.0	1.175561	Y
4	IC 280-634666/5	4.452864	5.65904	2.5	2308198.0	1.270876	Y
5	IC 280-634666/6	8.934272	10.832022	2.5	2152413.0	1.212412	Y
6	IC 280-634666/7	22.292864	25.321018	2.5	2026140.0	1.135835	Y
7	IC 280-634666/8	111.492864	144.109675	2.5	1457154.0	1.292546	Y



Calibration / Perfluoroheptanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

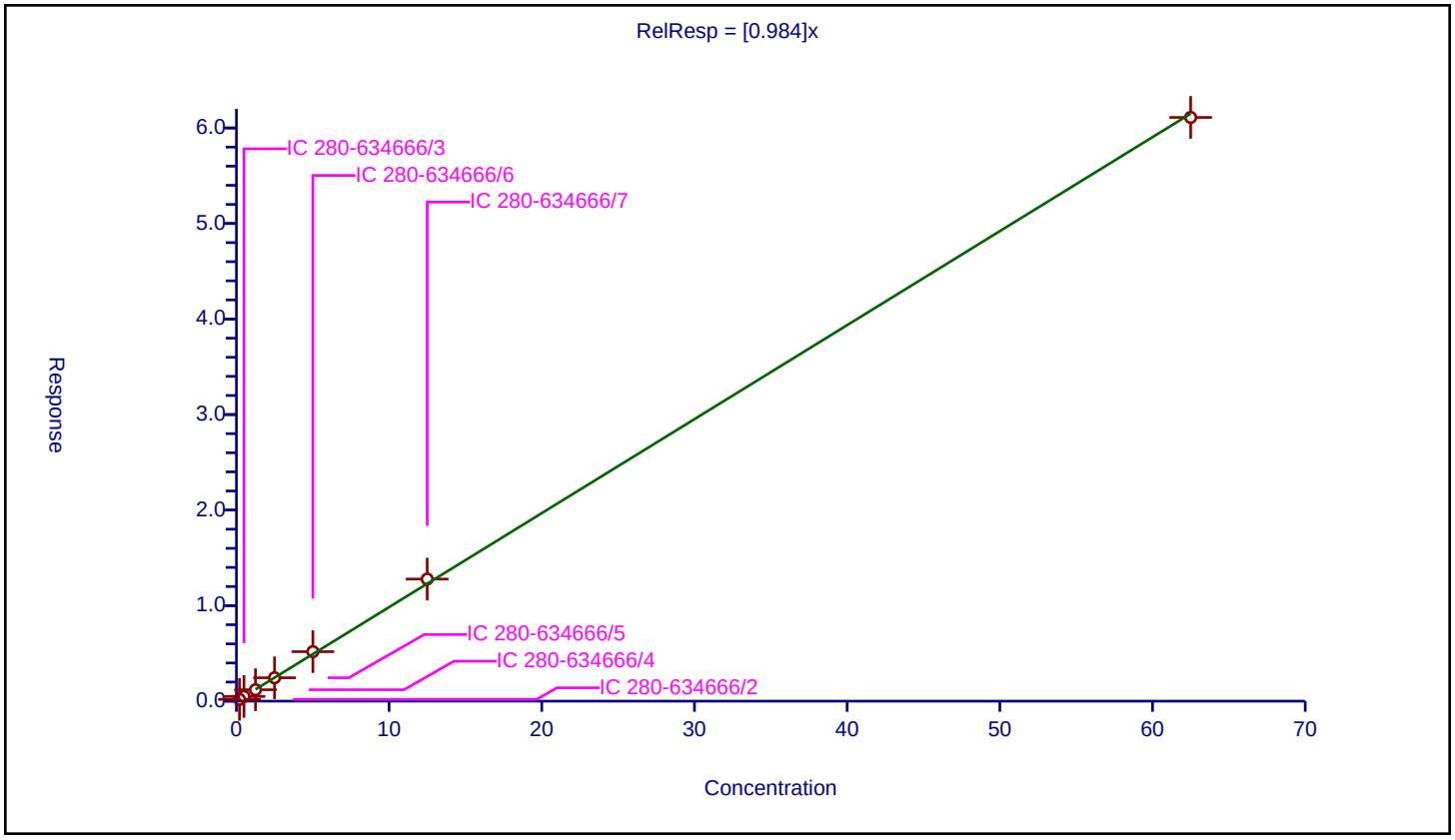
Curve Coefficients

Intercept:	0
Slope:	0.984

Error Coefficients

Standard Error:	18800000
Relative Standard Error:	3.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.184889	2.5	2402023.0	0.925926	Y
2	IC 280-634666/3	0.496	0.491093	2.5	2094950.0	0.990107	Y
3	IC 280-634666/4	1.248	1.194177	2.5	2221680.0	0.956873	Y
4	IC 280-634666/5	2.496	2.447648	2.5	2288673.0	0.980628	Y
5	IC 280-634666/6	5.008	5.179884	2.5	2146804.0	1.034322	Y
6	IC 280-634666/7	12.496	12.778563	2.5	2040613.0	1.022612	Y
7	IC 280-634666/8	62.496	61.104033	2.5	1824262.0	0.977727	Y



Calibration / Perfluoropentanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

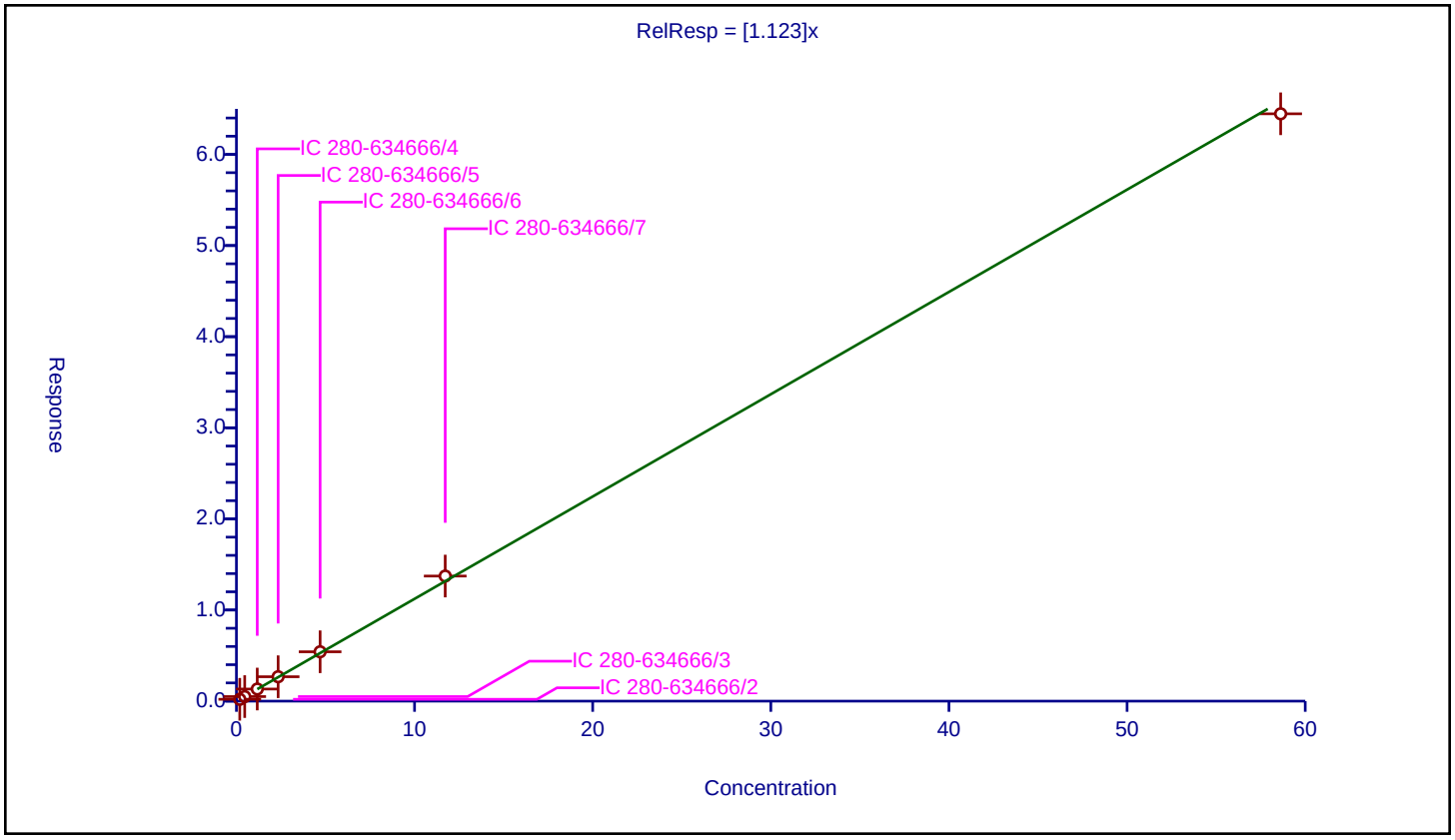
Curve Coefficients

Intercept:	0
Slope:	1.123

Error Coefficients

Standard Error:	5590000
Relative Standard Error:	3.4
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.1873	0.201914	2.365	634969.0	1.078025	Y
2	IC 280-634666/3	0.465248	0.501014	2.365	620949.0	1.076874	Y
3	IC 280-634666/4	1.170624	1.328893	2.365	610123.0	1.135201	Y
4	IC 280-634666/5	2.341248	2.679635	2.365	654361.0	1.144533	Y
5	IC 280-634666/6	4.697504	5.418245	2.365	579920.0	1.153431	Y
6	IC 280-634666/7	11.721248	13.72972	2.365	575388.0	1.171353	Y
7	IC 280-634666/8	58.621248	64.463054	2.365	483417.0	1.099653	Y



Calibration / DONA

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

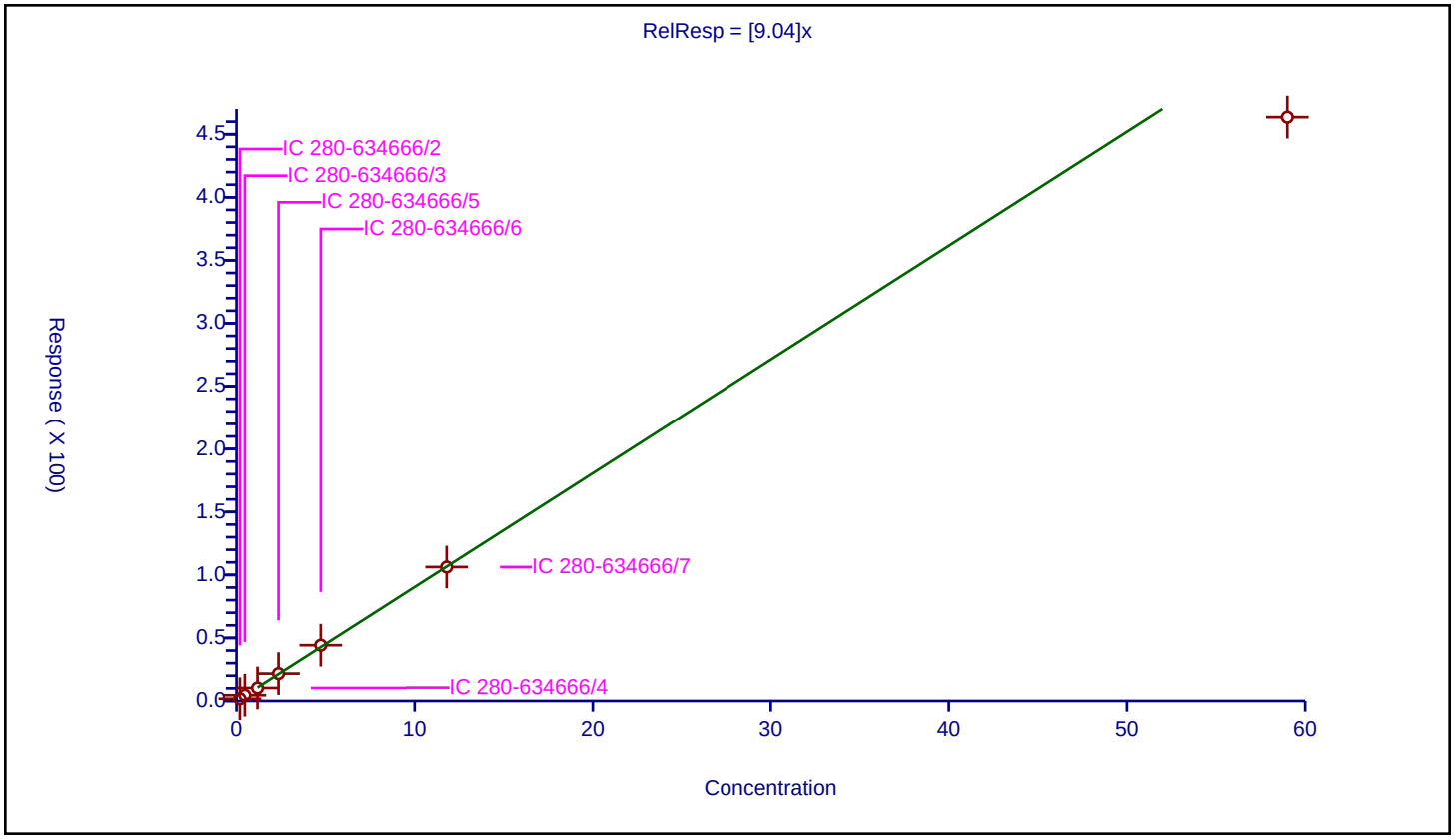
Curve Coefficients

Intercept:	0
Slope:	9.04

Error Coefficients

Standard Error:	35700000
Relative Standard Error:	6.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.188498	1.769838	10.0	2098701.0	9.389163	Y
2	IC 280-634666/3	0.468224	4.553407	10.0	1946292.0	9.724848	Y
3	IC 280-634666/4	1.178112	10.297769	10.0	1978108.0	8.740909	Y
4	IC 280-634666/5	2.356224	21.686866	10.0	2147776.0	9.204076	Y
5	IC 280-634666/6	4.727552	44.226097	10.0	1980106.0	9.354968	Y
6	IC 280-634666/7	11.796224	106.276832	10.0	2039532.0	9.009394	Y
7	IC 280-634666/8	58.996224	463.544156	10.0	1815473.0	7.857183	Y



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Calibration / 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

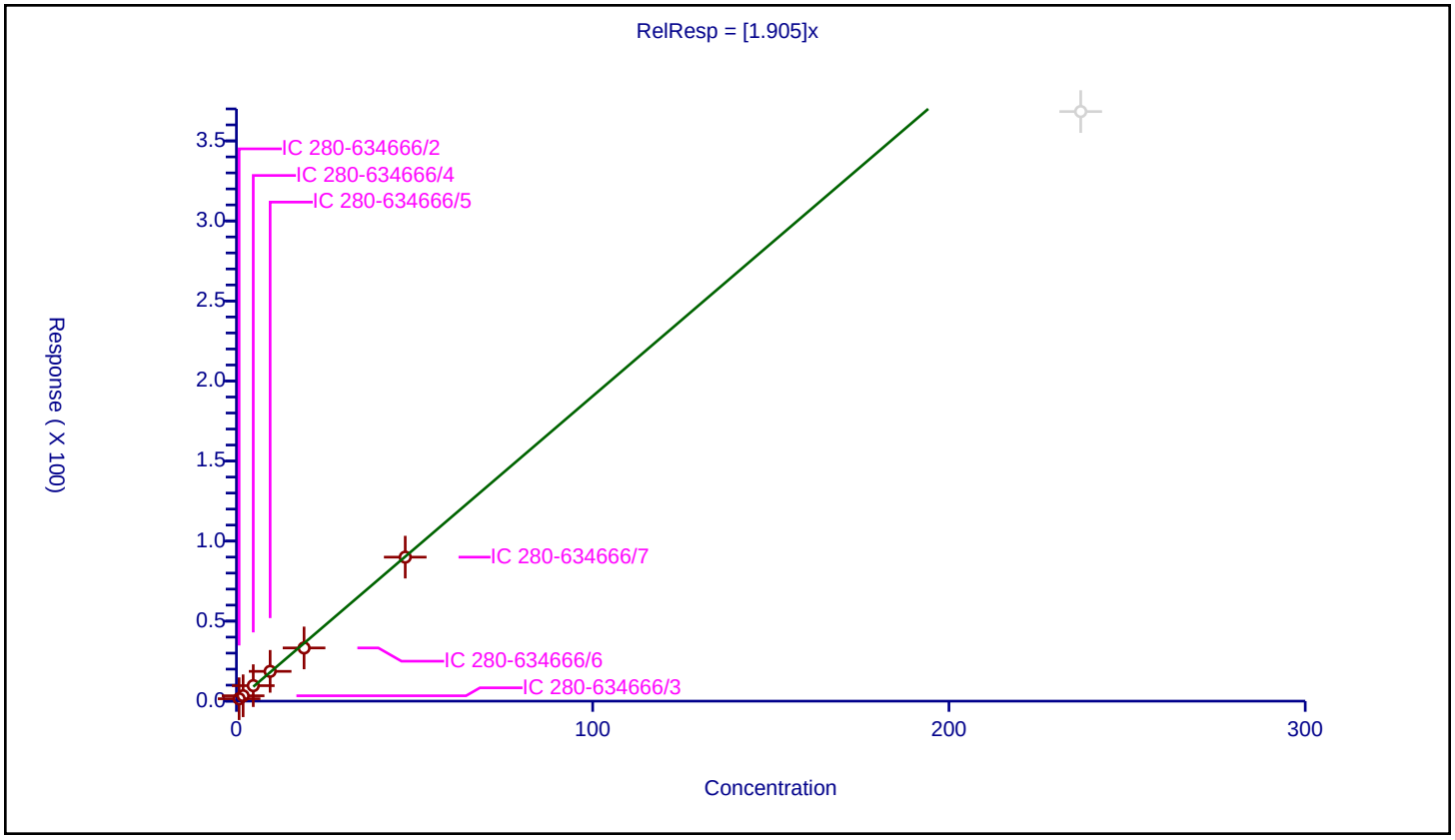
Curve Coefficients

Intercept:	0
Slope:	1.905

Error Coefficients

Standard Error:	2970000
Relative Standard Error:	6.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.757187	1.50361	4.75	391866.0	1.985786	Y
2	IC 280-634666/3	1.880832	3.358502	4.75	369333.0	1.785647	Y
3	IC 280-634666/4	4.732416	9.677461	4.75	333885.0	2.04493	Y
4	IC 280-634666/5	9.464832	18.61312	4.75	370468.0	1.966556	Y
5	IC 280-634666/6	18.990336	33.239411	4.75	366499.0	1.750333	Y
6	IC 280-634666/7	47.384832	89.959792	4.75	311851.0	1.898493	Y
7	IC 280-634666/8	236.984832	368.332986	4.75	285647.0	1.554247	N



Calibration / Perfluorooctanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

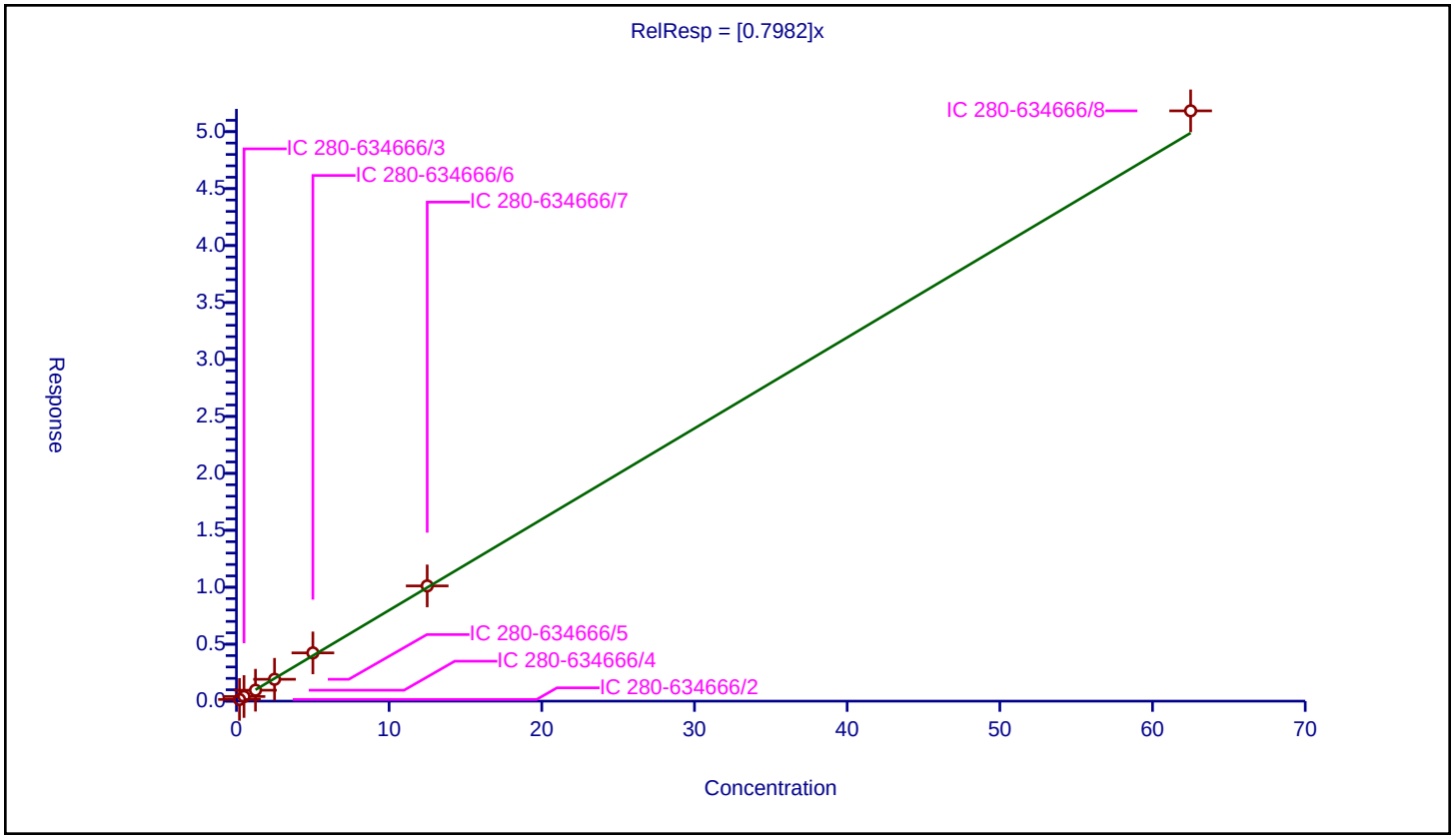
Curve Coefficients

Intercept:	0
Slope:	0.7982

Error Coefficients

Standard Error:	13200000
Relative Standard Error:	4.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.149452	2.5	2114812.0	0.748457	Y
2	IC 280-634666/3	0.496	0.405102	2.5	1960147.0	0.816738	Y
3	IC 280-634666/4	1.248	0.959984	2.5	1983246.0	0.769218	Y
4	IC 280-634666/5	2.496	1.917646	2.5	2110108.0	0.768288	Y
5	IC 280-634666/6	5.008	4.236091	2.5	1927703.0	0.845865	Y
6	IC 280-634666/7	12.496	10.118199	2.5	1900826.0	0.809715	Y
7	IC 280-634666/8	62.496	51.827708	2.5	1501777.0	0.829296	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

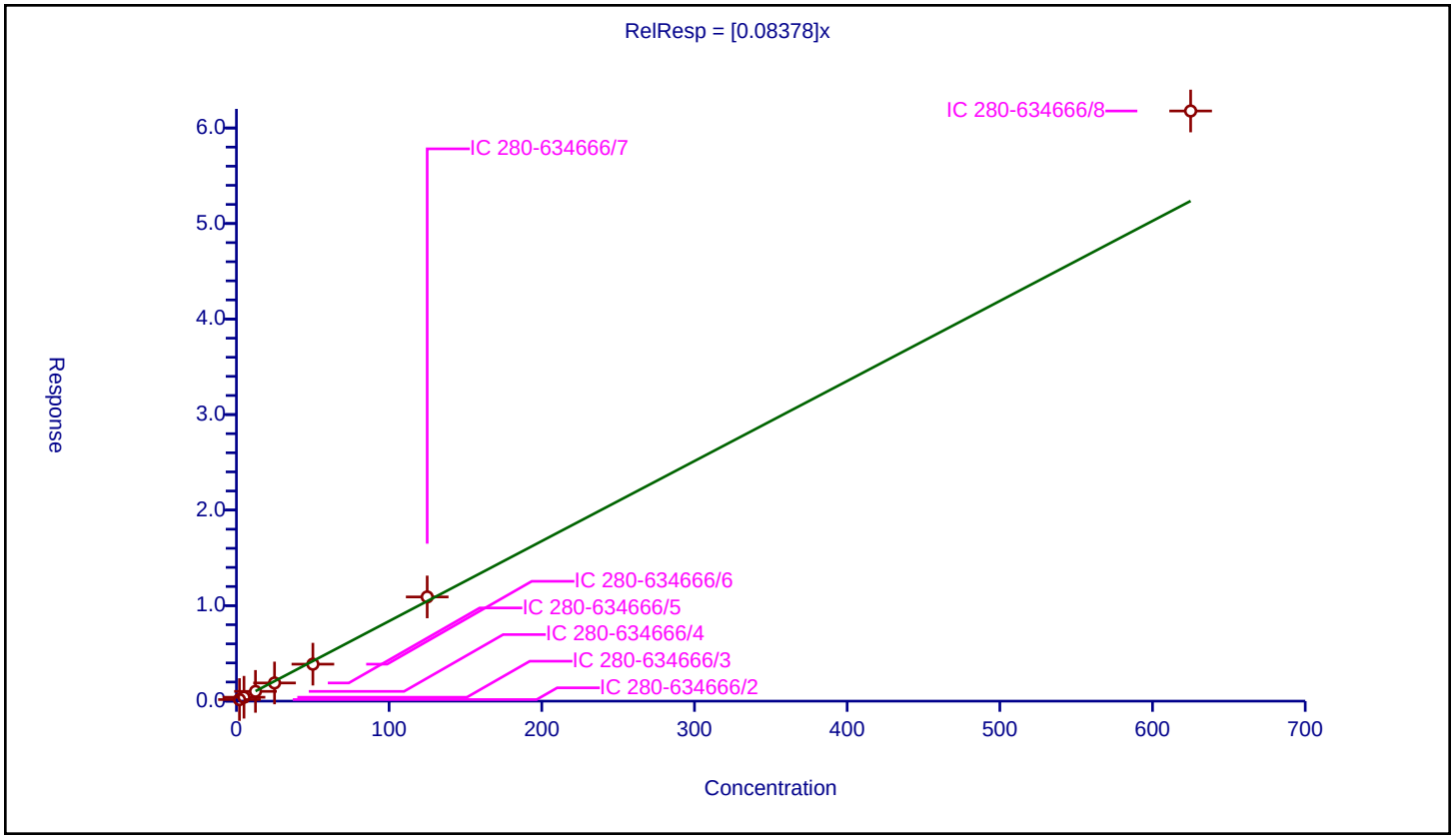
Curve Coefficients

Intercept:	0
Slope:	0.08378

Error Coefficients

Standard Error:	15200000
Relative Standard Error:	9.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	1.9968	0.164944	2.5	2305489.0	0.082604	Y
2	IC 280-634666/3	4.96	0.40793	2.5	2064136.0	0.082244	Y
3	IC 280-634666/4	12.48	1.022854	2.5	2100957.0	0.081959	Y
4	IC 280-634666/5	24.96	1.903041	2.5	2308198.0	0.076244	Y
5	IC 280-634666/6	50.08	3.870429	2.5	2152413.0	0.077285	Y
6	IC 280-634666/7	124.96	10.90788	2.5	2026140.0	0.087291	Y
7	IC 280-634666/8	624.96	61.779156	2.5	1457154.0	0.098853	Y



Calibration / Perfluorohexanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

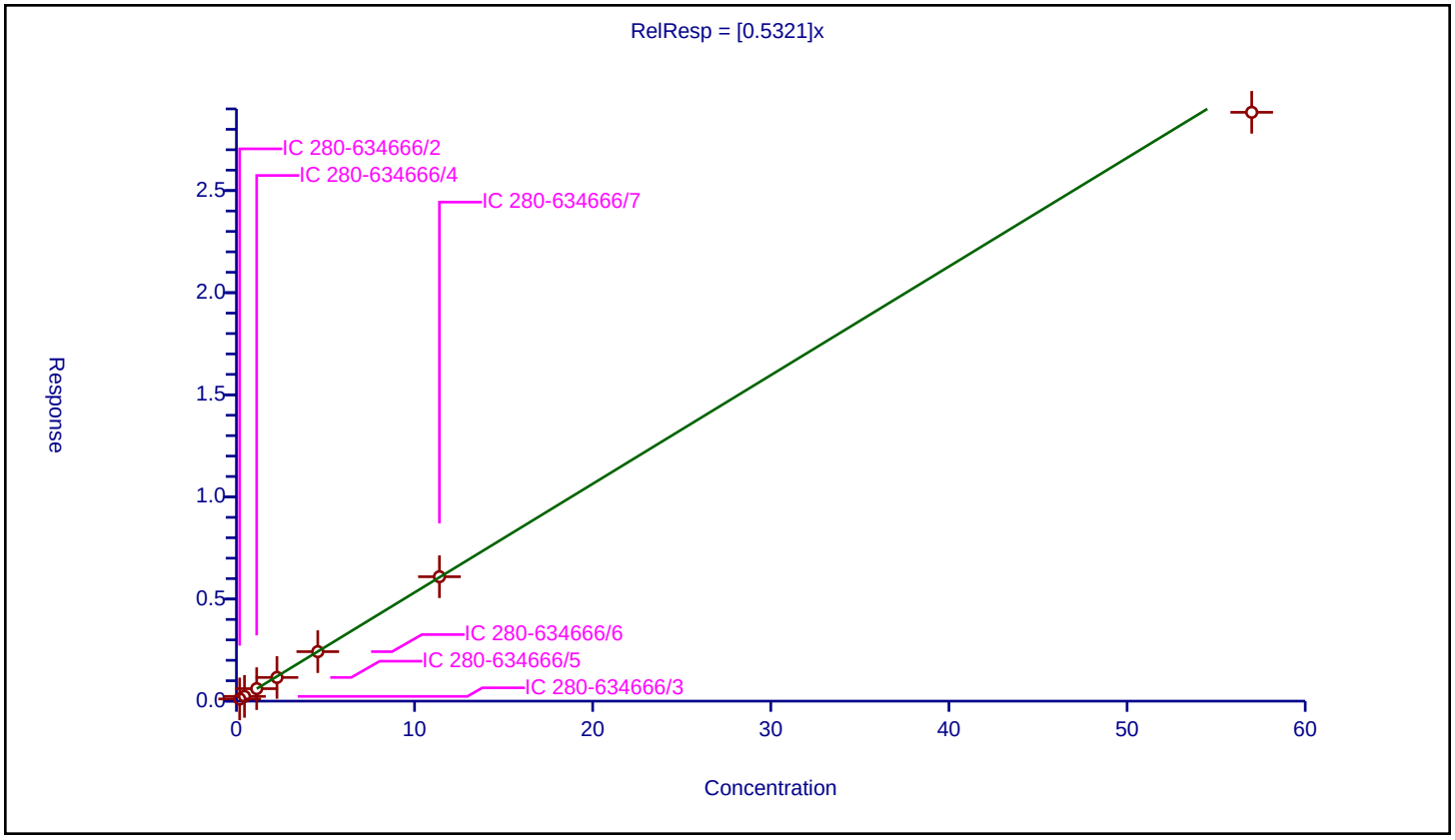
Curve Coefficients

Intercept:	0
Slope:	0.5321

Error Coefficients

Standard Error:	2500000
Relative Standard Error:	5.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.182108	0.107633	2.365	634969.0	0.59104	Y
2	IC 280-634666/3	0.452352	0.233172	2.365	620949.0	0.515465	Y
3	IC 280-634666/4	1.138176	0.611601	2.365	610123.0	0.537352	Y
4	IC 280-634666/5	2.276352	1.159653	2.365	654361.0	0.509435	Y
5	IC 280-634666/6	4.567296	2.423835	2.365	579920.0	0.530694	Y
6	IC 280-634666/7	11.396352	6.091798	2.365	575388.0	0.534539	Y
7	IC 280-634666/8	56.996352	28.832803	2.365	483417.0	0.505871	Y



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Calibration / Perfluorononanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

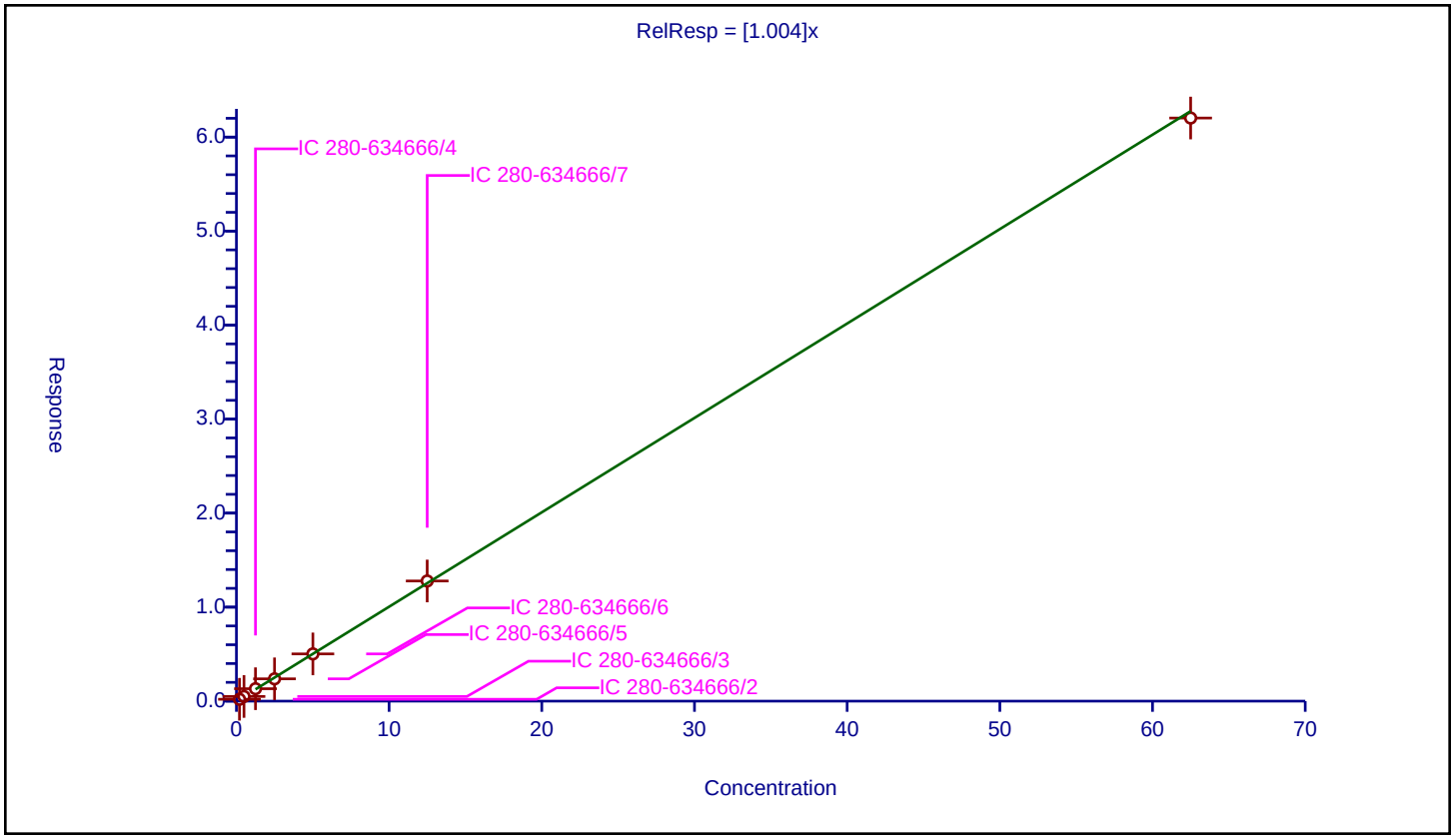
Curve Coefficients

Intercept:	0
Slope:	1.004

Error Coefficients

Standard Error:	19400000
Relative Standard Error:	3.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.199953	1.25	1219134.0	1.001369	Y
2	IC 280-634666/3	0.496	0.496011	1.25	1195936.0	1.000022	Y
3	IC 280-634666/4	1.248	1.320948	1.25	1105627.0	1.058452	Y
4	IC 280-634666/5	2.496	2.372876	1.25	1328258.0	0.950671	Y
5	IC 280-634666/6	5.008	5.025433	1.25	1222840.0	1.003481	Y
6	IC 280-634666/7	12.496	12.78251	1.25	1167517.0	1.022928	Y
7	IC 280-634666/8	62.496	62.027698	1.25	918456.0	0.992507	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

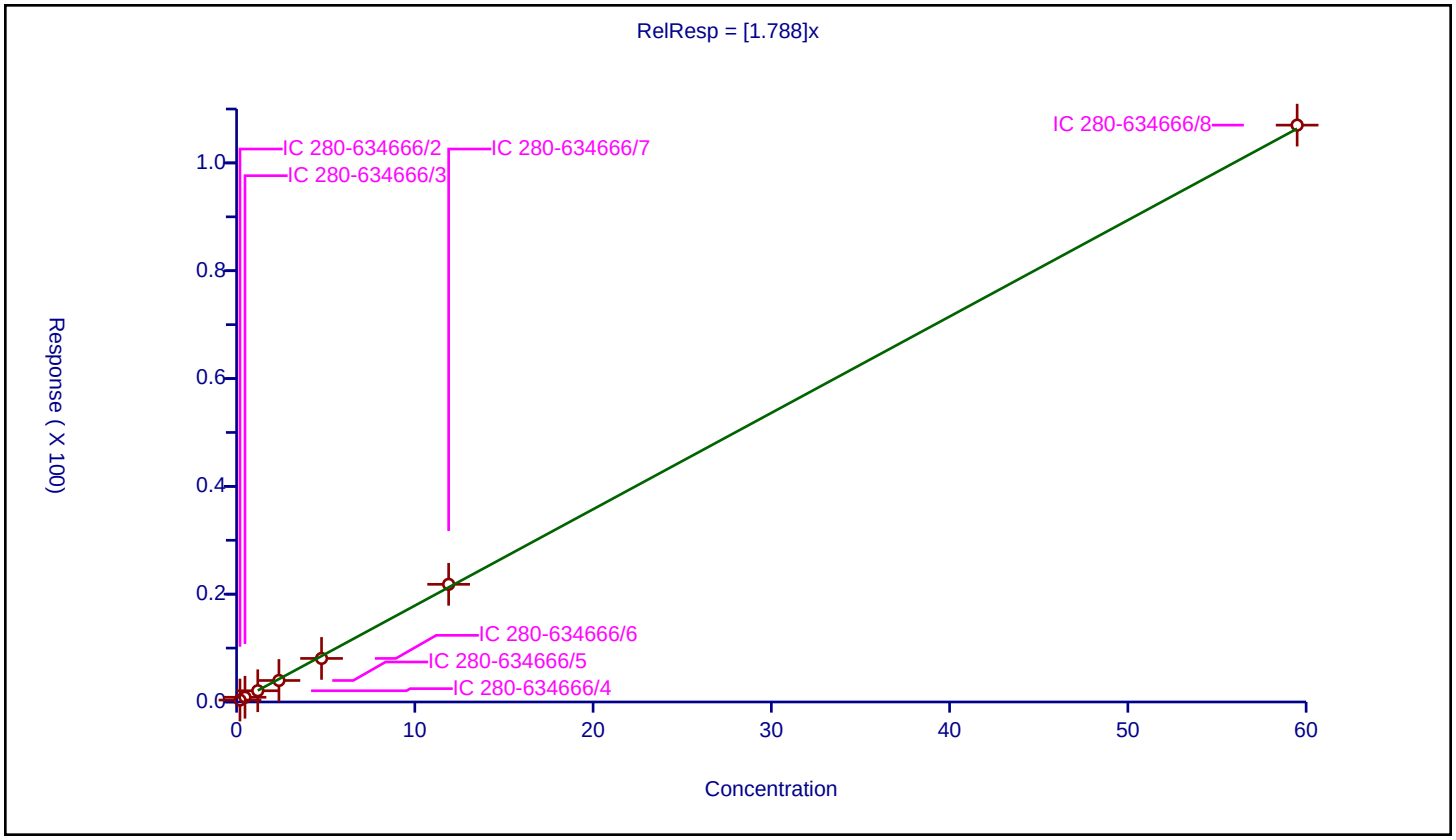
Curve Coefficients

Intercept:	0
Slope:	1.788

Error Coefficients

Standard Error:	4140000
Relative Standard Error:	4.5
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.190095	0.359372	2.39	287787.0	1.890481	Y
2	IC 280-634666/3	0.472192	0.878275	2.39	299258.0	1.859995	Y
3	IC 280-634666/4	1.188096	2.085283	2.39	313498.0	1.755147	Y
4	IC 280-634666/5	2.376192	3.989689	2.39	336918.0	1.679026	Y
5	IC 280-634666/6	4.767616	8.080941	2.39	312365.0	1.694965	Y
6	IC 280-634666/7	11.896192	21.829752	2.39	283823.0	1.83502	Y
7	IC 280-634666/8	59.496192	107.011772	2.39	217500.0	1.798632	Y



Calibration / 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

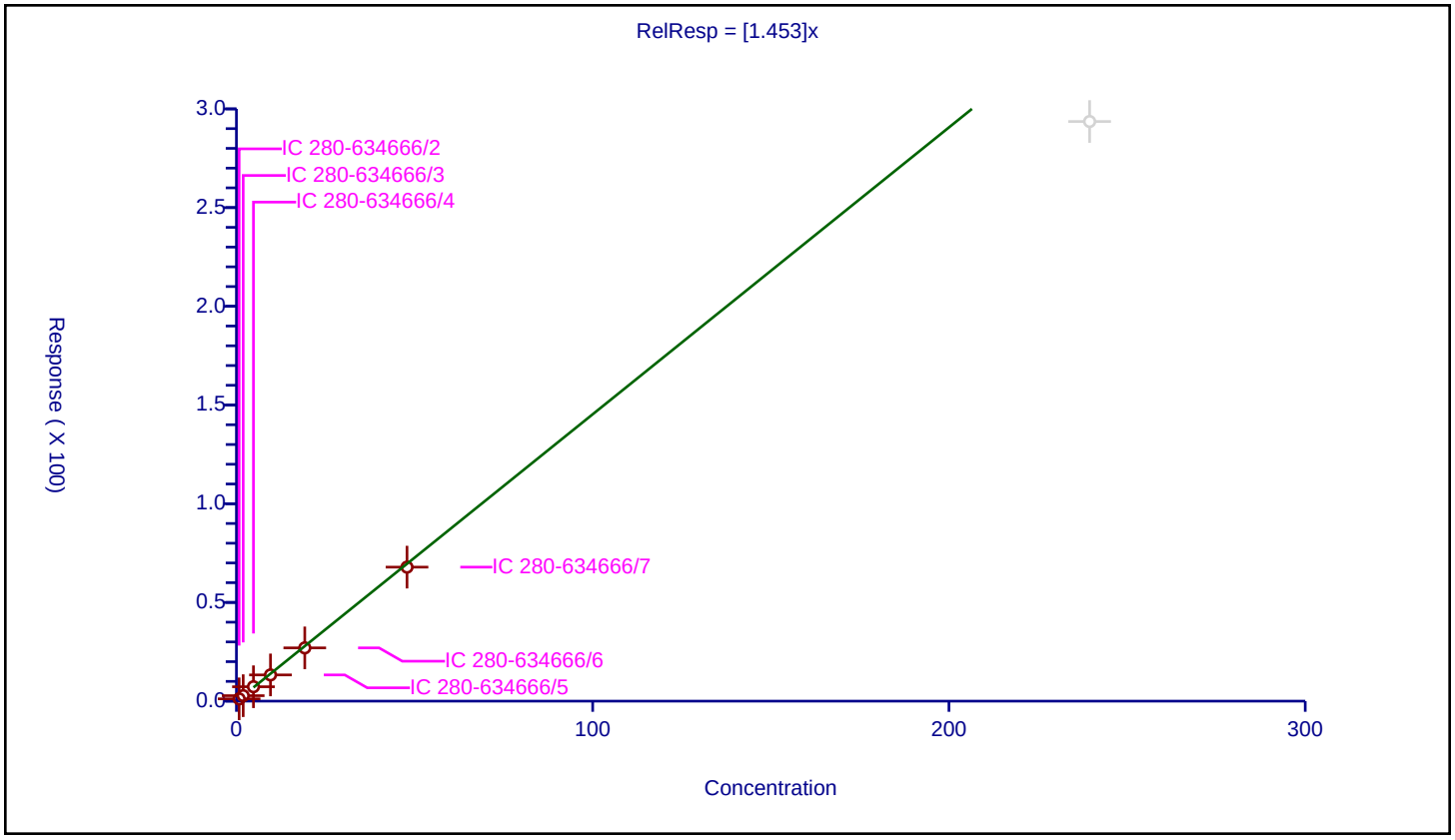
Curve Coefficients

Intercept:	0
Slope:	1.453

Error Coefficients

Standard Error:	2860000
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.765174	1.167374	4.79	442024.0	1.525633	Y
2	IC 280-634666/3	1.900672	2.766757	4.79	451605.0	1.455673	Y
3	IC 280-634666/4	4.782336	7.295208	4.79	439328.0	1.525449	Y
4	IC 280-634666/5	9.564672	13.276702	4.79	463237.0	1.388098	Y
5	IC 280-634666/6	19.190656	26.98132	4.79	419998.0	1.405961	Y
6	IC 280-634666/7	47.884672	67.875579	4.79	405704.0	1.41748	Y
7	IC 280-634666/8	239.484672	293.60618	4.79	355017.0	1.225992	N



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Calibration / N-methylperfluorooctanesulfonamidoacetic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

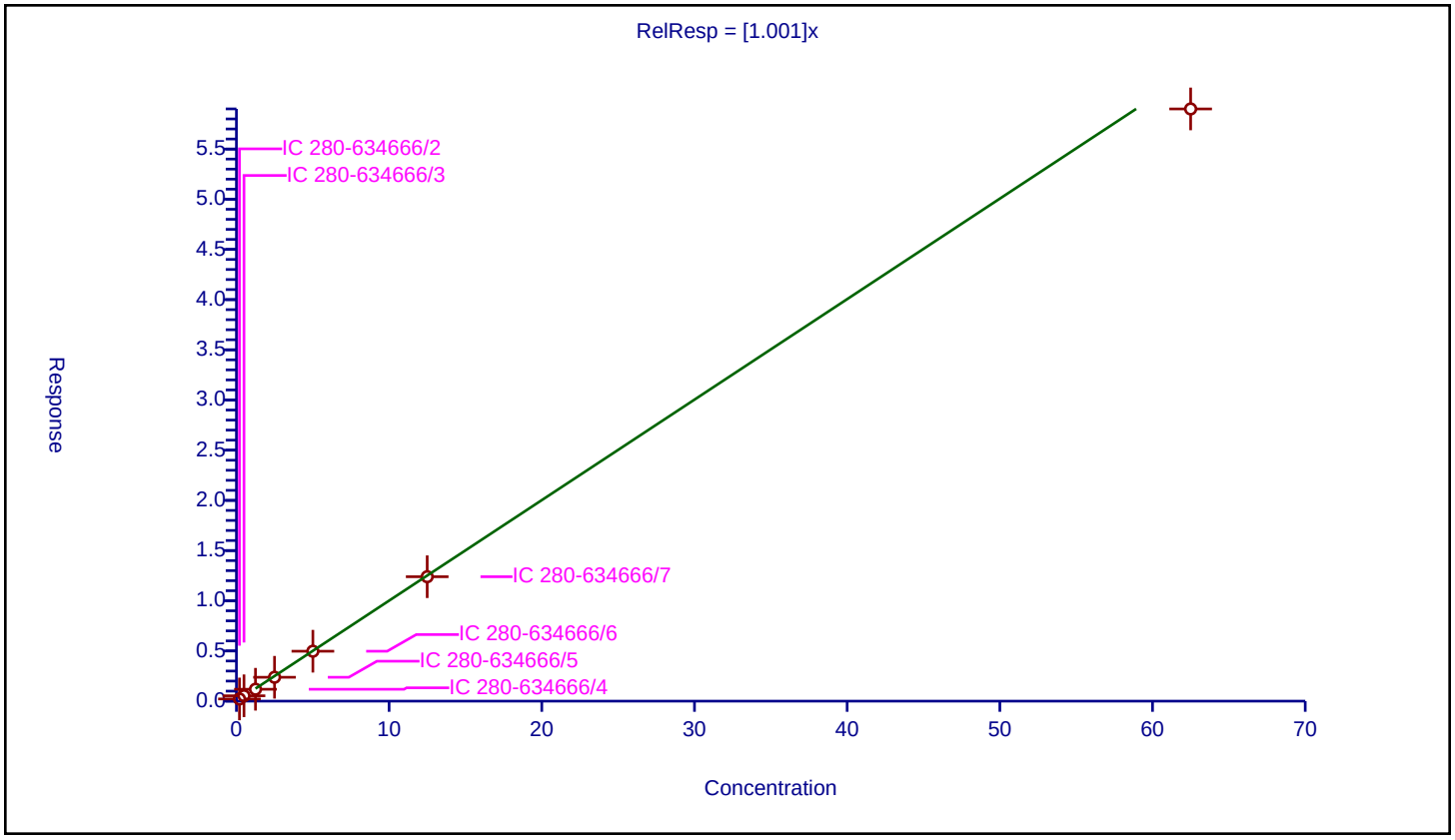
Curve Coefficients

Intercept:	0
Slope:	1.001

Error Coefficients

Standard Error:	2260000
Relative Standard Error:	6.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.219272	5.0	626049.0	1.098117	Y
2	IC 280-634666/3	0.496	0.535585	5.0	547691.0	1.079808	Y
3	IC 280-634666/4	1.248	1.184166	5.0	562776.0	0.948851	Y
4	IC 280-634666/5	2.496	2.378159	5.0	687536.0	0.952788	Y
5	IC 280-634666/6	5.008	4.972823	5.0	582847.0	0.992976	Y
6	IC 280-634666/7	12.496	12.393895	5.0	557441.0	0.991829	Y
7	IC 280-634666/8	62.496	58.995989	5.0	450259.0	0.943996	Y



Calibration / Perfluorodecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

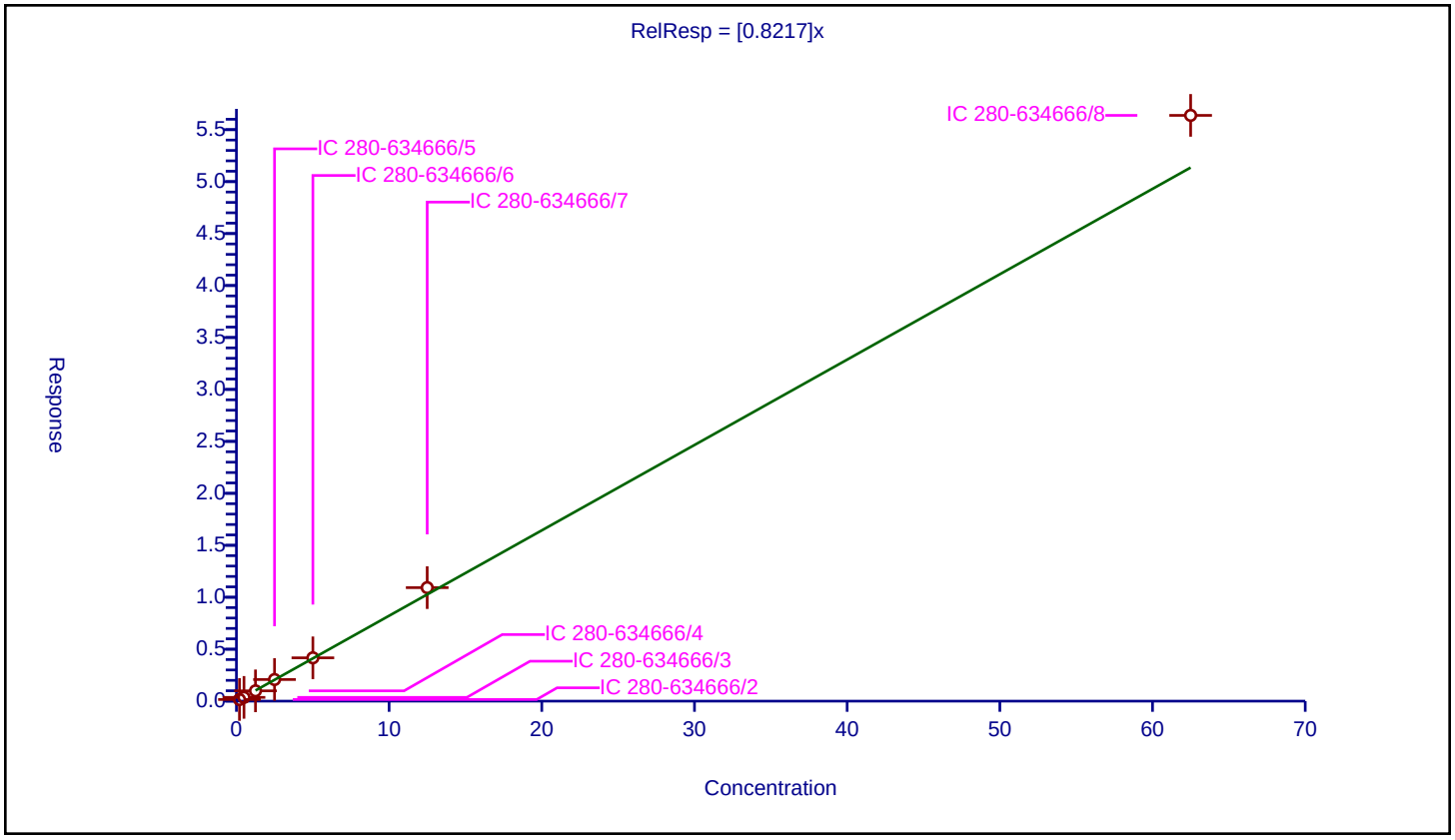
Curve Coefficients

Intercept:	0
Slope:	0.8217

Error Coefficients

Standard Error:	16900000
Relative Standard Error:	7.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.157138	1.25	1295451.0	0.786951	Y
2	IC 280-634666/3	0.496	0.361494	1.25	1185279.0	0.728819	Y
3	IC 280-634666/4	1.248	0.991237	1.25	1149883.0	0.79426	Y
4	IC 280-634666/5	2.496	2.079437	1.25	1239096.0	0.833108	Y
5	IC 280-634666/6	5.008	4.169936	1.25	1172566.0	0.832655	Y
6	IC 280-634666/7	12.496	10.923803	1.25	1133177.0	0.874184	Y
7	IC 280-634666/8	62.496	56.37477	1.25	884359.0	0.902054	Y



Calibration / N-ethylperfluorooctanesulfonamidoacetic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

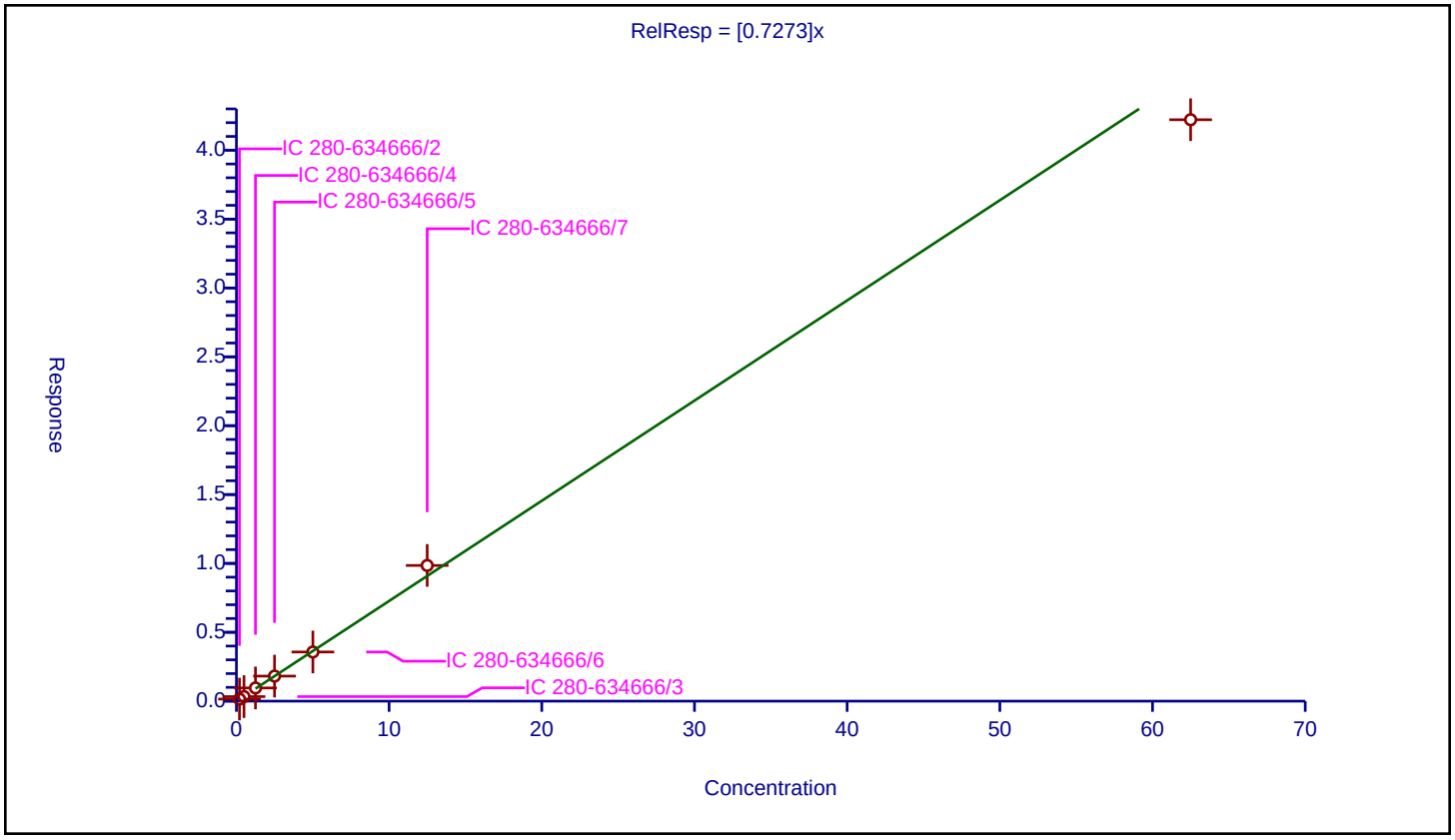
Curve Coefficients

Intercept:	0
Slope:	0.7273

Error Coefficients

Standard Error:	1960000
Relative Standard Error:	6.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.150449	5.0	684819.0	0.753448	Y
2	IC 280-634666/3	0.496	0.330092	5.0	687217.0	0.665509	Y
3	IC 280-634666/4	1.248	0.958048	5.0	682586.0	0.767666	Y
4	IC 280-634666/5	2.496	1.81785	5.0	714806.0	0.728305	Y
5	IC 280-634666/6	5.008	3.568026	5.0	690990.0	0.712465	Y
6	IC 280-634666/7	12.496	9.85096	5.0	628489.0	0.788329	Y
7	IC 280-634666/8	62.496	42.213046	5.0	543911.0	0.675452	Y



Calibration / Perfluorooctanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

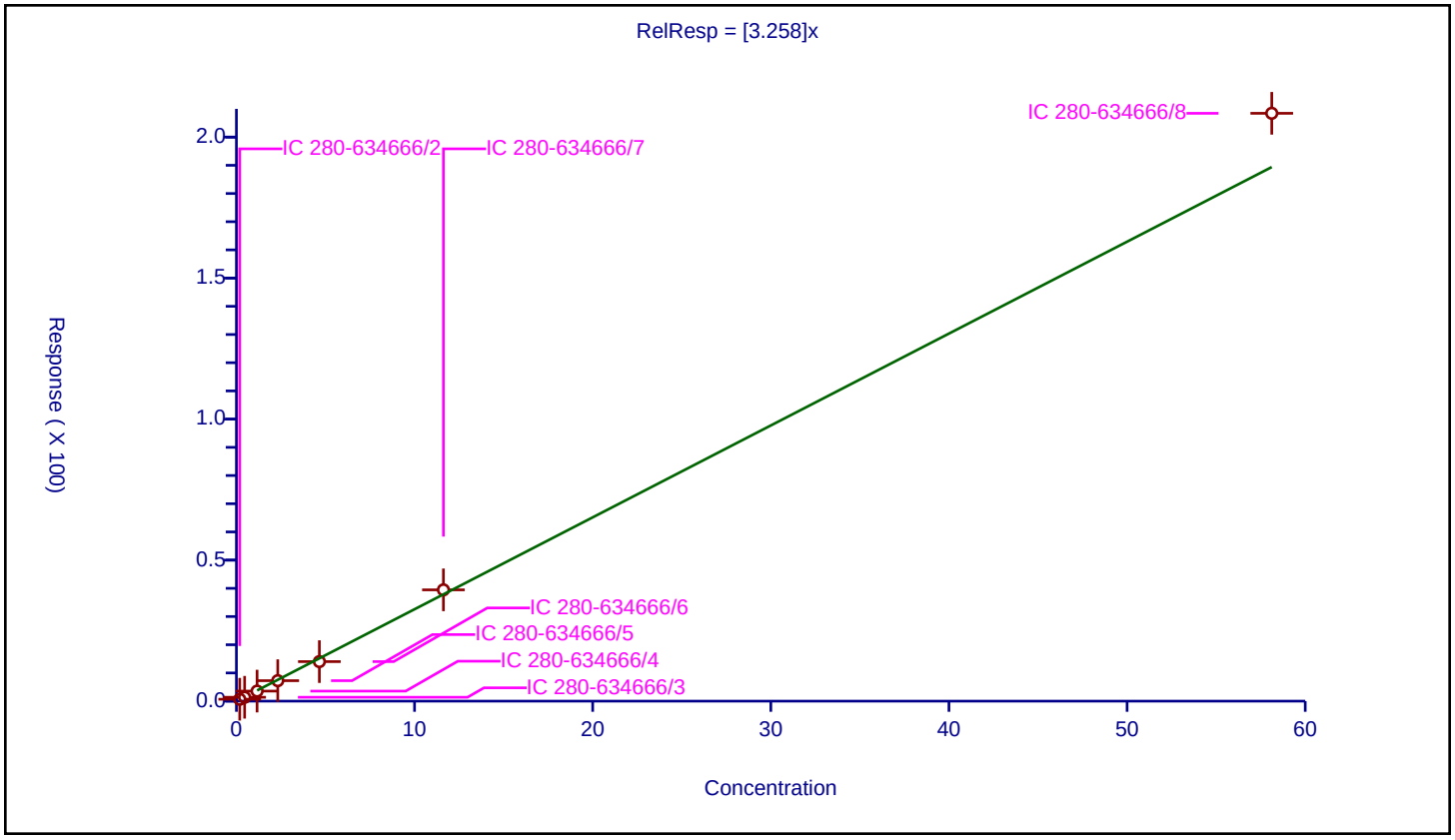
Curve Coefficients

Intercept:	0
Slope:	3.258

Error Coefficients

Standard Error:	8030000
Relative Standard Error:	8.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.185702	0.673474	2.39	287787.0	3.62663	Y
2	IC 280-634666/3	0.46128	1.378536	2.39	299258.0	2.988501	Y
3	IC 280-634666/4	1.16064	3.565285	2.39	313498.0	3.071827	Y
4	IC 280-634666/5	2.32128	7.259707	2.39	336918.0	3.127459	Y
5	IC 280-634666/6	4.65744	14.022892	2.39	312365.0	3.010858	Y
6	IC 280-634666/7	11.62128	39.465226	2.39	283823.0	3.395945	Y
7	IC 280-634666/8	58.12128	208.435592	2.39	217500.0	3.586218	Y



Calibration / Perfluoroundecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

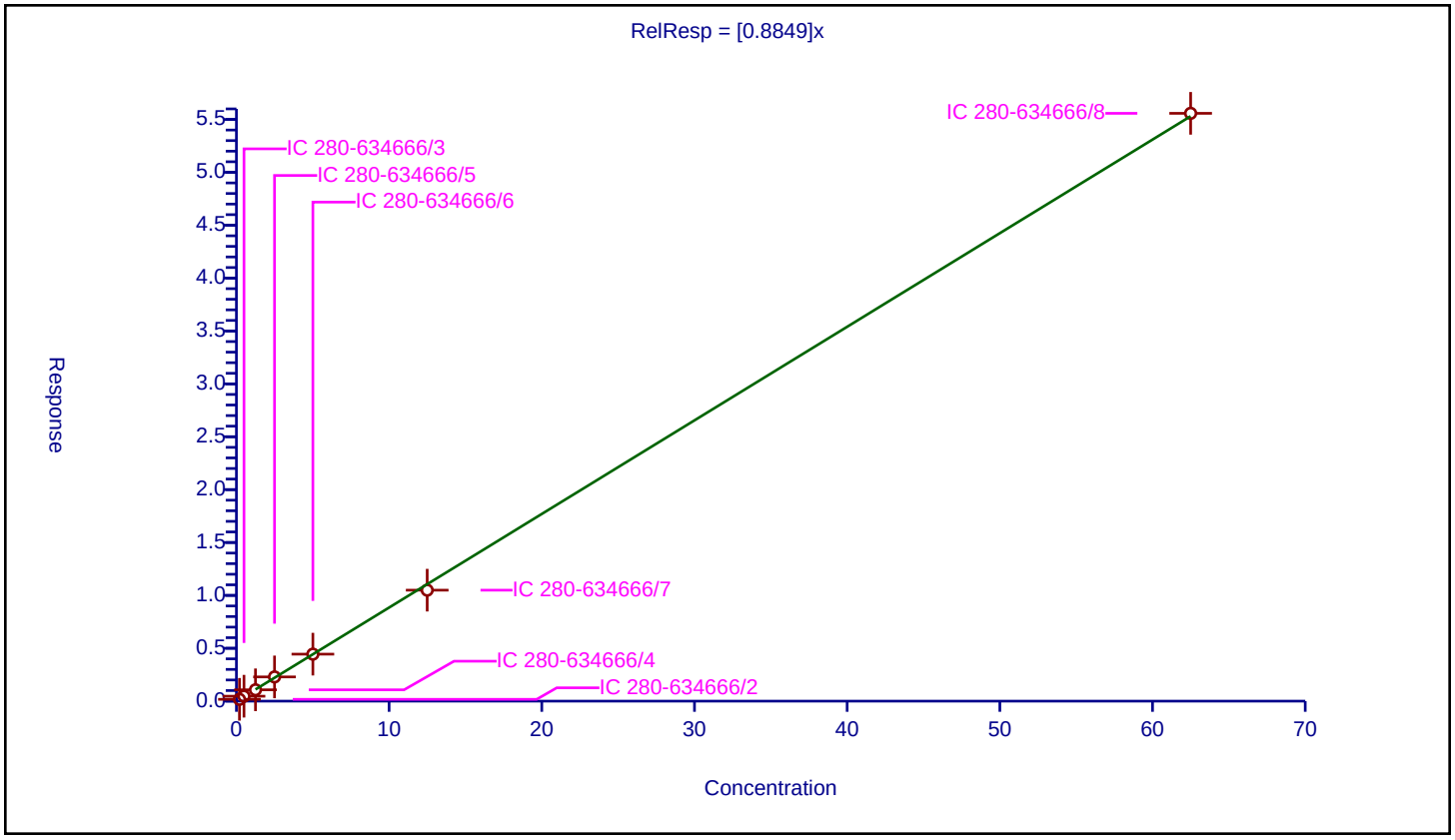
Curve Coefficients

Intercept:	0
Slope:	0.8849

Error Coefficients

Standard Error:	17800000
Relative Standard Error:	4.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.171491	1.25	1482306.0	0.85883	Y
2	IC 280-634666/3	0.496	0.467692	1.25	1264135.0	0.942928	Y
3	IC 280-634666/4	1.248	1.071481	1.25	1329701.0	0.858558	Y
4	IC 280-634666/5	2.496	2.290724	1.25	1400067.0	0.917758	Y
5	IC 280-634666/6	5.008	4.444239	1.25	1298445.0	0.887428	Y
6	IC 280-634666/7	12.496	10.492904	1.25	1285796.0	0.839701	Y
7	IC 280-634666/8	62.496	55.57893	1.25	944820.0	0.88932	Y



Calibration / 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

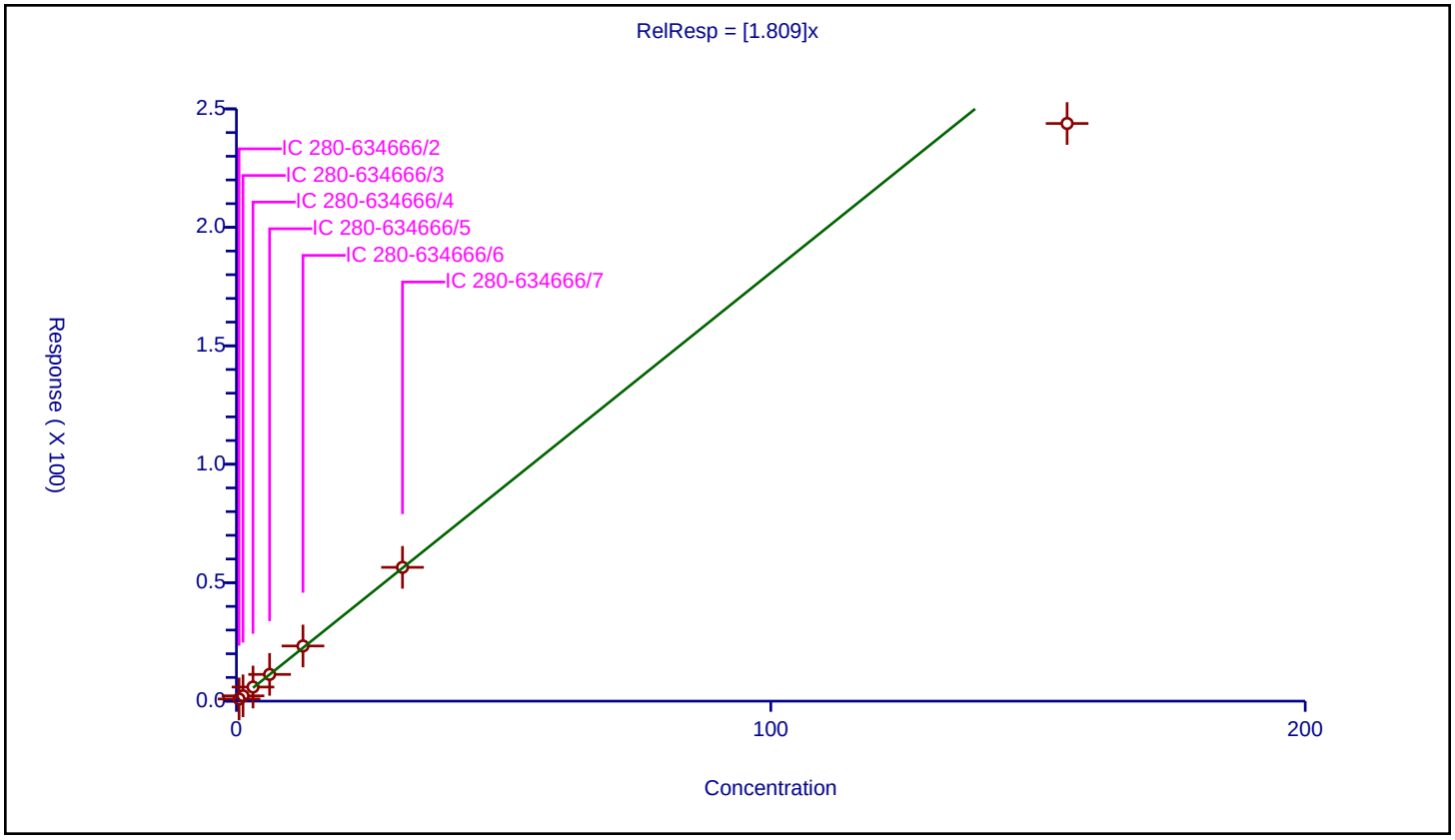
Curve Coefficients

Intercept:	0
Slope:	1.809

Error Coefficients

Standard Error:	18800000
Relative Standard Error:	6.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.496659	0.919869	10.0	2098701.0	1.852114	Y
2	IC 280-634666/3	1.233688	2.239602	10.0	1946292.0	1.815371	Y
3	IC 280-634666/4	3.104119	5.957663	10.0	1978108.0	1.919276	Y
4	IC 280-634666/5	6.208238	11.283919	10.0	2147776.0	1.817572	Y
5	IC 280-634666/6	12.456273	23.287829	10.0	1980106.0	1.869566	Y
6	IC 280-634666/7	31.080988	56.481006	10.0	2039532.0	1.81722	Y
7	IC 280-634666/8	155.444738	243.83965	10.0	1815473.0	1.568658	Y



Calibration / Perfluorononanesulfonic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

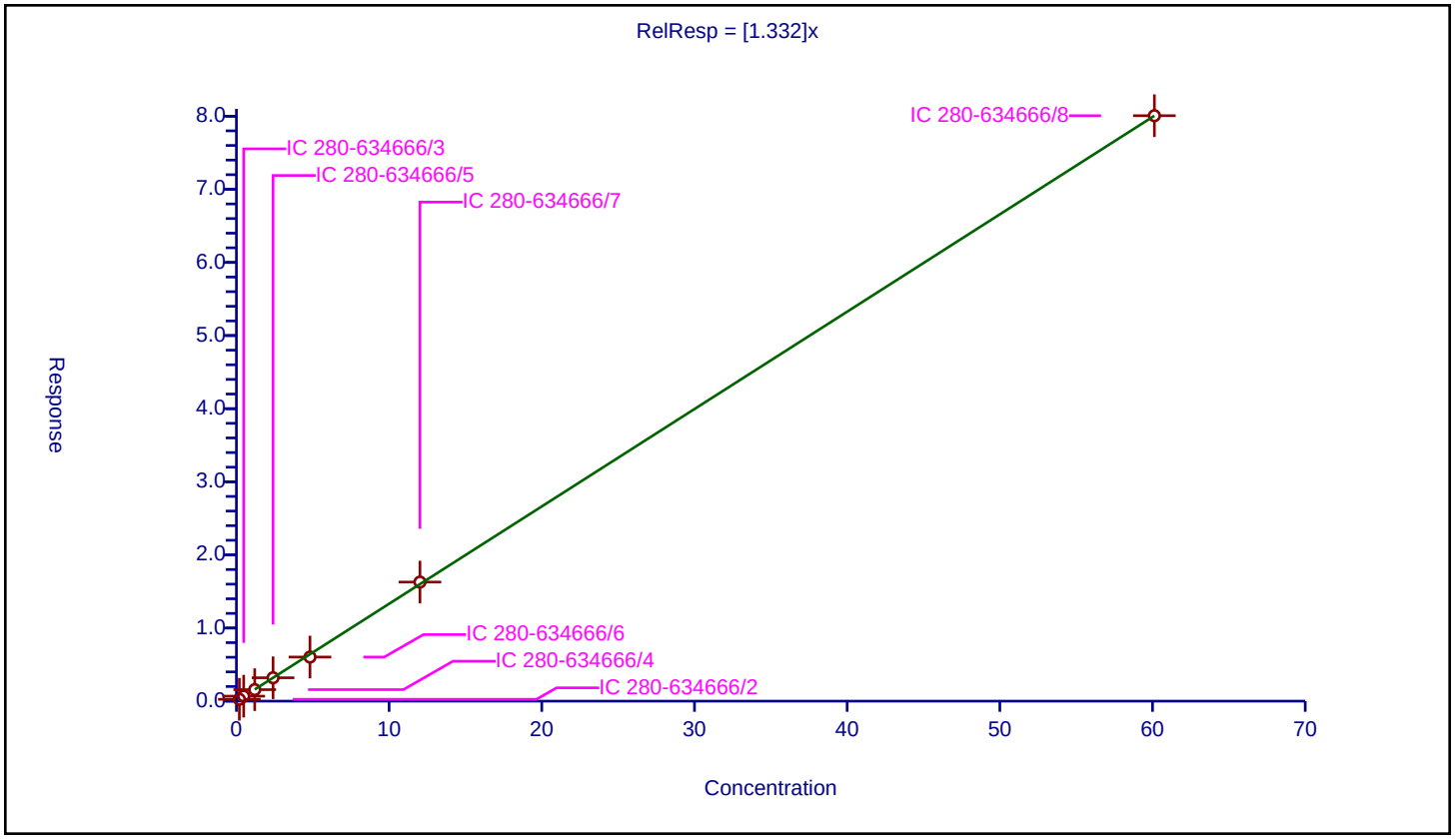
Curve Coefficients

Intercept:	0
Slope:	1.332

Error Coefficients

Standard Error:	3100000
Relative Standard Error:	4.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.192092	0.252581	2.39	287787.0	1.314894	Y
2	IC 280-634666/3	0.477152	0.681186	2.39	299258.0	1.427607	Y
3	IC 280-634666/4	1.200576	1.570907	2.39	313498.0	1.308461	Y
4	IC 280-634666/5	2.401152	3.197697	2.39	336918.0	1.331735	Y
5	IC 280-634666/6	4.817696	6.032113	2.39	312365.0	1.252074	Y
6	IC 280-634666/7	12.021152	16.283541	2.39	283823.0	1.354574	Y
7	IC 280-634666/8	60.121152	80.067033	2.39	217500.0	1.331761	Y



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Calibration / Perfluorooctanesulfonamide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

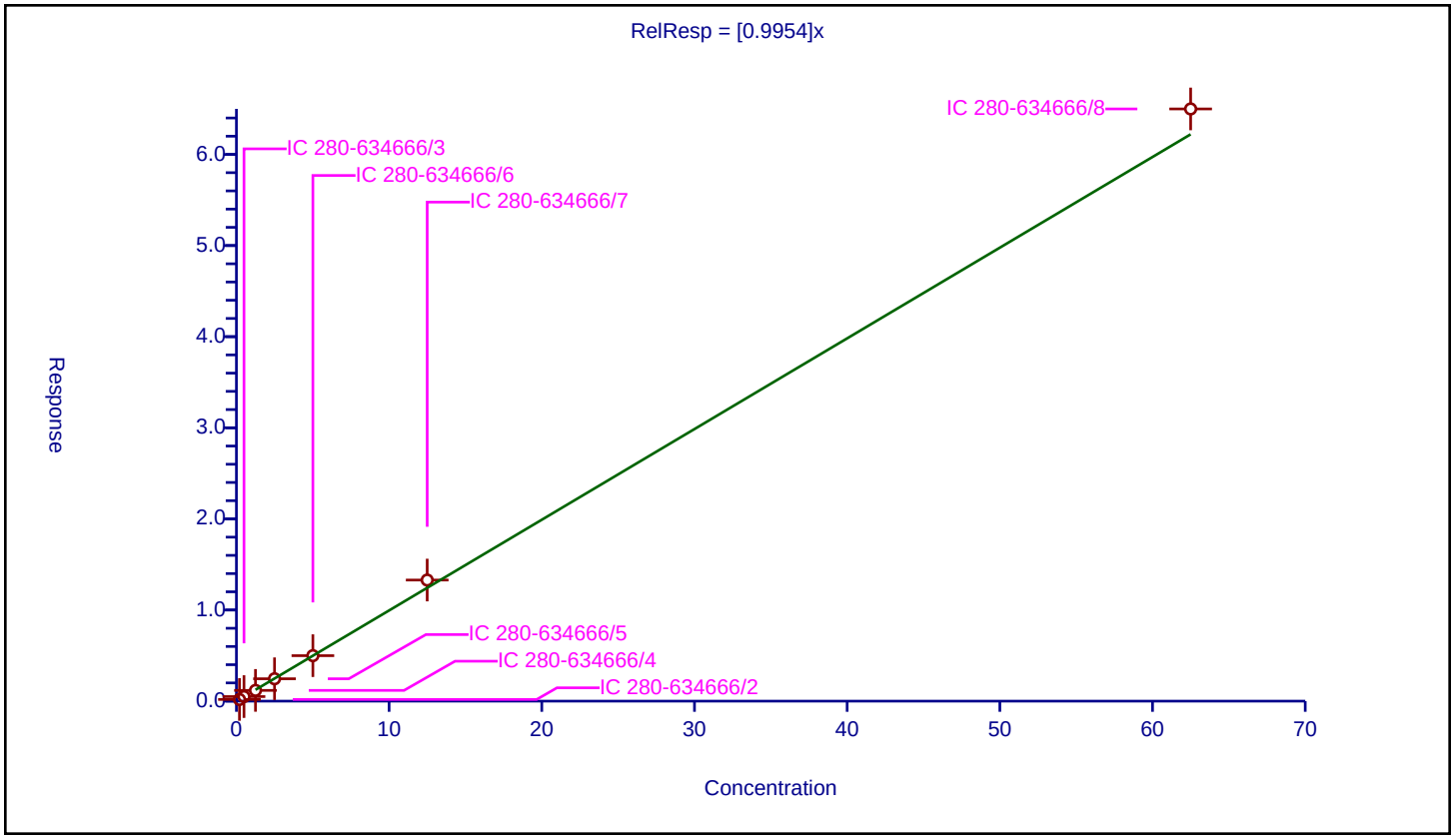
Curve Coefficients

Intercept:	0
Slope:	0.9954

Error Coefficients

Standard Error:	14000000
Relative Standard Error:	4.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.186005	2.5	1561249.0	0.931515	Y
2	IC 280-634666/3	0.496	0.499842	2.5	1473317.0	1.007745	Y
3	IC 280-634666/4	1.248	1.178201	2.5	1510364.0	0.944071	Y
4	IC 280-634666/5	2.496	2.45653	2.5	1556750.0	0.984187	Y
5	IC 280-634666/6	5.008	4.991553	2.5	1458243.0	0.996716	Y
6	IC 280-634666/7	12.496	13.288922	2.5	1488481.0	1.063454	Y
7	IC 280-634666/8	62.496	64.99497	2.5	1281734.0	1.039986	Y



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Calibration / Perfluorododecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

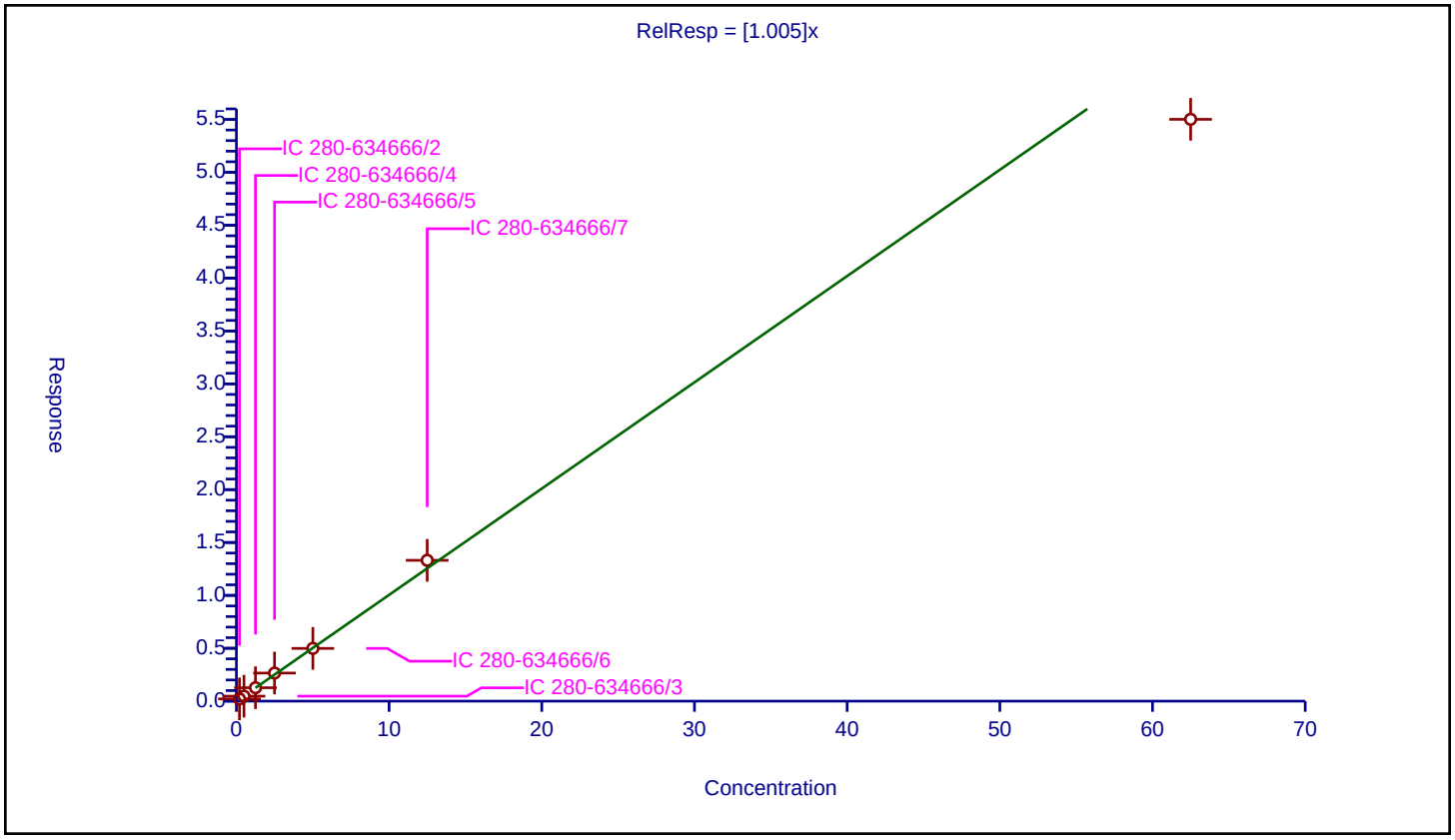
Curve Coefficients

Intercept:	0
Slope:	1.005

Error Coefficients

Standard Error:	19000000
Relative Standard Error:	6.8
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.210961	1.25	1352820.0	1.056496	Y
2	IC 280-634666/3	0.496	0.473381	1.25	1327943.0	0.954396	Y
3	IC 280-634666/4	1.248	1.26857	1.25	1338423.0	1.016483	Y
4	IC 280-634666/5	2.496	2.656723	1.25	1318290.0	1.064392	Y
5	IC 280-634666/6	5.008	4.988873	1.25	1295732.0	0.996181	Y
6	IC 280-634666/7	12.496	13.314733	1.25	1213316.0	1.06552	Y
7	IC 280-634666/8	62.496	55.013352	1.25	1004593.0	0.88027	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

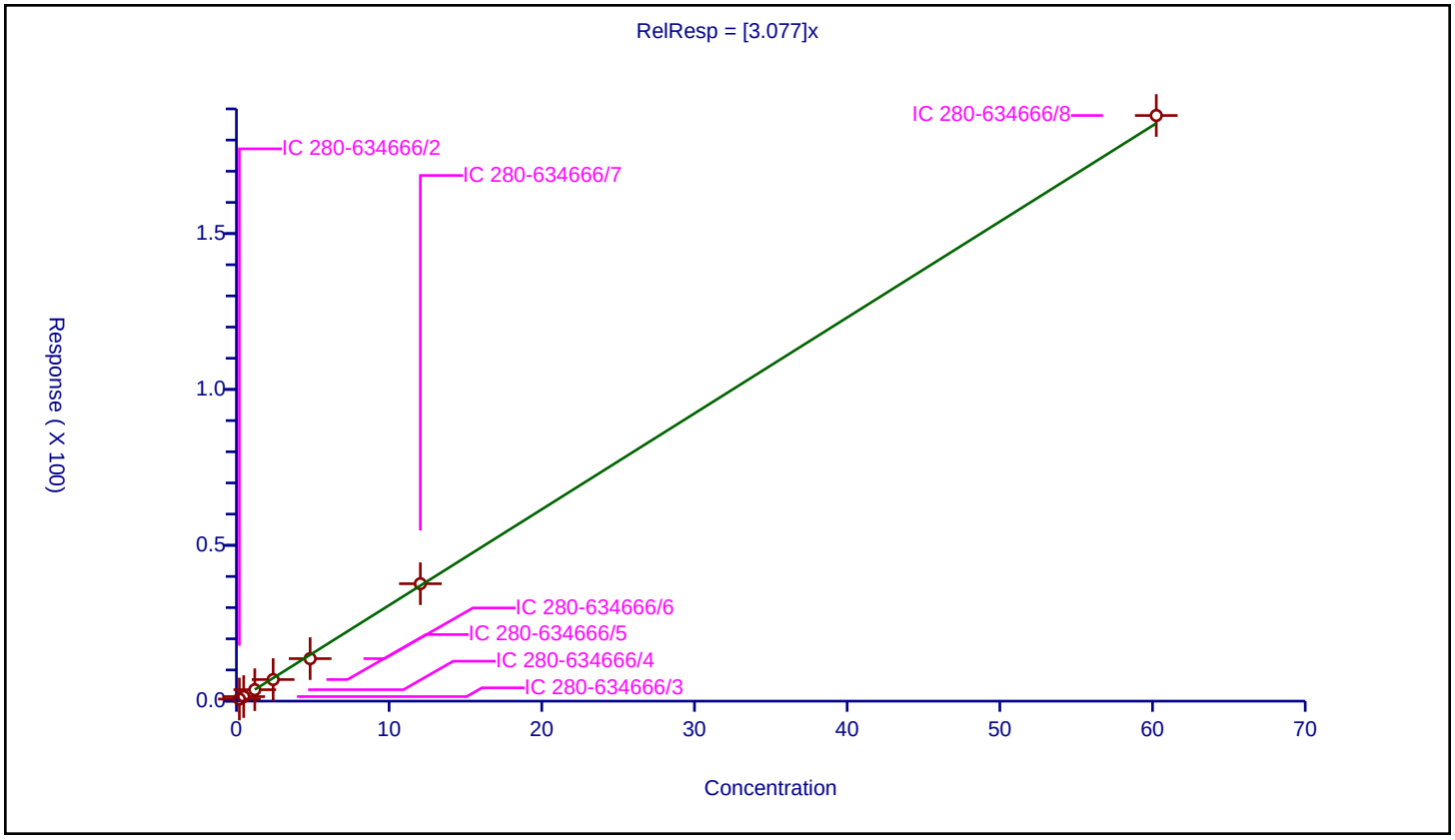
Curve Coefficients

Intercept:	0
Slope:	3.077

Error Coefficients

Standard Error:	7270000
Relative Standard Error:	7.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.192492	0.674454	2.39	287787.0	3.503811	Y
2	IC 280-634666/3	0.478144	1.452881	2.39	299258.0	3.038586	Y
3	IC 280-634666/4	1.203072	3.667854	2.39	313498.0	3.04874	Y
4	IC 280-634666/5	2.406144	6.922557	2.39	336918.0	2.877034	Y
5	IC 280-634666/6	4.827712	13.629615	2.39	312365.0	2.823204	Y
6	IC 280-634666/7	12.046144	37.667853	2.39	283823.0	3.126964	Y
7	IC 280-634666/8	60.246144	187.882988	2.39	217500.0	3.118589	Y



Calibration / Perfluorotridecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

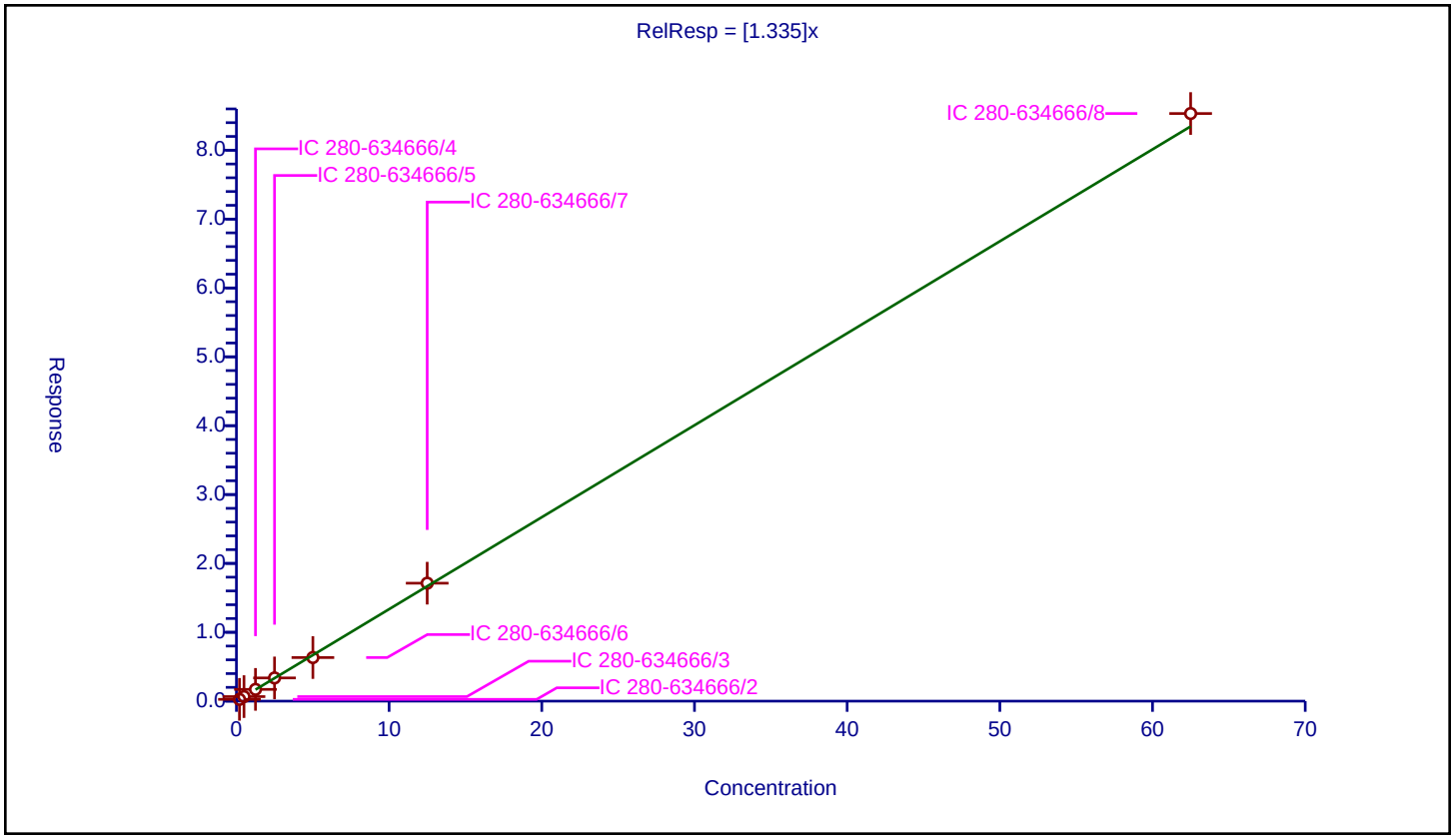
Curve Coefficients

Intercept:	0
Slope:	1.335

Error Coefficients

Standard Error:	13800000
Relative Standard Error:	3.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.259148	1.25	700937.0	1.297815	Y
2	IC 280-634666/3	0.496	0.659975	1.25	621429.0	1.330594	Y
3	IC 280-634666/4	1.248	1.708343	1.25	581181.0	1.368864	Y
4	IC 280-634666/5	2.496	3.372164	1.25	650895.0	1.351027	Y
5	IC 280-634666/6	5.008	6.327316	1.25	591696.0	1.263442	Y
6	IC 280-634666/7	12.496	17.127824	1.25	595088.0	1.370665	Y
7	IC 280-634666/8	62.496	85.327715	1.25	478899.0	1.365331	Y



Calibration / 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid

Curve Type:	Quadratic
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

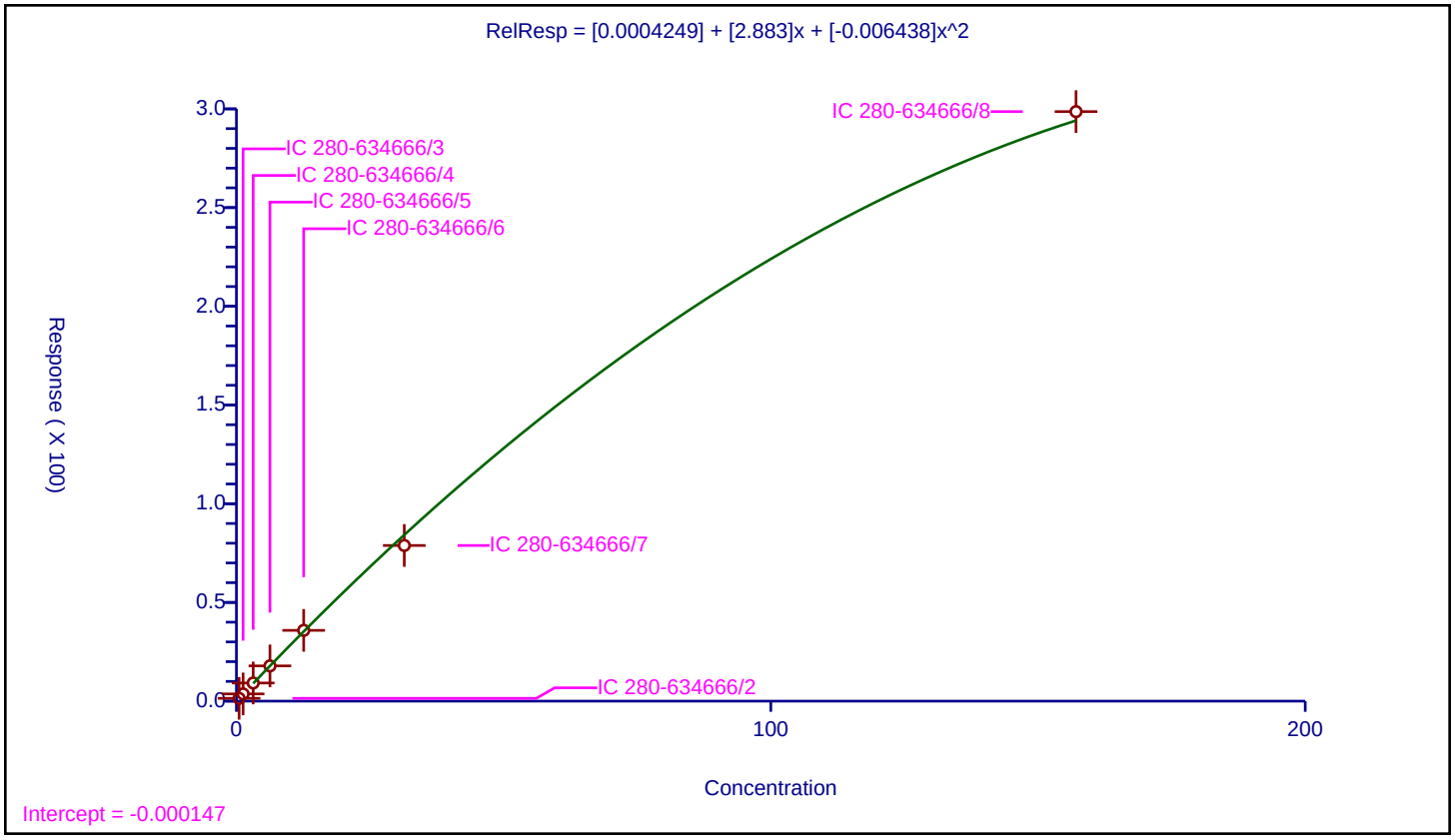
Curve Coefficients

Intercept:	0.0004249
Slope:	2.883
Second Order:	-0.006438

Error Coefficients

Standard Error:	28600000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.501988	1.42804	10.0	2098701.0	2.84477	Y
2	IC 280-634666/3	1.246925	3.667785	10.0	1946292.0	2.941463	Y
3	IC 280-634666/4	3.137425	9.189417	10.0	1978108.0	2.928968	Y
4	IC 280-634666/5	6.27485	17.849445	10.0	2147776.0	2.844601	Y
5	IC 280-634666/6	12.589924	35.857969	10.0	1980106.0	2.848148	Y
6	IC 280-634666/7	31.414475	78.852904	10.0	2039532.0	2.510082	Y
7	IC 280-634666/8	157.1126	298.629861	10.0	1815473.0	1.900738	Y



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Calibration / Perfluorotetradecanoic acid

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

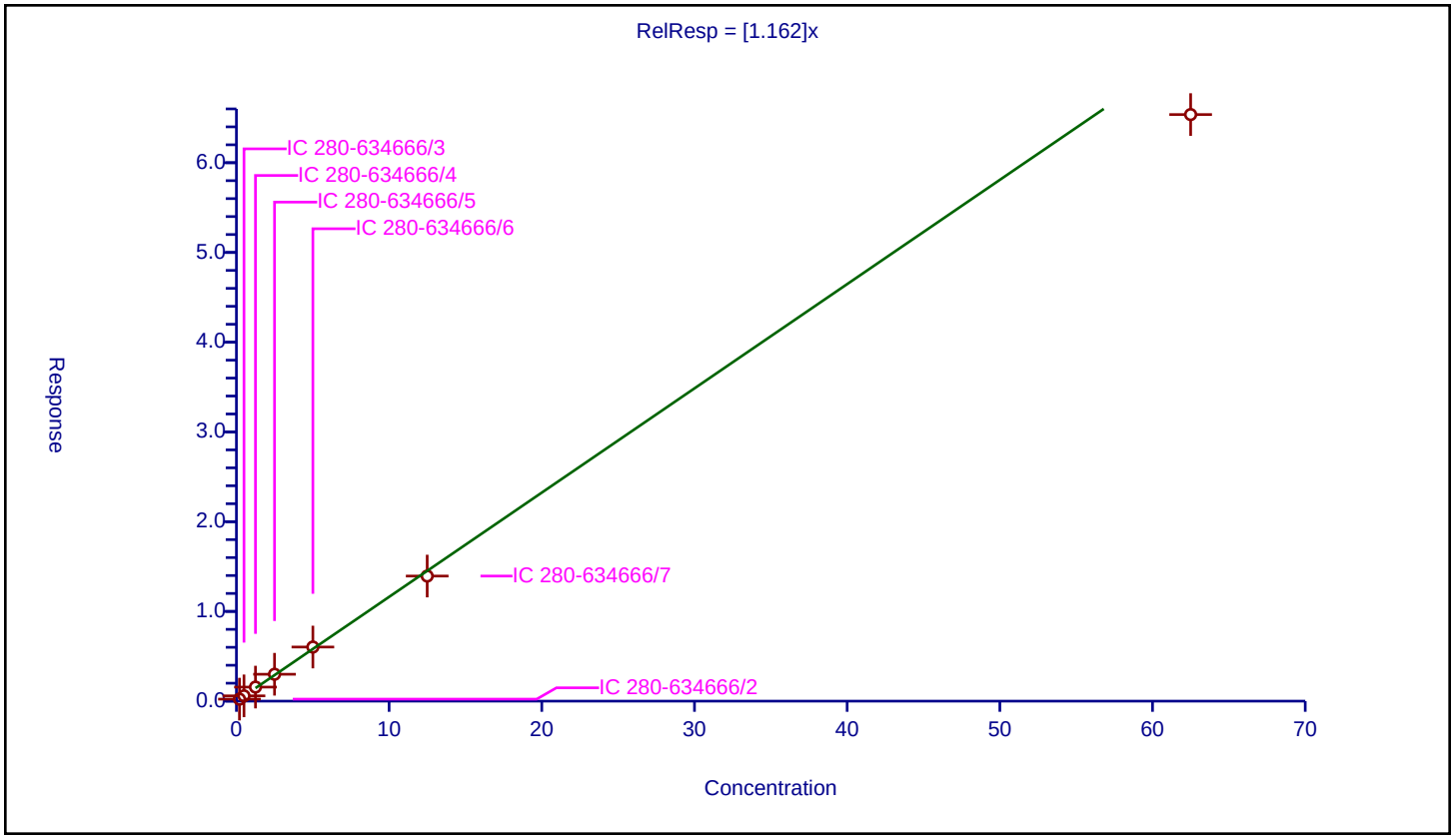
Curve Coefficients

Intercept:	0
Slope:	1.162

Error Coefficients

Standard Error:	10700000
Relative Standard Error:	6.1
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.223938	1.25	700937.0	1.121483	Y
2	IC 280-634666/3	0.496	0.59025	1.25	621429.0	1.190021	Y
3	IC 280-634666/4	1.248	1.566035	1.25	581181.0	1.254836	Y
4	IC 280-634666/5	2.496	2.996877	1.25	650895.0	1.200672	Y
5	IC 280-634666/6	5.008	6.030886	1.25	591696.0	1.20425	Y
6	IC 280-634666/7	12.496	13.940579	1.25	595088.0	1.115603	Y
7	IC 280-634666/8	62.496	65.367966	1.25	478899.0	1.045954	Y



Calibration / 2-(N-methylperfluoro-1-octanesulfonamido) ethanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

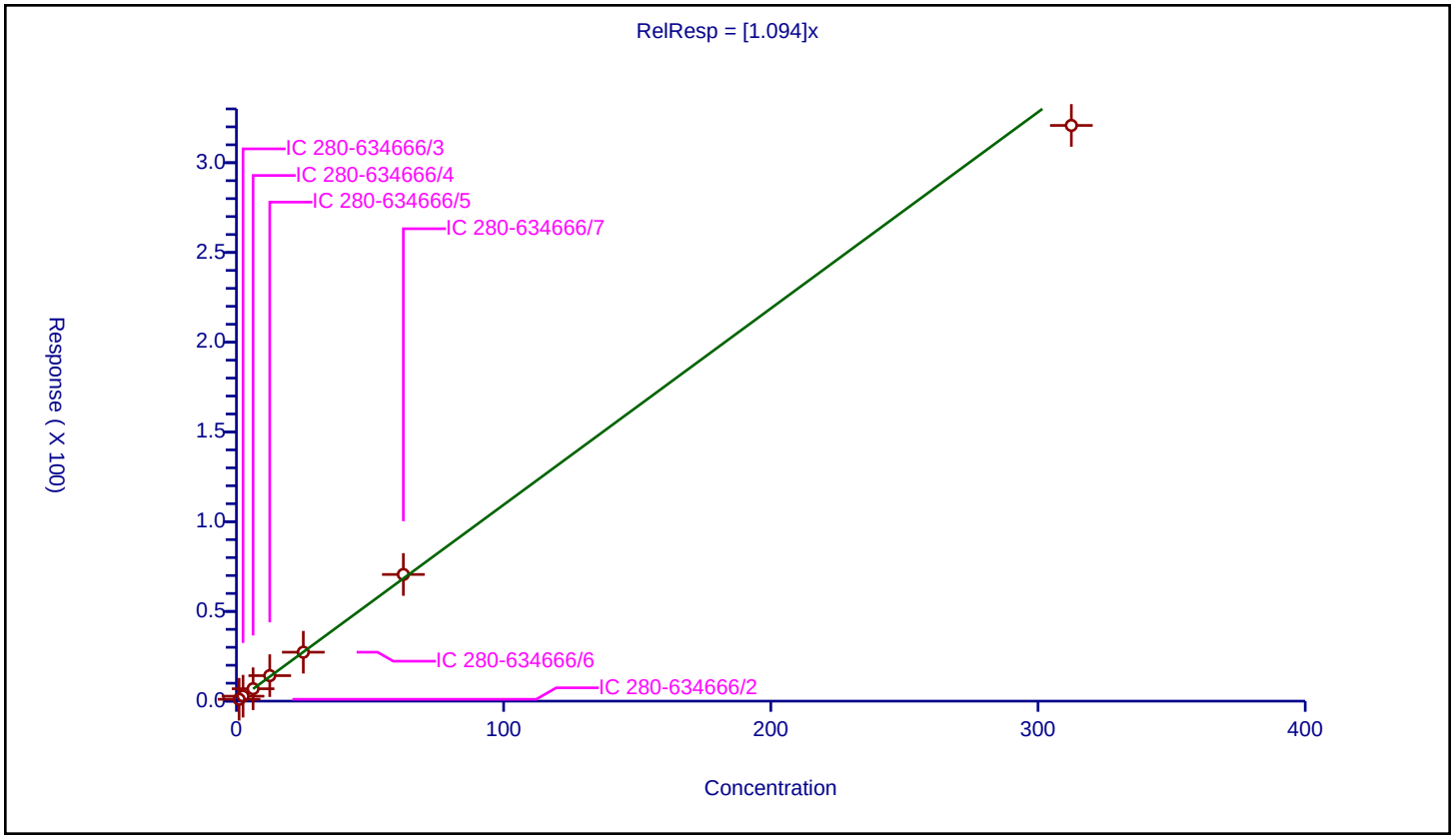
Curve Coefficients

Intercept:	0
Slope:	1.094

Error Coefficients

Standard Error:	52200000
Relative Standard Error:	3.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.9984	1.051129	25.0	11845142.0	1.052814	Y
2	IC 280-634666/3	2.48	2.760326	25.0	10834645.0	1.113035	Y
3	IC 280-634666/4	6.24	6.914961	25.0	10976291.0	1.108167	Y
4	IC 280-634666/5	12.48	14.20681	25.0	11144926.0	1.138366	Y
5	IC 280-634666/6	25.04	27.275916	25.0	10957610.0	1.089294	Y
6	IC 280-634666/7	62.48	70.589801	25.0	10474283.0	1.129798	Y
7	IC 280-634666/8	312.48	320.780733	25.0	9643471.0	1.026564	Y



Calibration / Perfluorododecanesulfonic acid (PFDoS)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

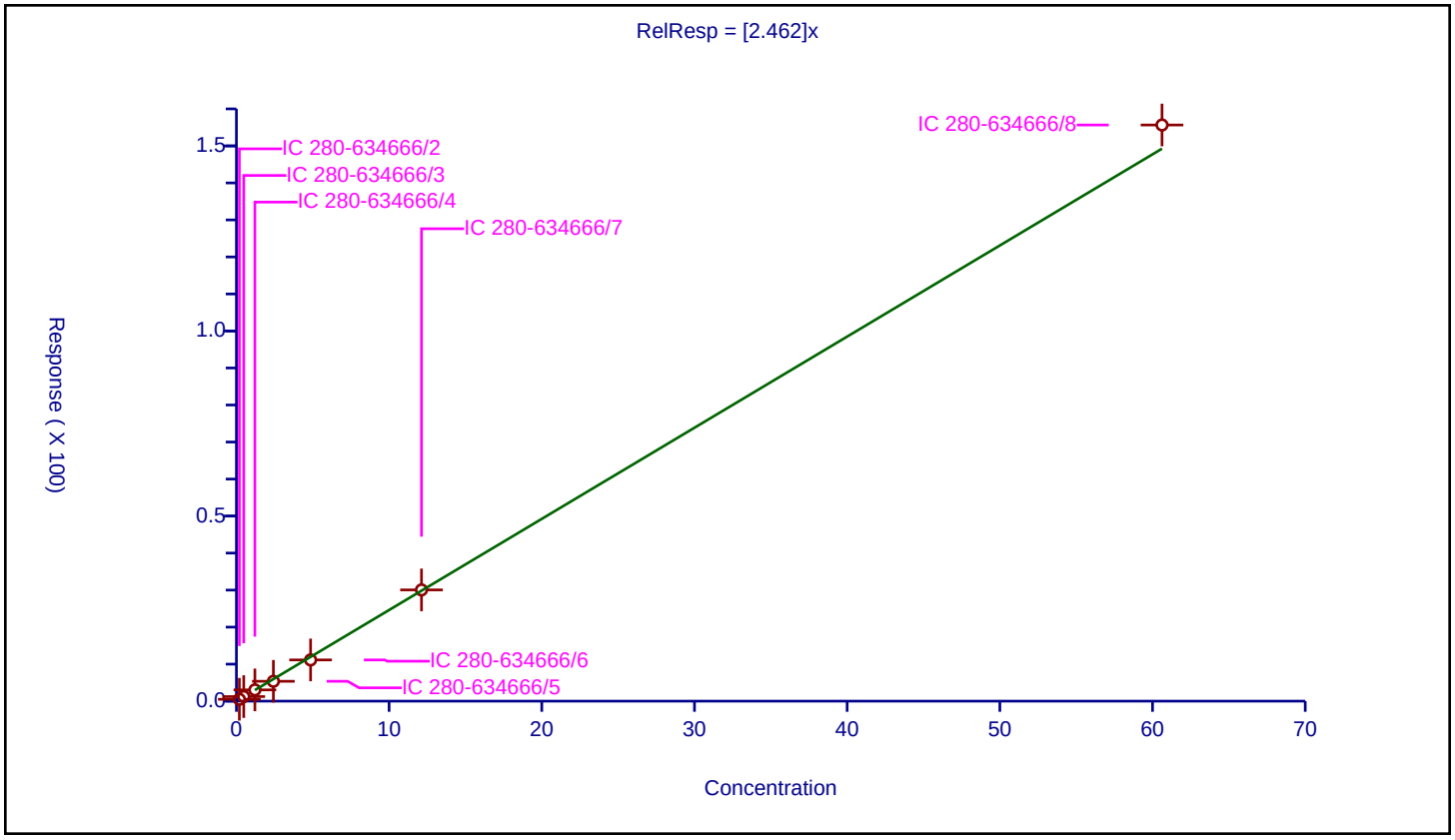
Curve Coefficients

Intercept:	0
Slope:	2.462

Error Coefficients

Standard Error:	6000000
Relative Standard Error:	6.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19369	0.503667	2.39	287787.0	2.600381	Y
2	IC 280-634666/3	0.48112	1.23502	2.39	299258.0	2.566969	Y
3	IC 280-634666/4	1.21056	3.041388	2.39	313498.0	2.512381	Y
4	IC 280-634666/5	2.42112	5.362557	2.39	336918.0	2.214908	Y
5	IC 280-634666/6	4.85776	11.137148	2.39	312365.0	2.292651	Y
6	IC 280-634666/7	12.12112	30.051124	2.39	283823.0	2.479237	Y
7	IC 280-634666/8	60.62112	155.649173	2.39	217500.0	2.567573	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

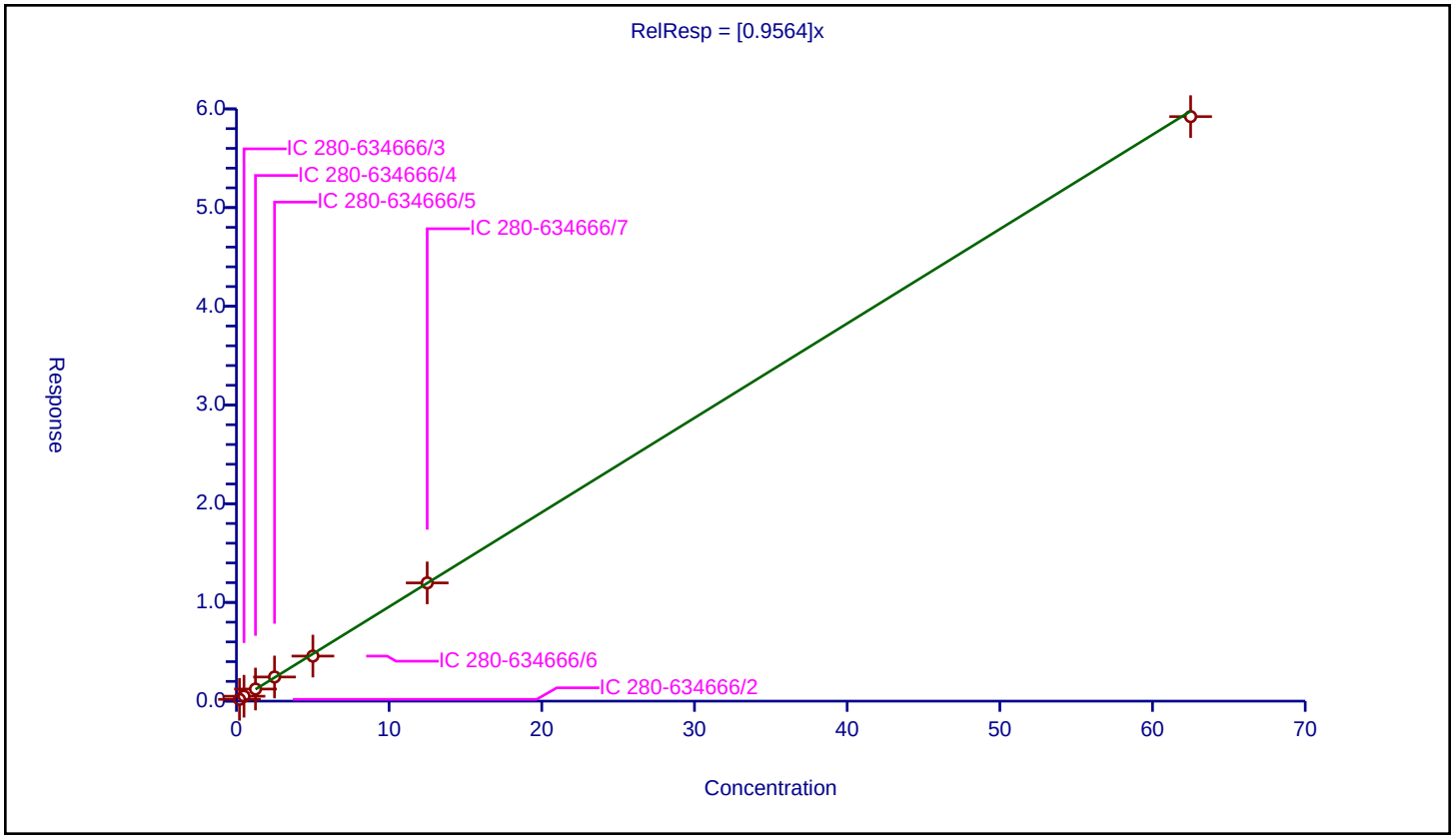
Curve Coefficients

Intercept:	0
Slope:	0.9564

Error Coefficients

Standard Error:	3130000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.181736	2.5	346781.0	0.910135	Y
2	IC 280-634666/3	0.496	0.498553	2.5	328676.0	1.005148	Y
3	IC 280-634666/4	1.248	1.22569	2.5	331136.0	0.982123	Y
4	IC 280-634666/5	2.496	2.446667	2.5	342239.0	0.980235	Y
5	IC 280-634666/6	5.008	4.563622	2.5	336308.0	0.911266	Y
6	IC 280-634666/7	12.496	11.978439	2.5	332569.0	0.958582	Y
7	IC 280-634666/8	62.496	59.216833	2.5	315415.0	0.94753	Y



Calibration / 2-(N-ethylperfluoro-1-octanesulfonamido) ethanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

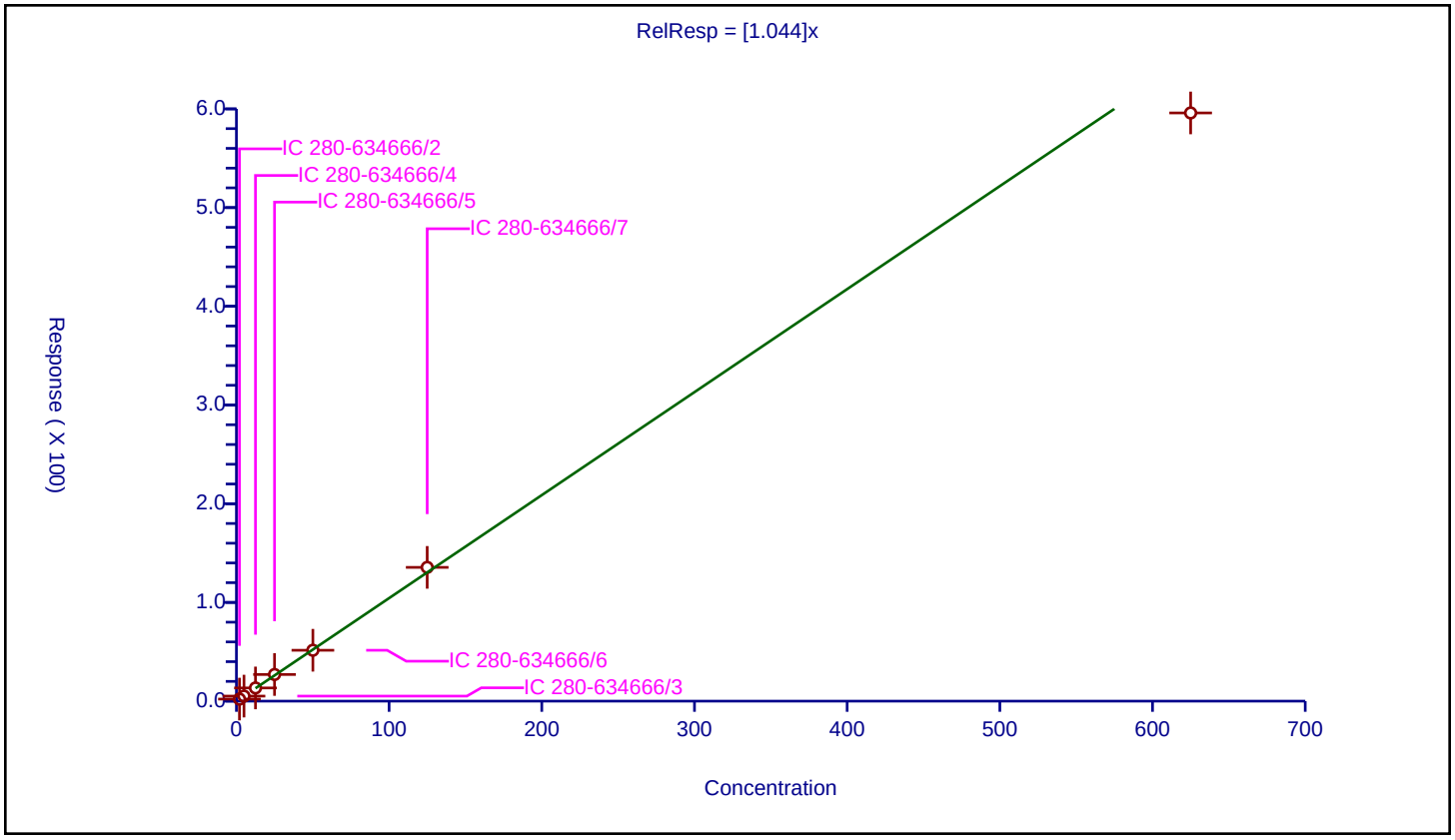
Curve Coefficients

Intercept:	0
Slope:	1.044

Error Coefficients

Standard Error:	114000000
Relative Standard Error:	4.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	1.9968	2.100374	25.0	15071545.0	1.05187	Y
2	IC 280-634666/3	4.96	5.125007	25.0	13841253.0	1.033268	Y
3	IC 280-634666/4	12.48	13.359971	25.0	13886982.0	1.07051	Y
4	IC 280-634666/5	24.96	26.988761	25.0	14402209.0	1.08128	Y
5	IC 280-634666/6	50.08	51.56157	25.0	13140094.0	1.029584	Y
6	IC 280-634666/7	124.96	135.53127	25.0	13229967.0	1.084597	Y
7	IC 280-634666/8	624.96	595.910126	25.0	11282322.0	0.953517	Y



Calibration / N-ethylperfluoro-1-octanesulfonamide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	IsoDil
Response Base:	AREA
RF Rounding:	0

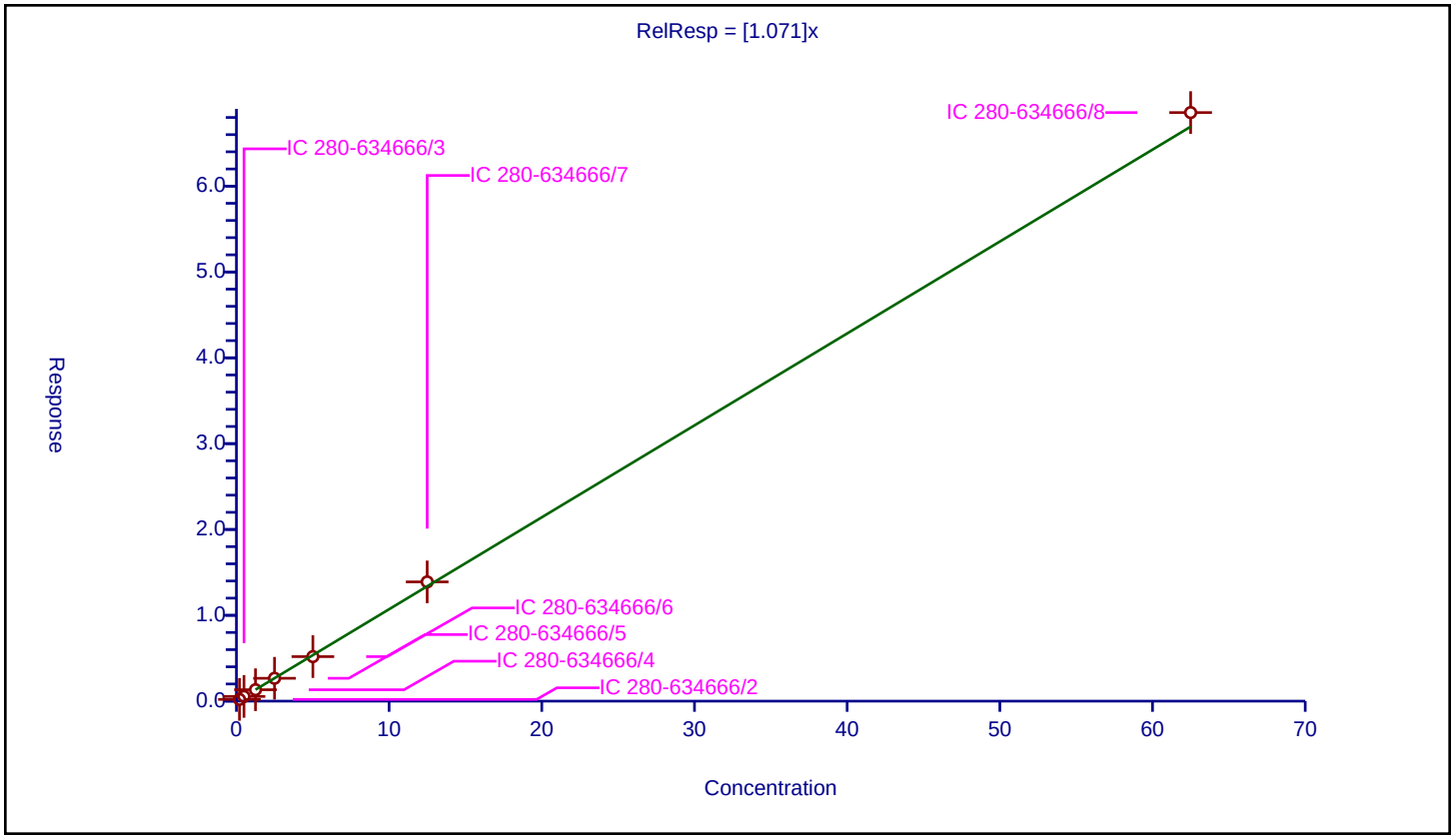
Curve Coefficients

Intercept:	0
Slope:	1.071

Error Coefficients

Standard Error:	3610000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-634666/2	0.19968	0.202462	2.5	353597.0	1.013933	Y
2	IC 280-634666/3	0.496	0.547496	2.5	338400.0	1.103822	Y
3	IC 280-634666/4	1.248	1.330513	2.5	343967.0	1.066116	Y
4	IC 280-634666/5	2.496	2.664829	2.5	362875.0	1.06764	Y
5	IC 280-634666/6	5.008	5.186129	2.5	347487.0	1.035569	Y
6	IC 280-634666/7	12.496	13.893555	2.5	338668.0	1.11184	Y
7	IC 280-634666/8	62.496	68.573025	2.5	313420.0	1.097239	Y



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FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Lab Sample ID: ICV 280-634666/12 | Calibration Date: 11/20/2023 20:27

Instrument ID: LC_LCMS11 | Calib Start Date: 11/20/2023 17:19

GC Column: Gemini C18 3X50 ID: 3.00(mm) | Calib End Date: 11/20/2023 19:16

Lab File ID: 2023.11.20b.011.d | Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.8940	0.8589		19.2	20.0	-3.9	30.0
PFMPA	AveID	1.277	1.083		33.9	40.0	-15.2	30.0
3:3 FTCA	AveID	0.1634	0.1518		9.29	10.0	-7.1	30.0
Perfluoropentanoic acid (PFPeA)	AveID	2.006	1.825		9.10	10.0	-9.0	30.0
PFMBA	AveID	2.526	2.012		31.9	40.0	-20.3	30.0
4:2 FTS	AveID	2.349	2.060		16.5	18.8	-12.3	30.0
NFDHA	AveID	0.3101	0.2720		35.1	40.0	-12.3	30.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.8902	0.8562		4.27	4.44	-3.8	30.0
Perfluorohexanoic acid (PFHxA)	AveID	1.101	0.9658		4.39	5.00	-12.3	30.0
5:3 FTCA	AveID	0.1813	0.1622		44.7	50.0	-10.5	30.0
HFPO-DA (GenX)	AveID	1.077	0.8147		7.56	10.0	-24.4	30.0
PFEESA	AveID	1.218	0.9690		28.3	35.6	-20.4	30.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.9840	0.9123		4.64	5.00	-7.3	30.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	1.123	1.062		4.45	4.71	-5.4	30.0
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	AveID	9.040	7.871		8.22	9.44	-12.9	30.0
6:2 FTS	AveID	1.905	1.643		16.4	19.0	-13.7	30.0
Perfluorooctanoic acid (PFOA)	AveID	0.7982	0.7302		4.57	5.00	-8.5	30.0
7:3 FTCA	AveID	0.0838	0.0757		45.2	50.0	-9.6	30.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	0.5321	0.5100		4.38	4.57	-4.1	30.0
Perfluorononanoic acid (PFNA)	AveID	1.004	0.9155		4.56	5.00	-8.8	30.0
Perfluoroheptanesulfonic acid (PFHpS)	AveID	1.788	1.563		4.17	4.77	-12.6	30.0
8:2 FTS	AveID	1.453	1.331		17.6	19.2	-8.4	30.0
NMeFOSAA	AveID	1.001	0.9279		4.63	5.00	-7.3	30.0
Perfluorodecanoic acid (PFDA)	AveID	0.8217	0.7145		4.35	5.00	-13.0	30.0
NEtFOSAA	AveID	0.7273	0.6327		4.35	5.00	-13.0	30.0
Perfluorooctanesulfonic acid (PFOS)	AveID	3.258	2.928		4.17	4.64	-10.1	30.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8849	0.8425		4.76	5.00	-4.8	30.0
9Cl-PF3ONS	AveID	1.809	1.716		8.86	9.34	-5.1	30.0
Perfluorononanesulfonic acid (PFNS)	AveID	1.332	1.279		4.62	4.81	-3.9	30.0
Perfluorooctanesulfonamide (PFOSA)	AveID	0.995	0.8785		4.41	5.00	-11.7	30.0
Perfluorododecanoic acid (PFDoA)	AveID	1.005	0.8990		4.47	5.00	-10.5	30.0
Perfluorodecanesulfonic acid (PFDS)	AveID	3.077	2.793		4.38	4.83	-9.2	30.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.8617	0.7694		4.46	5.00	-10.7	30.0

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Lab Sample ID: ICV 280-634666/12 | Calibration Date: 11/20/2023 20:27

Instrument ID: LC_LCMS11 | Calib Start Date: 11/20/2023 17:19

GC Column: Gemini C18 3X50 ID: 3.00(mm) | Calib End Date: 11/20/2023 19:16

Lab File ID: 2023.11.20b.011.d | Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
11Cl-PF3OUdS	Q2ID		2.597		8.67	9.44	-8.2	30.0
Perfluorotetradecanoic acid (PFTeDA)	AveID	1.162	1.026		4.41	5.00	-11.7	30.0
NMeFOSE	AveID	1.094	0.996		45.5	50.0	-9.0	30.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	2.462	2.377		4.68	4.85	-3.4	30.0
NMeFOSA	AveID	0.9564	0.8877		4.64	5.00	-7.2	30.0
NEtFOSE	AveID	1.044	1.002		48.0	50.0	-3.9	30.0
NEtFOSA	AveID	1.071	1.000		4.67	5.00	-6.6	30.0
13C4 PFBA	Ave	1.016	1.068		10.5	10.0	5.1	30.0
13C5 PFPeA	Ave	0.4984	0.5561		5.58	5.00	11.6	30.0
M2-4:2 FTS	Ave	0.2255	0.2125		4.40	4.67	-5.7	30.0
13C3 PFBS	Ave	1.283	1.268		2.30	2.33	-1.2	30.0
13C5 PFHxA	Ave	1.121	1.247		2.78	2.50	11.2	30.0
13C3 HFPO-DA	Ave	0.2741	0.3000		10.9	10.0	9.4	30.0
13C4 PFHpA	Ave	1.173	1.297		2.76	2.50	10.5	30.0
M2-6:2 FTS	Ave	0.2943	0.2916		4.71	4.75	-0.9	30.0
13C8 PFOA	Ave	6.544	6.929		2.65	2.50	5.9	30.0
13C3 PFHxS	Ave	1.016	1.064		2.48	2.37	4.7	30.0
13C9 PFNA	Ave	0.9452	1.004		1.33	1.25	6.2	30.0
M2-8:2 FTS	Ave	0.3568	0.3507		4.71	4.79	-1.7	30.0
d3-NMeFOSAA	Ave	0.3361	0.3442		5.12	5.00	2.4	30.0
13C6 PFDA	Ave	0.9948	1.160		1.46	1.25	16.6	30.0
d5-NEtFOSAA	Ave	0.3891	0.4224		5.43	5.00	8.6	30.0
13C8 PFOS	Ave	0.3592	0.4011		2.67	2.39	11.7	30.0
13C7 PFUnA	Ave	1.109	1.206		1.36	1.25	8.7	30.0
13C8 FOSA	Ave	1.739	1.921		2.76	2.50	10.5	30.0
13C2 PFDoA	Ave	1.095	1.264		1.44	1.25	15.5	30.0
13C2 PFTeDA	Ave	0.5212	0.6131		1.47	1.25	17.6	30.0
d7-N-MeFOSE-M	Ave	1.278	1.356		26.5	25.0	6.1	30.0
d3-NMePFOSA	Ave	0.3940	0.4138		2.63	2.50	5.0	30.0
d9-N-EtFOSE-M	Ave	1.593	1.660		26.1	25.0	4.2	30.0
d5-NEtPFOSA	Ave	0.4044	0.4306		2.66	2.50	6.5	30.0

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.011.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 20-Nov-2023 20:27:55 ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: Plate: 1 Rack: 1
Operator ID: DENLCMS Instrument ID: LC_LCMS11
Sublist:

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 21-Nov-2023 11:17:43 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1626

First Level Reviewer: B5QN Date: 21-Nov-2023 11:10:32
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.046	3.062	-0.016	0.995	5669409	10.5		105	44455	
* 1 13C3PFBA										
216.00 > 172.00	3.061	3.062	-0.001		2654849	5.00			9403	
2 PFBA										
212.80 > 168.90	3.061	3.077	-0.016	1.005	9739327	19.2			18638	
4 PFMPA										
229.00 > 84.90	3.728	3.728	0.0	0.835	17264854	33.9			259892	
5 3:3 FTCA										
241.00 > 177.00	3.912	3.928	-0.016	0.877	604832	9.29	Target=1.58		17451	
241.00 > 117.00	3.912	3.928	-0.016	0.877	359775		1.68(0.79-2.37)		8725	
D 7 13C5 PFPeA										
268.30 > 223.00	4.462	4.478	-0.016	0.834	1992406	5.58		112	19212	
6 PFPA										
263.00 > 219.00	4.462	4.478	-0.016	1.000	7271696	9.10	Target=212.56		13550	
263.00 > 68.90	4.462	4.478	-0.016	1.000	30999		234.58(106.28-318.84)		1163	
8 PFMBA										
279.00 > 85.10	4.778	4.778	0.0	1.071	32072876	31.9			707611	
10 4:2FTS										
327.10 > 307.00	5.097	5.097	-0.001	1.000	2157631	16.4	Target=1.59		54583	
327.10 > 80.90	5.097	5.097	-0.001	1.000	1471348		1.47(0.79-2.38)		11622	
D 9 13C2-4:2FTS										
329.10 > 80.90	5.097	5.097	-0.001	0.744	260809	4.40	Target=4.54	94.3	5479	
329.10 > 309.00	5.097	5.097	-0.001	0.744	71512		3.65(2.27-6.81)	94.3	3024	
11 NFDHA										
295.00 > 201.00	5.262	5.280	-0.018	0.983	9718910	35.1	Target=1.95		415546	
295.00 > 84.90	5.262	5.280	-0.018	0.983	5049448		1.92(0.97-2.92)		64971	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 16 13C3 PFBS										
302.10 > 79.90	5.353	5.354	-0.001	0.781	774739	2.30	Target=4.56	98.8	19870	
302.10 > 98.90	5.335	5.354	-0.019	0.778	165695		4.68(2.28-6.83)	98.8	7102	
15 PFBS										
298.70 > 79.90	5.353	5.354	-0.001	1.000	1265396	4.27	Target=2.16		40739	
298.70 > 98.80	5.353	5.354	-0.001	1.000	553694		2.29(1.08-3.24)		11887	
* 14 13C2 PFHxA										
315.10 > 270.00	5.353	5.354	-0.001		1791552	2.50	Target=79.67		23667	
315.10 > 119.40	5.335	5.354	-0.019		22656		79.08(39.83-119.50)		1006	
D 12 13C5 PFHxA										
318.00 > 273.00	5.353	5.354	-0.001	1.000	2233567	2.78	Target=53.27	111	41923	
318.00 > 120.30	5.353	5.354	-0.001	1.000	46522		48.01(26.63-79.90)	111	1026	
13 PFHxA										
313.00 > 269.00	5.353	5.354	-0.001	1.000	4314561	4.39	Target=18.64		16251	
313.00 > 118.90	5.353	5.354	-0.001	1.000	232467		18.56(9.32-27.96)		6129	
18 5:3 FTCA										
341.00 > 237.10	5.624	5.625	-0.001	1.051	7244467	44.7	Target=1.16		70301	
341.00 > 217.00	5.624	5.625	-0.001	1.051	6338797		1.14(0.58-1.74)		88536	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.663	5.682	-0.019	1.058	2149628	10.9	Target=1.53	109	25108	
286.90 > 184.90	5.663	5.682	-0.019	1.058	1462606		1.47(0.76-2.29)	109	26809	
19 HFPO-DA										
284.90 > 168.90	5.663	5.682	-0.019	1.000	1751196	7.56	Target=1.75		24861	
284.90 > 184.90	5.663	5.682	-0.019	1.000	1200185		1.46(0.87-2.62)		12827	
21 PFEESA										
314.80 > 134.90	5.789	5.789	0.0	1.081	30820734	28.3	Target=13.97		1309382	
314.80 > 82.90	5.789	5.789	0.0	1.081	2348327		13.12(6.99-20.96)		49921	
D 22 13C4 PFHpA										
367.10 > 322.00	6.105	6.122	-0.017	1.140	2322911	2.76		111	33303	
17 PFHpA										
363.10 > 319.00	6.105	6.122	-0.017	1.000	4238355	4.64	Target=3.96		16310	
363.10 > 169.00	6.105	6.122	-0.017	1.000	1087296		3.90(1.98-5.95)		15539	
23 PFPeS										
349.10 > 79.90	6.207	6.223	-0.016	0.905	1397135	4.45	Target=2.70		19809	
349.10 > 98.90	6.207	6.223	-0.016	0.905	499245		2.80(1.35-4.04)		14224	
24 ADONA										
376.90 > 250.90	6.338	6.355	-0.017	1.119	15971505	8.22	Target=3.02		186246	
376.90 > 84.80	6.338	6.355	-0.017	1.119	5223024		3.06(1.51-4.53)		73538	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.454	6.454	0.0	0.942	363971	4.71	Target=4.15	99.1	12980	
429.10 > 409.00	6.454	6.454	0.0	0.942	86721		4.20(2.07-6.22)	99.1	4150	
25 6:2FTS										
427.10 > 407.00	6.454	6.454	0.0	1.000	2392701	16.4	Target=1.93		48323	
427.10 > 80.90	6.454	6.454	0.0	1.000	1370183		1.75(0.96-2.89)		24320	
D 27 13C8 PFOA										
421.10 > 376.00	6.690	6.707	-0.017	1.000	2091374	2.65		106	32229	
* 29 13C4 PFOA										
417.10 > 172.00	6.690	6.707	-0.017		301841	2.50			10462	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 PFOA										
413.00 > 369.00	6.690	6.707	-0.017	1.000	3054200	4.57	Target=2.30		13287	
413.00 > 169.00	6.690	6.707	-0.017	1.000	1195282		2.56(1.15-3.45)		13773	
30 7:3 FTCA										
441.00 > 316.90	6.838	6.855	-0.017	1.277	3382752	45.2	Target=1.43		94436	
441.00 > 336.90	6.838	6.855	-0.017	1.277	2448617		1.38(0.72-2.15)		34334	
32 PFHxS										
398.70 > 79.90	6.855	6.872	-0.017	1.000	651912	4.38	Target=3.86		25445	
398.70 > 98.90	6.855	6.872	-0.017	1.000	156592		4.16(1.93-5.79)		6306	
* 31 18O2 PFHxS										
403.00 > 83.90	6.855	6.872	-0.017		622799	2.37			29107	
D 33 13C3 PFHxS										
402.10 > 79.90	6.855	6.872	-0.017	1.000	661515	2.48	Target=4.11	105	23165	
402.10 > 98.80	6.855	6.872	-0.017	1.000	164269		4.03(2.05-6.16)	105	7698	
36 PFNA										
463.00 > 419.00	7.240	7.241	-0.001	1.000	4646468	4.56	Target=6.02		33856	
463.00 > 219.00	7.240	7.241	-0.001	1.000	811674		5.72(3.01-9.04)		14377	
* 35 13C5 PFNA										
468.00 > 423.00	7.240	7.241	-0.001		1264205	1.25			19554	
D 34 13C9 PFNA										
472.10 > 427.00	7.240	7.241	-0.001	1.000	1268780	1.33		106	26244	
37 PFHpS										
449.00 > 79.90	7.440	7.457	-0.017	0.934	1034832	4.17	Target=4.91		17982	
449.00 > 98.80	7.440	7.457	-0.017	0.934	218300		4.74(2.46-7.37)		6100	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.489	7.506	-0.017	1.093	441423	4.71	Target=5.49	98.3	12425	
529.10 > 509.00	7.489	7.506	-0.017	1.093	93124		4.74(2.74-8.23)	98.3	4392	
39 8:2FTS										
527.10 > 507.00	7.489	7.506	-0.017	1.000	2355645	17.6	Target=1.56		41566	
527.10 > 80.80	7.489	7.506	-0.017	1.000	1428983		1.65(0.78-2.33)		28779	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.708	7.726	-0.018	0.965	596409	5.12		102	11323	
42 NMeFOSAA										
570.10 > 419.00	7.725	7.726	-0.001	1.002	553395	4.63	Target=1.15		12552	
570.10 > 483.00	7.725	7.726	-0.001	1.002	510444		1.08(0.58-1.73)		8542	
* 44 13C2 PFDA										
515.10 > 470.10	7.743	7.761	-0.018		1136076	1.25			30410	
D 40 13C6 PFDA										
519.10 > 474.10	7.743	7.761	-0.018	1.000	1317872	1.46		117	29373	
43 PFDA										
512.90 > 469.00	7.743	7.761	-0.018	1.000	3766542	4.35	Target=3.33		45867	
512.90 > 219.00	7.743	7.761	-0.018	1.000	1072891		3.51(1.67-5.00)		17963	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.934	7.934	0.0	0.993	731839	5.43		109	9730	
45 NEtFOSAA										
584.20 > 419.10	7.934	7.951	-0.017	1.000	463063	4.35	Target=1.55		7808	
584.20 > 526.00	7.934	7.951	-0.017	1.000	288234		1.61(0.77-2.32)		10395	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 49 13C8 PFOS										
507.10 > 79.90	7.969	7.986	-0.017	0.998	332149	2.67	Target=2.95	112	60.4	
507.10 > 98.90	7.986	7.986	0.0	1.000	110467		3.01(1.47-4.42)	112	2950	
* 47 13C4 PFOS										
502.80 > 79.90	7.986	7.986	0.0		829930	2.40	Target=3.78		15795	
502.80 > 98.90	7.986	7.986	0.0		214753		3.86(1.89-5.67)		9557	
48 PFOS										
498.90 > 79.90	7.986	8.004	-0.018	1.002	1888098	4.17	Target=4.86		32598	
498.90 > 98.80	7.986	8.004	-0.018	1.002	418175		4.52(2.43-7.28)		16598	
D 53 13C7 PFUnA										
570.00 > 525.10	8.248	8.249	-0.001	1.065	1369580	1.36		109	29215	
52 PFUnA										
563.10 > 519.00	8.248	8.267	-0.019	1.000	4615387	4.76	Target=5.72		59238	
563.10 > 269.10	8.248	8.267	-0.019	1.000	855325		5.40(2.86-8.59)		15731	
54 9ClFOS										
530.80 > 351.00	8.372	8.390	-0.018	1.478	3444376	8.86	Target=2.23		113785	
532.80 > 353.00	8.372	8.390	-0.018	1.478	1438324		2.39(1.11-3.34)		21102	
55 PFNS										
548.80 > 79.90	8.495	8.512	-0.017	1.066	855258	4.62	Target=4.00		16487	
548.80 > 98.80	8.495	8.512	-0.017	1.066	210261		4.07(2.00-6.00)		7128	
51 PFOSA										
498.10 > 77.90	8.706	8.723	-0.017	1.000	2923881	4.41	Target=41.88		18801	
498.10 > 478.00	8.706	8.723	-0.017	1.000	65567		44.59(20.94-62.83)		2825	
D 50 13C8 FOSA										
506.10 > 77.80	8.706	8.723	-0.017	1.090	1664164	2.76		110	23654	
D 56 13C2 PFDoA										
615.10 > 570.00	8.740	8.757	-0.017	1.129	1436438	1.44		116	23324	
57 PFDoA										
613.10 > 569.00	8.740	8.757	-0.017	1.000	5165229	4.47	Target=7.45		44795	
613.10 > 319.00	8.740	8.757	-0.017	1.000	694827		7.43(3.73-11.18)		12988	
58 PFDS										
599.00 > 79.90	8.996	9.028	-0.032	1.129	1872536	4.38	Target=4.54		23629	
599.00 > 98.80	8.996	9.028	-0.032	1.129	383896		4.88(2.27-6.82)		8928	
63 PFTrDA										
663.00 > 619.00	9.221	9.254	-0.033	0.948	3282347	4.46	Target=5.19		21373	
663.00 > 168.90	9.221	9.254	-0.033	0.948	659047		4.98(2.59-7.78)		11294	
66 11ClFOS										
630.90 > 450.90	9.398	9.413	-0.015	1.660	5269824	8.67	Target=3.47		107658	
632.90 > 452.90	9.398	9.413	-0.015	1.660	1543027		3.42(1.74-5.21)		31401	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.722	9.738	-0.016	1.256	696584	1.47		118	13339	
70 PFTeDA										
713.10 > 669.00	9.722	9.738	-0.016	1.000	2857655	4.41	Target=6.88		18204	
713.10 > 168.90	9.722	9.738	-0.016	1.000	396756		7.20(3.44-10.32)		8858	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.893	9.910	-0.017	1.239	11745790	26.5		106	121311	
60 N-MeFOSE-M										
616.10 > 58.90	9.931	9.930	0.001	1.004	23390105	45.5			109798	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
71 PFDoS										
699.10 > 79.90	9.989	10.007	-0.018	1.254	1602276	4.68	Target=4.14		17775	
699.10 > 98.80	9.989	10.007	-0.018	1.254	352251		4.55(2.07-6.21)		7148	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.103	10.102	0.001	1.265	358453	2.63		105	8718	
61 NMeFOSA										
511.90 > 219.00	10.103	10.102	0.001	1.000	636389	4.64	Target=0.98		9605	
511.90 > 169.00	10.103	10.102	0.001	1.000	595202		1.07(0.49-1.47)		8901	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.292	10.291	0.001	1.289	14382394	26.0		104	192893	
65 N-EtFOSE-M										
630.00 > 58.90	10.311	10.310	0.001	1.002	28832495	48.0			344848	
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.482	10.481	0.001	1.313	373070	2.66		106	4696	
68 N-EtFOSA-M										
526.00 > 219.00	10.501	10.500	0.001	1.002	746084	4.67	Target=0.99		6185	
526.00 > 169.00	10.501	10.500	0.001	1.002	693573		1.08(0.50-1.49)		7199	

QC Flag Legend

Processing Flags

Reagents:

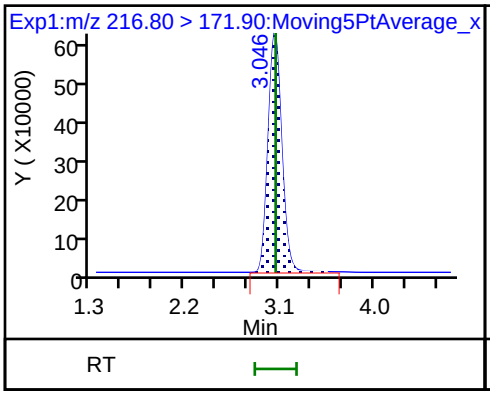
LC1633_ICV_00013 Amount Added: 1.00 Units: mL

Report Date: 21-Nov-2023 11:17:43 Chrom Revision: 2.3 15-Nov-2023 20:54:34

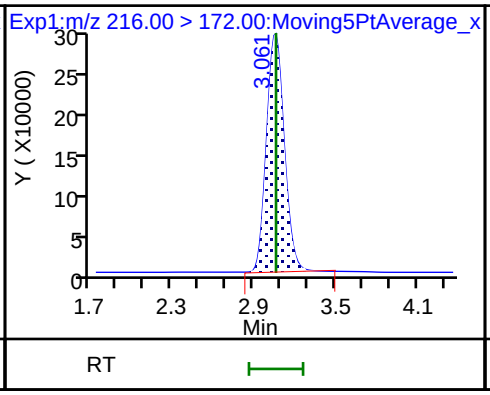
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.011.d
Injection Date: 20-Nov-2023 20:27:55 Instrument ID: LC_LCMS11
Lims ID: ICV
Client ID:
Operator ID: DENLCMS ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5

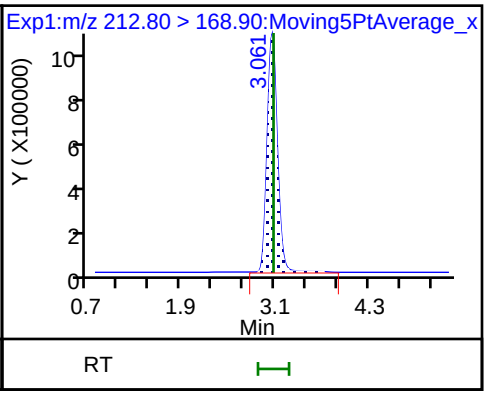
D 3 13C4-PFBA



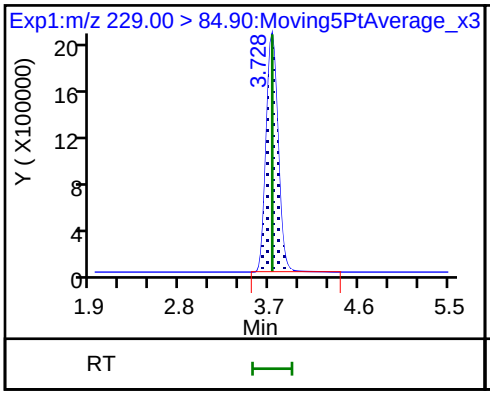
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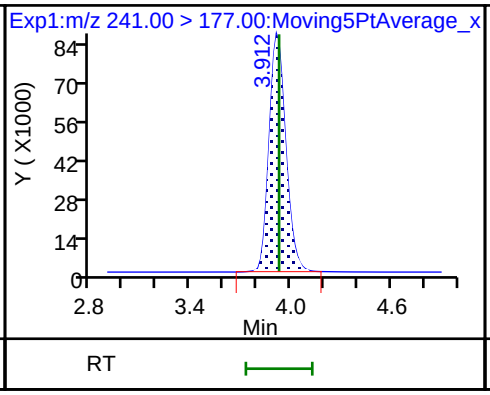
2 PFBA



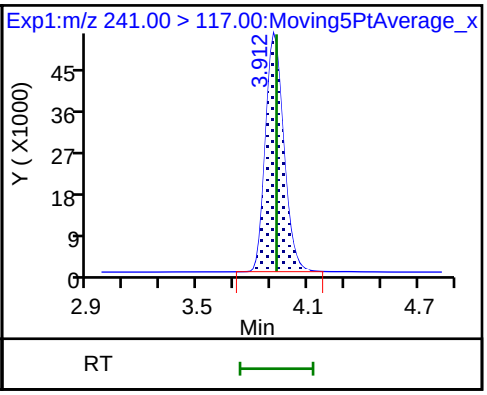
4 PFMPA



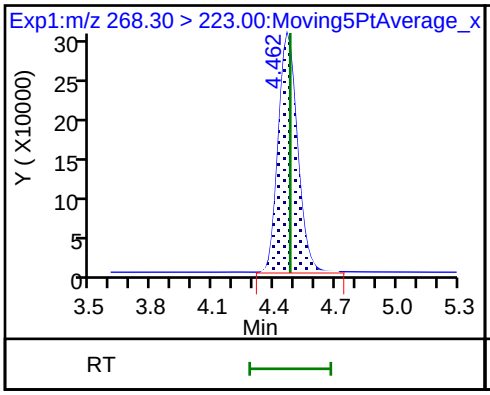
5 3:3 FTCA



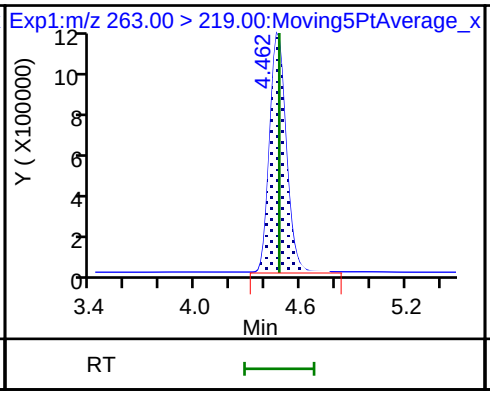
5 3:3 FTCA



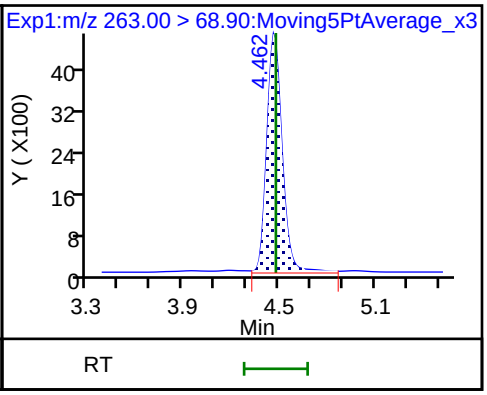
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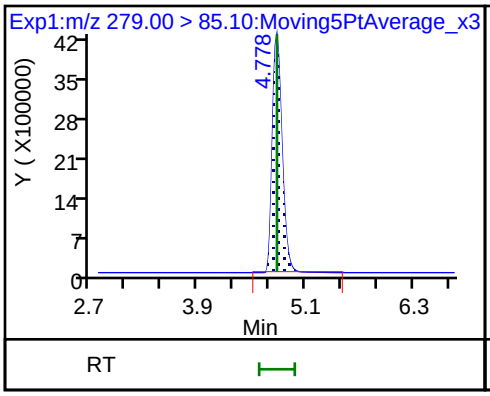
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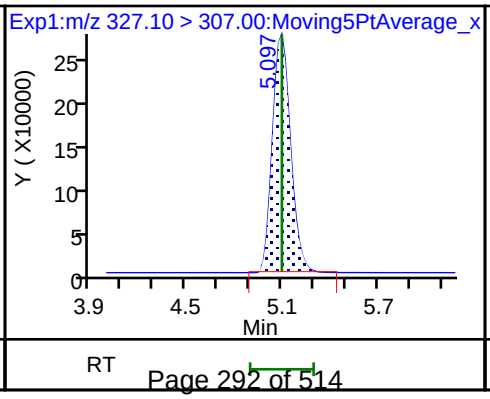
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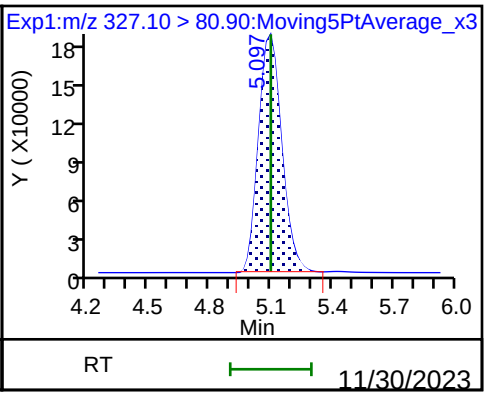
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10 4:2FTS

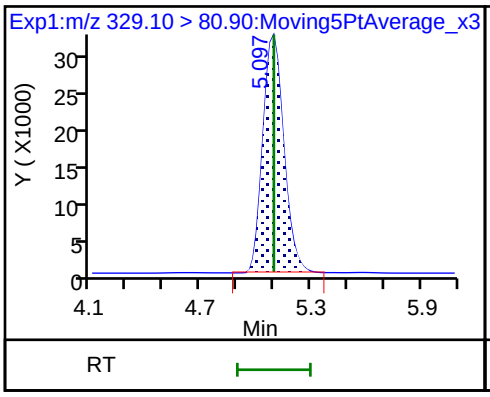


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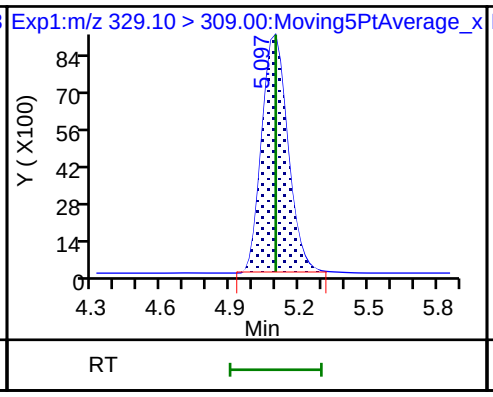


