# Period Review Report
# Hexagon Laboratories
# NYSDEC Site Number 203003

*Prepared for*

New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

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October 2021
Version: FINAL
EA Project No. 1602523.04

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7 October 2021

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| Number | Title |
|---|---|
| 1 | Groundwater Analytical Results 2021 |

## LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| µg/L | Microgram(s) per liter |
| Aztech | Aztech Technologies Inc., |
| DER | Division of Environmental Remediation |
| EA | EA Engineering, Science, and Technology, Inc., PBC |
| EAR | Environmental Assessment and Remediation |
| EEE | Ecology and Environment Engineering, P.C. |
| EPA | U.S. Environmental Protection Agency |
| FS | Feasibility study |
| ft | Foot (feet) |
| No. | Number |
| NYSDEC | New York State Department of Environmental Conservation |
| OU | Operable unit |
| P.E. | Professional Engineer |
| PFAS | Per- and polyfluoroalkyl substances |
| PFOA | Perfluorooctanoic acid |
| PFOS | Perfluorooctanesulfonic acid |
| P.G. | Professional Geologist |
| PRR | Periodic Review Report |
| RI | Remedial Investigation |
| ROD | Record of Decision |
| RSCO | Recommended Soil Cleanup Objective |
| SI | Site inspection |
| SMP | Site Management Plan |
| SVOC | Semi-volatile organic compound |
| UST | Underground storage tank |
| VOC | Volatile organic compound |
| WAZ | Waste acceptance zone |

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# ES. EXECUTIVE SUMMARY

## ES. Table 1 – Site Summary

| Category | Summary/Results |
|---|---|
| Site Name/Site Number | Hexagon Laboratories (Site No. 203003) |
| Engineering Control | • Locked monitoring well cover system<br>• Perimeter fencing<br>• Soil Cover |
| Institutional Control | • SMP (2013)<br>• Environmental deed restriction |
| Site Management Plan | SMP– March 2013 |
| Certification/Reporting Period | The Certification Period is defined as 1 year in the SMP. The SMP requires a PRR to be completed annually. This PRR is the first to be completed for the Site since the SMP was approved in March 2013. SMRs are not required. This PRR for hexagon laboratories cover reporting period January 2012 through June 2021. |
| **Inspection** | **Frequency** |
| Site Inspection | Annually and as needed following severe weather events |
| **Monitoring** | **Frequency** |
| Groundwater | Annually |
| Prior PRR Recommendations | This PRR is the first to be completed for the Site since the SMP was approved in March 2013. No SMRs were completed for the Site. |
| Site Management Activities | • SI 27 January 2021 conducted by EAR.<br>• March 2021 Groundwater sampling event performed by EAR. |
| Site Inspection Findings/Concerns | A SI conducted by EAR on 27 January 2021 found large quantities of materials and equipment staged at the site restricting inspection activities to open areas of the site. Onsite fencing gates and locks were observed to be in place and of good condition being maintained by the site owners. Entry and egress to the site is currently controlled by the site tenant. Several monitoring wells could not be located; EAR attempted to locate wells visually and with a metal detector, but only offsite monitoring wells MW-6, MW-12, MW-9, and MW-10 were located. Monitoring wells MW-9 and MW-10 appeared to be destroyed and were not viable for gauging or sampling. Monitoring wells MW-6 and MW-12 were found to be in relatively good condition and viable for gauging and sampling. |
| Groundwater Monitoring Findings/Results | On 3 March 2021, EAR performed groundwater sampling at the site and again attempted to locate the missing wells visually and with a metal detector; the missing wells were not located. Offsite wells MW-6 and MW-12 were gauged and sampled during this event and quality assurance/quality control samples were taken.<br>Multiple PFAS compounds were detected above their respective laboratory reporting limits. At MW-6, PFOS was reported at 40.8 ng/L and PFOA was reported at 16.7 ng/L. At MW 12, PFOS was reported at 42.4 ng/L and PFOA was reported at 33.1 ng/L. 1,4-dioxane was reported below the reporting limit in the sample collected from MW 6. At MW-12, a 1,4-dioxane concentration of 1.5 µg/L was detected. |

| | |
|---|---|
| Recommendations | 1. Annual SIs should continue to verify the institutional controls and engineering controls are in-place and effective and to observe any future development of the site. A SI report should be completed following the inspection. Severe weather event inspections (and associated reports) should be completed, as needed.<br>2. Further effort should be given to locating missing monitoring wells and confirm if they are viable for sampling or were destroyed.<br>3. If a significant number of the missing monitoring wells are found to be destroyed and/or not located, then installation of replacement wells should be considered.<br>4. Annual sampling events should continue to be performed according to the Site Management Plan (EEE 2013) to monitor the remediation of the site contaminants.<br>5. Periodic PFAS sampling should be added to the Site Management Plan. |

Notes:

EAR = Environmental Assessment and Remediation

EEE = Ecology and Environmental Engineering

No. = Number

ng/L = Nanogram(s) per liter

PFAS = Per- and polyfluoroalkyl substances

PFOA = Perfluorooctanoic acid

PFOS = Perfluorooctanesulfonic acid

PRR = Periodic review report

ROD = Record of decision

SI = Site inspection

SMP = Site management plan

SMR = Site management report

µg/L = Microgram(s) per liter

# 1. INTRODUCTION

EA Engineering, P.C. and its affiliate EA Science and Technology (EA) was tasked by the New York State Department of Environmental Conservation (NYSDEC) under State Superfund Standby Contract Work Assignment Number (No.) D009806-23 to prepare a Periodic Review Report (PRR) for the Hexagon Laboratories Site which covers the period January 2012 through June 2021. The purpose of this PRR is to summarize and evaluate the remedy implemented at the site, relative to the requirements of the Record of Decision (ROD) dated July 2002 (NYSDEC 2002). The information provided in this report summarizes the site inspection (SI) and sampling activities that were performed by Environmental Assessment and Remediations (EAR) at the request of NYSDEC. This report was prepared in accordance with the NYSDEC Division of Environmental Remediation (DER)-10, Technical Guidance for Site Investigation and Remediation. A site summary and applicable remedial program information are summarized in the sections below.

## 1.1 SITE LOCATION, OWNERSHIP, AND DESCRIPTION

The site is located at 3536 Peartree Avenue in the Eastchester Section, Bronx County, New York and is identified as Tax Lot: 17-5283-43 on the Bronx County Tax Map. The site is an approximately 0.8-acre area bounded by Boston Road to the northwest; Tufo's Wholesale Dairy and parking area, and Heathcote Avenue to the northeast; Next Level Collison, Herbalife Sales Center, and an unnamed construction equipment and materials storage yard to the southeast; and Peartree Avenue to the southwest (**Appendix A, Figure 1**) (Ecology and Environment Engineering, P.C. [EEE] 2013). The property is currently owned by Dino Tomassetti, Jr. (SF Peartree Holdings, LLC), and managed by Renard Management, Inc. The site is currently rented and used as a storage yard for a scaffolding rental company (EAR 2021). There are currently no buildings located on the site; however, scaffolding equipment and vehicles are staged on the property.

The immediate area around the site consists of light industrial and auto salvage facilities. There are several areas around the site that consist of concrete slabs. The surrounding area (0.25- to 0.5-mile radius) is a relatively densely populated urban area. The northern edge of Co-op City, a large housing unit, is approximately 2,000 feet (ft) south of the site, and the New England Thruway (Interstate Route 95) is about 250 ft southeast of the site. Presently, the site is zoned M2-1 (Medium Manufacturing). The land to the east and west is zoned M1-1 (Light Manufacturing) and the area to the northeast is M3-1 (Heavy Manufacturing). The land to the south of the site is zoned C4-1 (General Commercial District) and the area to the north/northwest is zoned R4 or General Residence District.

Hexagon Laboratories historically made pharmaceuticals, pharmaceutical intermediates, and organic chemicals from the 1940s to 1988 at which time the laboratory was closed. Products were primarily manufactured in batch-size quantities using batch reactors and distillation units. A wide array of raw materials and chemicals were used in manufacturing operations at the site and a wide variety of finished products and wastes were generated by those operations. Hexagon was also a hazardous waste generator, transporter, storage, and disposal facility (EEE 2013).

## 1.2 INVESTIGATION HISTORY

The facility had a history of chemical spillage as far back as the 1980s when there were complaints to local elected officials about dumping by Hexagon Laboratories. Complaints of strong odors and liquids seeping from the site along the Hexagon property-line were first made to NYSDEC by Bronx Auto Wrecking and Salvage, Inc., in 1980. The site was inspected several times by state and local environmental regulators in response to the complaints. From 1981 through 1988, there were numerous violations of federal, state, and local laws at the site, including missing U.S. Environmental Protection Agency (EPA) hazard codes, missing manifests, unlabeled waste drums, and spilled chemicals.

In 1986, NYSDEC directed Hexagon Laboratories to install monitoring wells and conduct groundwater sampling in response to past releases from their site. The plant was closed before a sampling plan could be implemented. In 1988, a no further remedial action plan was recommended (EEE, 2013); the Hazard Ranking System scoring for the site was 3.48 (a score of 28.5 is the minimum for the site to be listed on the federal National Priorities List).

In 1990, the New York City Police Department Bomb Squad removed several explosives and reactives from the site, and in 1992, the EPA initiated an emergency removal action. The removal action completed in April 1993 included removal of hazardous wastes and substances from drums and tanks (including process vessels and fuel oil tanks), as well as smaller containers (pails and laboratory chemicals) and obvious waste piles on the floors of buildings.

In 1996, as a preliminary step in the remedial investigation (RI)/feasibility study (FS), a structural evaluation of the Hexagon Laboratories buildings was conducted. The results of the evaluation concluded that, for safety-related reasons, several of the buildings should be demolished prior to initiating the planned intrusive investigative activities in and around these buildings. As a result, an Interim Remedial Measure was performed, consisting of demolition of four of the seven buildings on site, asbestos abatement of these structures and the yard areas, removal of 47 aboveground storage tanks/reactor vessels, and removal of 30 underground storage tanks (USTs). The Interim Remedial Measure began in July 1997 and was completed in January 1998.

Phase 1 RI field activities were initiated in November 1997 and were completed in April 1999, which included a topographic survey; a geographical survey; collection of surface soil and miscellaneous (oily material) samples; drilling of exploratory borings and collection of subsurface soil samples; collection of UST excavation sidewall samples; installation and sampling of six groundwater monitoring wells; and an ecological investigation. As part of Phase 2 RI, to supplement the earlier sampling effort, seven additional groundwater monitoring wells were installed during May and June 1999.

During the RI, contamination was found in surface soil, subsurface soil, and onsite and offsite groundwater. Contamination of the surface soil consisted of semi-volatile organic compounds (SVOCs), primarily polycyclic aromatic hydrocarbons. Polychlorinated biphenyls were also present in the surface soil and were found above NYSDEC Recommended Soil Cleanup Objectives

(RSCOs) in one shallow soil boring sample. Several metals were also present at concentrations that exceeded the NYSDEC RSCO.

Subsurface contamination consisted of volatile organic compounds (VOCs), including benzene, toluene, ethylbenzene, xylenes compounds, chlorinated aliphatic, chlorobenzenes, SVOCs (mainly polycyclic aromatic hydrocarbons), and metals. VOCs and SVOCs exceeded NYSDEC RSCOs. Pesticides were also detected in the subsurface soil samples; however, the presence of pesticides were suspected to be false positives due to matrix interference and analytical problems.

Groundwater contaminants were similar to those observed in the surface and subsurface soil. Although SVOC concentrations in groundwater samples were less significant than concentrations in surface and subsurface soil, SVOC concentrations still exceeded NYSDEC Class GA groundwater standards. VOC concentrations were greater than the Class GA groundwater standards at six of the onsite groundwater monitoring wells and four out of the six offsite groundwater monitoring wells. Several metals were also detected in groundwater samples at concentrations greater than the NYSDEC Class GA groundwater standards.

Light non-aqueous phase liquid was noted in two wells on site in 1997. A UST located near MW-4, was observed leaking fuel oil. During installation and development of MW-04, floating product, a chemical odor, presence of small globules in the purge water, and purge water with a bluish gray color was observed. MW-08 also exhibited similar qualities. During the installation of MW-08, dense non-aqueous phase liquid was noted in the upper 30 to 40 ft, but no dense non-aqueous phase liquid was observed in the development or purge water from MW-08 (EEE 2013).

A Focused FS was completed in 1999 addressing the soil contamination above the groundwater table (i.e., operable unit [OU]-1). A ROD was signed in February 2000 for OU-1, which called for excavation and removal of contaminated soil to 6 ft below ground surface or to the bedrock or water table, whichever was shallower (NYSDEC 2000). A second ROD was signed in July 2002 to address contamination in the groundwater, OU-2, which called for treatment of groundwater contaminants by chemical oxidant injections (NYSDEC 2002).

## 1.3 REMEDIAL HISTORY

Contaminated soil at the site was remediated in accordance with the NYSDEC-approved Remedial Action Work Plan, as described in the Site Management Plan (SMP) (EEE, 2013), and groundwater was remediated in accordance with the ROD for OU-2, dated July 2002 (NYSDEC, 2002). The OU-1 remedial action included excavation of contaminated soil from the site; test pits and waste acceptance sample studies were also performed for additional physical and chemical characterization of the soil that required removal. The site was divided into nine waste acceptance zones (WAZ), and soil excavation commenced in October 2005, after characterization. The WAZ areas were planned out to contain approximately the same volume of soil, 500-700 cubic yards. Excavated soil was disposed of as either nonhazardous waste (landfill), hazardous waste (landfill), hazardous waste (incineration and landfill), or Toxic Substance and Control Act Hazardous Waste (Resource Conservation and Recovery Act landfill). After soil excavation was complete, a survey was performed to ensure that at least 6 ft of soil was excavated unless bedrock or groundwater was

encountered. The excavated areas were backfilled with soil and cover material that was approved by the NYSDEC.

Groundwater remediation began with bench-scale treatability testing to evaluate the efficacy of different oxidizing agents in reducing site contaminants. Based on the reduction of contaminant concentrations and cost effectiveness, non-activated sodium persulfate was determined to be the most effective treatment for the contaminants in groundwater and was chosen for the in-situ chemical oxidation remedy. Pilot test injections were performed to verify chemical oxidation was effective at reducing VOC and SVOC mass in groundwater. Aztech Technology Inc. (Aztech) installed three open-hole bedrock monitoring wells: MW-15, MW-16, and MW-17 to further delineate the groundwater plume. In order to enlarge pathways in the bedrock to increase the transport rate of the chemical oxidants, two of the three new wells (MW-15 and MW-17) were hydraulically fractured by Harr Hydro Fracture, LLC, a subcontractor to Aztech. During the fracturing, water levels in adjacent boreholes (MW-14, MW-16,) were monitored to verify communication between the wells. To develop a new baseline for groundwater remediation, nine onsite wells were sampled from January to March 2011. In October 2011, approximately 4,400 gallons of oxidant was injected into MW-16, MW-17, and IW-01 (an injection well installed during the pilot testing in 2009). An additional round of groundwater sampling was performed in December of 2011 to sample nine onsite wells. There were no long-term treatment systems installed on site (EEE 2013).

## 1.4 REMAINING CONTAMINATION

During remedial action activities, soil from the north and south sections of the site was completely removed. Soil in the eastern section of the Site that was greater than 6 ft below ground surface or below the groundwater level was left behind and is the only contaminated soil that remains.

Prior to 2021, the most recent offsite groundwater sampling event was conducted in 2009 during bench-scale tests. VOCs, SVOCs, and metals were detected in the 2009 samples. Onsite groundwater sampling in December 2011, two months after the last chemical injection, consisted of sampling seven monitoring wells. The total concentration of nine target VOCs ranged from 280 µg/L in MW-16 to 790,030 µg/L in MW-08. Concentrations of the six most common metals ranged from 1,229 mg/L in MW-08 to 5,172 mg/L in MW-13. The total concentration of target SVOCs ranged from non-detect in MW-16 to 59,600 µg/L in MW-08 (EEE 2013).

## 1.5 REGULATORY REQUIREMENTS AND REMEDIAL GOAL

As specified in the RODs for OU-1 and OU-2 (NYSDEC 2000, 2002), the remediation goals for the site were to:

- Eliminate to the extent practicable exposure to contaminated surface and subsurface soil
- Eliminate to the extent practicable inhalation exposure pathways
- Eliminate to the extent practicable, soil sources of contaminated groundwater

- Eliminate to the extent practicable groundwater contamination on site that exceeds NYSDEC Class GA Ambient Water Quality Standards

- Eliminate to the extent practicable ingestion of groundwater affected by the site that does not attain New York State Department of Health Part 5 Water Quality Standards

- Eliminate to the extent practicable offsite mitigation of groundwater that does not attain NYSDEC Class GA Ambient Water Quality Standards.

- Eliminate to the extent practicable mitigation of non-aqueous phase liquid.

At a minimum, the remedy selected should eliminate or mitigate all significant threats to public health and or the environments presented by the hazardous waste disposed of at the site, through proper application of scientific and engineering principals.

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# 2. INSTITUTIONAL AND ENGINEERING CONTROL PLAN COMPLIANCE

## 2.1 INSTITUTIONAL CONTROLS

A series of institutional controls (ICs) were required by the RODs for OU-1 and OU-2 to: (1) implement, maintain, and monitor engineering control (EC) systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and (3) limit the use and development of the site to commercial use only. Adherence to these ICs is required by the Environmental Deed Restrictions and will be implemented under the SMP (EEE 2013).

The 2013 SMP requires the following:

- Compliance with the environmental Deed Restriction 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 the frequency and in a manner defined in the SMP.
- Groundwater, soil, 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 the manner defined in the SMP.

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

- The property may only be used for restricted commercial use, provided that the long-term ECs and ICs included in the SMP are employed.
- The property may not be used for a higher level of use, such as unrestricted commercial use, without additional remediation and amendment of the environmental Deed Restrictions, as approved by the NYSDEC.
- All future activities on the property that will disturb the soil cover system or 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 control 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 constitutes 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.

## 2.2 ENGINEERING CONTROLS

The ECs controls for the site include:

- Soil cover
- Locked monitoring well cover system
- Access control.

# 3. MONITORING AND SAMPLING PLAN COMPLIANCE

The SMP (EEE 2013) was prepared to manage the contamination remaining on the site and to ensure the remedy remains effective by restricting site use, site development, and soil movement on the site. The SMP states that SIs should take place annually to maintain the ECs and ICs at the site. Groundwater sampling should be performed annually according to this SMP.

## 3.1 SITE INSPECTION

An SI was conducted by EAR on 27 January 2021 as requested by the NYSDEC (NYSDEC, 2020). An EAR foreman met representatives from Renard Management, Inc. (current property manager for site owner) and DRE Environmental, Inc., (the property owner's environmental consulting firm) onsite to conduct SI activities. The SI was performed to document the condition of the onsite and offsite monitoring wells, perimeter fence, and overall site condition. Large quantities of materials and equipment were staged at the site, limiting inspection activities to open areas of the site only. Based upon visual observations, no obvious signs of recent onsite excavation were observed. Onsite fencing gates and locks were observed to be in place and of good condition, and appeared to be maintained by the site owners. Entry and egress to the site is currently controlled by the site tenant.

Several monitoring wells could not be located at the time of SI. EAR made attempts to locate missing monitoring wells visually and with a metal detector. Due to the large size and quantity of materials staged onsite and the presence of multiple parked or disabled vehicles in the area, many wells could not be found. A representative for DRE Environmental, Inc., indicated that the onsite monitoring wells were destroyed during a previously conducted sitewide (remedial) excavation. Offsite monitoring wells MW-6 and MW-12 were located, found to be viable, and were in good condition. However, both wells were missing locks on their well caps. MW-9 and MW-10-dry were found but appeared to be destroyed. MW-06 an MW-12 were gauged during the inspection (EAR 2021). A map of the site layout and monitoring wells is presented on **Figure 2 provided in Appendix A**.

Site photographs and SI reports from the recent inspection and site visits can be found in the Groundwater Sampling and Site Inspection Letter Report (EAR 2021) (**Appendix A**).

## 3.2 GROUNDWATER MONITORING SUMMARY

### 3.2.1 Groundwater Gauging

On 27 January 2021, offsite wells, which are screened in the overburden, were gauged for groundwater depth to evaluate groundwater flow and direction. There was not sufficient data to determine the direction of groundwater flow because only two wells were viable for gauging. Historically, groundwater flow has been to the southeast.

### 3.2.2 Groundwater Sampling

On 3 March 2021, EAR performed groundwater sampling at the site. EAR collected groundwater samples from monitoring wells MW-6 and MW-12. EAR attempted to locate the missing/destroyed onsite and offsite wells again during this sampling event (visually and with a metal detector). Efforts to locate the missing/destroyed wells were unsuccessful. Access to the site was coordinated with the property owner, who was onsite during the inspection.

At each location, depth-to-water was measured, and the volume of standing water was calculated. Each well was purged using an inertia pump (stainless steel foot valve) with dedicated high-density polyethylene tubing. Purge water was screened using a multi-parameter probe with flow-through cell (YSI 556 or similar) and a turbidity meter (Hach 2100Q). The wells were purged a minimum of one well volume, with purging continuing until values for temperature, pH, and oxidation/reduction potential reached stabilization and turbidity was measured below 50 nephelometric turbidity unit(s). These parameters, as well as dissolved oxygen and specific conductivity were recorded prior to sample collection (EAR 2021). In accordance with the SMP Quality Assurance Project Plan (EEE 2013), purge water was discharged to the ground surface in the vicinity of the well. Site Inspection Forms are included in Appendix B of the Groundwater Sampling and Site Inspection Letter Report **(Appendix A)**.

Samples collected for laboratory analysis were placed into appropriate, laboratory-provided containers and immediately placed in a cooler with ice to maintain a temperature no greater than 4 degrees Celsius. Non-dedicated sampling equipment was decontaminated between wells, in accordance with EAR's Standard Operating Procedures.

A total of six water samples (including one blind duplicate, one equipment blank, and one matrix spike/matrix spike duplicate) were submitted for analysis of per- and polyfluoroalkyl substances (PFAS) via EPA Method 537 (modified) and 1,4-dioxane via EPA Method 8270 Selected Ion Monitoring as requested by the NYSDEC (NYSDEC, 2020).

All samples were submitted to Eurofins TestAmerica, Inc. for analysis, with Category B deliverables and standard 10-day turnaround time requested.

### 3.2.3 Groundwater Sample Results

Multiple PFAS compounds were detected above their respective laboratory reporting limits. Concentrations of perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) exceeded NYSDEC guidance values (6 New York Code of Rules and Regulations Part 375, October 2020) in both wells sampled. At MW-6, PFOS was reported at 40.8 ng/L and PFOA was reported at 16.7 ng/L. At MW-12, PFOS was reported at 42.4 ng/L and PFOA was reported at 33.1 ng/L. In the sample collected from MW-6, 1,4-dioxane was reported below the reporting limit. At MW-12, 1,4-dioxane was detected at concentration of 1.5 µg/L (EAR 2021).

Analytical results, with comparison to NYSDEC guidance values are summarized on **Table 1** and are shown on **Figure 3 provided in Appendix A.**

A table showing the relative percent difference calculated for the blind duplicate and its parent sample has been included in Appendix C of the Groundwater Sampling and Site Inspection Letter Report **(Appendix A)**. Laboratory analytical reports and the Data Usability Summary Report are included in Appendixes D and E, respectively, of the Groundwater Sampling and Site Inspection Letter Report (**Appendix A**).

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# 4. CONCLUSTIONS AND RECOMMENDATIONS

## 4.1 CONCLUSIONS

Based on a review of results from the January 2021 site inspection and the March 2021 groundwater sampling event, the following conclusions can made:

- Groundwater flow direction could not be determined from this groundwater gauging and sampling data due to the lack of data points caused by missing/destroyed monitoring wells; however, in the past, groundwater flow has been to the southeast.

- PFOA and PFOS exceeded NYSDEC Guidance values in both groundwater samples collected from monitoring wells selected for emerging contaminant analysis.

- 1,4-Dioxane was detected in both groundwater samples collected from monitoring wells selected for emerging contaminant analysis.

## 4.2 RECOMMENDATIONS

Based on the observed condition of the Site from the January 2021 site inspection and the results of the March 2021 groundwater sampling event, the following actions are recommended for the Hexagon Laboratories site:

- Annual SIs should continue to verify the ICs and ECs are in-place and effective and to observe any future development of the site. A SI report should also be completed following the inspection event. Severe weather event inspections (and associated reports) should be completed as needed.

- Further effort should be given to locating missing monitoring wells and confirming if they are viable for sampling or were destroyed.

- If a significant number of the missing monitoring wells are found to be destroyed or not located, then the installation of replacement wells should be considered.

- Annual sampling events should continue to be performed according to the SMP (EEE 2013) to monitor the remediation of the site contaminants.

- PFAS sampling should be added to the SMP.

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# 5. FUTURE SITE ACTIVITIES

Based on the recommendations in Section 5, the following site management activities will be completed during the next PRR reporting period (July 2021 to June 2022):

- SIs – Annual (planned for January 2022)
- Severe Weather Event Inspection, as needed
- Groundwater – Annual (planned for March 2022)
- PRR – Annual (planned for July 2022).

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# 6. REFERENCES

Ecology and Environment Engineering, P.C. (EEE). 2013. *Former Hexagon Laboratories Site. Bronx County New York. Site Management Plan*. March.

Environmental Assessment and Remediations (EAR). 2021. *RE: Site No. 203003, Hexagon Laboratories, 3536 Rear Tree Avenue, Bronx, NY – 2021 Groundwater Sampling & Site Inspection*. June.

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# Appendix A

# Groundwater Sampling and Site Inspection Letter Report

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ENVIRONMENTAL
ASSESSMENT &
REMEDIATIONS

June 22, 2021

Sarah Saucier
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th floor
Albany, NY 12233-7015

***RE: Site No. 203003, Hexagon Laboratories, 3536 Pear Tree Avenue, Bronx, NY – 2021 Groundwater Sampling & Site Inspection***

Dear Ms. Saucier:

This letter presents and summarizes field activities and associated laboratory data conducted by Environmental Assessment & Remediations (EAR) at the above referenced site in response to directives outlined in NYSDEC Standby Contractor Authorization Form, Callout ID: 139309. The scope of work included a site inspection and groundwater sample collection from site monitoring wells. All samples collected were submitted for analysis of per- and polyfluoroalkyl substances (PFAS) and 1,4 dioxane. A site location map has been provided as Figure 1 and a site map has been included as Figure 2.

***Site Inspection***

On January 27, 2021, an EAR foreman met representatives from Renard Management, Inc. (current site owner) and DRE Environmental, Inc. (DRE) (the property owner's environmental consulting firm) onsite to conduct site inspection tasks. The site is currently being rented and utilized as a storage yard for a scaffolding rental company. Due to large quantities of materials stored onsite at the time of inspection, inspection activities were limited to available open areas of the site. Based upon visual observations, no obvious signs of recent onsite excavation were observed. Onsite fencing, gates, and locks appeared to be in place and operational. Site entry/egress is controlled by the current tenant.

Several monitoring wells could not be located. Attempts were made to locate wells visually and with a metal detector. Due to the large size and quantity of materials staged onsite and the presence of multiple parked or disabled vehicles in the area, many wells could not be found. According to DRE, the onsite monitoring wells were destroyed during a previously conducted site-wide (remedial) excavation. Offsite monitoring wells MW-6 and MW-12 were located, found to be viable, and were in good condition. Both wells were missing locks on their well caps. MW-9 & MW-10dry were found but appeared to be destroyed.

Photos of current site conditions are included in Appendix A. A completed Site Inspection Form has been included in Appendix B.

***Groundwater Sampling***

On March 3, 2021, EAR collected groundwater samples from monitoring wells MW-6 and MW-12. During the event, additional efforts to locate monitoring wells were conducted. Onsite and offsite well locations were inspected visually and with a metal detector. Access to the site was coordinated with the property owner, who was onsite during the inspection. No additional wells were found for sampling.

At each location, depth to water was measured and the volume of standing water was calculated. Each well was purged utilizing an inertia pump (stainless steel foot valve) with dedicated high-density polyethylene (HDPE) tubing. Purge

water was screened using a multi-parameter probe with flow-thru cell (YSI 556 or similar) and a turbidity meter (Hach 2100Q). All wells were purged a minimum of 1 well volume, with purging continuing until values for temperature, pH, and oxidation/reduction potential (ORP) reached stabilization and turbidity was measured below 50 NTU. These parameters, as well as dissolved oxygen and specific conductivity were recorded prior to sample collection. As directed, purge water was dispersed in the vicinity of the well. Field sheets are included in Appendix B.

Samples collected for laboratory analysis were placed into appropriate, laboratory-provided containers and immediately placed in a cooler with ice to maintain a temperature no greater than 4 degrees Celsius. Non-dedicated sampling equipment was decontaminated between wells, in accordance with EAR's standard operating procedures.

A total of 6 water samples (including 1 blind duplicate, 1 equipment blank, and 1 MS/MSD) were submitted for analysis of PFAS via EPA Method 537 (modified) and 1,4 dioxane via EPA Method 8270 SIM.

All samples were submitted to Eurofins TestAmerica, Inc. (TestAmerica) for analysis, with Category B deliverables and standard 10-day turnaround time requested.

***Groundwater Flow Direction***

Based upon historical information provided by the NYSDEC, groundwater flow direction possesses a southeastern component. Based upon information currently available, insufficient data exists to evaluate the current groundwater flow direction.

***Summary of Analytical Results***

Multiple PFAS compounds were detected above their respective laboratory reporting limits (RL). Concentrations of perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) exceeded NYSDEC guidance values (6 NYCRR Part 375, October 2020) in both wells sampled. At MW-6, PFOS was reported at 40.8 ng/L and PFOA was reported at 16.7 ng/L. At MW-12, PFOS was reported at 42.4 ng/L and PFOA was reported at 33.1 ng/L. 1,4 Dioxane was reported below the RL in the sample collected from MW-6. At MW-12, a concentration of 1.5 µg/L was detected.

Analytical results, with comparison to NYSDEC guidance values have been included as Table 1. A post map is included as Figure 3.

A table with relative percent difference calculated for the blind duplicate and its parent sample has been included in Appendix C. Laboratory analytical reports have been included in Appendix D.

***DUSR Preparation and Upload to NYENVDATA***

Following receipt and review of ASP Category B deliverable packages, electronic copies of all analytical results (reports and EDDs) from TestAmerica were submitted to Environmental Data Services, Inc. (Palm Beach Gardens, FL) for Data Usability Report preparation and Electronic Data Deliverable (EDD) validation. DUSRs reported no data rejections and found overall data to be acceptable. DUSRs are included as Appendix E. After validation, the EDDs were processed and submitted to NYENVDATA by EAR.

Should you have any questions regarding the activities or data detailed in this report, please feel free to contact me, at 631-447-6400, extension 152.

Sincerely,

Stephen Goetz
Project Manager

# TABLES

# TABLE 1

**Hexagon Laboratories**
**3536 Pear Tree Avenue**
**Bronx, NY**
**NYSDEC Site #203003**

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

**Groundwater Analytical Results**
**Eurofins TestAmerica, Inc.**
**EPA Methods E537 (Modified) & 8270E-SIM**

| Location | Date Collected | PFBS | PFBA | PFDA | PFHpS | PFHpA | PFHxS | PFHxA | PFNA | PFOS | PFOA | PFPeA | 8:2 FTS | 6:2 FTS | Total PFAS | 1,4-Dioxane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *ng/L* | | | | | | | | | | | | | | *µg/L* |
| HEX-MW06-030321 | 03/03/21 | **31.6** | **24.7** | **5.76** | <1.62 | **10.9** | **2.57** | **16.8** | **4.17** | **40.8** | **16.7** | **25.2** | <1.62 | <4.06 | **179** | <0.20 |
| HEX-MW12-030321 | 03/03/21 | **13.5** | **19.5** | **1.11 J** | **0.72 J** | **27.9** | **6.73** | **29.9** | **7.59** | **42.4** | **33.1** | **50.3** | **1.40 J** | **3 J** | **231** | **1.5** |
| NYSDEC Guidance Values (6 NYCRR Part 375, October 2020) | | **100** | **100** | **100** | **100** | **100** | **100** | **100** | **100** | **10** | **10** | **100** | **100** | **100** | **500** | nv |

**Notes:**
J - Laboratory estimated value.
nv - No established value.
Gray-shaded cells exceed NYSDEC Guidance Values.
Validated data presented.

**The chemicals listed below were reported below the LRL:**

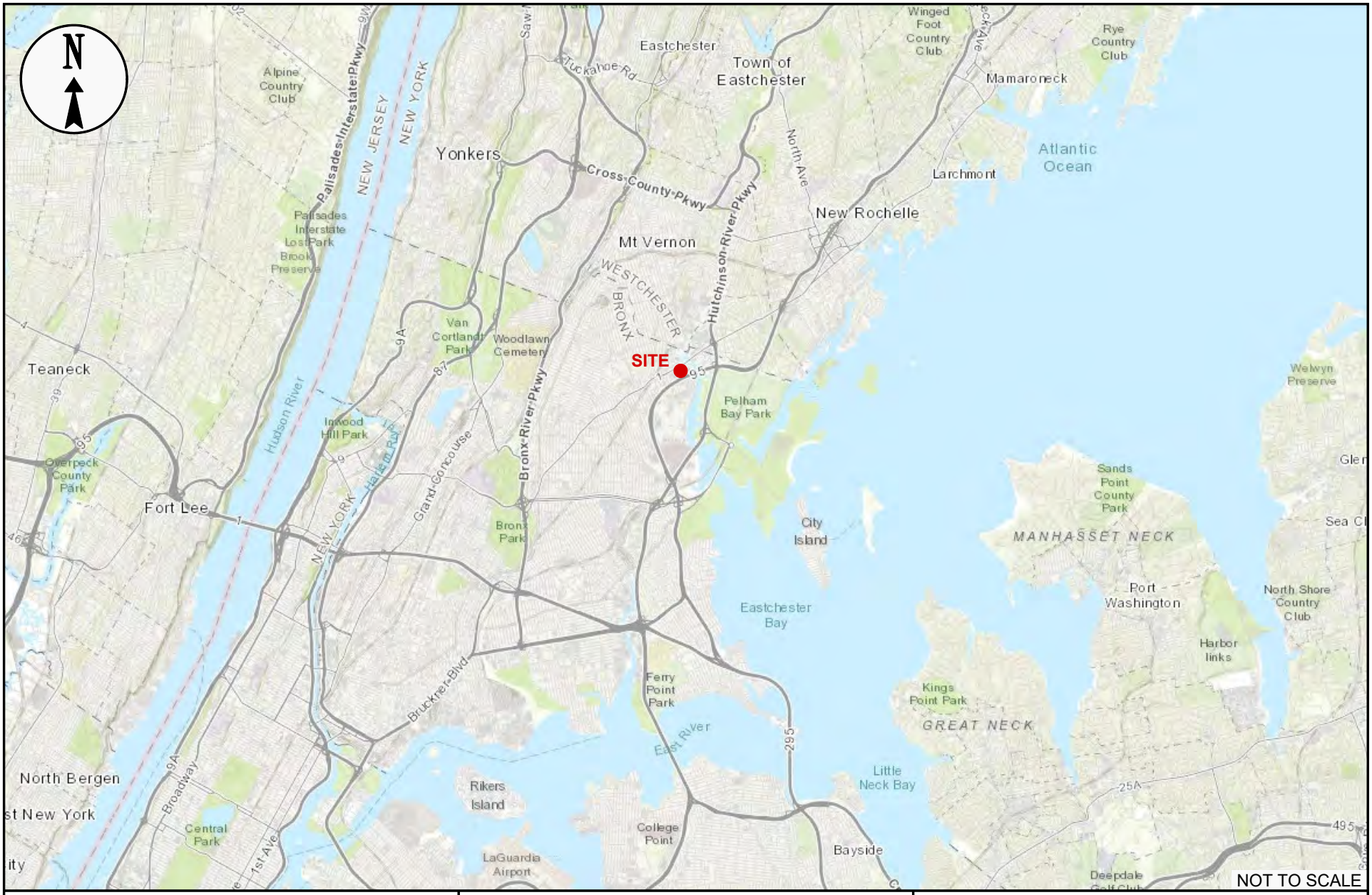
| | | | |
|---|---|---|---|
| N-MeFOSAA | PFDS | FOSA | PFTriA |
| N-EtFOSAA | PFDoA | PFTeA | PFUnA |

**Analyte Compound Acronym List:**

PFBS - Perfluorobutanesulfonic Acid
PFBA - Perfluorobutyric Acid
PFDS - Perfluorodecanesulfonic Acid
PFDA - Perfluorodecanoic Acid
PFDoA - Perfluorododecanoic Acid
PFHpS - Perfluoroheptane Sulfonate
PFHpA - Perfluoroheptanoic Acid
PFHxS - Perfluorohexanesulfonic Acid
PFHxA - Perfluorohexanoic Acid
PFNA - Perfluorononanoic Acid
FOSA - Perfluorooctane Sulfonamide
PFOS - Perfluorooctanesulfonic Acid
PFOA - Perfluorooctanoic Acid
PFPeA - Perfluoropentanoic Acid
PFTA/PFTeDA - Perfluorotetradecanoic Acid
PFTriA/PFTrDA - Perfluorotridecanoic Acid
PFUA/PFUdA - Perfluoroundecanoic Acid
8:2 FTS - SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE
6:2 FTS - SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE
N-MeFOSAA - N-methyl perfluorooctanesulfonamidoacetic Acid
N-EtFOSAA - N-ethyl perfluorooctanesulfonamidoacetic Acid

# FIGURES

**FIGURE 1**




ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

# Site Location Map

Hexagon Laboratories
3536 Pear Tree Avenue
Bronx, NY
NYSDEC Site #203003

**FIGURE 2**




ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

# Site Map

Hexagon Laboratories
3536 Pear Tree Avenue
Bronx, NY
NYSDEC Site #203003

**FIGURE 3**




ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Groundwater Analytical Results
March 2021
Eurofins TestAmerica, Inc.

Hexagon Laboratories
3536 Pear Tree Avenue
Bronx, NY
NYSDEC Site #203003

# APPENDIX A

**Hexagon Laboratories**
**3536 Pear Tree Avenue**
**Bronx, NY**
**NYSDEC Site #203003**



**Photo 1: Onsite, W side of site, facing NW.**



**Photo 2: Onsite, W side of site, facing NW.**

**Hexagon Laboratories**
**3536 Pear Tree Avenue**
**Bronx, NY**
**NYSDEC Site #203003**



**Photo 3: Onsite, W side of site, facing W.**



**Photo 4: Onsite, W side of site, facing NW.**

**Hexagon Laboratories**
**3536 Pear Tree Avenue**
**Bronx, NY**
**NYSDEC Site #203003**



**Photo 5: Onsite, N side of site, facing NE.**



**Photo 6: Onsite, E side of site, facing E.**

**Hexagon Laboratories**
**3536 Pear Tree Avenue**
**Bronx, NY**
**NYSDEC Site #203003**



**Photo 7: Onsite, N side of site, facing SSE.**



**Photo 8: Onsite, E side of site, facing NNW.**

**Hexagon Laboratories**
**3536 Pear Tree Avenue**
**Bronx, NY**
**NYSDEC Site #203003**



**Photo 9: Onsite, S side of site, facing E.**



**Photo 10: Onsite, S side of site, facing ENE.**

**Hexagon Laboratories**
**3536 Pear Tree Avenue**
**Bronx, NY**
**NYSDEC Site #203003**



**Photo 11: Onsite, S side of site, facing ESE.**



**Photo 12: E side of Pear Tree Ave., facing NNW.**

**Hexagon Laboratories**
**3536 Pear Tree Avenue**
**Bronx, NY**
**NYSDEC Site #203003**



**Photo 13: S side of Boston Rd., facing ENE.**



**Photo 14: MW-6**

**Hexagon Laboratories**
**3536 Pear Tree Avenue**
**Bronx, NY**
**NYSDEC Site #203003**



**Photo 15: MW-9**



**Photo 16: MW-10dry**

**Hexagon Laboratories**
**3536 Pear Tree Avenue**
**Bronx, NY**
**NYSDEC Site #203003**



**Photo 17: MW-12**



**Photo 18: Area of MW-11 & MW-12.**

**Hexagon Laboratories**
**3536 Pear Tree Avenue**
**Bronx, NY**
**NYSDEC Site #203003**



**Photo 19: Area of MW-7.**

# APPENDIX B

# SITE INSPECTION FORM

| I. SITE INFORMATION | |
|---|---|
| **Site Name:** Former Hexagon Laboratories | **Date of Inspection:** 01/27/21 |
| **Location:** 3536 Pear Tree Ave, Eastchester, Bronx, NY | **NYSDEC Site No.:** 2-03-003 |
| **Inspector (Firm/Individual):** | **Weather/Temperature:** |

**Attachments:** Sample results ☐ | Annotated site map ☐ | Other _____

| Item | Condition | | | Comments |
|---|---|---|---|---|
| | Good | Needs Maintenance | N/A | |
| **II. GENERAL SITE CONDITIONS** | | | | |
| Warning/instruction signs | | | | |
| Litter | | | | |
| Vandelism | | | | |
| Vegetative infestation | | | | |
| **III. ACCESS CONTROLS** | | | | |
| Fencing | ✓ | By others | | |
| Gates | ✓ | | | |
| Locks | ✓ | | | |
| **IV. SOIL COVER SYSTEM** | | | | |
| Gravel layer | | | | |
| Geotextile layer | | | | |
| Sand layer | | | | |
| **V. GROUNDWATER MONITORING WELLS** | | | | |
| Flush mount well covers | ✓ | | | |
| Lockable J plugs/locks | ✓ | no locks on MW6 & MW-12 | | |
| Overburden casings/seal | | | | |
| Functionality | | | | |

**VI. OVERALL OBSERVATIONS**

MW-6 & 12 Found & Gauged.
No other wells located
Except MW 9 + 10 which are DESTROYED.

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

# MANUAL WELL GAUGING

| SITE I.D. | | DATE: | 1/27/21 | |
|---|---|---|---|---|
| DEC-BP.ONX 3536 | | SPILL #: | | |
| | | TECHS: | DG | |
| | | | | |

| WELL # | WELL SIZE (inches) | Time | TOTAL WELL DEPTH (ft.) | DEPTH TO WATER (ft.) | Notes |
|---|---|---|---|---|---|
| MW-6 | 2" | | 14.89 | 7.12 | |
| | | | 76.65 | 10.98 | |
| MW-12 | | | | | |
| | | | | | |
| | | | | | |
|

# FORMER HEXAGON LABORATORY WELL PURGE & SAMPLE RECORD

HEX-MW06-030321

Site Name: Former Hexagon Laboratory Site — Well ID: MW-6

Location: Bronx, NY — Date: 3/3/21

Initial Depth to Water: 6.55 ft TOIC — 8.25 Column X .175 = 1.44 gal — Start Time: 8:20

Total Well Depth: 14.80 ft TOIC — End Time: 8:55

Depth to Pump: 13.0 ft TOIC — ☐ Bailer ☒ Pump

Initial Pump Rate: .150 L/min — Pump Type: WATERRA

adjusted to: .150 L/min at 5 minutes — Well Diameter: 2 inches

adjusted to: .150 L/min at 10 minutes — Well Volume: 1.44 gallons

| Time | Purge Volume (gallons) | pH (s.u.) | Temp. (°C) | ORP (mV) | Conductivity (mS/cm) | DO (mg/L) | Turbidity (NTU) | Water Level (ft) |
|---|---|---|---|---|---|---|---|---|
| 8:25 | 1.0 | 6.94 | 8.88 | 67.5 | 1125 | 4.75 | 25 | 6.75 |
| 8:30 | 1.25 | 6.88 | 8.80 | 64.2 | 1068 | 4.70 | 22 | 6.72 |
| 8:35 | 1.50 | 6.80 | 8.71 | 61.2 | 950 | 4.59 | 20 | 6.72 |
| 8:40 | 1.75 | 6.71 | 8.69 | 60.9 | 967 | 4.60 | 20 | 6.72 |
| 8:45 | 2.00 | 6.72 | 8.70 | 61.0 | 959 | 4.59 | 20 | 6.72 |
| 8:50 | 2.00 | 6.72 | 8.70 | 60.9 | 954 | 4.59 | 19 | 6.72 |
| | | | | | | | | |
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| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Final Sample Data: | | | | | | | | |

Sample ID: HEX-MW06-030321 — Duplicate? ☐ — Duplicate Sample ID: _____

Sample Time: 8:55 — MS/MSD? ☐

| Analyses: | Methods: |
|---|---|
| ~~☑ VOCs~~ | ☐ 8260 |
| ~~☑ SVOCs~~ | ~~☑ 8270~~ |
| ~~☑ Metals~~ | ☐ 6010/7074 |
| ☐ _____ | ☐ _____ |
| ☐ _____ | ☐ _____ |

Sampler(s): _____

Comments: _____

# FORMER HEXAGON LABORATORY WELL PURGE & SAMPLE RECORD

Site Name: Former Hexagon Laboratory Site
Well ID: MW-12
Location: Bronx, NY
Date: 3/3/21

Initial Depth to Water: 23.59 ft TOIC
Total Well Depth: 75.99 ft TOIC
Depth to Pump: 40 ft TOIC
Initial Pump Rate: 1.0 L/min
adjusted to: 1.0 L/min at _____ minutes
adjusted to: 1.0 L/min at _____ minutes

52.40 9.17 GAL

Start Time: 10:45
End Time: 11:50
☐ Bailer ☒ Pump
Pump Type: WATERRA
Well Diameter: 2 inches
Well Volume: 9.17 gallons

| Time | Purge Volume (gallons) | pH (s.u.) | Temp. (°C) | ORP (mV) | Conductivity (mS/cm) | DO (mg/L) | Turbidity (NTU) | Water Level (ft) |
|---|---|---|---|---|---|---|---|---|
| 10:55 | 2.0 | 6.95 | 8.37 | 98.5 | 57 | 9.81 | 47 | 24.5 |
| 11:00 | 3.25 | 6.92 | 8.35 | 90.6 | 51 | 10.21 | 40 | 24.5 |
| 11:05 | 4.50 | 6.90 | 8.32 | 80.1 | 44 | 8.42 | 31 | 24.8 |
| 11:10 | 5.75 | 6.87 | 8.25 | 77.4 | 38 | 7.80 | 25 | 24.7 |
| 11:15 | 7.00 | 6.87 | 8.25 | 74.2 | 32 | 7.70 | 24 | 24.7 |
| 11:20 | 8.25 | 6.87 | 8.25 | 70.6 | 32 | 7.71 | 24 | 24.8 |
| 11:30 | 9.50 | 6.87 | 8.25 | 70.5 | 32 | 7.70 | 22 | 24.7 |
| | | | | | | | | |
| | | | | | | | | |
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| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Final Sample Data: | | | | | | | | |

Sample ID: HEX-MW12-030321
Duplicate? ☑
Duplicate Sample ID: HEX-MW★-030321
Sample Time: 11:45
MS/MSD? ☑

Analyses: Methods:
~~☑ VOCs~~ ☐ 8260
~~☑ SVOCs~~ ~~☑ 8270~~
~~☑ Metals~~ ☐ 6010/7074
☐ _____ ☐ _____
☐ _____ ☐ _____

Sampler(s): _____
Comments: _____

**WELL CONDITION WORKSHEET**

Site: DEC-Brook 3536
Date: 3/3/2
Techs: RC/BV

MW-6, MW-12

Please complete for all wells sampled and explain any discrepancies.

| Well ID | Well Diameter (inches) | Concrete Pad Condition | Number of Bolts Present* | Number of Bolts Secure (not stripped out)* | Bolt Receivers (tabs) in Place and Operational?* | Well Cap in Place and Operational? | Well ID Marked on Well/ Well Cap? | North Marked on Well Riser? | Notes |
|---|---|---|---|---|---|---|---|---|---|
| MW-6 | 2 | Good | 3 | 3 | 3 | (y) / n | y / (n) | y / (n) | |
| MW-12 | 2 | Good | 3 | 3 | 3 | (y) / n | y / (n) | y / (n) | |
| | | | | | | y / n | y / n | y / n | |
| | | | | | | y / n | y / n | y / n | |
| | | | | | | y / n | y / n | y / n | |
| | | | | | | y / n | y / n | y / n | |
| | | | | | | y / n | y / n | y / n | |
| | | | | | | y / n | y / n | y / n | |
| | | | | | | y / n | y / n | y / n | |
| | | | | | | y / n | y / n | y / n | |
| | | | | | | y / n | y / n | y / n | |
| | | | | | | y / n | y / n | y / n | |
| | | | | | | y / n | y / n | y / n | |
| | | | | | | y / n | y / n | y / n | |
| | | | | | | y / n | y / n | y / n | |

*Please incdicate as a fraction, where 1st number is bolts/receivers physically present & operating and 2nd is the total number of manhole bolt holes/receivers. (i.e.-2/2, 1/3, etc.)

Additional Notes:

# APPENDIX C

**Hexagon Laboratories**
**3536 Pear Tree Avenue**
**Bronx, NY**
**NYSDEC Site #203003**

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

**Blind Duplicate Analysis, Relative Percent Difference**
**March 2021**
**Groundwater Analytical Results**
**Eurofins TestAmerica, Inc.**
**EPA Methods E537 (Modified) & 8270E-SIM**

| | Location | Date Collected | PFBS | PFBA | PFDA | PFHpS | PFHpA | PFHxS | PFHxA | PFNA | PFOS | PFOA | PFPeA | 8:2 FTS | 6:2 FTS | 1,4 Dioxane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | *ng/L* | | | | | | | | | | | | | *µg/L* |
| Original | HEX-MW12-030321 | 03/03/21 | 13.5 | 19.5 | 1.11 J | 0.72 J | 27.9 | 6.73 | 29.9 | 7.59 | 42.4 | 33.1 | 50.3 | 1.40 J | 3 J | 1.5 |
| Blind Duplicate | HEX-MWX-030321 | 03/03/21 | 13.7 | 21.2 | 1.10 J | 0.97 J | 28.4 | 7.57 | 28.1 | 8.81 | 44.9 | 35.4 | 46 | 1.34 J | 3.33 J | 1.5 |
| **Relative Percent Difference** | | | 1.5% | 8.4% | - | - | 1.8% | 11.7% | 6.2% | 14.9% | 5.7% | 6.7% | 8.9% | - | - | 0.0% |

**Notes:**
J - Laboratory estimated value.
Analytes reported below the RL were not included.
Validated data presented.

**Analyte Compound Acronym List:**

PFBS - Perfluorobutanesulfonic Acid
PFBA - Perfluorobutyric Acid
PFDS - Perfluorodecanesulfonic Acid
PFDA - Perfluorodecanoic Acid
PFDoA - Perfluorododecanoic Acid
PFHpS - Perfluoroheptane Sulfonate
PFHpA - Perfluoroheptanoic Acid
PFHxS - Perfluorohexanesulfonic Acid
PFHxA - Perfluorohexanoic Acid
PFNA - Perfluorononanoic Acid
FOSA - Perfluorooctane Sulfonamide
PFOS - Perfluorooctanesulfonic Acid
PFOA - Perfluorooctanoic Acid
PFPeA - Perfluoropentanoic Acid
PFTA/PFTeDA - Perfluorotetradecanoic Acid
PFTriA/PFTrDA - Perfluorotridecanoic Acid
PFUA/PFUdA - Perfluoroundecanoic Acid
8:2 FTS - SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE
6:2 FTS - SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE
N-MeFOSAA - N-methyl perfluorooctanesulfonamidoacetic Acid
N-EtFOSAA - N-ethyl perfluorooctanesulfonamidoacetic Acid

# APPENDIX D

# ANALYTICAL REPORT

Job Number: 460-229152-1

Job Description: DEC - BRONX3536 SITE: 203003

Contract Number: C100700

For:
New York State D.E.C.
625 Broadway
Division of Environmental Remediation
Albany, NY 12233-7014

Attention: Charles Gregory



Approved for release.
Julie L Gilmore
Project Manager I
3/18/2021 5:04 PM

Julie L Gilmore, Project Manager I
777 New Durham Road, Edison, NJ, 08817
(484)685-0865
Julie.Gilmore@Eurofinset.com
03/18/2021

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

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

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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# CASE NARRATIVE

## Client: New York State D.E.C.

## Project: DEC - BRONX3536 SITE: 203003

## Report Number: 460-229152-1

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 03/04/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was C.

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.

**PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)**

Samples HEX-MW06-030321 (460-229152-1), HEX-MW12-030321 (460-229152-2), HEX-MWX-030321 (460-229152-3) and HEX-EQUIPMENTBLANK-030321 (460-229152-4) were analyzed for Per- and Polyfluoroalkyl Substances (PFAS) in accordance with PFC. The samples were prepared on 03/09/2021 and analyzed on 03/12/2021.

The method blank for preparation batch 200-164654 and analytical batch 200-164776 contained Perfluorooctanoic acid (PFOA) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Perfluorooctanoic acid (PFOA) was detected in method blank MB 200-164654/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No other difficulties were encountered during the PFAS analysis.

All other quality control parameters were within the acceptance limits.

# Sample Summary

Client: New York State D.E.C.
Job ID: 460-229152-1
Project/Site: DEC - BRONX3536 SITE: 203003

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 460-229152-1 | HEX-MW06-030321 | Water | 03/03/21 08:55 | 03/04/21 12:52 | |
| 460-229152-2 | HEX-MW12-030321 | Water | 03/03/21 11:45 | 03/04/21 12:52 | |
| 460-229152-3 | HEX-MWX-030321 | Water | 03/03/21 00:00 | 03/04/21 12:52 | |
| 460-229152-4 | HEX-EQUIPMENTBLANK-030321 | Water | 03/03/21 12:10 | 03/04/21 12:52 | |

# Detection Summary

Client: New York State D.E.C.
Job ID: 460-229152-1
Project/Site: DEC - BRONX3536 SITE: 203003

## Client Sample ID: HEX-MW06-030321
## Lab Sample ID: 460-229152-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 24.7 | | 4.06 | 0.92 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 25.2 | | 1.62 | 0.88 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 16.8 | | 1.62 | 0.67 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 10.9 | | 1.62 | 0.37 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 16.7 | B | 1.62 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 4.17 | | 1.62 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 5.76 | | 1.62 | 0.37 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 31.6 | | 1.62 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.57 | | 1.62 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 40.8 | | 1.62 | 0.71 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: HEX-MW12-030321
## Lab Sample ID: 460-229152-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 19.5 | | 4.12 | 0.93 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 50.3 | | 1.65 | 0.89 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 29.9 | | 1.65 | 0.68 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 27.9 | | 1.65 | 0.38 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 33.1 | B | 1.65 | 0.81 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 7.59 | | 1.65 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 1.11 | J | 1.65 | 0.38 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 13.5 | | 1.65 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 6.73 | | 1.65 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.72 | J | 1.65 | 0.32 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 42.4 | | 1.65 | 0.72 | ng/L | 1 | | 537 (modified) | Total/NA |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 3.00 | J | 4.12 | 0.59 | ng/L | 1 | | 537 (modified) | Total/NA |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 1.40 | J | 1.65 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: HEX-MWX-030321
## Lab Sample ID: 460-229152-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 21.2 | | 4.13 | 0.93 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 46.0 | | 1.65 | 0.89 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 28.1 | | 1.65 | 0.69 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 28.4 | | 1.65 | 0.38 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 35.4 | B | 1.65 | 0.81 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 8.81 | | 1.65 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 1.10 | J | 1.65 | 0.38 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 13.7 | | 1.65 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 7.57 | | 1.65 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.97 | J | 1.65 | 0.32 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 44.9 | | 1.65 | 0.72 | ng/L | 1 | | 537 (modified) | Total/NA |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 3.33 | J | 4.13 | 0.59 | ng/L | 1 | | 537 (modified) | Total/NA |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 1.34 | J | 1.65 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: HEX-EQUIPMENTBLANK-030321
## Lab Sample ID: 460-229152-4

No Detections.

This Detection Summary does not include radiochemical test results.

# Method Summary

Client: New York State D.E.C.
Job ID: 460-229152-1
Project/Site: DEC - BRONX3536 SITE: 203003

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 537 (modified) | Fluorinated Alkyl Substances | EPA | TAL BUR |
| 3535 | Solid-Phase Extraction (SPE) | SW846 | TAL BUR |

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

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

## Client Sample ID: HEX-MW06-030321
**Lab Sample ID: 460-229152-1**

**Date Collected: 03/03/21 08:55**
**Matrix: Water**

**Date Received: 03/04/21 12:52**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **24.7** | | 4.06 | 0.92 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **25.2** | | 1.62 | 0.88 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **16.8** | | 1.62 | 0.67 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **10.9** | | 1.62 | 0.37 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **16.7** | **B** | 1.62 | 0.80 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| **Perfluorononanoic acid (PFNA)** | **4.17** | | 1.62 | 0.47 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **5.76** | | 1.62 | 0.37 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| Perfluoroundecanoic acid (PFUnA) | 0.59 | U | 1.62 | 0.59 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| Perfluorododecanoic acid (PFDoA) | 0.37 | U | 1.62 | 0.37 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| Perfluorotridecanoic acid (PFTriA) | 0.35 | U | 1.62 | 0.35 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | 0.48 | U | 1.62 | 0.48 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **31.6** | | 1.62 | 0.51 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.57** | | 1.62 | 0.54 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.32 | U | 1.62 | 0.32 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **40.8** | | 1.62 | 0.71 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | 0.39 | U | 1.62 | 0.39 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| Perfluorooctanesulfonamide (PFOSA) | 0.46 | U | 1.62 | 0.46 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.64 | U | 4.06 | 0.64 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 0.76 | U | 4.06 | 0.76 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 0.58 | U | 4.06 | 0.58 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 0.54 | U | 1.62 | 0.54 | ng/L | | 03/09/21 13:56 | 03/12/21 14:05 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *18O2 PFHxS* | *104* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |
| *13C4 PFHpA* | *104* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |
| *13C4 PFOA* | *104* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |
| *13C4 PFOS* | *104* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |
| *13C5 PFNA* | *106* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |
| *13C4 PFBA* | *74* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |
| *13C2 PFHxA* | *105* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |
| *13C2 PFDA* | *95* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |
| *13C2 PFUnA* | *89* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |
| *13C2 PFDoA* | *81* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |
| *13C8 FOSA* | *86* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |
| *13C5 PFPeA* | *92* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |
| *13C2 PFTeDA* | *77* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |
| *d3-NMeFOSAA* | *80* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |
| *d5-NEtFOSAA* | *84* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |
| *M2-6:2 FTS* | *120* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |
| *M2-8:2 FTS* | *114* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |
| *13C3 PFBS* | *95* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:05* | *1* |

## Client Sample ID: HEX-MW12-030321
**Lab Sample ID: 460-229152-2**

**Date Collected: 03/03/21 11:45**
**Matrix: Water**

**Date Received: 03/04/21 12:52**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **19.5** | | 4.12 | 0.93 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **50.3** | | 1.65 | 0.89 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **29.9** | | 1.65 | 0.68 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **27.9** | | 1.65 | 0.38 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **33.1** | **B** | 1.65 | 0.81 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| **Perfluorononanoic acid (PFNA)** | **7.59** | | 1.65 | 0.48 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **1.11** | **J** | 1.65 | 0.38 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| Perfluoroundecanoic acid (PFUnA) | 0.60 | U | 1.65 | 0.60 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| Perfluorododecanoic acid (PFDoA) | 0.38 | U | 1.65 | 0.38 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| Perfluorotridecanoic acid (PFTriA) | 0.35 | U | 1.65 | 0.35 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | 0.49 | U | 1.65 | 0.49 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **13.5** | | 1.65 | 0.52 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **6.73** | | 1.65 | 0.55 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.72** | **J** | 1.65 | 0.32 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **42.4** | | 1.65 | 0.72 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | 0.40 | U | 1.65 | 0.40 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| Perfluorooctanesulfonamide (PFOSA) | 0.47 | U | 1.65 | 0.47 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.65 | U | 4.12 | 0.65 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 0.77 | U | 4.12 | 0.77 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| **1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)** | **3.00** | **J** | 4.12 | 0.59 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |
| **1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)** | **1.40** | **J** | 1.65 | 0.54 | ng/L | | 03/09/21 13:56 | 03/12/21 14:13 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *18O2 PFHxS* | *92* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |
| *13C4 PFHpA* | *91* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |
| *13C4 PFOA* | *90* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |
| *13C4 PFOS* | *78* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |
| *13C5 PFNA* | *83* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |
| *13C4 PFBA* | *69* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |
| *13C2 PFHxA* | *88* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |
| *13C2 PFDA* | *72* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |
| *13C2 PFUnA* | *65* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |
| *13C2 PFDoA* | *64* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |
| *13C8 FOSA* | *62* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |
| *13C5 PFPeA* | *79* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |
| *13C2 PFTeDA* | *67* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |
| *d3-NMeFOSAA* | *62* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |
| *d5-NEtFOSAA* | *63* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |
| *M2-6:2 FTS* | *96* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |
| *M2-8:2 FTS* | *80* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |
| *13C3 PFBS* | *89* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:13* | *1* |

## Client Sample ID: HEX-MWX-030321
**Lab Sample ID: 460-229152-3**

**Date Collected: 03/03/21 00:00**
**Matrix: Water**

**Date Received: 03/04/21 12:52**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **21.2** | | 4.13 | 0.93 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **46.0** | | 1.65 | 0.89 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **28.1** | | 1.65 | 0.69 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **28.4** | | 1.65 | 0.38 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **35.4** | **B** | 1.65 | 0.81 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| **Perfluorononanoic acid (PFNA)** | **8.81** | | 1.65 | 0.48 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **1.10** | **J** | 1.65 | 0.38 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| Perfluoroundecanoic acid (PFUnA) | 0.60 | U | 1.65 | 0.60 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| Perfluorododecanoic acid (PFDoA) | 0.38 | U | 1.65 | 0.38 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| Perfluorotridecanoic acid (PFTriA) | 0.36 | U | 1.65 | 0.36 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | 0.49 | U | 1.65 | 0.49 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **13.7** | | 1.65 | 0.52 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **7.57** | | 1.65 | 0.55 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.97** | **J** | 1.65 | 0.32 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **44.9** | | 1.65 | 0.72 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | 0.40 | U | 1.65 | 0.40 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| Perfluorooctanesulfonamide (PFOSA) | 0.47 | U | 1.65 | 0.47 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.65 | U | 4.13 | 0.65 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 0.77 | U | 4.13 | 0.77 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| **1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)** | **3.33** | **J** | 4.13 | 0.59 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |
| **1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)** | **1.34** | **J** | 1.65 | 0.55 | ng/L | | 03/09/21 13:56 | 03/12/21 14:38 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *18O2 PFHxS* | *89* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |
| *13C4 PFHpA* | *92* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |
| *13C4 PFOA* | *87* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |
| *13C4 PFOS* | *72* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |
| *13C5 PFNA* | *75* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |
| *13C4 PFBA* | *78* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |
| *13C2 PFHxA* | *95* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |
| *13C2 PFDA* | *67* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |
| *13C2 PFUnA* | *59* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |
| *13C2 PFDoA* | *56* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |
| *13C8 FOSA* | *54* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |
| *13C5 PFPeA* | *89* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |
| *13C2 PFTeDA* | *59* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |
| *d3-NMeFOSAA* | *60* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |
| *d5-NEtFOSAA* | *66* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |
| *M2-6:2 FTS* | *102* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |
| *M2-8:2 FTS* | *71* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |
| *13C3 PFBS* | *95* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:38* | *1* |

## Client Sample ID: HEX-EQUIPMENTBLANK-030321
**Lab Sample ID: 460-229152-4**

**Date Collected: 03/03/21 12:10**
**Matrix: Water**
**Date Received: 03/04/21 12:52**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 0.95 | U | 4.19 | 0.95 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| Perfluoropentanoic acid (PFPeA) | 0.90 | U | 1.68 | 0.90 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| Perfluorohexanoic acid (PFHxA) | 0.70 | U | 1.68 | 0.70 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| Perfluoroheptanoic acid (PFHpA) | 0.39 | U | 1.68 | 0.39 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| Perfluorooctanoic acid (PFOA) | 0.82 | U | 1.68 | 0.82 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| Perfluorononanoic acid (PFNA) | 0.49 | U | 1.68 | 0.49 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| Perfluorodecanoic acid (PFDA) | 0.39 | U | 1.68 | 0.39 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| Perfluoroundecanoic acid (PFUnA) | 0.61 | U | 1.68 | 0.61 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| Perfluorododecanoic acid (PFDoA) | 0.39 | U | 1.68 | 0.39 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| Perfluorotridecanoic acid (PFTriA) | 0.36 | U | 1.68 | 0.36 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | 0.49 | U | 1.68 | 0.49 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | 0.53 | U | 1.68 | 0.53 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | 0.56 | U | 1.68 | 0.56 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.33 | U | 1.68 | 0.33 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | 0.73 | U | 1.68 | 0.73 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | 0.40 | U | 1.68 | 0.40 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| Perfluorooctanesulfonamide (PFOSA) | 0.48 | U | 1.68 | 0.48 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.66 | U | 4.19 | 0.66 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 0.78 | U | 4.19 | 0.78 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 0.60 | U | 4.19 | 0.60 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 0.55 | U | 1.68 | 0.55 | ng/L | | 03/09/21 13:56 | 03/12/21 14:46 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *18O2 PFHxS* | *108* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |
| *13C4 PFHpA* | *112* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |
| *13C4 PFOA* | *106* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |
| *13C4 PFOS* | *103* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |
| *13C5 PFNA* | *108* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |
| *13C4 PFBA* | *110* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |
| *13C2 PFHxA* | *115* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |
| *13C2 PFDA* | *99* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |
| *13C2 PFUnA* | *88* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |
| *13C2 PFDoA* | *78* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |
| *13C8 FOSA* | *63* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |
| *13C5 PFPeA* | *112* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |
| *13C2 PFTeDA* | *75* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |
| *d3-NMeFOSAA* | *87* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |
| *d5-NEtFOSAA* | *83* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |
| *M2-6:2 FTS* | *112* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |
| *M2-8:2 FTS* | *102* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |
| *13C3 PFBS* | *105* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 14:46* | *1* |

# Isotope Dilution Summary

Client: New York State D.E.C.
Job ID: 460-229152-1
Project/Site: DEC - BRONX3536 SITE: 203003

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | PFHxS | C4PFHA | PFOA | PFOS | PFNA | PFBA | PFHxA | PFDA |
| Lab Sample ID | Client Sample ID | (50-150) | (50-150) | (50-150) | (50-150) | (50-150) | (25-150) | (50-150) | (50-150) |
| 460-229152-1 | HEX-MW06-030321 | 104 | 104 | 104 | 104 | 106 | 74 | 105 | 95 |
| 460-229152-2 | HEX-MW12-030321 | 92 | 91 | 90 | 78 | 83 | 69 | 88 | 72 |
| 460-229152-2 MS | HEX-MW12-030321 | 93 | 95 | 90 | 77 | 83 | 77 | 99 | 69 |
| 460-229152-2 MSD | HEX-MW12-030321 | 96 | 98 | 92 | 80 | 79 | 79 | 100 | 73 |
| 460-229152-3 | HEX-MWX-030321 | 89 | 92 | 87 | 72 | 75 | 78 | 95 | 67 |
| 460-229152-4 | HEX-EQUIPMENTBLANK-0303 1 | 108 | 112 | 106 | 103 | 108 | 110 | 115 | 99 |
| LCS 200-164654/2-A | Lab Control Sample | 105 | 108 | 106 | 106 | 98 | 111 | 110 | 96 |
| MB 200-164654/1-A | Method Blank | 112 | 111 | 108 | 110 | 105 | 113 | 117 | 99 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | PFUnA | PFDoA | PFOSA | PFPeA | PFTDA | d3NMFOS | d5NEFOS | M262FTS |
| Lab Sample ID | Client Sample ID | (50-150) | (50-150) | (25-150) | (25-150) | (50-150) | (50-150) | (50-150) | (25-150) |
| 460-229152-1 | HEX-MW06-030321 | 89 | 81 | 86 | 92 | 77 | 80 | 84 | 120 |
| 460-229152-2 | HEX-MW12-030321 | 65 | 64 | 62 | 79 | 67 | 62 | 63 | 96 |
| 460-229152-2 MS | HEX-MW12-030321 | 66 | 67 | 66 | 89 | 70 | 66 | 66 | 102 |
| 460-229152-2 MSD | HEX-MW12-030321 | 67 | 67 | 67 | 90 | 68 | 70 | 69 | 97 |
| 460-229152-3 | HEX-MWX-030321 | 59 | 56 | 54 | 89 | 59 | 60 | 66 | 102 |
| 460-229152-4 | HEX-EQUIPMENTBLANK-0303 1 | 88 | 78 | 63 | 112 | 75 | 87 | 83 | 112 |
| LCS 200-164654/2-A | Lab Control Sample | 81 | 75 | 75 | 107 | 73 | 93 | 80 | 108 |
| MB 200-164654/1-A | Method Blank | 74 | 63 | 68 | 116 | 60 | 83 | 74 | 109 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | M282FTS | C3PFBS | | | | | | |
| Lab Sample ID | Client Sample ID | (25-150) | (50-150) | | | | | | |
| 460-229152-1 | HEX-MW06-030321 | 114 | 95 | | | | | | |
| 460-229152-2 | HEX-MW12-030321 | 80 | 89 | | | | | | |
| 460-229152-2 MS | HEX-MW12-030321 | 75 | 96 | | | | | | |
| 460-229152-2 MSD | HEX-MW12-030321 | 80 | 96 | | | | | | |
| 460-229152-3 | HEX-MWX-030321 | 71 | 95 | | | | | | |
| 460-229152-4 | HEX-EQUIPMENTBLANK-0303 1 | 102 | 105 | | | | | | |
| LCS 200-164654/2-A | Lab Control Sample | 103 | 105 | | | | | | |
| MB 200-164654/1-A | Method Blank | 100 | 111 | | | | | | |

**Surrogate Legend**

PFHxS = 18O2 PFHxS
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFNA = 13C5 PFNA
PFBA = 13C4 PFBA
PFHxA = 13C2 PFHxA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFOSA = 13C8 FOSA
PFPeA = 13C5 PFPeA
PFTDA = 13C2 PFTeDA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA

# Isotope Dilution Summary

Client: New York State D.E.C. Job ID: 460-229152-1

Project/Site: DEC - BRONX3536 SITE: 203003

M262FTS = M2-6:2 FTS

M282FTS = M2-8:2 FTS

C3PFBS = 13C3 PFBS

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Lab Sample ID: MB 200-164654/1-A**
**Matrix: Water**
**Analysis Batch: 164776**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 164654**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 1.13 | U | 5.00 | 1.13 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| Perfluoropentanoic acid (PFPeA) | 1.08 | U | 2.00 | 1.08 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| Perfluorohexanoic acid (PFHxA) | 0.83 | U | 2.00 | 0.83 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| Perfluoroheptanoic acid (PFHpA) | 0.46 | U | 2.00 | 0.46 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| Perfluorooctanoic acid (PFOA) | 1.615 | J | 2.00 | 0.98 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| Perfluorononanoic acid (PFNA) | 0.58 | U | 2.00 | 0.58 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| Perfluorodecanoic acid (PFDA) | 0.46 | U | 2.00 | 0.46 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| Perfluoroundecanoic acid (PFUnA) | 0.73 | U | 2.00 | 0.73 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| Perfluorododecanoic acid (PFDoA) | 0.46 | U | 2.00 | 0.46 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| Perfluorotridecanoic acid (PFTriA) | 0.43 | U | 2.00 | 0.43 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | 0.59 | U | 2.00 | 0.59 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | 0.63 | U | 2.00 | 0.63 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | 0.67 | U | 2.00 | 0.67 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.39 | U | 2.00 | 0.39 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | 0.87 | U | 2.00 | 0.87 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | 0.48 | U | 2.00 | 0.48 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| Perfluorooctanesulfonamide (PFOSA) | 0.57 | U | 2.00 | 0.57 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.79 | U | 5.00 | 0.79 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 0.93 | U | 5.00 | 0.93 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 0.72 | U | 5.00 | 0.72 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 0.66 | U | 2.00 | 0.66 | ng/L | | 03/09/21 13:56 | 03/12/21 12:34 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *18O2 PFHxS* | *112* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |
| *13C4 PFHpA* | *111* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |
| *13C4 PFOA* | *108* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |
| *13C4 PFOS* | *110* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |
| *13C5 PFNA* | *105* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |
| *13C4 PFBA* | *113* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |
| *13C2 PFHxA* | *117* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |
| *13C2 PFDA* | *99* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |
| *13C2 PFUnA* | *74* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |
| *13C2 PFDoA* | *63* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |
| *13C8 FOSA* | *68* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |
| *13C5 PFPeA* | *116* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |
| *13C2 PFTeDA* | *60* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |
| *d3-NMeFOSAA* | *83* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |
| *d5-NEtFOSAA* | *74* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |
| *M2-6:2 FTS* | *109* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |
| *M2-8:2 FTS* | *100* | | *25 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |
| *13C3 PFBS* | *111* | | *50 - 150* | *03/09/21 13:56* | *03/12/21 12:34* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 200-164654/2-A**
**Matrix: Water**
**Analysis Batch: 164776**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 164654**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 41.04 | | ng/L | | 103 | 50 - 150 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 40.18 | | ng/L | | 100 | 50 - 150 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 40.98 | | ng/L | | 102 | 70 - 130 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 41.77 | | ng/L | | 104 | 70 - 130 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 42.88 | | ng/L | | 107 | 70 - 130 |
| Perfluorononanoic acid (PFNA) | 40.0 | 42.69 | | ng/L | | 107 | 70 - 130 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 42.37 | | ng/L | | 106 | 70 - 130 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 43.26 | | ng/L | | 108 | 70 - 130 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 36.63 | | ng/L | | 92 | 70 - 130 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 37.68 | | ng/L | | 94 | 70 - 130 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 41.37 | | ng/L | | 103 | 70 - 130 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 38.69 | | ng/L | | 109 | 70 - 130 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 37.97 | | ng/L | | 104 | 70 - 130 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 40.93 | | ng/L | | 107 | 50 - 150 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 39.55 | | ng/L | | 107 | 70 - 130 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 33.92 | | ng/L | | 88 | 50 - 150 |
| Perfluorooctanesulfonamide (PFOSA) | 40.0 | 36.57 | | ng/L | | 91 | 50 - 150 |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 40.0 | 37.63 | | ng/L | | 94 | 70 - 130 |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 40.0 | 42.34 | | ng/L | | 106 | 70 - 130 |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 37.9 | 33.14 | | ng/L | | 87 | 50 - 150 |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 38.3 | 30.57 | | ng/L | | 80 | 50 - 150 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *18O2 PFHxS* | *105* | | *50 - 150* |
| *13C4 PFHpA* | *108* | | *50 - 150* |
| *13C4 PFOA* | *106* | | *50 - 150* |
| *13C4 PFOS* | *106* | | *50 - 150* |
| *13C5 PFNA* | *98* | | *50 - 150* |
| *13C4 PFBA* | *111* | | *25 - 150* |
| *13C2 PFHxA* | *110* | | *50 - 150* |
| *13C2 PFDA* | *96* | | *50 - 150* |
| *13C2 PFUnA* | *81* | | *50 - 150* |
| *13C2 PFDoA* | *75* | | *50 - 150* |
| *13C8 FOSA* | *75* | | *25 - 150* |
| *13C5 PFPeA* | *107* | | *25 - 150* |
| *13C2 PFTeDA* | *73* | | *50 - 150* |
| *d3-NMeFOSAA* | *93* | | *50 - 150* |
| *d5-NEtFOSAA* | *80* | | *50 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 200-164654/2-A**
**Client Sample ID: Lab Control Sample**
**Matrix: Water**
**Prep Type: Total/NA**
**Analysis Batch: 164776**
**Prep Batch: 164654**

| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| M2-6:2 FTS | 108 | | 25 - 150 |
| M2-8:2 FTS | 103 | | 25 - 150 |
| 13C3 PFBS | 105 | | 50 - 150 |

**Lab Sample ID: 460-229152-2 MS**
**Client Sample ID: HEX-MW12-030321**
**Matrix: Water**
**Prep Type: Total/NA**
**Analysis Batch: 164776**
**Prep Batch: 164654**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 19.5 | | 32.8 | 52.25 | | ng/L | | 100 | 40 - 160 |
| Perfluoropentanoic acid (PFPeA) | 50.3 | | 32.8 | 80.21 | | ng/L | | 91 | 40 - 160 |
| Perfluorohexanoic acid (PFHxA) | 29.9 | | 32.8 | 61.15 | | ng/L | | 95 | 40 - 160 |
| Perfluoroheptanoic acid (PFHpA) | 27.9 | | 32.8 | 62.58 | | ng/L | | 106 | 40 - 160 |
| Perfluorooctanoic acid (PFOA) | 33.1 | B | 32.8 | 70.71 | | ng/L | | 115 | 40 - 160 |
| Perfluorononanoic acid (PFNA) | 7.59 | | 32.8 | 38.25 | | ng/L | | 94 | 40 - 160 |
| Perfluorodecanoic acid (PFDA) | 1.11 | J | 32.8 | 27.06 | | ng/L | | 79 | 40 - 160 |
| Perfluoroundecanoic acid (PFUnA) | 0.60 | U | 32.8 | 28.40 | | ng/L | | 87 | 40 - 160 |
| Perfluorododecanoic acid (PFDoA) | 0.38 | U | 32.8 | 27.20 | | ng/L | | 83 | 40 - 160 |
| Perfluorotridecanoic acid (PFTriA) | 0.35 | U | 32.8 | 28.84 | | ng/L | | 88 | 40 - 160 |
| Perfluorotetradecanoic acid (PFTeA) | 0.49 | U | 32.8 | 32.82 | | ng/L | | 100 | 40 - 160 |
| Perfluorobutanesulfonic acid (PFBS) | 13.5 | | 29.0 | 42.74 | | ng/L | | 101 | 40 - 160 |
| Perfluorohexanesulfonic acid (PFHxS) | 6.73 | | 29.8 | 38.05 | | ng/L | | 105 | 40 - 160 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.72 | J | 31.2 | 38.07 | | ng/L | | 120 | 40 - 160 |
| Perfluorooctanesulfonic acid (PFOS) | 42.4 | | 30.4 | 67.21 | | ng/L | | 82 | 40 - 160 |
| Perfluorodecanesulfonic acid (PFDS) | 0.40 | U | 31.6 | 26.77 | | ng/L | | 85 | 40 - 160 |
| Perfluorooctanesulfonamide (PFOSA) | 0.47 | U | 32.8 | 24.38 | | ng/L | | 74 | 40 - 160 |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.65 | U | 32.8 | 27.67 | | ng/L | | 84 | 40 - 160 |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 0.77 | U | 32.8 | 26.42 | | ng/L | | 81 | 40 - 160 |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 3.00 | J | 31.1 | 33.16 | | ng/L | | 97 | 40 - 160 |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 1.40 | J | 31.4 | 24.31 | | ng/L | | 73 | 40 - 160 |

| Isotope Dilution | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| 18O2 PFHxS | 93 | | 50 - 150 |
| 13C4 PFHpA | 95 | | 50 - 150 |
| 13C4 PFOA | 90 | | 50 - 150 |
| 13C4 PFOS | 77 | | 50 - 150 |
| 13C5 PFNA | 83 | | 50 - 150 |
| 13C4 PFBA | 77 | | 25 - 150 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 460-229152-2 MS**
**Matrix: Water**
**Analysis Batch: 164776**

**Client Sample ID: HEX-MW12-030321**
**Prep Type: Total/NA**
**Prep Batch: 164654**

| Isotope Dilution | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| 13C2 PFHxA | 99 | | 50 - 150 |
| 13C2 PFDA | 69 | | 50 - 150 |
| 13C2 PFUnA | 66 | | 50 - 150 |
| 13C2 PFDoA | 67 | | 50 - 150 |
| 13C8 FOSA | 66 | | 25 - 150 |
| 13C5 PFPeA | 89 | | 25 - 150 |
| 13C2 PFTeDA | 70 | | 50 - 150 |
| d3-NMeFOSAA | 66 | | 50 - 150 |
| d5-NEtFOSAA | 66 | | 50 - 150 |
| M2-6:2 FTS | 102 | | 25 - 150 |
| M2-8:2 FTS | 75 | | 25 - 150 |
| 13C3 PFBS | 96 | | 50 - 150 |

**Lab Sample ID: 460-229152-2 MSD**
**Matrix: Water**
**Analysis Batch: 164776**

**Client Sample ID: HEX-MW12-030321**
**Prep Type: Total/NA**
**Prep Batch: 164654**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 19.5 | | 33.2 | 51.63 | | ng/L | | 97 | 40 - 160 | 1 | 30 |
| Perfluoropentanoic acid (PFPeA) | 50.3 | | 33.2 | 80.88 | | ng/L | | 92 | 40 - 160 | 1 | 30 |
| Perfluorohexanoic acid (PFHxA) | 29.9 | | 33.2 | 63.55 | | ng/L | | 101 | 40 - 160 | 4 | 20 |
| Perfluoroheptanoic acid (PFHpA) | 27.9 | | 33.2 | 62.68 | | ng/L | | 105 | 40 - 160 | 0 | 20 |
| Perfluorooctanoic acid (PFOA) | 33.1 | B | 33.2 | 68.38 | | ng/L | | 106 | 40 - 160 | 3 | 20 |
| Perfluorononanoic acid (PFNA) | 7.59 | | 33.2 | 41.06 | | ng/L | | 101 | 40 - 160 | 7 | 20 |
| Perfluorodecanoic acid (PFDA) | 1.11 | J | 33.2 | 26.47 | | ng/L | | 76 | 40 - 160 | 2 | 20 |
| Perfluoroundecanoic acid (PFUnA) | 0.60 | U | 33.2 | 27.66 | | ng/L | | 83 | 40 - 160 | 3 | 20 |
| Perfluorododecanoic acid (PFDoA) | 0.38 | U | 33.2 | 28.71 | | ng/L | | 87 | 40 - 160 | 5 | 20 |
| Perfluorotridecanoic acid (PFTriA) | 0.35 | U | 33.2 | 30.74 | | ng/L | | 93 | 40 - 160 | 6 | 20 |
| Perfluorotetradecanoic acid (PFTeA) | 0.49 | U | 33.2 | 34.22 | | ng/L | | 103 | 40 - 160 | 4 | 20 |
| Perfluorobutanesulfonic acid (PFBS) | 13.5 | | 29.3 | 44.13 | | ng/L | | 104 | 40 - 160 | 3 | 20 |
| Perfluorohexanesulfonic acid (PFHxS) | 6.73 | | 30.2 | 38.46 | | ng/L | | 105 | 40 - 160 | 1 | 20 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.72 | J | 31.6 | 37.49 | | ng/L | | 116 | 40 - 160 | 2 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | 42.4 | | 30.8 | 65.45 | | ng/L | | 75 | 40 - 160 | 3 | 20 |
| Perfluorodecanesulfonic acid (PFDS) | 0.40 | U | 32.0 | 26.15 | | ng/L | | 82 | 40 - 160 | 2 | 30 |
| Perfluorooctanesulfonamide (PFOSA) | 0.47 | U | 33.2 | 26.42 | | ng/L | | 80 | 40 - 160 | 8 | 30 |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.65 | U | 33.2 | 29.14 | | ng/L | | 88 | 40 - 160 | 5 | 20 |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 0.77 | U | 33.2 | 30.49 | | ng/L | | 92 | 40 - 160 | 14 | 20 |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 3.00 | J | 31.5 | 33.98 | | ng/L | | 99 | 40 - 160 | 2 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 460-229152-2 MSD** **Client Sample ID: HEX-MW12-030321**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 164776** **Prep Batch: 164654**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 1.40 | J | 31.8 | 21.49 | | ng/L | | 63 | 40 - 160 | 12 | 30 |

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *18O2 PFHxS* | *96* | | *50 - 150* |
| *13C4 PFHpA* | *98* | | *50 - 150* |
| *13C4 PFOA* | *92* | | *50 - 150* |
| *13C4 PFOS* | *80* | | *50 - 150* |
| *13C5 PFNA* | *79* | | *50 - 150* |
| *13C4 PFBA* | *79* | | *25 - 150* |
| *13C2 PFHxA* | *100* | | *50 - 150* |
| *13C2 PFDA* | *73* | | *50 - 150* |
| *13C2 PFUnA* | *67* | | *50 - 150* |
| *13C2 PFDoA* | *67* | | *50 - 150* |
| *13C8 FOSA* | *67* | | *25 - 150* |
| *13C5 PFPeA* | *90* | | *25 - 150* |
| *13C2 PFTeDA* | *68* | | *50 - 150* |
| *d3-NMeFOSAA* | *70* | | *50 - 150* |
| *d5-NEtFOSAA* | *69* | | *50 - 150* |
| *M2-6:2 FTS* | *97* | | *25 - 150* |
| *M2-8:2 FTS* | *80* | | *25 - 150* |
| *13C3 PFBS* | *96* | | *50 - 150* |

## Qualifiers

### LCMS

| Qualifier | Qualifier Description |
|---|---|
| B | Compound was found in the blank and sample. |
| 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 |

# QC Association Summary

Client: New York State D.E.C.
Job ID: 460-229152-1
Project/Site: DEC - BRONX3536 SITE: 203003

## LCMS

### Prep Batch: 164654

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 460-229152-1 | HEX-MW06-030321 | Total/NA | Water | 3535 | |
| 460-229152-2 | HEX-MW12-030321 | Total/NA | Water | 3535 | |
| 460-229152-3 | HEX-MWX-030321 | Total/NA | Water | 3535 | |
| 460-229152-4 | HEX-EQUIPMENTBLANK-030321 | Total/NA | Water | 3535 | |
| MB 200-164654/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 200-164654/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| 460-229152-2 MS | HEX-MW12-030321 | Total/NA | Water | 3535 | |
| 460-229152-2 MSD | HEX-MW12-030321 | Total/NA | Water | 3535 | |

### Analysis Batch: 164776

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 460-229152-1 | HEX-MW06-030321 | Total/NA | Water | 537 (modified) | 164654 |
| 460-229152-2 | HEX-MW12-030321 | Total/NA | Water | 537 (modified) | 164654 |
| 460-229152-3 | HEX-MWX-030321 | Total/NA | Water | 537 (modified) | 164654 |
| 460-229152-4 | HEX-EQUIPMENTBLANK-030321 | Total/NA | Water | 537 (modified) | 164654 |
| MB 200-164654/1-A | Method Blank | Total/NA | Water | 537 (modified) | 164654 |
| LCS 200-164654/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 164654 |
| 460-229152-2 MS | HEX-MW12-030321 | Total/NA | Water | 537 (modified) | 164654 |
| 460-229152-2 MSD | HEX-MW12-030321 | Total/NA | Water | 537 (modified) | 164654 |

# Lab Chronicle

Client: New York State D.E.C.
Job ID: 460-229152-1
Project/Site: DEC - BRONX3536 SITE: 203003

## Client Sample ID: HEX-MW06-030321
**Lab Sample ID: 460-229152-1**
**Date Collected: 03/03/21 08:55**
**Matrix: Water**
**Date Received: 03/04/21 12:52**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 164654 | 03/09/21 13:56 | EK | TAL BUR |
| Total/NA | Analysis | 537 (modified) | | 1 | 164776 | 03/12/21 14:05 | ND | TAL BUR |

## Client Sample ID: HEX-MW12-030321
**Lab Sample ID: 460-229152-2**
**Date Collected: 03/03/21 11:45**
**Matrix: Water**
**Date Received: 03/04/21 12:52**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 164654 | 03/09/21 13:56 | EK | TAL BUR |
| Total/NA | Analysis | 537 (modified) | | 1 | 164776 | 03/12/21 14:13 | ND | TAL BUR |

## Client Sample ID: HEX-MWX-030321
**Lab Sample ID: 460-229152-3**
**Date Collected: 03/03/21 00:00**
**Matrix: Water**
**Date Received: 03/04/21 12:52**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 164654 | 03/09/21 13:56 | EK | TAL BUR |
| Total/NA | Analysis | 537 (modified) | | 1 | 164776 | 03/12/21 14:38 | ND | TAL BUR |

## Client Sample ID: HEX-EQUIPMENTBLANK-030321
**Lab Sample ID: 460-229152-4**
**Date Collected: 03/03/21 12:10**
**Matrix: Water**
**Date Received: 03/04/21 12:52**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 164654 | 03/09/21 13:56 | EK | TAL BUR |
| Total/NA | Analysis | 537 (modified) | | 1 | 164776 | 03/12/21 14:46 | ND | TAL BUR |

**Laboratory References:**

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

# Accreditation/Certification Summary

Client: New York State D.E.C. Job ID: 460-229152-1
Project/Site: DEC - BRONX3536 SITE: 203003

## Laboratory: Eurofins TestAmerica, Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| ANAB | Dept. of Defense ELAP | L2336 | 02-25-23 |
| Connecticut | State | PH-0751 | 09-30-21 |
| DE Haz. Subst. Cleanup Act (HSCA) | State | N/A | 05-16-21 |
| Florida | NELAP | E87467 | 06-30-21 |
| Minnesota | NELAP | 050-999-436 | 12-31-21 |
| New Hampshire | NELAP | 2006 | 12-18-21 |
| New Jersey | NELAP | VT972 | 06-30-21 |
| New York | NELAP | 10391 | 04-01-21 |
| Pennsylvania | NELAP | 68-00489 | 04-30-21 |
| Rhode Island | State | LAO00298 | 12-30-21 |
| US Fish & Wildlife | US Federal Programs | 058448 | 07-31-21 |
| USDA | US Federal Programs | P330-17-00272 | 10-30-23 |
| Vermont | State | VT4000 | 02-10-22 |
| Virginia | NELAP | 460209 | 12-14-21 |
| Wisconsin | State | 399133350 | 08-31-21 |

# Method PFC IDA

## Fluorinated Hydrocarbons by Method PFAS IDA

FORM II
LCMS SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Matrix: Water  Level: Low

GC Column (1): C-18  ID: 4.6 (mm)

| Client Sample ID | Lab Sample ID | PFBA # | PFPeA # | C3PFBS # | PFHxA # | C4PFHA # | PFHxS # | M262FTS # | PFOA # |
|---|---|---|---|---|---|---|---|---|---|
| HEX-MW06-030321 | 460-229152-1 | 74 | 92 | 95 | 105 | 104 | 104 | 120 | 104 |
| HEX-MW12-030321 | 460-229152-2 | 69 | 79 | 89 | 88 | 91 | 92 | 96 | 90 |
| HEX-MWX-030321 | 460-229152-3 | 78 | 89 | 95 | 95 | 92 | 89 | 102 | 87 |
| HEX-EQUIPMENTBLANK-030321 | 460-229152-4 | 110 | 112 | 105 | 115 | 112 | 108 | 112 | 106 |
| | MB 200-164654/1-A | 113 | 116 | 111 | 117 | 111 | 112 | 109 | 108 |
| | LCS 200-164654/2-A | 111 | 107 | 105 | 110 | 108 | 105 | 108 | 106 |
| HEX-MW12-030321 MS | 460-229152-2 MS | 77 | 89 | 96 | 99 | 95 | 93 | 102 | 90 |
| HEX-MW12-030321 MSD | 460-229152-2 MSD | 79 | 90 | 96 | 100 | 98 | 96 | 97 | 92 |

| | QC LIMITS |
|---|---|
| PFBA = 13C4 PFBA | 25-150 |
| PFPeA = 13C5 PFPeA | 25-150 |
| C3PFBS = 13C3 PFBS | 50-150 |
| PFHxA = 13C2 PFHxA | 50-150 |
| PFHxS = 18O2 PFHxS | 50-150 |
| C4PFHA = 13C4 PFHpA | 50-150 |
| M262FTS = M2-6:2 FTS | 25-150 |
| PFOA = 13C4 PFOA | 50-150 |

# Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Matrix: Water  Level: Low

GC Column (1): C-18  ID: 4.6 (mm)

| Client Sample ID | Lab Sample ID | PFOS # | PFNA # | M282FTS # | PFDA # | PFOSA # | d3NMFOS # | PFUnA # | d5NEFOS # |
|---|---|---|---|---|---|---|---|---|---|
| HEX-MW06-030321 | 460-229152-1 | 104 | 106 | 114 | 95 | 86 | 80 | 89 | 84 |
| HEX-MW12-030321 | 460-229152-2 | 78 | 83 | 80 | 72 | 62 | 62 | 65 | 63 |
| HEX-MWX-030321 | 460-229152-3 | 72 | 75 | 71 | 67 | 54 | 60 | 59 | 66 |
| HEX-EQUIPMENTBLANK-030321 | 460-229152-4 | 103 | 108 | 102 | 99 | 63 | 87 | 88 | 83 |
| | MB 200-164654/1-A | 110 | 105 | 100 | 99 | 68 | 83 | 74 | 74 |
| | LCS 200-164654/2-A | 106 | 98 | 103 | 96 | 75 | 93 | 81 | 80 |
| HEX-MW12-030321 MS | 460-229152-2 MS | 77 | 83 | 75 | 69 | 66 | 66 | 66 | 66 |
| HEX-MW12-030321 MSD | 460-229152-2 MSD | 80 | 79 | 80 | 73 | 67 | 70 | 67 | 69 |

| | QC LIMITS |
|---|---|
| PFOS = 13C4 PFOS | 50-150 |
| PFNA = 13C5 PFNA | 50-150 |
| M282FTS = M2-8:2 FTS | 25-150 |
| PFDA = 13C2 PFDA | 50-150 |
| PFOSA = 13C8 FOSA | 25-150 |
| d3NMFOS = d3-NMeFOSAA | 50-150 |
| PFUnA = 13C2 PFUnA | 50-150 |
| d5NEFOS = d5-NEtFOSAA | 50-150 |

# Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Matrix: Water  Level: Low

GC Column (1): C-18  ID: 4.6 (mm)

| Client Sample ID | Lab Sample ID | PFDoA # | PFTDA # |
|---|---|---|---|
| HEX-MW06-030321 | 460-229152-1 | 81 | 77 |
| HEX-MW12-030321 | 460-229152-2 | 64 | 67 |
| HEX-MWX-030321 | 460-229152-3 | 56 | 59 |
| HEX-EQUIPMENTBLANK-030321 | 460-229152-4 | 78 | 75 |
| | MB 200-164654/1-A | 63 | 60 |
| | LCS 200-164654/2-A | 75 | 73 |
| HEX-MW12-030321 MS | 460-229152-2 MS | 67 | 70 |
| HEX-MW12-030321 MSD | 460-229152-2 MSD | 67 | 68 |

| | QC LIMITS |
|---|---|
| PFDoA = 13C2 PFDoA | 50-150 |
| PFTDA = 13C2 PFTeDA | 50-150 |

# Column to be used to flag recovery values

FORM II 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: PA210312B06.d

Lab ID: LCS 200-164654/2-A  Client ID:

| COMPOUND | SPIKE ADDED (ng/L) | LCS CONCENTRATION (ng/L) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 41.04 | 103 | 50-150 | |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 40.18 | 100 | 50-150 | |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 40.98 | 102 | 70-130 | |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 41.77 | 104 | 70-130 | |
| Perfluorooctanoic acid (PFOA) | 40.0 | 42.88 | 107 | 70-130 | |
| Perfluorononanoic acid (PFNA) | 40.0 | 42.69 | 107 | 70-130 | |
| Perfluorodecanoic acid (PFDA) | 40.0 | 42.37 | 106 | 70-130 | |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 43.26 | 108 | 70-130 | |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 36.63 | 92 | 70-130 | |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 37.68 | 94 | 70-130 | |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 41.37 | 103 | 70-130 | |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 38.69 | 109 | 70-130 | |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 37.97 | 104 | 70-130 | |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 40.93 | 107 | 50-150 | |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 39.55 | 107 | 70-130 | |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 33.92 | 88 | 50-150 | |
| Perfluorooctanesulfonamide (PFOSA) | 40.0 | 36.57 | 91 | 50-150 | |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 40.0 | 37.63 | 94 | 70-130 | |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 40.0 | 42.34 | 106 | 70-130 | |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 37.9 | 33.14 | 87 | 50-150 | |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 38.3 | 30.57 | 80 | 50-150 | |
| 18O2 PFHxS | 47.3 | 49.85 | 105 | 50-150 | |
| 13C4 PFHpA | 50.0 | 53.96 | 108 | 50-150 | |
| 13C4 PFOA | 50.0 | 53.10 | 106 | 50-150 | |
| 13C4 PFOS | 47.8 | 50.74 | 106 | 50-150 | |
| 13C5 PFNA | 50.0 | 49.16 | 98 | 50-150 | |
| 13C4 PFBA | 50.0 | 55.68 | 111 | 25-150 | |

# Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: PA210312B06.d

Lab ID: LCS 200-164654/2-A  Client ID:

| COMPOUND | SPIKE ADDED (ng/L) | LCS CONCENTRATION (ng/L) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| 13C2 PFHxA | 50.0 | 54.87 | 110 | 50-150 | |
| 13C2 PFDA | 50.0 | 48.21 | 96 | 50-150 | |
| 13C2 PFUnA | 50.0 | 40.68 | 81 | 50-150 | |
| 13C2 PFDoA | 50.0 | 37.72 | 75 | 50-150 | |
| 13C8 FOSA | 50.0 | 37.64 | 75 | 25-150 | |
| 13C5 PFPeA | 50.0 | 53.45 | 107 | 25-150 | |
| 13C2 PFTeDA | 50.0 | 36.52 | 73 | 50-150 | |
| d3-NMeFOSAA | 50.0 | 46.65 | 93 | 50-150 | |
| d5-NEtFOSAA | 50.0 | 40.01 | 80 | 50-150 | |
| M2-6:2 FTS | 47.5 | 51.52 | 108 | 25-150 | |
| M2-8:2 FTS | 47.9 | 49.27 | 103 | 25-150 | |
| 13C3 PFBS | 46.5 | 48.99 | 105 | 50-150 | |

# Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: PA210312B18.d

Lab ID: 460-229152-2 MS  Client ID: HEX-MW12-030321 MS

| COMPOUND | SPIKE ADDED (ng/L) | SAMPLE CONCENTRATION (ng/L) | MS CONCENTRATION (ng/L) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 32.8 | 19.5 | 52.25 | 100 | 40-160 | |
| Perfluoropentanoic acid (PFPeA) | 32.8 | 50.3 | 80.21 | 91 | 40-160 | |
| Perfluorohexanoic acid (PFHxA) | 32.8 | 29.9 | 61.15 | 95 | 40-160 | |
| Perfluoroheptanoic acid (PFHpA) | 32.8 | 27.9 | 62.58 | 106 | 40-160 | |
| Perfluorooctanoic acid (PFOA) | 32.8 | 33.1 | 70.71 | 115 | 40-160 | |
| Perfluorononanoic acid (PFNA) | 32.8 | 7.59 | 38.25 | 94 | 40-160 | |
| Perfluorodecanoic acid (PFDA) | 32.8 | 1.11 J | 27.06 | 79 | 40-160 | |
| Perfluoroundecanoic acid (PFUnA) | 32.8 | 0.60 U | 28.40 | 87 | 40-160 | |
| Perfluorododecanoic acid (PFDoA) | 32.8 | 0.38 U | 27.20 | 83 | 40-160 | |
| Perfluorotridecanoic acid (PFTriA) | 32.8 | 0.35 U | 28.84 | 88 | 40-160 | |
| Perfluorotetradecanoic acid (PFTeA) | 32.8 | 0.49 U | 32.82 | 100 | 40-160 | |
| Perfluorobutanesulfonic acid (PFBS) | 29.0 | 13.5 | 42.74 | 101 | 40-160 | |
| Perfluorohexanesulfonic acid (PFHxS) | 29.8 | 6.73 | 38.05 | 105 | 40-160 | |
| Perfluoroheptanesulfonic Acid (PFHpS) | 31.2 | 0.72 J | 38.07 | 120 | 40-160 | |
| Perfluorooctanesulfonic acid (PFOS) | 30.4 | 42.4 | 67.21 | 82 | 40-160 | |
| Perfluorodecanesulfonic acid (PFDS) | 31.6 | 0.40 U | 26.77 | 85 | 40-160 | |
| Perfluorooctanesulfonamide (PFOSA) | 32.8 | 0.47 U | 24.38 | 74 | 40-160 | |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 32.8 | 0.65 U | 27.67 | 84 | 40-160 | |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 32.8 | 0.77 U | 26.42 | 81 | 40-160 | |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 31.1 | 3.00 J | 33.16 | 97 | 40-160 | |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 31.4 | 1.40 J | 24.31 | 73 | 40-160 | |
| 18O2 PFHxS | 38.7 | 36.0 | 36.11 | 93 | 50-150 | |
| 13C4 PFHpA | 41.0 | 37.4 | 39.11 | 95 | 50-150 | |
| 13C4 PFOA | 41.0 | 37.0 | 37.05 | 90 | 50-150 | |
| 13C4 PFOS | 39.2 | 30.9 | 30.04 | 77 | 50-150 | |
| 13C5 PFNA | 41.0 | 34.3 | 34.11 | 83 | 50-150 | |
| 13C4 PFBA | 41.0 | 28.4 | 31.64 | 77 | 25-150 | |

# Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: PA210312B18.d

Lab ID: 460-229152-2 MS  Client ID: HEX-MW12-030321 MS

| COMPOUND | SPIKE ADDED (ng/L) | SAMPLE CONCENTRATION (ng/L) | MS CONCENTRATION (ng/L) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| 13C2 PFHxA | 41.0 | 36.3 | 40.36 | 99 | 50-150 | |
| 13C2 PFDA | 41.0 | 29.9 | 28.09 | 69 | 50-150 | |
| 13C2 PFUnA | 41.0 | 27.0 | 27.06 | 66 | 50-150 | |
| 13C2 PFDoA | 41.0 | 26.4 | 27.30 | 67 | 50-150 | |
| 13C8 FOSA | 41.0 | 25.4 | 27.17 | 66 | 25-150 | |
| 13C5 PFPeA | 41.0 | 32.8 | 36.41 | 89 | 25-150 | |
| 13C2 PFTeDA | 41.0 | 27.6 | 28.61 | 70 | 50-150 | |
| d3-NMeFOSAA | 41.0 | 25.6 | 26.95 | 66 | 50-150 | |
| d5-NEtFOSAA | 41.0 | 25.9 | 26.90 | 66 | 50-150 | |
| M2-6:2 FTS | 38.9 | 37.6 | 39.59 | 102 | 25-150 | |
| M2-8:2 FTS | 39.2 | 31.7 | 29.62 | 75 | 25-150 | |
| 13C3 PFBS | 38.1 | 34.2 | 36.39 | 96 | 50-150 | |

# Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: PA210312B19.d

Lab ID: 460-229152-2 MSD  Client ID: HEX-MW12-030321 MSD

| COMPOUND | SPIKE ADDED (ng/L) | MSD CONCENTRATION (ng/L) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 33.2 | 51.63 | 97 | 1 | 30 | 40-160 | |
| Perfluoropentanoic acid (PFPeA) | 33.2 | 80.88 | 92 | 1 | 30 | 40-160 | |
| Perfluorohexanoic acid (PFHxA) | 33.2 | 63.55 | 101 | 4 | 20 | 40-160 | |
| Perfluoroheptanoic acid (PFHpA) | 33.2 | 62.68 | 105 | 0 | 20 | 40-160 | |
| Perfluorooctanoic acid (PFOA) | 33.2 | 68.38 | 106 | 3 | 20 | 40-160 | |
| Perfluorononanoic acid (PFNA) | 33.2 | 41.06 | 101 | 7 | 20 | 40-160 | |
| Perfluorodecanoic acid (PFDA) | 33.2 | 26.47 | 76 | 2 | 20 | 40-160 | |
| Perfluoroundecanoic acid (PFUnA) | 33.2 | 27.66 | 83 | 3 | 20 | 40-160 | |
| Perfluorododecanoic acid (PFDoA) | 33.2 | 28.71 | 87 | 5 | 20 | 40-160 | |
| Perfluorotridecanoic acid (PFTriA) | 33.2 | 30.74 | 93 | 6 | 20 | 40-160 | |
| Perfluorotetradecanoic acid (PFTeA) | 33.2 | 34.22 | 103 | 4 | 20 | 40-160 | |
| Perfluorobutanesulfonic acid (PFBS) | 29.3 | 44.13 | 104 | 3 | 20 | 40-160 | |
| Perfluorohexanesulfonic acid (PFHxS) | 30.2 | 38.46 | 105 | 1 | 20 | 40-160 | |
| Perfluoroheptanesulfonic Acid (PFHpS) | 31.6 | 37.49 | 116 | 2 | 30 | 40-160 | |
| Perfluorooctanesulfonic acid (PFOS) | 30.8 | 65.45 | 75 | 3 | 20 | 40-160 | |
| Perfluorodecanesulfonic acid (PFDS) | 32.0 | 26.15 | 82 | 2 | 30 | 40-160 | |
| Perfluorooctanesulfonamide (PFOSA) | 33.2 | 26.42 | 80 | 8 | 30 | 40-160 | |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 33.2 | 29.14 | 88 | 5 | 20 | 40-160 | |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 33.2 | 30.49 | 92 | 14 | 20 | 40-160 | |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 31.5 | 33.98 | 99 | 2 | 30 | 40-160 | |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 31.8 | 21.49 | 63 | 12 | 30 | 40-160 | |
| 18O2 PFHxS | 39.2 | 37.58 | 96 | | | 50-150 | |
| 13C4 PFHpA | 41.5 | 40.62 | 98 | | | 50-150 | |
| 13C4 PFOA | 41.5 | 38.34 | 92 | | | 50-150 | |
| 13C4 PFOS | 39.6 | 31.58 | 80 | | | 50-150 | |
| 13C5 PFNA | 41.5 | 32.61 | 79 | | | 50-150 | |
| 13C4 PFBA | 41.5 | 32.77 | 79 | | | 25-150 | |

# Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: PA210312B19.d

Lab ID: 460-229152-2 MSD  Client ID: HEX-MW12-030321 MSD

| COMPOUND | SPIKE ADDED (ng/L) | MSD CONCENTRATION (ng/L) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| 13C2 PFHxA | 41.5 | 41.64 | 100 | | | 50-150 | |
| 13C2 PFDA | 41.5 | 30.30 | 73 | | | 50-150 | |
| 13C2 PFUnA | 41.5 | 27.89 | 67 | | | 50-150 | |
| 13C2 PFDoA | 41.5 | 27.81 | 67 | | | 50-150 | |
| 13C8 FOSA | 41.5 | 27.74 | 67 | | | 25-150 | |
| 13C5 PFPeA | 41.5 | 37.19 | 90 | | | 25-150 | |
| 13C2 PFTeDA | 41.5 | 28.25 | 68 | | | 50-150 | |
| d3-NMeFOSAA | 41.5 | 29.06 | 70 | | | 50-150 | |
| d5-NEtFOSAA | 41.5 | 28.77 | 69 | | | 50-150 | |
| M2-6:2 FTS | 39.4 | 38.32 | 97 | | | 25-150 | |
| M2-8:2 FTS | 39.7 | 31.90 | 80 | | | 25-150 | |
| 13C3 PFBS | 38.6 | 37.01 | 96 | | | 50-150 | |

# Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Lab File ID: PA210312B05.d  Lab Sample ID: MB 200-164654/1-A

Matrix: Water  Date Extracted: 03/09/2021 13:56

Instrument ID: LC812  Date Analyzed: 03/12/2021 12:34

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| | LCS 200-164654/2-A | PA210312B06.d | 03/12/2021 12:42 |
| HEX-MW06-030321 | 460-229152-1 | PA210312B16.d | 03/12/2021 14:05 |
| HEX-MW12-030321 | 460-229152-2 | PA210312B17.d | 03/12/2021 14:13 |
| HEX-MW12-030321 MS | 460-229152-2 MS | PA210312B18.d | 03/12/2021 14:21 |
| HEX-MW12-030321 MSD | 460-229152-2 MSD | PA210312B19.d | 03/12/2021 14:30 |
| HEX-MWX-030321 | 460-229152-3 | PA210312B20.d | 03/12/2021 14:38 |
| HEX-EQUIPMENTBLANK-030321 | 460-229152-4 | PA210312B21.d | 03/12/2021 14:46 |

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Sample No.: ICIS 200-162365/11  Date Analyzed: 12/22/2020 13:13

Instrument ID: LC812  GC Column: C-18  ID: 4.6(mm)

Lab File ID (Standard): PA201222ICAL011.d  Heated Purge: (Y/N) N

Calibration ID: 44876

| | | 13PFOA | | | | | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | # | RT # | # | RT # |
| INITIAL CALIBRATION MID-POINT | | 889632 | 3.49 | | | | |
| UPPER LIMIT | | 1334448 | 3.69 | | | | |
| LOWER LIMIT | | 444816 | 3.29 | | | | |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| ICB 200-162365/14 | | 875786 | 3.49 | | | | |
| ICV 200-162365/15 | | 893380 | 3.49 | | | | |
| CCVL 200-164765/5 | | 1061534 | 3.48 | | | | |
| CCVIS 200-164765/9 | | 1226573 | 3.48 | | | | |

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-229152-1

SDG No.:

Sample No.: CCVIS 200-164765/9 Date Analyzed: 03/12/2021 11:11

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm)

Lab File ID (Standard): PA210312A09.d Heated Purge: (Y/N) N

Calibration ID: 44876

| | | 13PFOA | | | | | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | # | RT # | # | RT # |
| 12/24 HOUR STD | | 1226573 | 3.48 | | | | |
| UPPER LIMIT | | 1839860 | 3.68 | | | | |
| LOWER LIMIT | | 613287 | 3.28 | | | | |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| CCV 200-164776/1 | | 1052883 | 3.48 | | | | |
| MB 200-164654/1-A | | 953207 | 3.48 | | | | |
| LCS 200-164654/2-A | | 993750 | 3.47 | | | | |
| CCV 200-164776/14 | | 1035074 | 3.48 | | | | |
| 460-229152-1 | HEX-MW06-030321 | 966057 | 3.48 | | | | |
| 460-229152-2 | HEX-MW12-030321 | 1130849 | 3.48 | | | | |
| 460-229152-2 MS | HEX-MW12-030321 MS | 932748 | 3.48 | | | | |
| 460-229152-2 MSD | HEX-MW12-030321 MSD | 925076 | 3.48 | | | | |
| 460-229152-3 | HEX-MWX-030321 | 948056 | 3.48 | | | | |
| 460-229152-4 | HEX-EQUIPMENTBLANK-030321 | 968255 | 3.48 | | | | |
| CCV 200-164776/23 | | 1085156 | 3.48 | | | | |

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID: HEX-MW06-030321  Lab Sample ID: 460-229152-1

Matrix: Water  Lab File ID: PA210312B16.d

Analysis Method: 537 (modified)  Date Collected: 03/03/2021 08:55

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 307.8(mL)  Date Analyzed: 03/12/2021 14:05

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 375-22-4 | Perfluorobutanoic acid (PFBA) | 24.7 | | 4.06 | 0.92 |
| 2706-90-3 | Perfluoropentanoic acid (PFPeA) | 25.2 | | 1.62 | 0.88 |
| 307-24-4 | Perfluorohexanoic acid (PFHxA) | 16.8 | | 1.62 | 0.67 |
| 375-85-9 | Perfluoroheptanoic acid (PFHpA) | 10.9 | | 1.62 | 0.37 |
| 335-67-1 | Perfluorooctanoic acid (PFOA) | 16.7 | B | 1.62 | 0.80 |
| 375-95-1 | Perfluorononanoic acid (PFNA) | 4.17 | | 1.62 | 0.47 |
| 335-76-2 | Perfluorodecanoic acid (PFDA) | 5.76 | | 1.62 | 0.37 |
| 2058-94-8 | Perfluoroundecanoic acid (PFUnA) | 0.59 | U | 1.62 | 0.59 |
| 307-55-1 | Perfluorododecanoic acid (PFDoA) | 0.37 | U | 1.62 | 0.37 |
| 72629-94-8 | Perfluorotridecanoic acid (PFTriA) | 0.35 | U | 1.62 | 0.35 |
| 376-06-7 | Perfluorotetradecanoic acid (PFTeA) | 0.48 | U | 1.62 | 0.48 |
| 375-73-5 | Perfluorobutanesulfonic acid (PFBS) | 31.6 | | 1.62 | 0.51 |
| 355-46-4 | Perfluorohexanesulfonic acid (PFHxS) | 2.57 | | 1.62 | 0.54 |
| 375-92-8 | Perfluoroheptanesulfonic Acid (PFHpS) | 0.32 | U | 1.62 | 0.32 |
| 1763-23-1 | Perfluorooctanesulfonic acid (PFOS) | 40.8 | | 1.62 | 0.71 |
| 335-77-3 | Perfluorodecanesulfonic acid (PFDS) | 0.39 | U | 1.62 | 0.39 |
| 754-91-6 | Perfluorooctanesulfonamide (PFOSA) | 0.46 | U | 1.62 | 0.46 |
| 2355-31-9 | N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.64 | U | 4.06 | 0.64 |
| 2991-50-6 | N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 0.76 | U | 4.06 | 0.76 |
| 27619-97-2 | 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 0.58 | U | 4.06 | 0.58 |
| 39108-34-4 | 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 0.54 | U | 1.62 | 0.54 |

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID: HEX-MW06-030321  Lab Sample ID: 460-229152-1

Matrix: Water  Lab File ID: PA210312B16.d

Analysis Method: 537 (modified)  Date Collected: 03/03/2021 08:55

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 307.8(mL)  Date Analyzed: 03/12/2021 14:05

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| STL00994 | 18O2 PFHxS | 104 | | 50-150 |
| STL01892 | 13C4 PFHpA | 104 | | 50-150 |
| STL00990 | 13C4 PFOA | 104 | | 50-150 |
| STL00991 | 13C4 PFOS | 104 | | 50-150 |
| STL00995 | 13C5 PFNA | 106 | | 50-150 |
| STL00992 | 13C4 PFBA | 74 | | 25-150 |
| STL00993 | 13C2 PFHxA | 105 | | 50-150 |
| STL00996 | 13C2 PFDA | 95 | | 50-150 |
| STL00997 | 13C2 PFUnA | 89 | | 50-150 |
| STL00998 | 13C2 PFDoA | 81 | | 50-150 |
| STL01056 | 13C8 FOSA | 86 | | 25-150 |
| STL01893 | 13C5 PFPeA | 92 | | 25-150 |
| STL02116 | 13C2 PFTeDA | 77 | | 50-150 |
| STL02118 | d3-NMeFOSAA | 80 | | 50-150 |
| STL02117 | d5-NEtFOSAA | 84 | | 50-150 |
| STL02279 | M2-6:2 FTS | 120 | | 25-150 |
| STL02280 | M2-8:2 FTS | 114 | | 25-150 |
| STL02337 | 13C3 PFBS | 95 | | 50-150 |

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d
Lims ID: 460-229152-A-1-A
Client ID: HEX-MW06-030321
Sample Type: Client
Inject. Date: 12-Mar-2021 14:05:23 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-229152-A-1-A
Misc. Info.: 200-0045149-016 Plate: 1 Rack: 2
Operator ID: lc812tech Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 15-Mar-2021 17:45:51 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1650

First Level Reviewer: nampitakw Date: 15-Mar-2021 13:00:50
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.074 | 2.091 | -0.017 | 0.595 | 964063 | 0.9286 | | 74.3 | 5284 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | M |
| 212.90 > 169.00 | 2.074 | 2.091 | -0.017 | 1.000 | 588351 | 0.7613 | | | 86.0 | M |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.401 | 2.413 | -0.012 | 0.689 | 863688 | 1.15 | | 92.1 | 679 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | M |
| 262.90 > 219.00 | 2.401 | 2.413 | -0.012 | 1.000 | 593970 | 0.7764 | | | 9.2 | M |
| D 47 13C3 PFBS | | | | | | | | | | M |
| 301.90 > 80.00 | 2.414 | 2.426 | -0.012 | 0.693 | 1092878 | 1.11 | | 95.2 | 35919 | M |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | M |
| 298.90 > 80.00 | 2.414 | 2.439 | -0.025 | 1.000 | 1035023 | 0.9732 | Target=2.21 | | 68.6 | M |
| 298.90 > 99.00 | 2.414 | 2.439 | -0.025 | 1.000 | 489470 | | 2.11(1.11-3.32) | | 60.3 | M |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.747 | 2.770 | -0.023 | 0.788 | 1035137 | 1.32 | | 105 | 2475 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | |
| 313.00 > 269.00 | 2.759 | 2.770 | -0.011 | 1.004 | 468623 | 0.5180 | Target=12.83 | | 12.6 | |
| 313.00 > 119.00 | 2.747 | 2.770 | -0.023 | 1.000 | 36888 | | 12.70(6.42-19.25) | | 35.0 | |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.123 | 3.132 | -0.009 | 1.000 | 71166 | 0.0790 | Target=4.15 | | 12.0 | M |
| 399.00 > 99.00 | 3.112 | 3.132 | -0.020 | 0.997 | 17469 | | 4.07(2.08-6.23) | | 12.0 | M |
| D 11 18O2 PFHxS | | | | | | | | | | M |
| 403.00 > 84.00 | 3.123 | 3.132 | -0.009 | 0.896 | 904023 | 1.23 | | 104 | 1796 | M |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.123 | 3.143 | -0.020 | 0.896 | 977855 | 1.30 | | 104 | 2840 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | M |
| 363.00 > 319.00 | 3.123 | 3.143 | -0.020 | 1.000 | 286742 | 0.3356 | Target=3.66 | | 9.7 | M |
| 363.00 > 169.00 | 3.123 | 3.143 | -0.020 | 1.000 | 80756 | | 3.55(1.83-5.49) | | 126 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | M |
| 449.00 > 80.00 | 3.466 | 3.483 | -0.017 | 0.913 | 6571 | 0.009294 | Target=5.95 | | 2.3 | M |
| 449.00 > 99.00 | 3.466 | 3.483 | -0.017 | 0.913 | 1725 | | 3.81(2.98-8.93) | | 1.8 | M |
| D 12 M2-6:2 FTS | | | | | | | | | | |
| 429.00 > 81.00 | 3.475 | 3.492 | -0.017 | 0.997 | 130751 | 1.43 | | 120 | 46.5 | |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | M |
| 427.00 > 407.00 | 3.457 | 3.492 | -0.035 | 0.995 | 580 | 0.004736 | | | 10.3 | M |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.484 | 3.501 | -0.017 | 1.000 | 990926 | 1.30 | | 104 | 2745 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.484 | 3.501 | -0.017 | | 966057 | 1.25 | | | 3716 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | M |
| 413.00 > 369.00 | 3.484 | 3.501 | -0.017 | 1.000 | 442075 | 0.5145 | Target=2.58 | | 32.7 | M |
| 413.00 > 169.00 | 3.484 | 3.501 | -0.017 | 1.000 | 175161 | | 2.52(1.29-3.87) | | 290 | M |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.798 | 3.814 | -0.016 | 1.000 | 755448 | 1.25 | Target=5.65 | | 179 | M |
| 499.00 > 99.00 | 3.798 | 3.814 | -0.016 | 1.000 | 106295 | | 7.11(2.82-8.47) | | 141 | M |
| D 18 13C4 PFOS | | | | | | | | | | M |
| 503.00 > 80.00 | 3.798 | 3.814 | -0.016 | 1.090 | 625755 | 1.24 | | 104 | 302 | M |
| D 19 13C5 PFNA | | | | | | | | | | M |
| 468.00 > 423.00 | 3.818 | 3.824 | -0.006 | 1.096 | 891686 | 1.32 | | 106 | 2752 | M |
| 20 Perfluorononanoic acid | | | | | | | | | | M |
| 463.00 > 419.00 | 3.818 | 3.824 | -0.006 | 1.000 | 101356 | 0.1284 | Target=7.44 | | 10.2 | |
| 463.00 > 169.00 | 3.818 | 3.824 | -0.006 | 1.000 | 15610 | | 6.49(3.72-11.16) | | 70.6 | M |
| D 23 13C2 PFDA | | | | | | | | | | M |
| 515.00 > 470.00 | 4.108 | 4.126 | -0.018 | 1.179 | 764619 | 1.19 | | 94.8 | 2997 | M |
| 24 Perfluorodecanoic acid | | | | | | | | | | M |
| 513.00 > 469.00 | 4.108 | 4.126 | -0.018 | 1.000 | 111733 | 0.1773 | Target=9.29 | | 27.1 | M |
| 513.00 > 169.00 | 4.108 | 4.126 | -0.018 | 1.000 | 13433 | | 8.32(4.64-13.93) | | 68.1 | M |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.120 | 4.137 | -0.017 | 1.182 | 129294 | 1.37 | | 114 | 108 | |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | M |
| 527.00 > 507.00 | 4.131 | 4.137 | -0.006 | 1.003 | 89 | 0.001212 | | | 2.9 | M |
| D 21 13C8 FOSA | | | | | | | | | | M |
| 506.00 > 78.00 | 4.209 | 4.225 | -0.016 | 1.208 | 1018715 | 1.07 | | 86.0 | 2446 | M |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | M |
| 498.00 > 78.00 | 4.209 | 4.225 | -0.016 | 1.000 | 4024 | 0.004927 | | | 5.6 | M |
| D 27 d3-NMeFOSAA | | | | | | | | | | |
| 573.00 > 419.00 | 4.251 | 4.268 | -0.017 | 1.220 | 46590 | 1.00 | | 79.7 | 254 | |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | M |
| 570.00 > 419.00 | 4.263 | 4.268 | -0.005 | 1.003 | 43 | 0.001302 | | | 0.9 | M |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | RM |
| 599.00 > 80.00 | 4.364 | 4.358 | 0.006 | 1.149 | 283 | 0.000790 | Target=2.80 | | 0.7 | RM |
| 599.00 > 99.00 | 4.353 | 4.358 | -0.005 | 1.146 | 682 | | 0.41(1.40-4.19) | | 2.7 | M |
| D 30 13C2 PFUnA | | | | | | | | | | M |
| 565.00 > 520.00 | 4.375 | 4.391 | -0.016 | 1.256 | 587819 | 1.11 | | 88.8 | 3209 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 31 Perfluoroundecanoic acid | | | | | | | | | | RM |
| 563.00 > 519.00 | 4.387 | 4.391 | -0.004 | 1.003 | 3897 | 0.008126 | Target=8.12 | | 1.2 | RM |
| 563.00 > 169.00 | 4.375 | 4.391 | -0.016 | 1.000 | 198 | | 19.68(4.06-12.18) | | 2.0 | M |
| D 32 d5-NEtFOSAA | | | | | | | | | | |
| 589.00 > 419.00 | 4.387 | 4.402 | -0.015 | 1.259 | 47571 | 1.05 | | 84.1 | 324 | |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.430 | 4.402 | 0.028 | 1.010 | 229 | 0.006500 | | | 2.9 | M |
| D 36 13C2 PFDoA | | | | | | | | | | |
| 615.00 > 570.00 | 4.598 | 4.622 | -0.024 | 1.320 | 567259 | 1.01 | | 81.1 | 2308 | |
| 37 Perfluorododecanoic acid | | | | | | | | | | M |
| 613.00 > 569.00 | 4.598 | 4.622 | -0.024 | 1.000 | 3628 | 0.007269 | Target=6.91 | | 1.0 | M |
| 613.00 > 169.00 | 4.609 | 4.622 | -0.013 | 1.002 | 593 | | 6.12(3.45-10.36) | | 4.4 | M |
| 41 Perfluorotridecanoic acid | | | | | | | | | | RM |
| 663.00 > 619.00 | 4.808 | 4.822 | -0.014 | 1.046 | 1454 | 0.003590 | Target=4.39 | | 0.8 | RM |
| 663.00 > 169.00 | 4.808 | 4.822 | -0.014 | 1.046 | 74 | | 19.65(2.20-6.59) | | 2.1 | M |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 5.000 | 5.014 | -0.014 | 1.435 | 396996 | 0.9596 | | 76.8 | 2425 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | RM |
| 713.00 > 169.00 | 5.010 | 5.014 | -0.004 | 1.002 | 72 | 0.001222 | Target=1.06 | | 2.8 | RM |
| 713.00 > 219.00 | 4.981 | 5.014 | -0.033 | 0.996 | 241 | | 0.30(0.53-1.59) | | 7.0 | M |

## QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 15-Mar-2021 17:46:17 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d

Injection Date: 12-Mar-2021 14:05:23 Instrument ID: LC812

Lims ID: 460-229152-A-1-A Lab Sample ID: 200-229152-1

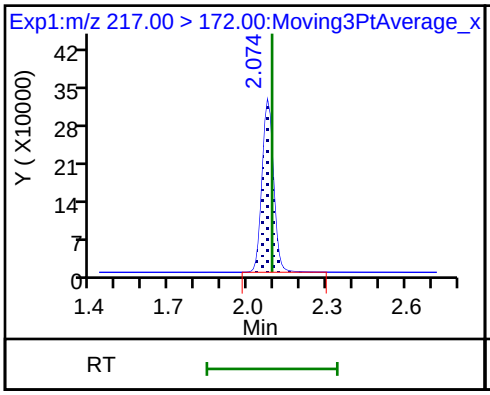
Client ID: HEX-MW06-030321

Operator ID: lc812tech ALS Bottle#: 16 Worklist Smp#: 16

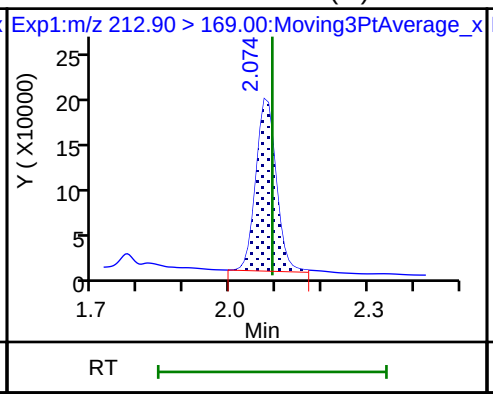
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

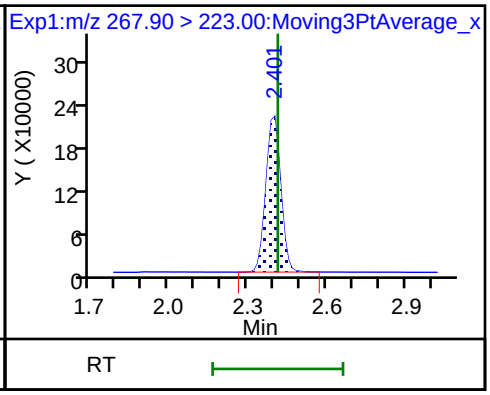
D 1 13C4 PFBA



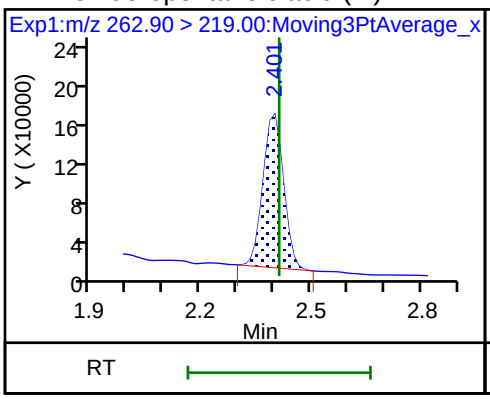

2 Perfluorobutanoic acid (M)



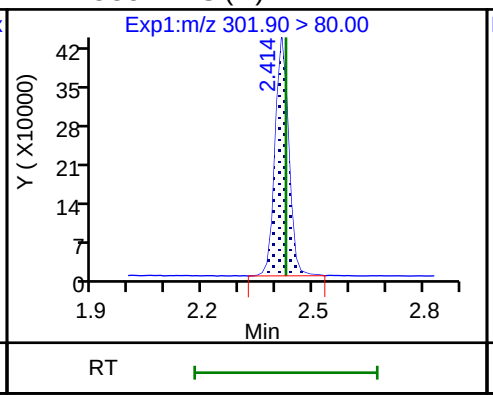

D 3 13C5 PFPeA



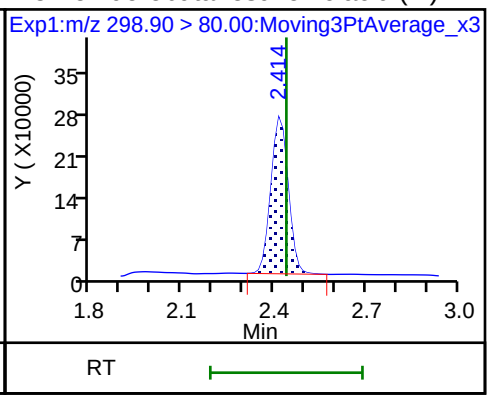

4 Perfluoropentanoic acid (M)



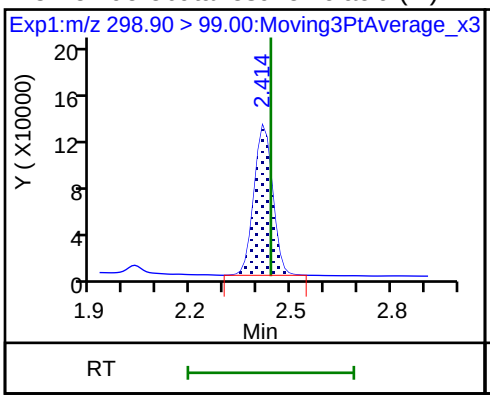

D 47 13C3 PFBS (M)



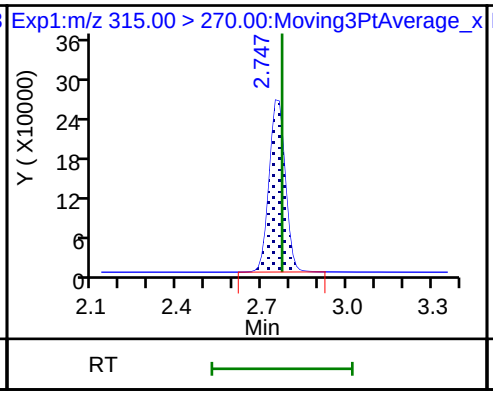

5 Perfluorobutanesulfonic acid (M)



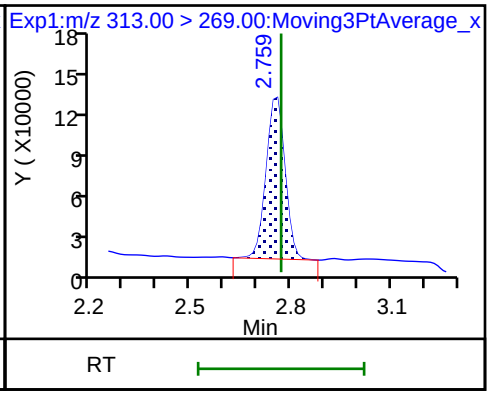

5 Perfluorobutanesulfonic acid (M)



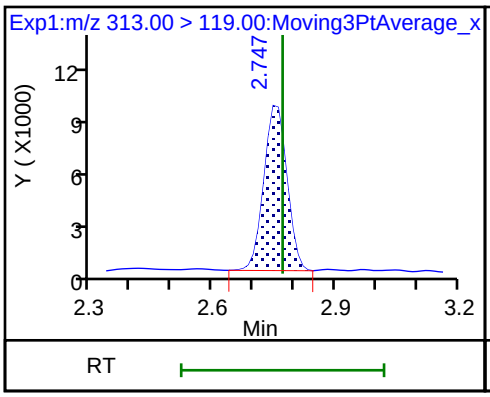

D 7 13C2 PFHxA



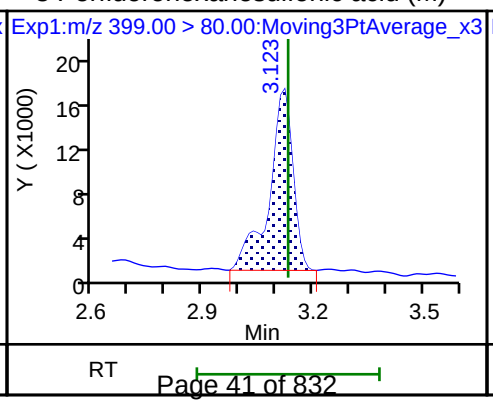

6 Perfluorohexanoic acid



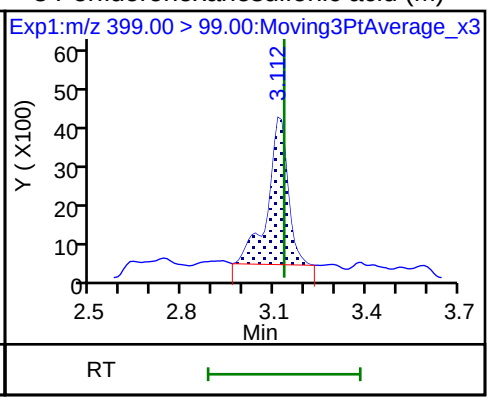

6 Perfluorohexanoic acid



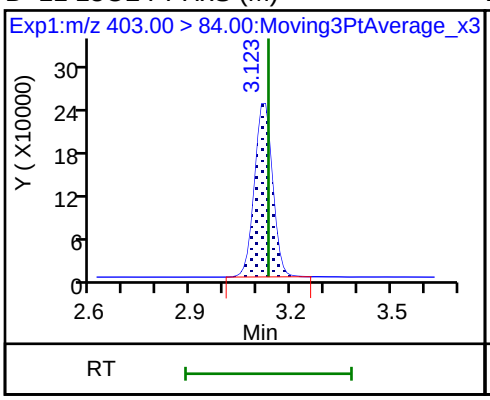

8 Perfluorohexanesulfonic acid (M)



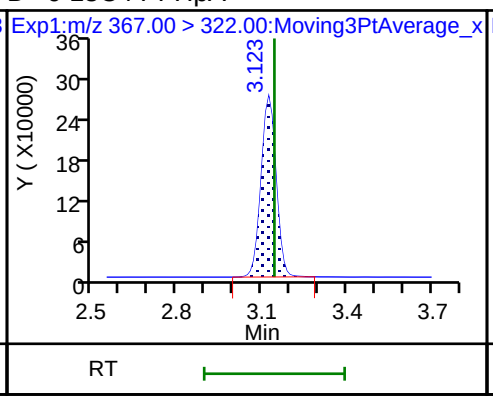

8 Perfluorohexanesulfonic acid (M)



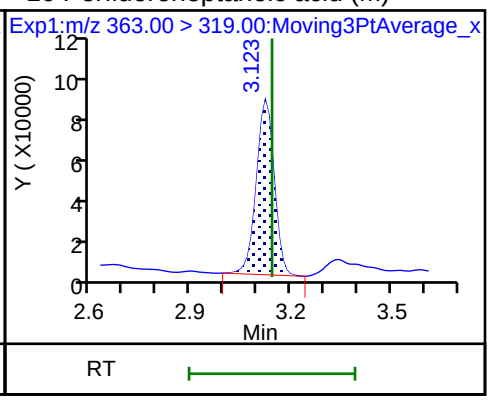
D 11 18O2 PFHxS (M)



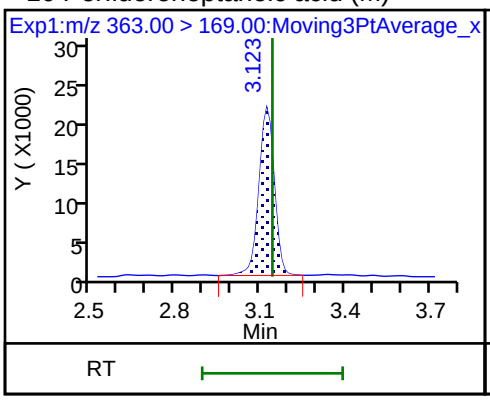

D 9 13C4 PFHpA



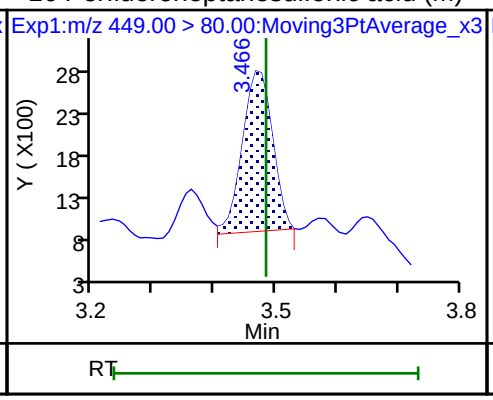

10 Perfluoroheptanoic acid (M)



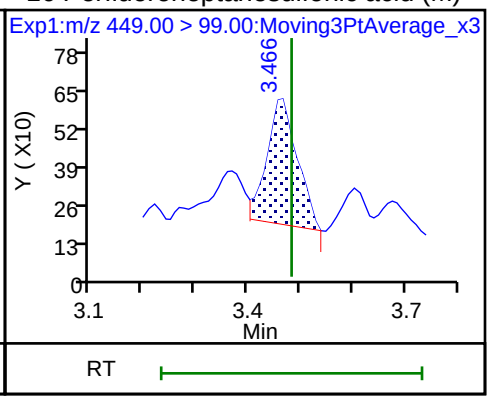

10 Perfluoroheptanoic acid (M)



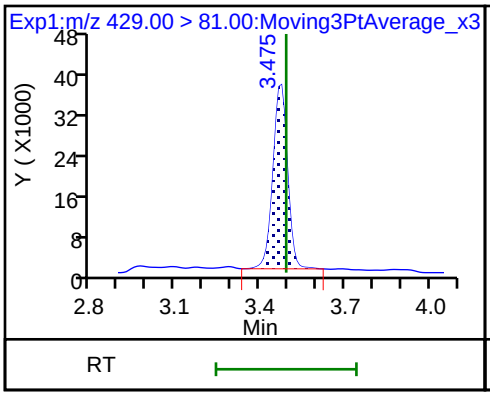

16 Perfluoroheptanesulfonic acid (M)



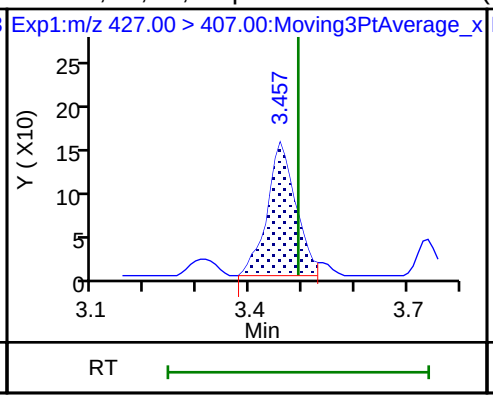

16 Perfluoroheptanesulfonic acid (M)



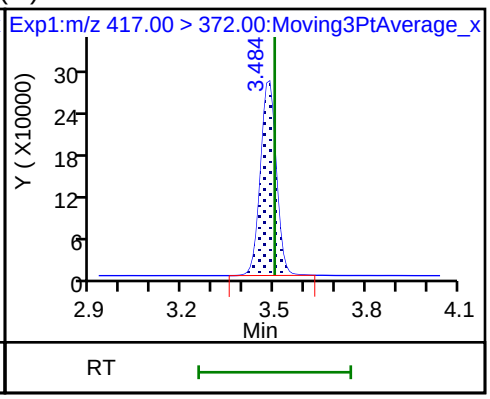

D 12 M2-6:2 FTS



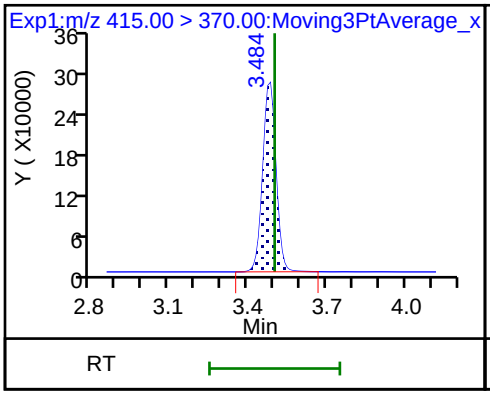

13 1H,1H,2H,2H-perfluorooctanesulfo (M)



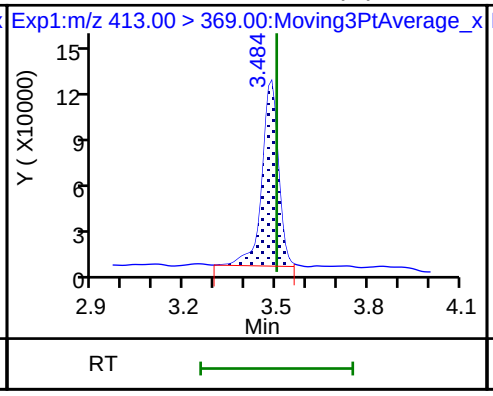

D 14 13C4 PFOA



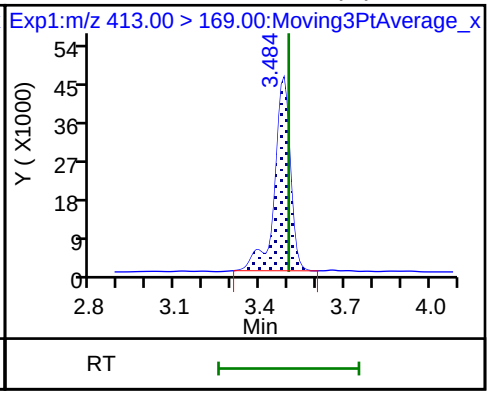

* 62 13C2 PFOA



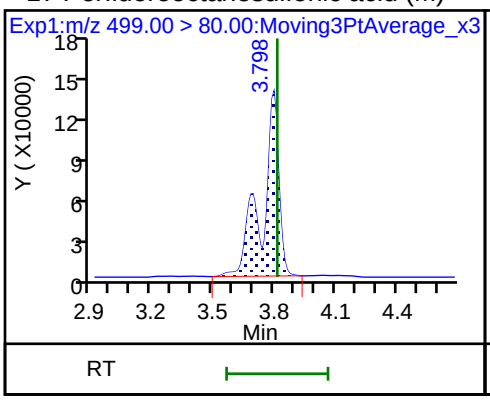

15 Perfluorooctanoic acid (M)



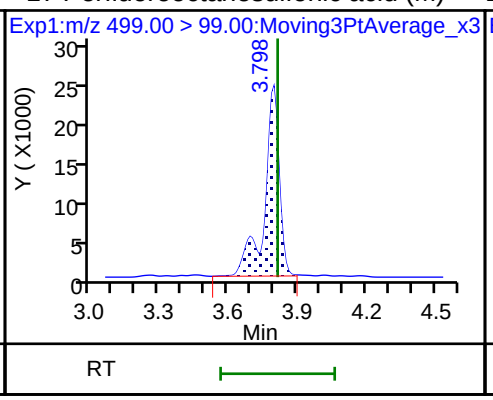

15 Perfluorooctanoic acid (M)



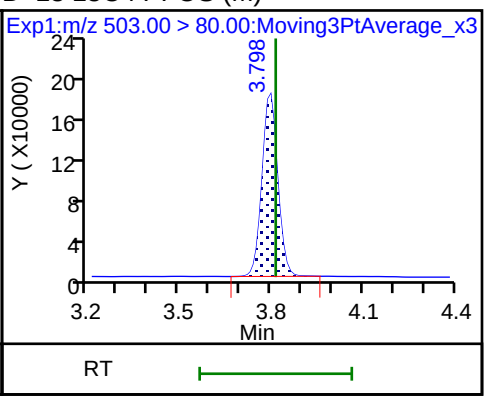
17 Perfluorooctanesulfonic acid (M)



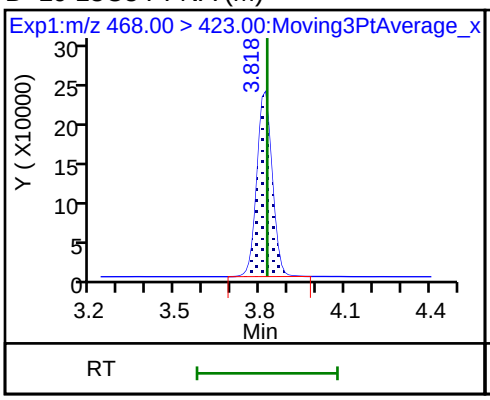

17 Perfluorooctanesulfonic acid (M)



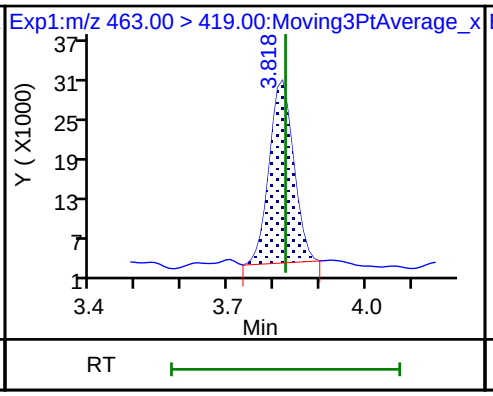

D 18 13C4 PFOS (M)



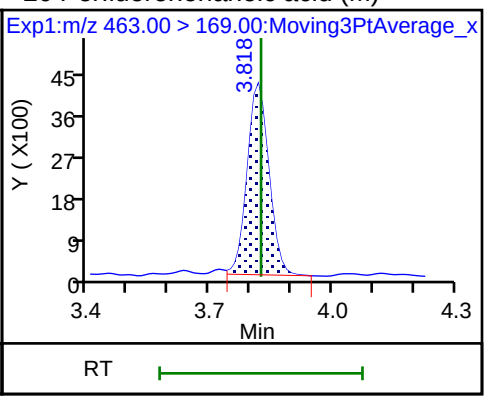

D 19 13C5 PFNA (M)



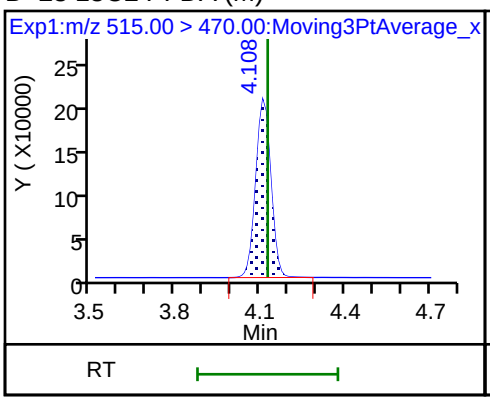

20 Perfluorononanoic acid



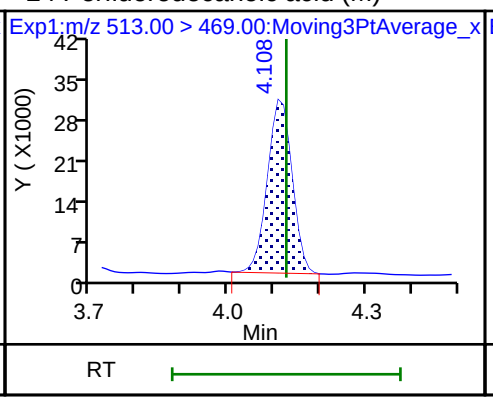

20 Perfluorononanoic acid (M)



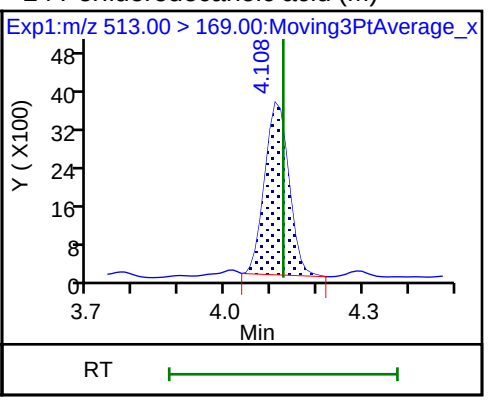

D 23 13C2 PFDA (M)



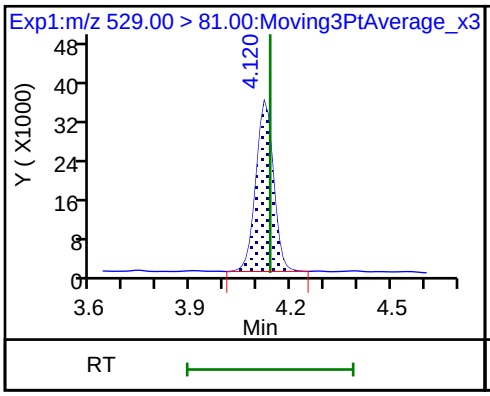

24 Perfluorodecanoic acid (M)



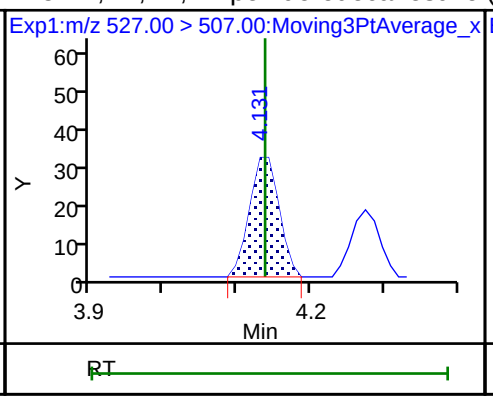

24 Perfluorodecanoic acid (M)



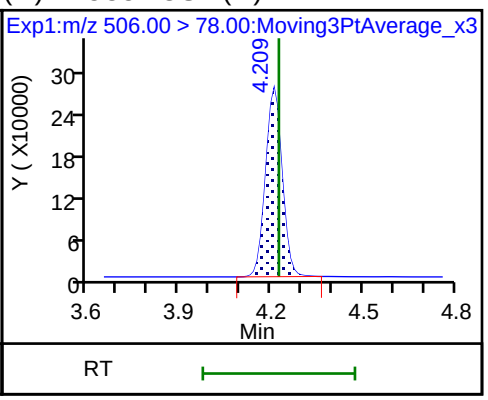

D 26 M2-8:2 FTS



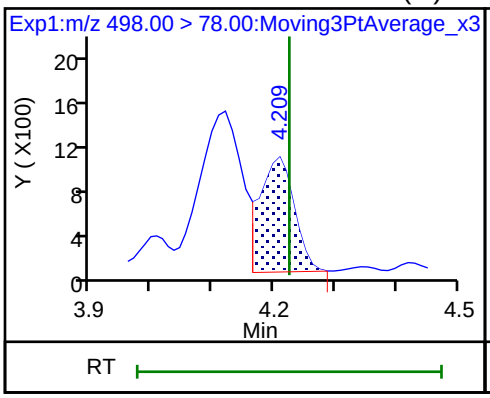

25 1H,1H,2H,2H-perfluorodecanesulfo (M)



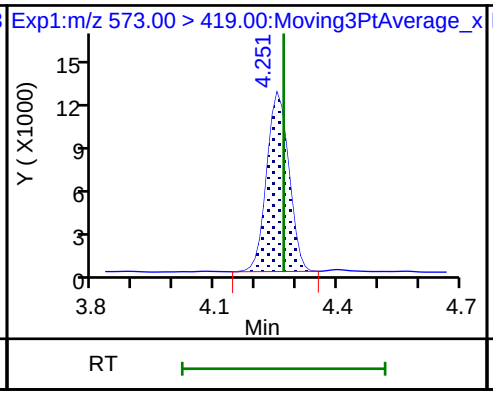

D 21 13C8 FOSA (M)



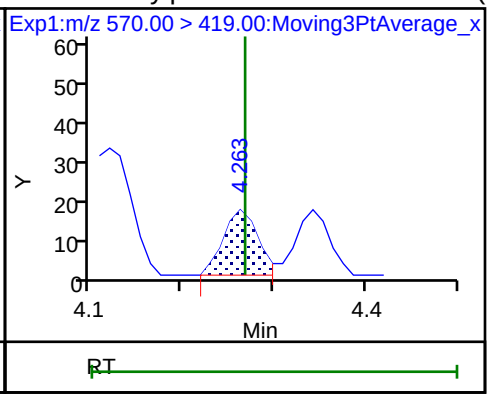
22 Perfluorooctanesulfonamide (M)



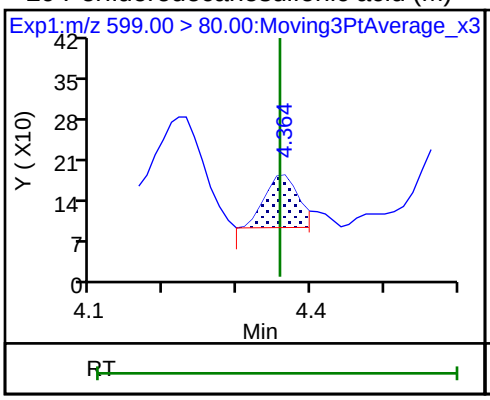

D 27 d3-NMeFOSAA



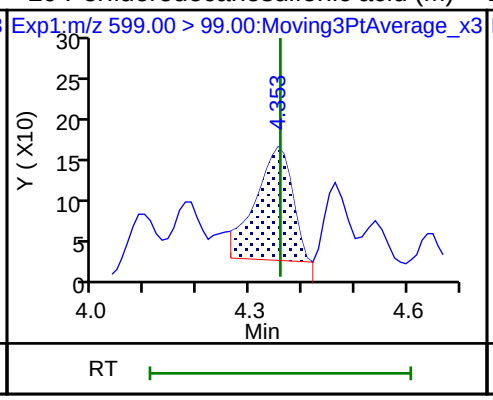

28 N-methylperfluorooctanesulfonami (M)



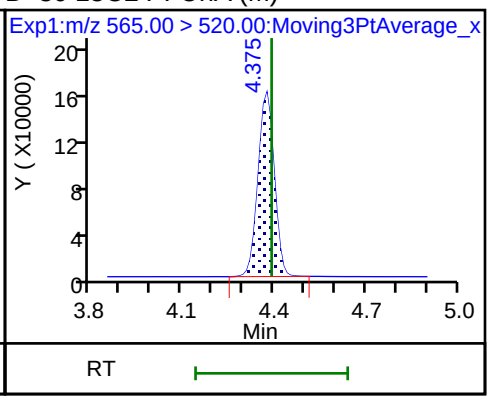

29 Perfluorodecanesulfonic acid (M)



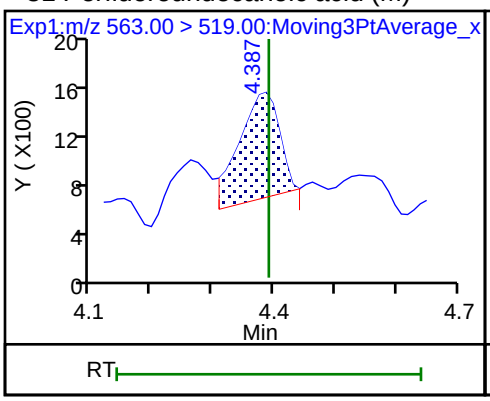

29 Perfluorodecanesulfonic acid (M)



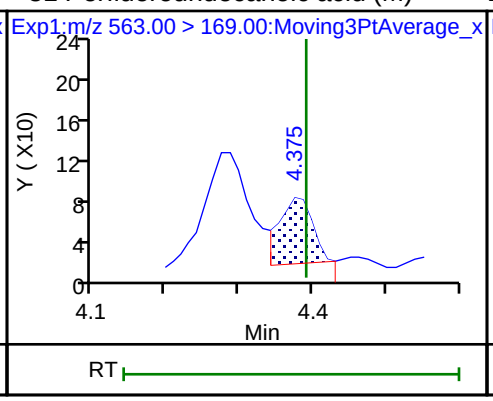

D 30 13C2 PFUnA (M)



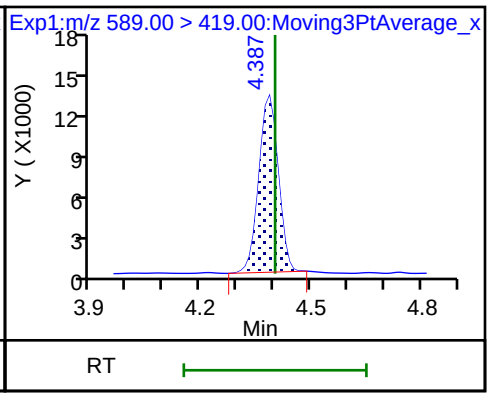

31 Perfluoroundecanoic acid (M)



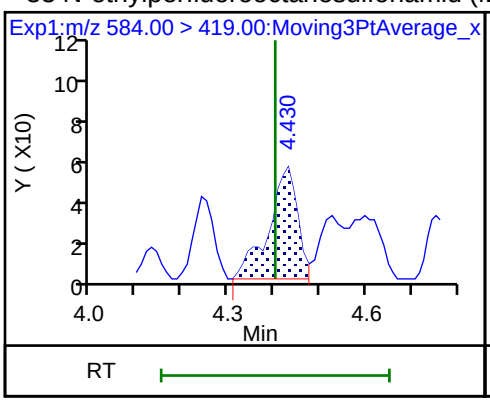

31 Perfluoroundecanoic acid (M)



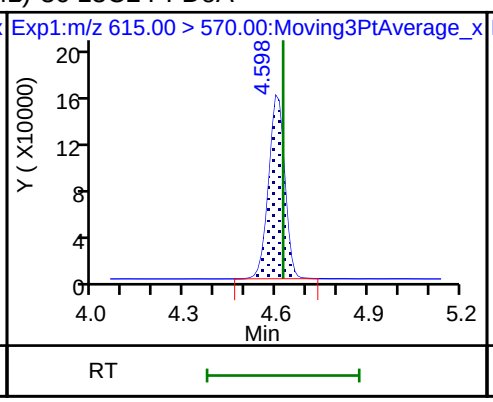

D 32 d5-NEtFOSAA



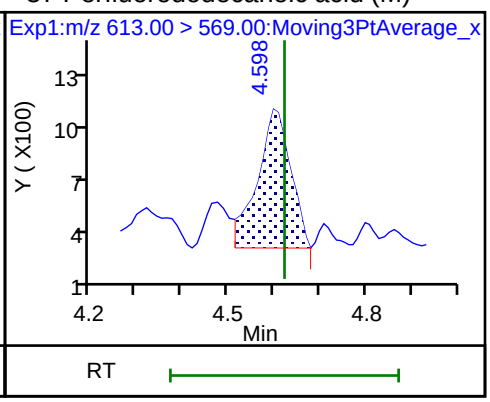

33 N-ethylperfluorooctanesulfonamid (M)



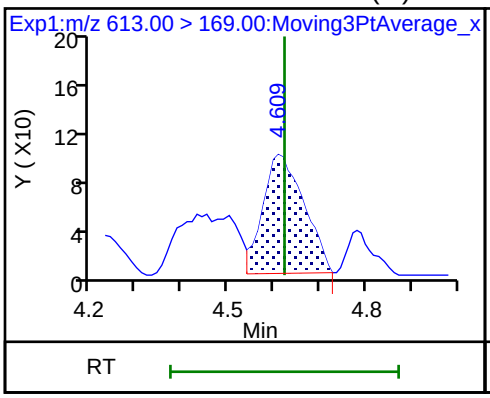

D 36 13C2 PFDoA



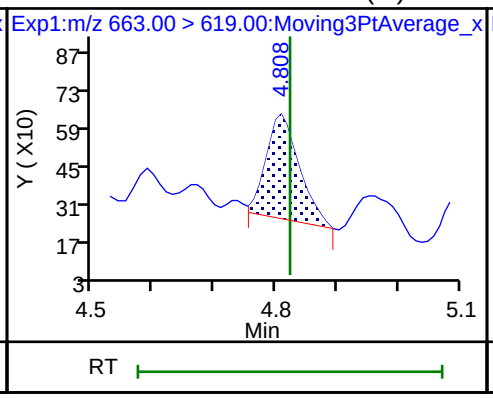

37 Perfluorododecanoic acid (M)



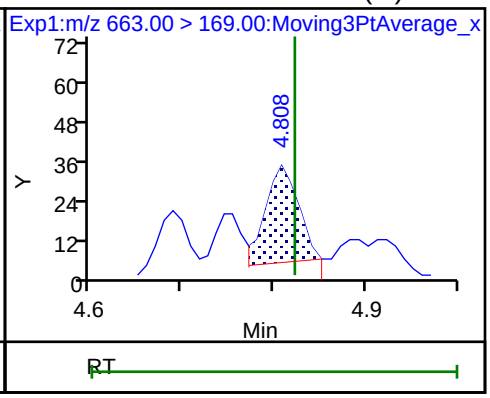
37 Perfluorododecanoic acid (M)



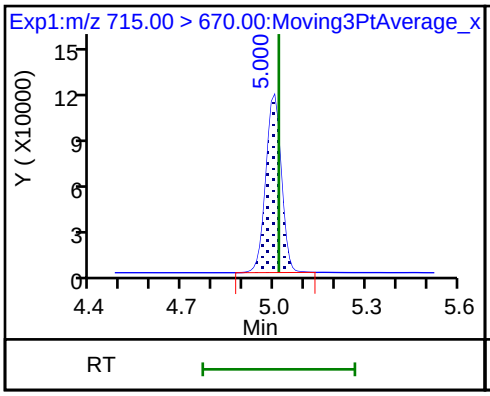

41 Perfluorotridecanoic acid (M)



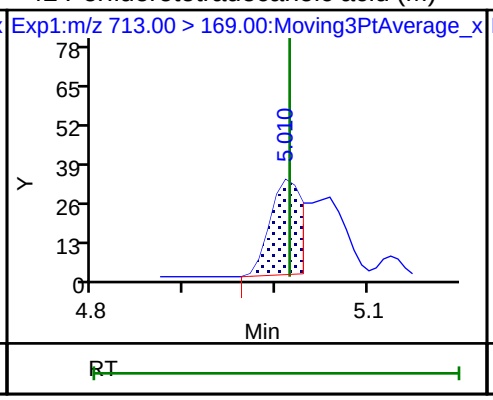

41 Perfluorotridecanoic acid (M)



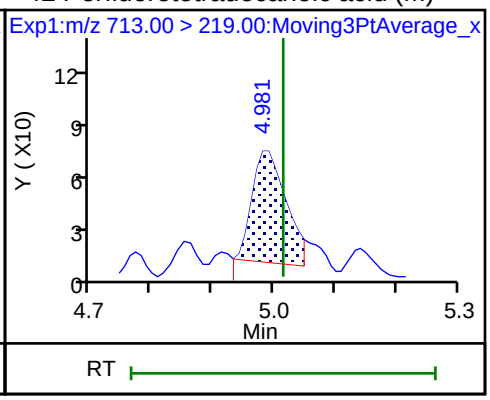

D 43 13C2 PFTeDA




42 Perfluorotetradecanoic acid (M)




42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

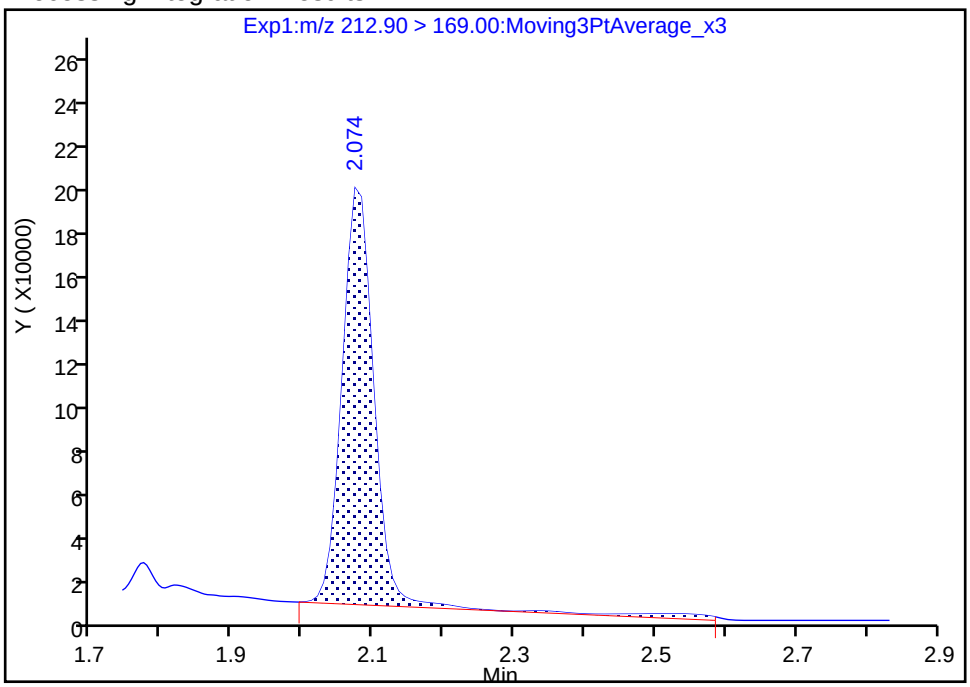
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

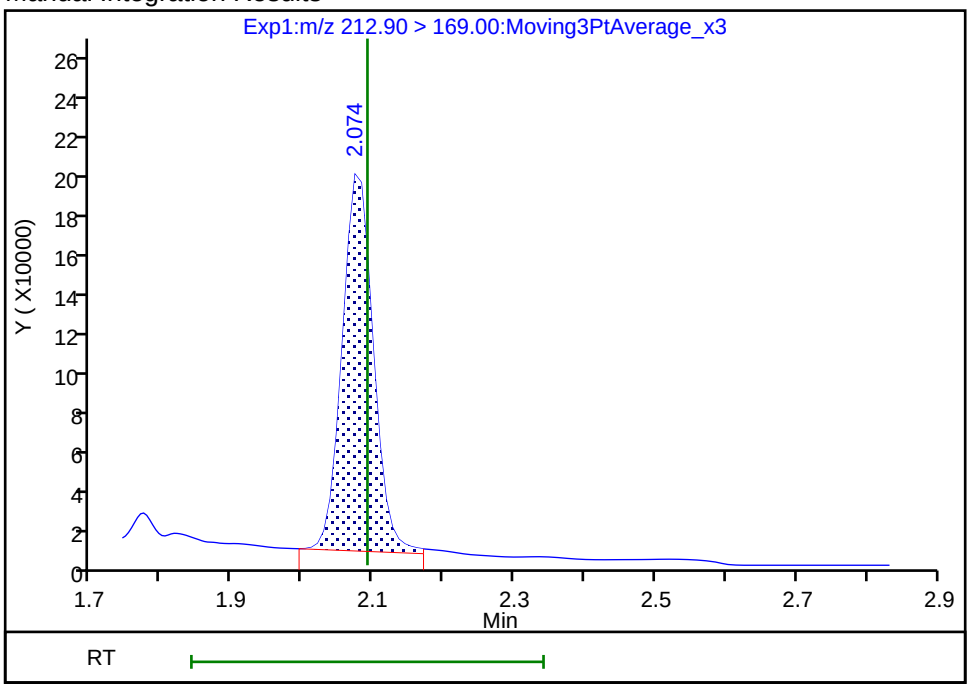
Processing Integration Results

RT: 2.07
Area: 615030
Amount: 0.795845
Amount Units: ng/ml




Manual Integration Results

RT: 2.07
Area: 588351
Amount: 0.761323
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:48:07

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

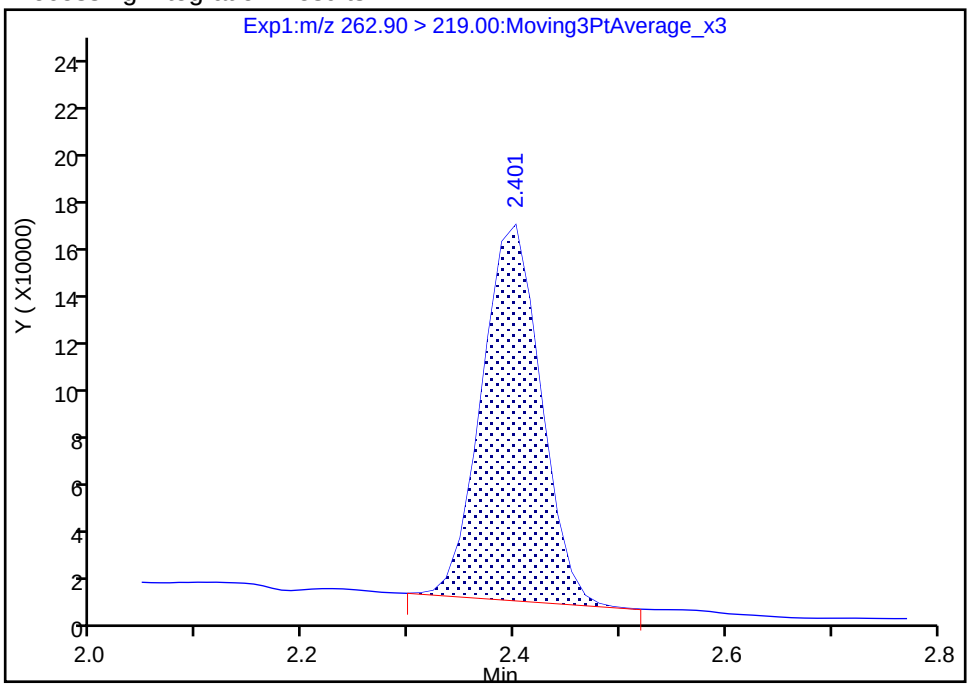
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| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

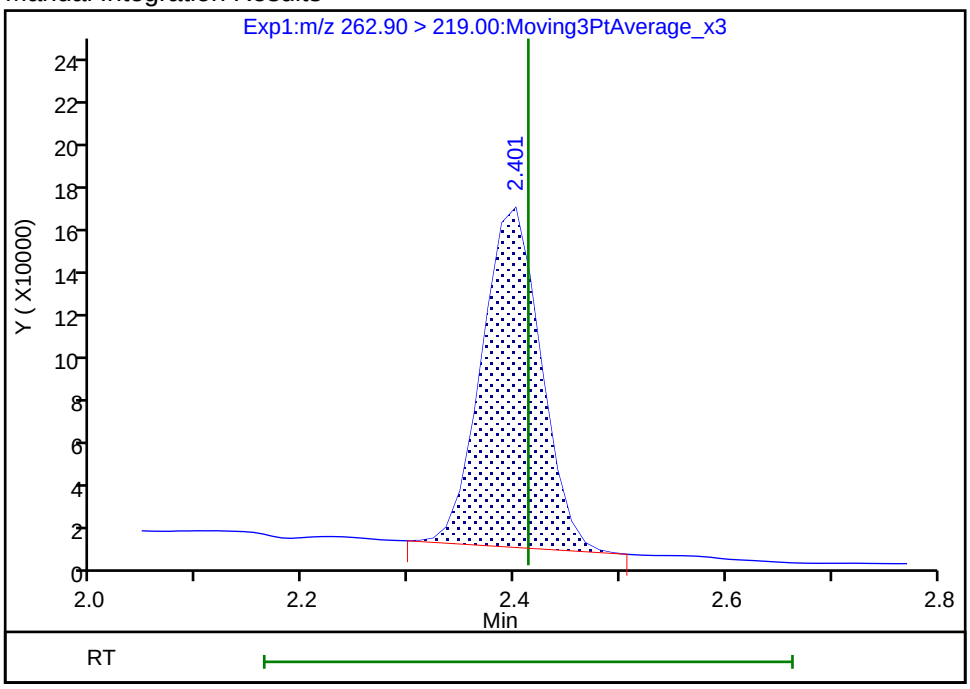
Processing Integration Results

RT: 2.40
Area: 595161
Amount: 0.777908
Amount Units: ng/ml




Manual Integration Results

RT: 2.40
Area: 593970
Amount: 0.776351
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:48:23

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

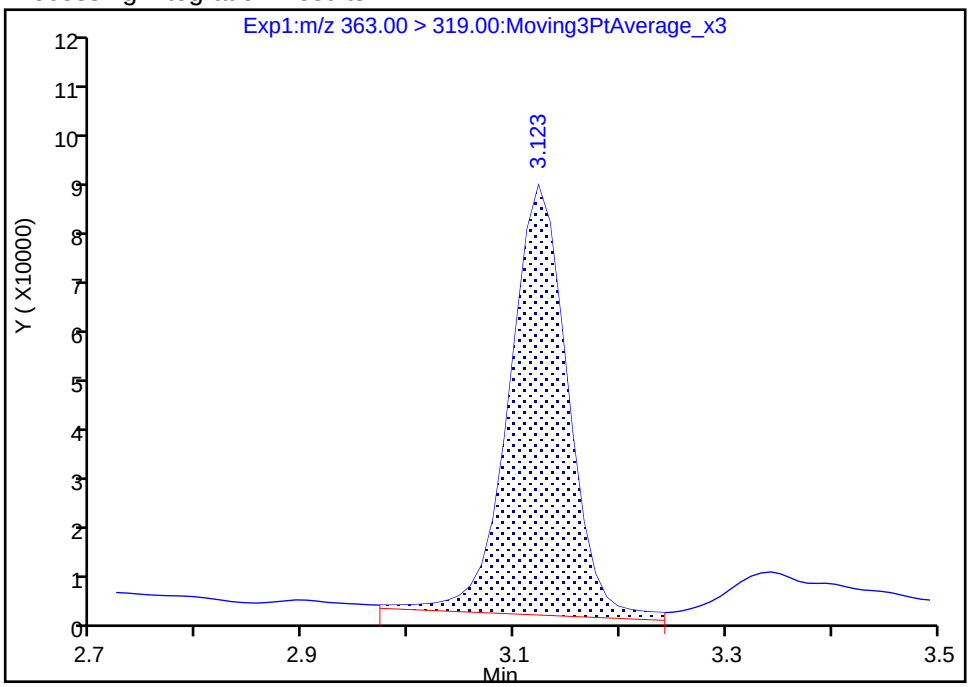
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

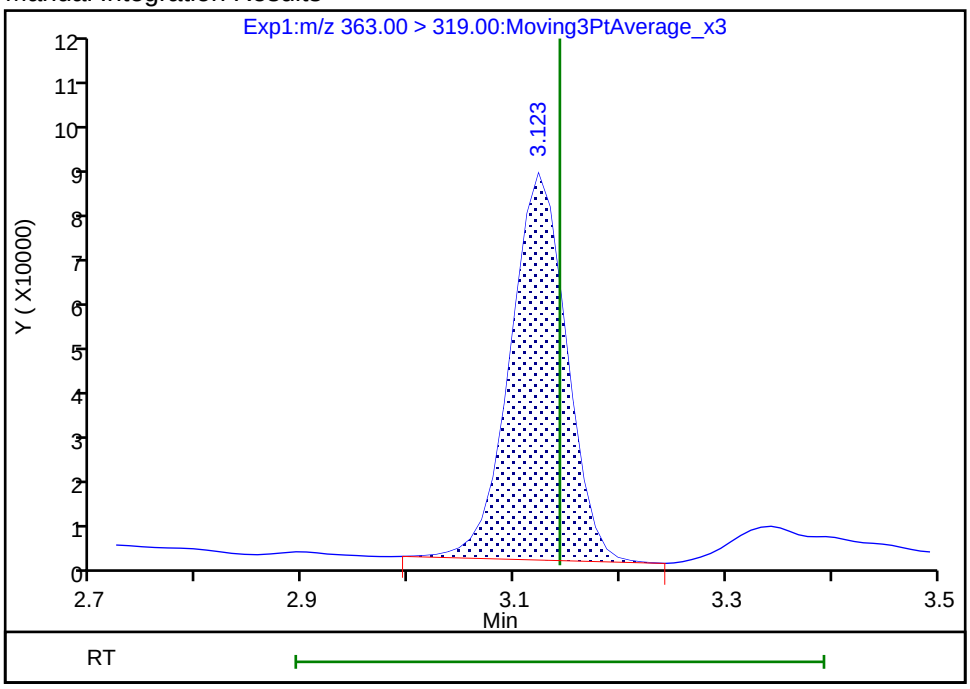
Processing Integration Results

RT: 3.12
Area: 303968
Amount: 0.355759
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 286742
Amount: 0.335598
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:53:58
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

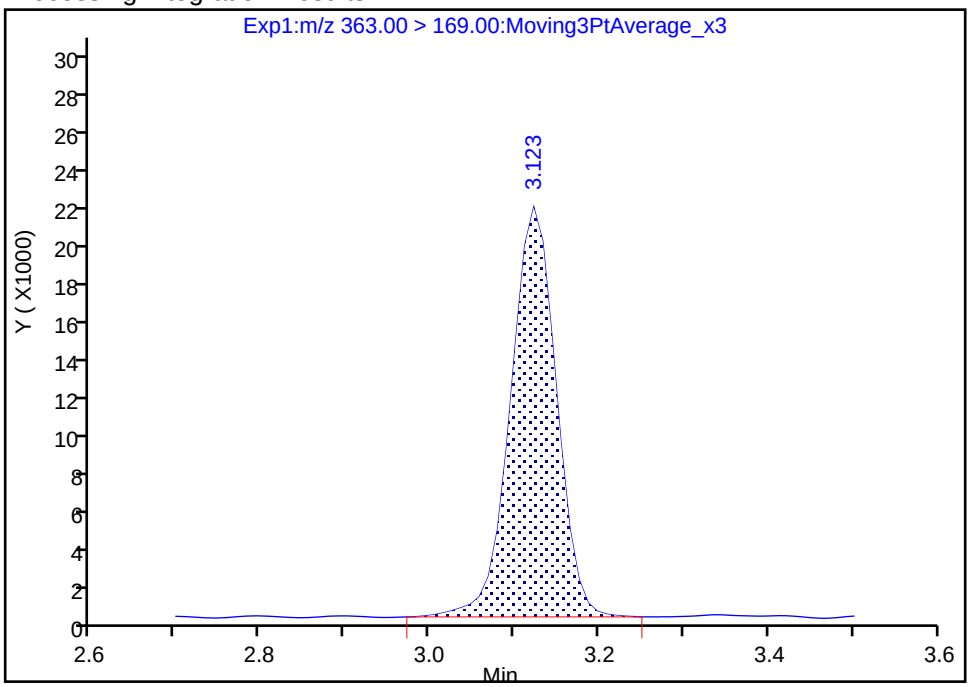
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

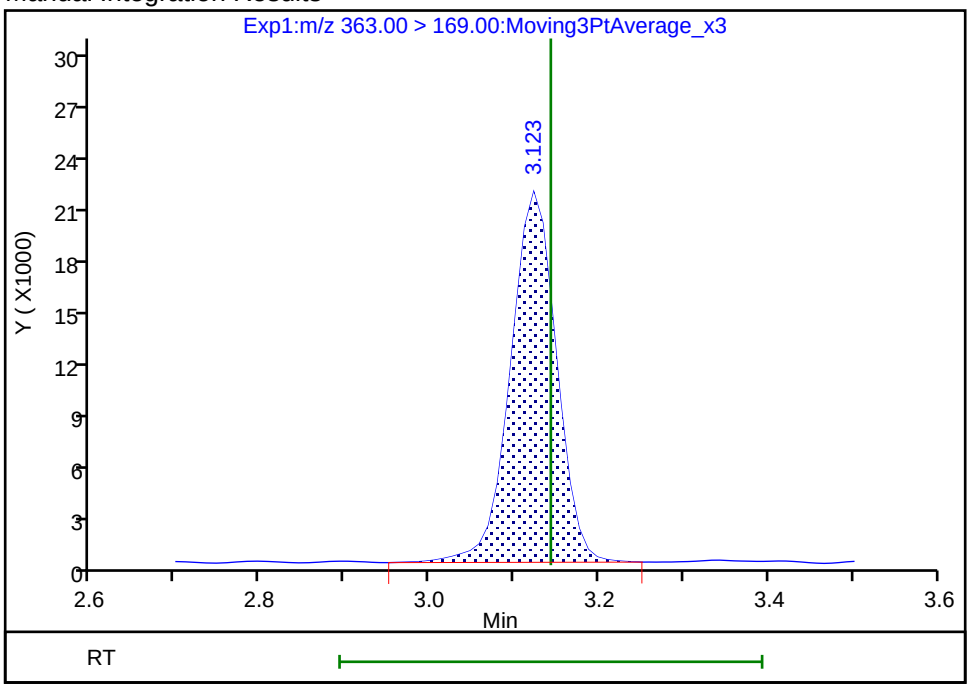
Processing Integration Results

RT: 3.12
Area: 80514
Amount: 0.355759
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 80756
Amount: 0.335598
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:54:13

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

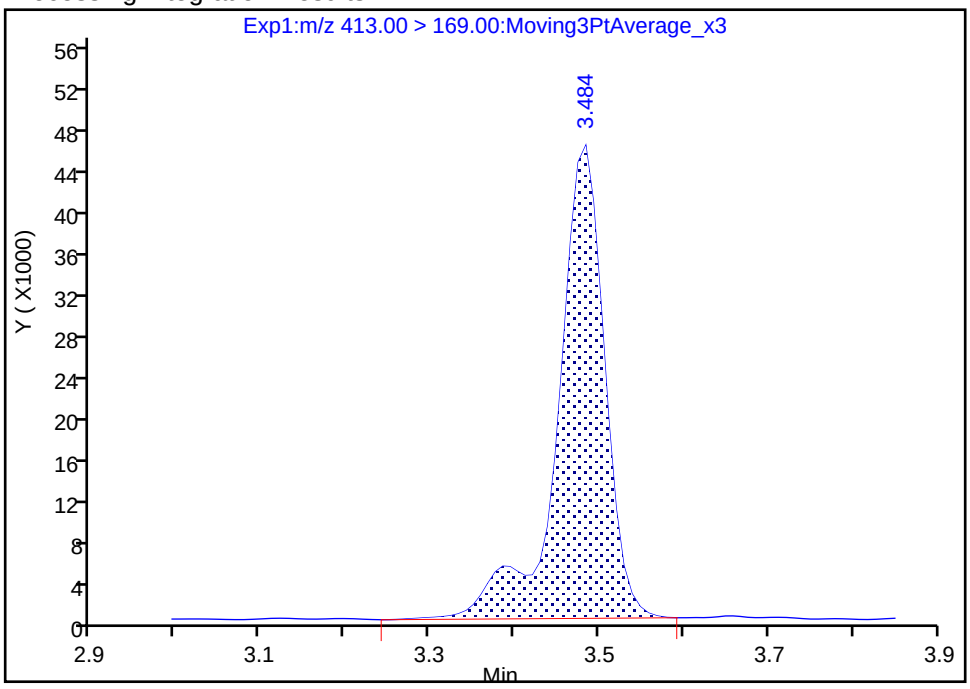
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

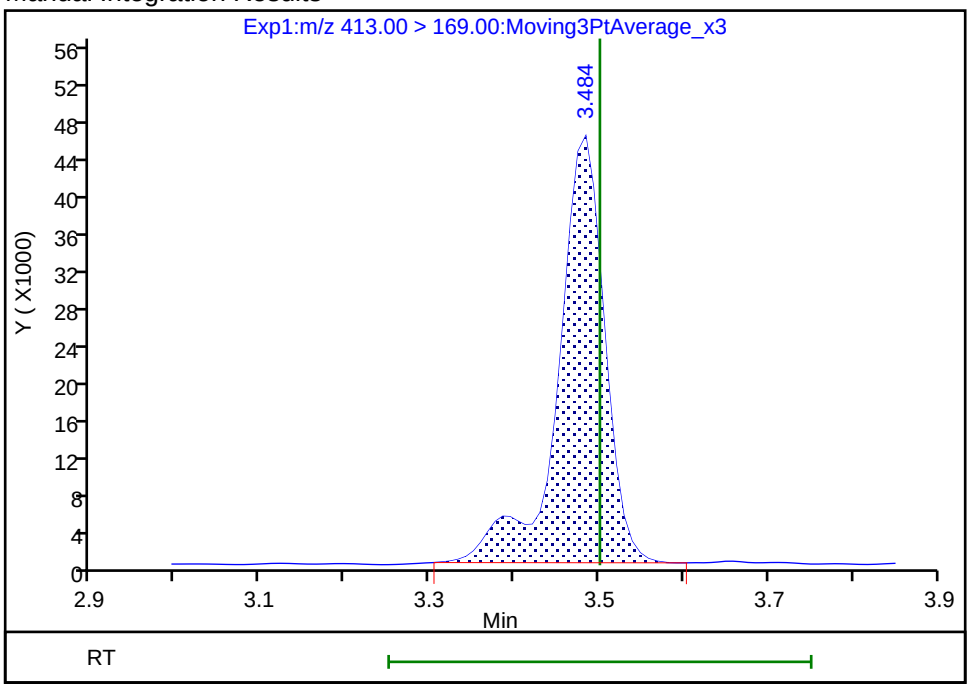
Processing Integration Results

RT: 3.48
Area: 177126
Amount: 0.524284
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 175161
Amount: 0.514460
Amount Units: ng/ml




Reviewer: deannd, 15-Mar-2021 17:18:03

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

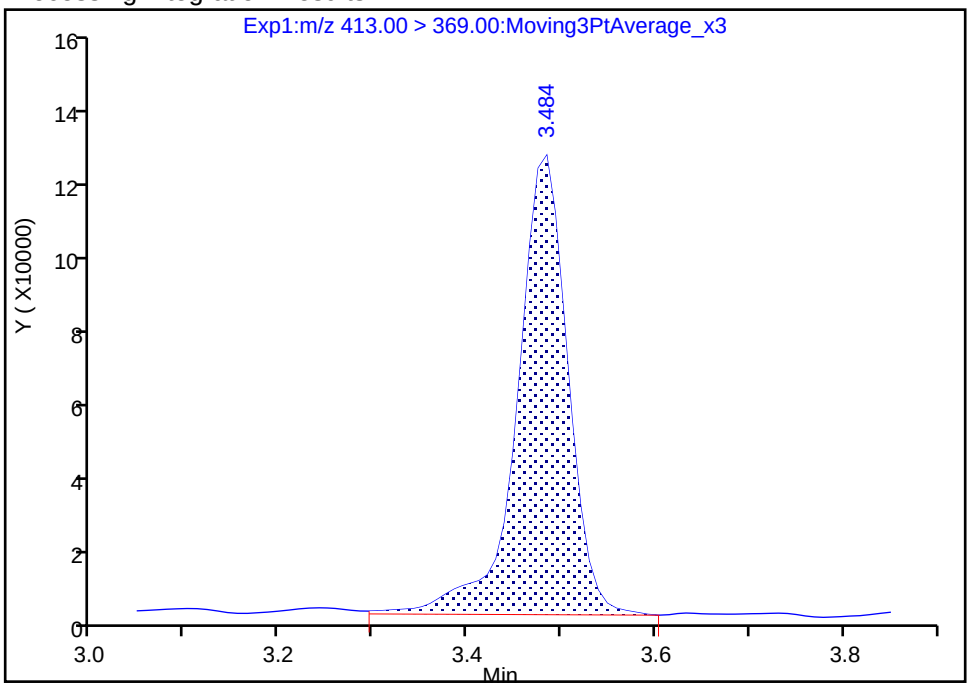
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

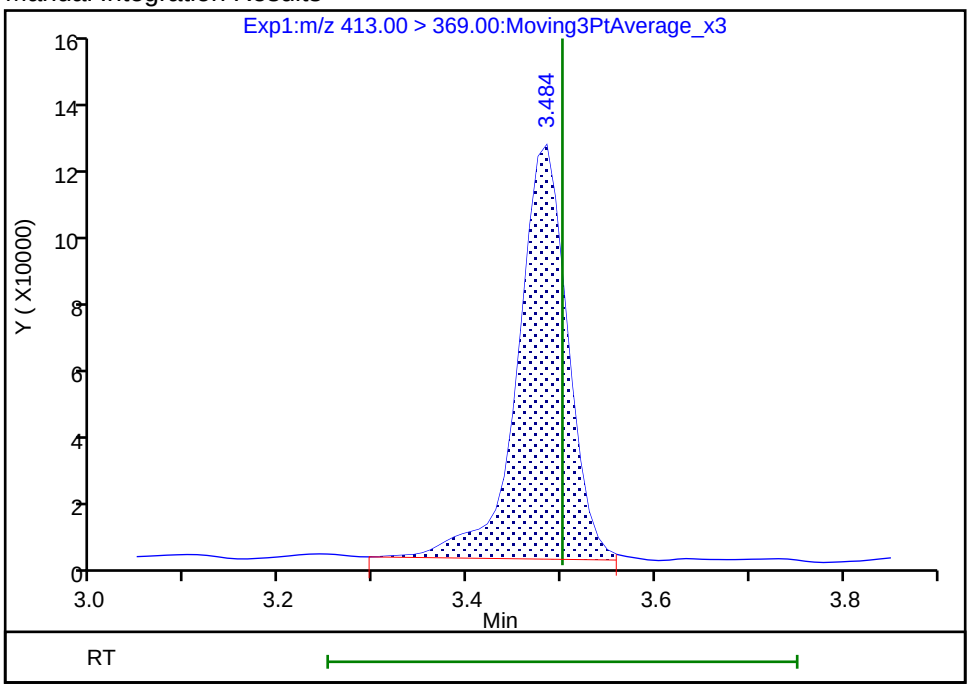
Processing Integration Results

RT: 3.48
Area: 450517
Amount: 0.524284
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 442075
Amount: 0.514460
Amount Units: ng/ml




Reviewer: deannd, 15-Mar-2021 17:18:10

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

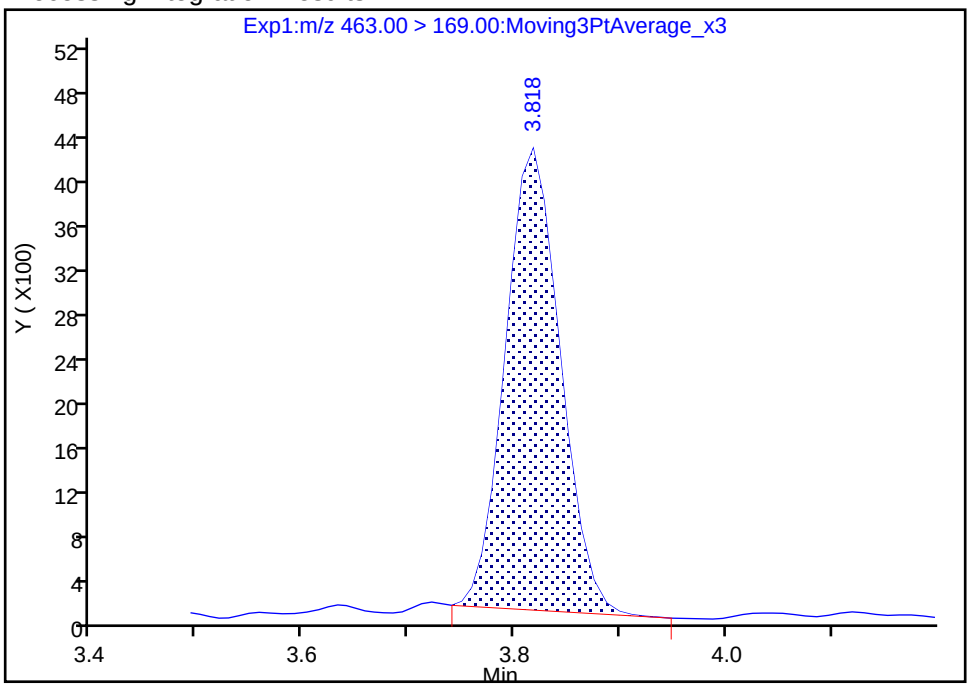
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

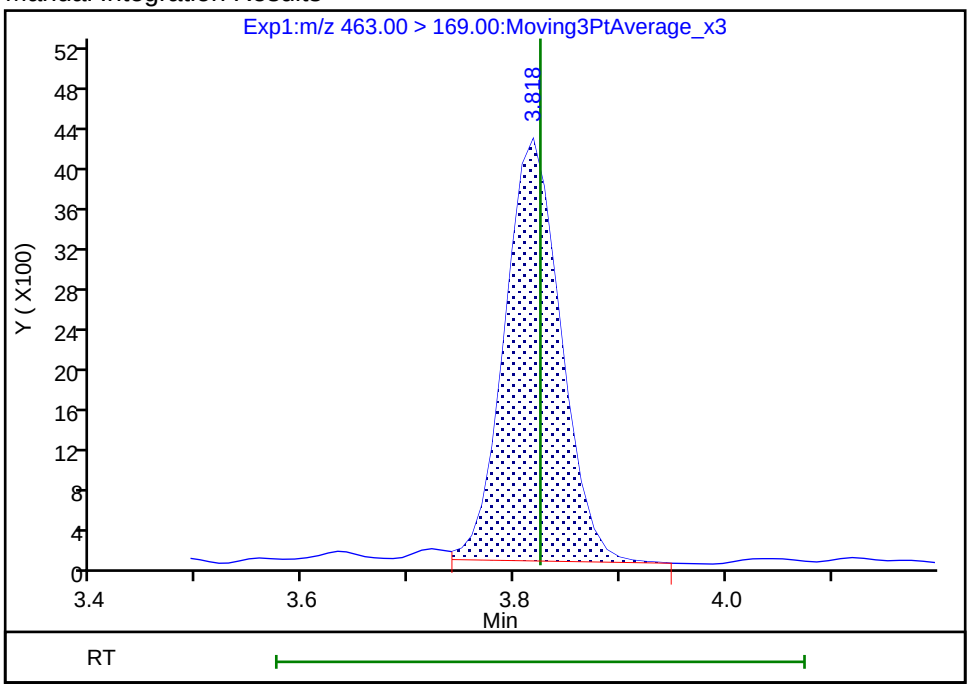
Processing Integration Results

RT: 3.82
Area: 15118
Amount: 0.128366
Amount Units: ng/ml




Manual Integration Results

RT: 3.82
Area: 15610
Amount: 0.128366
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:56:34

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

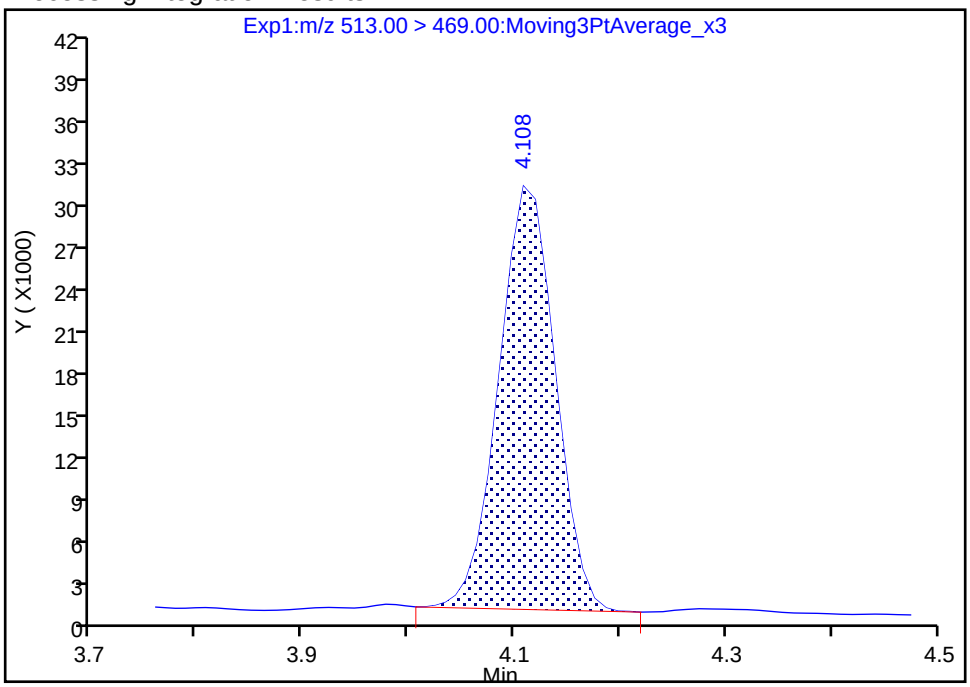
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

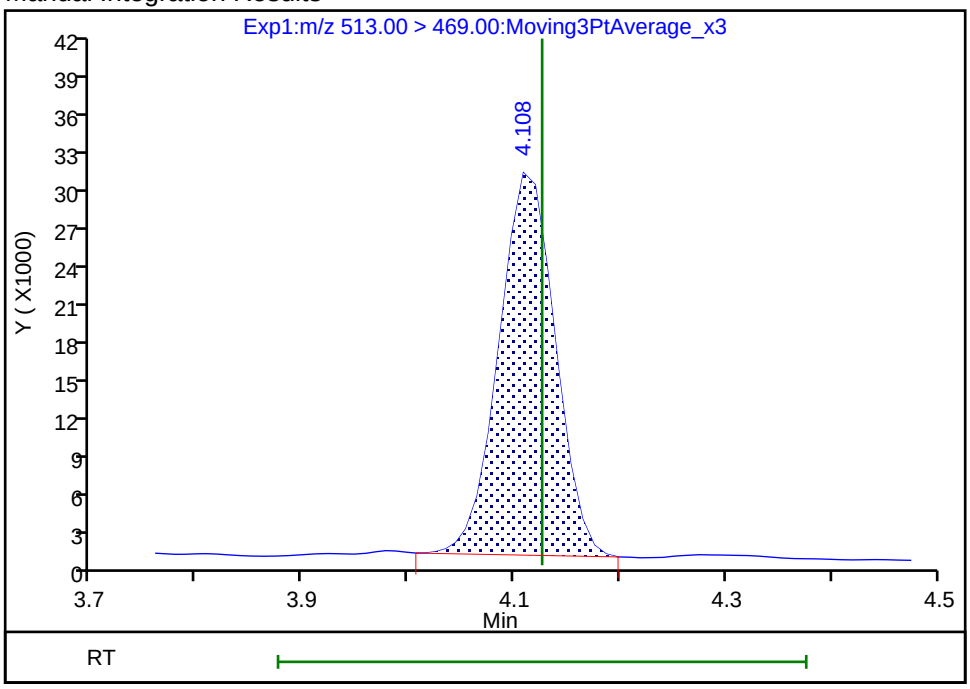
Processing Integration Results

RT: 4.11
Area: 111945
Amount: 0.177587
Amount Units: ng/ml




Manual Integration Results

RT: 4.11
Area: 111733
Amount: 0.177251
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:56:47

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

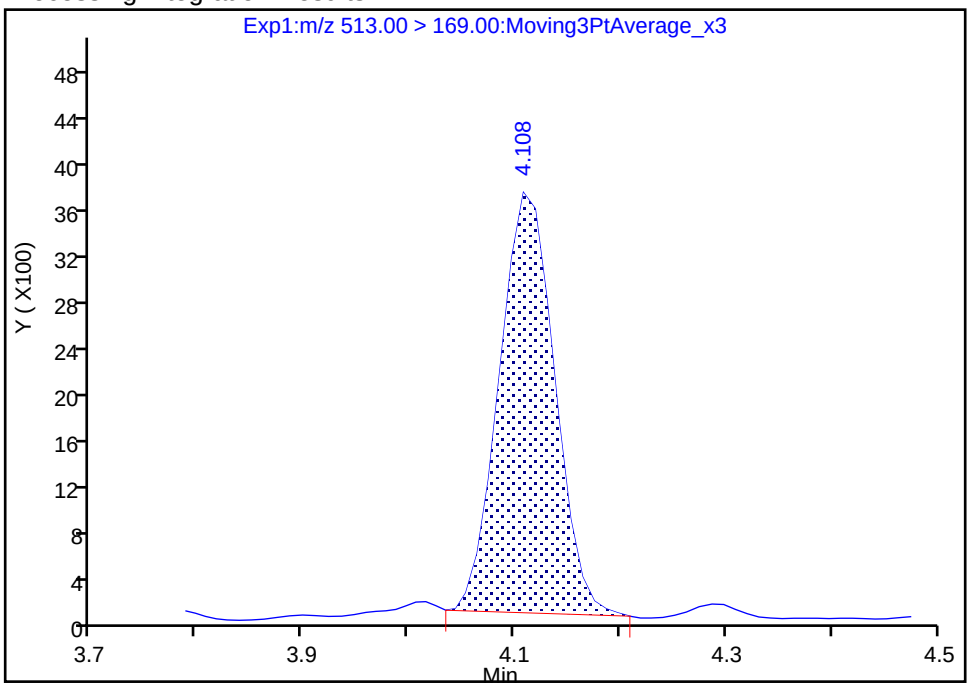
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

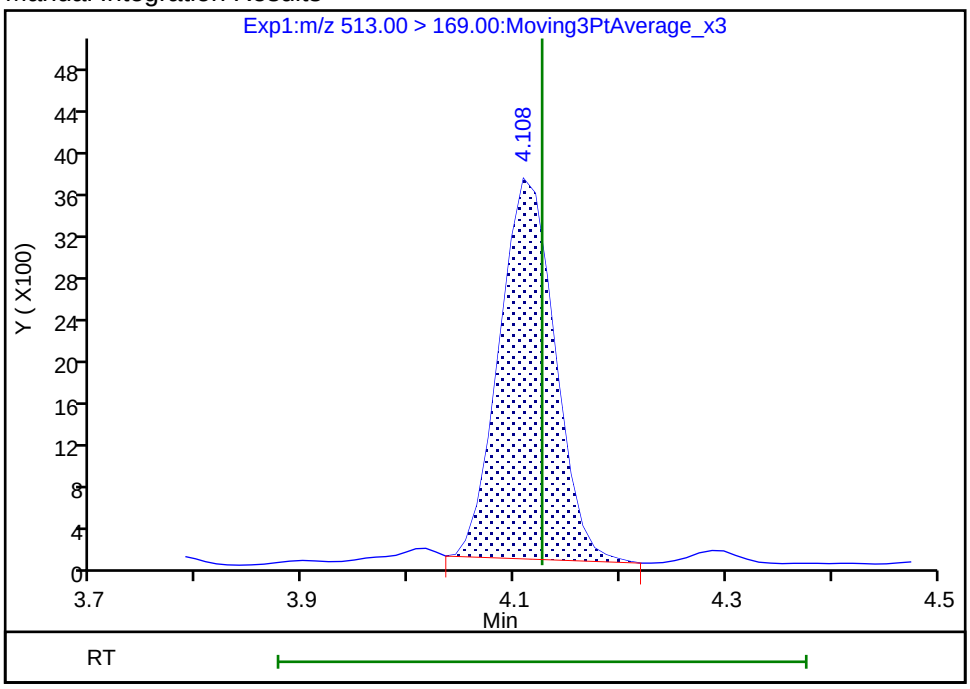
Processing Integration Results

RT: 4.11
Area: 13365
Amount: 0.177587
Amount Units: ng/ml




Manual Integration Results

RT: 4.11
Area: 13433
Amount: 0.177251
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:56:55

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

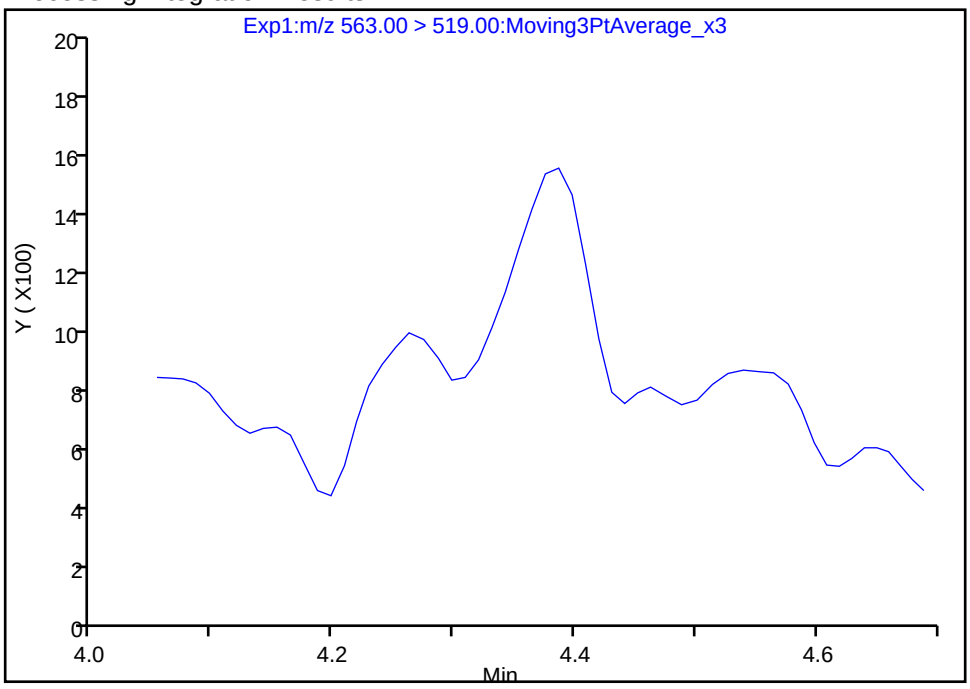
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

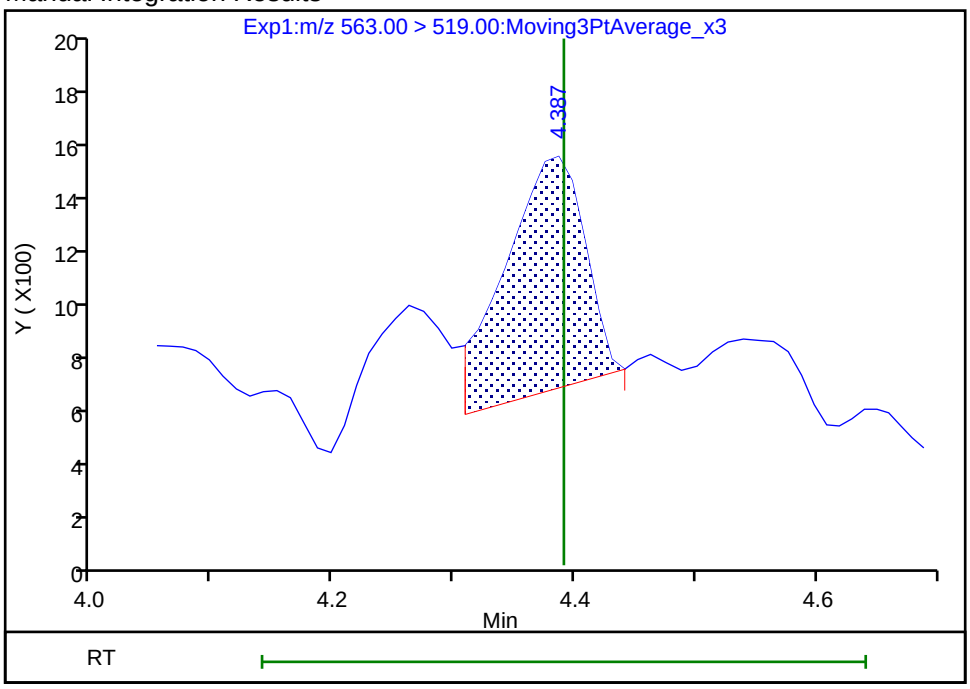
Not Detected
Expected RT: 4.39

Processing Integration Results




Manual Integration Results

RT: 4.39
Area: 3897
Amount: 0.008126
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:58:25
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

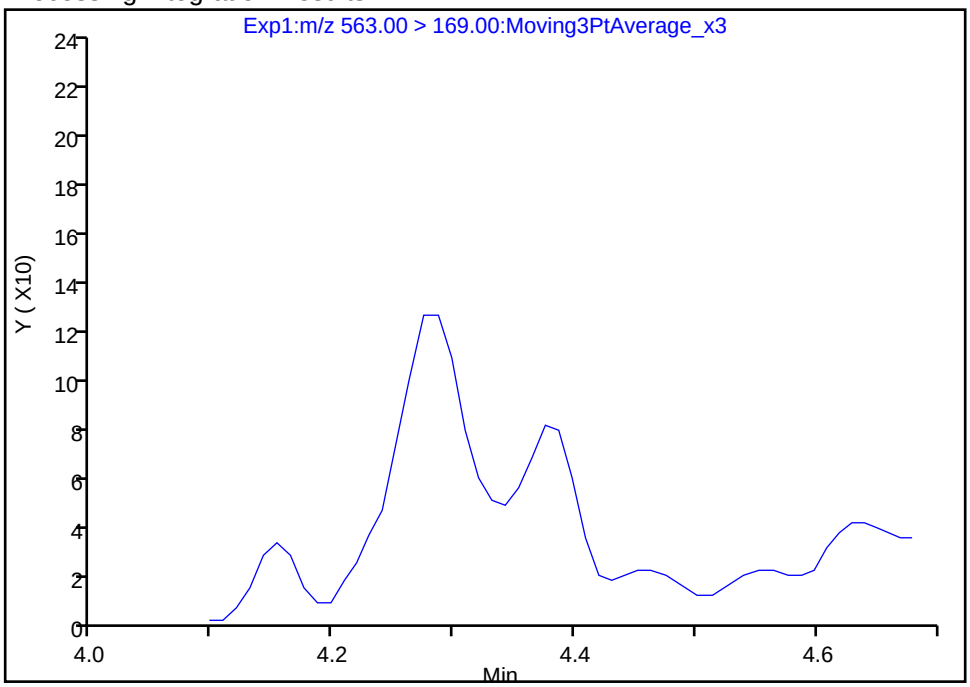
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

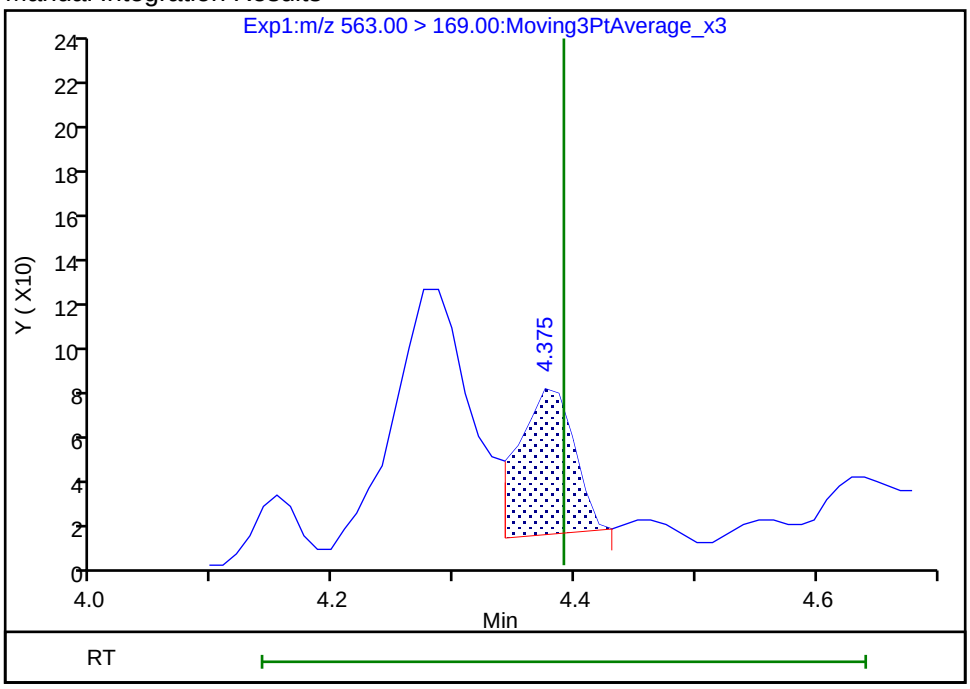
Not Detected
Expected RT: 4.39

Processing Integration Results




Manual Integration Results

RT: 4.38
Area: 198
Amount: 0.008126
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:58:27
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

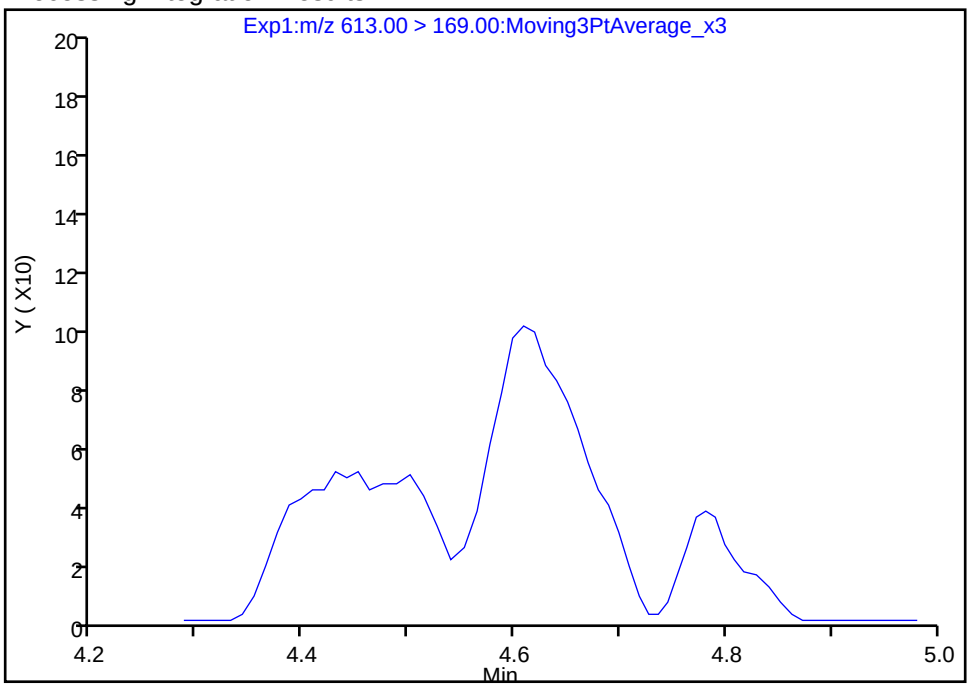
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

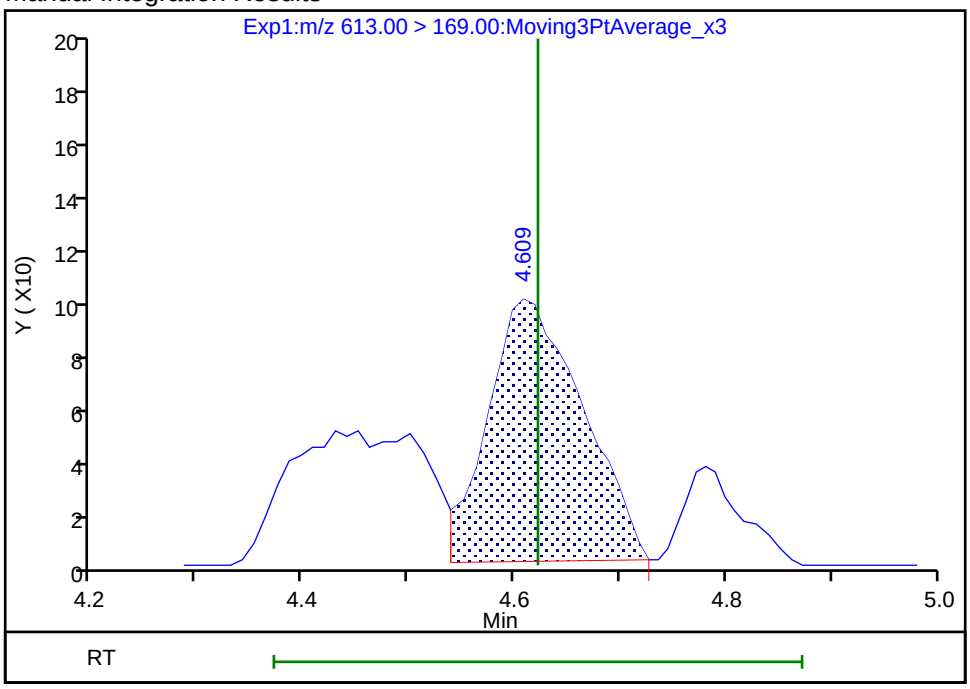
Not Detected
Expected RT: 4.62

Processing Integration Results




Manual Integration Results

RT: 4.61
Area: 593
Amount: 0.007269
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:59:26
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

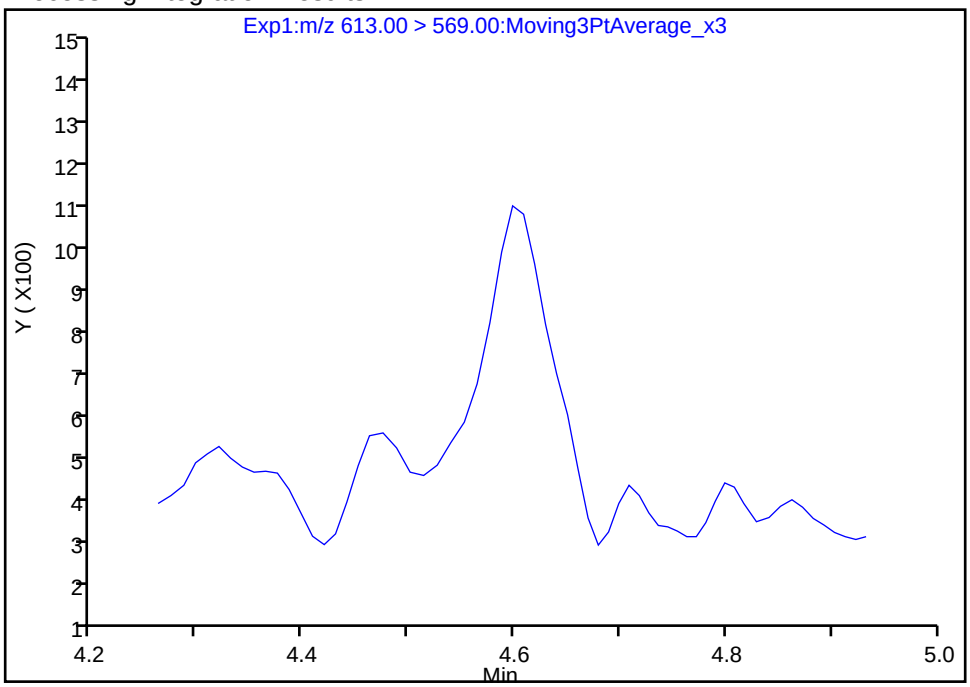
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

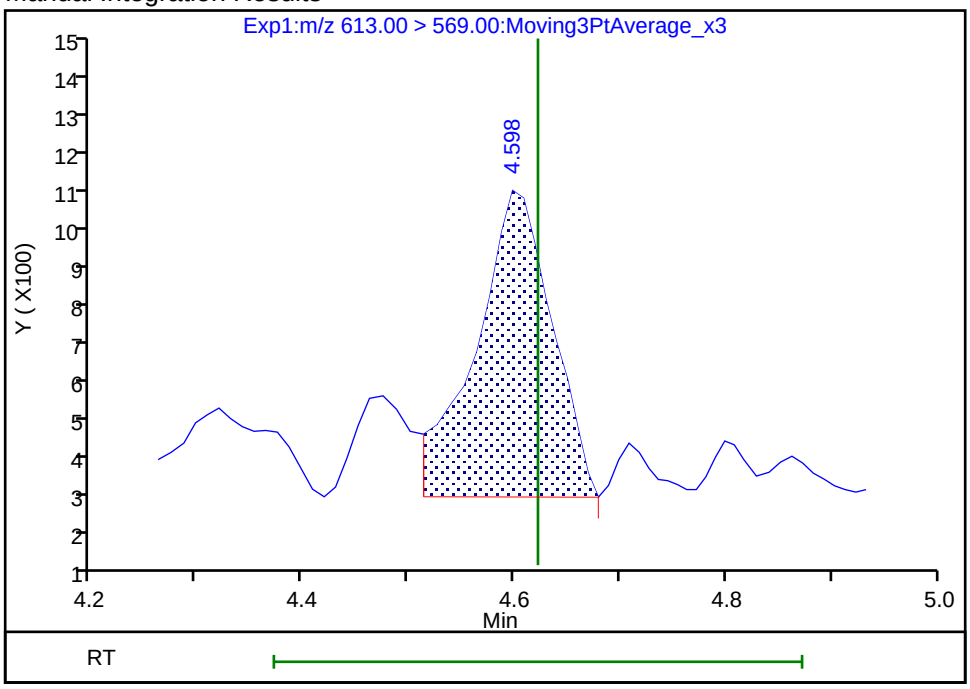
Not Detected
Expected RT: 4.62

Processing Integration Results




Manual Integration Results

RT: 4.60
Area: 3628
Amount: 0.007269
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:59:34
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

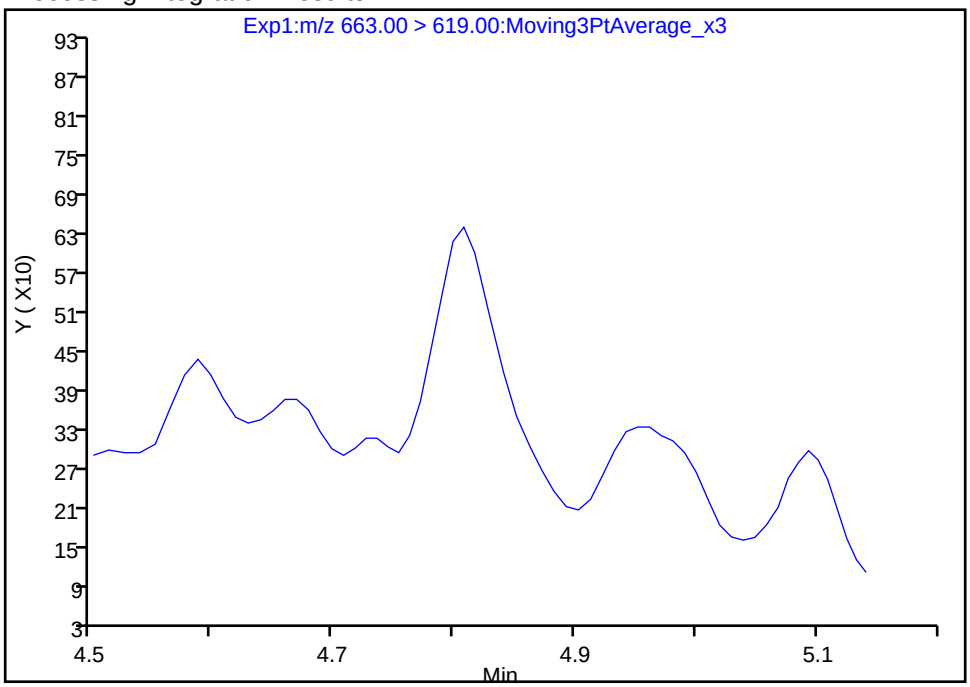
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

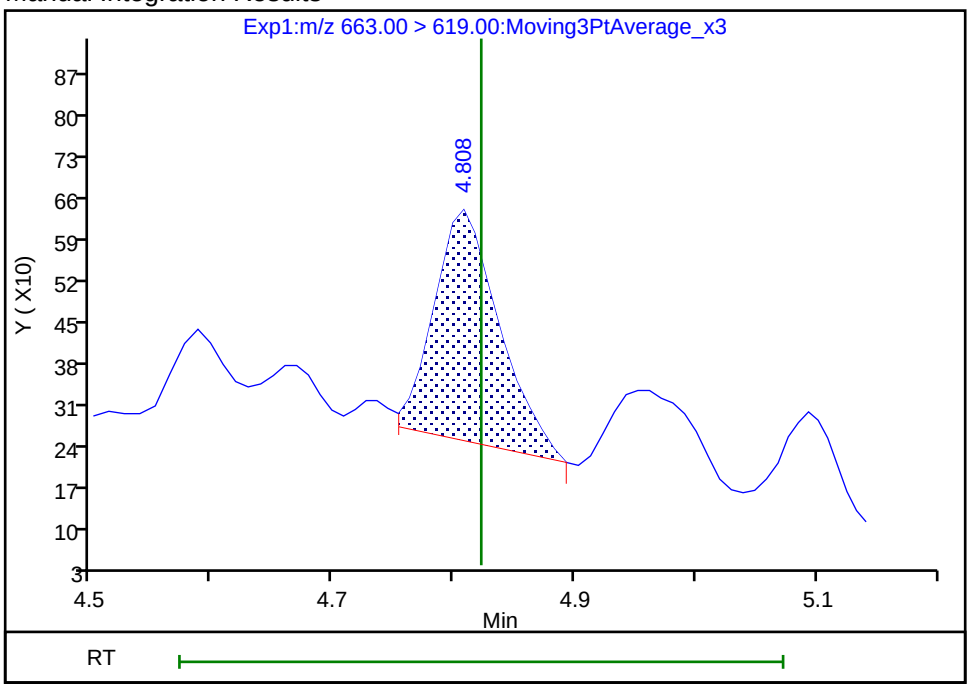
Not Detected
Expected RT: 4.82

Processing Integration Results




Manual Integration Results

RT: 4.81
Area: 1454
Amount: 0.003590
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:00:07
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

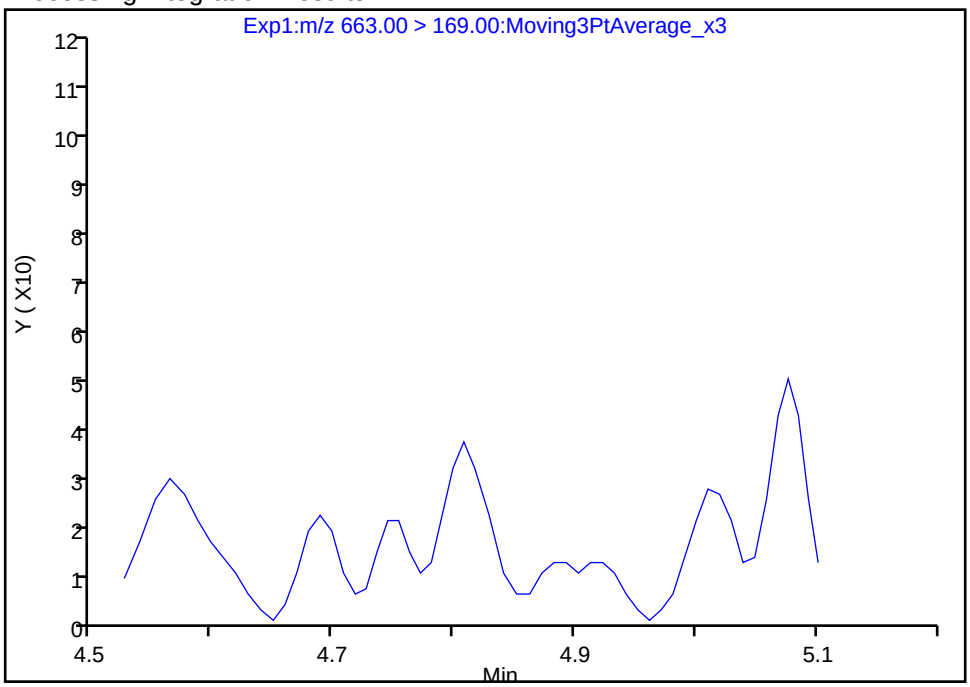
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

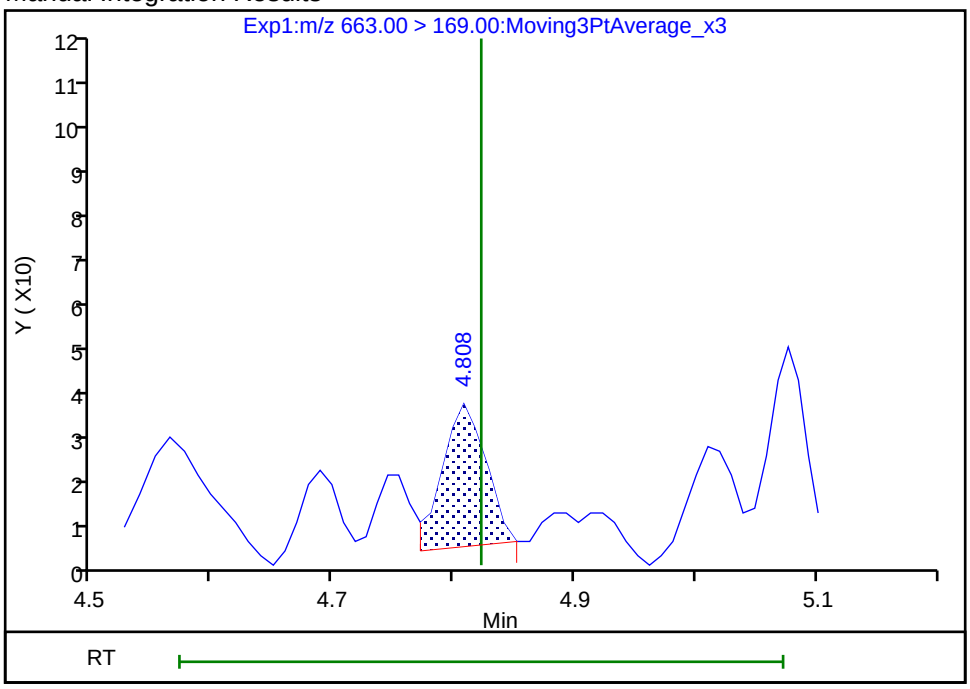
Not Detected
Expected RT: 4.82

Processing Integration Results




Manual Integration Results

RT: 4.81
Area: 74
Amount: 0.003590
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:00:10
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

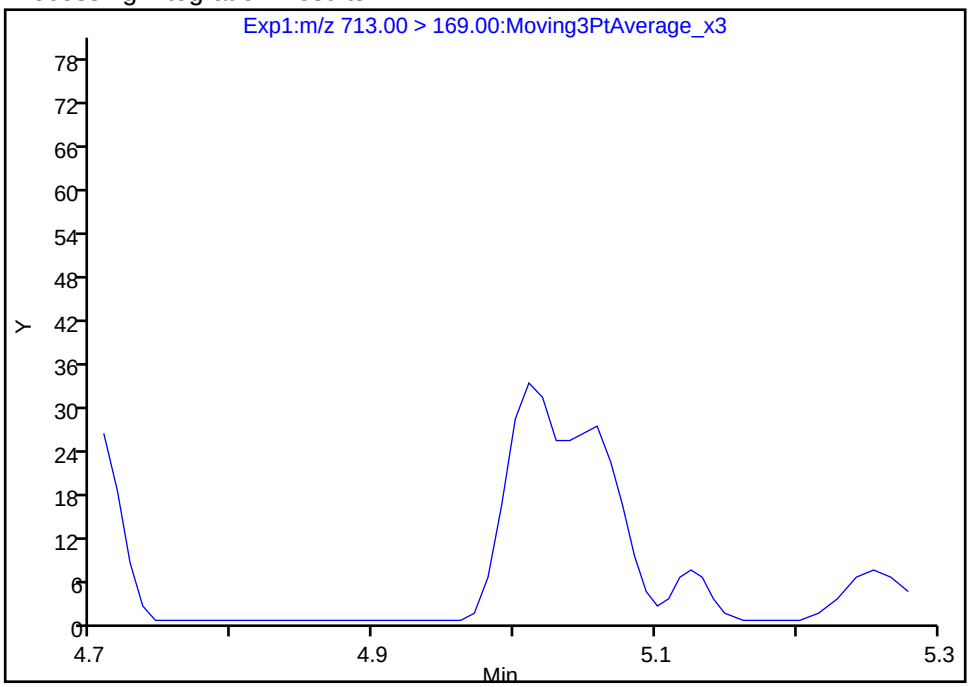
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

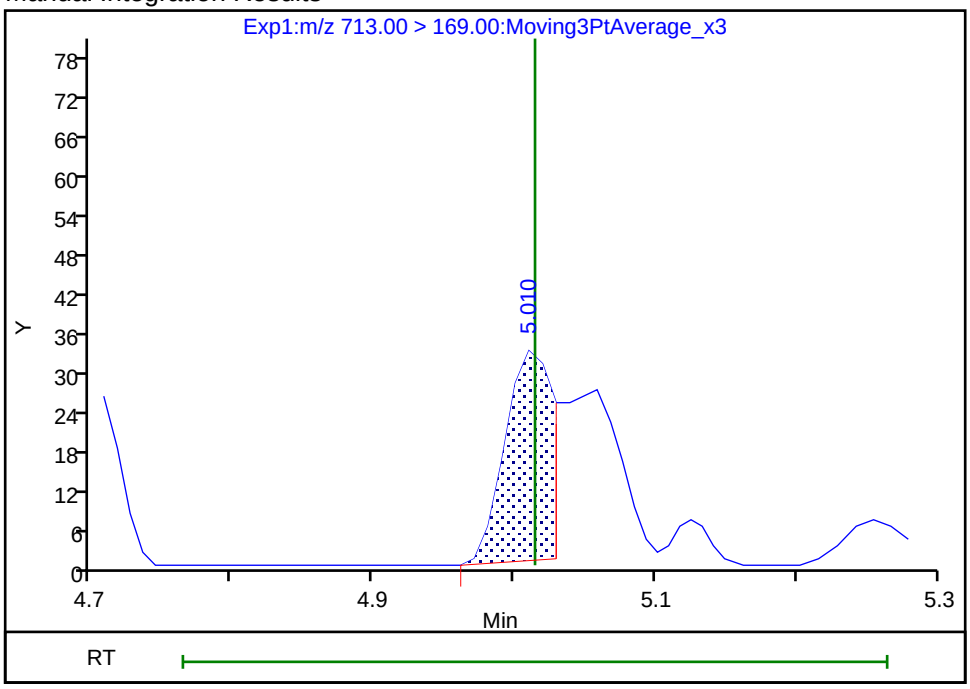
Not Detected
Expected RT: 5.01

Processing Integration Results




Manual Integration Results

RT: 5.01
Area: 72
Amount: 0.001222
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:00:35
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

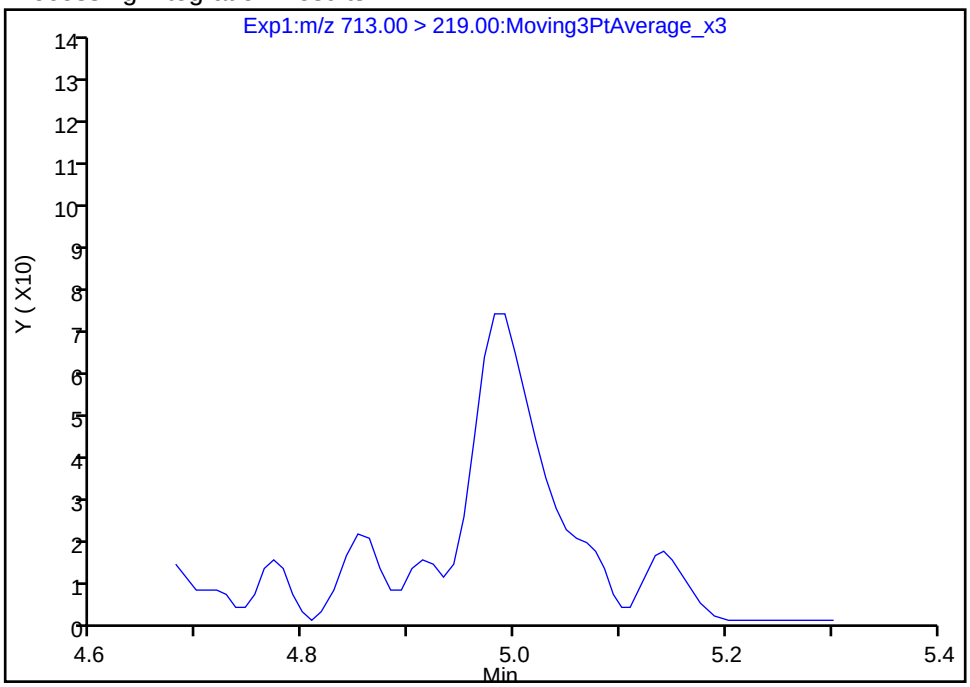
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

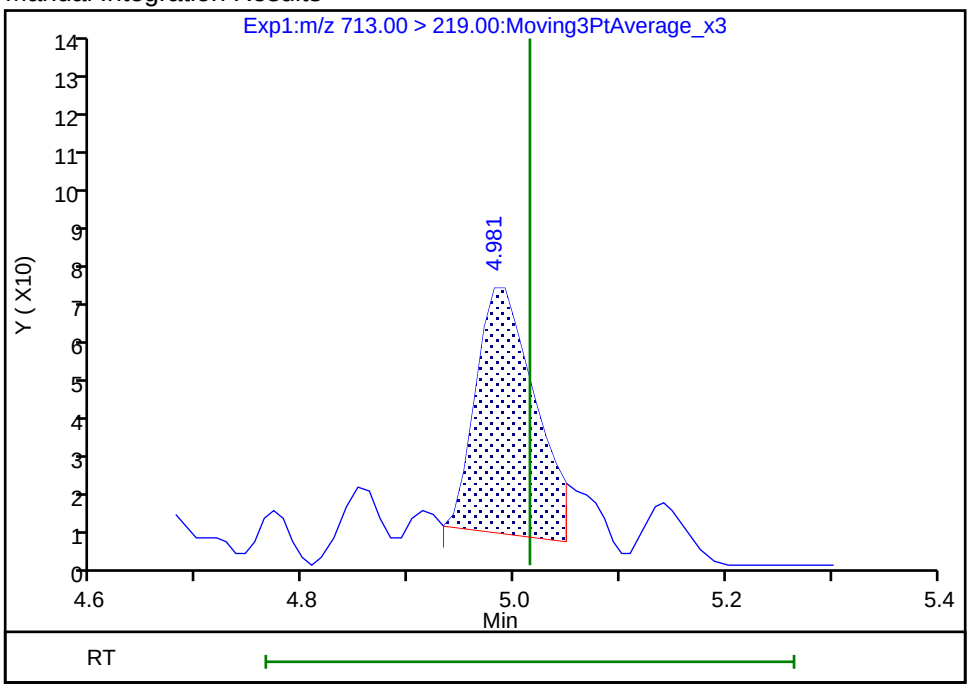
Not Detected
Expected RT: 5.01

Processing Integration Results




Manual Integration Results

RT: 4.98
Area: 241
Amount: 0.001222
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:00:40
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

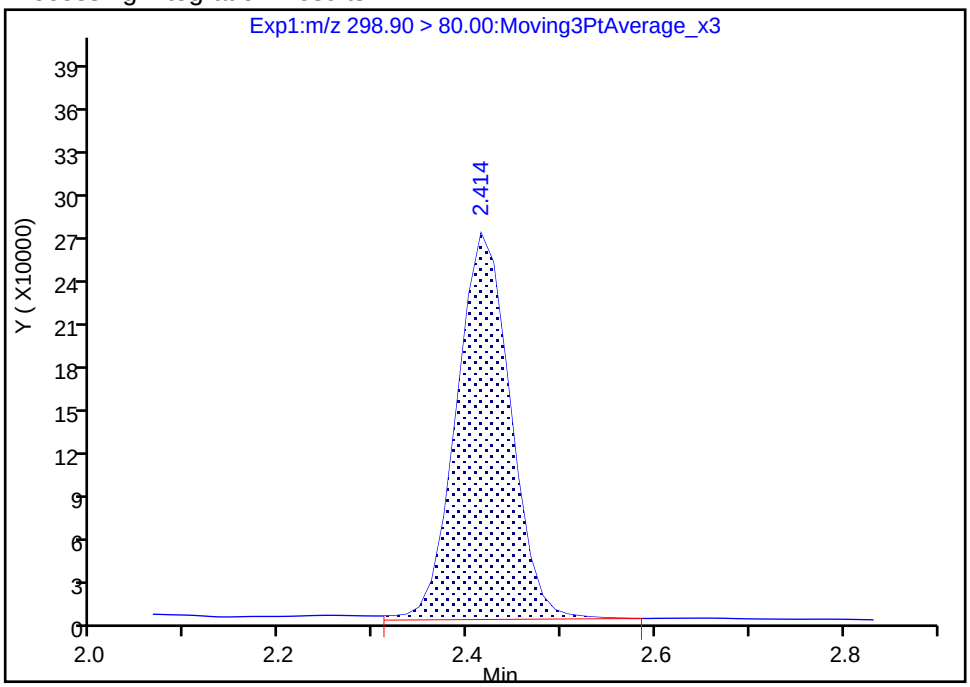
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

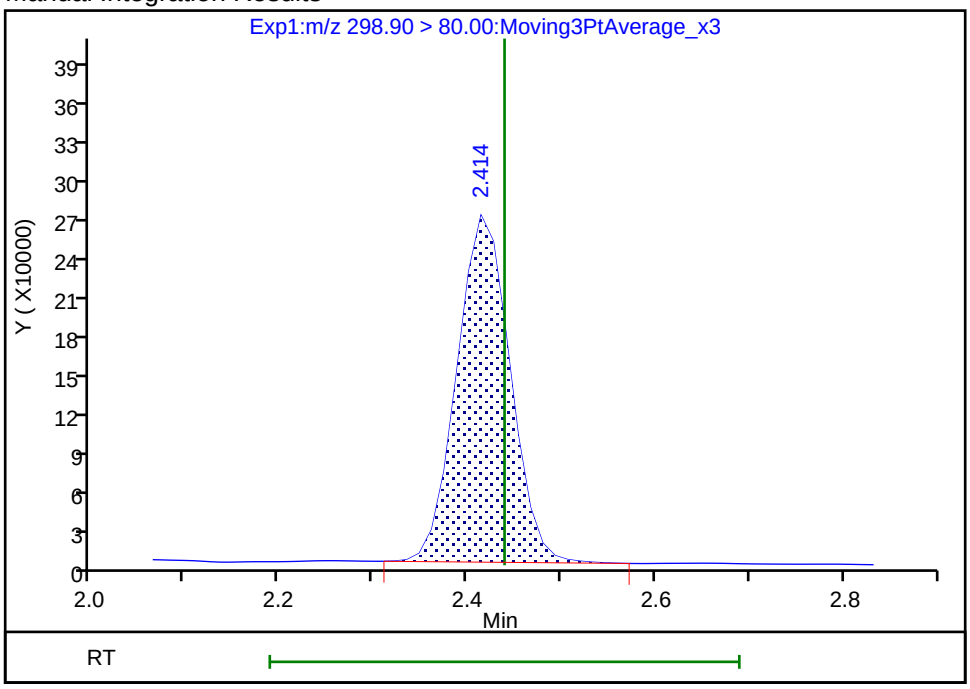
Processing Integration Results

RT: 2.41
Area: 1058245
Amount: 0.995018
Amount Units: ng/ml




Manual Integration Results

RT: 2.41
Area: 1035023
Amount: 0.973184
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:50:08

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

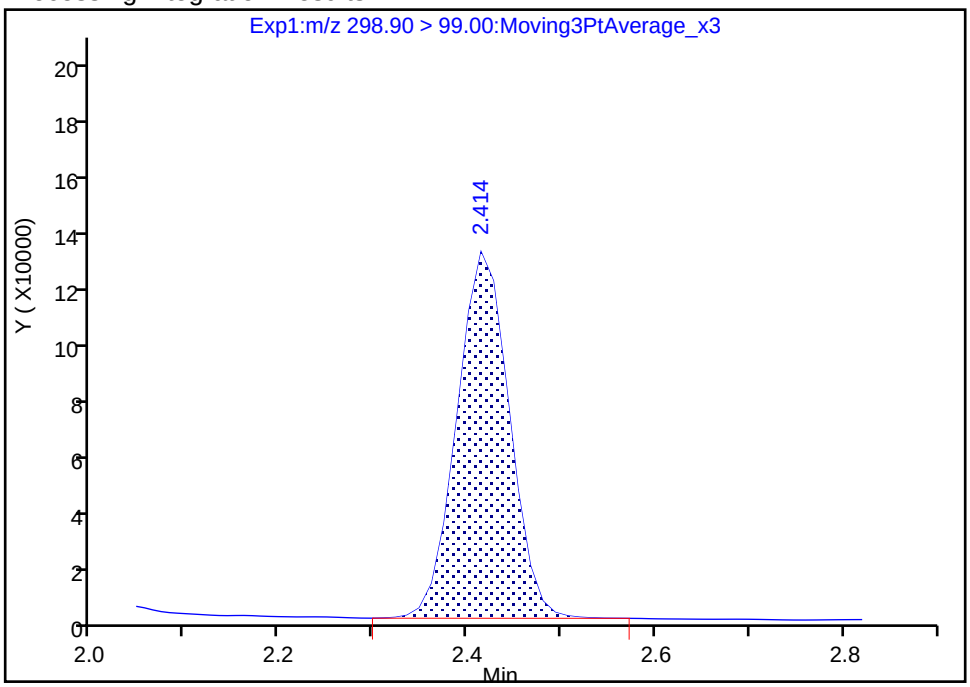
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

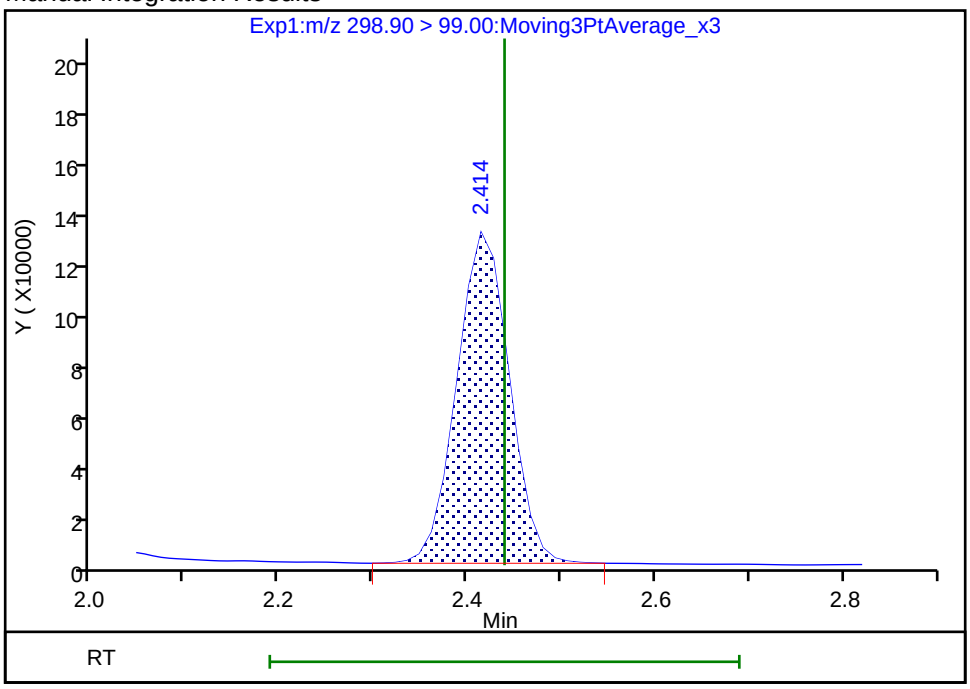
Processing Integration Results

RT: 2.41
Area: 489855
Amount: 0.995018
Amount Units: ng/ml




Manual Integration Results

RT: 2.41
Area: 489470
Amount: 0.973184
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:50:33

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

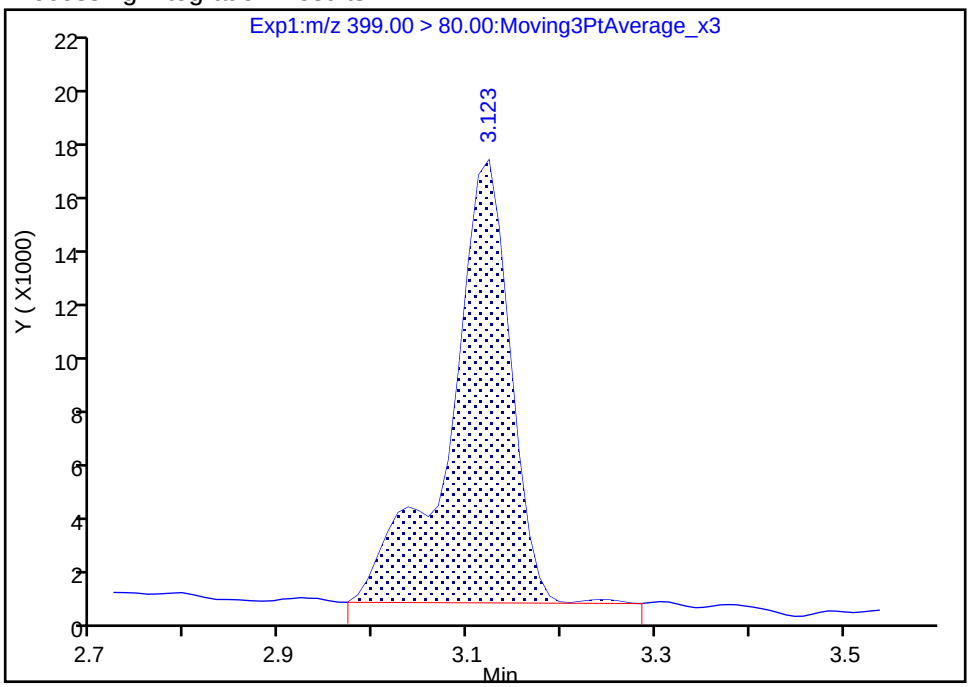
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