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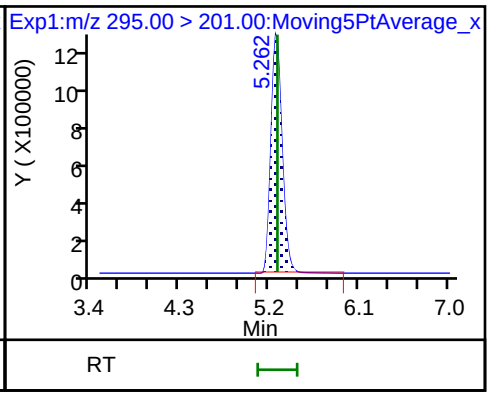
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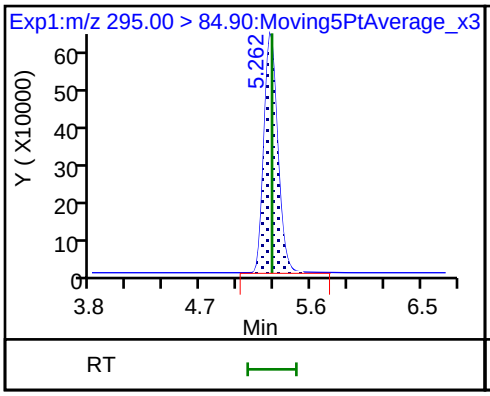
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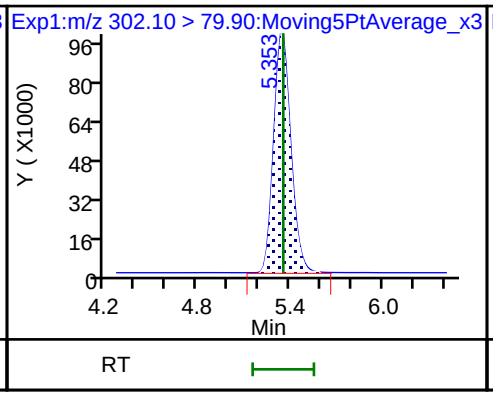
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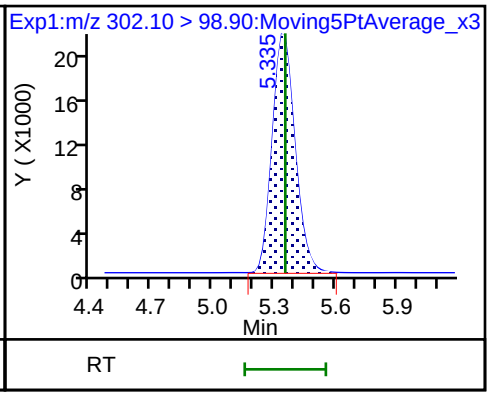
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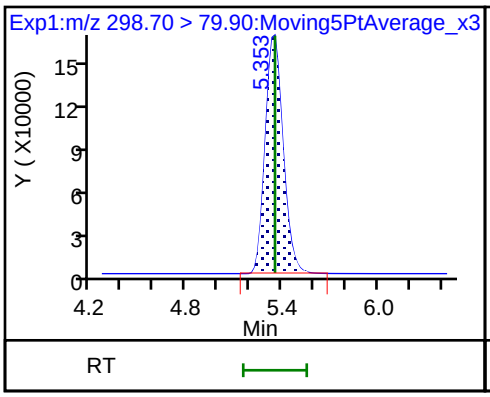
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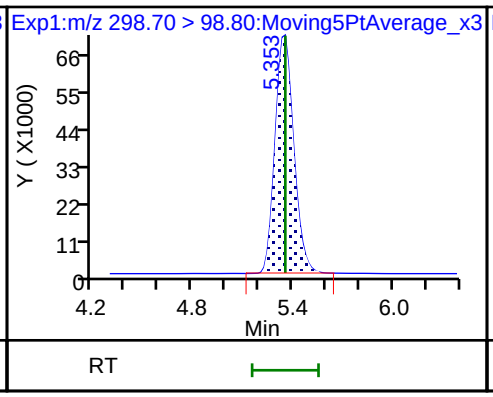
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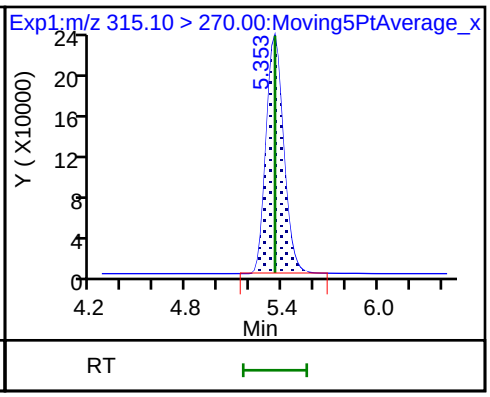
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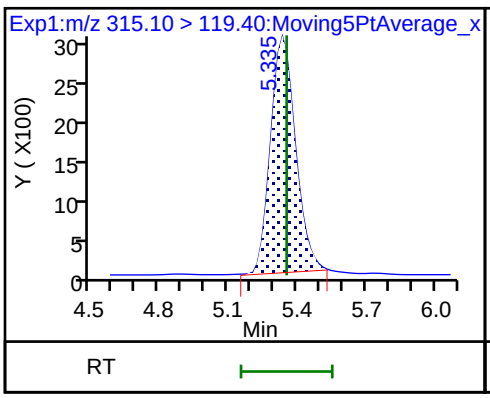
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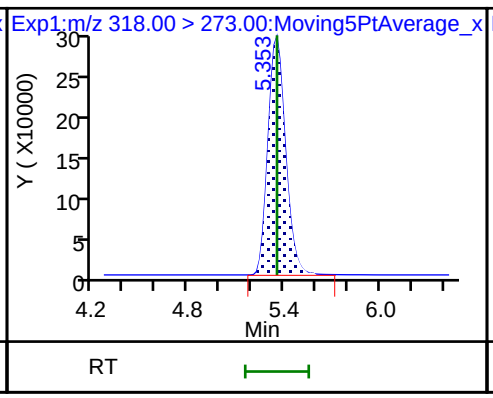
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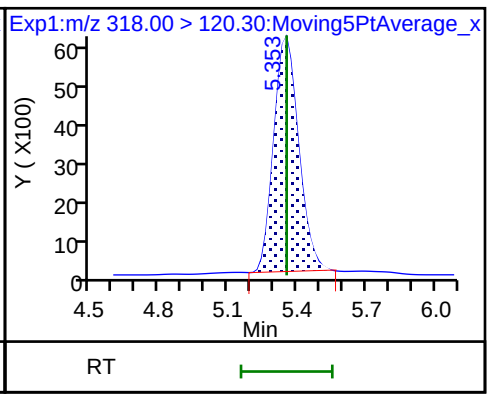
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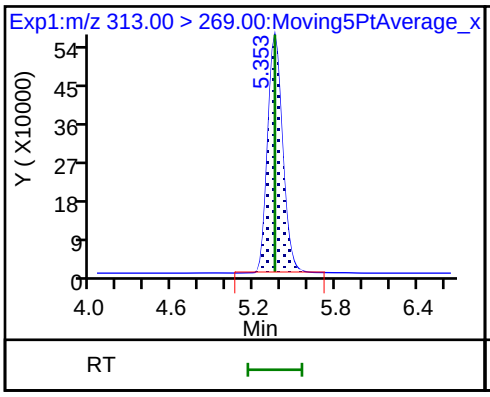
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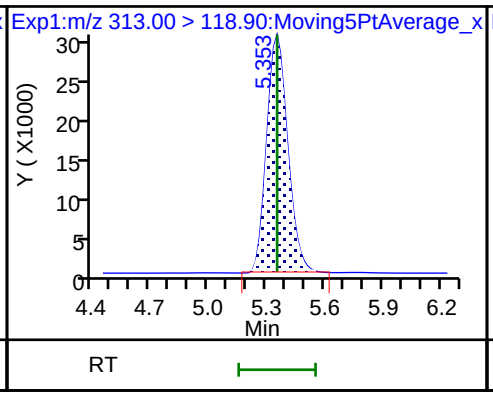
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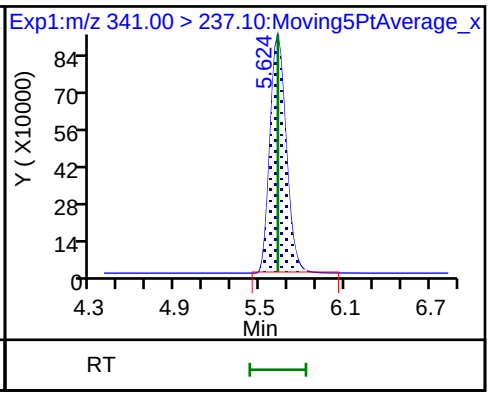
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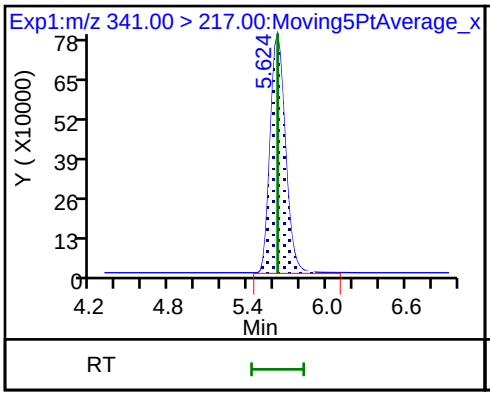
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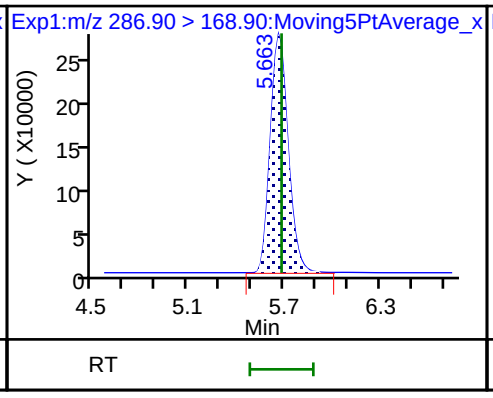
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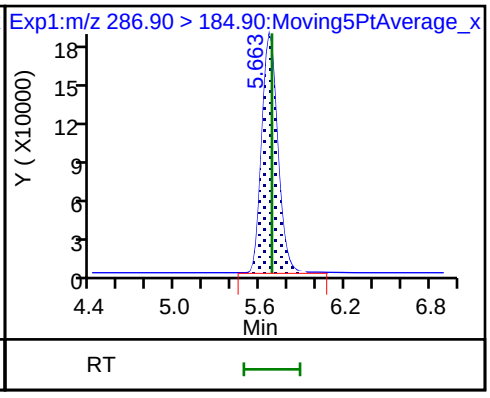
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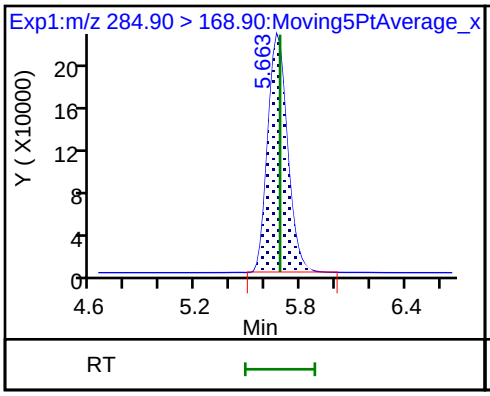
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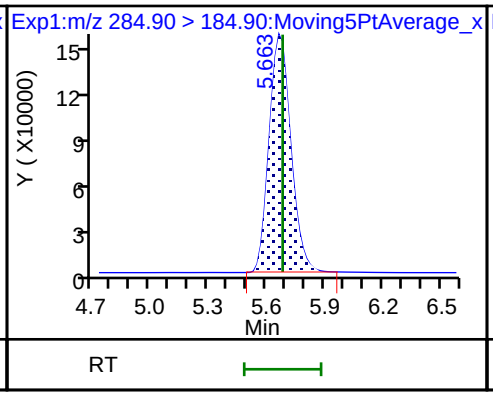
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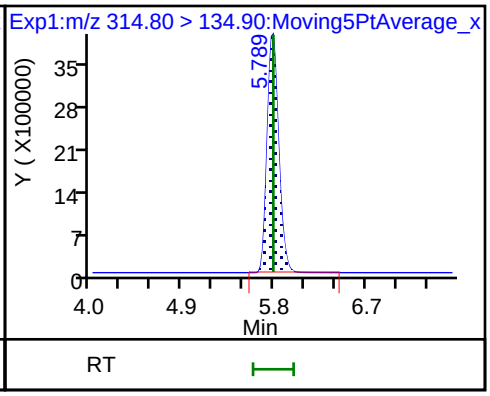
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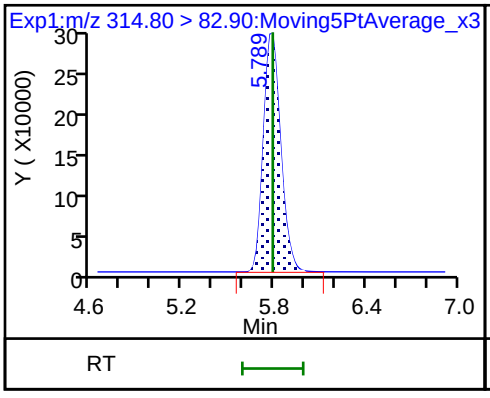
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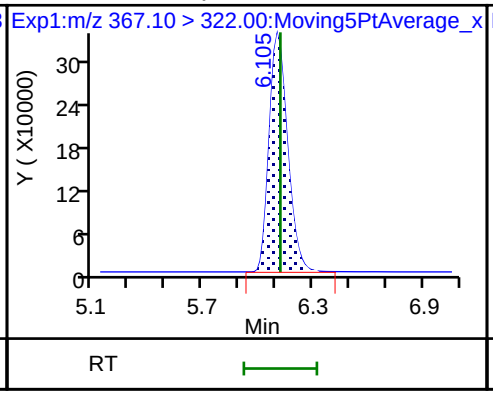
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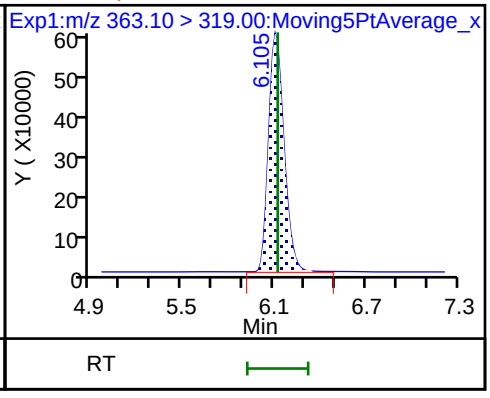
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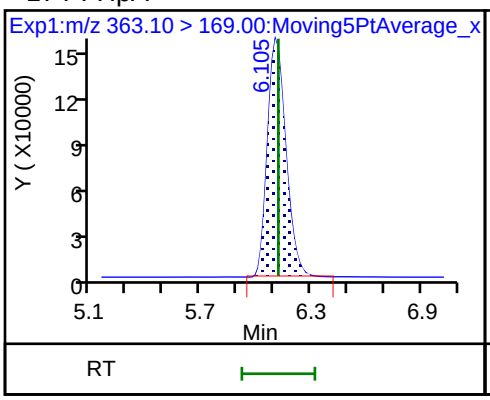
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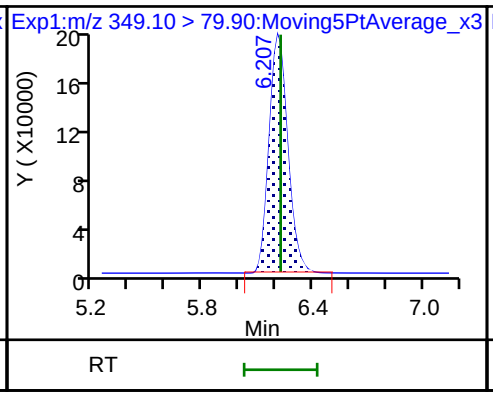
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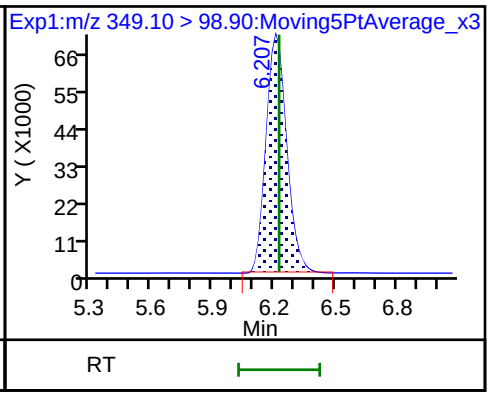
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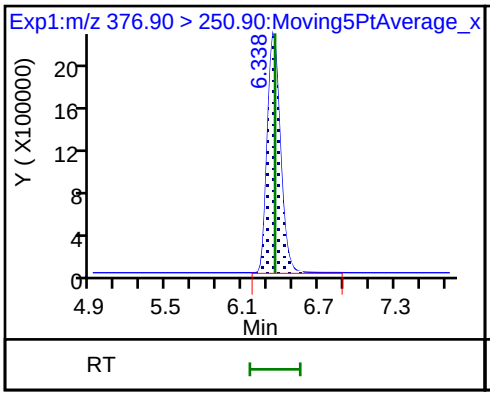
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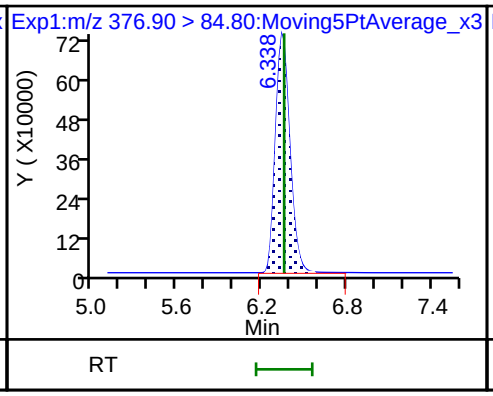
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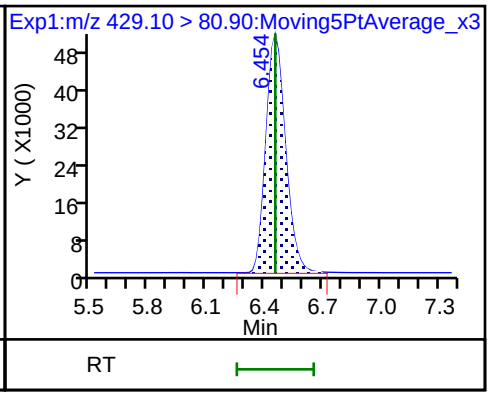
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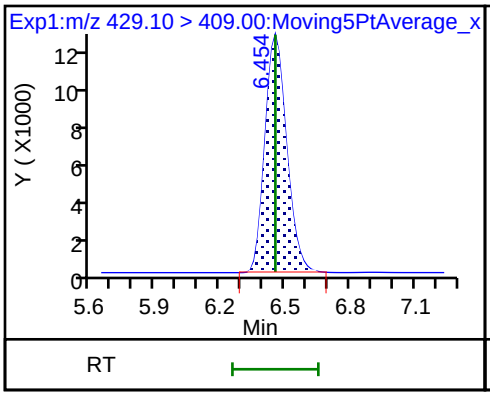
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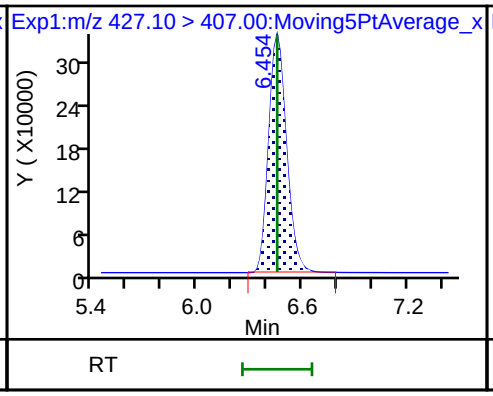
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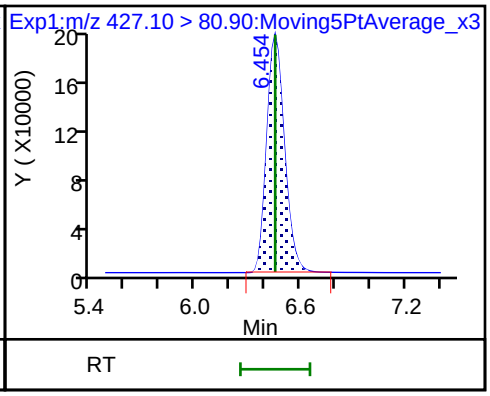
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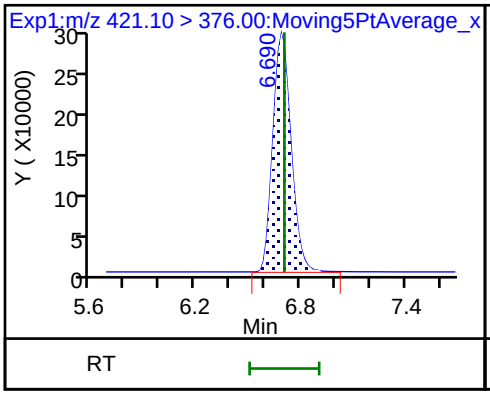
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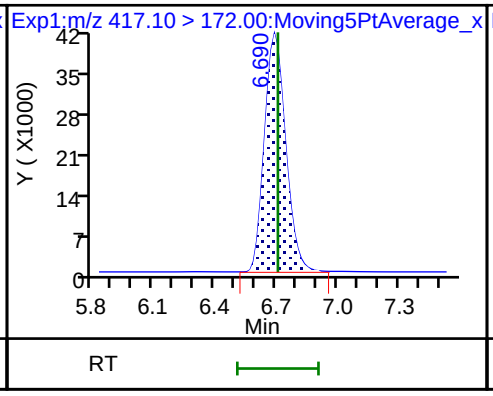
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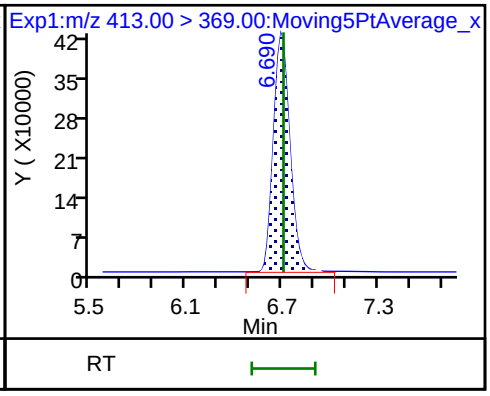
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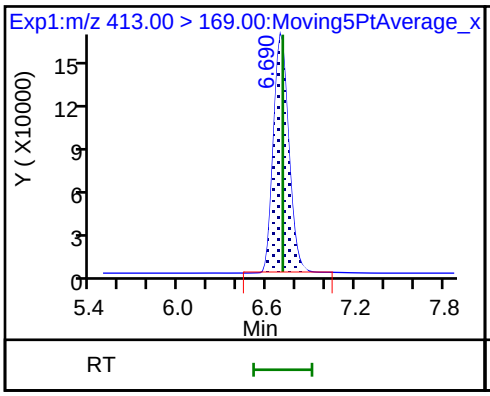
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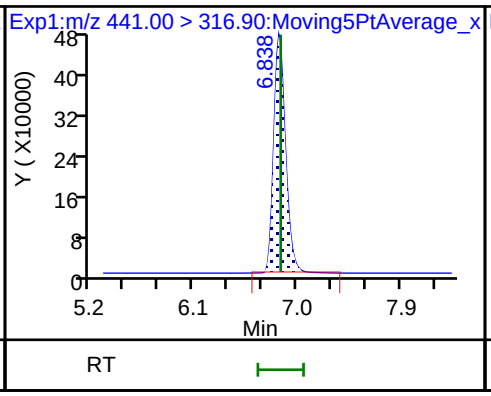
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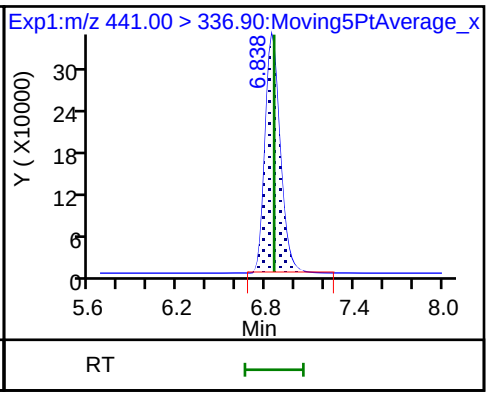
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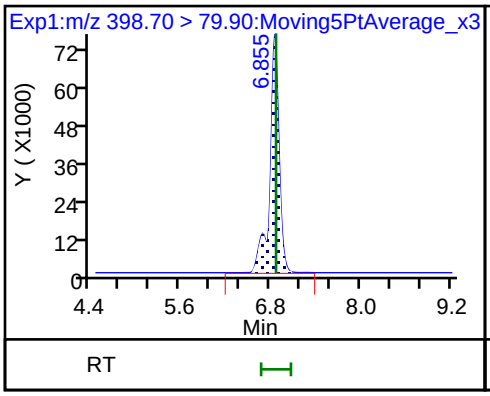
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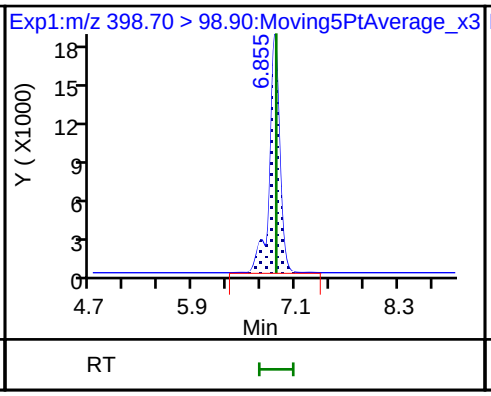
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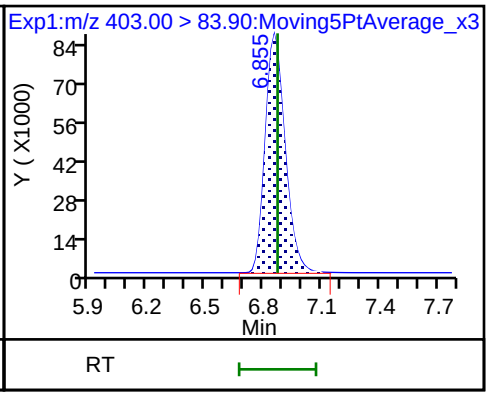
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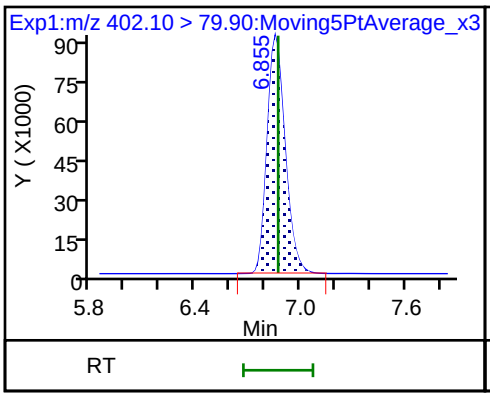
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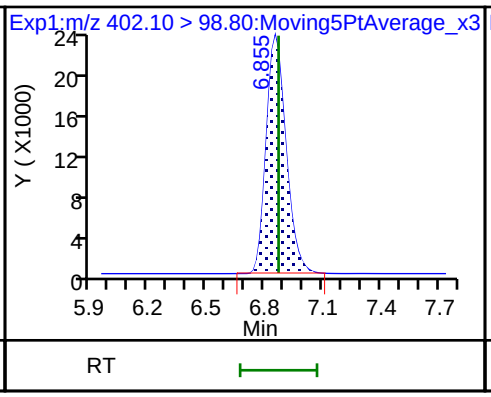
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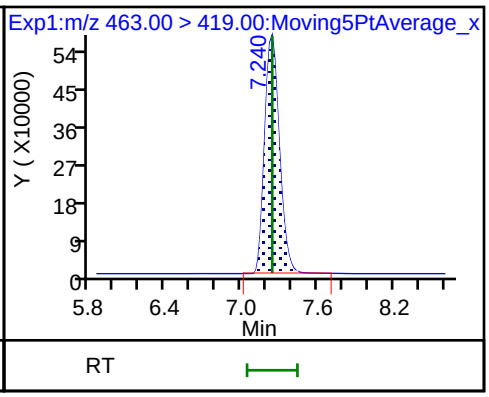
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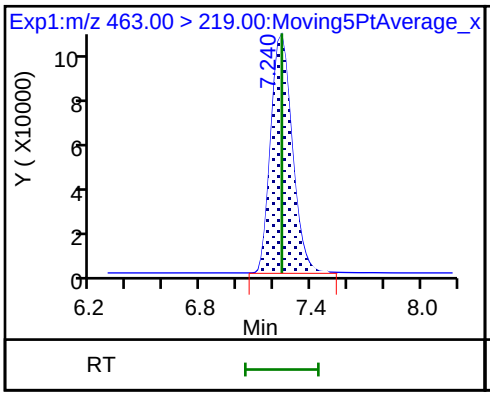
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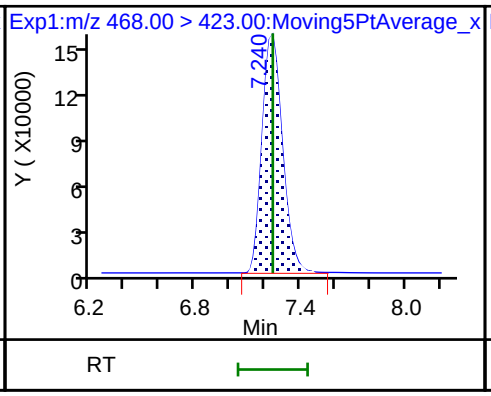
36 PFNA



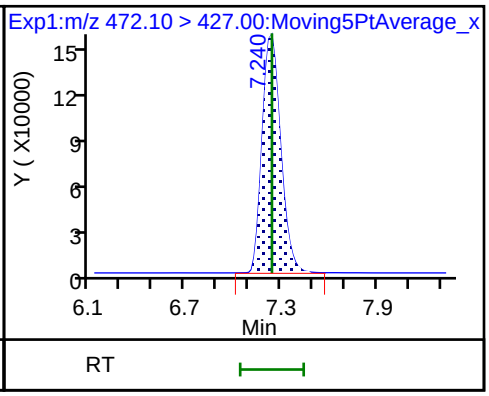
36 PFNA



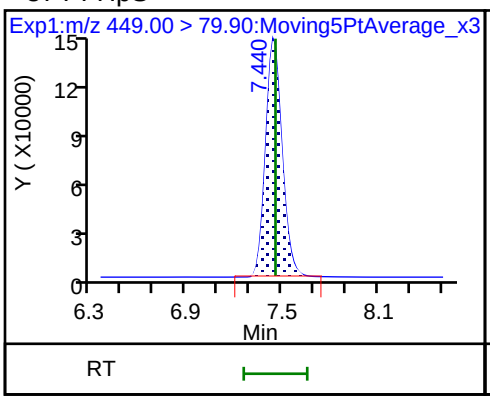
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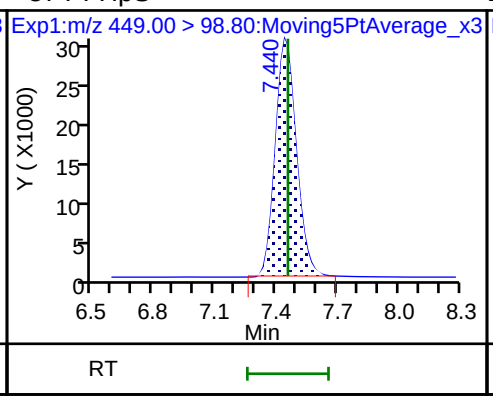
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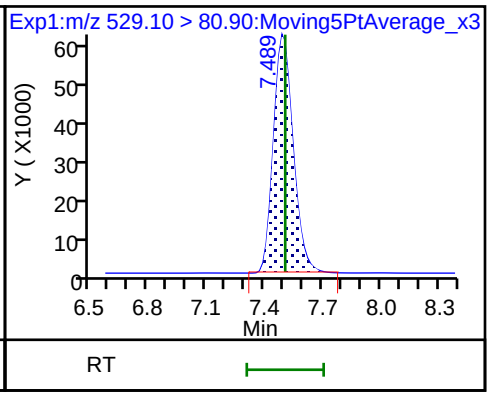
37 PFHpS



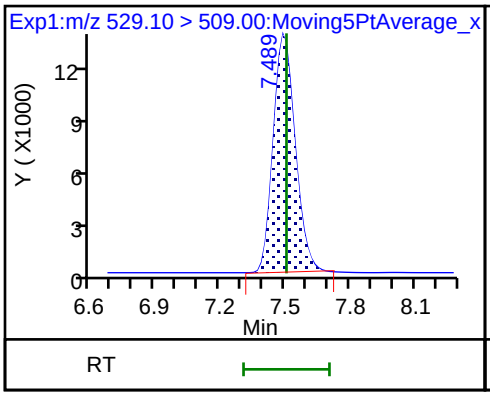
37 PFHpS



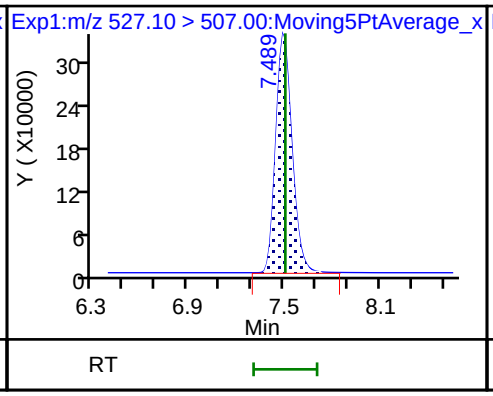
D 38 13C2-8:2FTS



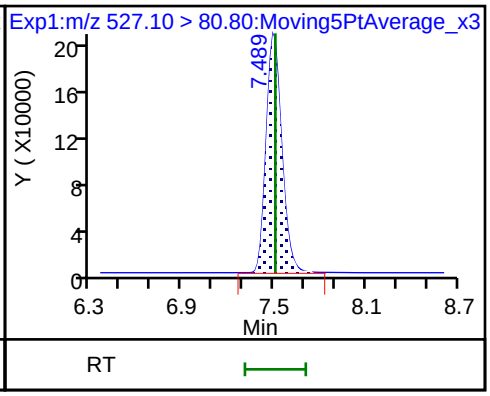
D 38 13C2-8:2FTS



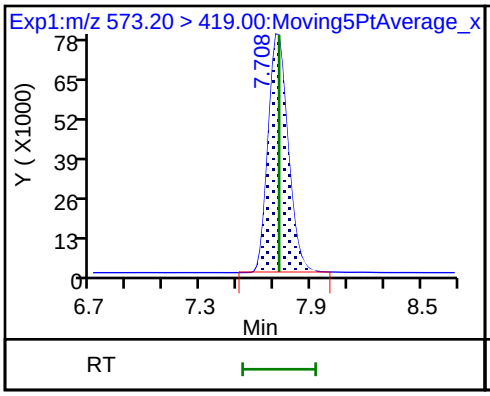
39 8:2FTS



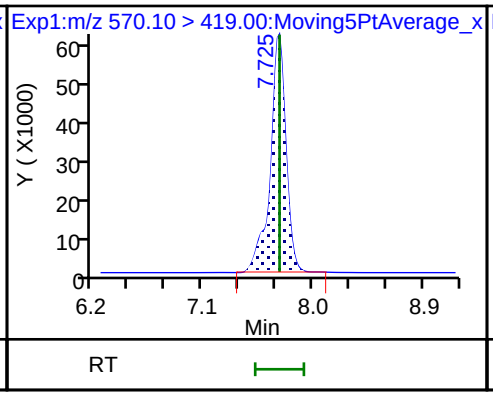
39 8:2FTS



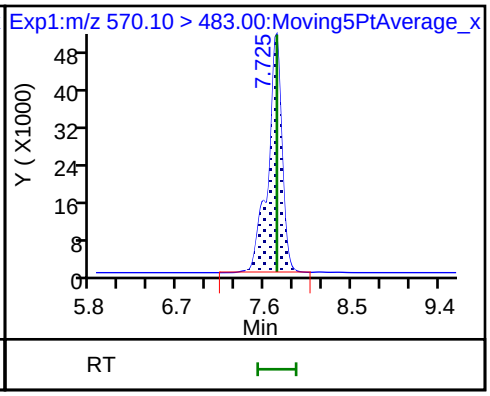
D 41 d3-NMeFOSAA



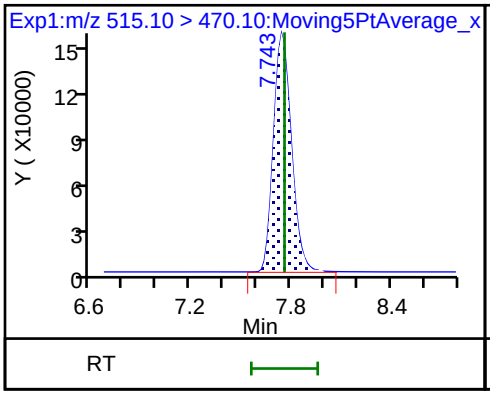
42 NMeFOSAA



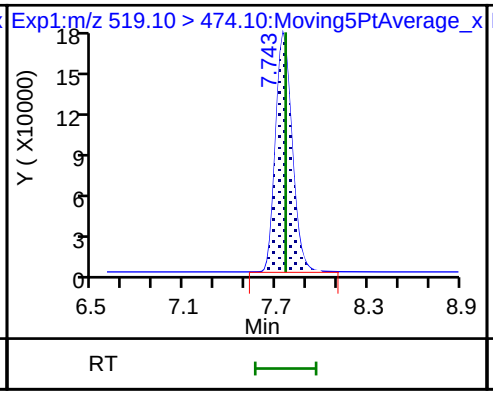
42 NMeFOSAA



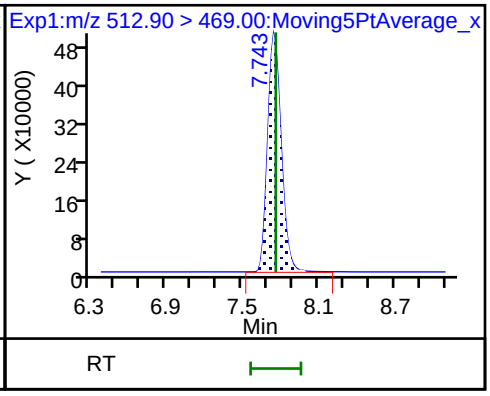
* 44 13C2 PFDA



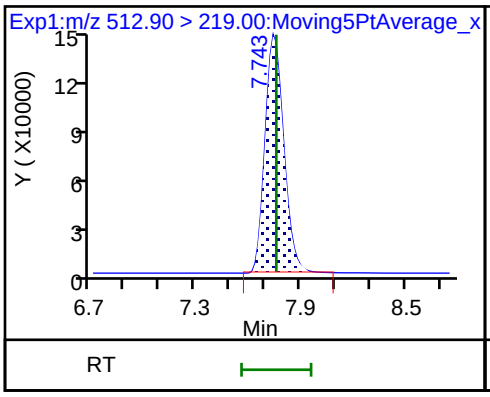
D 40 13C6 PFDA



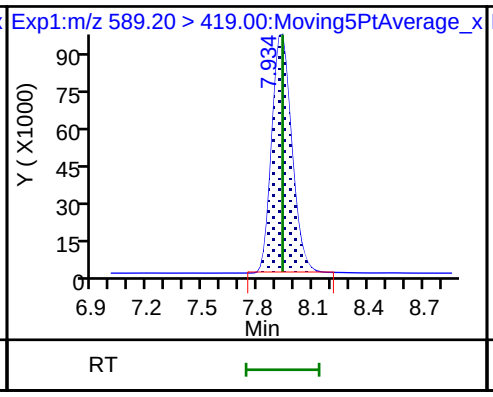
43 PFDA



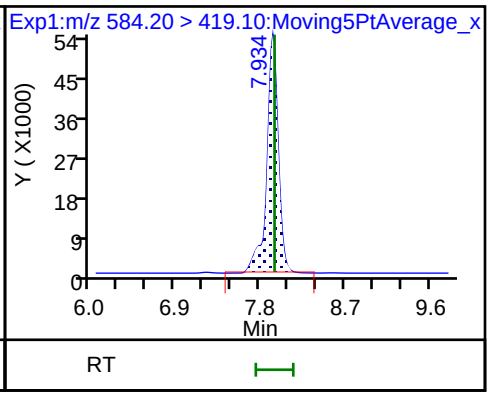
43 PFDA



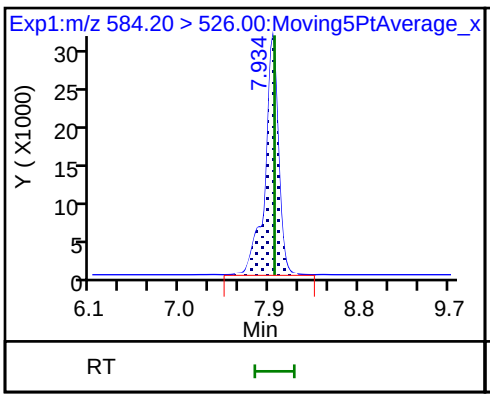
D 46 d5-NEtFOSAA



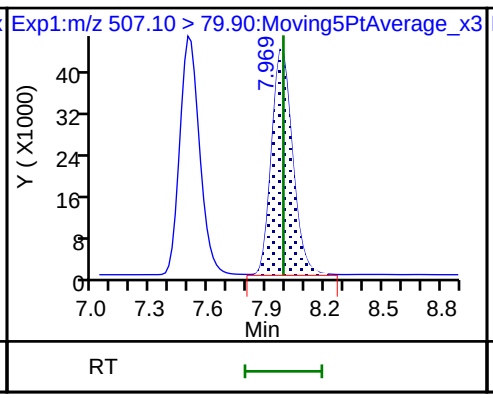
45 NEtFOSAA



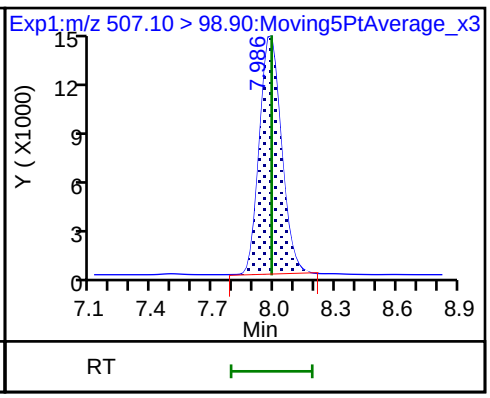
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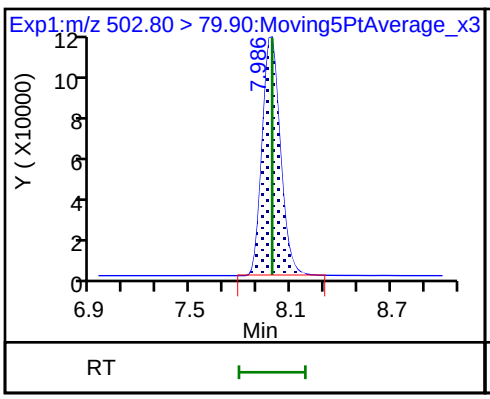
D 49 13C8 PFOS



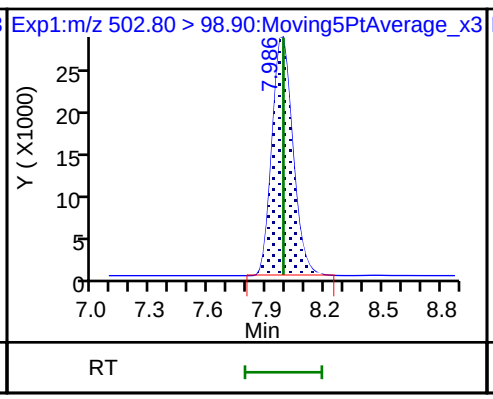
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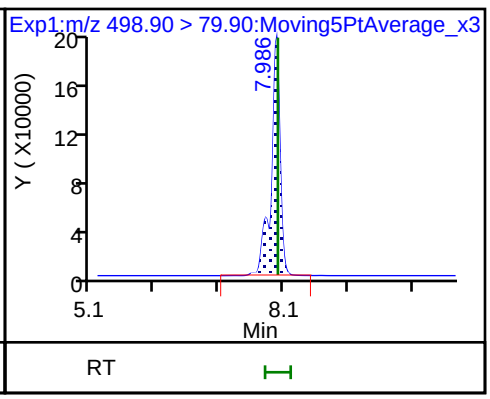
* 47 13C4 PFOS



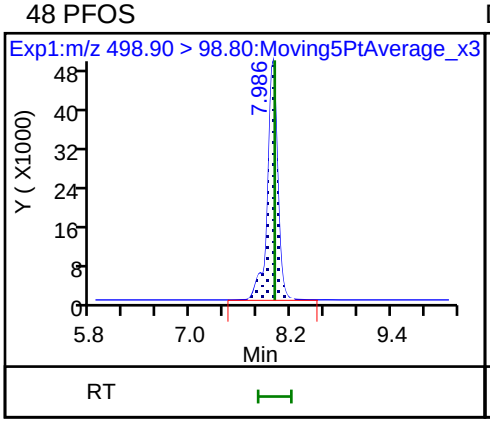
* 47 13C4 PFOS



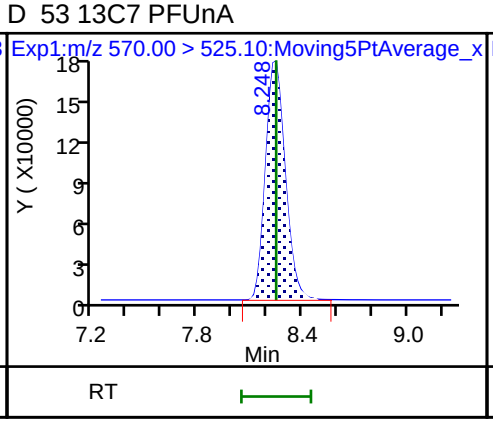
48 PFOS



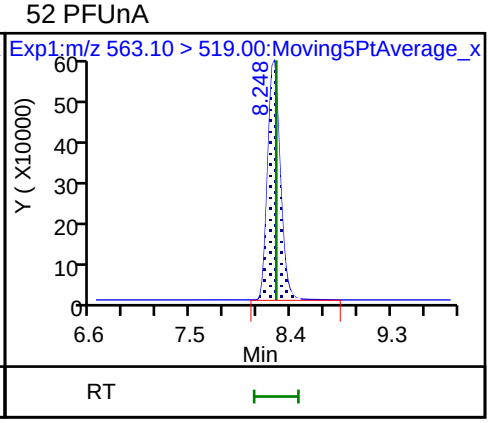
48 PFOS



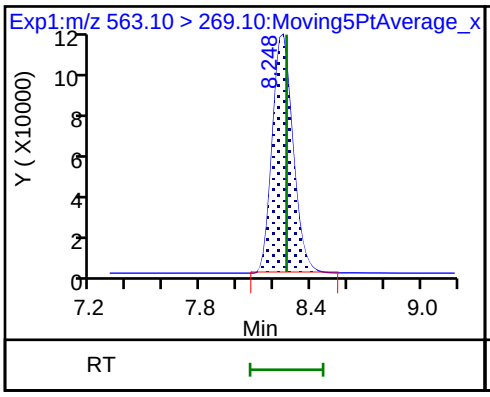
D 53 13C7 PFUnA



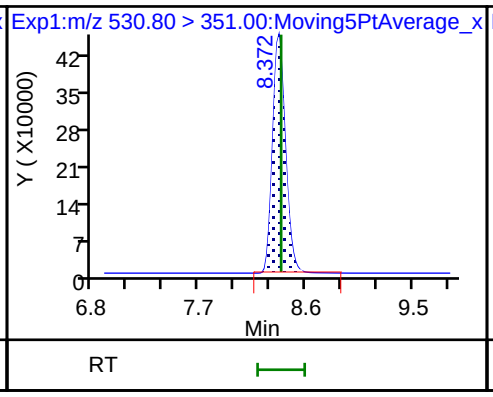
52 PFUnA



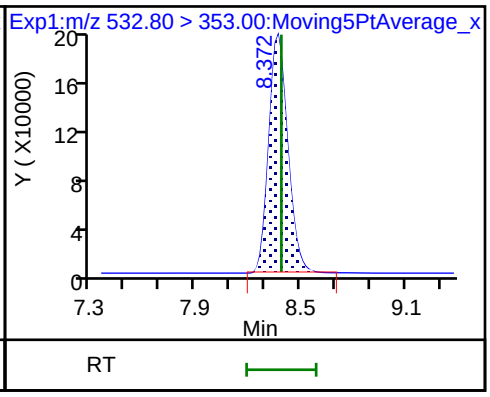
52 PFUnA



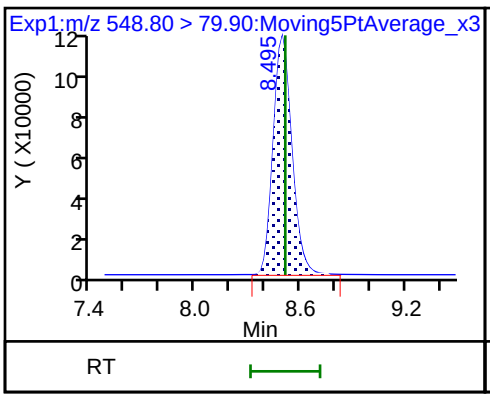
54 9ClFOS



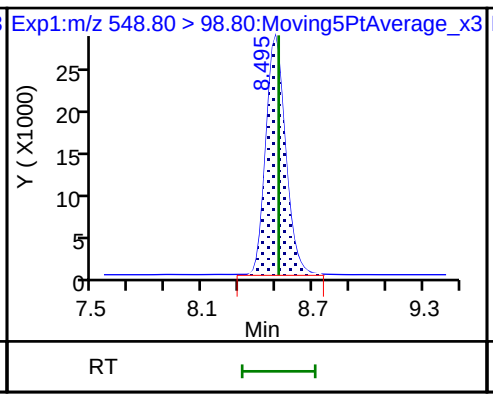
54 9ClFOS



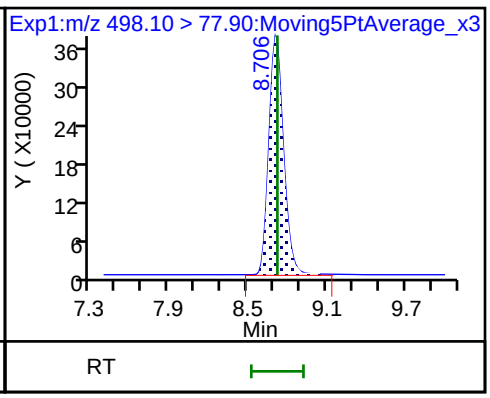
55 PFNS



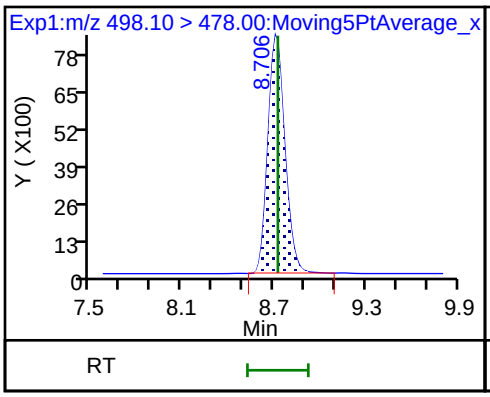
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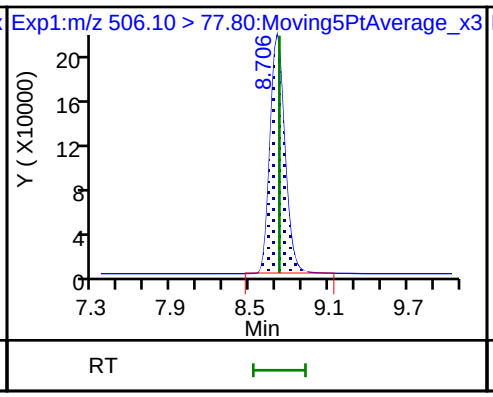
51 PFOSA



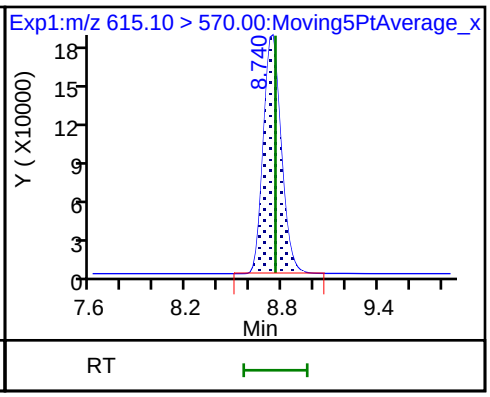
51 PFOSA



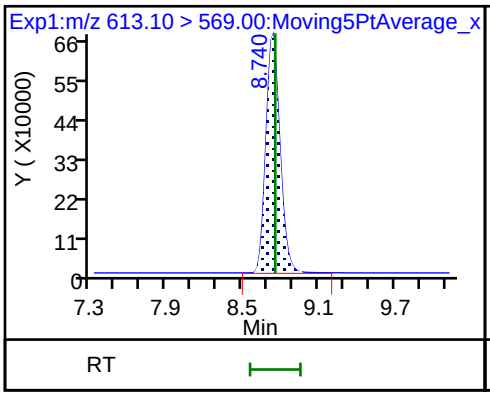
D 50 13C8 FOSA



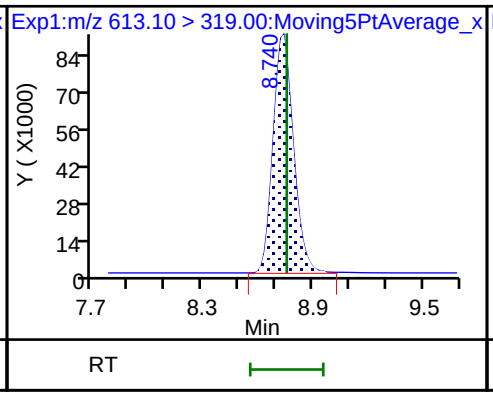
D 56 13C2 PFDoA



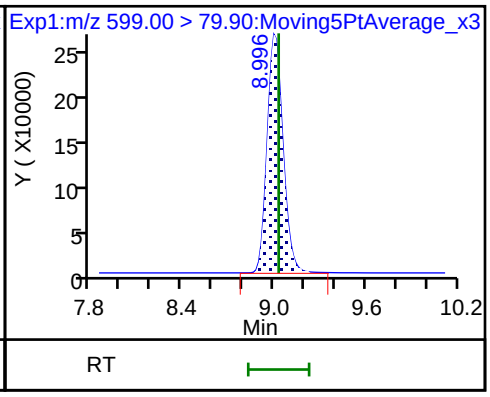
57 PFDoA



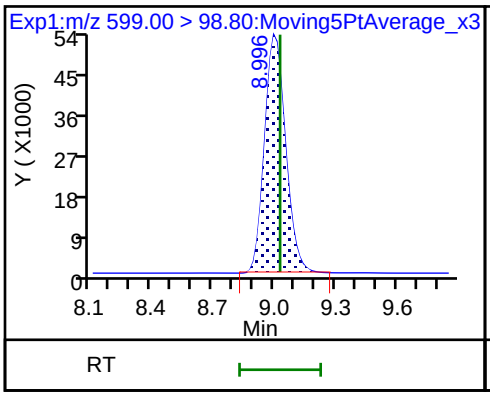
57 PFDoA



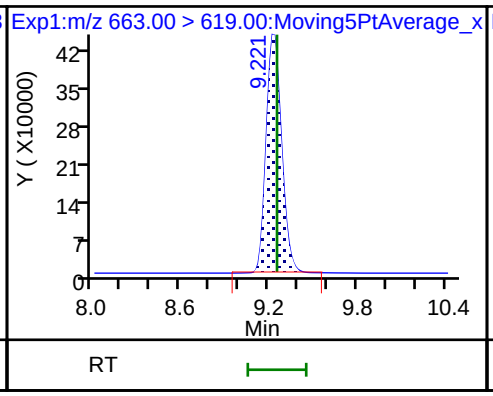
58 PFDS



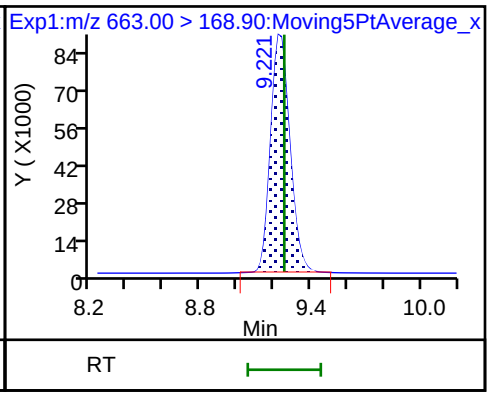
58 PFDS



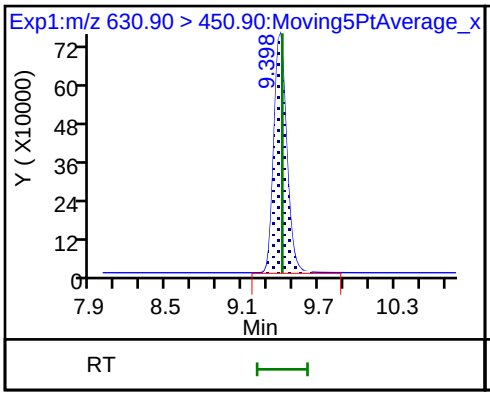
63 PFTrDA



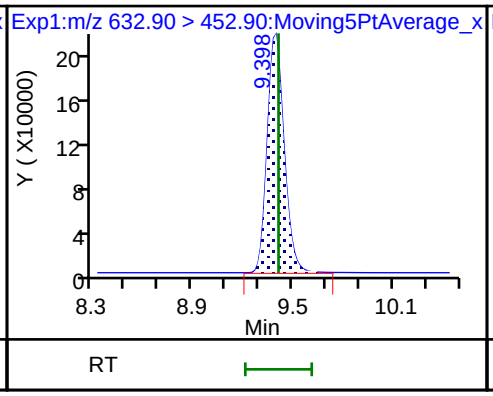
63 PFTrDA



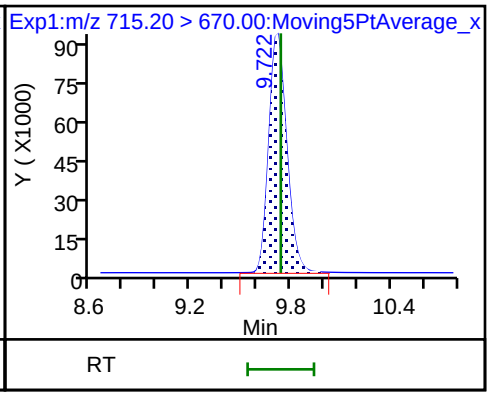
66 11ClFOS



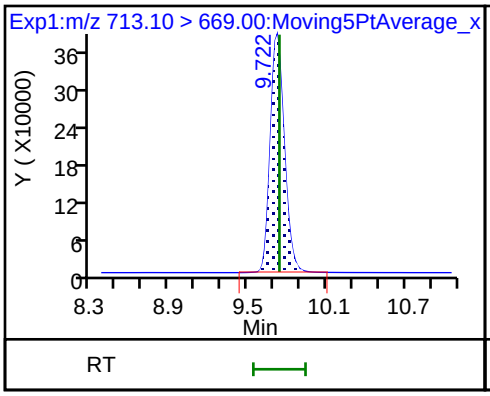
66 11ClFOS



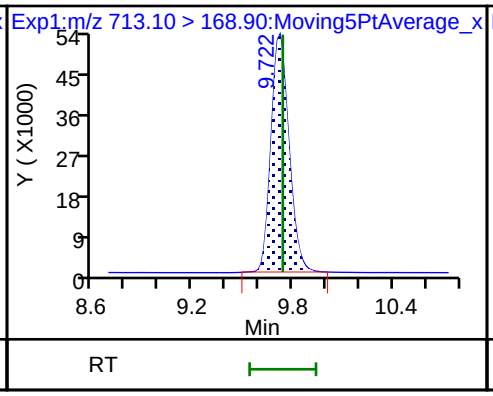
D 69 13C2 PFTeDA



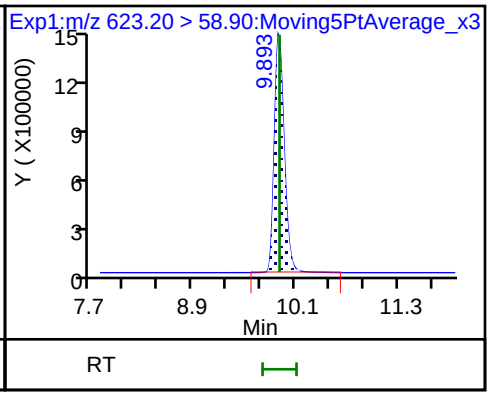
70 PFTeDA



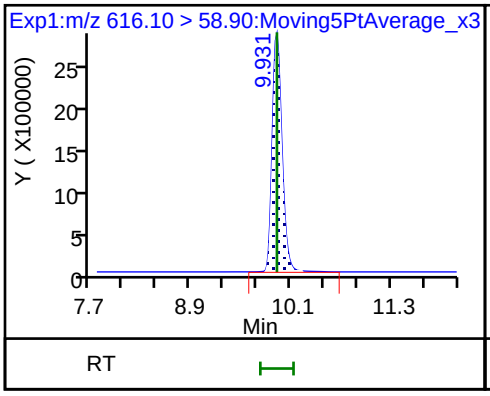
70 PFTeDA



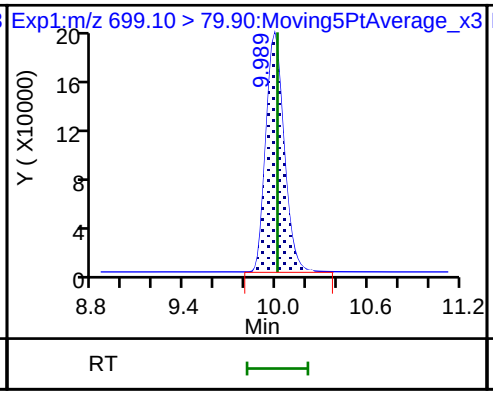
D 59 d7-N-Me-FOSE



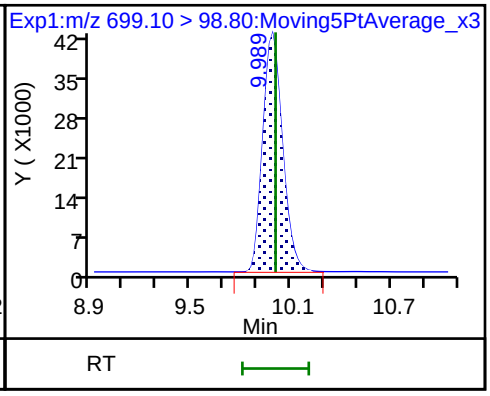
60 N-MeFOSE-M



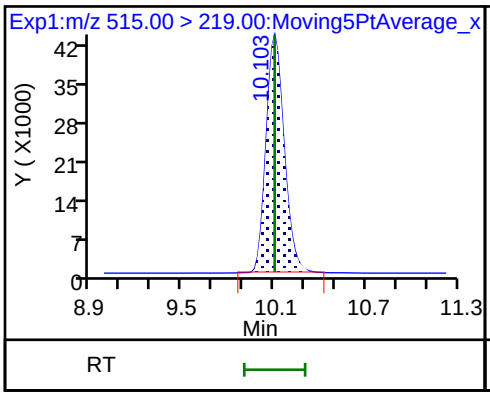
71 PFDoS



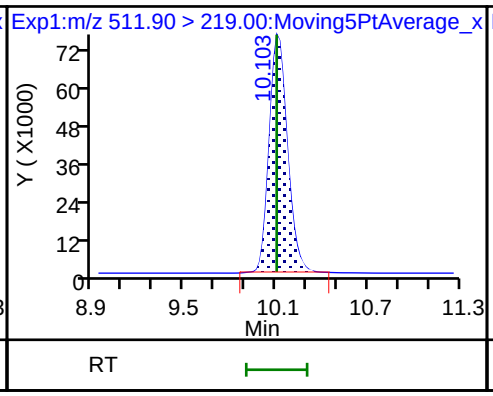
71 PFDoS



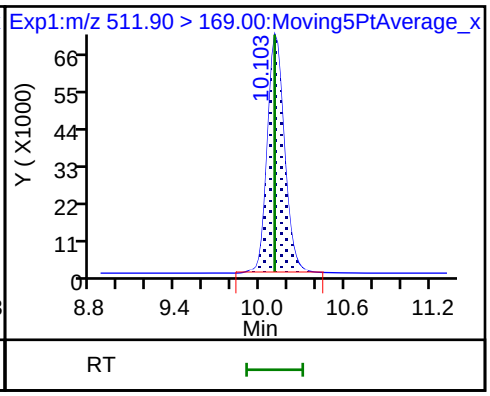
D 62 d3-NMePFOSA



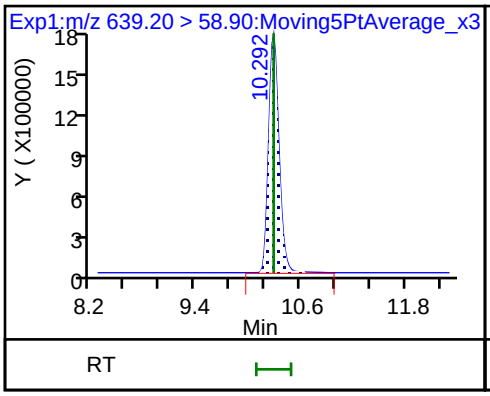
61 NMeFOSA



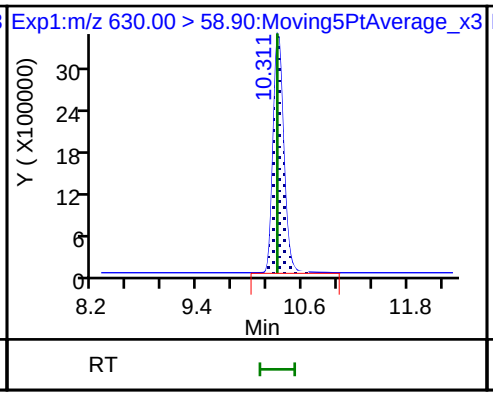
61 NMeFOSA



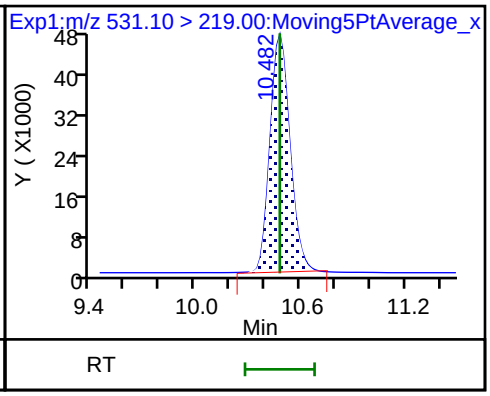
D 64 d9-N-EtFOSE



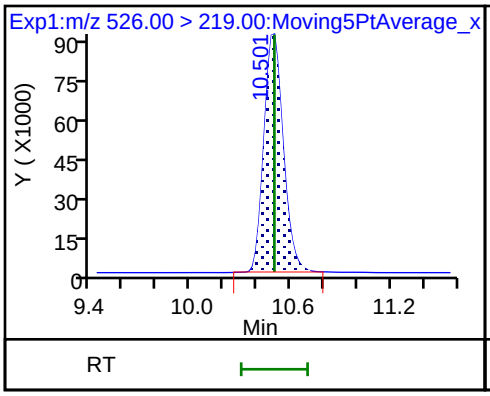
65 N-EtFOSE-M



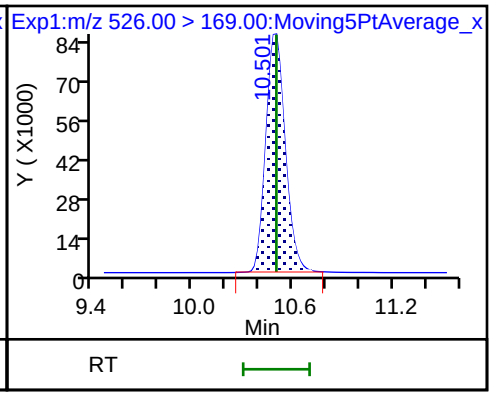
D 67 d5-NEtPFOSA



68 N-EtFOSA-M



68 N-EtFOSA-M



FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Lab Sample ID: CCVL 280-635316/3 Calibration Date: 11/28/2023 12:18

Instrument ID: LC_LCMS11 Calib Start Date: 11/20/2023 17:19

GC Column: Gemini C18 3X50 ID: 3.00(mm) Calib End Date: 11/20/2023 19:16

Lab File ID: 2023.11.28a.003.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.8940	0.8972		0.200	0.200	0.4	30.0
PFMPA	AveID	1.277	1.234		0.386	0.399	-3.4	30.0
3:3 FTCA	AveID	0.1634	0.1390		0.849	0.998	-14.9	30.0
Perfluoropentanoic acid (PFPeA)	AveID	2.006	2.034		0.202	0.200	1.4	30.0
PFMBA	AveID	2.526	2.355		0.372	0.399	-6.8	30.0
4:2 FTS	AveID	2.349	2.042		0.433	0.498	-13.0	30.0
NFDHA	AveID	0.3101	0.3080		0.198	0.200	-0.7	30.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.8902	0.7403		0.147	0.177	-16.8	30.0
Perfluorohexanoic acid (PFHxA)	AveID	1.101	1.073		0.195	0.200	-2.5	30.0
5:3 FTCA	AveID	0.1813	0.1464		1.61	2.00	-19.2	30.0
HFPO-DA (GenX)	AveID	1.077	1.065		0.197	0.200	-1.1	30.0
PFEESA	AveID	1.218	1.102		0.322	0.356	-9.5	30.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.9840	1.013		0.206	0.200	3.0	30.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	1.123	1.015		0.169	0.187	-9.6	30.0
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	AveID	9.040	8.578		0.179	0.188	-5.1	30.0
6:2 FTS	AveID	1.905	2.049		0.814	0.757	7.5	30.0
Perfluorooctanoic acid (PFOA)	AveID	0.7982	0.7747		0.194	0.200	-3.0	30.0
7:3 FTCA	AveID	0.0838	0.0707		1.69	2.00	-15.6	30.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	0.5321	0.5485		0.188	0.182	3.1	30.0
Perfluorononanoic acid (PFNA)	AveID	1.004	1.055		0.210	0.200	5.0	30.0
Perfluoroheptanesulfonic acid (PFHpS)	AveID	1.788	1.658		0.176	0.190	-7.2	30.0
8:2 FTS	AveID	1.453	1.423		0.749	0.765	-2.1	30.0
NMeFOSAA	AveID	1.001	1.139		0.227	0.200	13.8	30.0
Perfluorodecanoic acid (PFDA)	AveID	0.8217	0.7185		0.175	0.200	-12.6	30.0
NEtFOSAA	AveID	0.7273	0.7523		0.207	0.200	3.4	30.0
Perfluorooctanesulfonic acid (PFOS)	AveID	3.258	3.389		0.193	0.186	4.0	30.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8849	0.8392		0.189	0.200	-5.2	30.0
9Cl-PF3ONS	AveID	1.809	1.612		0.443	0.497	-10.9	30.0
Perfluorononanesulfonic acid (PFNS)	AveID	1.332	1.276		0.184	0.192	-4.2	30.0
Perfluorododecanoic acid (PFDoA)	AveID	1.005	0.9749		0.194	0.200	-3.0	30.0
Perfluorooctanesulfonamide (PFOSA)	AveID	0.995	0.998		0.200	0.200	0.3	30.0
Perfluorodecanesulfonic acid (PFDS)	AveID	3.077	3.276		0.205	0.192	6.5	30.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.8617	0.8215		0.190	0.200	-4.7	30.0

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Lab Sample ID: CCVL 280-635316/3 | Calibration Date: 11/28/2023 12:18

Instrument ID: LC_LCMS11 | Calib Start Date: 11/20/2023 17:19

GC Column: Gemini C18 3X50 ID: 3.00(mm) | Calib End Date: 11/20/2023 19:16

Lab File ID: 2023.11.28a.003.d | Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
11Cl-PF3OUdS	Q2ID		2.478		0.432	0.502	-14.0	30.0
Perfluorotetradecanoic acid (PFTeDA)	AveID	1.162	1.148		0.197	0.200	-1.2	30.0
NMeFOSE	AveID	1.094	1.162		1.06	0.998	6.2	30.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	2.462	2.579		0.203	0.194	4.7	30.0
NMeFOSA	AveID	0.9564	0.9776		0.204	0.200	2.2	30.0
NEtFOSE	AveID	1.044	1.071		2.05	2.00	2.6	30.0
NEtFOSA	AveID	1.071	1.060		0.198	0.200	-1.1	30.0
13C4 PFBA	Ave	1.016	0.9891		9.73	10.0	-2.7	30.0
13C5 PFPeA	Ave	0.4984	0.5004		5.02	5.00	0.4	30.0
M2-4:2 FTS	Ave	0.2255	0.2099		4.35	4.67	-6.9	30.0
13C3 PFBS	Ave	1.283	1.370		2.48	2.33	6.8	30.0
13C5 PFHxA	Ave	1.121	1.230		2.74	2.50	9.8	30.0
13C3 HFPO-DA	Ave	0.2741	0.3085		11.3	10.0	12.6	30.0
13C4 PFHpA	Ave	1.173	1.172		2.50	2.50	-0.1	30.0
M2-6:2 FTS	Ave	0.2943	0.2678		4.32	4.75	-9.0	30.0
13C8 PFOA	Ave	6.544	6.461		2.47	2.50	-1.3	30.0
13C3 PFHxS	Ave	1.016	1.063		2.47	2.37	4.6	30.0
13C9 PFNA	Ave	0.9452	0.9708		1.28	1.25	2.7	30.0
M2-8:2 FTS	Ave	0.3568	0.3241		4.35	4.79	-9.2	30.0
d3-NMeFOSAA	Ave	0.3361	0.3146		4.68	5.00	-6.4	30.0
13C6 PFDA	Ave	0.9948	0.9854		1.24	1.25	-0.9	30.0
d5-NEtFOSAA	Ave	0.3891	0.3479		4.47	5.00	-10.6	30.0
13C8 PFOS	Ave	0.3592	0.3394		2.26	2.39	-5.5	30.0
13C7 PFUnA	Ave	1.109	1.084		1.22	1.25	-2.3	30.0
13C8 FOSA	Ave	1.739	1.634		2.35	2.50	-6.1	30.0
13C2 PFDoA	Ave	1.095	1.129		1.29	1.25	3.1	30.0
13C2 PFTeDA	Ave	0.5212	0.5250		1.26	1.25	0.7	30.0
d7-N-MeFOSE-M	Ave	1.278	1.235		24.2	25.0	-3.4	30.0
d3-NMePFOSA	Ave	0.3940	0.3746		2.38	2.50	-4.9	30.0
d9-N-EtFOSE-M	Ave	1.593	1.659		26.0	25.0	4.1	30.0
d5-NEtPFOSA	Ave	0.4044	0.3753		2.32	2.50	-7.2	30.0

Preliminary Report

Manual Integration/User Assign Peak Report

Eurofins Denver

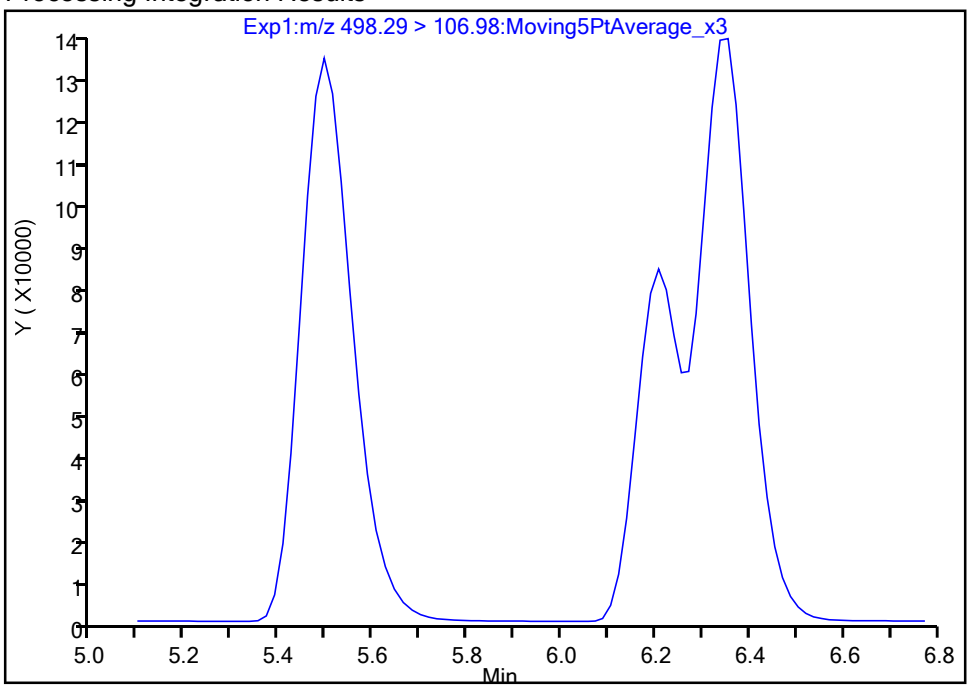
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Lims ID:	BILE SALTS MIX	Lab Sample ID:	Client 280-635317/5-A		
Client ID:					
Operator ID:	B5QN	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

73 TDCA, CAS: 516-50-7

Signal: 1

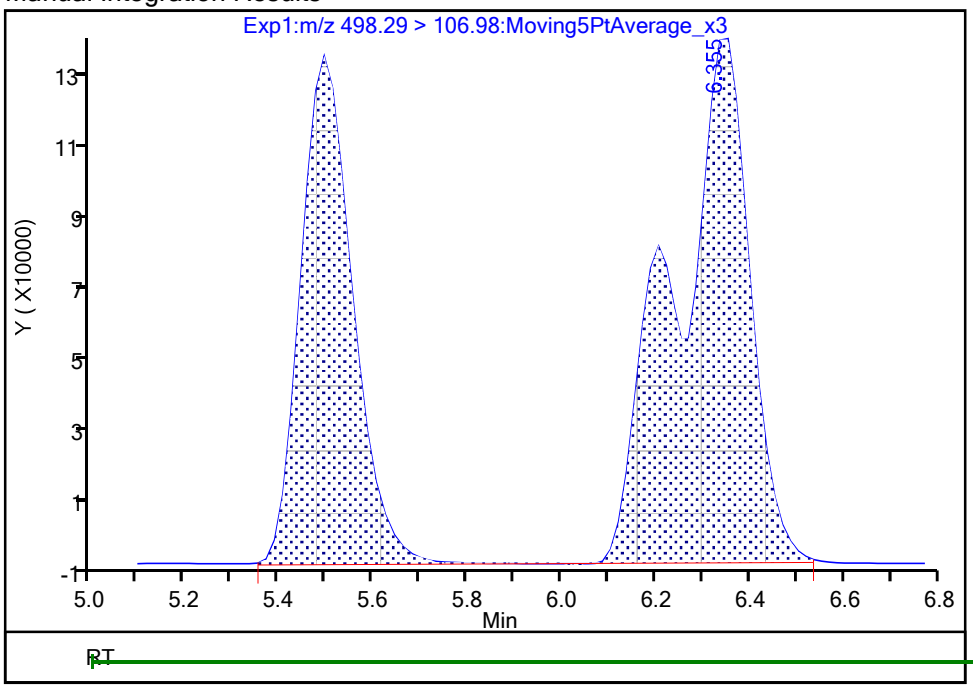
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Processing Integration Results



Manual Integration Results

RT: 6.35
Area: 2421228
Amount: 0
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:36:52 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Missed Peak

Preliminary Report

Manual Integration/User Assign Peak Report

Eurofins Denver

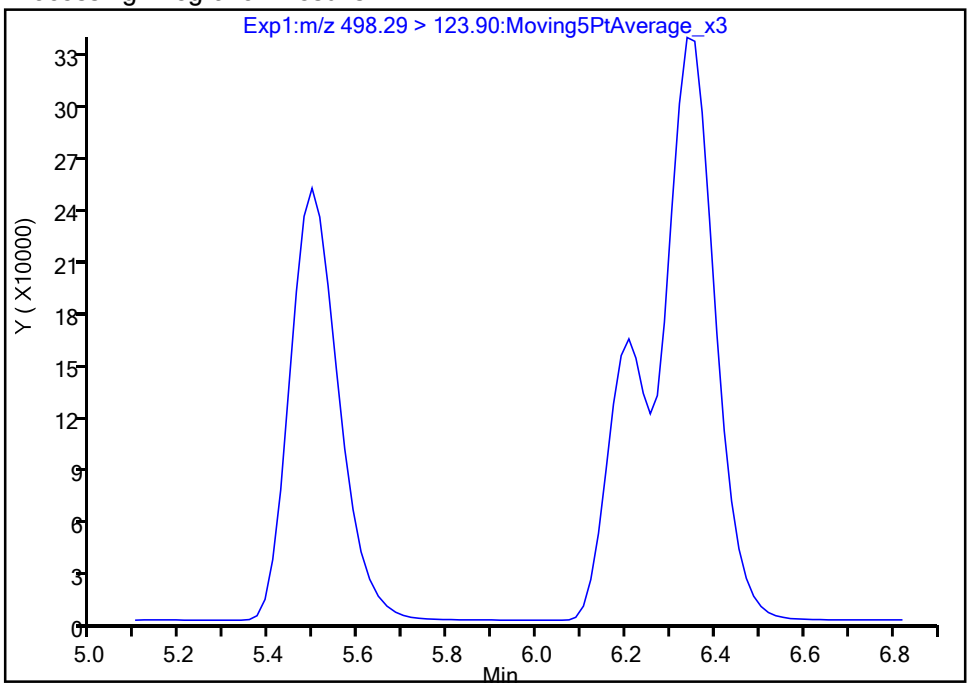
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Lims ID:	BILE SALTS MIX	Lab Sample ID:	Client 280-635317/5-A		
Client ID:					
Operator ID:	B5QN	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

73 TDCA, CAS: 516-50-7

Signal: 2

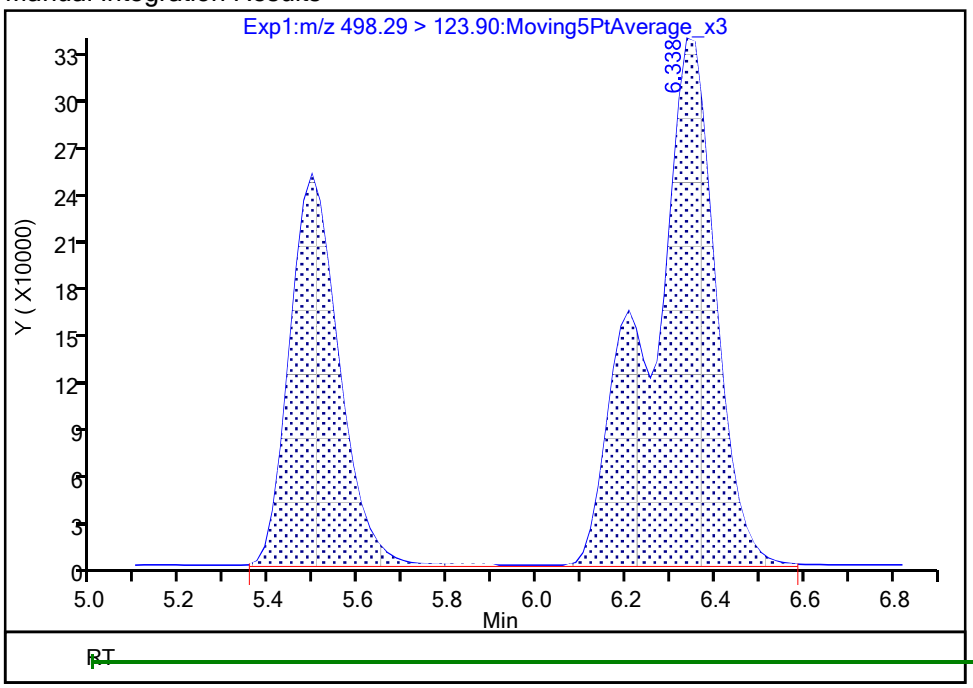
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Processing Integration Results



Manual Integration Results

RT: 6.34
Area: 5414527
Amount: 0
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:37:01 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Missed Peak

Preliminary Report

Manual Integration/User Assign Peak Report

Eurofins Denver

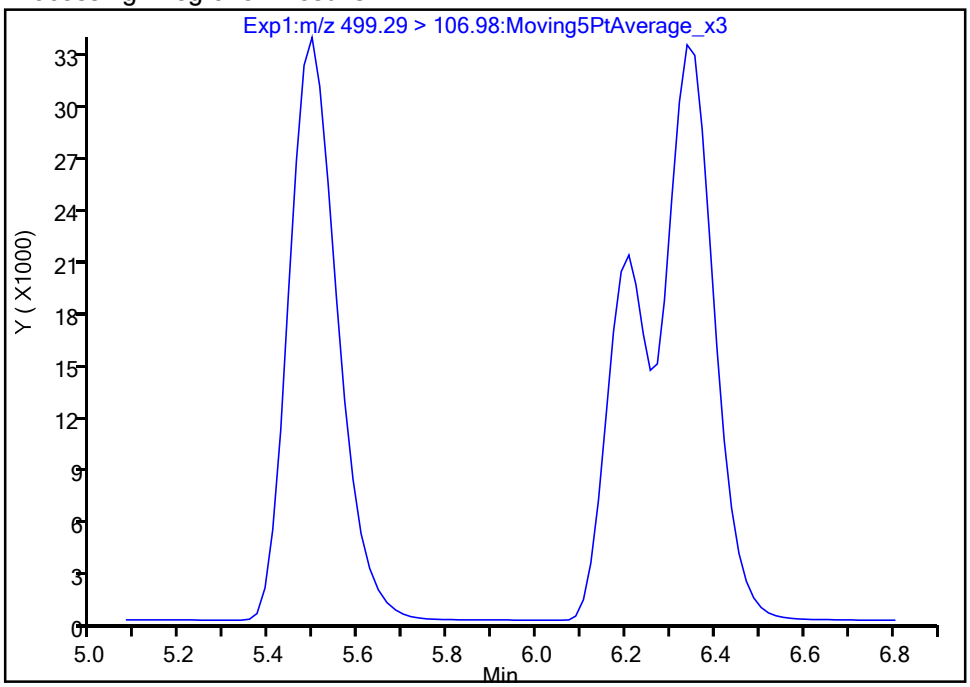
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Lims ID:	BILE SALTS MIX	Lab Sample ID:	Client 280-635317/5-A		
Client ID:					
Operator ID:	B5QN	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

73 TDCA, CAS: 516-50-7

Signal: 3

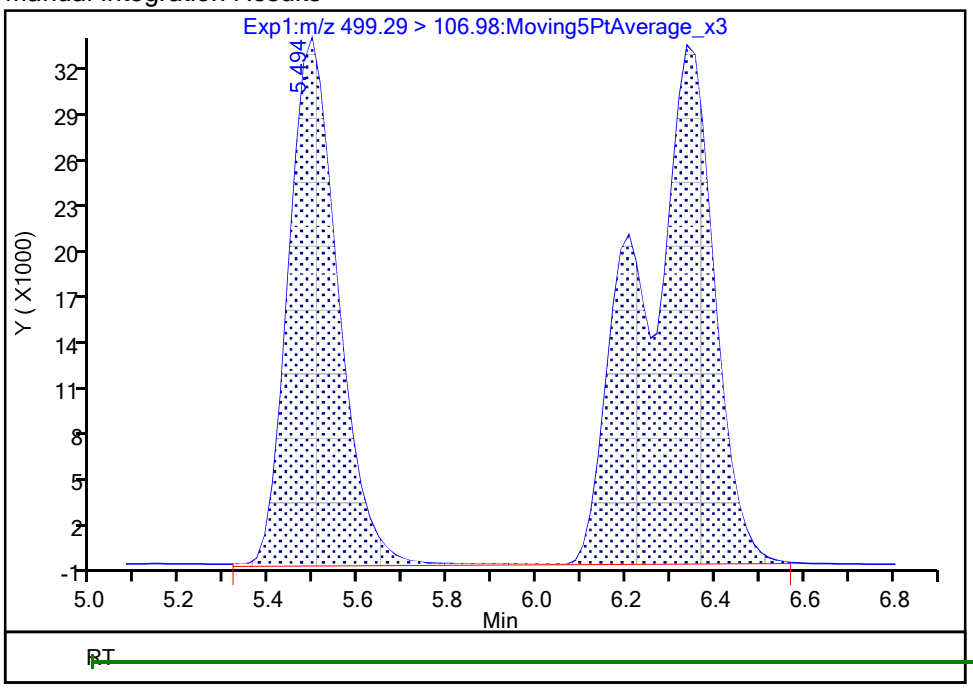
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Expected RT: 0.00

Processing Integration Results



Manual Integration Results

RT: 5.49
Area: 633280
Amount: 0
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:37:08 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Missed Peak

Preliminary Report

Manual Integration/User Assign Peak Report

Eurofins Denver

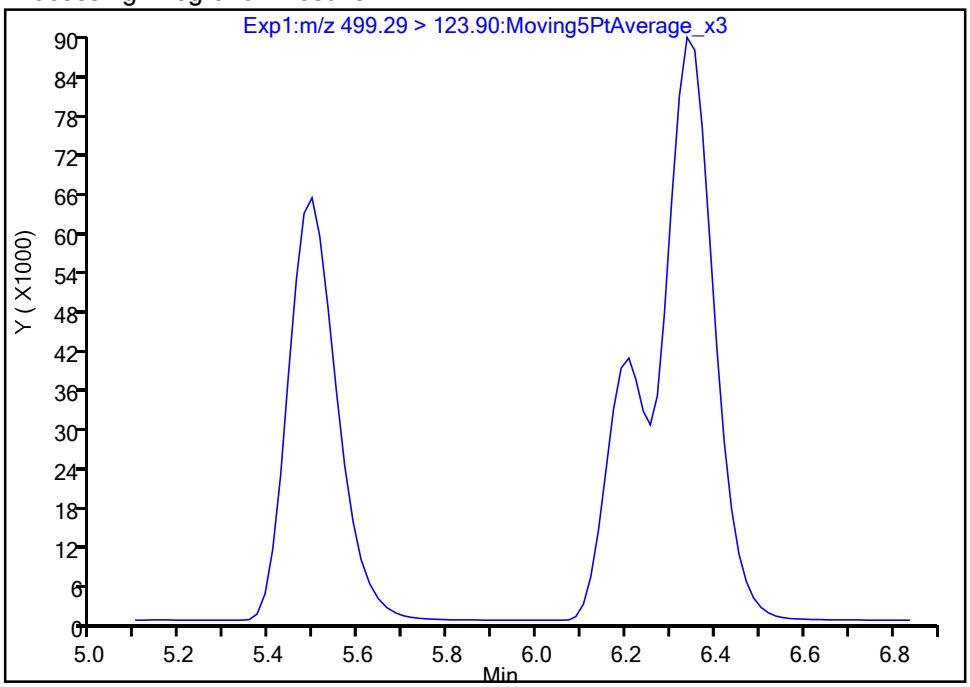
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Lims ID:	BILE SALTS MIX	Lab Sample ID:	Client 280-635317/5-A		
Client ID:					
Operator ID:	B5QN	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

73 TDCA, CAS: 516-50-7

Signal: 4

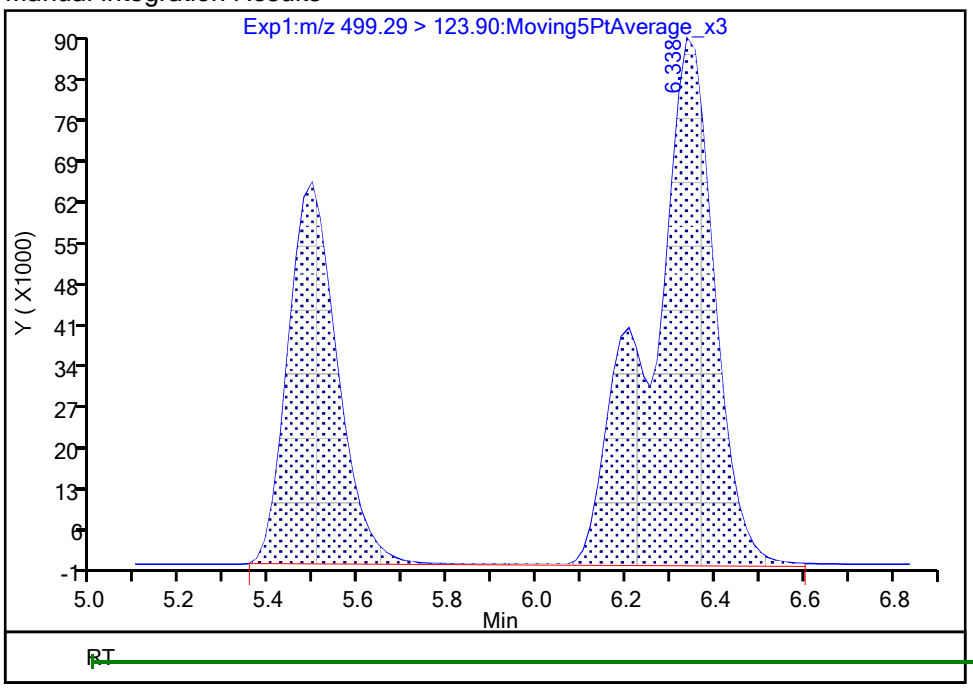
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Processing Integration Results



Manual Integration Results

RT: 6.34
Area: 1410337
Amount: 0
Amount Units: ng/ml



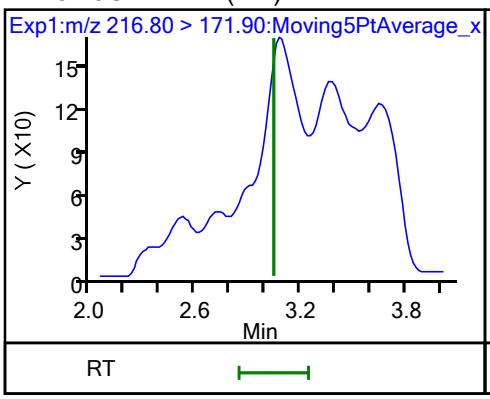
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Audit Action: Manually Integrated Audit Reason: Missed Peak

Preliminary Report

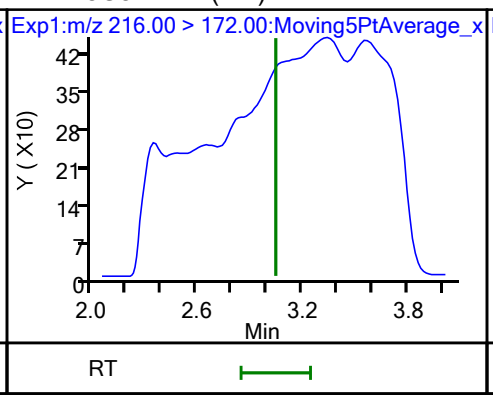
Eurofins Denver

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Client ID:
Operator ID: B5QN ALS Bottle#: 4 Worklist Smp#: 4
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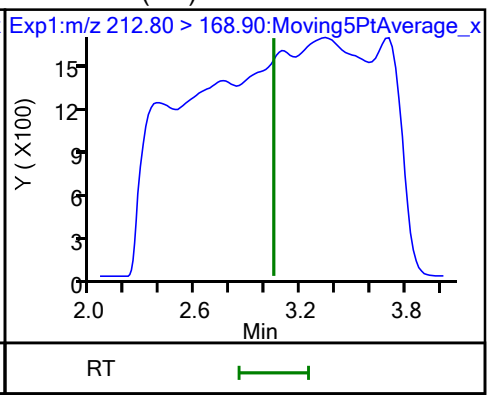
D 3 13C4-PFBA (ND)



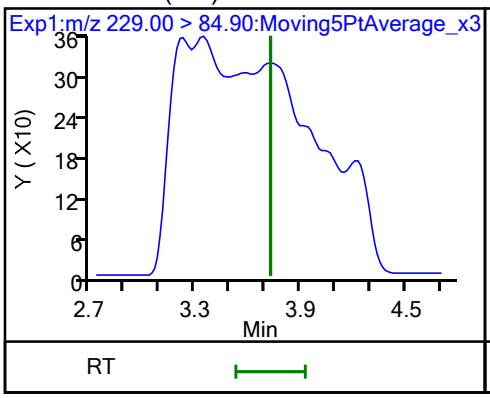
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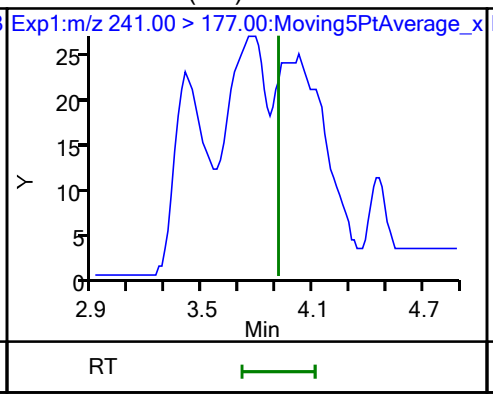
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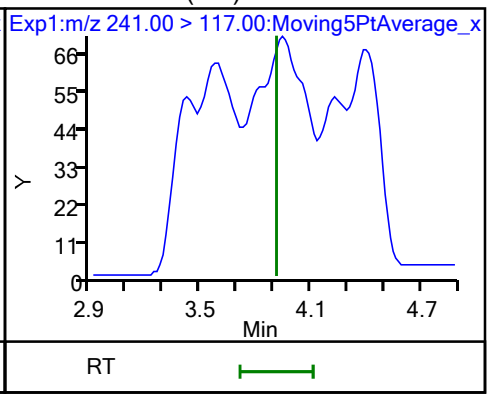
4 PFMPA (ND)



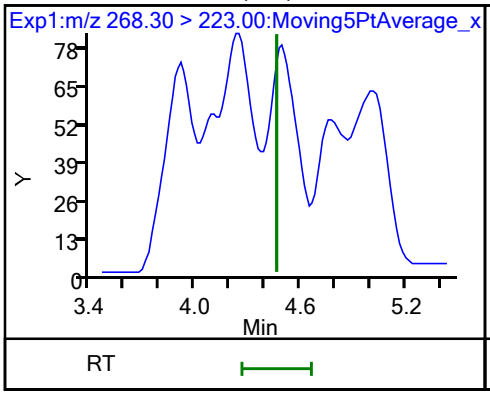
5 3:3 FTCA (ND)



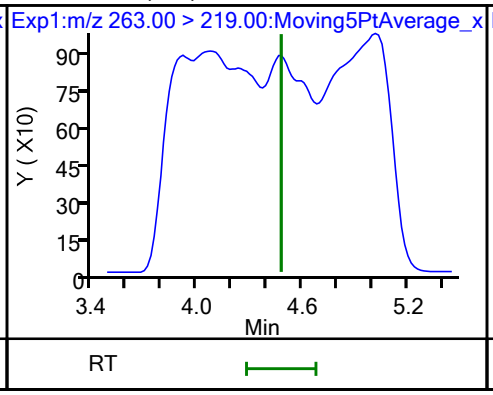
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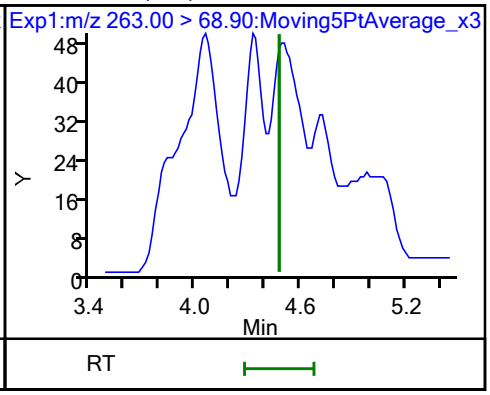
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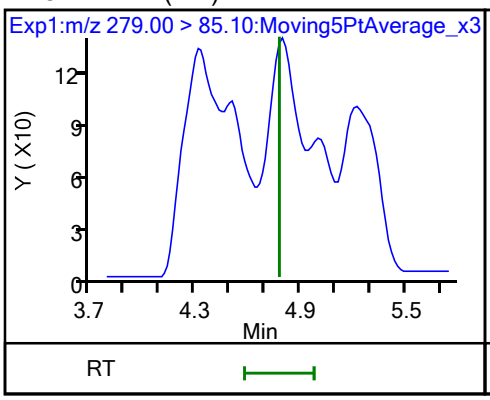
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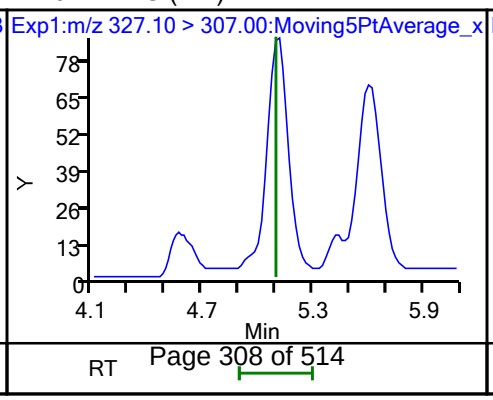
6 PFPA (ND)



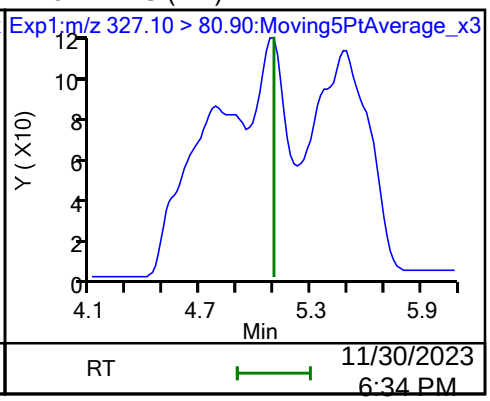
8 PFMBA (ND)



10 4:2FTS (ND)



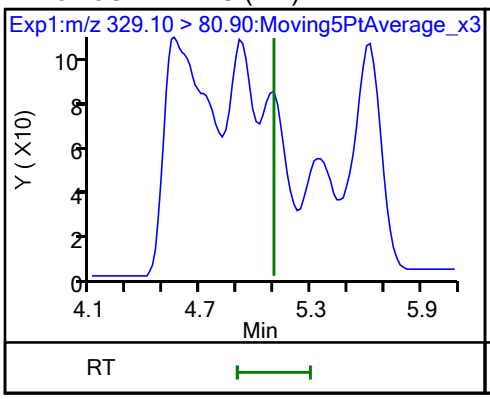
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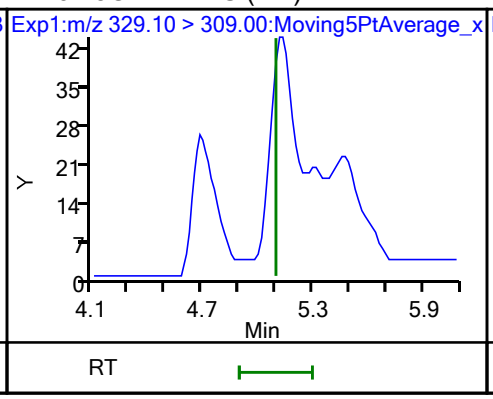
Preliminary Report

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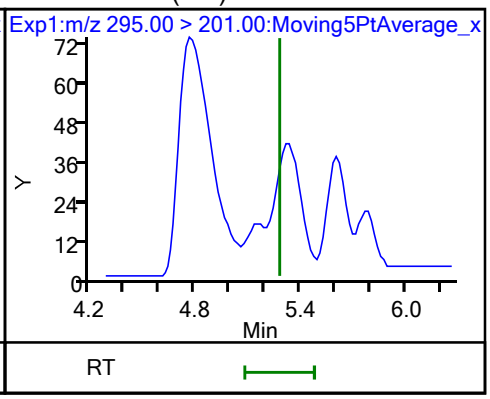
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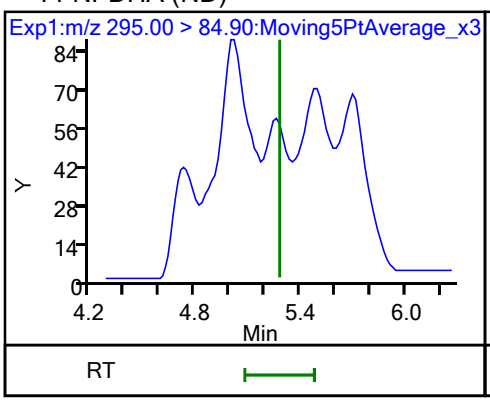
D 9 13C2-4:2FTS (ND)



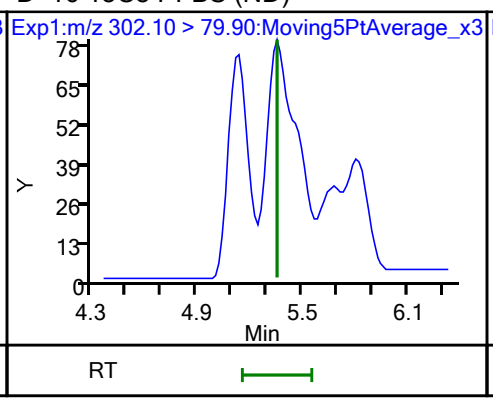
11 NFDHA (ND)



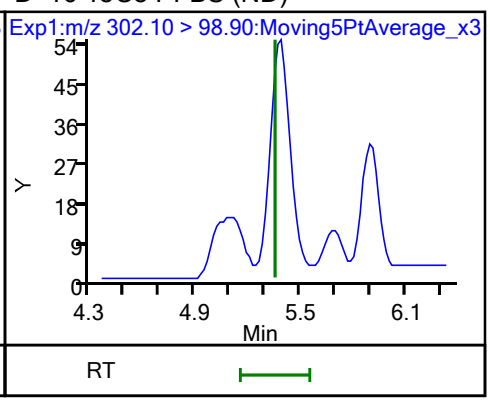
11 NFDHA (ND)



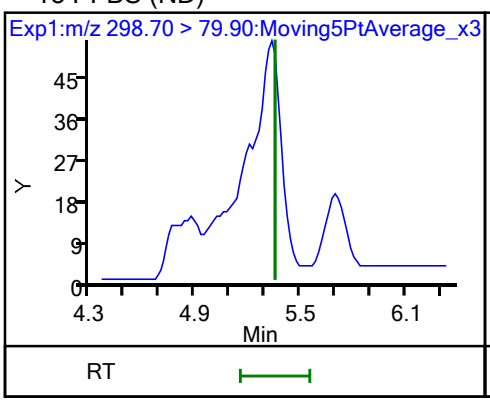
D 16 13C3 PFBS (ND)



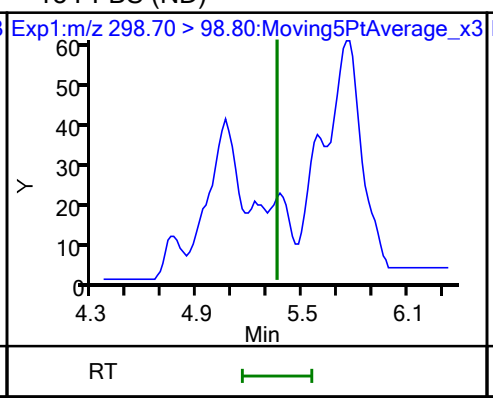
D 16 13C3 PFBS (ND)



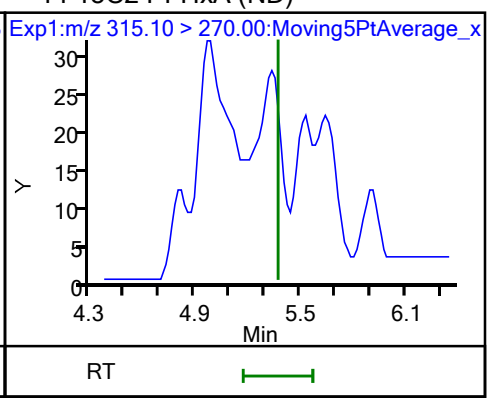
15 PFBS (ND)



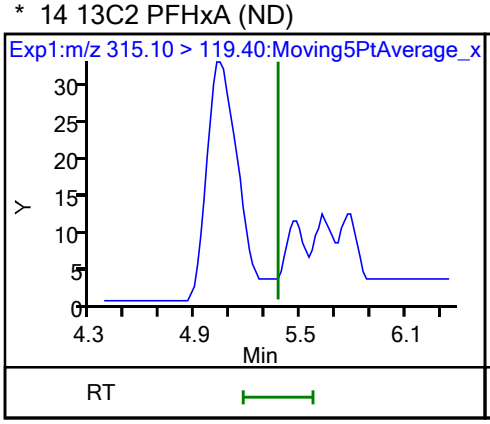
15 PFBS (ND)



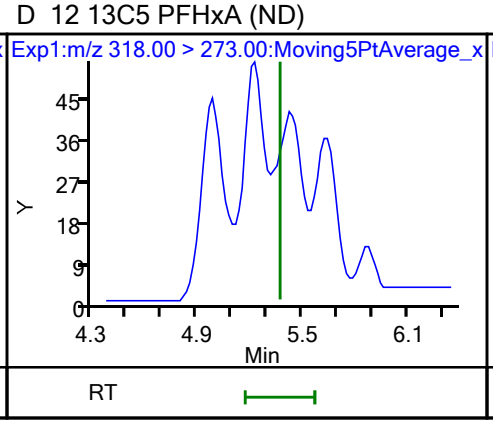
* 14 13C2 PFHxA (ND)



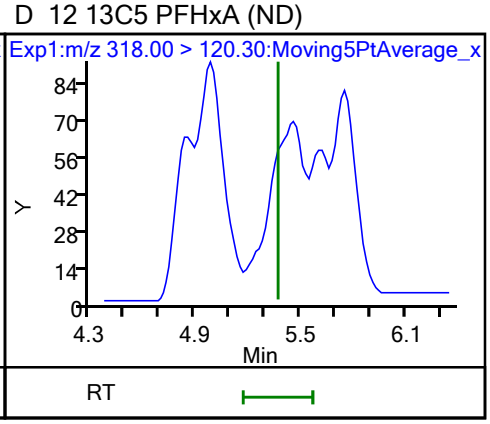
* 14 13C2 PFHxA (ND)



D 12 13C5 PFHxA (ND)



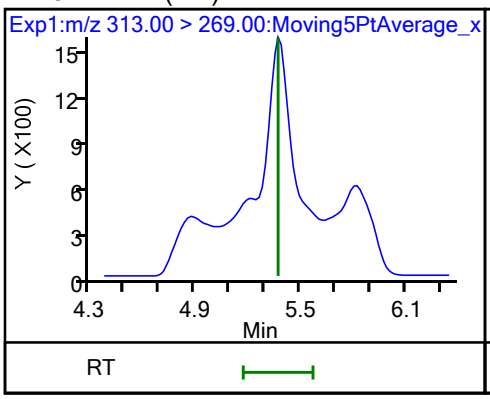
D 12 13C5 PFHxA (ND)



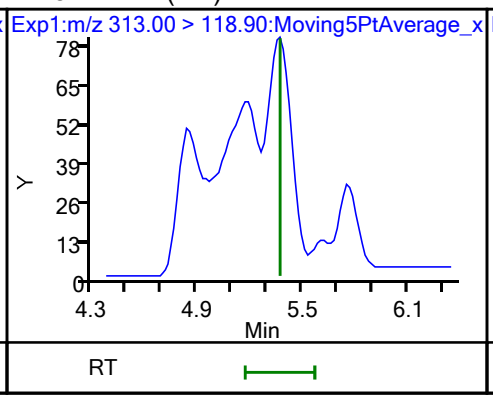
Preliminary Report

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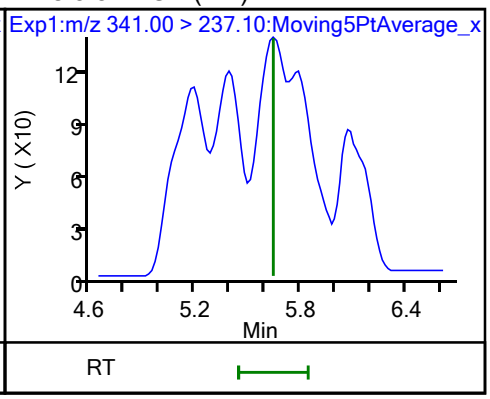
13 PFHxA (ND)



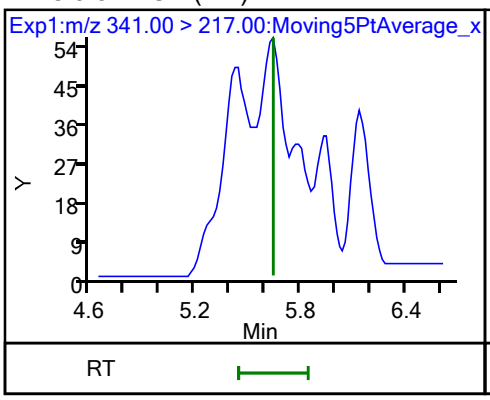
13 PFHxA (ND)



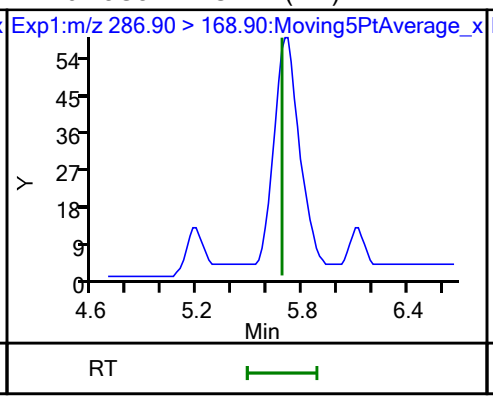
18 5:3 FTCA (ND)



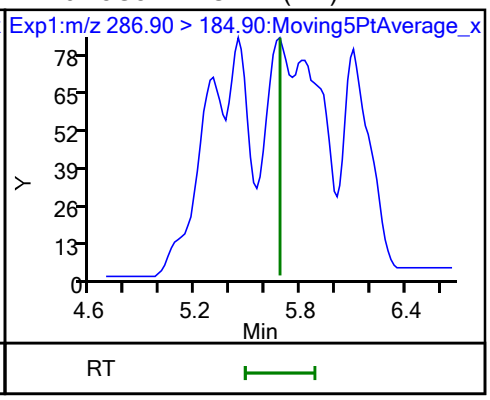
18 5:3 FTCA (ND)



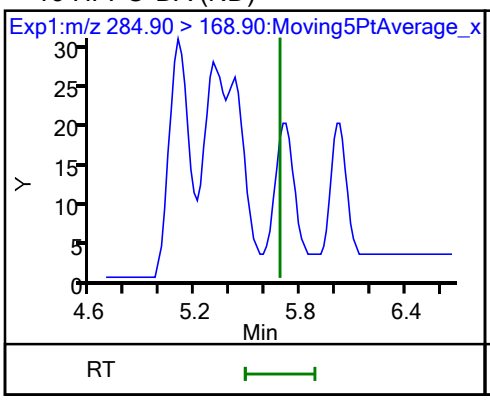
D 20 13C3 HFPO-DA (ND)



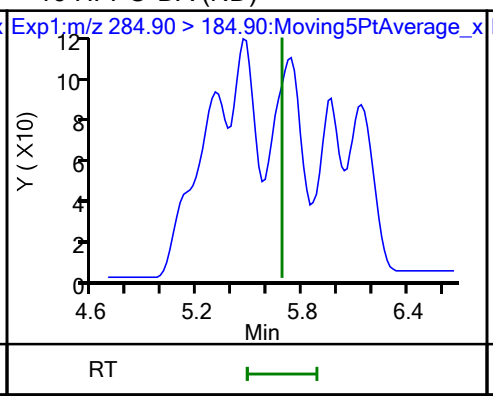
D 20 13C3 HFPO-DA (ND)



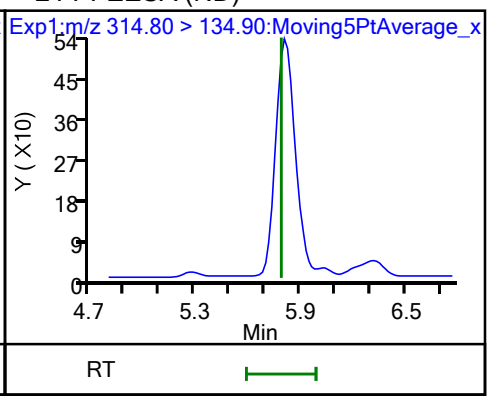
19 HFPO-DA (ND)



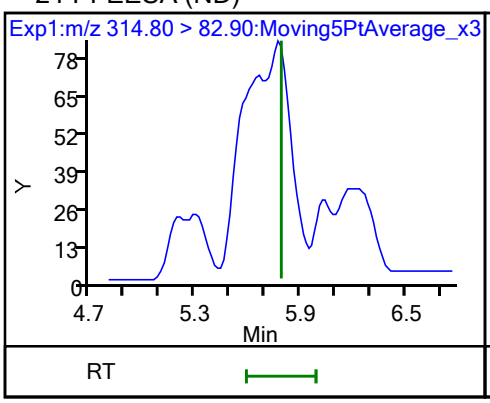
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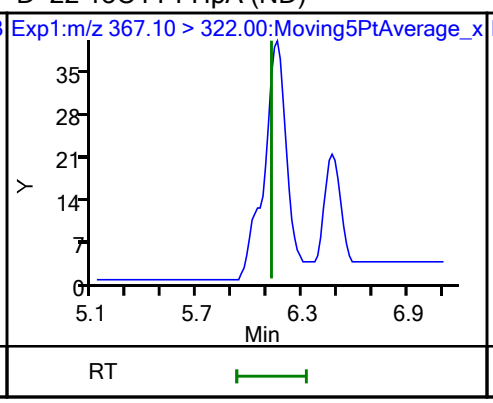
21 PFEESA (ND)



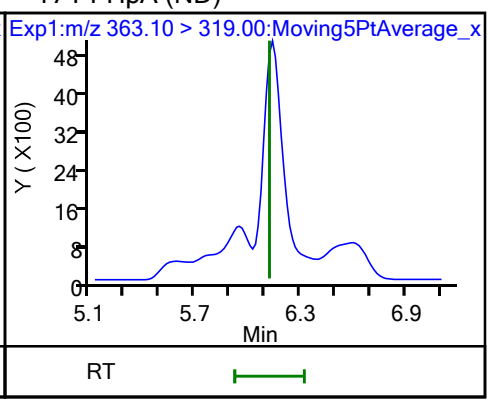
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D 22 13C4 PFHpA (ND)



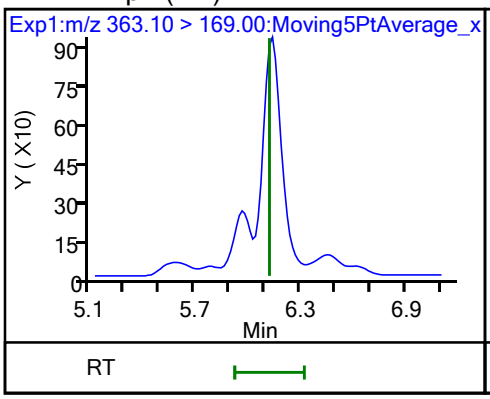
17 PFHpA (ND)



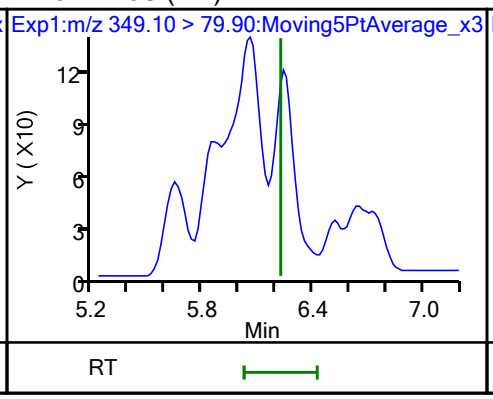
Preliminary Report

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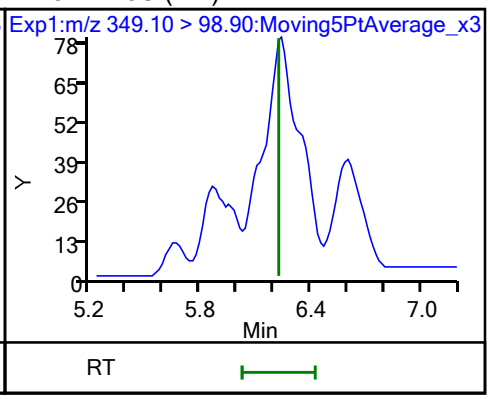
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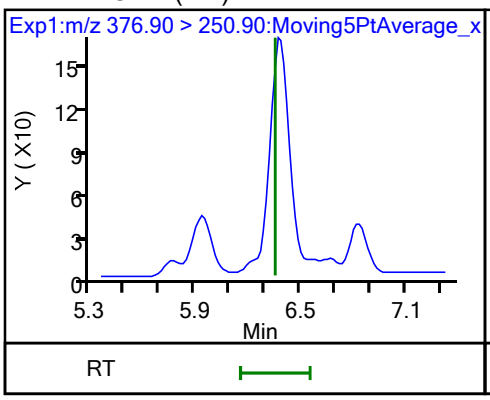
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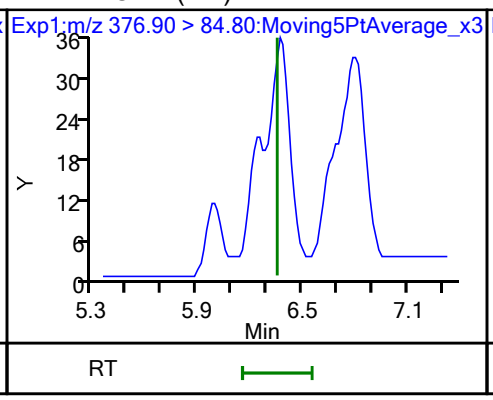
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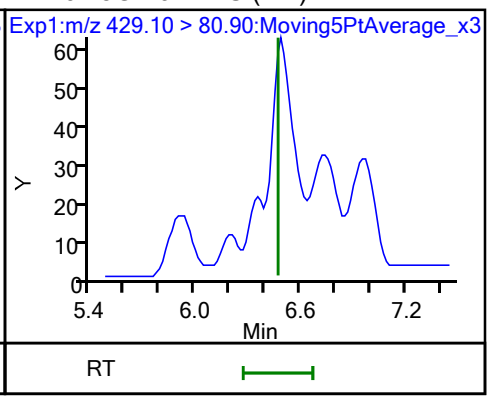
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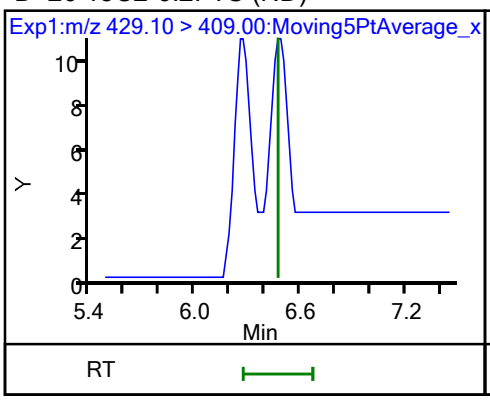
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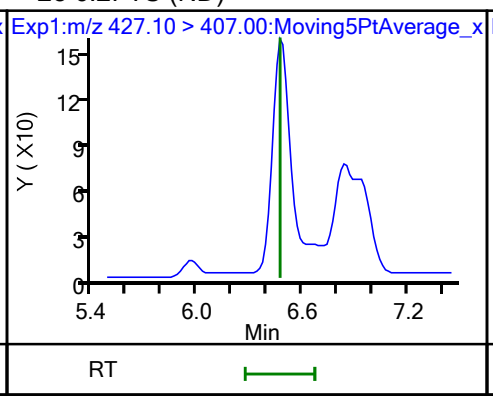
D 26 13C2-6:2FTS (ND)



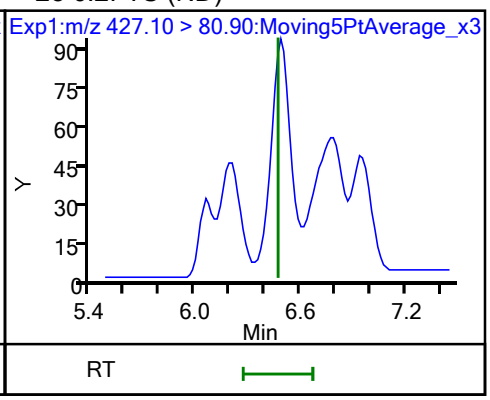
D 26 13C2-6:2FTS (ND)



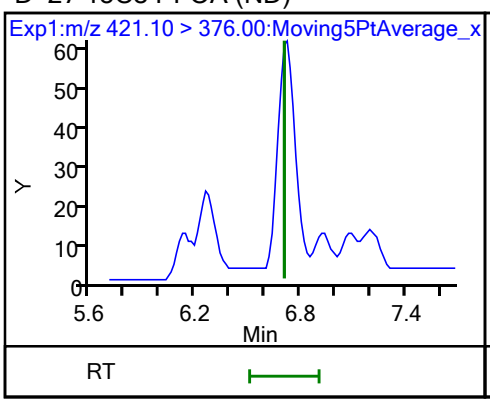
25 6:2FTS (ND)



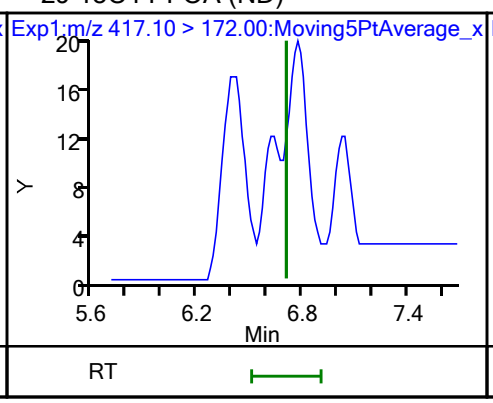
25 6:2FTS (ND)



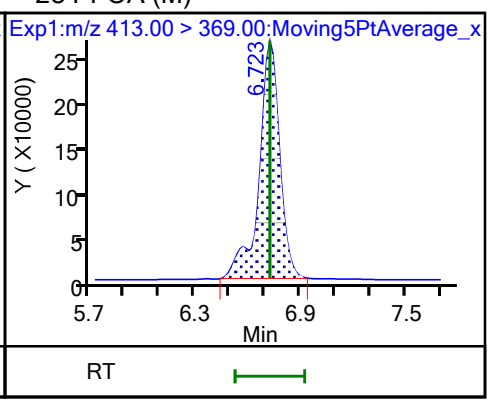
D 27 13C8 PFOA (ND)



* 29 13C4 PFOA (ND)



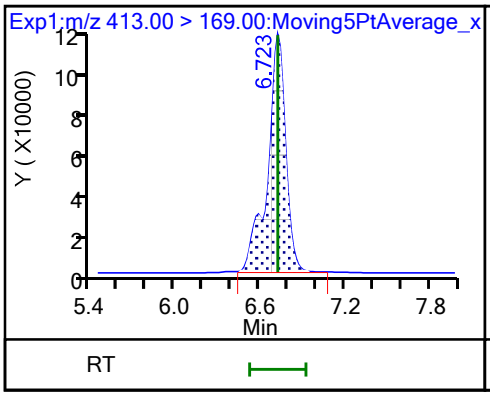
28 PFOA (M)



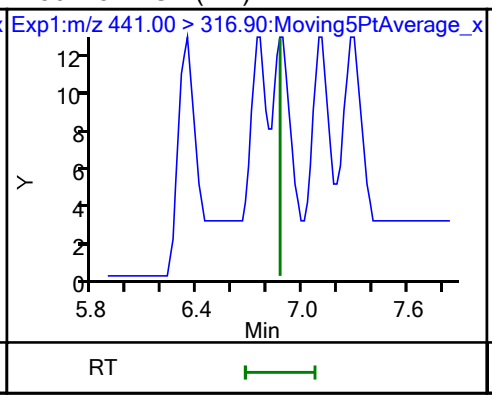
Preliminary Report

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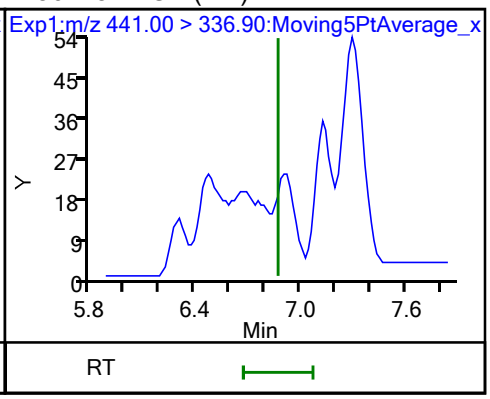
28 PFOA



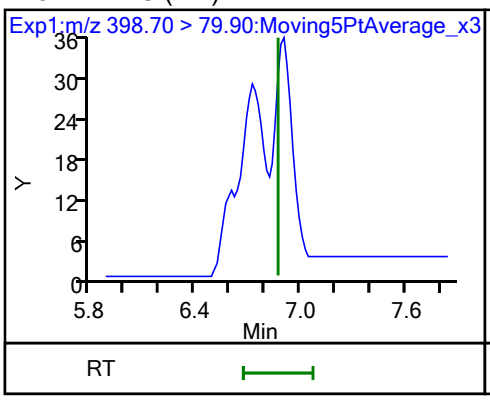
30 7:3 FTCA (ND)



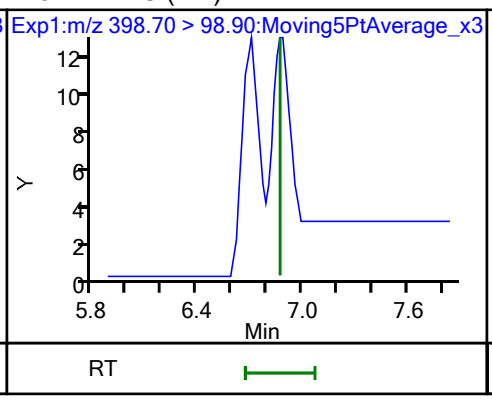
30 7:3 FTCA (ND)



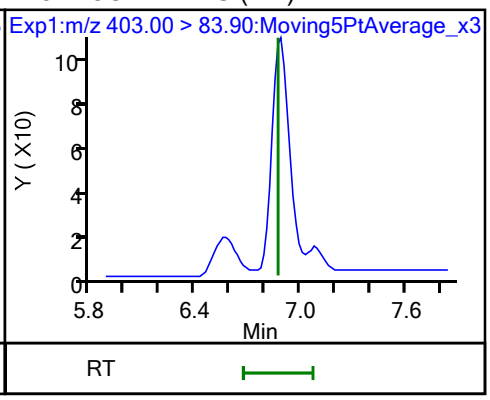
32 PFHxS (ND)



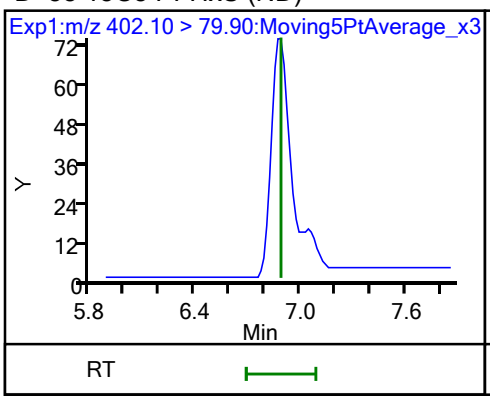
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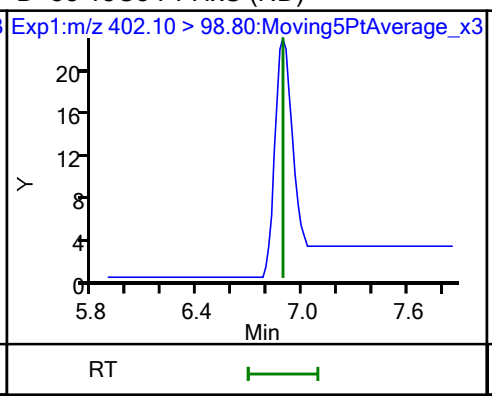
* 31 18O2 PFHxS (ND)



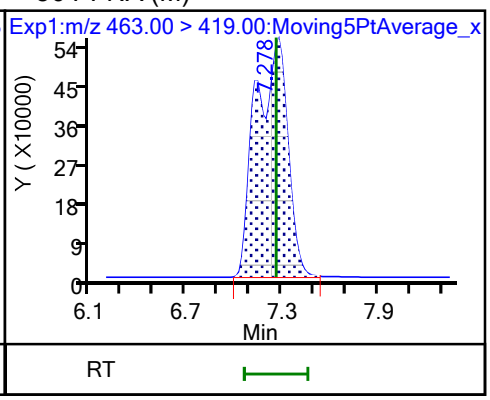
D 33 13C3 PFHxS (ND)



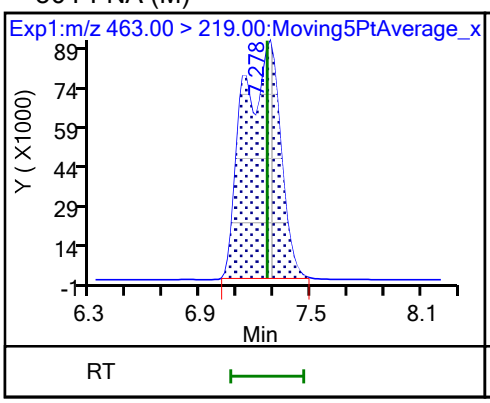
D 33 13C3 PFHxS (ND)



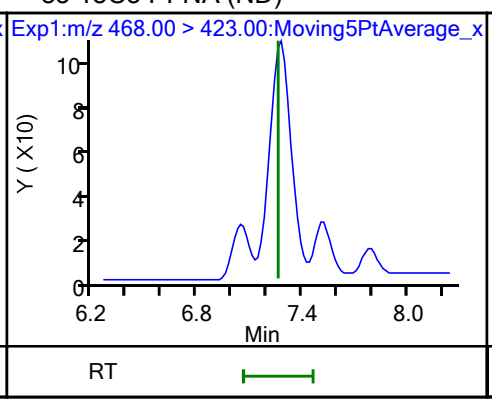
36 PFNA (M)



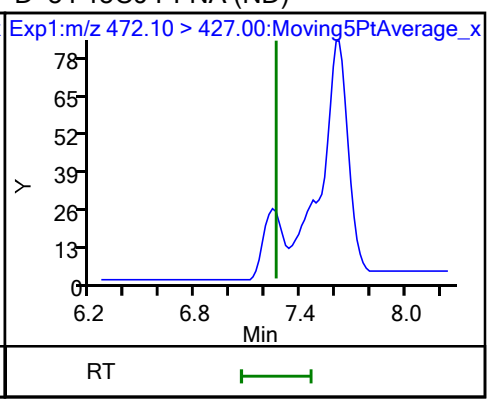
36 PFNA (M)



* 35 13C5 PFNA (ND)



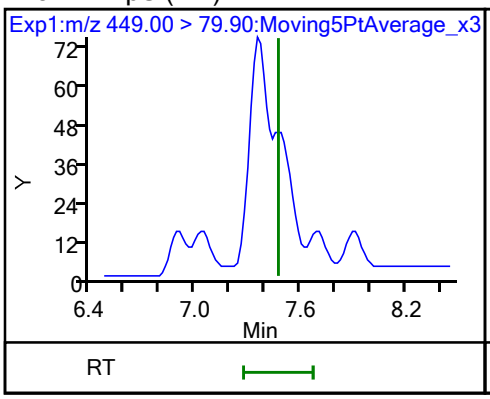
D 34 13C9 PFNA (ND)



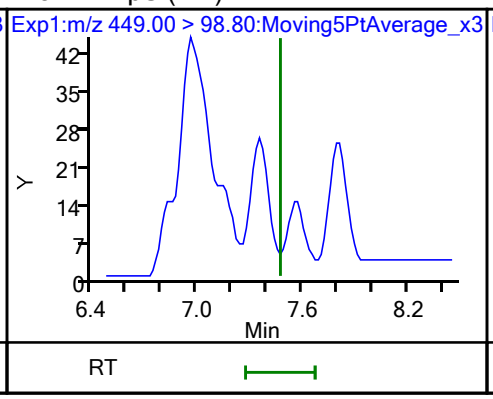
Preliminary Report

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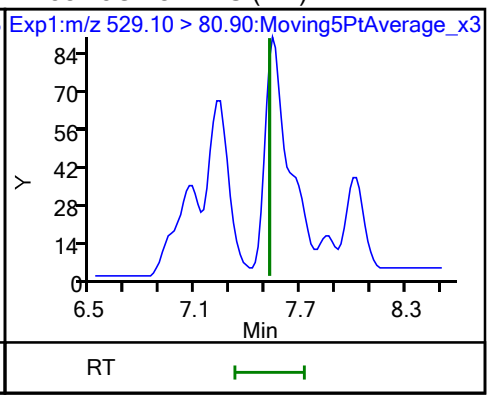
37 PFHpS (ND)



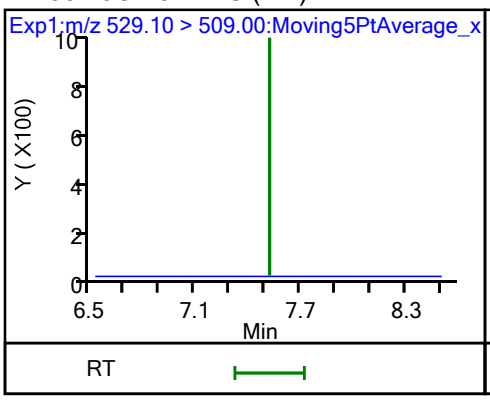
37 PFHpS (ND)



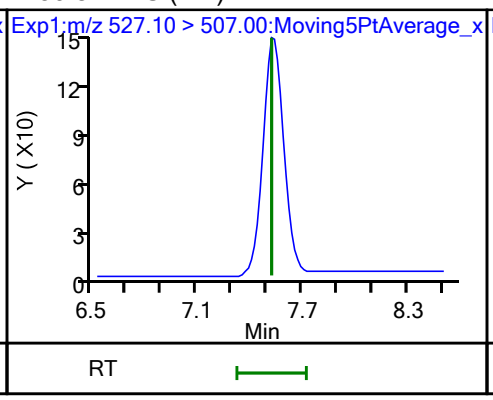
D 38 13C2-8:2FTS (ND)



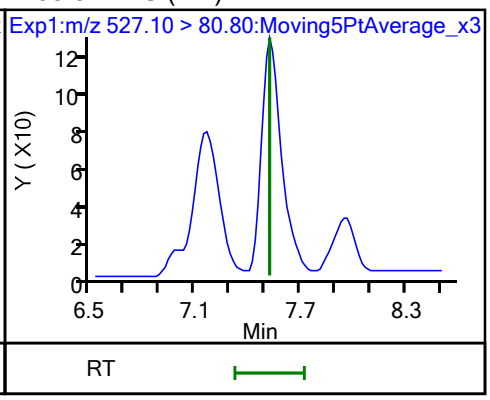
D 38 13C2-8:2FTS (ND)



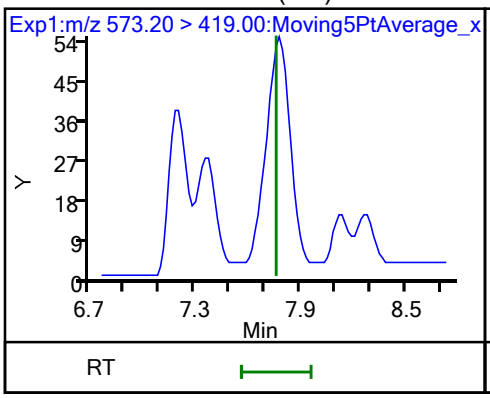
39 8:2FTS (ND)



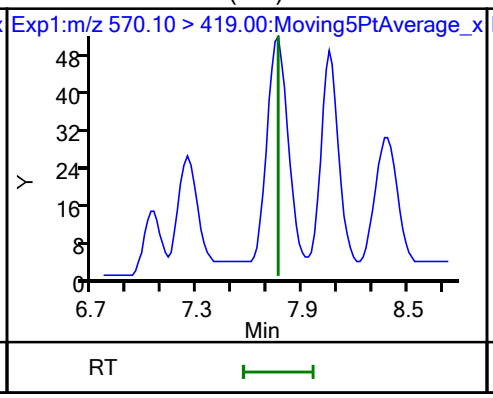
39 8:2FTS (ND)



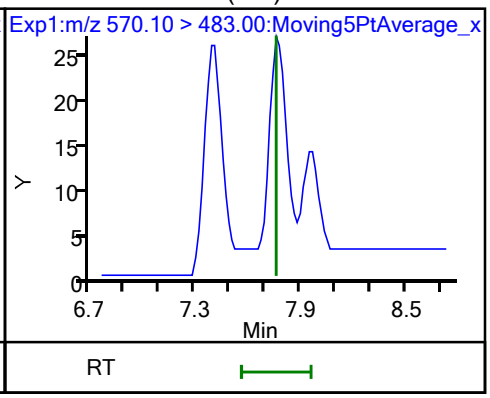
D 41 d3-NMeFOSAA (ND)



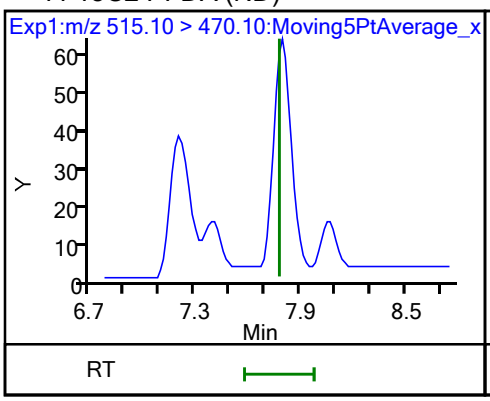
42 NMeFOSAA (ND)



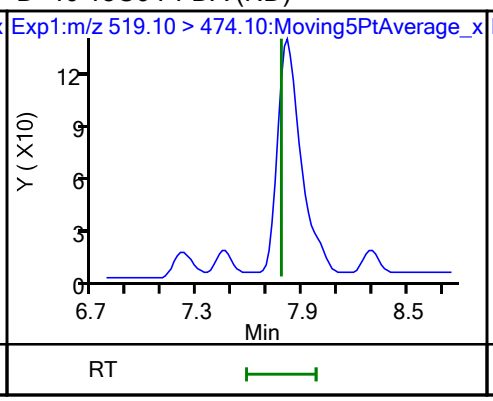
42 NMeFOSAA (ND)



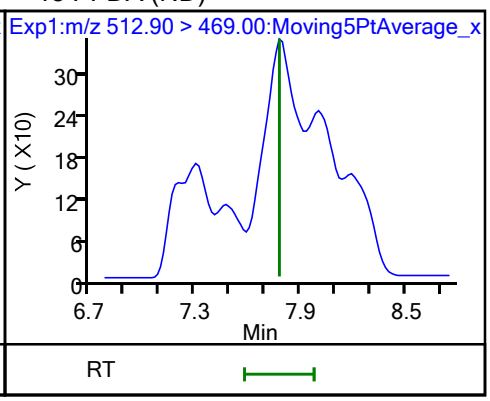
* 44 13C2 PFDA (ND)



D 40 13C6 PFDA (ND)



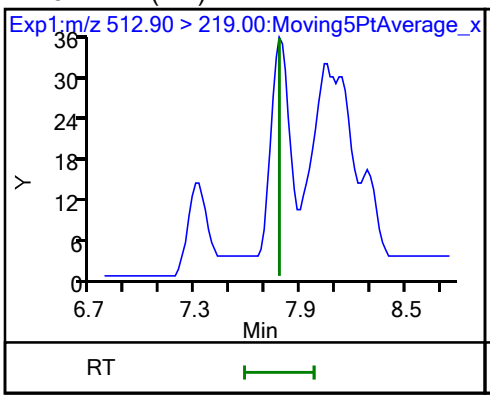
43 PFDA (ND)



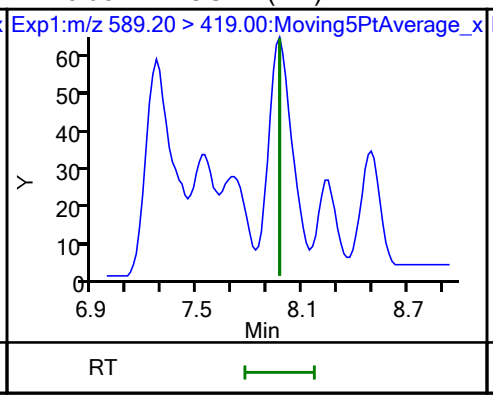
Preliminary Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.008.d

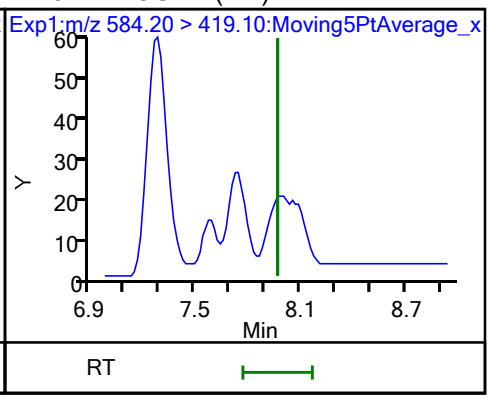
43 PFDA (ND)



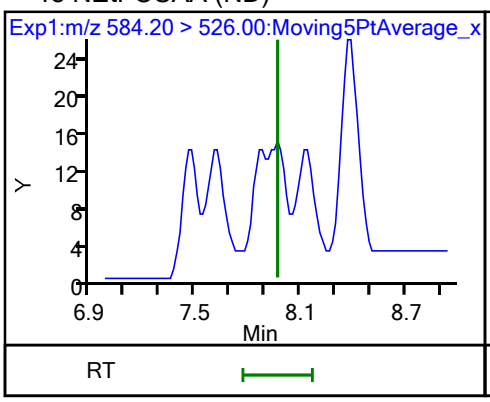
D 46 d5-NEtFOSAA (ND)



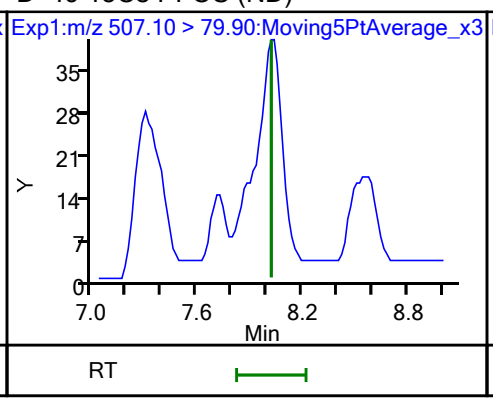
45 NEtFOSAA (ND)



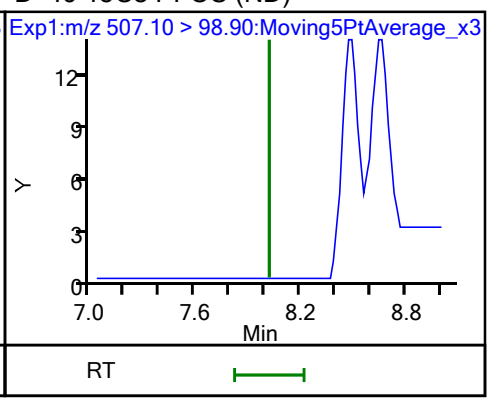
45 NEtFOSAA (ND)



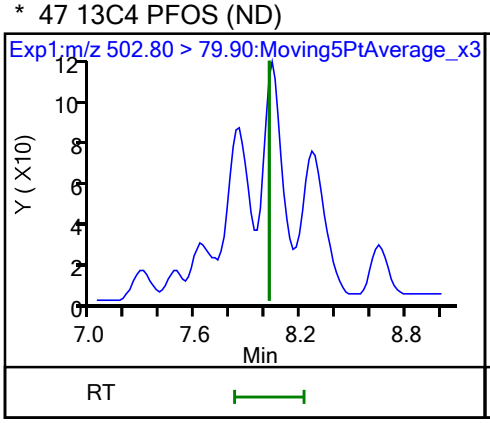
D 49 13C8 PFOS (ND)



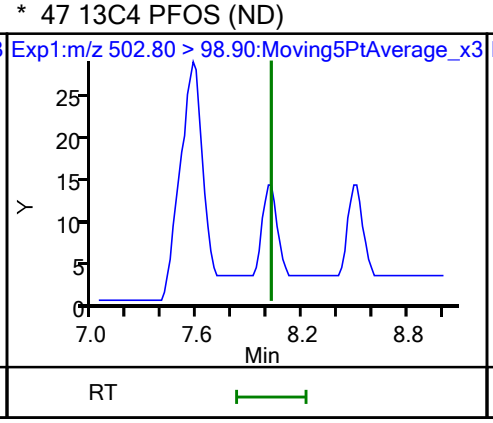
D 49 13C8 PFOS (ND)



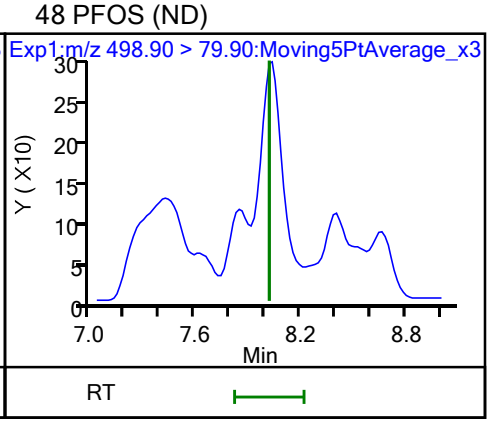
* 47 13C4 PFOS (ND)



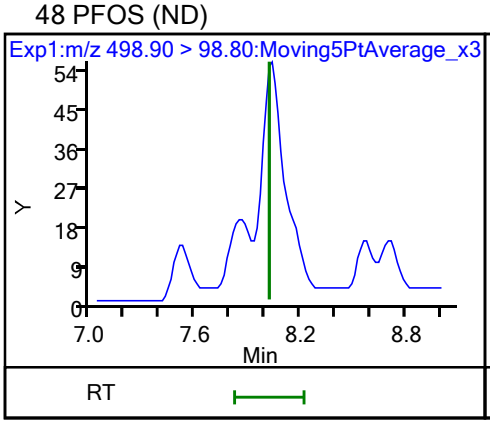
* 47 13C4 PFOS (ND)



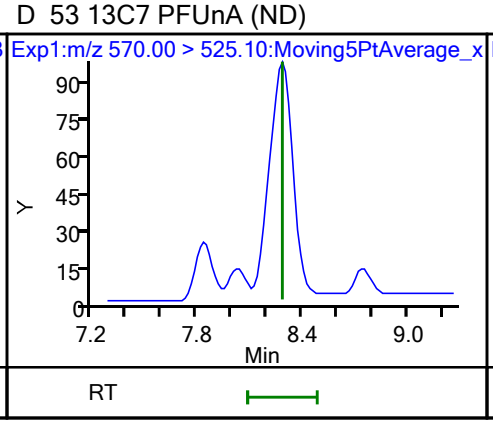
48 PFOS (ND)



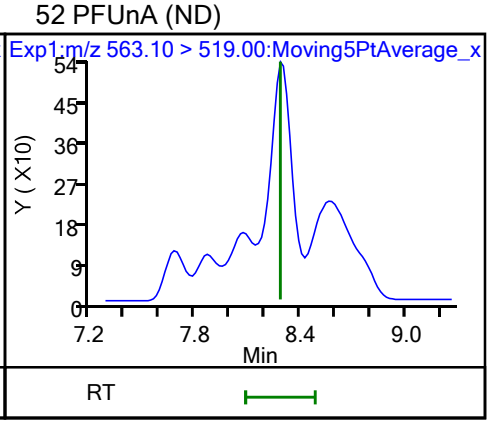
48 PFOS (ND)



D 53 13C7 PFUnA (ND)



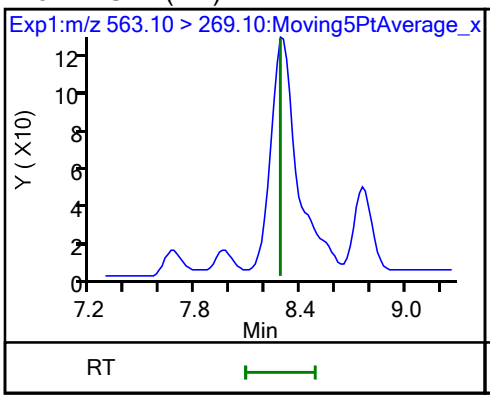
52 PFUnA (ND)



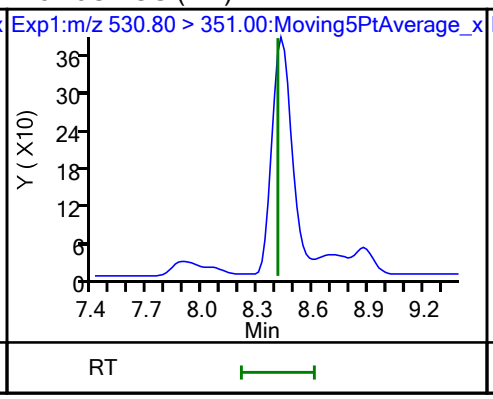
Preliminary Report

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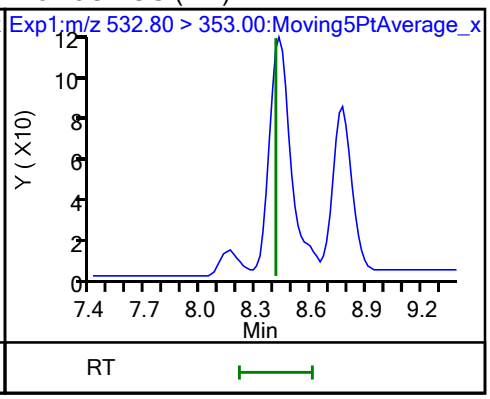
52 PFUnA (ND)



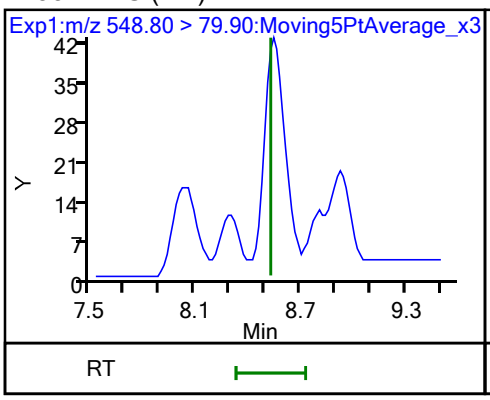
54 9ClFOS (ND)



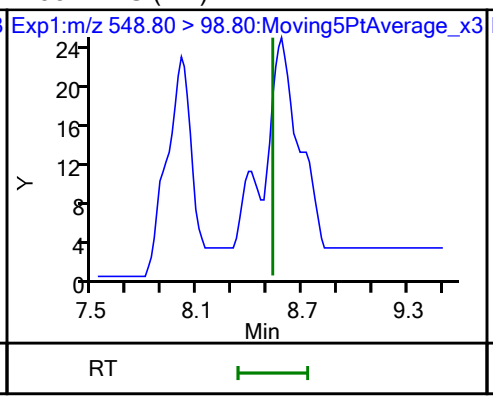
54 9ClFOS (ND)



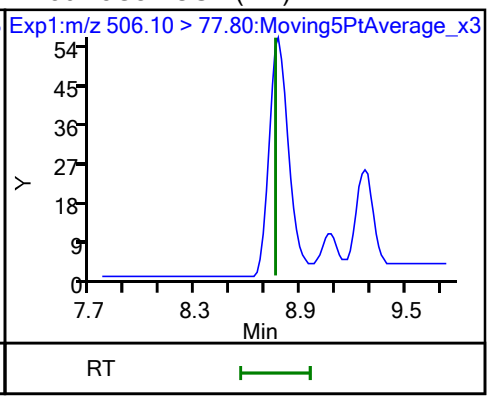
55 PFNS (ND)



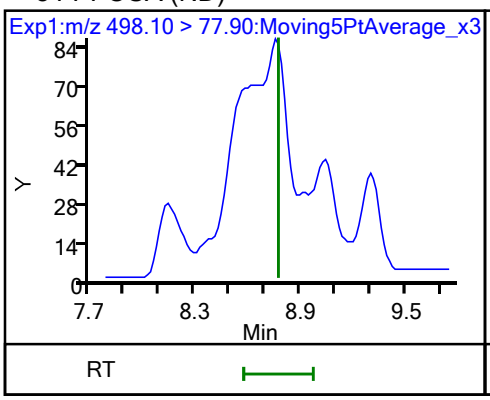
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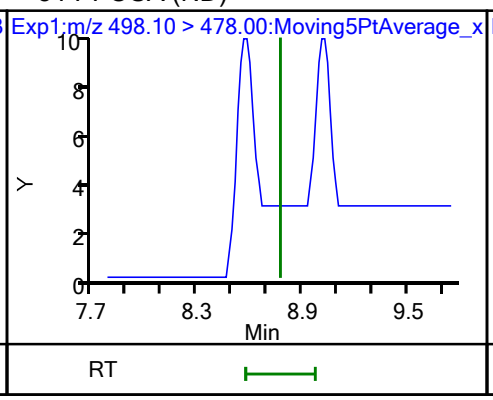
D 50 13C8 FOSA (ND)



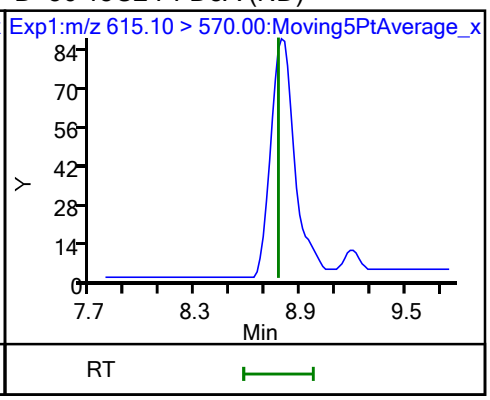
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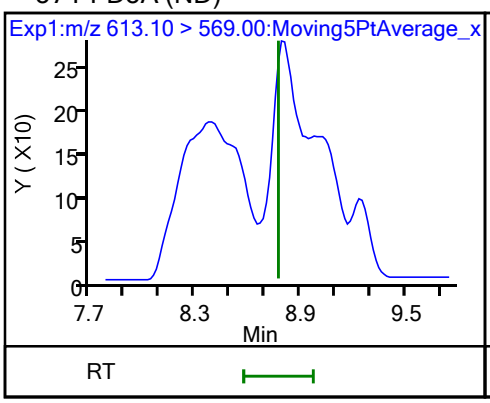
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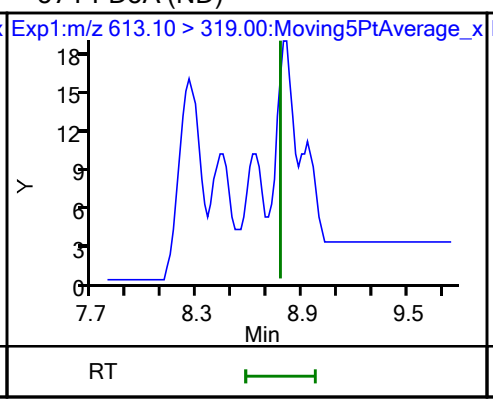
D 56 13C2 PFDoA (ND)



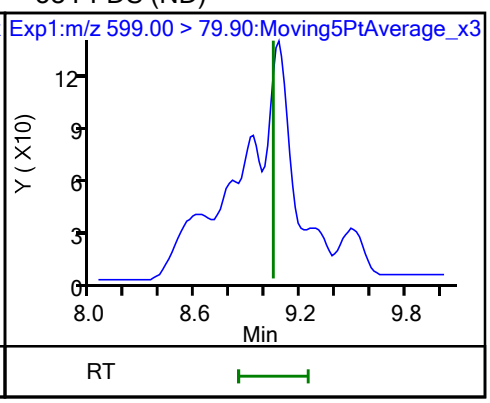
57 PFDoA (ND)



57 PFDoA (ND)



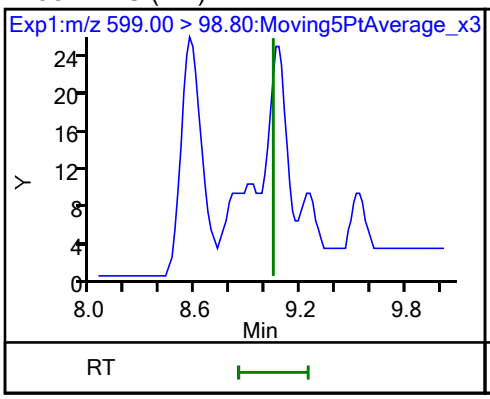
58 PFDS (ND)



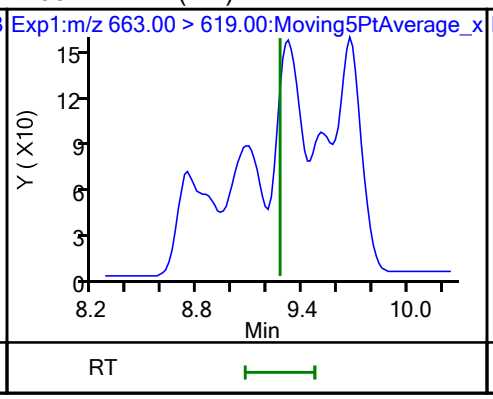
Preliminary Report

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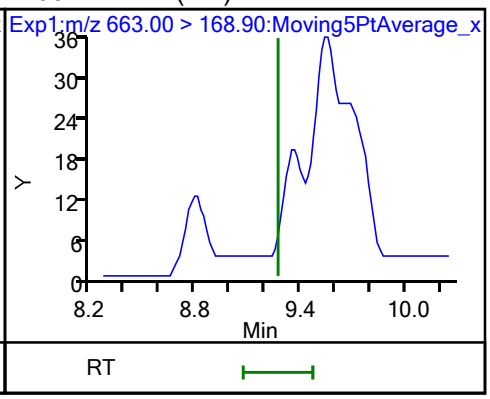
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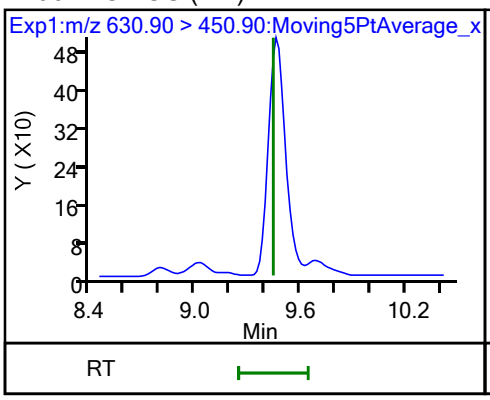
63 PFTrDA (ND)



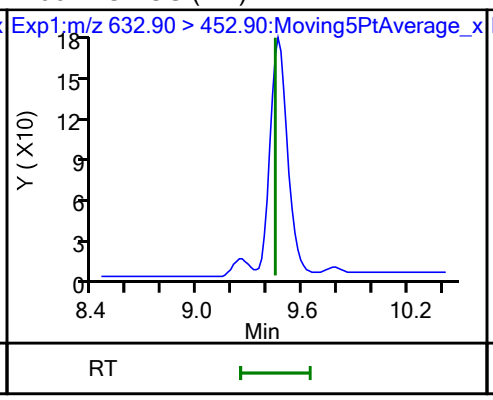
63 PFTrDA (ND)



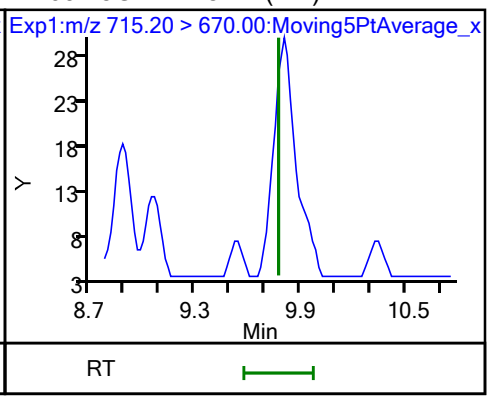
66 11ClFOS (ND)



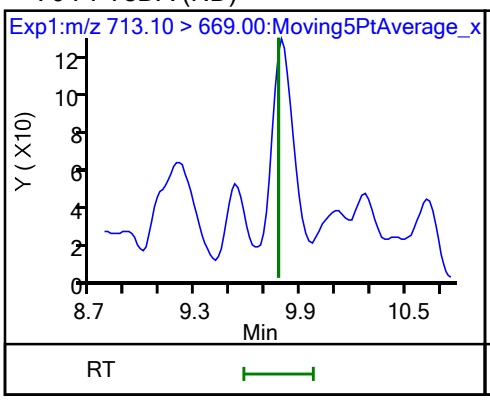
66 11ClFOS (ND)



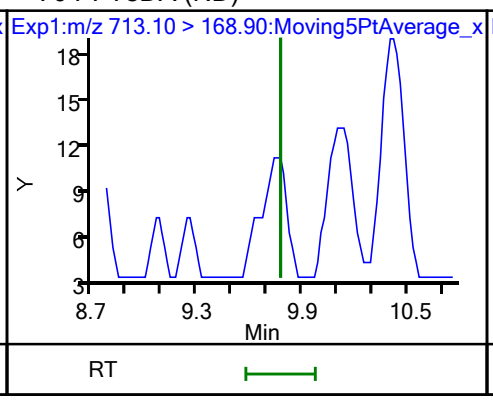
D 69 13C2 PFTeDA (ND)



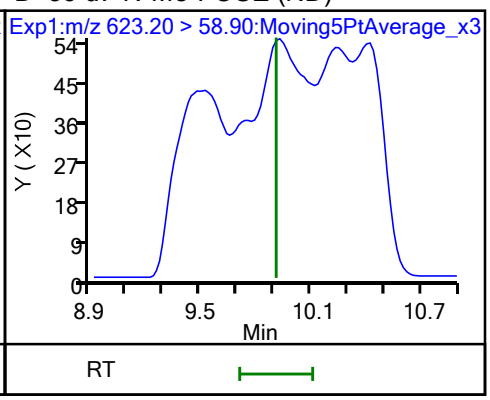
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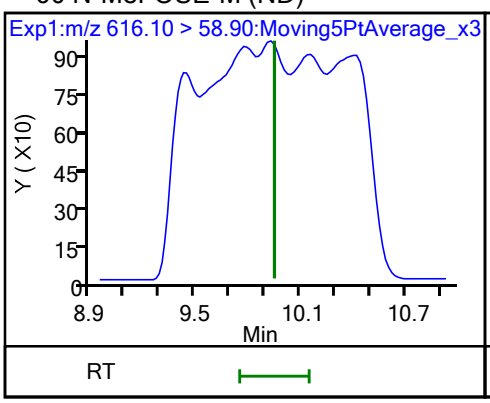
70 PFTeDA (ND)



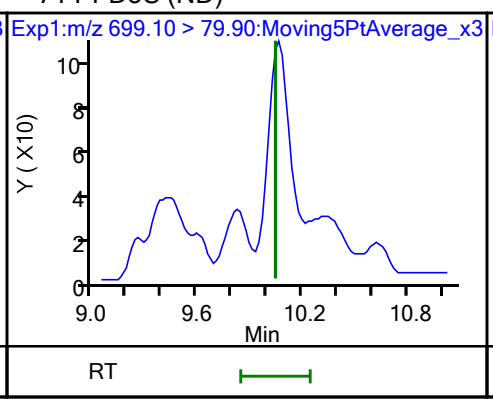
D 59 d7-N-Me-FOSE (ND)



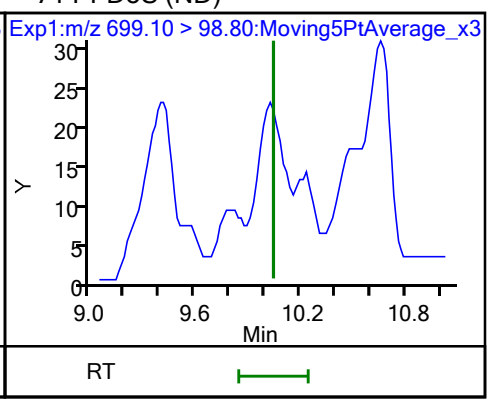
60 N-MeFOSE-M (ND)



71 PFDoS (ND)



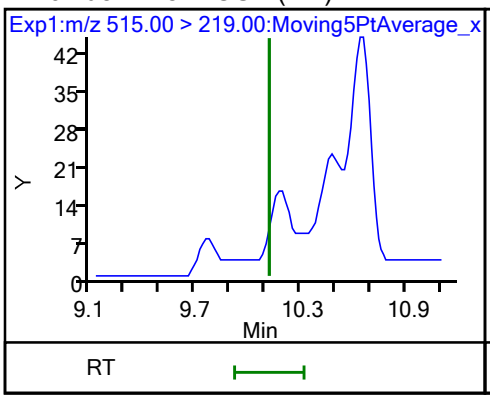
71 PFDoS (ND)



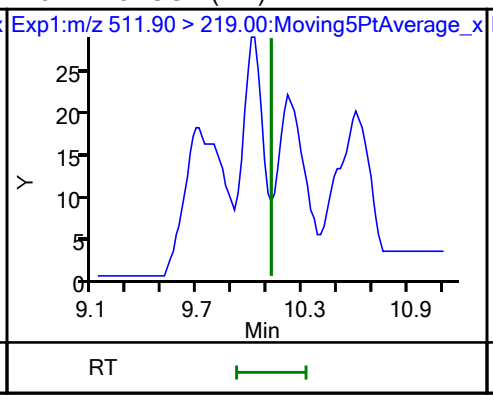
Preliminary Report

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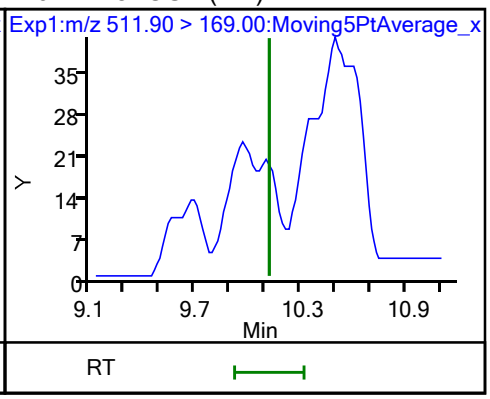
D 62 d3-NMePFOSA (ND)



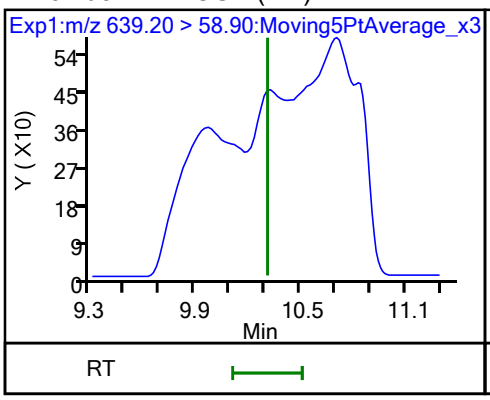
61 NMeFOSA (ND)



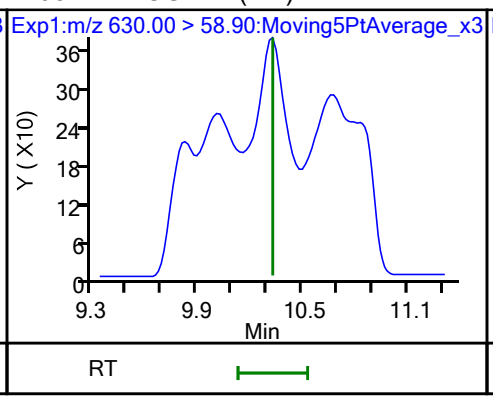
61 NMeFOSA (ND)



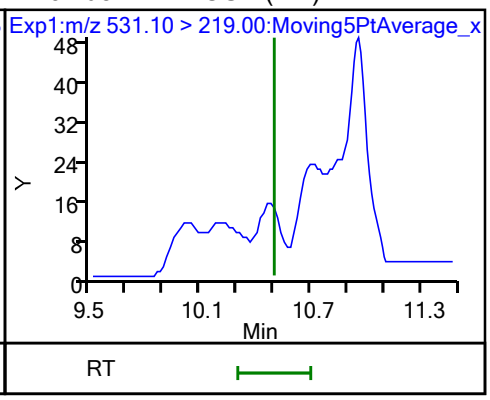
D 64 d9-N-EtFOSE (ND)



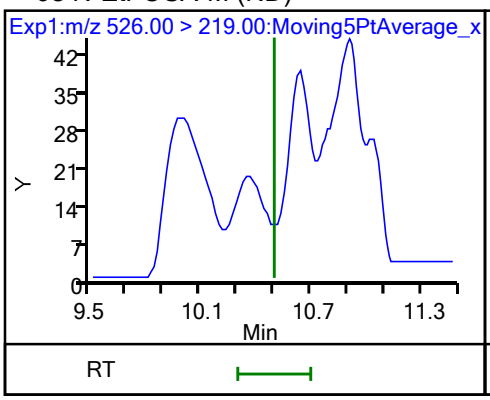
65 N-EtFOSE-M (ND)



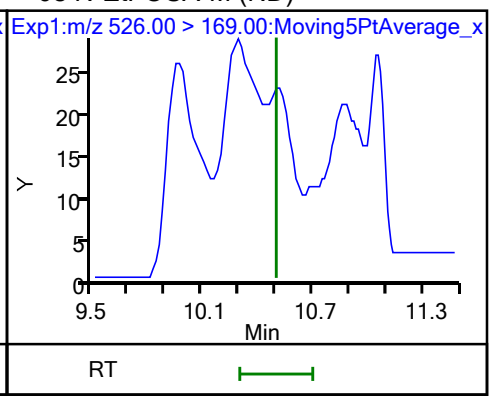
D 67 d5-NEtPFOSA (ND)



68 N-EtFOSA-M (ND)



68 N-EtFOSA-M (ND)



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.003.d
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 28-Nov-2023 12:18:02 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: CCVL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: B5QN Instrument ID: LC_LCMS11
Sublist: chrom-PFC_IDA_DEN11*sub5

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 29-Nov-2023 13:35:20 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1603

First Level Reviewer: B5QN Date: 29-Nov-2023 13:35:20
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.046	3.046	0.0	1.000	5464348	9.73		97.3	49217	
* 1 13C3PFBA										
216.00 > 172.00	3.046	3.046	0.0		2762227	5.00			9717	
2 PFBA										
212.80 > 168.90	3.046	3.046	0.0	1.000	97892	0.2004		100	93.6	
4 PFMPA										
229.00 > 84.90	3.728	3.728	0.0	0.835	164653	0.3857		96.6	1100	
5 3:3 FTCA										
241.00 > 177.00	3.912	3.912	0.0	0.877	46382	0.8492	Target=1.58	85.1	1682	
241.00 > 117.00	3.912	3.912	0.0	0.877	25969		1.79(0.79-2.37)		637	
D 7 13C5 PFPeA										
268.30 > 223.00	4.463	4.463	0.0	0.831	1670794	5.02		100	16876	
6 PFPA										
263.00 > 219.00	4.478	4.478	0.0	1.003	135739	0.2025	Target=212.56	101	267	
263.00 > 68.90	4.463	4.478	-0.015	1.000	1015		133.73(106.28-318.84)		16.0	
8 PFMBA										
279.00 > 85.10	4.778	4.778	0.0	1.071	314275	0.3723		93.2	3772	
10 4:2FTS										
327.10 > 307.00	5.097	5.097	0.0	1.000	49295	0.4328	Target=1.59	87.0	1571	
327.10 > 80.90	5.097	5.097	0.0	1.000	36958		1.33(0.79-2.38)		422	
D 9 13C2-4:2FTS										
329.10 > 80.90	5.097	5.097	0.0	0.742	226466	4.35	Target=4.54	93.1	4067	
329.10 > 309.00	5.097	5.097	0.0	0.742	46927		4.83(2.27-6.81)	93.1	1981	
11 NFDHA										
295.00 > 201.00	5.280	5.280	0.0	0.983	50533	0.1983	Target=1.95	99.3	1652	
295.00 > 84.90	5.280	5.280	0.0	0.983	25127		2.01(0.97-2.92)		468	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 16 13C3 PFBS										
302.10 > 79.90	5.354	5.354	0.0	0.779	736083	2.48	Target=4.56	107	24073	
302.10 > 98.90	5.354	5.354	0.0	0.779	154743		4.76(2.28-6.83)	107	6783	
15 PFBS										
298.70 > 79.90	5.354	5.354	0.0	1.000	41561	0.1475	Target=2.16	83.2	1807	
298.70 > 98.80	5.354	5.354	0.0	1.000	20494		2.03(1.08-3.24)		546	
* 14 13C2 PFHxA										
315.10 > 270.00	5.371	5.371	0.0		1669545	2.50	Target=79.67		31122	
315.10 > 119.40	5.354	5.371	-0.017		23177		72.03(39.83-119.50)		780	
D 12 13C5 PFHxA										
318.00 > 273.00	5.371	5.371	0.0	1.000	2054235	2.74	Target=53.27	110	38250	
318.00 > 120.30	5.371	5.371	0.0	1.000	38599		53.22(26.63-79.90)	110	724	
13 PFHxA										
313.00 > 269.00	5.371	5.371	0.0	1.000	176087	0.1946	Target=18.64	97.5	865	
313.00 > 118.90	5.371	5.371	0.0	1.000	8377		21.02(9.32-27.96)		222	
18 5:3 FTCA										
341.00 > 237.10	5.644	5.644	0.0	1.051	240288	1.61	Target=1.16	80.8	4361	
341.00 > 217.00	5.644	5.644	0.0	1.051	203456		1.18(0.58-1.74)		5146	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.682	5.682	0.0	1.058	2060490	11.3	Target=1.53	113	26558	
286.90 > 184.90	5.682	5.682	0.0	1.058	1236416		1.67(0.76-2.29)	113	17663	
19 HFPO-DA										
284.90 > 168.90	5.682	5.682	0.0	1.000	43832	0.1975	Target=1.75	98.9	1884	
284.90 > 184.90	5.682	5.682	0.0	1.000	24261		1.81(0.87-2.62)		532	
21 PFEESA										
314.80 > 134.90	5.789	5.789	0.0	1.078	322572	0.3224	Target=13.97	90.5	13910	
314.80 > 82.90	5.789	5.789	0.0	1.078	22276		14.48(6.99-20.96)		739	
D 22 13C4 PFHpA										
367.10 > 322.00	6.122	6.122	0.0	1.140	1956302	2.50		99.9	30724	
17 PFHpA										
363.10 > 319.00	6.122	6.122	0.0	1.000	158332	0.2056	Target=3.96	103	553	
363.10 > 169.00	6.122	6.122	0.0	1.000	36833		4.30(1.98-5.95)		665	
23 PFPeS										
349.10 > 79.90	6.223	6.223	0.0	0.903	46675	0.1693	Target=2.70	90.4	1105	
349.10 > 98.90	6.223	6.223	0.0	0.903	15725		2.97(1.35-4.04)		751	
24 ADONA										
376.90 > 250.90	6.355	6.355	0.0	1.118	333149	0.1789	Target=3.02	94.9	7792	
376.90 > 84.80	6.355	6.355	0.0	1.118	100570		3.31(1.51-4.53)		4690	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.471	6.471	0.0	0.942	293946	4.32	Target=4.15	91.0	10470	
429.10 > 409.00	6.471	6.471	0.0	0.942	61656		4.77(2.07-6.22)	91.0	2948	
25 6:2FTS										
427.10 > 407.00	6.471	6.471	0.0	1.000	96004	0.8142	Target=1.93	108	2756	
427.10 > 80.90	6.471	6.471	0.0	1.000	51789		1.85(0.96-2.89)		1477	
D 27 13C8 PFOA										
421.10 > 376.00	6.707	6.707	0.0	1.000	1983087	2.47		98.7	34258	
* 29 13C4 PFOA										
417.10 > 172.00	6.707	6.707	0.0		306943	2.50			10537	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 PFOA										
413.00 > 369.00	6.724	6.724	0.0	1.002	122700	0.1938	Target=2.30	97.0	492	
413.00 > 169.00	6.724	6.724	0.0	1.002	49538		2.48(1.15-3.45)		691	
30 7:3 FTCA										
441.00 > 316.90	6.871	6.871	0.0	1.279	116022	1.69	Target=1.43	84.4	5290	
441.00 > 336.90	6.871	6.871	0.0	1.279	78920		1.47(0.72-2.15)		2669	
32 PFHxS										
398.70 > 79.90	6.871	6.871	0.0	0.998	24528	0.1877	Target=3.86	103	903	
398.70 > 98.90	6.888	6.871	0.017	1.000	6761		3.63(1.93-5.79)		285	
* 31 18O2 PFHxS										
403.00 > 83.90	6.871	6.871	0.0		547606	2.37			18695	
D 33 13C3 PFHxS										
402.10 > 79.90	6.888	6.888	0.0	1.002	580765	2.47	Target=4.11	105	19823	
402.10 > 98.80	6.888	6.888	0.0	1.002	129996		4.47(2.05-6.16)	105	4455	
D 34 13C9 PFNA										
472.10 > 427.00	7.261	7.261	0.0	1.000	1107644	1.28		103	19714	
36 PFNA										
463.00 > 419.00	7.261	7.261	0.0	1.000	186656	0.2098	Target=6.02	105	1282	
463.00 > 219.00	7.261	7.261	0.0	1.000	30659		6.09(3.01-9.04)		966	
* 35 13C5 PFNA										
468.00 > 423.00	7.261	7.261	0.0		1140968	1.25			23551	
37 PFHpS										
449.00 > 79.90	7.473	7.473	0.0	0.932	34809	0.1763	Target=4.91	92.8	1224	
449.00 > 98.80	7.473	7.473	0.0	0.932	8690		4.01(2.46-7.37)		417	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.522	7.522	0.0	1.095	358715	4.35	Target=5.49	90.8	16791	
529.10 > 509.00	7.522	7.522	0.0	1.095	59134		6.07(2.74-8.23)	90.8	2821	
39 8:2FTS										
527.10 > 507.00	7.522	7.522	0.0	1.000	81540	0.7493	Target=1.56	97.9	3835	
527.10 > 80.80	7.522	7.522	0.0	1.000	48639		1.68(0.78-2.33)		1731	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.761	7.761	0.0	0.968	511781	4.68		93.6	13529	
42 NMeFOSAA										
570.10 > 419.00	7.761	7.761	0.0	1.000	23287	0.2272	Target=1.15	114	673	
570.10 > 483.00	7.761	7.761	0.0	1.000	20838		1.12(0.58-1.73)		768	
43 PFDA										
512.90 > 469.00	7.779	7.779	0.0	1.000	129976	0.1746	Target=3.33	87.4	1256	
512.90 > 219.00	7.779	7.779	0.0	1.000	41417		3.14(1.67-5.00)		1125	
* 44 13C2 PFDA										
515.10 > 470.10	7.779	7.779	0.0		1149256	1.25			19284	
D 40 13C6 PFDA										
519.10 > 474.10	7.779	7.779	0.0	1.000	1132453	1.24		99.1	30369	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.969	7.969	0.0	0.994	565843	4.47		89.4	8463	
45 NEtFOSAA										
584.20 > 419.10	7.969	7.969	0.0	1.000	16999	0.2065	Target=1.55	103	668	
584.20 > 526.00	7.969	7.969	0.0	1.000	12255		1.39(0.77-2.32)		450	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 49 13C8 PFOS										
507.10 > 79.90	8.021	8.021	0.0	1.000	263904	2.26	Target=2.95	94.5	1153	
507.10 > 98.90	8.021	8.021	0.0	1.000	92097		2.87(1.47-4.42)	94.5	3128	
* 47 13C4 PFOS										
502.80 > 79.90	8.021	8.021	0.0		779115	2.40	Target=3.78		21022	
502.80 > 98.90	8.021	8.021	0.0		194993		4.00(1.89-5.67)		6605	
48 PFOS										
498.90 > 79.90	8.021	8.021	0.0	1.000	69489	0.1931	Target=4.86	104	1083	
498.90 > 98.80	8.021	8.021	0.0	1.000	15036		4.62(2.43-7.28)		604	
D 53 13C7 PFUnA										
570.00 > 525.10	8.285	8.285	0.0	1.065	1245668	1.22		97.7	27177	
52 PFUnA										
563.10 > 519.00	8.285	8.285	0.0	1.000	166992	0.1894	Target=5.72	94.8	1693	
563.10 > 269.10	8.285	8.285	0.0	1.000	30554		5.47(2.86-8.59)		1031	
54 9ClFOS										
530.80 > 351.00	8.408	8.408	0.0	1.480	164918	0.4426	Target=2.23	89.1	4385	
532.80 > 353.00	8.408	8.408	0.0	1.480	83286		1.98(1.11-3.34)		2222	
55 PFNS										
548.80 > 79.90	8.529	8.529	0.0	1.063	27057	0.1840	Target=4.00	95.8	1198	
548.80 > 98.80	8.529	8.529	0.0	1.063	8545		3.17(2.00-6.00)		292	
D 50 13C8 FOSA										
506.10 > 77.80	8.756	8.756	0.0	1.092	1328491	2.35		93.9	19123	
51 PFOSA										M
498.10 > 77.90	8.773	8.773	0.0	1.002	105911	0.2002	Target=41.88	100	2219	M
498.10 > 478.00	8.773	8.773	0.0	1.002	2361		44.86(20.94-62.83)		101	M
D 56 13C2 PFDoA										
615.10 > 570.00	8.773	8.773	0.0	1.128	1297045	1.29		103	28679	
57 PFDoA										
613.10 > 569.00	8.773	8.773	0.0	1.000	201992	0.1937	Target=7.45	97.0	2054	
613.10 > 319.00	8.773	8.773	0.0	1.000	24194		8.35(3.73-11.18)		798	
58 PFDS										
599.00 > 79.90	9.044	9.044	0.0	1.128	69635	0.2050	Target=4.54	106	1407	
599.00 > 98.80	9.044	9.044	0.0	1.128	11903		5.85(2.27-6.82)		570	
63 PFTrDA										
663.00 > 619.00	9.271	9.271	0.0	0.949	124703	0.1904	Target=5.19	95.3	1566	
663.00 > 168.90	9.271	9.271	0.0	0.949	23292		5.35(2.59-7.78)		664	
66 11ClFOS										
630.90 > 450.90	9.444	9.444	0.0	1.662	256278	0.4316	Target=3.47	86.0	12155	
632.90 > 452.90	9.444	9.444	0.0	1.662	77829		3.29(1.74-5.21)		3721	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.774	9.774	0.0	1.257	603379	1.26		101	15920	
70 PFTeDA										
713.10 > 669.00	9.774	9.774	0.0	1.000	110681	0.1974	Target=6.88	98.8	1344	
713.10 > 168.90	9.774	9.774	0.0	1.000	14645		7.56(3.44-10.32)		652	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.910	9.910	0.0	1.236	10043044	24.2		96.6	55935	
60 N-MeFOSE-M										M
616.10 > 58.90	9.950	9.950	0.0	1.004	466158	1.06		106	708	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
71 PFDoS										
699.10 > 79.90	10.045	10.045	0.0	1.252	55148	0.2029	Target=4.14	105	1116	
699.10 > 98.80	10.045	10.045	0.0	1.252	10015		5.51(2.07-6.21)		248	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.120	10.120	0.0	1.262	304614	2.38		95.1	7400	
61 NMeFOSA										M
511.90 > 219.00	10.120	10.120	0.0	1.000	23785	0.2041	Target=0.98	102	576	M
511.90 > 169.00	10.120	10.120	0.0	1.000	23521		1.01(0.49-1.47)		523	M
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.310	10.310	0.0	1.285	13492105	26.0		104	95167	
65 N-EtFOSE-M										M
630.00 > 58.90	10.329	10.329	0.0	1.002	1154314	2.05		103	2348	M
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.500	10.500	0.0	1.309	305212	2.32		92.8	3477	
68 N-EtFOSA-M										M
526.00 > 219.00	10.500	10.500	0.0	1.000	25830	0.1976	Target=0.99	98.9	433	M
526.00 > 169.00	10.500	10.500	0.0	1.000	24924		1.04(0.50-1.49)		459	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

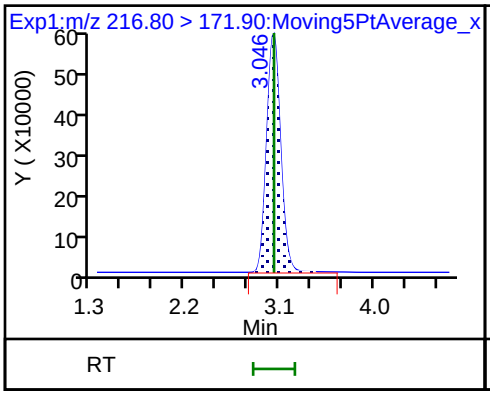
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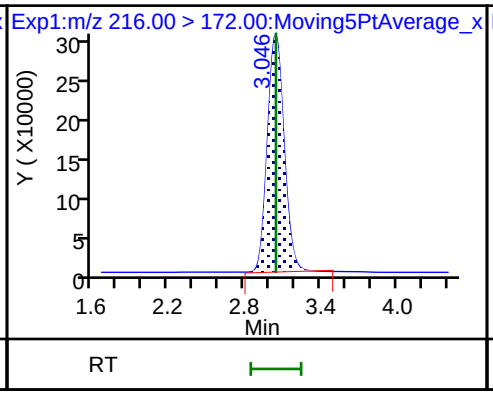
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.003.d
Injection Date: 28-Nov-2023 12:18:02 Instrument ID: LC_LCMS11
Lims ID: CCVL
Client ID:
Operator ID: B5QN ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5

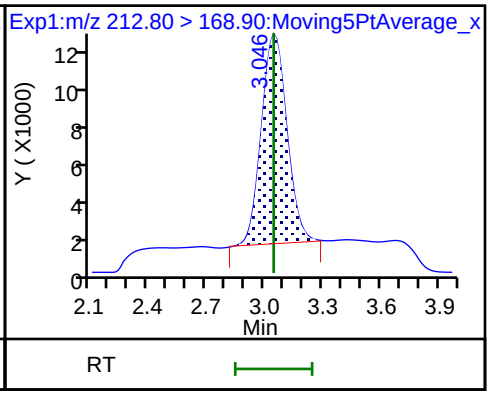
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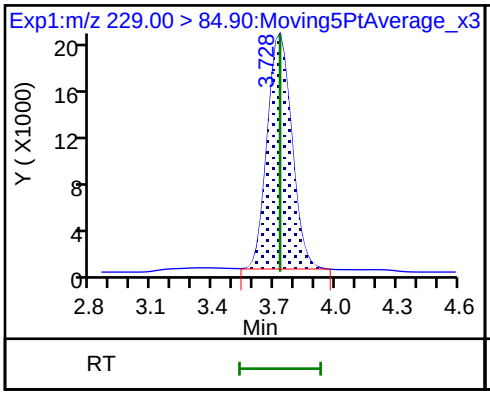
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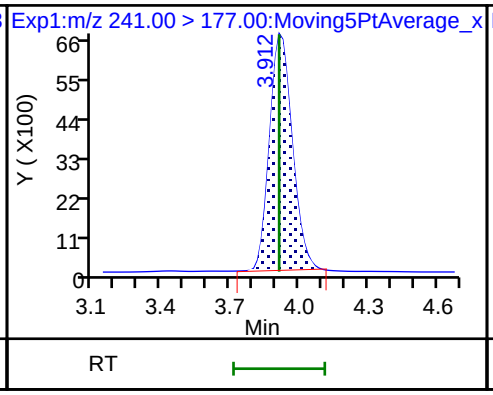
2 PFBA



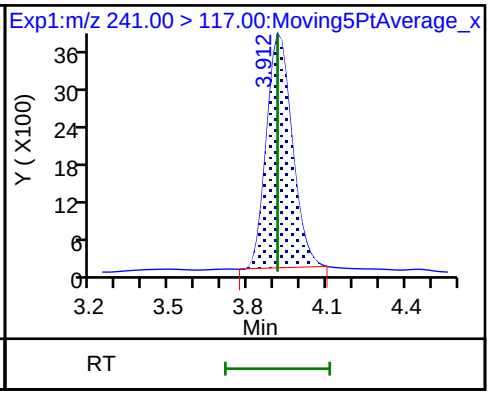
4 PFMPA



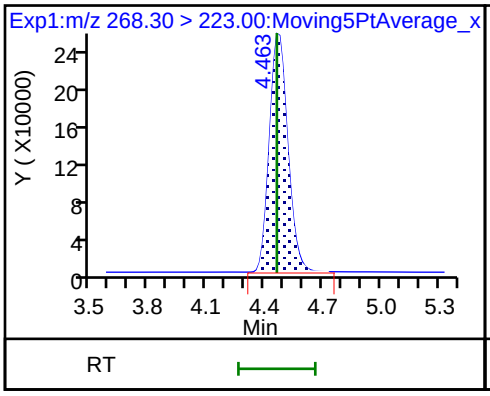
5 3:3 FTCA



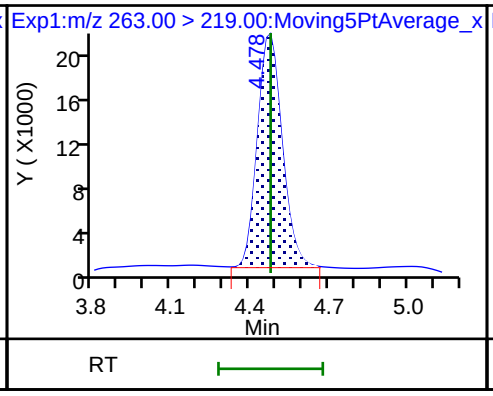
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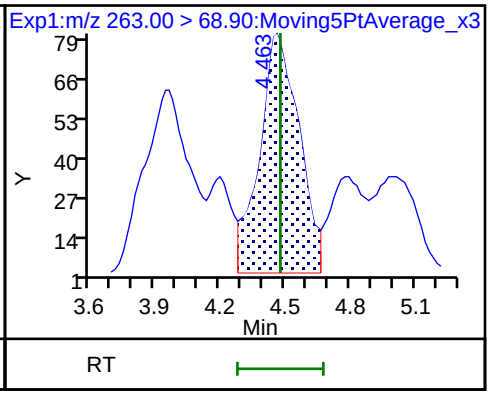
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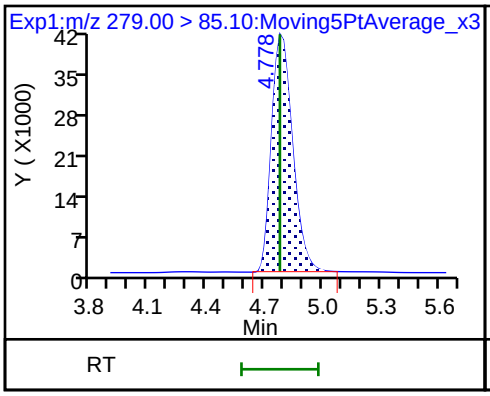
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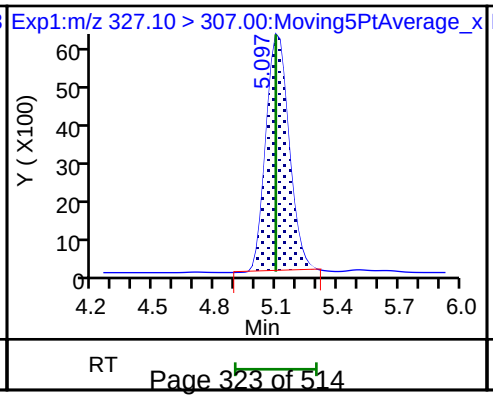
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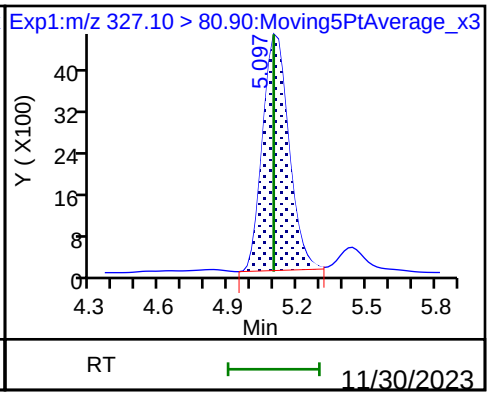
8 PFMBA



10 4:2FTS

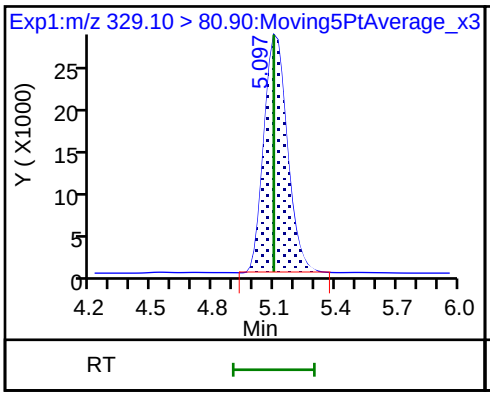


10 4:2FTS

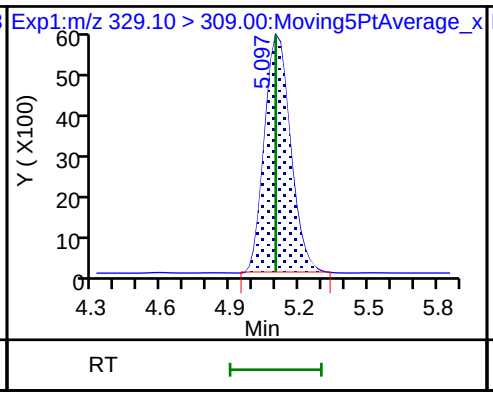


11/30/2023
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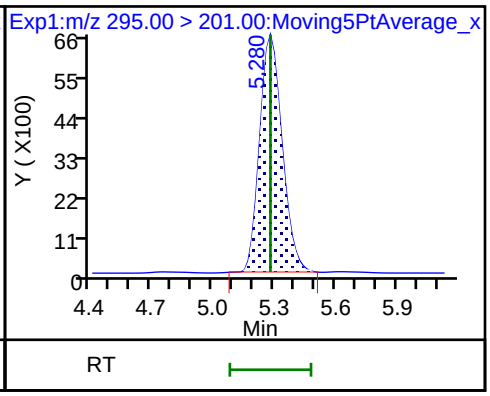
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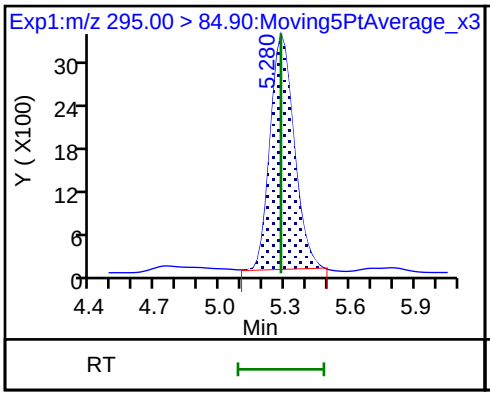
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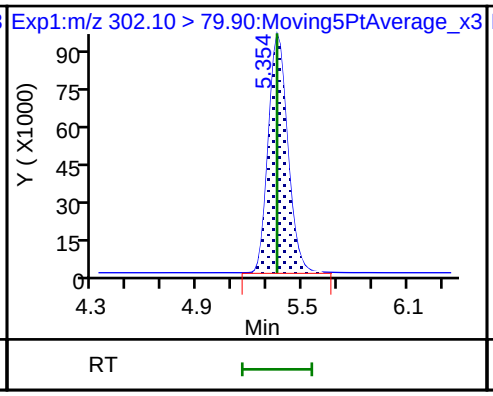
11 NFDHA



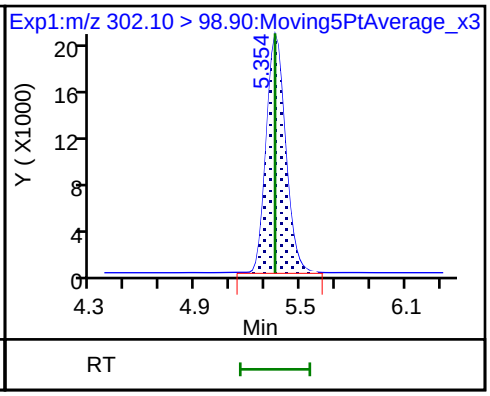
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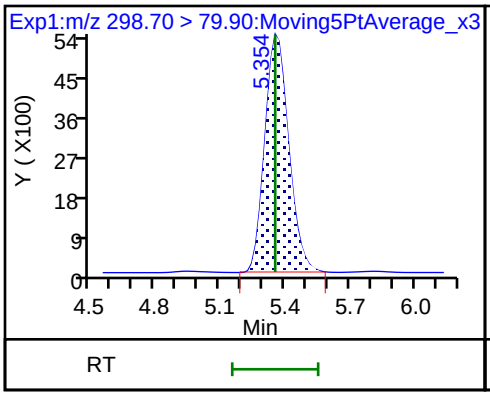
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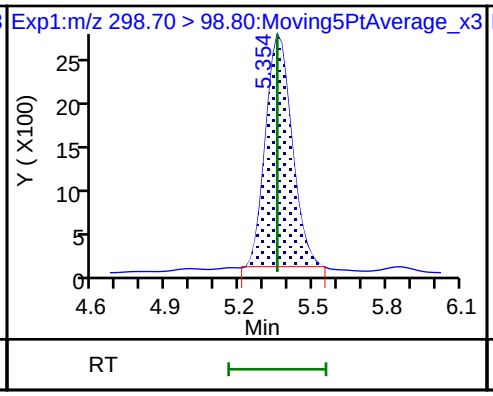
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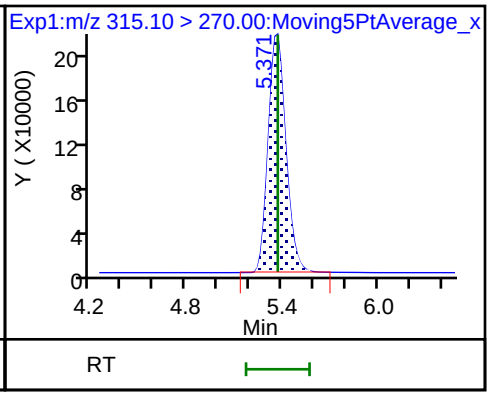
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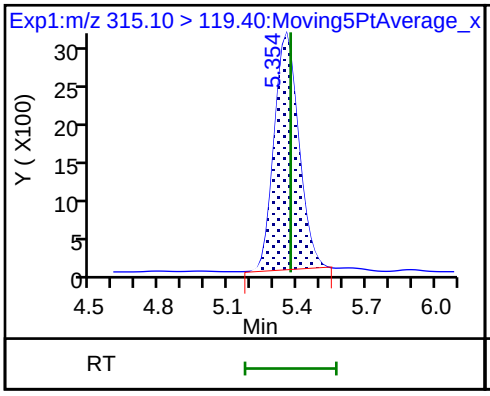
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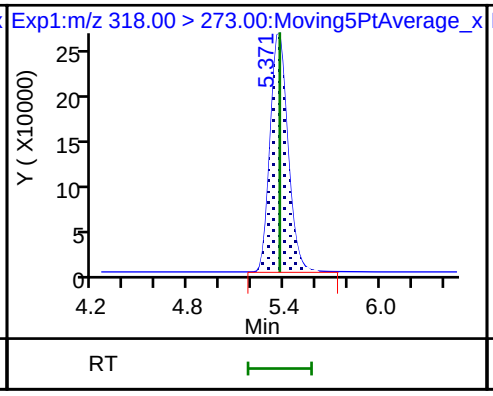
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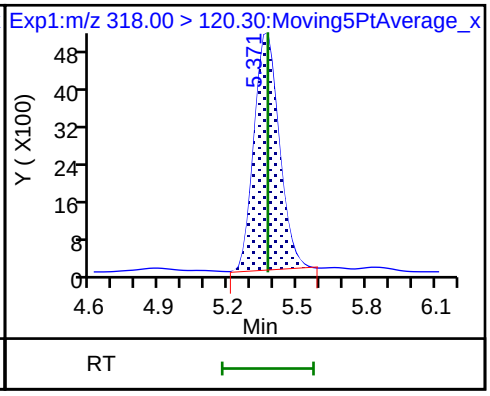
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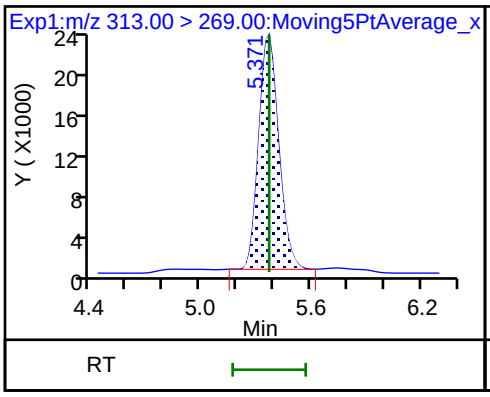
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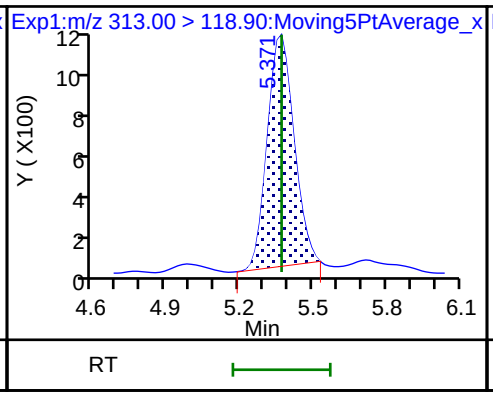
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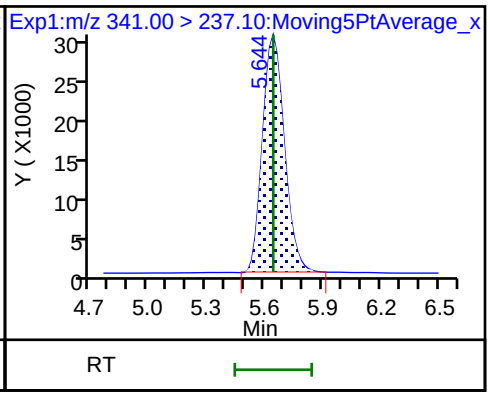
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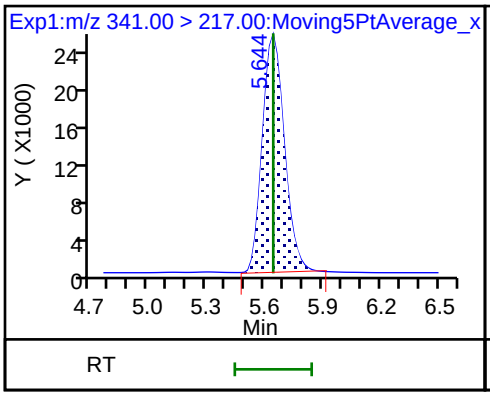
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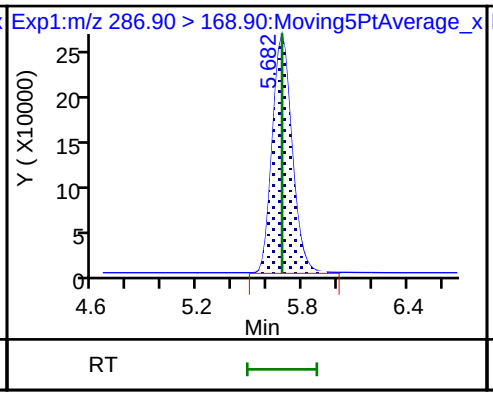
18 5:3 FTCA



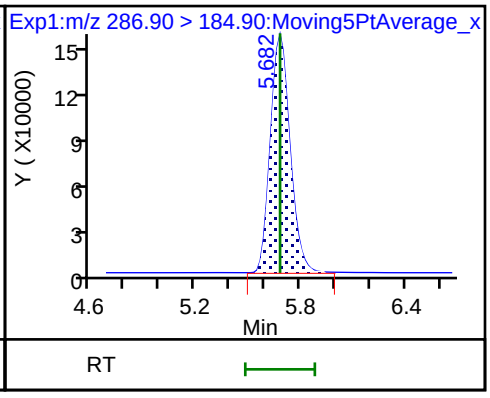
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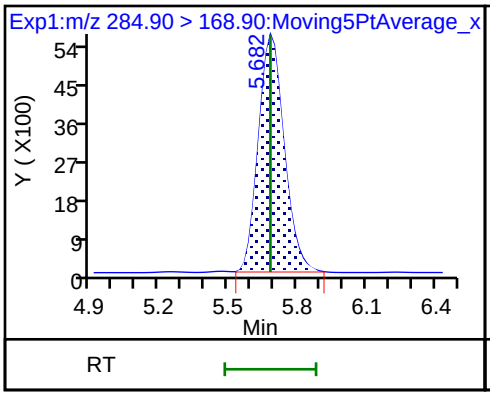
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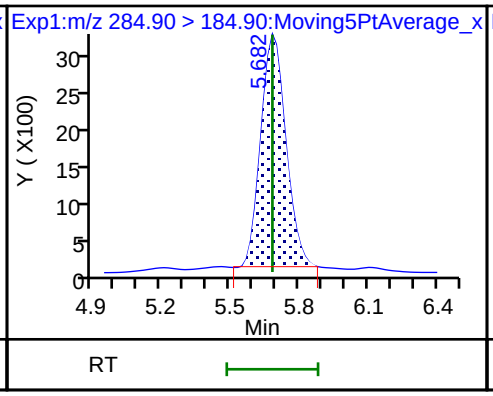
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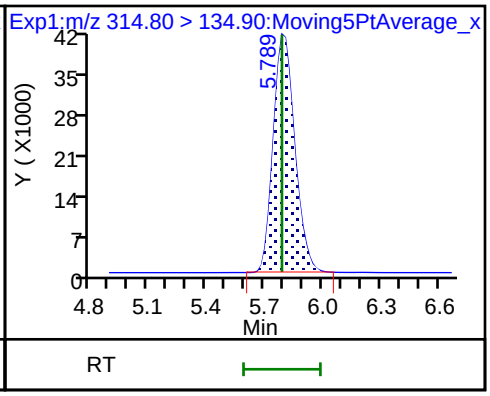
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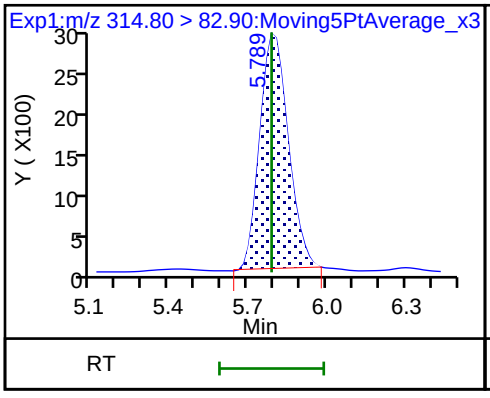
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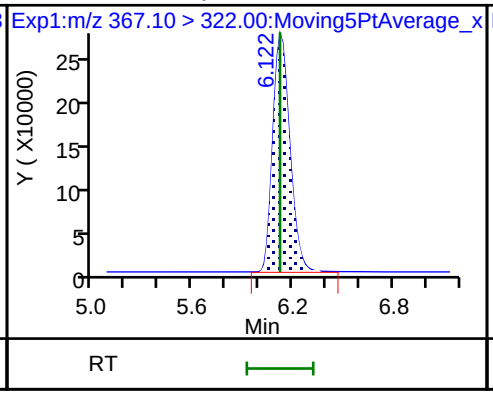
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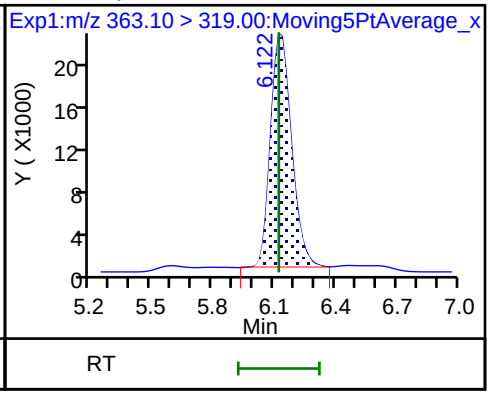
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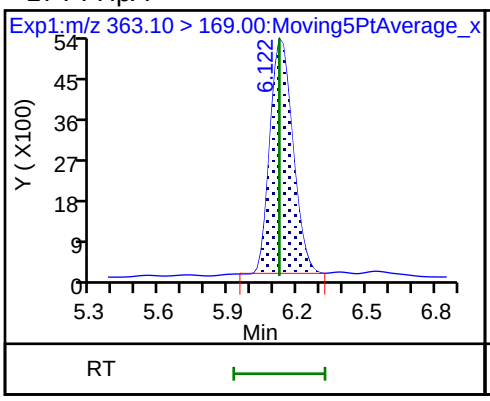
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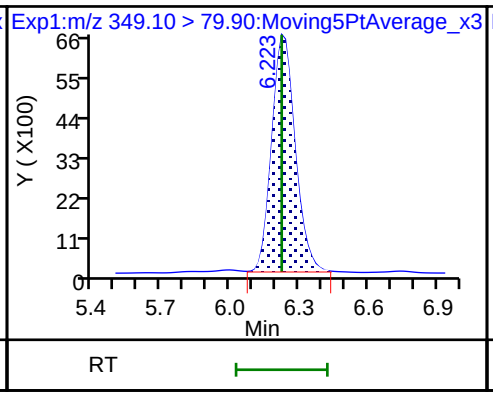
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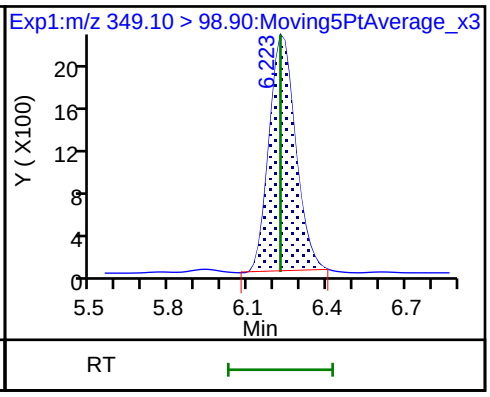
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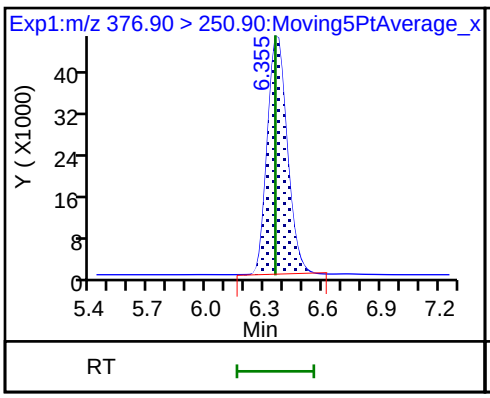
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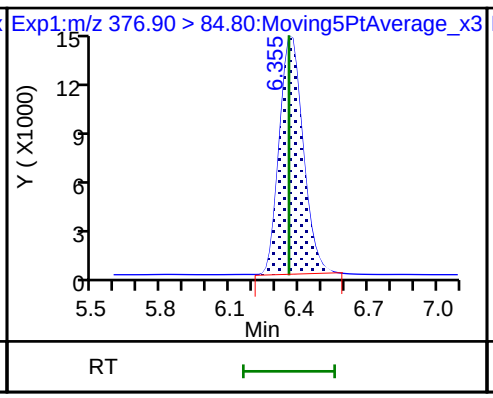
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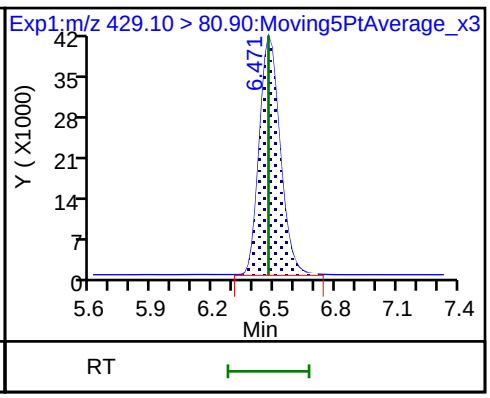
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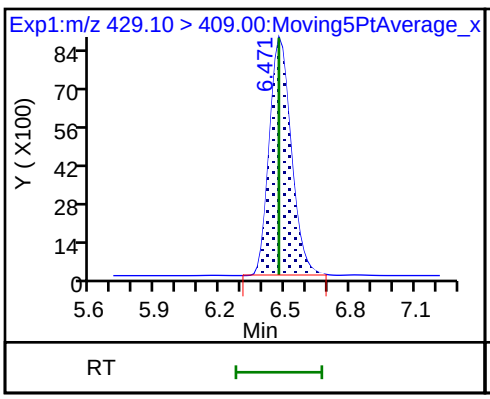
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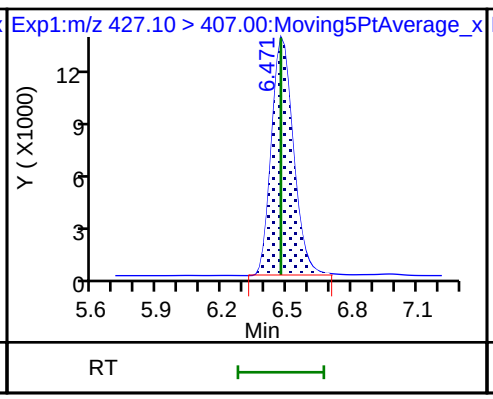
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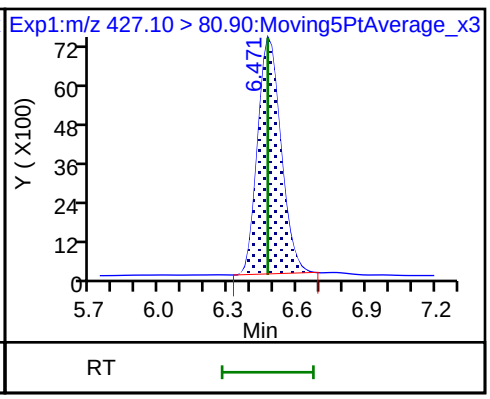
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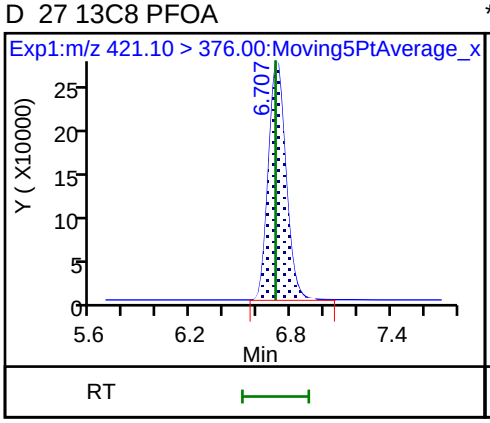
25 6:2FTS



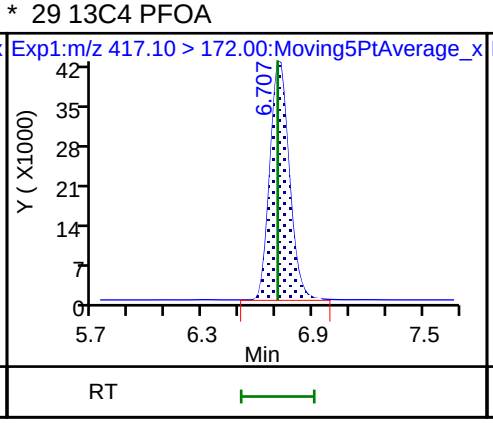
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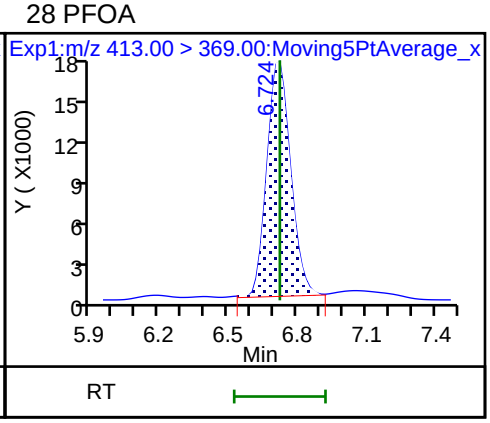
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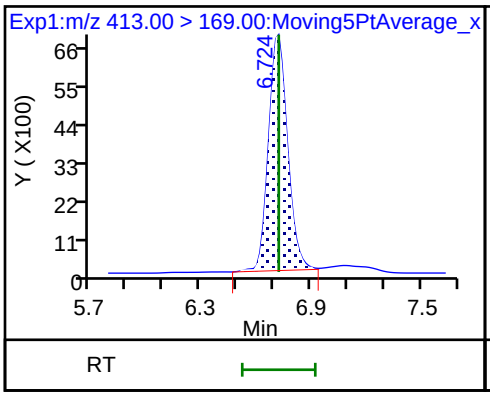
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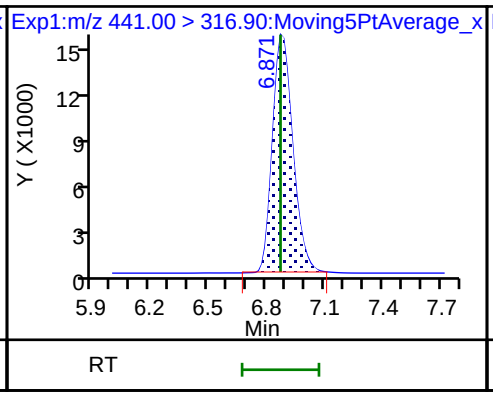
28 PFOA



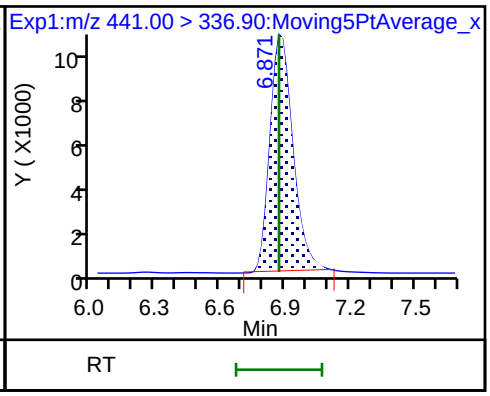
28 PFOA



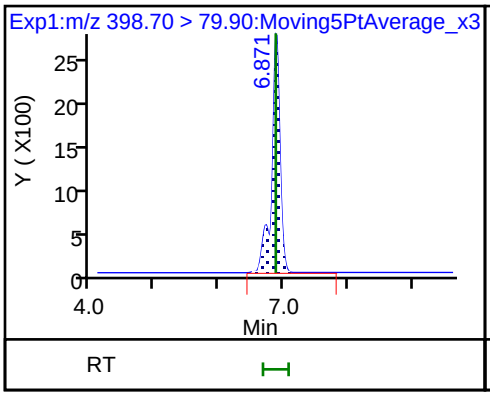
30 7:3 FTCA



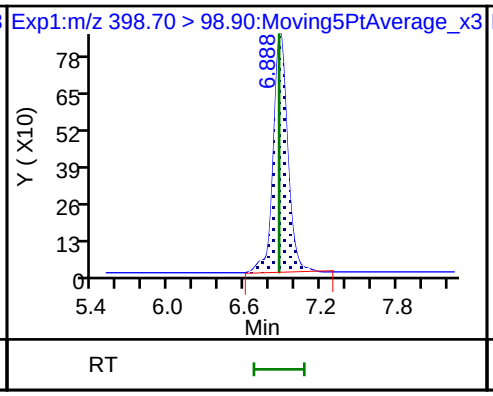
30 7:3 FTCA



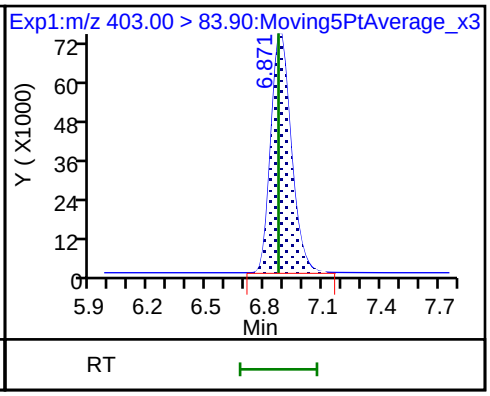
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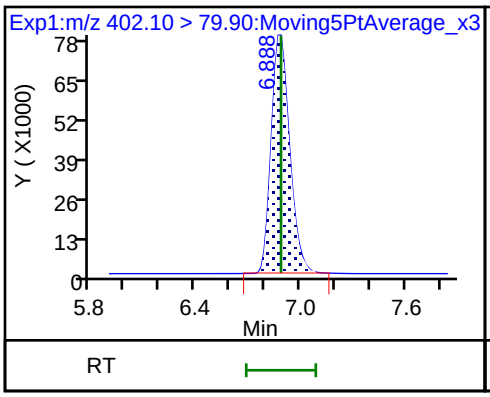
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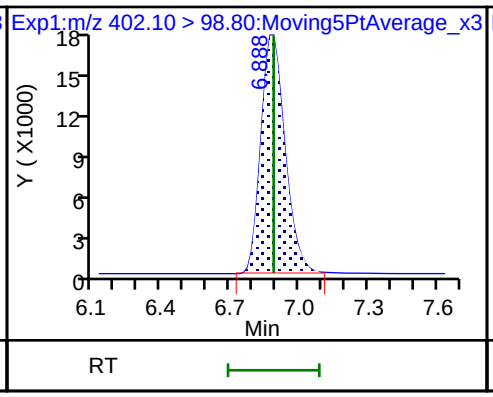
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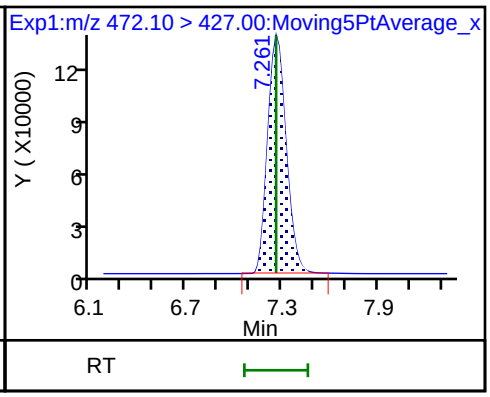
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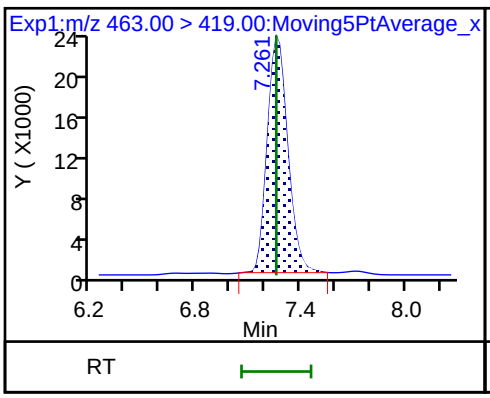
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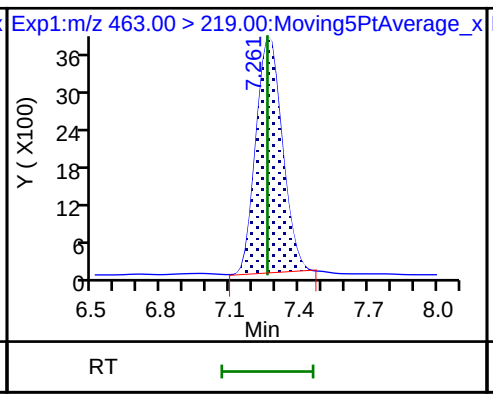
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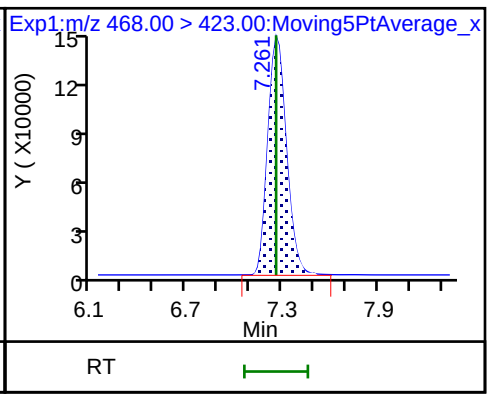
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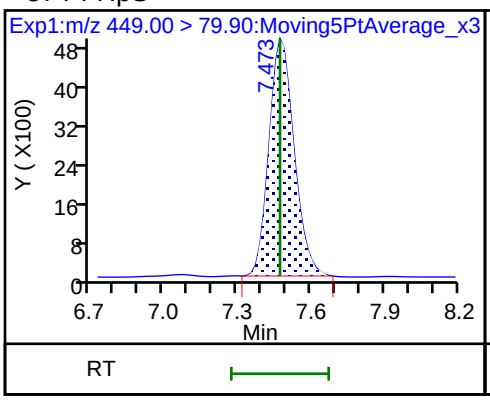
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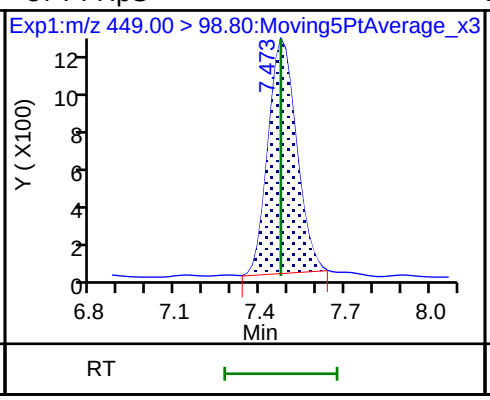
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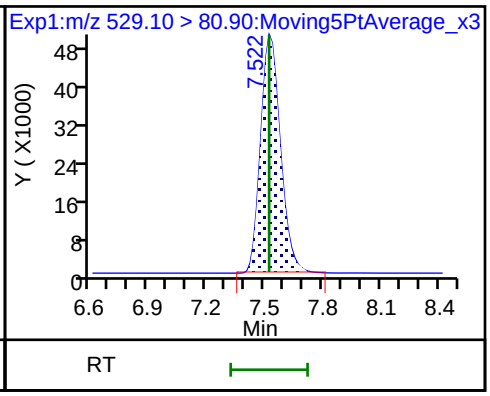
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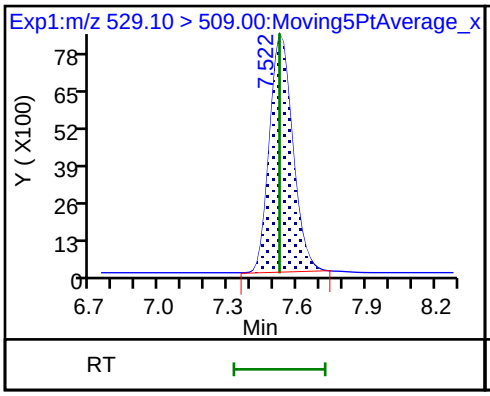
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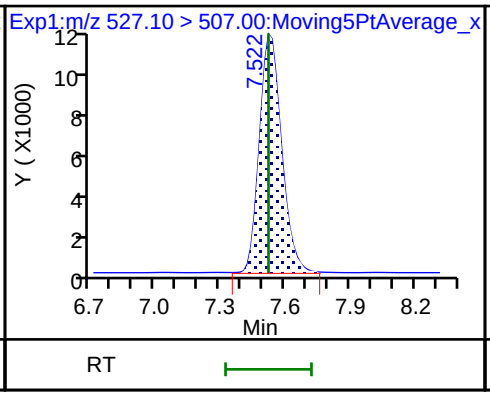
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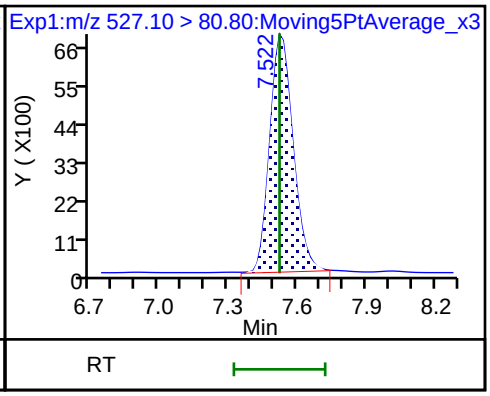
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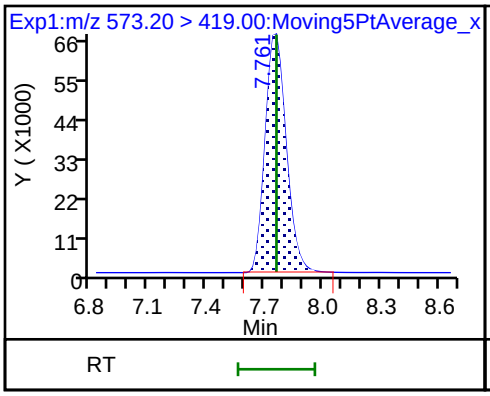
39 8:2FTS



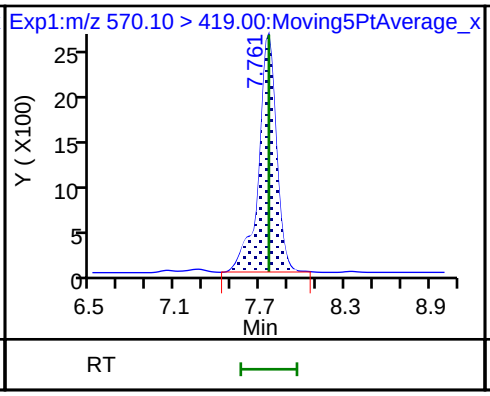
39 8:2FTS



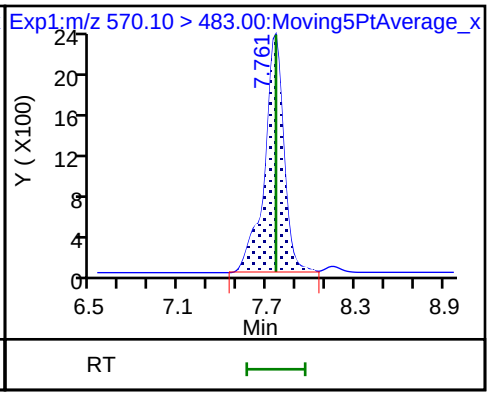
D 41 d3-NMeFOSAA



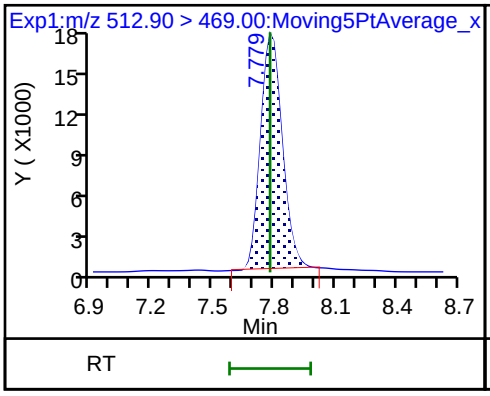
42 NMeFOSAA



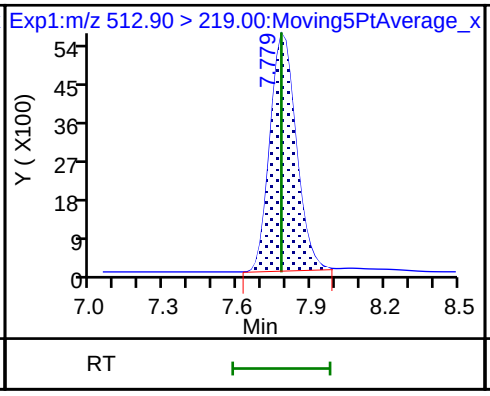
42 NMeFOSAA



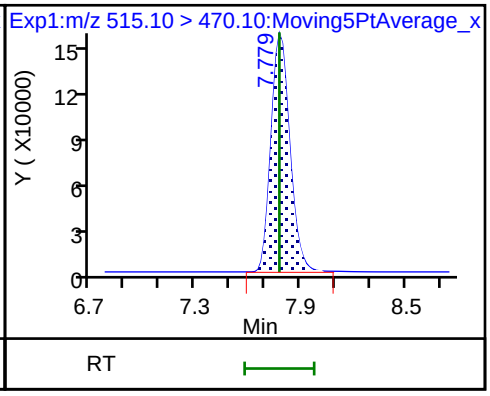
43 PFDA



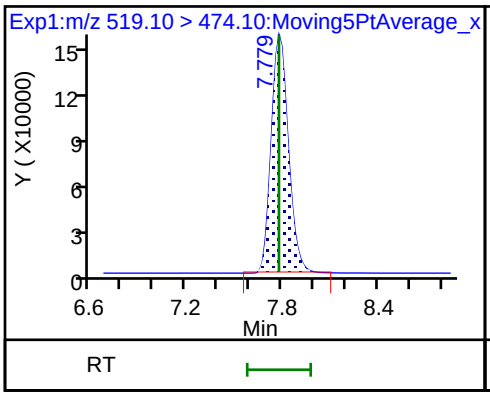
43 PFDA



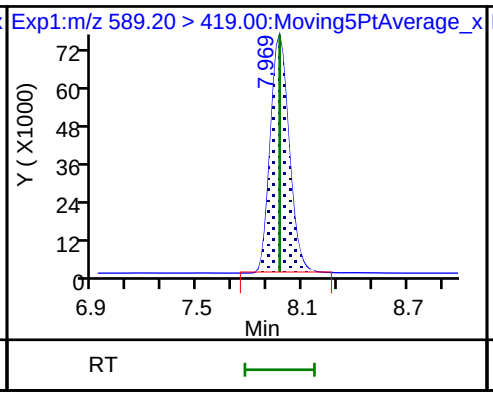
* 44 13C2 PFDA



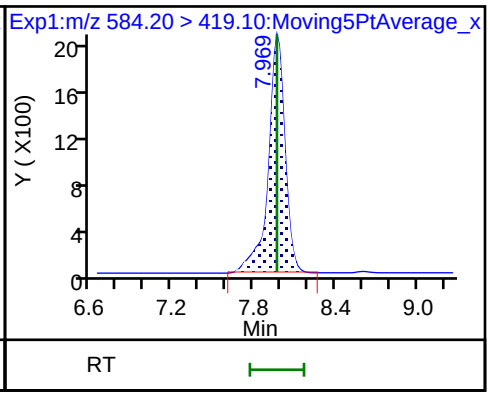
D 40 13C6 PFDA



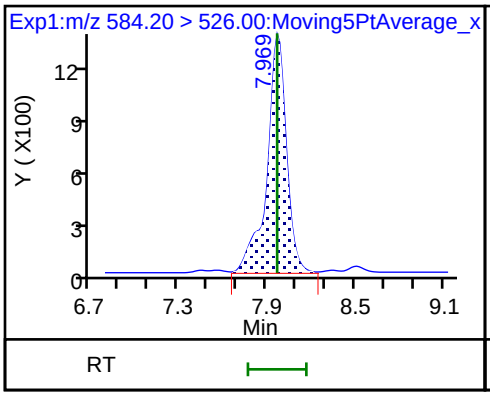
D 46 d5-NEtFOSAA



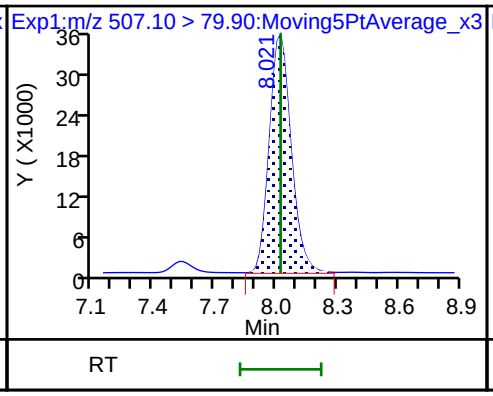
45 NEtFOSAA



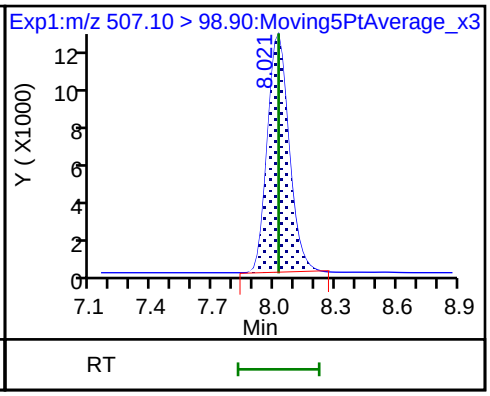
45 NEtFOSAA



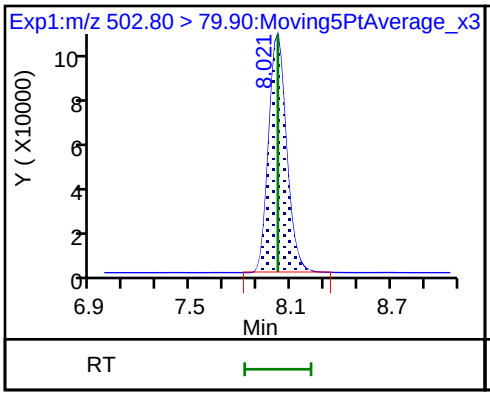
D 49 13C8 PFOS



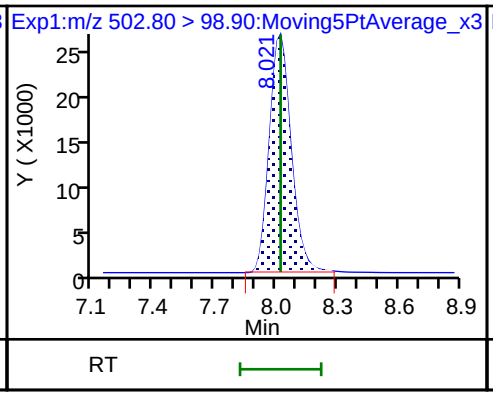
D 49 13C8 PFOS



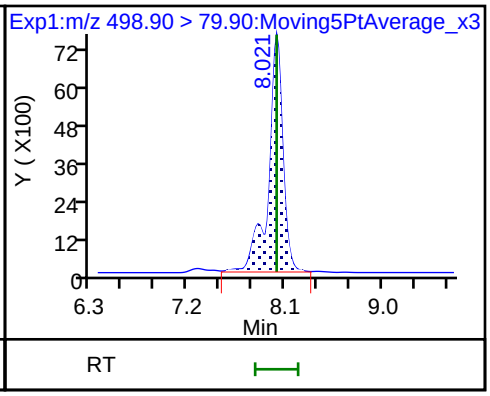
* 47 13C4 PFOS



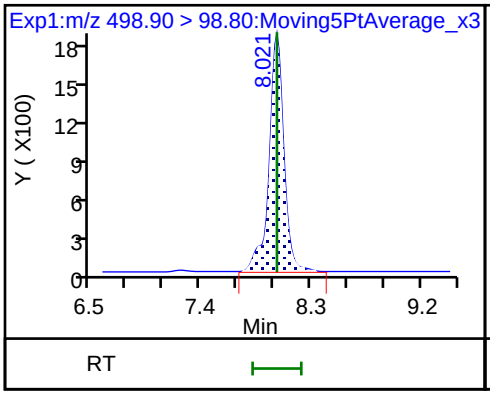
* 47 13C4 PFOS



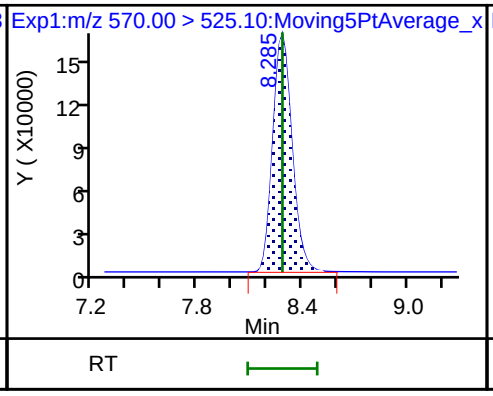
48 PFOS



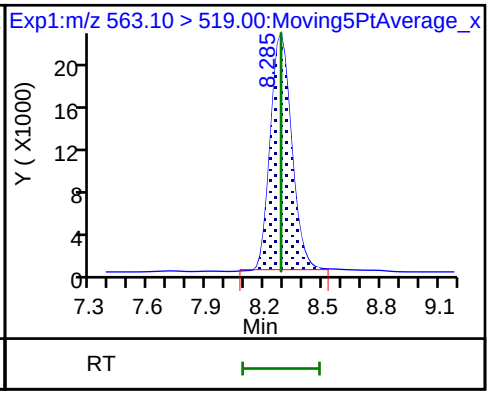
48 PFOS



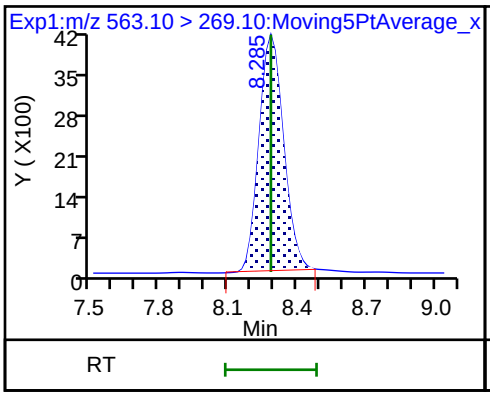
D 53 13C7 PFUnA



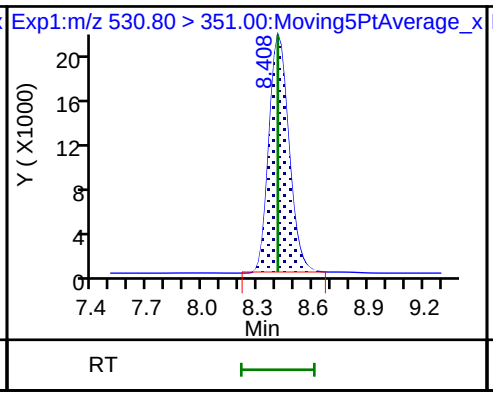
52 PFUnA



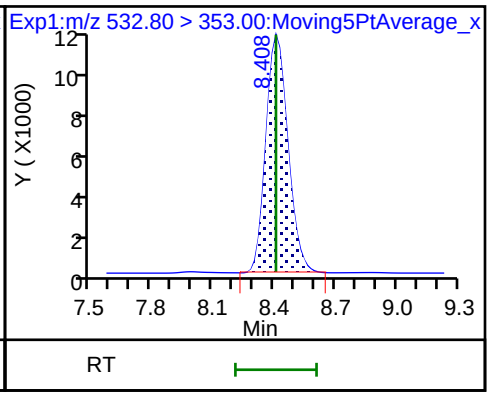
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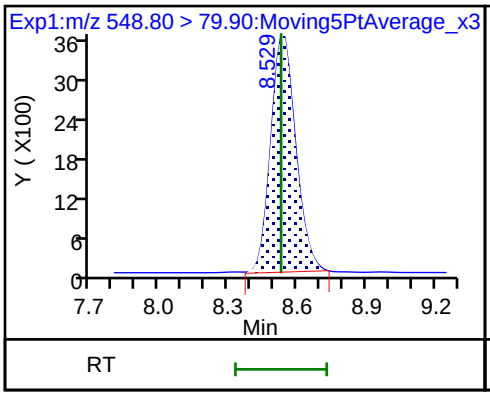
54 9ClFOS



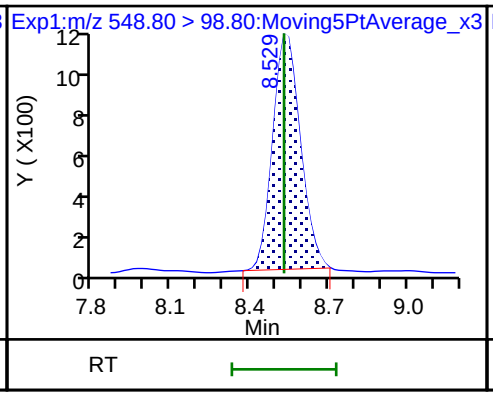
54 9ClFOS



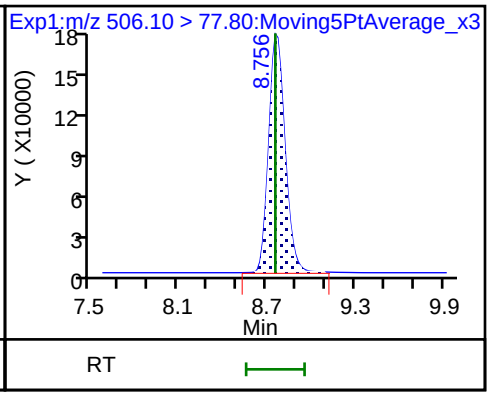
55 PFNS



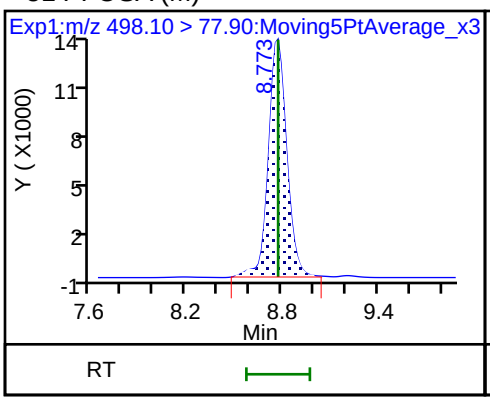
55 PFNS



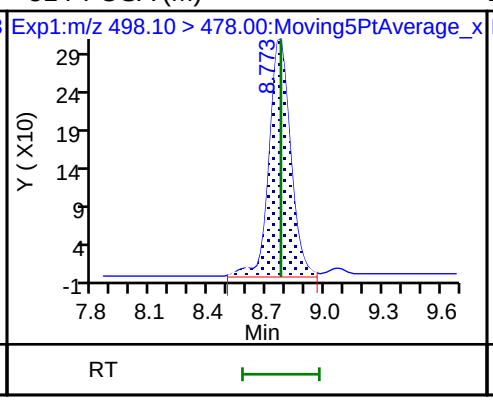
D 50 13C8 FOSA



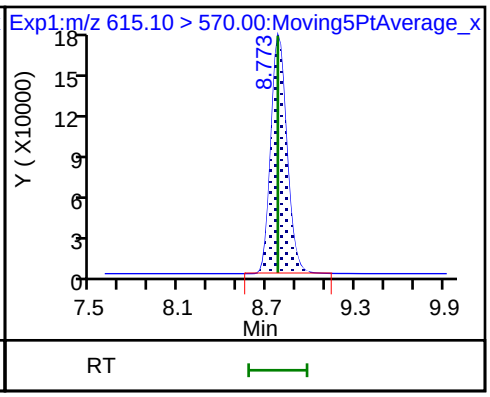
51 PFOSA (M)



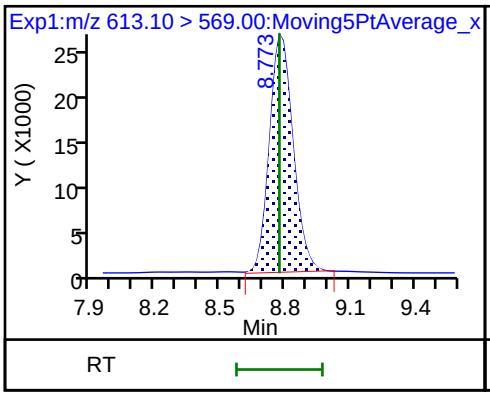
51 PFOSA (M)



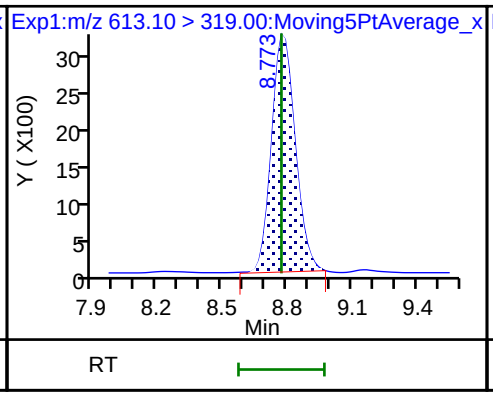
D 56 13C2 PFDoA



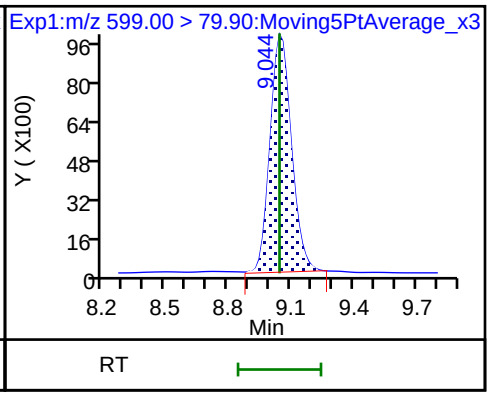
57 PFDoA



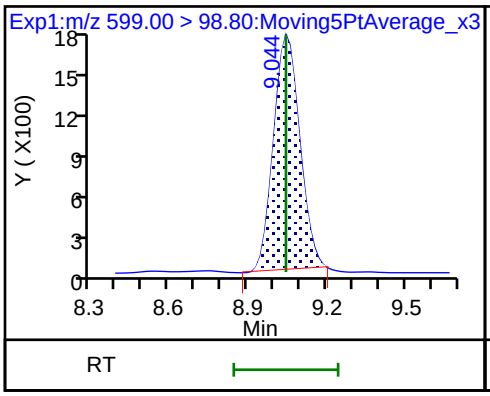
57 PFDoA



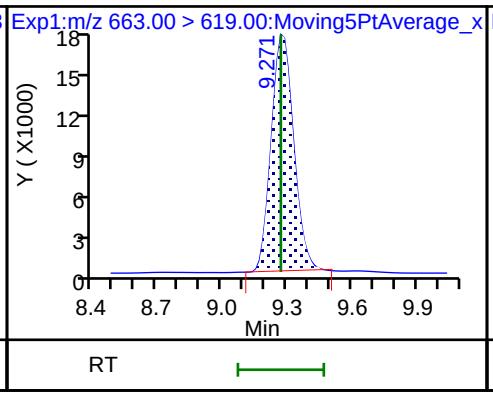
58 PFDS



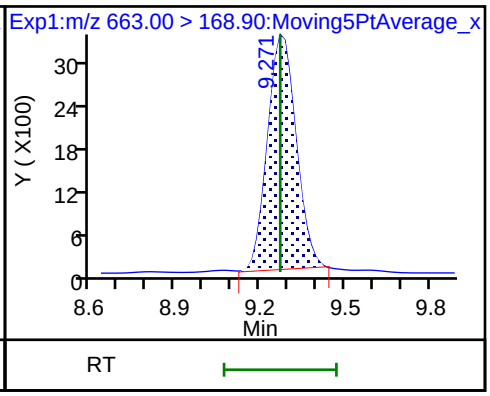
58 PFDS



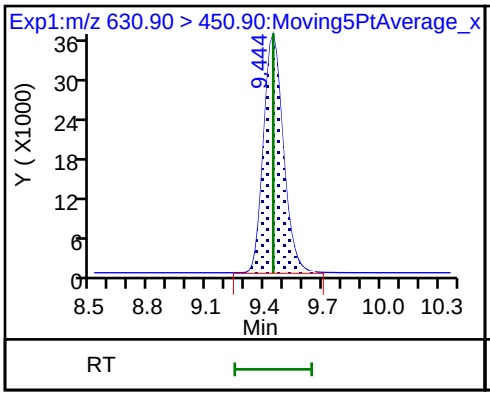
63 PFTrDA



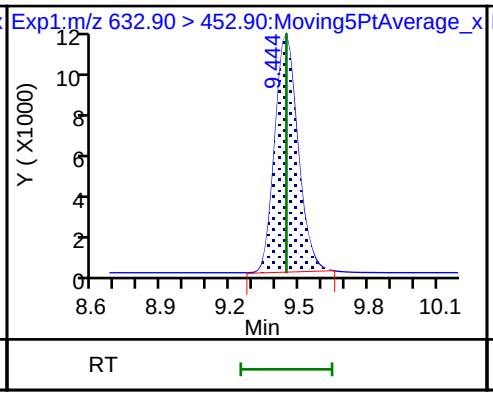
63 PFTrDA



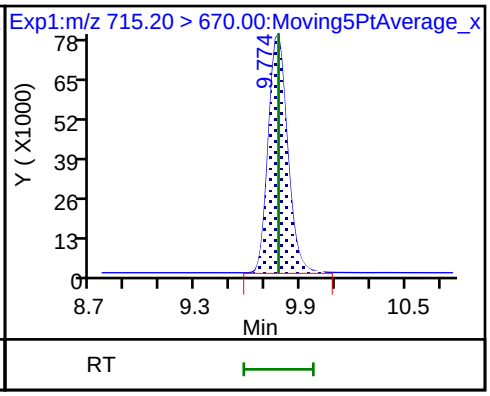
66 11ClFOS



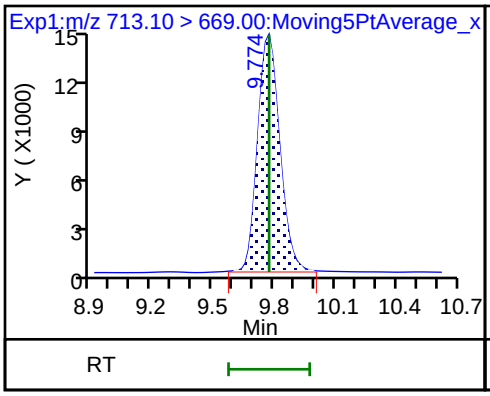
66 11ClFOS



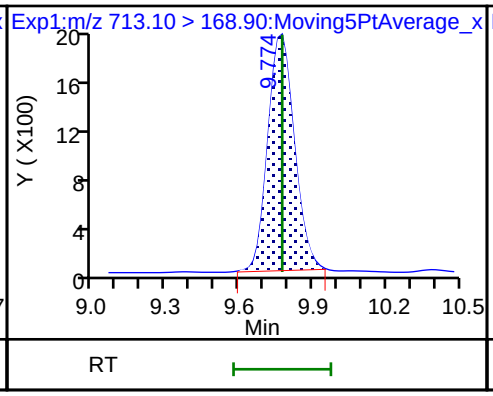
D 69 13C2 PFTeDA



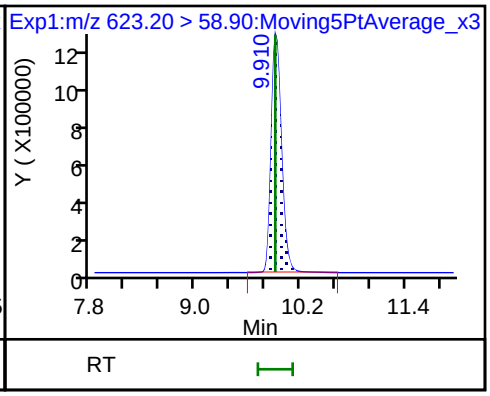
70 PFTeDA



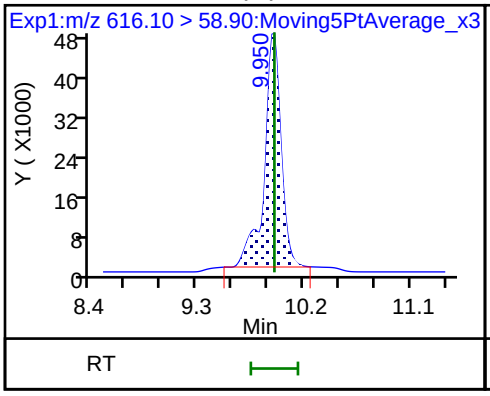
70 PFTeDA



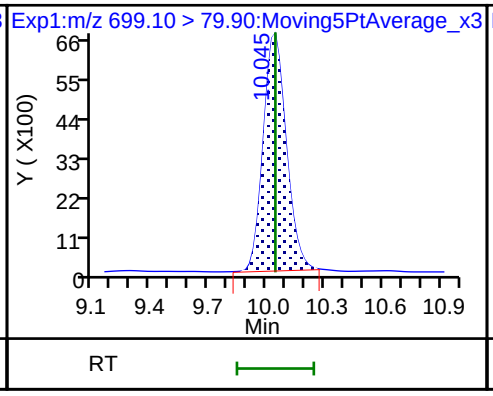
D 59 d7-N-Me-FOSE



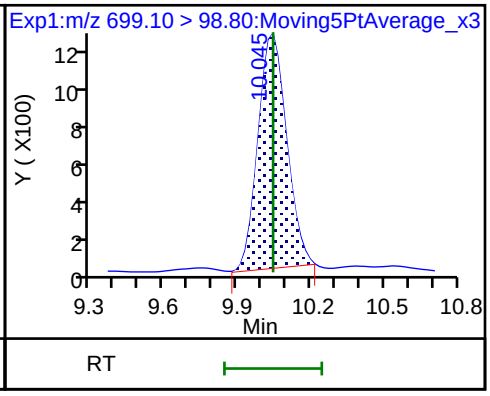
60 N-MeFOSE-M (M)



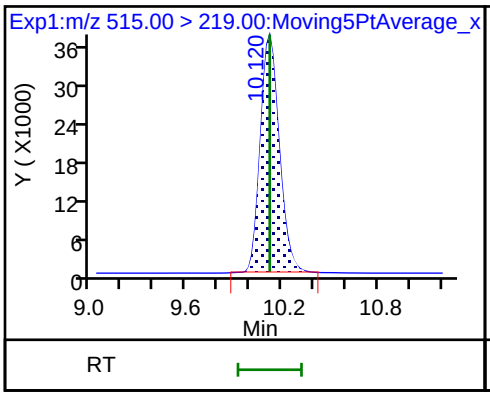
71 PFDoS



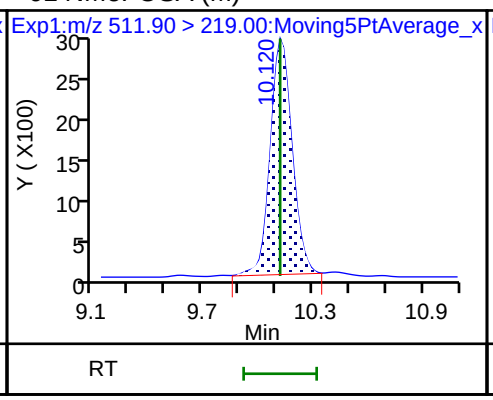
71 PFDoS



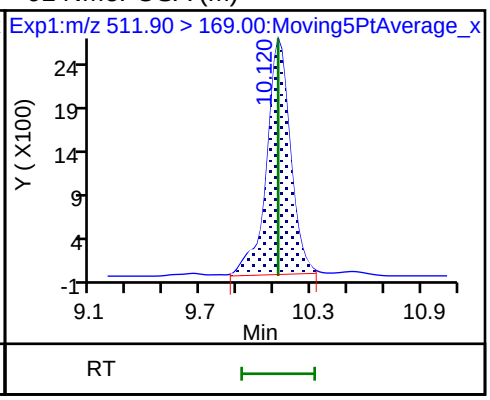
D 62 d3-NMePFOSA



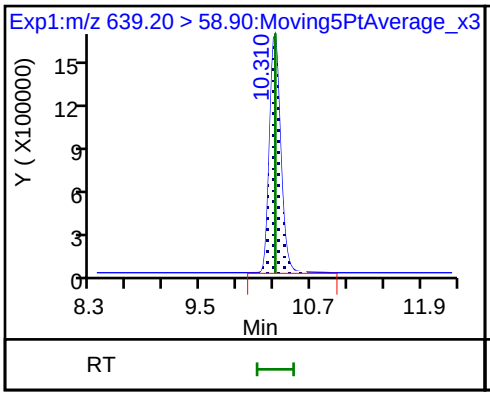
61 NMeFOSA (M)



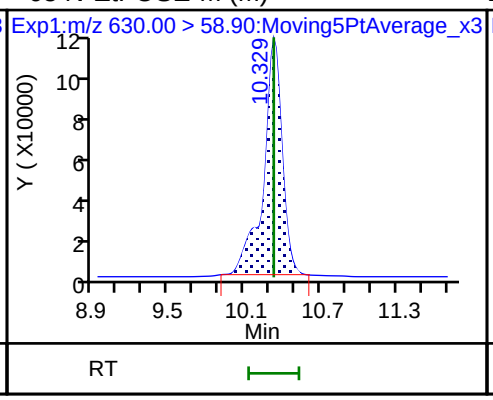
61 NMeFOSA (M)



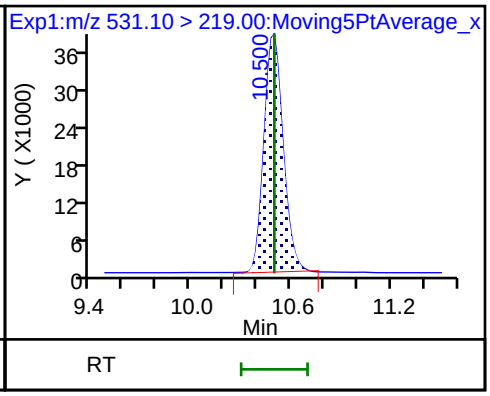
D 64 d9-N-EtFOSE



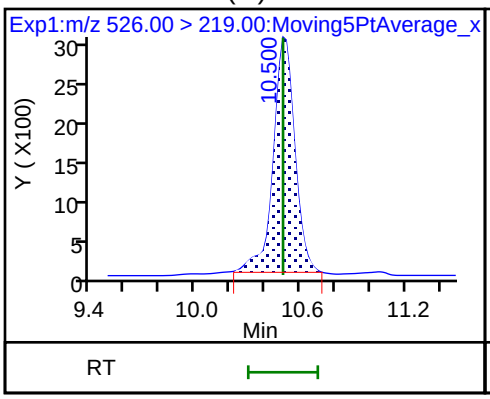
65 N-EtFOSE-M (M)



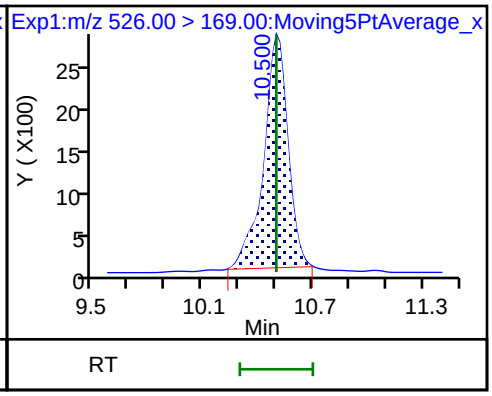
D 67 d5-NEtPFOSA



68 N-EtFOSA-M (M)



68 N-EtFOSA-M



Manual Integration/User Assign Peak Report

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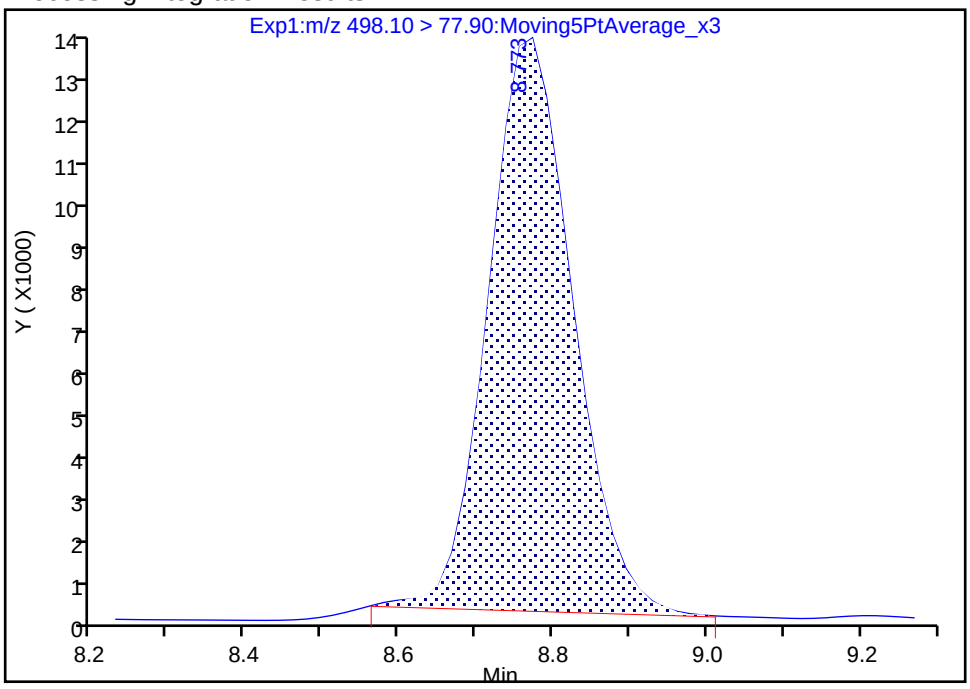
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.003.d
Injection Date: 28-Nov-2023 12:18:02 Instrument ID: LC_LCMS11
Lims ID: CCVL
Client ID:
Operator ID: B5QN ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

51 PFOSA, CAS: 754-91-6

Signal: 1

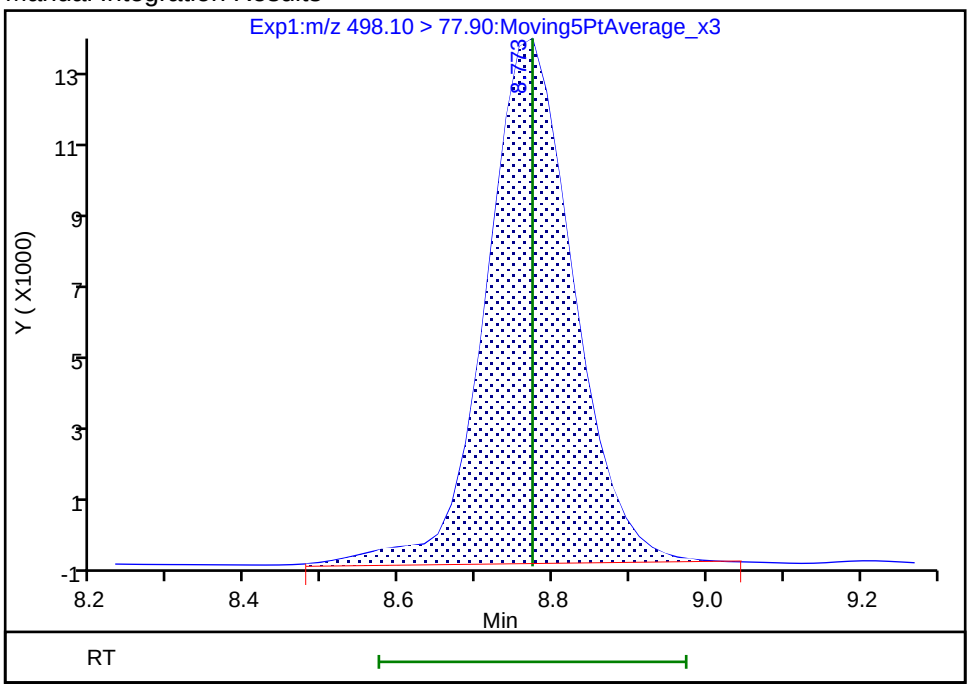
Processing Integration Results

RT: 8.77
Area: 100107
Amount: 0.189259
Amount Units: ng/ml



Manual Integration Results

RT: 8.77
Area: 105911
Amount: 0.200232
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:34:11 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

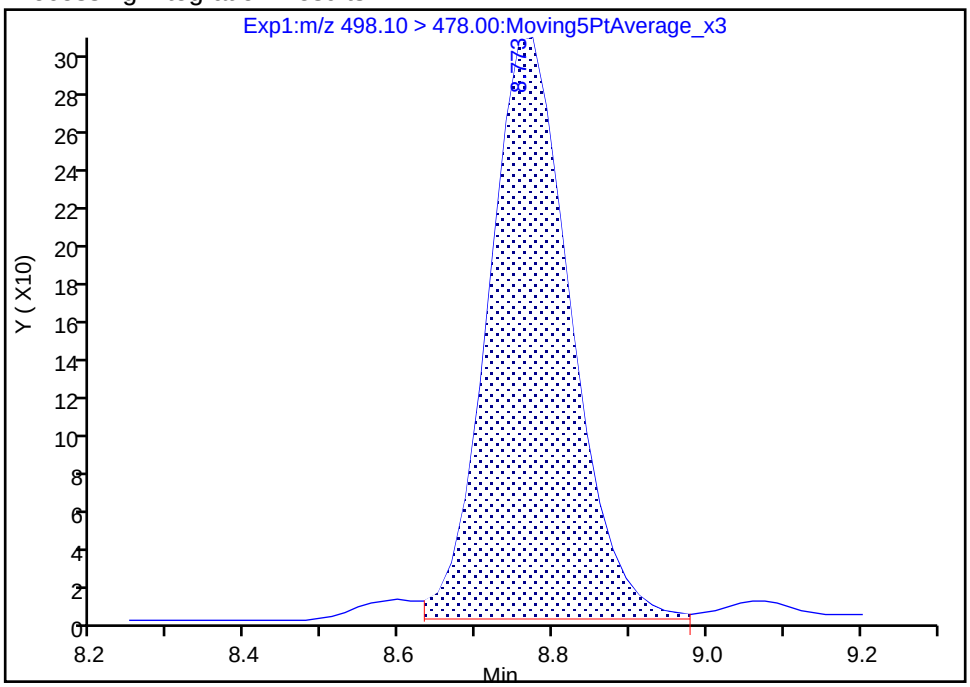
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.003.d
Injection Date: 28-Nov-2023 12:18:02 Instrument ID: LC_LCMS11
Lims ID: CCVL
Client ID:
Operator ID: B5QN ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

51 PFOSA, CAS: 754-91-6

Signal: 2

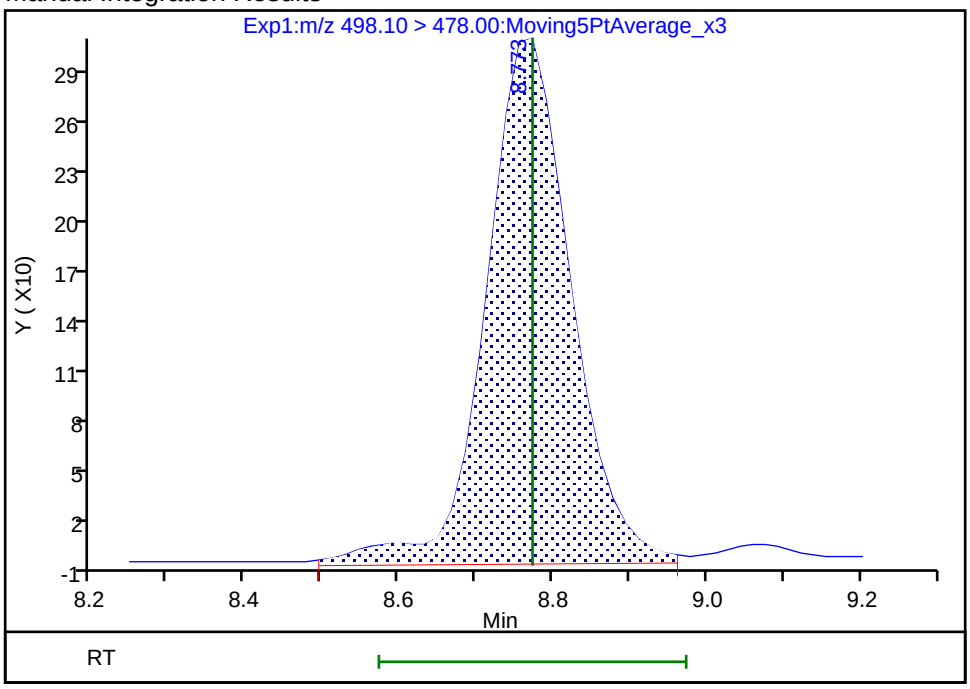
Processing Integration Results

RT: 8.77
Area: 2252
Amount: 0.189259
Amount Units: ng/ml



Manual Integration Results

RT: 8.77
Area: 2361
Amount: 0.200232
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:34:18 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

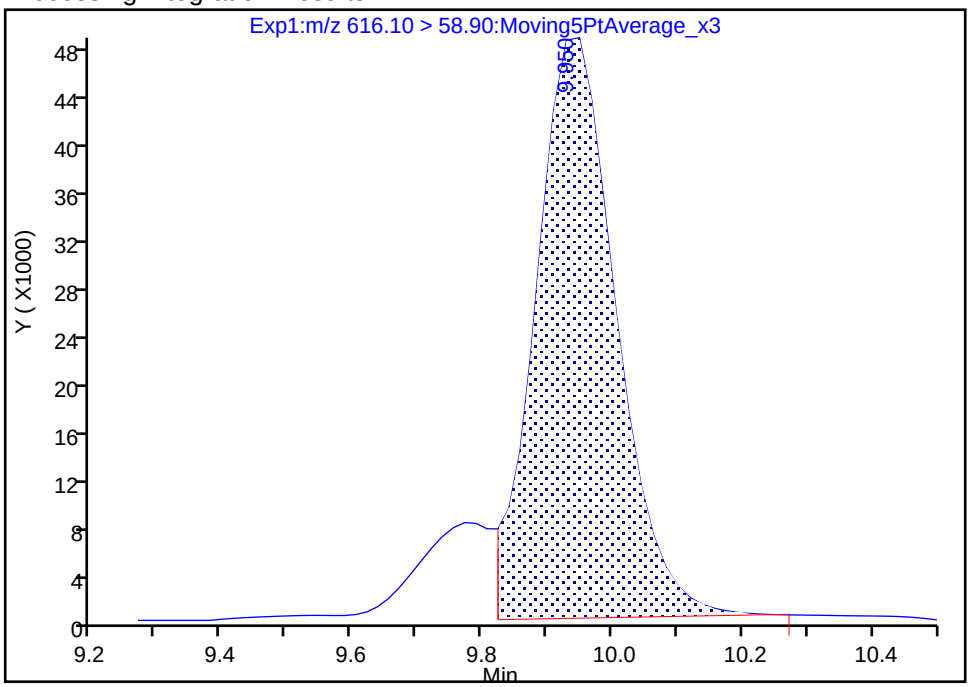
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.003.d
Injection Date: 28-Nov-2023 12:18:02 Instrument ID: LC_LCMS11
Lims ID: CCVL
Client ID:
Operator ID: B5QN ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

60 N-MeFOSE-M, CAS: 24448-09-7

Signal: 1

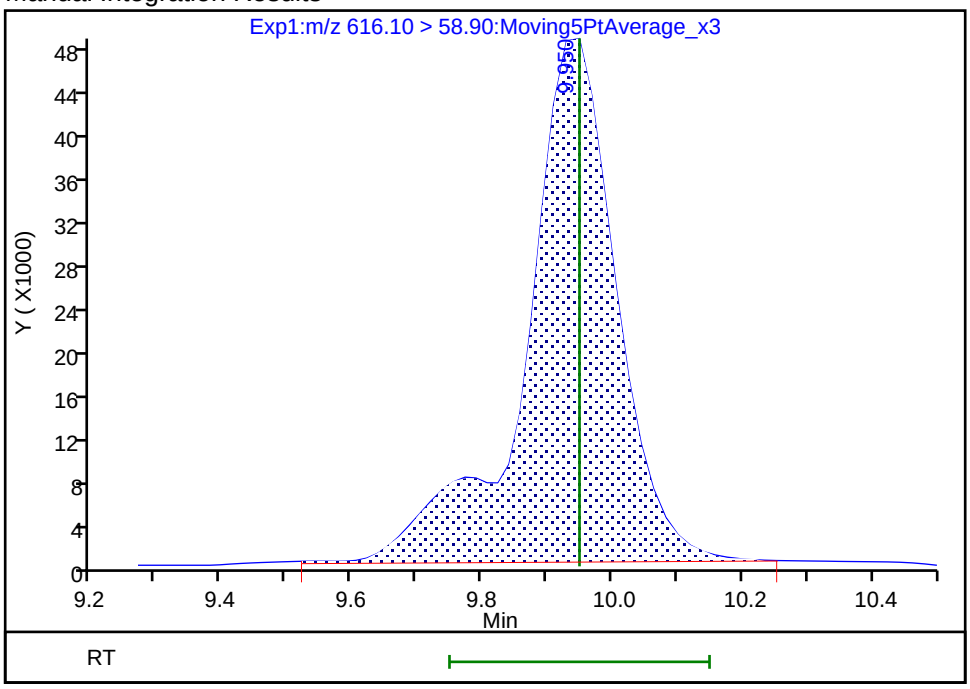
RT: 9.95
Area: 410120
Amount: 0.933182
Amount Units: ng/ml

Processing Integration Results



RT: 9.95
Area: 466158
Amount: 1.060690
Amount Units: ng/ml

Manual Integration Results



Reviewer: B5QN, 29-Nov-2023 13:34:27 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

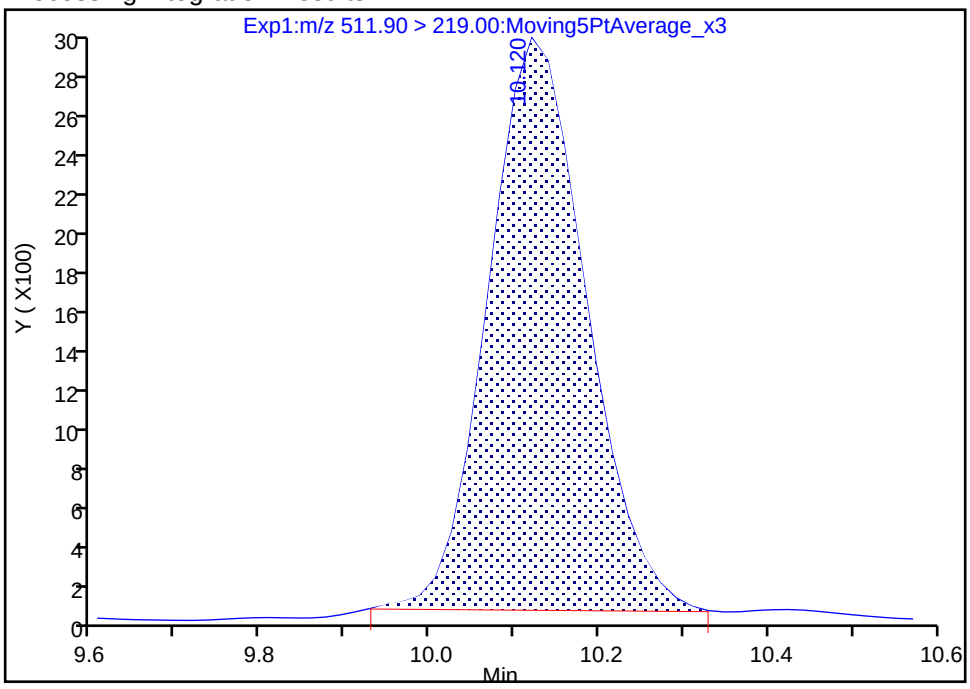
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.003.d
Injection Date: 28-Nov-2023 12:18:02 Instrument ID: LC_LCMS11
Lims ID: CCVL
Client ID:
Operator ID: B5QN ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

61 NMeFOSA, CAS: 31506-32-8

Signal: 1

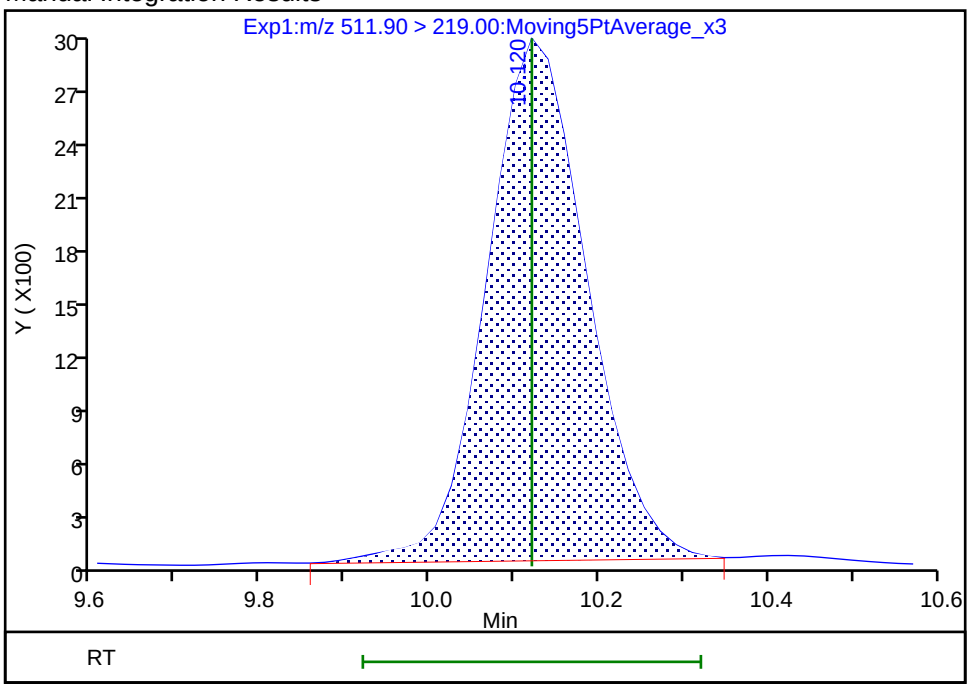
Processing Integration Results

RT: 10.12
Area: 22972
Amount: 0.197122
Amount Units: ng/ml



Manual Integration Results

RT: 10.12
Area: 23785
Amount: 0.204098
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:34:35 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver

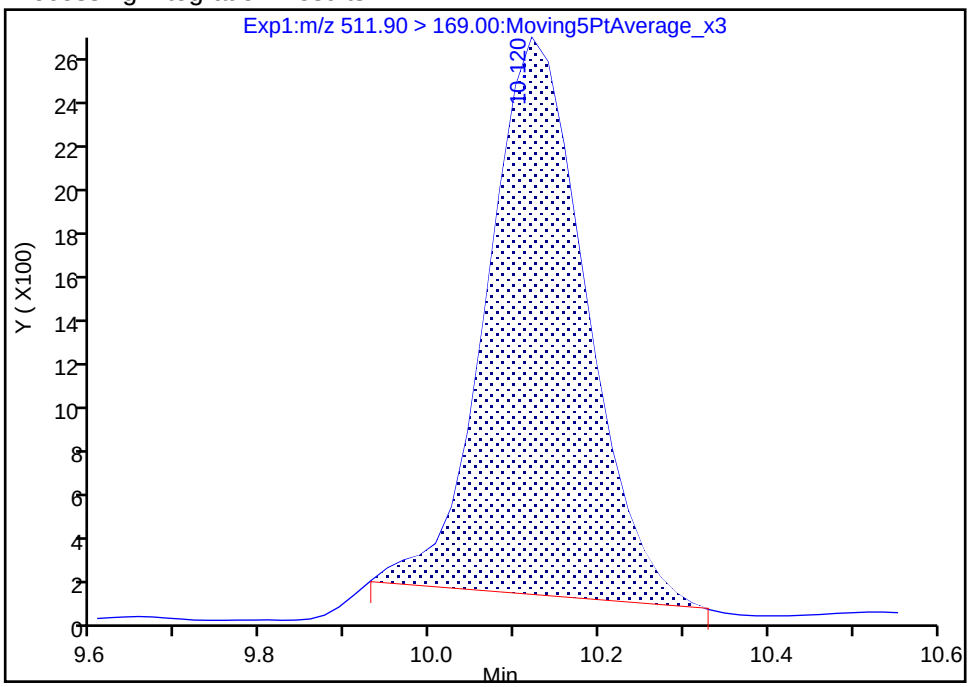
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.003.d
Injection Date: 28-Nov-2023 12:18:02 Instrument ID: LC_LCMS11
Lims ID: CCVL
Client ID:
Operator ID: B5QN ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

61 NMeFOSA, CAS: 31506-32-8

Signal: 2

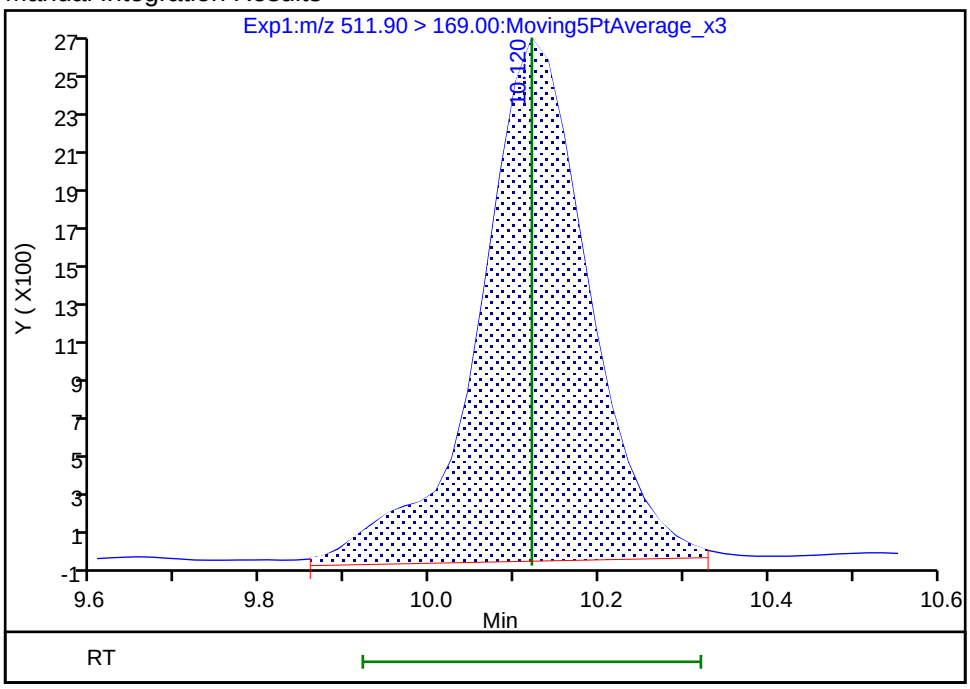
Processing Integration Results

RT: 10.12
Area: 20408
Amount: 0.197122
Amount Units: ng/ml



Manual Integration Results

RT: 10.12
Area: 23521
Amount: 0.204098
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:34:39 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver

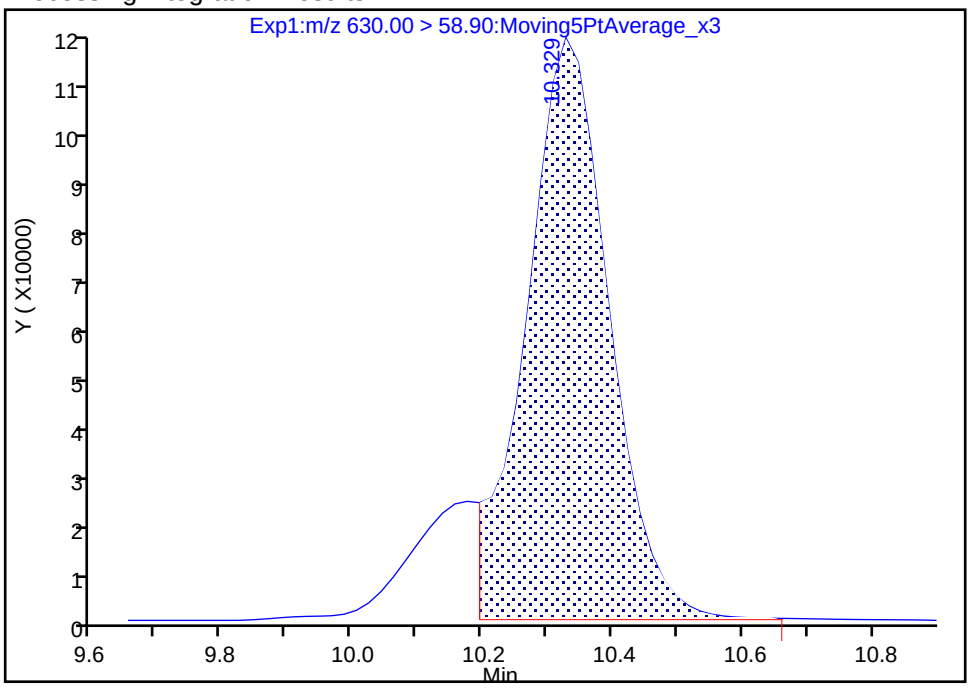
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.003.d
Injection Date: 28-Nov-2023 12:18:02 Instrument ID: LC_LCMS11
Lims ID: CCVL
Client ID:
Operator ID: B5QN ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

65 N-EtFOSE-M, CAS: 1691-99-2

Signal: 1

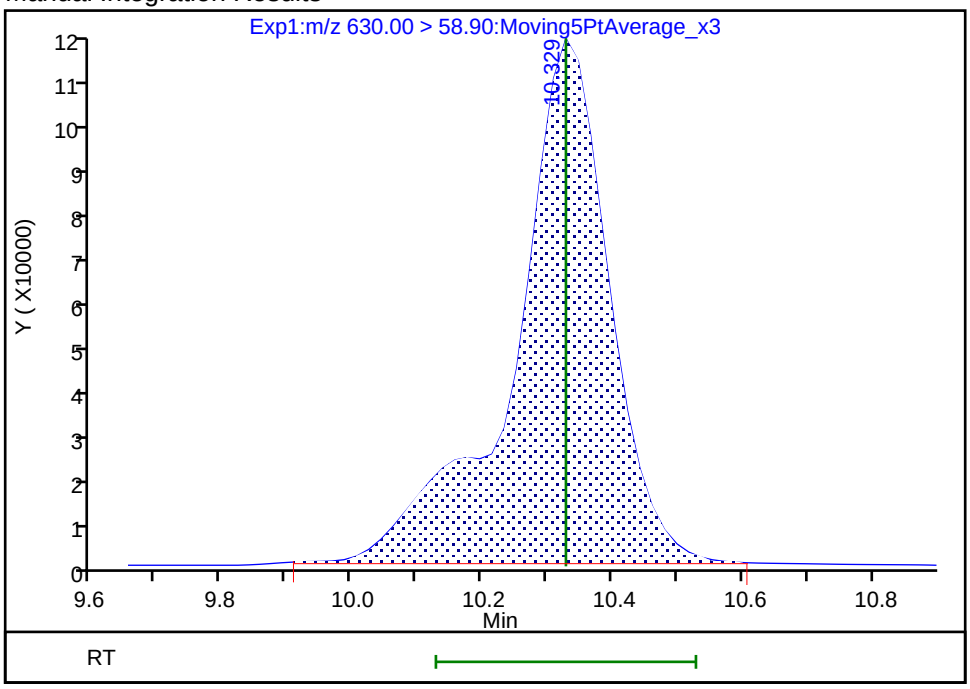
Processing Integration Results

RT: 10.33
Area: 996356
Amount: 1.769191
Amount Units: ng/ml



Manual Integration Results

RT: 10.33
Area: 1154314
Amount: 2.049671
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:34:47 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver

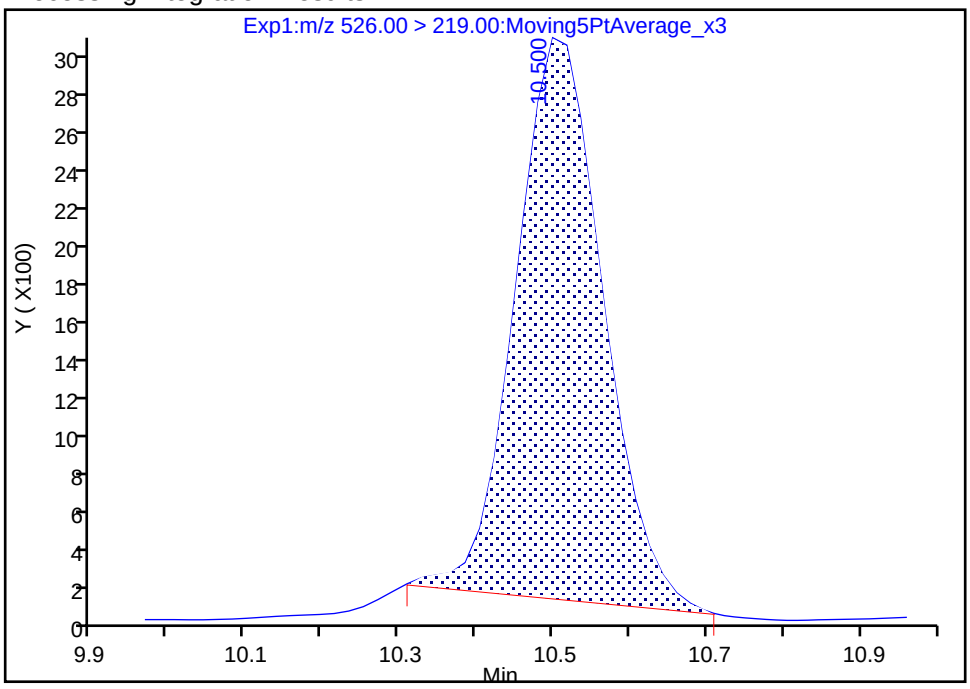
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.003.d
Injection Date: 28-Nov-2023 12:18:02 Instrument ID: LC_LCMS11
Lims ID: CCVL
Client ID:
Operator ID: B5QN ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

68 N-EtFOSA-M, CAS: 4151-50-2

Signal: 1

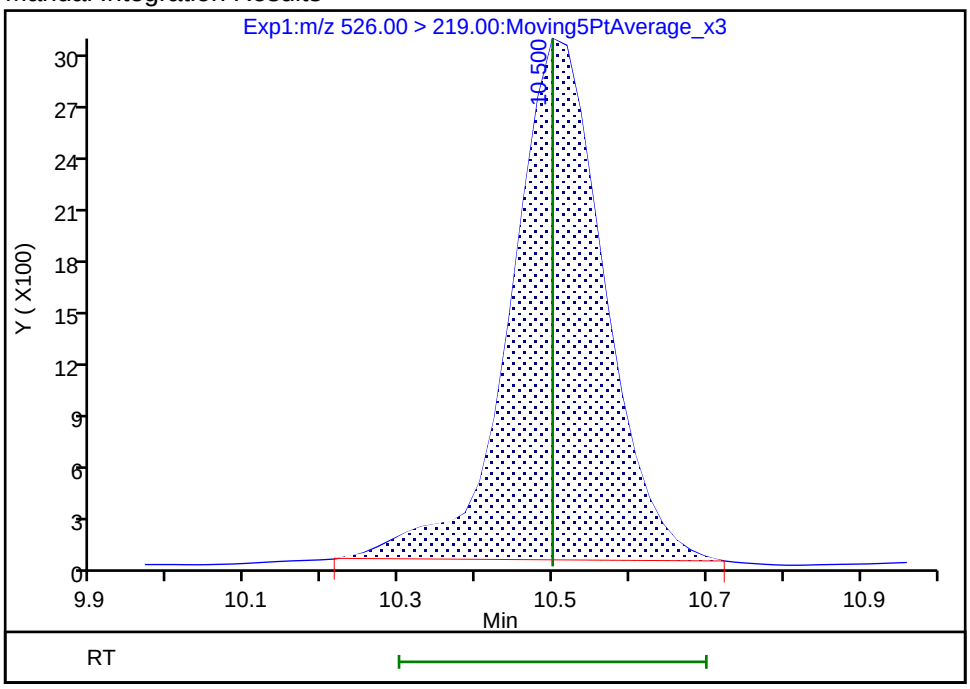
Processing Integration Results

RT: 10.50
Area: 23322
Amount: 0.178387
Amount Units: ng/ml



Manual Integration Results

RT: 10.50
Area: 25830
Amount: 0.197570
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:34:56 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Lab Sample ID: CCV 280-635316/21 Calibration Date: 11/28/2023 18:20

Instrument ID: LC_LCMS11 Calib Start Date: 11/20/2023 17:19

GC Column: Gemini C18 3X50 ID: 3.00(mm) Calib End Date: 11/20/2023 19:16

Lab File ID: 2023.11.28a.025.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.8940	0.8810		2.46	2.50	-1.5	30.0
PFMPA	AveID	1.277	1.206		4.71	4.99	-5.6	30.0
3:3 FTCA	AveID	0.1634	0.1406		10.7	12.5	-14.0	30.0
Perfluoropentanoic acid (PFPeA)	AveID	2.006	1.984		2.47	2.50	-1.1	30.0
PFMBA	AveID	2.526	2.478		4.90	4.99	-1.9	30.0
4:2 FTS	AveID	2.349	2.062		5.46	6.22	-12.2	30.0
NFDHA	AveID	0.3101	0.3018		2.43	2.50	-2.7	30.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.8902	0.7985		1.99	2.22	-10.3	30.0
Perfluorohexanoic acid (PFHxA)	AveID	1.101	1.087		2.46	2.50	-1.3	30.0
5:3 FTCA	AveID	0.1813	0.1556		21.4	25.0	-14.2	30.0
HFPO-DA (GenX)	AveID	1.077	1.135		2.63	2.50	5.4	30.0
PFEESA	AveID	1.218	1.120		4.09	4.45	-8.1	30.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.9840	1.026		2.60	2.50	4.3	30.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	1.123	1.070		2.23	2.34	-4.7	30.0
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	AveID	9.040	9.580		2.50	2.36	6.0	30.0
6:2 FTS	AveID	1.905	2.083		10.4	9.46	9.3	30.0
Perfluorooctanoic acid (PFOA)	AveID	0.7982	0.7950		2.49	2.50	-0.4	30.0
7:3 FTCA	AveID	0.0838	0.0707		21.1	25.0	-15.6	30.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	0.5321	0.5505		2.36	2.28	3.5	30.0
Perfluorononanoic acid (PFNA)	AveID	1.004	1.046		2.60	2.50	4.2	30.0
Perfluoroheptanesulfonic acid (PFHpS)	AveID	1.788	1.592		2.12	2.38	-10.9	30.0
8:2 FTS	AveID	1.453	1.435		9.45	9.56	-1.3	30.0
NMeFOSAA	AveID	1.001	0.9079		2.26	2.50	-9.3	30.0
Perfluorodecanoic acid (PFDA)	AveID	0.8217	0.8052		2.45	2.50	-2.0	30.0
NEtFOSAA	AveID	0.7273	0.6825		2.34	2.50	-6.2	30.0
Perfluorooctanesulfonic acid (PFOS)	AveID	3.258	3.084		2.20	2.32	-5.3	30.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8849	0.9454		2.67	2.50	6.8	30.0
9Cl-PF3ONS	AveID	1.809	1.994		6.85	6.21	10.3	30.0
Perfluorononanesulfonic acid (PFNS)	AveID	1.332	1.255		2.26	2.40	-5.7	30.0
Perfluorooctanesulfonamide (PFOSA)	AveID	0.995	1.085		2.72	2.50	9.0	30.0
Perfluorododecanoic acid (PFDoA)	AveID	1.005	1.037		2.58	2.50	3.2	30.0
Perfluorodecanesulfonic acid (PFDS)	AveID	3.077	3.138		2.45	2.41	2.0	30.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.8617	0.8747		2.53	2.50	1.5	30.0

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Lab Sample ID: CCV 280-635316/21 | Calibration Date: 11/28/2023 18:20

Instrument ID: LC_LCMS11 | Calib Start Date: 11/20/2023 17:19

GC Column: Gemini C18 3X50 ID: 3.00(mm) | Calib End Date: 11/20/2023 19:16

Lab File ID: 2023.11.28a.025.d | Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
11Cl-PF3OUdS	Q2ID		3.141		6.94	6.27	10.6	30.0
Perfluorotetradecanoic acid (PFTeDA)	AveID	1.162	1.068		2.29	2.50	-8.1	30.0
NMeFOSE	AveID	1.094	1.126		12.8	12.5	2.9	30.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	2.462	2.471		2.43	2.42	0.4	30.0
NMeFOSA	AveID	0.9564	0.9634		2.51	2.50	0.7	30.0
NEtFOSE	AveID	1.044	1.084		25.9	25.0	3.9	30.0
NEtFOSA	AveID	1.071	1.050		2.45	2.50	-2.0	30.0
13C4 PFBA	Ave	1.016	0.999		9.83	10.0	-1.7	30.0
13C5 PFPeA	Ave	0.4984	0.4565		4.58	5.00	-8.4	30.0
M2-4:2 FTS	Ave	0.2255	0.1691		3.50	4.67	-25.0	30.0
13C3 PFBS	Ave	1.283	1.275		2.31	2.33	-0.6	30.0
13C5 PFHxA	Ave	1.121	1.076		2.40	2.50	-4.0	30.0
13C3 HFPO-DA	Ave	0.2741	0.2387		8.71	10.0	-12.9	30.0
13C4 PFHpA	Ave	1.173	1.035		2.21	2.50	-11.8	30.0
M2-6:2 FTS	Ave	0.2943	0.2288		3.69	4.75	-22.3	30.0
13C8 PFOA	Ave	6.544	6.649		2.54	2.50	1.6	30.0
13C3 PFHxS	Ave	1.016	0.9801		2.28	2.37	-3.6	30.0
13C9 PFNA	Ave	0.9452	0.9101		1.20	1.25	-3.7	30.0
M2-8:2 FTS	Ave	0.3568	0.2744		3.68	4.79	-23.1	30.0
d3-NMeFOSAA	Ave	0.3361	0.3075		4.58	5.00	-8.5	30.0
13C6 PFDA	Ave	0.9948	1.015		1.28	1.25	2.1	30.0
d5-NEtFOSAA	Ave	0.3891	0.3589		4.61	5.00	-7.7	30.0
13C8 PFOS	Ave	0.3592	0.3887		2.59	2.39	8.2	30.0
13C7 PFUnA	Ave	1.109	1.105		1.25	1.25	-0.4	30.0
13C8 FOSA	Ave	1.739	1.721		2.47	2.50	-1.0	30.0
13C2 PFDoA	Ave	1.095	1.100		1.26	1.25	0.5	30.0
13C2 PFTeDA	Ave	0.5212	0.5601		1.34	1.25	7.5	30.0
d7-N-MeFOSE-M	Ave	1.278	1.291		25.3	25.0	1.0	30.0
d3-NMePFOSA	Ave	0.3940	0.4038		2.56	2.50	2.5	30.0
d9-N-EtFOSE-M	Ave	1.593	1.658		26.0	25.0	4.1	30.0
d5-NEtPFOSA	Ave	0.4044	0.4257		2.63	2.50	5.3	30.0

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.025.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 28-Nov-2023 18:20:59 ALS Bottle#: 19 Worklist Smp#: 21
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: Plate: 1 Rack: 1
Operator ID: B5QN Instrument ID: LC_LCMS11
Sublist: chrom-PFC_IDA_DEN11*sub5

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 29-Nov-2023 13:47:20 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1603

First Level Reviewer: B5QN Date: 29-Nov-2023 13:47:20
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.031	3.046	-0.015	1.000	5134751	9.83		98.3	36711	
* 1 13C3PFBA										
216.00 > 172.00	3.031	3.046	-0.015		2570768	5.00			8893	
2 PFBA										
212.80 > 168.90	3.031	3.046	-0.015	1.000	1129160	2.46		98.5	1254	
4 PFMPA										
229.00 > 84.90	3.708	3.728	-0.020	0.831	1902471	4.71		94.4	9882	
5 3:3 FTCA										
241.00 > 177.00	3.912	3.912	0.0	0.877	554504	10.7	Target=1.58	86.0	15984	
241.00 > 117.00	3.912	3.912	0.0	0.877	339749		1.63(0.79-2.37)		8205	
D 7 13C5 PFPeA										
268.30 > 223.00	4.462	4.463	-0.001	0.834	1580211	4.58		91.6	15028	
6 PFPA										
263.00 > 219.00	4.462	4.478	-0.016	1.000	1565399	2.47	Target=212.56	98.9	2858	
263.00 > 68.90	4.462	4.478	-0.016	1.000	7655		204.49(106.28-318.84)		213	
8 PFMBA										
279.00 > 85.10	4.778	4.778	0.0	1.071	3909080	4.90		98.1	31872	
10 4:2FTS										
327.10 > 307.00	5.096	5.097	-0.001	1.000	479088	5.46	Target=1.59	87.8	20027	
327.10 > 80.90	5.096	5.097	-0.001	1.000	319427		1.50(0.79-2.38)		3659	
D 9 13C2-4:2FTS										
329.10 > 80.90	5.096	5.097	-0.001	0.743	174358	3.50	Target=4.54	75.0	3154	
329.10 > 309.00	5.096	5.097	-0.001	0.743	36354		4.80(2.27-6.81)	75.0	1542	
11 NFDHA										
295.00 > 201.00	5.280	5.280	0.0	0.986	561244	2.43	Target=1.95	97.3	14615	
295.00 > 84.90	5.280	5.280	0.0	0.986	259830		2.16(0.97-2.92)		4225	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 16 13C3 PFBS										
302.10 > 79.90	5.353	5.354	-0.001	0.781	654900	2.31	Target=4.56	99.4	17127	
302.10 > 98.90	5.353	5.354	-0.001	0.781	156124		4.19(2.28-6.83)	99.4	6803	
15 PFBS										
298.70 > 79.90	5.353	5.354	-0.001	1.000	498519	1.99	Target=2.16	89.7	16183	
298.70 > 98.80	5.353	5.354	-0.001	1.000	232430		2.14(1.08-3.24)		6087	
* 14 13C2 PFHxA										
315.10 > 270.00	5.353	5.371	-0.018		1730892	2.50	Target=79.67		32214	
315.10 > 119.40	5.353	5.371	-0.018		20325		85.16(39.83-119.50)		897	
D 12 13C5 PFHxA										
318.00 > 273.00	5.353	5.371	-0.018	1.000	1862760	2.40	Target=53.27	96.0	34634	
318.00 > 120.30	5.353	5.371	-0.018	1.000	35173		52.96(26.63-79.90)	96.0	914	
13 PFHxA										
313.00 > 269.00	5.371	5.371	0.0	1.003	2020707	2.46	Target=18.64	98.7	8509	
313.00 > 118.90	5.353	5.371	-0.018	1.000	98353		20.55(9.32-27.96)		2580	
18 5:3 FTCA										
341.00 > 237.10	5.643	5.644	-0.001	1.054	2894037	21.4	Target=1.16	85.8	33059	
341.00 > 217.00	5.643	5.644	-0.001	1.054	2411208		1.20(0.58-1.74)		37742	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.682	5.682	0.0	1.061	1652439	8.71	Target=1.53	87.1	30185	
286.90 > 184.90	5.682	5.682	0.0	1.061	1226150		1.35(0.76-2.29)	87.1	17525	
19 HFPO-DA										
284.90 > 168.90	5.682	5.682	0.0	1.000	468326	2.63	Target=1.75	105	12074	
284.90 > 184.90	5.682	5.682	0.0	1.000	279540		1.68(0.87-2.62)		5113	
21 PFEESA										
314.80 > 134.90	5.789	5.789	0.0	1.081	3714919	4.09	Target=13.97	91.9	96168	
314.80 > 82.90	5.789	5.789	0.0	1.081	266950		13.92(6.99-20.96)		8724	
D 22 13C4 PFHpA										
367.10 > 322.00	6.121	6.122	-0.001	1.143	1790820	2.20		88.2	22999	
17 PFHpA										
363.10 > 319.00	6.121	6.122	-0.001	1.000	1834393	2.60	Target=3.96	104	6647	
363.10 > 169.00	6.121	6.122	-0.001	1.000	441311		4.16(1.98-5.95)		6913	
23 PFPeS										
349.10 > 79.90	6.223	6.223	0.0	0.908	542197	2.23	Target=2.70	95.3	12654	
349.10 > 98.90	6.223	6.223	0.0	0.908	207611		2.61(1.35-4.04)		9686	
24 ADONA										
376.90 > 250.90	6.354	6.355	-0.001	1.118	3729796	2.50	Target=3.02	106	34796	
376.90 > 84.80	6.354	6.355	-0.001	1.118	1209167		3.08(1.51-4.53)		33886	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.454	6.471	-0.017	0.941	240017	3.69	Target=4.15	77.7	8469	
429.10 > 409.00	6.454	6.471	-0.017	0.941	55715		4.31(2.07-6.22)	77.7	2630	
25 6:2FTS										
427.10 > 407.00	6.454	6.471	-0.017	1.000	996347	10.3	Target=1.93	109	28019	
427.10 > 80.90	6.454	6.471	-0.017	1.000	492370		2.02(0.96-2.89)		17397	
D 27 13C8 PFOA										
421.10 > 376.00	6.706	6.707	-0.001	1.000	1750344	2.54		102	23944	
* 29 13C4 PFOA										
417.10 > 172.00	6.706	6.707	-0.001		263262	2.50			9083	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 PFOA										
413.00 > 369.00	6.706	6.724	-0.018	1.000	1389279	2.49	Target=2.30	99.6	6648	
413.00 > 169.00	6.706	6.724	-0.018	1.000	566899		2.45(1.15-3.45)		9728	
30 7:3 FTCA										
441.00 > 316.90	6.855	6.871	-0.016	1.281	1315215	21.1	Target=1.43	84.4	22610	
441.00 > 336.90	6.855	6.871	-0.016	1.281	867174		1.52(0.72-2.15)		19828	
32 PFHxS										
398.70 > 79.90	6.871	6.871	0.0	1.002	271274	2.36	Target=3.86	103	10273	
398.70 > 98.90	6.855	6.871	-0.016	1.000	66120		4.10(1.93-5.79)		2622	
* 31 18O2 PFHxS										
403.00 > 83.90	6.855	6.871	-0.016		523417	2.37			17954	
D 33 13C3 PFHxS										
402.10 > 79.90	6.855	6.888	-0.033	1.000	511943	2.28	Target=4.11	96.4	17581	
402.10 > 98.80	6.855	6.888	-0.033	1.000	123802		4.14(2.05-6.16)	96.4	5666	
36 PFNA										
463.00 > 419.00	7.241	7.261	-0.020	1.000	2138108	2.60	Target=6.02	104	21925	
463.00 > 219.00	7.241	7.261	-0.020	1.000	332887		6.42(3.01-9.04)		6861	
* 35 13C5 PFNA										
468.00 > 423.00	7.241	7.261	-0.020		1124732	1.25			13922	
D 34 13C9 PFNA										
472.10 > 427.00	7.241	7.261	-0.020	1.000	1023671	1.20		96.3	12731	
37 PFHpS										
449.00 > 79.90	7.457	7.473	-0.016	0.934	415687	2.12	Target=4.91	89.1	11602	
449.00 > 98.80	7.457	7.473	-0.016	0.934	86258		4.82(2.46-7.37)		4060	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.506	7.522	-0.016	1.095	290301	3.68	Target=5.49	76.9	10231	
529.10 > 509.00	7.506	7.522	-0.016	1.095	53418		5.43(2.74-8.23)	76.9	2533	
39 8:2FTS										
527.10 > 507.00	7.506	7.522	-0.016	1.000	831740	9.44	Target=1.56	98.7	23458	
527.10 > 80.80	7.506	7.522	-0.016	1.000	496722		1.67(0.78-2.33)		14050	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.726	7.761	-0.035	0.967	434620	4.57		91.5	11654	
42 NMeFOSAA										
570.10 > 419.00	7.743	7.761	-0.018	1.002	196971	2.26	Target=1.15	90.7	5744	
570.10 > 483.00	7.743	7.761	-0.018	1.002	178044		1.11(0.58-1.73)		6057	
* 44 13C2 PFDA										
515.10 > 470.10	7.761	7.779	-0.018		1010180	1.25			16917	
D 40 13C6 PFDA										
519.10 > 474.10	7.761	7.779	-0.018	1.000	1025649	1.28		102	22896	
43 PFDA										
512.90 > 469.00	7.761	7.779	-0.018	1.000	1649112	2.45	Target=3.33	98.0	17025	
512.90 > 219.00	7.761	7.779	-0.018	1.000	487359		3.38(1.67-5.00)		10869	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.951	7.969	-0.018	0.996	507236	4.61		92.3	7453	
45 NEtFOSAA										
584.20 > 419.10	7.951	7.969	-0.018	1.000	172823	2.34	Target=1.55	93.8	5122	
584.20 > 526.00	7.951	7.969	-0.018	1.000	119813		1.44(0.77-2.32)		4157	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 49 13C8 PFOS										
507.10 > 79.90	7.986	8.021	-0.035	1.000	262597	2.59	Target=2.95	108	149	
507.10 > 98.90	7.986	8.021	-0.035	1.000	86640		3.03(1.47-4.42)	108	3864	
* 47 13C4 PFOS										
502.80 > 79.90	7.986	8.021	-0.035		676922	2.40	Target=3.78		15159	
502.80 > 98.90	7.986	8.021	-0.035		184953		3.66(1.89-5.67)		6205	
48 PFOS										
498.90 > 79.90	8.004	8.021	-0.017	1.002	786675	2.20	Target=4.86	94.7	26527	
498.90 > 98.80	8.004	8.021	-0.017	1.002	165212		4.76(2.43-7.28)		6484	
D 53 13C7 PFUnA										
570.00 > 525.10	8.248	8.285	-0.036	1.063	1116019	1.25		99.6	24016	
52 PFUnA										
563.10 > 519.00	8.248	8.285	-0.036	1.000	2106833	2.67	Target=5.72	107	24550	
563.10 > 269.10	8.267	8.285	-0.017	1.002	374998		5.62(2.86-8.59)		12056	
54 9ClFOS										
530.80 > 351.00	8.390	8.408	-0.018	1.477	2045726	6.85	Target=2.23	110	29777	
532.80 > 353.00	8.390	8.408	-0.018	1.477	898317		2.28(1.11-3.34)		16733	
55 PFNS										
548.80 > 79.90	8.512	8.529	-0.017	1.066	331227	2.26	Target=4.00	94.3	8868	
548.80 > 98.80	8.512	8.529	-0.017	1.066	80801		4.10(2.00-6.00)		2702	
D 50 13C8 FOSA										
506.10 > 77.80	8.740	8.756	-0.016	1.094	1216000	2.47		99.0	17516	
51 PFOSA										M
498.10 > 77.90	8.740	8.773	-0.033	1.000	1316871	2.72	Target=41.88	109	12671	
498.10 > 478.00	8.740	8.773	-0.033	1.000	29411		44.77(20.94-62.83)		1230	M
D 56 13C2 PFDoA										
615.10 > 570.00	8.756	8.773	-0.017	1.128	1110888	1.26		100	18079	
57 PFDoA										
613.10 > 569.00	8.756	8.773	-0.017	1.000	2300526	2.58	Target=7.45	103	16703	
613.10 > 319.00	8.756	8.773	-0.017	1.000	296134		7.77(3.73-11.18)		7790	
58 PFDS										
599.00 > 79.90	9.011	9.044	-0.033	1.128	829499	2.45	Target=4.54	102	14391	
599.00 > 98.80	9.011	9.044	-0.033	1.128	177860		4.66(2.27-6.82)		6166	
63 PFTrDA										
663.00 > 619.00	9.254	9.271	-0.017	0.950	1464317	2.53	Target=5.19	102	22123	
663.00 > 168.90	9.254	9.271	-0.017	0.950	286390		5.11(2.59-7.78)		6506	
66 11ClFOS										
630.90 > 450.90	9.413	9.444	-0.031	1.657	3256461	6.94	Target=3.47	111	92834	
632.90 > 452.90	9.413	9.444	-0.031	1.657	952740		3.42(1.74-5.21)		19380	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.738	9.774	-0.036	1.255	565821	1.34		107	9442	
70 PFTeDA										
713.10 > 669.00	9.738	9.774	-0.036	1.000	1206610	2.29	Target=6.88	91.9	11409	
713.10 > 168.90	9.738	9.774	-0.036	1.000	179631		6.72(3.44-10.32)		6007	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.910	9.910	0.0	1.241	9121413	25.3		101	40074	
60 N-MeFOSE-M										M
616.10 > 58.90	9.930	9.950	-0.020	1.002	5124990	12.8		103	4369	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
71 PFDoS										
699.10 > 79.90	10.007	10.045	-0.038	1.253	657455	2.43	Target=4.14	100	11386	
699.10 > 98.80	10.007	10.045	-0.038	1.253	143804		4.57(2.07-6.21)		3497	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.102	10.120	-0.018	1.265	285291	2.56		102	6877	
61 NMeFOSA										
511.90 > 219.00	10.121	10.120	0.001	1.002	274404	2.51	Target=0.98	101	4644	
511.90 > 169.00	10.121	10.120	0.001	1.002	262171		1.05(0.49-1.47)		4918	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.291	10.310	-0.019	1.289	11717299	26.0		104	77843	
65 N-EtFOSE-M										M
630.00 > 58.90	10.329	10.329	0.0	1.004	12678666	25.9		104	4309	M
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.481	10.500	-0.019	1.312	300772	2.63		105	3784	
68 N-EtFOSA-M										
526.00 > 219.00	10.500	10.500	0.0	1.002	315185	2.45	Target=0.99	98.0	4100	
526.00 > 169.00	10.500	10.500	0.0	1.002	312336		1.01(0.50-1.49)		4244	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

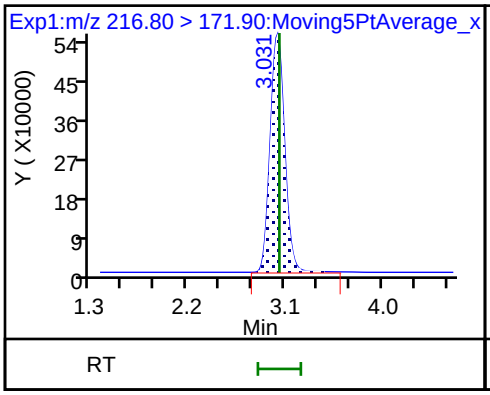
LC1633EPA_LL6_00013 Amount Added: 1.00 Units: mL

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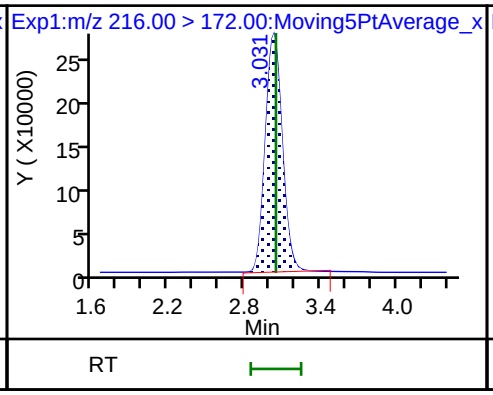
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.025.d
Injection Date: 28-Nov-2023 18:20:59 Instrument ID: LC_LCMS11
Lims ID: CCV
Client ID:
Operator ID: B5QN ALS Bottle#: 19 Worklist Smp#: 21
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5

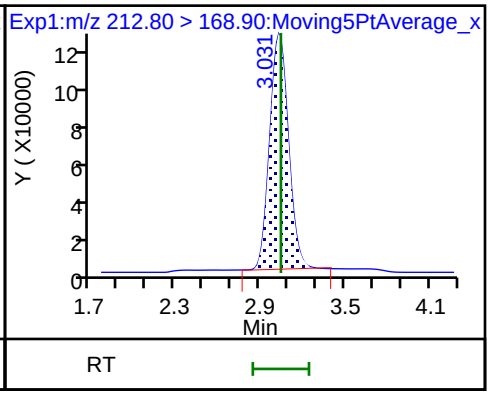
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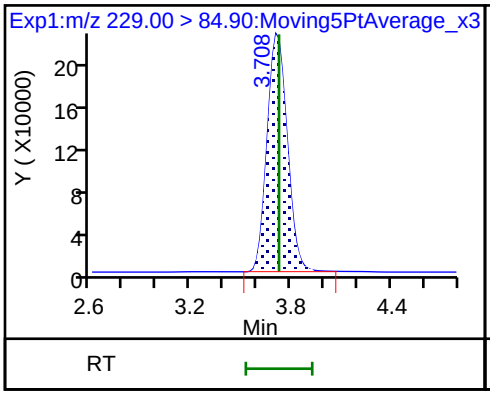
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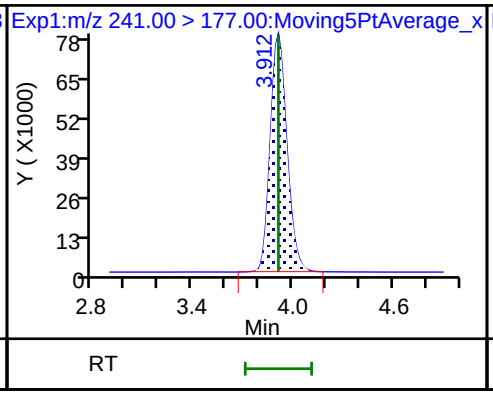
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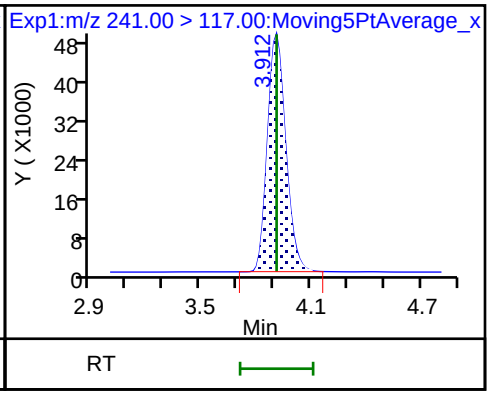
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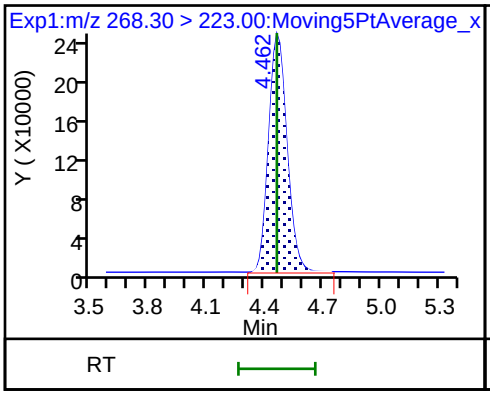
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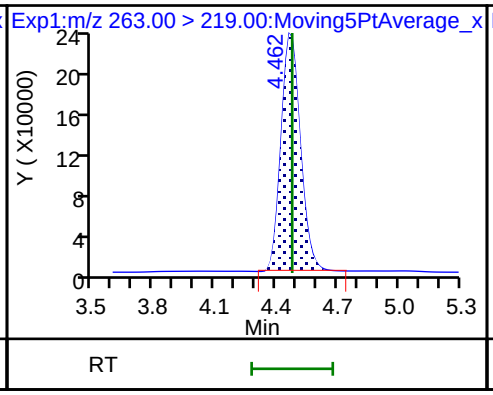
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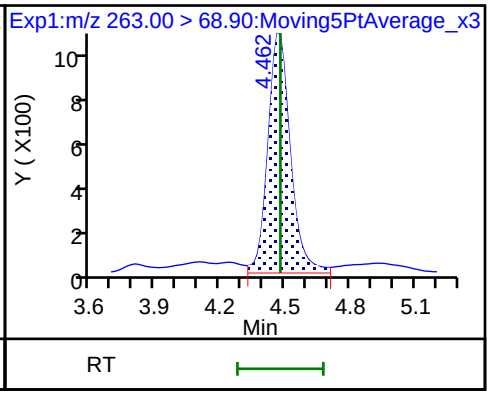
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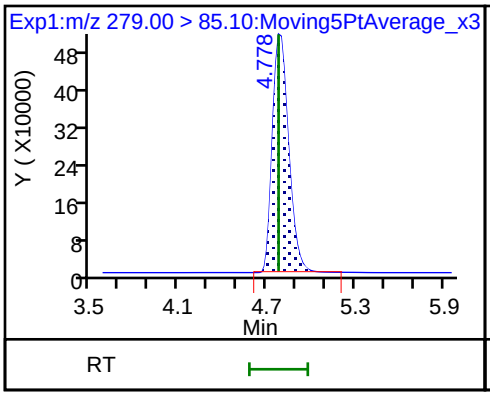
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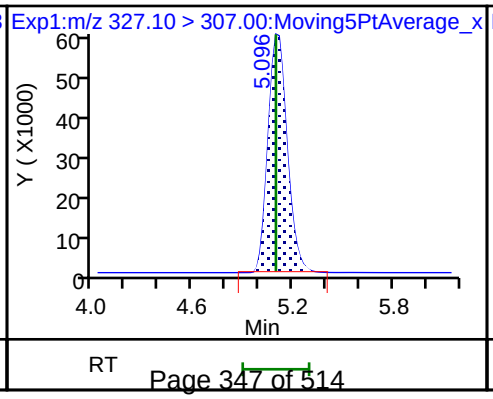
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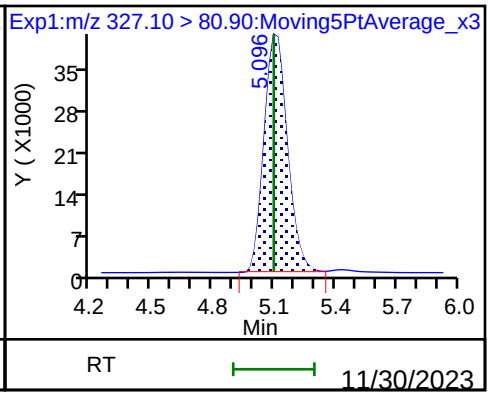
8 PFMBA



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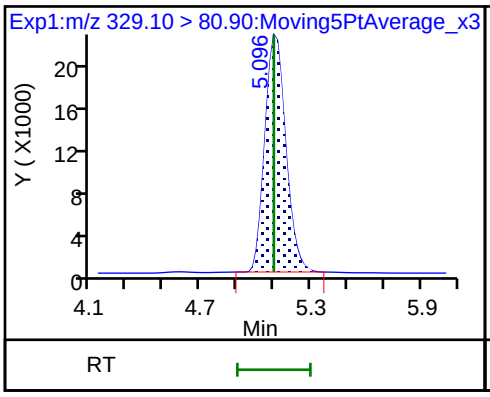


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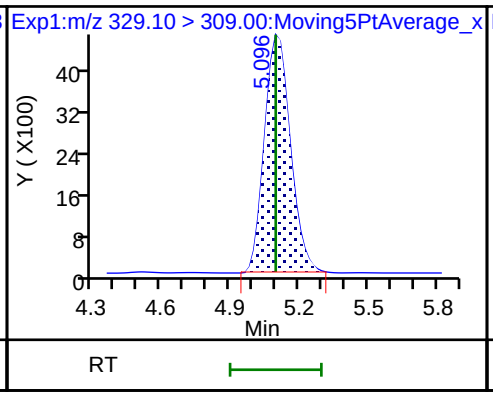


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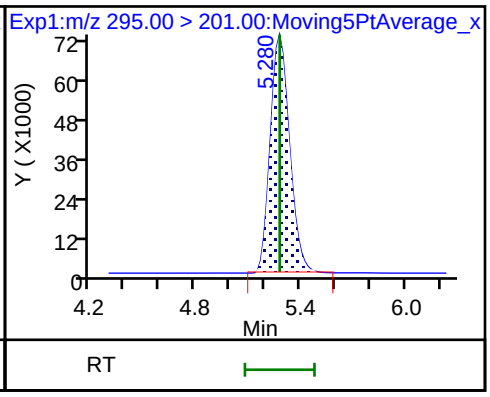
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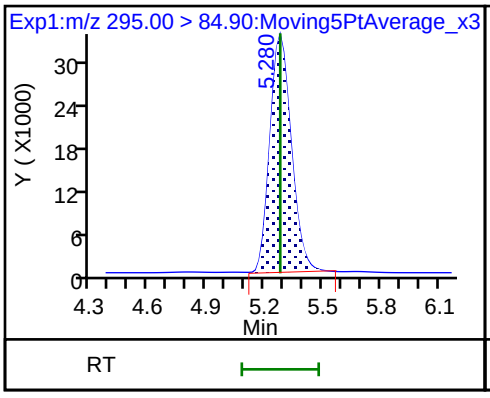
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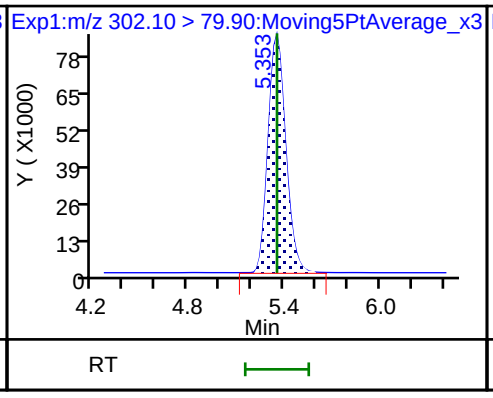
11 NFDHA



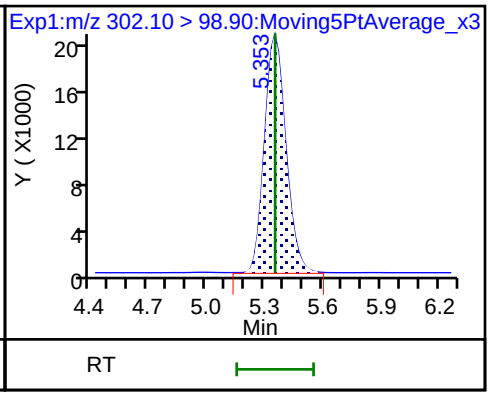
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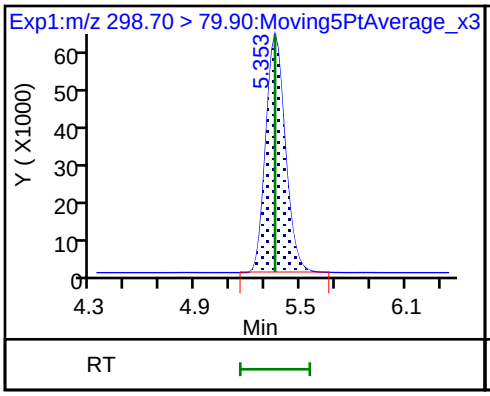
D 16 13C3 PFBS



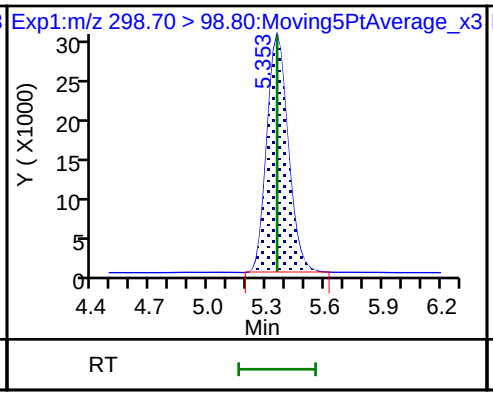
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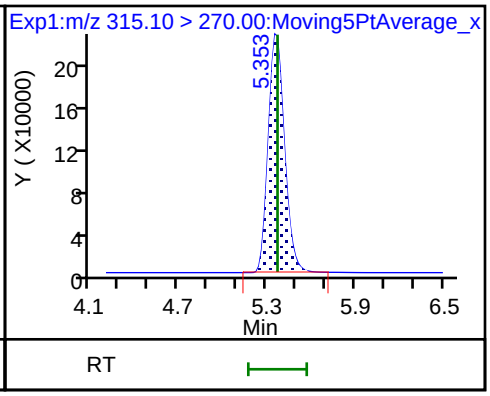
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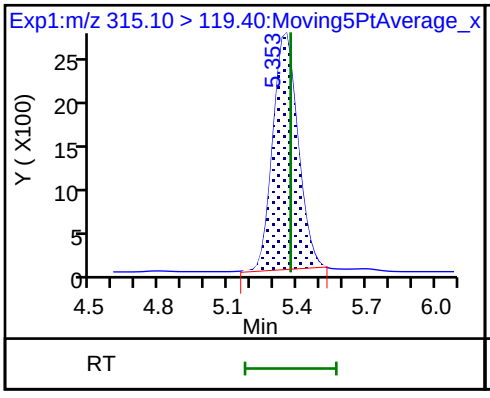
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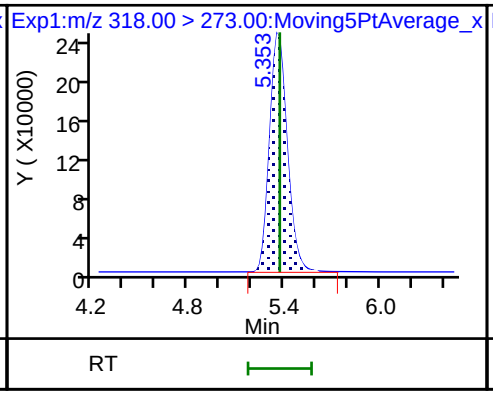
* 14 13C2 PFHxA



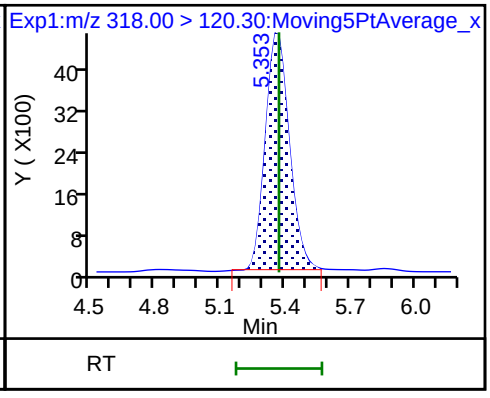
* 14 13C2 PFHxA



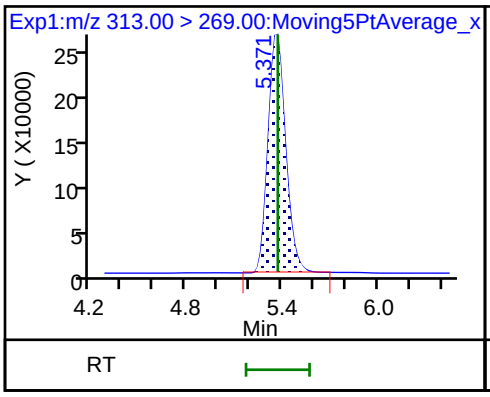
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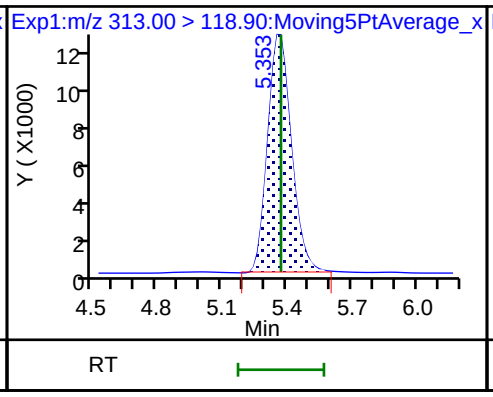
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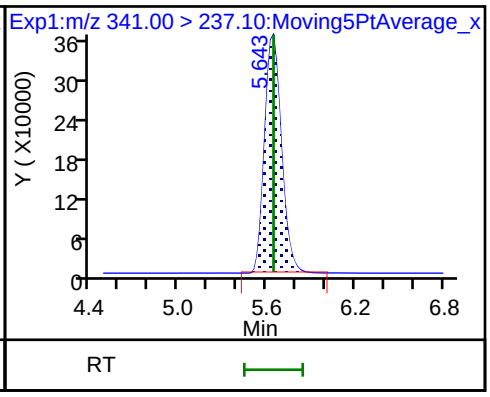
13 PFHxA



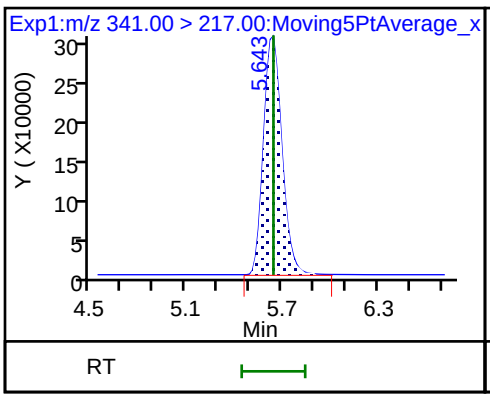
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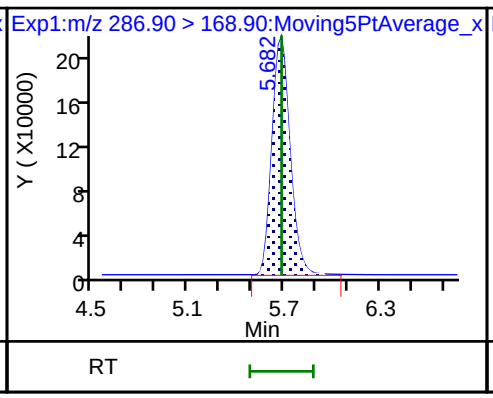
18 5:3 FTCA



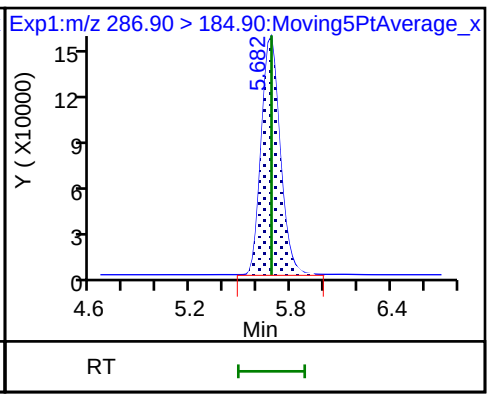
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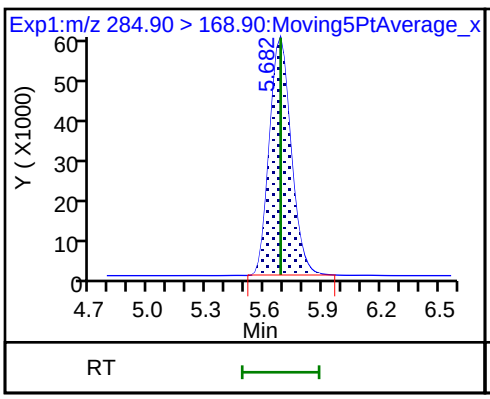
D 20 13C3 HFPO-DA



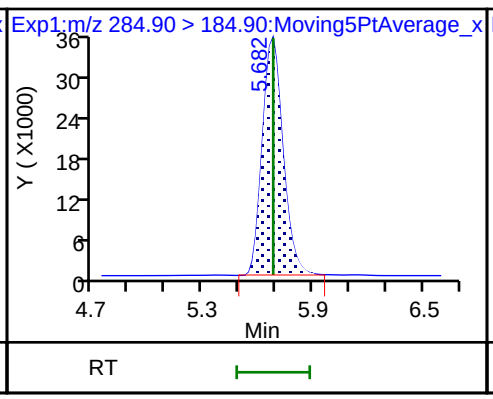
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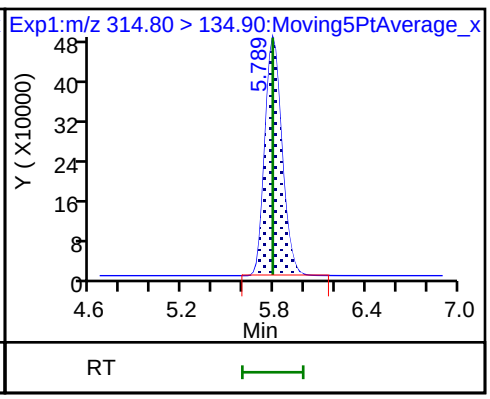
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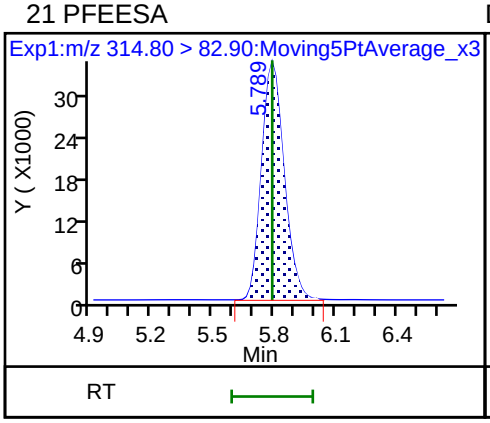
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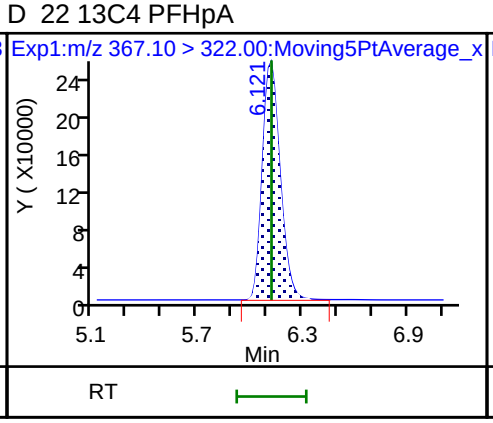
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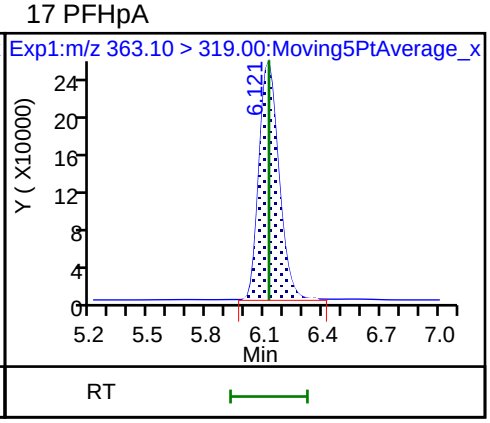
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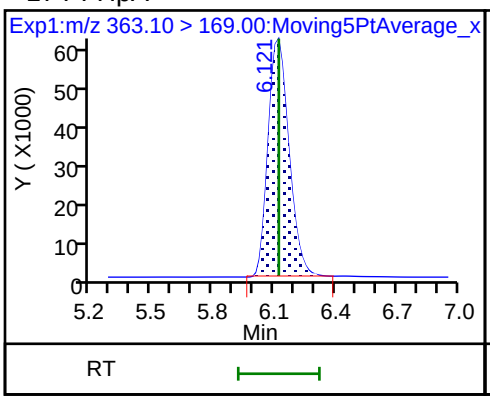
D 22 13C4 PFHpA



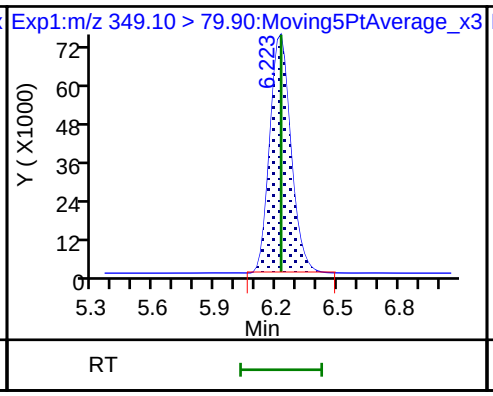
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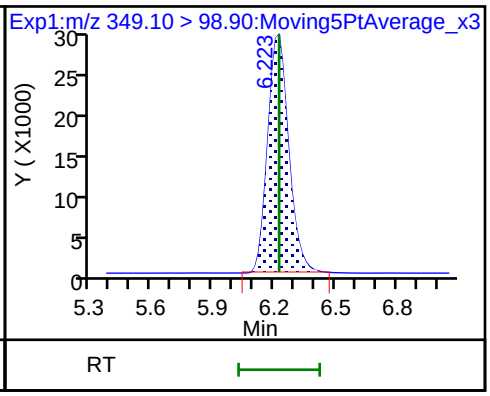
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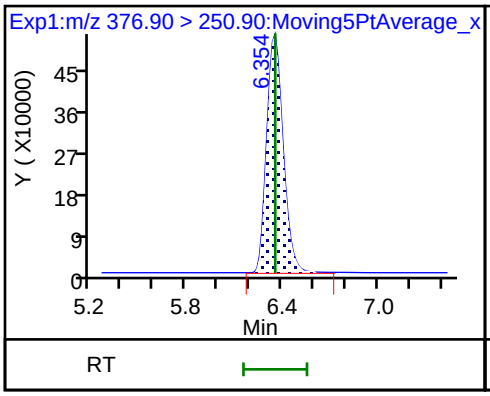
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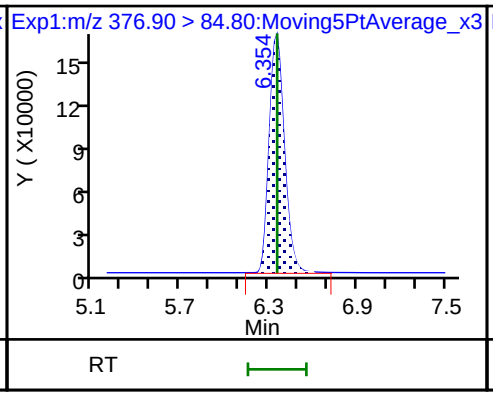
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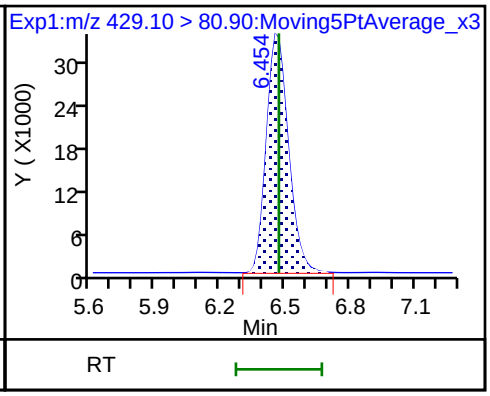
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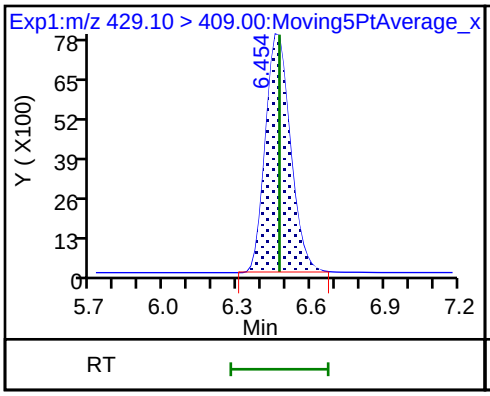
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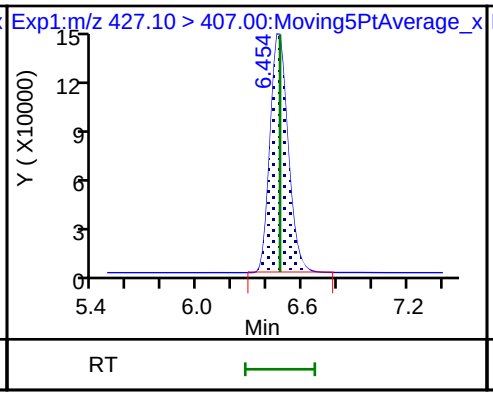
D 26 13C2-6:2FTS



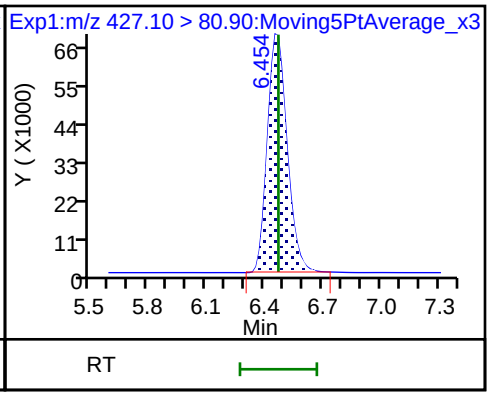
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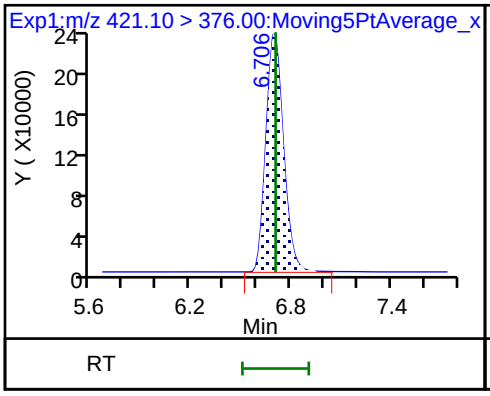
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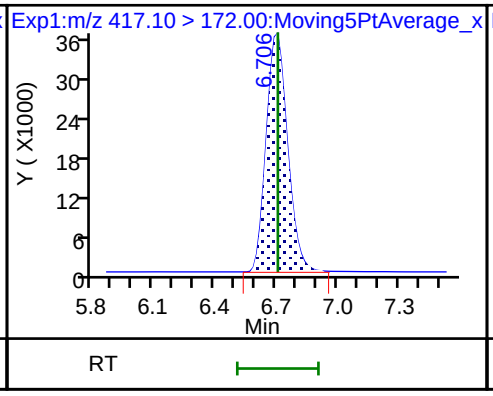
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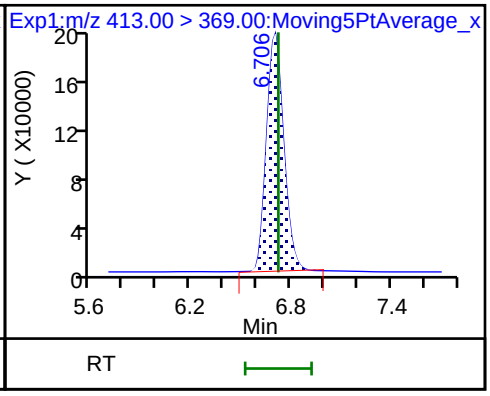
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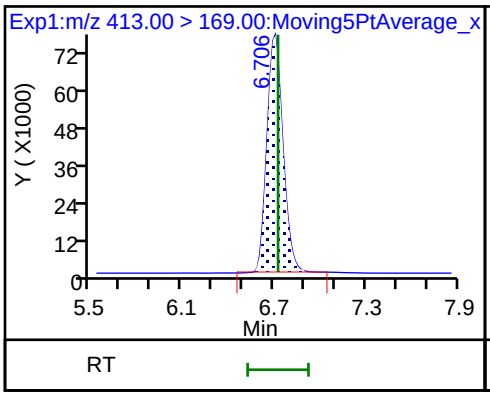
* 29 13C4 PFOA



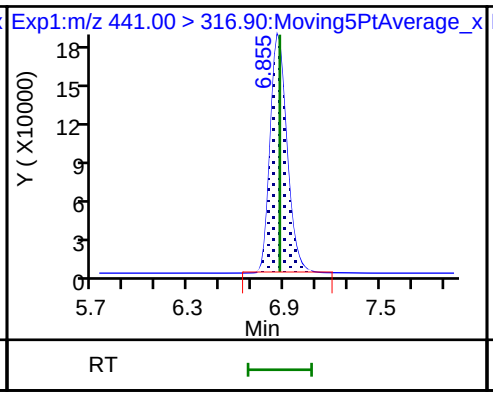
28 PFOA



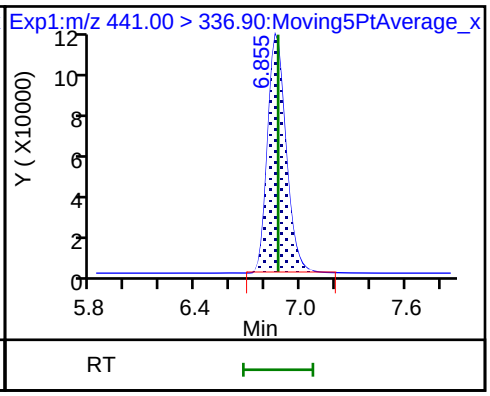
28 PFOA



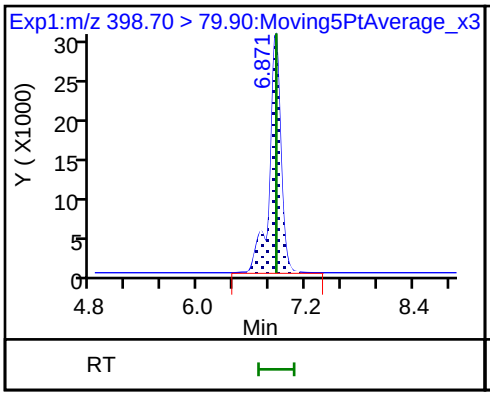
30 7:3 FTCA



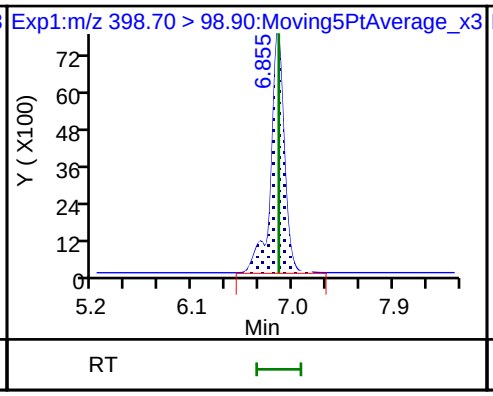
30 7:3 FTCA



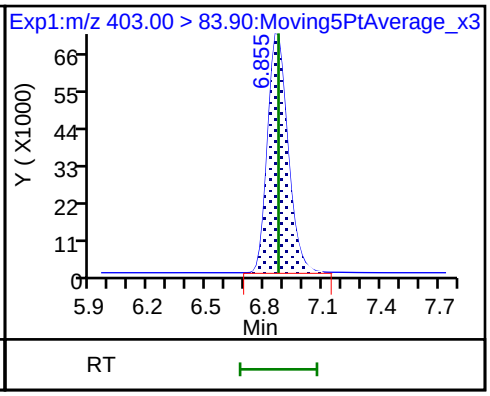
32 PFHxS



32 PFHxS



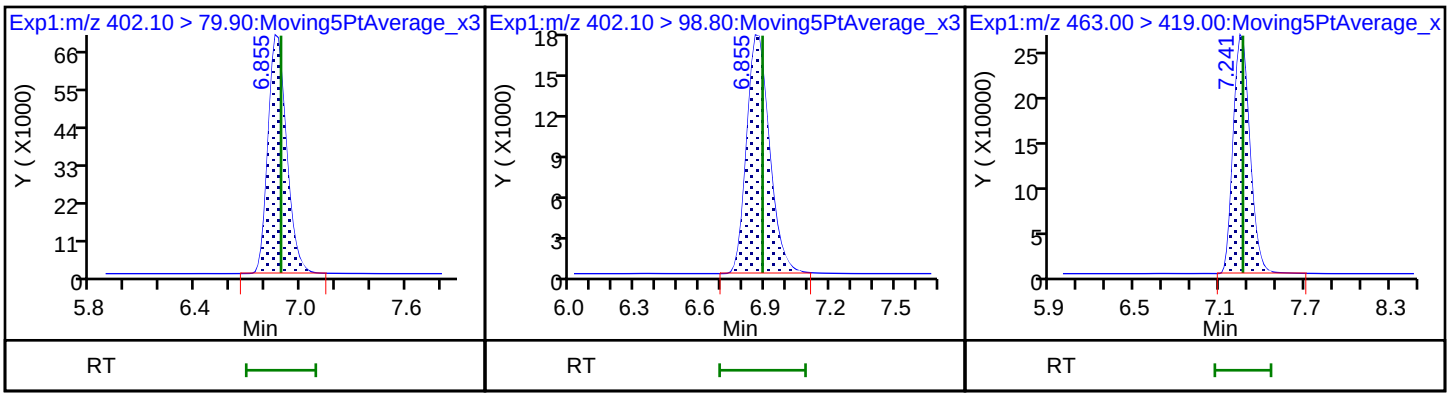
* 31 18O2 PFHxS



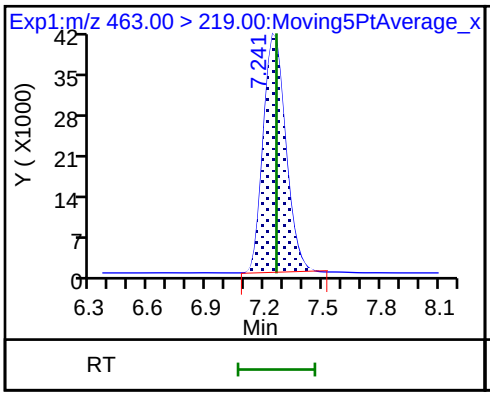
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D 33 13C3 PFHxS