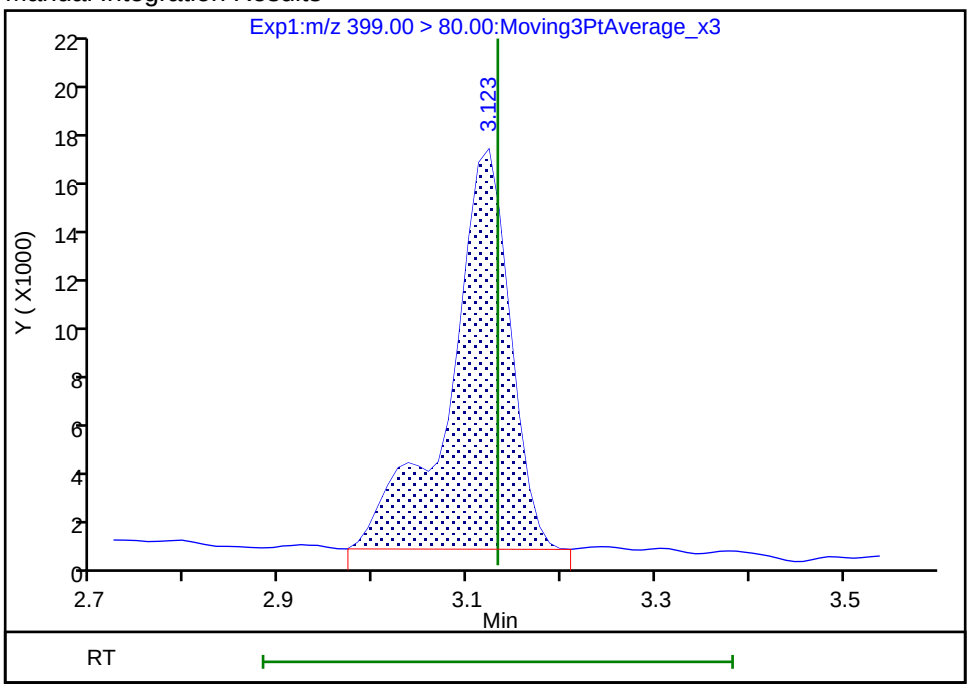
Processing Integration Results

RT: 3.12
Area: 71588
Amount: 0.079458
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 71166
Amount: 0.078990
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:52:45

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

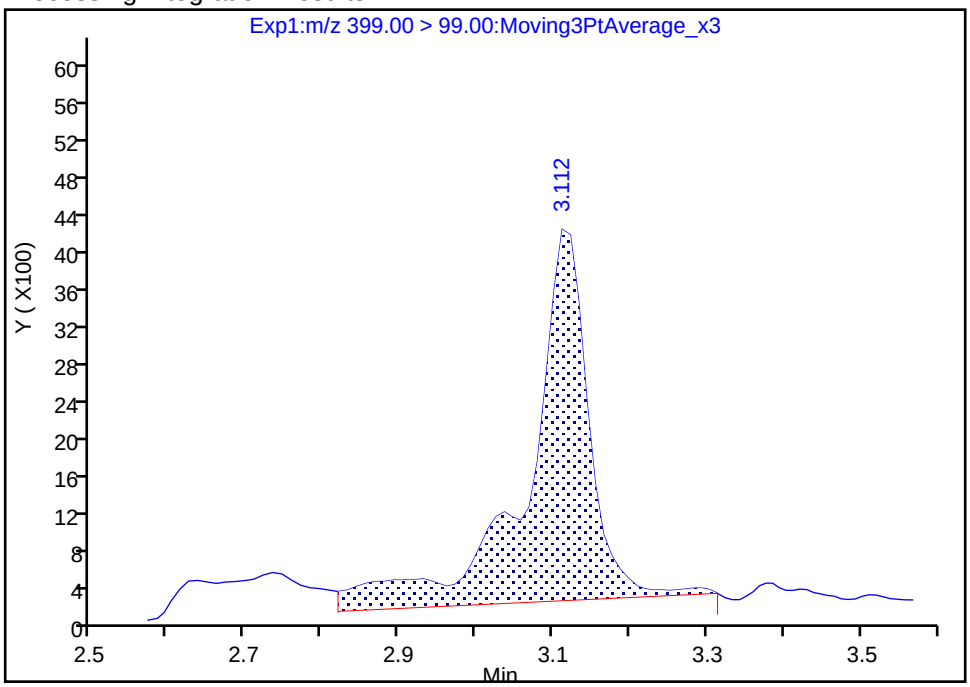
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

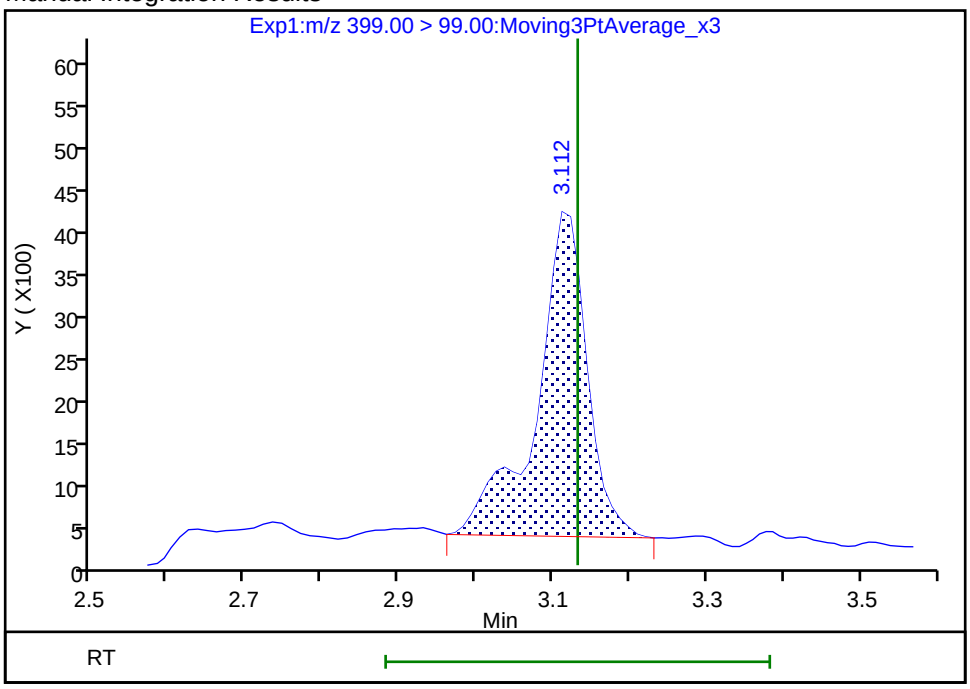
Processing Integration Results

RT: 3.11
Area: 22336
Amount: 0.079458
Amount Units: ng/ml




Manual Integration Results

RT: 3.11
Area: 17469
Amount: 0.078990
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:53:04

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

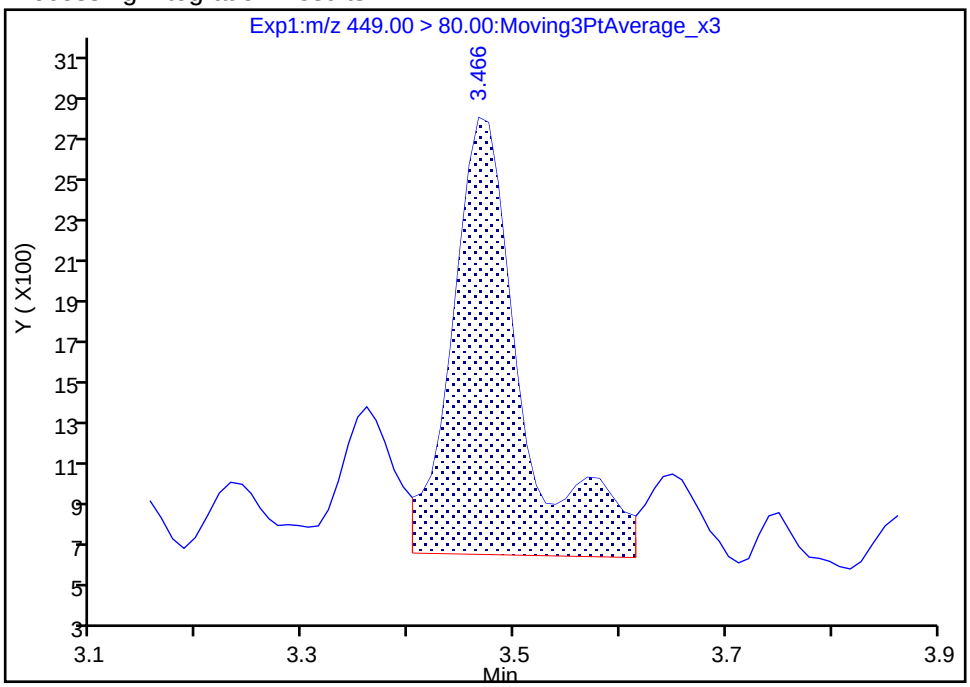
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

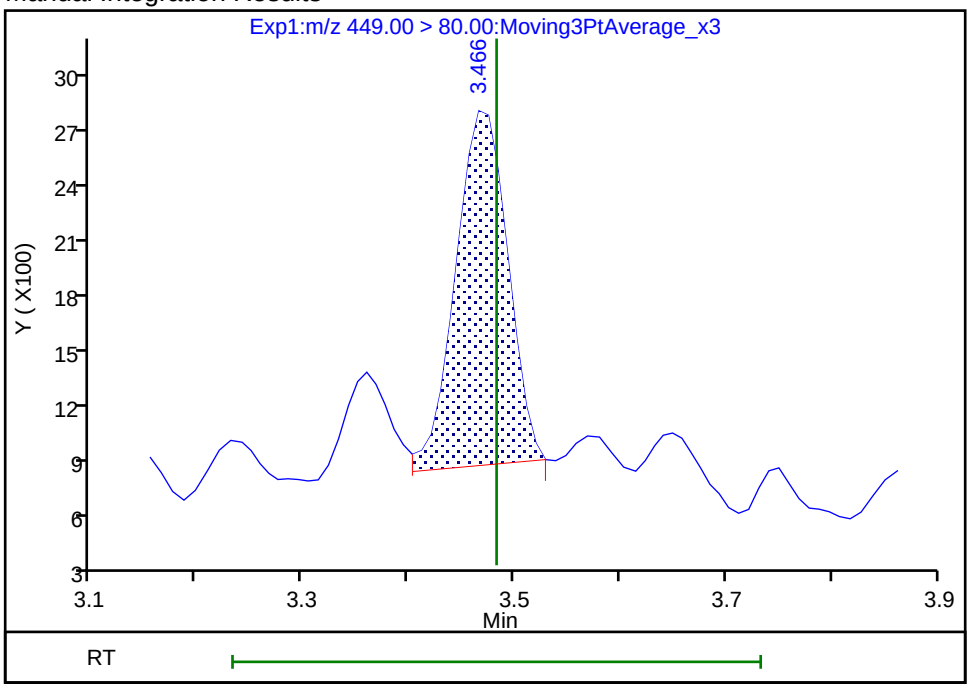
Processing Integration Results

RT: 3.47
Area: 9747
Amount: 0.013786
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 6571
Amount: 0.009294
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:54:36

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

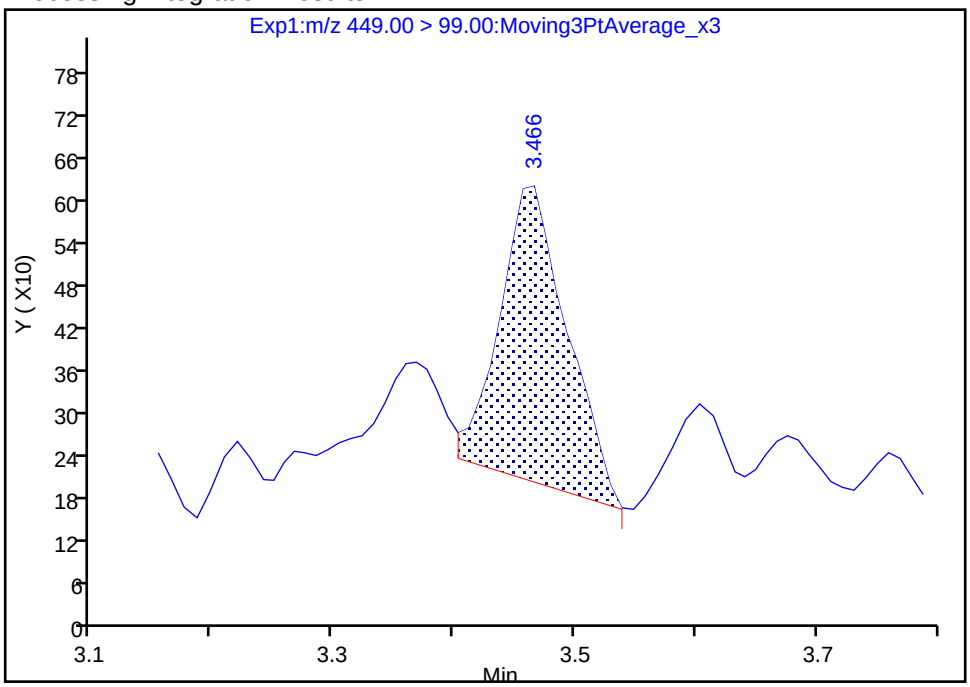
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

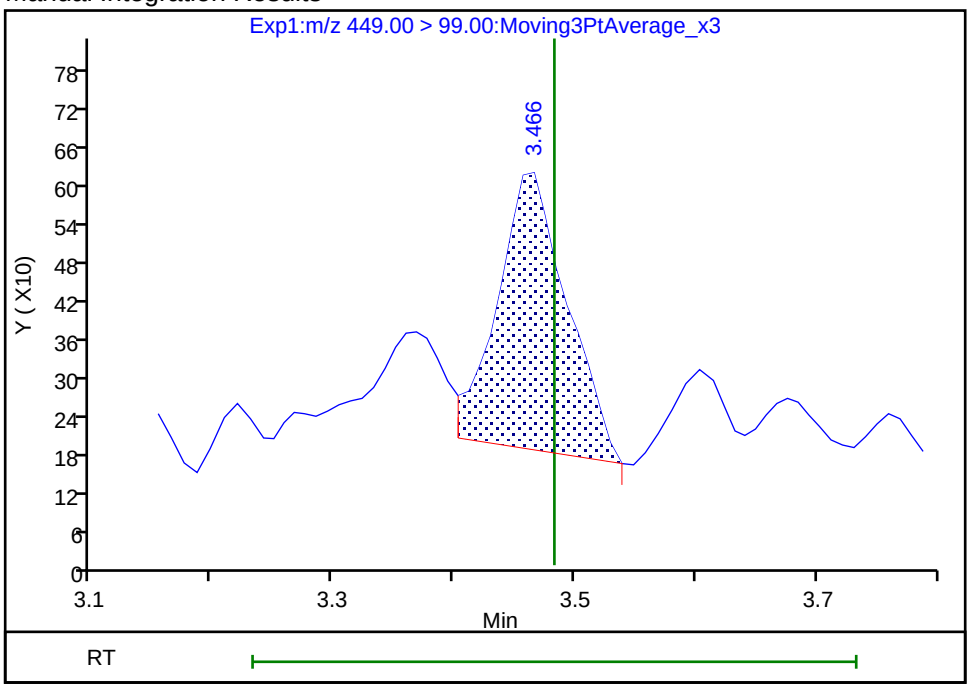
Processing Integration Results

RT: 3.47
Area: 1611
Amount: 0.013786
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 1725
Amount: 0.009294
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:54:50

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

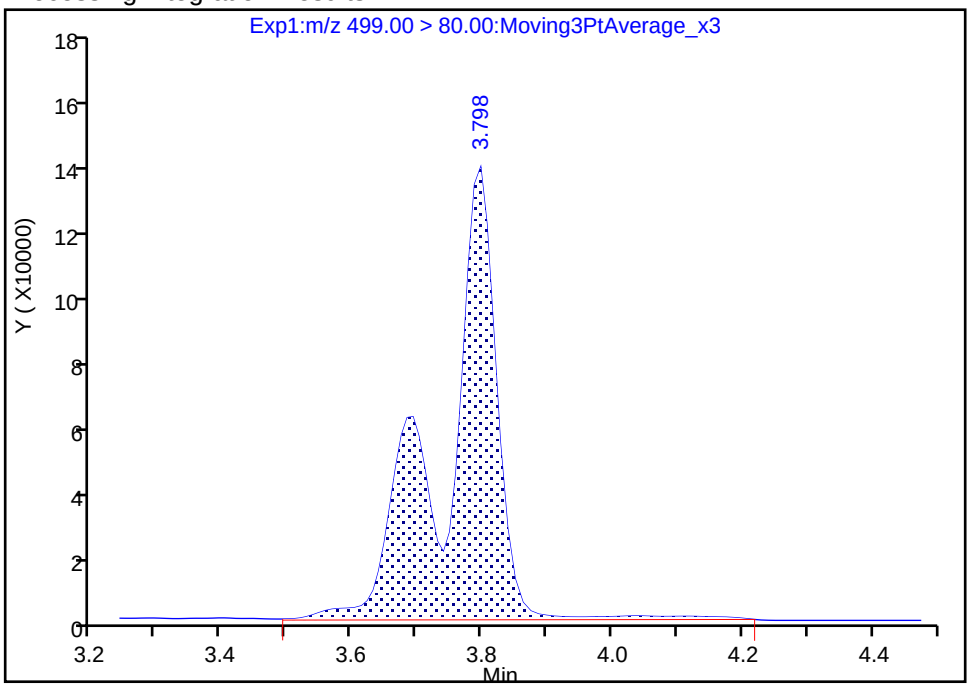
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

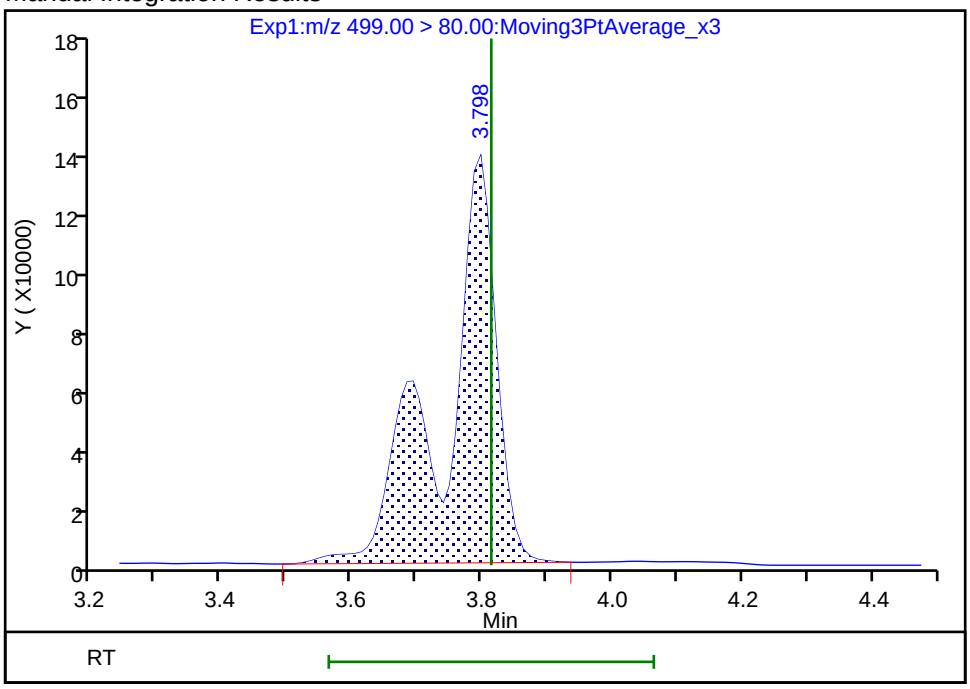
Processing Integration Results

RT: 3.80
Area: 783964
Amount: 1.301740
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 755448
Amount: 1.254390
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:55:34

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

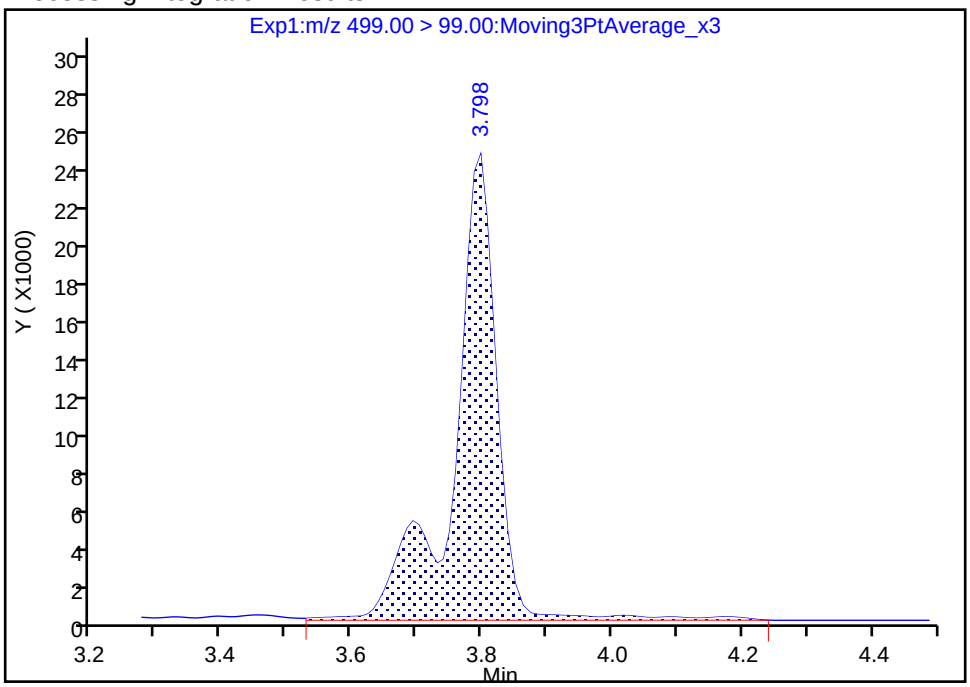
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

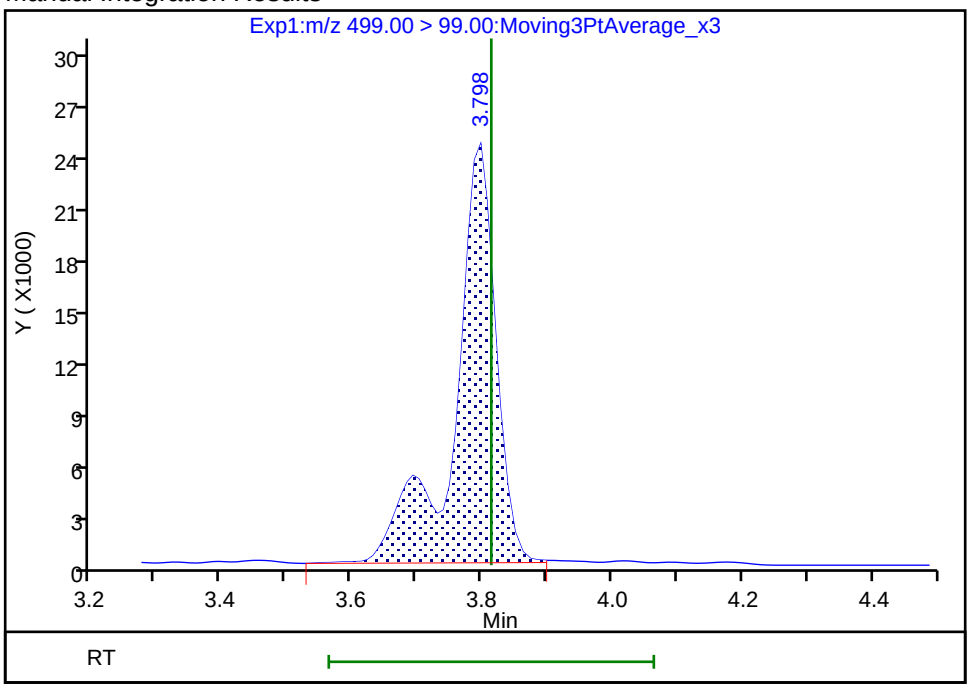
Processing Integration Results

RT: 3.80
Area: 112382
Amount: 1.301740
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 106295
Amount: 1.254390
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:55:58

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

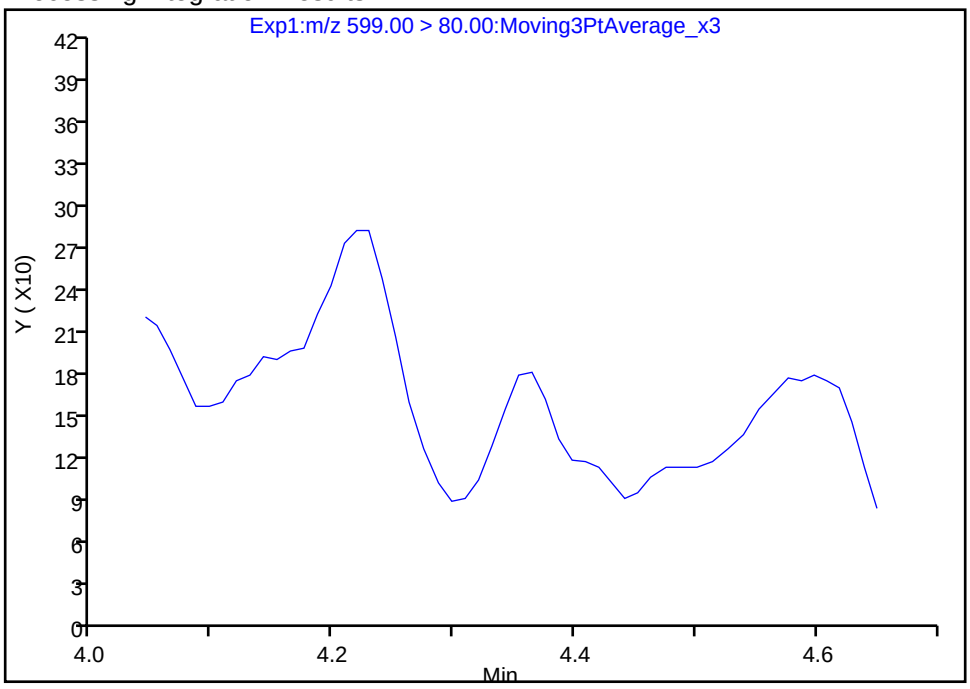
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

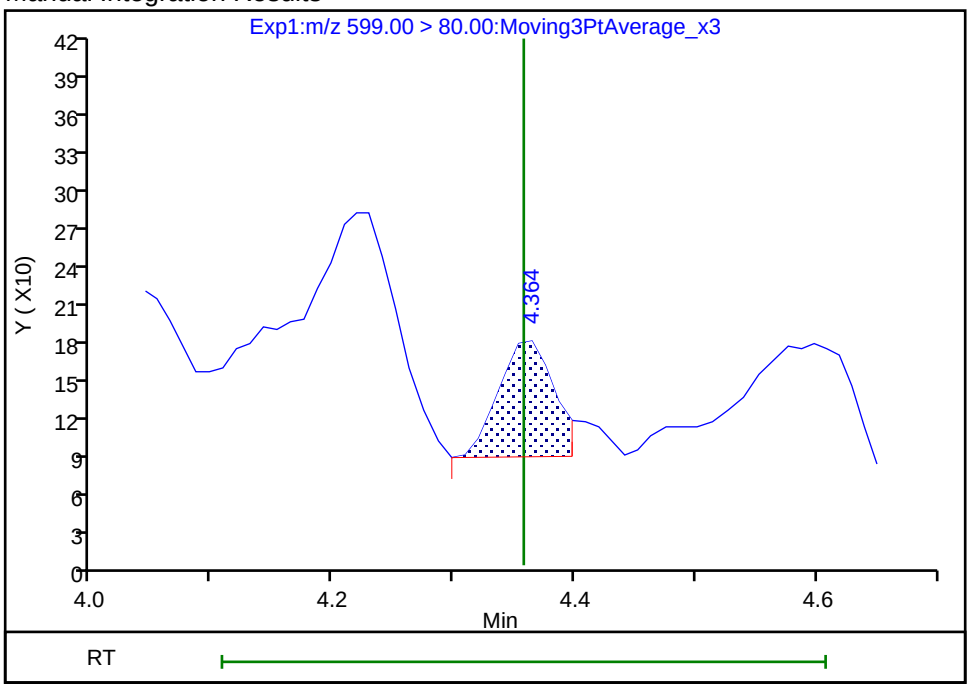
Not Detected
Expected RT: 4.36

Processing Integration Results




Manual Integration Results

RT: 4.36
Area: 283
Amount: 0.000790
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:57:56
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

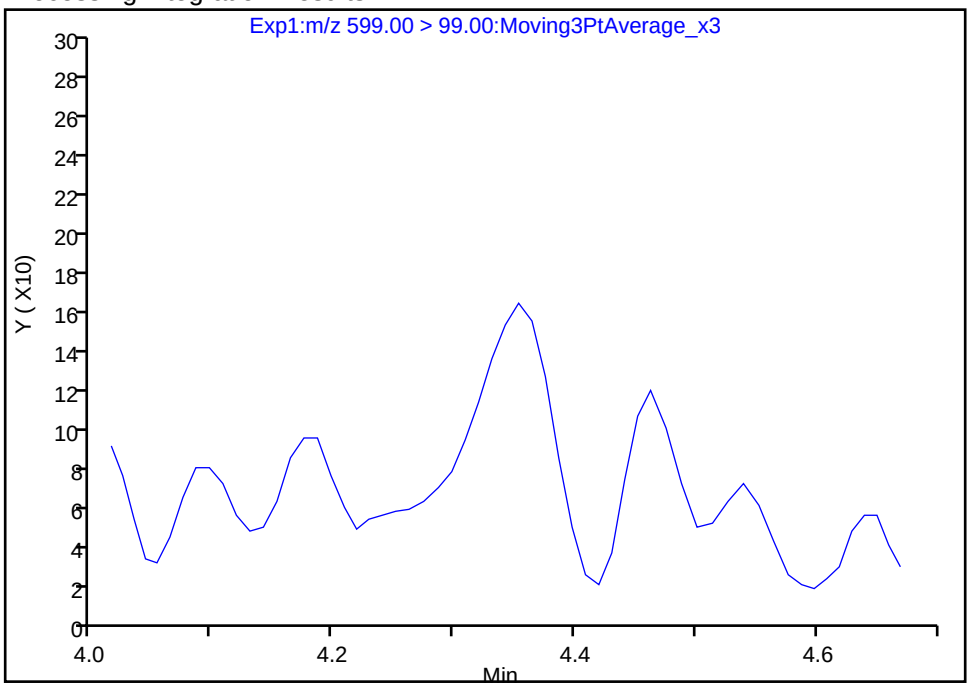
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

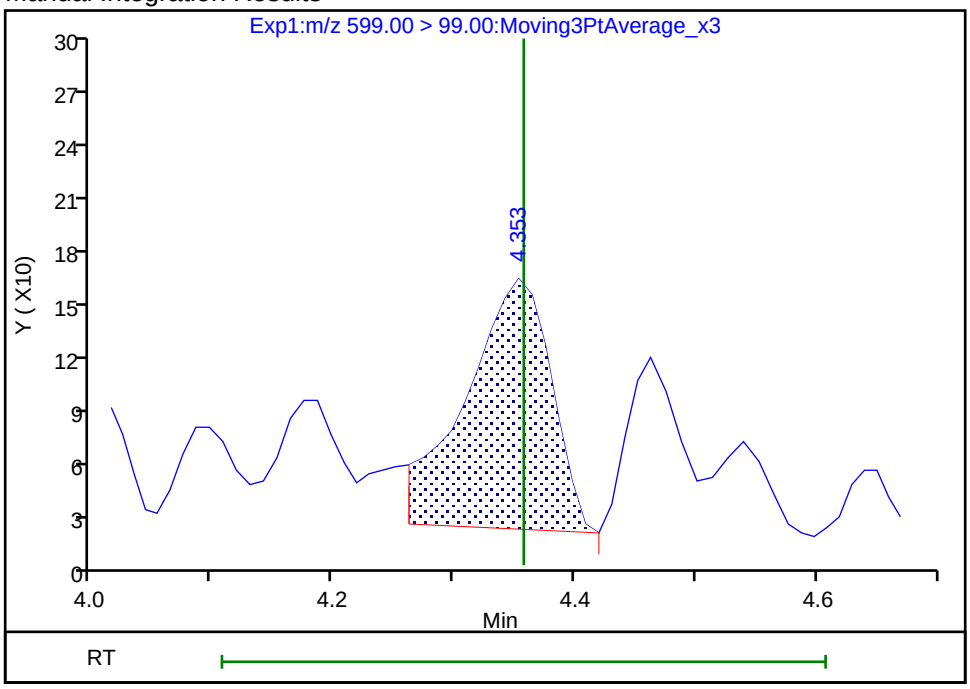
Not Detected
Expected RT: 4.36

Processing Integration Results




Manual Integration Results

RT: 4.35
Area: 682
Amount: 0.000790
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:57:59
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

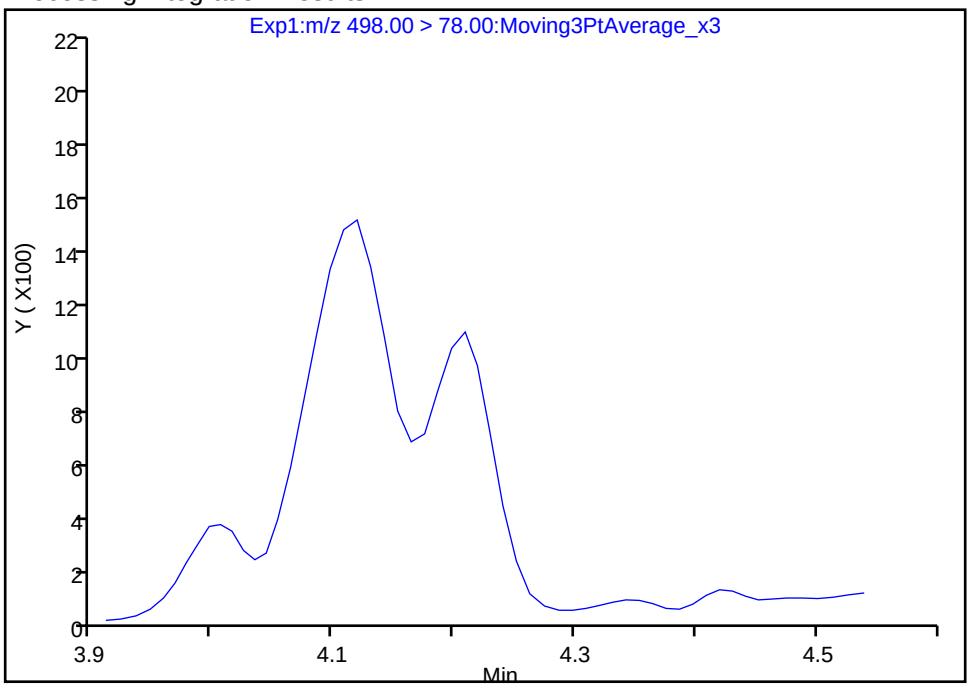
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

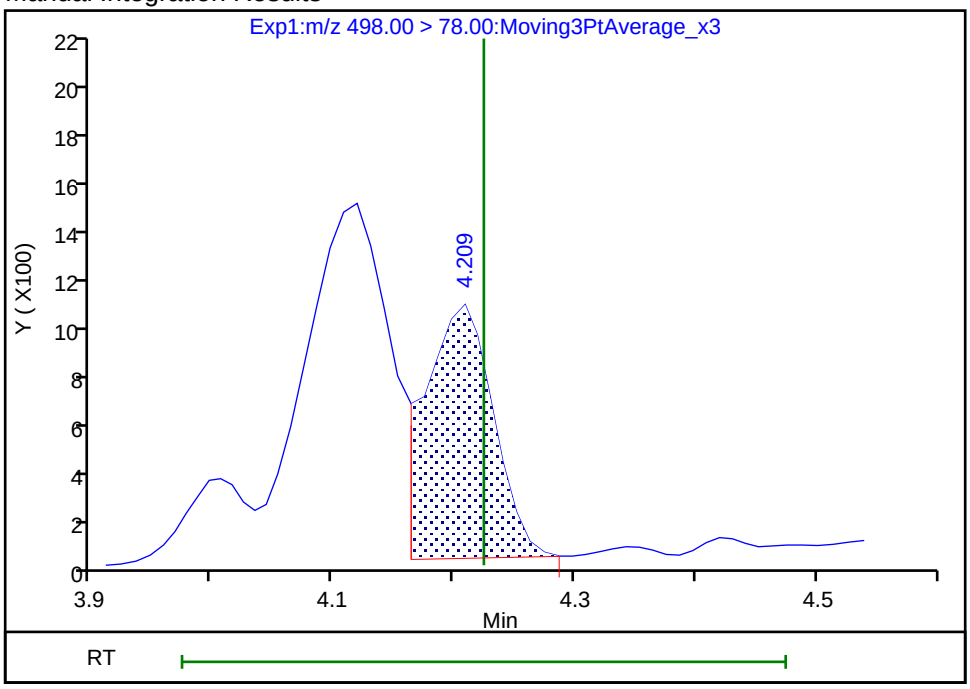
Not Detected
Expected RT: 4.22

Processing Integration Results




Manual Integration Results

RT: 4.21
Area: 4024
Amount: 0.004927
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:57:23
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

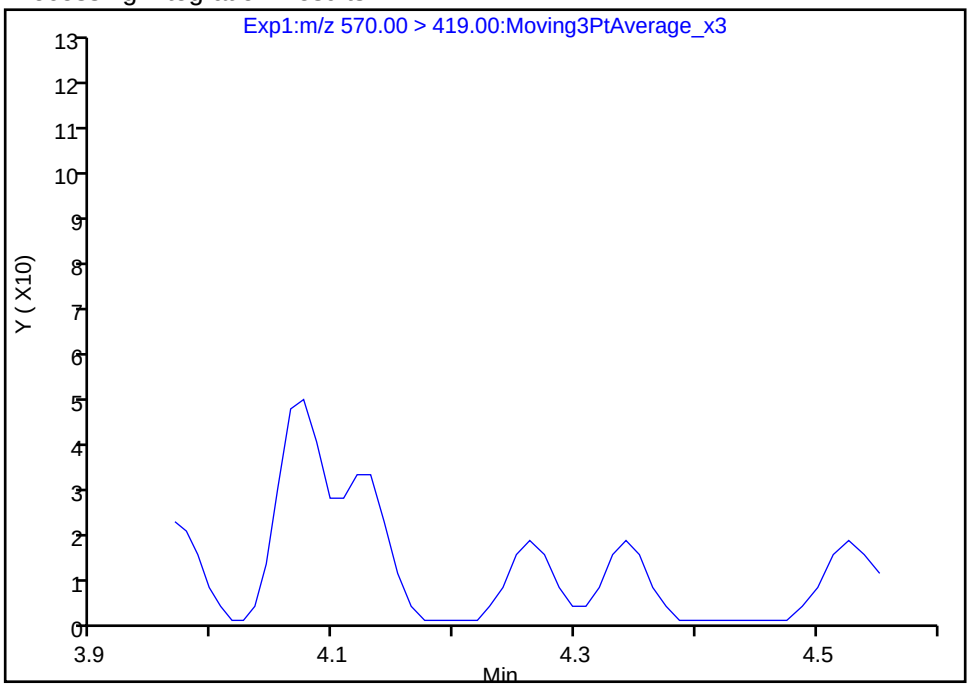
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

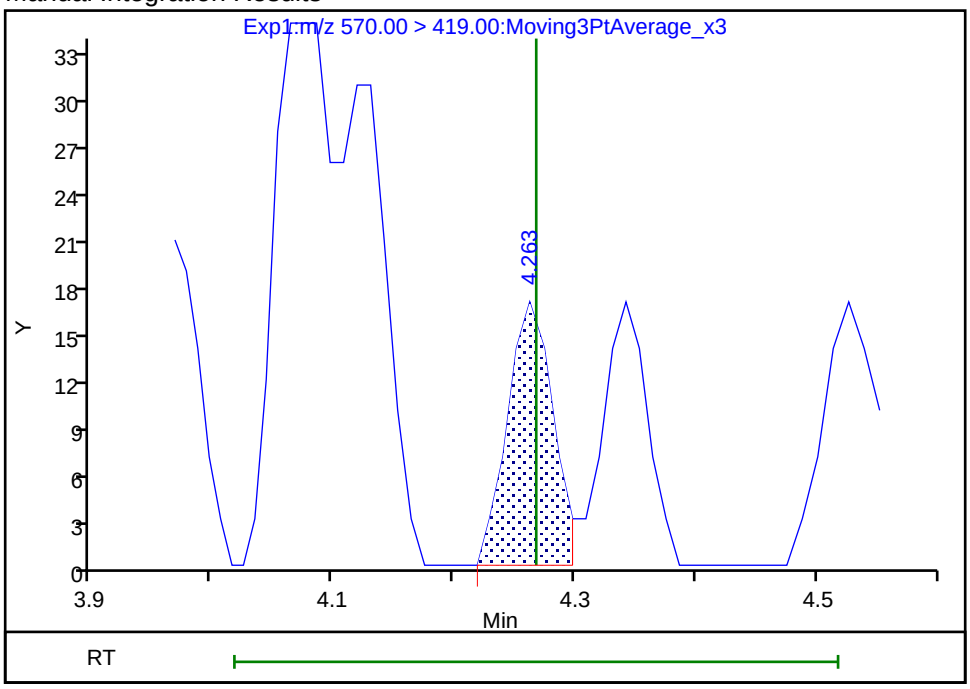
Not Detected
Expected RT: 4.27

Processing Integration Results




Manual Integration Results

RT: 4.26
Area: 43
Amount: 0.001302
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:57:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

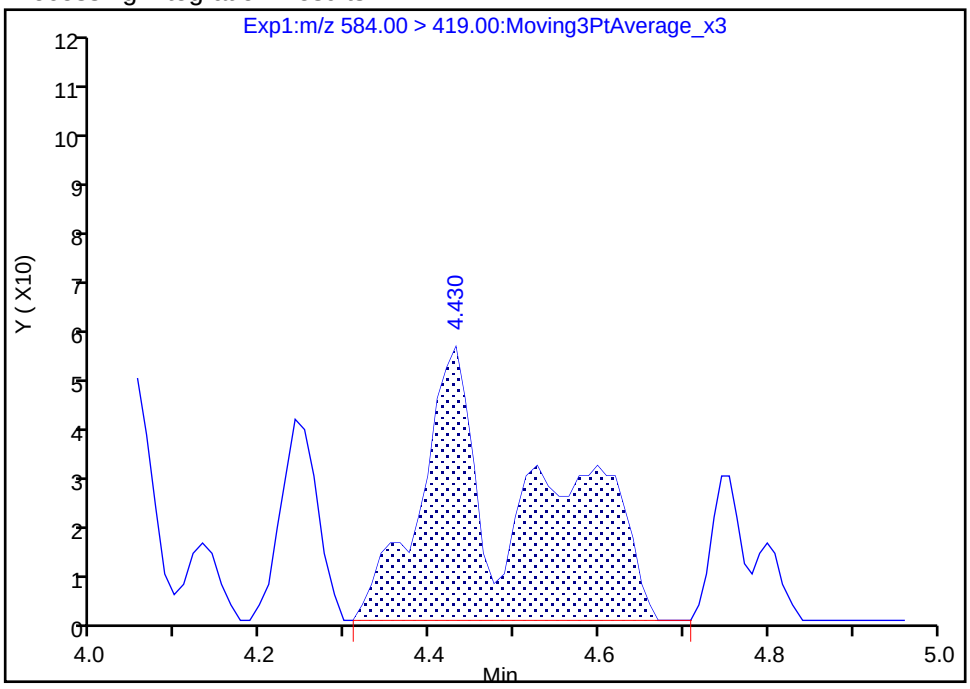
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

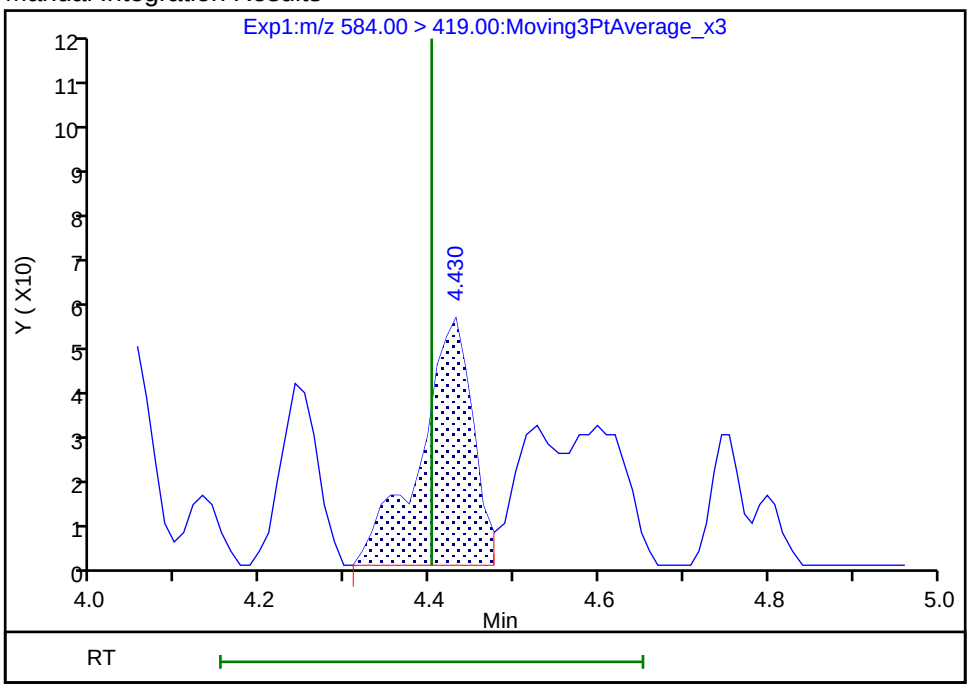
Processing Integration Results

RT: 4.43
Area: 475
Amount: 0.013483
Amount Units: ng/ml




Manual Integration Results

RT: 4.43
Area: 229
Amount: 0.006500
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:58:47

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

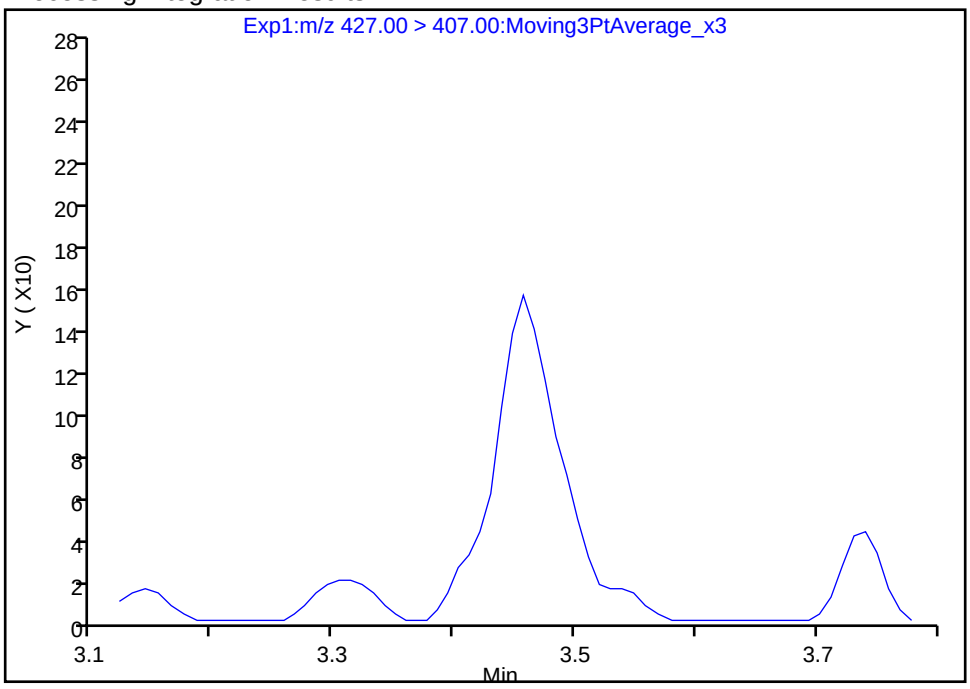
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

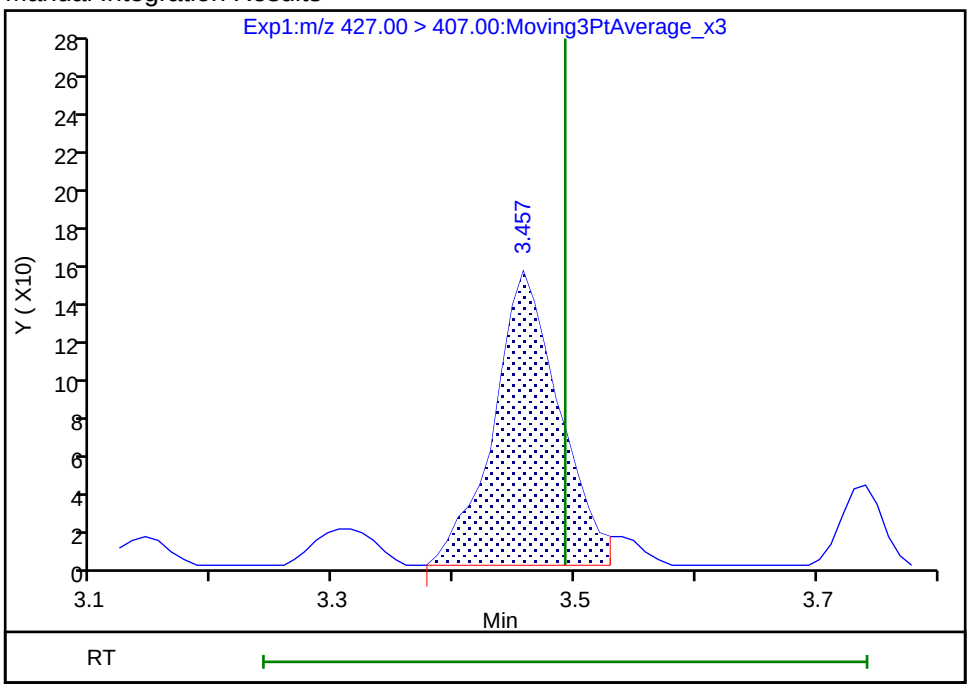
Not Detected
Expected RT: 3.49

Processing Integration Results




Manual Integration Results

RT: 3.46
Area: 580
Amount: 0.004736
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:55:05
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

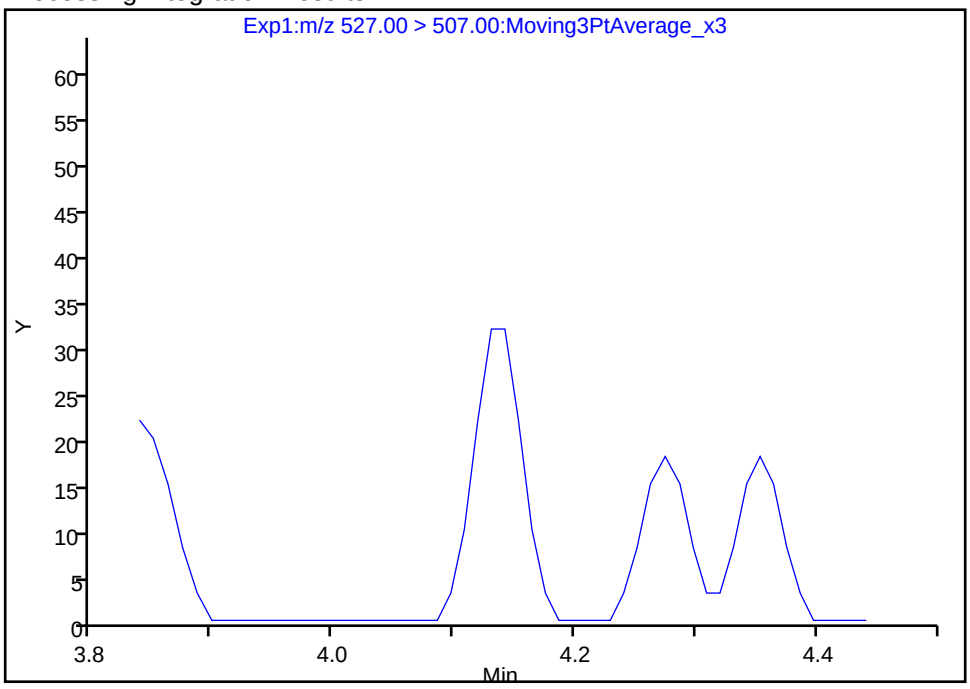
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

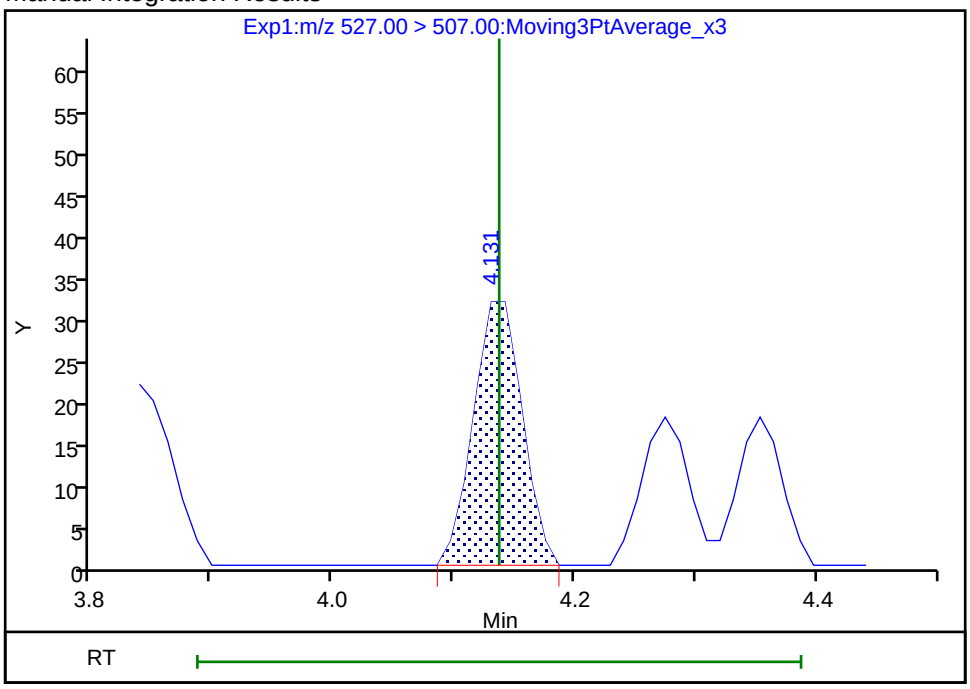
Not Detected
Expected RT: 4.14

Processing Integration Results




Manual Integration Results

RT: 4.13
Area: 89
Amount: 0.001212
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:57:05
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

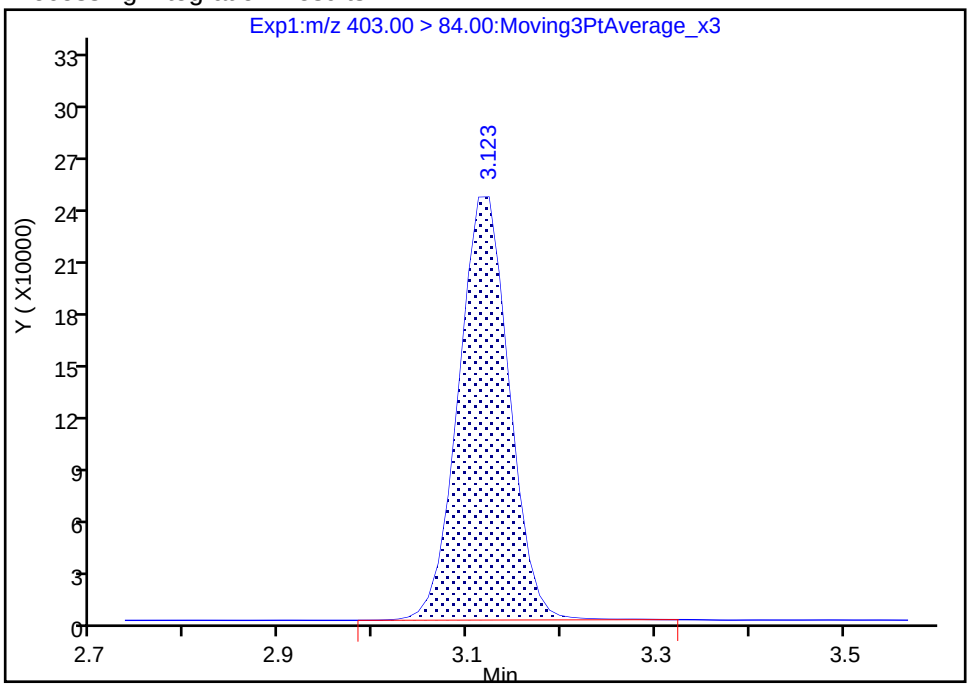
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 11 18O2 PFHxS, CAS: STL00994

Signal: 1

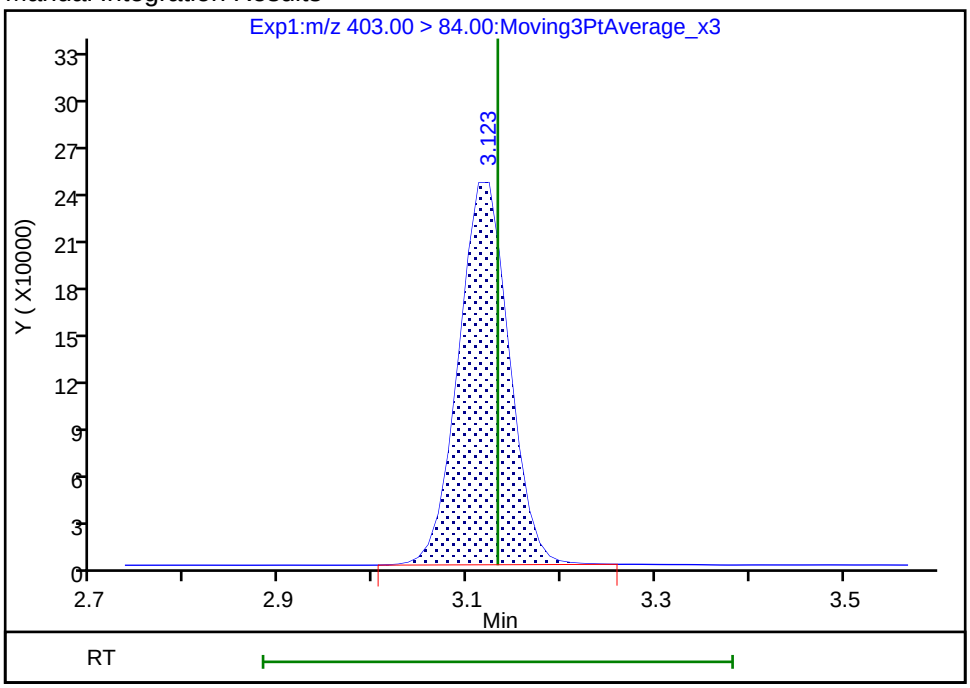
Processing Integration Results

RT: 3.12
Area: 906524
Amount: 1.233308
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 904023
Amount: 1.229905
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:46:27

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

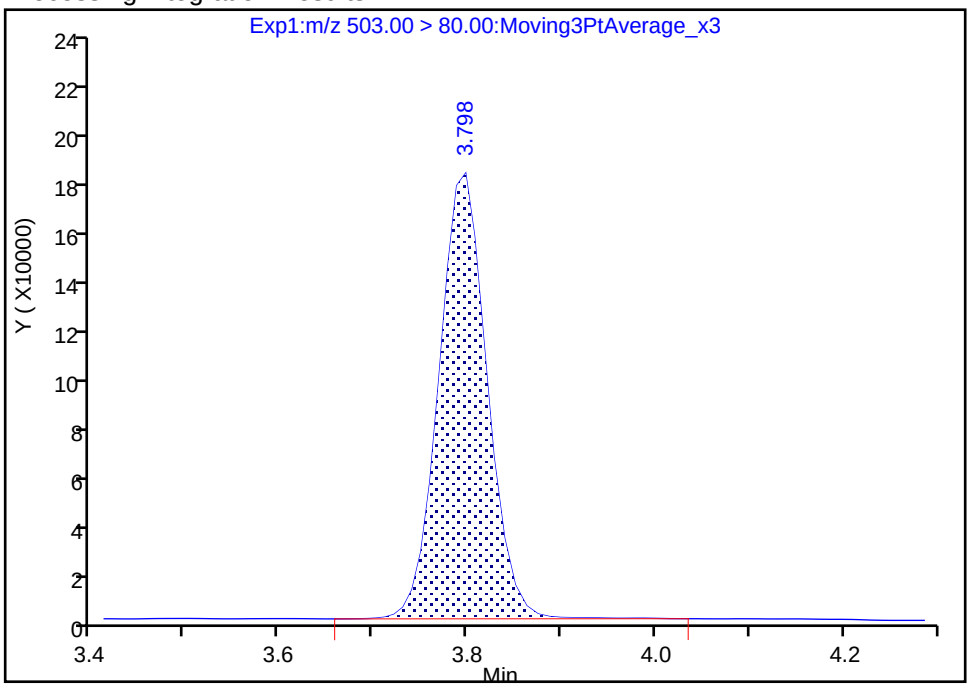
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 18 13C4 PFOS, CAS: STL00991

Signal: 1

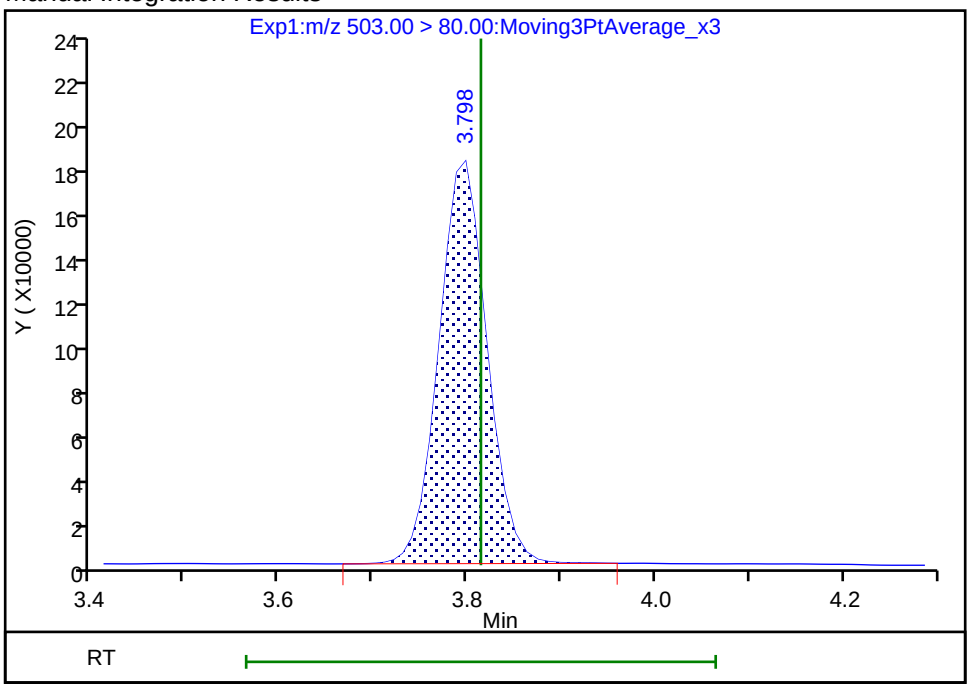
Processing Integration Results

RT: 3.80
Area: 628097
Amount: 1.244986
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 625755
Amount: 1.240344
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:46:45

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

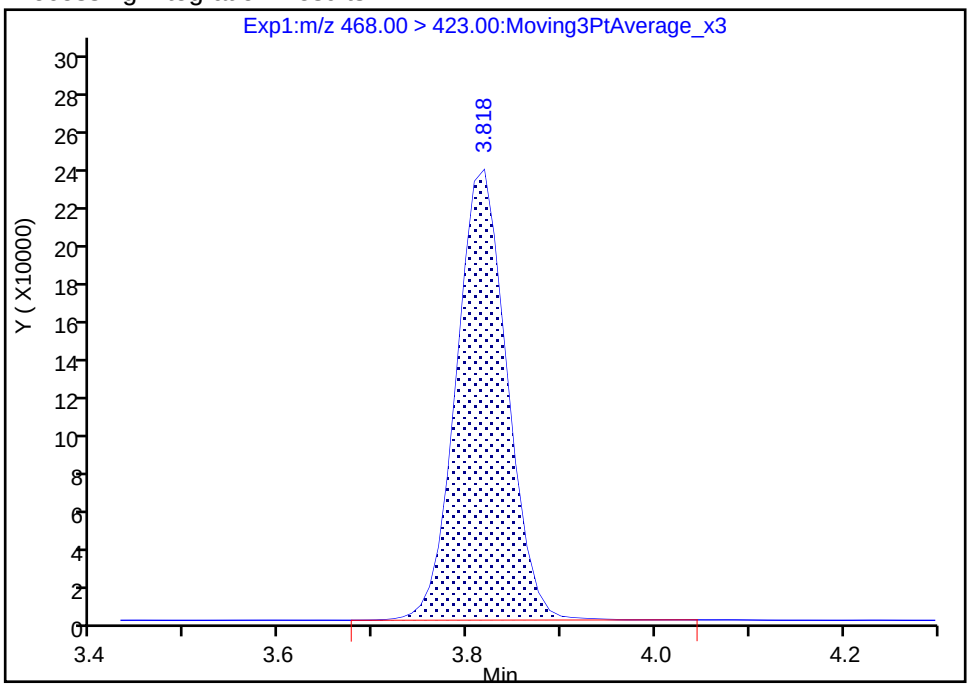
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 19 13C5 PFNA, CAS: STL00995

Signal: 1

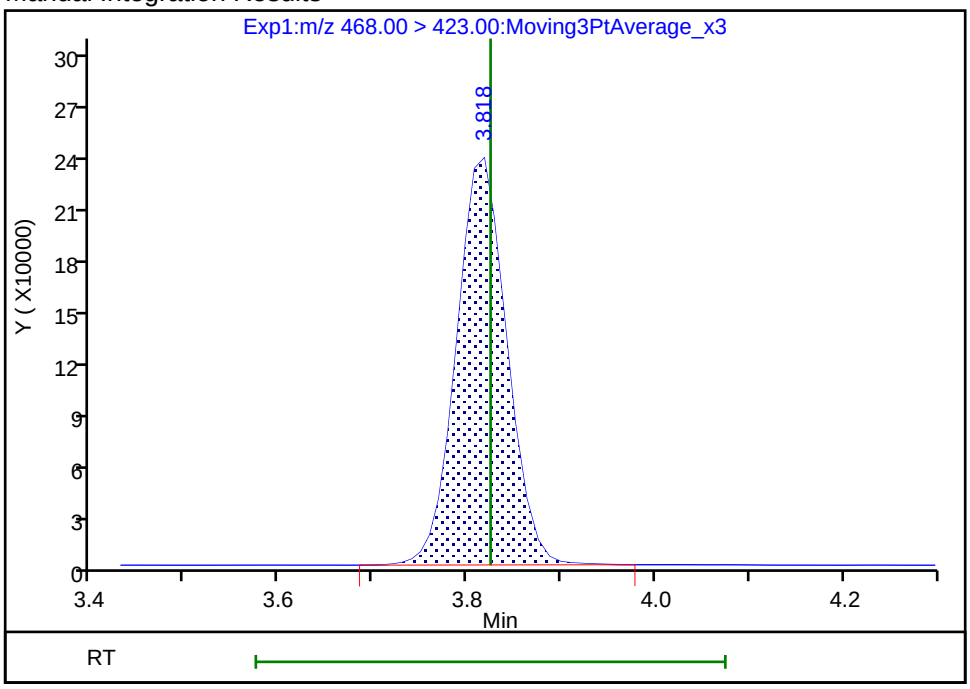
Processing Integration Results

RT: 3.82
Area: 892571
Amount: 1.322897
Amount Units: ng/ml




Manual Integration Results

RT: 3.82
Area: 891686
Amount: 1.321585
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:46:56

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

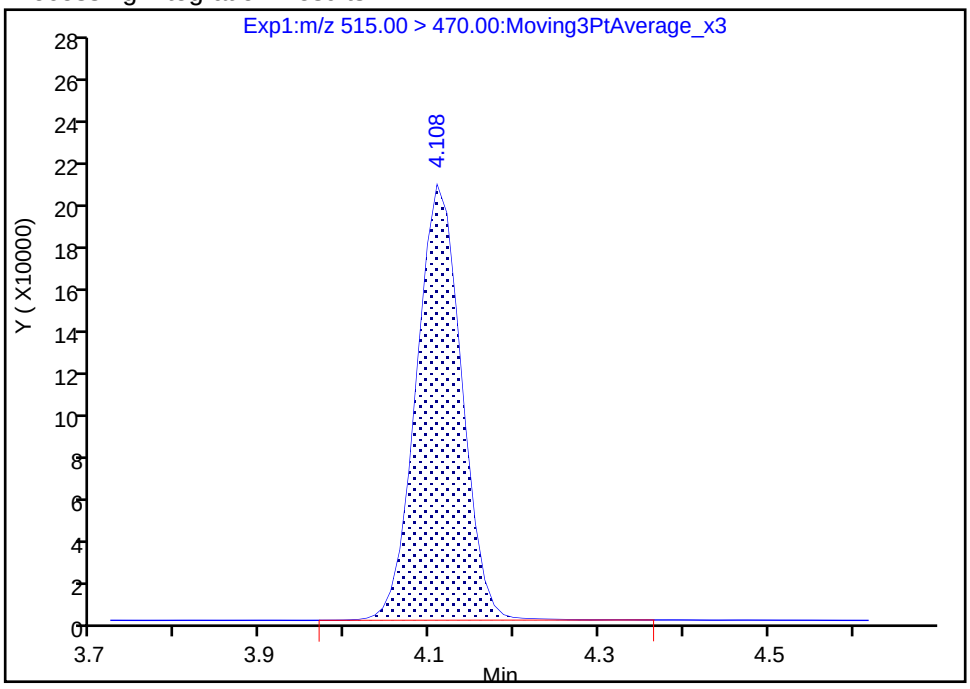
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 23 13C2 PFDA, CAS: STL00996

Signal: 1

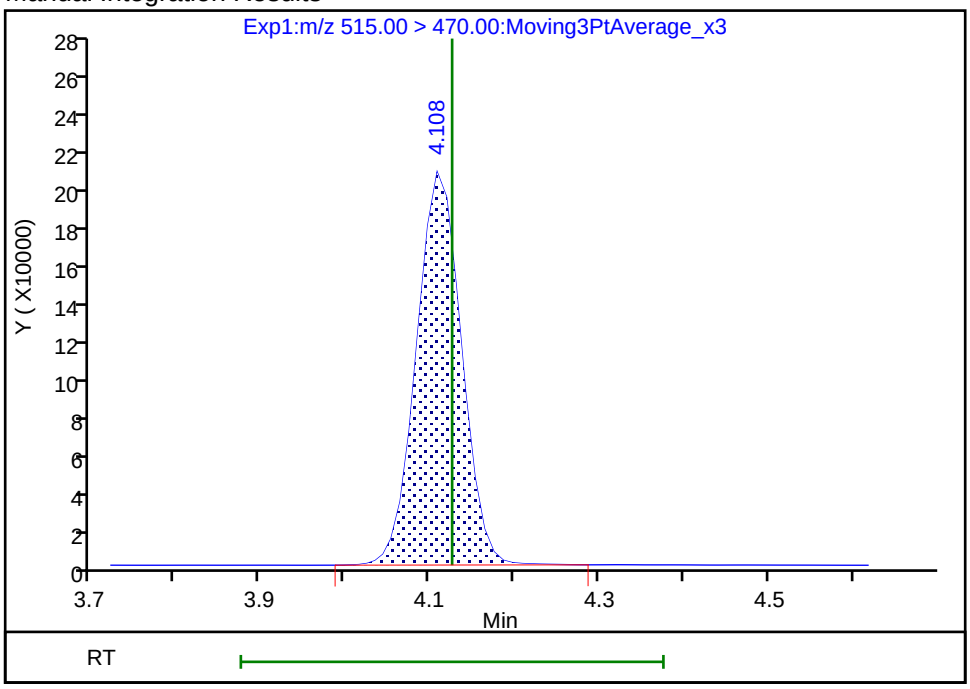
Processing Integration Results

RT: 4.11
Area: 765464
Amount: 1.186682
Amount Units: ng/ml




Manual Integration Results

RT: 4.11
Area: 764619
Amount: 1.185372
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:47:07

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

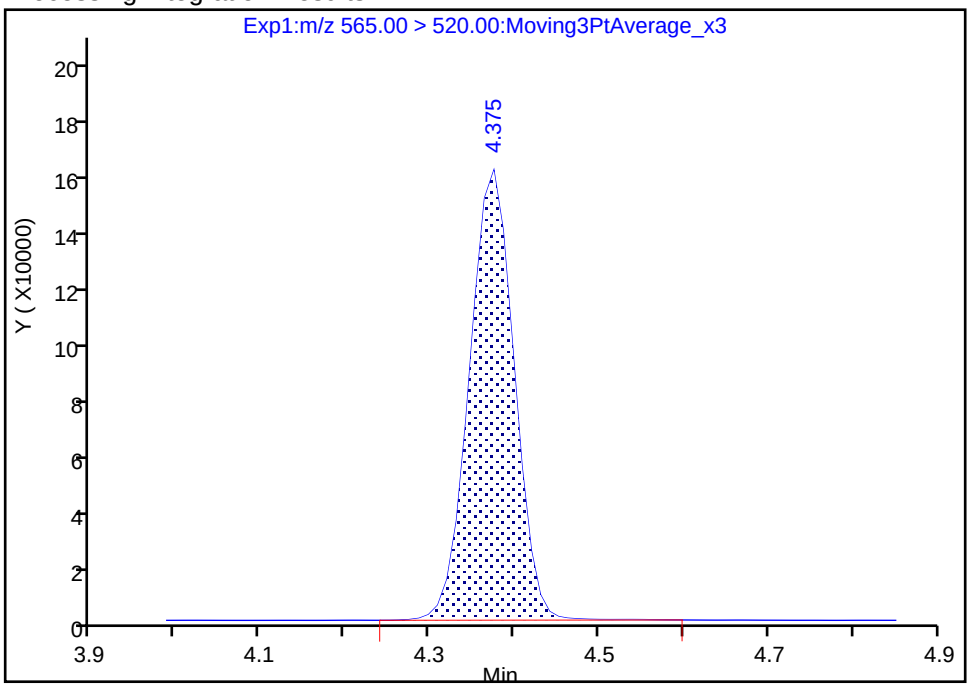
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 30 13C2 PFUnA, CAS: STL00997

Signal: 1

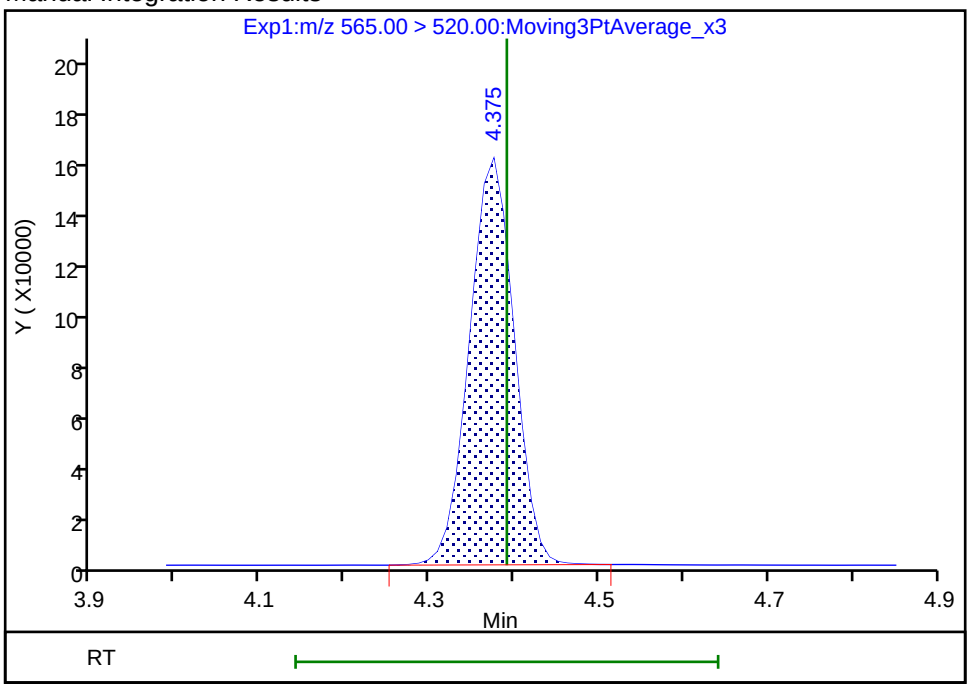
Processing Integration Results

RT: 4.38
Area: 589670
Amount: 1.112887
Amount Units: ng/ml




Manual Integration Results

RT: 4.38
Area: 587819
Amount: 1.109393
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:47:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

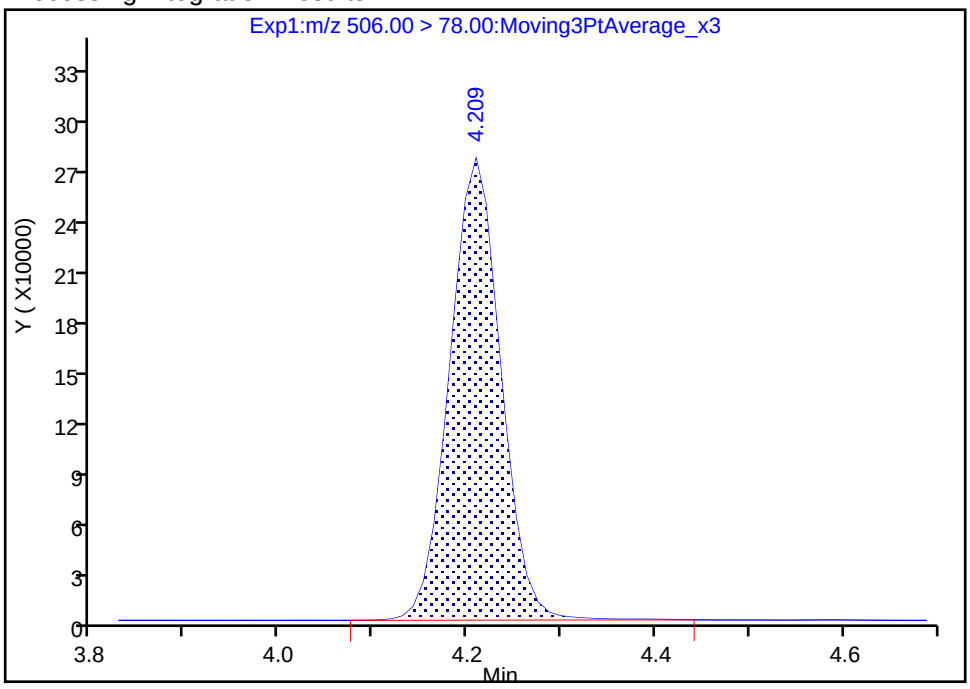
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 21 13C8 FOSA, CAS: STL01056

Signal: 1

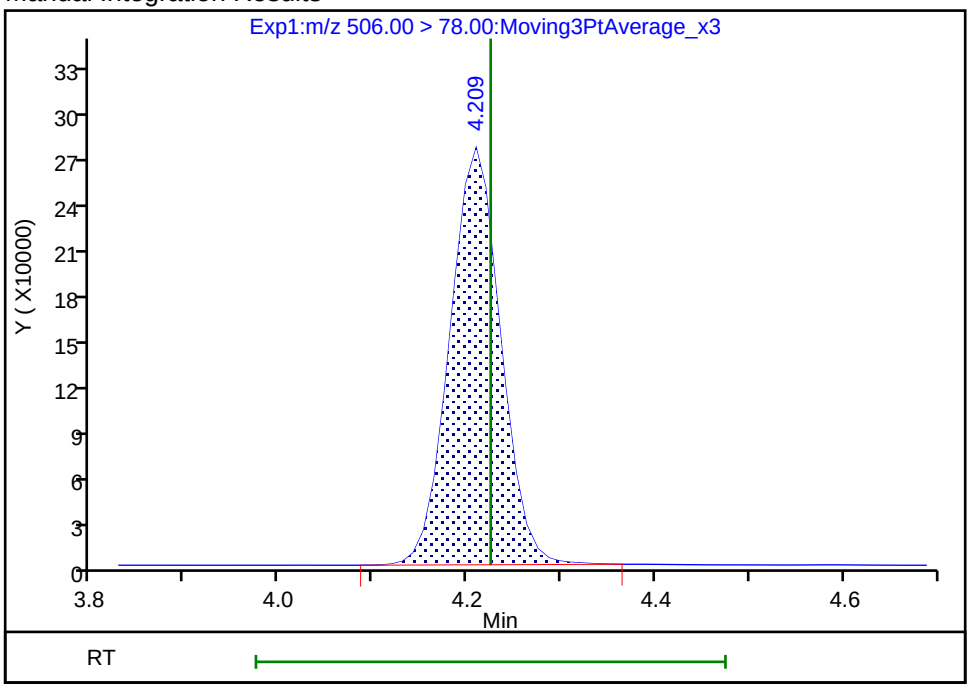
Processing Integration Results

RT: 4.21
Area: 1022903
Amount: 1.078803
Amount Units: ng/ml




Manual Integration Results

RT: 4.21
Area: 1018715
Amount: 1.074386
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:47:22

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

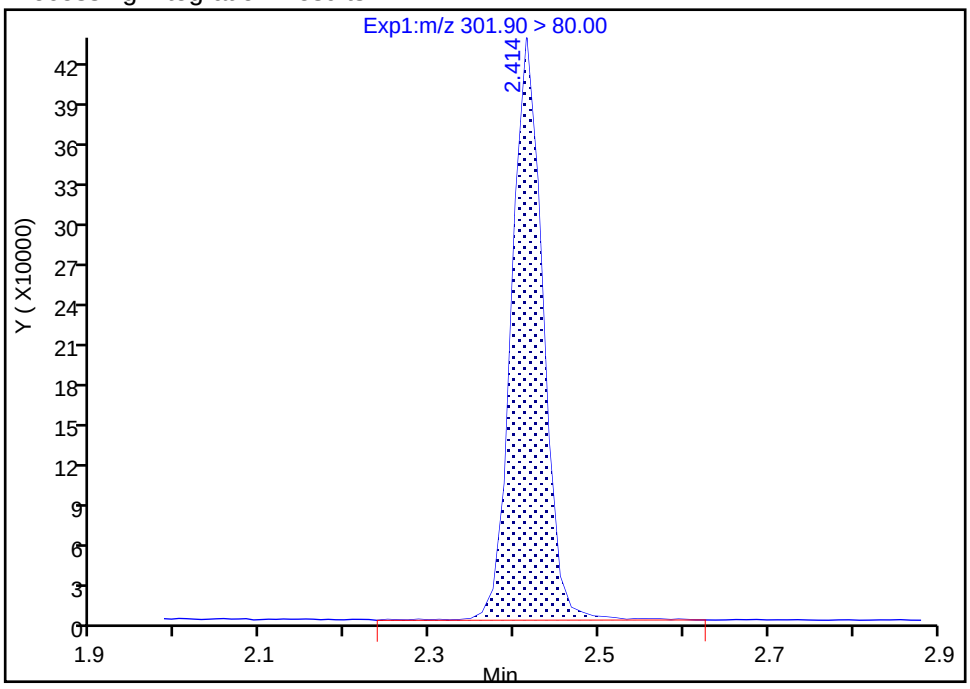
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B16.d | | | | |
| Injection Date: | 12-Mar-2021 14:05:23 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-1-A | Lab Sample ID: | 200-229152-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 47 13C3 PFBS, CAS: STL02337

Signal: 1

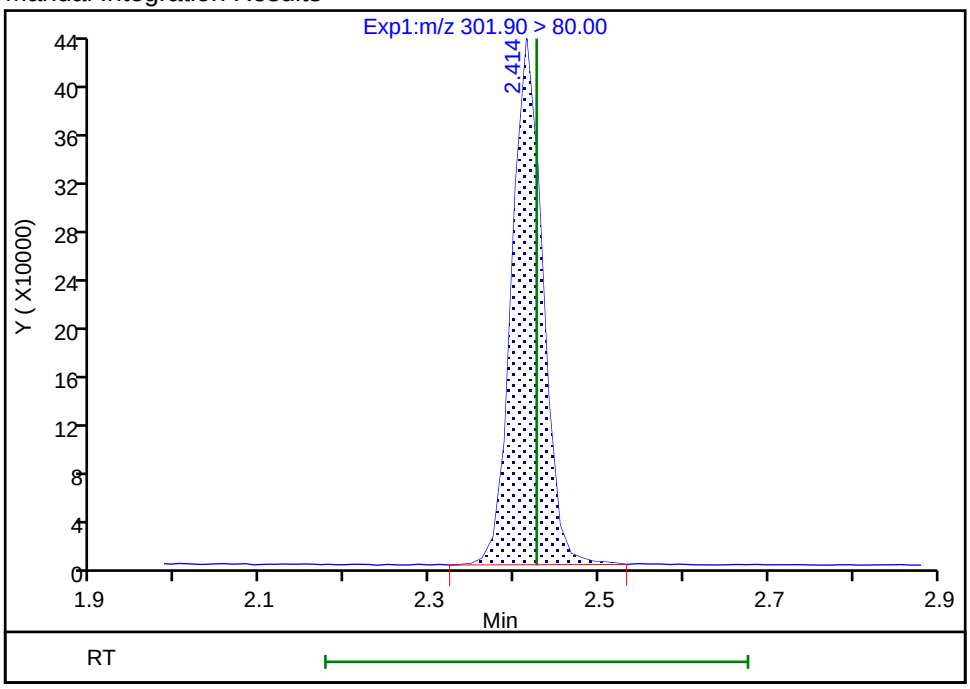
Processing Integration Results

RT: 2.41
Area: 1101337
Amount: 1.115250
Amount Units: ng/ml




Manual Integration Results

RT: 2.41
Area: 1092878
Amount: 1.106684
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 12:46:06

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID: HEX-MW12-030321  Lab Sample ID: 460-229152-2

Matrix: Water  Lab File ID: PA210312B17.d

Analysis Method: 537 (modified)  Date Collected: 03/03/2021 11:45

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 303.1(mL)  Date Analyzed: 03/12/2021 14:13

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 375-22-4 | Perfluorobutanoic acid (PFBA) | 19.5 | | 4.12 | 0.93 |
| 2706-90-3 | Perfluoropentanoic acid (PFPeA) | 50.3 | | 1.65 | 0.89 |
| 307-24-4 | Perfluorohexanoic acid (PFHxA) | 29.9 | | 1.65 | 0.68 |
| 375-85-9 | Perfluoroheptanoic acid (PFHpA) | 27.9 | | 1.65 | 0.38 |
| 335-67-1 | Perfluorooctanoic acid (PFOA) | 33.1 | B | 1.65 | 0.81 |
| 375-95-1 | Perfluorononanoic acid (PFNA) | 7.59 | | 1.65 | 0.48 |
| 335-76-2 | Perfluorodecanoic acid (PFDA) | 1.11 | J | 1.65 | 0.38 |
| 2058-94-8 | Perfluoroundecanoic acid (PFUnA) | 0.60 | U | 1.65 | 0.60 |
| 307-55-1 | Perfluorododecanoic acid (PFDoA) | 0.38 | U | 1.65 | 0.38 |
| 72629-94-8 | Perfluorotridecanoic acid (PFTriA) | 0.35 | U | 1.65 | 0.35 |
| 376-06-7 | Perfluorotetradecanoic acid (PFTeA) | 0.49 | U | 1.65 | 0.49 |
| 375-73-5 | Perfluorobutanesulfonic acid (PFBS) | 13.5 | | 1.65 | 0.52 |
| 355-46-4 | Perfluorohexanesulfonic acid (PFHxS) | 6.73 | | 1.65 | 0.55 |
| 375-92-8 | Perfluoroheptanesulfonic Acid (PFHpS) | 0.72 | J | 1.65 | 0.32 |
| 1763-23-1 | Perfluorooctanesulfonic acid (PFOS) | 42.4 | | 1.65 | 0.72 |
| 335-77-3 | Perfluorodecanesulfonic acid (PFDS) | 0.40 | U | 1.65 | 0.40 |
| 754-91-6 | Perfluorooctanesulfonamide (PFOSA) | 0.47 | U | 1.65 | 0.47 |
| 2355-31-9 | N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.65 | U | 4.12 | 0.65 |
| 2991-50-6 | N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 0.77 | U | 4.12 | 0.77 |
| 27619-97-2 | 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 3.00 | J | 4.12 | 0.59 |
| 39108-34-4 | 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 1.40 | J | 1.65 | 0.54 |

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID: HEX-MW12-030321  Lab Sample ID: 460-229152-2

Matrix: Water  Lab File ID: PA210312B17.d

Analysis Method: 537 (modified)  Date Collected: 03/03/2021 11:45

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 303.1(mL)  Date Analyzed: 03/12/2021 14:13

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| STL00994 | 18O2 PFHxS | 92 | | 50-150 |
| STL01892 | 13C4 PFHpA | 91 | | 50-150 |
| STL00990 | 13C4 PFOA | 90 | | 50-150 |
| STL00991 | 13C4 PFOS | 78 | | 50-150 |
| STL00995 | 13C5 PFNA | 83 | | 50-150 |
| STL00992 | 13C4 PFBA | 69 | | 25-150 |
| STL00993 | 13C2 PFHxA | 88 | | 50-150 |
| STL00996 | 13C2 PFDA | 72 | | 50-150 |
| STL00997 | 13C2 PFUnA | 65 | | 50-150 |
| STL00998 | 13C2 PFDoA | 64 | | 50-150 |
| STL01056 | 13C8 FOSA | 62 | | 25-150 |
| STL01893 | 13C5 PFPeA | 79 | | 25-150 |
| STL02116 | 13C2 PFTeDA | 67 | | 50-150 |
| STL02118 | d3-NMeFOSAA | 62 | | 50-150 |
| STL02117 | d5-NEtFOSAA | 63 | | 50-150 |
| STL02279 | M2-6:2 FTS | 96 | | 25-150 |
| STL02280 | M2-8:2 FTS | 80 | | 25-150 |
| STL02337 | 13C3 PFBS | 89 | | 50-150 |

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d
Lims ID: 460-229152-A-2-A
Client ID: HEX-MW12-030321
Sample Type: Client
Inject. Date: 12-Mar-2021 14:13:41 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-229152-A-2-A
Misc. Info.: 200-0045149-017 Plate: 1 Rack: 2
Operator ID: lc812tech Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 15-Mar-2021 17:45:51 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1650

First Level Reviewer: nampitakw Date: 15-Mar-2021 13:22:56
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.082 | 2.091 | -0.009 | 0.598 | 1044846 | 0.8597 | | 68.8 | 5079 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | M |
| 212.90 > 169.00 | 2.082 | 2.091 | -0.009 | 1.000 | 494307 | 0.5902 | | | 45.9 | M |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.400 | 2.413 | -0.013 | 0.689 | 872351 | 0.99 | | 79.4 | 562 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | M |
| 262.90 > 219.00 | 2.400 | 2.413 | -0.013 | 1.000 | 1177496 | 1.52 | | | 12.3 | M |
| D 47 13C3 PFBS | | | | | | | | | | M |
| 301.90 > 80.00 | 2.413 | 2.426 | -0.013 | 0.693 | 1199760 | 1.04 | | 89.3 | 35004 | M |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | M |
| 298.90 > 80.00 | 2.426 | 2.439 | -0.013 | 1.005 | 477011 | 0.4086 | Target=2.21 | | 16.4 | M |
| 298.90 > 99.00 | 2.426 | 2.439 | -0.013 | 1.005 | 212572 | | 2.24(1.11-3.32) | | 27.7 | M |
| D 60 M2-4:2 FTS | | | | | | | | | | M |
| 329.00 > 81.00 | 2.722 | 2.734 | -0.012 | 0.781 | 111033 | 1.15 | | 98.6 | 13.1 | M |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | M |
| 327.00 > 307.00 | 2.722 | 2.734 | -0.012 | 1.000 | 206 | 0.001181 | | | 1.1 | M |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.758 | 2.770 | -0.012 | 0.792 | 1012768 | 1.10 | | 88.0 | 2356 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | M |
| 313.00 > 269.00 | 2.758 | 2.770 | -0.012 | 1.000 | 801836 | 0.9059 | Target=12.83 | | 16.1 | |
| 313.00 > 119.00 | 2.758 | 2.770 | -0.012 | 1.000 | 67065 | | 11.96(6.42-19.25) | | 46.5 | M |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | M |
| 349.00 > 80.00 | 2.758 | 2.770 | -0.012 | 0.884 | 23642 | 0.0227 | Target=3.35 | | 1.9 | M |
| 349.00 > 99.00 | 2.758 | 2.770 | -0.012 | 0.884 | 7165 | | 3.30(1.67-5.02) | | 2.1 | M |
| 67 Perfluoro(2-propoxypropanoic) ac | | | | | | | | | | M |
| 329.10 > 285.00 | 2.843 | 2.880 | -0.037 | 0.992 | 3343 | 0.0259 | | | 0.3 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 64 13C3 HFPO-DA | | | | | | | | | | |
| 332.10 > 287.00 | 2.868 | 2.880 | -0.012 | 0.823 | 116572 | 0.7191 | | 57.5 | 312 | |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.121 | 3.132 | -0.011 | 1.000 | 190554 | 0.2039 | Target=4.15 | | 18.0 | |
| 399.00 > 99.00 | 3.121 | 3.132 | -0.011 | 1.000 | 45217 | | 4.21(2.08-6.23) | | 24.6 | M |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.121 | 3.132 | -0.011 | 0.896 | 937784 | 1.09 | | 92.2 | 2330 | |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.121 | 3.143 | -0.022 | 0.896 | 997965 | 1.13 | | 90.6 | 3096 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | M |
| 363.00 > 319.00 | 3.121 | 3.143 | -0.022 | 1.000 | 738615 | 0.8470 | Target=3.66 | | 24.3 | M |
| 363.00 > 169.00 | 3.121 | 3.143 | -0.022 | 1.000 | 218005 | | 3.39(1.83-5.49) | | 280 | M |
| 77 DONA | | | | | | | | | | RM |
| 377.00 > 251.00 | 3.154 | 3.175 | -0.021 | 0.831 | 722 | 0.000466 | Target=2.43 | | 0.5 | RM |
| 377.00 > 85.00 | 3.175 | 3.175 | 0.0 | 0.837 | 1067 | | 0.68(1.22-3.65) | | 0.6 | M |
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | M |
| 449.00 > 80.00 | 3.474 | 3.483 | -0.009 | 0.916 | 13641 | 0.0219 | Target=5.95 | | 2.8 | M |
| 449.00 > 99.00 | 3.474 | 3.483 | -0.009 | 0.916 | 2641 | | 5.17(2.98-8.93) | | 2.8 | M |
| D 12 M2-6:2 FTS | | | | | | | | | | M |
| 429.00 > 81.00 | 3.474 | 3.492 | -0.018 | 0.997 | 122296 | 1.14 | | 95.9 | 36.1 | M |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | M |
| 427.00 > 407.00 | 3.474 | 3.492 | -0.018 | 1.000 | 10407 | 0.0908 | | | 111 | M |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.483 | 3.501 | -0.018 | 1.000 | 1003414 | 1.12 | | 89.7 | 3484 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.483 | 3.501 | -0.018 | | 1130849 | 1.25 | | | 3654 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | M |
| 413.00 > 369.00 | 3.483 | 3.501 | -0.018 | 1.000 | 873205 | 1.00 | Target=2.58 | | 56.2 | M |
| 413.00 > 169.00 | 3.483 | 3.501 | -0.018 | 1.000 | 379772 | | 2.30(1.29-3.87) | | 475 | M |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.795 | 3.814 | -0.019 | 1.000 | 682756 | 1.28 | Target=5.65 | | 101 | M |
| 499.00 > 99.00 | 3.795 | 3.814 | -0.019 | 1.000 | 93418 | | 7.31(2.82-8.47) | | 104 | M |
| D 18 13C4 PFOS | | | | | | | | | | |
| 503.00 > 80.00 | 3.795 | 3.814 | -0.019 | 1.089 | 552408 | 0.9354 | | 78.3 | 211 | |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.814 | 3.824 | -0.010 | 1.095 | 821303 | 1.04 | | 83.2 | 2589 | |
| 20 Perfluorononanoic acid | | | | | | | | | | M |
| 463.00 > 419.00 | 3.814 | 3.824 | -0.010 | 1.000 | 167393 | 0.2302 | Target=7.44 | | 15.8 | M |
| 463.00 > 169.00 | 3.814 | 3.824 | -0.010 | 1.000 | 26137 | | 6.40(3.72-11.16) | | 90.6 | M |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.115 | 4.126 | -0.011 | 1.181 | 683239 | 0.9049 | | 72.4 | 4097 | |
| 24 Perfluorodecanoic acid | | | | | | | | | | M |
| 513.00 > 469.00 | 4.115 | 4.126 | -0.011 | 1.000 | 18960 | 0.0337 | Target=9.29 | | 4.1 | M |
| 513.00 > 169.00 | 4.115 | 4.126 | -0.011 | 1.000 | 2252 | | 8.42(4.64-13.93) | | 13.8 | M |
| D 26 M2-8:2 FTS | | | | | | | | | | M |
| 529.00 > 81.00 | 4.126 | 4.137 | -0.011 | 1.185 | 106458 | 0.9608 | | 80.2 | 77.7 | M |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | M |
| 527.00 > 507.00 | 4.115 | 4.137 | -0.022 | 0.997 | 2564 | 0.0424 | | | 61.1 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 21 13C8 FOSA | | | | | | | | | | |
| 506.00 > 78.00 | 4.215 | 4.225 | -0.010 | 1.210 | 854715 | 0.7701 | | 61.6 | 2547 | |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | M |
| 498.00 > 78.00 | 4.205 | 4.225 | -0.020 | 0.998 | 1144 | 0.001669 | | | 4.0 | M |
| D 27 d3-NMeFOSAA | | | | | | | | | | M |
| 573.00 > 419.00 | 4.257 | 4.268 | -0.011 | 1.222 | 42462 | 0.7753 | | 62.0 | 342 | M |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | RM |
| 599.00 > 80.00 | 4.358 | 4.358 | 0.0 | 1.148 | 116 | 0.000367 | Target=2.80 | | 0.5 | RM |
| 599.00 > 99.00 | 4.336 | 4.358 | -0.022 | 1.143 | 431 | | 0.27(1.40-4.19) | | 2.5 | M |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.369 | 4.391 | -0.022 | 1.254 | 507506 | 0.8182 | | 65.5 | 2946 | |
| D 32 d5-NEtFOSAA | | | | | | | | | | |
| 589.00 > 419.00 | 4.391 | 4.402 | -0.011 | 1.261 | 41519 | 0.7842 | | 62.7 | 389 | |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.369 | 4.402 | -0.033 | 0.995 | 189 | 0.006147 | | | 3.9 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | M |
| 631.00 > 451.00 | 4.467 | 4.479 | -0.012 | 1.177 | 275 | 0.000447 | | | 5.2 | M |
| D 36 13C2 PFDoA | | | | | | | | | | |
| 615.00 > 570.00 | 4.601 | 4.622 | -0.021 | 1.321 | 523923 | 0.8002 | | 64.0 | 2625 | |
| 37 Perfluorododecanoic acid | | | | | | | | | | M |
| 613.00 > 569.00 | 4.601 | 4.622 | -0.021 | 1.000 | 1144 | 0.002482 | Target=6.91 | | 0.6 | M |
| 613.00 > 169.00 | 4.611 | 4.622 | -0.011 | 1.002 | 142 | | 8.06(3.45-10.36) | | 2.1 | M |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 5.004 | 5.014 | -0.010 | 1.437 | 405532 | 0.8374 | | 67.0 | 2195 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | RM |
| 713.00 > 169.00 | 4.995 | 5.014 | -0.019 | 0.998 | 83 | 0.001380 | Target=1.06 | | 2.1 | RM |
| 713.00 > 219.00 | 4.995 | 5.014 | -0.019 | 0.998 | 178 | | 0.47(0.53-1.59) | | 7.7 | M |
| D 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.338 | 5.360 | -0.022 | 1.533 | 423479 | 0.8186 | | 65.5 | 2488 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | |
| 813.00 > 769.00 | 5.349 | 5.360 | -0.011 | 1.002 | 3929 | -0.002802 | Target=3.84 | | 2.9 | |
| 813.00 > 169.00 | 5.338 | 5.360 | -0.022 | 1.000 | 1072 | | 3.67(1.92-5.76) | | 56.6 | |
| 46 Perfluorooctadecanoic acid | | | | | | | | | | M |
| 913.00 > 869.00 | 5.665 | 5.674 | -0.009 | 1.061 | 174 | 0.000571 | Target=3.92 | | 0.3 | M |
| 913.00 > 169.00 | 5.647 | 5.674 | -0.027 | 1.058 | 88 | | 1.98(1.96-5.88) | | 5.4 | M |

## QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 15-Mar-2021 17:46:18 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d

Injection Date: 12-Mar-2021 14:13:41 Instrument ID: LC812

Lims ID: 460-229152-A-2-A Lab Sample ID: 200-229152-2

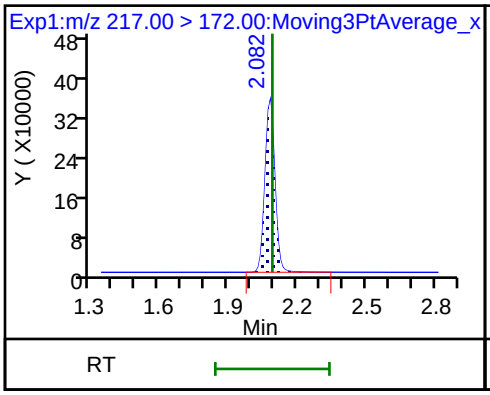
Client ID: HEX-MW12-030321

Operator ID: lc812tech ALS Bottle#: 17 Worklist Smp#: 17

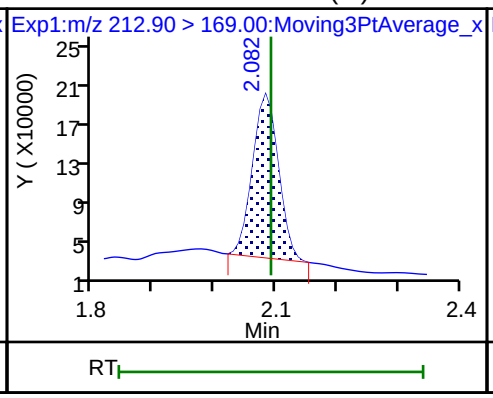
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

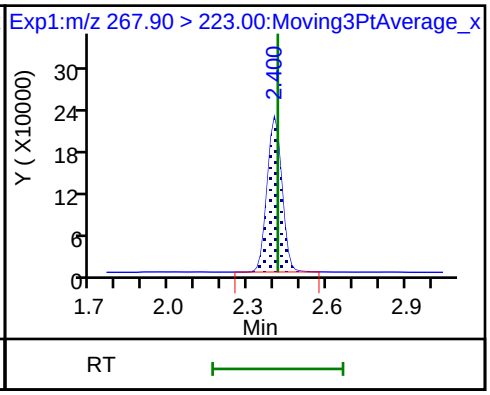
D 1 13C4 PFBA



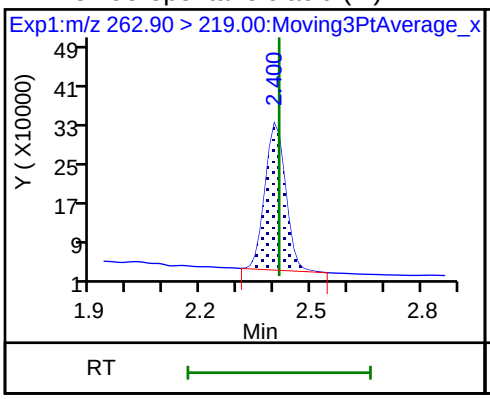

2 Perfluorobutanoic acid (M)



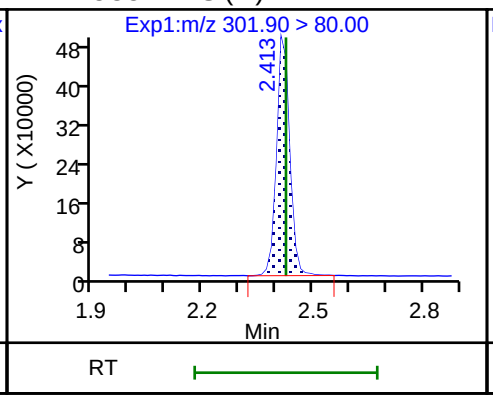

D 3 13C5 PFPeA



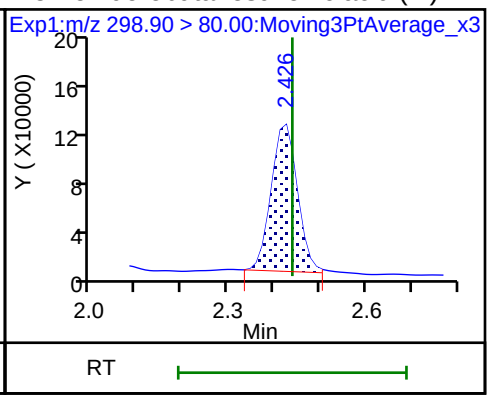

4 Perfluoropentanoic acid (M)



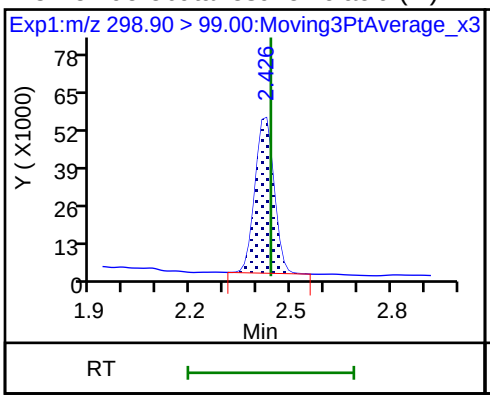

D 47 13C3 PFBS (M)



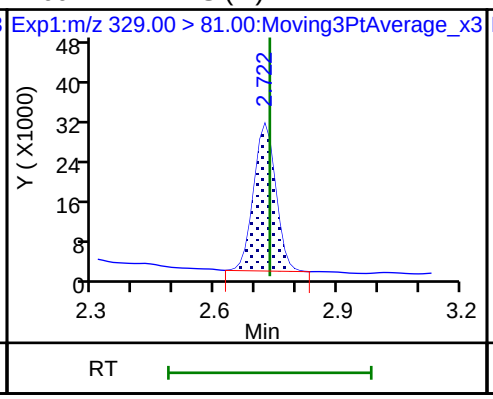

5 Perfluorobutanesulfonic acid (M)



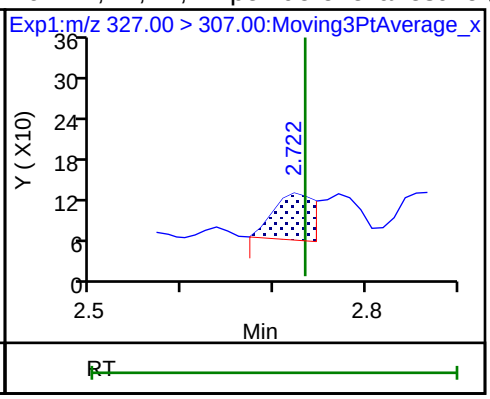

5 Perfluorobutanesulfonic acid (M)



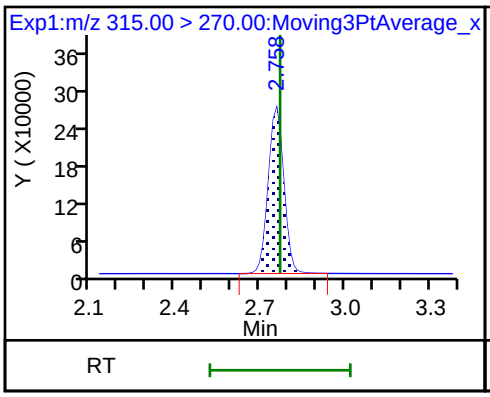

D 60 M2-4:2 FTS (M)



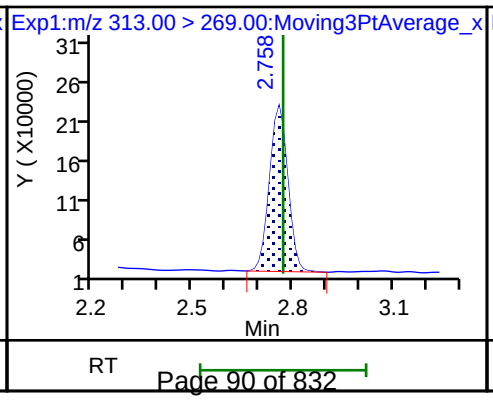

61 1H,1H,2H,2H-perfluorohexanesulfo (M)



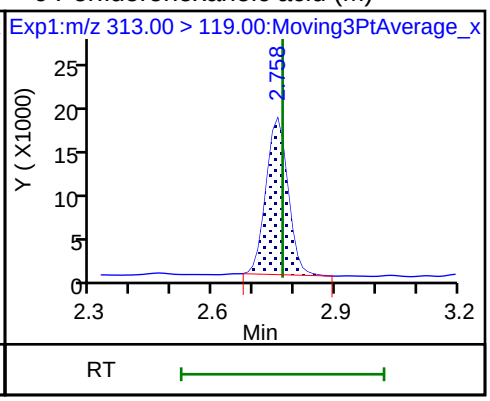

D 7 13C2 PFHxA



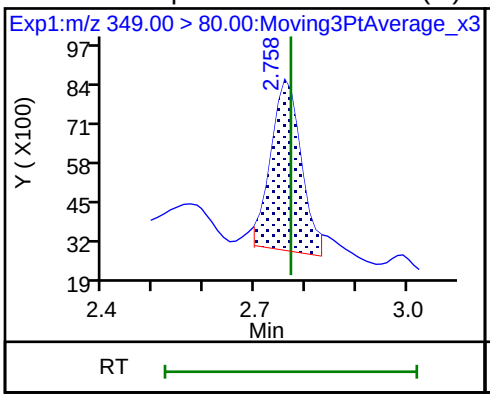

6 Perfluorohexanoic acid



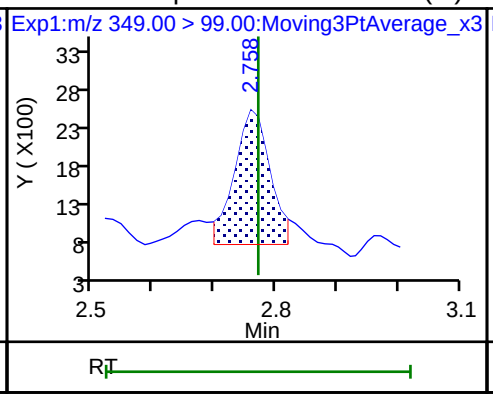

6 Perfluorohexanoic acid (M)



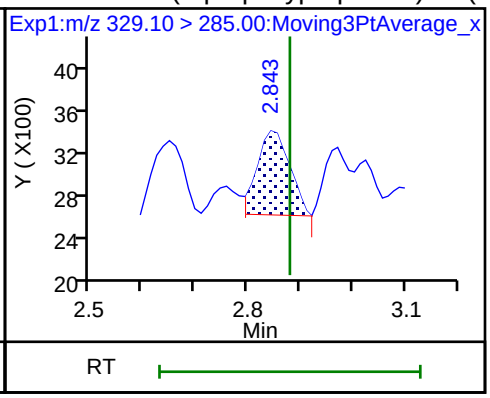
70 Perfluoropentanesulfonic acid (M)



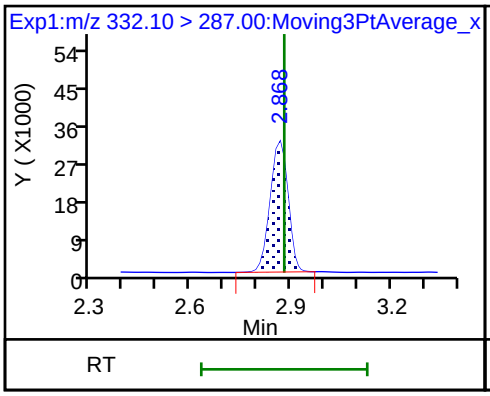

70 Perfluoropentanesulfonic acid (M)



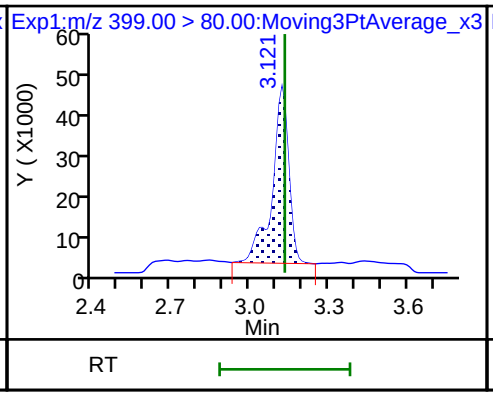

67 Perfluoro(2-propoxypropanoic) ac (M)



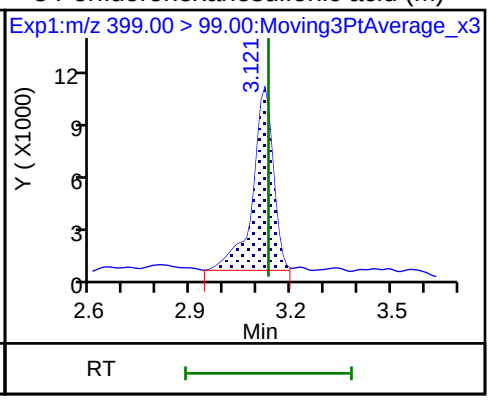

D 64 13C3 HFPO-DA



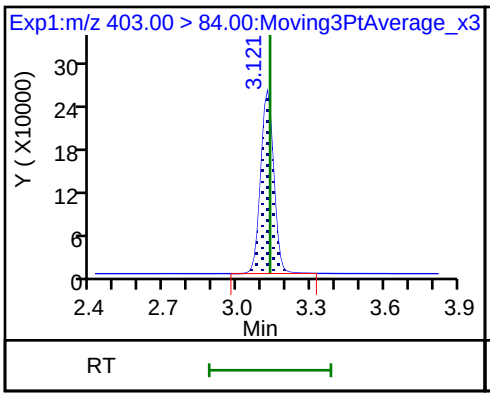

8 Perfluorohexanesulfonic acid



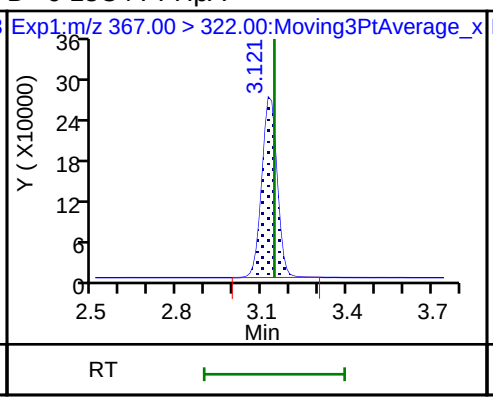

8 Perfluorohexanesulfonic acid (M)



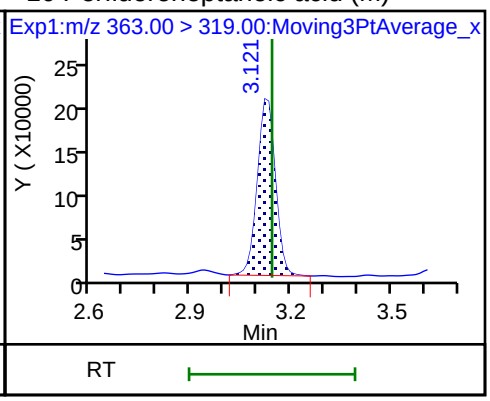

D 11 18O2 PFHxS



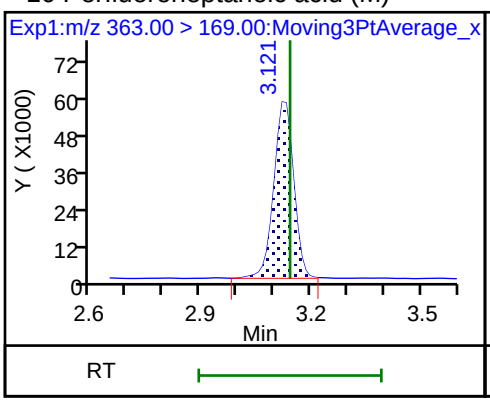

D 9 13C4 PFHpA



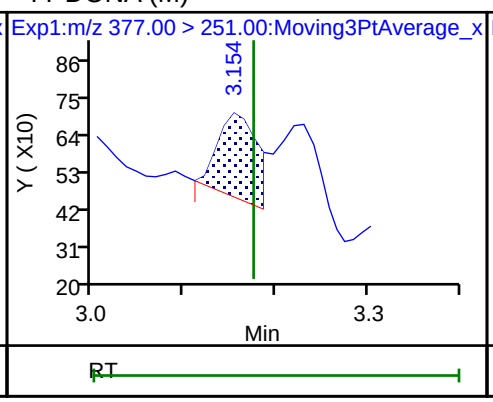

10 Perfluoroheptanoic acid (M)



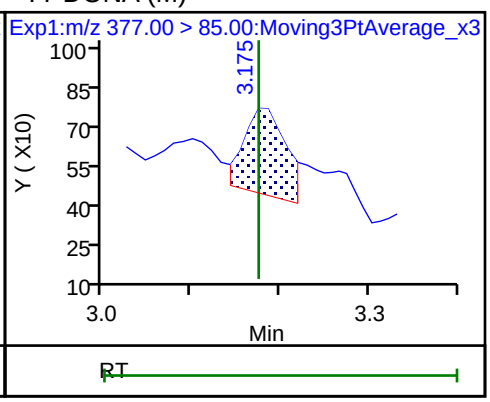

10 Perfluoroheptanoic acid (M)



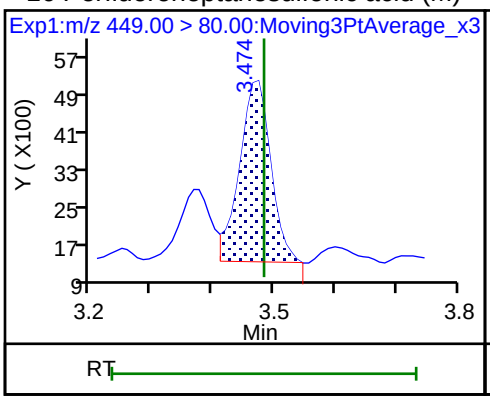

77 DONA (M)



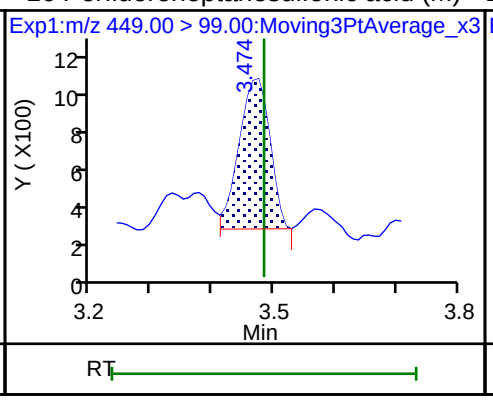

77 DONA (M)



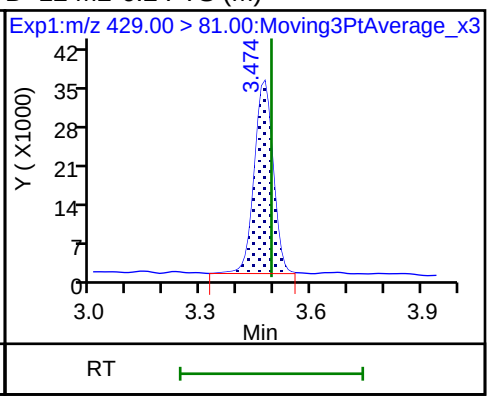
16 Perfluoroheptanesulfonic acid (M)



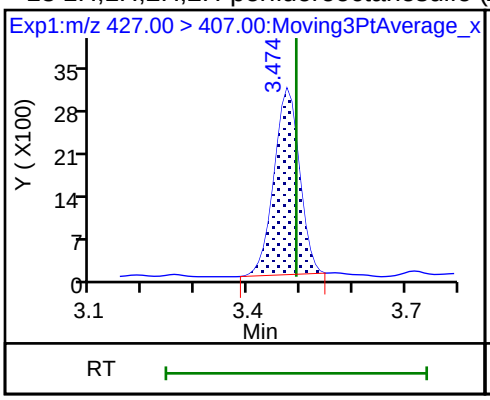

16 Perfluoroheptanesulfonic acid (M)



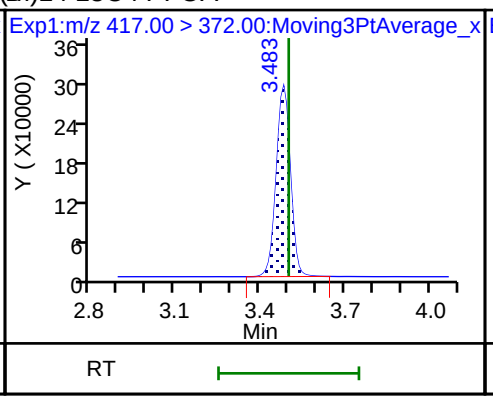

D 12 M2-6:2 FTS (M)



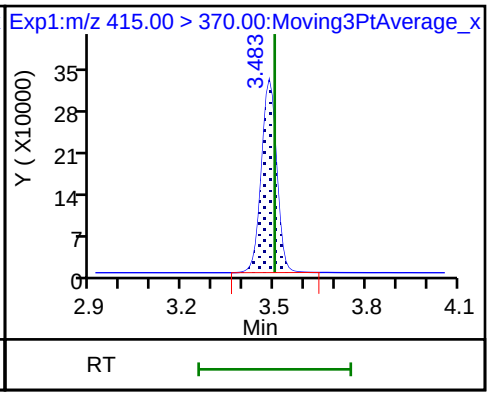

13 1H,1H,2H,2H-perfluorooctanesulfo (M)



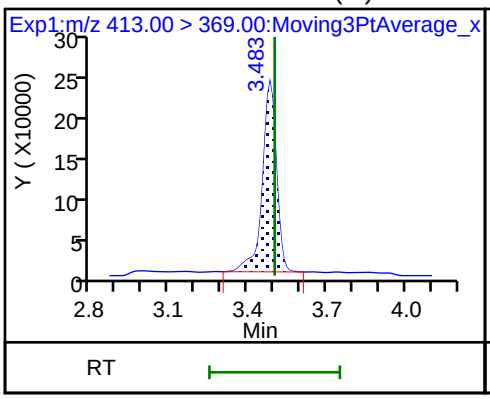

D 14 13C4 PFOA



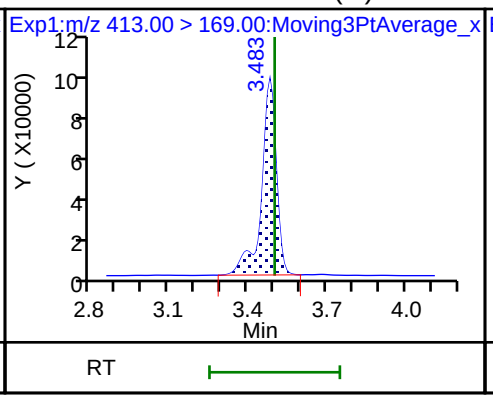

* 62 13C2 PFOA



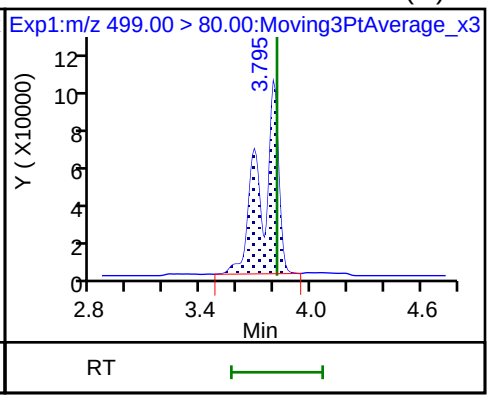

15 Perfluorooctanoic acid (M)



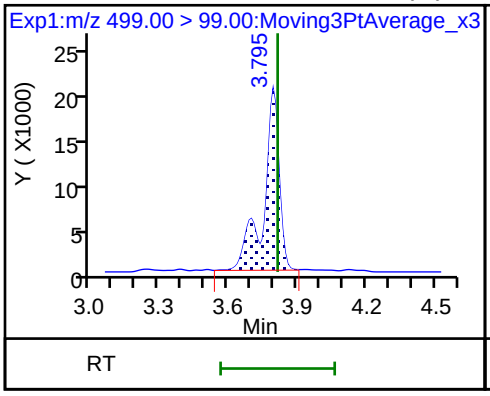

15 Perfluorooctanoic acid (M)



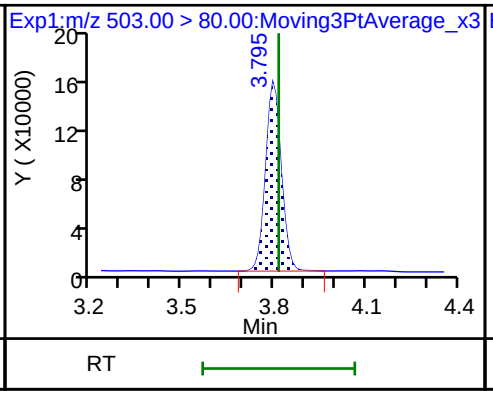

17 Perfluorooctanesulfonic acid (M)



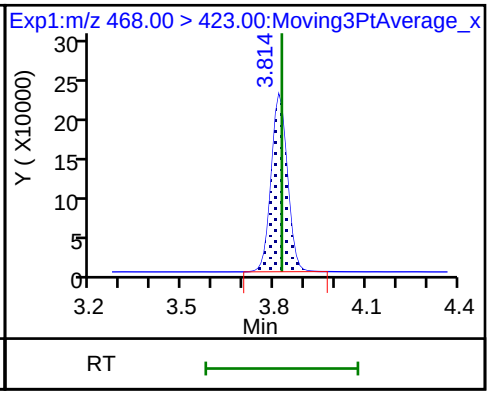

17 Perfluorooctanesulfonic acid (M)



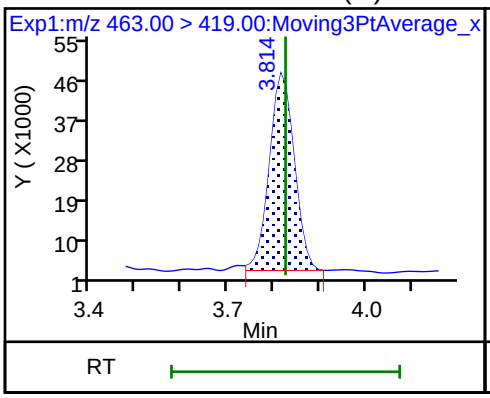

D 18 13C4 PFOS



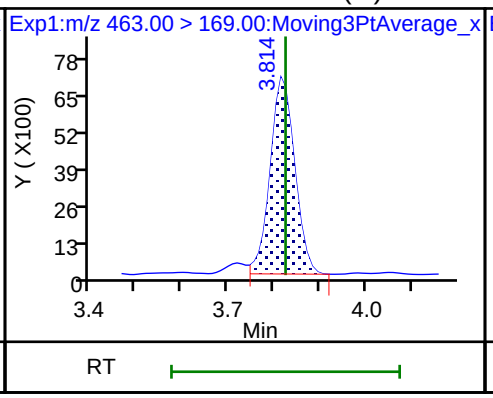

D 19 13C5 PFNA



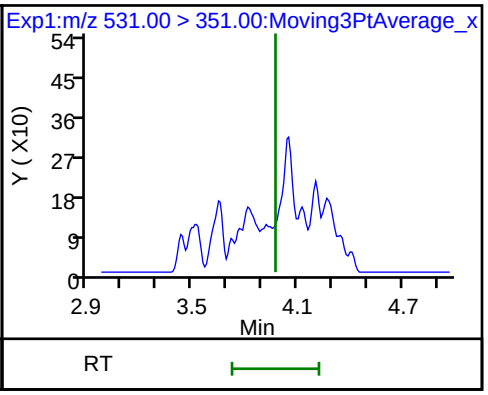
20 Perfluorononanoic acid (M)



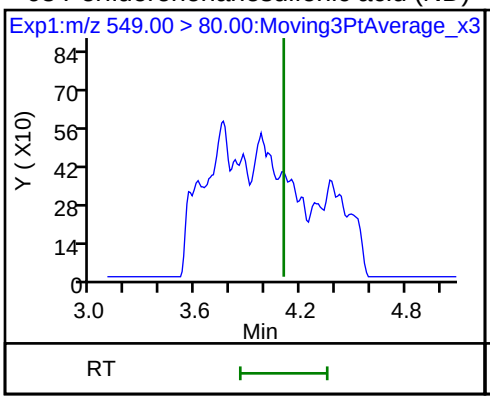

20 Perfluorononanoic acid (M)



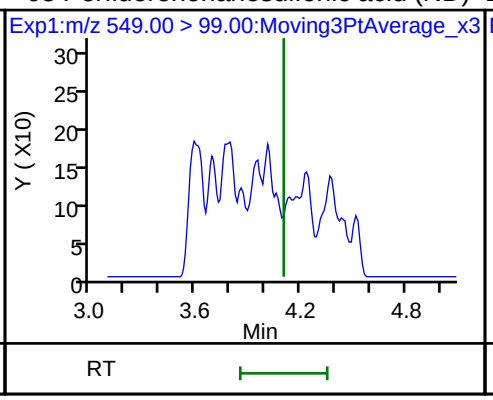

69 9-Chlorohexadecafluoro-3-oxanona (ND)



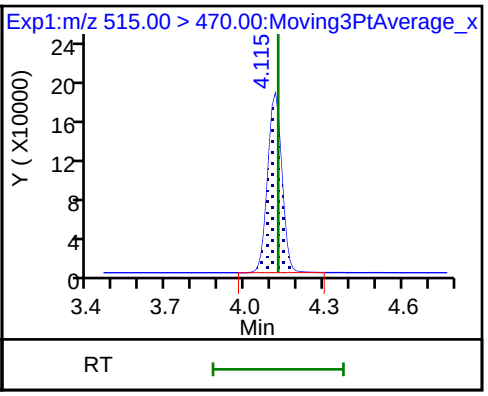

68 Perfluorononanesulfonic acid (ND)



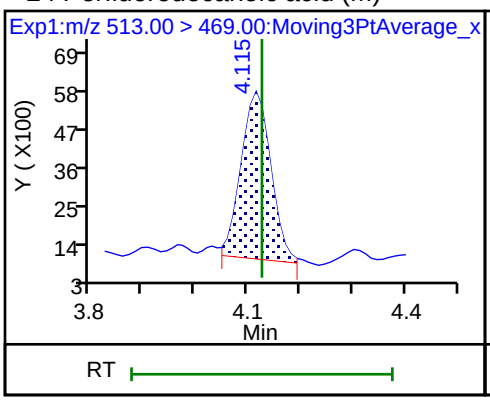

68 Perfluorononanesulfonic acid (ND)



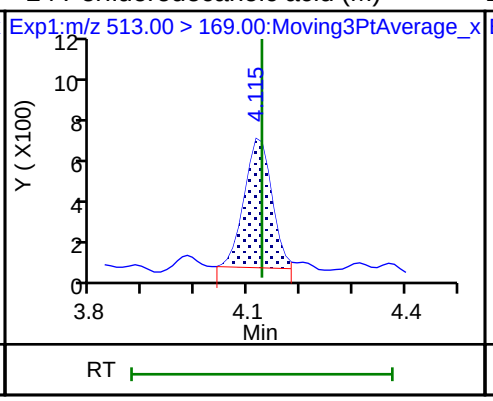

D 23 13C2 PFDA



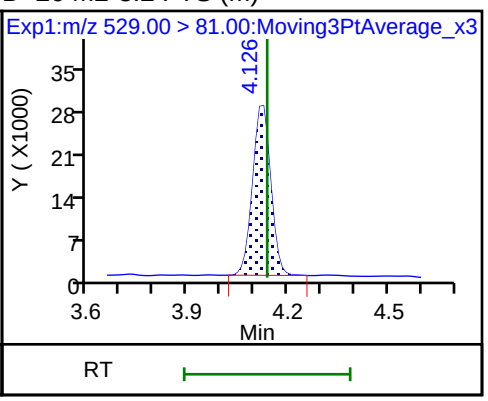

24 Perfluorodecanoic acid (M)



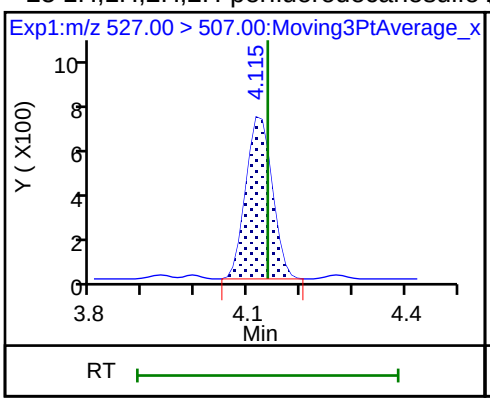

24 Perfluorodecanoic acid (M)



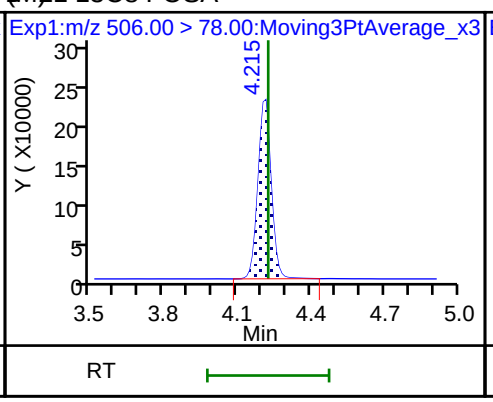

D 26 M2-8:2 FTS (M)



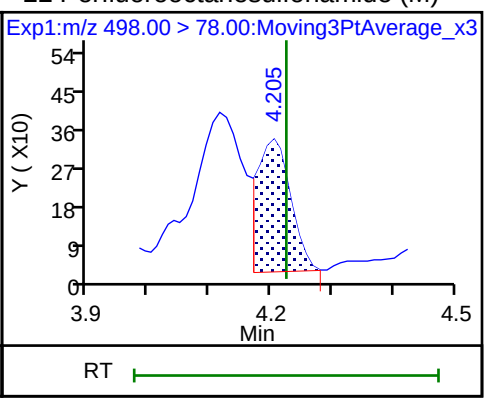

25 1H,1H,2H,2H-perfluorodecanesulfo (M)



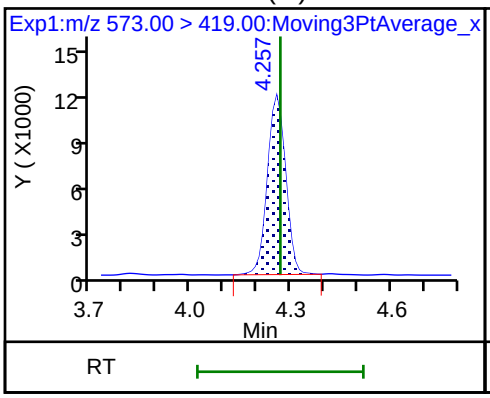

D 21 13C8 FOSA



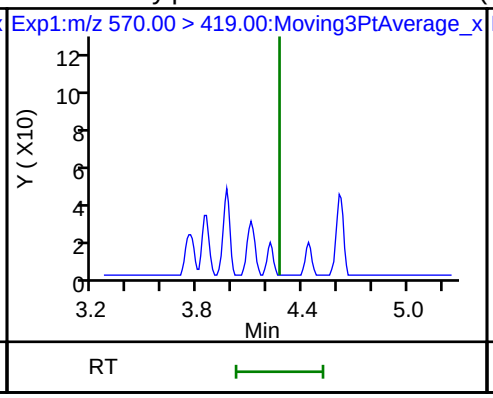

22 Perfluorooctanesulfonamide (M)



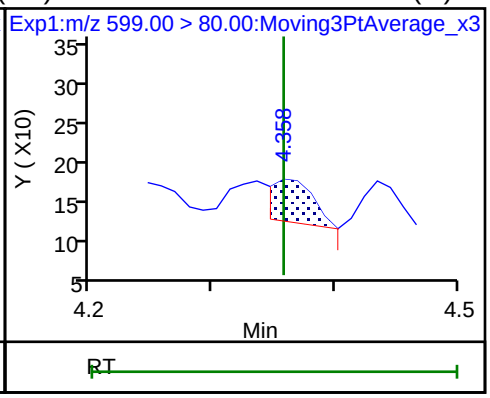
D 27 d3-NMeFOSAA (M)



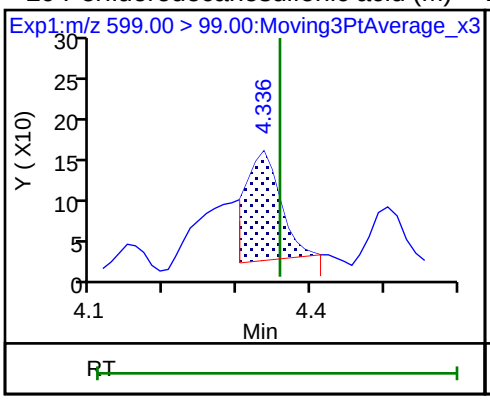

28 N-methylperfluorooctanesulfonami (ND)



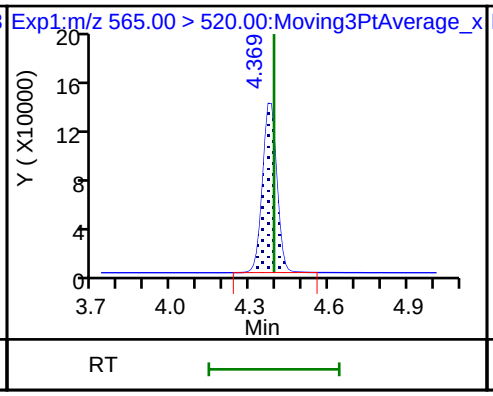

29 Perfluorodecanesulfonic acid (M)



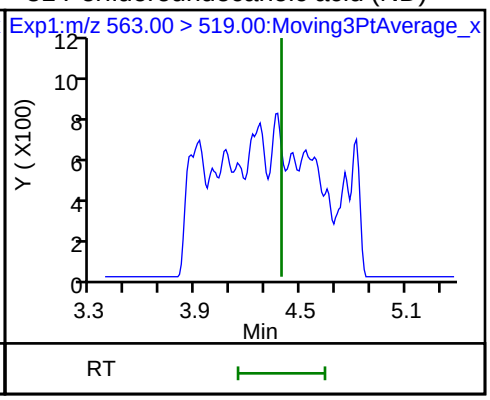

29 Perfluorodecanesulfonic acid (M)



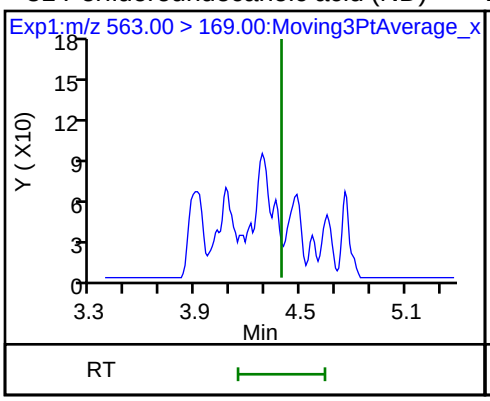

D 30 13C2 PFUnA



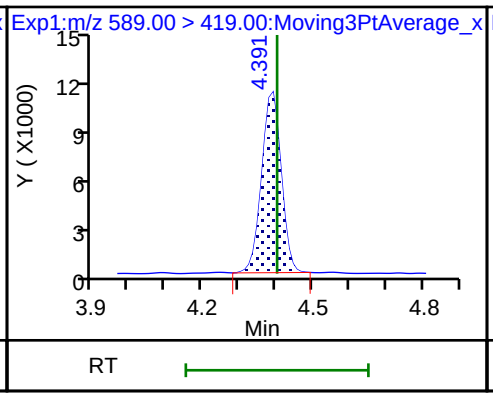

31 Perfluoroundecanoic acid (ND)



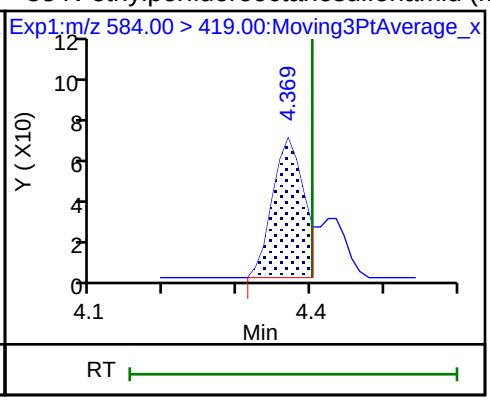

31 Perfluoroundecanoic acid (ND)



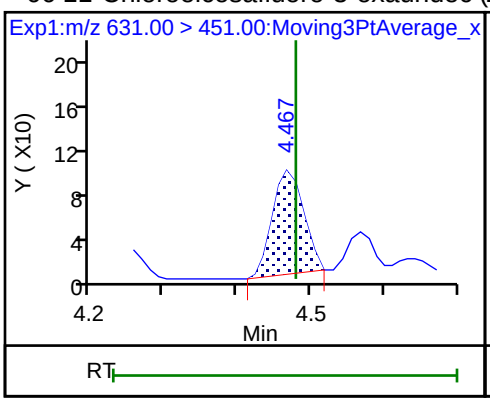

D 32 d5-NEtFOSAA



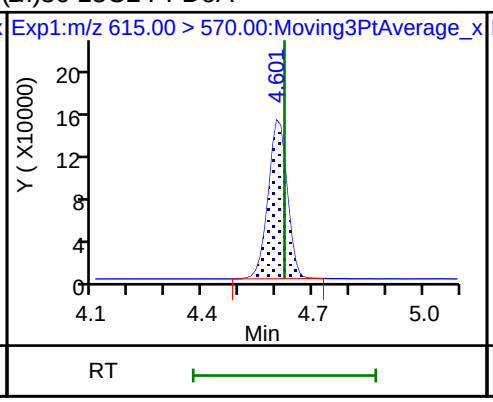

33 N-ethylperfluorooctanesulfonamid (M)



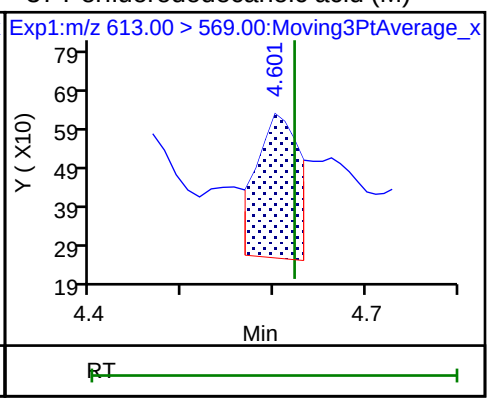

66 11-Chloroeicosafluoro-3-oxaundec (M)



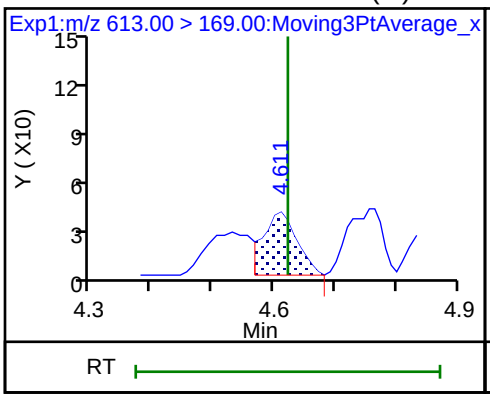

D 36 13C2 PFDoA



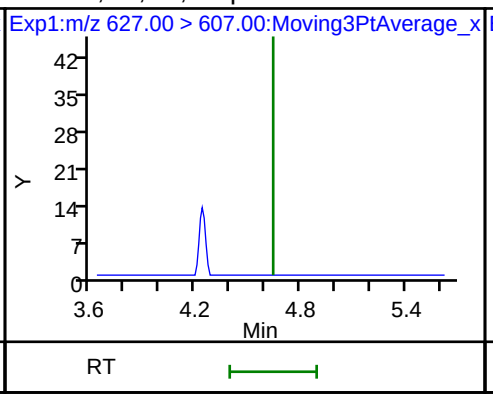

37 Perfluorododecanoic acid (M)



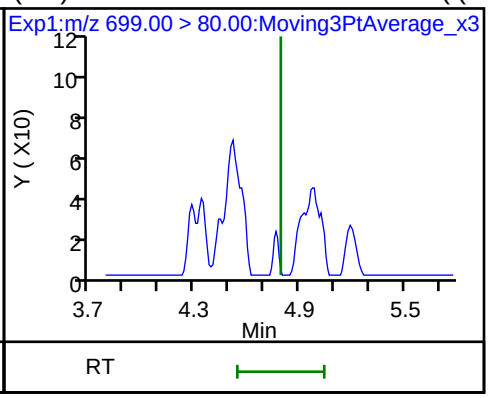
37 Perfluorododecanoic acid (M)



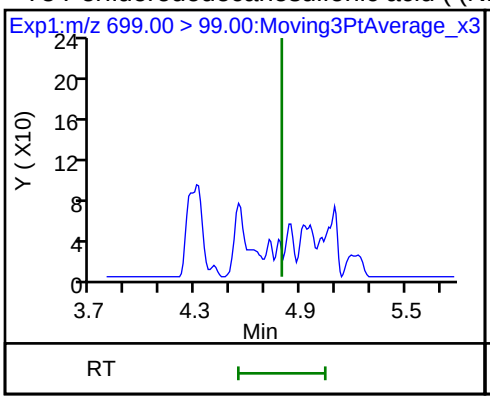

74 1H,1H,2H,2H-perfluorododecanesul (ND)



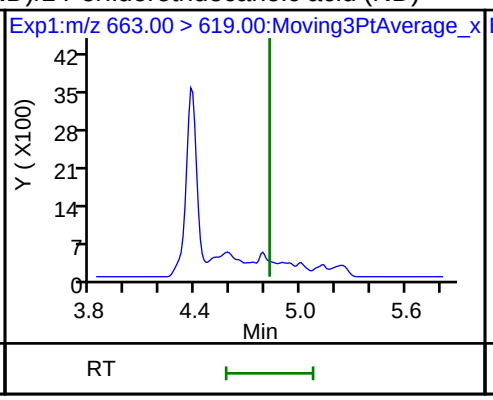

75 Perfluorododecanesulfonic acid ( (ND)



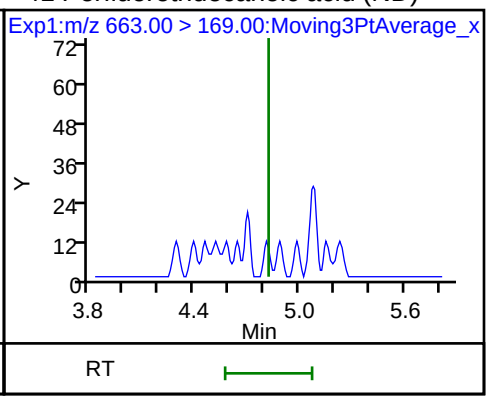

75 Perfluorododecanesulfonic acid ( (ND)



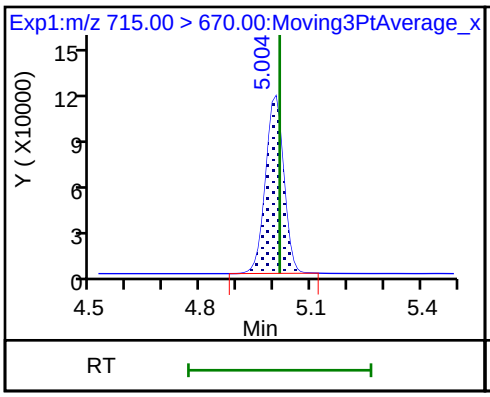

41 Perfluorotridecanoic acid (ND)



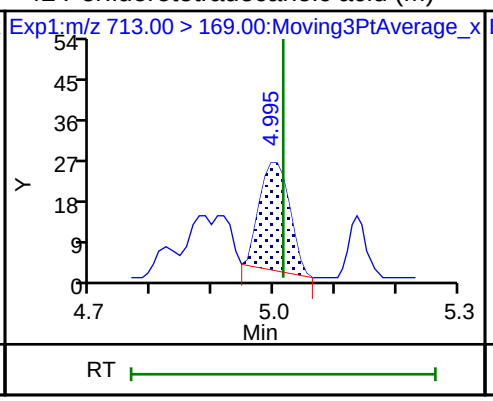

41 Perfluorotridecanoic acid (ND)



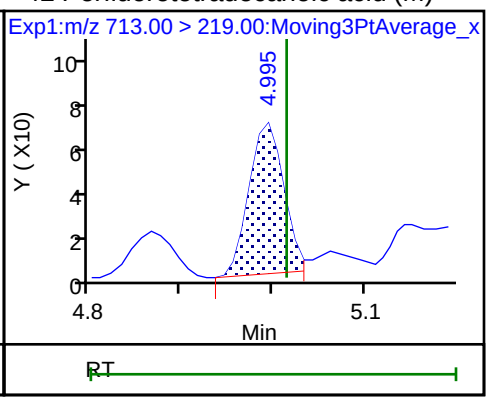

D 43 13C2 PFTeDA



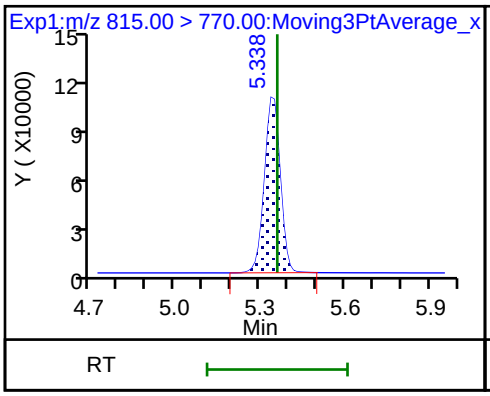

42 Perfluorotetradecanoic acid (M)



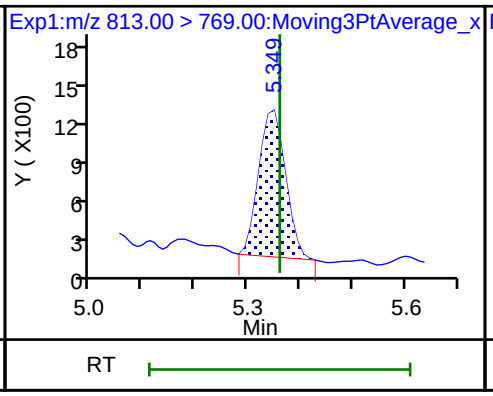

42 Perfluorotetradecanoic acid (M)



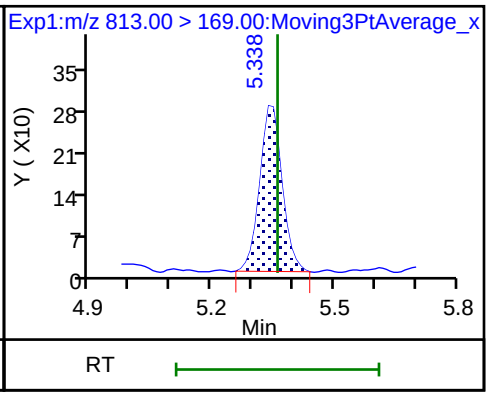

D 44 13C2 PFHxDA



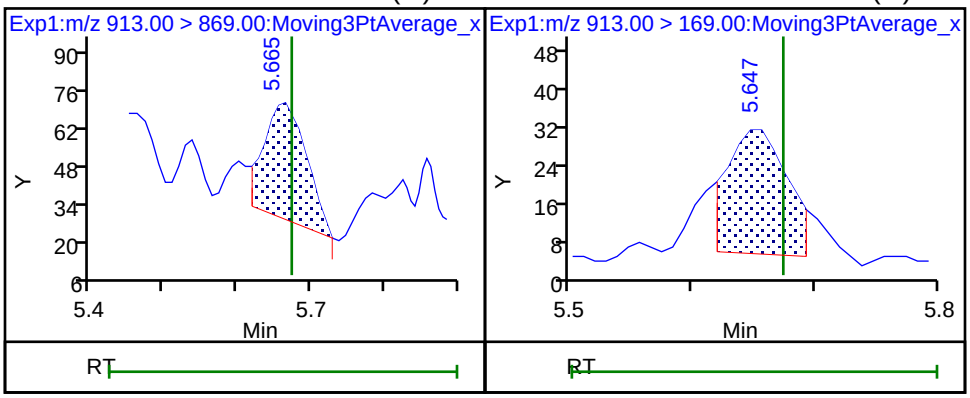

45 Perfluorohexadecanoic acid




45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



Eurofins TestAmerica, Burlington

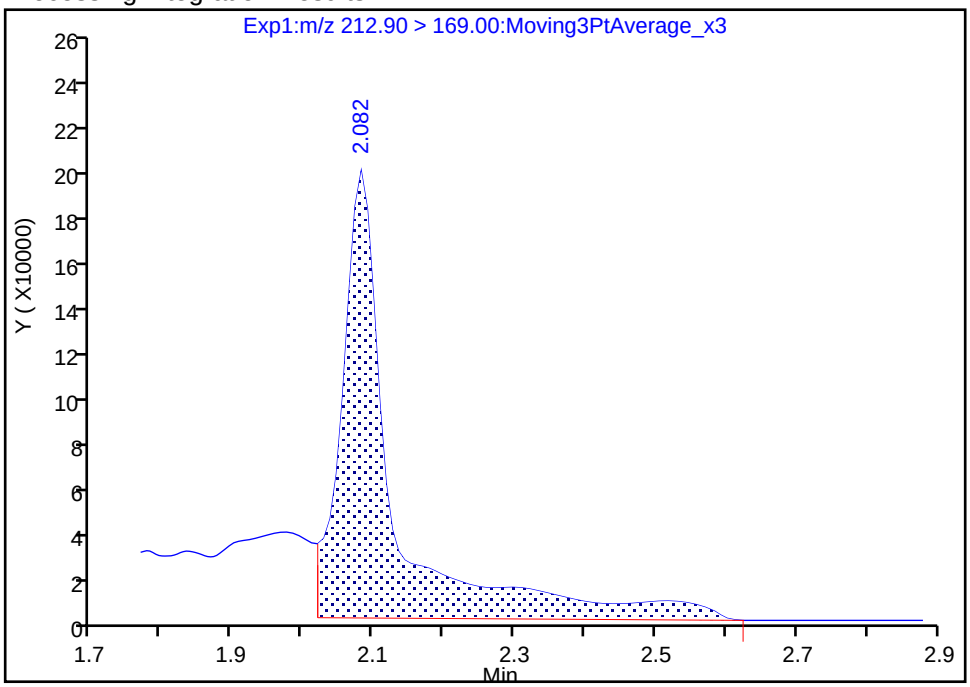
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

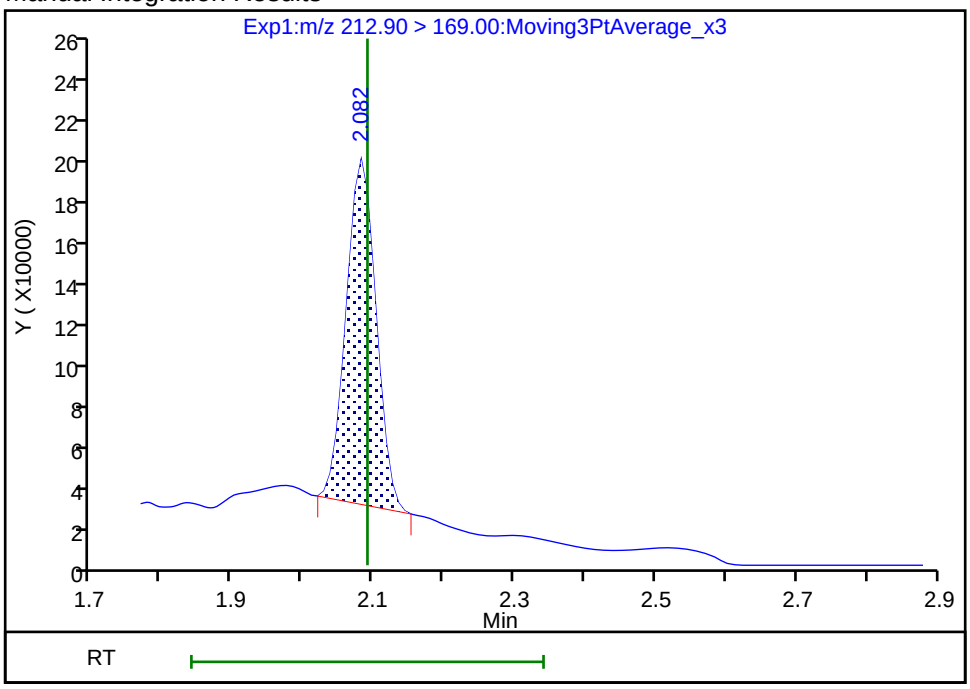
Processing Integration Results

RT: 2.08
Area: 1021740
Amount: 1.219905
Amount Units: ng/ml




Manual Integration Results

RT: 2.08
Area: 494307
Amount: 0.590177
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:04:23
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

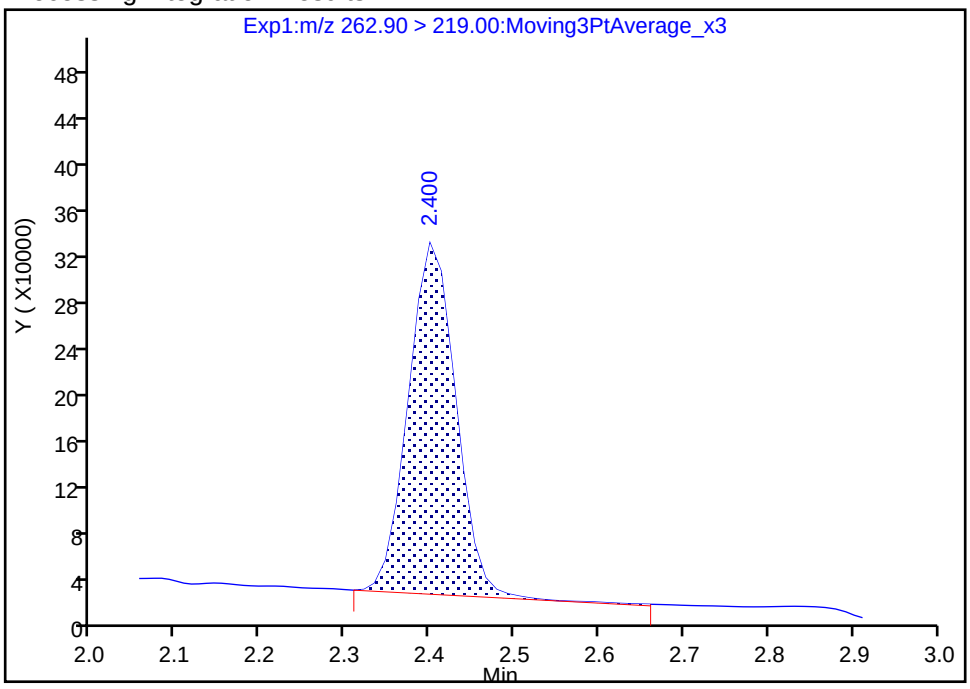
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

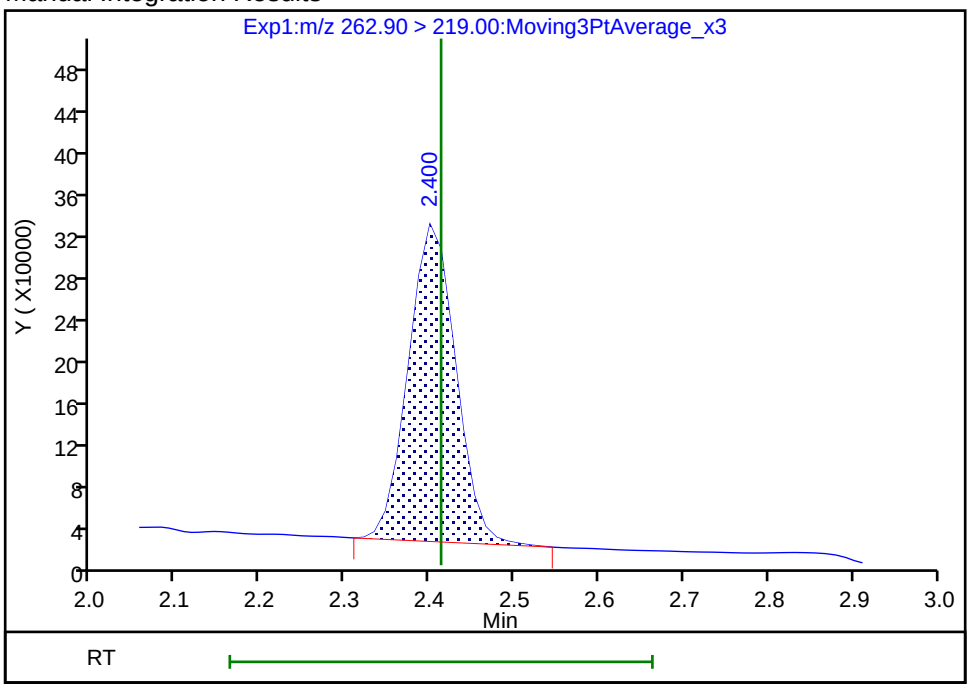
Processing Integration Results

RT: 2.40
Area: 1184795
Amount: 1.533214
Amount Units: ng/ml




Manual Integration Results

RT: 2.40
Area: 1177496
Amount: 1.523768
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:04:36

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

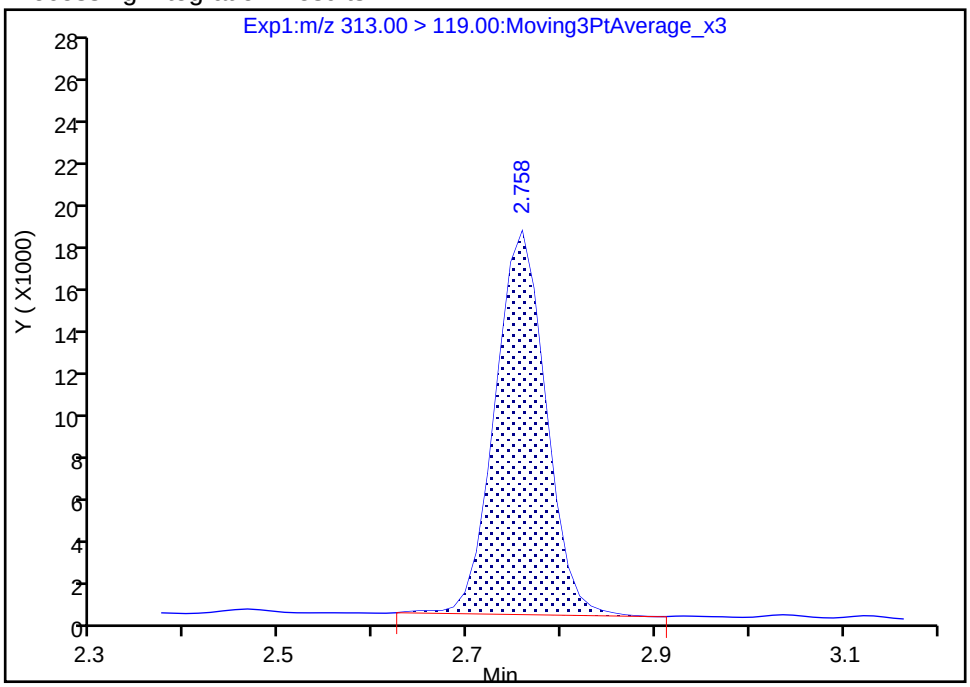
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

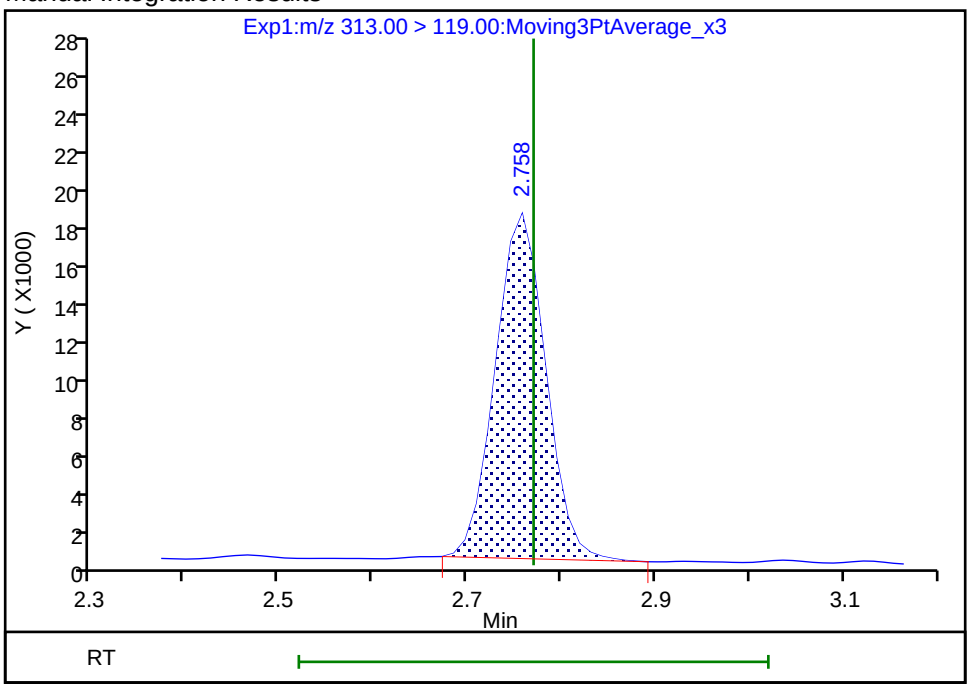
Processing Integration Results

RT: 2.76
Area: 68141
Amount: 0.905910
Amount Units: ng/ml




Manual Integration Results

RT: 2.76
Area: 67065
Amount: 0.905910
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:06:55

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

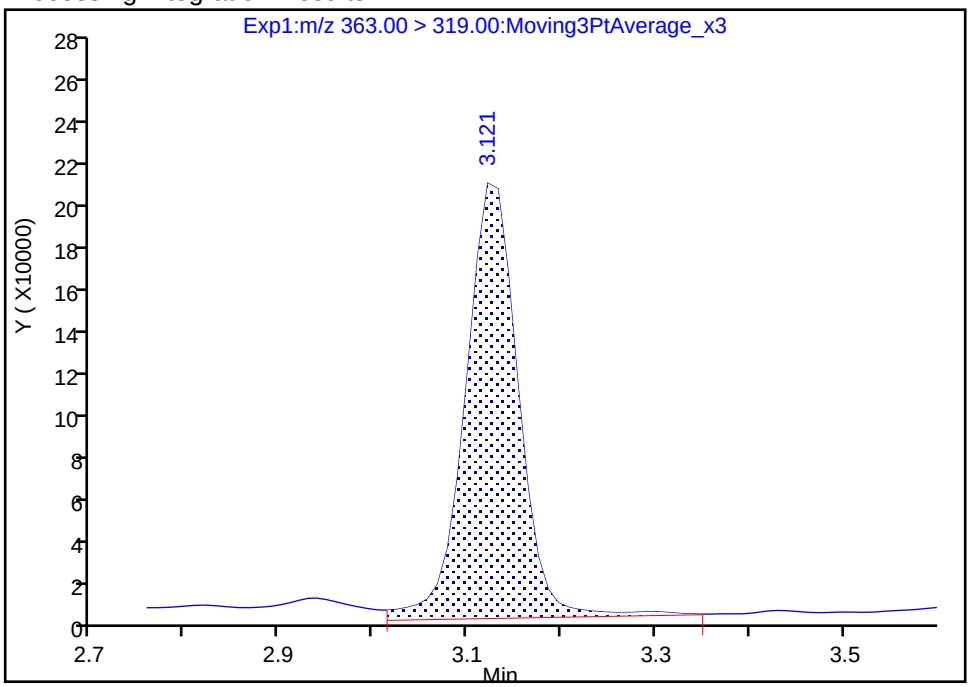
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

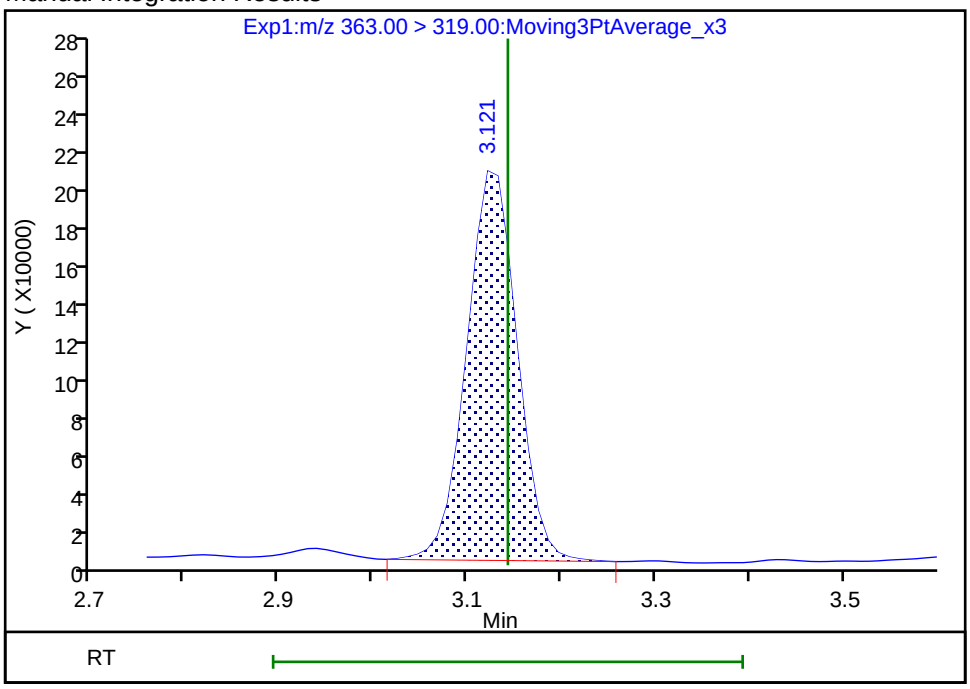
Processing Integration Results

RT: 3.12
Area: 792408
Amount: 0.908731
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 738615
Amount: 0.847042
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:08:27
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

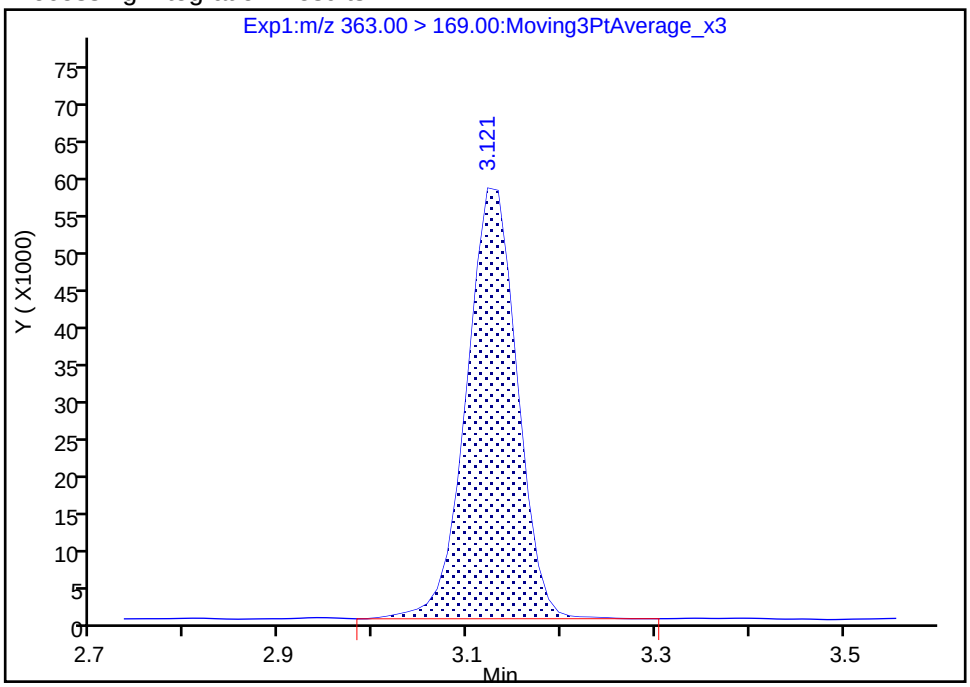
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

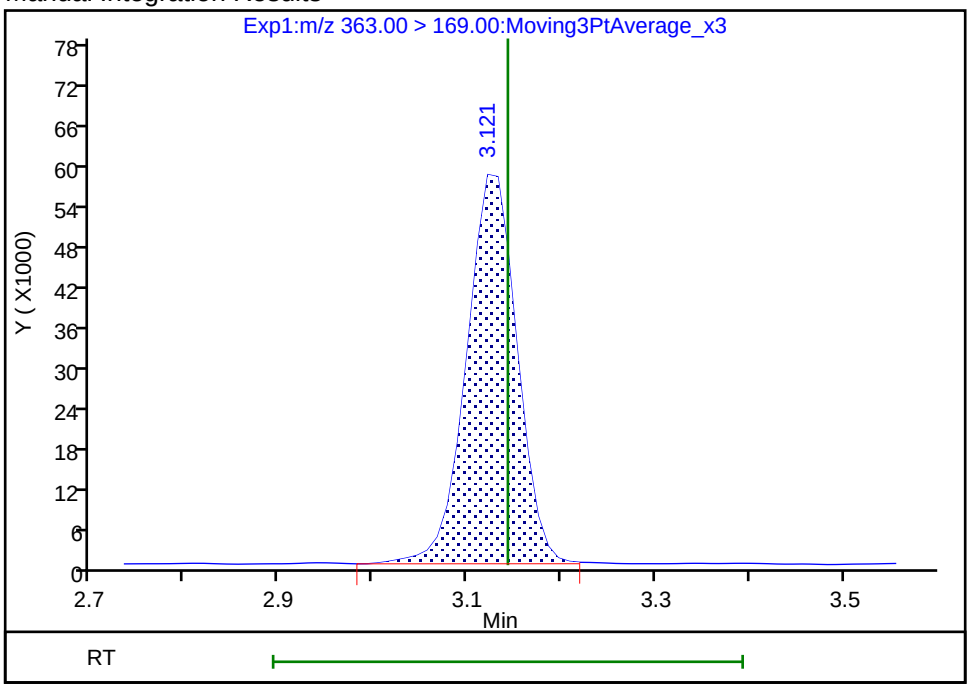
Processing Integration Results

RT: 3.12
Area: 218387
Amount: 0.908731
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 218005
Amount: 0.847042
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:08:49

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

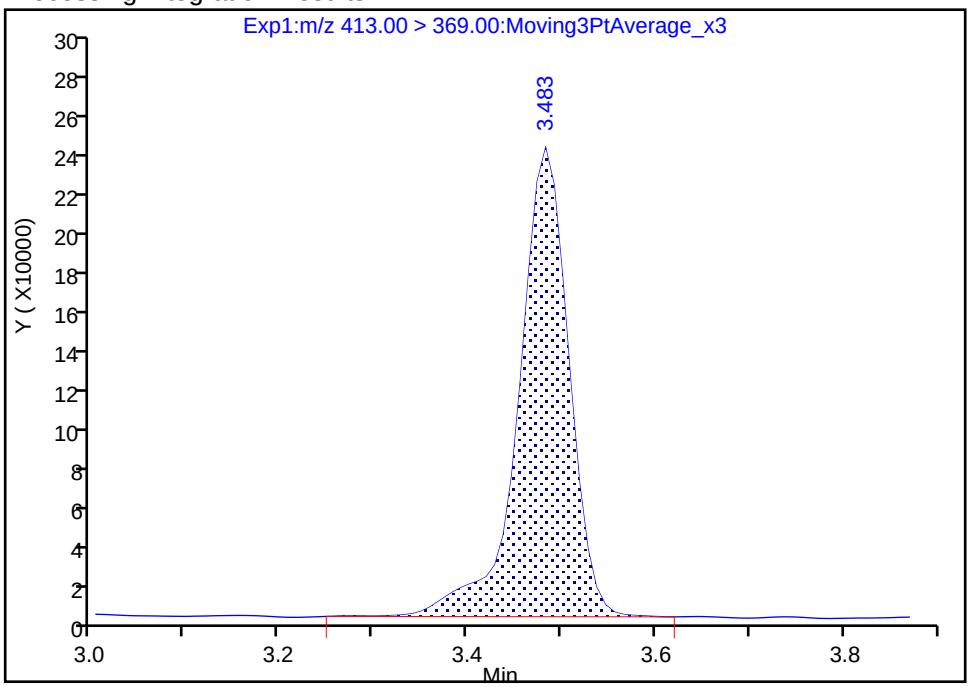
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| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

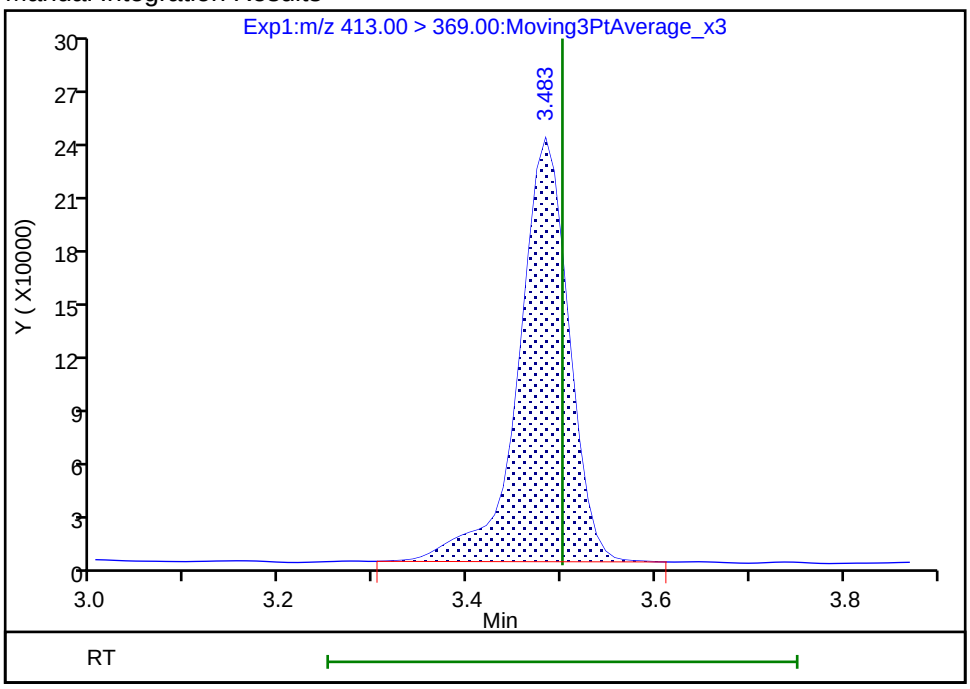
Processing Integration Results

RT: 3.48
Area: 876353
Amount: 1.007153
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 873205
Amount: 1.003535
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:11:38

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

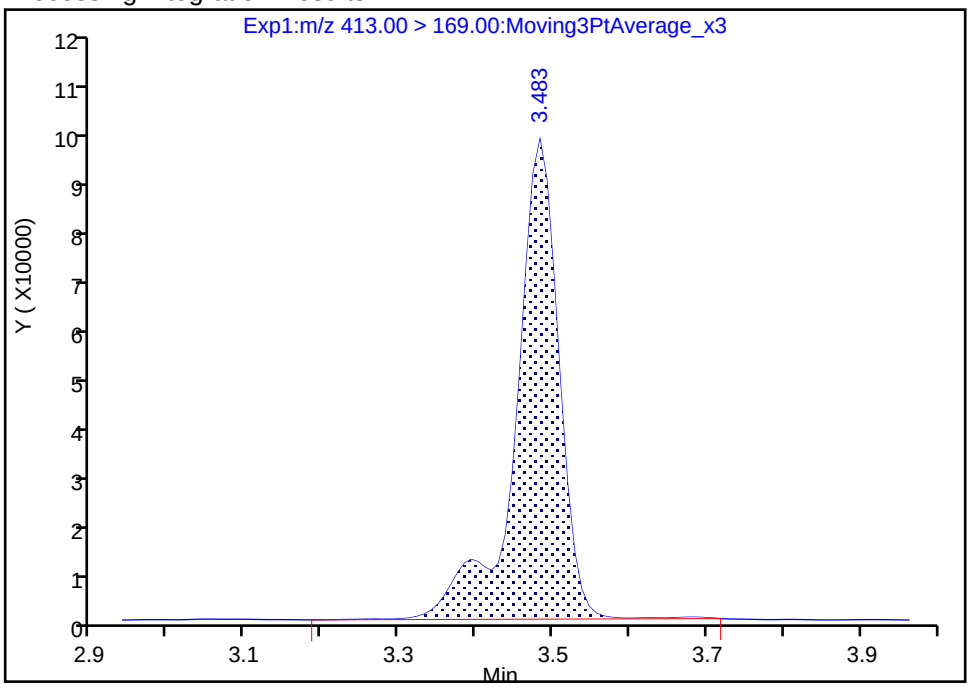
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

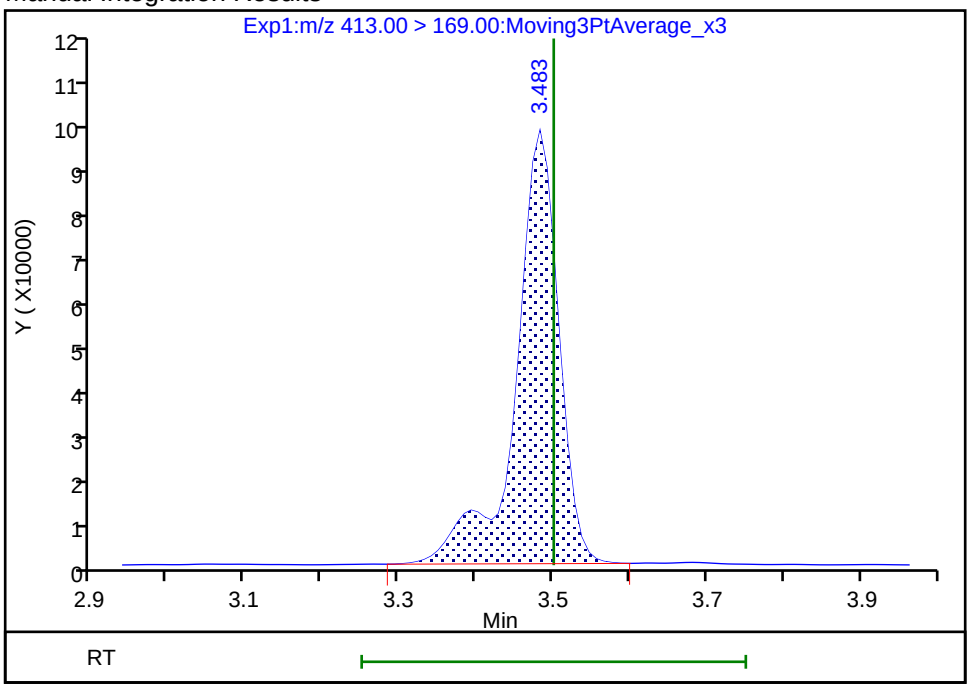
Processing Integration Results

RT: 3.48
Area: 383241
Amount: 1.007153
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 379772
Amount: 1.003535
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:11:48

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

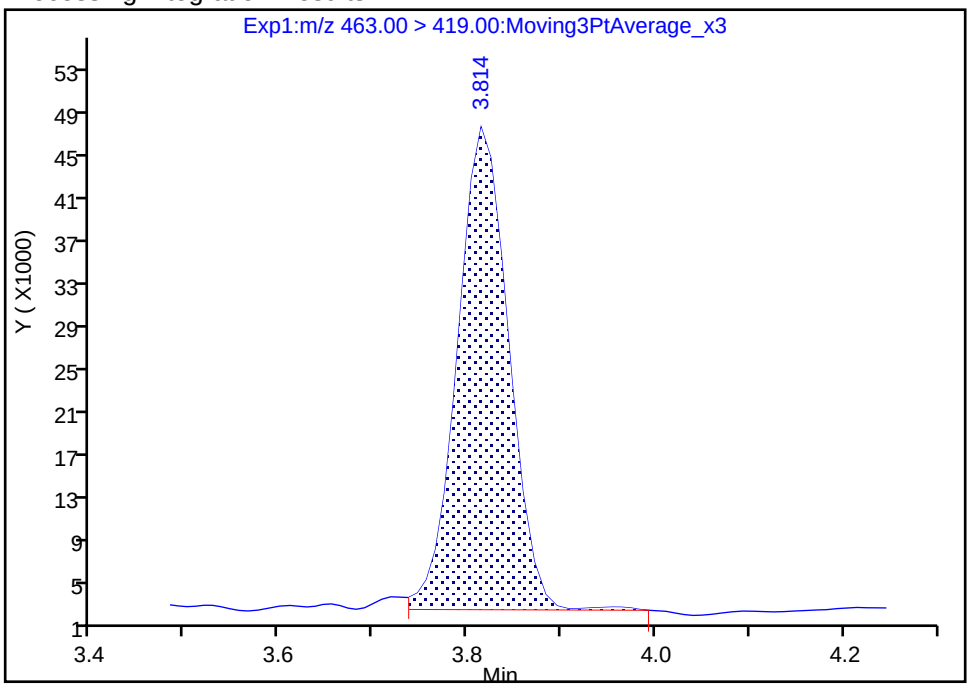
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

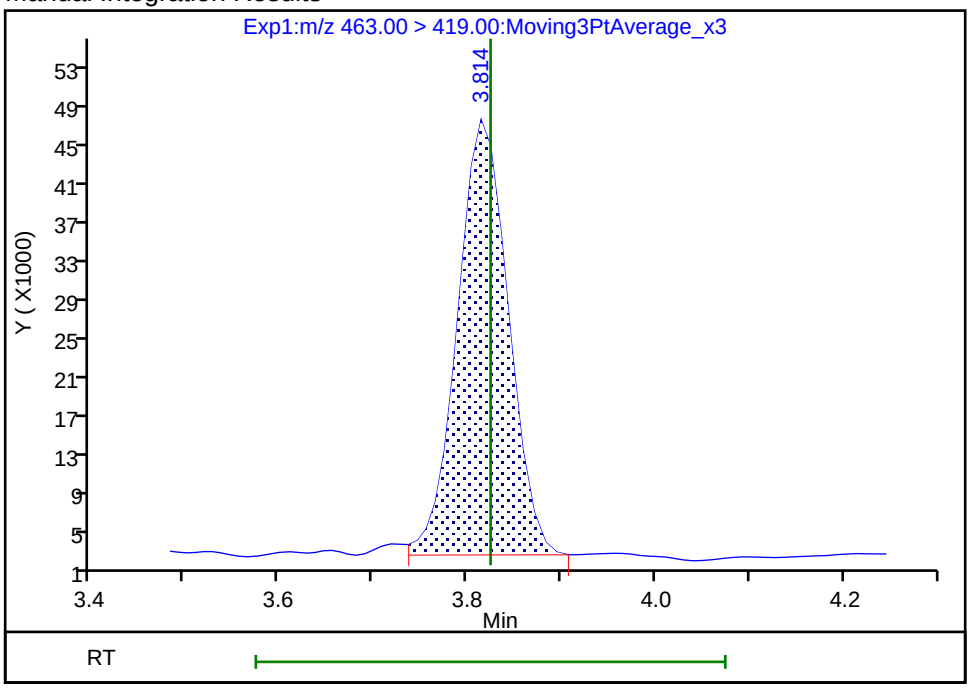
Processing Integration Results

RT: 3.81
Area: 169018
Amount: 0.232404
Amount Units: ng/ml




Manual Integration Results

RT: 3.81
Area: 167393
Amount: 0.230170
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:13:34

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

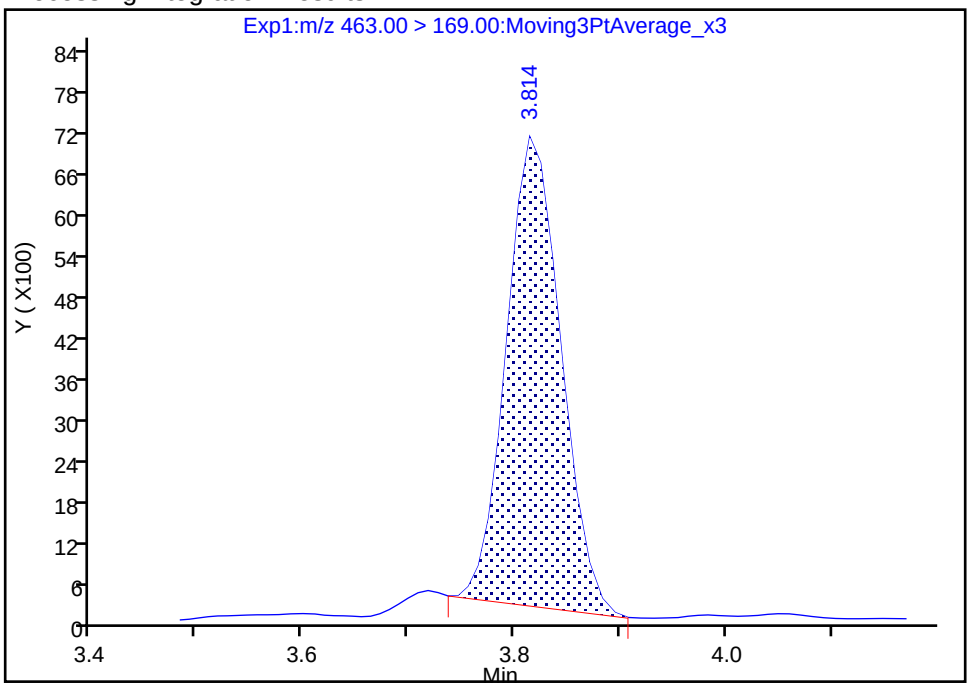
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

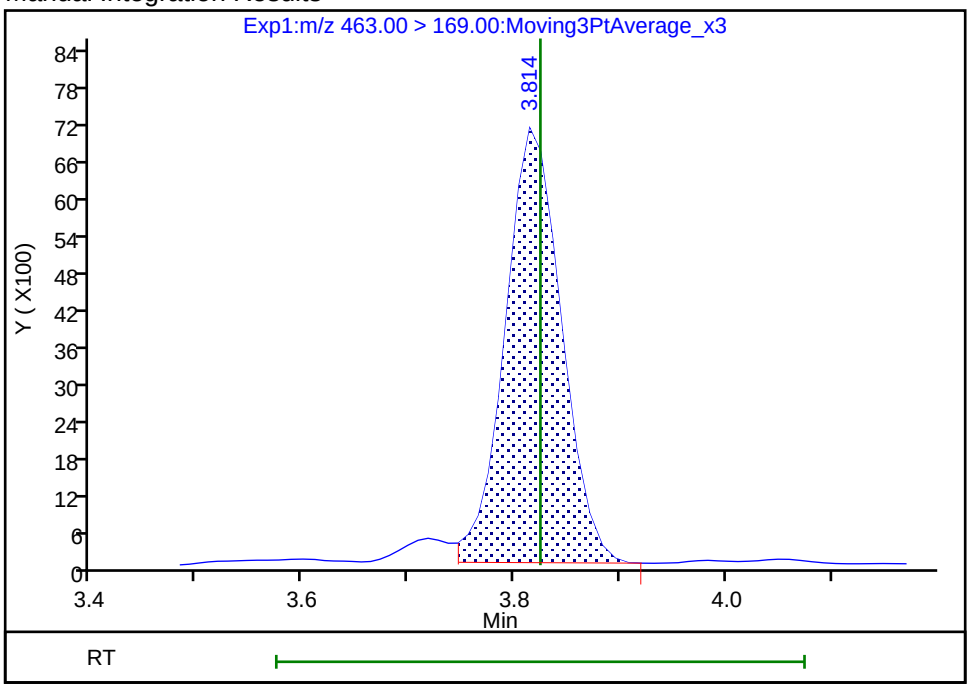
Processing Integration Results

RT: 3.81
Area: 24749
Amount: 0.232404
Amount Units: ng/ml




Manual Integration Results

RT: 3.81
Area: 26137
Amount: 0.230170
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:13:59

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

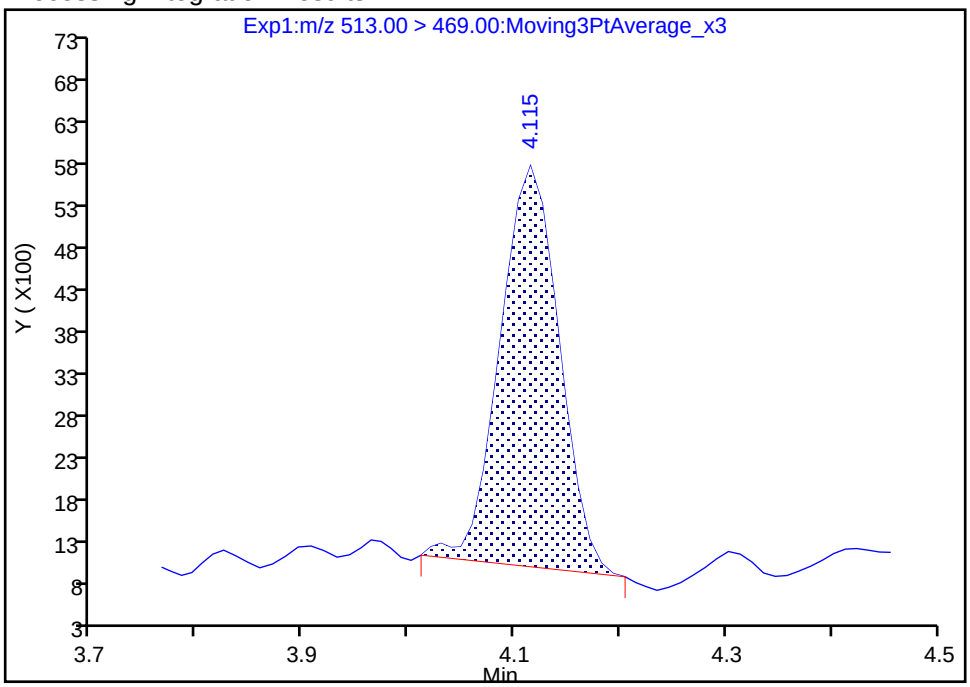
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| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

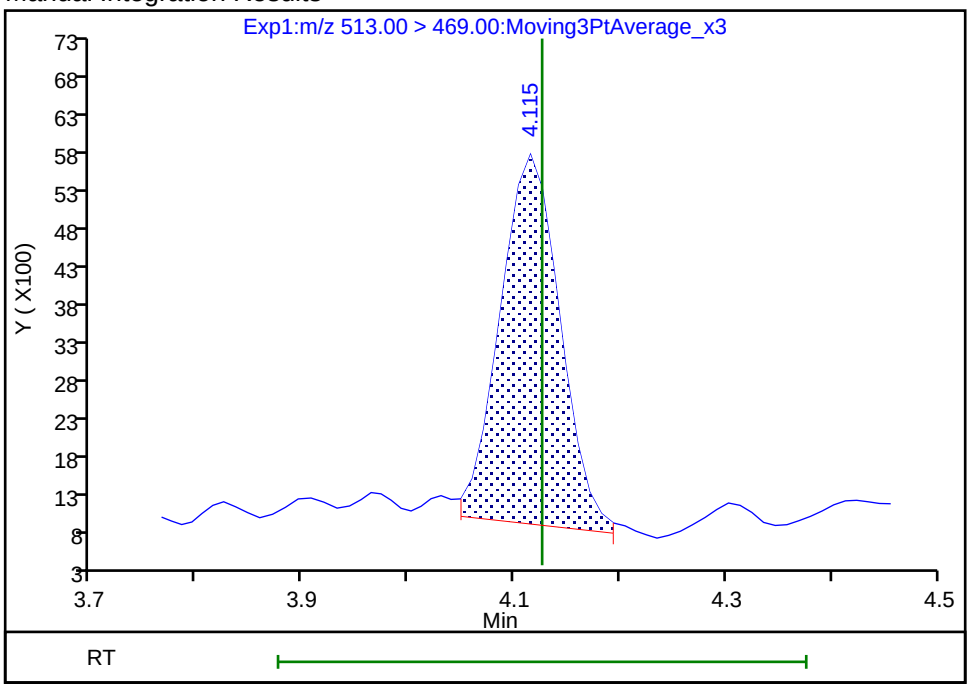
Processing Integration Results

RT: 4.12
Area: 18412
Amount: 0.032687
Amount Units: ng/ml




Manual Integration Results

RT: 4.12
Area: 18960
Amount: 0.033660
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:14:26

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

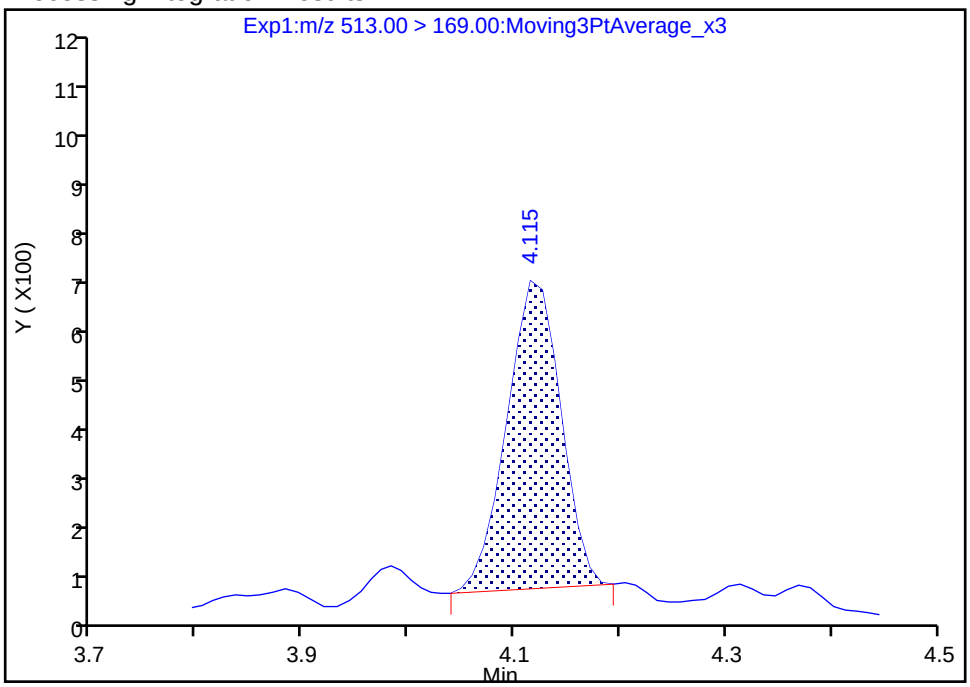
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

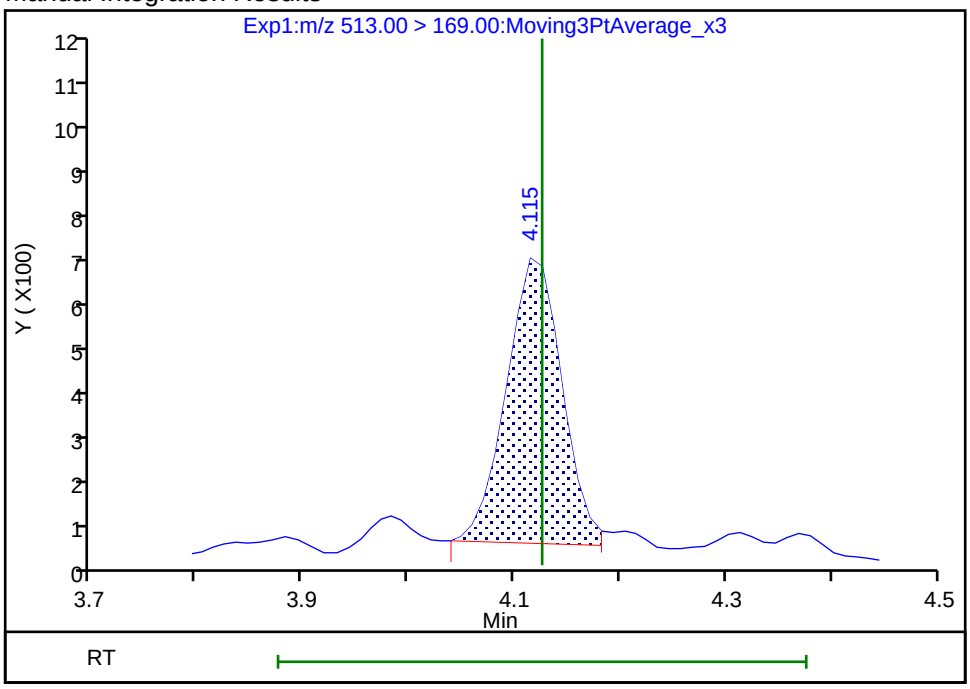
Processing Integration Results

RT: 4.12
Area: 2140
Amount: 0.032687
Amount Units: ng/ml




Manual Integration Results

RT: 4.12
Area: 2252
Amount: 0.033660
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:15:17

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

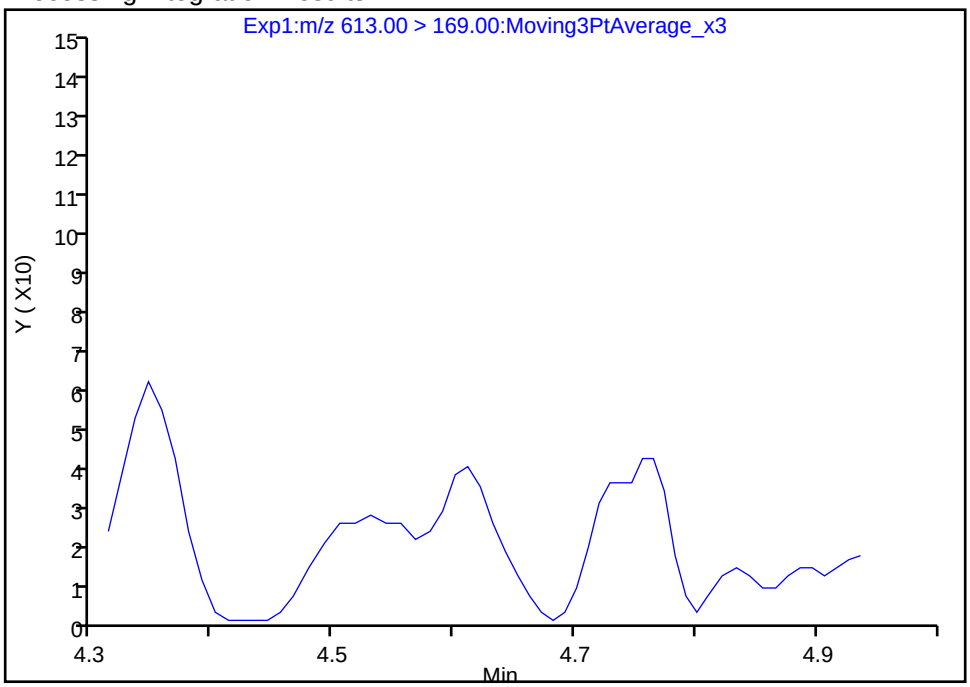
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

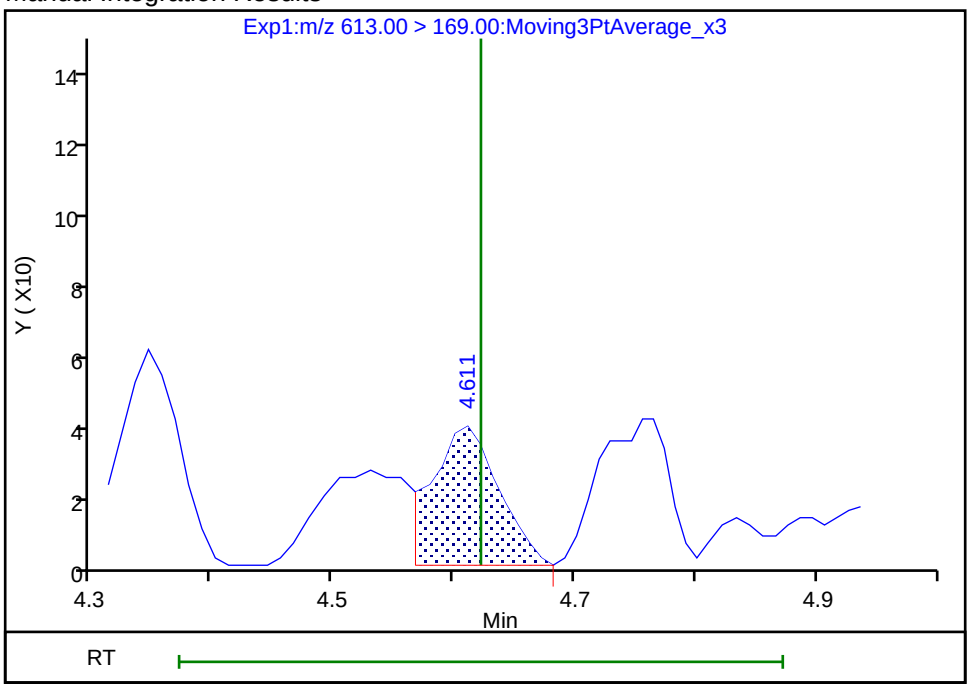
Not Detected
Expected RT: 4.62

Processing Integration Results




Manual Integration Results

RT: 4.61
Area: 142
Amount: 0.002482
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:20:03
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

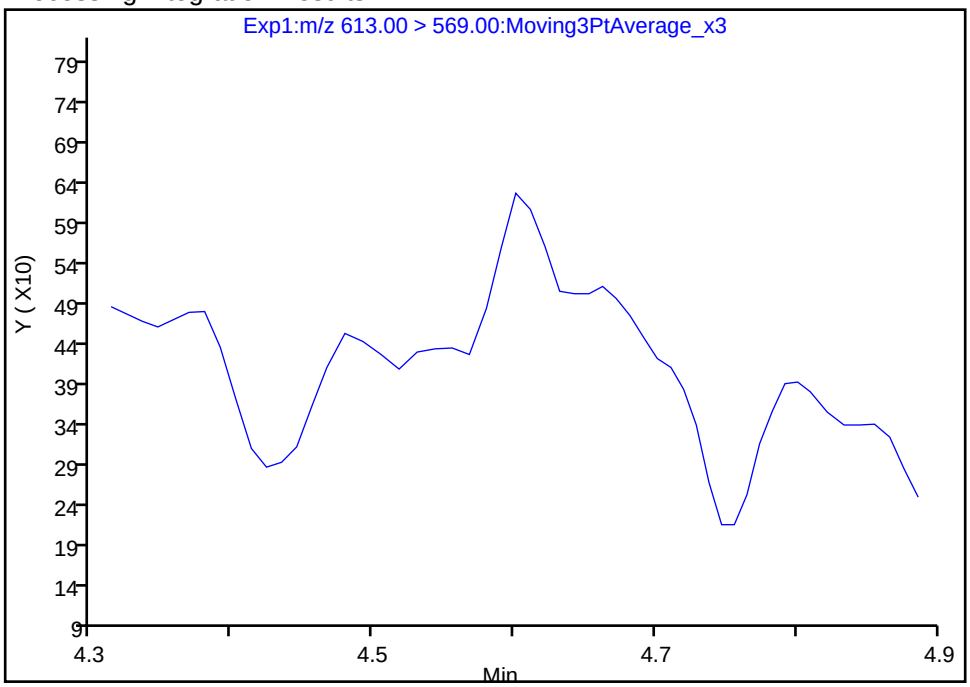
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

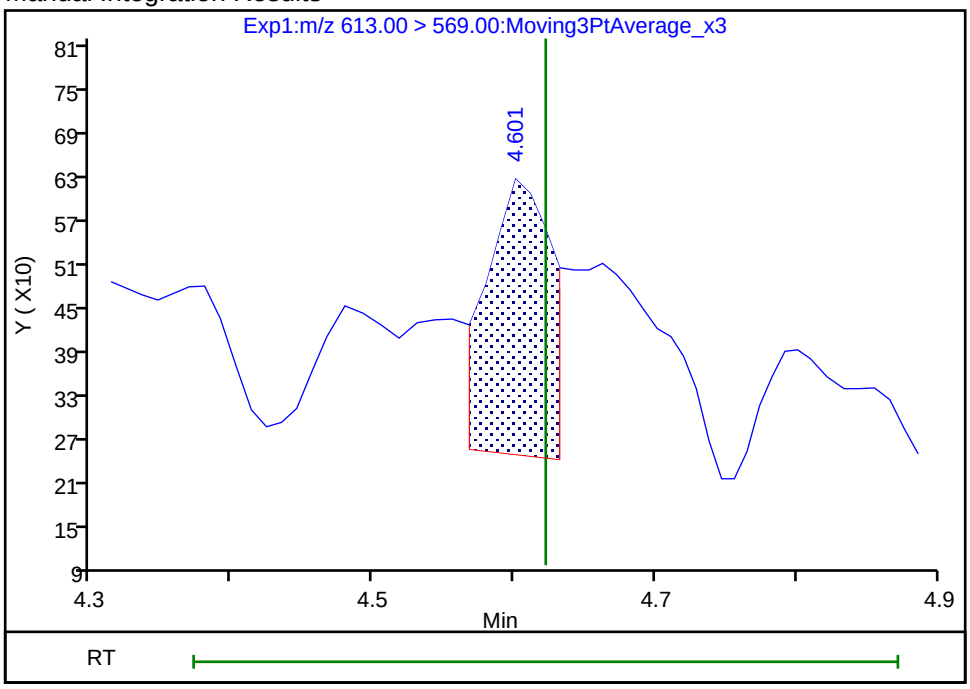
Not Detected
Expected RT: 4.62

Processing Integration Results




Manual Integration Results

RT: 4.60
Area: 1144
Amount: 0.002482
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:20:08
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

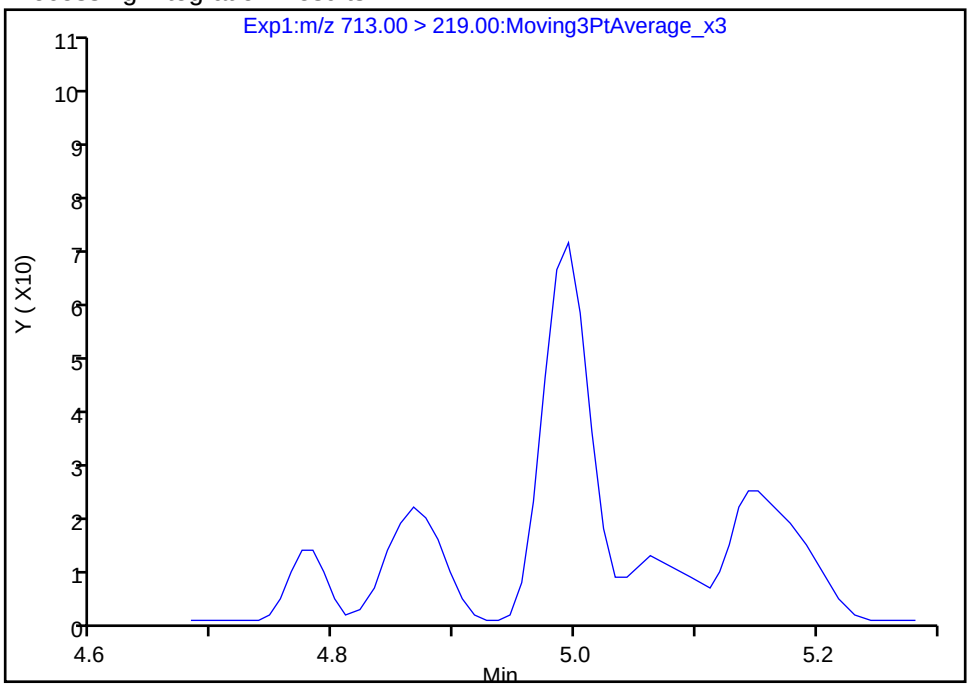
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

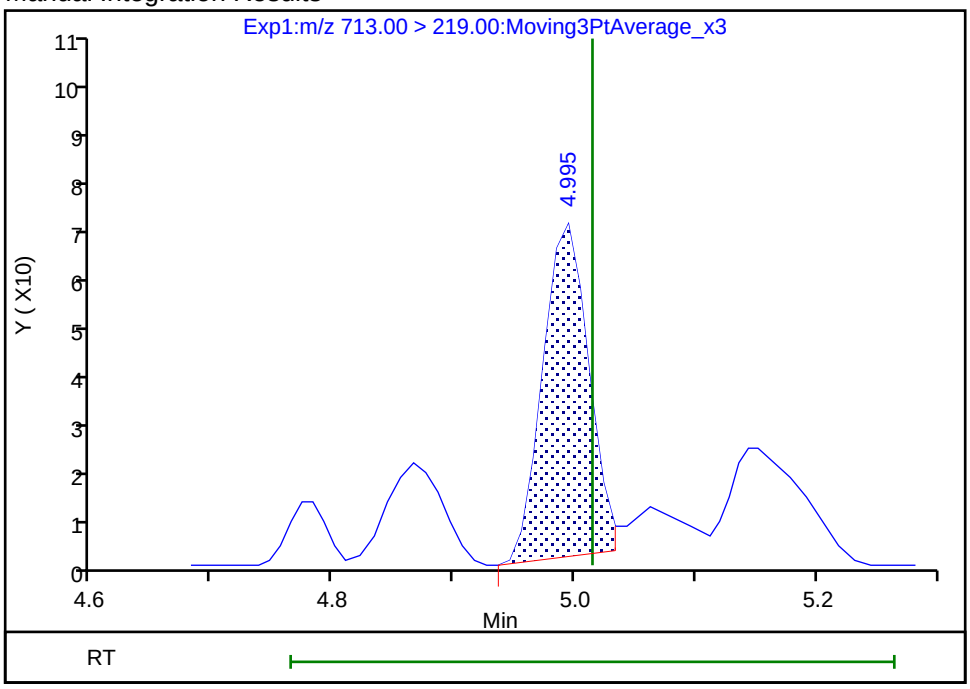
Not Detected
Expected RT: 5.01

Processing Integration Results




Manual Integration Results

RT: 4.99
Area: 178
Amount: 0.001380
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:21:09
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

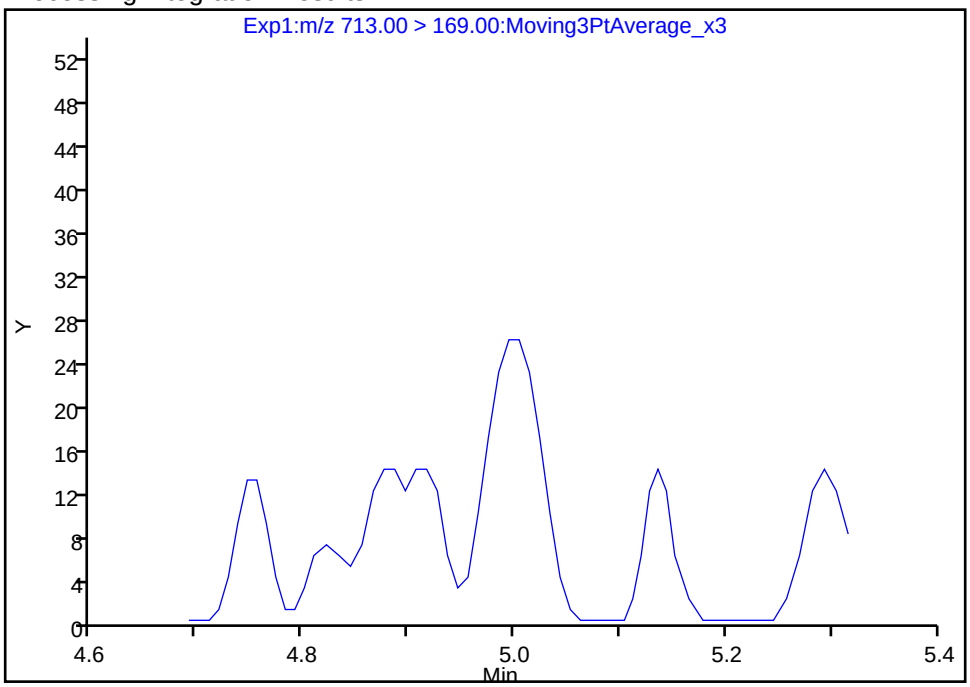
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

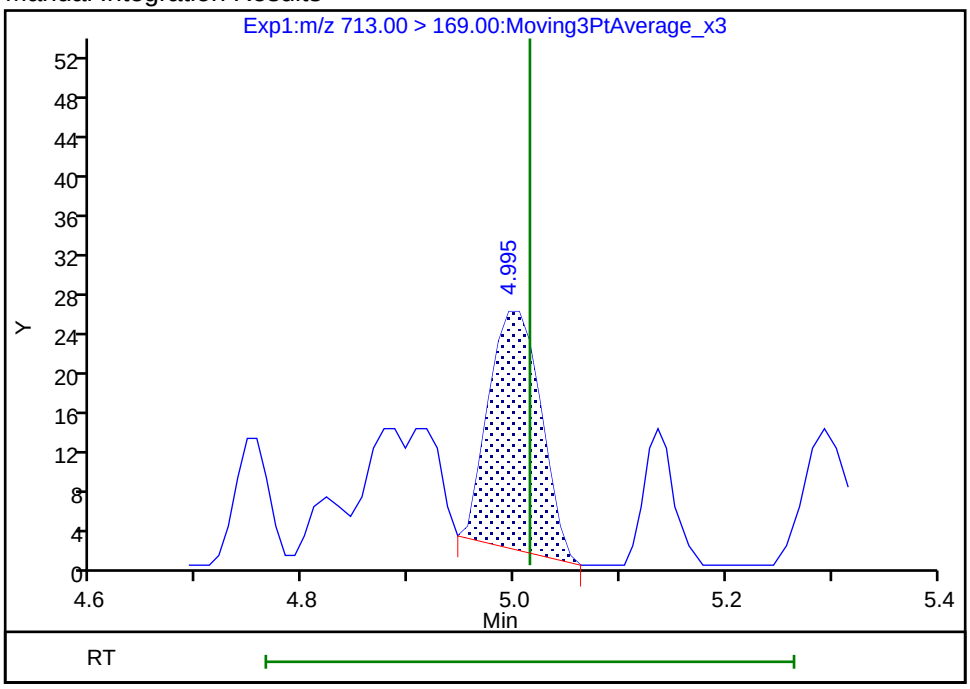
Not Detected
Expected RT: 5.01

Processing Integration Results




Manual Integration Results

RT: 4.99
Area: 83
Amount: 0.001380
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:21:17
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

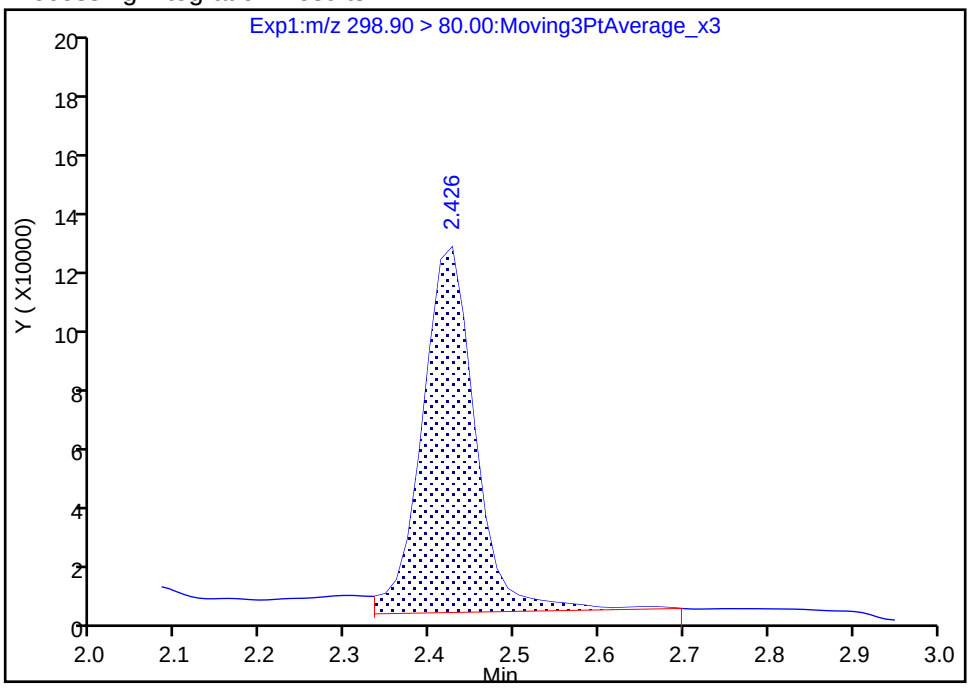
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

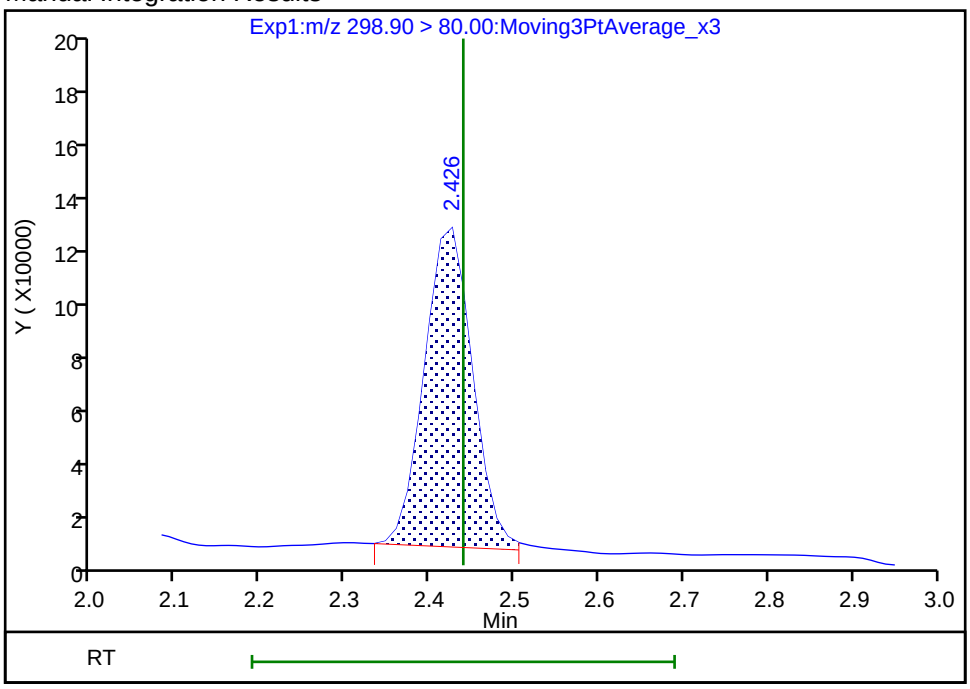
Processing Integration Results

RT: 2.43
Area: 541323
Amount: 0.463638
Amount Units: ng/ml




Manual Integration Results

RT: 2.43
Area: 477011
Amount: 0.408555
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:06:08

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

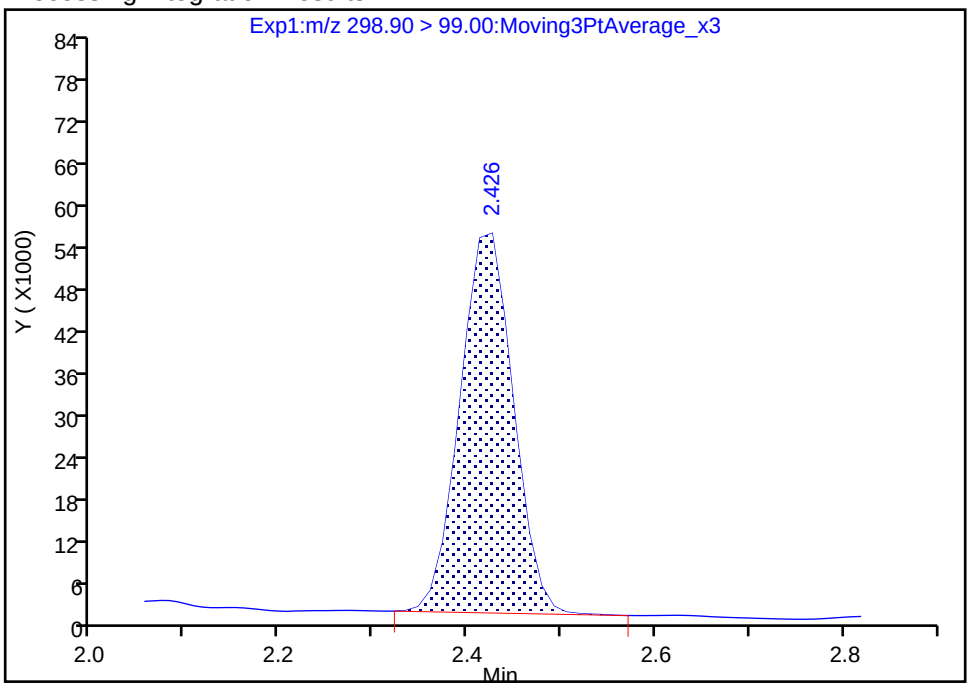
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

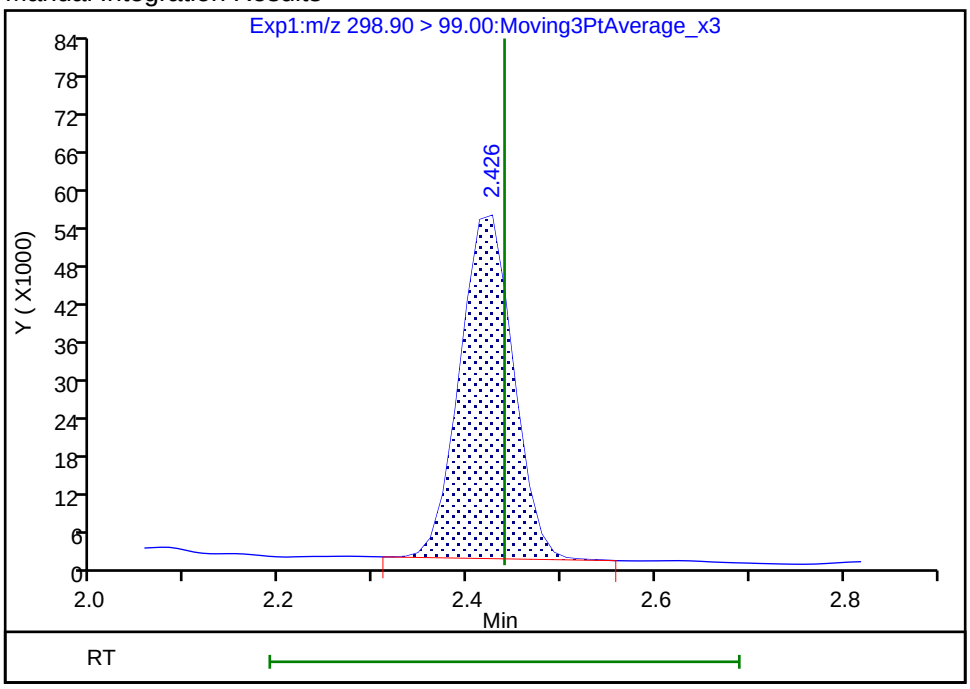
Processing Integration Results

RT: 2.43
Area: 212454
Amount: 0.463638
Amount Units: ng/ml




Manual Integration Results

RT: 2.43
Area: 212572
Amount: 0.408555
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:06:20

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

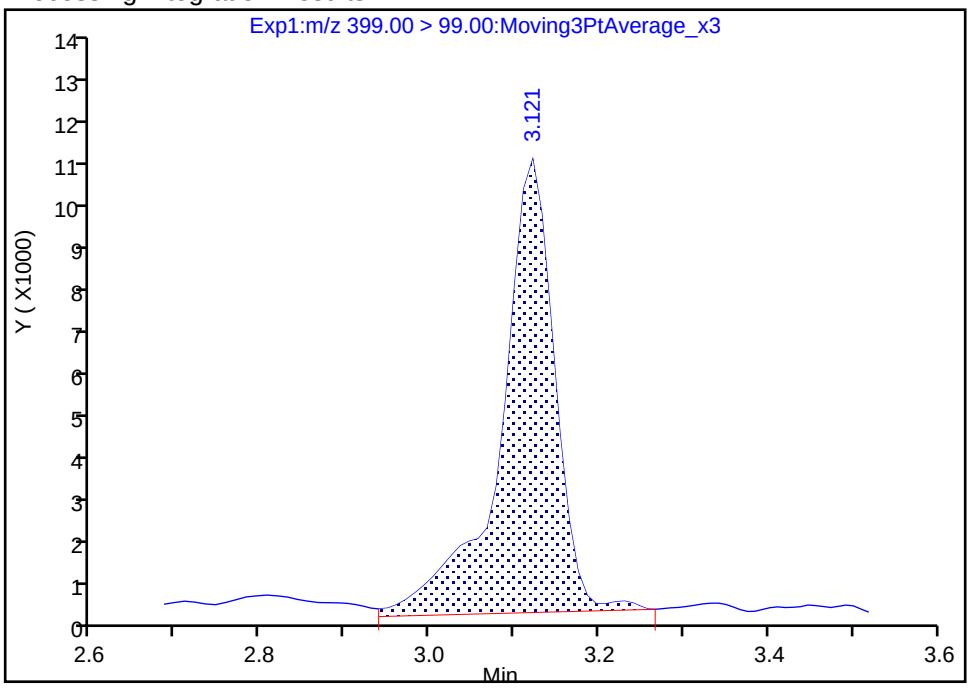
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| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

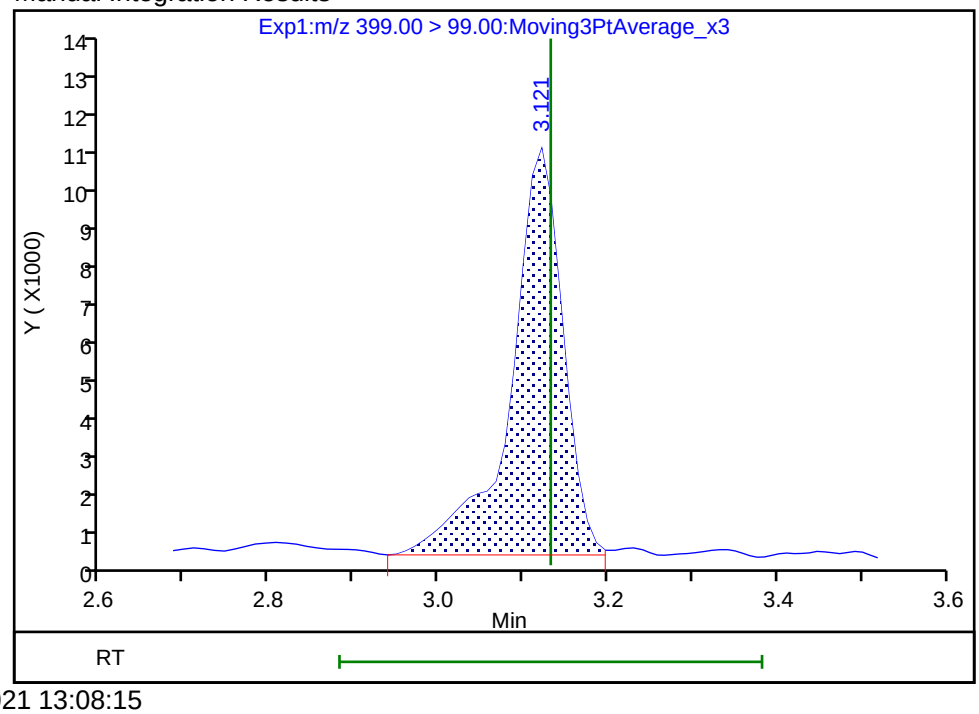
Processing Integration Results

RT: 3.12
Area: 47503
Amount: 0.203889
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 45217
Amount: 0.203889
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:08:15

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

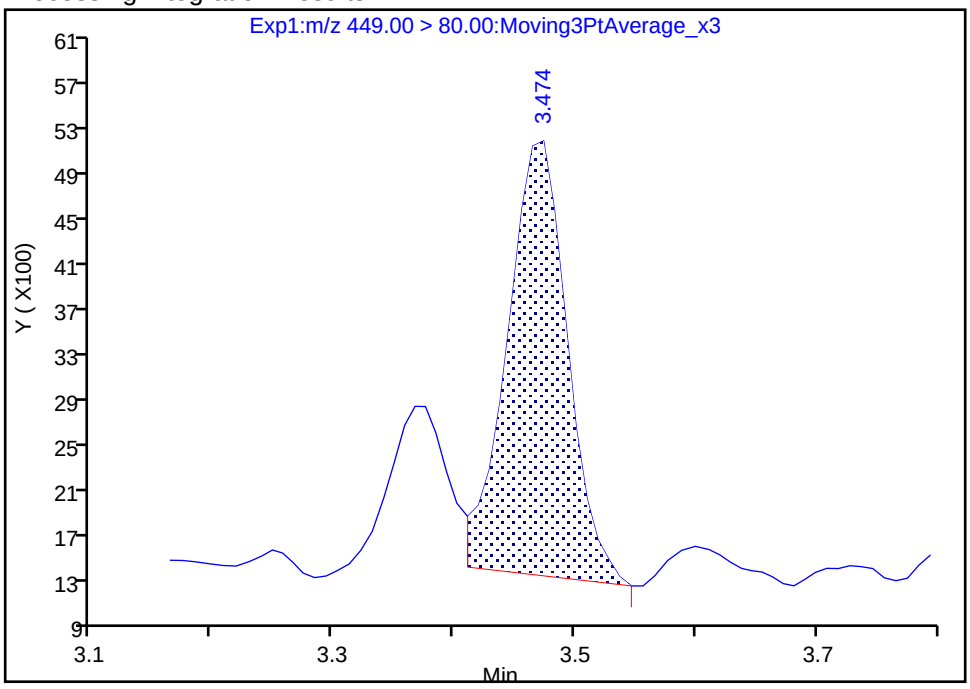
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

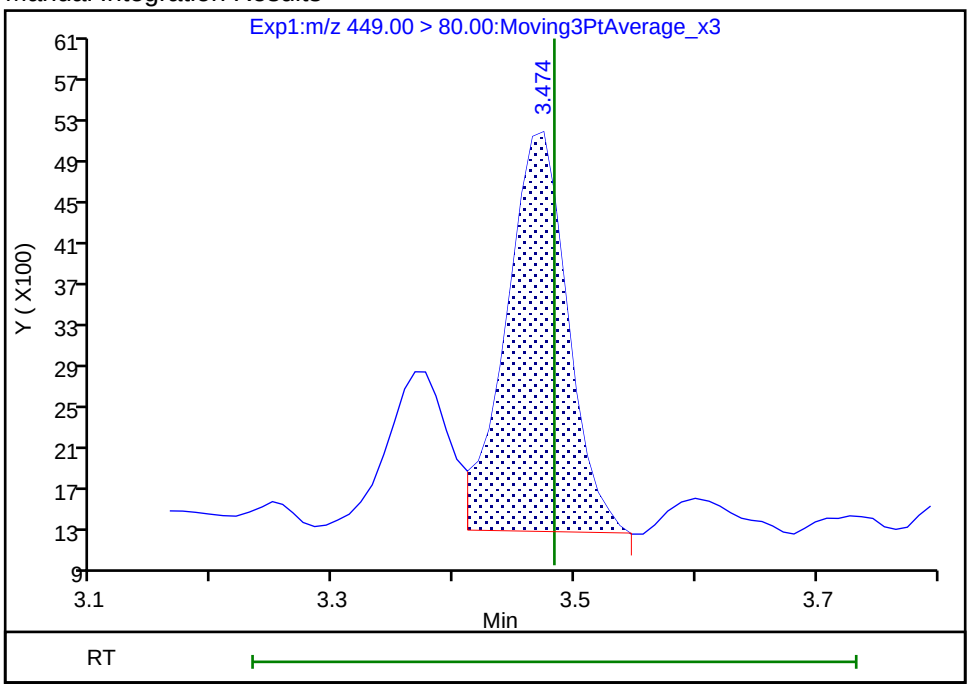
Processing Integration Results

RT: 3.47
Area: 13169
Amount: 0.021099
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 13641
Amount: 0.021856
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:10:33
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

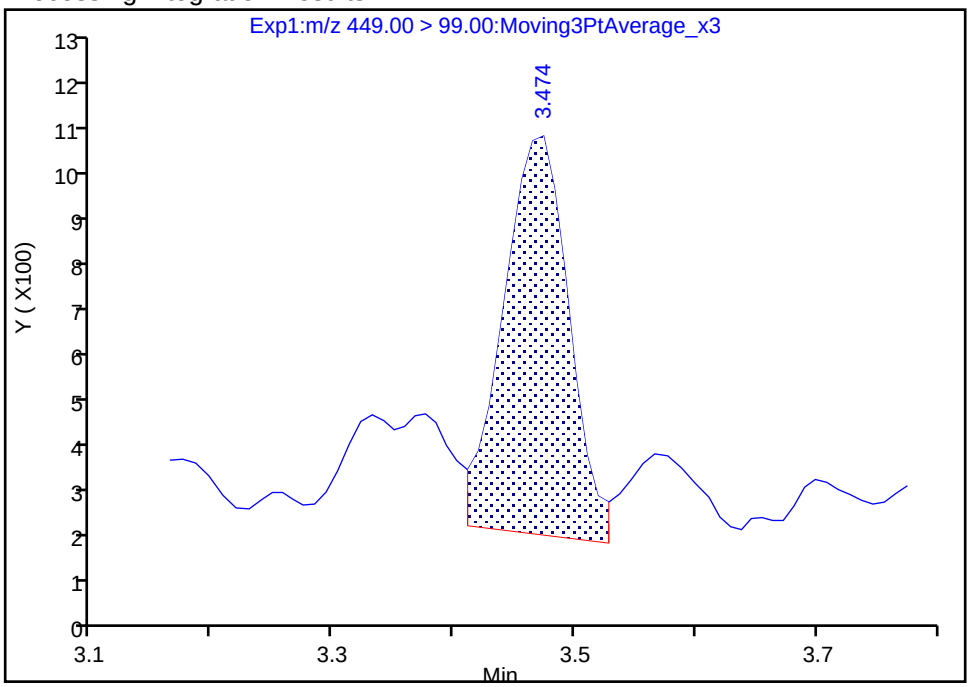
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

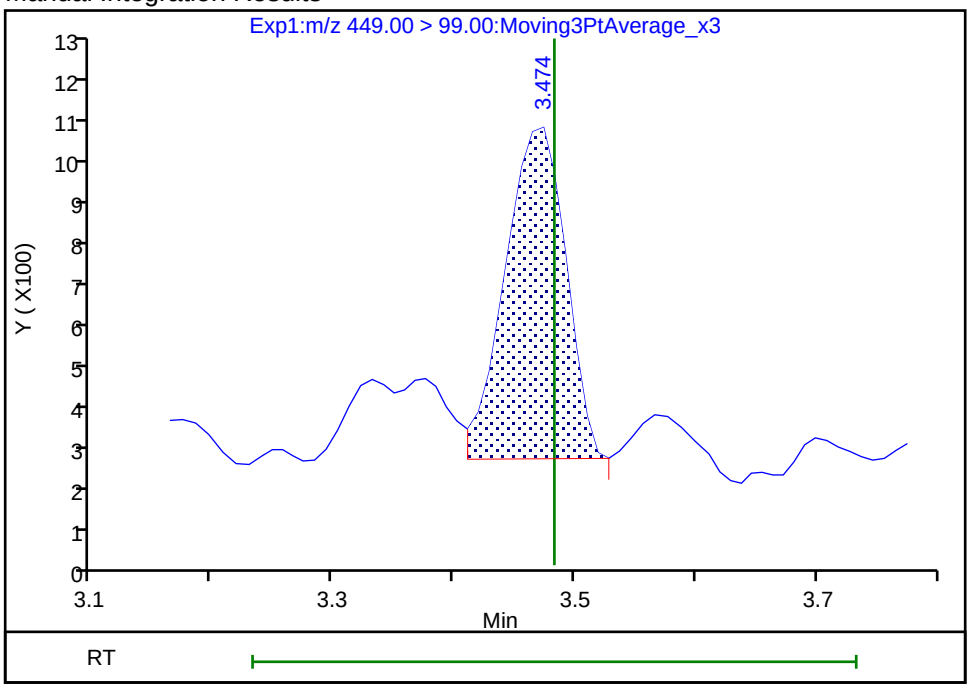
Processing Integration Results

RT: 3.47
Area: 3104
Amount: 0.021099
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 2641
Amount: 0.021856
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:10:49

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

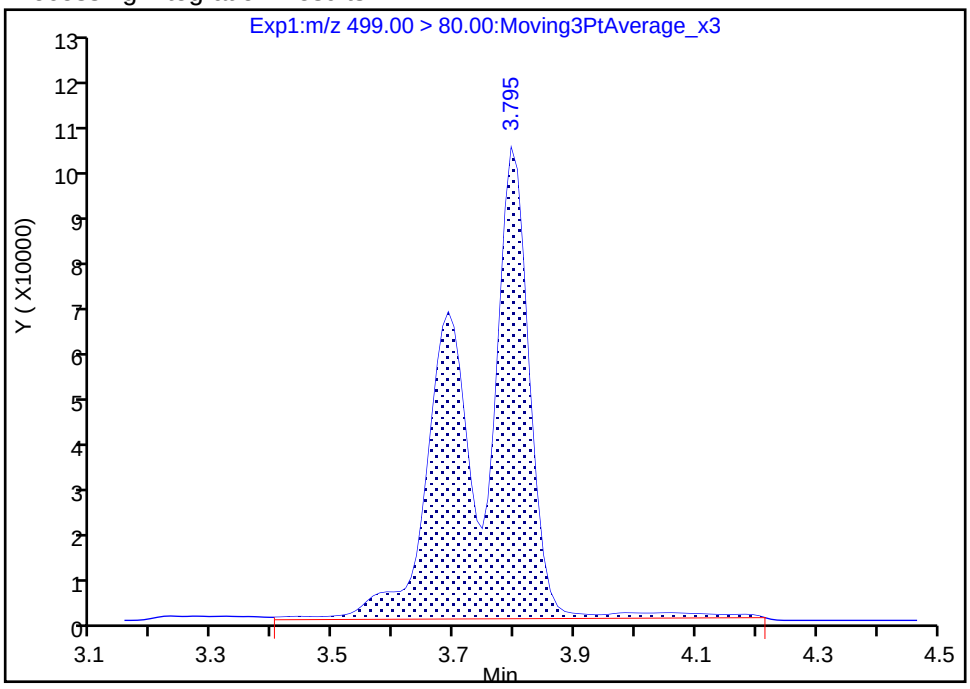
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

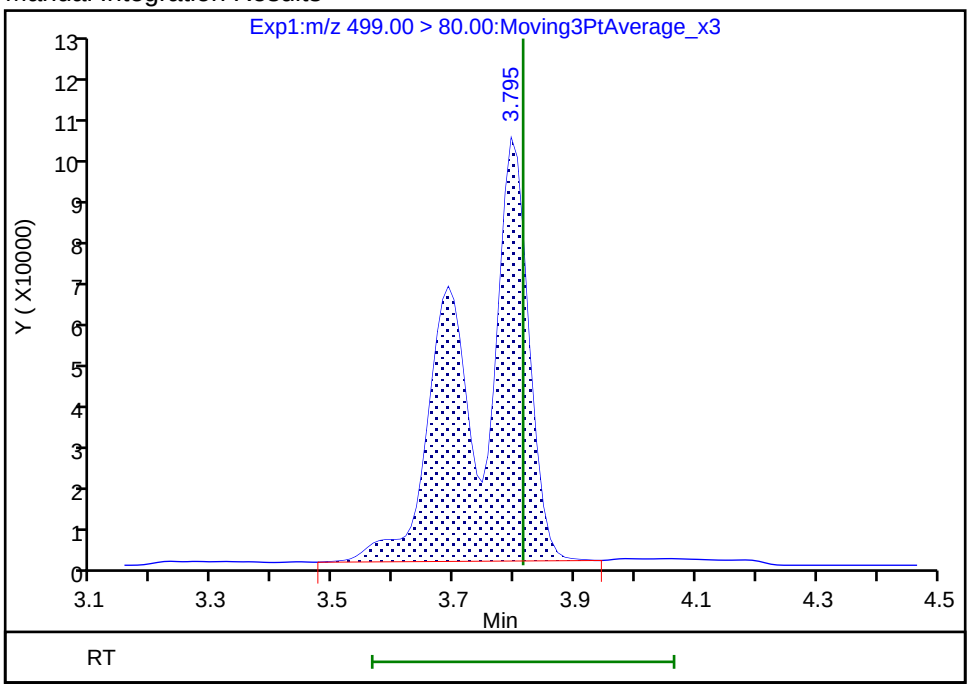
Processing Integration Results

RT: 3.79
Area: 717542
Amount: 1.349646
Amount Units: ng/ml




Manual Integration Results

RT: 3.79
Area: 682756
Amount: 1.284216
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:12:13

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

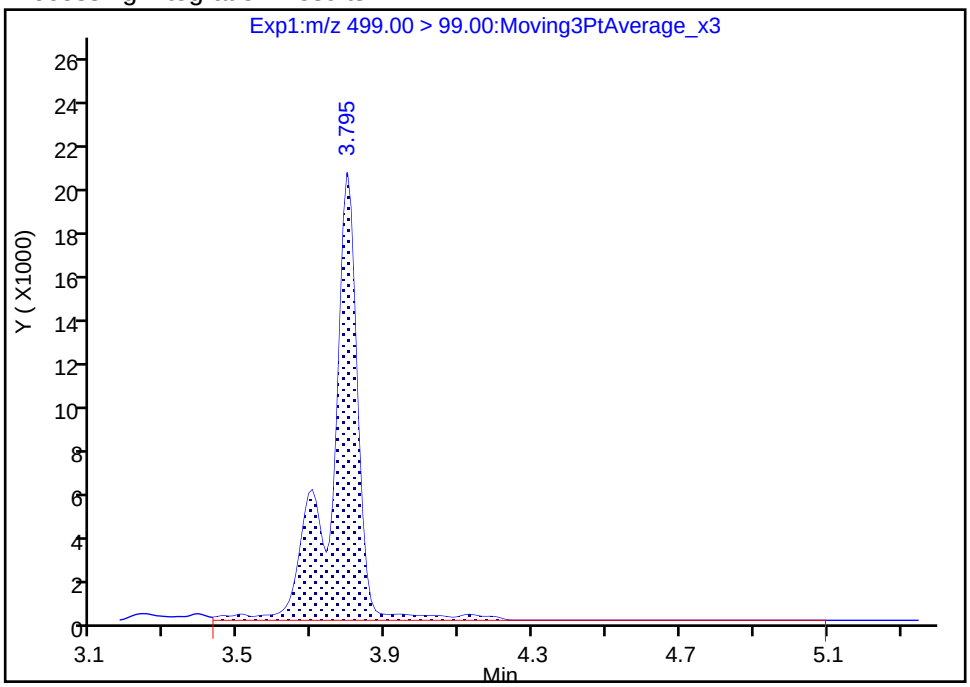
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

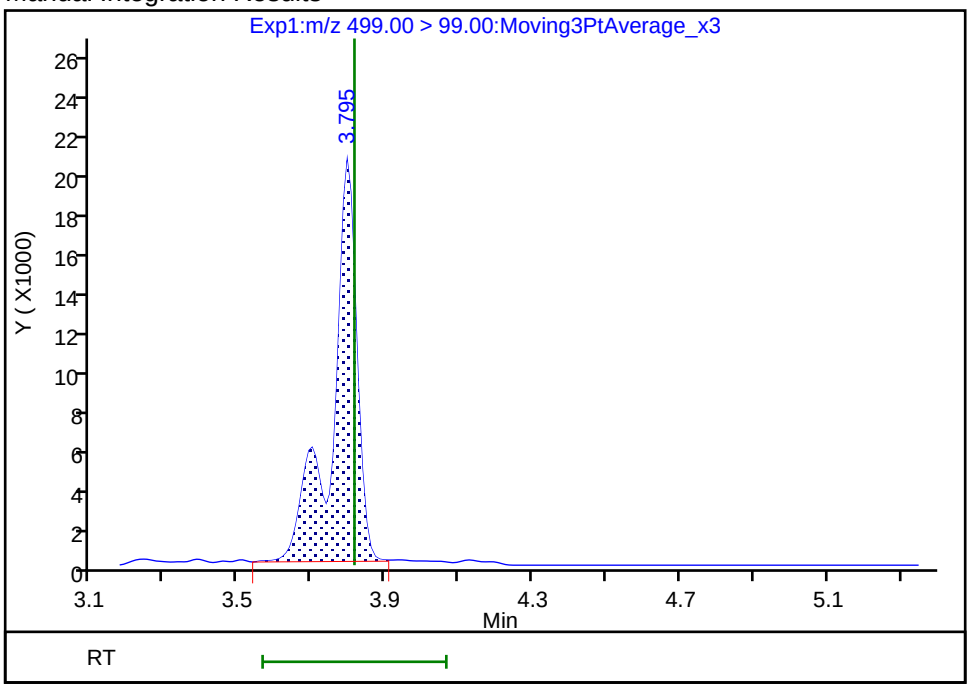
Processing Integration Results

RT: 3.79
Area: 102371
Amount: 1.349646
Amount Units: ng/ml




Manual Integration Results

RT: 3.79
Area: 93418
Amount: 1.284216
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:13:12