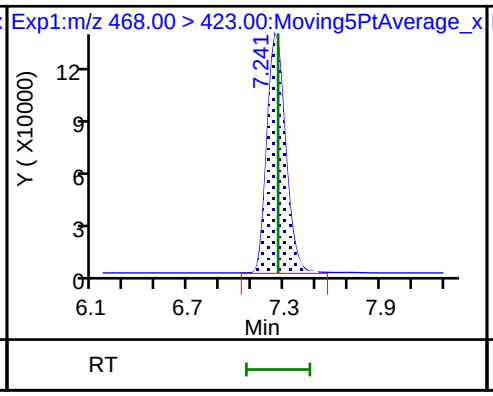
36 PFNA



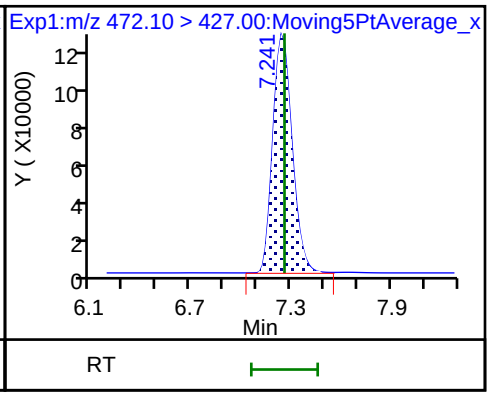
36 PFNA



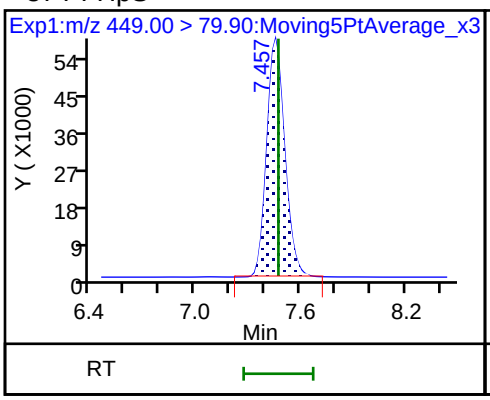
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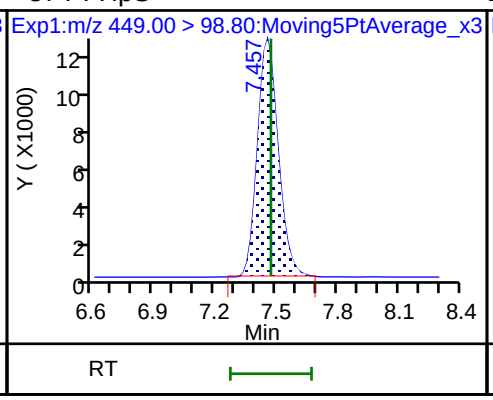
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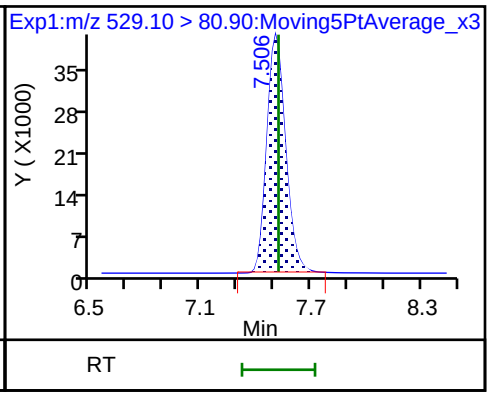
37 PFHpS



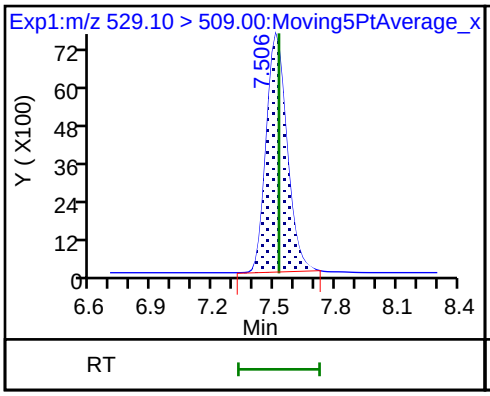
37 PFHpS



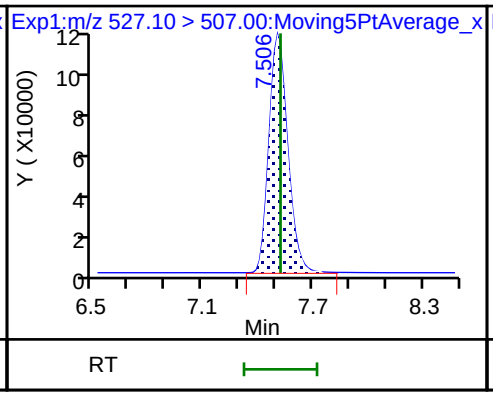
D 38 13C2-8:2FTS



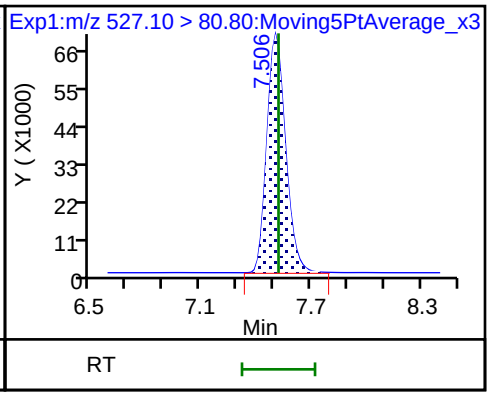
D 38 13C2-8:2FTS



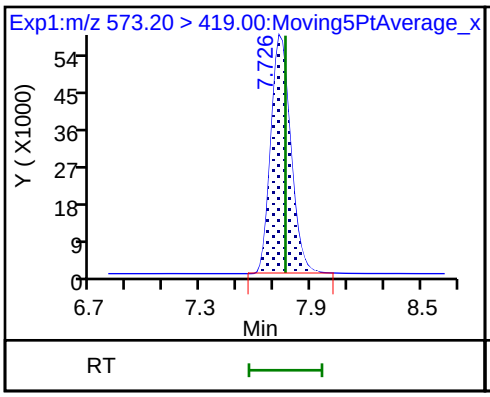
39 8:2FTS



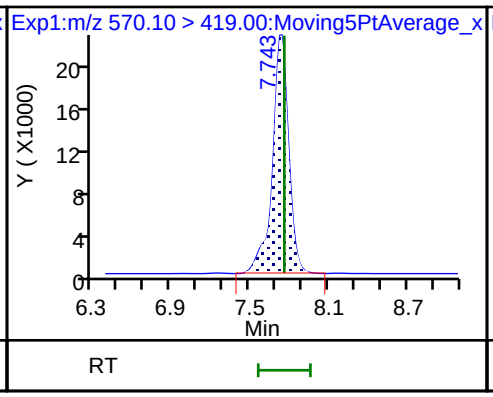
39 8:2FTS



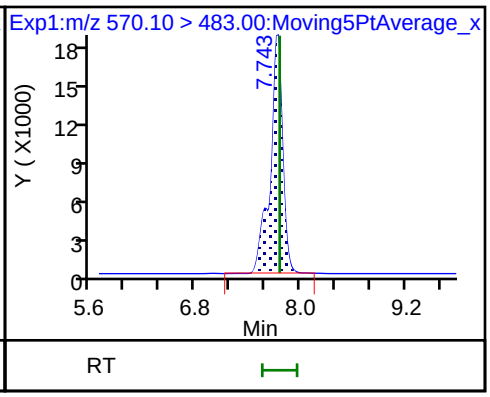
D 41 d3-NMeFOSAA



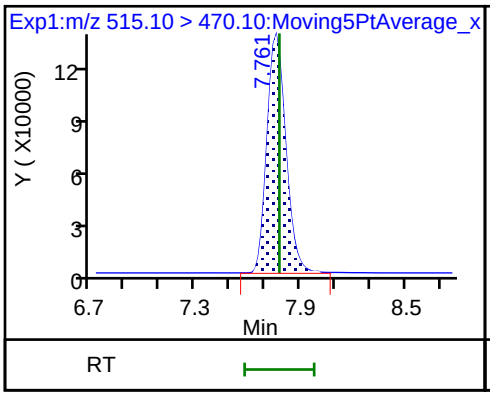
42 NMeFOSAA



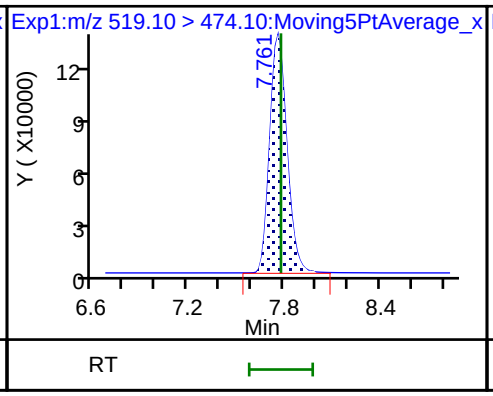
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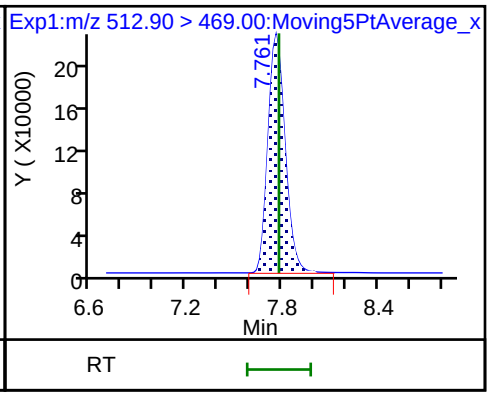
* 44 13C2 PFDA



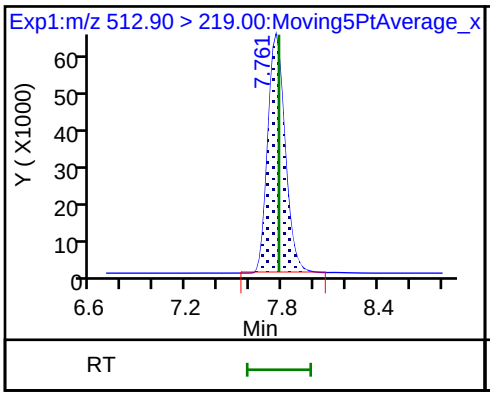
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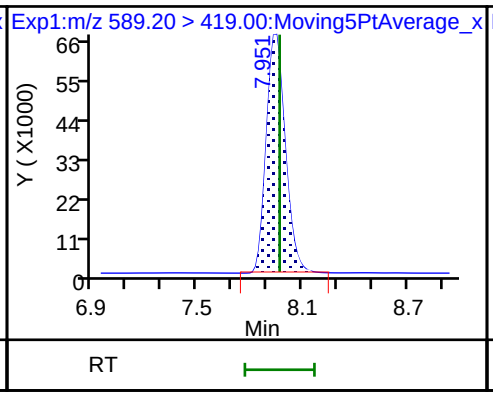
43 PFDA



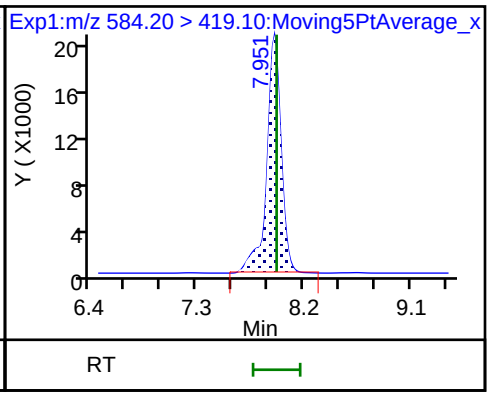
43 PFDA



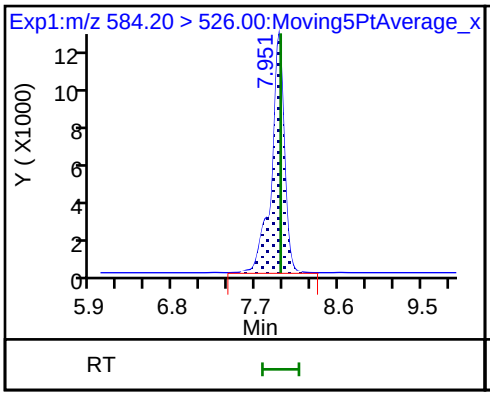
D 46 d5-NEtFOSAA



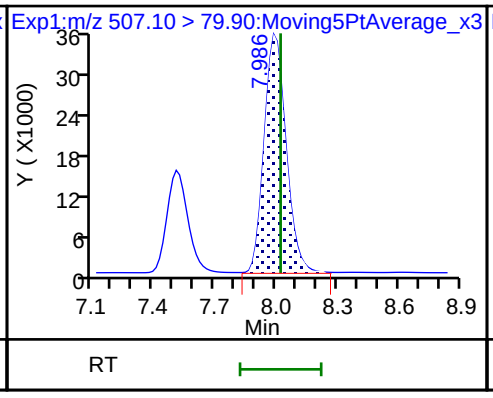
45 NEtFOSAA



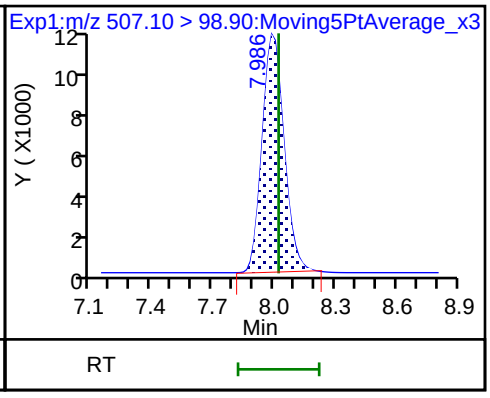
45 NEtFOSAA



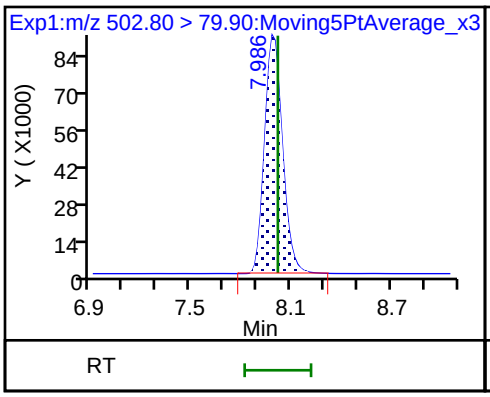
D 49 13C8 PFOS



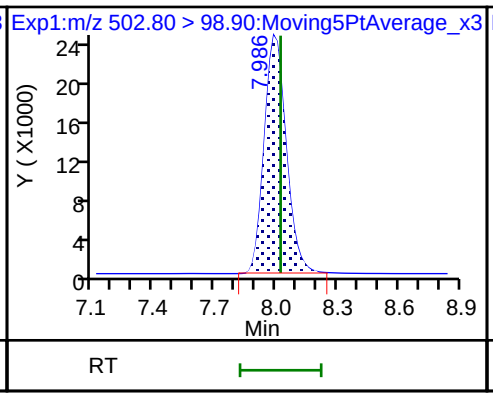
D 49 13C8 PFOS



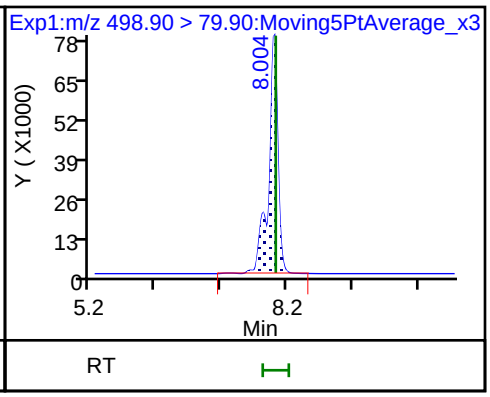
* 47 13C4 PFOS



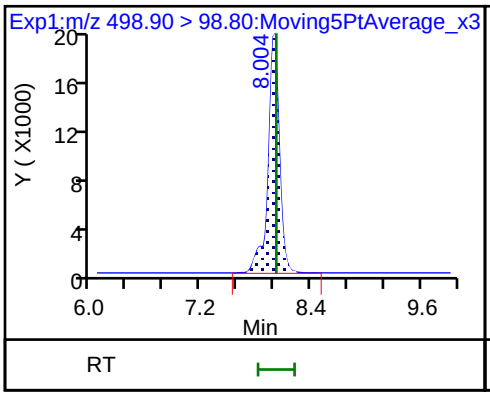
* 47 13C4 PFOS



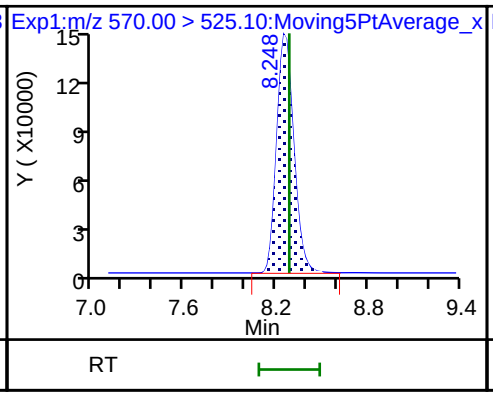
48 PFOS



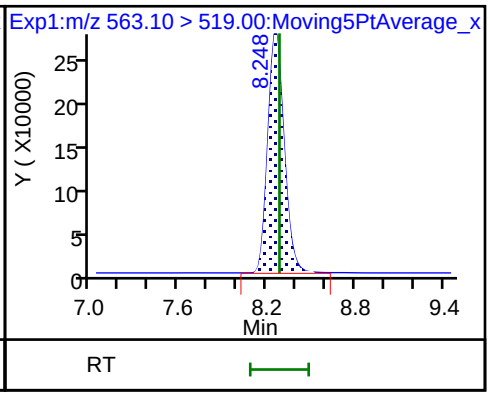
48 PFOS



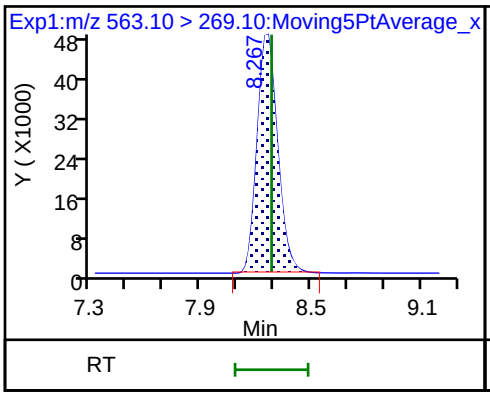
D 53 13C7 PFUnA



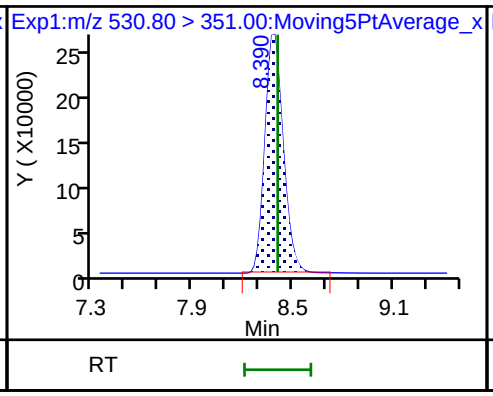
52 PFUnA



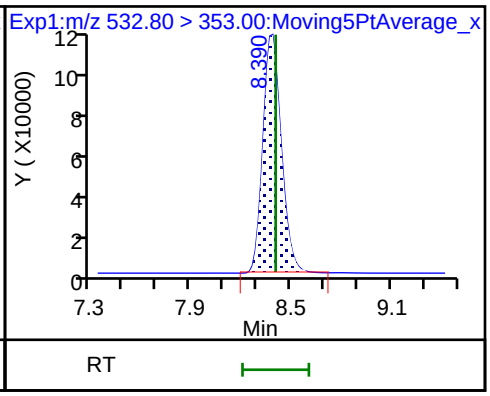
52 PFUnA



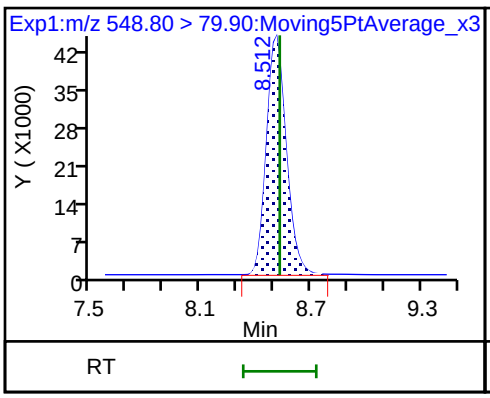
54 9ClFOS



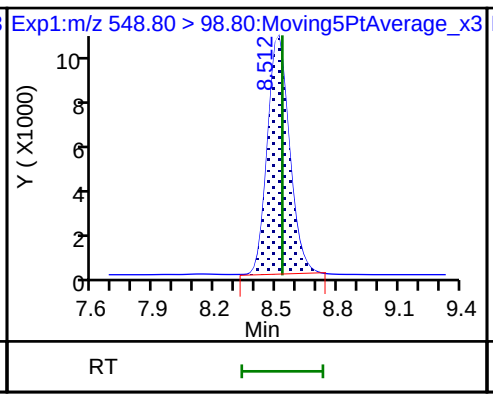
54 9ClFOS



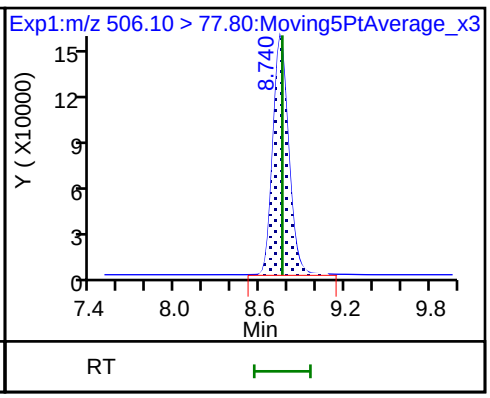
55 PFNS



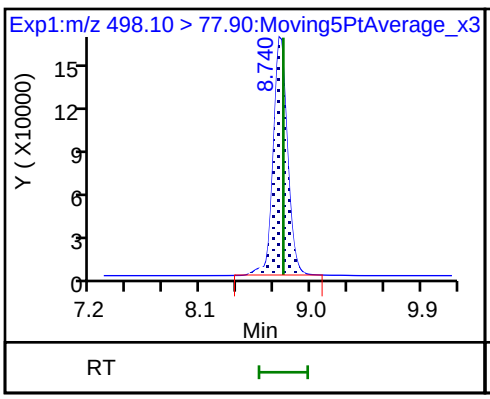
55 PFNS



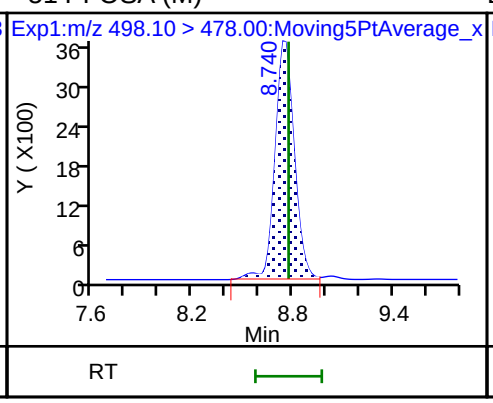
D 50 13C8 FOSA



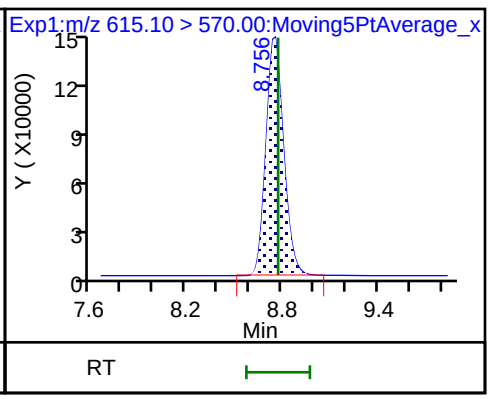
51 PFOSA



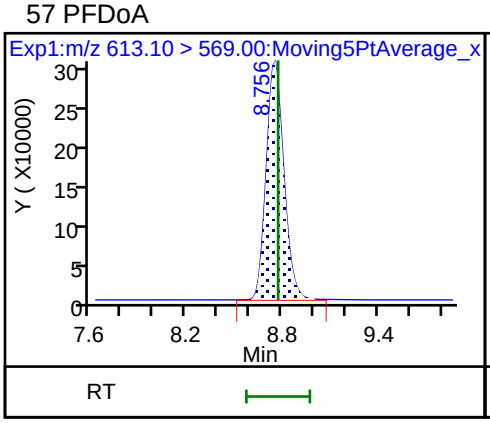
51 PFOSA (M)



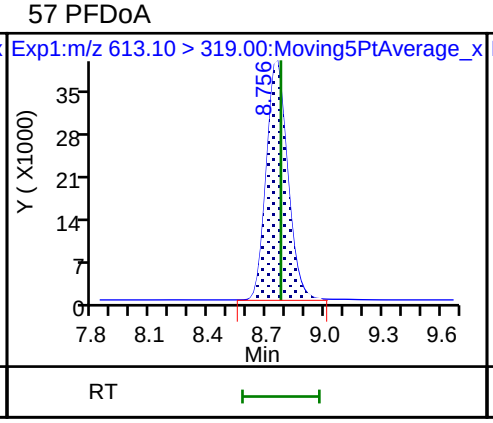
D 56 13C2 PFDoA



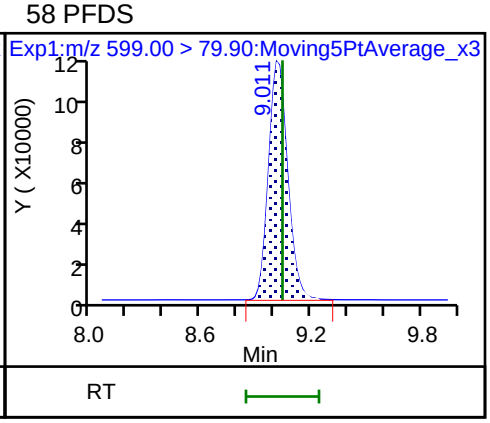
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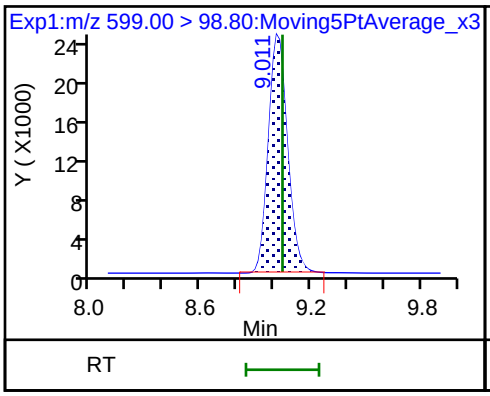
57 PFDoA



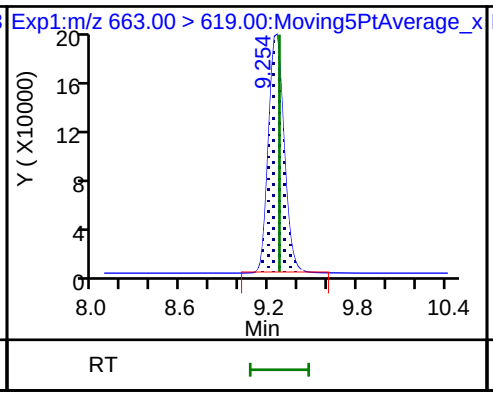
58 PFDS



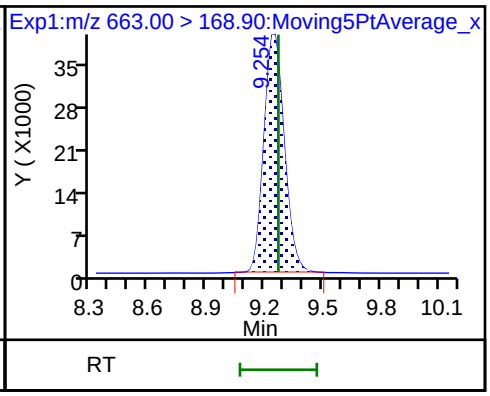
58 PFDS



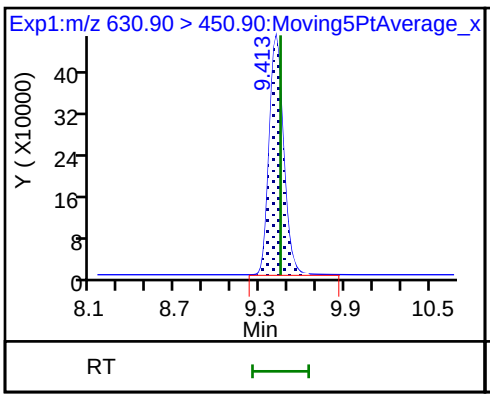
63 PFTrDA



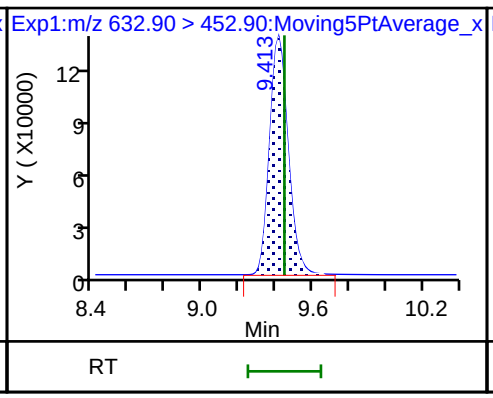
63 PFTrDA



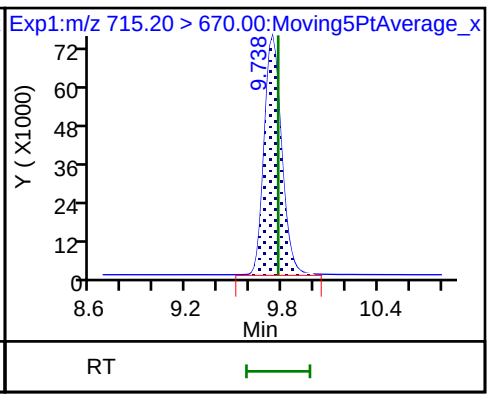
66 11ClFOS



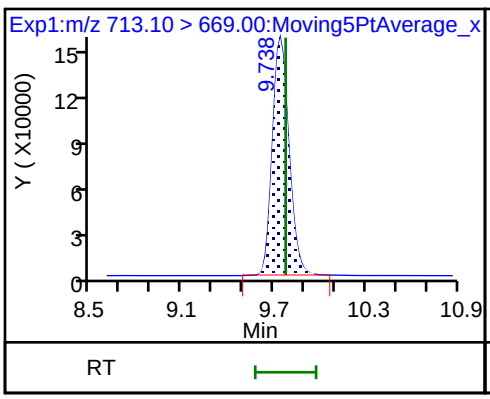
66 11ClFOS



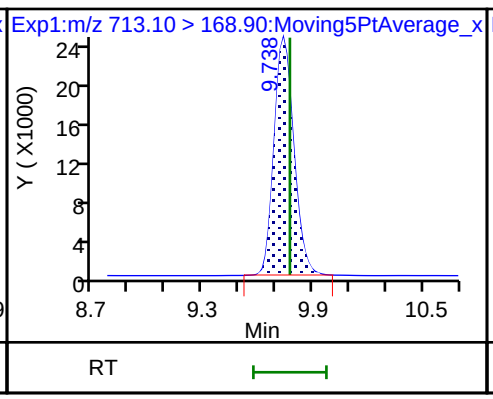
D 69 13C2 PFTeDA



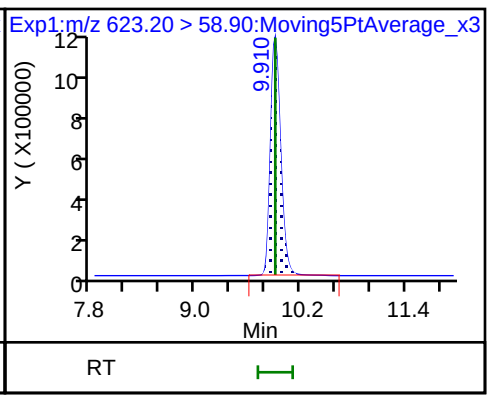
70 PFTeDA



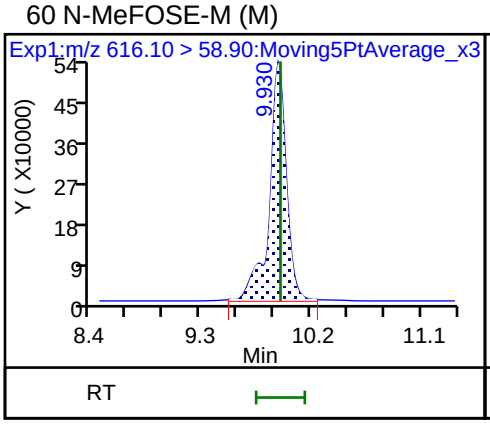
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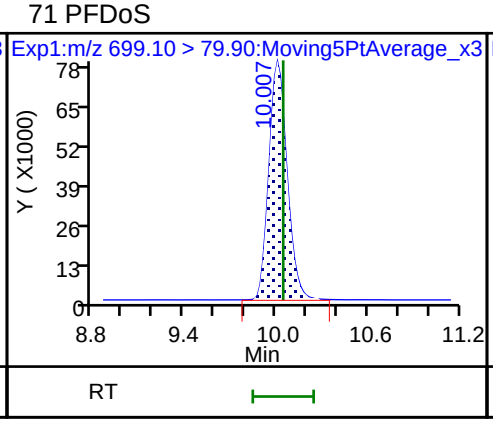
D 59 d7-N-Me-FOSE



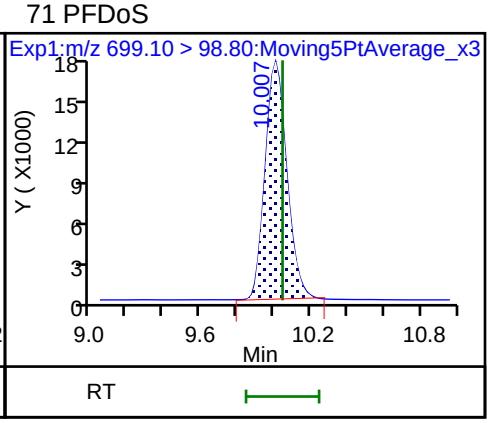
60 N-MeFOSE-M (M)



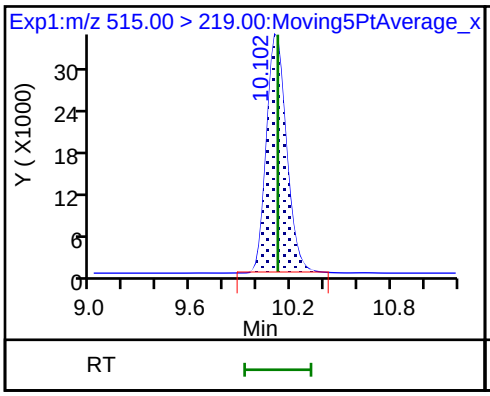
71 PFDoS



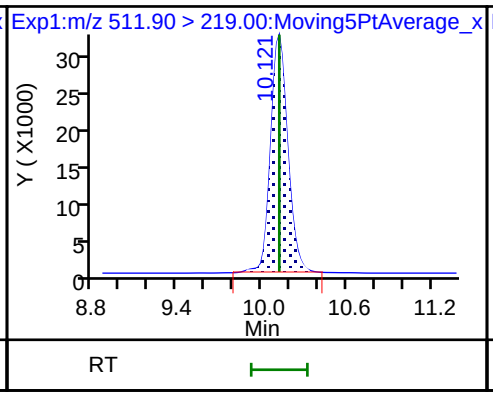
71 PFDoS



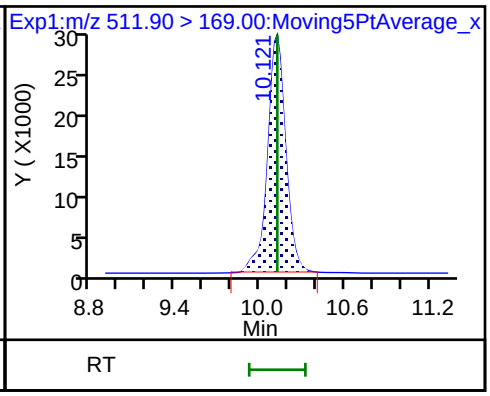
D 62 d3-NMePFOSA



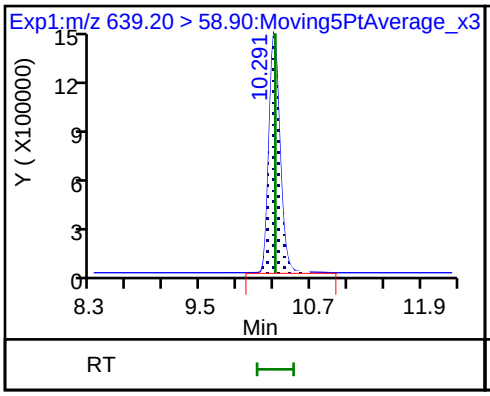
61 NMeFOSA



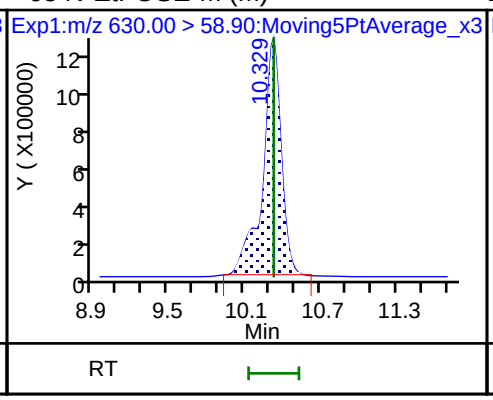
61 NMeFOSA



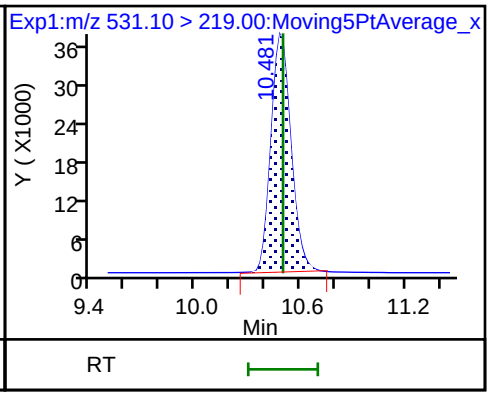
D 64 d9-N-EtFOSE



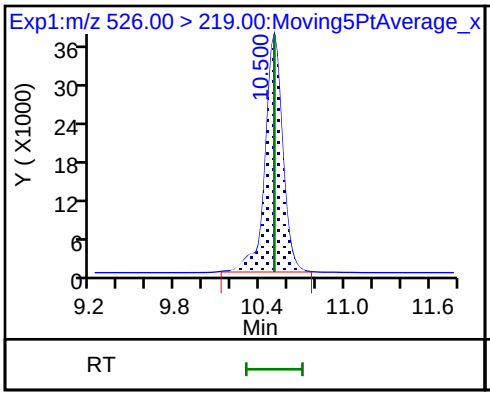
65 N-EtFOSE-M (M)



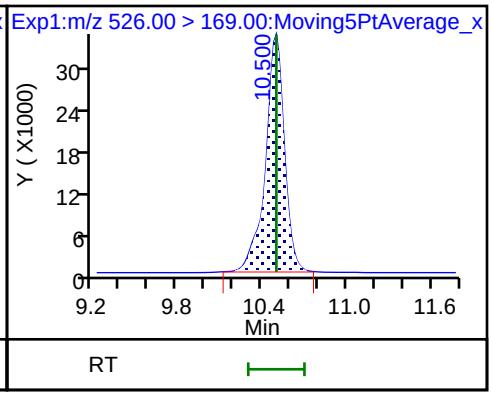
D 67 d5-NEtPFOSA



68 N-EtFOSA-M



68 N-EtFOSA-M



Manual Integration/User Assign Peak Report

Eurofins Denver

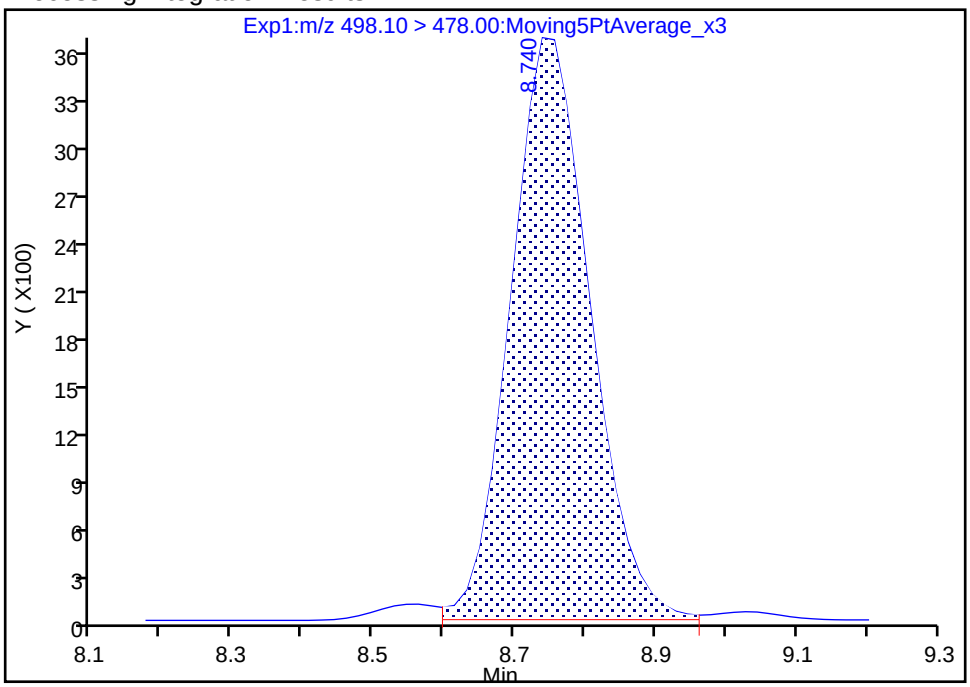
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Injection Date: 28-Nov-2023 18:20:59 Instrument ID: LC_LCMS11
Lims ID: CCV
Client ID:
Operator ID: B5QN ALS Bottle#: 19 Worklist Smp#: 21
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

51 PFOSA, CAS: 754-91-6

Signal: 2

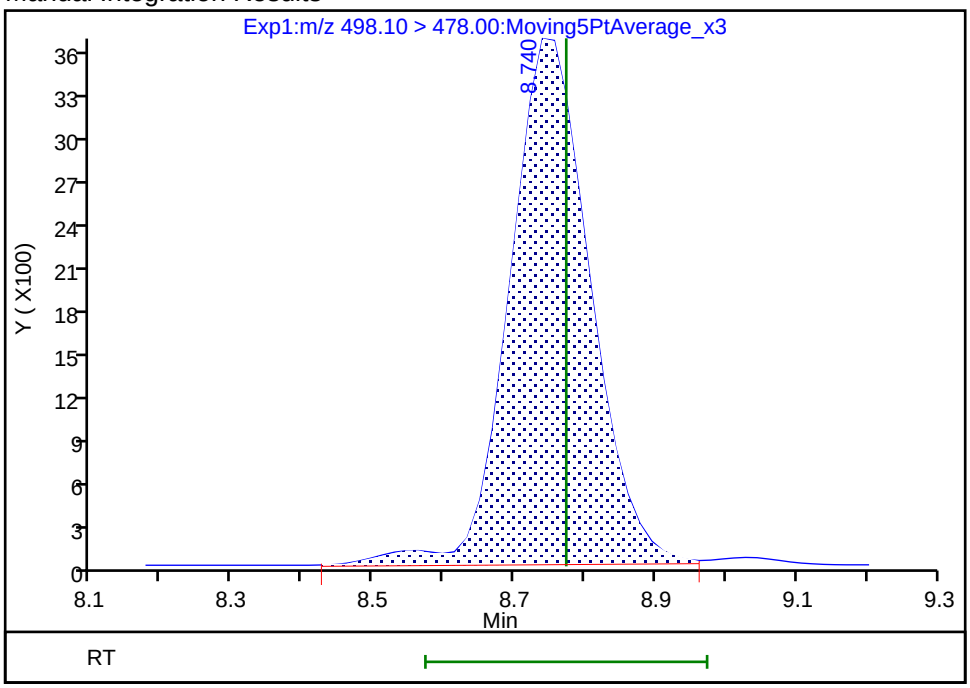
Processing Integration Results

RT: 8.74
Area: 29058
Amount: 2.719944
Amount Units: ng/ml



Manual Integration Results

RT: 8.74
Area: 29411
Amount: 2.719944
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:46:47 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

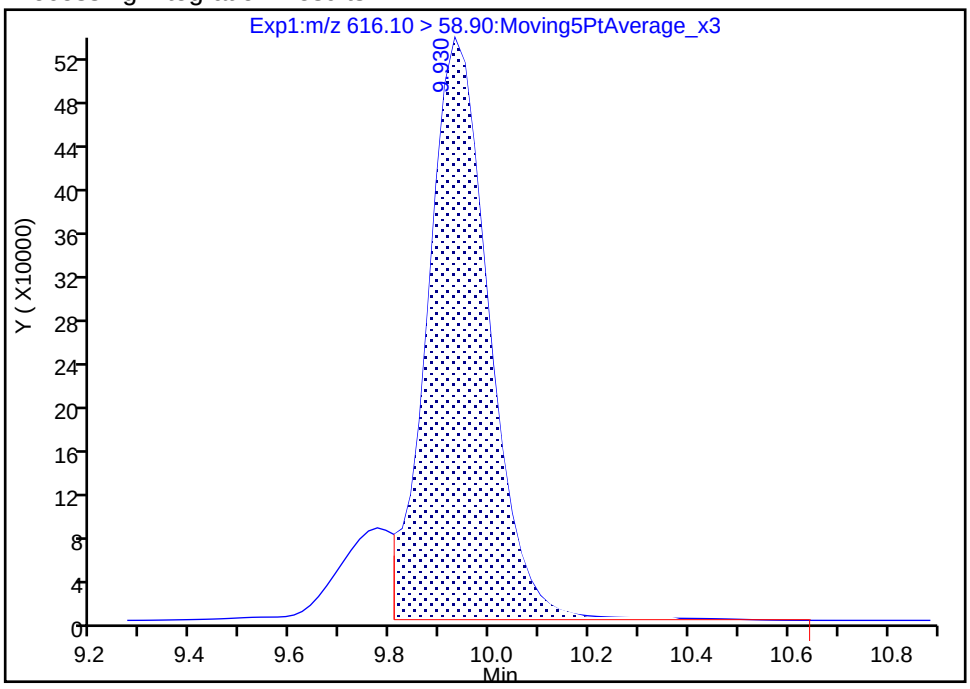
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Lims ID: CCV
Client ID:
Operator ID: B5QN ALS Bottle#: 19 Worklist Smp#: 21
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

60 N-MeFOSE-M, CAS: 24448-09-7

Signal: 1

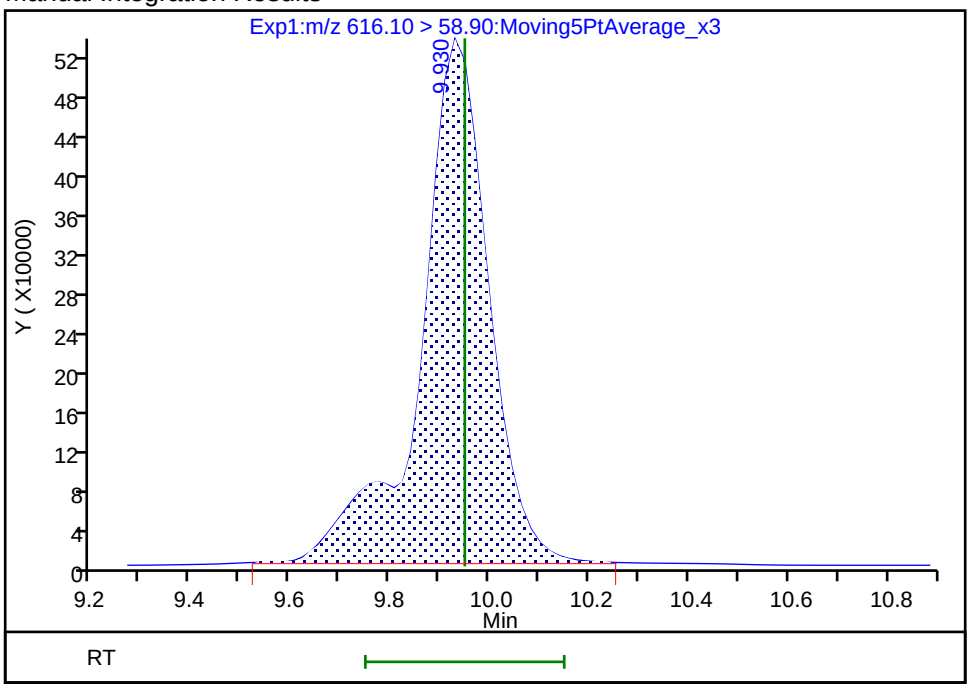
Processing Integration Results

RT: 9.93
Area: 4592632
Amount: 11.505886
Amount Units: ng/ml



Manual Integration Results

RT: 9.93
Area: 5124990
Amount: 12.839599
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:46:59 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

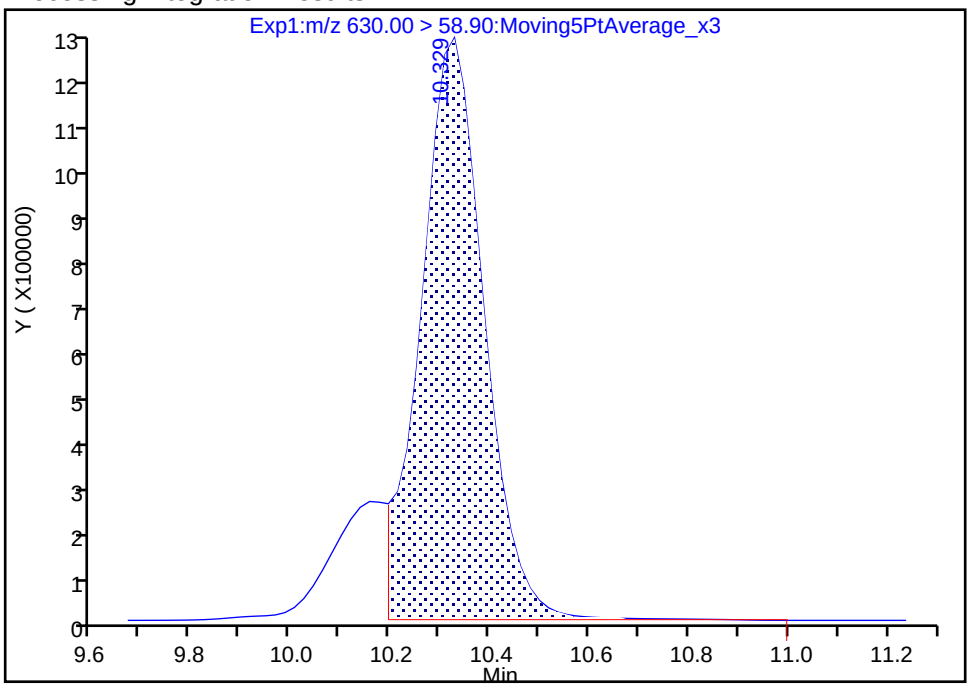
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Injection Date: 28-Nov-2023 18:20:59 Instrument ID: LC_LCMS11
Lims ID: CCV
Client ID:
Operator ID: B5QN ALS Bottle#: 19 Worklist Smp#: 21
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

65 N-EtFOSE-M, CAS: 1691-99-2

Signal: 1

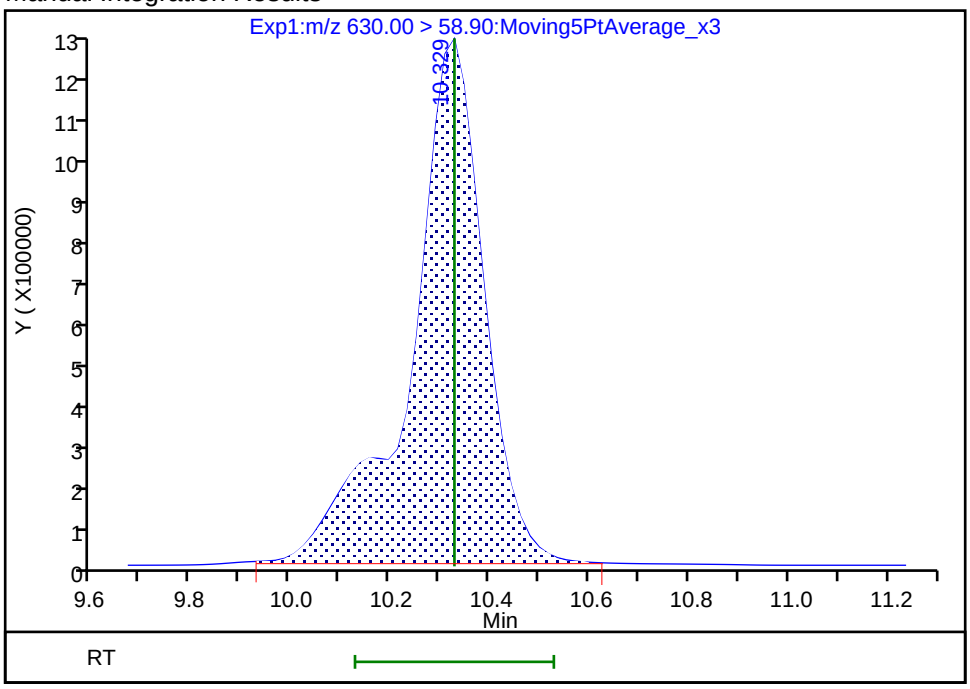
Processing Integration Results

RT: 10.33
Area: 10983937
Amount: 22.457972
Amount Units: ng/ml

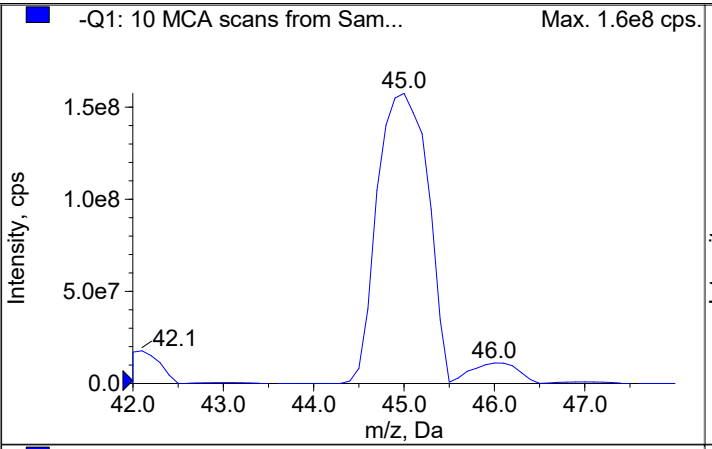


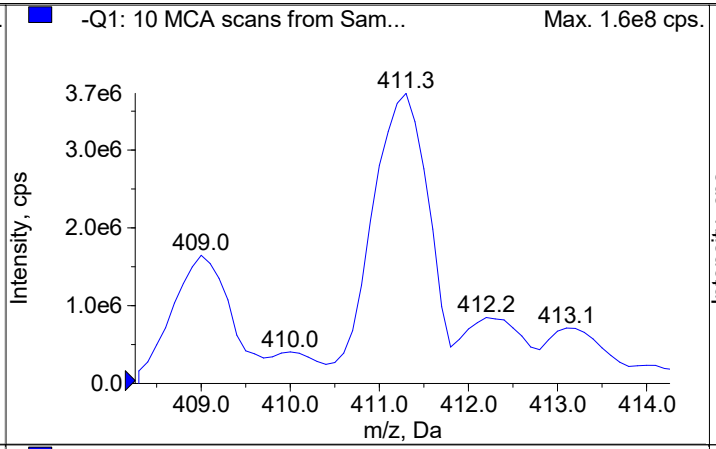
Manual Integration Results

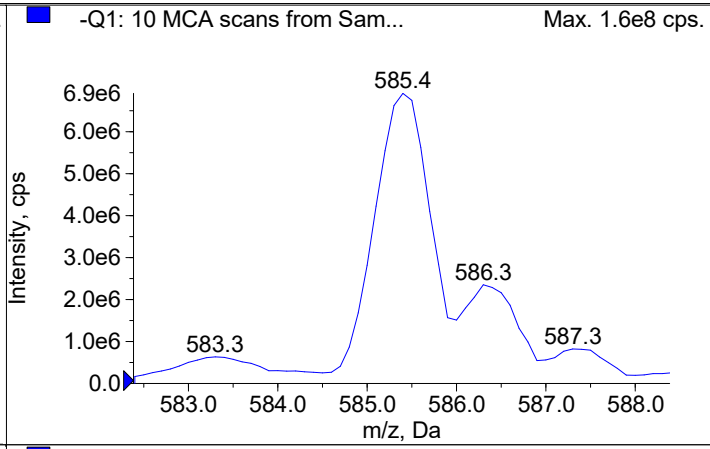
RT: 10.33
Area: 12678666
Amount: 25.923048
Amount Units: ng/ml

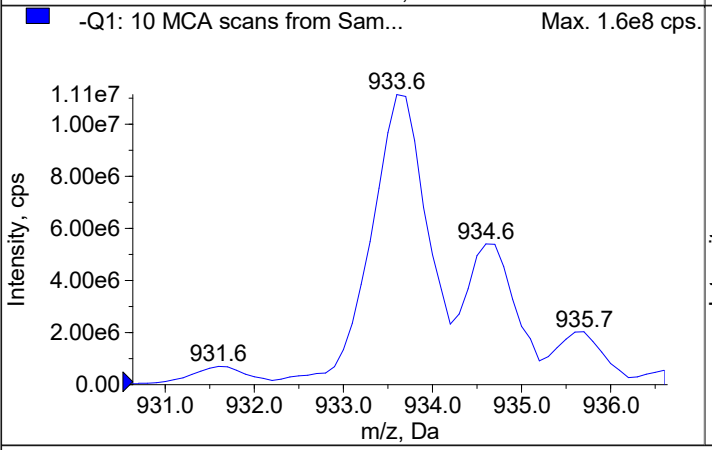


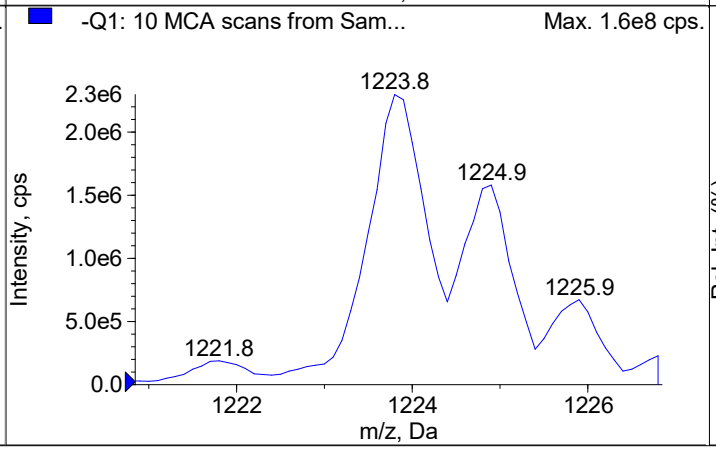
Reviewer: B5QN, 29-Nov-2023 13:47:09 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

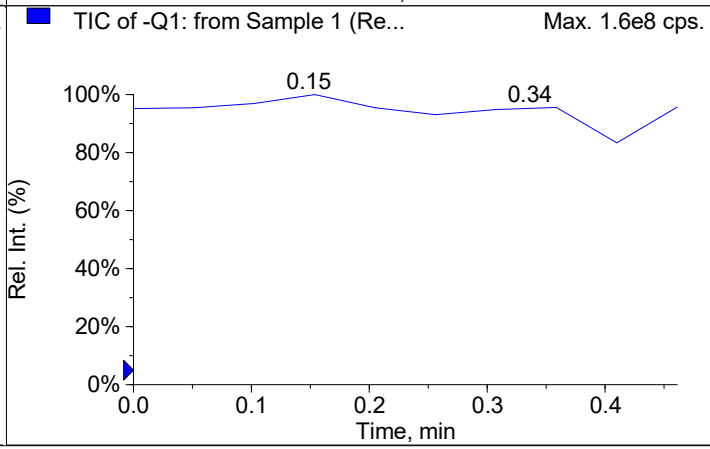






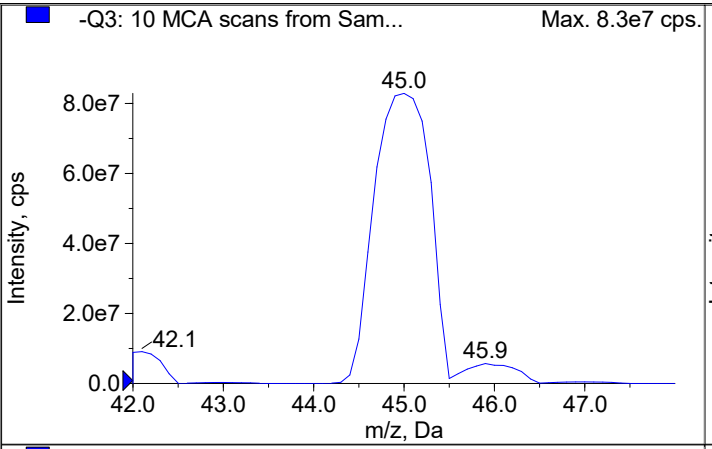


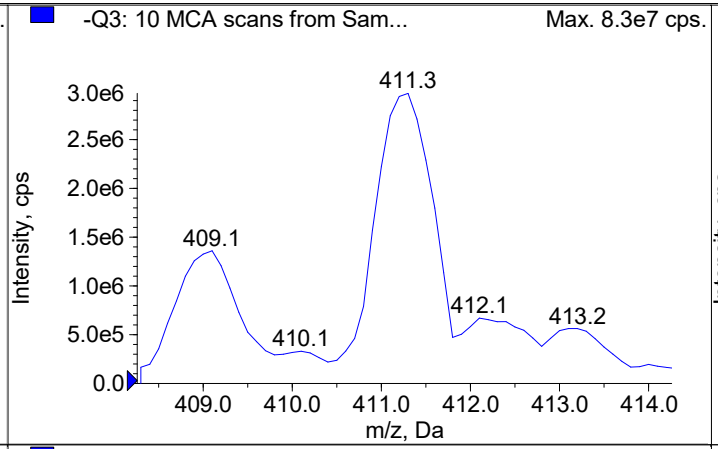


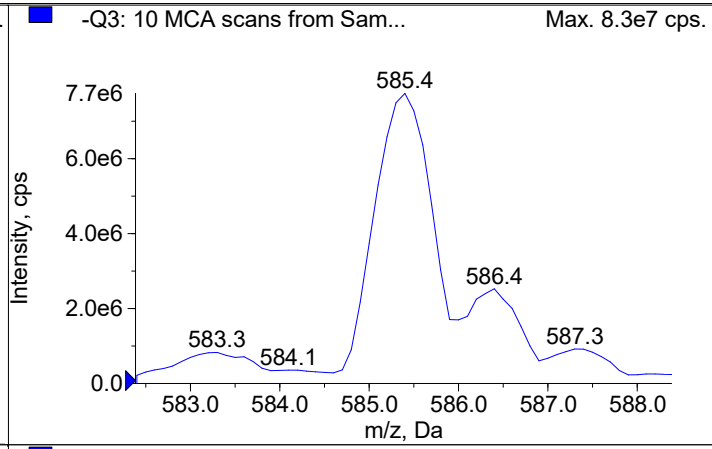


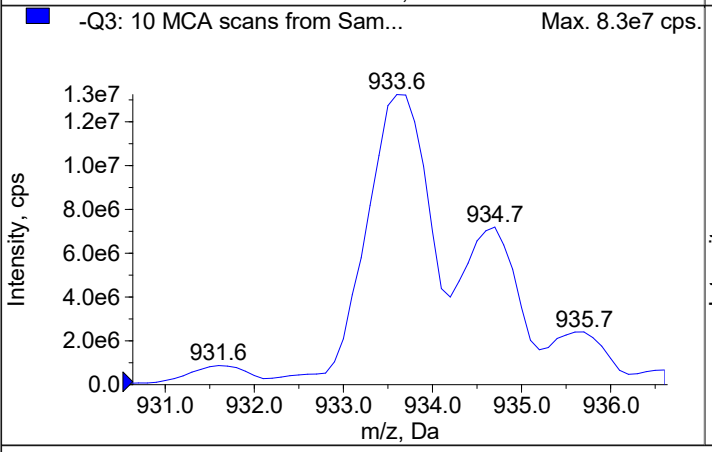
Peak List for " -Q1: 10 MCA scans from Sample 1 (Repair Q1 Neg PPG 10 SS) of Repair Q1 Neg PPG 10 SS.wiff (Turbo Spray)"

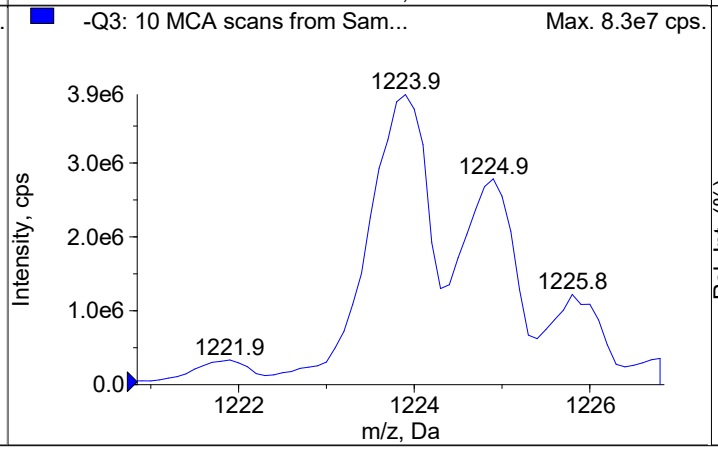
	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	44.9980	44.9875	1.5750e8	0.6670	0.0105
2	411.2590	411.2473	3.7286e6	0.7395	0.0117
3	585.3850	585.3995	6.9139e6	0.7056	-0.0145
4	933.6360	933.6394	1.1138e7	0.6645	-3.3781e-3
5	1223.8450	1223.8408	2.2971e6	0.7157	4.1795e-3
6	1572.0970	n/a	n/a	n/a	n/a
7	1863.3060	n/a	n/a	n/a	n/a
8	1979.3890	n/a	n/a	n/a	n/a

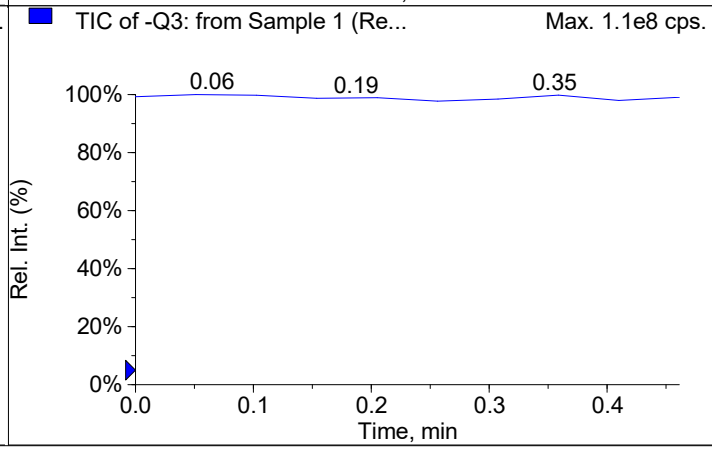






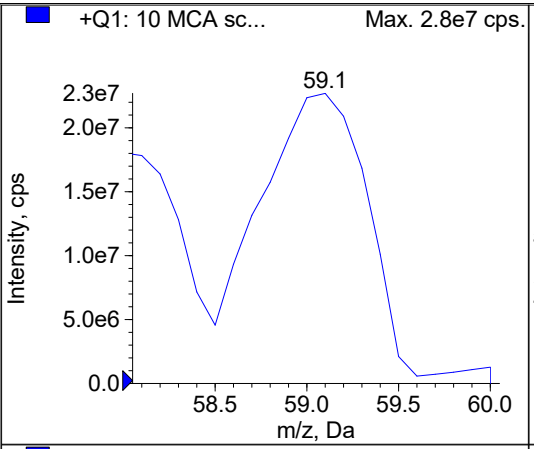


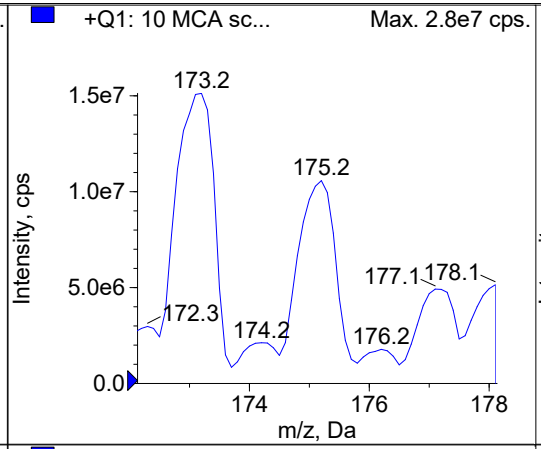


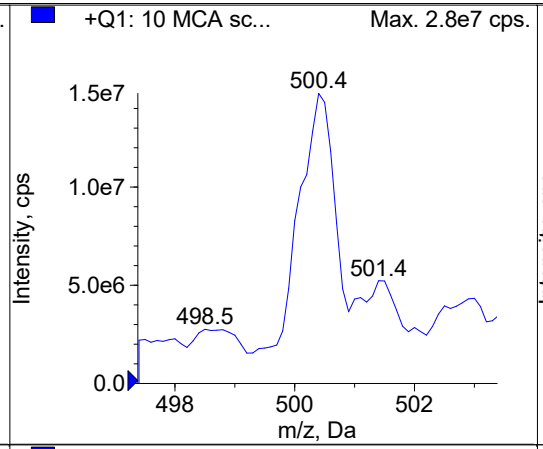


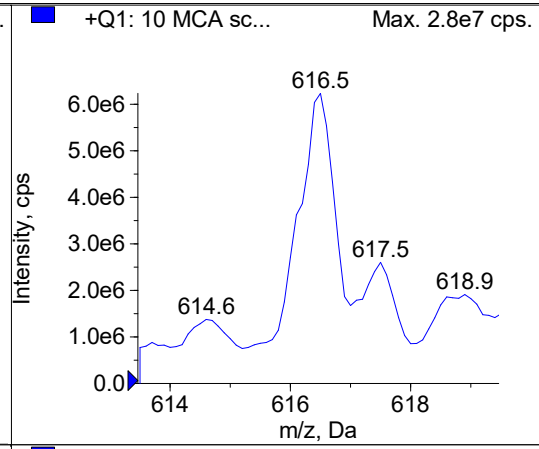
Peak List for " -Q3: 10 MCA scans from Sample 1 (Repair Q3 Neg PPG 10 SS) of Repair Q3 Neg PPG 10 SS.wiff (Turbo Spray)"

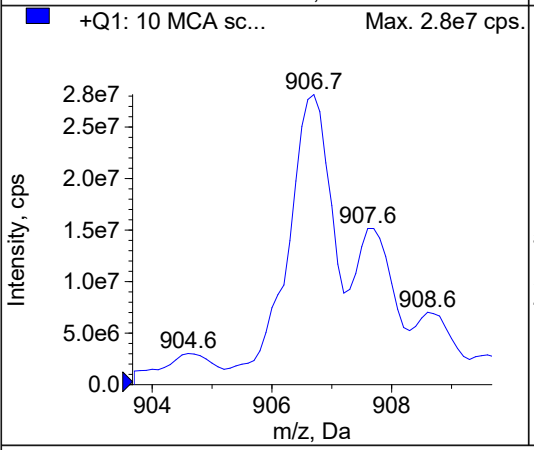
	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	44.9980	44.9933	8.2882e7	0.7298	4.7090e-3
2	411.2590	411.2627	2.9739e6	0.7577	-3.6927e-3
3	585.3850	585.3878	7.7434e6	0.7426	-2.7842e-3
4	933.6360	933.6307	1.3243e7	0.7797	5.2836e-3
5	1223.8450	1223.8543	3.9259e6	0.7367	-9.3279e-3
6	1572.0970	n/a	n/a	n/a	n/a
7	1863.3060	n/a	n/a	n/a	n/a
8	1979.3890	n/a	n/a	n/a	n/a

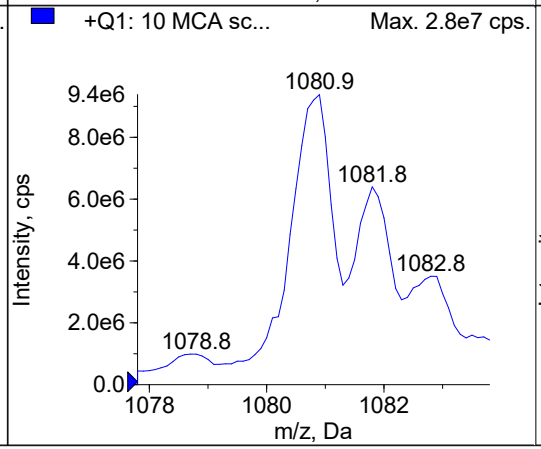


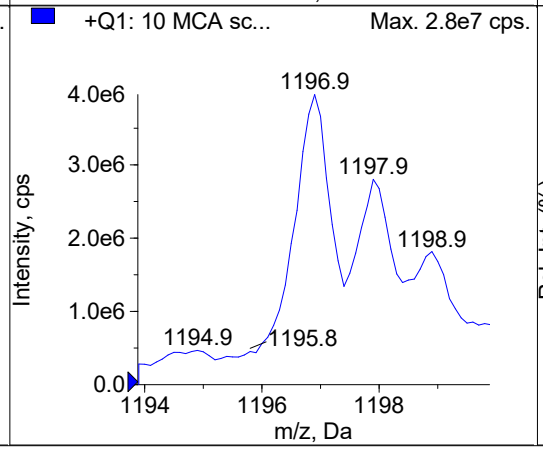


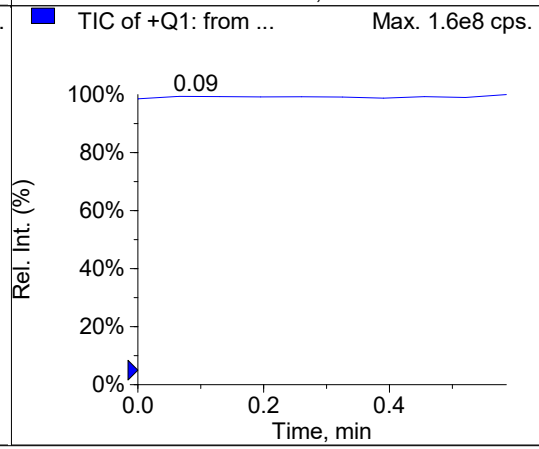






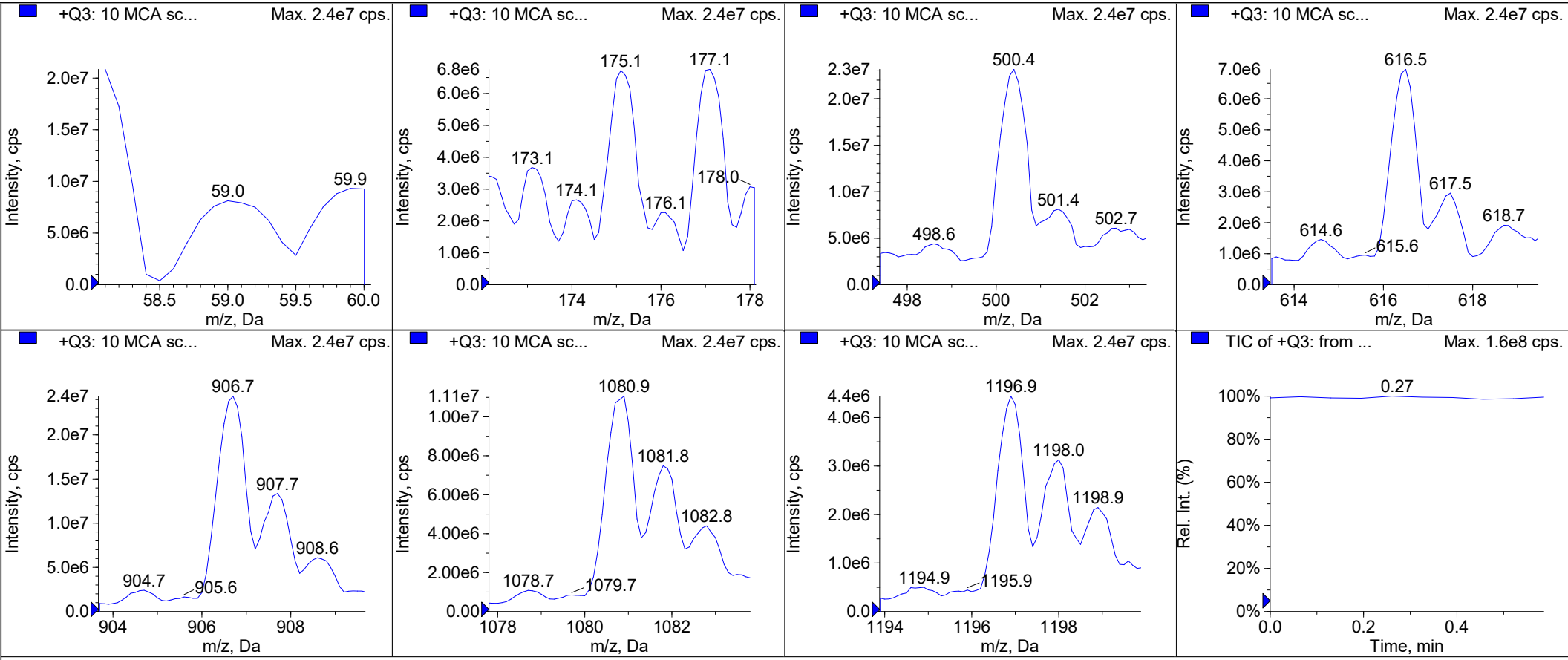






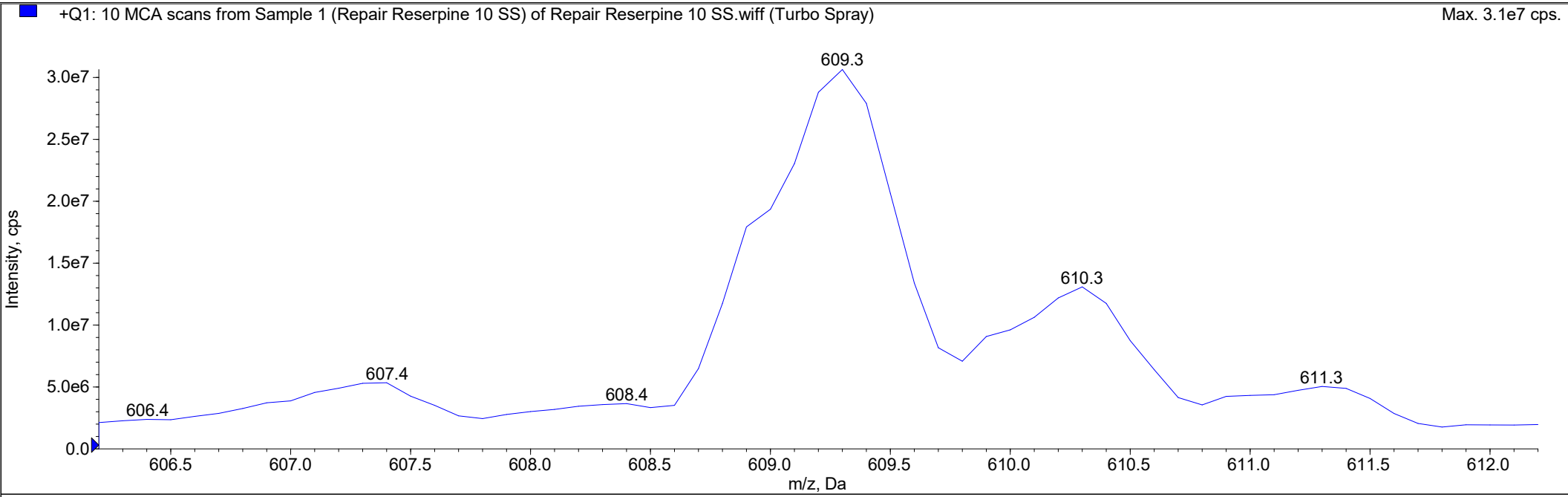
Peak List for " +Q1: 10 MCA scans from Sample 1 (Repair Q1 Pos PPG 10 SS) of Repair Q1 Pos PPG 10 SS.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	59.0500	59.0484	2.2695e7	0.7289	1.5951e-3
2	175.1330	175.1288	1.0577e7	0.7336	4.1687e-3
3	500.3800	500.3831	1.4769e7	0.7488	-3.0650e-3
4	616.4640	616.4558	6.2339e6	0.7461	8.1734e-3
5	906.6730	906.6772	2.8150e7	0.7564	-4.1661e-3
6	1080.7990	1080.7975	9.3815e6	0.7748	1.5141e-3
7	1196.8830	1196.8832	3.9594e6	0.7299	-2.3792e-4
8	1254.9250	n/a	n/a	n/a	n/a
9	1545.1340	n/a	n/a	n/a	n/a
10	1952.4270	n/a	n/a	n/a	n/a



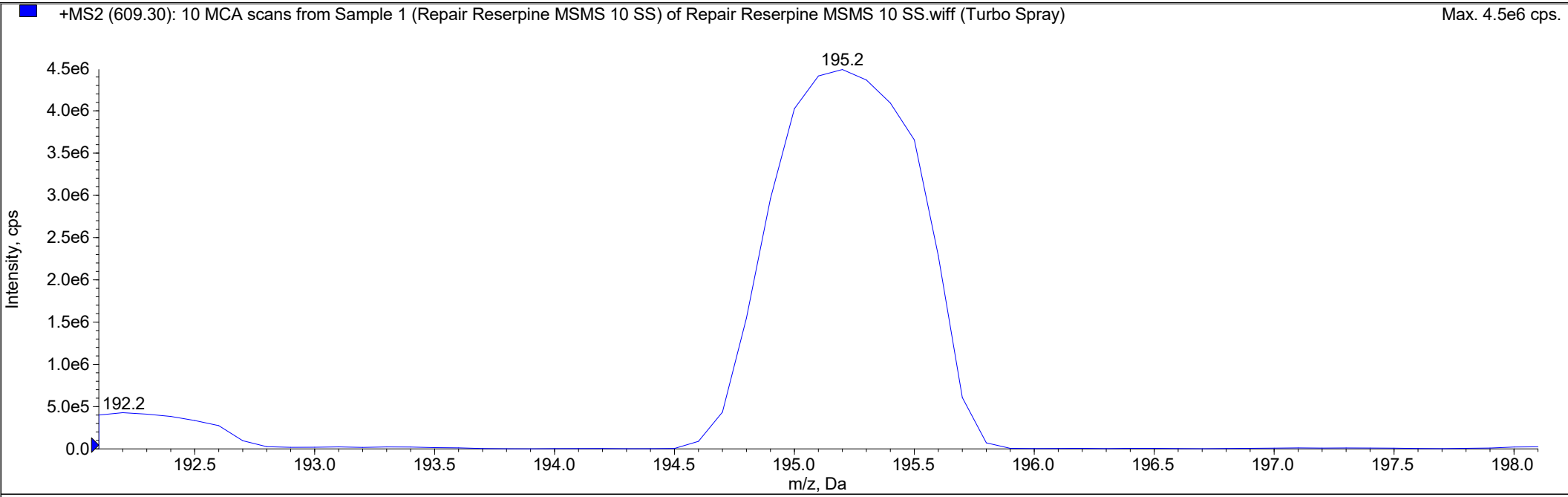
Peak List for " +Q3: 10 MCA scans from Sample 2 (Repair Q3 Pos PPG 10 SS) of Repair Q3 Pos PPG 10 SS.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	59.0500	59.0478	8.1250e6	0.7009	2.1977e-3
2	175.1330	175.1284	6.7254e6	0.7366	4.5988e-3
3	500.3800	500.3891	2.3164e7	0.7548	-9.1228e-3
4	616.4640	616.4566	6.9520e6	0.7025	7.3537e-3
5	906.6730	906.6728	2.4386e7	0.7444	1.6176e-4
6	1080.7990	1080.8060	1.1065e7	0.7482	-6.9856e-3
7	1196.8830	1196.8957	4.4425e6	0.7189	-0.0127
8	1254.9250	n/a	n/a	n/a	n/a
9	1545.1340	n/a	n/a	n/a	n/a
10	1952.4270	n/a	n/a	n/a	n/a



Peak List for " +Q1: 10 MCA scans from Sample 1 (Repair Reserpine 10 SS) of Repair Reserpine 10 SS.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	174.1000	n/a	n/a	n/a	n/a
2	195.1000	n/a	n/a	n/a	n/a
3	397.2000	n/a	n/a	n/a	n/a
4	448.1000	n/a	n/a	n/a	n/a
5	609.2810	609.2538	3.0642e7	0.7156	0.0272



Peak List for " +MS2 (609.30): 10 MCA scans from Sample 1 (Repair Reserpine MSMS 10 SS) of Repair Reserpine MSMS 10 SS.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	174.1000	n/a	n/a	n/a	n/a
2	195.1000	195.2189	4.4886e6	0.7530	-0.1189
3	397.2000	n/a	n/a	n/a	n/a
4	448.1000	n/a	n/a	n/a	n/a
5	609.2810	n/a	n/a	n/a	n/a

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-635120/1-A

Matrix: Water | Lab File ID: 2023.11.28a.012.d

Analysis Method: Draft 1633 | Date Collected:

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 500(mL) | Date Analyzed: 11/28/2023 14:08

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	8.00	U	8.00	2.00
2706-90-3	Perfluoropentanoic acid (PFPeA)	4.00	U	4.00	1.00
307-24-4	Perfluorohexanoic acid (PFHxA)	2.00	U	2.00	0.50
375-85-9	Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.52
335-67-1	Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.64
375-95-1	Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.50
335-76-2	Perfluorodecanoic acid (PFDA)	2.00	U	2.00	0.50
2058-94-8	Perfluoroundecanoic acid (PFUnA)	2.00	U	2.00	0.50
307-55-1	Perfluorododecanoic acid (PFDoA)	2.00	U	2.00	0.50
72629-94-8	Perfluorotridecanoic acid (PFTriA)	2.00	U	2.00	0.50
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	2.00	U	2.00	0.50
375-73-5	Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.30
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	2.00	U	2.00	0.50
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.57
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	2.00	U	2.00	0.40
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	0.50
68259-12-1	Perfluorononanesulfonic acid (PFNS)	2.00	U	2.00	0.40
335-77-3	Perfluorodecanesulfonic acid (PFDS)	2.00	U	2.00	0.50
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	2.00	U	2.00	0.90
757124-72-4	4:2 FTS	8.00	U	8.00	1.70
27619-97-2	6:2 FTS	8.00	U	8.00	2.50
39108-34-4	8:2 FTS	8.00	U	8.00	2.60
754-91-6	Perfluorooctanesulfonamide (PFOSA)	2.00	U	2.00	0.50
31506-32-8	NMeFOSA	2.00	U	2.00	0.50
4151-50-2	NEtFOSA	2.00	U	2.00	0.50
2355-31-9	NMeFOSAA	4.00	U	4.00	1.20
2991-50-6	NEtFOSAA	2.00	U	2.00	0.70
24448-09-7	NMeFOSE	20.0	U	20.0	5.00
1691-99-2	NEtFOSE	20.0	U	20.0	5.00
13252-13-6	HFPO-DA (GenX)	8.00	U	8.00	2.00

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-635120/1-A

Matrix: Water | Lab File ID: 2023.11.28a.012.d

Analysis Method: Draft 1633 | Date Collected:

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 500(mL) | Date Analyzed: 11/28/2023 14:08

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	8.00	U	8.00	1.50
863090-89-5	PFMBA	4.00	U	4.00	1.00
151772-58-6	NFDHA	4.00	U	4.00	1.00
377-73-1	PFMPA	4.00	U	4.00	0.50
756426-58-1	9Cl-PF3ONS	8.00	U	8.00	1.00
763051-92-9	11Cl-PF3OUdS	8.00	U	8.00	2.00
113507-82-7	PFEESA	4.00	U	4.00	0.50
356-02-5	3:3 FTCA	10.0	U	10.0	1.50
914637-49-3	5:3 FTCA	50.0	U	50.0	10.0
812-70-4	7:3 FTCA	50.0	U	50.0	10.0

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-635120/1-A

Matrix: Water | Lab File ID: 2023.11.28a.012.d

Analysis Method: Draft 1633 | Date Collected:

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 500(mL) | Date Analyzed: 11/28/2023 14:08

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	99		10-130
STL01893	13C5 PFPeA	100		35-150
STL02577	13C5 PFHxA	110		55-150
STL01892	13C4 PFHpA	96		55-150
STL01052	13C8 PFOA	100		60-140
STL02578	13C9 PFNA	97		55-140
STL02579	13C6 PFDA	108		50-140
STL02580	13C7 PFUnA	100		30-140
STL00998	13C2 PFDoA	92		10-150
STL02116	13C2 PFTeDA	80		10-130
STL02337	13C3 PFBS	101		55-150
STL02581	13C3 PFHxS	104		55-150
STL01054	13C8 PFOS	94		45-140
STL01056	13C8 FOSA	101		30-130
STL02118	d3-NMeFOSAA	112		45-200
STL02117	d5-NEtFOSAA	87		10-200
STL02395	M2-4:2 FTS	96		60-200
STL02279	M2-6:2 FTS	89		60-200
STL02280	M2-8:2 FTS	99		50-200
STL02255	13C3 HFPO-DA	113		25-160
STL02277	d7-N-MeFOSE-M	112		10-150
STL02278	d9-N-EtFOSE-M	116		10-150
STL02704	d5-NEtPFOSA	83		10-130
STL02705	d3-NMePFOSA	75		15-130

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.012.d
Lims ID: MB 280-635120/1-A
Client ID:
Sample Type: MB
Inject. Date: 28-Nov-2023 14:08:30 ALS Bottle#: 6 Worklist Smp#: 8
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-635120/1-A
Misc. Info.: Plate: 1 Rack: 1
Operator ID: B5QN Instrument ID: LC_LCMS11

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 29-Nov-2023 13:42:48 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1603

First Level Reviewer: B5QN Date: 29-Nov-2023 13:42:48
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.031	3.046	-0.015	1.000	5558416	9.91		99.1	38041	
* 1 13C3PFBA										
216.00 > 172.00	3.031	3.046	-0.015		2760459	5.00			9987	
D 7 13C5 PFPeA										
268.30 > 223.00	4.462	4.463	-0.001	0.834	1691019	4.98		99.6	17315	
D 9 13C2-4:2FTS										
329.10 > 80.90	5.096	5.097	-0.001	0.742	222641	4.48	Target=4.54	96.0	4009	
329.10 > 309.00	5.096	5.097	-0.001	0.742	50775		4.38(2.27-6.81)	96.0	2129	
D 16 13C3 PFBS										
302.10 > 79.90	5.335	5.354	-0.019	0.776	661454	2.34	Target=4.56	101	21369	
302.10 > 98.90	5.335	5.354	-0.019	0.776	136872		4.83(2.28-6.83)	101	4426	
* 14 13C2 PFHxA										
315.10 > 270.00	5.353	5.371	-0.018		1703998	2.50	Target=79.67		31966	
315.10 > 119.40	5.335	5.371	-0.036		24180		70.47(39.83-119.50)		1080	
D 12 13C5 PFHxA										
318.00 > 273.00	5.353	5.371	-0.018	1.000	2093210	2.74	Target=53.27	110	30628	
318.00 > 120.30	5.353	5.371	-0.018	1.000	41717		50.18(26.63-79.90)	110	788	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.663	5.682	-0.019	1.058	2104688	11.3	Target=1.53	113	24518	
286.90 > 184.90	5.663	5.682	-0.019	1.058	1290646		1.63(0.76-2.29)	113	16491	
D 22 13C4 PFHpA										
367.10 > 322.00	6.121	6.122	-0.001	1.143	1909420	2.39		95.5	24381	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.470	6.471	-0.001	0.942	275614	4.25	Target=4.15	89.5	7826	
429.10 > 409.00	6.470	6.471	-0.001	0.942	58610		4.70(2.07-6.22)	89.5	2786	
D 27 13C8 PFOA										
421.10 > 376.00	6.707	6.707	-0.001	1.000	1912702	2.51		100	33168	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
* 29 13C4 PFOA										
417.10 > 172.00	6.707	6.707	-0.001		291454	2.50			8081	
28 PFOA										
413.00 > 369.00	6.707	6.724	-0.018	1.000	3418	0.005597	Target=2.30		15.1	
413.00 > 169.00	6.707	6.724	-0.018	1.000	2786		1.23(1.15-3.45)		26.5	
* 31 18O2 PFHxS										
403.00 > 83.90	6.871	6.871	0.0		522077	2.37			17981	
D 33 13C3 PFHxS										
402.10 > 79.90	6.871	6.888	-0.017	1.000	548716	2.45	Target=4.11	104	18964	
402.10 > 98.80	6.871	6.888	-0.017	1.000	122650		4.47(2.05-6.16)	104	5631	
* 35 13C5 PFNA										
468.00 > 423.00	7.261	7.261	0.0		1268601	1.25			17345	
D 34 13C9 PFNA										
472.10 > 427.00	7.241	7.261	-0.020	0.997	1158950	1.21		96.6	23693	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.523	7.522	0.001	1.095	373712	4.76	Target=5.49	99.3	7465	
529.10 > 509.00	7.506	7.522	-0.016	1.092	59001		6.33(2.74-8.23)	99.3	2760	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.743	7.761	-0.018	0.967	572673	5.59		112	15448	
* 44 13C2 PFDA										
515.10 > 470.10	7.761	7.779	-0.018		1171822	1.25			19451	
D 40 13C6 PFDA										
519.10 > 474.10	7.761	7.779	-0.018	1.000	1254578	1.35		108	23938	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.951	7.969	-0.018	0.993	516845	4.36		87.1	9938	
D 49 13C8 PFOS										
507.10 > 79.90	8.004	8.021	-0.017	1.000	245668	2.24	Target=2.95	93.8	8292	
507.10 > 98.90	8.004	8.021	-0.017	1.000	90465		2.72(1.47-4.42)	93.8	4085	
* 47 13C4 PFOS										
502.80 > 79.90	8.004	8.021	-0.017		730365	2.40	Target=3.78		9935	
502.80 > 98.90	8.004	8.021	-0.017		190951		3.82(1.89-5.67)		8622	
D 53 13C7 PFUnA										
570.00 > 525.10	8.267	8.285	-0.017	1.065	1295546	1.25		99.7	28266	
D 50 13C8 FOSA										
506.10 > 77.80	8.757	8.756	0.001	1.094	1343858	2.53		101	15941	
D 56 13C2 PFDoA										
615.10 > 570.00	8.757	8.773	-0.016	1.128	1176502	1.15		91.7	25887	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.739	9.774	-0.035	1.255	487776	1.00		79.9	9322	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.931	9.910	0.021	1.241	10942832	28.1		112	63502	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.122	10.120	0.002	1.265	223873	1.86		74.5	5443	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.311	10.310	0.001	1.288	14117141	29.1		116	114168	
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.501	10.500	0.001	1.312	255249	2.07		82.8	3601	

QC Flag Legend

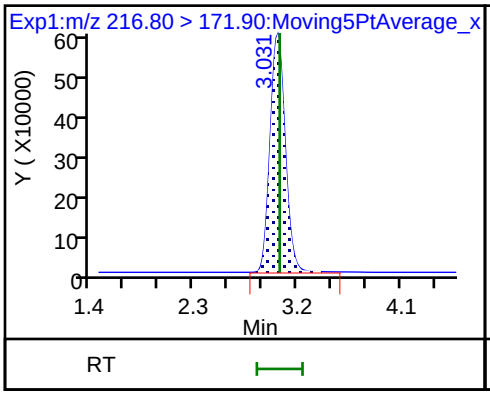
Processing Flags

Report Date: 29-Nov-2023 13:42:48 Chrom Revision: 2.3 15-Nov-2023 20:54:34

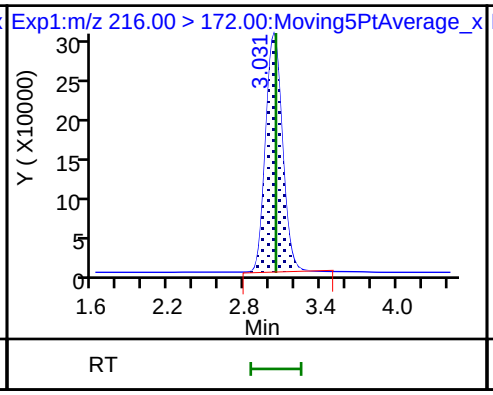
Eurofins Denver

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Lims ID: MB 280-635120/1-A
Client ID:
Operator ID: B5QN ALS Bottle#: 6 Worklist Smp#: 8
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5

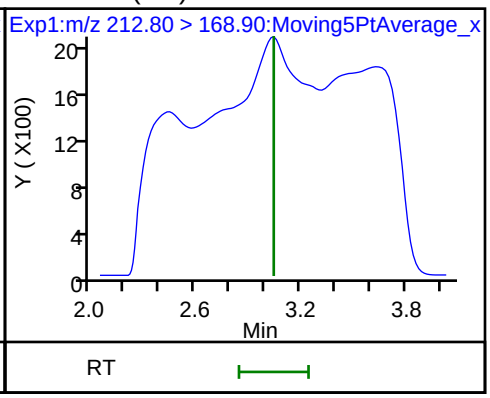
D 3 13C4-PFBA



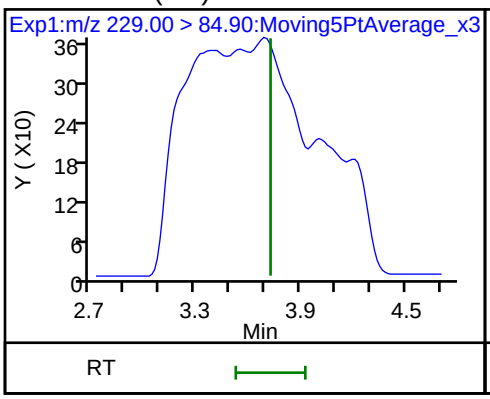
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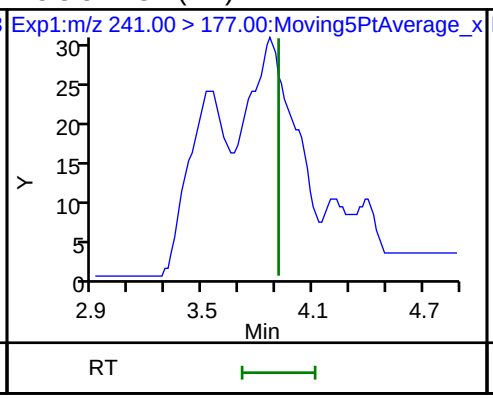
2 PFBA (ND)



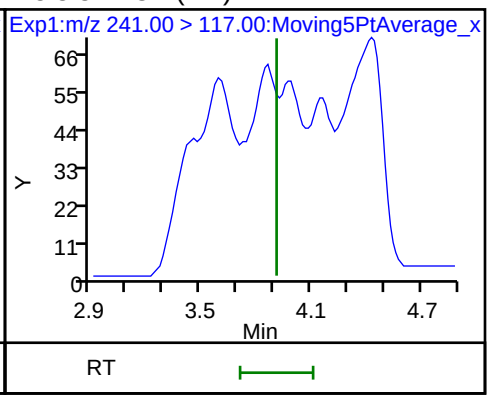
4 PFMPA (ND)



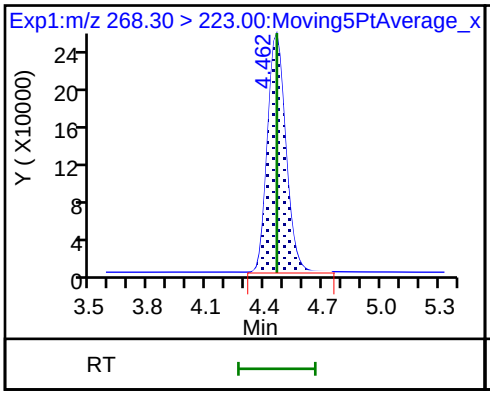
5 3:3 FTCA (ND)



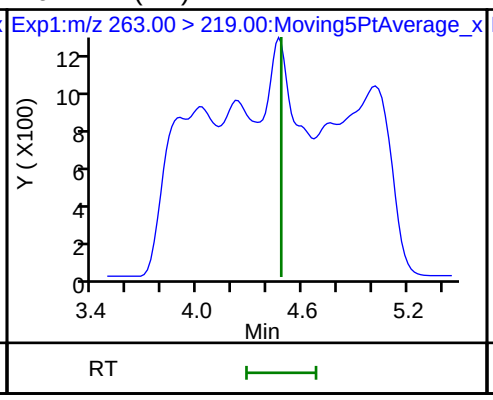
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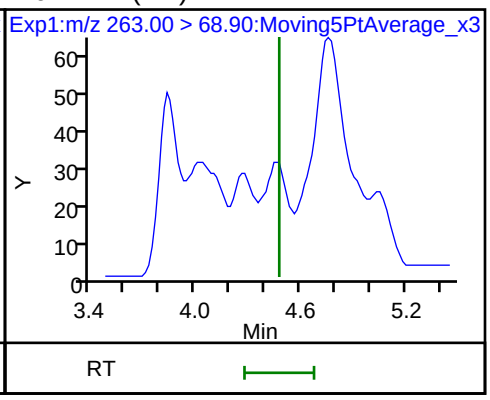
D 7 13C5 PFPeA



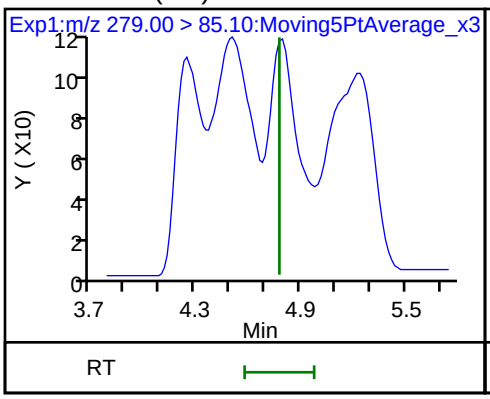
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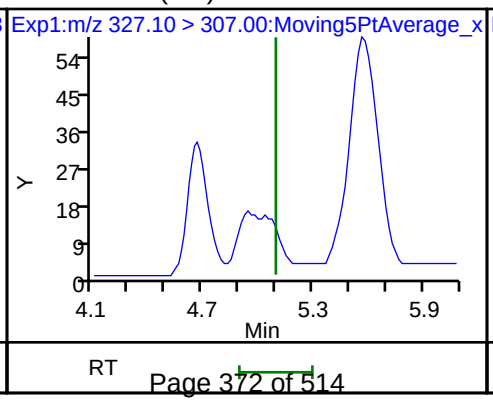
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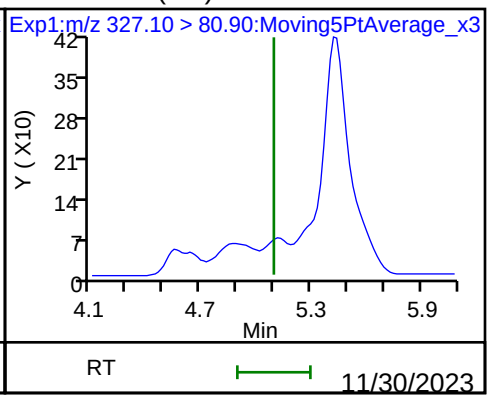
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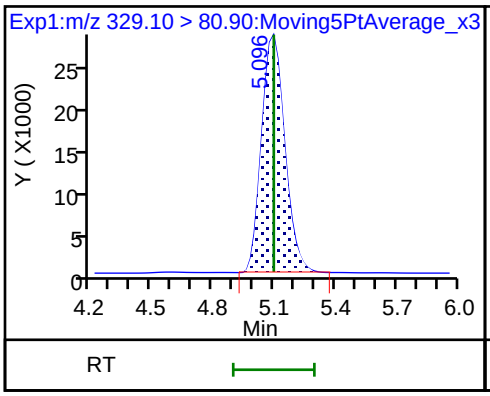
10 4:2FTS (ND)



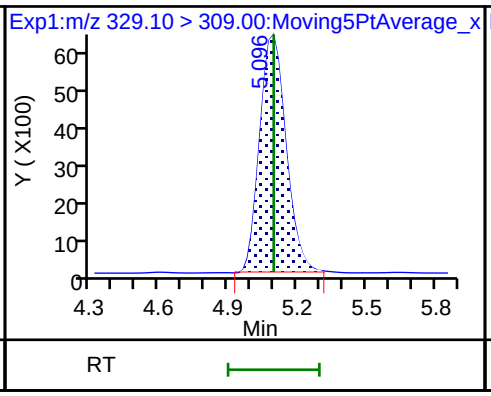
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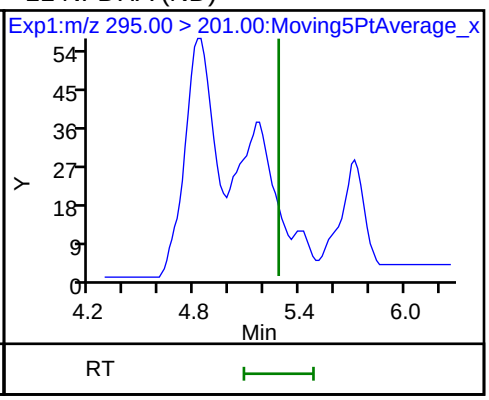
D 9 13C2-4:2FTS



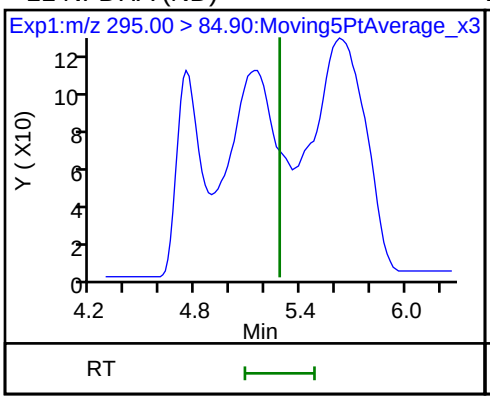
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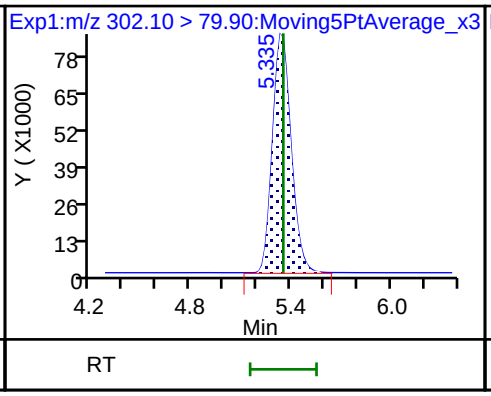
11 NFDHA (ND)



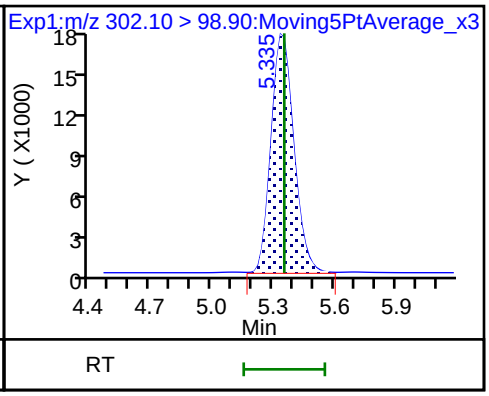
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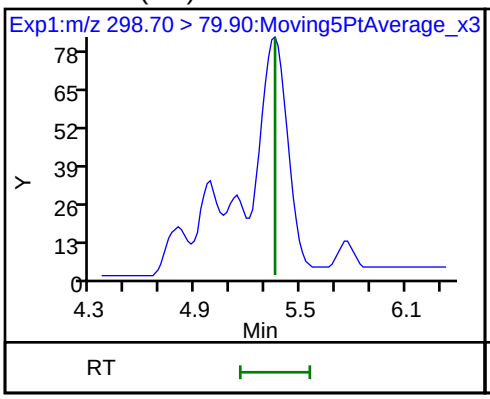
D 16 13C3 PFBS



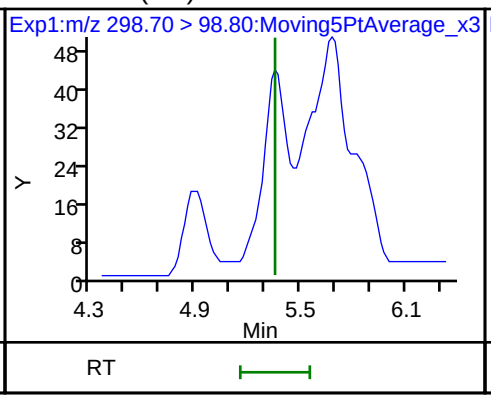
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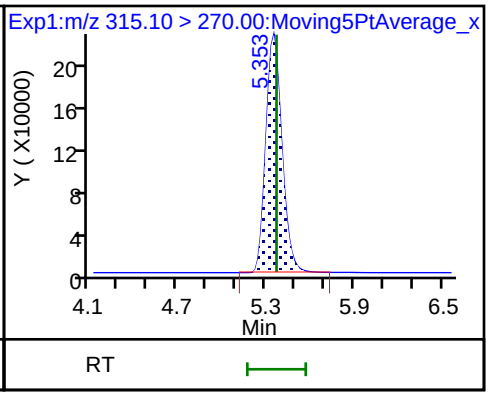
15 PFBS (ND)



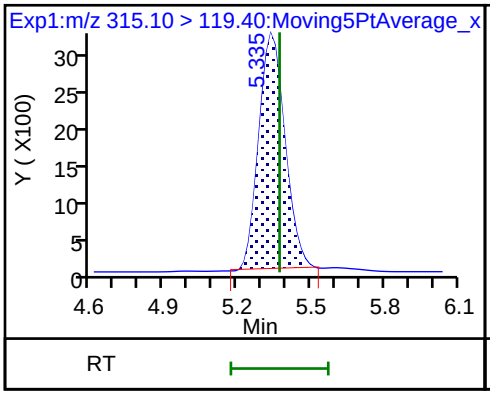
15 PFBS (ND)



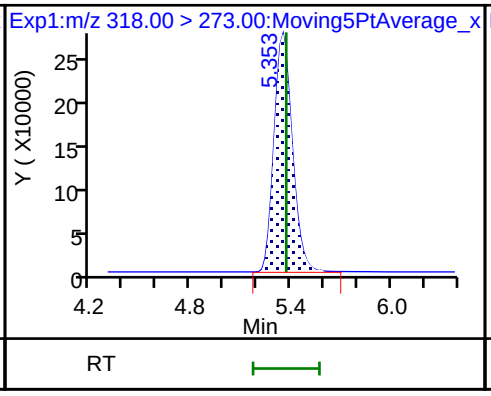
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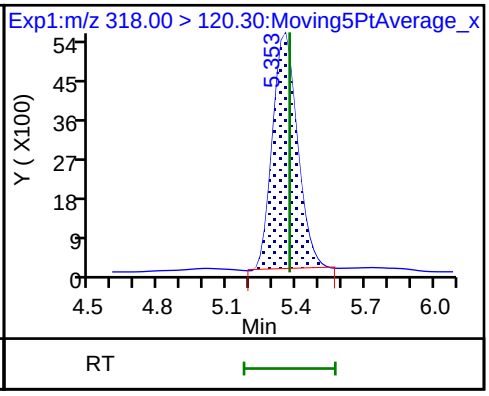
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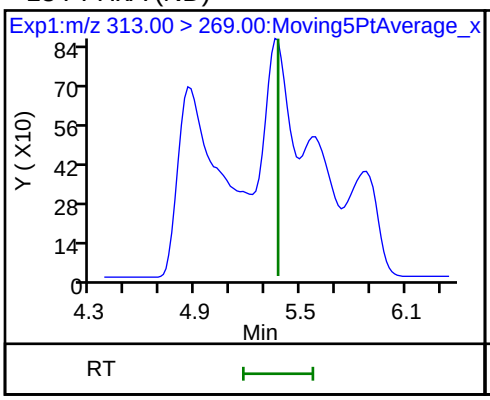
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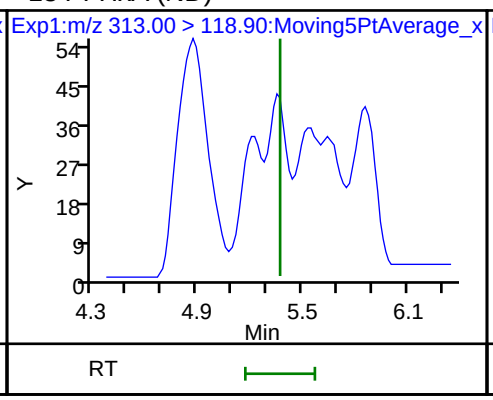
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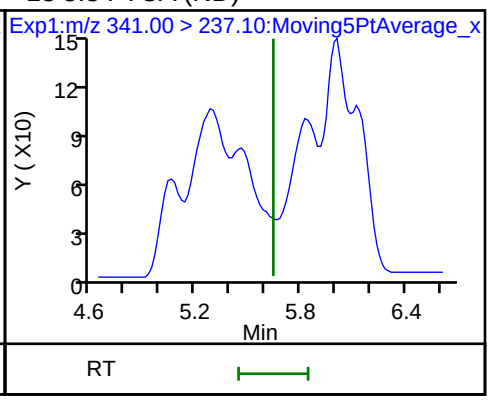
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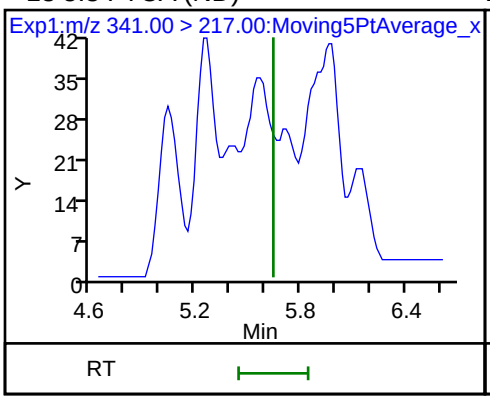
13 PFHxA (ND)



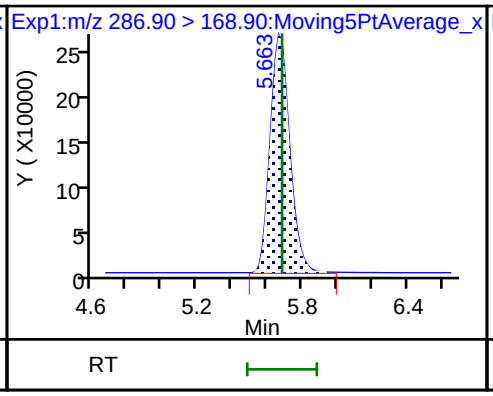
18 5:3 FTCA (ND)



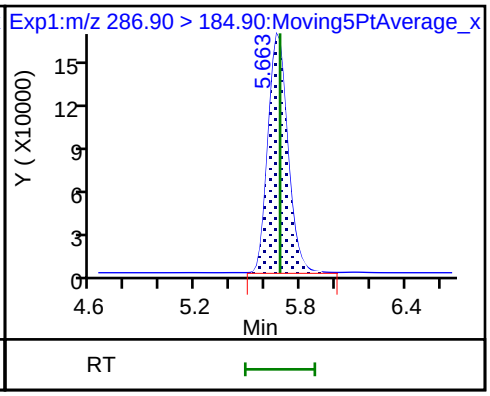
18 5:3 FTCA (ND)



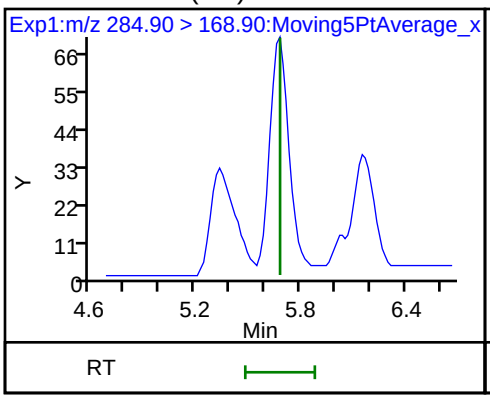
D 20 13C3 HFPO-DA



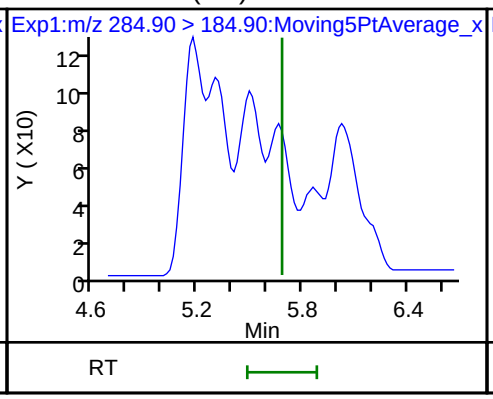
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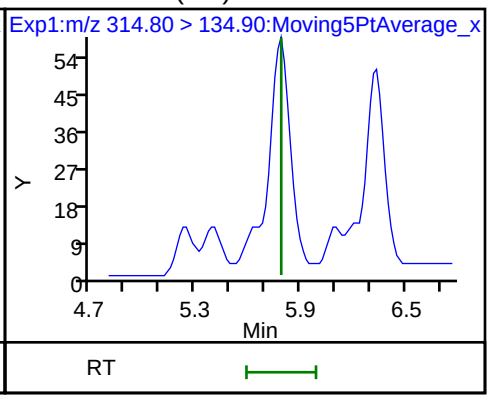
19 HFPO-DA (ND)



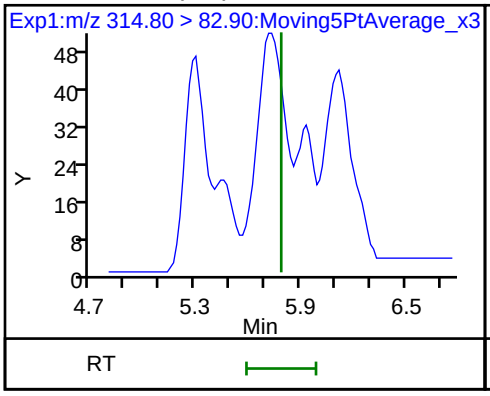
19 HFPO-DA (ND)



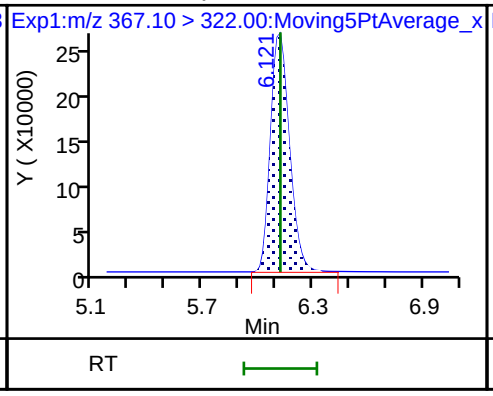
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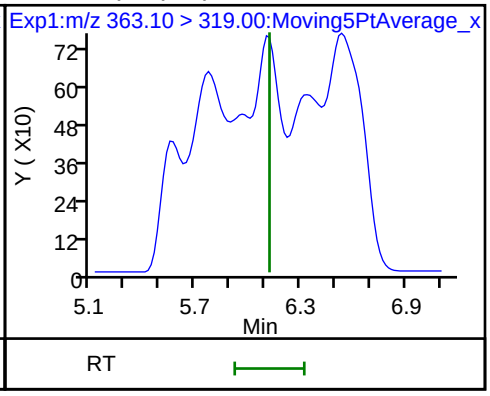
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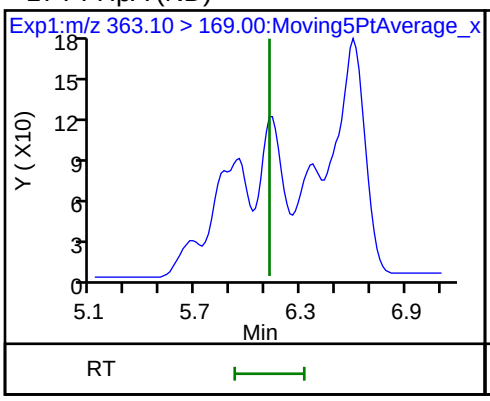
D 22 13C4 PFHpA



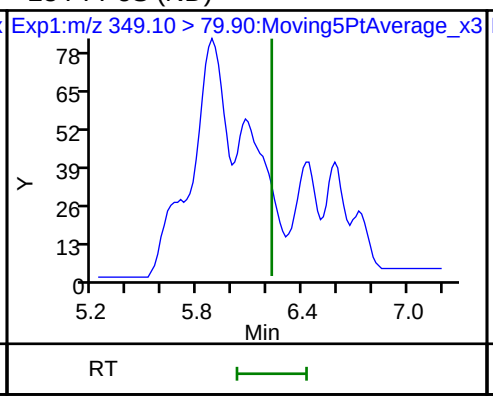
17 PFHpA (ND)



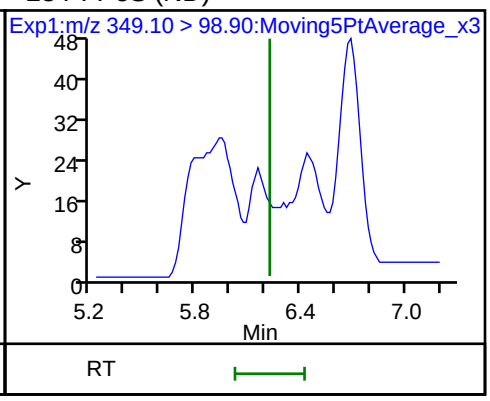
17 PFHpA (ND)



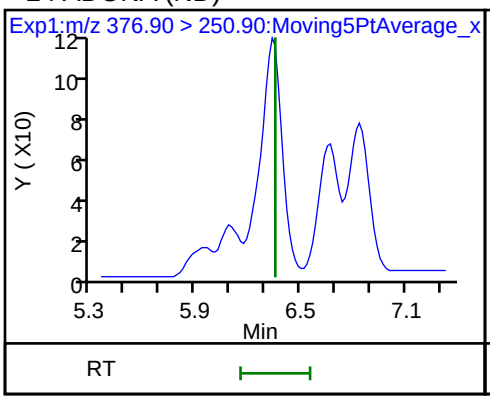
23 PFPeS (ND)



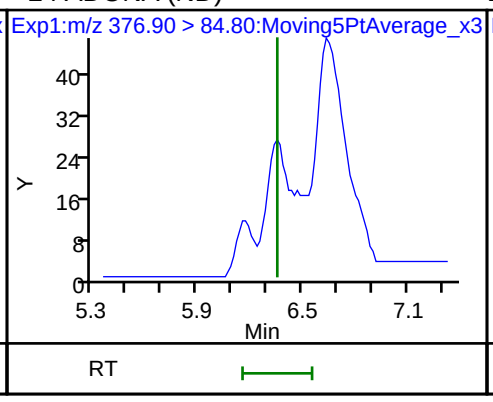
23 PFPeS (ND)



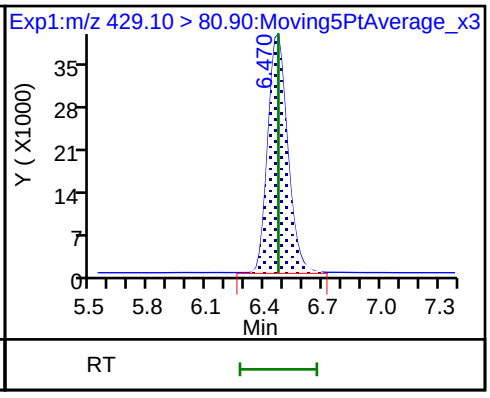
24 ADONA (ND)



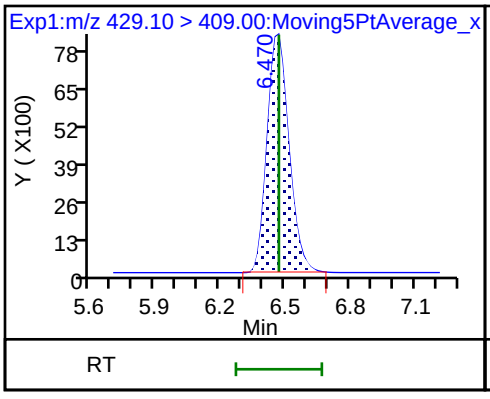
24 ADONA (ND)



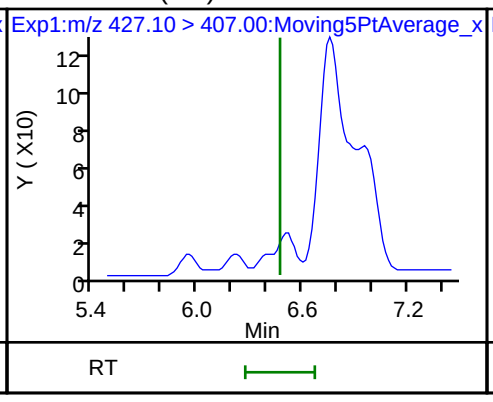
D 26 13C2-6:2FTS



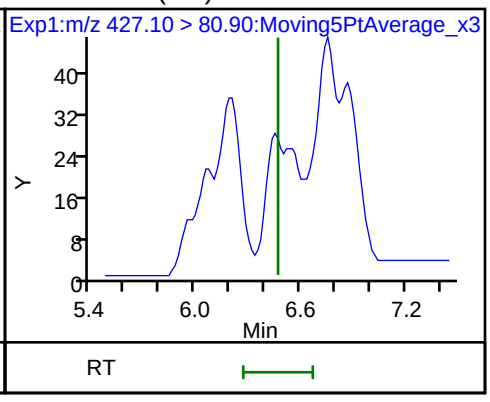
D 26 13C2-6:2FTS



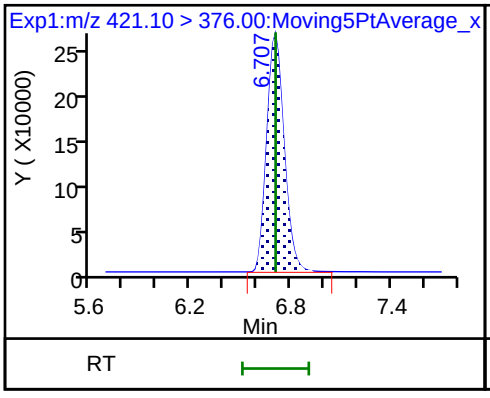
25 6:2FTS (ND)



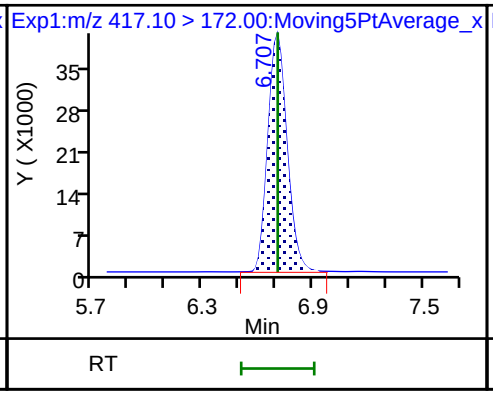
25 6:2FTS (ND)



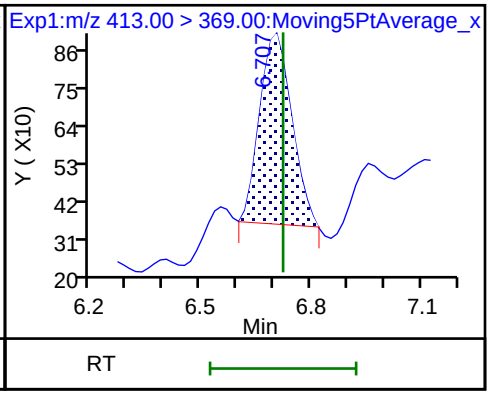
D 27 13C8 PFOA



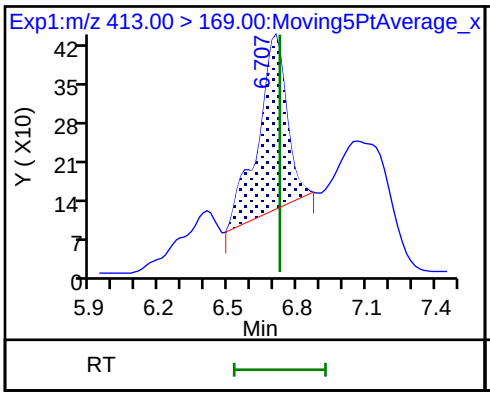
* 29 13C4 PFOA



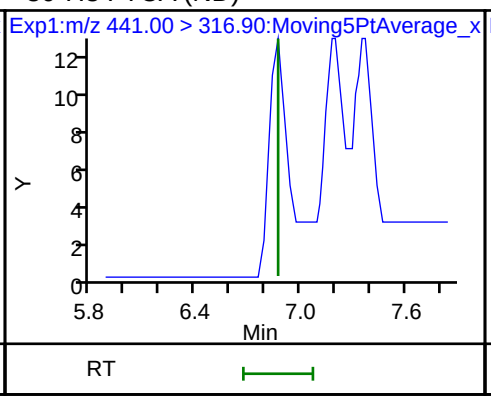
28 PFOA



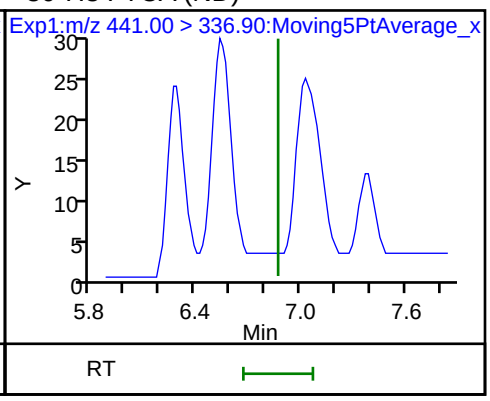
28 PFOA



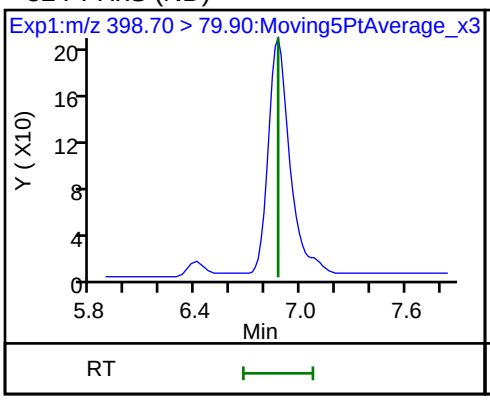
30 7:3 FTCA (ND)



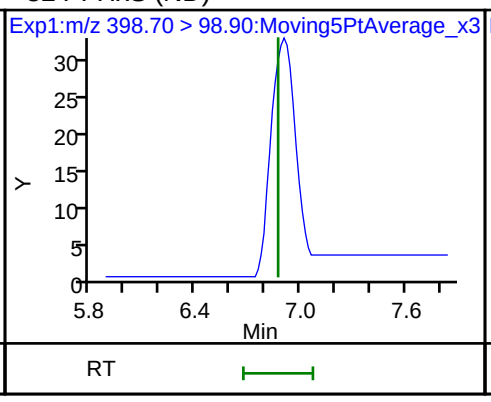
30 7:3 FTCA (ND)



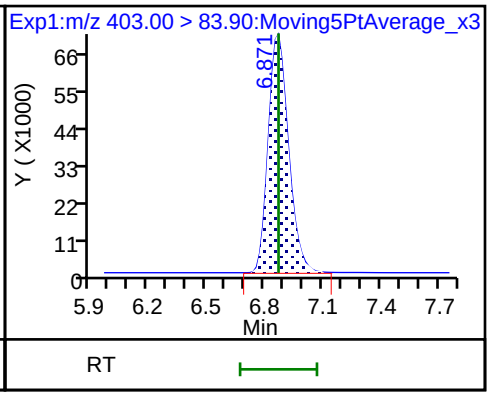
32 PFHxS (ND)



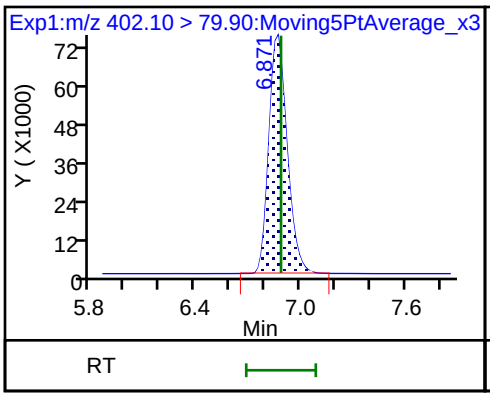
32 PFHxS (ND)



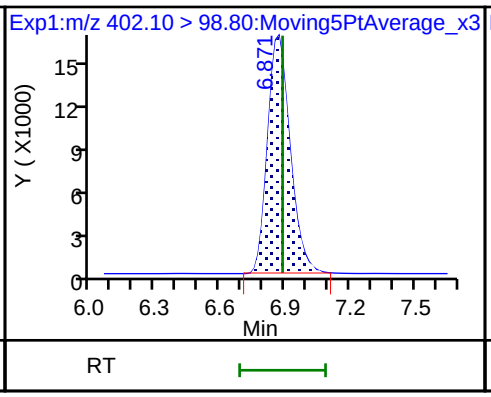
* 31 18O2 PFHxS



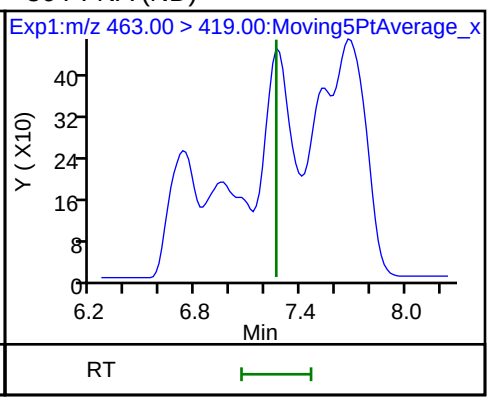
D 33 13C3 PFHxS



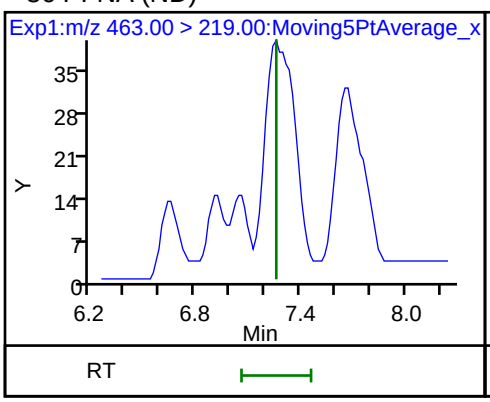
D 33 13C3 PFHxS



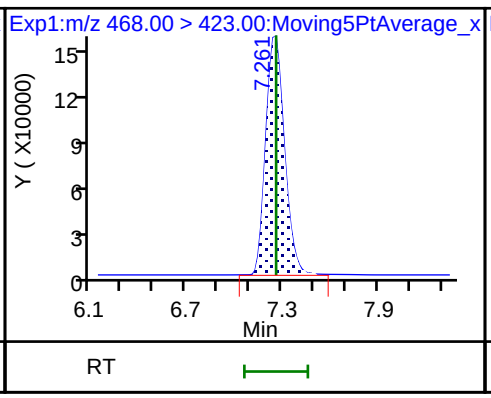
36 PFNA (ND)



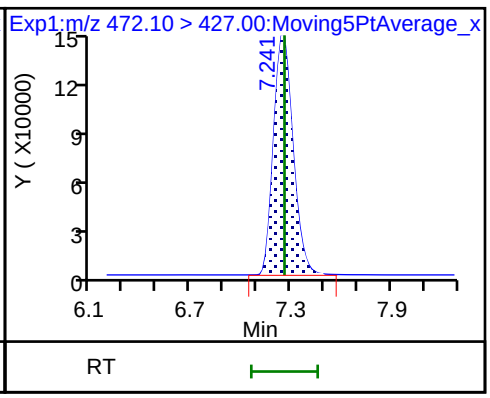
36 PFNA (ND)



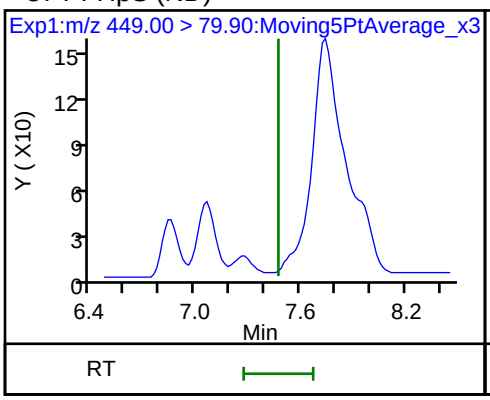
* 35 13C5 PFNA



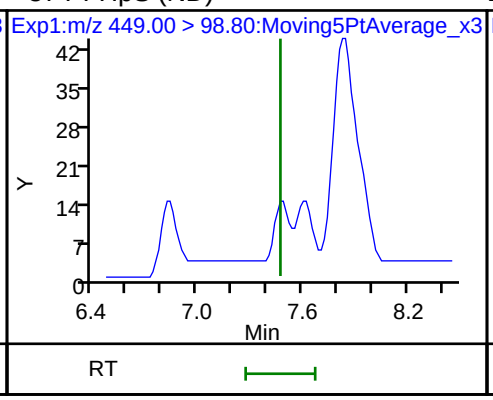
D 34 13C9 PFNA



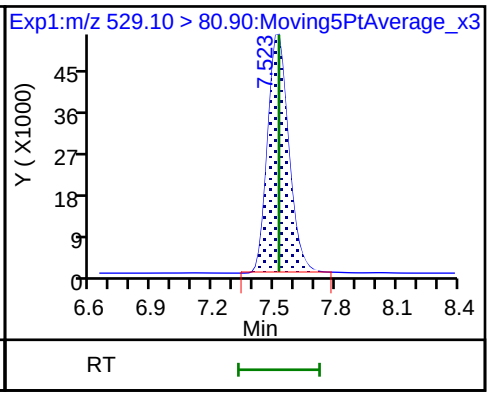
37 PFHpS (ND)



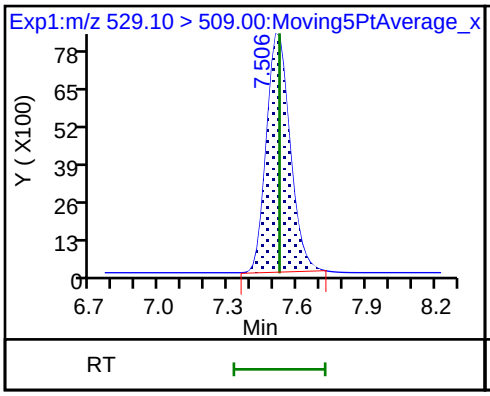
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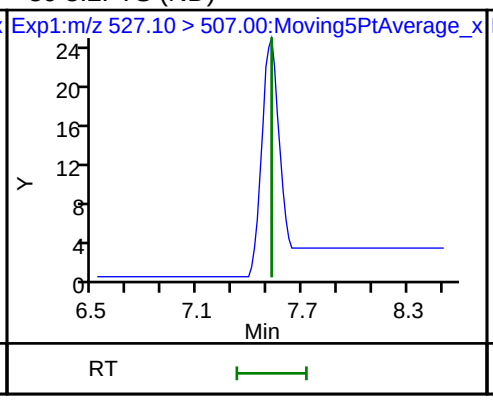
D 38 13C2-8:2FTS



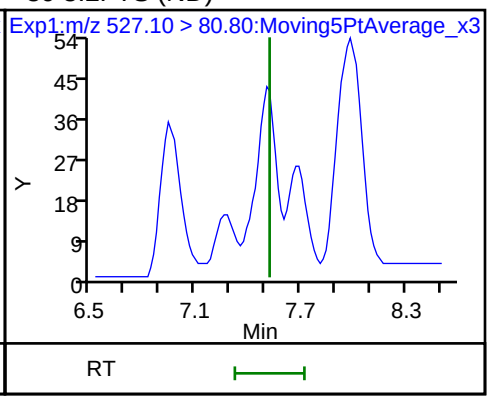
D 38 13C2-8:2FTS



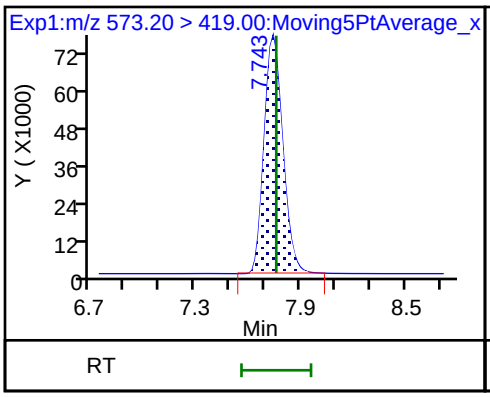
39 8:2FTS (ND)



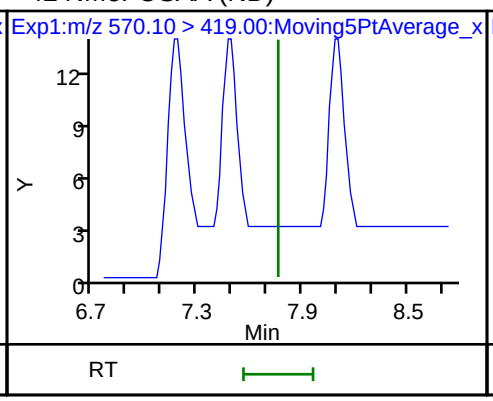
39 8:2FTS (ND)



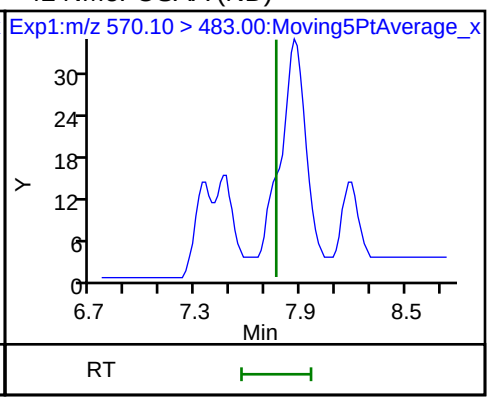
D 41 d3-NMeFOSAA



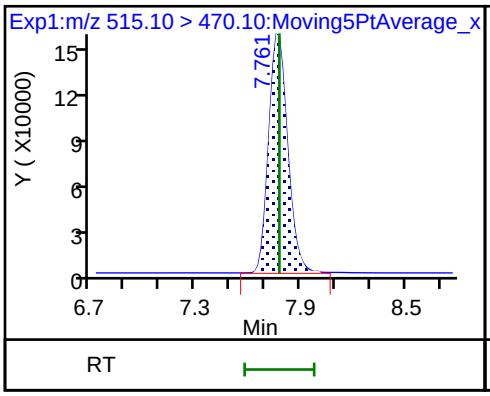
42 NMeFOSAA (ND)



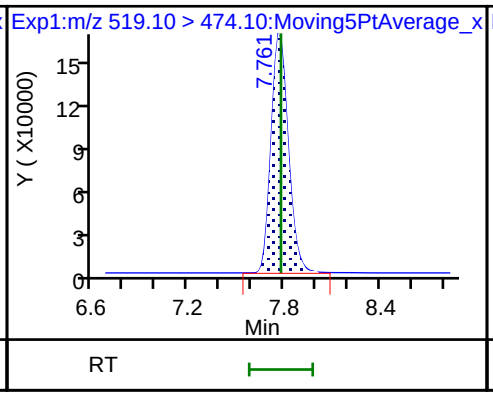
42 NMeFOSAA (ND)



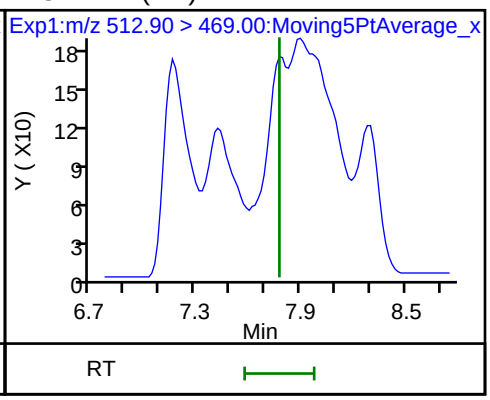
* 44 13C2 PFDA



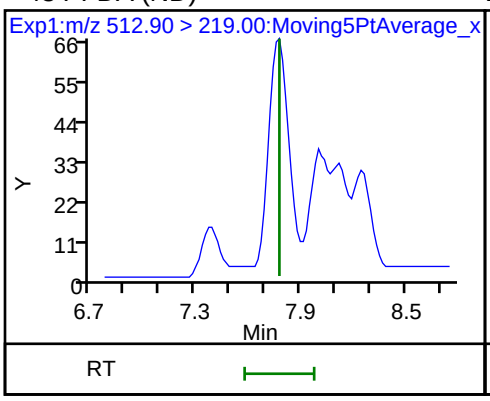
D 40 13C6 PFDA



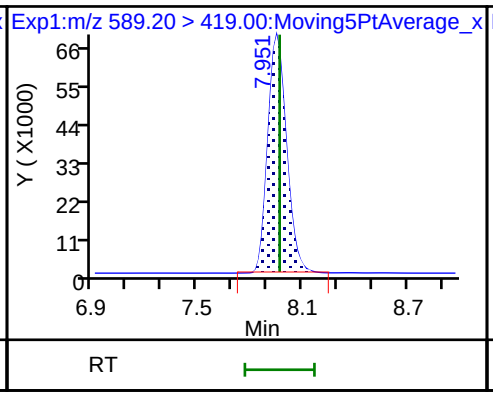
43 PFDA (ND)



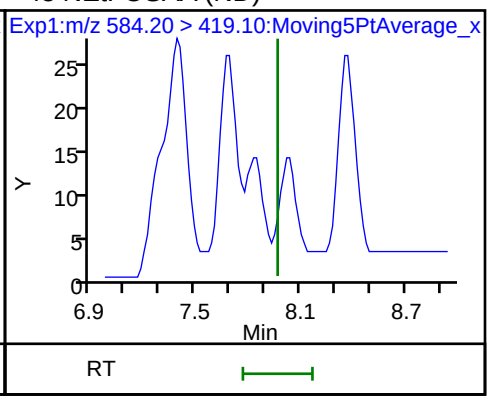
43 PFDA (ND)



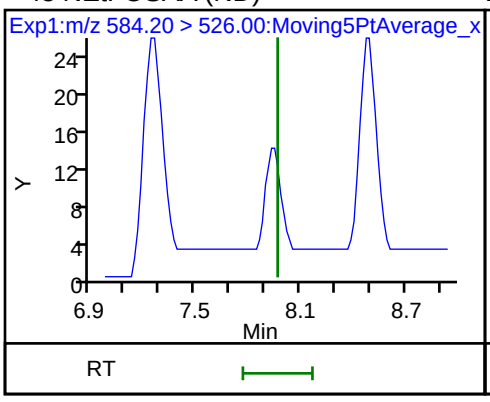
D 46 d5-NEtFOSAA



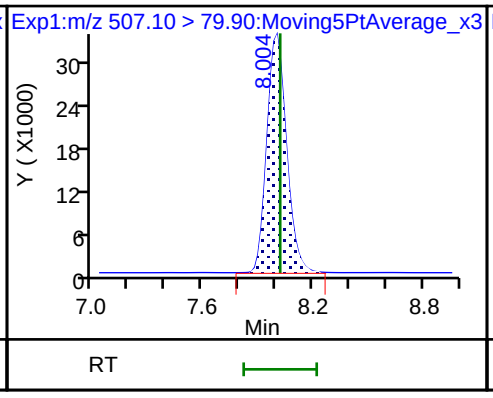
45 NEtFOSAA (ND)



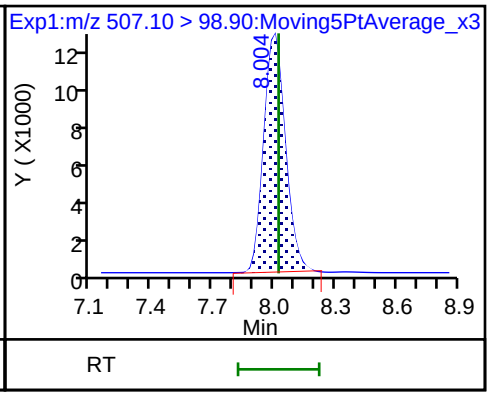
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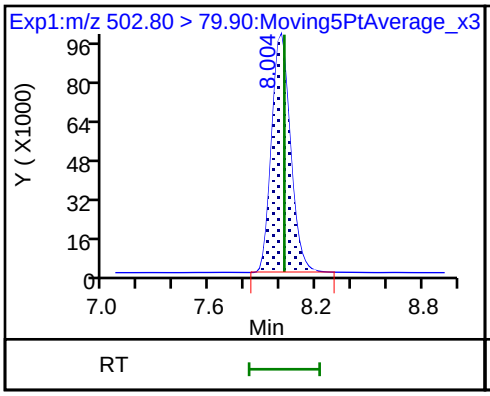
D 49 13C8 PFOS



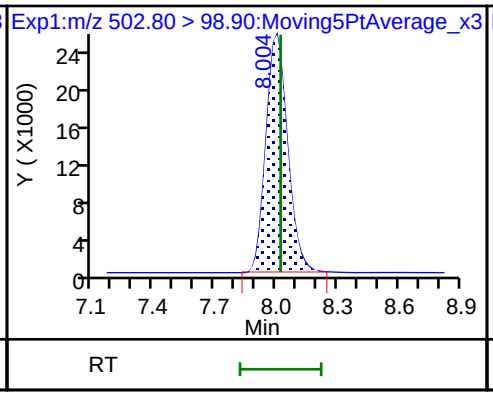
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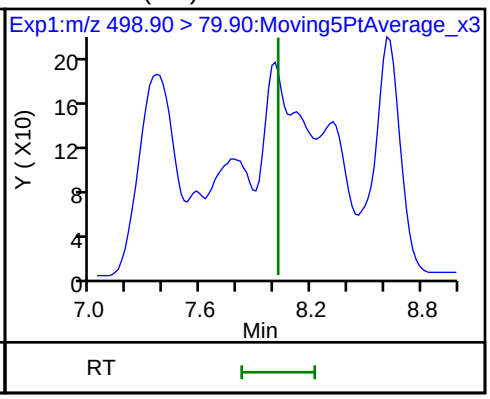
* 47 13C4 PFOS



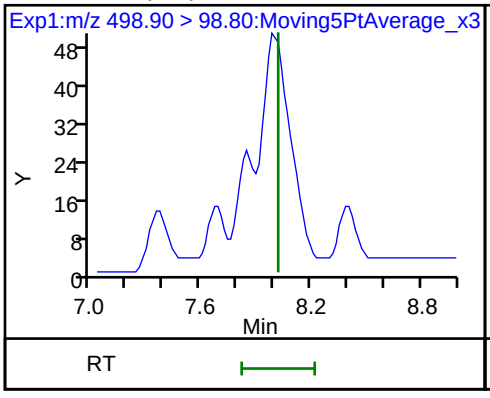
* 47 13C4 PFOS



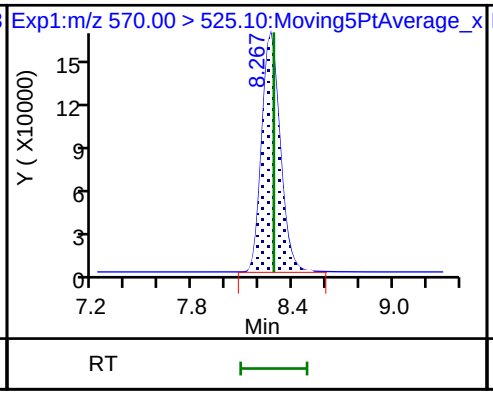
48 PFOS (ND)



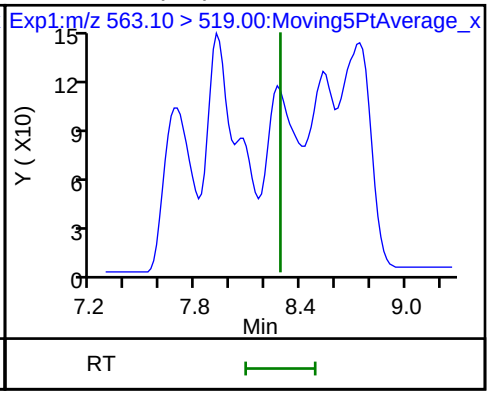
48 PFOS (ND)



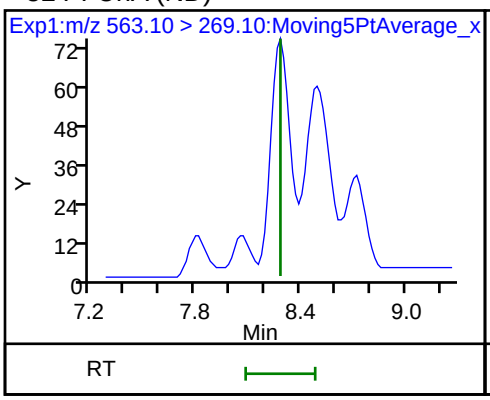
D 53 13C7 PFUnA



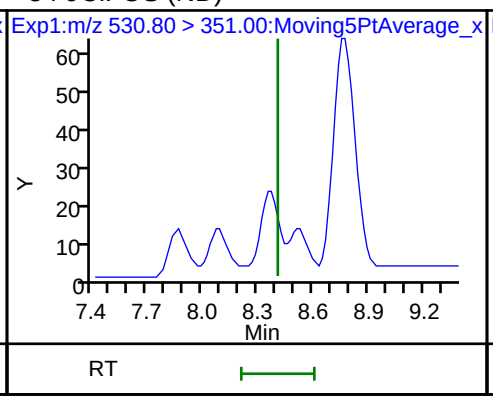
52 PFUnA (ND)



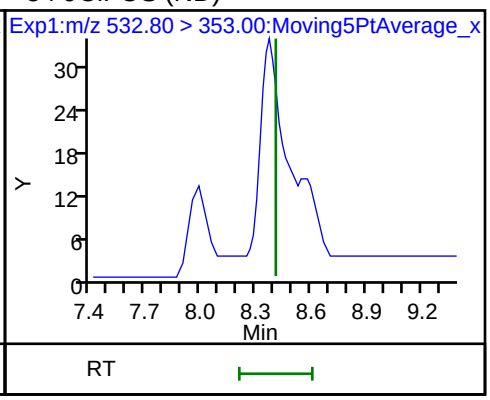
52 PFUnA (ND)



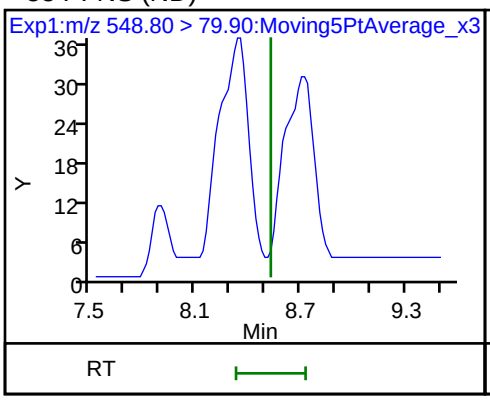
54 9ClFOS (ND)



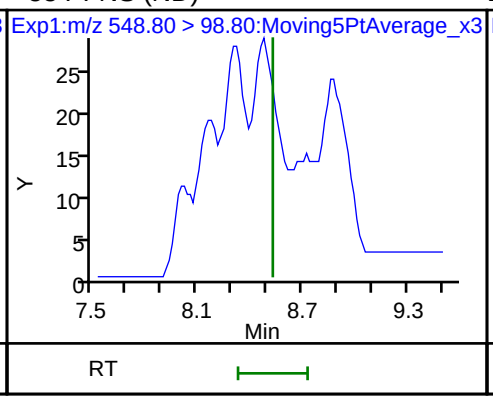
54 9ClFOS (ND)



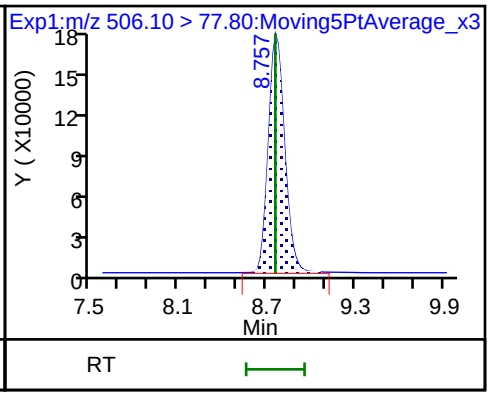
55 PFNS (ND)



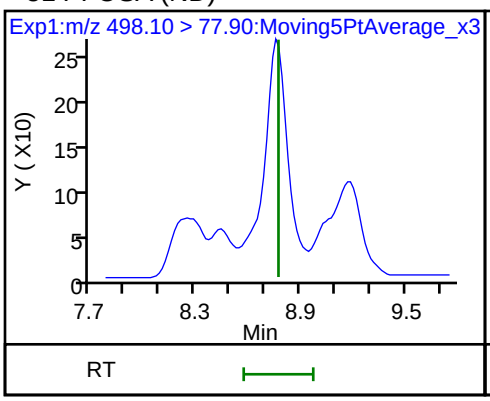
55 PFNS (ND)



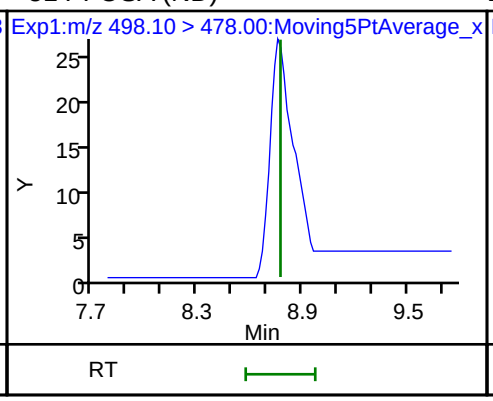
D 50 13C8 FOSA



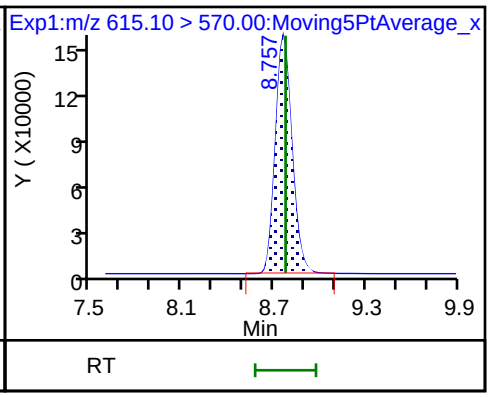
51 PFOSA (ND)



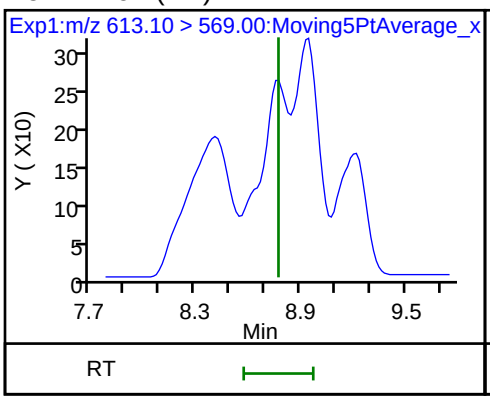
51 PFOSA (ND)



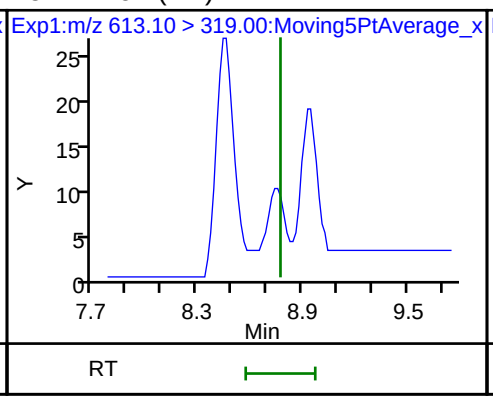
D 56 13C2 PFDoA



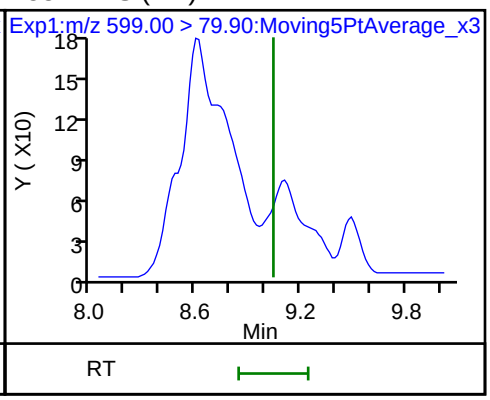
57 PFDoA (ND)



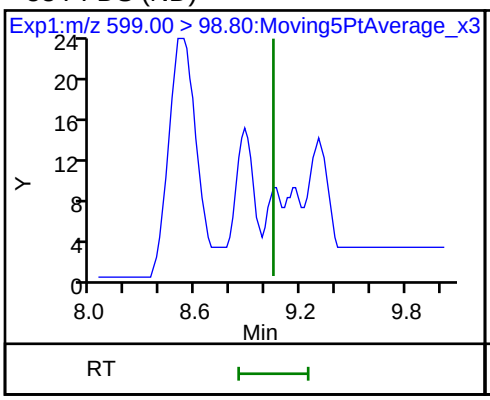
57 PFDoA (ND)



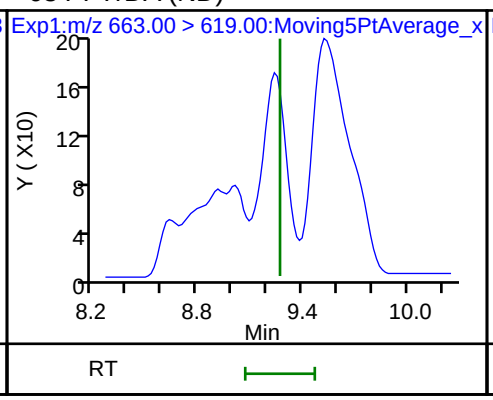
58 PFDS (ND)



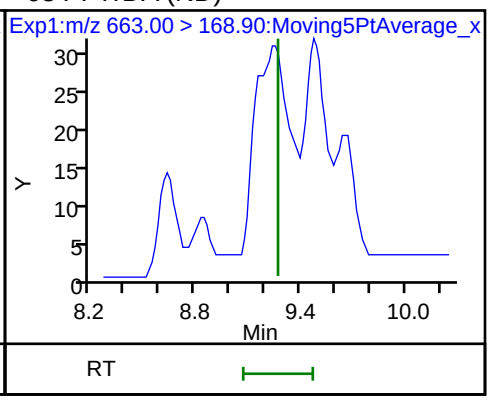
58 PFDS (ND)



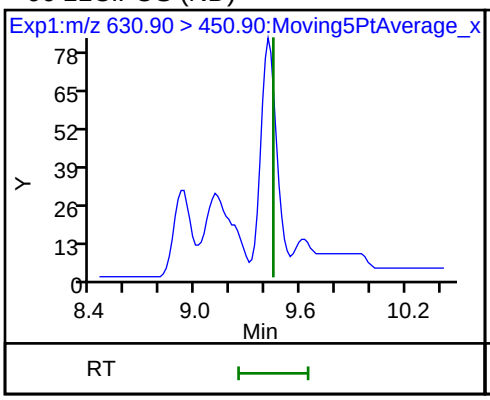
63 PFTrDA (ND)



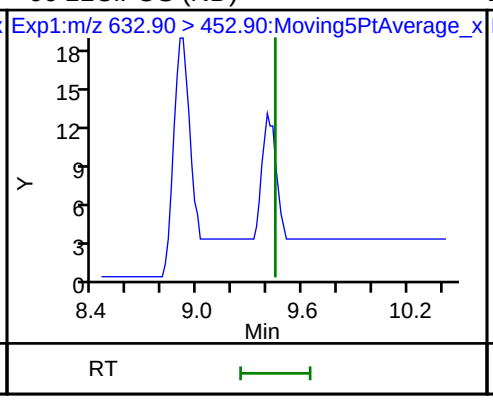
63 PFTrDA (ND)



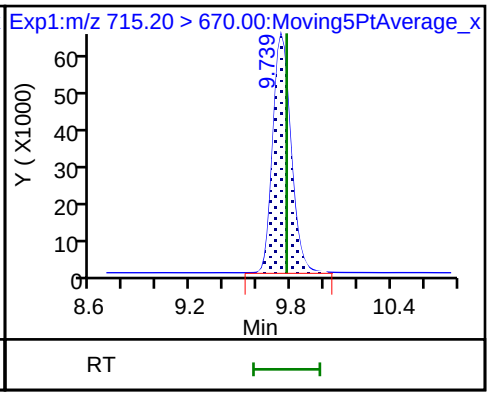
66 11ClFOS (ND)



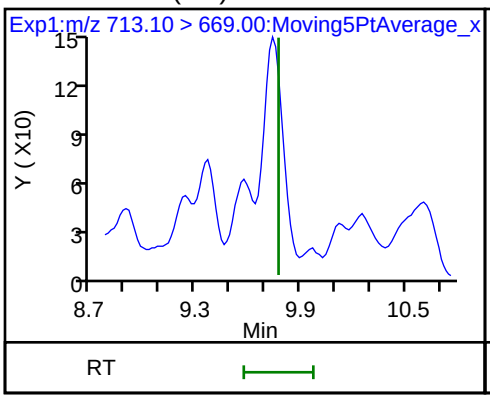
66 11ClFOS (ND)



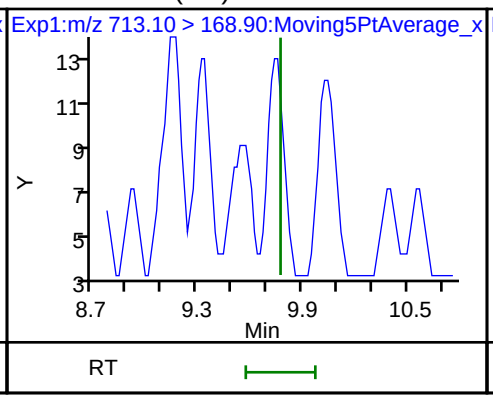
D 69 13C2 PFTeDA



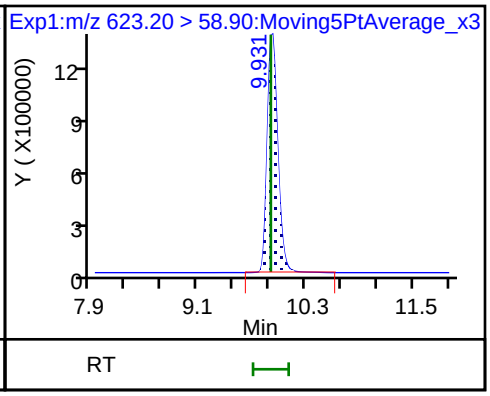
70 PFTeDA (ND)



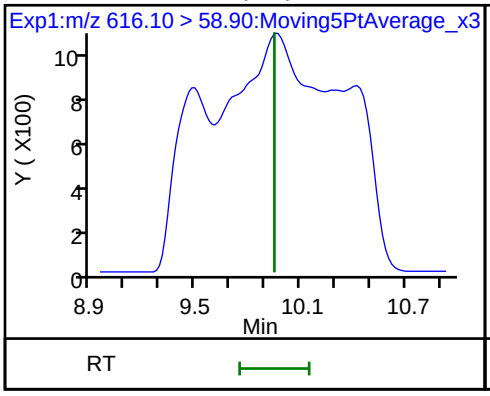
70 PFTeDA (ND)



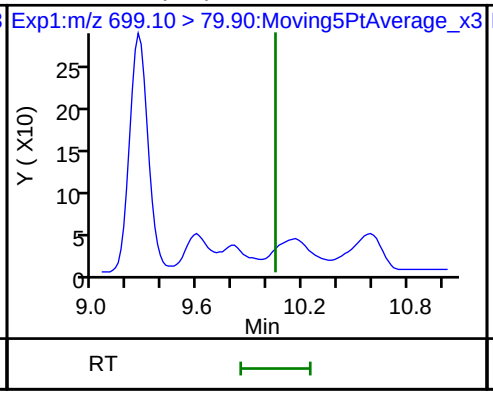
D 59 d7-N-Me-FOSE



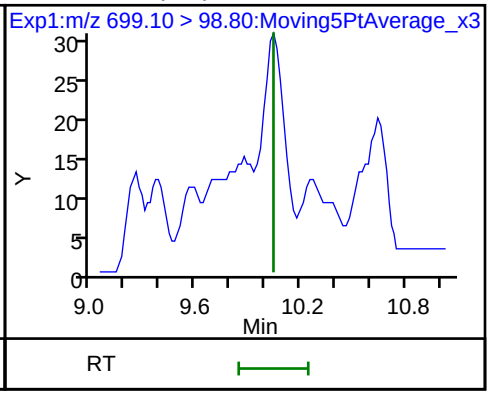
60 N-MeFOSE-M (ND)



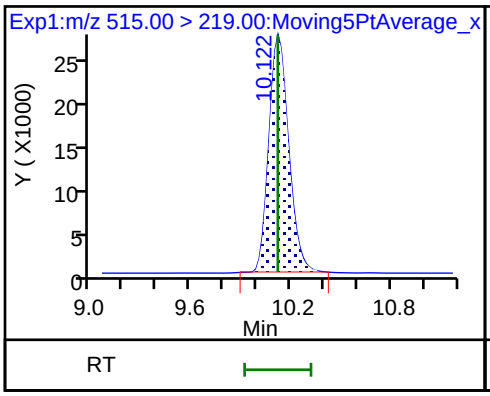
71 PFDoS (ND)



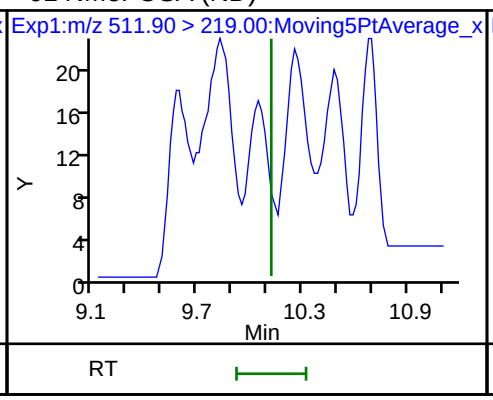
71 PFDoS (ND)



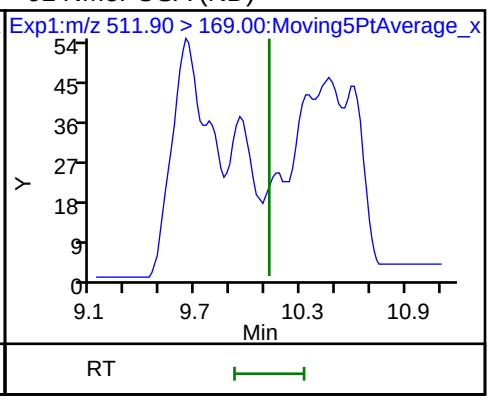
D 62 d3-NMePFOSA



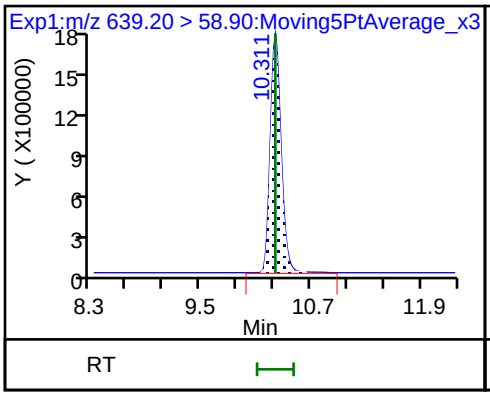
61 NMeFOSA (ND)



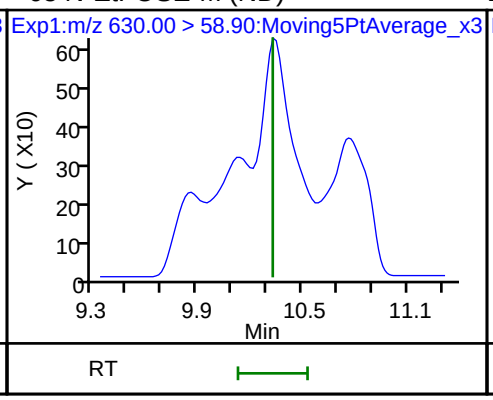
61 NMeFOSA (ND)



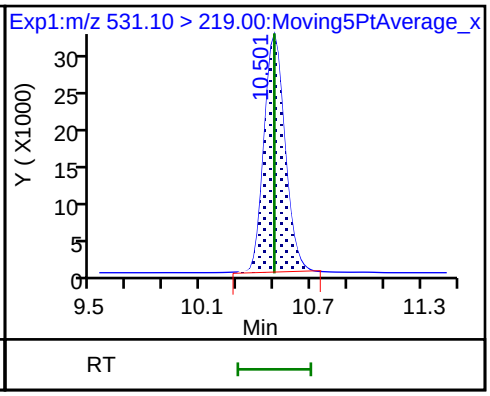
D 64 d9-N-EtFOSE



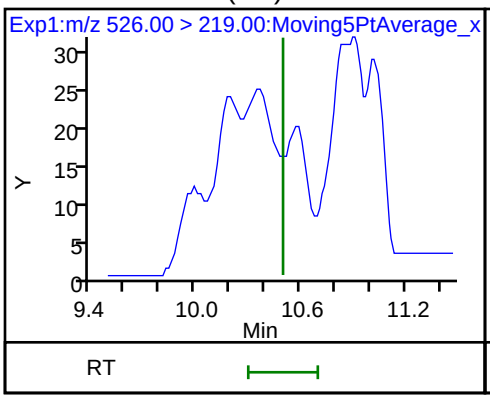
65 N-EtFOSE-M (ND)



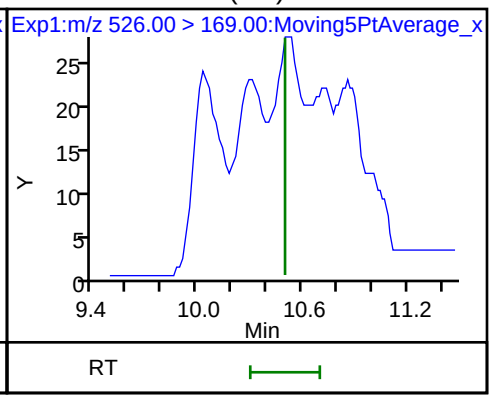
D 67 d5-NEtPFOSA



68 N-EtFOSA-M (ND)



68 N-EtFOSA-M (ND)



FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: | Lab Sample ID: CCB 280-635316/22