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

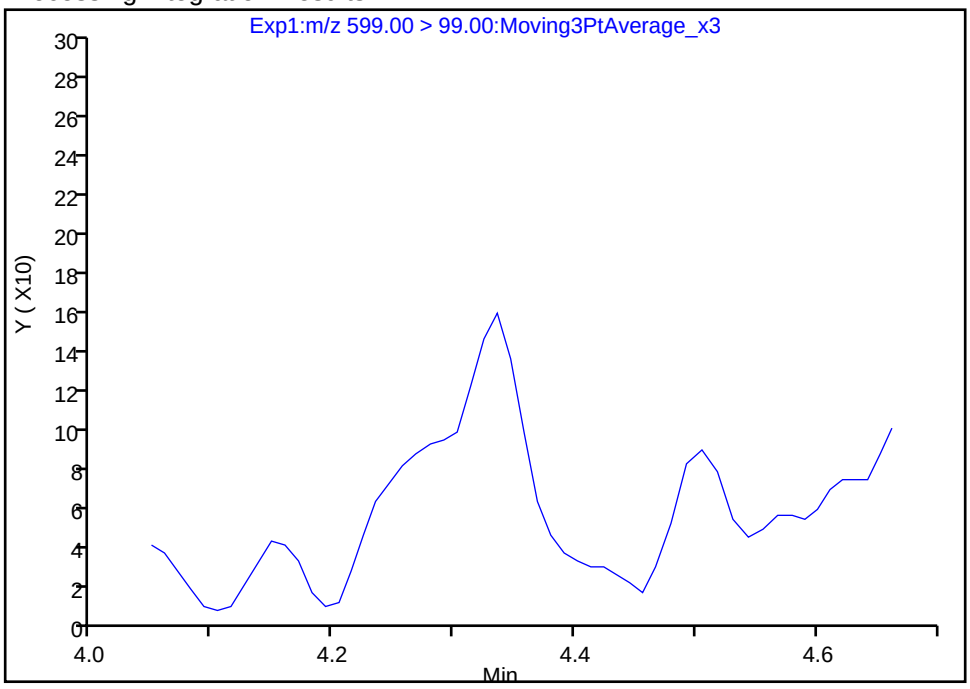
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

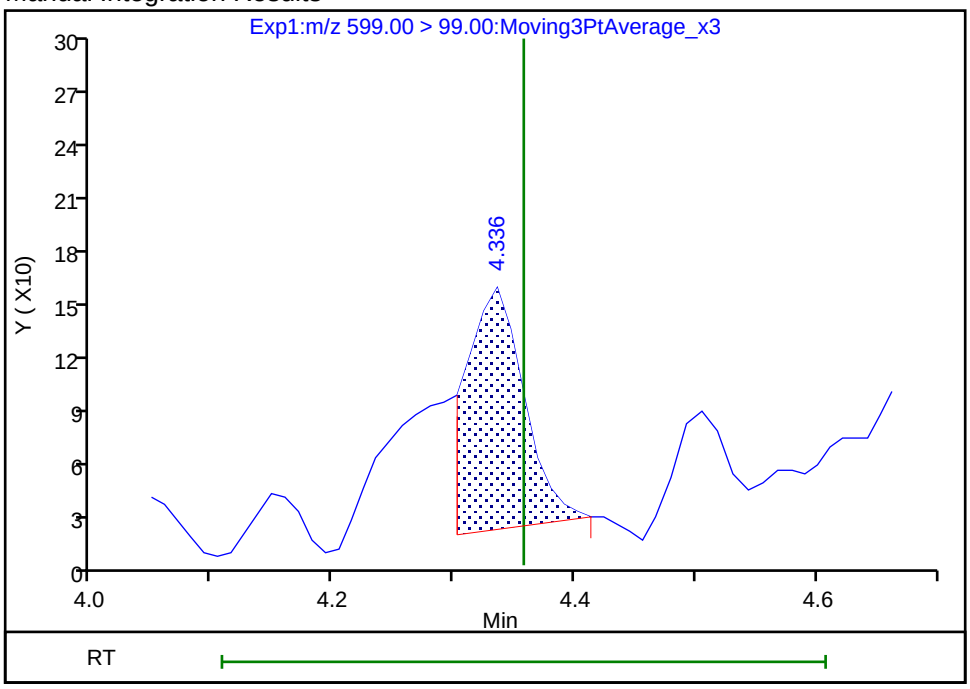
Not Detected
Expected RT: 4.36

Processing Integration Results




Manual Integration Results

RT: 4.34
Area: 431
Amount: 0.000367
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:17:37
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

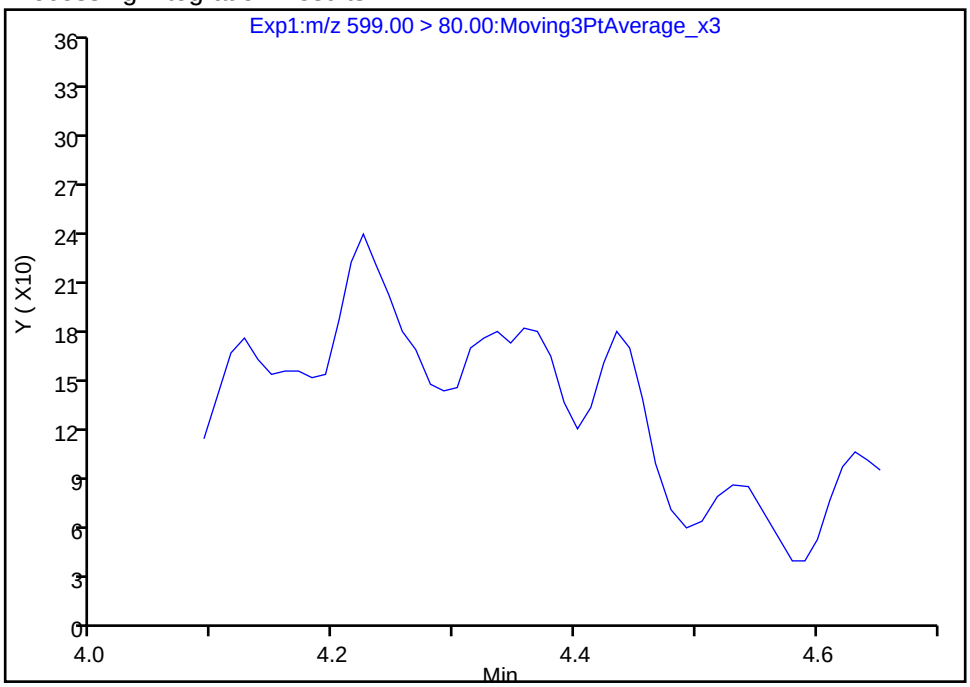
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

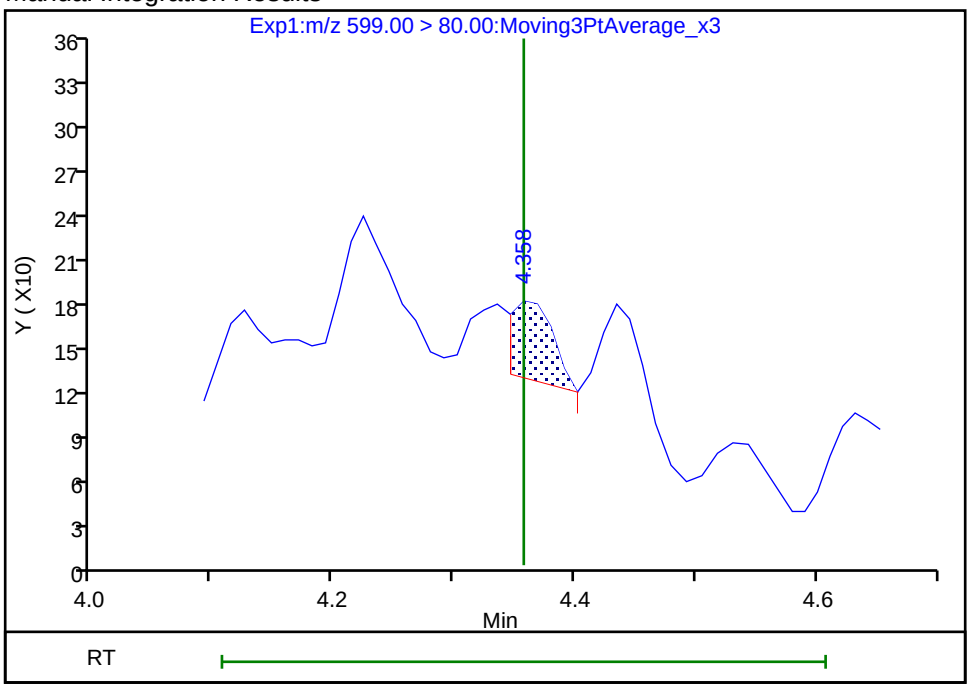
Not Detected
Expected RT: 4.36

Processing Integration Results




Manual Integration Results

RT: 4.36
Area: 116
Amount: 0.000367
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:17:44
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

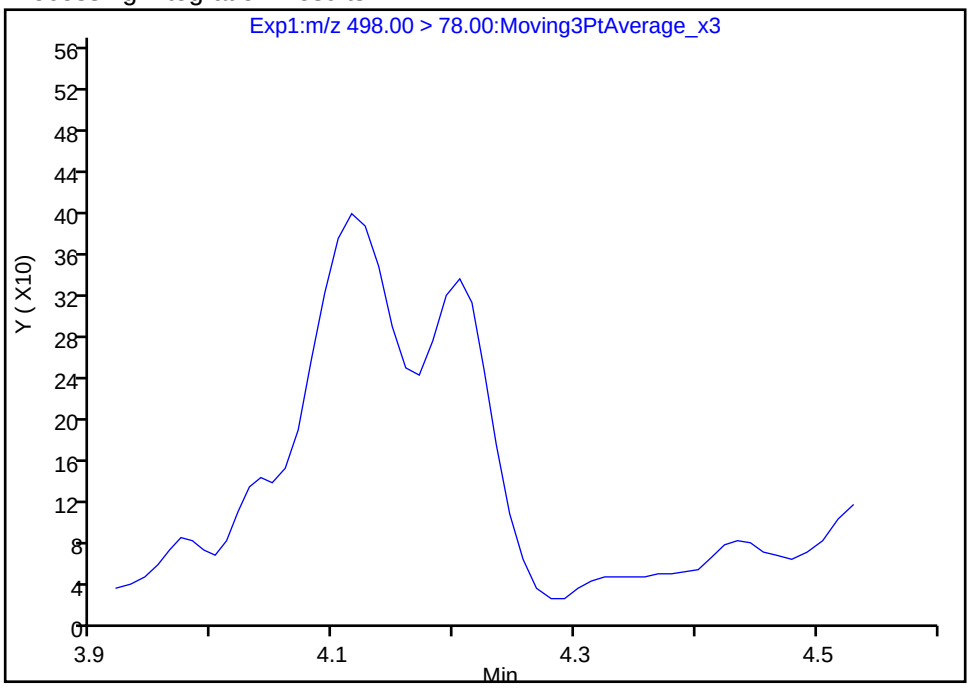
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| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

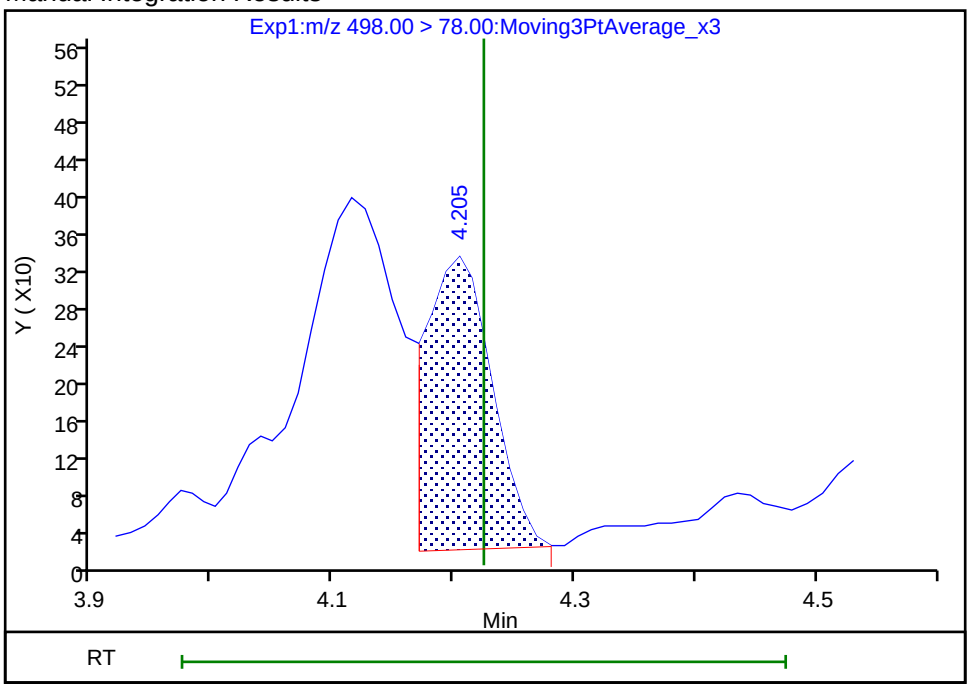
Not Detected
Expected RT: 4.22

Processing Integration Results




Manual Integration Results

RT: 4.20
Area: 1144
Amount: 0.001669
Amount Units: ng/ml




Reviewer: deannd, 15-Mar-2021 17:20:32
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

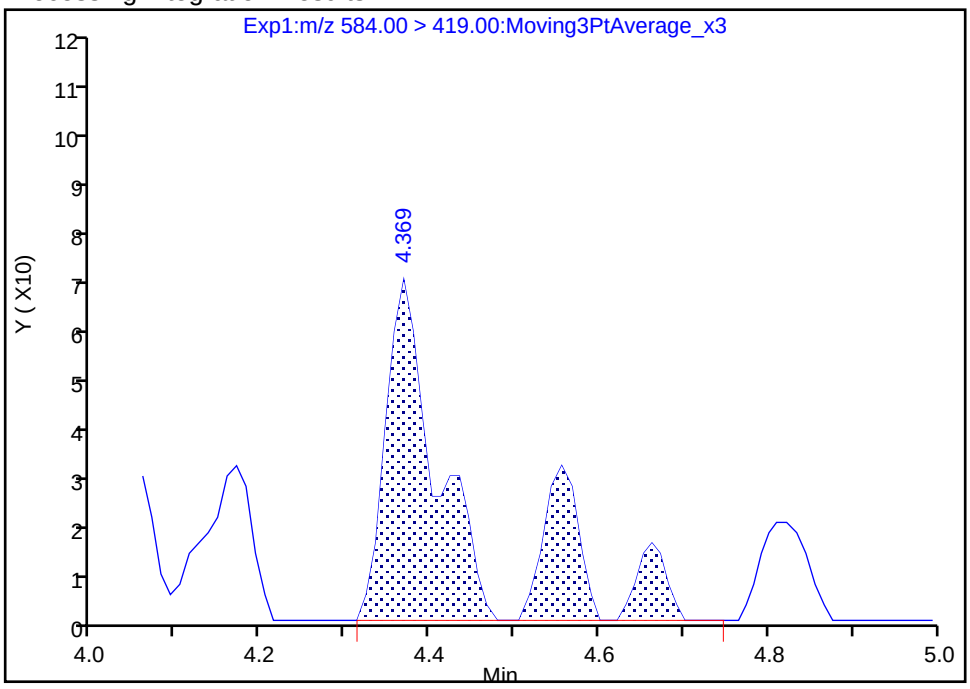
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

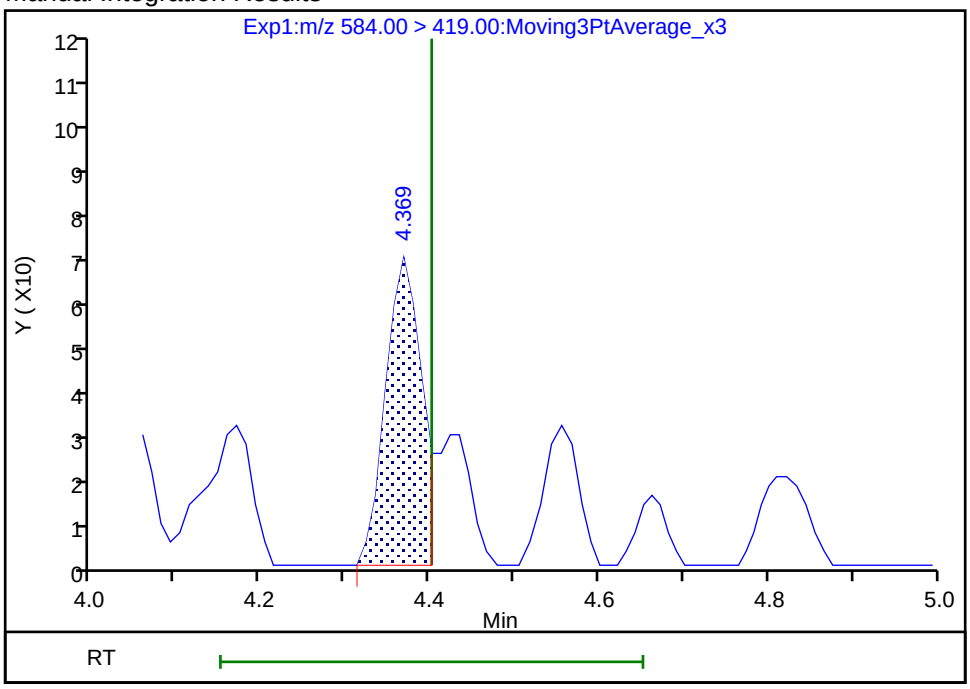
Processing Integration Results

RT: 4.37
Area: 392
Amount: 0.012749
Amount Units: ng/ml




Manual Integration Results

RT: 4.37
Area: 189
Amount: 0.006147
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:19:05

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

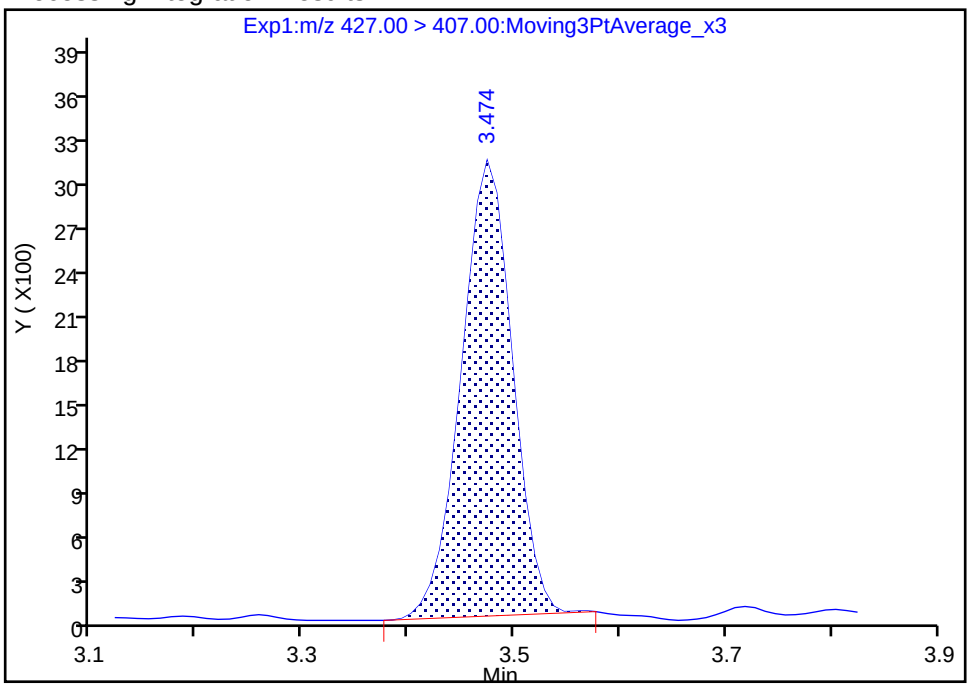
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

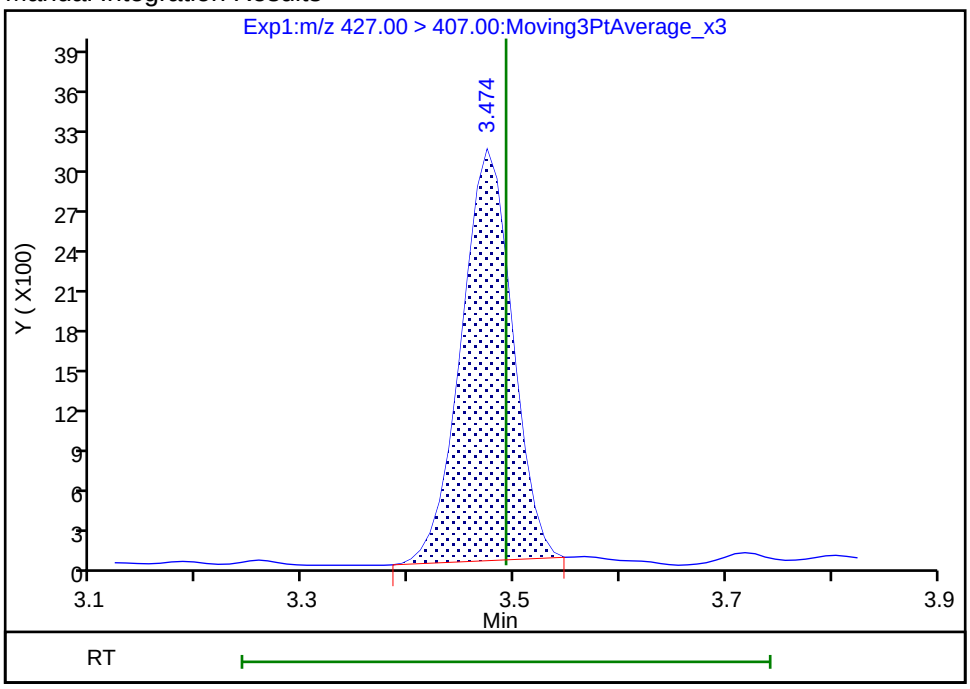
Processing Integration Results

RT: 3.47
Area: 10466
Amount: 0.091361
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 10407
Amount: 0.090846
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:11:15

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

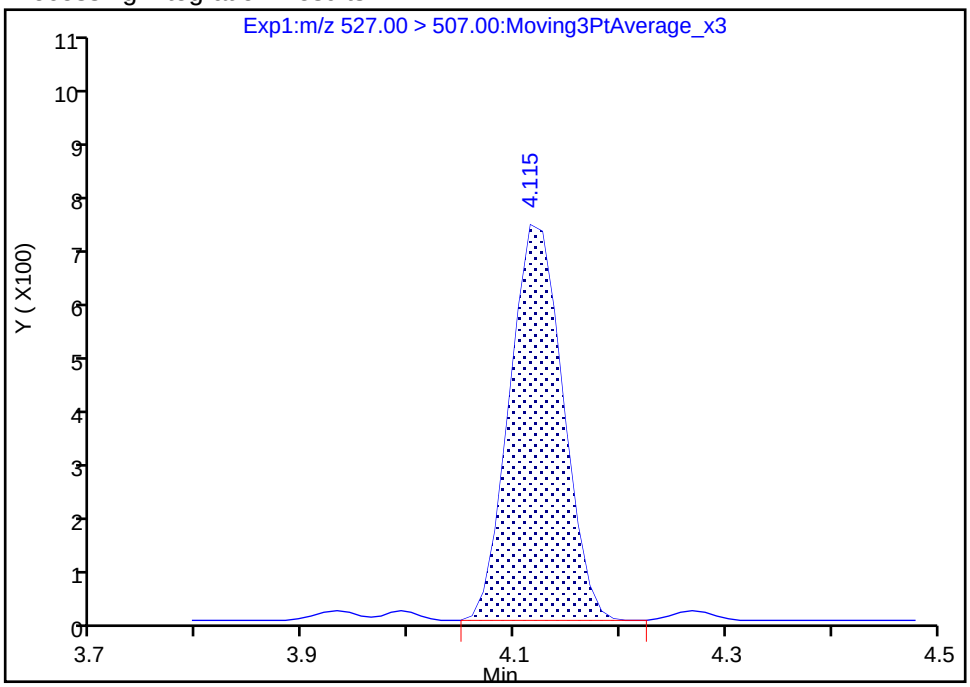
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

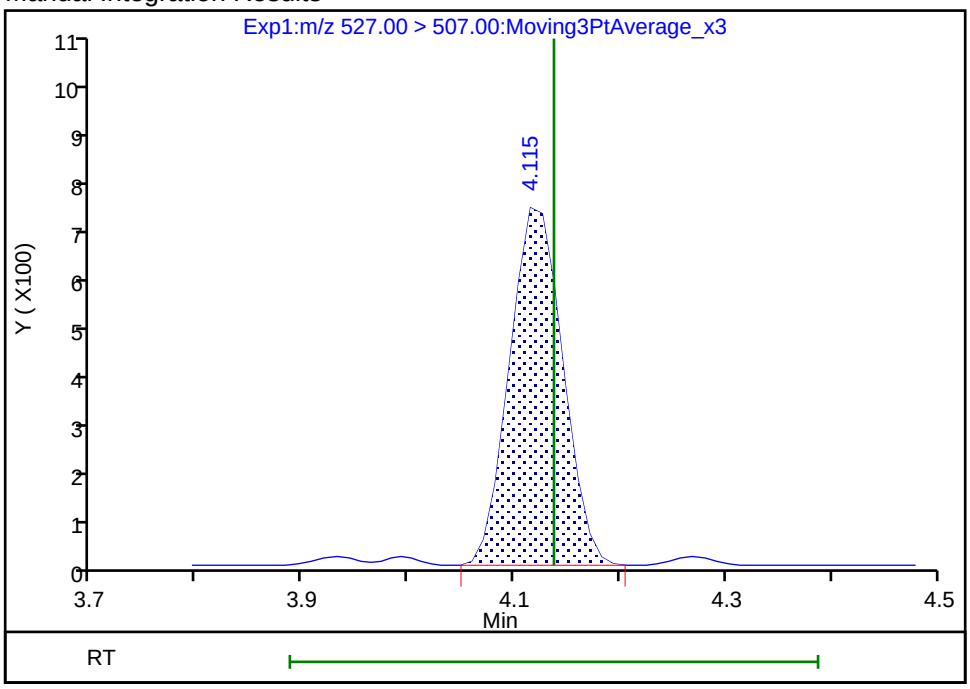
Processing Integration Results

RT: 4.12
Area: 2564
Amount: 0.042407
Amount Units: ng/ml




Manual Integration Results

RT: 4.12
Area: 2564
Amount: 0.042407
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:15:44

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

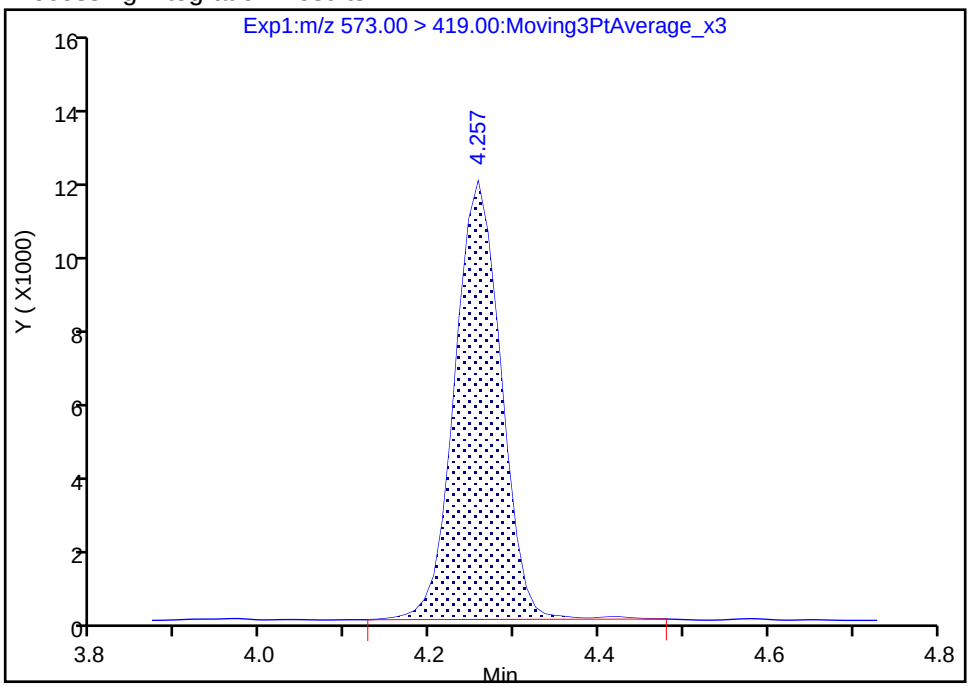
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

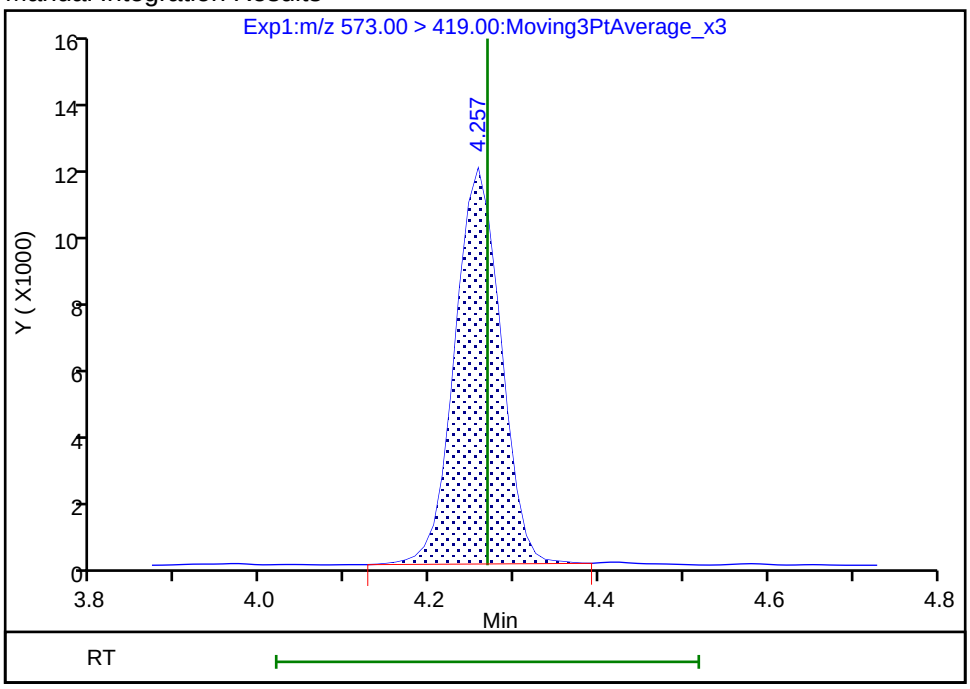
Processing Integration Results

RT: 4.26
Area: 42802
Amount: 0.781526
Amount Units: ng/ml




Manual Integration Results

RT: 4.26
Area: 42462
Amount: 0.775318
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:03:45
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

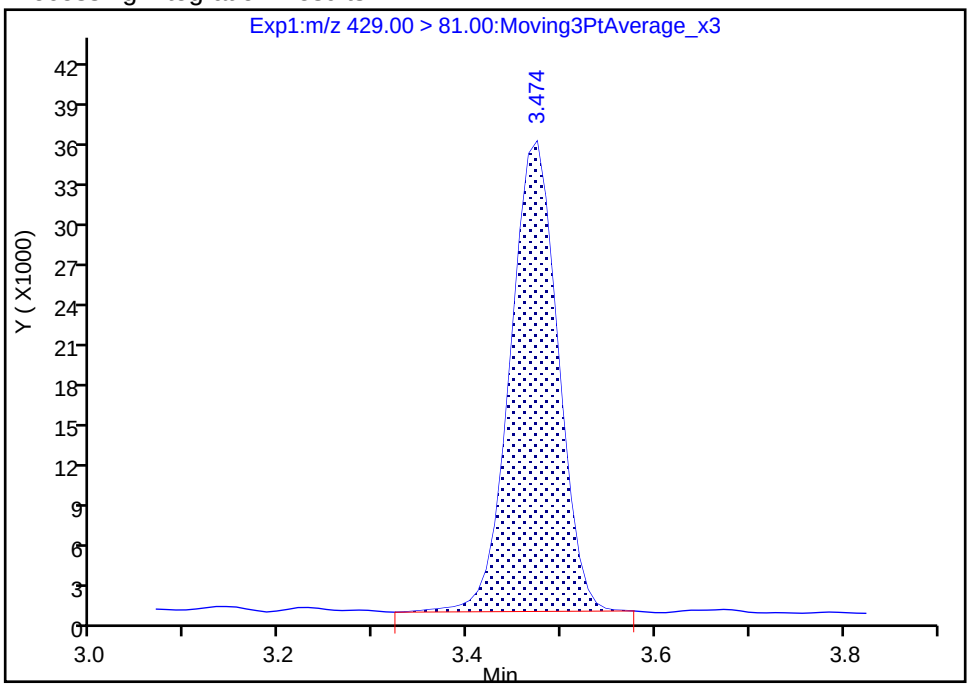
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

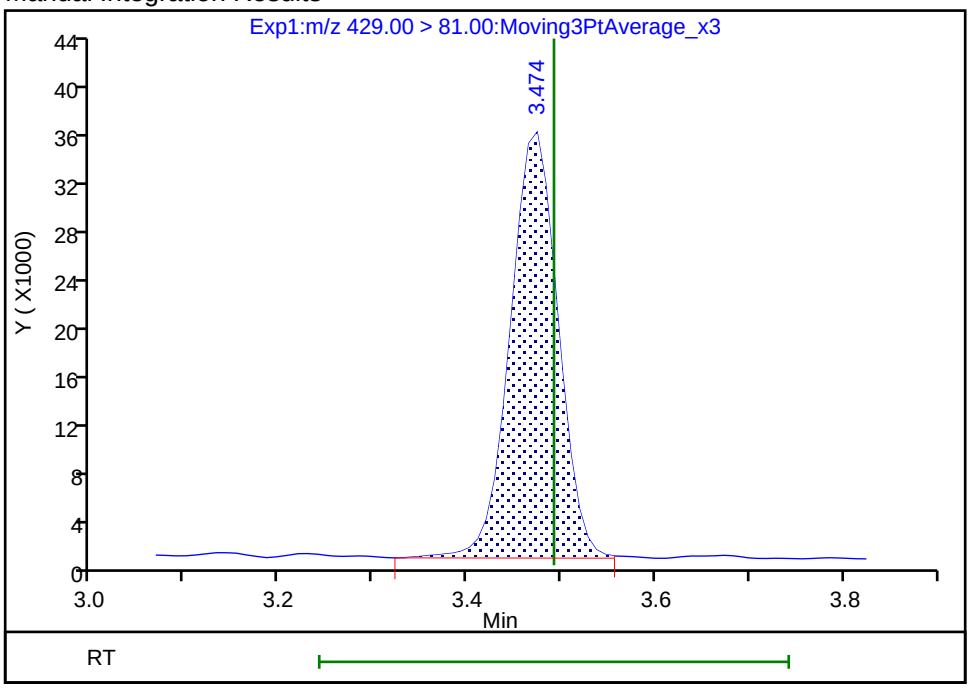
Processing Integration Results

RT: 3.47
Area: 121557
Amount: 1.131925
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 122296
Amount: 1.138807
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:02:58
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

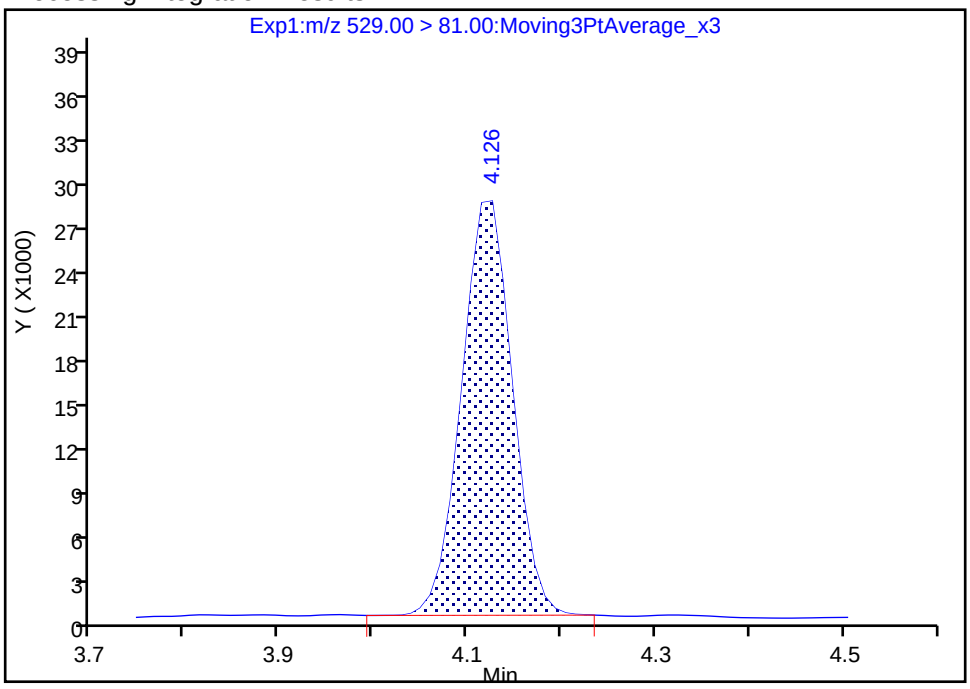
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 26 M2-8:2 FTS, CAS: STL02280

Signal: 1

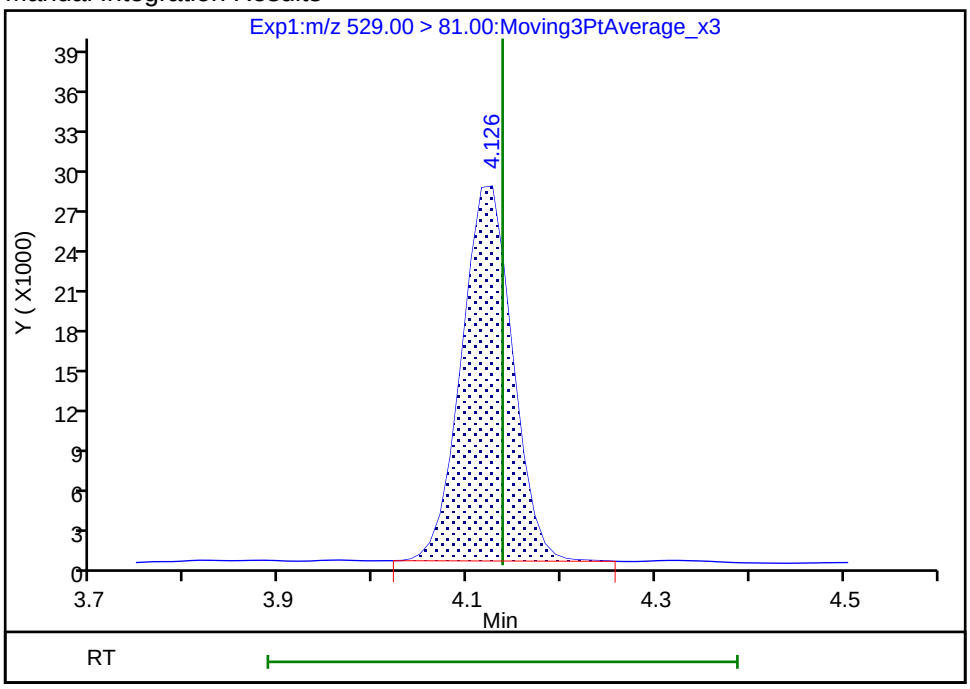
Processing Integration Results

RT: 4.13
Area: 106070
Amount: 0.957271
Amount Units: ng/ml




Manual Integration Results

RT: 4.13
Area: 106458
Amount: 0.960772
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:03:29

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

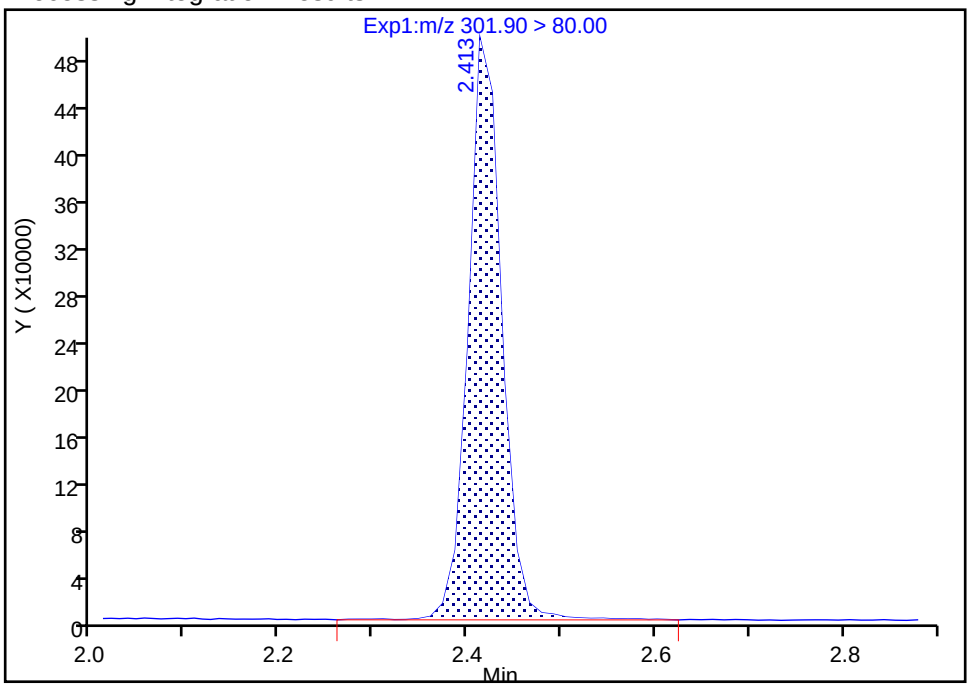
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B17.d | | | | |
| Injection Date: | 12-Mar-2021 14:13:41 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-A | Lab Sample ID: | 200-229152-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 17 | Worklist Smp#: | 17 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 47 13C3 PFBS, CAS: STL02337

Signal: 1

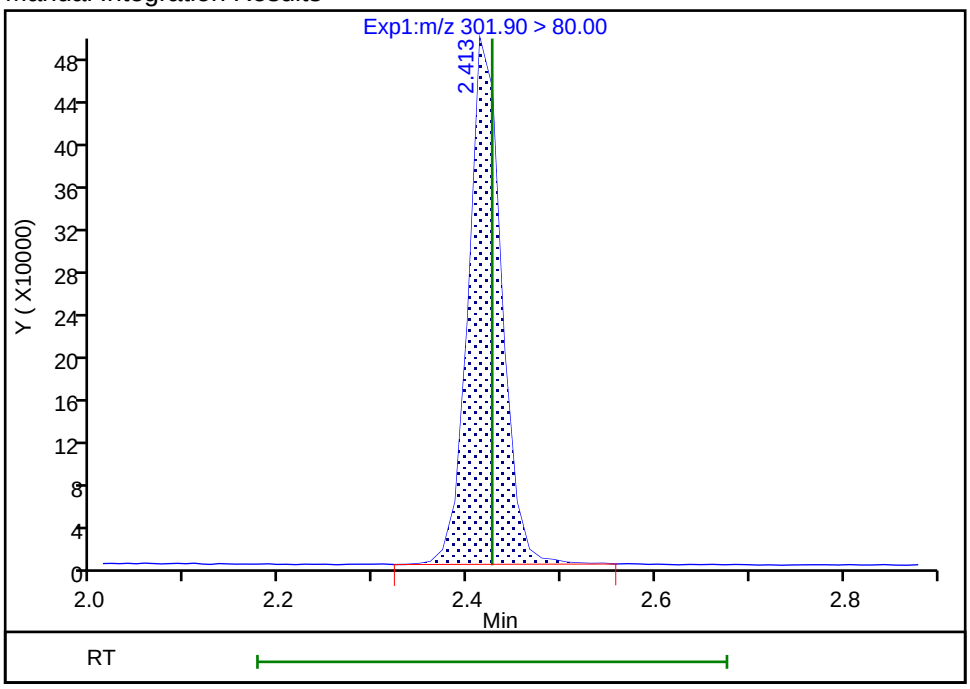
Processing Integration Results

RT: 2.41
Area: 1210678
Amount: 1.047318
Amount Units: ng/ml




Manual Integration Results

RT: 2.41
Area: 1199760
Amount: 1.037874
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:01:56

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID: HEX-MWX-030321  Lab Sample ID: 460-229152-3

Matrix: Water  Lab File ID: PA210312B20.d

Analysis Method: 537 (modified)  Date Collected: 03/03/2021 00:00

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 302.6(mL)  Date Analyzed: 03/12/2021 14:38

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 375-22-4 | Perfluorobutanoic acid (PFBA) | 21.2 | | 4.13 | 0.93 |
| 2706-90-3 | Perfluoropentanoic acid (PFPeA) | 46.0 | | 1.65 | 0.89 |
| 307-24-4 | Perfluorohexanoic acid (PFHxA) | 28.1 | | 1.65 | 0.69 |
| 375-85-9 | Perfluoroheptanoic acid (PFHpA) | 28.4 | | 1.65 | 0.38 |
| 335-67-1 | Perfluorooctanoic acid (PFOA) | 35.4 | B | 1.65 | 0.81 |
| 375-95-1 | Perfluorononanoic acid (PFNA) | 8.81 | | 1.65 | 0.48 |
| 335-76-2 | Perfluorodecanoic acid (PFDA) | 1.10 | J | 1.65 | 0.38 |
| 2058-94-8 | Perfluoroundecanoic acid (PFUnA) | 0.60 | U | 1.65 | 0.60 |
| 307-55-1 | Perfluorododecanoic acid (PFDoA) | 0.38 | U | 1.65 | 0.38 |
| 72629-94-8 | Perfluorotridecanoic acid (PFTriA) | 0.36 | U | 1.65 | 0.36 |
| 376-06-7 | Perfluorotetradecanoic acid (PFTeA) | 0.49 | U | 1.65 | 0.49 |
| 375-73-5 | Perfluorobutanesulfonic acid (PFBS) | 13.7 | | 1.65 | 0.52 |
| 355-46-4 | Perfluorohexanesulfonic acid (PFHxS) | 7.57 | | 1.65 | 0.55 |
| 375-92-8 | Perfluoroheptanesulfonic Acid (PFHpS) | 0.97 | J | 1.65 | 0.32 |
| 1763-23-1 | Perfluorooctanesulfonic acid (PFOS) | 44.9 | | 1.65 | 0.72 |
| 335-77-3 | Perfluorodecanesulfonic acid (PFDS) | 0.40 | U | 1.65 | 0.40 |
| 754-91-6 | Perfluorooctanesulfonamide (PFOSA) | 0.47 | U | 1.65 | 0.47 |
| 2355-31-9 | N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.65 | U | 4.13 | 0.65 |
| 2991-50-6 | N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 0.77 | U | 4.13 | 0.77 |
| 27619-97-2 | 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 3.33 | J | 4.13 | 0.59 |
| 39108-34-4 | 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 1.34 | J | 1.65 | 0.55 |

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID: HEX-MWX-030321  Lab Sample ID: 460-229152-3

Matrix: Water  Lab File ID: PA210312B20.d

Analysis Method: 537 (modified)  Date Collected: 03/03/2021 00:00

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 302.6(mL)  Date Analyzed: 03/12/2021 14:38

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| STL00994 | 18O2 PFHxS | 89 | | 50-150 |
| STL01892 | 13C4 PFHpA | 92 | | 50-150 |
| STL00990 | 13C4 PFOA | 87 | | 50-150 |
| STL00991 | 13C4 PFOS | 72 | | 50-150 |
| STL00995 | 13C5 PFNA | 75 | | 50-150 |
| STL00992 | 13C4 PFBA | 78 | | 25-150 |
| STL00993 | 13C2 PFHxA | 95 | | 50-150 |
| STL00996 | 13C2 PFDA | 67 | | 50-150 |
| STL00997 | 13C2 PFUnA | 59 | | 50-150 |
| STL00998 | 13C2 PFDoA | 56 | | 50-150 |
| STL01056 | 13C8 FOSA | 54 | | 25-150 |
| STL01893 | 13C5 PFPeA | 89 | | 25-150 |
| STL02116 | 13C2 PFTeDA | 59 | | 50-150 |
| STL02118 | d3-NMeFOSAA | 60 | | 50-150 |
| STL02117 | d5-NEtFOSAA | 66 | | 50-150 |
| STL02279 | M2-6:2 FTS | 102 | | 25-150 |
| STL02280 | M2-8:2 FTS | 71 | | 25-150 |
| STL02337 | 13C3 PFBS | 95 | | 50-150 |

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d
Lims ID: 460-229152-A-3-A
Client ID: HEX-MWX-030321
Sample Type: Client
Inject. Date: 12-Mar-2021 14:38:30 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-229152-A-3-A
Misc. Info.: 200-0045149-020 Plate: 1 Rack: 2
Operator ID: lc812tech Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 15-Mar-2021 17:45:51 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1650

First Level Reviewer: nampitakw Date: 15-Mar-2021 14:12:12
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.071 | 2.091 | -0.020 | 0.595 | 987446 | 0.9692 | | 77.5 | 4682 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | M |
| 212.90 > 169.00 | 2.080 | 2.091 | -0.011 | 1.004 | 508656 | 0.6426 | | | 46.0 | M |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.398 | 2.413 | -0.015 | 0.688 | 818963 | 1.11 | | 89.0 | 607 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | M |
| 262.90 > 219.00 | 2.398 | 2.413 | -0.015 | 1.000 | 1009978 | 1.39 | | | 11.7 | M |
| D 47 13C3 PFBS | | | | | | | | | | M |
| 301.90 > 80.00 | 2.411 | 2.426 | -0.015 | 0.692 | 1074056 | 1.11 | | 95.3 | 33016 | M |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | M |
| 298.90 > 80.00 | 2.424 | 2.439 | -0.015 | 1.005 | 434177 | 0.4154 | Target=2.21 | | 16.7 | M |
| 298.90 > 99.00 | 2.411 | 2.439 | -0.028 | 1.000 | 197350 | | 2.20(1.11-3.32) | | 28.9 | |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.756 | 2.770 | -0.014 | 0.791 | 921258 | 1.19 | | 95.5 | 2221 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | M |
| 313.00 > 269.00 | 2.756 | 2.770 | -0.014 | 1.000 | 685349 | 0.8512 | Target=12.83 | | 15.1 | M |
| 313.00 > 119.00 | 2.756 | 2.770 | -0.014 | 1.000 | 57096 | | 12.00(6.42-19.25) | | 39.6 | M |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.122 | 3.132 | -0.010 | 1.000 | 172383 | 0.2289 | Target=4.15 | | 18.6 | M |
| 399.00 > 99.00 | 3.122 | 3.132 | -0.010 | 1.000 | 35987 | | 4.79(2.08-6.23) | | 21.7 | M |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.122 | 3.132 | -0.010 | 0.896 | 755513 | 1.05 | | 88.6 | 2794 | |
| D 9 13C4 PFHpA | | | | | | | | | | M |
| 367.00 > 322.00 | 3.122 | 3.143 | -0.021 | 0.896 | 845213 | 1.14 | | 91.5 | 2189 | M |
| 10 Perfluoroheptanoic acid | | | | | | | | | | M |
| 363.00 > 319.00 | 3.122 | 3.143 | -0.021 | 1.000 | 635414 | 0.8604 | Target=3.66 | | 25.1 | M |
| 363.00 > 169.00 | 3.122 | 3.143 | -0.021 | 1.000 | 180005 | | 3.53(1.83-5.49) | | 256 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | M |
| 449.00 > 80.00 | 3.474 | 3.483 | -0.009 | 0.916 | 14223 | 0.0294 | Target=5.95 | | 3.6 | M |
| 449.00 > 99.00 | 3.465 | 3.483 | -0.018 | 0.913 | 3521 | | 4.04(2.98-8.93) | | 3.3 | M |
| D 12 M2-6:2 FTS | | | | | | | | | | M |
| 429.00 > 81.00 | 3.465 | 3.492 | -0.027 | 0.995 | 108563 | 1.21 | | 102 | 37.2 | M |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | M |
| 427.00 > 407.00 | 3.474 | 3.492 | -0.018 | 1.003 | 10240 | 0.1007 | | | 131 | M |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.483 | 3.501 | -0.018 | 1.000 | 814378 | 1.09 | | 86.8 | 2221 | |
| * 62 13C2 PFOA | | | | | | | | | | M |
| 415.00 > 370.00 | 3.483 | 3.501 | -0.018 | | 948056 | 1.25 | | | 3267 | M |
| 15 Perfluorooctanoic acid | | | | | | | | | | M |
| 413.00 > 369.00 | 3.483 | 3.501 | -0.018 | 1.000 | 756400 | 1.07 | Target=2.58 | | 51.8 | M |
| 413.00 > 169.00 | 3.483 | 3.501 | -0.018 | 1.000 | 330558 | | 2.29(1.29-3.87) | | 512 | M |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.795 | 3.814 | -0.019 | 1.000 | 559594 | 1.36 | Target=5.65 | | 97.0 | M |
| 499.00 > 99.00 | 3.795 | 3.814 | -0.019 | 1.000 | 78404 | | 7.14(2.82-8.47) | | 95.8 | M |
| D 18 13C4 PFOS | | | | | | | | | | M |
| 503.00 > 80.00 | 3.795 | 3.814 | -0.019 | 1.089 | 427757 | 0.8640 | | 72.3 | 182 | M |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.814 | 3.824 | -0.010 | 1.095 | 624354 | 0.9429 | | 75.4 | 1995 | |
| 20 Perfluorononanoic acid | | | | | | | | | | M |
| 463.00 > 419.00 | 3.814 | 3.824 | -0.010 | 1.000 | 147316 | 0.2665 | Target=7.44 | | 14.9 | M |
| 463.00 > 169.00 | 3.814 | 3.824 | -0.010 | 1.000 | 23290 | | 6.33(3.72-11.16) | | 92.2 | M |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.115 | 4.126 | -0.011 | 1.181 | 529620 | 0.8366 | | 66.9 | 2263 | |
| 24 Perfluorodecanoic acid | | | | | | | | | | M |
| 513.00 > 469.00 | 4.115 | 4.126 | -0.011 | 1.000 | 14523 | 0.0333 | Target=9.29 | | 4.3 | M |
| 513.00 > 169.00 | 4.115 | 4.126 | -0.011 | 1.000 | 1695 | | 8.57(4.64-13.93) | | 7.7 | M |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.115 | 4.137 | -0.022 | 1.181 | 78650 | 0.8467 | | 70.7 | 59.5 | |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | M |
| 527.00 > 507.00 | 4.115 | 4.137 | -0.022 | 1.000 | 1818 | 0.0407 | | | 46.6 | M |
| D 21 13C8 FOSA | | | | | | | | | | |
| 506.00 > 78.00 | 4.205 | 4.225 | -0.020 | 1.207 | 629190 | 0.6762 | | 54.1 | 2172 | |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | M |
| 498.00 > 78.00 | 4.215 | 4.225 | -0.010 | 1.002 | 3521 | 0.006980 | | | 16.2 | M |
| D 27 d3-NMeFOSAA | | | | | | | | | | M |
| 573.00 > 419.00 | 4.257 | 4.268 | -0.011 | 1.222 | 34366 | 0.7485 | | 59.9 | 252 | M |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | M |
| 570.00 > 419.00 | 4.246 | 4.268 | -0.022 | 0.997 | 459 | 0.0188 | | | 2.8 | M |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | M |
| 599.00 > 80.00 | 4.347 | 4.358 | -0.011 | 1.146 | 1113 | 0.004545 | Target=2.80 | | 3.4 | M |
| 599.00 > 99.00 | 4.358 | 4.358 | 0.0 | 1.148 | 537 | | 2.07(1.40-4.19) | | 2.0 | M |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.380 | 4.391 | -0.011 | 1.257 | 384160 | 0.7388 | | 59.1 | 2980 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 31 Perfluoroundecanoic acid | | | | | | | | | | RM |
| 563.00 > 519.00 | 4.369 | 4.391 | -0.022 | 0.997 | 2584 | 0.008244 | Target=8.12 | | 1.2 | RM |
| 563.00 > 169.00 | 4.380 | 4.391 | -0.011 | 1.000 | 193 | | 13.39(4.06-12.18) | | 1.4 | M |
| D 32 d5-NEtFOSAA | | | | | | | | | | |
| 589.00 > 419.00 | 4.380 | 4.402 | -0.022 | 1.257 | 36792 | 0.8289 | | 66.3 | 391 | |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.391 | 4.402 | -0.011 | 1.003 | 363 | 0.0133 | | | 2.0 | M |
| D 36 13C2 PFDoA | | | | | | | | | | M |
| 615.00 > 570.00 | 4.601 | 4.622 | -0.021 | 1.321 | 381715 | 0.6954 | | 55.6 | 3758 | M |
| 37 Perfluorododecanoic acid | | | | | | | | | | M |
| 613.00 > 569.00 | 4.601 | 4.622 | -0.021 | 1.000 | 2493 | 0.007423 | Target=6.91 | | 1.1 | |
| 613.00 > 169.00 | 4.601 | 4.622 | -0.021 | 1.000 | 342 | | 7.29(3.45-10.36) | | 4.9 | M |
| 41 Perfluorotridecanoic acid | | | | | | | | | | M |
| 663.00 > 619.00 | 4.810 | 4.822 | -0.012 | 1.045 | 1987 | 0.007290 | Target=4.39 | | 1.3 | M |
| 663.00 > 169.00 | 4.810 | 4.822 | -0.012 | 1.045 | 443 | | 4.49(2.20-6.59) | | 9.2 | M |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 5.004 | 5.014 | -0.010 | 1.437 | 298956 | 0.7364 | | 58.9 | 2313 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | M |
| 713.00 > 169.00 | 5.004 | 5.014 | -0.010 | 1.000 | 501 | 0.0113 | Target=1.06 | | 22.0 | M |
| 713.00 > 219.00 | 5.004 | 5.014 | -0.010 | 1.000 | 374 | | 1.34(0.53-1.59) | | 16.5 | M |

## QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 15-Mar-2021 17:46:25 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d

Injection Date: 12-Mar-2021 14:38:30 Instrument ID: LC812

Lims ID: 460-229152-A-3-A Lab Sample ID: 200-229152-3

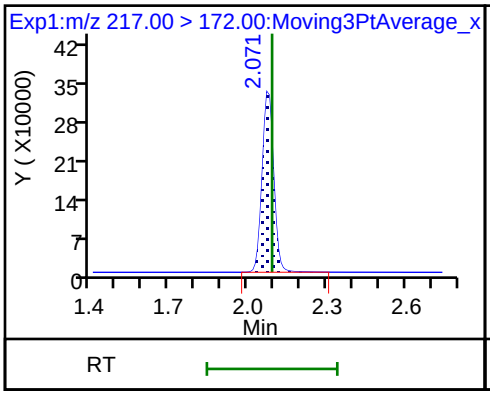
Client ID: HEX-MWX-030321

Operator ID: lc812tech ALS Bottle#: 20 Worklist Smp#: 20

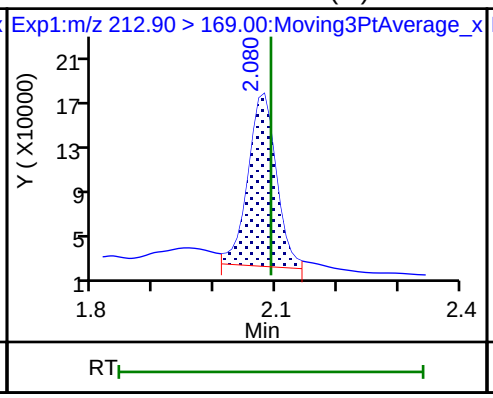
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

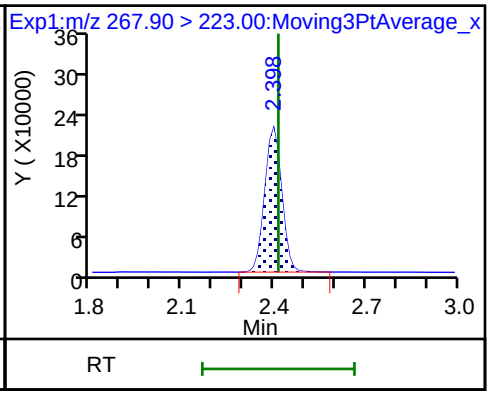
D 1 13C4 PFBA



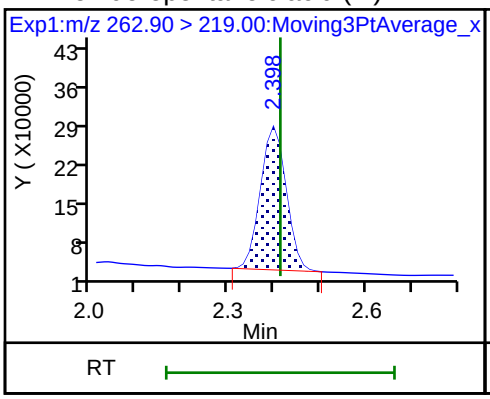

2 Perfluorobutanoic acid (M)



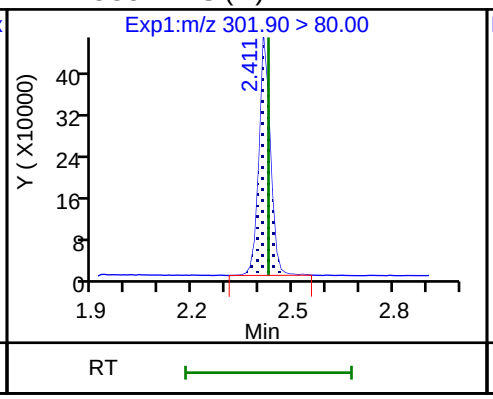

D 3 13C5 PFPeA



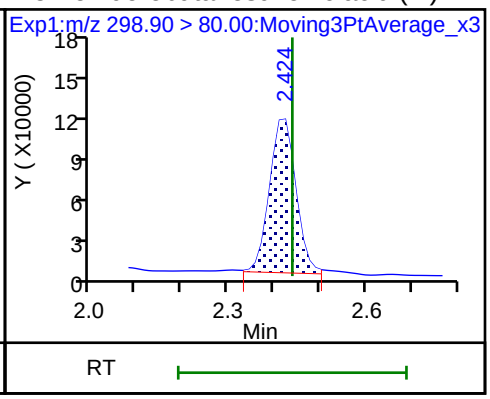

4 Perfluoropentanoic acid (M)



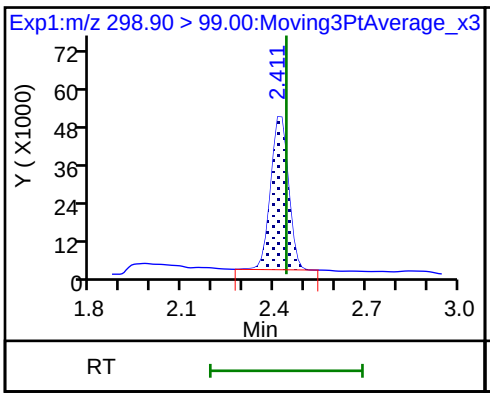

D 47 13C3 PFBS (M)



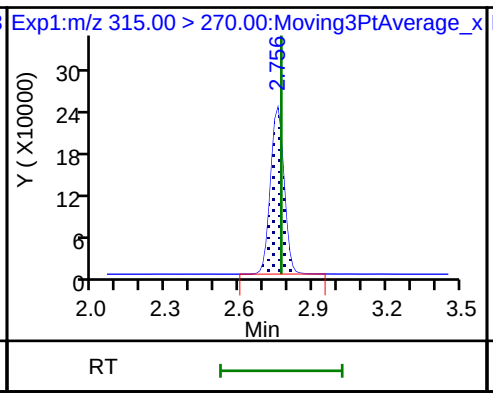

5 Perfluorobutanesulfonic acid (M)



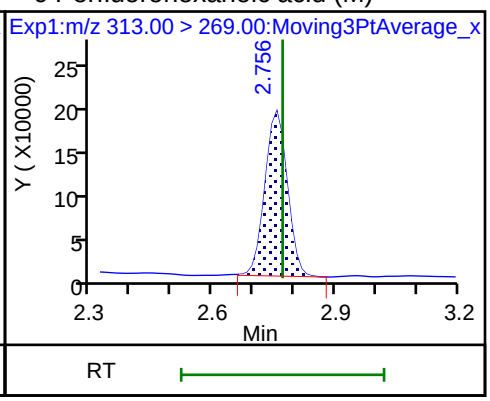

5 Perfluorobutanesulfonic acid



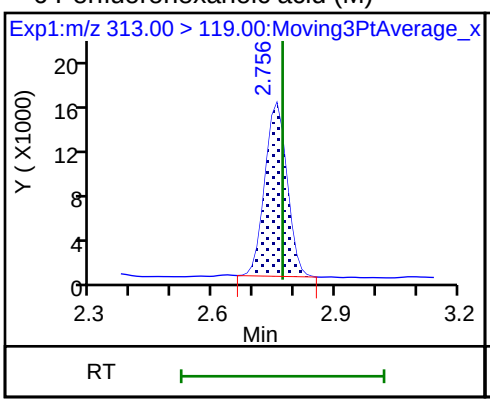

D 7 13C2 PFHxA



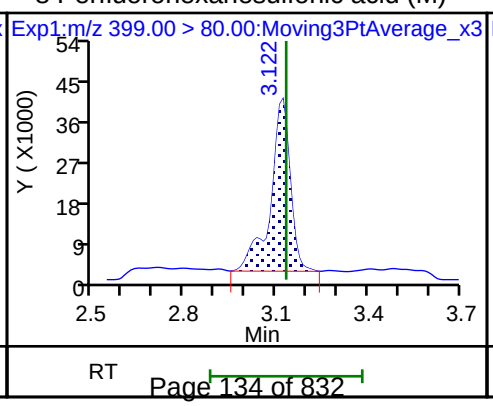

6 Perfluorohexanoic acid (M)



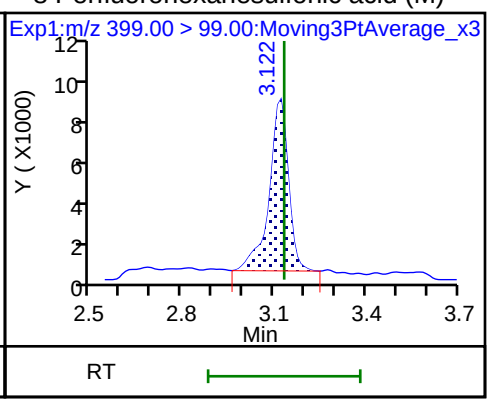

6 Perfluorohexanoic acid (M)



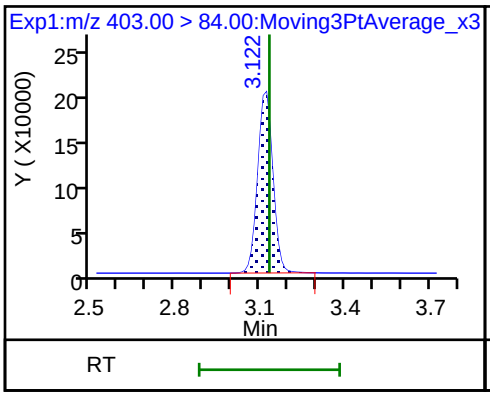

8 Perfluorohexanesulfonic acid (M)



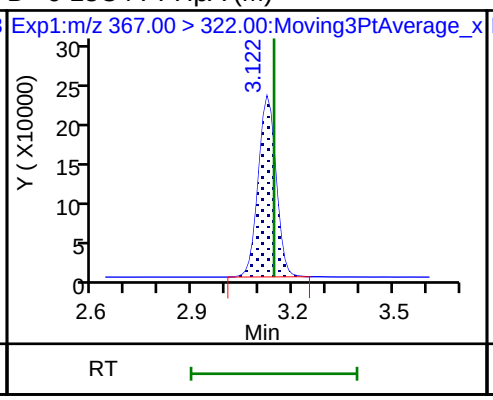

8 Perfluorohexanesulfonic acid (M)



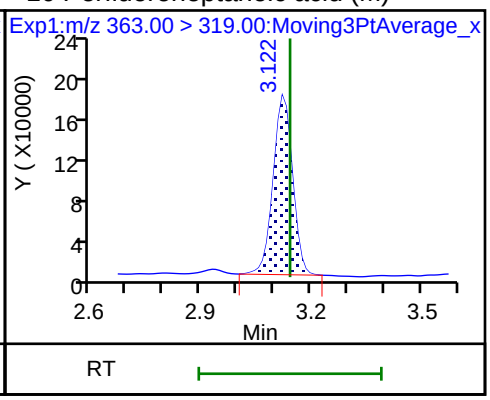
D 11 18O2 PFHxS



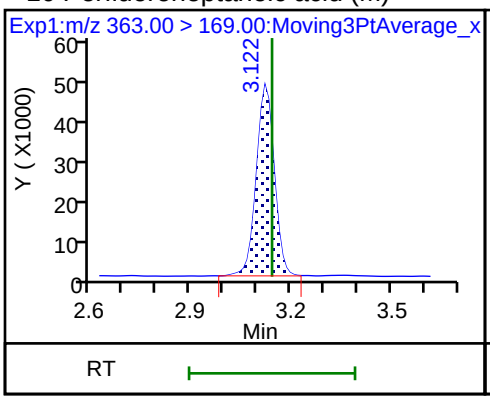

D 9 13C4 PFHpA (M)



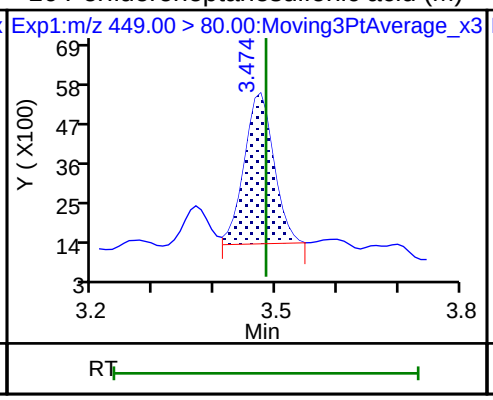

10 Perfluoroheptanoic acid (M)



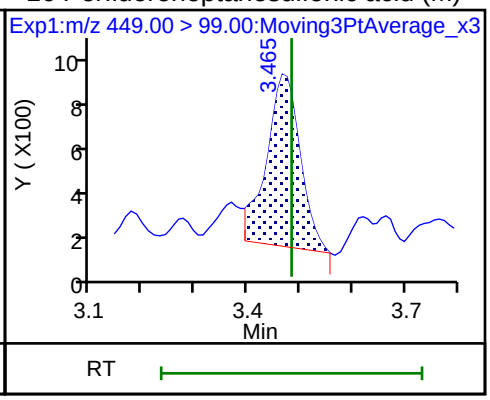

10 Perfluoroheptanoic acid (M)



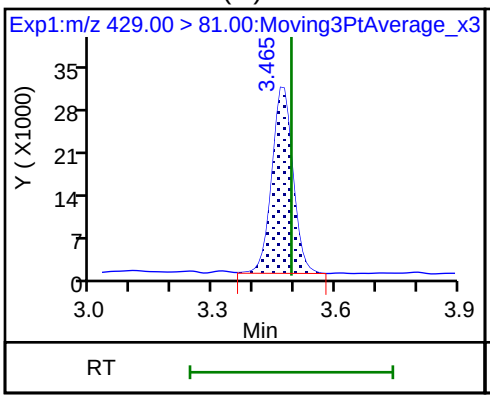

16 Perfluoroheptanesulfonic acid (M)



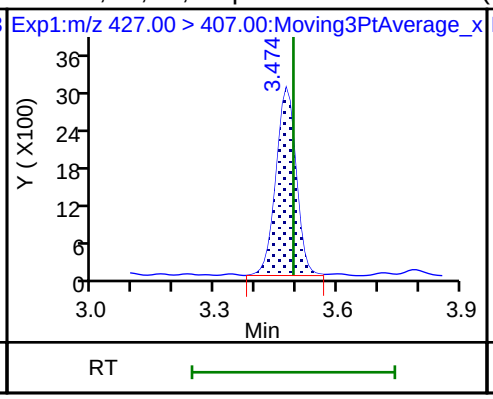

16 Perfluoroheptanesulfonic acid (M)



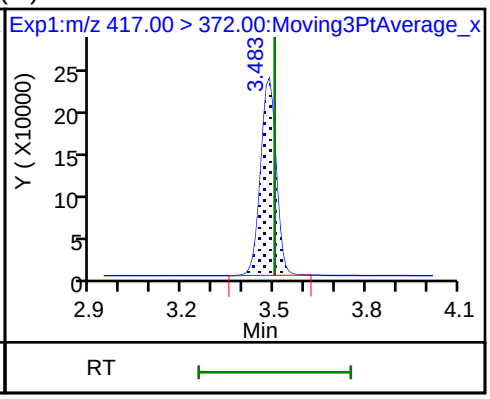

D 12 M2-6:2 FTS (M)



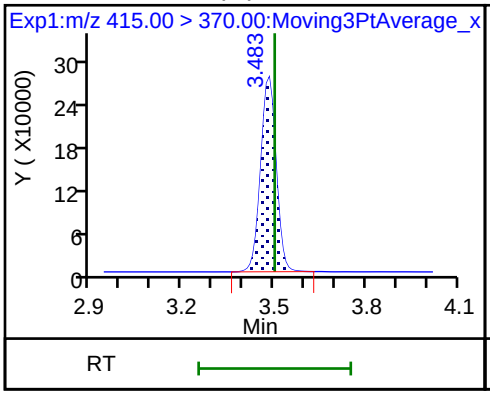

13 1H,1H,2H,2H-perfluorooctanesulfo (M)



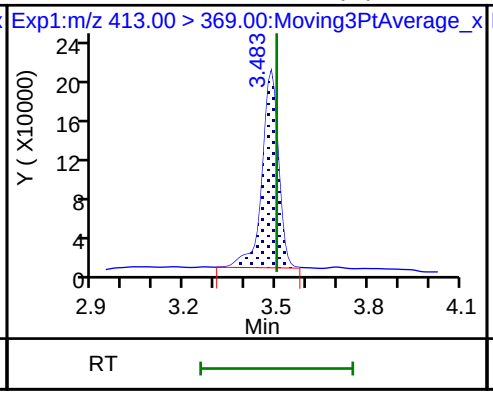

14 13C4 PFOA



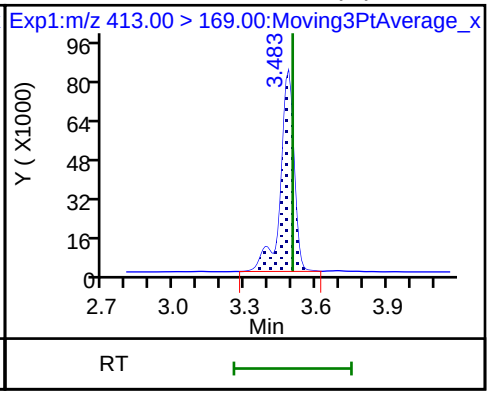

* 62 13C2 PFOA (M)



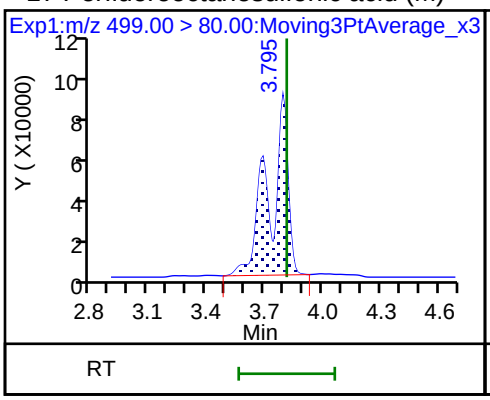

15 Perfluorooctanoic acid (M)



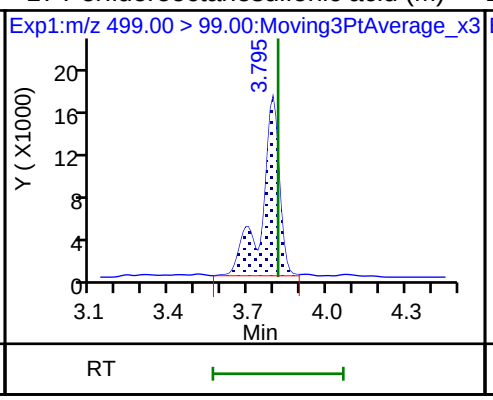

15 Perfluorooctanoic acid (M)



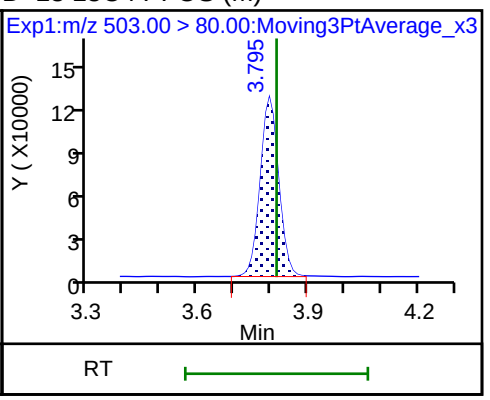
17 Perfluorooctanesulfonic acid (M)



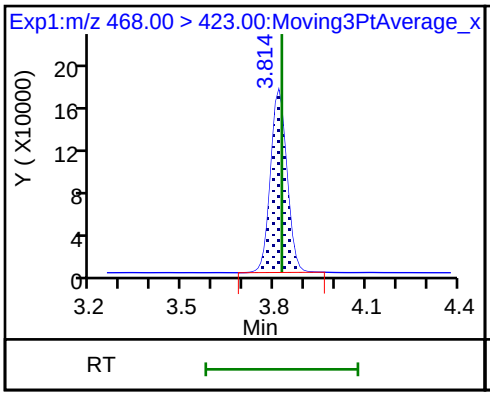

17 Perfluorooctanesulfonic acid (M)



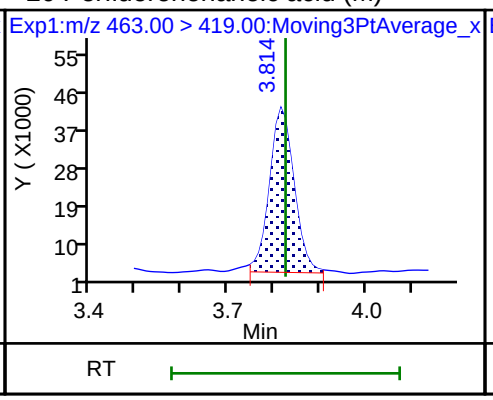

D 18 13C4 PFOS (M)



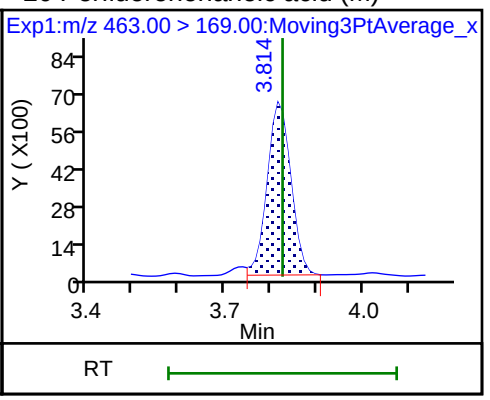

D 19 13C5 PFNA



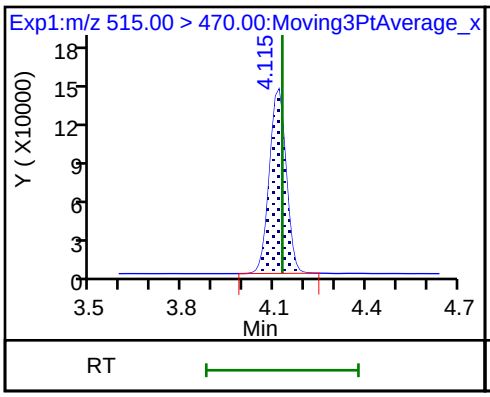

20 Perfluorononanoic acid (M)



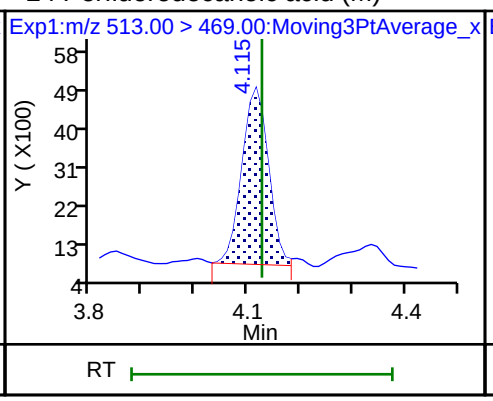

20 Perfluorononanoic acid (M)



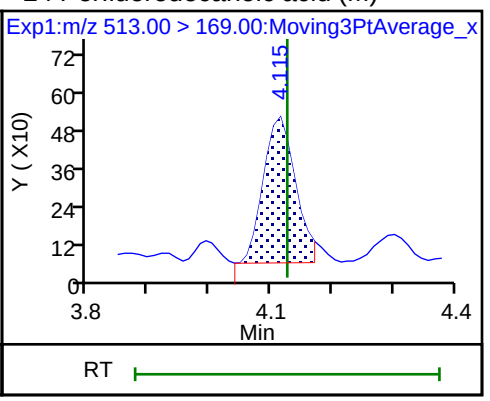

D 23 13C2 PFDA



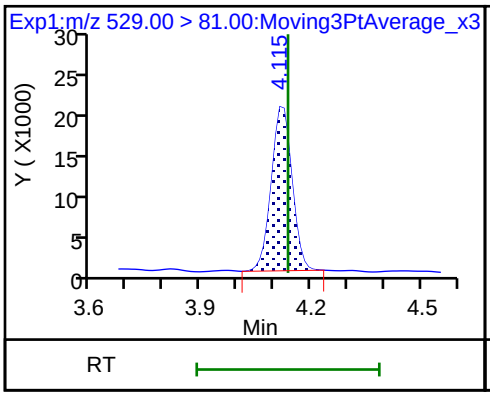

24 Perfluorodecanoic acid (M)



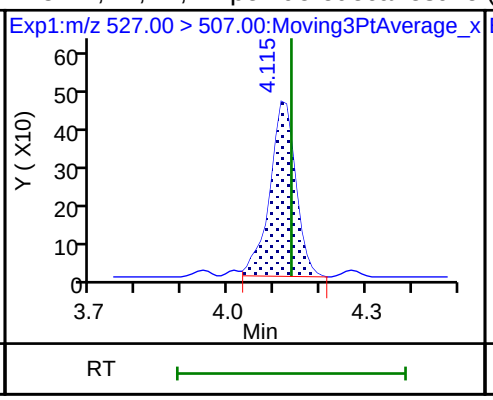

24 Perfluorodecanoic acid (M)



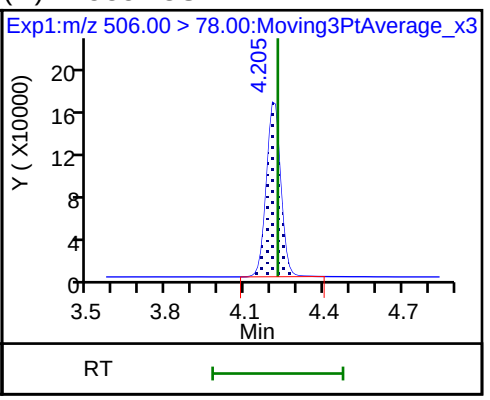

D 26 M2-8:2 FTS



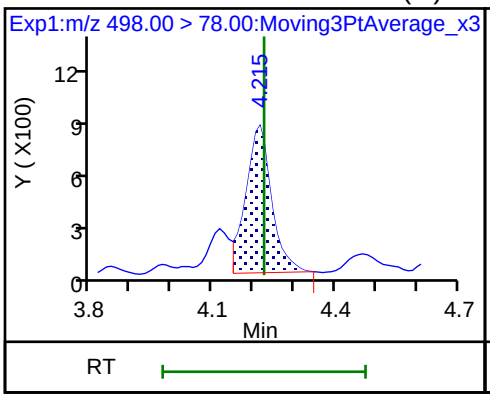

25 1H,1H,2H,2H-perfluorodecanesulfo (M)



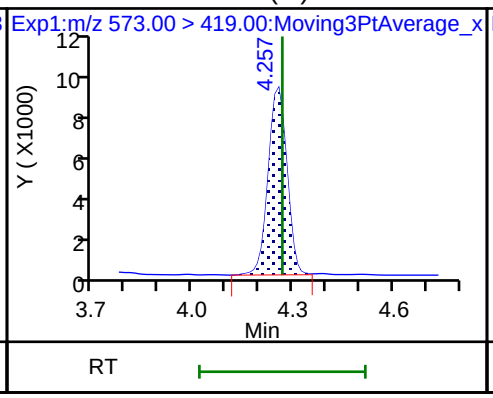

D 21 13C8 FOSA



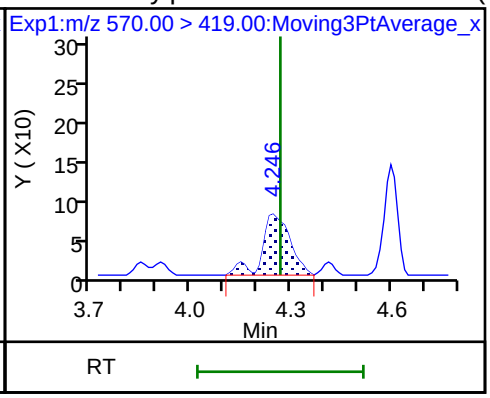
22 Perfluorooctanesulfonamide (M)



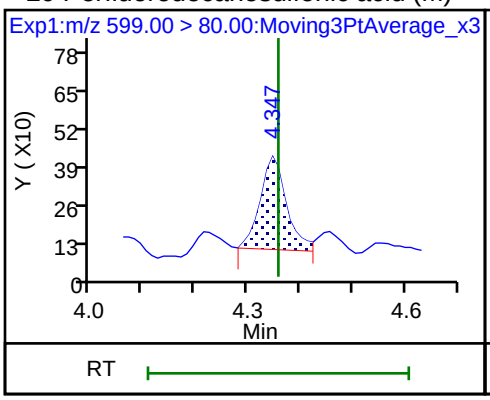

D 27 d3-NMeFOSAA (M)



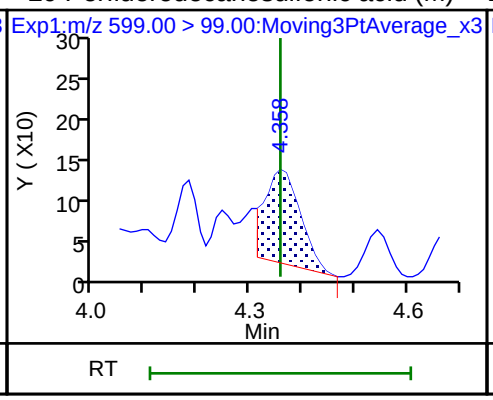

28 N-methylperfluorooctanesulfonami (M)



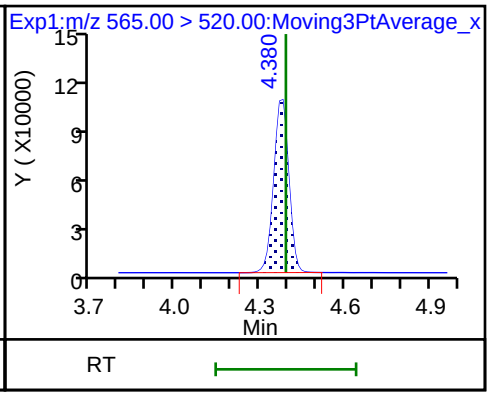

29 Perfluorodecanesulfonic acid (M)



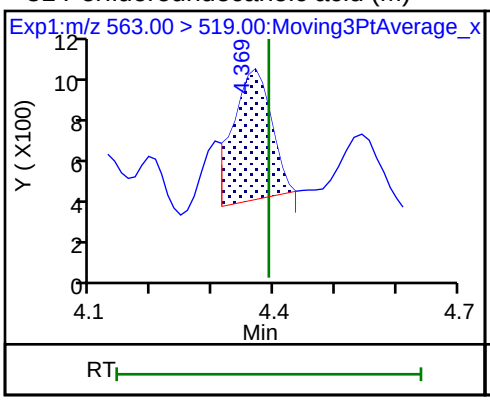

29 Perfluorodecanesulfonic acid (M)



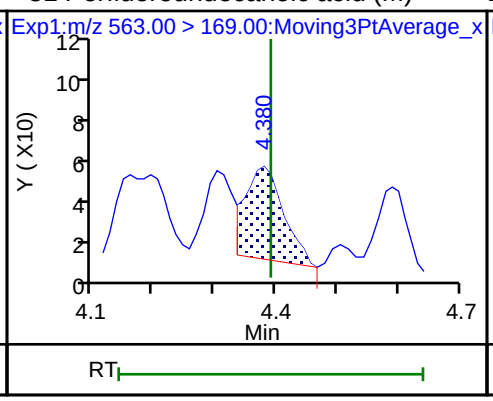

D 30 13C2 PFUnA



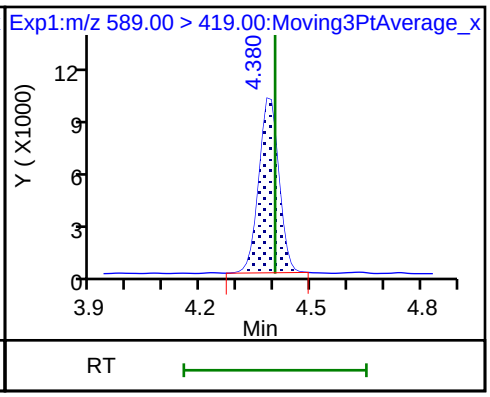

31 Perfluoroundecanoic acid (M)



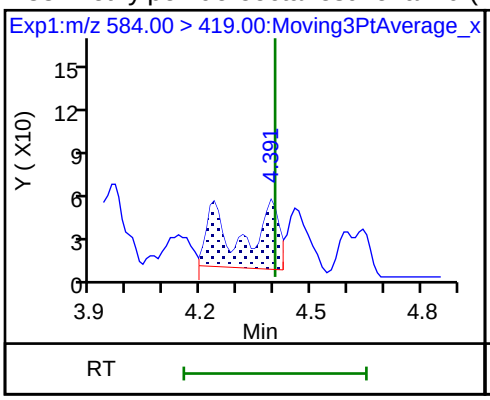

31 Perfluoroundecanoic acid (M)



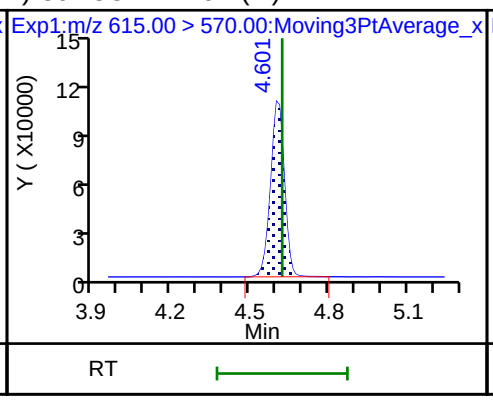

D 32 d5-NEtFOSAA



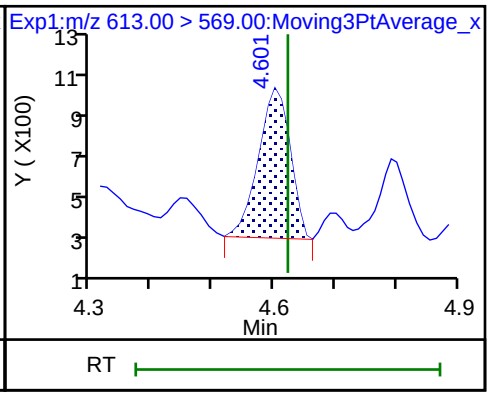

33 N-ethylperfluorooctanesulfonamid (M)



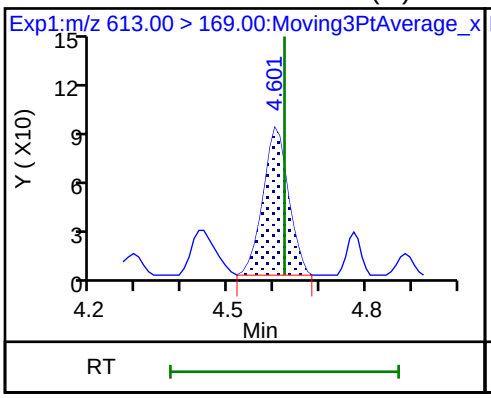

D 36 13C2 PFDoA (M)



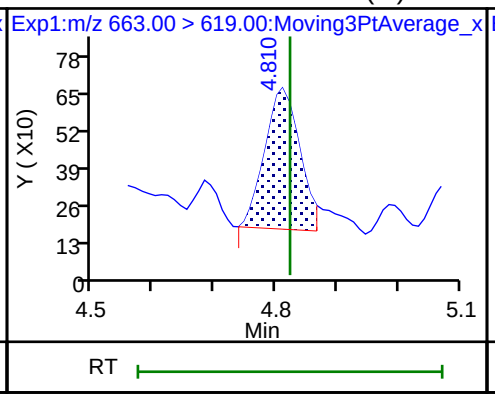

37 Perfluorododecanoic acid



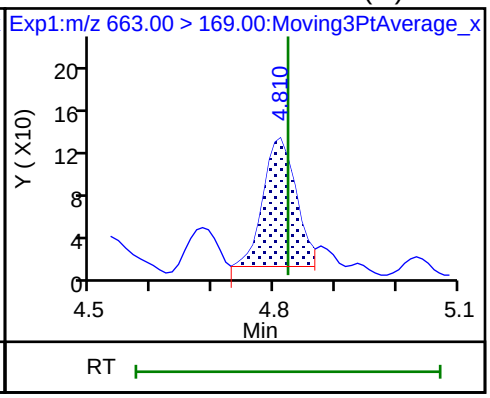
37 Perfluorododecanoic acid (M)



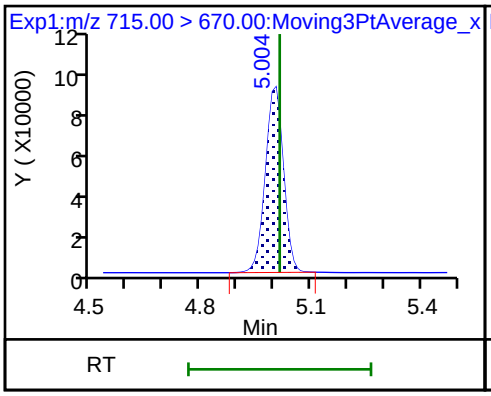

41 Perfluorotridecanoic acid (M)



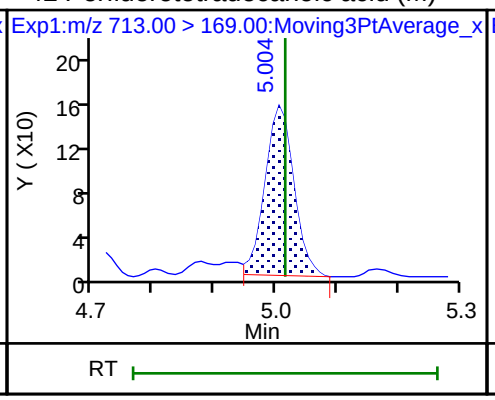

41 Perfluorotridecanoic acid (M)



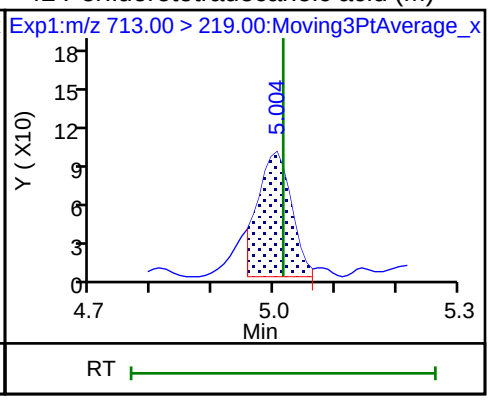

D 43 13C2 PFTeDA




42 Perfluorotetradecanoic acid (M)




42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

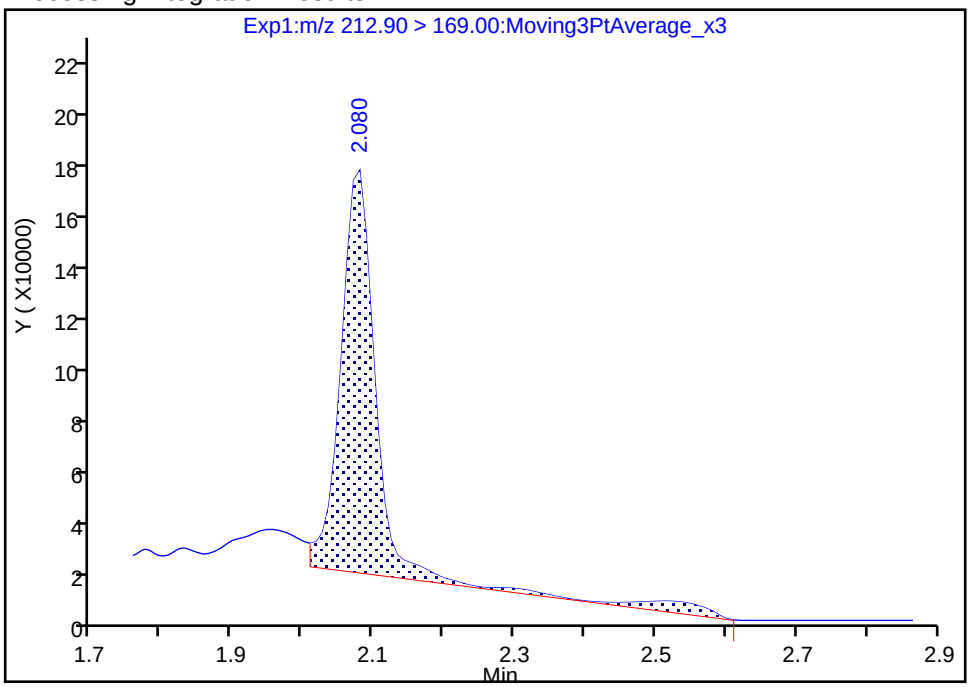
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| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

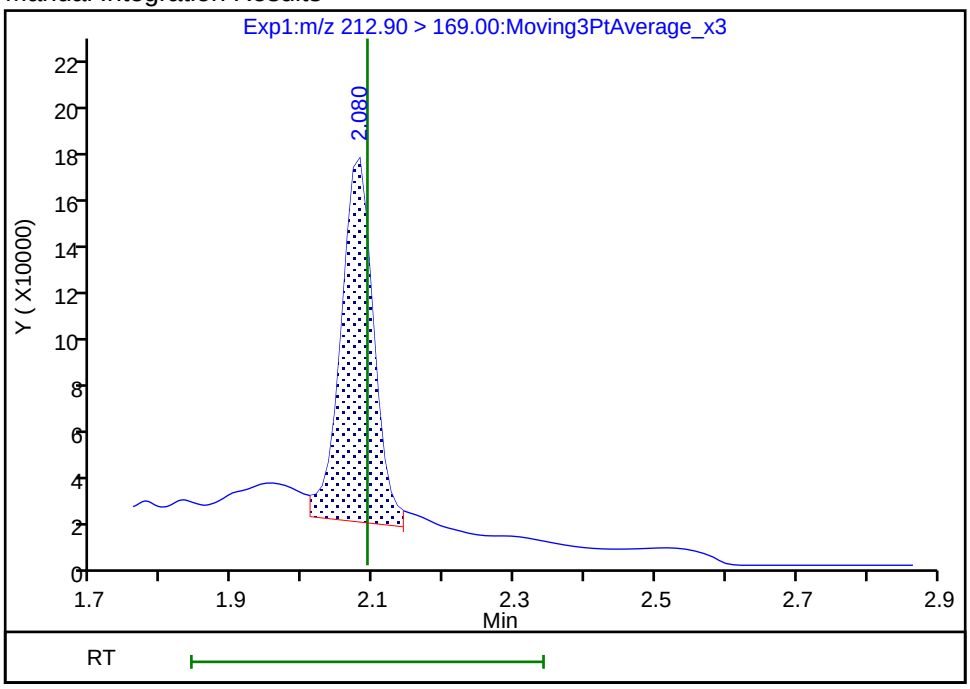
Processing Integration Results

RT: 2.08
Area: 570285
Amount: 0.720471
Amount Units: ng/ml




Manual Integration Results

RT: 2.08
Area: 508656
Amount: 0.642612
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:01:45

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

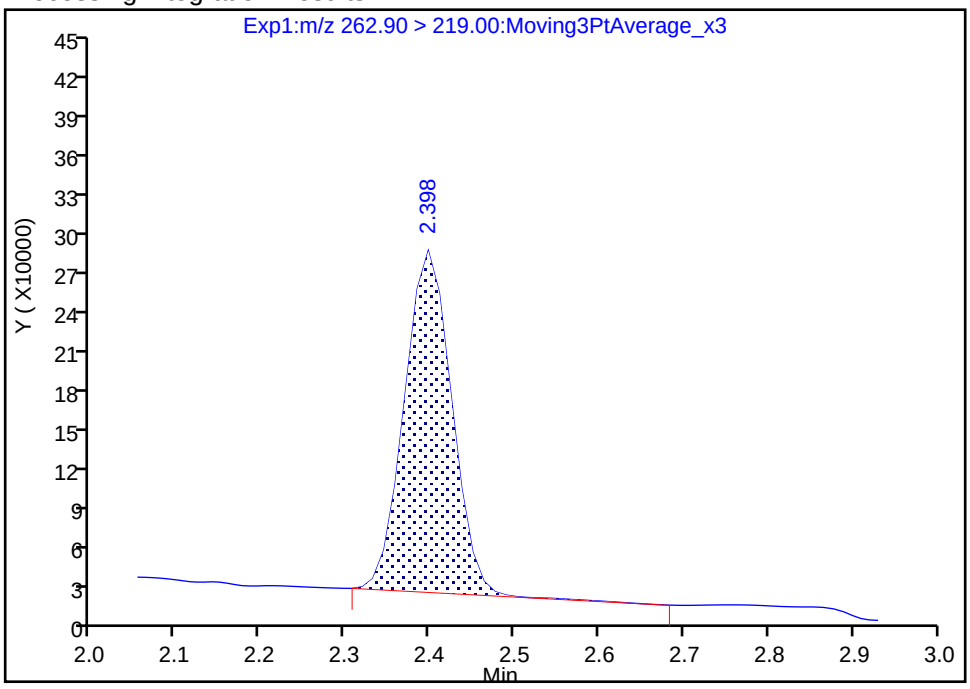
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

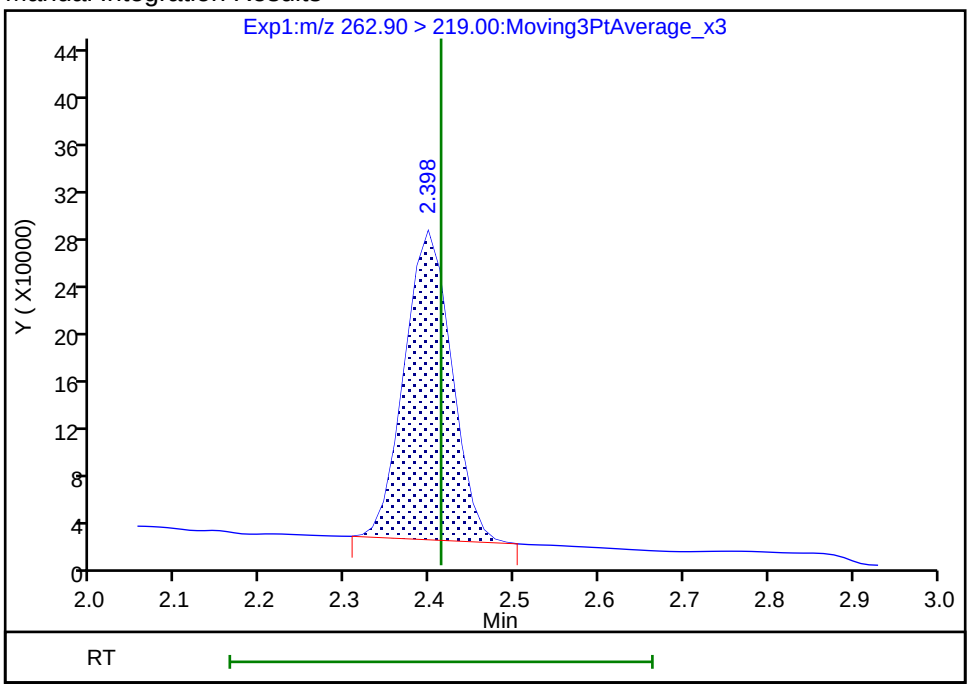
Processing Integration Results

RT: 2.40
Area: 1016133
Amount: 1.400674
Amount Units: ng/ml




Manual Integration Results

RT: 2.40
Area: 1009978
Amount: 1.392190
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:01:54
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

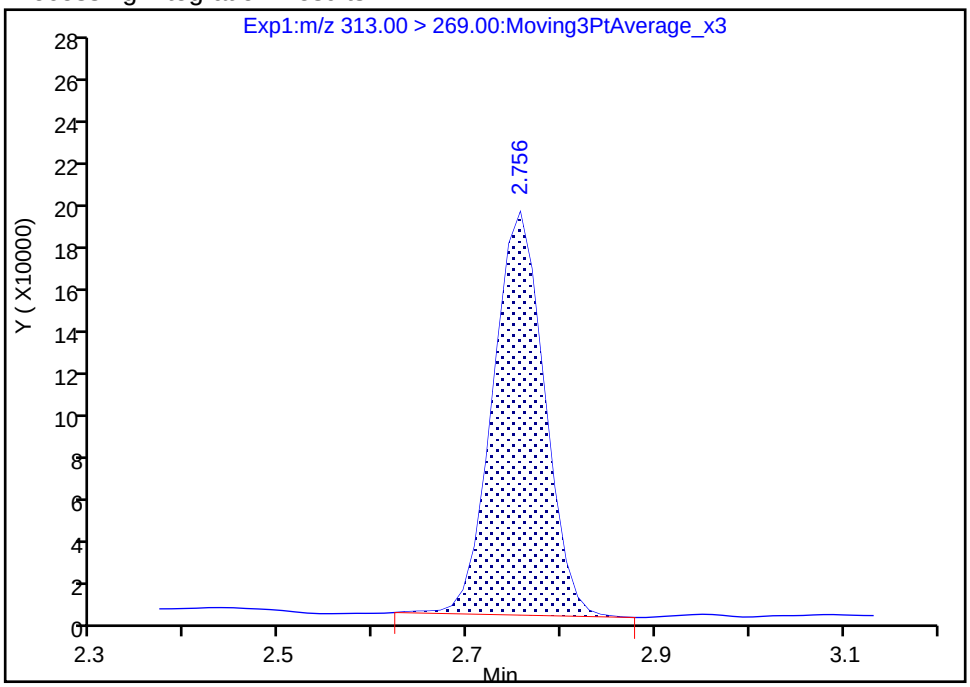
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

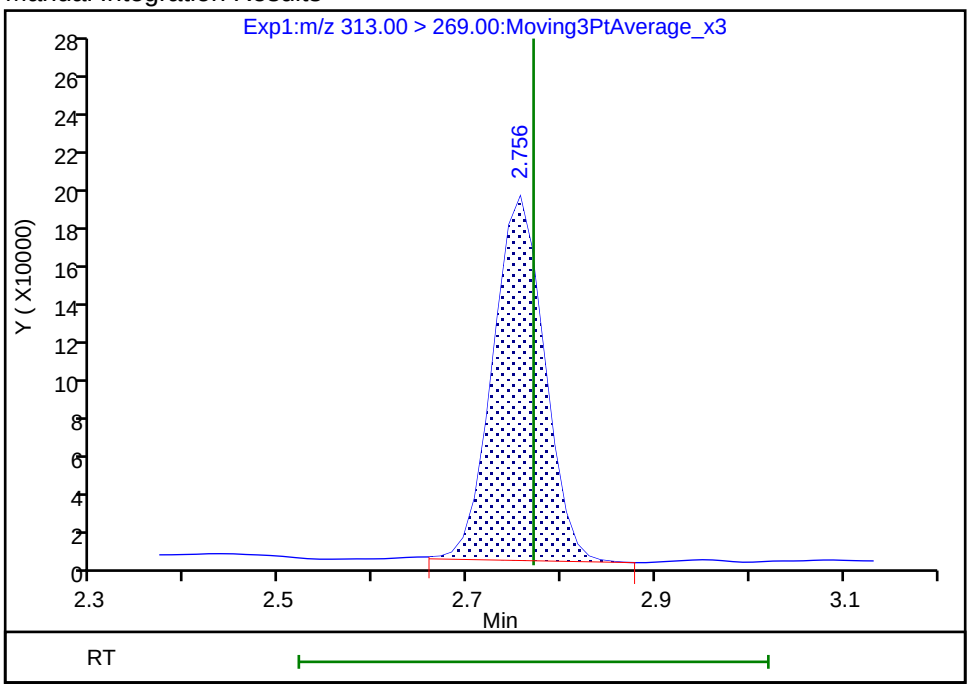
Processing Integration Results

RT: 2.76
Area: 686509
Amount: 0.852657
Amount Units: ng/ml




Manual Integration Results

RT: 2.76
Area: 685349
Amount: 0.851217
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:02:20

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

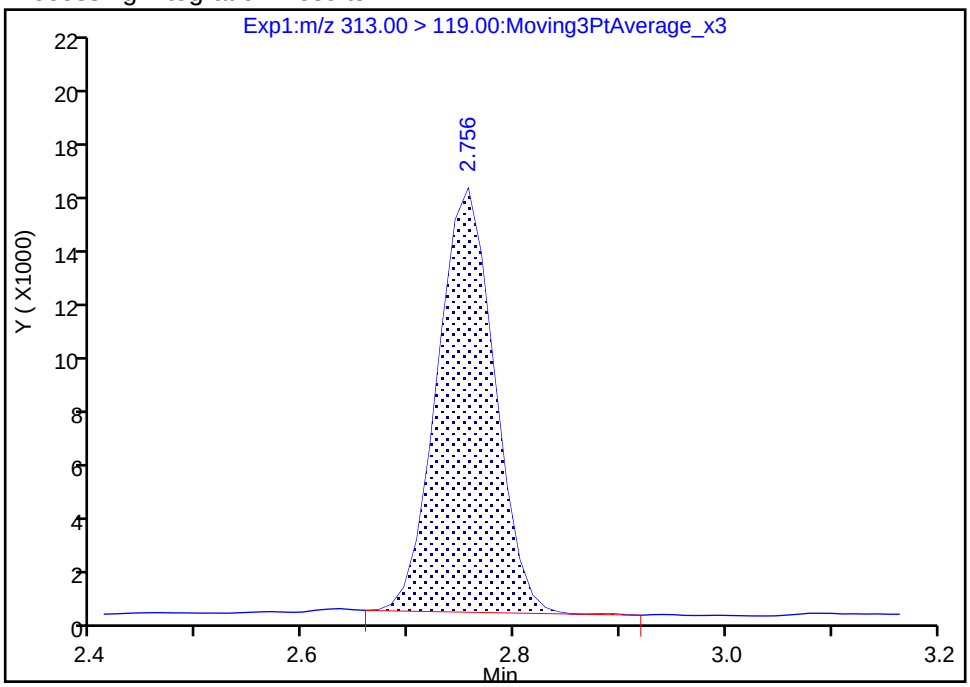
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| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

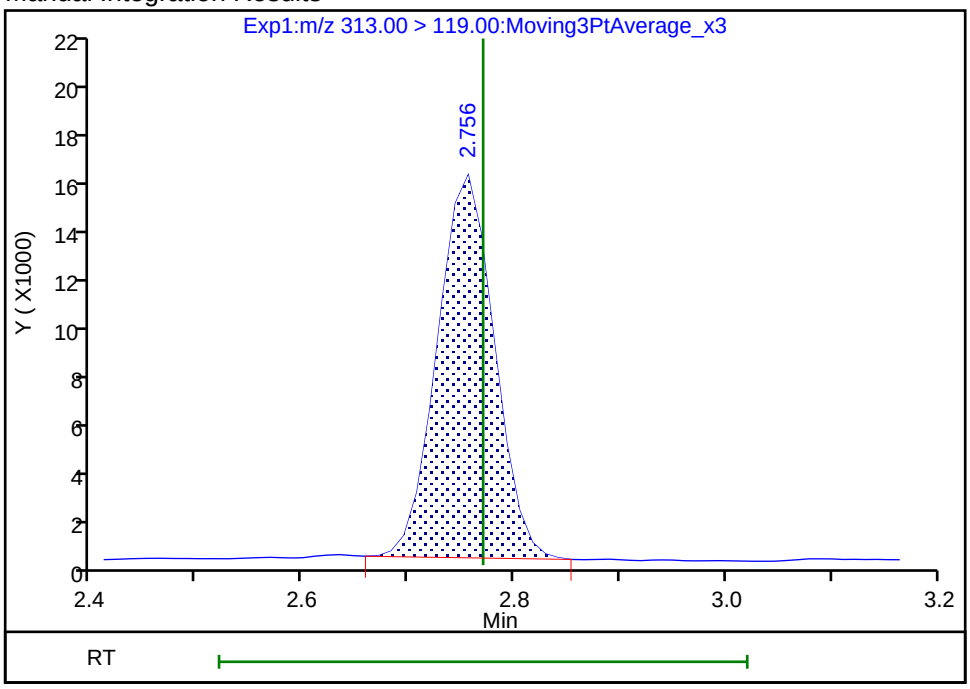
Processing Integration Results

RT: 2.76
Area: 57175
Amount: 0.852657
Amount Units: ng/ml




Manual Integration Results

RT: 2.76
Area: 57096
Amount: 0.851217
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:02:28

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

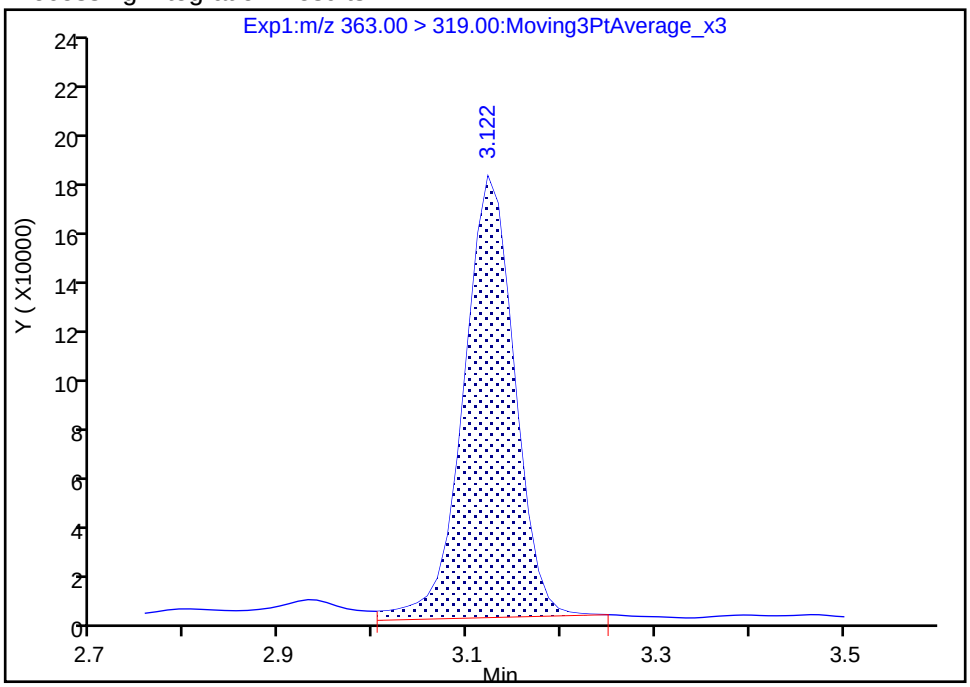
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| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

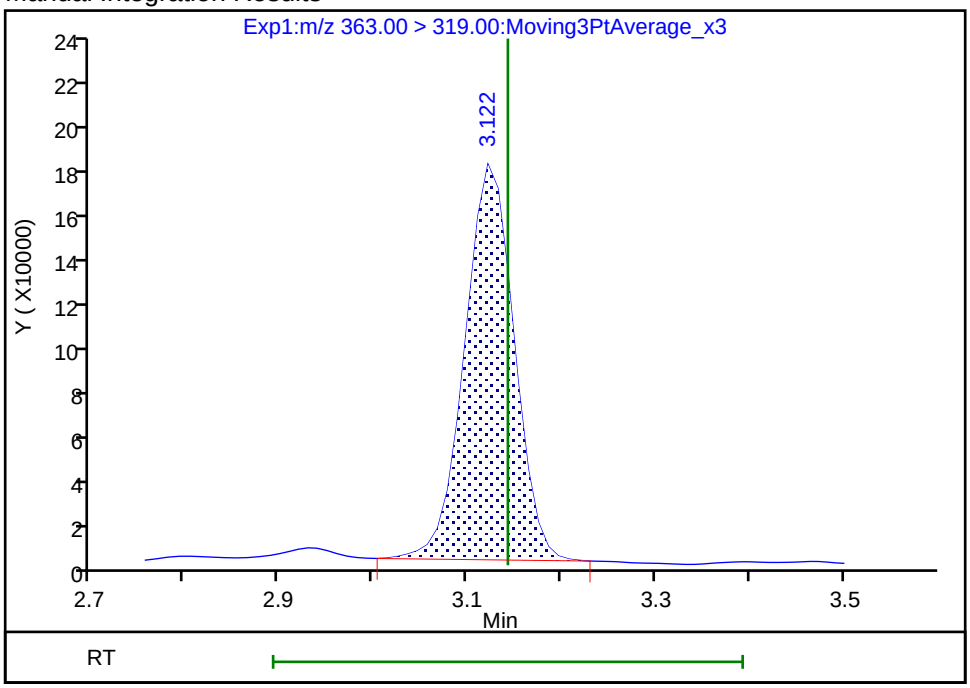
Processing Integration Results

RT: 3.12
Area: 662467
Amount: 0.897016
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 635414
Amount: 0.860384
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:03:14
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

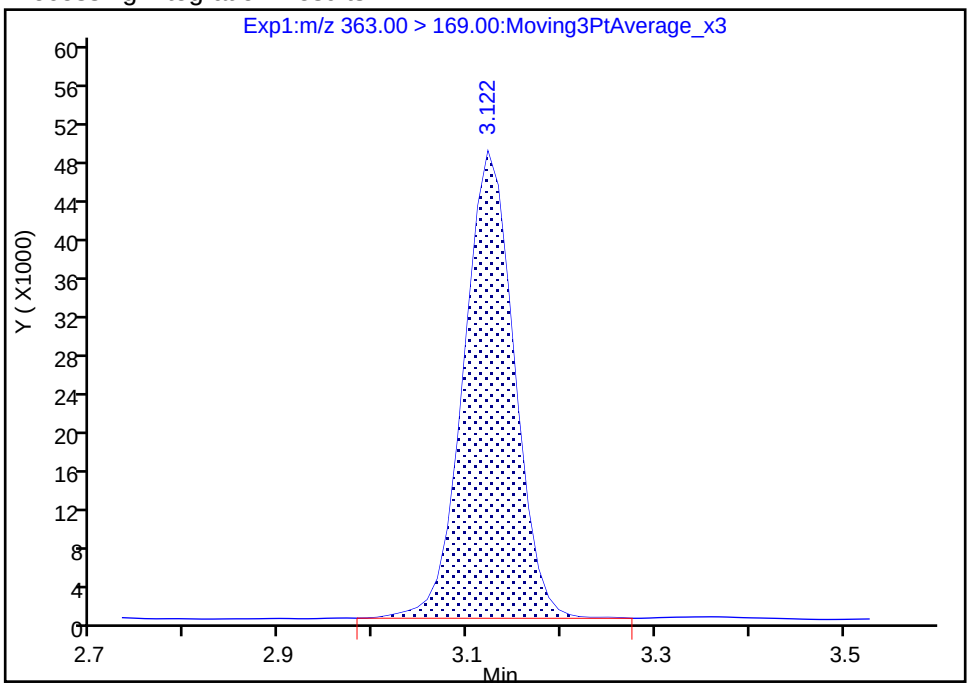
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| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

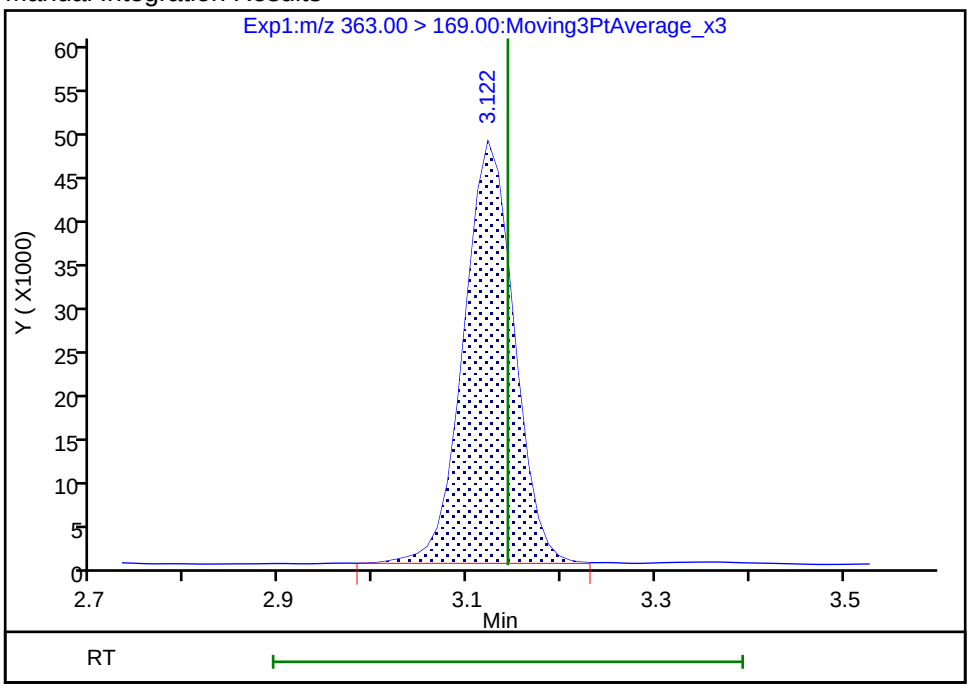
Processing Integration Results

RT: 3.12
Area: 180180
Amount: 0.897016
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 180005
Amount: 0.860384
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:03:35

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

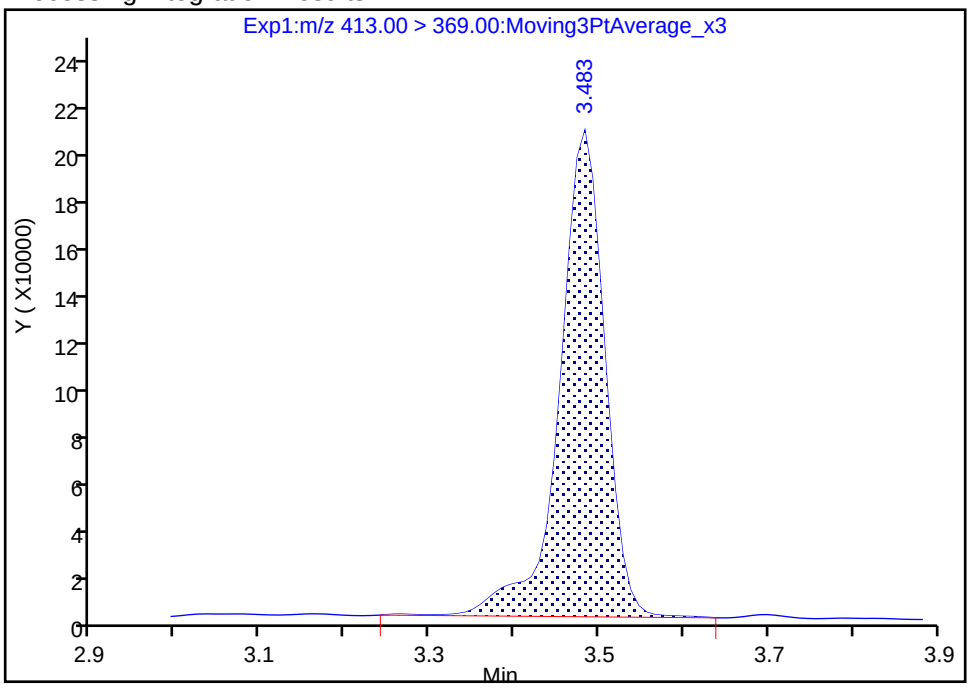
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| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

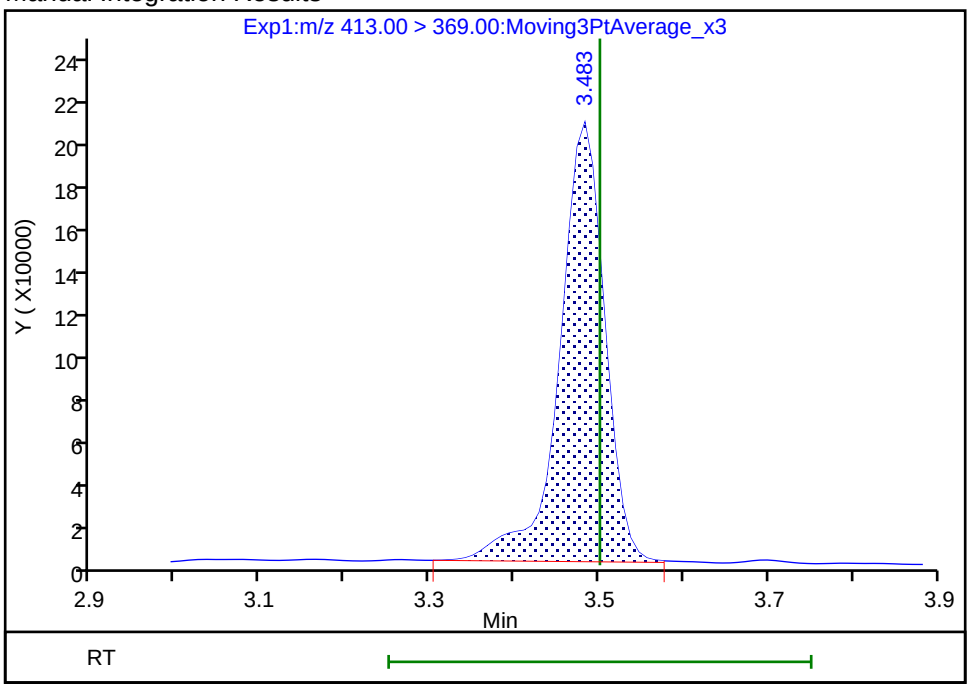
Processing Integration Results

RT: 3.48
Area: 761835
Amount: 1.078777
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 756400
Amount: 1.071081
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:04:50
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

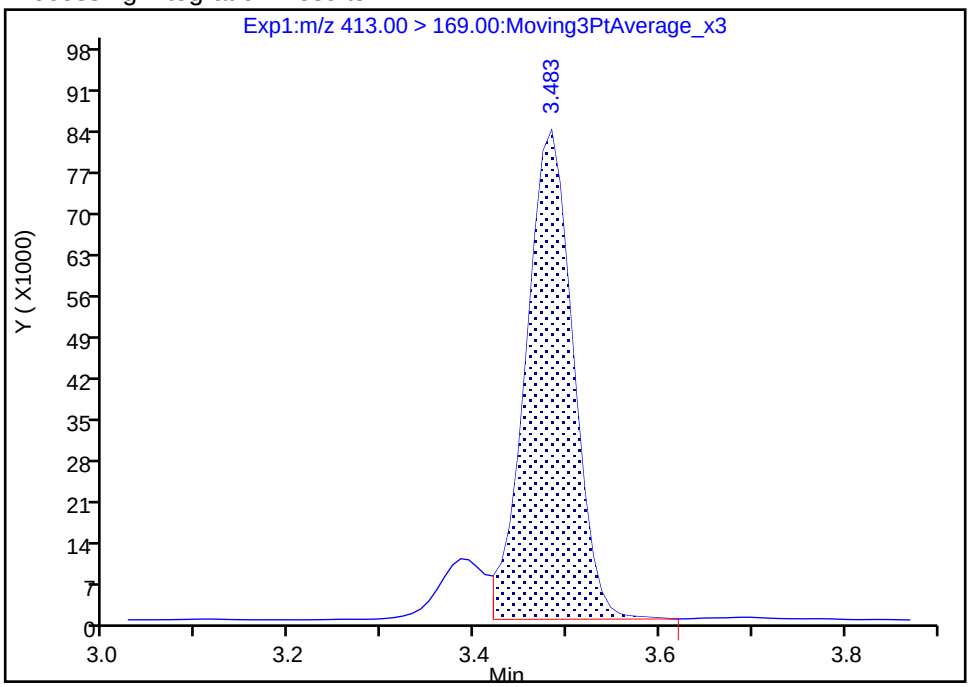
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| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

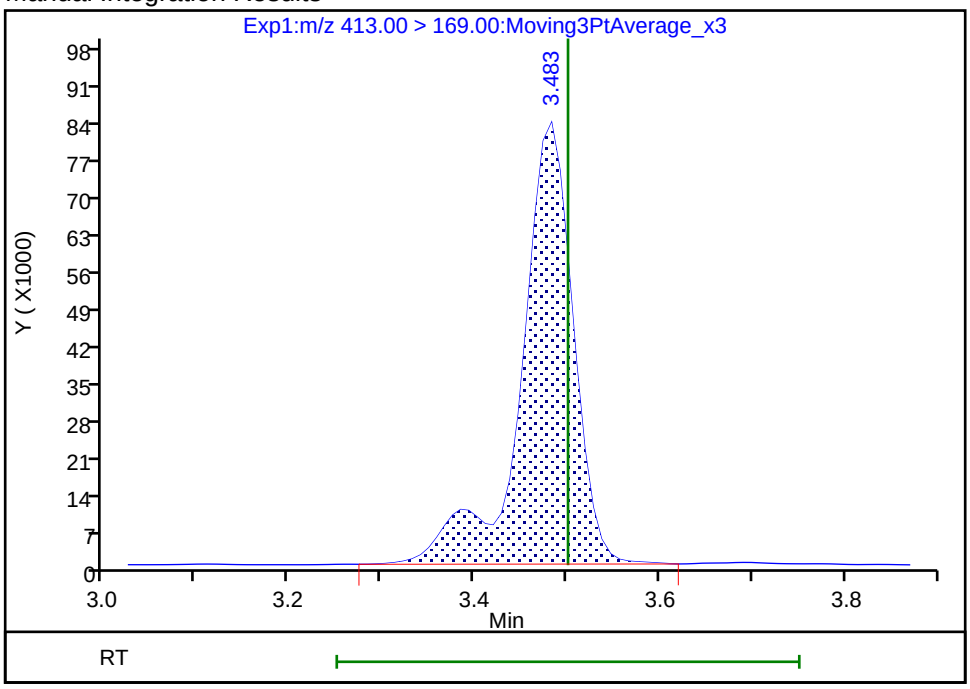
Processing Integration Results

RT: 3.48
Area: 294406
Amount: 1.078777
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 330558
Amount: 1.071081
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:05:10

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

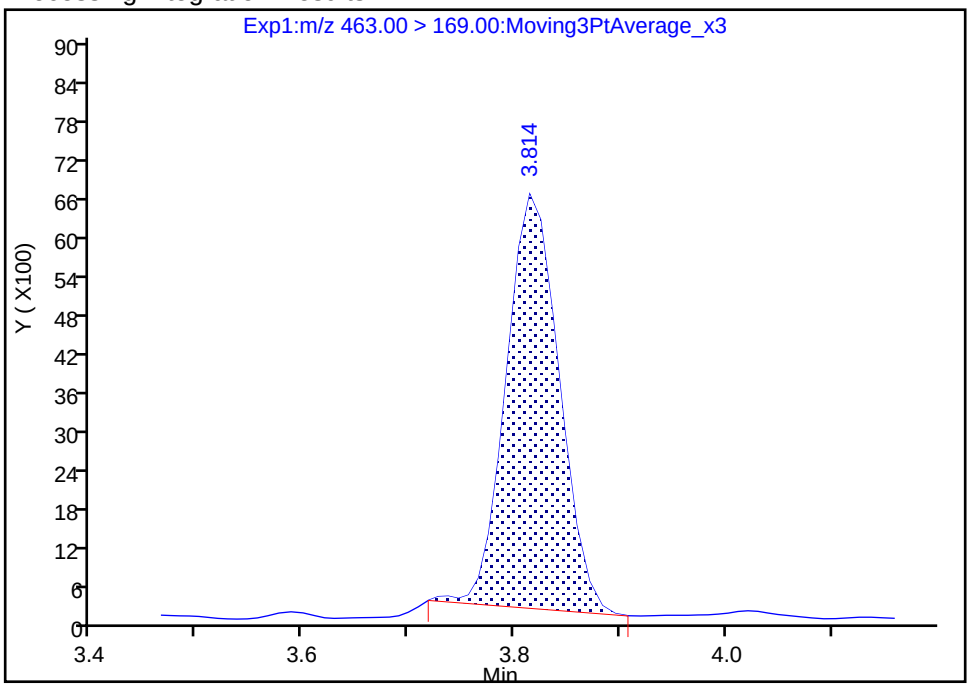
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

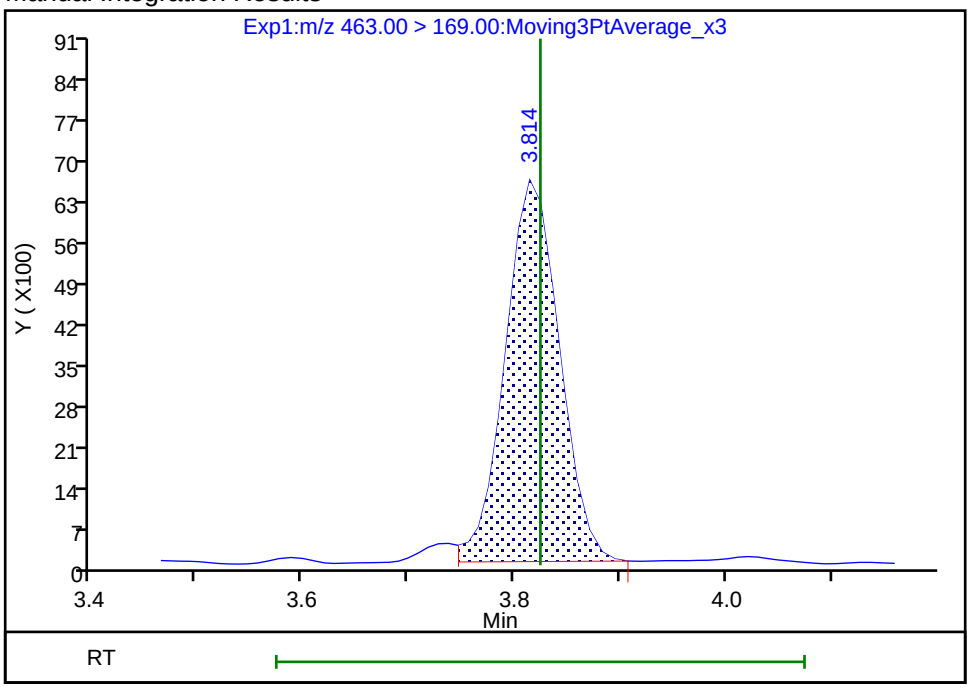
Processing Integration Results

RT: 3.81
Area: 22379
Amount: 0.266204
Amount Units: ng/ml




Manual Integration Results

RT: 3.81
Area: 23290
Amount: 0.266461
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:08:41

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

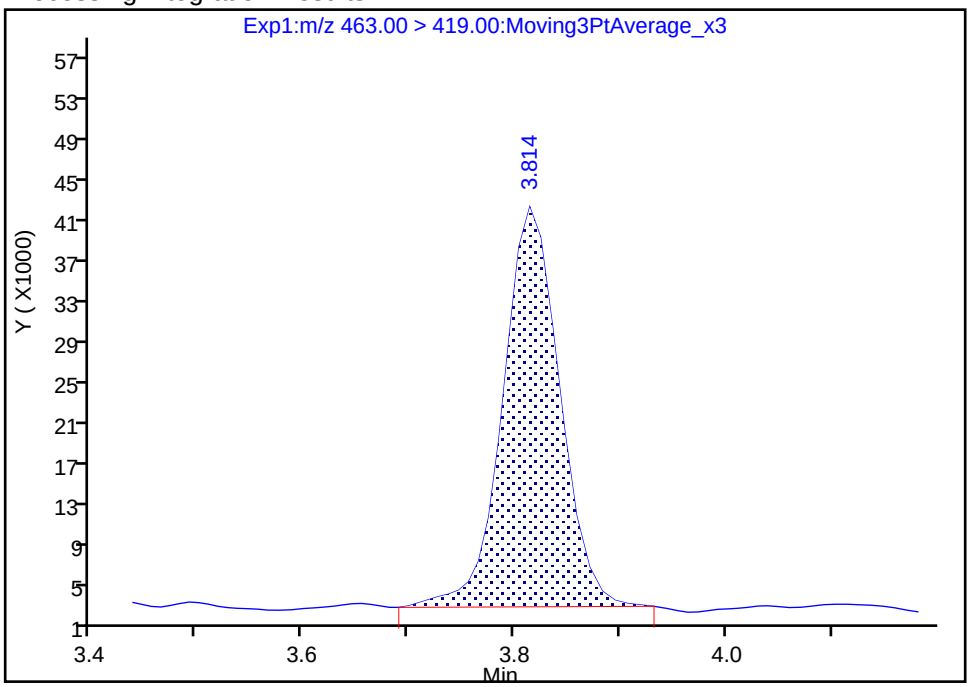
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

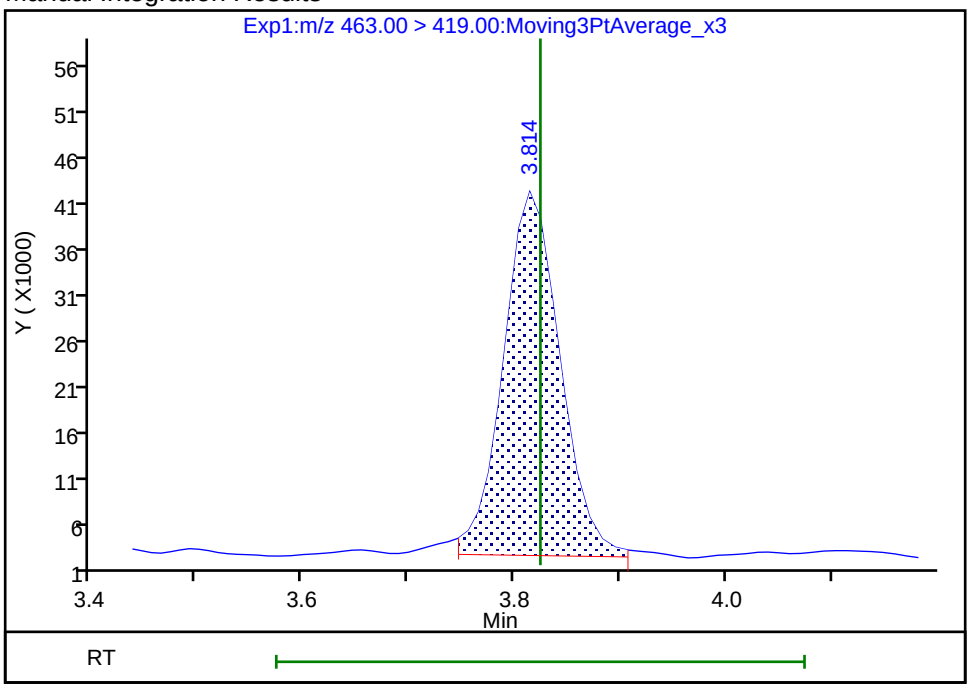
Processing Integration Results

RT: 3.81
Area: 147174
Amount: 0.266204
Amount Units: ng/ml




Manual Integration Results

RT: 3.81
Area: 147316
Amount: 0.266461
Amount Units: ng/ml




Reviewer: deannd, 15-Mar-2021 17:25:52

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

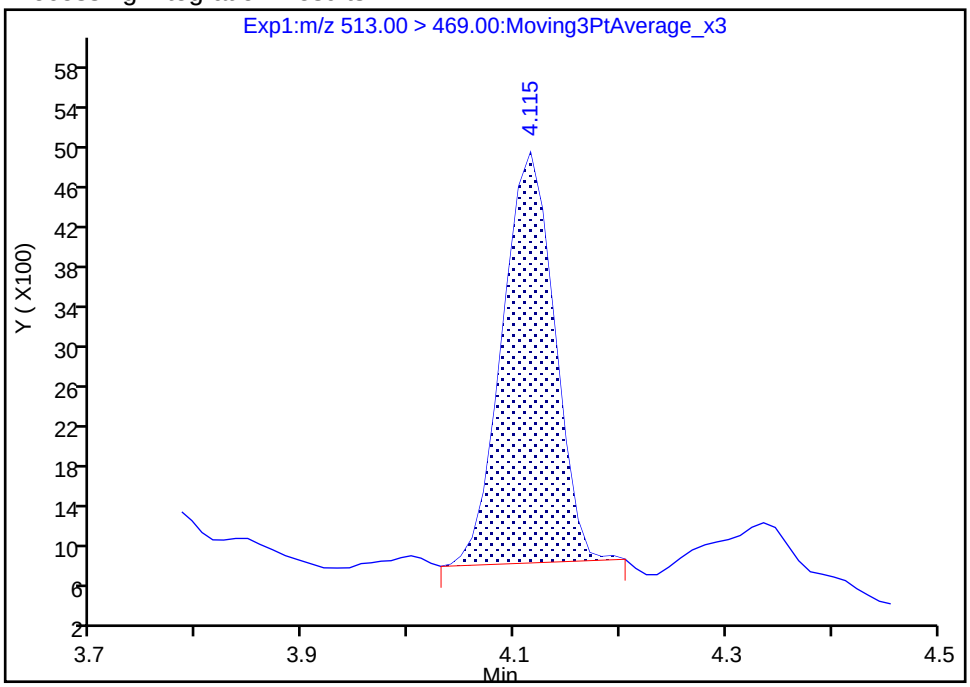
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

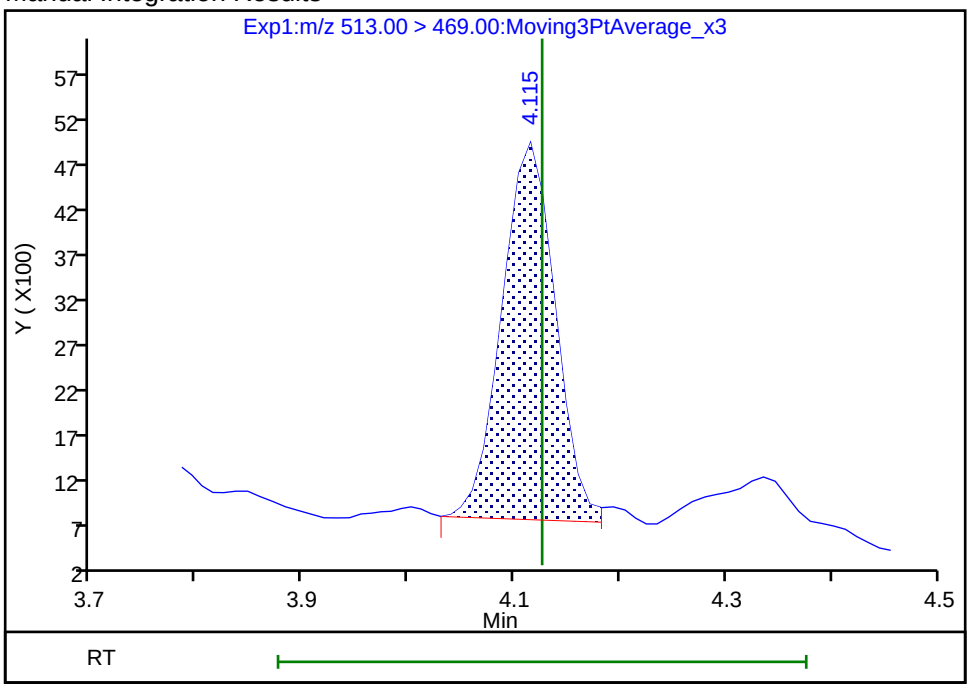
Processing Integration Results

RT: 4.12
Area: 13992
Amount: 0.032046
Amount Units: ng/ml




Manual Integration Results

RT: 4.12
Area: 14523
Amount: 0.033262
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:09:01

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

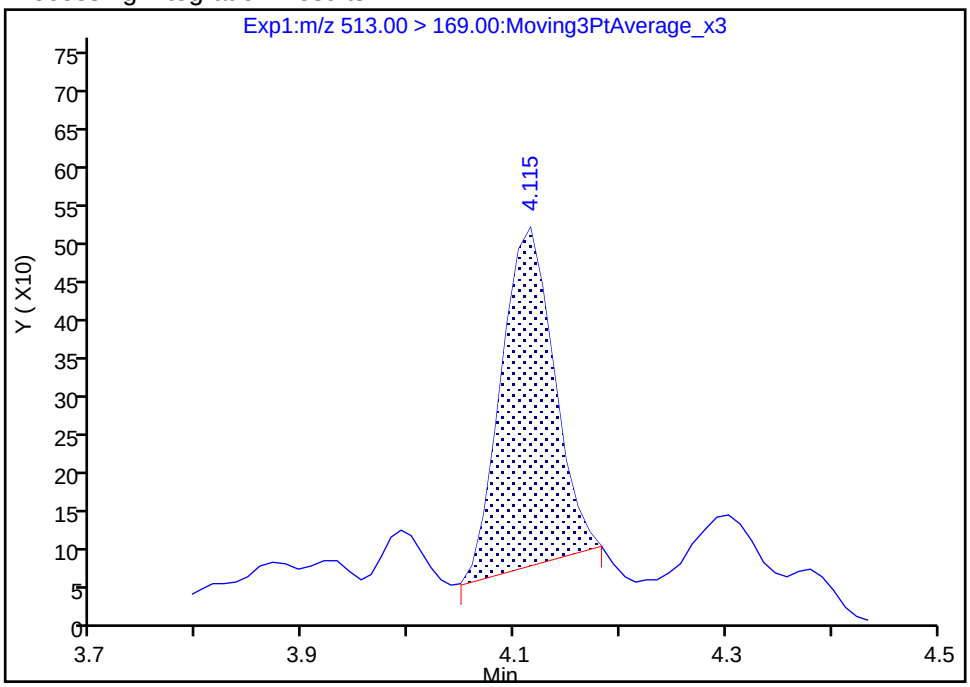
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

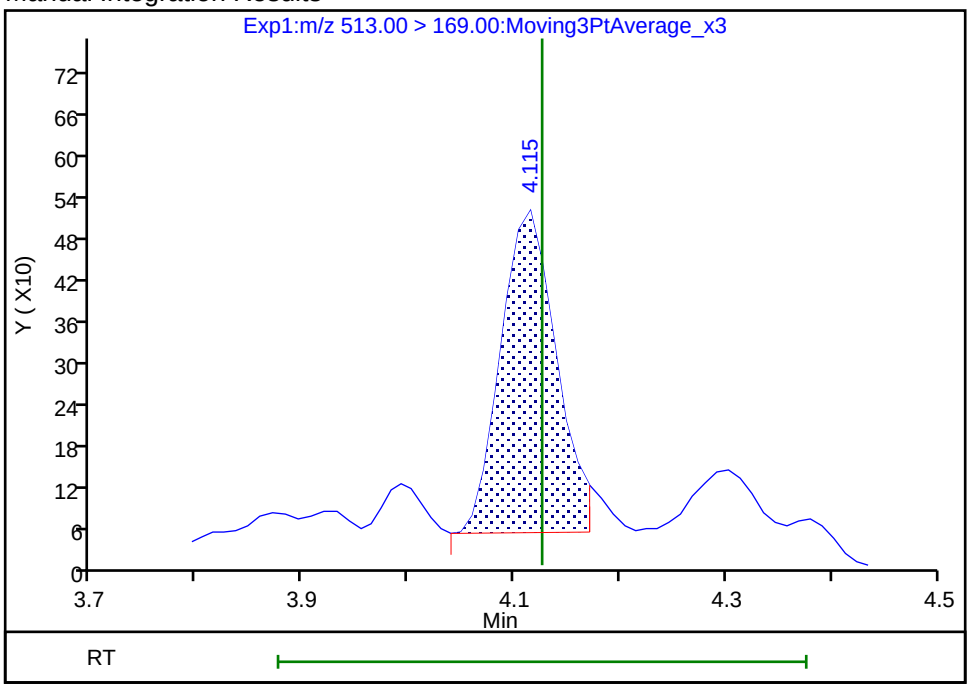
Processing Integration Results

RT: 4.12
Area: 1539
Amount: 0.032046
Amount Units: ng/ml




Manual Integration Results

RT: 4.12
Area: 1695
Amount: 0.033262
Amount Units: ng/ml




Reviewer: deannd, 15-Mar-2021 17:26:01

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

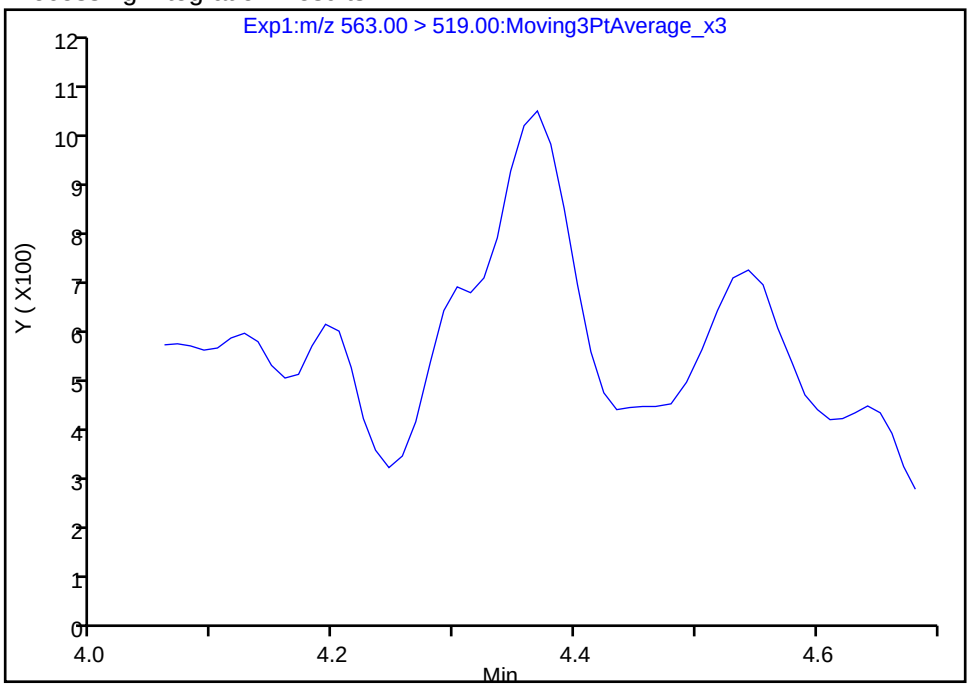
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

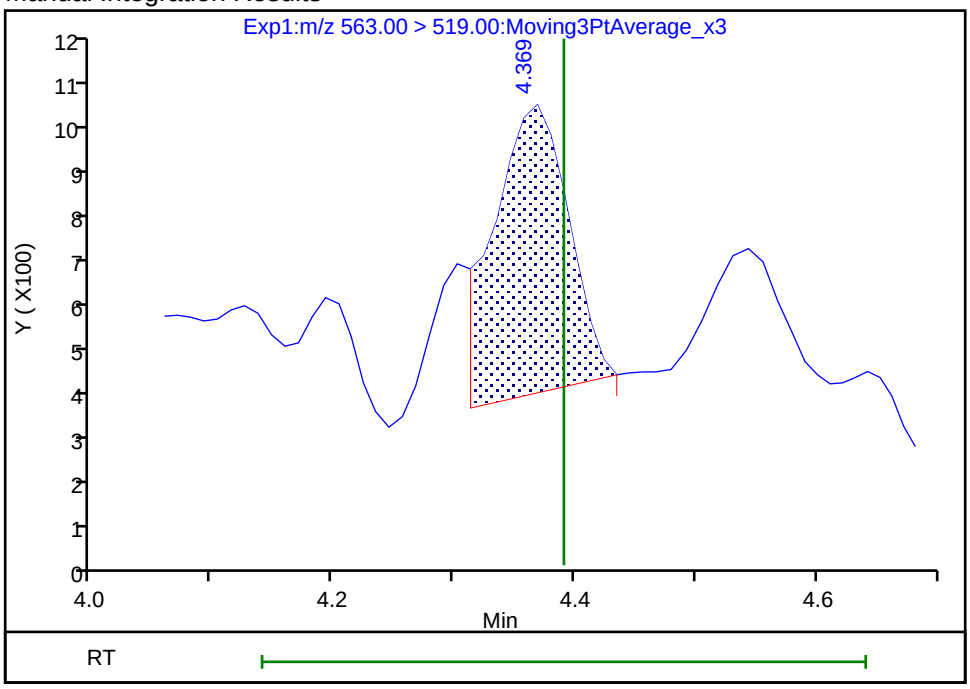
Not Detected
Expected RT: 4.39

Processing Integration Results




Manual Integration Results

RT: 4.37
Area: 2584
Amount: 0.008244
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:10:17
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

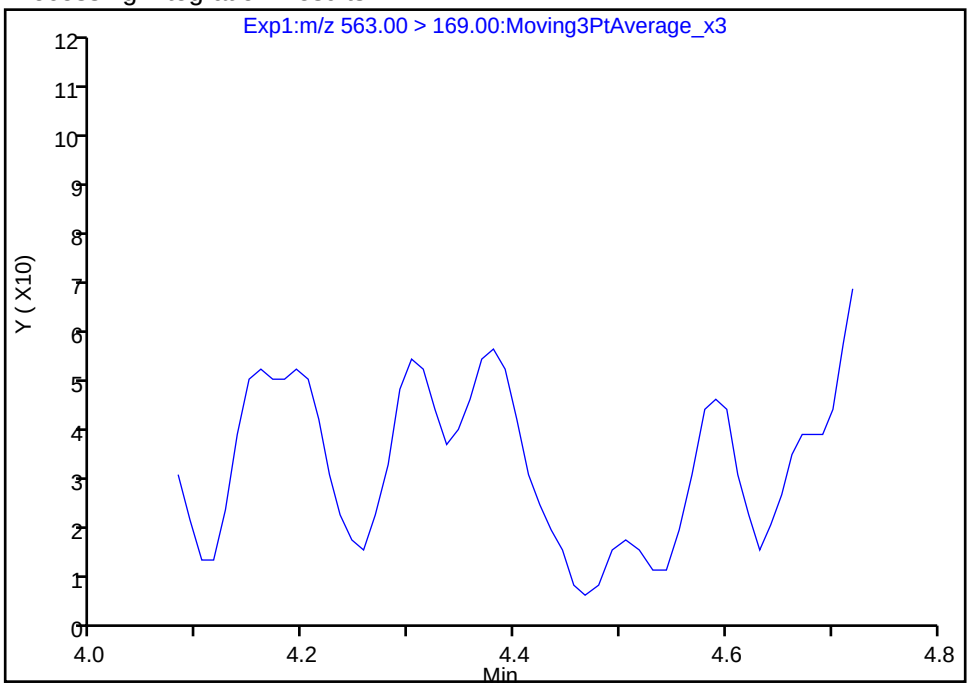
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

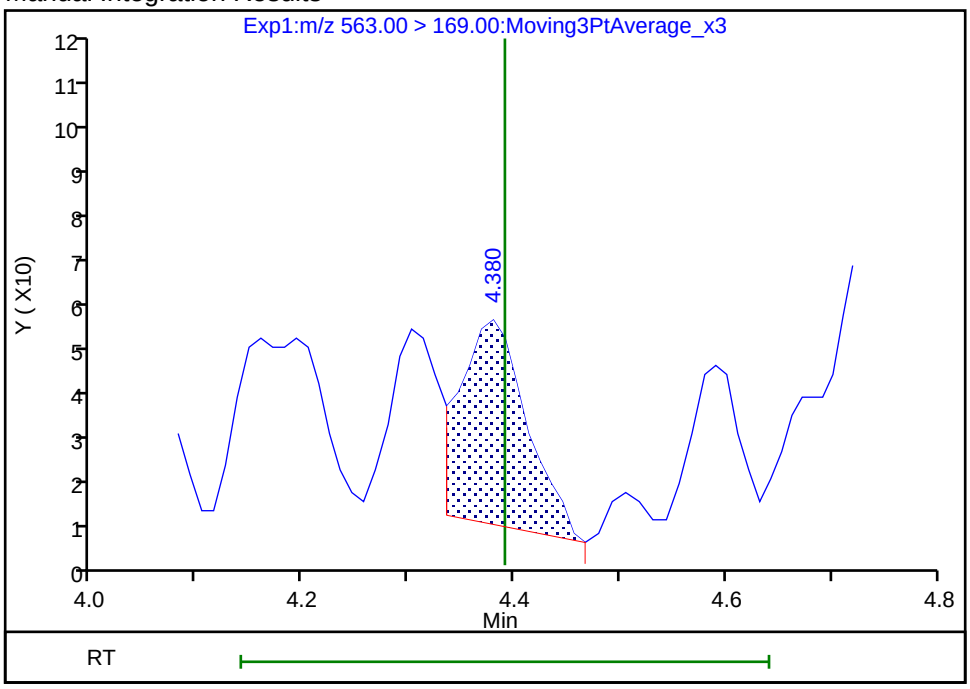
Not Detected
Expected RT: 4.39

Processing Integration Results




Manual Integration Results

RT: 4.38
Area: 193
Amount: 0.008244
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:10:29
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

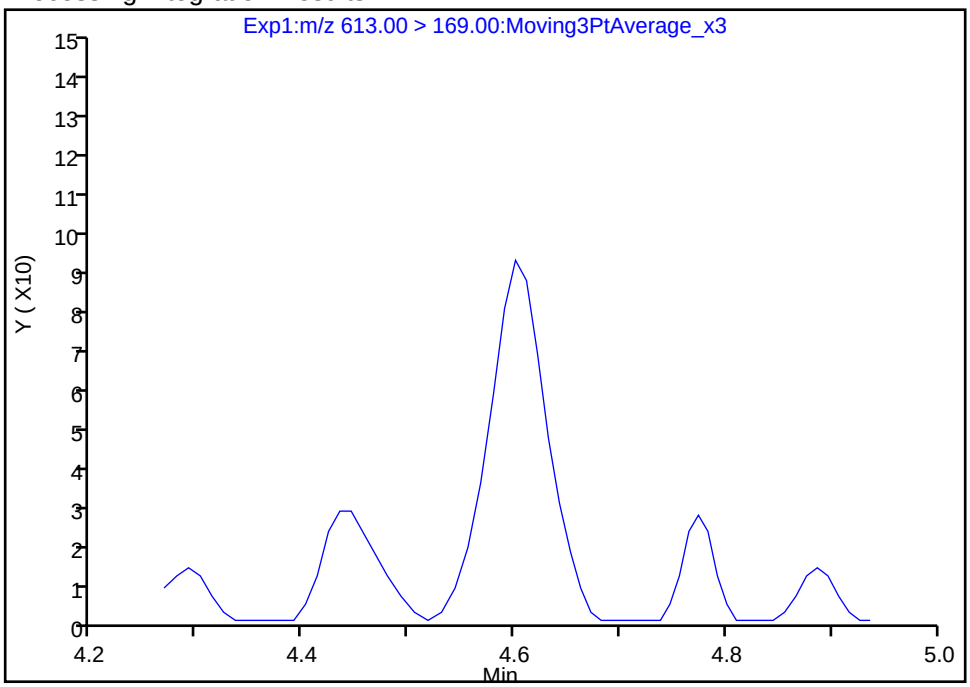
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

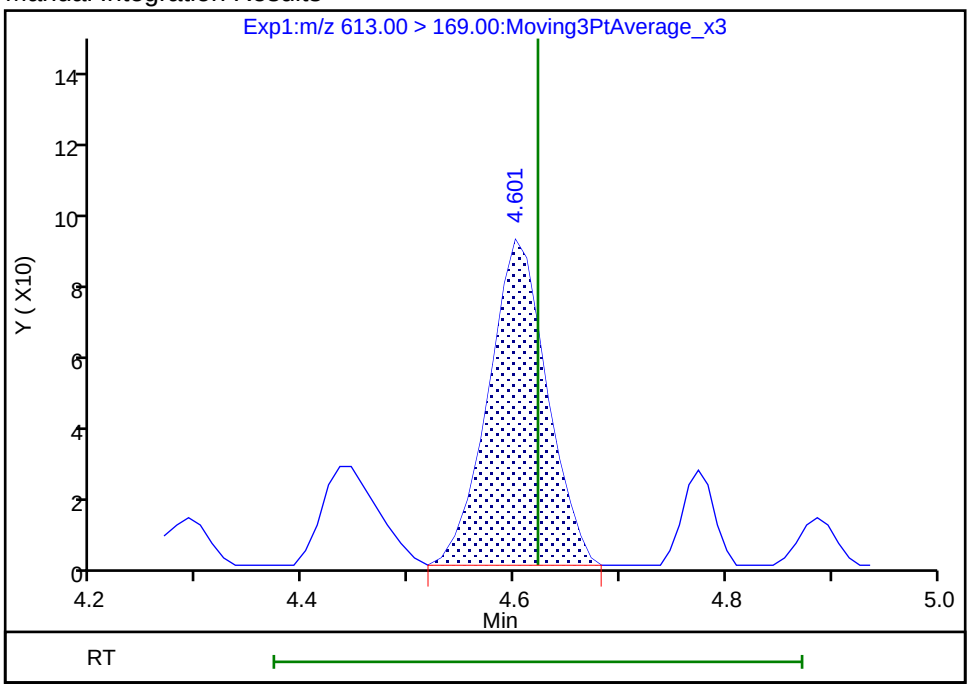
Not Detected
Expected RT: 4.62

Processing Integration Results




Manual Integration Results

RT: 4.60
Area: 342
Amount: 0.007423
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:11:05
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

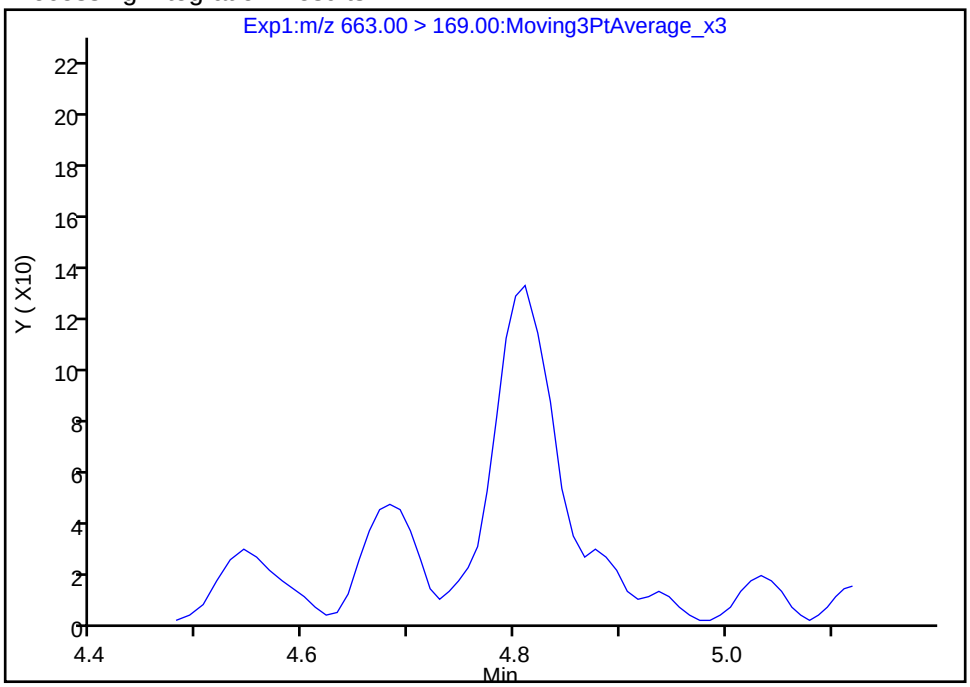
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

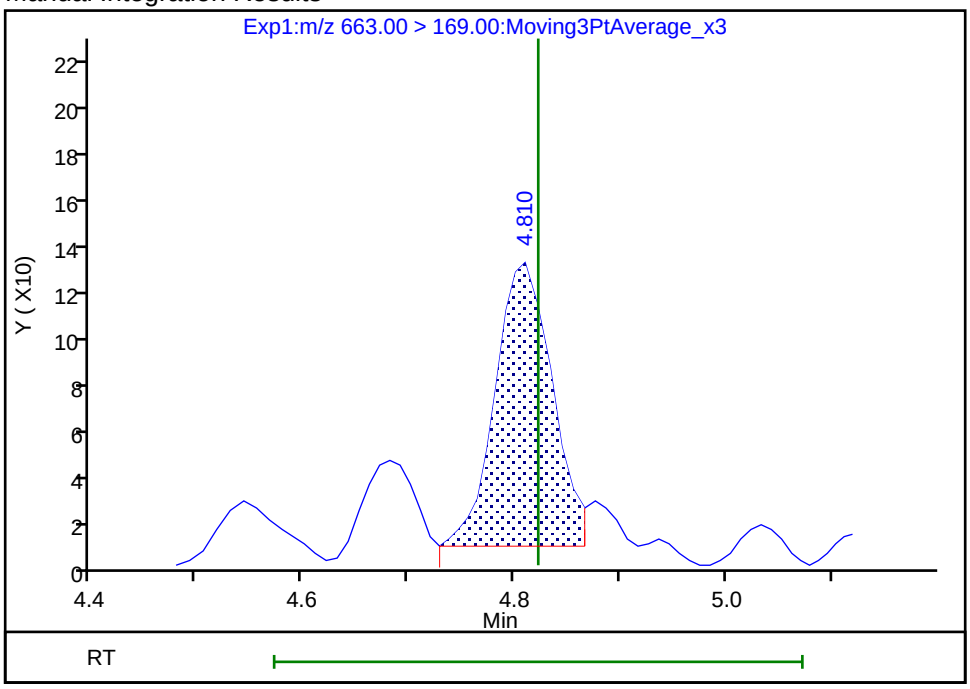
Not Detected
Expected RT: 4.82

Processing Integration Results




Manual Integration Results

RT: 4.81
Area: 443
Amount: 0.007290
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:11:29
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

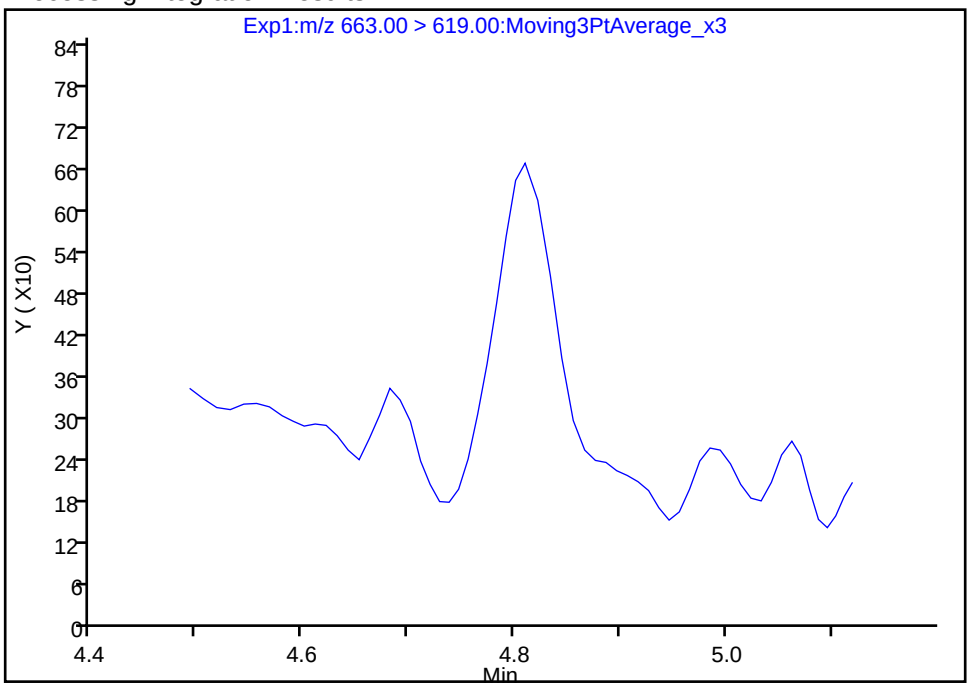
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

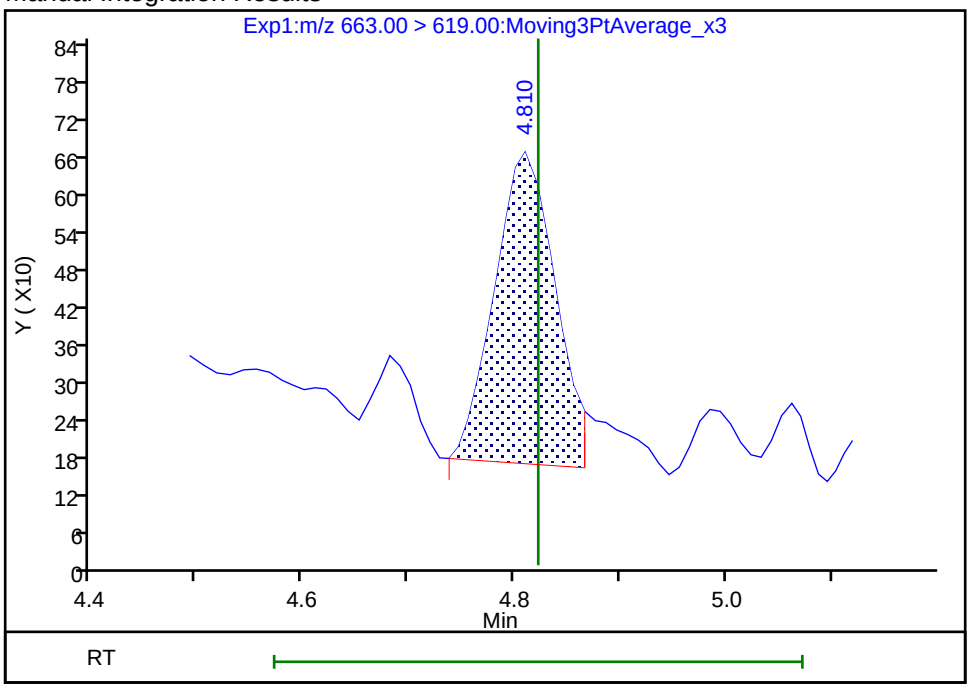
Not Detected
Expected RT: 4.82

Processing Integration Results




Manual Integration Results

RT: 4.81
Area: 1987
Amount: 0.007290
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:11:31
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

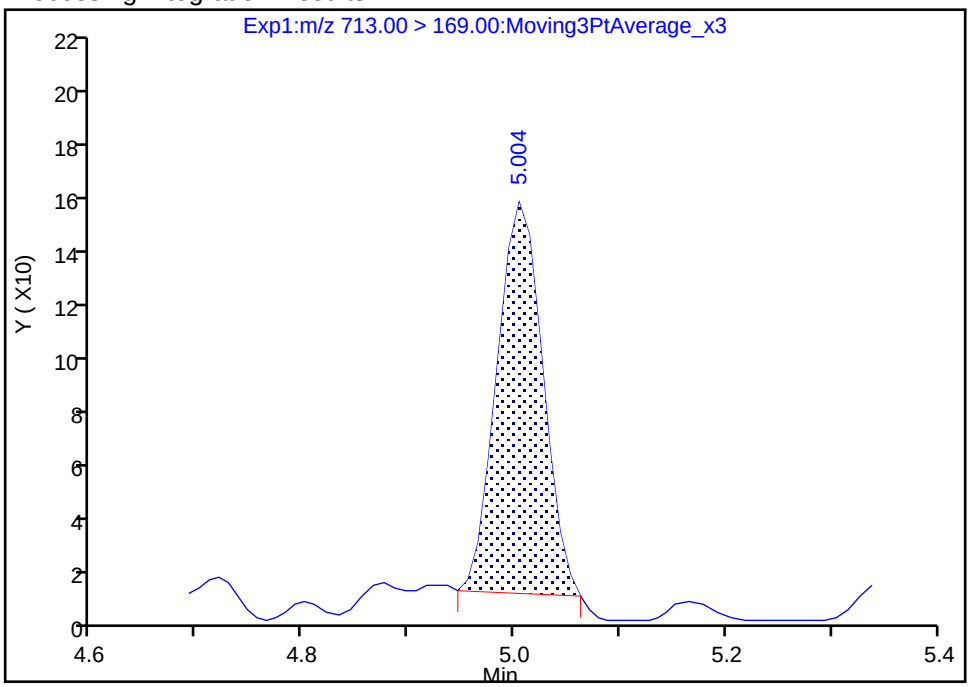
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

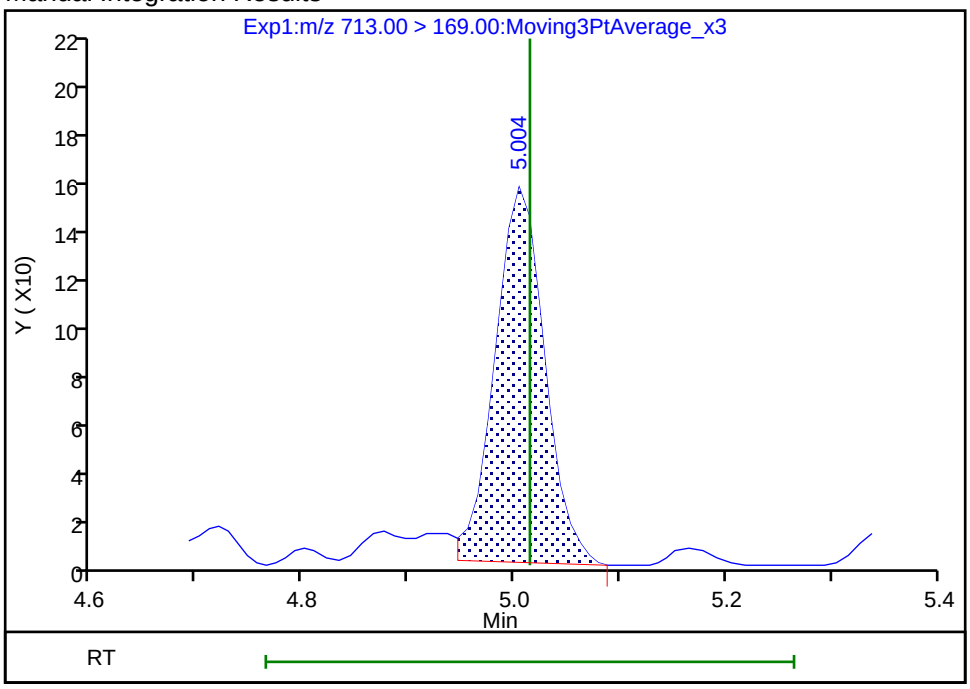
Processing Integration Results

RT: 5.00
Area: 435
Amount: 0.009808
Amount Units: ng/ml




Manual Integration Results

RT: 5.00
Area: 501
Amount: 0.011296
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:11:47
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

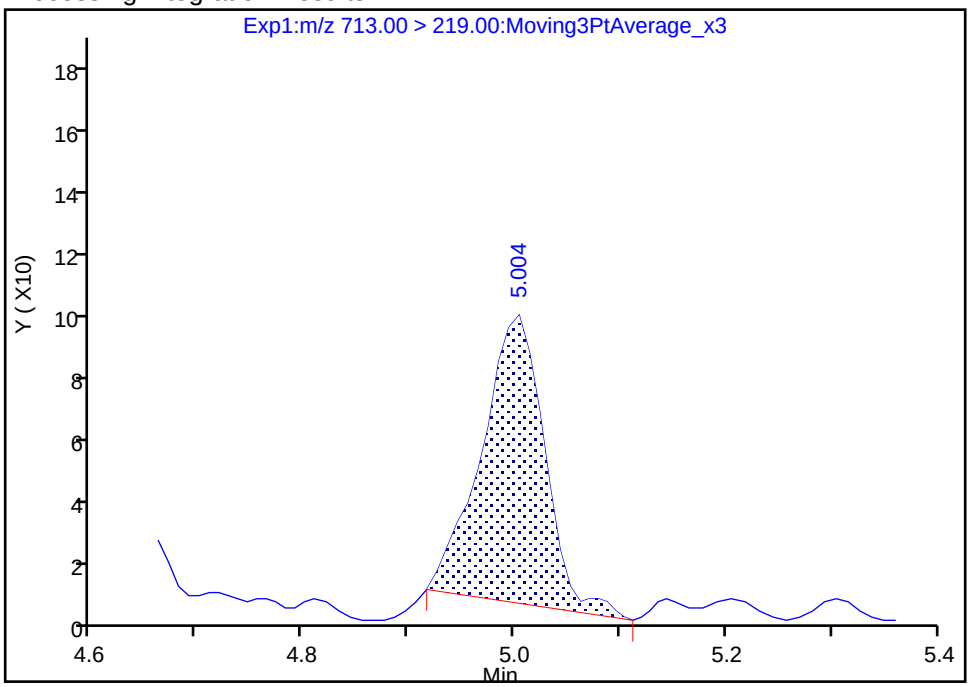
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

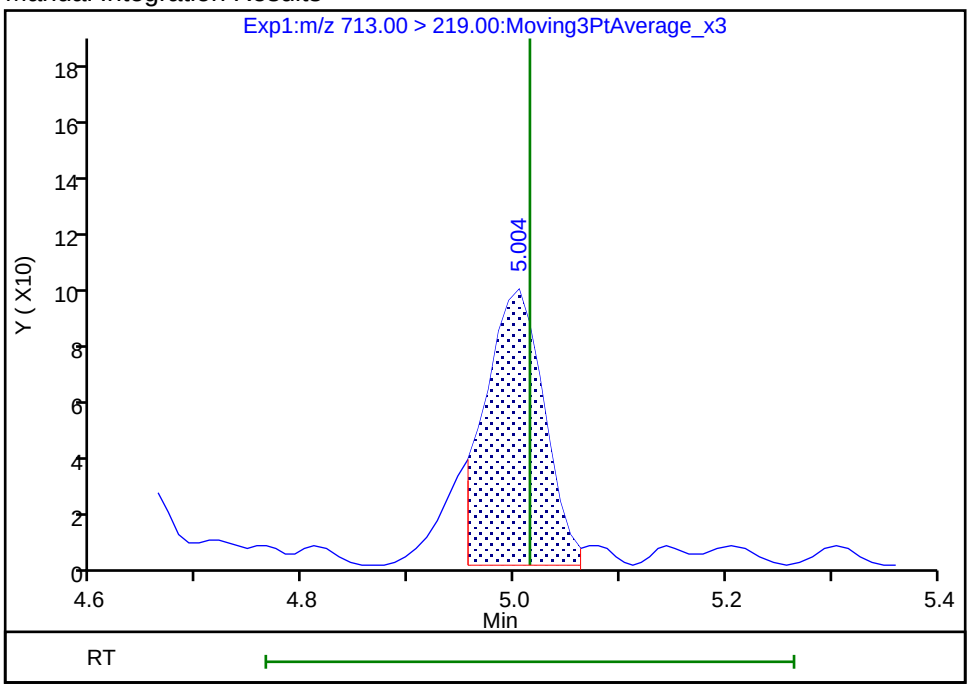
Processing Integration Results

RT: 5.00
Area: 385
Amount: 0.009808
Amount Units: ng/ml




Manual Integration Results

RT: 5.00
Area: 374
Amount: 0.011296
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:12:06

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

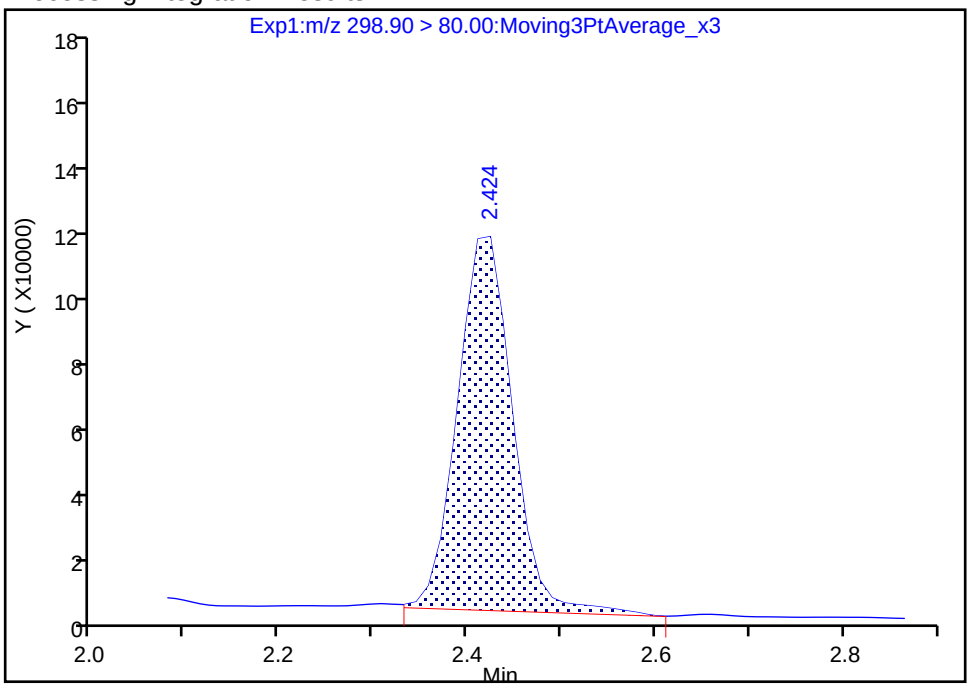
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

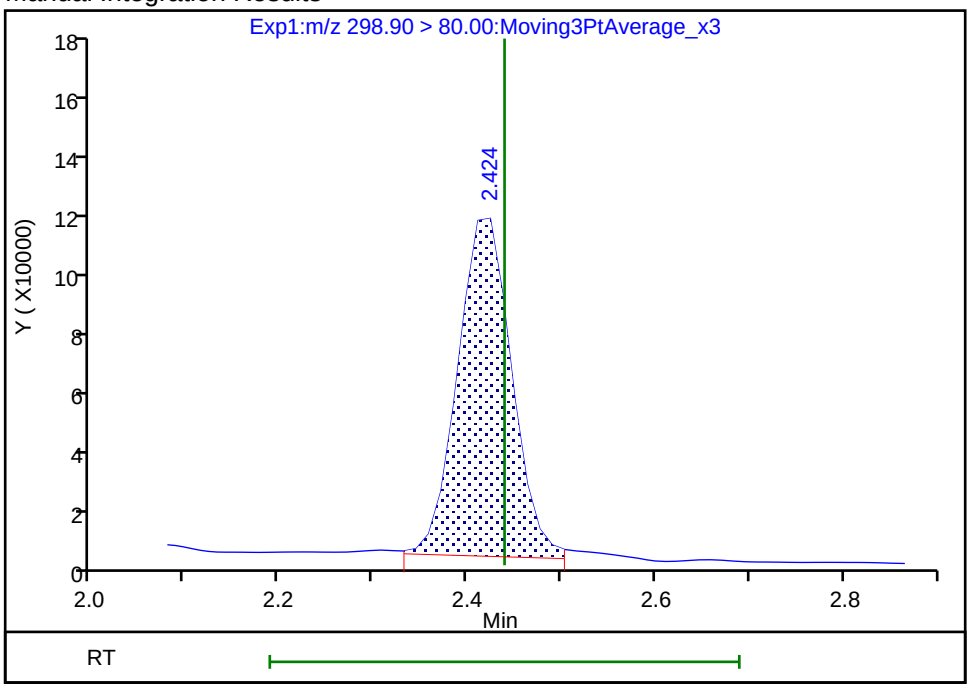
Processing Integration Results

RT: 2.42
Area: 444260
Amount: 0.425037
Amount Units: ng/ml




Manual Integration Results

RT: 2.42
Area: 434177
Amount: 0.415390
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:02:07
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

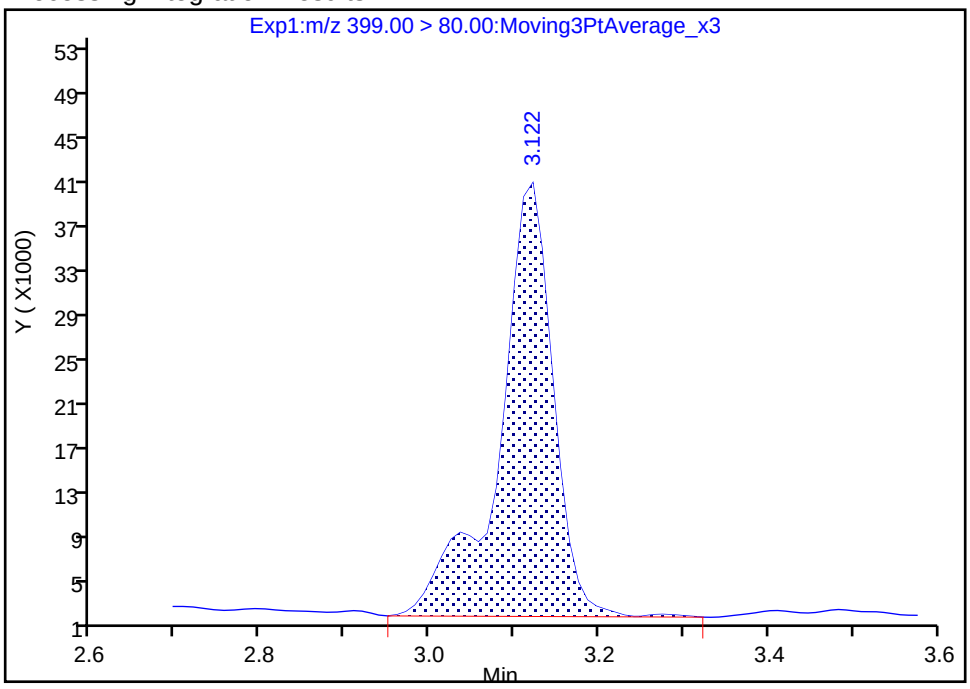
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

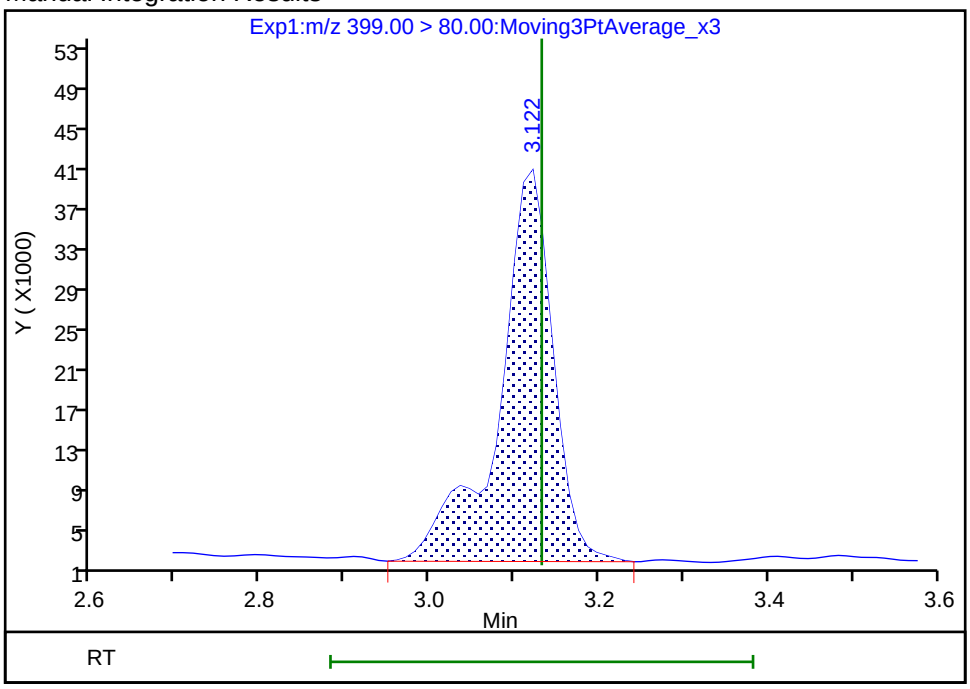
Processing Integration Results

RT: 3.12
Area: 173309
Amount: 0.230174
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 172383
Amount: 0.228945
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:02:39

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

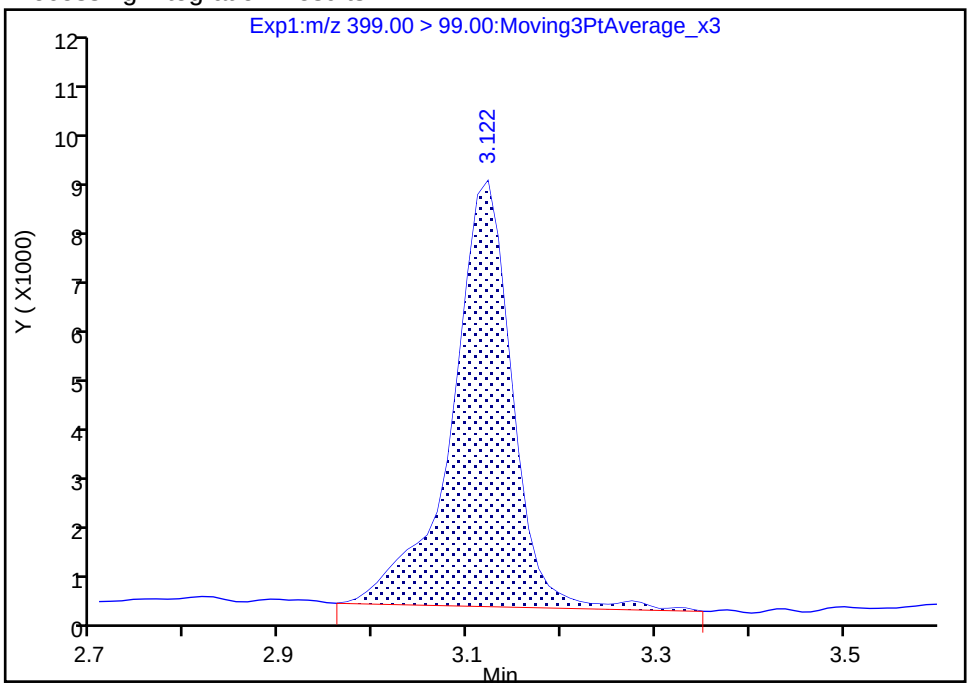
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

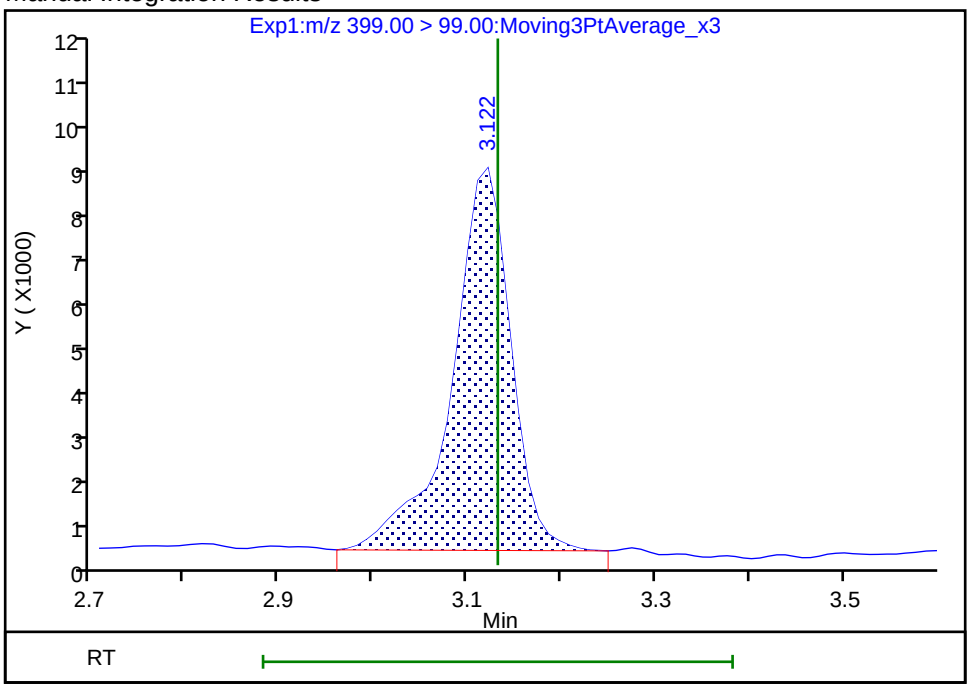
Processing Integration Results

RT: 3.12
Area: 37298
Amount: 0.230174
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 35987
Amount: 0.228945
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:02:47

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

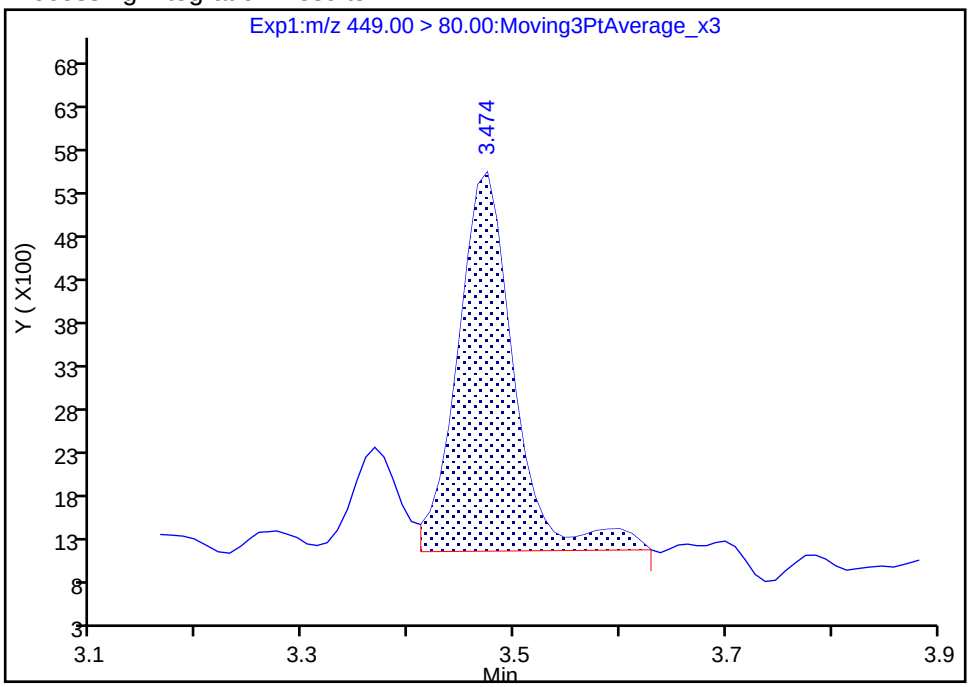
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

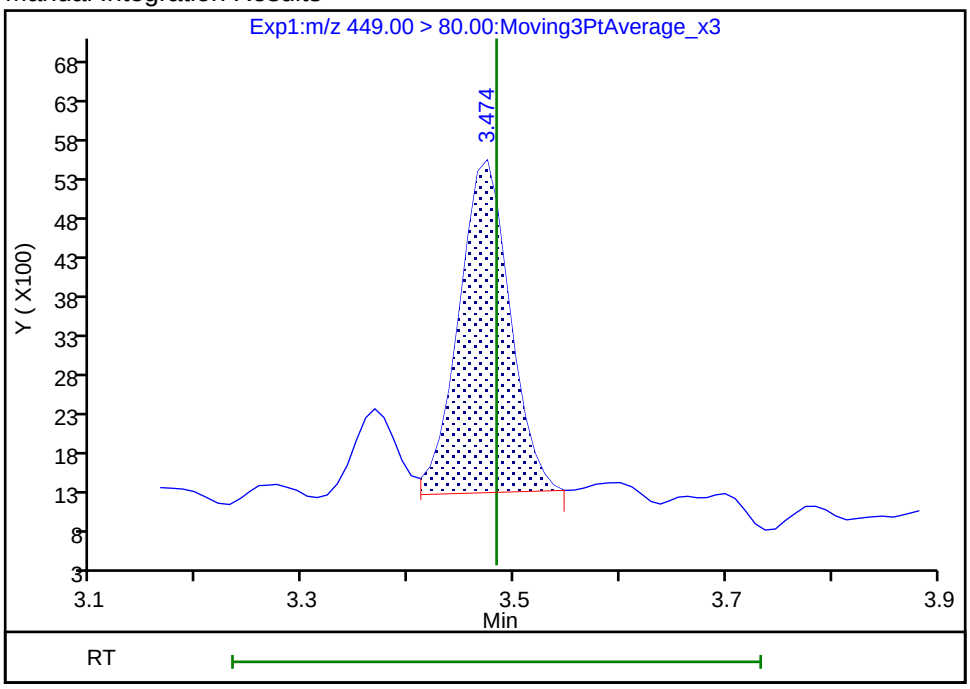
Processing Integration Results

RT: 3.47
Area: 16176
Amount: 0.033470
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 14223
Amount: 0.029429
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:03:55
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

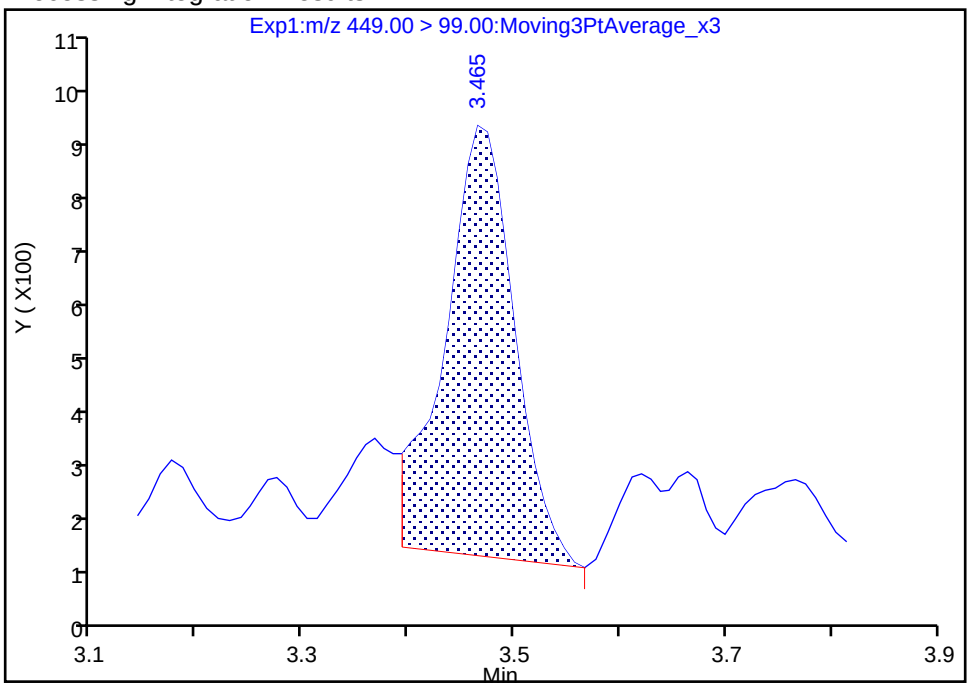
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

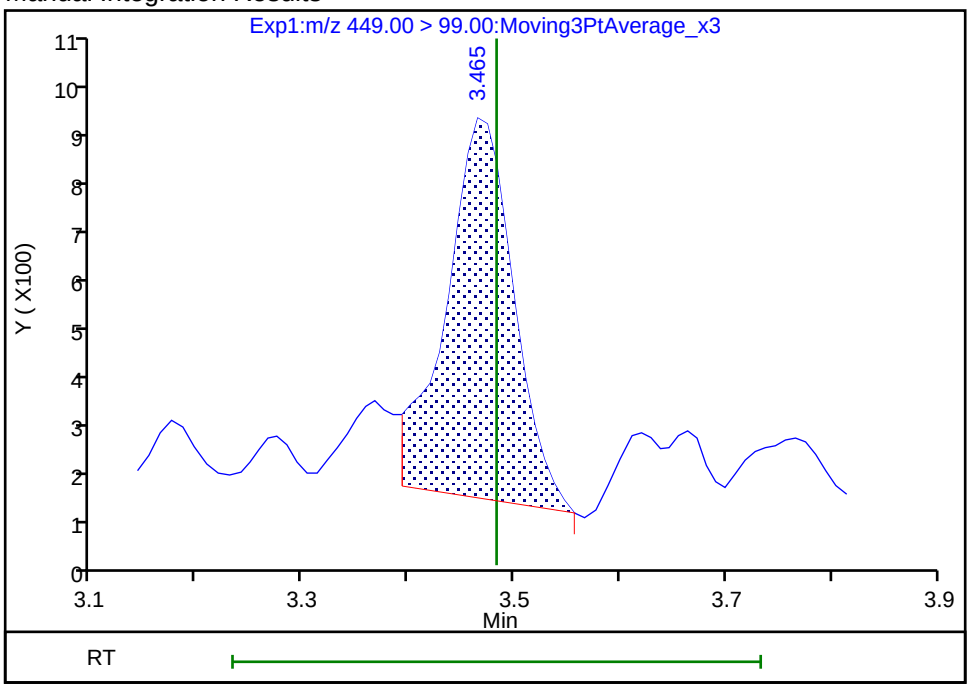
Processing Integration Results

RT: 3.47
Area: 3694
Amount: 0.033470
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 3521
Amount: 0.029429
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:04:02

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

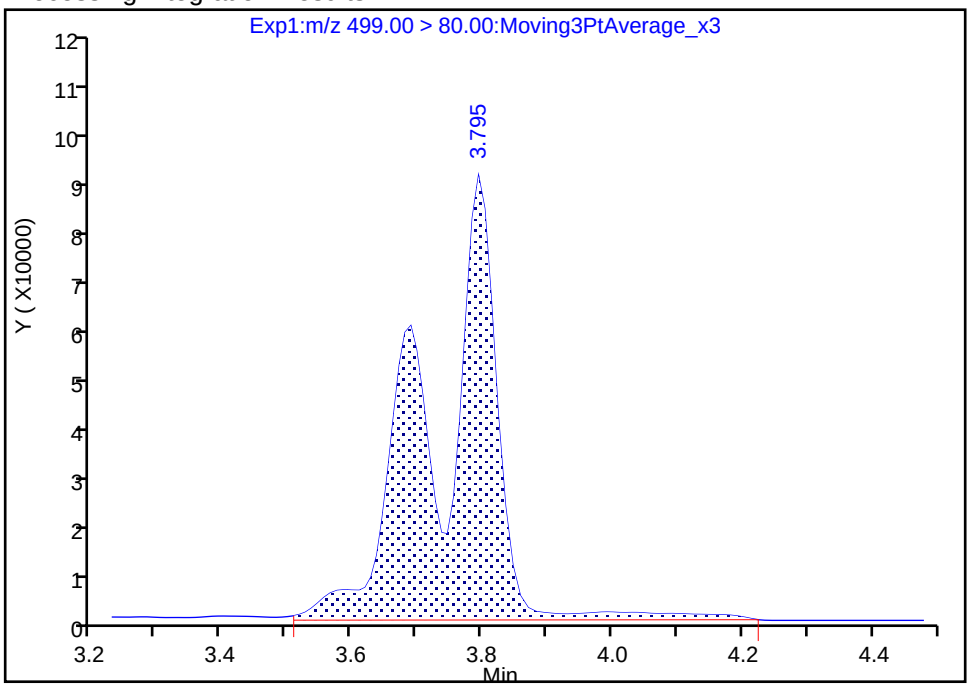
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

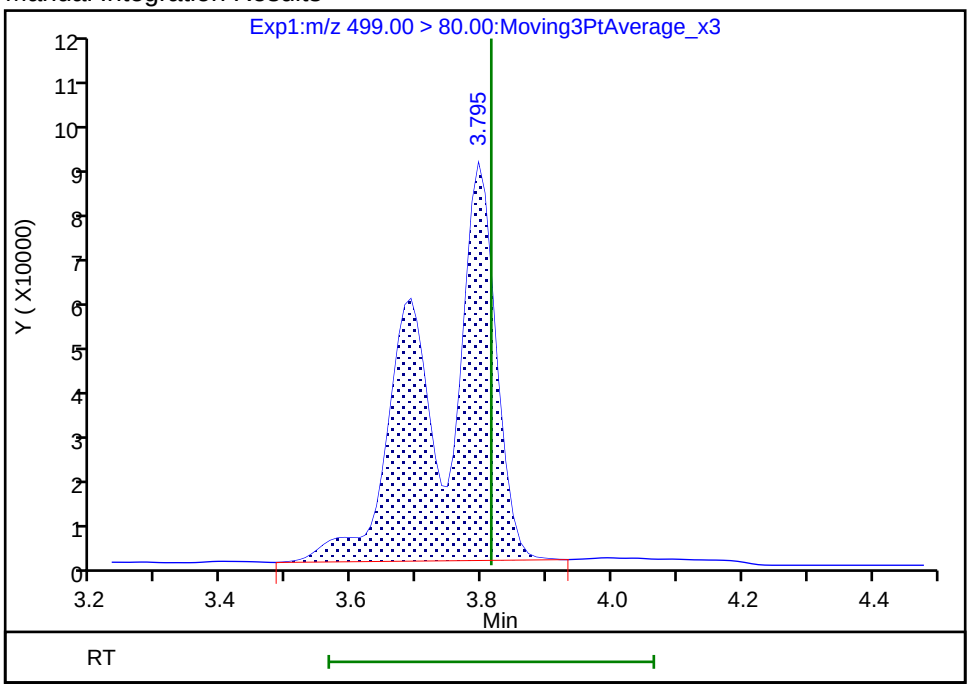
Processing Integration Results

RT: 3.79
Area: 600239
Amount: 1.458007
Amount Units: ng/ml




Manual Integration Results

RT: 3.79
Area: 559594
Amount: 1.359278
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:05:40

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

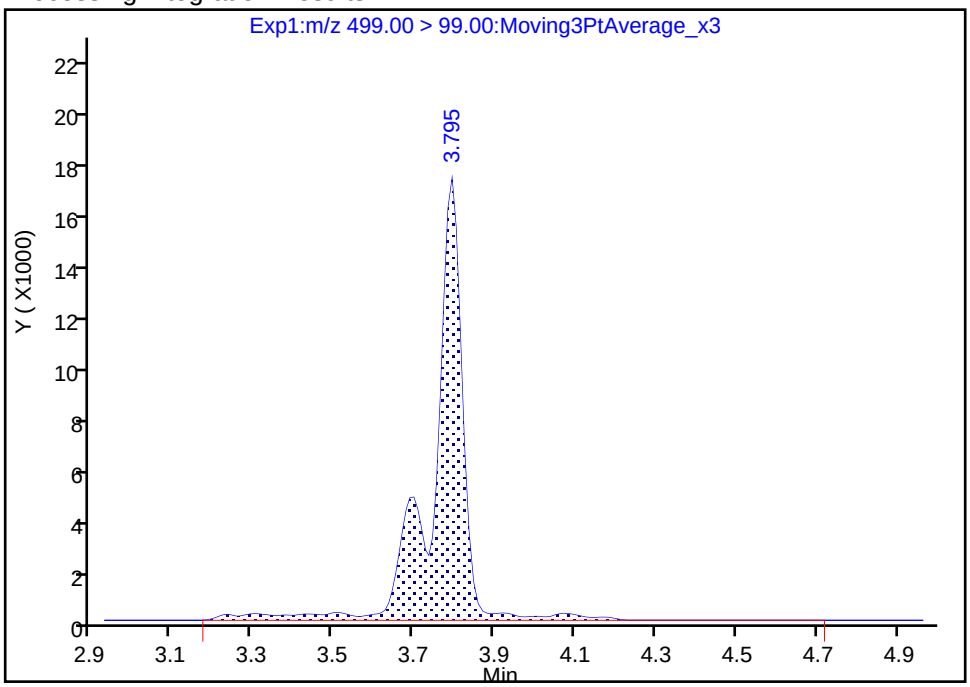
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

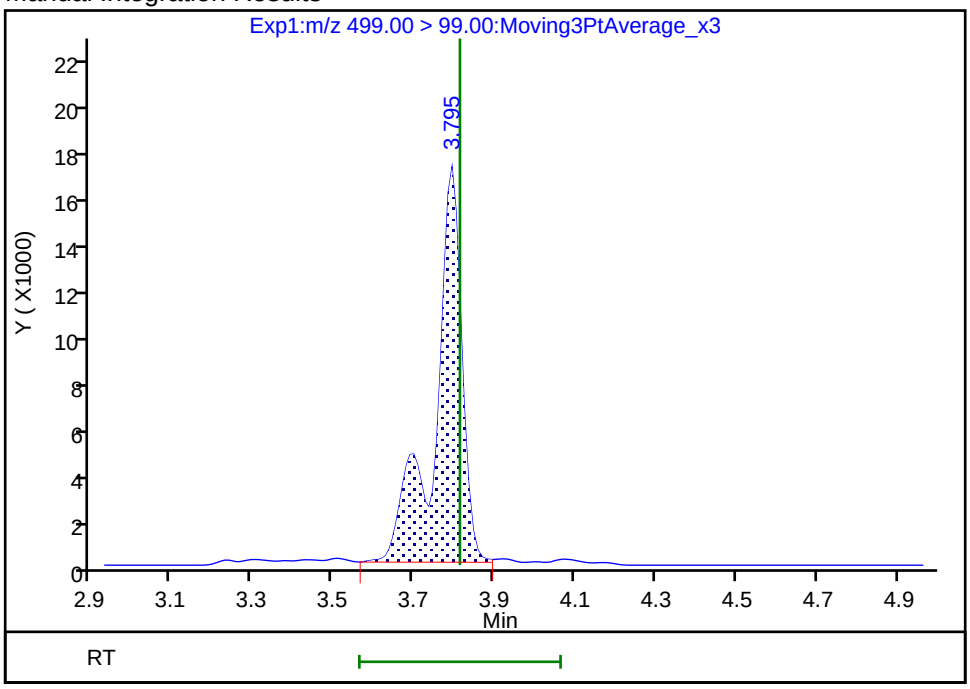
Processing Integration Results

RT: 3.79
Area: 88465
Amount: 1.458007
Amount Units: ng/ml




Manual Integration Results

RT: 3.79
Area: 78404
Amount: 1.359278
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:07:37

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

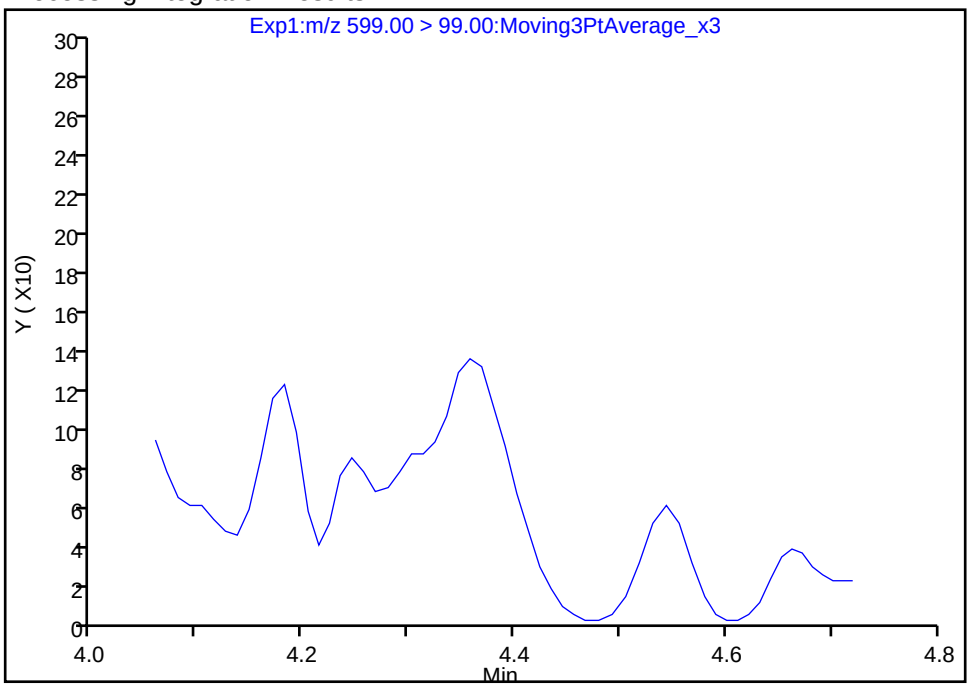
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

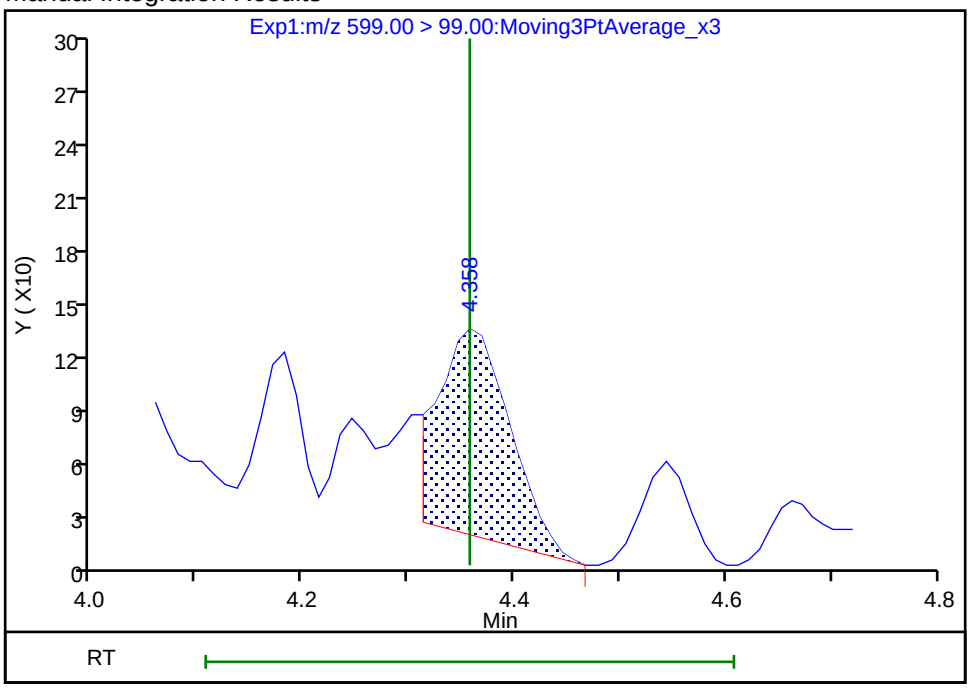
Not Detected
Expected RT: 4.36

Processing Integration Results




Manual Integration Results

RT: 4.36
Area: 537
Amount: 0.004545
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:10:02
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

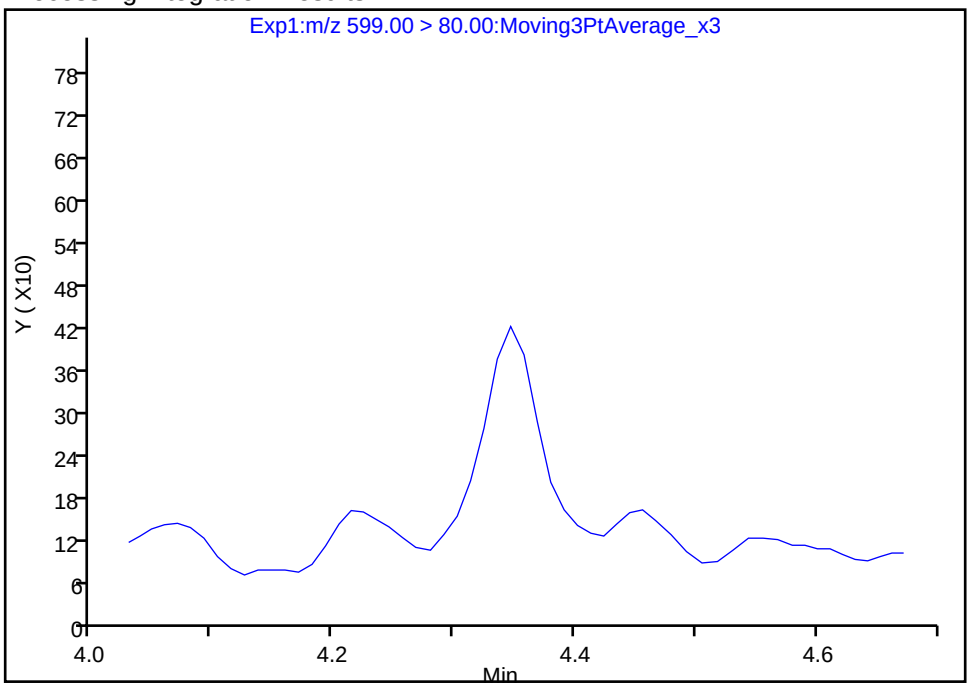
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

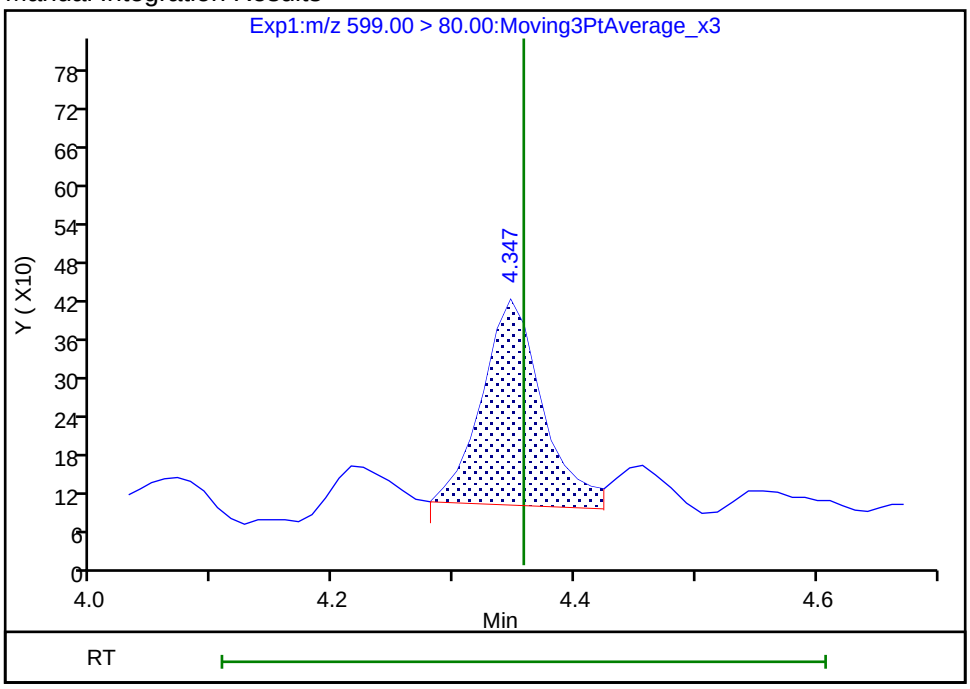
Not Detected
Expected RT: 4.36

Processing Integration Results




Manual Integration Results

RT: 4.35
Area: 1113
Amount: 0.004545
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:10:04
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

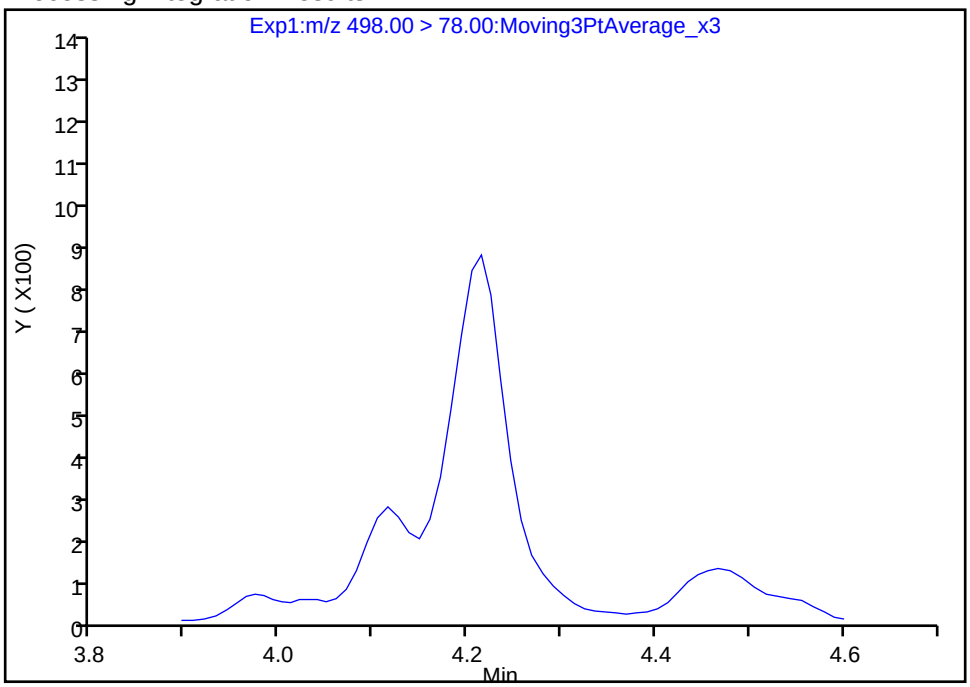
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

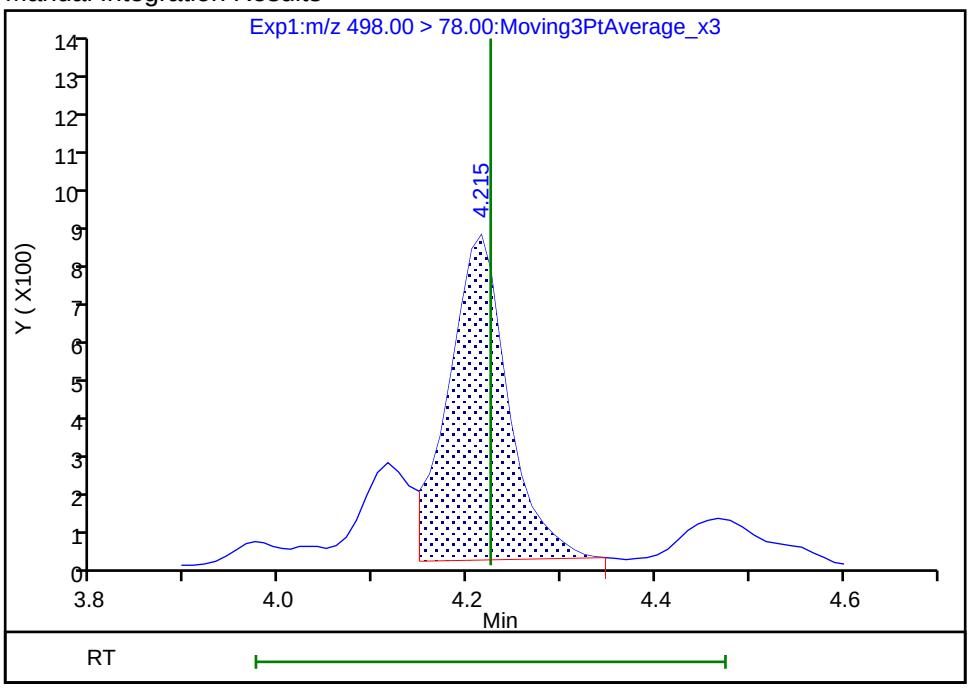
Not Detected
Expected RT: 4.22

Processing Integration Results




Manual Integration Results

RT: 4.21
Area: 3521
Amount: 0.006980
Amount Units: ng/ml




Reviewer: deannd, 15-Mar-2021 17:26:16
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

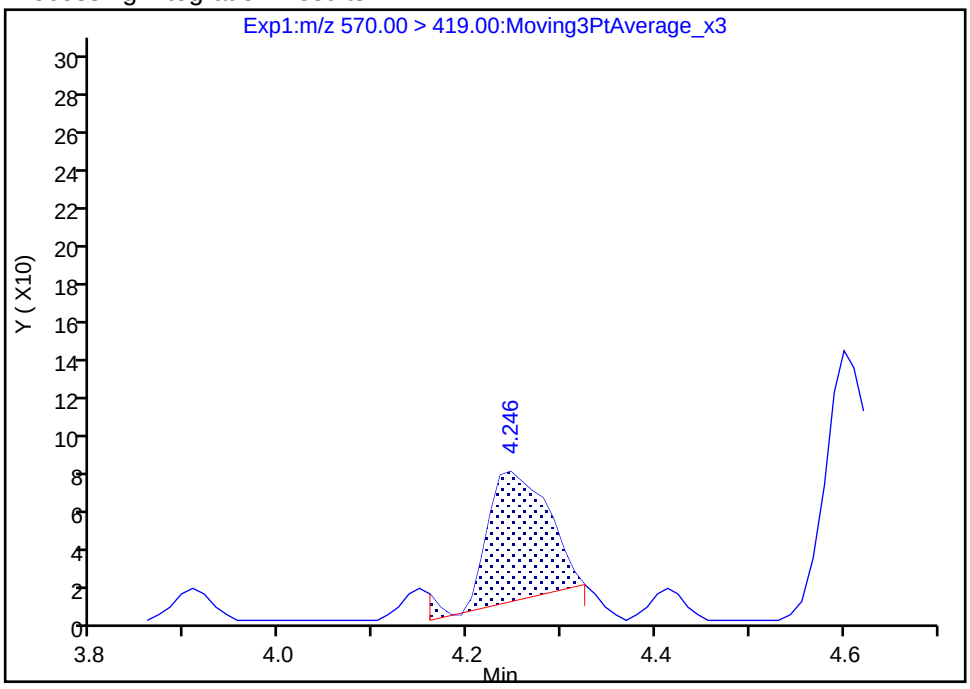
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

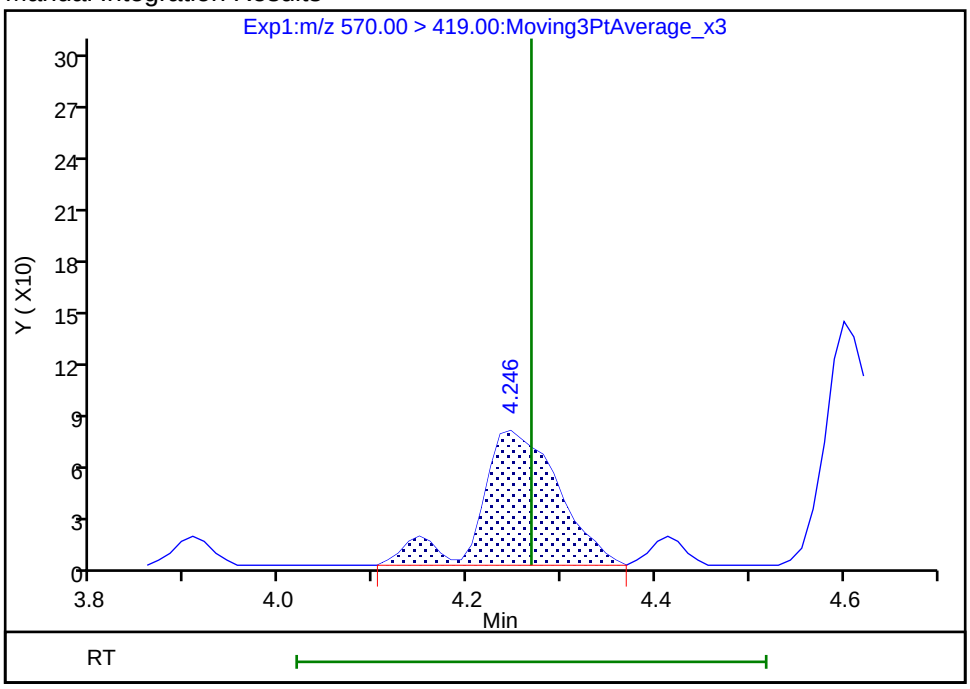
Processing Integration Results

RT: 4.25
Area: 311
Amount: 0.012762
Amount Units: ng/ml




Manual Integration Results

RT: 4.25
Area: 459
Amount: 0.018836
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:09:40
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

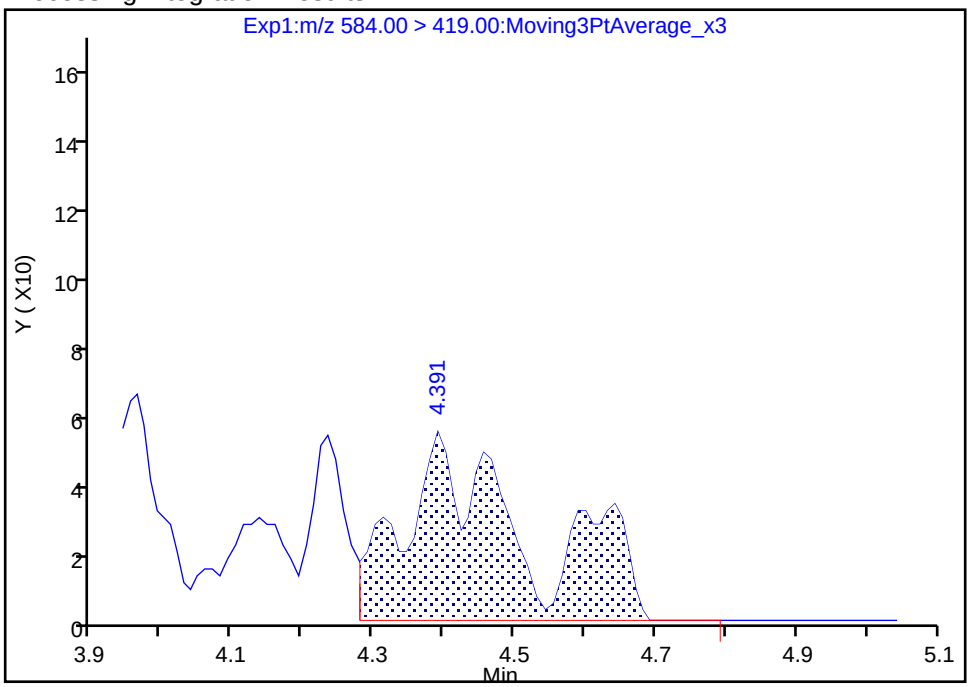
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

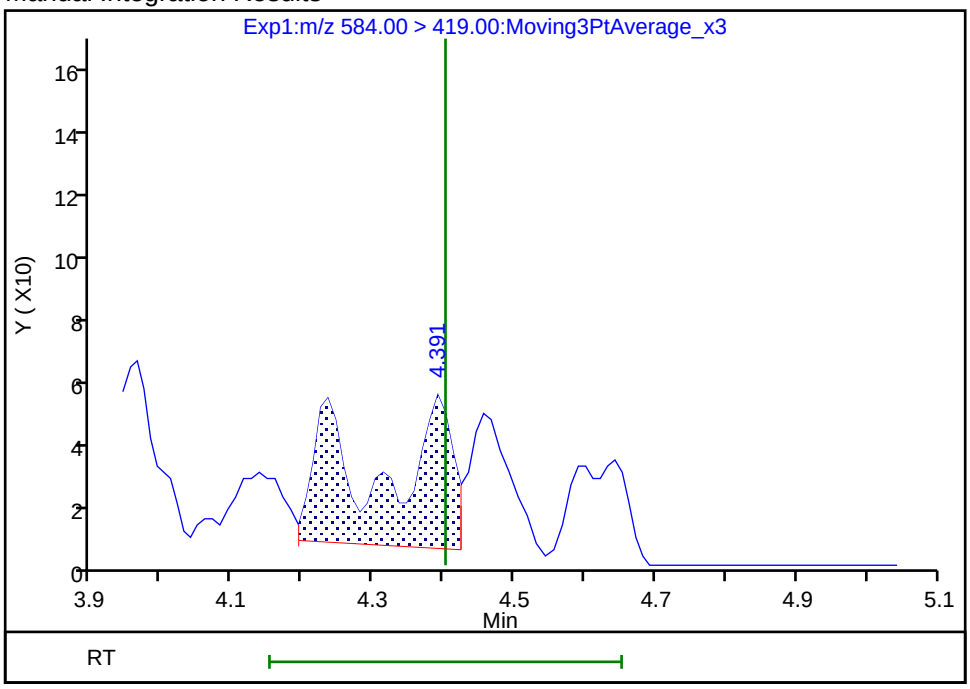
Processing Integration Results

RT: 4.39
Area: 667
Amount: 0.024480
Amount Units: ng/ml




Manual Integration Results

RT: 4.39
Area: 363
Amount: 0.013323
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:10:53
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

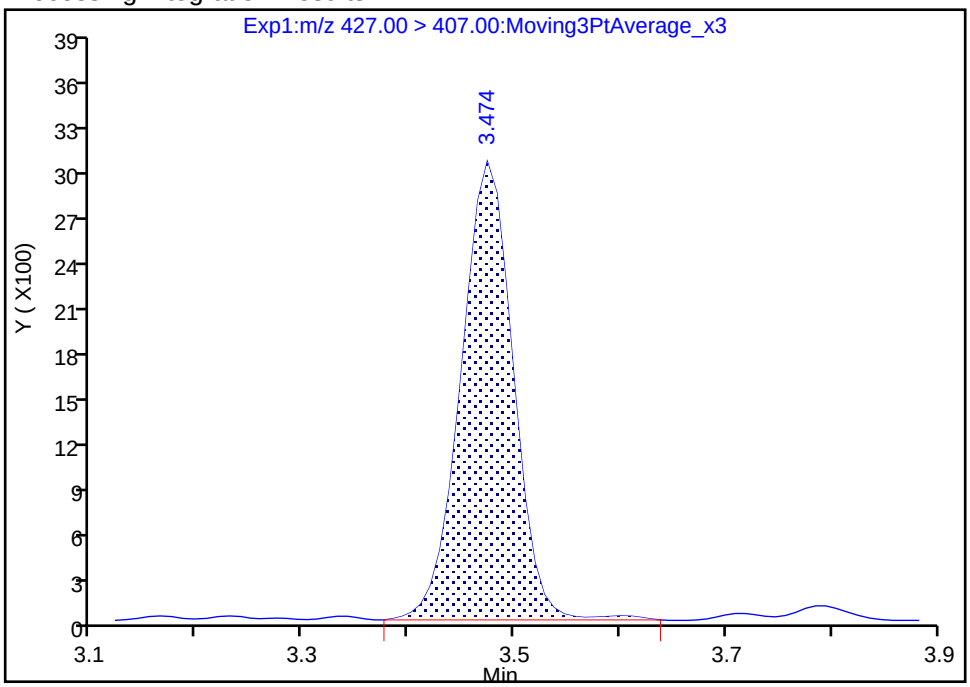
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

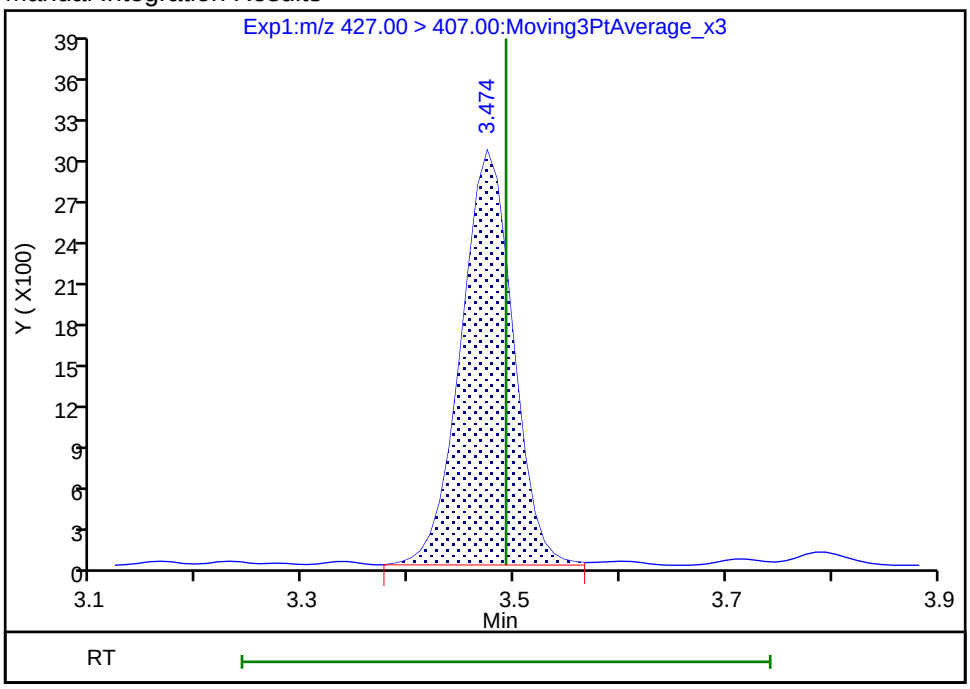
Processing Integration Results

RT: 3.47
Area: 10305
Amount: 0.101335
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 10240
Amount: 0.100696
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:04:17

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

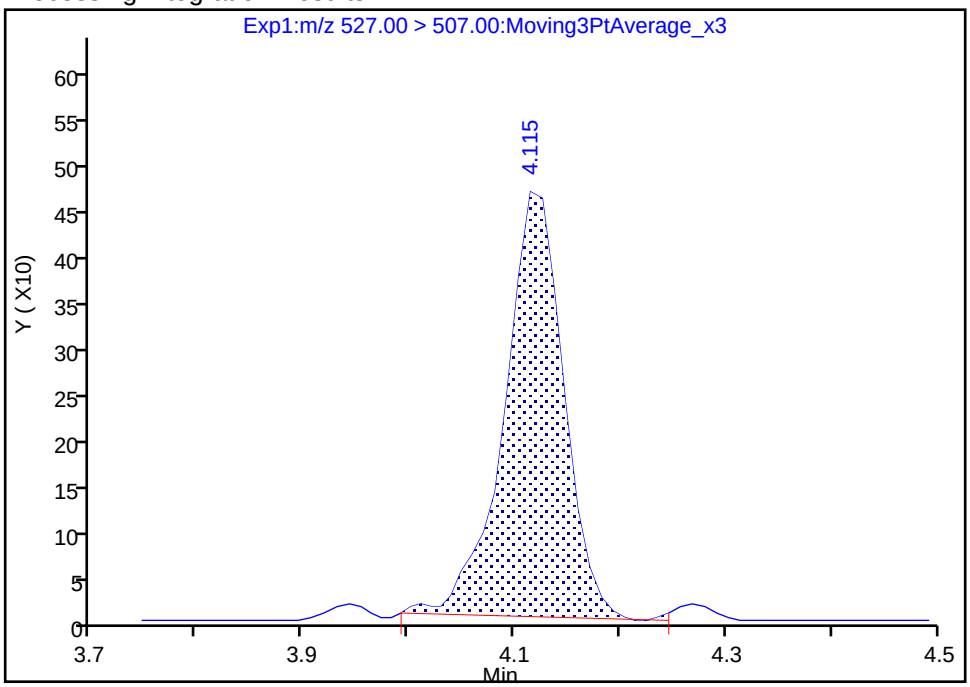
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

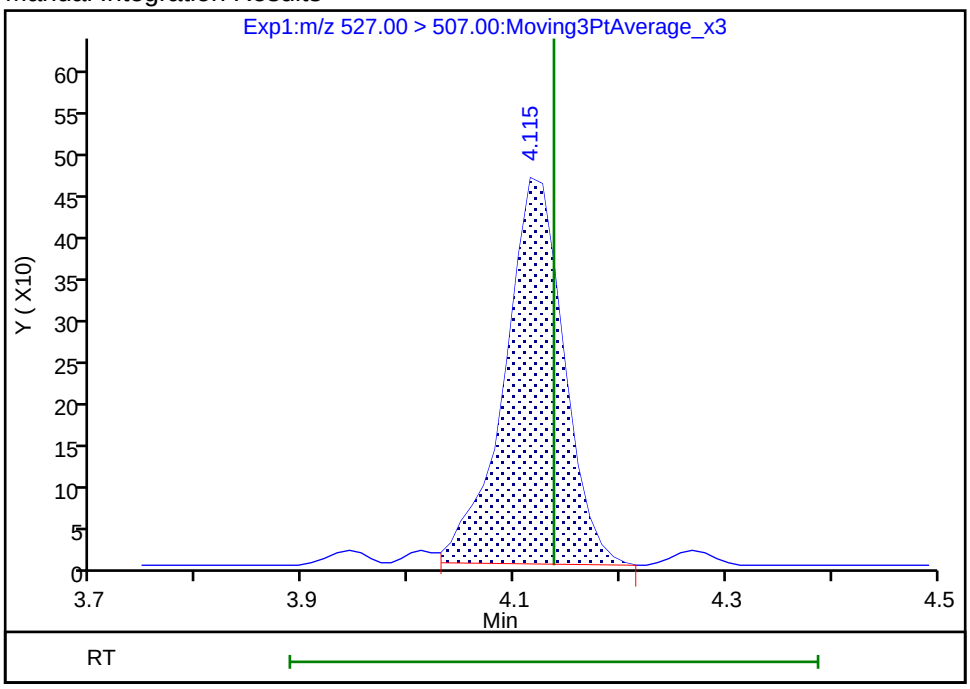
Processing Integration Results

RT: 4.12
Area: 1812
Amount: 0.040565
Amount Units: ng/ml




Manual Integration Results

RT: 4.12
Area: 1818
Amount: 0.040700
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:09:21

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

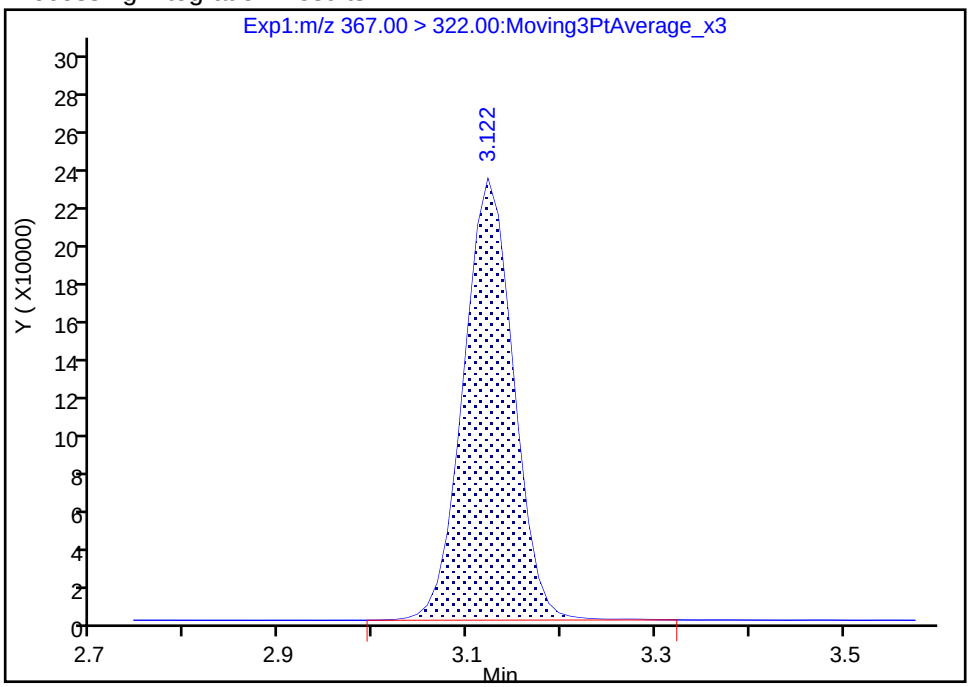
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 9 13C4 PFHpA, CAS: STL01892

Signal: 1

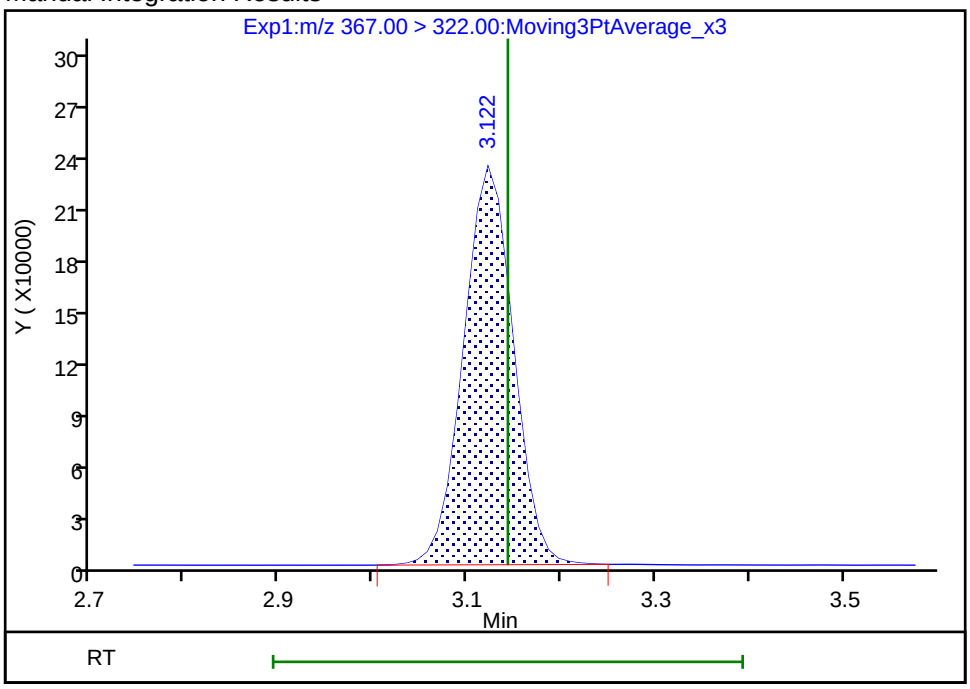
Processing Integration Results

RT: 3.12
Area: 848375
Amount: 1.144005
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 845213
Amount: 1.143912
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:57:59

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

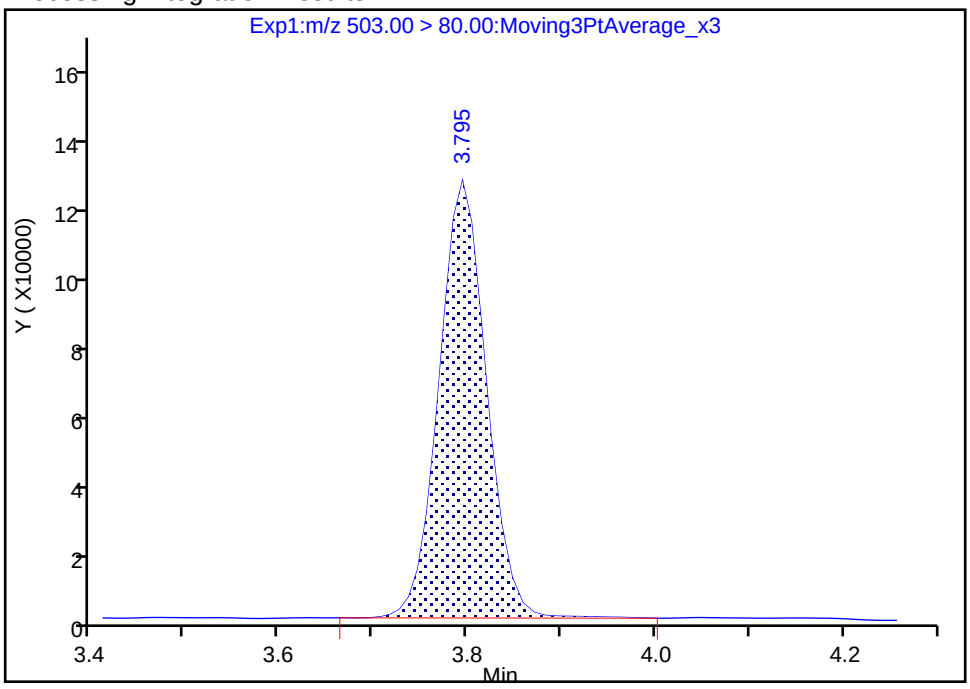
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 18 13C4 PFOS, CAS: STL00991