Matrix: Water | Lab File ID: 2023.11.28a.026.d

Analysis Method: Draft 1633 | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 11/28/2023 18:40

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	0.64	U	0.64	0.059
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.32	U	0.32	0.038
307-24-4	Perfluorohexanoic acid (PFHxA)	0.16	U	0.16	0.012
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.16	U	0.16	0.020
335-67-1	Perfluorooctanoic acid (PFOA)	0.16	U	0.16	0.065
375-95-1	Perfluorononanoic acid (PFNA)	0.16	U	0.16	0.018
335-76-2	Perfluorodecanoic acid (PFDA)	0.16	U	0.16	0.0087
2058-94-8	Perfluoroundecanoic acid (PFUnA)	0.16	U	0.16	0.028
307-55-1	Perfluorododecanoic acid (PFDoA)	0.16	U	0.16	0.036
72629-94-8	Perfluorotridecanoic acid (PFTriA)	0.16	U	0.16	0.016
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	0.16	U	0.16	0.021
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.16	U	0.16	0.017
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	0.16	U	0.16	0.015
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.16	U	0.16	0.024
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	0.16	U	0.16	0.040
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.16	U	0.16	0.032
68259-12-1	Perfluorononanesulfonic acid (PFNS)	0.16	U	0.16	0.015
335-77-3	Perfluorodecanesulfonic acid (PFDS)	0.16	U	0.16	0.024
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	0.16	U	0.16	0.022
757124-72-4	4:2 FTS	0.64	U	0.64	0.068
27619-97-2	6:2 FTS	0.64	U	0.64	0.059
39108-34-4	8:2 FTS	0.64	U	0.64	0.077
754-91-6	Perfluorooctanesulfonamide (PFOSA)	0.16	U	0.16	0.011
31506-32-8	NMeFOSA	0.16	U	0.16	0.031
4151-50-2	NEtFOSA	0.16	U	0.16	0.020
2355-31-9	NMeFOSAA	0.16	U	0.16	0.042
2991-50-6	NEtFOSAA	0.16	U	0.16	0.036
24448-09-7	NMeFOSE	1.60	U	1.60	0.11
1691-99-2	NEtFOSE	1.60	U	1.60	0.11
13252-13-6	HFPO-DA (GenX)	0.64	U	0.64	0.047

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: | Lab Sample ID: CCB 280-635316/22

Matrix: Water | Lab File ID: 2023.11.28a.026.d

Analysis Method: Draft 1633 | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 11/28/2023 18:40

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.64	U	0.64	0.043
863090-89-5	PFMBA	0.32	U	0.32	0.048
151772-58-6	NFDHA	0.32	U	0.32	0.038
377-73-1	PFMPA	0.32	U	0.32	0.050
756426-58-1	9Cl-PF3ONS	0.64	U	0.64	0.11
763051-92-9	11Cl-PF3OUdS	0.64	U	0.64	0.12
113507-82-7	PFEESA	0.32	U	0.32	0.034
356-02-5	3:3 FTCA	0.80	U	0.80	0.18
914637-49-3	5:3 FTCA	4.00	U	4.00	0.51
812-70-4	7:3 FTCA	4.00	U	4.00	0.55

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: | Lab Sample ID: CCB 280-635316/22

Matrix: Water | Lab File ID: 2023.11.28a.026.d

Analysis Method: Draft 1633 | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 11/28/2023 18:40

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/mL

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	102		10-130
STL01893	13C5 PFPeA	110		35-150
STL02577	13C5 PFHxA	109		55-150
STL01892	13C4 PFHpA	103		55-150
STL01052	13C8 PFOA	101		60-140
STL02578	13C9 PFNA	103		55-140
STL02579	13C6 PFDA	109		50-140
STL02580	13C7 PFUnA	103		30-140
STL00998	13C2 PFDoA	103		10-150
STL02116	13C2 PFTeDA	111		10-130
STL02337	13C3 PFBS	93		55-150
STL02581	13C3 PFHxS	101		55-150
STL01054	13C8 PFOS	108		45-140
STL01056	13C8 FOSA	119		30-130
STL02118	d3-NMeFOSAA	96		45-200
STL02117	d5-NEtFOSAA	95		10-200
STL02395	M2-4:2 FTS	76		60-200
STL02279	M2-6:2 FTS	81		60-200
STL02280	M2-8:2 FTS	75		50-200
STL02255	13C3 HFPO-DA	112		25-160
STL02277	d7-N-MeFOSE-M	114		10-150
STL02278	d9-N-EtFOSE-M	117		10-150
STL02704	d5-NEtPFOSA	116		10-130
STL02705	d3-NMePFOSA	108		15-130

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.026.d
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 28-Nov-2023 18:40:23 ALS Bottle#: 20 Worklist Smp#: 22
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: CCB
Misc. Info.: Plate: 1 Rack: 1
Operator ID: B5QN Instrument ID: LC_LCMS11

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 29-Nov-2023 13:47:33 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1603

First Level Reviewer: B5QN Date: 29-Nov-2023 13:47:33
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.015	3.046	-0.031	0.995	5743274	10.2		102	38595	
* 1 13C3PFBA										
216.00 > 172.00	3.031	3.046	-0.015		2771570	5.00			10254	
D 7 13C5 PFPeA										
268.30 > 223.00	4.462	4.463	-0.001	0.834	1837600	5.48		110	16530	
D 9 13C2-4:2FTS										
329.10 > 80.90	5.096	5.097	-0.001	0.742	197752	3.53	Target=4.54	75.7	3554	
329.10 > 309.00	5.096	5.097	-0.001	0.742	33247		5.95(2.27-6.81)	75.7	1397	
D 16 13C3 PFBS										
302.10 > 79.90	5.335	5.354	-0.019	0.776	691473	2.17	Target=4.56	93.4	22183	
302.10 > 98.90	5.335	5.354	-0.019	0.776	163873		4.22(2.28-6.83)	93.4	7034	
* 14 13C2 PFHxA										
315.10 > 270.00	5.353	5.371	-0.018		1682132	2.50	Target=79.67		31766	
315.10 > 119.40	5.335	5.371	-0.036		24818		67.78(39.83-119.50)		1103	
D 12 13C5 PFHxA										
318.00 > 273.00	5.353	5.371	-0.018	1.000	2051895	2.72	Target=53.27	109	38605	
318.00 > 120.30	5.353	5.371	-0.018	1.000	38297		53.58(26.63-79.90)	109	1265	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.663	5.682	-0.019	1.058	2060685	11.2	Target=1.53	112	52537	
286.90 > 184.90	5.663	5.682	-0.019	1.058	1266347		1.63(0.76-2.29)	112	22929	
D 22 13C4 PFHpA										
367.10 > 322.00	6.104	6.122	-0.018	1.140	2025864	2.57		103	28531	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.454	6.471	-0.017	0.939	280080	3.83	Target=4.15	80.7	7902	
429.10 > 409.00	6.454	6.471	-0.017	0.939	55696		5.03(2.07-6.22)	80.7	2653	
D 27 13C8 PFOA										
421.10 > 376.00	6.707	6.707	0.0	1.000	1950816	2.52		101	29671	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
* 29 13C4 PFOA										
417.10 > 172.00	6.707	6.707	0.0		296112	2.50			10225	
* 31 18O2 PFHxS										
403.00 > 83.90	6.871	6.871	0.0		588380	2.37			26949	
D 33 13C3 PFHxS										
402.10 > 79.90	6.854	6.888	-0.034	0.998	600588	2.38	Target=4.11	101	27492	
402.10 > 98.80	6.854	6.888	-0.034	0.998	142795		4.21(2.05-6.16)	101	6536	
* 35 13C5 PFNA										
468.00 > 423.00	7.239	7.261	-0.022		1207545	1.25			21214	
D 34 13C9 PFNA										
472.10 > 427.00	7.239	7.261	-0.022	1.000	1176386	1.29		103	18129	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.506	7.522	-0.016	1.092	316823	3.58	Target=5.49	74.7	11132	
529.10 > 509.00	7.506	7.522	-0.016	1.092	58907		5.38(2.74-8.23)	74.7	2778	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.725	7.761	-0.036	0.965	477953	4.78		95.7	10488	
D 40 13C6 PFDA										
519.10 > 474.10	7.760	7.779	-0.019	1.000	1255503	1.36		109	28044	
* 44 13C2 PFDA										
515.10 > 470.10	7.760	7.779	-0.019		1159585	1.25			19459	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.951	7.969	-0.018	0.993	549566	4.75		95.0	9139	
D 49 13C8 PFOS										
507.10 > 79.90	7.986	8.021	-0.035	0.998	275784	2.58	Target=2.95	108	9179	
507.10 > 98.90	7.986	8.021	-0.035	0.998	96693		2.85(1.47-4.42)	108	4247	
* 47 13C4 PFOS										
502.80 > 79.90	8.003	8.021	-0.018		711932	2.40	Target=3.78		13538	
502.80 > 98.90	7.986	8.021	-0.035		194037		3.67(1.89-5.67)		8608	
D 53 13C7 PFUnA										
570.00 > 525.10	8.266	8.285	-0.018	1.065	1327064	1.29		103	24421	
D 50 13C8 FOSA										
506.10 > 77.80	8.739	8.756	-0.017	1.092	1533883	2.97		119	19913	
D 56 13C2 PFDoA										
615.10 > 570.00	8.756	8.773	-0.017	1.128	1308669	1.29		103	24588	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.738	9.774	-0.036	1.255	673599	1.39		111	12807	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.910	9.910	0.0	1.238	10817191	28.5		114	40417	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.101	10.120	-0.019	1.262	315166	2.69		108	7590	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.291	10.310	-0.019	1.286	13878079	29.3		117	83577	
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.480	10.500	-0.020	1.310	347504	2.89		116	4365	

QC Flag Legend

Processing Flags

Reagents:

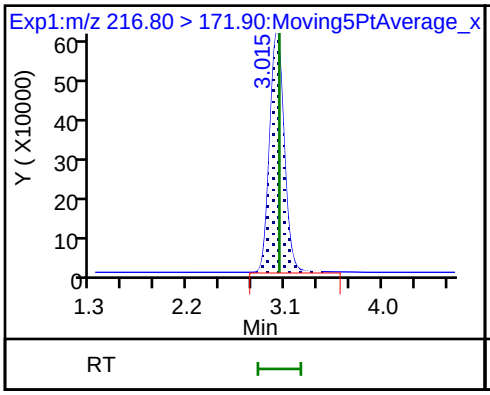
LC1633EPA_LL0_00016 Amount Added: 1.00 Units: mL

Report Date: 29-Nov-2023 13:47:33 Chrom Revision: 2.3 15-Nov-2023 20:54:34

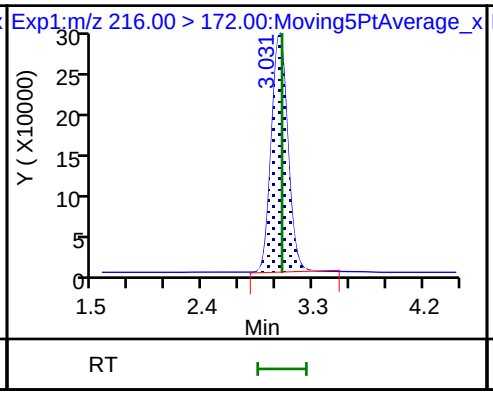
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.026.d
Injection Date: 28-Nov-2023 18:40:23 Instrument ID: LC_LCMS11
Lims ID: CCB
Client ID:
Operator ID: B5QN ALS Bottle#: 20 Worklist Smp#: 22
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5

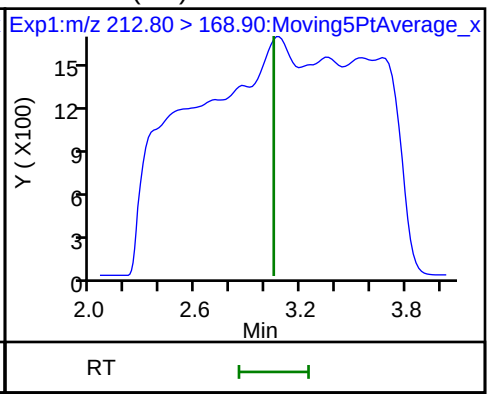
D 3 13C4-PFBA



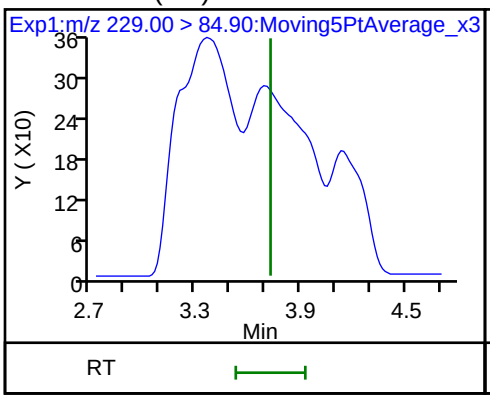
* 1 13C3PFBA



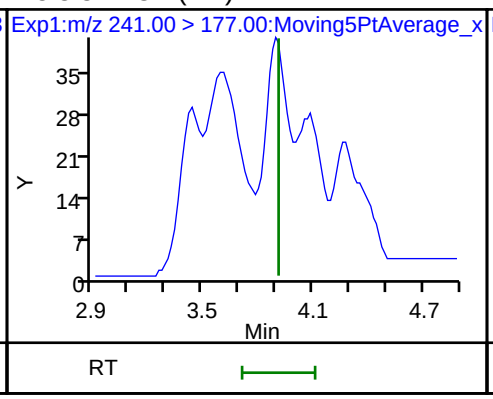
2 PFBA (ND)



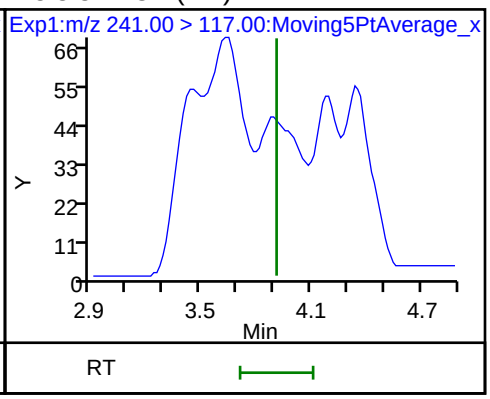
4 PFMPA (ND)



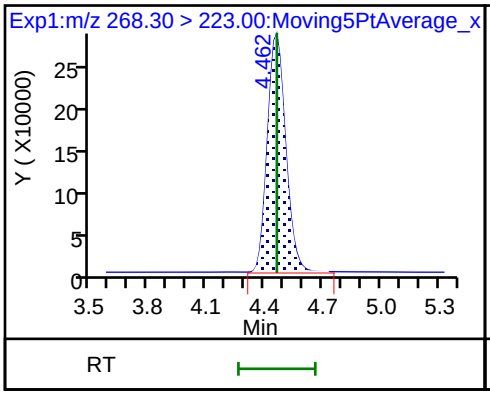
5 3:3 FTCA (ND)



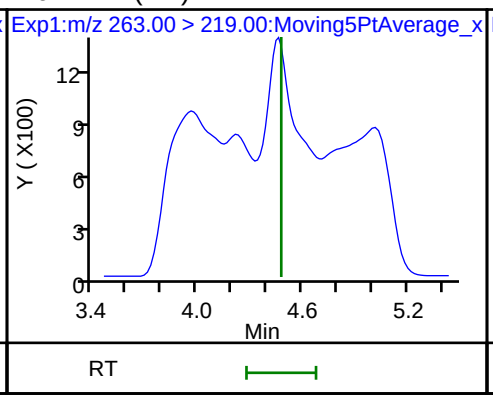
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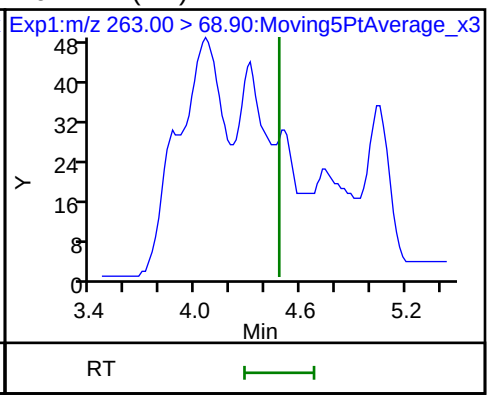
D 7 13C5 PFPeA



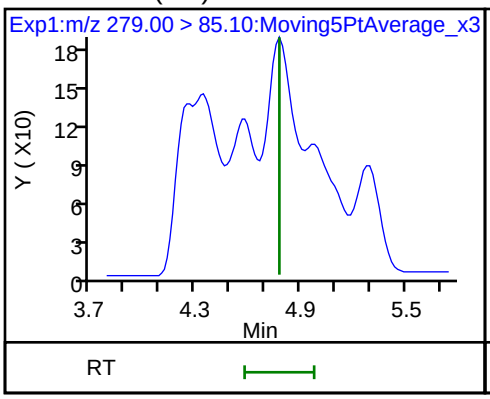
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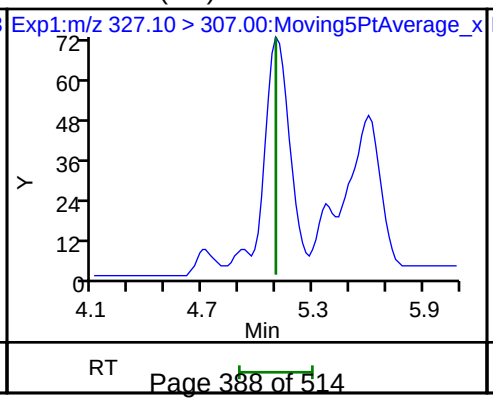
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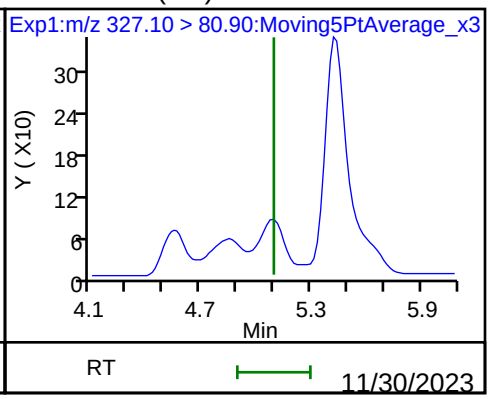
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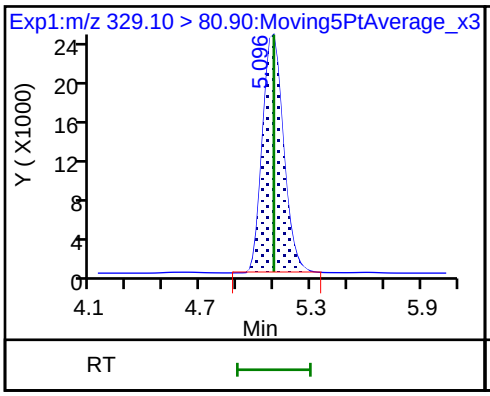
10 4:2FTS (ND)



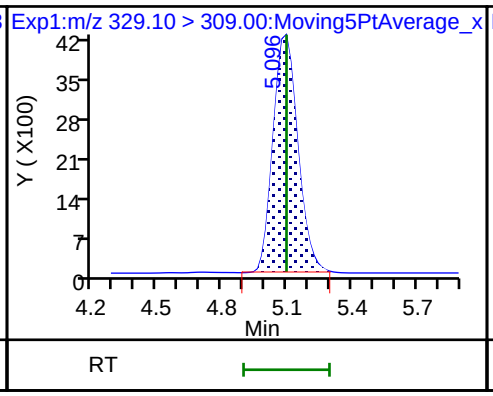
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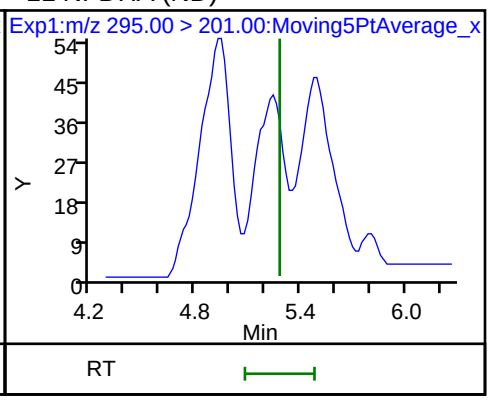
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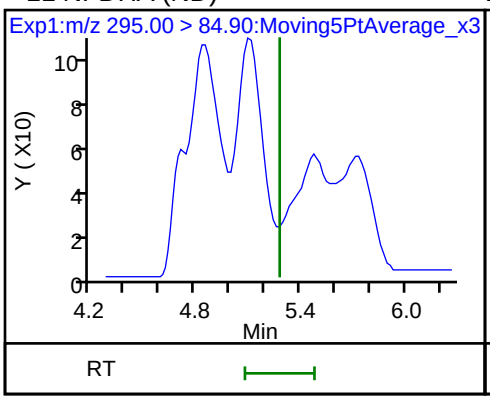
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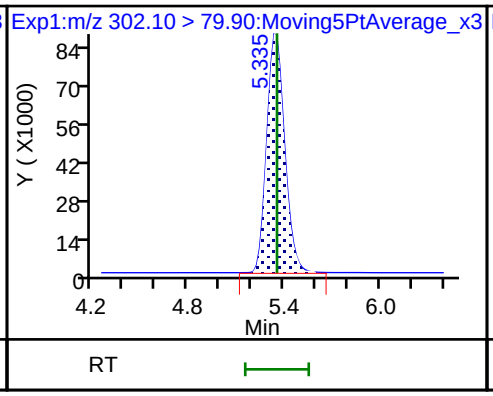
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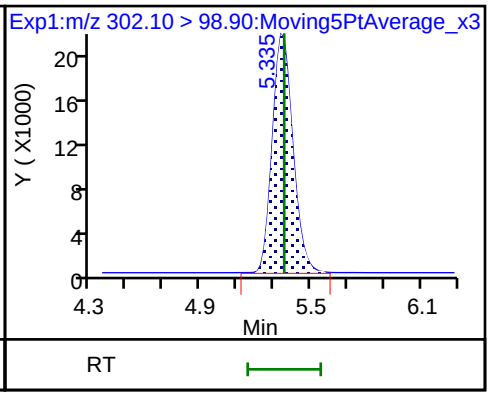
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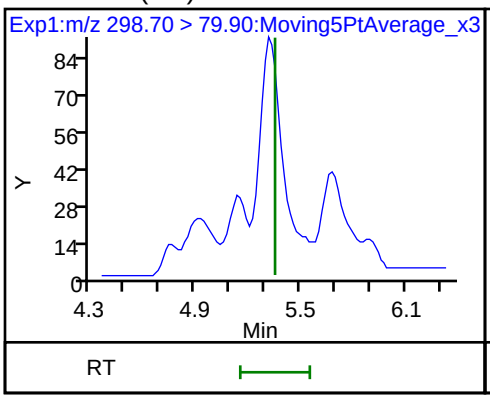
D 16 13C3 PFBS



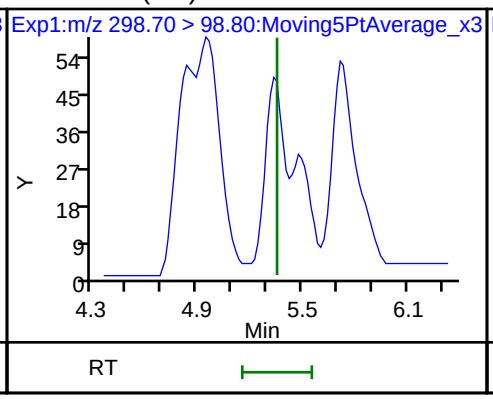
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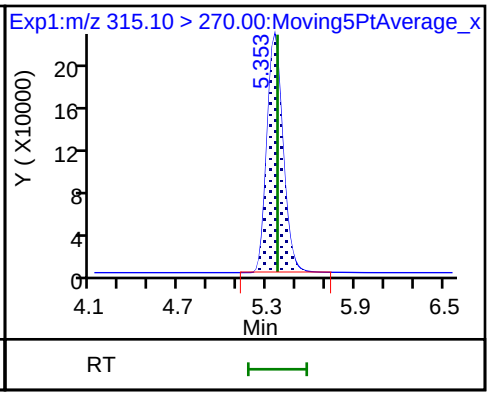
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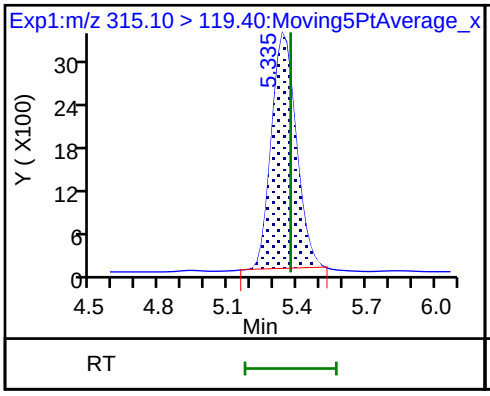
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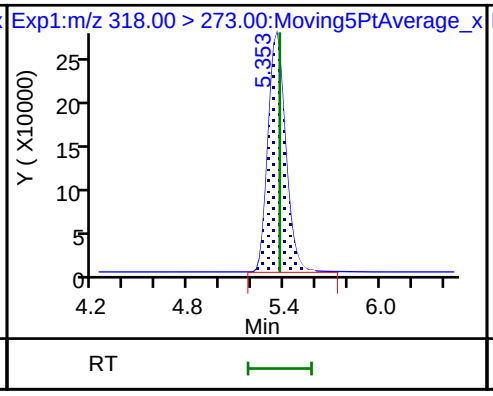
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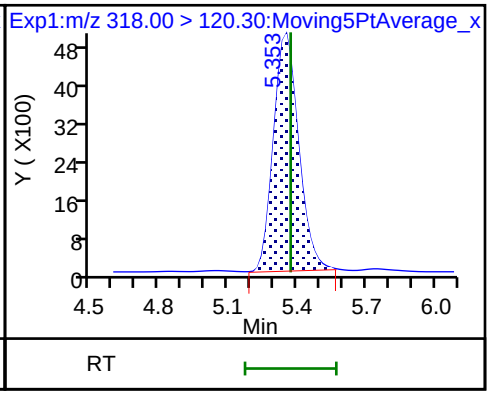
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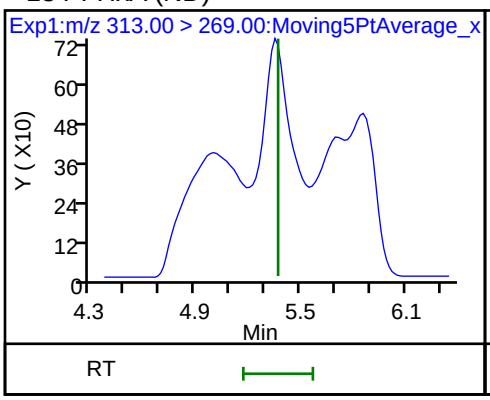
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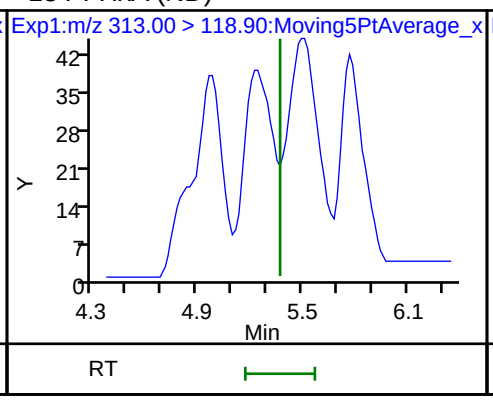
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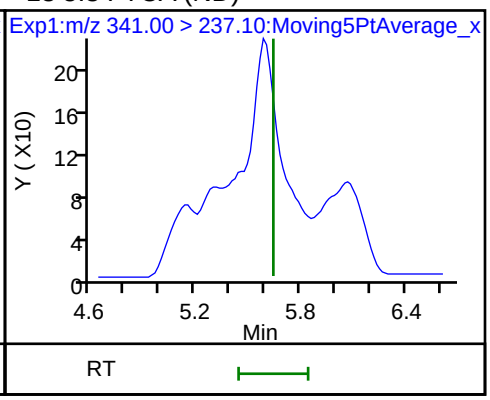
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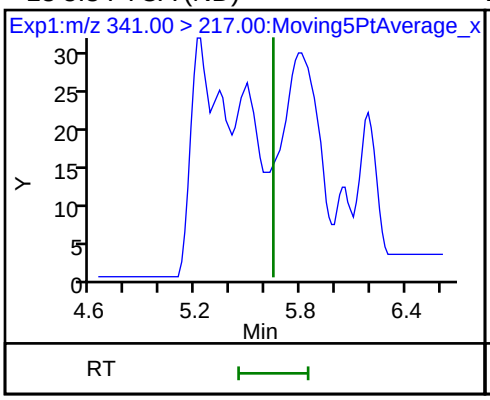
13 PFHxA (ND)



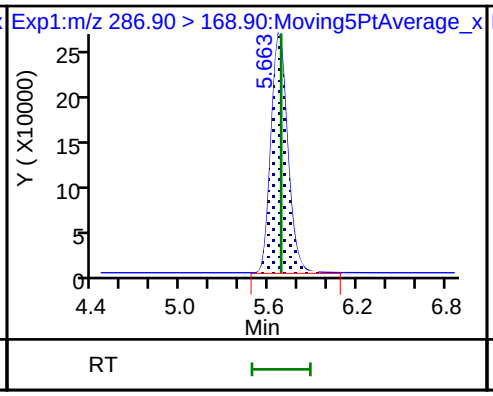
18 5:3 FTCA (ND)



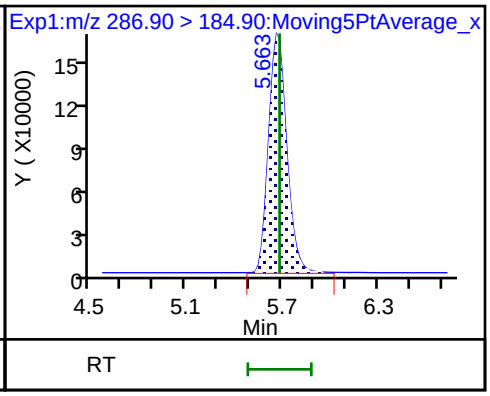
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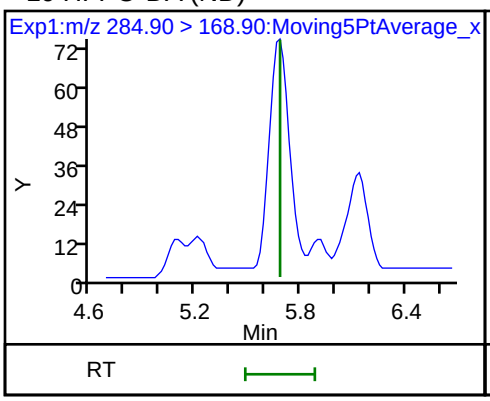
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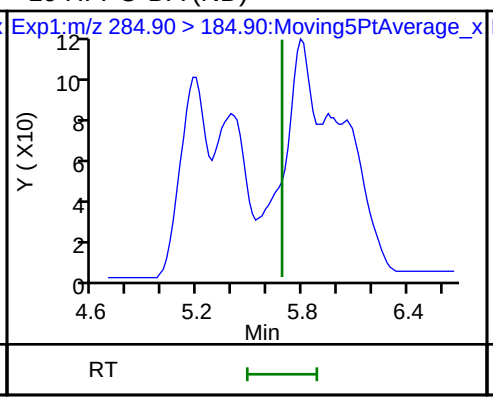
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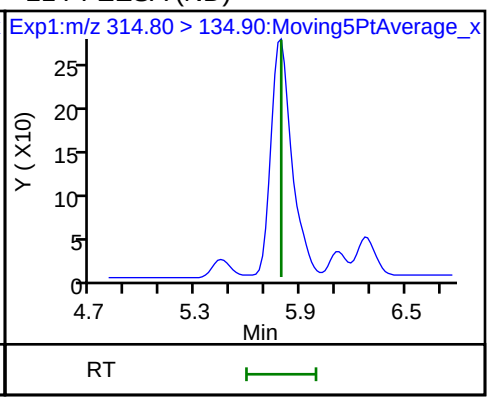
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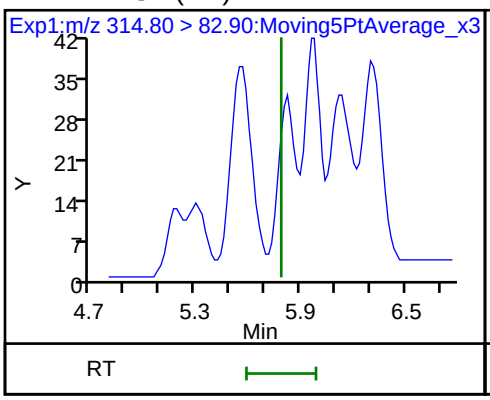
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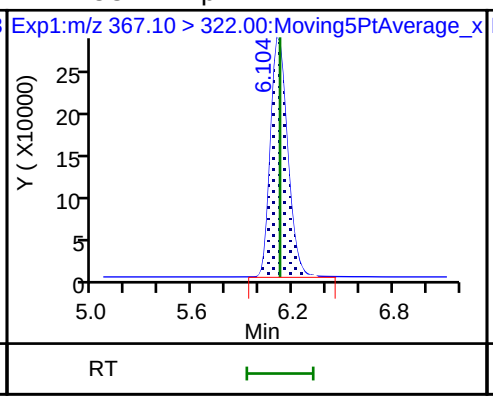
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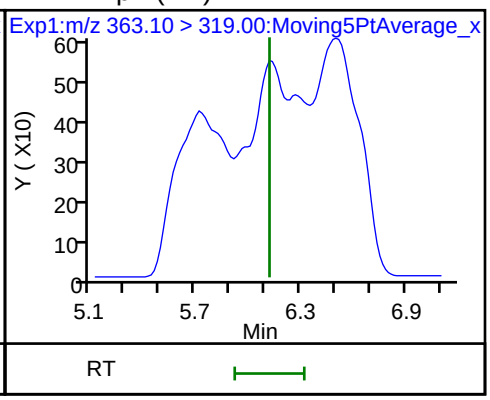
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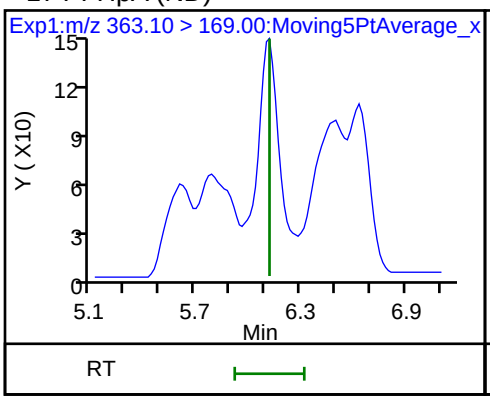
D 22 13C4 PFHpA



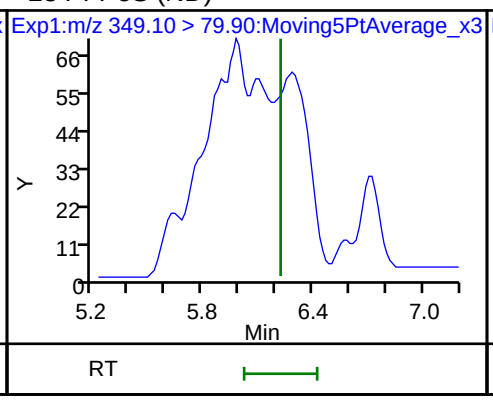
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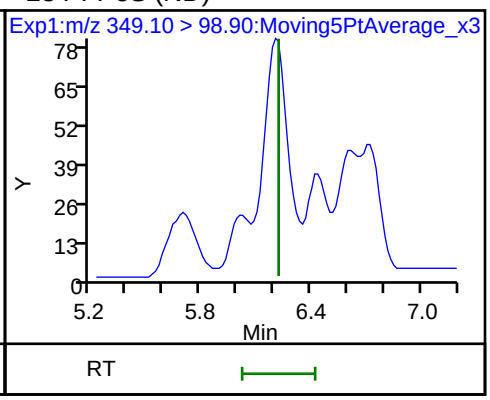
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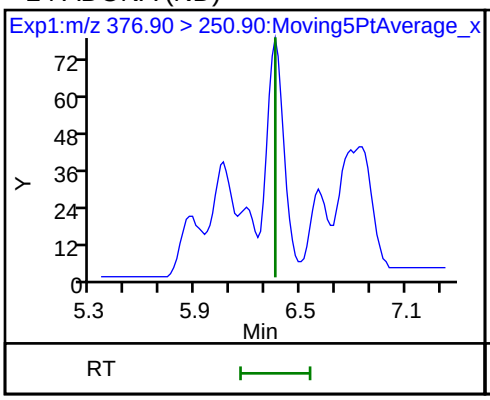
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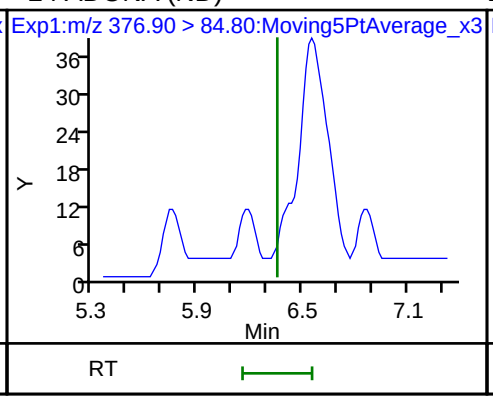
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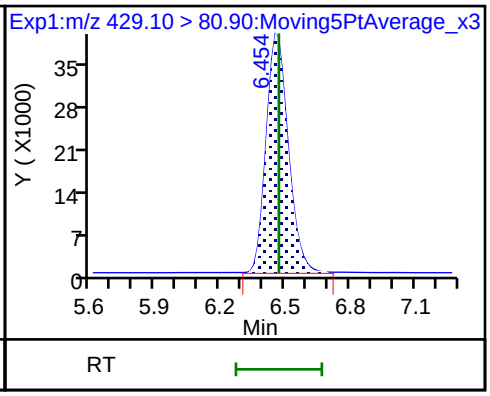
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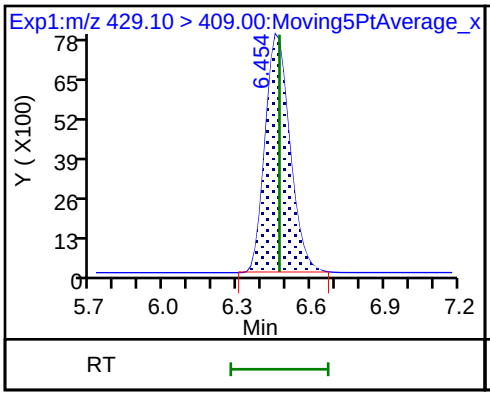
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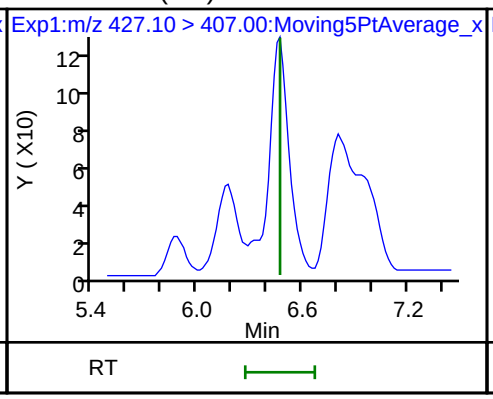
D 26 13C2-6:2FTS



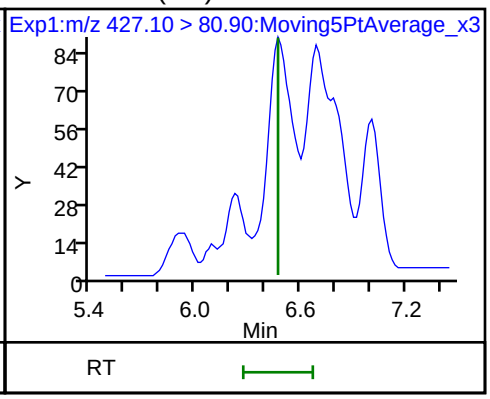
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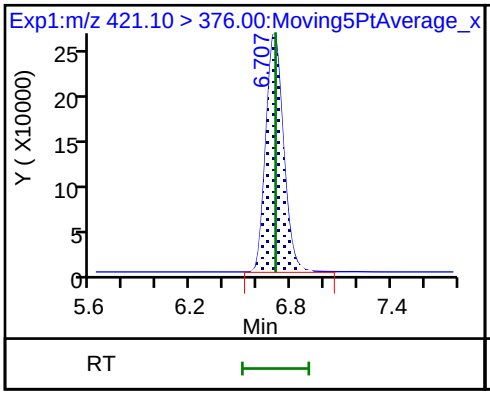
25 6:2FTS (ND)



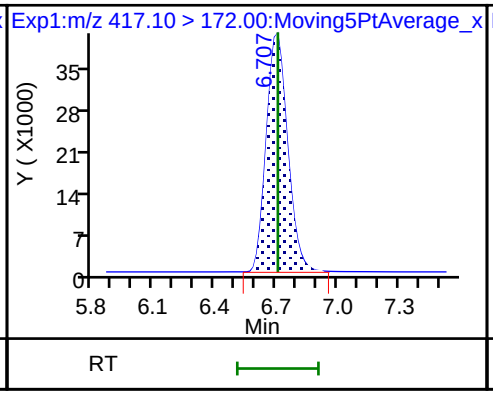
25 6:2FTS (ND)



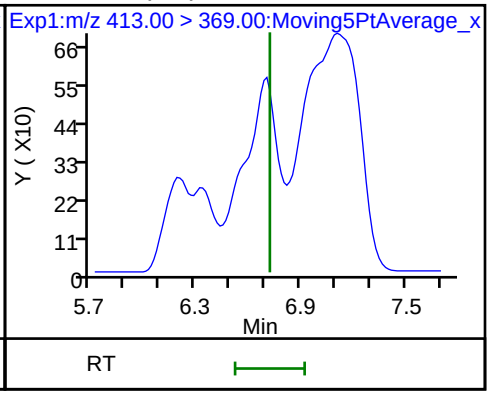
D 27 13C8 PFOA



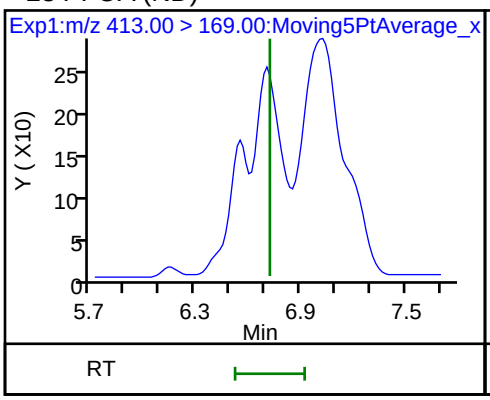
* 29 13C4 PFOA



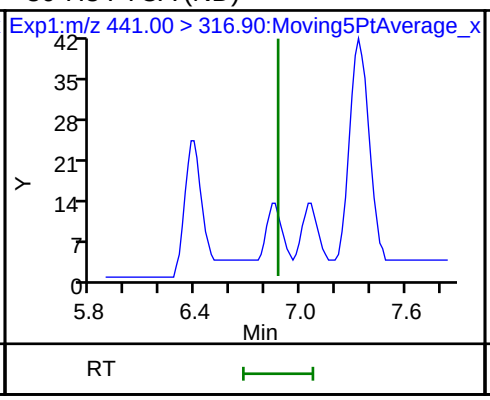
28 PFOA (ND)



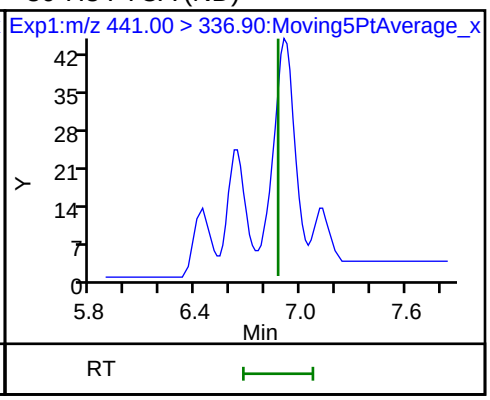
28 PFOA (ND)



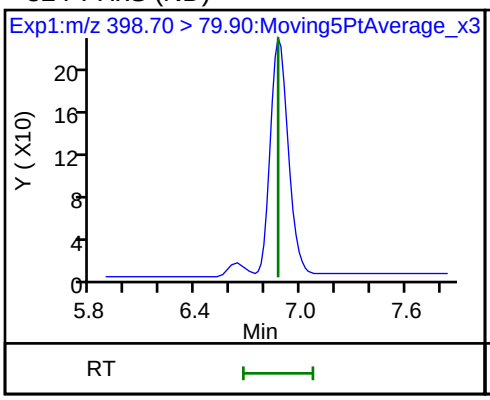
30 7:3 FTCA (ND)



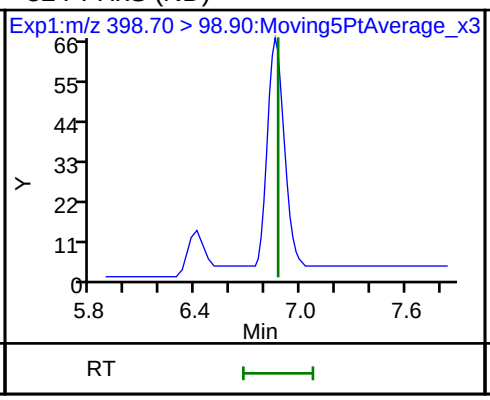
30 7:3 FTCA (ND)



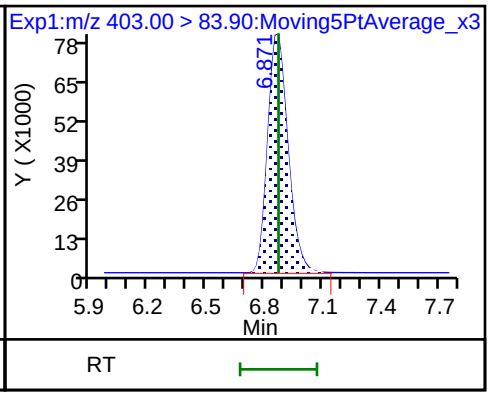
32 PFHxS (ND)



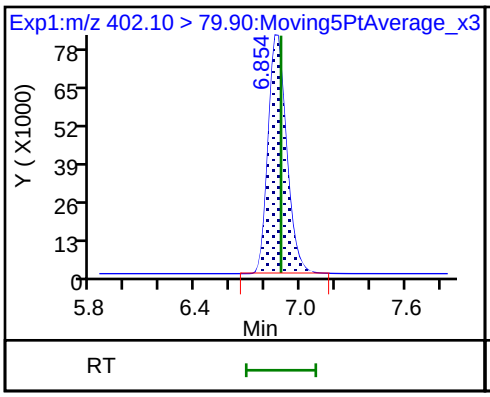
32 PFHxS (ND)



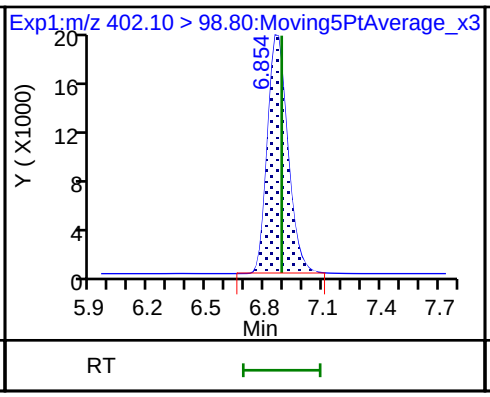
* 31 18O2 PFHxS



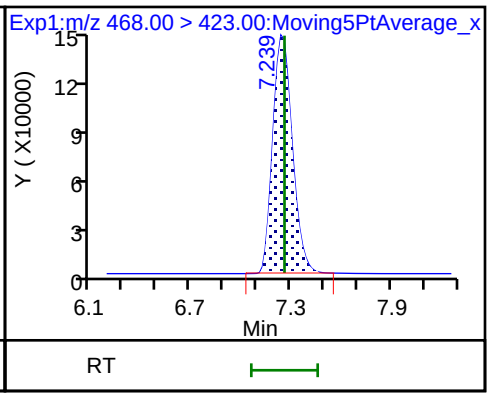
D 33 13C3 PFHxS



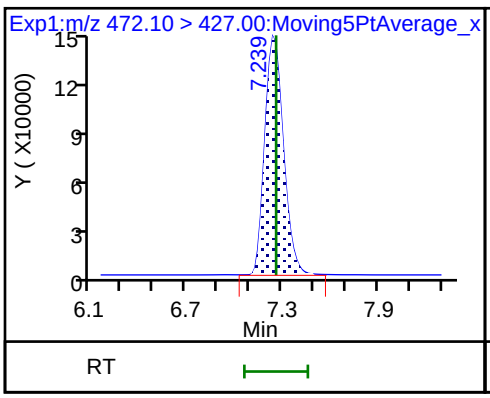
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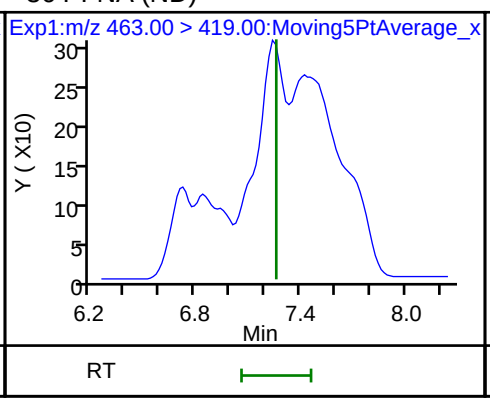
* 35 13C5 PFNA



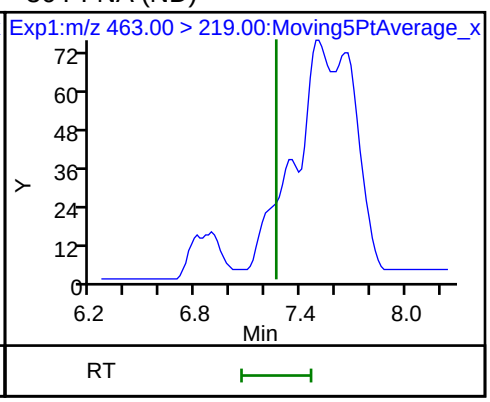
D 34 13C9 PFNA



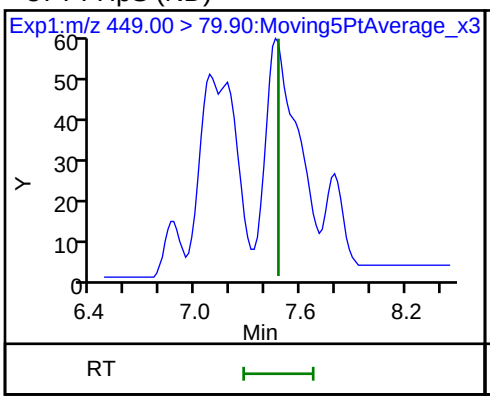
36 PFNA (ND)



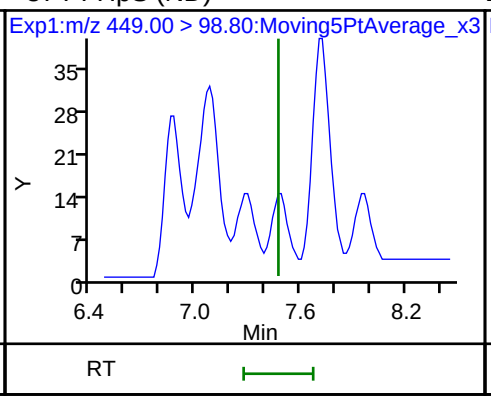
36 PFNA (ND)



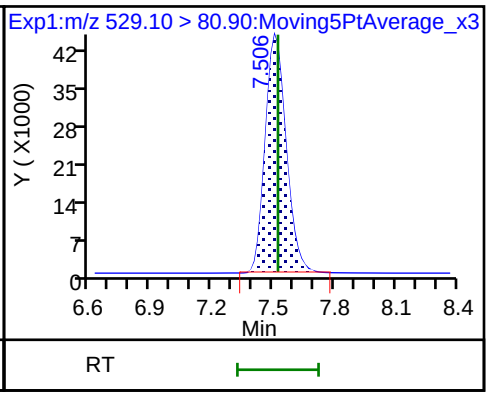
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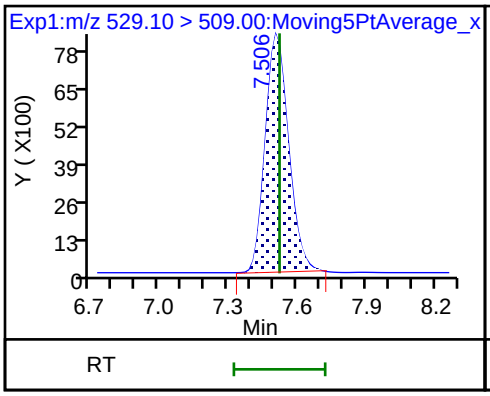
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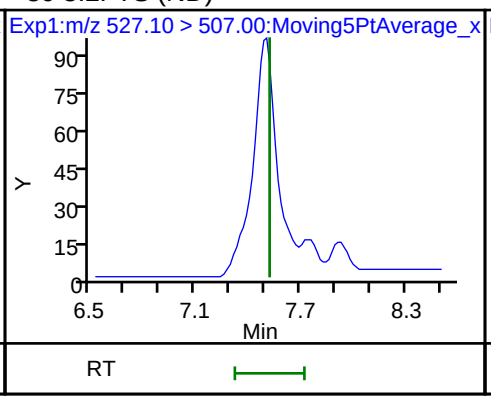
D 38 13C2-8:2FTS



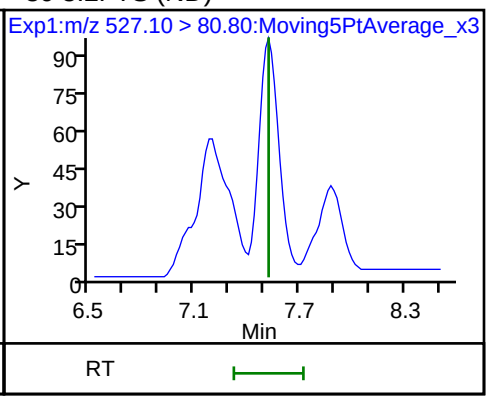
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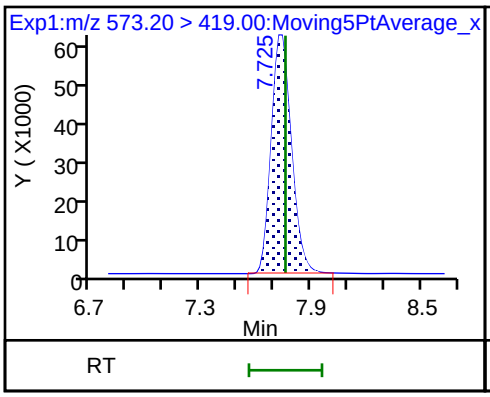
39 8:2FTS (ND)



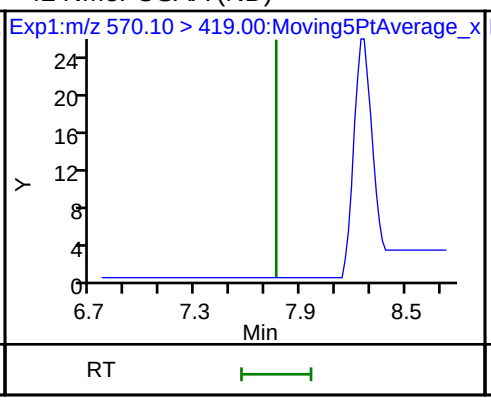
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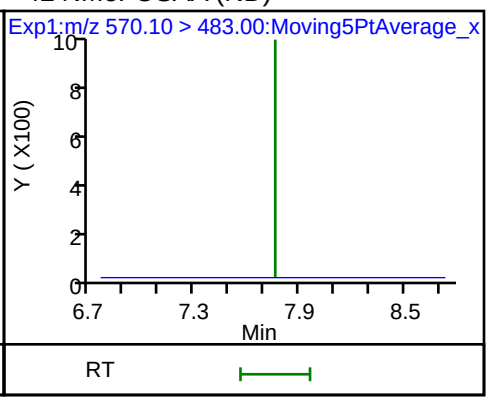
D 41 d3-NMeFOSAA



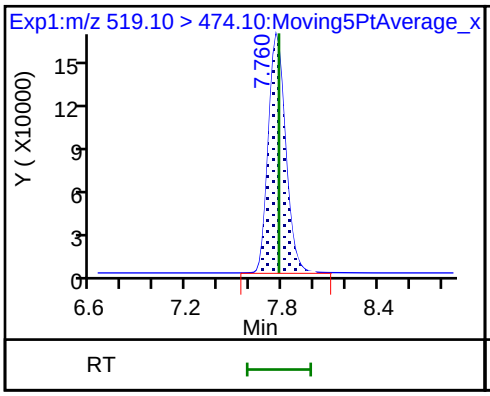
42 NMeFOSAA (ND)



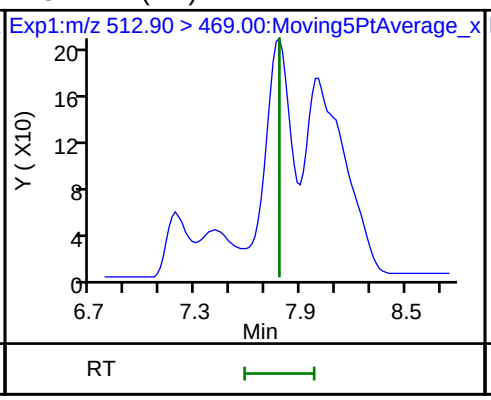
42 NMeFOSAA (ND)



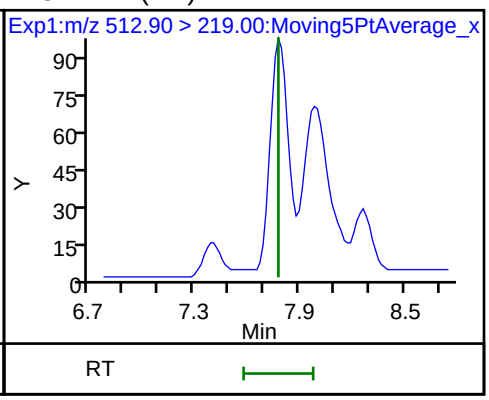
D 40 13C6 PFDA



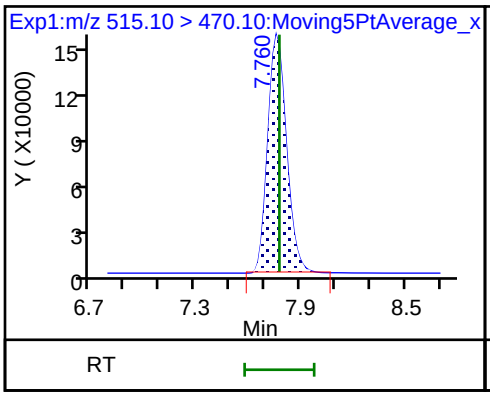
43 PFDA (ND)



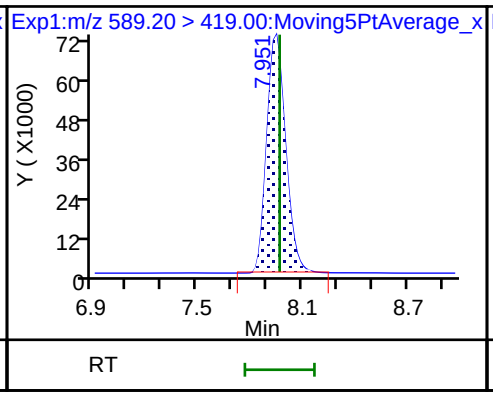
43 PFDA (ND)



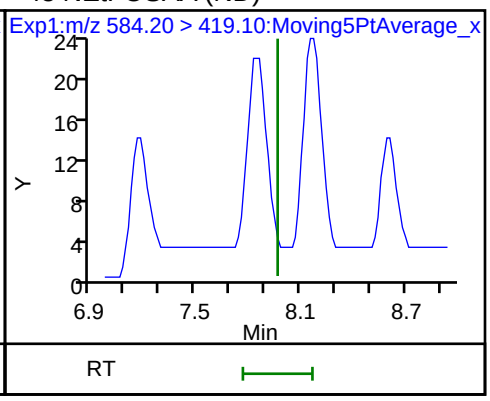
* 44 13C2 PFDA



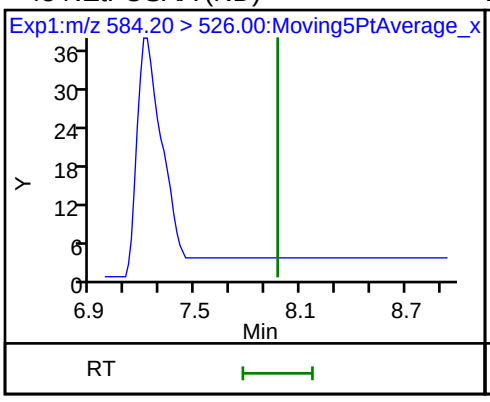
D 46 d5-NEtFOSAA



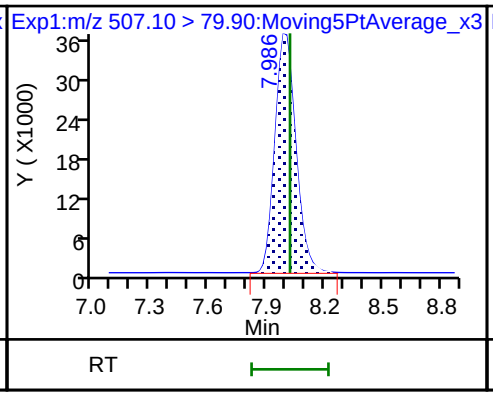
45 NEtFOSAA (ND)



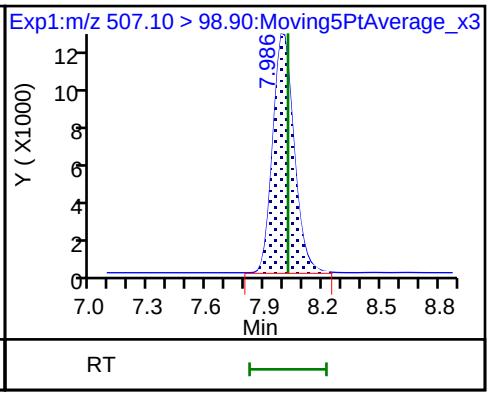
45 NEtFOSAA (ND)



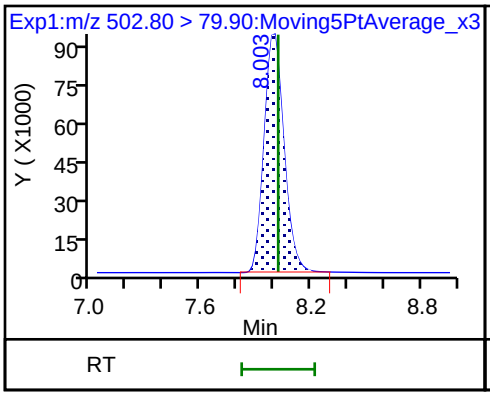
D 49 13C8 PFOS



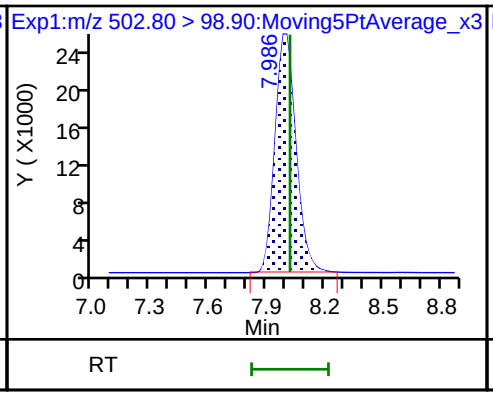
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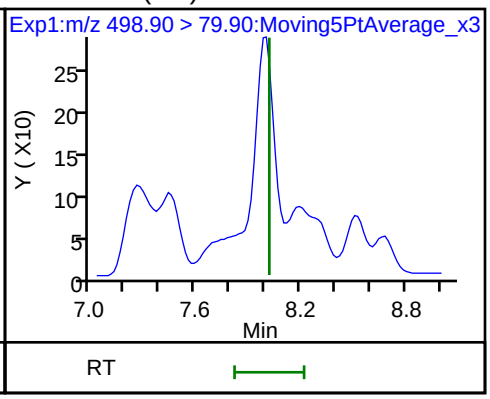
* 47 13C4 PFOS



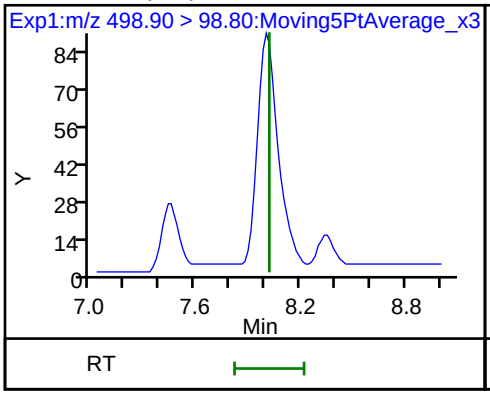
* 47 13C4 PFOS



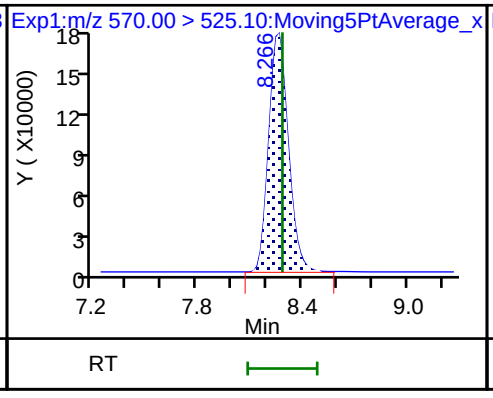
48 PFOS (ND)



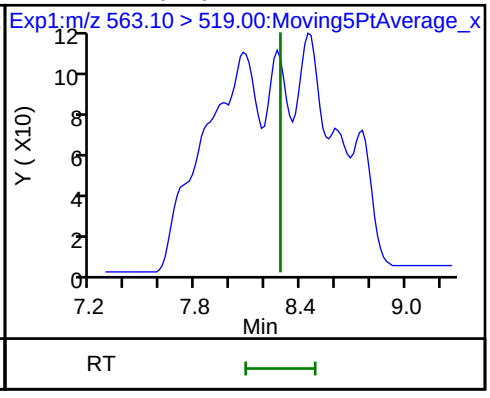
48 PFOS (ND)



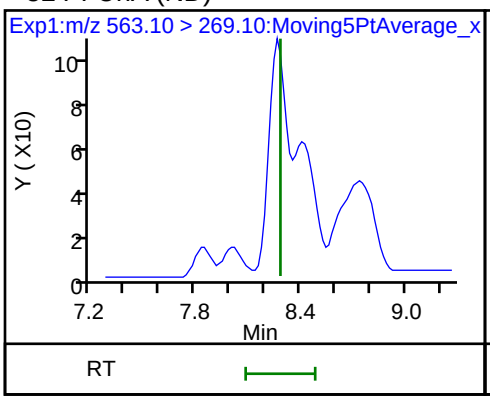
D 53 13C7 PFUnA



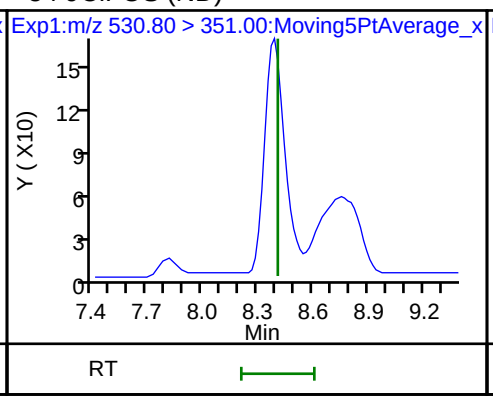
52 PFUnA (ND)



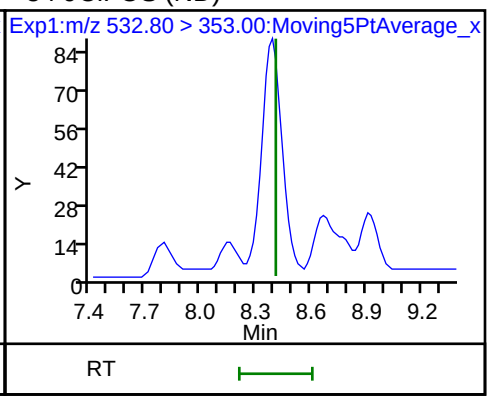
52 PFUnA (ND)



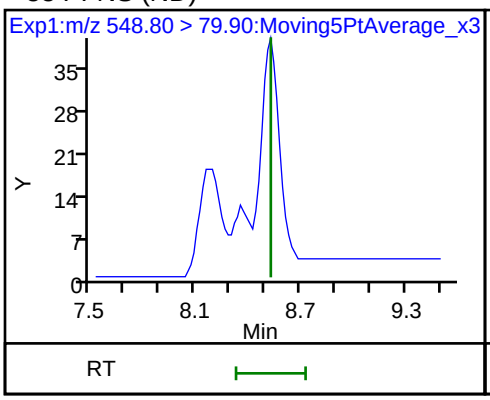
54 9ClFOS (ND)



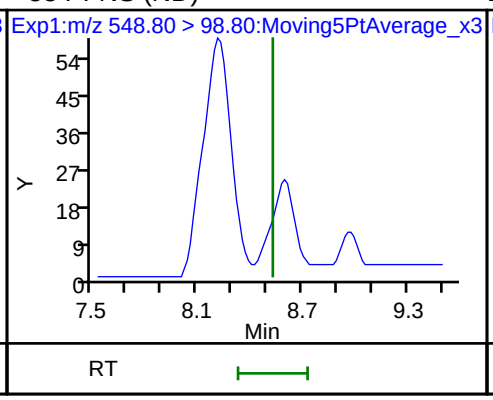
54 9ClFOS (ND)



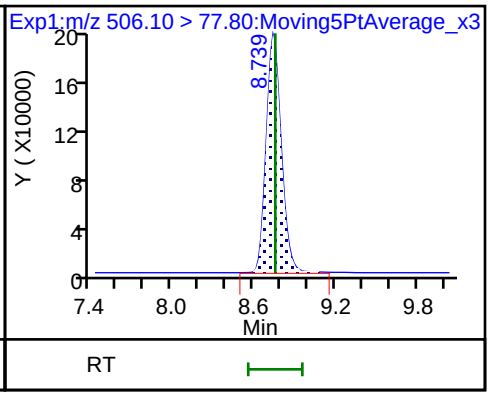
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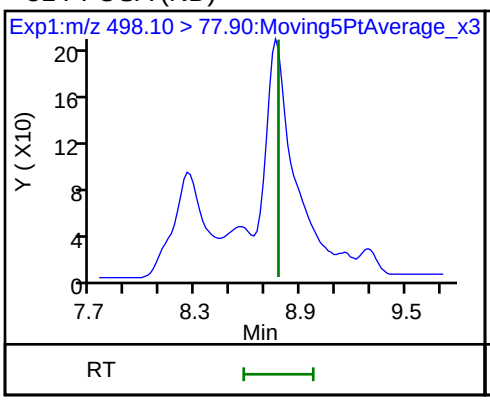
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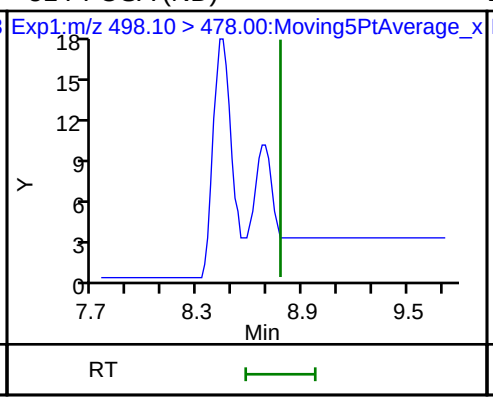
D 50 13C8 FOSA



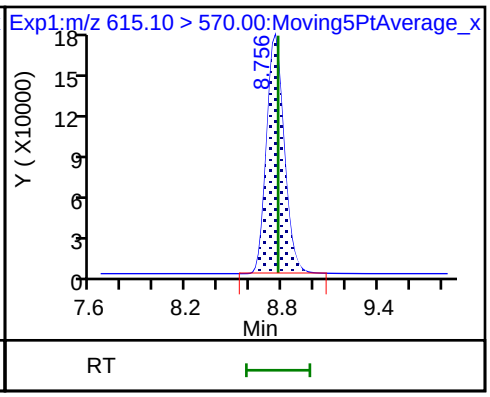
51 PFOSA (ND)



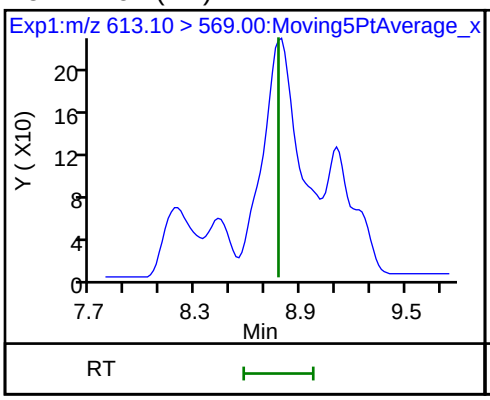
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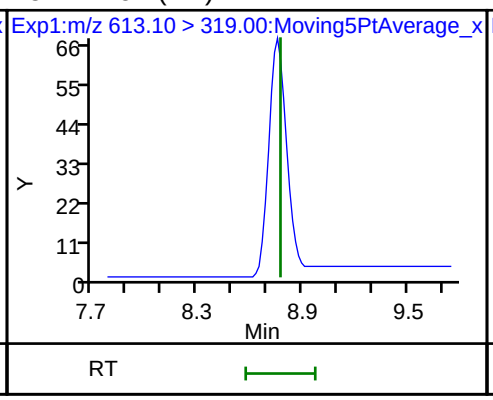
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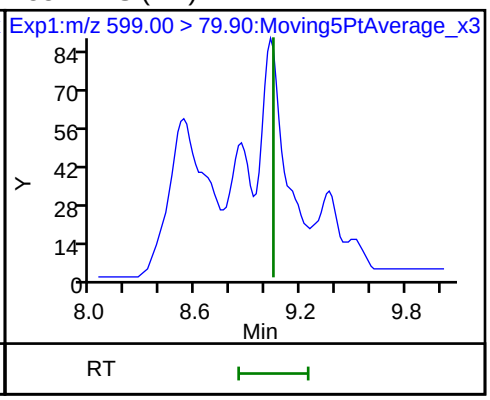
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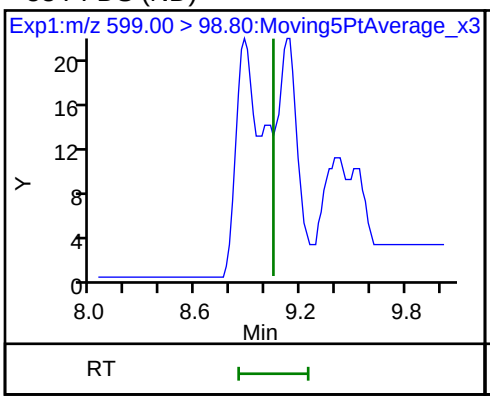
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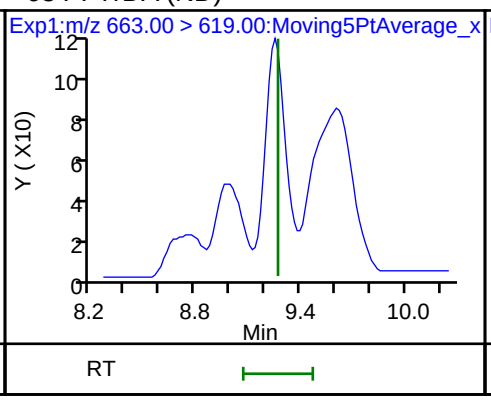
58 PFDS (ND)



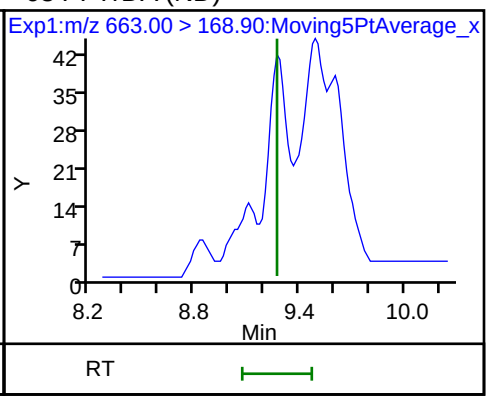
58 PFDS (ND)



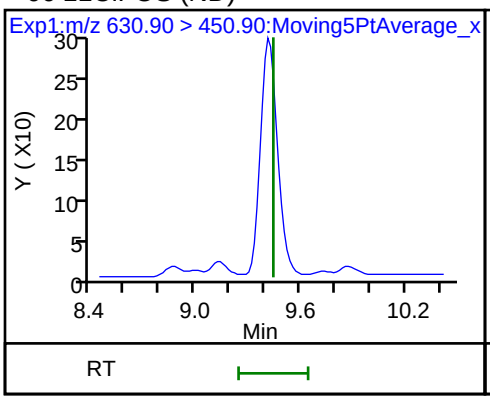
63 PFTrDA (ND)



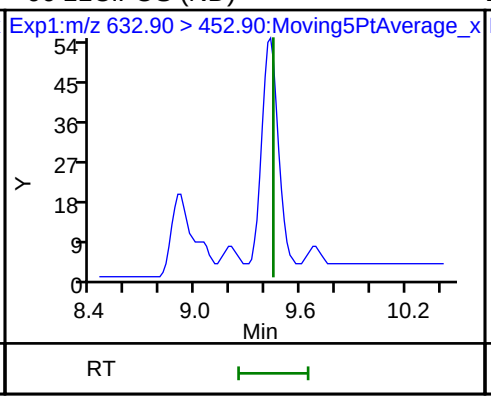
63 PFTrDA (ND)



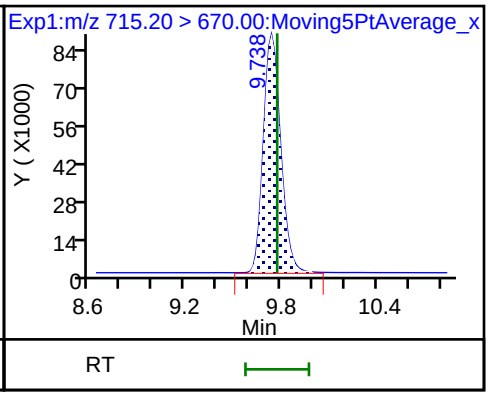
66 11ClFOS (ND)



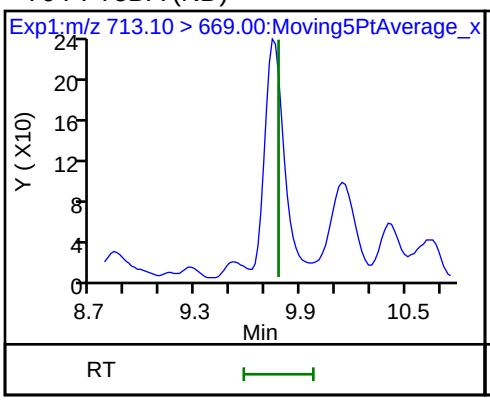
66 11ClFOS (ND)



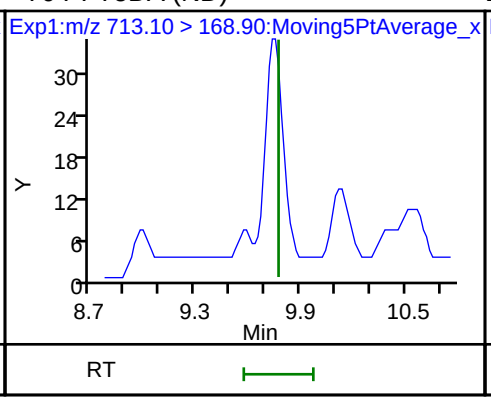
D 69 13C2 PFTeDA



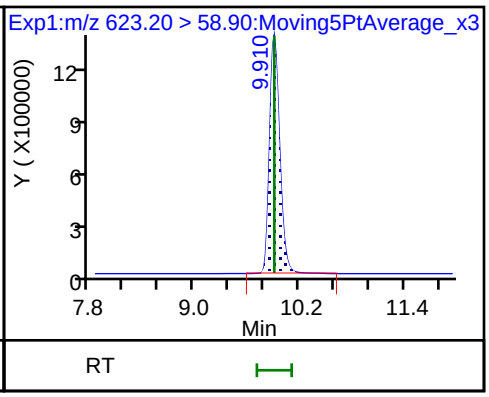
70 PFTeDA (ND)



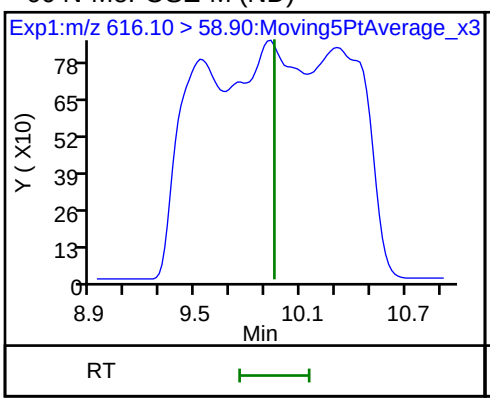
70 PFTeDA (ND)



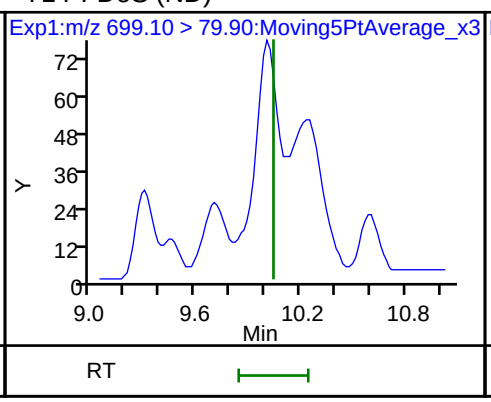
D 59 d7-N-Me-FOSE



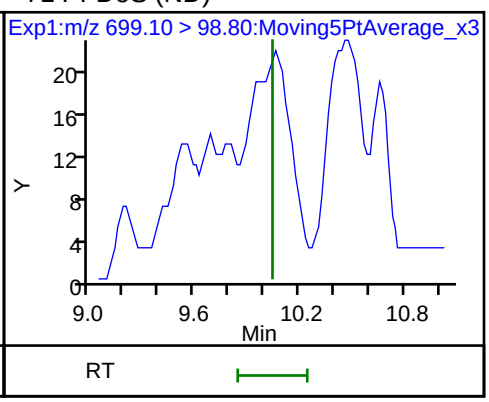
60 N-MeFOSE-M (ND)



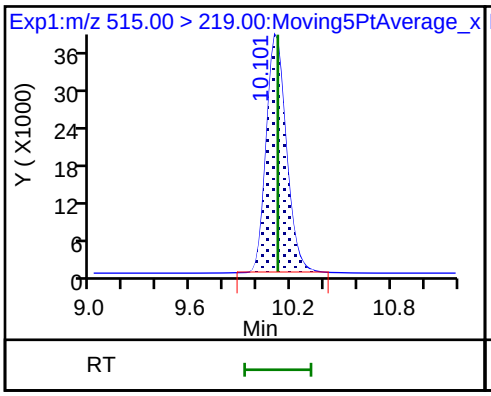
71 PFDoS (ND)



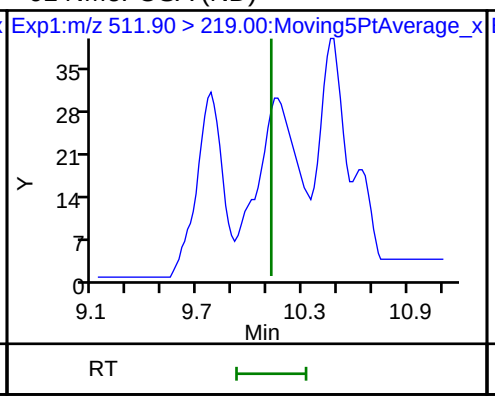
71 PFDoS (ND)



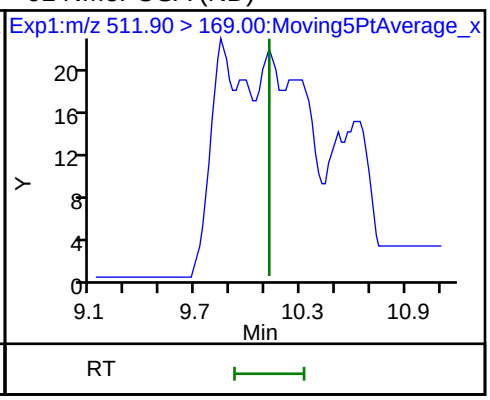
D 62 d3-NMePFOSA



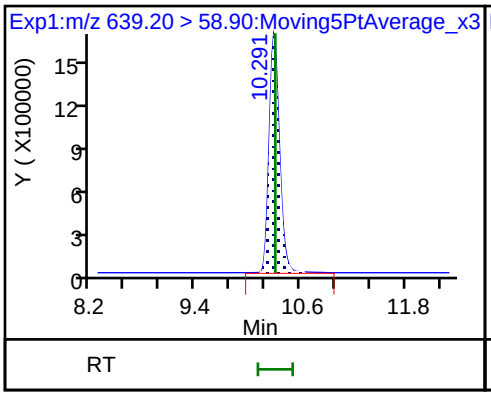
61 NMeFOSA (ND)



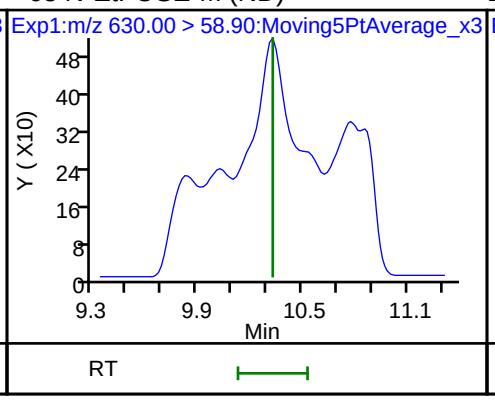
61 NMeFOSA (ND)



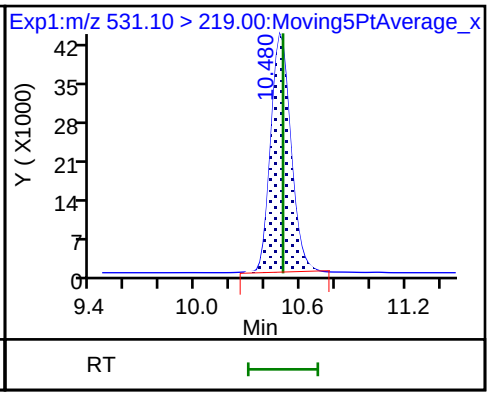
D 64 d9-N-EtFOSE



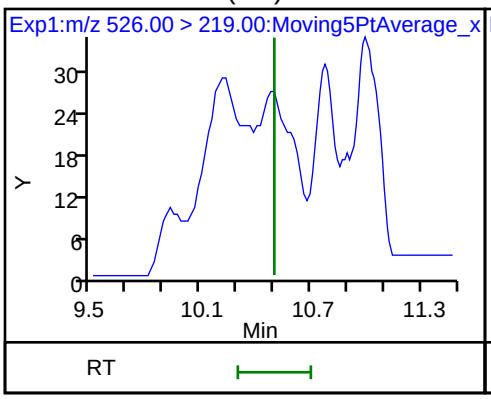
65 N-EtFOSE-M (ND)



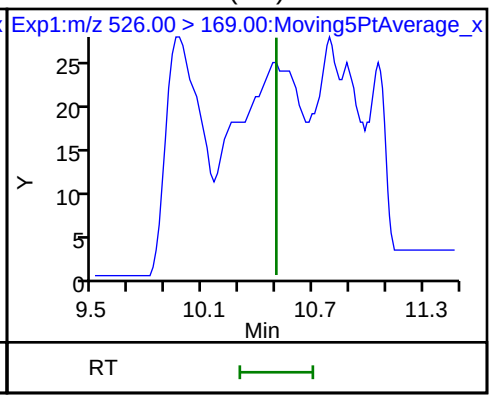
D 67 d5-NEtPFOSA



68 N-EtFOSA-M (ND)



68 N-EtFOSA-M (ND)



FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: | Lab Sample ID: ICB 280-634666/9

Matrix: Water | Lab File ID: 2023.11.20b.008.d

Analysis Method: Draft 1633 | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 11/20/2023 19:35

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 634666 | Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	0.64	U	0.64	0.059
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.32	U	0.32	0.038
307-24-4	Perfluorohexanoic acid (PFHxA)	0.16	U	0.16	0.012
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.16	U	0.16	0.020
335-67-1	Perfluorooctanoic acid (PFOA)	0.16	U	0.16	0.065
375-95-1	Perfluorononanoic acid (PFNA)	0.16	U	0.16	0.018
335-76-2	Perfluorodecanoic acid (PFDA)	0.16	U	0.16	0.0087
2058-94-8	Perfluoroundecanoic acid (PFUnA)	0.16	U	0.16	0.028
307-55-1	Perfluorododecanoic acid (PFDoA)	0.16	U	0.16	0.036
72629-94-8	Perfluorotridecanoic acid (PFTriA)	0.16	U	0.16	0.016
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	0.16	U	0.16	0.021
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.16	U	0.16	0.017
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	0.16	U	0.16	0.015
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.16	U	0.16	0.024
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	0.16	U	0.16	0.040
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.16	U	0.16	0.032
68259-12-1	Perfluorononanesulfonic acid (PFNS)	0.16	U	0.16	0.015
335-77-3	Perfluorodecanesulfonic acid (PFDS)	0.16	U	0.16	0.024
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	0.16	U	0.16	0.022
757124-72-4	4:2 FTS	0.64	U	0.64	0.068
27619-97-2	6:2 FTS	0.64	U	0.64	0.059
39108-34-4	8:2 FTS	0.64	U	0.64	0.077
754-91-6	Perfluorooctanesulfonamide (PFOSA)	0.16	U	0.16	0.011
31506-32-8	NMeFOSA	0.16	U	0.16	0.031
4151-50-2	NEtFOSA	0.16	U	0.16	0.020
2355-31-9	NMeFOSAA	0.16	U	0.16	0.042
2991-50-6	NEtFOSAA	0.16	U	0.16	0.036
24448-09-7	NMeFOSE	1.60	U	1.60	0.11
1691-99-2	NEtFOSE	1.60	U	1.60	0.11
13252-13-6	HFPO-DA (GenX)	0.64	U	0.64	0.047

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: | Lab Sample ID: ICB 280-634666/9

Matrix: Water | Lab File ID: 2023.11.20b.008.d

Analysis Method: Draft 1633 | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 11/20/2023 19:35

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 634666 | Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.64	U	0.64	0.043
863090-89-5	PFMBA	0.32	U	0.32	0.048
151772-58-6	NFDHA	0.32	U	0.32	0.038
377-73-1	PFMPA	0.32	U	0.32	0.050
756426-58-1	9Cl-PF3ONS	0.64	U	0.64	0.11
763051-92-9	11Cl-PF3OUdS	0.64	U	0.64	0.12
113507-82-7	PFEESA	0.32	U	0.32	0.034
356-02-5	3:3 FTCA	0.80	U	0.80	0.18
914637-49-3	5:3 FTCA	4.00	U	4.00	0.51
812-70-4	7:3 FTCA	4.00	U	4.00	0.55

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: | Lab Sample ID: ICB 280-634666/9

Matrix: Water | Lab File ID: 2023.11.20b.008.d

Analysis Method: Draft 1633 | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 11/20/2023 19:35

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 634666 | Units: ng/mL

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	104		10-130
STL01893	13C5 PFPeA	108		35-150
STL02577	13C5 PFHxA	118		55-150
STL01892	13C4 PFHpA	105		55-150
STL01052	13C8 PFOA	97		60-140
STL02578	13C9 PFNA	101		55-140
STL02579	13C6 PFDA	111		50-140
STL02580	13C7 PFUnA	102		30-140
STL00998	13C2 PFDoA	106		10-150
STL02116	13C2 PFTeDA	104		10-130
STL02337	13C3 PFBS	100		55-150
STL02581	13C3 PFHxS	103		55-150
STL01054	13C8 PFOS	102		45-140
STL01056	13C8 FOSA	108		30-130
STL02118	d3-NMeFOSAA	116		45-200
STL02117	d5-NEtFOSAA	101		10-200
STL02395	M2-4:2 FTS	115		60-200
STL02279	M2-6:2 FTS	104		60-200
STL02280	M2-8:2 FTS	101		50-200
STL02255	13C3 HFPO-DA	108		25-160
STL02277	d7-N-MeFOSE-M	105		10-150
STL02278	d9-N-EtFOSE-M	107		10-150
STL02704	d5-NEtPFOSA	102		10-130
STL02705	d3-NMePFOSA	96		15-130

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.008.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 20-Nov-2023 19:35:36 ALS Bottle#: 10 Worklist Smp#: 9
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: ICB
Misc. Info.: Plate: 1 Rack: 1
Operator ID: DENLCMS Instrument ID: LC_LCMS11

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 21-Nov-2023 11:15:16 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1626

First Level Reviewer: B5QN Date: 21-Nov-2023 11:10:15
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.061	3.062	-0.001	1.000	6738462	10.4		104	150486	
* 1 13C3PFBA										
216.00 > 172.00	3.061	3.062	-0.001		3188754	5.00			14204	
D 7 13C5 PFPeA										
268.30 > 223.00	4.478	4.478	0.0	0.836	2042349	5.41		108	19639	
D 9 13C2-4:2FTS										
329.10 > 80.90	5.097	5.097	0.0	0.742	325577	5.37	Target=4.54	115	5905	
329.10 > 309.00	5.097	5.097	0.0	0.742	67986		4.79(2.27-6.81)	115	2880	
D 16 13C3 PFBS										
302.10 > 79.90	5.353	5.354	-0.001	0.779	806110	2.34	Target=4.56	100	26227	
302.10 > 98.90	5.353	5.354	-0.001	0.779	175898		4.58(2.28-6.83)	100	7659	
* 14 13C2 PFHxA										
315.10 > 270.00	5.353	5.354	-0.001		1895257	2.50	Target=79.67		24690	
315.10 > 119.40	5.353	5.354	-0.001		28171		67.28(39.83-119.50)		947	
D 12 13C5 PFHxA										
318.00 > 273.00	5.353	5.354	-0.001	1.000	2497599	2.94	Target=53.27	118	40762	
318.00 > 120.30	5.353	5.354	-0.001	1.000	47371		52.72(26.63-79.90)	118	1254	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.682	5.682	0.0	1.061	2251218	10.8	Target=1.53	108	24143	
286.90 > 184.90	5.682	5.682	0.0	1.061	1518807		1.48(0.76-2.29)	108	19571	
D 22 13C4 PFHpA										
367.10 > 322.00	6.121	6.122	-0.001	1.143	2340515	2.63		105	41390	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.471	6.454	0.017	0.942	392526	4.96	Target=4.15	104	11123	
429.10 > 409.00	6.471	6.454	0.017	0.942	74711		5.25(2.07-6.22)	104	3541	
D 27 13C8 PFOA										
421.10 > 376.00	6.707	6.707	0.0	1.000	2158536	2.43		97.3	33352	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
* 29 13C4 PFOA										
417.10 > 172.00	6.707	6.707	0.0		338931	2.50			9507	
* 31 18O2 PFHxS										
403.00 > 83.90	6.871	6.872	-0.001		637455	2.37			22168	
D 33 13C3 PFHxS										
402.10 > 79.90	6.871	6.872	-0.001	1.000	665684	2.44	Target=4.11	103	23161	
402.10 > 98.80	6.871	6.872	-0.001	1.000	162947		4.09(2.05-6.16)	103	7617	
* 35 13C5 PFNA										
468.00 > 423.00	7.259	7.241	0.018		1418023	1.25			25068	
D 34 13C9 PFNA										
472.10 > 427.00	7.259	7.241	0.018	1.000	1356923	1.27		101	18592	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.506	7.506	0.0	1.092	464150	4.84	Target=5.49	101	13034	
529.10 > 509.00	7.506	7.506	0.0	1.092	83370		5.57(2.74-8.23)	101	3888	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.725	7.726	-0.001	0.965	706041	5.80		116	15675	
* 44 13C2 PFDA										
515.10 > 470.10	7.760	7.761	-0.001		1282384	1.25			28749	
D 40 13C6 PFDA										
519.10 > 474.10	7.760	7.761	-0.001	1.000	1416500	1.39		111	31773	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.951	7.934	0.017	0.993	713569	5.06		101	13607	
D 49 13C8 PFOS										
507.10 > 79.90	8.004	7.986	0.018	1.000	316376	2.43	Target=2.95	102	8572	
507.10 > 98.90	8.004	7.986	0.018	1.000	121774		2.60(1.47-4.42)	102	5510	
* 47 13C4 PFOS										
502.80 > 79.90	8.004	7.986	0.018		867778	2.40	Target=3.78		16838	
502.80 > 98.90	8.004	7.986	0.018		236840		3.66(1.89-5.67)		10759	
D 53 13C7 PFUnA										
570.00 > 525.10	8.266	8.249	0.017	1.065	1445694	1.27		102	23580	
D 50 13C8 FOSA										
506.10 > 77.80	8.722	8.723	-0.001	1.090	1699610	2.70		108	11559	
D 56 13C2 PFDoA										
615.10 > 570.00	8.756	8.757	-0.001	1.128	1486058	1.32		106	28179	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.756	9.738	0.018	1.257	695454	1.30		104	13192	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.910	9.910	0.0	1.238	12175537	26.3		105	88000	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.101	10.102	-0.001	1.262	343621	2.41		96.3	8360	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.291	10.291	0.0	1.286	15417933	26.7		107	169683	
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.480	10.481	-0.001	1.309	371982	2.54		102	5194	

Reagents:

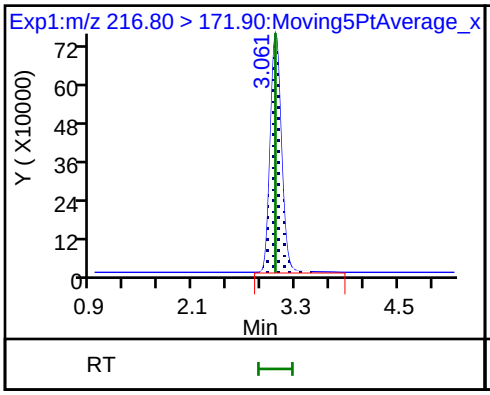
LC1633EPA_LL0_00016 Amount Added: 1.00 Units: mL

Report Date: 21-Nov-2023 11:17:40 Chrom Revision: 2.3 15-Nov-2023 20:54:34

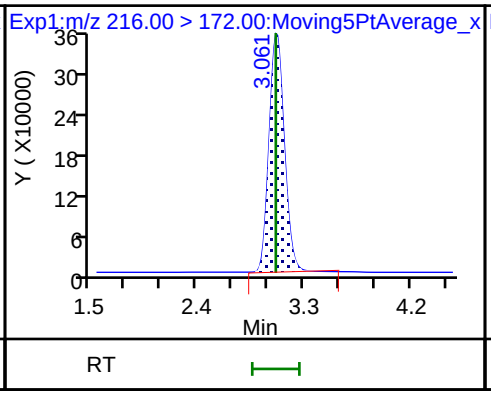
Eurofins Denver

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Lims ID: ICB
Client ID:
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Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5

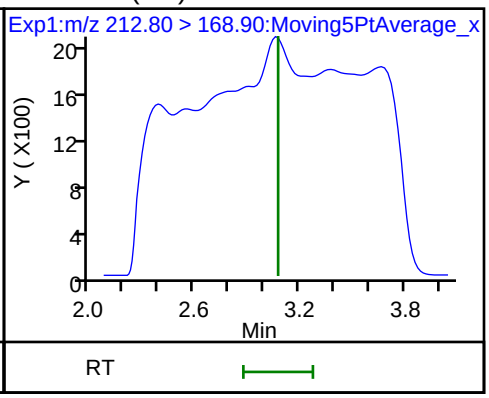
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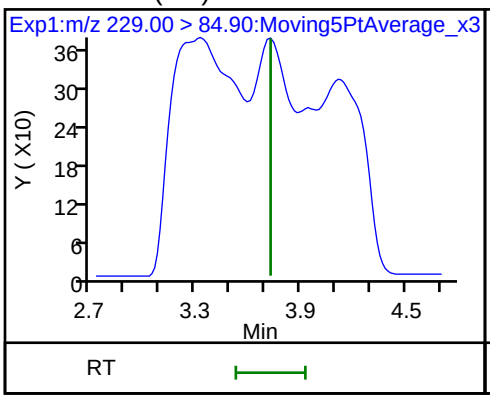
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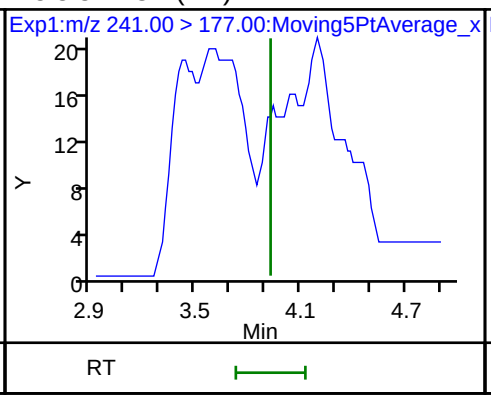
2 PFBA (ND)



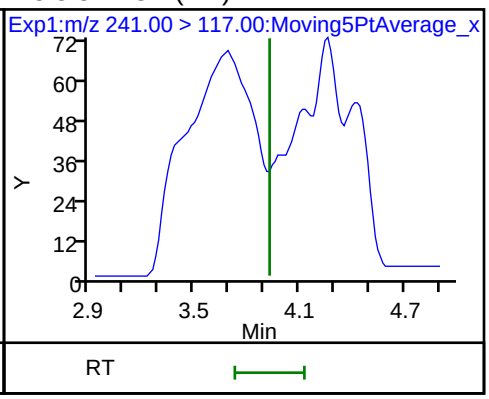
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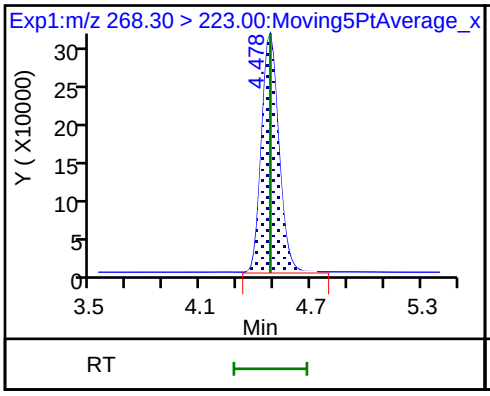
5 3:3 FTCA (ND)



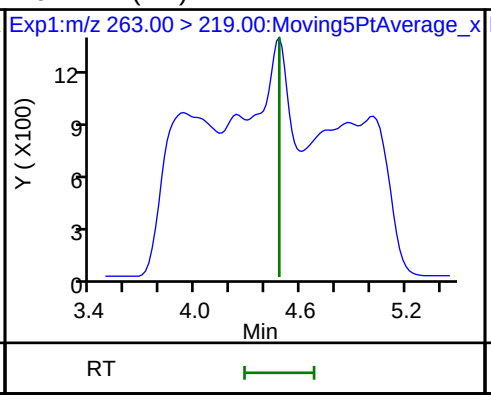
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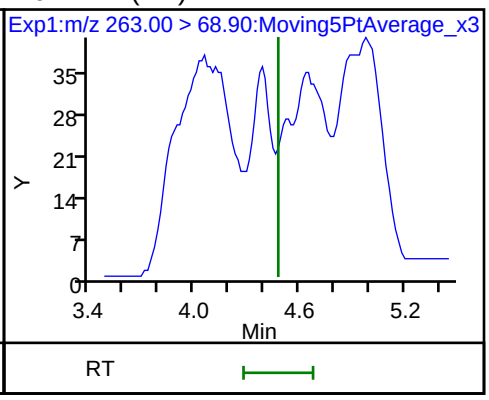
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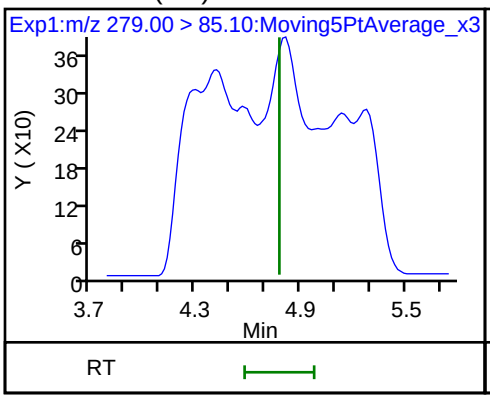
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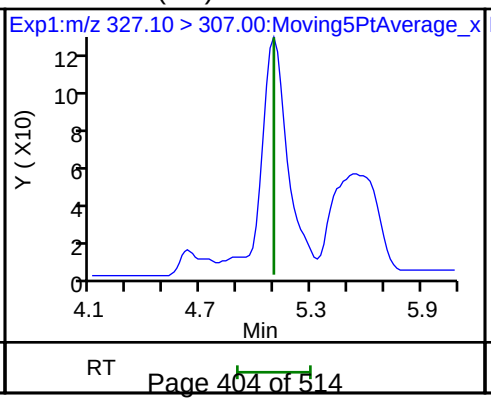
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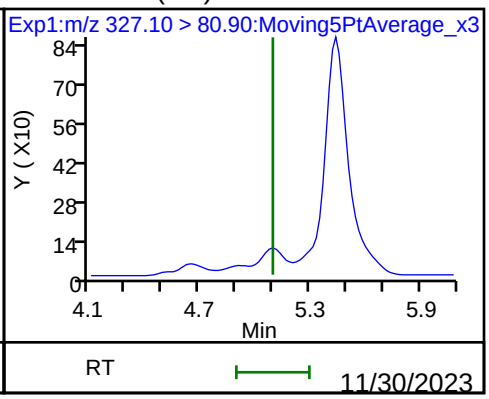
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10 4:2FTS (ND)

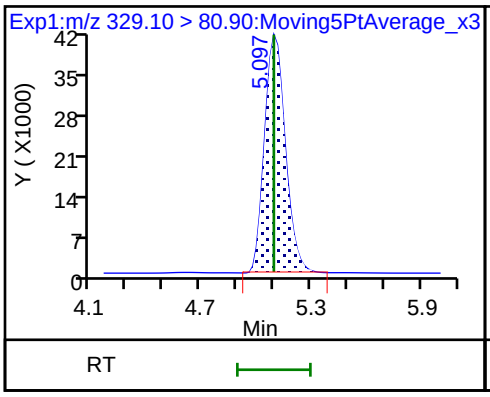


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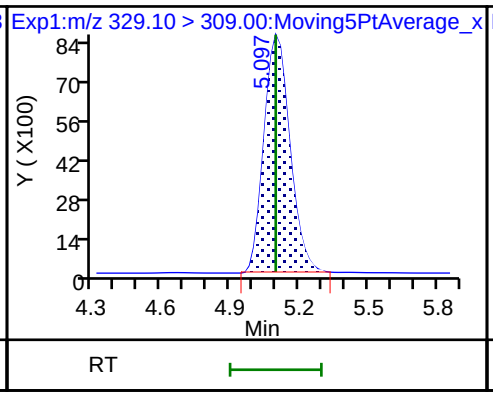


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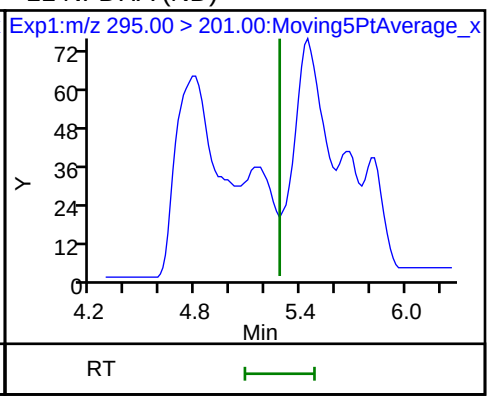
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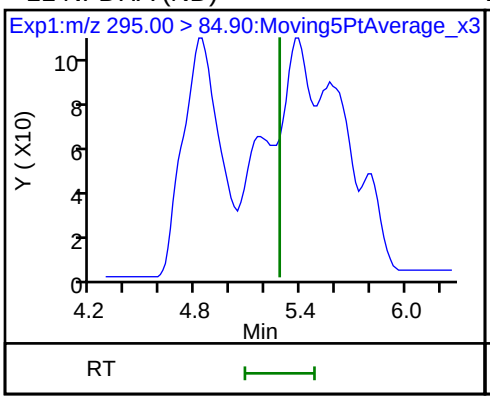
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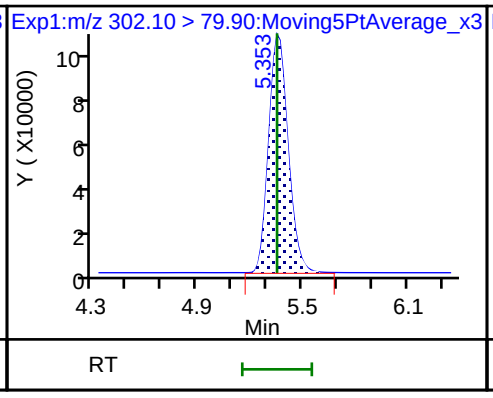
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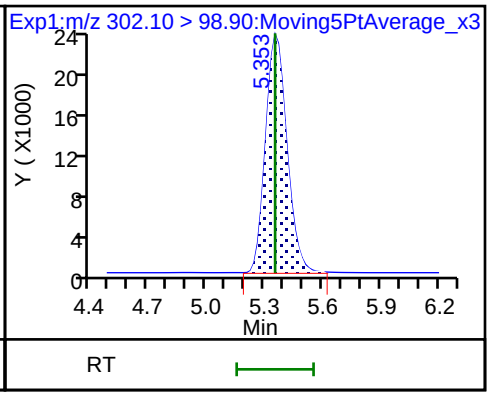
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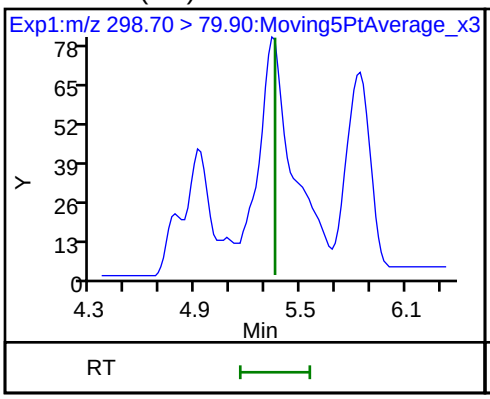
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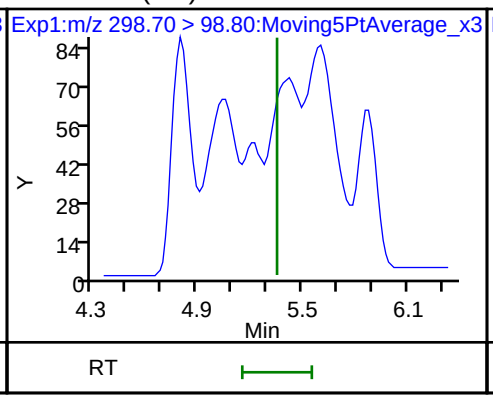
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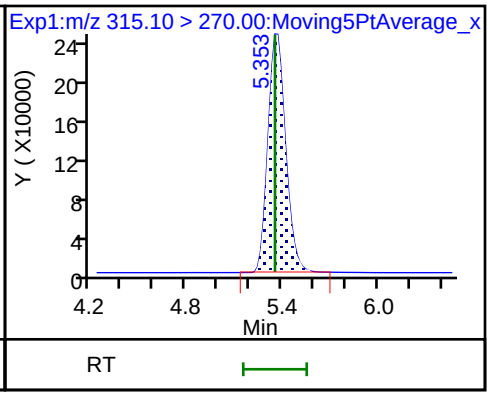
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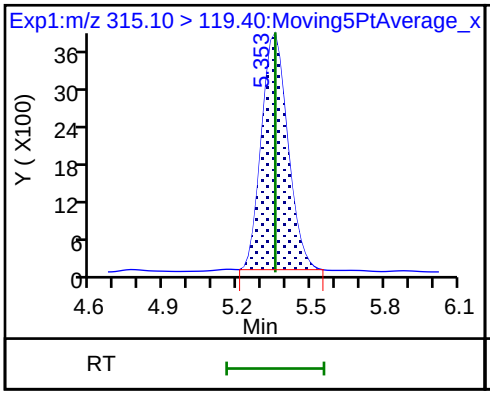
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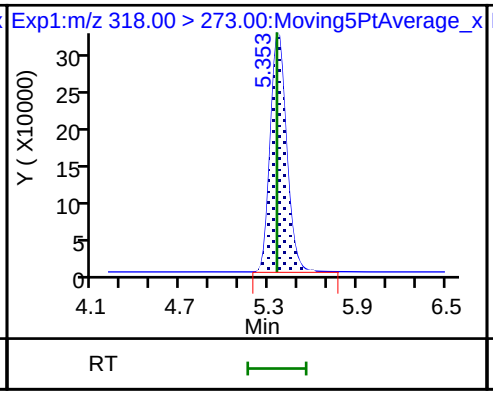
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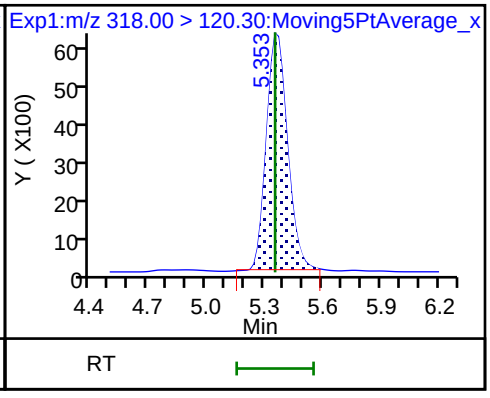
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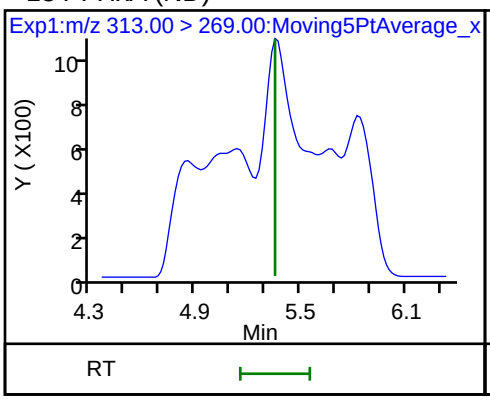
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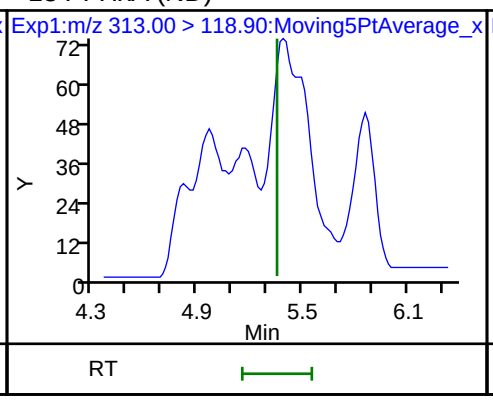
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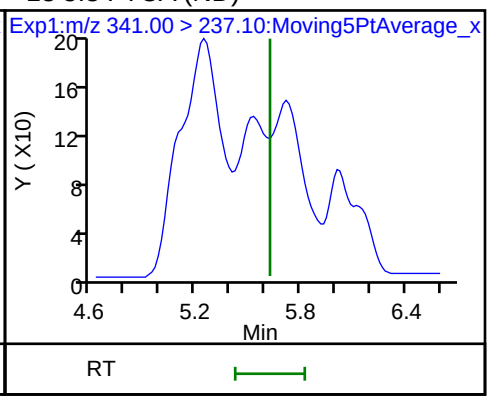
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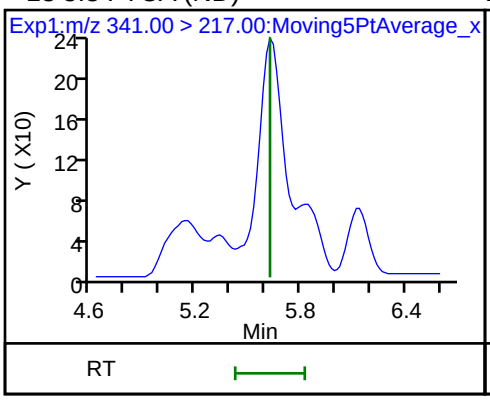
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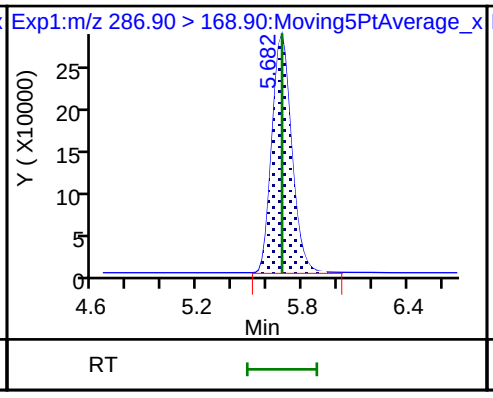
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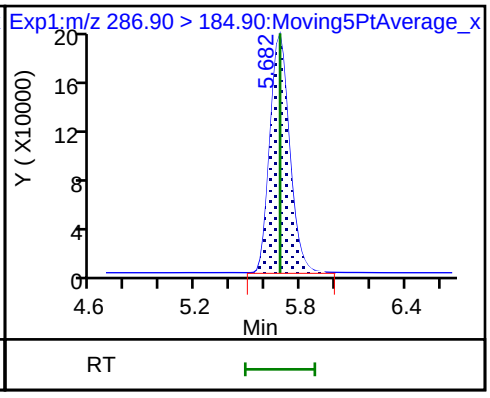
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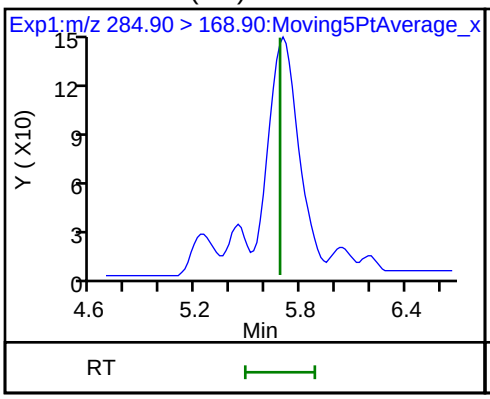
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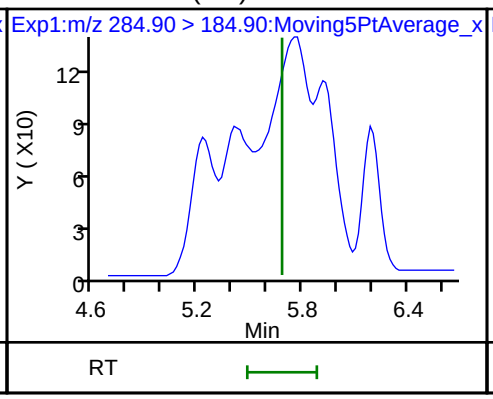
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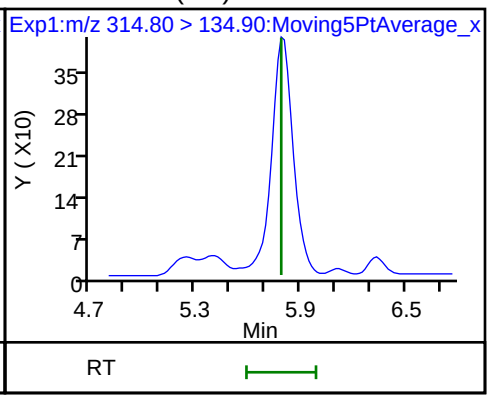
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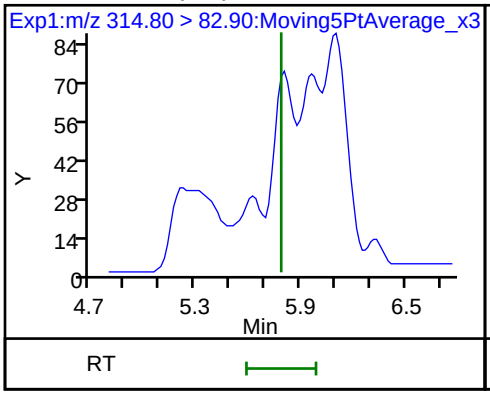
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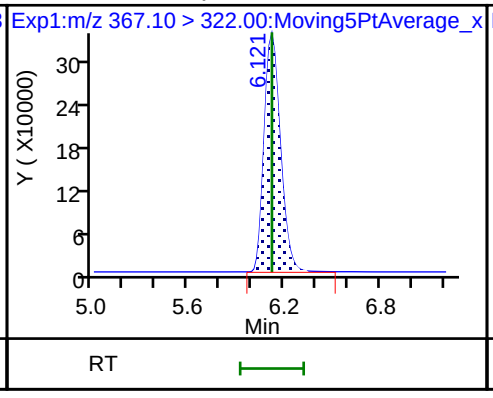
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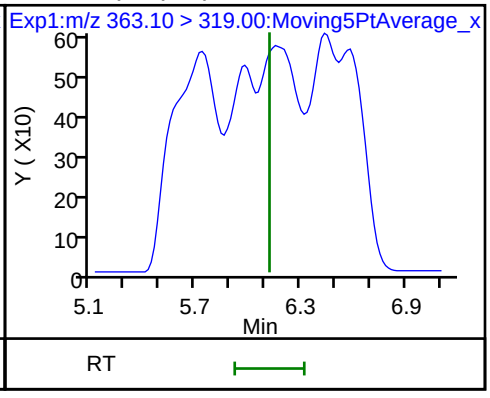
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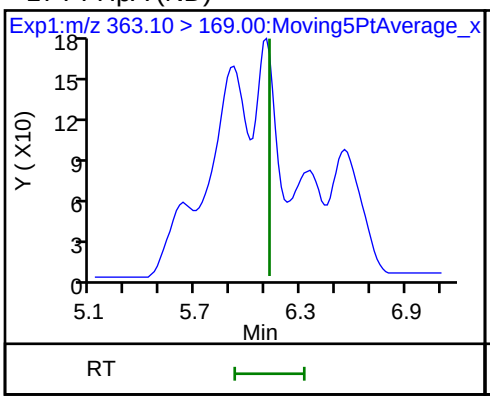
D 22 13C4 PFHpA



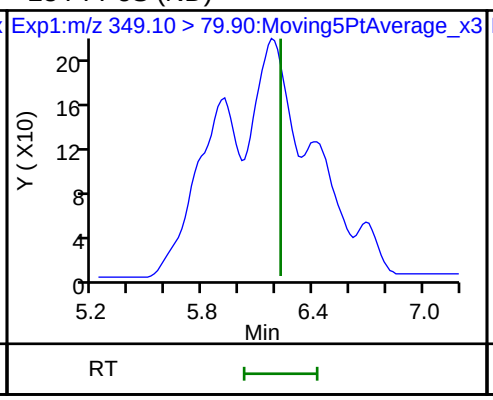
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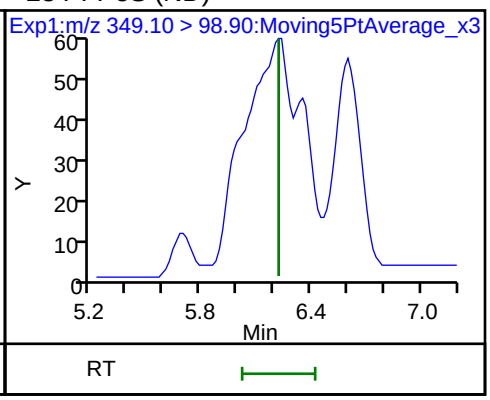
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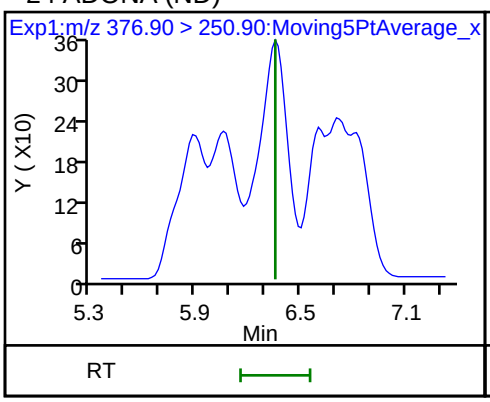
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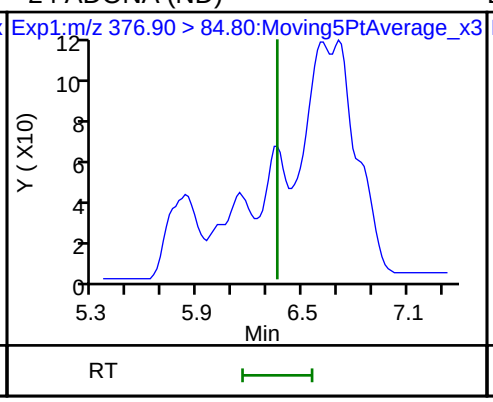
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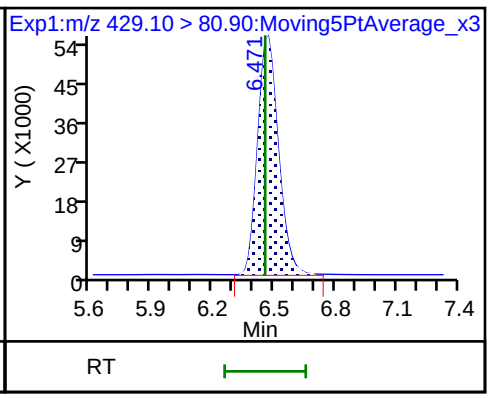
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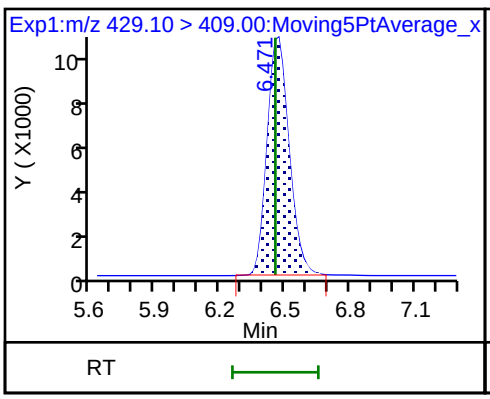
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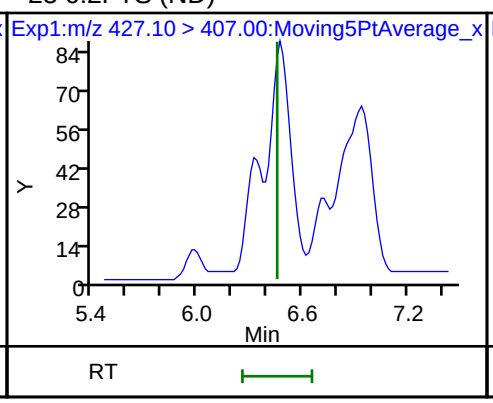
D 26 13C2-6:2FTS



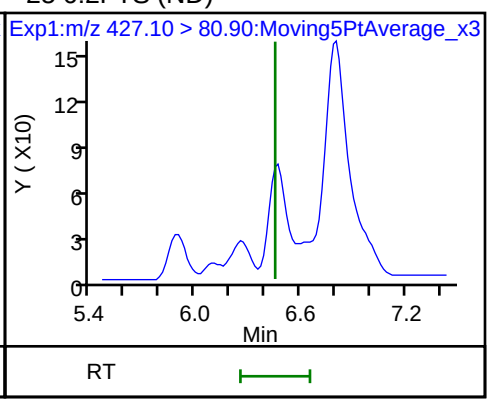
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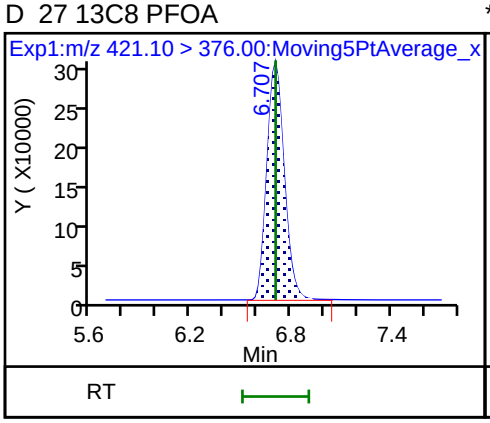
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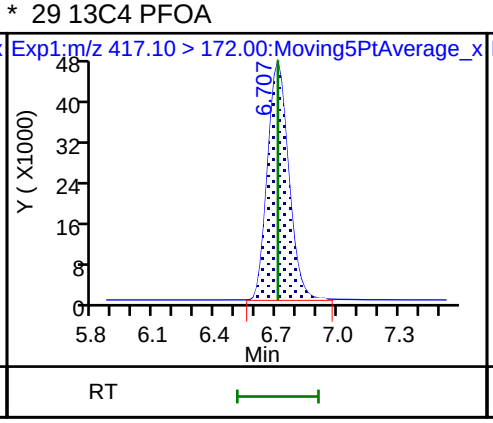
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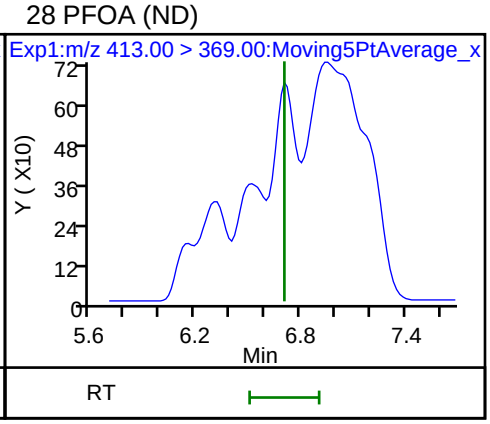
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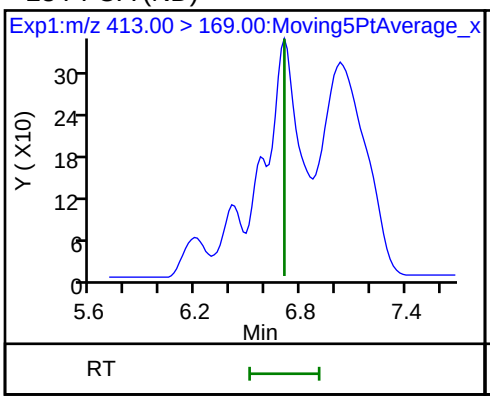
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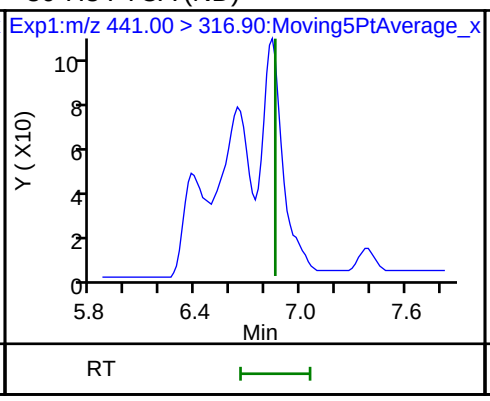
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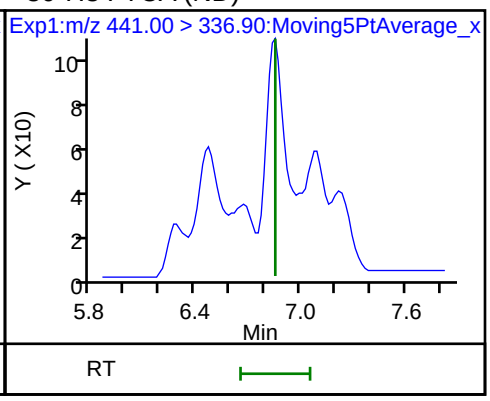
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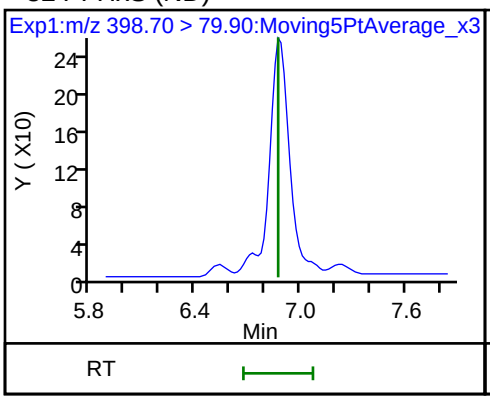
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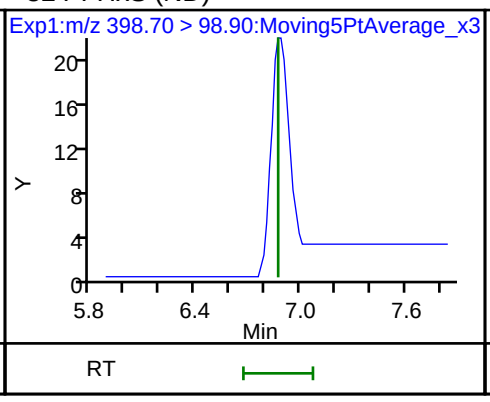
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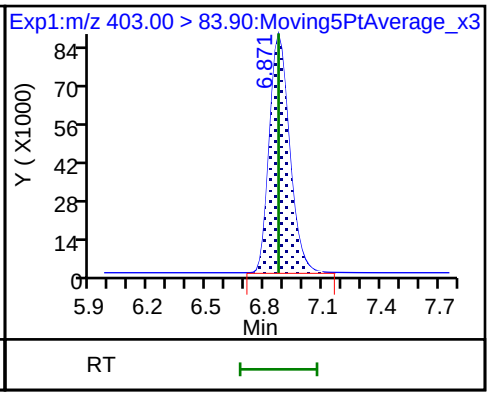
32 PFHxS (ND)



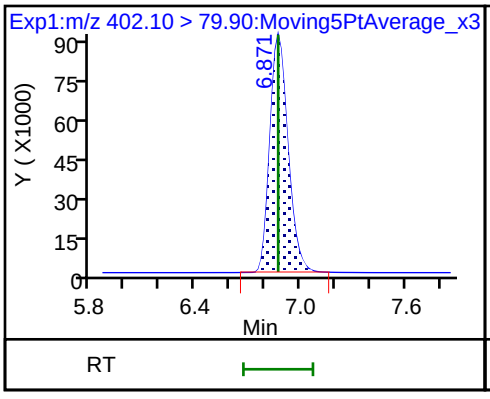
32 PFHxS (ND)



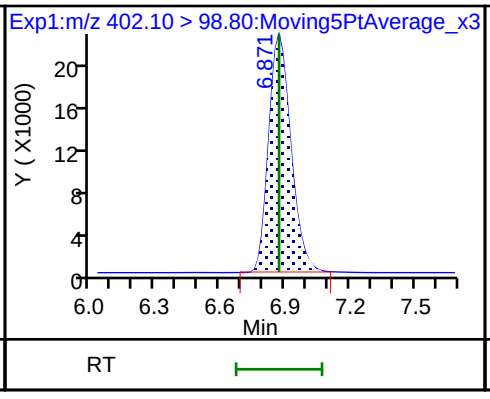
* 31 18O2 PFHxS



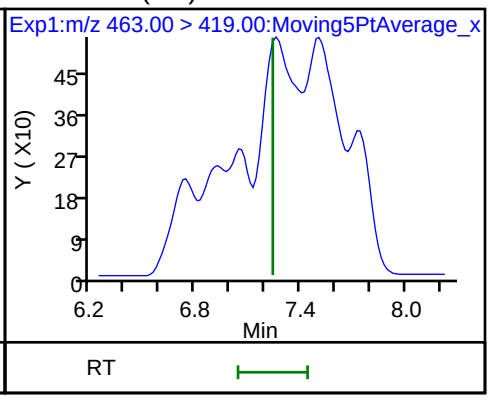
D 33 13C3 PFHxS



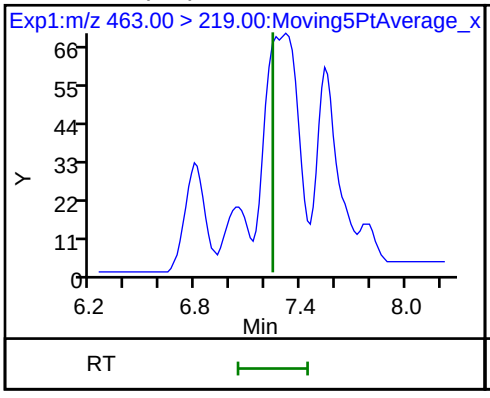
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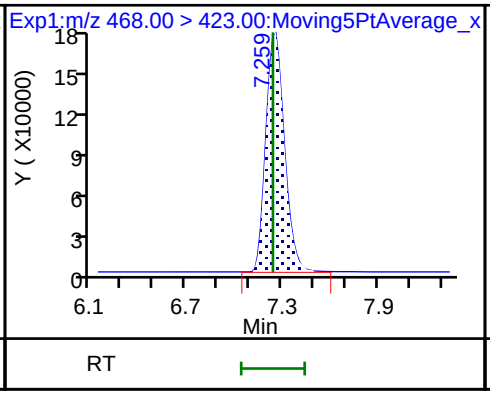
36 PFNA (ND)



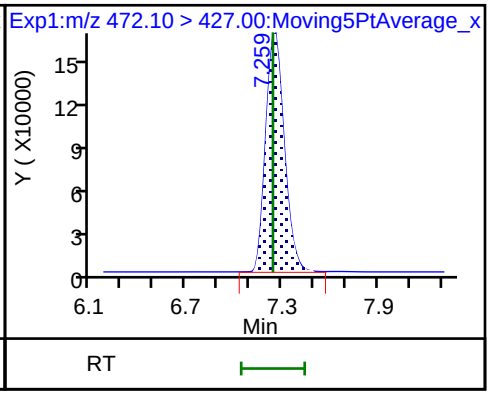
36 PFNA (ND)



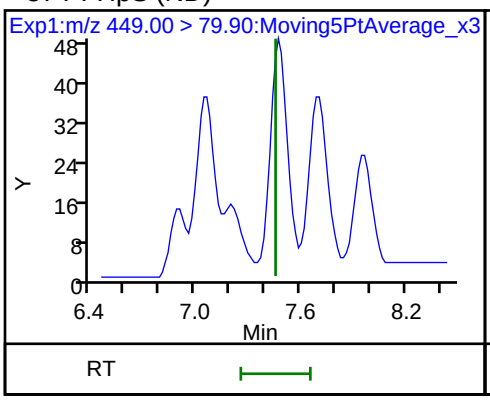
* 35 13C5 PFNA



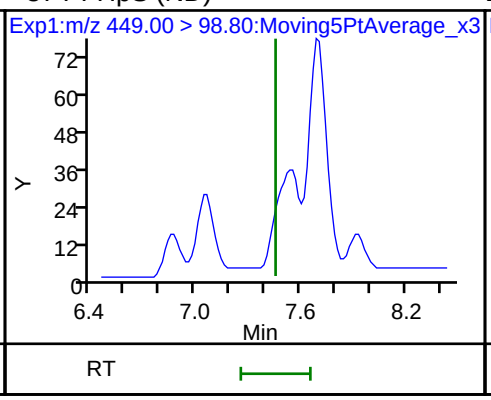
D 34 13C9 PFNA



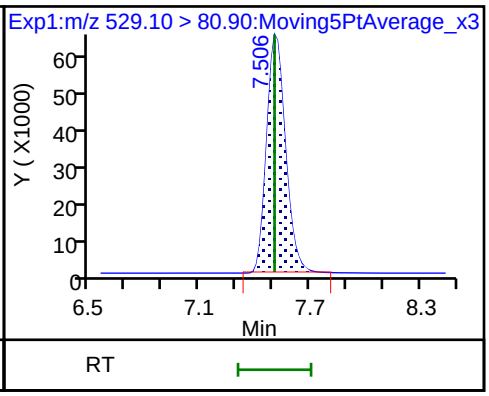
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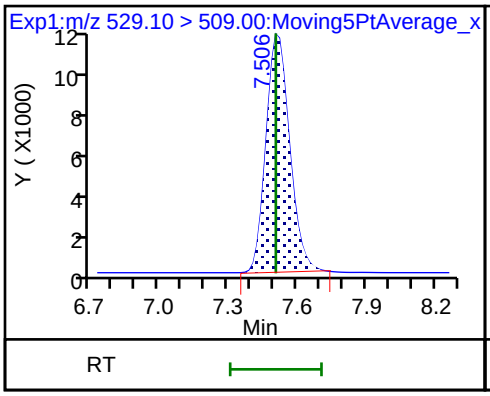
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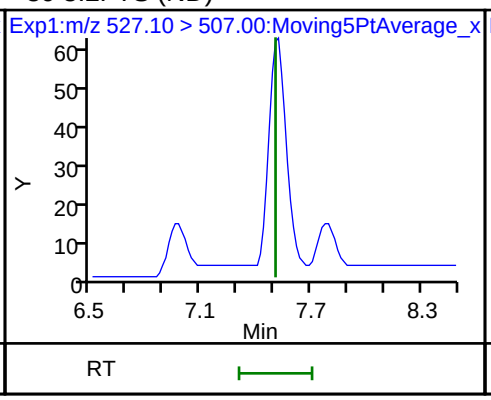
D 38 13C2-8:2FTS



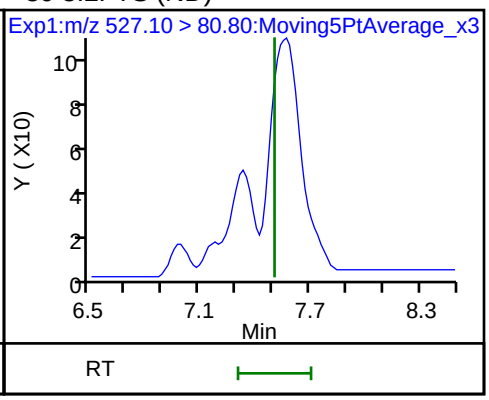
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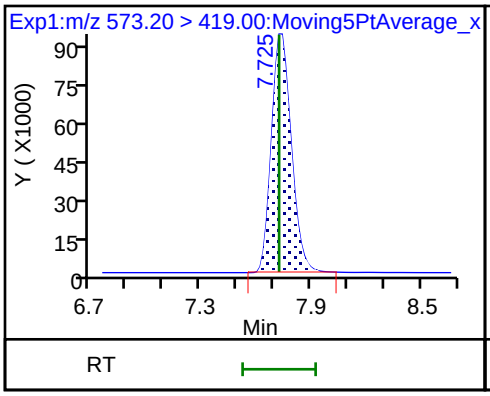
39 8:2FTS (ND)



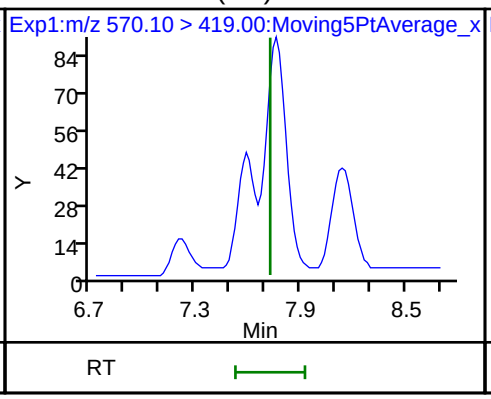
39 8:2FTS (ND)



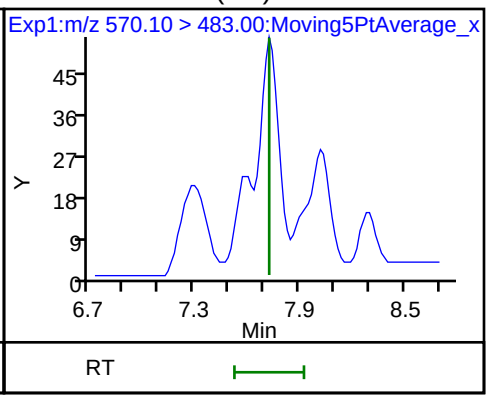
D 41 d3-NMeFOSAA



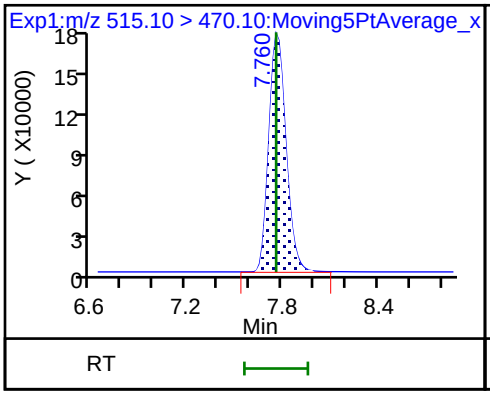
42 NMeFOSAA (ND)



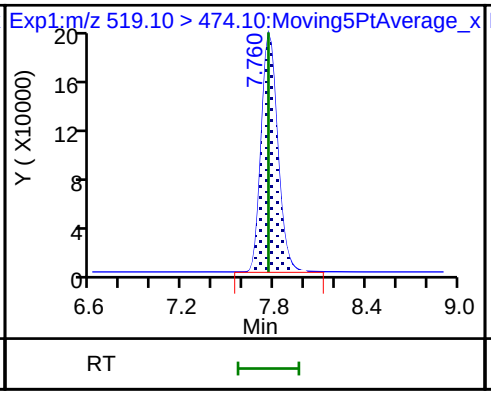
42 NMeFOSAA (ND)



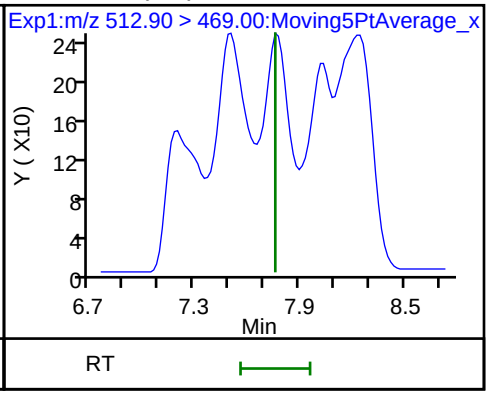
* 44 13C2 PFDA



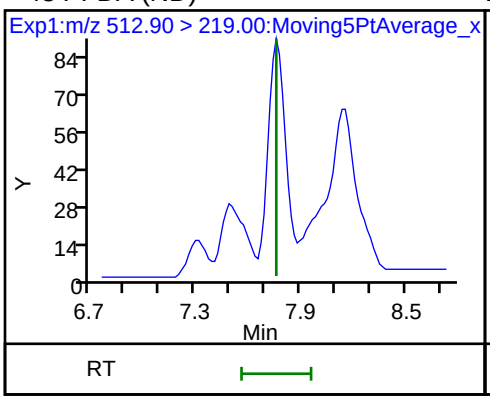
D 40 13C6 PFDA



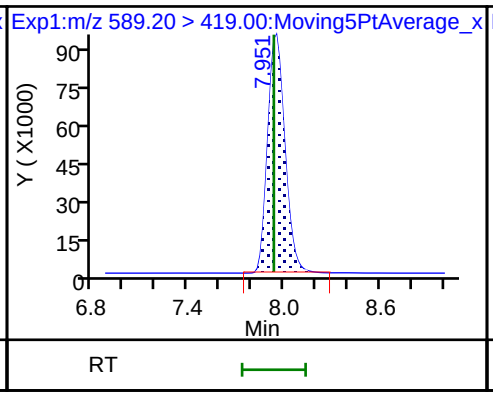
43 PFDA (ND)



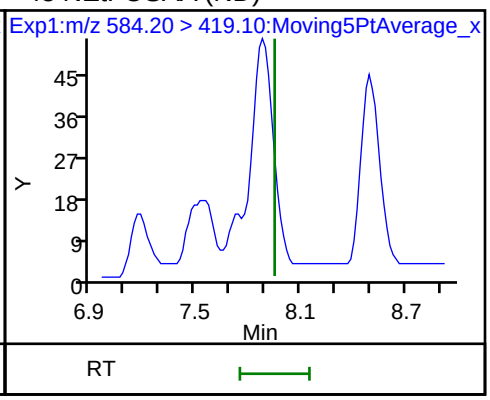
43 PFDA (ND)



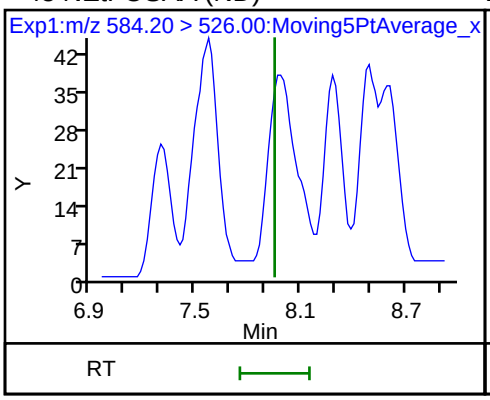
D 46 d5-NEtFOSAA



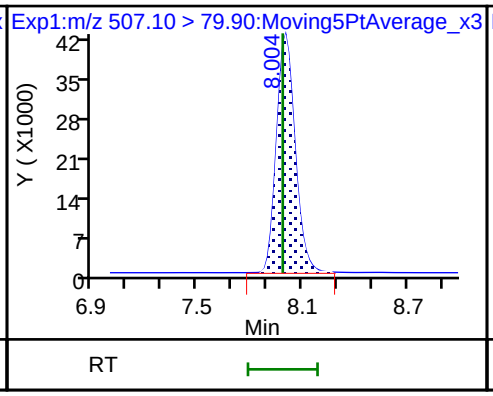
45 NEtFOSAA (ND)



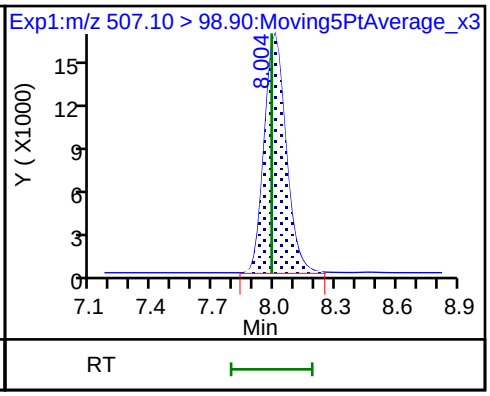
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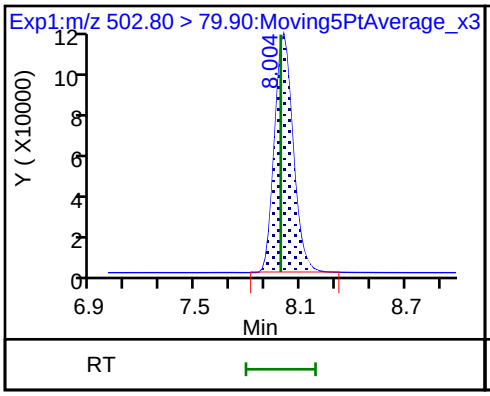
D 49 13C8 PFOS



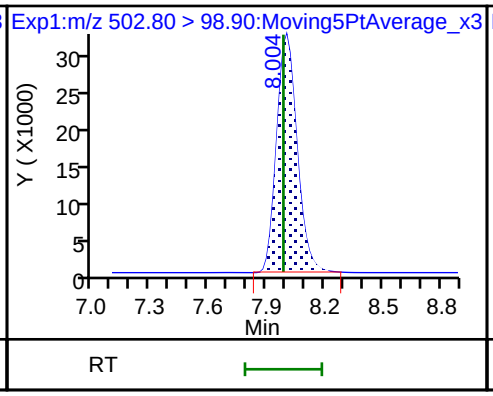
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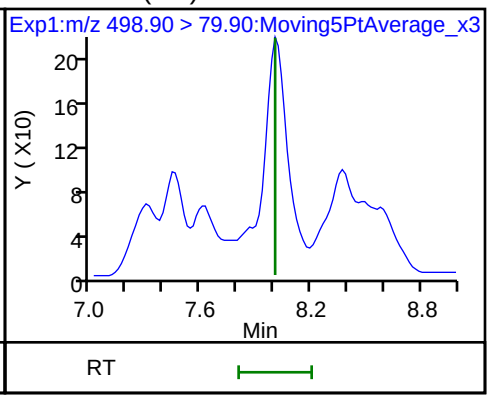
* 47 13C4 PFOS



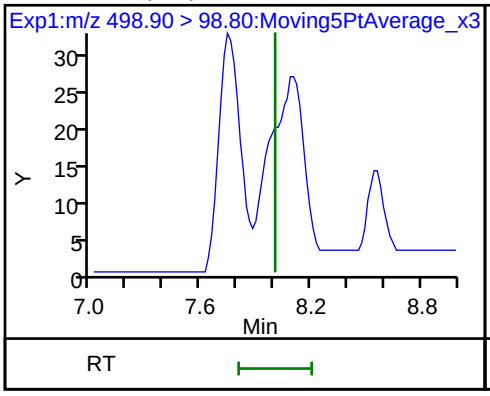
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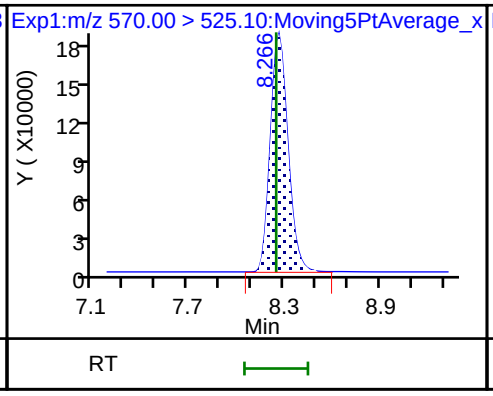
48 PFOS (ND)



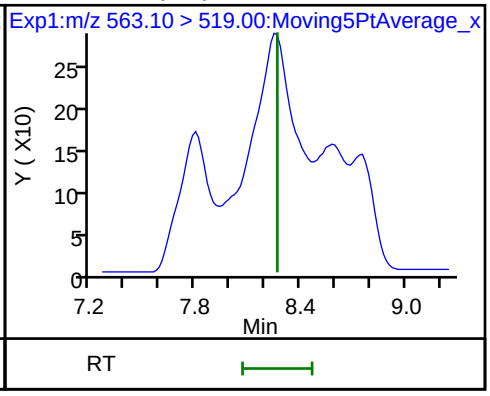
48 PFOS (ND)



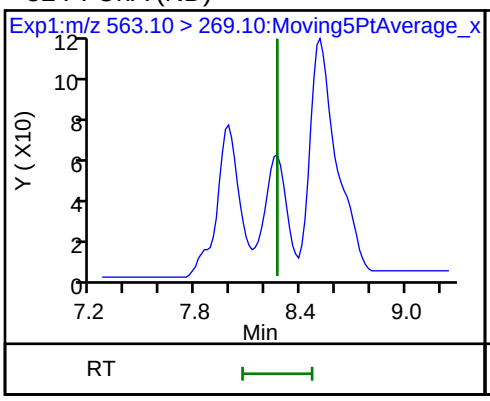
D 53 13C7 PFUnA



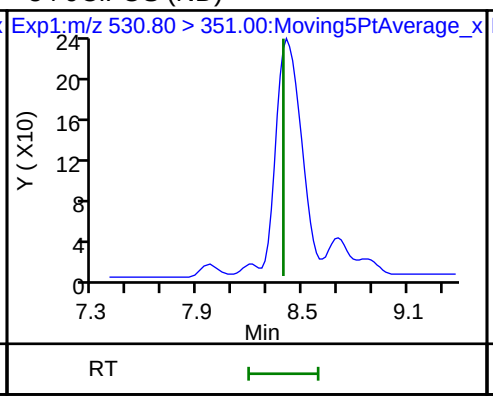
52 PFUnA (ND)



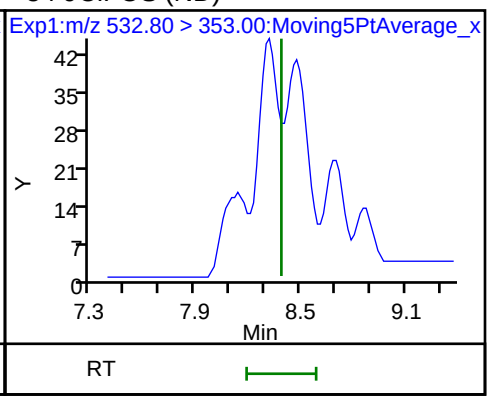
52 PFUnA (ND)



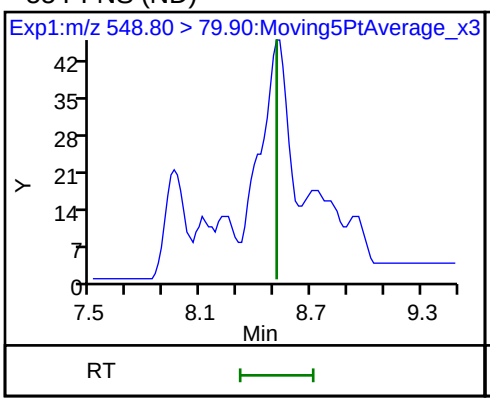
54 9ClFOS (ND)



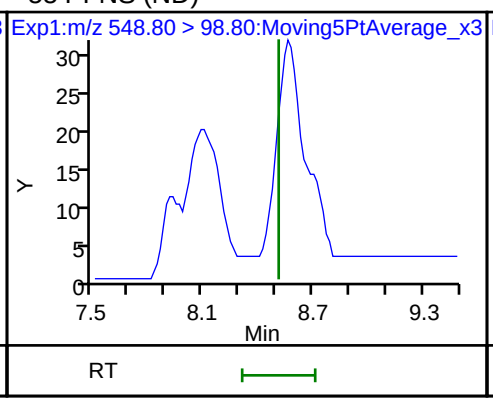
54 9ClFOS (ND)



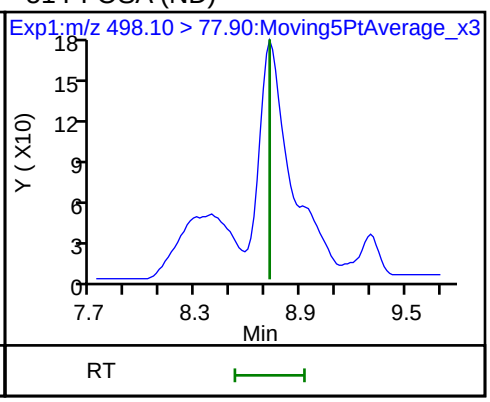
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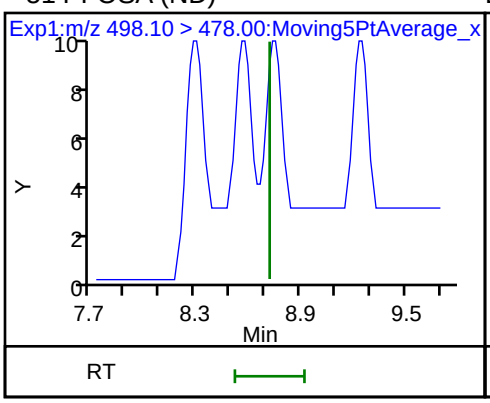
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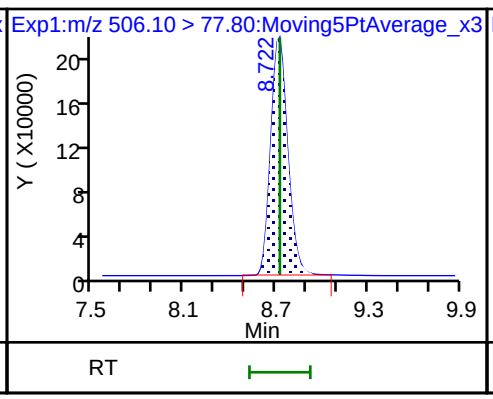
51 PFOSA (ND)



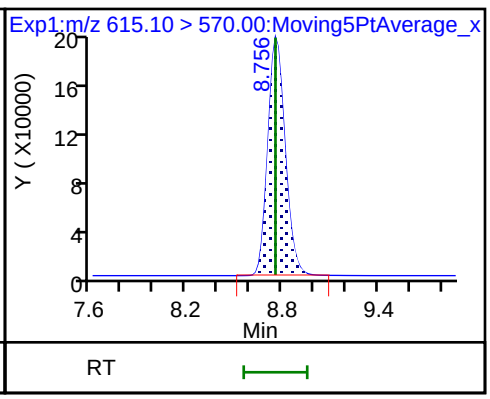
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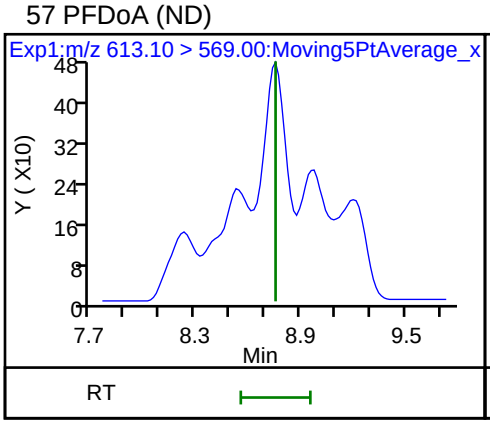
D 50 13C8 FOSA



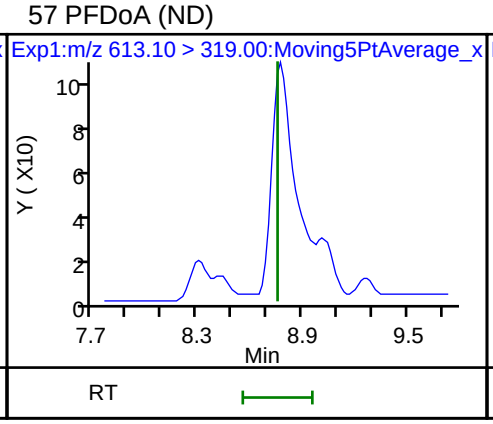
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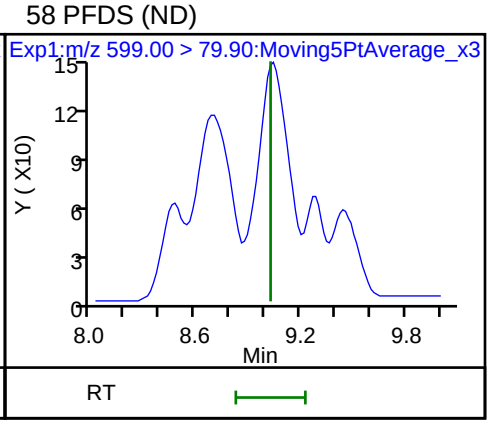
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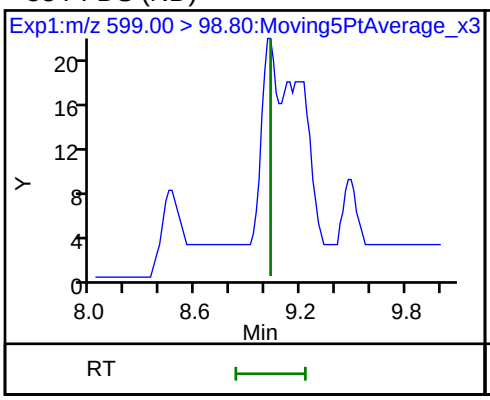
57 PFDoA (ND)



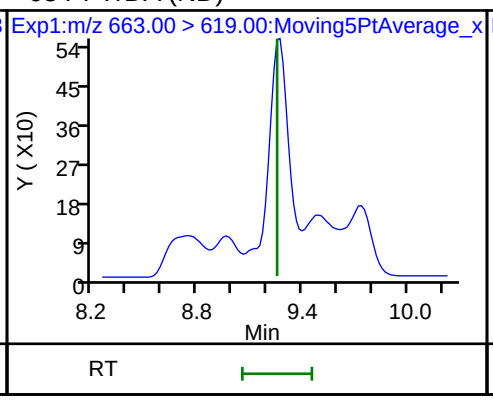
58 PFDS (ND)



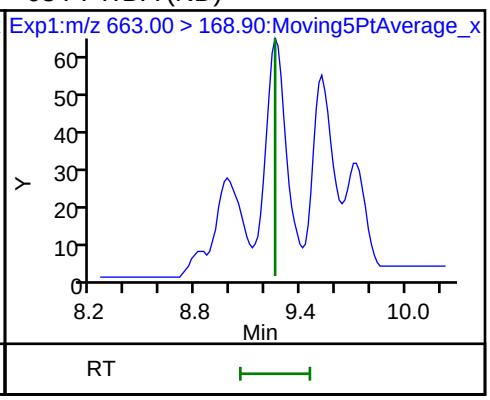
58 PFDS (ND)



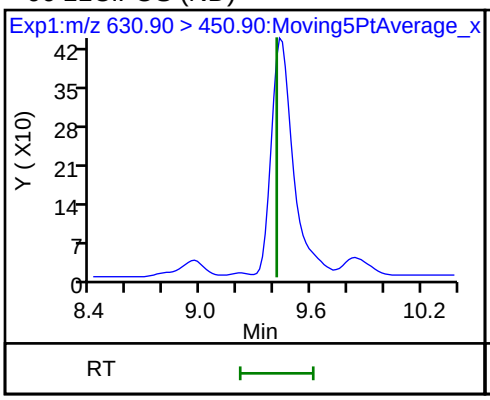
63 PFTrDA (ND)



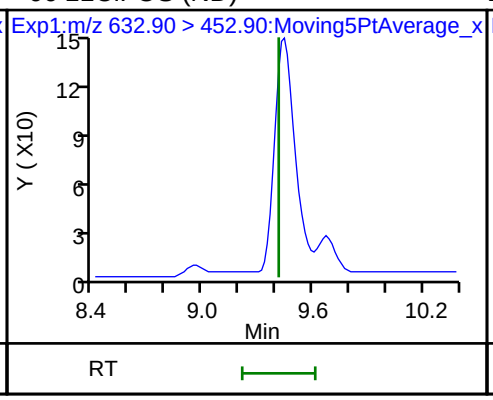
63 PFTrDA (ND)



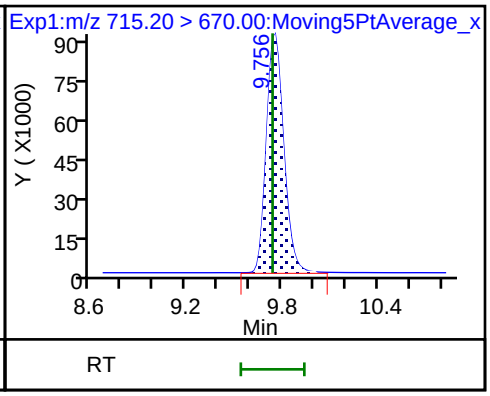
66 11ClFOS (ND)



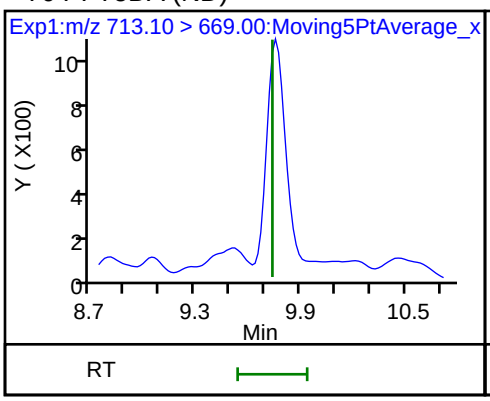
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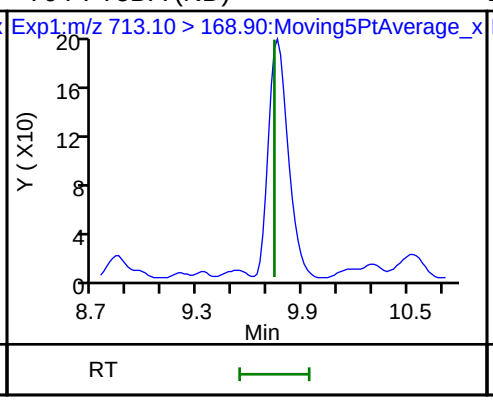
D 69 13C2 PFTeDA



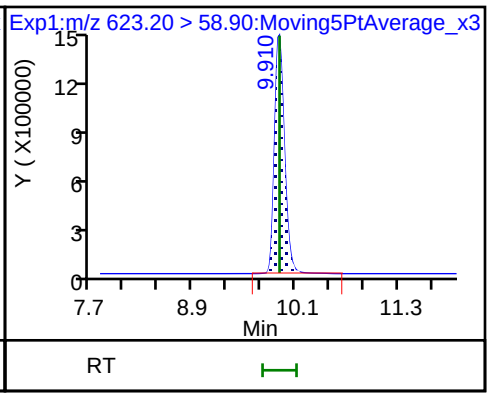
70 PFTeDA (ND)



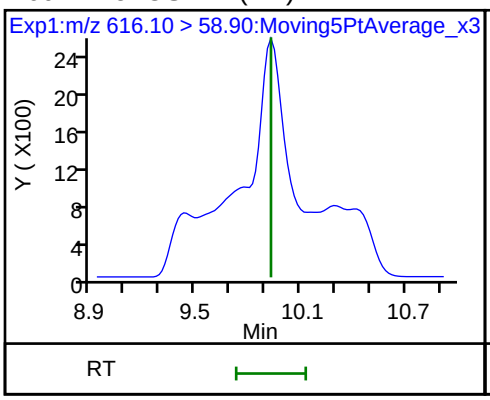
70 PFTeDA (ND)



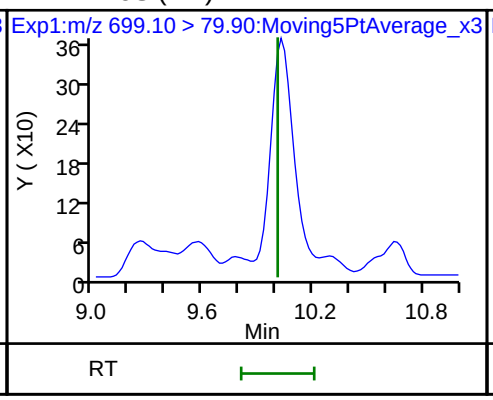
D 59 d7-N-Me-FOSE



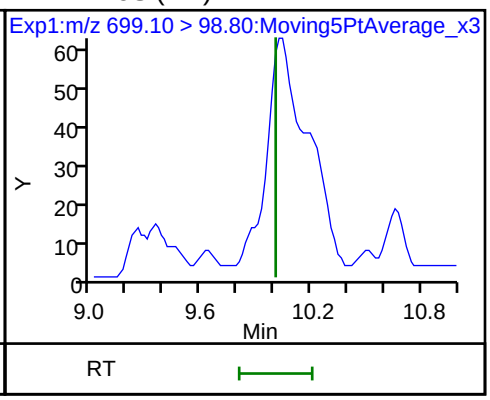
60 N-MeFOSE-M (ND)



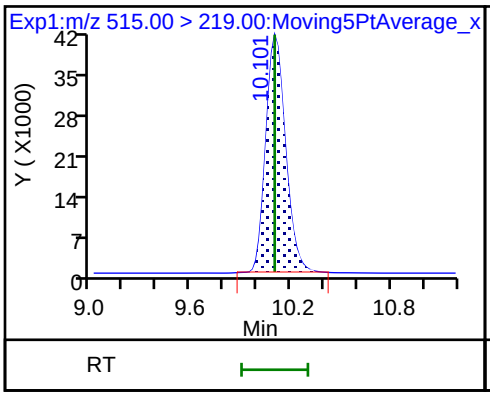
71 PFDoS (ND)



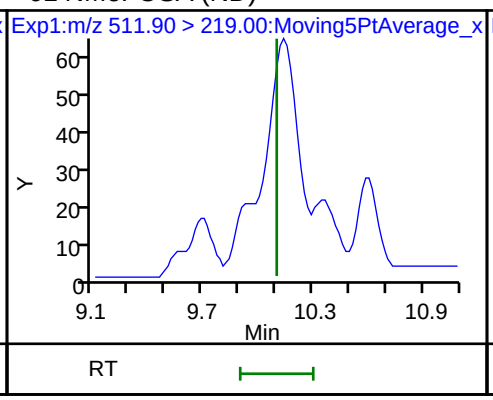
71 PFDoS (ND)



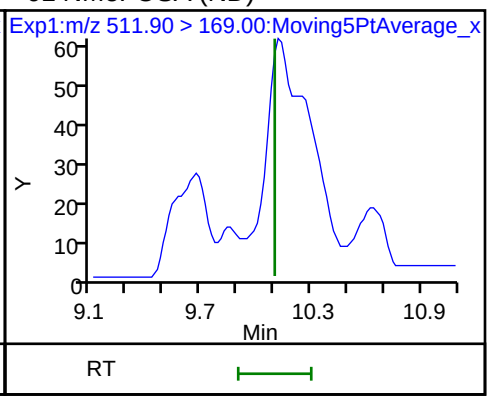
D 62 d3-NMePFOSA



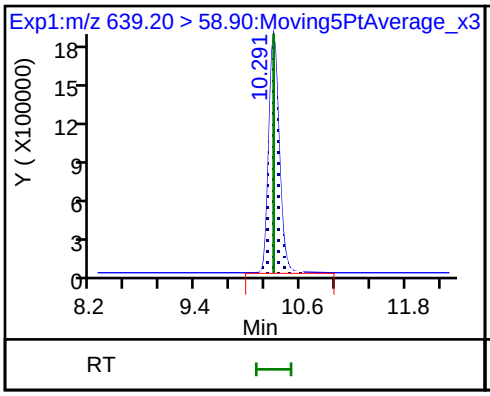
61 NMeFOSA (ND)