Signal: 1

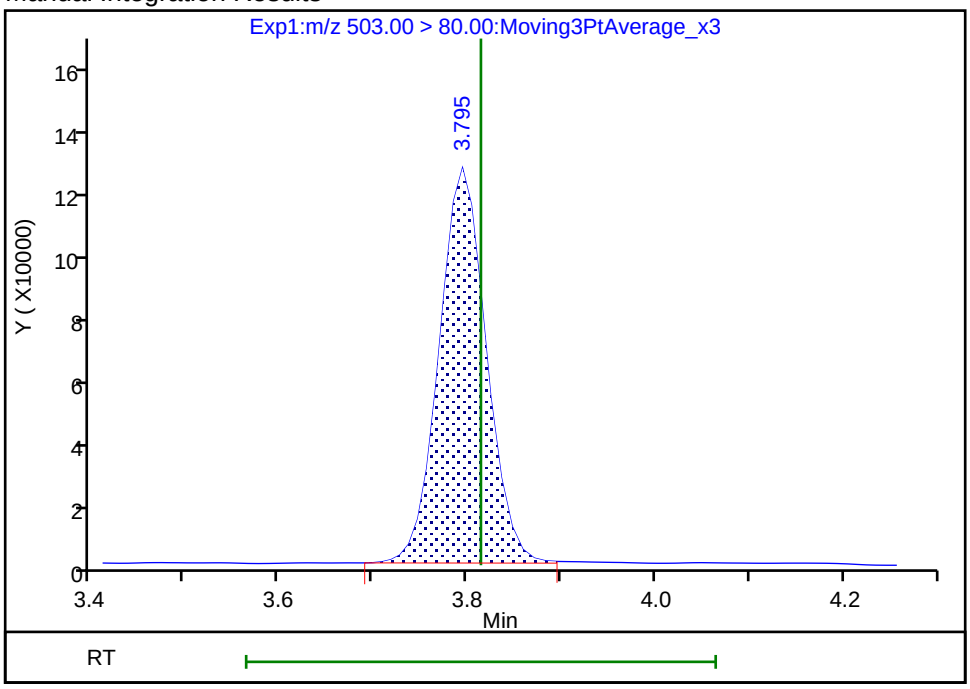
Processing Integration Results

RT: 3.79
Area: 429705
Amount: 0.864750
Amount Units: ng/ml




Manual Integration Results

RT: 3.79
Area: 427757
Amount: 0.863980
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:58:47

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

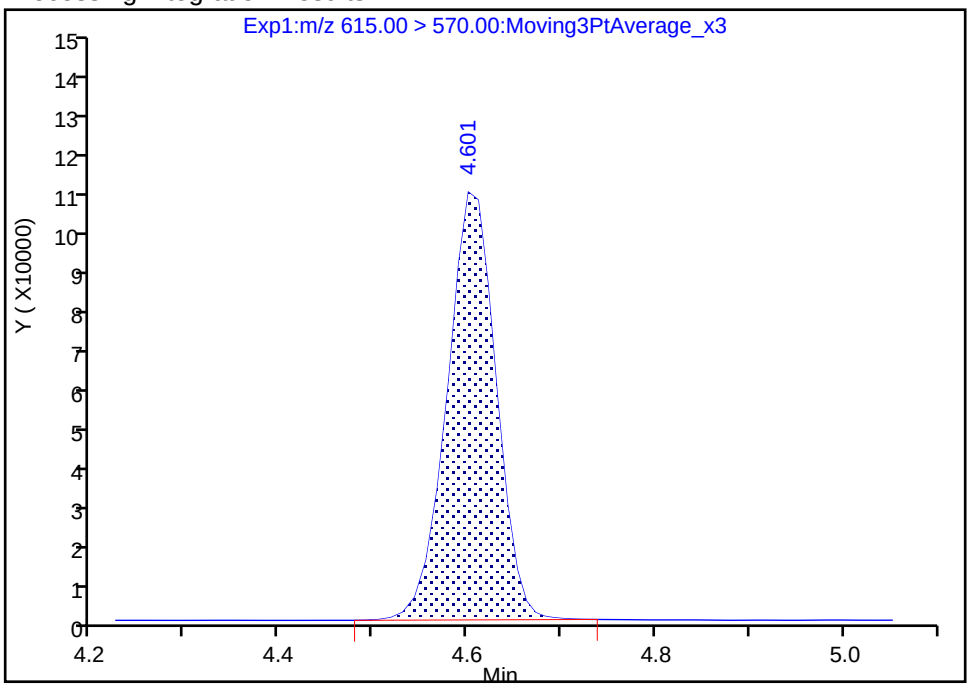
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 36 13C2 PFDoA, CAS: STL00998

Signal: 1

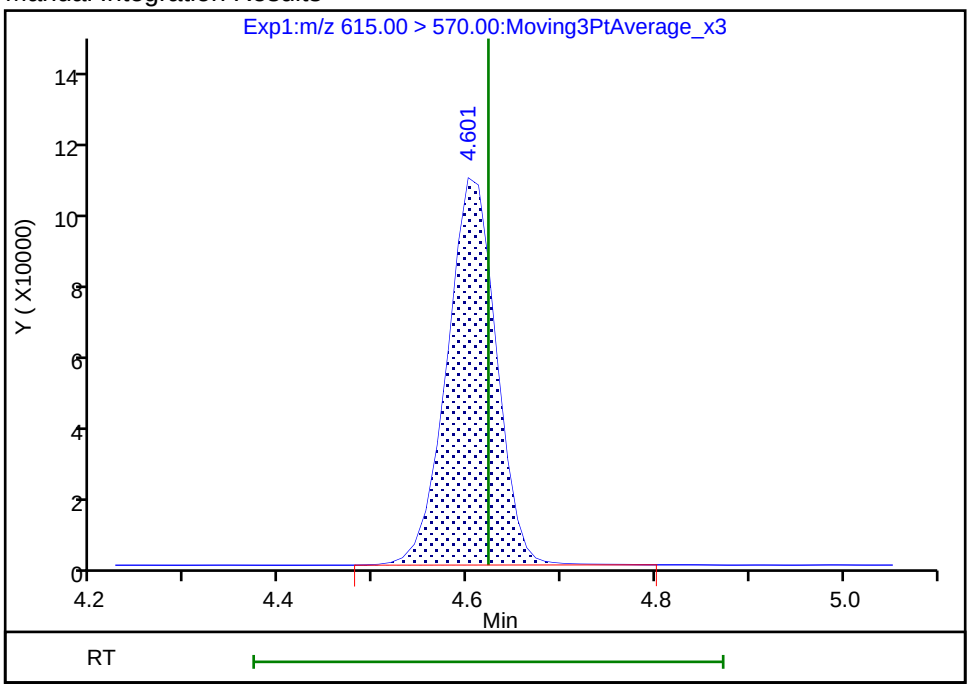
Processing Integration Results

RT: 4.60
Area: 380502
Amount: 0.690637
Amount Units: ng/ml




Manual Integration Results

RT: 4.60
Area: 381715
Amount: 0.695375
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:00:24

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

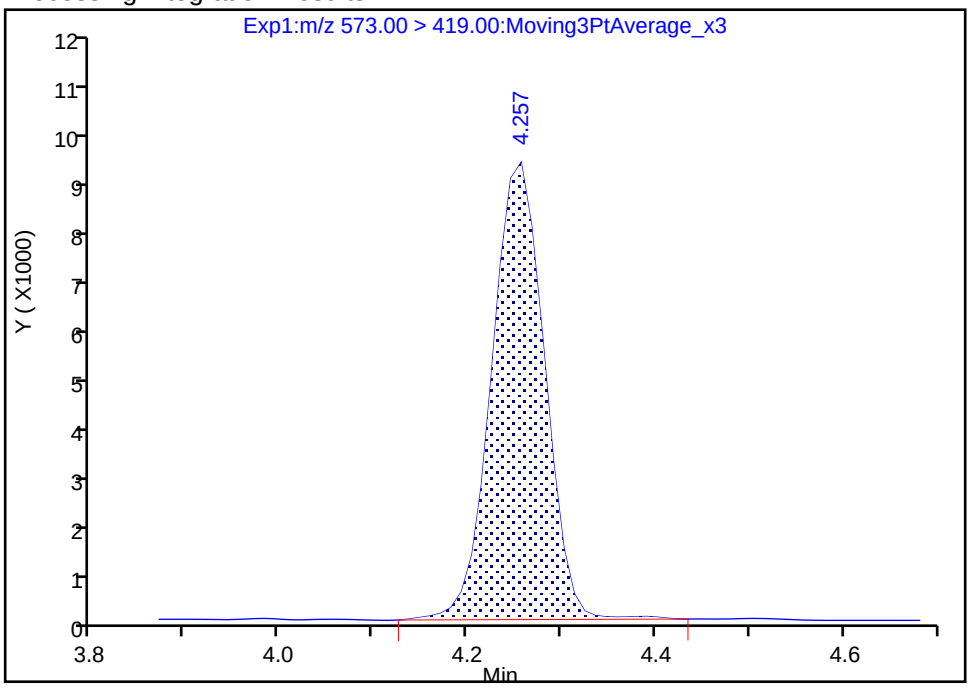
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

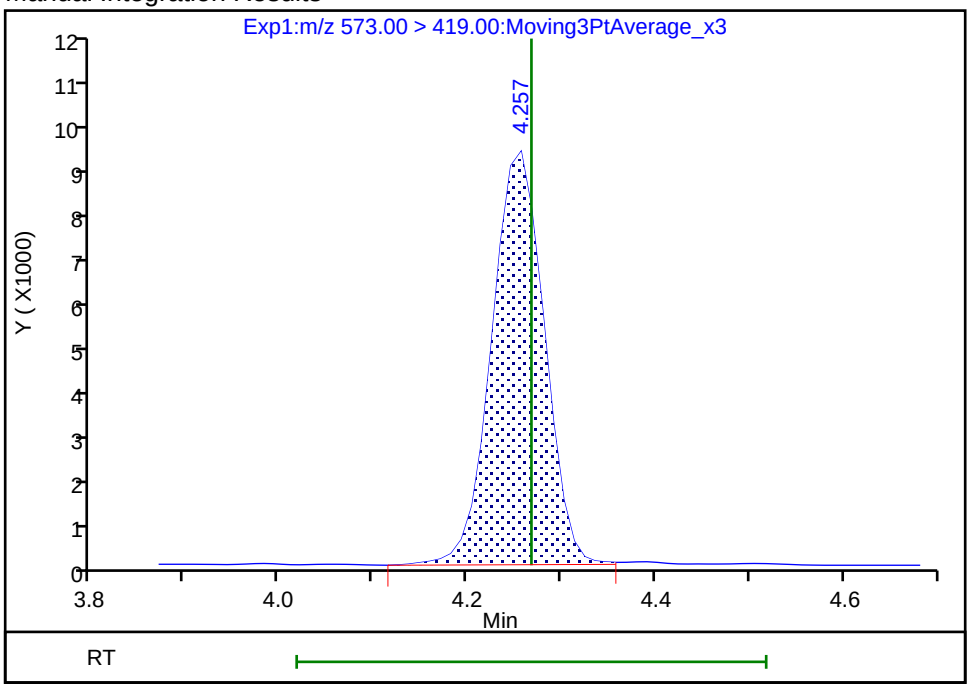
Processing Integration Results

RT: 4.26
Area: 34449
Amount: 0.747550
Amount Units: ng/ml




Manual Integration Results

RT: 4.26
Area: 34366
Amount: 0.748478
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:59:26
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

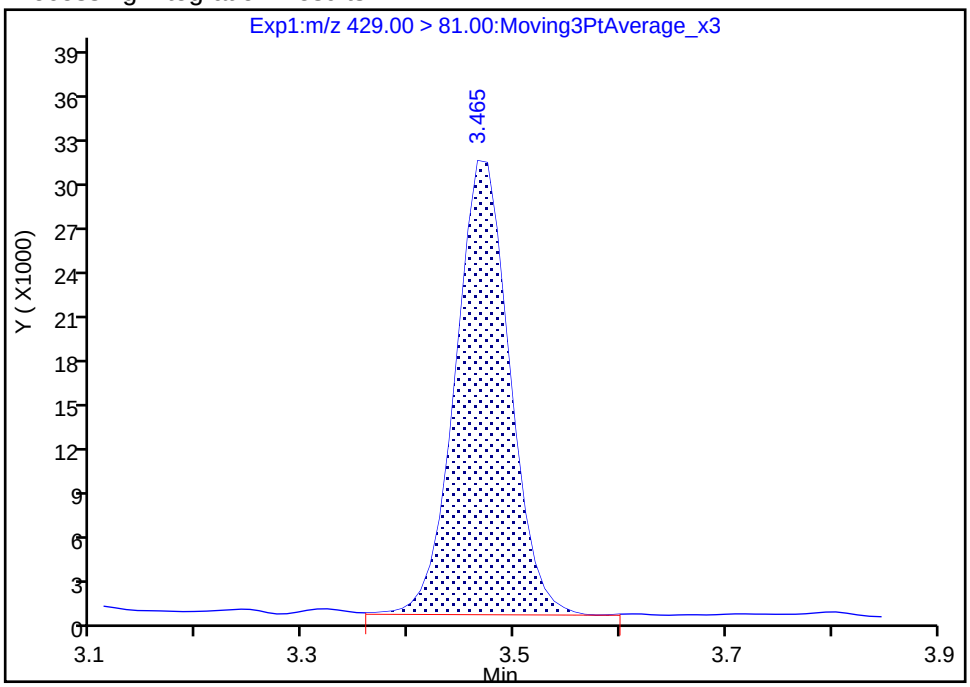
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

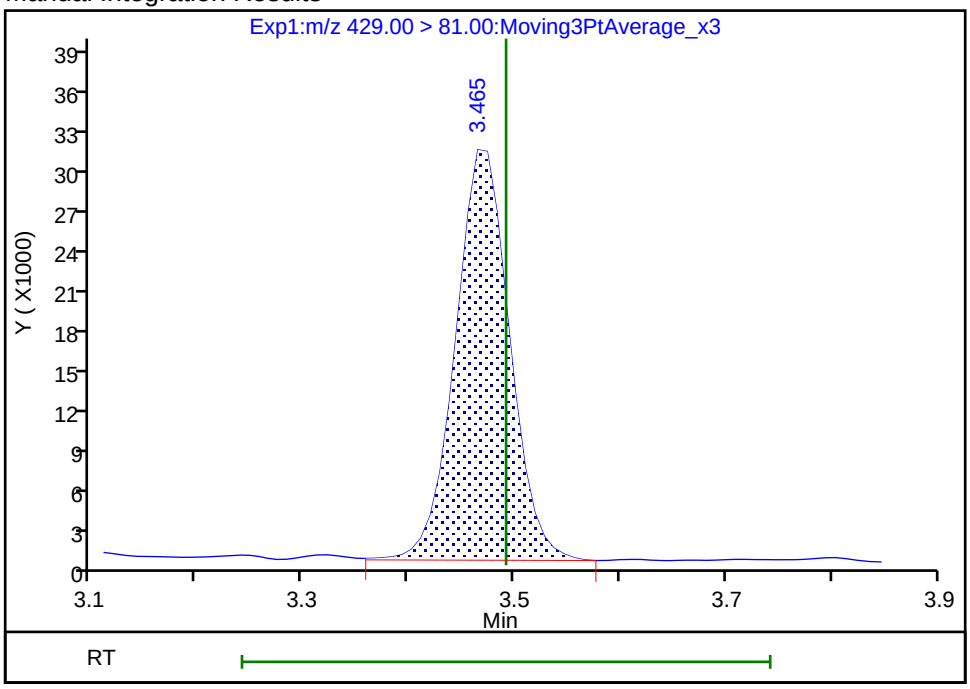
Processing Integration Results

RT: 3.47
Area: 108529
Amount: 1.201068
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 108563
Amount: 1.205841
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:58:25
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

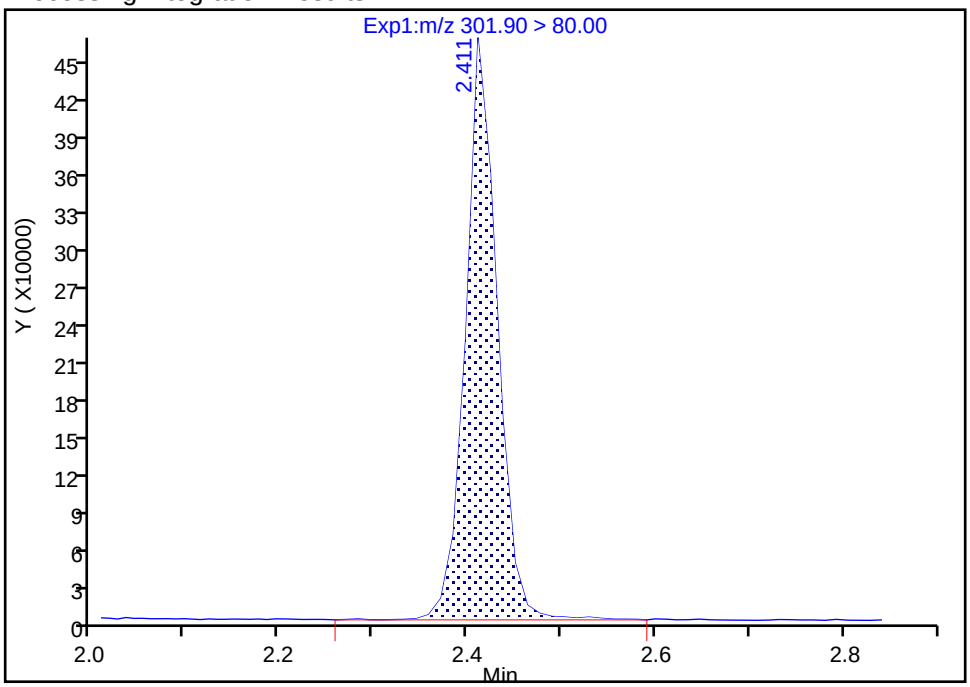
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 47 13C3 PFBS, CAS: STL02337

Signal: 1

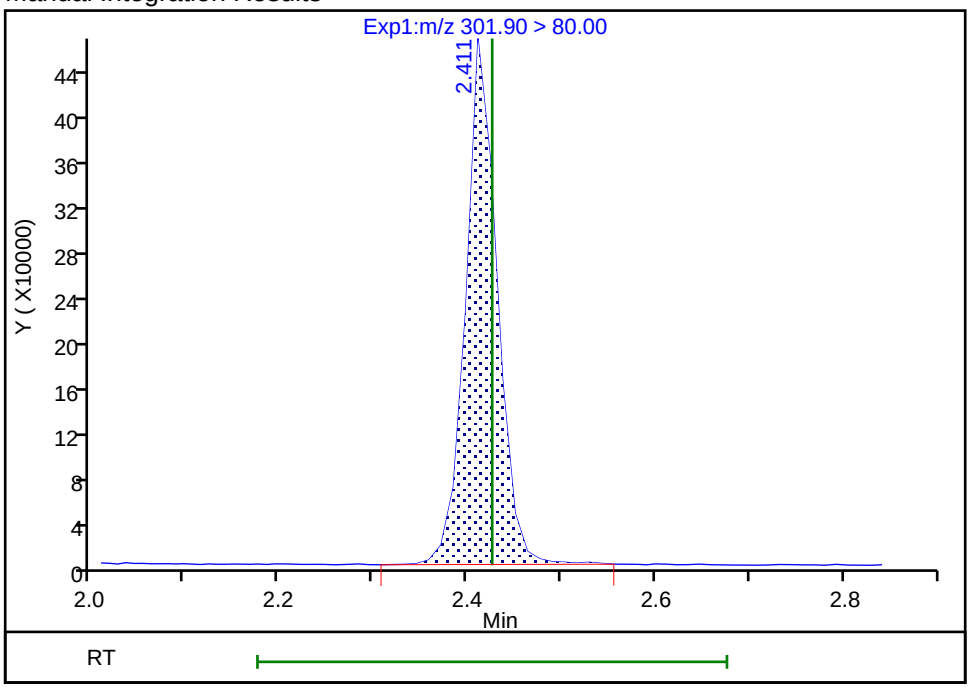
Processing Integration Results

RT: 2.41
Area: 1080018
Amount: 1.110363
Amount Units: ng/ml




Manual Integration Results

RT: 2.41
Area: 1074056
Amount: 1.108275
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:57:42

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

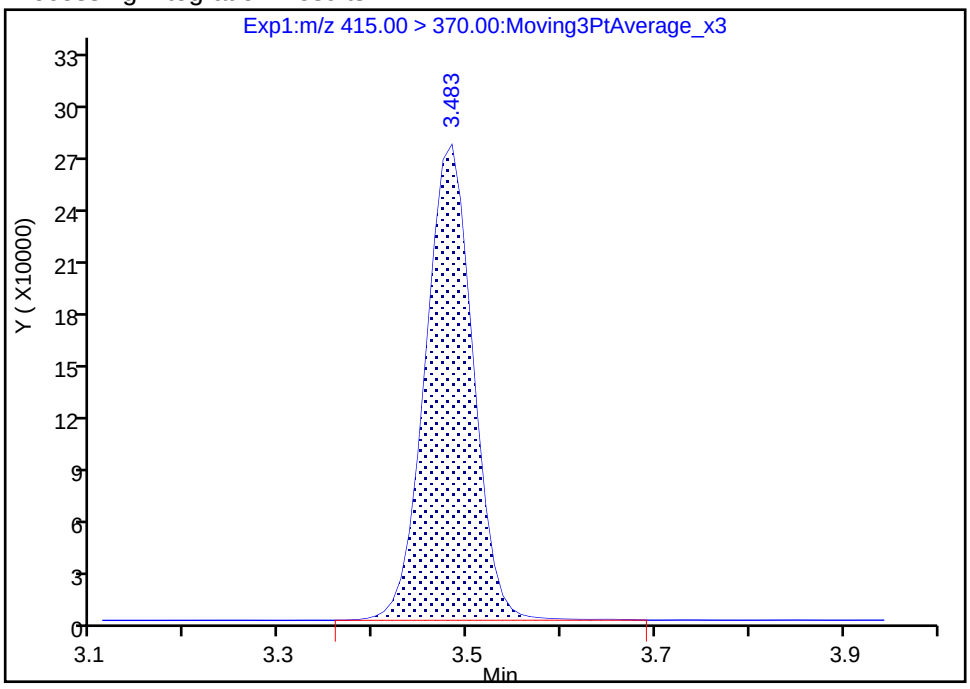
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B20.d | | | | |
| Injection Date: | 12-Mar-2021 14:38:30 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-3-A | Lab Sample ID: | 200-229152-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 20 | Worklist Smp#: | 20 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## * 62 13C2 PFOA, CAS: STL00623

Signal: 1

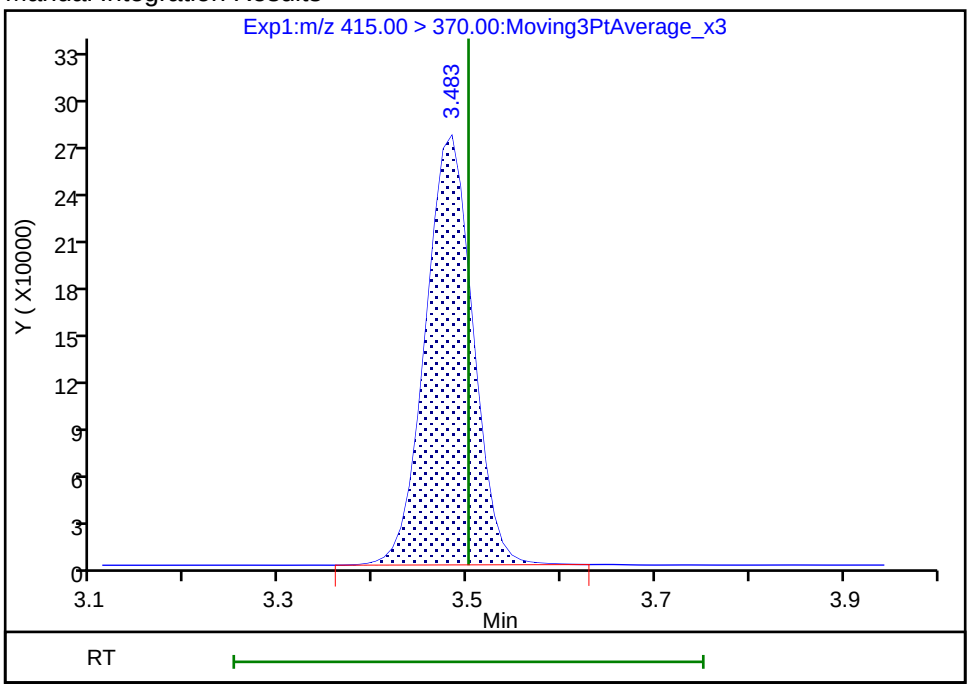
Processing Integration Results

RT: 3.48
Area: 951526
Amount: 1.250000
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 948056
Amount: 1.250000
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:00:51

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID: HEX-EQUIPMENTBLANK-030321  Lab Sample ID: 460-229152-4

Matrix: Water  Lab File ID: PA210312B21.d

Analysis Method: 537 (modified)  Date Collected: 03/03/2021 12:10

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 298.4(mL)  Date Analyzed: 03/12/2021 14:46

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 375-22-4 | Perfluorobutanoic acid (PFBA) | 0.95 | U | 4.19 | 0.95 |
| 2706-90-3 | Perfluoropentanoic acid (PFPeA) | 0.90 | U | 1.68 | 0.90 |
| 307-24-4 | Perfluorohexanoic acid (PFHxA) | 0.70 | U | 1.68 | 0.70 |
| 375-85-9 | Perfluoroheptanoic acid (PFHpA) | 0.39 | U | 1.68 | 0.39 |
| 335-67-1 | Perfluorooctanoic acid (PFOA) | 0.82 | U | 1.68 | 0.82 |
| 375-95-1 | Perfluorononanoic acid (PFNA) | 0.49 | U | 1.68 | 0.49 |
| 335-76-2 | Perfluorodecanoic acid (PFDA) | 0.39 | U | 1.68 | 0.39 |
| 2058-94-8 | Perfluoroundecanoic acid (PFUnA) | 0.61 | U | 1.68 | 0.61 |
| 307-55-1 | Perfluorododecanoic acid (PFDoA) | 0.39 | U | 1.68 | 0.39 |
| 72629-94-8 | Perfluorotridecanoic acid (PFTriA) | 0.36 | U | 1.68 | 0.36 |
| 376-06-7 | Perfluorotetradecanoic acid (PFTeA) | 0.49 | U | 1.68 | 0.49 |
| 375-73-5 | Perfluorobutanesulfonic acid (PFBS) | 0.53 | U | 1.68 | 0.53 |
| 355-46-4 | Perfluorohexanesulfonic acid (PFHxS) | 0.56 | U | 1.68 | 0.56 |
| 375-92-8 | Perfluoroheptanesulfonic Acid (PFHpS) | 0.33 | U | 1.68 | 0.33 |
| 1763-23-1 | Perfluorooctanesulfonic acid (PFOS) | 0.73 | U | 1.68 | 0.73 |
| 335-77-3 | Perfluorodecanesulfonic acid (PFDS) | 0.40 | U | 1.68 | 0.40 |
| 754-91-6 | Perfluorooctanesulfonamide (PFOSA) | 0.48 | U | 1.68 | 0.48 |
| 2355-31-9 | N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.66 | U | 4.19 | 0.66 |
| 2991-50-6 | N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 0.78 | U | 4.19 | 0.78 |
| 27619-97-2 | 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 0.60 | U | 4.19 | 0.60 |
| 39108-34-4 | 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 0.55 | U | 1.68 | 0.55 |

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID: HEX-EQUIPMENTBLANK-030321  Lab Sample ID: 460-229152-4

Matrix: Water  Lab File ID: PA210312B21.d

Analysis Method: 537 (modified)  Date Collected: 03/03/2021 12:10

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 298.4(mL)  Date Analyzed: 03/12/2021 14:46

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| STL00994 | 18O2 PFHxS | 108 | | 50-150 |
| STL01892 | 13C4 PFHpA | 112 | | 50-150 |
| STL00990 | 13C4 PFOA | 106 | | 50-150 |
| STL00991 | 13C4 PFOS | 103 | | 50-150 |
| STL00995 | 13C5 PFNA | 108 | | 50-150 |
| STL00992 | 13C4 PFBA | 110 | | 25-150 |
| STL00993 | 13C2 PFHxA | 115 | | 50-150 |
| STL00996 | 13C2 PFDA | 99 | | 50-150 |
| STL00997 | 13C2 PFUnA | 88 | | 50-150 |
| STL00998 | 13C2 PFDoA | 78 | | 50-150 |
| STL01056 | 13C8 FOSA | 63 | | 25-150 |
| STL01893 | 13C5 PFPeA | 112 | | 25-150 |
| STL02116 | 13C2 PFTeDA | 75 | | 50-150 |
| STL02118 | d3-NMeFOSAA | 87 | | 50-150 |
| STL02117 | d5-NEtFOSAA | 83 | | 50-150 |
| STL02279 | M2-6:2 FTS | 112 | | 25-150 |
| STL02280 | M2-8:2 FTS | 102 | | 25-150 |
| STL02337 | 13C3 PFBS | 105 | | 50-150 |

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d
Lims ID: 460-229152-A-4-A
Client ID: HEX-EQUIPMENTBLANK-030321
Sample Type: Client
Inject. Date: 12-Mar-2021 14:46:48 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-229152-A-4-A
Misc. Info.: 200-0045149-021 Plate: 1 Rack: 2
Operator ID: lc812tech Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 15-Mar-2021 17:45:51 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1650

First Level Reviewer: nampitakw Date: 15-Mar-2021 14:22:10
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.073 | 2.091 | -0.018 | 0.595 | 1435700 | 1.38 | | 110 | 10532 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | M |
| 212.90 > 169.00 | 2.082 | 2.091 | -0.009 | 1.004 | 27402 | 0.0238 | | | 4.6 | M |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.401 | 2.413 | -0.012 | 0.689 | 1048452 | 1.39 | | 112 | 2842 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | M |
| 262.90 > 219.00 | 2.401 | 2.413 | -0.012 | 1.000 | 23866 | 0.0257 | | | 0.8 | M |
| D 47 13C3 PFBS | | | | | | | | | | M |
| 301.90 > 80.00 | 2.414 | 2.426 | -0.012 | 0.693 | 1202888 | 1.22 | | 105 | 242423 | M |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | M |
| 298.90 > 80.00 | 2.427 | 2.439 | -0.012 | 1.005 | 7413 | 0.006333 | Target=2.21 | | 9.9 | |
| 298.90 > 99.00 | 2.414 | 2.439 | -0.025 | 1.000 | 2600 | | 2.85(1.11-3.32) | | 2.1 | M |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.759 | 2.770 | -0.011 | 0.792 | 1128287 | 1.43 | | 115 | 3709 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | RM |
| 313.00 > 269.00 | 2.759 | 2.770 | -0.011 | 1.000 | 6372 | 0.006462 | Target=12.83 | | 1.2 | RM |
| 313.00 > 119.00 | 2.771 | 2.770 | 0.001 | 1.004 | 1094 | | 5.82(6.42-19.25) | | 1.8 | M |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.122 | 3.132 | -0.010 | 1.000 | 5198 | 0.005567 | Target=4.15 | | 20.8 | M |
| 399.00 > 99.00 | 3.122 | 3.132 | -0.010 | 1.000 | 1247 | | 4.17(2.08-6.23) | | 1.7 | M |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.122 | 3.132 | -0.010 | 0.896 | 936836 | 1.27 | | 108 | 2315 | |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.122 | 3.143 | -0.021 | 0.896 | 1053382 | 1.40 | | 112 | 4571 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | |
| 363.00 > 319.00 | 3.133 | 3.143 | -0.010 | 1.003 | 6078 | 0.006604 | Target=3.66 | | 1.6 | |
| 363.00 > 169.00 | 3.133 | 3.143 | -0.010 | 1.003 | 1584 | | 3.84(1.83-5.49) | | 5.0 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 12 M2-6:2 FTS | | | | | | | | | | M |
| 429.00 > 81.00 | 3.475 | 3.492 | -0.017 | 0.997 | 122293 | 1.33 | | 112 | 467 | M |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | M |
| 427.00 > 407.00 | 3.475 | 3.492 | -0.017 | 1.000 | 246 | 0.002147 | | | 6.4 | M |
| D 14 13C4 PFOA | | | | | | | | | | M |
| 417.00 > 372.00 | 3.484 | 3.501 | -0.017 | 1.000 | 1017172 | 1.33 | | 106 | 2352 | M |
| * 62 13C2 PFOA | | | | | | | | | | M |
| 415.00 > 370.00 | 3.484 | 3.501 | -0.017 | | 968255 | 1.25 | | | 3983 | M |
| 15 Perfluorooctanoic acid | | | | | | | | | | M |
| 413.00 > 369.00 | 3.484 | 3.501 | -0.017 | 1.000 | 7008 | 0.007945 | Target=2.58 | | 1.4 | M |
| 413.00 > 169.00 | 3.493 | 3.501 | -0.008 | 1.003 | 2812 | | 2.49(1.29-3.87) | | 7.0 | M |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.796 | 3.814 | -0.018 | 1.000 | 4648 | 0.007726 | Target=5.65 | | 2.9 | M |
| 499.00 > 99.00 | 3.796 | 3.814 | -0.018 | 1.000 | 1562 | | 2.98(2.82-8.47) | | 2.2 | M |
| D 18 13C4 PFOS | | | | | | | | | | M |
| 503.00 > 80.00 | 3.796 | 3.814 | -0.018 | 1.090 | 625074 | 1.24 | | 103 | 3060 | M |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.816 | 3.824 | -0.008 | 1.095 | 914106 | 1.35 | | 108 | 2956 | |
| 20 Perfluorononanoic acid | | | | | | | | | | RM |
| 463.00 > 419.00 | 3.826 | 3.824 | 0.002 | 1.003 | 3738 | 0.004618 | Target=7.44 | | 0.7 | RM |
| 463.00 > 169.00 | 3.806 | 3.824 | -0.018 | 0.997 | 334 | | 11.19(3.72-11.16) | | 5.3 | M |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.118 | 4.126 | -0.008 | 1.182 | 801739 | 1.24 | | 99.2 | 3148 | |
| 24 Perfluorodecanoic acid | | | | | | | | | | RM |
| 513.00 > 469.00 | 4.106 | 4.126 | -0.020 | 0.997 | 1011 | 0.001530 | Target=9.29 | | 1.1 | RM |
| 513.00 > 169.00 | 4.118 | 4.126 | -0.008 | 1.000 | 283 | | 3.57(4.64-13.93) | | 2.6 | M |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.118 | 4.137 | -0.019 | 1.182 | 116159 | 1.22 | | 102 | 411 | |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | M |
| 527.00 > 507.00 | 4.106 | 4.137 | -0.031 | 0.997 | 46 | 0.000697 | | | 1.8 | M |
| D 21 13C8 FOSA | | | | | | | | | | |
| 506.00 > 78.00 | 4.207 | 4.225 | -0.018 | 1.208 | 746486 | 0.7855 | | 62.8 | 2367 | |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | M |
| 498.00 > 78.00 | 4.217 | 4.225 | -0.008 | 1.002 | 691 | 0.001155 | | | 5.2 | M |
| D 27 d3-NMeFOSAA | | | | | | | | | | M |
| 573.00 > 419.00 | 4.249 | 4.268 | -0.020 | 1.219 | 51094 | 1.09 | | 87.2 | 548 | M |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | M |
| 570.00 > 419.00 | 4.260 | 4.268 | -0.008 | 1.003 | 44 | 0.001214 | | | 0.2 | M |
| D 30 13C2 PFUnA | | | | | | | | | | M |
| 565.00 > 520.00 | 4.373 | 4.391 | -0.018 | 1.255 | 585686 | 1.10 | | 88.2 | 2547 | M |
| D 32 d5-NEtFOSAA | | | | | | | | | | M |
| 589.00 > 419.00 | 4.384 | 4.402 | -0.018 | 1.258 | 47266 | 1.04 | | 83.4 | 387 | M |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.406 | 4.402 | 0.004 | 1.005 | 190 | 0.005428 | | | 6.9 | M |
| D 36 13C2 PFDoA | | | | | | | | | | M |
| 615.00 > 570.00 | 4.606 | 4.622 | -0.016 | 1.322 | 548532 | 0.9784 | | 78.3 | 3325 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 37 Perfluorododecanoic acid | | | | | | | | | | RM |
| 613.00 > 569.00 | 4.606 | 4.622 | -0.016 | 1.000 | 776 | 0.001608 | Target=6.91 | | 0.4 | RM |
| 613.00 > 169.00 | 4.626 | 4.622 | 0.004 | 1.005 | 246 | | 3.15(3.45-10.36) | | 5.0 | M |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 4.998 | 5.014 | -0.016 | 1.435 | 389125 | 0.9385 | | 75.1 | 3330 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | M |
| 713.00 > 169.00 | 4.989 | 5.014 | -0.025 | 0.998 | 75 | 0.001299 | Target=1.06 | | 3.4 | M |
| 713.00 > 219.00 | 4.998 | 5.014 | -0.016 | 1.000 | 85 | | 0.88(0.53-1.59) | | 4.9 | M |

## QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 15-Mar-2021 17:46:27 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d

Injection Date: 12-Mar-2021 14:46:48 Instrument ID: LC812

Lims ID: 460-229152-A-4-A Lab Sample ID: 200-229152-4

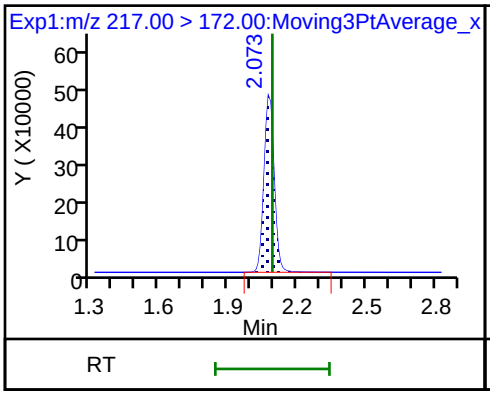
Client ID: HEX-EQUIPMENTBLANK-030321

Operator ID: lc812tech ALS Bottle#: 21 Worklist Smp#: 21

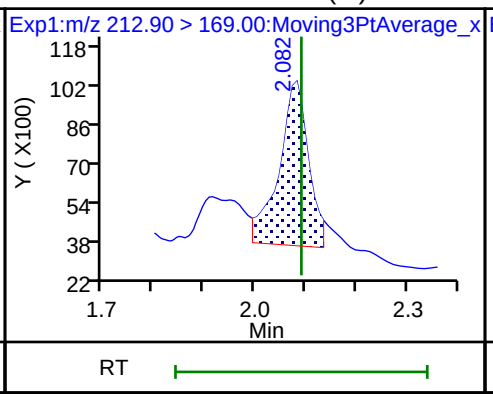
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

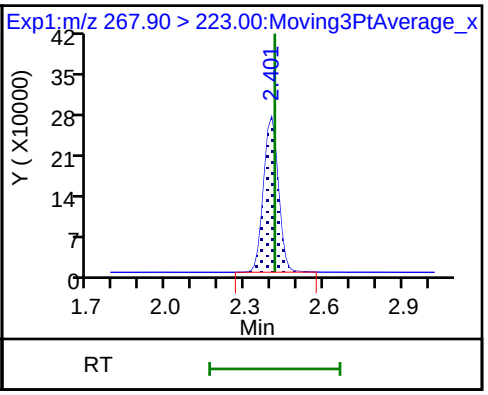
D 1 13C4 PFBA



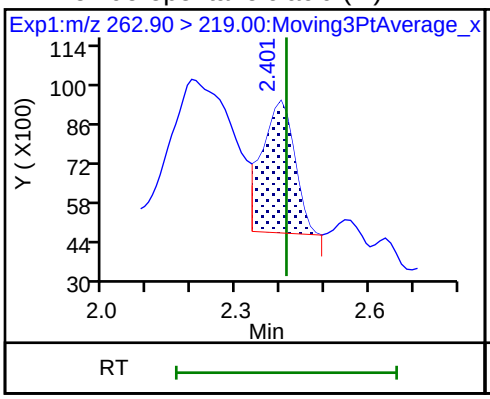

2 Perfluorobutanoic acid (M)



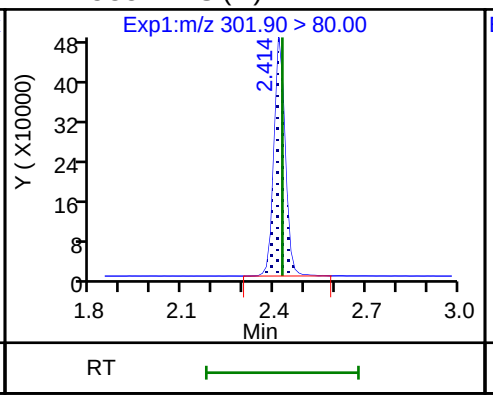

D 3 13C5 PFPeA



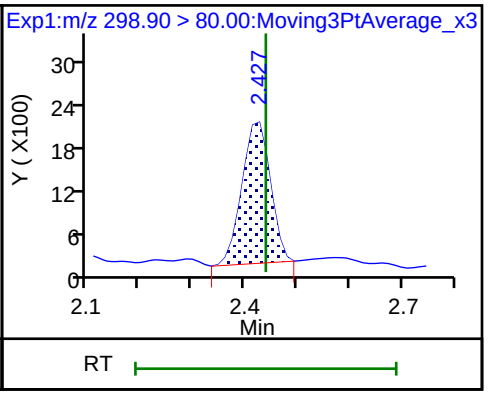

4 Perfluoropentanoic acid (M)



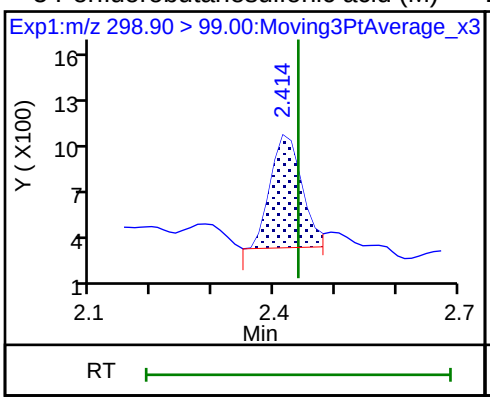

D 47 13C3 PFBS (M)



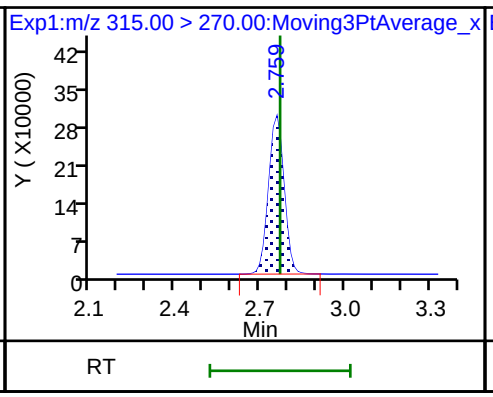

5 Perfluorobutanesulfonic acid



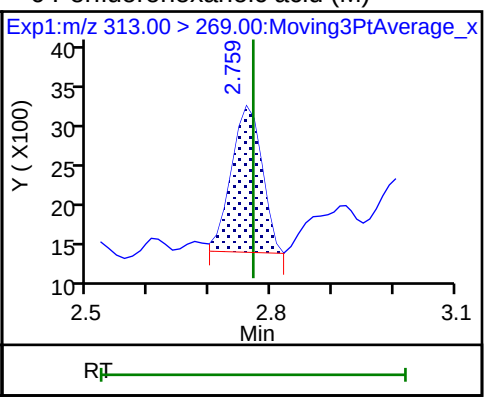

5 Perfluorobutanesulfonic acid (M)



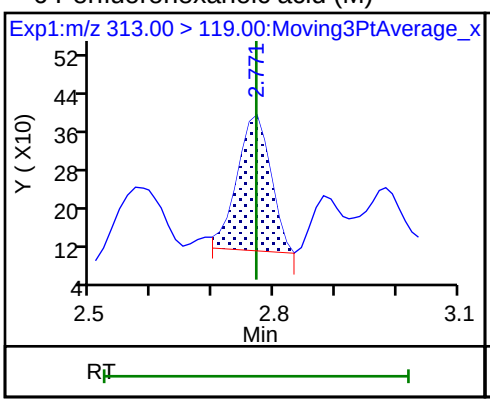

D 7 13C2 PFHxA



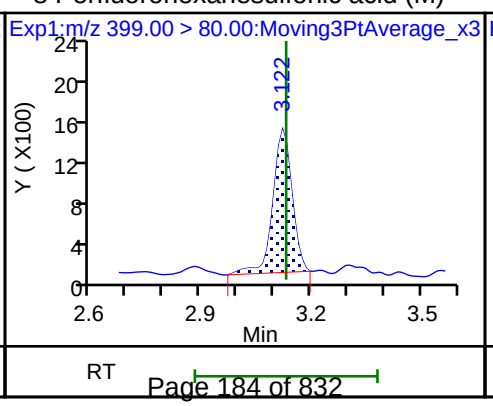

6 Perfluorohexanoic acid (M)



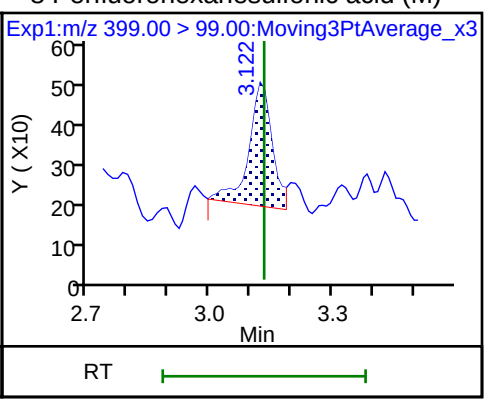

6 Perfluorohexanoic acid (M)



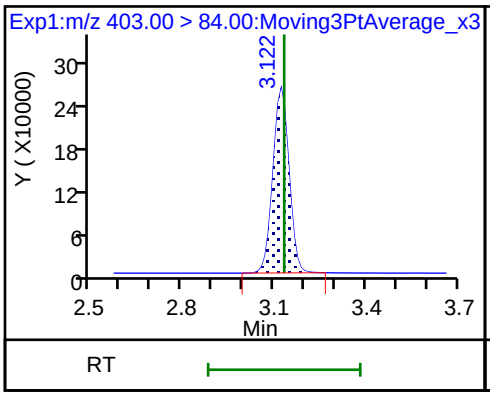

8 Perfluorohexanesulfonic acid (M)



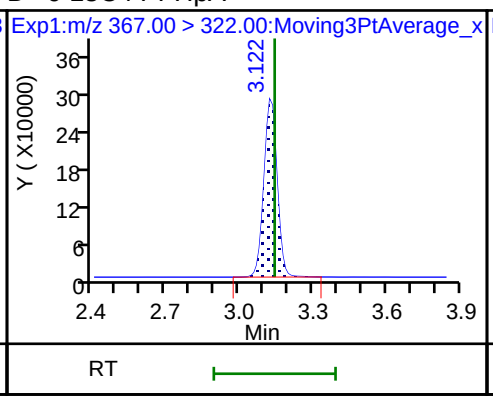

8 Perfluorohexanesulfonic acid (M)



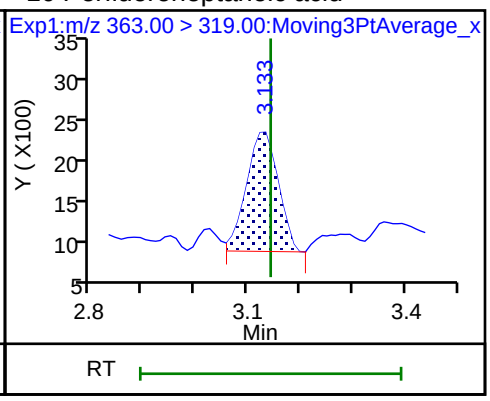
D 11 18O2 PFHxS



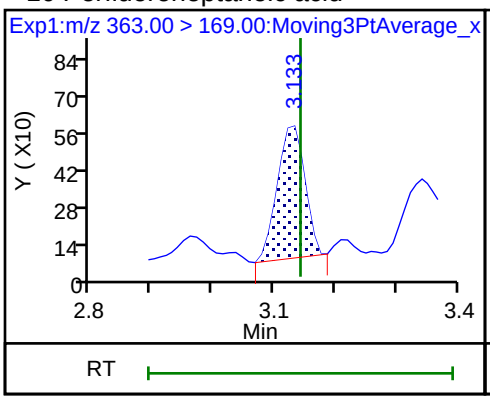

D 9 13C4 PFHpA



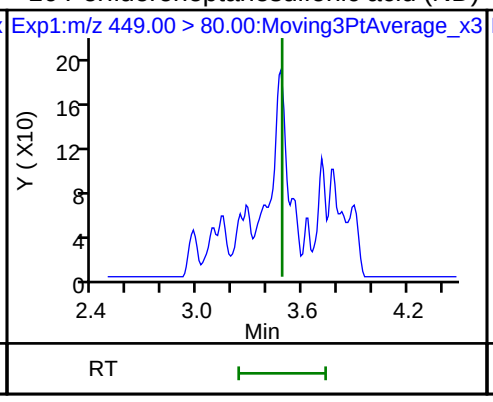

10 Perfluoroheptanoic acid



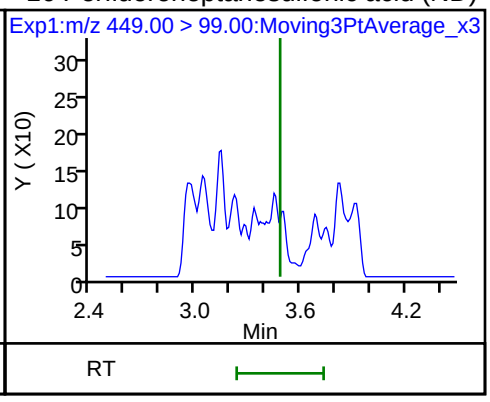

10 Perfluoroheptanoic acid



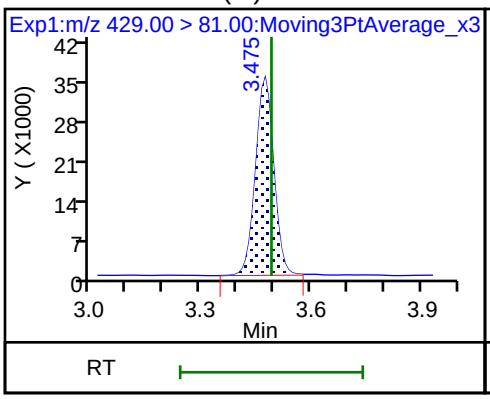

16 Perfluoroheptanesulfonic acid (ND)



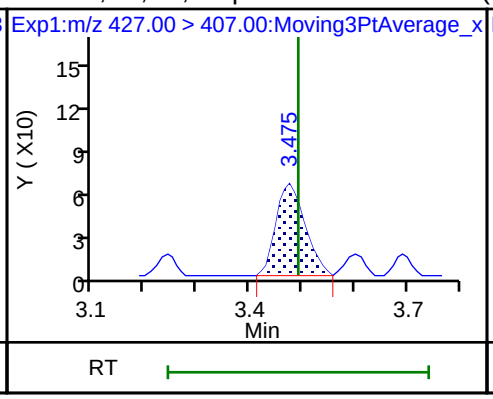

16 Perfluoroheptanesulfonic acid (ND)



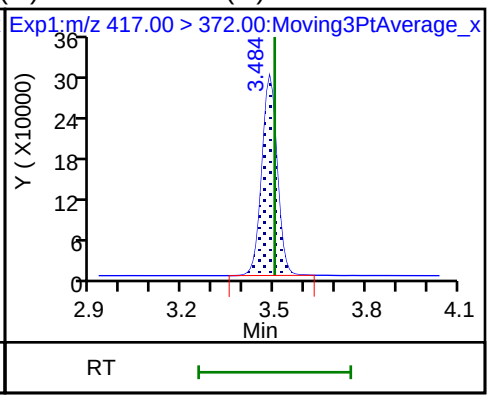

D 12 M2-6:2 FTS (M)



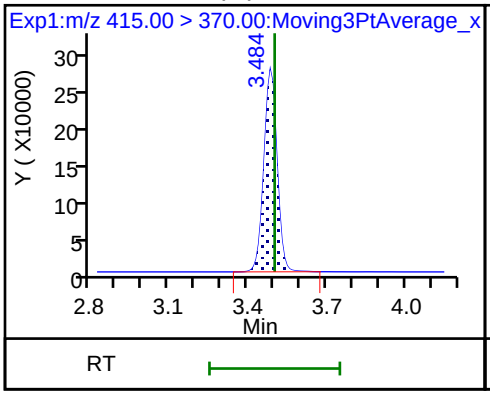

13 1H,1H,2H,2H-perfluorooctanesulfo (M)



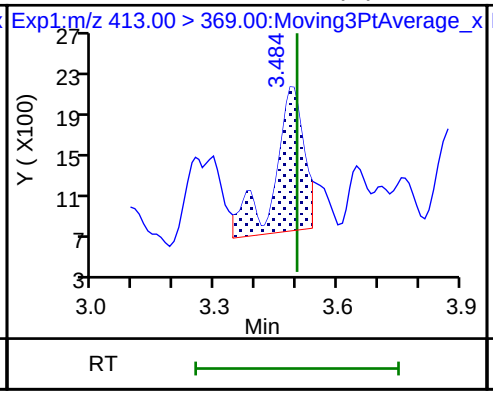

D 14 13C4 PFOA (M)



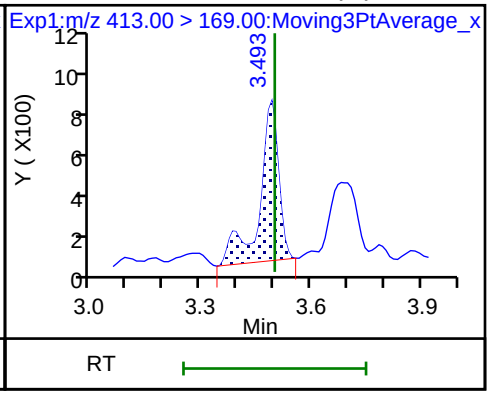

* 62 13C2 PFOA (M)



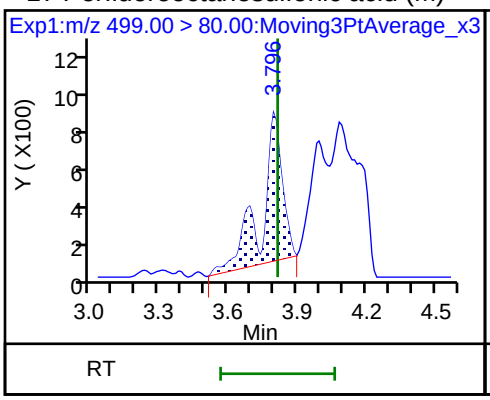

15 Perfluorooctanoic acid (M)



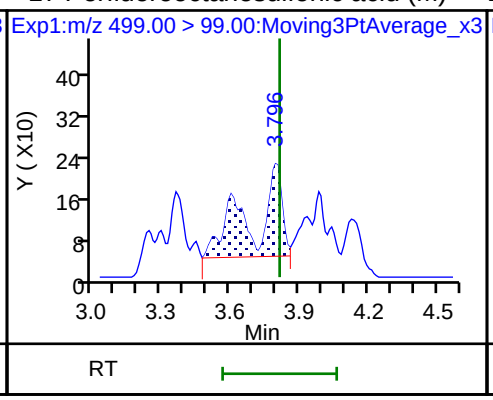

15 Perfluorooctanoic acid (M)



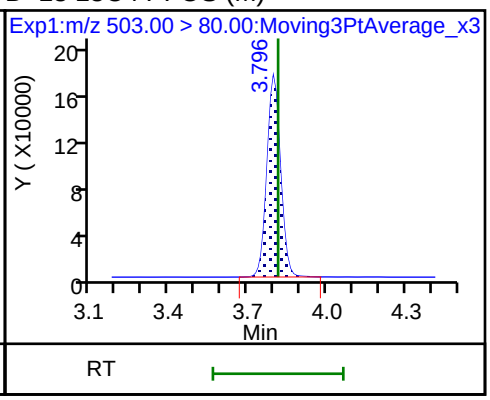
17 Perfluorooctanesulfonic acid (M)



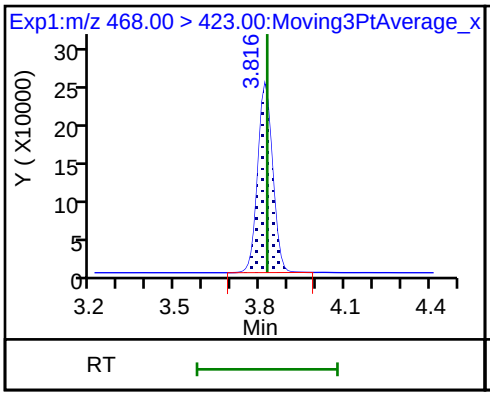

17 Perfluorooctanesulfonic acid (M)



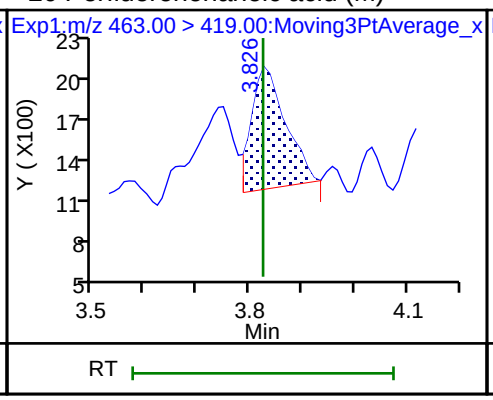

D 18 13C4 PFOS (M)



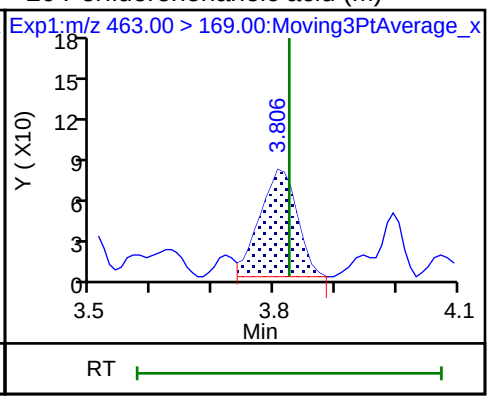

D 19 13C5 PFNA



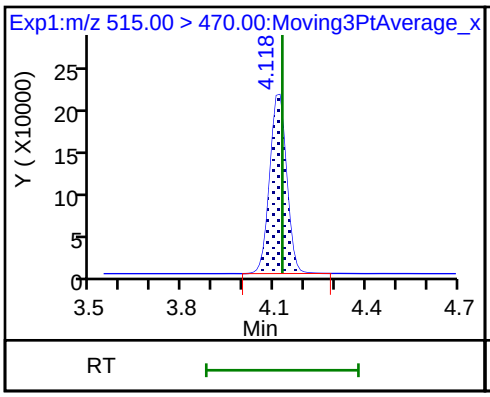

20 Perfluorononanoic acid (M)



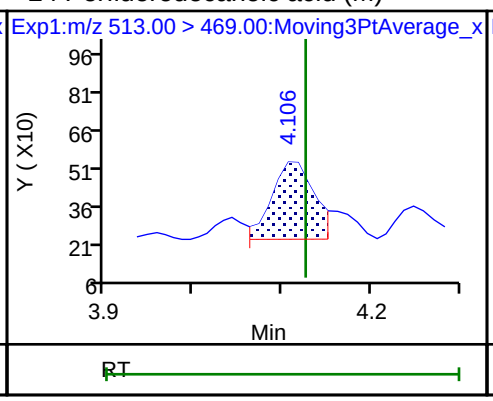

20 Perfluorononanoic acid (M)



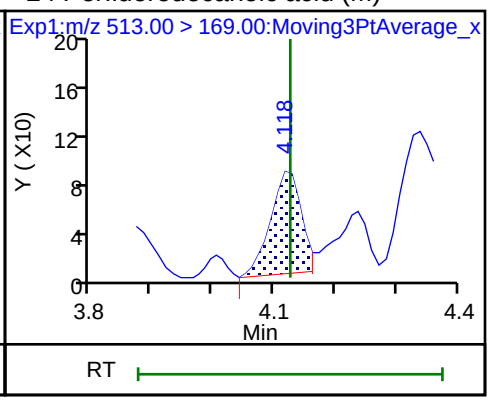

D 23 13C2 PFDA



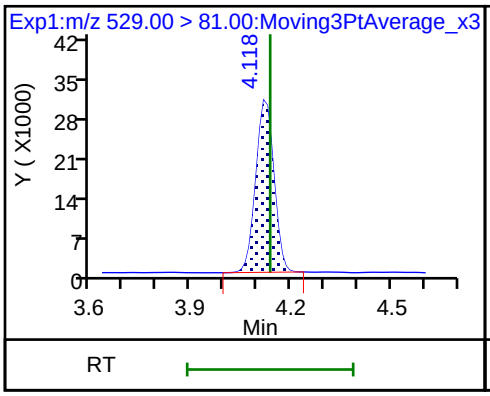

24 Perfluorodecanoic acid (M)



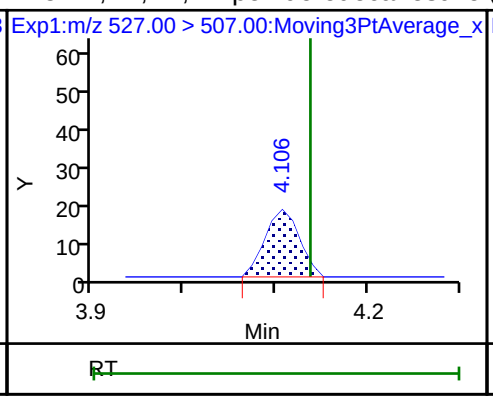

24 Perfluorodecanoic acid (M)



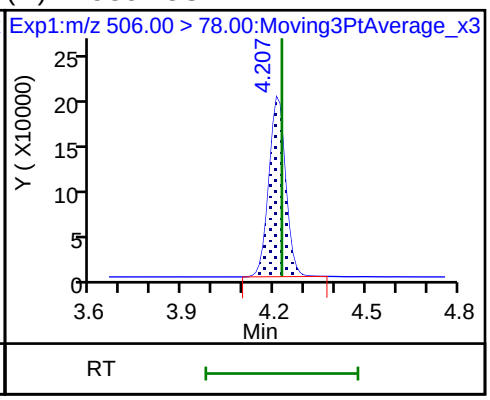

D 26 M2-8:2 FTS



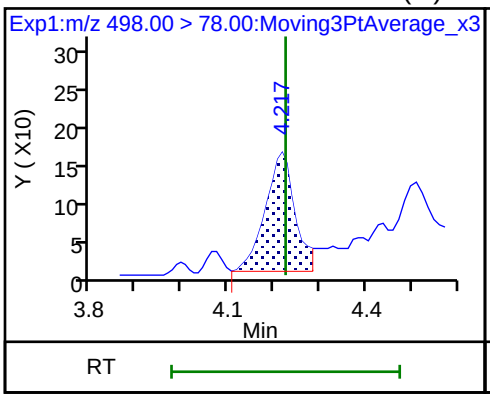

25 1H,1H,2H,2H-perfluorodecanesulfo (M)



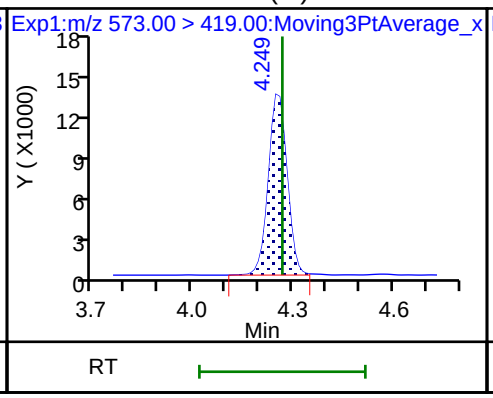

D 21 13C8 FOSA



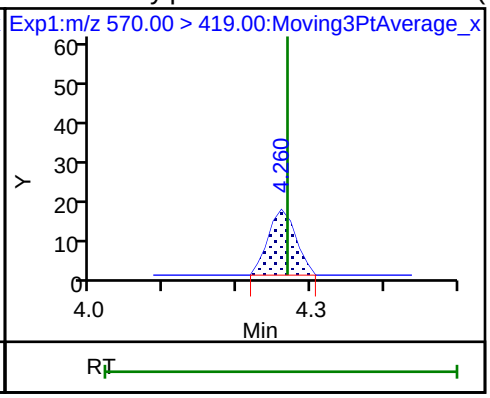
22 Perfluorooctanesulfonamide (M)



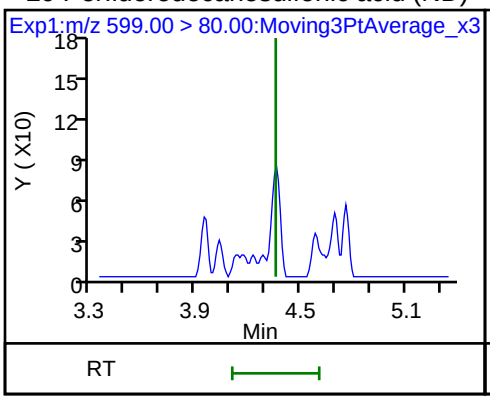

D 27 d3-NMeFOSAA (M)



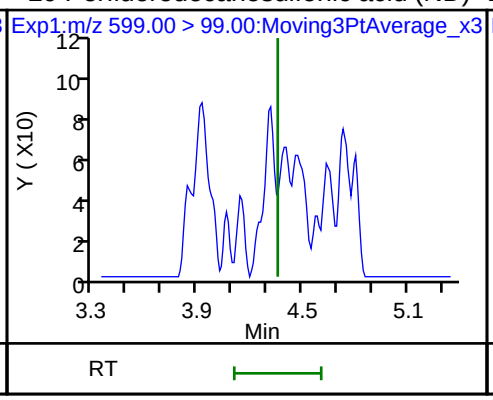

28 N-methylperfluorooctanesulfonami (M)



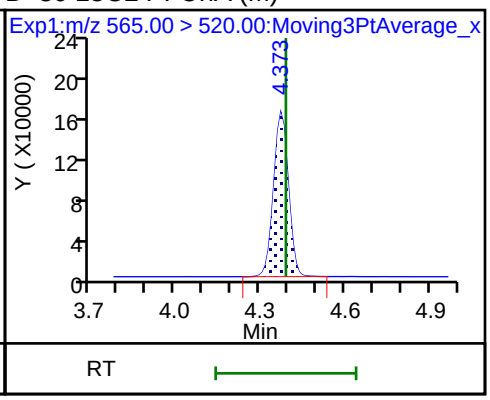

29 Perfluorodecanesulfonic acid (ND)



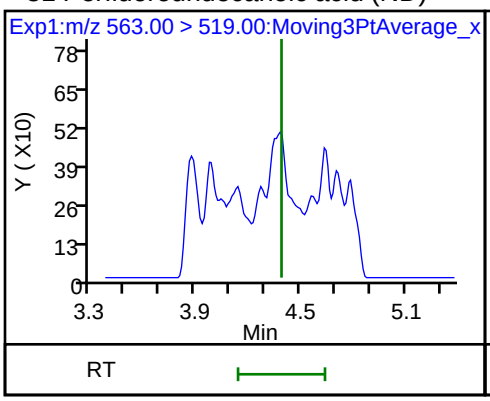

29 Perfluorodecanesulfonic acid (ND)



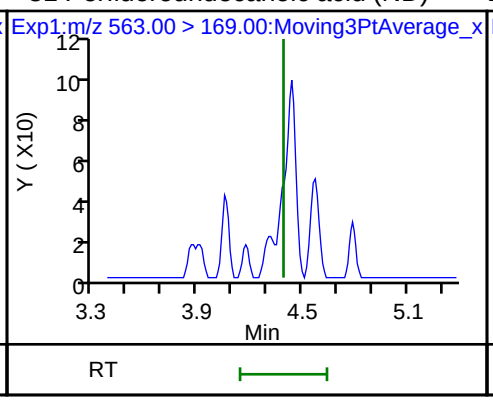

D 30 13C2 PFUnA (M)



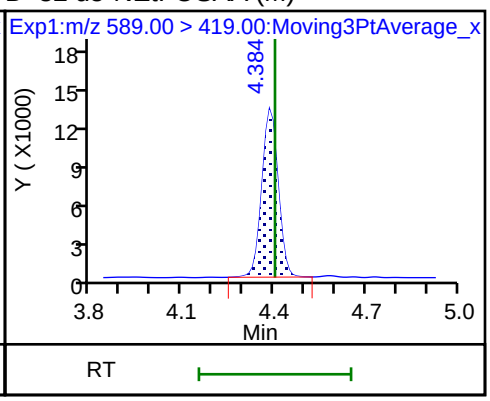

31 Perfluoroundecanoic acid (ND)



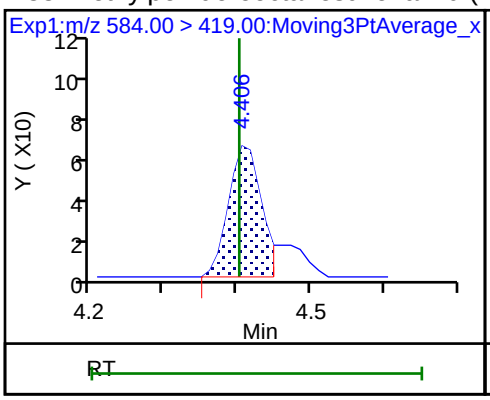

31 Perfluoroundecanoic acid (ND)



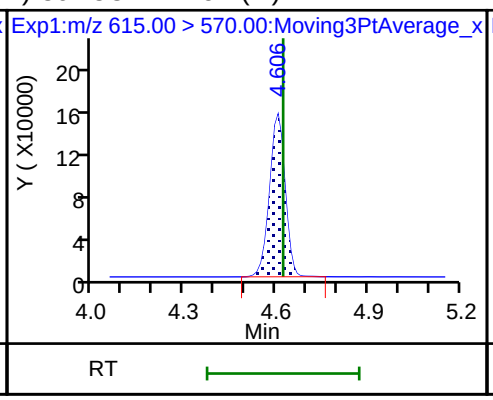

D 32 d5-NEtFOSAA (M)



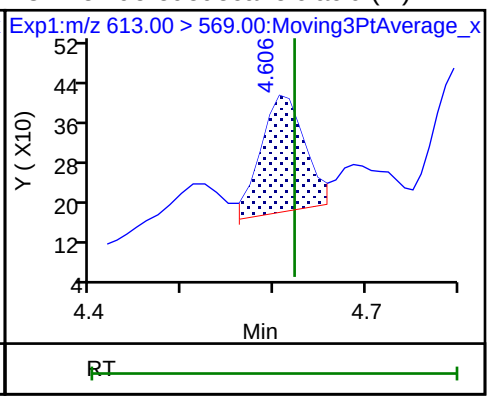

33 N-ethylperfluorooctanesulfonamid (ND)



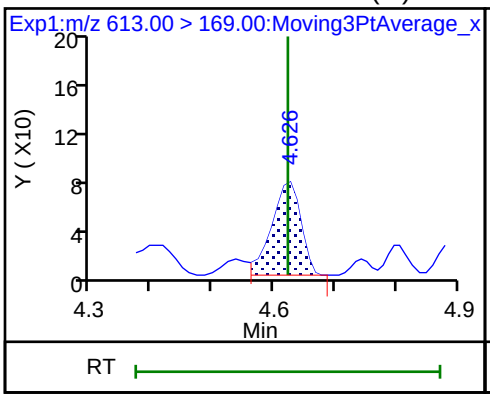

D 36 13C2 PFDoA (M)



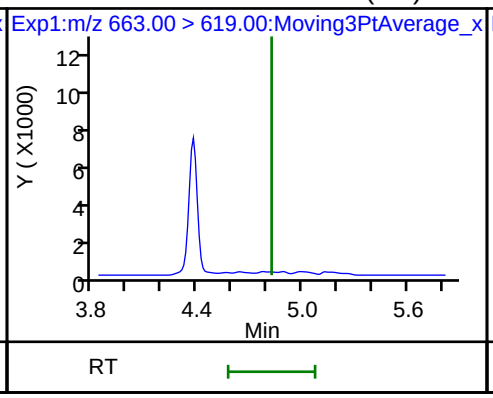

37 Perfluorododecanoic acid (M)



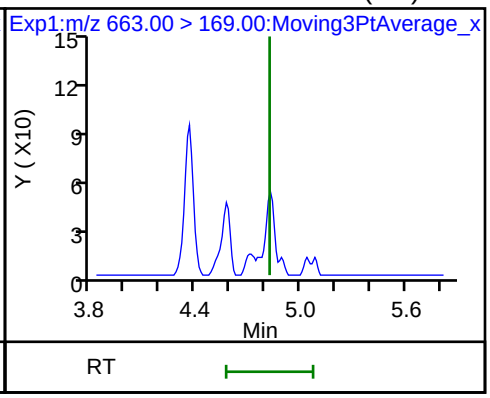
37 Perfluorododecanoic acid (M)



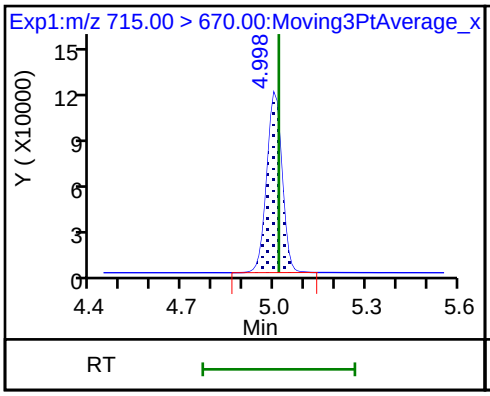

41 Perfluorotridecanoic acid (ND)



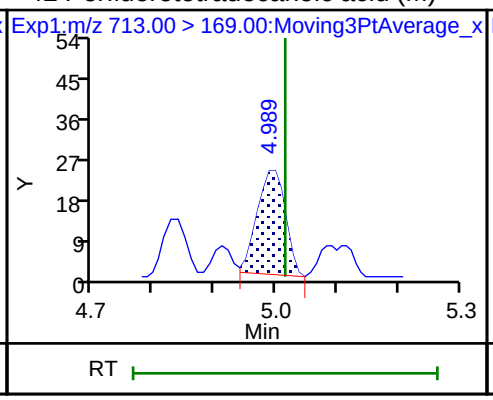

41 Perfluorotridecanoic acid (ND)



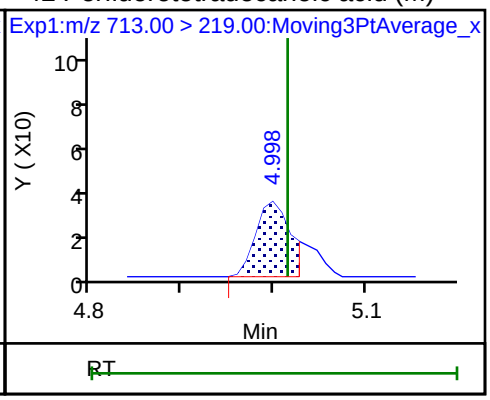

D 43 13C2 PFTeDA




42 Perfluorotetradecanoic acid (M)




42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

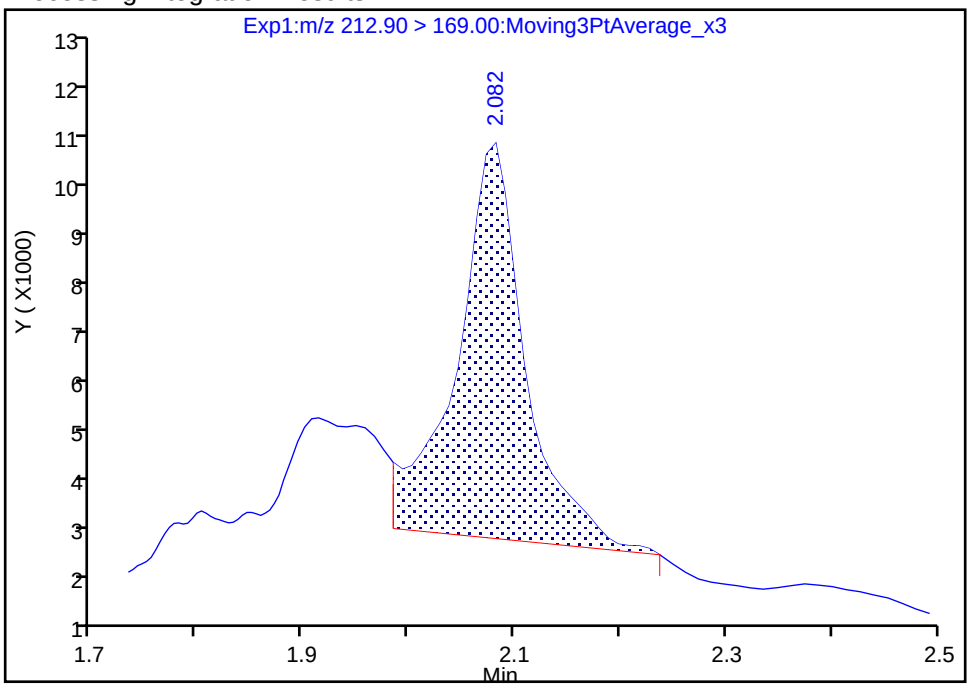
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

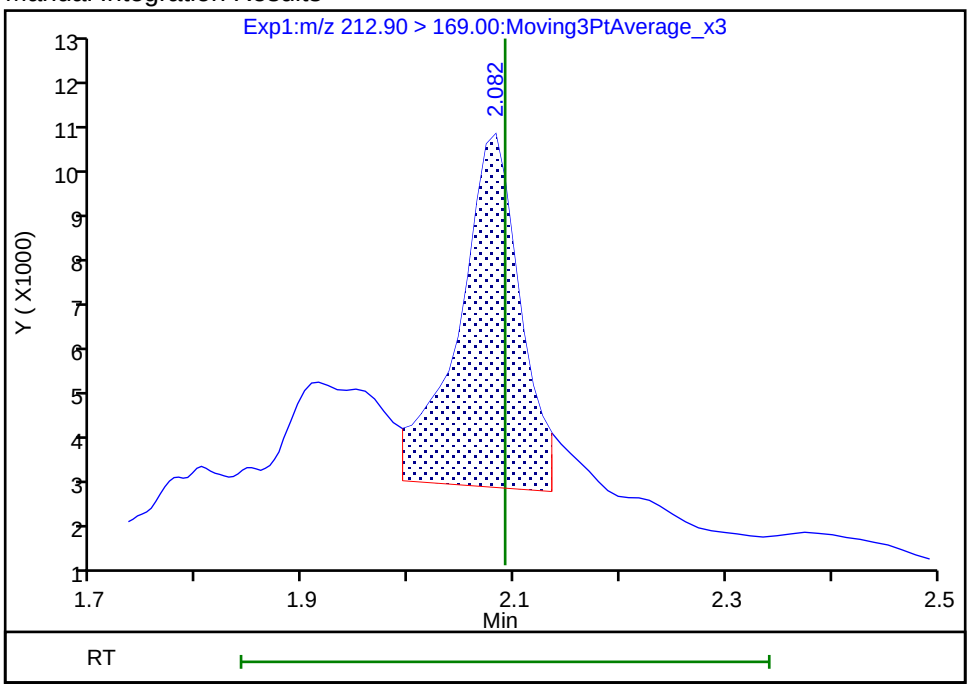
Processing Integration Results

RT: 2.08
Area: 31104
Amount: 0.027027
Amount Units: ng/ml




Manual Integration Results

RT: 2.08
Area: 27402
Amount: 0.023810
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:22:35

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

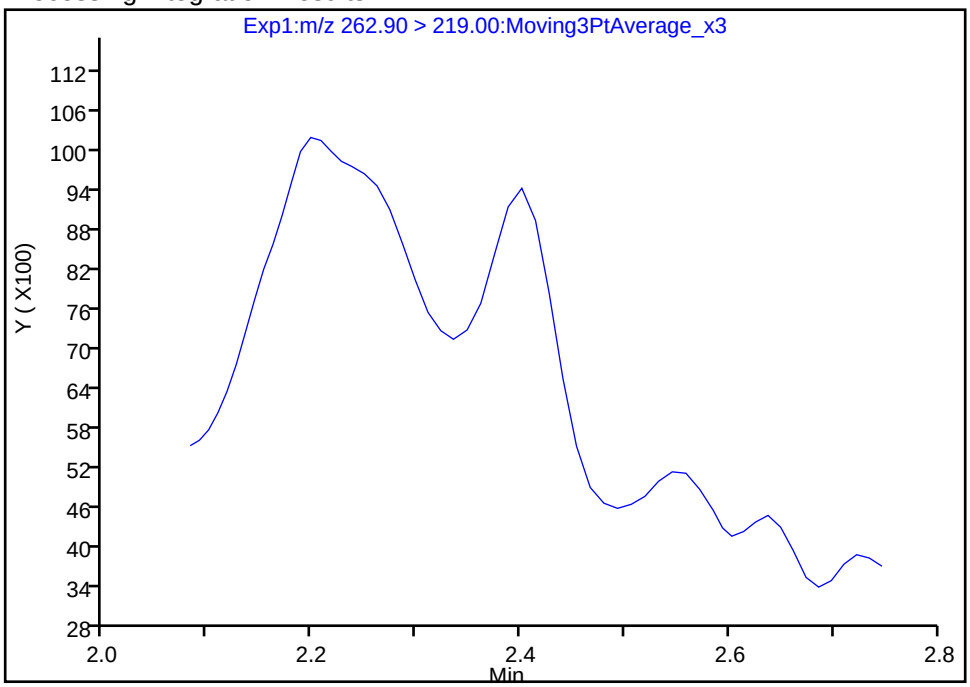
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

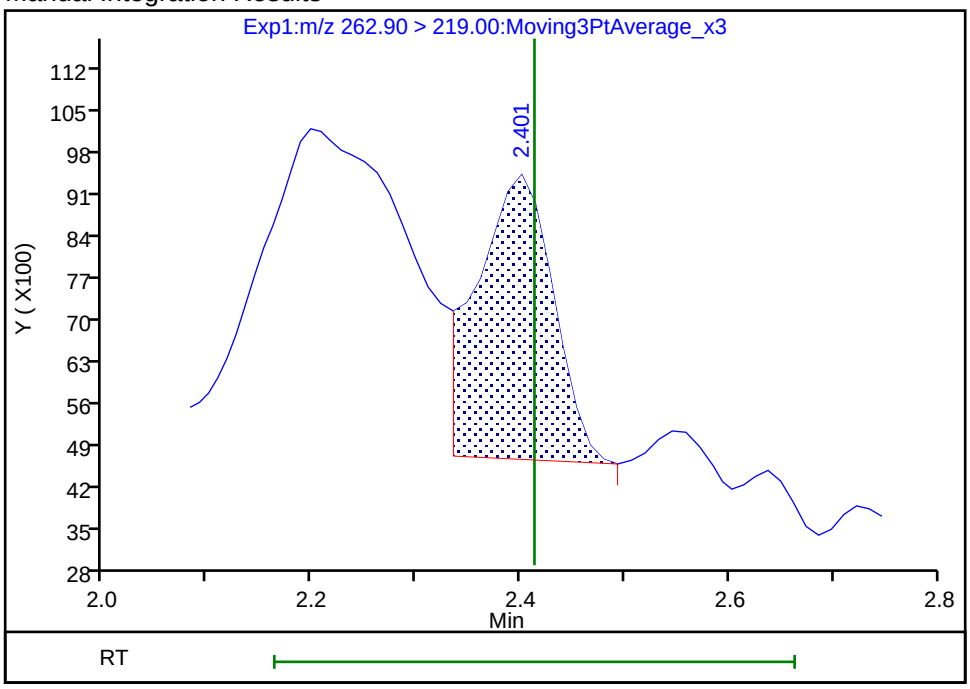
Not Detected
Expected RT: 2.41

Processing Integration Results




Manual Integration Results

RT: 2.40
Area: 23866
Amount: 0.025697
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:22:57
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

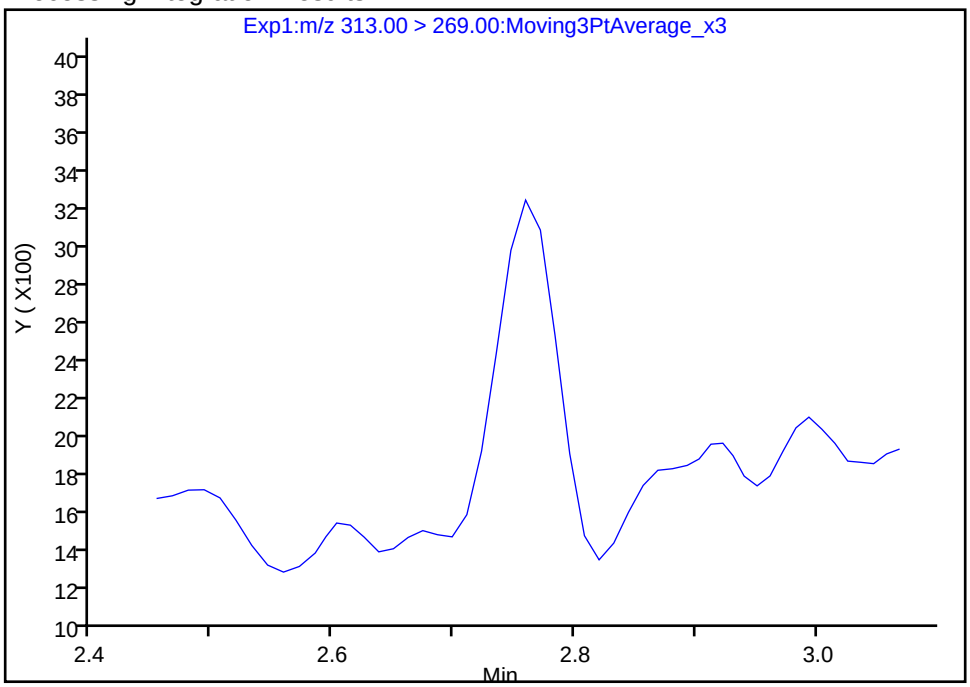
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

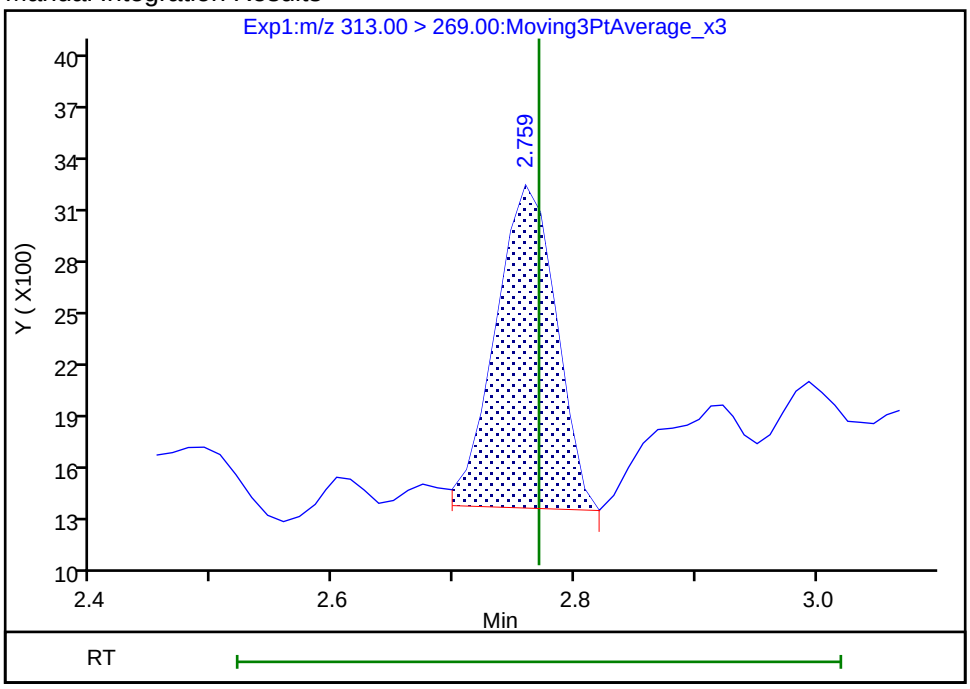
Not Detected
Expected RT: 2.77

Processing Integration Results




Manual Integration Results

RT: 2.76
Area: 6372
Amount: 0.006462
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:23:26
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

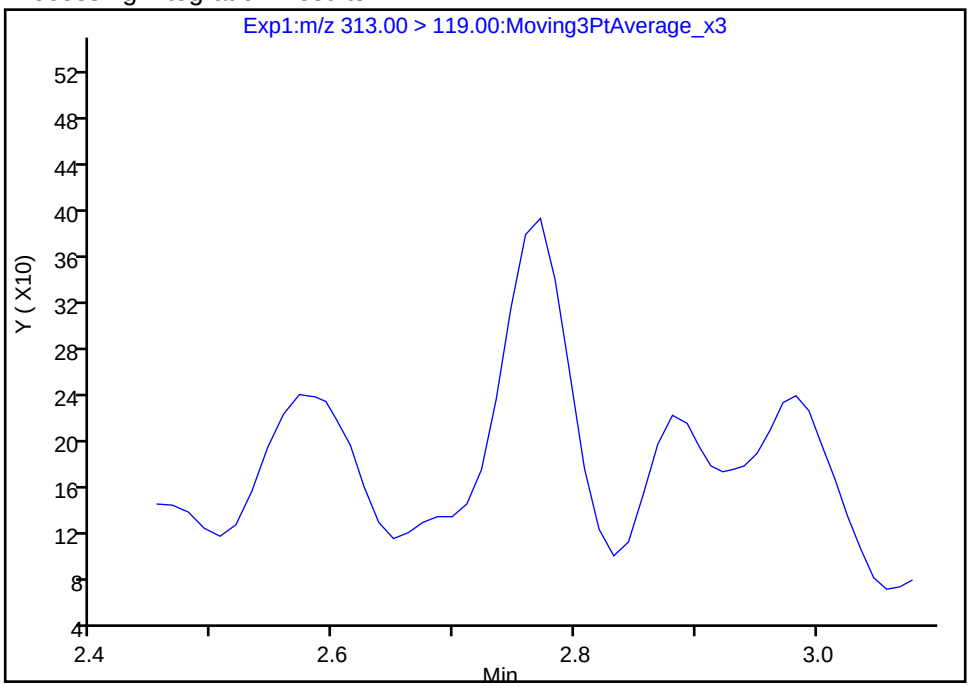
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

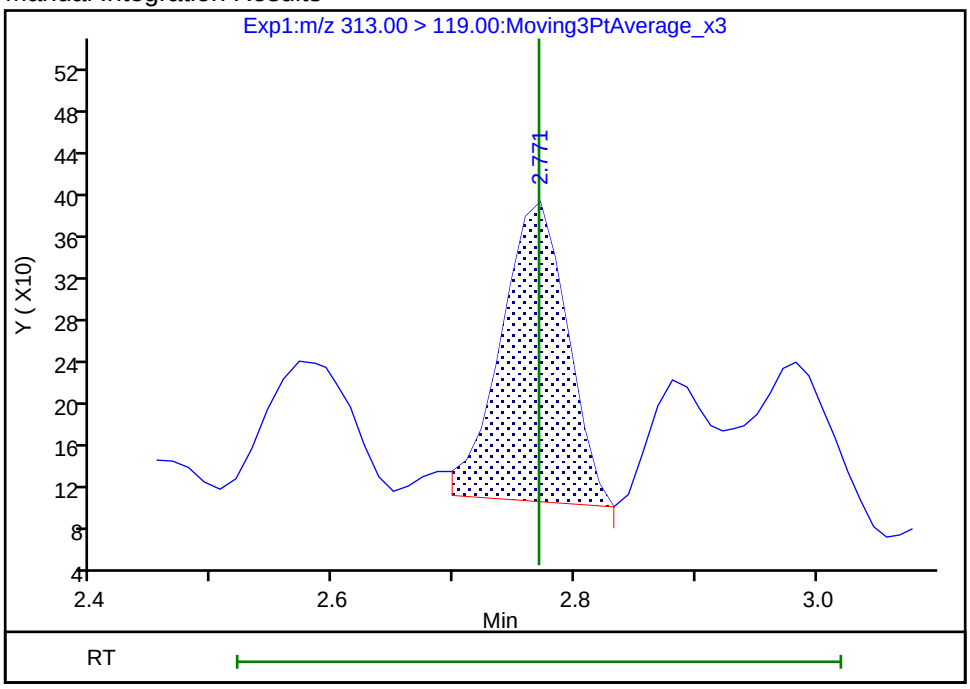
Not Detected
Expected RT: 2.77

Processing Integration Results




Manual Integration Results

RT: 2.77
Area: 1094
Amount: 0.006462
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:23:35
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

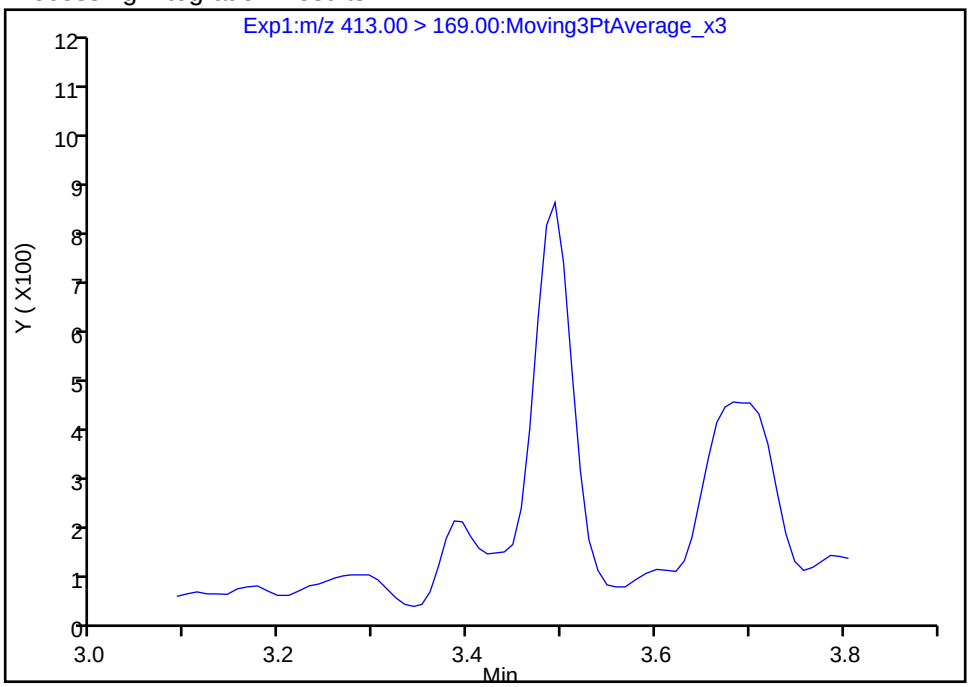
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

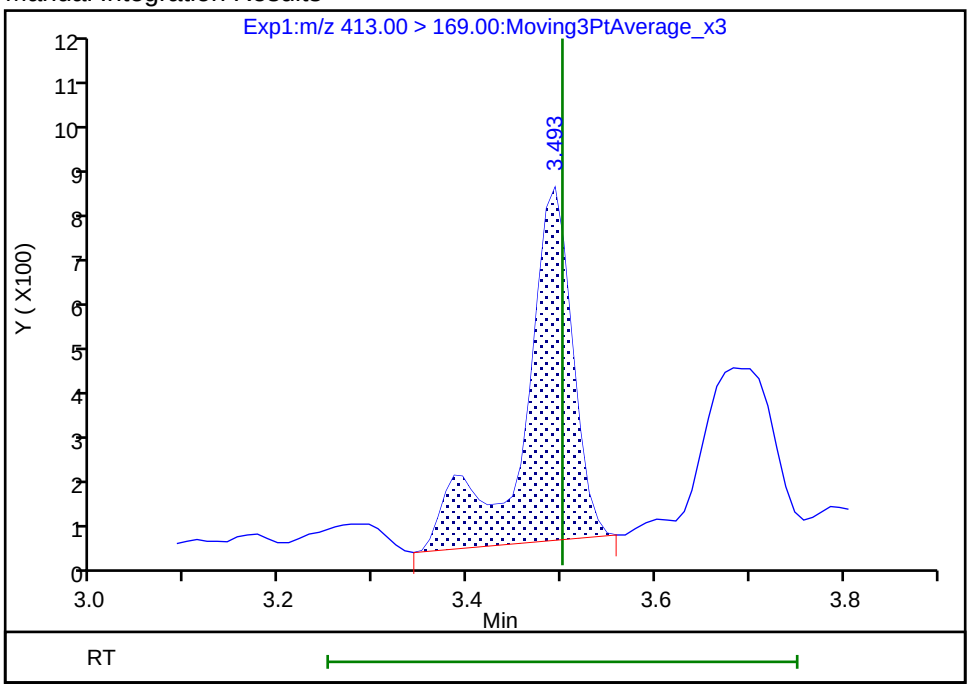
Not Detected
Expected RT: 3.50

Processing Integration Results




Manual Integration Results

RT: 3.49
Area: 2812
Amount: 0.007945
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:30:58
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

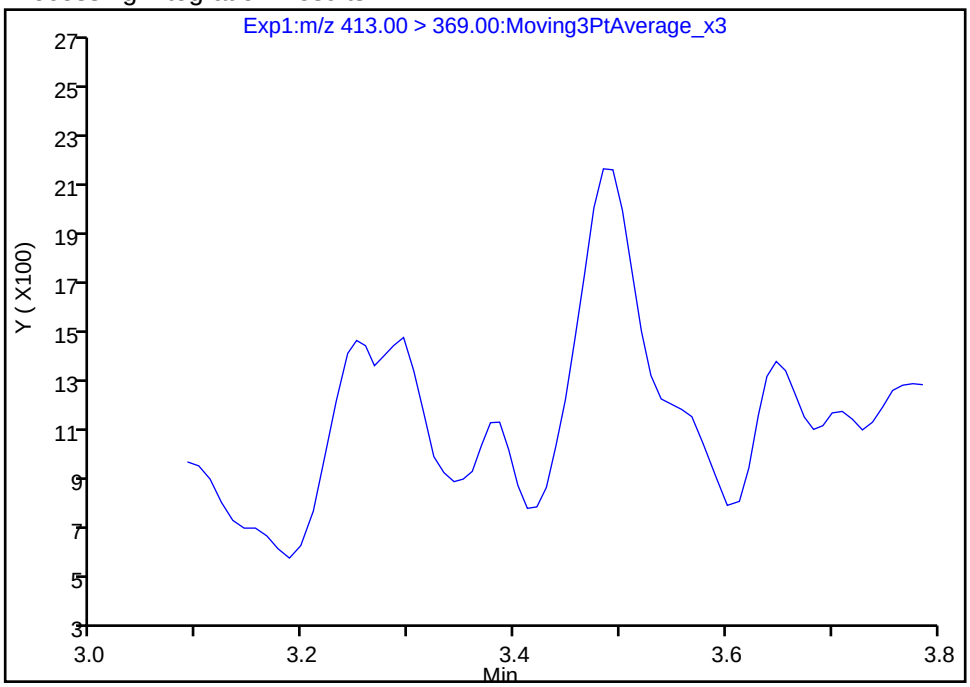
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

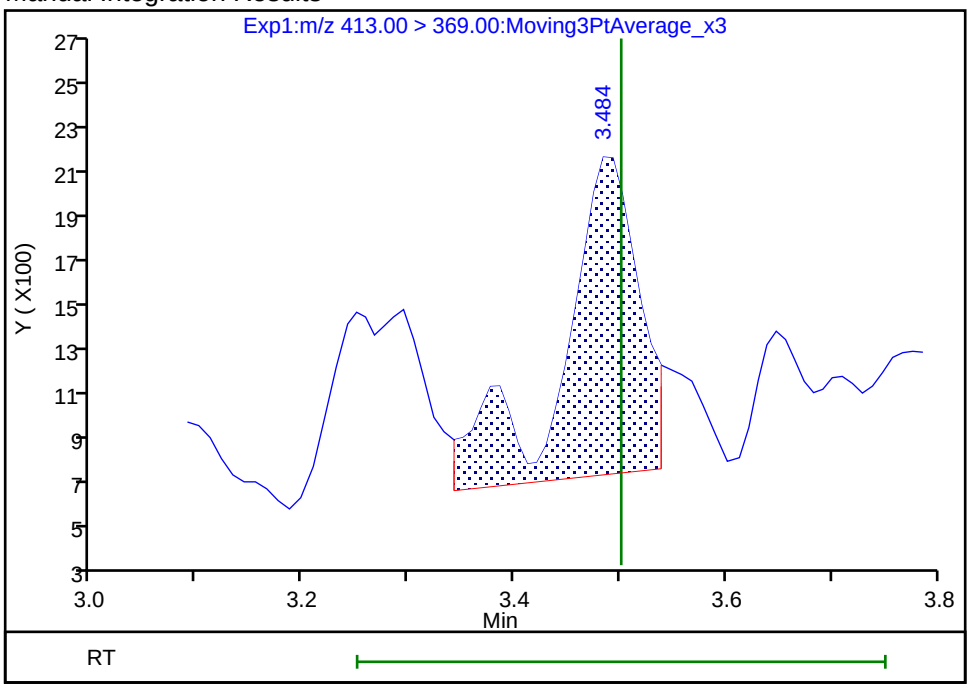
Not Detected
Expected RT: 3.50

Processing Integration Results




Manual Integration Results

RT: 3.48
Area: 7008
Amount: 0.007945
Amount Units: ng/ml




Reviewer: deannd, 15-Mar-2021 17:27:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

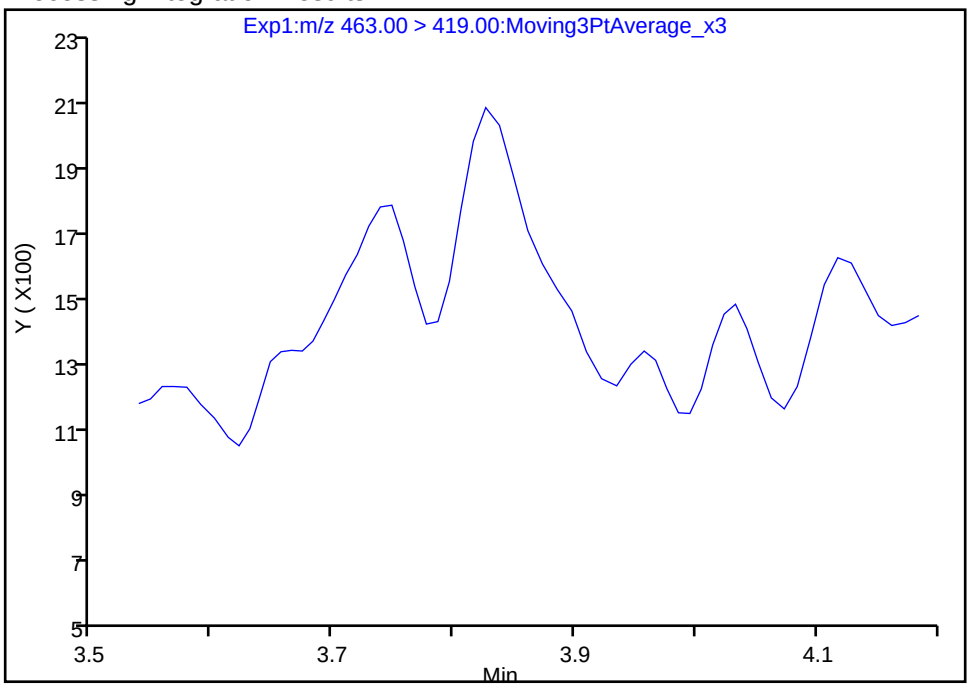
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

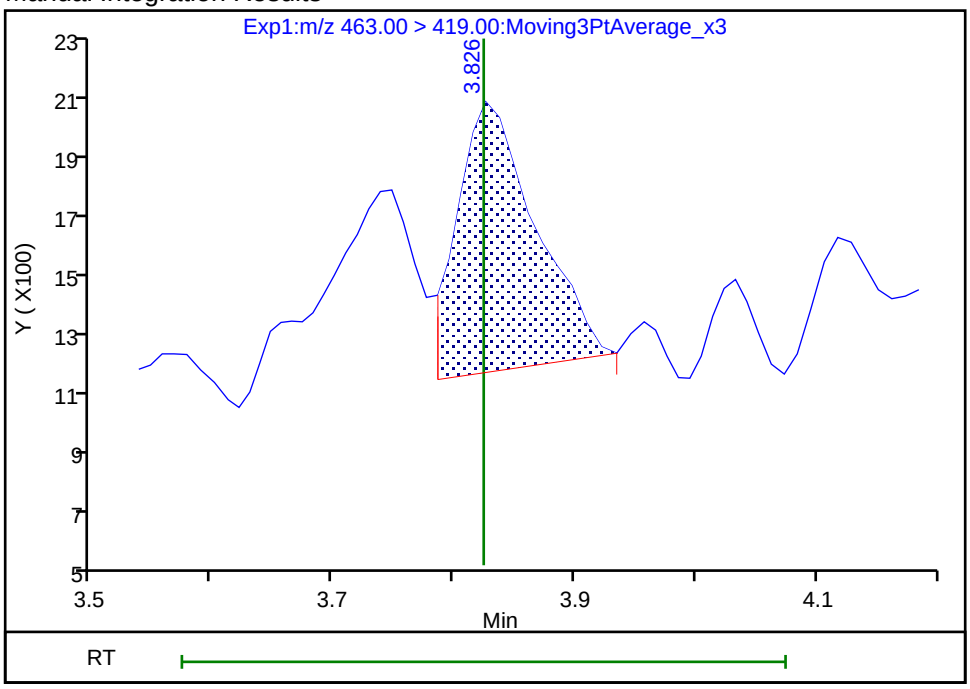
Not Detected
Expected RT: 3.82

Processing Integration Results




Manual Integration Results

RT: 3.83
Area: 3738
Amount: 0.004618
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:32:25
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

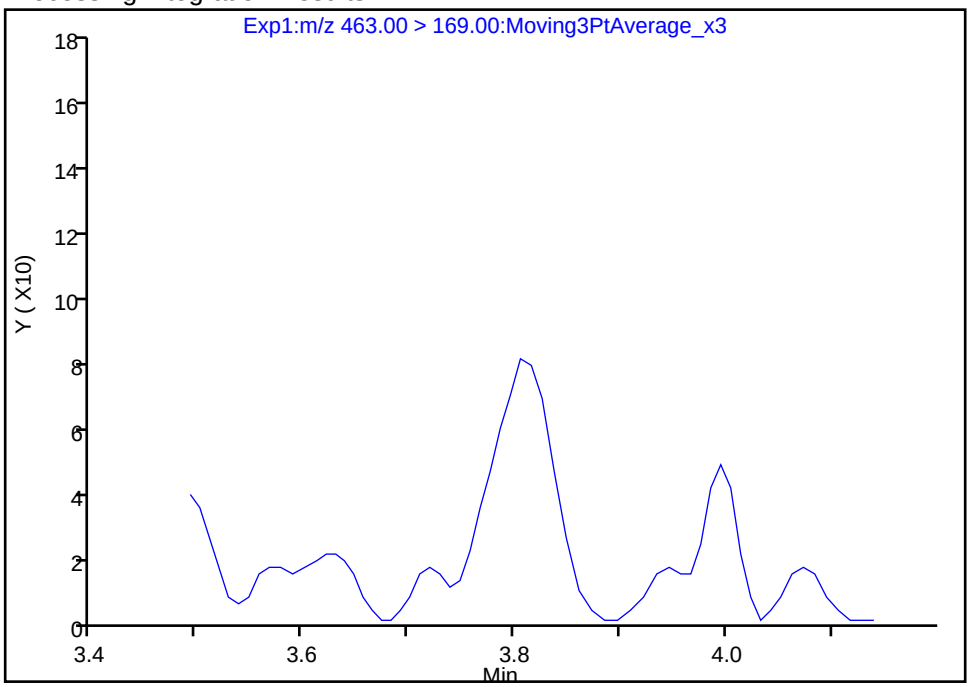
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|---|---|---|---|---|---|
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| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

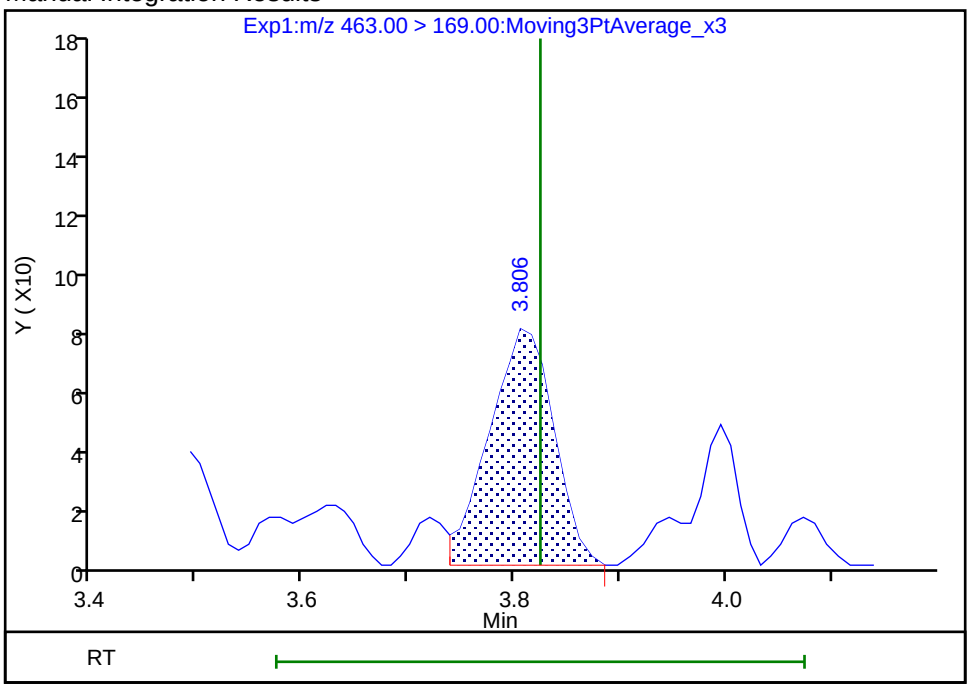
Not Detected
Expected RT: 3.82

Processing Integration Results




Manual Integration Results

RT: 3.81
Area: 334
Amount: 0.004618
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:32:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

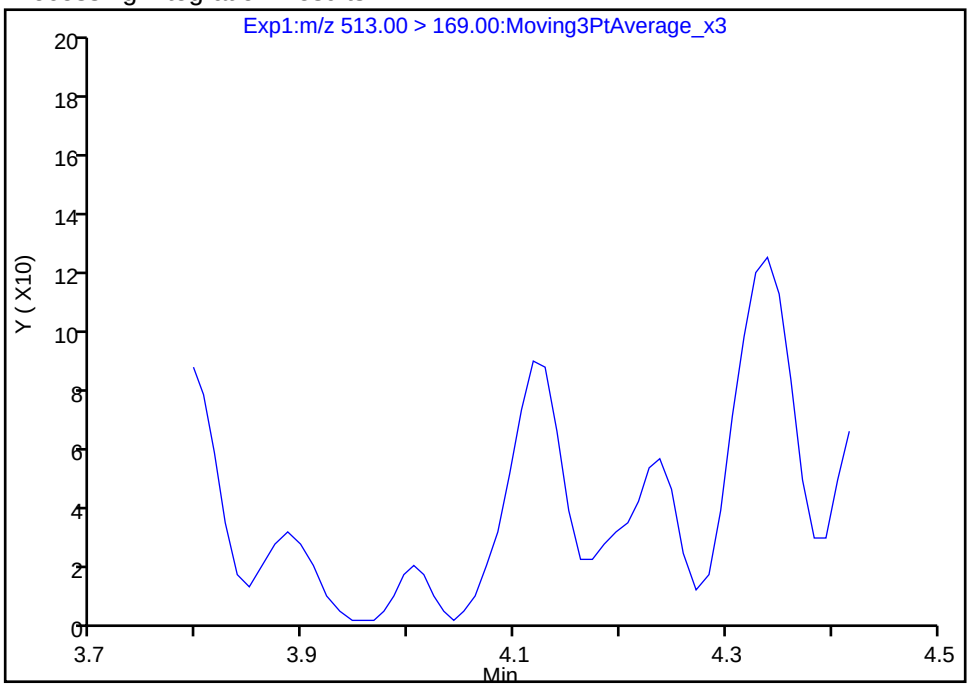
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

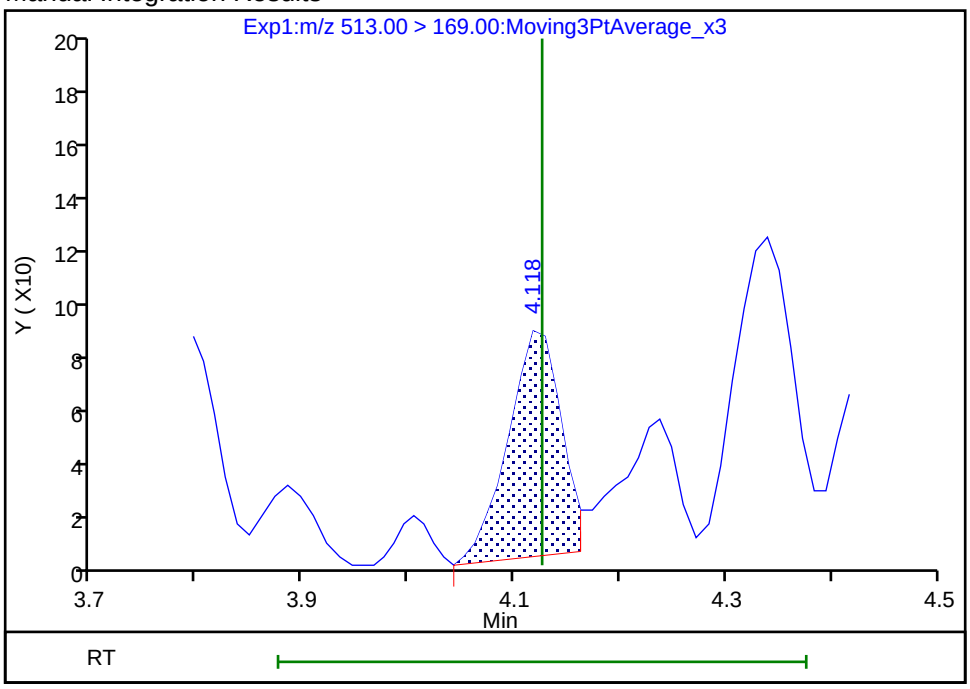
Not Detected
Expected RT: 4.13

Processing Integration Results




Manual Integration Results

RT: 4.12
Area: 283
Amount: 0.001530
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:33:56
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

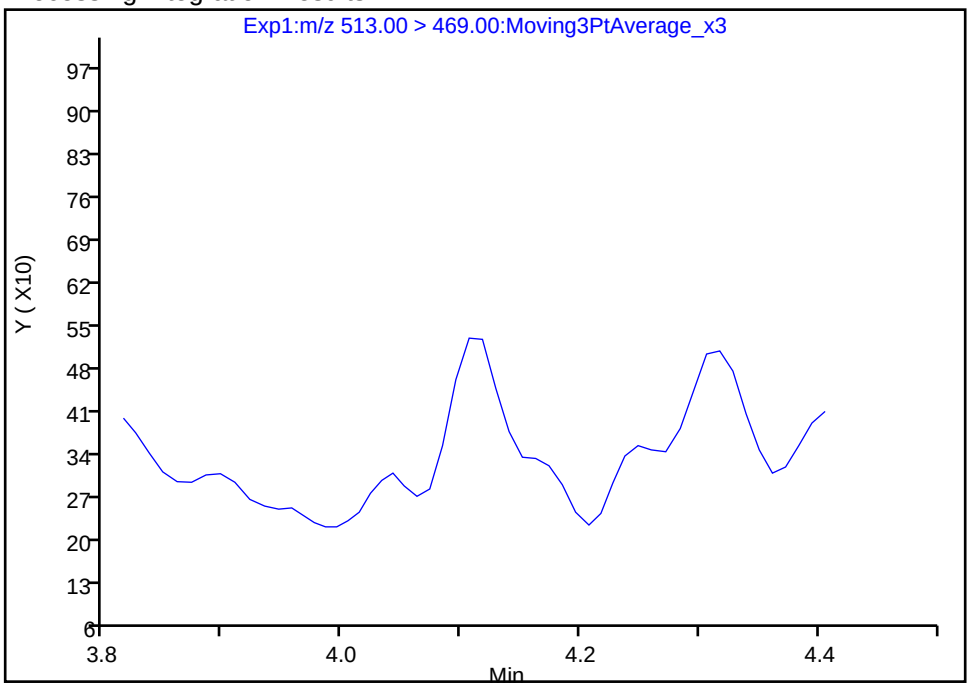
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

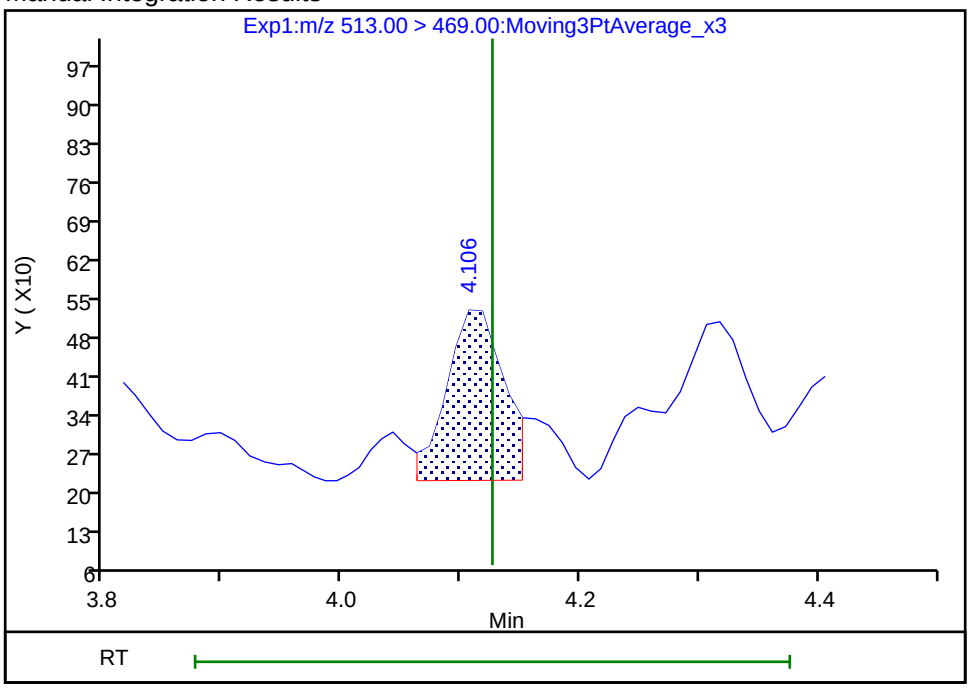
Not Detected
Expected RT: 4.13

Processing Integration Results




Manual Integration Results

RT: 4.11
Area: 1011
Amount: 0.001530
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:34:07
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

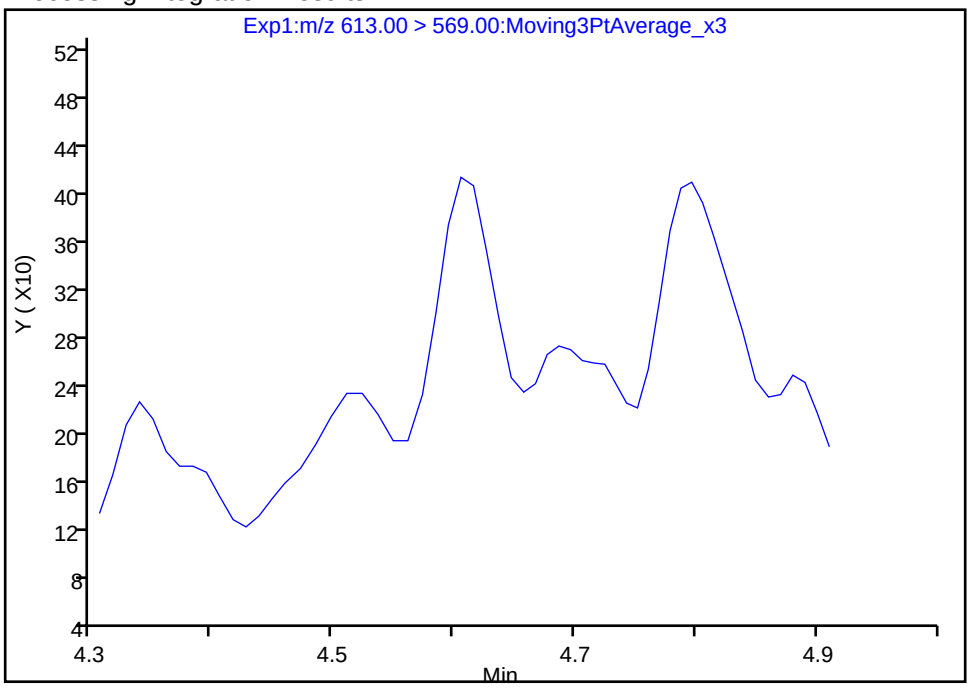
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

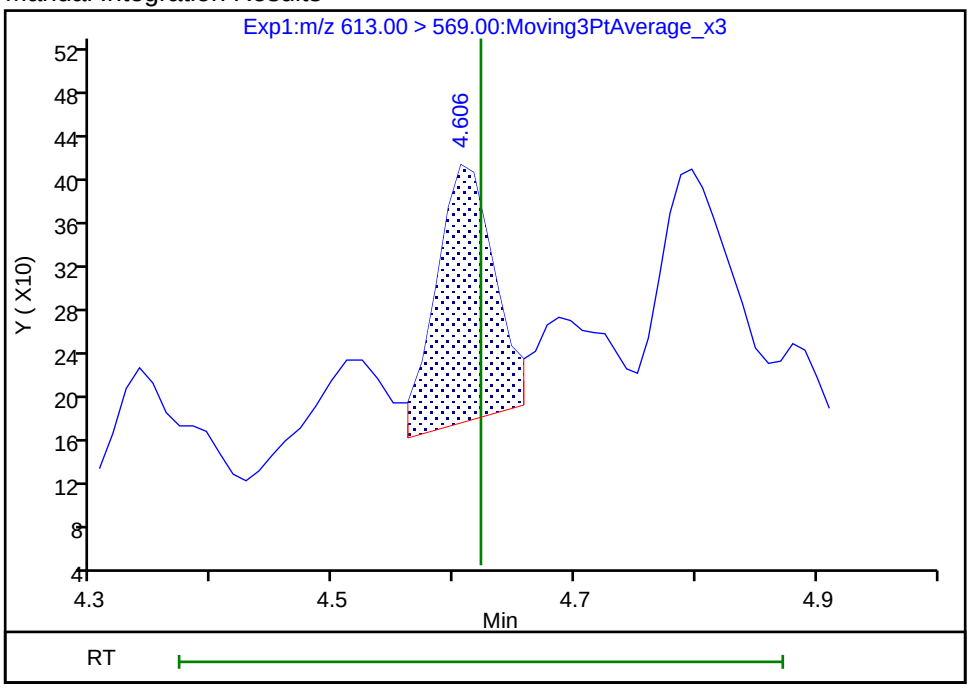
Not Detected
Expected RT: 4.62

Processing Integration Results




Manual Integration Results

RT: 4.61
Area: 776
Amount: 0.001608
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:35:48
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

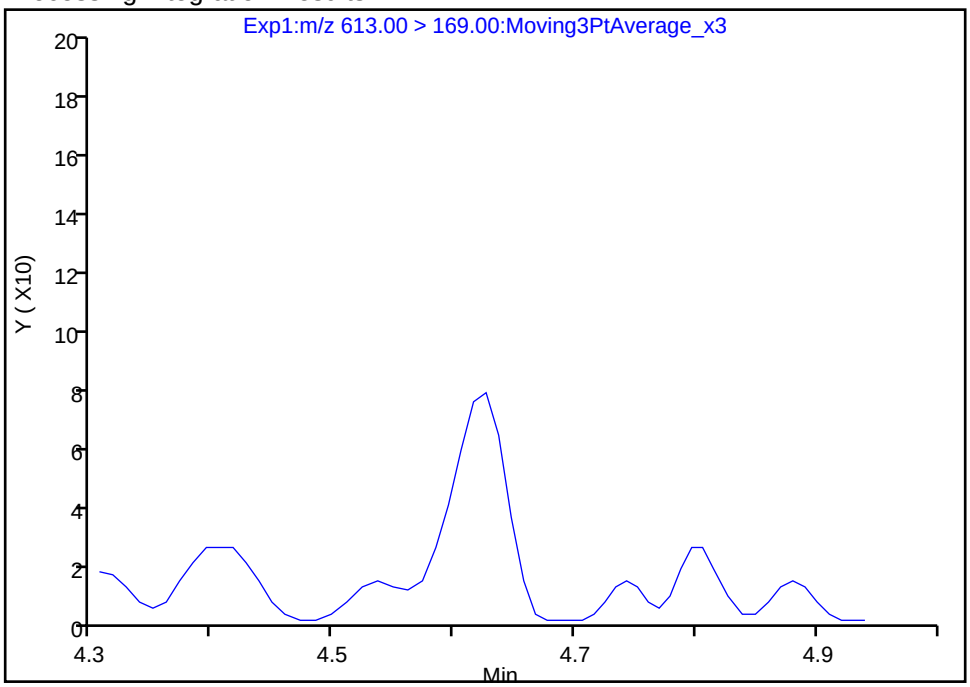
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

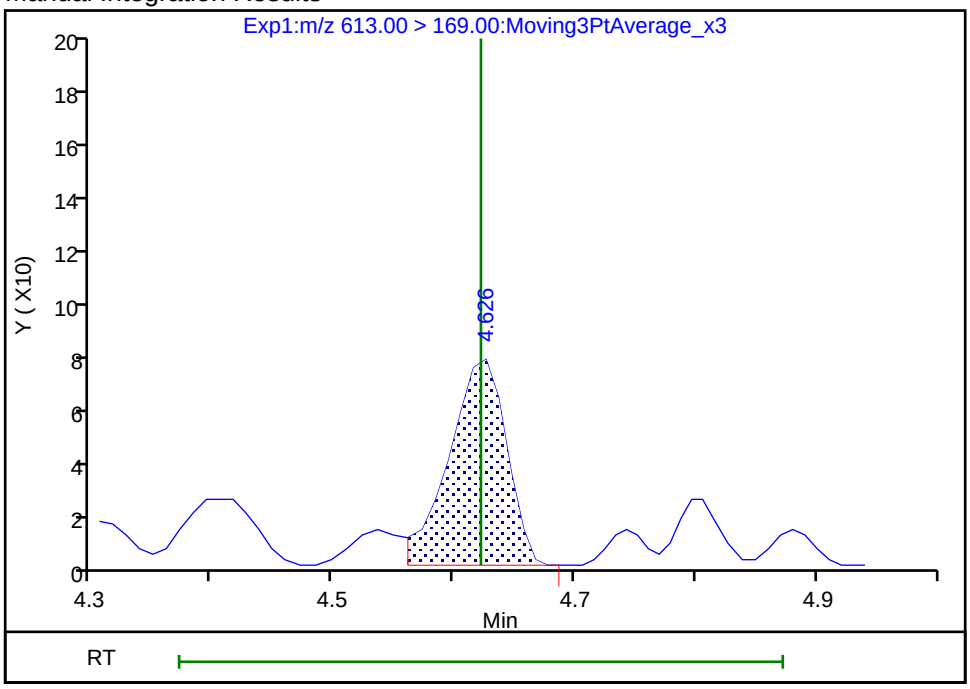
Not Detected
Expected RT: 4.62

Processing Integration Results




Manual Integration Results

RT: 4.63
Area: 246
Amount: 0.001608
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:35:50
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

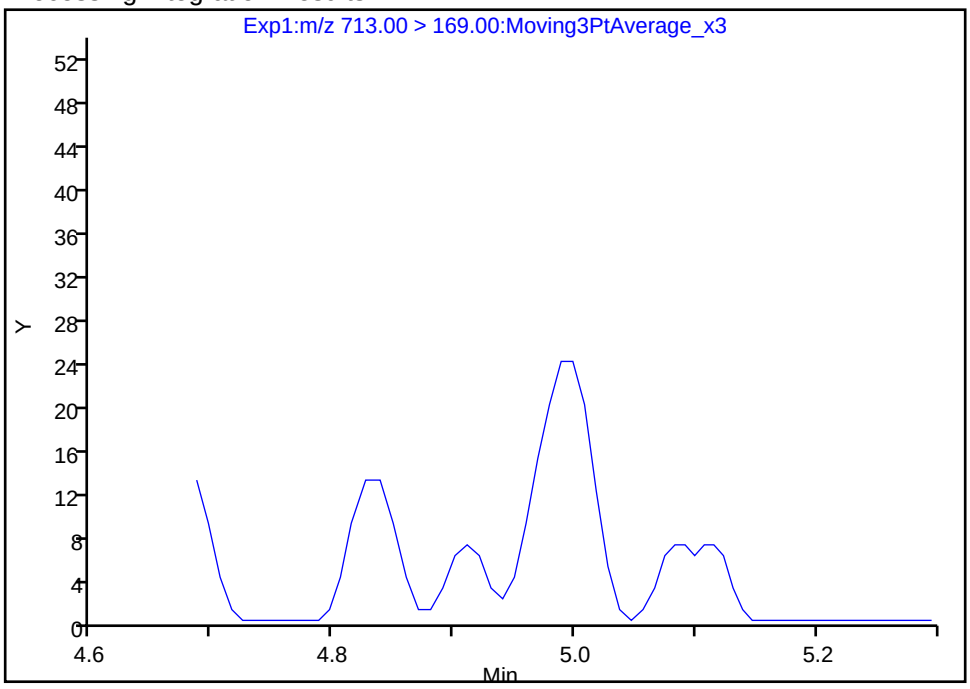
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

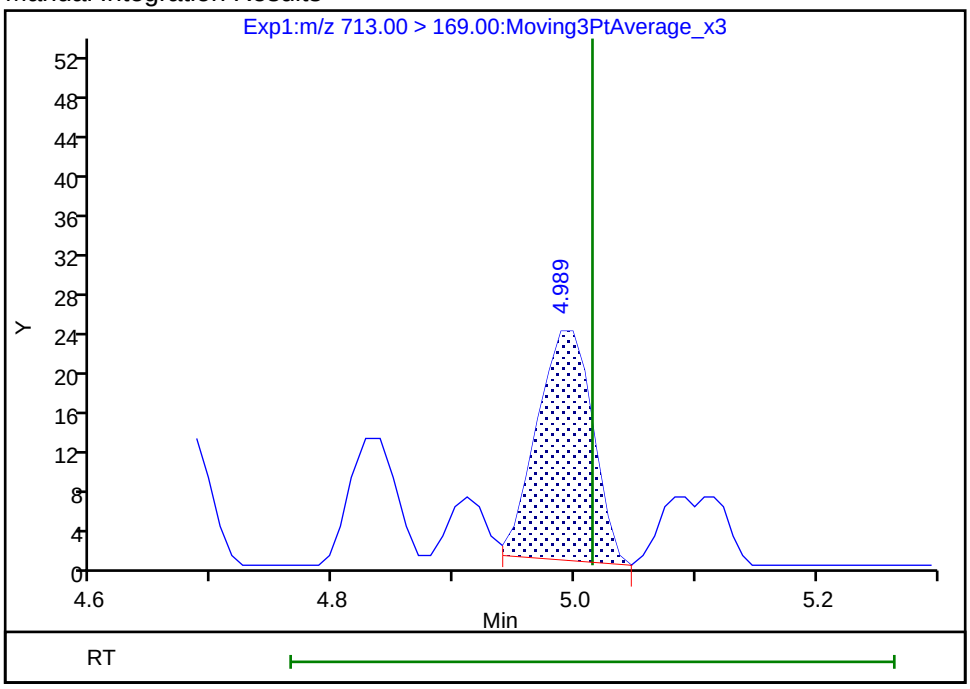
Not Detected
Expected RT: 5.01

Processing Integration Results




Manual Integration Results

RT: 4.99
Area: 75
Amount: 0.001299
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:36:30
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

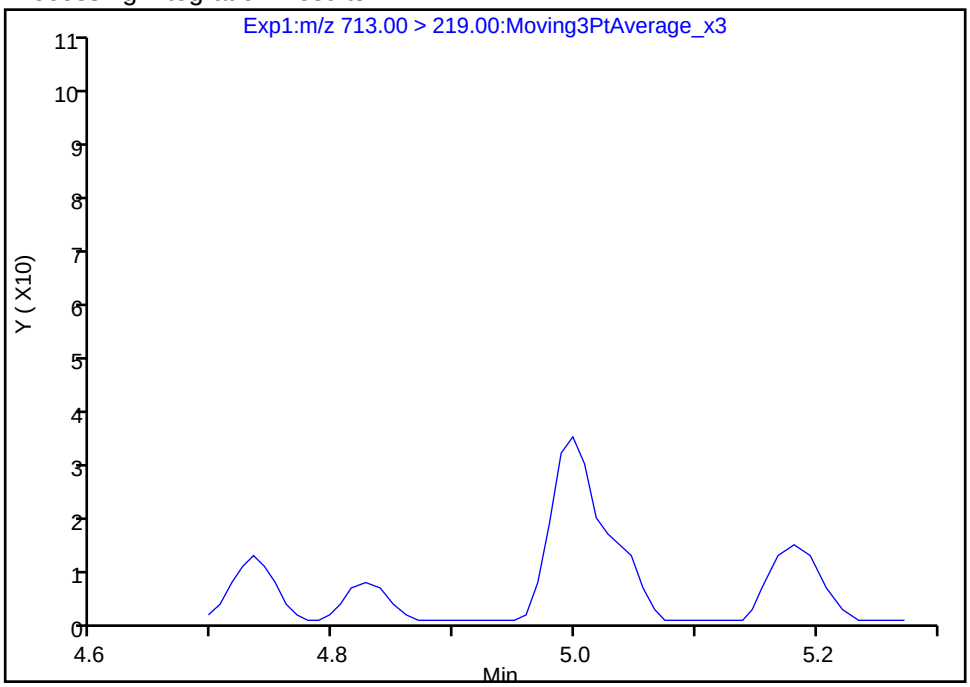
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

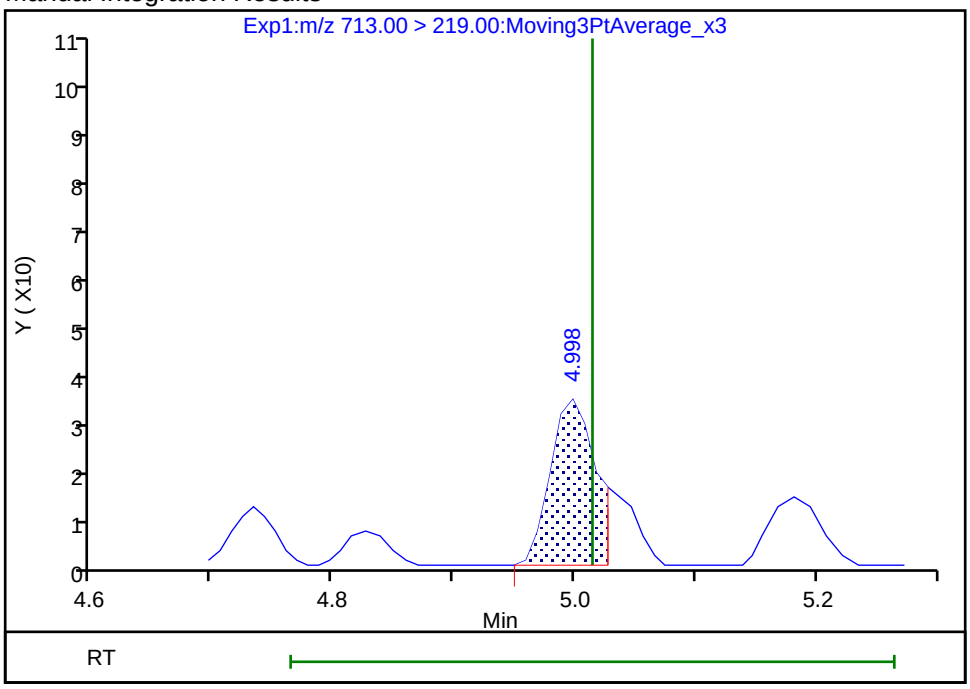
Not Detected
Expected RT: 5.01

Processing Integration Results




Manual Integration Results

RT: 5.00
Area: 85
Amount: 0.001299
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:36:32
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

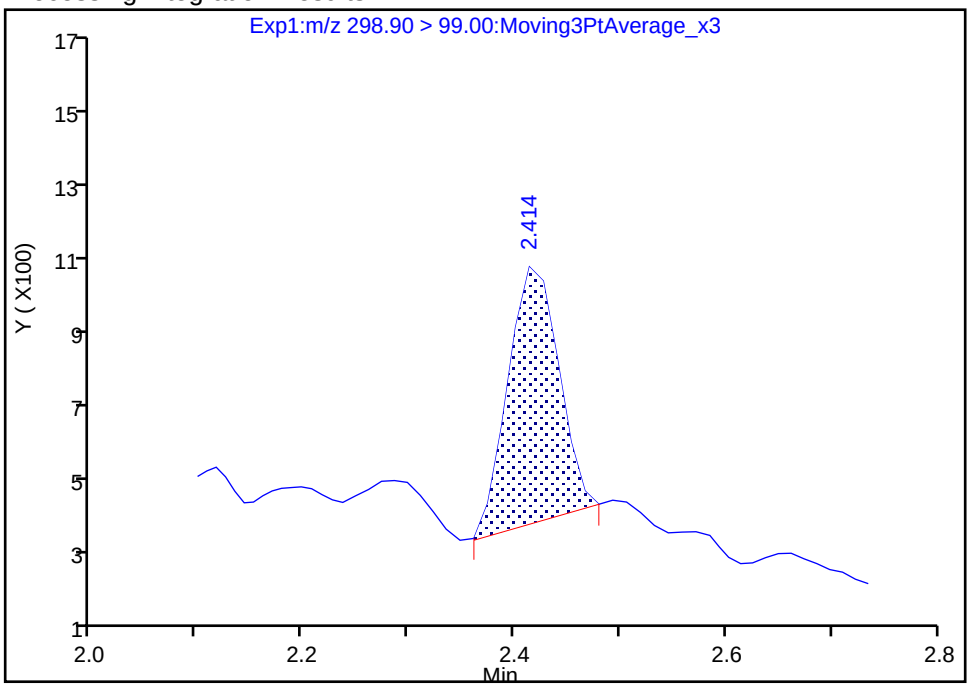
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

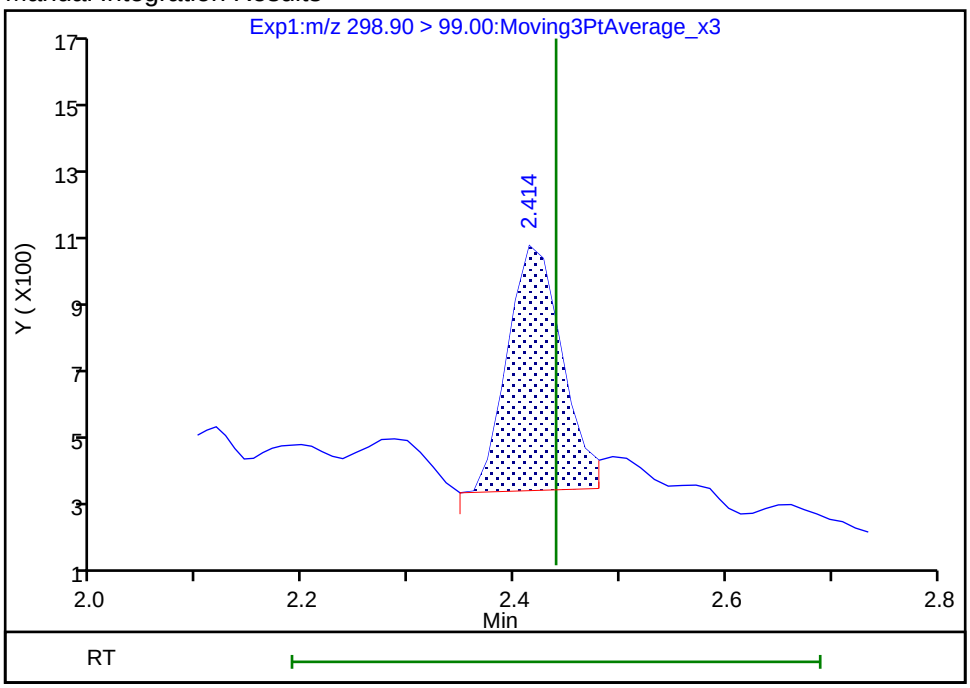
Processing Integration Results

RT: 2.41
Area: 2305
Amount: 0.006333
Amount Units: ng/ml




Manual Integration Results

RT: 2.41
Area: 2600
Amount: 0.006333
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:23:09

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

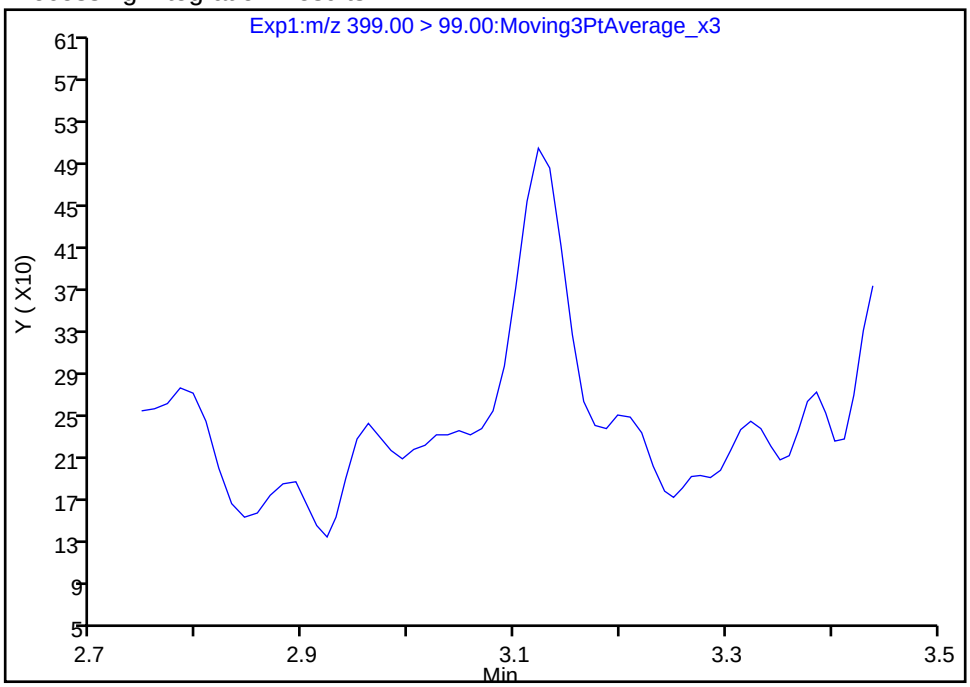
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

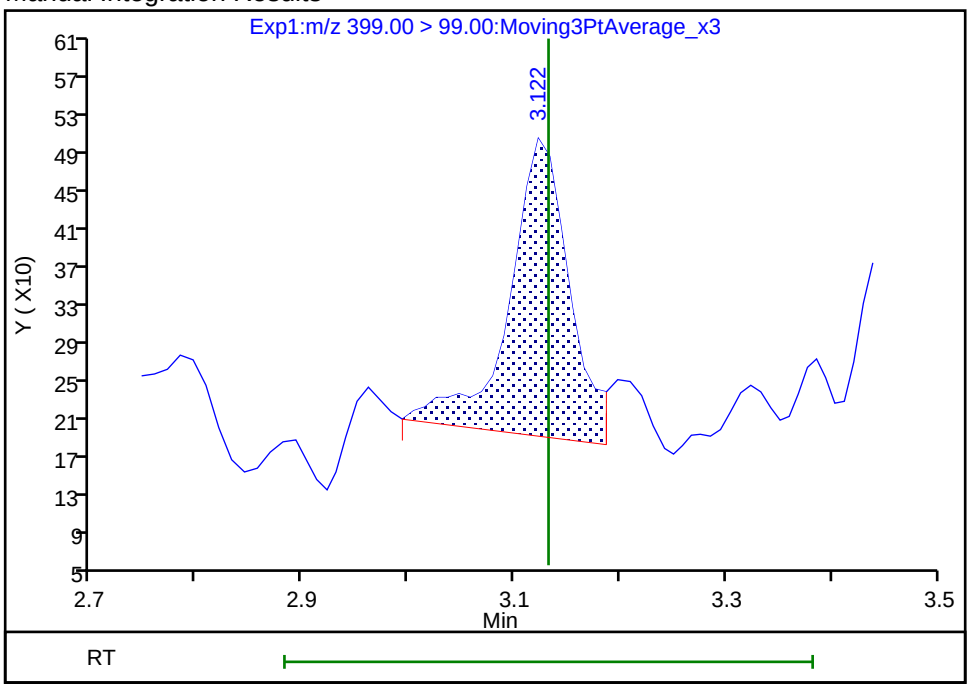
Not Detected
Expected RT: 3.13

Processing Integration Results




Manual Integration Results

RT: 3.12
Area: 1247
Amount: 0.005567
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:28:09
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

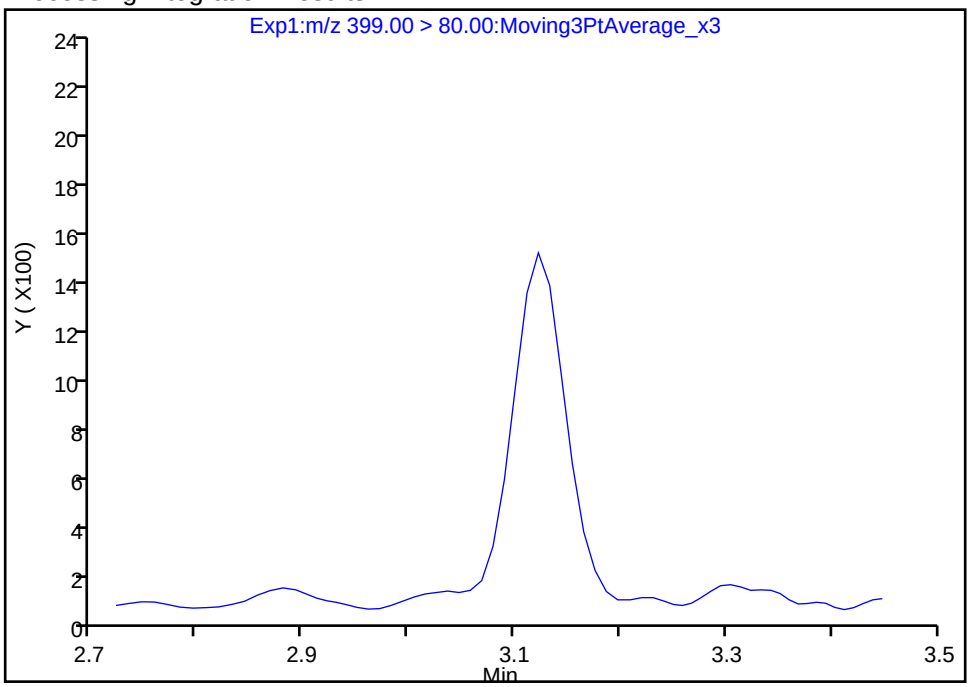
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

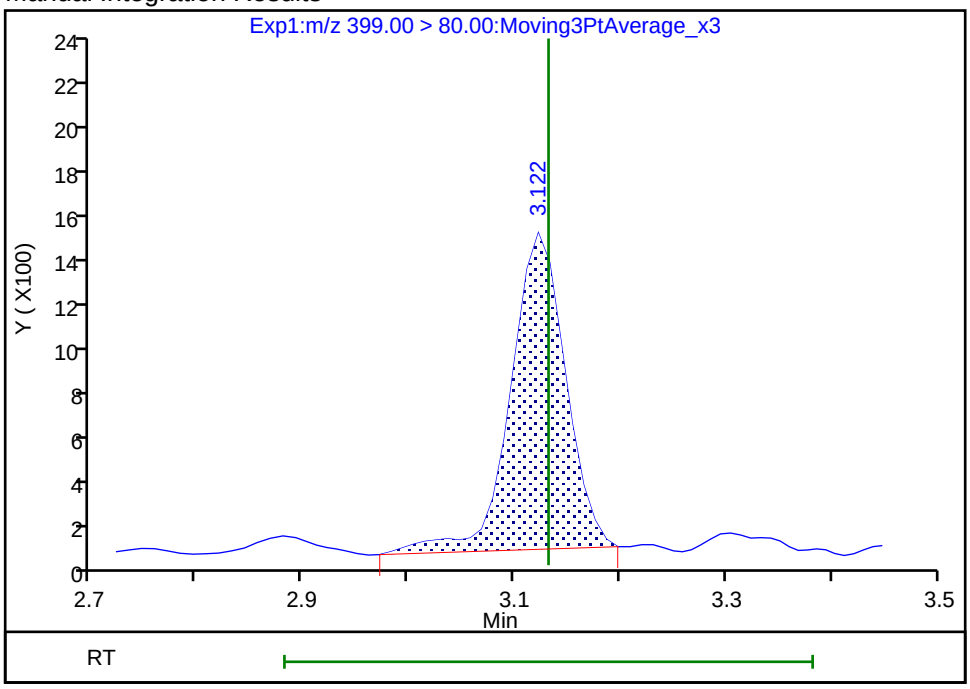
Not Detected
Expected RT: 3.13

Processing Integration Results




Manual Integration Results

RT: 3.12
Area: 5198
Amount: 0.005567
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:28:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

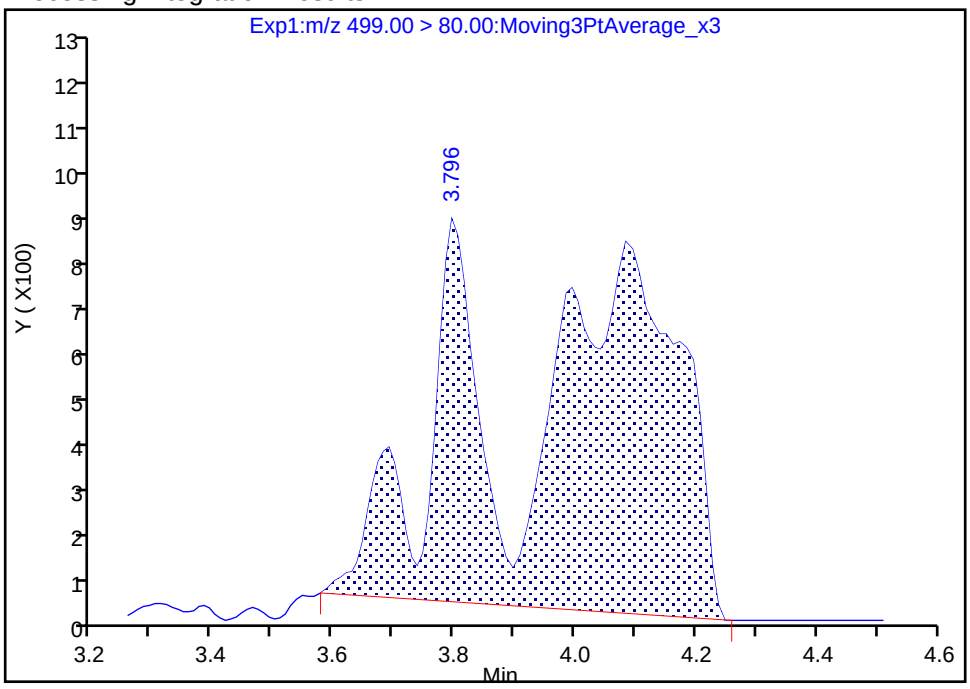
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

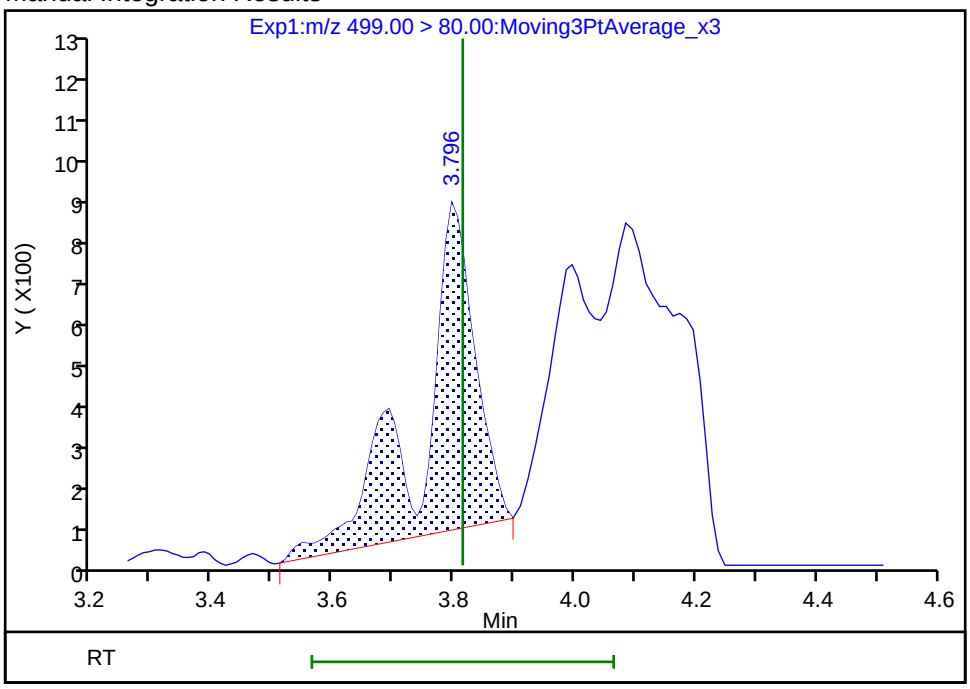
Processing Integration Results

RT: 3.80
Area: 15199
Amount: 0.025265
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 4648
Amount: 0.007726
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:31:38

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

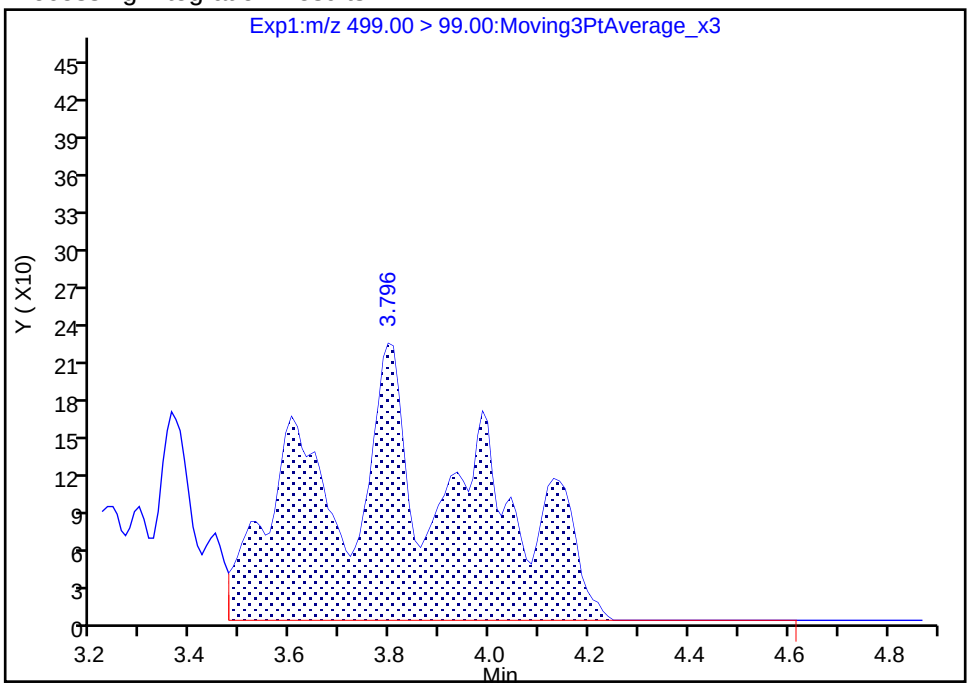
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

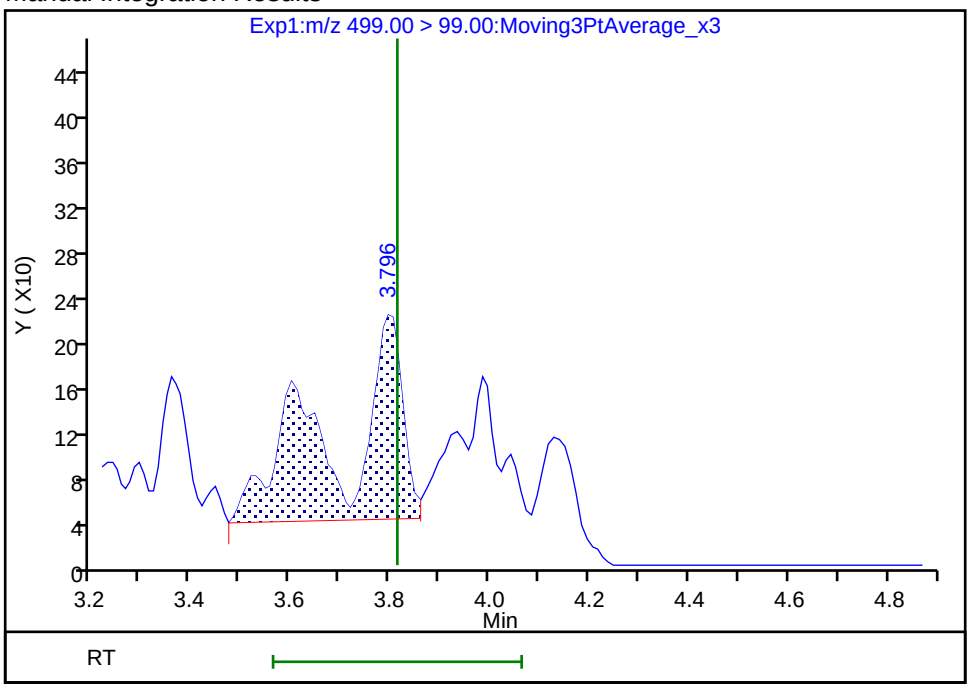
Processing Integration Results

RT: 3.80
Area: 4343
Amount: 0.025265
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 1562
Amount: 0.007726
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:31:40

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

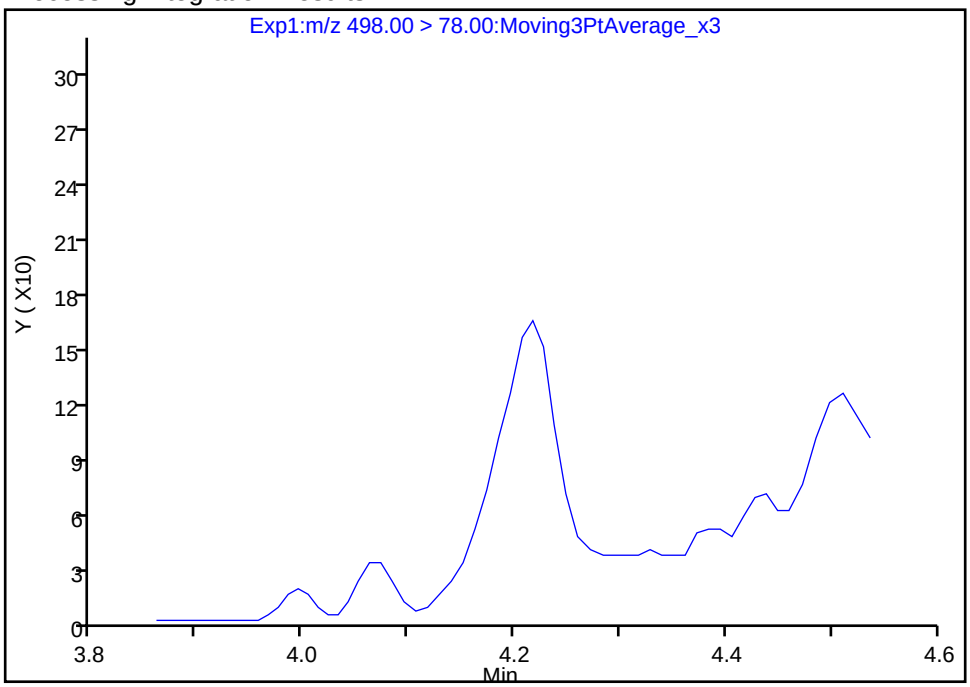
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

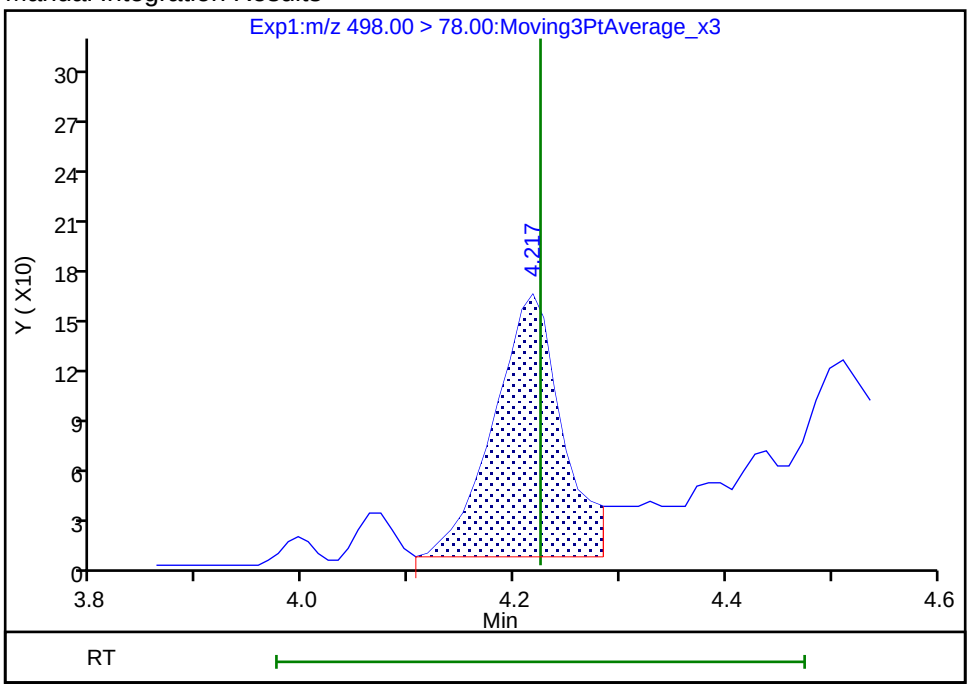
Not Detected
Expected RT: 4.22

Processing Integration Results




Manual Integration Results

RT: 4.22
Area: 691
Amount: 0.001155
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:34:38
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

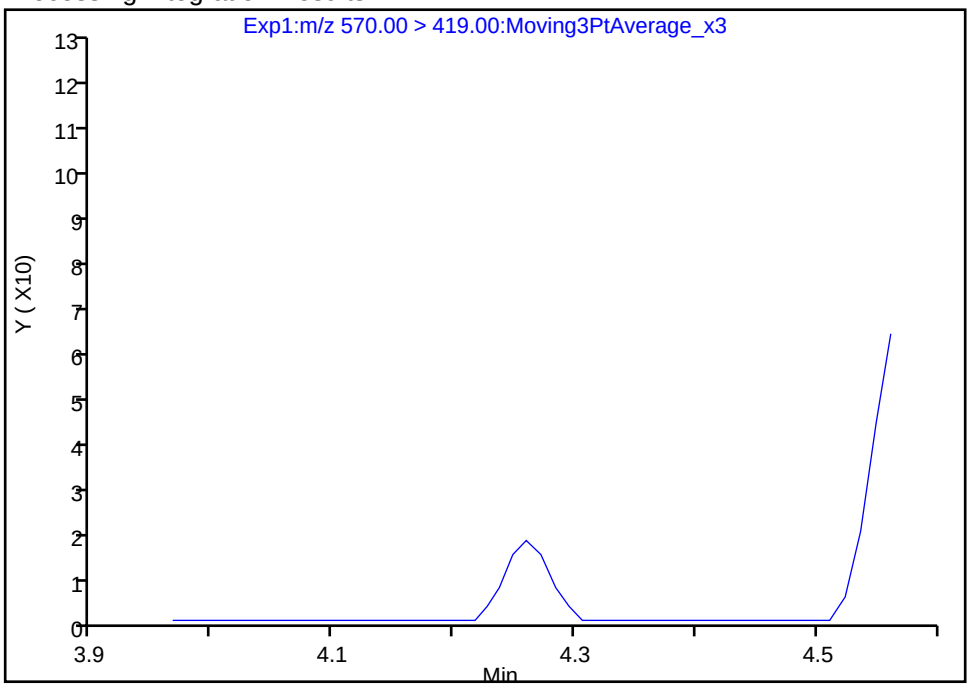
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

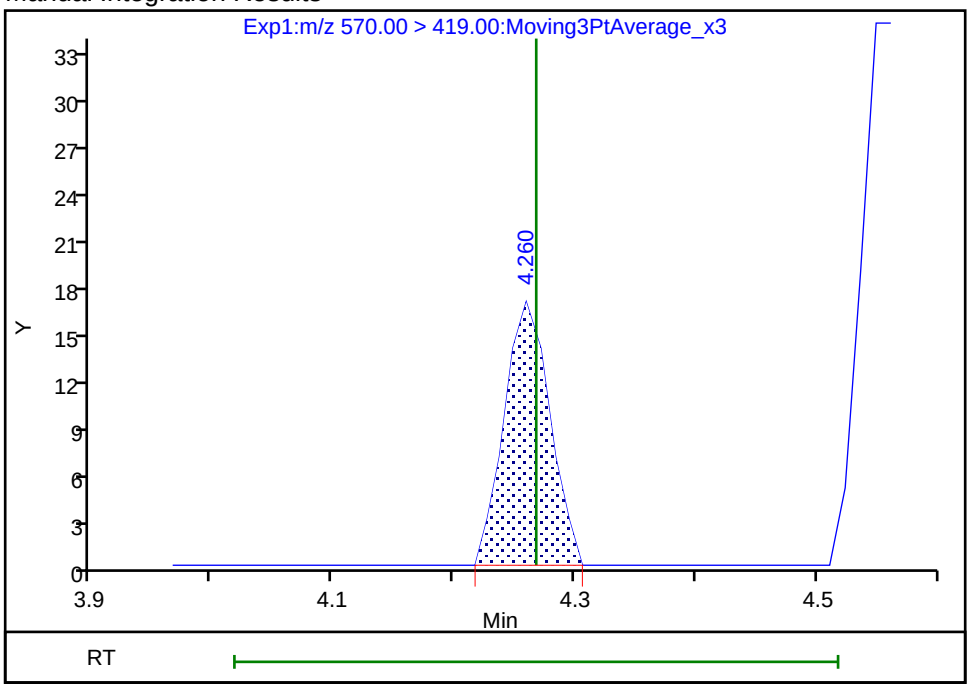
Not Detected
Expected RT: 4.27

Processing Integration Results




Manual Integration Results

RT: 4.26
Area: 44
Amount: 0.001214
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:34:46
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

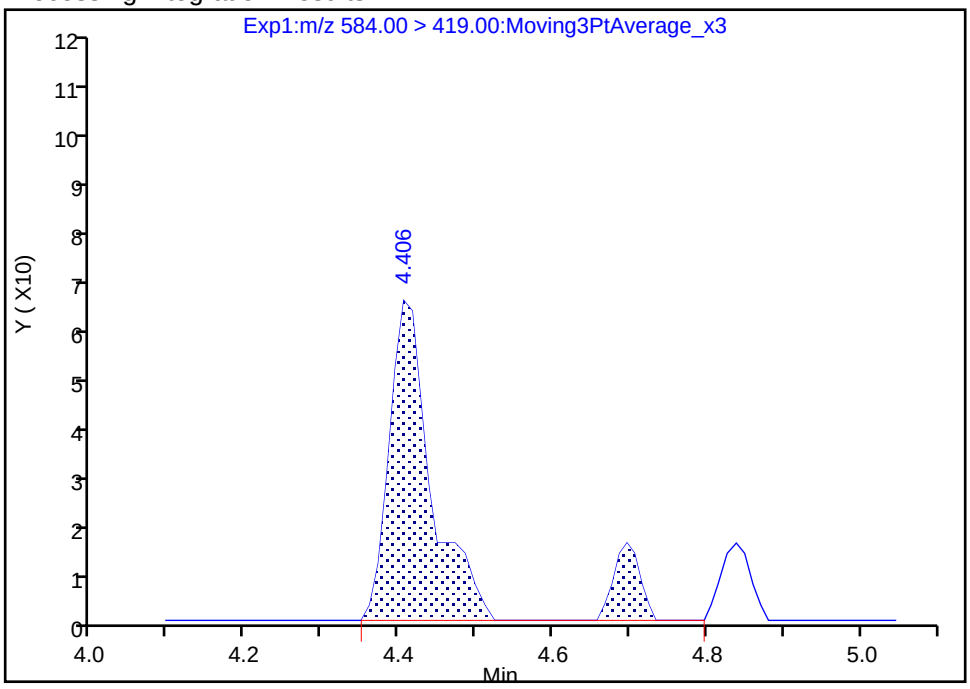
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

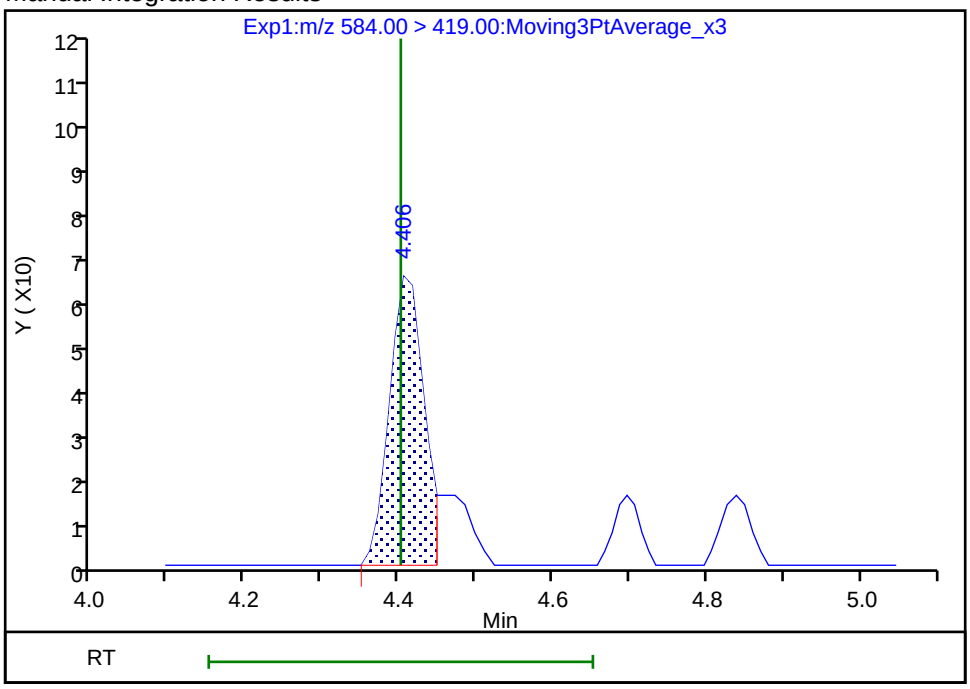
Processing Integration Results

RT: 4.41
Area: 269
Amount: 0.007685
Amount Units: ng/ml




Manual Integration Results

RT: 4.41
Area: 190
Amount: 0.005428
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:35:21

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

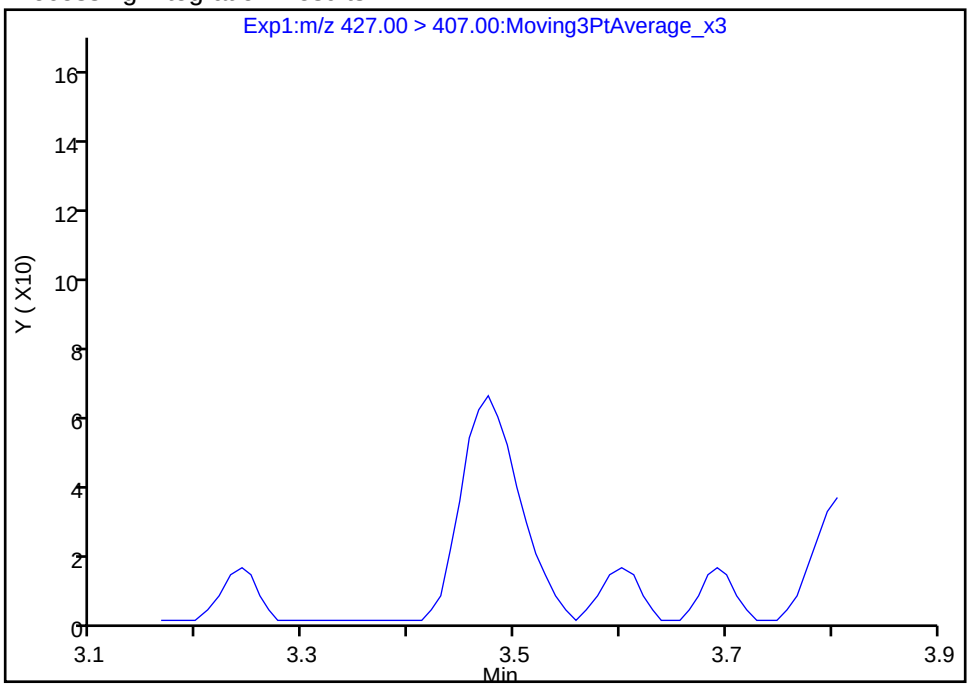
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

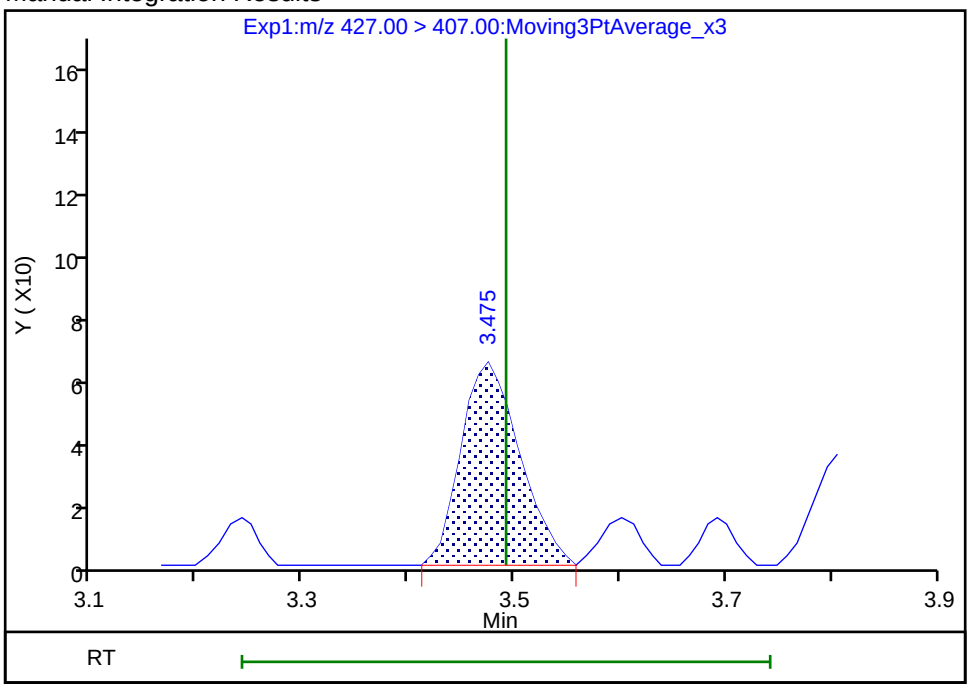
Not Detected
Expected RT: 3.49

Processing Integration Results




Manual Integration Results

RT: 3.48
Area: 246
Amount: 0.002147
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:30:30
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

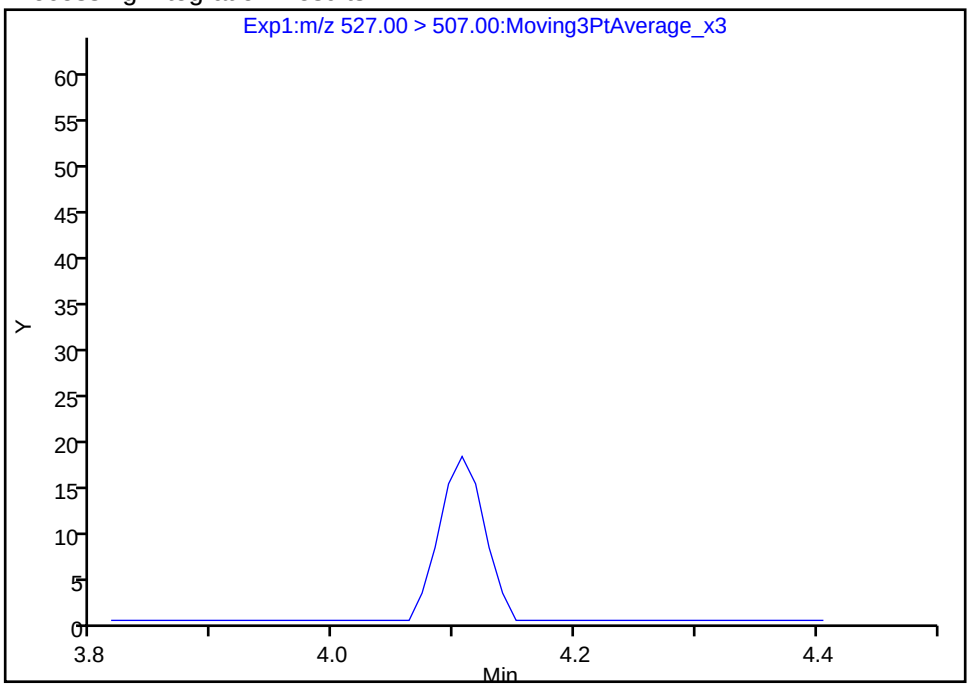
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

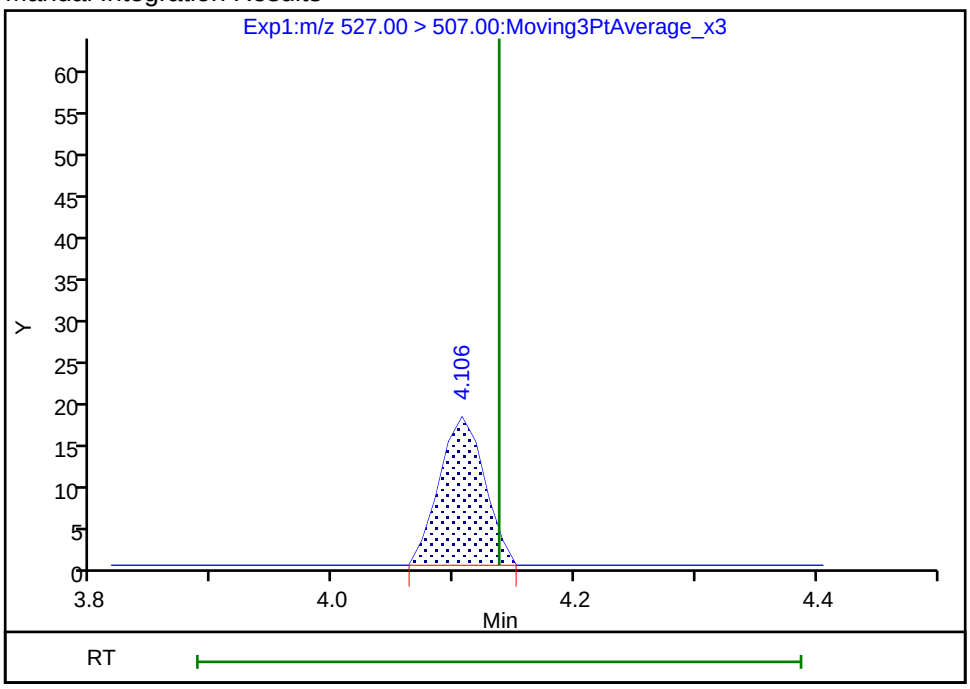
Not Detected
Expected RT: 4.14

Processing Integration Results




Manual Integration Results

RT: 4.11
Area: 46
Amount: 0.000697
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:34:26
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

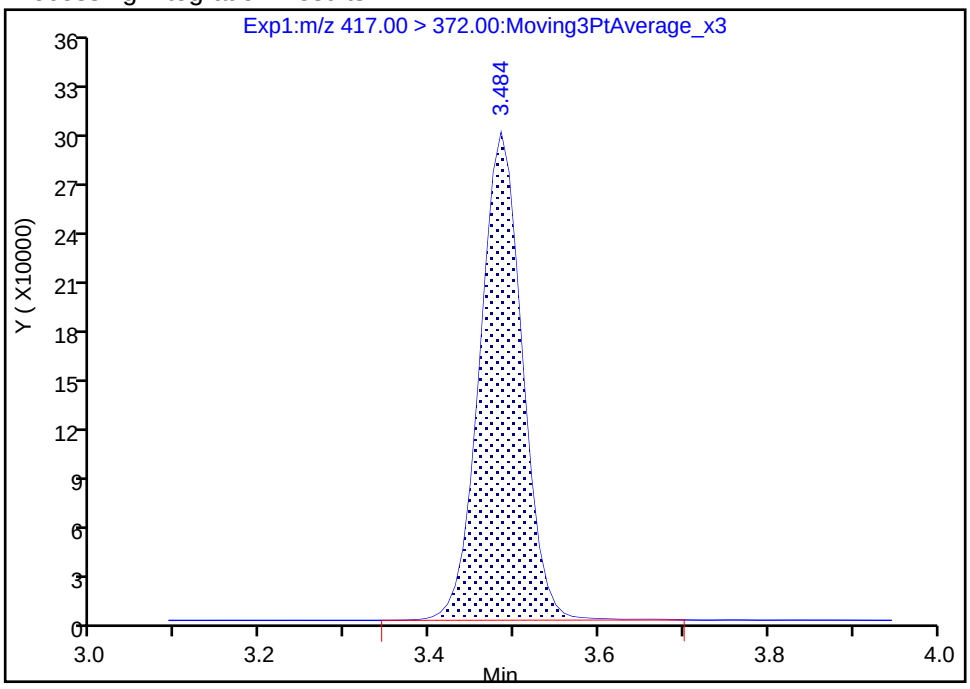
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 14 13C4 PFOA, CAS: STL00990

Signal: 1

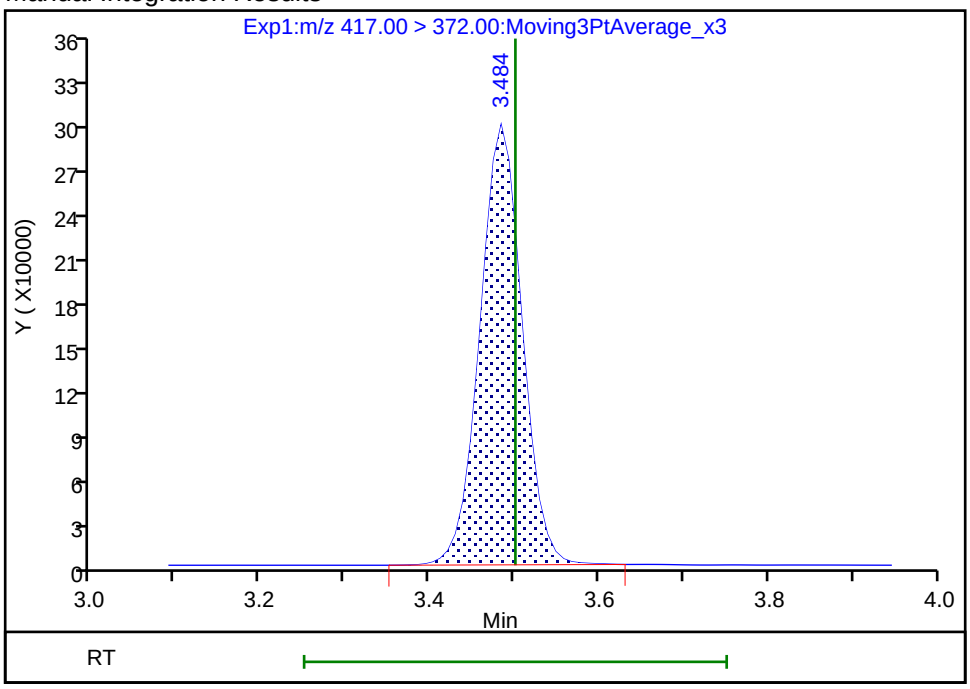
Processing Integration Results

RT: 3.48
Area: 1020761
Amount: 1.330116
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 1017172
Amount: 1.326959
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:19:50

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

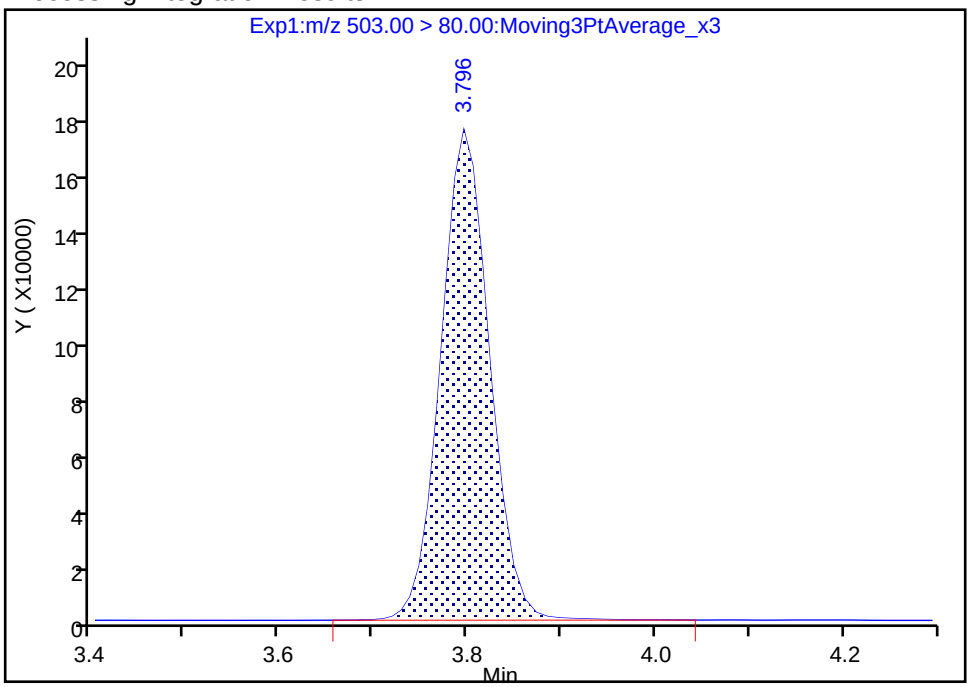
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 18 13C4 PFOS, CAS: STL00991

Signal: 1

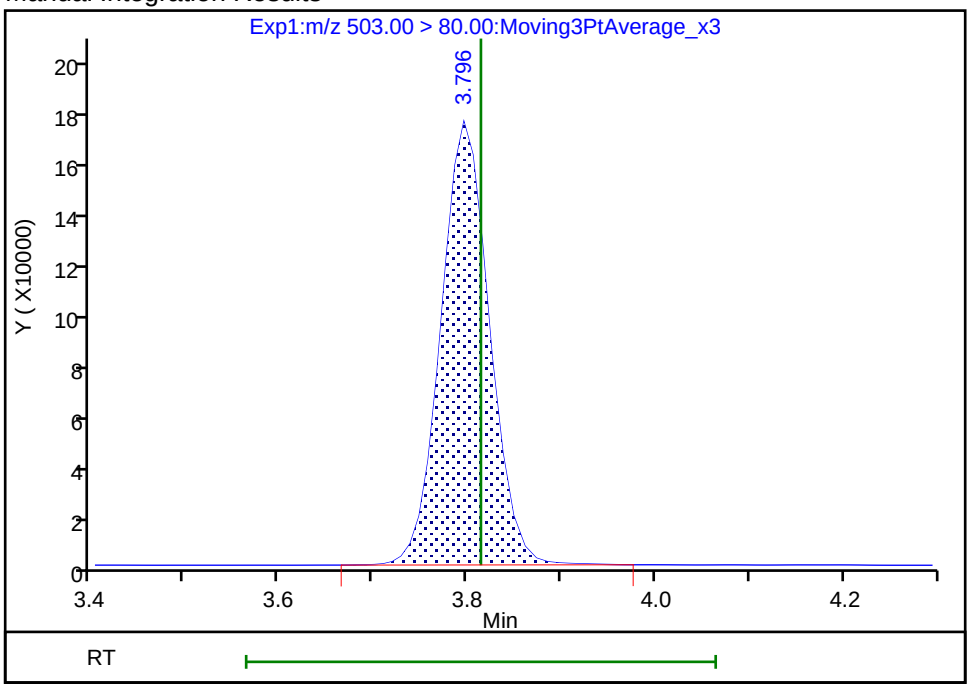
Processing Integration Results

RT: 3.80
Area: 626105
Amount: 1.236803
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 625074
Amount: 1.236182
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:20:01
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

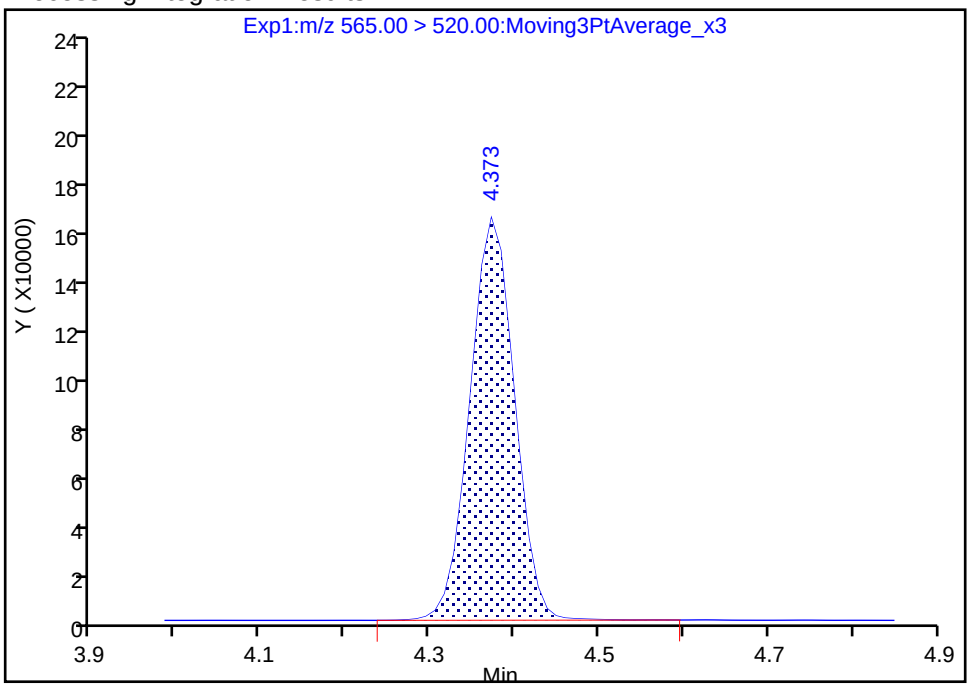
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 30 13C2 PFUnA, CAS: STL00997

Signal: 1

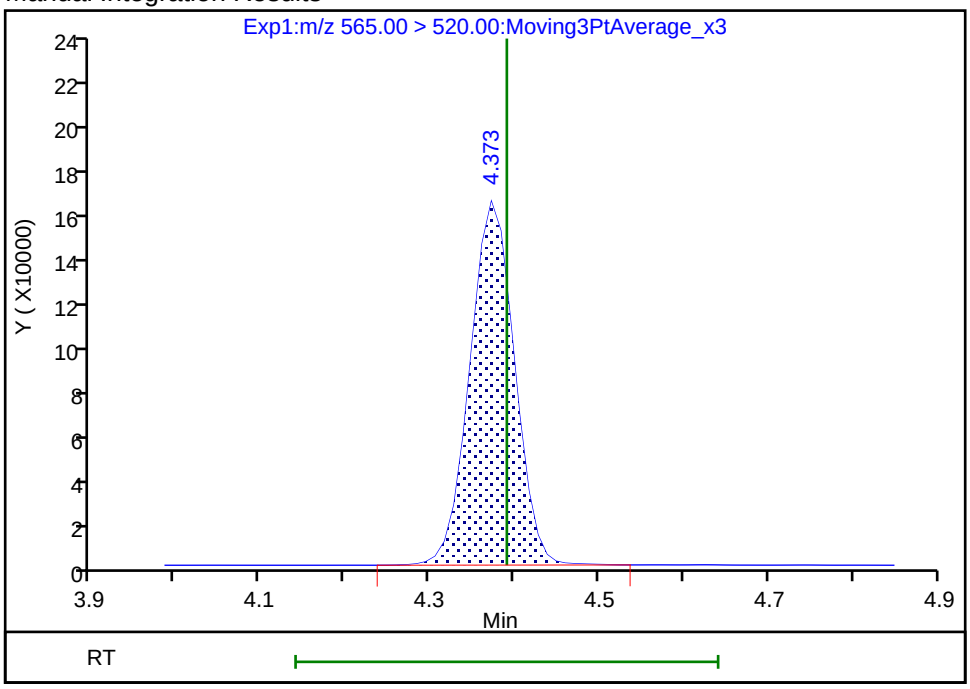
Processing Integration Results

RT: 4.37
Area: 585972
Amount: 1.102133
Amount Units: ng/ml




Manual Integration Results

RT: 4.37
Area: 585686
Amount: 1.102858
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:20:33

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

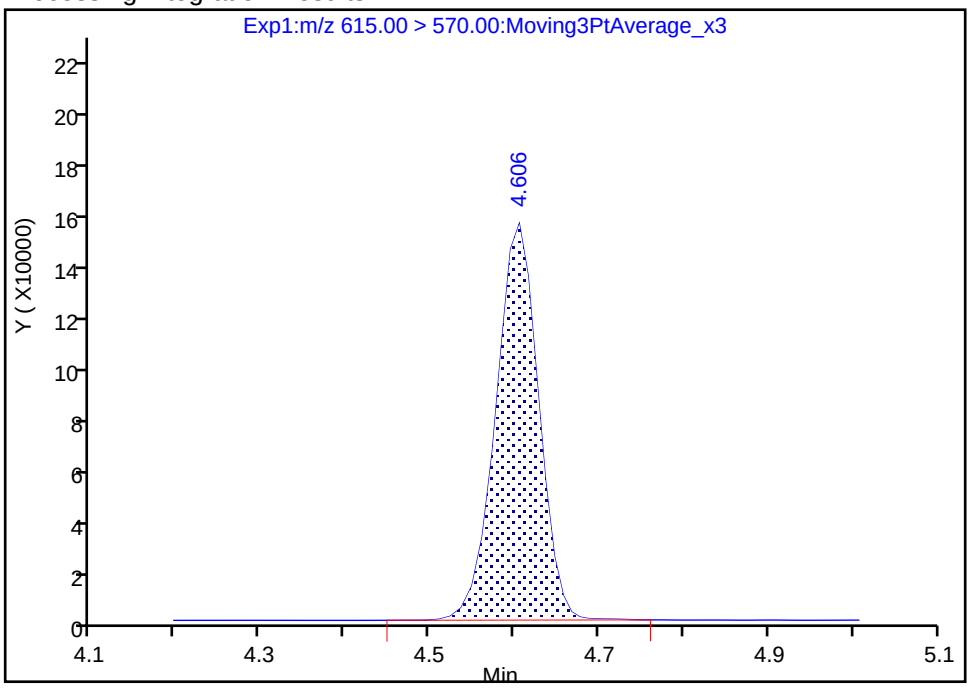
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 36 13C2 PFDoA, CAS: STL00998

Signal: 1

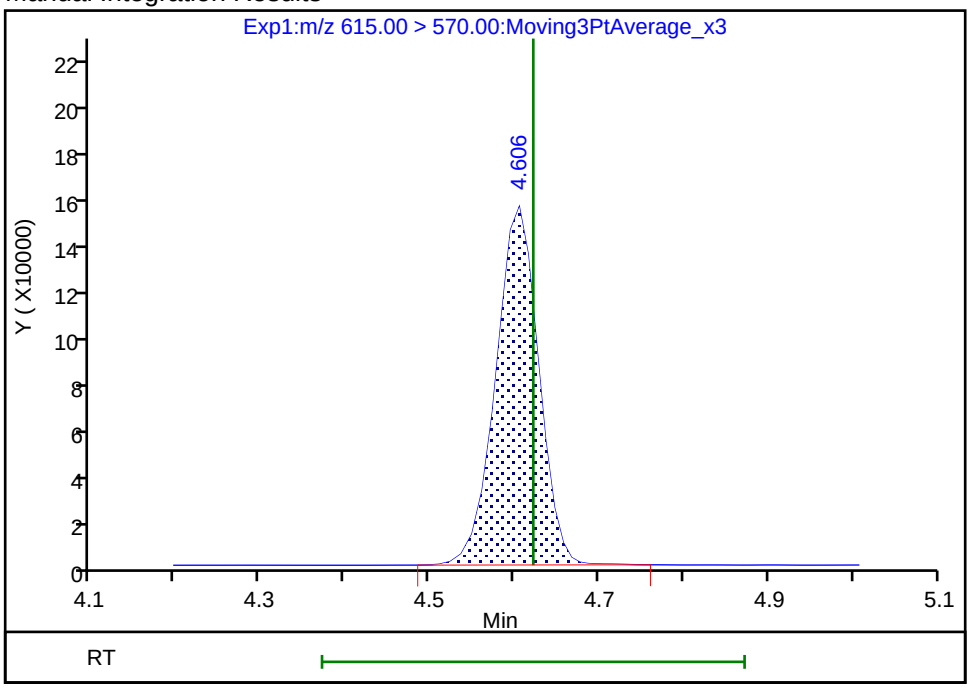
Processing Integration Results

RT: 4.61
Area: 548607
Amount: 0.977434
Amount Units: ng/ml




Manual Integration Results

RT: 4.61
Area: 548532
Amount: 0.978421
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:20:54

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

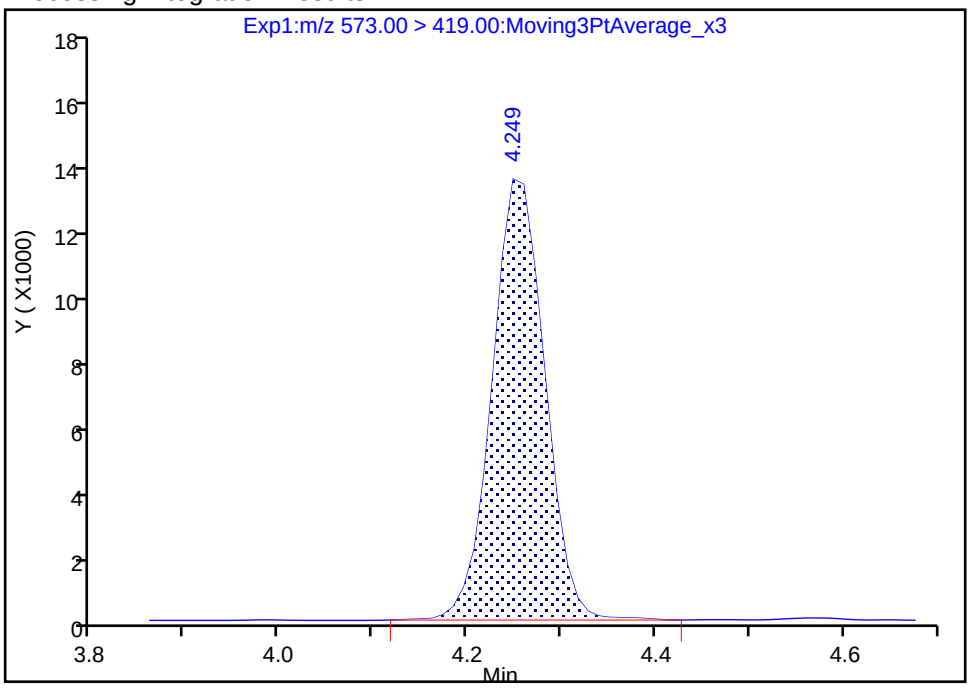
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

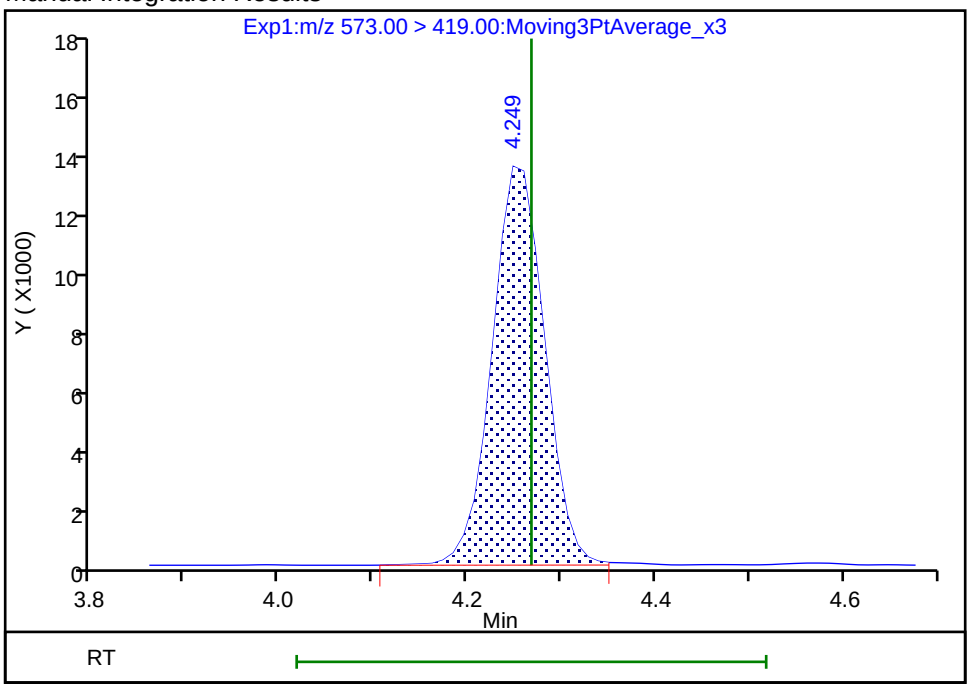
Processing Integration Results

RT: 4.25
Area: 51191
Amount: 1.090412
Amount Units: ng/ml




Manual Integration Results

RT: 4.25
Area: 51094
Amount: 1.089593
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:20:24
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

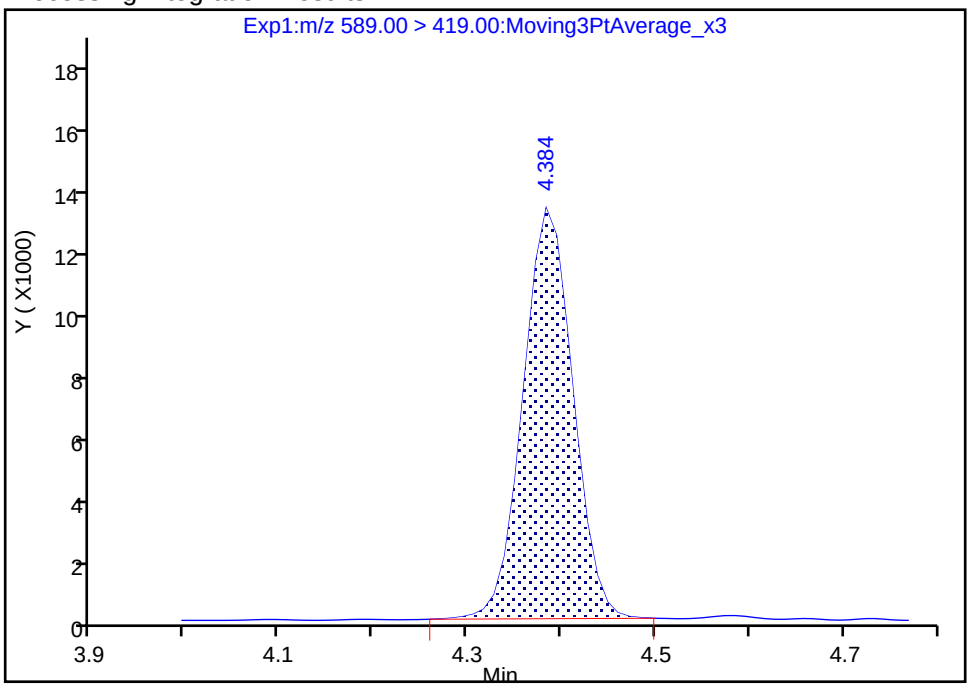
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 32 d5-NEtFOSAA, CAS: STL02117

Signal: 1

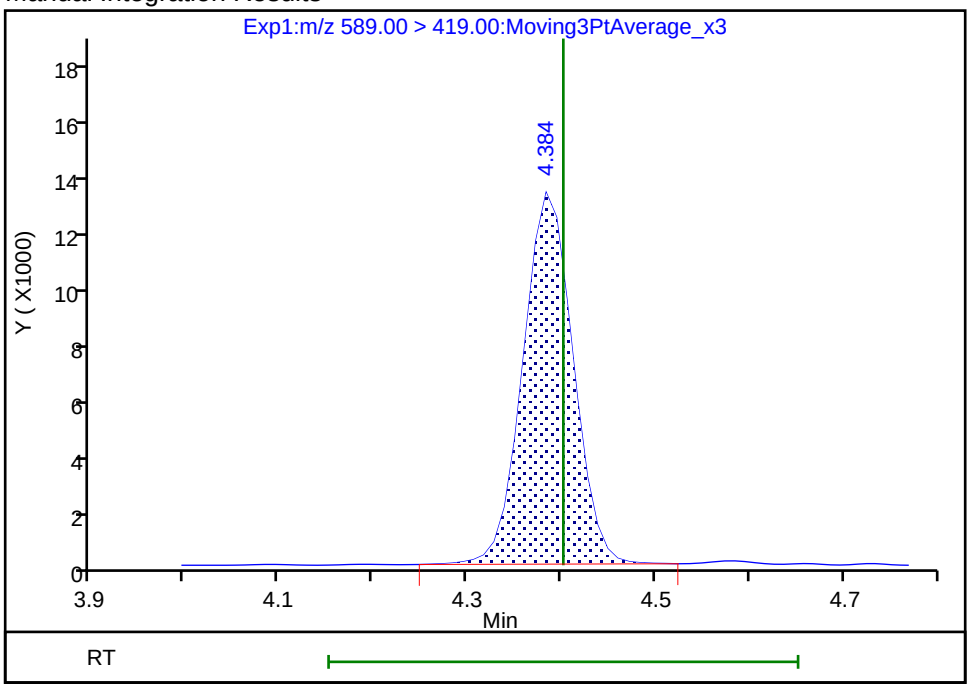
Processing Integration Results

RT: 4.38
Area: 47067
Amount: 1.037141
Amount Units: ng/ml




Manual Integration Results

RT: 4.38
Area: 47266
Amount: 1.042720
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:20:46

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

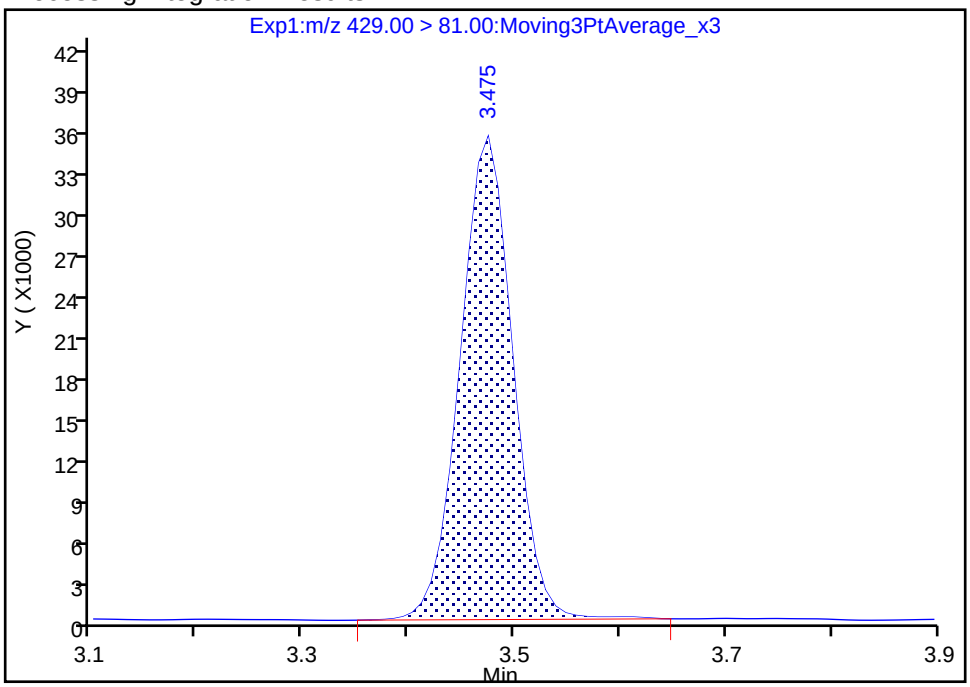
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

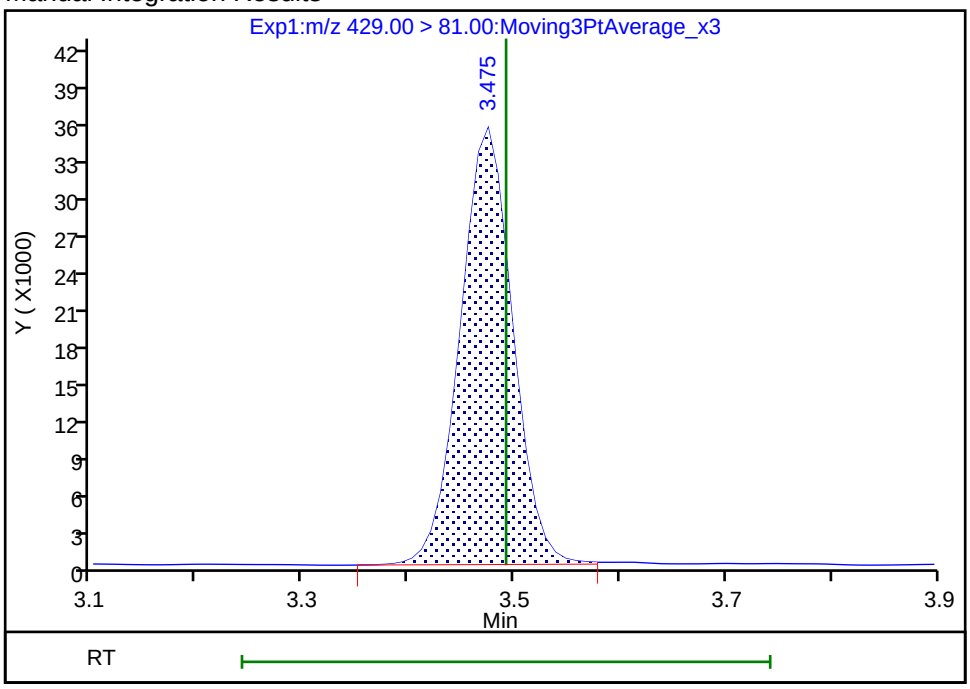
Processing Integration Results

RT: 3.48
Area: 122707
Amount: 1.332982
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 122293
Amount: 1.330008
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:19:41

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

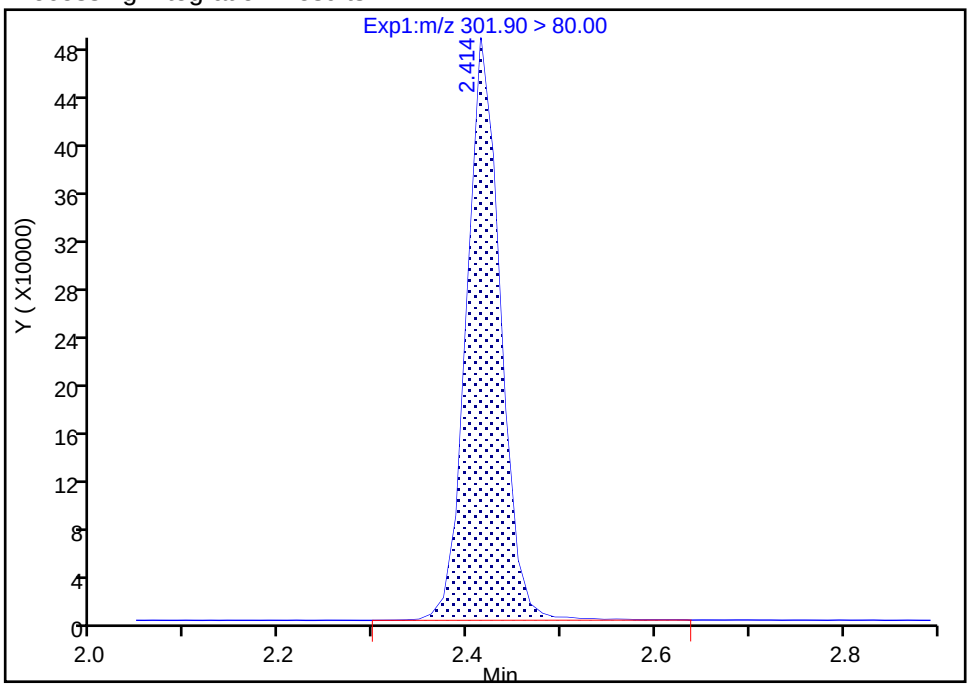
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 47 13C3 PFBS, CAS: STL02337

Signal: 1

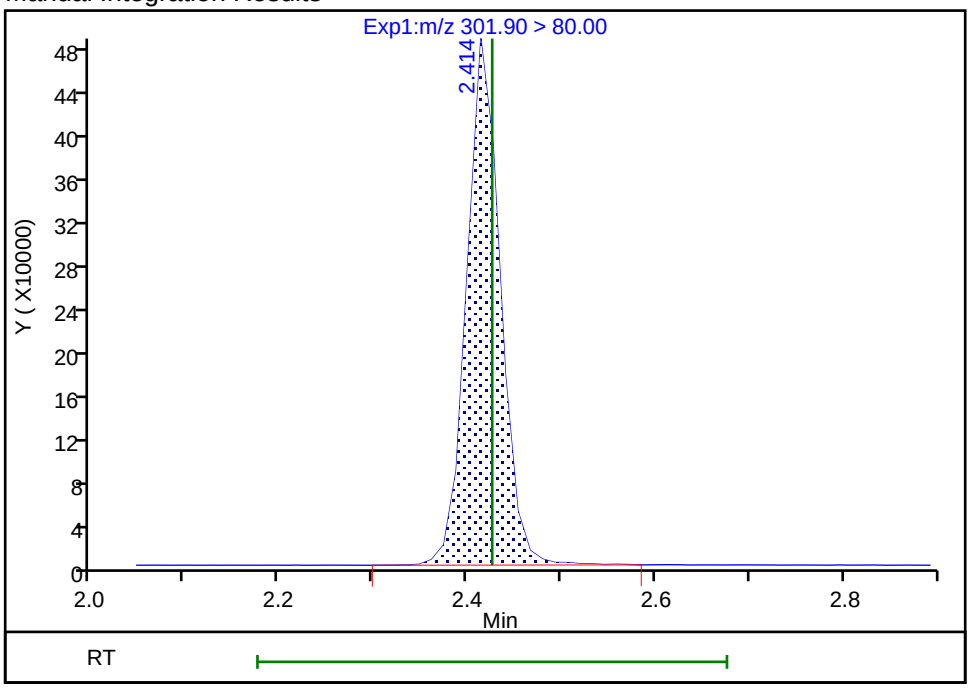
Processing Integration Results

RT: 2.41
Area: 1204776
Amount: 1.215832
Amount Units: ng/ml




Manual Integration Results

RT: 2.41
Area: 1202888
Amount: 1.215319
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:19:18

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

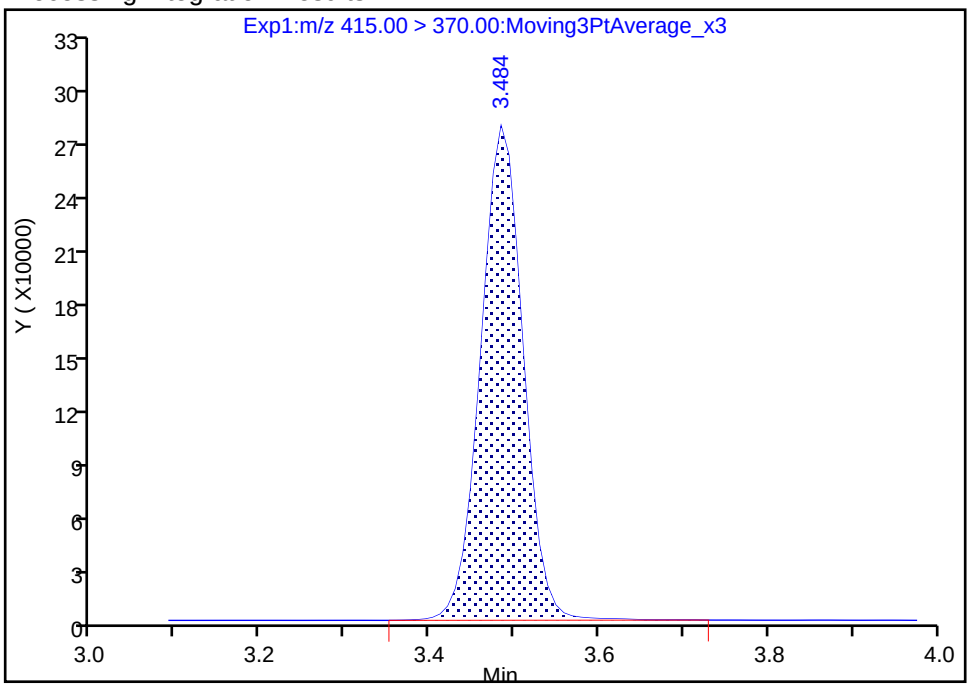
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B21.d | | | | |
| Injection Date: | 12-Mar-2021 14:46:48 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-4-A | Lab Sample ID: | 200-229152-4 | | |
| Client ID: | HEX-EQUIPMENTBLANK-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## * 62 13C2 PFOA, CAS: STL00623

Signal: 1

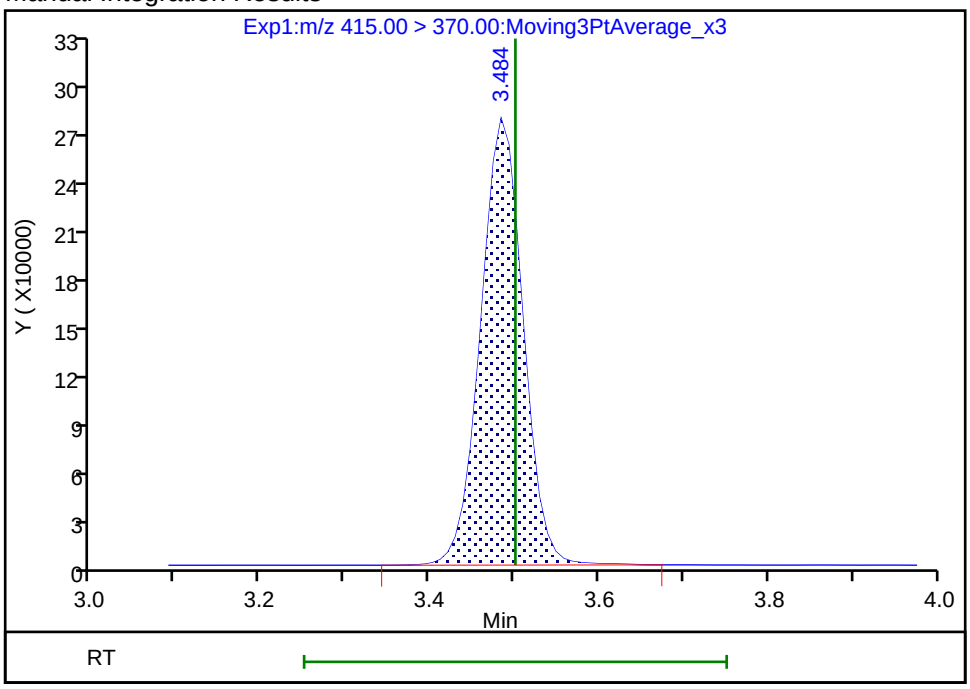
Processing Integration Results

RT: 3.48
Area: 969365
Amount: 1.250000
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 968255
Amount: 1.250000
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:21:06

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-229152-1 Analy Batch No.: 162365

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/22/2020 12:48 Calibration End Date: 12/22/2020 13:29 Calibration ID: 44876

Calibration Files

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | IC 200-162365/8 | PA201222ICAL008.d |
| Level 2 | IC 200-162365/9 | PA201222ICAL009.d |
| Level 3 | IC 200-162365/10 | PA201222ICAL010.d |
| Level 4 | ICIS 200-162365/11 | PA201222ICAL011.d |
| Level 5 | IC 200-162365/12 | PA201222ICAL012.d |
| Level 6 | IC 200-162365/13 | PA201222ICAL013.d |

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1 LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Perfluorobutanoic acid (PFBA) | 1.2189 0.9212 | 1.0687 | 0.9486 | 0.9302 | 0.9245 | AveID | | 1.0020 | | | | 12.0 | | 35.0 | | | |
| Perfluoropentanoic acid (PFPeA) | 1.2359 1.0381 | 1.2067 | 1.0701 | 1.0593 | 1.0336 | AveID | | 1.1073 | | | | 8.1 | | 35.0 | | | |
| Perfluorobutanesulfonic acid (PFBS) | 1.2430 1.0810 | 1.2027 | 1.1143 | 1.0713 | 1.0755 | AveID | | 1.1313 | | | | 6.5 | | 35.0 | | | |
| 1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2) | 2.1097 1.7815 | 1.7396 | 1.8012 | 1.7853 | 1.7852 | AveID | | 1.8337 | | | | 7.5 | | 50.0 | | | |
| Perfluorohexanoic acid (PFHxA) | 1.2889 1.0559 | 1.0893 | 1.0241 | 1.0681 | 1.0283 | AveID | | 1.0924 | | | | 9.1 | | 35.0 | | | |
| Perfluoropentanesulfonic acid | 1.3317 1.2762 | 1.3900 | 1.3228 | 1.3125 | 1.2408 | AveID | | 1.3123 | | | | 3.9 | | 50.0 | | | |
| HFPO-DA | 1.6029 1.5130 | 1.4395 | 1.2239 | 1.2678 | 1.2653 | AveID | | 1.3854 | | | | 11.2 | | 35.0 | | | |
| Perfluorohexanesulfonic acid (PFHxS) | 1.3163 1.0823 | 1.2845 | 1.1737 | 1.1347 | 1.0794 | AveID | | 1.1785 | | | | 8.6 | | 35.0 | | | |
| Perfluoroheptanoic acid (PFHpA) | 1.1499 1.0050 | 1.2248 | 1.0199 | 1.0649 | 1.0888 | AveID | | 1.0922 | | | | 7.6 | | 35.0 | | | |
| DONA | 3.5199 3.1986 | 3.4097 | 3.3571 | 3.1992 | 3.4069 | AveID | | 3.3485 | | | | 3.8 | | 50.0 | | | |
| Perfluoroheptanesulfonic Acid (PFHpS) | 1.4516 1.2663 | 1.4209 | 1.3827 | 1.2969 | 1.2825 | AveID | | 1.3502 | | | | 5.8 | | 50.0 | | | |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 1.1353 1.1108 | 1.0938 | 1.0521 | 1.1805 | 1.1016 | AveID | | 1.1123 | | | | 3.9 | | 35.0 | | | |
| Perfluorooctanoic acid (PFOA) | 1.1405 1.0797 | 1.1163 | 1.0725 | 1.0647 | 1.0301 | AveID | | 1.0840 | | | | 3.6 | | 35.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-229152-1 Analy Batch No.: 162365

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/22/2020 12:48 Calibration End Date: 12/22/2020 13:29 Calibration ID: 44876

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1 LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Perfluorooctanesulfonic acid (PFOS) | 1.2730 1.0861 | 1.2252 | 1.1557 | 1.0760 | 1.0845 | AveID | | 1.1501 | | | | 7.2 | | 35.0 | | | |
| Perfluorononanoic acid (PFNA) | 1.2720 1.0506 | 1.1314 | 1.0797 | 1.0688 | 1.0387 | AveID | | 1.1069 | | | | 7.9 | | 35.0 | | | |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid | 1.3764 1.2216 | 1.2415 | 1.2991 | 1.2610 | 1.2996 | AveID | | 1.2832 | | | | 4.3 | | 50.0 | | | |
| Perfluorononanesulfonic acid | 0.9575 0.8062 | 0.9122 | 0.8952 | 0.7667 | 0.8107 | AveID | | 0.8581 | | | | 8.6 | | 50.0 | | | |
| Perfluorodecanoic acid (PFDA) | 1.0684 1.0125 | 1.0468 | 1.0595 | 1.0466 | 0.9494 | AveID | | 1.0305 | | | | 4.3 | | 35.0 | | | |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 0.6644 0.6523 | 0.7808 | 0.6633 | 0.6388 | 0.6810 | AveID | | 0.6801 | | | | 7.5 | | 35.0 | | | |
| Perfluorooctanesulfonamide (PFOSA) | 0.9663 0.9744 | 1.0478 | 0.9946 | 0.9970 | 1.0328 | AveID | | 1.0021 | | | | 3.2 | | 35.0 | | | |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.8884 0.9227 | 0.9333 | 0.7706 | 0.9010 | 0.9023 | AveID | | 0.8864 | | | | 6.7 | | 35.0 | | | |
| Perfluorodecanesulfonic acid (PFDS) | 0.7308 0.6500 | 0.6951 | 0.6680 | 0.6763 | 0.6843 | AveID | | 0.6841 | | | | 4.0 | | 50.0 | | | |
| Perfluoroundecanoic acid (PFUnA) | 0.9653 0.9963 | 1.0681 | 1.0534 | 1.0365 | 0.9995 | AveID | | 1.0198 | | | | 3.8 | | 35.0 | | | |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 1.0840 0.8490 | 0.9020 | 0.8715 | 0.8865 | 0.9612 | AveID | | 0.9257 | | | | 9.3 | | 35.0 | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid | 1.3680 1.2897 | 1.3189 | 1.3742 | 1.3366 | 1.3013 | AveID | | 1.3315 | | | | 2.6 | | 50.0 | | | |
| Perfluorododecanoic acid (PFDoA) | 1.1939 1.0908 | 1.1709 | 1.0287 | 1.0643 | 1.0505 | AveID | | 1.0999 | | | | 6.1 | | 35.0 | | | |
| 10:2 FTS | 0.2963 0.3499 | 0.3593 | 0.3884 | 0.3534 | 0.3536 | AveID | | 0.3501 | | | | 8.5 | | 50.0 | | | |
| Perfluorododecanesulfonic acid (PFDoS) | 0.3056 0.2278 | 0.2625 | 0.2486 | 0.2372 | 0.2284 | AveID | | 0.2517 | | | | 11.7 | | 50.0 | | | |
| Perfluorotridecanoic acid (PFTriA) | 0.9603 0.8509 | 0.9077 | 0.8822 | 0.8740 | 0.8804 | AveID | | 0.8926 | | | | 4.2 | | 50.0 | | | |
| Perfluorotetradecanoic acid (PFTeA) | 0.2058 0.1744 | 0.1755 | 0.1790 | 0.1993 | 0.1787 | AveID | | 0.1855 | | | | 7.3 | | 35.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-229152-1 Analy Batch No.: 162365

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/22/2020 12:48 Calibration End Date: 12/22/2020 13:29 Calibration ID: 44876

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 1.1808<br>0.9325 | 1.0946 | 0.9853 | 0.9326 | 0.9374 | L1ID | 0.0142 | 0.9312 | | | | | | | 1.0000 | | 0.9900 |
| Perfluoro-n-octadecanoic acid (PFODA) | 0.9585<br>0.9072 | 0.8914 | 0.8714 | 0.8948 | 0.8753 | AveID | | 0.8998 | | | | 3.5 | | 50.0 | | | |
| 13C4 PFBA | 1.3516<br>1.4010 | 1.2562 | 1.3934 | 1.3322 | 1.3257 | Ave | | 1.3433 | | | | 3.9 | | 30.0 | | | |
| 13C5 PFPeA | 1.0050<br>0.9950 | 0.9334 | 0.9917 | 0.9482 | 0.9528 | Ave | | 0.9710 | | | | 3.1 | | 30.0 | | | |
| 13C3 PFBS | 1.2595<br>1.3474 | 1.2450 | 1.2928 | 1.2842 | 1.2377 | Ave | | 1.2778 | | | | 3.2 | | 30.0 | | | |
| M2-4:2 FTS | 0.1068<br>0.1107 | 0.1097 | 0.1066 | 0.1039 | 0.1020 | Ave | | 0.1066 | | | | 3.1 | | 30.0 | | | |
| 13C2 PFHxA | 1.0392<br>1.0173 | 0.9943 | 1.0464 | 1.0067 | 1.0023 | Ave | | 1.0177 | | | | 2.1 | | 30.0 | | | |
| 13C3 HFPO-DA | 0.1775<br>0.1641 | 0.1678 | 0.2001 | 0.1881 | 0.1776 | Ave | | 0.1792 | | | | 7.4 | | 30.0 | | | |
| 18O2 PFHxS | 0.9945<br>0.9952 | 0.9157 | 0.9459 | 0.9138 | 0.9414 | Ave | | 0.9511 | | | | 3.8 | | 30.0 | | | |
| 13C4 PFHpA | 0.9758<br>1.0180 | 0.9235 | 1.0338 | 0.9550 | 0.9390 | Ave | | 0.9742 | | | | 4.5 | | 30.0 | | | |
| M2-6:2 FTS | 0.1210<br>0.1191 | 0.1173 | 0.1250 | 0.1147 | 0.1152 | Ave | | 0.1187 | | | | 3.3 | | 30.0 | | | |
| 13C4 PFOA | 1.0167<br>0.9862 | 0.9977 | 0.9929 | 0.9770 | 0.9669 | Ave | | 0.9896 | | | | 1.7 | | 30.0 | | | |
| 13C4 PFOS | 0.6612<br>0.6787 | 0.6466 | 0.6579 | 0.6518 | 0.6206 | Ave | | 0.6528 | | | | 2.9 | | 30.0 | | | |
| 13C5 PFNA | 0.9008<br>0.8670 | 0.8743 | 0.8943 | 0.8543 | 0.8475 | Ave | | 0.8730 | | | | 2.4 | | 30.0 | | | |
| 13C2 PFDA | 0.8480<br>0.8214 | 0.8392 | 0.8359 | 0.8118 | 0.8517 | Ave | | 0.8346 | | | | 1.8 | | 30.0 | | | |
| M2-8:2 FTS | 0.1285<br>0.1295 | 0.1188 | 0.1212 | 0.1180 | 0.1188 | Ave | | 0.1225 | | | | 4.2 | | 30.0 | | | |
| 13C8 FOSA | 1.2313<br>1.3053 | 1.2240 | 1.2319 | 1.2023 | 1.1664 | Ave | | 1.2269 | | | | 3.7 | | 30.0 | | | |
| d3-NMeFOSAA | 0.0571<br>0.0621 | 0.0633 | 0.0629 | 0.0593 | 0.0586 | Ave | | 0.0605 | | | | 4.3 | | 30.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-229152-1 Analy Batch No.: 162365

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/22/2020 12:48 Calibration End Date: 12/22/2020 13:29 Calibration ID: 44876

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 13C2 PFUnA | 0.7235<br>0.6928 | 0.6824 | 0.6717 | 0.6694 | 0.6738 | Ave | | 0.6856 | | | | 3.0 | | 30.0 | | | |
| d5-NEtFOSAA | 0.0562<br>0.0615 | 0.0603 | 0.0604 | 0.0567 | 0.0560 | Ave | | 0.0585 | | | | 4.2 | | 30.0 | | | |
| 13C2 PFDoA | 0.7321<br>0.7422 | 0.7045 | 0.7438 | 0.7209 | 0.6991 | Ave | | 0.7238 | | | | 2.6 | | 30.0 | | | |
| 13C2 PFTeDA | 0.5271<br>0.5540 | 0.5419 | 0.5559 | 0.5063 | 0.5266 | Ave | | 0.5353 | | | | 3.5 | | 30.0 | | | |
| 13C2 PFHxDA | 0.5646<br>0.5903 | 0.5755 | 0.5757 | 0.5580 | 0.5667 | Ave | | 0.5718 | | | | 2.0 | | 30.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-229152-1 Analy Batch No.: 162365

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/22/2020 12:48 Calibration End Date: 12/22/2020 13:29 Calibration ID: 44876

Calibration Files

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | IC 200-162365/8 | PA201222ICAL008.d |
| Level 2 | IC 200-162365/9 | PA201222ICAL009.d |
| Level 3 | IC 200-162365/10 | PA201222ICAL010.d |
| Level 4 | ICIS 200-162365/11 | PA201222ICAL011.d |
| Level 5 | IC 200-162365/12 | PA201222ICAL012.d |
| Level 6 | IC 200-162365/13 | PA201222ICAL013.d |

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/ML) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| Perfluorobutanoic acid (PFBA) | | AveID | 57629<br>8790651 | 118541 | 456581 | 881958 | 2187518 | 0.0500<br>10.0 | 0.100 | 0.500 | 1.00 | 2.50 |
| Perfluoropentanoic acid (PFPeA) | | AveID | 43447<br>7036279 | 99455 | 366588 | 714864 | 1757757 | 0.0500<br>10.0 | 0.100 | 0.500 | 1.00 | 2.50 |
| Perfluorobutanesulfonic acid (PFBS) | | AveID | 48410<br>8770776 | 116878 | 439919 | 865582 | 2100213 | 0.0442<br>8.84 | 0.0884 | 0.442 | 0.884 | 2.21 |
| 1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2) | | AveID | 7359<br>1254443 | 15740 | 61951 | 123314 | 303490 | 0.0467<br>9.34 | 0.0934 | 0.467 | 0.934 | 2.34 |
| Perfluorohexanoic acid (PFHxA) | | AveID | 46854<br>7316861 | 95637 | 370199 | 765249 | 1839714 | 0.0500<br>10.0 | 0.100 | 0.500 | 1.00 | 2.50 |
| Perfluoropentanesulfonic acid | | AveID | 43453<br>8114898 | 105420 | 405410 | 800668 | 1955608 | 0.0469<br>9.38 | 0.0938 | 0.469 | 0.938 | 2.35 |
| HFPO-DA | | AveID | 9952<br>1690983 | 21331 | 84587 | 169678 | 401085 | 0.0500<br>10.0 | 0.100 | 0.500 | 1.00 | 2.50 |
| Perfluorohexanesulfonic acid (PFHxS) | | AveID | 41668<br>6676661 | 94508 | 348983 | 671571 | 1650425 | 0.0455<br>9.10 | 0.0910 | 0.455 | 0.910 | 2.28 |
| Perfluoroheptanoic acid (PFHpA) | | AveID | 39251<br>6968995 | 99874 | 364247 | 723792 | 1824848 | 0.0500<br>10.0 | 0.100 | 0.500 | 1.00 | 2.50 |

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-229152-1 Analy Batch No.: 162365

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/22/2020 12:48 Calibration End Date: 12/22/2020 13:29 Calibration ID: 44876

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/ML) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| DONA | | AveI D | 76688<br>13928638 | 183369 | 718739 | 1397912 | 3554808 | 0.0471<br>9.42 | 0.0942 | 0.471 | 0.942 | 2.36 |
| Perfluoroheptanesulfonic Acid (PFHpS) | | AveI D | 31963<br>5572962 | 77228 | 299175 | 572696 | 1352437 | 0.0476<br>9.52 | 0.0952 | 0.476 | 0.952 | 2.38 |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | | AveI D | 4554<br>854196 | 10738 | 43065 | 91369 | 214702 | 0.0474<br>9.48 | 0.0948 | 0.474 | 0.948 | 2.37 |
| Perfluorooctanoic acid (PFOA) | | AveI D | 40563<br>7252703 | 98345 | 367859 | 740338 | 1777820 | 0.0500<br>10.0 | 0.100 | 0.500 | 1.00 | 2.50 |
| Perfluorooctanesulfonic acid (PFOS) | | AveI D | 27324<br>4659375 | 64913 | 243758 | 463174 | 1114751 | 0.0464<br>9.28 | 0.0928 | 0.464 | 0.928 | 2.32 |
| Perfluorononanoic acid (PFNA) | | AveI D | 40080<br>6204125 | 87340 | 333548 | 649860 | 1571226 | 0.0500<br>10.0 | 0.100 | 0.500 | 1.00 | 2.50 |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid | | AveI D | 29669<br>5263362 | 66060 | 275177 | 545155 | 1341633 | 0.0466<br>9.32 | 0.0932 | 0.466 | 0.932 | 2.33 |
| Perfluorononanesulfonic acid | | AveI D | 21260<br>3577811 | 49994 | 195317 | 341392 | 862047 | 0.0480<br>9.60 | 0.0960 | 0.480 | 0.960 | 2.40 |
| Perfluorodecanoic acid (PFDA) | | AveI D | 31691<br>5664507 | 77566 | 305912 | 604674 | 1443205 | 0.0500<br>10.0 | 0.100 | 0.500 | 1.00 | 2.50 |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | | AveI D | 2861<br>551191 | 7849 | 26606 | 51395 | 138394 | 0.0479<br>9.58 | 0.0958 | 0.479 | 0.958 | 2.40 |
| Perfluorooctanesulfonamide (PFOSA) | | AveI D | 41621<br>8663983 | 113239 | 423265 | 853072 | 2150057 | 0.0500<br>10.0 | 0.100 | 0.500 | 1.00 | 2.50 |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | AveI D | 1773<br>390016 | 5218 | 16744 | 38043 | 94320 | 0.0500<br>10.0 | 0.100 | 0.500 | 1.00 | 2.50 |

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-229152-1 Analy Batch No.: 162365

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/22/2020 12:48 Calibration End Date: 12/22/2020 13:29 Calibration ID: 44876

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/ML) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| Perfluorodecanesulfonic acid (PFDS) | | AveI D | 16293<br>2896712 | 38256 | 146348 | 302428 | 730691 | 0.0482<br>9.64 | 0.0964 | 0.482 | 0.964 | 2.41 |
| Perfluoroundecanoic acid (PFUnA) | | AveI D | 24431<br>4701521 | 64357 | 244409 | 493796 | 1201956 | 0.0500<br>10.0 | 0.100 | 0.500 | 1.00 | 2.50 |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | AveI D | 2130<br>355914 | 4802 | 18172 | 35802 | 96074 | 0.0500<br>10.0 | 0.100 | 0.500 | 1.00 | 2.50 |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid | | AveI D | 29806<br>5616158 | 70930 | 294213 | 584047 | 1357763 | 0.0471<br>9.42 | 0.0942 | 0.471 | 0.942 | 2.36 |
| Perfluorododecanoic acid (PFDoA) | | AveI D | 30573<br>5514700 | 72835 | 264312 | 546074 | 1310849 | 0.0500<br>10.0 | 0.100 | 0.500 | 1.00 | 2.50 |
| 10:2 FTS | | AveI D | 1284<br>297521 | 3634 | 15677 | 28609 | 72297 | 0.0482<br>9.64 | 0.0964 | 0.482 | 0.964 | 2.41 |
| Perfluorododecanesulfonic acid (PFDoS) | | AveI D | 6843<br>1019532 | 14504 | 54696 | 106502 | 244860 | 0.0484<br>9.68 | 0.0968 | 0.484 | 0.968 | 2.42 |
| Perfluorotridecanoic acid (PFTriA) | | AveI D | 24591<br>4302065 | 56462 | 226665 | 448445 | 1098559 | 0.0500<br>10.0 | 0.100 | 0.500 | 1.00 | 2.50 |
| Perfluorotetradecanoic acid (PFTeA) | | AveI D | 3795<br>657979 | 8395 | 34379 | 71818 | 167971 | 0.0500<br>10.0 | 0.100 | 0.500 | 1.00 | 2.50 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | | L1ID | 23322<br>3749492 | 55625 | 195955 | 370408 | 948058 | 0.0500<br>10.0 | 0.100 | 0.500 | 1.00 | 2.50 |
| Perfluoro-n-octadecanoic acid (PFODA) | | AveI D | 18931<br>3647983 | 45299 | 173296 | 355381 | 885277 | 0.0500<br>10.0 | 0.100 | 0.500 | 1.00 | 2.50 |
| 13C4 PFBA | 13PFOA | Ave | 1181985<br>1192876 | 1386458 | 1203352 | 1185176 | 1183081 | 1.25<br>1.25 | 1.25 | 1.25 | 1.25 | 1.25 |

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-229152-1 Analy Batch No.: 162365

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/22/2020 12:48 Calibration End Date: 12/22/2020 13:29 Calibration ID: 44876

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/ML) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| 13C5 PFPeA | 13PF OA | Ave | 878850<br>847223 | 1030251 | 856461 | 843580 | 850273 | 1.25<br>1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| 13C3 PFBS | 13PF OA | Ave | 1024342<br>1066974 | 1277928 | 1038343 | 1062494 | 1027240 | 1.16<br>1.16 | 1.16 | 1.16 | 1.16 | 1.16 |
| M2-4:2 FTS | 13PF OA | Ave | 87206<br>88021 | 113101 | 85984 | 86339 | 85003 | 1.17<br>1.17 | 1.17 | 1.17 | 1.17 | 1.17 |
| 13C2 PFHxA | 13PF OA | Ave | 908776<br>866171 | 1097468 | 903699 | 895585 | 894513 | 1.25<br>1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| 13C3 HFPO-DA | 13PF OA | Ave | 155222<br>139707 | 185233 | 172775 | 167297 | 158496 | 1.25<br>1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| 18O2 PFHxS | 13PF OA | Ave | 822695<br>801639 | 956077 | 772740 | 769056 | 794776 | 1.18<br>1.18 | 1.18 | 1.18 | 1.18 | 1.18 |
| 13C4 PFHpA | 13PF OA | Ave | 853376<br>866766 | 1019298 | 892830 | 849594 | 838035 | 1.25<br>1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| M2-6:2 FTS | 13PF OA | Ave | 100493<br>96331 | 122975 | 102545 | 96952 | 97655 | 1.19<br>1.19 | 1.19 | 1.19 | 1.19 | 1.19 |
| 13C4 PFOA | 13PF OA | Ave | 889146<br>839703 | 1101215 | 857479 | 869201 | 862938 | 1.25<br>1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| 13C4 PFOS | 13PF OA | Ave | 552776<br>552420 | 682230 | 543196 | 554310 | 529467 | 1.20<br>1.20 | 1.20 | 1.20 | 1.20 | 1.20 |
| 13C5 PFNA | 13PF OA | Ave | 787744<br>738168 | 964938 | 772347 | 760016 | 756323 | 1.25<br>1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| 13C2 PFDA | 13PF OA | Ave | 741582<br>699346 | 926205 | 721858 | 722168 | 760056 | 1.25<br>1.25 | 1.25 | 1.25 | 1.25 | 1.25 |

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-229152-1 Analy Batch No.: 162365

SDG No.:

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/22/2020 12:48 Calibration End Date: 12/22/2020 13:29 Calibration ID: 44876

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/ML) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| M2-8:2 FTS | 13PFOA | Ave | 107657<br>105624 | 125650 | 100274 | 100569 | 101608 | 1.20<br>1.20 | 1.20 | 1.20 | 1.20 | 1.20 |
| 13C8 FOSA | 13PFOA | Ave | 1076815<br>1111429 | 1350960 | 1063884 | 1069567 | 1040920 | 1.25<br>1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| d3-NMeFOSAA | 13PFOA | Ave | 49895<br>52838 | 69887 | 54321 | 52781 | 52266 | 1.25<br>1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| 13C2 PFUnA | 13PFOA | Ave | 632709<br>589898 | 753171 | 580063 | 595523 | 601281 | 1.25<br>1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| d5-NEtFOSAA | 13PFOA | Ave | 49123<br>52405 | 66544 | 52130 | 50481 | 49976 | 1.25<br>1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| 13C2 PFDoA | 13PFOA | Ave | 640188<br>631964 | 777582 | 642314 | 641373 | 623891 | 1.25<br>1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| 13C2 PFTeDA | 13PFOA | Ave | 460978<br>471704 | 598063 | 480039 | 450404 | 469963 | 1.25<br>1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| 13C2 PFHxDA | 13PFOA | Ave | 493765<br>502634 | 635237 | 497203 | 496455 | 505699 | 1.25<br>1.25 | 1.25 | 1.25 | 1.25 | 1.25 |

Curve Type Legend

Ave = Average ISTD
AveID = Average isotope dilution
L1ID = Linear 1/conc IsoDil

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 22-Dec-2020 12:48:13 ALS Bottle#: 2 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 200-0044184-008 Plate: 1 Rack: 1
Operator ID: lc812tech Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 22-Dec-2020 14:39:20 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1625