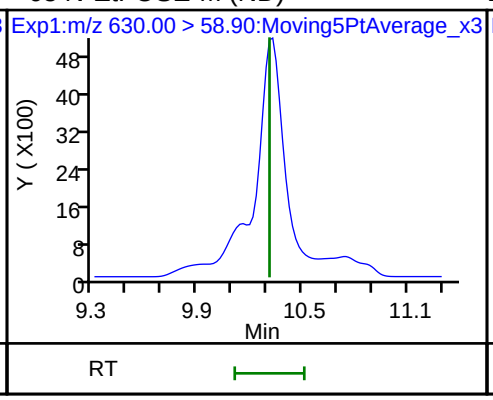
61 NMeFOSA (ND)



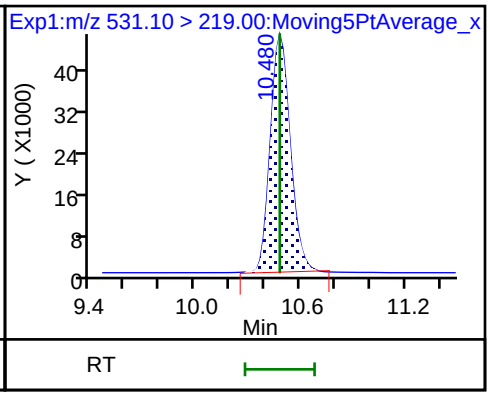
D 64 d9-N-EtFOSE



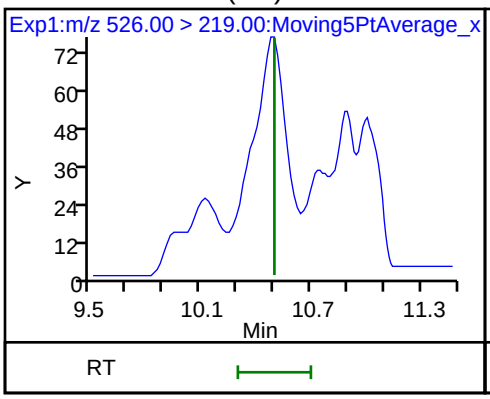
65 N-EtFOSE-M (ND)



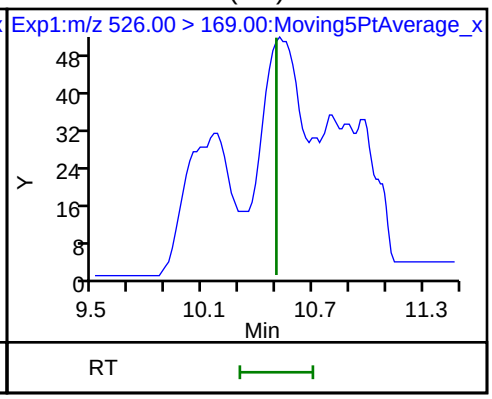
D 67 d5-NEtPFOSA



68 N-EtFOSA-M (ND)



68 N-EtFOSA-M (ND)



FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-635120/3-A

Matrix: Water | Lab File ID: 2023.11.28a.014.d

Analysis Method: Draft 1633 | Date Collected:

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 500(mL) | Date Analyzed: 11/28/2023 14:47

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	30.81		8.00	2.00
2706-90-3	Perfluoropentanoic acid (PFPeA)	30.58		4.00	1.00
307-24-4	Perfluorohexanoic acid (PFHxA)	29.09		2.00	0.50
375-85-9	Perfluoroheptanoic acid (PFHpA)	27.49		2.00	0.52
335-67-1	Perfluorooctanoic acid (PFOA)	29.58		2.00	0.64
375-95-1	Perfluorononanoic acid (PFNA)	32.75		2.00	0.50
335-76-2	Perfluorodecanoic acid (PFDA)	31.73		2.00	0.50
2058-94-8	Perfluoroundecanoic acid (PFUnA)	29.82		2.00	0.50
307-55-1	Perfluorododecanoic acid (PFDoA)	29.91		2.00	0.50
72629-94-8	Perfluorotridecanoic acid (PFTriA)	28.83		2.00	0.50
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	29.67		2.00	0.50
375-73-5	Perfluorobutanesulfonic acid (PFBS)	26.20		2.00	0.30
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	27.93		2.00	0.50
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	24.20		2.00	0.57
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	30.39		2.00	0.40
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	28.98		2.00	0.50
68259-12-1	Perfluorononanesulfonic acid (PFNS)	30.74		2.00	0.40
335-77-3	Perfluorodecanesulfonic acid (PFDS)	29.41		2.00	0.50
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	25.23		2.00	0.90
757124-72-4	4:2 FTS	71.27		8.00	1.70
27619-97-2	6:2 FTS	123.1		8.00	2.50
39108-34-4	8:2 FTS	113.0		8.00	2.60
754-91-6	Perfluorooctanesulfonamide (PFOSA)	28.17		2.00	0.50
31506-32-8	NMeFOSA	33.77		2.00	0.50
4151-50-2	NEtFOSA	30.66		2.00	0.50
2355-31-9	NMeFOSAA	28.84		4.00	1.20
2991-50-6	NEtFOSAA	30.58		2.00	0.70
24448-09-7	NMeFOSE	158.4		20.0	5.00
1691-99-2	NEtFOSE	322.5		20.0	5.00
13252-13-6	HFPO-DA (GenX)	32.97		8.00	2.00

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-635120/3-A

Matrix: Water | Lab File ID: 2023.11.28a.014.d

Analysis Method: Draft 1633 | Date Collected:

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 500(mL) | Date Analyzed: 11/28/2023 14:47

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	29.77		8.00	1.50
863090-89-5	PFMBA	61.76		4.00	1.00
151772-58-6	NFDHA	27.99		4.00	1.00
377-73-1	PFMPA	58.58		4.00	0.50
756426-58-1	9Cl-PF3ONS	78.00		8.00	1.00
763051-92-9	11Cl-PF3OUdS	71.01		8.00	2.00
113507-82-7	PFEESA	51.74		4.00	0.50
356-02-5	3:3 FTCA	132.3		10.0	1.50
914637-49-3	5:3 FTCA	250.8		50.0	10.0
812-70-4	7:3 FTCA	256.6		50.0	10.0

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-635120/3-A

Matrix: Water | Lab File ID: 2023.11.28a.014.d

Analysis Method: Draft 1633 | Date Collected:

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 500(mL) | Date Analyzed: 11/28/2023 14:47

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	92		10-130
STL01893	13C5 PFPeA	100		40-150
STL02577	13C5 PFHxA	104		40-150
STL01892	13C4 PFHpA	106		40-150
STL01052	13C8 PFOA	100		30-140
STL02578	13C9 PFNA	90		30-140
STL02579	13C6 PFDA	96		20-140
STL02580	13C7 PFUnA	92		20-140
STL00998	13C2 PFDoA	89		10-150
STL02116	13C2 PFTeDA	69		10-130
STL02337	13C3 PFBS	95		25-150
STL02581	13C3 PFHxS	95		25-150
STL01054	13C8 PFOS	87		20-140
STL01056	13C8 FOSA	94		10-130
STL02118	d3-NMeFOSAA	85		10-200
STL02117	d5-NEtFOSAA	68		10-200
STL02395	M2-4:2 FTS	79		25-200
STL02279	M2-6:2 FTS	72		25-200
STL02280	M2-8:2 FTS	71		25-200
STL02255	13C3 HFPO-DA	95		25-160
STL02277	d7-N-MeFOSE-M	95		10-150
STL02278	d9-N-EtFOSE-M	92		10-150
STL02704	d5-NEtPFOSA	73		10-130
STL02705	d3-NMePFOSA	64		10-130

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.014.d
Lims ID: LCS 280-635120/3-A
Client ID:
Sample Type: LCS
Inject. Date: 28-Nov-2023 14:47:22 ALS Bottle#: 8 Worklist Smp#: 10
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-635120/3-A
Misc. Info.: Plate: 1 Rack: 1
Operator ID: B5QN Instrument ID: LC_LCMS11

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 29-Nov-2023 13:46:03 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1603

First Level Reviewer: B5QN Date: 29-Nov-2023 13:46:11
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.046	3.046	0.0	1.000	5097166	9.23		92.3	37024	
* 1 13C3PFBA										
216.00 > 172.00	3.046	3.046	0.0		2717032	5.00			11061	
2 PFBA										
212.80 > 168.90	3.046	3.046	0.0	1.000	1403956	3.08		96.3	1515	
4 PFMPA										
229.00 > 84.90	3.728	3.728	0.0	0.835	2441199	5.86		91.5	14022	
5 3:3 FTCA										
241.00 > 177.00	3.912	3.912	0.0	0.877	705346	13.2	Target=1.58	82.7	20202	
241.00 > 117.00	3.912	3.912	0.0	0.877	416880		1.69(0.79-2.37)		10069	
D 7 13C5 PFPeA										
268.30 > 223.00	4.462	4.463	-0.001	0.834	1631141	5.02		100	16551	
6 PFPA										
263.00 > 219.00	4.477	4.478	-0.001	1.003	2001144	3.06	Target=212.56	95.5	4013	
263.00 > 68.90	4.462	4.478	-0.016	1.000	7841		255.22(106.28-318.84)		229	
8 PFMBA										
279.00 > 85.10	4.778	4.778	0.0	1.071	5089452	6.18		96.5	111665	
10 4:2FTS										
327.10 > 307.00	5.096	5.097	-0.001	1.000	669771	7.13	Target=1.59	89.3	21180	
327.10 > 80.90	5.096	5.097	-0.001	1.000	401995		1.67(0.79-2.38)		5097	
D 9 13C2-4:2FTS										
329.10 > 80.90	5.096	5.097	-0.001	0.742	186854	3.68	Target=4.54	78.9	3940	
329.10 > 309.00	5.096	5.097	-0.001	0.742	36192		5.16(2.27-6.81)	78.9	1533	
11 NFDHA										
295.00 > 201.00	5.280	5.280	0.0	0.986	658344	2.80	Target=1.95	87.5	14295	
295.00 > 84.90	5.280	5.280	0.0	0.986	330685		1.99(0.97-2.92)		7181	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 16 13C3 PFBS										
302.10 > 79.90	5.353	5.354	-0.001	0.779	635329	2.20	Target=4.56	94.7	20723	
302.10 > 98.90	5.353	5.354	-0.001	0.779	131073		4.85(2.28-6.83)	94.7	5716	
15 PFBS										
298.70 > 79.90	5.353	5.354	-0.001	1.000	637320	2.62	Target=2.16	92.2	20926	
298.70 > 98.80	5.353	5.354	-0.001	1.000	274489		2.32(1.08-3.24)		9042	
* 14 13C2 PFHxA										
315.10 > 270.00	5.353	5.371	-0.018		1629768	2.50	Target=79.67		23634	
315.10 > 119.40	5.353	5.371	-0.018		21077		77.32(39.83-119.50)		933	
D 12 13C5 PFHxA										
318.00 > 273.00	5.353	5.371	-0.018	1.000	1896392	2.60	Target=53.27	104	41306	
318.00 > 120.30	5.353	5.371	-0.018	1.000	40176		47.20(26.63-79.90)	104	1076	
13 PFHxA										
313.00 > 269.00	5.371	5.371	0.0	1.003	2430279	2.91	Target=18.64	90.9	13763	
313.00 > 118.90	5.353	5.371	-0.018	1.000	129714		18.74(9.32-27.96)		3384	
18 5:3 FTCA										
341.00 > 237.10	5.643	5.644	-0.001	1.054	3448726	25.1	Target=1.16	78.4	43441	
341.00 > 217.00	5.643	5.644	-0.001	1.054	3083261		1.12(0.58-1.74)		43054	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.682	5.682	0.0	1.061	1705021	9.54	Target=1.53	95.4	27165	
286.90 > 184.90	5.682	5.682	0.0	1.061	1226005		1.39(0.76-2.29)	95.4	17506	
19 HFPO-DA										
284.90 > 168.90	5.682	5.682	0.0	1.000	605640	3.30	Target=1.75	103	13032	
284.90 > 184.90	5.682	5.682	0.0	1.000	325555		1.86(0.87-2.62)		5250	
21 PFEESA										
314.80 > 134.90	5.789	5.789	0.0	1.081	4779932	5.17	Target=13.97	90.6	103535	
314.80 > 82.90	5.789	5.789	0.0	1.081	293007		16.31(6.99-20.96)		7594	
D 22 13C4 PFHpA										
367.10 > 322.00	6.121	6.122	-0.001	1.143	2022448	2.64		106	31874	
17 PFHpA										
363.10 > 319.00	6.121	6.122	-0.001	1.000	2188396	2.75	Target=3.96	85.9	8582	
363.10 > 169.00	6.121	6.122	-0.001	1.000	543109		4.03(1.98-5.95)		8520	
23 PFPeS										
349.10 > 79.90	6.223	6.223	0.0	0.906	683826	2.79	Target=2.70	93.1	16129	
349.10 > 98.90	6.223	6.223	0.0	0.906	248558		2.75(1.35-4.04)		8783	
24 ADONA										
376.90 > 250.90	6.355	6.355	0.0	1.118	4589224	2.98	Target=3.02	98.6	45626	
376.90 > 84.80	6.355	6.355	0.0	1.118	1511730		3.04(1.51-4.53)		26469	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.470	6.471	-0.001	0.942	226269	3.42	Target=4.15	71.9	8045	
429.10 > 409.00	6.470	6.471	-0.001	0.942	51183		4.42(2.07-6.22)	71.9	2422	
25 6:2FTS										
427.10 > 407.00	6.470	6.471	-0.001	1.000	1117261	12.3	Target=1.93	101	31645	
427.10 > 80.90	6.470	6.471	-0.001	1.000	558156		2.00(0.96-2.89)		13255	
D 27 13C8 PFOA										
421.10 > 376.00	6.707	6.707	0.0	1.000	1763456	2.49		99.6	30420	
* 29 13C4 PFOA										
417.10 > 172.00	6.707	6.707	0.0		270608	2.50			9344	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 PFOA										
413.00 > 369.00	6.707	6.724	-0.017	1.000	1665411	2.96	Target=2.30	92.4	10389	
413.00 > 169.00	6.707	6.724	-0.017	1.000	677218		2.46(1.15-3.45)		9275	
30 7:3 FTCA										
441.00 > 316.90	6.871	6.871	0.0	1.284	1630696	25.7	Target=1.43	80.2	44372	
441.00 > 336.90	6.871	6.871	0.0	1.284	1130545		1.44(0.72-2.15)		15447	
32 PFHxS										
398.70 > 79.90	6.871	6.871	0.0	1.000	280815	2.42	Target=3.86	82.9	10591	
398.70 > 98.90	6.871	6.871	0.0	1.000	75151		3.74(1.93-5.79)		3011	
* 31 18O2 PFHxS										
403.00 > 83.90	6.871	6.871	0.0		533187	2.37			18416	
D 33 13C3 PFHxS										
402.10 > 79.90	6.871	6.888	-0.017	1.000	515712	2.26	Target=4.11	95.4	23583	
402.10 > 98.80	6.871	6.888	-0.017	1.000	117474		4.39(2.05-6.16)	95.4	5453	
D 34 13C9 PFNA										
472.10 > 427.00	7.261	7.261	0.0	1.000	1004914	1.13		90.3	13925	
36 PFNA										
463.00 > 419.00	7.261	7.261	0.0	1.000	2643851	3.27	Target=6.02	102	23416	
463.00 > 219.00	7.261	7.261	0.0	1.000	423794		6.24(3.01-9.04)		13201	
* 35 13C5 PFNA										
468.00 > 423.00	7.261	7.261	0.0		1177921	1.25			24447	
37 PFHpS										
449.00 > 79.90	7.473	7.473	0.0	0.934	531743	3.04	Target=4.91	99.7	12460	
449.00 > 98.80	7.473	7.473	0.0	0.934	99648		5.34(2.46-7.37)		2819	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.523	7.522	0.001	1.095	274224	3.42	Target=5.49	71.3	9706	
529.10 > 509.00	7.523	7.522	0.001	1.095	45630		6.01(2.74-8.23)	71.3	2146	
39 8:2FTS										
527.10 > 507.00	7.523	7.522	0.001	1.000	940308	11.3	Target=1.56	92.2	26371	
527.10 > 80.80	7.523	7.522	0.001	1.000	560947		1.68(0.78-2.33)		15681	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.743	7.761	-0.018	0.965	443727	4.23		84.6	14775	
42 NMeFOSAA										
570.10 > 419.00	7.761	7.761	0.0	1.002	256251	2.88	Target=1.15	90.1	7608	
570.10 > 483.00	7.761	7.761	0.0	1.002	225872		1.13(0.58-1.73)		7907	
43 PFDA										
512.90 > 469.00	7.779	7.779	0.0	1.000	2161297	3.17	Target=3.33	99.2	17179	
512.90 > 219.00	7.779	7.779	0.0	1.000	596529		3.62(1.67-5.00)		16014	
* 44 13C2 PFDA										
515.10 > 470.10	7.779	7.779	0.0		1090238	1.25			20860	
D 40 13C6 PFDA										
519.10 > 474.10	7.779	7.779	0.0	1.000	1036030	1.19		95.5	19953	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.969	7.969	0.0	0.994	410903	3.38		67.7	7784	
45 NEtFOSAA										
584.20 > 419.10	7.969	7.969	0.0	1.000	182758	3.06	Target=1.55	95.6	3002	
584.20 > 526.00	7.969	7.969	0.0	1.000	126392		1.45(0.77-2.32)		4260	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 49 13C8 PFOS										
507.10 > 79.90	8.004	8.021	-0.017	0.998	233954	2.09	Target=2.95	87.3	110	
507.10 > 98.90	8.021	8.021	0.0	1.000	80063		2.92(1.47-4.42)	87.3	3537	
* 47 13C4 PFOS										
502.80 > 79.90	8.021	8.021	0.0		747689	2.40	Target=3.78		20005	
502.80 > 98.90	8.021	8.021	0.0		195014		3.83(1.89-5.67)		8662	
48 PFOS										
498.90 > 79.90	8.021	8.021	0.0	1.002	924353	2.90	Target=4.86	97.4	18550	
498.90 > 98.80	8.021	8.021	0.0	1.002	200025		4.62(2.43-7.28)		7815	
D 53 13C7 PFUnA										
570.00 > 525.10	8.285	8.285	0.001	1.065	1110354	1.15		91.8	23796	
52 PFUnA										
563.10 > 519.00	8.285	8.285	0.001	1.000	2344156	2.98	Target=5.72	93.2	43368	
563.10 > 269.10	8.285	8.285	0.001	1.000	416052		5.63(2.86-8.59)		9002	
54 9ClFOS										
530.80 > 351.00	8.408	8.408	0.0	1.480	2405129	7.80	Target=2.23	98.0	39627	
532.80 > 353.00	8.408	8.408	0.0	1.480	1047064		2.30(1.11-3.34)		27583	
55 PFNS										
548.80 > 79.90	8.529	8.529	0.0	1.066	400662	3.07	Target=4.00	99.9	10759	
548.80 > 98.80	8.529	8.529	0.0	1.066	98258		4.08(2.00-6.00)		2662	
D 50 13C8 FOSA										
506.10 > 77.80	8.773	8.756	0.017	1.094	1269663	2.34		93.6	13707	
51 PFOSA										M
498.10 > 77.90	8.773	8.773	0.0	1.000	1424160	2.82	Target=41.88	88.0	13858	
498.10 > 478.00	8.773	8.773	0.0	1.000	33281		42.79(20.94-62.83)		1408	M
D 56 13C2 PFDoA										
615.10 > 570.00	8.773	8.773	0.0	1.128	1062041	1.11		89.0	20219	
57 PFDoA										
613.10 > 569.00	8.773	8.773	0.0	1.000	2553724	2.99	Target=7.45	93.5	21225	
613.10 > 319.00	8.773	8.773	0.0	1.000	320757		7.96(3.73-11.18)		10695	
58 PFDS										
599.00 > 79.90	9.044	9.044	0.0	1.130	885872	2.94	Target=4.54	95.4	12425	
599.00 > 98.80	9.044	9.044	0.0	1.130	173094		5.12(2.27-6.82)		6033	
63 PFTrDA										
663.00 > 619.00	9.271	9.271	0.0	0.950	1445963	2.88	Target=5.19	90.1	20025	
663.00 > 168.90	9.271	9.271	0.0	0.950	263876		5.48(2.59-7.78)		7362	
66 11ClFOS										
630.90 > 450.90	9.428	9.444	-0.016	1.659	3435974	7.10	Target=3.47	88.3	96986	
632.90 > 452.90	9.428	9.444	-0.016	1.659	1036065		3.32(1.74-5.21)		18386	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.756	9.774	-0.018	1.254	393251	0.8651		69.2	10366	
70 PFTeDA										
713.10 > 669.00	9.756	9.774	-0.018	1.000	1084469	2.97	Target=6.88	92.7	11005	
713.10 > 168.90	9.756	9.774	-0.018	1.000	146210		7.42(3.44-10.32)		4782	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.910	9.910	0.0	1.236	9446703	23.7		94.7	63848	
60 N-MeFOSE-M										M
616.10 > 58.90	9.950	9.950	0.0	1.004	6546593	15.8		99.0	4472	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
71 PFDoS										
699.10 > 79.90	10.026	10.045	-0.019	1.253	608156	2.52	Target=4.14	81.3	7382	
699.10 > 98.80	10.026	10.045	-0.019	1.253	130636		4.66(2.07-6.21)		3950	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.121	10.120	0.001	1.262	196057	1.59		63.8	4742	
61 NMeFOSA										
511.90 > 219.00	10.121	10.120	0.001	1.000	253267	3.38	Target=0.98	106	5004	
511.90 > 169.00	10.121	10.120	0.001	1.000	259663		0.98(0.49-1.47)		4872	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.310	10.310	0.0	1.285	11487404	23.1		92.4	86297	
65 N-EtFOSE-M										M
630.00 > 58.90	10.329	10.329	0.0	1.002	15462200	32.2		101	5050	M
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.500	10.500	0.0	1.309	230841	1.83		73.1	3627	
68 N-EtFOSA-M										
526.00 > 219.00	10.500	10.500	0.0	1.000	303124	3.07	Target=0.99	95.8	3486	
526.00 > 169.00	10.500	10.500	0.0	1.000	299866		1.01(0.50-1.49)		3295	

QC Flag Legend

Processing Flags

Review Flags

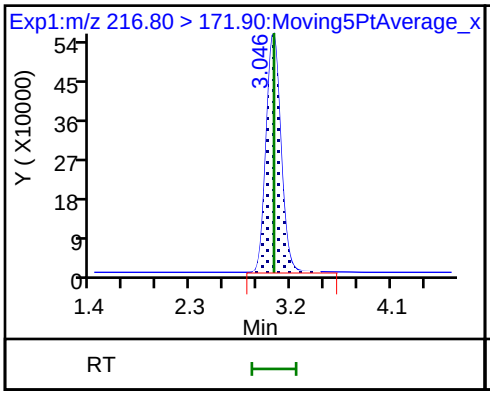
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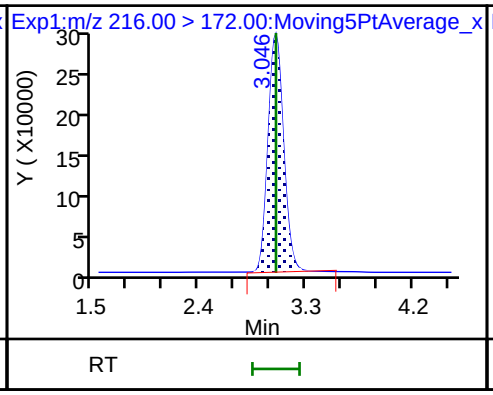
Eurofins Denver

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Lims ID: LCS 280-635120/3-A
Client ID:
Operator ID: B5QN ALS Bottle#: 8 Worklist Smp#: 10
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5

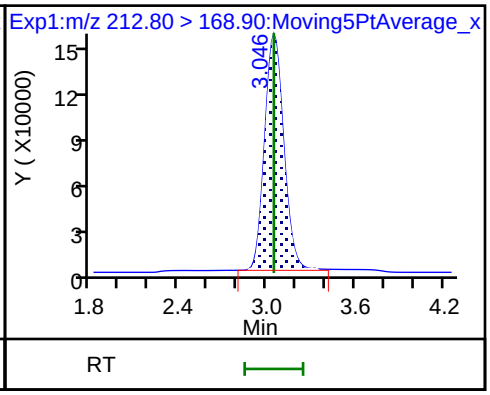
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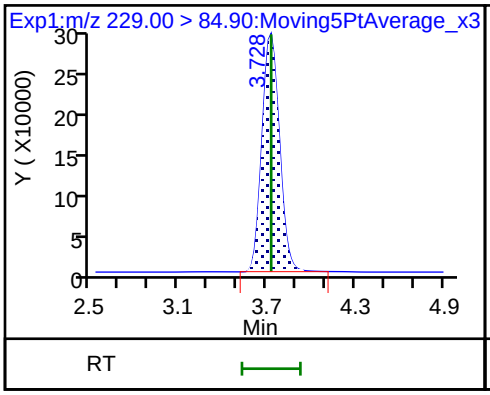
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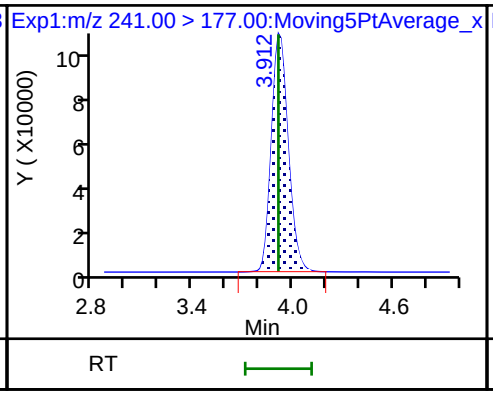
2 PFBA



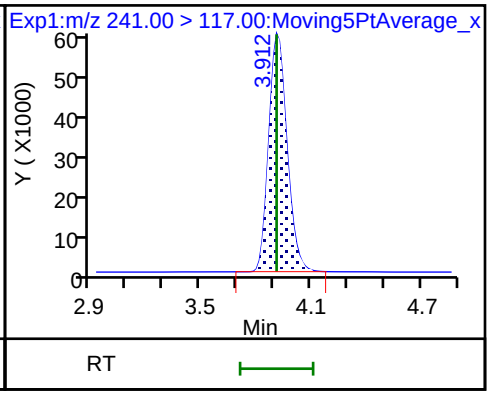
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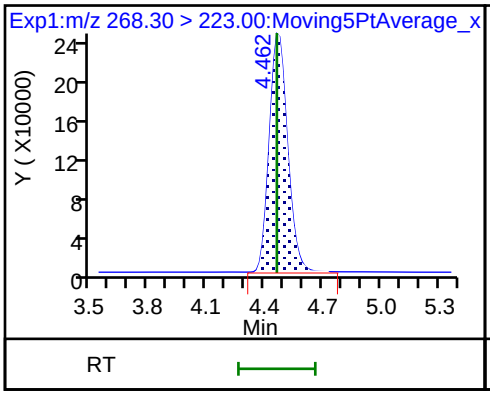
5 3:3 FTCA



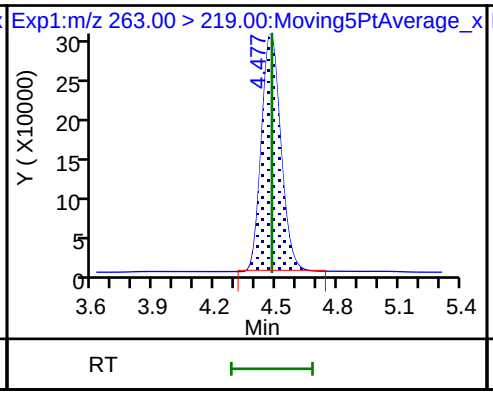
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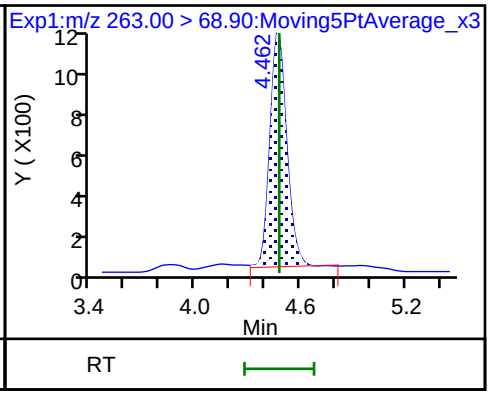
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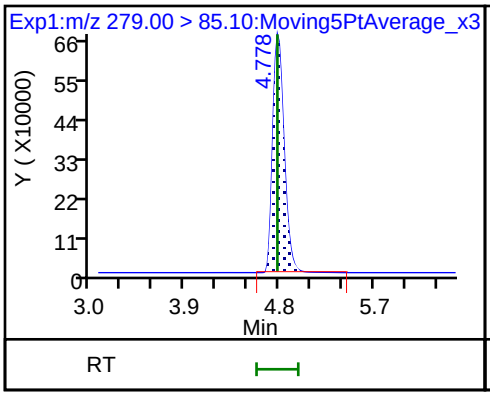
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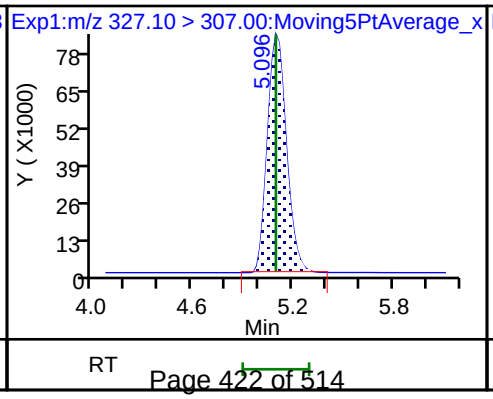
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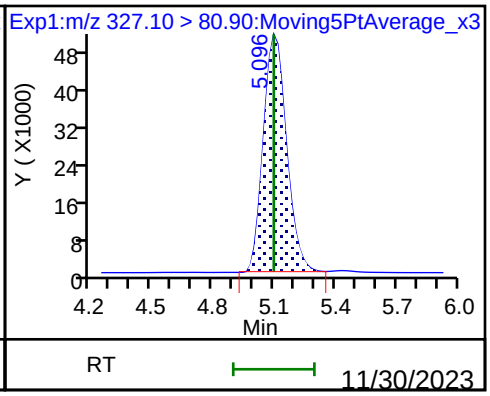
8 PFMBA



10 4:2FTS

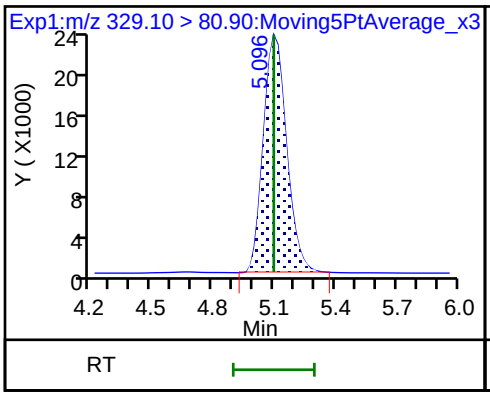


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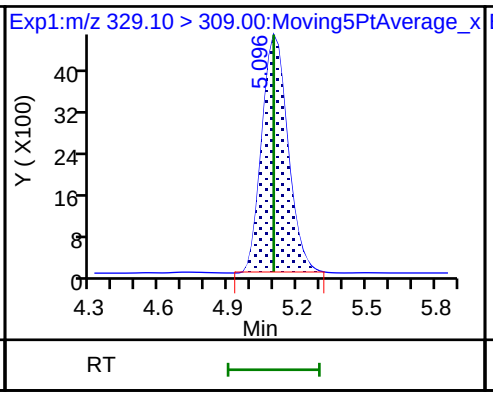


11/30/2023
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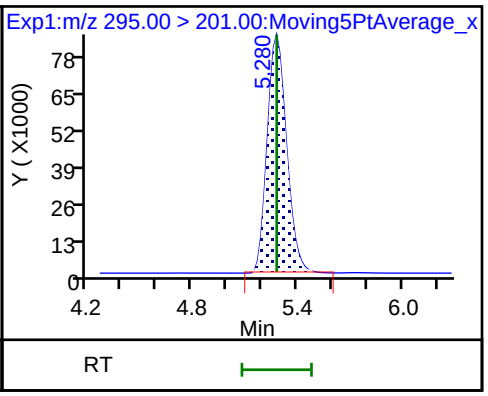
D 9 13C2-4:2FTS



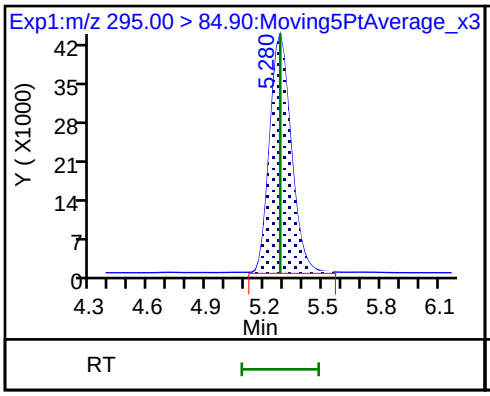
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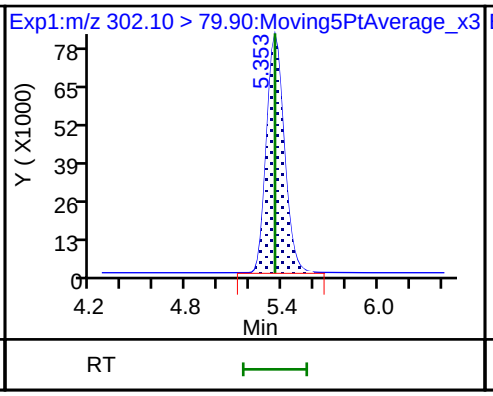
11 NFDHA



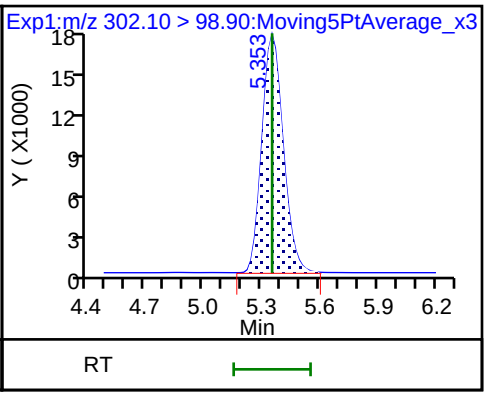
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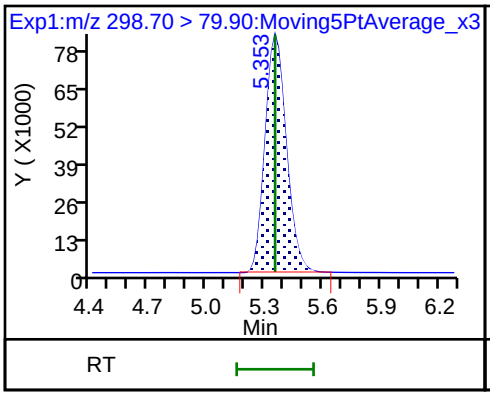
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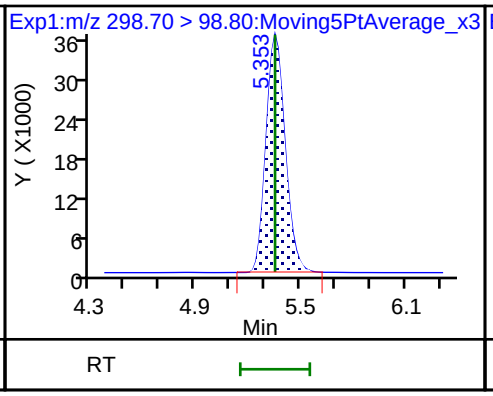
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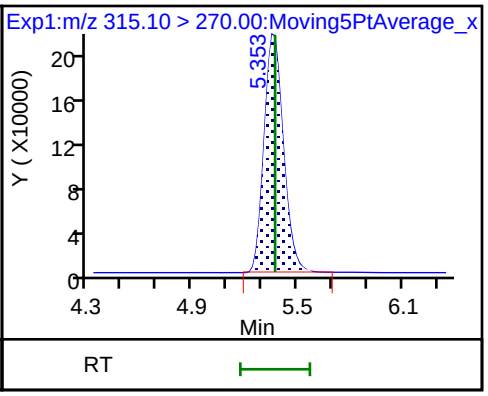
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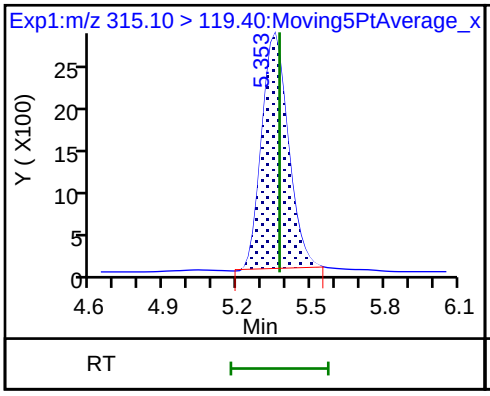
15 PFBS



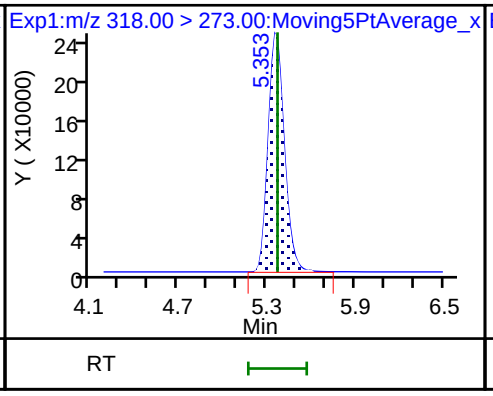
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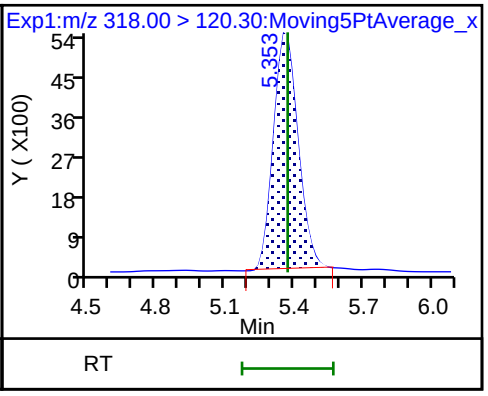
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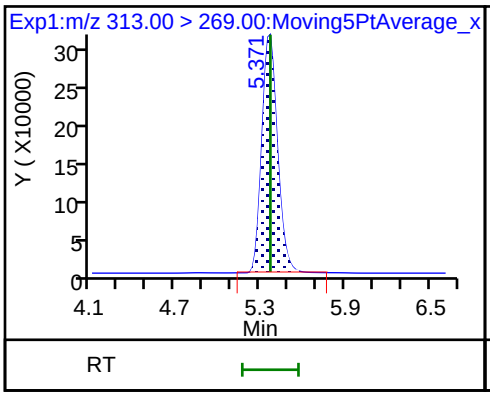
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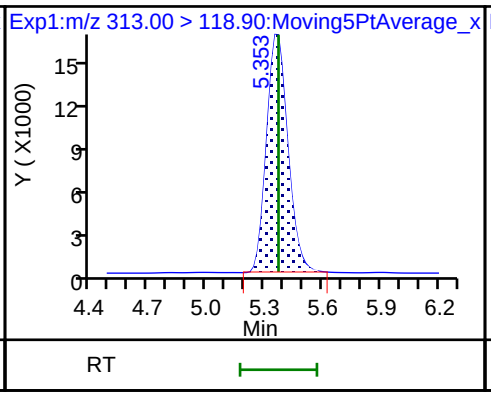
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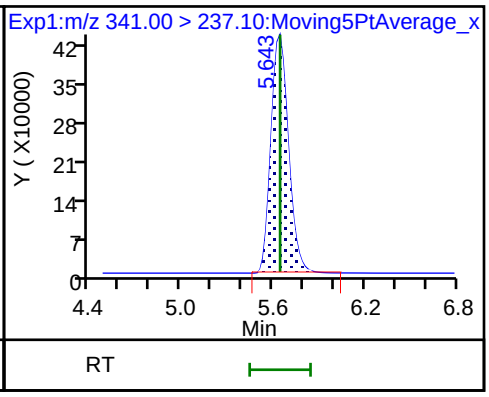
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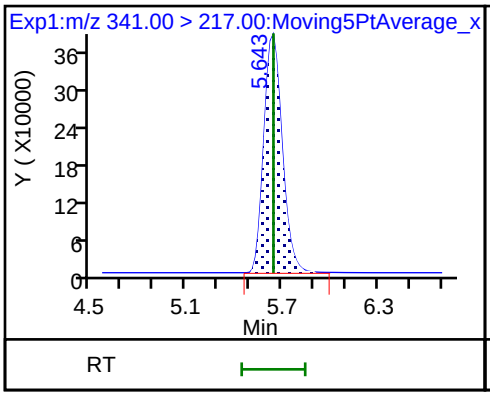
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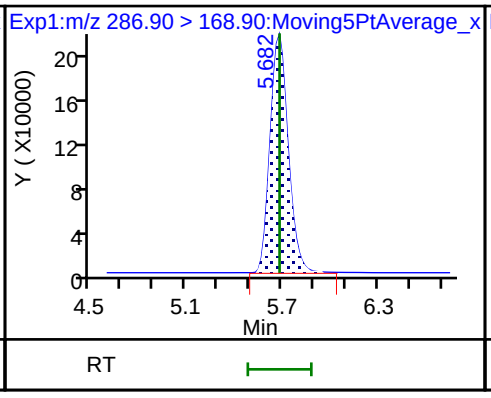
18 5:3 FTCA



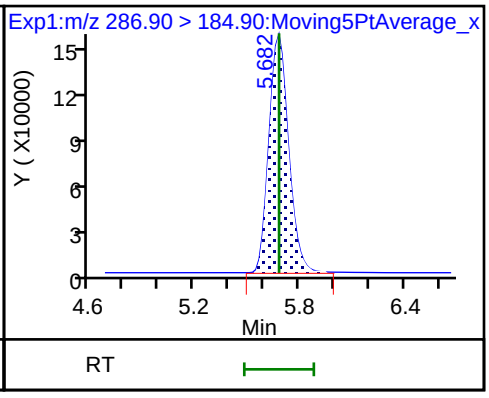
18 5:3 FTCA



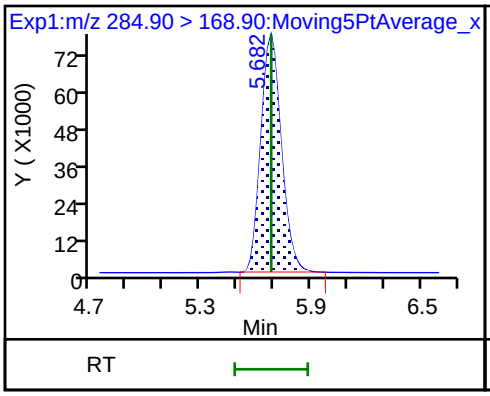
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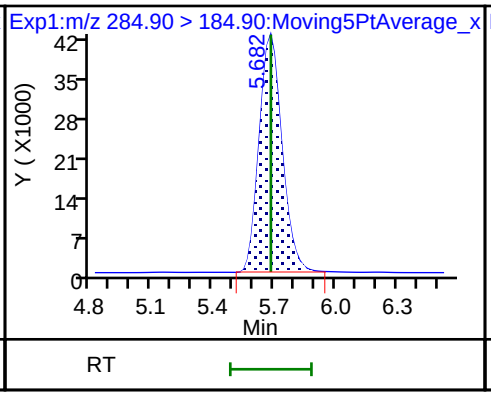
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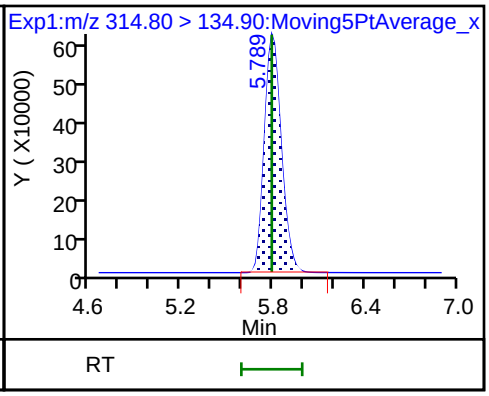
19 HFPO-DA



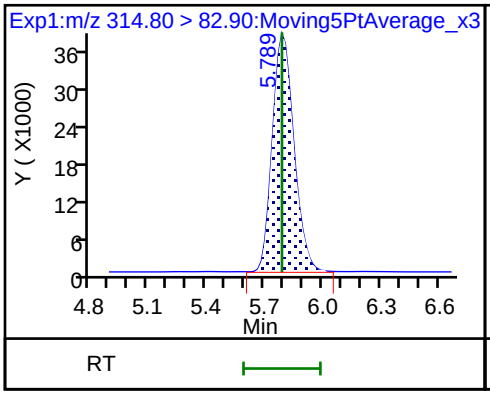
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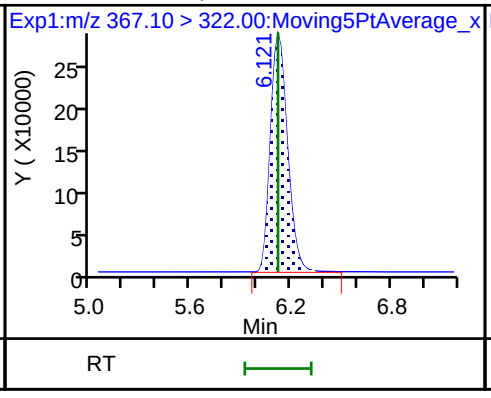
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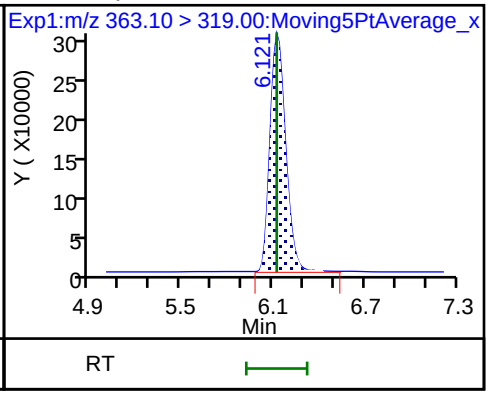
21 PFEESA



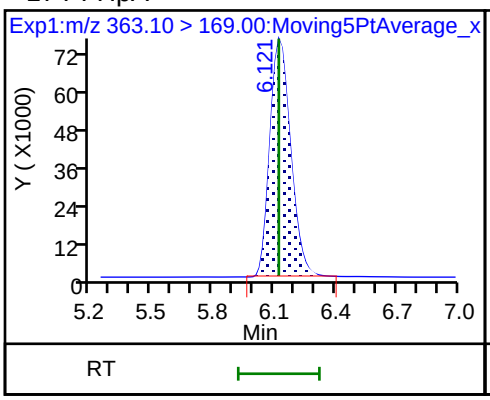
D 22 13C4 PFHpA



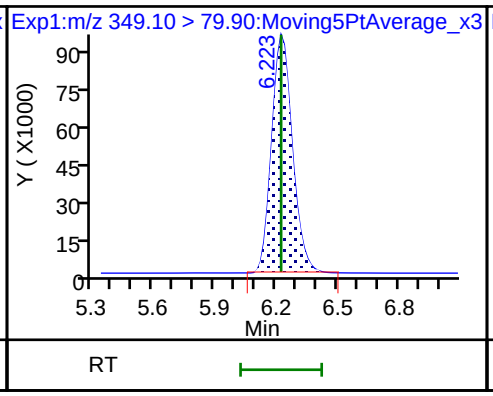
17 PFHpA



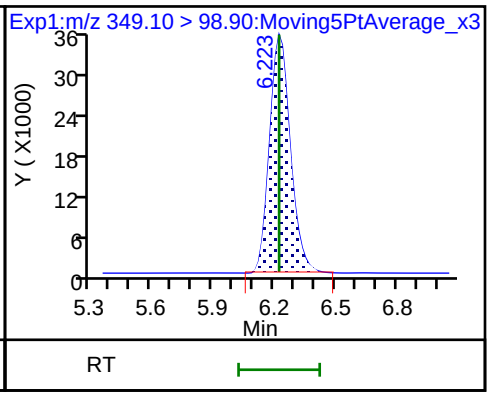
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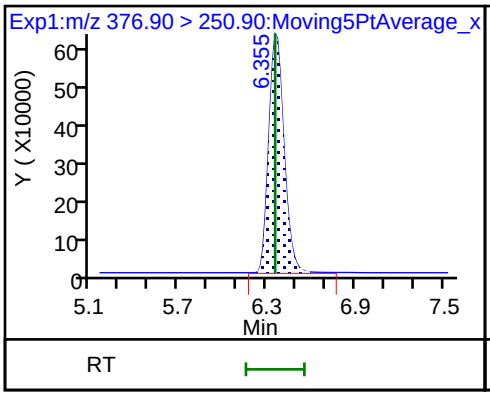
23 PFPeS



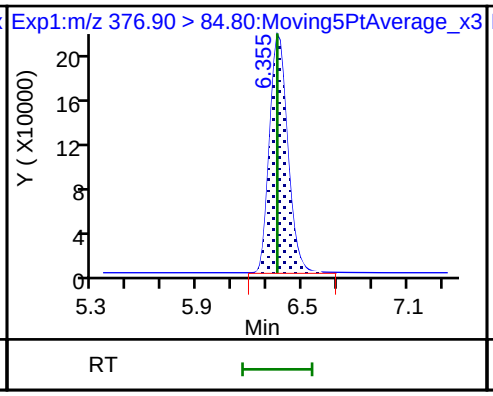
23 PFPeS



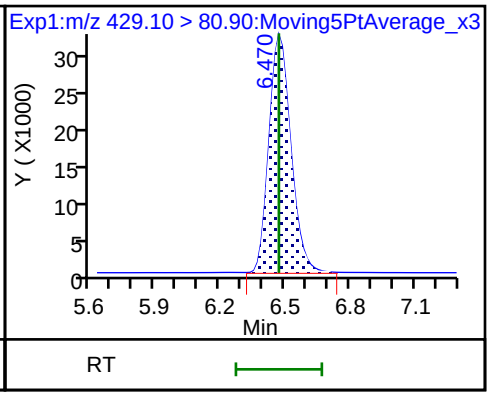
24 ADONA



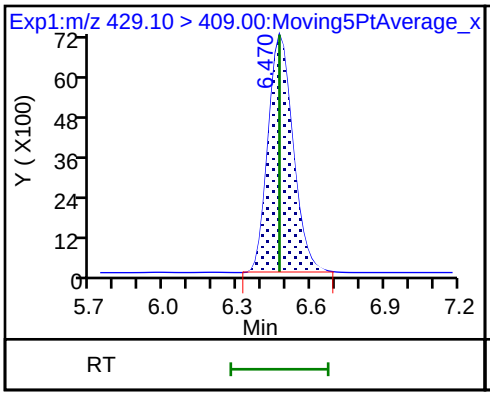
24 ADONA



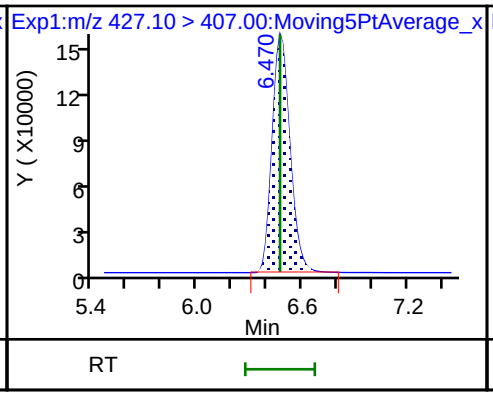
D 26 13C2-6:2FTS



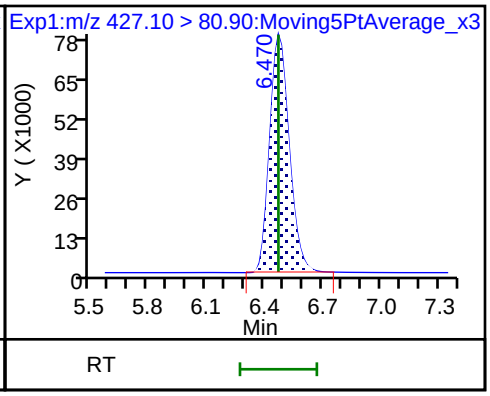
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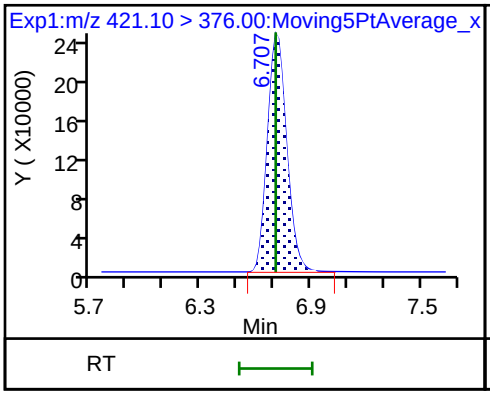
25 6:2FTS



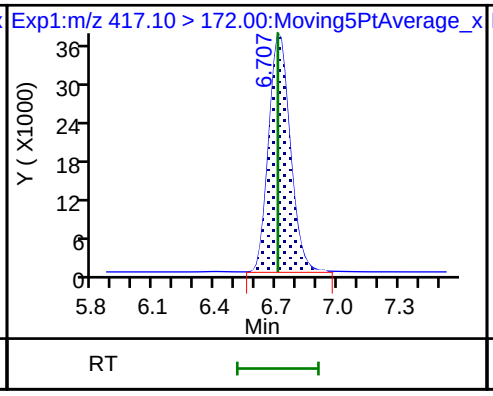
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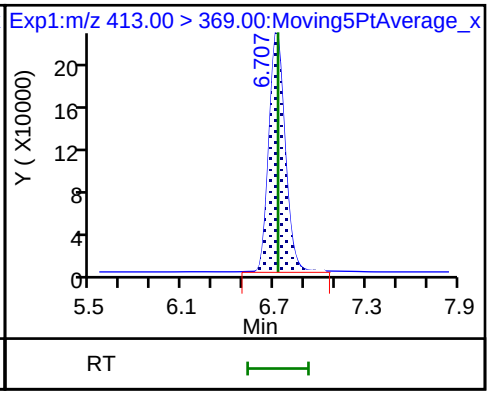
D 27 13C8 PFOA



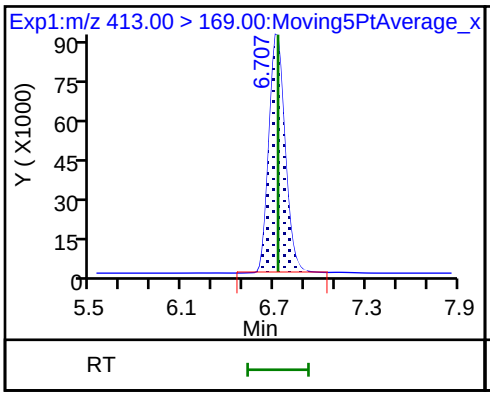
* 29 13C4 PFOA



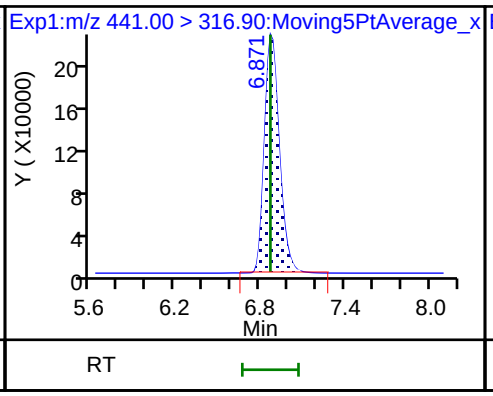
28 PFOA



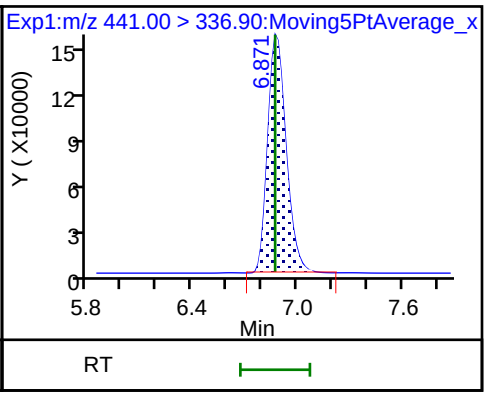
28 PFOA



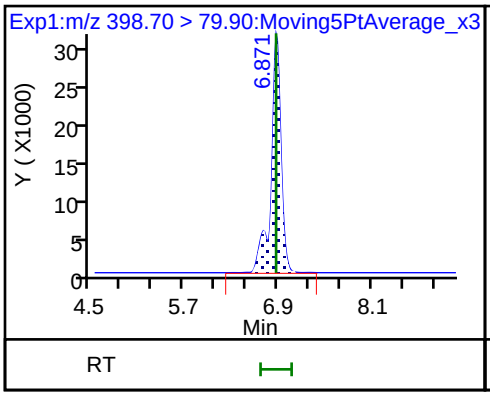
30 7:3 FTCA



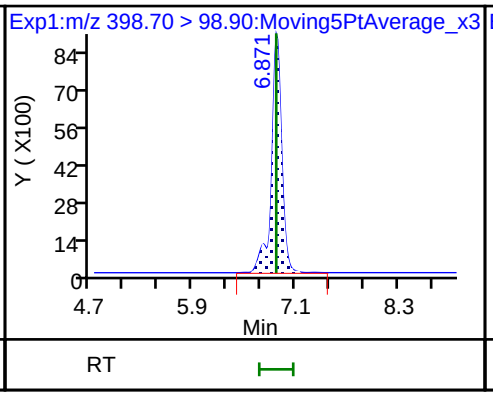
30 7:3 FTCA



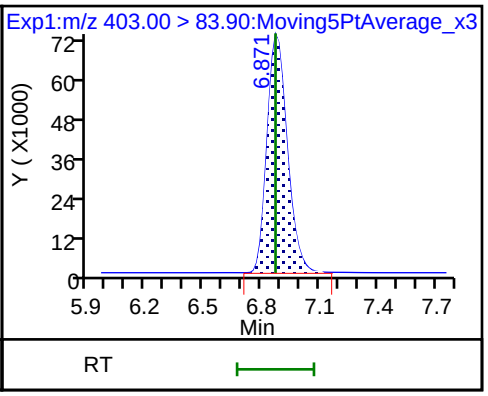
32 PFHxS



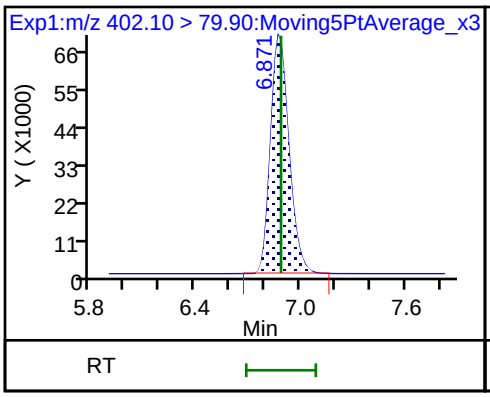
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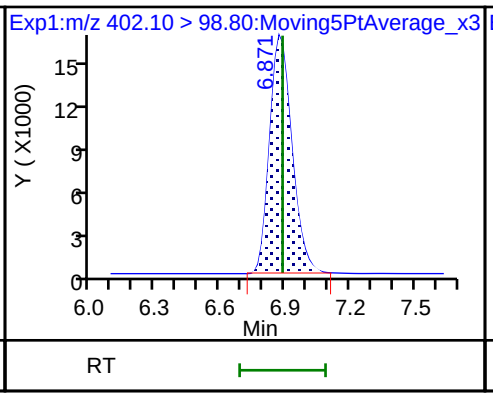
* 31 18O2 PFHxS



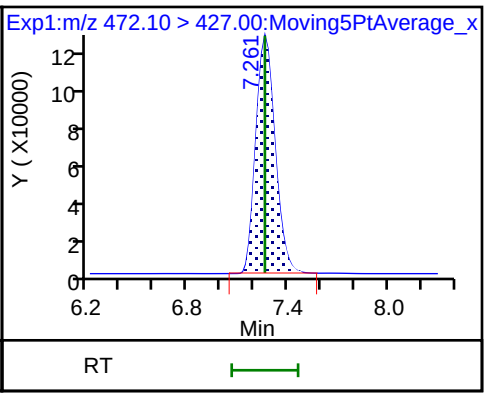
D 33 13C3 PFHxS



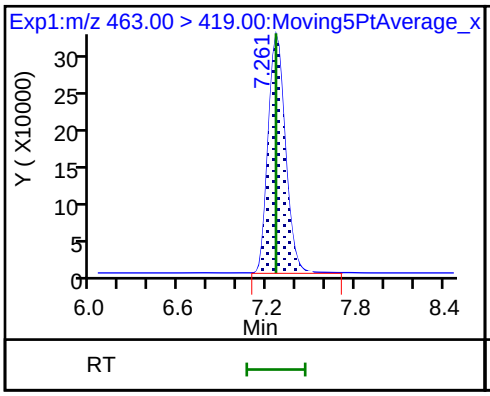
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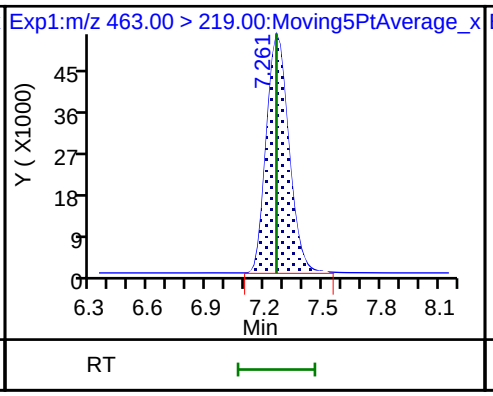
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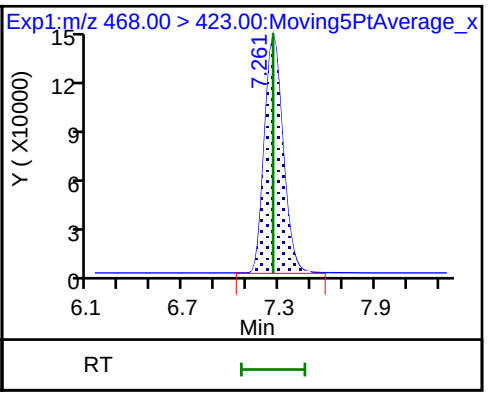
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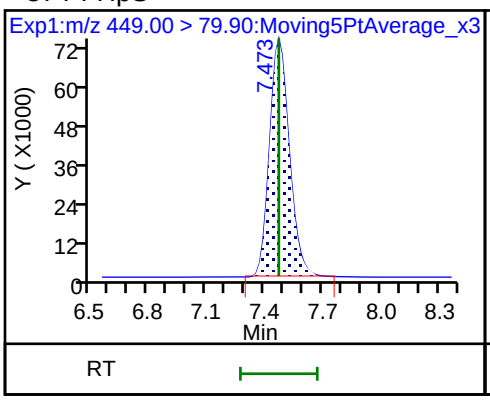
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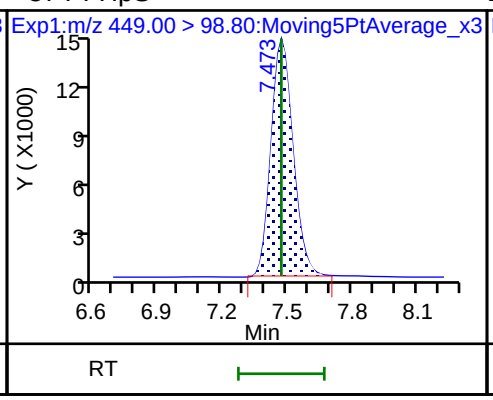
* 35 13C5 PFNA



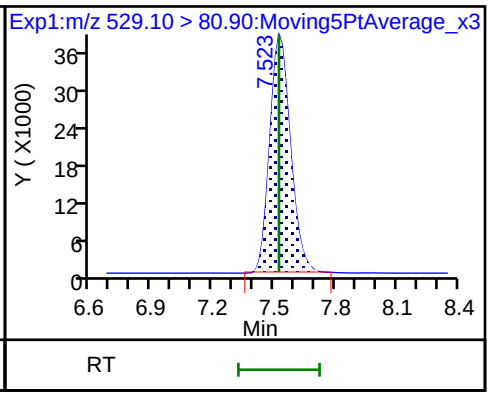
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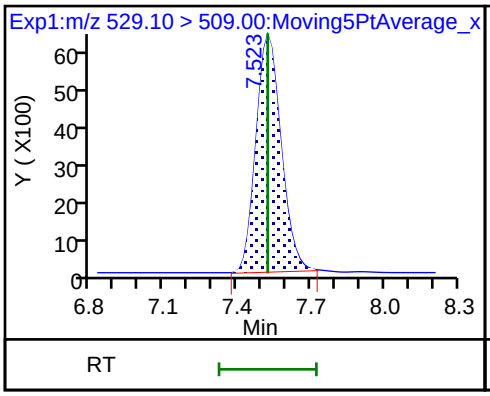
37 PFHpS



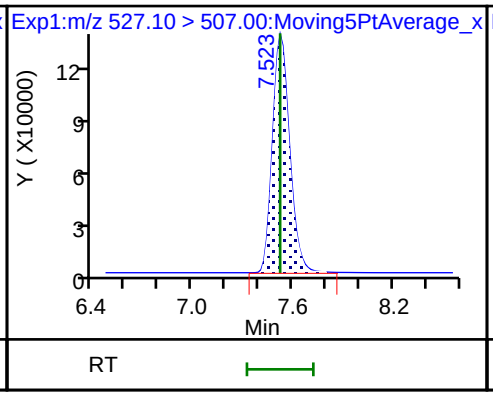
D 38 13C2-8:2FTS



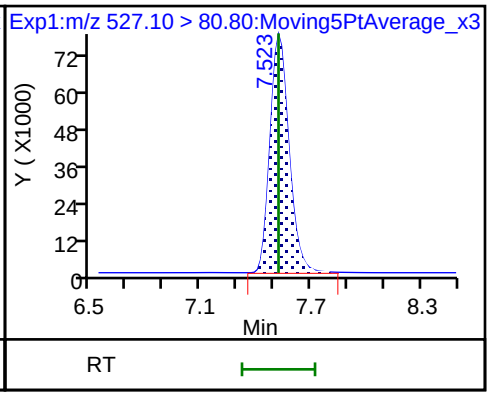
D 38 13C2-8:2FTS



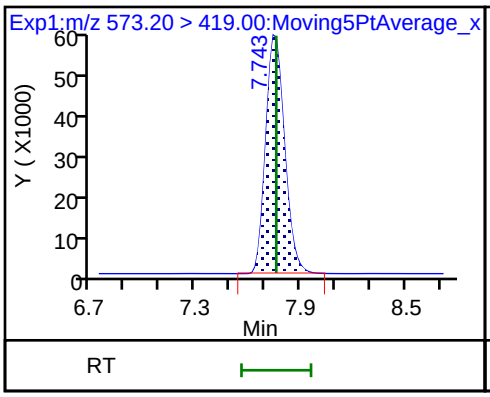
39 8:2FTS



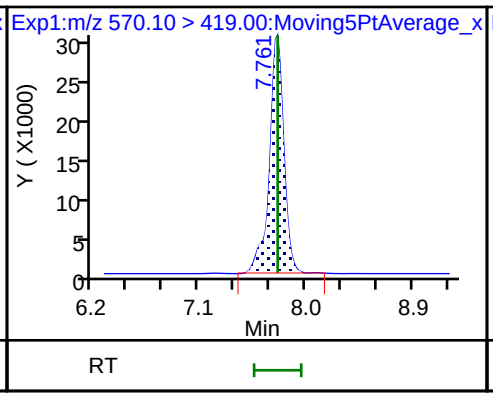
39 8:2FTS



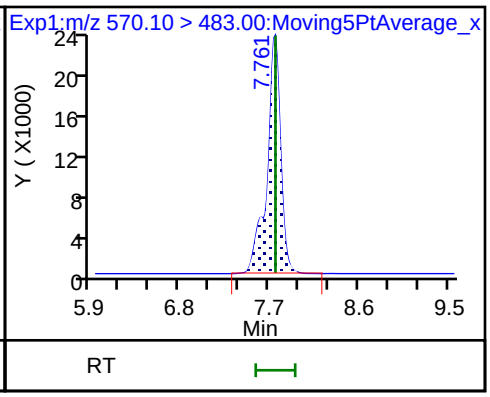
D 41 d3-NMeFOSAA



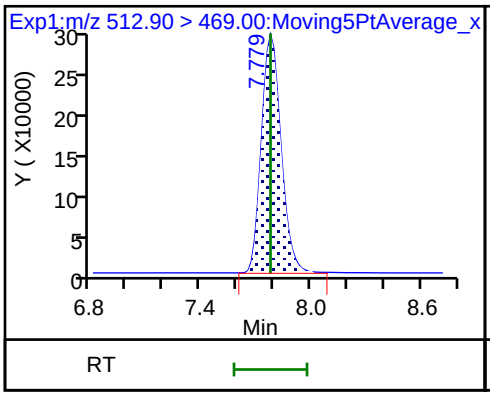
42 NMeFOSAA



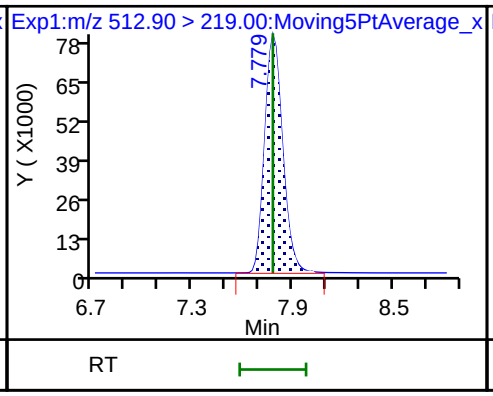
42 NMeFOSAA



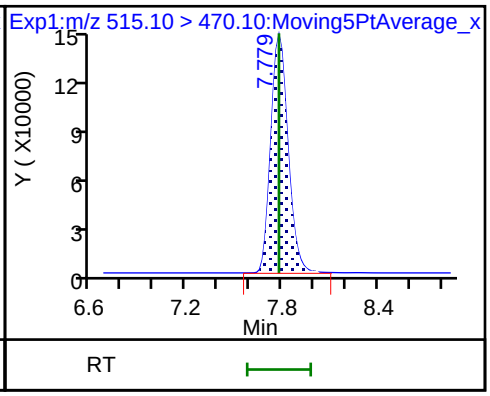
43 PFDA



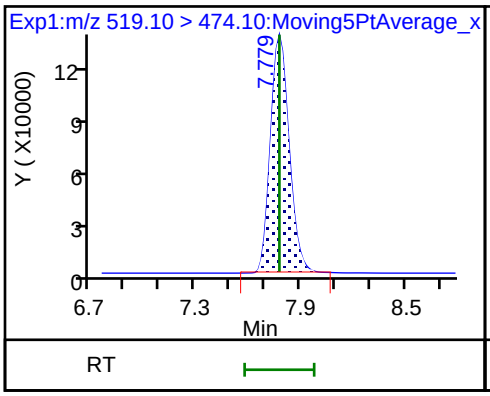
43 PFDA



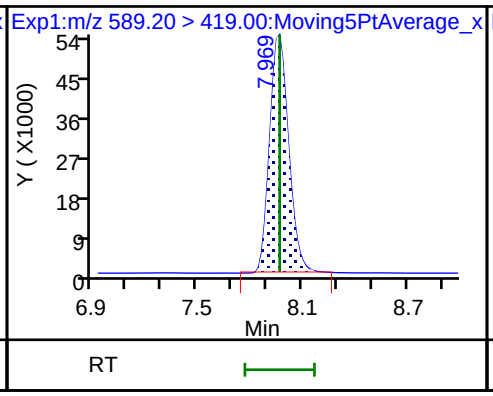
* 44 13C2 PFDA



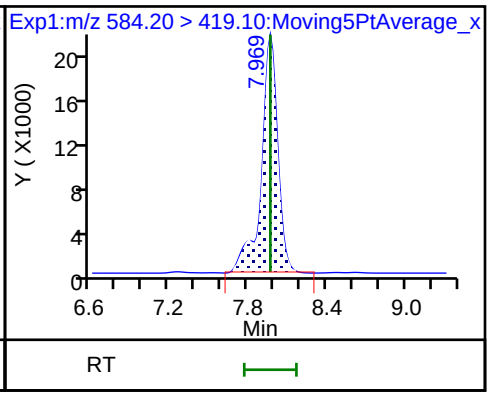
D 40 13C6 PFDA



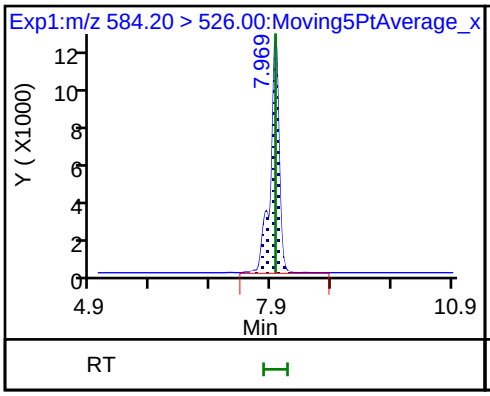
D 46 d5-NEtFOSAA



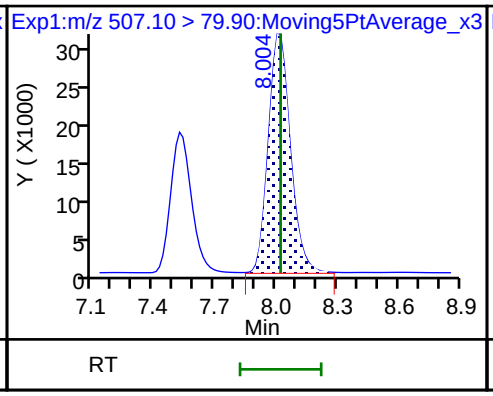
45 NEtFOSAA



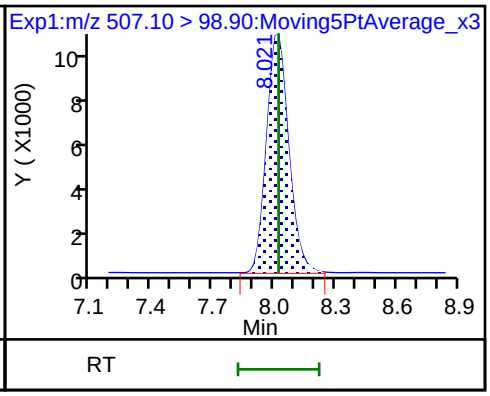
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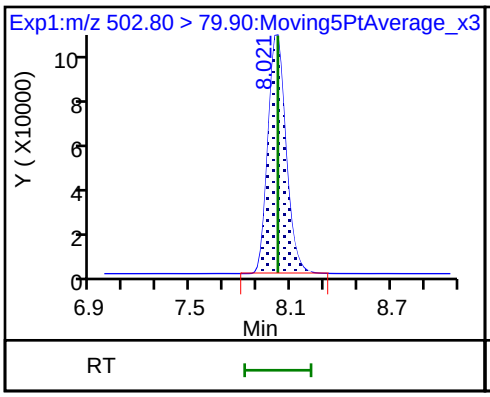
D 49 13C8 PFOS



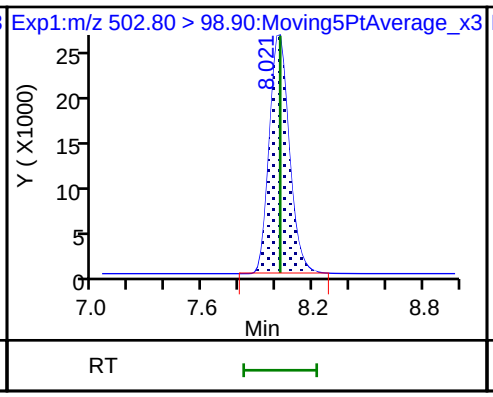
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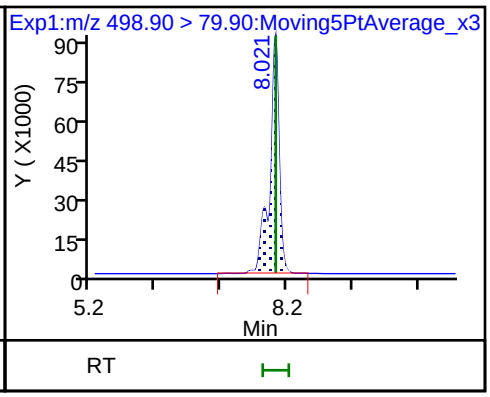
* 47 13C4 PFOS



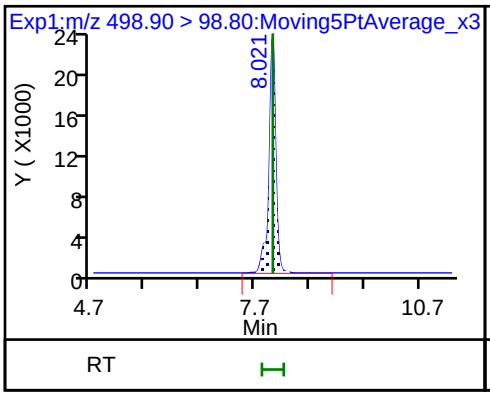
* 47 13C4 PFOS



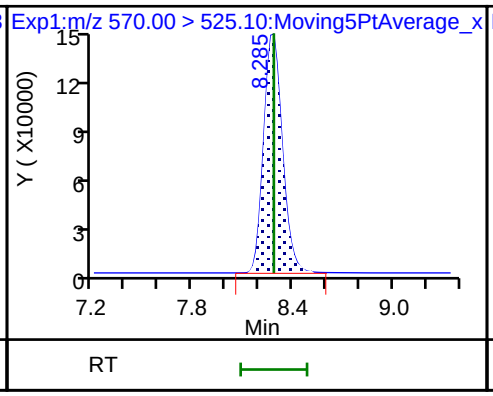
48 PFOS



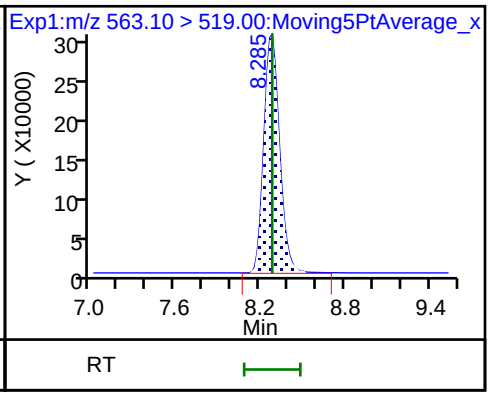
48 PFOS



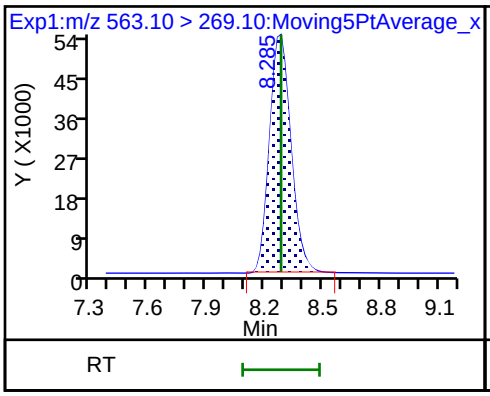
D 53 13C7 PFUnA



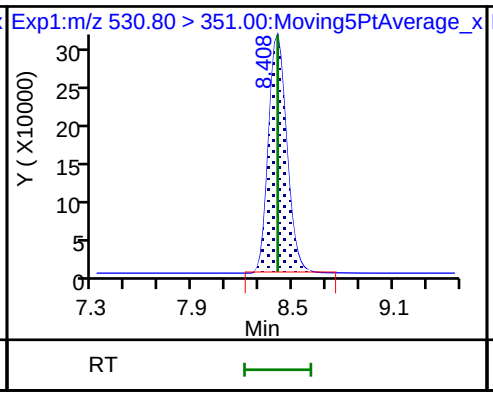
52 PFUnA



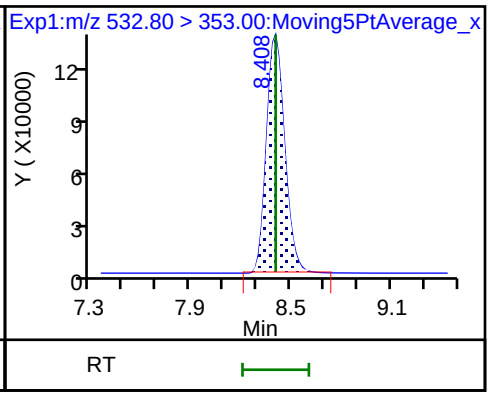
52 PFUnA



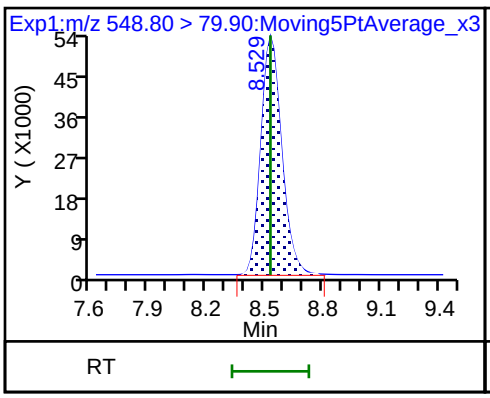
54 9ClFOS



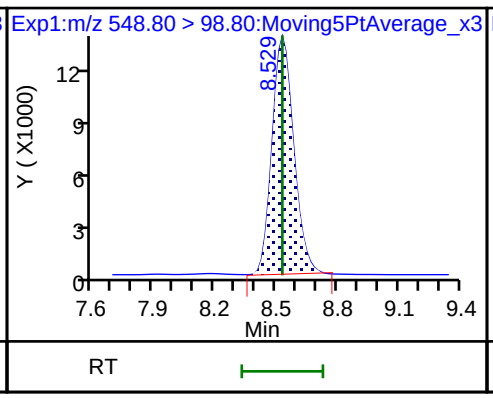
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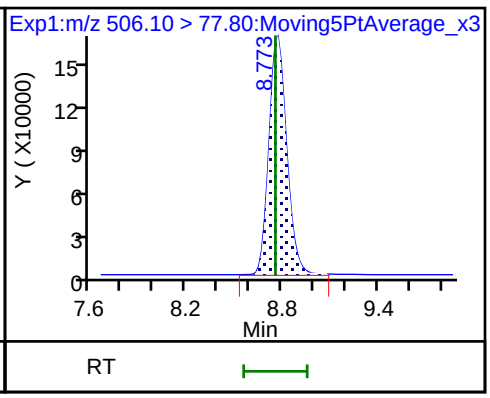
55 PFNS



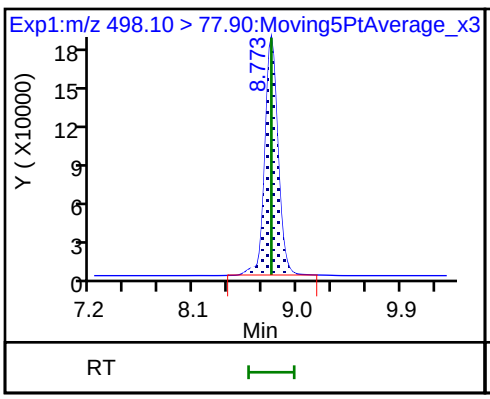
55 PFNS



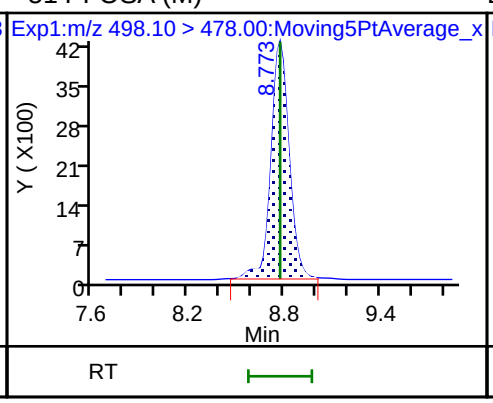
D 50 13C8 FOSA



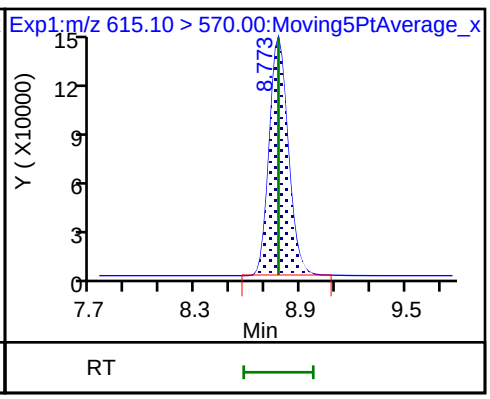
51 PFOSA



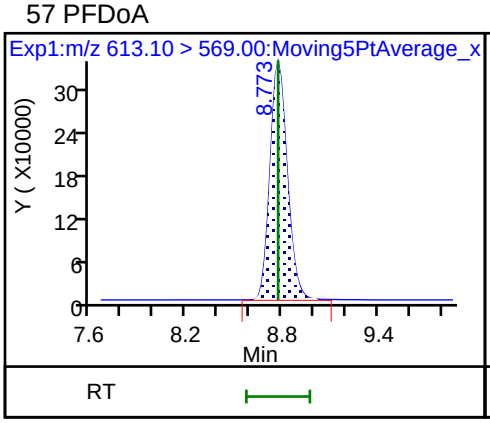
51 PFOSA (M)



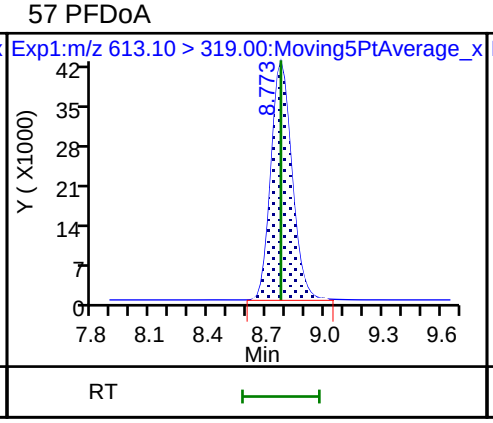
D 56 13C2 PFDoA



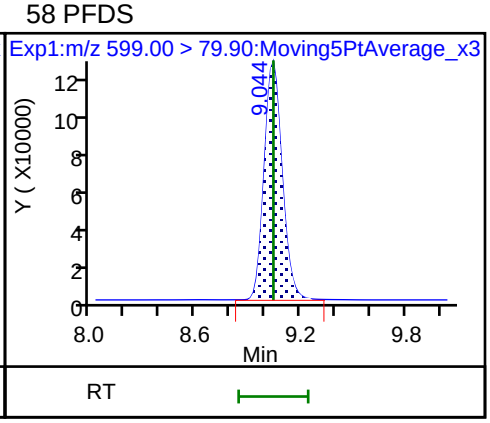
57 PFDoA



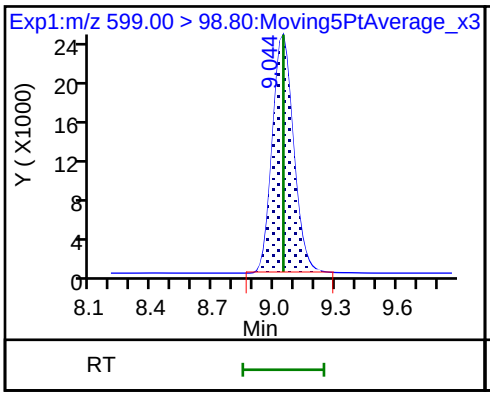
57 PFDoA



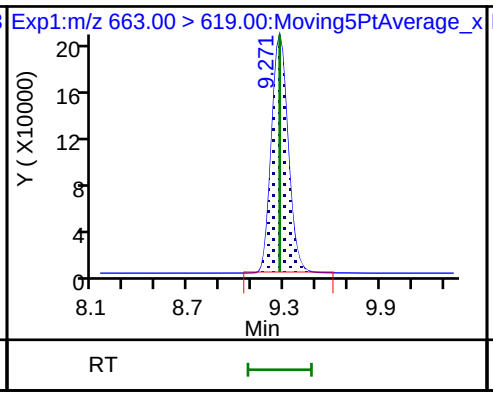
58 PFDS



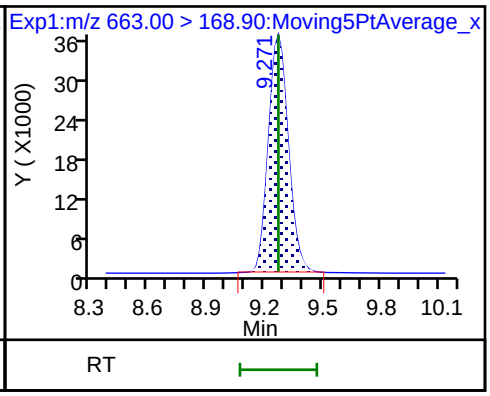
58 PFDS



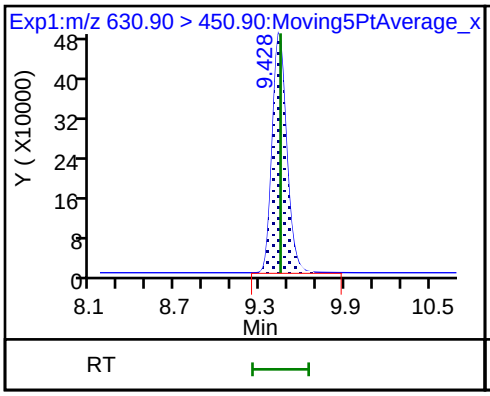
63 PFTrDA



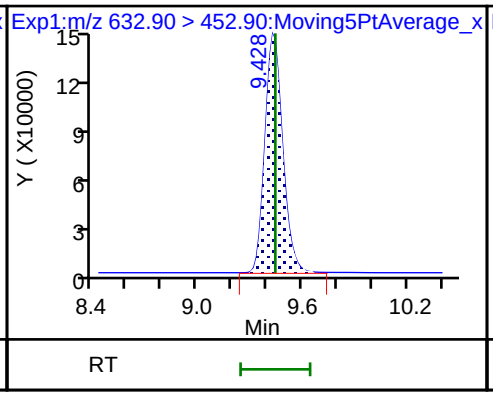
63 PFTrDA



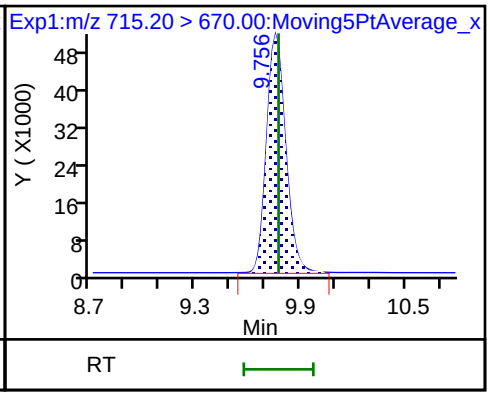
66 11ClFOS



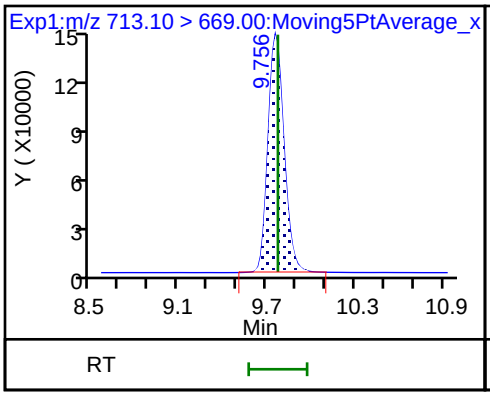
66 11ClFOS



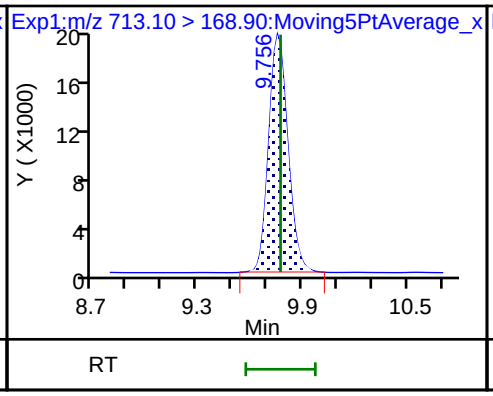
D 69 13C2 PFTeDA



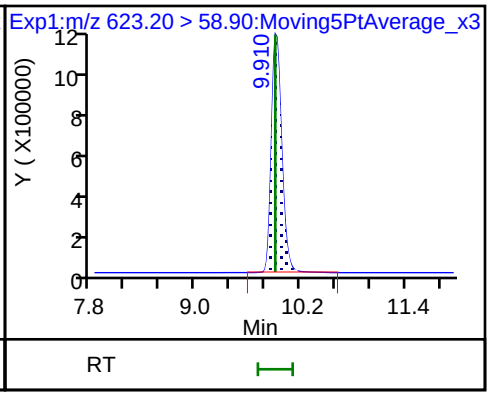
70 PFTeDA



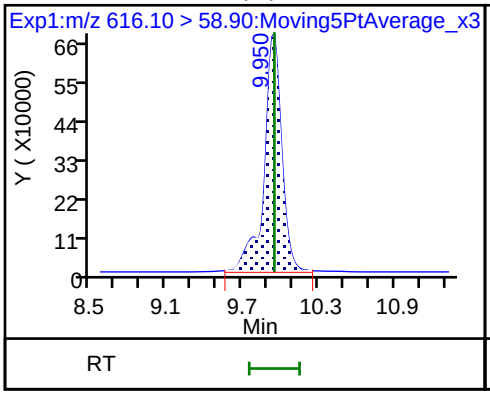
70 PFTeDA



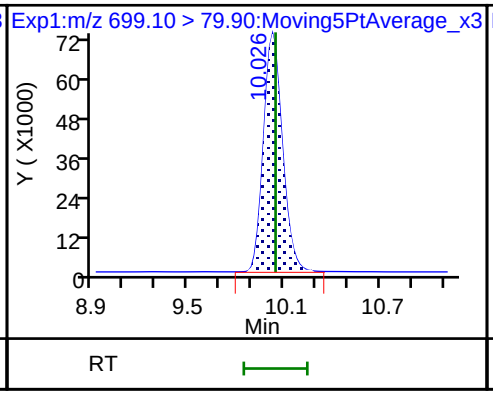
D 59 d7-N-Me-FOSE



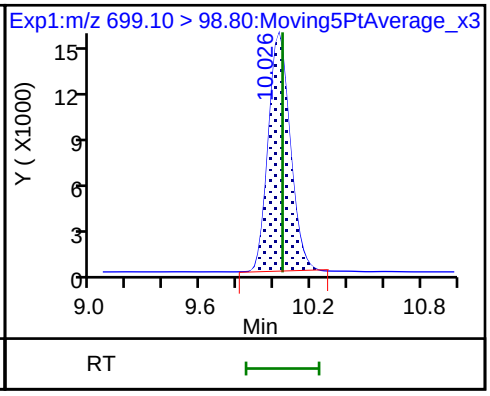
60 N-MeFOSE-M (M)



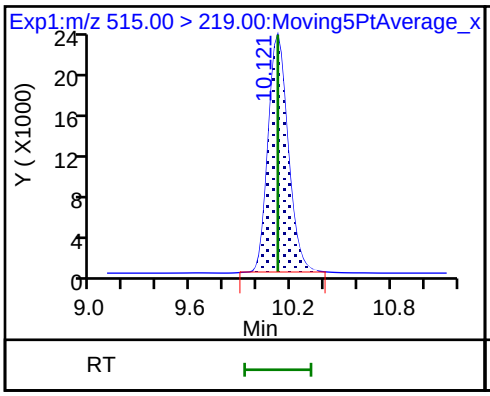
71 PFDoS



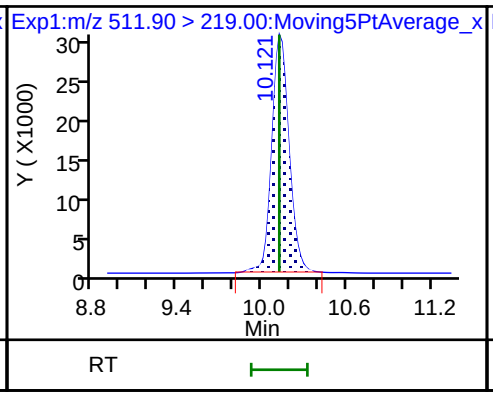
71 PFDoS



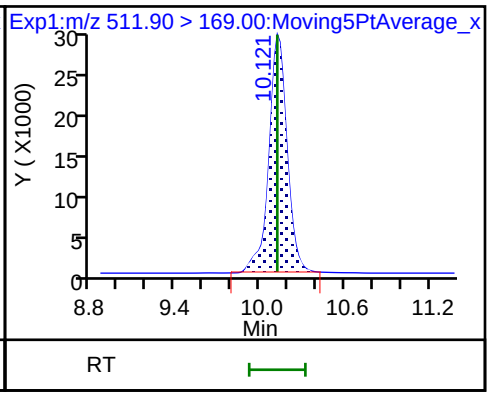
D 62 d3-NMePFOSA



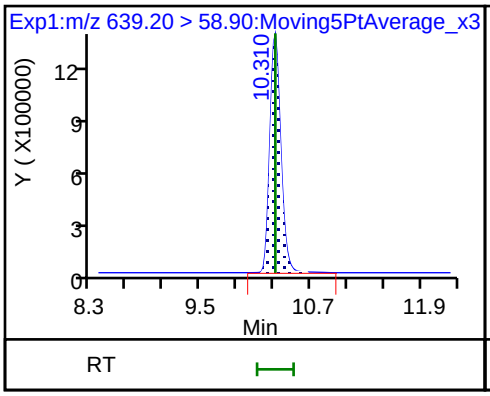
61 NMeFOSA



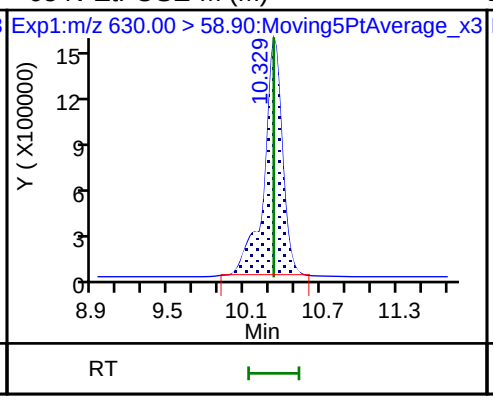
61 NMeFOSA



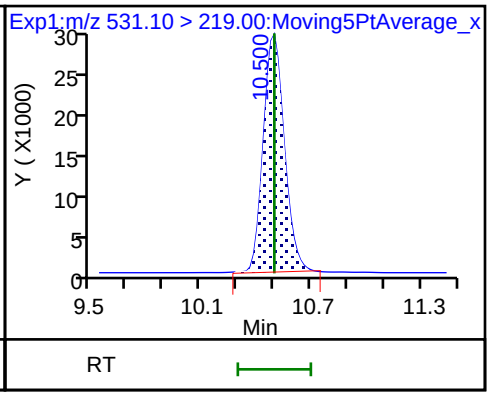
D 64 d9-N-EtFOSE



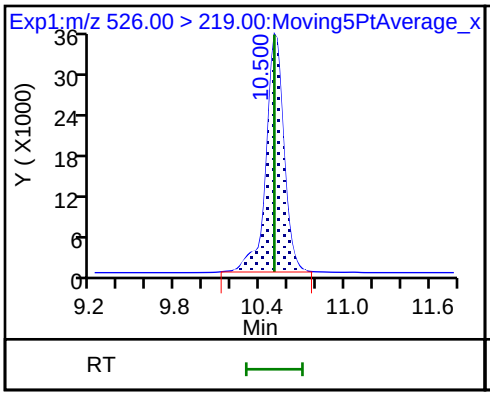
65 N-EtFOSE-M (M)



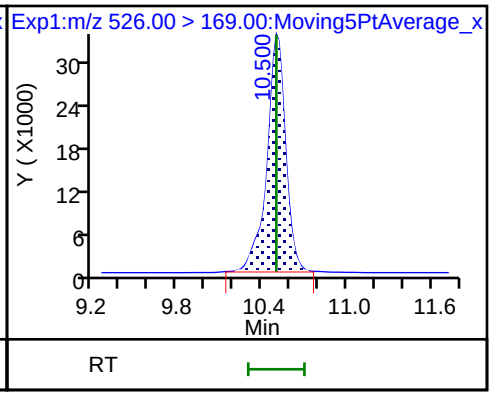
D 67 d5-NEtPFOSA



68 N-EtFOSA-M



68 N-EtFOSA-M



Manual Integration/User Assign Peak Report

Eurofins Denver

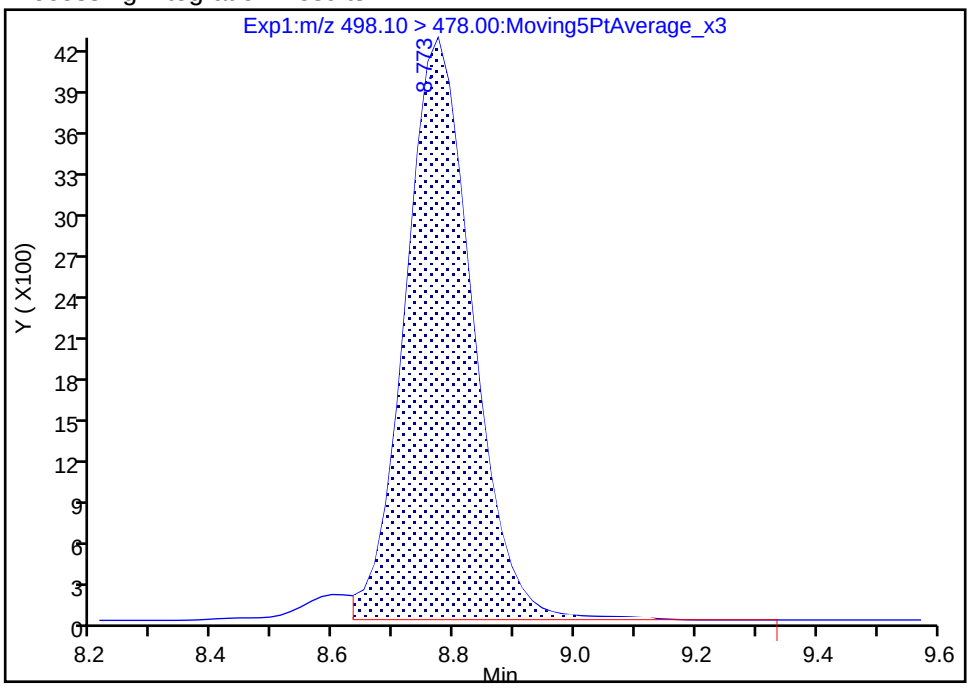
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Injection Date: 28-Nov-2023 14:47:22 Instrument ID: LC_LCMS11
Lims ID: LCS 280-635120/3-A
Client ID:
Operator ID: B5QN ALS Bottle#: 8 Worklist Smp#: 10
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

51 PFOSA, CAS: 754-91-6

Signal: 2

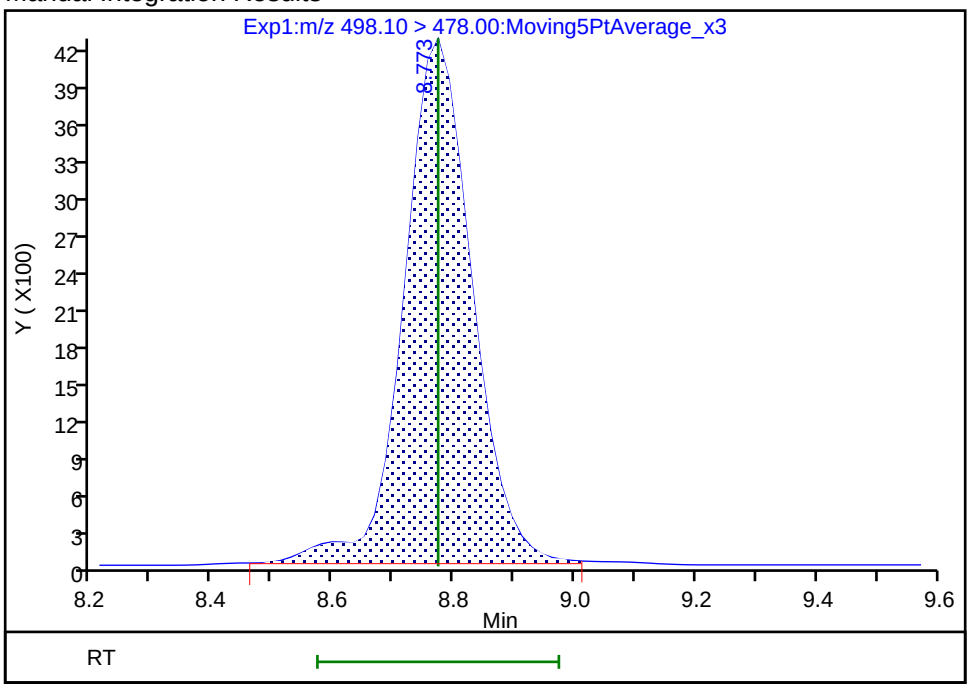
Processing Integration Results

RT: 8.77
Area: 32792
Amount: 2.817219
Amount Units: ng/ml



Manual Integration Results

RT: 8.77
Area: 33281
Amount: 2.817219
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:45:35 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

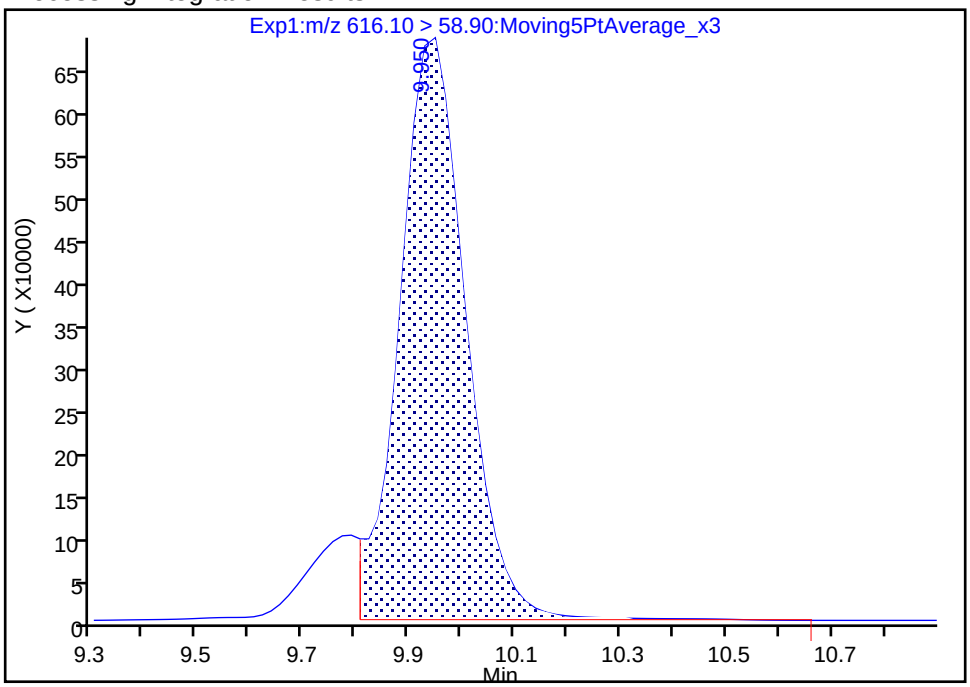
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Injection Date: 28-Nov-2023 14:47:22 Instrument ID: LC_LCMS11
Lims ID: LCS 280-635120/3-A
Client ID:
Operator ID: B5QN ALS Bottle#: 8 Worklist Smp#: 10
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

60 N-MeFOSE-M, CAS: 24448-09-7

Signal: 1

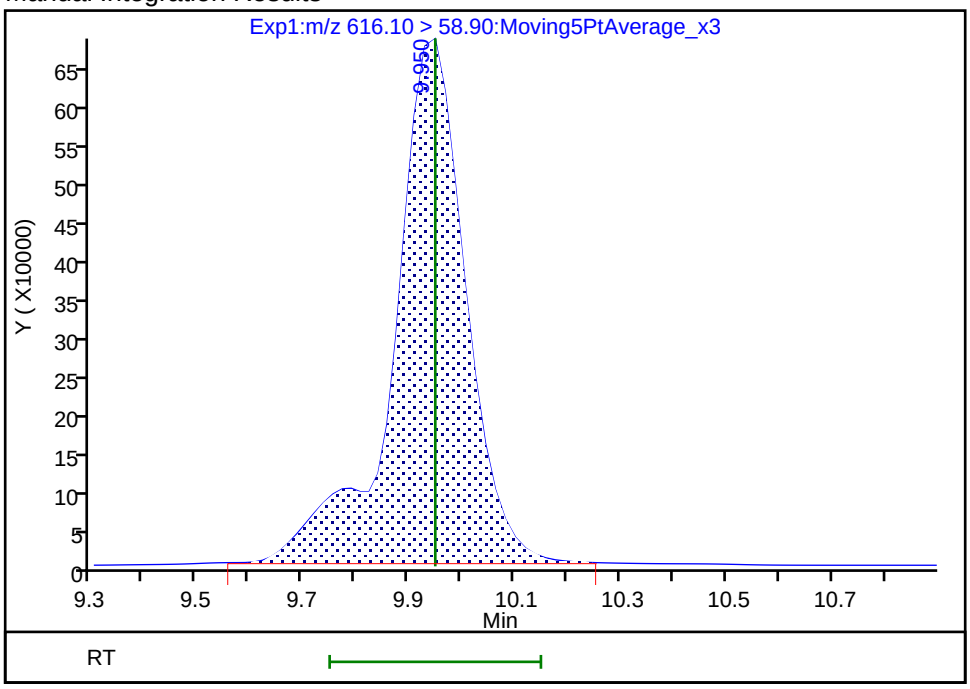
Processing Integration Results

RT: 9.95
Area: 5986541
Amount: 14.481590
Amount Units: ng/ml



Manual Integration Results

RT: 9.95
Area: 6546593
Amount: 15.836370
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:45:47 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

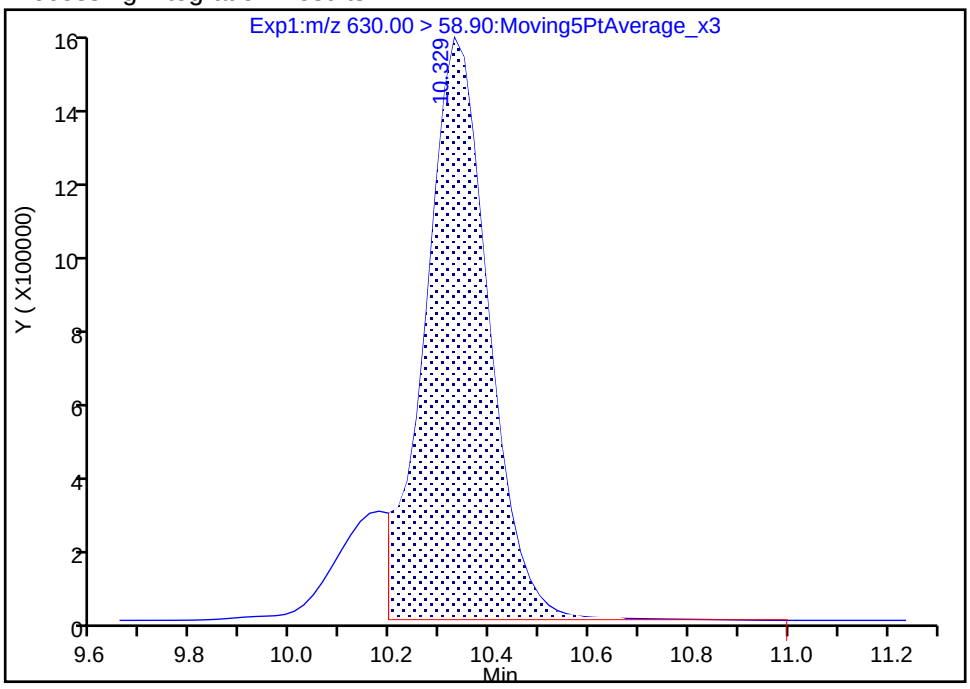
Data File:	\\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.014.d				
Injection Date:	28-Nov-2023 14:47:22	Instrument ID:	LC_LCMS11		
Lims ID:	LCS 280-635120/3-A				
Client ID:					
Operator ID:	B5QN	ALS Bottle#:	8	Worklist Smp#:	10
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

65 N-EtFOSE-M, CAS: 1691-99-2

Signal: 1

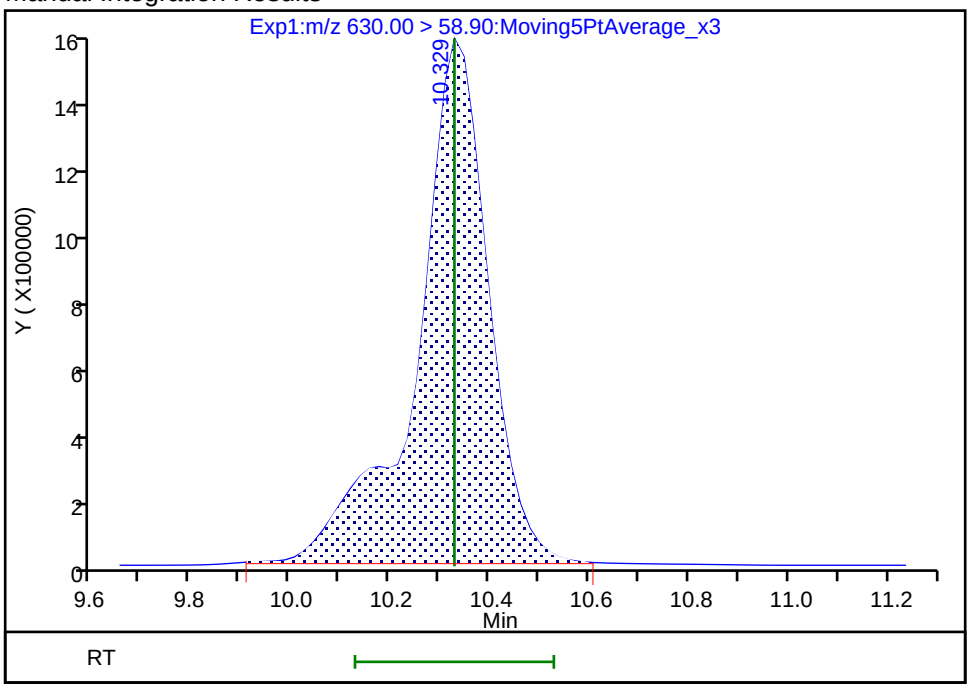
Processing Integration Results

RT: 10.33
Area: 13745934
Amount: 28.667668
Amount Units: ng/ml



Manual Integration Results

RT: 10.33
Area: 15462200
Amount: 32.247006
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:45:58 -07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Isomers

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: | Lab Sample ID: LLCS 280-635120/2-A

Matrix: Water | Lab File ID: 2023.11.28a.013.d

Analysis Method: Draft 1633 | Date Collected:

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 500(mL) | Date Analyzed: 11/28/2023 14:27

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	2.919	J	8.00	2.00
2706-90-3	Perfluoropentanoic acid (PFPeA)	2.973	J	4.00	1.00
307-24-4	Perfluorohexanoic acid (PFHxA)	2.788		2.00	0.50
375-85-9	Perfluoroheptanoic acid (PFHpA)	3.341		2.00	0.52
335-67-1	Perfluorooctanoic acid (PFOA)	2.811		2.00	0.64
375-95-1	Perfluorononanoic acid (PFNA)	2.753		2.00	0.50
335-76-2	Perfluorodecanoic acid (PFDA)	2.982		2.00	0.50
2058-94-8	Perfluoroundecanoic acid (PFUnA)	2.912		2.00	0.50
307-55-1	Perfluorododecanoic acid (PFDoA)	2.883		2.00	0.50
72629-94-8	Perfluorotridecanoic acid (PFTriA)	2.848		2.00	0.50
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	2.837		2.00	0.50
375-73-5	Perfluorobutanesulfonic acid (PFBS)	2.337		2.00	0.30
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	2.738		2.00	0.50
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.757		2.00	0.57
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	2.776		2.00	0.40
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.808		2.00	0.50
68259-12-1	Perfluorononanesulfonic acid (PFNS)	2.787		2.00	0.40
335-77-3	Perfluorodecanesulfonic acid (PFDS)	3.003		2.00	0.50
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	2.582		2.00	0.90
757124-72-4	4:2 FTS	5.776	J	8.00	1.70
27619-97-2	6:2 FTS	11.79		8.00	2.50
39108-34-4	8:2 FTS	10.44		8.00	2.60
754-91-6	Perfluorooctanesulfonamide (PFOSA)	2.672		2.00	0.50
31506-32-8	NMeFOSA	2.732		2.00	0.50
4151-50-2	NEtFOSA	2.899		2.00	0.50
2355-31-9	NMeFOSAA	3.041	J	4.00	1.20
2991-50-6	NEtFOSAA	2.933		2.00	0.70
24448-09-7	NMeFOSE	14.70	J	20.0	5.00
1691-99-2	NEtFOSE	28.48		20.0	5.00
13252-13-6	HFPO-DA (GenX)	2.882	J	8.00	2.00

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: | Lab Sample ID: LLCS 280-635120/2-A

Matrix: Water | Lab File ID: 2023.11.28a.013.d

Analysis Method: Draft 1633 | Date Collected:

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 500(mL) | Date Analyzed: 11/28/2023 14:27

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.803	J	8.00	1.50
863090-89-5	PFMBA	6.117		4.00	1.00
151772-58-6	NFDHA	2.478	J	4.00	1.00
377-73-1	PFMPA	5.942		4.00	0.50
756426-58-1	9Cl-PF3ONS	7.027	J	8.00	1.00
763051-92-9	11Cl-PF3OUdS	6.466	J	8.00	2.00
113507-82-7	PFEESA	4.847		4.00	0.50
356-02-5	3:3 FTCA	13.14		10.0	1.50
914637-49-3	5:3 FTCA	25.01	J	50.0	10.0
812-70-4	7:3 FTCA	23.99	J	50.0	10.0

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: | Lab Sample ID: LLCS 280-635120/2-A

Matrix: Water | Lab File ID: 2023.11.28a.013.d

Analysis Method: Draft 1633 | Date Collected:

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 500(mL) | Date Analyzed: 11/28/2023 14:27

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	99		10-130
STL01893	13C5 PFPeA	92		35-150
STL02577	13C5 PFHxA	100		55-150
STL01892	13C4 PFHpA	92		55-150
STL01052	13C8 PFOA	103		60-140
STL02578	13C9 PFNA	97		55-140
STL02579	13C6 PFDA	97		50-140
STL02580	13C7 PFUnA	96		30-140
STL00998	13C2 PFDoA	97		10-150
STL02116	13C2 PFTeDA	71		10-130
STL02337	13C3 PFBS	104		55-150
STL02581	13C3 PFHxS	103		55-150
STL01054	13C8 PFOS	94		45-140
STL01056	13C8 FOSA	105		30-130
STL02118	d3-NMeFOSAA	110		45-200
STL02117	d5-NEtFOSAA	90		10-200
STL02395	M2-4:2 FTS	102		60-200
STL02279	M2-6:2 FTS	88		60-200
STL02280	M2-8:2 FTS	95		50-200
STL02255	13C3 HFPO-DA	99		25-160
STL02277	d7-N-MeFOSE-M	108		10-150
STL02278	d9-N-EtFOSE-M	112		10-150
STL02704	d5-NEtPFOSA	82		10-130
STL02705	d3-NMePFOSA	77		15-130

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.013.d
Lims ID: LLCS 280-635120/2-A
Client ID:
Sample Type: LLCS
Inject. Date: 28-Nov-2023 14:27:54 ALS Bottle#: 7 Worklist Smp#: 9
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: LLCS 280-635120/2-A
Misc. Info.: Plate: 1 Rack: 1
Operator ID: B5QN Instrument ID: LC_LCMS11

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 29-Nov-2023 13:44:22 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1603

First Level Reviewer: B5QN Date: 29-Nov-2023 13:44:29
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.031	3.046	-0.015	1.000	5384513	9.86		98.6	36868	
* 1 13C3PFBA										
216.00 > 172.00	3.031	3.046	-0.015		2687258	5.00			9422	
2 PFBA										
212.80 > 168.90	3.046	3.046	0.0	1.005	140505	0.2919		91.2	131	
4 PFMPA										
229.00 > 84.90	3.708	3.728	-0.020	0.831	240303	0.5942		92.9	1445	
5 3:3 FTCA										
241.00 > 177.00	3.912	3.912	0.0	0.877	67994	1.31	Target=1.58	82.1	2468	
241.00 > 117.00	3.912	3.912	0.0	0.877	42361		1.61(0.79-2.37)		1030	
D 7 13C5 PFPeA										
268.30 > 223.00	4.463	4.463	0.0	0.834	1582742	4.60		92.0	17377	
6 PFPA										M
263.00 > 219.00	4.463	4.478	-0.015	1.000	188783	0.2973	Target=212.56	92.9	394	
263.00 > 68.90	4.463	4.478	-0.015	1.000	693		272.41(106.28-318.84)		23.0	M
8 PFMBA										
279.00 > 85.10	4.778	4.778	0.0	1.071	489133	0.6117		95.6	6534	
10 4:2FTS										
327.10 > 307.00	5.097	5.097	0.0	1.000	66767	0.5776	Target=1.59	72.4	2120	
327.10 > 80.90	5.097	5.097	0.0	1.000	51998		1.28(0.79-2.38)		604	
D 9 13C2-4:2FTS										
329.10 > 80.90	5.097	5.097	0.0	0.742	229818	4.77	Target=4.54	102	4166	
329.10 > 309.00	5.097	5.097	0.0	0.742	45805		5.02(2.27-6.81)	102	1953	
11 NFDHA										
295.00 > 201.00	5.280	5.280	0.0	0.986	59244	0.2478	Target=1.95	77.4	1919	
295.00 > 84.90	5.280	5.280	0.0	0.986	32519		1.82(0.97-2.92)		536	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 16 13C3 PFBS										
302.10 > 79.90	5.353	5.354	-0.001	0.779	662732	2.42	Target=4.56	104	21635	
302.10 > 98.90	5.353	5.354	-0.001	0.779	149313		4.44(2.28-6.83)	104	6472	
15 PFBS										
298.70 > 79.90	5.353	5.354	-0.001	1.000	59300	0.2337	Target=2.16	82.2	1929	
298.70 > 98.80	5.353	5.354	-0.001	1.000	24057		2.46(1.08-3.24)		630	
* 14 13C2 PFHxA										
315.10 > 270.00	5.353	5.371	-0.018		1725858	2.50	Target=79.67		20765	
315.10 > 119.40	5.353	5.371	-0.018		23633		73.03(39.83-119.50)		776	
D 12 13C5 PFHxA										
318.00 > 273.00	5.353	5.371	-0.018	1.000	1927850	2.49	Target=53.27	99.7	36188	
318.00 > 120.30	5.353	5.371	-0.018	1.000	37633		51.23(26.63-79.90)	99.7	993	
13 PFHxA										
313.00 > 269.00	5.353	5.371	-0.018	1.000	236789	0.2788	Target=18.64	87.1	1154	
313.00 > 118.90	5.353	5.371	-0.018	1.000	10906		21.71(9.32-27.96)		293	
18 5:3 FTCA										
341.00 > 237.10	5.624	5.644	-0.020	1.051	349696	2.50	Target=1.16	78.2	5449	
341.00 > 217.00	5.624	5.644	-0.020	1.051	281712		1.24(0.58-1.74)		7031	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.682	5.682	0.0	1.061	1877830	9.92	Target=1.53	99.2	26301	
286.90 > 184.90	5.682	5.682	0.0	1.061	1165602		1.61(0.76-2.29)	99.2	20906	
19 HFPO-DA										
284.90 > 168.90	5.682	5.682	0.0	1.000	58306	0.2882	Target=1.75	90.1	1866	
284.90 > 184.90	5.682	5.682	0.0	1.000	27929		2.09(0.87-2.62)		455	
21 PFEESA										
314.80 > 134.90	5.789	5.789	0.0	1.081	455156	0.4847	Target=13.97	84.9	14836	
314.80 > 82.90	5.789	5.789	0.0	1.081	32833		13.86(6.99-20.96)		1066	
D 22 13C4 PFHpA										
367.10 > 322.00	6.121	6.122	-0.001	1.143	1867278	2.31		92.2	33016	
17 PFHpA										
363.10 > 319.00	6.121	6.122	-0.001	1.000	245529	0.3341	Target=3.96	104	942	
363.10 > 169.00	6.121	6.122	-0.001	1.000	51342		4.78(1.98-5.95)		1048	
23 PFPeS										
349.10 > 79.90	6.223	6.223	0.0	0.906	68805	0.2738	Target=2.70	91.2	1625	
349.10 > 98.90	6.223	6.223	0.0	0.906	25724		2.67(1.35-4.04)		911	
24 ADONA										
376.90 > 250.90	6.355	6.355	0.0	1.118	475795	0.2803	Target=3.02	92.8	13408	
376.90 > 84.80	6.355	6.355	0.0	1.118	137896		3.45(1.51-4.53)		4893	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.470	6.471	-0.001	0.942	264325	4.20	Target=4.15	88.4	9445	
429.10 > 409.00	6.470	6.471	-0.001	0.942	56146		4.71(2.07-6.22)	88.4	2705	
25 6:2FTS										
427.10 > 407.00	6.470	6.471	-0.001	1.000	125028	1.18	Target=1.93	97.2	3566	
427.10 > 80.90	6.470	6.471	-0.001	1.000	64760		1.93(0.96-2.89)		1859	
D 27 13C8 PFOA										
421.10 > 376.00	6.707	6.707	0.0	1.000	1865046	2.57		103	51790	
* 29 13C4 PFOA										
417.10 > 172.00	6.707	6.707	0.0		277178	2.50			9683	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 PFOA										
413.00 > 369.00	6.707	6.724	-0.017	1.000	167396	0.2811	Target=2.30	87.8	782	
413.00 > 169.00	6.707	6.724	-0.017	1.000	72082		2.32(1.15-3.45)		2413	
30 7:3 FTCA										
441.00 > 316.90	6.871	6.871	0.0	1.284	154969	2.40	Target=1.43	75.0	5352	
441.00 > 336.90	6.871	6.871	0.0	1.284	110556		1.40(0.72-2.15)		3811	
32 PFHxS										
398.70 > 79.90	6.871	6.871	0.0	1.000	32832	0.2757	Target=3.86	94.5	1266	
398.70 > 98.90	6.871	6.871	0.0	1.000	7580		4.33(1.93-5.79)		308	
* 31 18O2 PFHxS										
403.00 > 83.90	6.871	6.871	0.0		506650	2.37			23440	
D 33 13C3 PFHxS										
402.10 > 79.90	6.871	6.888	-0.017	1.000	529319	2.44	Target=4.11	103	18473	
402.10 > 98.80	6.871	6.888	-0.017	1.000	124145		4.26(2.05-6.16)	103	5786	
* 35 13C5 PFNA										
468.00 > 423.00	7.259	7.261	-0.002		1230519	1.25			19174	
D 34 13C9 PFNA										
472.10 > 427.00	7.259	7.261	-0.002	1.000	1123848	1.21		96.6	15613	
36 PFNA										
463.00 > 419.00	7.259	7.261	-0.002	1.000	248548	0.2753	Target=6.02	86.0	1562	
463.00 > 219.00	7.259	7.261	-0.002	1.000	43521		5.71(3.01-9.04)		1348	
37 PFHpS										
449.00 > 79.90	7.473	7.473	0.0	0.934	49858	0.2776	Target=4.91	91.1	1738	
449.00 > 98.80	7.473	7.473	0.0	0.934	11482		4.34(2.46-7.37)		411	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.522	7.522	0.0	1.095	347003	4.55	Target=5.49	95.0	12300	
529.10 > 509.00	7.522	7.522	0.0	1.095	54645		6.35(2.74-8.23)	95.0	2563	
39 8:2FTS										
527.10 > 507.00	7.522	7.522	0.0	1.000	109941	1.04	Target=1.56	85.2	3874	
527.10 > 80.80	7.522	7.522	0.0	1.000	68321		1.61(0.78-2.33)		2421	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.743	7.761	-0.018	0.967	551728	5.52		110	12293	
42 NMeFOSAA										
570.10 > 419.00	7.743	7.761	-0.018	1.000	33597	0.3041	Target=1.15	95.0	1351	
570.10 > 483.00	7.743	7.761	-0.018	1.000	29378		1.14(0.58-1.73)		958	
D 40 13C6 PFDA										
519.10 > 474.10	7.779	7.779	0.0	1.000	1073108	1.22		97.5	20560	
43 PFDA										
512.90 > 469.00	7.779	7.779	0.0	1.000	210363	0.2982	Target=3.33	93.2	2581	
512.90 > 219.00	7.779	7.779	0.0	1.000	55190		3.81(1.67-5.00)		1852	
* 44 13C2 PFDA										
515.10 > 470.10	7.779	7.779	0.0		1106754	1.25			21207	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.951	7.969	-0.018	0.993	517715	4.48		89.5	8670	
45 NEtFOSAA										
584.20 > 419.10	7.969	7.969	0.0	1.002	22090	0.2933	Target=1.55	91.7	830	
584.20 > 526.00	7.969	7.969	0.0	1.002	14534		1.52(0.77-2.32)		458	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 49 13C8 PFOS										
507.10 > 79.90	8.004	8.021	-0.017	1.000	240164	2.25	Target=2.95	94.1	1011	
507.10 > 98.90	8.004	8.021	-0.017	1.000	86079		2.79(1.47-4.42)	94.1	3888	
* 47 13C4 PFOS										
502.80 > 79.90	8.004	8.021	-0.017		711799	2.40	Target=3.78		11984	
502.80 > 98.90	8.004	8.021	-0.017		199682		3.56(1.89-5.67)		8991	
48 PFOS										
498.90 > 79.90	8.004	8.021	-0.017	1.000	91923	0.2808	Target=4.86	94.3	1204	
498.90 > 98.80	8.004	8.021	-0.017	1.000	19895		4.62(2.43-7.28)		826	
D 53 13C7 PFUnA										
570.00 > 525.10	8.266	8.285	-0.018	1.063	1182988	1.20		96.4	19257	
52 PFUnA										
563.10 > 519.00	8.266	8.285	-0.018	1.000	243904	0.2912	Target=5.72	91.0	3494	
563.10 > 269.10	8.266	8.285	-0.018	1.000	38782		6.29(2.86-8.59)		1703	
54 9ClFOS										
530.80 > 351.00	8.408	8.408	0.0	1.480	238649	0.7027	Target=2.23	88.3	5202	
532.80 > 353.00	8.390	8.408	-0.018	1.477	107142		2.23(1.11-3.34)		4686	
55 PFNS										
548.80 > 79.90	8.529	8.529	0.0	1.066	37298	0.2787	Target=4.00	90.5	1264	
548.80 > 98.80	8.529	8.529	0.0	1.066	9156		4.07(2.00-6.00)		309	
D 50 13C8 FOSA										
506.10 > 77.80	8.756	8.756	0.0	1.094	1354800	2.62		105	17437	
51 PFOSA										M
498.10 > 77.90	8.773	8.773	0.0	1.002	144134	0.2672	Target=41.88	83.5	2309	M
498.10 > 478.00	8.773	8.773	0.0	1.002	3775		38.18(20.94-62.83)		154	M
D 56 13C2 PFDoA										
615.10 > 570.00	8.756	8.773	-0.017	1.126	1179042	1.22		97.3	22061	
57 PFDoA										
613.10 > 569.00	8.773	8.773	0.0	1.002	273272	0.2883	Target=7.45	90.1	3013	
613.10 > 319.00	8.773	8.773	0.0	1.002	31766		8.60(3.73-11.18)		1410	
58 PFDS										
599.00 > 79.90	9.028	9.044	-0.016	1.128	92858	0.3003	Target=4.54	97.4	1437	
599.00 > 98.80	9.028	9.044	-0.016	1.128	17177		5.41(2.27-6.82)		808	
63 PFTrDA										
663.00 > 619.00	9.254	9.271	-0.017	0.949	155775	0.2848	Target=5.19	89.0	2152	
663.00 > 168.90	9.254	9.271	-0.017	0.949	28201		5.52(2.59-7.78)		780	
66 11ClFOS										
630.90 > 450.90	9.428	9.444	-0.016	1.659	349701	0.6466	Target=3.47	80.4	9949	
632.90 > 452.90	9.428	9.444	-0.016	1.659	108636		3.22(1.74-5.21)		3897	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.756	9.774	-0.018	1.254	407567	0.8832		70.7	7731	
70 PFTeDA										
713.10 > 669.00	9.756	9.774	-0.018	1.000	107457	0.2837	Target=6.88	88.6	1787	
713.10 > 168.90	9.756	9.774	-0.018	1.000	15522		6.92(3.44-10.32)		695	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.930	9.910	0.020	1.241	10256076	27.0		108	65862	
60 N-MeFOSE-M										M
616.10 > 58.90	9.950	9.950	0.0	1.002	659897	1.47		91.9	774	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
71 PFDoS										
699.10 > 79.90	10.026	10.045	-0.019	1.253	63868	0.2582	Target=4.14	83.2	1104	
699.10 > 98.80	10.026	10.045	-0.019	1.253	13677		4.67(2.07-6.21)		417	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.120	10.120	0.0	1.264	224024	1.91		76.5	3896	
61 NMeFOSA										M
511.90 > 219.00	10.139	10.120	0.019	1.002	23419	0.2732	Target=0.98	85.4	689	M
511.90 > 169.00	10.120	10.120	0.0	1.000	25113		0.93(0.49-1.47)		704	M
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.310	10.310	0.0	1.288	13261006	28.0		112	94768	
65 N-EtFOSE-M										M
630.00 > 58.90	10.329	10.329	0.0	1.002	1576594	2.85		89.0	2568	M
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.499	10.500	-0.001	1.312	246925	2.05		82.2	3462	
68 N-EtFOSA-M										M
526.00 > 219.00	10.518	10.500	0.018	1.002	30661	0.2899	Target=0.99	90.6	595	M
526.00 > 169.00	10.499	10.500	-0.001	1.000	30598		1.00(0.50-1.49)		564	

QC Flag Legend

Processing Flags

Review Flags

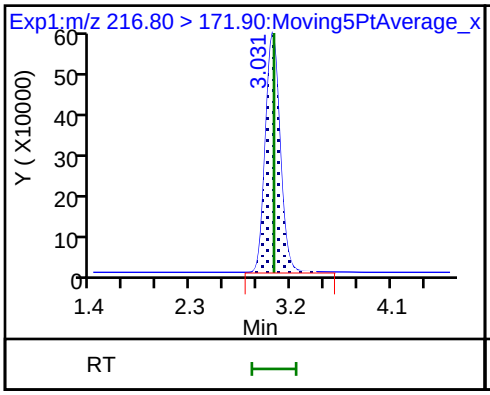
M - Manually Integrated

Report Date: 29-Nov-2023 13:44:30 Chrom Revision: 2.3 15-Nov-2023 20:54:34

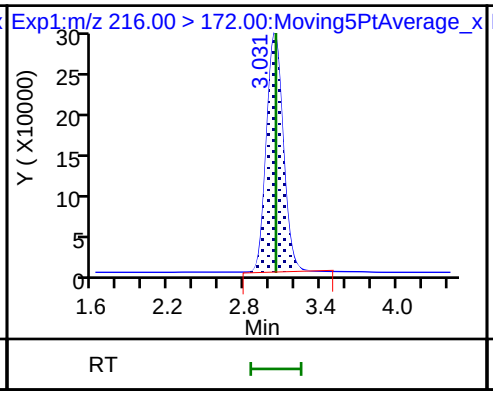
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.013.d
Injection Date: 28-Nov-2023 14:27:54 Instrument ID: LC_LCMS11
Lims ID: LLCS 280-635120/2-A
Client ID:
Operator ID: B5QN ALS Bottle#: 7 Worklist Smp#: 9
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5

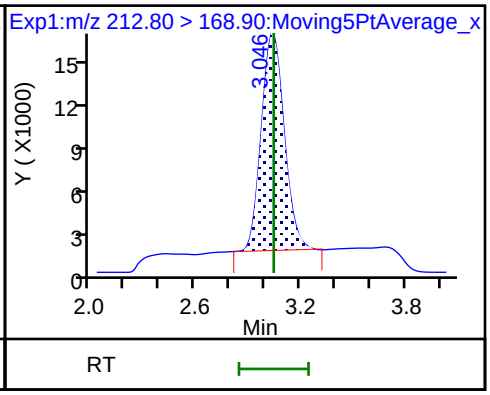
D 3 13C4-PFBA



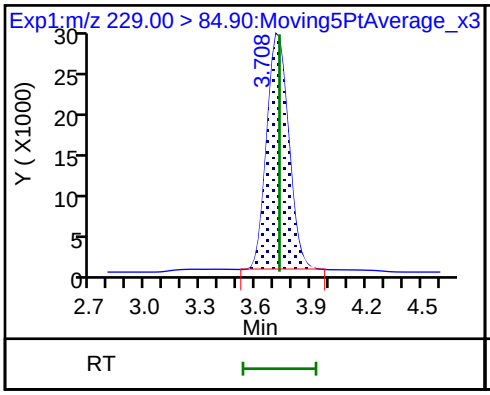
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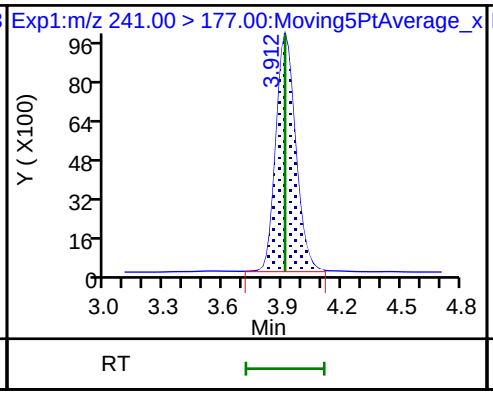
2 PFBA



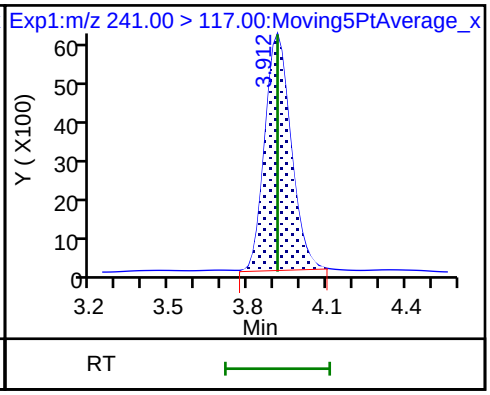
4 PFMPA



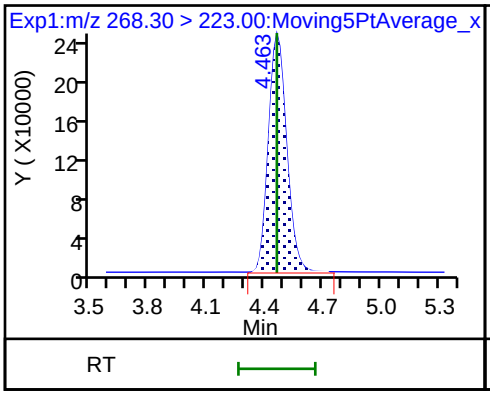
5 3:3 FTCA



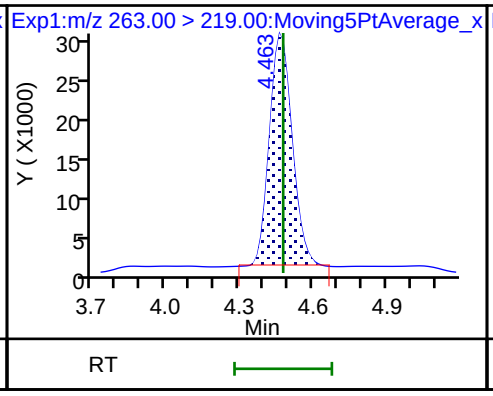
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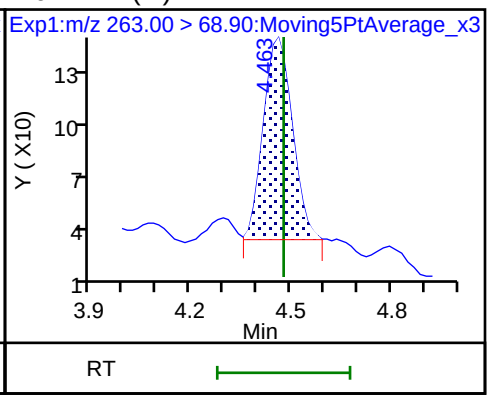
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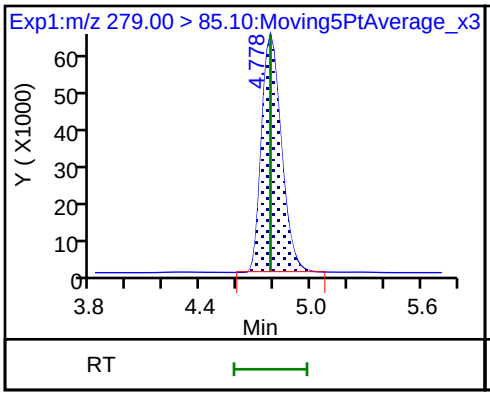
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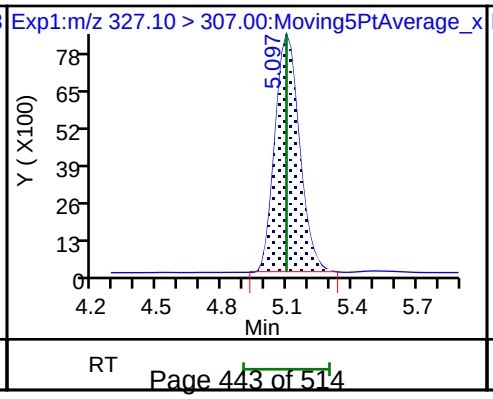
6 PFPA (M)



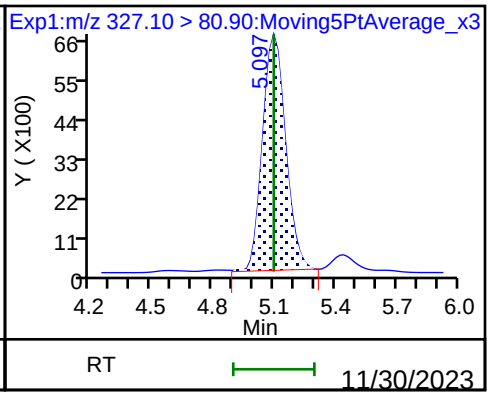
8 PFMBA



10 4:2FTS

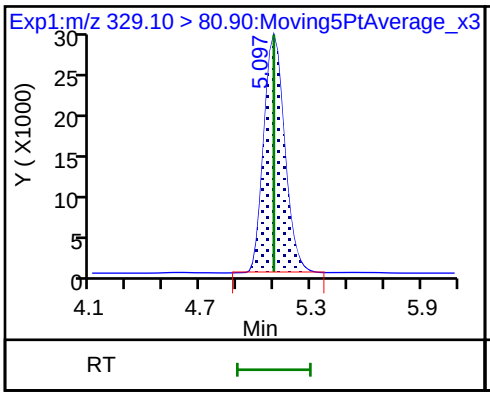


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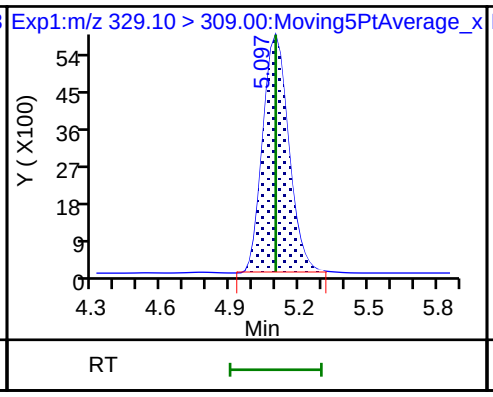


11/30/2023
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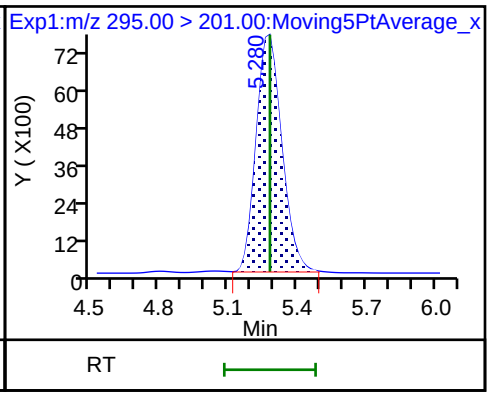
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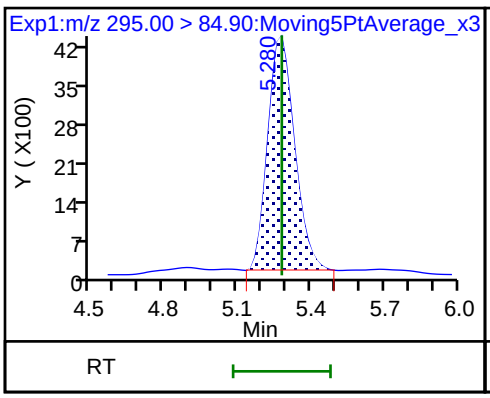
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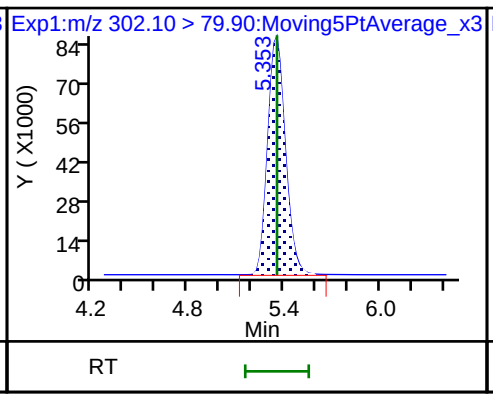
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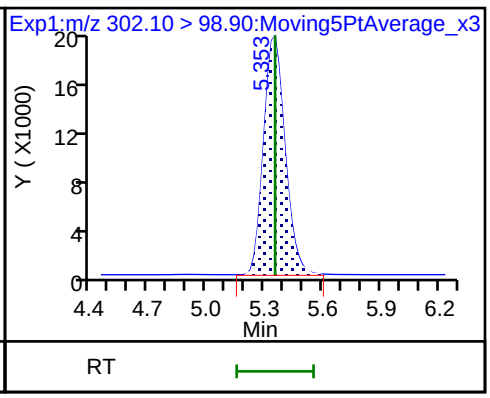
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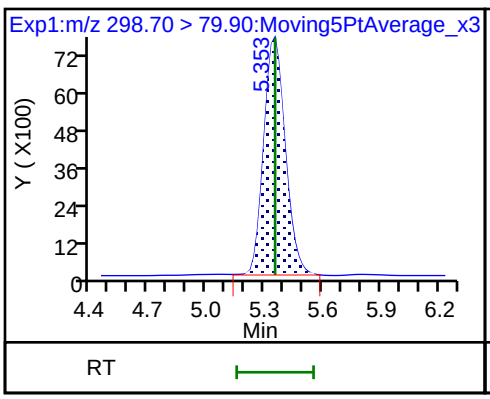
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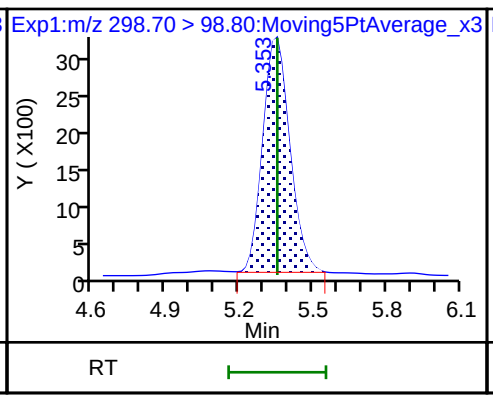
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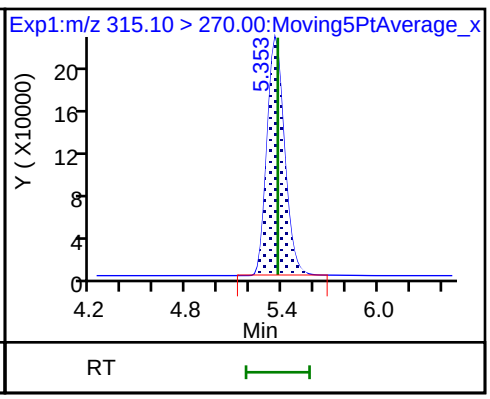
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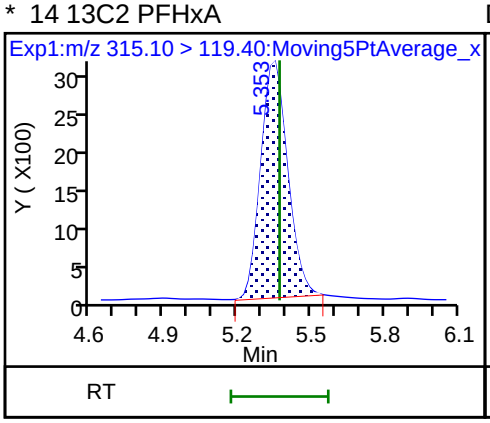
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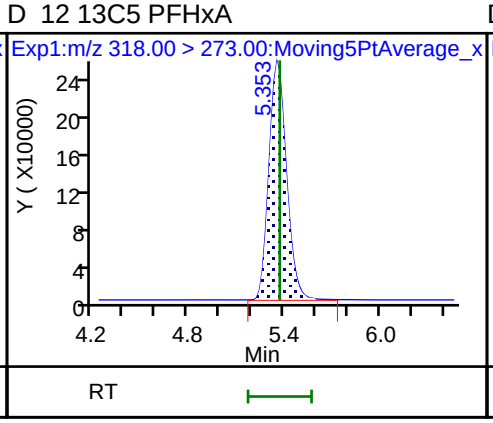
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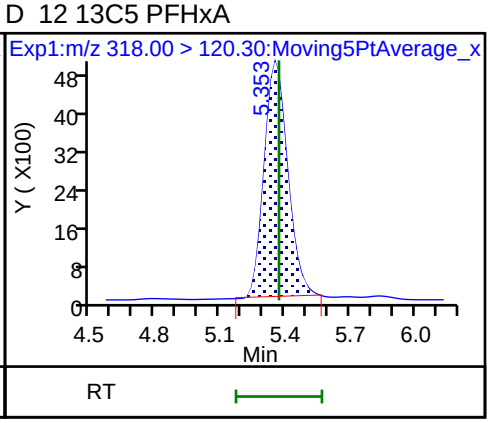
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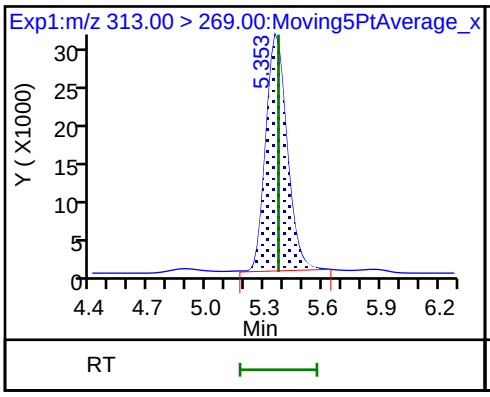
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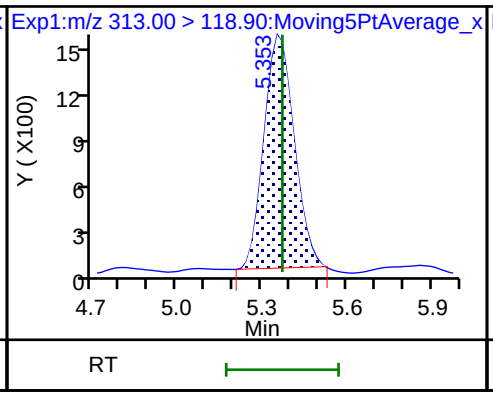
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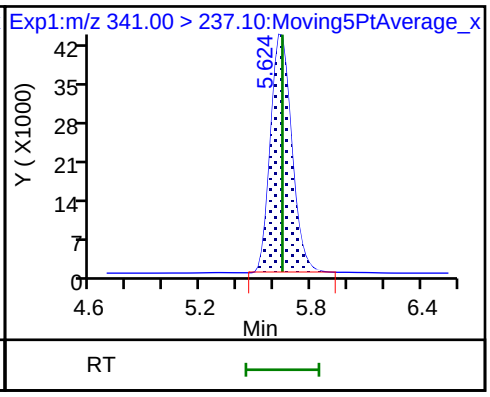
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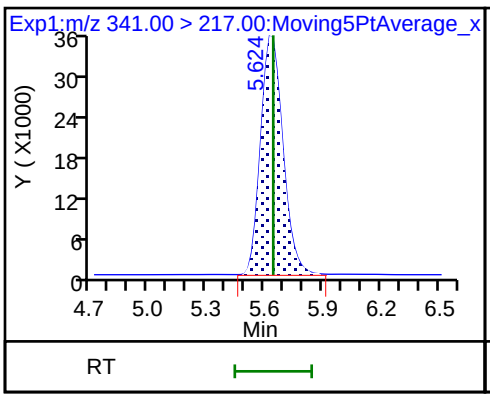
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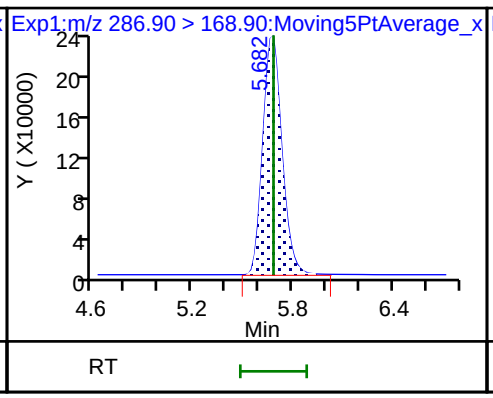
18 5:3 FTCA



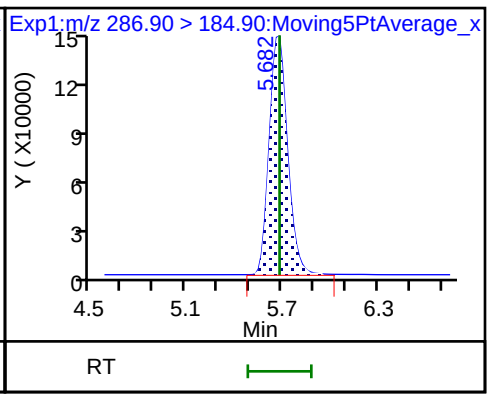
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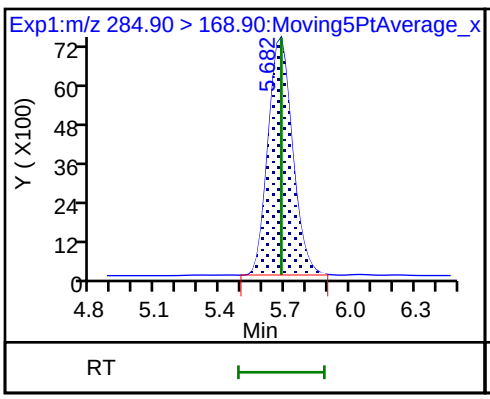
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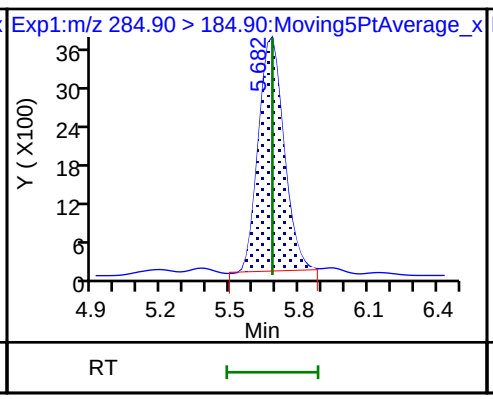
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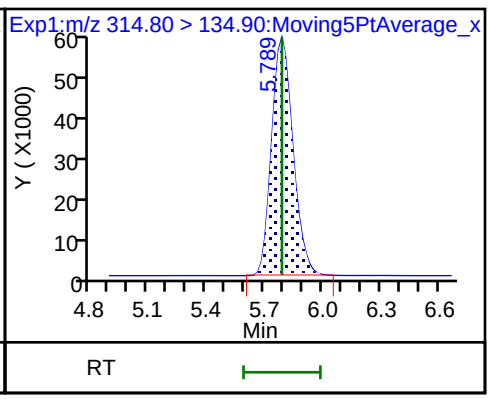
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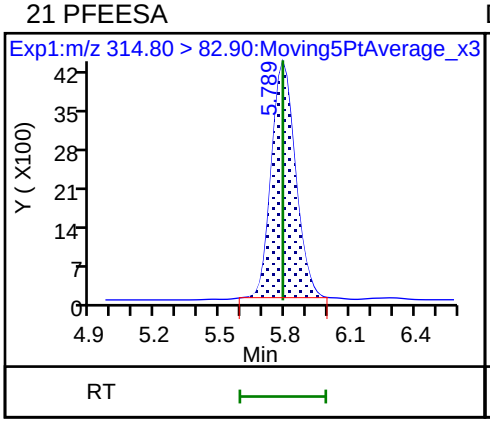
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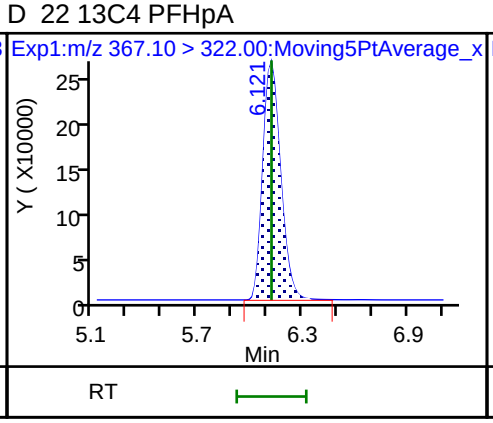
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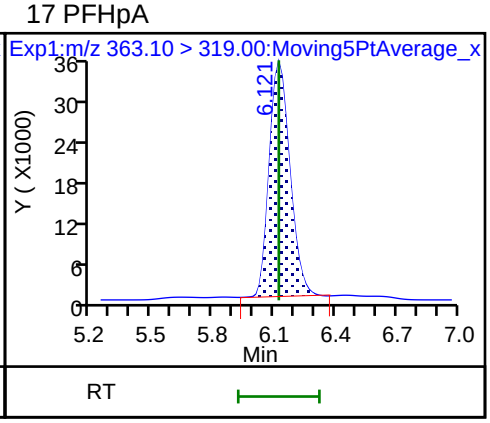
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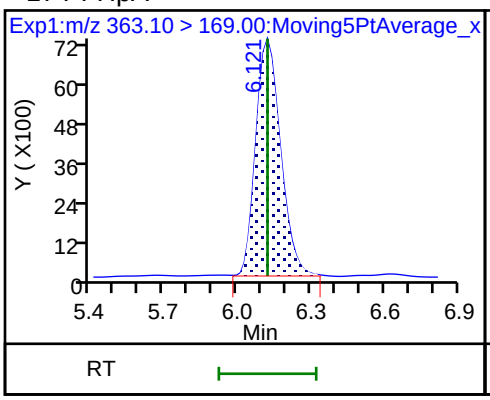
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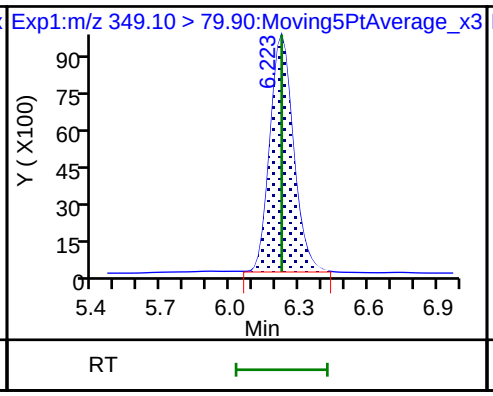
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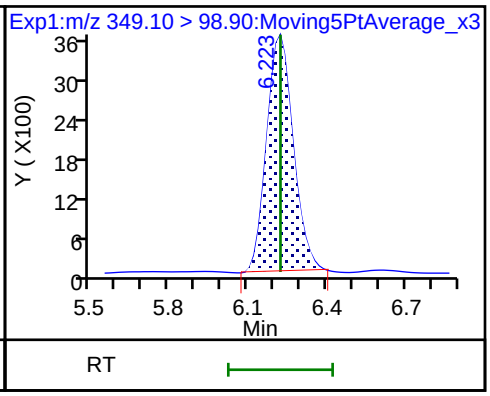
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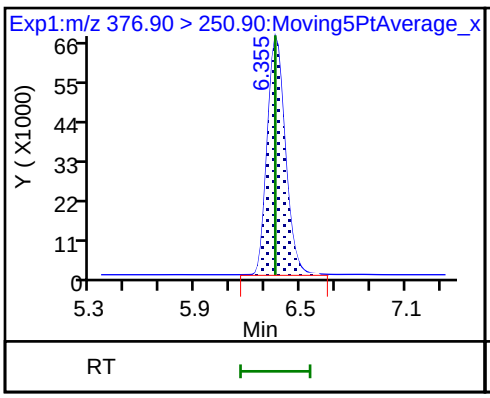
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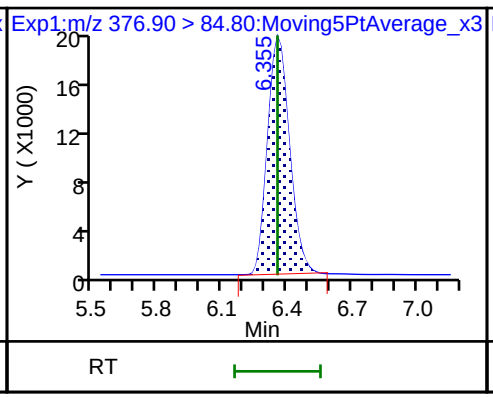
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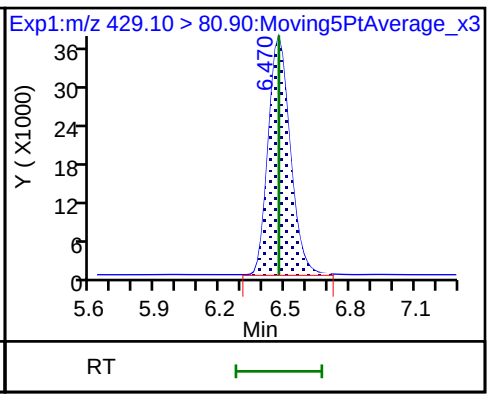
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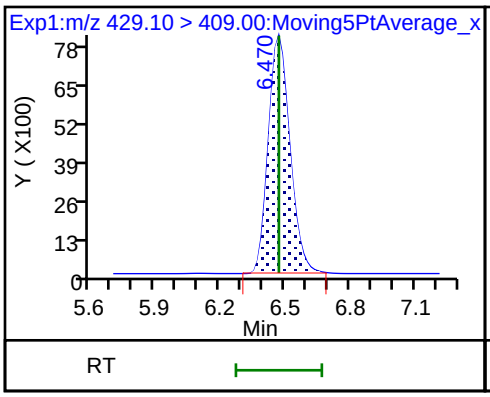
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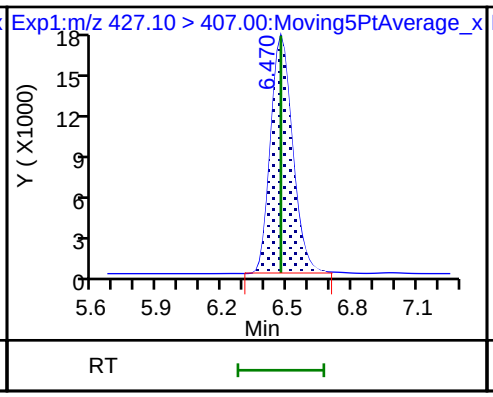
D 26 13C2-6:2FTS



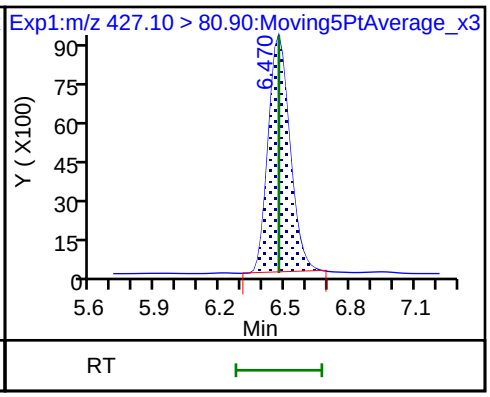
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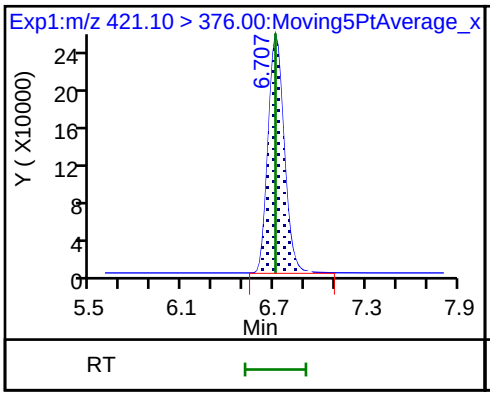
25 6:2FTS



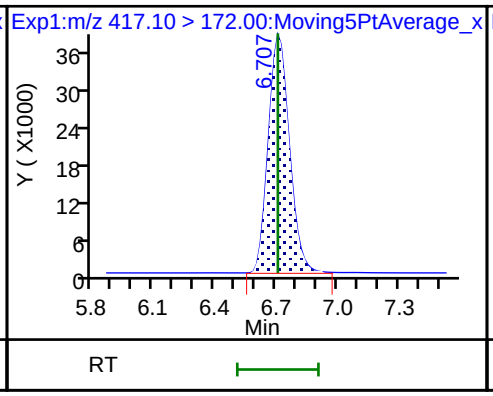
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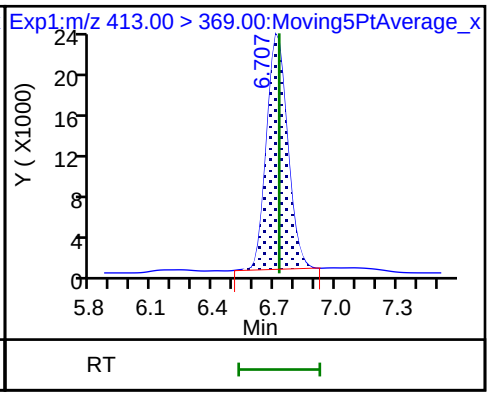
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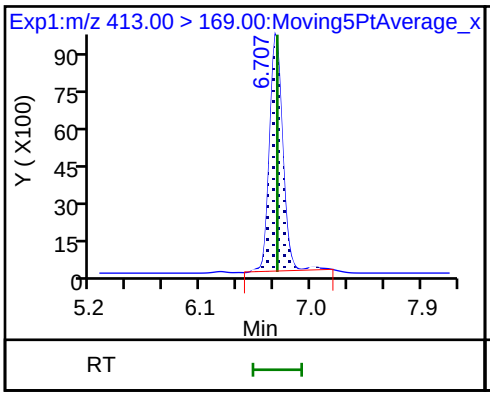
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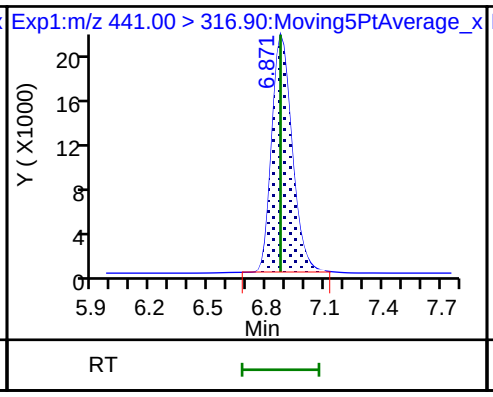
28 PFOA



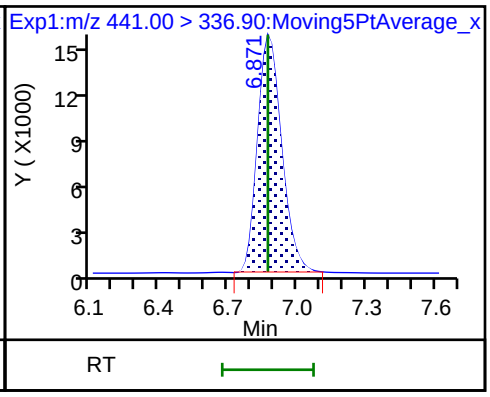
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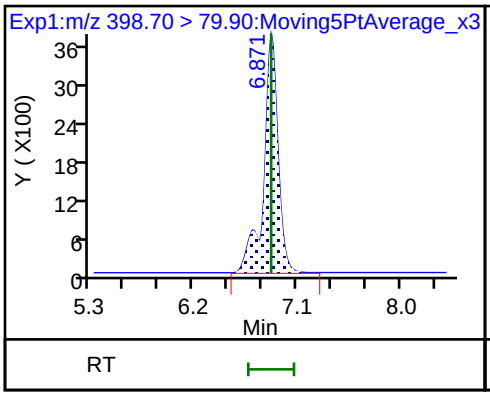
30 7:3 FTCA



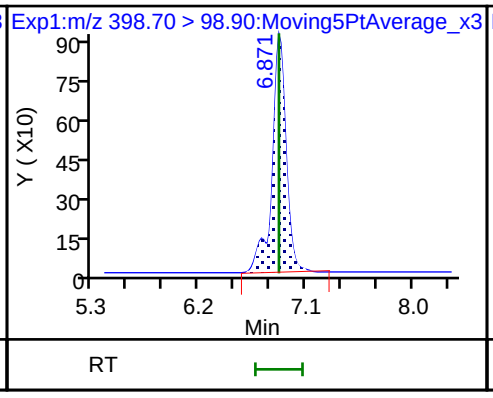
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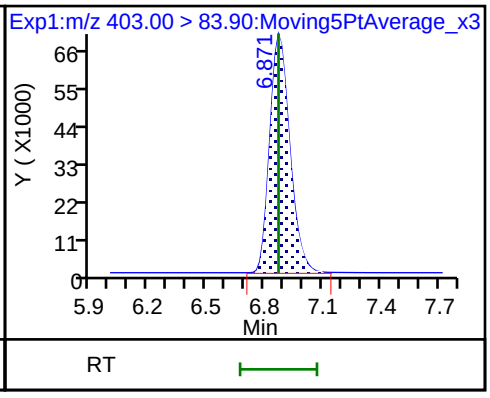
32 PFHxS