First Level Reviewer: deannd Date: 22-Dec-2020 13:44:52
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.082 | 2.091 | -0.009 | 0.596 | 1181985 | 1.26 | | 101 | 10169 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | M |
| 212.90 > 169.00 | 2.091 | 2.091 | 0.0 | 1.004 | 57629 | 0.0608 | | 122 | 6.6 | M |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.401 | 2.414 | -0.013 | 0.687 | 878850 | 1.29 | | 103 | 2743 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | |
| 262.90 > 219.00 | 2.401 | 2.414 | -0.013 | 1.000 | 43447 | 0.0558 | | 112 | 1.8 | |
| D 47 13C3 PFBS | | | | | | | | | | |
| 301.90 > 80.00 | 2.427 | 2.427 | 0.0 | 0.695 | 1024342 | 1.15 | | 98.6 | 180745 | |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | |
| 298.90 > 80.00 | 2.427 | 2.427 | 0.0 | 1.000 | 48410 | 0.0486 | Target=2.21 | 110 | 133 | |
| 298.90 > 99.00 | 2.427 | 2.427 | 0.0 | 1.000 | 22181 | | 2.18(1.10-3.31) | 110 | 29.3 | |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | |
| 327.00 > 307.00 | 2.723 | 2.735 | -0.012 | 1.000 | 7359 | 0.0537 | | 115 | 154 | |
| D 60 M2-4:2 FTS | | | | | | | | | | |
| 329.00 > 81.00 | 2.723 | 2.735 | -0.012 | 0.779 | 87206 | 1.17 | | 100 | 92.0 | |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.759 | 2.771 | -0.012 | 0.790 | 908776 | 1.28 | | 102 | 2502 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | M |
| 313.00 > 269.00 | 2.759 | 2.771 | -0.012 | 1.000 | 46854 | 0.0590 | Target=12.17 | 118 | 12.0 | |
| 313.00 > 119.00 | 2.759 | 2.771 | -0.012 | 1.000 | 3848 | | 12.18(6.09-18.26) | 118 | 6.8 | M |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | |
| 349.00 > 80.00 | 2.771 | 2.771 | 0.0 | 0.888 | 43453 | 0.0476 | Target=3.32 | 101 | 153 | |
| 349.00 > 99.00 | 2.759 | 2.771 | -0.012 | 0.884 | 12485 | | 3.48(1.66-4.98) | 101 | 31.9 | |
| 67 Perfluoro(2-propoxypropanoic) ac | | | | | | | | | | |
| 329.10 > 285.00 | 2.869 | 2.881 | -0.012 | 1.000 | 9952 | 0.0578 | | 116 | 1.2 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 64 13C3 HFPO-DA | | | | | | | | | | |
| 332.10 > 287.00 | 2.869 | 2.881 | -0.012 | 0.821 | 155222 | 1.24 | | 99.1 | 808 | |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.123 | 3.133 | -0.011 | 0.894 | 822695 | 1.24 | | 105 | 1287 | |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.133 | 3.133 | 0.0 | 1.003 | 41668 | 0.0508 | Target=4.08 | 112 | 50.8 | M |
| 399.00 > 99.00 | 3.123 | 3.133 | -0.011 | 1.000 | 11112 | | 3.75(2.04-6.11) | 112 | 9.6 | M |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.133 | 3.133 | 0.0 | 0.897 | 853376 | 1.25 | | 100 | 3008 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | |
| 363.00 > 319.00 | 3.133 | 3.133 | 0.0 | 1.000 | 39251 | 0.0526 | Target=3.70 | 105 | 10.4 | |
| 363.00 > 169.00 | 3.133 | 3.133 | 0.0 | 1.000 | 11020 | | 3.56(1.85-5.56) | 105 | 35.2 | |
| 77 DONA | | | | | | | | | | |
| 377.00 > 251.00 | 3.165 | 3.176 | -0.011 | 0.832 | 76688 | 0.0495 | Target=2.47 | 105 | 110 | |
| 377.00 > 85.00 | 3.165 | 3.176 | -0.011 | 0.832 | 30043 | | 2.55(1.23-3.70) | 105 | 33.3 | |
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | M |
| 449.00 > 80.00 | 3.475 | 3.484 | -0.009 | 0.913 | 31963 | 0.0512 | Target=5.85 | 108 | 249 | |
| 449.00 > 99.00 | 3.475 | 3.484 | -0.009 | 0.913 | 5848 | | 5.47(2.93-8.78) | 108 | 36.6 | M |
| D 12 M2-6:2 FTS | | | | | | | | | | M |
| 429.00 > 81.00 | 3.475 | 3.484 | -0.009 | 0.995 | 100493 | 1.21 | | 102 | 352 | M |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | M |
| 427.00 > 407.00 | 3.484 | 3.484 | 0.0 | 1.003 | 4554 | 0.0484 | | 102 | 112 | M |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.493 | 3.493 | 0.0 | 1.000 | 889146 | 1.28 | | 103 | 2451 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.493 | 3.493 | 0.0 | | 874500 | 1.25 | | | 3167 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | M |
| 413.00 > 369.00 | 3.493 | 3.493 | 0.0 | 1.000 | 40563 | 0.0526 | Target=2.58 | 105 | 9.1 | |
| 413.00 > 169.00 | 3.493 | 3.493 | 0.0 | 1.000 | 16414 | | 2.47(1.29-3.87) | 105 | 40.6 | M |
| D 18 13C4 PFOS | | | | | | | | | | |
| 503.00 > 80.00 | 3.806 | 3.806 | 0.0 | 1.089 | 552776 | 1.21 | | 101 | 1557 | |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.806 | 3.806 | 0.0 | 1.000 | 27324 | 0.0514 | Target=5.56 | 111 | 34.0 | M |
| 499.00 > 99.00 | 3.806 | 3.806 | 0.0 | 1.000 | 5749 | | 4.75(2.78-8.34) | 111 | 21.4 | M |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.826 | 3.826 | 0.0 | 1.095 | 787744 | 1.29 | | 103 | 2069 | |
| 20 Perfluorononanoic acid | | | | | | | | | | M |
| 463.00 > 419.00 | 3.826 | 3.826 | 0.0 | 1.000 | 40080 | 0.0575 | Target=6.87 | 115 | 6.3 | M |
| 463.00 > 169.00 | 3.816 | 3.826 | -0.010 | 0.997 | 6287 | | 6.38(3.43-10.30) | 115 | 60.0 | M |
| 69 9-Chlorohexadecafluoro-3-oxanona | | | | | | | | | | |
| 531.00 > 351.00 | 3.967 | 3.967 | 0.0 | 1.042 | 29669 | 0.0500 | | 107 | 209 | |
| 68 Perfluorononanesulfonic acid | | | | | | | | | | M |
| 549.00 > 80.00 | 4.095 | 4.095 | 0.0 | 1.076 | 21260 | 0.0536 | Target=2.78 | 112 | 265 | M |
| 549.00 > 99.00 | 4.095 | 4.095 | 0.0 | 1.076 | 7735 | | 2.75(1.39-4.17) | 112 | 23.1 | M |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.118 | 4.129 | -0.011 | 1.179 | 741582 | 1.27 | | 102 | 2696 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 24 Perfluorodecanoic acid | | | | | | | | | | M |
| 513.00 > 469.00 | 4.118 | 4.129 | -0.011 | 1.000 | 31691 | 0.0518 | Target=9.03 | 104 | 24.7 | M |
| 513.00 > 169.00 | 4.118 | 4.129 | -0.011 | 1.000 | 3824 | | 8.29(4.51-13.54) | 104 | 31.1 | M |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | |
| 527.00 > 507.00 | 4.129 | 4.140 | -0.011 | 1.000 | 2861 | 0.0468 | | 97.7 | 73.0 | |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.129 | 4.140 | -0.011 | 1.182 | 107657 | 1.26 | | 105 | 657 | |
| D 21 13C8 FOSA | | | | | | | | | | |
| 506.00 > 78.00 | 4.207 | 4.207 | 0.0 | 1.204 | 1076815 | 1.25 | | 100 | 3541 | |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | |
| 498.00 > 78.00 | 4.207 | 4.207 | 0.0 | 1.000 | 41621 | 0.0482 | | 96.4 | 229 | |
| D 27 d3-NMeFOSAA | | | | | | | | | | |
| 573.00 > 419.00 | 4.260 | 4.272 | -0.012 | 1.219 | 49895 | 1.18 | | 94.2 | 714 | |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | M |
| 570.00 > 419.00 | 4.272 | 4.272 | 0.0 | 1.003 | 1773 | 0.0501 | | 100 | 18.6 | M |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | |
| 599.00 > 80.00 | 4.350 | 4.362 | -0.012 | 1.143 | 16293 | 0.0515 | Target=2.76 | 107 | 164 | |
| 599.00 > 99.00 | 4.350 | 4.362 | -0.012 | 1.143 | 5699 | | 2.86(1.38-4.14) | 107 | 32.2 | |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.384 | 4.384 | 0.0 | 1.255 | 632709 | 1.32 | | 106 | 1998 | |
| 31 Perfluoroundecanoic acid | | | | | | | | | | |
| 563.00 > 519.00 | 4.384 | 4.395 | -0.011 | 1.000 | 24431 | 0.0473 | Target=8.02 | 94.7 | 10.1 | |
| 563.00 > 169.00 | 4.384 | 4.395 | -0.011 | 1.000 | 3612 | | 6.76(4.01-12.03) | 94.7 | 53.0 | |
| D 32 d5-NEtFOSAA | | | | | | | | | | |
| 589.00 > 419.00 | 4.395 | 4.395 | 0.0 | 1.258 | 49123 | 1.20 | | 96.0 | 347 | |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.395 | 4.406 | -0.011 | 1.000 | 2130 | 0.0586 | | 117 | 45.3 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | |
| 631.00 > 451.00 | 4.485 | 4.485 | 0.0 | 1.179 | 29806 | 0.0484 | | 103 | 568 | |
| D 36 13C2 PFDoA | | | | | | | | | | |
| 615.00 > 570.00 | 4.616 | 4.626 | -0.010 | 1.322 | 640188 | 1.26 | | 101 | 3580 | |
| 37 Perfluorododecanoic acid | | | | | | | | | | M |
| 613.00 > 569.00 | 4.616 | 4.626 | -0.010 | 1.000 | 30573 | 0.0543 | Target=6.85 | 109 | 9.7 | |
| 613.00 > 169.00 | 4.616 | 4.626 | -0.010 | 1.000 | 3833 | | 7.98(3.42-10.27) | 109 | 57.9 | M |
| 74 1H,1H,2H,2H-perfluorododecanesul | | | | | | | | | | M |
| 627.00 > 607.00 | 4.637 | 4.637 | 0.0 | 1.123 | 1284 | 0.0408 | | 84.6 | 40.0 | M |
| 75 Perfluorododecanesulfonic acid ( | | | | | | | | | | M |
| 699.00 > 80.00 | 4.797 | 4.797 | 0.0 | 1.261 | 6843 | 0.0588 | Target=0.53 | 121 | 16.8 | M |
| 699.00 > 99.00 | 4.797 | 4.797 | 0.0 | 1.261 | 10922 | | 0.63(0.26-0.79) | 121 | 65.2 | |
| 41 Perfluorotridecanoic acid | | | | | | | | | | |
| 663.00 > 619.00 | 4.827 | 4.839 | -0.012 | 1.046 | 24591 | 0.0538 | Target=4.48 | 108 | 10.0 | |
| 663.00 > 169.00 | 4.827 | 4.839 | -0.012 | 1.046 | 5908 | | 4.16(2.24-6.72) | 108 | 88.9 | |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 5.018 | 5.027 | -0.009 | 1.436 | 460978 | 1.23 | | 98.5 | 2875 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | M |
| 713.00 > 169.00 | 5.027 | 5.027 | 0.0 | 1.002 | 3795 | 0.0555 | Target=0.99 | 111 | 120 | M |
| 713.00 > 219.00 | 5.018 | 5.027 | -0.009 | 1.000 | 4608 | | 0.82(0.50-1.49) | 111 | 166 | |

Report Date: 22-Dec-2020 14:39:20 Chrom Revision: 2.3 09-Dec-2020 16:22:14
Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d
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 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.374 | 5.374 | 0.0 | 1.539 | 493765 | 1.23 | | 98.7 | 1409 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | M |
| 813.00 > 769.00 | 5.374 | 5.374 | 0.0 | 1.000 | 23322 | 0.0481 | Target=4.02 | 96.3 | 6.3 | |
| 813.00 > 169.00 | 5.374 | 5.374 | 0.0 | 1.000 | 5860 | | 3.98(2.01-6.02) | 96.3 | 134 | M |
| 46 Perfluorooctadecanoic acid | | | | | | | | | | |
| 913.00 > 869.00 | 5.722 | 5.722 | 0.0 | 1.065 | 18931 | 0.0533 | Target=3.88 | 107 | 16.4 | |
| 913.00 > 169.00 | 5.713 | 5.722 | -0.009 | 1.063 | 4824 | | 3.92(1.94-5.82) | 107 | 121 | |

## QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

## Reagents:

PFAS32NCIC1_00007 Amount Added: 100.00 Units: uL

Report Date: 22-Dec-2020 14:39:20 Chrom Revision: 2.3 09-Dec-2020 16:22:14

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d

Injection Date: 22-Dec-2020 12:48:13 Instrument ID: LC812

Lims ID: IC

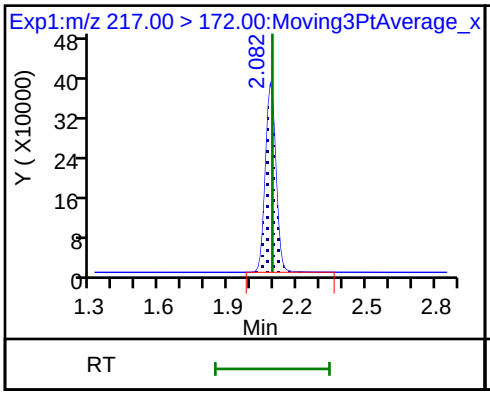
Client ID:

Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 8

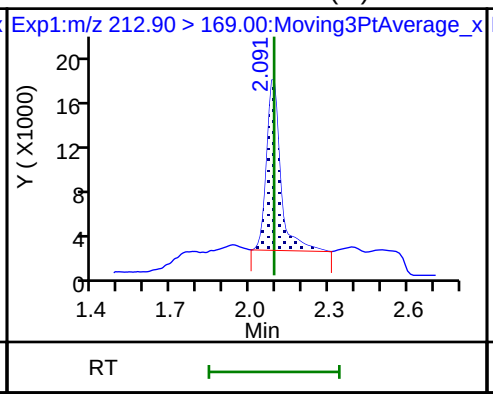
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

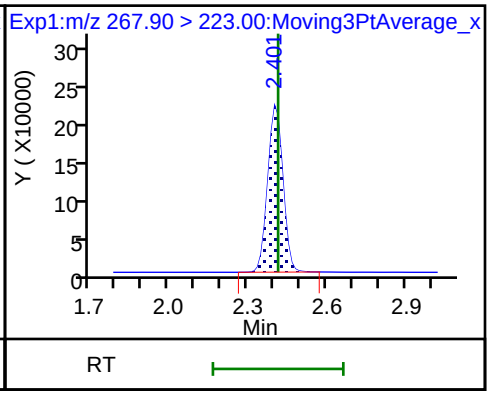
D 1 13C4 PFBA



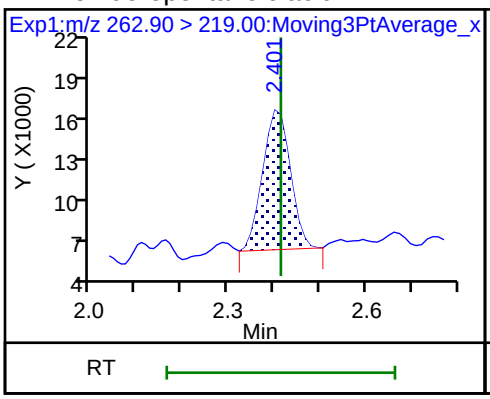

2 Perfluorobutanoic acid (M)



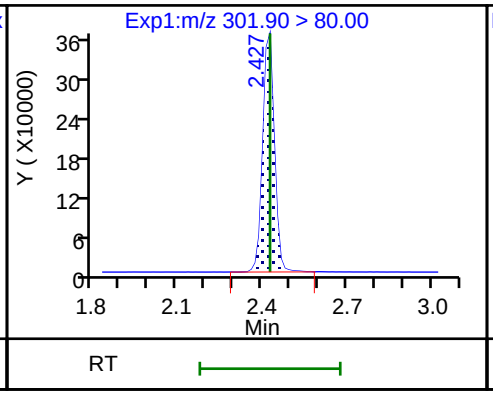

D 3 13C5 PFPeA



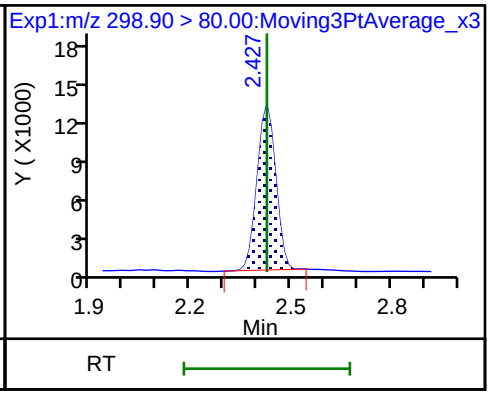

4 Perfluoropentanoic acid



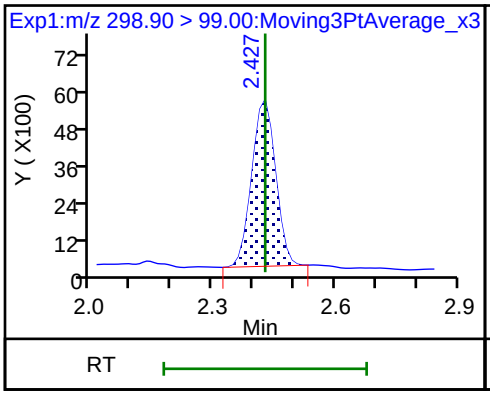

D 47 13C3 PFBS



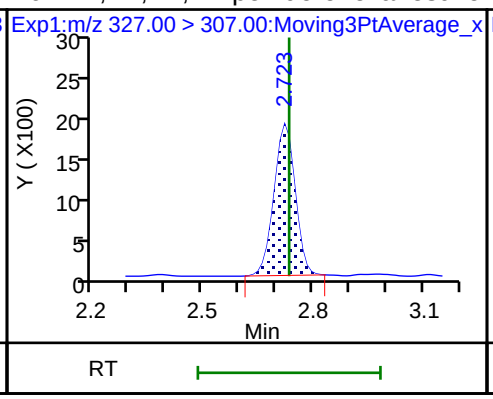

5 Perfluorobutanesulfonic acid



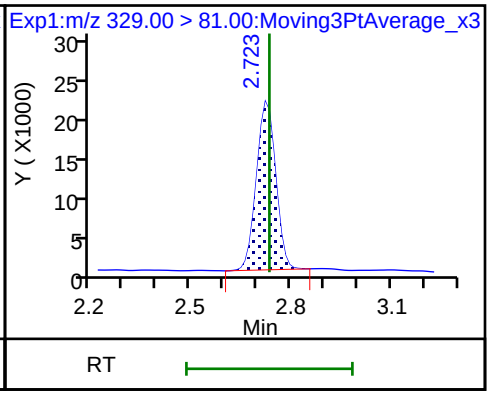

5 Perfluorobutanesulfonic acid



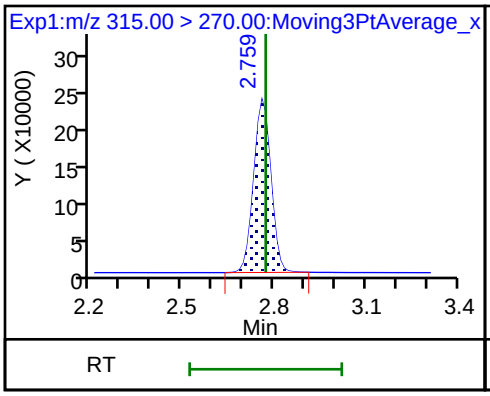

61 1H,1H,2H,2H-perfluorohexanesulfo



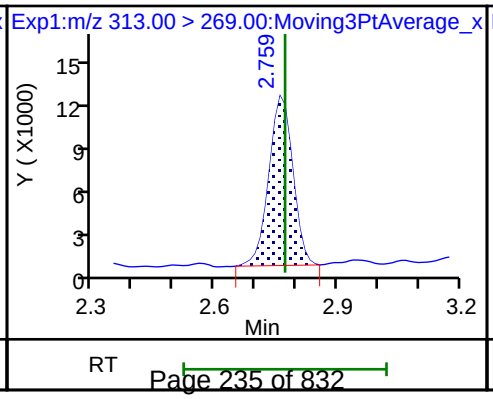

D 60 M2-4:2 FTS



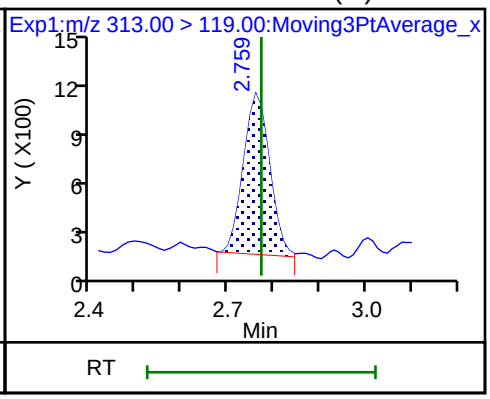

D 7 13C2 PFHxA



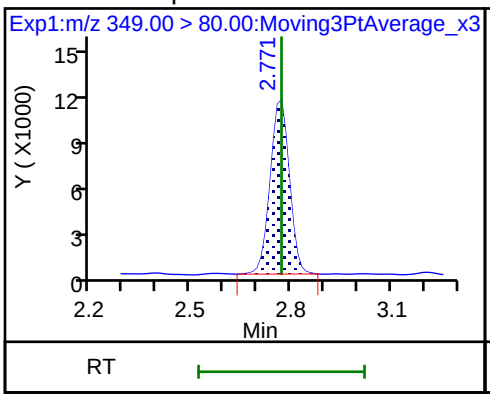

6 Perfluorohexanoic acid



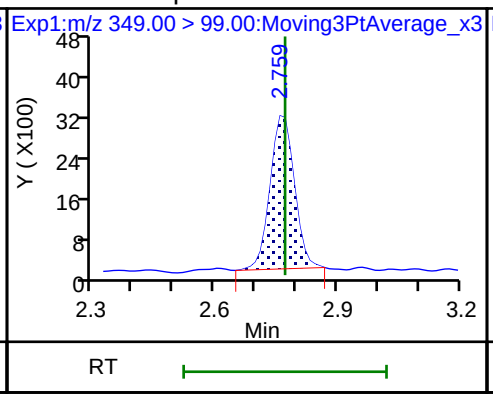

6 Perfluorohexanoic acid (M)



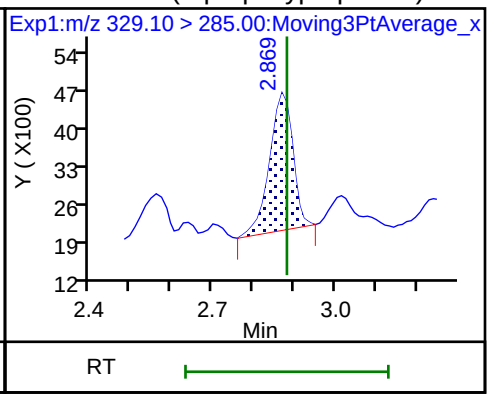
70 Perfluoropentanesulfonic acid



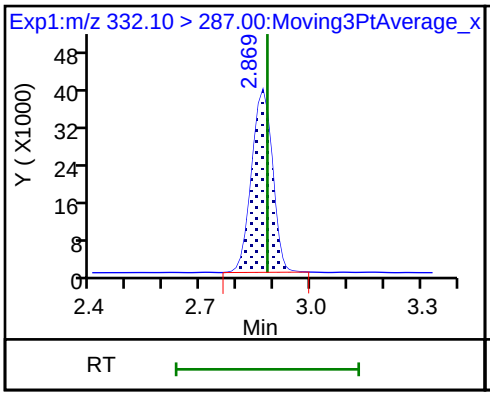

70 Perfluoropentanesulfonic acid



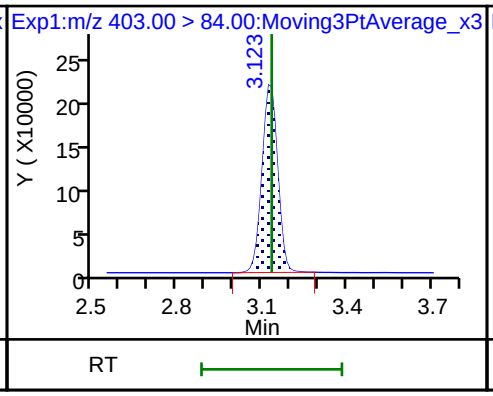

67 Perfluoro(2-propoxypropanoic) ac



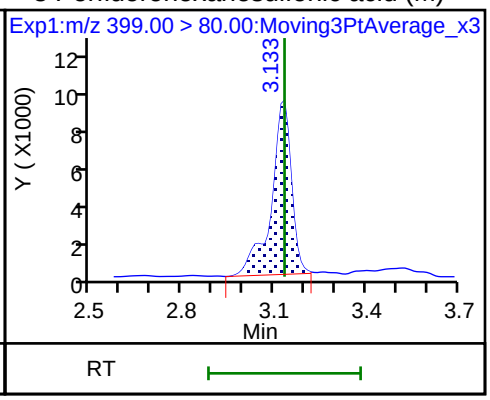

D 64 13C3 HFPO-DA



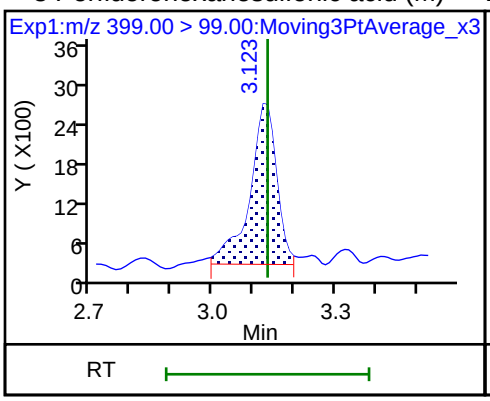

D 11 18O2 PFHxS



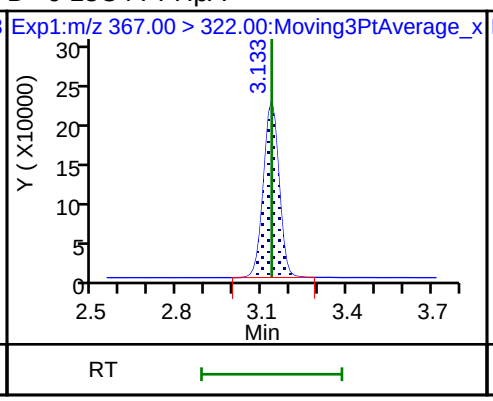

8 Perfluorohexanesulfonic acid (M)



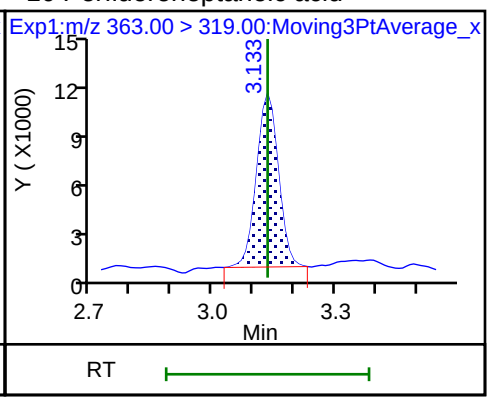

8 Perfluorohexanesulfonic acid (M)



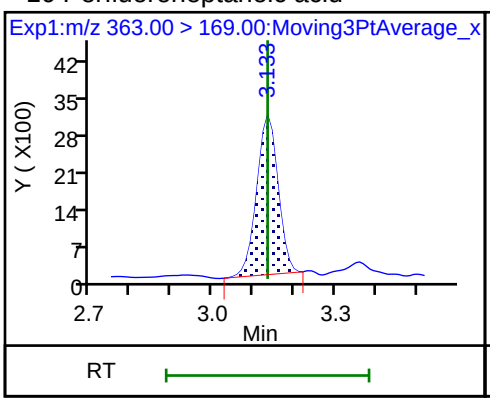

D 9 13C4 PFHpA



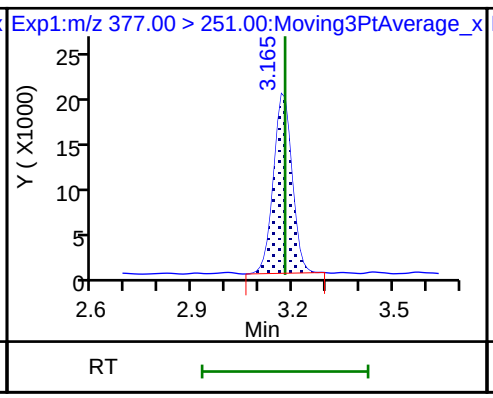

10 Perfluoroheptanoic acid



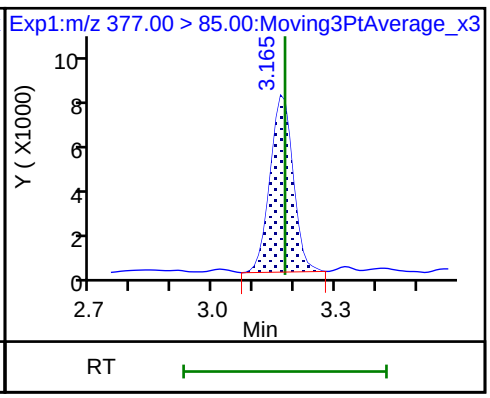

10 Perfluoroheptanoic acid



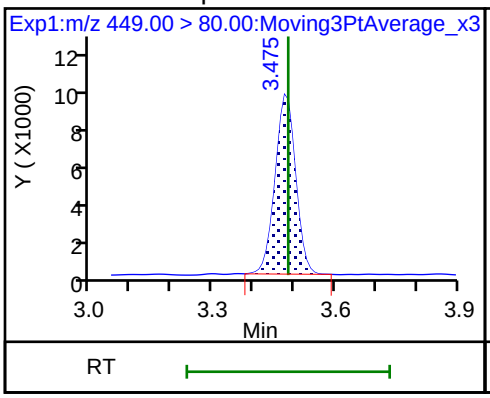

77 DONA



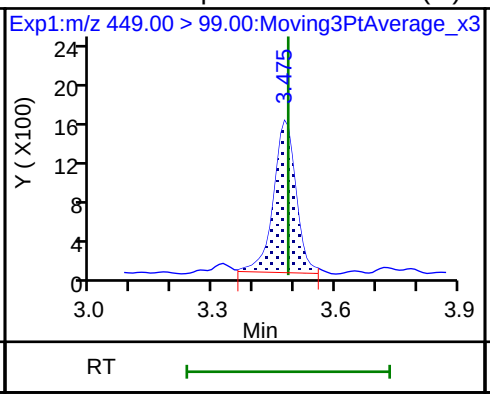

77 DONA



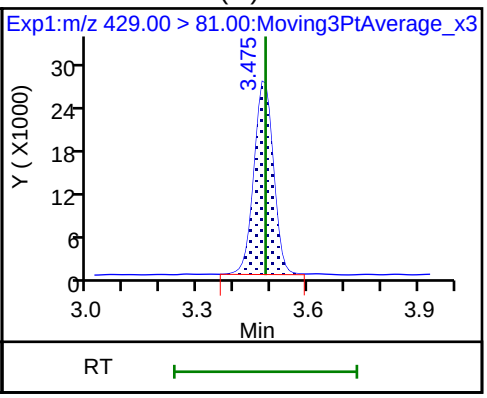
16 Perfluoroheptanesulfonic acid



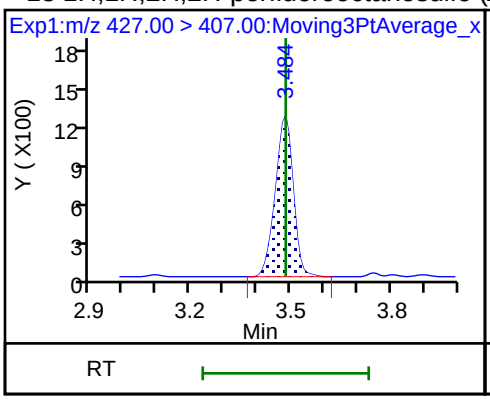

16 Perfluoroheptanesulfonic acid (M)



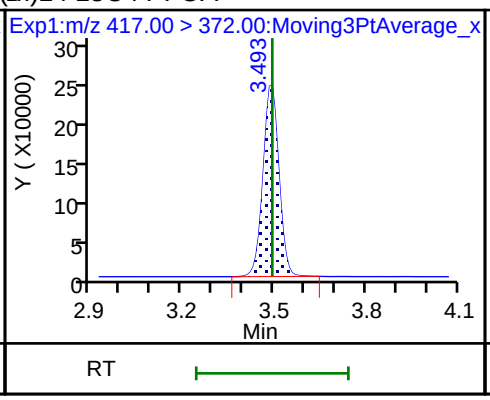

D 12 M2-6:2 FTS (M)



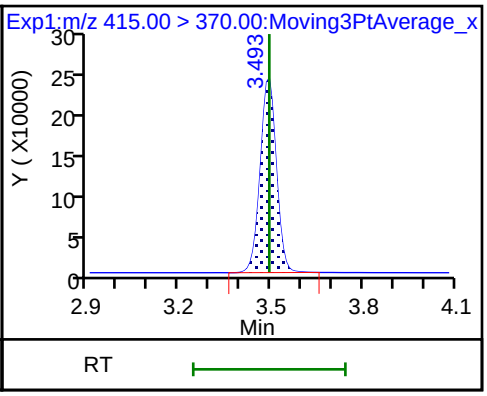

13 1H,1H,2H,2H-perfluorooctanesulfo (M)



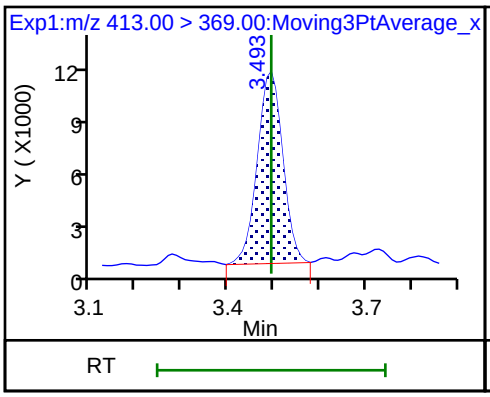

14 13C4 PFOA



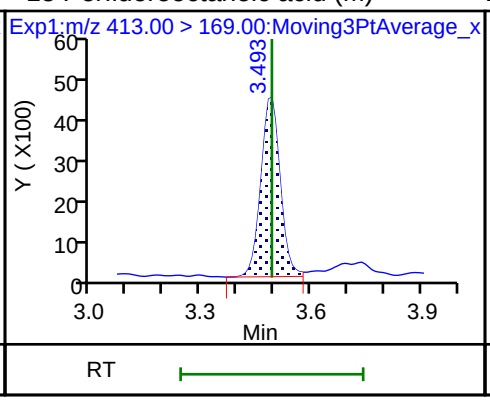

* 62 13C2 PFOA



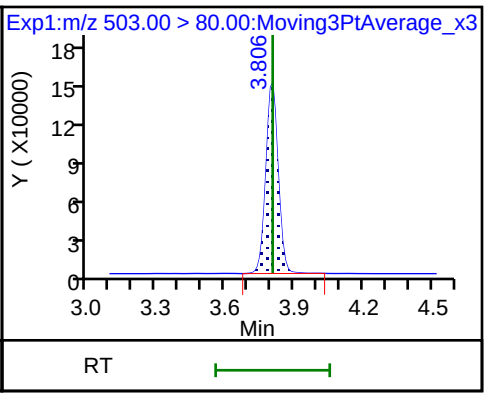

15 Perfluorooctanoic acid



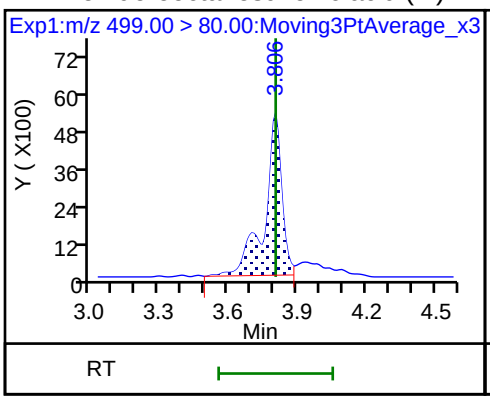

15 Perfluorooctanoic acid (M)



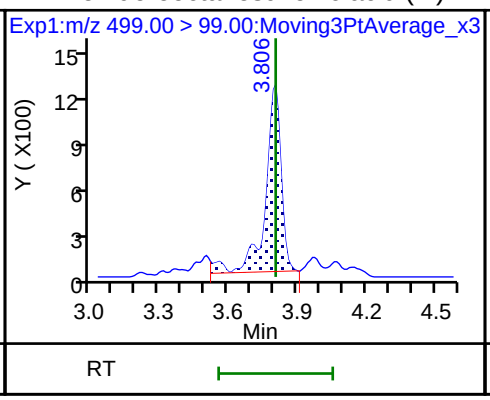

D 18 13C4 PFOS



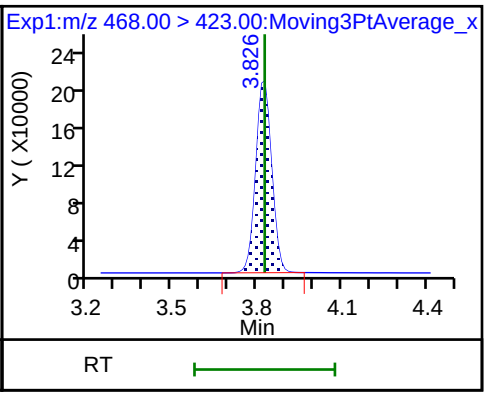

17 Perfluorooctanesulfonic acid (M)



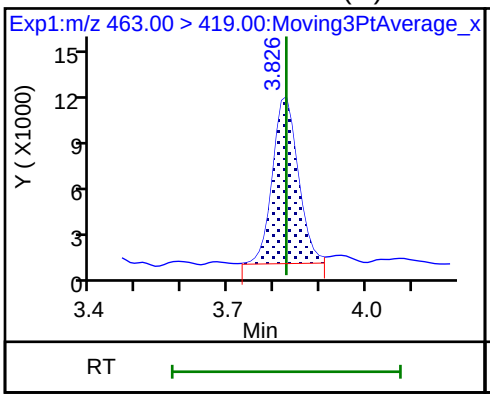

17 Perfluorooctanesulfonic acid (M)



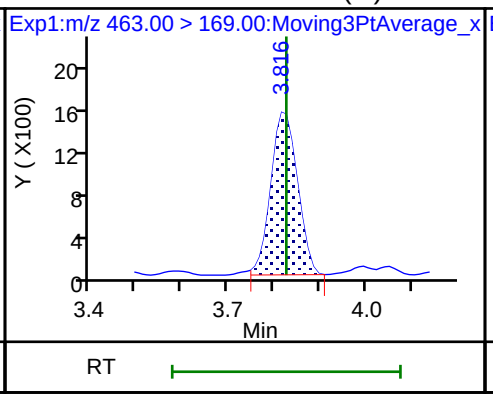

D 19 13C5 PFNA



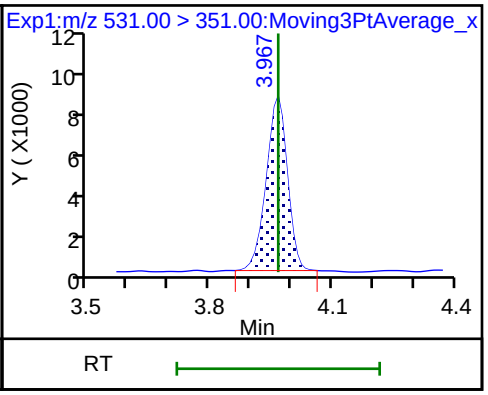
20 Perfluorononanoic acid (M)



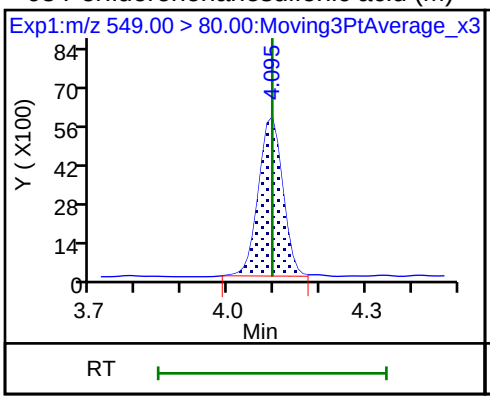

20 Perfluorononanoic acid (M)



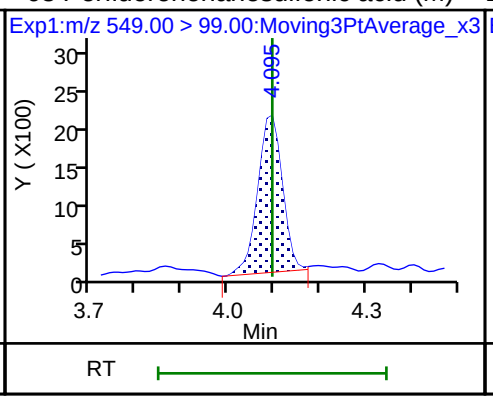

69 9-Chlorohexadecafluoro-3-oxanona



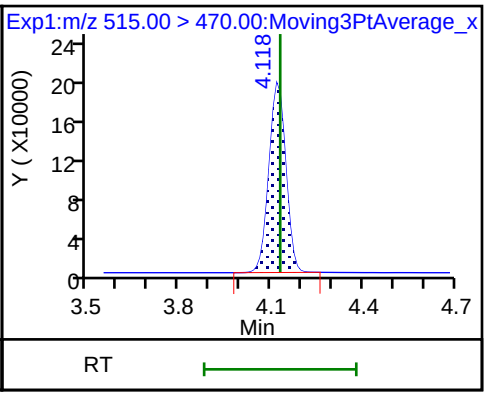

68 Perfluorononanesulfonic acid (M)



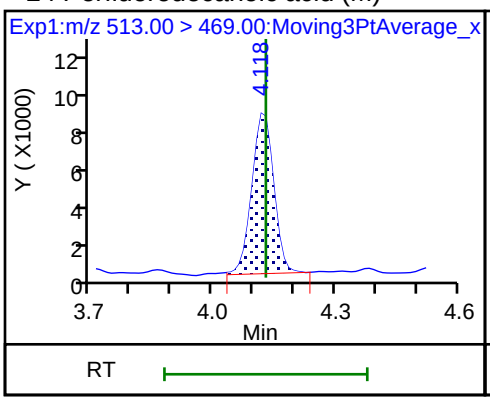

68 Perfluorononanesulfonic acid (M)



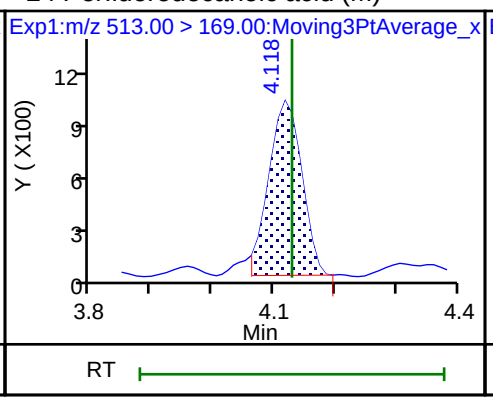

D 23 13C2 PFDA



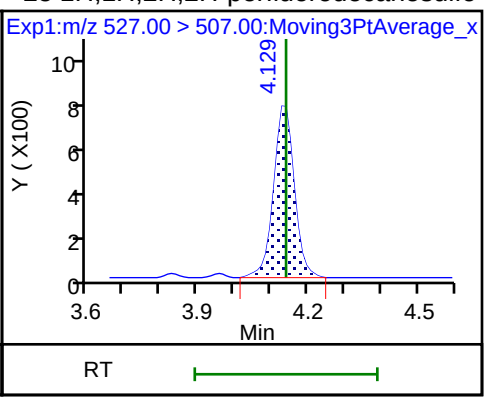

24 Perfluorodecanoic acid (M)



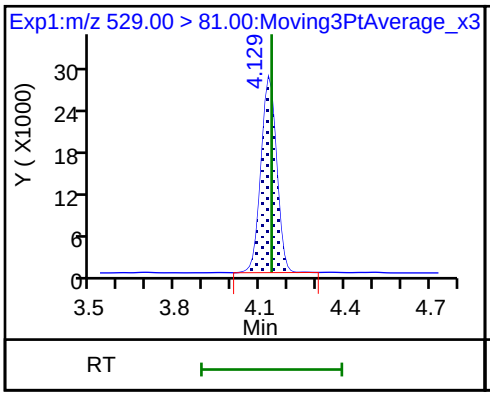

24 Perfluorodecanoic acid (M)



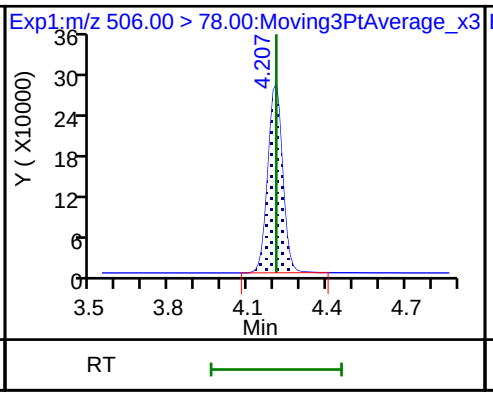

25 1H,1H,2H,2H-perfluorodecanesulfo



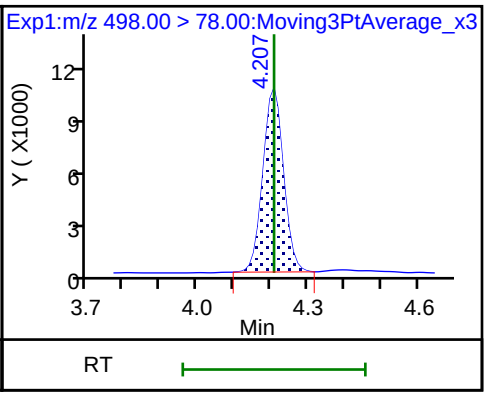

D 26 M2-8:2 FTS



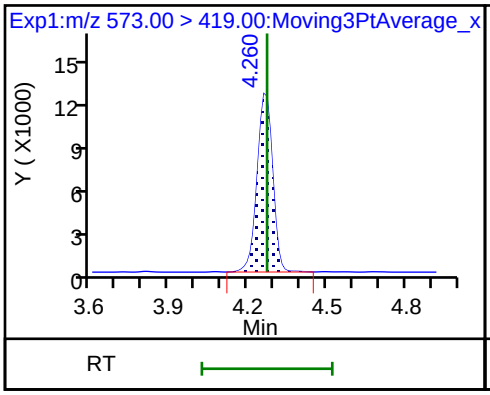

D 21 13C8 FOSA



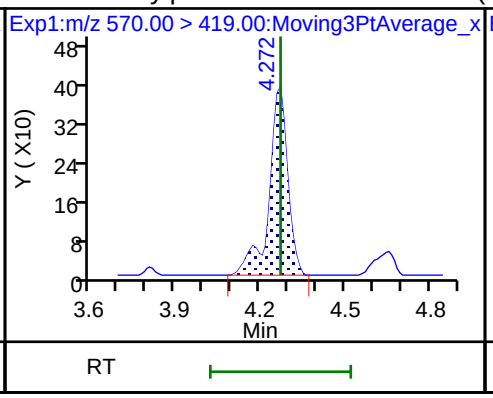

22 Perfluorooctanesulfonamide



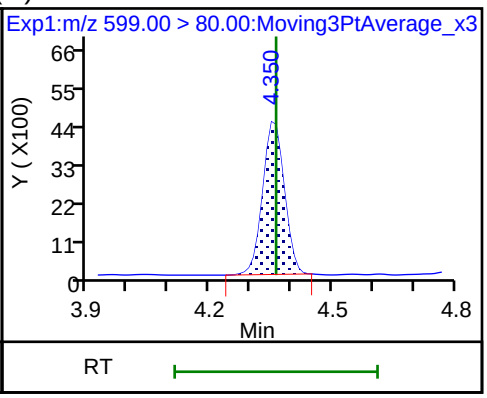
D 27 d3-NMeFOSAA



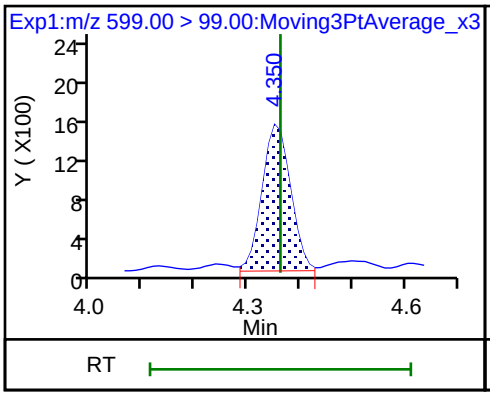

28 N-methylperfluorooctanesulfonami (M)



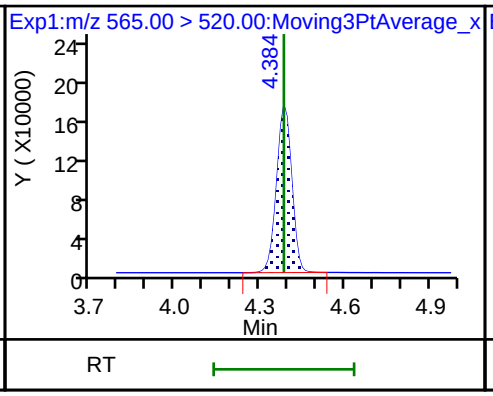

29 Perfluorodecanesulfonic acid



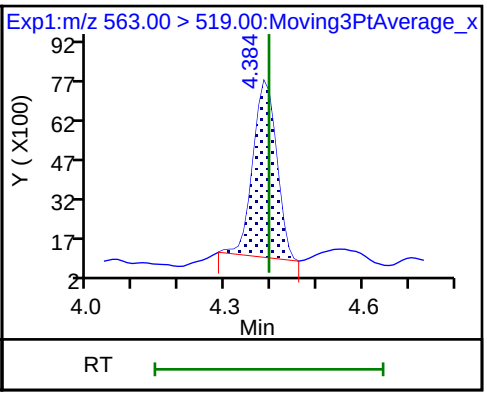

29 Perfluorodecanesulfonic acid



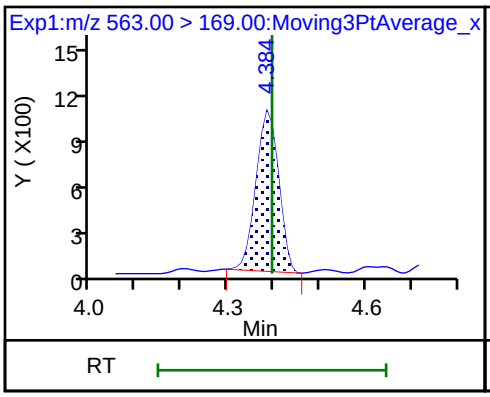

D 30 13C2 PFUnA



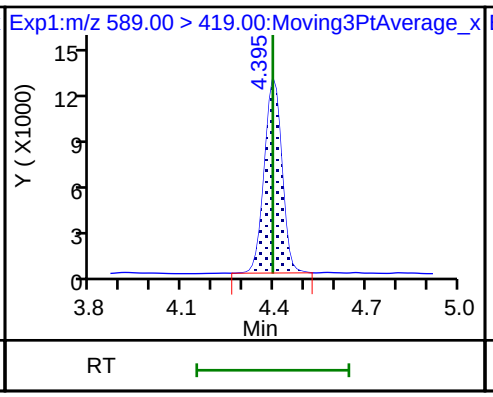

31 Perfluoroundecanoic acid



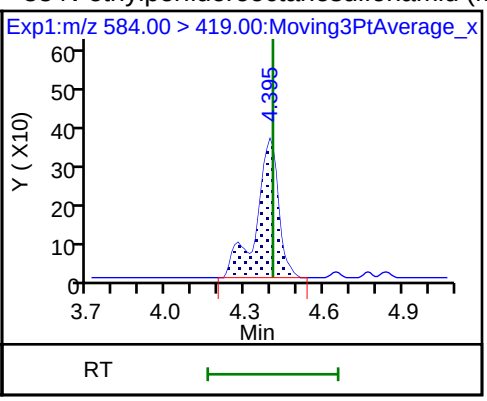

31 Perfluoroundecanoic acid



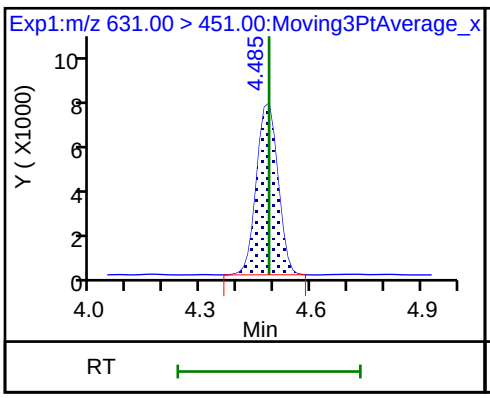

D 32 d5-NEtFOSAA



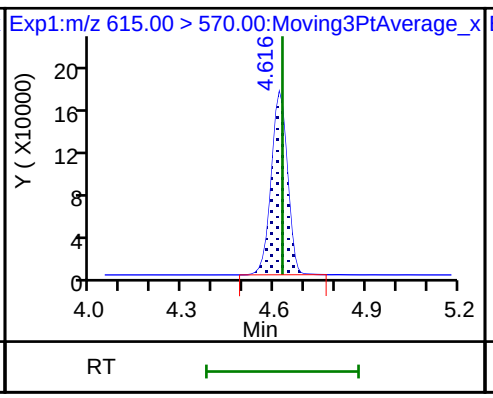

33 N-ethylperfluorooctanesulfonamid (M)



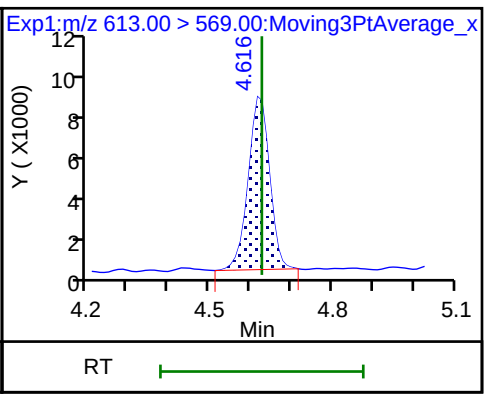

66 11-Chloroeicosafluoro-3-oxaundec



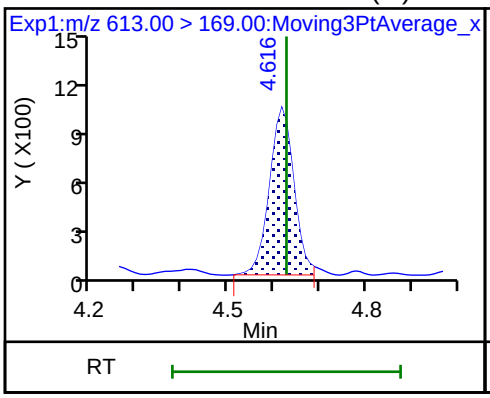

D 36 13C2 PFDoA



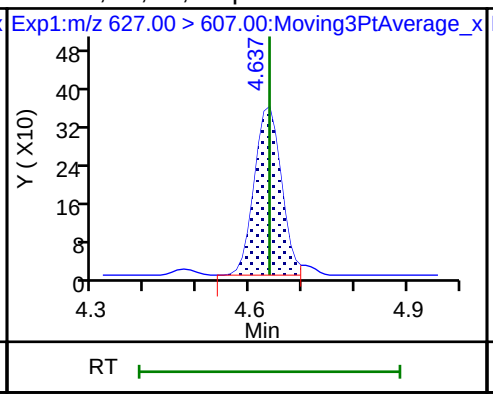

37 Perfluorododecanoic acid



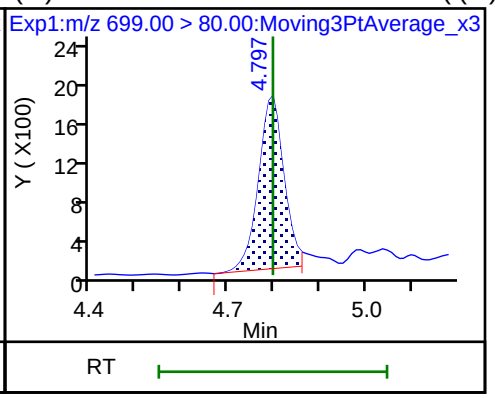
37 Perfluorododecanoic acid (M)



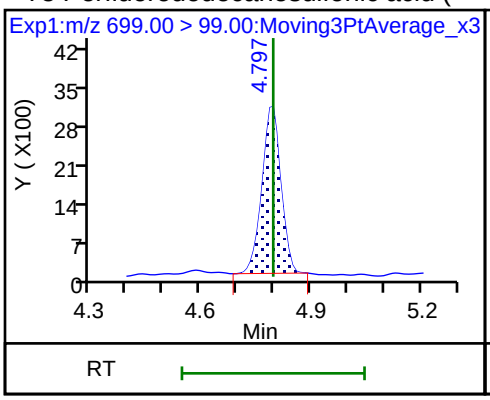

74 1H,1H,2H,2H-perfluorododecanesul (M)



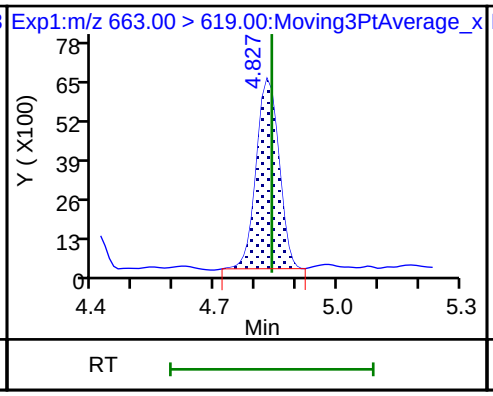

75 Perfluorododecanesulfonic acid ( (M)



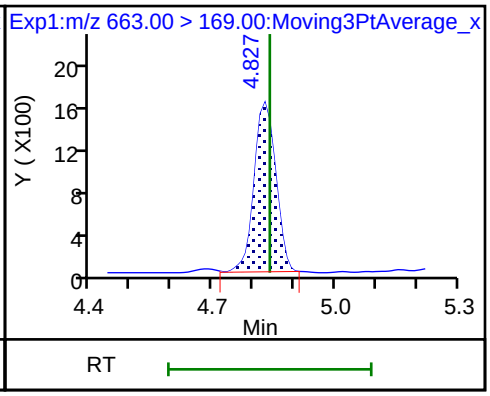

75 Perfluorododecanesulfonic acid (



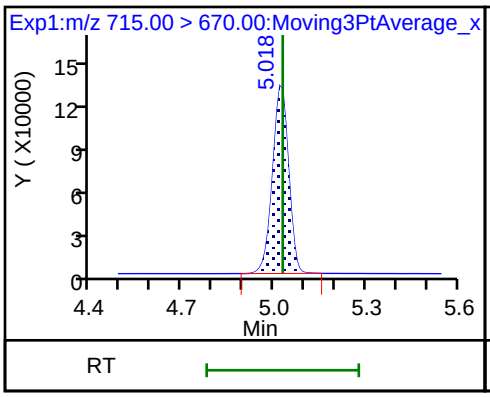

41 Perfluorotridecanoic acid



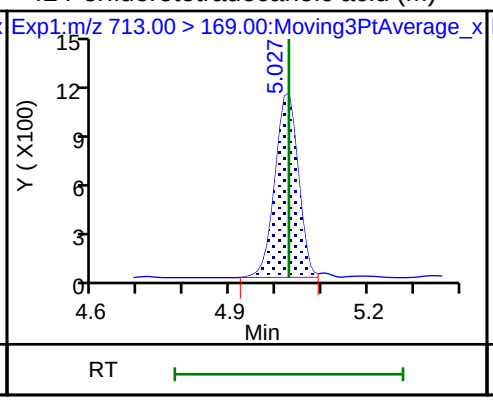

41 Perfluorotridecanoic acid



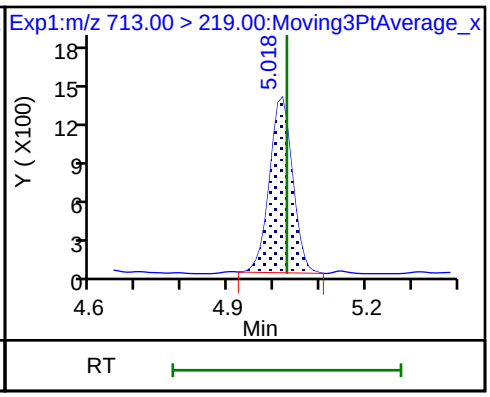

D 43 13C2 PFTeDA



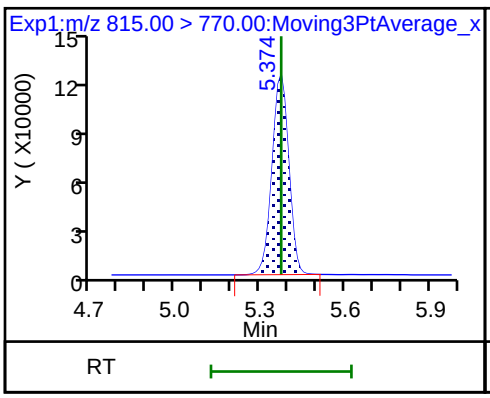

42 Perfluorotetradecanoic acid (M)



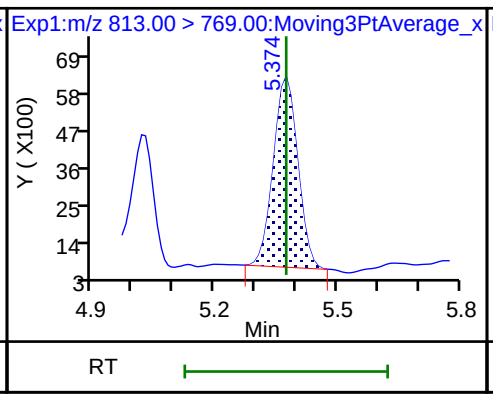

42 Perfluorotetradecanoic acid



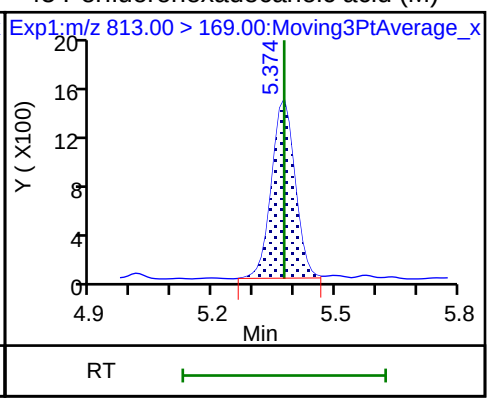

D 44 13C2 PFHxDA



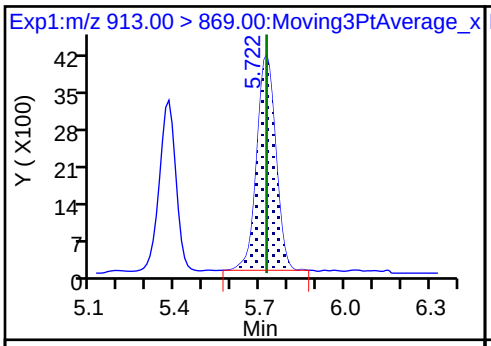

45 Perfluorohexadecanoic acid



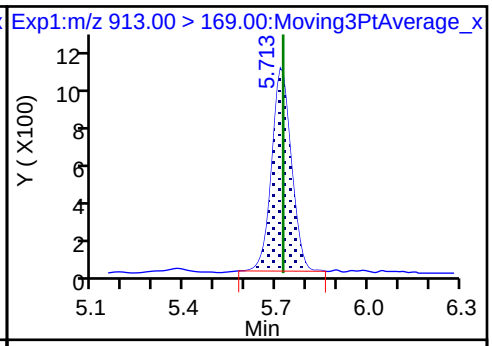

45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid




46 Perfluorooctadecanoic acid



Eurofins TestAmerica, Burlington

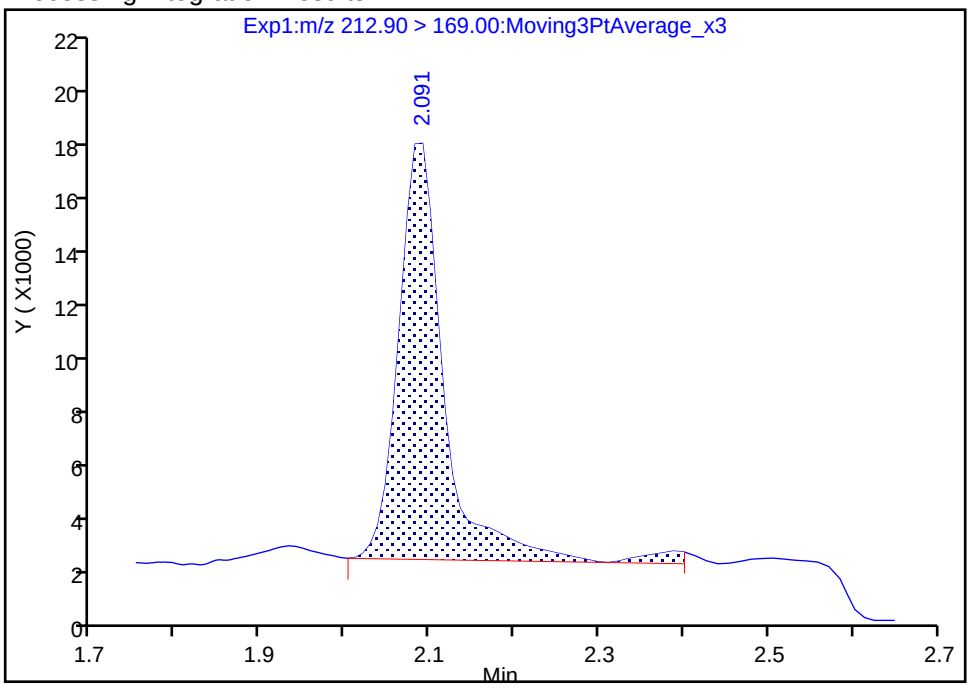
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

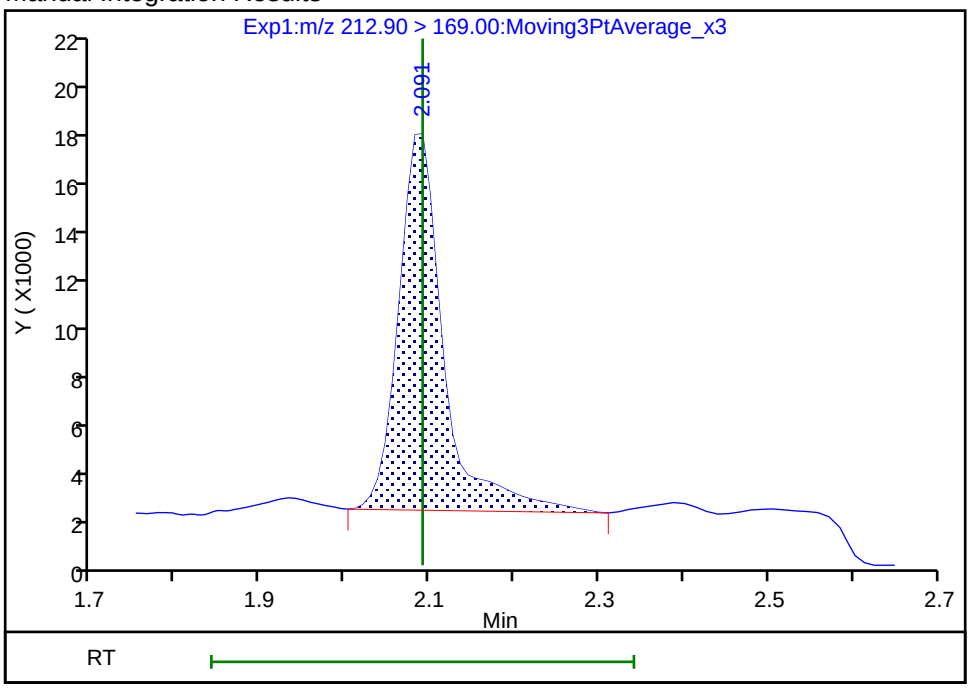
Processing Integration Results

RT: 2.09
Area: 59095
Amount: 0.050540
Amount Units: ng/ml




Manual Integration Results

RT: 2.09
Area: 57629
Amount: 0.060823
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:33:32
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

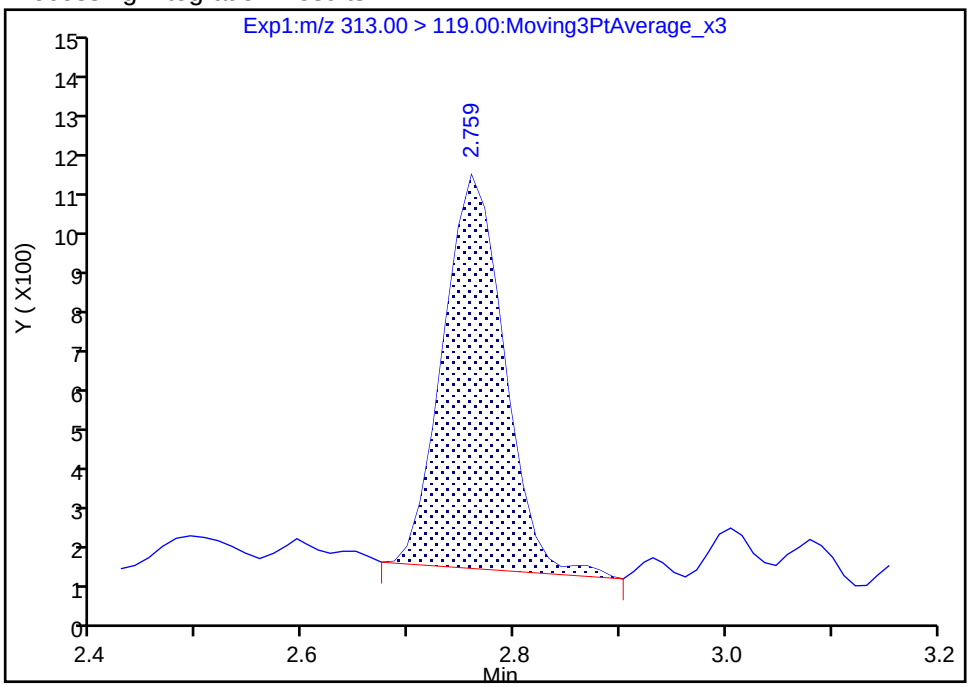
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

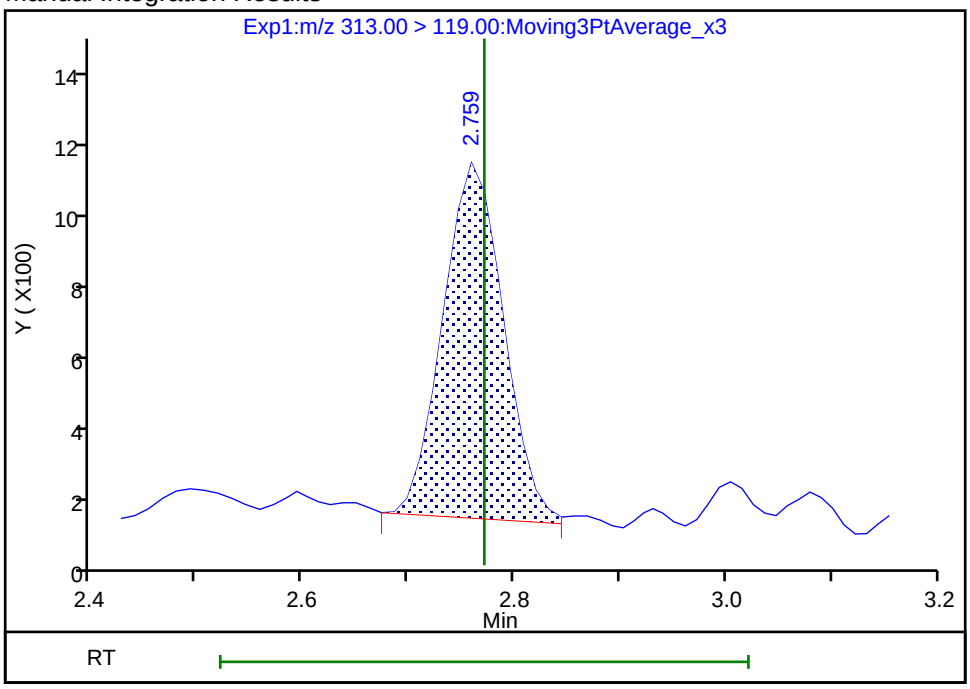
Processing Integration Results

RT: 2.76
Area: 3908
Amount: 0.051782
Amount Units: ng/ml




Manual Integration Results

RT: 2.76
Area: 3848
Amount: 0.058993
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:38:20
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

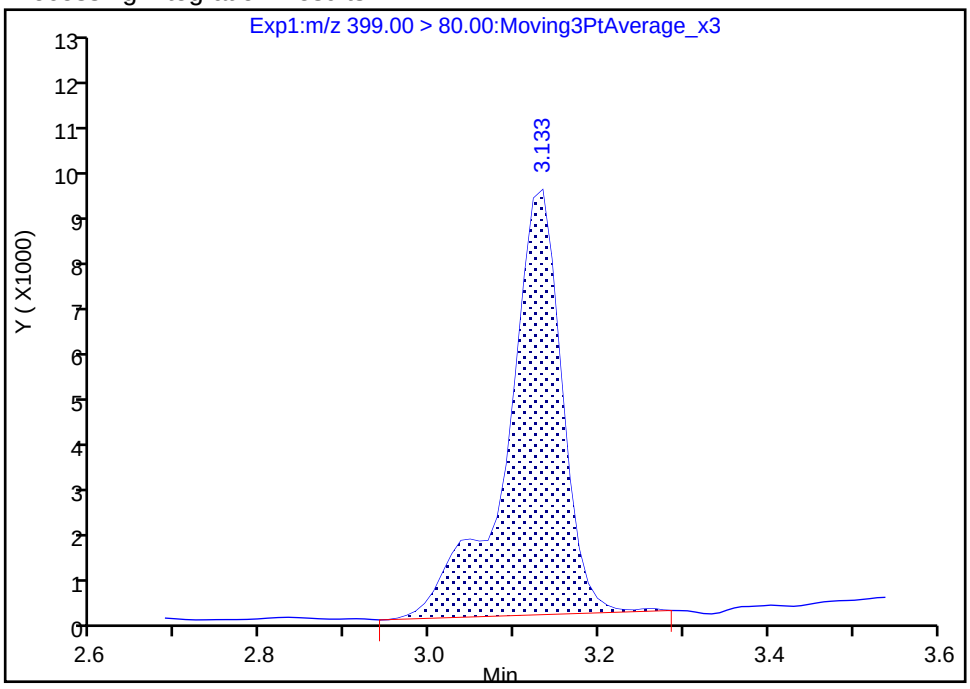
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

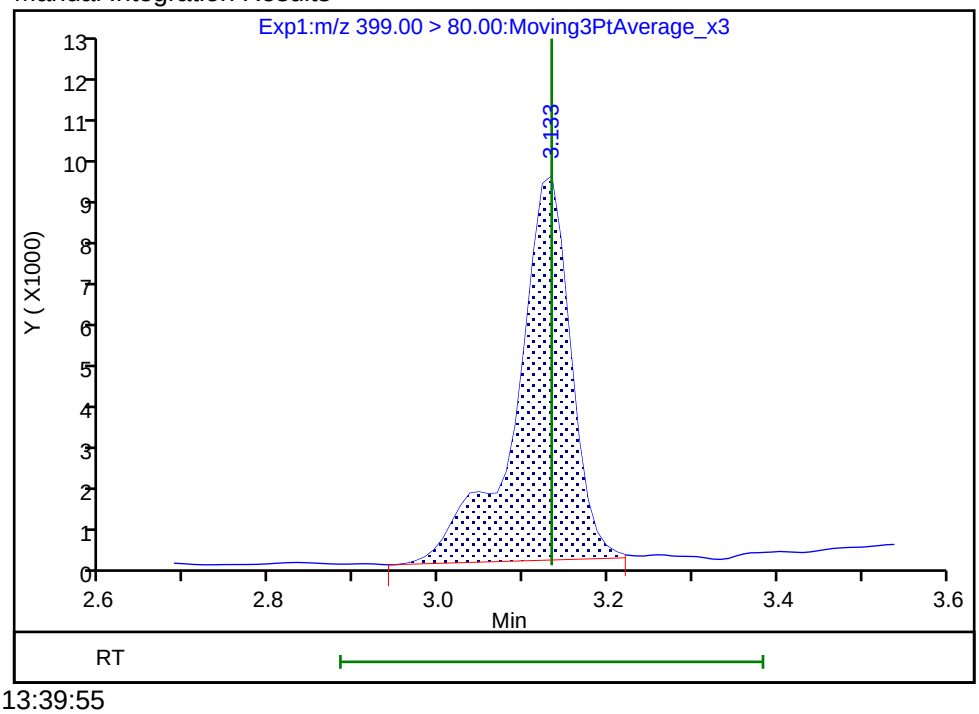
Processing Integration Results

RT: 3.13
Area: 41838
Amount: 0.042786
Amount Units: ng/ml




Manual Integration Results

RT: 3.13
Area: 41668
Amount: 0.050821
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:39:55
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

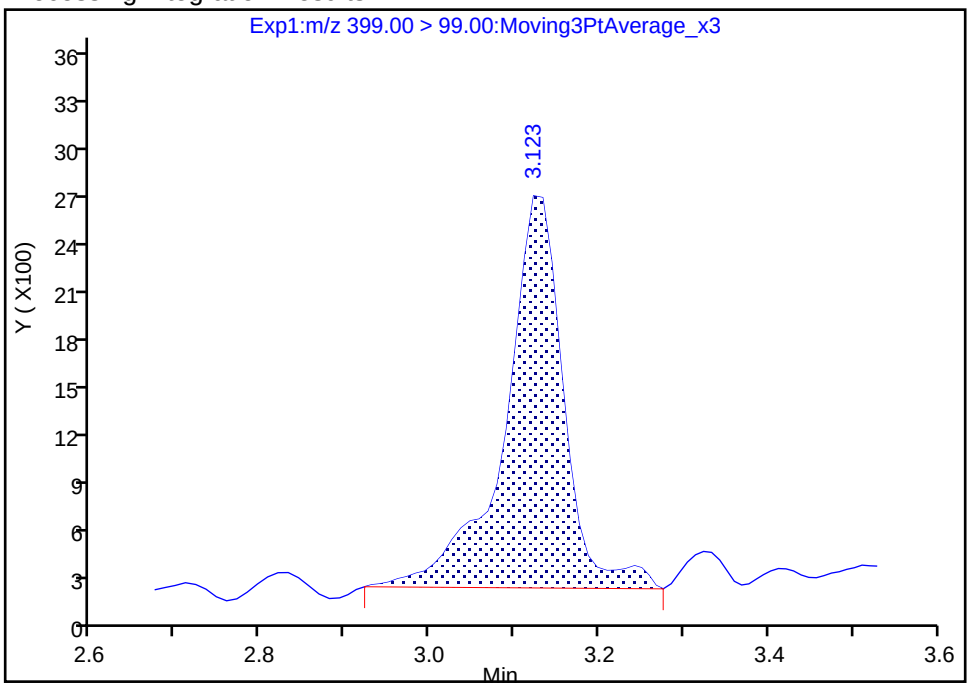
Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d
Injection Date: 22-Dec-2020 12:48:13 Instrument ID: LC812
Lims ID: IC
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

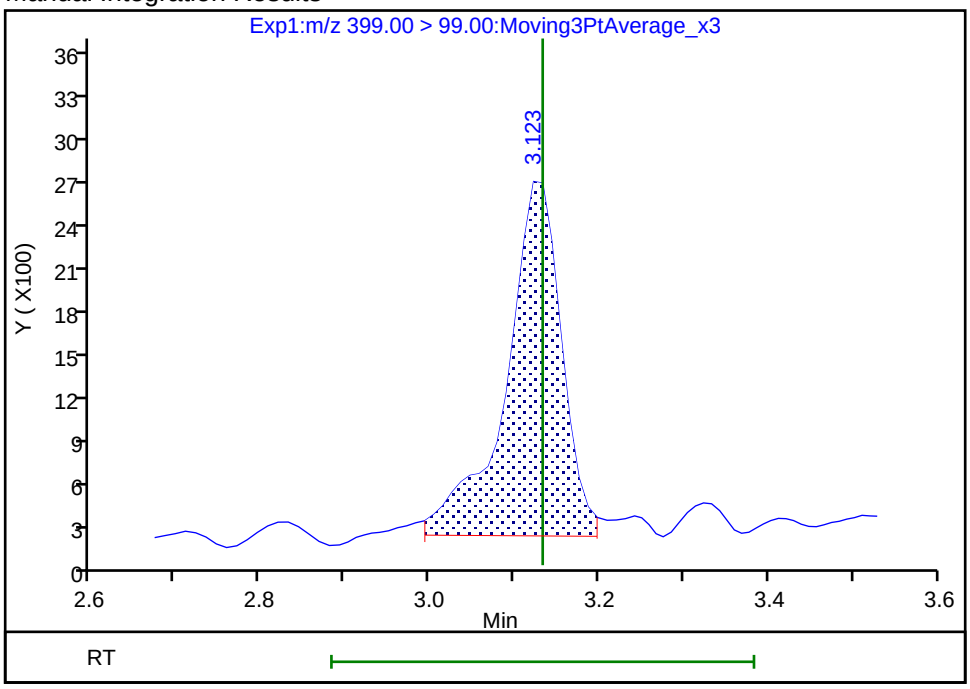
Processing Integration Results

RT: 3.12
Area: 11785
Amount: 0.042786
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 11112
Amount: 0.050821
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:39:58
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

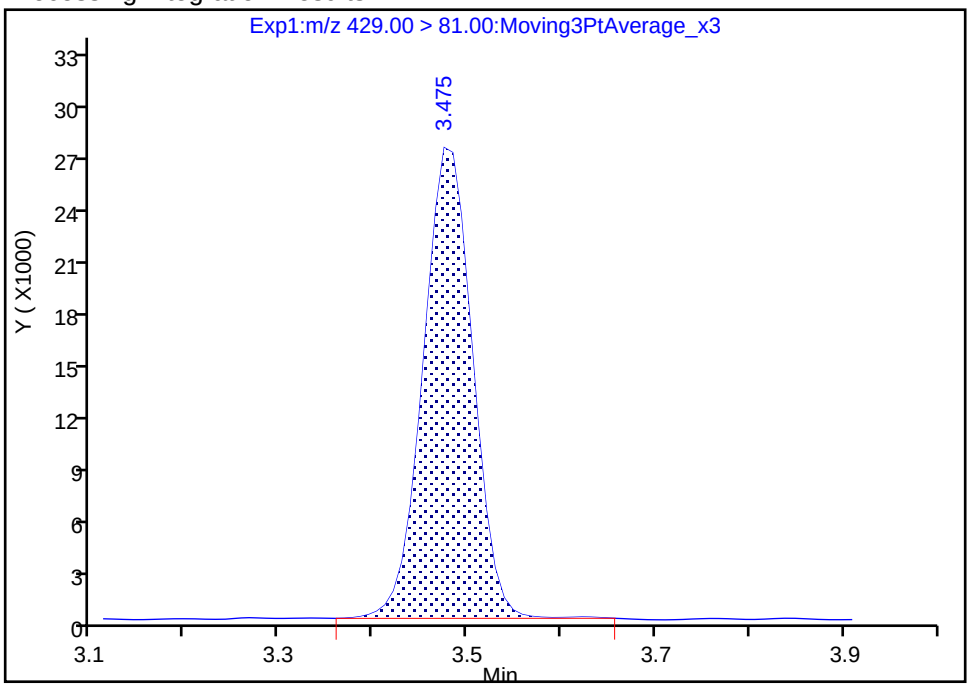
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

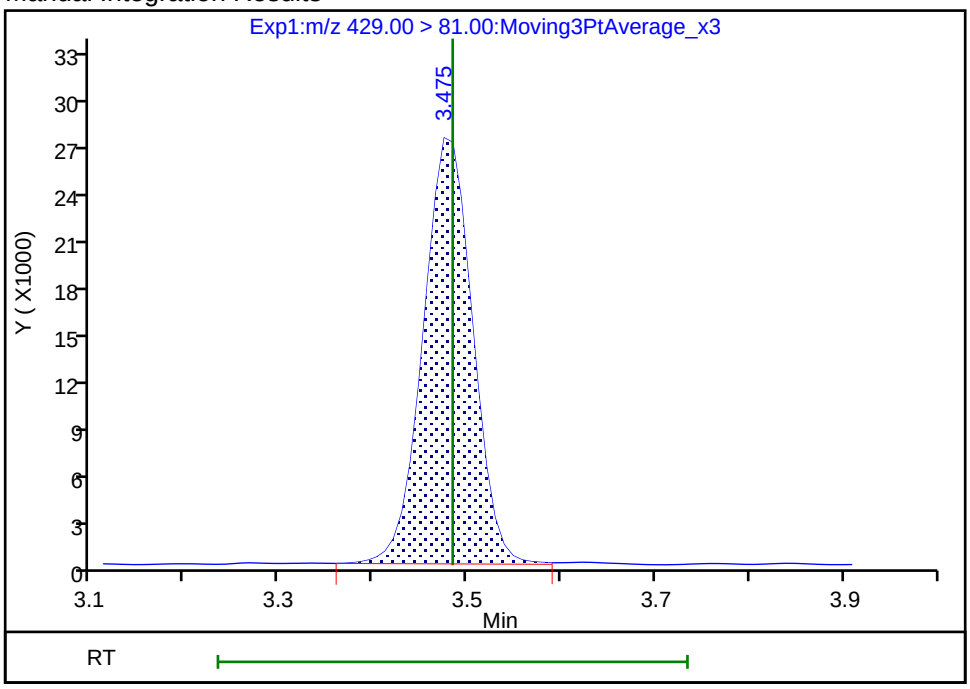
Processing Integration Results

RT: 3.48
Area: 100266
Amount: 1.224525
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 100493
Amount: 1.210092
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:40:34

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

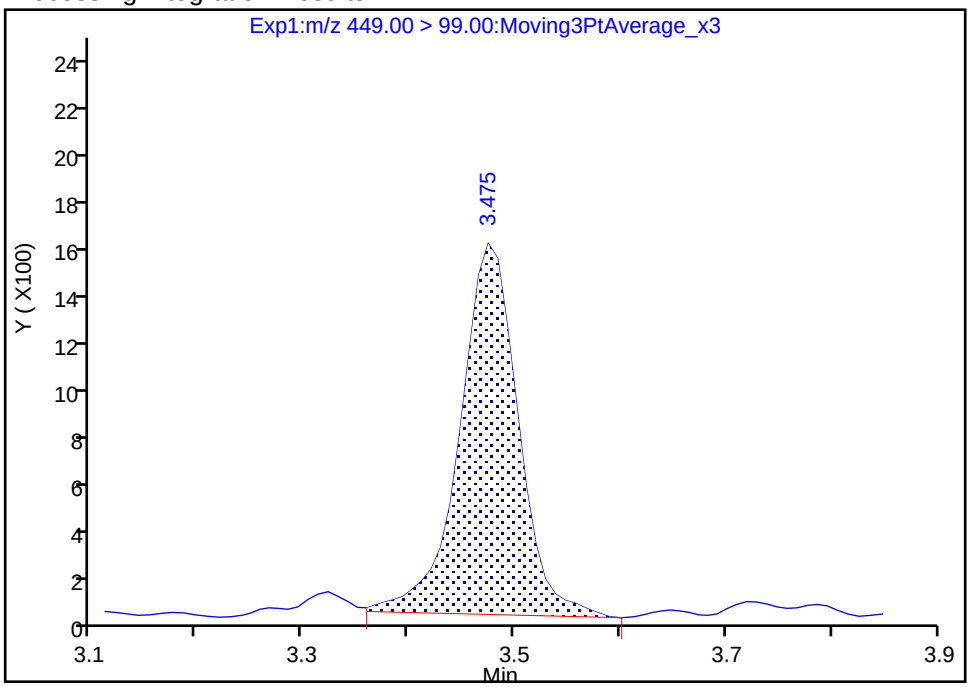
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

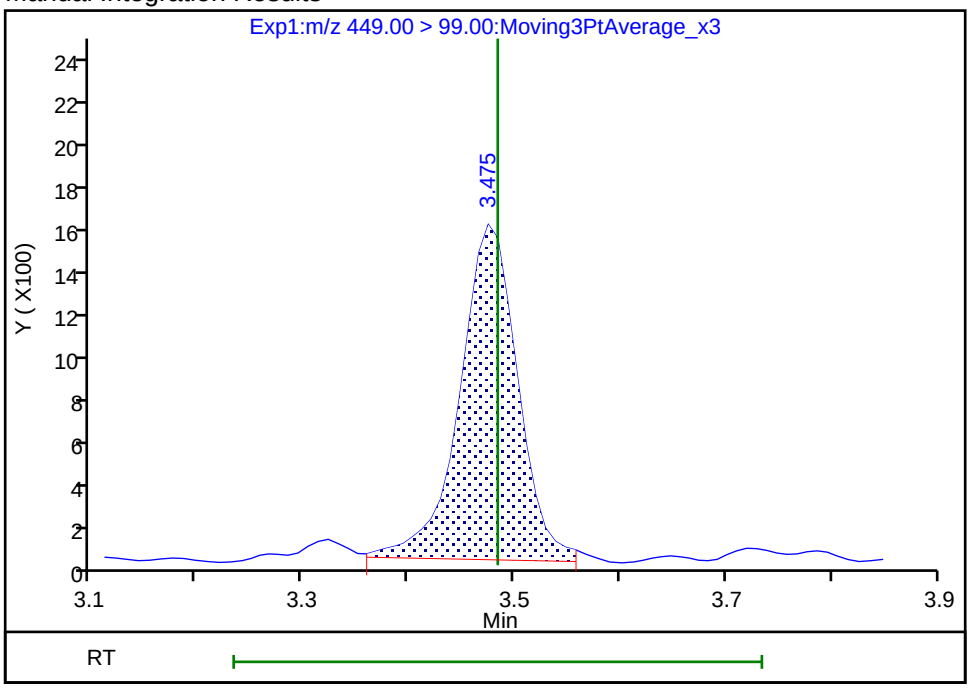
Processing Integration Results

RT: 3.48
Area: 5908
Amount: 0.046186
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 5848
Amount: 0.051177
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:40:18
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

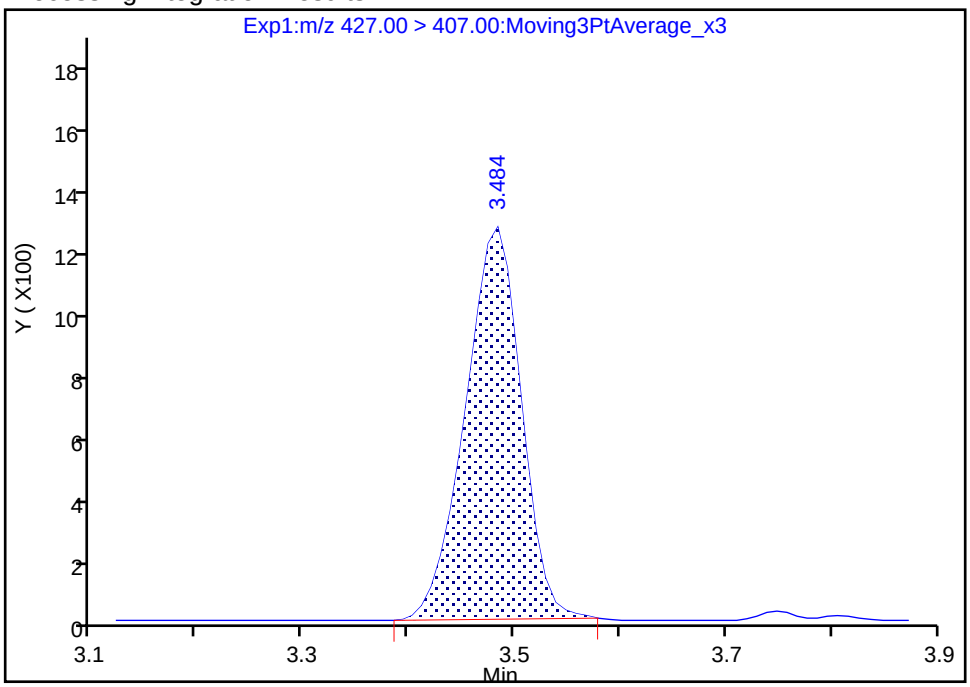
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

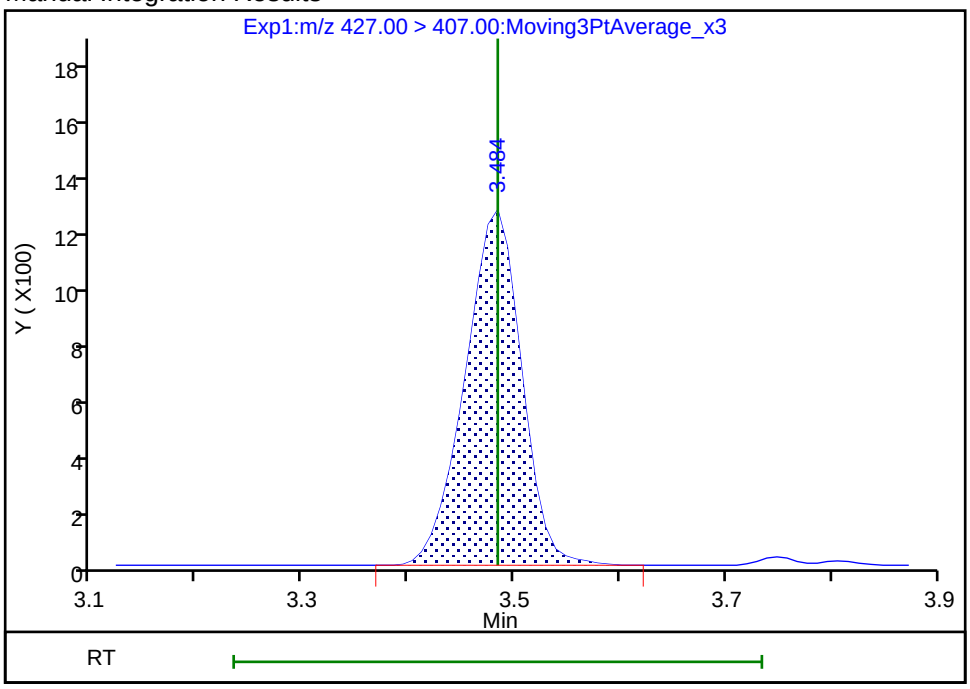
Processing Integration Results

RT: 3.48
Area: 4509
Amount: 0.047470
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 4554
Amount: 0.048378
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:40:43

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

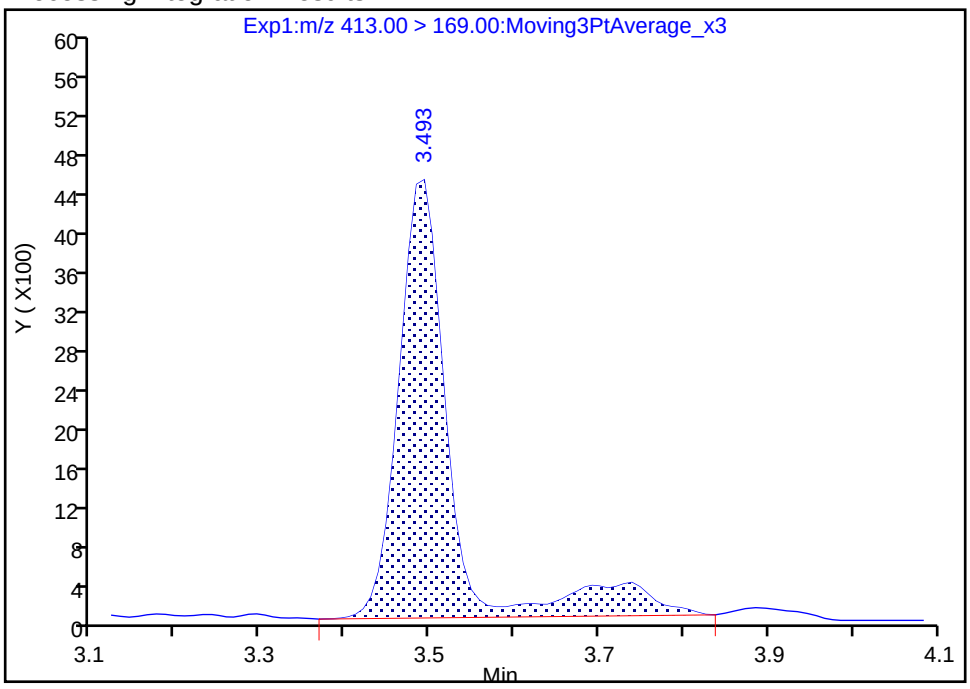
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

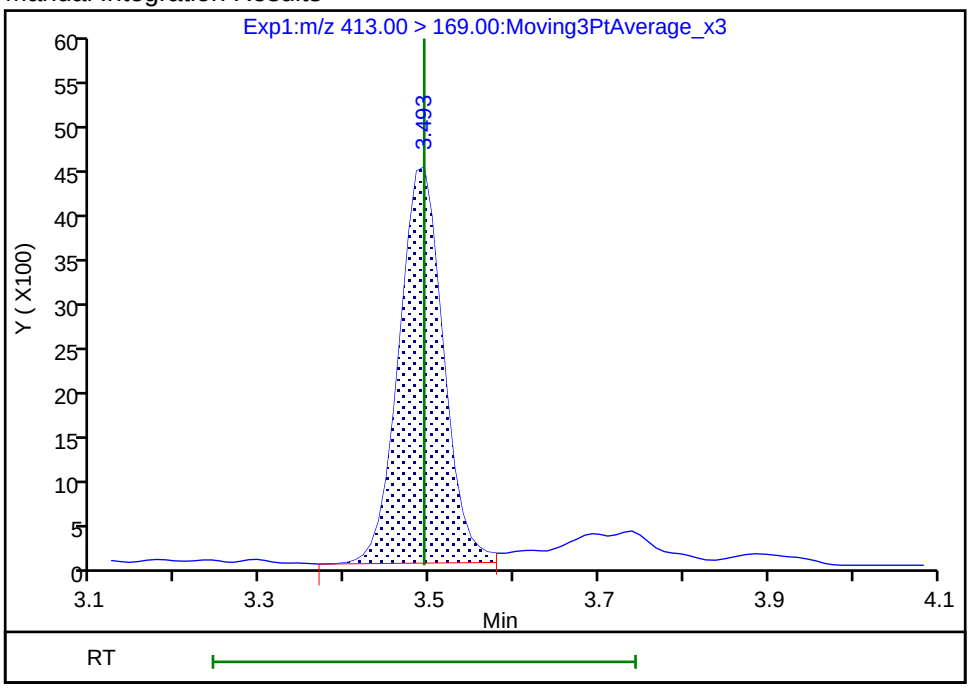
Processing Integration Results

RT: 3.49
Area: 19115
Amount: 0.048680
Amount Units: ng/ml




Manual Integration Results

RT: 3.49
Area: 16414
Amount: 0.052608
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:40:57

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

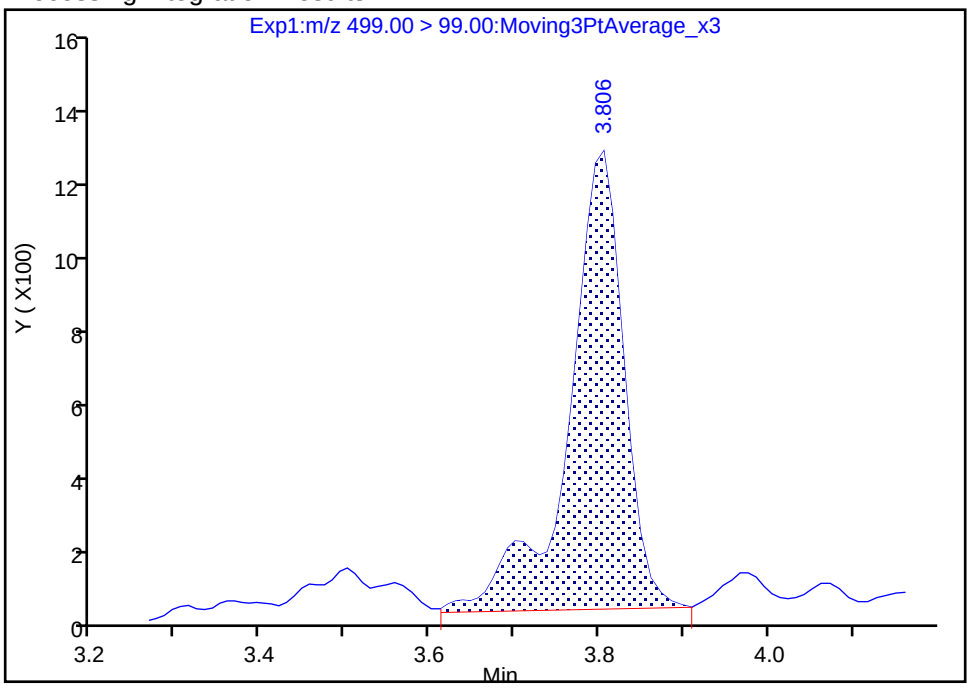
Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d
Injection Date: 22-Dec-2020 12:48:13 Instrument ID: LC812
Lims ID: IC
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

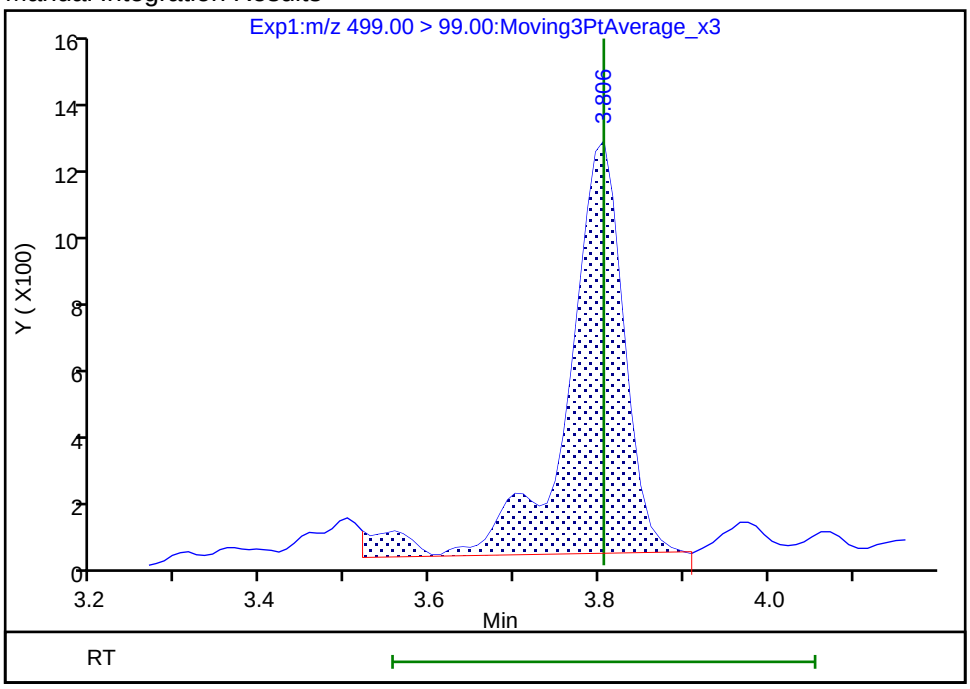
Processing Integration Results

RT: 3.81
Area: 5573
Amount: 0.046531
Amount Units: ng/ml




Manual Integration Results

RT: 3.81
Area: 5749
Amount: 0.051360
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:41:31
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

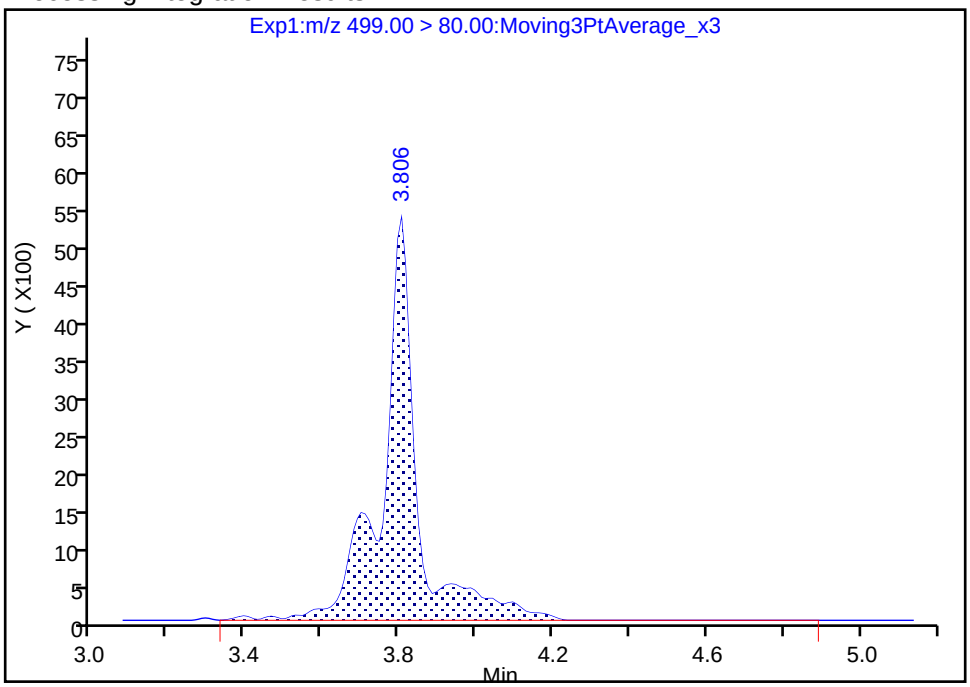
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

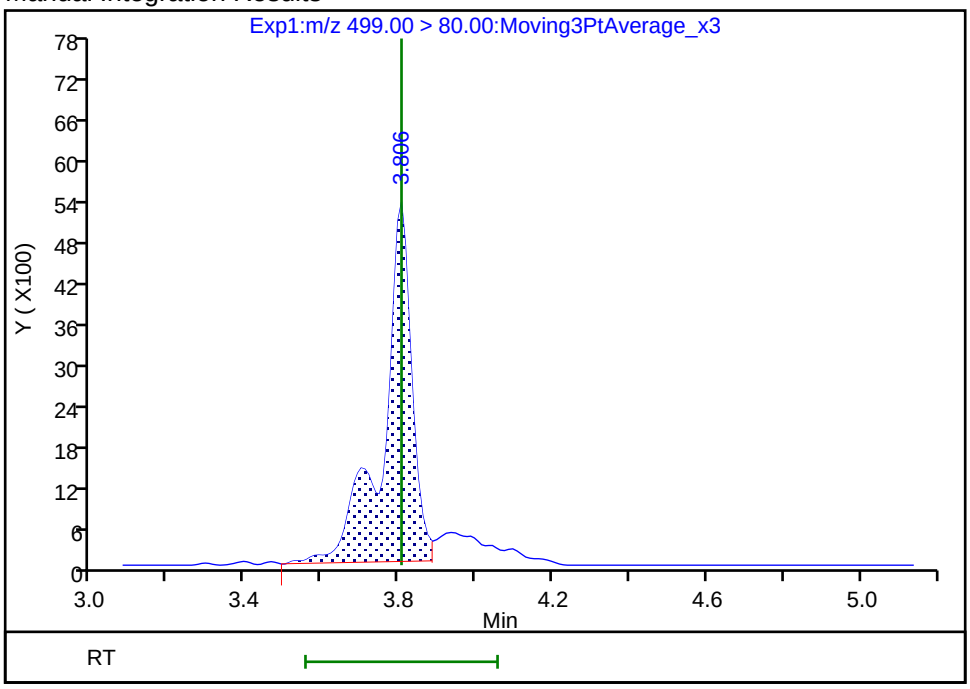
Processing Integration Results

RT: 3.81
Area: 33869
Amount: 0.046531
Amount Units: ng/ml




Manual Integration Results

RT: 3.81
Area: 27324
Amount: 0.051360
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:41:52

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

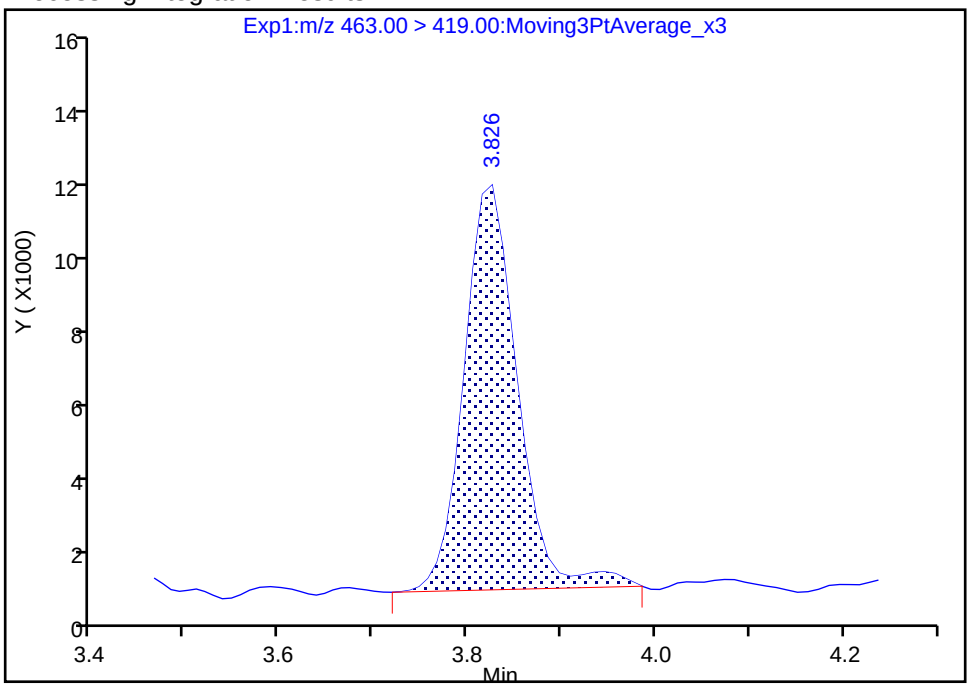
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

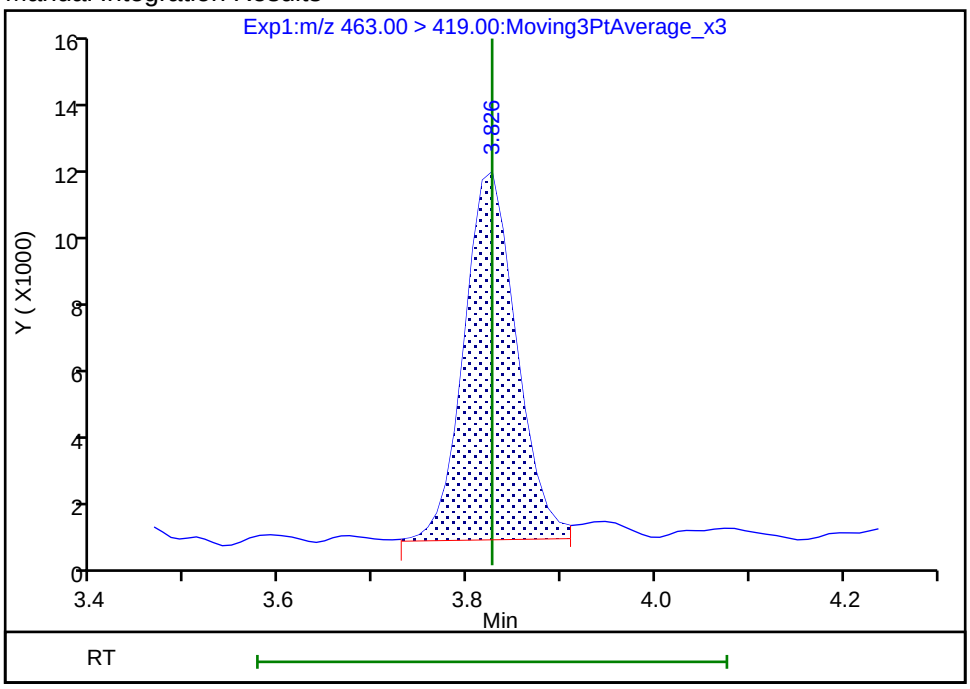
Processing Integration Results

RT: 3.83
Area: 40725
Amount: 0.050765
Amount Units: ng/ml




Manual Integration Results

RT: 3.83
Area: 40080
Amount: 0.057459
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:42:29

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

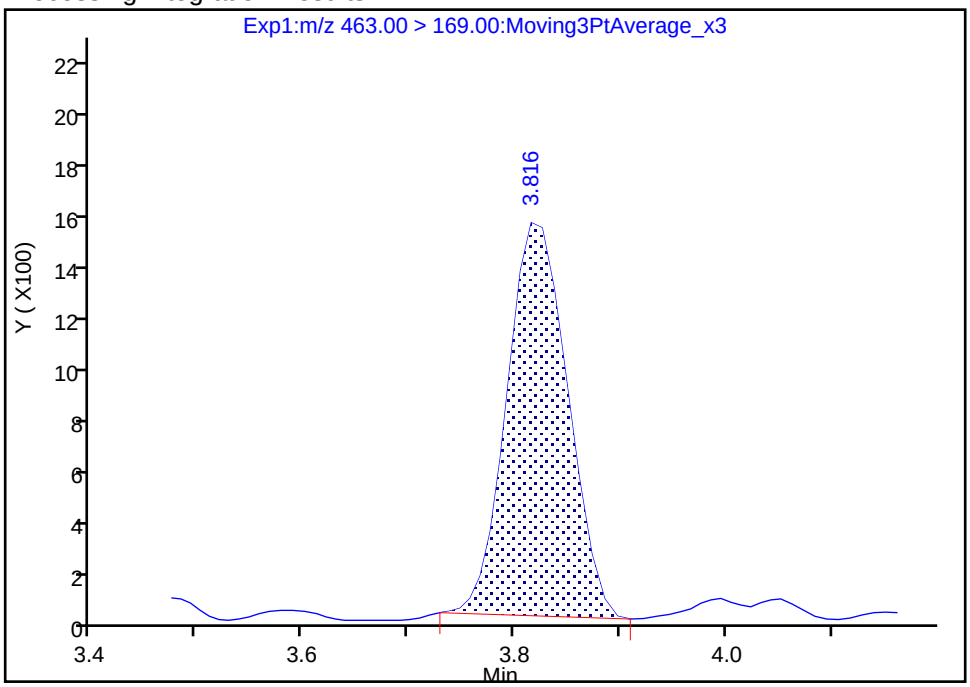
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

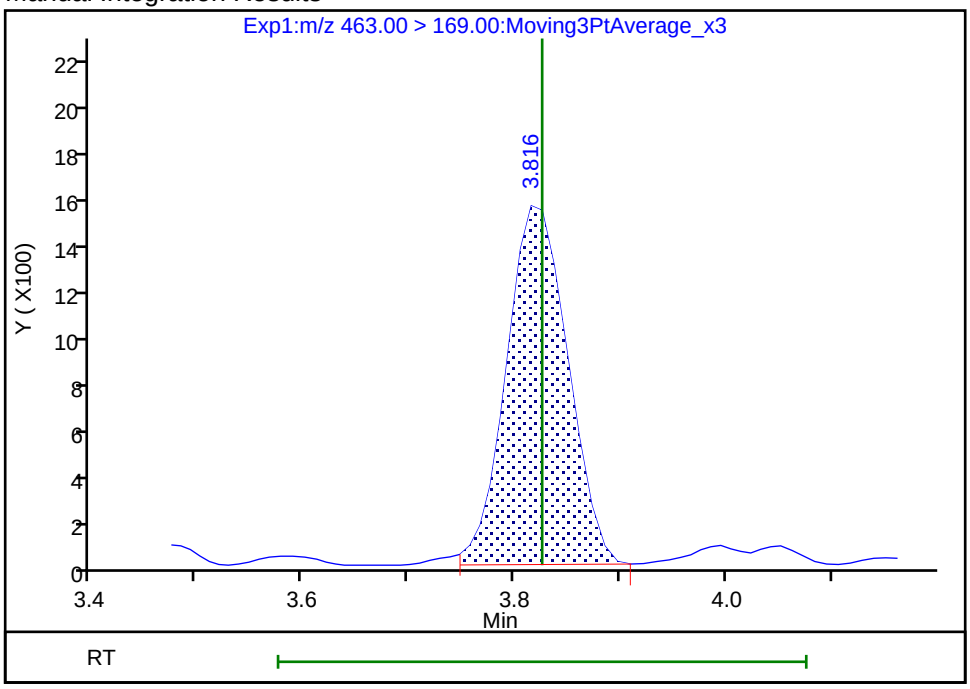
Processing Integration Results

RT: 3.82
Area: 6170
Amount: 0.050765
Amount Units: ng/ml




Manual Integration Results

RT: 3.82
Area: 6287
Amount: 0.057459
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:42:33

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

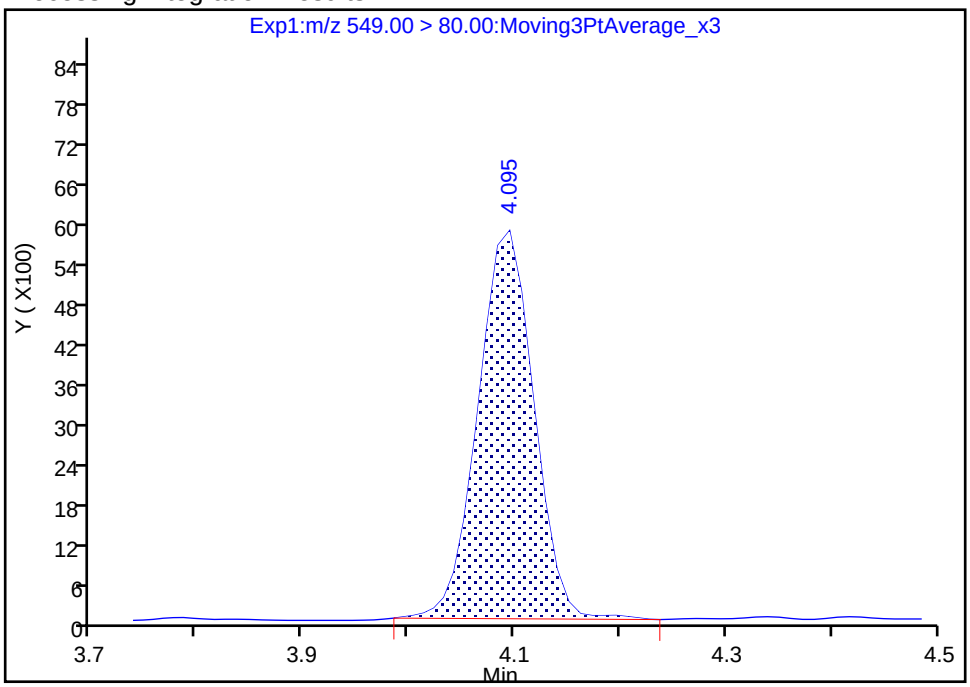
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

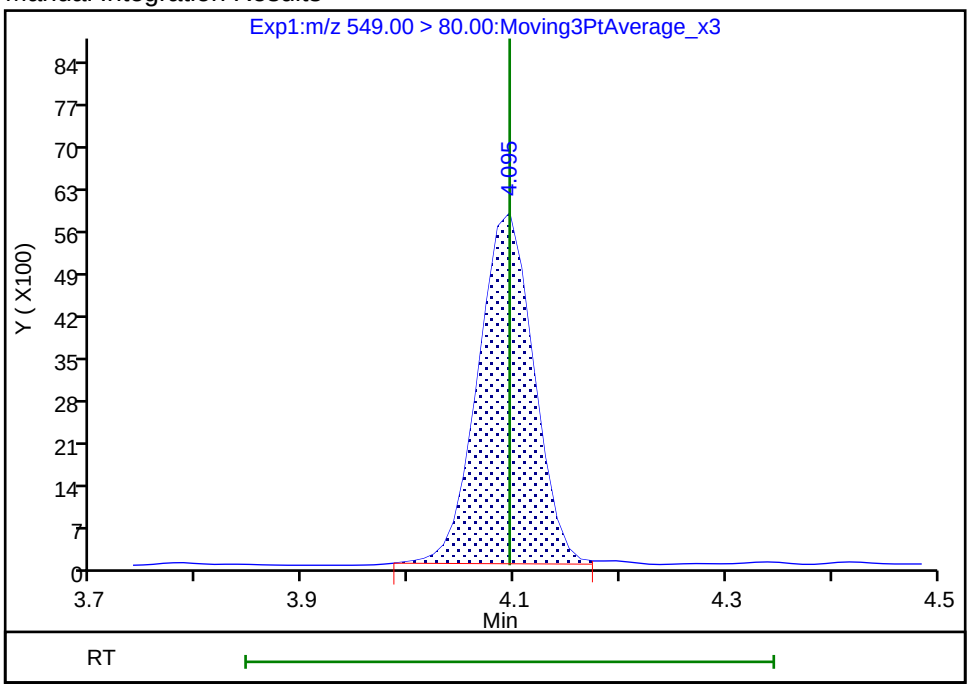
Processing Integration Results

RT: 4.10
Area: 21398
Amount: 0.047565
Amount Units: ng/ml




Manual Integration Results

RT: 4.10
Area: 21260
Amount: 0.053562
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:42:43
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

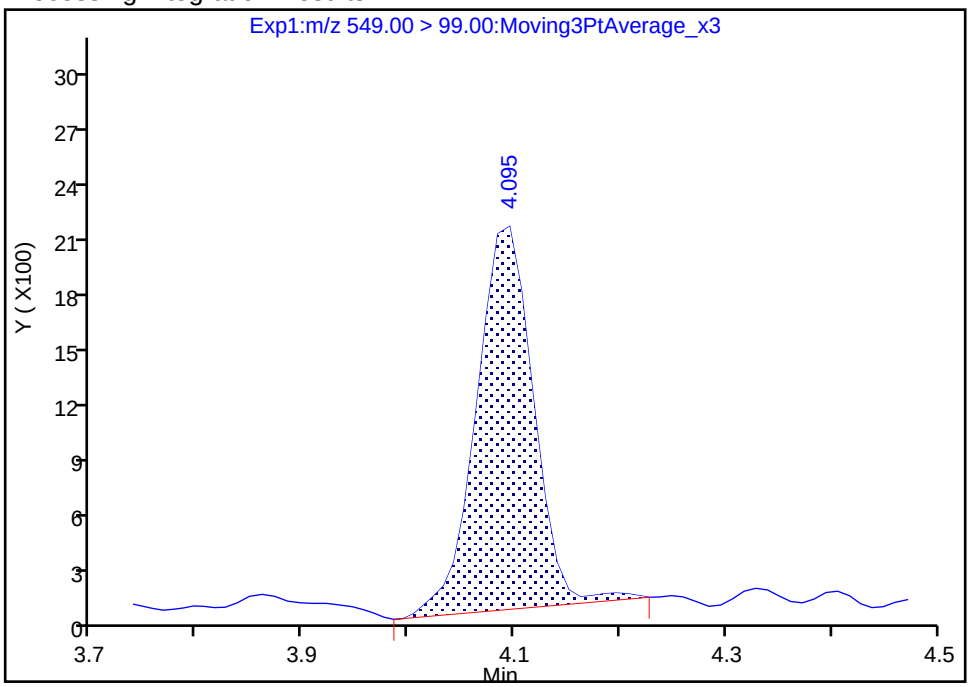
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

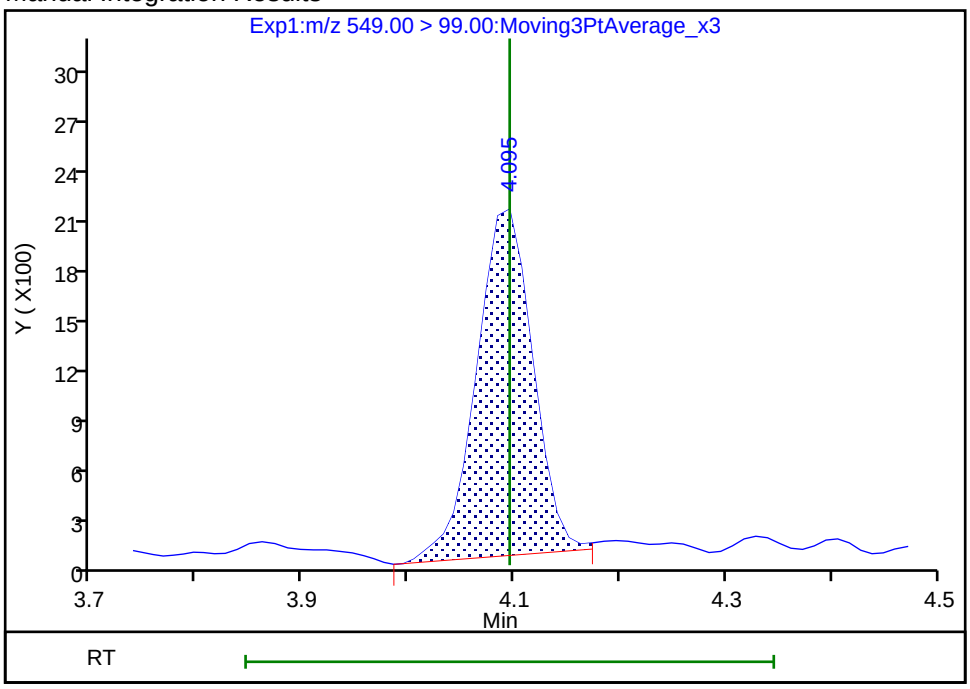
Processing Integration Results

RT: 4.10
Area: 7819
Amount: 0.047565
Amount Units: ng/ml




Manual Integration Results

RT: 4.10
Area: 7735
Amount: 0.053562
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:42:47

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

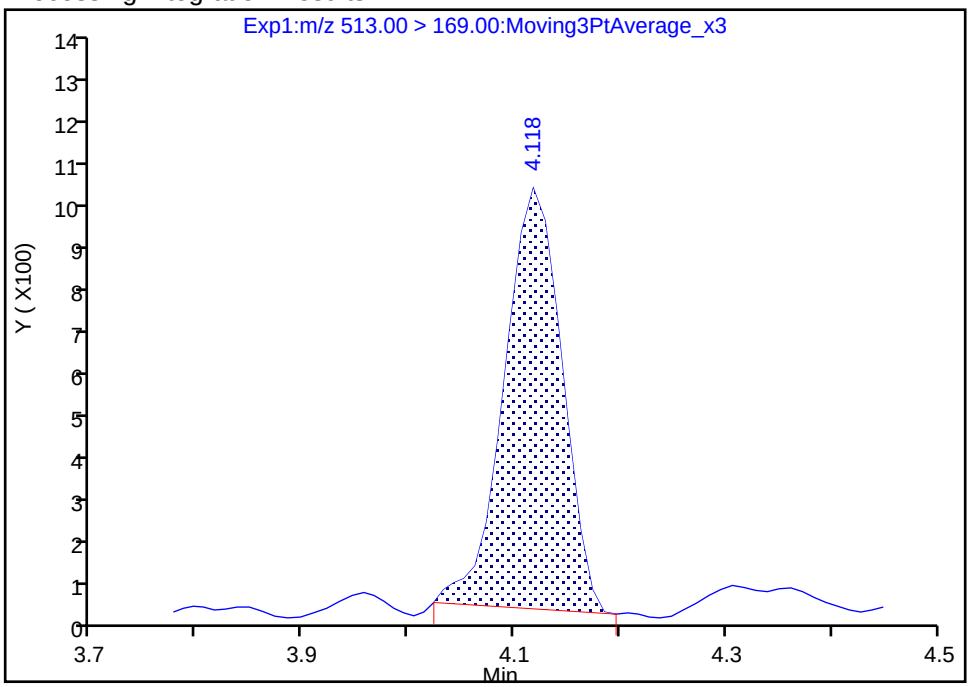
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

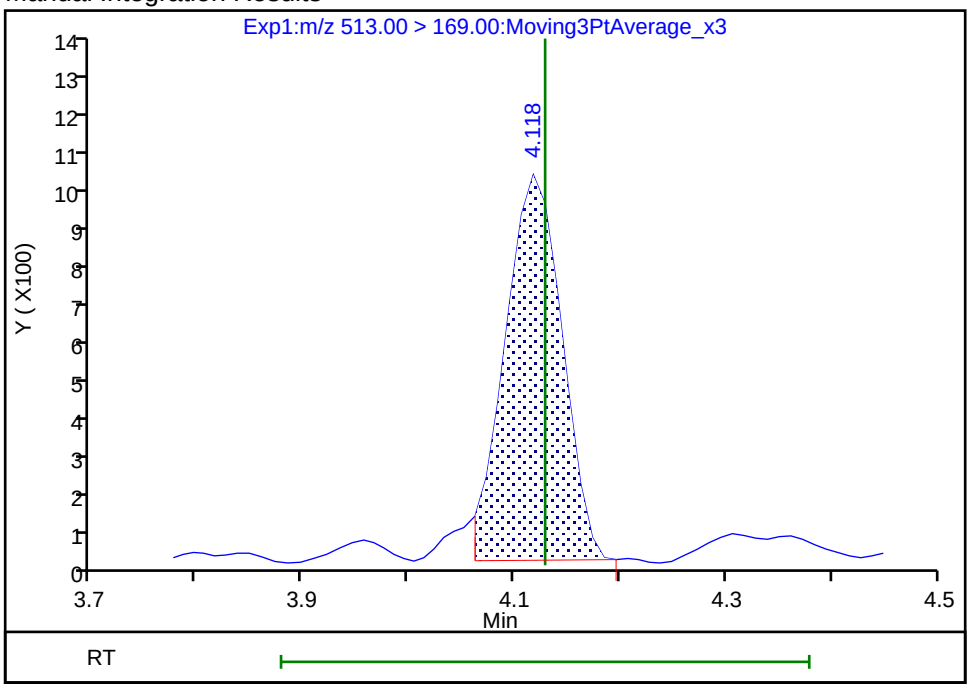
Processing Integration Results

RT: 4.12
Area: 3840
Amount: 0.047221
Amount Units: ng/ml




Manual Integration Results

RT: 4.12
Area: 3824
Amount: 0.051836
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:43:04
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

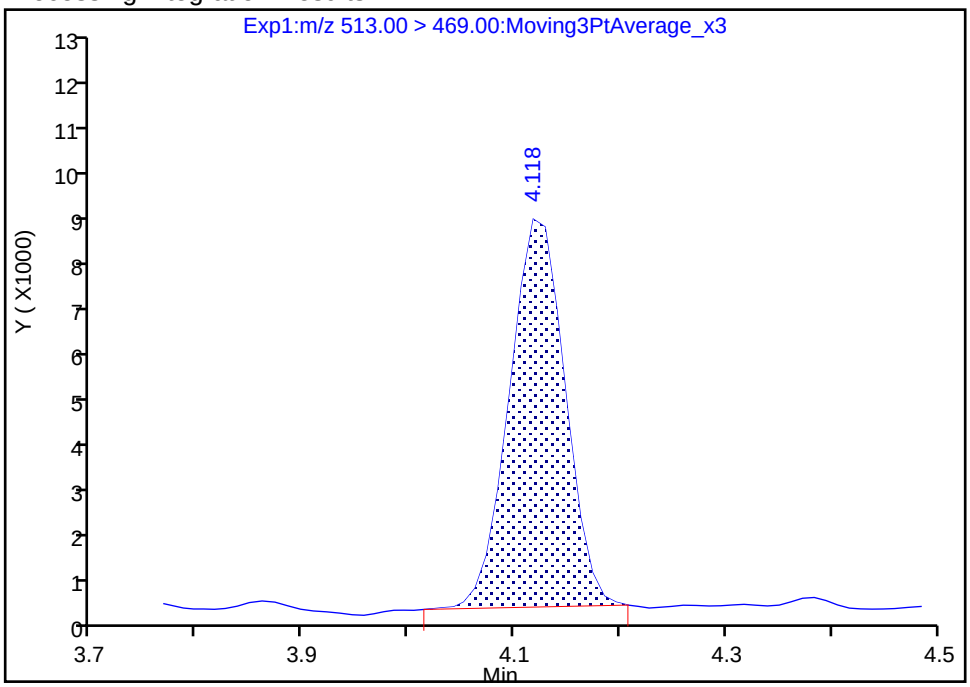
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

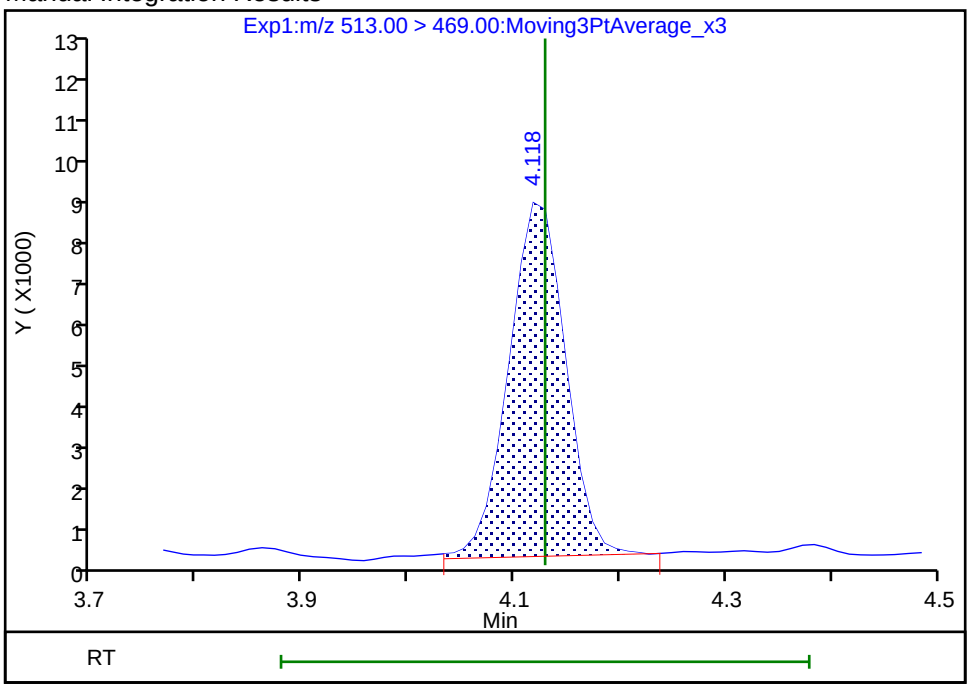
Processing Integration Results

RT: 4.12
Area: 30845
Amount: 0.047221
Amount Units: ng/ml




Manual Integration Results

RT: 4.12
Area: 31691
Amount: 0.051836
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:43:07

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

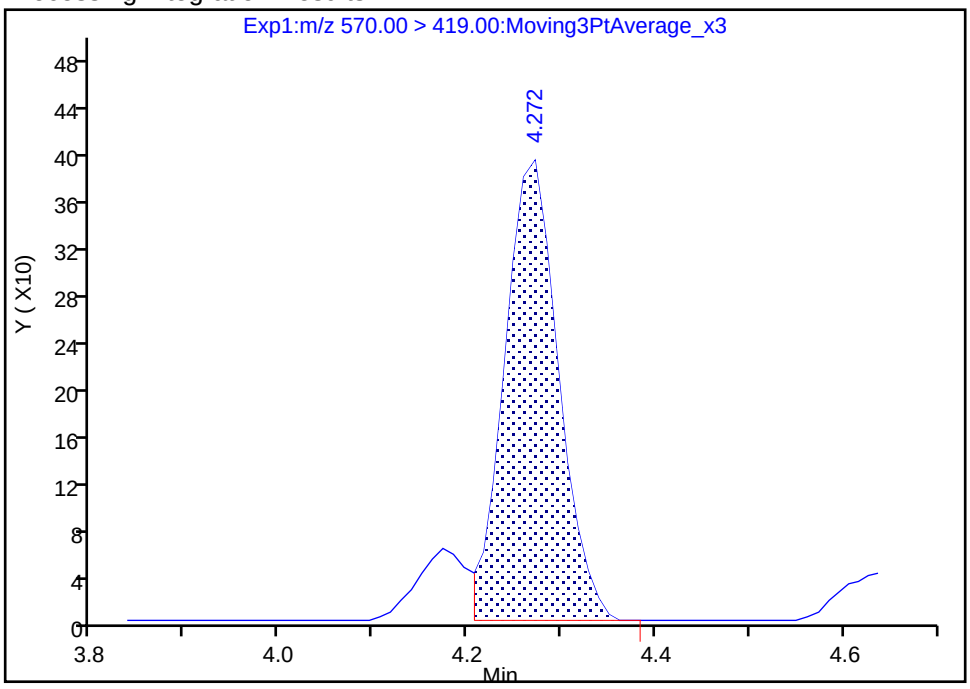
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

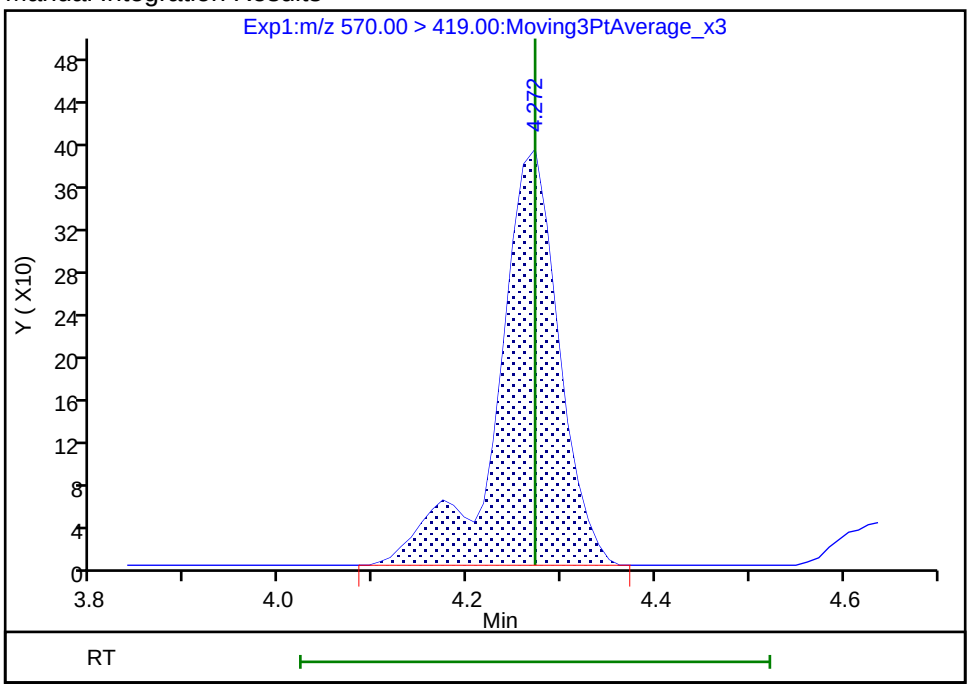
Processing Integration Results

RT: 4.27
Area: 1554
Amount: 0.046107
Amount Units: ng/ml




Manual Integration Results

RT: 4.27
Area: 1773
Amount: 0.050113
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:43:23
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

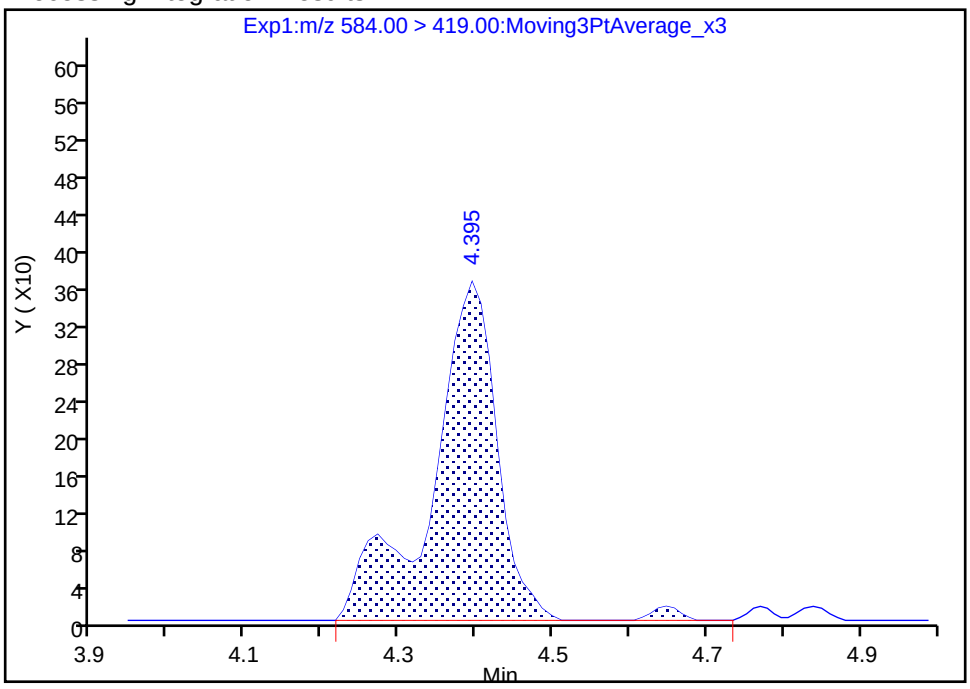
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

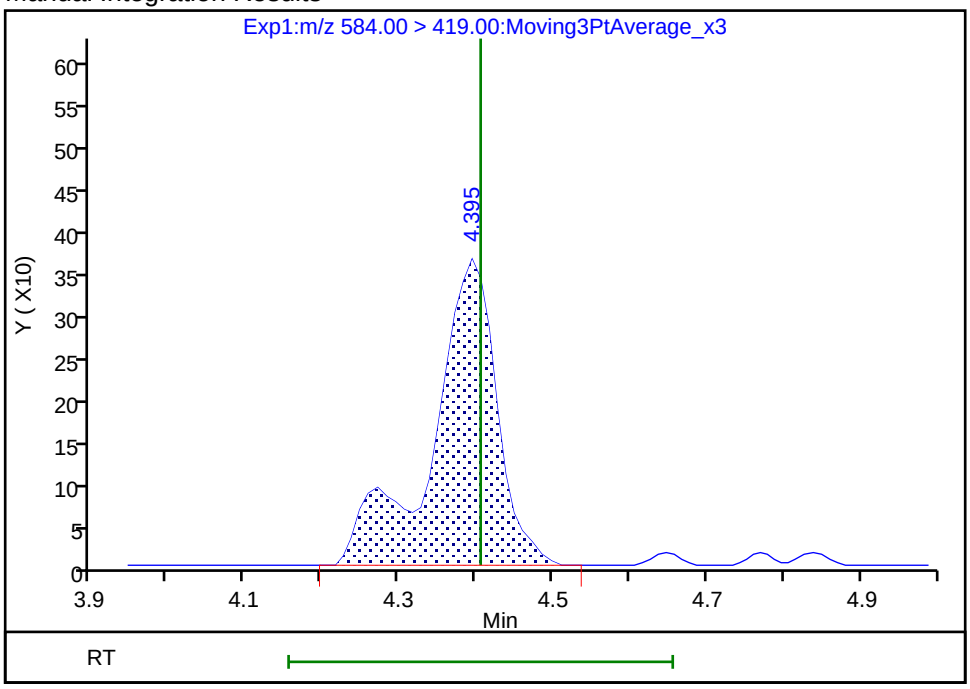
Processing Integration Results

RT: 4.39
Area: 2167
Amount: 0.054458
Amount Units: ng/ml




Manual Integration Results

RT: 4.39
Area: 2130
Amount: 0.058551
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:43:40
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

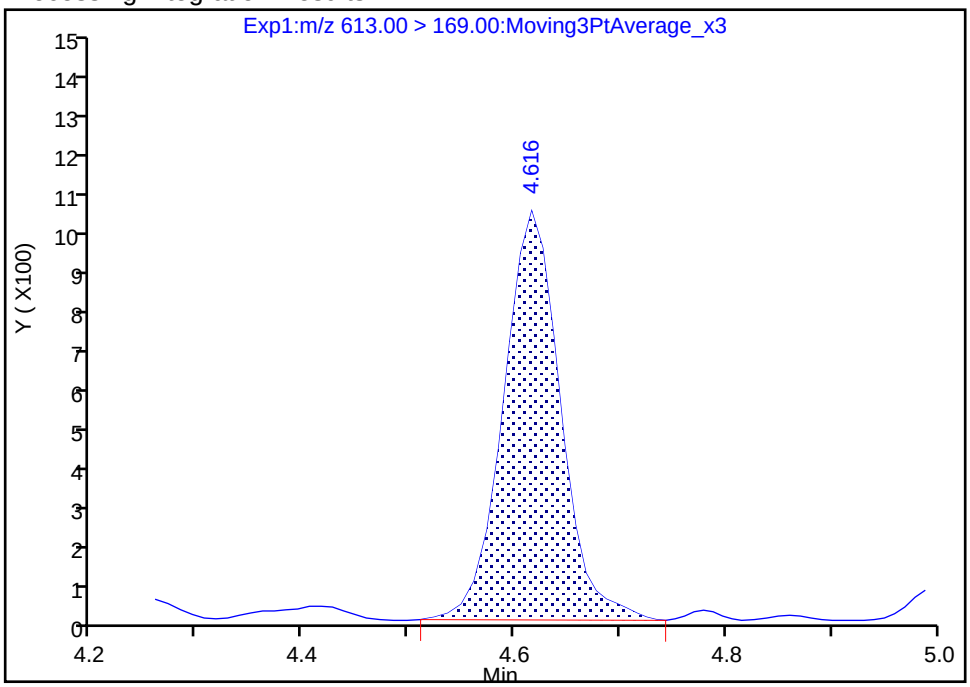
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

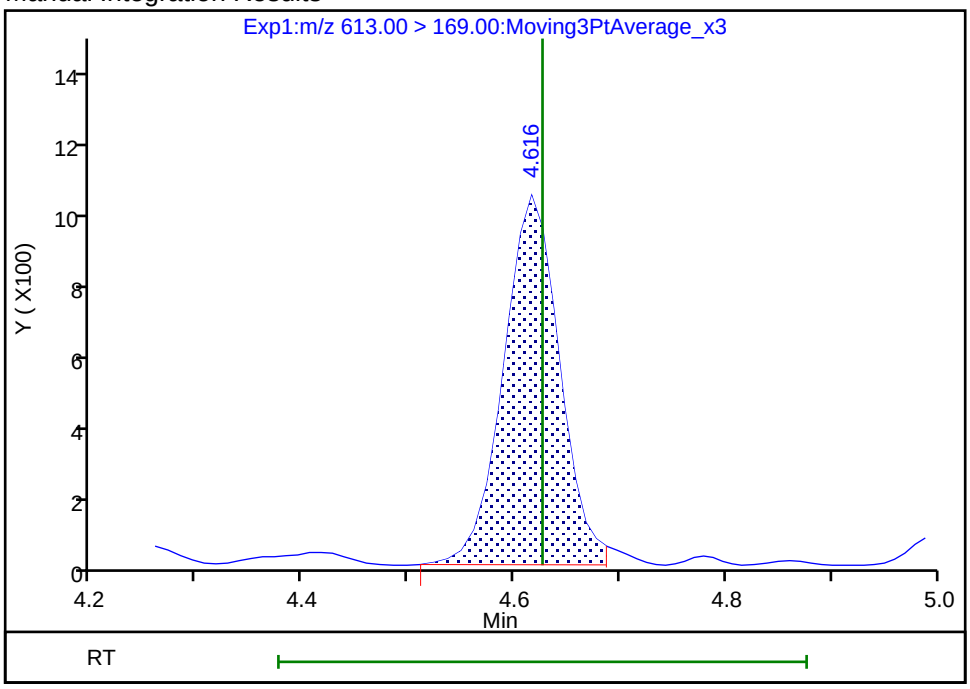
Processing Integration Results

RT: 4.62
Area: 3910
Amount: 0.048356
Amount Units: ng/ml




Manual Integration Results

RT: 4.62
Area: 3833
Amount: 0.054276
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:43:58
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

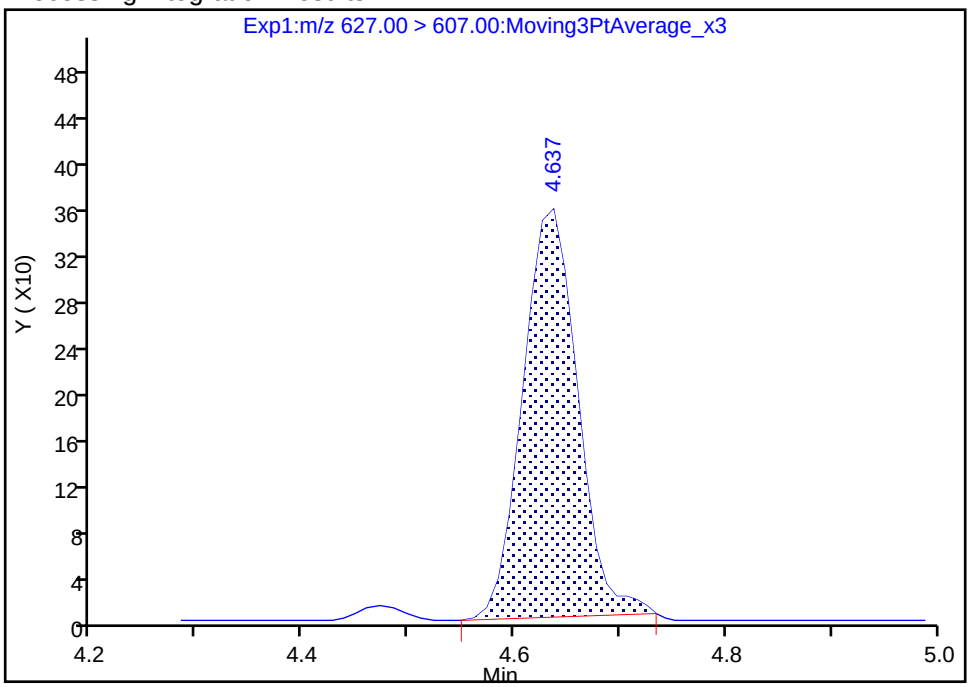
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 74 1H,1H,2H,2H-perfluorododecanesul, CAS: 120226-60-0

Signal: 1

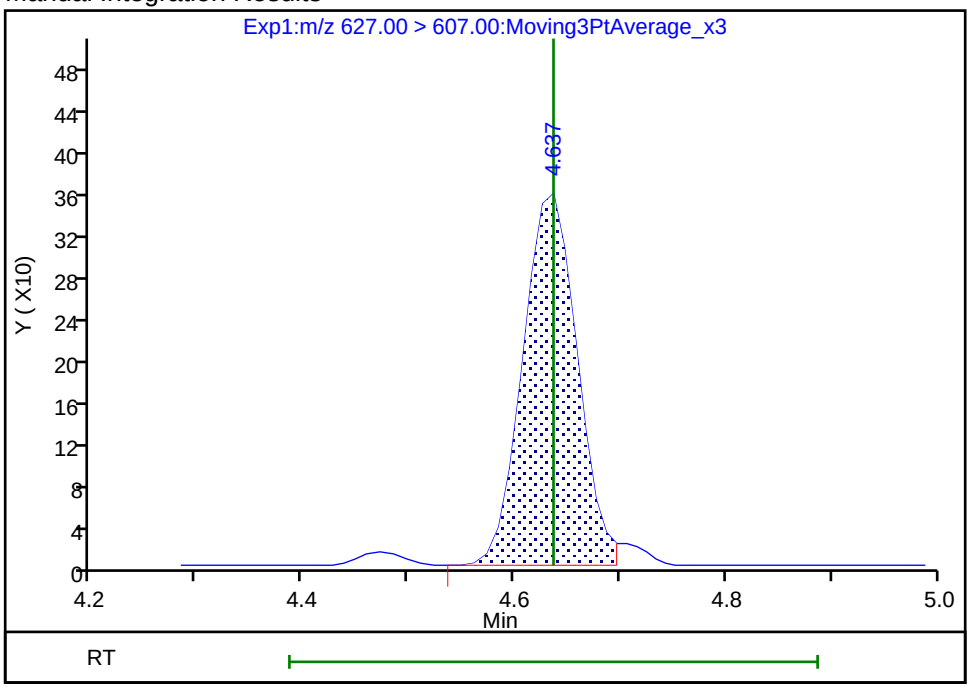
Processing Integration Results

RT: 4.64
Area: 1287
Amount: 0.045204
Amount Units: ng/ml




Manual Integration Results

RT: 4.64
Area: 1284
Amount: 0.040790
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:44:11

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

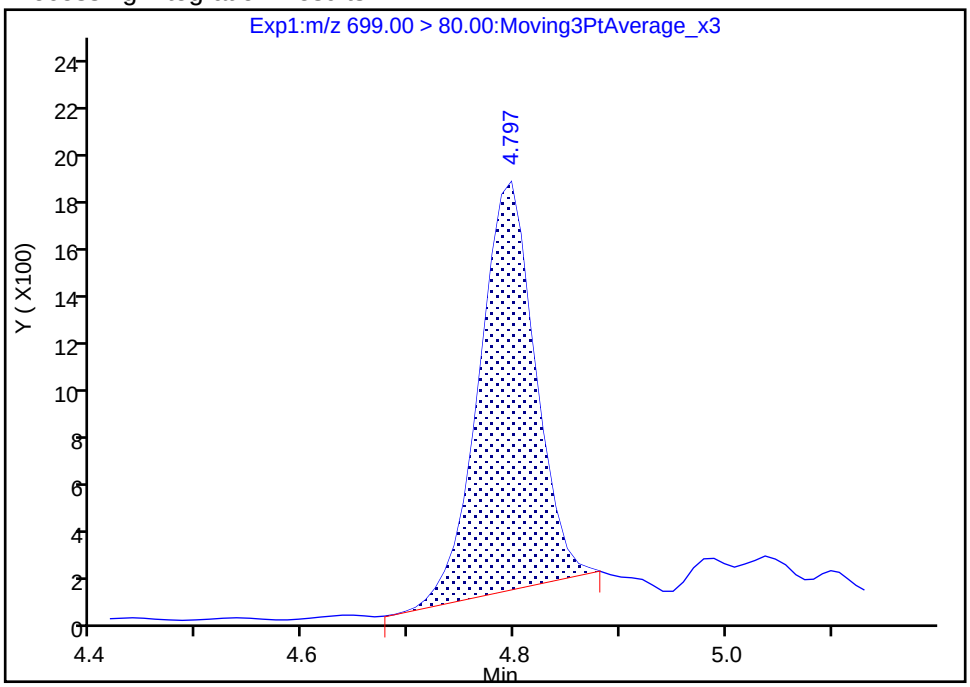
Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d
Injection Date: 22-Dec-2020 12:48:13 Instrument ID: LC812
Lims ID: IC
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 75 Perfluorododecanesulfonic acid (, CAS: 79780-39-5

Signal: 1

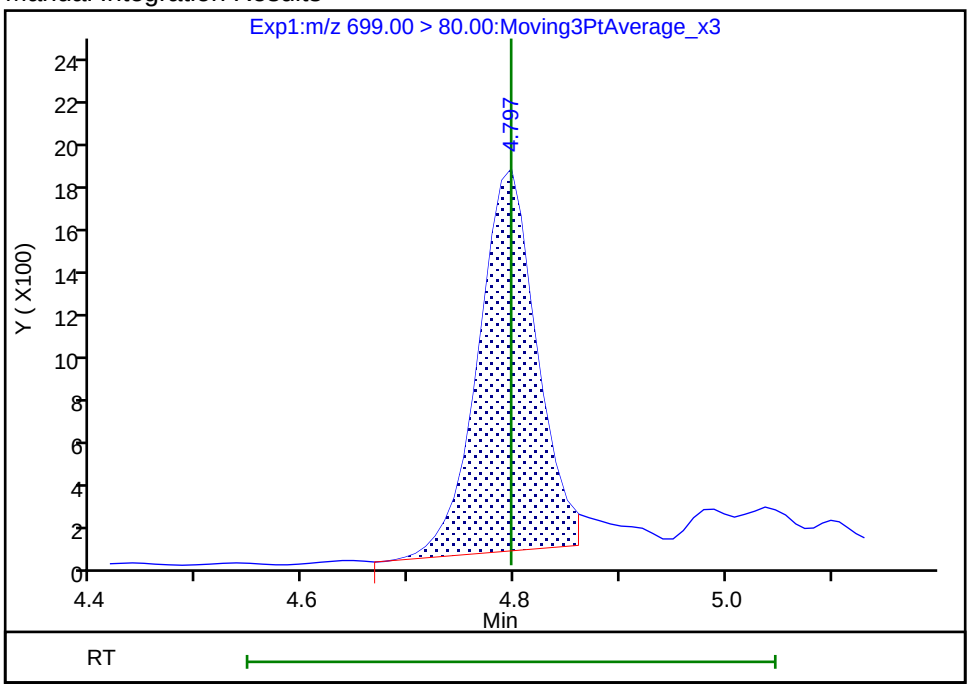
Processing Integration Results

RT: 4.80
Area: 6369
Amount: 0.047233
Amount Units: ng/ml




Manual Integration Results

RT: 4.80
Area: 6843
Amount: 0.058777
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:44:24
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

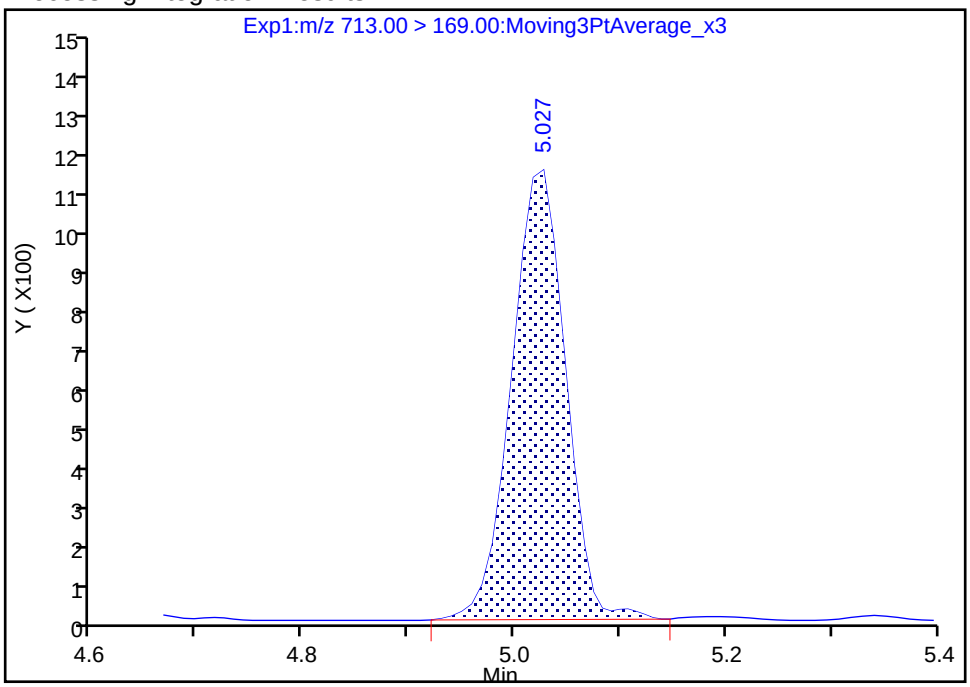
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

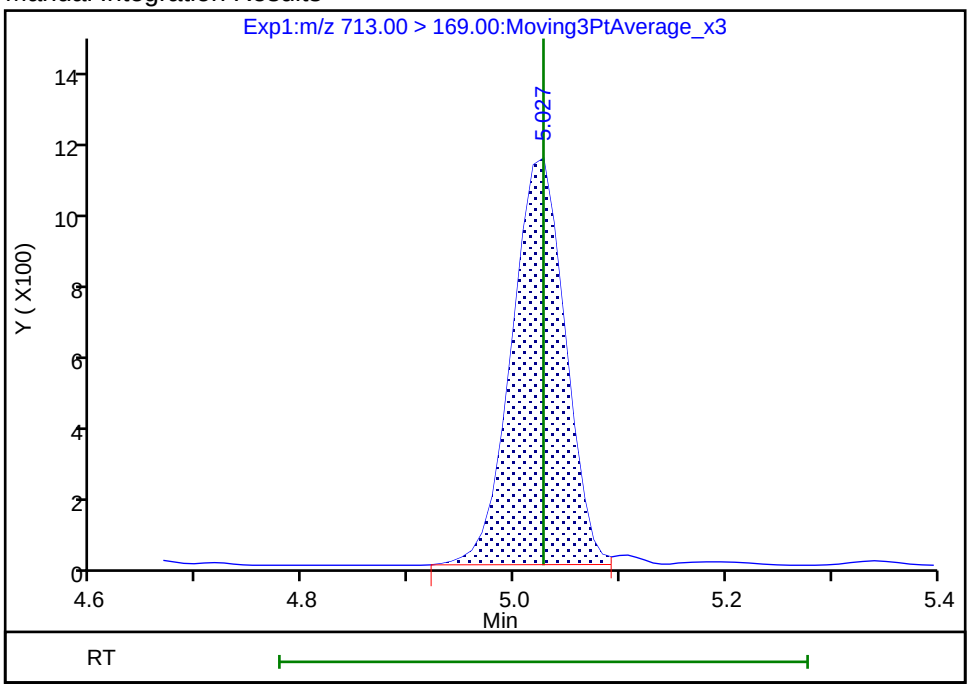
Processing Integration Results

RT: 5.03
Area: 3835
Amount: 0.052002
Amount Units: ng/ml




Manual Integration Results

RT: 5.03
Area: 3795
Amount: 0.055490
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:44:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

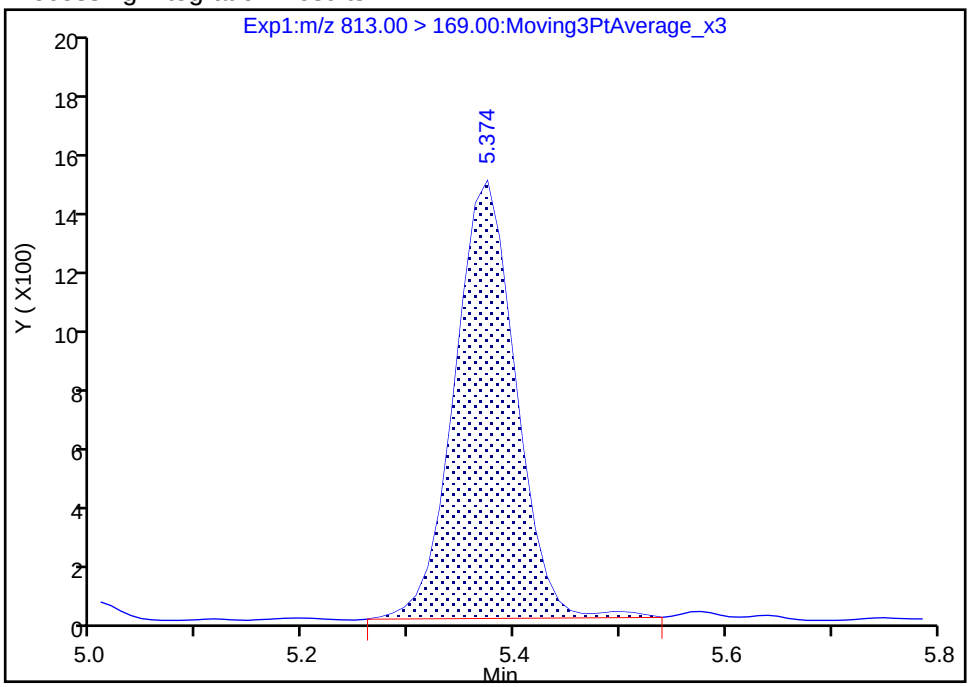
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL008.d | | | | |
| Injection Date: | 22-Dec-2020 12:48:13 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 45 Perfluorohexadecanoic acid, CAS: 67905-19-5

Signal: 2

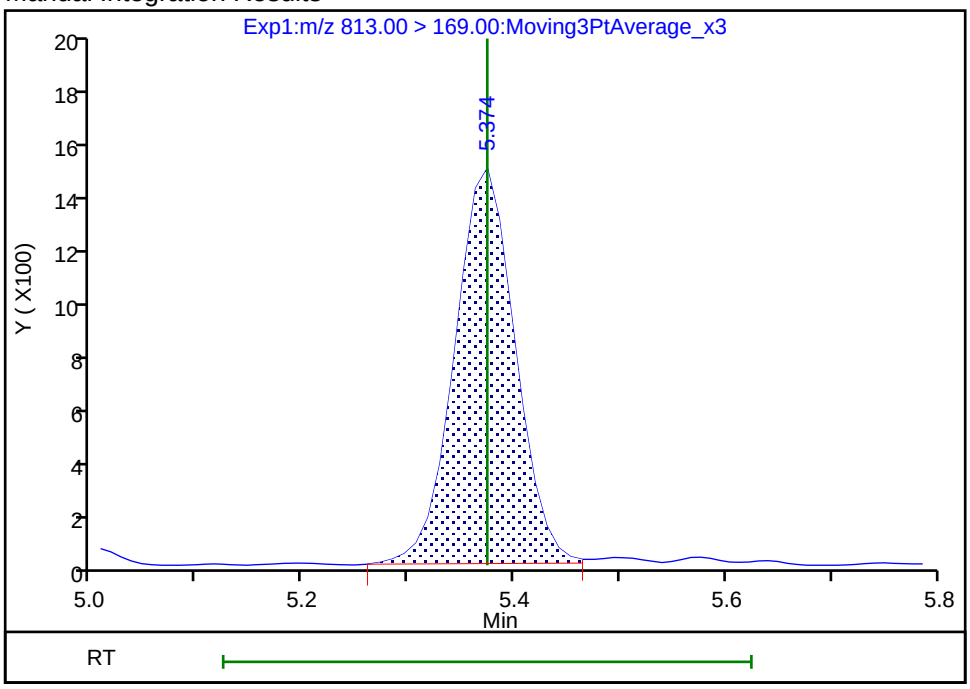
Processing Integration Results

RT: 5.37
Area: 5918
Amount: 0.048807
Amount Units: ng/ml




Manual Integration Results

RT: 5.37
Area: 5860
Amount: 0.048147
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:44:42
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 22-Dec-2020 12:56:31 ALS Bottle#: 3 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 200-0044184-009 Plate: 1 Rack: 1
Operator ID: lc812tech Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 22-Dec-2020 14:39:23 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1625

First Level Reviewer: deannd Date: 22-Dec-2020 13:14:51
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.089 | 2.091 | -0.002 | 0.598 | 1386458 | 1.17 | | 93.5 | 10763 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | M |
| 212.90 > 169.00 | 2.089 | 2.091 | -0.002 | 1.000 | 118541 | 0.1067 | | 107 | 14.5 | M |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.411 | 2.414 | -0.003 | 0.690 | 1030251 | 1.20 | | 96.1 | 3380 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | |
| 262.90 > 219.00 | 2.411 | 2.414 | -0.003 | 1.000 | 99455 | 0.1090 | | 109 | 4.0 | |
| D 47 13C3 PFBS | | | | | | | | | | |
| 301.90 > 80.00 | 2.424 | 2.427 | -0.003 | 0.694 | 1277928 | 1.13 | | 97.4 | 252272 | |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | |
| 298.90 > 80.00 | 2.424 | 2.427 | -0.003 | 1.000 | 116878 | 0.0940 | Target=2.21 | 106 | 312 | |
| 298.90 > 99.00 | 2.424 | 2.427 | -0.003 | 1.000 | 52401 | | 2.23(1.10-3.31) | 106 | 67.4 | |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | |
| 327.00 > 307.00 | 2.732 | 2.735 | -0.003 | 1.000 | 15740 | 0.0886 | | 94.9 | 312 | |
| D 60 M2-4:2 FTS | | | | | | | | | | M |
| 329.00 > 81.00 | 2.732 | 2.735 | -0.003 | 0.782 | 113101 | 1.20 | | 103 | 114 | M |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.756 | 2.771 | -0.015 | 0.789 | 1097468 | 1.22 | | 97.7 | 3242 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | M |
| 313.00 > 269.00 | 2.768 | 2.771 | -0.003 | 1.004 | 95637 | 0.0997 | Target=12.17 | 99.7 | 23.1 | |
| 313.00 > 119.00 | 2.756 | 2.771 | -0.015 | 1.000 | 8260 | | 11.58(6.09-18.26) | 99.7 | 14.9 | M |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | M |
| 349.00 > 80.00 | 2.768 | 2.771 | -0.003 | 0.884 | 105420 | 0.0994 | Target=3.32 | 106 | 388 | |
| 349.00 > 99.00 | 2.768 | 2.771 | -0.003 | 0.884 | 33039 | | 3.19(1.66-4.98) | 106 | 68.2 | M |
| 67 Perfluoro(2-propoxypropanoic) ac | | | | | | | | | | M |
| 329.10 > 285.00 | 2.866 | 2.881 | -0.015 | 0.996 | 21331 | 0.1039 | | 104 | 2.4 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 64 13C3 HFPO-DA | | | | | | | | | | |
| 332.10 > 287.00 | 2.878 | 2.881 | -0.003 | 0.824 | 185233 | 1.17 | | 93.7 | 1519 | |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.132 | 3.133 | -0.001 | 0.897 | 956077 | 1.14 | | 96.3 | 3982 | |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.122 | 3.133 | -0.011 | 0.997 | 94508 | 0.0992 | Target=4.08 | 109 | 112 | M |
| 399.00 > 99.00 | 3.122 | 3.133 | -0.011 | 0.997 | 22626 | | 4.18(2.04-6.11) | 109 | 20.2 | M |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.132 | 3.133 | -0.001 | 0.897 | 1019298 | 1.18 | | 94.8 | 1684 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | M |
| 363.00 > 319.00 | 3.132 | 3.133 | -0.001 | 1.000 | 99874 | 0.1121 | Target=3.70 | 112 | 26.0 | M |
| 363.00 > 169.00 | 3.132 | 3.133 | -0.001 | 1.000 | 25333 | | 3.94(1.85-5.56) | 112 | 73.0 | |
| 77 DONA | | | | | | | | | | |
| 377.00 > 251.00 | 3.164 | 3.176 | -0.012 | 0.832 | 183369 | 0.0959 | Target=2.47 | 102 | 246 | |
| 377.00 > 85.00 | 3.164 | 3.176 | -0.012 | 0.832 | 75776 | | 2.42(1.23-3.70) | 102 | 77.5 | |
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | M |
| 449.00 > 80.00 | 3.474 | 3.484 | -0.010 | 0.913 | 77228 | 0.1002 | Target=5.85 | 105 | 802 | |
| 449.00 > 99.00 | 3.474 | 3.484 | -0.010 | 0.913 | 13156 | | 5.87(2.93-8.78) | 105 | 96.8 | M |
| D 12 M2-6:2 FTS | | | | | | | | | | |
| 429.00 > 81.00 | 3.483 | 3.484 | -0.001 | 0.997 | 122975 | 1.17 | | 98.8 | 426 | |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | M |
| 427.00 > 407.00 | 3.483 | 3.484 | -0.001 | 1.000 | 10738 | 0.0932 | | 98.3 | 187 | M |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.492 | 3.493 | -0.001 | 1.000 | 1101215 | 1.26 | | 101 | 3358 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.492 | 3.493 | -0.001 | | 1103718 | 1.25 | | | 2862 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | M |
| 413.00 > 369.00 | 3.492 | 3.493 | -0.001 | 1.000 | 98345 | 0.1030 | Target=2.58 | 103 | 23.3 | |
| 413.00 > 169.00 | 3.492 | 3.493 | -0.001 | 1.000 | 37378 | | 2.63(1.29-3.87) | 103 | 85.8 | M |
| D 18 13C4 PFOS | | | | | | | | | | |
| 503.00 > 80.00 | 3.804 | 3.806 | -0.002 | 1.089 | 682230 | 1.18 | | 99.0 | 1801 | |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.804 | 3.806 | -0.002 | 1.000 | 64913 | 0.0989 | Target=5.56 | 107 | 101 | M |
| 499.00 > 99.00 | 3.804 | 3.806 | -0.002 | 1.000 | 11330 | | 5.73(2.78-8.34) | 107 | 48.4 | M |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.825 | 3.826 | -0.001 | 1.095 | 964938 | 1.25 | | 100 | 2839 | |
| 20 Perfluorononanoic acid | | | | | | | | | | |
| 463.00 > 419.00 | 3.825 | 3.826 | -0.001 | 1.000 | 87340 | 0.1022 | Target=6.87 | 102 | 14.1 | |
| 463.00 > 169.00 | 3.825 | 3.826 | -0.001 | 1.000 | 12785 | | 6.83(3.43-10.30) | 102 | 160 | |
| 69 9-Chlorohexadecafluoro-3-oxanona | | | | | | | | | | |
| 531.00 > 351.00 | 3.964 | 3.967 | -0.003 | 1.042 | 66060 | 0.0902 | | 96.8 | 406 | |
| 68 Perfluorononanesulfonic acid | | | | | | | | | | M |
| 549.00 > 80.00 | 4.093 | 4.095 | -0.002 | 1.076 | 49994 | 0.1021 | Target=2.78 | 106 | 545 | |
| 549.00 > 99.00 | 4.093 | 4.095 | -0.002 | 1.076 | 17680 | | 2.83(1.39-4.17) | 106 | 50.1 | M |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.115 | 4.129 | -0.014 | 1.178 | 926205 | 1.26 | | 101 | 5089 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 24 Perfluorodecanoic acid | | | | | | | | | | |
| 513.00 > 469.00 | 4.126 | 4.129 | -0.003 | 1.003 | 77566 | 0.1016 | Target=9.03 | 102 | 57.4 | |
| 513.00 > 169.00 | 4.126 | 4.129 | -0.003 | 1.003 | 7425 | | 10.45(4.51-13.54) | 102 | 62.2 | |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | M |
| 527.00 > 507.00 | 4.126 | 4.140 | -0.014 | 1.000 | 7849 | 0.1100 | | 115 | 208 | M |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.126 | 4.140 | -0.014 | 1.182 | 125650 | 1.16 | | 97.0 | 549 | |
| D 21 13C8 FOSA | | | | | | | | | | |
| 506.00 > 78.00 | 4.205 | 4.207 | -0.002 | 1.204 | 1350960 | 1.25 | | 99.8 | 3463 | |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | |
| 498.00 > 78.00 | 4.205 | 4.207 | -0.002 | 1.000 | 113239 | 0.1046 | | 105 | 482 | |
| D 27 d3-NMeFOSAA | | | | | | | | | | |
| 573.00 > 419.00 | 4.257 | 4.272 | -0.015 | 1.219 | 69887 | 1.31 | | 105 | 615 | |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | M |
| 570.00 > 419.00 | 4.268 | 4.272 | -0.004 | 1.003 | 5218 | 0.1053 | | 105 | 32.7 | M |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | |
| 599.00 > 80.00 | 4.358 | 4.362 | -0.004 | 1.146 | 38256 | 0.0980 | Target=2.76 | 102 | 327 | |
| 599.00 > 99.00 | 4.358 | 4.362 | -0.004 | 1.146 | 13445 | | 2.85(1.38-4.14) | 102 | 58.5 | |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.391 | 4.384 | 0.007 | 1.257 | 753171 | 1.24 | | 99.5 | 3341 | |
| 31 Perfluoroundecanoic acid | | | | | | | | | | M |
| 563.00 > 519.00 | 4.391 | 4.395 | -0.004 | 1.000 | 64357 | 0.1047 | Target=8.02 | 105 | 26.8 | |
| 563.00 > 169.00 | 4.391 | 4.395 | -0.004 | 1.000 | 7377 | | 8.72(4.01-12.03) | 105 | 119 | M |
| D 32 d5-NEtFOSAA | | | | | | | | | | |
| 589.00 > 419.00 | 4.391 | 4.395 | -0.004 | 1.257 | 66544 | 1.29 | | 103 | 433 | |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.402 | 4.406 | -0.004 | 1.003 | 4802 | 0.0974 | | 97.4 | 108 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | |
| 631.00 > 451.00 | 4.480 | 4.485 | -0.005 | 1.178 | 70930 | 0.0933 | | 99.1 | 820 | |
| D 36 13C2 PFDoA | | | | | | | | | | |
| 615.00 > 570.00 | 4.622 | 4.626 | -0.004 | 1.323 | 777582 | 1.22 | | 97.3 | 2674 | |
| 37 Perfluorododecanoic acid | | | | | | | | | | |
| 613.00 > 569.00 | 4.622 | 4.626 | -0.004 | 1.000 | 72835 | 0.1065 | Target=6.85 | 106 | 20.2 | |
| 613.00 > 169.00 | 4.622 | 4.626 | -0.004 | 1.000 | 10752 | | 6.77(3.42-10.27) | 106 | 245 | |
| 74 1H,1H,2H,2H-perfluorododecanesul | | | | | | | | | | |
| 627.00 > 607.00 | 4.632 | 4.637 | -0.005 | 1.123 | 3634 | 0.0989 | | 103 | 126 | |
| 75 Perfluorododecanesulfonic acid ( | | | | | | | | | | |
| 699.00 > 80.00 | 4.792 | 4.797 | -0.005 | 1.260 | 14504 | 0.1009 | Target=0.53 | 104 | 41.0 | |
| 699.00 > 99.00 | 4.792 | 4.797 | -0.005 | 1.260 | 28153 | | 0.52(0.26-0.79) | 104 | 181 | |
| 41 Perfluorotridecanoic acid | | | | | | | | | | |
| 663.00 > 619.00 | 4.834 | 4.839 | -0.005 | 1.046 | 56462 | 0.1017 | Target=4.48 | 102 | 18.4 | |
| 663.00 > 169.00 | 4.822 | 4.839 | -0.017 | 1.043 | 12265 | | 4.60(2.24-6.72) | 102 | 220 | |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 5.024 | 5.027 | -0.003 | 1.439 | 598063 | 1.27 | | 101 | 5734 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | |
| 713.00 > 169.00 | 5.024 | 5.027 | -0.003 | 1.000 | 8395 | 0.0946 | Target=0.99 | 94.6 | 246 | |
| 713.00 > 219.00 | 5.014 | 5.027 | -0.013 | 0.998 | 8166 | | 1.03(0.50-1.49) | 94.6 | 233 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.372 | 5.374 | -0.002 | 1.538 | 635237 | 1.26 | | 101 | 1942 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | |
| 813.00 > 769.00 | 5.372 | 5.374 | -0.002 | 1.000 | 55625 | 0.1023 | Target=4.02 | 102 | 14.4 | |
| 813.00 > 169.00 | 5.372 | 5.374 | -0.002 | 1.000 | 13256 | | 4.20(2.01-6.02) | 102 | 365 | |
| 46 Perfluorooctadecanoic acid | | | | | | | | | | |
| 913.00 > 869.00 | 5.720 | 5.722 | -0.002 | 1.065 | 45299 | 0.0991 | Target=3.88 | 99.1 | 29.9 | |
| 913.00 > 169.00 | 5.711 | 5.722 | -0.011 | 1.063 | 11915 | | 3.80(1.94-5.82) | 99.1 | 261 | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

## Reagents:

PFAS32NCIC2_00006 Amount Added: 100.00 Units: uL

Report Date: 22-Dec-2020 14:39:24 Chrom Revision: 2.3 09-Dec-2020 16:22:14

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d

Injection Date: 22-Dec-2020 12:56:31 Instrument ID: LC812

Lims ID: IC

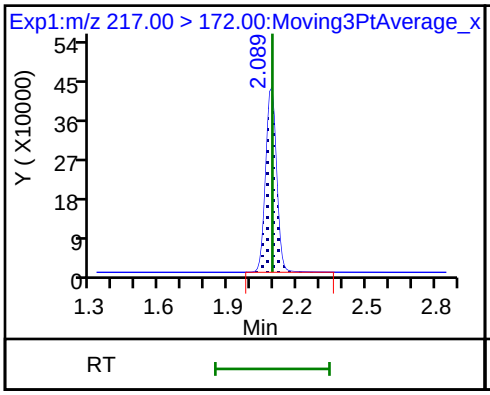
Client ID:

Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 9

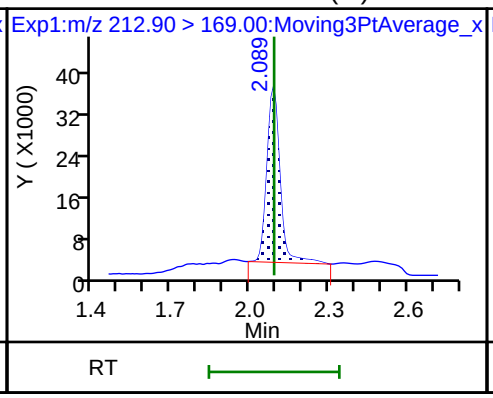
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

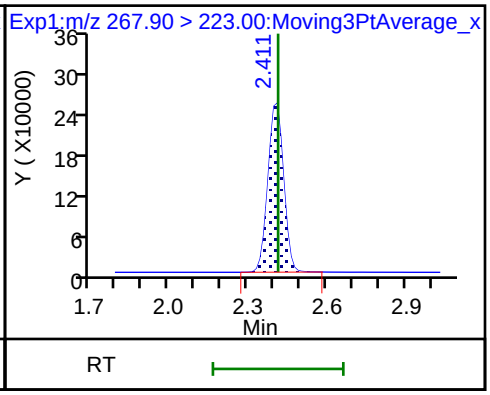
D 1 13C4 PFBA



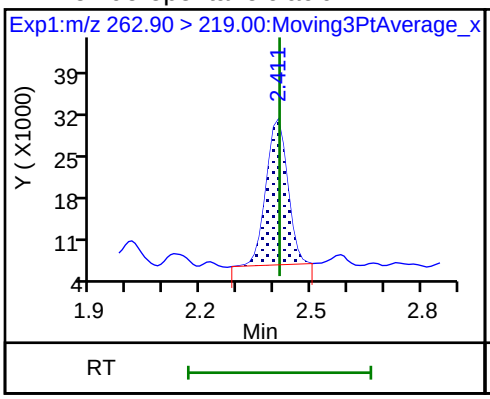

2 Perfluorobutanoic acid (M)



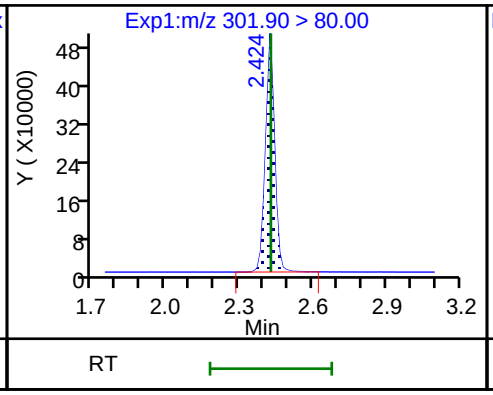

D 3 13C5 PFPeA



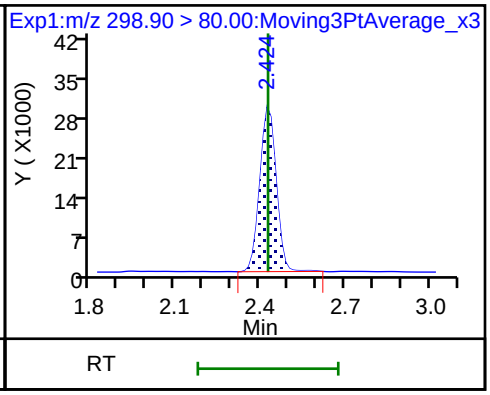

4 Perfluoropentanoic acid



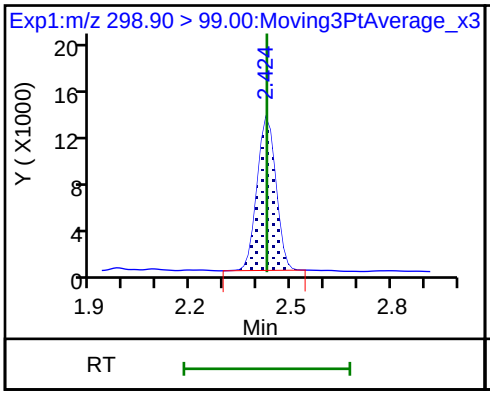

D 47 13C3 PFBS



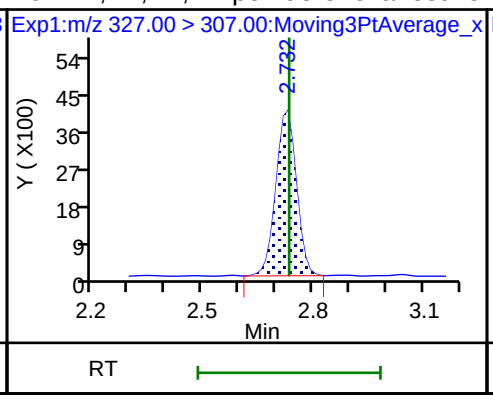

5 Perfluorobutanesulfonic acid



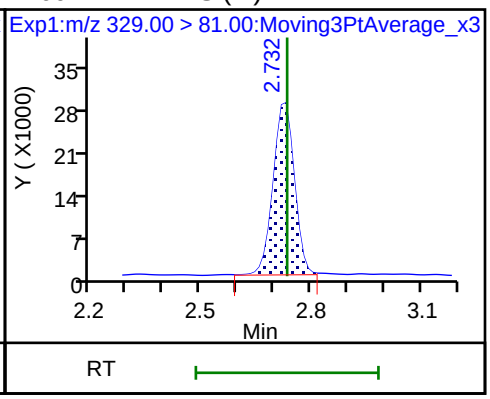

5 Perfluorobutanesulfonic acid



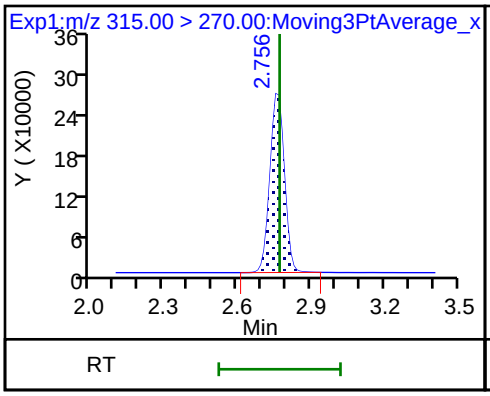

61 1H,1H,2H,2H-perfluorohexanesulfo



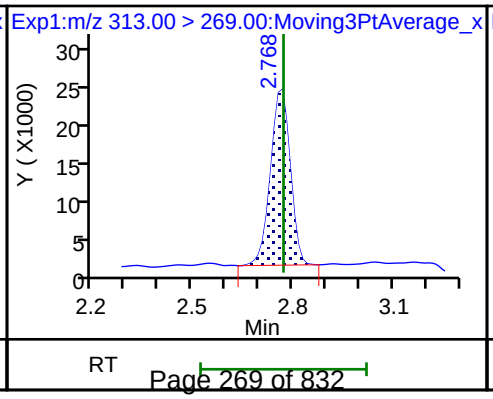

D 60 M2-4:2 FTS (M)



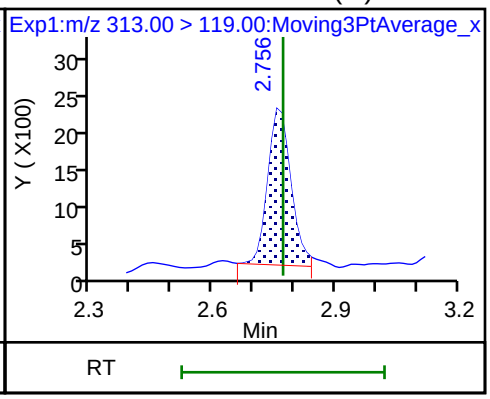

D 7 13C2 PFHxA



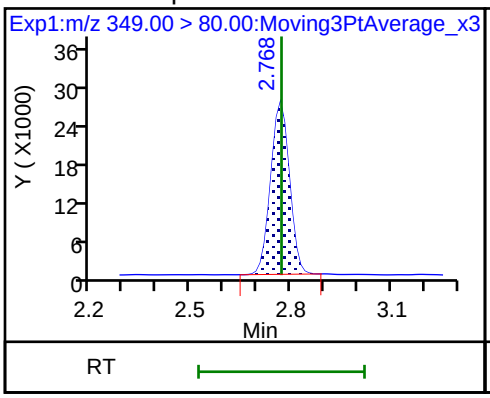

6 Perfluorohexanoic acid



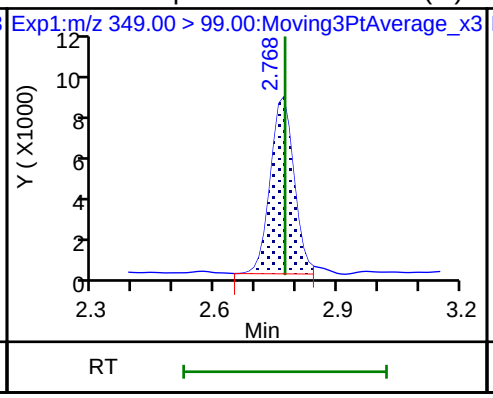

6 Perfluorohexanoic acid (M)



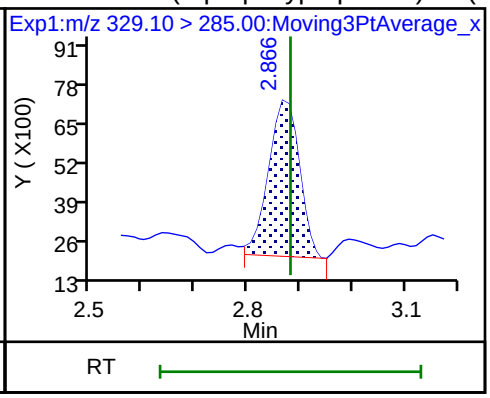
70 Perfluoropentanesulfonic acid



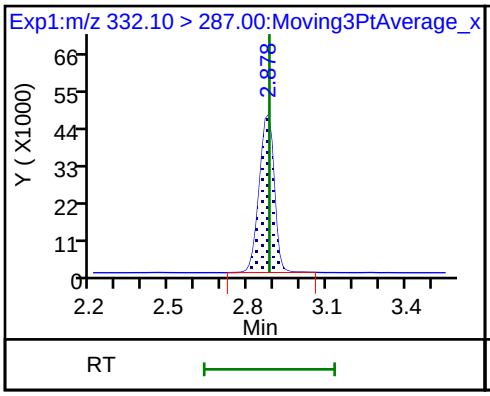

70 Perfluoropentanesulfonic acid (M)



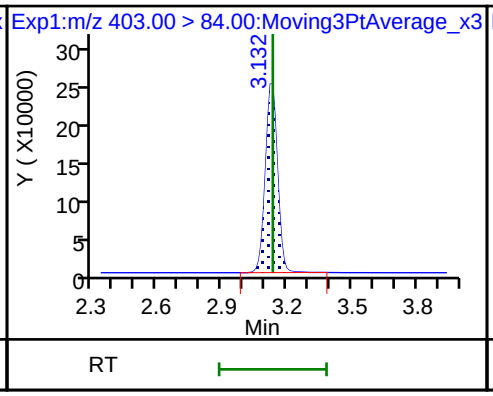

67 Perfluoro(2-propoxypropanoic) ac (M)



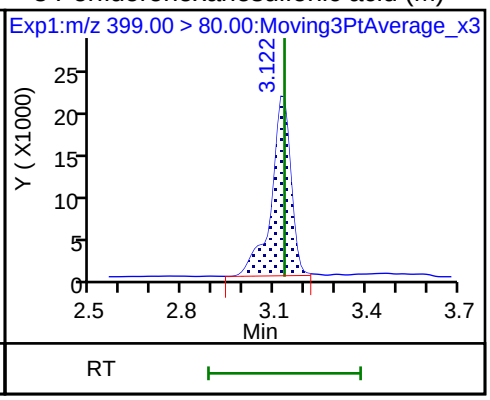

D 64 13C3 HFPO-DA



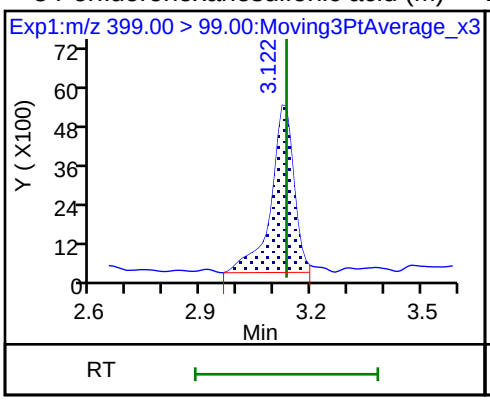

D 11 18O2 PFHxS



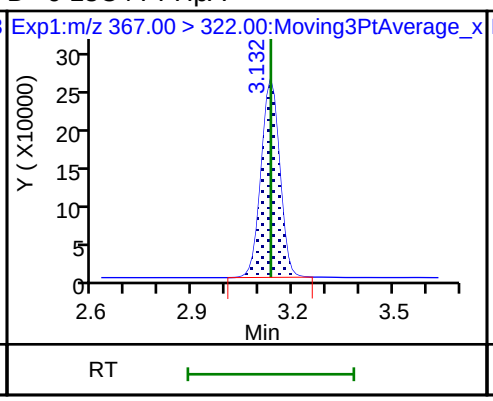

8 Perfluorohexanesulfonic acid (M)



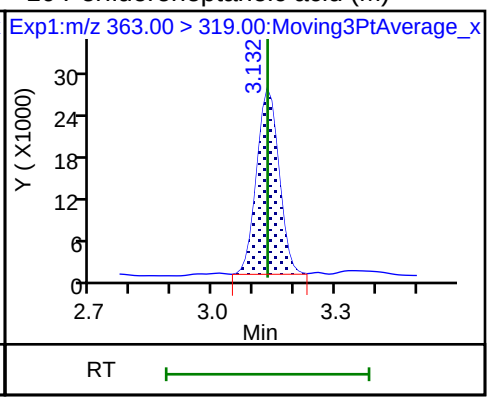

8 Perfluorohexanesulfonic acid (M)



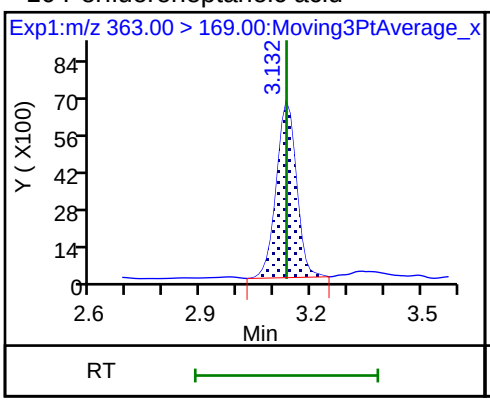

D 9 13C4 PFHpA



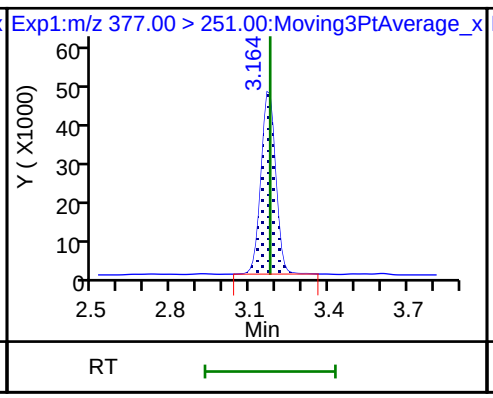

10 Perfluoroheptanoic acid (M)



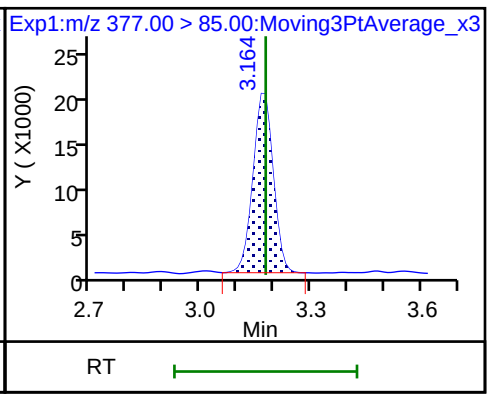

10 Perfluoroheptanoic acid



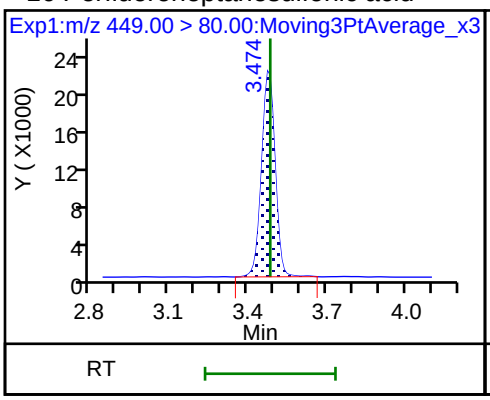

77 DONA



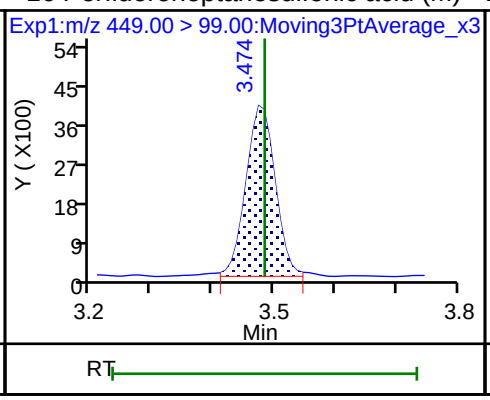

77 DONA



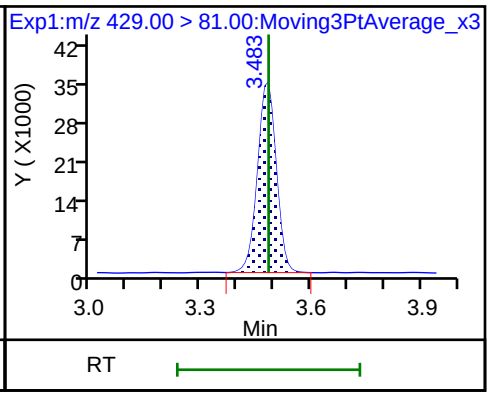
16 Perfluoroheptanesulfonic acid



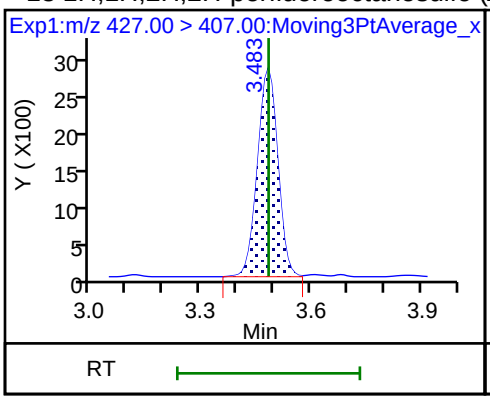

16 Perfluoroheptanesulfonic acid (M)



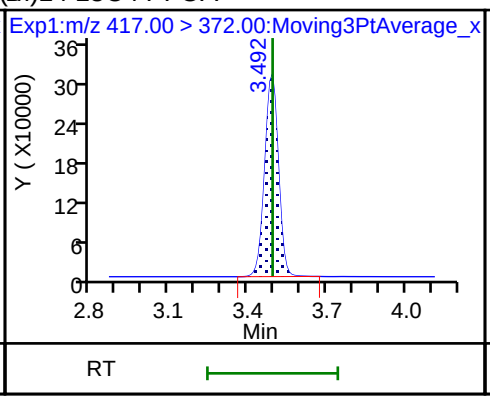

D 12 M2-6:2 FTS



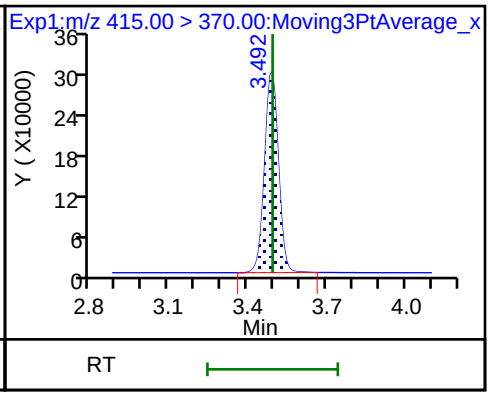

13 1H,1H,2H,2H-perfluorooctanesulfo (M)



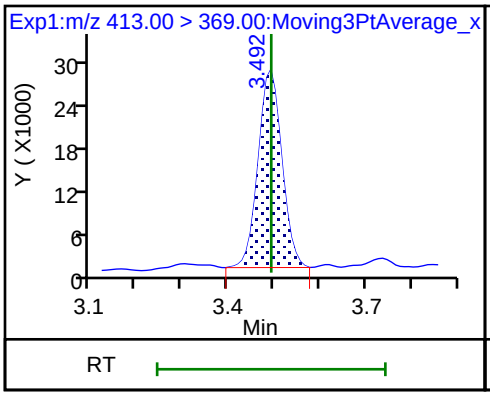

14 13C4 PFOA



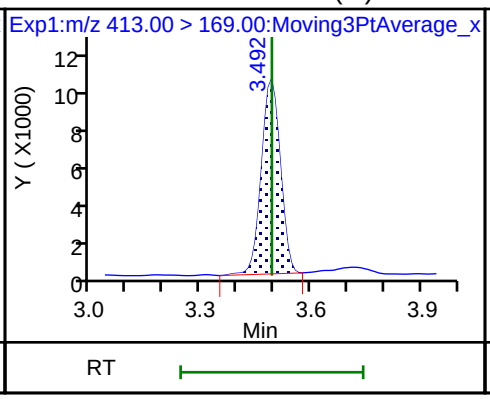

* 62 13C2 PFOA



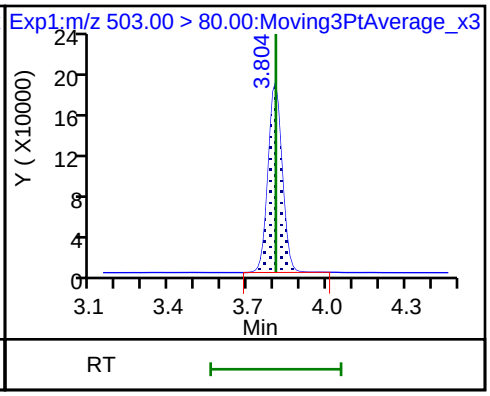

15 Perfluorooctanoic acid



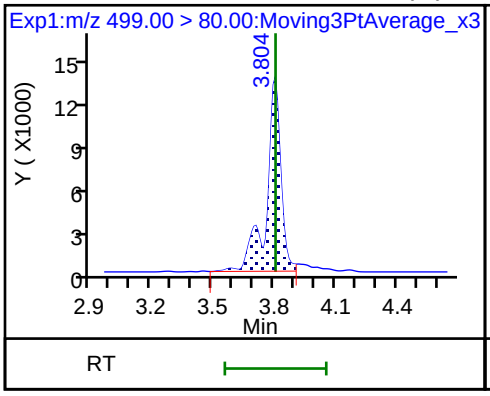

15 Perfluorooctanoic acid (M)



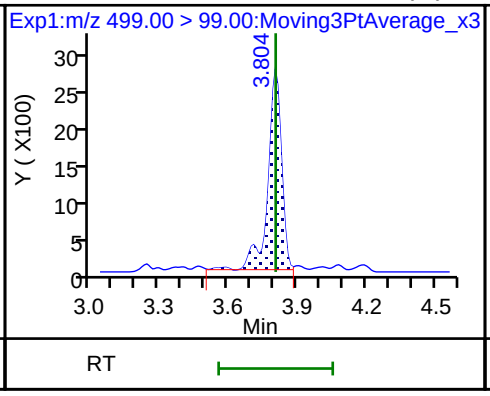

D 18 13C4 PFOS



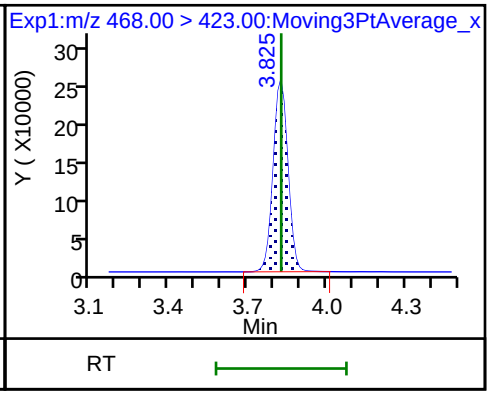

17 Perfluorooctanesulfonic acid (M)



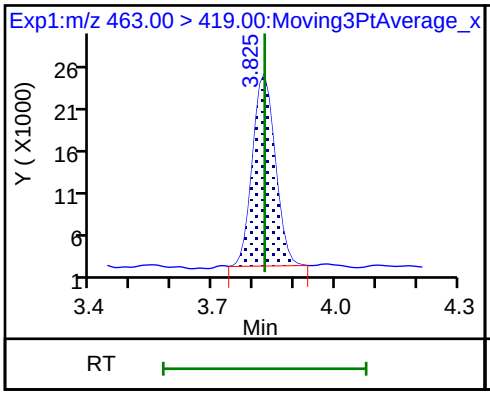

17 Perfluorooctanesulfonic acid (M)



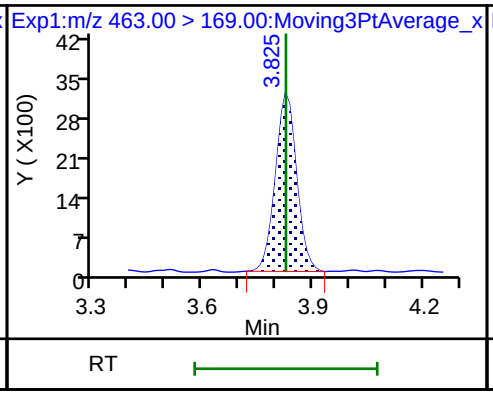

D 19 13C5 PFNA



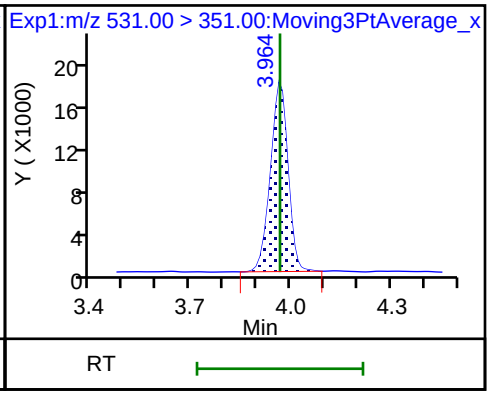
20 Perfluorononanoic acid



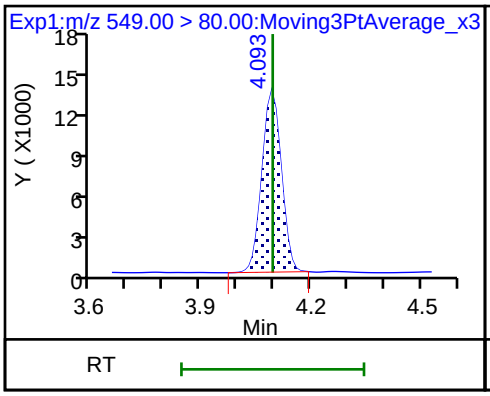

20 Perfluorononanoic acid



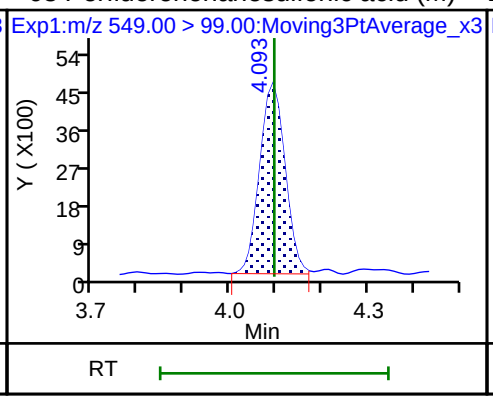

69 9-Chlorohexadecafluoro-3-oxanona



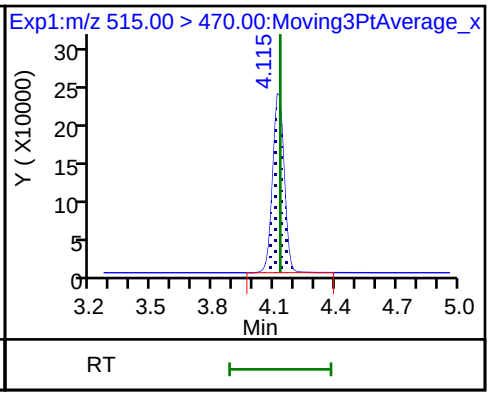

68 Perfluorononanesulfonic acid



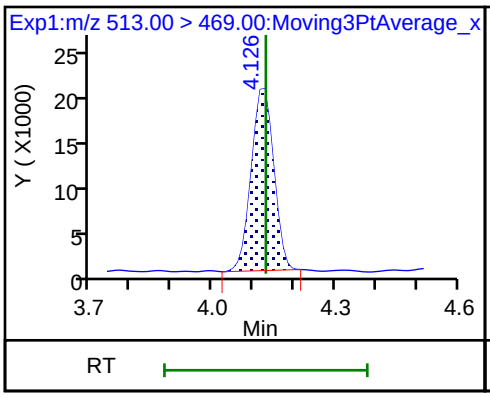

68 Perfluorononanesulfonic acid (M)



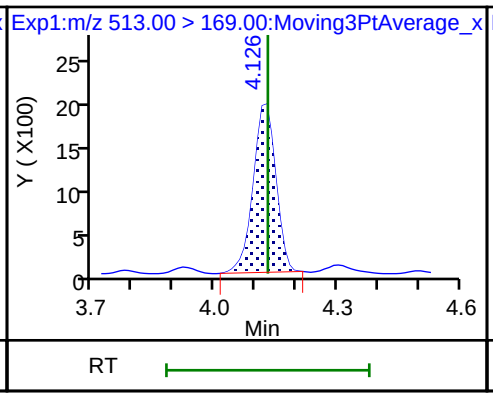

D 23 13C2 PFDA



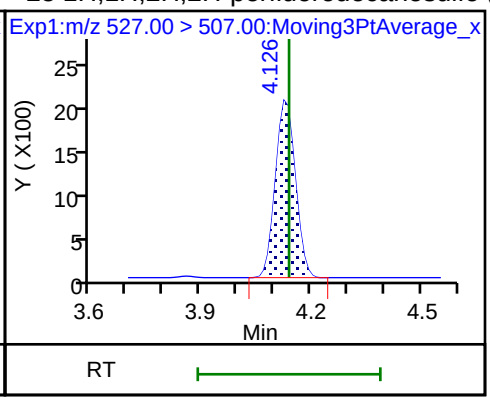

24 Perfluorodecanoic acid



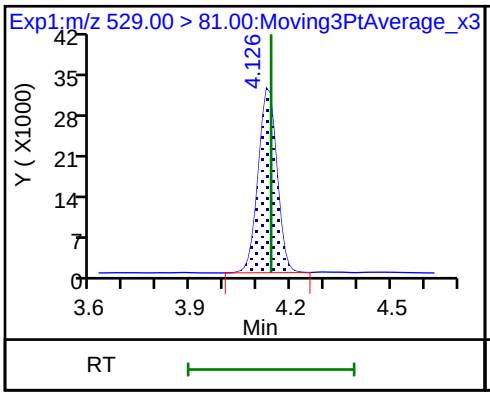

24 Perfluorodecanoic acid



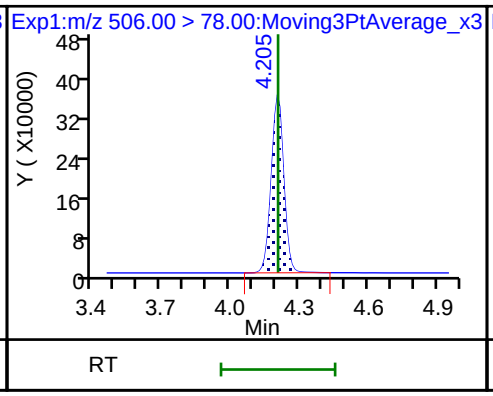

25 1H,1H,2H,2H-perfluorodecanesulfo (M)



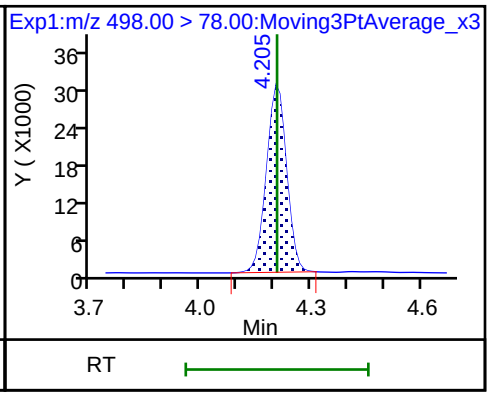

D 26 M2-8:2 FTS



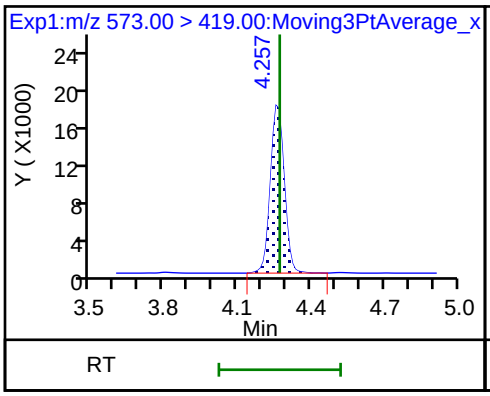

D 21 13C8 FOSA



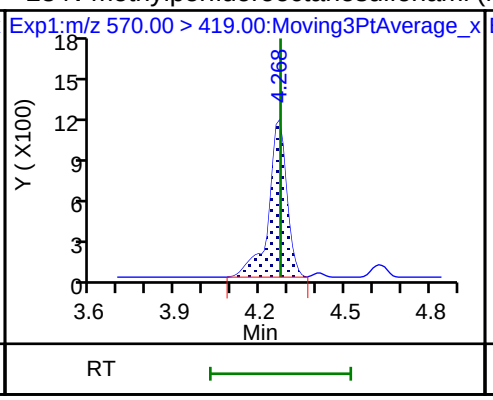

22 Perfluorooctanesulfonamide



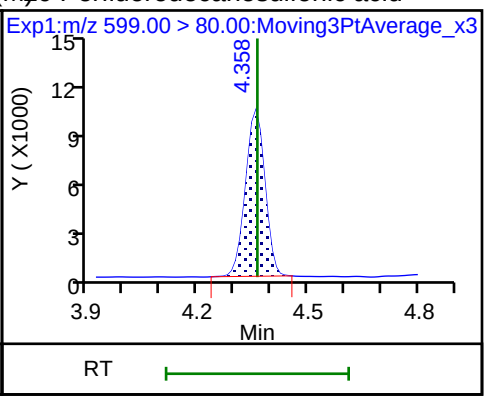
D 27 d3-NMeFOSAA



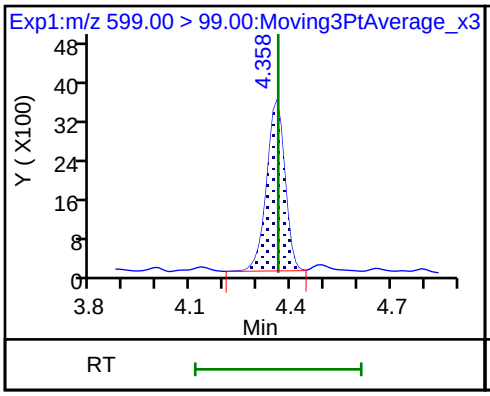

28 N-methylperfluorooctanesulfonami (M)



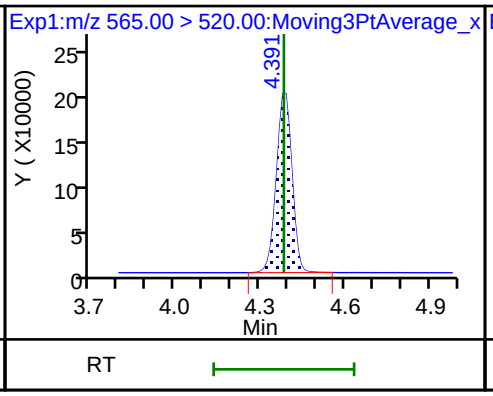

29 Perfluorodecanesulfonic acid



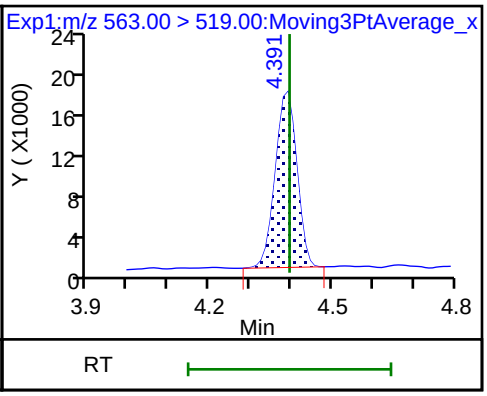

29 Perfluorodecanesulfonic acid



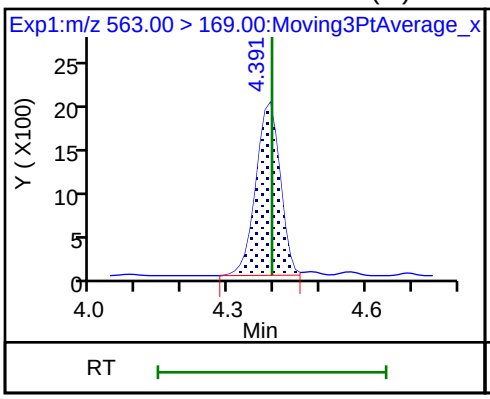

D 30 13C2 PFUnA



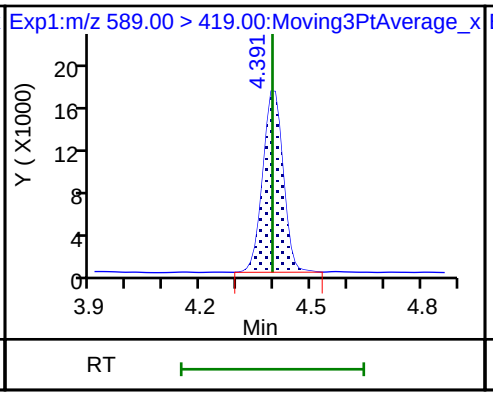

31 Perfluoroundecanoic acid



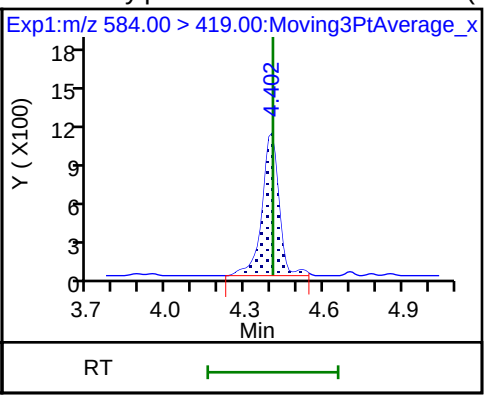

31 Perfluoroundecanoic acid (M)



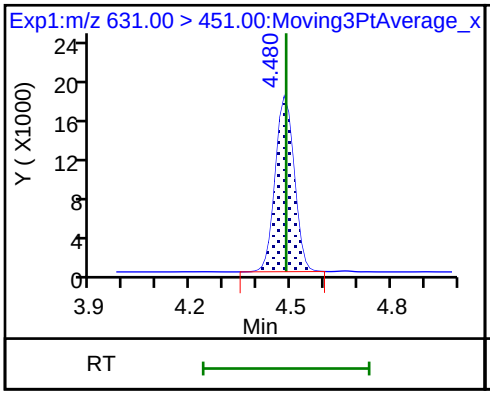

D 32 d5-NEtFOSAA



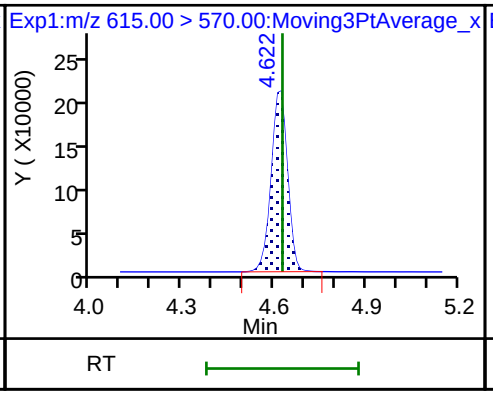

33 N-ethylperfluorooctanesulfonamid (M)



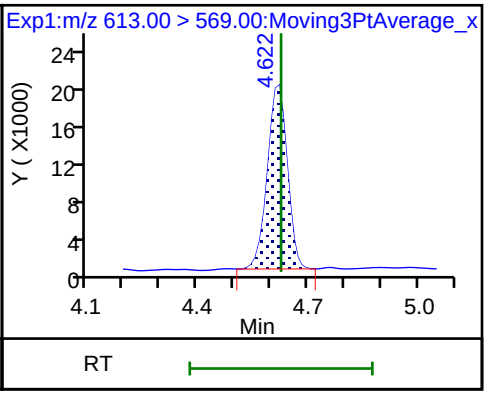

66 11-Chloroeicosafluoro-3-oxaundec



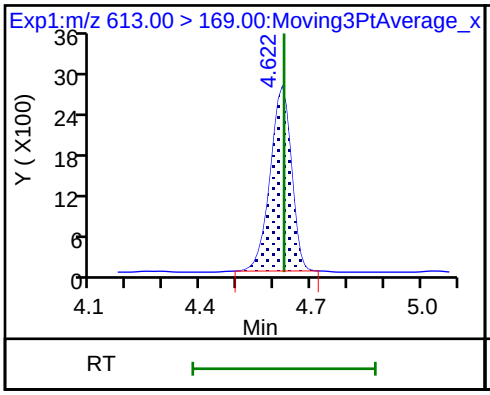

D 36 13C2 PFDoA



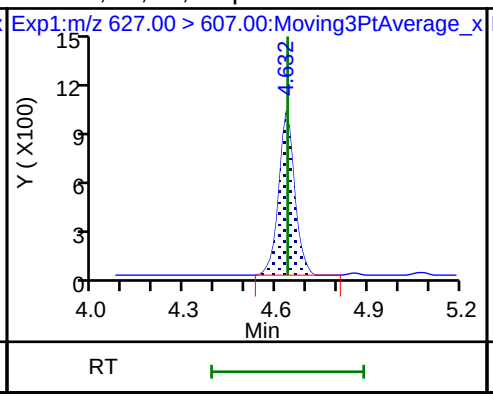

37 Perfluorododecanoic acid



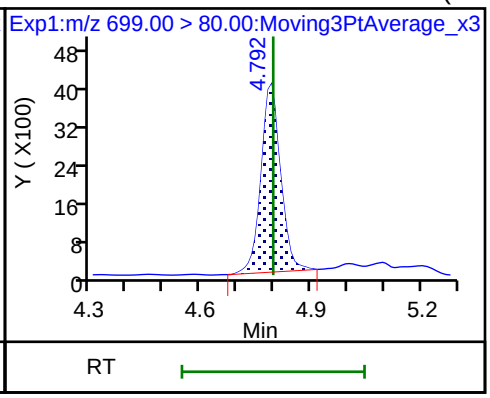
37 Perfluorododecanoic acid



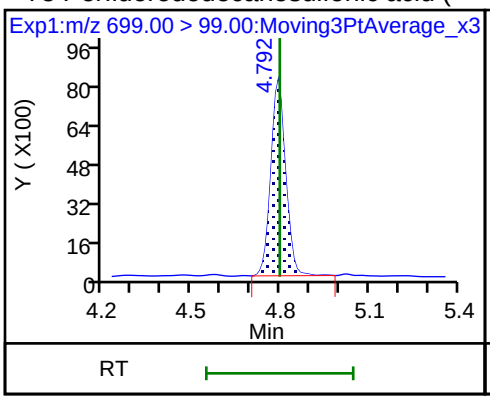

74 1H,1H,2H,2H-perfluorododecanesul



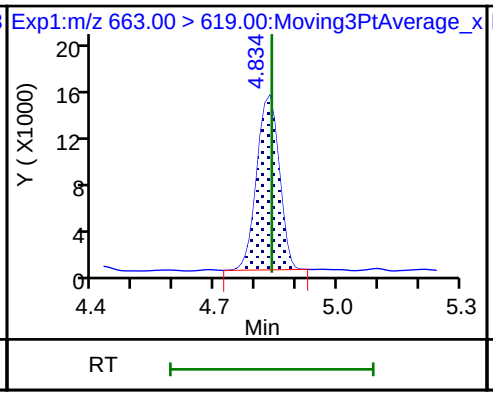

75 Perfluorododecanesulfonic acid (



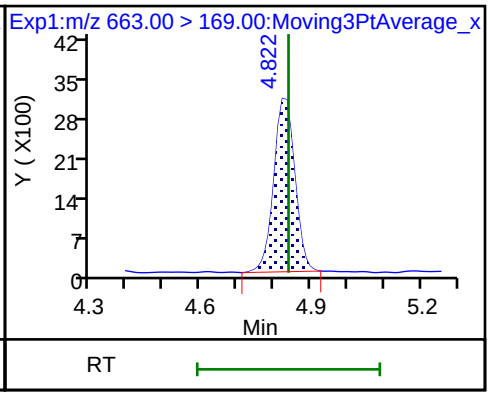

75 Perfluorododecanesulfonic acid (



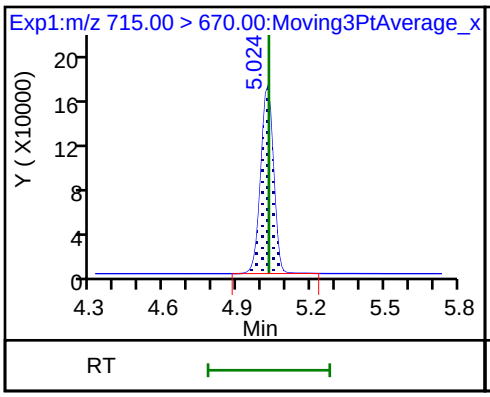

41 Perfluorotridecanoic acid



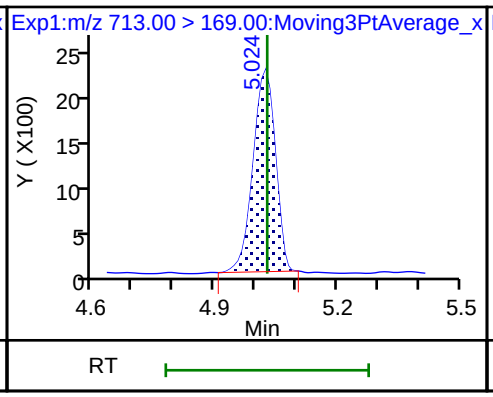

41 Perfluorotridecanoic acid



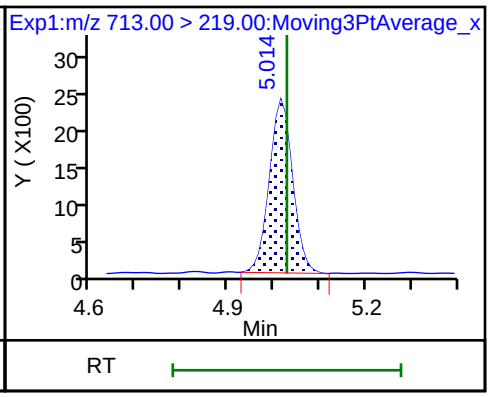

D 43 13C2 PFTeDA



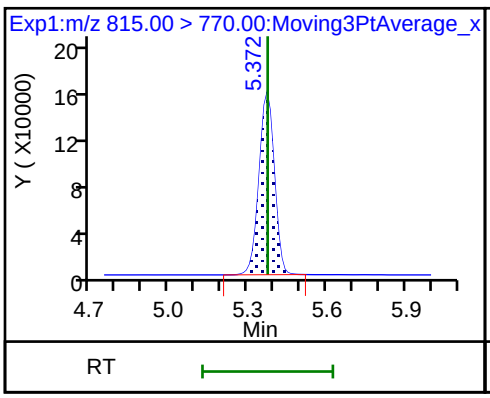

42 Perfluorotetradecanoic acid



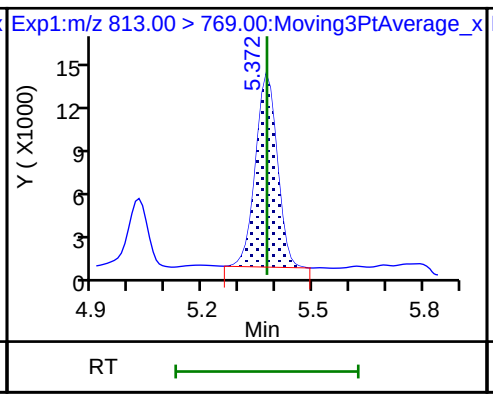

42 Perfluorotetradecanoic acid



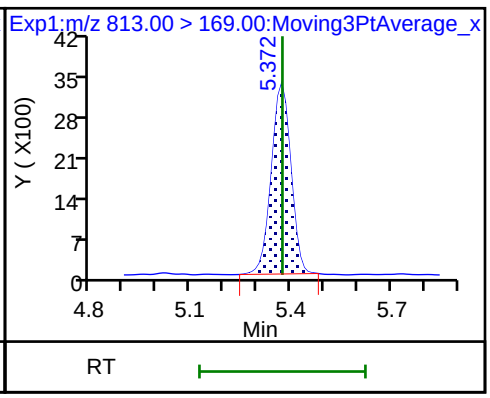

D 44 13C2 PFHxDA



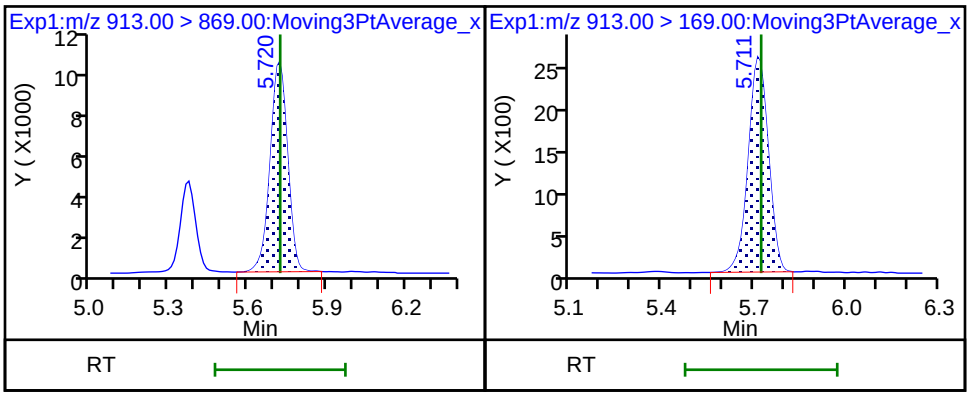

45 Perfluorohexadecanoic acid




45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid




46 Perfluorooctadecanoic acid

Eurofins TestAmerica, Burlington

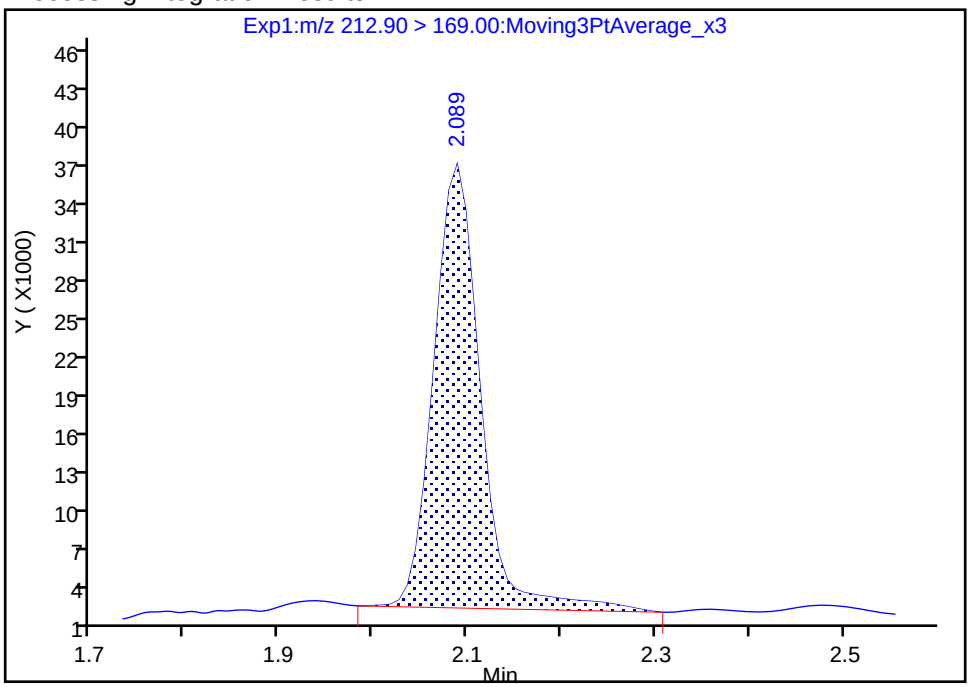
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d | | | | |
| Injection Date: | 22-Dec-2020 12:56:31 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 3 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

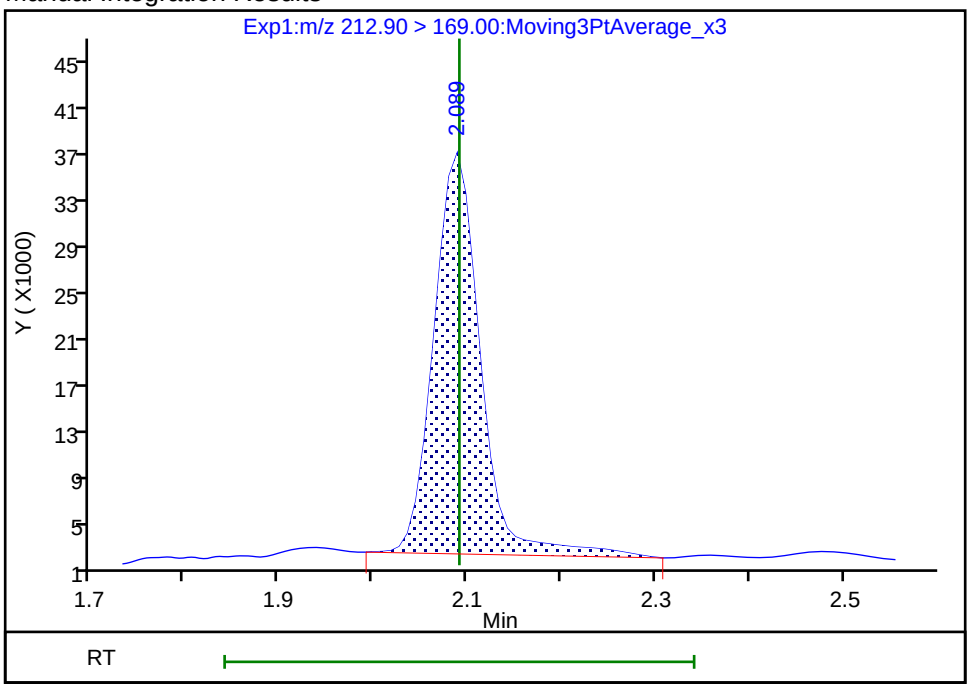
Processing Integration Results

RT: 2.09
Area: 118682
Amount: 0.101454
Amount Units: ng/ml




Manual Integration Results

RT: 2.09
Area: 118541
Amount: 0.106660
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:33:53
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

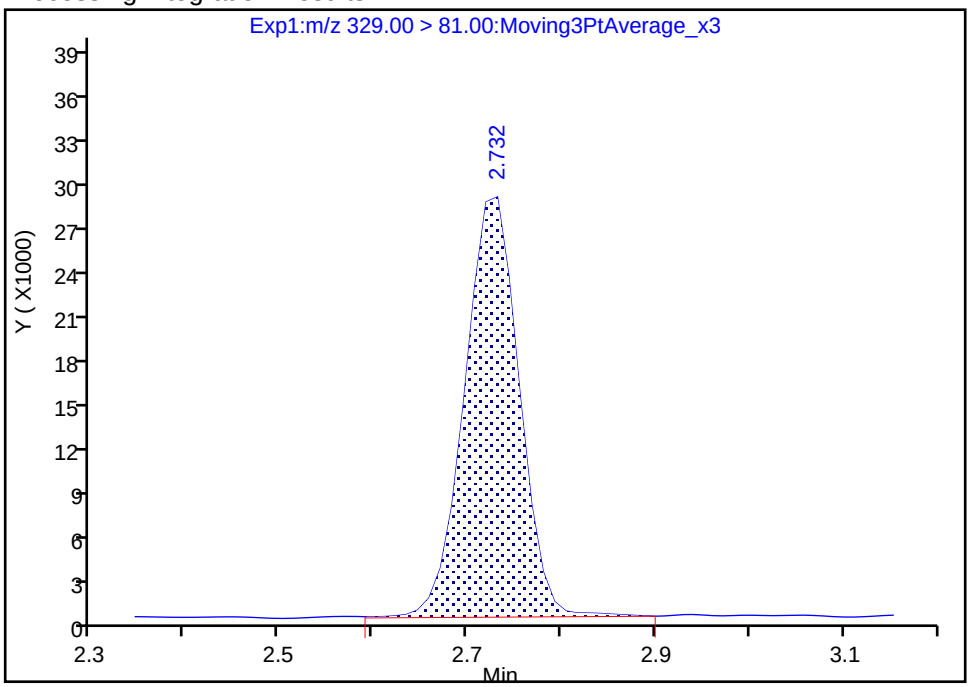
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d | | | | |
| Injection Date: | 22-Dec-2020 12:56:31 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 3 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

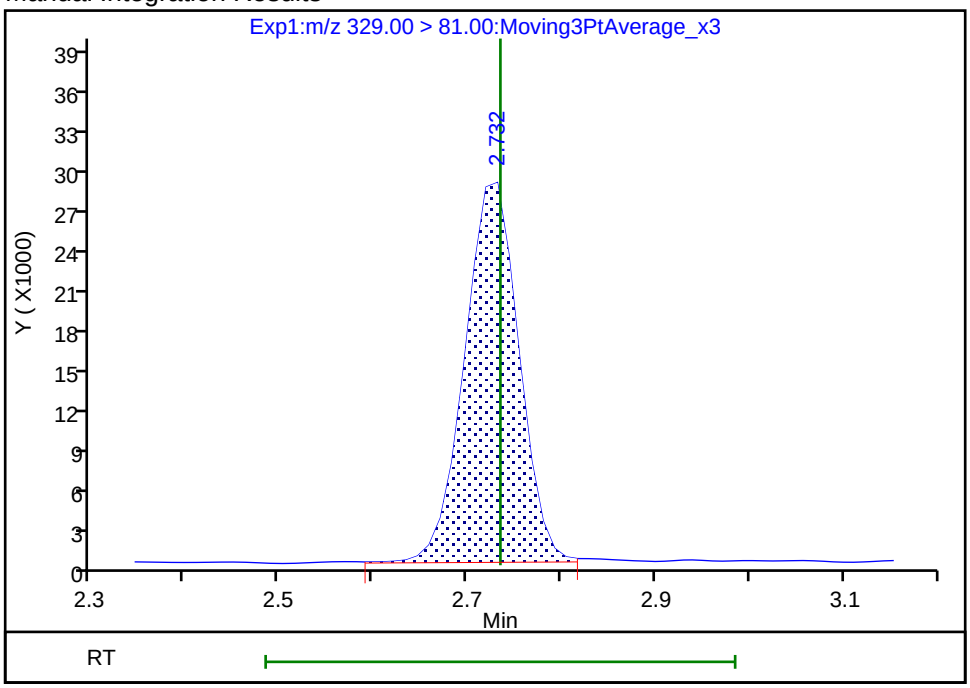
Processing Integration Results

RT: 2.73
Area: 113766
Amount: 1.212479
Amount Units: ng/ml




Manual Integration Results

RT: 2.73
Area: 113101
Amount: 1.201509
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:50:31
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

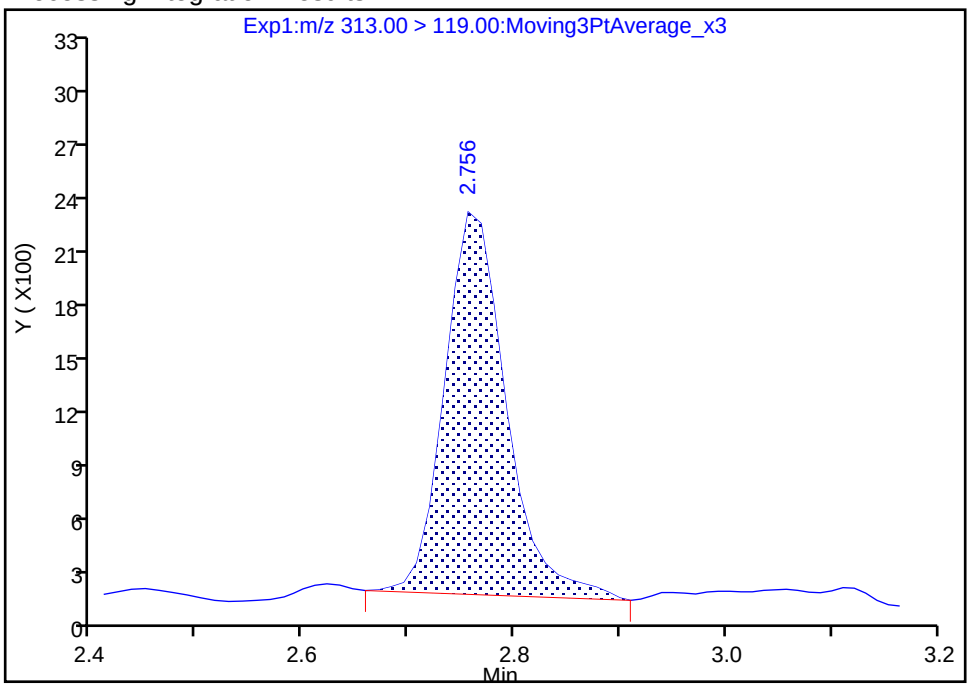
Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d
Injection Date: 22-Dec-2020 12:56:31 Instrument ID: LC812
Lims ID: IC
Client ID:
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

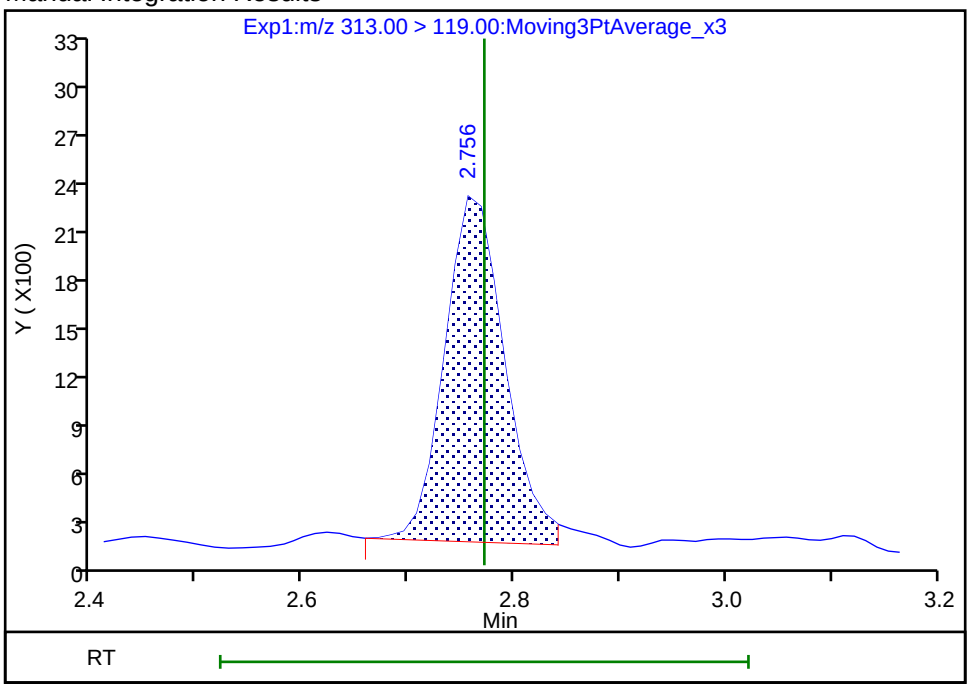
Processing Integration Results

RT: 2.76
Area: 8512
Amount: 0.094868
Amount Units: ng/ml




Manual Integration Results

RT: 2.76
Area: 8260
Amount: 0.099711
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:50:22
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

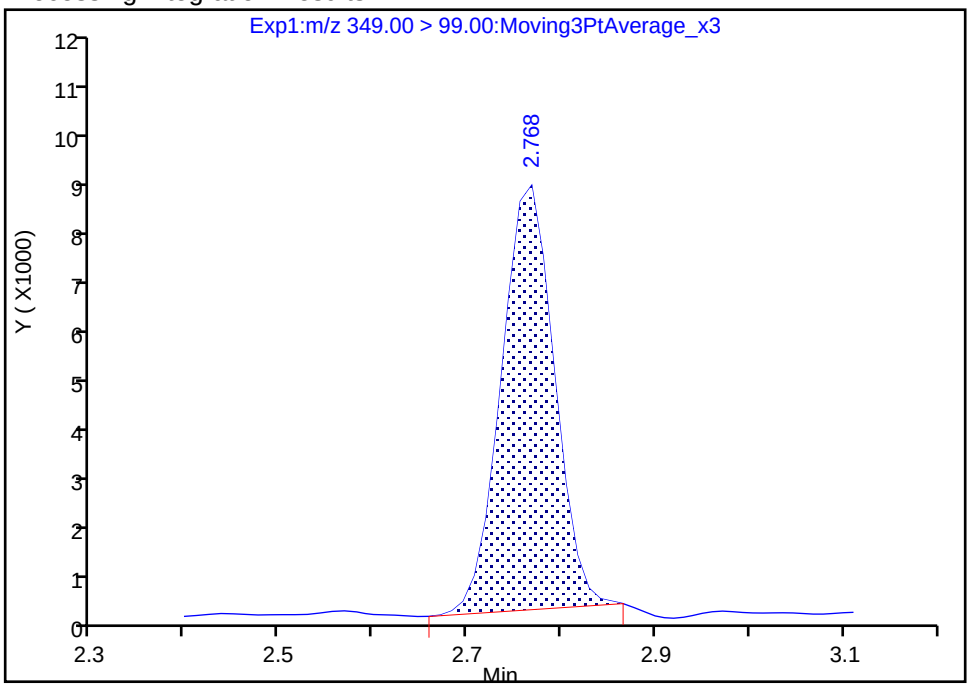
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d | | | | |
| Injection Date: | 22-Dec-2020 12:56:31 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 3 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

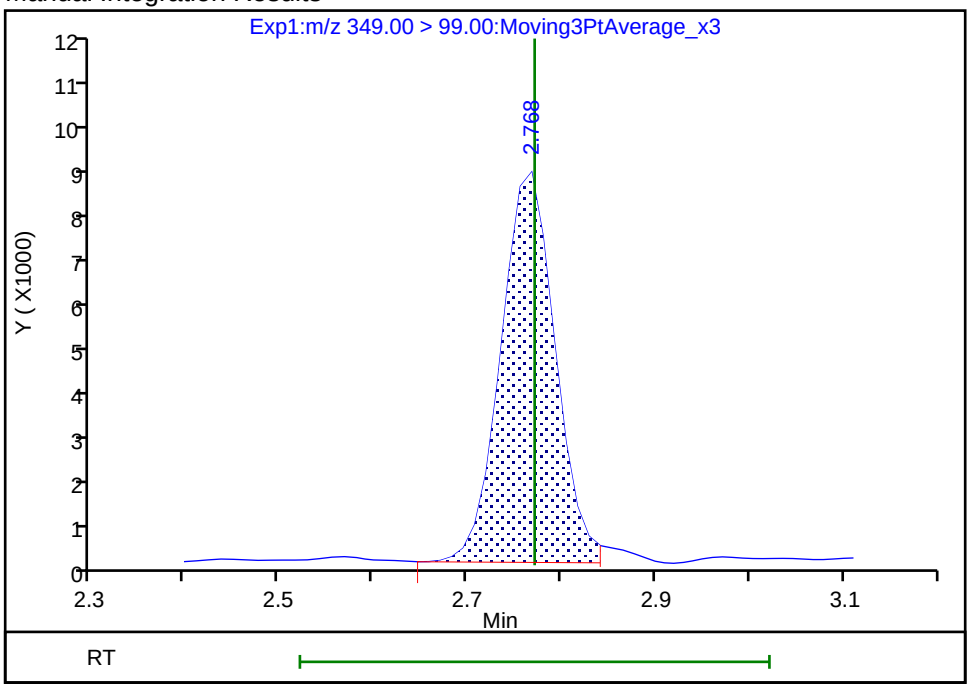
Processing Integration Results

RT: 2.77
Area: 31806
Amount: 0.097860
Amount Units: ng/ml




Manual Integration Results

RT: 2.77
Area: 33039
Amount: 0.099355
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:50:13
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

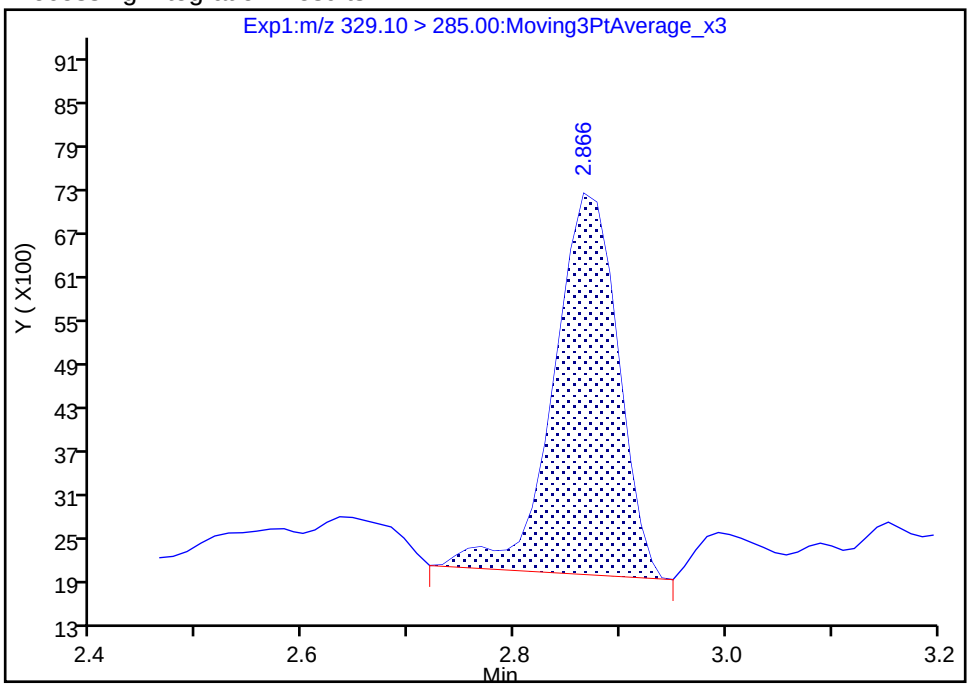
Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d
Injection Date: 22-Dec-2020 12:56:31 Instrument ID: LC812
Lims ID: IC
Client ID:
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