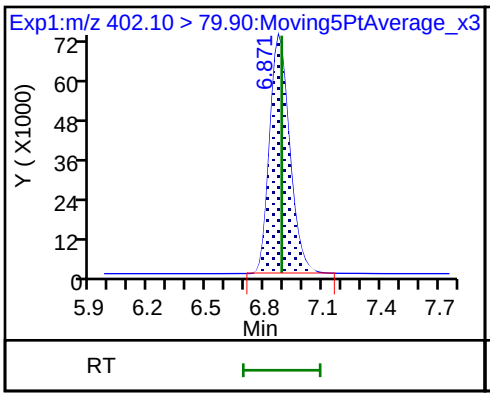
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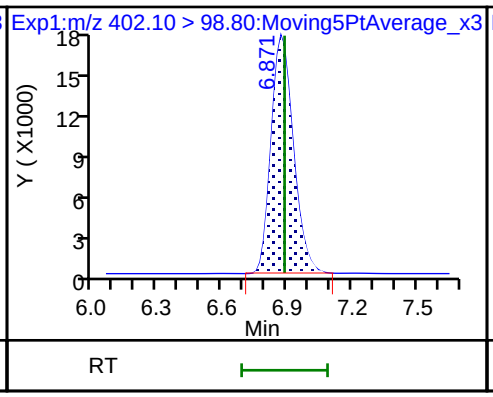
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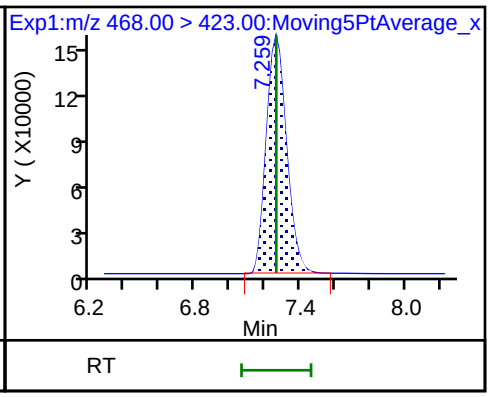
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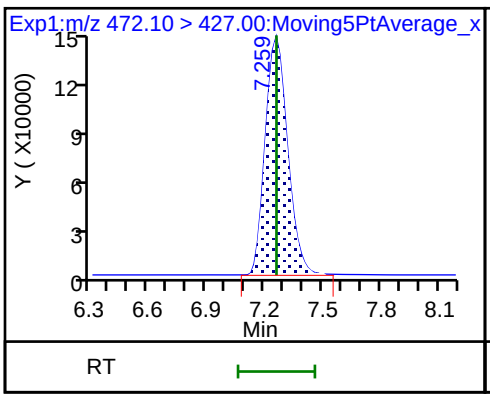
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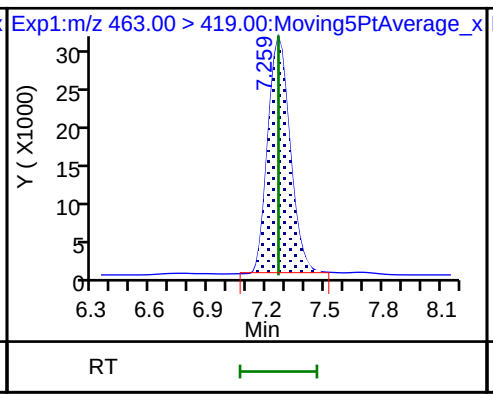
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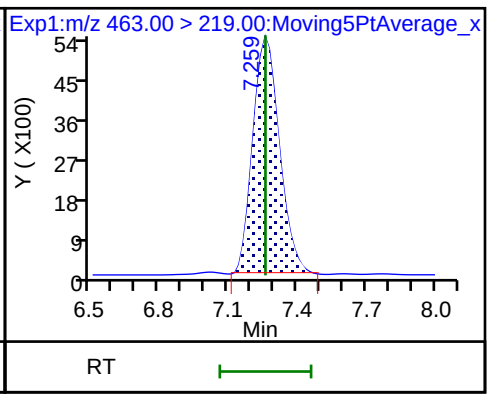
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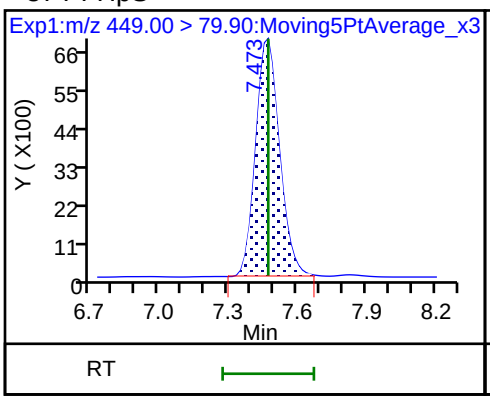
36 PFNA



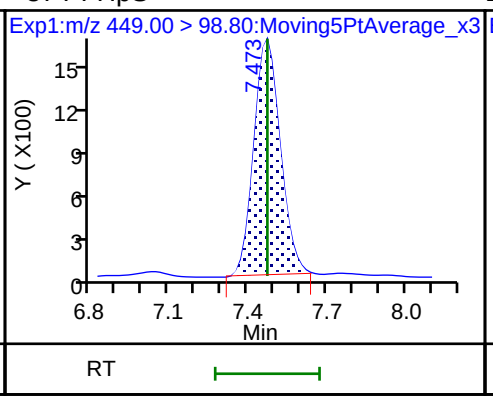
36 PFNA



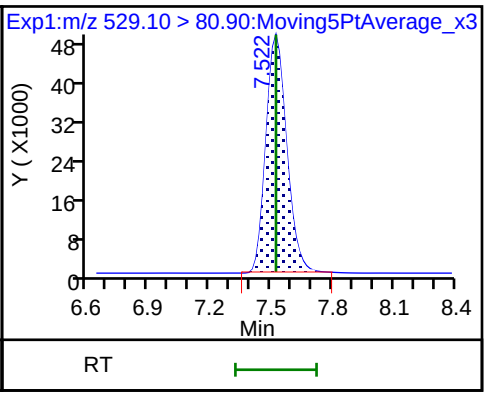
37 PFHpS



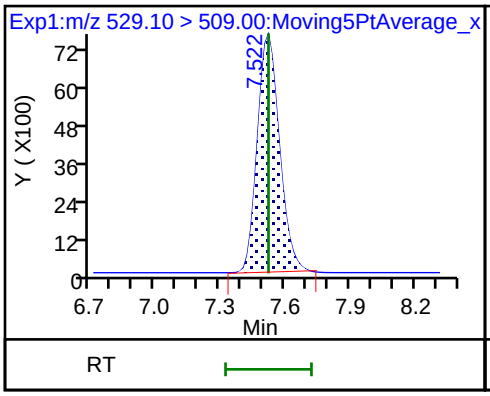
37 PFHpS



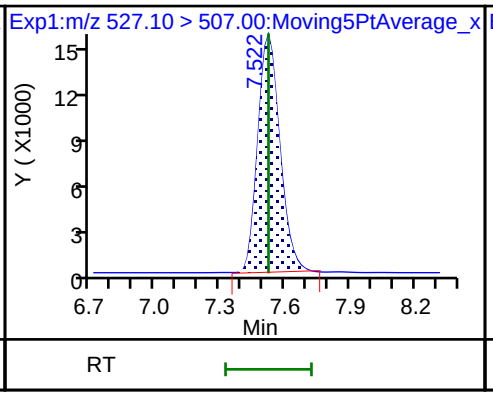
D 38 13C2-8:2FTS



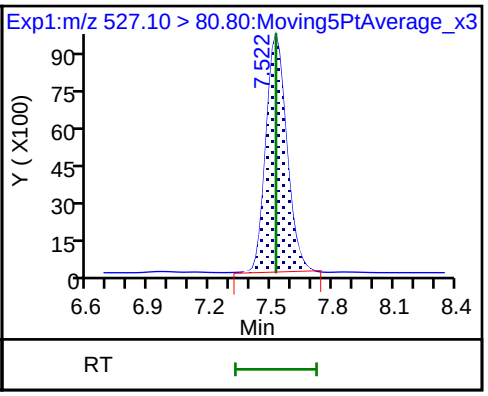
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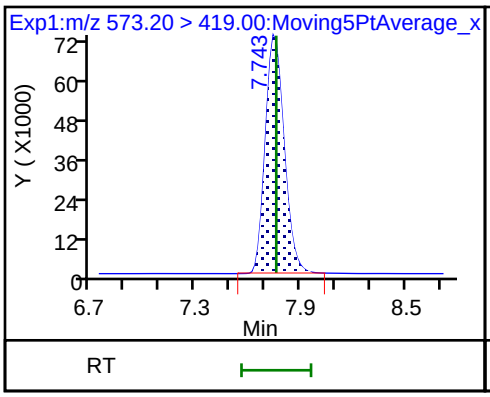
39 8:2FTS



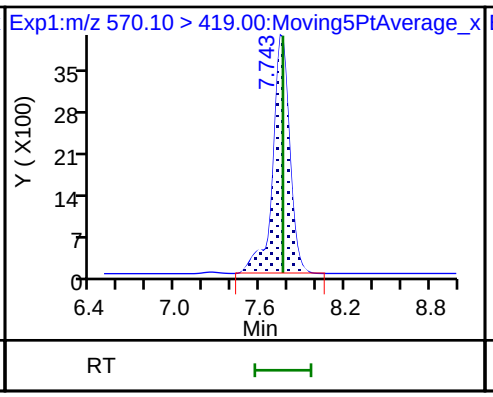
39 8:2FTS



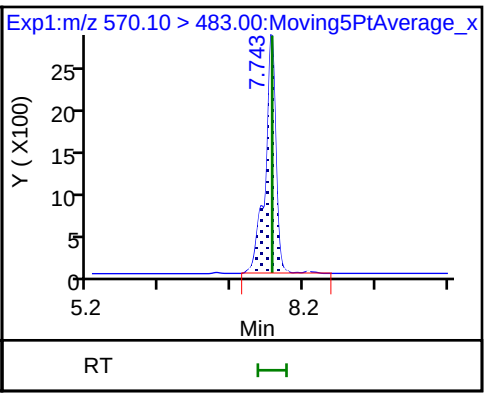
D 41 d3-NMeFOSAA



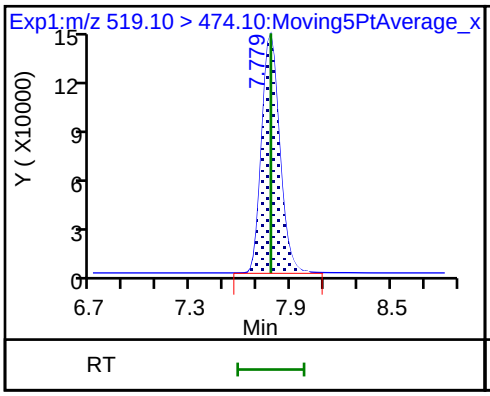
42 NMeFOSAA



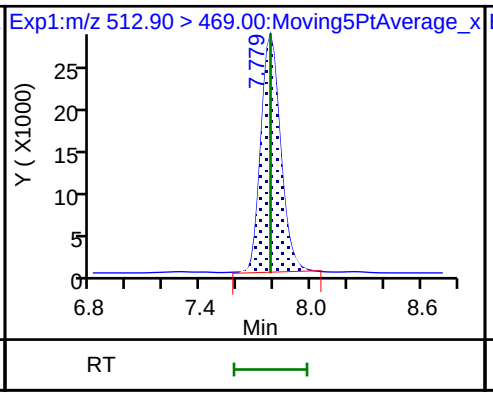
42 NMeFOSAA



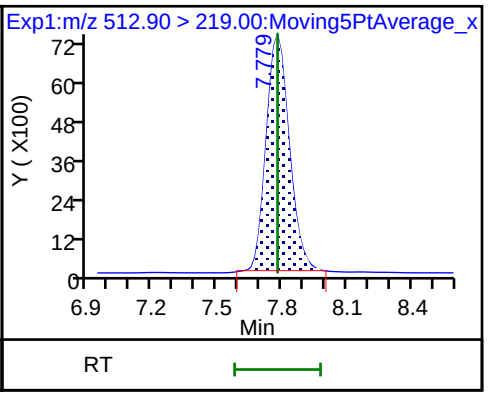
D 40 13C6 PFDA



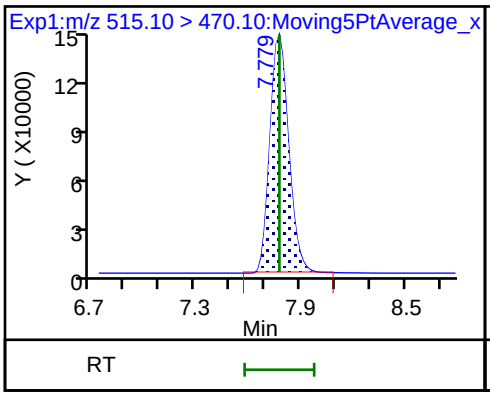
43 PFDA



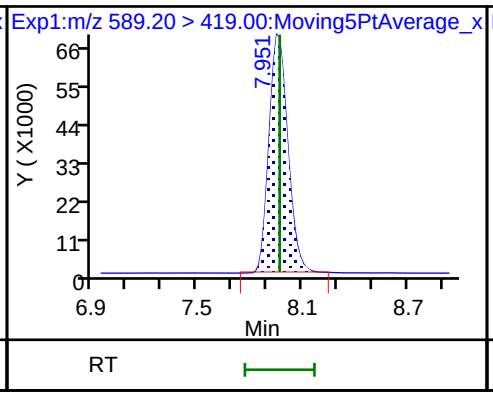
43 PFDA



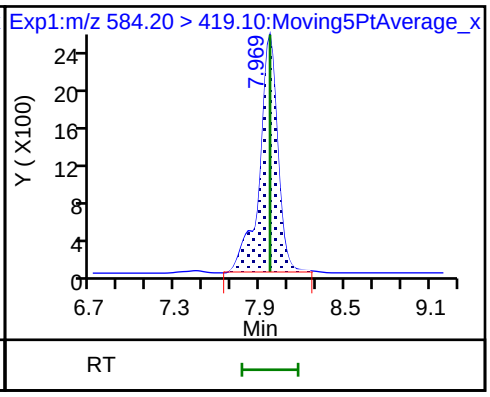
* 44 13C2 PFDA



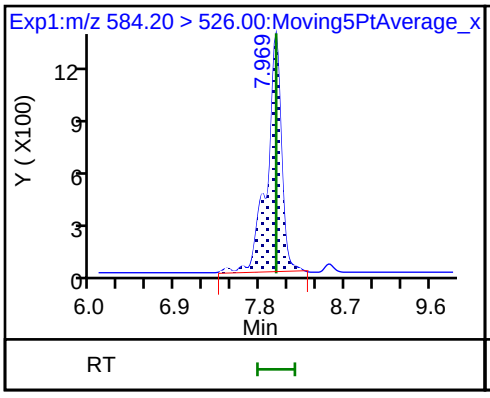
D 46 d5-NEtFOSAA



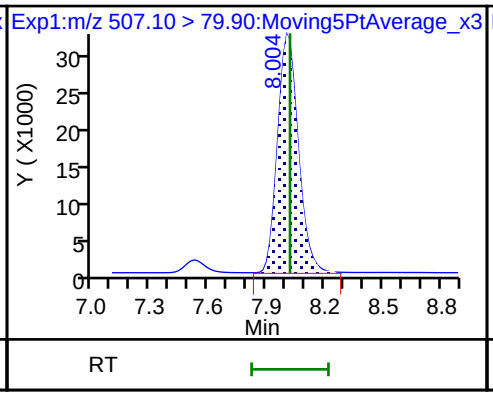
45 NEtFOSAA



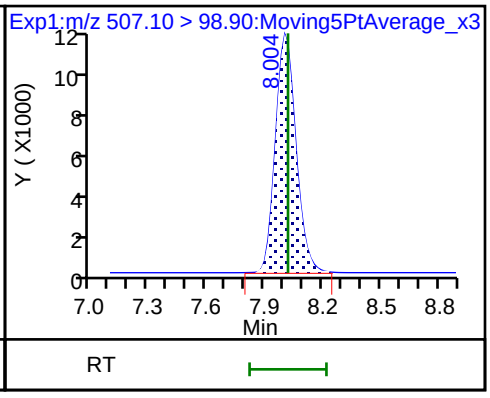
45 NEtFOSAA



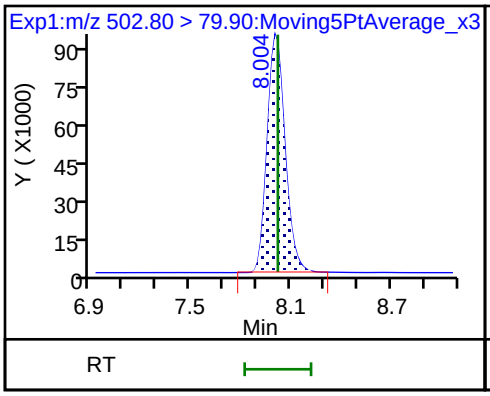
D 49 13C8 PFOS



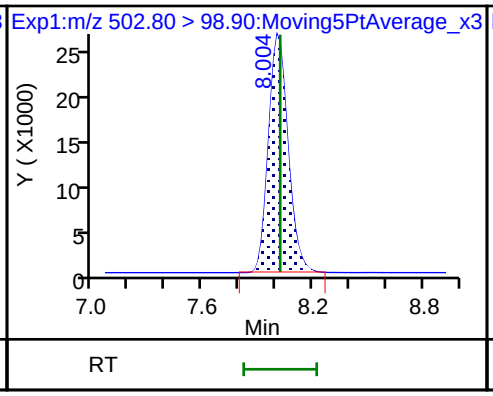
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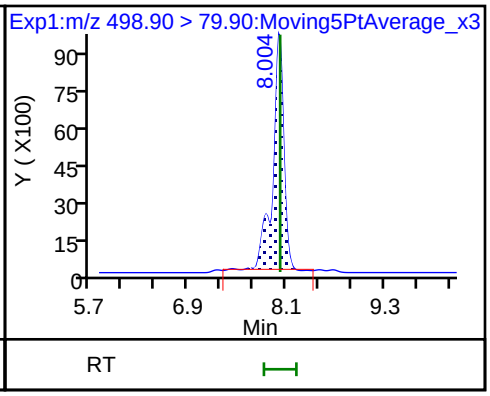
* 47 13C4 PFOS



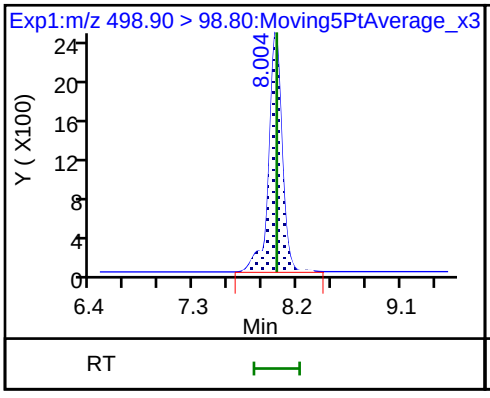
* 47 13C4 PFOS



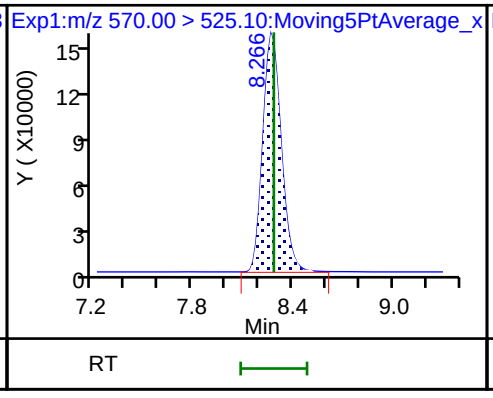
48 PFOS



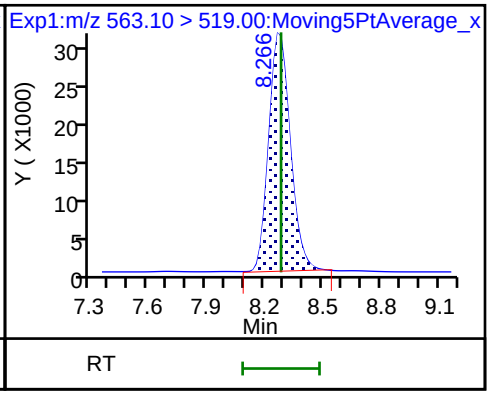
48 PFOS



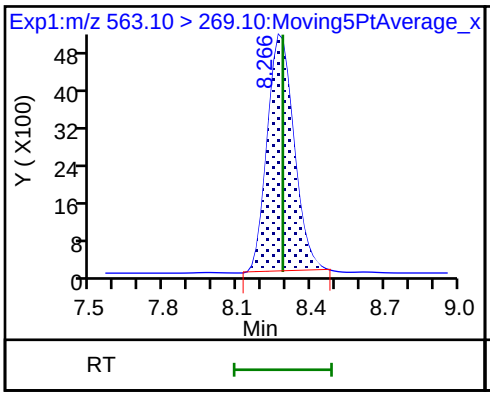
D 53 13C7 PFUnA



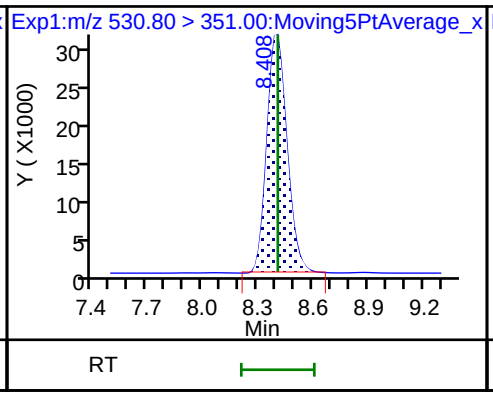
52 PFUnA



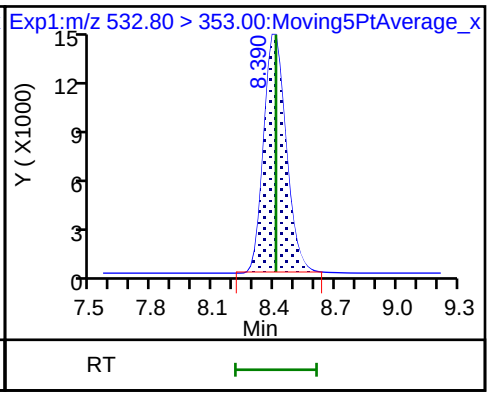
52 PFUnA



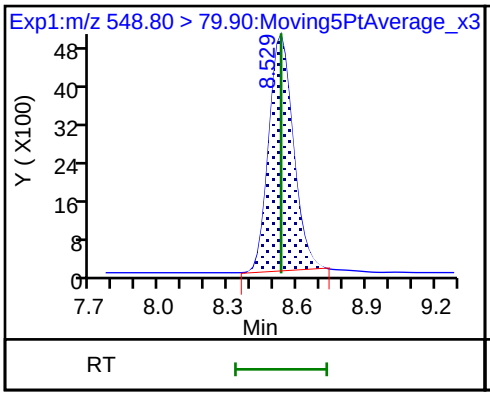
54 9ClFOS



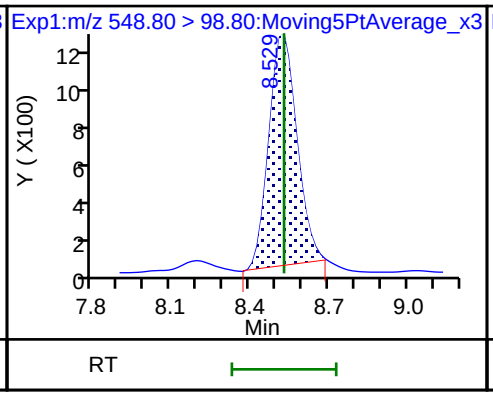
54 9ClFOS



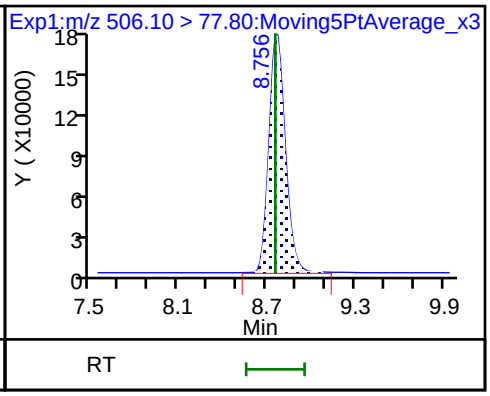
55 PFNS



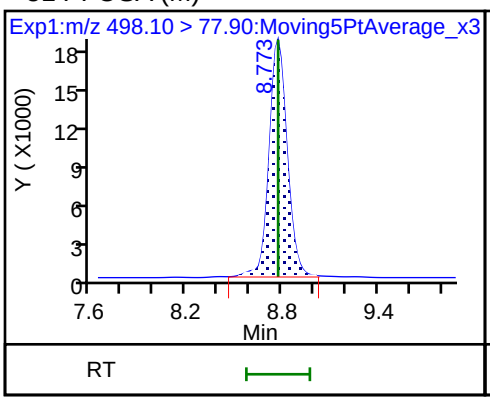
55 PFNS



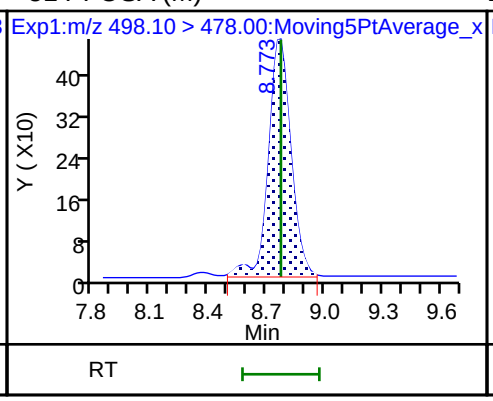
D 50 13C8 FOSA



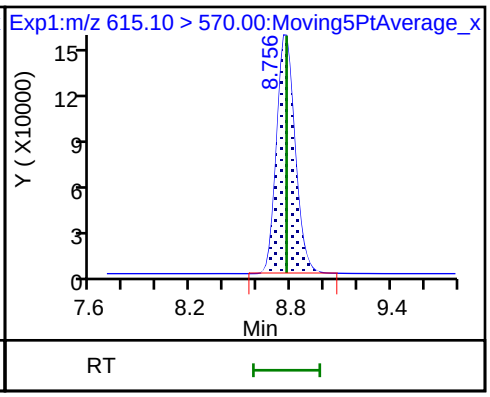
51 PFOSA (M)



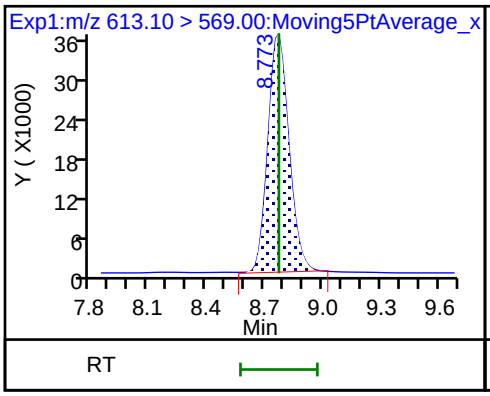
51 PFOSA (M)



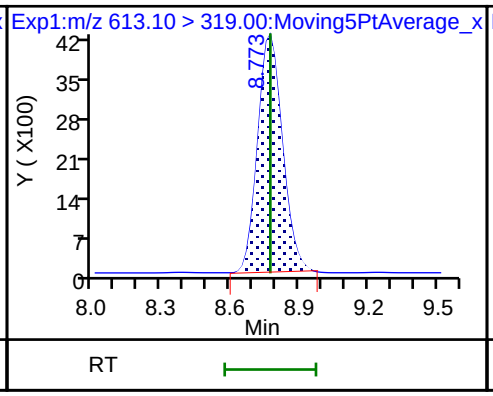
D 56 13C2 PFDoA



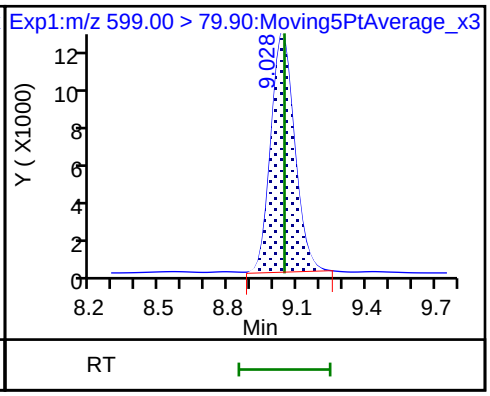
57 PFDoA



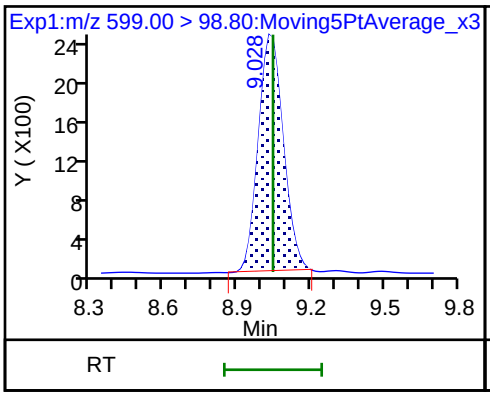
57 PFDoA



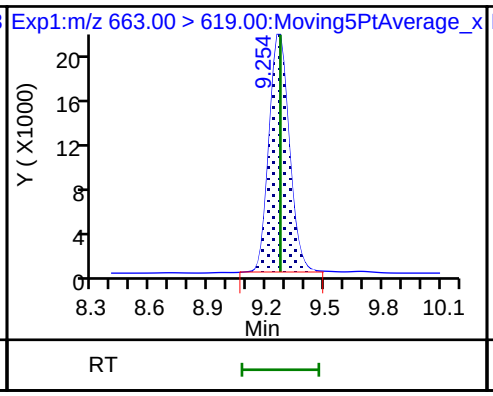
58 PFDS



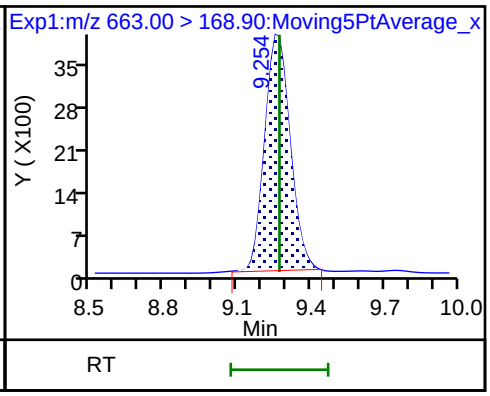
58 PFDS



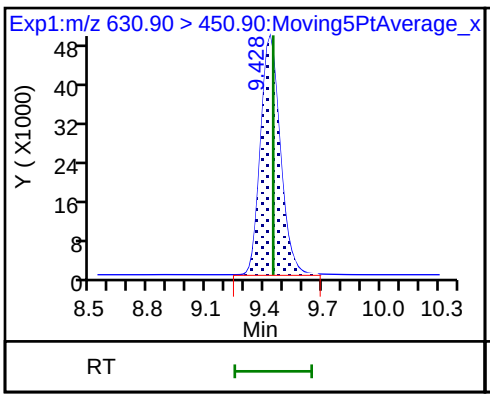
63 PFTrDA



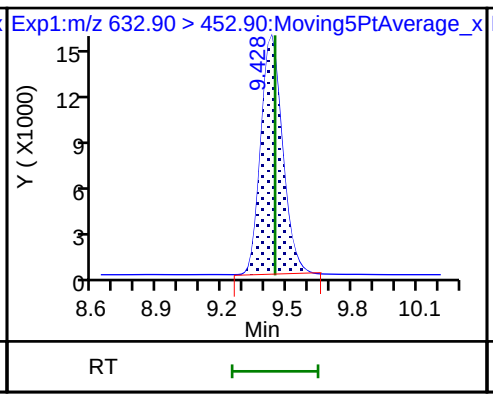
63 PFTrDA



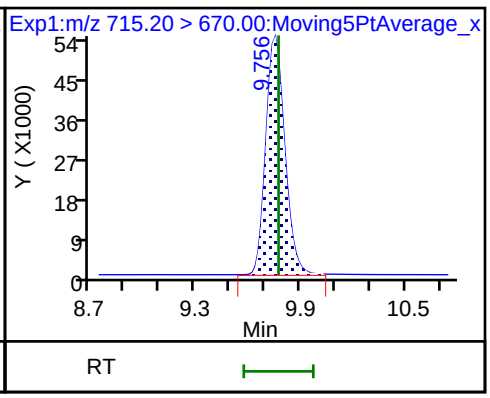
66 11ClFOS



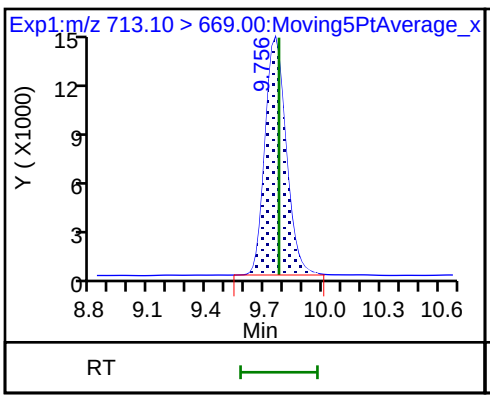
66 11ClFOS



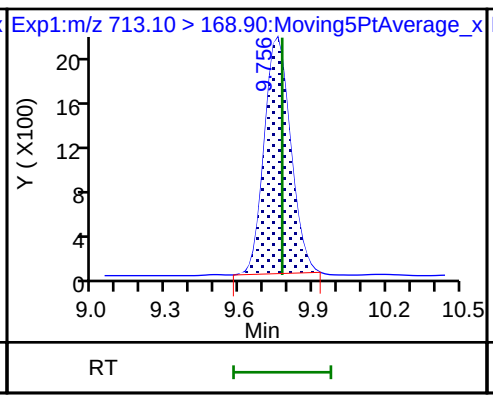
D 69 13C2 PFTeDA



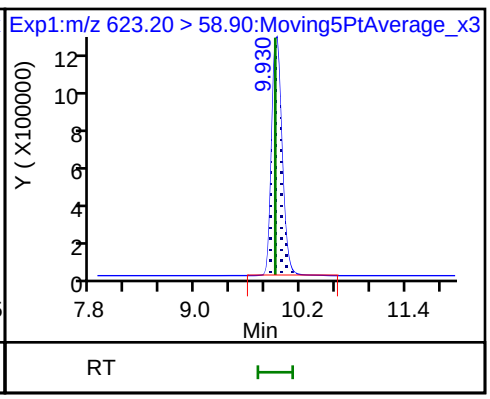
70 PFTeDA



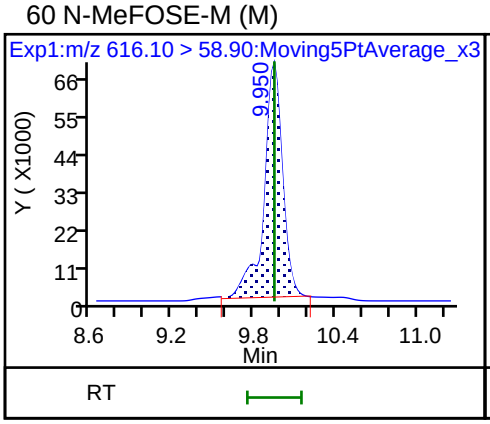
70 PFTeDA



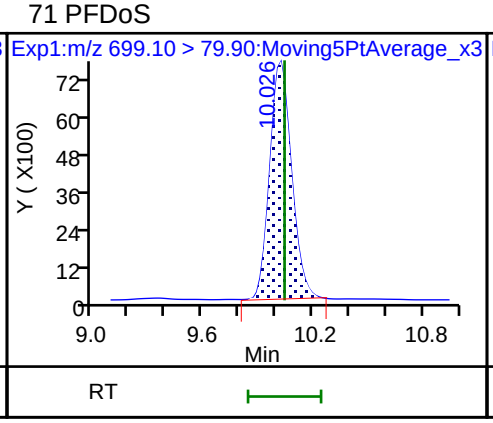
D 59 d7-N-Me-FOSE



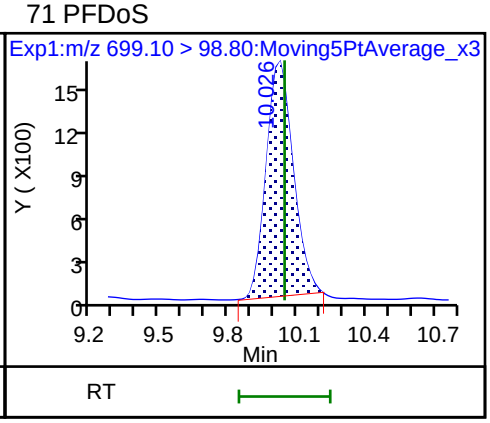
60 N-MeFOSE-M (M)



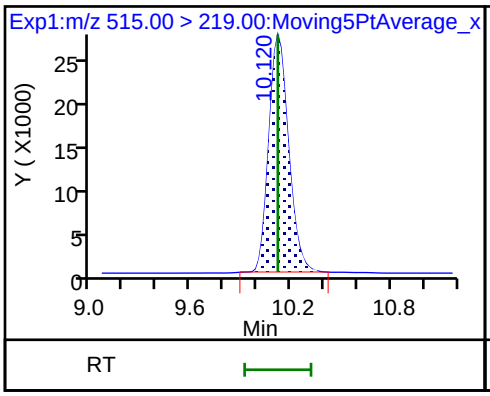
71 PFDoS



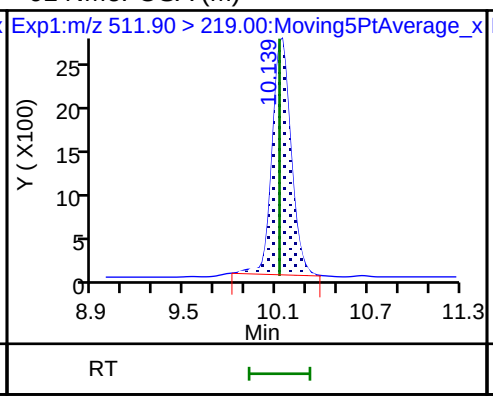
71 PFDoS



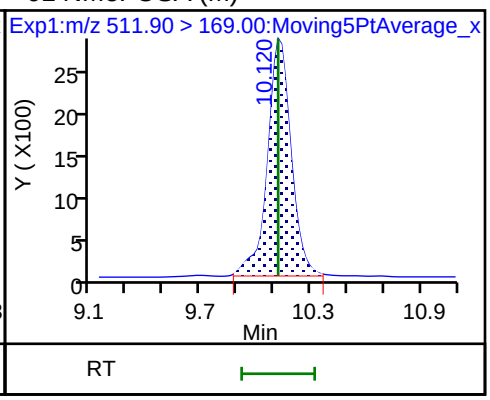
D 62 d3-NMePFOSA



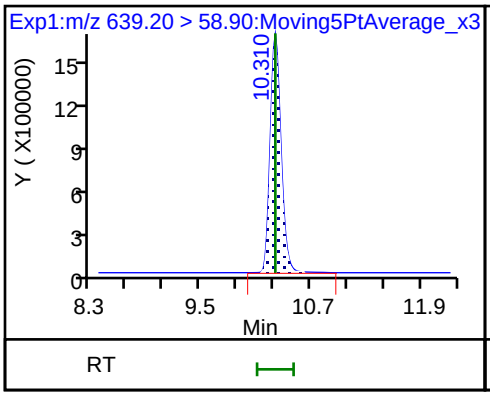
61 NMeFOSA (M)



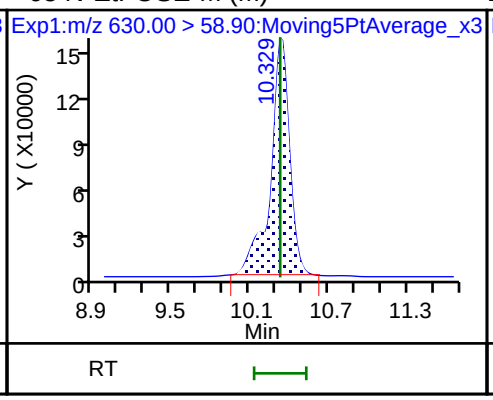
61 NMeFOSA (M)



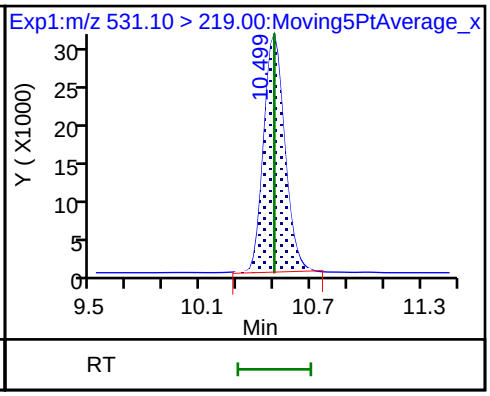
D 64 d9-N-EtFOSE



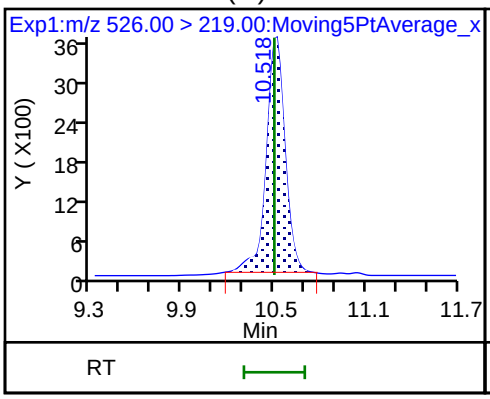
65 N-EtFOSE-M (M)



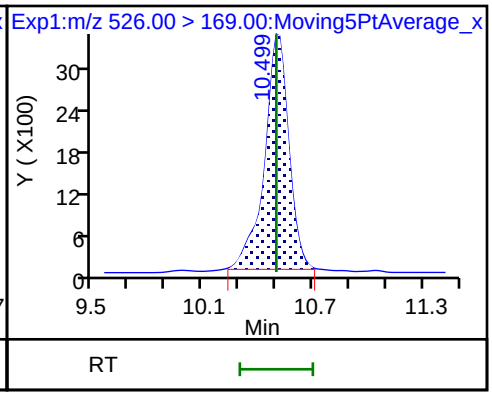
D 67 d5-NEtPFOSA



68 N-EtFOSA-M (M)



68 N-EtFOSA-M



Manual Integration/User Assign Peak Report

Eurofins Denver

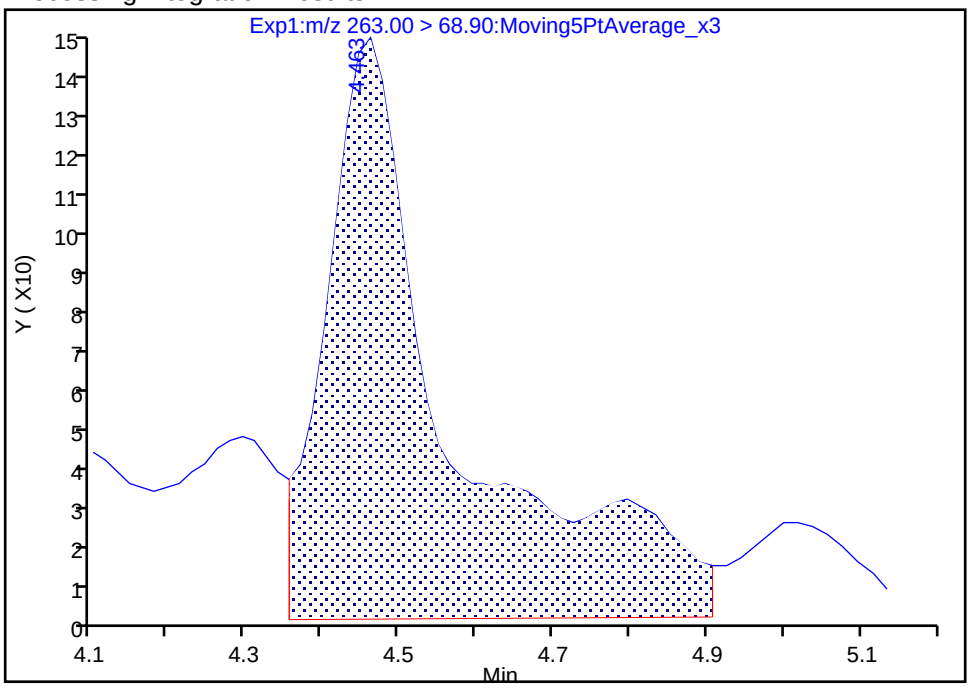
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.013.d
Injection Date: 28-Nov-2023 14:27:54 Instrument ID: LC_LCMS11
Lims ID: LLCS 280-635120/2-A
Client ID:
Operator ID: B5QN ALS Bottle#: 7 Worklist Smp#: 9
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

6 PFPA, CAS: 2706-90-3

Signal: 2

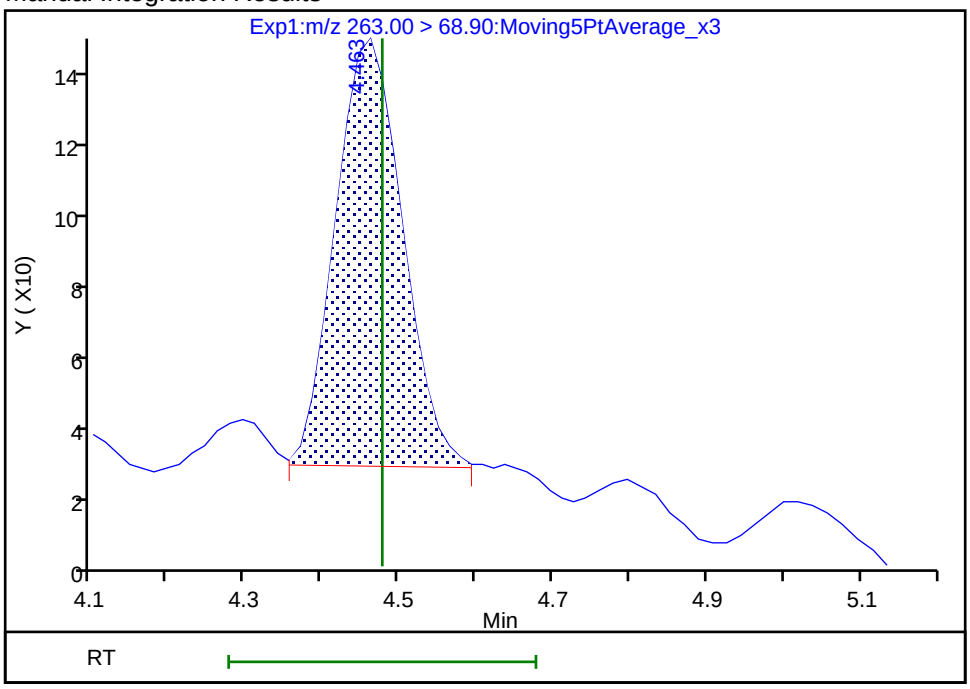
Processing Integration Results

RT: 4.46
Area: 1688
Amount: 0.297266
Amount Units: ng/ml



Manual Integration Results

RT: 4.46
Area: 693
Amount: 0.297266
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:43:08 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins Denver

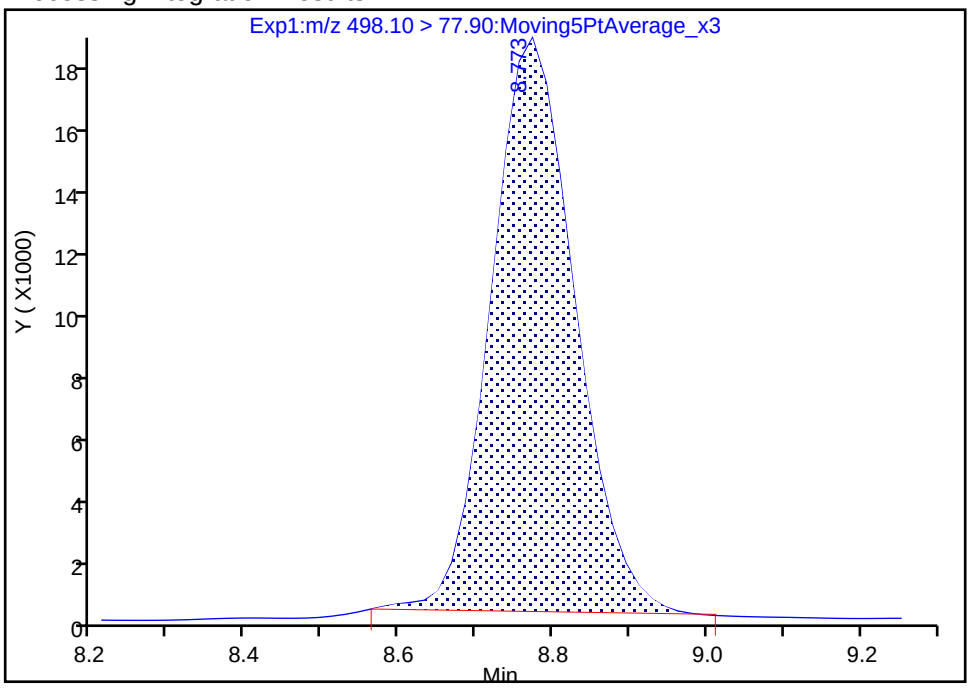
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.013.d
Injection Date: 28-Nov-2023 14:27:54 Instrument ID: LC_LCMS11
Lims ID: LLCS 280-635120/2-A
Client ID:
Operator ID: B5QN ALS Bottle#: 7 Worklist Smp#: 9
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

51 PFOSA, CAS: 754-91-6

Signal: 1

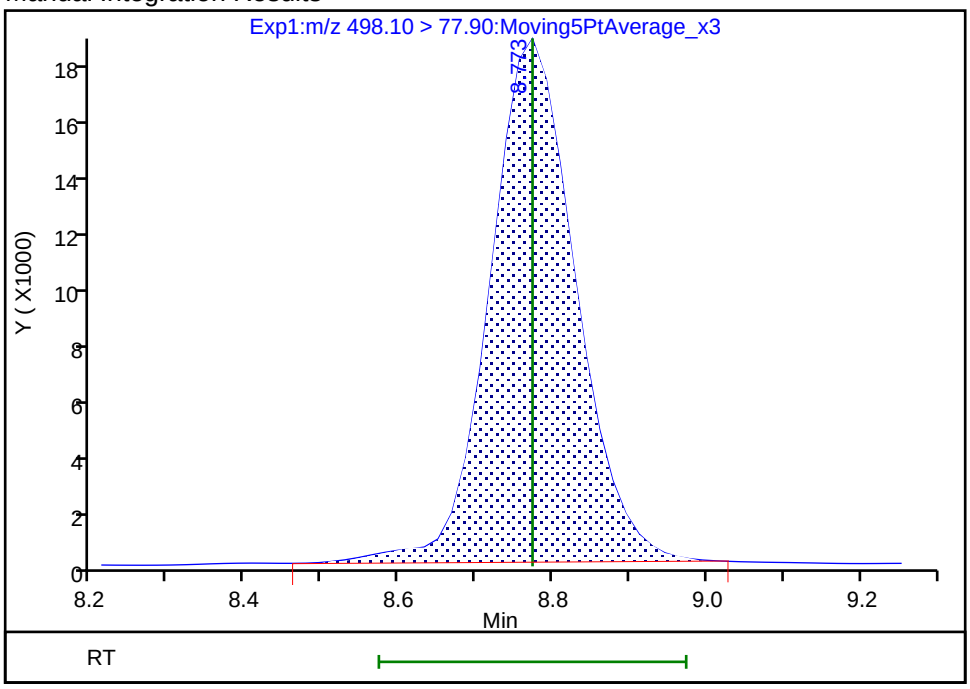
Processing Integration Results

RT: 8.77
Area: 139283
Amount: 0.258210
Amount Units: ng/ml



Manual Integration Results

RT: 8.77
Area: 144134
Amount: 0.267203
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:43:25 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver

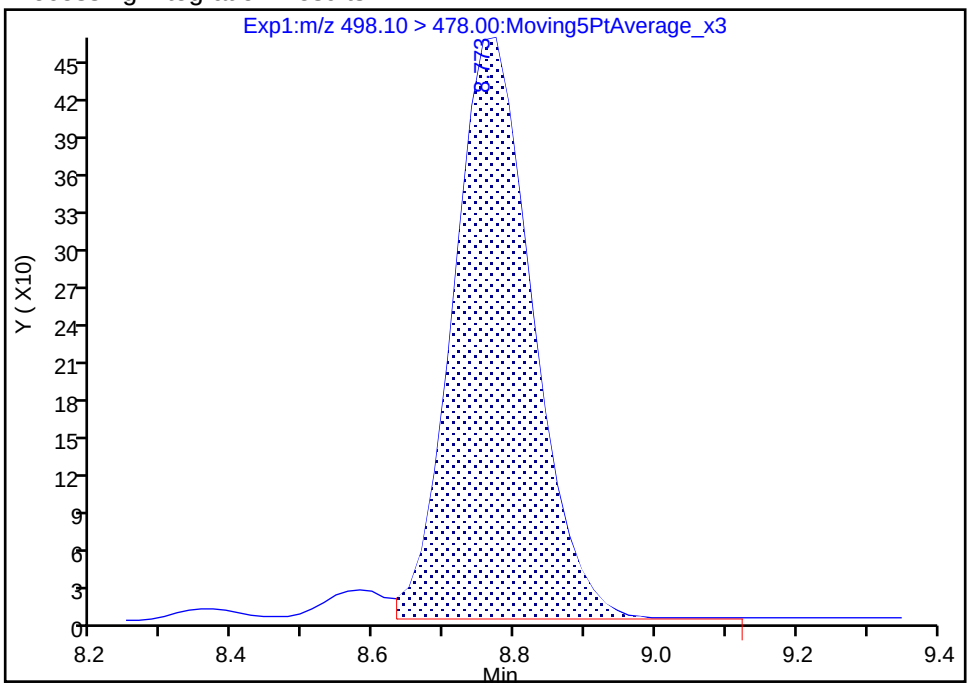
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.013.d
Injection Date: 28-Nov-2023 14:27:54 Instrument ID: LC_LCMS11
Lims ID: LLCS 280-635120/2-A
Client ID:
Operator ID: B5QN ALS Bottle#: 7 Worklist Smp#: 9
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

51 PFOSA, CAS: 754-91-6

Signal: 2

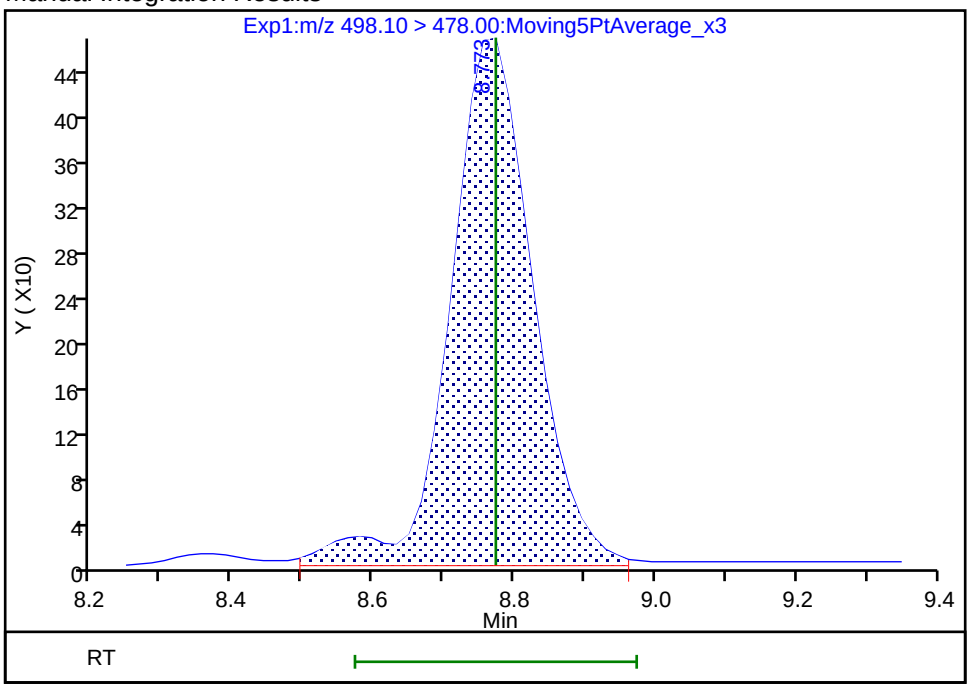
Processing Integration Results

RT: 8.77
Area: 3593
Amount: 0.258210
Amount Units: ng/ml



Manual Integration Results

RT: 8.77
Area: 3775
Amount: 0.267203
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:43:29 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

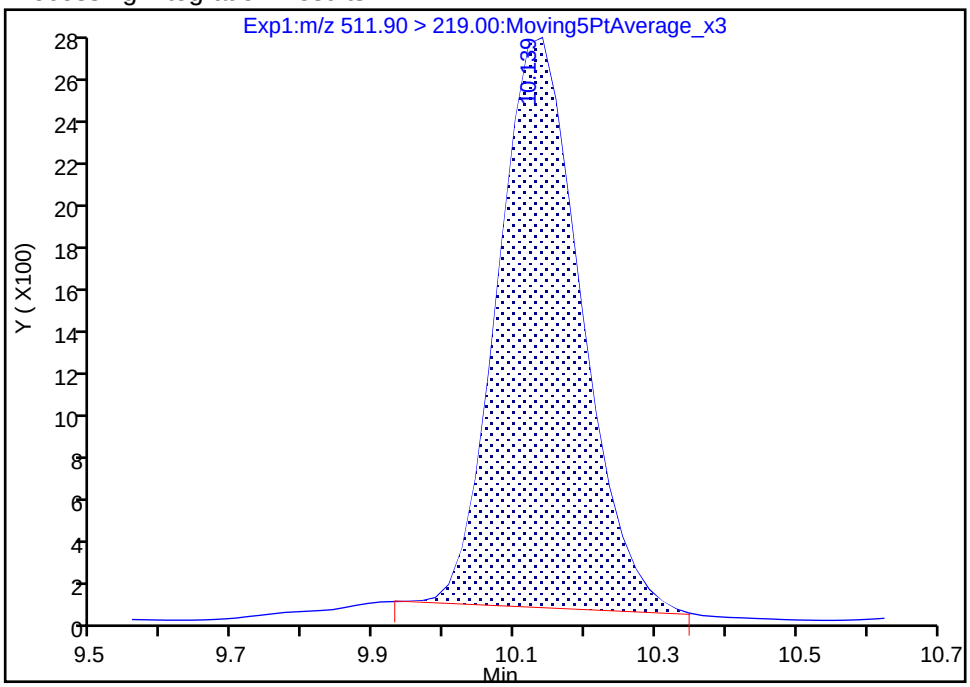
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.013.d
Injection Date: 28-Nov-2023 14:27:54 Instrument ID: LC_LCMS11
Lims ID: LLCS 280-635120/2-A
Client ID:
Operator ID: B5QN ALS Bottle#: 7 Worklist Smp#: 9
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

61 NMeFOSA, CAS: 31506-32-8

Signal: 1

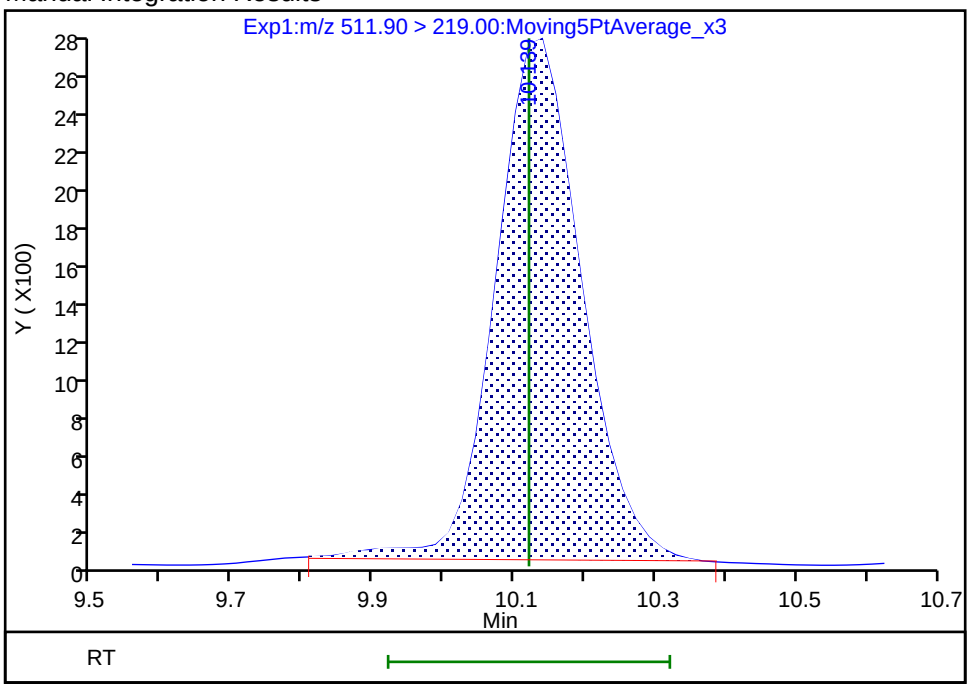
Processing Integration Results

RT: 10.14
Area: 22342
Amount: 0.260684
Amount Units: ng/ml



Manual Integration Results

RT: 10.14
Area: 23419
Amount: 0.273250
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:43:49 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

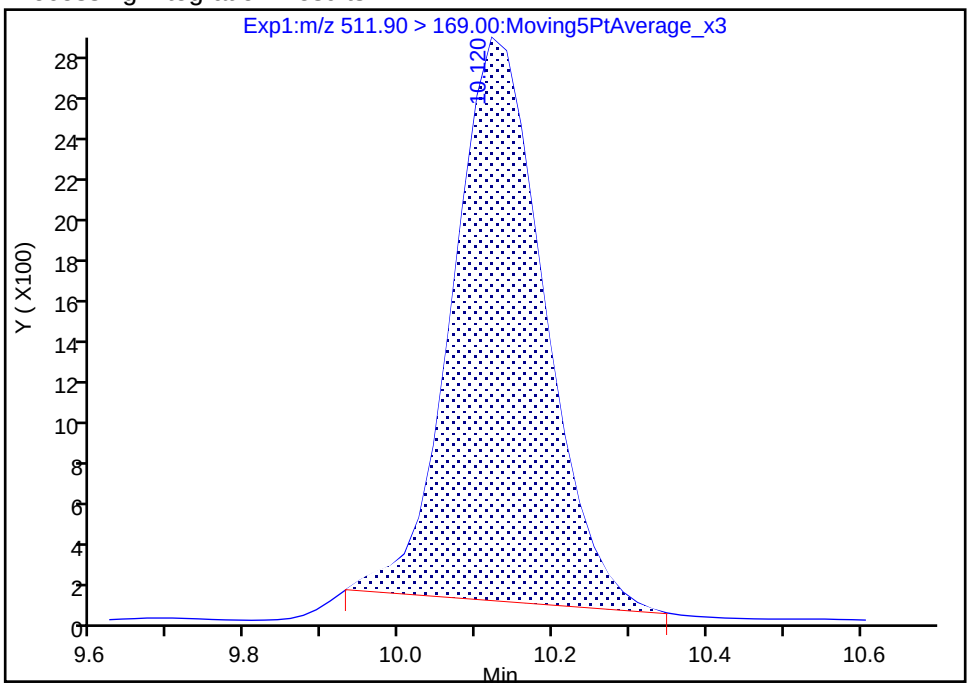
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.013.d
Injection Date: 28-Nov-2023 14:27:54 Instrument ID: LC_LCMS11
Lims ID: LLCS 280-635120/2-A
Client ID:
Operator ID: B5QN ALS Bottle#: 7 Worklist Smp#: 9
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

61 NMeFOSA, CAS: 31506-32-8

Signal: 2

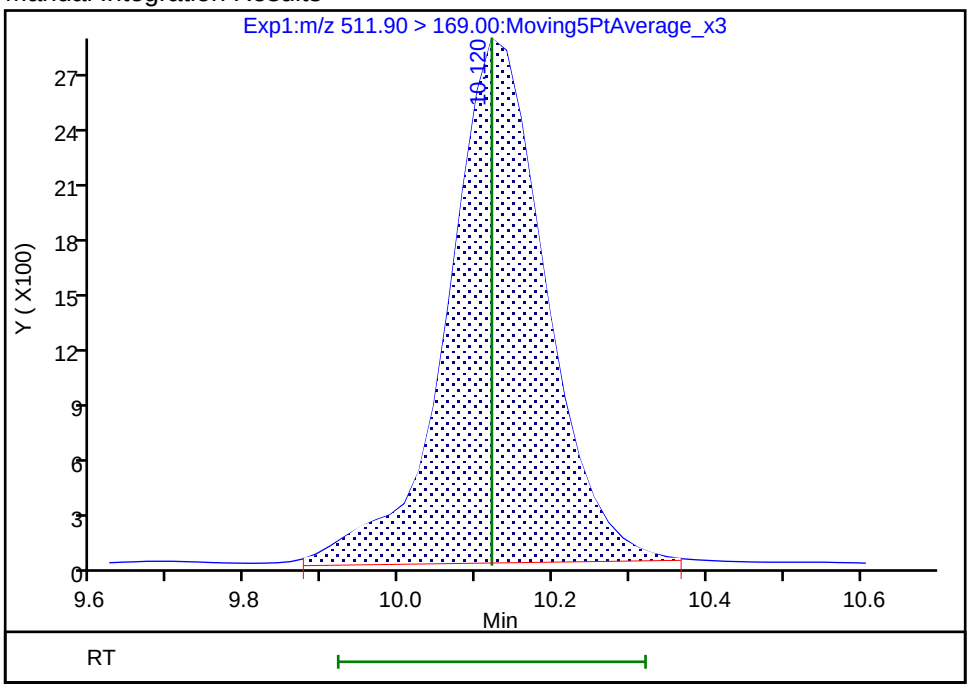
Processing Integration Results

RT: 10.12
Area: 22597
Amount: 0.260684
Amount Units: ng/ml



Manual Integration Results

RT: 10.12
Area: 25113
Amount: 0.273250
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:43:53 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver

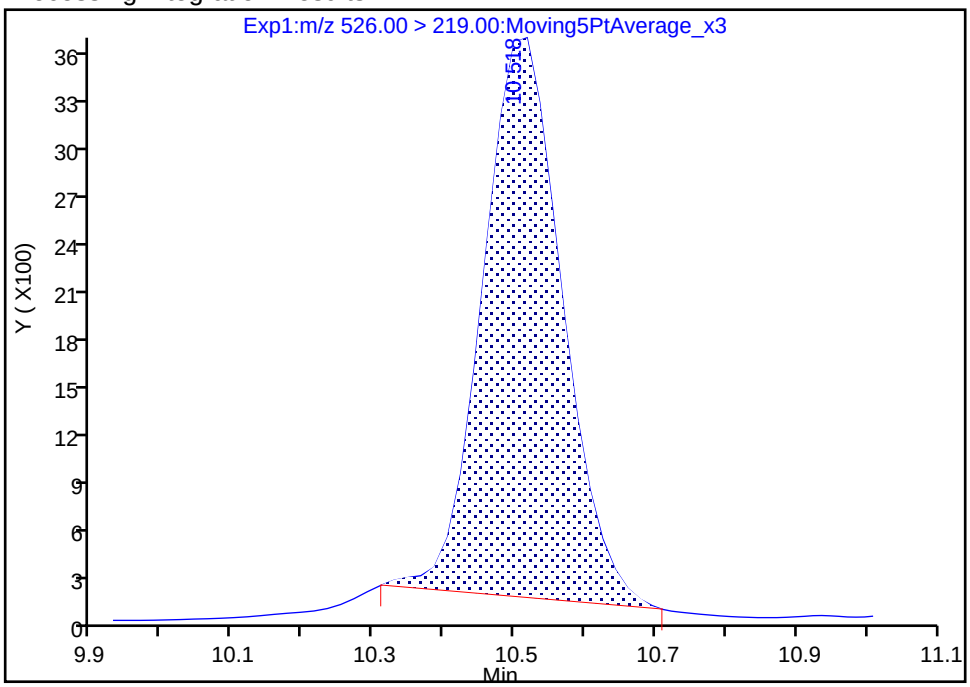
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.013.d
Injection Date: 28-Nov-2023 14:27:54 Instrument ID: LC_LCMS11
Lims ID: LLCS 280-635120/2-A
Client ID:
Operator ID: B5QN ALS Bottle#: 7 Worklist Smp#: 9
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

68 N-EtFOSA-M, CAS: 4151-50-2

Signal: 1

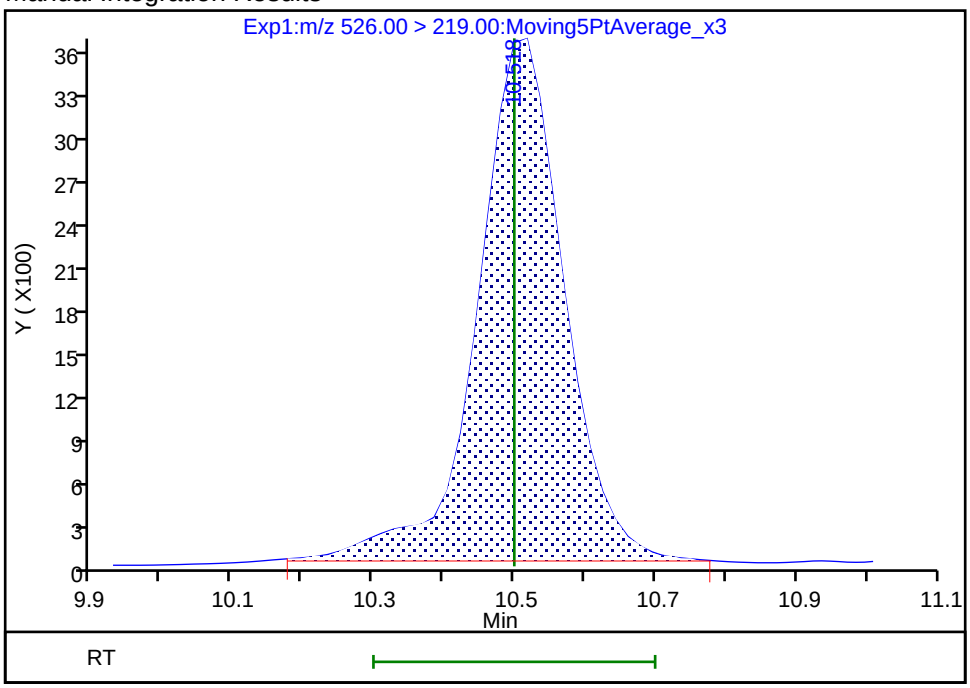
Processing Integration Results

RT: 10.52
Area: 27241
Amount: 0.257547
Amount Units: ng/ml



Manual Integration Results

RT: 10.52
Area: 30661
Amount: 0.289882
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:44:15 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Eurofins Denver

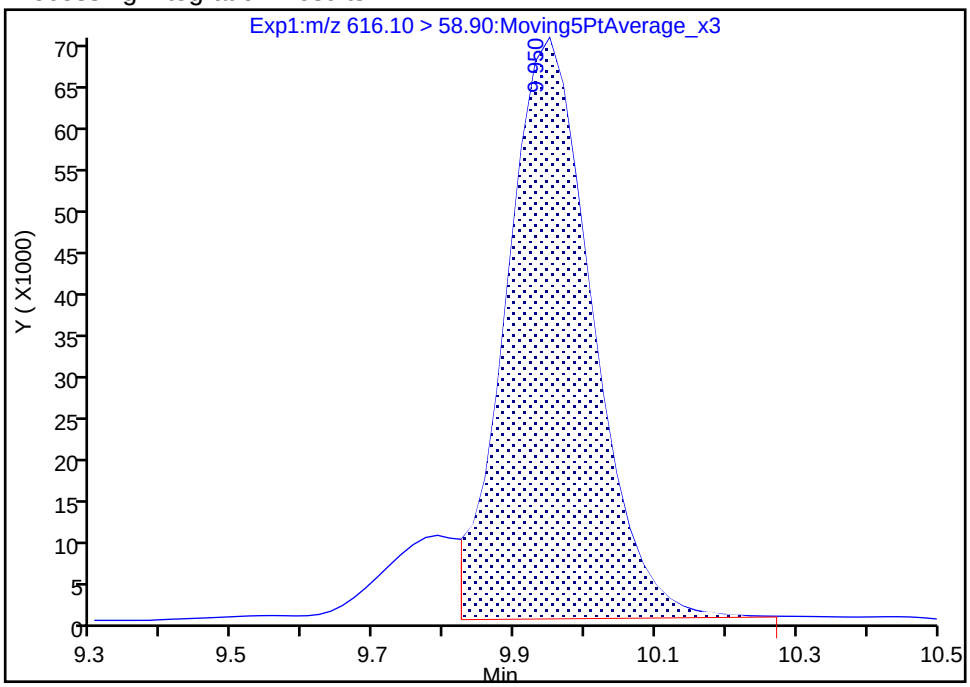
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.013.d
Injection Date: 28-Nov-2023 14:27:54 Instrument ID: LC_LCMS11
Lims ID: LLCS 280-635120/2-A
Client ID:
Operator ID: B5QN ALS Bottle#: 7 Worklist Smp#: 9
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

60 N-MeFOSE-M, CAS: 24448-09-7

Signal: 1

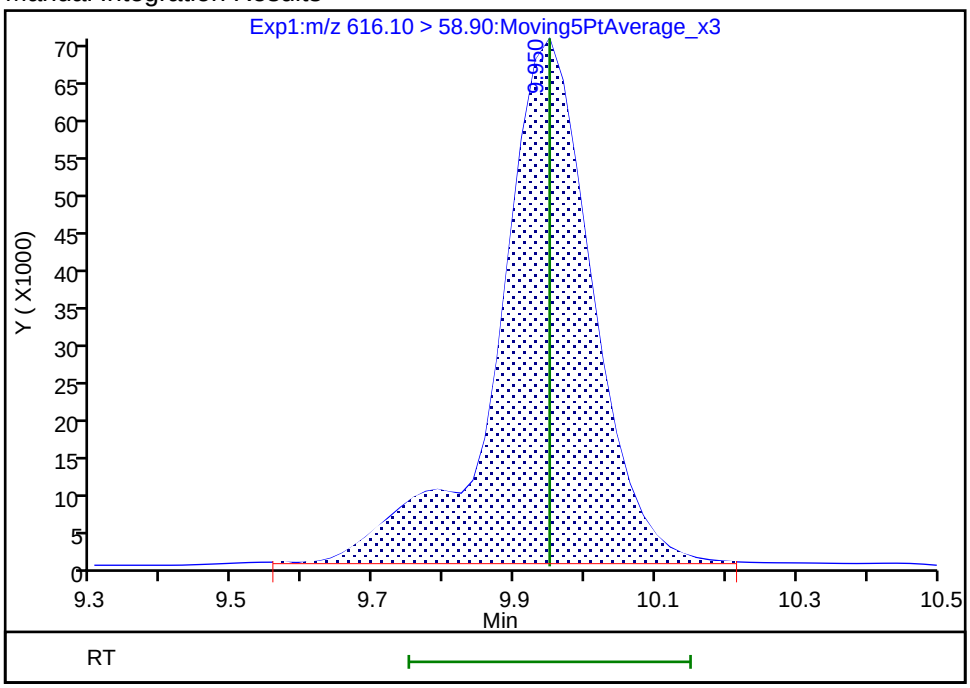
Processing Integration Results

RT: 9.95
Area: 591464
Amount: 1.317855
Amount Units: ng/ml



Manual Integration Results

RT: 9.95
Area: 659897
Amount: 1.470332
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:43:41 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

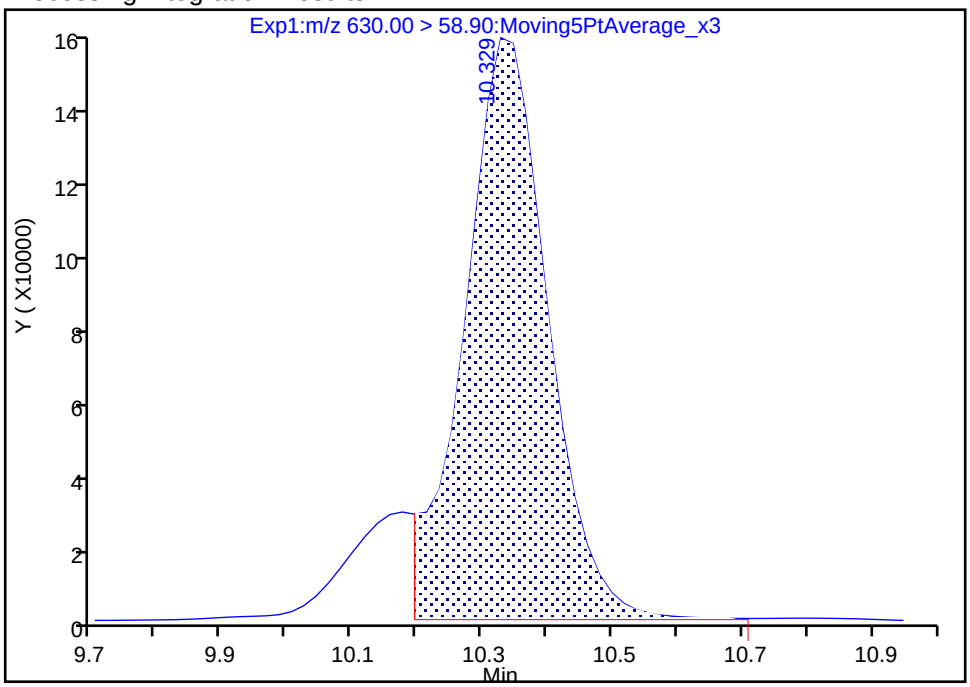
Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.013.d
Injection Date: 28-Nov-2023 14:27:54 Instrument ID: LC_LCMS11
Lims ID: LLCS 280-635120/2-A
Client ID:
Operator ID: B5QN ALS Bottle#: 7 Worklist Smp#: 9
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5
Column: Gemini C18 3um 3mm X 50mm (3.00mm) Detector EXP1

65 N-EtFOSE-M, CAS: 1691-99-2

Signal: 1

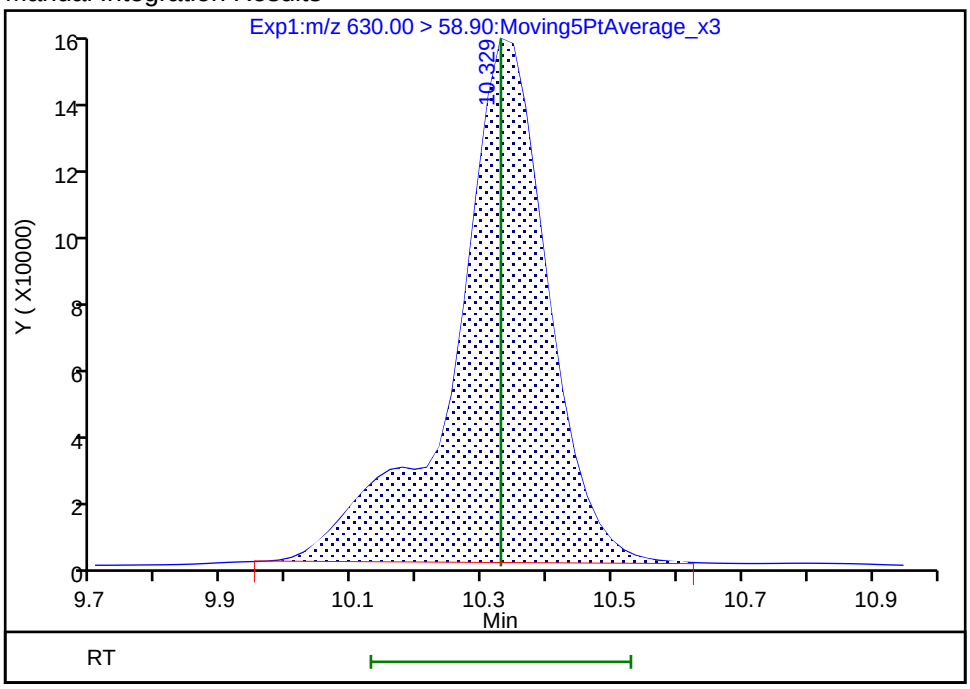
Processing Integration Results

RT: 10.33
Area: 1396064
Amount: 2.522138
Amount Units: ng/ml



Manual Integration Results

RT: 10.33
Area: 1576594
Amount: 2.848285
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 13:44:08 -07:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Isomers

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: WCF-10 MS | Lab Sample ID: 460-292594-3 MS

Matrix: Water | Lab File ID: 2023.11.28a.021.d

Analysis Method: Draft 1633 | Date Collected: 11/13/2023 12:00

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 544.6(mL) | Date Analyzed: 11/28/2023 17:03

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	40.54		7.34	1.84
2706-90-3	Perfluoropentanoic acid (PFPeA)	62.24		3.67	0.92
307-24-4	Perfluorohexanoic acid (PFHxA)	65.68		1.84	0.46
375-85-9	Perfluoroheptanoic acid (PFHpA)	43.33		1.84	0.48
335-67-1	Perfluorooctanoic acid (PFOA)	57.69		1.84	0.59
375-95-1	Perfluorononanoic acid (PFNA)	33.55		1.84	0.46
335-76-2	Perfluorodecanoic acid (PFDA)	37.02		1.84	0.46
2058-94-8	Perfluoroundecanoic acid (PFUnA)	30.75		1.84	0.46
307-55-1	Perfluorododecanoic acid (PFDoA)	27.06		1.84	0.46
72629-94-8	Perfluorotridecanoic acid (PFTriA)	25.24		1.84	0.46
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	26.80		1.84	0.46
375-73-5	Perfluorobutanesulfonic acid (PFBS)	27.96		1.84	0.28
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	26.83		1.84	0.46
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	24.06		1.84	0.52
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	28.82		1.84	0.37
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	31.38		1.84	0.46
68259-12-1	Perfluorononanesulfonic acid (PFNS)	30.38		1.84	0.37
335-77-3	Perfluorodecanesulfonic acid (PFDS)	28.31		1.84	0.46
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	25.27		1.84	0.83
757124-72-4	4:2 FTS	69.17		7.34	1.56
27619-97-2	6:2 FTS	107.8		7.34	2.30
39108-34-4	8:2 FTS	109.4		7.34	2.39
754-91-6	Perfluorooctanesulfonamide (PFOSA)	26.01		1.84	0.46
31506-32-8	NMeFOSA	29.30		1.84	0.46
4151-50-2	NEtFOSA	27.61		1.84	0.46
2355-31-9	NMeFOSAA	26.58		3.67	1.10
2991-50-6	NEtFOSAA	26.48		1.84	0.64
24448-09-7	NMeFOSE	135.5		18.4	4.59
1691-99-2	NEtFOSE	271.0		18.4	4.59
13252-13-6	HFPO-DA (GenX)	24.34		7.34	1.84

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: WCF-10 MS | Lab Sample ID: 460-292594-3 MS

Matrix: Water | Lab File ID: 2023.11.28a.021.d

Analysis Method: Draft 1633 | Date Collected: 11/13/2023 12:00

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 544.6(mL) | Date Analyzed: 11/28/2023 17:03

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	24.77		7.34	1.38
863090-89-5	PFMBA	56.41		3.67	0.92
151772-58-6	NFDHA	25.97		3.67	0.92
377-73-1	PFMPA	56.45		3.67	0.46
756426-58-1	9Cl-PF3ONS	61.64		7.34	0.92
763051-92-9	11Cl-PF3OUdS	51.64		7.34	1.84
113507-82-7	PFEESA	46.08		3.67	0.46
356-02-5	3:3 FTCA	134.4		9.18	1.38
914637-49-3	5:3 FTCA	240.8		45.9	9.18
812-70-4	7:3 FTCA	229.9		45.9	9.18

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: WCF-10 MS | Lab Sample ID: 460-292594-3 MS

Matrix: Water | Lab File ID: 2023.11.28a.021.d

Analysis Method: Draft 1633 | Date Collected: 11/13/2023 12:00

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 544.6(mL) | Date Analyzed: 11/28/2023 17:03

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	100		10-130
STL01893	13C5 PFPeA	91		35-150
STL02577	13C5 PFHxA	102		55-150
STL01892	13C4 PFHpA	95		55-150
STL01052	13C8 PFOA	100		60-140
STL02578	13C9 PFNA	100		55-140
STL02579	13C6 PFDA	106		50-140
STL02580	13C7 PFUnA	104		30-140
STL00998	13C2 PFDoA	101		10-150
STL02116	13C2 PFTeDA	83		10-130
STL02337	13C3 PFBS	105		55-150
STL02581	13C3 PFHxS	100		55-150
STL01054	13C8 PFOS	92		45-140
STL01056	13C8 FOSA	109		30-130
STL02118	d3-NMeFOSAA	104		45-200
STL02117	d5-NEtFOSAA	98		10-200
STL02395	M2-4:2 FTS	144		60-200
STL02279	M2-6:2 FTS	112		60-200
STL02280	M2-8:2 FTS	101		50-200
STL02255	13C3 HFPO-DA	110		25-160
STL02277	d7-N-MeFOSE-M	103		10-150
STL02278	d9-N-EtFOSE-M	102		10-150
STL02704	d5-NEtPFOSA	85		10-130
STL02705	d3-NMePFOSA	74		15-130

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.021.d
Lims ID: 460-292594-B-3-B MS
Client ID: WCF-10
Sample Type: MS
Inject. Date: 28-Nov-2023 17:03:21 ALS Bottle#: 15 Worklist Smp#: 17
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: 460-292594-B-3-B MS
Misc. Info.: Plate: 1 Rack: 1
Operator ID: B5QN Instrument ID: LC_LCMS11

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 29-Nov-2023 14:11:47 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1603

First Level Reviewer: B5QN Date: 29-Nov-2023 14:11:53
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.031	3.046	-0.015	0.995	5120120	10.0		100	31709	
* 1 13C3PFBA										
216.00 > 172.00	3.046	3.046	0.0		2517925	5.00			5259	
2 PFBA										
212.80 > 168.90	3.046	3.046	0.0	1.005	2021025	4.42		138	2285	
4 PFMPA										
229.00 > 84.90	3.728	3.728	0.0	0.835	2347704	6.15		96.1	12227	
5 3:3 FTCA										
241.00 > 177.00	3.912	3.912	0.0	0.877	715218	14.6	Target=1.58	91.5	14796	
241.00 > 117.00	3.912	3.912	0.0	0.877	409886		1.74(0.79-2.37)		8503	
D 7 13C5 PFPeA										
268.30 > 223.00	4.462	4.463	-0.001	0.834	1494347	4.55		91.0	8505	
6 PFPA										M
263.00 > 219.00	4.462	4.478	-0.016	1.000	4064785	6.78	Target=212.56	212	815	
263.00 > 68.90	4.462	4.478	-0.016	1.000	15306		265.57(106.28-318.84)		150	M
8 PFMBA										
279.00 > 85.10	4.778	4.778	0.0	1.071	4639247	6.14		96.0	32492	
10 4:2FTS										
327.10 > 307.00	5.096	5.097	-0.001	1.000	1165223	7.53	Target=1.59	94.5	29555	
327.10 > 80.90	5.096	5.097	-0.001	1.000	756614		1.54(0.79-2.38)		2092	
D 9 13C2-4:2FTS										
329.10 > 80.90	5.096	5.097	-0.001	0.742	307520	6.70	Target=4.54	144	912	
329.10 > 309.00	5.096	5.097	-0.001	0.742	69955		4.40(2.27-6.81)	144	2952	
11 NFDHA										
295.00 > 201.00	5.280	5.280	0.0	0.986	659075	2.83	Target=1.95	88.4	14243	
295.00 > 84.90	5.280	5.280	0.0	0.986	329413		2.00(0.97-2.92)		1475	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 16 13C3 PFBS										
302.10 > 79.90	5.353	5.354	-0.001	0.779	638424	2.45	Target=4.56	105	5196	
302.10 > 98.90	5.353	5.354	-0.001	0.779	129585		4.93(2.28-6.83)	105	5548	
15 PFBS										
298.70 > 79.90	5.353	5.354	-0.001	1.000	744455	3.05	Target=2.16	107	5394	
298.70 > 98.80	5.353	5.354	-0.001	1.000	326806		2.28(1.08-3.24)		8482	
* 14 13C2 PFHxA										
315.10 > 270.00	5.353	5.371	-0.018		1647787	2.50	Target=79.67		19641	
315.10 > 119.40	5.353	5.371	-0.018		23086		71.38(39.83-119.50)		437	
D 12 13C5 PFHxA										
318.00 > 273.00	5.353	5.371	-0.018	1.000	1878442	2.54	Target=53.27	102	20682	
318.00 > 120.30	5.353	5.371	-0.018	1.000	37802		49.69(26.63-79.90)	102	844	
13 PFHxA										
313.00 > 269.00	5.353	5.371	-0.018	1.000	5919482	7.15	Target=18.64	224	2628	
313.00 > 118.90	5.353	5.371	-0.018	1.000	278991		21.22(9.32-27.96)		5204	
18 5:3 FTCA										
341.00 > 237.10	5.624	5.644	-0.020	1.051	3573058	26.2	Target=1.16	82.0	15900	
341.00 > 217.00	5.624	5.644	-0.020	1.051	3161378		1.13(0.58-1.74)		16464	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.682	5.682	0.0	1.061	1989964	11.0	Target=1.53	110	25112	
286.90 > 184.90	5.682	5.682	0.0	1.061	1083140		1.84(0.76-2.29)	110	10637	
19 HFPO-DA										
284.90 > 168.90	5.682	5.682	0.0	1.000	568370	2.65	Target=1.75	82.9	10434	
284.90 > 184.90	5.682	5.682	0.0	1.000	329882		1.72(0.87-2.62)		4189	
21 PFEESA										
314.80 > 134.90	5.789	5.789	0.0	1.081	4592880	5.02	Target=13.97	87.9	85538	
314.80 > 82.90	5.789	5.789	0.0	1.081	314531		14.60(6.99-20.96)		6847	
D 22 13C4 PFHpA										
367.10 > 322.00	6.121	6.122	-0.001	1.143	1835932	2.37		95.0	26035	
17 PFHpA										
363.10 > 319.00	6.121	6.122	-0.001	1.000	3410404	4.72	Target=3.96	147	2920	
363.10 > 169.00	6.121	6.122	-0.001	1.000	817816		4.17(1.98-5.95)		8906	
23 PFPeS										
349.10 > 79.90	6.223	6.223	0.0	0.906	677230	2.92	Target=2.70	97.3	4332	
349.10 > 98.90	6.223	6.223	0.0	0.906	239690		2.83(1.35-4.04)		2595	
24 ADONA										
376.90 > 250.90	6.355	6.355	0.0	1.118	4853550	2.70	Target=3.02	89.3	85408	
376.90 > 84.80	6.355	6.355	0.0	1.118	1401557		3.46(1.51-4.53)		17906	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.470	6.471	-0.001	0.942	318074	5.31	Target=4.15	112	3225	
429.10 > 409.00	6.470	6.471	-0.001	0.942	80401		3.96(2.07-6.22)	112	3813	
25 6:2FTS										
427.10 > 407.00	6.470	6.471	-0.001	1.000	1497932	11.7	Target=1.93	96.8	26582	
427.10 > 80.90	6.470	6.471	-0.001	1.000	812254		1.84(0.96-2.89)		8835	
D 27 13C8 PFOA										
421.10 > 376.00	6.707	6.707	0.0	1.000	1629492	2.50		100	28292	
* 29 13C4 PFOA										
417.10 > 172.00	6.707	6.707	0.0		248586	2.50			8611	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 PFOA										
413.00 > 369.00	6.707	6.724	-0.017	1.000	3269014	6.28	Target=2.30	196	5676	
413.00 > 169.00	6.707	6.724	-0.017	1.000	1190091		2.75(1.15-3.45)		18226	
30 7:3 FTCA										
441.00 > 316.90	6.871	6.871	0.0	1.284	1576274	25.0	Target=1.43	78.2	30781	
441.00 > 336.90	6.871	6.871	0.0	1.284	1121540		1.41(0.72-2.15)		8561	
32 PFHxS										
398.70 > 79.90	6.871	6.871	0.0	1.000	287801	2.62	Target=3.86	89.8	11001	
398.70 > 98.90	6.871	6.871	0.0	1.000	73205		3.93(1.93-5.79)		2936	
* 31 18O2 PFHxS										
403.00 > 83.90	6.871	6.871	0.0		482232	2.37			16770	
D 33 13C3 PFHxS										
402.10 > 79.90	6.871	6.888	-0.017	1.000	488247	2.36	Target=4.11	99.8	8447	
402.10 > 98.80	6.871	6.888	-0.017	1.000	120546		4.05(2.05-6.16)	99.8	5592	
D 34 13C9 PFNA										
472.10 > 427.00	7.261	7.261	0.0	1.000	1042945	1.25		100	21497	
36 PFNA										
463.00 > 419.00	7.261	7.261	0.0	1.000	3061834	3.65	Target=6.02	114	12254	
463.00 > 219.00	7.261	7.261	0.0	1.000	505581		6.06(3.01-9.04)		12625	
* 35 13C5 PFNA										
468.00 > 423.00	7.261	7.261	0.0		1103254	1.25			17151	
37 PFHpS										
449.00 > 79.90	7.473	7.473	0.0	0.934	503361	3.14	Target=4.91	103	8651	
449.00 > 98.80	7.473	7.473	0.0	0.934	103018		4.89(2.46-7.37)		2858	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.523	7.522	0.001	1.095	349499	4.81	Target=5.49	101	4896	
529.10 > 509.00	7.523	7.522	0.001	1.095	61346		5.70(2.74-8.23)	101	2850	
39 8:2FTS										
527.10 > 507.00	7.523	7.522	0.001	1.000	1263395	11.9	Target=1.56	97.2	25125	
527.10 > 80.80	7.523	7.522	0.001	1.000	739968		1.71(0.78-2.33)		9388	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.743	7.761	-0.018	0.967	473269	5.21		104	10679	
42 NMeFOSAA										
570.10 > 419.00	7.743	7.761	-0.018	1.000	274390	2.90	Target=1.15	90.5	8051	
570.10 > 483.00	7.743	7.761	-0.018	1.000	226447		1.21(0.58-1.73)		5873	
43 PFDA										
512.90 > 469.00	7.779	7.779	0.0	1.000	2796417	4.03	Target=3.33	126	16318	
512.90 > 219.00	7.779	7.779	0.0	1.000	716852		3.90(1.67-5.00)		15977	
* 44 13C2 PFDA										
515.10 > 470.10	7.779	7.779	0.0		1004236	1.25			16766	
D 40 13C6 PFDA										
519.10 > 474.10	7.779	7.779	0.0	1.000	1054993	1.32		106	23276	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.951	7.969	-0.018	0.993	513513	4.88		97.7	8641	
45 NEtFOSAA										
584.20 > 419.10	7.969	7.969	0.0	1.002	215451	2.88	Target=1.55	90.1	5060	
584.20 > 526.00	7.951	7.969	-0.018	1.000	147191		1.46(0.77-2.32)		5007	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 49 13C8 PFOS										
507.10 > 79.90	8.004	8.021	-0.017	1.000	214389	2.21	Target=2.95	92.4	83.4	
507.10 > 98.90	8.004	8.021	-0.017	1.000	68678		3.12(1.47-4.42)	92.4	3107	
* 47 13C4 PFOS										
502.80 > 79.90	8.004	8.021	-0.017		647110	2.40	Target=3.78		8746	
502.80 > 98.90	8.004	8.021	-0.017		174831		3.70(1.89-5.67)		7922	
48 PFOS										
498.90 > 79.90	8.004	8.021	-0.017	1.000	998831	3.42	Target=4.86	115	50668	
498.90 > 98.80	8.004	8.021	-0.017	1.000	203046		4.92(2.43-7.28)		7879	
D 53 13C7 PFUnA										
570.00 > 525.10	8.267	8.285	-0.018	1.063	1156656	1.30		104	21558	
52 PFUnA										
563.10 > 519.00	8.267	8.285	-0.018	1.000	2742730	3.35	Target=5.72	105	23702	
563.10 > 269.10	8.267	8.285	-0.018	1.000	495750		5.53(2.86-8.59)		7214	
54 9ClFOS										
530.80 > 351.00	8.390	8.408	-0.018	1.477	2416081	6.71	Target=2.23	84.3	24353	
532.80 > 353.00	8.390	8.408	-0.018	1.477	1022922		2.36(1.11-3.34)		33433	
55 PFNS										
548.80 > 79.90	8.529	8.529	0.0	1.066	395248	3.31	Target=4.00	107	10536	
548.80 > 98.80	8.529	8.529	0.0	1.066	89377		4.42(2.00-6.00)		3001	
D 50 13C8 FOSA										
506.10 > 77.80	8.756	8.756	0.0	1.094	1282231	2.73		109	15118	
51 PFOSA										
498.10 > 77.90	8.756	8.773	-0.017	1.000	1446260	2.83	Target=41.88	88.5	10112	
498.10 > 478.00	8.756	8.773	-0.017	1.000	35389		40.87(20.94-62.83)		1496	
D 56 13C2 PFDoA										
615.10 > 570.00	8.756	8.773	-0.017	1.126	1112399	1.26		101	24239	
57 PFDoA										
613.10 > 569.00	8.773	8.773	0.0	1.002	2635280	2.95	Target=7.45	92.1	31311	
613.10 > 319.00	8.773	8.773	0.0	1.002	346558		7.60(3.73-11.18)		7601	
58 PFDS										
599.00 > 79.90	9.028	9.044	-0.016	1.128	851131	3.08	Target=4.54	100.0	9198	
599.00 > 98.80	9.028	9.044	-0.016	1.128	176509		4.82(2.27-6.82)		6178	
63 PFTrDA										
663.00 > 619.00	9.271	9.271	0.0	0.950	1466282	2.75	Target=5.19	85.9	16757	
663.00 > 168.90	9.271	9.271	0.0	0.950	278369		5.27(2.59-7.78)		7643	
66 11ClFOS										
630.90 > 450.90	9.428	9.444	-0.016	1.659	3186924	5.62	Target=3.47	69.9	50678	
632.90 > 452.90	9.428	9.444	-0.016	1.659	998148		3.19(1.74-5.21)		23788	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.756	9.774	-0.018	1.254	435060	1.04		83.1	11498	
70 PFTeDA										
713.10 > 669.00	9.756	9.774	-0.018	1.000	1180566	2.92	Target=6.88	91.2	14123	
713.10 > 168.90	9.756	9.774	-0.018	1.000	163432		7.22(3.44-10.32)		4335	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.910	9.910	0.0	1.238	8863806	25.7		103	34174	
60 N-MeFOSE-M										M
616.10 > 58.90	9.930	9.950	-0.020	1.002	5725504	14.8		92.3	3155	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
71 PFDoS										
699.10 > 79.90	10.026	10.045	-0.019	1.253	607855	2.75	Target=4.14	88.7	7392	
699.10 > 98.80	10.026	10.045	-0.019	1.253	130504		4.66(2.07-6.21)		3961	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.120	10.120	0.0	1.264	197533	1.86		74.2	4796	
61 NMeFOSA										
511.90 > 219.00	10.120	10.120	0.0	1.000	241190	3.19	Target=0.98	99.7	4781	
511.90 > 169.00	10.120	10.120	0.0	1.000	236811		1.02(0.49-1.47)		4491	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.310	10.310	0.0	1.288	11007719	25.6		102	82658	
65 N-EtFOSE-M										M
630.00 > 58.90	10.329	10.329	0.0	1.002	13560235	29.5		92.2	4533	M
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.500	10.500	0.0	1.312	231744	2.12		84.8	2905	
68 N-EtFOSA-M										
526.00 > 219.00	10.500	10.500	0.0	1.000	298576	3.01	Target=0.99	94.0	4990	
526.00 > 169.00	10.500	10.500	0.0	1.000	287629		1.04(0.50-1.49)		3494	

QC Flag Legend

Processing Flags

Review Flags

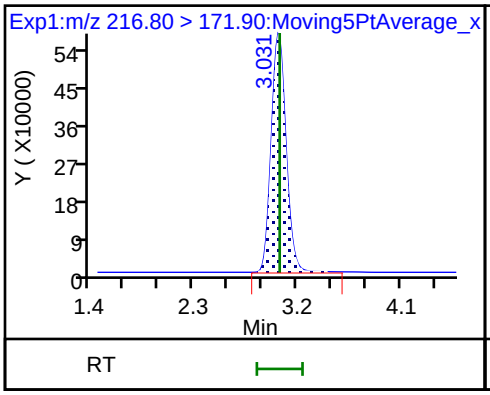
M - Manually Integrated

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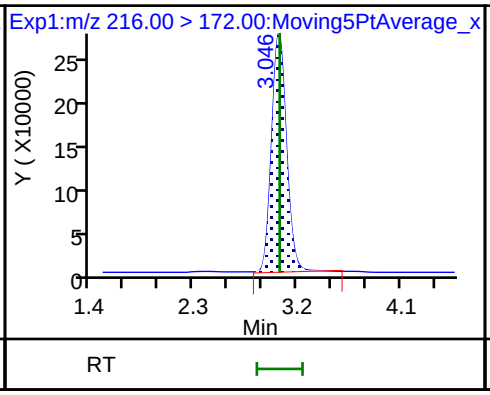
Eurofins Denver

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Lims ID: 460-292594-B-3-B MS
Client ID: WCF-10
Operator ID: B5QN ALS Bottle#: 15 Worklist Smp#: 17
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Method: PFC_IDA_DEN11 Limit Group: LC - 1633_DOD5

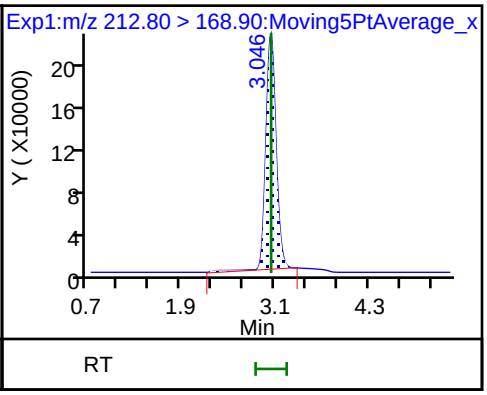
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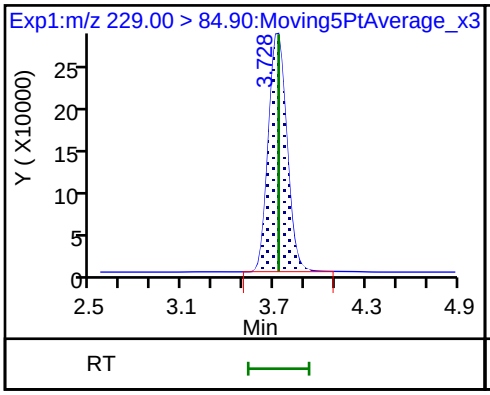
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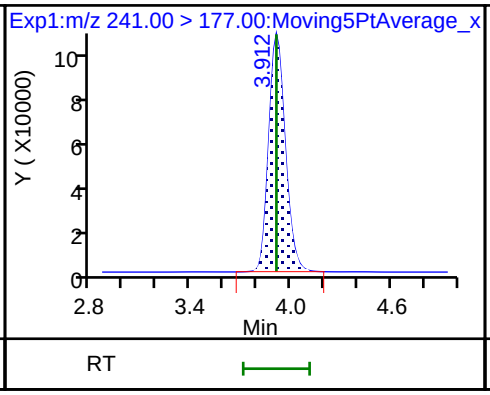
2 PFBA



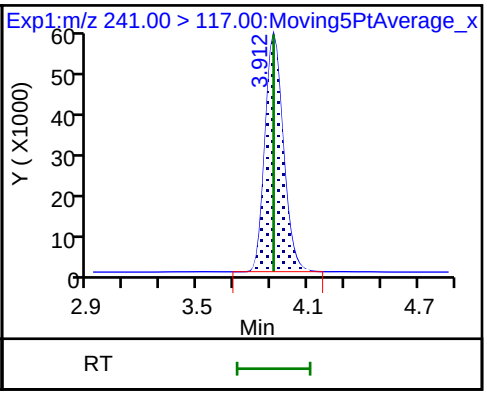
4 PFMPA



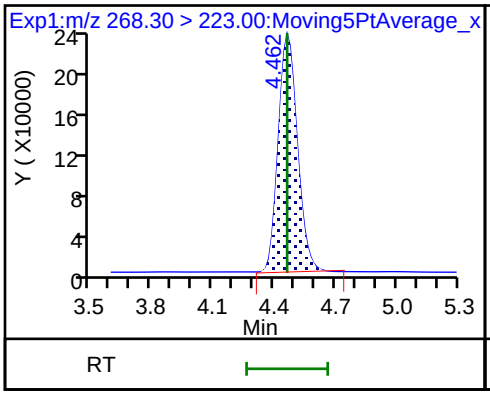
5 3:3 FTCA



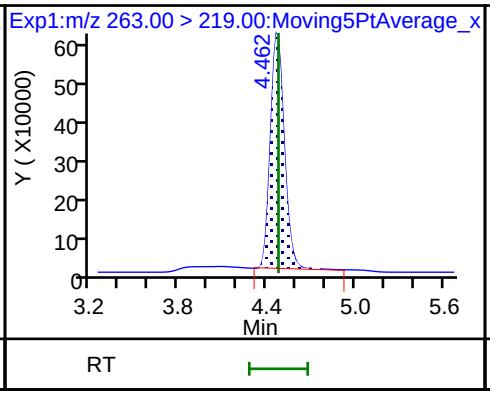
5 3:3 FTCA



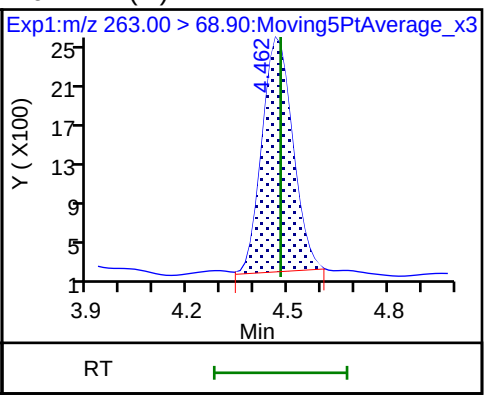
D 7 13C5 PFPeA



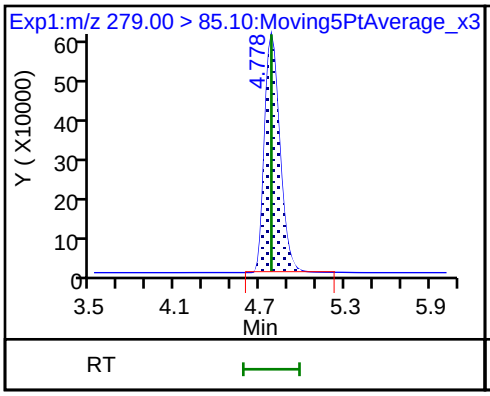
6 PFPA



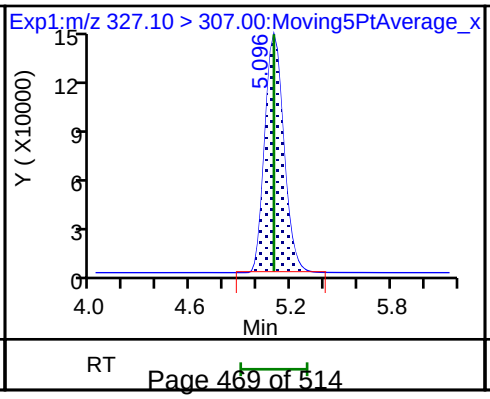
6 PFPA (M)



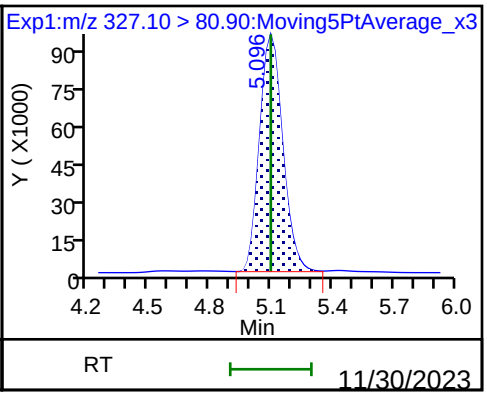
8 PFMBA



10 4:2FTS

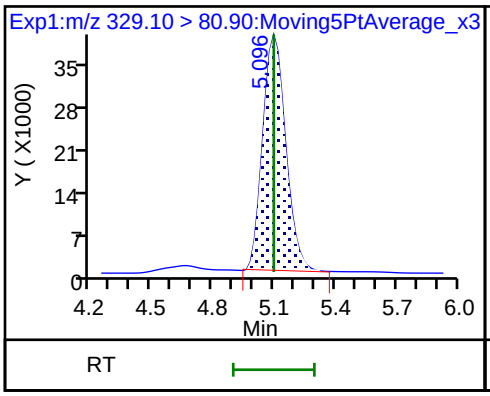


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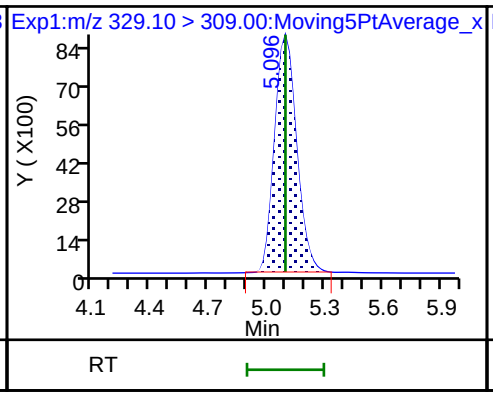


11/30/2023
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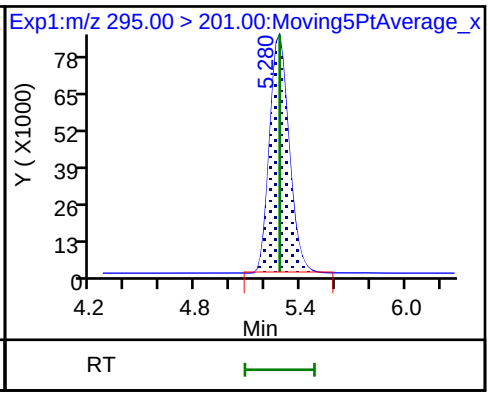
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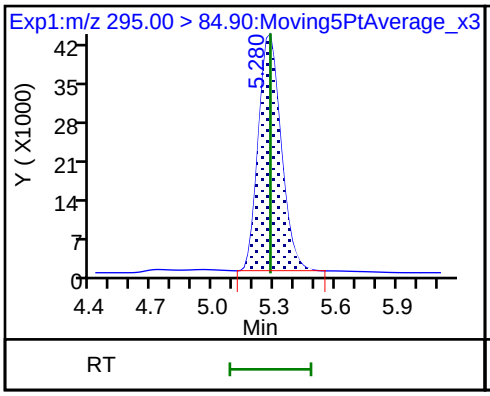
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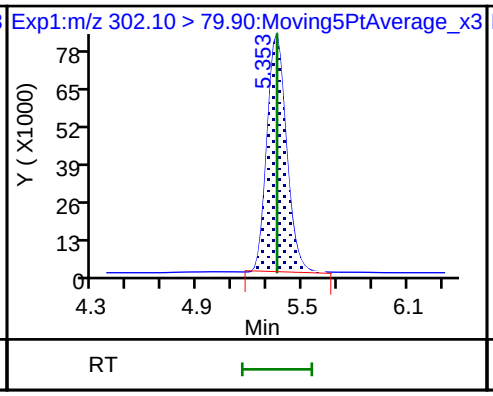
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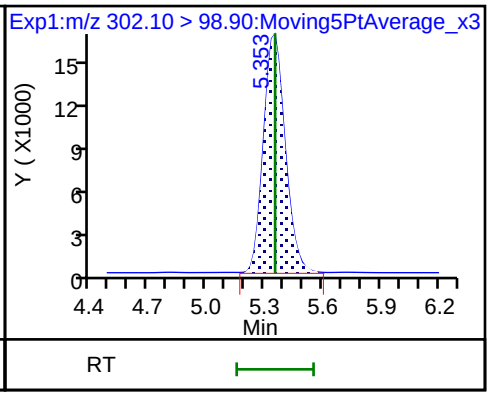
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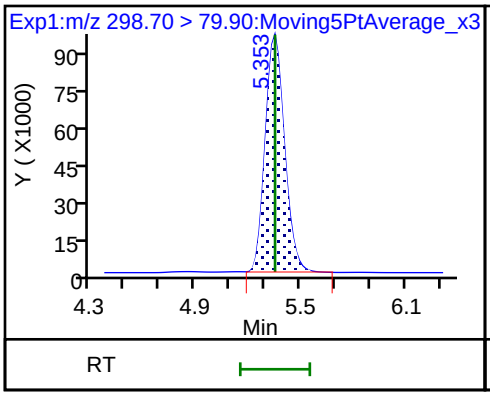
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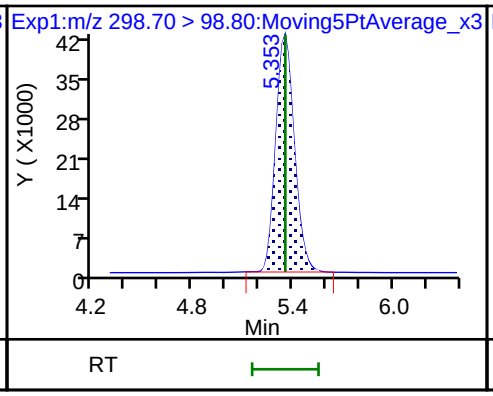
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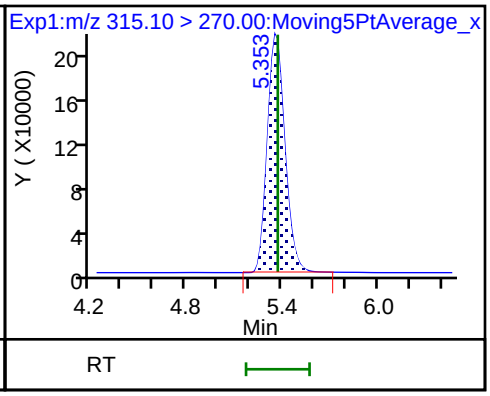
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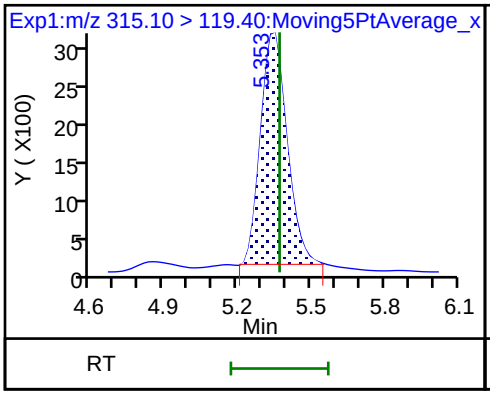
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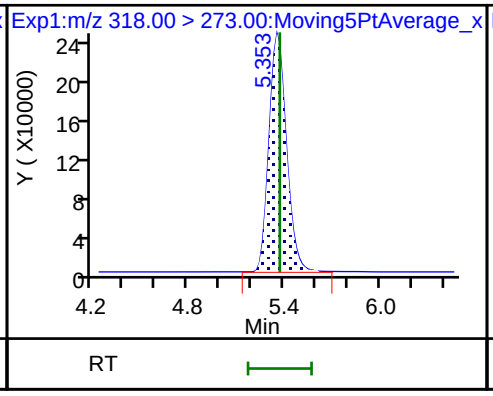
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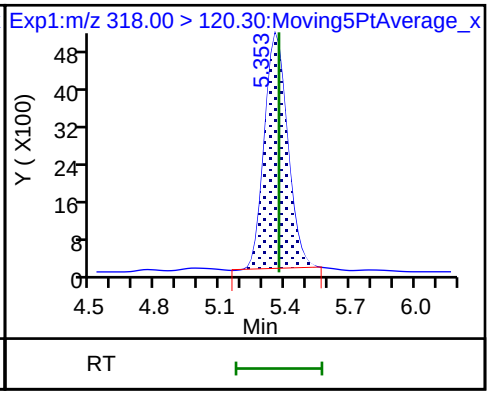
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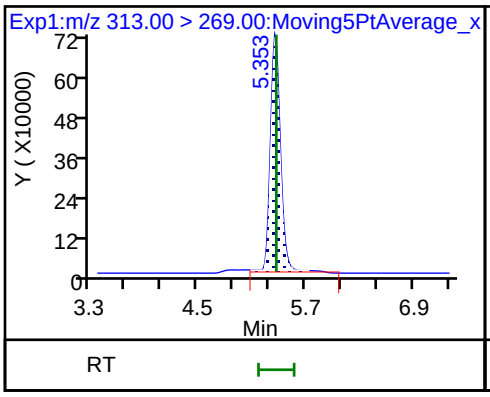
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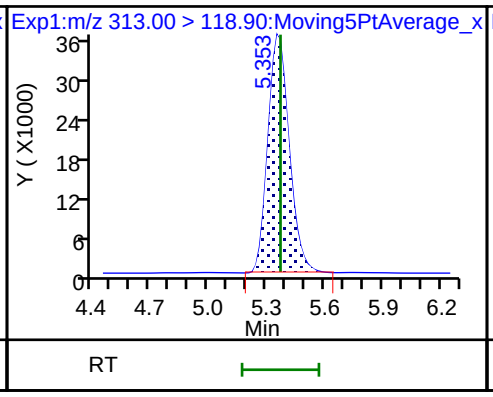
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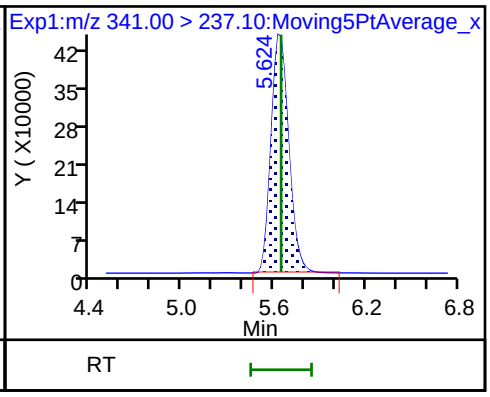
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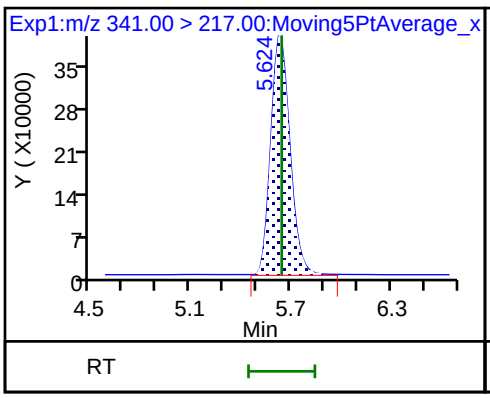
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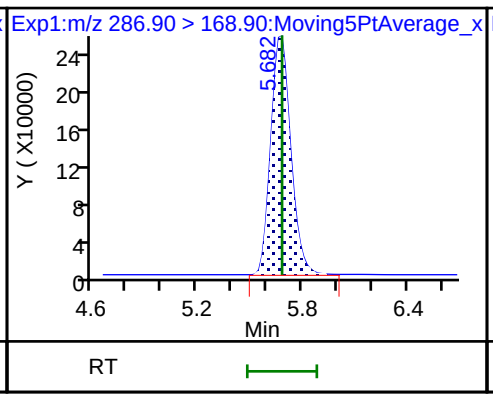
18 5:3 FTCA



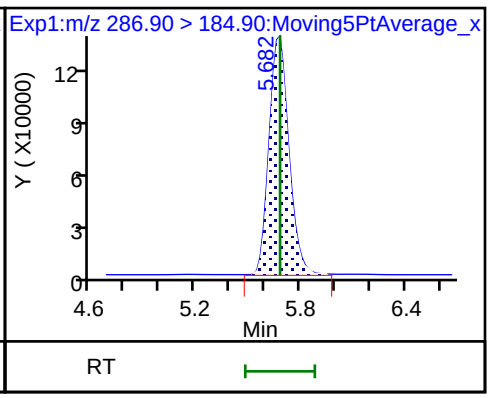
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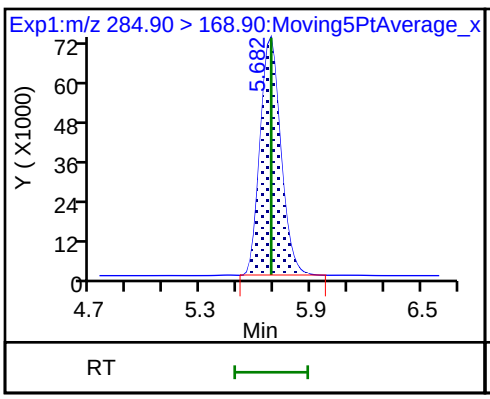
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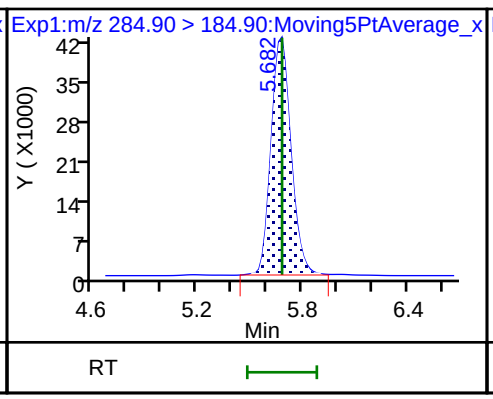
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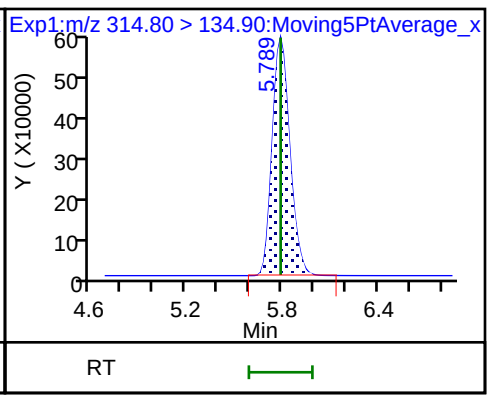
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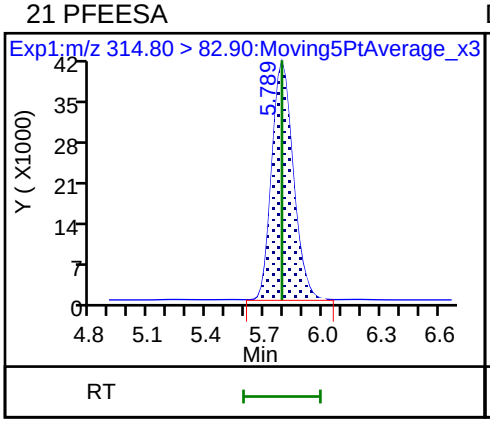
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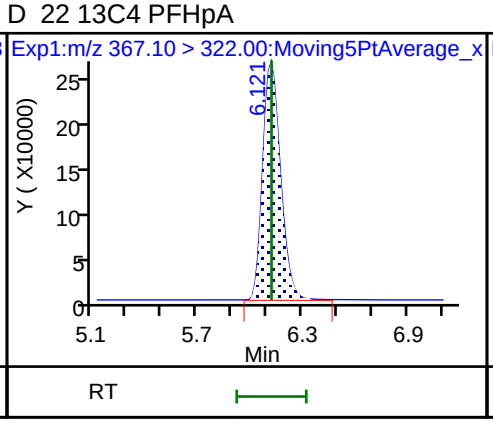
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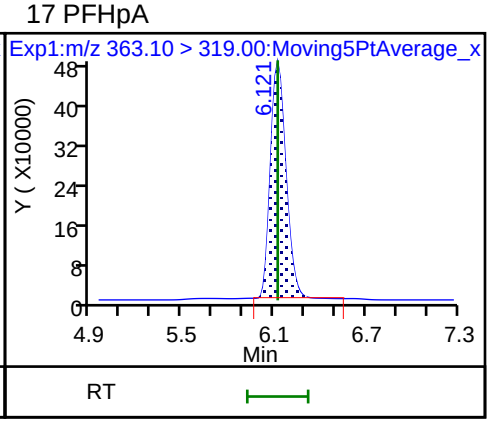
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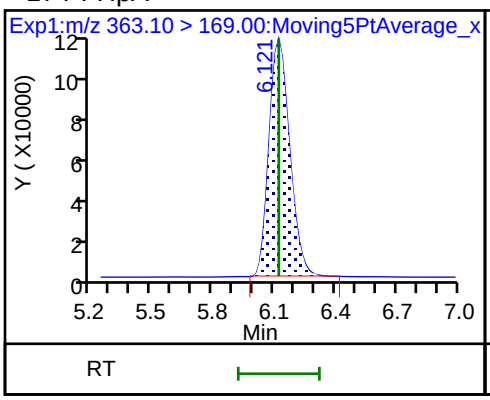
D 22 13C4 PFHpA



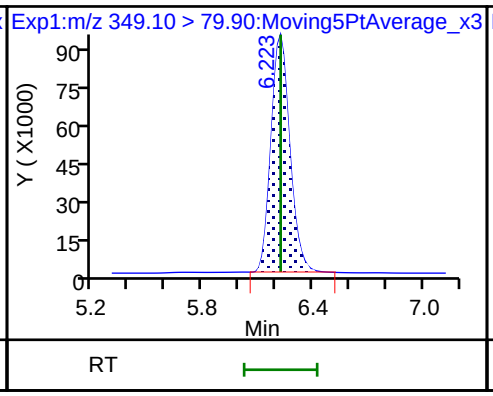
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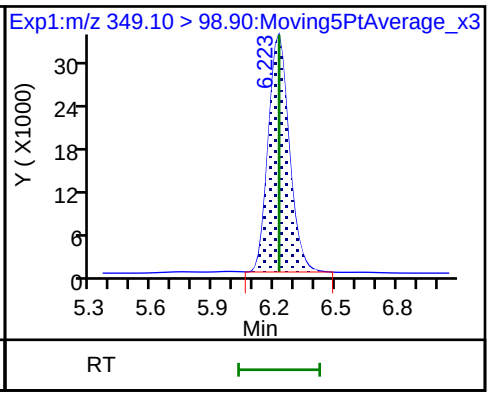
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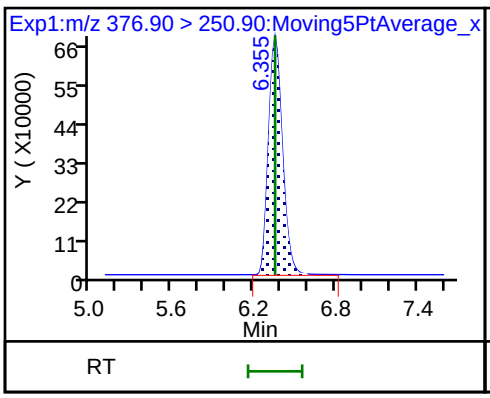
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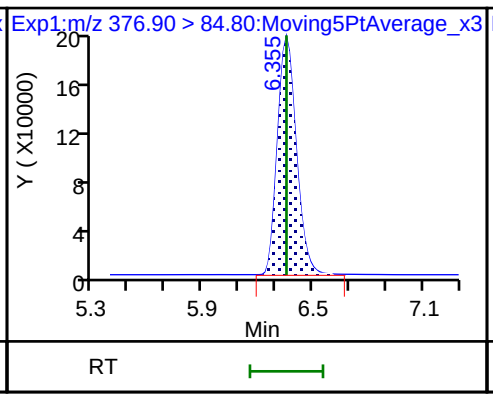
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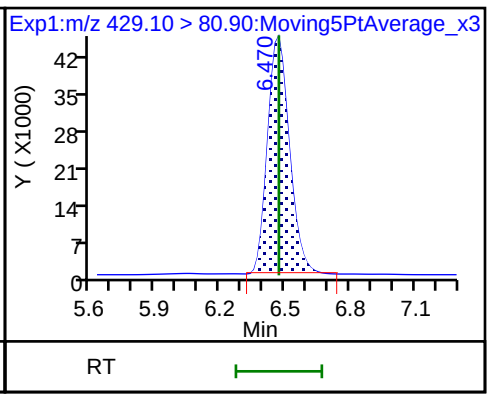
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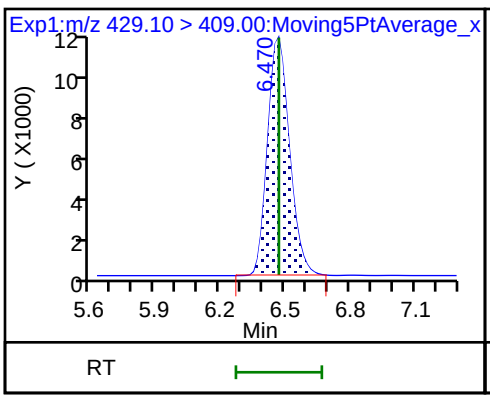
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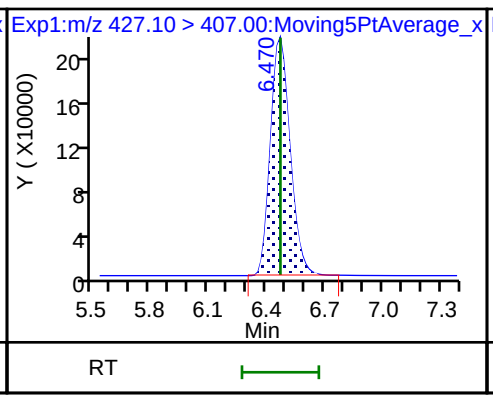
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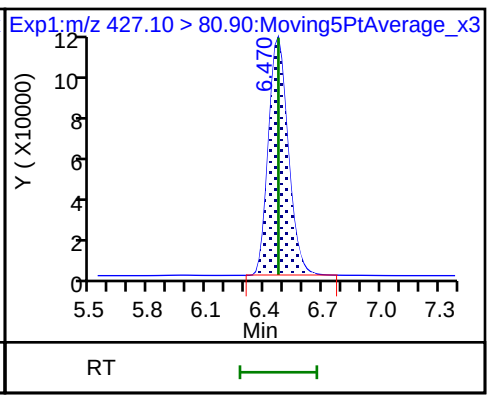
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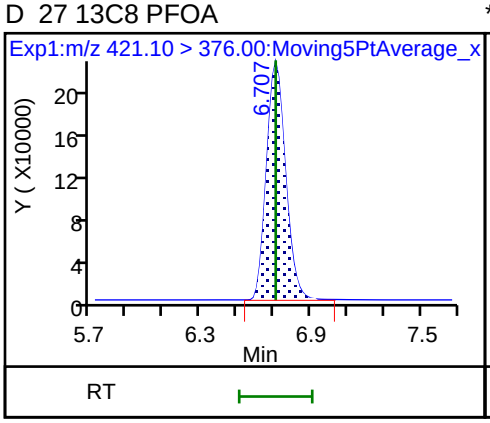
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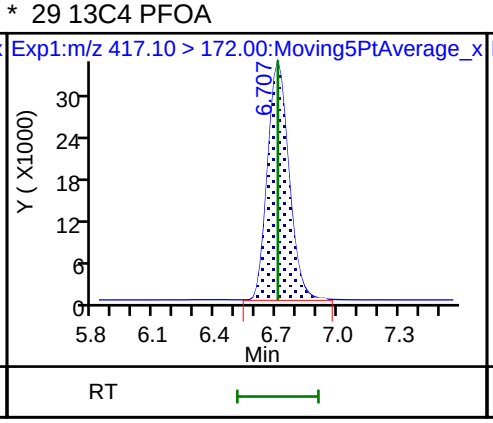
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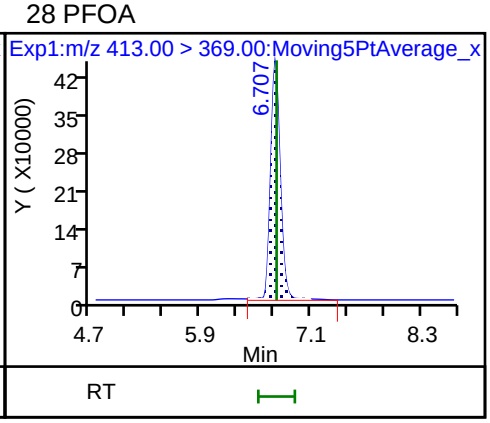
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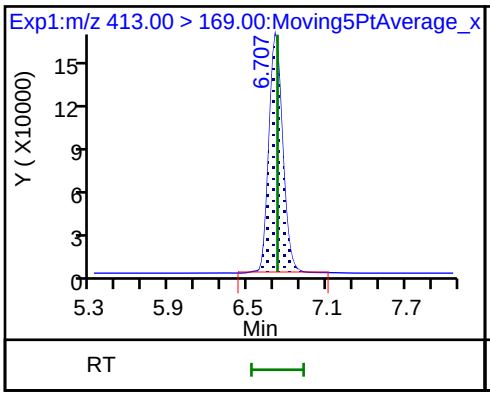
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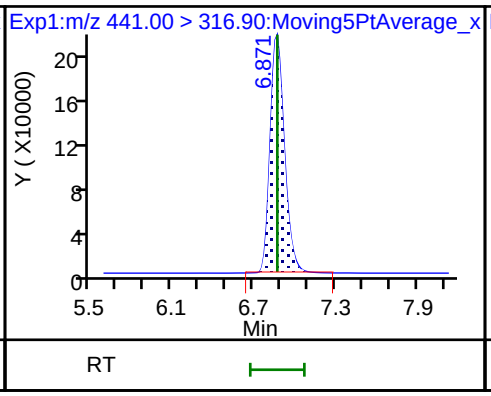
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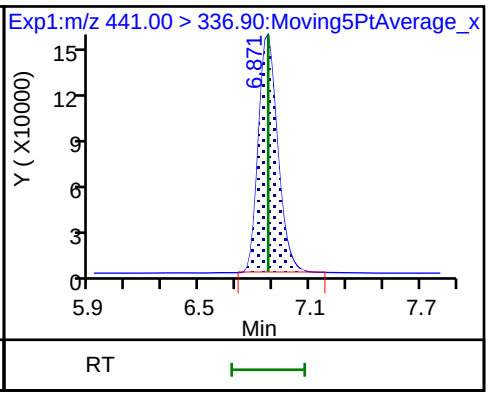
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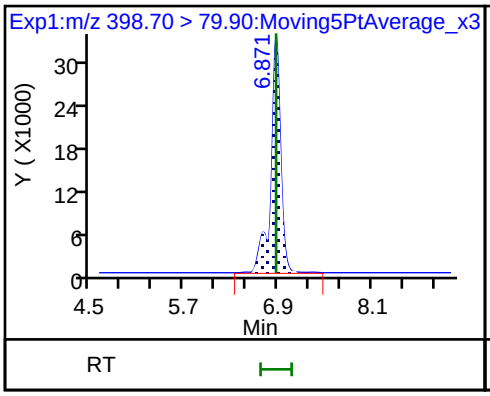
30 7:3 FTCA



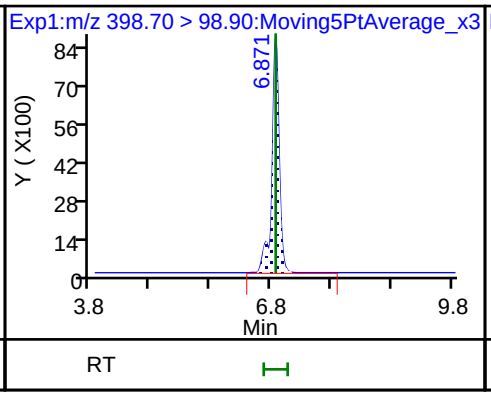
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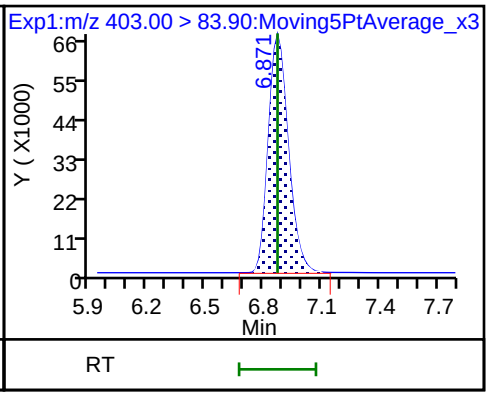
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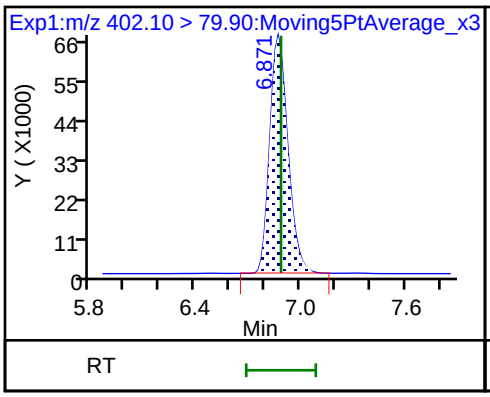
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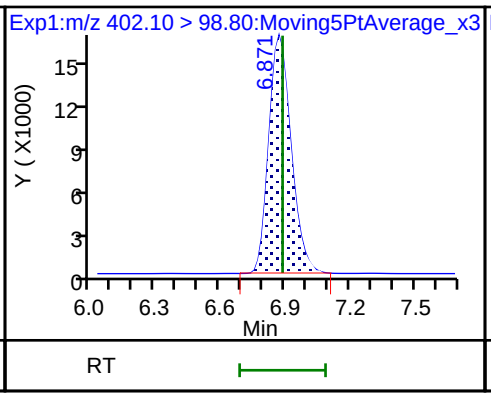
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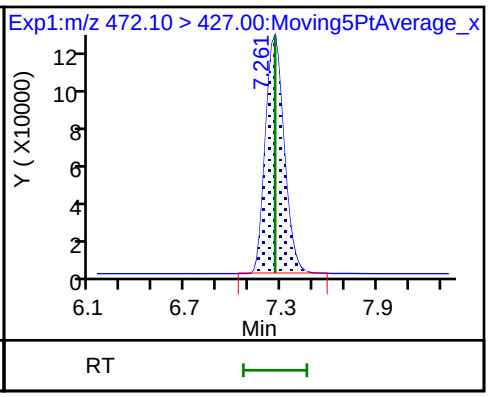
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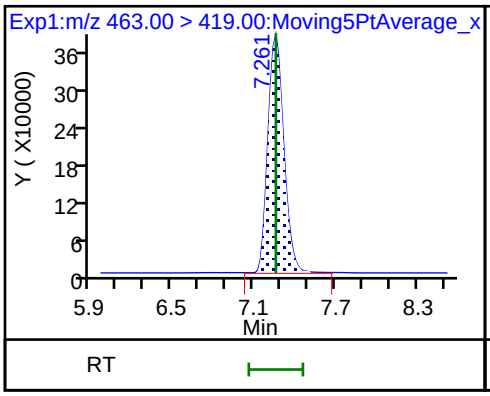
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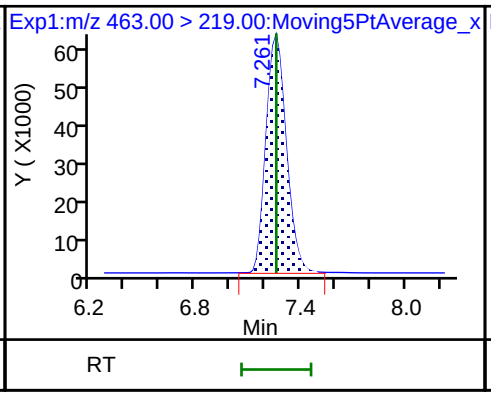
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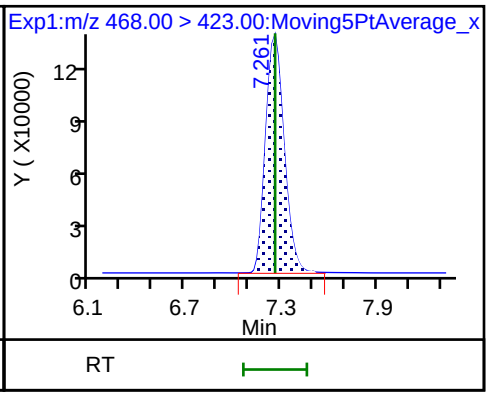
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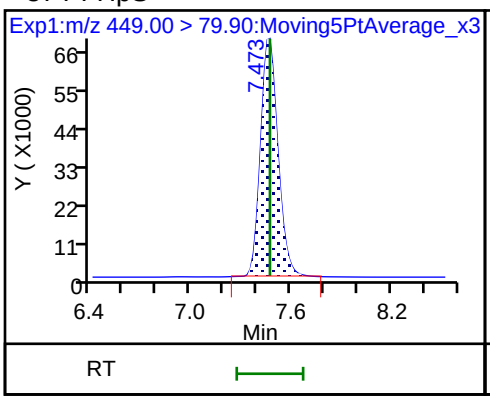
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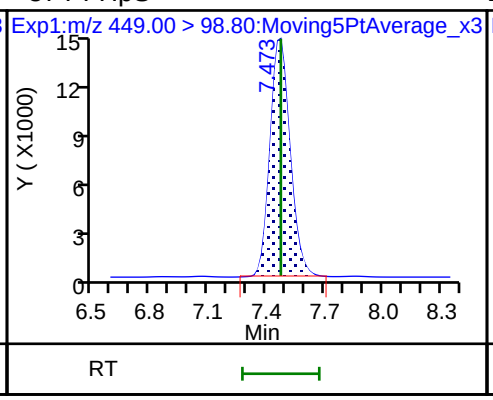
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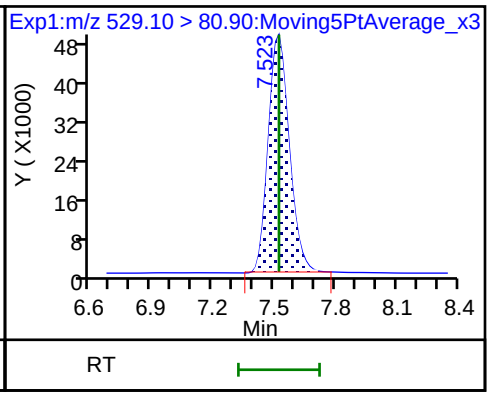
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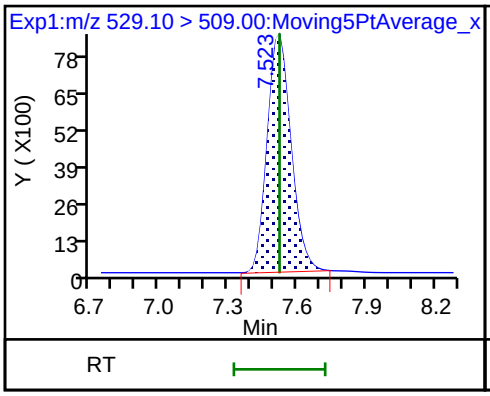
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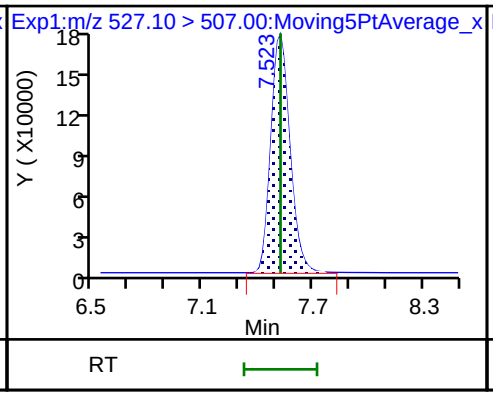
D 38 13C2-8:2FTS



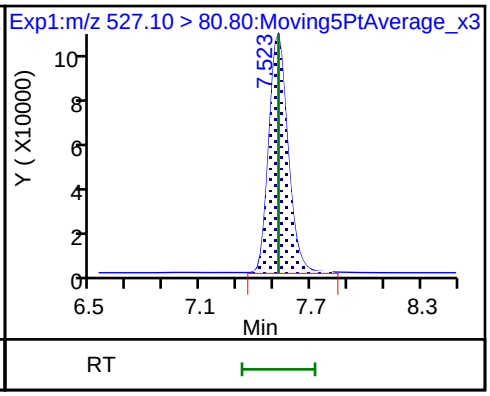
D 38 13C2-8:2FTS



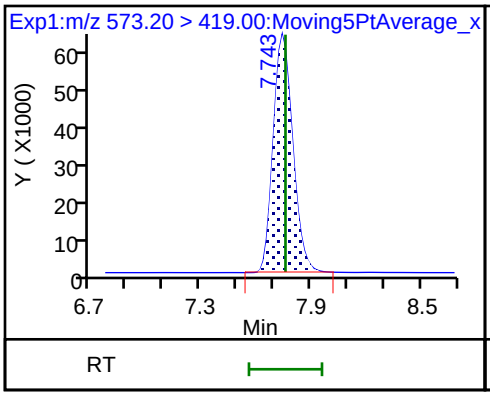
39 8:2FTS



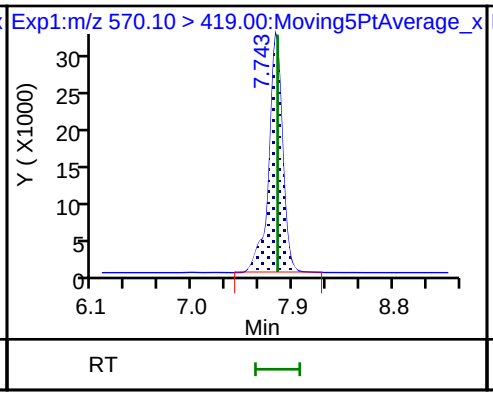
39 8:2FTS



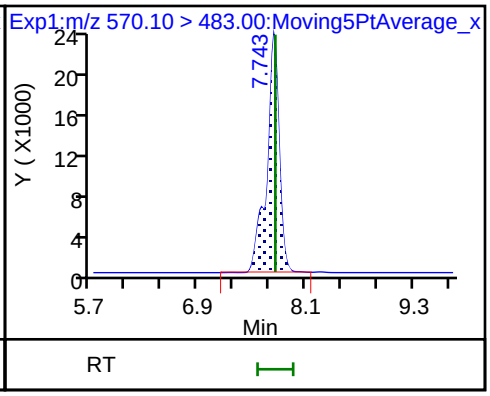
D 41 d3-NMeFOSAA



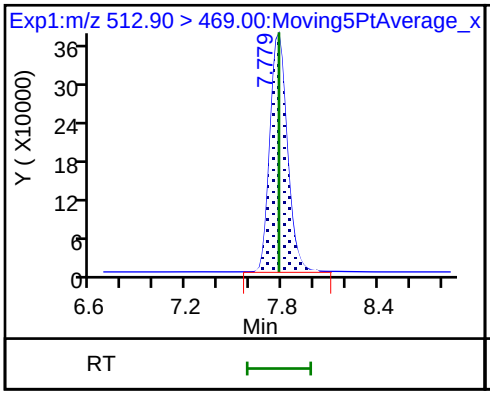
42 NMeFOSAA



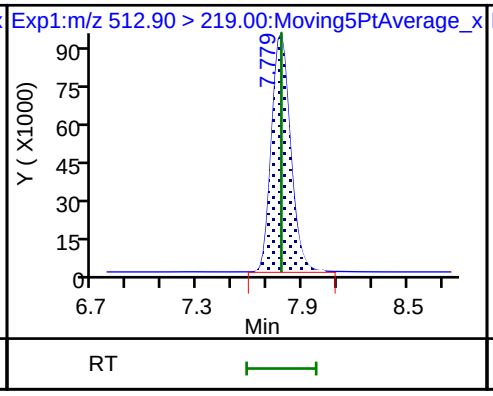
42 NMeFOSAA



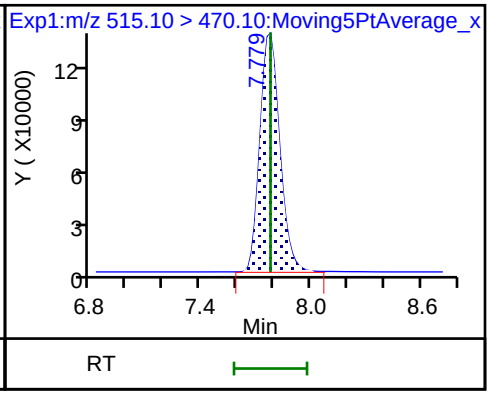
43 PFDA



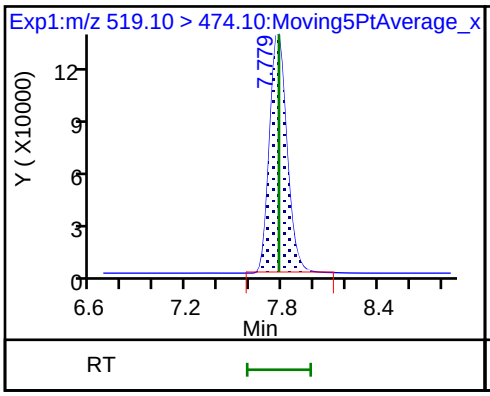
43 PFDA



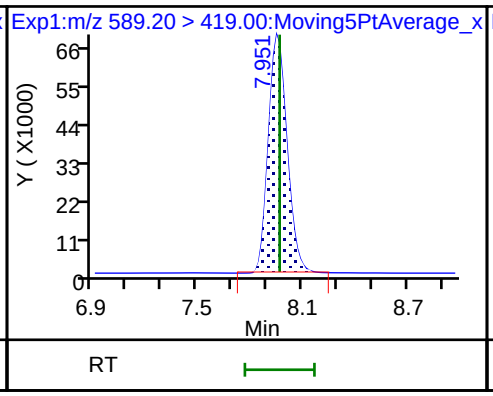
* 44 13C2 PFDA



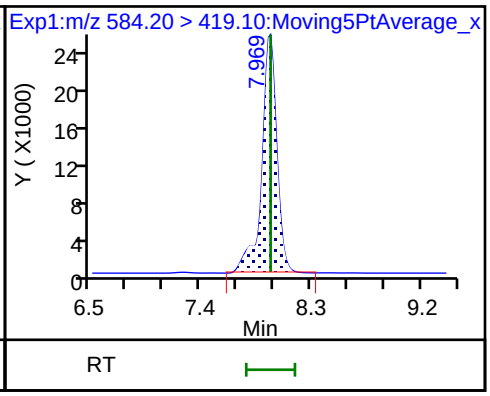
D 40 13C6 PFDA



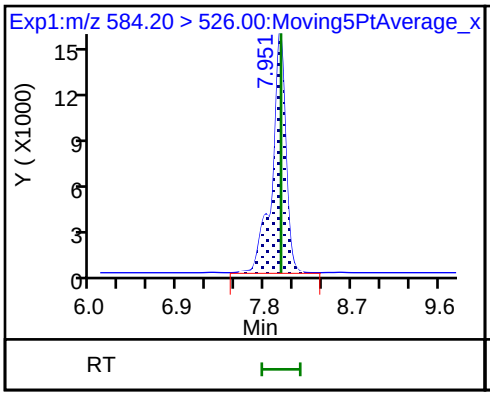
D 46 d5-NEtFOSAA



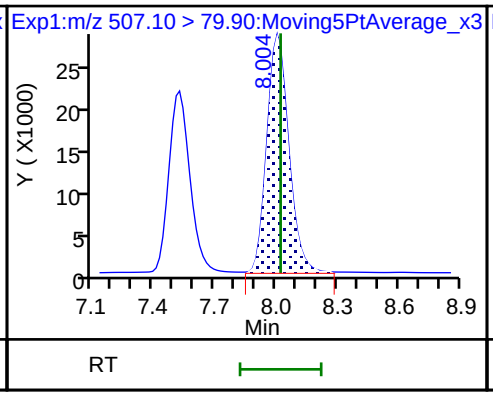
45 NEtFOSAA



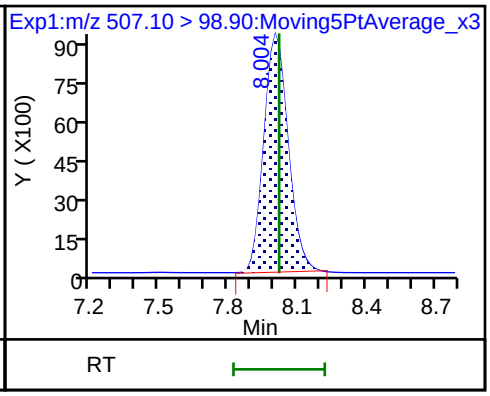
45 NEtFOSAA



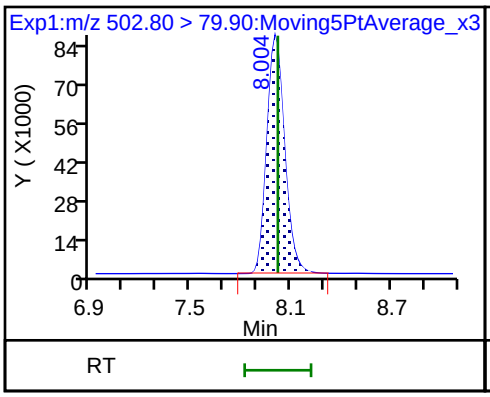
D 49 13C8 PFOS



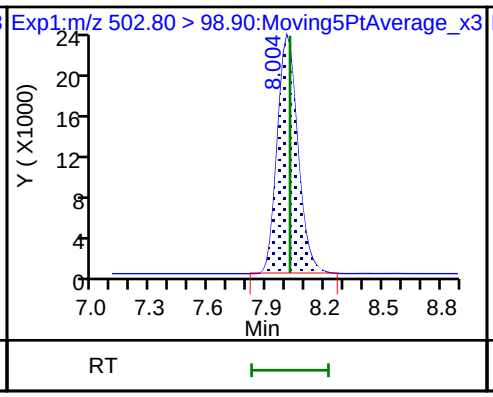
D 49 13C8 PFOS



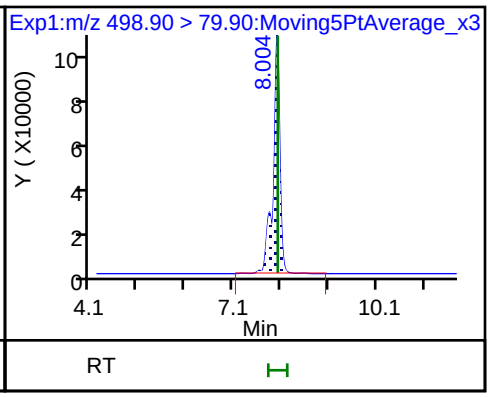
* 47 13C4 PFOS



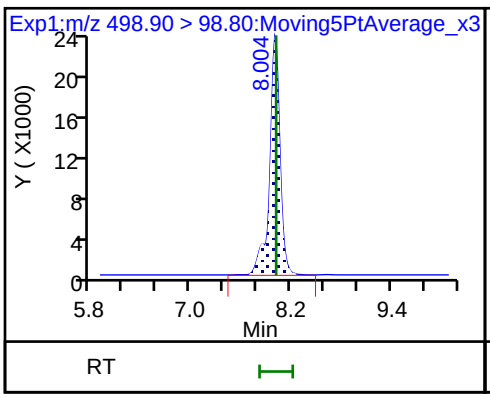
* 47 13C4 PFOS



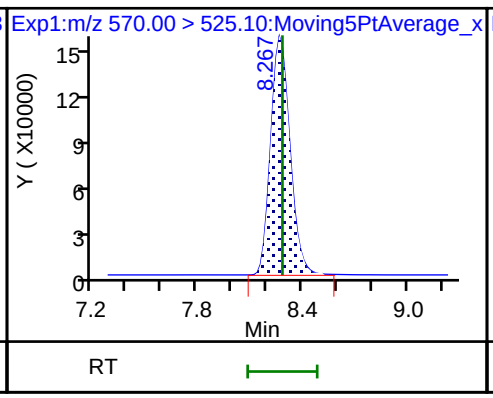
48 PFOS



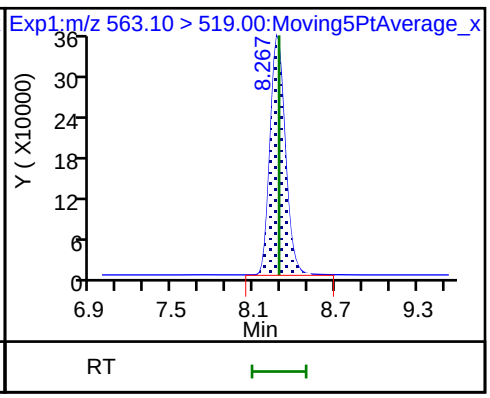
48 PFOS



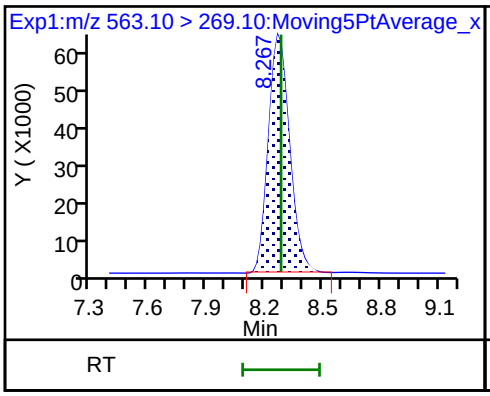
D 53 13C7 PFUnA



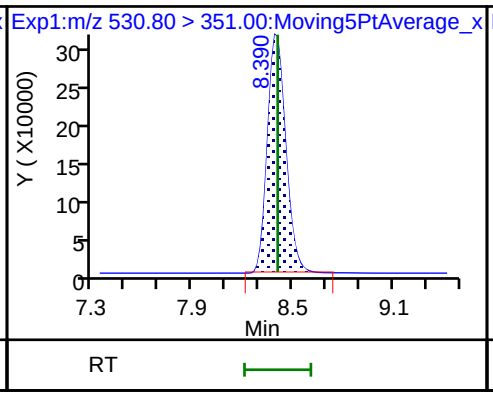
52 PFUnA



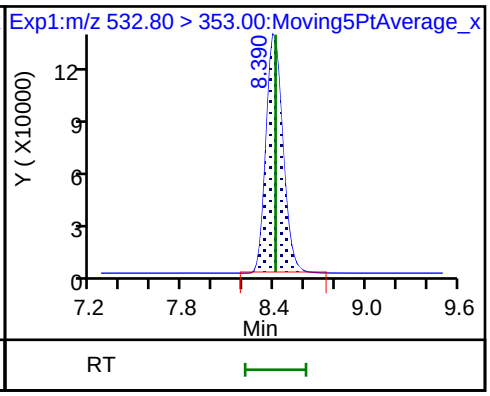
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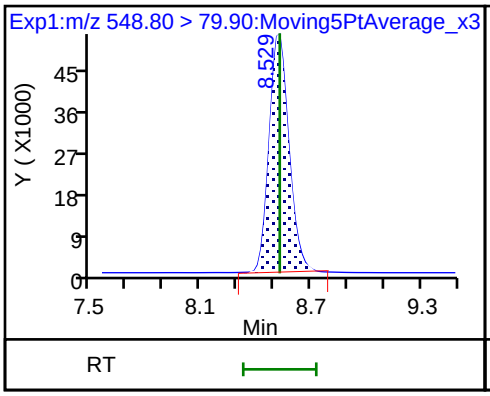
54 9ClFOS



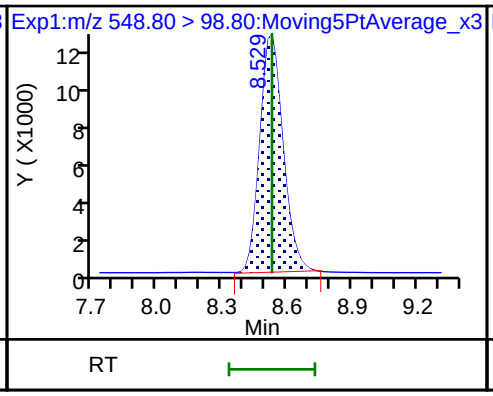
54 9ClFOS



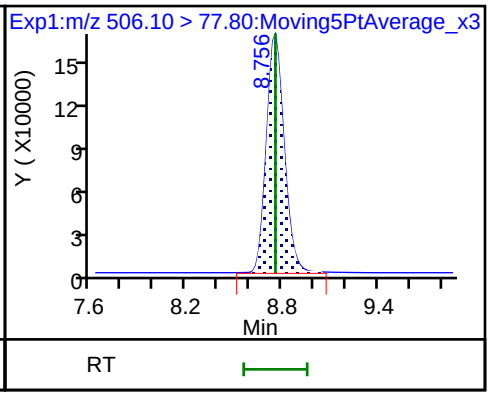
55 PFNS



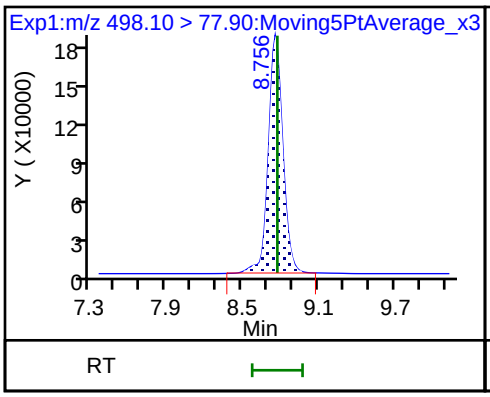
55 PFNS



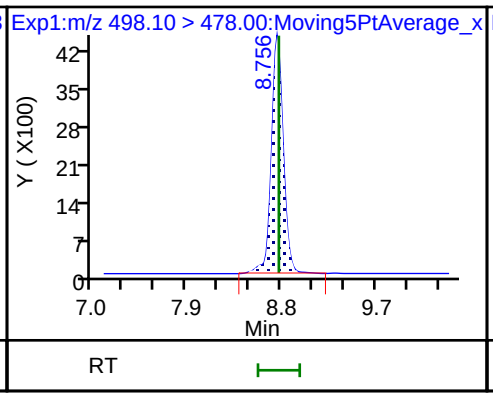
D 50 13C8 FOSA



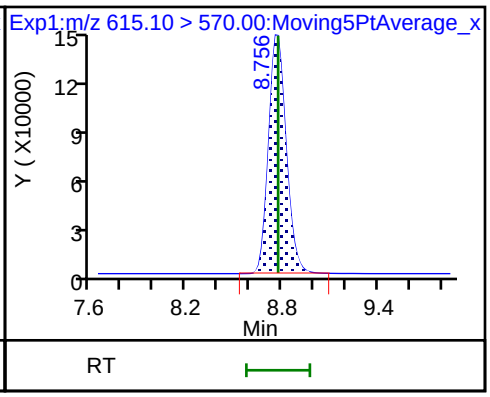
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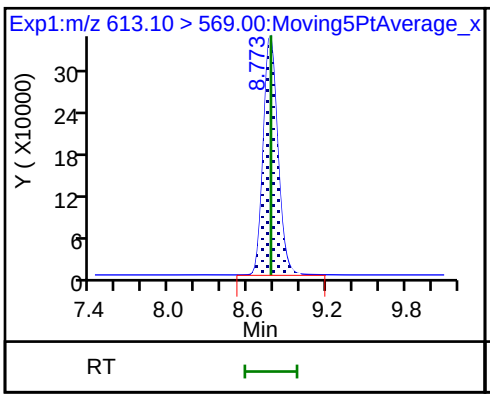
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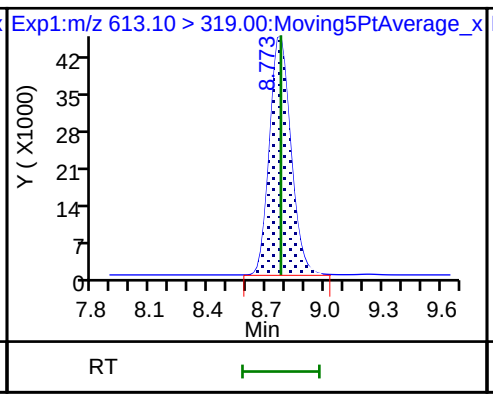
D 56 13C2 PFDoA



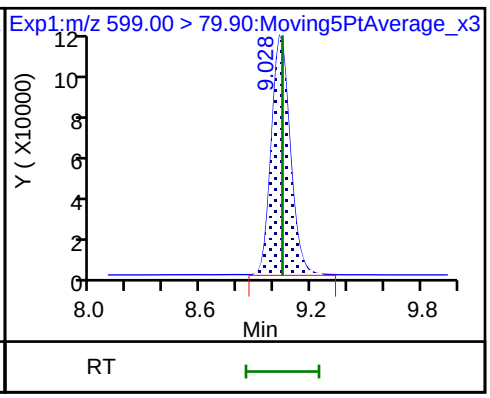
57 PFDoA



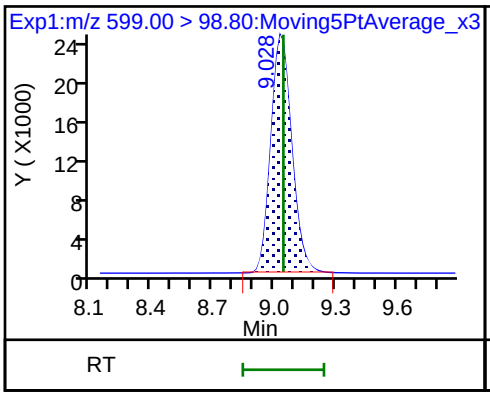
57 PFDoA



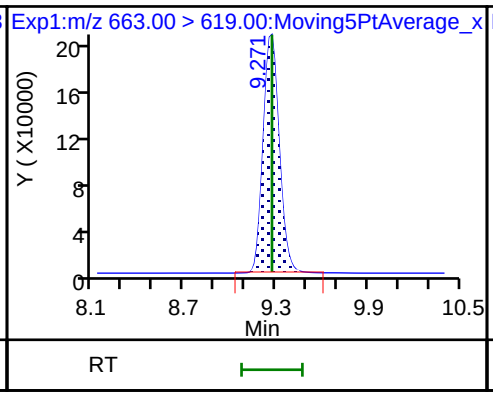
58 PFDS



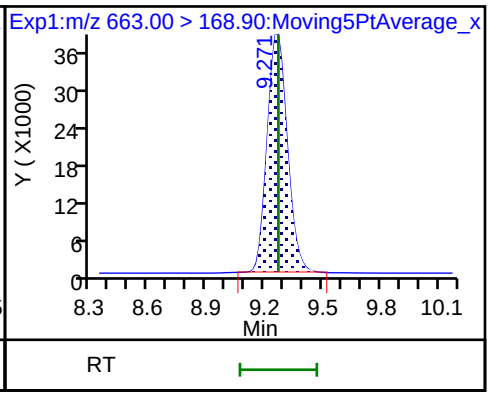
58 PFDS



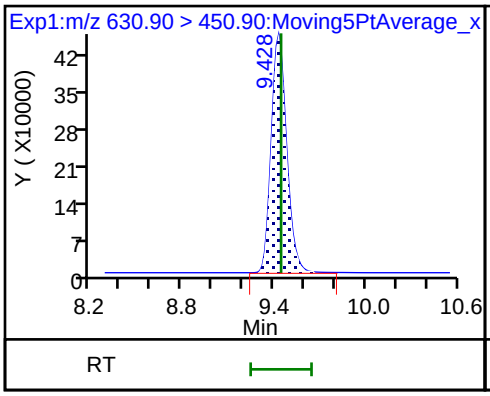
63 PFTrDA



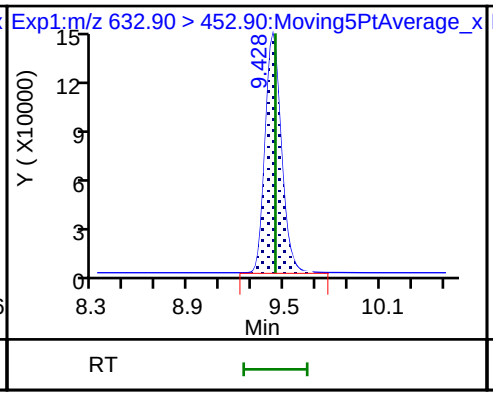
63 PFTrDA



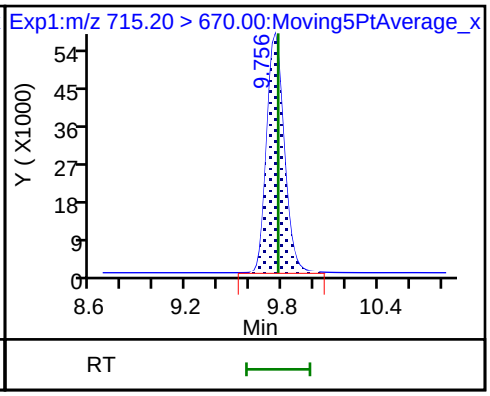
66 11ClFOS



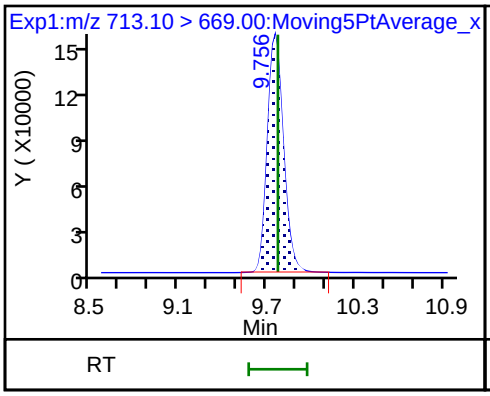
66 11ClFOS



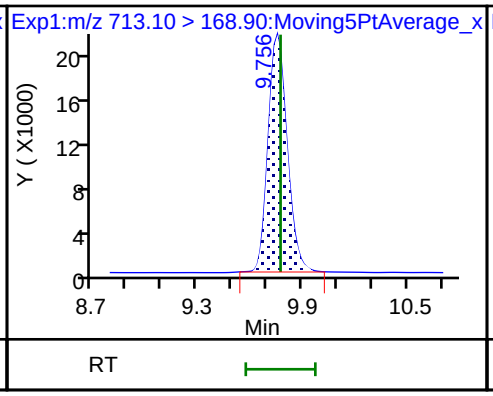
D 69 13C2 PFTeDA



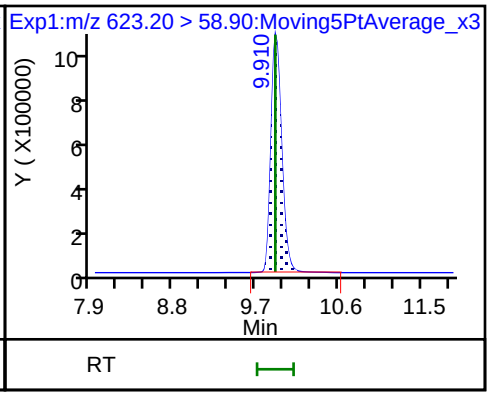
70 PFTeDA



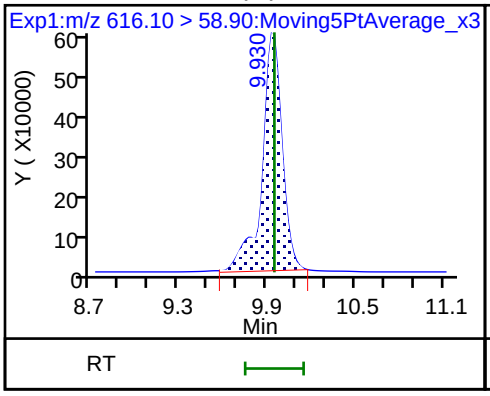
70 PFTeDA



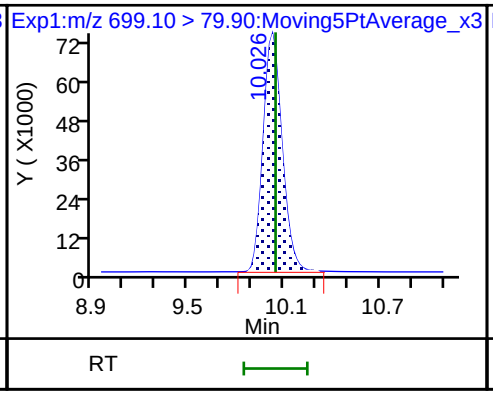
D 59 d7-N-Me-FOSE



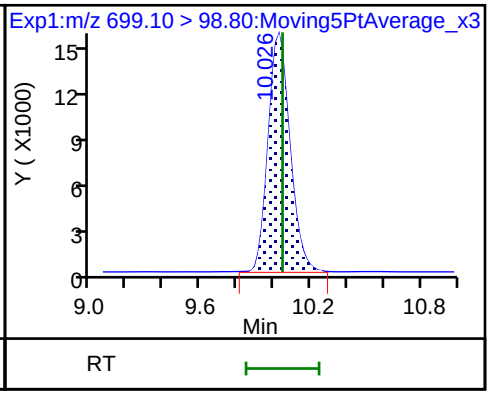
60 N-MeFOSE-M (M)



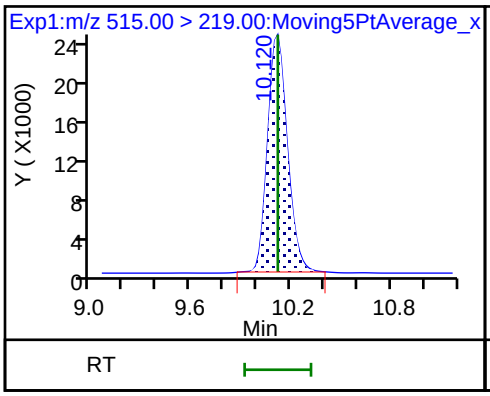
71 PFDoS



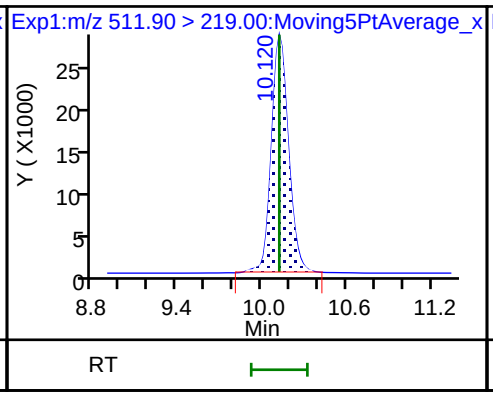
71 PFDoS



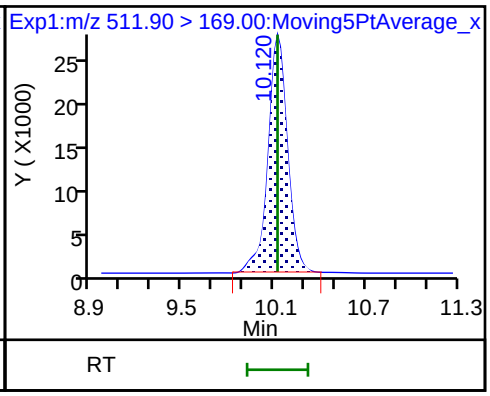
D 62 d3-NMePFOSA



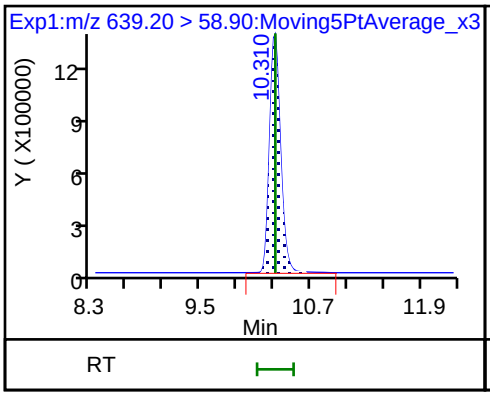
61 NMeFOSA



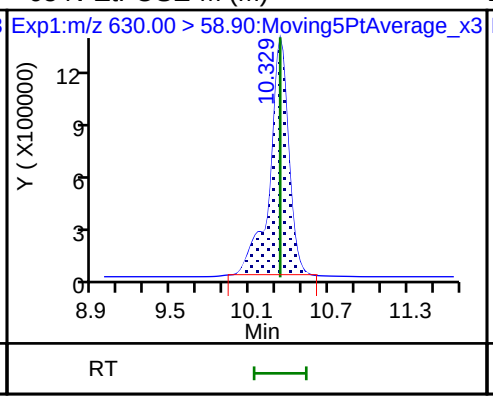
61 NMeFOSA



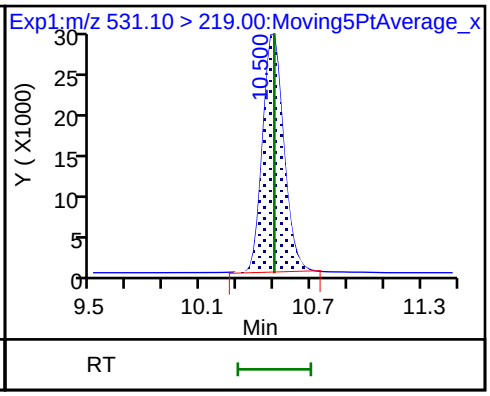
D 64 d9-N-EtFOSE



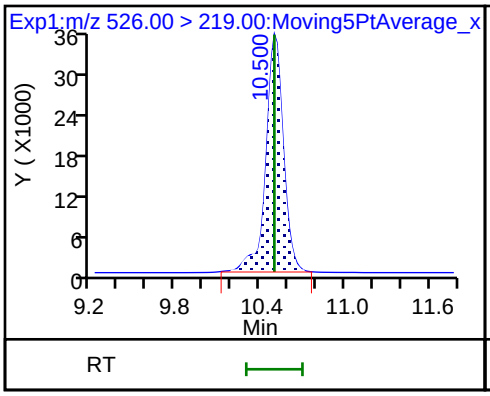
65 N-EtFOSE-M (M)



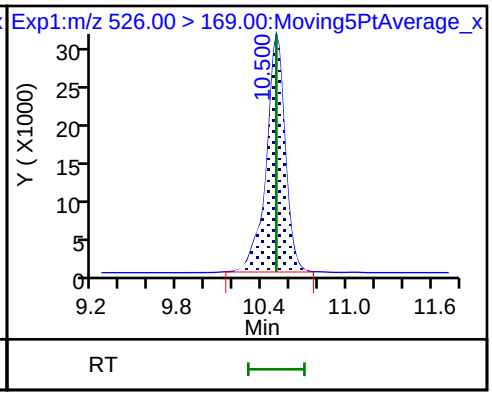
D 67 d5-NEtPFOSA



68 N-EtFOSA-M



68 N-EtFOSA-M



Manual Integration/User Assign Peak Report

Eurofins Denver

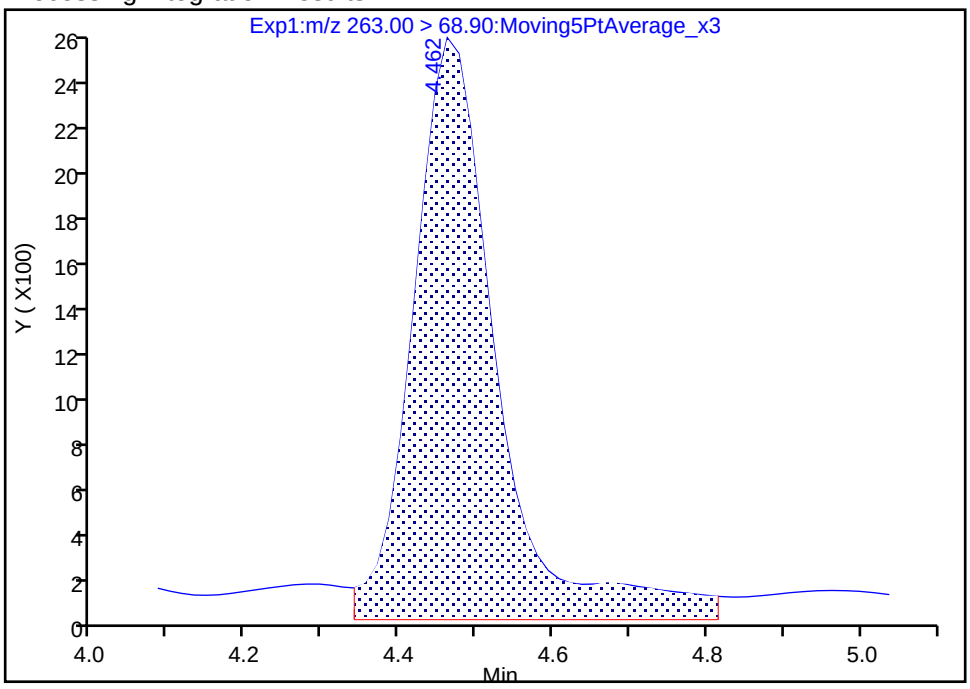
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Injection Date:	28-Nov-2023 17:03:21	Instrument ID:	LC_LCMS11		
Lims ID:	460-292594-B-3-B MS				
Client ID:	WCF-10				
Operator ID:	B5QN	ALS Bottle#:	15	Worklist Smp#:	17
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

6 PFPA, CAS: 2706-90-3

Signal: 2

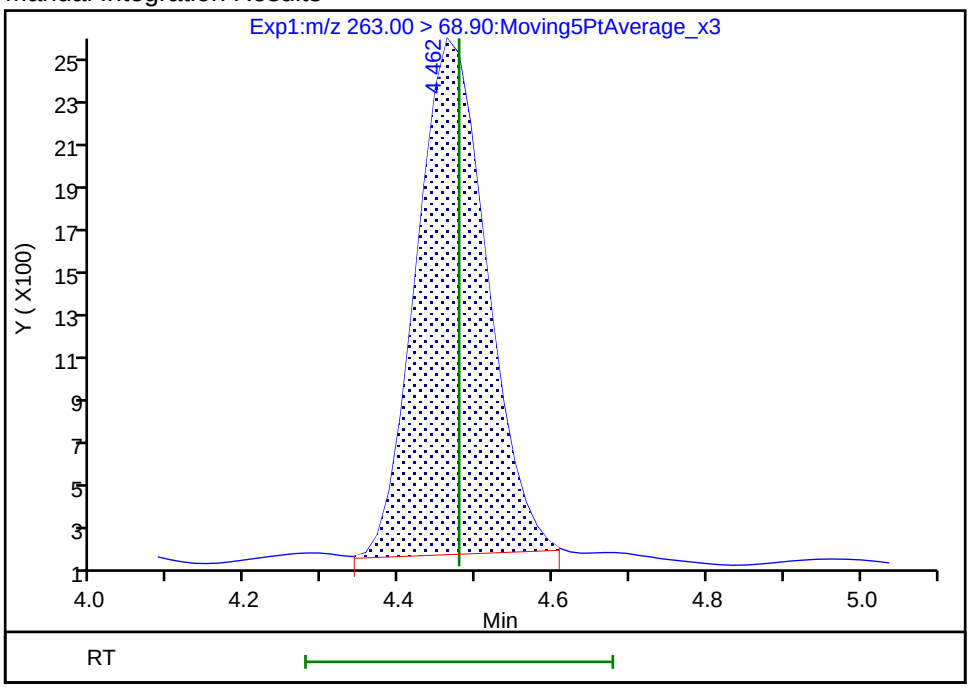
Processing Integration Results

RT: 4.46
Area: 19501
Amount: 6.779200
Amount Units: ng/ml



Manual Integration Results

RT: 4.46
Area: 15306
Amount: 6.779200
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 14:11:08 -07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins Denver

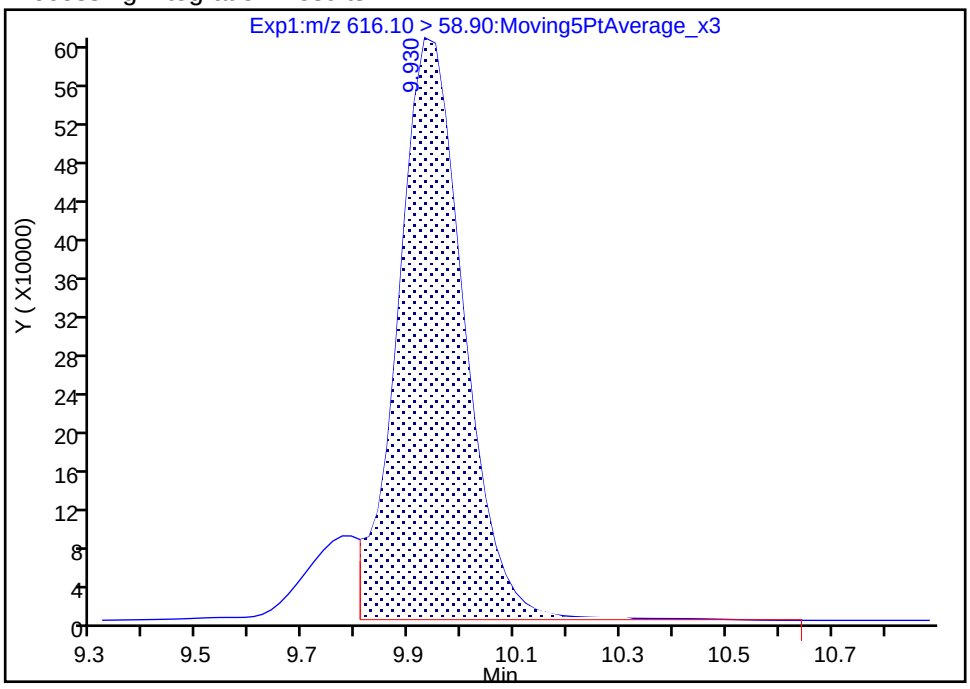
Data File:	\\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.021.d				
Injection Date:	28-Nov-2023 17:03:21	Instrument ID:	LC_LCMS11		
Lims ID:	460-292594-B-3-B MS				
Client ID:	WCF-10				
Operator ID:	B5QN	ALS Bottle#:	15	Worklist Smp#:	17
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

60 N-MeFOSE-M, CAS: 24448-09-7

Signal: 1

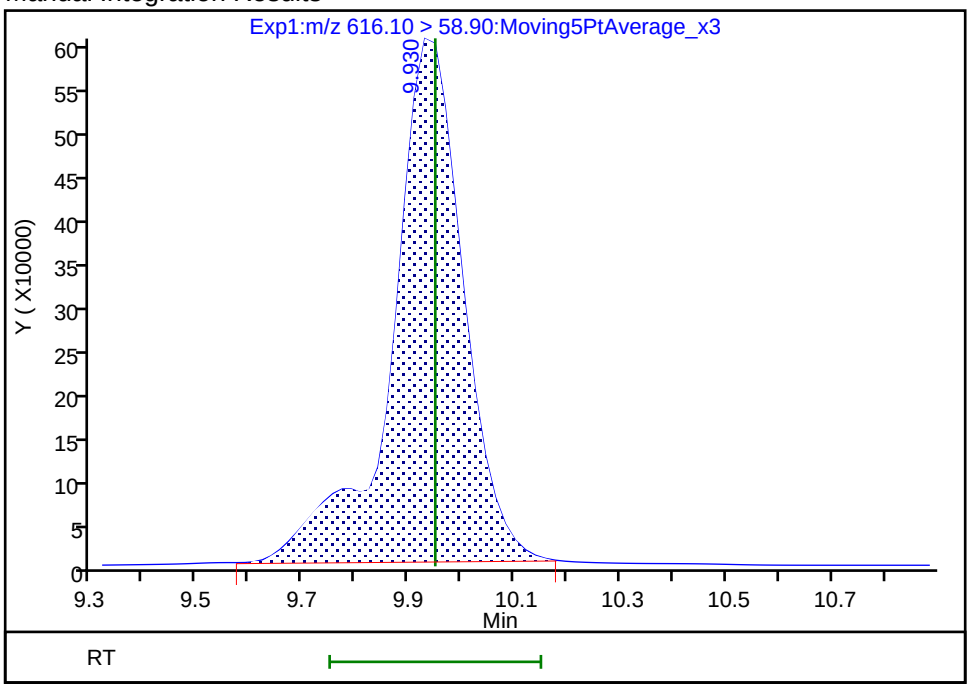
Processing Integration Results

RT: 9.93
Area: 5286888
Amount: 13.630143
Amount Units: ng/ml



Manual Integration Results

RT: 9.93
Area: 5725504
Amount: 14.760941
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 14:11:33 -07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

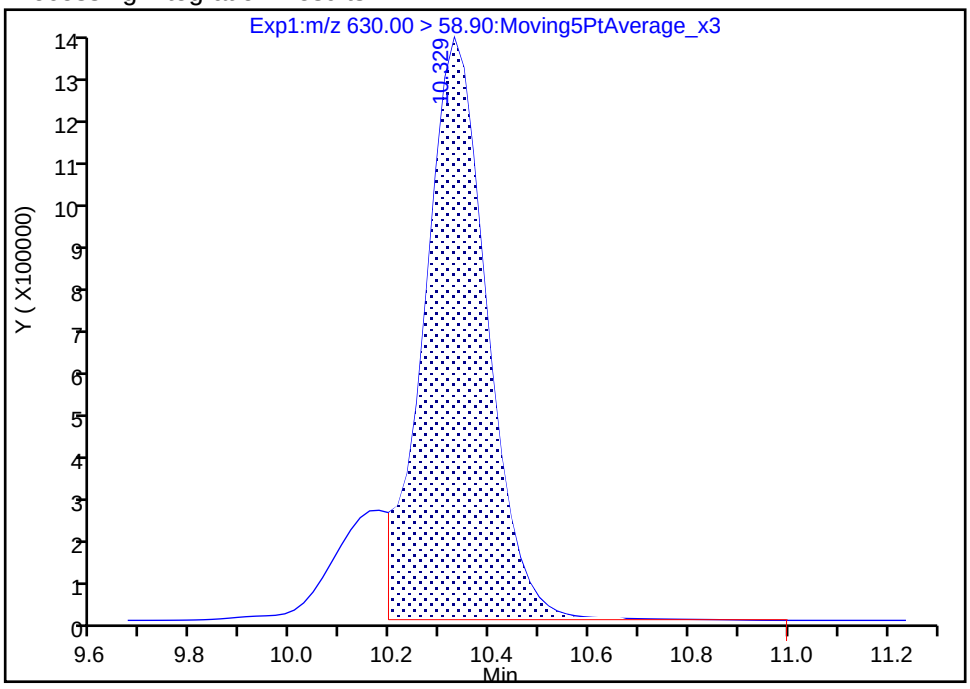
Data File:	\\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.021.d				
Injection Date:	28-Nov-2023 17:03:21	Instrument ID:	LC_LCMS11		
Lims ID:	460-292594-B-3-B MS				
Client ID:	WCF-10				
Operator ID:	B5QN	ALS Bottle#:	15	Worklist Smp#:	17
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

65 N-EtFOSE-M, CAS: 1691-99-2

Signal: 1

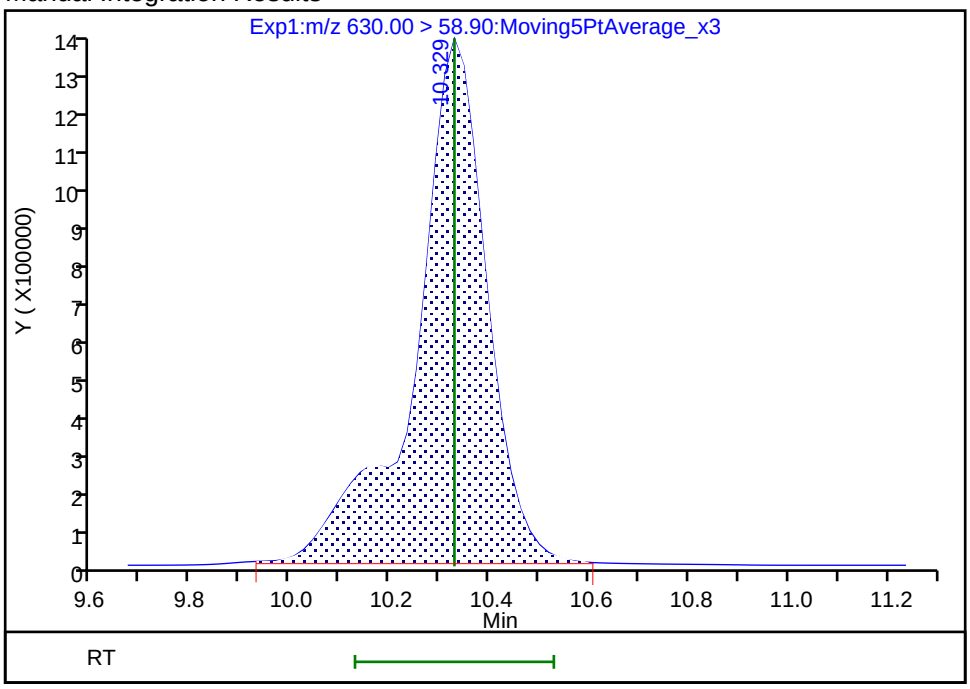
Processing Integration Results

RT: 10.33
Area: 11901434
Amount: 25.902517
Amount Units: ng/ml



Manual Integration Results

RT: 10.33
Area: 13560235
Amount: 29.512764
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 14:11:43 -07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Isomers

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: WCF-10 MSD | Lab Sample ID: 460-292594-3 MSD

Matrix: Water | Lab File ID: 2023.11.28a.022.d

Analysis Method: Draft 1633 | Date Collected: 11/13/2023 12:00

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 584.5(mL) | Date Analyzed: 11/28/2023 17:22

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	38.33		6.84	1.71
2706-90-3	Perfluoropentanoic acid (PFPeA)	63.66		3.42	0.86
307-24-4	Perfluorohexanoic acid (PFHxA)	65.15		1.71	0.43
375-85-9	Perfluoroheptanoic acid (PFHpA)	42.38		1.71	0.44
335-67-1	Perfluorooctanoic acid (PFOA)	50.77		1.71	0.55
375-95-1	Perfluorononanoic acid (PFNA)	30.60		1.71	0.43
335-76-2	Perfluorodecanoic acid (PFDA)	32.99		1.71	0.43
2058-94-8	Perfluoroundecanoic acid (PFUnA)	27.92		1.71	0.43
307-55-1	Perfluorododecanoic acid (PFDoA)	27.99		1.71	0.43
72629-94-8	Perfluorotridecanoic acid (PFTriA)	23.66		1.71	0.43
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	24.27		1.71	0.43
375-73-5	Perfluorobutanesulfonic acid (PFBS)	26.30		1.71	0.26
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	22.86		1.71	0.43
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	21.72		1.71	0.49
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	25.71		1.71	0.34
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	28.27		1.71	0.43
68259-12-1	Perfluorononanesulfonic acid (PFNS)	26.06		1.71	0.34
335-77-3	Perfluorodecanesulfonic acid (PFDS)	25.58		1.71	0.43
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	22.49		1.71	0.77
757124-72-4	4:2 FTS	59.47		6.84	1.45
27619-97-2	6:2 FTS	103.4		6.84	2.14
39108-34-4	8:2 FTS	103.2		6.84	2.22
754-91-6	Perfluorooctanesulfonamide (PFOSA)	24.72		1.71	0.43
31506-32-8	NMeFOSA	26.99		1.71	0.43
4151-50-2	NEtFOSA	26.56		1.71	0.43
2355-31-9	NMeFOSAA	26.66		3.42	1.03
2991-50-6	NEtFOSAA	25.68		1.71	0.60
24448-09-7	NMeFOSE	128.4		17.1	4.28
1691-99-2	NEtFOSE	259.5		17.1	4.28
13252-13-6	HFPO-DA (GenX)	24.01		6.84	1.71

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: WCF-10 MSD | Lab Sample ID: 460-292594-3 MSD

Matrix: Water | Lab File ID: 2023.11.28a.022.d

Analysis Method: Draft 1633 | Date Collected: 11/13/2023 12:00

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 584.5(mL) | Date Analyzed: 11/28/2023 17:22

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	21.60		6.84	1.28
863090-89-5	PFMBA	54.88		3.42	0.86
151772-58-6	NFDHA	27.86		3.42	0.86
377-73-1	PFMPA	55.17		3.42	0.43
756426-58-1	9Cl-PF3ONS	57.61		6.84	0.86
763051-92-9	11Cl-PF3OUdS	49.43		6.84	1.71
113507-82-7	PFEESA	44.42		3.42	0.43
356-02-5	3:3 FTCA	131.4		8.55	1.28
914637-49-3	5:3 FTCA	264.5		42.8	8.55
812-70-4	7:3 FTCA	245.8		42.8	8.55

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 460-292594-1

SDG No.:

Client Sample ID: WCF-10 MSD | Lab Sample ID: 460-292594-3 MSD

Matrix: Water | Lab File ID: 2023.11.28a.022.d

Analysis Method: Draft 1633 | Date Collected: 11/13/2023 12:00

Extraction Method: 1633 | Date Extracted: 11/27/2023 11:00

Sample wt/vol: 584.5(mL) | Date Analyzed: 11/28/2023 17:22

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 6(uL) | GC Column: Gemini C18 3X50 ID: 3(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 635316 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	99		10-130
STL01893	13C5 PFPeA	88		35-150
STL02577	13C5 PFHxA	95		55-150
STL01892	13C4 PFHpA	96		55-150
STL01052	13C8 PFOA	106		60-140
STL02578	13C9 PFNA	96		55-140
STL02579	13C6 PFDA	110		50-140
STL02580	13C7 PFUnA	100		30-140
STL00998	13C2 PFDoA	94		10-150
STL02116	13C2 PFTeDA	85		10-130
STL02337	13C3 PFBS	103		55-150
STL02581	13C3 PFHxS	101		55-150
STL01054	13C8 PFOS	95		45-140
STL01056	13C8 FOSA	103		30-130
STL02118	d3-NMeFOSAA	87		45-200
STL02117	d5-NEtFOSAA	87		10-200
STL02395	M2-4:2 FTS	158		60-200
STL02279	M2-6:2 FTS	115		60-200
STL02280	M2-8:2 FTS	92		50-200
STL02255	13C3 HFPO-DA	108		25-160
STL02277	d7-N-MeFOSE-M	93		10-150
STL02278	d9-N-EtFOSE-M	92		10-150
STL02704	d5-NEtPFOSA	77		10-130
STL02705	d3-NMePFOSA	69		15-130

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.022.d
Lims ID: 460-292594-B-3-C MSD
Client ID: WCF-10
Sample Type: MSD
Inject. Date: 28-Nov-2023 17:22:45 ALS Bottle#: 16 Worklist Smp#: 18
Injection Vol: 6.0 ul Dil. Factor: 1.0000
Sample Info: 460-292594-B-3-C MSD
Misc. Info.: Plate: 1 Rack: 1
Operator ID: B5QN Instrument ID: LC_LCMS11

Method: \\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\PFC_IDA_DEN11.m
Limit Group: LC - 1633_DOD5
Last Update: 29-Nov-2023 14:12:41 Calib Date: 20-Nov-2023 19:16:12
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS11\20231120-127875.b\2023.11.20b.007.d

Column 1 : Gemini C18 3um 3mm X 50mm (3.00 mm) Det: EXP1
Process Host: CTX1603

First Level Reviewer: B5QN Date: 29-Nov-2023 14:13:00
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 3 13C4-PFBA										
216.80 > 171.90	3.031	3.046	-0.015	0.995	5115810	9.93		99.3	33822	
* 1 13C3PFBA										
216.00 > 172.00	3.046	3.046	0.0		2534354	5.00			4910	
2 PFBA										
212.80 > 168.90	3.046	3.046	0.0	1.005	2049167	4.48		140	1342	
4 PFMPA										
229.00 > 84.90	3.727	3.728	-0.001	0.835	2416262	6.45		101	13954	
5 3:3 FTCA										
241.00 > 177.00	3.912	3.912	0.0	0.877	736404	15.4	Target=1.58	96.0	13272	
241.00 > 117.00	3.912	3.912	0.0	0.877	424595		1.73(0.79-2.37)		10259	
D 7 13C5 PFPeA										
268.30 > 223.00	4.462	4.463	-0.001	0.834	1466362	4.40		88.1	7993	
6 PFPA										
263.00 > 219.00	4.477	4.478	-0.001	1.003	4378481	7.44	Target=212.56	233	739	
263.00 > 68.90	4.462	4.478	-0.016	1.000	18558		235.93(106.28-318.84)		192	
8 PFMBA										
279.00 > 85.10	4.778	4.778	0.0	1.071	4752819	6.42		100	36819	
10 4:2FTS										
327.10 > 307.00	5.096	5.097	-0.001	1.000	1232828	6.95	Target=1.59	87.2	25863	
327.10 > 80.90	5.096	5.097	-0.001	1.000	744107		1.66(0.79-2.38)		2089	
D 9 13C2-4:2FTS										
329.10 > 80.90	5.096	5.097	-0.001	0.742	352582	7.39	Target=4.54	158	1045	
329.10 > 309.00	5.096	5.097	-0.001	0.742	74953		4.70(2.27-6.81)	158	3141	
11 NFDHA										
295.00 > 201.00	5.280	5.280	0.0	0.986	719767	3.26	Target=1.95	102	15649	
295.00 > 84.90	5.280	5.280	0.0	0.986	299567		2.40(0.97-2.92)		1384	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 16 13C3 PFBS										
302.10 > 79.90	5.353	5.354	-0.001	0.779	648876	2.39	Target=4.56	103	4706	
302.10 > 98.90	5.353	5.354	-0.001	0.779	143530		4.52(2.28-6.83)	103	4701	
15 PFBS										
298.70 > 79.90	5.353	5.354	-0.001	1.000	763892	3.07	Target=2.16	108	5555	
298.70 > 98.80	5.353	5.354	-0.001	1.000	348546		2.19(1.08-3.24)		11413	
* 14 13C2 PFHxA										
315.10 > 270.00	5.353	5.371	-0.018		1670700	2.50	Target=79.67		27058	
315.10 > 119.40	5.353	5.371	-0.018		25850		64.63(39.83-119.50)		428	
D 12 13C5 PFHxA										
318.00 > 273.00	5.353	5.371	-0.018	1.000	1781910	2.38	Target=53.27	95.2	19404	
318.00 > 120.30	5.353	5.371	-0.018	1.000	36589		48.70(26.63-79.90)	95.2	962	
13 PFHxA										
313.00 > 269.00	5.371	5.371	0.0	1.003	5978130	7.62	Target=18.64	238	1718	
313.00 > 118.90	5.371	5.371	0.0	1.003	298308		20.04(9.32-27.96)		4853	
18 5:3 FTCA										
341.00 > 237.10	5.643	5.644	-0.001	1.054	3995867	30.9	Target=1.16	96.6	15366	
341.00 > 217.00	5.643	5.644	-0.001	1.054	3362596		1.19(0.58-1.74)		20294	
D 20 13C3 HFPO-DA										
286.90 > 168.90	5.682	5.682	0.0	1.061	1983020	10.8	Target=1.53	108	25647	
286.90 > 184.90	5.682	5.682	0.0	1.061	1047924		1.89(0.76-2.29)	108	12221	
19 HFPO-DA										
284.90 > 168.90	5.682	5.682	0.0	1.000	599582	2.81	Target=1.75	87.7	11022	
284.90 > 184.90	5.682	5.682	0.0	1.000	332181		1.80(0.87-2.62)		3563	
21 PFEESA										
314.80 > 134.90	5.789	5.789	0.0	1.081	4507753	5.19	Target=13.97	91.0	83091	
314.80 > 82.90	5.789	5.789	0.0	1.081	306485		14.71(6.99-20.96)		4970	
D 22 13C4 PFHpA										
367.10 > 322.00	6.121	6.122	-0.001	1.144	1883902	2.40		96.1	18947	
17 PFHpA										
363.10 > 319.00	6.121	6.122	-0.001	1.000	3673301	4.95	Target=3.96	155	2676	
363.10 > 169.00	6.121	6.122	-0.001	1.000	856559		4.29(1.98-5.95)		7540	
23 PFPeS										
349.10 > 79.90	6.223	6.223	0.0	0.906	650165	2.67	Target=2.70	89.0	3810	
349.10 > 98.90	6.223	6.223	0.0	0.906	248276		2.62(1.35-4.04)		2925	
24 ADONA										
376.90 > 250.90	6.371	6.355	0.016	1.121	4527296	2.53	Target=3.02	83.6	52166	
376.90 > 84.80	6.355	6.355	0.0	1.118	1421203		3.19(1.51-4.53)		16500	
D 26 13C2-6:2FTS										
429.10 > 80.90	6.470	6.471	-0.001	0.942	340431	5.46	Target=4.15	115	3708	
429.10 > 409.00	6.470	6.471	-0.001	0.942	81203		4.19(2.07-6.22)	115	3861	
25 6:2FTS										
427.10 > 407.00	6.470	6.471	-0.001	1.000	1650071	12.1	Target=1.93	99.6	38787	
427.10 > 80.90	6.470	6.471	-0.001	1.000	860917		1.92(0.96-2.89)		8736	
D 27 13C8 PFOA										
421.10 > 376.00	6.707	6.707	0.0	1.000	1762451	2.64		106	24329	
* 29 13C4 PFOA										
417.10 > 172.00	6.707	6.707	0.0		254747	2.50			8735	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 PFOA										
413.00 > 369.00	6.723	6.724	-0.001	1.002	3339982	5.94	Target=2.30	185	5074	
413.00 > 169.00	6.723	6.724	-0.001	1.002	1187135		2.81(1.15-3.45)		31890	
30 7:3 FTCA										
441.00 > 316.90	6.871	6.871	0.0	1.284	1715595	28.7	Target=1.43	89.8	38881	
441.00 > 336.90	6.871	6.871	0.0	1.284	1171839		1.46(0.72-2.15)		8443	
32 PFHxS										
398.70 > 79.90	6.871	6.871	0.0	1.000	292686	2.54	Target=3.86	87.0	10760	
398.70 > 98.90	6.871	6.871	0.0	1.000	70939		4.13(1.93-5.79)		2787	
* 31 18O2 PFHxS										
403.00 > 83.90	6.871	6.871	0.0		501822	2.37			22837	
D 33 13C3 PFHxS										
402.10 > 79.90	6.871	6.888	-0.017	1.000	512439	2.38	Target=4.11	101	6987	
402.10 > 98.80	6.871	6.888	-0.017	1.000	124513		4.12(2.05-6.16)	101	5699	
36 PFNA										
463.00 > 419.00	7.259	7.261	-0.002	1.000	3049648	3.58	Target=6.02	112	8207	
463.00 > 219.00	7.259	7.261	-0.002	1.000	514638		5.93(3.01-9.04)		12757	
* 35 13C5 PFNA										
468.00 > 423.00	7.259	7.261	-0.002		1167143	1.25			16050	
D 34 13C9 PFNA										
472.10 > 427.00	7.259	7.261	-0.002	1.000	1061154	1.20		96.2	16459	
37 PFHpS										
449.00 > 79.90	7.473	7.473	0.0	0.932	523306	3.01	Target=4.91	98.7	7354	
449.00 > 98.80	7.473	7.473	0.0	0.932	96912		5.40(2.46-7.37)		2290	
D 38 13C2-8:2FTS										
529.10 > 80.90	7.522	7.522	0.0	1.095	334464	4.43	Target=5.49	92.4	4671	
529.10 > 509.00	7.522	7.522	0.0	1.095	72863		4.59(2.74-8.23)	92.4	3473	
39 8:2FTS										
527.10 > 507.00	7.522	7.522	0.0	1.000	1224092	12.1	Target=1.56	98.4	34162	
527.10 > 80.80	7.522	7.522	0.0	1.000	720079		1.70(0.78-2.33)		12557	
D 41 d3-NMeFOSAA										
573.20 > 419.00	7.742	7.761	-0.019	0.965	419551	4.37		87.5	13931	
42 NMeFOSAA										
570.10 > 419.00	7.760	7.761	-0.001	1.002	261775	3.12	Target=1.15	97.4	6179	
570.10 > 483.00	7.760	7.761	-0.001	1.002	243303		1.08(0.58-1.73)		8580	
* 44 13C2 PFDA										
515.10 > 470.10	7.778	7.779	-0.001		1033539	1.25			17330	
D 40 13C6 PFDA										
519.10 > 474.10	7.778	7.779	-0.001	1.000	1135282	1.38		110	30510	
43 PFDA										
512.90 > 469.00	7.778	7.779	-0.001	1.000	2878386	3.86	Target=3.33	121	22773	
512.90 > 219.00	7.778	7.779	-0.001	1.000	744884		3.86(1.67-5.00)		14304	
D 46 d5-NEtFOSAA										
589.20 > 419.00	7.968	7.969	-0.001	0.994	481329	4.34		86.7	7137	
45 NEtFOSAA										
584.20 > 419.10	7.968	7.969	-0.001	1.000	210154	3.00	Target=1.55	93.8	6061	
584.20 > 526.00	7.968	7.969	-0.001	1.000	135943		1.55(0.77-2.32)		4632	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 49 13C8 PFOS										
507.10 > 79.90	8.020	8.021	-0.001	1.000	232751	2.27	Target=2.95	95.0	89.4	
507.10 > 98.90	8.020	8.021	-0.001	1.000	72156		3.23(1.47-4.42)	95.0	3225	
* 47 13C4 PFOS										
502.80 > 79.90	8.020	8.021	-0.001		683485	2.40	Target=3.78		9197	
502.80 > 98.90	8.020	8.021	-0.001		187592		3.64(1.89-5.67)		6249	
48 PFOS										
498.90 > 79.90	8.020	8.021	-0.001	1.000	1048721	3.31	Target=4.86	111	21979	
498.90 > 98.80	8.020	8.021	-0.001	1.000	222351		4.72(2.43-7.28)		8664	
D 53 13C7 PFUnA										
570.00 > 525.10	8.284	8.285	0.0	1.065	1143569	1.25		99.8	29485	
52 PFUnA										
563.10 > 519.00	8.284	8.285	0.0	1.000	2642627	3.26	Target=5.72	102	22594	
563.10 > 269.10	8.284	8.285	0.0	1.000	480739		5.50(2.86-8.59)		12461	
54 9ClFOS										
530.80 > 351.00	8.407	8.408	-0.001	1.480	2415387	6.73	Target=2.23	84.6	35538	
532.80 > 353.00	8.407	8.408	-0.001	1.480	1008781		2.39(1.11-3.34)		18980	
55 PFNS										
548.80 > 79.90	8.529	8.529	0.0	1.063	395078	3.05	Target=4.00	99.0	10651	
548.80 > 98.80	8.529	8.529	0.0	1.063	100343		3.94(2.00-6.00)		3387	
D 50 13C8 FOSA										
506.10 > 77.80	8.756	8.756	0.0	1.092	1280153	2.58		103	13822	
51 PFOSA										
498.10 > 77.90	8.773	8.773	0.0	1.002	1473079	2.89	Target=41.88	90.3	11637	
498.10 > 478.00	8.773	8.773	0.0	1.002	33339		44.18(20.94-62.83)		1366	
D 56 13C2 PFDoA										
615.10 > 570.00	8.773	8.773	0.0	1.128	1059244	1.17		93.6	23383	
57 PFDoA										
613.10 > 569.00	8.773	8.773	0.0	1.000	2785648	3.27	Target=7.45	102	19435	
613.10 > 319.00	8.773	8.773	0.0	1.000	350058		7.96(3.73-11.18)		7748	
58 PFDS										
599.00 > 79.90	9.044	9.044	0.0	1.128	896062	2.99	Target=4.54	96.9	9661	
599.00 > 98.80	9.044	9.044	0.0	1.128	182128		4.92(2.27-6.82)		5135	
63 PFTrDA										
663.00 > 619.00	9.270	9.271	-0.001	0.950	1448339	2.77	Target=5.19	86.4	11801	
663.00 > 168.90	9.270	9.271	-0.001	0.950	271001		5.34(2.59-7.78)		7514	
66 11ClFOS										
630.90 > 450.90	9.428	9.444	-0.016	1.659	3261201	5.78	Target=3.47	71.8	57320	
632.90 > 452.90	9.428	9.444	-0.016	1.659	1009835		3.23(1.74-5.21)		23807	
D 69 13C2 PFTeDA										
715.20 > 670.00	9.756	9.774	-0.018	1.254	460273	1.07		85.4	10148	
70 PFTeDA										
713.10 > 669.00	9.756	9.774	-0.018	1.000	1213566	2.84	Target=6.88	88.6	11349	
713.10 > 168.90	9.756	9.774	-0.018	1.000	177683		6.83(3.44-10.32)		5825	
D 59 d7-N-Me-FOSE										
623.20 > 58.90	9.910	9.910	0.0	1.236	8503257	23.3		93.3	26331	
60 N-MeFOSE-M										M
616.10 > 58.90	9.950	9.950	0.0	1.004	5585917	15.0		93.8	4355	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
71 PFDoS										
699.10 > 79.90	10.025	10.045	-0.020	1.250	630338	2.63	Target=4.14	84.7	6375	
699.10 > 98.80	10.025	10.045	-0.020	1.250	140758		4.48(2.07-6.21)		3427	
D 62 d3-NMePFOSA										
515.00 > 219.00	10.120	10.120	0.0	1.262	194168	1.73		69.1	3937	
61 NMeFOSA										
511.90 > 219.00	10.120	10.120	0.0	1.000	234332	3.15	Target=0.98	98.6	4617	
511.90 > 169.00	10.120	10.120	0.0	1.000	235658		0.99(0.49-1.47)		3747	
D 64 d9-N-EtFOSE										
639.20 > 58.90	10.310	10.310	0.0	1.285	10422085	22.9		91.7	52470	
65 N-EtFOSE-M										M
630.00 > 58.90	10.329	10.329	0.0	1.002	13194978	30.3		94.8	4975	M
D 67 d5-NEtPFOSA										
531.10 > 219.00	10.499	10.500	-0.001	1.309	222389	1.93		77.1	3521	
68 N-EtFOSA-M										
526.00 > 219.00	10.499	10.500	-0.001	1.000	295737	3.10	Target=0.99	97.0	3798	
526.00 > 169.00	10.499	10.500	-0.001	1.000	287401		1.03(0.50-1.49)		3877	

QC Flag Legend

Processing Flags

Review Flags

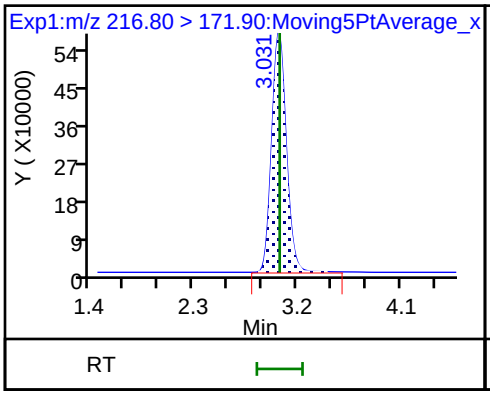
M - Manually Integrated

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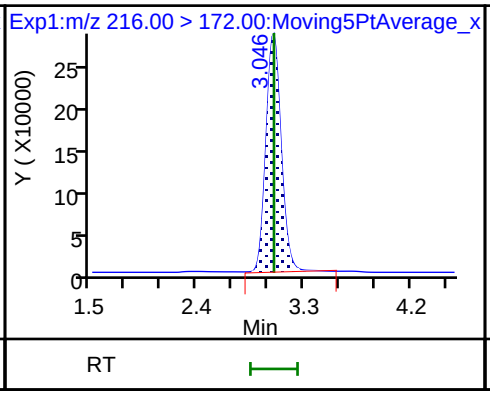
Eurofins Denver

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Lims ID: 460-292594-B-3-C MSD
Client ID: WCF-10
Operator ID: B5QN ALS Bottle#: 16 Worklist Smp#: 18
Injection Vol: 6.0 ul Dil. Factor: 1.0000
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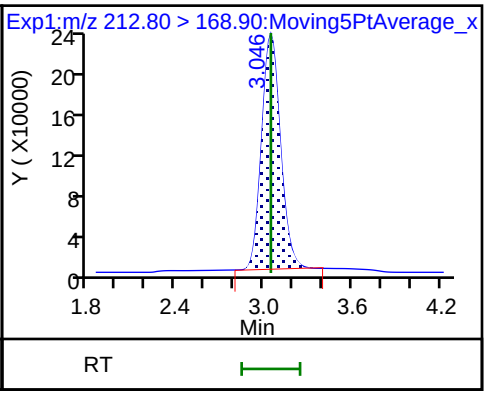
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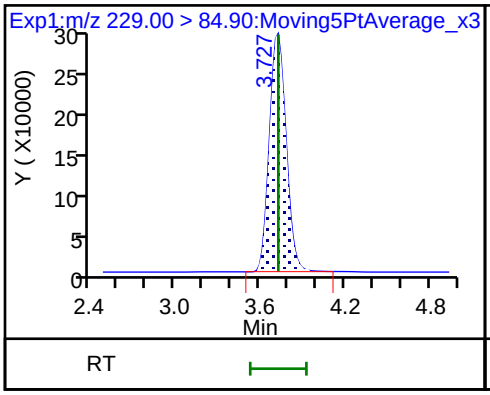
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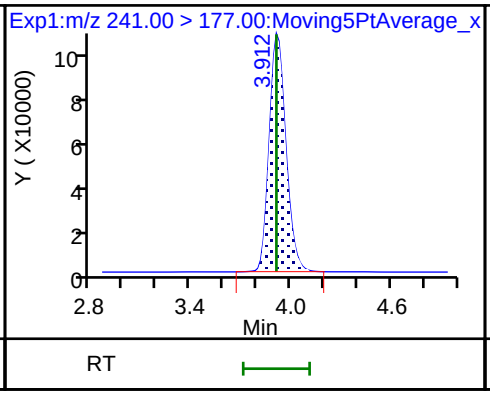
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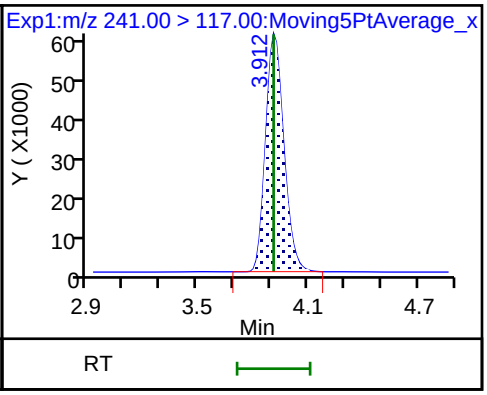
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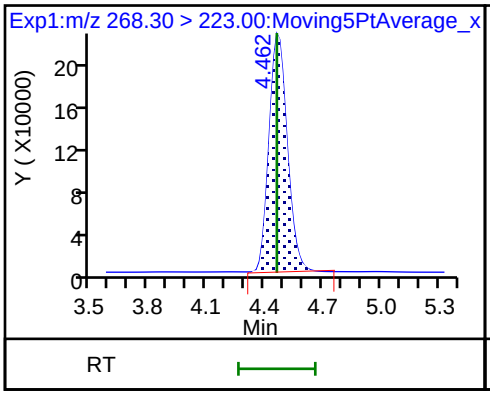
5 3:3 FTCA



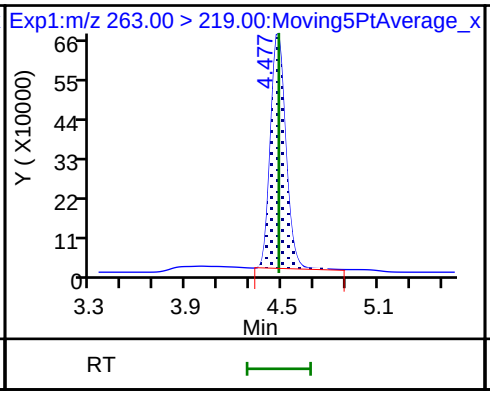
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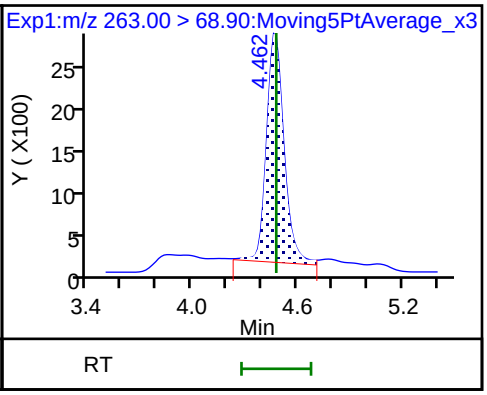
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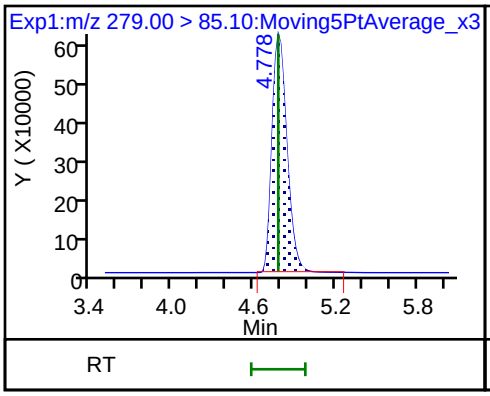
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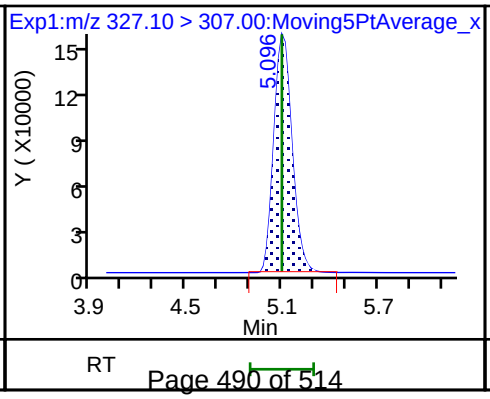
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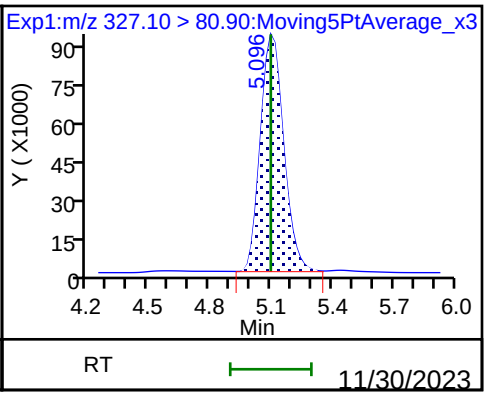
8 PFMBA



10 4:2FTS

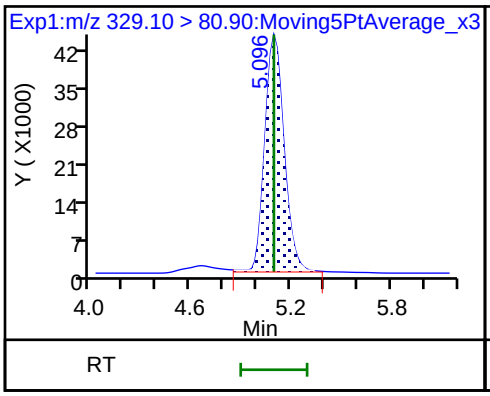


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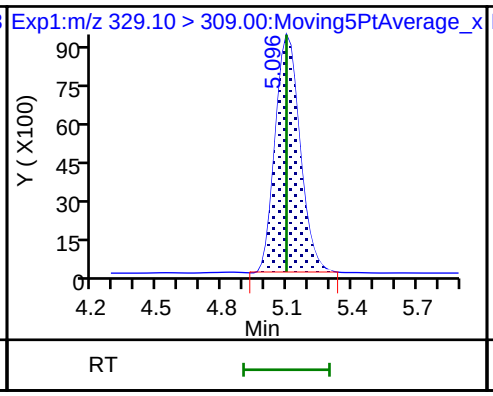


11/30/2023
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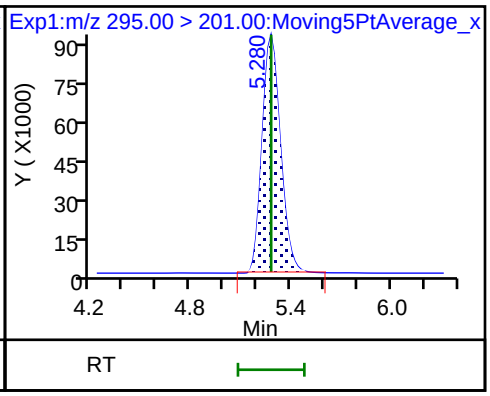
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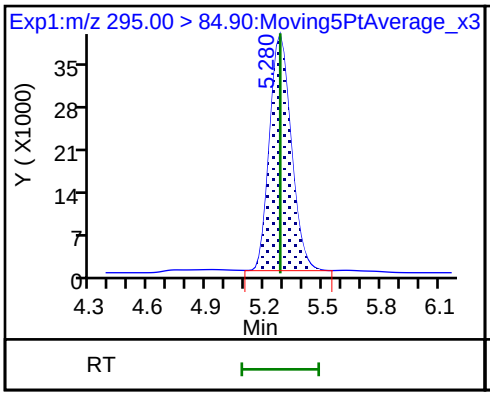
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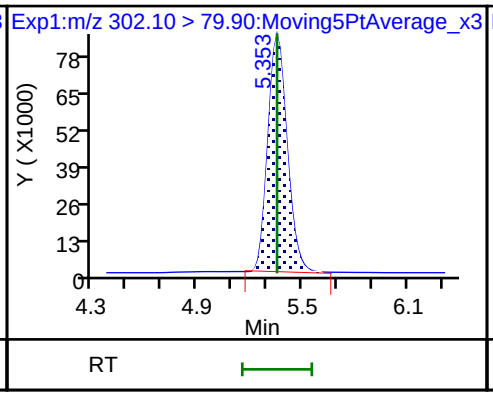
11 NFDHA



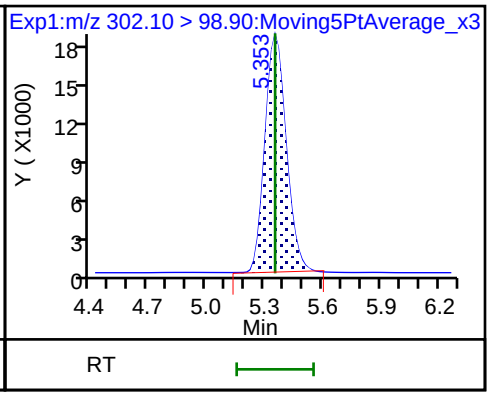
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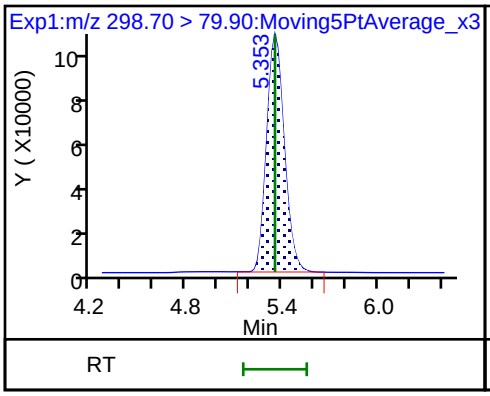
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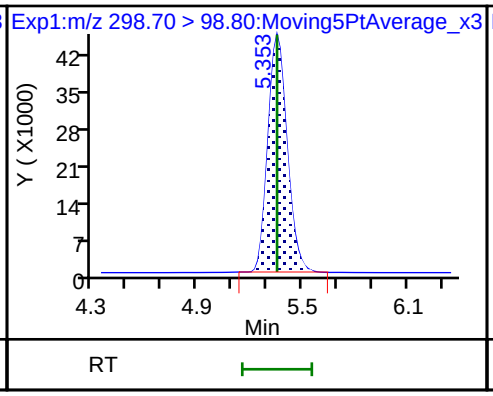
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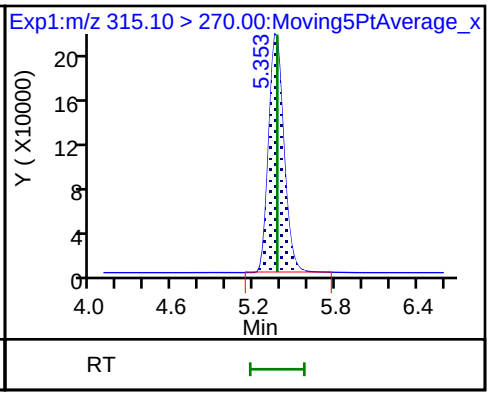
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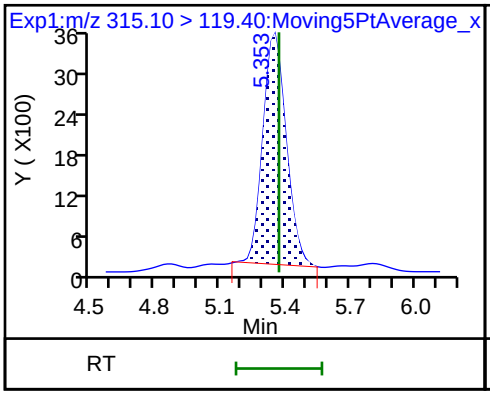
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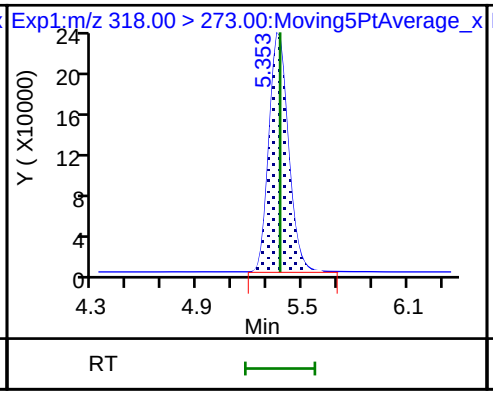
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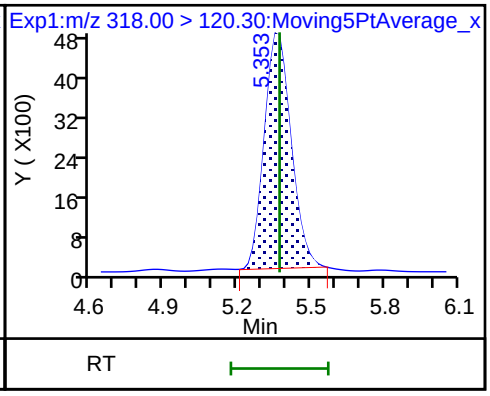
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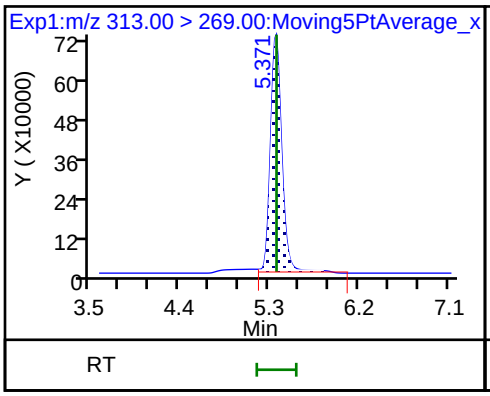
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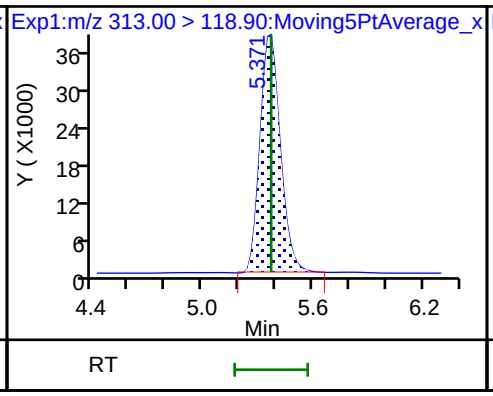
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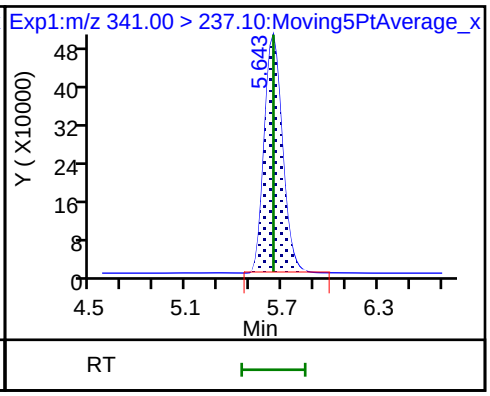
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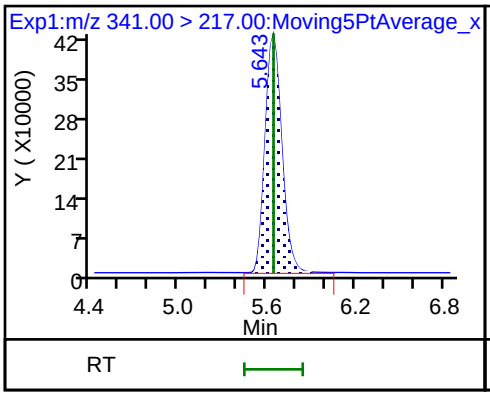
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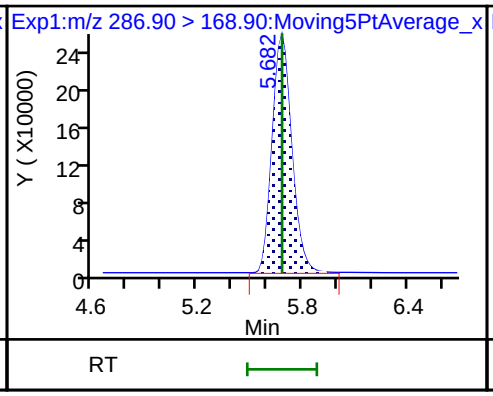
18 5:3 FTCA



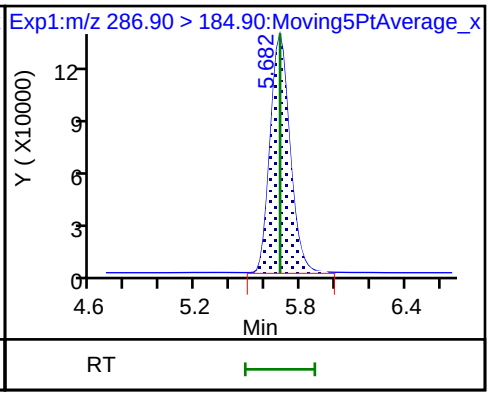
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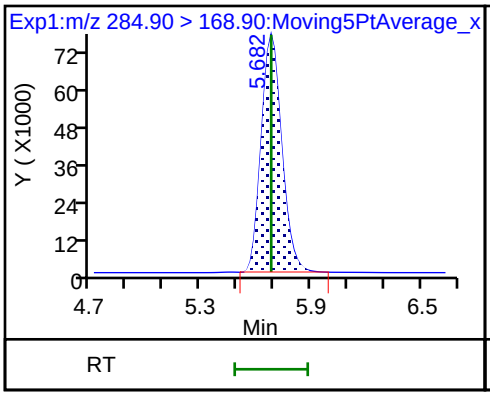
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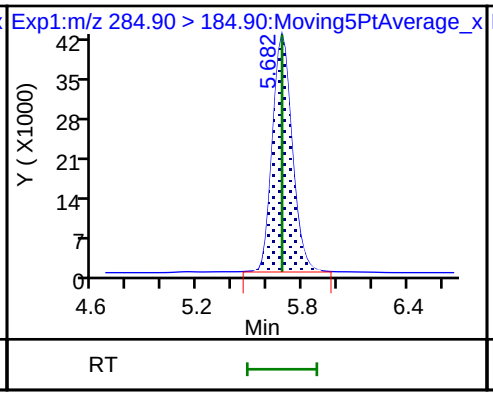
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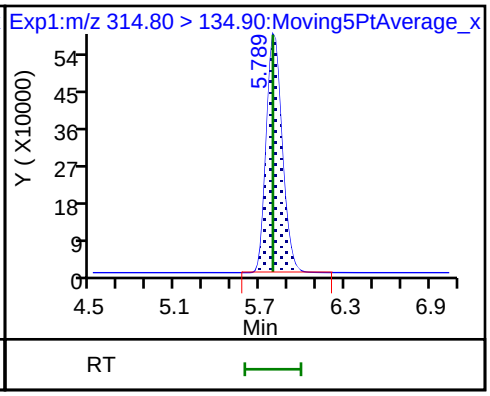
19 HFPO-DA



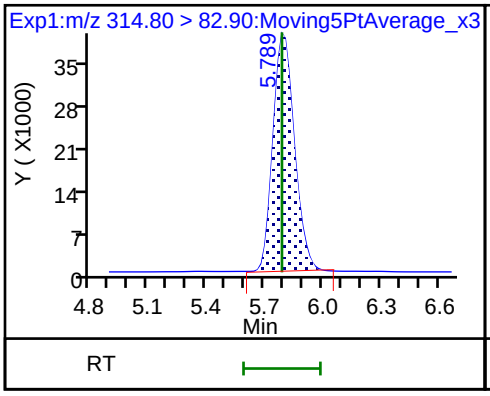
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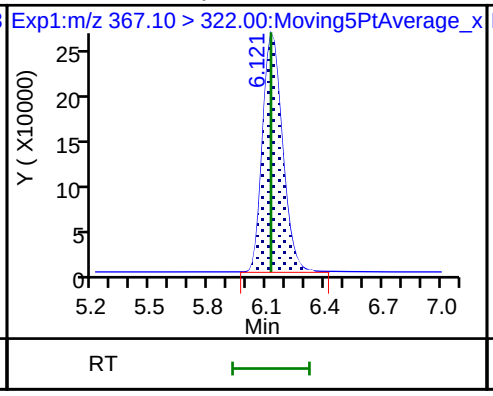
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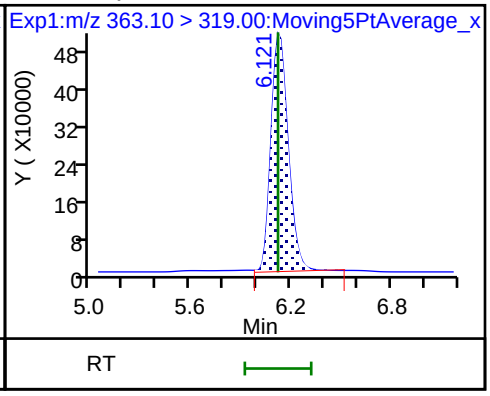
21 PFEESA



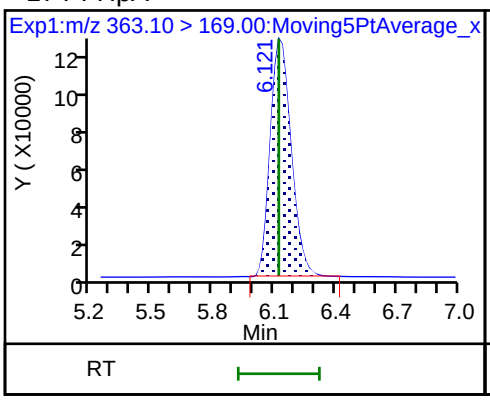
D 22 13C4 PFHpA



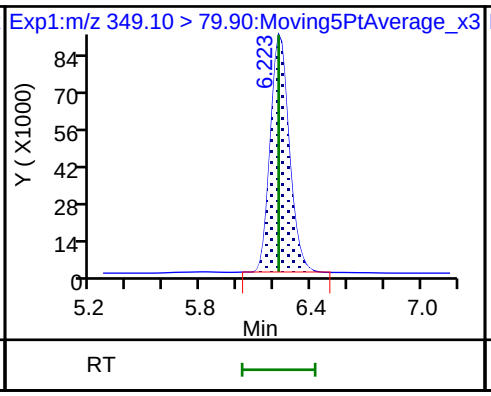
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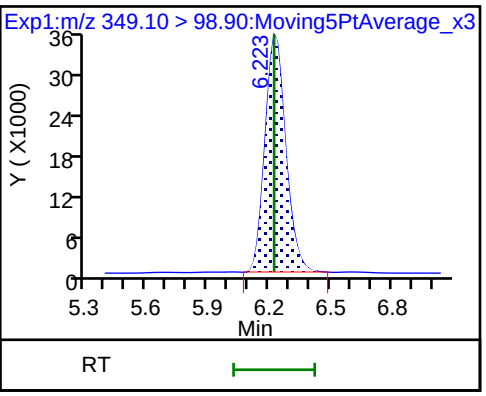
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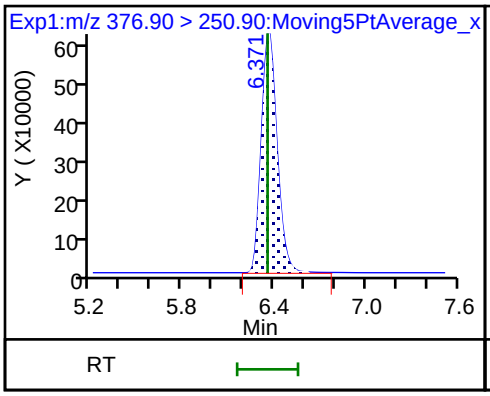
23 PFPeS



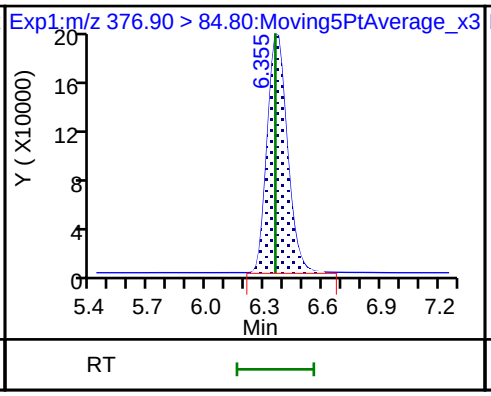
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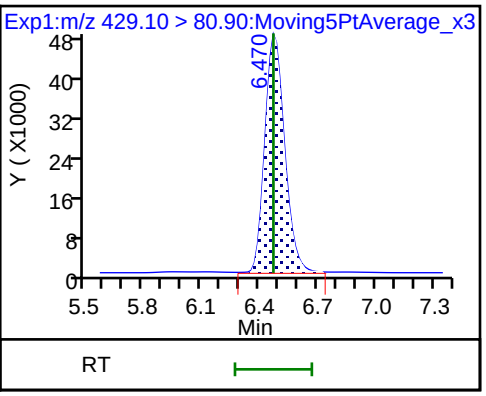
24 ADONA



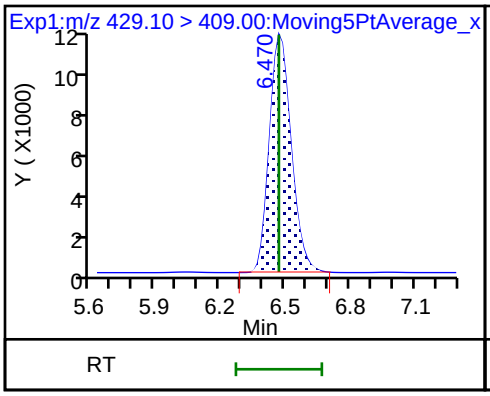
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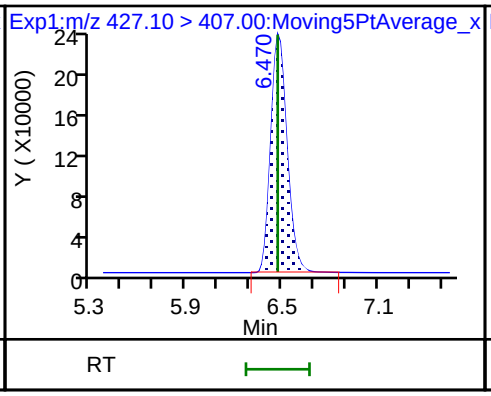
D 26 13C2-6:2FTS



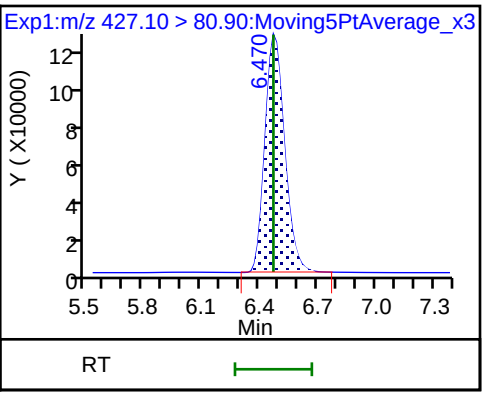
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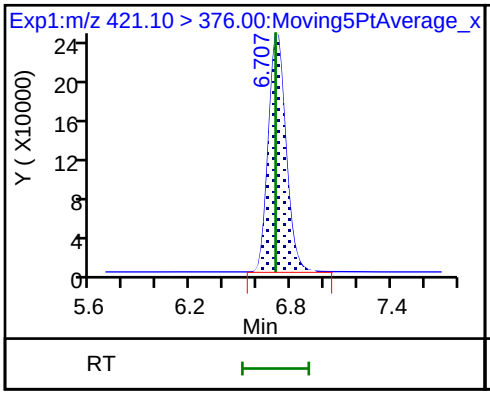
25 6:2FTS



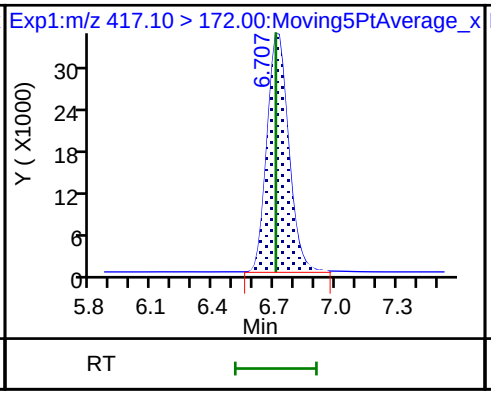
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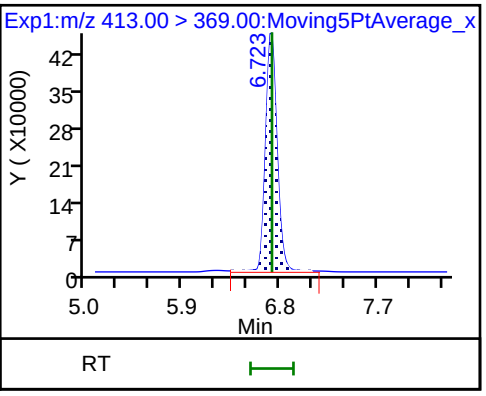
D 27 13C8 PFOA



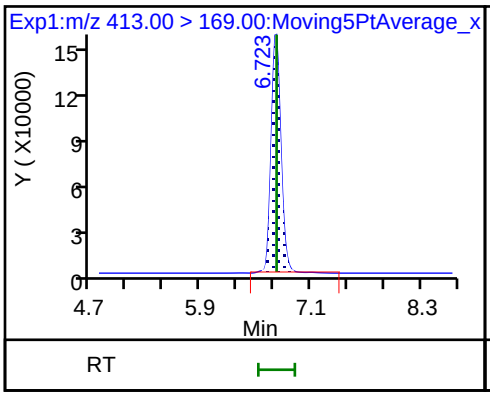
* 29 13C4 PFOA



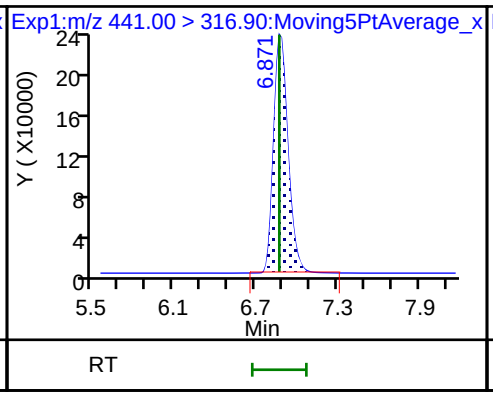
28 PFOA



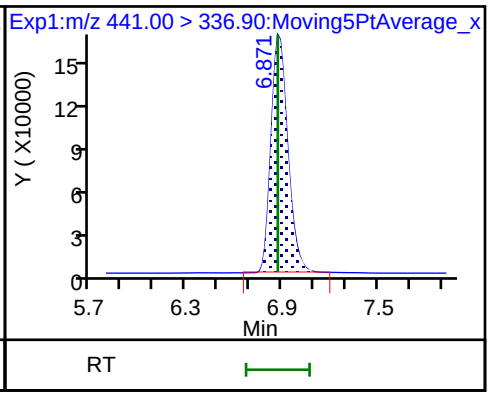
28 PFOA



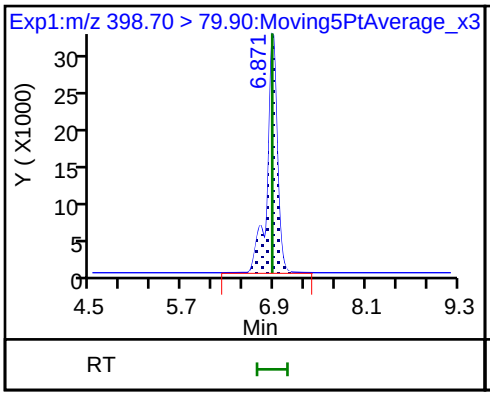
30 7:3 FTCA



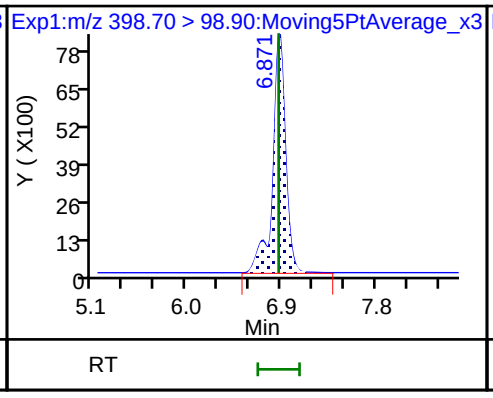
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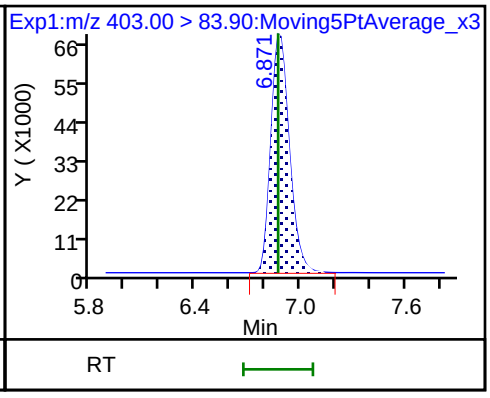
32 PFHxS



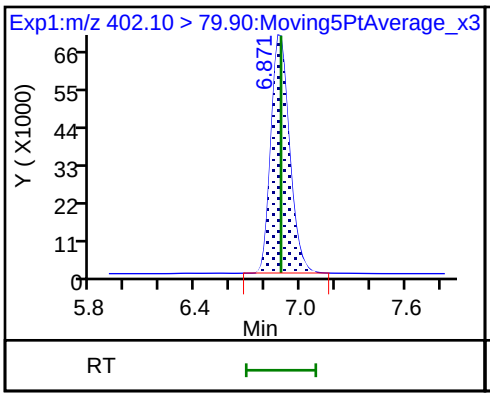
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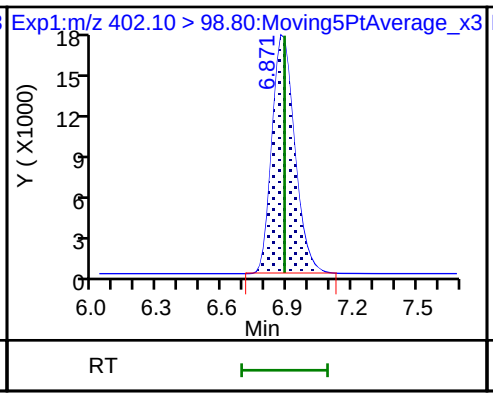
* 31 18O2 PFHxS



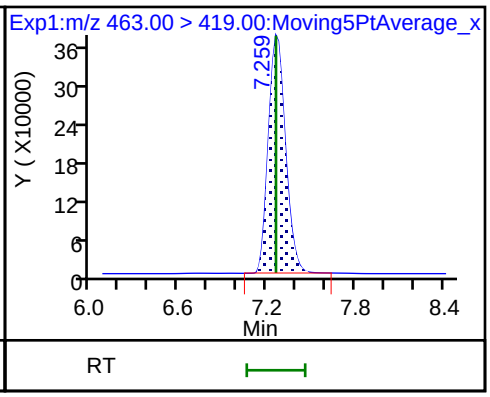
D 33 13C3 PFHxS



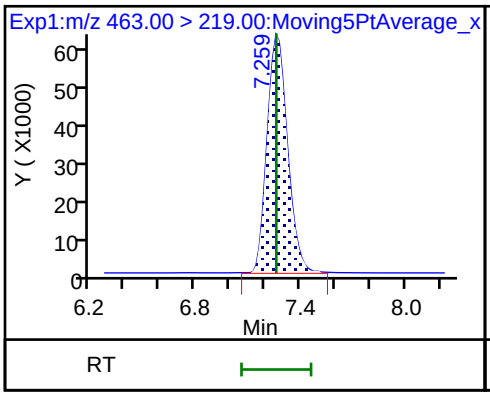
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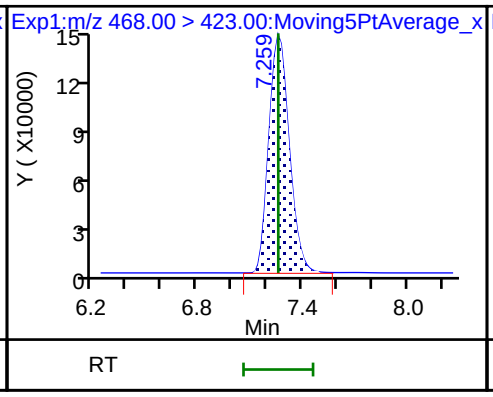
36 PFNA



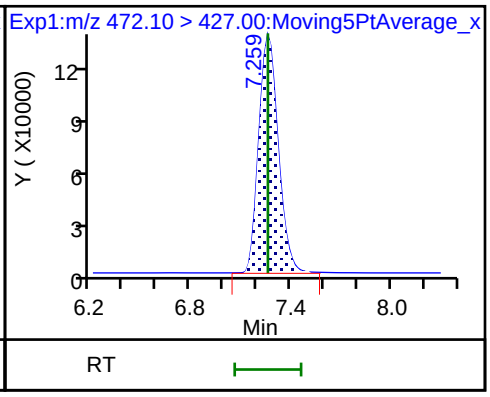
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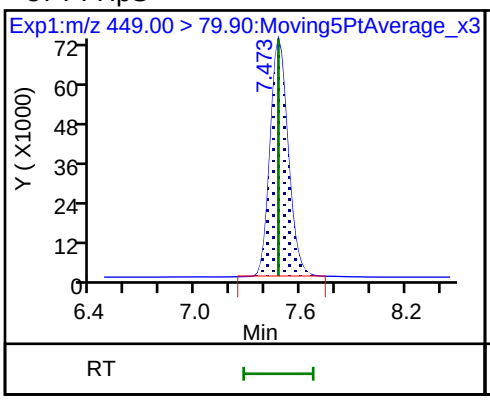
* 35 13C5 PFNA



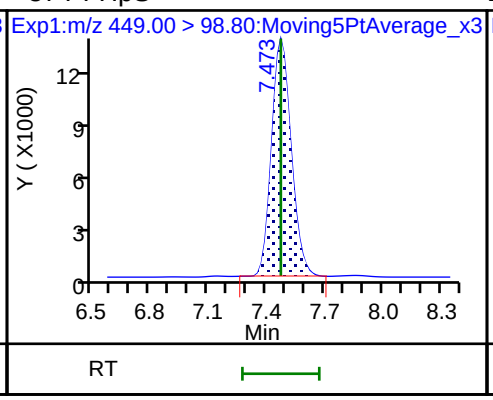
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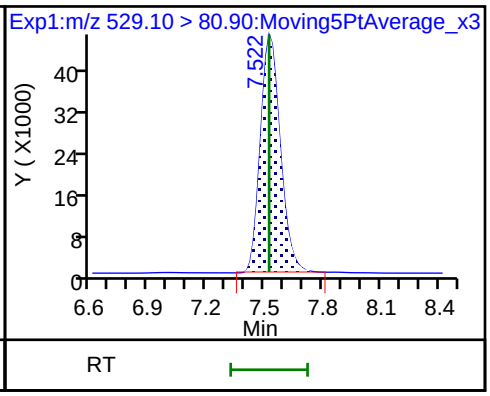
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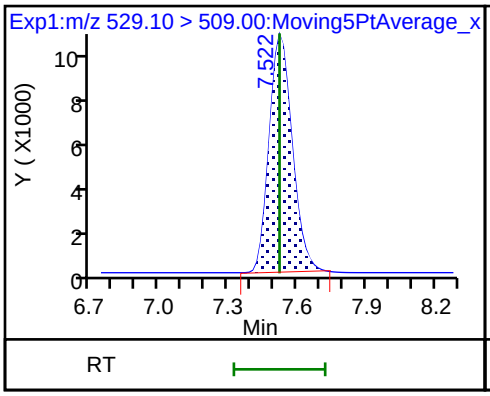
37 PFHpS



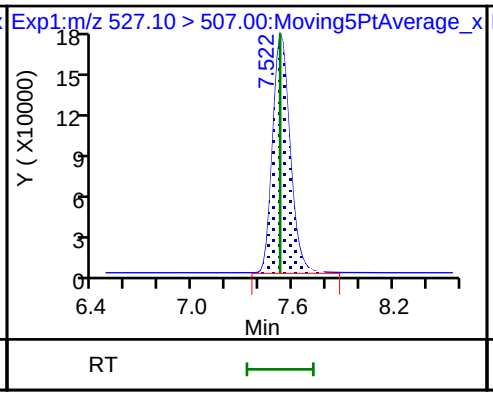
D 38 13C2-8:2FTS



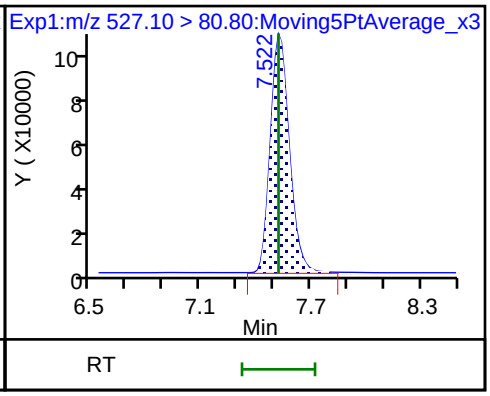
D 38 13C2-8:2FTS



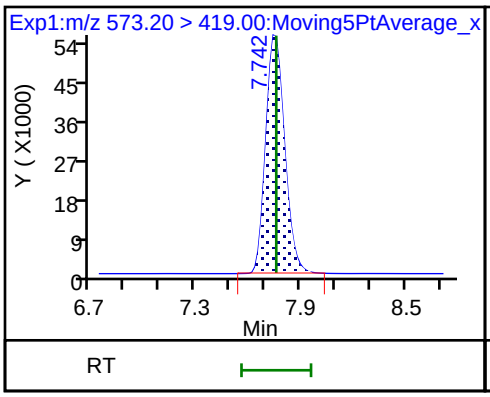
39 8:2FTS



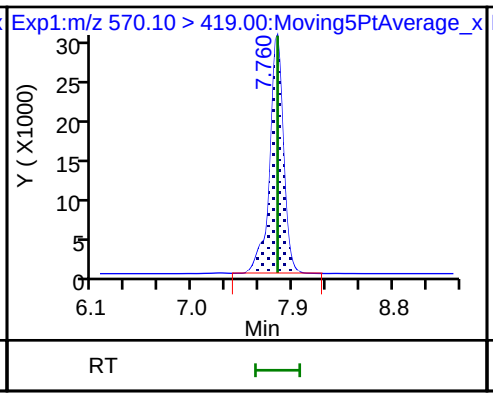
39 8:2FTS



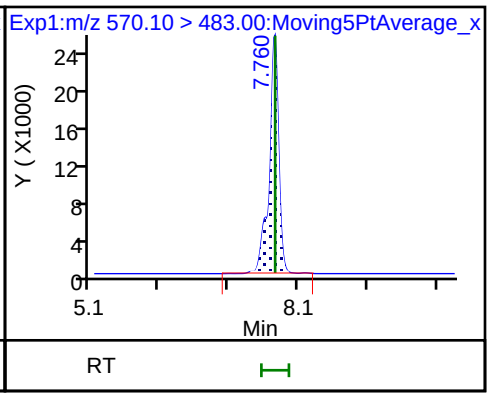
D 41 d3-NMeFOSAA



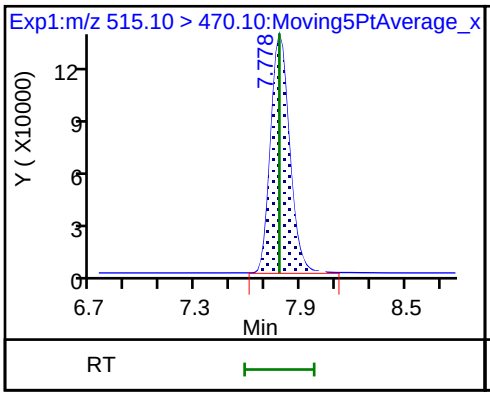
42 NMeFOSAA



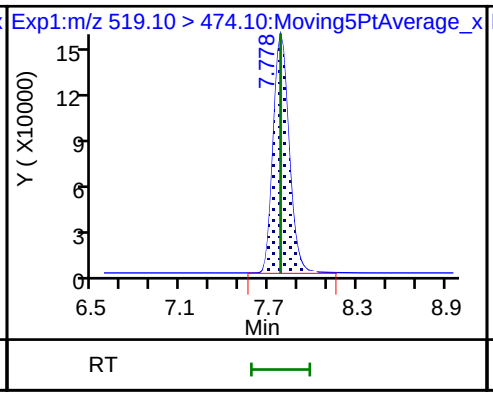
42 NMeFOSAA



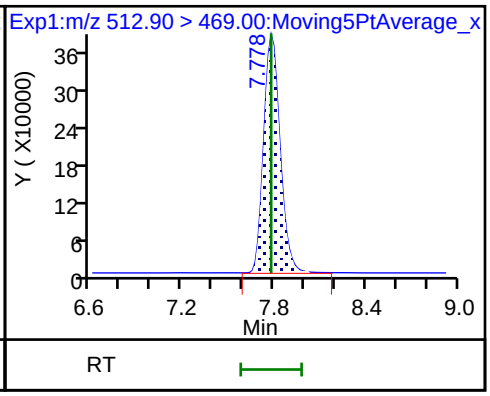
* 44 13C2 PFDA



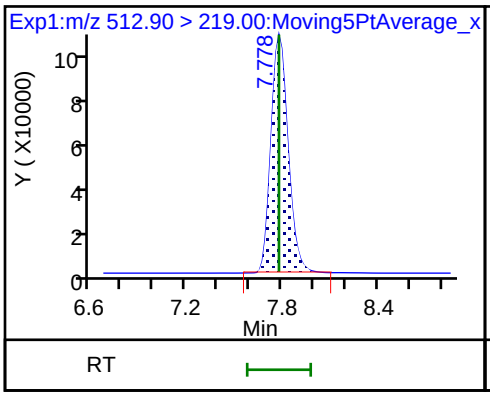
D 40 13C6 PFDA



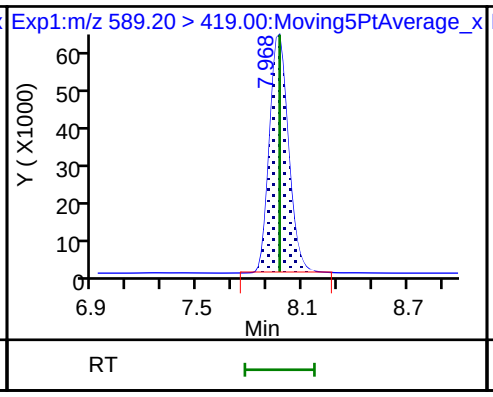
43 PFDA



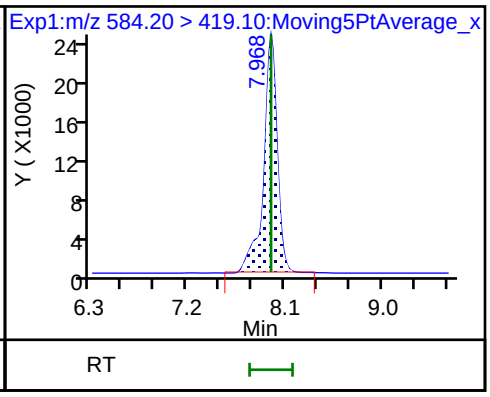
43 PFDA



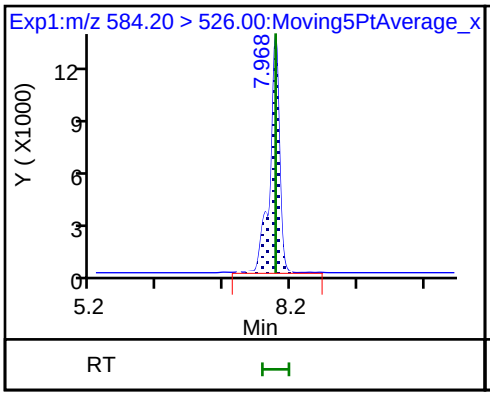
D 46 d5-NEtFOSAA



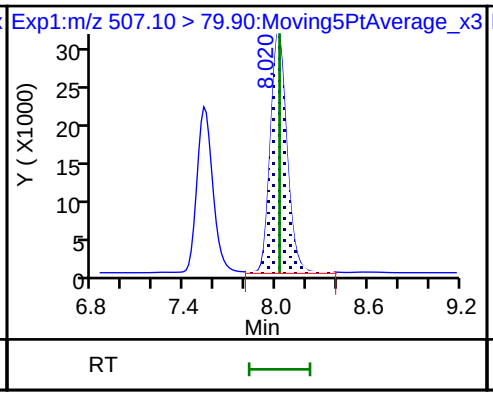
45 NEtFOSAA



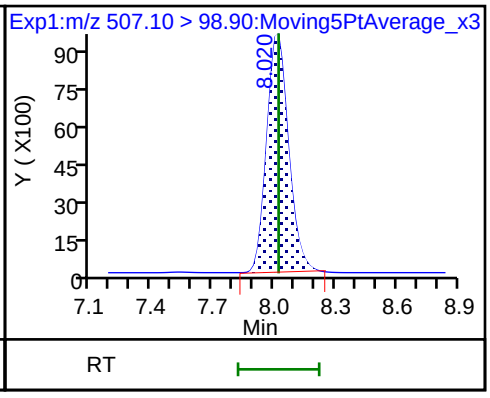
45 NEtFOSAA



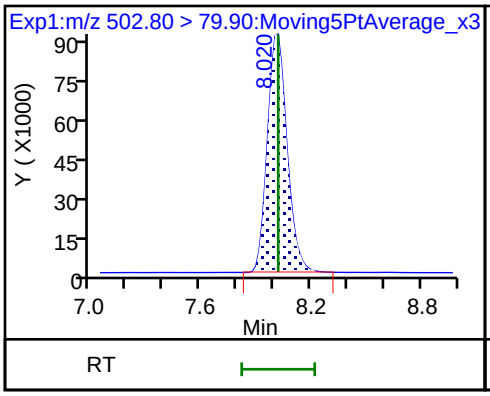
D 49 13C8 PFOS



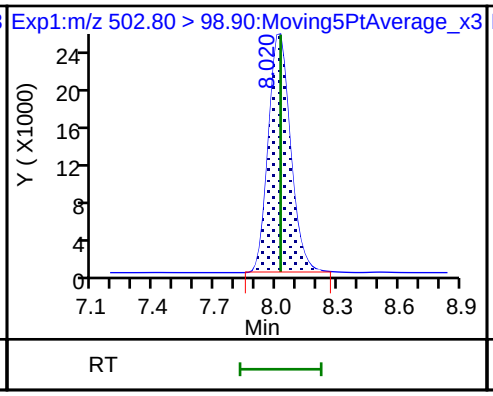
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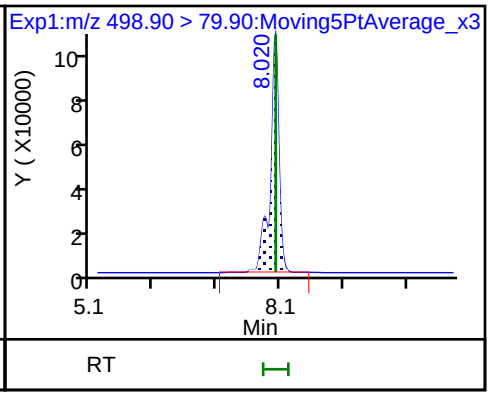
* 47 13C4 PFOS



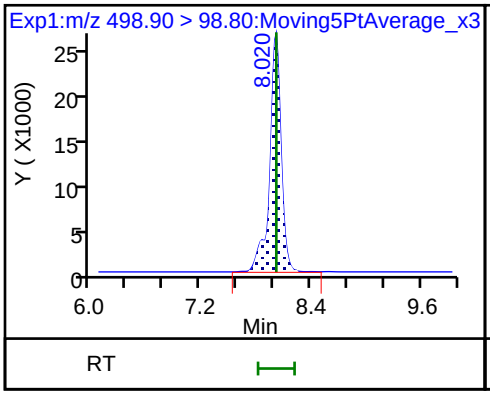
* 47 13C4 PFOS



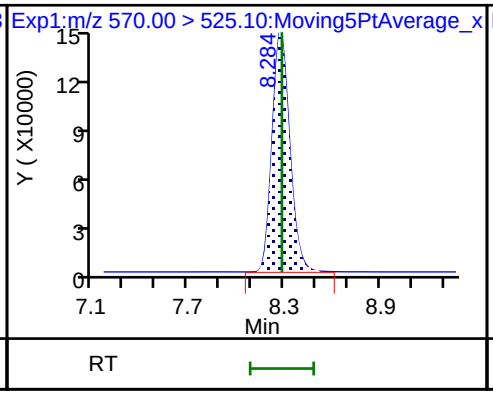
48 PFOS



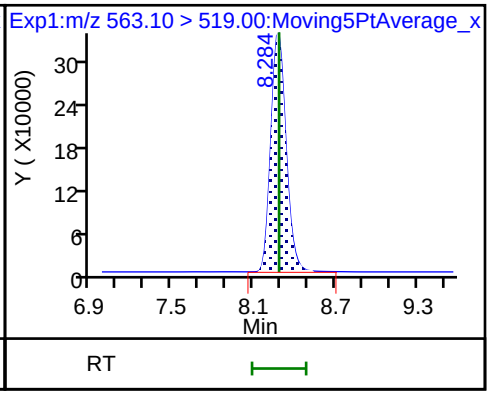
48 PFOS



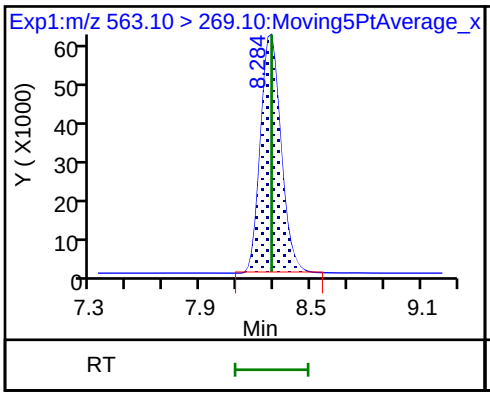
D 53 13C7 PFUnA



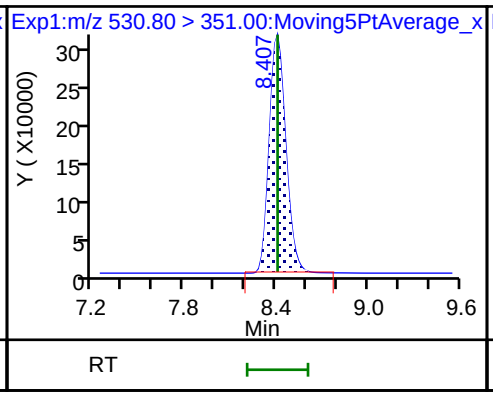
52 PFUnA



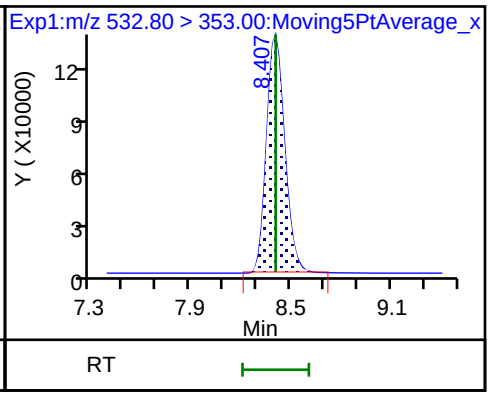
52 PFUnA



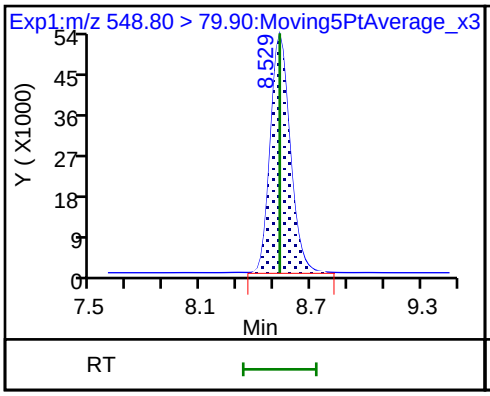
54 9ClFOS



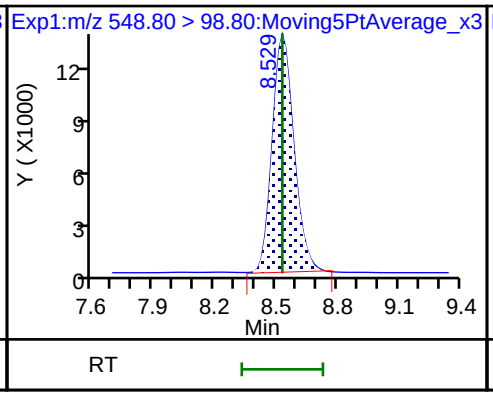
54 9ClFOS



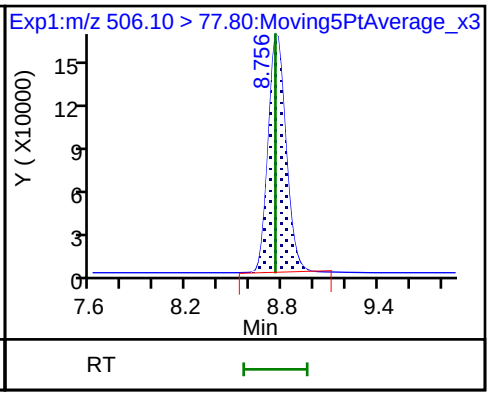
55 PFNS



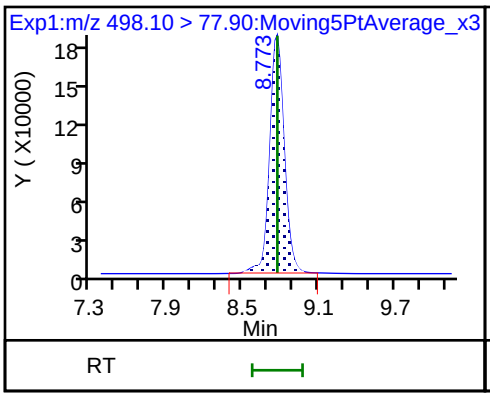
55 PFNS



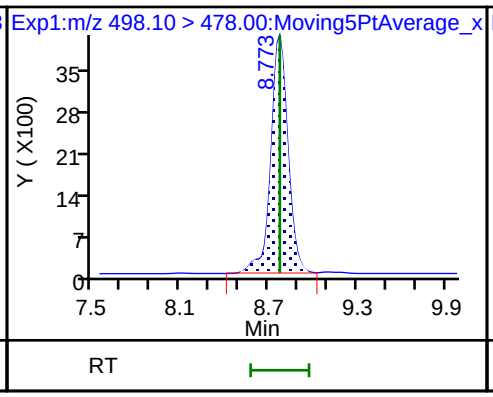
D 50 13C8 FOSA



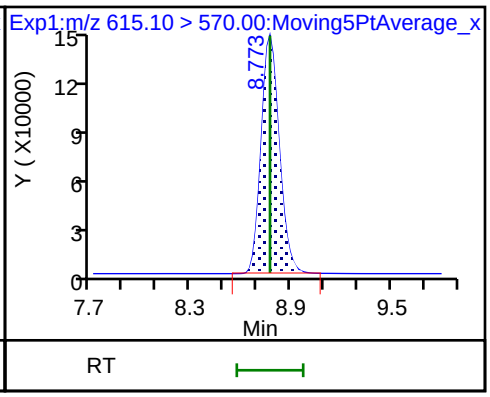
51 PFOSA



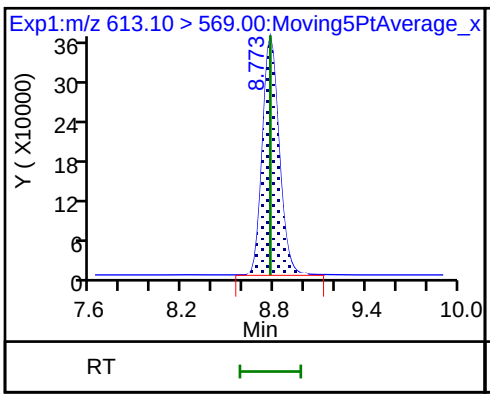
51 PFOSA



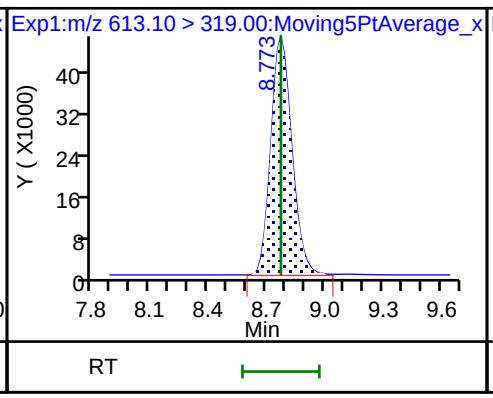
D 56 13C2 PFDoA



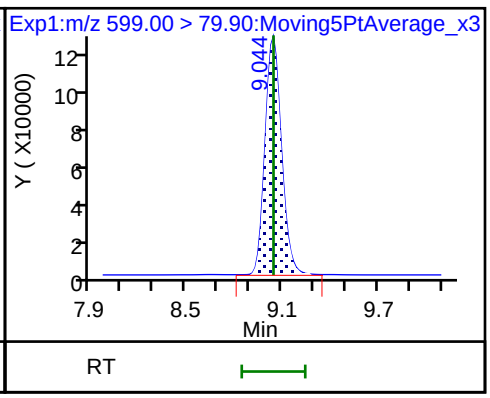
57 PFDoA



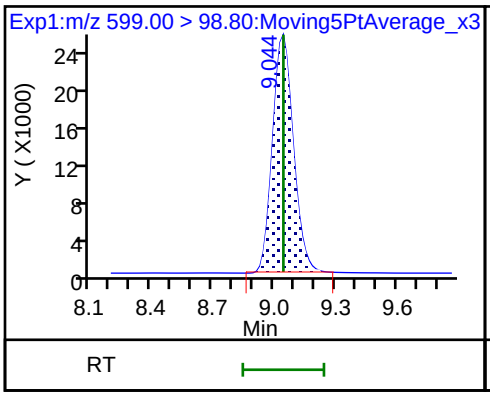
57 PFDoA



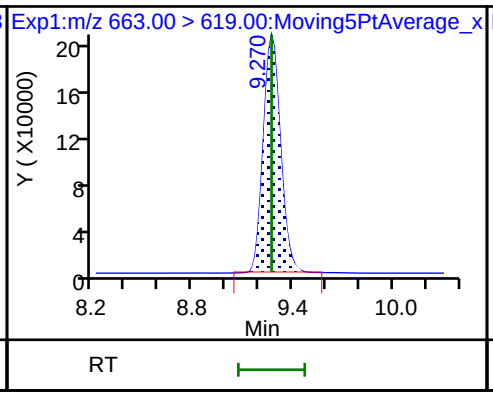
58 PFDS



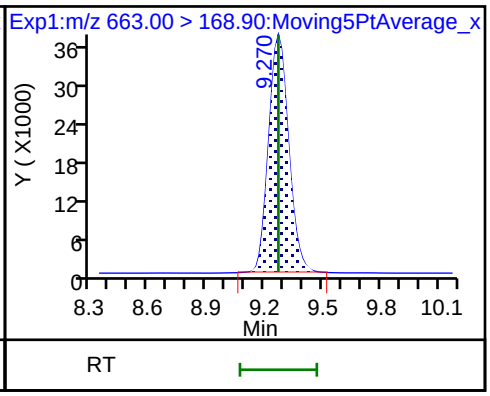
58 PFDS



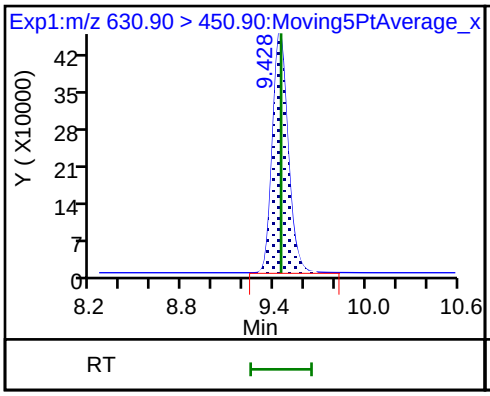
63 PFTrDA



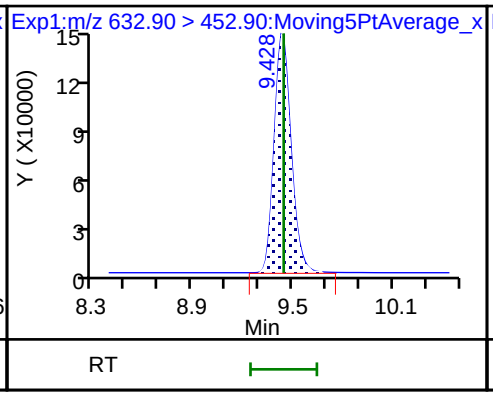
63 PFTrDA



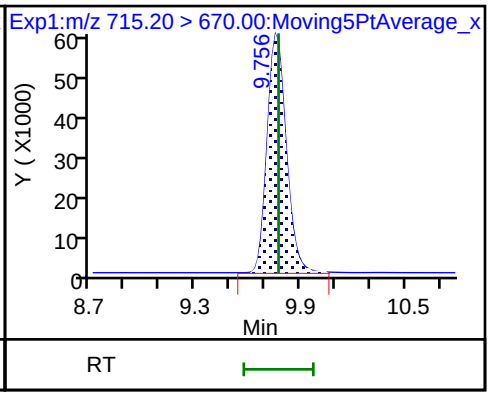
66 11ClFOS



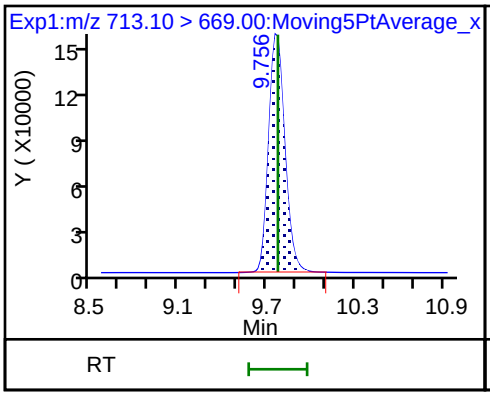
66 11ClFOS



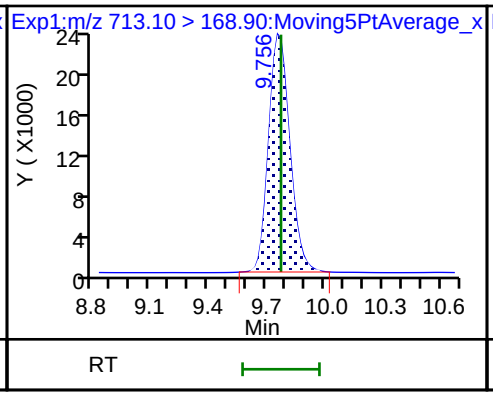
D 69 13C2 PFTeDA



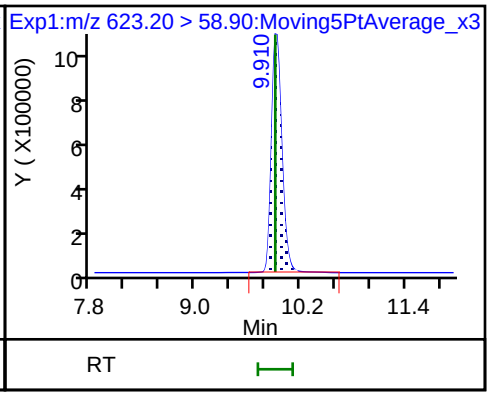
70 PFTeDA



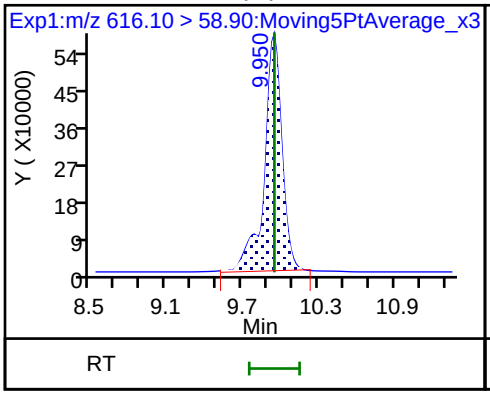
70 PFTeDA



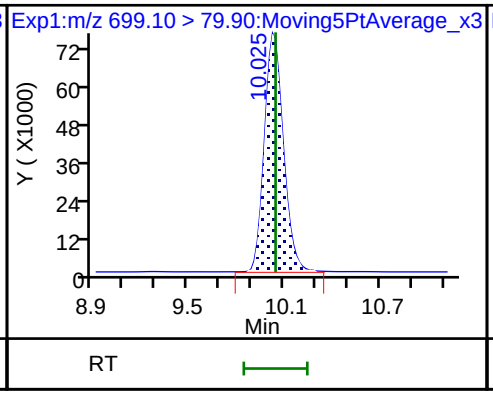
D 59 d7-N-Me-FOSE



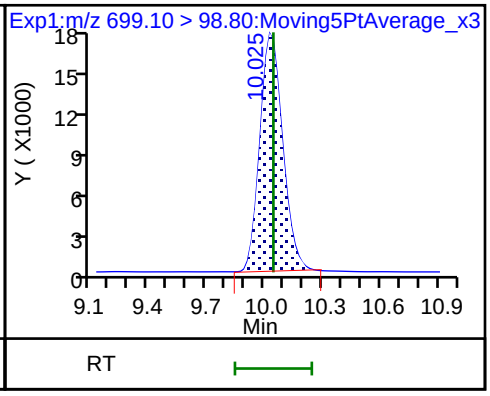
60 N-MeFOSE-M (M)



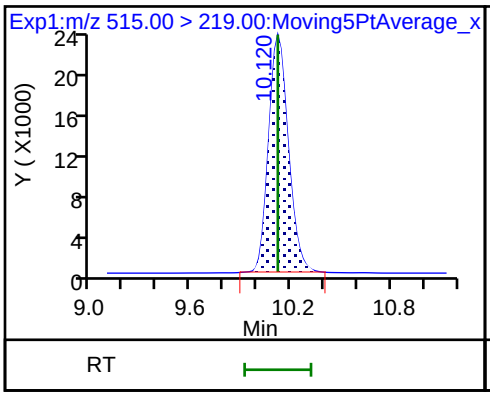
71 PFDoS



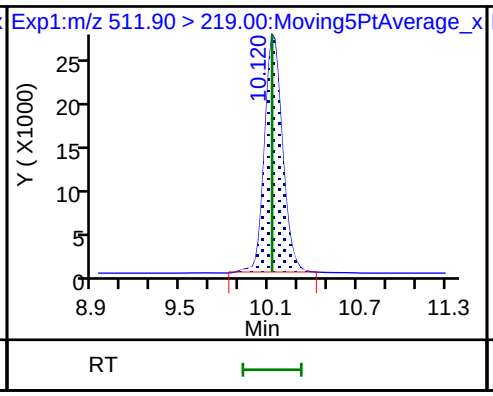
71 PFDoS



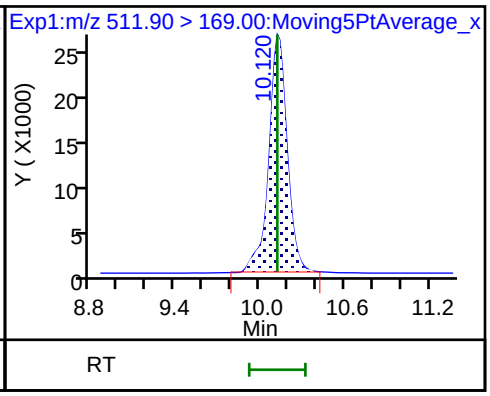
D 62 d3-NMePFOSA



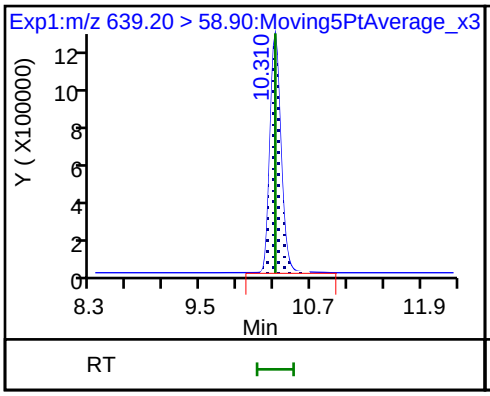
61 NMeFOSA



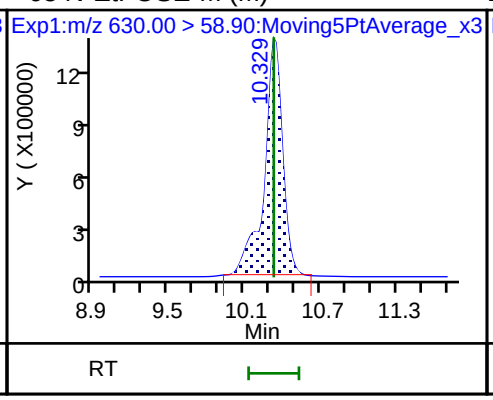
61 NMeFOSA



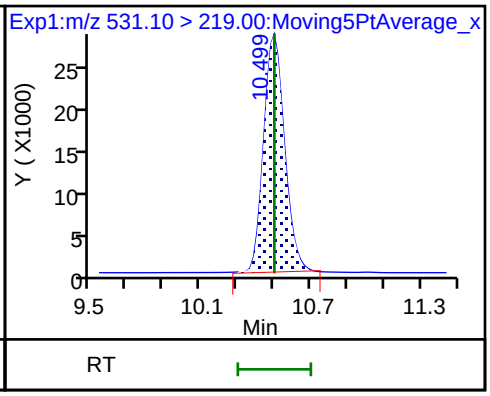
D 64 d9-N-EtFOSE



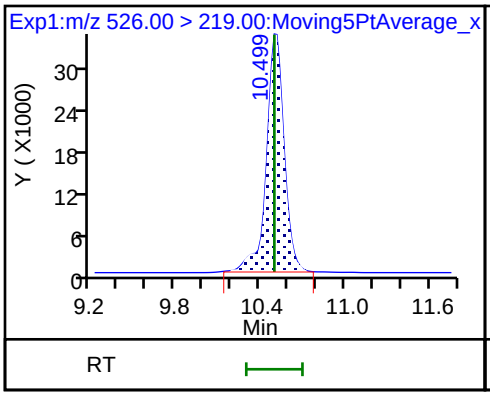
65 N-EtFOSE-M (M)



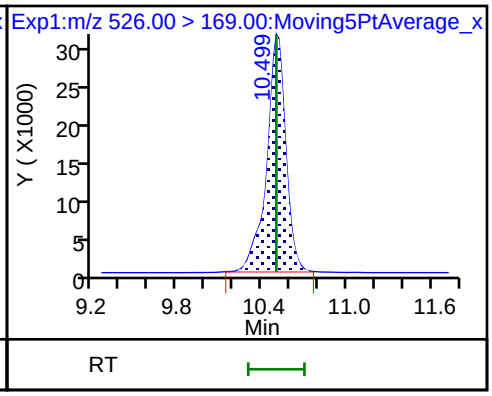
D 67 d5-NEtPFOSA



68 N-EtFOSA-M



68 N-EtFOSA-M



Manual Integration/User Assign Peak Report

Eurofins Denver

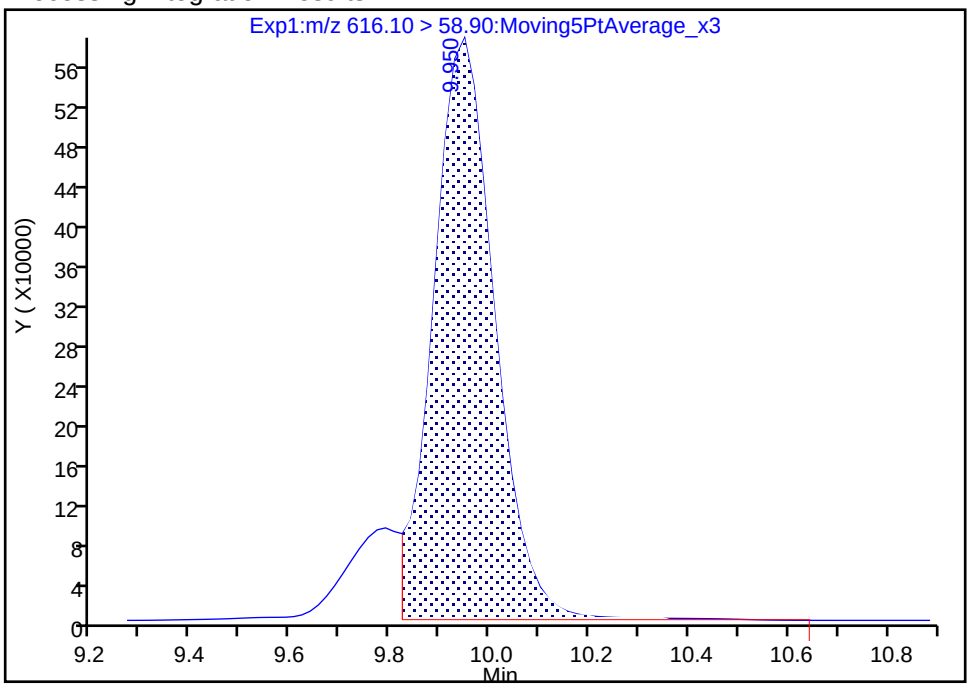
Data File:	\\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.022.d				
Injection Date:	28-Nov-2023 17:22:45	Instrument ID:	LC_LCMS11		
Lims ID:	460-292594-B-3-C MSD				
Client ID:	WCF-10				
Operator ID:	B5QN	ALS Bottle#:	16	Worklist Smp#:	18
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

60 N-MeFOSE-M, CAS: 24448-09-7

Signal: 1

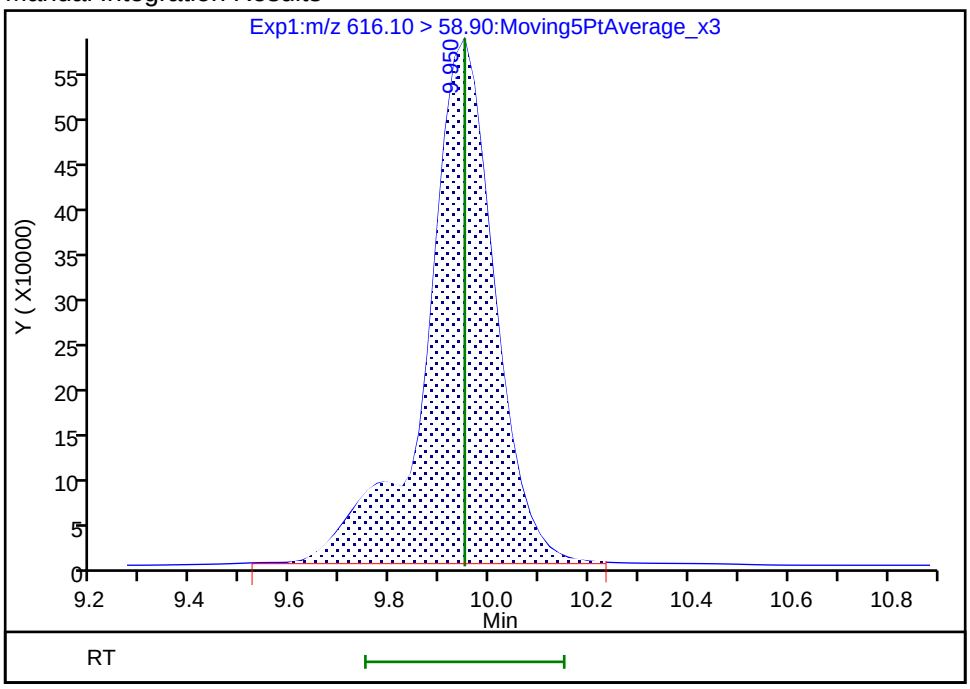
Processing Integration Results

RT: 9.95
Area: 4995518
Amount: 13.425046
Amount Units: ng/ml



Manual Integration Results

RT: 9.95
Area: 5585917
Amount: 15.011695
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 14:12:28 -07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

Eurofins Denver

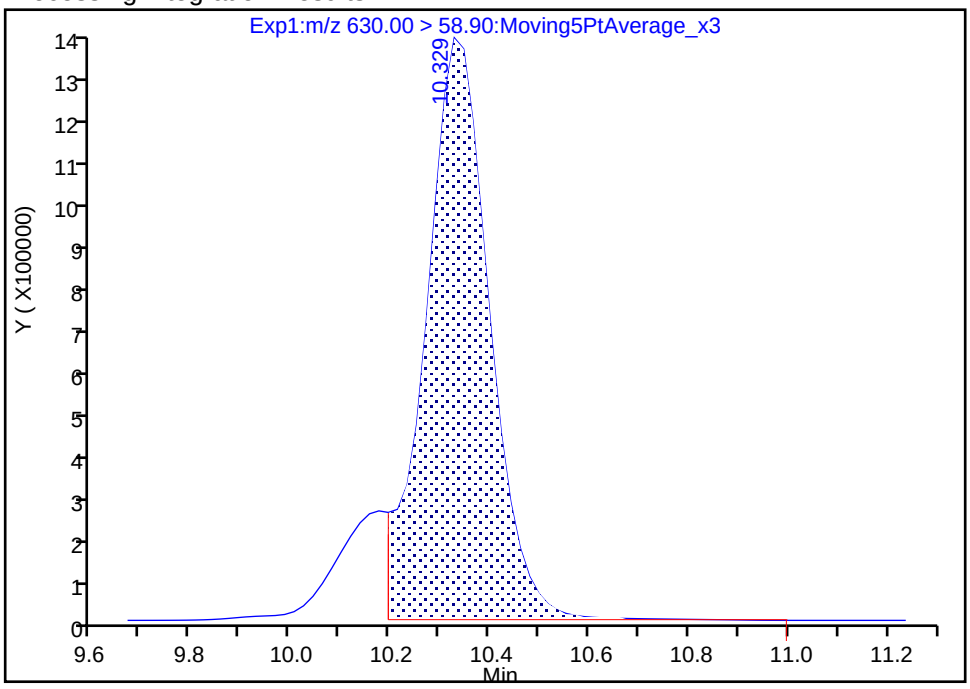
Data File:	\\chromfs\Denver\ChromData\LC_LCMS11\20231128-128055.b\2023.11.28a.022.d				
Injection Date:	28-Nov-2023 17:22:45	Instrument ID:	LC_LCMS11		
Lims ID:	460-292594-B-3-C MSD				
Client ID:	WCF-10				
Operator ID:	B5QN	ALS Bottle#:	16	Worklist Smp#:	18
Injection Vol:	6.0 ul	Dil. Factor:	1.0000		
Method:	PFC_IDA_DEN11	Limit Group:	LC - 1633_DOD5		
Column:	Gemini C18 3um 3mm X 50mm (3.00mm)	Detector	EXP1		

65 N-EtFOSE-M, CAS: 1691-99-2

Signal: 1

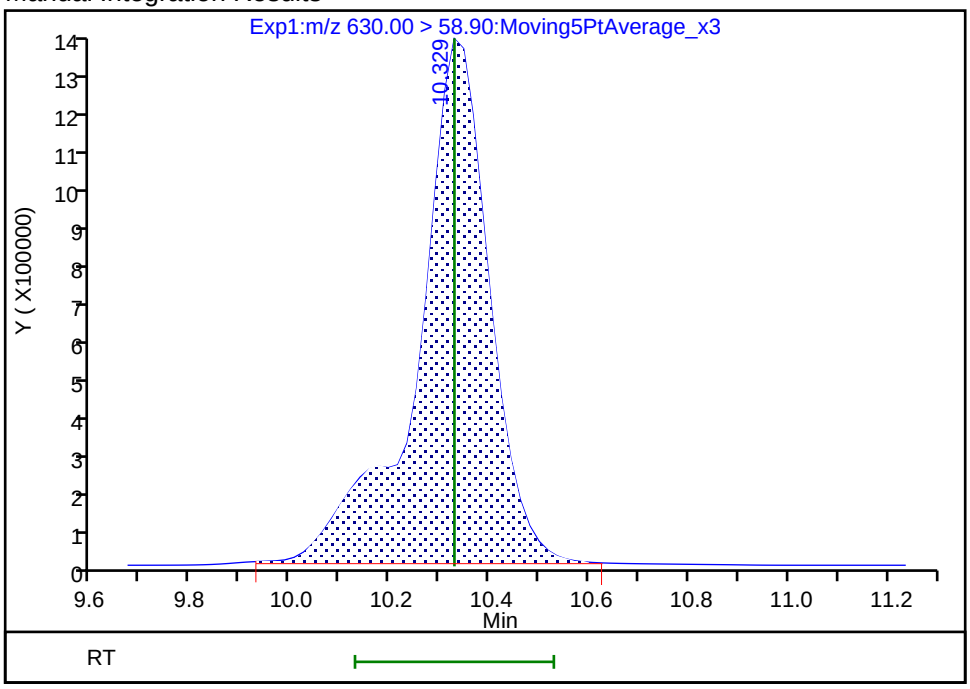
Processing Integration Results

RT: 10.33
Area: 11775505
Amount: 27.068547
Amount Units: ng/ml



Manual Integration Results

RT: 10.33
Area: 13194978
Amount: 30.331513
Amount Units: ng/ml



Reviewer: B5QN, 29-Nov-2023 14:12:37 -07:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Isomers

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Instrument ID: LC_LCMS11 Start Date: 11/20/2023 17:19

Analysis Batch Number: 634666 End Date: 11/21/2023 07:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-634666/2		11/20/2023 17:19	1	2023.11.20b.001.d	Gemini C18 3X50 3(mm)
IC 280-634666/3		11/20/2023 17:39	1	2023.11.20b.002.d	Gemini C18 3X50 3(mm)
IC 280-634666/4		11/20/2023 17:58	1	2023.11.20b.003.d	Gemini C18 3X50 3(mm)
IC 280-634666/5 ICISAV		11/20/2023 18:17	1	2023.11.20b.004.d	Gemini C18 3X50 3(mm)
IC 280-634666/6		11/20/2023 18:37	1	2023.11.20b.005.d	Gemini C18 3X50 3(mm)
IC 280-634666/7		11/20/2023 18:56	1	2023.11.20b.006.d	Gemini C18 3X50 3(mm)
IC 280-634666/8		11/20/2023 19:16	1	2023.11.20b.007.d	Gemini C18 3X50 3(mm)
ICB 280-634666/9		11/20/2023 19:35	1	2023.11.20b.008.d	Gemini C18 3X50 3(mm)
ICV 280-634666/12		11/20/2023 20:27	1	2023.11.20b.011.d	Gemini C18 3X50 3(mm)
CCVL 280-634666/13		11/20/2023 20:47	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/20/2023 21:26	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/20/2023 21:45	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/20/2023 22:37	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/20/2023 22:57	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/20/2023 23:16	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/20/2023 23:36	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/20/2023 23:55	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 00:15	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 00:34	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 00:53	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 01:13	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 01:32	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 01:52	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 02:11	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 02:31	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 02:50	1		Gemini C18 3X50 3(mm)
CCV 280-634666/33		11/21/2023 03:09	1		Gemini C18 3X50 3(mm)
CCB 280-634666/34		11/21/2023 03:29	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 03:48	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 04:08	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 04:27	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 04:47	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 05:06	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 05:26	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 05:45	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 06:04	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 06:24	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/21/2023 06:43	1		Gemini C18 3X50 3(mm)
CCV 280-634666/45		11/21/2023 07:03	1		Gemini C18 3X50 3(mm)
CCB 280-634666/46		11/21/2023 07:22	1		Gemini C18 3X50 3(mm)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Instrument ID: LC_LCMS11 Start Date: 11/28/2023 12:18

Analysis Batch Number: 635316 End Date: 11/28/2023 22:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVL 280-635316/3		11/28/2023 12:18	1	2023.11.28a.003.d	Gemini C18 3X50 3(mm)
ZZZZZ		11/28/2023 12:56	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/28/2023 13:16	1		Gemini C18 3X50 3(mm)
MB 280-635120/1-A		11/28/2023 14:08	1	2023.11.28a.012.d	Gemini C18 3X50 3(mm)
LLCS 280-635120/2-A		11/28/2023 14:27	1	2023.11.28a.013.d	Gemini C18 3X50 3(mm)
LCS 280-635120/3-A		11/28/2023 14:47	1	2023.11.28a.014.d	Gemini C18 3X50 3(mm)
ZZZZZ		11/28/2023 15:06	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/28/2023 15:26	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/28/2023 15:45	1		Gemini C18 3X50 3(mm)
460-292594-1	MW-2	11/28/2023 16:05	1	2023.11.28a.018.d	Gemini C18 3X50 3(mm)
460-292594-2	DUP_111323	11/28/2023 16:24	1	2023.11.28a.019.d	Gemini C18 3X50 3(mm)
460-292594-3	WCF-10	11/28/2023 16:43	1	2023.11.28a.020.d	Gemini C18 3X50 3(mm)
460-292594-3 MS	WCF-10 MS	11/28/2023 17:03	1	2023.11.28a.021.d	Gemini C18 3X50 3(mm)
460-292594-3 MSD	WCF-10 MSD	11/28/2023 17:22	1	2023.11.28a.022.d	Gemini C18 3X50 3(mm)
ZZZZZ		11/28/2023 17:42	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/28/2023 18:01	1		Gemini C18 3X50 3(mm)
CCV 280-635316/21		11/28/2023 18:20	1	2023.11.28a.025.d	Gemini C18 3X50 3(mm)
CCB 280-635316/22		11/28/2023 18:40	1	2023.11.28a.026.d	Gemini C18 3X50 3(mm)
ZZZZZ		11/28/2023 18:59	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/28/2023 19:19	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/28/2023 19:38	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/28/2023 19:58	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/28/2023 20:17	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/28/2023 20:36	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/28/2023 20:56	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/28/2023 21:15	1		Gemini C18 3X50 3(mm)
ZZZZZ		11/28/2023 21:35	1		Gemini C18 3X50 3(mm)
CCV 280-635316/32		11/28/2023 21:54	1		Gemini C18 3X50 3(mm)
CCB 280-635316/33		11/28/2023 22:14	1		Gemini C18 3X50 3(mm)

PFAS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Batch Number: 634666 Batch Start Date: 11/20/23 17:19 Batch Analyst: Ma, Ci

Batch Method: Draft 1633 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	LC1633_ICV 00013	LC1633EPA_LL0 00016	LC1633EPA_LL3 00009	LC1633EPA_LL4 00012	LC1633EPA_LL5 00009
IC 280-634666/2		Draft 1633		1 mL			1 mL		
IC 280-634666/3		Draft 1633		1 mL				1 mL	
IC 280-634666/4		Draft 1633		1 mL					1 mL
IC 280-634666/5 ICISAV		Draft 1633		1 mL					
IC 280-634666/6		Draft 1633		1 mL					
IC 280-634666/7		Draft 1633		1 mL					
IC 280-634666/8		Draft 1633		1 mL					
ICB 280-634666/9		Draft 1633		1 mL		1 mL			
ICV 280-634666/12		Draft 1633		1 mL	1 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	LC1633EPA_LL6 00013	LC1633EPA_LL7 00010	LC1633EPA_LL8 00009	LC1633EPA_LL9 00001		
IC 280-634666/2		Draft 1633							
IC 280-634666/3		Draft 1633							
IC 280-634666/4		Draft 1633							
IC 280-634666/5 ICISAV		Draft 1633		1 mL					
IC 280-634666/6		Draft 1633			1 mL				
IC 280-634666/7		Draft 1633				1 mL			
IC 280-634666/8		Draft 1633					1 mL		
ICB 280-634666/9		Draft 1633							
ICV 280-634666/12		Draft 1633							

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Batch Number: 635120 Batch Start Date: 11/27/23 11:00 Batch Analyst: Johnston, Malcolm S

Batch Method: 1633 Batch End Date: 11/27/23 16:21

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ReceivedpH	LC1633_EIS 00016
MB 280-635120/1		1633, Draft 1633				500 mL	5 mL	6.0 SU	250 uL
LLCS 280-635120/2		1633, Draft 1633				500 mL	5 mL	6.0 SU	250 uL
LCS 280-635120/3		1633, Draft 1633				500 mL	5 mL	6.0 SU	250 uL
460-292594-B-1	MW-2	1633, Draft 1633	T	605.0 g	44.5 g	560.5 mL	5 mL	6.2 SU	250 uL
460-292594-B-2	DUP_111323	1633, Draft 1633	T	598.4 g	44.7 g	553.7 mL	5 mL	6.2 SU	250 uL
460-292594-B-3	WCF-10	1633, Draft 1633	T	601.2 g	44.3 g	556.9 mL	5 mL	6.2 SU	250 uL
460-292594-B-3 MS	WCF-10	1633, Draft 1633	T	589.8 g	45.2 g	544.6 mL	5 mL	6.2 SU	250 uL
460-292594-B-3 MSD	WCF-10	1633, Draft 1633	T	628.8 g	44.3 g	584.5 mL	5 mL	6.2 SU	250 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	LC1633_NIS 00012	LC1633EPALSP 00010				
MB 280-635120/1		1633, Draft 1633		62.5 uL					
LLCS 280-635120/2		1633, Draft 1633		62.5 uL	0.1 mL				
LCS 280-635120/3		1633, Draft 1633		62.5 uL	1 mL				
460-292594-B-1	MW-2	1633, Draft 1633	T	62.5 uL					
460-292594-B-2	DUP_111323	1633, Draft 1633	T	62.5 uL					
460-292594-B-3	WCF-10	1633, Draft 1633	T	62.5 uL					
460-292594-B-3 MS	WCF-10	1633, Draft 1633	T	62.5 uL	1 mL				
460-292594-B-3 MSD	WCF-10	1633, Draft 1633	T	62.5 uL	1 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Batch Number: 635120 Batch Start Date: 11/27/23 11:00 Batch Analyst: Johnston, Malcolm S

Batch Method: 1633 Batch End Date: 11/27/23 16:21

Batch Notes	
pH Indicator ID	Hydrion pH Paper lot: 230522
Manifold ID	PFAS-1, PFAS-7
First Start time	11/27/2023 12:18
First End time	11/27/2023 15:38
SPE Reservoir ID #	318145
SPE Cartridge Type	Strata PFAS (WAX/GCB) Cartridge, 200 mg/50mg/6 uL
SPE Cartridge Lot ID	F02856
Balance ID	24950441
Balance is Level? (Y/N)	yes
Pipette/Syringe/Dispenser ID	Pyrrha, Frodo, Tanjiro
Pipette Tip Lot ID	200uL (Lot#L208825R), 1000uL (Lot#L201049G), 5mL (Lot#M211424J)
Methanol ID	232043
H2O ID	SHBQ8018
Solvent Name	1% NH4OH/MeOH
Solvent Lot #	1 % NH4OH/MeOH_00046
Rinse Solvent Name	0.3M Formic Acid / 1:1 0.1M Formic Acid
Rinse Solvent Lot	0.3M FormicA_00018/ 1:1 0.1M Formi_00029
Acetic Acid ID	AceticAcid_00149
Analyst ID - Reagent Drop	MJ
Analyst ID - Reagent Drop Witness	AA
Analyst ID - IS Reagent Drop	MJ
Analyst ID - IS Reagent Drop Witness	MD
Centrifuge Tube ID	Lot: 05-539-5/12618012
QC Bottle Lot ID	0215001I
Glass Wool ID	GlassWool_00013
Filter ID	311068258
Syringe ID	23D03C8
Medicine Cup Lot ID	41523030002
Batch Comment	DV-LC-0040

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PFAS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 460-292594-1

SDG No.:

Batch Number: 635120 Batch Start Date: 11/27/23 11:00 Batch Analyst: Johnston, Malcolm S

Batch Method: 1633 Batch End Date: 11/27/23 16:21

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Subcontract Data

Shipping and Receiving Documents

Chain of Custody Record

677912

eurofins | Environment Testing America

Address. _____

Regulatory Program ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact	Project Manager: Rachel Fenwick	Site Contact:	Date:	COC No:
Company Name: RAUX	Tel/Email: rfenwick@rauxinc.com	Lab Contact:	Carrier:	____ of ____ COCs
Address: 209 Shafter St ~~Islandia NY~~	Analysis Turnaround Time			Sampler:
City/State/Zip: Islandia / NY / 11749	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone: (631) 232-2600	TAT if different from Below _____			Walk-in Client:
Fax: (631) 232-9898	☐ 2 weeks ☑ 1 week ☐ 2 days ☐ 1 day			Lab Sampling:
Project Name: watchcase factory condos				Job / SDG No. 292594
Site: 15 Church St Sag Harbor, NY				
PO# 28 02 00014000				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	PFAS (11633)	Sample Specific Notes:
MW-2	11/13/23	1045	G	GW	3				
DUP-111323	11/13/23	1130	G	GW	3				
~~MW~~ WCF-10	11/13/23	1200	G	GW	9	N			MS/MSD

5-Day RUSH

NYC 22

460-292594 Chain of Custody

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Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temp. (°C): Obs'd:	Corr'd.	Therm ID No.:

Relinquished by: Rachel Fenwick	Company: RAUX	Date/Time: 11/13/23 1445	Received by:	Company:	Date/Time: 11/13 1445
Relinquished by:	Company:	Date/Time: 11/13/23 1600	Received by:	Company:	Date/Time: 11/13/23 1700
Relinquished by:	Company:	Date/Time: 11/13/23 1800	Received in Laboratory by:	Company: ETA	Date/Time: 11-13-23 1800

11/30/2023 6:34 PM

1112329

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 292594

Number of Coolers: 1 IR Gun # 6

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	11 °C	12 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below.

Sample No(s). adjusted. _____

Preservative Name/Conc. _____ Volume of Preservative used (ml) _____

Lot # of Preservative(s) _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials: Lauren Date: 11/3/23

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Haas, Melissa	Carrier Tracking No(s):	COC No: 460-69792.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Melissa.Haas@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 460-292594-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 12/1/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: Watchcase Factory Condominium	Project #: 46042155			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1633_B24/1633_SPE EPA Method 1633 Std List	1633_DRAFT_TSS/ Percent Suspend Solids for Analysis PFAS	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MW-2 (460-292594-1)	11/13/23	10:45 Eastern		Water			X	X	3	
DUP_111323 (460-292594-2)	11/13/23	11:30 Eastern		Water			X	X	3	
WCF-10 (460-292594-3)	11/13/23	12:00 Eastern		Water			X	X	3	
WCF-10 (460-292594-3MS)	11/13/23	12:00 Eastern	MS	Water			X		3	
WCF-10 (460-292594-3MSD)	11/13/23	12:00 Eastern	MSD	Water			X		3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/15/23 1900	EETBL		11-16-23 0945	EETDNE
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		1.6 1.9 of 0.3 IR MOMO

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Login Sample Receipt Checklist

Client: Roux Environmental Eng & Geology DPC

Job Number: 460-292594-1

Login Number: 292594
List Number: 1
Creator: Rivera, Kenneth

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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.	True	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Roux Environmental Eng & Geology DPC

Job Number: 460-292594-1

Login Number: 292594
List Number: 2
Creator: Martinez, Anthony

List Source: Eurofins Denver
List Creation: 11/16/23 02:44 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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?	N/A	
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.	True	
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	

APPENDIX D

DUSRs for SSDS Effluent and Groundwater Results

Data Validation Services

120 Cobble Creek Road P. O. Box
208 North Creek, NY 12853
Phone (518) 251-4429
harry@frontiernet.net

May 22, 2024

Rachel Fenwick
Roux Environmental Engineering and Geology, D. P. C.
209 Shafter St
Islandia, NY 11749

RE: BulovaWatchcase Factory Air Sampling Event
Data Usability Summary Report (DUSR); Validation of Analytical Laboratory Data Package
Eurofins SDG No. 200-68952-1

Dear Ms. Fenwick,

Review has been completed for the data package generated by Eurofins, Inc pertains to samples collected 06/30/23 at the Bulova Watchcase Factory site. Two 6L summa canisters were processed for volatile analytes by USEPA method TO-15.

The data packages submitted by the laboratory contain full deliverables for validation, and this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. The reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the USEPA national and regional validation documents, and in consideration for the specific requirements of the analytical methodology. The following items were reviewed:

* Data Completeness
* Case Narrative
* Custody Documentation/Sample Receipt
* Holding Times
* Internal Standard Recoveries
* Method Blanks
* Laboratory Control Sample (LCS)
* Laboratory Duplicate Correlations
* Instrumental Tunes
* Initial and Continuing Calibration Standards
* Method Compliance
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review, as discussed in NYS DER-10 Appendix B Section 2.0 (c). Documentation of the outlying parameters cited in this report can be found in the laboratory data packages.

In summary, results for the samples are usable with qualification as estimated in value.

Data completeness, laboratory accuracy, precision, representativeness, reproducibility, sensitivity, and comparability are acceptable.

Validation data qualifier definitions and client sample identifications are attached to this text. Also included in this report is the client EDD.

Chain-of-Custody

The flow controller IDs and the final canister vacuums measured in the field were not entered onto the custody form.

Volatile Analyses by EPA TO-15

Both canisters were received with no residual vacuum (0"Hg). The results are therefore qualified as estimated in value.

Holding times were met, internal standard responses are compliant, and instrument tunes meet fragmentation requirements. LCSs show compliant recoveries. Method and canister blanks show no contamination.

Initial and continuing calibration standard (ICV and CCV) linearity and calibration verification responses were compliant.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

Judy Harry

Judy Harry

Attachments: Validation Data Qualifier Definitions
Sample Identifications
Qualified Laboratory EQuIS EDD

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
J-	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
J+	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
UJ	The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

Sample Identification Summary

Sample Summary

Client: Roux Environmental Eng & Geology DPC
Project/Site: Bulova Watchcase Factory Condominium

Job ID: 200-68952-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
200-68952-1	Garage Blower Effluent	Air	06/30/23 09:00	07/01/23 09:40	Air Canister (6-Liter) #3220
200-68952-2	Factory Blower Effluent (FB-2)	Air	06/30/23 10:00	07/01/23 09:40	Air Canister (6-Liter) #9272

Data Validation Services

120 Cobble Creek Road P. O. Box
208 North Creek, NY 12853
Phone (518) 251-4429
harry@frontiernet.net

February 1, 2024

Rachel Fenwick
Roux Environmental Engineering and Geology, D. P. C.
209 Shafter St.
Islandia, NY 11747

RE: Watchcase Factory Condominiums
Data Usability Summary Report (DUSR); Validation of Analytical Laboratory Data Packages
Eurofins TestAmerica No. 460-292594-1

Dear Ms. Fenwick:

Review has been completed for the data package generated by Eurofins TestAmerica that pertains to samples collected 11/13/23 at the Watchcase Factory Condominium site. Two aqueous samples and a field duplicate were processed for per- and polyfluoroalkyl substances (PFAS) by USEPA SW846 method 1633.

The data packages submitted by the laboratory contain full deliverables for validation, but this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. The reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the USEPA national and regional validation documents, and in consideration for the specific requirements of the analytical methodology. The following items were reviewed:

* Data Completeness
* Case Narrative
* Custody Documentation/Sample Receipt
* Holding Times
* Isotopic Dilution and Internal Standard Recoveries
* Preparation Blanks
* Matrix Spike Recoveries/Duplicate Correlations
* Blind Field Duplicate Correlations
* Laboratory Control Sample (LCS)
* Initial and Continuing Calibration Standards
* Method Compliance
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review, as discussed in NYS DER-10 Appendix B Section 2.0 (c). Documentation of the outlying parameters cited in this report can be found in the laboratory data packages.

In summary, laboratory processing was compliant. Results for the samples are usable as reported.

Data completeness, accuracy, precision, representativeness, reproducibility, sensitivity, and comparability are acceptable.

The client sample identifications are attached to this text. Also included in this report is the client/laboratory EDD.

Blind Field Duplicate

The blind field duplicate evaluation was performed for volatiles on location MW-2 and shows correlations within validation guidelines.

PFAS by EPA Method 1633

The matrix spikes of WCF-10 show recoveries and correlations within validation guidelines. LCS recoveries are within required acceptance ranges.

Isotopic dilution standards are compliant with protocol requirements. Calibration standard responses are within validation action guidelines. Blanks show no contamination.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

Judy Harry

Judy Harry

Attachments: Sample Identifications
Laboratory EQuIS EDD

Sample Identification Summary

Sample Summary

Client: Roux Environmental Eng & Geology DPC
Project/Site: Watchcase Factory Condominium

Job ID: 460-292594-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-292594-1	MW-2	Water	11/13/23 10:45	11/13/23 18:00
460-292594-2	DUP_111323	Water	11/13/23 11:30	11/13/23 18:00
460-292594-3	WCF-10	Water	11/13/23 12:00	11/13/23 18:00

APPENDIX E

Annual Inspection Form

SITE MONITORING, INSPECTION AND MAINTENANCE LOG

PROJECT:	Watchcase Factory Condominiums	DATE :	11/13/2023
Location :	Sag Harbor, NY	PERSONNEL:	Mike Sarni, Rachel Fenwick
Roux Project No.:	2802.0001Y000		

General Inspection Requirements

Yes	No	
[ ]	[X]	Tresspassing/vandalism/dumping noted?
[ ]	[X]	Perimeter fencing or gates require repair?
[ ]	[X]	Other conditions observed? If yes, refer to Corrective Actions for additional clarification.

Inspection of Soil Cover System

Yes	No	
[ ]	[X]	Significant bare spots observed in landscaped areas?
[ ]	[X]	Significant cracks observed in paved areas?
[ ]	[X]	Other conditions observed? If yes, refer to Corrective Actions for additional clarification.

Inspection of SSDS Piping

Yes	No	
[ ]	[X]	Significant cracks/damage observed in above ground piping?
[ ]	[X]	Other conditions observed? If yes, refer to Corrective Actions for additional clarification.

Inspection of SSDS Monitoring Points

Yes	No	
[X]	[ ]	Locking cover and plug intact and locked?
[X]	[ ]	Monitoring point tubing in good condition?
[ ]	[X]	Other conditions observed? If yes, refer to Corrective Actions for additional clarification.

APPENDIX F

Photo Log



Photograph 1: View of monitoring well (WCF-10) location and protective cover located along Division Street, north of the site.



Photograph 2: View of a meter reading for the Zone 3 monitoring point.



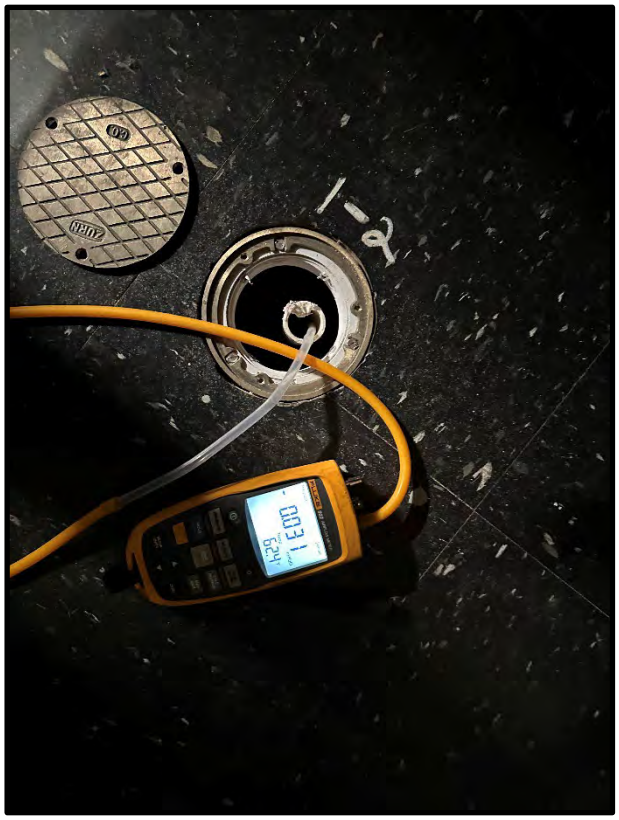
Photograph 3: Photo of SSDS Blower vacuum readings.



Photograph 4: View of SSDS Blower configuration with inlet filters, knock out tank, and control panel in view.



Photograph 5: Photo of active SSDS Blower control panel.



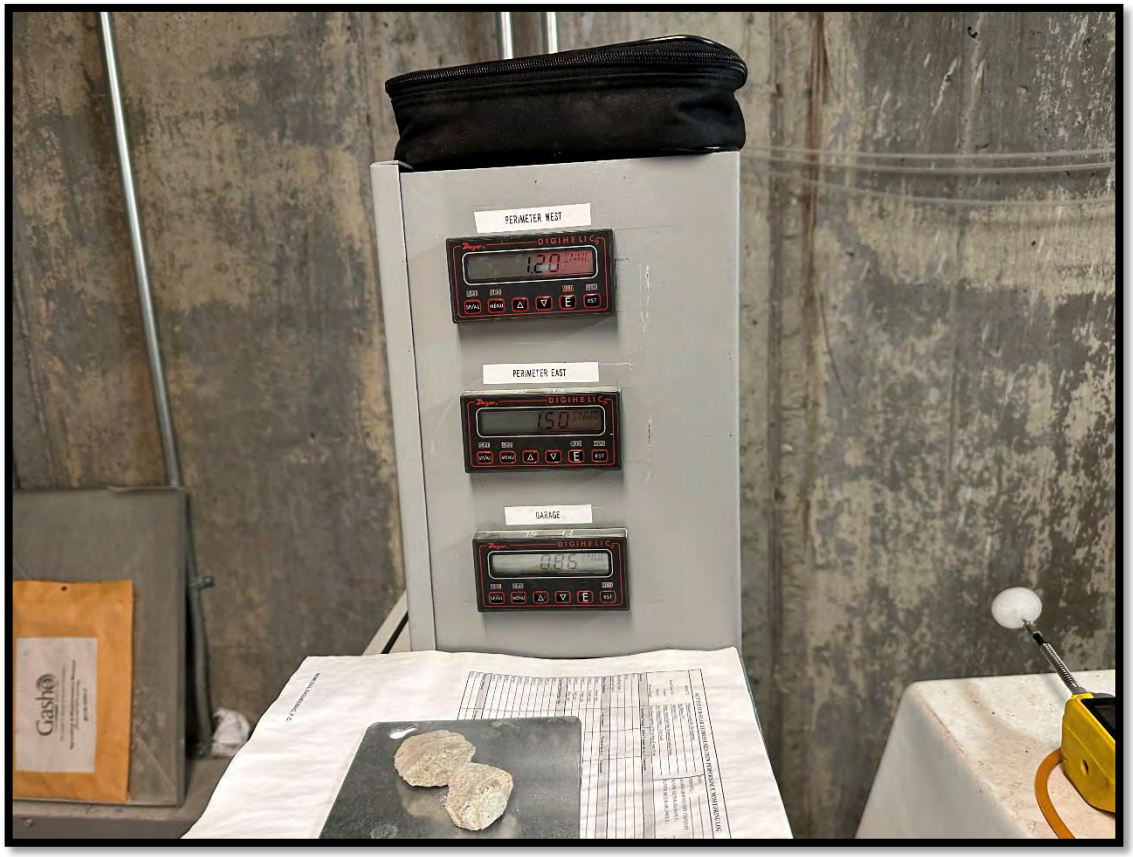
Photograph 6: View of MP 1-2 during vacuum monitoring.



Photograph 7: View of field vacuum monitoring performed for MP 5-2.



Photograph 8: View of field vacuum monitoring performed at MP 2-2.



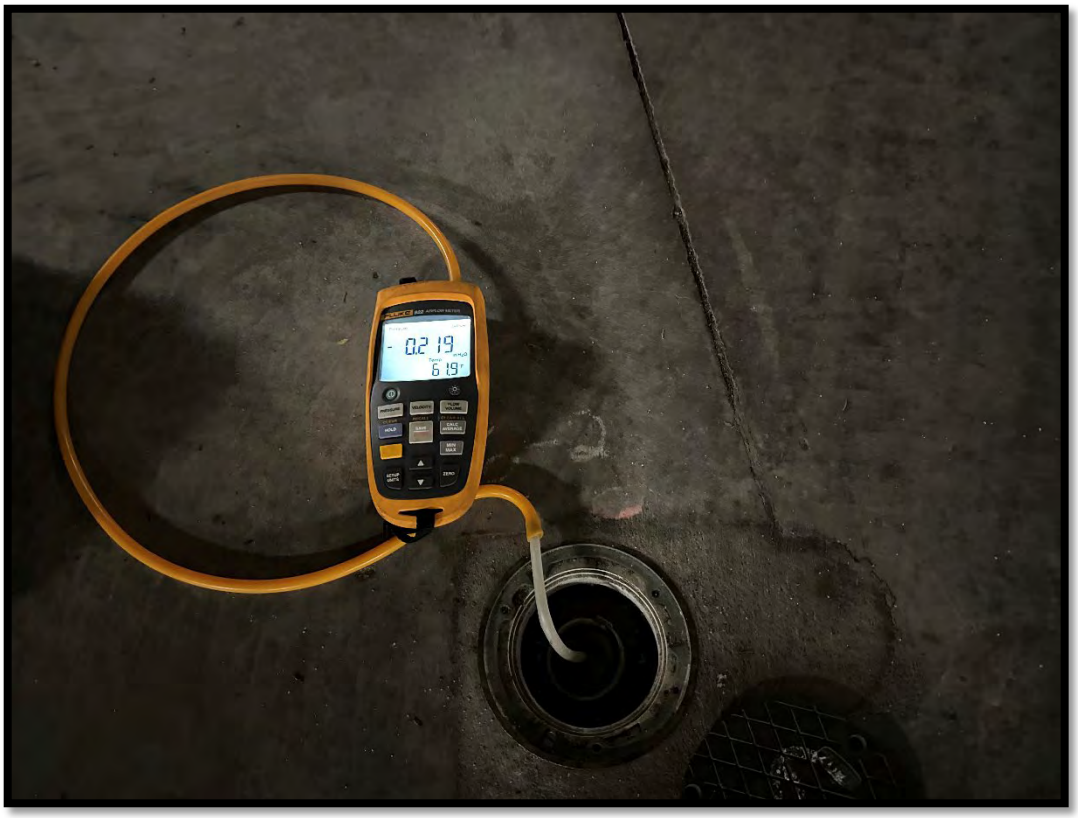
Photograph 9: Photo of the Garage, Perimeter West, and Perimeter East zone monitoring point readings.



Photograph 10: View of garage SSDS Blower control panel in operation.



Photograph 11: SSDS Blower air inlet filters and knock out tank in view during gauge reading for inspection.



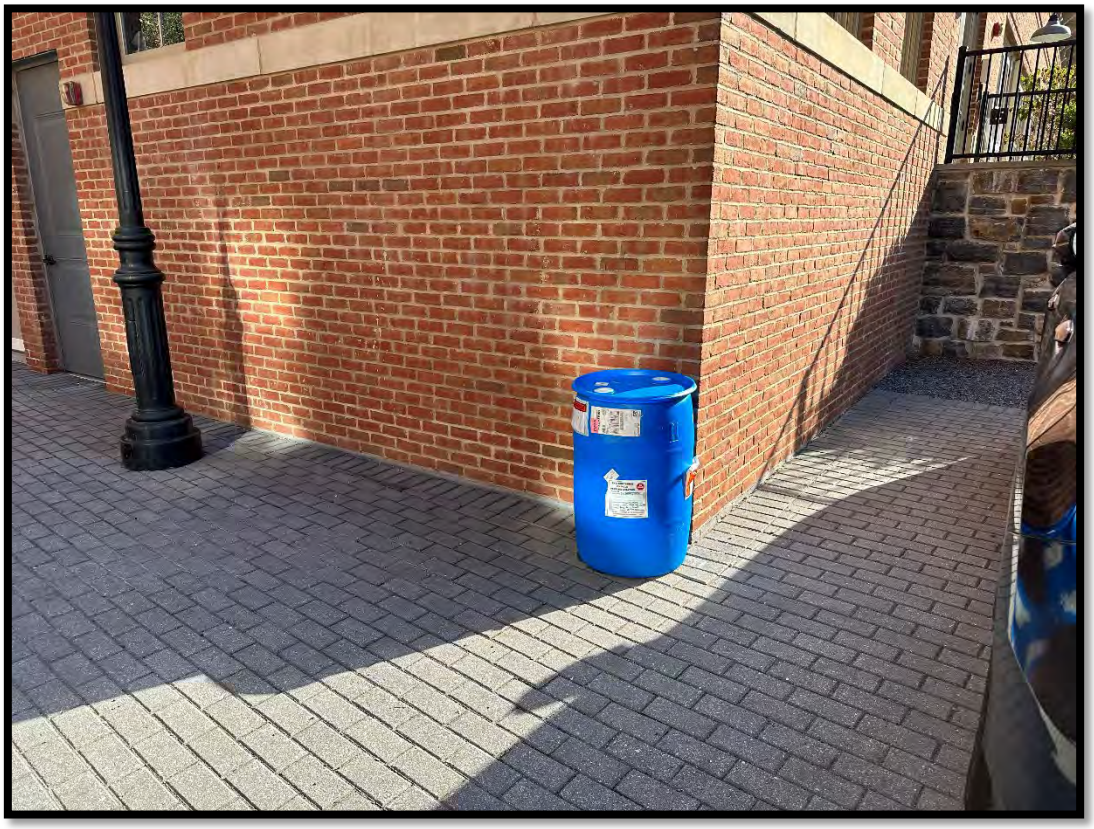
Photograph 12: View of MP 6-2 undergoing field pressure test.



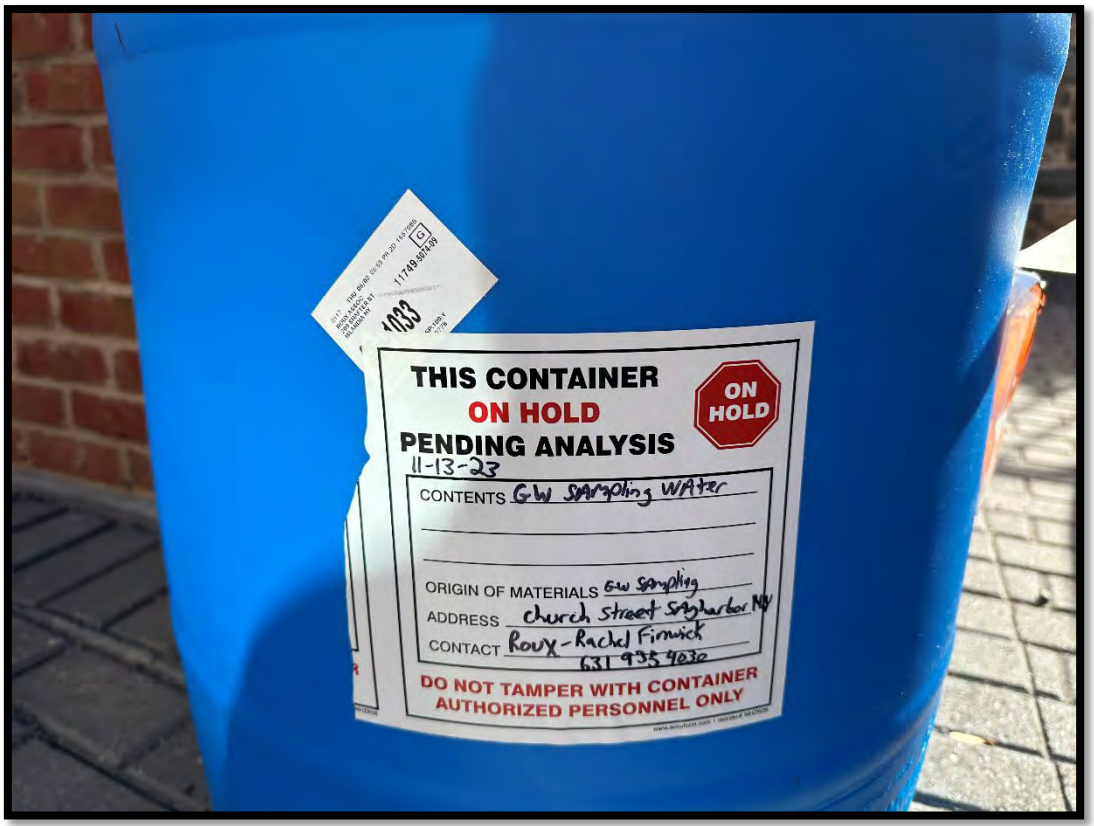
Photograph 13: View of groundwater sampling at WCF-10.



Photograph 14: View during groundwater sampling activities at WCF-10.



Photograph 15: Photo of staged drum onsite containing purge water from groundwater sampling work; prior to off-site disposal.



Photograph 16: Photo of contents label for purge water drum completed by Roux Associates .



Photograph 15: Photo along the Site perimeter on Church St, facing southeast.



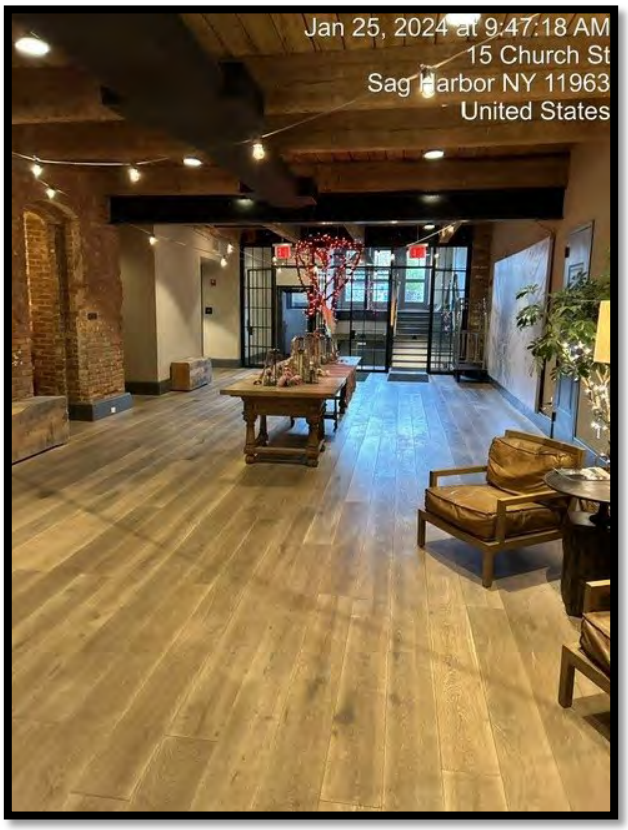
Photograph 16: Photo of Site access way from Church St, facing east.



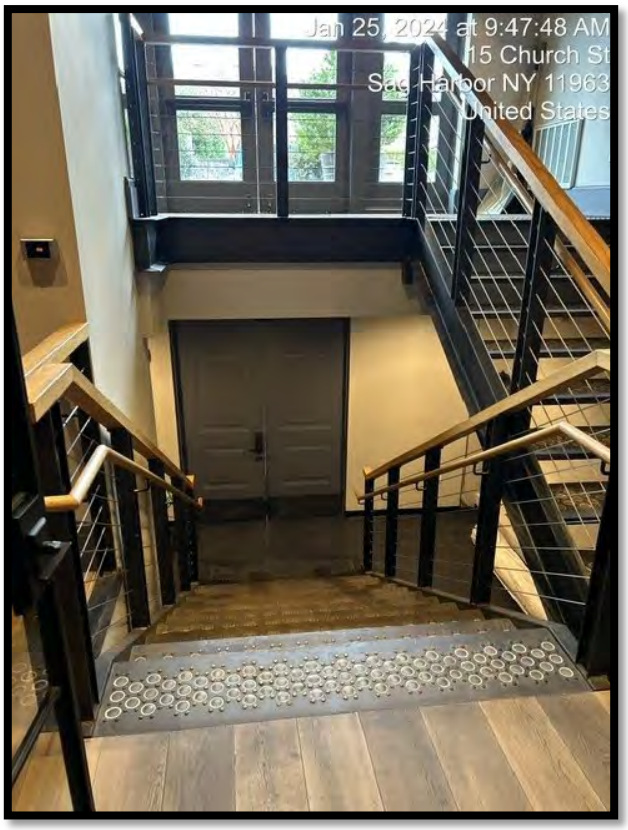
Photograph 15: View of the southern asphalt ramp accessway for the Site.



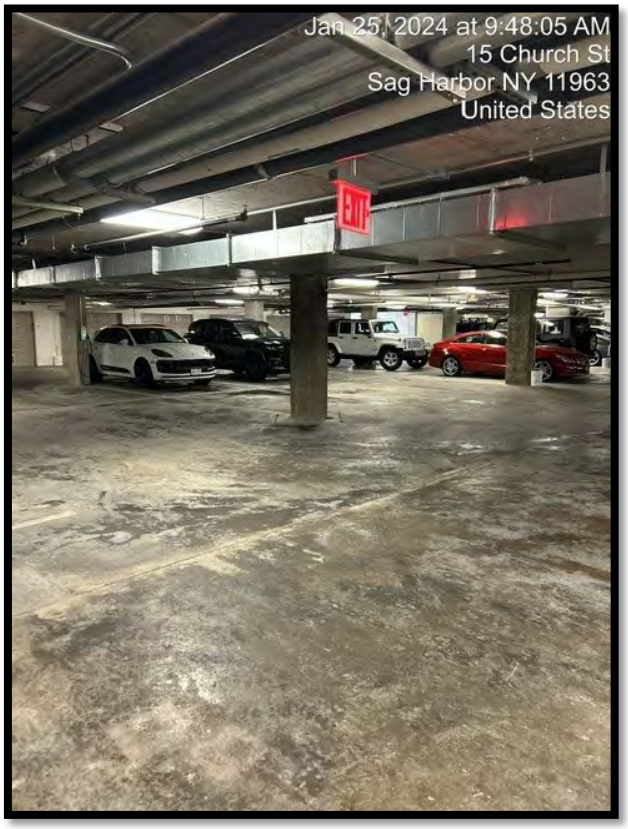
Photograph 16: Photo of the adjacent streets (Washington St and Division St) located in the northeastern direction from the Site.



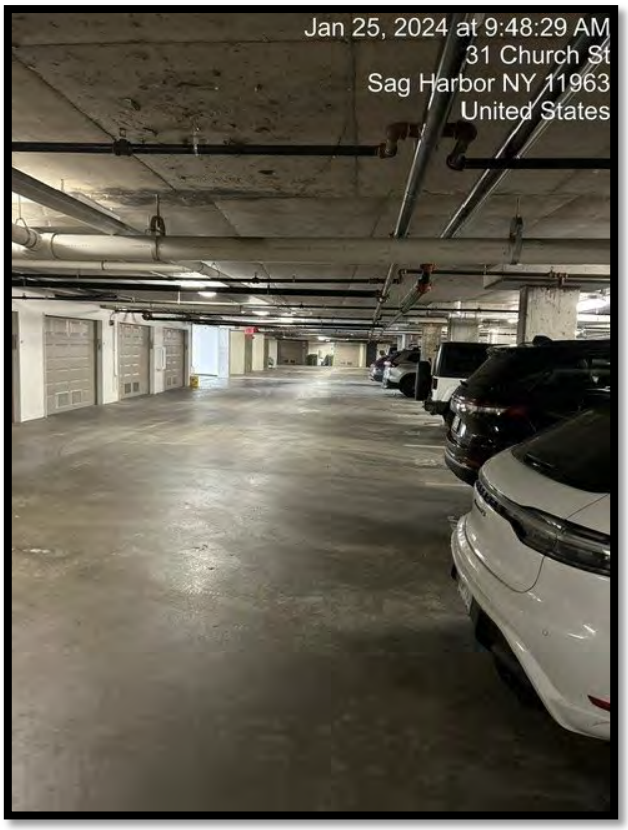
Photograph 15: Photo of the Site's present residential complex interior lobby.



Photograph 16: Photo within the lobby interior facing the cellar garage access doors.



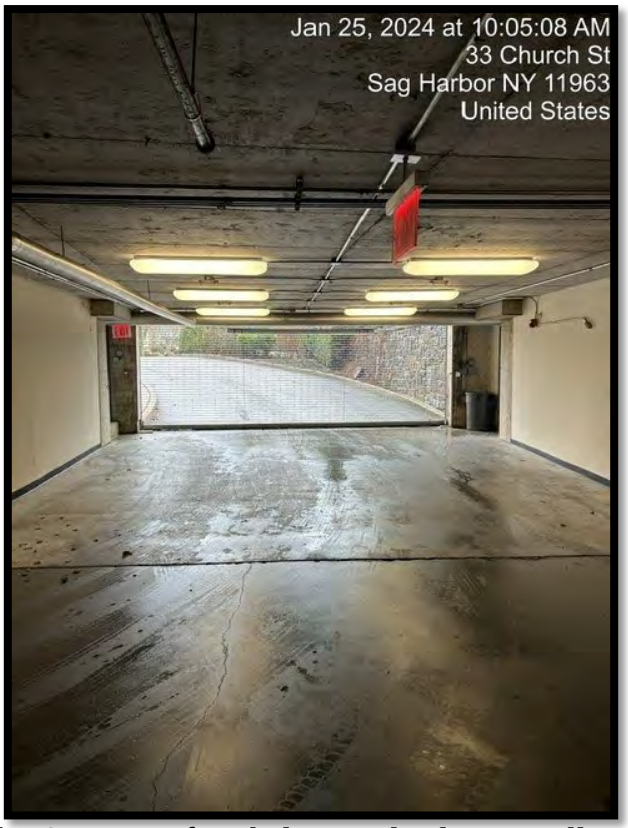
Photograph 15: View of cellar parking garage. All visible foundation elements were inspected.



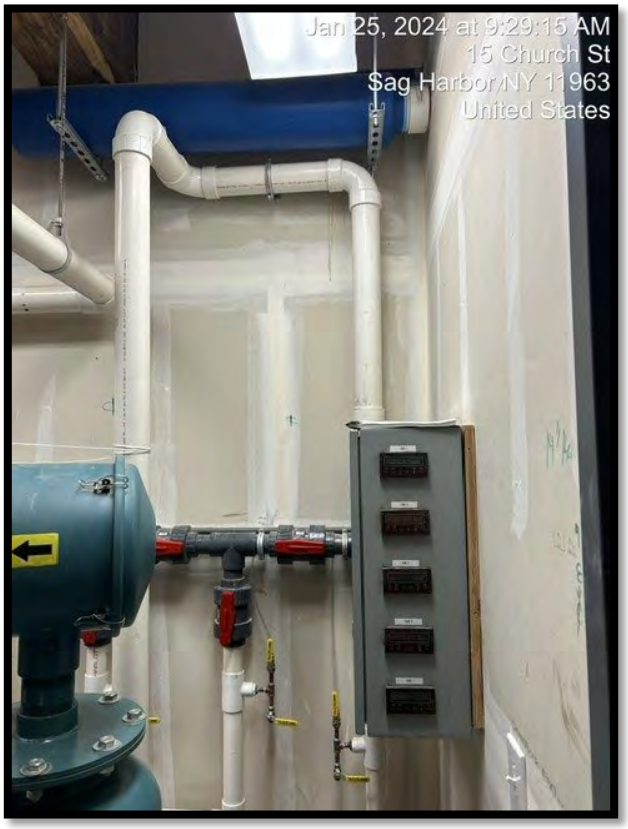
Photograph 16: View along the interior perimeter of the cellar parking garage. All visible foundation elements were inspected.



Photograph 15: Photo of maintenance room hallway during site walk activities.



Photograph 16: View of asphalt ramp leading to cellar garage exit.



Photograph 15: Photo of the SSDS Blower piping configuration to the monitoring point reader panel box.



Photograph 16: Photo of SSDS Blower.



Photograph 15: View of the Sensaphone monitoring system located within the SSDS Blower control panel.



Photograph 16: Photo of SSDS Blower overall unit system equipped with inlet filter, knockout tank, and monitoring point meters.