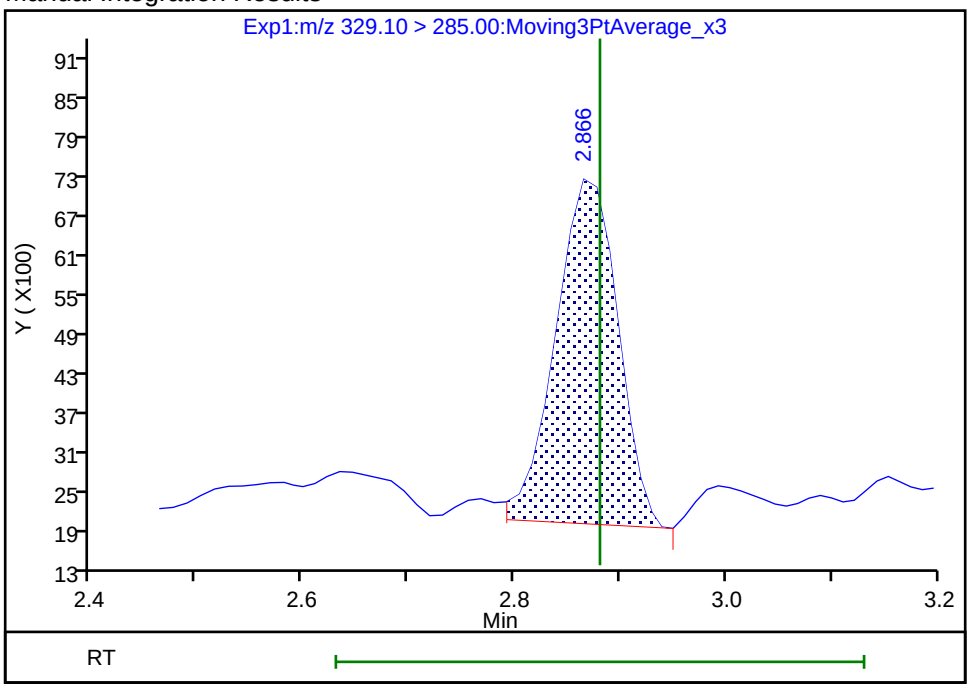
Processing Integration Results

RT: 2.87
Area: 22157
Amount: 0.102844
Amount Units: ng/ml




Manual Integration Results

RT: 2.87
Area: 21331
Amount: 0.103904
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:49:59
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

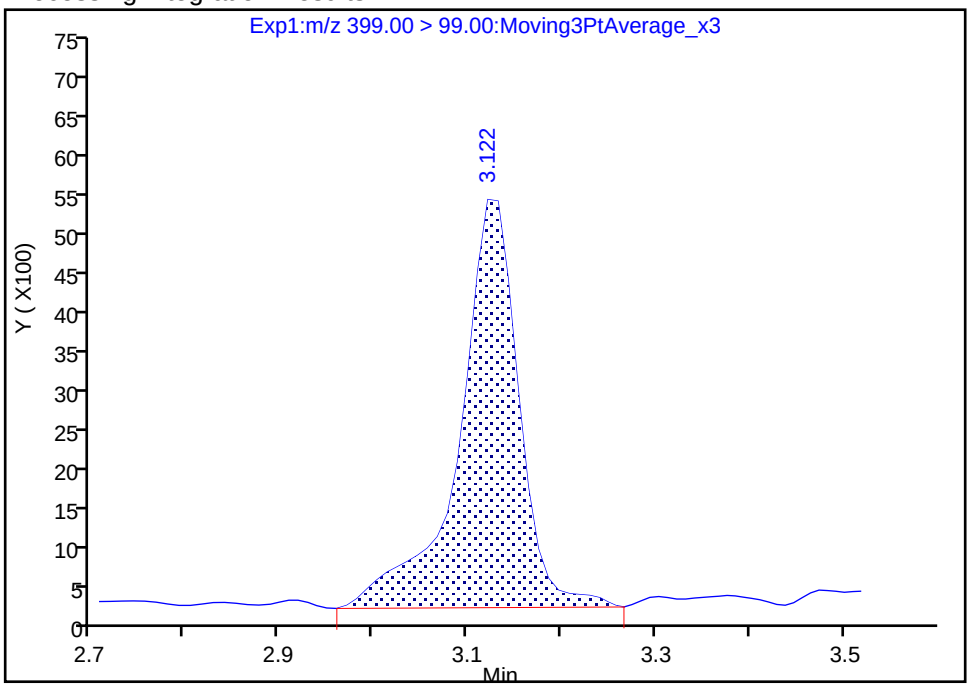
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d | | | | |
| Injection Date: | 22-Dec-2020 12:56:31 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 3 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

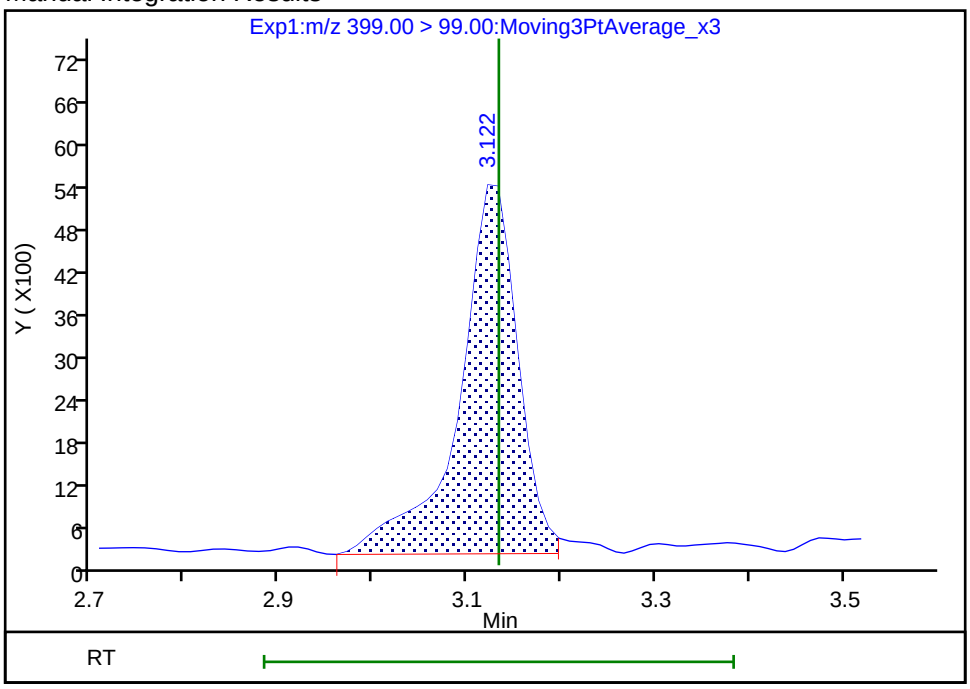
Processing Integration Results

RT: 3.12
Area: 23122
Amount: 0.095239
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 22626
Amount: 0.099187
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:49:48
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

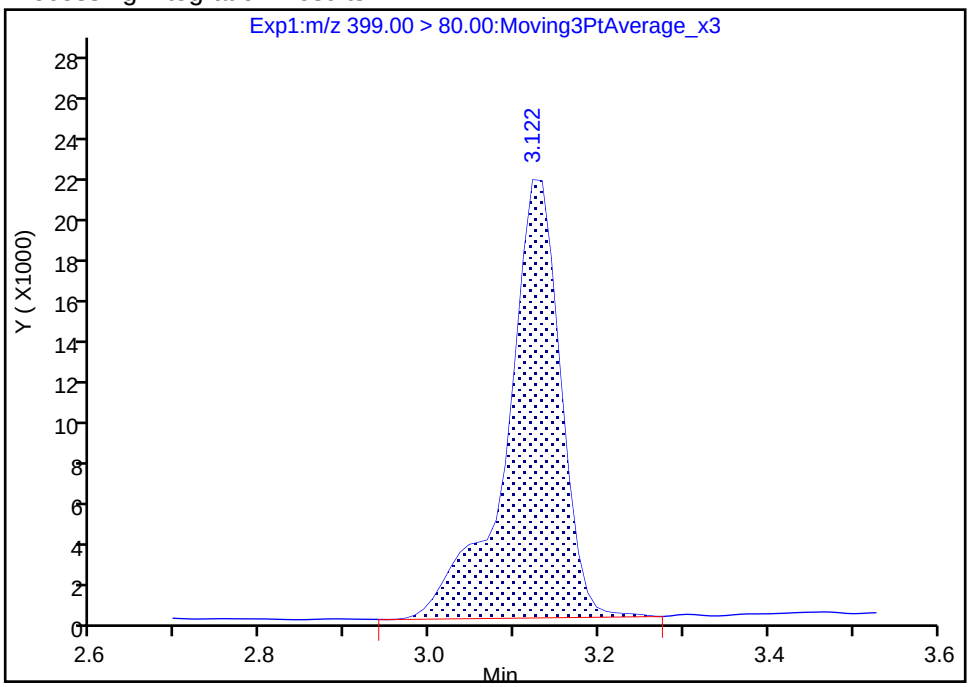
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d | | | | |
| Injection Date: | 22-Dec-2020 12:56:31 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 3 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

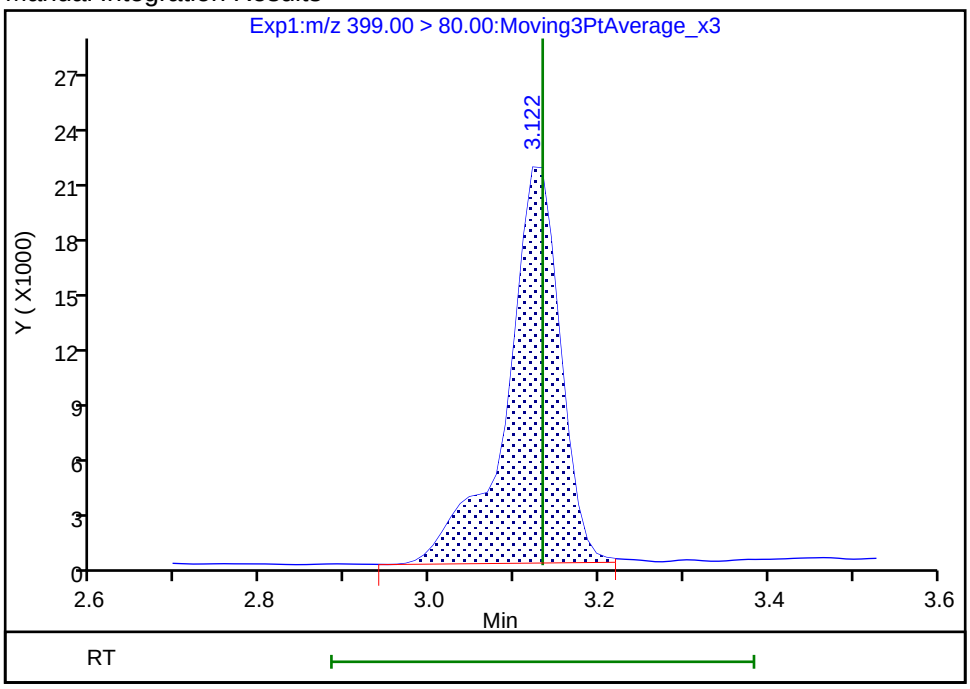
Processing Integration Results

RT: 3.12
Area: 94813
Amount: 0.095239
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 94508
Amount: 0.099187
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:49:51

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

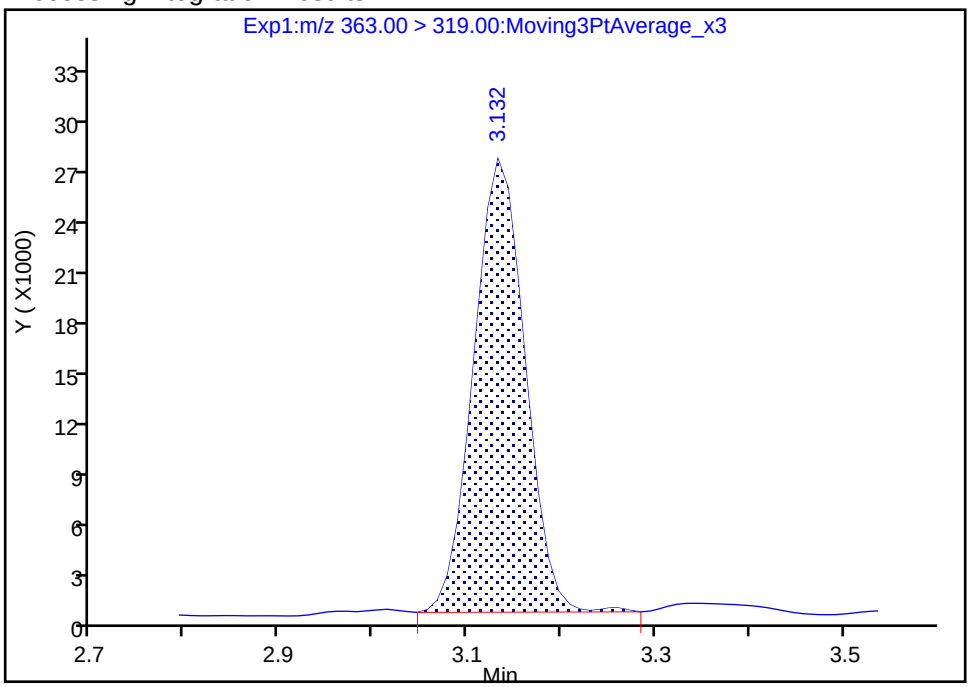
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d | | | | |
| Injection Date: | 22-Dec-2020 12:56:31 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 3 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

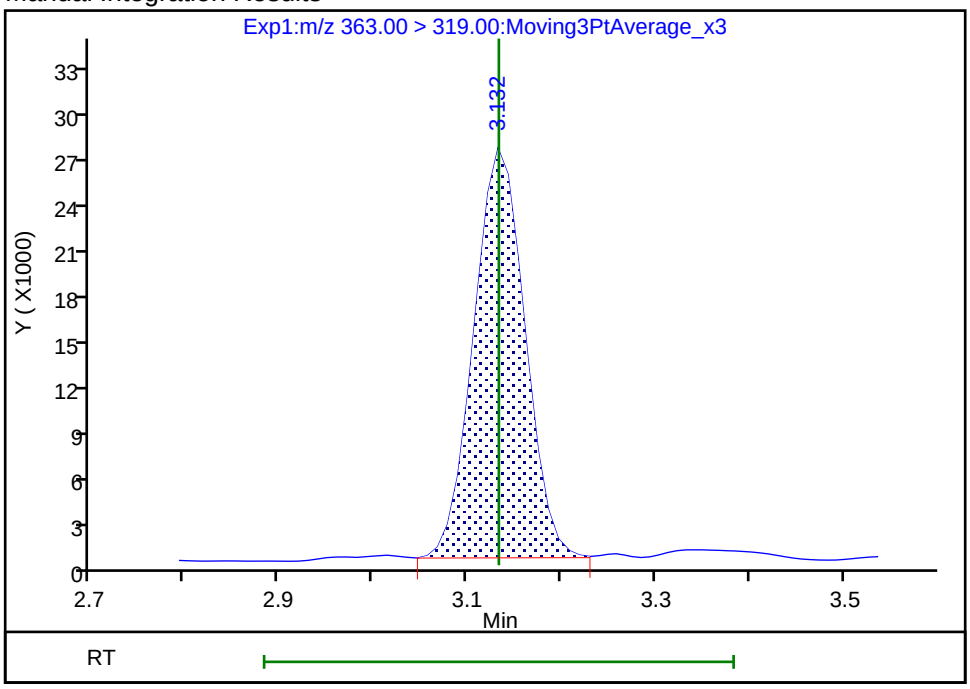
Processing Integration Results

RT: 3.13
Area: 100330
Amount: 0.107605
Amount Units: ng/ml




Manual Integration Results

RT: 3.13
Area: 99874
Amount: 0.112138
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:49:42
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

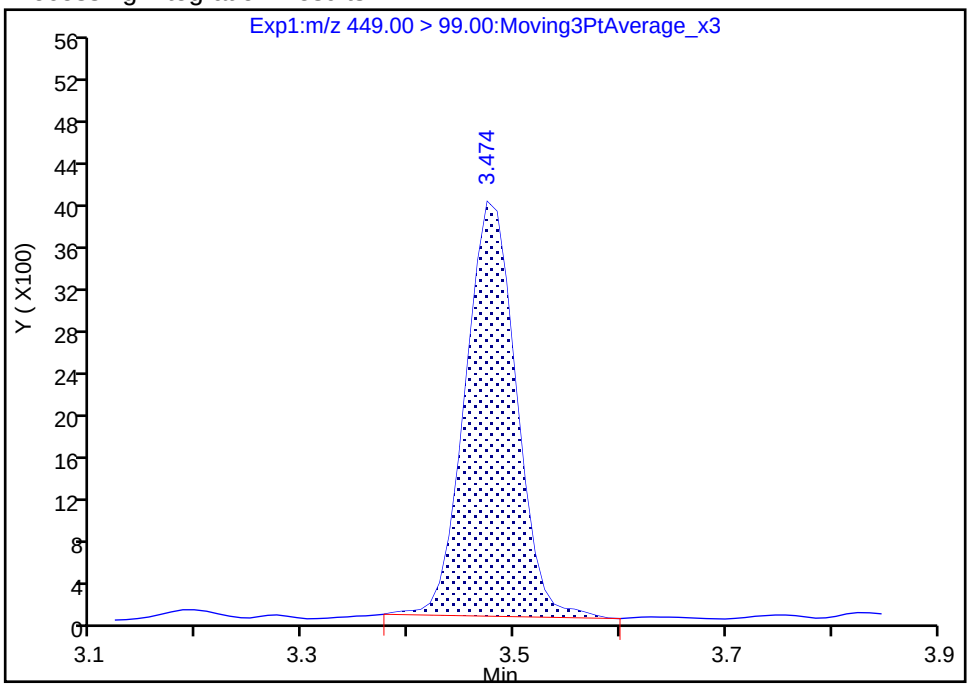
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d | | | | |
| Injection Date: | 22-Dec-2020 12:56:31 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 3 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

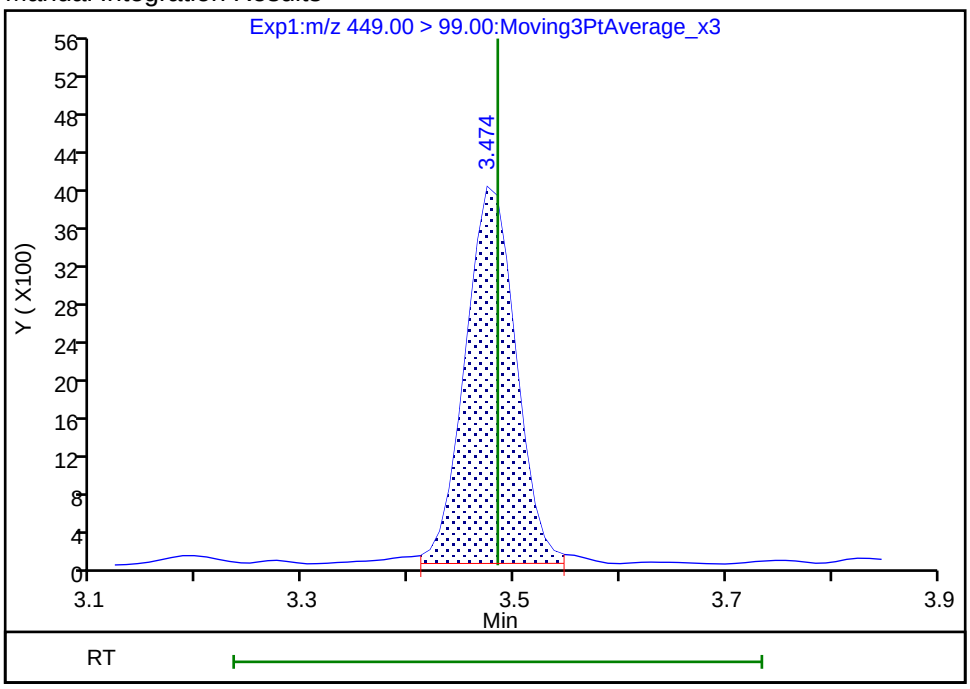
Processing Integration Results

RT: 3.47
Area: 13173
Amount: 0.097839
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 13156
Amount: 0.100190
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:49:35
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

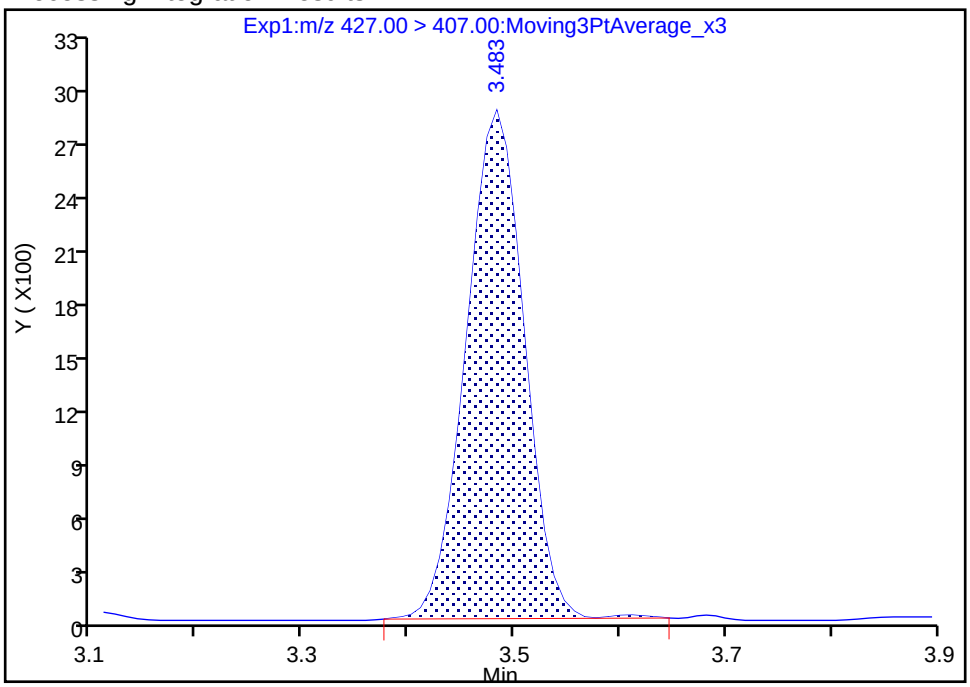
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d | | | | |
| Injection Date: | 22-Dec-2020 12:56:31 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 3 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

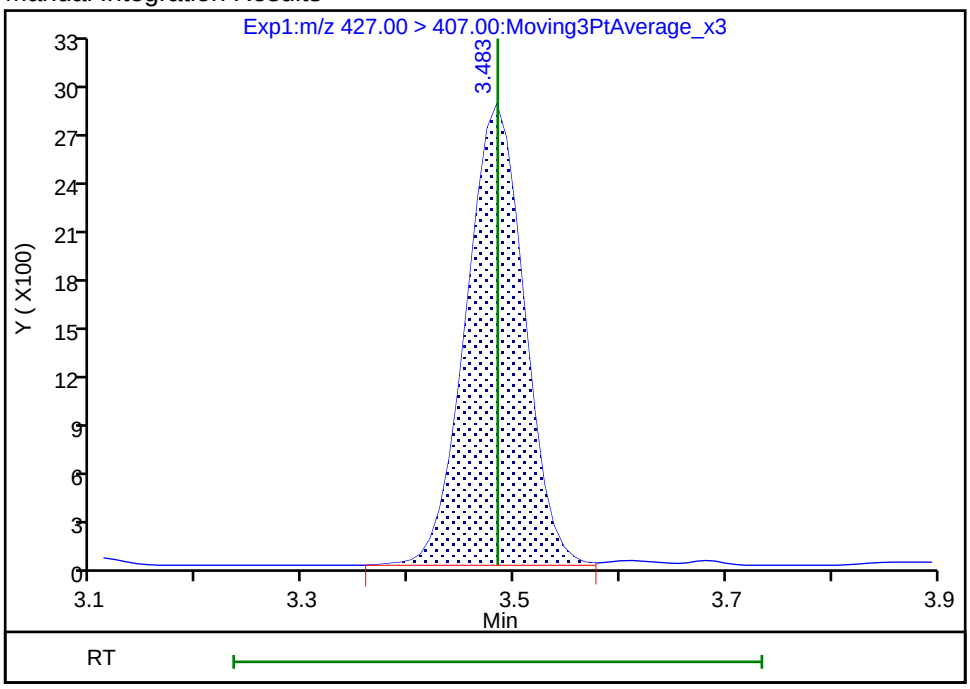
Processing Integration Results

RT: 3.48
Area: 10663
Amount: 0.091432
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 10738
Amount: 0.093218
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:49:18

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

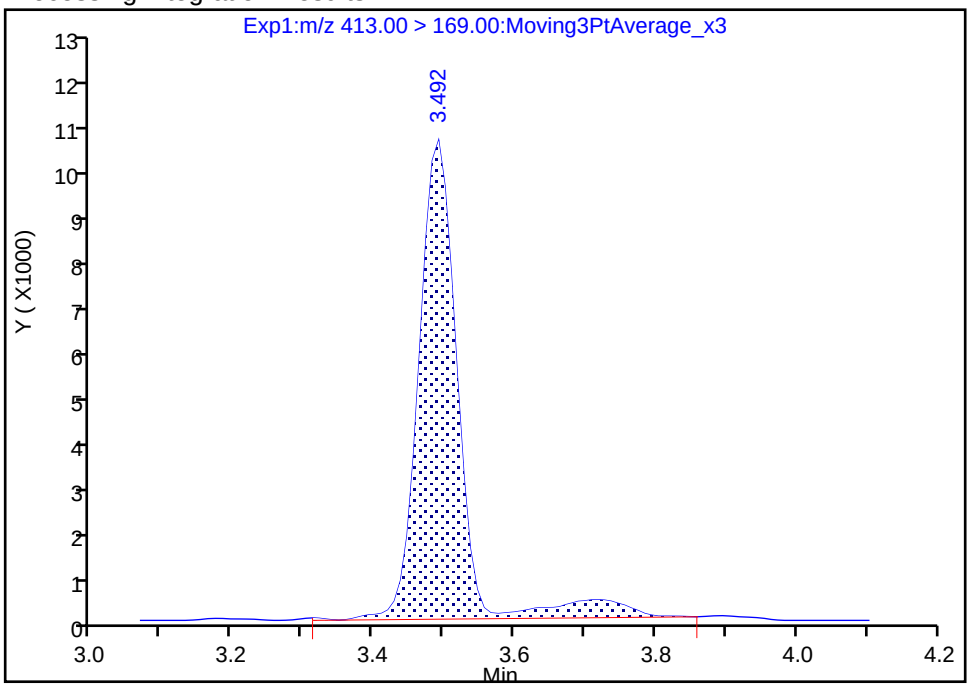
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d | | | | |
| Injection Date: | 22-Dec-2020 12:56:31 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 3 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

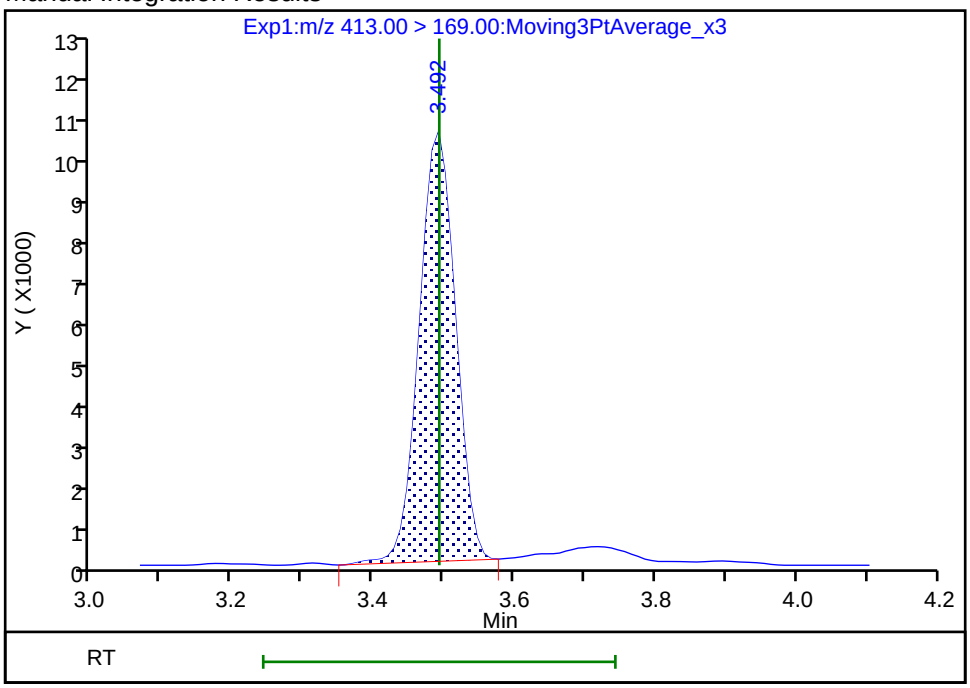
Processing Integration Results

RT: 3.49
Area: 41476
Amount: 0.101377
Amount Units: ng/ml




Manual Integration Results

RT: 3.49
Area: 37378
Amount: 0.102986
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:49:00
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

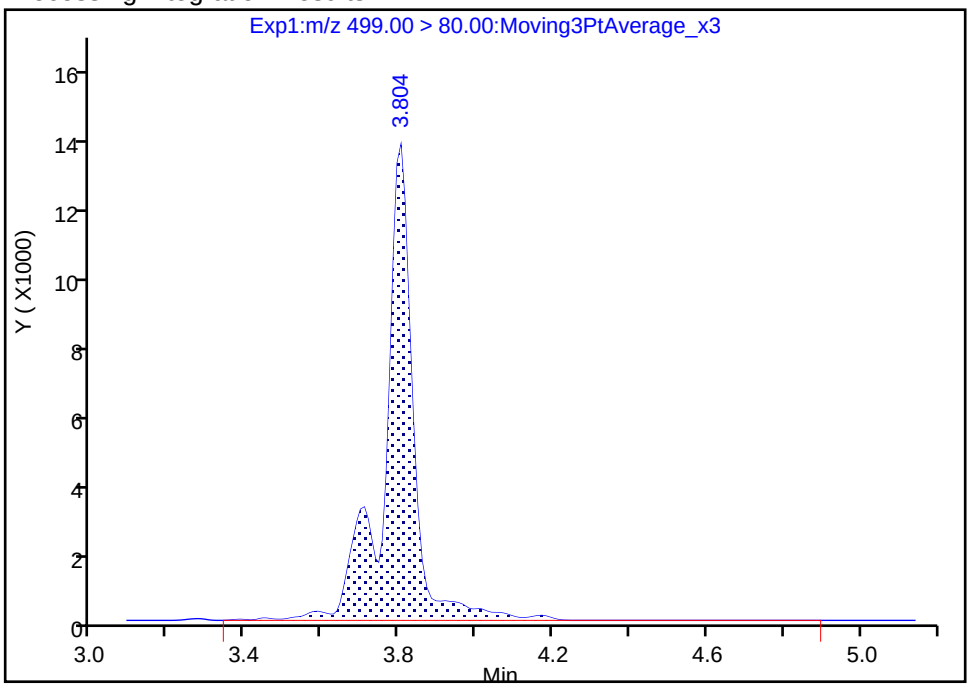
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d | | | | |
| Injection Date: | 22-Dec-2020 12:56:31 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 3 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

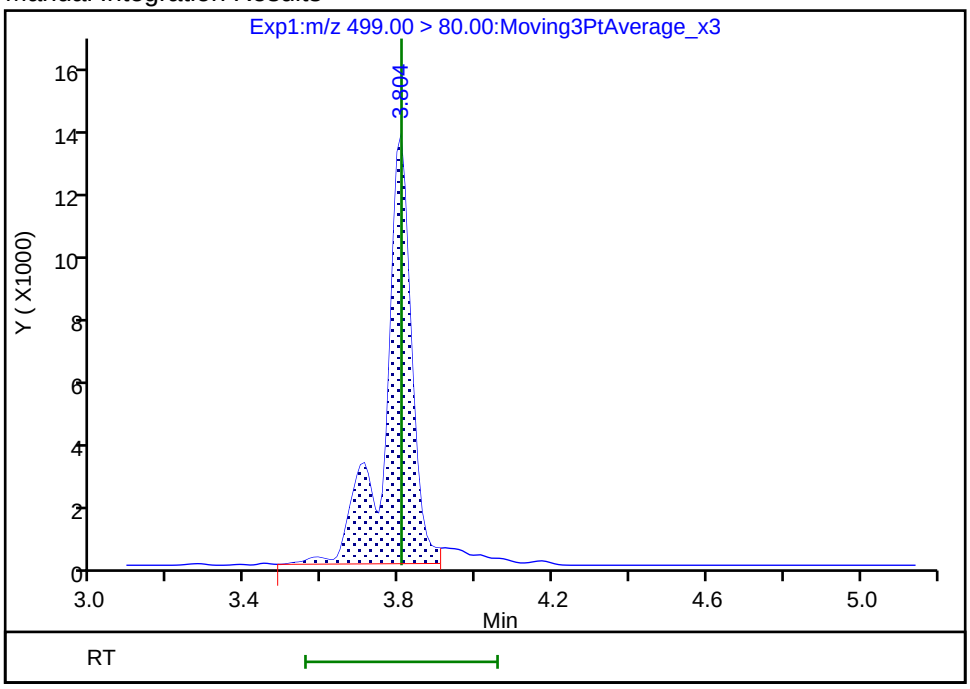
Processing Integration Results

RT: 3.80
Area: 70713
Amount: 0.101573
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 64913
Amount: 0.098863
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:48:39
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

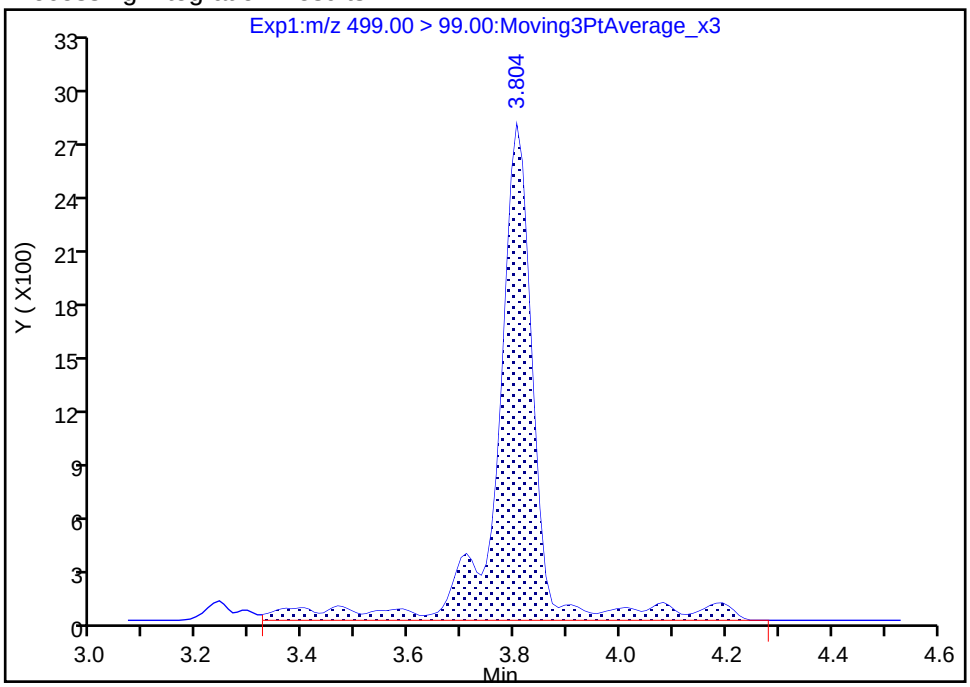
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d | | | | |
| Injection Date: | 22-Dec-2020 12:56:31 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 3 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

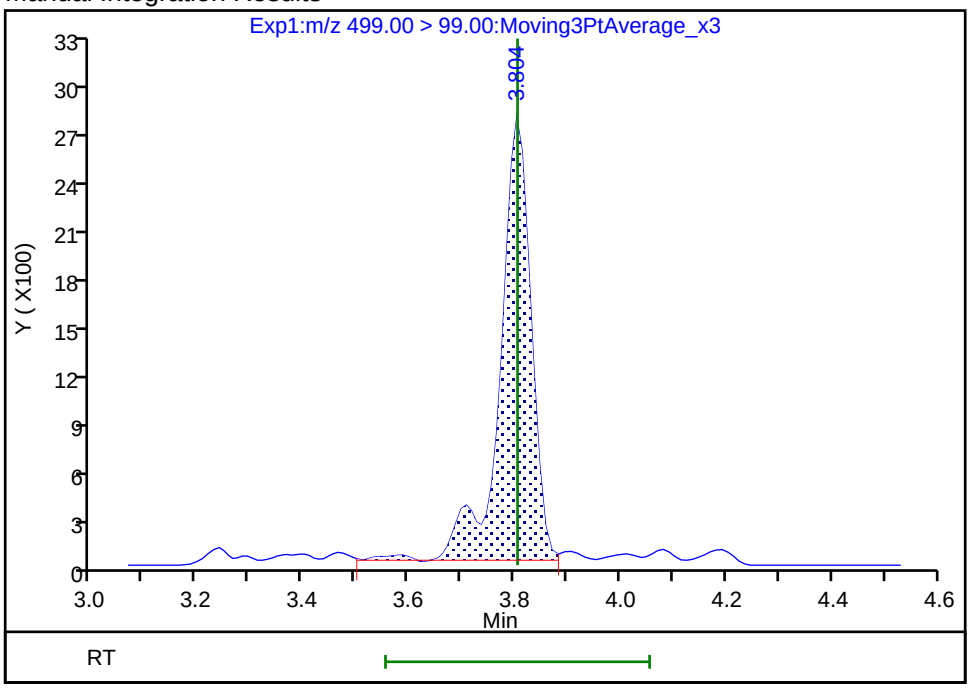
Processing Integration Results

RT: 3.80
Area: 13970
Amount: 0.101573
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 11330
Amount: 0.098863
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:48:47
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

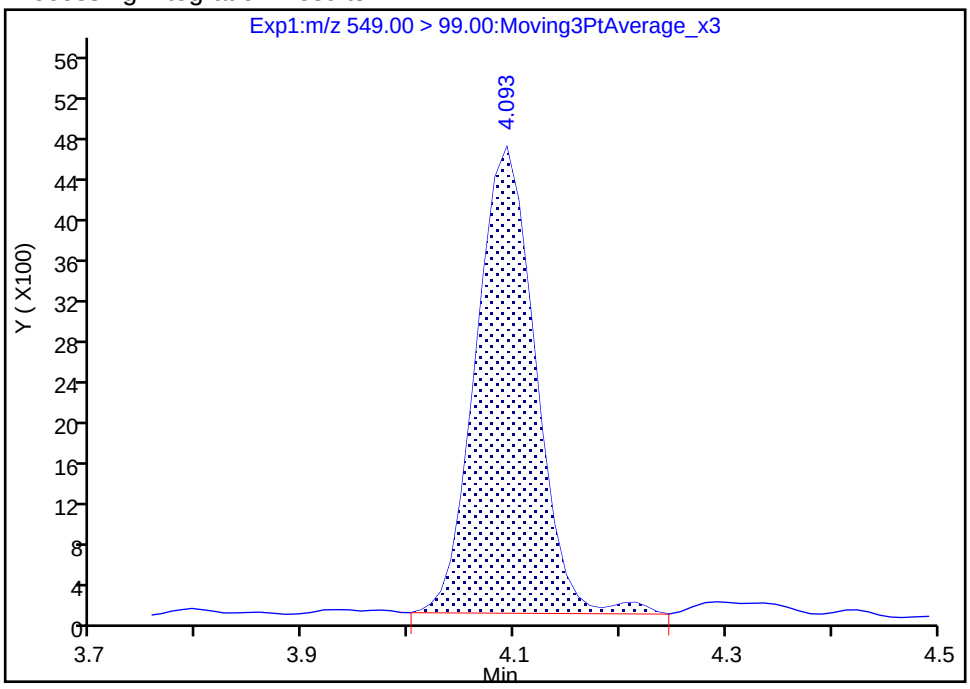
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d | | | | |
| Injection Date: | 22-Dec-2020 12:56:31 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 3 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

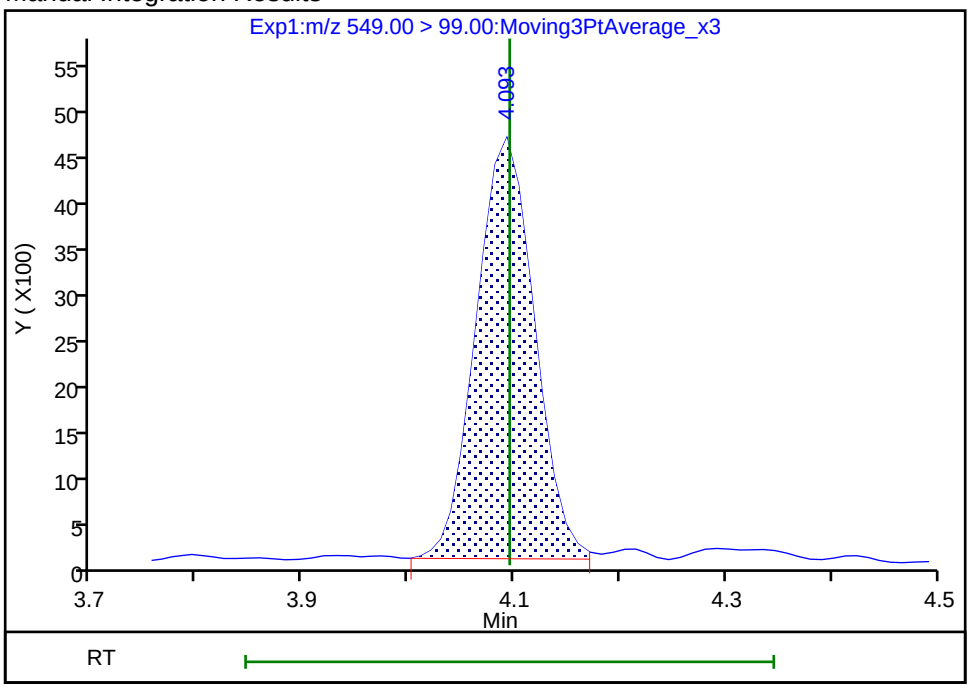
Processing Integration Results

RT: 4.09
Area: 17997
Amount: 0.099852
Amount Units: ng/ml




Manual Integration Results

RT: 4.09
Area: 17680
Amount: 0.102055
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:48:16

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

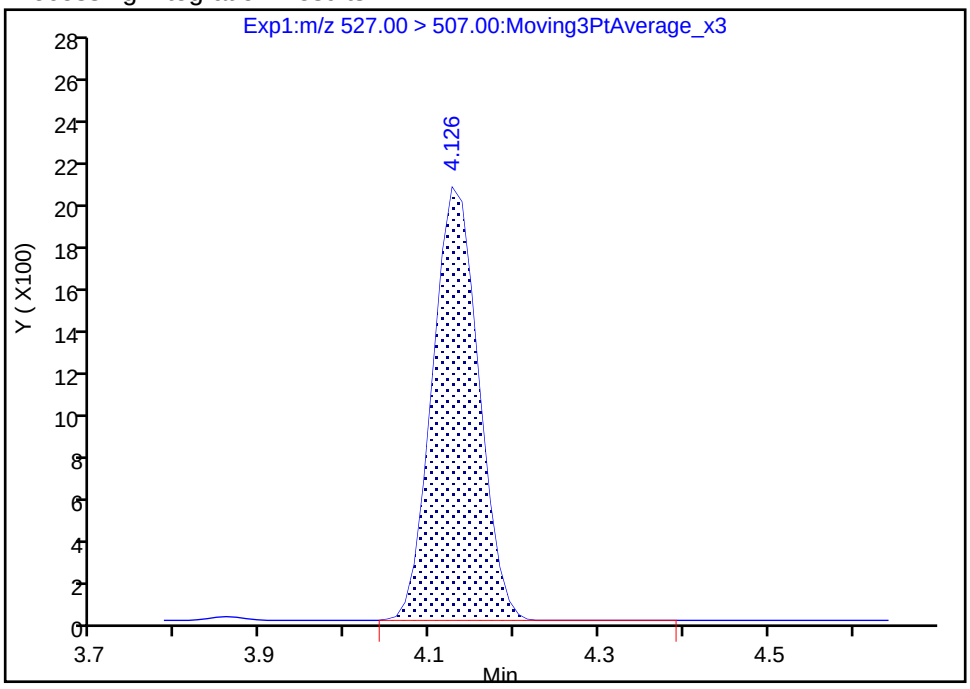
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d | | | | |
| Injection Date: | 22-Dec-2020 12:56:31 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 3 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

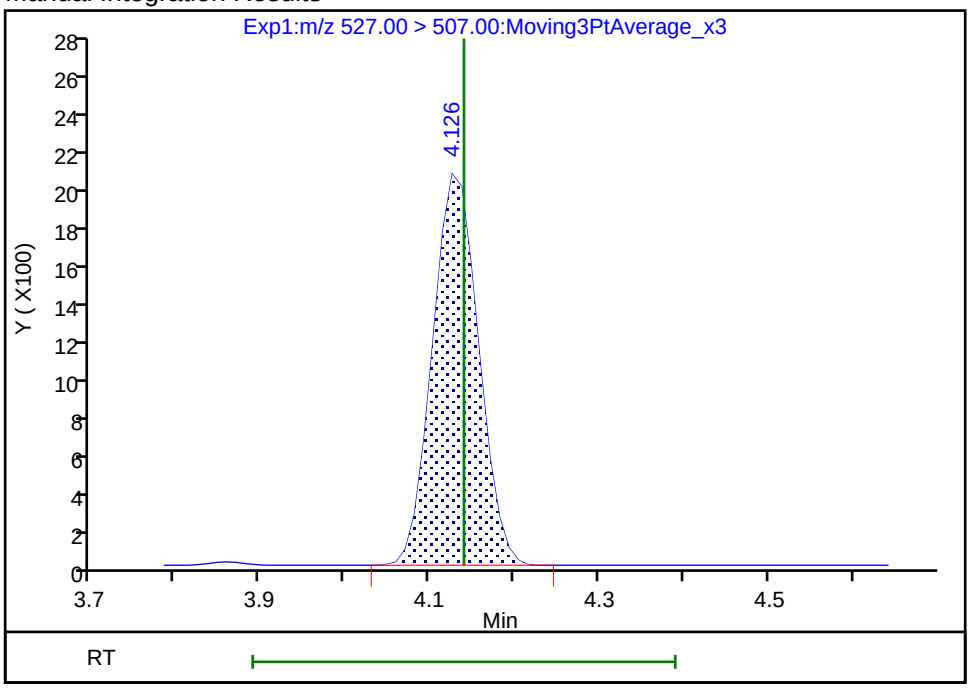
Processing Integration Results

RT: 4.13
Area: 7849
Amount: 0.107751
Amount Units: ng/ml




Manual Integration Results

RT: 4.13
Area: 7849
Amount: 0.109988
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:48:04

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

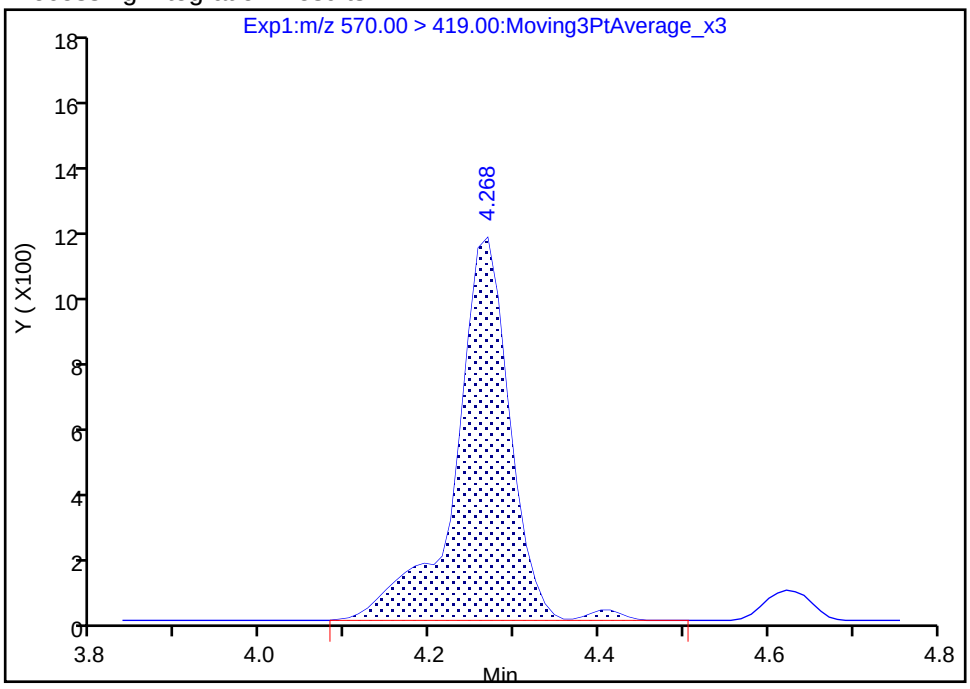
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d | | | | |
| Injection Date: | 22-Dec-2020 12:56:31 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 3 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

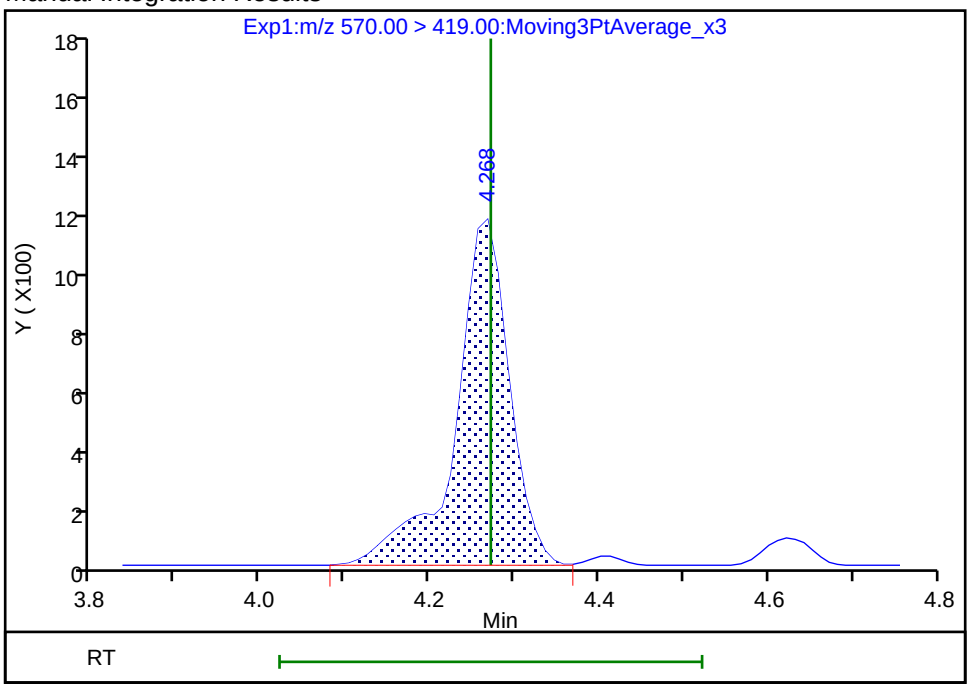
Processing Integration Results

RT: 4.27
Area: 5303
Amount: 0.103943
Amount Units: ng/ml




Manual Integration Results

RT: 4.27
Area: 5218
Amount: 0.105294
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:47:35
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

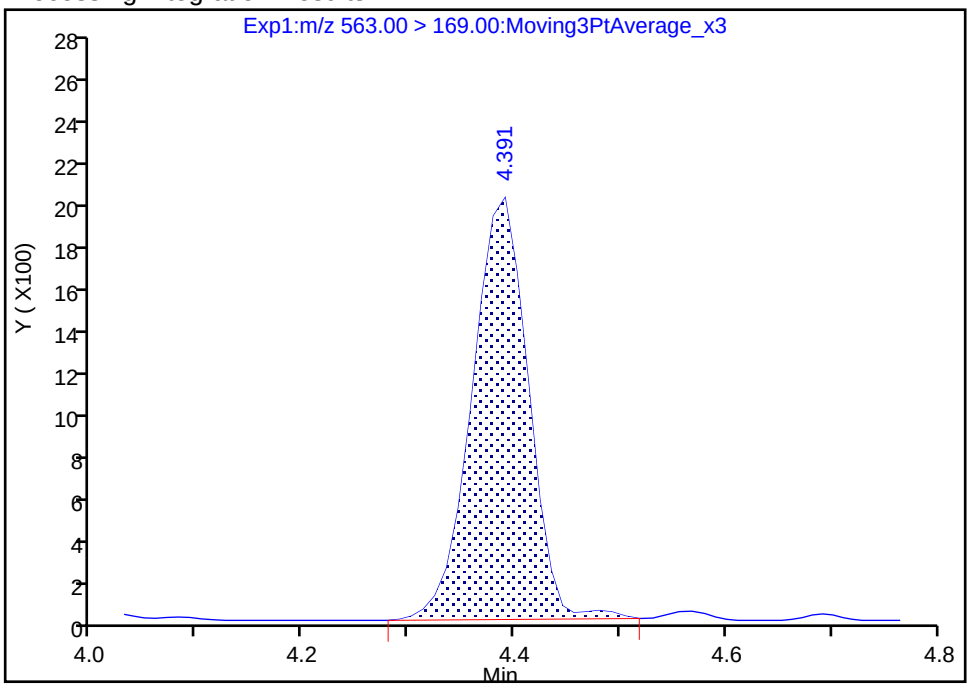
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d | | | | |
| Injection Date: | 22-Dec-2020 12:56:31 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 3 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

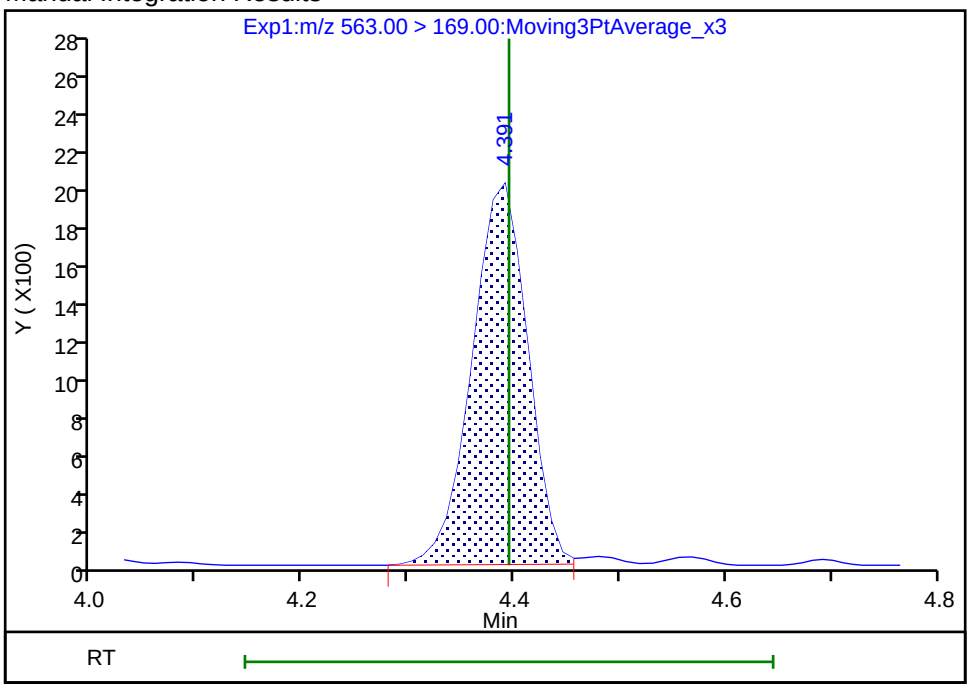
Processing Integration Results

RT: 4.39
Area: 7470
Amount: 0.104826
Amount Units: ng/ml




Manual Integration Results

RT: 4.39
Area: 7377
Amount: 0.104732
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:47:22

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

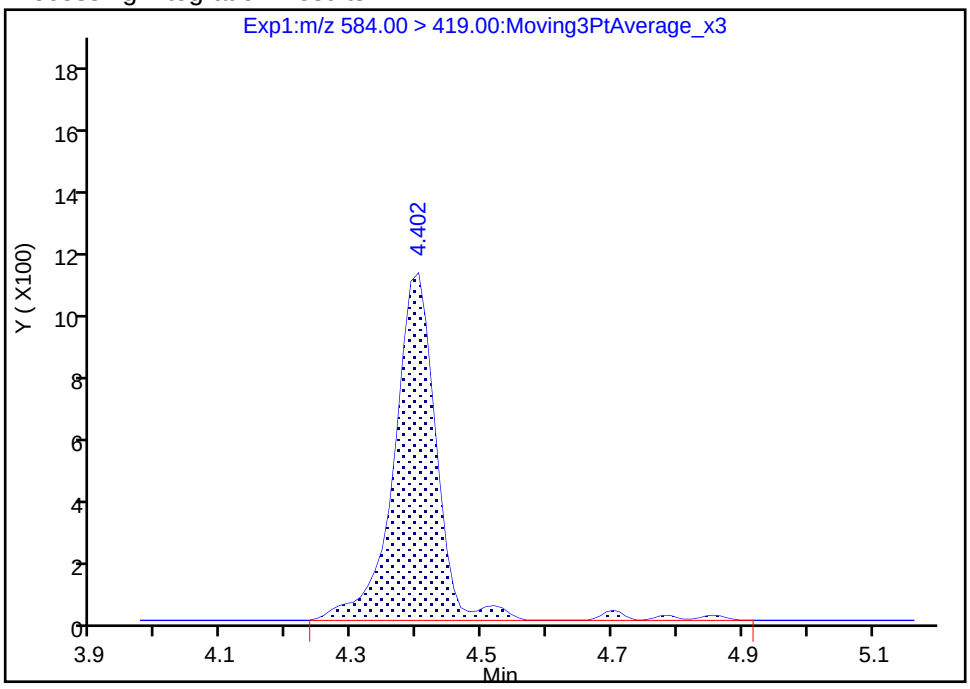
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL009.d | | | | |
| Injection Date: | 22-Dec-2020 12:56:31 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 3 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

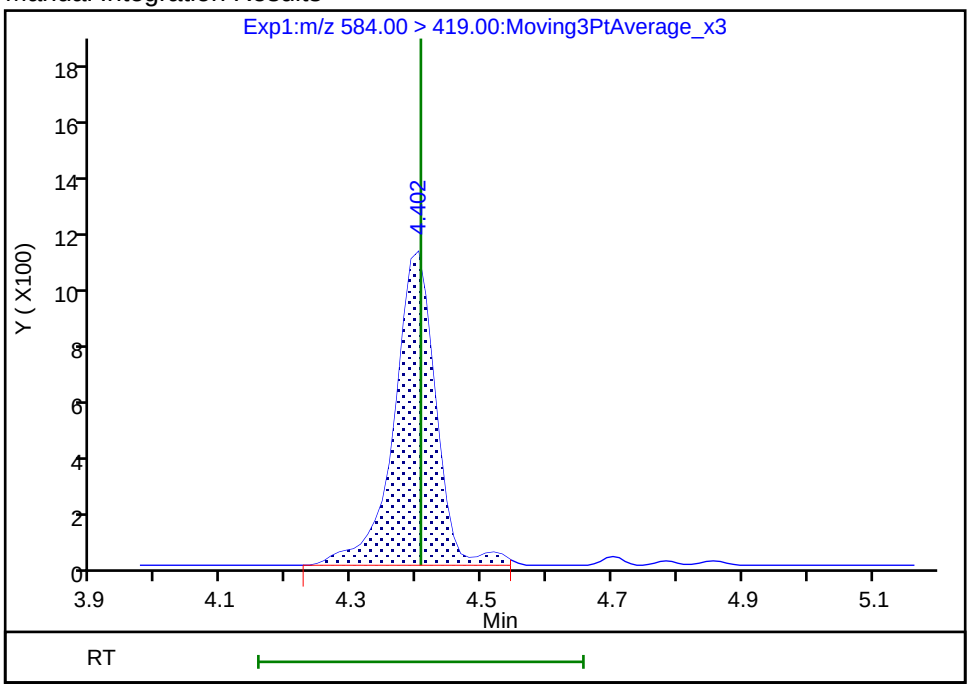
Processing Integration Results

RT: 4.40
Area: 4955
Amount: 0.095218
Amount Units: ng/ml




Manual Integration Results

RT: 4.40
Area: 4802
Amount: 0.097444
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:47:50
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL010.d
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 22-Dec-2020 13:04:47 ALS Bottle#: 4 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 200-0044184-010 Plate: 1 Rack: 1
Operator ID: lc812tech Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 22-Dec-2020 14:39:27 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1625

First Level Reviewer: deannd Date: 22-Dec-2020 13:54:26
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.082 | 2.091 | -0.009 | 0.596 | 1203352 | 1.30 | | 104 | 8925 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | |
| 212.90 > 169.00 | 2.091 | 2.091 | 0.0 | 1.004 | 456581 | 0.4733 | | 94.7 | 58.6 | |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.400 | 2.414 | -0.014 | 0.687 | 856461 | 1.28 | | 102 | 3165 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | M |
| 262.90 > 219.00 | 2.413 | 2.414 | -0.001 | 1.005 | 366588 | 0.4832 | | 96.6 | 14.1 | M |
| D 47 13C3 PFBS | | | | | | | | | | |
| 301.90 > 80.00 | 2.426 | 2.427 | -0.001 | 0.695 | 1038343 | 1.18 | | 101 | 190646 | |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | |
| 298.90 > 80.00 | 2.426 | 2.427 | -0.001 | 1.000 | 439919 | 0.4354 | Target=2.21 | 98.5 | 936 | |
| 298.90 > 99.00 | 2.426 | 2.427 | -0.001 | 1.000 | 196460 | | 2.24(1.10-3.31) | 98.5 | 210 | |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | |
| 327.00 > 307.00 | 2.722 | 2.735 | -0.013 | 1.000 | 61951 | 0.4587 | | 98.2 | 1168 | |
| D 60 M2-4:2 FTS | | | | | | | | | | M |
| 329.00 > 81.00 | 2.722 | 2.735 | -0.013 | 0.779 | 85984 | 1.17 | | 100 | 90.5 | M |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.758 | 2.771 | -0.013 | 0.790 | 903699 | 1.29 | | 103 | 3305 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | |
| 313.00 > 269.00 | 2.758 | 2.771 | -0.013 | 1.000 | 370199 | 0.4687 | Target=12.17 | 93.7 | 92.5 | |
| 313.00 > 119.00 | 2.758 | 2.771 | -0.013 | 1.000 | 30072 | | 12.31(6.09-18.26) | 93.7 | 46.5 | |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | |
| 349.00 > 80.00 | 2.770 | 2.771 | -0.001 | 0.884 | 405410 | 0.4727 | Target=3.32 | 101 | 1026 | |
| 349.00 > 99.00 | 2.770 | 2.771 | -0.001 | 0.884 | 124768 | | 3.25(1.66-4.98) | 101 | 227 | |
| 67 Perfluoro(2-propoxypropanoic) ac | | | | | | | | | | M |
| 329.10 > 285.00 | 2.868 | 2.881 | -0.013 | 1.000 | 84587 | 0.4417 | | 88.3 | 9.7 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 64 13C3 HFPO-DA | | | | | | | | | | |
| 332.10 > 287.00 | 2.868 | 2.881 | -0.013 | 0.821 | 172775 | 1.40 | | 112 | 1278 | |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.132 | 3.133 | -0.001 | 0.897 | 772740 | 1.18 | | 99.5 | 3063 | |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | |
| 399.00 > 80.00 | 3.132 | 3.133 | -0.001 | 1.000 | 348983 | 0.4532 | Target=4.08 | 99.6 | 333 | |
| 399.00 > 99.00 | 3.132 | 3.133 | -0.001 | 1.000 | 83133 | | 4.20(2.04-6.11) | 99.6 | 75.2 | |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.132 | 3.133 | -0.001 | 0.897 | 892830 | 1.33 | | 106 | 4015 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | |
| 363.00 > 319.00 | 3.132 | 3.133 | -0.001 | 1.000 | 364247 | 0.4669 | Target=3.70 | 93.4 | 90.6 | |
| 363.00 > 169.00 | 3.132 | 3.133 | -0.001 | 1.000 | 98861 | | 3.68(1.85-5.56) | 93.4 | 266 | |
| 77 DONA | | | | | | | | | | |
| 377.00 > 251.00 | 3.175 | 3.176 | -0.001 | 0.835 | 718739 | 0.4722 | Target=2.47 | 100 | 864 | |
| 377.00 > 85.00 | 3.164 | 3.176 | -0.012 | 0.832 | 296310 | | 2.43(1.23-3.70) | 100 | 299 | |
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | |
| 449.00 > 80.00 | 3.474 | 3.484 | -0.010 | 0.913 | 299175 | 0.4875 | Target=5.85 | 102 | 1865 | |
| 449.00 > 99.00 | 3.474 | 3.484 | -0.010 | 0.913 | 49233 | | 6.08(2.93-8.78) | 102 | 263 | |
| D 12 M2-6:2 FTS | | | | | | | | | | M |
| 429.00 > 81.00 | 3.483 | 3.484 | -0.001 | 0.997 | 102545 | 1.25 | | 105 | 434 | M |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | M |
| 427.00 > 407.00 | 3.483 | 3.484 | -0.001 | 1.000 | 43065 | 0.4483 | | 94.6 | 540 | M |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.492 | 3.493 | -0.001 | 1.000 | 857479 | 1.25 | | 100 | 3031 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.492 | 3.493 | -0.001 | | 863609 | 1.25 | | | 2079 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | M |
| 413.00 > 369.00 | 3.492 | 3.493 | -0.001 | 1.000 | 367859 | 0.4947 | Target=2.58 | 98.9 | 74.6 | M |
| 413.00 > 169.00 | 3.492 | 3.493 | -0.001 | 1.000 | 139299 | | 2.64(1.29-3.87) | 98.9 | 307 | M |
| D 18 13C4 PFOS | | | | | | | | | | |
| 503.00 > 80.00 | 3.804 | 3.806 | -0.002 | 1.089 | 543196 | 1.20 | | 101 | 1530 | |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.804 | 3.806 | -0.002 | 1.000 | 243758 | 0.4663 | Target=5.56 | 100 | 344 | M |
| 499.00 > 99.00 | 3.804 | 3.806 | -0.002 | 1.000 | 40689 | | 5.99(2.78-8.34) | 100 | 175 | M |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.825 | 3.826 | -0.001 | 1.095 | 772347 | 1.28 | | 102 | 3142 | |
| 20 Perfluorononanoic acid | | | | | | | | | | |
| 463.00 > 419.00 | 3.825 | 3.826 | -0.001 | 1.000 | 333548 | 0.4877 | Target=6.87 | 97.5 | 56.9 | |
| 463.00 > 169.00 | 3.825 | 3.826 | -0.001 | 1.000 | 48745 | | 6.84(3.43-10.30) | 97.5 | 496 | |
| 69 9-Chlorohexadecafluoro-3-oxanona | | | | | | | | | | |
| 531.00 > 351.00 | 3.964 | 3.967 | -0.003 | 1.042 | 275177 | 0.4718 | | 101 | 1786 | |
| 68 Perfluorononanesulfonic acid | | | | | | | | | | |
| 549.00 > 80.00 | 4.093 | 4.095 | -0.002 | 1.076 | 195317 | 0.5008 | Target=2.78 | 104 | 2076 | |
| 549.00 > 99.00 | 4.093 | 4.095 | -0.002 | 1.076 | 64085 | | 3.05(1.39-4.17) | 104 | 211 | |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.126 | 4.129 | -0.003 | 1.182 | 721858 | 1.25 | | 100 | 3027 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 24 Perfluorodecanoic acid | | | | | | | | | | |
| 513.00 > 469.00 | 4.126 | 4.129 | -0.003 | 1.000 | 305912 | 0.5140 | Target=9.03 | 103 | 248 | |
| 513.00 > 169.00 | 4.126 | 4.129 | -0.003 | 1.000 | 35067 | | 8.72(4.51-13.54) | 103 | 262 | |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | |
| 527.00 > 507.00 | 4.126 | 4.140 | -0.014 | 1.000 | 26606 | 0.4672 | | 97.5 | 734 | |
| D 26 M2-8:2 FTS | | | | | | | | | | M |
| 529.00 > 81.00 | 4.126 | 4.140 | -0.014 | 1.182 | 100274 | 1.18 | | 99.0 | 555 | M |
| D 21 13C8 FOSA | | | | | | | | | | |
| 506.00 > 78.00 | 4.205 | 4.207 | -0.002 | 1.204 | 1063884 | 1.26 | | 100 | 2586 | |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | |
| 498.00 > 78.00 | 4.205 | 4.207 | -0.002 | 1.000 | 423265 | 0.4962 | | 99.2 | 1392 | |
| D 27 d3-NMeFOSAA | | | | | | | | | | M |
| 573.00 > 419.00 | 4.268 | 4.272 | -0.004 | 1.222 | 54321 | 1.30 | | 104 | 214 | M |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | |
| 570.00 > 419.00 | 4.268 | 4.272 | -0.004 | 1.000 | 16744 | 0.4347 | | 86.9 | 164 | |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | |
| 599.00 > 80.00 | 4.358 | 4.362 | -0.004 | 1.146 | 146348 | 0.4706 | Target=2.76 | 97.6 | 911 | |
| 599.00 > 99.00 | 4.358 | 4.362 | -0.004 | 1.146 | 55990 | | 2.61(1.38-4.14) | 97.6 | 249 | |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.380 | 4.384 | -0.004 | 1.254 | 580063 | 1.22 | | 98.0 | 2619 | |
| 31 Perfluoroundecanoic acid | | | | | | | | | | |
| 563.00 > 519.00 | 4.380 | 4.395 | -0.015 | 1.000 | 244409 | 0.5164 | Target=8.02 | 103 | 106 | |
| 563.00 > 169.00 | 4.380 | 4.395 | -0.015 | 1.000 | 30090 | | 8.12(4.01-12.03) | 103 | 399 | |
| D 32 d5-NEtFOSAA | | | | | | | | | | |
| 589.00 > 419.00 | 4.402 | 4.395 | 0.007 | 1.261 | 52130 | 1.29 | | 103 | 354 | |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.402 | 4.406 | -0.004 | 1.000 | 18172 | 0.4707 | | 94.1 | 352 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | |
| 631.00 > 451.00 | 4.480 | 4.485 | -0.005 | 1.178 | 294213 | 0.4861 | | 103 | 2000 | |
| D 36 13C2 PFDoA | | | | | | | | | | |
| 615.00 > 570.00 | 4.611 | 4.626 | -0.015 | 1.320 | 642314 | 1.28 | | 103 | 2858 | |
| 37 Perfluorododecanoic acid | | | | | | | | | | |
| 613.00 > 569.00 | 4.622 | 4.626 | -0.004 | 1.002 | 264312 | 0.4677 | Target=6.85 | 93.5 | 73.5 | |
| 613.00 > 169.00 | 4.622 | 4.626 | -0.004 | 1.002 | 45410 | | 5.82(3.42-10.27) | 93.5 | 1100 | |
| 74 1H,1H,2H,2H-perfluorododecanesul | | | | | | | | | | |
| 627.00 > 607.00 | 4.642 | 4.637 | 0.005 | 1.125 | 15677 | 0.5347 | | 111 | 349 | |
| 75 Perfluorododecanesulfonic acid ( | | | | | | | | | | |
| 699.00 > 80.00 | 4.792 | 4.797 | -0.005 | 1.260 | 54696 | 0.4781 | Target=0.53 | 98.8 | 146 | |
| 699.00 > 99.00 | 4.792 | 4.797 | -0.005 | 1.260 | 105717 | | 0.52(0.26-0.79) | 98.8 | 628 | |
| 41 Perfluorotridecanoic acid | | | | | | | | | | |
| 663.00 > 619.00 | 4.834 | 4.839 | -0.005 | 1.048 | 226665 | 0.4942 | Target=4.48 | 98.8 | 96.5 | |
| 663.00 > 169.00 | 4.834 | 4.839 | -0.005 | 1.048 | 47211 | | 4.80(2.24-6.72) | 98.8 | 564 | |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 5.014 | 5.027 | -0.013 | 1.436 | 480039 | 1.30 | | 104 | 3351 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | |
| 713.00 > 169.00 | 5.024 | 5.027 | -0.003 | 1.002 | 34379 | 0.4827 | Target=0.99 | 96.5 | 848 | |
| 713.00 > 219.00 | 5.014 | 5.027 | -0.013 | 1.000 | 34663 | | 0.99(0.50-1.49) | 96.5 | 949 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.372 | 5.374 | -0.002 | 1.538 | 497203 | 1.26 | | 101 | 1522 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | |
| 813.00 > 769.00 | 5.372 | 5.374 | -0.002 | 1.000 | 195955 | 0.5138 | Target=4.02 | 103 | 57.1 | |
| 813.00 > 169.00 | 5.372 | 5.374 | -0.002 | 1.000 | 50967 | | 3.84(2.01-6.02) | 103 | 1147 | |
| 46 Perfluorooctadecanoic acid | | | | | | | | | | |
| 913.00 > 869.00 | 5.711 | 5.722 | -0.011 | 1.063 | 173296 | 0.4842 | Target=3.88 | 96.8 | 133 | |
| 913.00 > 169.00 | 5.711 | 5.722 | -0.011 | 1.063 | 45239 | | 3.83(1.94-5.82) | 96.8 | 618 | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

## Reagents:

PFAS32NCIC3_00008 Amount Added: 100.00 Units: uL

Report Date: 22-Dec-2020 14:39:28 Chrom Revision: 2.3 09-Dec-2020 16:22:14

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL010.d

Injection Date: 22-Dec-2020 13:04:47 Instrument ID: LC812

Lims ID: IC

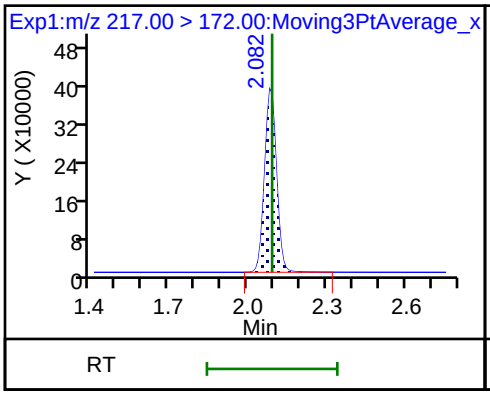
Client ID:

Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 10

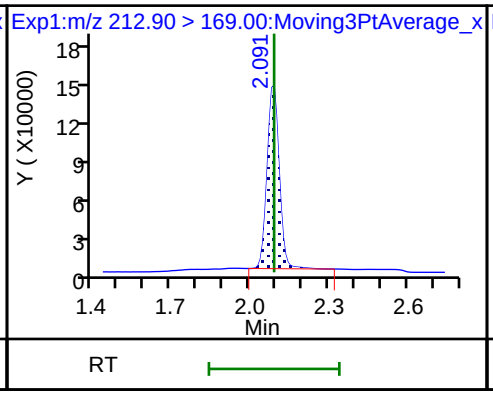
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

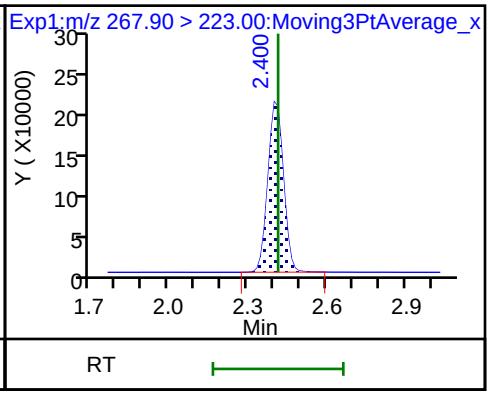
D 1 13C4 PFBA



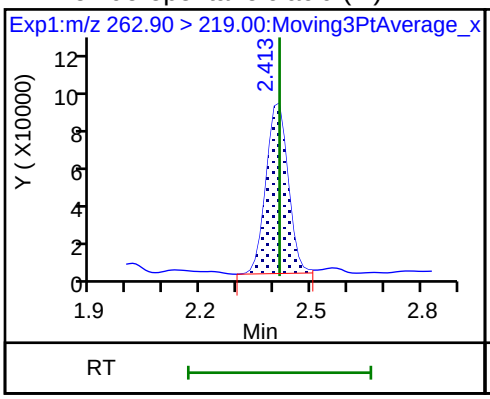

2 Perfluorobutanoic acid



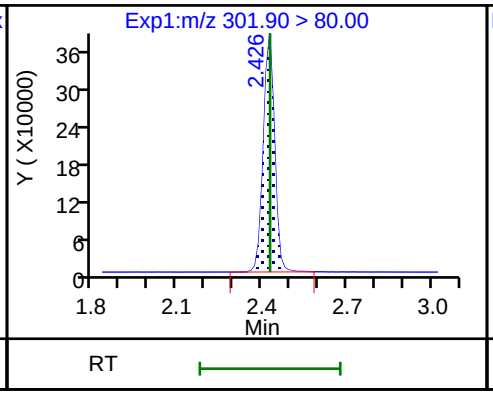

D 3 13C5 PFPeA



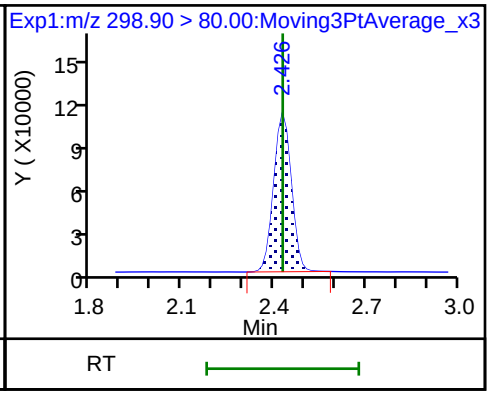

4 Perfluoropentanoic acid (M)



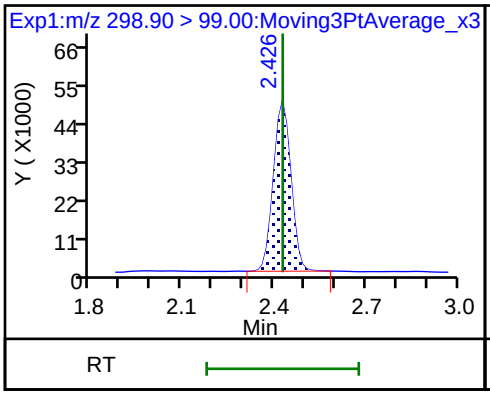

D 47 13C3 PFBS



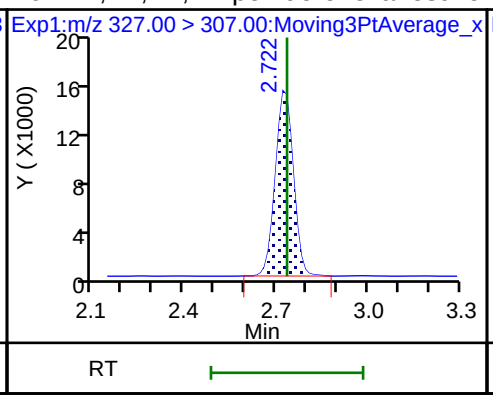

5 Perfluorobutanesulfonic acid



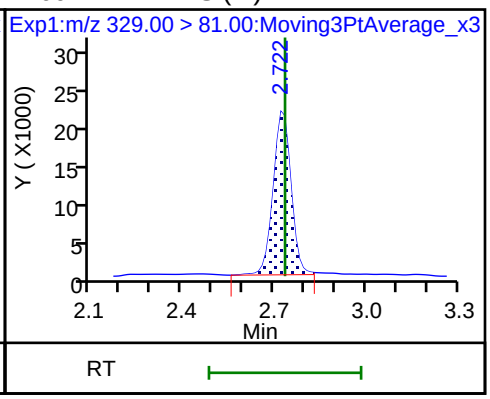

5 Perfluorobutanesulfonic acid



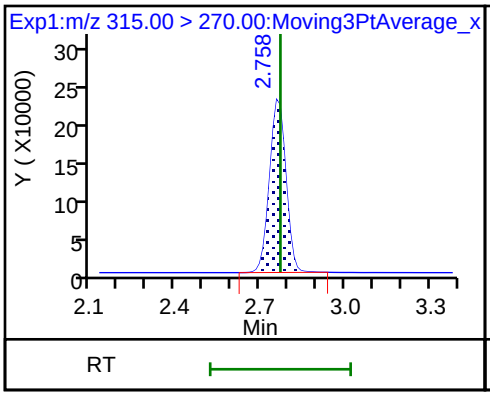

61 1H,1H,2H,2H-perfluorohexanesulfo



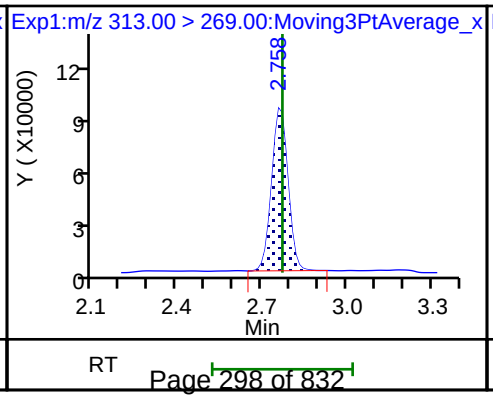

D 60 M2-4:2 FTS (M)



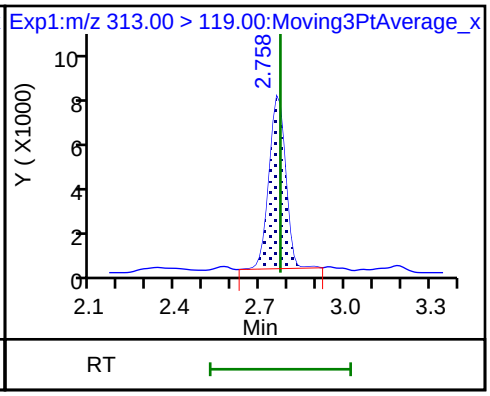

D 7 13C2 PFHxA



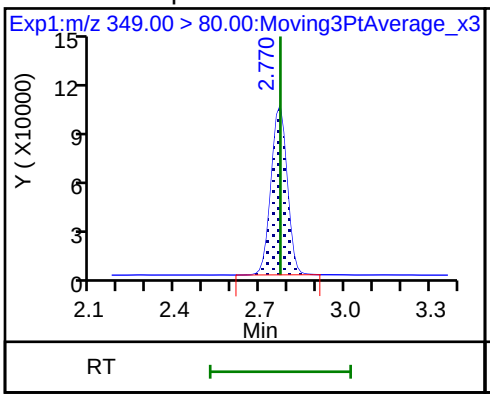

6 Perfluorohexanoic acid



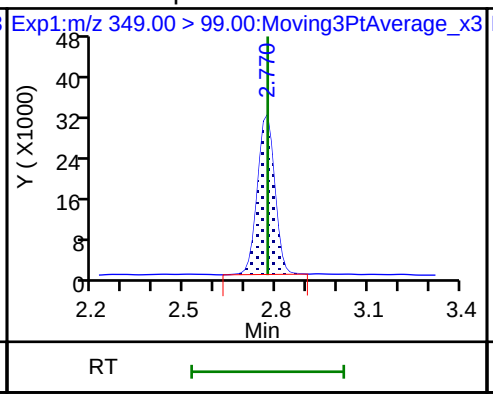

6 Perfluorohexanoic acid



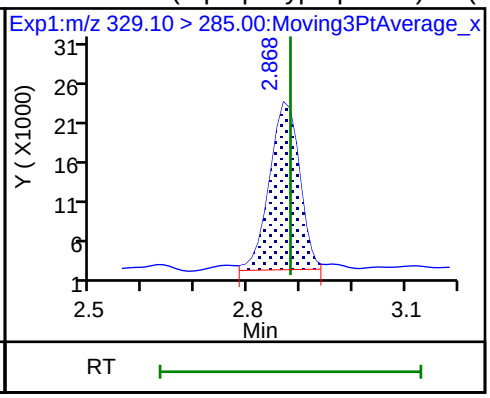
70 Perfluoropentanesulfonic acid



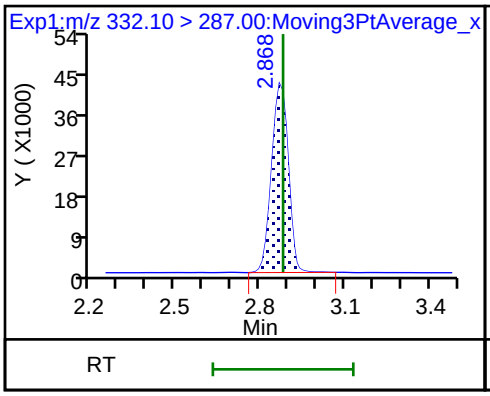

70 Perfluoropentanesulfonic acid



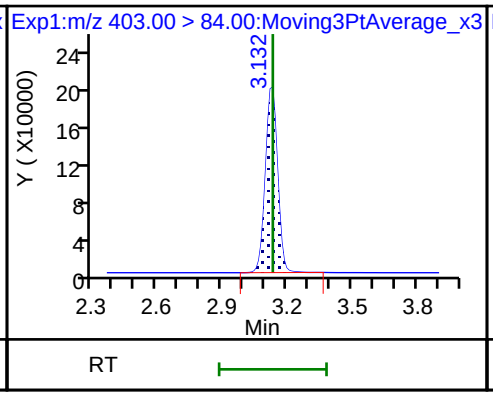

67 Perfluoro(2-propoxypropanoic) ac (M)



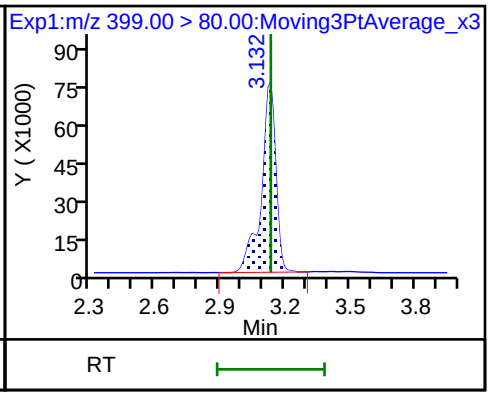

D 64 13C3 HFPO-DA



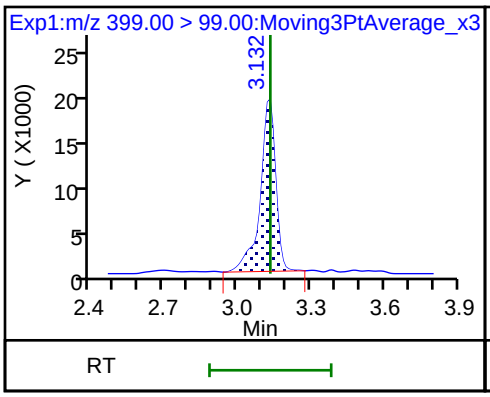

D 11 18O2 PFHxS



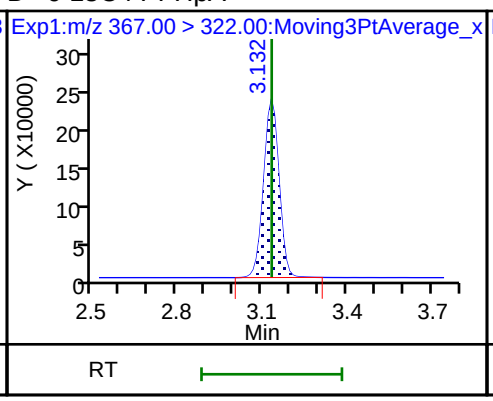

8 Perfluorohexanesulfonic acid



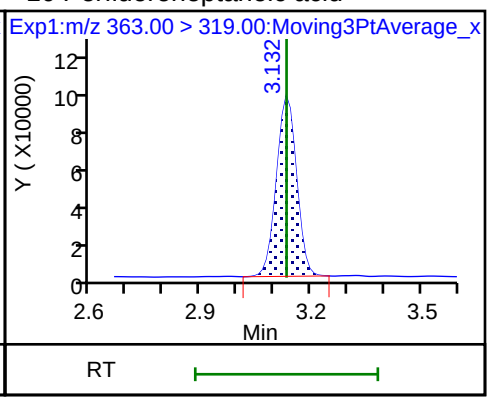

8 Perfluorohexanesulfonic acid



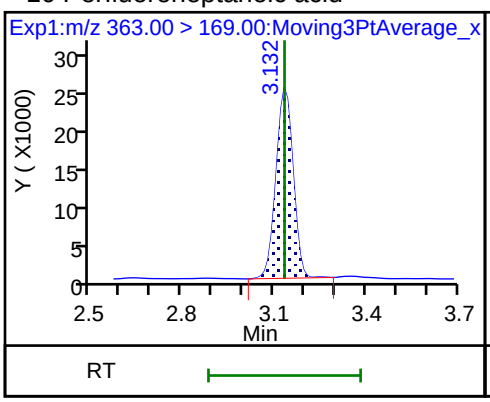

D 9 13C4 PFHpA



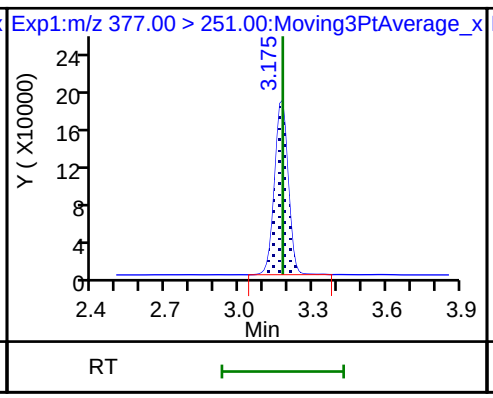

10 Perfluoroheptanoic acid



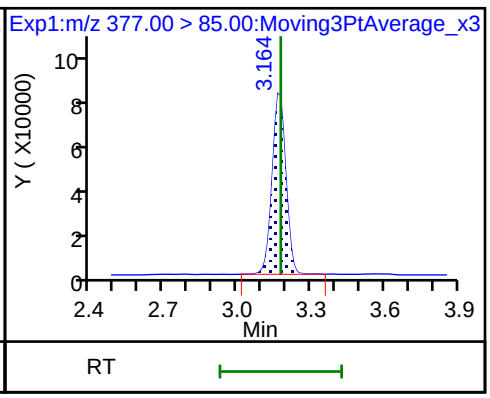

10 Perfluoroheptanoic acid



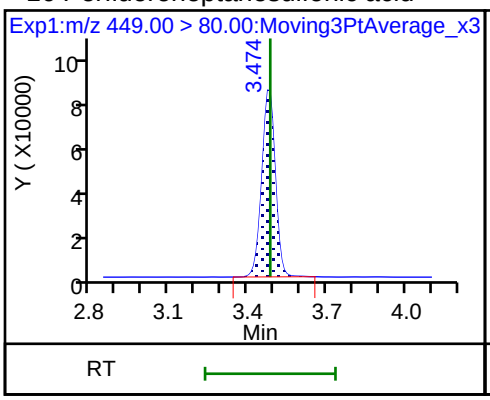

77 DONA



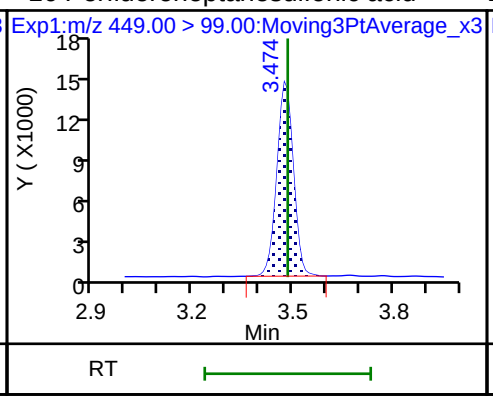

77 DONA



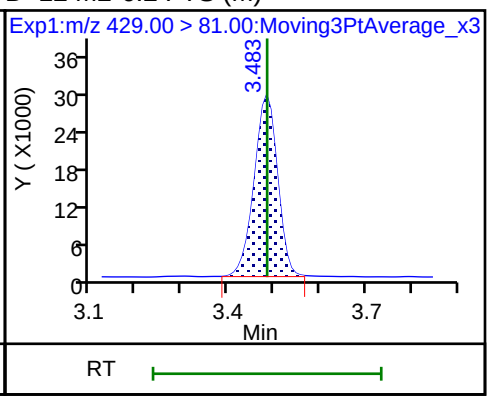
16 Perfluoroheptanesulfonic acid



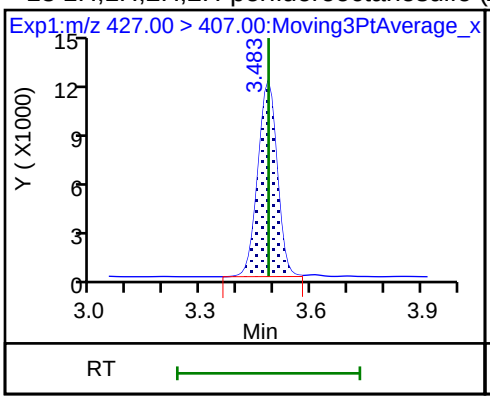

16 Perfluoroheptanesulfonic acid



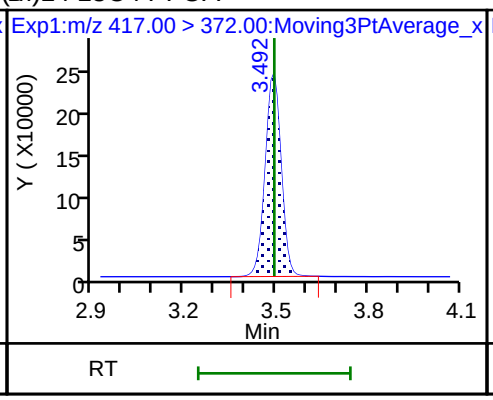

D 12 M2-6:2 FTS (M)



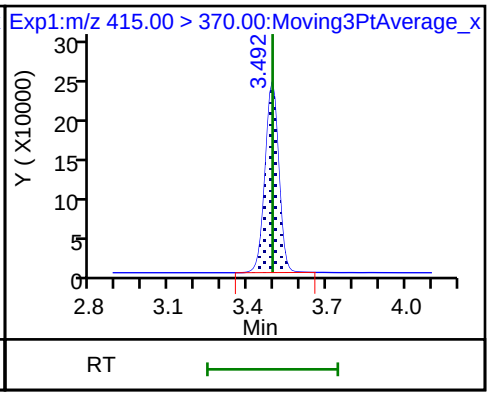

13 1H,1H,2H,2H-perfluorooctanesulfo (M)



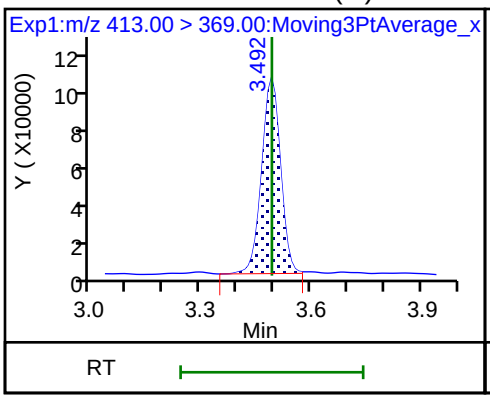

D 14 13C4 PFOA



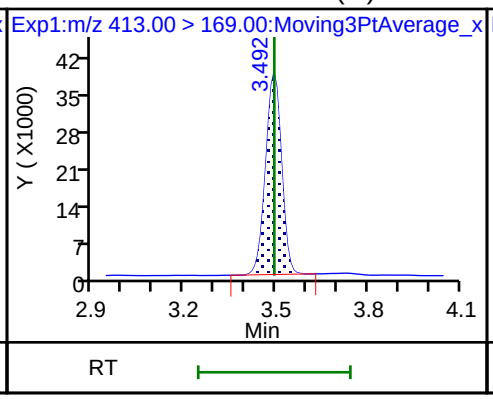

* 62 13C2 PFOA



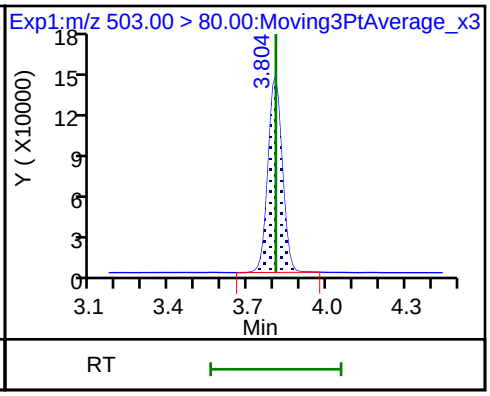

15 Perfluorooctanoic acid (M)



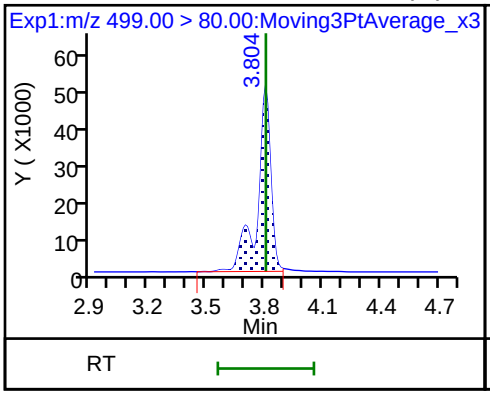

15 Perfluorooctanoic acid (M)



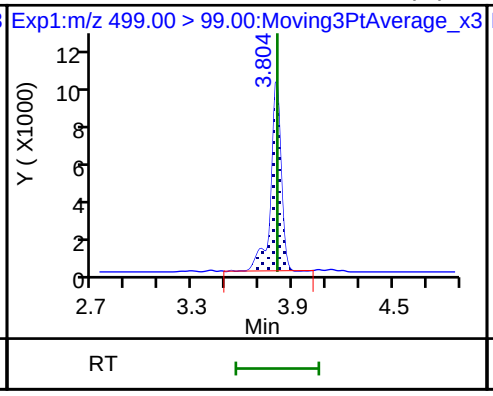

D 18 13C4 PFOS



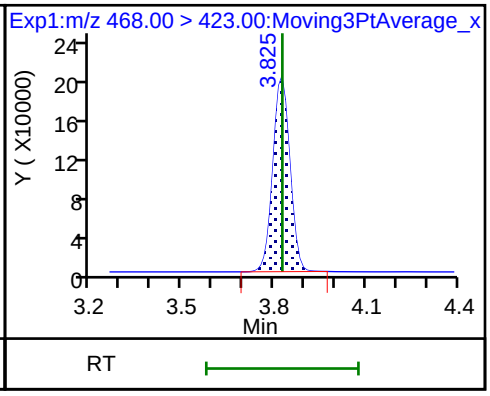

17 Perfluorooctanesulfonic acid (M)



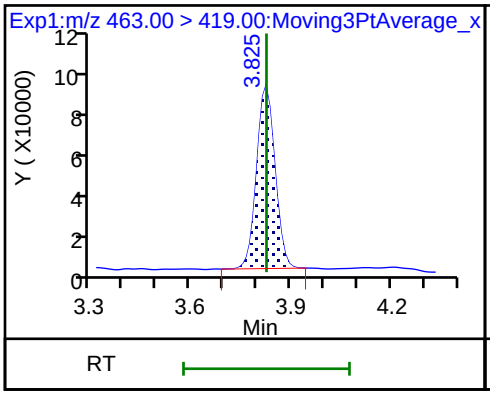

17 Perfluorooctanesulfonic acid (M)



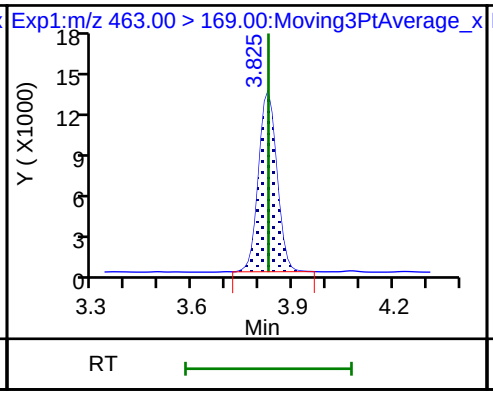

D 19 13C5 PFNA



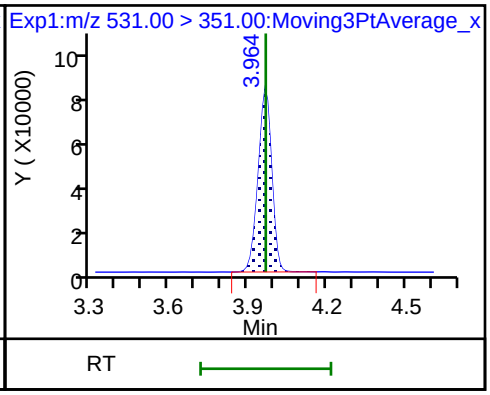
20 Perfluorononanoic acid



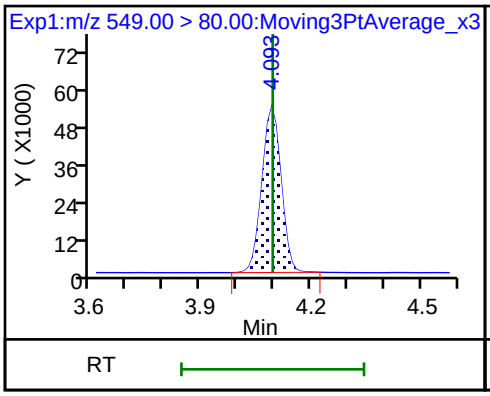

20 Perfluorononanoic acid



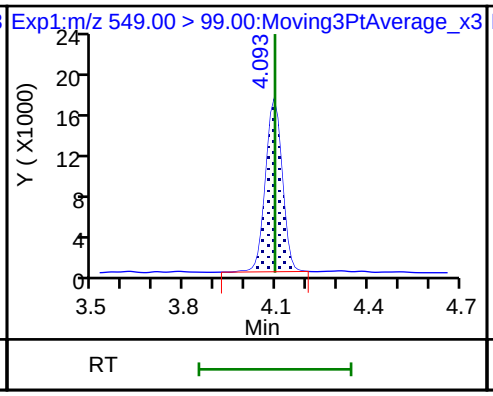

69 9-Chlorohexadecafluoro-3-oxanona



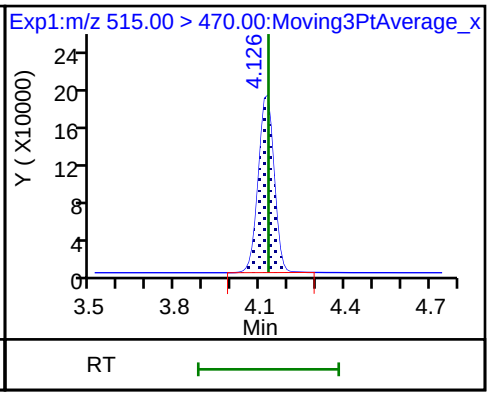

68 Perfluorononanesulfonic acid



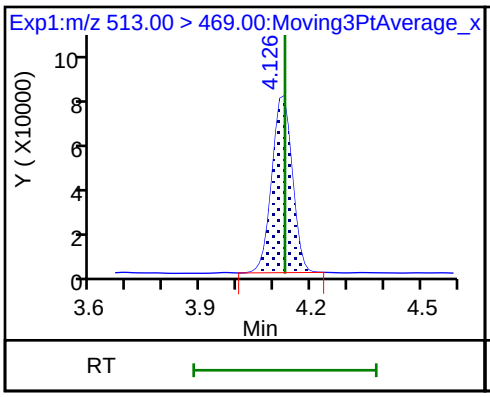

68 Perfluorononanesulfonic acid



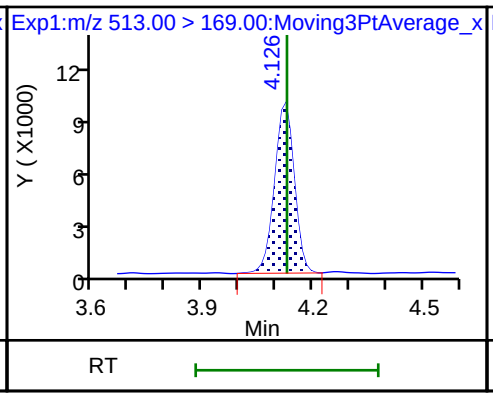

D 23 13C2 PFDA



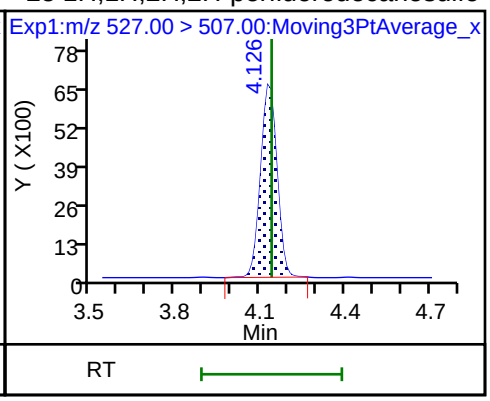

24 Perfluorodecanoic acid



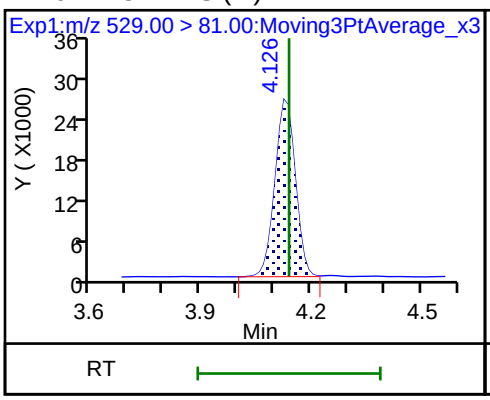

24 Perfluorodecanoic acid



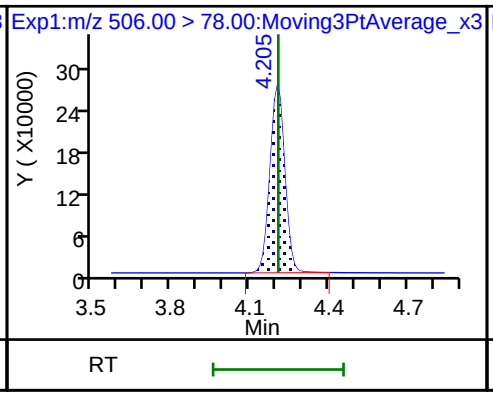

25 1H,1H,2H,2H-perfluorodecanesulfo



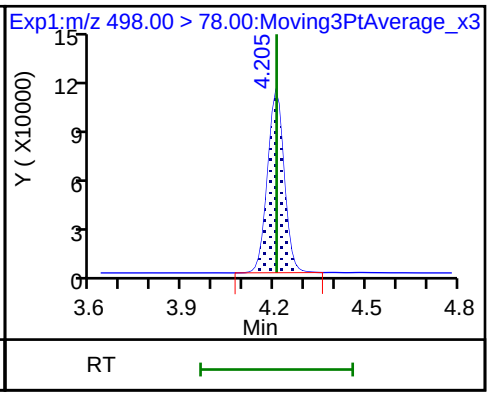

D 26 M2-8:2 FTS (M)



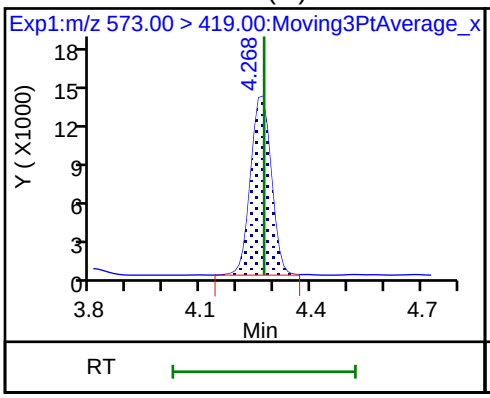

D 21 13C8 FOSA



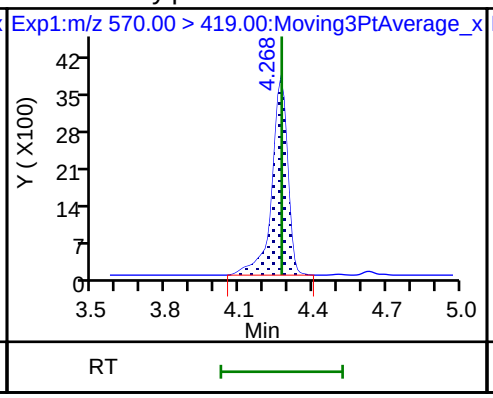

22 Perfluorooctanesulfonamide



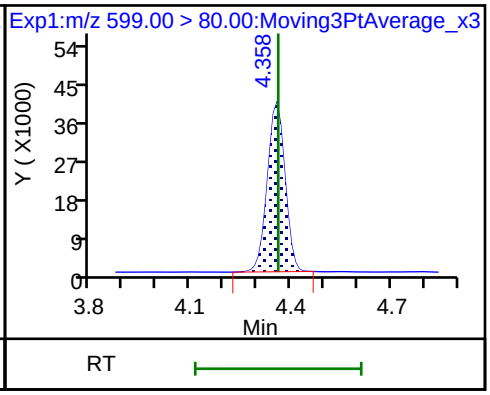
D 27 d3-NMeFOSAA (M)



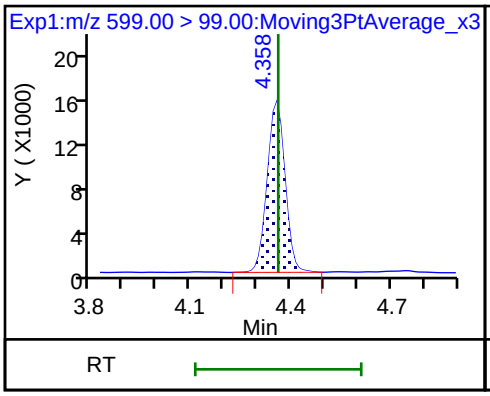

28 N-methylperfluorooctanesulfonami



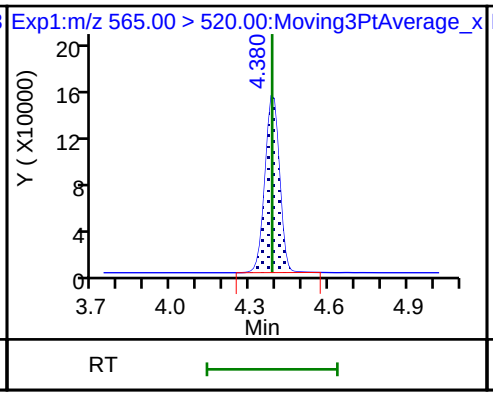

29 Perfluorodecanesulfonic acid



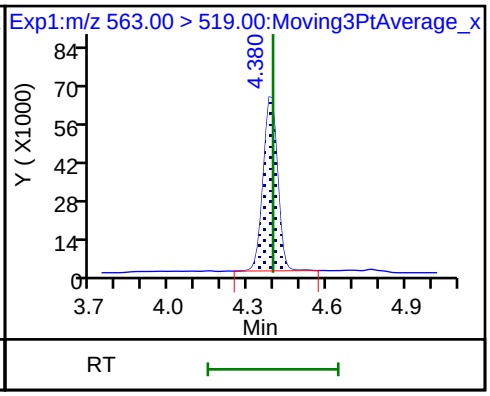

29 Perfluorodecanesulfonic acid



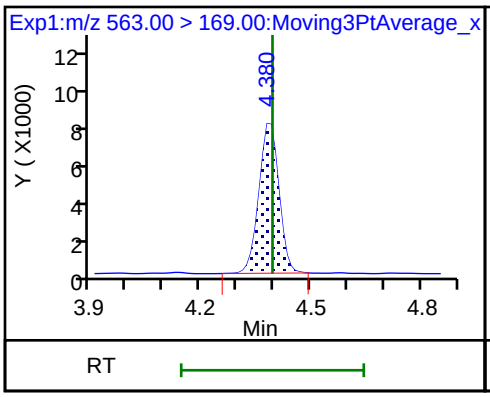

D 30 13C2 PFUnA



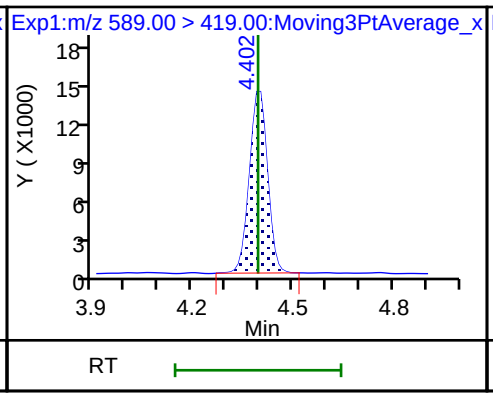

31 Perfluoroundecanoic acid



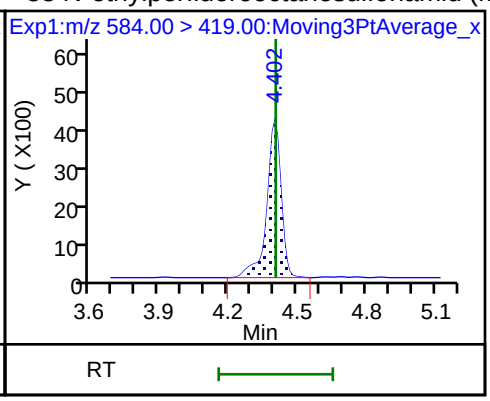

31 Perfluoroundecanoic acid



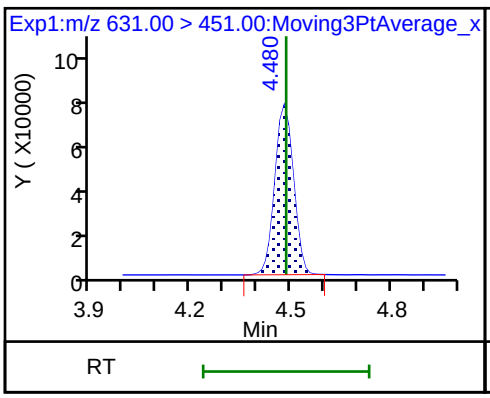

D 32 d5-NEtFOSAA



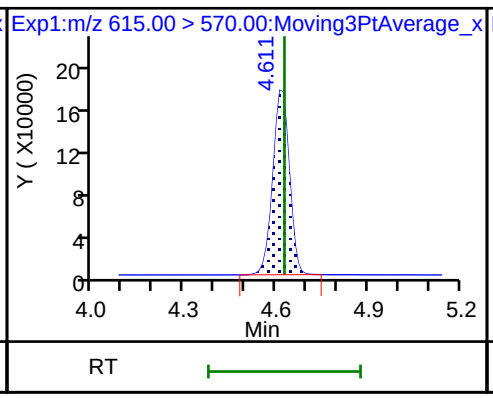

33 N-ethylperfluorooctanesulfonamid (M)



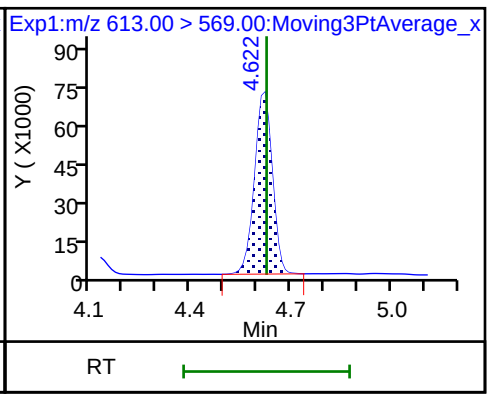

66 11-Chloroeicosafluoro-3-oxaundec



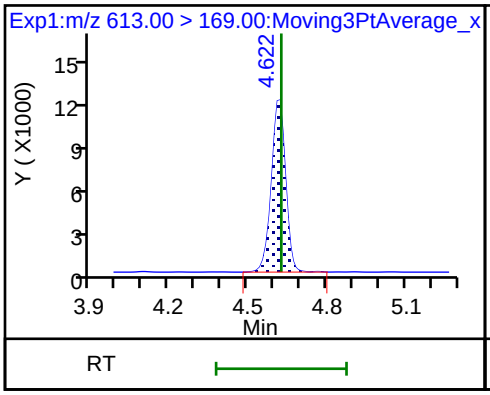

D 36 13C2 PFDoA



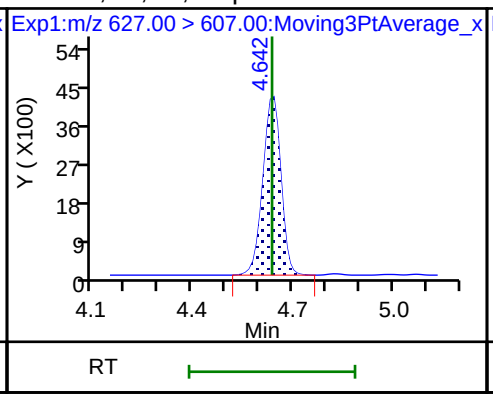

37 Perfluorododecanoic acid



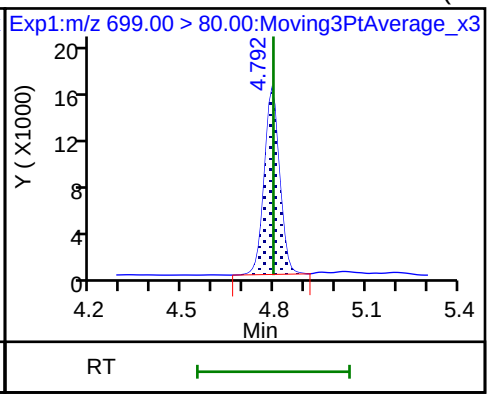
37 Perfluorododecanoic acid



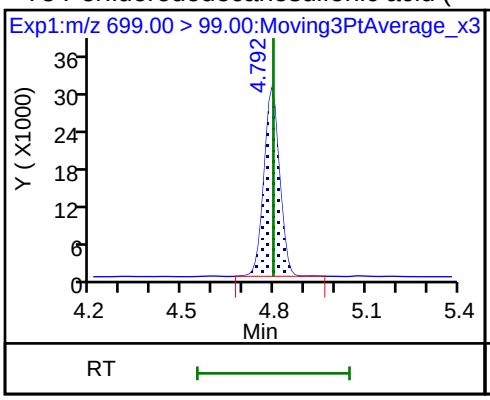

74 1H,1H,2H,2H-perfluorododecanesul



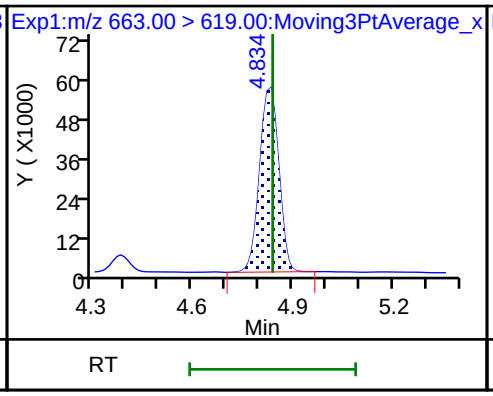

75 Perfluorododecanesulfonic acid (



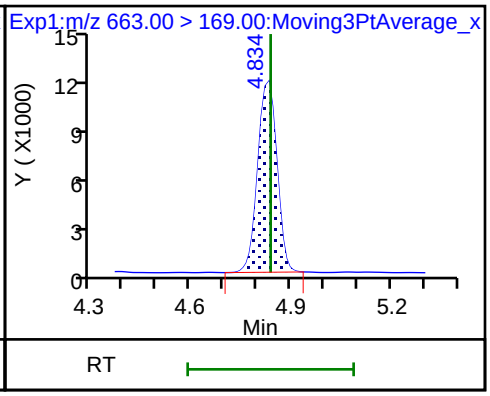

75 Perfluorododecanesulfonic acid (



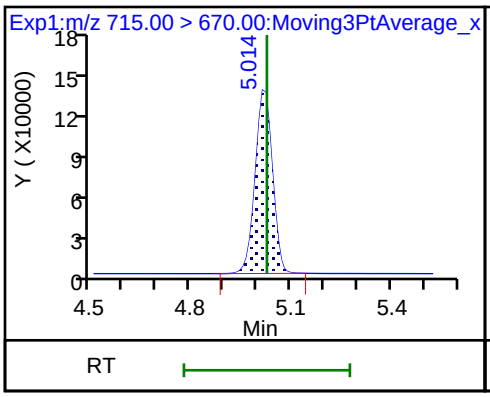

41 Perfluorotridecanoic acid



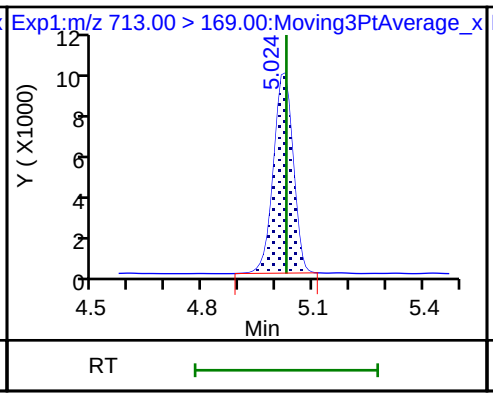

41 Perfluorotridecanoic acid



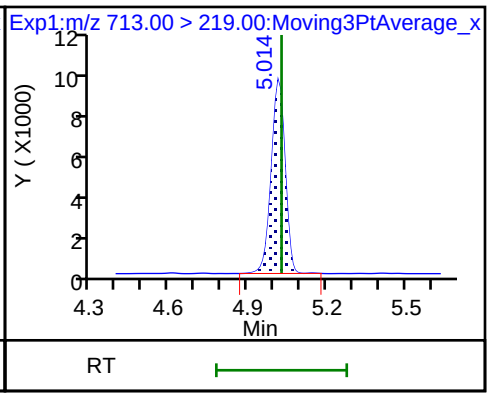

D 43 13C2 PFTeDA



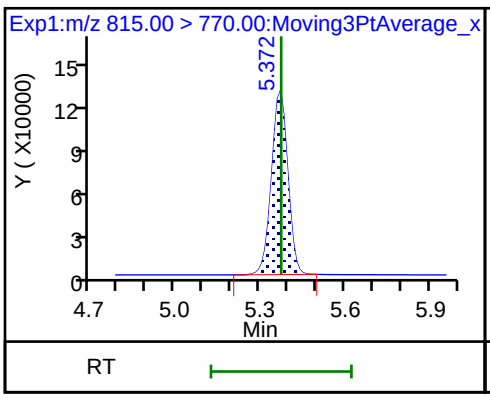

42 Perfluorotetradecanoic acid



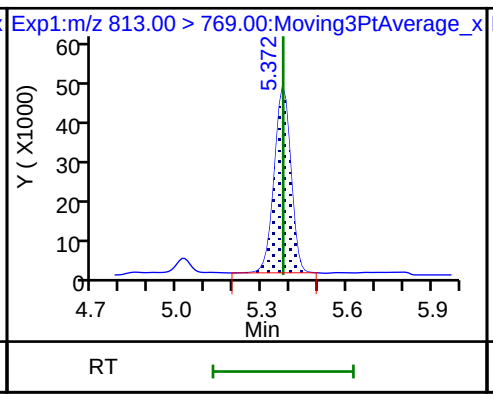

42 Perfluorotetradecanoic acid



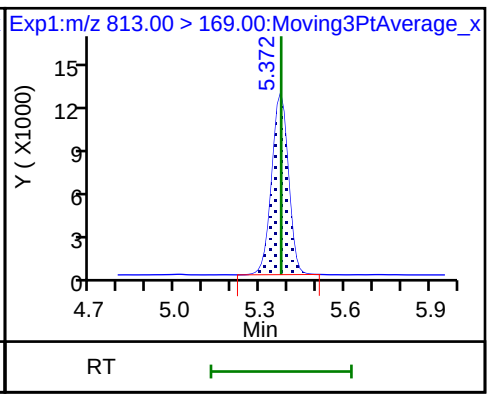

D 44 13C2 PFHxDA



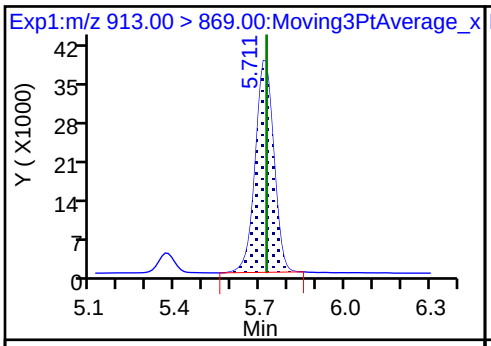

45 Perfluorohexadecanoic acid



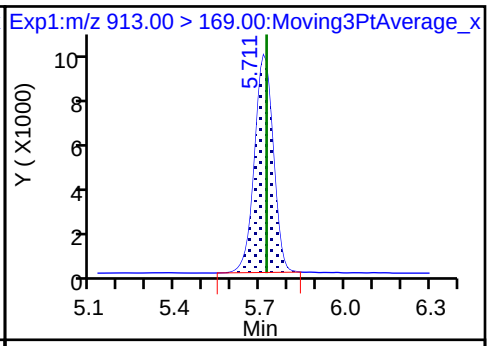

45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid




46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

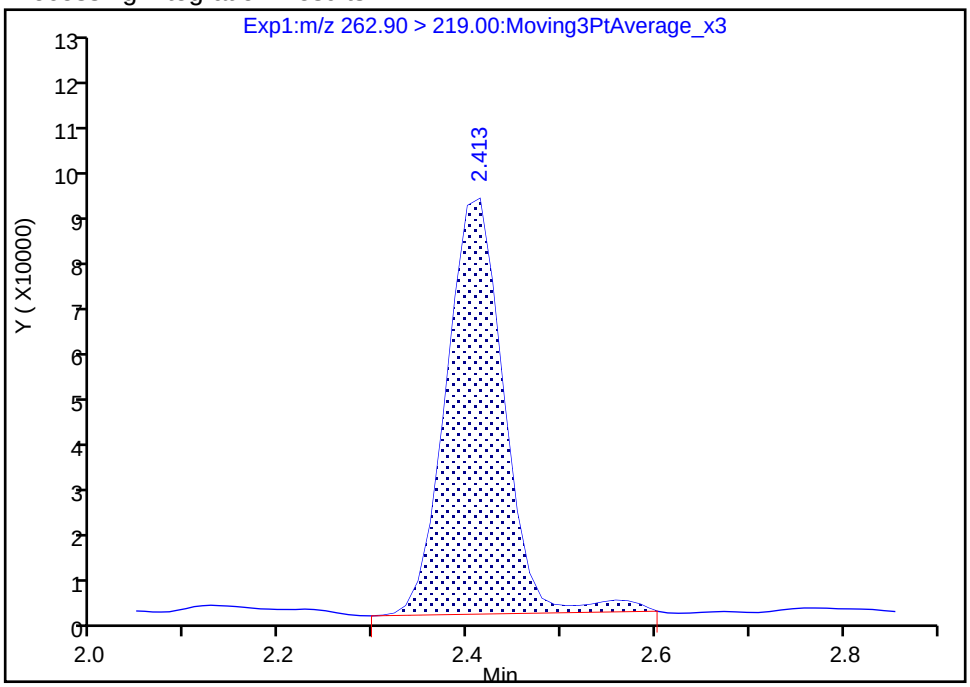
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| Injection Date: | 22-Dec-2020 13:04:47 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 4 | Worklist Smp#: | 10 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

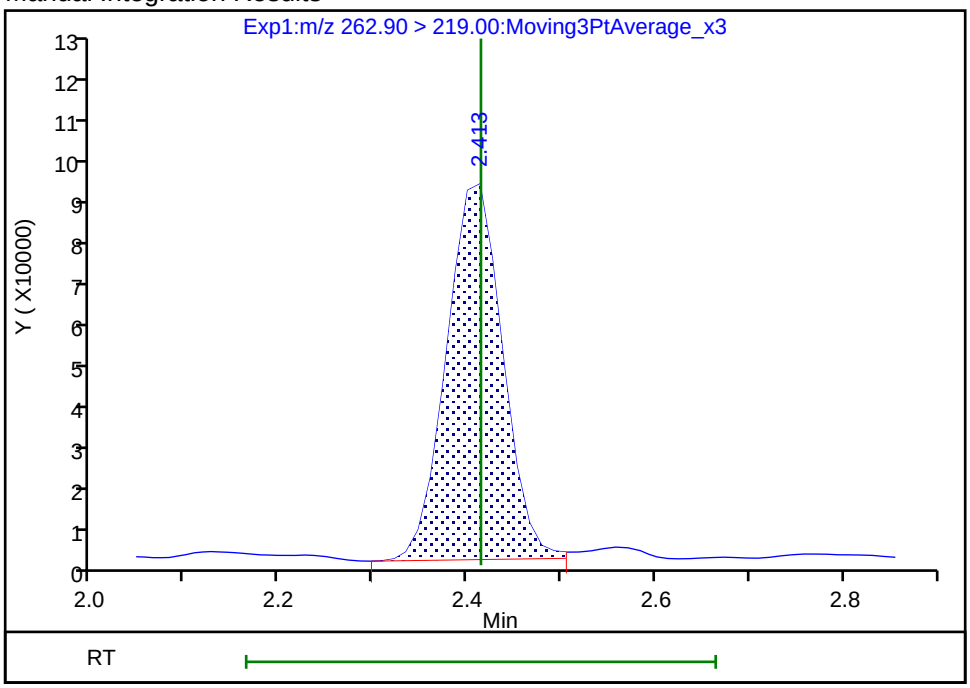
Processing Integration Results

RT: 2.41
Area: 376357
Amount: 0.514937
Amount Units: ng/ml




Manual Integration Results

RT: 2.41
Area: 366588
Amount: 0.483194
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:51:30

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

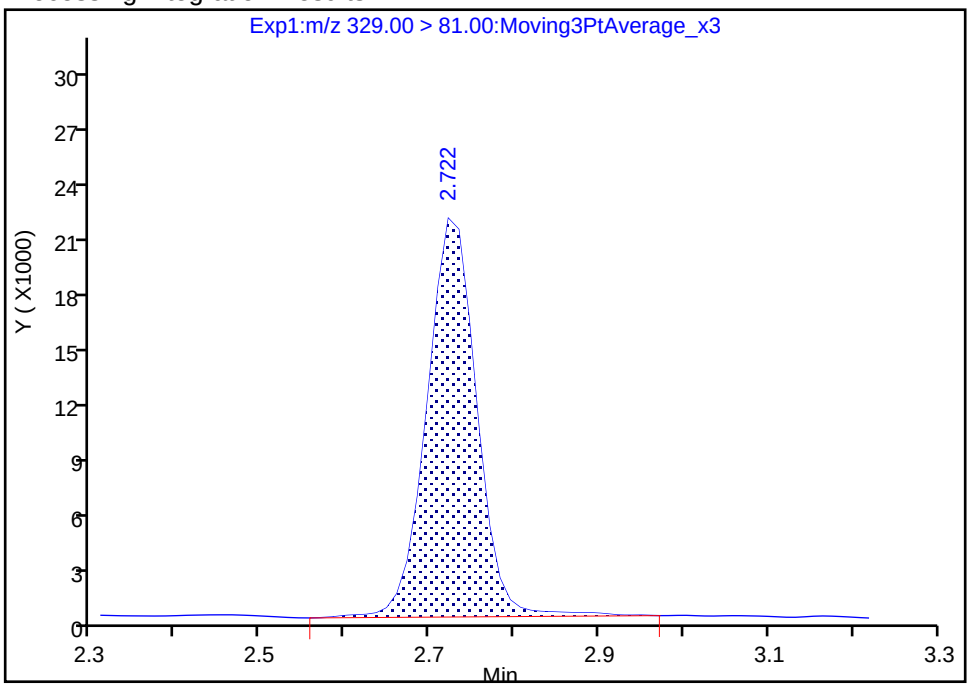
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| Injection Date: | 22-Dec-2020 13:04:47 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 4 | Worklist Smp#: | 10 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

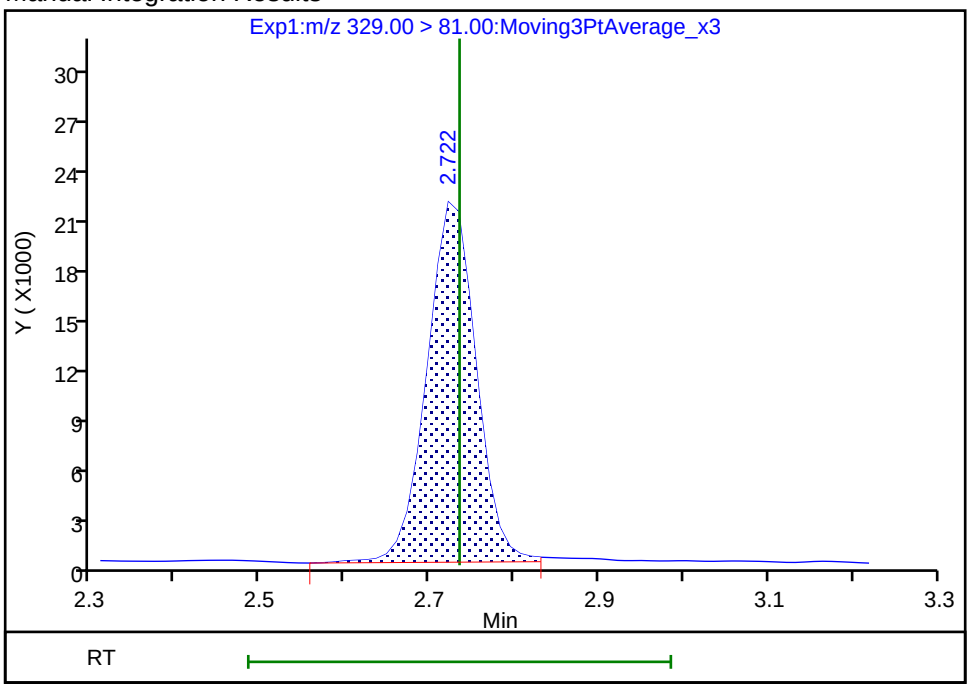
Processing Integration Results

RT: 2.72
Area: 87005
Amount: 1.182952
Amount Units: ng/ml




Manual Integration Results

RT: 2.72
Area: 85984
Amount: 1.167398
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:51:39

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

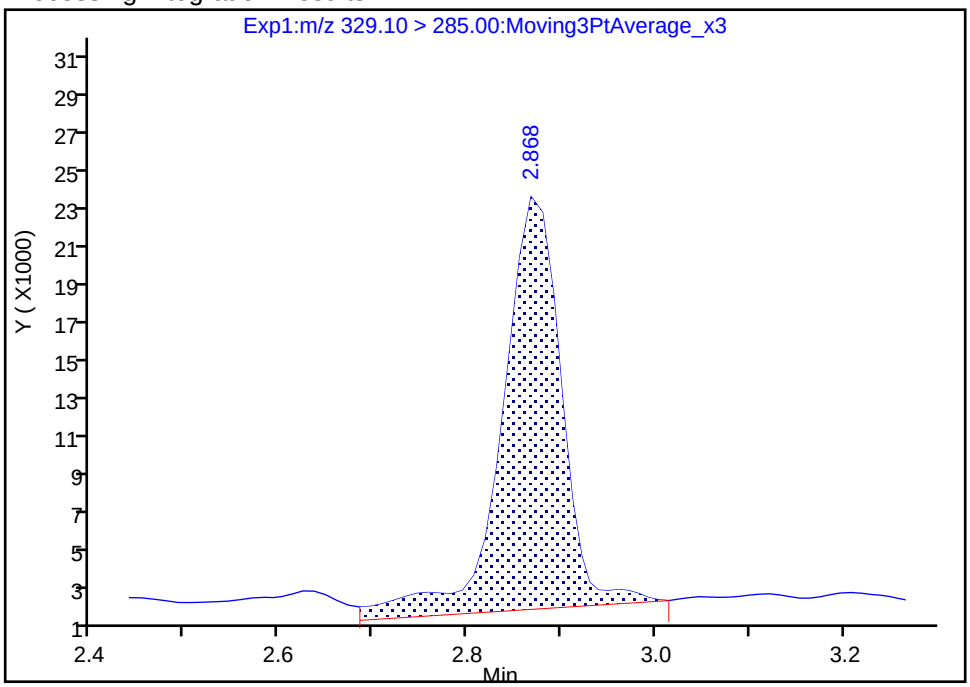
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL010.d | | | | |
| Injection Date: | 22-Dec-2020 13:04:47 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 4 | Worklist Smp#: | 10 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

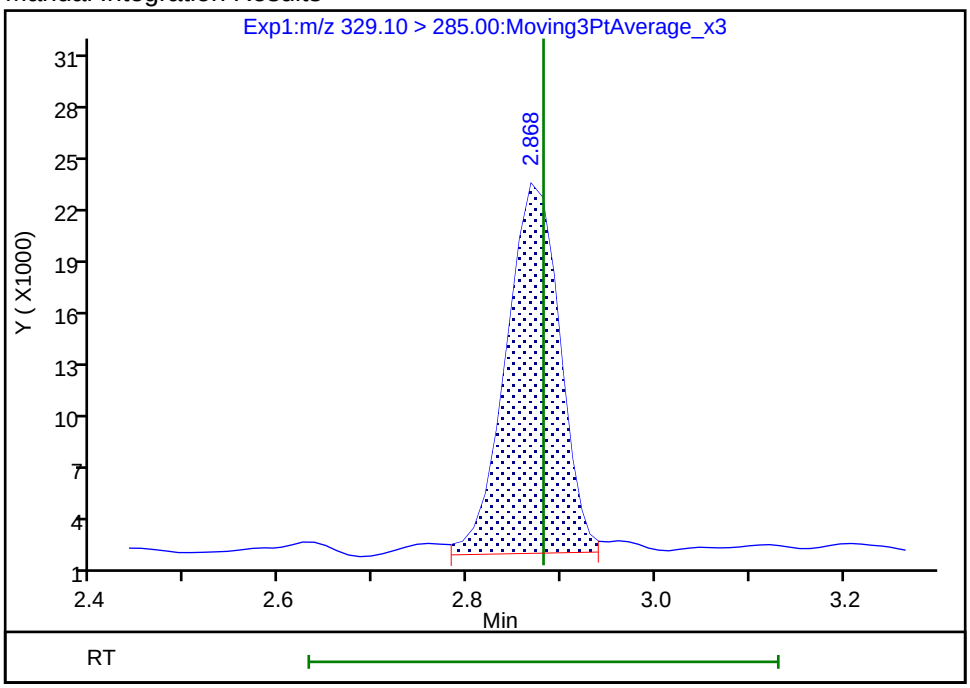
Processing Integration Results

RT: 2.87
Area: 95640
Amount: 0.527822
Amount Units: ng/ml




Manual Integration Results

RT: 2.87
Area: 84587
Amount: 0.441734
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:52:01
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

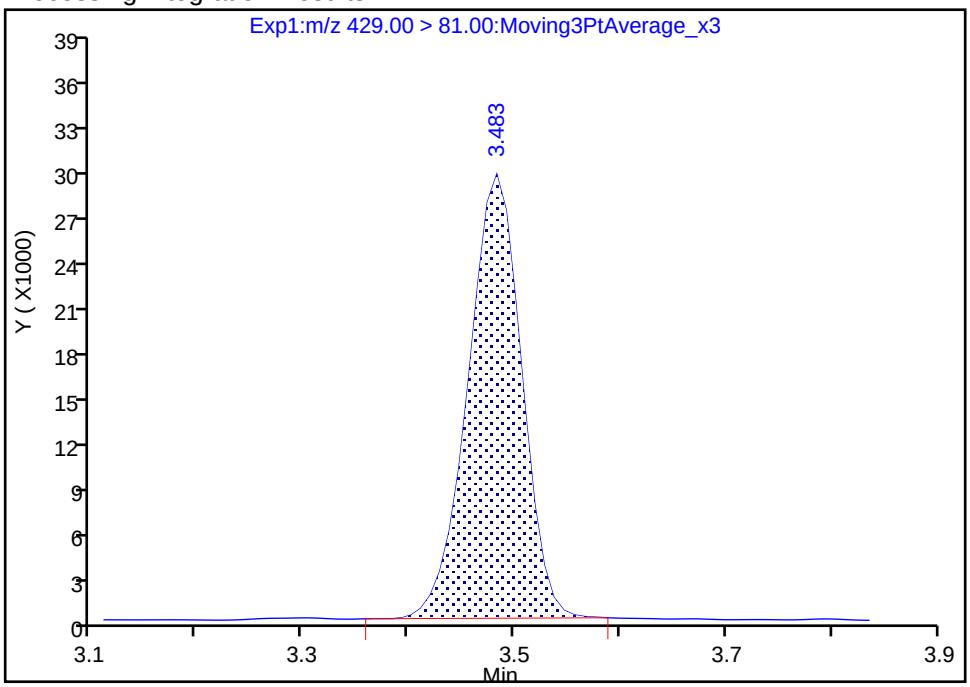
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL010.d | | | | |
| Injection Date: | 22-Dec-2020 13:04:47 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 4 | Worklist Smp#: | 10 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

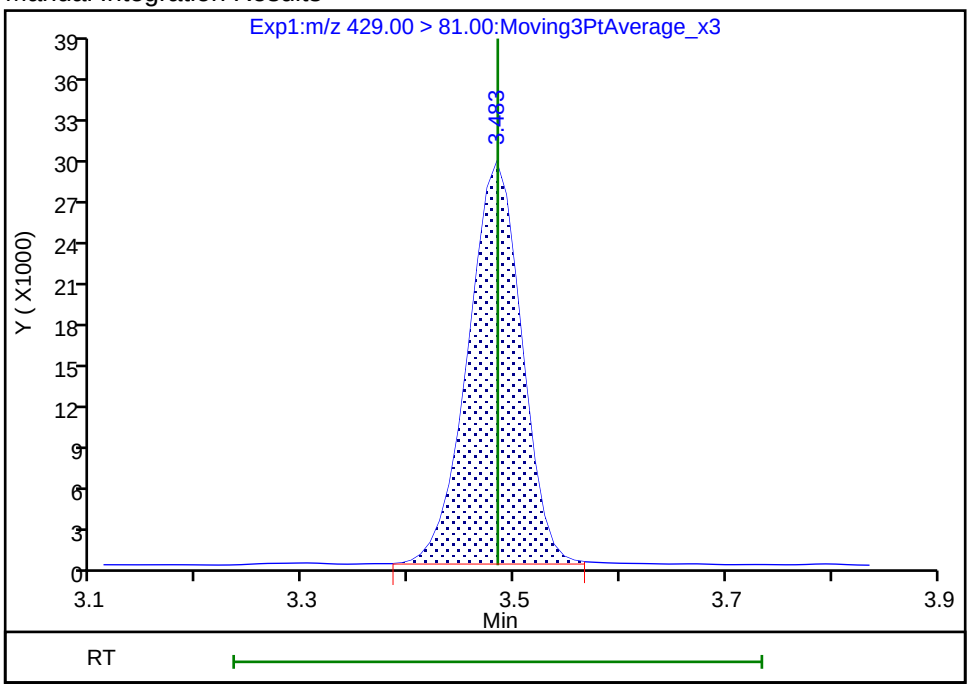
Processing Integration Results

RT: 3.48
Area: 102045
Amount: 1.245762
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 102545
Amount: 1.250373
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:52:25
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

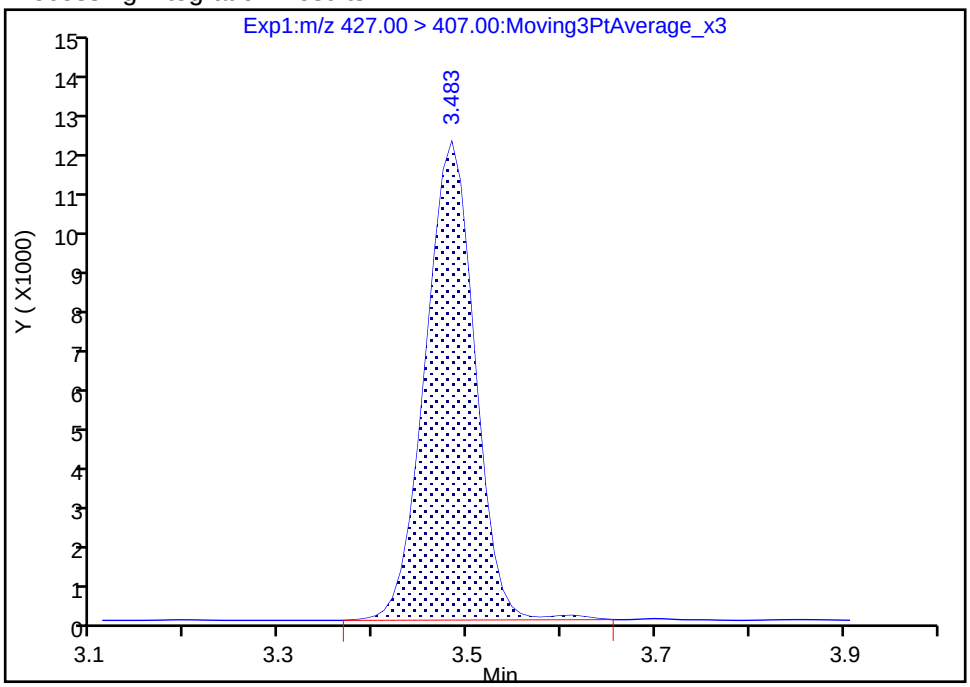
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| Injection Date: | 22-Dec-2020 13:04:47 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 4 | Worklist Smp#: | 10 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

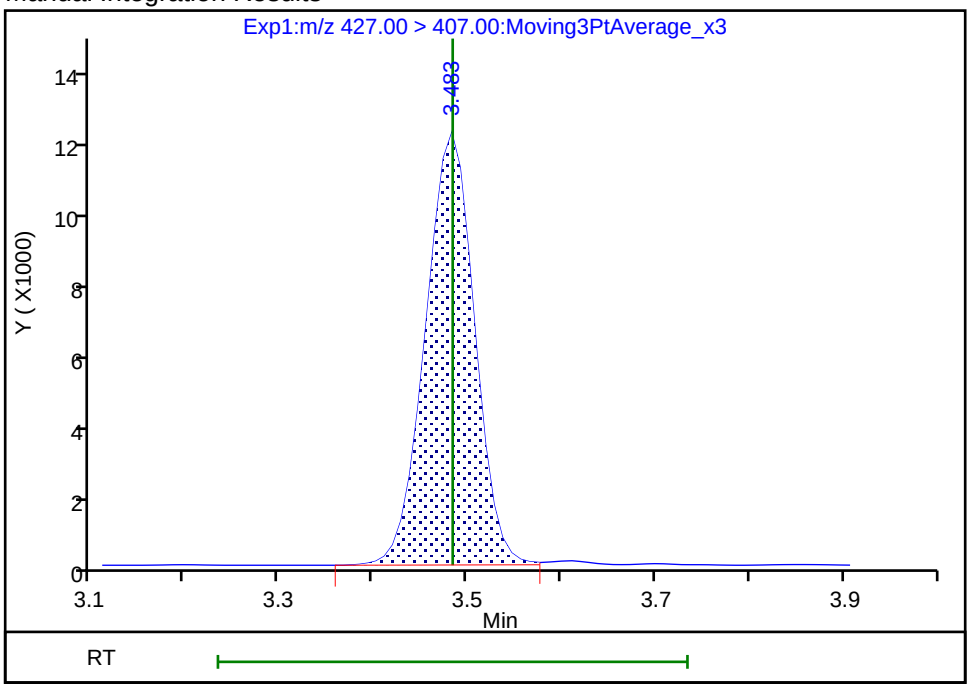
Processing Integration Results

RT: 3.48
Area: 43369
Amount: 0.450504
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 43065
Amount: 0.448336
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:52:39

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

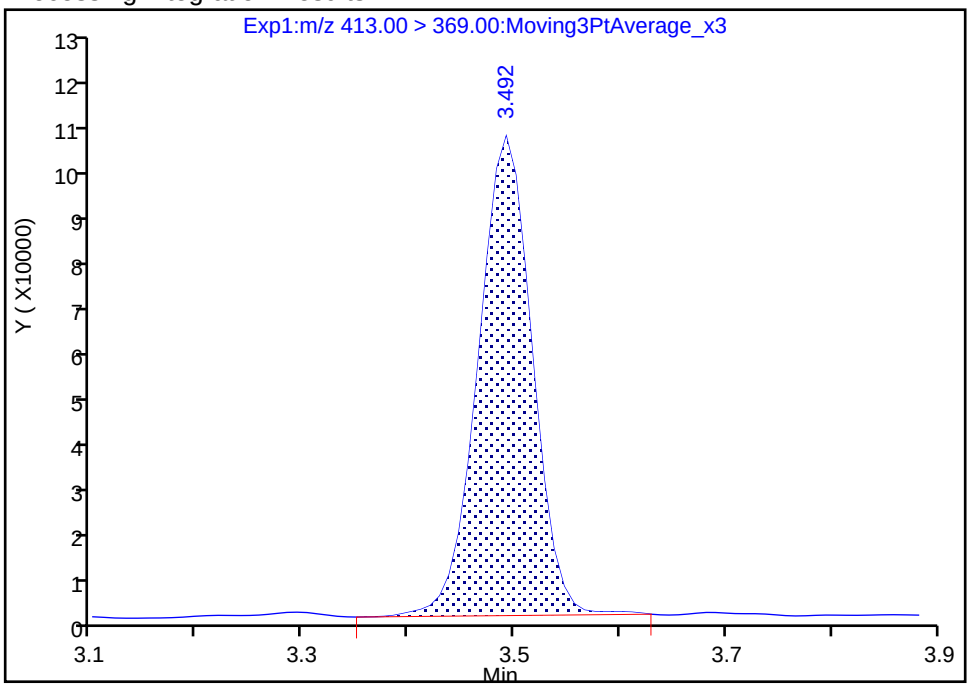
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL010.d | | | | |
| Injection Date: | 22-Dec-2020 13:04:47 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 4 | Worklist Smp#: | 10 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

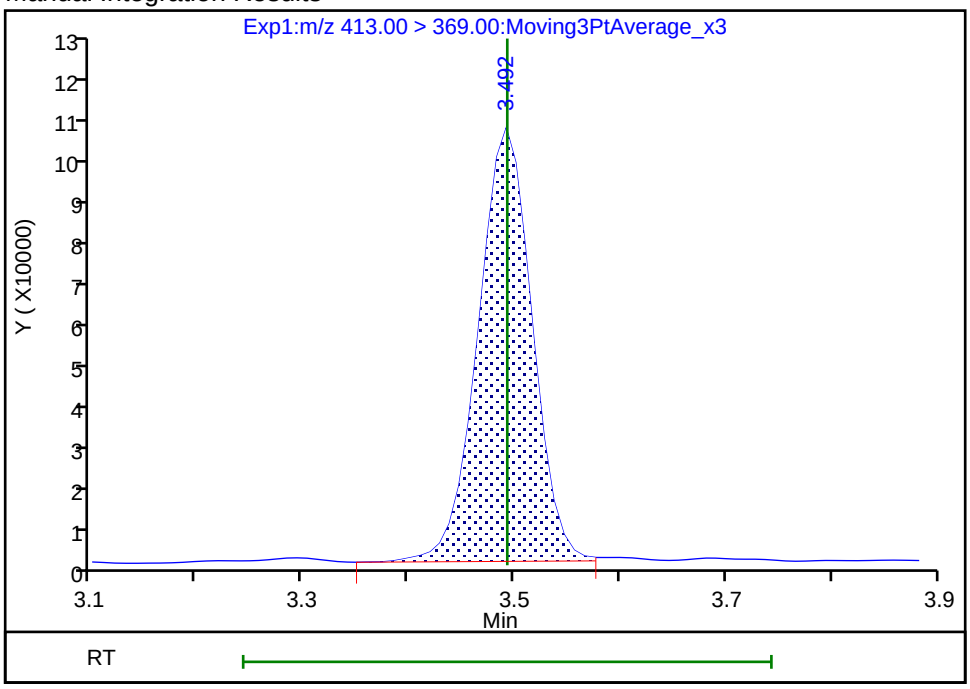
Processing Integration Results

RT: 3.49
Area: 368121
Amount: 0.509972
Amount Units: ng/ml




Manual Integration Results

RT: 3.49
Area: 367859
Amount: 0.494714
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:53:04
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

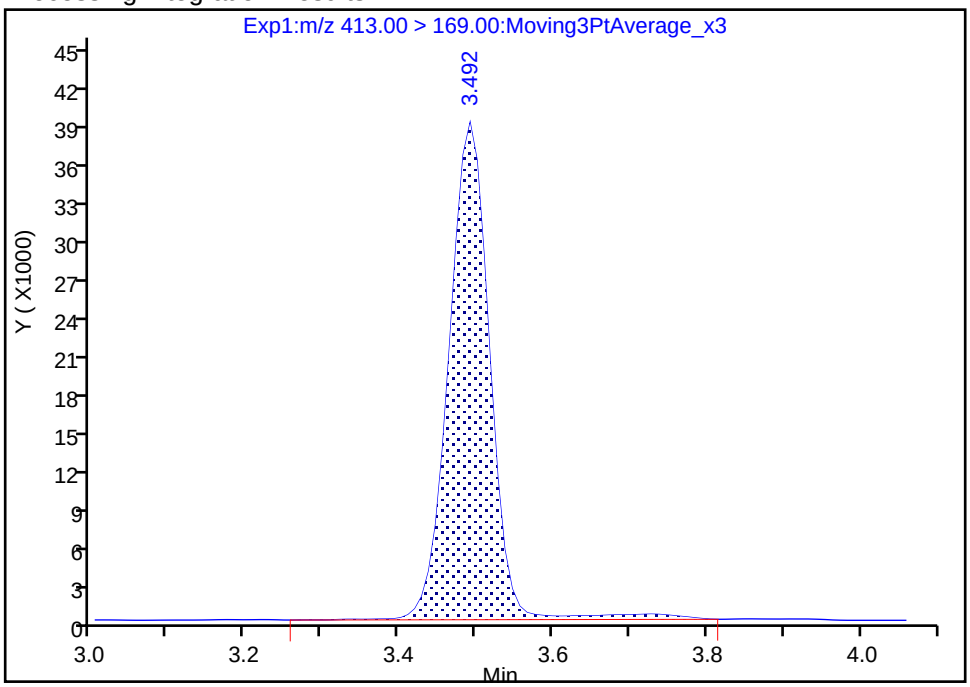
Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL010.d
Injection Date: 22-Dec-2020 13:04:47 Instrument ID: LC812
Lims ID: IC
Client ID:
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

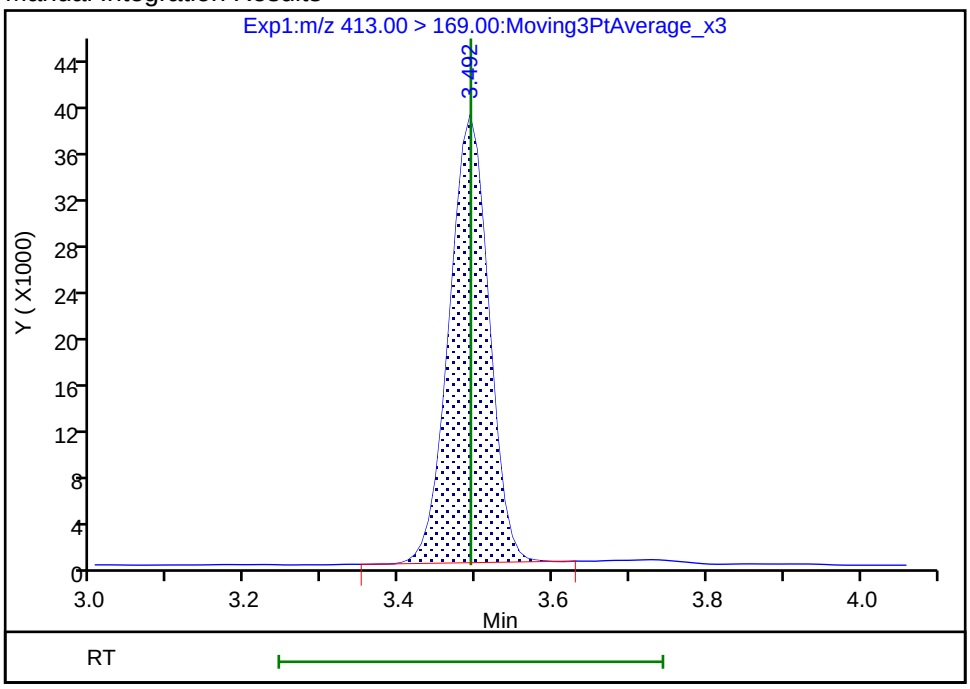
Processing Integration Results

RT: 3.49
Area: 145339
Amount: 0.509972
Amount Units: ng/ml




Manual Integration Results

RT: 3.49
Area: 139299
Amount: 0.494714
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:53:09
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

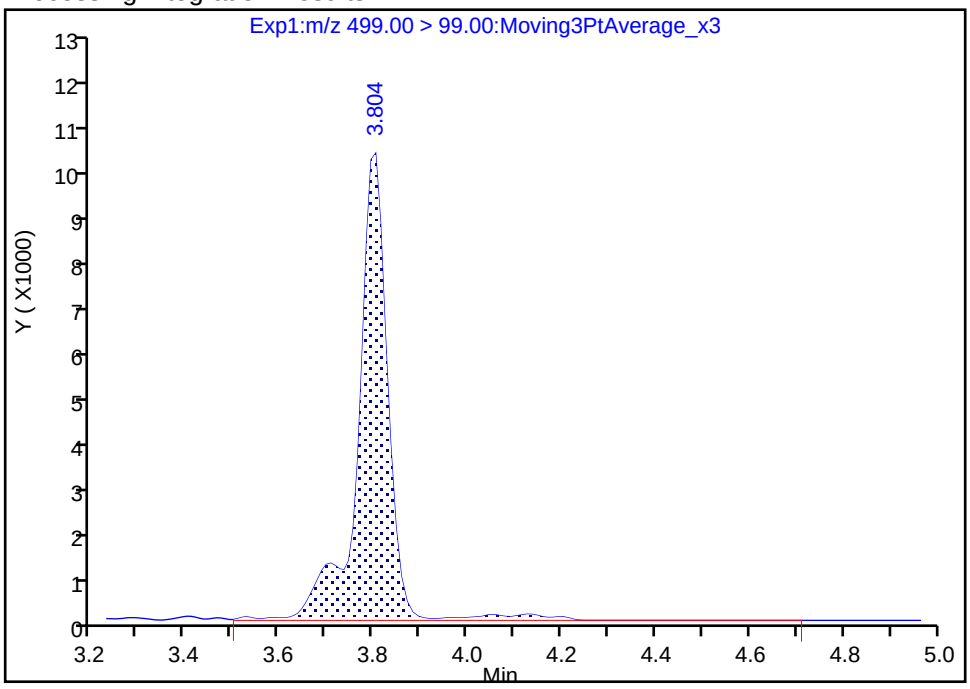
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL010.d | | | | |
| Injection Date: | 22-Dec-2020 13:04:47 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 4 | Worklist Smp#: | 10 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

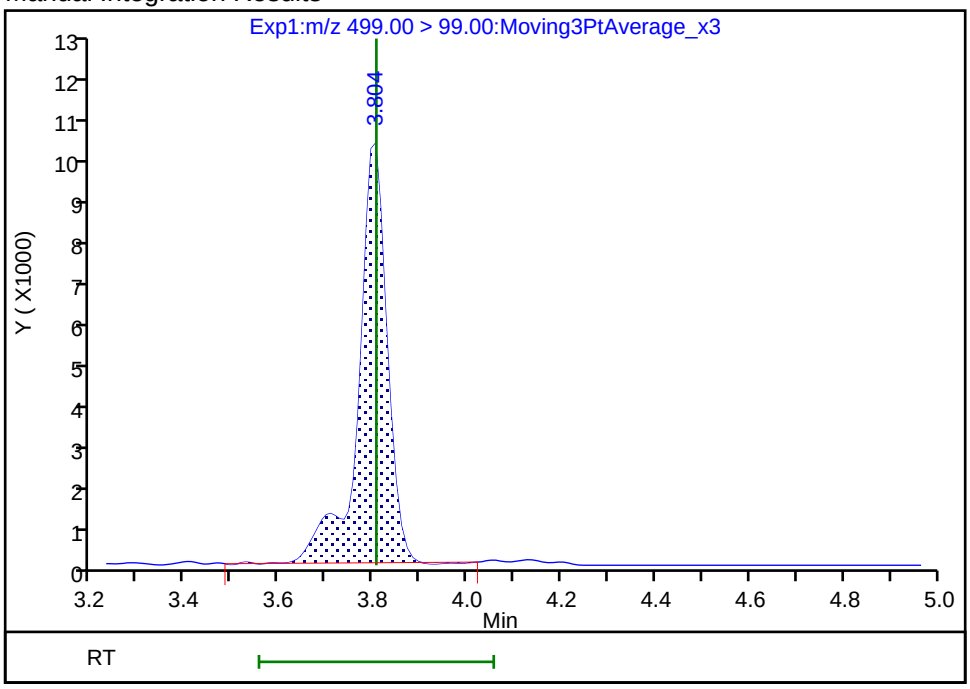
Processing Integration Results

RT: 3.80
Area: 43473
Amount: 0.493773
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 40689
Amount: 0.466267
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:53:23
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

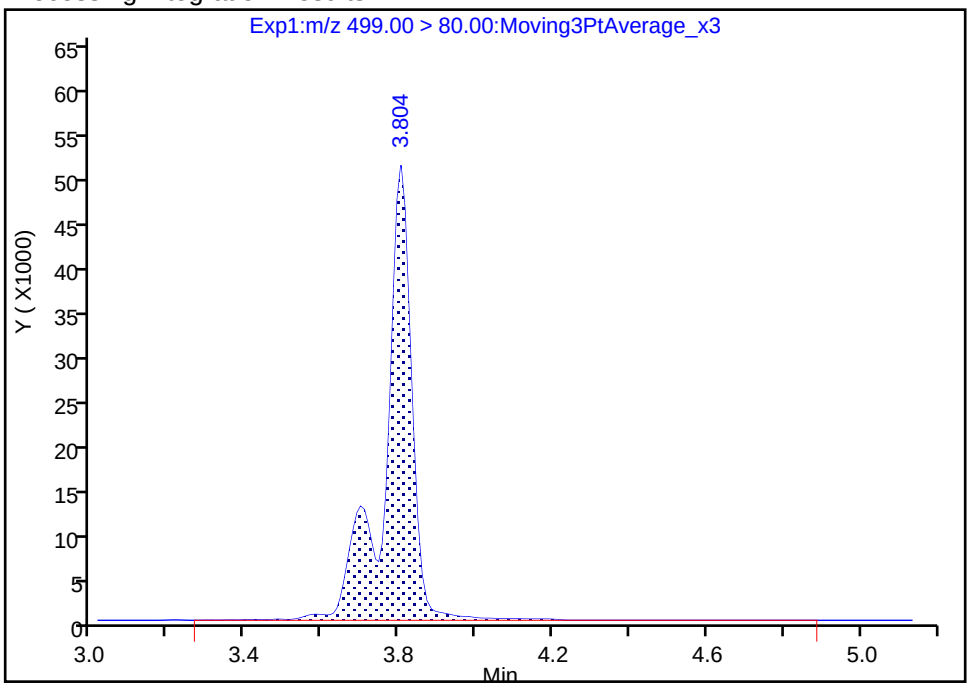
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL010.d | | | | |
| Injection Date: | 22-Dec-2020 13:04:47 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 4 | Worklist Smp#: | 10 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

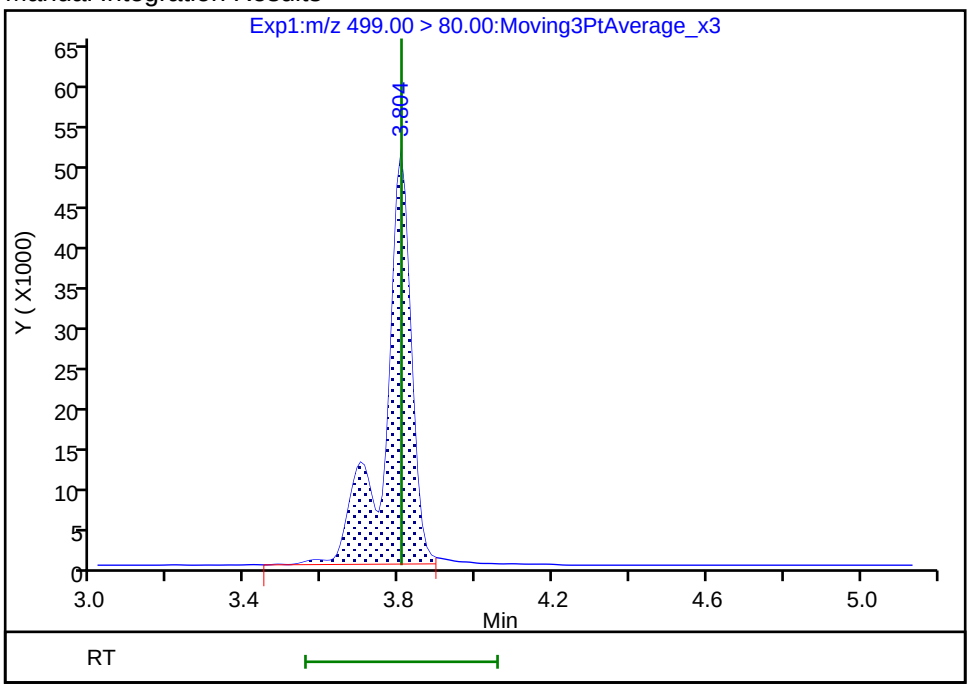
Processing Integration Results

RT: 3.80
Area: 252343
Amount: 0.493773
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 243758
Amount: 0.466267
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:53:27

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

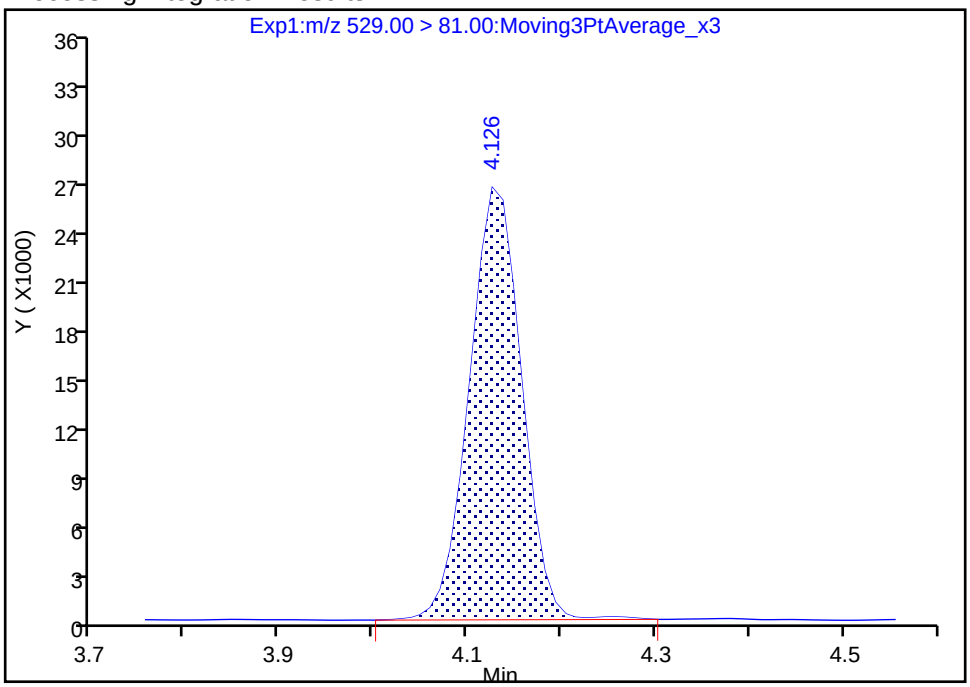
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL010.d | | | | |
| Injection Date: | 22-Dec-2020 13:04:47 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 4 | Worklist Smp#: | 10 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 26 M2-8:2 FTS, CAS: STL02280

Signal: 1

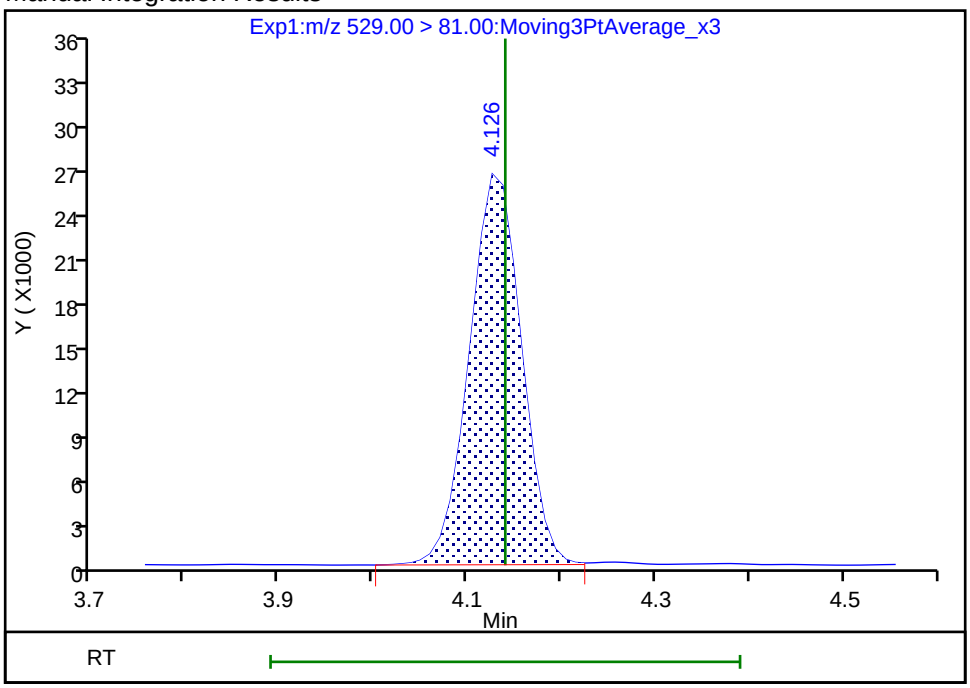
Processing Integration Results

RT: 4.13
Area: 100736
Amount: 1.203135
Amount Units: ng/ml




Manual Integration Results

RT: 4.13
Area: 100274
Amount: 1.184999
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:53:41
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

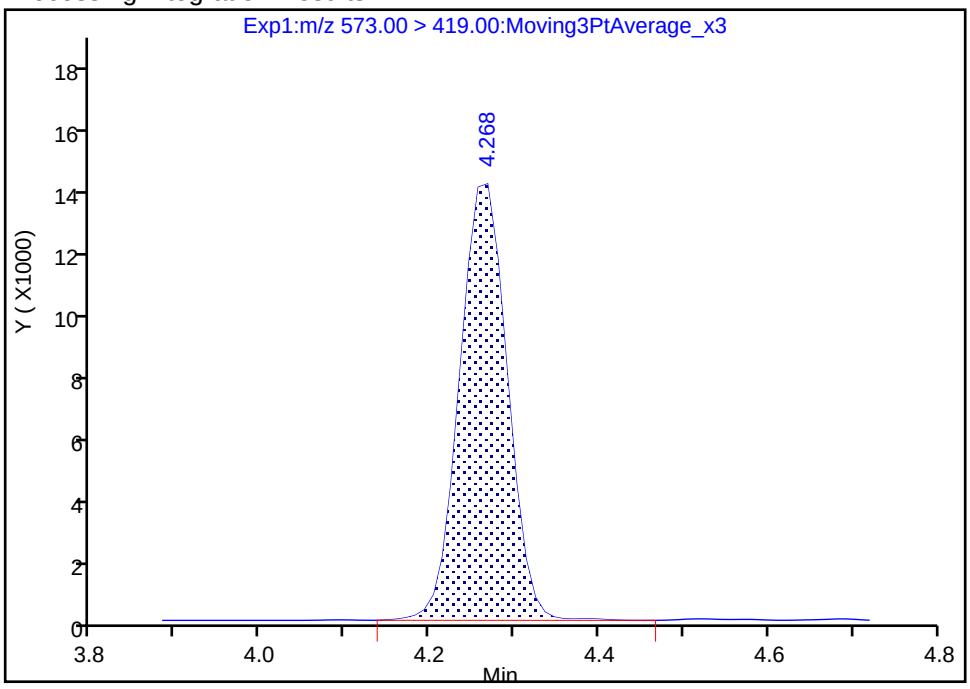
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL010.d | | | | |
| Injection Date: | 22-Dec-2020 13:04:47 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 4 | Worklist Smp#: | 10 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

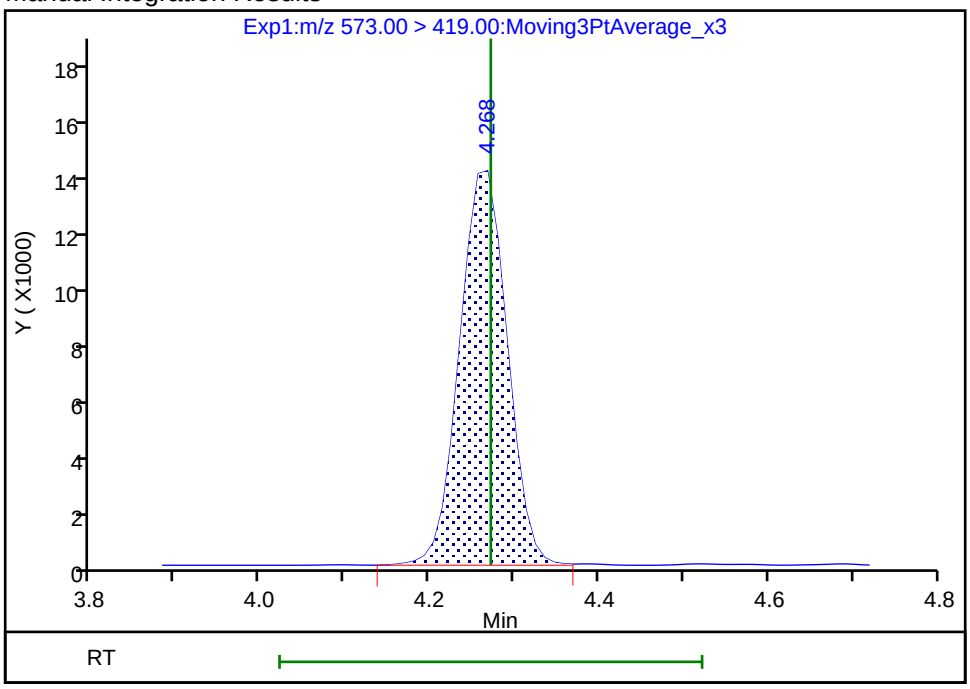
Processing Integration Results

RT: 4.27
Area: 54433
Amount: 1.307455
Amount Units: ng/ml




Manual Integration Results

RT: 4.27
Area: 54321
Amount: 1.298778
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:53:51
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

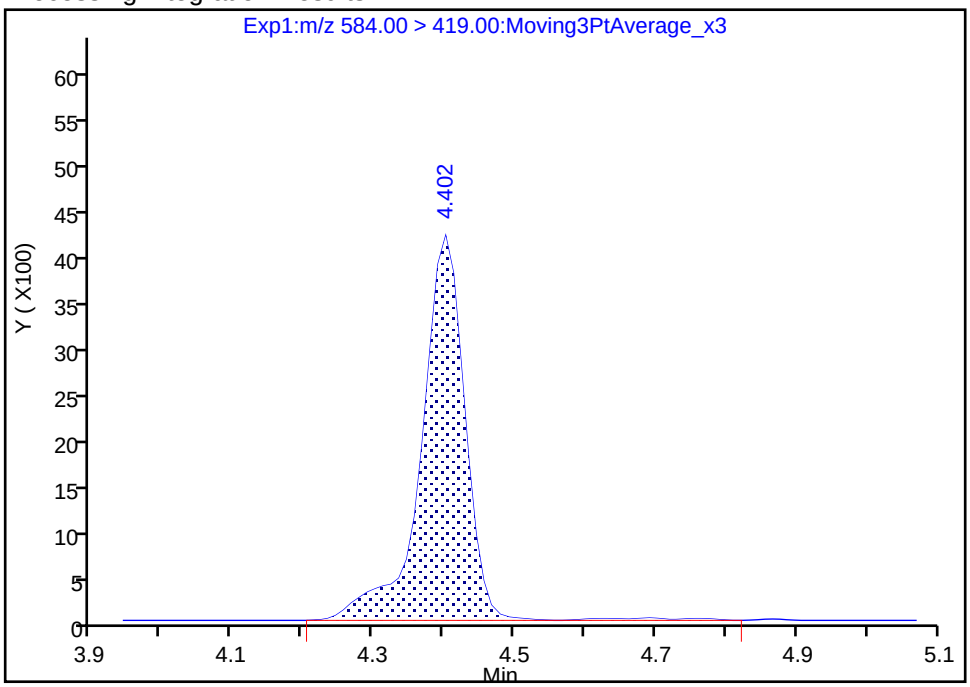
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL010.d | | | | |
| Injection Date: | 22-Dec-2020 13:04:47 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 4 | Worklist Smp#: | 10 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

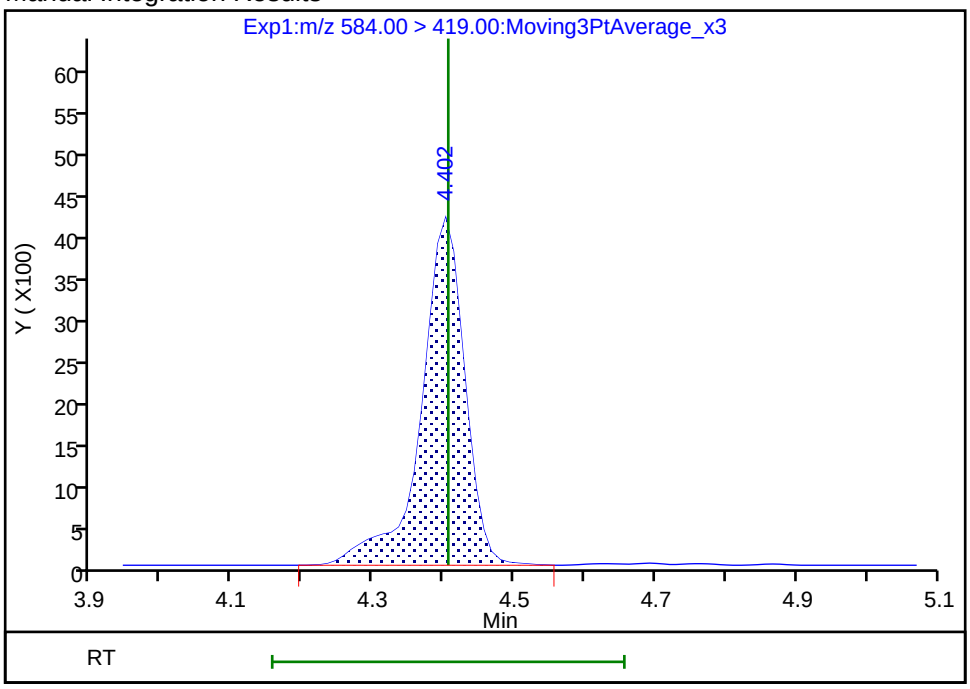
Processing Integration Results

RT: 4.40
Area: 18376
Amount: 0.467982
Amount Units: ng/ml




Manual Integration Results

RT: 4.40
Area: 18172
Amount: 0.470712
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:54:12
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL011.d
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 22-Dec-2020 13:13:03 ALS Bottle#: 5 Worklist Smp#: 11
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICIS
Misc. Info.: 200-0044184-011 Plate: 1 Rack: 1
Operator ID: lc812tech Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 22-Dec-2020 14:39:31 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1625

First Level Reviewer: deannd Date: 22-Dec-2020 13:57:34
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.091 | 2.091 | 0.0 | 0.599 | 1185176 | 1.24 | | 99.2 | 10280 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | |
| 212.90 > 169.00 | 2.091 | 2.091 | 0.0 | 1.000 | 881958 | 0.9283 | | 92.8 | 114 | |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.414 | 2.414 | 0.0 | 0.691 | 843580 | 1.22 | | 97.7 | 2846 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | |
| 262.90 > 219.00 | 2.414 | 2.414 | 0.0 | 1.000 | 714864 | 0.9566 | | 95.7 | 28.1 | |
| D 47 13C3 PFBS | | | | | | | | | | |
| 301.90 > 80.00 | 2.427 | 2.427 | 0.0 | 0.695 | 1062494 | 1.17 | | 101 | 398684 | |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | |
| 298.90 > 80.00 | 2.427 | 2.427 | 0.0 | 1.000 | 865582 | 0.8371 | Target=2.21 | 94.7 | 1429 | |
| 298.90 > 99.00 | 2.427 | 2.427 | 0.0 | 1.000 | 391368 | | 2.21(1.10-3.31) | 94.7 | 429 | |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | |
| 327.00 > 307.00 | 2.735 | 2.735 | 0.0 | 1.000 | 123314 | 0.9093 | | 97.4 | 1431 | |
| D 60 M2-4:2 FTS | | | | | | | | | | M |
| 329.00 > 81.00 | 2.735 | 2.735 | 0.0 | 0.783 | 86339 | 1.14 | | 97.5 | 95.9 | M |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.771 | 2.771 | 0.0 | 0.793 | 895585 | 1.24 | | 98.9 | 2915 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | |
| 313.00 > 269.00 | 2.771 | 2.771 | 0.0 | 1.000 | 765249 | 0.9777 | Target=12.17 | 97.8 | 193 | |
| 313.00 > 119.00 | 2.771 | 2.771 | 0.0 | 1.000 | 59624 | | 12.83(6.09-18.26) | 97.8 | 105 | |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | |
| 349.00 > 80.00 | 2.771 | 2.771 | 0.0 | 0.885 | 800668 | 0.9381 | Target=3.32 | 100 | 1524 | |
| 349.00 > 99.00 | 2.771 | 2.771 | 0.0 | 0.885 | 239318 | | 3.35(1.66-4.98) | 100 | 463 | |
| 67 Perfluoro(2-propoxypropanoic) ac | | | | | | | | | | M |
| 329.10 > 285.00 | 2.881 | 2.881 | 0.0 | 1.000 | 169678 | 0.9151 | | 91.5 | 19.0 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 64 13C3 HFPO-DA | | | | | | | | | | |
| 332.10 > 287.00 | 2.881 | 2.881 | 0.0 | 0.825 | 167297 | 1.31 | | 105 | 1158 | |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.133 | 3.133 | 0.0 | 0.897 | 769056 | 1.14 | | 96.1 | 2513 | |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.133 | 3.133 | 0.0 | 1.000 | 671571 | 0.8762 | Target=4.08 | 96.3 | 623 | |
| 399.00 > 99.00 | 3.133 | 3.133 | 0.0 | 1.000 | 161822 | | 4.15(2.04-6.11) | 96.3 | 175 | M |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.133 | 3.133 | 0.0 | 0.897 | 849594 | 1.23 | | 98.0 | 2733 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | |
| 363.00 > 319.00 | 3.133 | 3.133 | 0.0 | 1.000 | 723792 | 0.9750 | Target=3.70 | 97.5 | 176 | |
| 363.00 > 169.00 | 3.133 | 3.133 | 0.0 | 1.000 | 197811 | | 3.66(1.85-5.56) | 97.5 | 484 | |
| 77 DONA | | | | | | | | | | |
| 377.00 > 251.00 | 3.176 | 3.176 | 0.0 | 0.835 | 1397912 | 0.9000 | Target=2.47 | 95.5 | 1291 | |
| 377.00 > 85.00 | 3.176 | 3.176 | 0.0 | 0.835 | 574726 | | 2.43(1.23-3.70) | 95.5 | 519 | |
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | |
| 449.00 > 80.00 | 3.484 | 3.484 | 0.0 | 0.916 | 572696 | 0.9144 | Target=5.85 | 96.1 | 2707 | |
| 449.00 > 99.00 | 3.484 | 3.484 | 0.0 | 0.916 | 96214 | | 5.95(2.93-8.78) | 96.1 | 548 | |
| D 12 M2-6:2 FTS | | | | | | | | | | M |
| 429.00 > 81.00 | 3.484 | 3.484 | 0.0 | 0.997 | 96952 | 1.15 | | 96.6 | 475 | M |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | |
| 427.00 > 407.00 | 3.484 | 3.484 | 0.0 | 1.000 | 91369 | 1.01 | | 106 | 727 | |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.493 | 3.493 | 0.0 | 1.000 | 869201 | 1.23 | | 98.7 | 5713 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.493 | 3.493 | 0.0 | | 889632 | 1.25 | | | 2744 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | |
| 413.00 > 369.00 | 3.493 | 3.493 | 0.0 | 1.000 | 740338 | 0.9822 | Target=2.58 | 98.2 | 177 | |
| 413.00 > 169.00 | 3.493 | 3.493 | 0.0 | 1.000 | 286978 | | 2.58(1.29-3.87) | 98.2 | 628 | |
| D 18 13C4 PFOS | | | | | | | | | | |
| 503.00 > 80.00 | 3.806 | 3.806 | 0.0 | 1.089 | 554310 | 1.19 | | 99.8 | 1960 | |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.806 | 3.806 | 0.0 | 1.000 | 463174 | 0.8682 | Target=5.56 | 93.6 | 522 | M |
| 499.00 > 99.00 | 3.806 | 3.806 | 0.0 | 1.000 | 82037 | | 5.65(2.78-8.34) | 93.6 | 317 | M |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.826 | 3.826 | 0.0 | 1.095 | 760016 | 1.22 | | 97.9 | 3695 | |
| 20 Perfluorononanoic acid | | | | | | | | | | |
| 463.00 > 419.00 | 3.826 | 3.826 | 0.0 | 1.000 | 649860 | 0.9656 | Target=6.87 | 96.6 | 110 | |
| 463.00 > 169.00 | 3.826 | 3.826 | 0.0 | 1.000 | 87334 | | 7.44(3.43-10.30) | 96.6 | 640 | |
| 69 9-Chlorohexadecafluoro-3-oxanona | | | | | | | | | | |
| 531.00 > 351.00 | 3.967 | 3.967 | 0.0 | 1.042 | 545155 | 0.9159 | | 98.3 | 2096 | |
| 68 Perfluorononanesulfonic acid | | | | | | | | | | M |
| 549.00 > 80.00 | 4.095 | 4.095 | 0.0 | 1.076 | 341392 | 0.8577 | Target=2.78 | 89.3 | 1751 | |
| 549.00 > 99.00 | 4.095 | 4.095 | 0.0 | 1.076 | 134385 | | 2.54(1.39-4.17) | 89.3 | 357 | M |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.129 | 4.129 | 0.0 | 1.182 | 722168 | 1.22 | | 97.3 | 7907 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 24 Perfluorodecanoic acid | | | | | | | | | | |
| 513.00 > 469.00 | 4.129 | 4.129 | 0.0 | 1.000 | 604674 | 1.02 | Target=9.03 | 102 | 401 | |
| 513.00 > 169.00 | 4.129 | 4.129 | 0.0 | 1.000 | 65108 | | 9.29(4.51-13.54) | 102 | 408 | |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | |
| 527.00 > 507.00 | 4.140 | 4.140 | 0.0 | 1.000 | 51395 | 0.8998 | | 93.9 | 944 | |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.140 | 4.140 | 0.0 | 1.185 | 100569 | 1.15 | | 96.3 | 455 | |
| D 21 13C8 FOSA | | | | | | | | | | |
| 506.00 > 78.00 | 4.207 | 4.207 | 0.0 | 1.204 | 1069567 | 1.22 | | 98.0 | 1916 | |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | |
| 498.00 > 78.00 | 4.207 | 4.207 | 0.0 | 1.000 | 853072 | 0.99 | | 99.5 | 2290 | |
| D 27 d3-NMeFOSAA | | | | | | | | | | |
| 573.00 > 419.00 | 4.272 | 4.272 | 0.0 | 1.223 | 52781 | 1.23 | | 98.0 | 124 | |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | M |
| 570.00 > 419.00 | 4.272 | 4.272 | 0.0 | 1.000 | 38043 | 1.02 | | 102 | 275 | M |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | |
| 599.00 > 80.00 | 4.362 | 4.362 | 0.0 | 1.146 | 302428 | 0.9531 | Target=2.76 | 98.9 | 1641 | |
| 599.00 > 99.00 | 4.362 | 4.362 | 0.0 | 1.146 | 108196 | | 2.80(1.38-4.14) | 98.9 | 554 | |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.384 | 4.384 | 0.0 | 1.255 | 595523 | 1.22 | | 97.6 | 2499 | |
| 31 Perfluoroundecanoic acid | | | | | | | | | | |
| 563.00 > 519.00 | 4.395 | 4.395 | 0.0 | 1.003 | 493796 | 1.02 | Target=8.02 | 102 | 177 | |
| 563.00 > 169.00 | 4.395 | 4.395 | 0.0 | 1.003 | 60802 | | 8.12(4.01-12.03) | 102 | 1209 | |
| D 32 d5-NEtFOSAA | | | | | | | | | | |
| 589.00 > 419.00 | 4.395 | 4.395 | 0.0 | 1.258 | 50481 | 1.21 | | 97.0 | 447 | |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.406 | 4.406 | 0.0 | 1.003 | 35802 | 0.9577 | | 95.8 | 637 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | M |
| 631.00 > 451.00 | 4.485 | 4.485 | 0.0 | 1.179 | 584047 | 0.9457 | | 100 | 1618 | M |
| D 36 13C2 PFDoA | | | | | | | | | | |
| 615.00 > 570.00 | 4.626 | 4.626 | 0.0 | 1.324 | 641373 | 1.25 | | 99.6 | 1825 | |
| 37 Perfluorododecanoic acid | | | | | | | | | | |
| 613.00 > 569.00 | 4.626 | 4.626 | 0.0 | 1.000 | 546074 | 0.9676 | Target=6.85 | 96.8 | 153 | |
| 613.00 > 169.00 | 4.616 | 4.626 | -0.010 | 0.998 | 79070 | | 6.91(3.42-10.27) | 96.8 | 1104 | |
| 74 1H,1H,2H,2H-perfluorododecanesul | | | | | | | | | | |
| 627.00 > 607.00 | 4.637 | 4.637 | 0.0 | 1.120 | 28609 | 0.9729 | | 101 | 523 | |
| 75 Perfluorododecanesulfonic acid ( | | | | | | | | | | M |
| 699.00 > 80.00 | 4.797 | 4.797 | 0.0 | 1.260 | 106502 | 0.9123 | Target=0.53 | 94.2 | 287 | M |
| 699.00 > 99.00 | 4.797 | 4.797 | 0.0 | 1.260 | 208152 | | 0.51(0.26-0.79) | 94.2 | 825 | |
| 41 Perfluorotridecanoic acid | | | | | | | | | | |
| 663.00 > 619.00 | 4.839 | 4.839 | 0.0 | 1.046 | 448445 | 0.9792 | Target=4.48 | 97.9 | 173 | |
| 663.00 > 169.00 | 4.839 | 4.839 | 0.0 | 1.046 | 102042 | | 4.39(2.24-6.72) | 97.9 | 959 | |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 5.027 | 5.027 | 0.0 | 1.439 | 450404 | 1.18 | | 94.6 | 1593 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | |
| 713.00 > 169.00 | 5.027 | 5.027 | 0.0 | 1.000 | 71818 | 1.07 | Target=0.99 | 107 | 1310 | |
| 713.00 > 219.00 | 5.018 | 5.027 | -0.009 | 0.998 | 67692 | | 1.06(0.50-1.49) | 107 | 2370 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.374 | 5.374 | 0.0 | 1.539 | 496455 | 1.22 | | 97.6 | 1772 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | |
| 813.00 > 769.00 | 5.374 | 5.374 | 0.0 | 1.000 | 370408 | 0.9863 | Target=4.02 | 98.6 | 105 | |
| 813.00 > 169.00 | 5.374 | 5.374 | 0.0 | 1.000 | 96475 | | 3.84(2.01-6.02) | 98.6 | 1401 | |
| 46 Perfluorooctadecanoic acid | | | | | | | | | | |
| 913.00 > 869.00 | 5.722 | 5.722 | 0.0 | 1.065 | 355381 | 0.99 | Target=3.88 | 99.4 | 241 | |
| 913.00 > 169.00 | 5.722 | 5.722 | 0.0 | 1.065 | 90588 | | 3.92(1.94-5.82) | 99.4 | 794 | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

## Reagents:

PFAS32NCIC4_00015 Amount Added: 100.00 Units: uL

Report Date: 22-Dec-2020 14:39:31 Chrom Revision: 2.3 09-Dec-2020 16:22:14

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL011.d

Injection Date: 22-Dec-2020 13:13:03 Instrument ID: LC812

Lims ID: ICIS

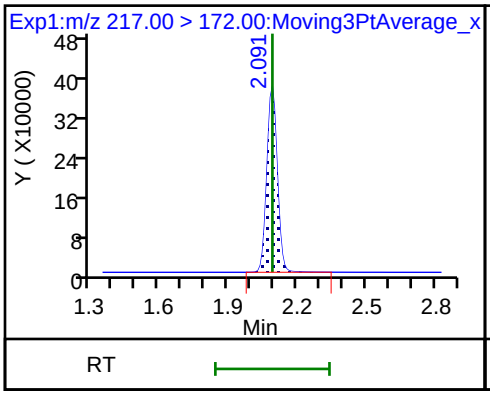
Client ID:

Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 11

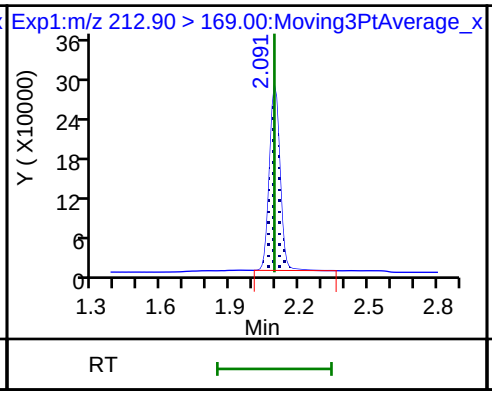
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

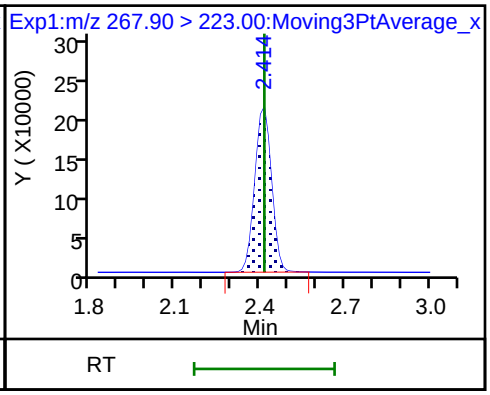
D 1 13C4 PFBA



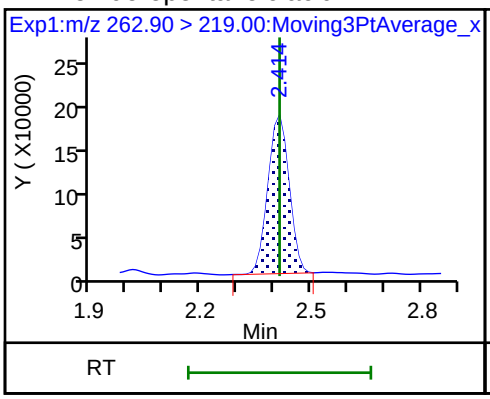

2 Perfluorobutanoic acid



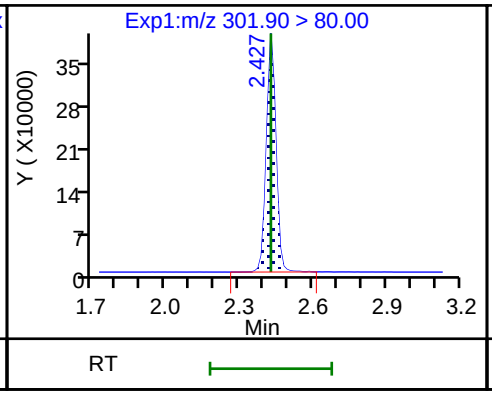

D 3 13C5 PFPeA



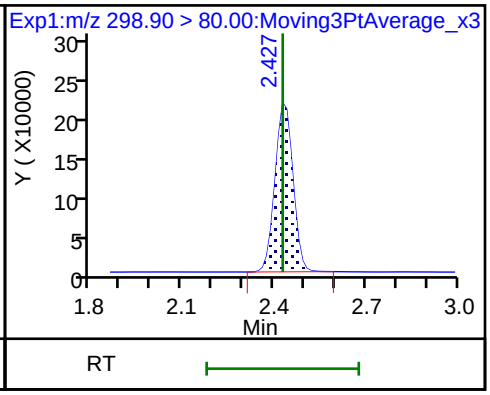

4 Perfluoropentanoic acid



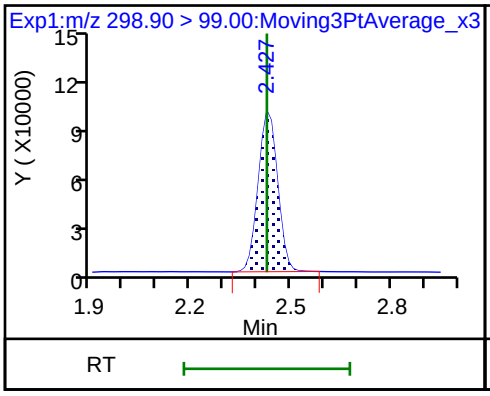

D 47 13C3 PFBS



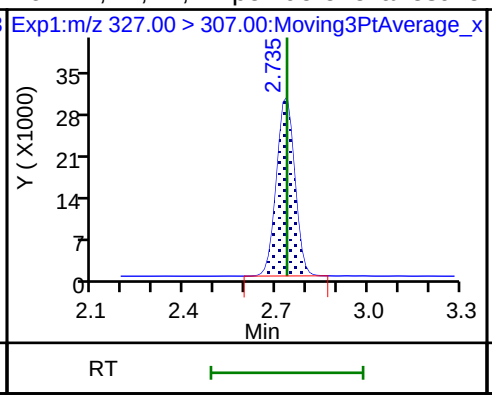

5 Perfluorobutanesulfonic acid



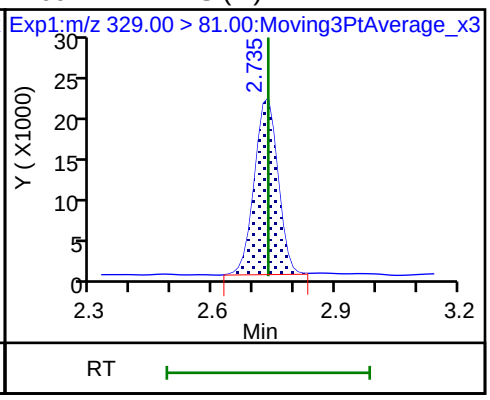

5 Perfluorobutanesulfonic acid



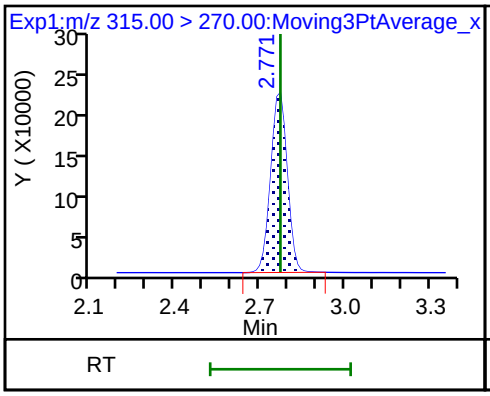

61 1H,1H,2H,2H-perfluorohexanesulfo



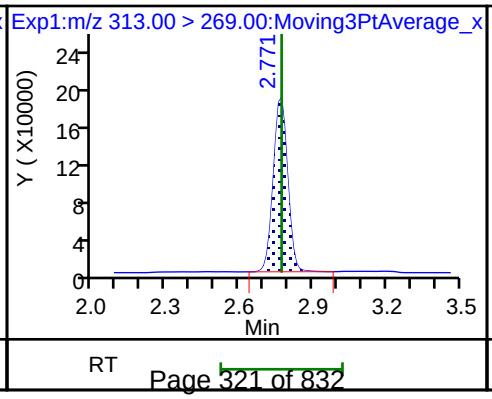

D 60 M2-4:2 FTS (M)



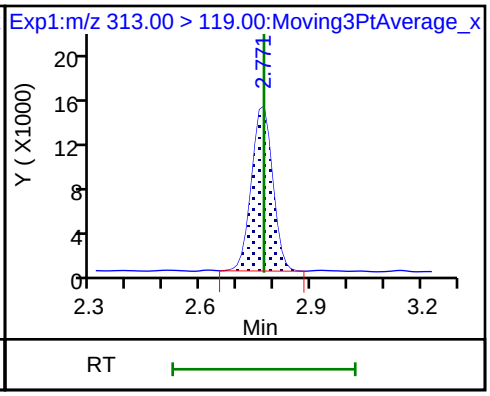

D 7 13C2 PFHxA



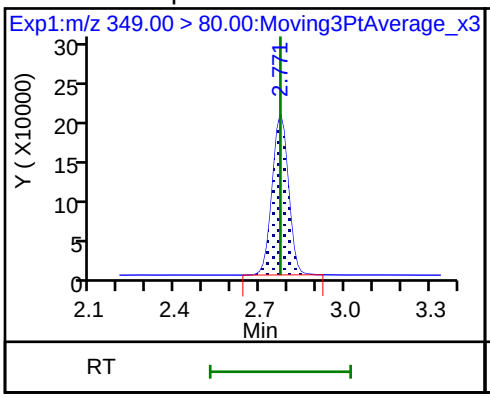

6 Perfluorohexanoic acid



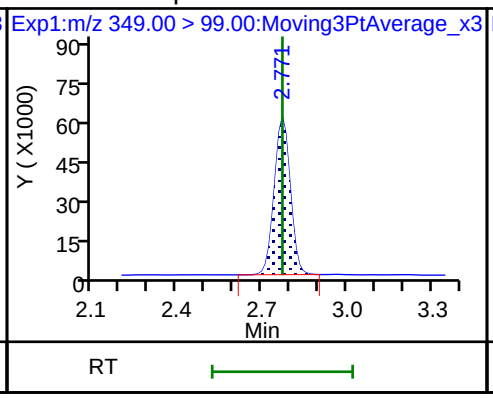

6 Perfluorohexanoic acid



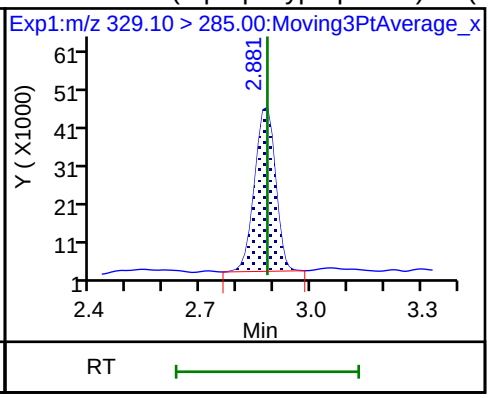
70 Perfluoropentanesulfonic acid



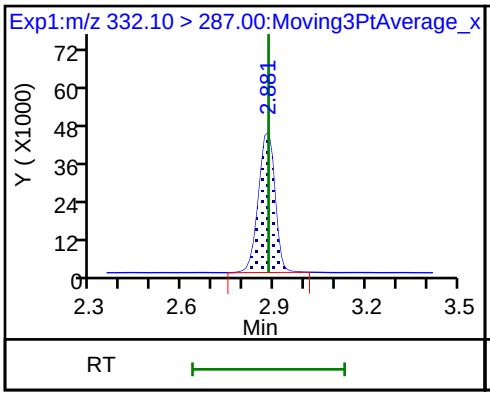

70 Perfluoropentanesulfonic acid



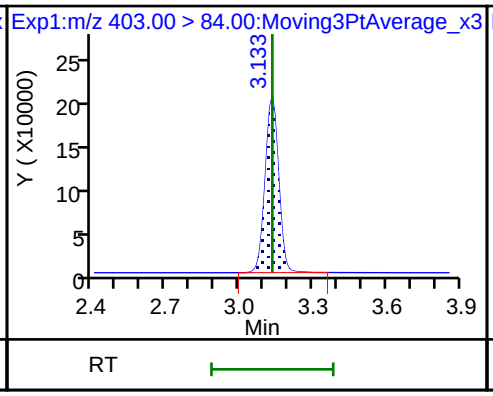

67 Perfluoro(2-propoxypropanoic) ac (M)



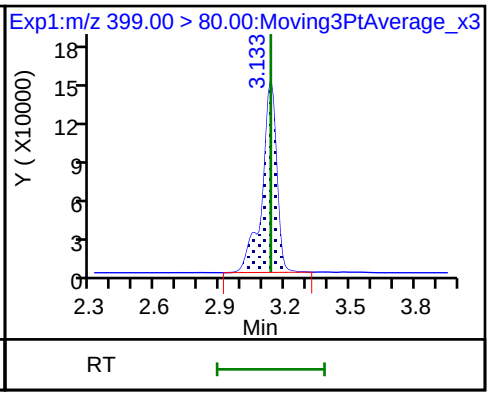

D 64 13C3 HFPO-DA



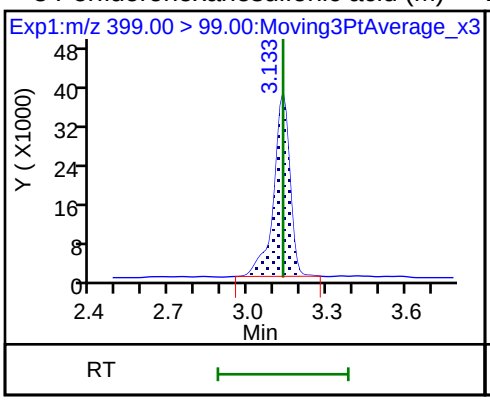

D 11 18O2 PFHxS



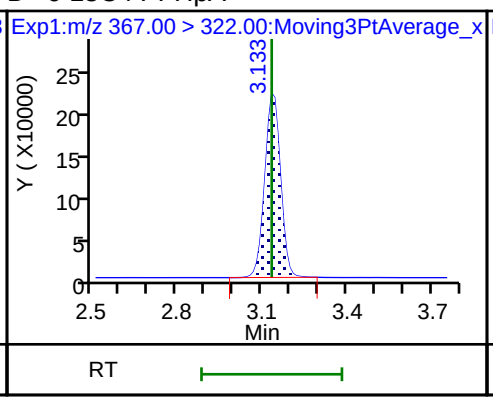

8 Perfluorohexanesulfonic acid



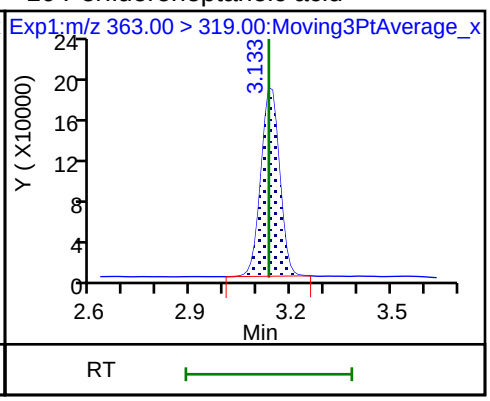

8 Perfluorohexanesulfonic acid (M)



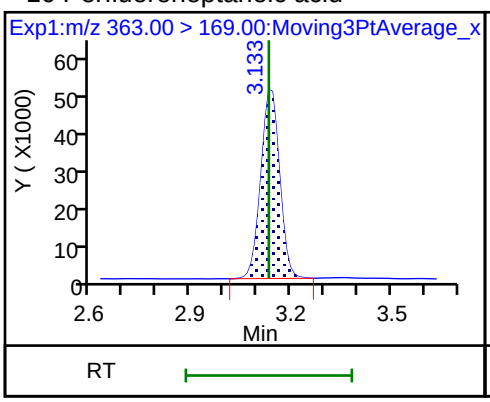

D 9 13C4 PFHpA



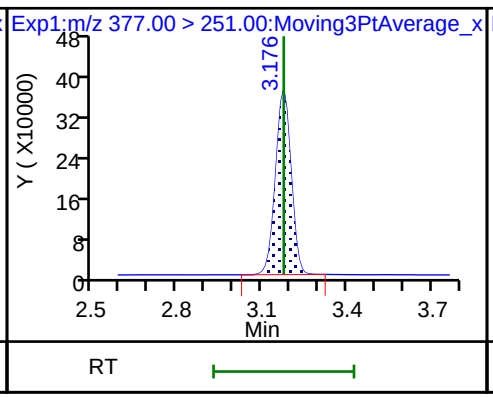

10 Perfluoroheptanoic acid



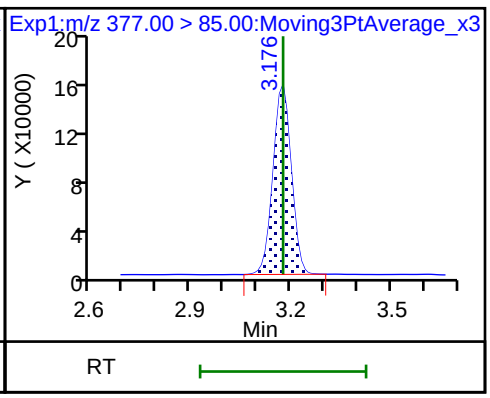

10 Perfluoroheptanoic acid



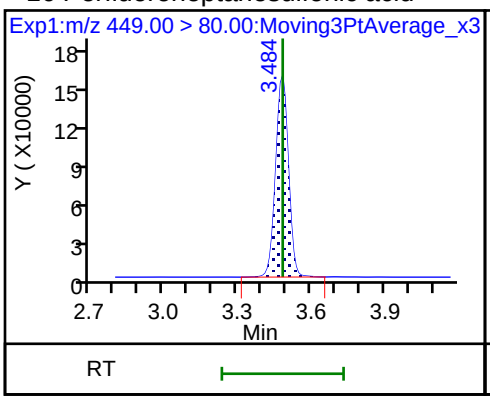

77 DONA



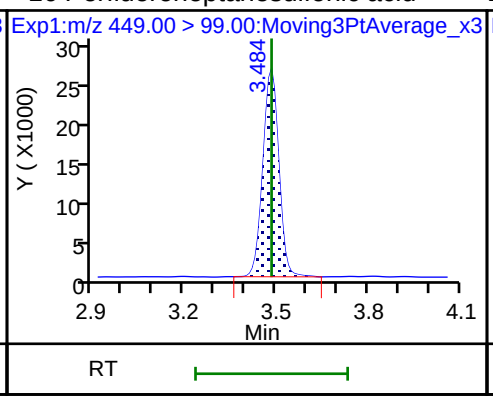

77 DONA



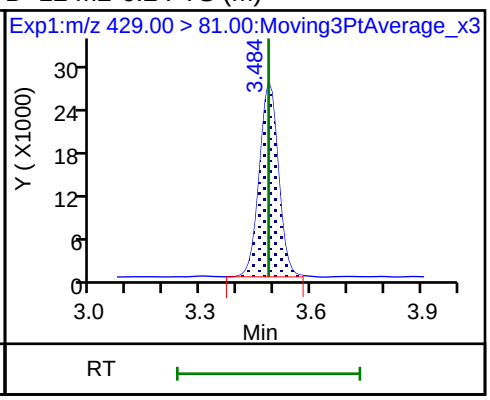
16 Perfluoroheptanesulfonic acid



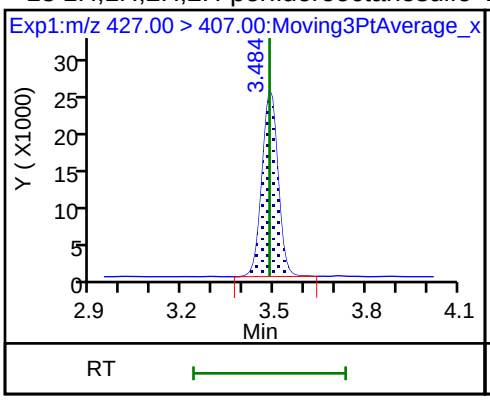

16 Perfluoroheptanesulfonic acid



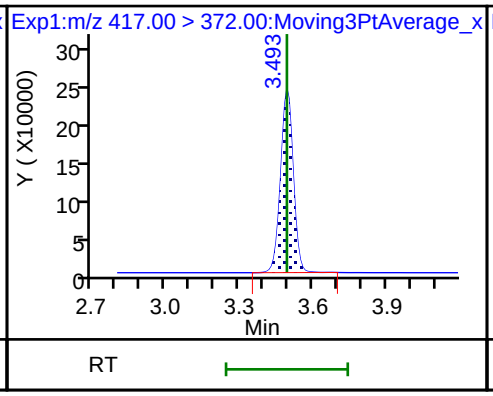

D 12 M2-6:2 FTS (M)



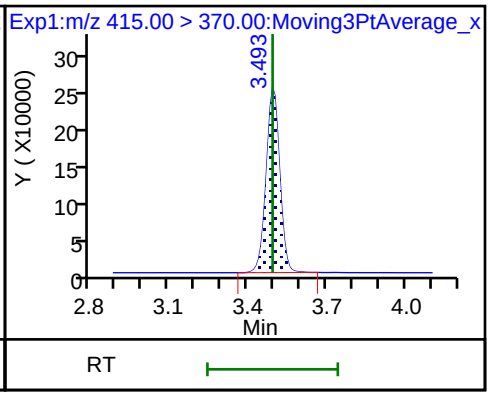

13 1H,1H,2H,2H-perfluorooctanesulfo



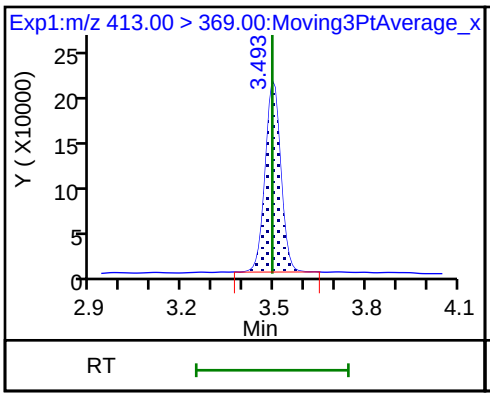

D 14 13C4 PFOA



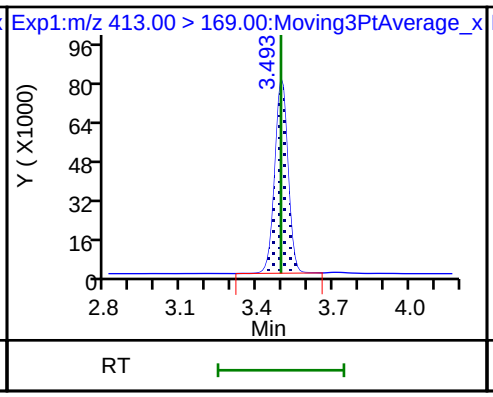

* 62 13C2 PFOA



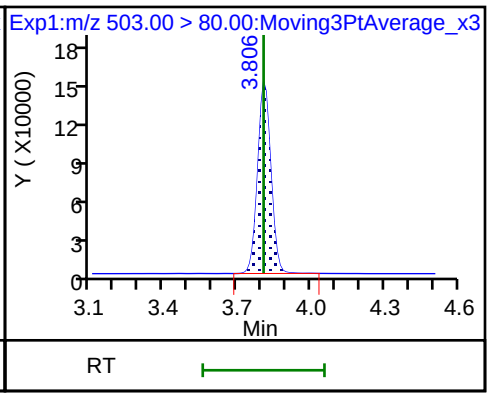

15 Perfluorooctanoic acid



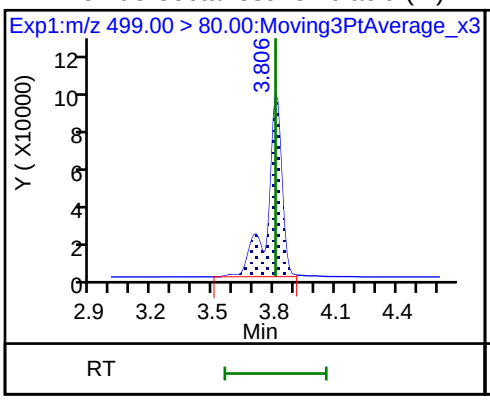

15 Perfluorooctanoic acid



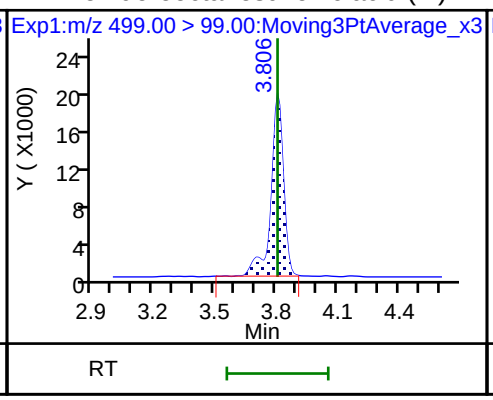

D 18 13C4 PFOS



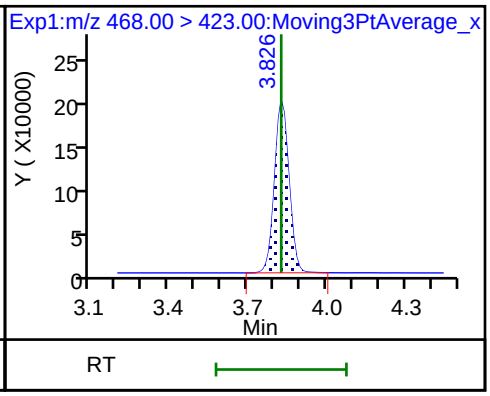

17 Perfluorooctanesulfonic acid (M)



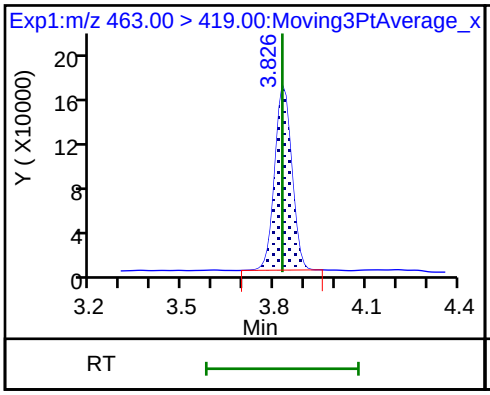

17 Perfluorooctanesulfonic acid (M)



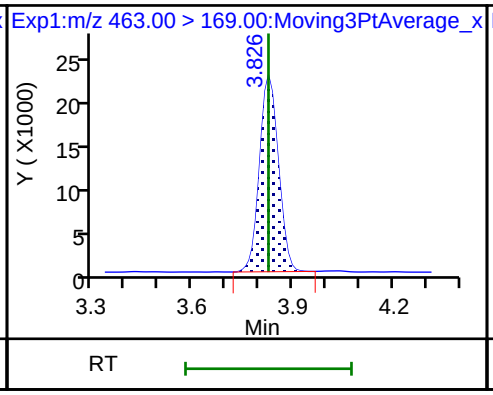

D 19 13C5 PFNA



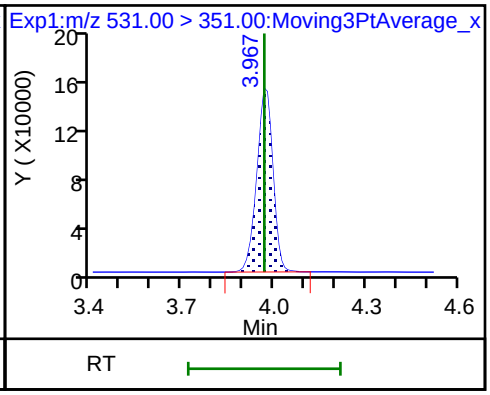
20 Perfluorononanoic acid



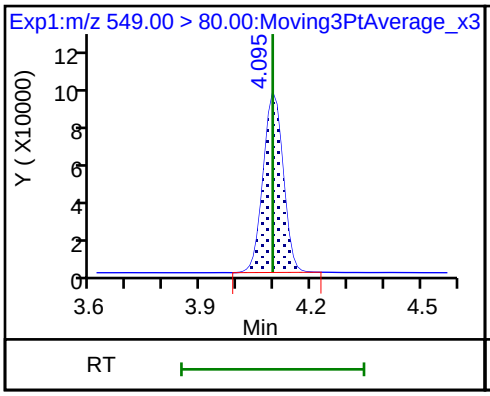

20 Perfluorononanoic acid



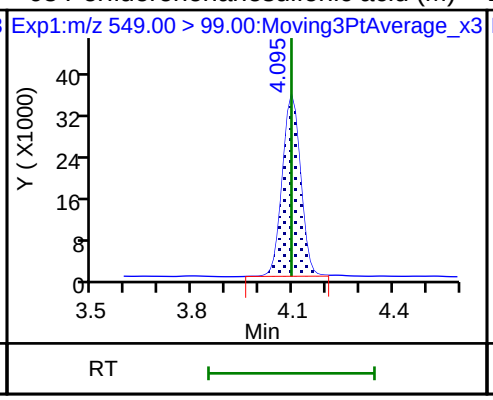

69 9-Chlorohexadecafluoro-3-oxanona



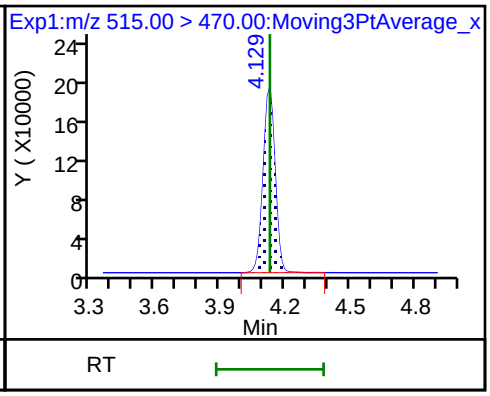

68 Perfluorononanesulfonic acid



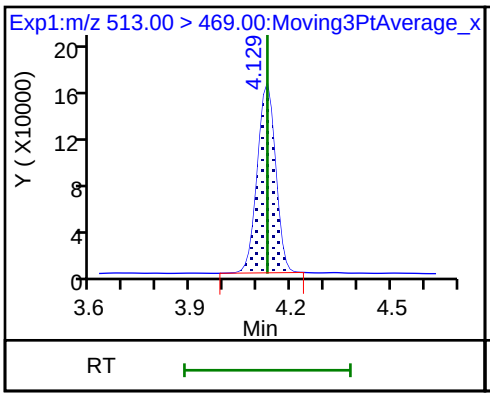

68 Perfluorononanesulfonic acid (M)



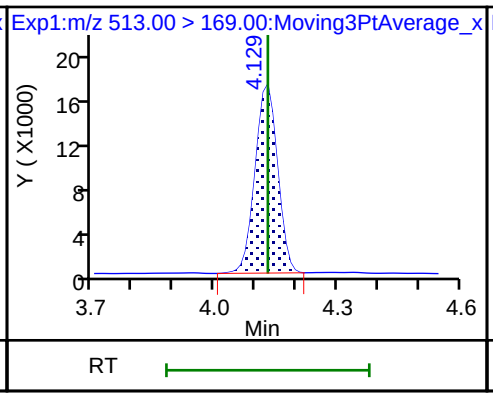

D 23 13C2 PFDA



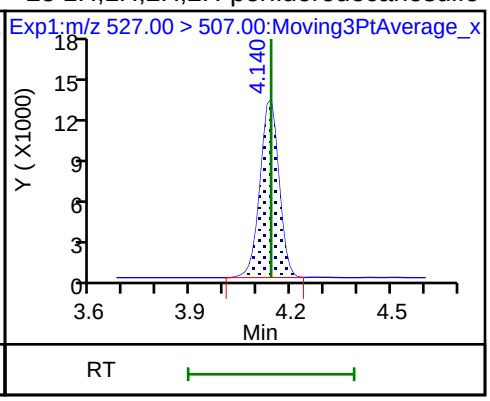

24 Perfluorodecanoic acid



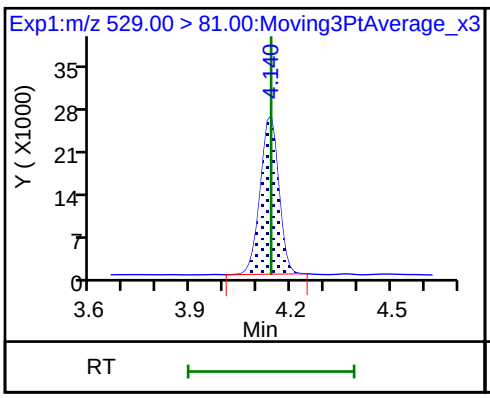

24 Perfluorodecanoic acid



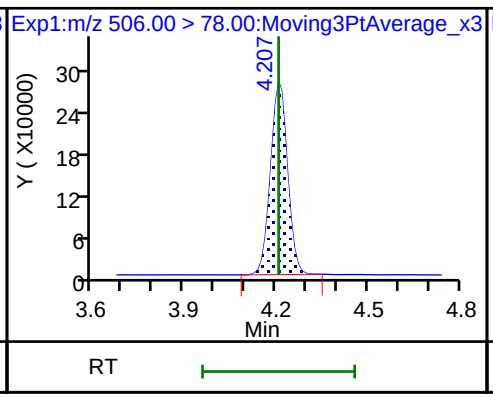

25 1H,1H,2H,2H-perfluorodecanesulfo



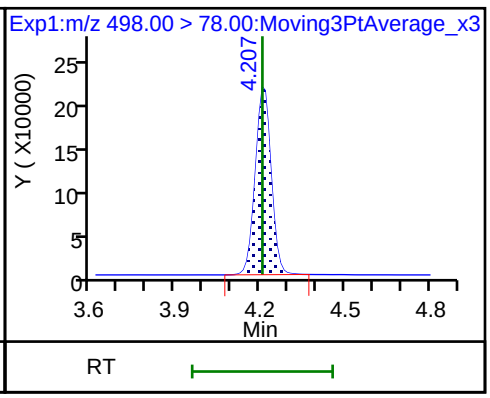

D 26 M2-8:2 FTS



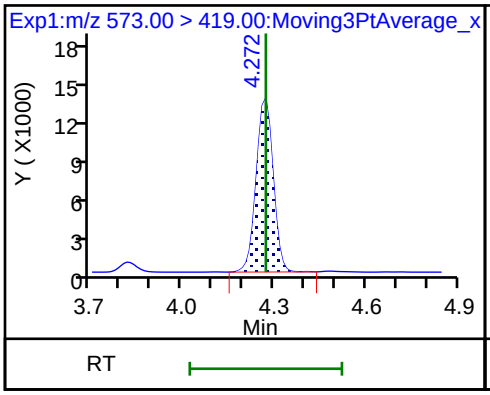

D 21 13C8 FOSA



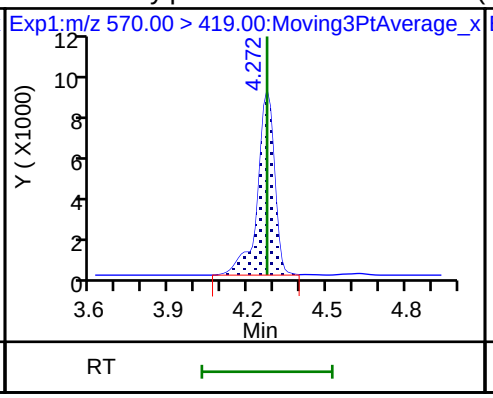

22 Perfluorooctanesulfonamide



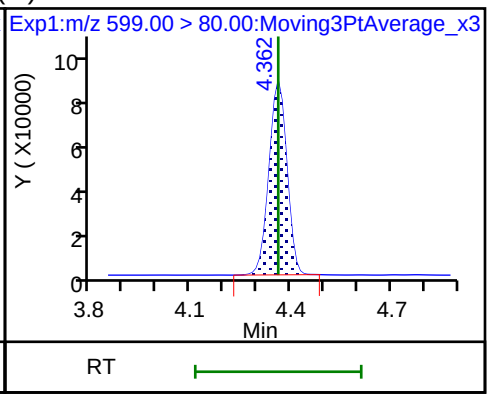
D 27 d3-NMeFOSAA



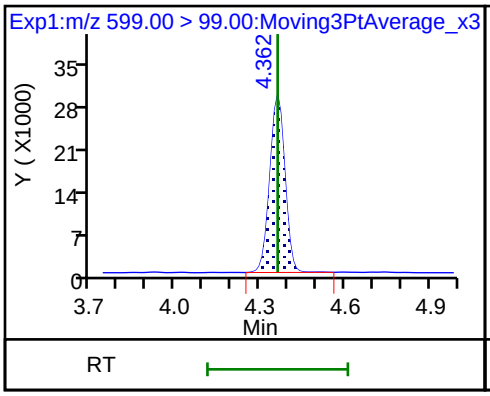

28 N-methylperfluorooctanesulfonami (M)



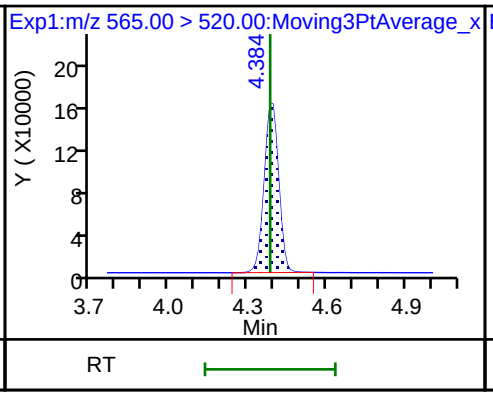

29 Perfluorodecanesulfonic acid



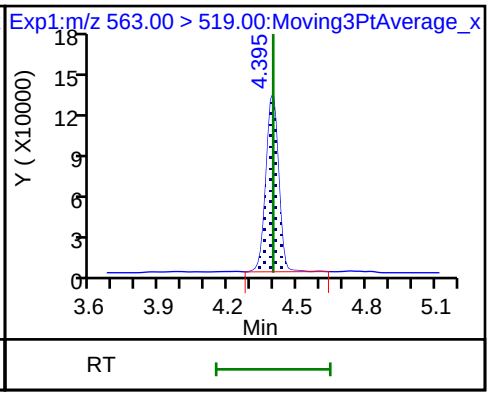

29 Perfluorodecanesulfonic acid



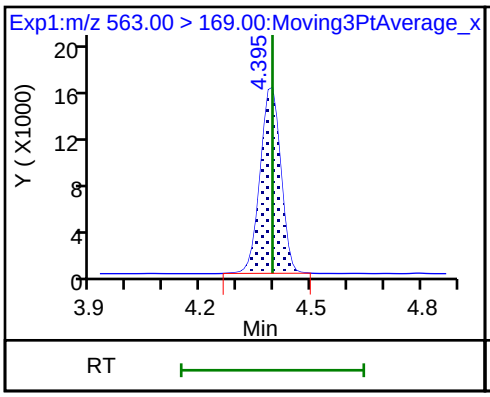

D 30 13C2 PFUnA



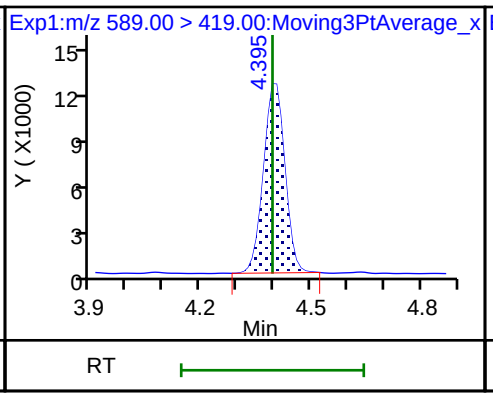

31 Perfluoroundecanoic acid



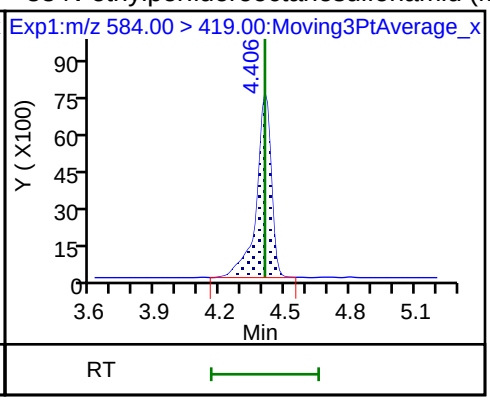

31 Perfluoroundecanoic acid



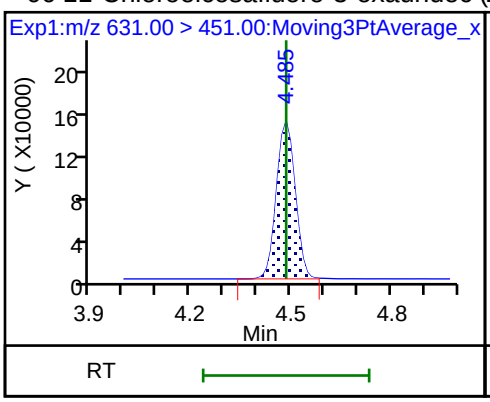

D 32 d5-NEtFOSAA



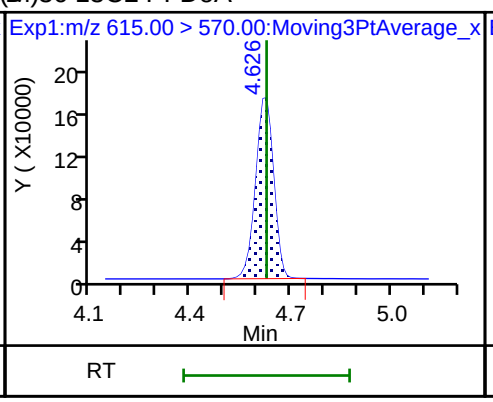

33 N-ethylperfluorooctanesulfonamid (M)



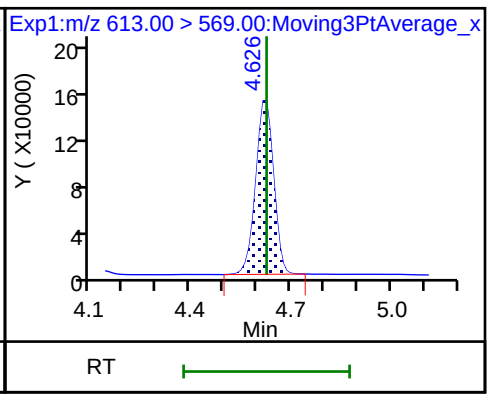

66 11-Chloroeicosafluoro-3-oxaundec (M)



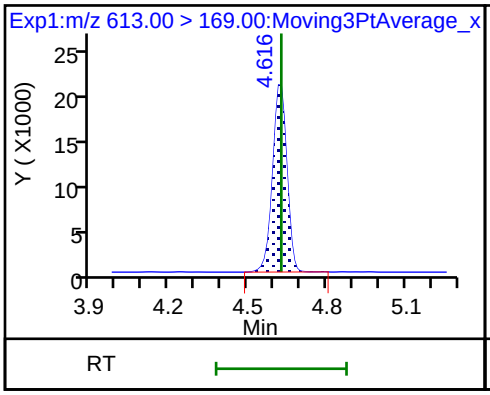

D 36 13C2 PFDoA



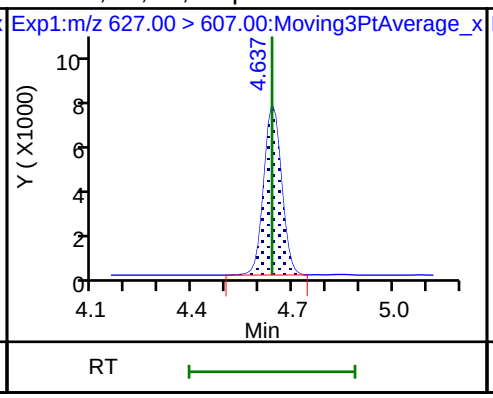

37 Perfluorododecanoic acid



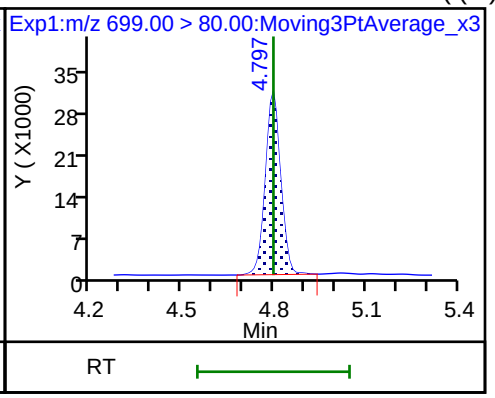
37 Perfluorododecanoic acid



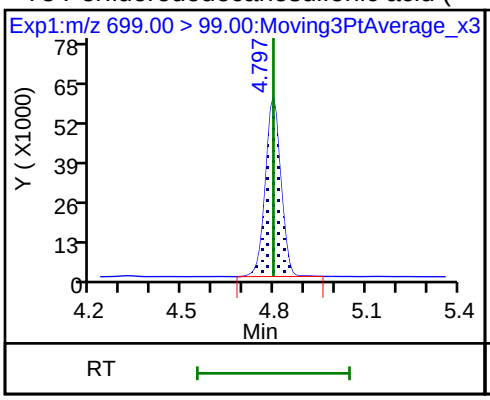

74 1H,1H,2H,2H-perfluorododecanesul



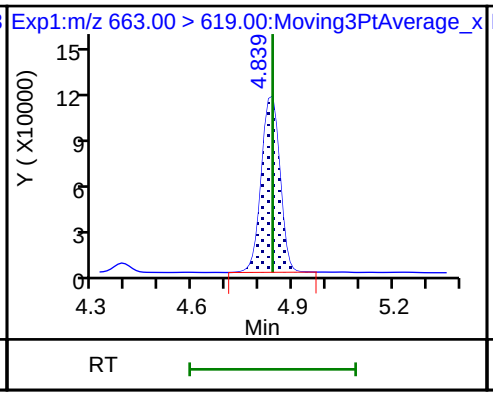

75 Perfluorododecanesulfonic acid ( (M)



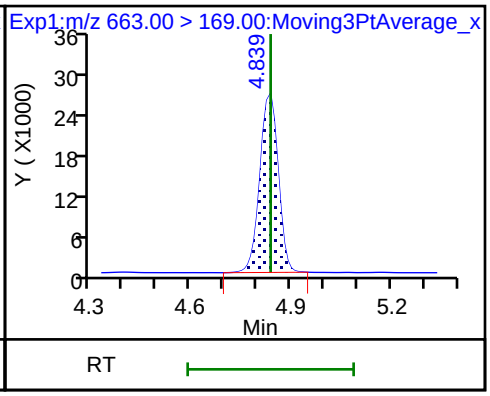

75 Perfluorododecanesulfonic acid (



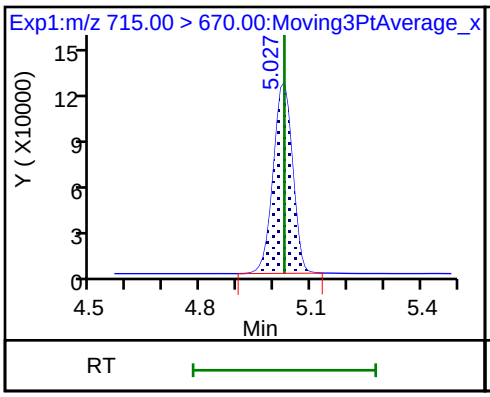

41 Perfluorotridecanoic acid



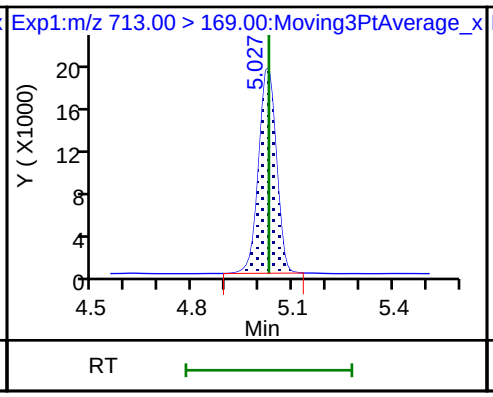

41 Perfluorotridecanoic acid



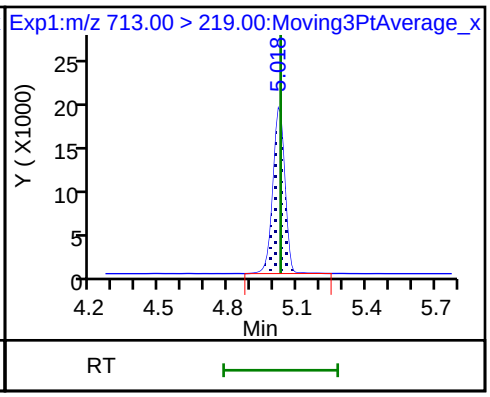

D 43 13C2 PFTeDA



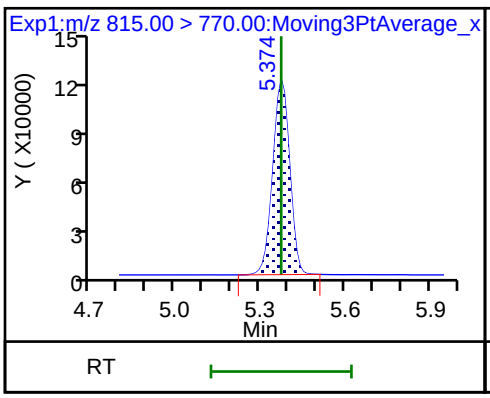

42 Perfluorotetradecanoic acid



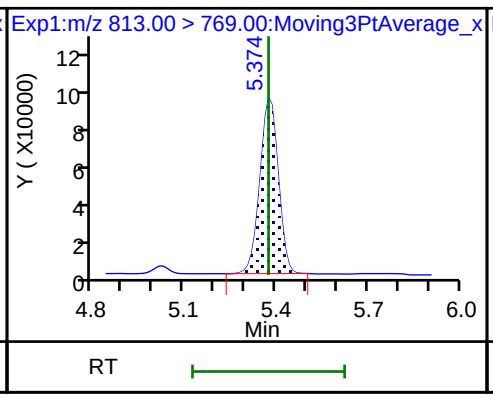

42 Perfluorotetradecanoic acid



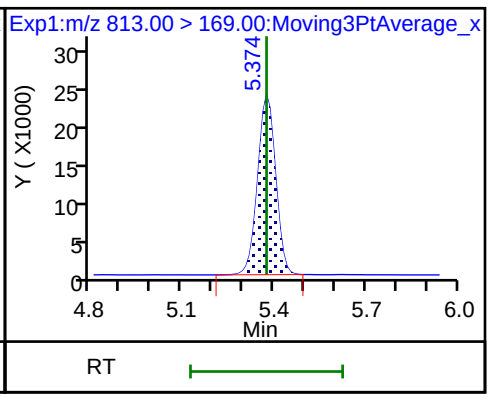

D 44 13C2 PFHxDA



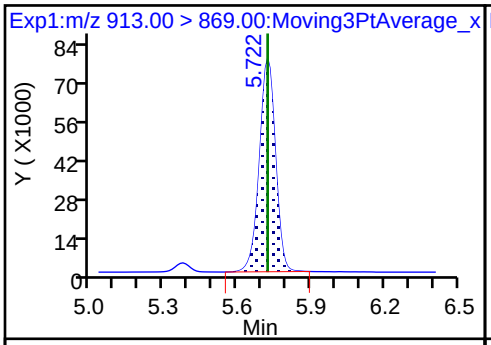

45 Perfluorohexadecanoic acid



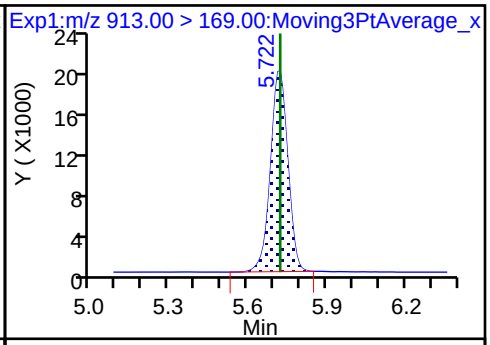

45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid




46 Perfluorooctadecanoic acid



Eurofins TestAmerica, Burlington

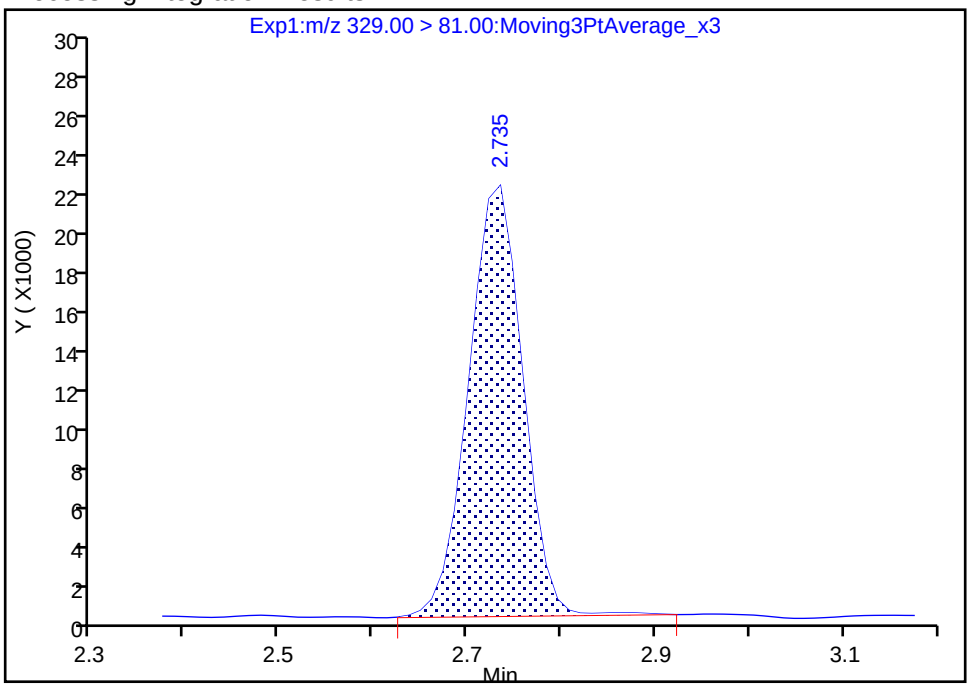
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL011.d | | | | |
| Injection Date: | 22-Dec-2020 13:13:03 | Instrument ID: | LC812 | | |
| Lims ID: | ICIS | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 11 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

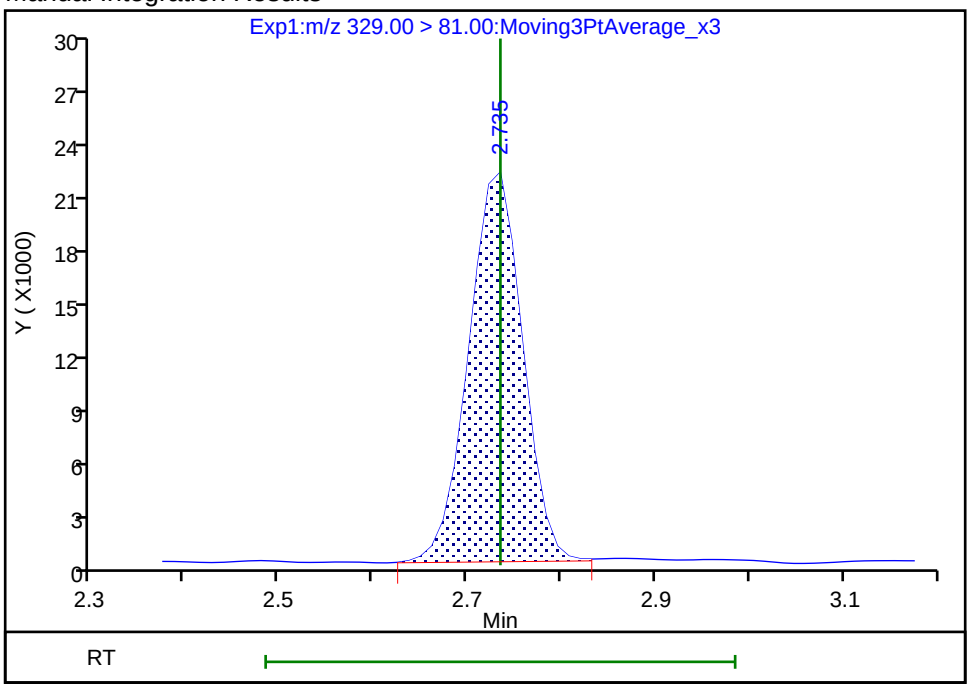
Processing Integration Results

RT: 2.73
Area: 86795
Amount: 1.148308
Amount Units: ng/ml




Manual Integration Results

RT: 2.73
Area: 86339
Amount: 1.137929
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:57:19
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

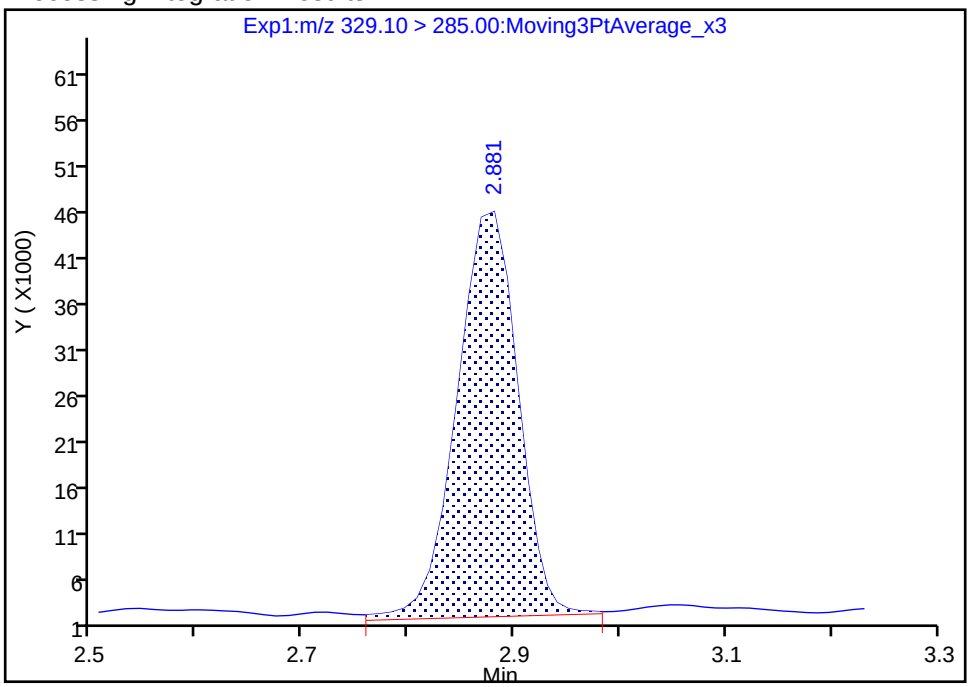
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| Injection Date: | 22-Dec-2020 13:13:03 | Instrument ID: | LC812 | | |
| Lims ID: | ICIS | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 11 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

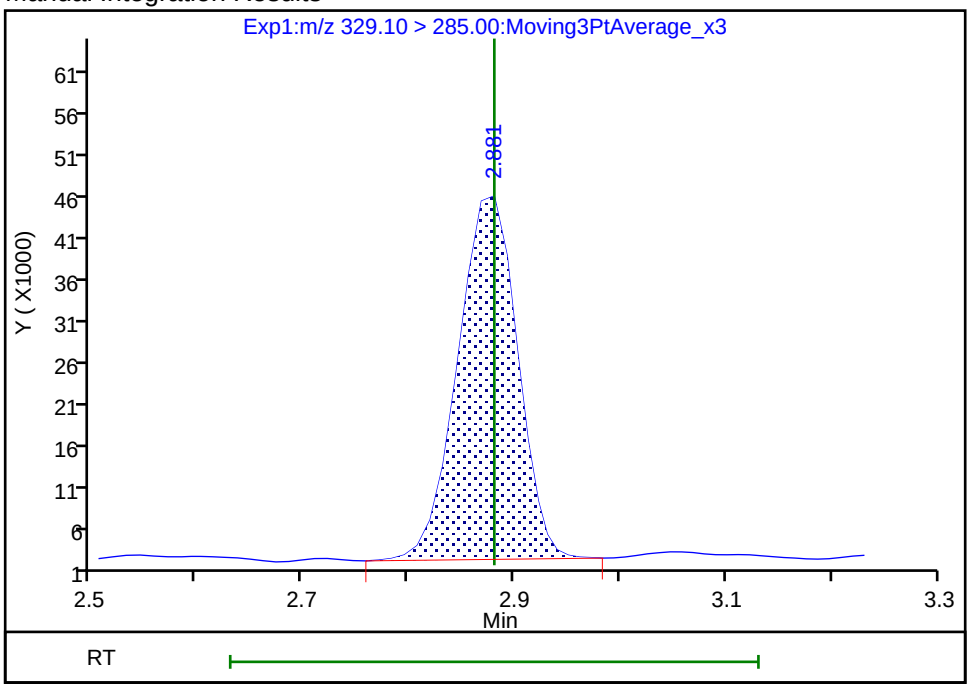
Processing Integration Results

RT: 2.88
Area: 175050
Amount: 1.025742
Amount Units: ng/ml




Manual Integration Results

RT: 2.88
Area: 169678
Amount: 0.915115
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:57:08
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

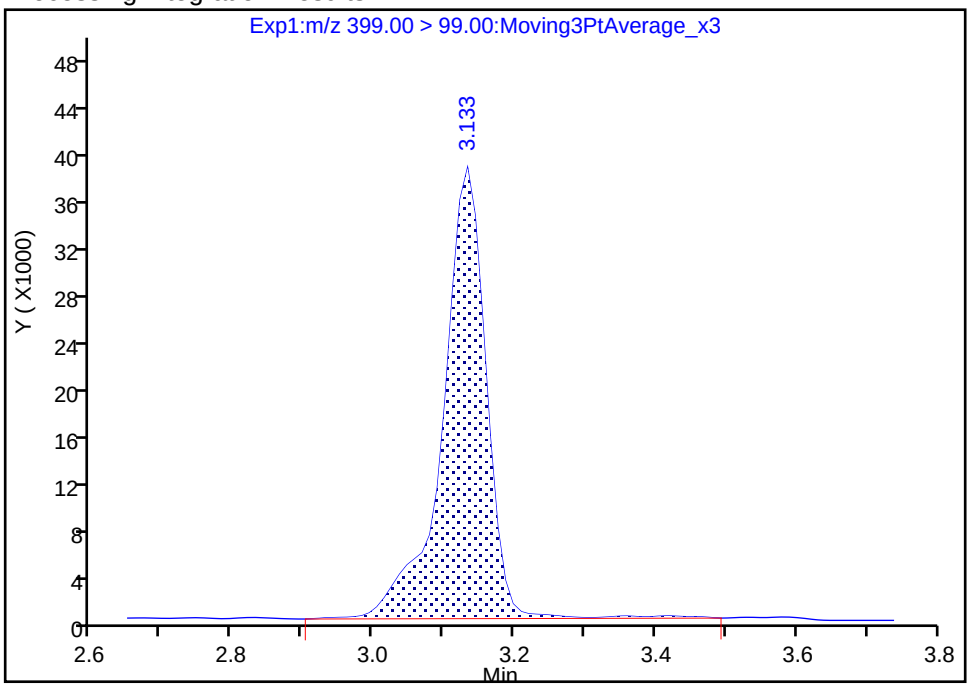
Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL011.d
Injection Date: 22-Dec-2020 13:13:03 Instrument ID: LC812
Lims ID: ICIS
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 11
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

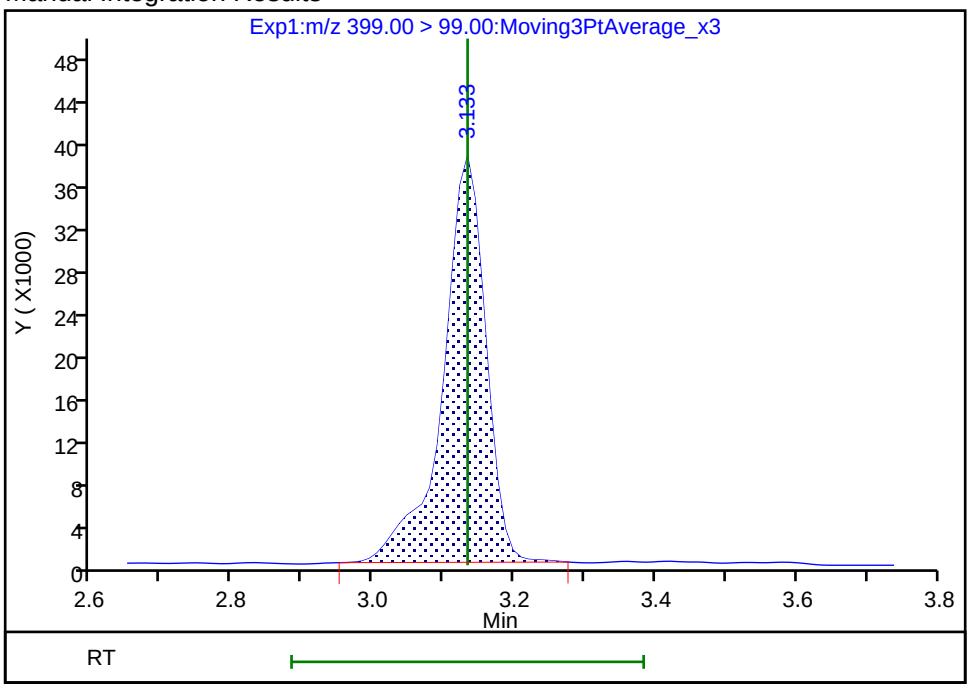
Processing Integration Results

RT: 3.13
Area: 166074
Amount: 0.928046
Amount Units: ng/ml




Manual Integration Results

RT: 3.13
Area: 161822
Amount: 0.876218
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:56:59
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

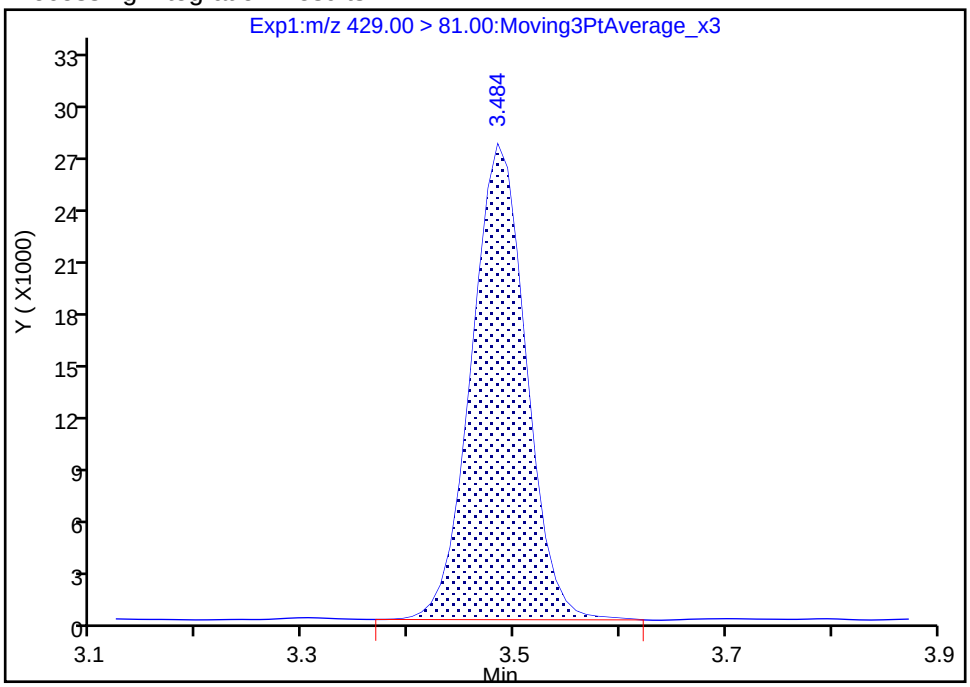
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL011.d | | | | |
| Injection Date: | 22-Dec-2020 13:13:03 | Instrument ID: | LC812 | | |
| Lims ID: | ICIS | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 11 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

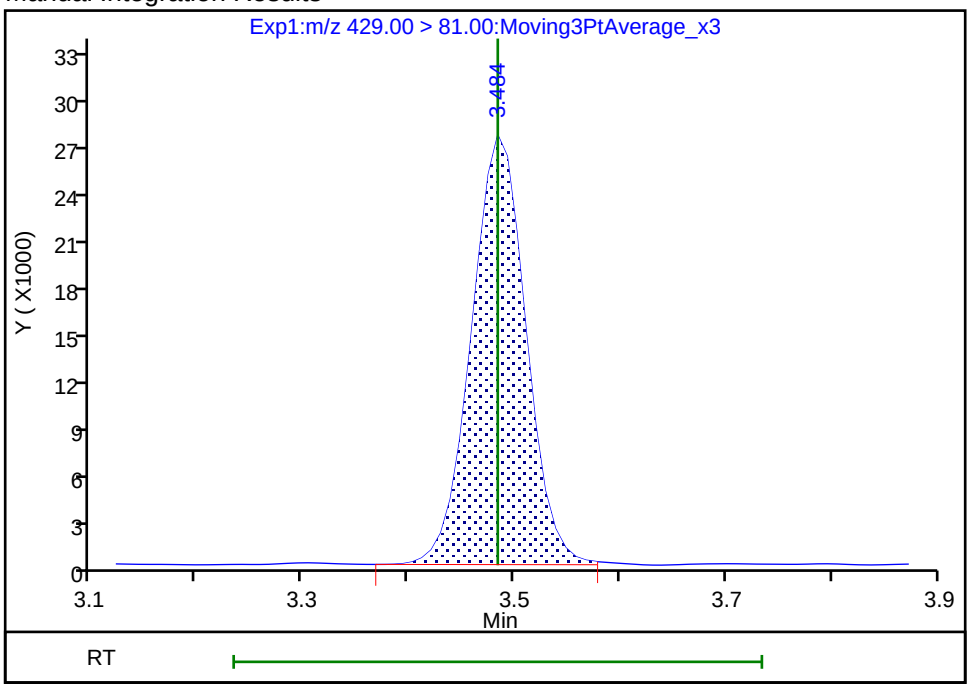
Processing Integration Results

RT: 3.48
Area: 97196
Amount: 1.150674
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 96952
Amount: 1.147595
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:56:46
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

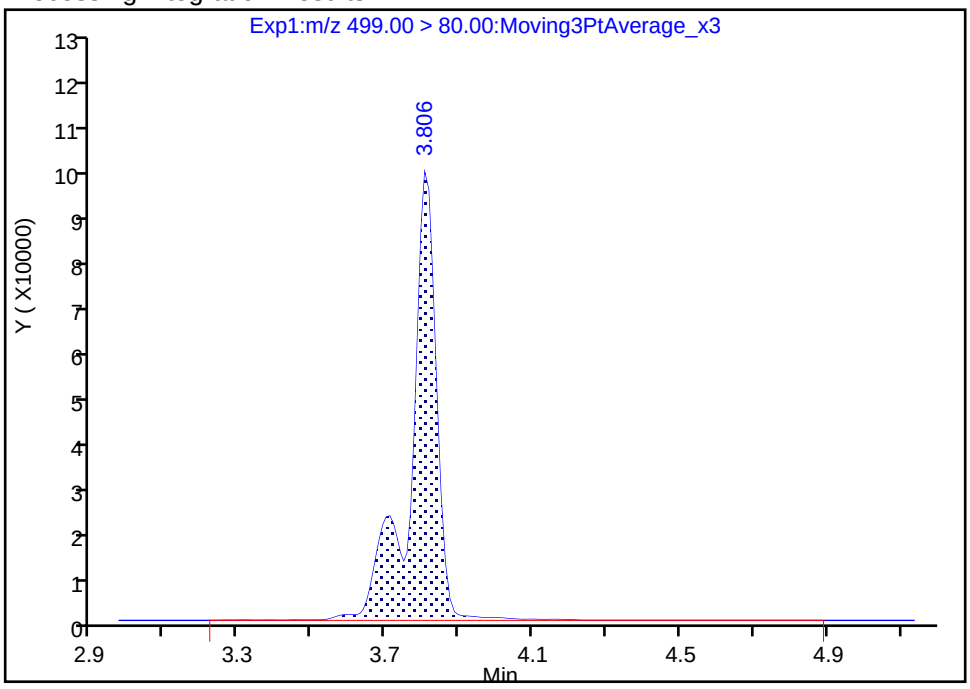
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL011.d | | | | |
| Injection Date: | 22-Dec-2020 13:13:03 | Instrument ID: | LC812 | | |
| Lims ID: | ICIS | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 11 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

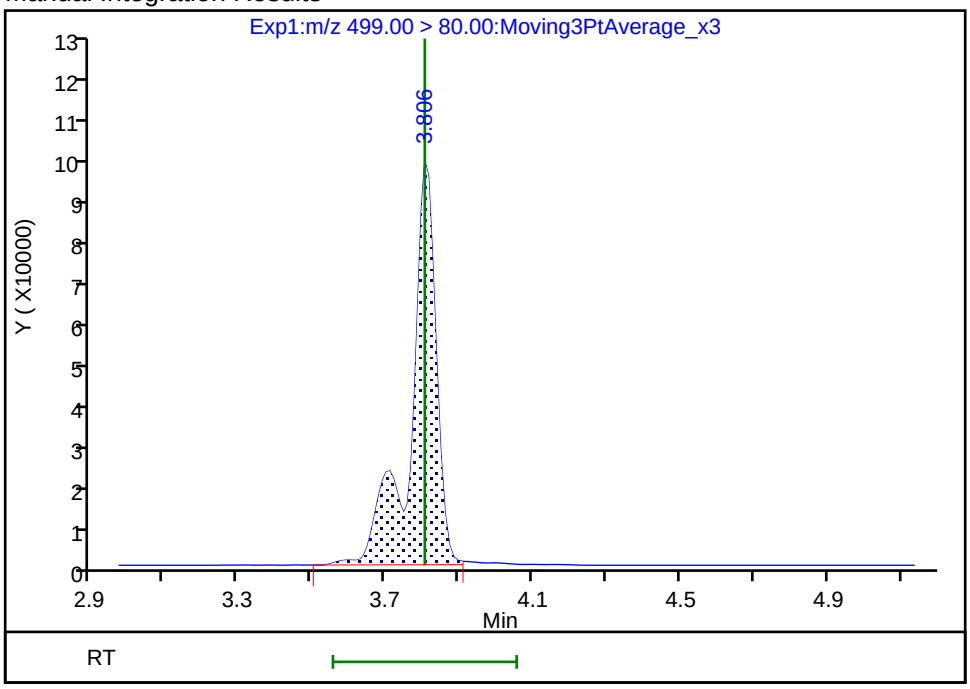
Processing Integration Results

RT: 3.81
Area: 472976
Amount: 0.918920
Amount Units: ng/ml




Manual Integration Results

RT: 3.81
Area: 463174
Amount: 0.868208
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:56:27

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

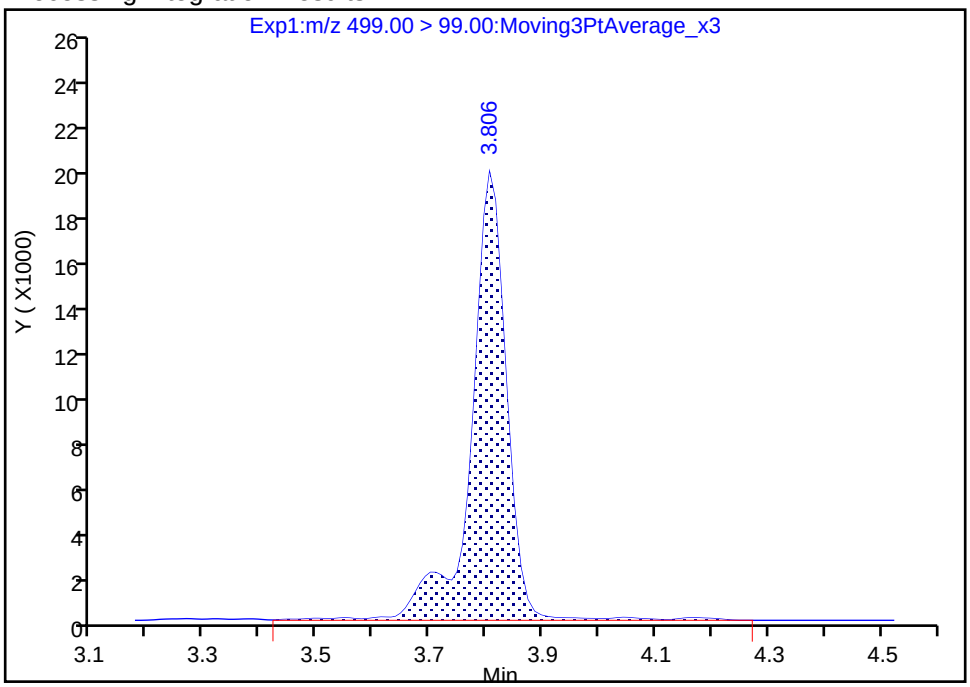
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL011.d | | | | |
| Injection Date: | 22-Dec-2020 13:13:03 | Instrument ID: | LC812 | | |
| Lims ID: | ICIS | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 11 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

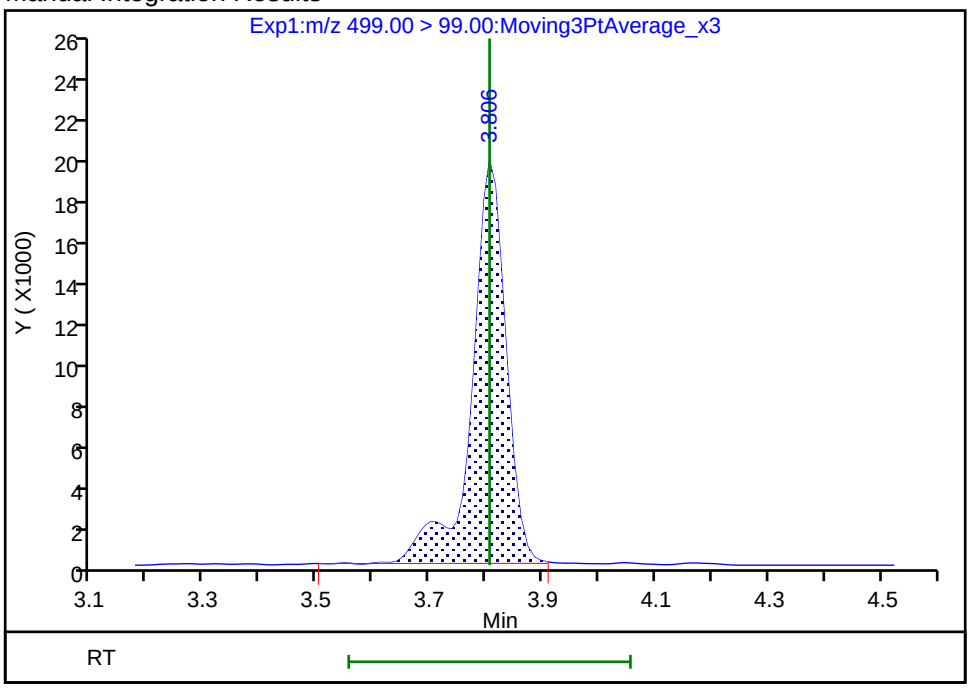
Processing Integration Results

RT: 3.81
Area: 85844
Amount: 0.918920
Amount Units: ng/ml




Manual Integration Results

RT: 3.81
Area: 82037
Amount: 0.868208
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:56:31

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

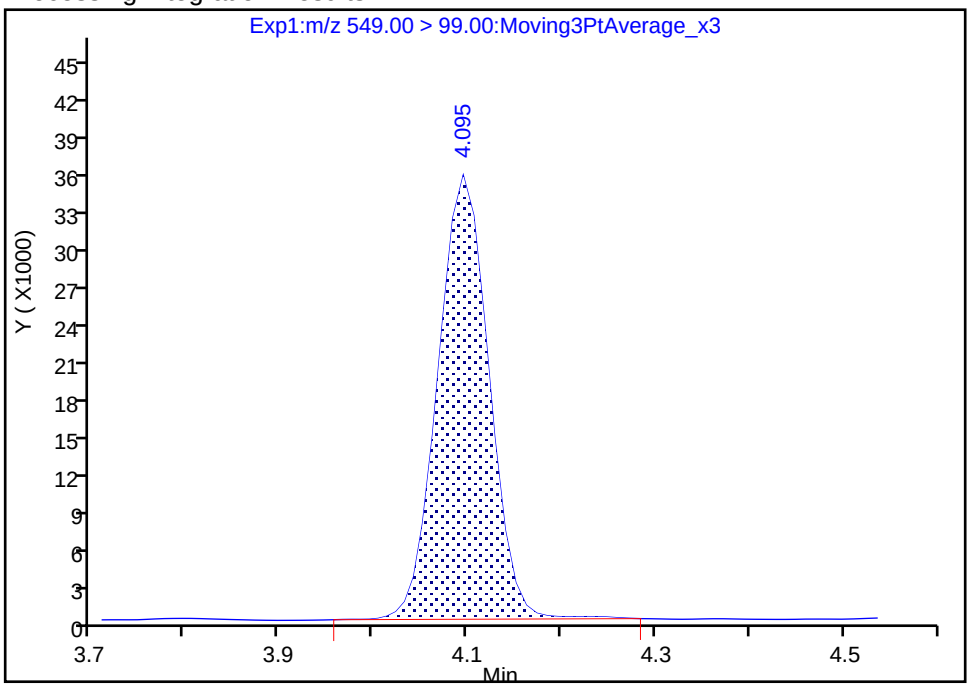
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL011.d | | | | |
| Injection Date: | 22-Dec-2020 13:13:03 | Instrument ID: | LC812 | | |
| Lims ID: | ICIS | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 11 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

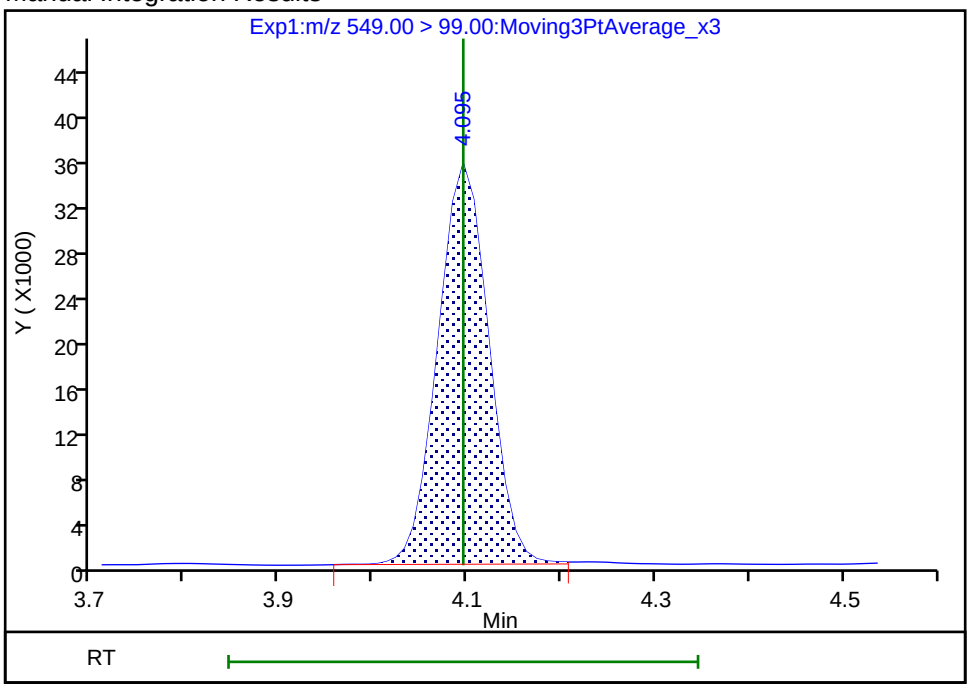
Processing Integration Results

RT: 4.10
Area: 134901
Amount: 0.905222
Amount Units: ng/ml




Manual Integration Results

RT: 4.10
Area: 134385
Amount: 0.857723
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:56:07

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

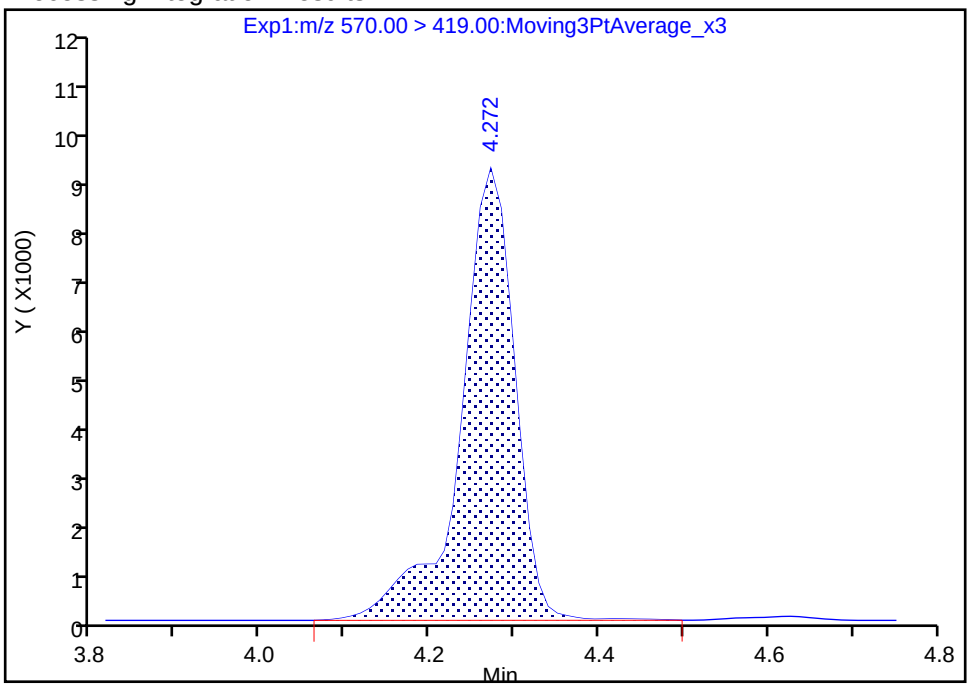
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL011.d | | | | |
| Injection Date: | 22-Dec-2020 13:13:03 | Instrument ID: | LC812 | | |
| Lims ID: | ICIS | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 11 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

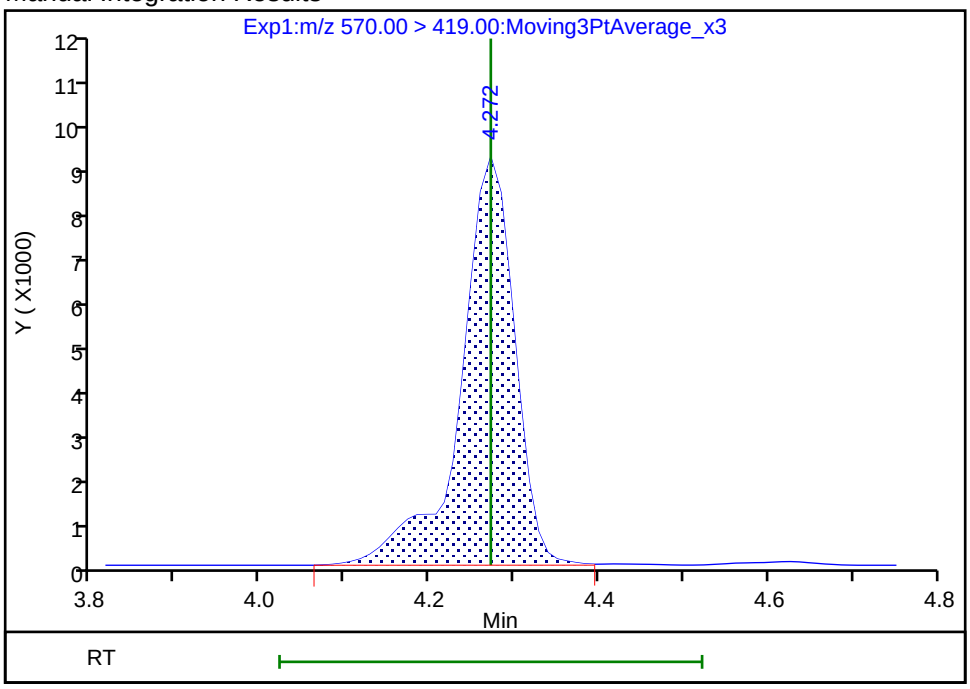
Processing Integration Results

RT: 4.27
Area: 38154
Amount: 1.017971
Amount Units: ng/ml




Manual Integration Results

RT: 4.27
Area: 38043
Amount: 1.016468
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:55:55
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

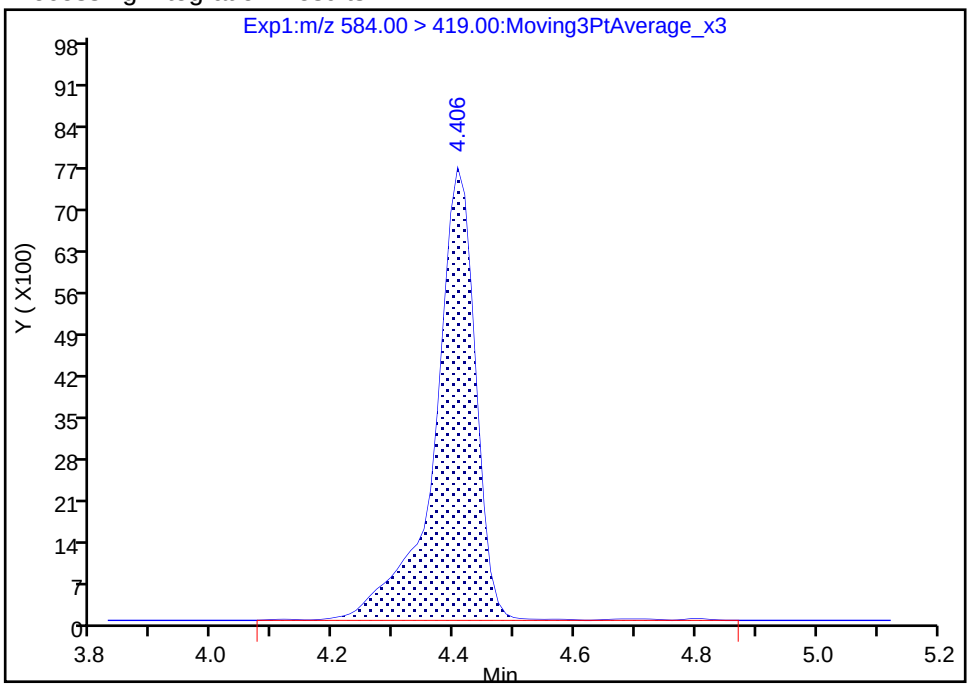
Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL011.d
Injection Date: 22-Dec-2020 13:13:03 Instrument ID: LC812
Lims ID: ICIS
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 11
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

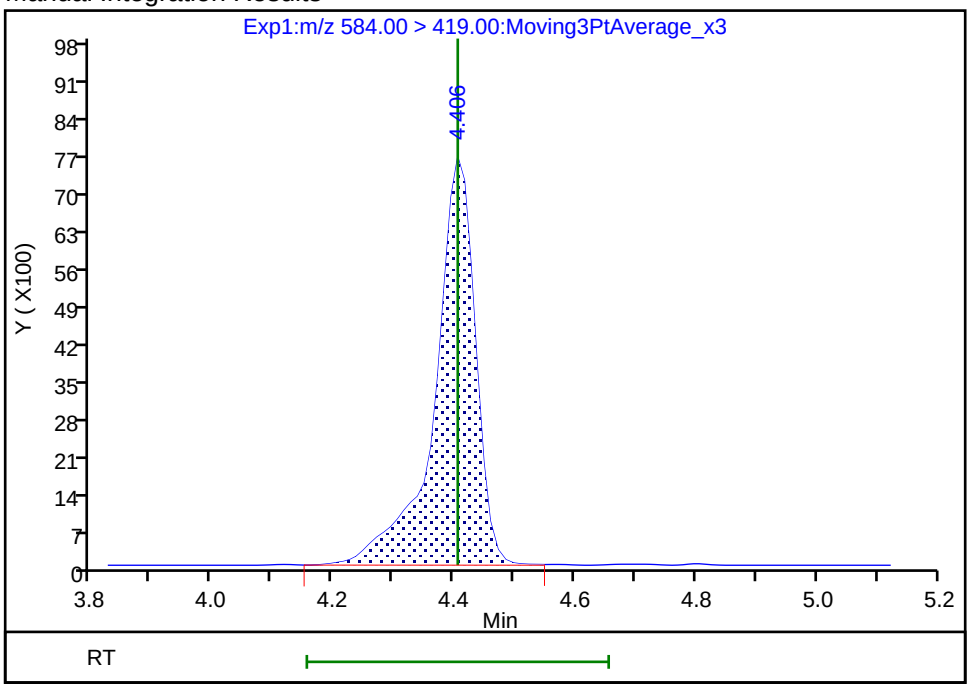
Processing Integration Results

RT: 4.41
Area: 36100
Amount: 0.951686
Amount Units: ng/ml




Manual Integration Results

RT: 4.41
Area: 35802
Amount: 0.957678
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:55:27
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

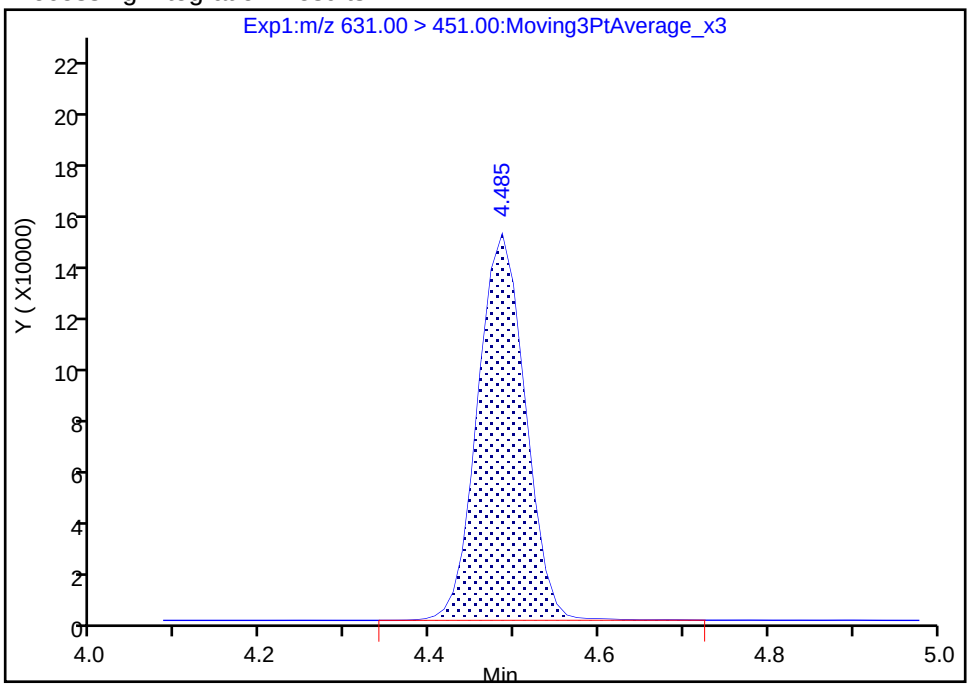
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL011.d | | | | |
| Injection Date: | 22-Dec-2020 13:13:03 | Instrument ID: | LC812 | | |
| Lims ID: | ICIS | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 11 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 66 11-Chloroeicosafluoro-3-oxaundec, CAS: 763051-92-9

Signal: 1

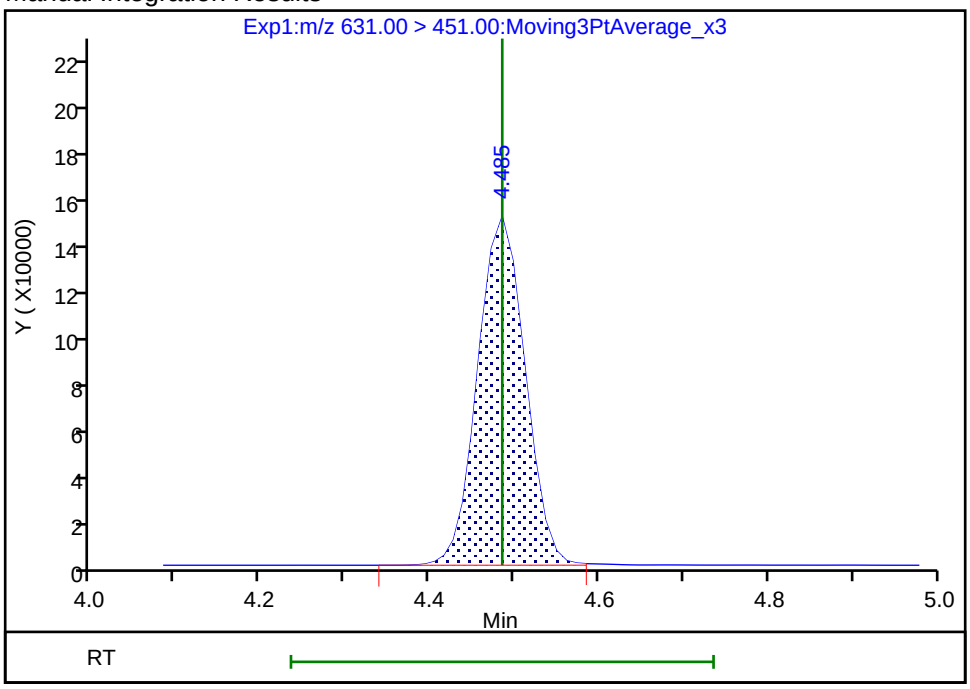
Processing Integration Results

RT: 4.49
Area: 585554
Amount: 0.956453
Amount Units: ng/ml




Manual Integration Results

RT: 4.49
Area: 584047
Amount: 0.945661
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 13:55:10
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

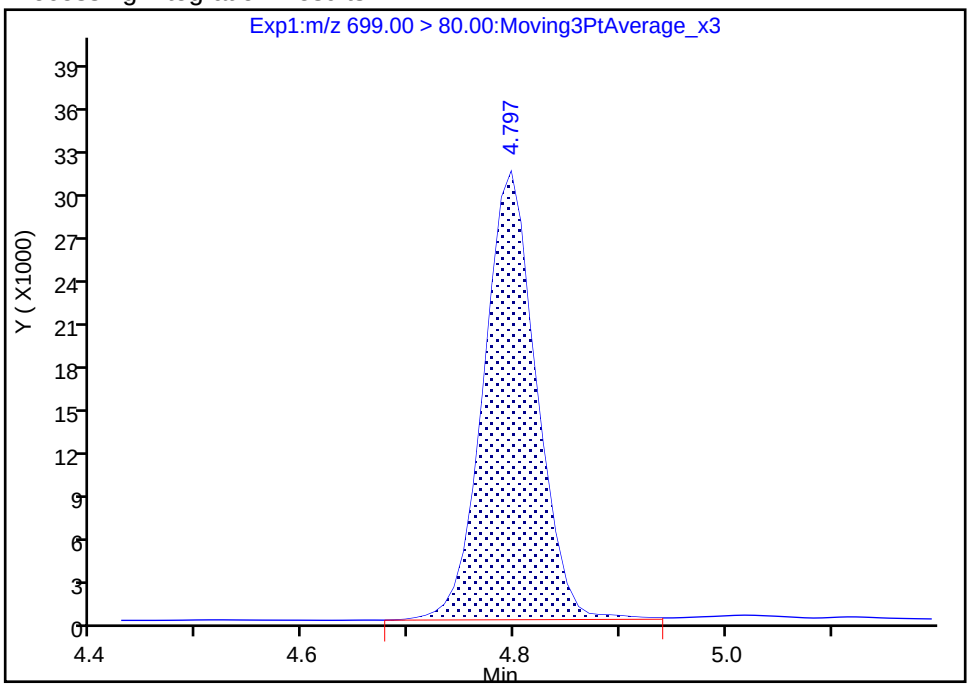
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL011.d | | | | |
| Injection Date: | 22-Dec-2020 13:13:03 | Instrument ID: | LC812 | | |
| Lims ID: | ICIS | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 11 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 75 Perfluorododecanesulfonic acid (, CAS: 79780-39-5

Signal: 1

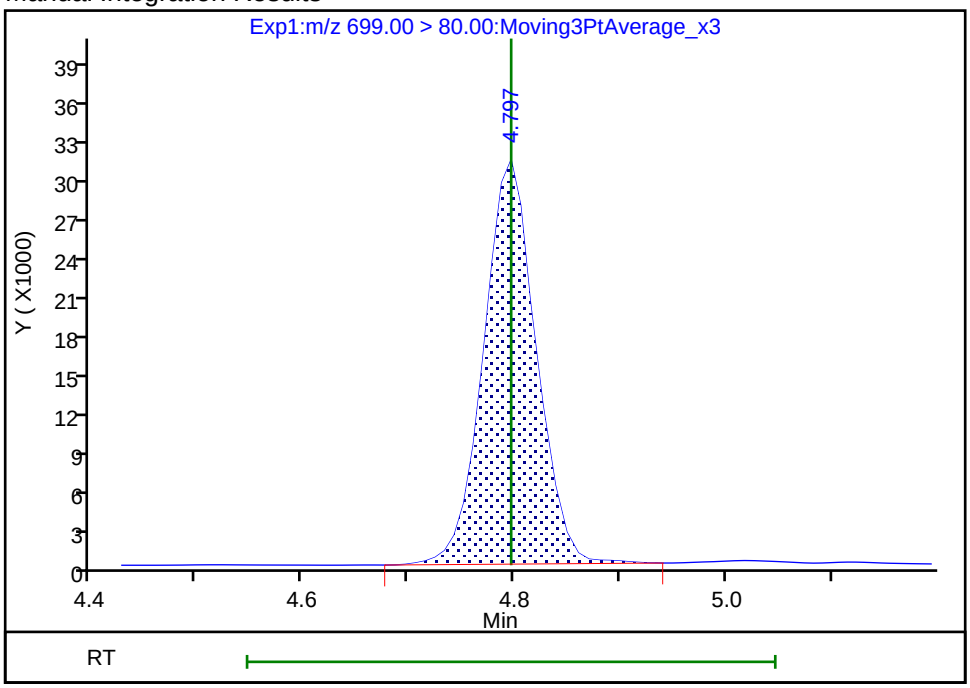
Processing Integration Results

RT: 4.80
Area: 107220
Amount: 0.917436
Amount Units: ng/ml




Manual Integration Results

RT: 4.80
Area: 106502
Amount: 0.912257
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:29:39
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Report Date: 22-Dec-2020 14:39:35 Chrom Revision: 2.3 09-Dec-2020 16:22:14

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL012.d
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 22-Dec-2020 13:21:21 ALS Bottle#: 6 Worklist Smp#: 12
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 200-0044184-012 Plate: 1 Rack: 1
Operator ID: lc812tech Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 22-Dec-2020 14:39:34 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1625

First Level Reviewer: deannd Date: 22-Dec-2020 14:07:02
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.089 | 2.091 | -0.002 | 0.598 | 1183081 | 1.23 | | 98.7 | 9506 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | |
| 212.90 > 169.00 | 2.089 | 2.091 | -0.002 | 1.000 | 2187518 | 2.31 | | 92.3 | 295 | |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.411 | 2.414 | -0.003 | 0.690 | 850273 | 1.23 | | 98.1 | 2895 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | M |
| 262.90 > 219.00 | 2.411 | 2.414 | -0.003 | 1.000 | 1757757 | 2.33 | | 93.3 | 67.8 | M |
| D 47 13C3 PFBS | | | | | | | | | | |
| 301.90 > 80.00 | 2.424 | 2.427 | -0.003 | 0.694 | 1027240 | 1.13 | | 96.9 | 180081 | |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | |
| 298.90 > 80.00 | 2.437 | 2.427 | 0.010 | 1.005 | 2100213 | 2.10 | Target=2.21 | 95.1 | 2803 | |
| 298.90 > 99.00 | 2.424 | 2.427 | -0.003 | 1.000 | 961927 | | 2.18(1.10-3.31) | 95.1 | 818 | |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | |
| 327.00 > 307.00 | 2.732 | 2.735 | -0.003 | 1.000 | 303490 | 2.27 | | 97.4 | 4444 | |
| D 60 M2-4:2 FTS | | | | | | | | | | M |
| 329.00 > 81.00 | 2.732 | 2.735 | -0.003 | 0.782 | 85003 | 1.12 | | 95.7 | 91.0 | M |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.768 | 2.771 | -0.003 | 0.793 | 894513 | 1.23 | | 98.5 | 3312 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | |
| 313.00 > 269.00 | 2.768 | 2.771 | -0.003 | 1.000 | 1839714 | 2.35 | Target=12.17 | 94.1 | 423 | |
| 313.00 > 119.00 | 2.768 | 2.771 | -0.003 | 1.000 | 154104 | | 11.94(6.09-18.26) | 94.1 | 252 | |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | |
| 349.00 > 80.00 | 2.768 | 2.771 | -0.003 | 0.884 | 1955608 | 2.22 | Target=3.32 | 94.5 | 2881 | |
| 349.00 > 99.00 | 2.768 | 2.771 | -0.003 | 0.884 | 582906 | | 3.35(1.66-4.98) | 94.5 | 848 | |
| 67 Perfluoro(2-propoxypropanoic) ac | | | | | | | | | | |
| 329.10 > 285.00 | 2.878 | 2.881 | -0.003 | 1.000 | 401085 | 2.28 | | 91.3 | 46.2 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 64 13C3 HFPO-DA | | | | | | | | | | |
| 332.10 > 287.00 | 2.878 | 2.881 | -0.003 | 0.824 | 158496 | 1.24 | | 99.1 | 927 | |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.133 | 3.133 | 0.0 | 0.897 | 794776 | 1.17 | | 99.0 | 2186 | |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.133 | 3.133 | 0.0 | 1.000 | 1650425 | 2.08 | Target=4.08 | 91.6 | 1134 | M |
| 399.00 > 99.00 | 3.133 | 3.133 | 0.0 | 1.000 | 403565 | | 4.09(2.04-6.11) | 91.6 | 384 | M |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.133 | 3.133 | 0.0 | 0.897 | 838035 | 1.20 | | 96.4 | 2374 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | |
| 363.00 > 319.00 | 3.143 | 3.133 | 0.010 | 1.003 | 1824848 | 2.49 | Target=3.70 | 99.7 | 409 | |
| 363.00 > 169.00 | 3.143 | 3.133 | 0.010 | 1.003 | 477628 | | 3.82(1.85-5.56) | 99.7 | 918 | |
| 77 DONA | | | | | | | | | | |
| 377.00 > 251.00 | 3.175 | 3.176 | -0.001 | 0.835 | 3554808 | 2.40 | Target=2.47 | 102 | 2378 | |
| 377.00 > 85.00 | 3.175 | 3.176 | -0.001 | 0.835 | 1382083 | | 2.57(1.23-3.70) | 102 | 1182 | |
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | |
| 449.00 > 80.00 | 3.483 | 3.484 | -0.001 | 0.916 | 1352437 | 2.26 | Target=5.85 | 95.0 | 5671 | |
| 449.00 > 99.00 | 3.483 | 3.484 | -0.001 | 0.916 | 226210 | | 5.98(2.93-8.78) | 95.0 | 974 | |
| D 12 M2-6:2 FTS | | | | | | | | | | |
| 429.00 > 81.00 | 3.483 | 3.484 | -0.001 | 0.997 | 97655 | 1.15 | | 97.0 | 471 | |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | |
| 427.00 > 407.00 | 3.483 | 3.484 | -0.001 | 1.000 | 214702 | 2.35 | | 99.0 | 1811 | |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.492 | 3.493 | -0.001 | 1.000 | 862938 | 1.22 | | 97.7 | 2325 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.492 | 3.493 | -0.001 | | 892433 | 1.25 | | | 2279 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | M |
| 413.00 > 369.00 | 3.492 | 3.493 | -0.001 | 1.000 | 1777820 | 2.38 | Target=2.58 | 95.0 | 367 | |
| 413.00 > 169.00 | 3.492 | 3.493 | -0.001 | 1.000 | 690547 | | 2.57(1.29-3.87) | 95.0 | 1154 | M |
| D 18 13C4 PFOS | | | | | | | | | | |
| 503.00 > 80.00 | 3.804 | 3.806 | -0.002 | 1.089 | 529467 | 1.14 | | 95.1 | 1322 | |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.804 | 3.806 | -0.002 | 1.000 | 1114751 | 2.19 | Target=5.56 | 94.3 | 1348 | M |
| 499.00 > 99.00 | 3.804 | 3.806 | -0.002 | 1.000 | 198425 | | 5.62(2.78-8.34) | 94.3 | 627 | M |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.825 | 3.826 | -0.001 | 1.095 | 756323 | 1.21 | | 97.1 | 3684 | |
| 20 Perfluorononanoic acid | | | | | | | | | | |
| 463.00 > 419.00 | 3.825 | 3.826 | -0.001 | 1.000 | 1571226 | 2.35 | Target=6.87 | 93.8 | 259 | |
| 463.00 > 169.00 | 3.825 | 3.826 | -0.001 | 1.000 | 229840 | | 6.84(3.43-10.30) | 93.8 | 1752 | |
| 69 9-Chlorohexadecafluoro-3-oxanona | | | | | | | | | | |
| 531.00 > 351.00 | 3.974 | 3.967 | 0.007 | 1.045 | 1341633 | 2.36 | | 101 | 3383 | |
| 68 Perfluorononanesulfonic acid | | | | | | | | | | |
| 549.00 > 80.00 | 4.093 | 4.095 | -0.002 | 1.076 | 862047 | 2.27 | Target=2.78 | 94.5 | 2392 | |
| 549.00 > 99.00 | 4.093 | 4.095 | -0.002 | 1.076 | 311060 | | 2.77(1.39-4.17) | 94.5 | 1009 | |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.126 | 4.129 | -0.003 | 1.182 | 760056 | 1.28 | | 102 | 3401 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 24 Perfluorodecanoic acid | | | | | | | | | | |
| 513.00 > 469.00 | 4.126 | 4.129 | -0.003 | 1.000 | 1443205 | 2.30 | Target=9.03 | 92.1 | 841 | |
| 513.00 > 169.00 | 4.126 | 4.129 | -0.003 | 1.000 | 169912 | | 8.49(4.51-13.54) | 92.1 | 930 | |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | |
| 527.00 > 507.00 | 4.137 | 4.140 | -0.003 | 1.000 | 138394 | 2.40 | | 100 | 1447 | |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.137 | 4.140 | -0.003 | 1.185 | 101608 | 1.16 | | 97.0 | 466 | |
| D 21 13C8 FOSA | | | | | | | | | | |
| 506.00 > 78.00 | 4.215 | 4.207 | 0.008 | 1.207 | 1040920 | 1.19 | | 95.1 | 3186 | |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | |
| 498.00 > 78.00 | 4.215 | 4.207 | 0.008 | 1.000 | 2150057 | 2.58 | | 103 | 4654 | |
| D 27 d3-NMeFOSAA | | | | | | | | | | |
| 573.00 > 419.00 | 4.268 | 4.272 | -0.004 | 1.222 | 52266 | 1.21 | | 96.7 | 51.5 | |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | |
| 570.00 > 419.00 | 4.268 | 4.272 | -0.004 | 1.000 | 94320 | 2.54 | | 102 | 737 | |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | |
| 599.00 > 80.00 | 4.358 | 4.362 | -0.004 | 1.146 | 730691 | 2.41 | Target=2.76 | 100 | 2833 | |
| 599.00 > 99.00 | 4.358 | 4.362 | -0.004 | 1.146 | 275358 | | 2.65(1.38-4.14) | 100 | 1107 | |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.391 | 4.384 | 0.007 | 1.257 | 601281 | 1.23 | | 98.3 | 3472 | |
| 31 Perfluoroundecanoic acid | | | | | | | | | | |
| 563.00 > 519.00 | 4.391 | 4.395 | -0.004 | 1.000 | 1201956 | 2.45 | Target=8.02 | 98.0 | 427 | |
| 563.00 > 169.00 | 4.391 | 4.395 | -0.004 | 1.000 | 148688 | | 8.08(4.01-12.03) | 98.0 | 1524 | |
| D 32 d5-NEtFOSAA | | | | | | | | | | |
| 589.00 > 419.00 | 4.402 | 4.395 | 0.007 | 1.261 | 49976 | 1.20 | | 95.7 | 418 | |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.402 | 4.406 | -0.004 | 1.000 | 96074 | 2.60 | | 104 | 738 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | |
| 631.00 > 451.00 | 4.480 | 4.485 | -0.005 | 1.178 | 1357763 | 2.30 | | 97.7 | 2955 | |
| D 36 13C2 PFDoA | | | | | | | | | | |
| 615.00 > 570.00 | 4.622 | 4.626 | -0.004 | 1.323 | 623891 | 1.21 | | 96.6 | 2594 | |
| 37 Perfluorododecanoic acid | | | | | | | | | | |
| 613.00 > 569.00 | 4.622 | 4.626 | -0.004 | 1.000 | 1310849 | 2.39 | Target=6.85 | 95.5 | 318 | |
| 613.00 > 169.00 | 4.622 | 4.626 | -0.004 | 1.000 | 198640 | | 6.60(3.42-10.27) | 95.5 | 2140 | |
| 74 1H,1H,2H,2H-perfluorododecanesul | | | | | | | | | | |
| 627.00 > 607.00 | 4.642 | 4.637 | 0.005 | 1.122 | 72297 | 2.43 | | 101 | 1626 | |
| 75 Perfluorododecanesulfonic acid ( | | | | | | | | | | M |
| 699.00 > 80.00 | 4.792 | 4.797 | -0.005 | 1.260 | 244860 | 2.20 | Target=0.53 | 90.7 | 659 | M |
| 699.00 > 99.00 | 4.792 | 4.797 | -0.005 | 1.260 | 492584 | | 0.50(0.26-0.79) | 90.7 | 1772 | |
| 41 Perfluorotridecanoic acid | | | | | | | | | | |
| 663.00 > 619.00 | 4.834 | 4.839 | -0.005 | 1.046 | 1098559 | 2.47 | Target=4.48 | 98.6 | 391 | |
| 663.00 > 169.00 | 4.834 | 4.839 | -0.005 | 1.046 | 251357 | | 4.37(2.24-6.72) | 98.6 | 2262 | |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 5.024 | 5.027 | -0.003 | 1.439 | 469963 | 1.23 | | 98.4 | 3452 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | |
| 713.00 > 169.00 | 5.024 | 5.027 | -0.003 | 1.000 | 167971 | 2.41 | Target=0.99 | 96.4 | 1947 | |
| 713.00 > 219.00 | 5.024 | 5.027 | -0.003 | 1.000 | 158772 | | 1.06(0.50-1.49) | 96.4 | 2056 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.372 | 5.374 | -0.002 | 1.538 | 505699 | 1.24 | | 99.1 | 1951 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | |
| 813.00 > 769.00 | 5.372 | 5.374 | -0.002 | 1.000 | 948058 | 2.50 | Target=4.02 | 100 | 251 | |
| 813.00 > 169.00 | 5.372 | 5.374 | -0.002 | 1.000 | 224400 | | 4.22(2.01-6.02) | 100 | 2163 | |
| 46 Perfluorooctadecanoic acid | | | | | | | | | | |
| 913.00 > 869.00 | 5.720 | 5.722 | -0.002 | 1.065 | 885277 | 2.43 | Target=3.88 | 97.3 | 484 | |
| 913.00 > 169.00 | 5.720 | 5.722 | -0.002 | 1.065 | 226882 | | 3.90(1.94-5.82) | 97.3 | 1101 | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

## Reagents:

PFAS32NCIC5_00013 Amount Added: 100.00 Units: uL

Report Date: 22-Dec-2020 14:39:35 Chrom Revision: 2.3 09-Dec-2020 16:22:14

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL012.d

Injection Date: 22-Dec-2020 13:21:21 Instrument ID: LC812

Lims ID: IC

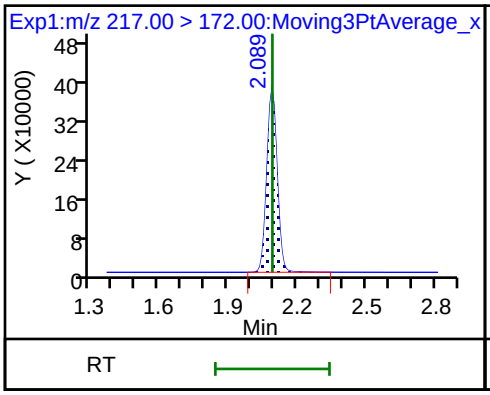
Client ID:

Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 12

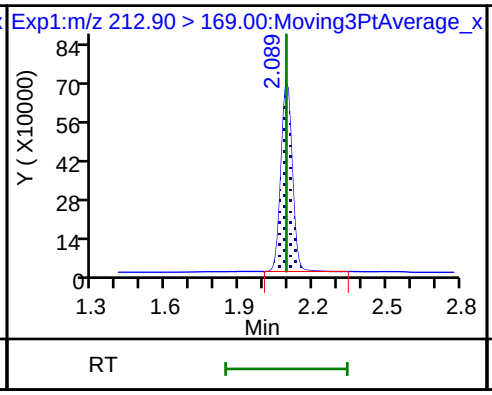
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

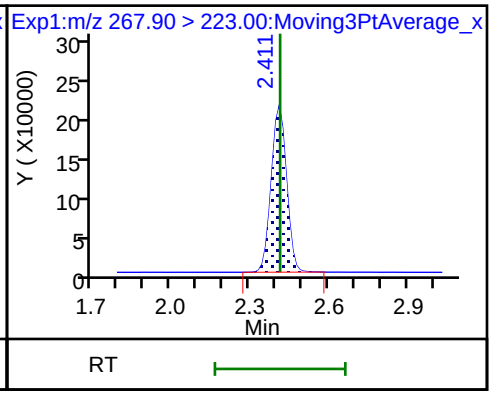
D 1 13C4 PFBA



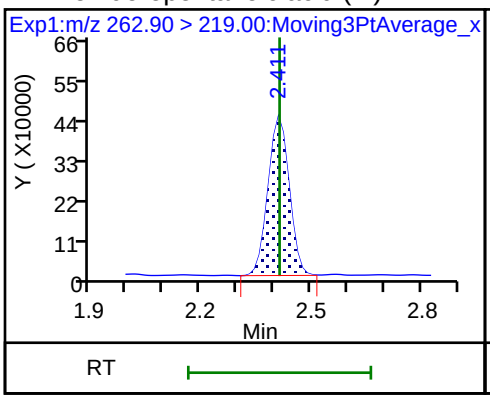

2 Perfluorobutanoic acid



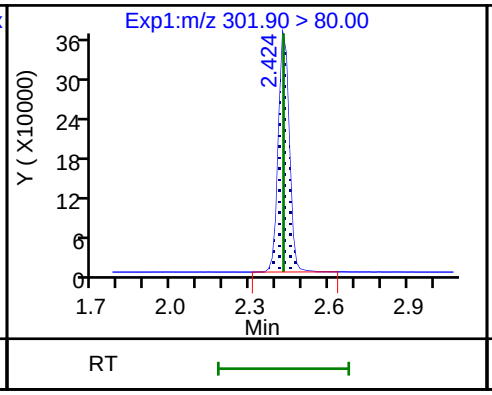

D 3 13C5 PFPeA



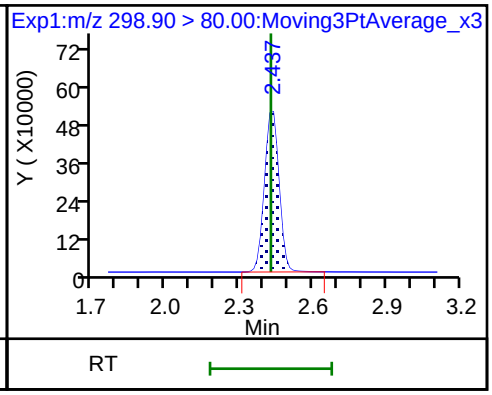

4 Perfluoropentanoic acid (M)



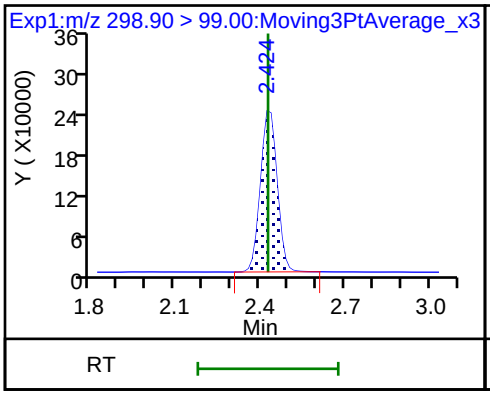

D 47 13C3 PFBS



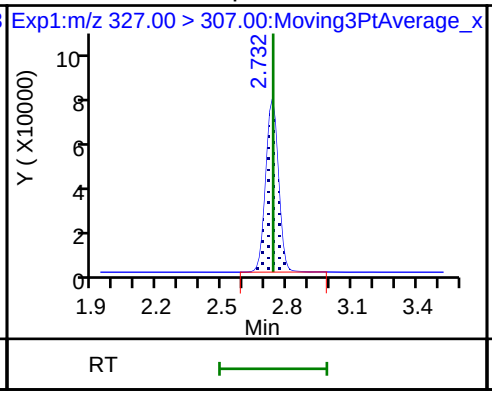

5 Perfluorobutanesulfonic acid



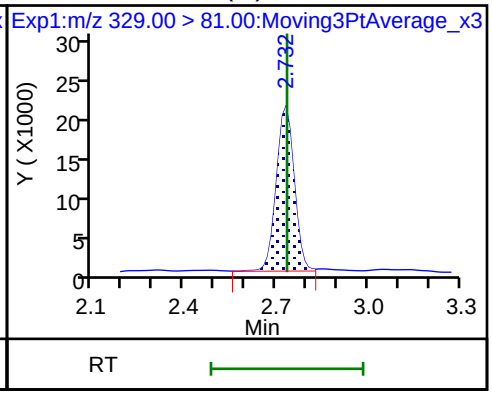

5 Perfluorobutanesulfonic acid



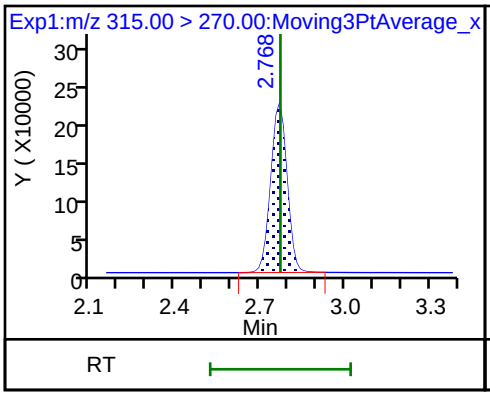

61 1H,1H,2H,2H-perfluorohexanesulfo



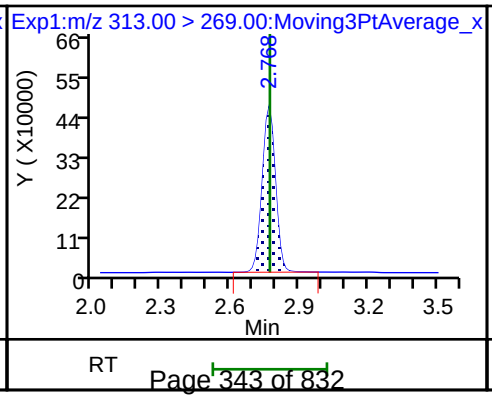

D 60 M2-4:2 FTS (M)



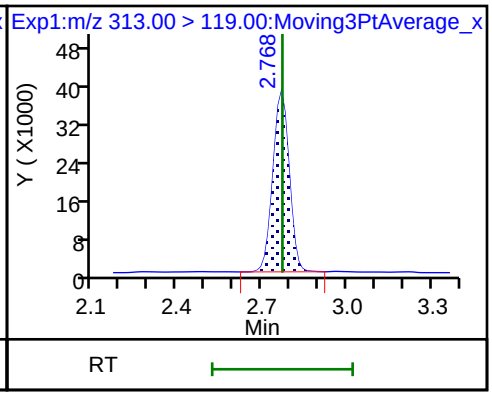

D 7 13C2 PFHxA



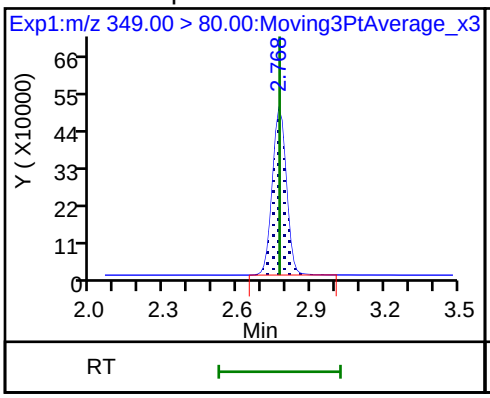

6 Perfluorohexanoic acid



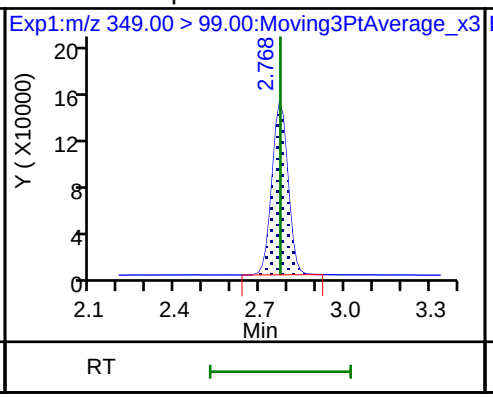

6 Perfluorohexanoic acid



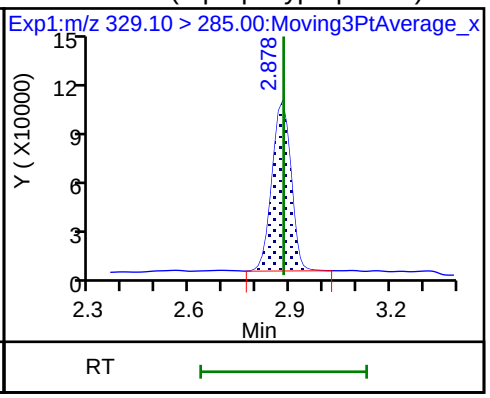
70 Perfluoropentanesulfonic acid



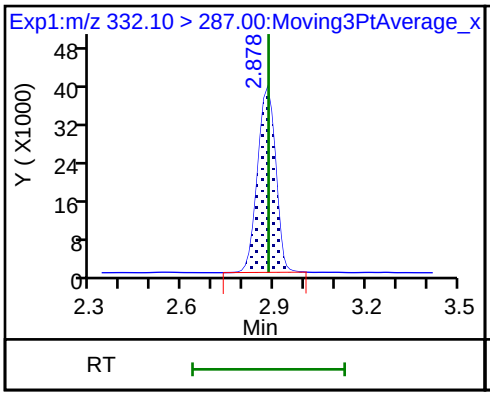

70 Perfluoropentanesulfonic acid



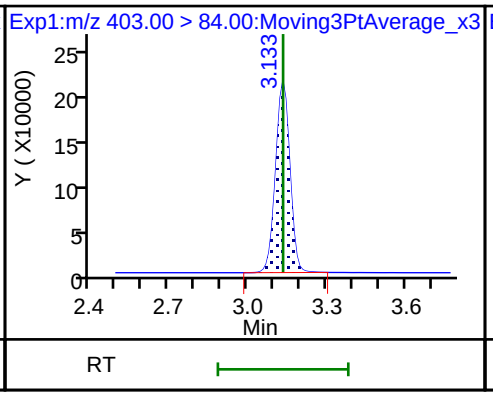

67 Perfluoro(2-propoxypropanoic) ac



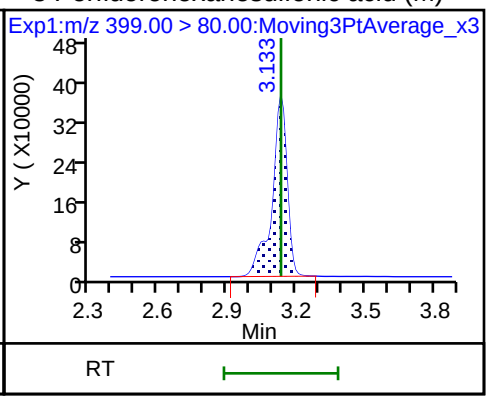

D 64 13C3 HFPO-DA



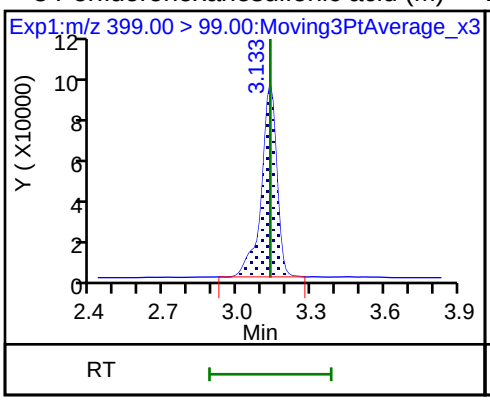

D 11 18O2 PFHxS



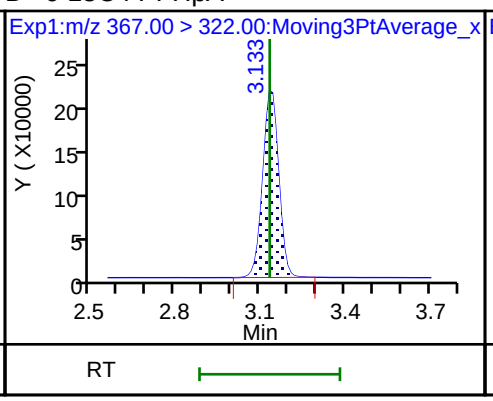

8 Perfluorohexanesulfonic acid (M)



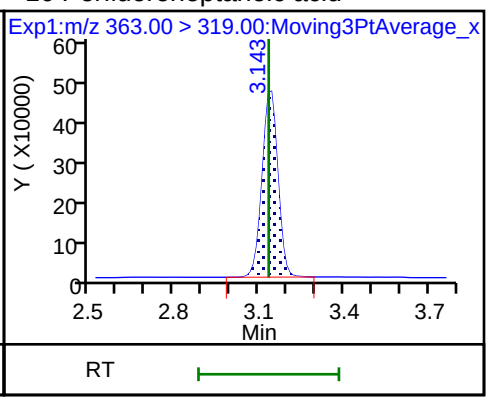

8 Perfluorohexanesulfonic acid (M)



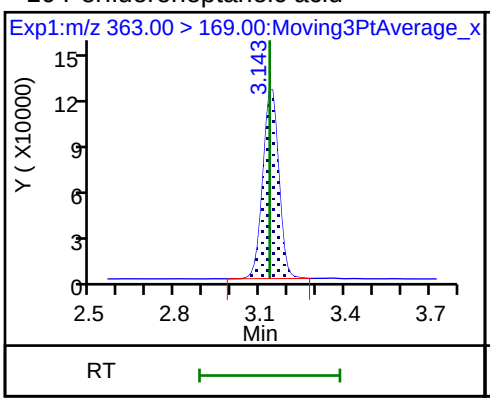

D 9 13C4 PFHpA



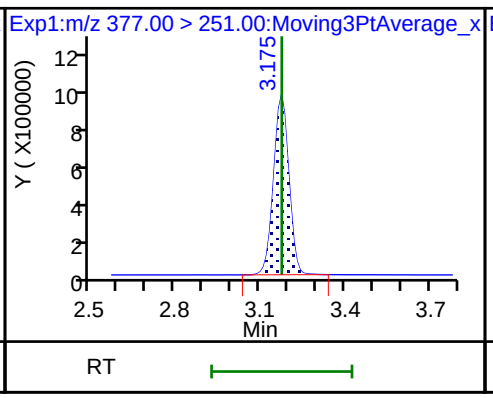

10 Perfluoroheptanoic acid



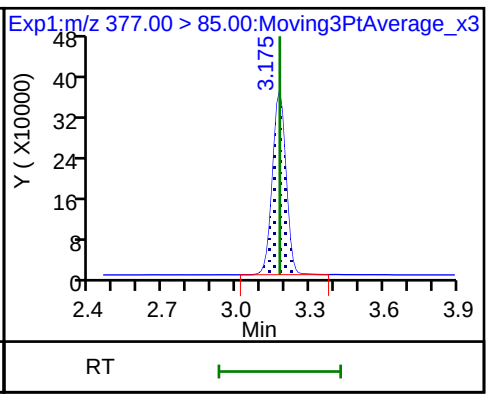

10 Perfluoroheptanoic acid



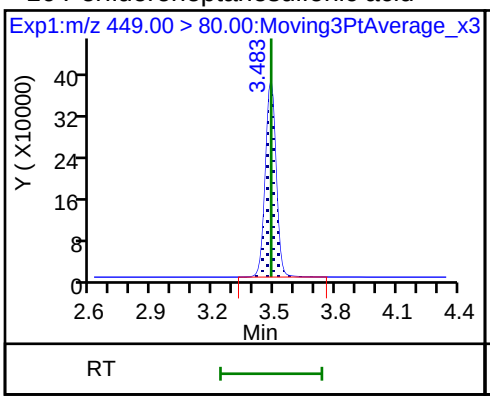

77 DONA



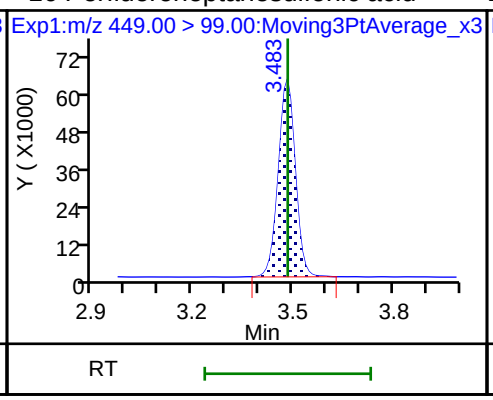

77 DONA



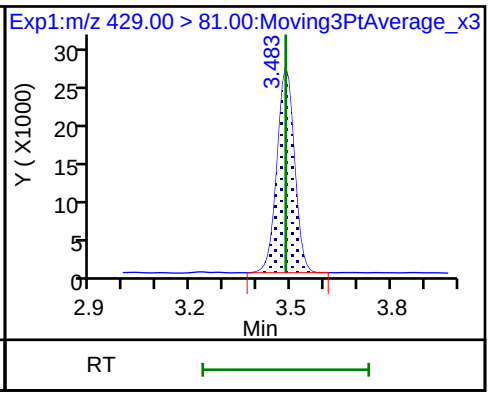
16 Perfluoroheptanesulfonic acid



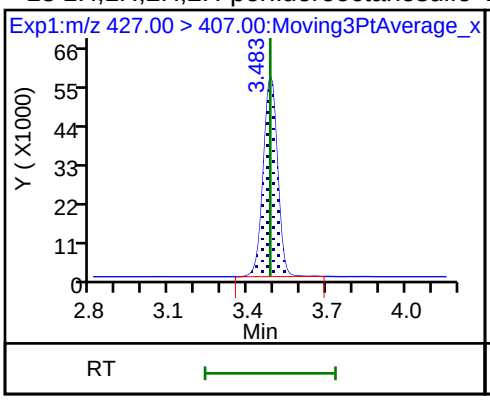

16 Perfluoroheptanesulfonic acid



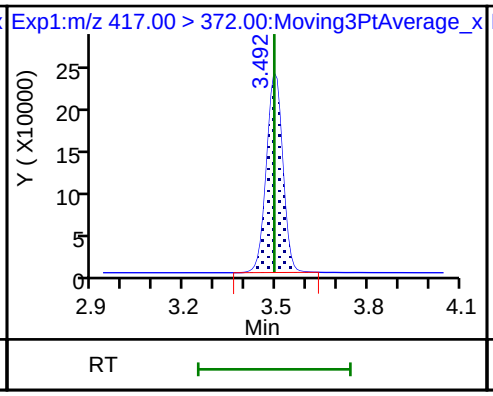

D 12 M2-6:2 FTS



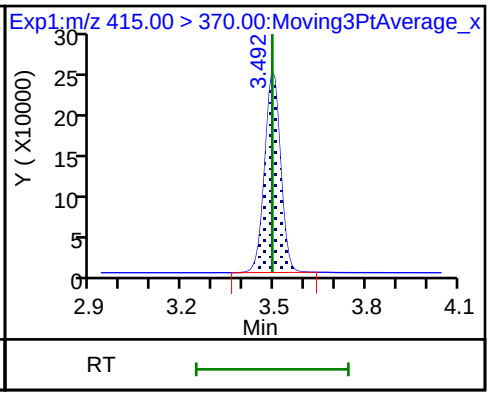

13 1H,1H,2H,2H-perfluorooctanesulfo



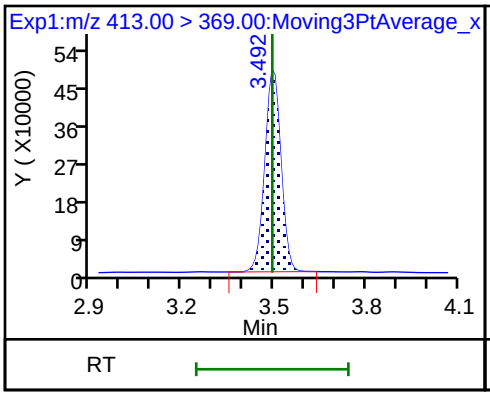

D 14 13C4 PFOA



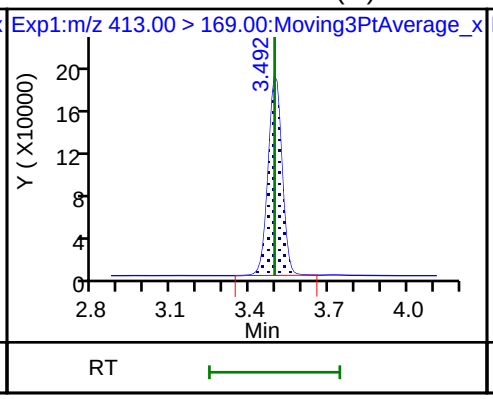

* 62 13C2 PFOA



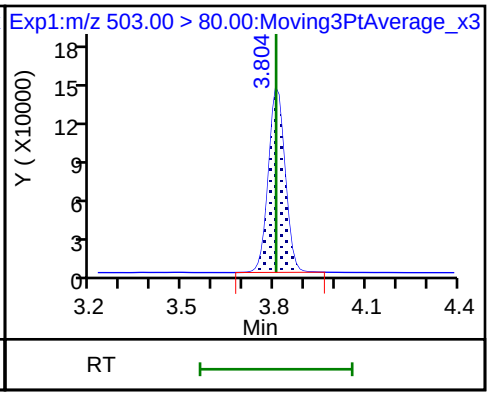

15 Perfluorooctanoic acid



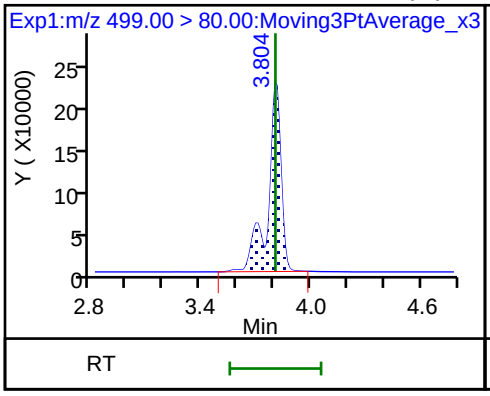

15 Perfluorooctanoic acid (M)



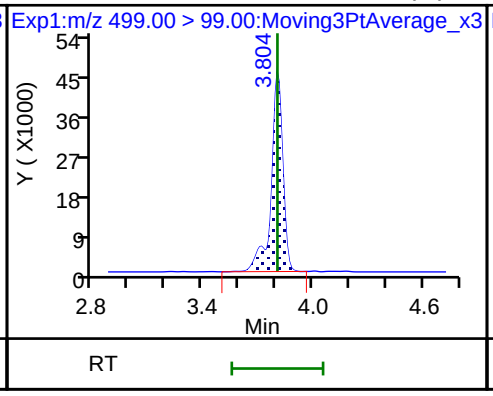

D 18 13C4 PFOS



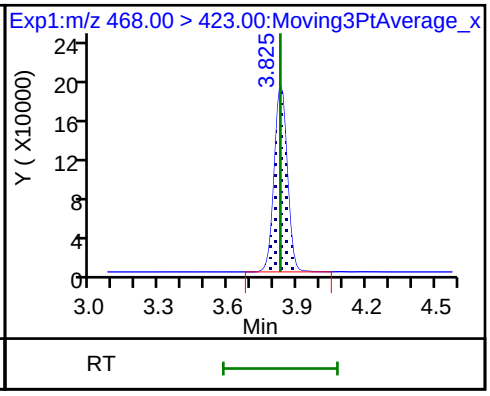

17 Perfluorooctanesulfonic acid (M)



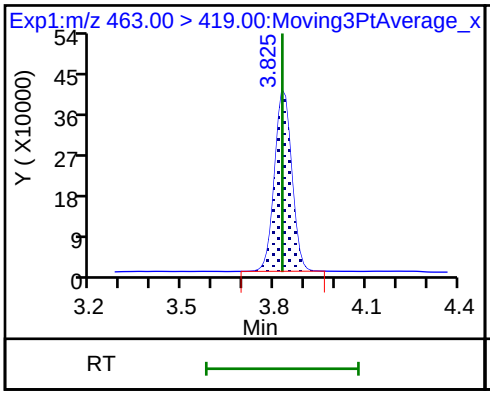

17 Perfluorooctanesulfonic acid (M)



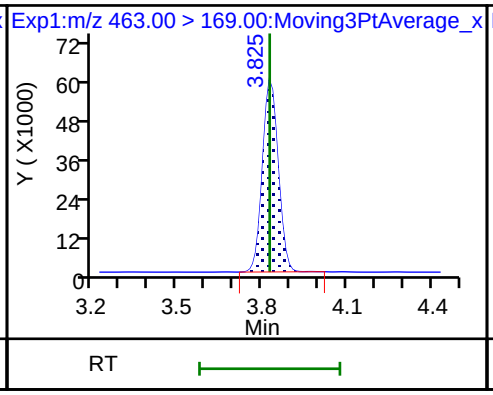

D 19 13C5 PFNA



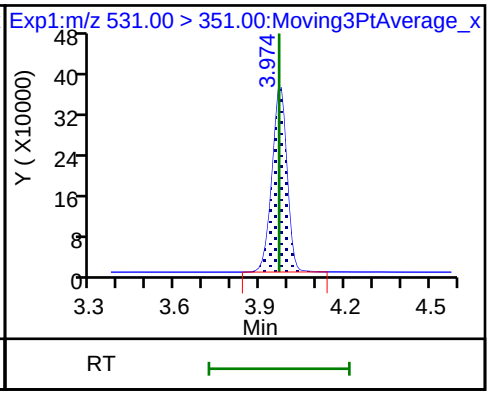
20 Perfluorononanoic acid



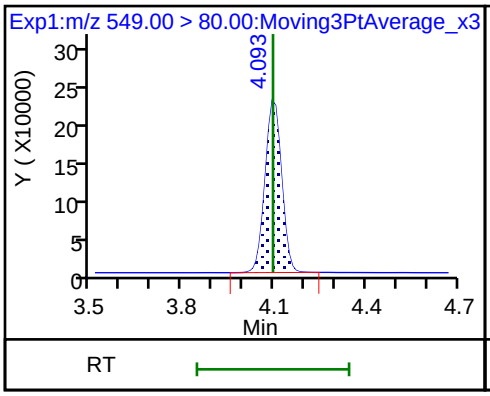

20 Perfluorononanoic acid



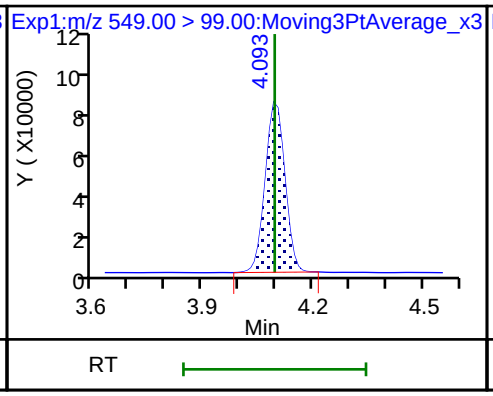

69 9-Chlorohexadecafluoro-3-oxanona



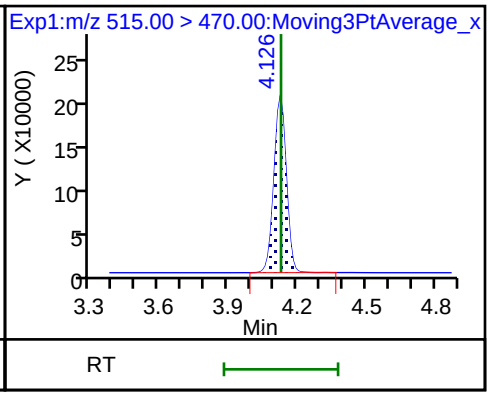

68 Perfluorononanesulfonic acid



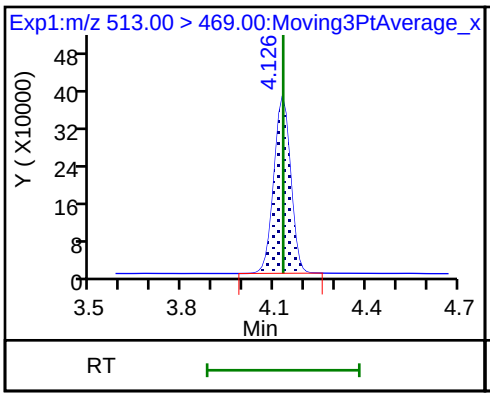

68 Perfluorononanesulfonic acid



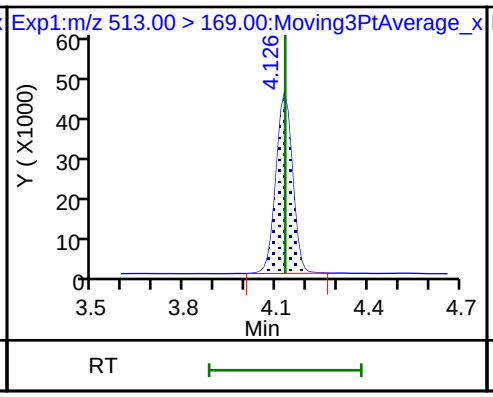

D 23 13C2 PFDA



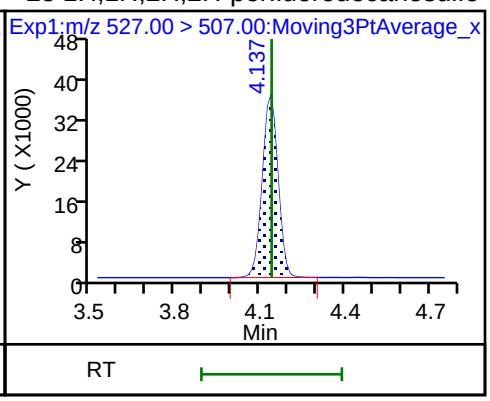

24 Perfluorodecanoic acid



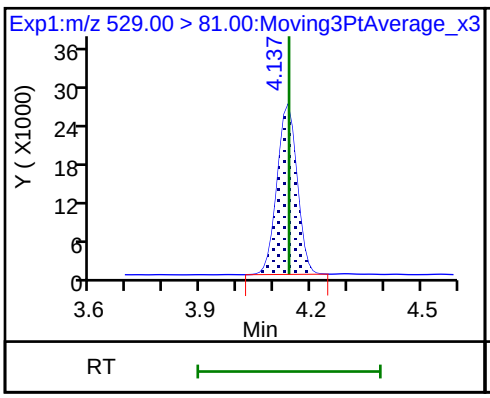

24 Perfluorodecanoic acid



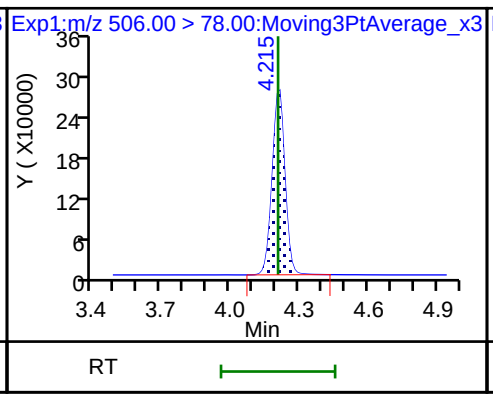

25 1H,1H,2H,2H-perfluorodecanesulfo



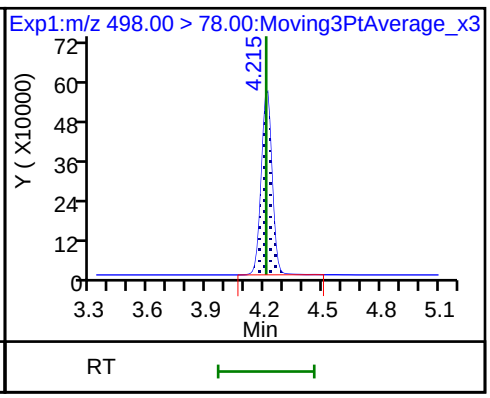

D 26 M2-8:2 FTS



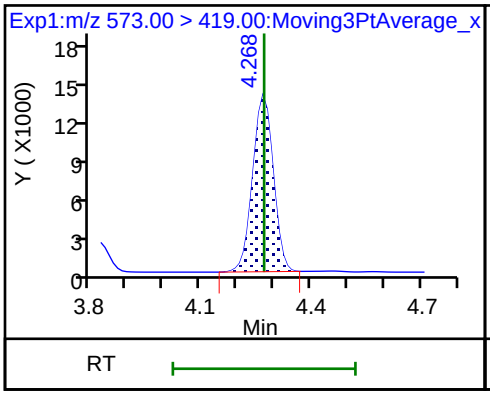

D 21 13C8 FOSA



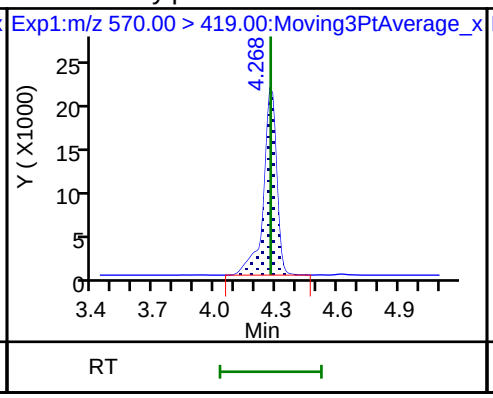

22 Perfluorooctanesulfonamide



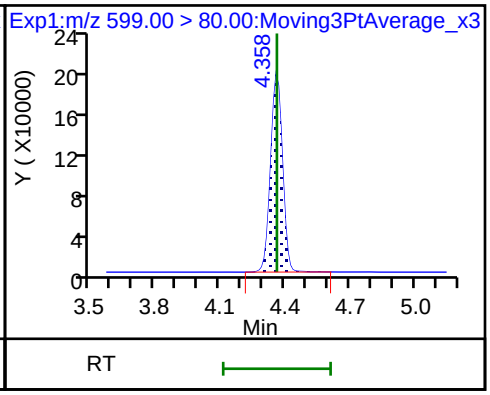
D 27 d3-NMeFOSAA



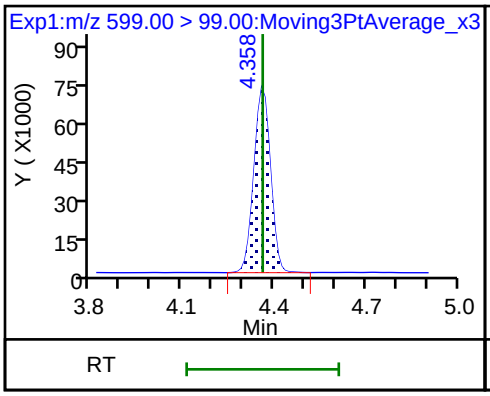

28 N-methylperfluorooctanesulfonami



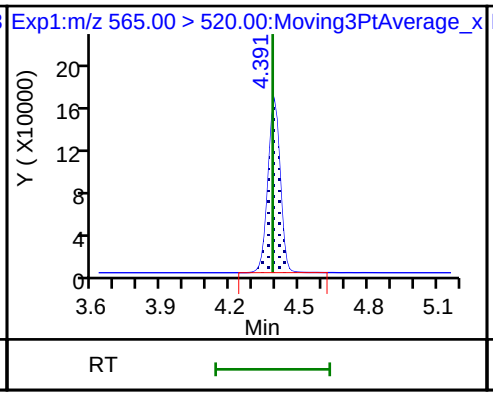

29 Perfluorodecanesulfonic acid



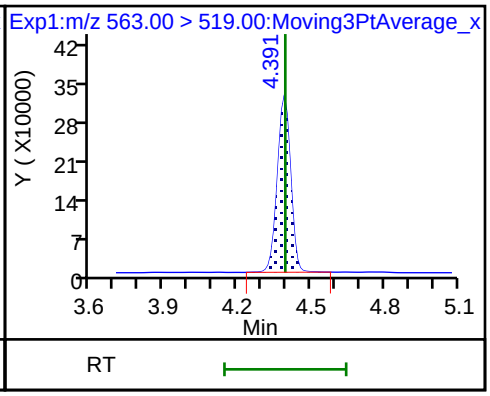

29 Perfluorodecanesulfonic acid



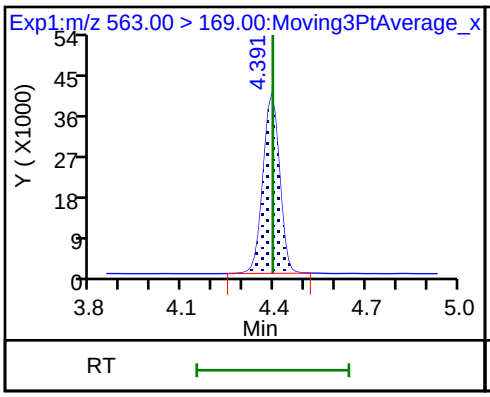

D 30 13C2 PFUnA



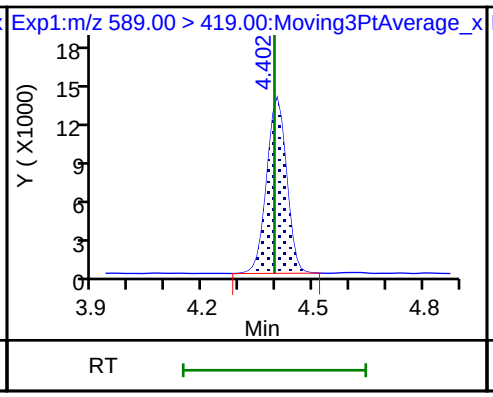

31 Perfluoroundecanoic acid



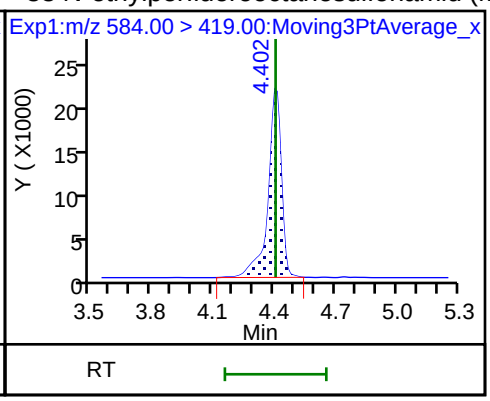

31 Perfluoroundecanoic acid



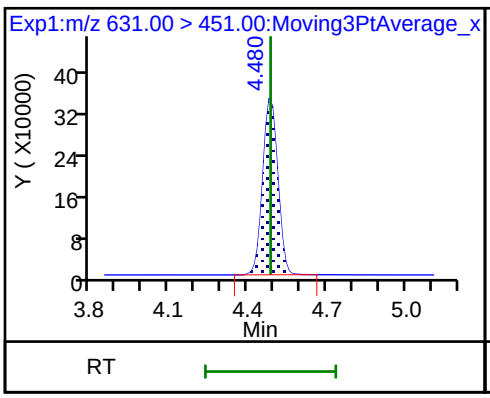

D 32 d5-NEtFOSAA



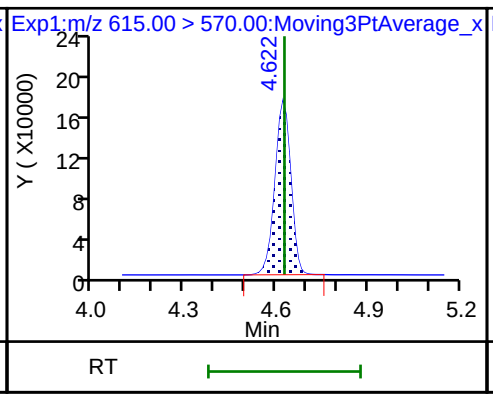

33 N-ethylperfluorooctanesulfonamid (M)



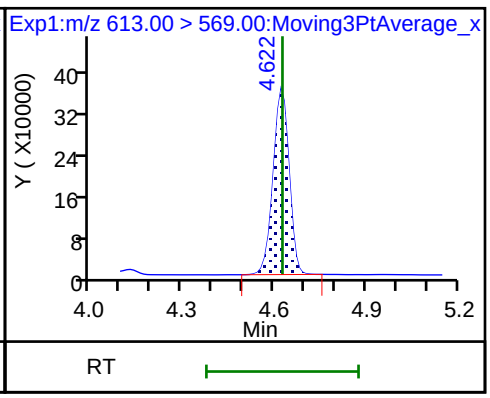

66 11-Chloroeicosafluoro-3-oxaundec



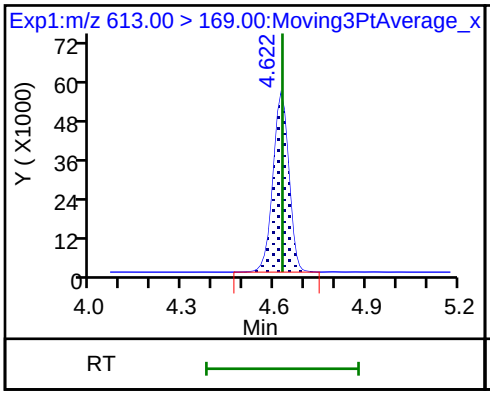

D 36 13C2 PFDoA



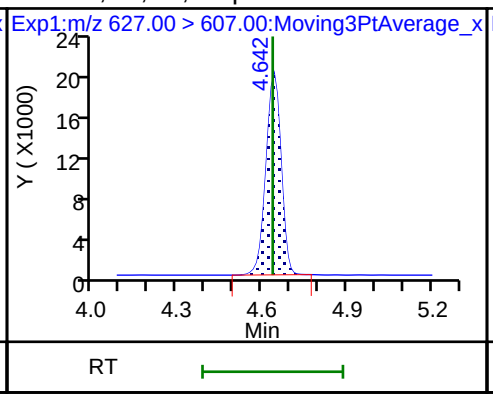

37 Perfluorododecanoic acid



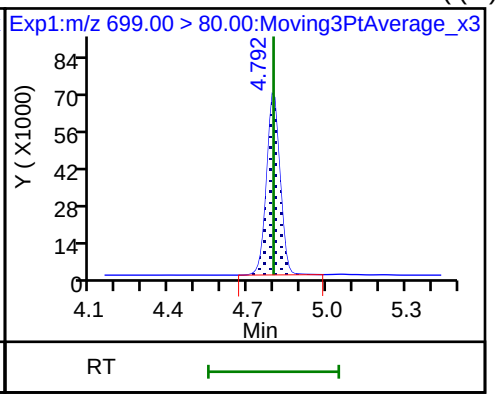
37 Perfluorododecanoic acid



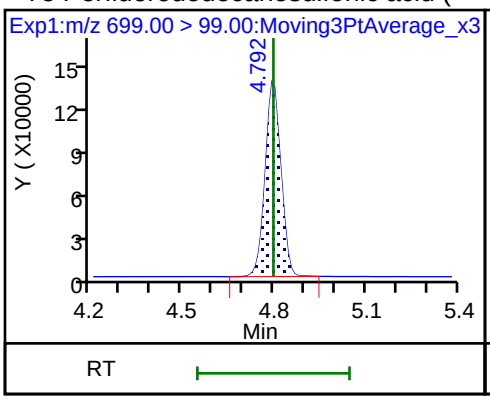

74 1H,1H,2H,2H-perfluorododecanesul



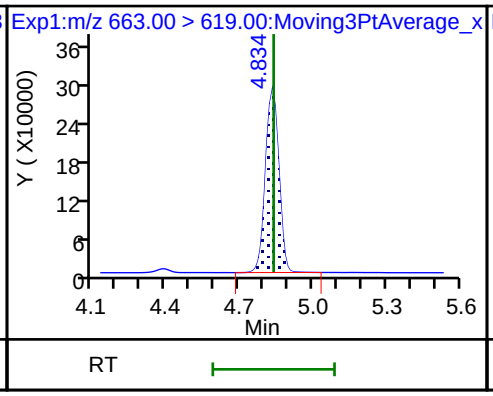

75 Perfluorododecanesulfonic acid ( (M)



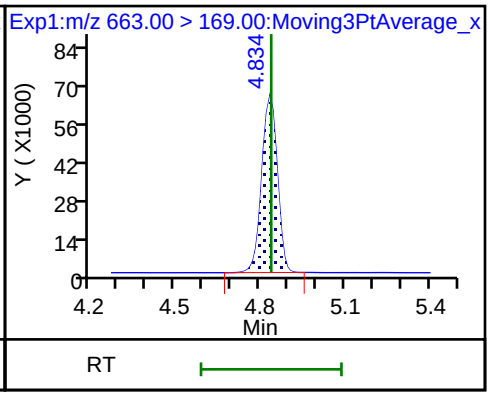

75 Perfluorododecanesulfonic acid (



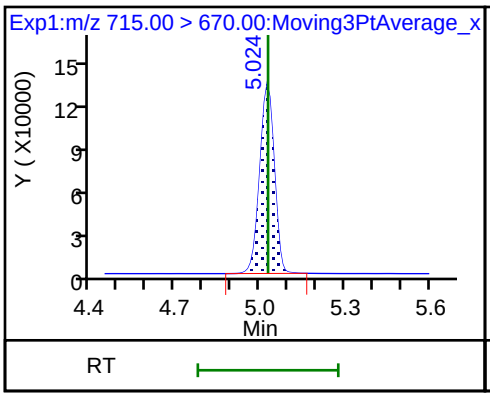

41 Perfluorotridecanoic acid



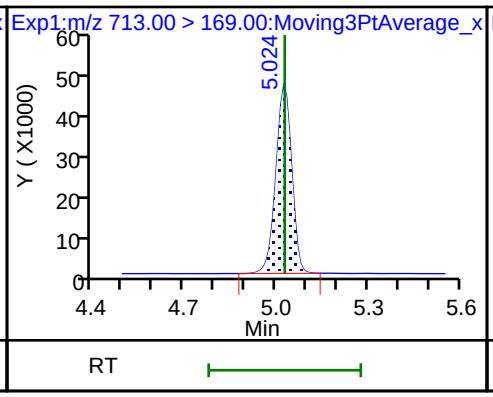

41 Perfluorotridecanoic acid



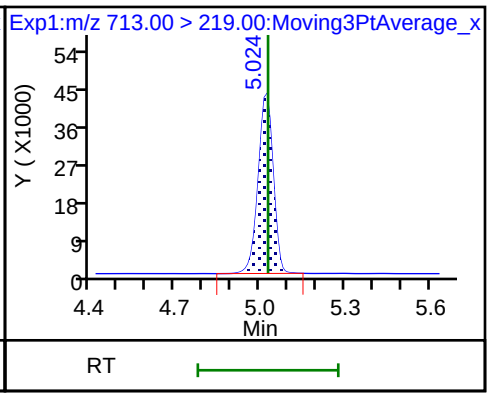

D 43 13C2 PFTeDA



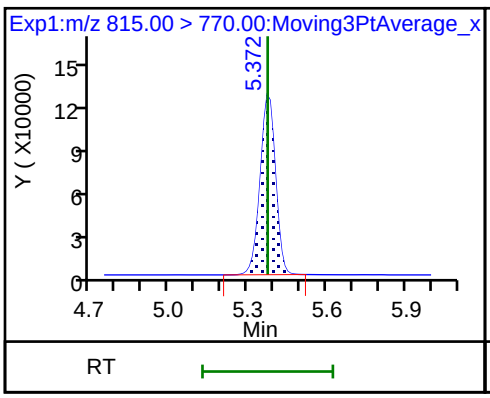

42 Perfluorotetradecanoic acid



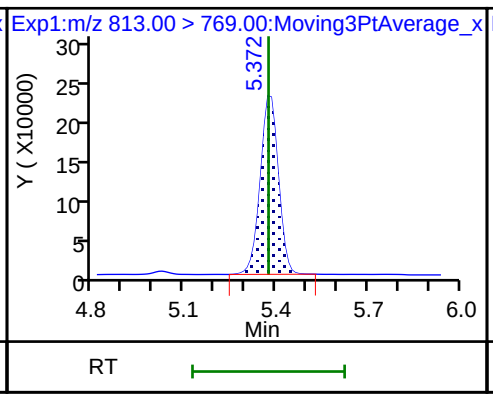

42 Perfluorotetradecanoic acid



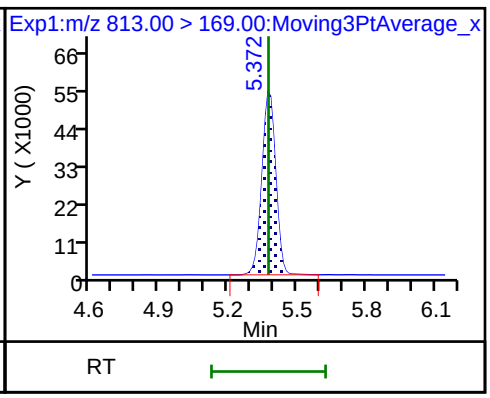

D 44 13C2 PFHxDA



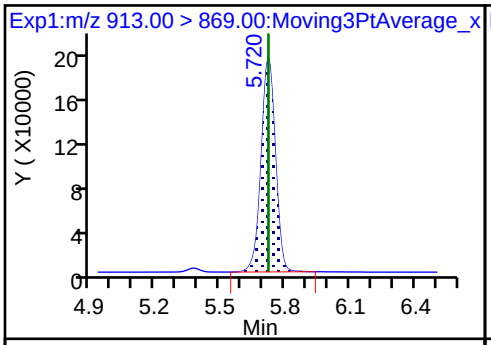

45 Perfluorohexadecanoic acid



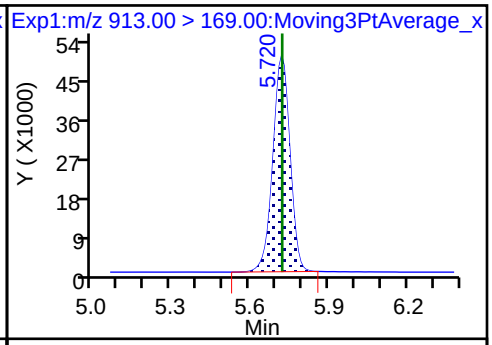

45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid




46 Perfluorooctadecanoic acid



Eurofins TestAmerica, Burlington

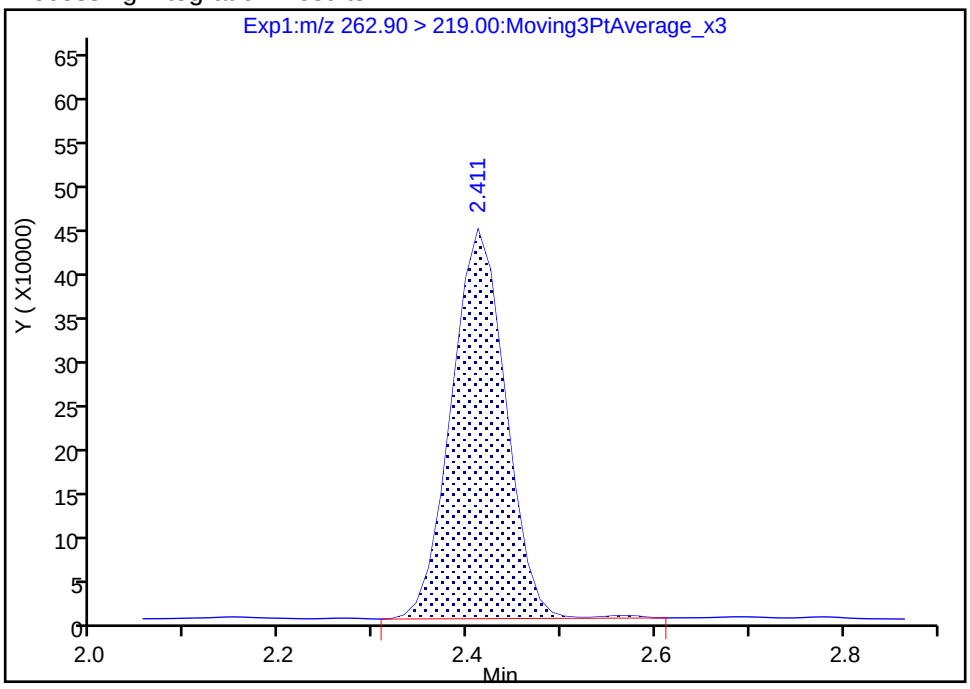
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL012.d | | | | |
| Injection Date: | 22-Dec-2020 13:21:21 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 12 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

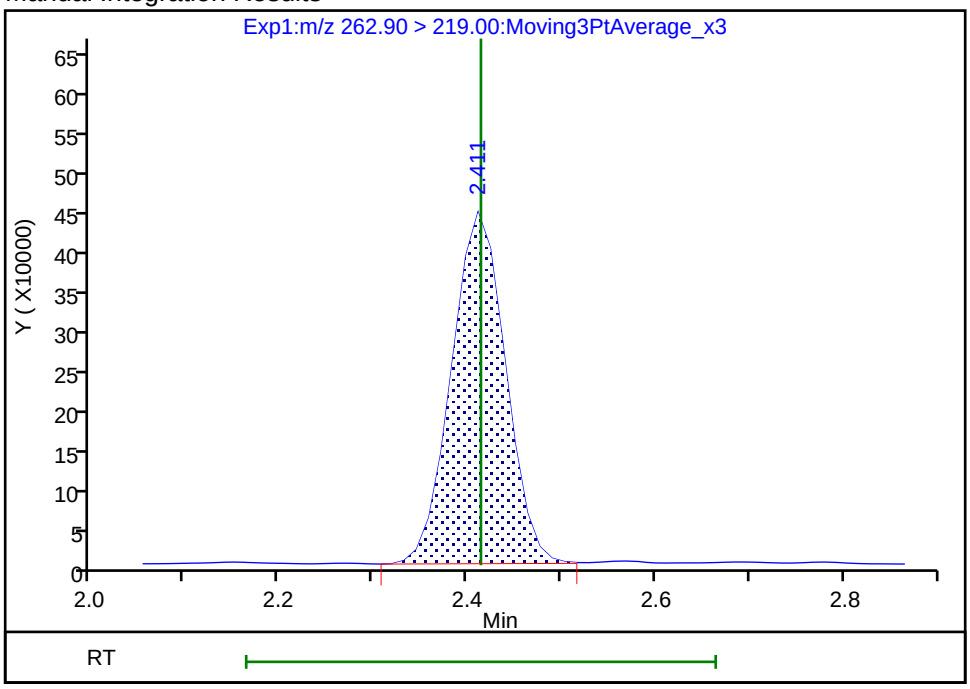
Processing Integration Results

RT: 2.41
Area: 1766120
Amount: 2.490698
Amount Units: ng/ml




Manual Integration Results

RT: 2.41
Area: 1757757
Amount: 2.333733
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:06:49
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

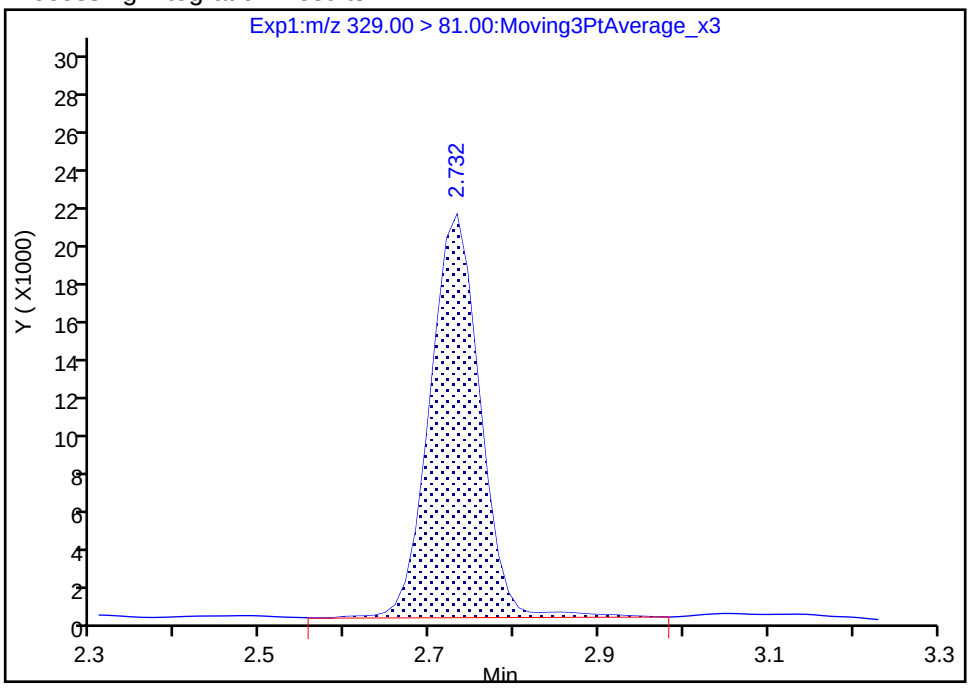
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| Injection Date: | 22-Dec-2020 13:21:21 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 12 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

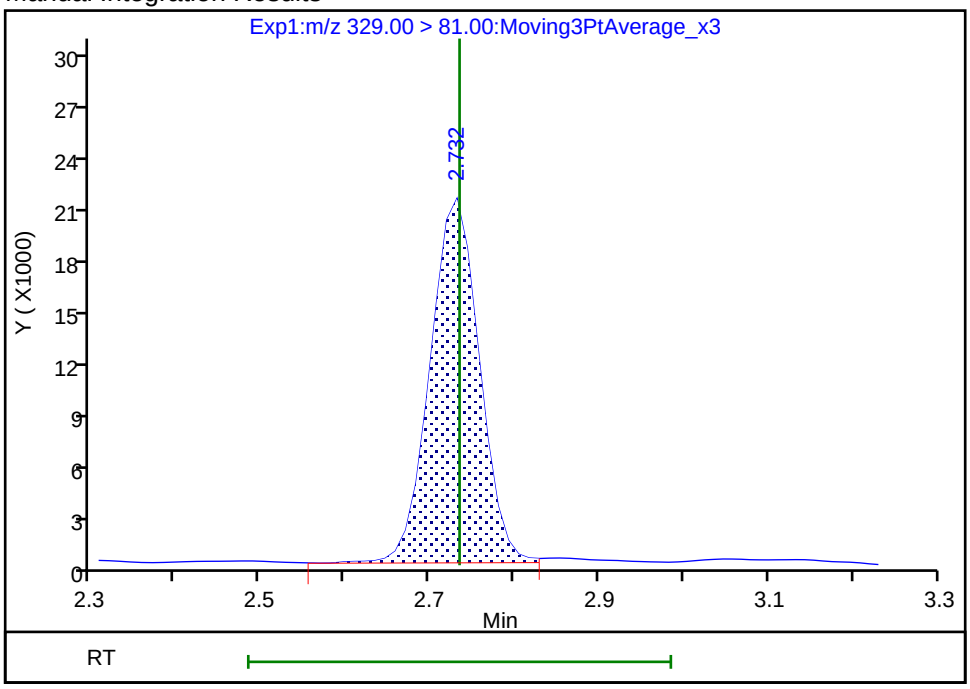
Processing Integration Results

RT: 2.73
Area: 86251
Amount: 1.130555
Amount Units: ng/ml




Manual Integration Results

RT: 2.73
Area: 85003
Amount: 1.116805
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:06:38
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

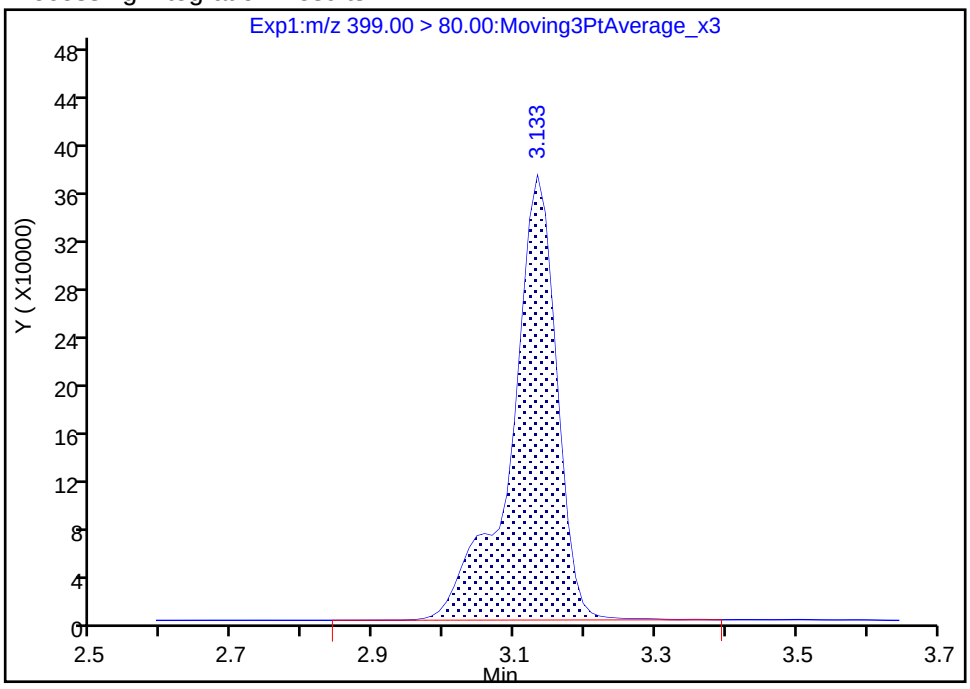
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL012.d | | | | |
| Injection Date: | 22-Dec-2020 13:21:21 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 12 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

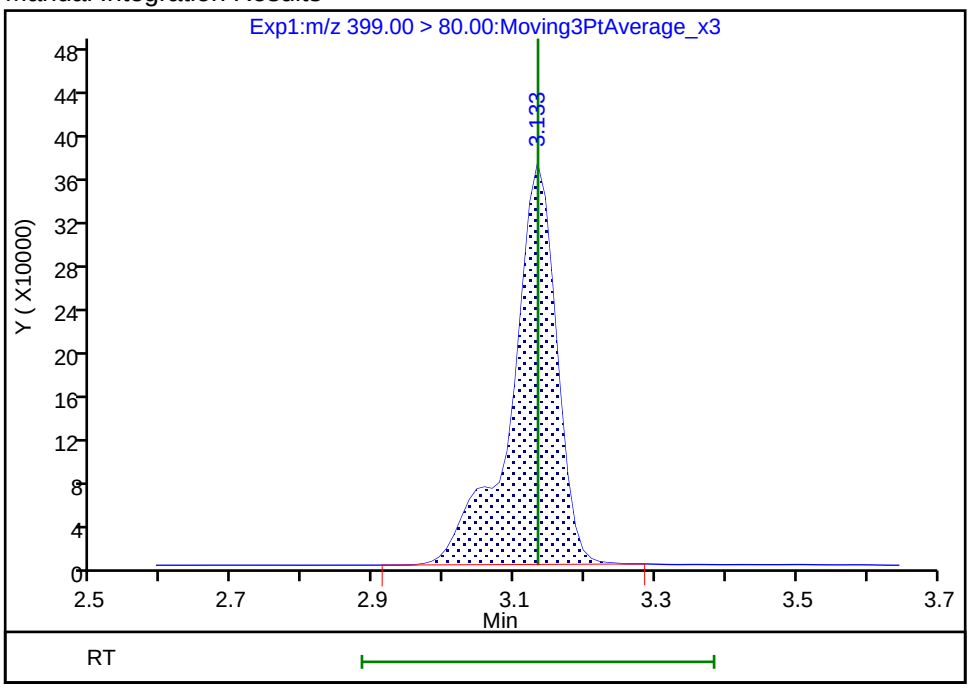
Processing Integration Results

RT: 3.13
Area: 1661072
Amount: 2.263574
Amount Units: ng/ml




Manual Integration Results

RT: 3.13
Area: 1650425
Amount: 2.083671
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:06:21
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

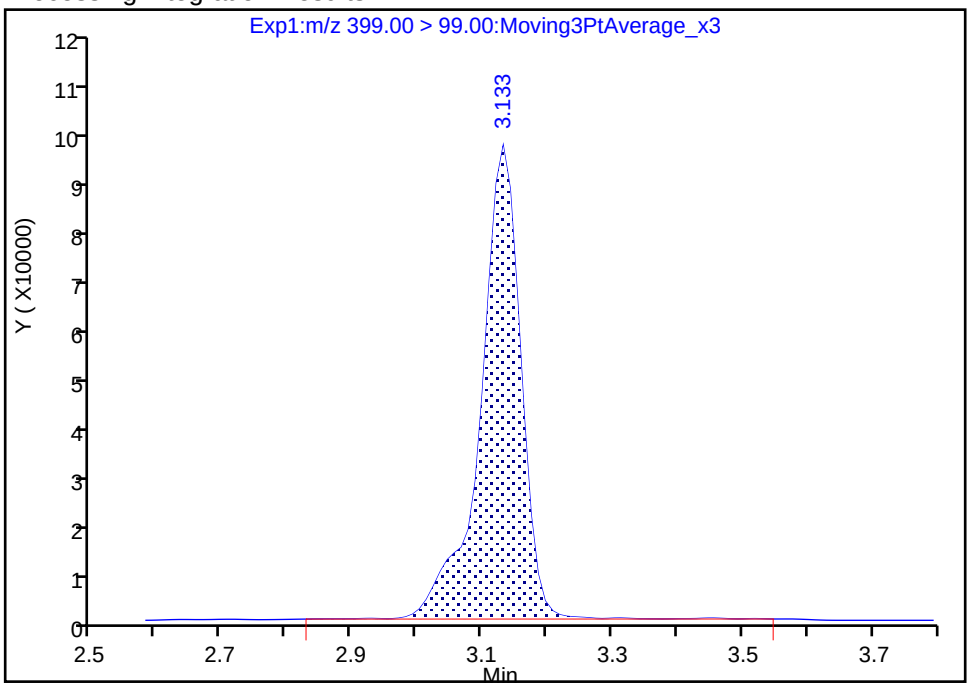
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL012.d | | | | |
| Injection Date: | 22-Dec-2020 13:21:21 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 12 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

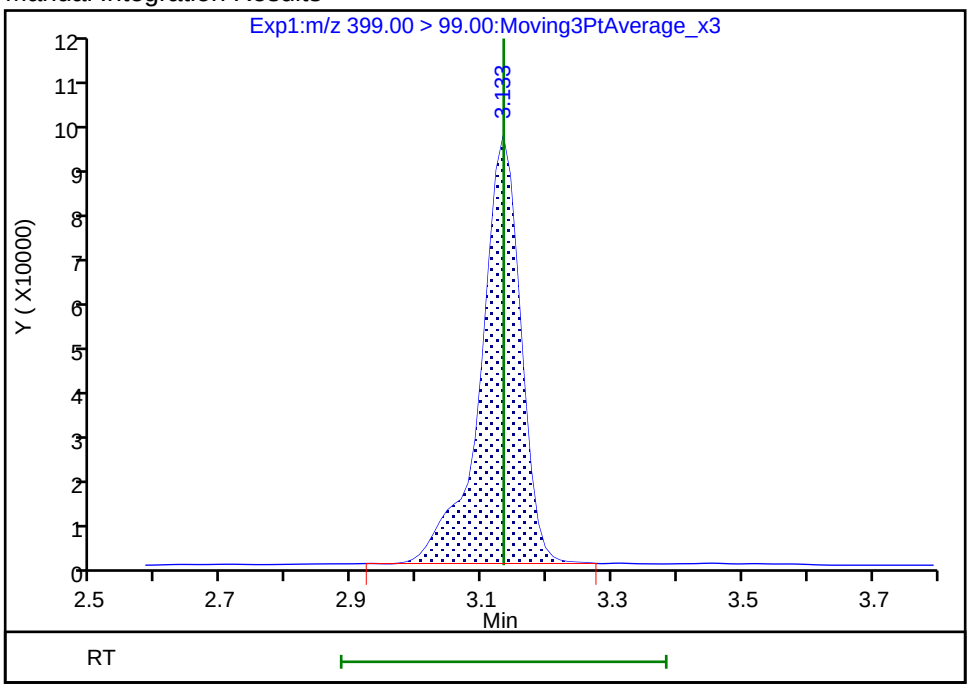
Processing Integration Results

RT: 3.13
Area: 407785
Amount: 2.263574
Amount Units: ng/ml




Manual Integration Results

RT: 3.13
Area: 403565
Amount: 2.083671
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:06:25

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

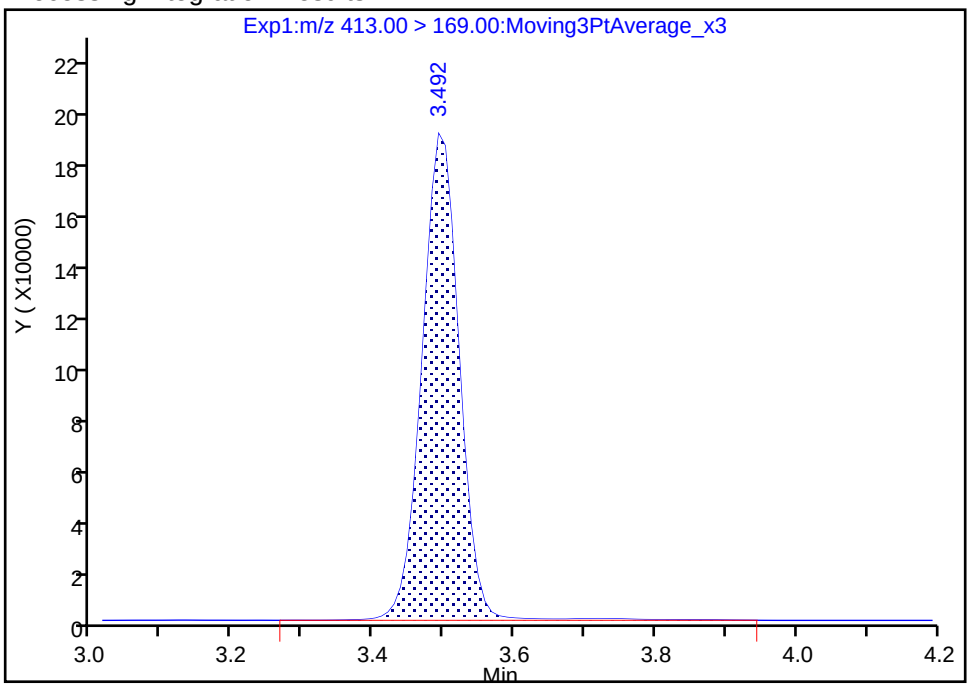
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL012.d | | | | |
| Injection Date: | 22-Dec-2020 13:21:21 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 12 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

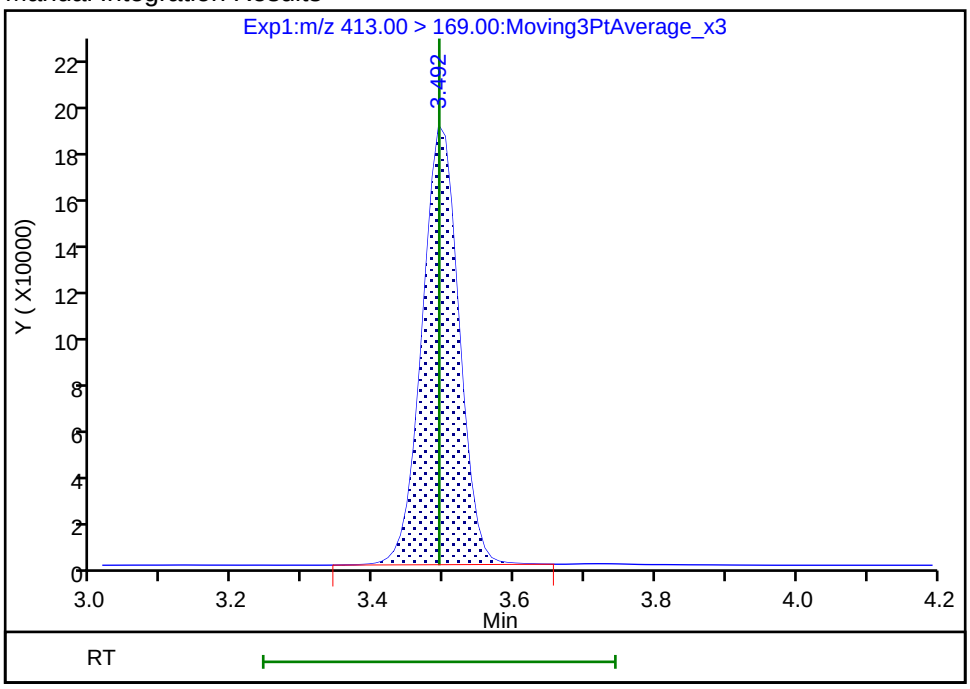
Processing Integration Results

RT: 3.49
Area: 699967
Amount: 2.406684
Amount Units: ng/ml




Manual Integration Results

RT: 3.49
Area: 690547
Amount: 2.375772
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:06:07
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

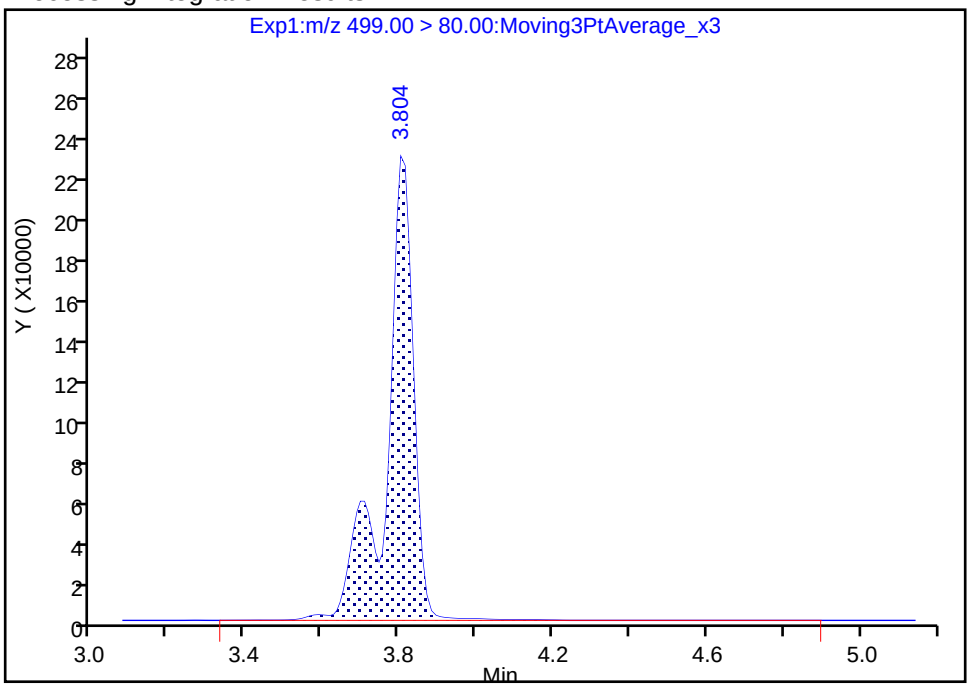
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| Injection Date: | 22-Dec-2020 13:21:21 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 12 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

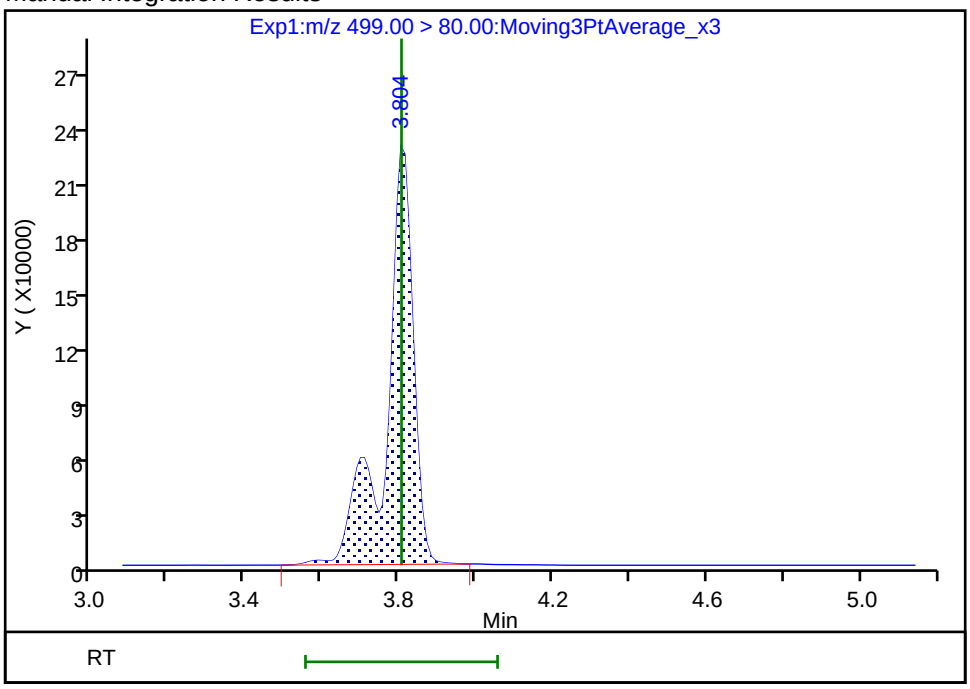
Processing Integration Results

RT: 3.80
Area: 1131058
Amount: 2.338355
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 1114751
Amount: 2.187617
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:05:53
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

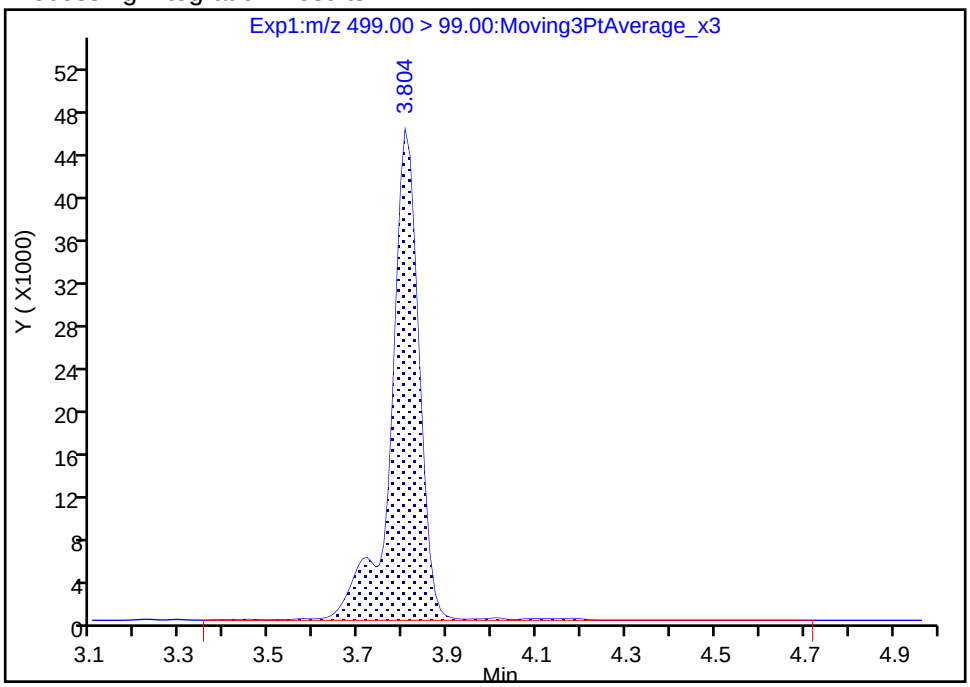
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL012.d | | | | |
| Injection Date: | 22-Dec-2020 13:21:21 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 12 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

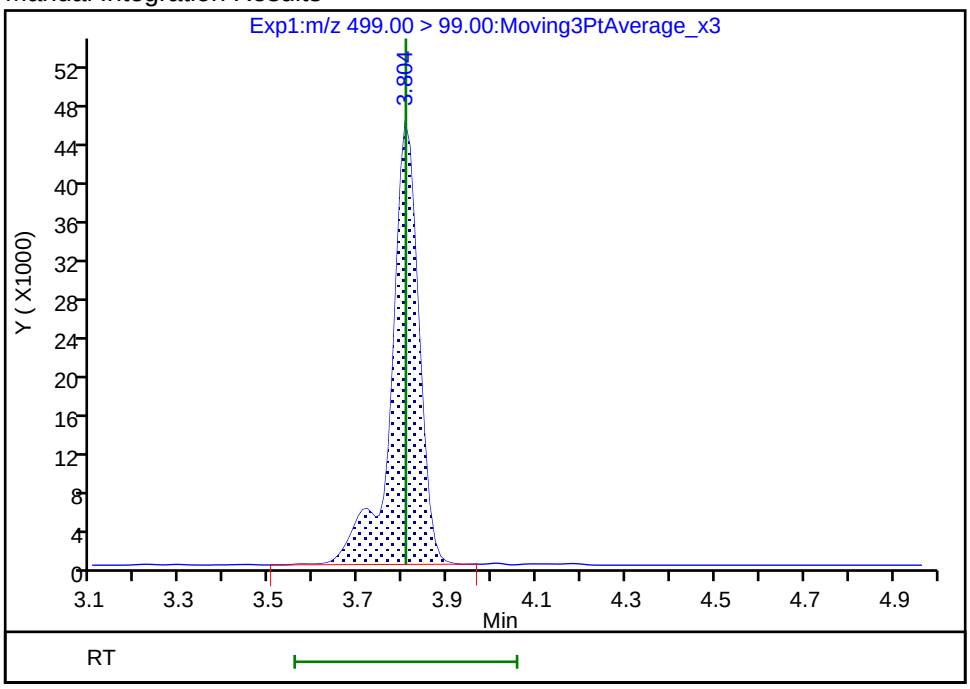
Processing Integration Results

RT: 3.80
Area: 202581
Amount: 2.338355
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 198425
Amount: 2.187617
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:05:58

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

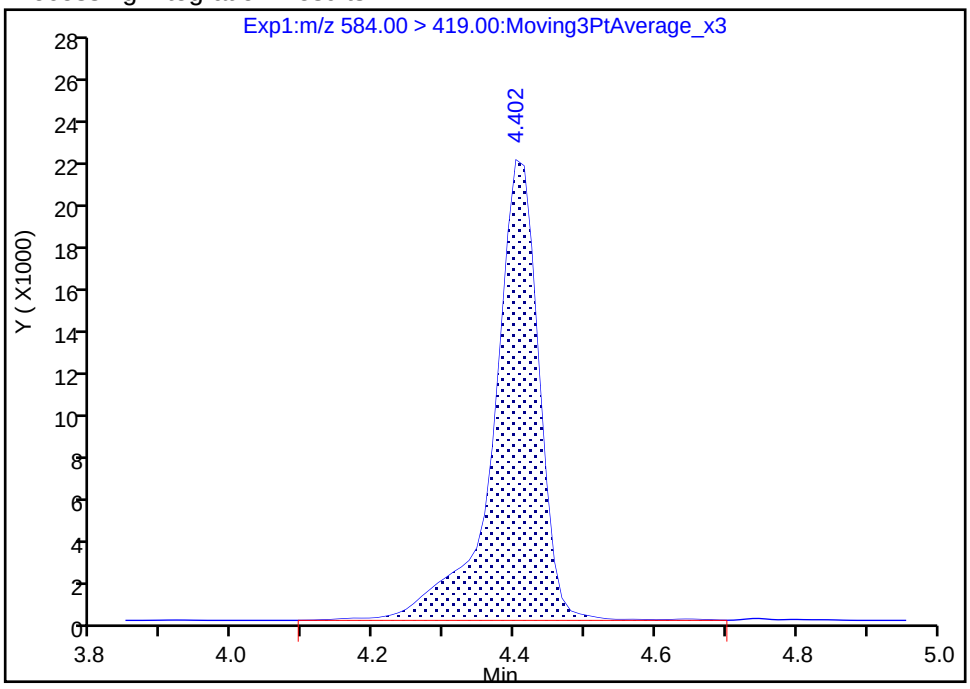
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL012.d | | | | |
| Injection Date: | 22-Dec-2020 13:21:21 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 12 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

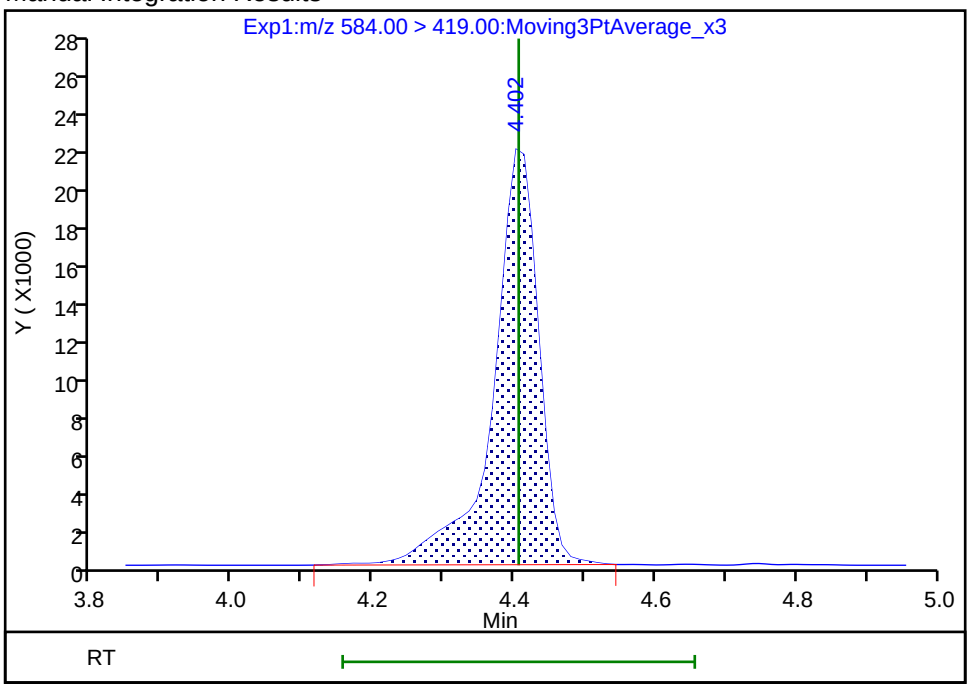
Processing Integration Results

RT: 4.40
Area: 96935
Amount: 2.773055
Amount Units: ng/ml




Manual Integration Results

RT: 4.40
Area: 96074
Amount: 2.595879
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:05:30
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

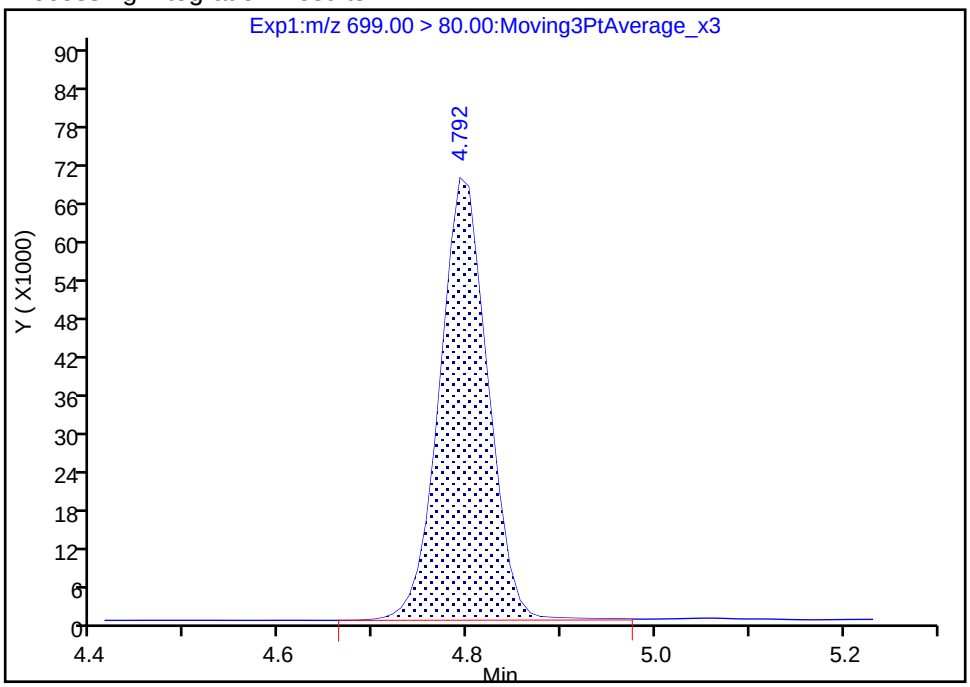
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL012.d | | | | |
| Injection Date: | 22-Dec-2020 13:21:21 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 12 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 75 Perfluorododecanesulfonic acid (, CAS: 79780-39-5

Signal: 1

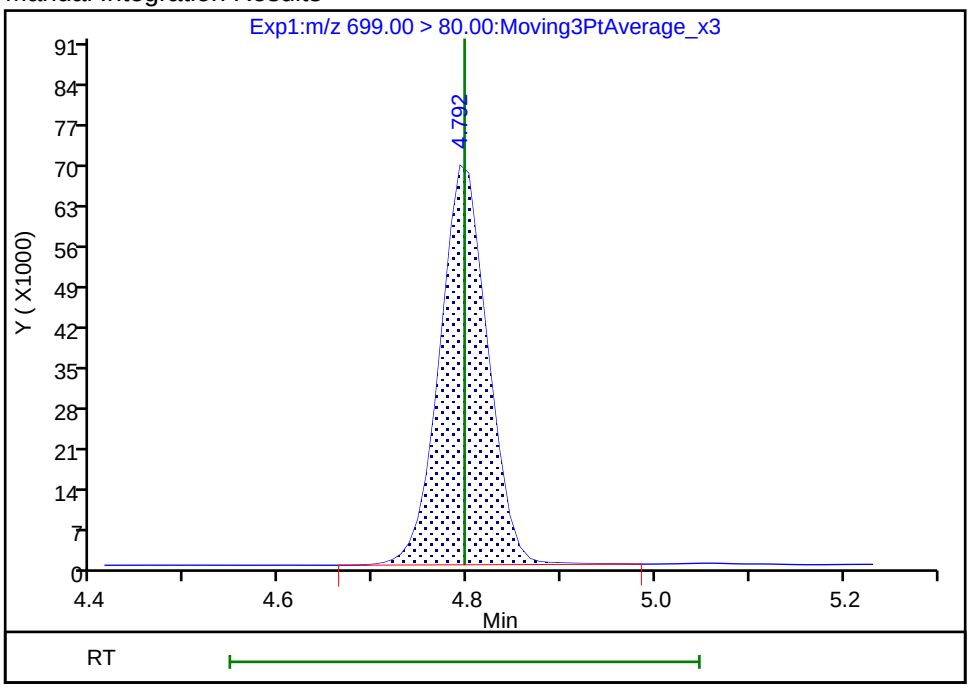
Processing Integration Results

RT: 4.79
Area: 245955
Amount: 2.200561
Amount Units: ng/ml




Manual Integration Results

RT: 4.79
Area: 244860
Amount: 2.195792
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:28:22
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 22-Dec-2020 13:29:37 ALS Bottle#: 7 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 200-0044184-013 Plate: 1 Rack: 1
Operator ID: lc812tech Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 22-Dec-2020 14:39:38 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1625

First Level Reviewer: deannd Date: 22-Dec-2020 14:04:56
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.089 | 2.091 | -0.002 | 0.598 | 1192876 | 1.30 | | 104 | 9158 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | M |
| 212.90 > 169.00 | 2.089 | 2.091 | -0.002 | 1.000 | 8790651 | 9.19 | | 91.9 | 1191 | M |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.411 | 2.414 | -0.003 | 0.690 | 847223 | 1.28 | | 102 | 2699 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | |
| 262.90 > 219.00 | 2.411 | 2.414 | -0.003 | 1.000 | 7036279 | 9.38 | | 93.8 | 265 | |
| D 47 13C3 PFBS | | | | | | | | | | |
| 301.90 > 80.00 | 2.424 | 2.427 | -0.003 | 0.694 | 1066974 | 1.23 | | 105 | 392285 | |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | M |
| 298.90 > 80.00 | 2.424 | 2.427 | -0.003 | 1.000 | 8770776 | 8.45 | Target=2.21 | 95.6 | 5300 | M |
| 298.90 > 99.00 | 2.424 | 2.427 | -0.003 | 1.000 | 3982557 | | 2.20(1.10-3.31) | 95.6 | 2595 | M |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | |
| 327.00 > 307.00 | 2.732 | 2.735 | -0.003 | 1.000 | 1254443 | 9.07 | | 97.1 | 2421 | |
| D 60 M2-4:2 FTS | | | | | | | | | | M |
| 329.00 > 81.00 | 2.732 | 2.735 | -0.003 | 0.782 | 88021 | 1.21 | | 104 | 101 | M |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.768 | 2.771 | -0.003 | 0.793 | 866171 | 1.25 | | 100.0 | 3139 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | M |
| 313.00 > 269.00 | 2.768 | 2.771 | -0.003 | 1.000 | 7316861 | 9.67 | Target=12.17 | 96.7 | 1318 | M |
| 313.00 > 119.00 | 2.768 | 2.771 | -0.003 | 1.000 | 600272 | | 12.19(6.09-18.26) | 96.7 | 839 | M |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | M |
| 349.00 > 80.00 | 2.768 | 2.771 | -0.003 | 0.884 | 8114898 | 9.12 | Target=3.32 | 97.2 | 3936 | M |
| 349.00 > 99.00 | 2.768 | 2.771 | -0.003 | 0.884 | 2455035 | | 3.31(1.66-4.98) | 97.2 | 2029 | M |
| 67 Perfluoro(2-propoxypropanoic) ac | | | | | | | | | | M |
| 329.10 > 285.00 | 2.878 | 2.881 | -0.003 | 1.000 | 1690983 | 10.9 | | 109 | 180 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 64 13C3 HFPO-DA | | | | | | | | | | |
| 332.10 > 287.00 | 2.878 | 2.881 | -0.003 | 0.824 | 139707 | 1.14 | | 91.6 | 855 | |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.132 | 3.133 | -0.001 | 0.897 | 801639 | 1.24 | | 105 | 3223 | |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.132 | 3.133 | -0.001 | 1.000 | 6676661 | 8.36 | Target=4.08 | 91.8 | 1824 | M |
| 399.00 > 99.00 | 3.132 | 3.133 | -0.001 | 1.000 | 1631116 | | 4.09(2.04-6.11) | 91.8 | 1026 | M |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.132 | 3.133 | -0.001 | 0.897 | 866766 | 1.31 | | 104 | 2235 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | |
| 363.00 > 319.00 | 3.132 | 3.133 | -0.001 | 1.000 | 6968995 | 9.20 | Target=3.70 | 92.0 | 1254 | |
| 363.00 > 169.00 | 3.132 | 3.133 | -0.001 | 1.000 | 1961292 | | 3.55(1.85-5.56) | 92.0 | 2662 | |
| 77 DONA | | | | | | | | | | M |
| 377.00 > 251.00 | 3.175 | 3.176 | -0.001 | 0.835 | 13928638 | 9.00 | Target=2.47 | 95.5 | 4514 | M |
| 377.00 > 85.00 | 3.175 | 3.176 | -0.001 | 0.835 | 5802950 | | 2.40(1.23-3.70) | 95.5 | 2592 | M |
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | M |
| 449.00 > 80.00 | 3.483 | 3.484 | -0.001 | 0.916 | 5572962 | 8.93 | Target=5.85 | 93.8 | 3244 | M |
| 449.00 > 99.00 | 3.483 | 3.484 | -0.001 | 0.916 | 965141 | | 5.77(2.93-8.78) | 93.8 | 2810 | M |
| D 12 M2-6:2 FTS | | | | | | | | | | |
| 429.00 > 81.00 | 3.483 | 3.484 | -0.001 | 0.997 | 96331 | 1.19 | | 100 | 384 | |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | M |
| 427.00 > 407.00 | 3.483 | 3.484 | -0.001 | 1.000 | 854196 | 9.47 | | 99.9 | 1820 | M |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.492 | 3.493 | -0.001 | 1.000 | 839703 | 1.25 | | 99.7 | 2870 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.492 | 3.493 | -0.001 | | 851453 | 1.25 | | | 3240 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | M |
| 413.00 > 369.00 | 3.492 | 3.493 | -0.001 | 1.000 | 7252703 | 9.96 | Target=2.58 | 99.6 | 1101 | M |
| 413.00 > 169.00 | 3.492 | 3.493 | -0.001 | 1.000 | 2794731 | | 2.60(1.29-3.87) | 99.6 | 2212 | M |
| D 18 13C4 PFOS | | | | | | | | | | |
| 503.00 > 80.00 | 3.804 | 3.806 | -0.002 | 1.089 | 552420 | 1.24 | | 104 | 894 | |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.804 | 3.806 | -0.002 | 1.000 | 4659375 | 8.76 | Target=5.56 | 94.4 | 3431 | M |
| 499.00 > 99.00 | 3.804 | 3.806 | -0.002 | 1.000 | 828174 | | 5.63(2.78-8.34) | 94.4 | 1717 | M |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.825 | 3.826 | -0.001 | 1.095 | 738168 | 1.24 | | 99.3 | 3598 | |
| 20 Perfluorononanoic acid | | | | | | | | | | |
| 463.00 > 419.00 | 3.825 | 3.826 | -0.001 | 1.000 | 6204125 | 9.49 | Target=6.87 | 94.9 | 920 | |
| 463.00 > 169.00 | 3.825 | 3.826 | -0.001 | 1.000 | 903137 | | 6.87(3.43-10.30) | 94.9 | 3042 | |
| 69 9-Chlorohexadecafluoro-3-oxanona | | | | | | | | | | M |
| 531.00 > 351.00 | 3.964 | 3.967 | -0.003 | 1.042 | 5263362 | 8.87 | | 95.2 | 5275 | M |
| 68 Perfluorononanesulfonic acid | | | | | | | | | | |
| 549.00 > 80.00 | 4.093 | 4.095 | -0.002 | 1.076 | 3577811 | 9.02 | Target=2.78 | 94.0 | 11373 | |
| 549.00 > 99.00 | 4.093 | 4.095 | -0.002 | 1.076 | 1313064 | | 2.72(1.39-4.17) | 94.0 | 3473 | |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.126 | 4.129 | -0.003 | 1.182 | 699346 | 1.23 | | 98.4 | 3511 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 24 Perfluorodecanoic acid | | | | | | | | | | |
| 513.00 > 469.00 | 4.126 | 4.129 | -0.003 | 1.000 | 5664507 | 9.82 | Target=9.03 | 98.2 | 2648 | |
| 513.00 > 169.00 | 4.126 | 4.129 | -0.003 | 1.000 | 633903 | | 8.94(4.51-13.54) | 98.2 | 3241 | |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | |
| 527.00 > 507.00 | 4.138 | 4.140 | -0.002 | 1.000 | 551191 | 9.19 | | 95.9 | 3136 | |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.138 | 4.140 | -0.002 | 1.185 | 105624 | 1.27 | | 106 | 519 | |
| D 21 13C8 FOSA | | | | | | | | | | |
| 506.00 > 78.00 | 4.205 | 4.207 | -0.002 | 1.204 | 1111429 | 1.33 | | 106 | 3985 | |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | M |
| 498.00 > 78.00 | 4.215 | 4.207 | 0.008 | 1.002 | 8663983 | 9.72 | | 97.2 | 4787 | M |
| D 27 d3-NMeFOSAA | | | | | | | | | | M |
| 573.00 > 419.00 | 4.268 | 4.272 | -0.004 | 1.222 | 52838 | 1.28 | | 103 | 18.4 | M |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | M |
| 570.00 > 419.00 | 4.268 | 4.272 | -0.004 | 1.000 | 390016 | 10.4 | | 104 | 632 | M |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | M |
| 599.00 > 80.00 | 4.358 | 4.362 | -0.004 | 1.146 | 2896712 | 9.16 | Target=2.76 | 95.0 | 3660 | |
| 599.00 > 99.00 | 4.358 | 4.362 | -0.004 | 1.146 | 1043601 | | 2.78(1.38-4.14) | 95.0 | 2448 | M |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.391 | 4.384 | 0.007 | 1.257 | 589898 | 1.26 | | 101 | 2327 | |
| 31 Perfluoroundecanoic acid | | | | | | | | | | |
| 563.00 > 519.00 | 4.391 | 4.395 | -0.004 | 1.000 | 4701521 | 9.77 | Target=8.02 | 97.7 | 1491 | |
| 563.00 > 169.00 | 4.391 | 4.395 | -0.004 | 1.000 | 566462 | | 8.30(4.01-12.03) | 97.7 | 4044 | |
| D 32 d5-NEtFOSAA | | | | | | | | | | M |
| 589.00 > 419.00 | 4.402 | 4.395 | 0.007 | 1.261 | 52405 | 1.31 | | 105 | 495 | M |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.402 | 4.406 | -0.004 | 1.000 | 355914 | 9.17 | | 91.7 | 1454 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | |
| 631.00 > 451.00 | 4.480 | 4.485 | -0.005 | 1.178 | 5616158 | 9.12 | | 96.9 | 3009 | |
| D 36 13C2 PFDoA | | | | | | | | | | |
| 615.00 > 570.00 | 4.622 | 4.626 | -0.004 | 1.323 | 631964 | 1.28 | | 103 | 3397 | |
| 37 Perfluorododecanoic acid | | | | | | | | | | |
| 613.00 > 569.00 | 4.622 | 4.626 | -0.004 | 1.000 | 5514700 | 9.92 | Target=6.85 | 99.2 | 1136 | |
| 613.00 > 169.00 | 4.622 | 4.626 | -0.004 | 1.000 | 787613 | | 7.00(3.42-10.27) | 99.2 | 3121 | |
| 74 1H,1H,2H,2H-perfluorododecanesul | | | | | | | | | | |
| 627.00 > 607.00 | 4.643 | 4.637 | 0.006 | 1.122 | 297521 | 9.63 | | 99.9 | 2455 | |
| 75 Perfluorododecanesulfonic acid ( | | | | | | | | | | M |
| 699.00 > 80.00 | 4.792 | 4.797 | -0.005 | 1.260 | 1019532 | 8.76 | Target=0.53 | 90.5 | 1881 | M |
| 699.00 > 99.00 | 4.792 | 4.797 | -0.005 | 1.260 | 2048689 | | 0.50(0.26-0.79) | 90.5 | 4378 | |
| 41 Perfluorotridecanoic acid | | | | | | | | | | |
| 663.00 > 619.00 | 4.834 | 4.839 | -0.005 | 1.046 | 4302065 | 9.53 | Target=4.48 | 95.3 | 1238 | |
| 663.00 > 169.00 | 4.834 | 4.839 | -0.005 | 1.046 | 944848 | | 4.55(2.24-6.72) | 95.3 | 2957 | |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 5.024 | 5.027 | -0.003 | 1.439 | 471704 | 1.29 | | 103 | 2620 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | |
| 713.00 > 169.00 | 5.024 | 5.027 | -0.003 | 1.000 | 657979 | 9.40 | Target=0.99 | 94.0 | 4514 | |
| 713.00 > 219.00 | 5.024 | 5.027 | -0.003 | 1.000 | 661054 | | 1.00(0.50-1.49) | 94.0 | 4489 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.372 | 5.374 | -0.002 | 1.538 | 502634 | 1.29 | | 103 | 1958 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | M |
| 813.00 > 769.00 | 5.383 | 5.374 | 0.009 | 1.002 | 3749492 | 10.0 | Target=4.02 | 100.0 | 831 | M |
| 813.00 > 169.00 | 5.372 | 5.374 | -0.002 | 1.000 | 935182 | | 4.01(2.01-6.02) | 100.0 | 2911 | M |
| 46 Perfluorooctadecanoic acid | | | | | | | | | | |
| 913.00 > 869.00 | 5.720 | 5.722 | -0.002 | 1.065 | 3647983 | 10.1 | Target=3.88 | 101 | 1290 | |
| 913.00 > 169.00 | 5.720 | 5.722 | -0.002 | 1.065 | 937246 | | 3.89(1.94-5.82) | 101 | 1904 | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

## Reagents:

PFAS32NCIC6_00006 Amount Added: 100.00 Units: uL

Report Date: 22-Dec-2020 14:39:38 Chrom Revision: 2.3 09-Dec-2020 16:22:14

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Injection Date: 22-Dec-2020 13:29:37 Instrument ID: LC812

Lims ID: IC

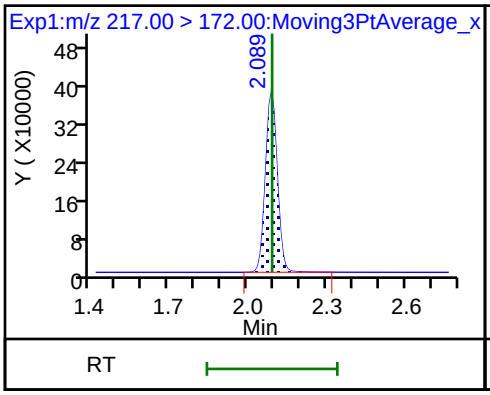
Client ID:

Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 13

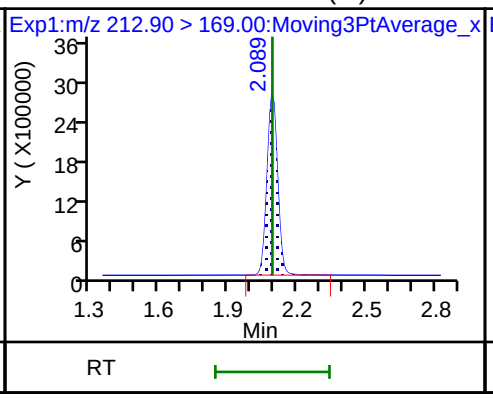
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

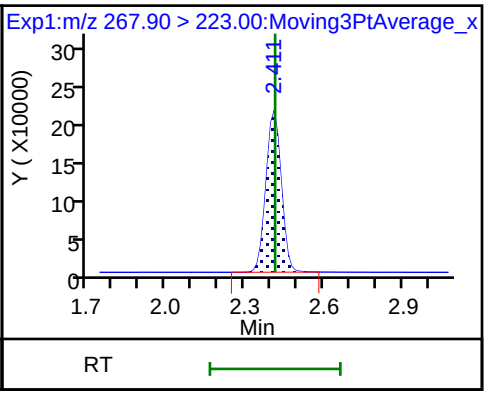
D 1 13C4 PFBA



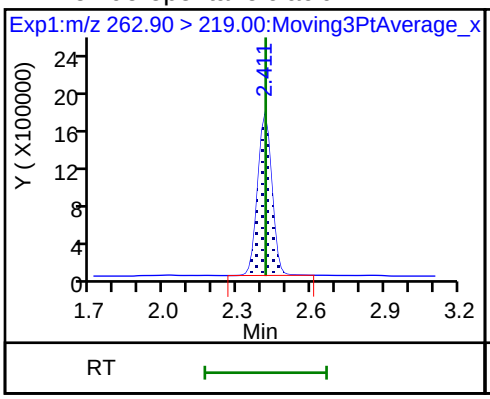

2 Perfluorobutanoic acid (M)



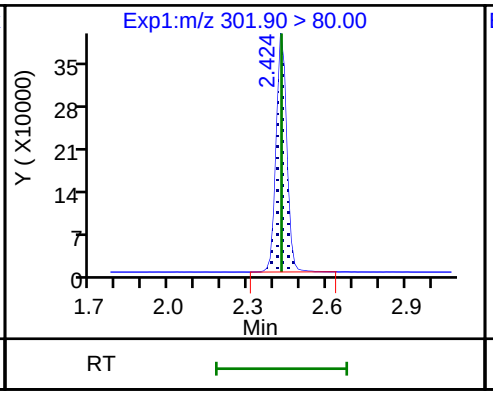

D 3 13C5 PFPeA



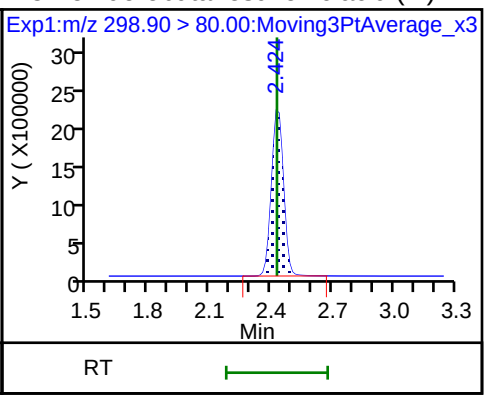

4 Perfluoropentanoic acid



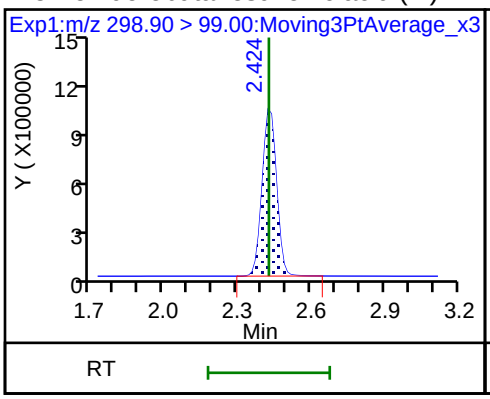

D 47 13C3 PFBS



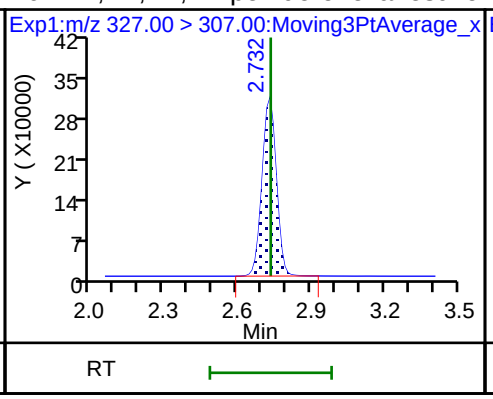

5 Perfluorobutanesulfonic acid (M)



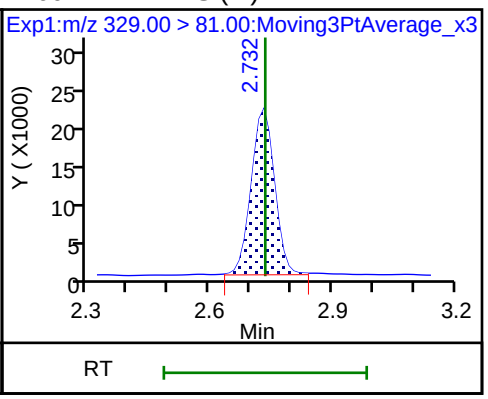

5 Perfluorobutanesulfonic acid (M)



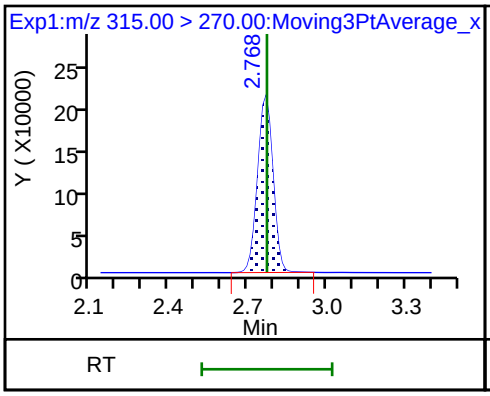

61 1H,1H,2H,2H-perfluorohexanesulfo



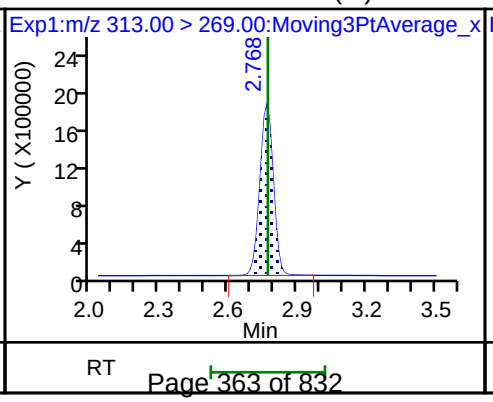

D 60 M2-4:2 FTS (M)



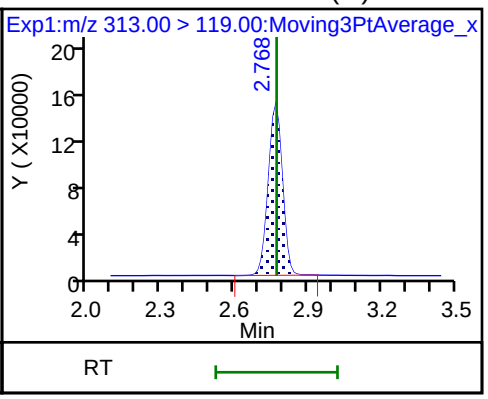

D 7 13C2 PFHxA



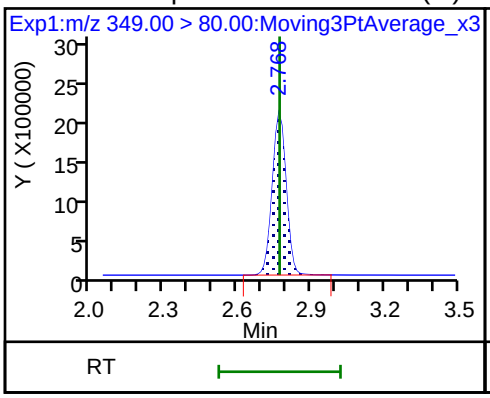

6 Perfluorohexanoic acid (M)



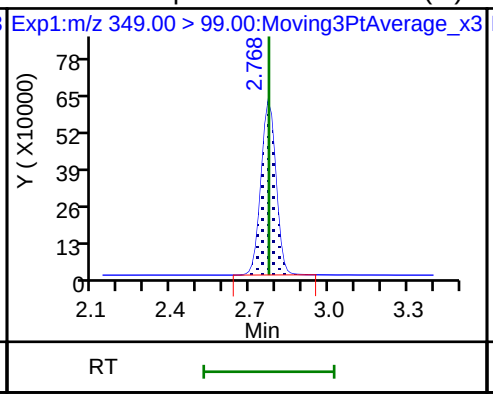

6 Perfluorohexanoic acid (M)



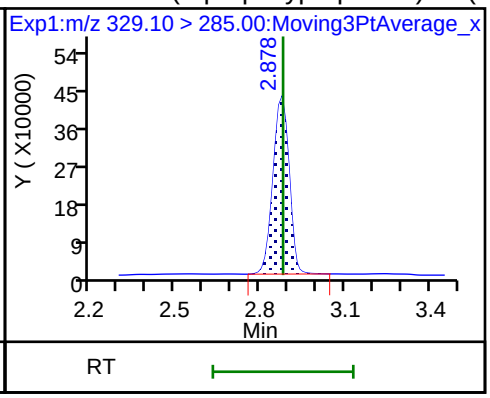
70 Perfluoropentanesulfonic acid (M)



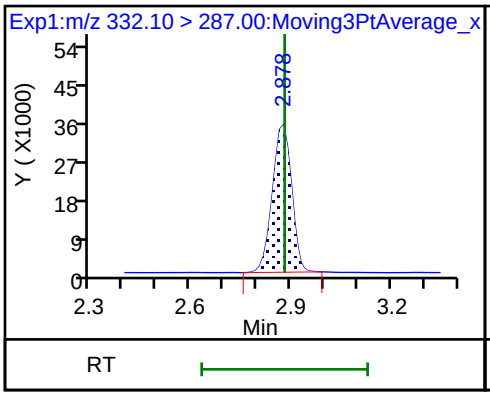

70 Perfluoropentanesulfonic acid (M)



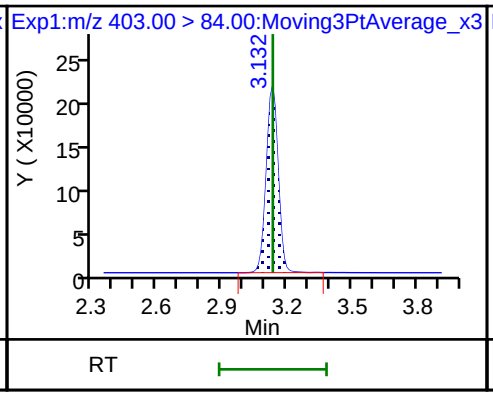

67 Perfluoro(2-propoxypropanoic) ac (M)



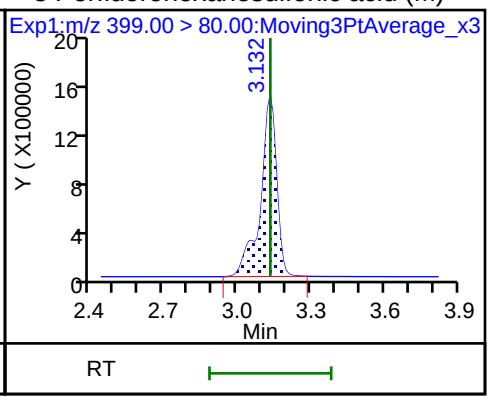

D 64 13C3 HFPO-DA



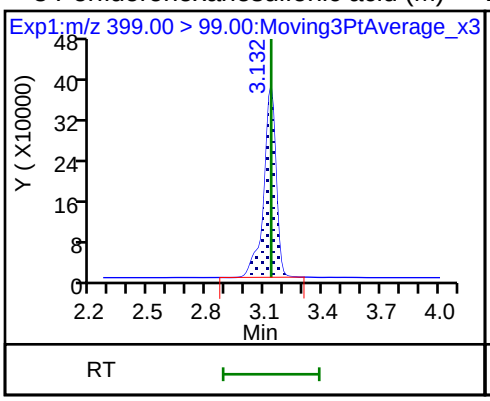

D 11 18O2 PFHxS



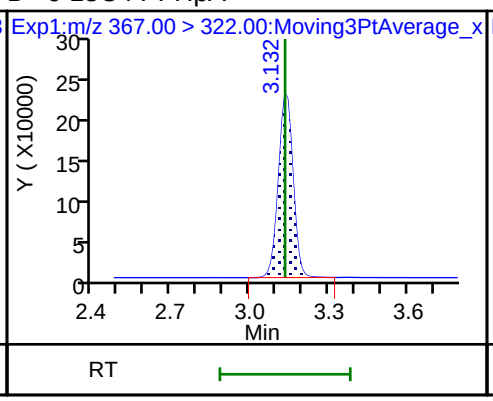

8 Perfluorohexanesulfonic acid (M)



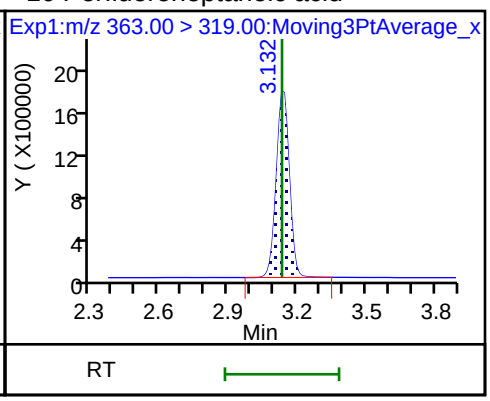

8 Perfluorohexanesulfonic acid (M)



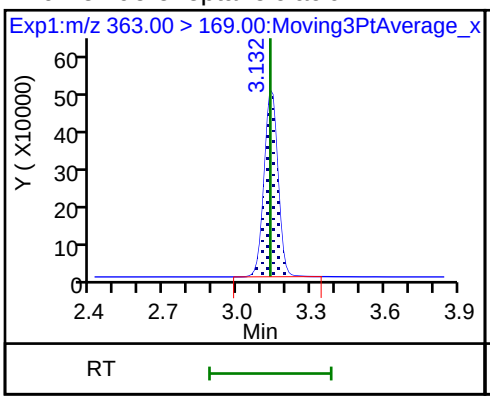

D 9 13C4 PFHpA



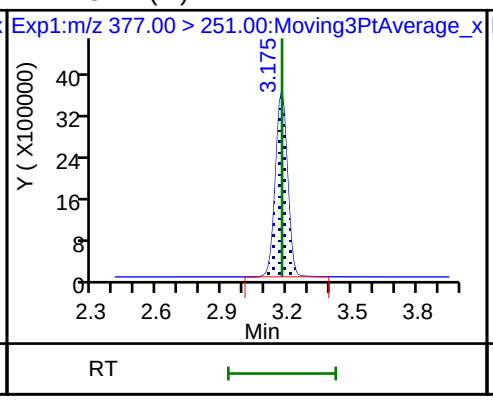

10 Perfluoroheptanoic acid



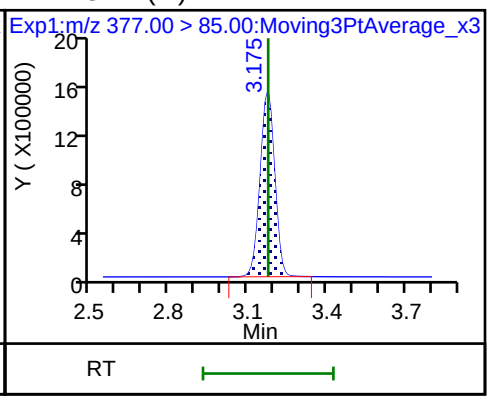

10 Perfluoroheptanoic acid



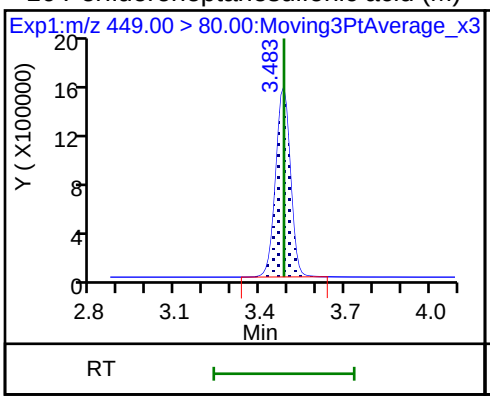

77 DONA (M)



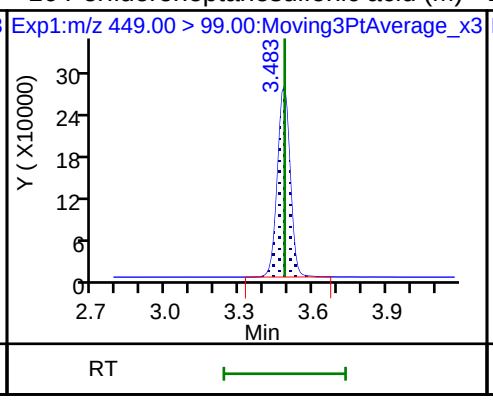

77 DONA (M)



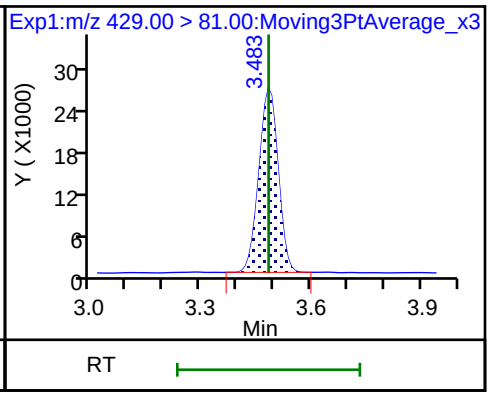
16 Perfluoroheptanesulfonic acid (M)



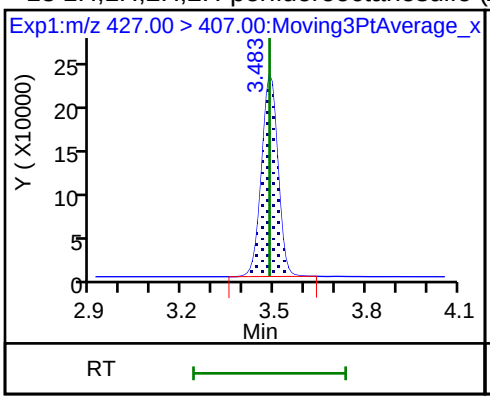

16 Perfluoroheptanesulfonic acid (M)



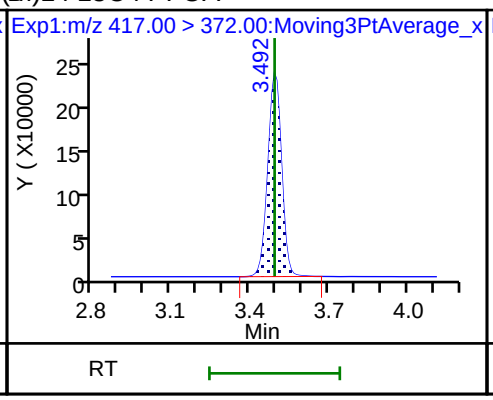

D 12 M2-6:2 FTS



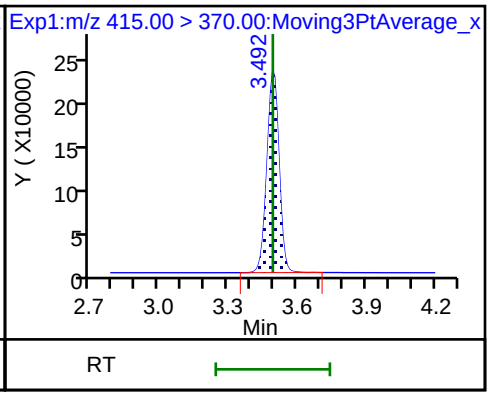

13 1H,1H,2H,2H-perfluorooctanesulfo (M)



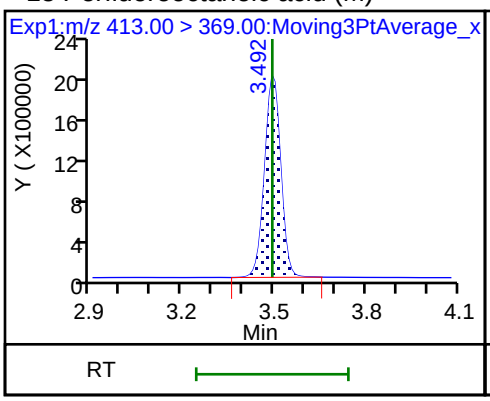

D 14 13C4 PFOA



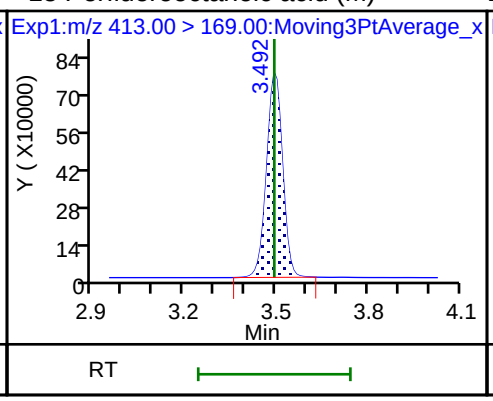

* 62 13C2 PFOA



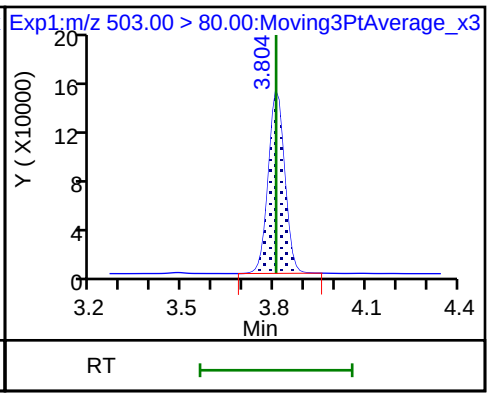

15 Perfluorooctanoic acid (M)



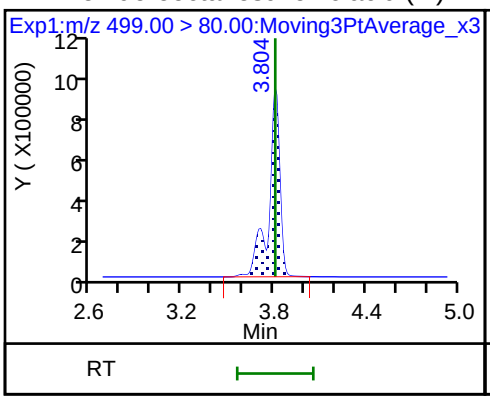

15 Perfluorooctanoic acid (M)



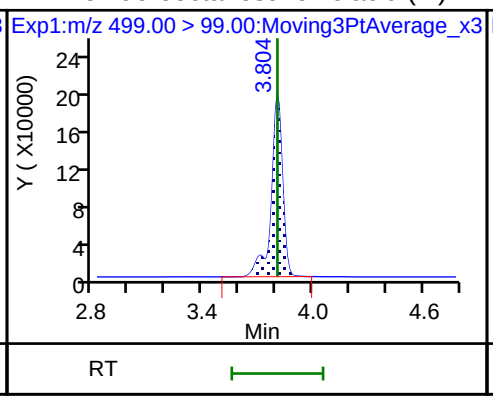

D 18 13C4 PFOS



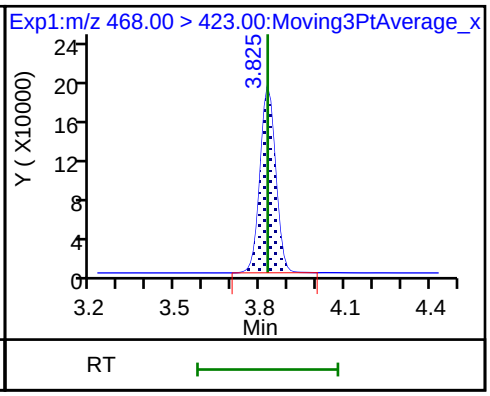

17 Perfluorooctanesulfonic acid (M)



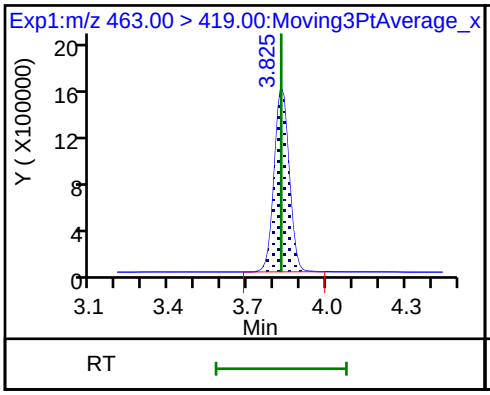

17 Perfluorooctanesulfonic acid (M)



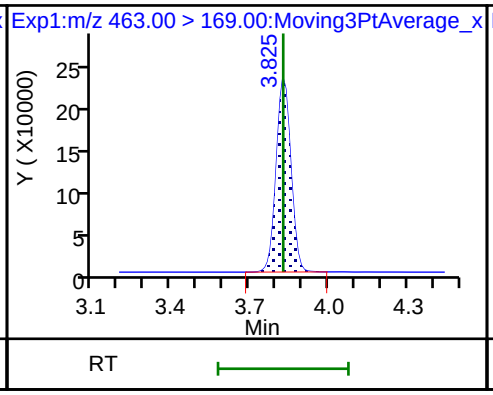

D 19 13C5 PFNA



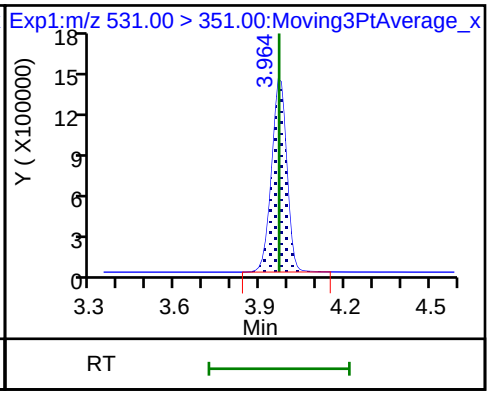
20 Perfluorononanoic acid



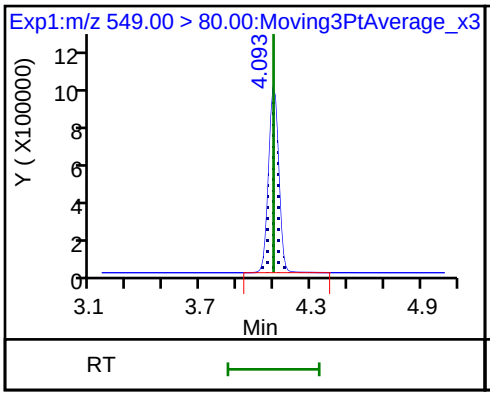

20 Perfluorononanoic acid



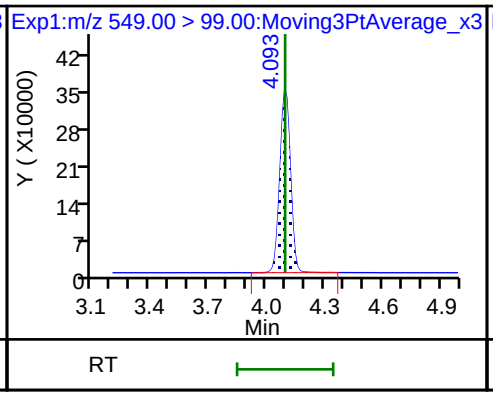

69 9-Chlorohexadecafluoro-3-oxanona (M)



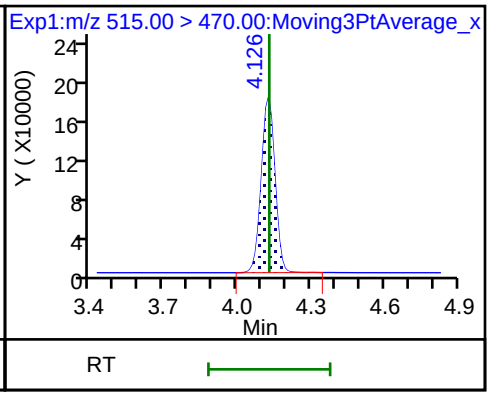

68 Perfluorononanesulfonic acid



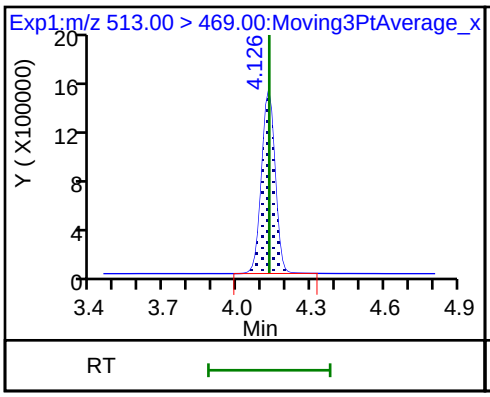

68 Perfluorononanesulfonic acid



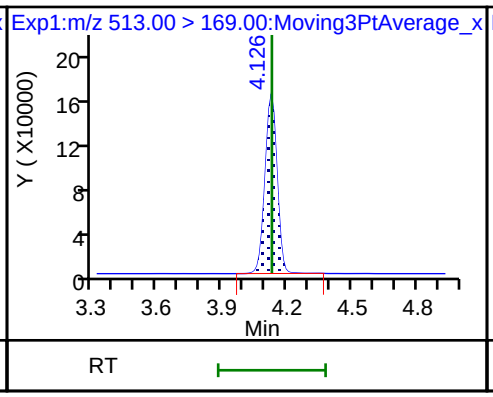

D 23 13C2 PFDA



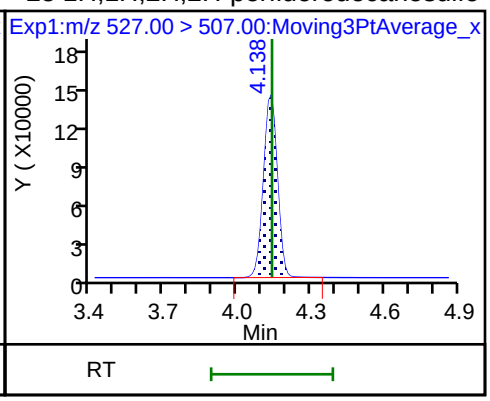

24 Perfluorodecanoic acid



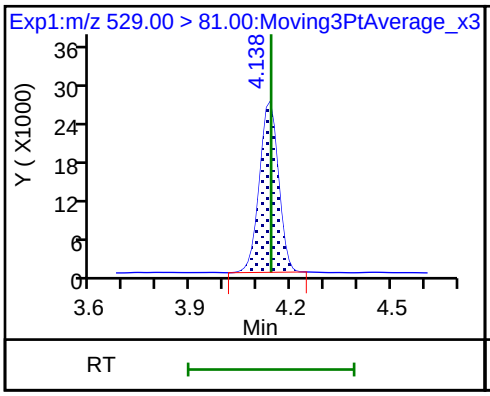

24 Perfluorodecanoic acid



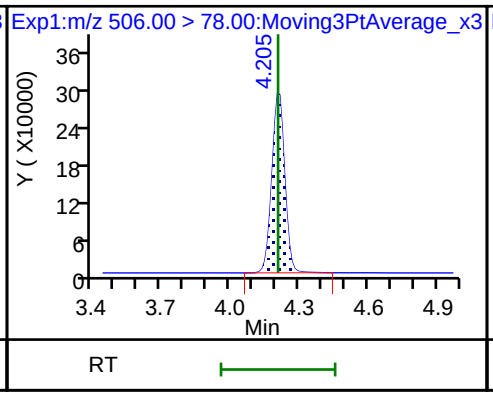

25 1H,1H,2H,2H-perfluorodecanesulfo



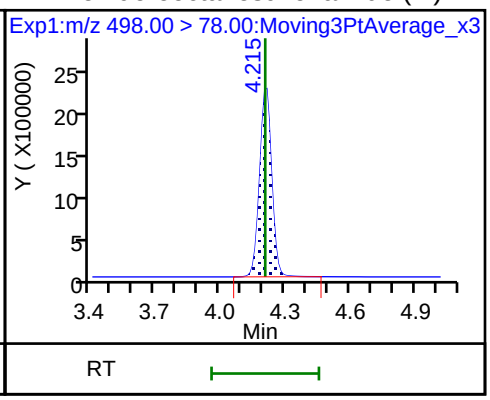

D 26 M2-8:2 FTS



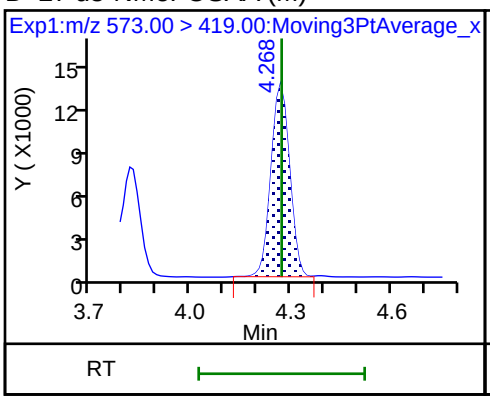

D 21 13C8 FOSA



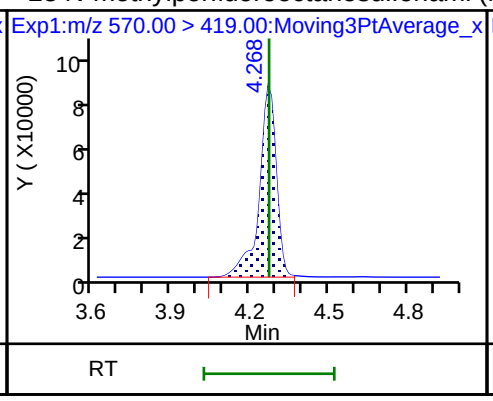

22 Perfluorooctanesulfonamide (M)



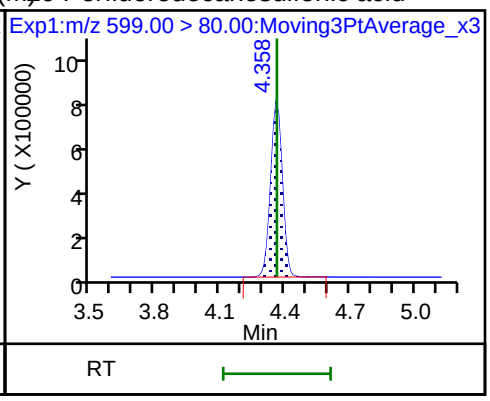
D 27 d3-NMeFOSAA (M)



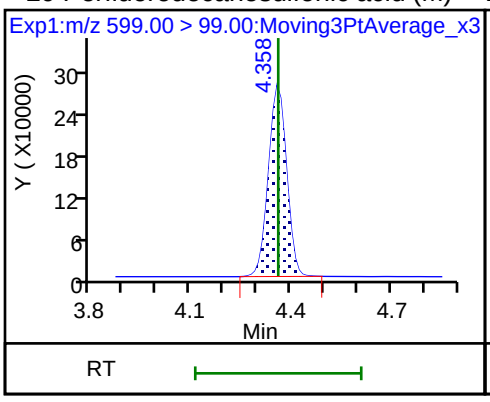

28 N-methylperfluorooctanesulfonami (M)



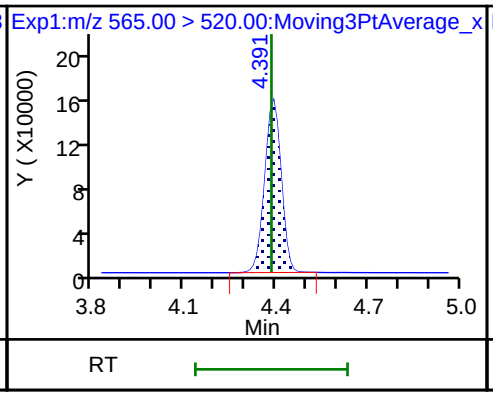

29 Perfluorodecanesulfonic acid



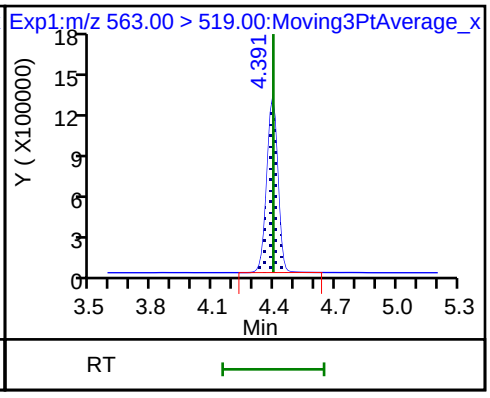

29 Perfluorodecanesulfonic acid (M)



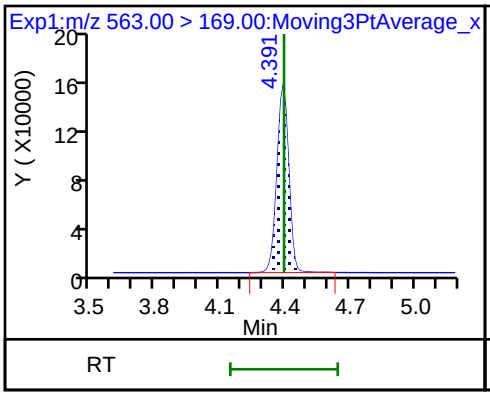

D 30 13C2 PFUnA



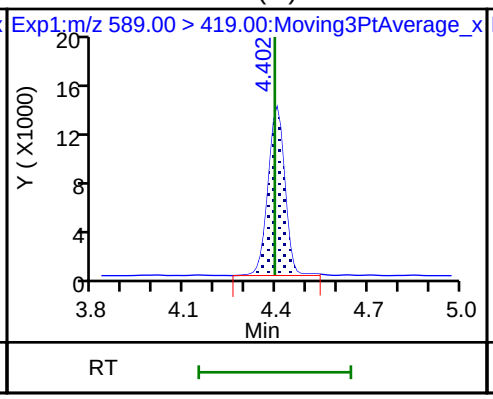

31 Perfluoroundecanoic acid



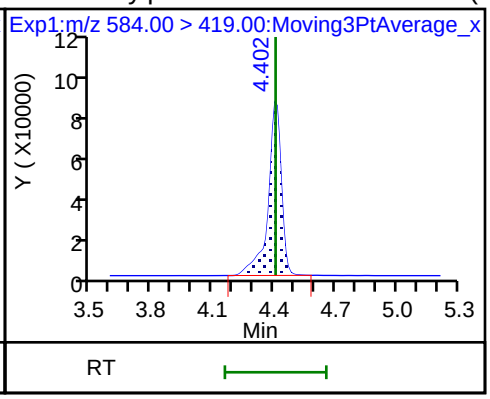

31 Perfluoroundecanoic acid



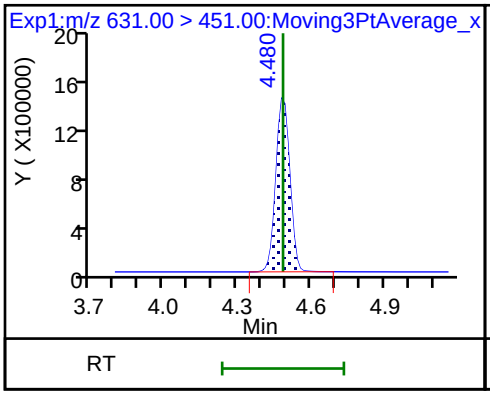

D 32 d5-NEtFOSAA (M)



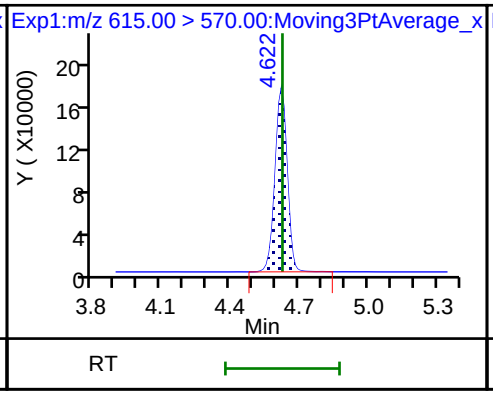

33 N-ethylperfluorooctanesulfonamid (M)



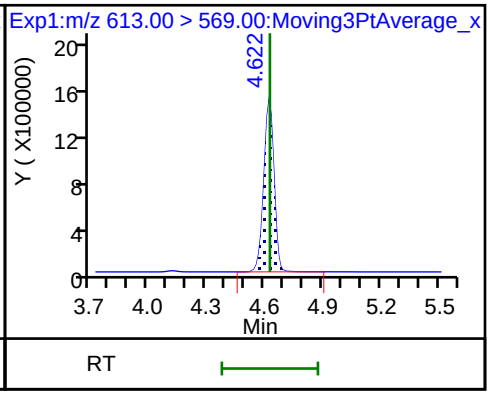

66 11-Chloroeicosafluoro-3-oxaundec



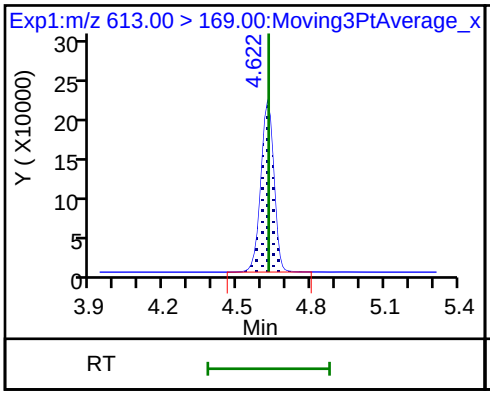

D 36 13C2 PFDoA



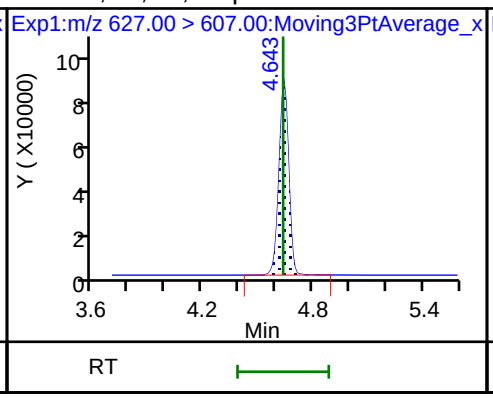

37 Perfluorododecanoic acid



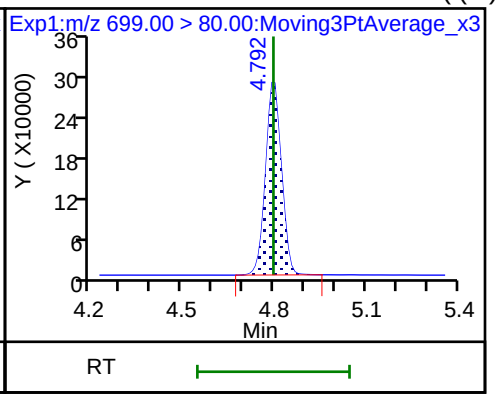
37 Perfluorododecanoic acid



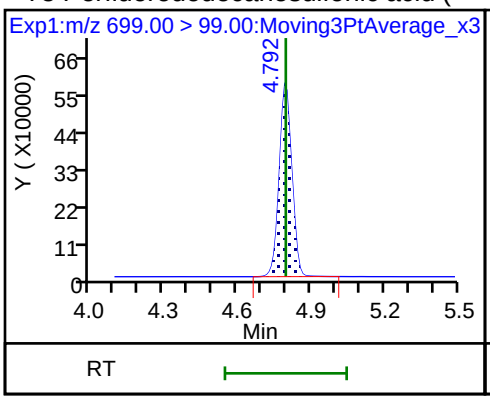

74 1H,1H,2H,2H-perfluorododecanesul



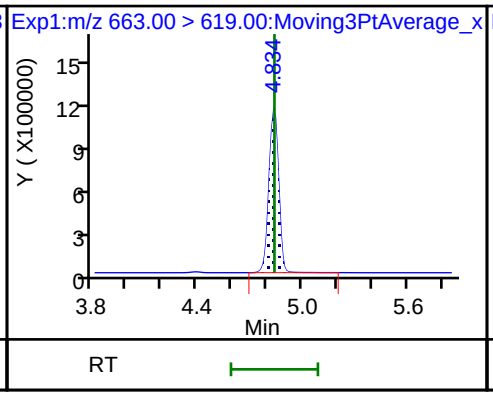

75 Perfluorododecanesulfonic acid ( (M)



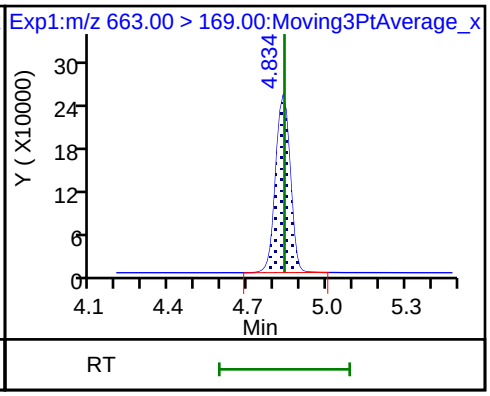

75 Perfluorododecanesulfonic acid (



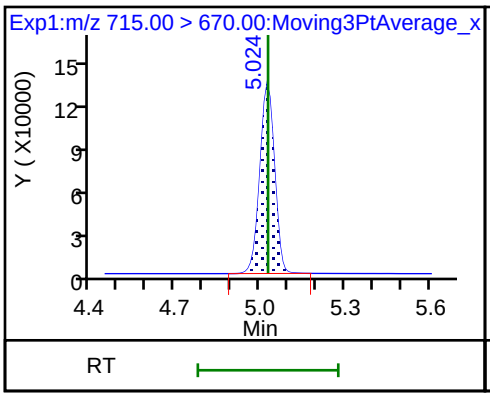

41 Perfluorotridecanoic acid



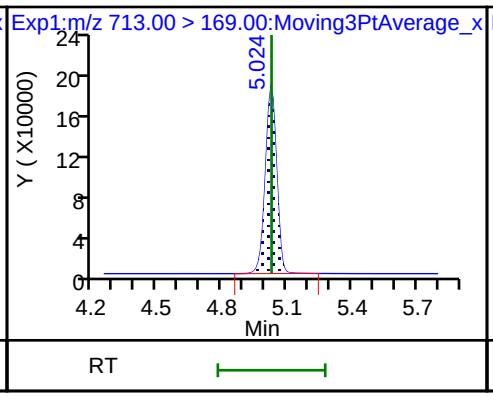

41 Perfluorotridecanoic acid



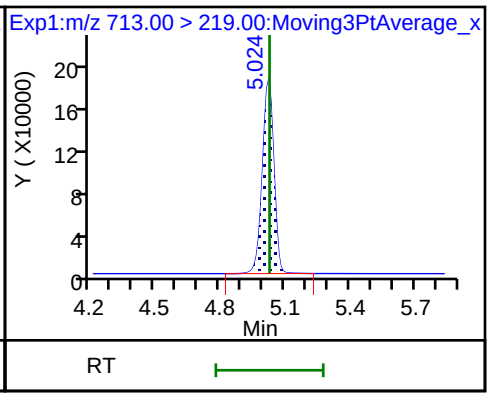

D 43 13C2 PFTeDA



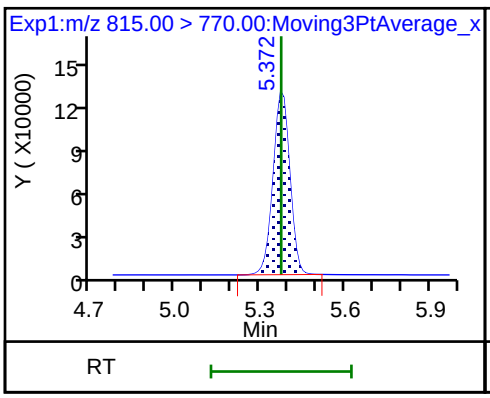

42 Perfluorotetradecanoic acid



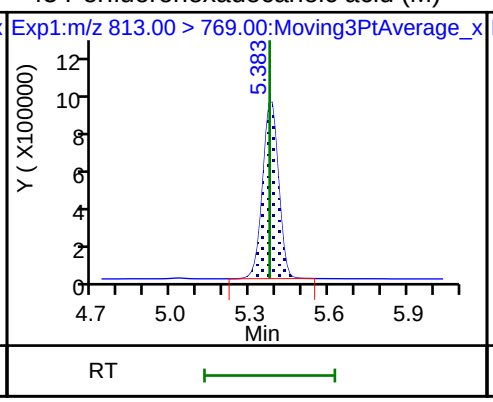

42 Perfluorotetradecanoic acid



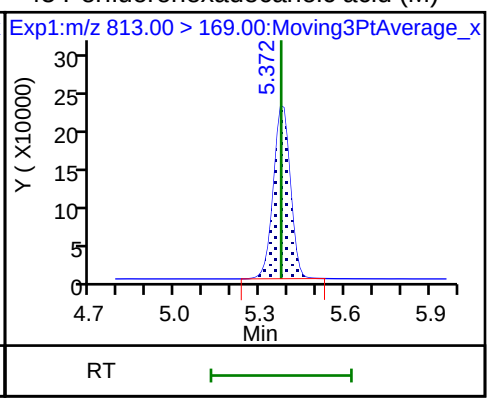

D 44 13C2 PFHxDA



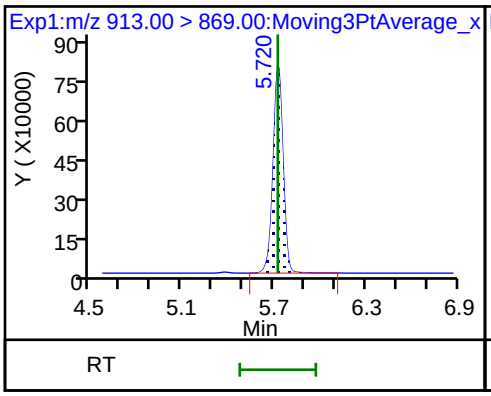

45 Perfluorohexadecanoic acid (M)



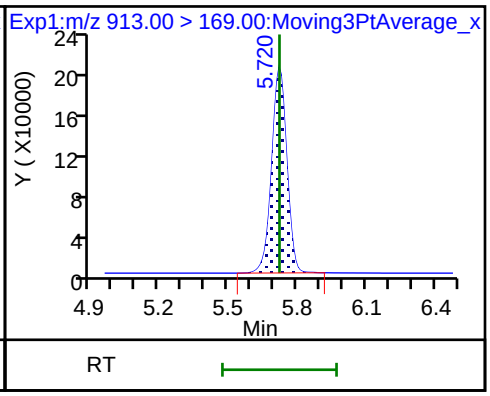

45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid




46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

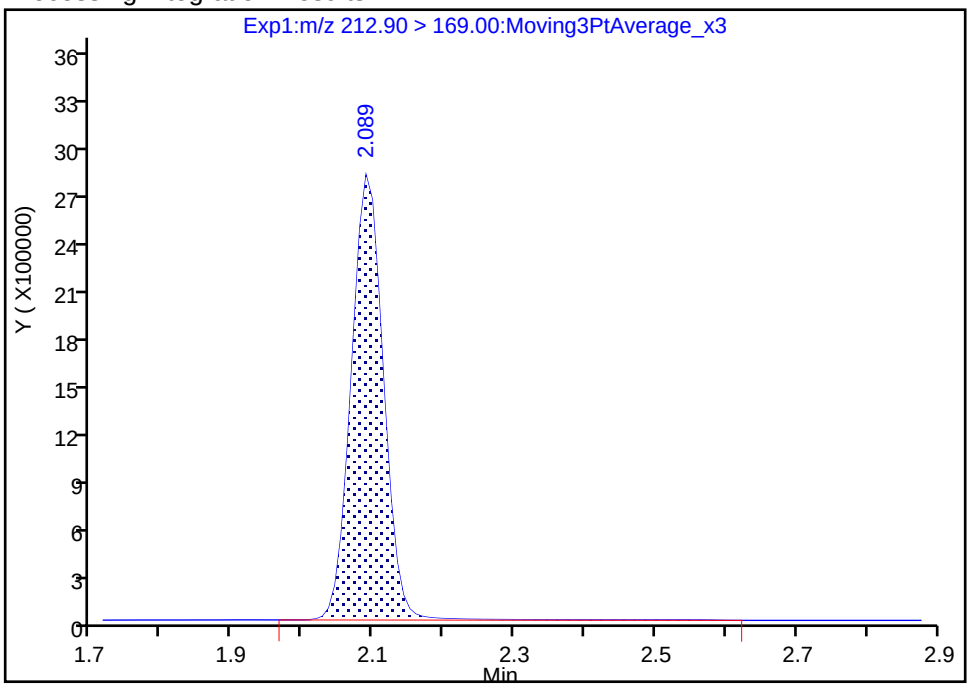
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

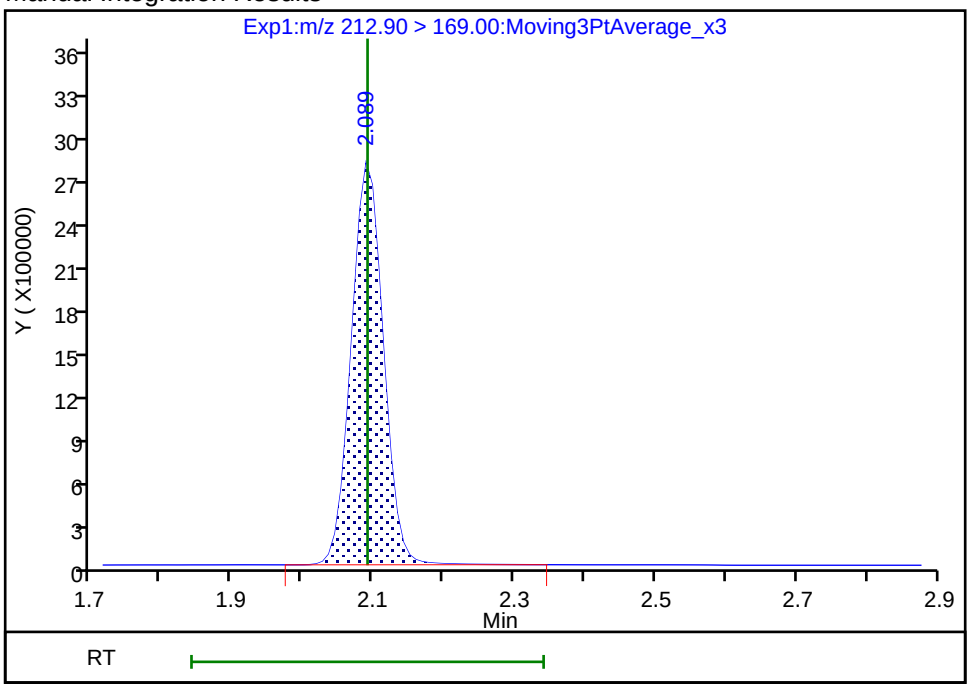
Processing Integration Results

RT: 2.09
Area: 8854729
Amount: 10.021258
Amount Units: ng/ml




Manual Integration Results

RT: 2.09
Area: 8790651
Amount: 9.193132
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:00:25

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

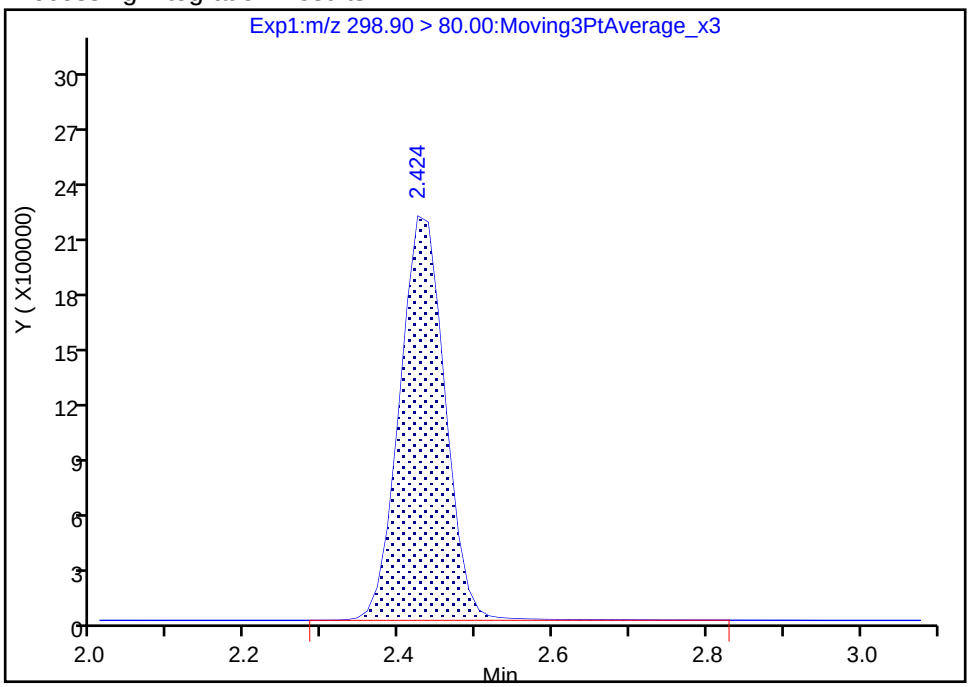
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

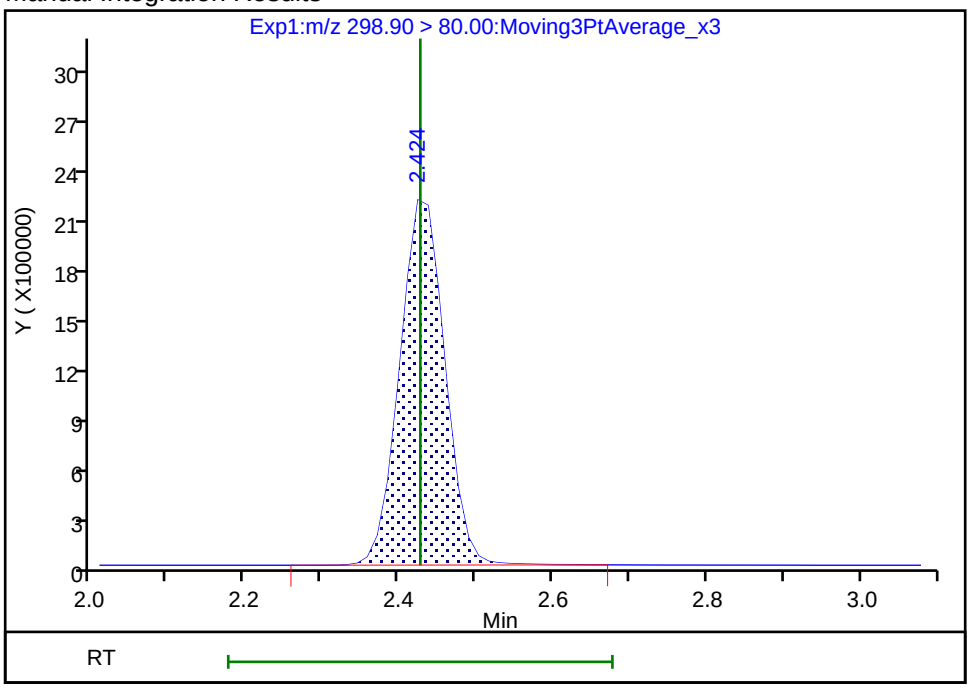
Processing Integration Results

RT: 2.42
Area: 8798028
Amount: 8.864743
Amount Units: ng/ml




Manual Integration Results

RT: 2.42
Area: 8770776
Amount: 8.446965
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:00:35
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

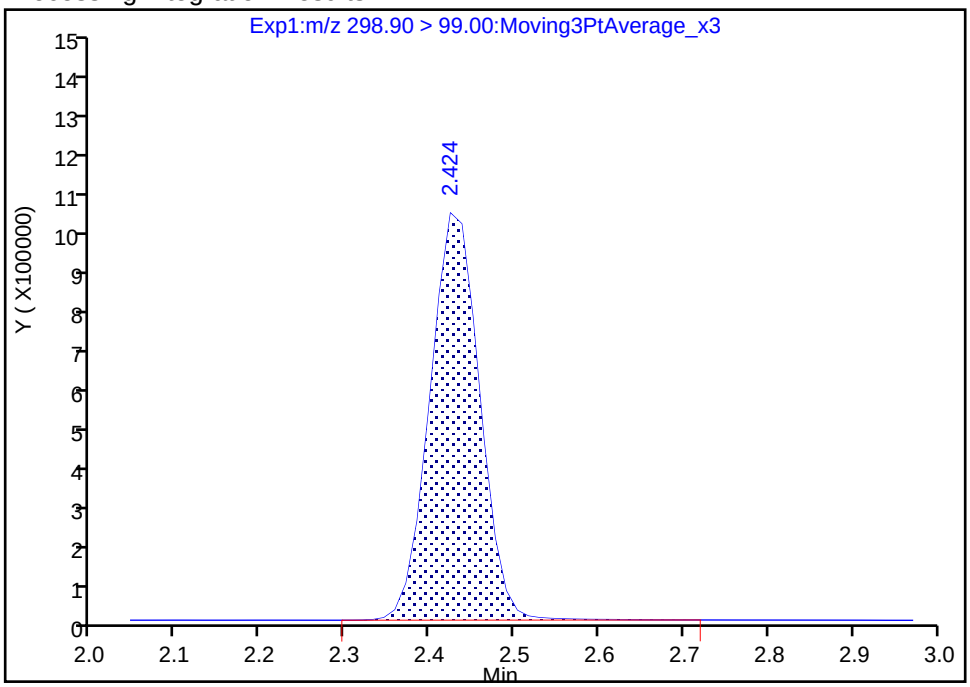
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

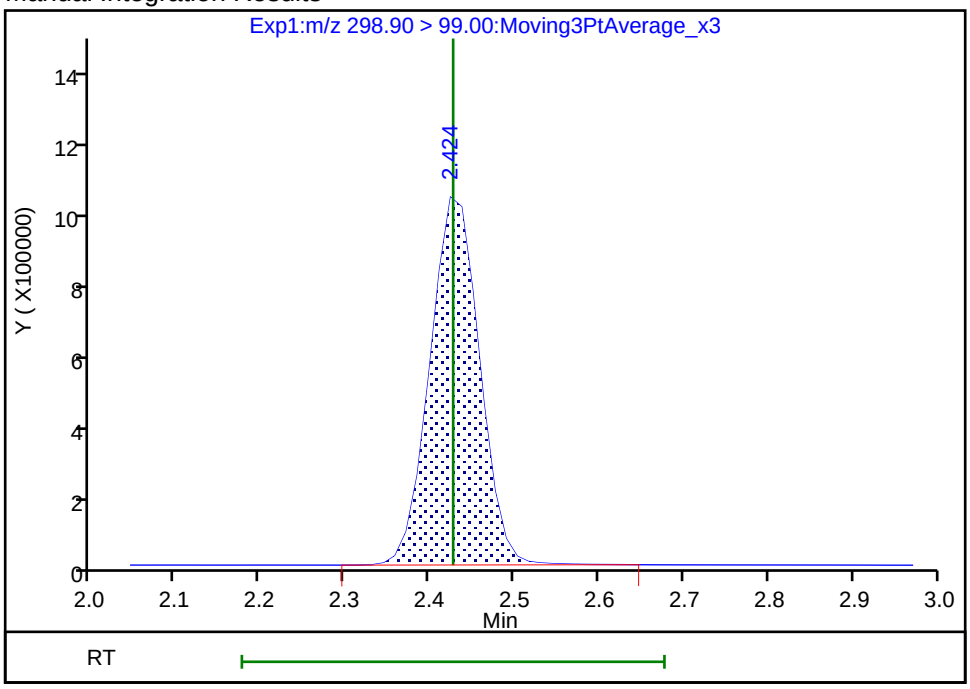
Processing Integration Results

RT: 2.42
Area: 3988912
Amount: 8.864743
Amount Units: ng/ml




Manual Integration Results

RT: 2.42
Area: 3982557
Amount: 8.446965
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:00:40
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

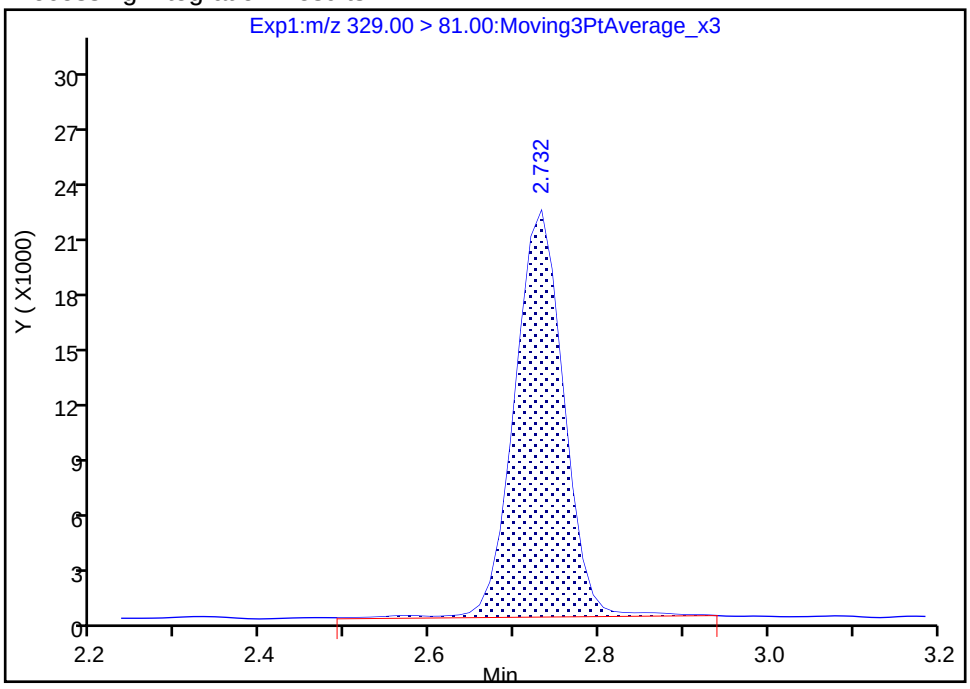
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

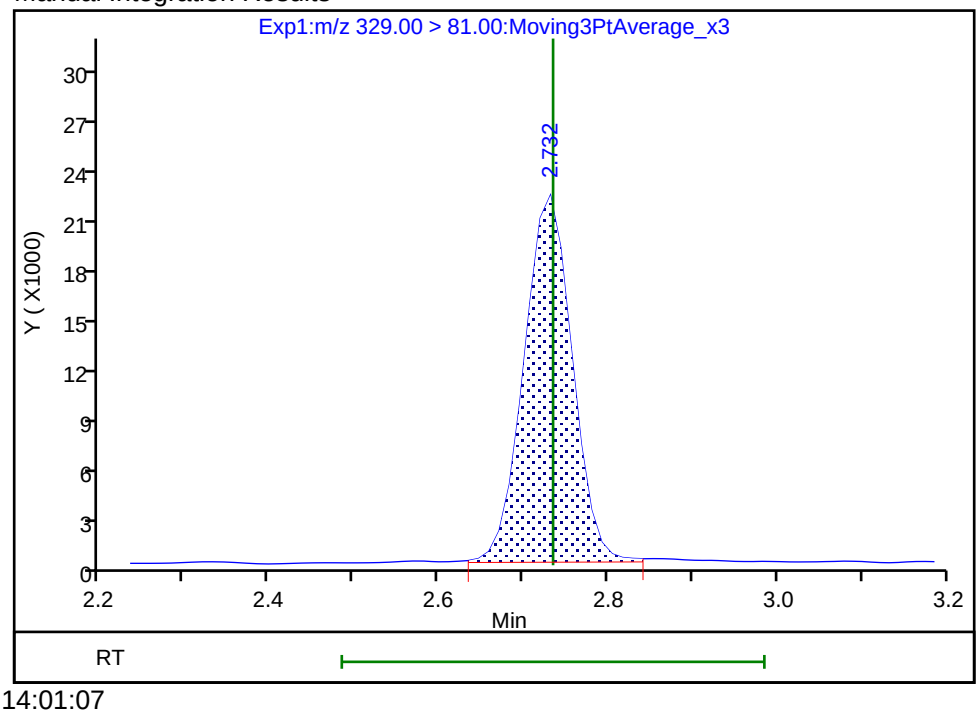
Processing Integration Results

RT: 2.73
Area: 89402
Amount: 1.224941
Amount Units: ng/ml




Manual Integration Results

RT: 2.73
Area: 88021
Amount: 1.212116
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:01:07

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

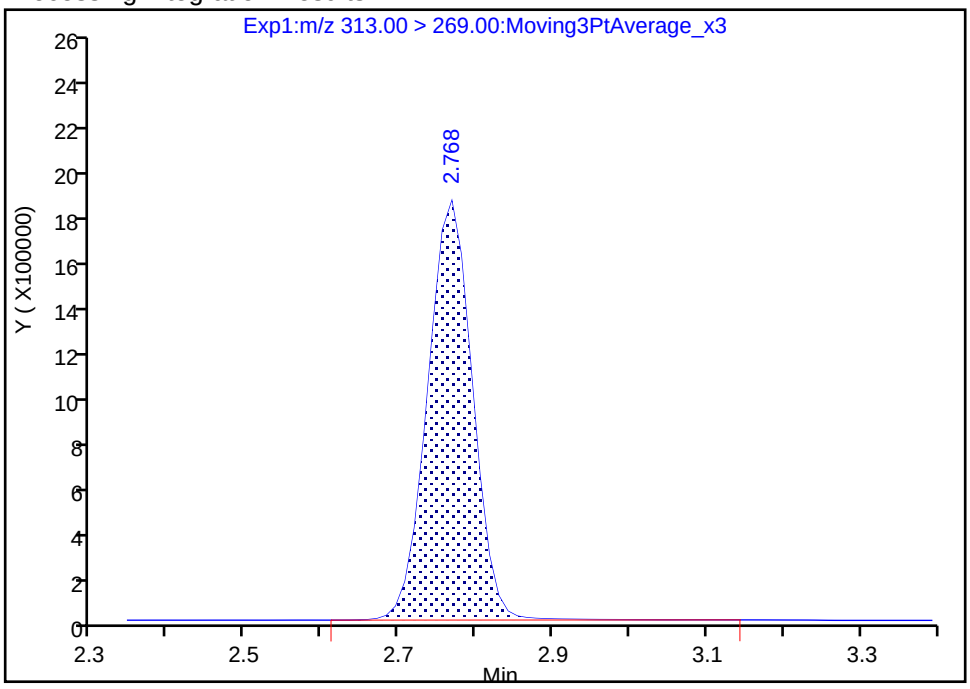
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

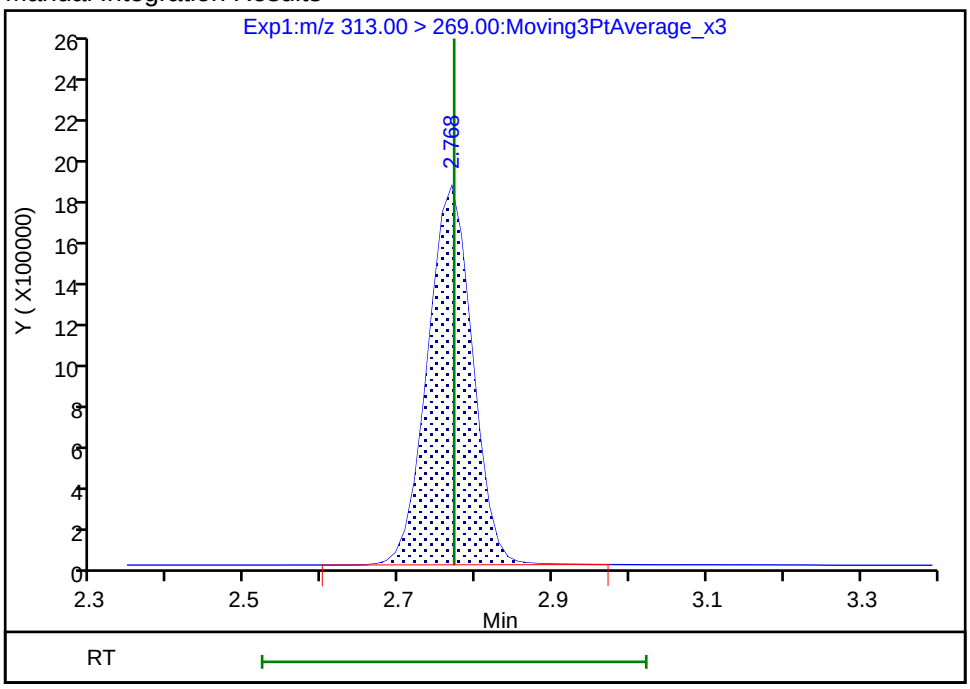
Processing Integration Results

RT: 2.77
Area: 7340146
Amount: 10.071365
Amount Units: ng/ml




Manual Integration Results

RT: 2.77
Area: 7316861
Amount: 9.665643
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:01:14
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

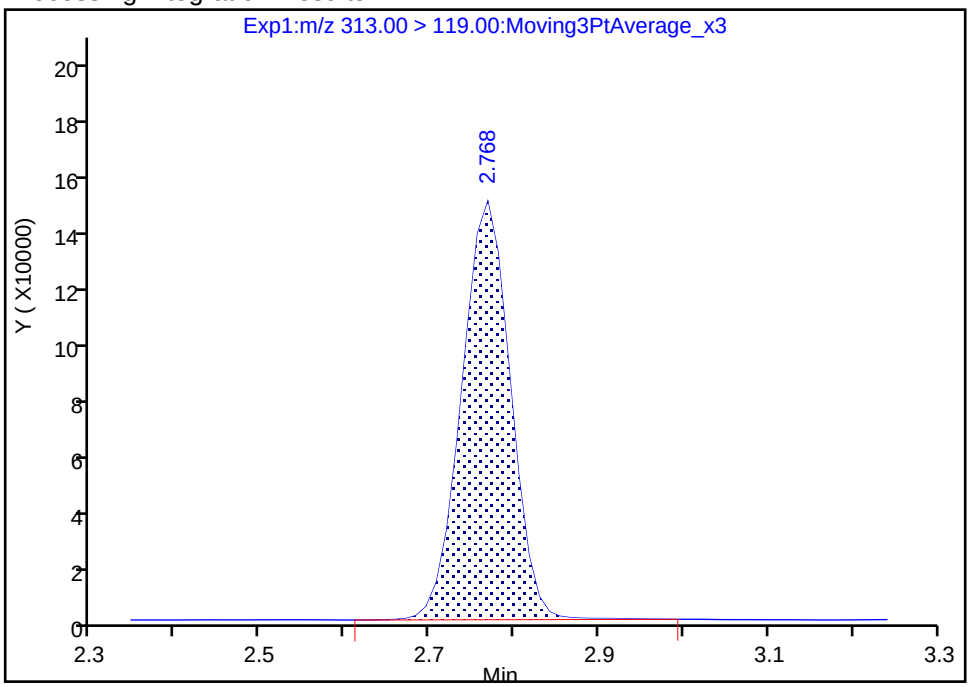
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

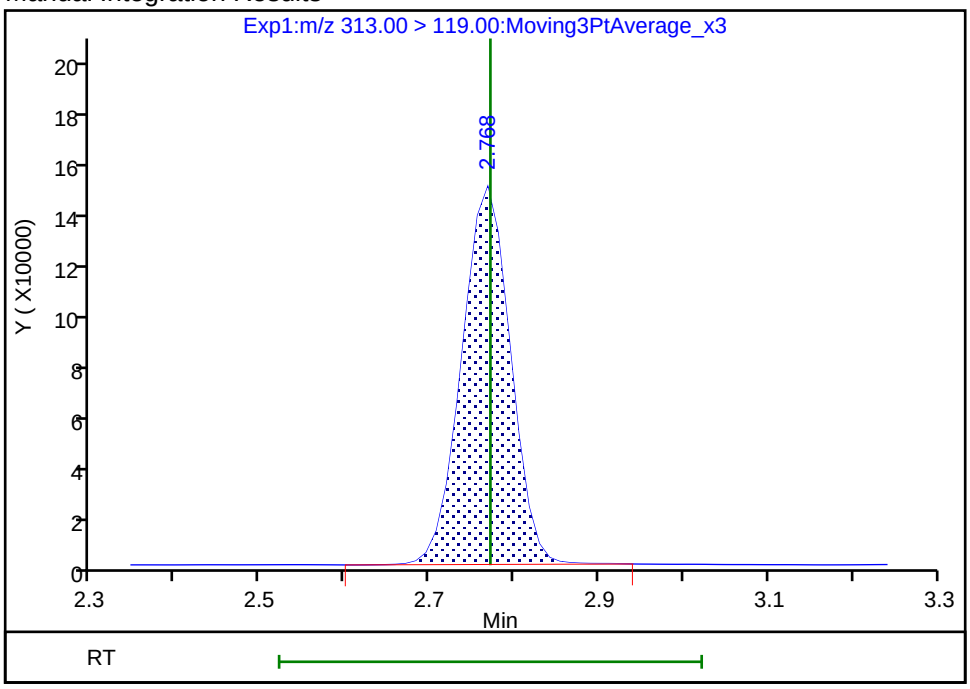
Processing Integration Results

RT: 2.77
Area: 602299
Amount: 10.071365
Amount Units: ng/ml




Manual Integration Results

RT: 2.77
Area: 600272
Amount: 9.665643
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:01:19

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

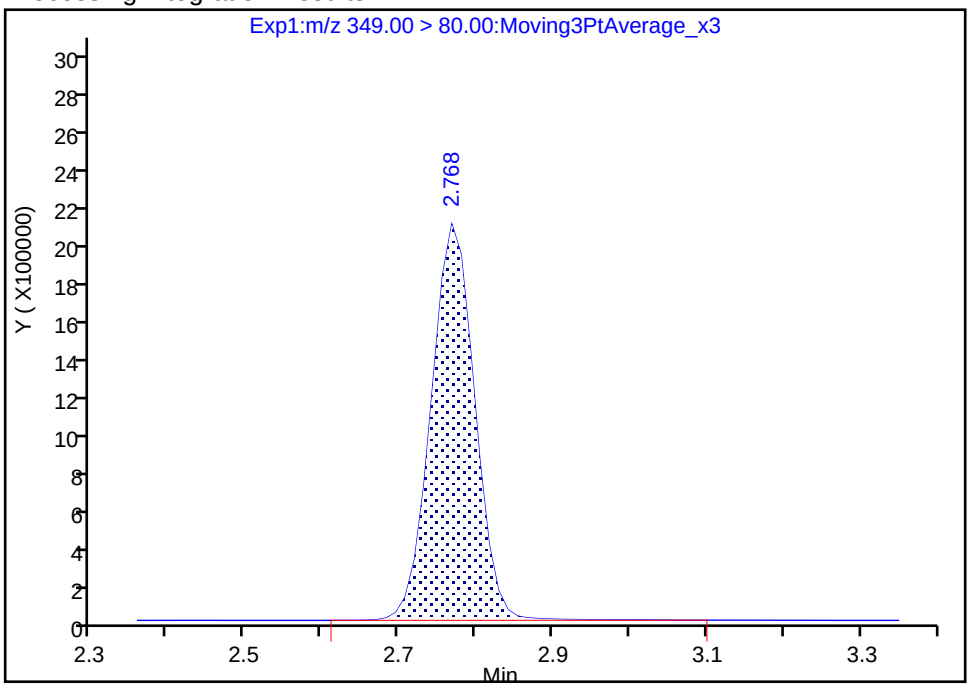
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

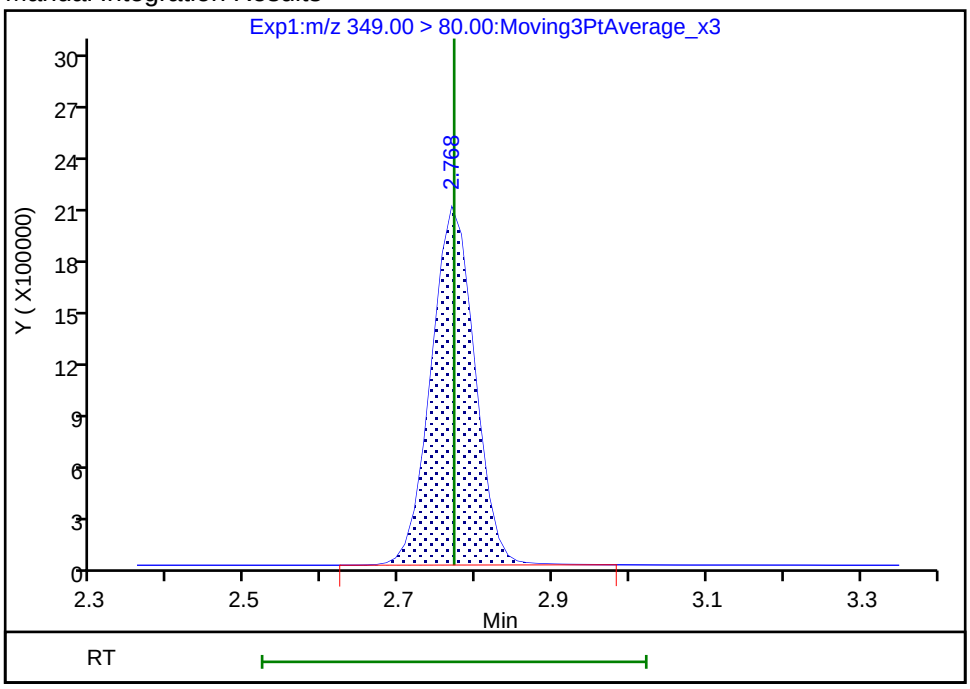
Processing Integration Results

RT: 2.77
Area: 8141354
Amount: 9.412724
Amount Units: ng/ml




Manual Integration Results

RT: 2.77
Area: 8114898
Amount: 9.121450
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:01:27
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

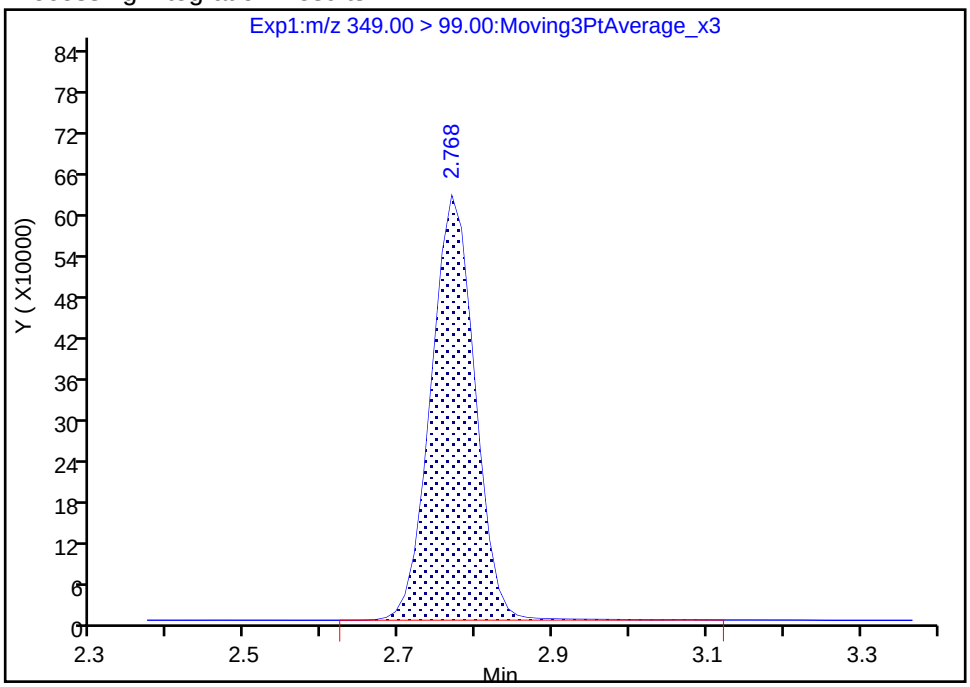
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

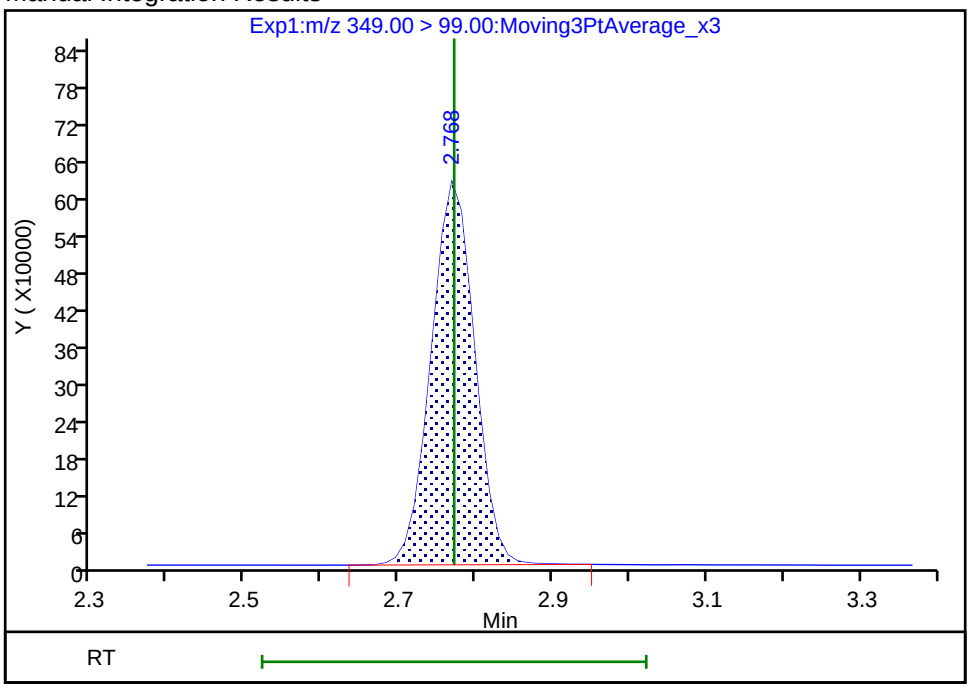
Processing Integration Results

RT: 2.77
Area: 2468153
Amount: 9.412724
Amount Units: ng/ml




Manual Integration Results

RT: 2.77
Area: 2455035
Amount: 9.121450
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:01:31

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

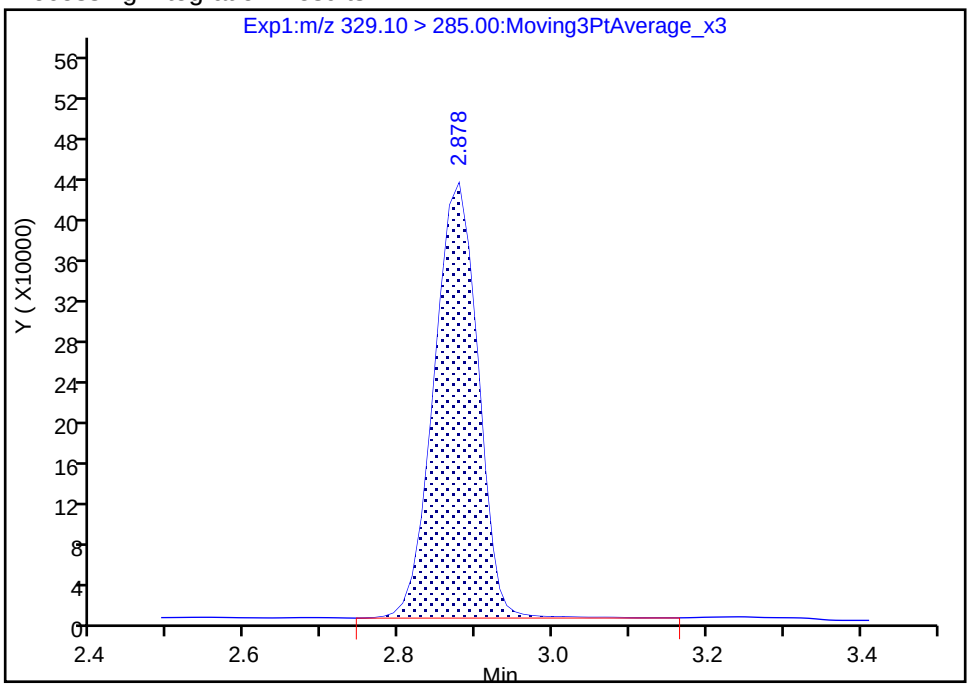
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

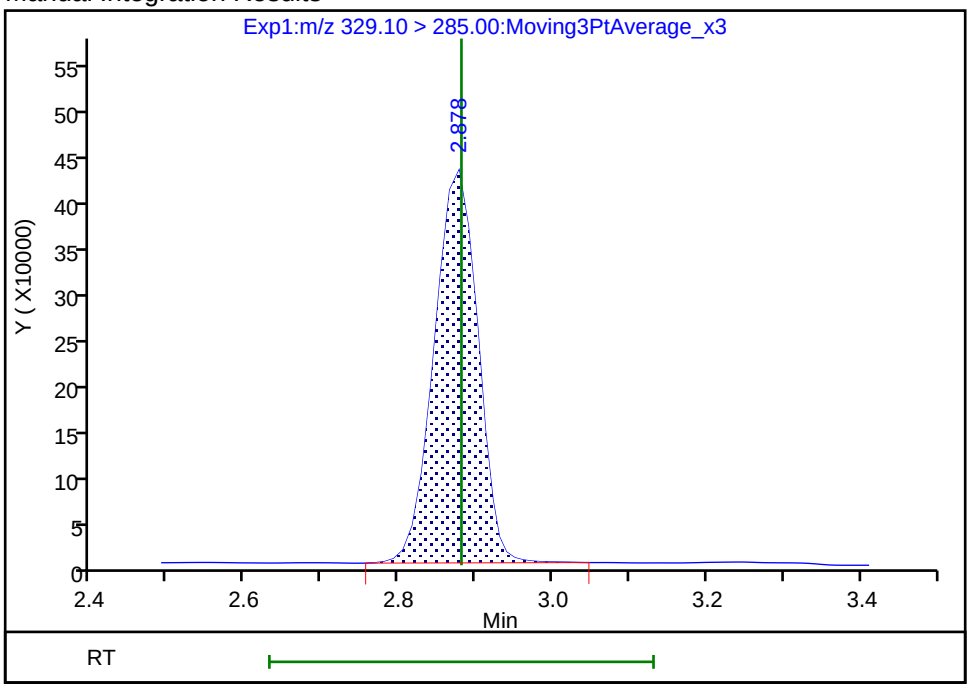
Processing Integration Results

RT: 2.88
Area: 1699465
Amount: 10.481820
Amount Units: ng/ml




Manual Integration Results

RT: 2.88
Area: 1690983
Amount: 10.920927
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:01:39
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

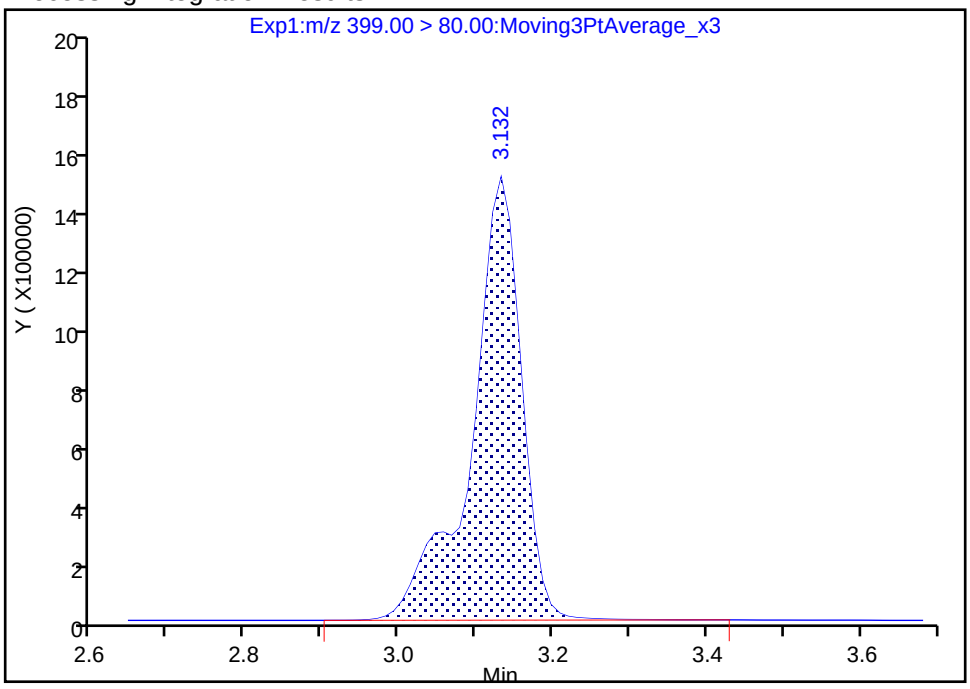
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

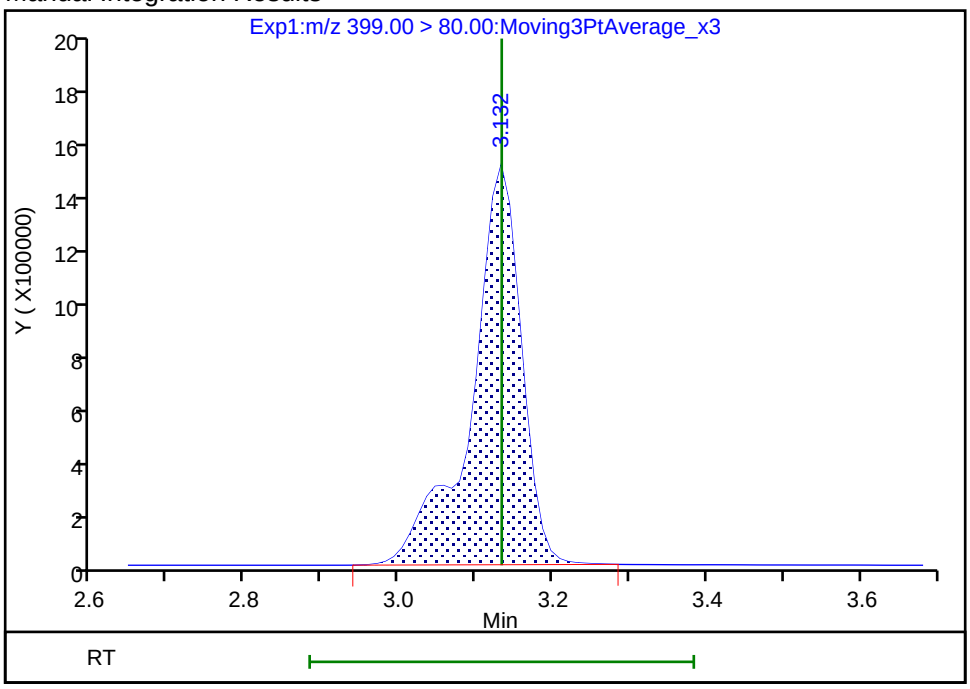
Processing Integration Results

RT: 3.13
Area: 6704374
Amount: 9.072810
Amount Units: ng/ml




Manual Integration Results

RT: 3.13
Area: 6676661
Amount: 8.357156
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:01:46

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

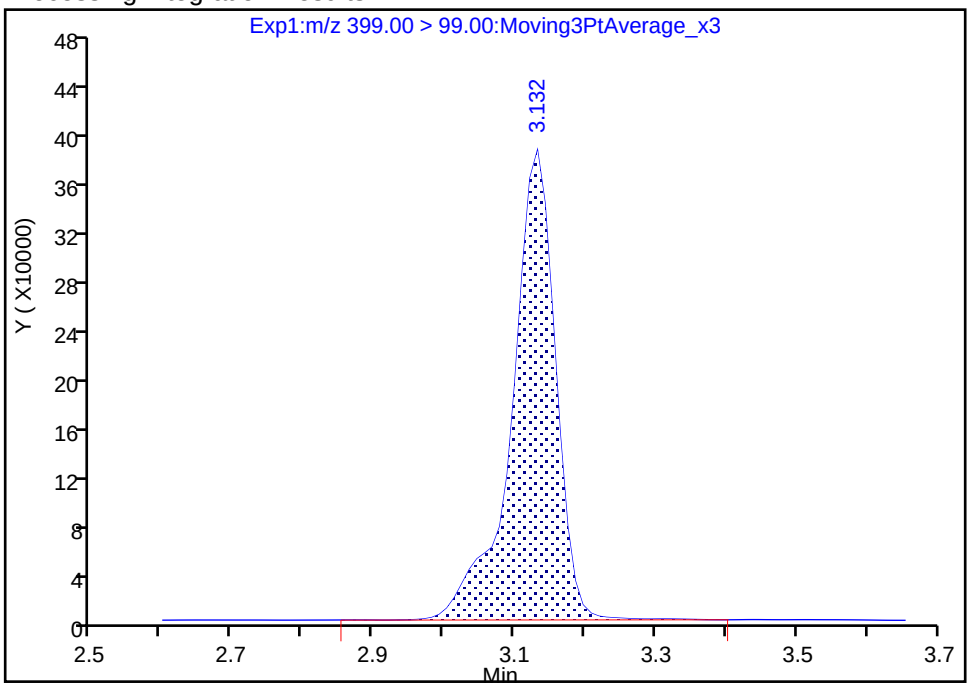
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

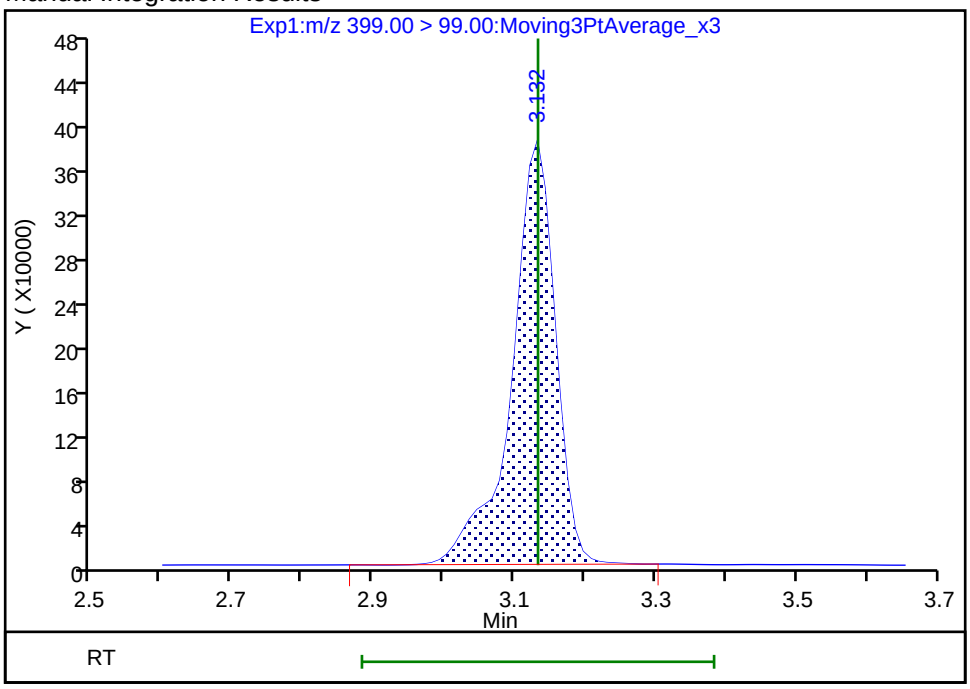
Processing Integration Results

RT: 3.13
Area: 1643683
Amount: 9.072810
Amount Units: ng/ml




Manual Integration Results

RT: 3.13
Area: 1631116
Amount: 8.357156
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:01:49

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

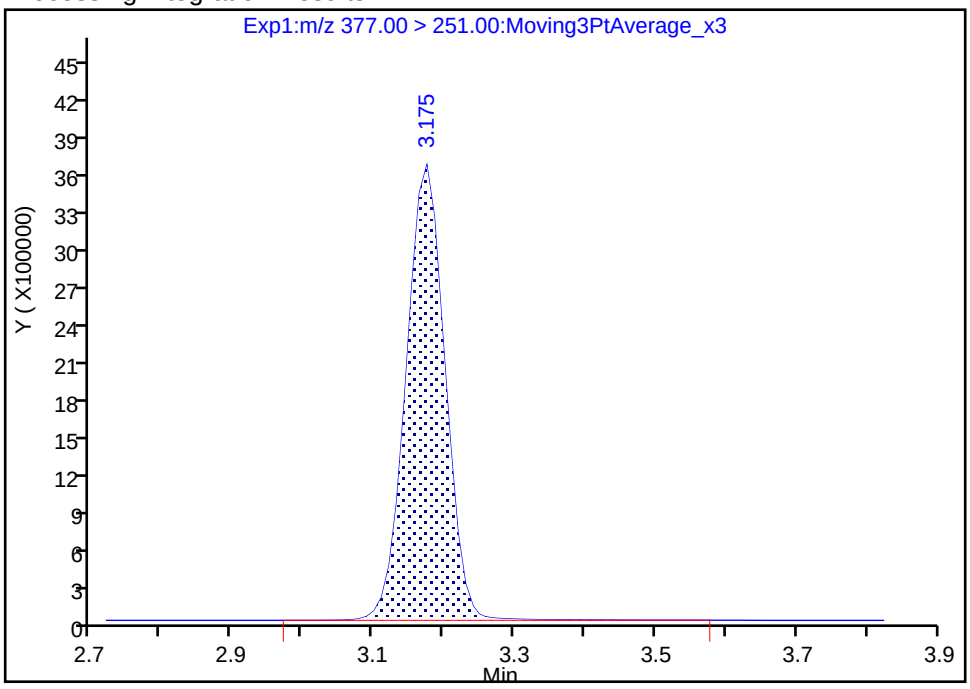
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 77 DONA, CAS: 919005-14-4

Signal: 1

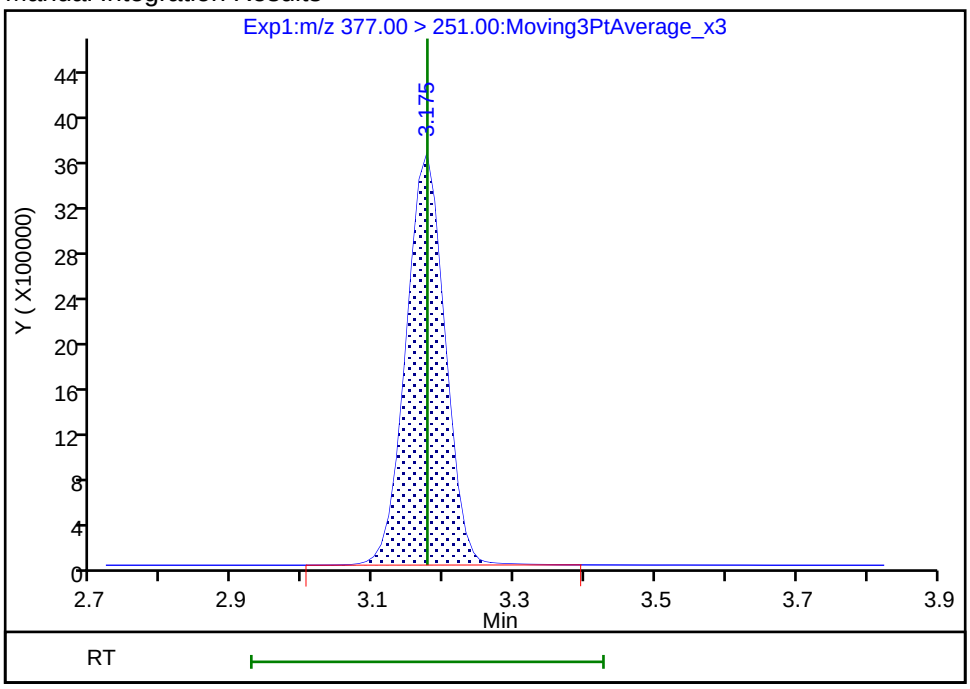
Processing Integration Results

RT: 3.18
Area: 13968604
Amount: 9.315090
Amount Units: ng/ml




Manual Integration Results

RT: 3.18
Area: 13928638
Amount: 8.998109
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:01:57
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

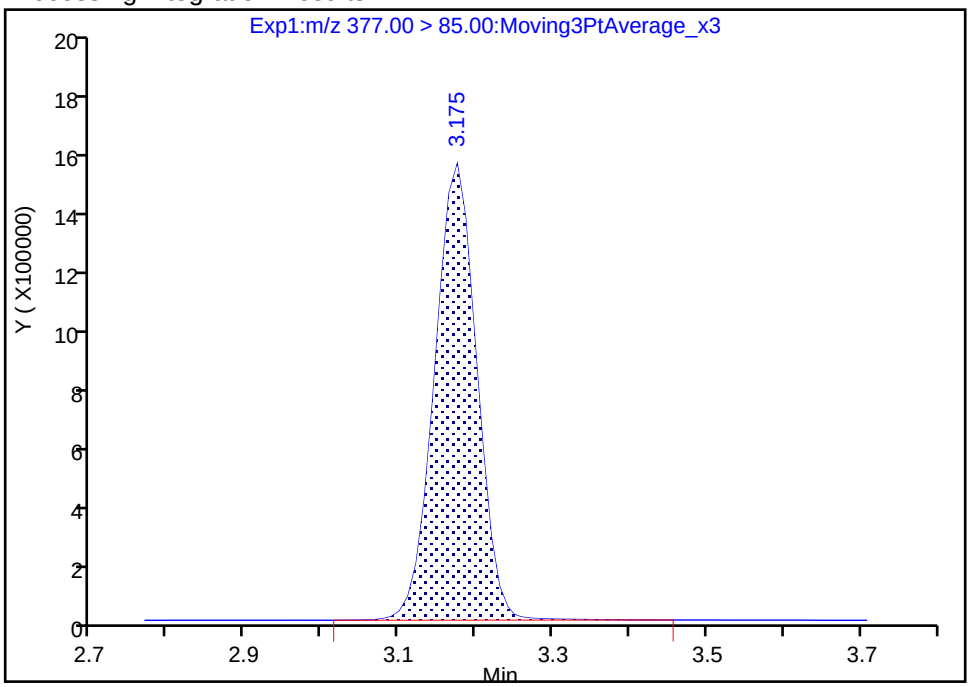
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 77 DONA, CAS: 919005-14-4

Signal: 2

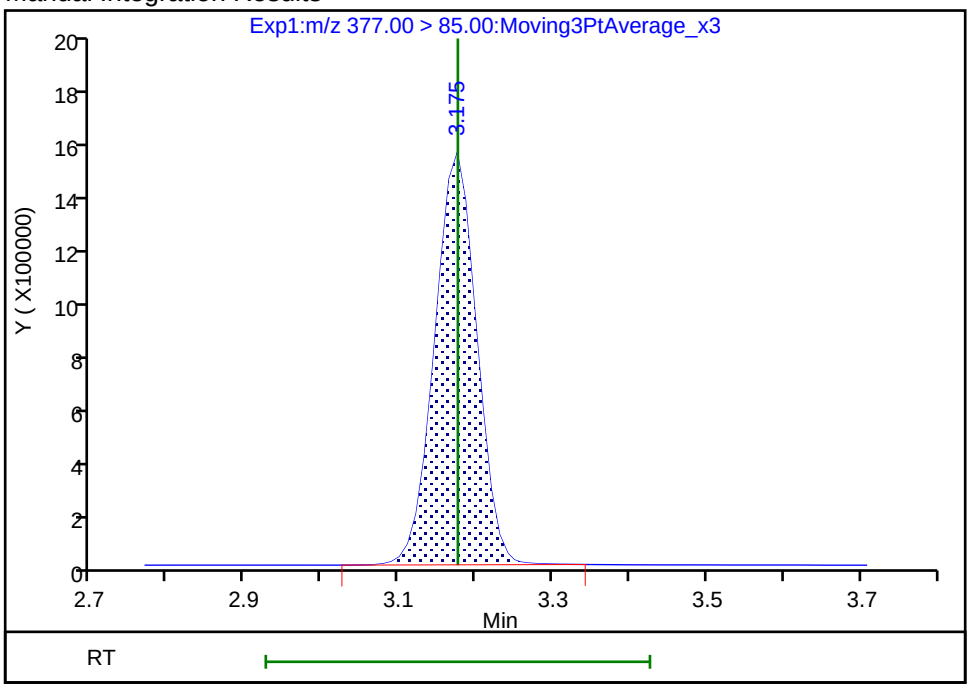
Processing Integration Results

RT: 3.18
Area: 5824120
Amount: 9.315090
Amount Units: ng/ml




Manual Integration Results

RT: 3.18
Area: 5802950
Amount: 8.998109
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:02:01

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

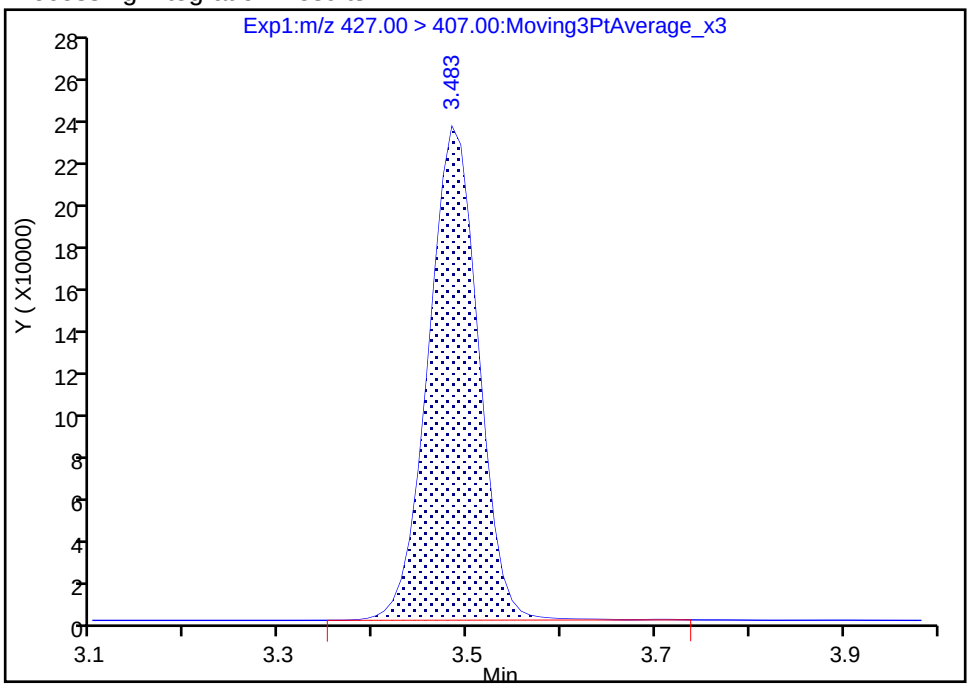
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

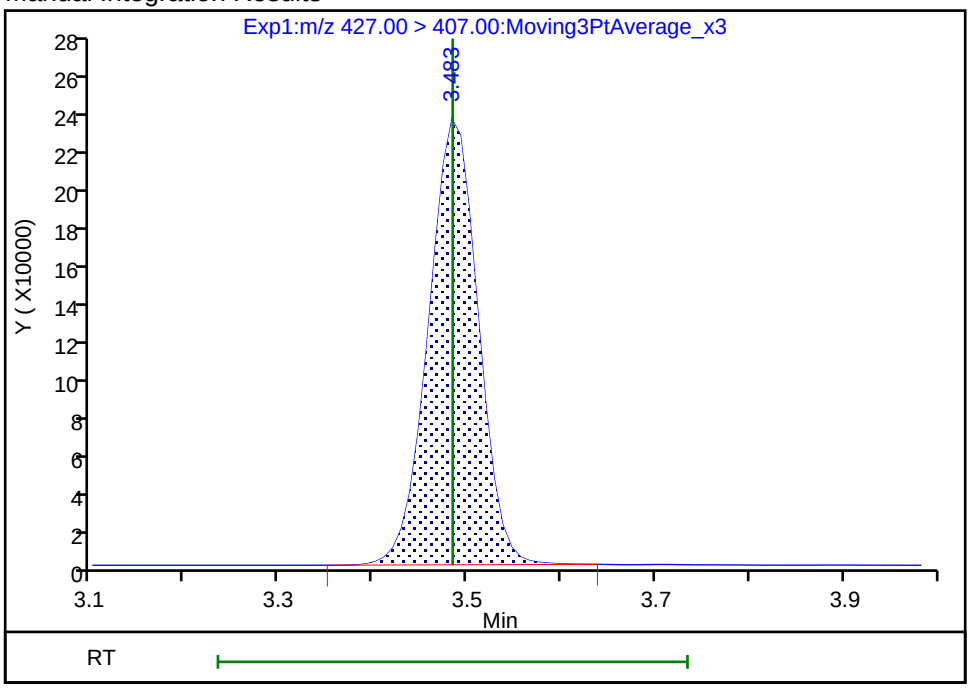
Processing Integration Results

RT: 3.48
Area: 857542
Amount: 9.479520
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 854196
Amount: 9.466413
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:02:20

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

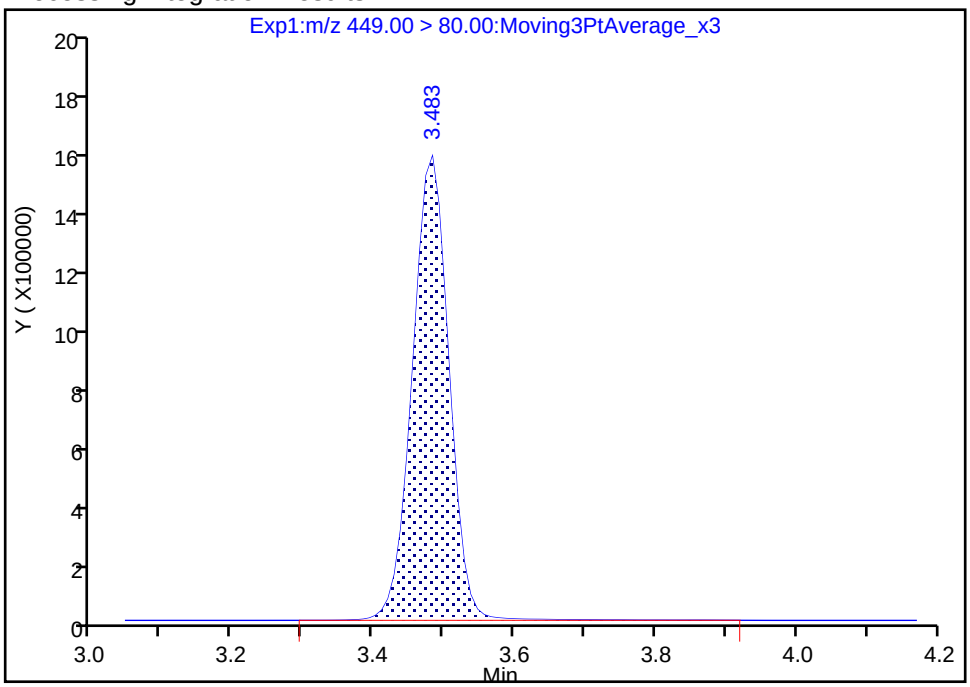
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

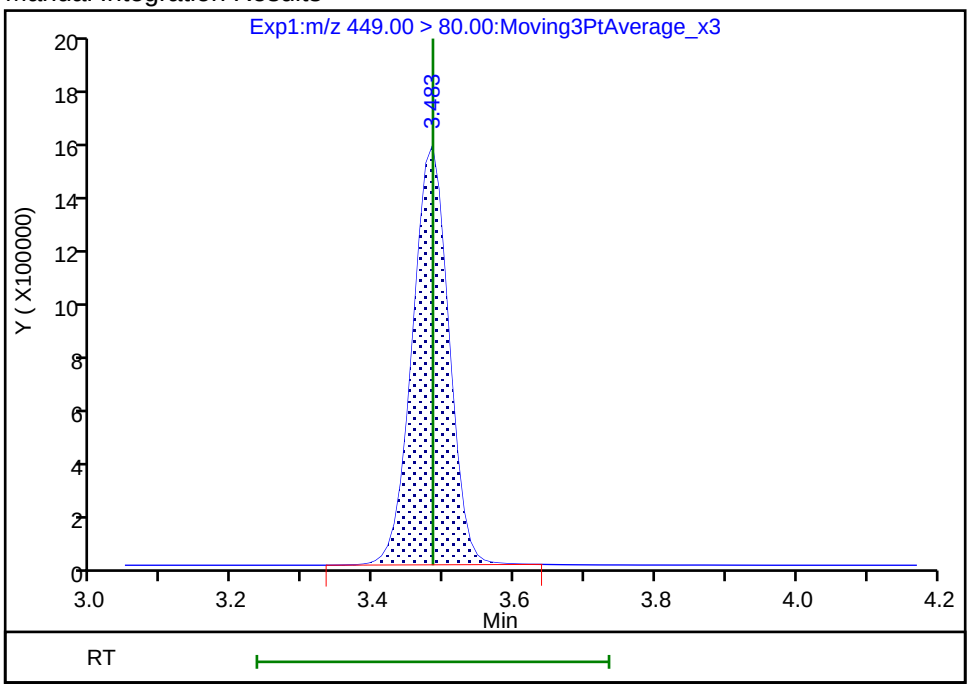
Processing Integration Results

RT: 3.48
Area: 5614949
Amount: 9.491517
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 5572962
Amount: 8.928842
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:02:08
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

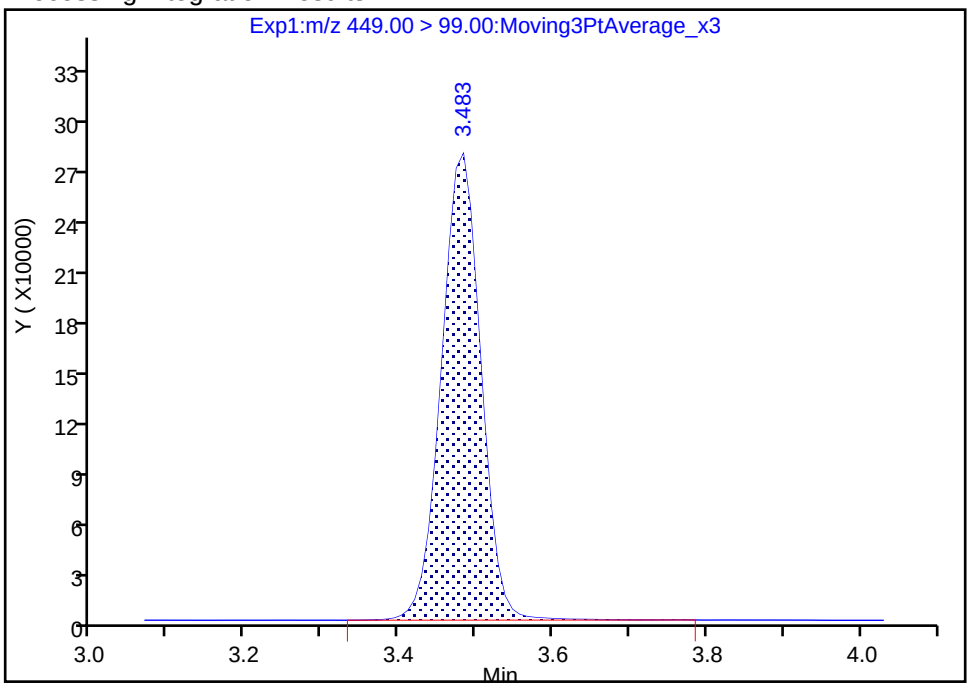
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

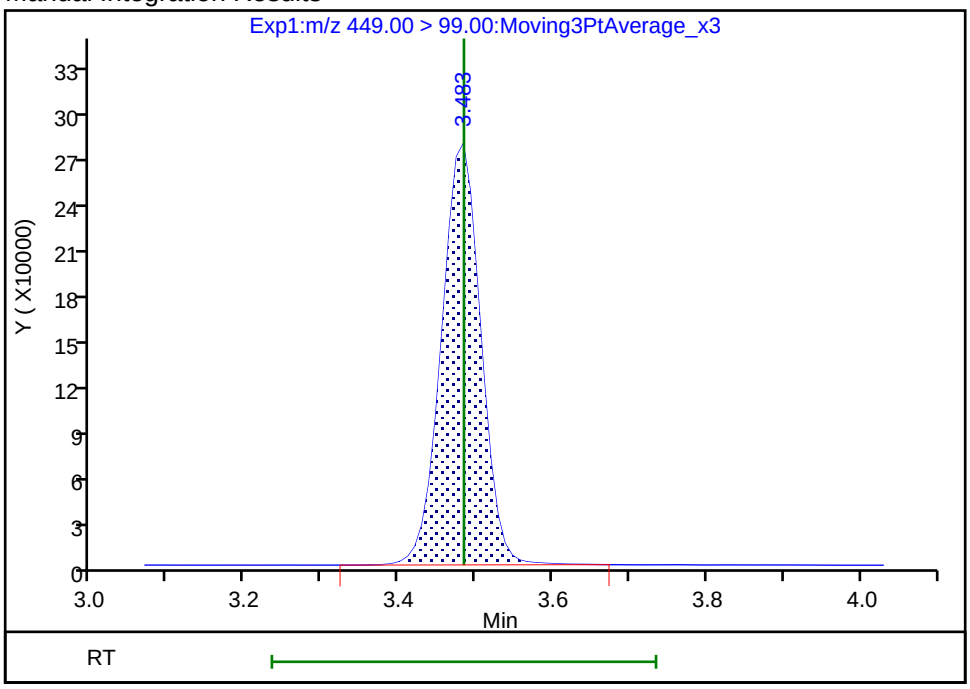
Processing Integration Results

RT: 3.48
Area: 967749
Amount: 9.491517
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 965141
Amount: 8.928842
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:02:12

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

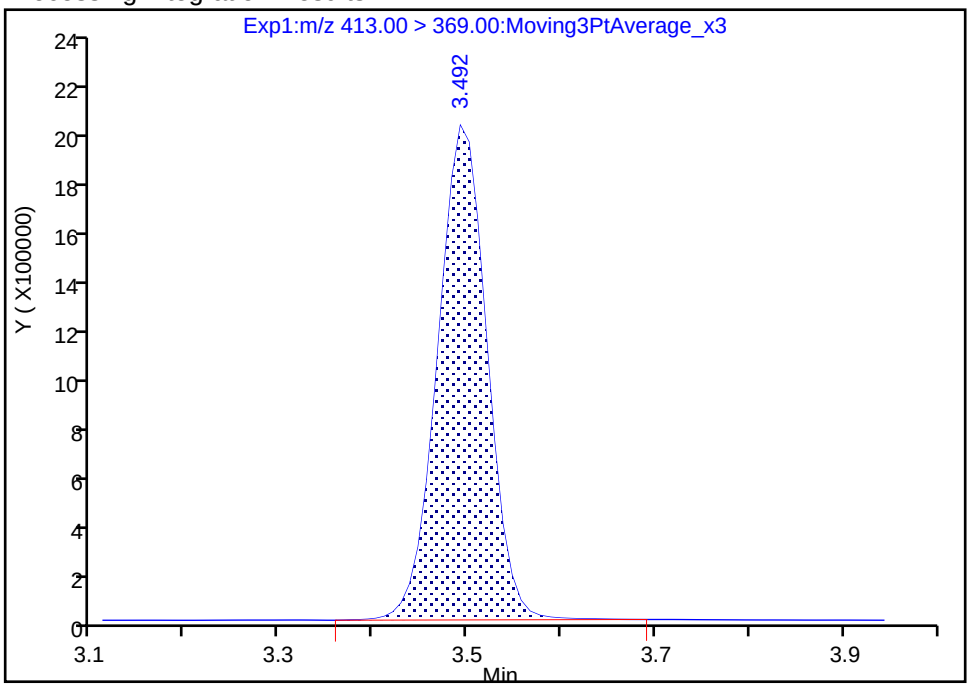
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

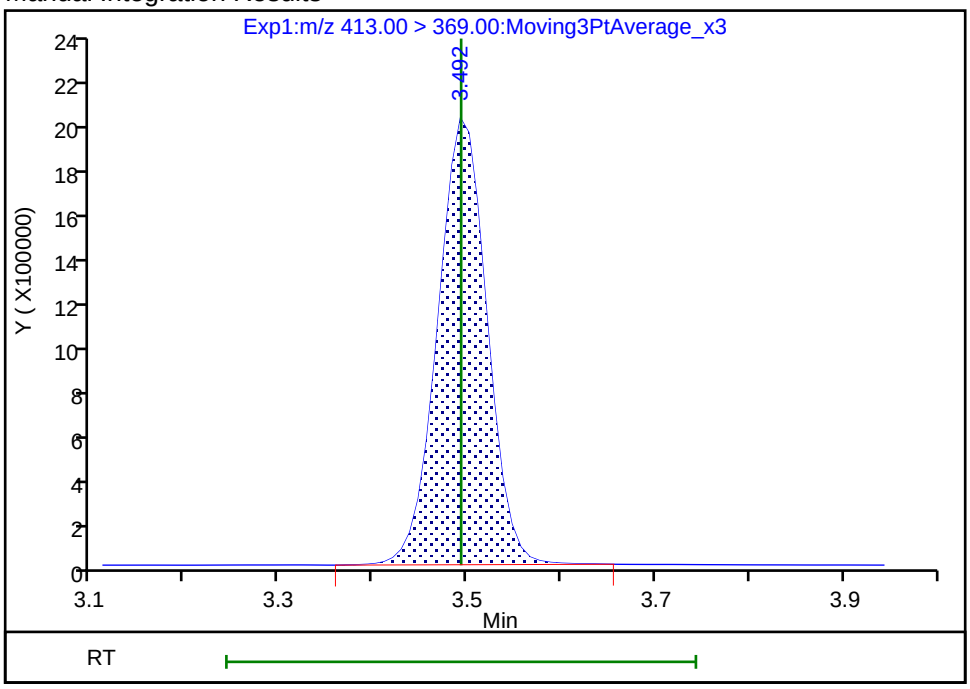
Processing Integration Results

RT: 3.49
Area: 7264133
Amount: 10.101909
Amount Units: ng/ml




Manual Integration Results

RT: 3.49
Area: 7252703
Amount: 9.960263
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:02:31
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

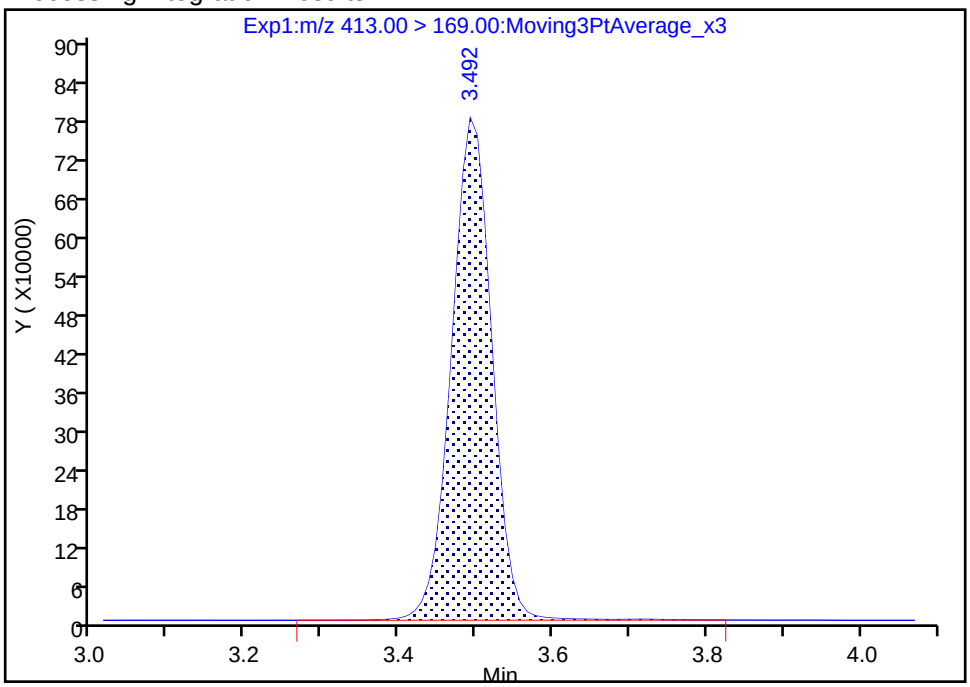
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

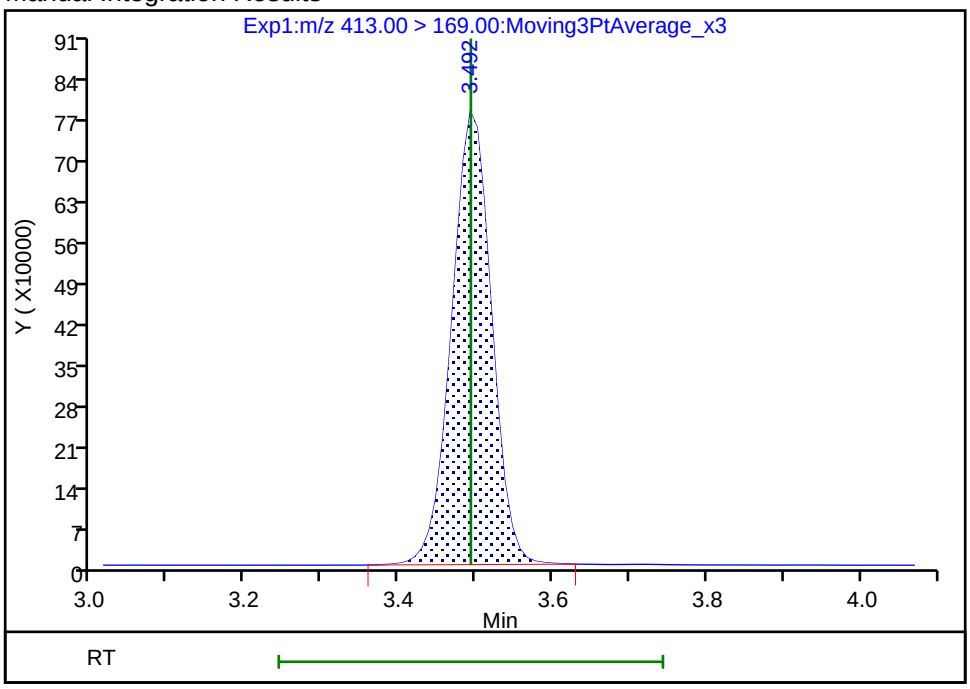
Processing Integration Results

RT: 3.49
Area: 2818415
Amount: 10.101909
Amount Units: ng/ml




Manual Integration Results

RT: 3.49
Area: 2794731
Amount: 9.960263
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:02:35

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

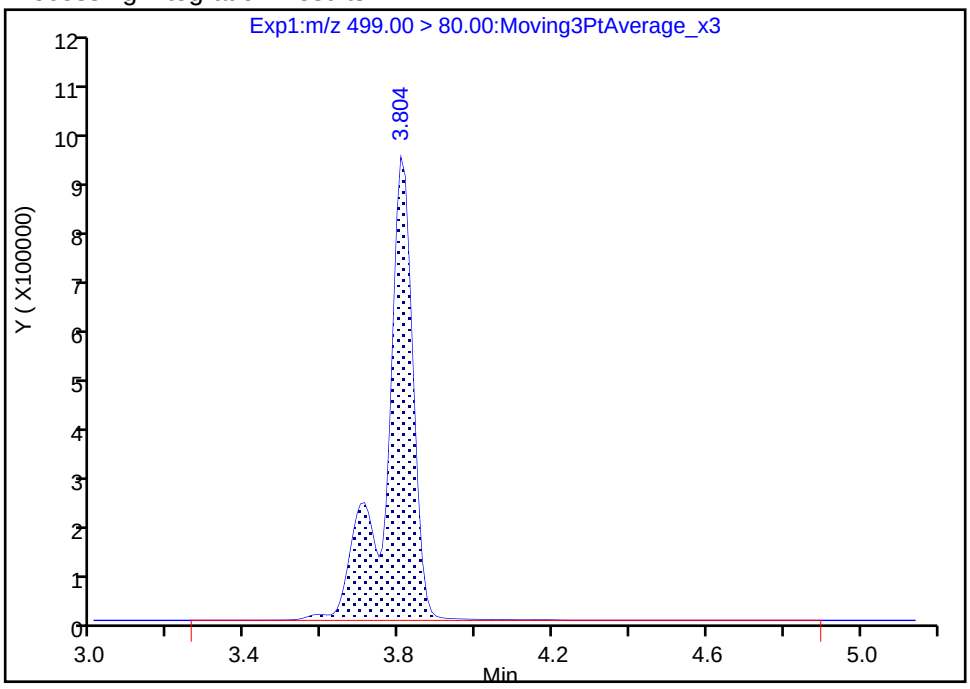
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

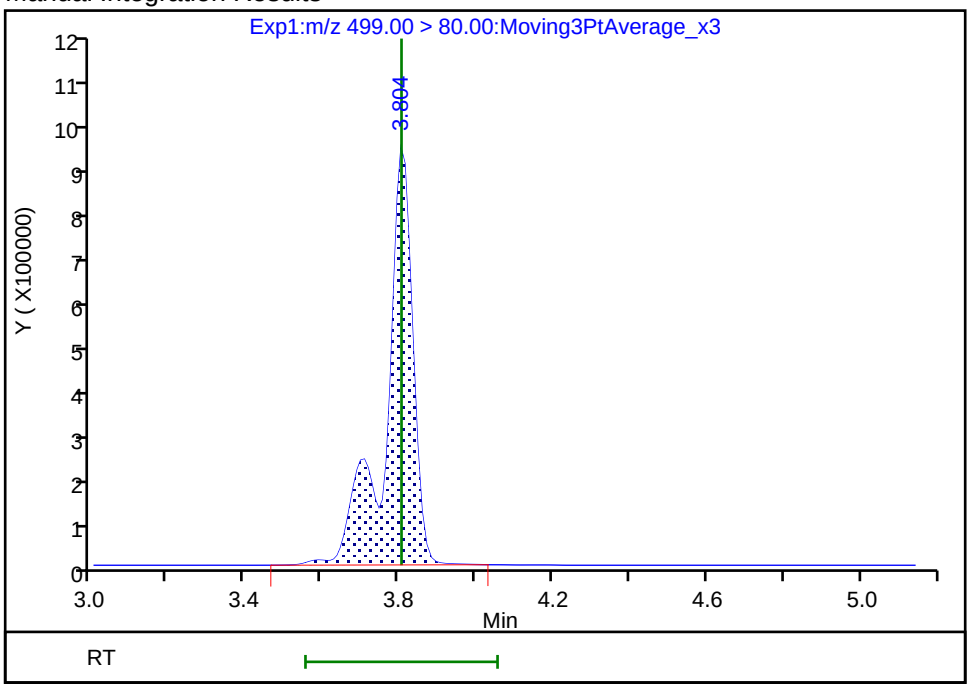
Processing Integration Results

RT: 3.80
Area: 4689022
Amount: 9.277509
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 4659375
Amount: 8.763764
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:02:44
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

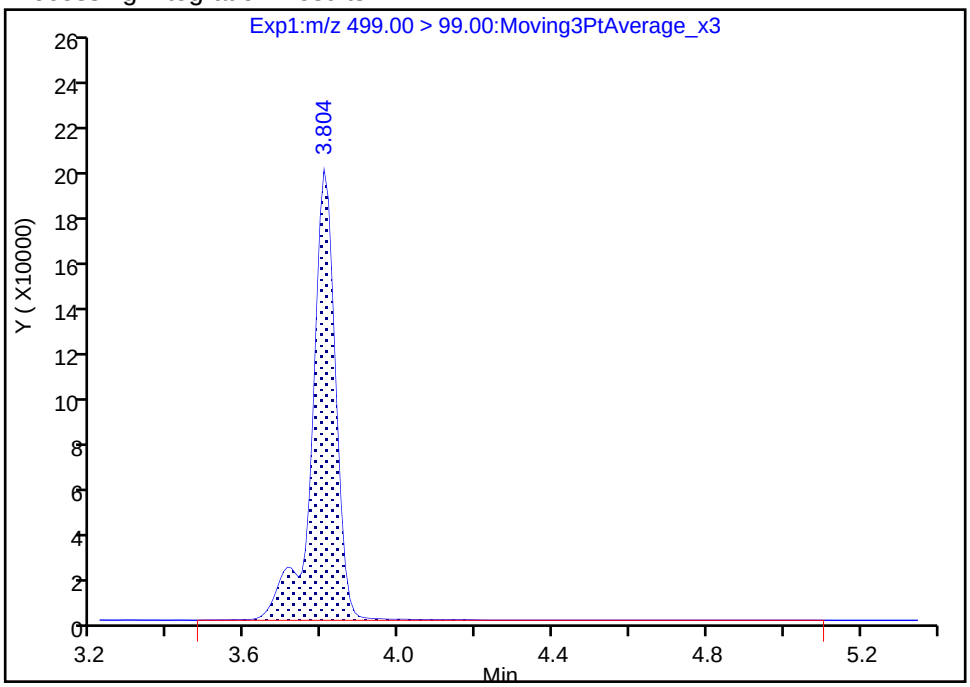
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

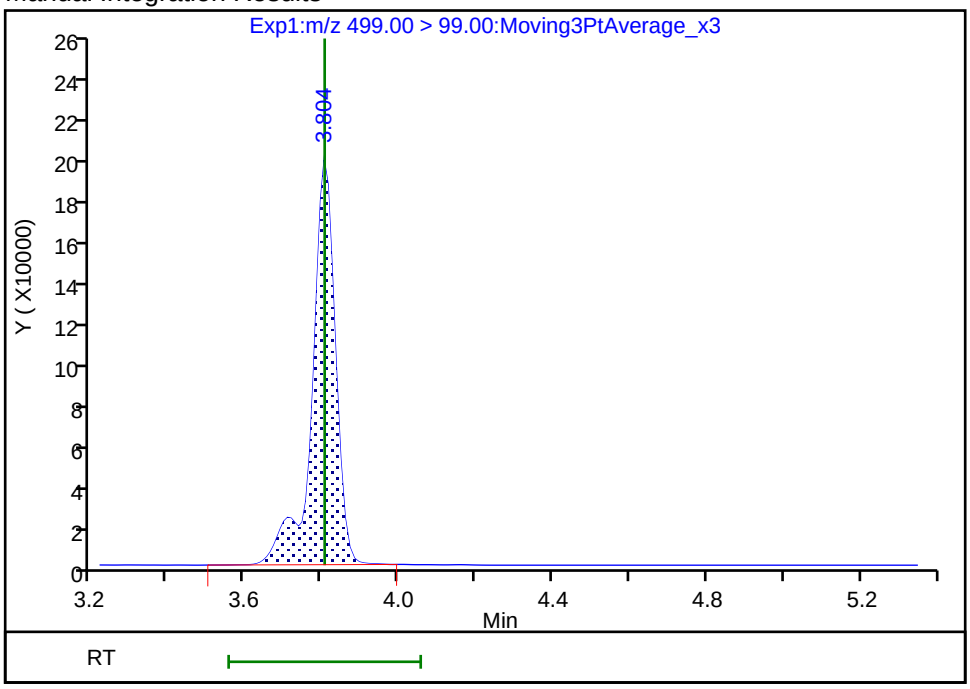
Processing Integration Results

RT: 3.80
Area: 837352
Amount: 9.277509
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 828174
Amount: 8.763764
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:02:50

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

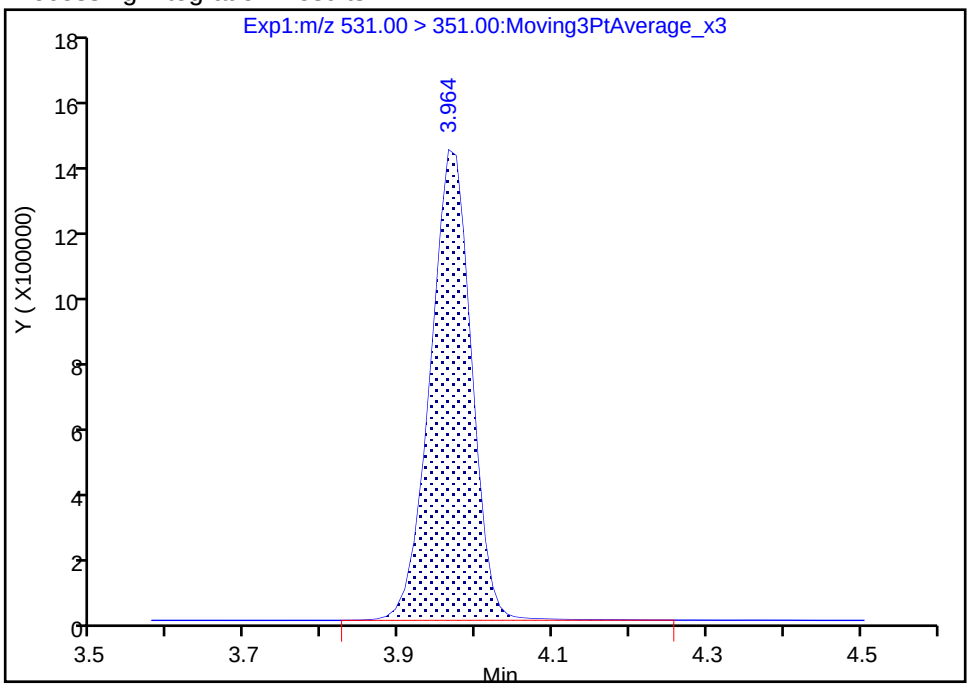
Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d
Injection Date: 22-Dec-2020 13:29:37 Instrument ID: LC812
Lims ID: IC
Client ID:
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

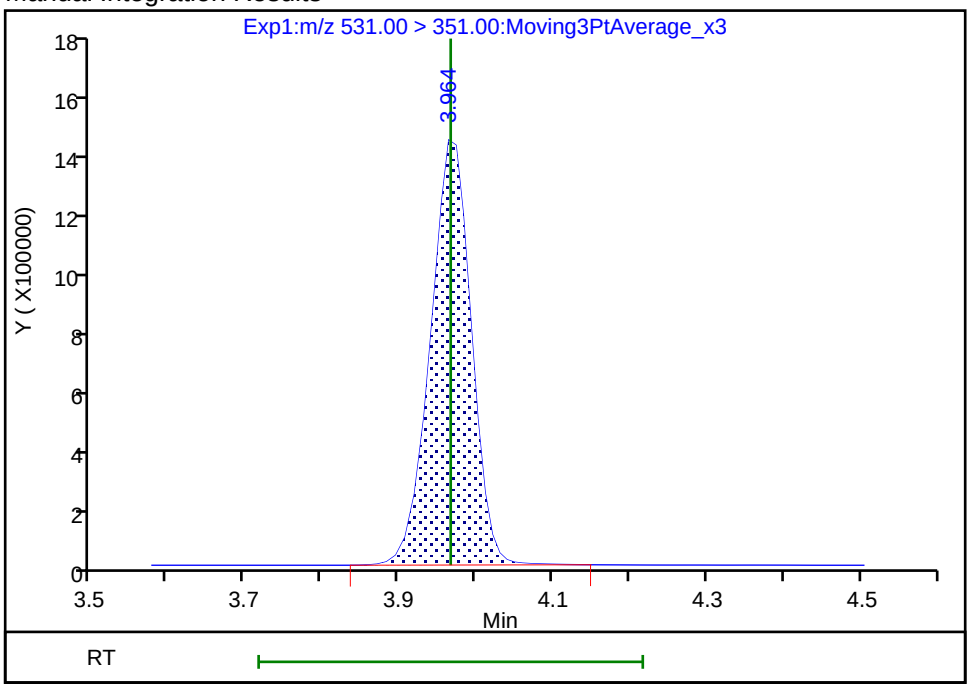
Processing Integration Results

RT: 3.96
Area: 5277681
Amount: 9.196032
Amount Units: ng/ml




Manual Integration Results

RT: 3.96
Area: 5263362
Amount: 8.872886
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:02:58
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

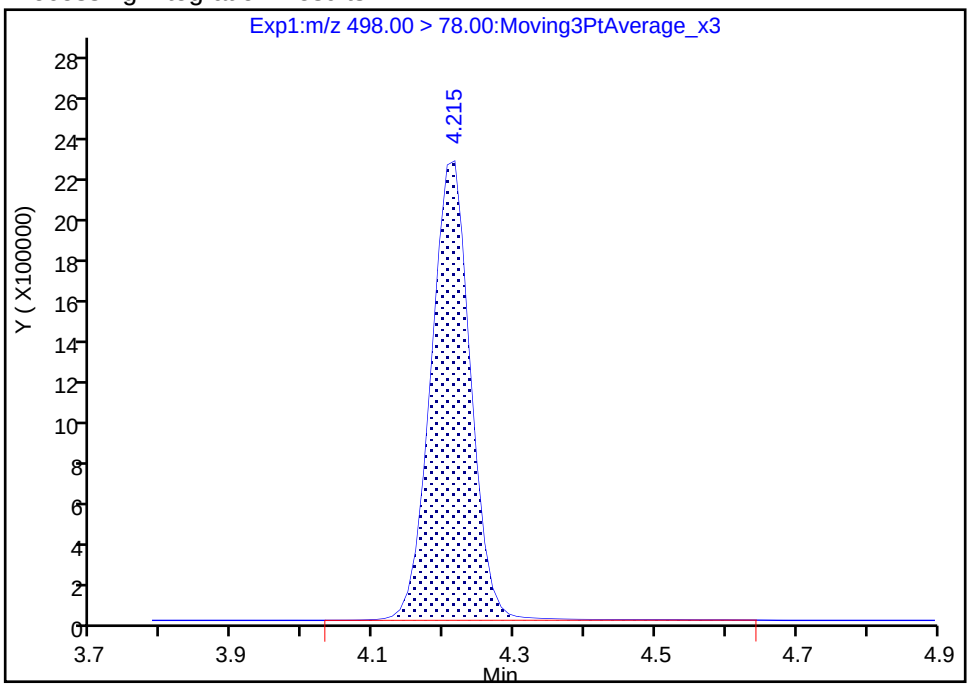
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

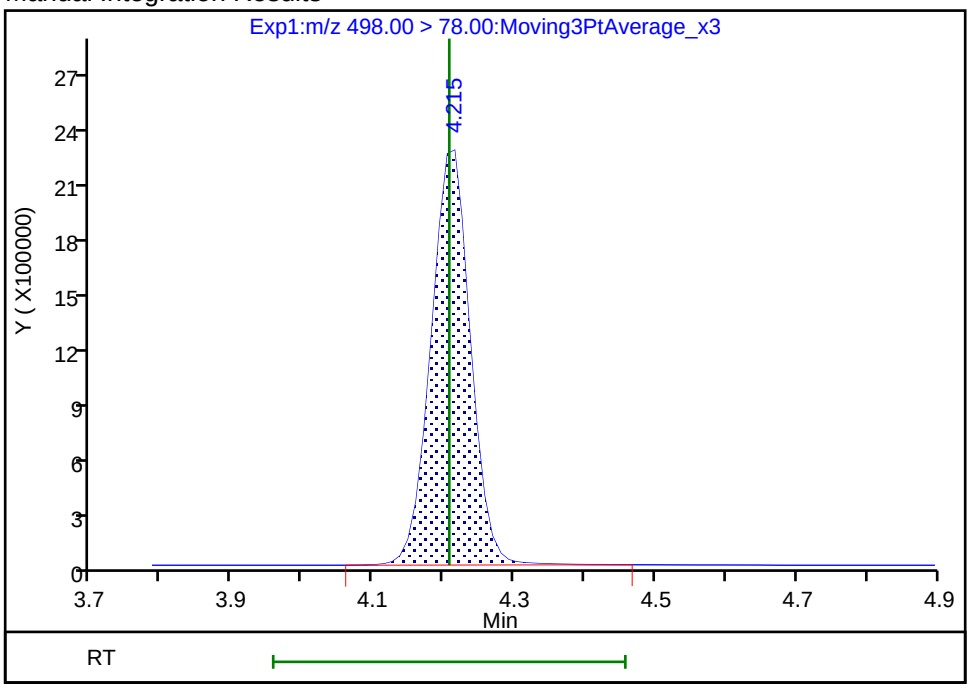
Processing Integration Results

RT: 4.21
Area: 8695535
Amount: 9.886059
Amount Units: ng/ml




Manual Integration Results

RT: 4.21
Area: 8663983
Amount: 9.723361
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:03:09
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

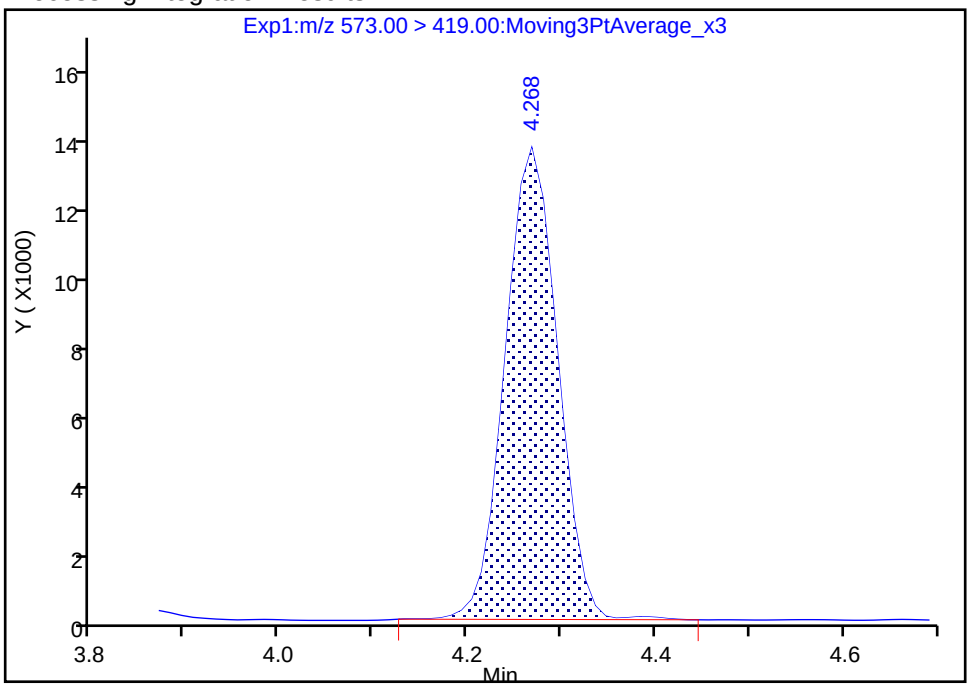
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

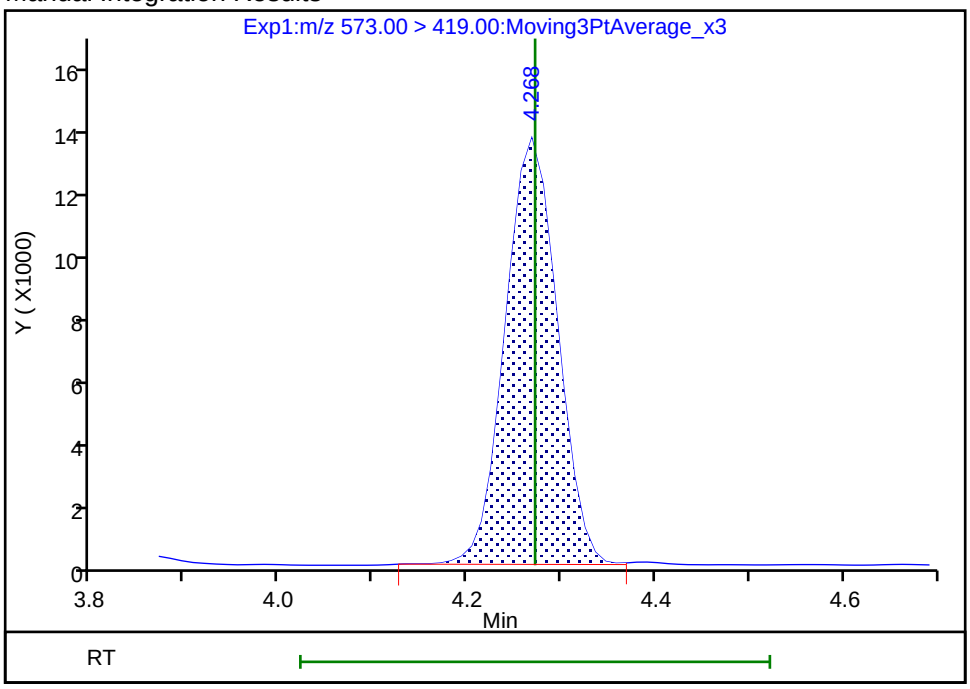
Processing Integration Results

RT: 4.27
Area: 53040
Amount: 1.285415
Amount Units: ng/ml




Manual Integration Results

RT: 4.27
Area: 52838
Amount: 1.281356
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:03:23

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

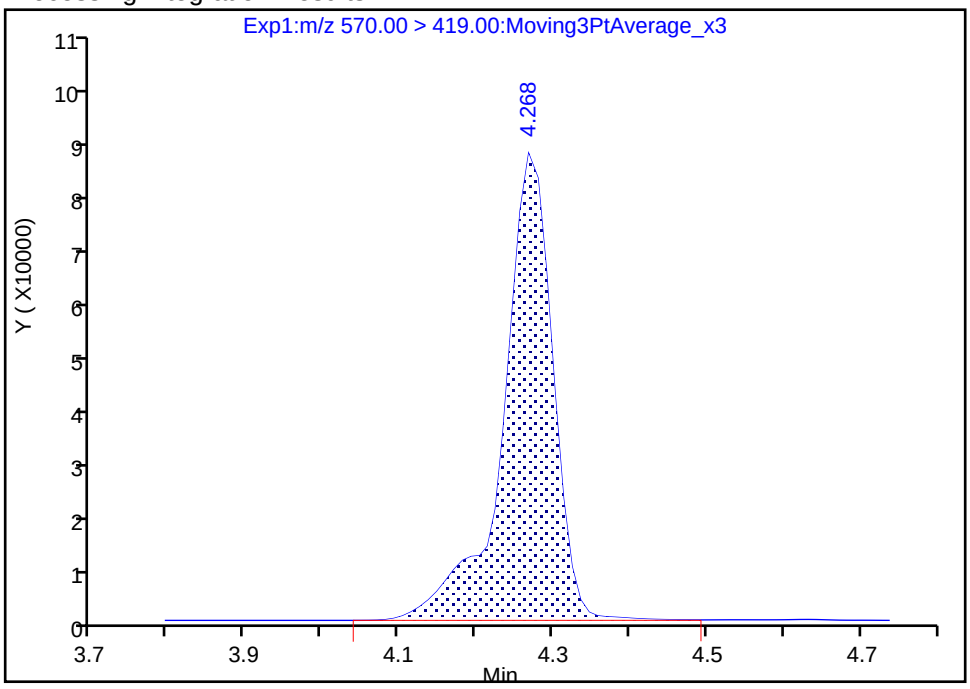
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

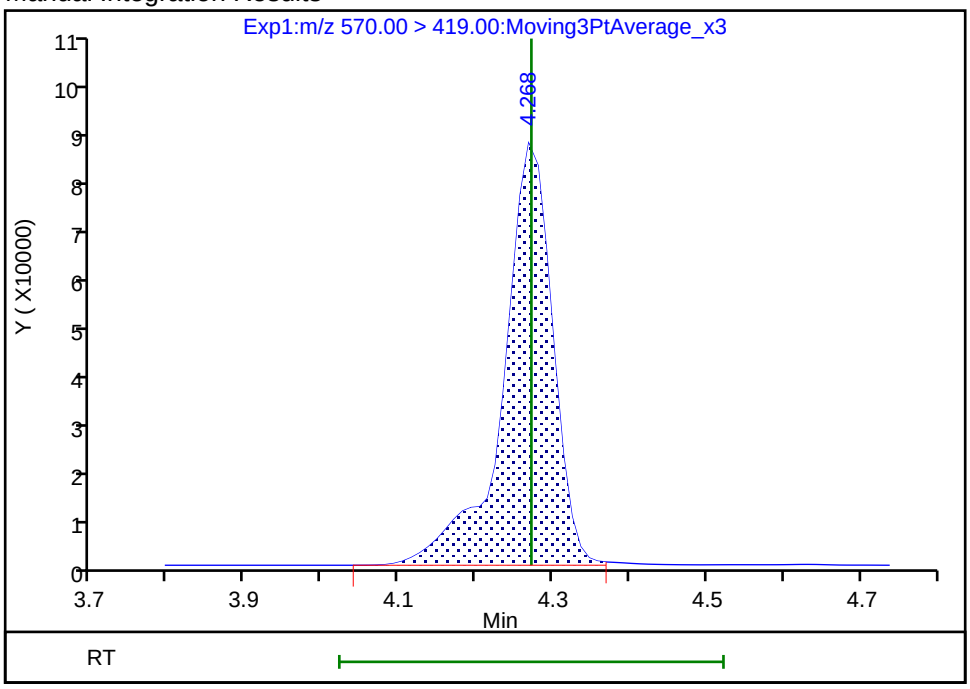
Processing Integration Results

RT: 4.27
Area: 391936
Amount: 10.110192
Amount Units: ng/ml




Manual Integration Results

RT: 4.27
Area: 390016
Amount: 10.409562
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:03:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

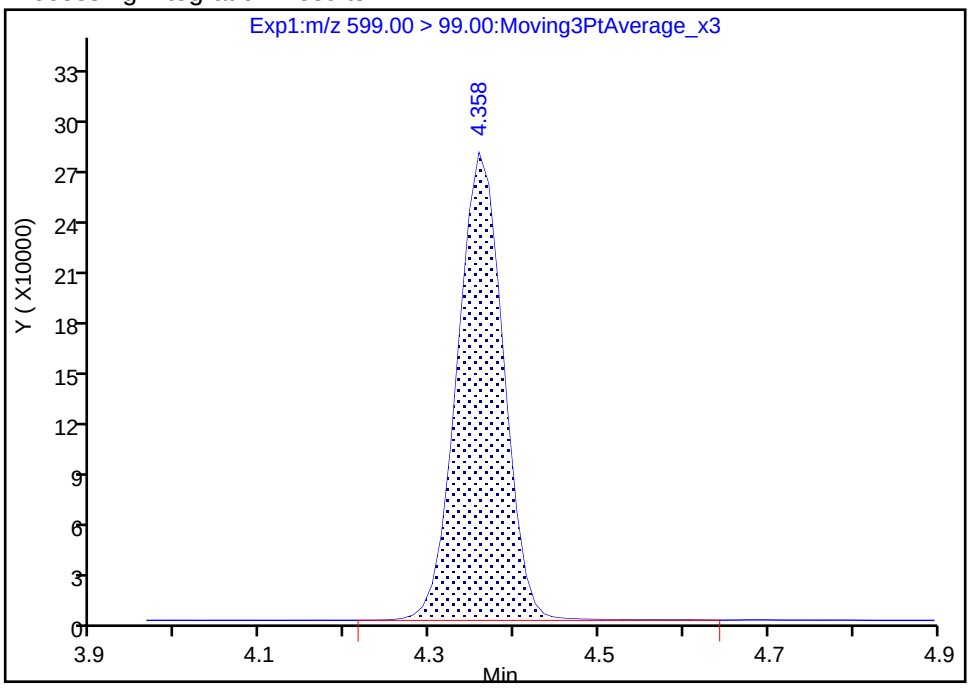
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

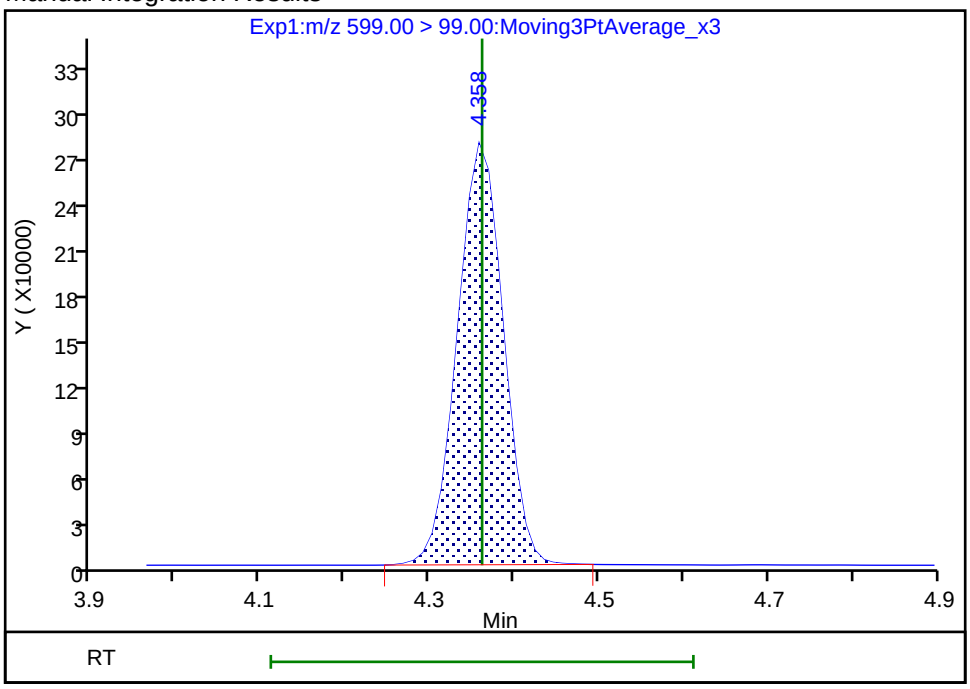
Processing Integration Results

RT: 4.36
Area: 1051372
Amount: 9.528663
Amount Units: ng/ml




Manual Integration Results

RT: 4.36
Area: 1043601
Amount: 9.160012
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:03:46
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

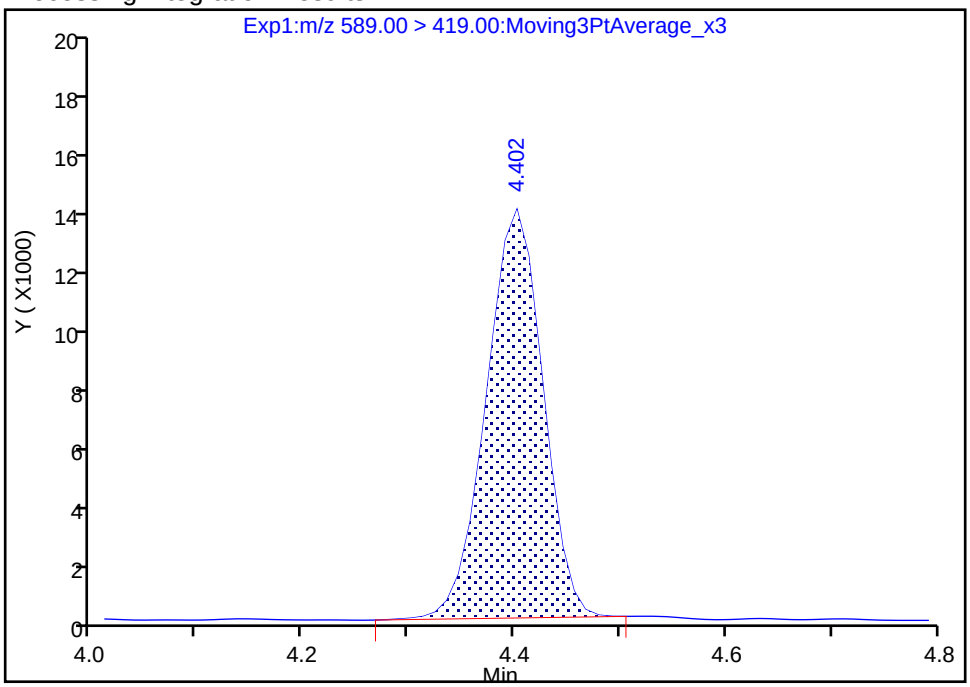
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 32 d5-NEtFOSAA, CAS: STL02117

Signal: 1

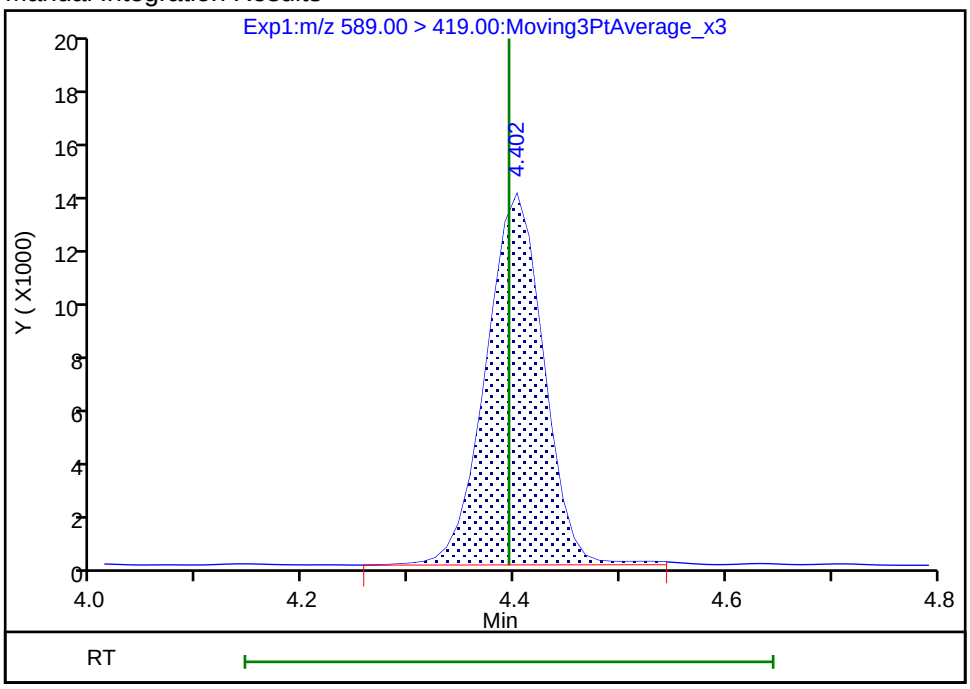
Processing Integration Results

RT: 4.40
Area: 51255
Amount: 1.290797
Amount Units: ng/ml




Manual Integration Results

RT: 4.40
Area: 52405
Amount: 1.314682
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:04:04
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

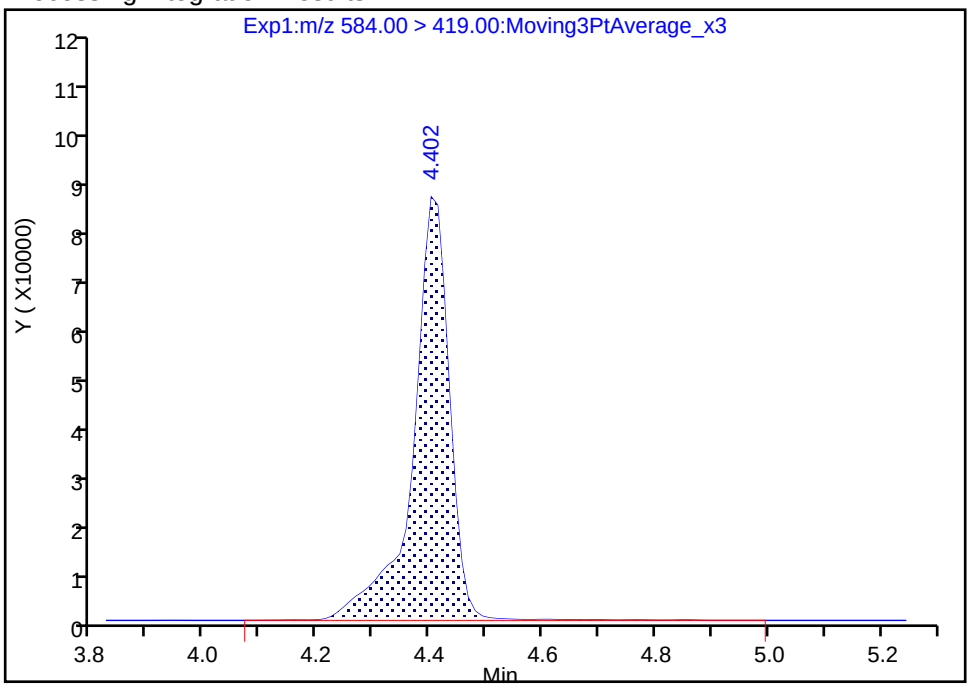
Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d
Injection Date: 22-Dec-2020 13:29:37 Instrument ID: LC812
Lims ID: IC
Client ID:
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

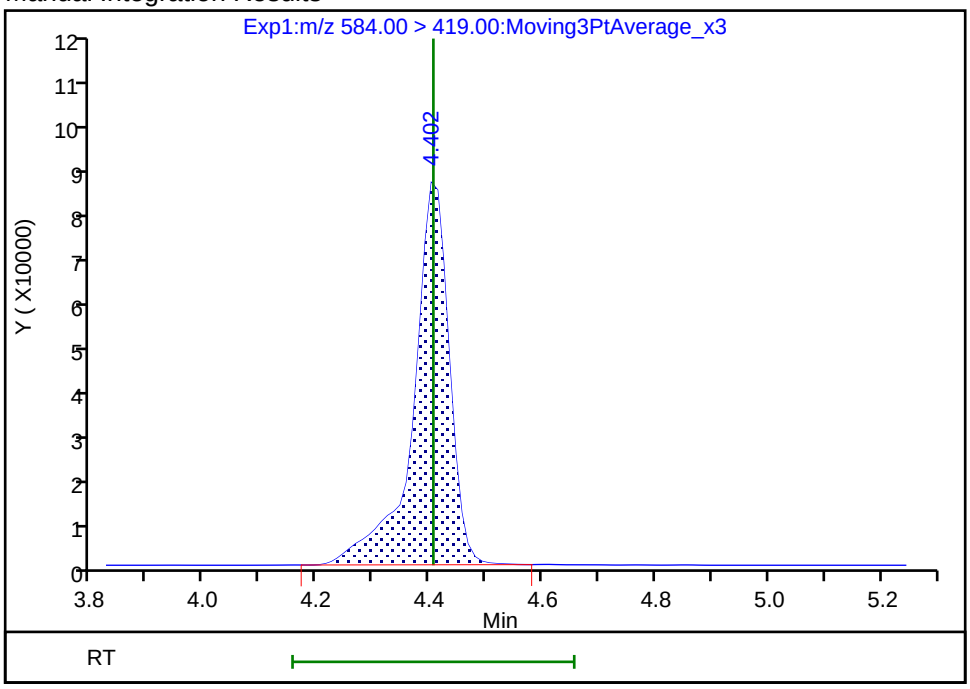
Processing Integration Results

RT: 4.40
Area: 359681
Amount: 9.767456
Amount Units: ng/ml




Manual Integration Results

RT: 4.40
Area: 355914
Amount: 9.170908
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:04:17
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

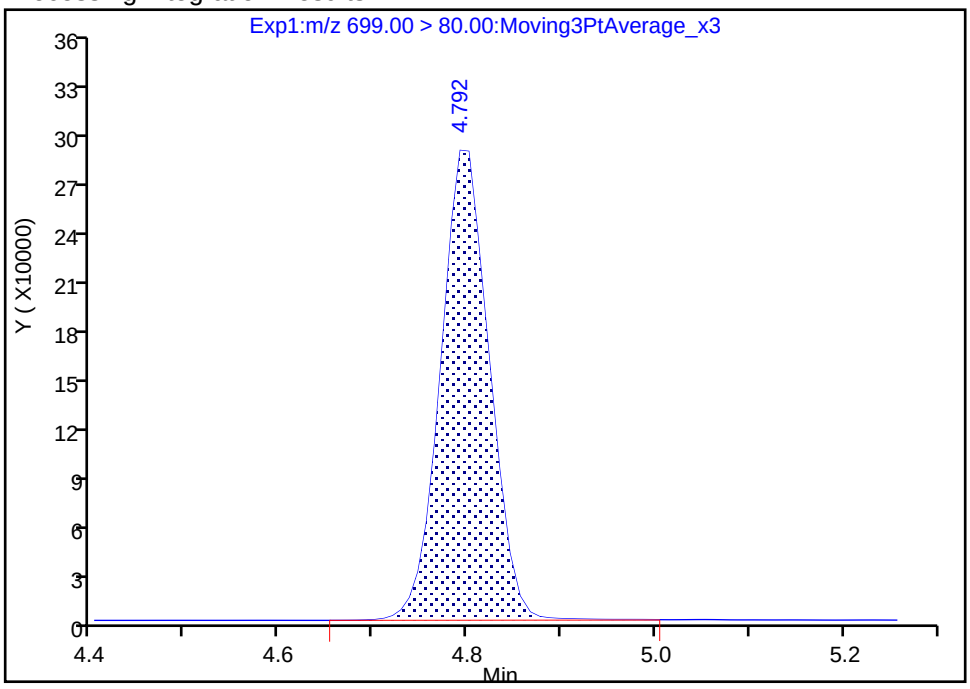
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 75 Perfluorododecanesulfonic acid (, CAS: 79780-39-5

Signal: 1

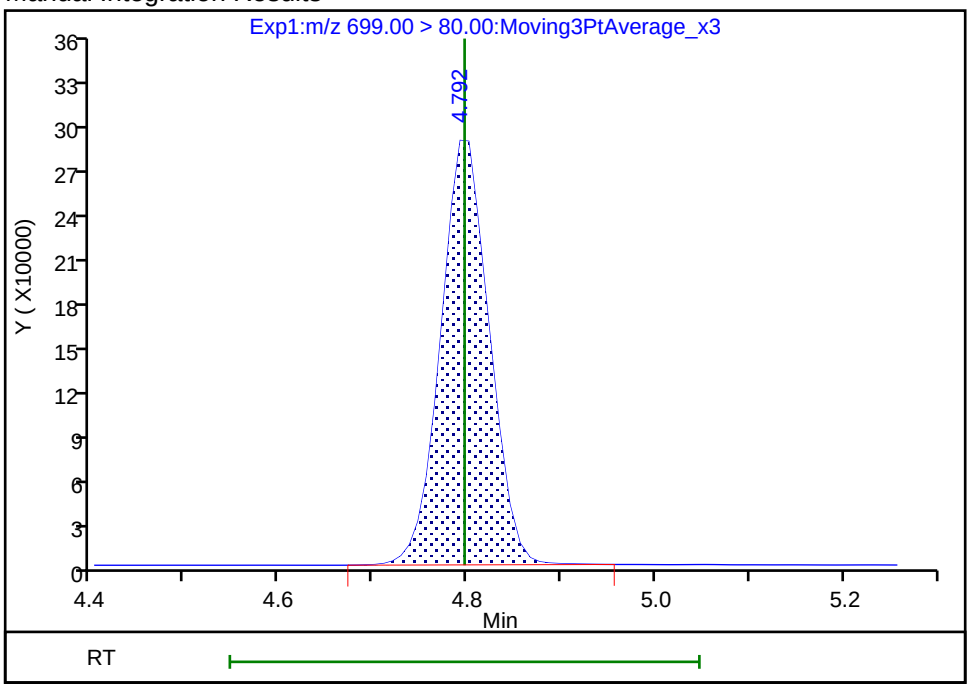
Processing Integration Results

RT: 4.79
Area: 1023317
Amount: 8.781133
Amount Units: ng/ml




Manual Integration Results

RT: 4.79
Area: 1019532
Amount: 8.762818
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:28:52
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

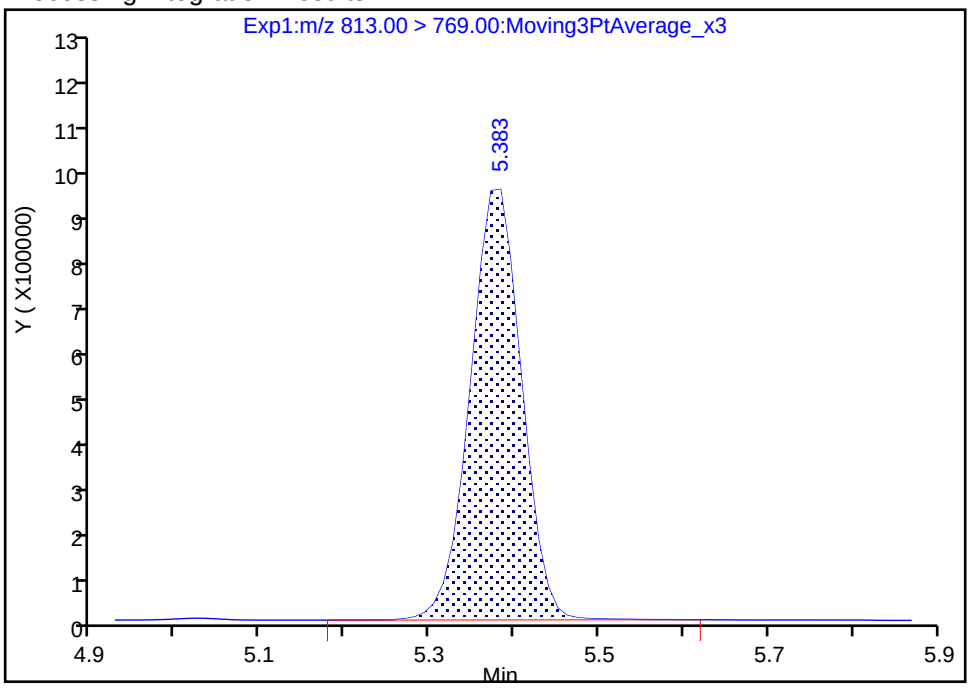
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d | | | | |
| Injection Date: | 22-Dec-2020 13:29:37 | Instrument ID: | LC812 | | |
| Lims ID: | IC | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 7 | Worklist Smp#: | 13 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 45 Perfluorohexadecanoic acid, CAS: 67905-19-5

Signal: 1

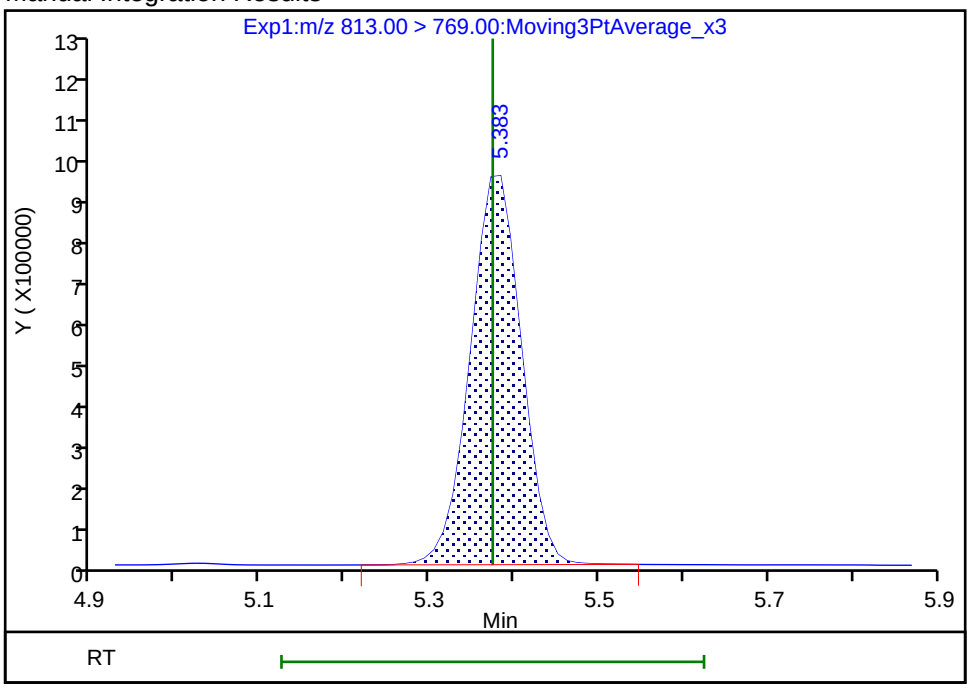
Processing Integration Results

RT: 5.38
Area: 3759052
Amount: 10.004821
Amount Units: ng/ml




Manual Integration Results

RT: 5.38
Area: 3749492
Amount: 9.998208
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:04:45
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

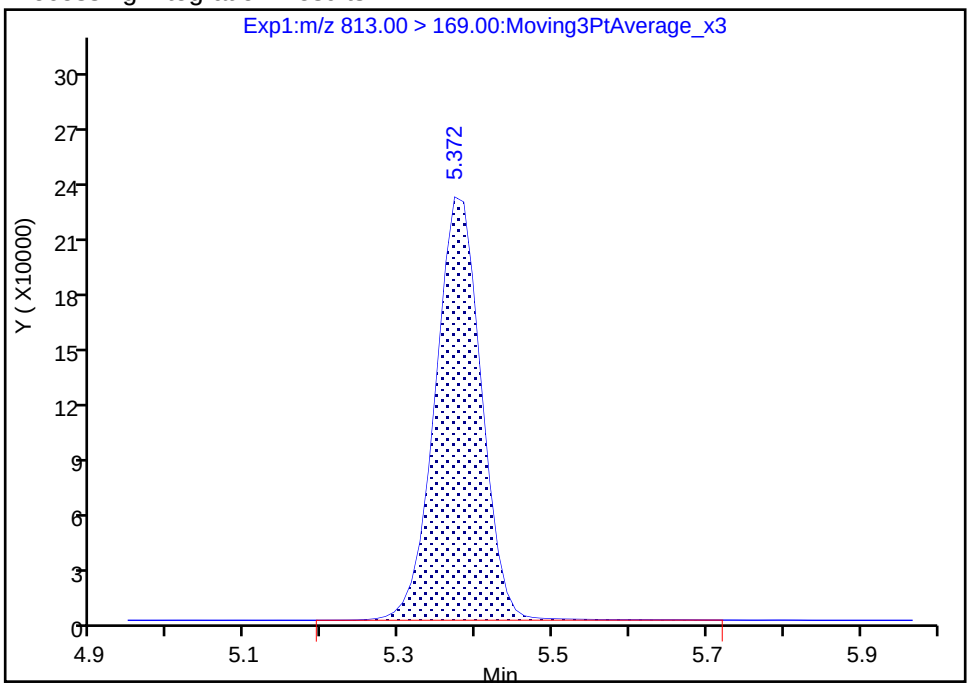
Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d
Injection Date: 22-Dec-2020 13:29:37 Instrument ID: LC812
Lims ID: IC
Client ID:
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 13
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 45 Perfluorohexadecanoic acid, CAS: 67905-19-5

Signal: 2

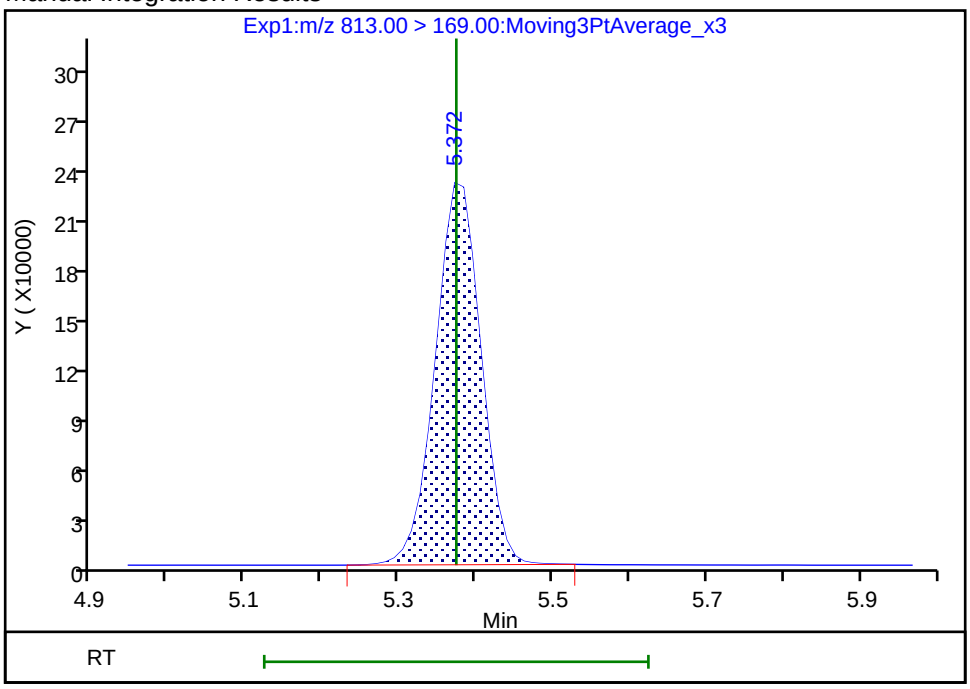
Processing Integration Results

RT: 5.37
Area: 940773
Amount: 10.004821
Amount Units: ng/ml




Manual Integration Results

RT: 5.37
Area: 935182
Amount: 9.998208
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:04:50
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

## Calibration / Perfluorobutanoic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

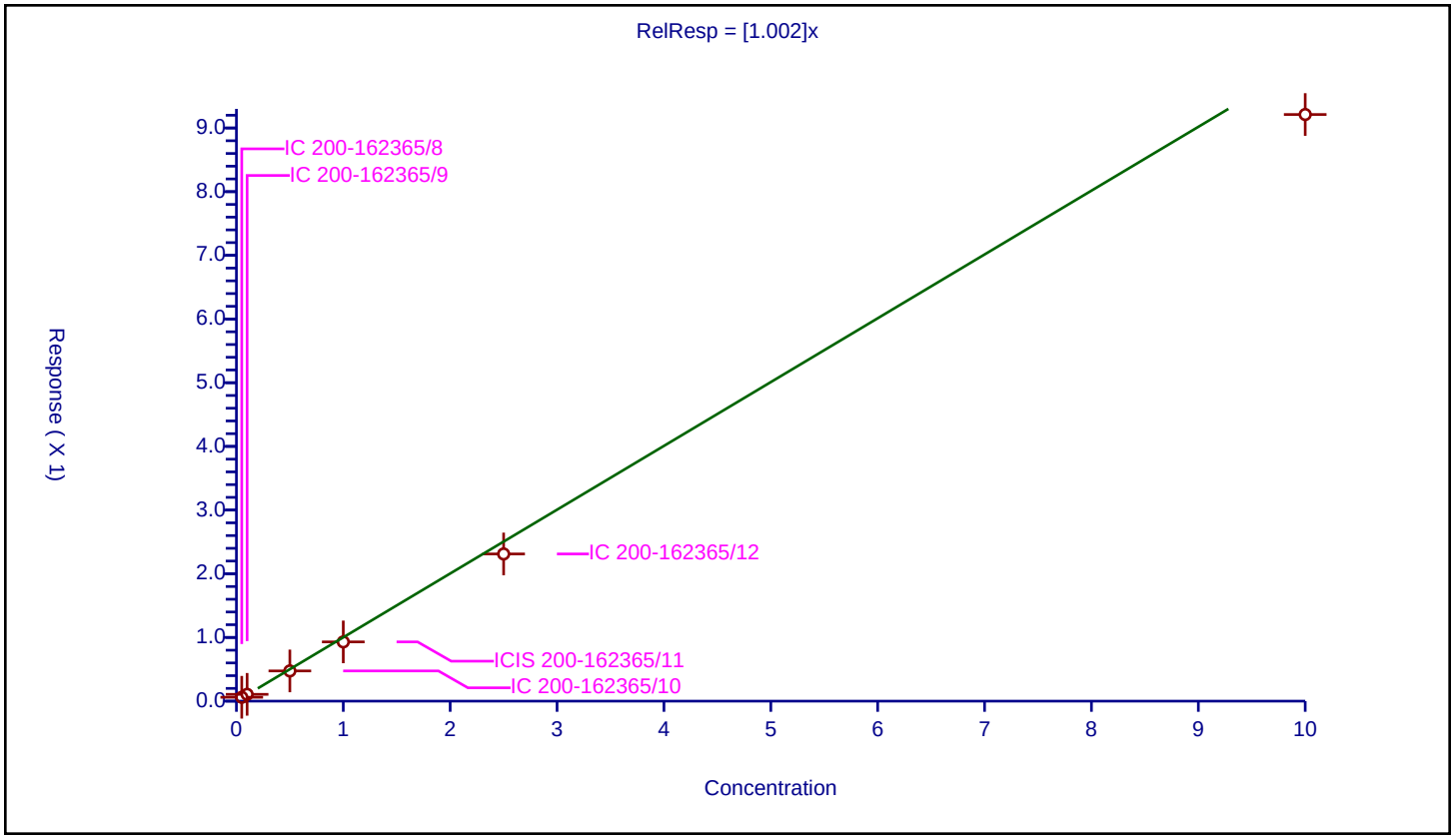
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.002 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 4080000 |
| **Relative Standard Error:** | 12.0 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.977 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.05 | 0.060945 | 1.25 | 1181985.0 | 1.218903 | Y |
| 2 | IC 200-162365/9 | 0.1 | 0.106874 | 1.25 | 1386458.0 | 1.06874 | Y |
| 3 | IC 200-162365/10 | 0.5 | 0.47428 | 1.25 | 1203352.0 | 0.948561 | Y |
| 4 | ICIS 200-162365/11 | 1.0 | 0.930197 | 1.25 | 1185176.0 | 0.930197 | Y |
| 5 | IC 200-162365/12 | 2.5 | 2.311251 | 1.25 | 1183081.0 | 0.924501 | Y |
| 6 | IC 200-162365/13 | 10.0 | 9.211614 | 1.25 | 1192876.0 | 0.921161 | Y |



## Calibration / Perfluoropentanoic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

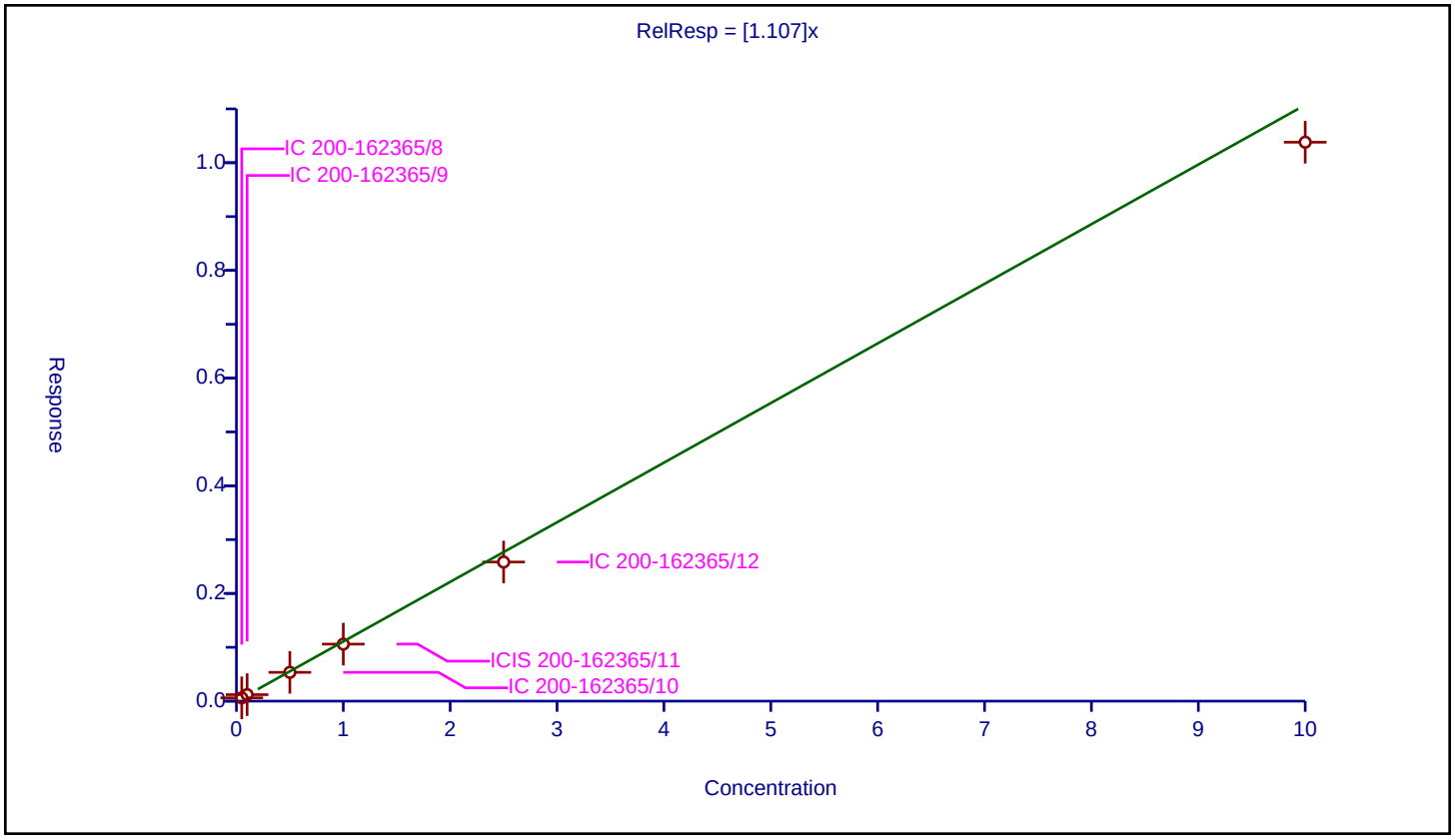
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.107 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 3260000 |
| **Relative Standard Error:** | 8.1 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.990 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.05 | 0.061795 | 1.25 | 878850.0 | 1.235905 | Y |
| 2 | IC 200-162365/9 | 0.1 | 0.120668 | 1.25 | 1030251.0 | 1.206684 | Y |
| 3 | IC 200-162365/10 | 0.5 | 0.535033 | 1.25 | 856461.0 | 1.070066 | Y |
| 4 | ICIS 200-162365/11 | 1.0 | 1.059271 | 1.25 | 843580.0 | 1.059271 | Y |
| 5 | IC 200-162365/12 | 2.5 | 2.584107 | 1.25 | 850273.0 | 1.033643 | Y |
| 6 | IC 200-162365/13 | 10.0 | 10.381386 | 1.25 | 847223.0 | 1.038139 | Y |



## Calibration / Perfluorobutanesulfonic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

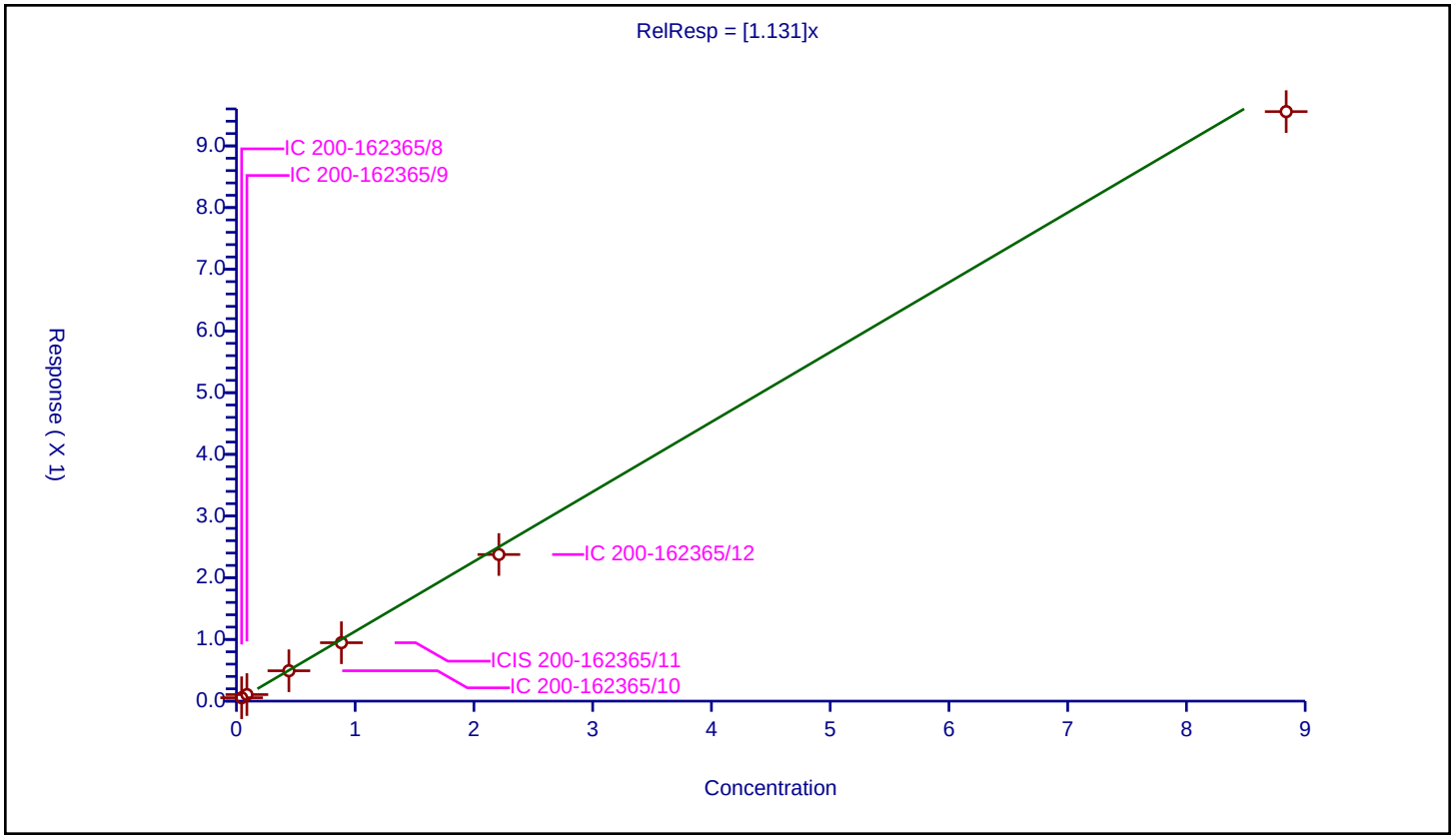
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.131 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 4060000 |
| **Relative Standard Error:** | 6.5 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.994 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.0442 | 0.054939 | 1.1625 | 1024342.0 | 1.24297 | Y |
| 2 | IC 200-162365/9 | 0.0884 | 0.106321 | 1.1625 | 1277928.0 | 1.202727 | Y |
| 3 | IC 200-162365/10 | 0.442 | 0.492521 | 1.1625 | 1038343.0 | 1.114301 | Y |
| 4 | ICIS 200-162365/11 | 0.884 | 0.947054 | 1.1625 | 1062494.0 | 1.071328 | Y |
| 5 | IC 200-162365/12 | 2.21 | 2.376755 | 1.1625 | 1027240.0 | 1.075455 | Y |
| 6 | IC 200-162365/13 | 8.84 | 9.556022 | 1.1625 | 1066974.0 | 1.080998 | 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 |

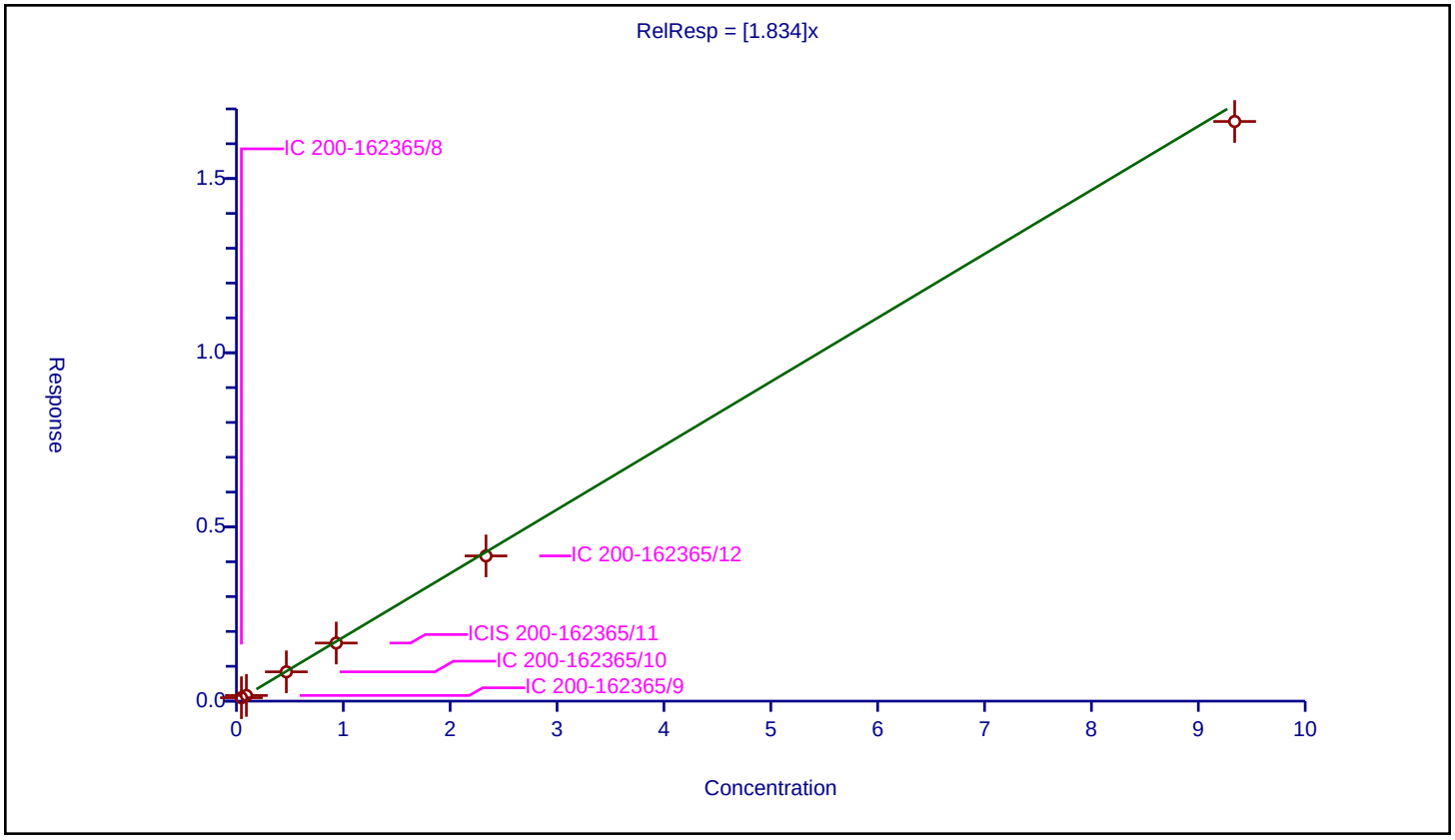
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.834 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 581000 |
| **Relative Standard Error:** | 7.5 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.992 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.0467 | 0.098521 | 1.1675 | 87206.0 | 2.10966 | Y |
| 2 | IC 200-162365/9 | 0.0934 | 0.162478 | 1.1675 | 113101.0 | 1.739596 | Y |
| 3 | IC 200-162365/10 | 0.467 | 0.841177 | 1.1675 | 85984.0 | 1.801236 | Y |
| 4 | ICIS 200-162365/11 | 0.934 | 1.667486 | 1.1675 | 86339.0 | 1.785317 | Y |
| 5 | IC 200-162365/12 | 2.335 | 4.168377 | 1.1675 | 85003.0 | 1.785172 | Y |
| 6 | IC 200-162365/13 | 9.34 | 16.638782 | 1.1675 | 88021.0 | 1.781454 | Y |



## Calibration / Perfluorohexanoic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

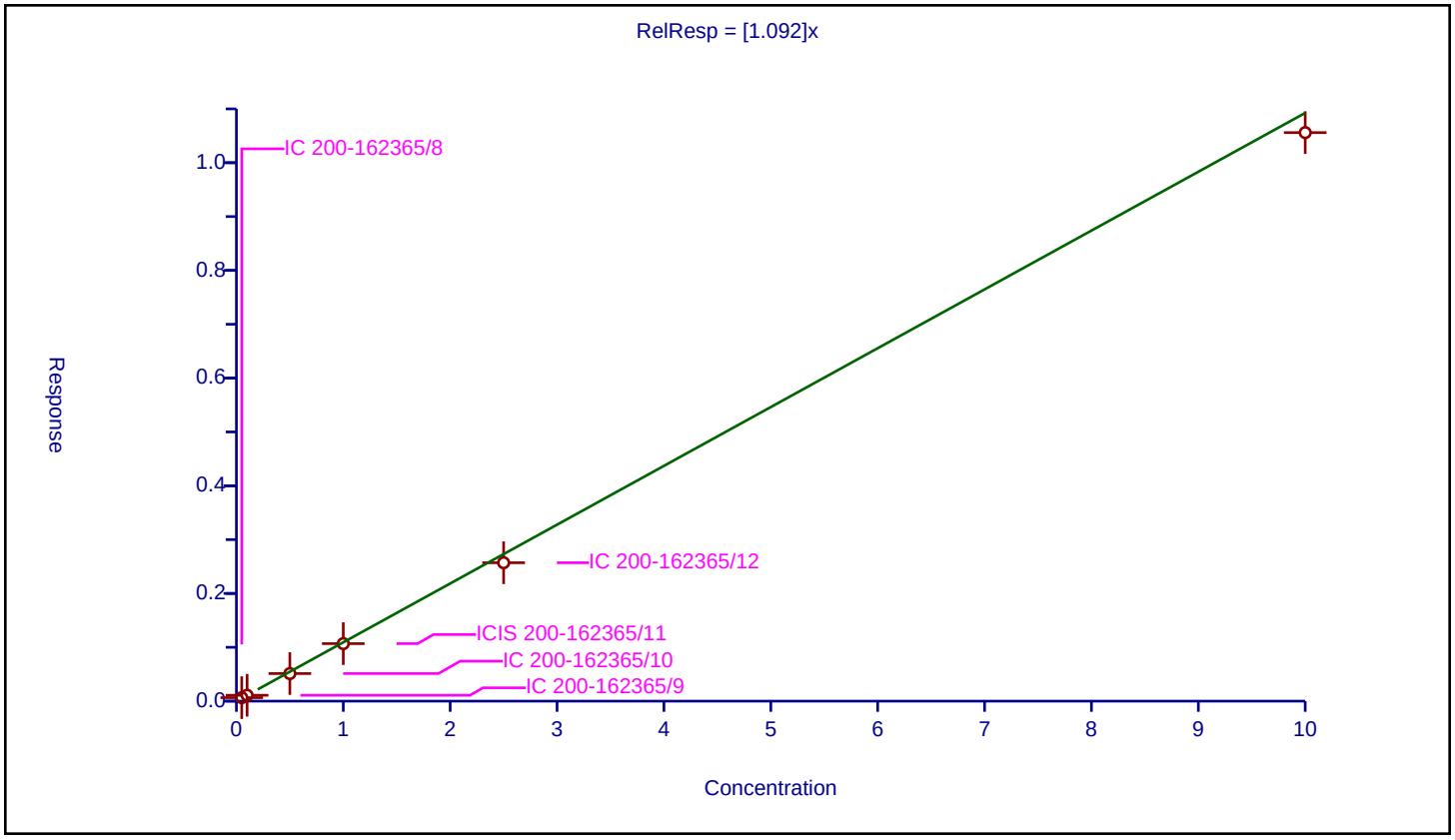
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.092 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 3400000 |
| **Relative Standard Error:** | 9.1 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.988 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.05 | 0.064447 | 1.25 | 908776.0 | 1.288931 | Y |
| 2 | IC 200-162365/9 | 0.1 | 0.108929 | 1.25 | 1097468.0 | 1.089291 | Y |
| 3 | IC 200-162365/10 | 0.5 | 0.512061 | 1.25 | 903699.0 | 1.024121 | Y |
| 4 | ICIS 200-162365/11 | 1.0 | 1.068085 | 1.25 | 895585.0 | 1.068085 | Y |
| 5 | IC 200-162365/12 | 2.5 | 2.570832 | 1.25 | 894513.0 | 1.028333 | Y |
| 6 | IC 200-162365/13 | 10.0 | 10.559204 | 1.25 | 866171.0 | 1.05592 | Y |



## Calibration / Perfluoropentanesulfonic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

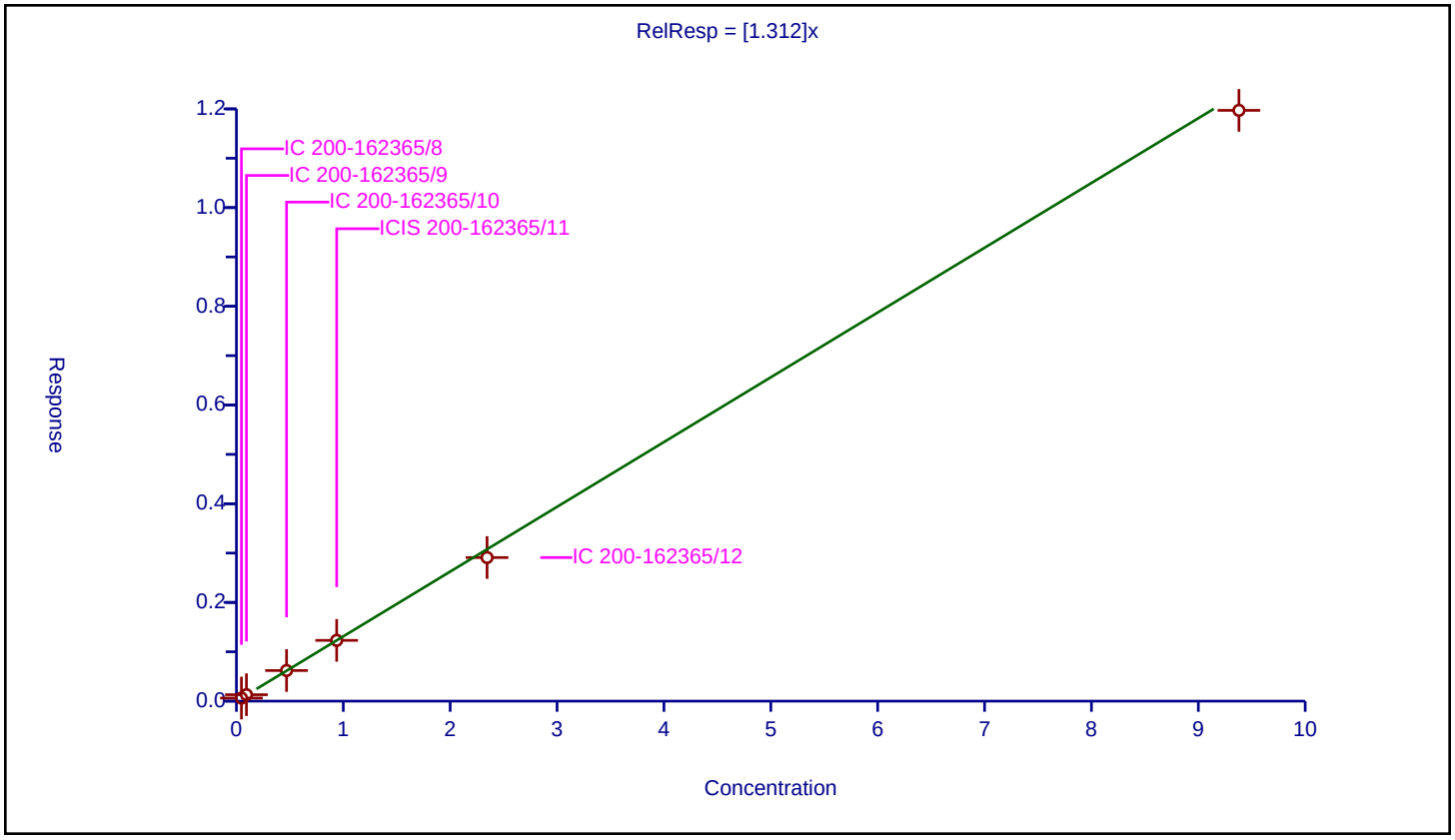
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.312 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 3750000 |
| **Relative Standard Error:** | 3.9 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.998 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.0469 | 0.062457 | 1.1825 | 822695.0 | 1.331709 | Y |
| 2 | IC 200-162365/9 | 0.0938 | 0.130386 | 1.1825 | 956077.0 | 1.390044 | Y |
| 3 | IC 200-162365/10 | 0.469 | 0.620386 | 1.1825 | 772740.0 | 1.322785 | Y |
| 4 | ICIS 200-162365/11 | 0.938 | 1.231107 | 1.1825 | 769056.0 | 1.31248 | Y |
| 5 | IC 200-162365/12 | 2.345 | 2.909633 | 1.1825 | 794776.0 | 1.240782 | Y |
| 6 | IC 200-162365/13 | 9.38 | 11.970309 | 1.1825 | 801639.0 | 1.276152 | 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 |

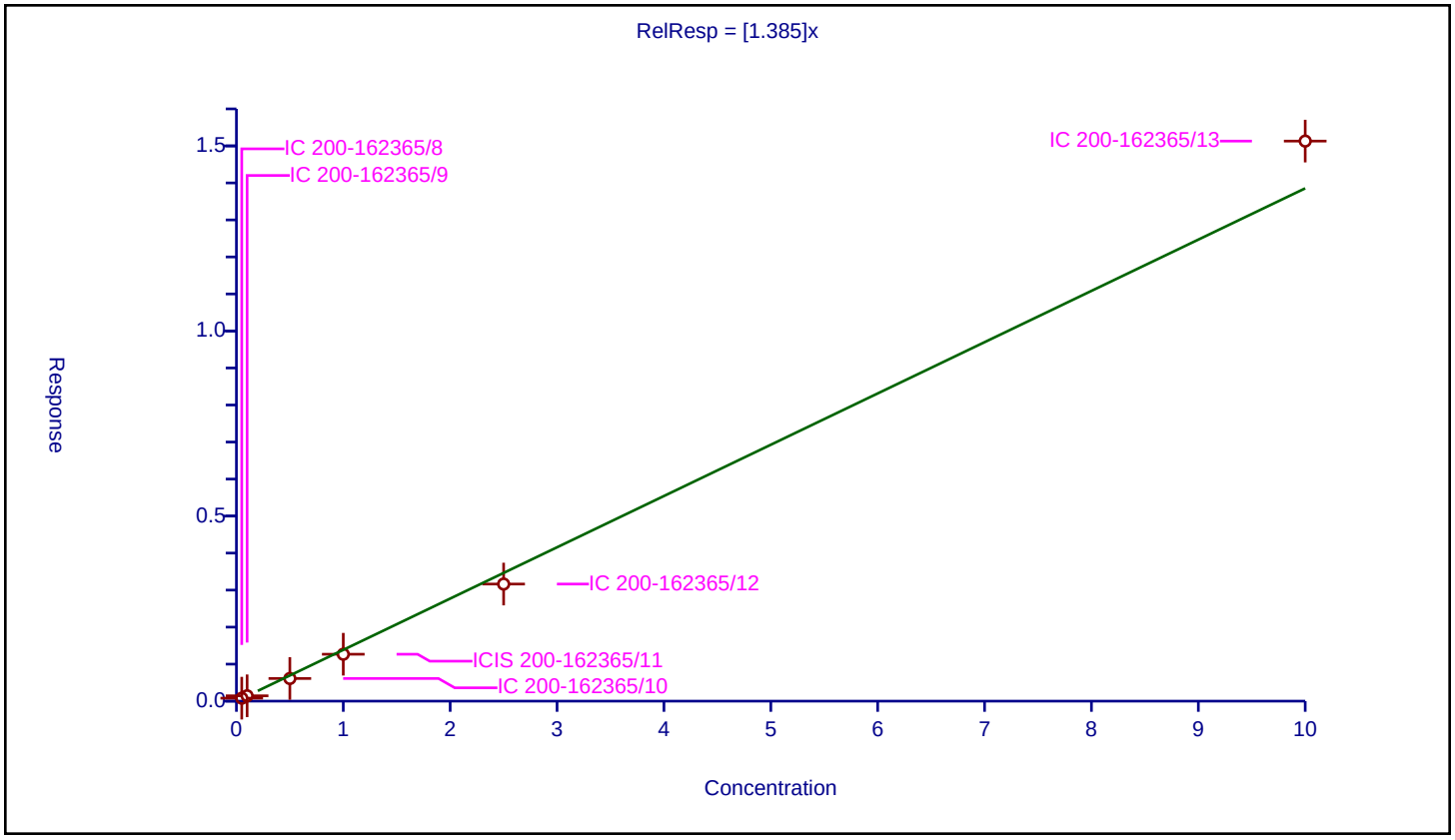
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.385 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 782000 |
| **Relative Standard Error:** | 11.2 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.981 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.05 | 0.080143 | 1.25 | 155222.0 | 1.602866 | Y |
| 2 | IC 200-162365/9 | 0.1 | 0.143947 | 1.25 | 185233.0 | 1.439471 | Y |
| 3 | IC 200-162365/10 | 0.5 | 0.611974 | 1.25 | 172775.0 | 1.223947 | Y |
| 4 | ICIS 200-162365/11 | 1.0 | 1.26779 | 1.25 | 167297.0 | 1.26779 | Y |
| 5 | IC 200-162365/12 | 2.5 | 3.163211 | 1.25 | 158496.0 | 1.265284 | Y |
| 6 | IC 200-162365/13 | 10.0 | 15.129727 | 1.25 | 139707.0 | 1.512973 | Y |



## Calibration / Perfluorohexanesulfonic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

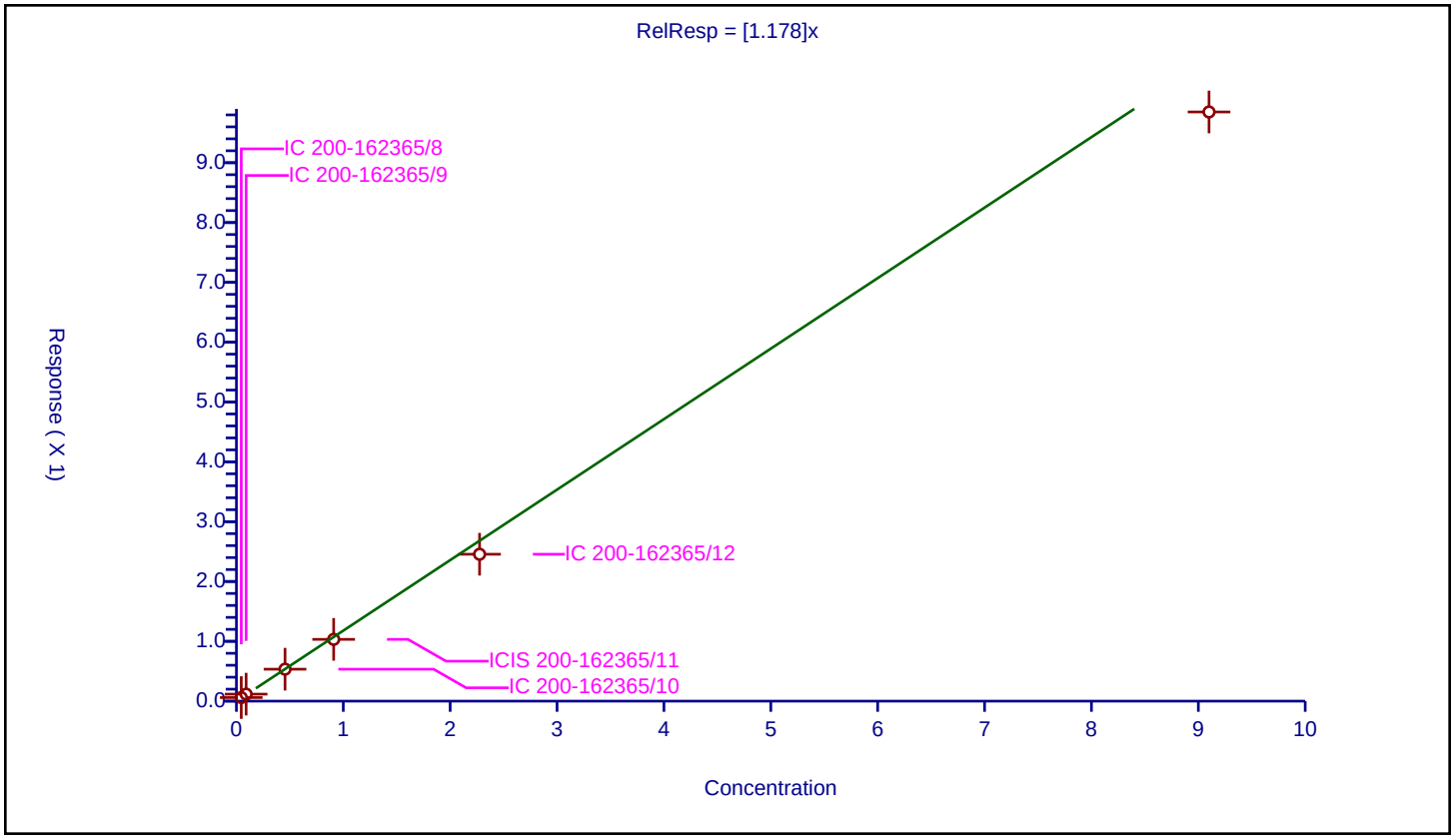
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.178 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 3090000 |
| **Relative Standard Error:** | 8.6 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.989 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.0455 | 0.059891 | 1.1825 | 822695.0 | 1.316296 | Y |
| 2 | IC 200-162365/9 | 0.091 | 0.11689 | 1.1825 | 956077.0 | 1.284504 | Y |
| 3 | IC 200-162365/10 | 0.455 | 0.534038 | 1.1825 | 772740.0 | 1.17371 | Y |
| 4 | ICIS 200-162365/11 | 0.91 | 1.032607 | 1.1825 | 769056.0 | 1.134733 | Y |
| 5 | IC 200-162365/12 | 2.275 | 2.455569 | 1.1825 | 794776.0 | 1.079371 | Y |
| 6 | IC 200-162365/13 | 9.1 | 9.848762 | 1.1825 | 801639.0 | 1.082282 | Y |



## Calibration / Perfluoroheptanoic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

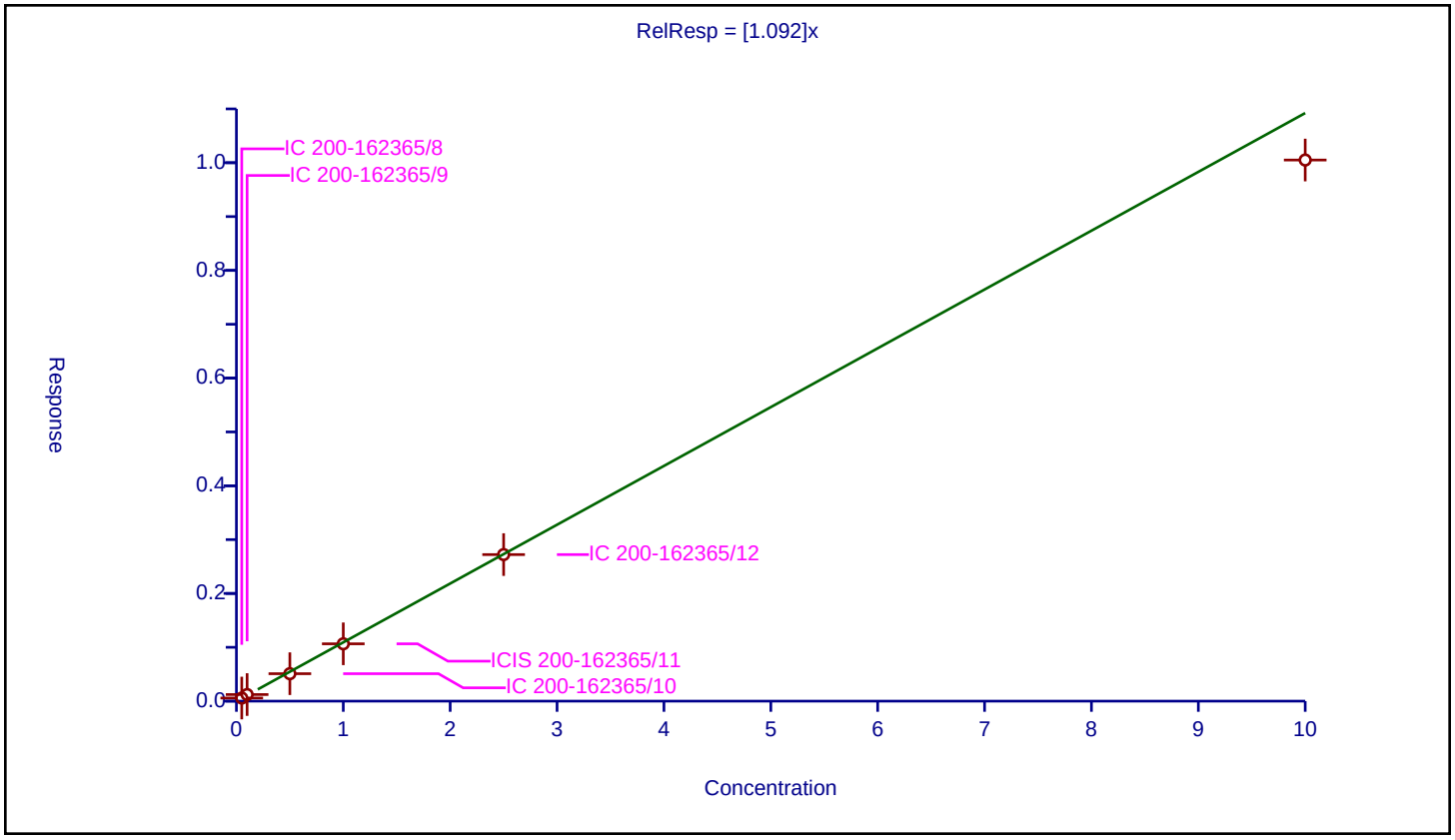
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.092 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 3240000 |
| **Relative Standard Error:** | 7.6 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.992 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.05 | 0.057494 | 1.25 | 853376.0 | 1.149874 | Y |
| 2 | IC 200-162365/9 | 0.1 | 0.122479 | 1.25 | 1019298.0 | 1.224789 | Y |
| 3 | IC 200-162365/10 | 0.5 | 0.509961 | 1.25 | 892830.0 | 1.019923 | Y |
| 4 | ICIS 200-162365/11 | 1.0 | 1.064909 | 1.25 | 849594.0 | 1.064909 | Y |
| 5 | IC 200-162365/12 | 2.5 | 2.721915 | 1.25 | 838035.0 | 1.088766 | Y |
| 6 | IC 200-162365/13 | 10.0 | 10.050283 | 1.25 | 866766.0 | 1.005028 | Y |



## Calibration / DONA

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

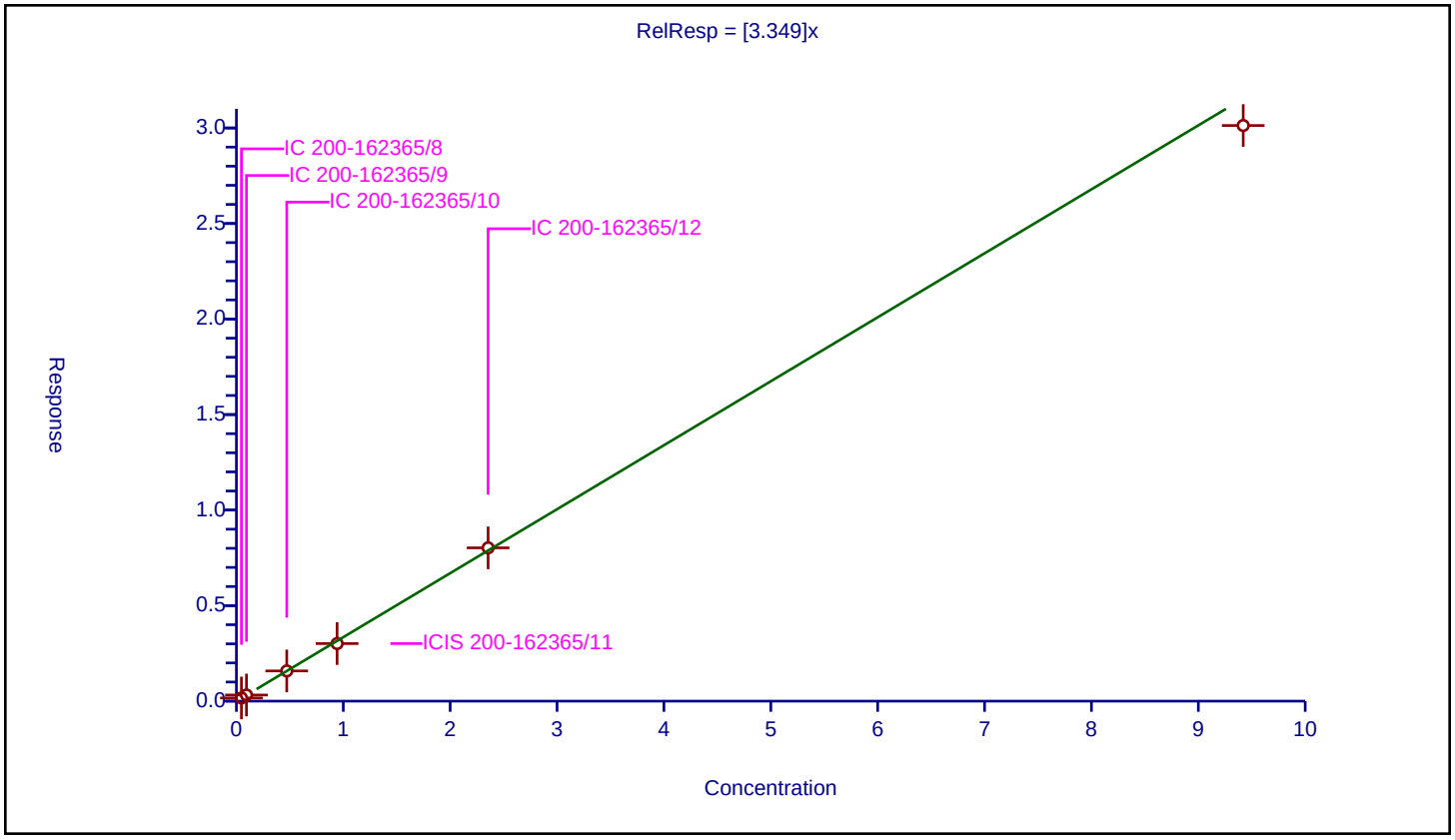
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 3.349 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 6470000 |
| **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 200-162365/8 | 0.0471 | 0.165785 | 1.195 | 552776.0 | 3.519859 | Y |
| 2 | IC 200-162365/9 | 0.0942 | 0.321191 | 1.195 | 682230.0 | 3.409668 | Y |
| 3 | IC 200-162365/10 | 0.471 | 1.581185 | 1.195 | 543196.0 | 3.35708 | Y |
| 4 | ICIS 200-162365/11 | 0.942 | 3.013665 | 1.195 | 554310.0 | 3.19922 | Y |
| 5 | IC 200-162365/12 | 2.355 | 8.023155 | 1.195 | 529467.0 | 3.40686 | Y |
| 6 | IC 200-162365/13 | 9.42 | 30.130557 | 1.195 | 552420.0 | 3.198573 | Y |



## Calibration / Perfluoroheptanesulfonic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

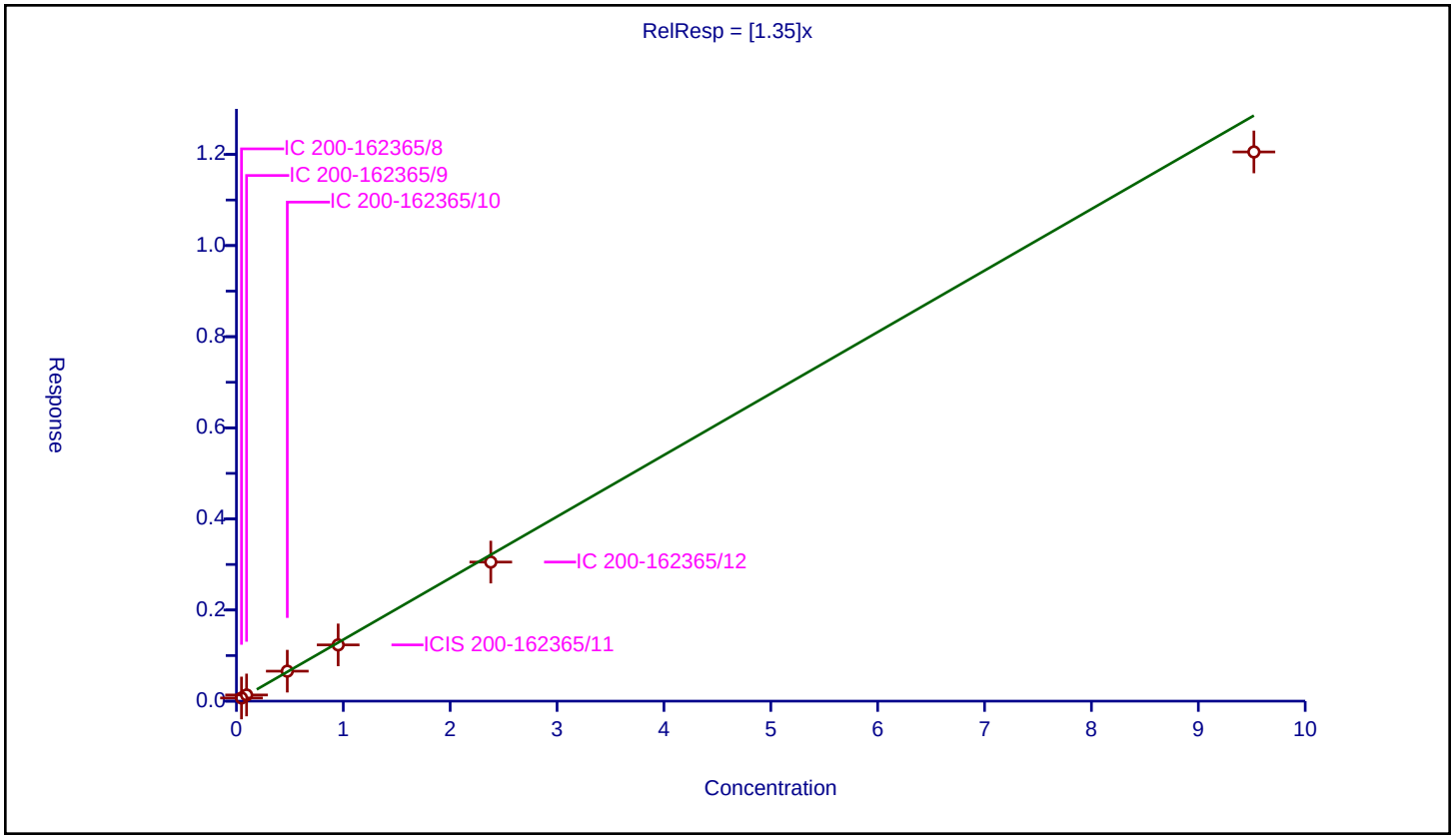
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.35 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 2580000 |
| **Relative Standard Error:** | 5.8 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.995 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.0476 | 0.069098 | 1.195 | 552776.0 | 1.451641 | Y |
| 2 | IC 200-162365/9 | 0.0952 | 0.135273 | 1.195 | 682230.0 | 1.420937 | Y |
| 3 | IC 200-162365/10 | 0.476 | 0.658168 | 1.195 | 543196.0 | 1.382705 | Y |
| 4 | ICIS 200-162365/11 | 0.952 | 1.234637 | 1.195 | 554310.0 | 1.296888 | Y |
| 5 | IC 200-162365/12 | 2.38 | 3.052432 | 1.195 | 529467.0 | 1.282535 | Y |
| 6 | IC 200-162365/13 | 9.52 | 12.055482 | 1.195 | 552420.0 | 1.266332 | Y |



## 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 |

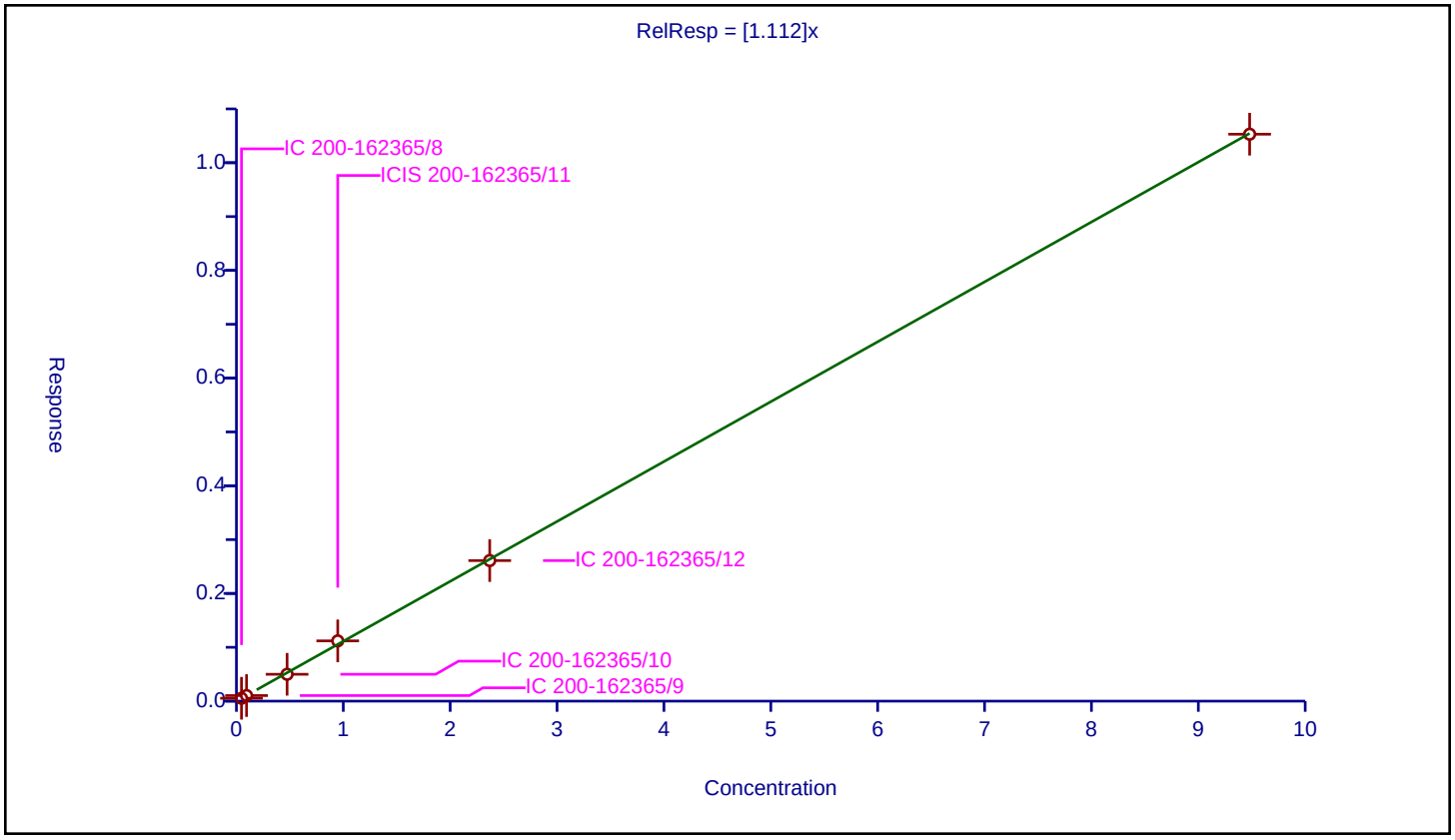
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.112 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 397000 |
| **Relative Standard Error:** | 3.9 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.998 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.0474 | 0.053813 | 1.1875 | 100493.0 | 1.135305 | Y |
| 2 | IC 200-162365/9 | 0.0948 | 0.103691 | 1.1875 | 122975.0 | 1.093785 | Y |
| 3 | IC 200-162365/10 | 0.474 | 0.498705 | 1.1875 | 102545.0 | 1.05212 | Y |
| 4 | ICIS 200-162365/11 | 0.948 | 1.119118 | 1.1875 | 96952.0 | 1.180504 | Y |
| 5 | IC 200-162365/12 | 2.37 | 2.61081 | 1.1875 | 97655.0 | 1.101607 | Y |
| 6 | IC 200-162365/13 | 9.48 | 10.52992 | 1.1875 | 96331.0 | 1.110751 | Y |



## Calibration / Perfluorooctanoic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

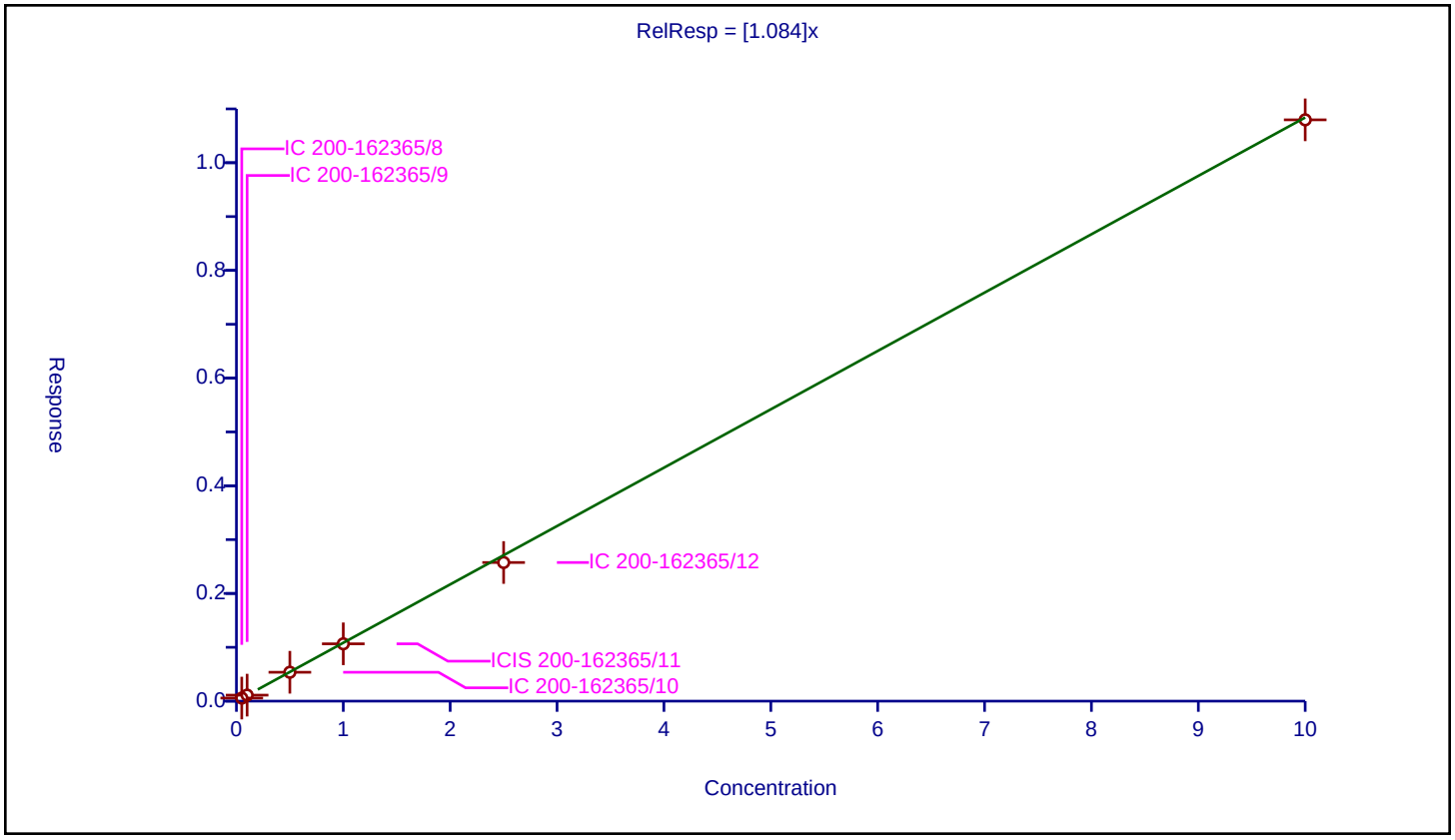
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.084 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 3360000 |
| **Relative Standard Error:** | 3.6 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.998 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.05 | 0.057025 | 1.25 | 889146.0 | 1.140504 | Y |
| 2 | IC 200-162365/9 | 0.1 | 0.111632 | 1.25 | 1101215.0 | 1.116324 | Y |
| 3 | IC 200-162365/10 | 0.5 | 0.536251 | 1.25 | 857479.0 | 1.072501 | Y |
| 4 | ICIS 200-162365/11 | 1.0 | 1.064682 | 1.25 | 869201.0 | 1.064682 | Y |
| 5 | IC 200-162365/12 | 2.5 | 2.575243 | 1.25 | 862938.0 | 1.030097 | Y |
| 6 | IC 200-162365/13 | 10.0 | 10.79653 | 1.25 | 839703.0 | 1.079653 | Y |



## Calibration / Perfluorooctanesulfonic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

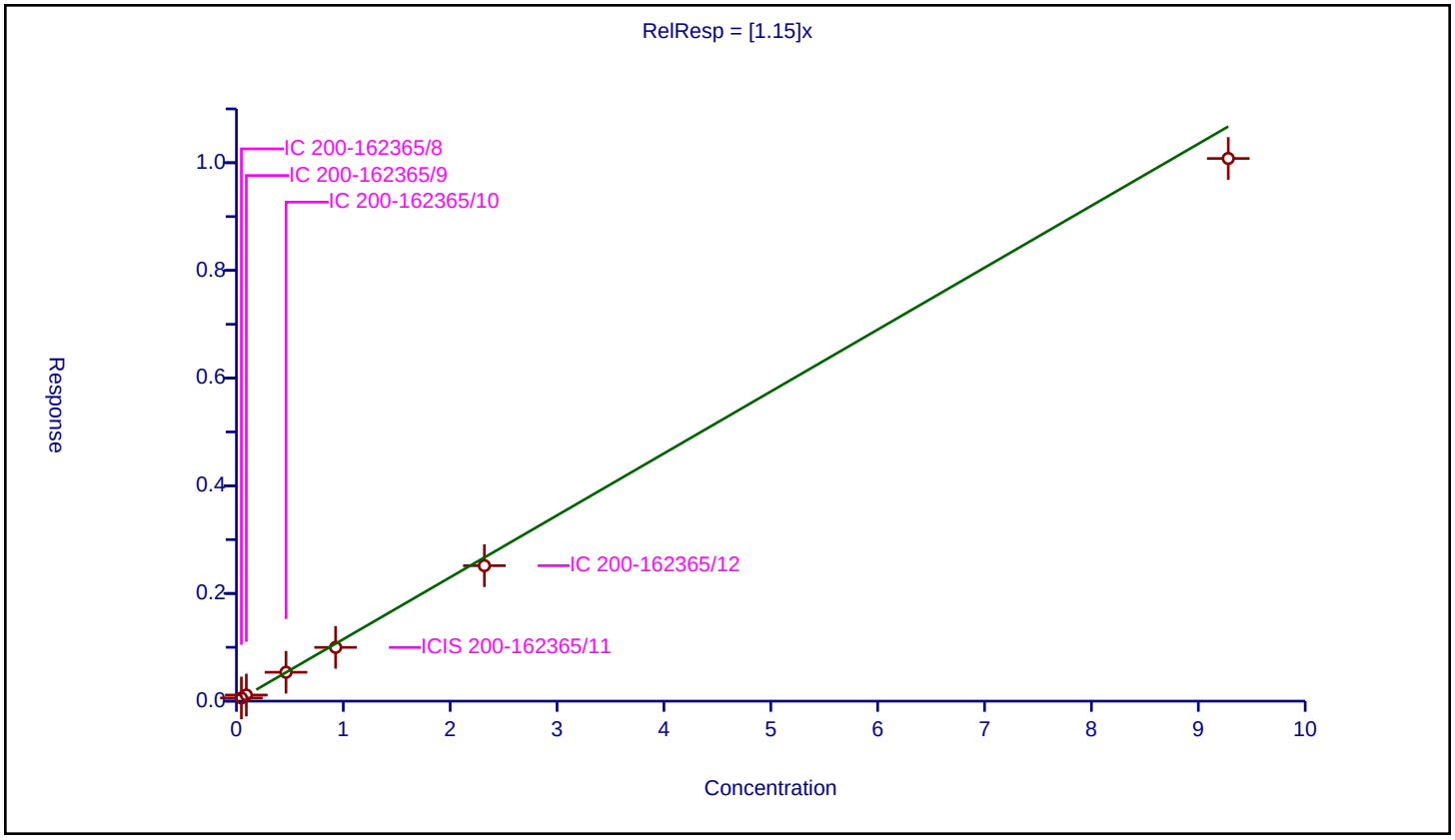
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.15 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 2160000 |
| **Relative Standard Error:** | 7.2 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.992 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.0464 | 0.059069 | 1.195 | 552776.0 | 1.273049 | Y |
| 2 | IC 200-162365/9 | 0.0928 | 0.113702 | 1.195 | 682230.0 | 1.225239 | Y |
| 3 | IC 200-162365/10 | 0.464 | 0.536254 | 1.195 | 543196.0 | 1.155719 | Y |
| 4 | ICIS 200-162365/11 | 0.928 | 0.998526 | 1.195 | 554310.0 | 1.075998 | Y |
| 5 | IC 200-162365/12 | 2.32 | 2.515978 | 1.195 | 529467.0 | 1.084473 | Y |
| 6 | IC 200-162365/13 | 9.28 | 10.079203 | 1.195 | 552420.0 | 1.086121 | Y |



## Calibration / Perfluorononanoic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

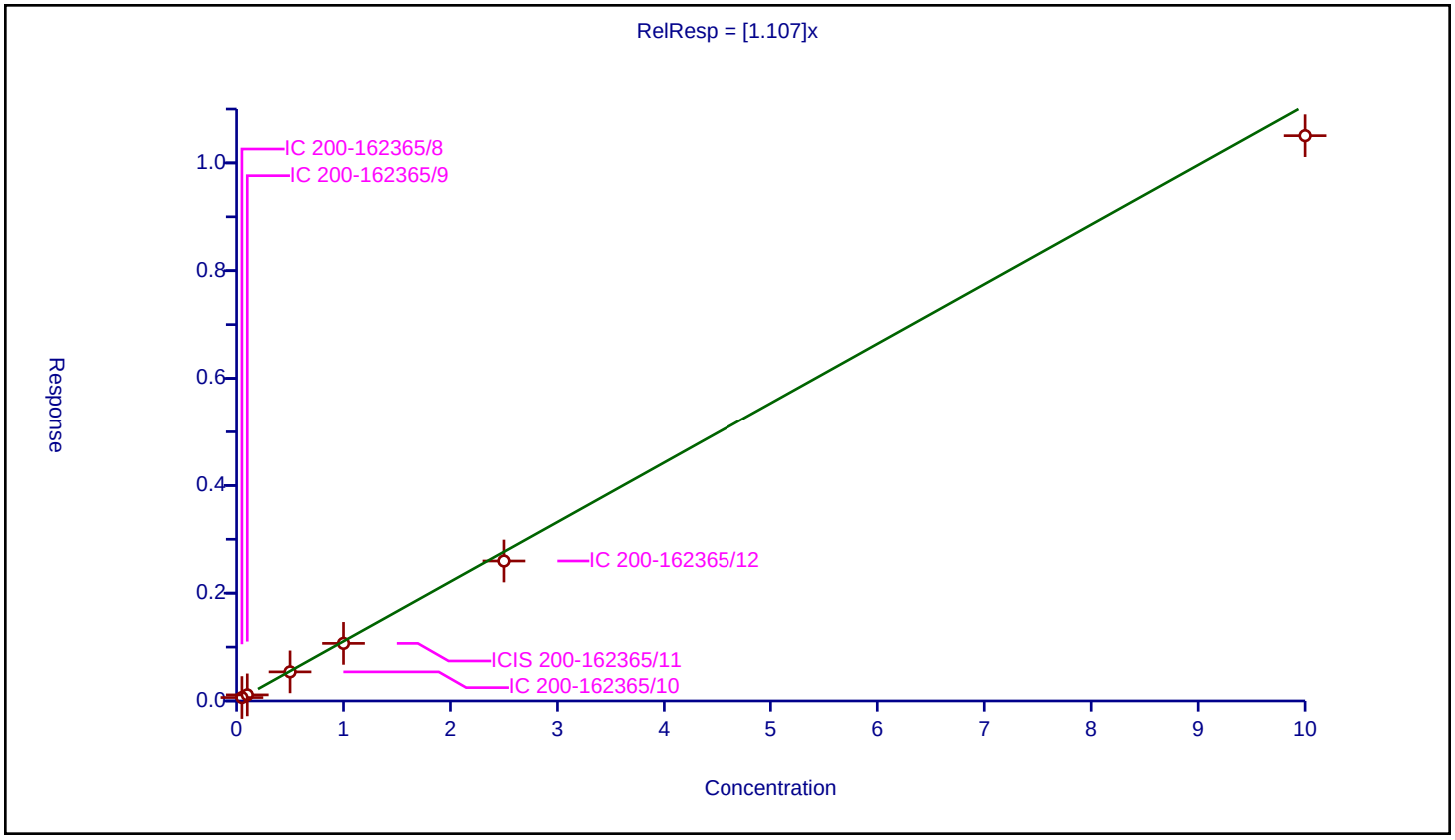
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.107 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 2880000 |
| **Relative Standard Error:** | 7.9 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.991 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.05 | 0.063599 | 1.25 | 787744.0 | 1.271987 | Y |
| 2 | IC 200-162365/9 | 0.1 | 0.113142 | 1.25 | 964938.0 | 1.13142 | Y |
| 3 | IC 200-162365/10 | 0.5 | 0.539829 | 1.25 | 772347.0 | 1.079657 | Y |
| 4 | ICIS 200-162365/11 | 1.0 | 1.068826 | 1.25 | 760016.0 | 1.068826 | Y |
| 5 | IC 200-162365/12 | 2.5 | 2.596817 | 1.25 | 756323.0 | 1.038727 | Y |
| 6 | IC 200-162365/13 | 10.0 | 10.50595 | 1.25 | 738168.0 | 1.050595 | 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 |

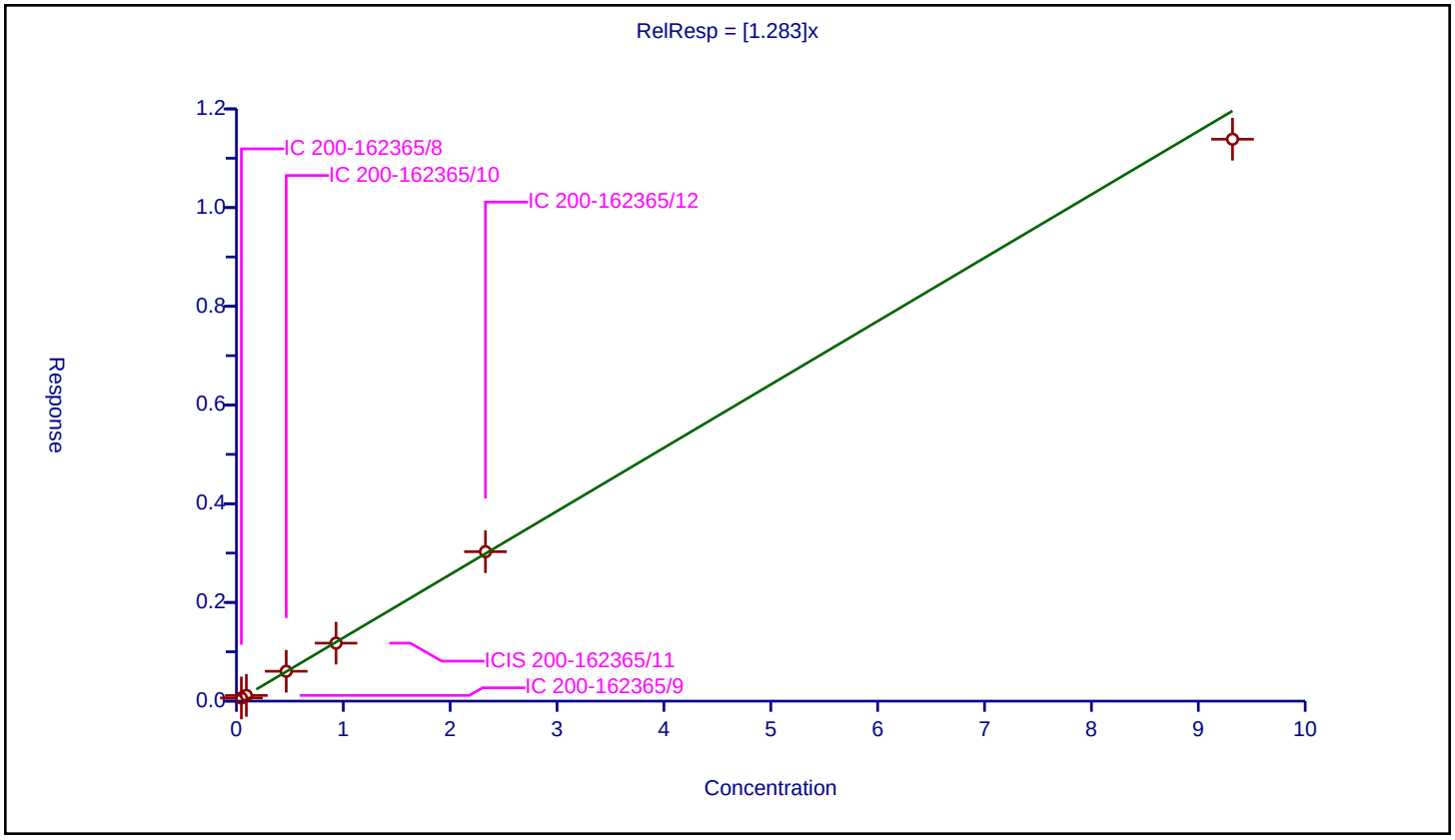
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.283 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 2440000 |
| **Relative Standard Error:** | 4.3 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.997 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.0466 | 0.064139 | 1.195 | 552776.0 | 1.376372 | Y |
| 2 | IC 200-162365/9 | 0.0932 | 0.115711 | 1.195 | 682230.0 | 1.241537 | Y |
| 3 | IC 200-162365/10 | 0.466 | 0.605374 | 1.195 | 543196.0 | 1.299085 | Y |
| 4 | ICIS 200-162365/11 | 0.932 | 1.175263 | 1.195 | 554310.0 | 1.261012 | Y |
| 5 | IC 200-162365/12 | 2.33 | 3.028048 | 1.195 | 529467.0 | 1.299591 | Y |
| 6 | IC 200-162365/13 | 9.32 | 11.385753 | 1.195 | 552420.0 | 1.221647 | Y |



## Calibration / Perfluorononanesulfonic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

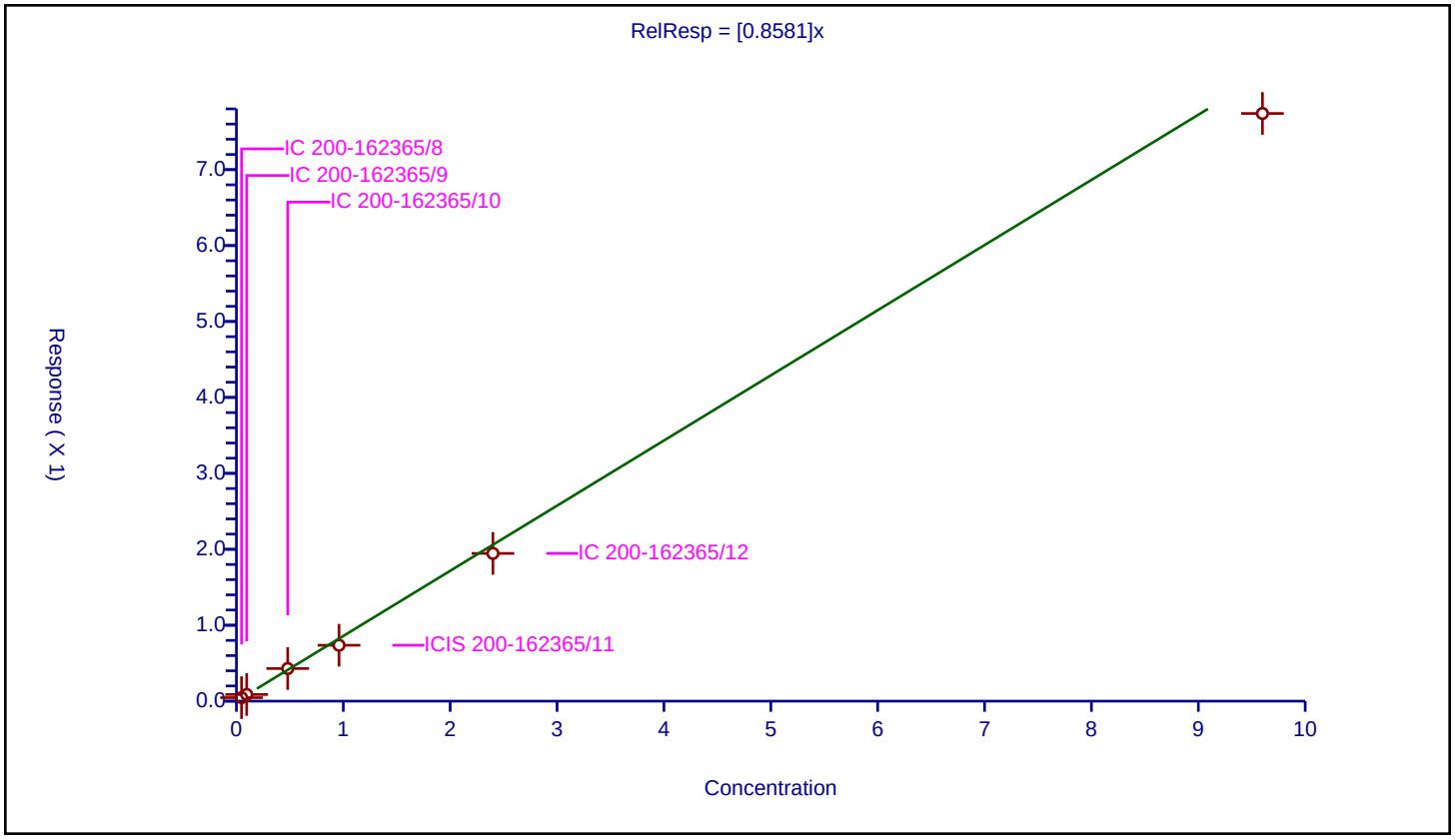
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 0.8581 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 1660000 |
| **Relative Standard Error:** | 8.6 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.989 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.048 | 0.04596 | 1.195 | 552776.0 | 0.957504 | Y |
| 2 | IC 200-162365/9 | 0.096 | 0.08757 | 1.195 | 682230.0 | 0.912187 | Y |
| 3 | IC 200-162365/10 | 0.48 | 0.429686 | 1.195 | 543196.0 | 0.89518 | Y |
| 4 | ICIS 200-162365/11 | 0.96 | 0.735984 | 1.195 | 554310.0 | 0.76665 | Y |
| 5 | IC 200-162365/12 | 2.4 | 1.945629 | 1.195 | 529467.0 | 0.810679 | Y |
| 6 | IC 200-162365/13 | 9.6 | 7.739554 | 1.195 | 552420.0 | 0.806203 | Y |



## Calibration / Perfluorodecanoic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

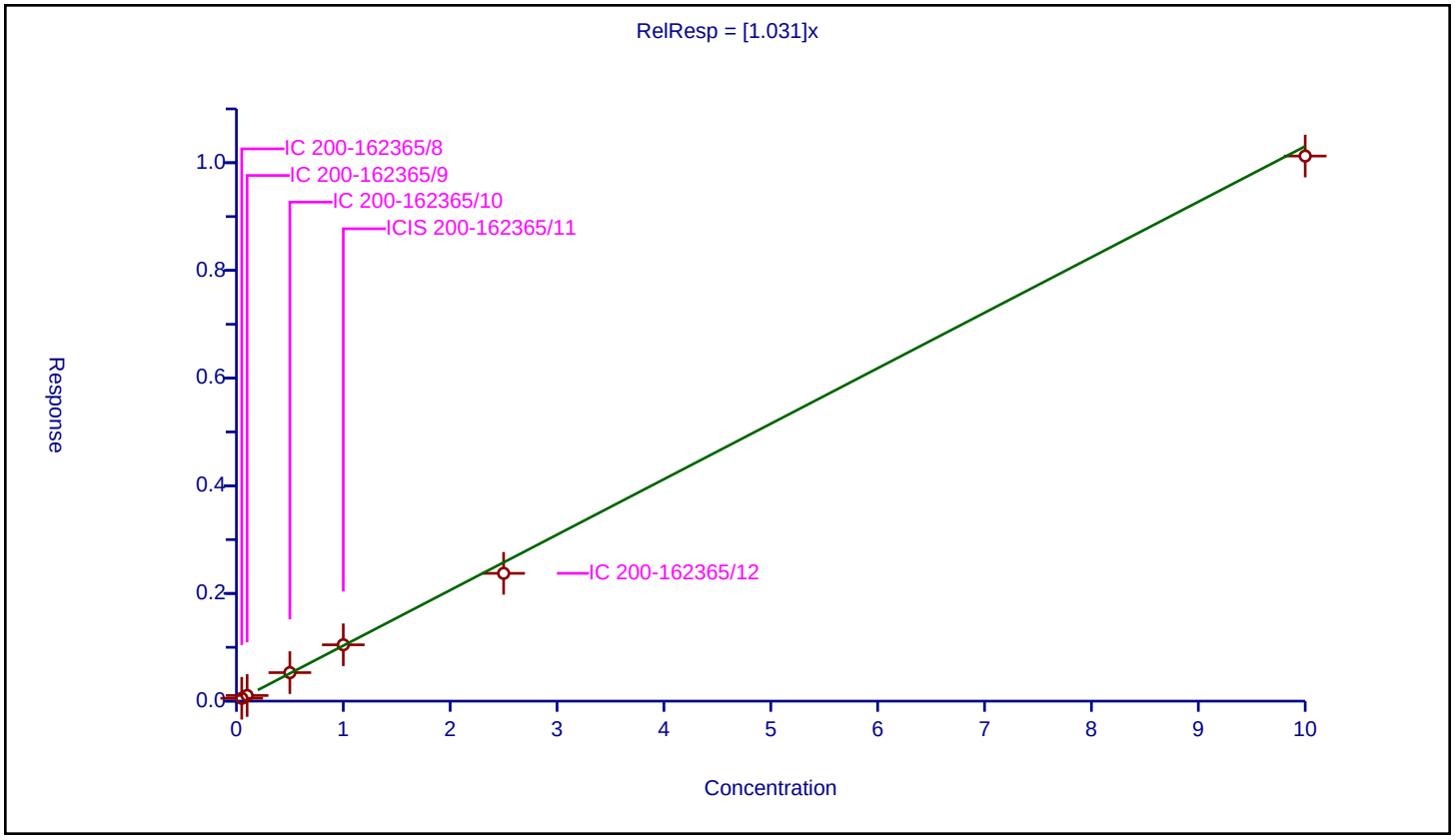
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.031 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 2630000 |
| **Relative Standard Error:** | 4.3 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.998 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.05 | 0.053418 | 1.25 | 741582.0 | 1.068358 | Y |
| 2 | IC 200-162365/9 | 0.1 | 0.104683 | 1.25 | 926205.0 | 1.046825 | Y |
| 3 | IC 200-162365/10 | 0.5 | 0.52973 | 1.25 | 721858.0 | 1.05946 | Y |
| 4 | ICIS 200-162365/11 | 1.0 | 1.04663 | 1.25 | 722168.0 | 1.04663 | Y |
| 5 | IC 200-162365/12 | 2.5 | 2.373518 | 1.25 | 760056.0 | 0.949407 | Y |
| 6 | IC 200-162365/13 | 10.0 | 10.12465 | 1.25 | 699346.0 | 1.012465 | 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 |

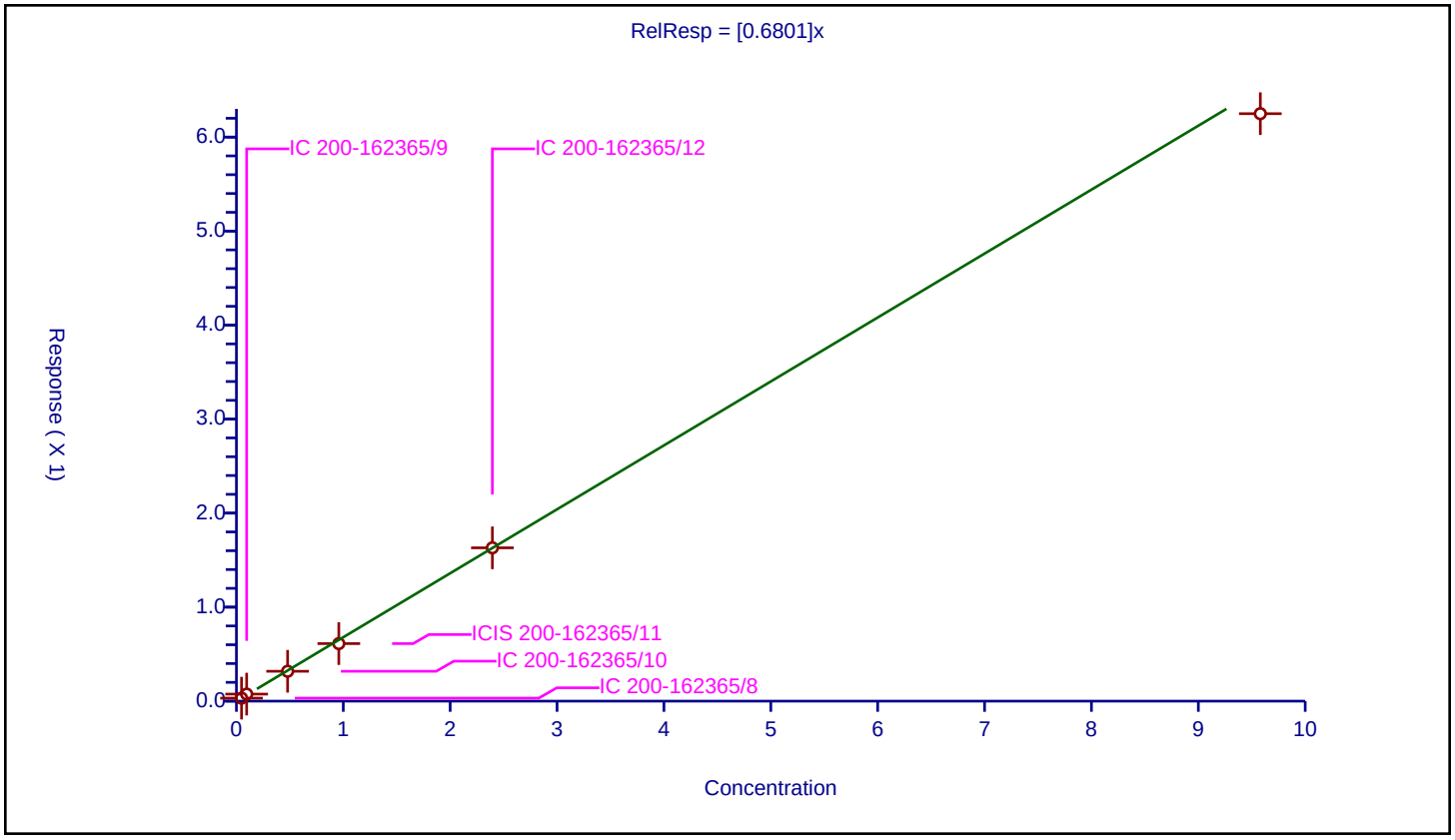
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 0.6801 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 255000 |
| **Relative Standard Error:** | 7.5 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.992 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.0479 | 0.031824 | 1.1975 | 107657.0 | 0.664379 | Y |
| 2 | IC 200-162365/9 | 0.0958 | 0.074804 | 1.1975 | 125650.0 | 0.78084 | Y |
| 3 | IC 200-162365/10 | 0.479 | 0.317736 | 1.1975 | 100274.0 | 0.663332 | Y |
| 4 | ICIS 200-162365/11 | 0.958 | 0.611973 | 1.1975 | 100569.0 | 0.638803 | Y |
| 5 | IC 200-162365/12 | 2.395 | 1.631041 | 1.1975 | 101608.0 | 0.681019 | Y |
| 6 | IC 200-162365/13 | 9.58 | 6.249065 | 1.1975 | 105624.0 | 0.652303 | Y |



## Calibration / Perfluorooctanesulfonamide

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

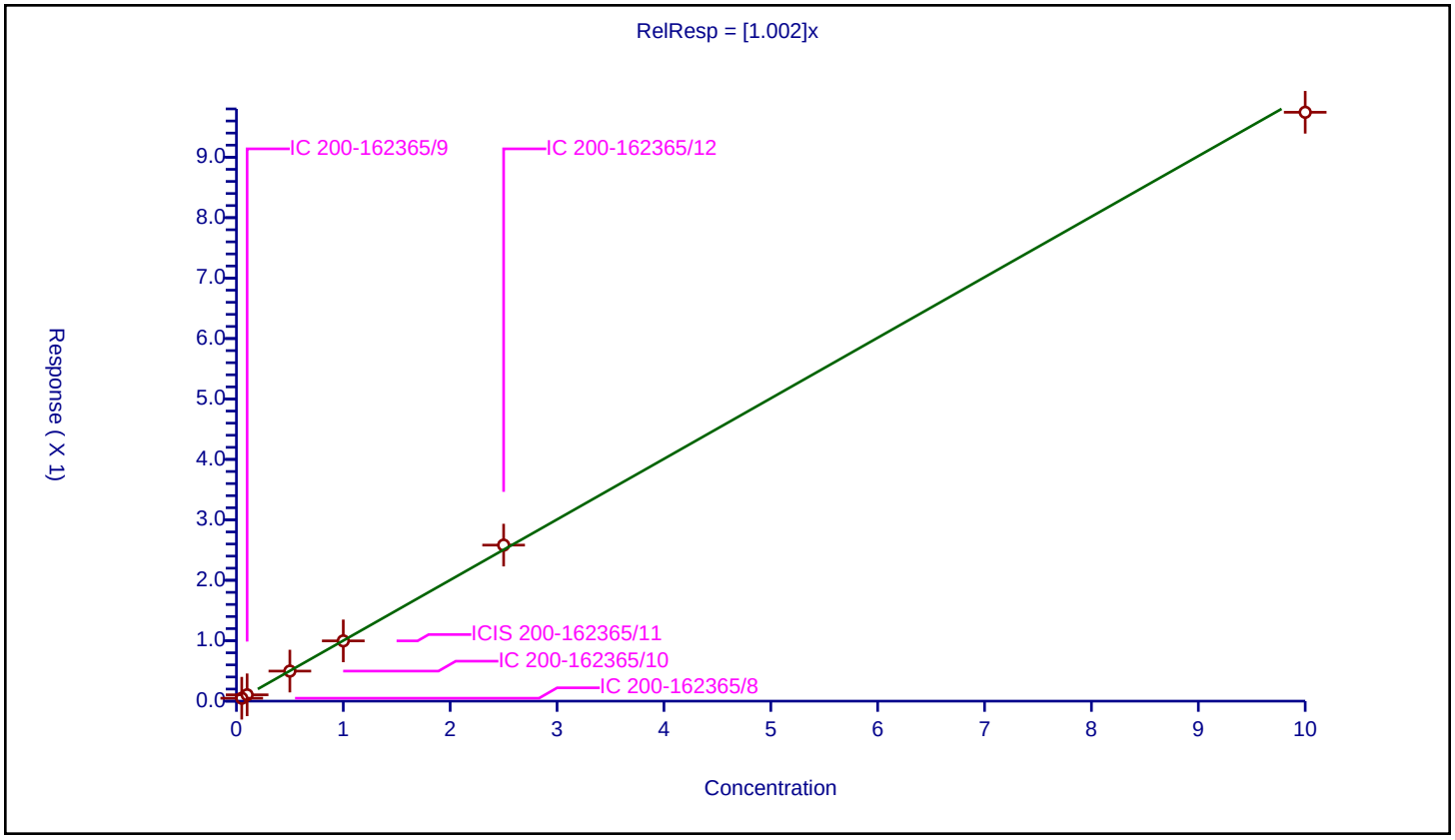
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.002 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 4020000 |
| **Relative Standard Error:** | 3.2 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.999 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.05 | 0.048315 | 1.25 | 1076815.0 | 0.966299 | Y |
| 2 | IC 200-162365/9 | 0.1 | 0.104776 | 1.25 | 1350960.0 | 1.047764 | Y |
| 3 | IC 200-162365/10 | 0.5 | 0.497311 | 1.25 | 1063884.0 | 0.994622 | Y |
| 4 | ICIS 200-162365/11 | 1.0 | 0.996983 | 1.25 | 1069567.0 | 0.996983 | Y |
| 5 | IC 200-162365/12 | 2.5 | 2.581919 | 1.25 | 1040920.0 | 1.032768 | Y |
| 6 | IC 200-162365/13 | 10.0 | 9.744193 | 1.25 | 1111429.0 | 0.974419 | Y |



## Calibration / N-methylperfluorooctanesulfonamidoacetic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

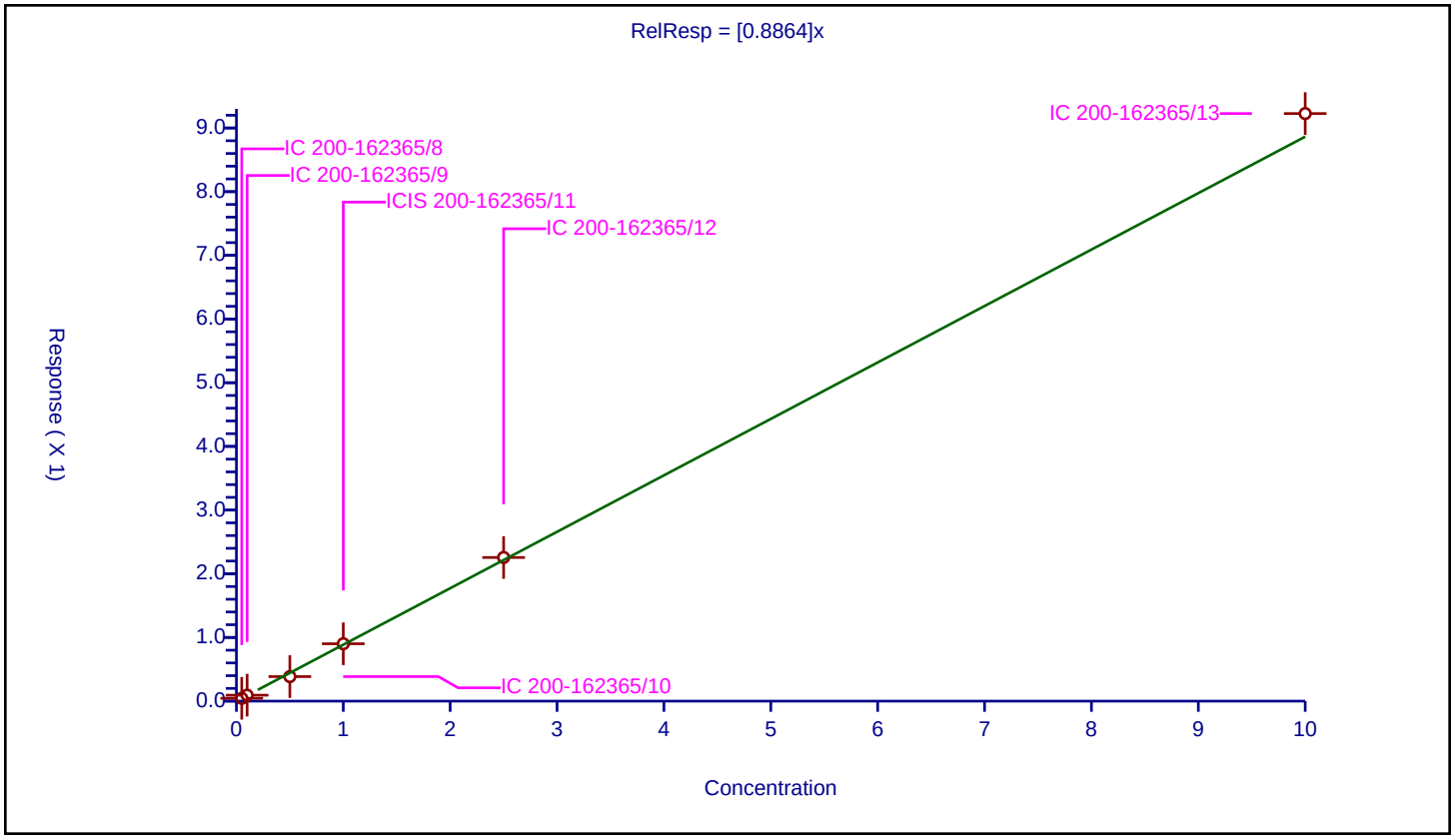
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 0.8864 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 180000 |
| **Relative Standard Error:** | 6.7 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.994 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.05 | 0.044418 | 1.25 | 49895.0 | 0.888366 | Y |
| 2 | IC 200-162365/9 | 0.1 | 0.093329 | 1.25 | 69887.0 | 0.933292 | Y |
| 3 | IC 200-162365/10 | 0.5 | 0.385302 | 1.25 | 54321.0 | 0.770604 | Y |
| 4 | ICIS 200-162365/11 | 1.0 | 0.900963 | 1.25 | 52781.0 | 0.900963 | Y |
| 5 | IC 200-162365/12 | 2.5 | 2.255769 | 1.25 | 52266.0 | 0.902307 | Y |
| 6 | IC 200-162365/13 | 10.0 | 9.226693 | 1.25 | 52838.0 | 0.922669 | Y |



## Calibration / Perfluorodecanesulfonic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

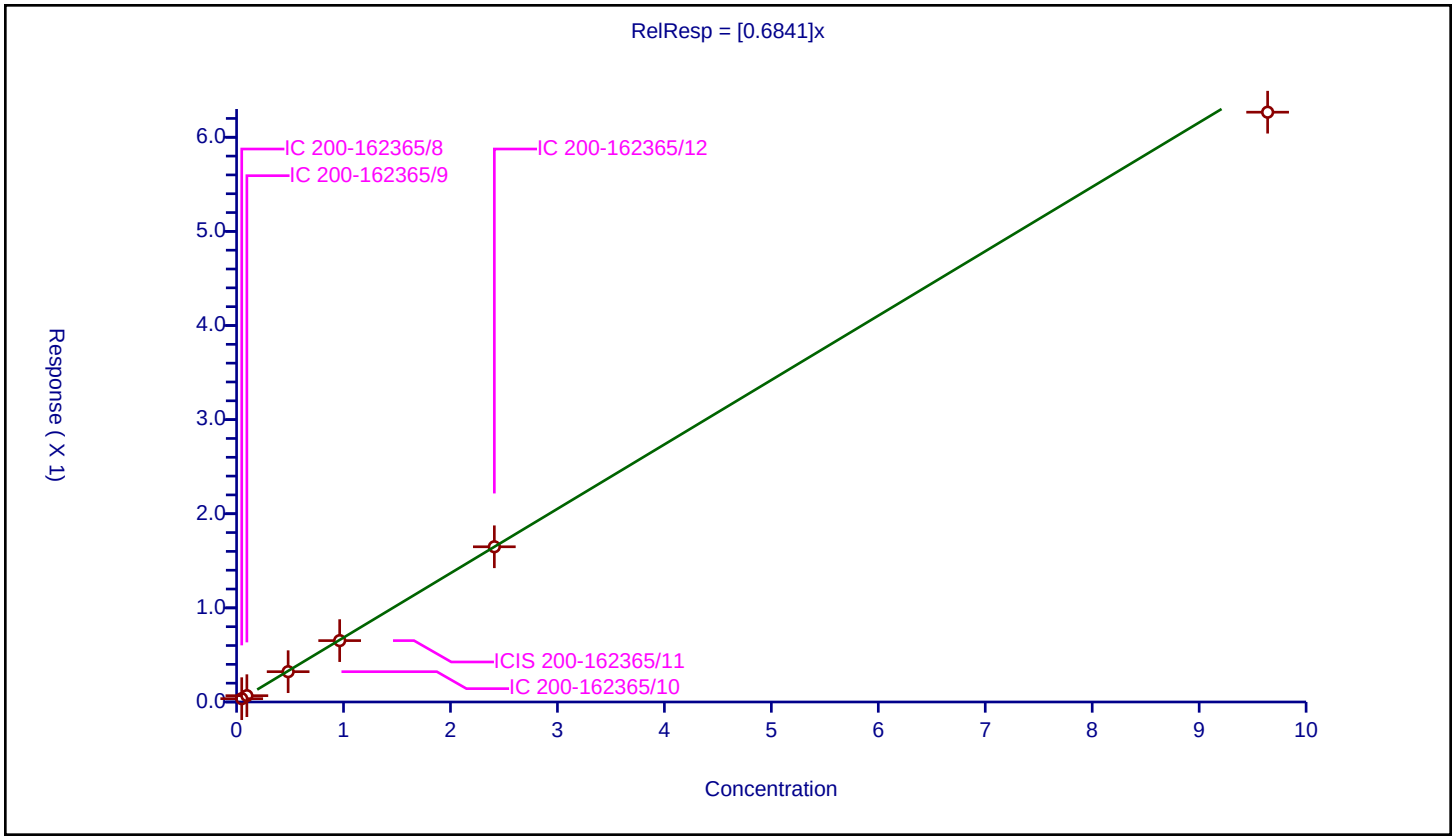
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 0.6841 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 1340000 |
| **Relative Standard Error:** | 4.0 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.998 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.0482 | 0.035222 | 1.195 | 552776.0 | 0.730757 | Y |
| 2 | IC 200-162365/9 | 0.0964 | 0.06701 | 1.195 | 682230.0 | 0.69512 | Y |
| 3 | IC 200-162365/10 | 0.482 | 0.321957 | 1.195 | 543196.0 | 0.667961 | Y |
| 4 | ICIS 200-162365/11 | 0.964 | 0.651984 | 1.195 | 554310.0 | 0.676332 | Y |
| 5 | IC 200-162365/12 | 2.41 | 1.64916 | 1.195 | 529467.0 | 0.684299 | Y |
| 6 | IC 200-162365/13 | 9.64 | 6.266194 | 1.195 | 552420.0 | 0.65002 | Y |



## Calibration / Perfluoroundecanoic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

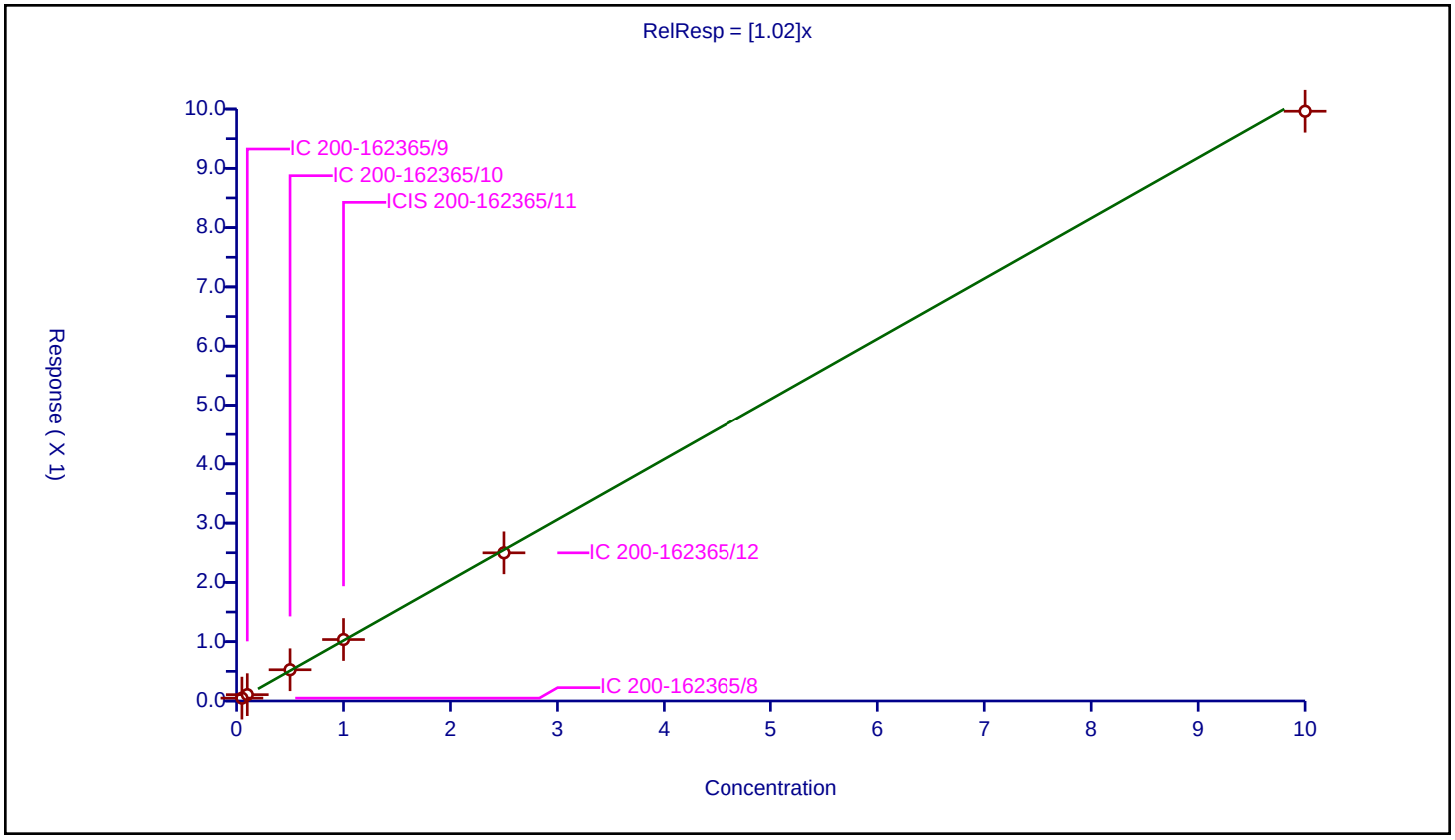
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.02 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 2180000 |
| **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 200-162365/8 | 0.05 | 0.048267 | 1.25 | 632709.0 | 0.965333 | Y |
| 2 | IC 200-162365/9 | 0.1 | 0.10681 | 1.25 | 753171.0 | 1.068101 | Y |
| 3 | IC 200-162365/10 | 0.5 | 0.526686 | 1.25 | 580063.0 | 1.053373 | Y |
| 4 | ICIS 200-162365/11 | 1.0 | 1.036476 | 1.25 | 595523.0 | 1.036476 | Y |
| 5 | IC 200-162365/12 | 2.5 | 2.49874 | 1.25 | 601281.0 | 0.999496 | Y |
| 6 | IC 200-162365/13 | 10.0 | 9.962572 | 1.25 | 589898.0 | 0.996257 | Y |



## Calibration / N-ethylperfluorooctanesulfonamidoacetic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

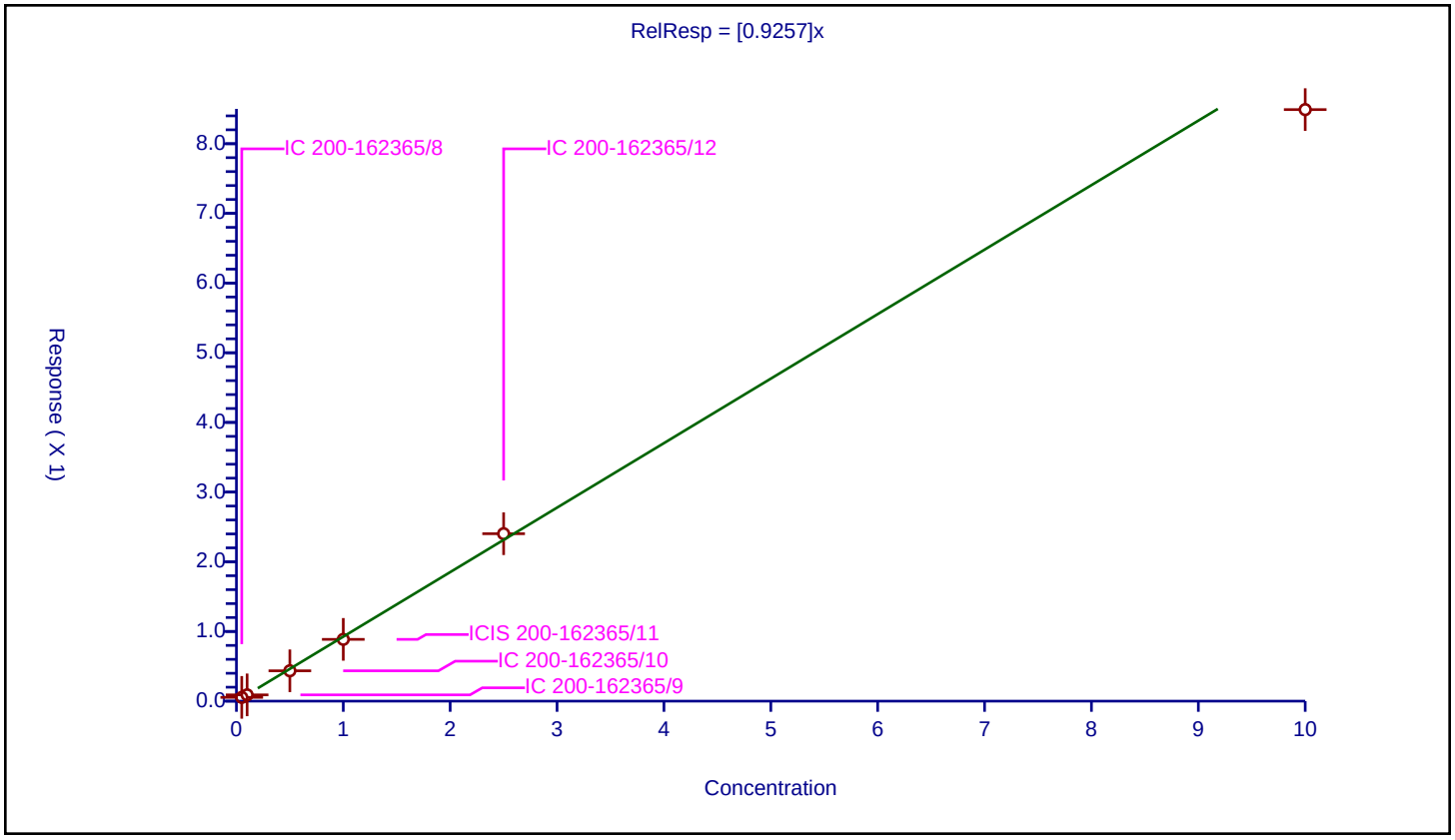
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 0.9257 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 166000 |
| **Relative Standard Error:** | 9.3 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.987 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.05 | 0.054201 | 1.25 | 49123.0 | 1.084014 | Y |
| 2 | IC 200-162365/9 | 0.1 | 0.090203 | 1.25 | 66544.0 | 0.902035 | Y |
| 3 | IC 200-162365/10 | 0.5 | 0.435738 | 1.25 | 52130.0 | 0.871475 | Y |
| 4 | ICIS 200-162365/11 | 1.0 | 0.886522 | 1.25 | 50481.0 | 0.886522 | Y |
| 5 | IC 200-162365/12 | 2.5 | 2.403003 | 1.25 | 49976.0 | 0.961201 | Y |
| 6 | IC 200-162365/13 | 10.0 | 8.489505 | 1.25 | 52405.0 | 0.84895 | Y |



## Calibration / 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

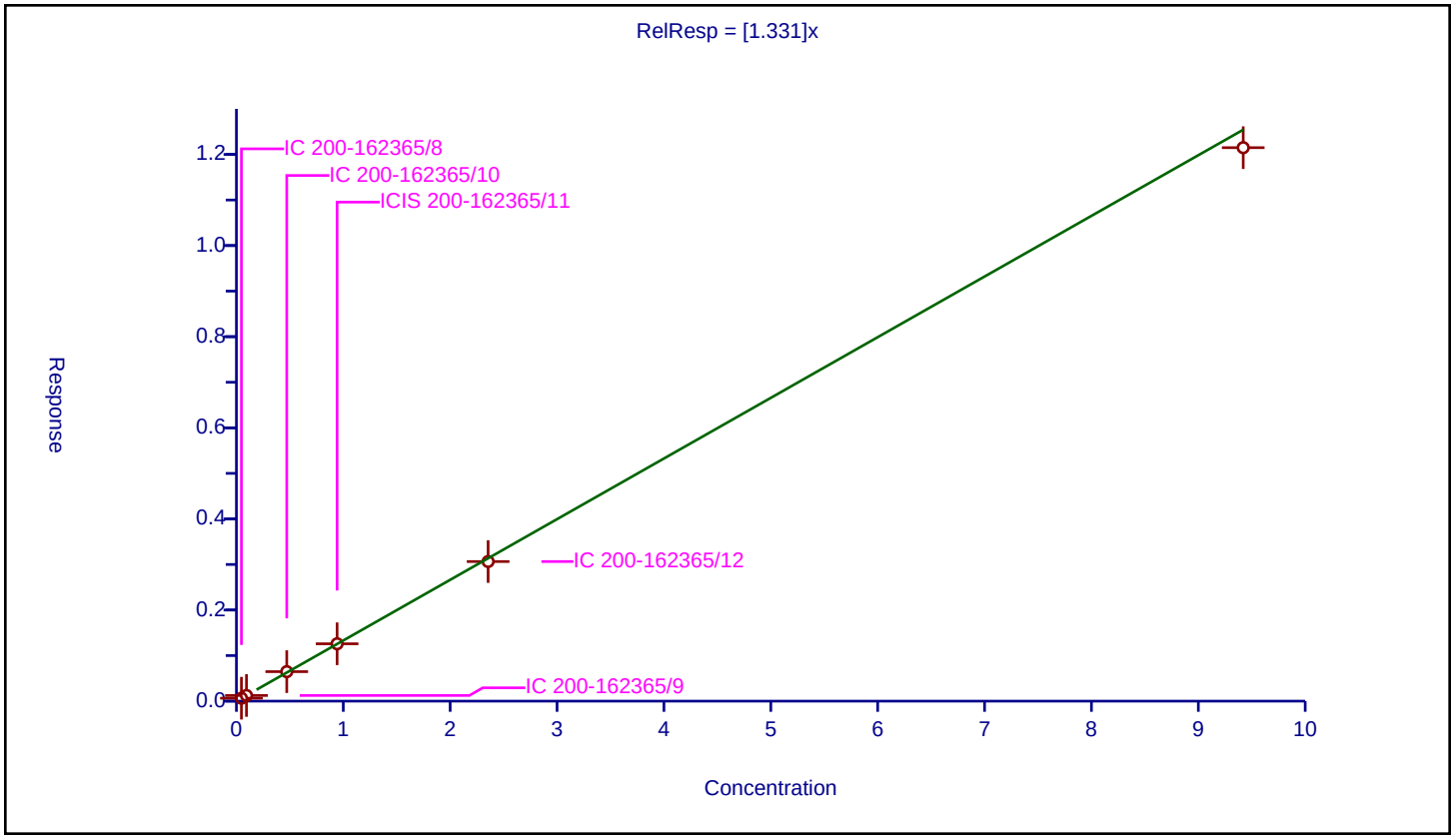
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.331 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 2600000 |
| **Relative Standard Error:** | 2.6 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.999 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.0471 | 0.064435 | 1.195 | 552776.0 | 1.368049 | Y |
| 2 | IC 200-162365/9 | 0.0942 | 0.124242 | 1.195 | 682230.0 | 1.318913 | Y |
| 3 | IC 200-162365/10 | 0.471 | 0.647252 | 1.195 | 543196.0 | 1.374207 | Y |
| 4 | ICIS 200-162365/11 | 0.942 | 1.259108 | 1.195 | 554310.0 | 1.336633 | Y |
| 5 | IC 200-162365/12 | 2.355 | 3.064453 | 1.195 | 529467.0 | 1.301254 | Y |
| 6 | IC 200-162365/13 | 9.42 | 12.148924 | 1.195 | 552420.0 | 1.289695 | Y |



## Calibration / Perfluorododecanoic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

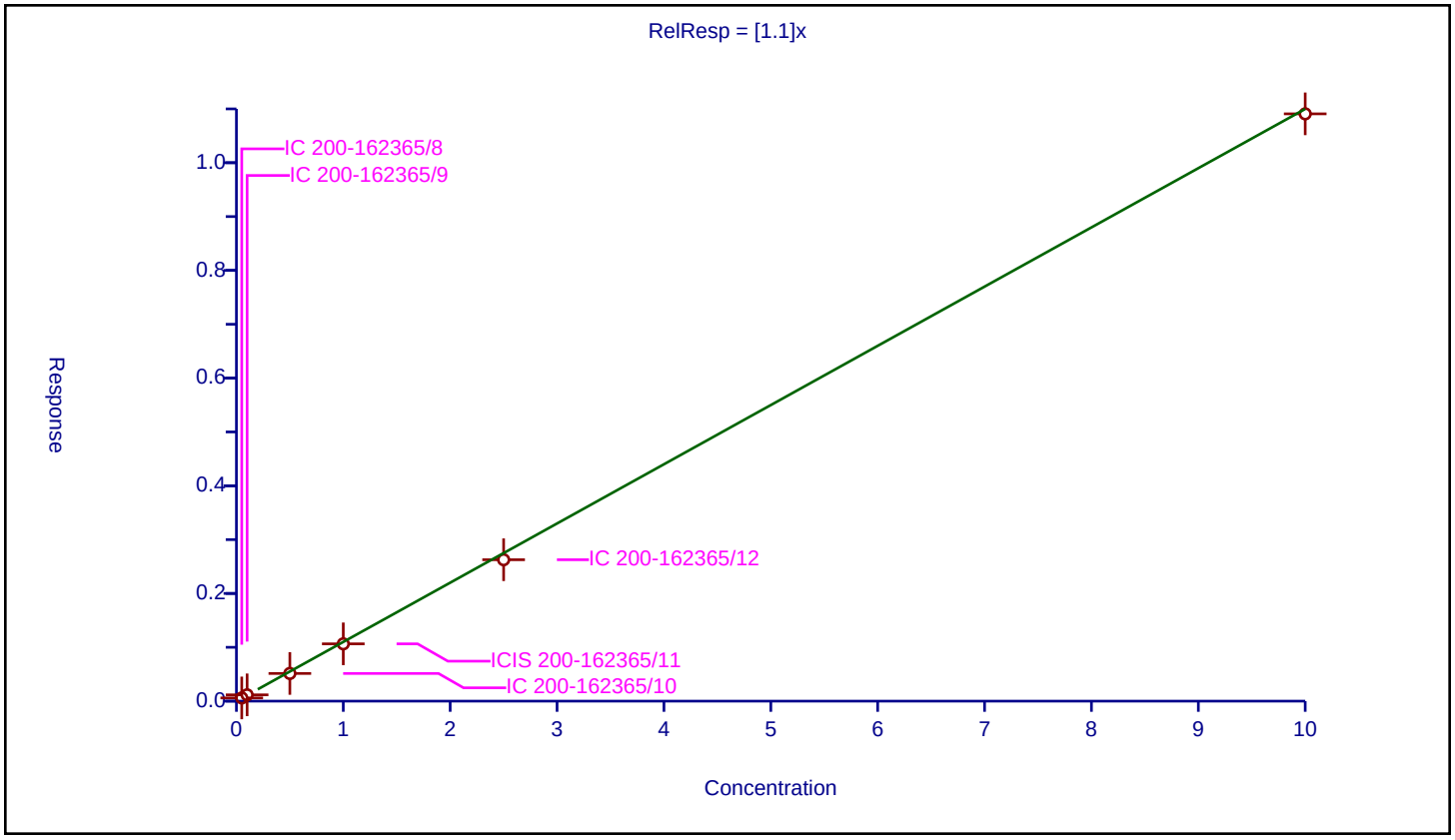
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.1 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 2550000 |
| **Relative Standard Error:** | 6.1 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.995 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.05 | 0.059695 | 1.25 | 640188.0 | 1.193907 | Y |
| 2 | IC 200-162365/9 | 0.1 | 0.117086 | 1.25 | 777582.0 | 1.170857 | Y |
| 3 | IC 200-162365/10 | 0.5 | 0.514375 | 1.25 | 642314.0 | 1.028749 | Y |
| 4 | ICIS 200-162365/11 | 1.0 | 1.064268 | 1.25 | 641373.0 | 1.064268 | Y |
| 5 | IC 200-162365/12 | 2.5 | 2.626358 | 1.25 | 623891.0 | 1.050543 | Y |
| 6 | IC 200-162365/13 | 10.0 | 10.90786 | 1.25 | 631964.0 | 1.090786 | Y |



## Calibration / 1H,1H,2H,2H-perfluorododecanesulfonic acid (10:2)

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

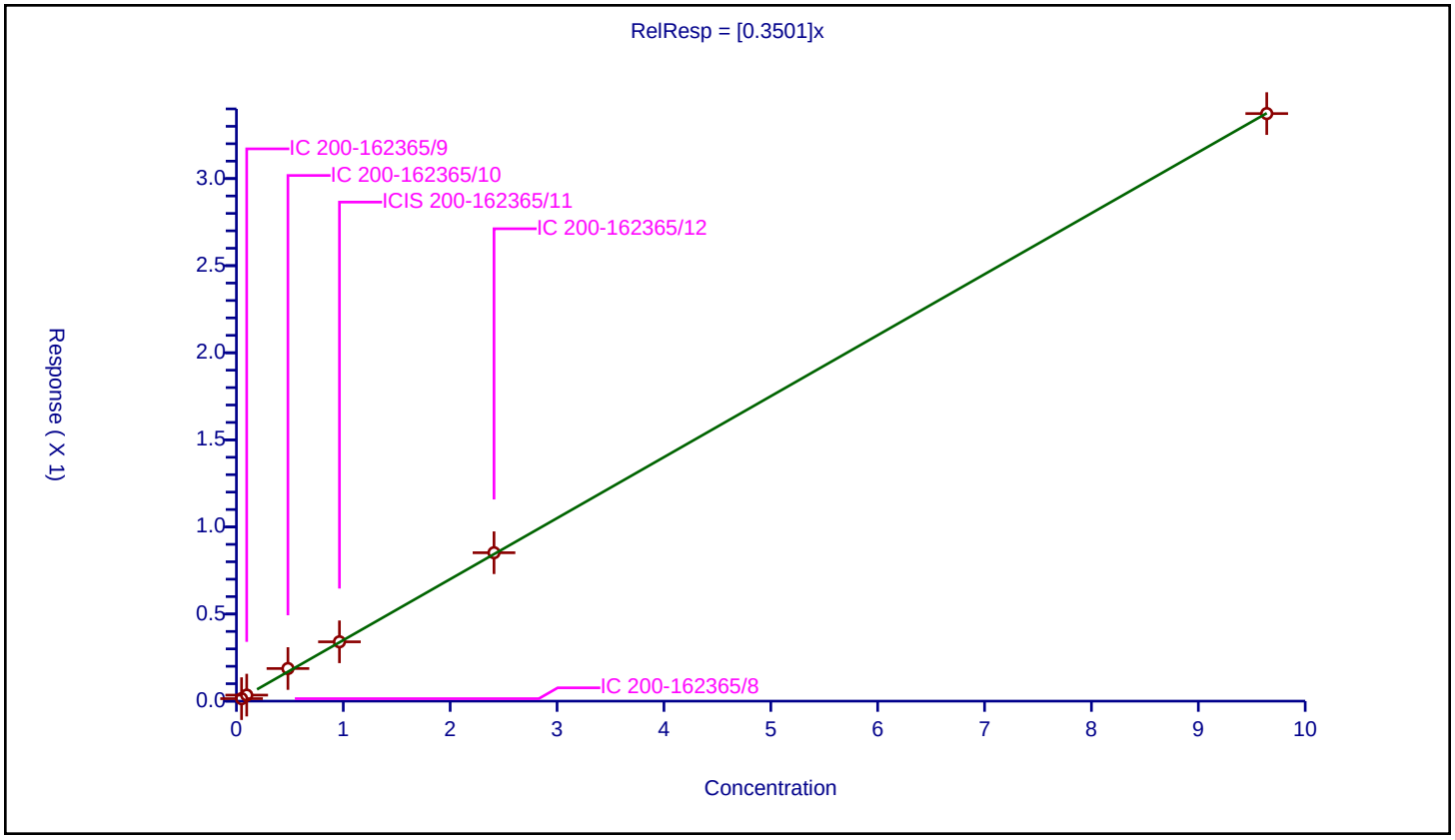
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 0.3501 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 138000 |
| **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 200-162365/8 | 0.0482 | 0.014282 | 1.1975 | 107657.0 | 0.296313 | Y |
| 2 | IC 200-162365/9 | 0.0964 | 0.034634 | 1.1975 | 125650.0 | 0.35927 | Y |
| 3 | IC 200-162365/10 | 0.482 | 0.187219 | 1.1975 | 100274.0 | 0.388421 | Y |
| 4 | ICIS 200-162365/11 | 0.964 | 0.340654 | 1.1975 | 100569.0 | 0.353376 | Y |
| 5 | IC 200-162365/12 | 2.41 | 0.852056 | 1.1975 | 101608.0 | 0.35355 | Y |
| 6 | IC 200-162365/13 | 9.64 | 3.37311 | 1.1975 | 105624.0 | 0.349908 | Y |



## Calibration / Perfluorododecanesulfonic acid (PFDoS)

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

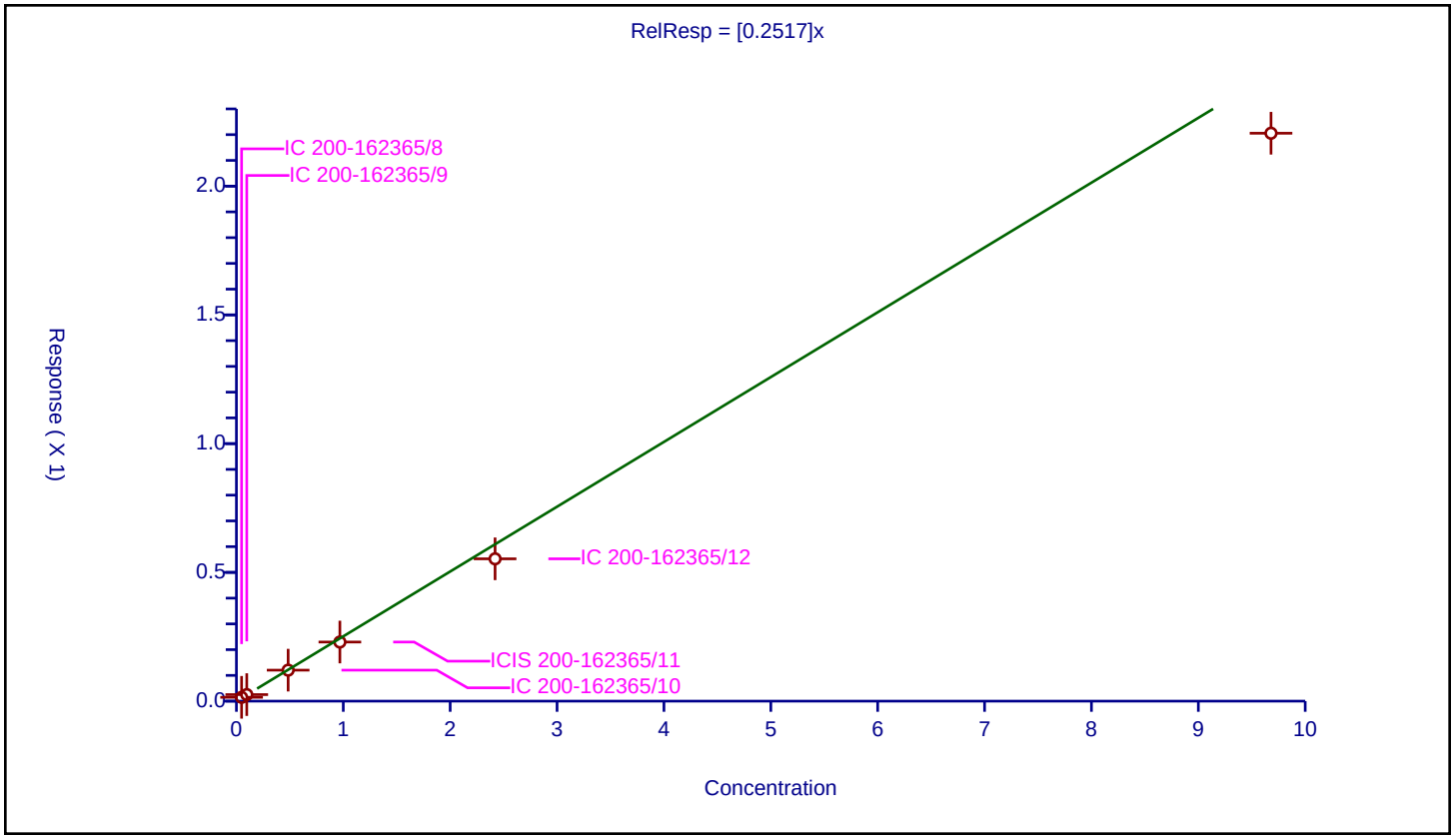
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 0.2517 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 472000 |
| **Relative Standard Error:** | 11.7 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.978 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.0484 | 0.014793 | 1.195 | 552776.0 | 0.305647 | Y |
| 2 | IC 200-162365/9 | 0.0968 | 0.025405 | 1.195 | 682230.0 | 0.262452 | Y |
| 3 | IC 200-162365/10 | 0.484 | 0.120328 | 1.195 | 543196.0 | 0.248612 | Y |
| 4 | ICIS 200-162365/11 | 0.968 | 0.229601 | 1.195 | 554310.0 | 0.237191 | Y |
| 5 | IC 200-162365/12 | 2.42 | 0.552646 | 1.195 | 529467.0 | 0.228366 | Y |
| 6 | IC 200-162365/13 | 9.68 | 2.205461 | 1.195 | 552420.0 | 0.227837 | Y |



## Calibration / Perfluorotridecanoic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

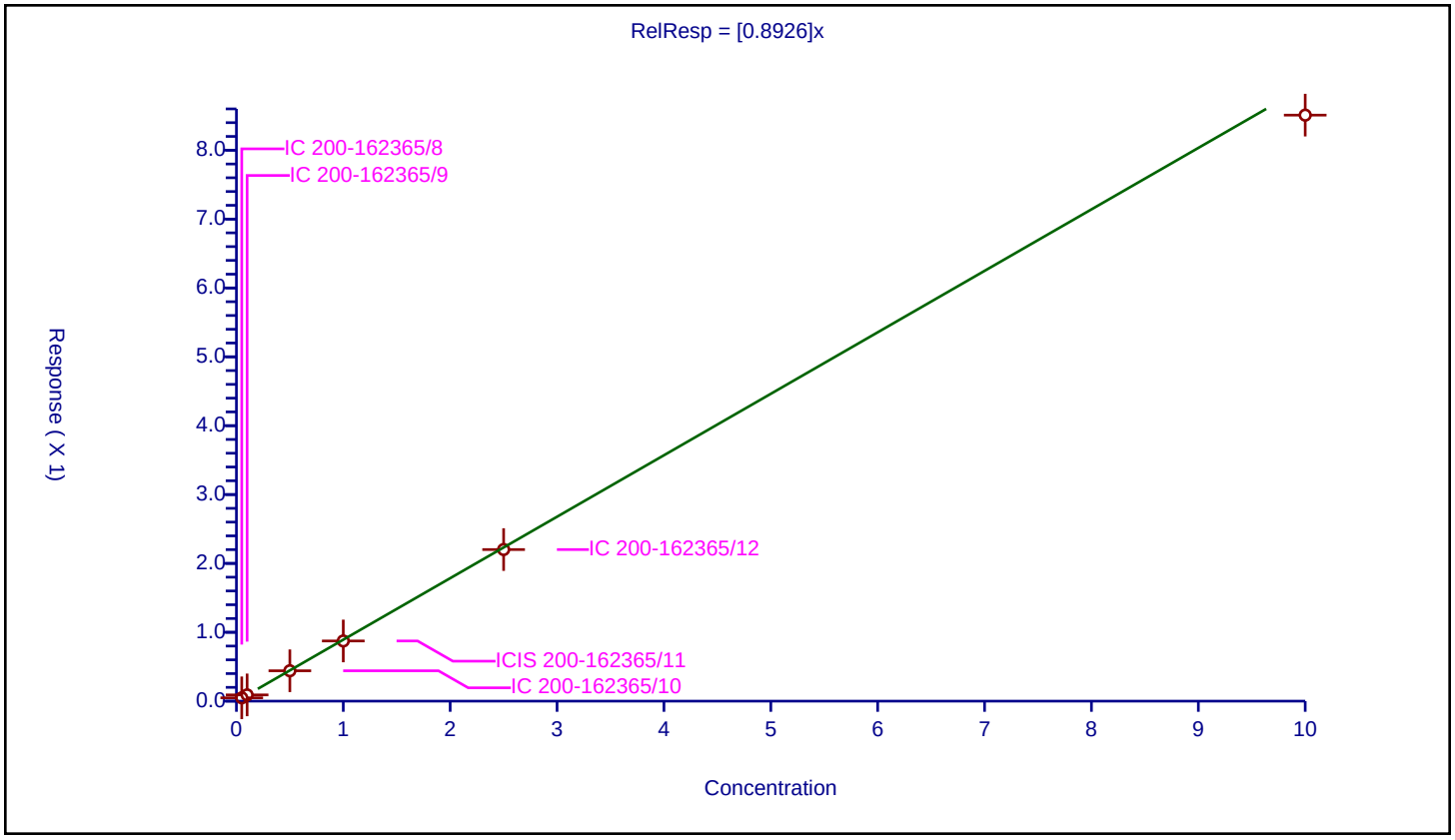
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 0.8926 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 2000000 |
| **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 200-162365/8 | 0.05 | 0.048015 | 1.25 | 640188.0 | 0.960304 | Y |
| 2 | IC 200-162365/9 | 0.1 | 0.090765 | 1.25 | 777582.0 | 0.907653 | Y |
| 3 | IC 200-162365/10 | 0.5 | 0.44111 | 1.25 | 642314.0 | 0.88222 | Y |
| 4 | ICIS 200-162365/11 | 1.0 | 0.873994 | 1.25 | 641373.0 | 0.873994 | Y |
| 5 | IC 200-162365/12 | 2.5 | 2.201023 | 1.25 | 623891.0 | 0.880409 | Y |
| 6 | IC 200-162365/13 | 10.0 | 8.509316 | 1.25 | 631964.0 | 0.850932 | Y |



## Calibration / Perfluorotetradecanoic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

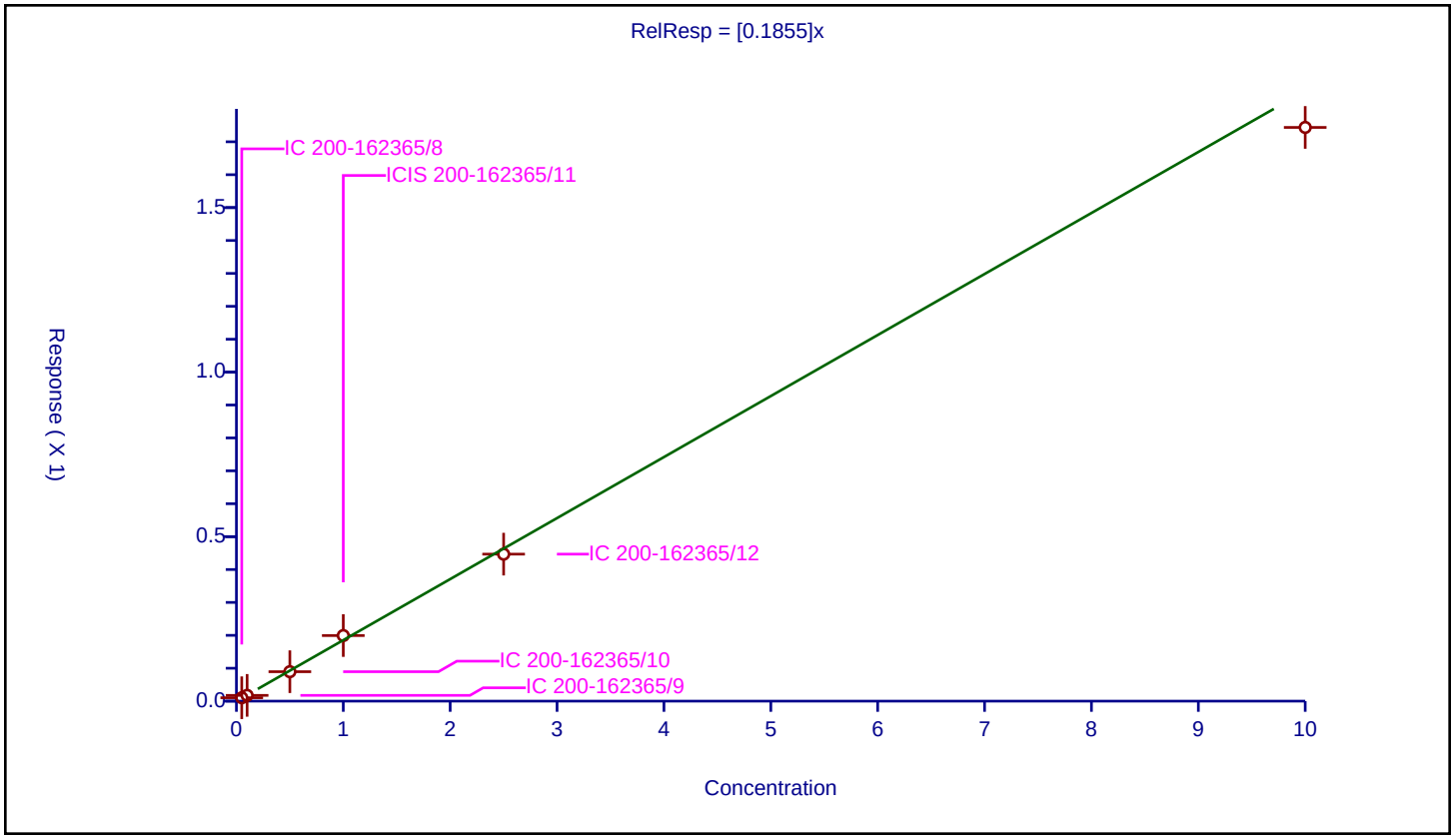
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 0.1855 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 306000 |
| **Relative Standard Error:** | 7.3 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.993 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.05 | 0.010291 | 1.25 | 460978.0 | 0.205812 | Y |
| 2 | IC 200-162365/9 | 0.1 | 0.017546 | 1.25 | 598063.0 | 0.175462 | Y |
| 3 | IC 200-162365/10 | 0.5 | 0.089521 | 1.25 | 480039.0 | 0.179043 | Y |
| 4 | ICIS 200-162365/11 | 1.0 | 0.199316 | 1.25 | 450404.0 | 0.199316 | Y |
| 5 | IC 200-162365/12 | 2.5 | 0.446767 | 1.25 | 469963.0 | 0.178707 | Y |
| 6 | IC 200-162365/13 | 10.0 | 1.743623 | 1.25 | 471704.0 | 0.174362 | Y |



## Calibration / Perfluorohexadecanoic acid

| | |
|---|---|
| **Curve Type:** | Linear |
| **Weighting:** | Conc |
| **Origin:** | None |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

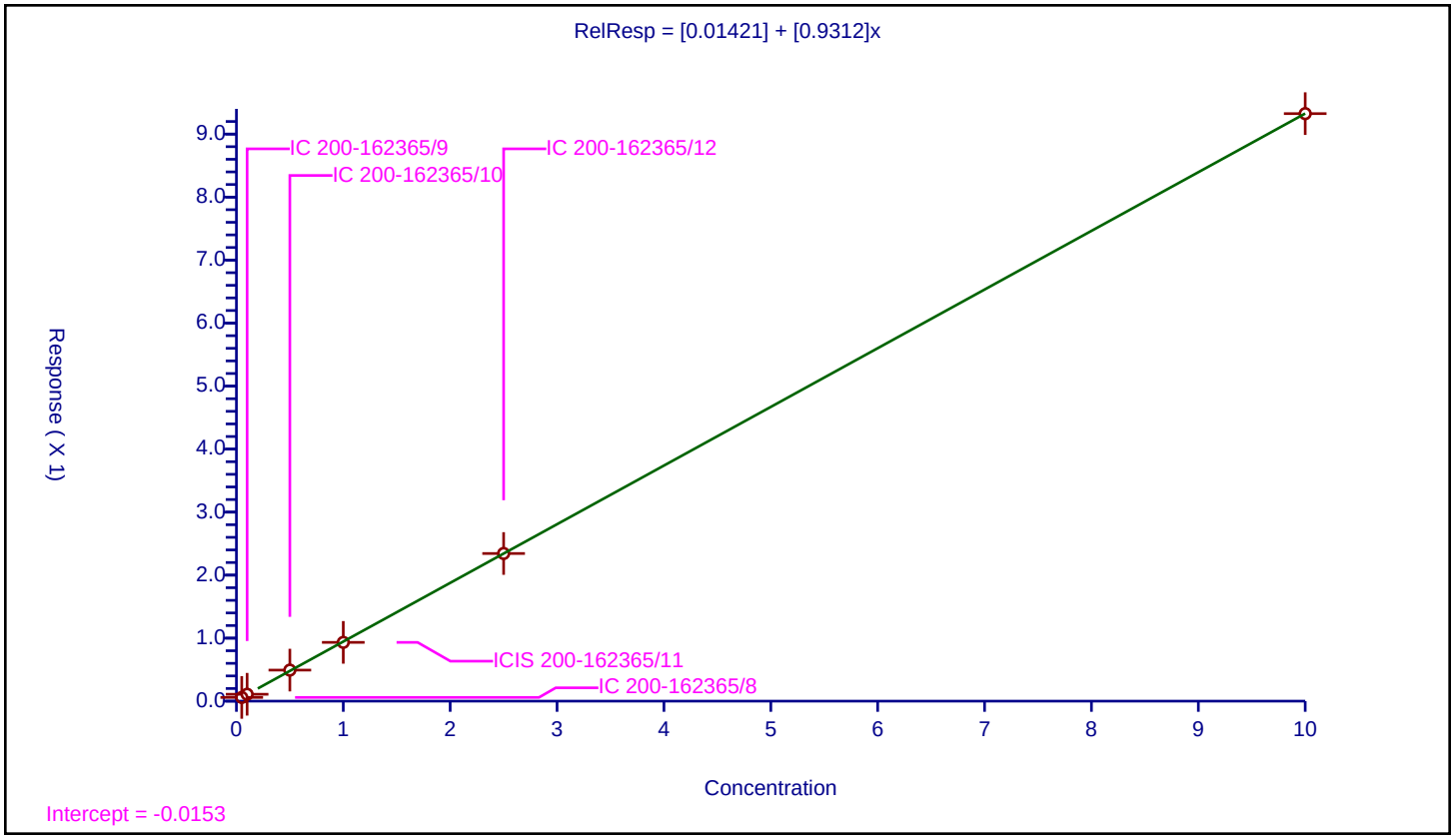
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0.01421 |
| **Slope:** | 0.9312 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 1950000 |
| **Relative Standard Error:** | 2.7 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 1.000 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.05 | 0.059041 | 1.25 | 493765.0 | 1.180825 | Y |
| 2 | IC 200-162365/9 | 0.1 | 0.109457 | 1.25 | 635237.0 | 1.094572 | Y |
| 3 | IC 200-162365/10 | 0.5 | 0.492643 | 1.25 | 497203.0 | 0.985287 | Y |
| 4 | ICIS 200-162365/11 | 1.0 | 0.932632 | 1.25 | 496455.0 | 0.932632 | Y |
| 5 | IC 200-162365/12 | 2.5 | 2.343435 | 1.25 | 505699.0 | 0.937374 | Y |
| 6 | IC 200-162365/13 | 10.0 | 9.324608 | 1.25 | 502634.0 | 0.932461 | Y |



## Calibration / Perfluorooctadecanoic acid

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

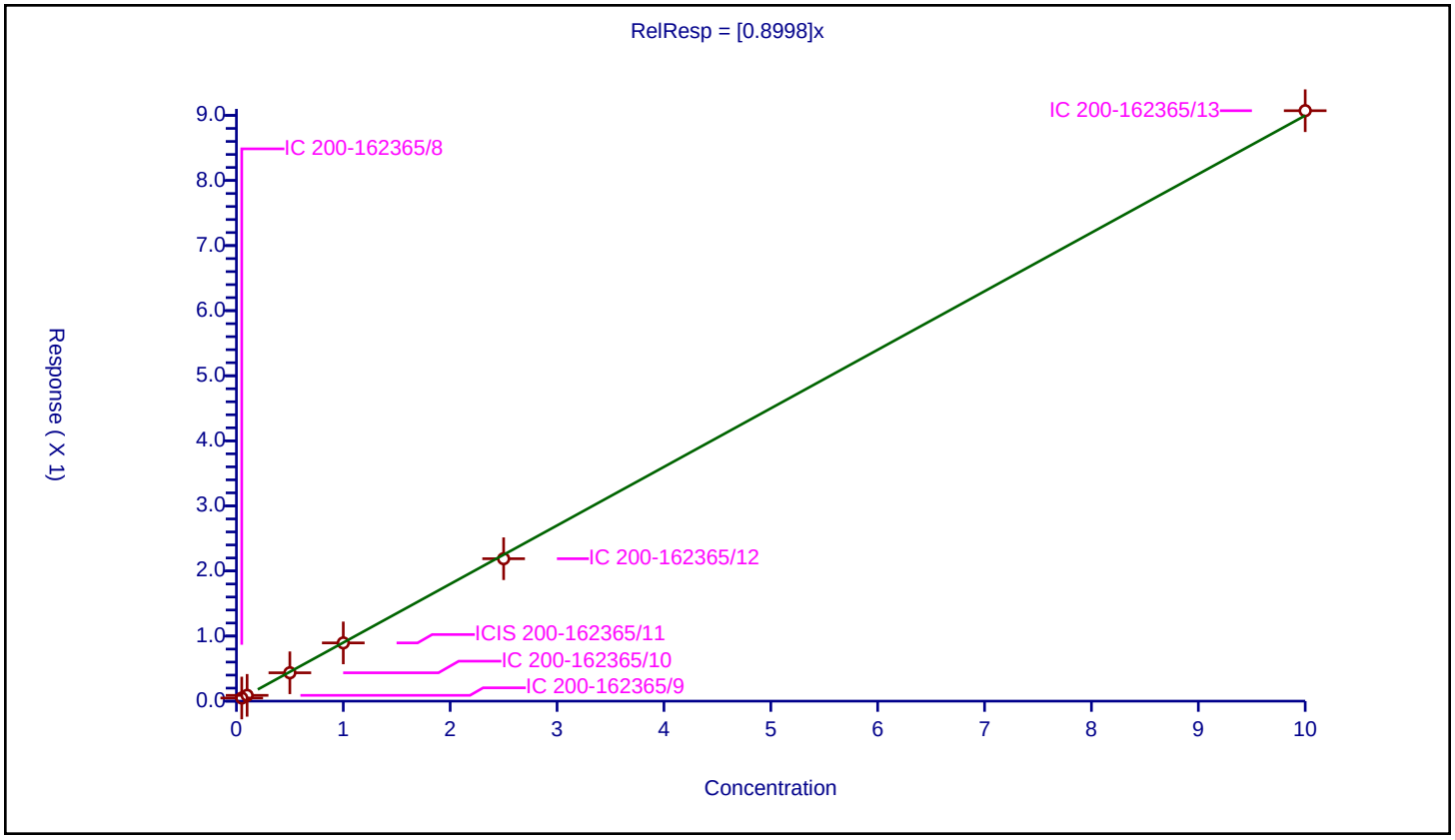
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 0.8998 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 1690000 |
| **Relative Standard Error:** | 3.5 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.998 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | IC 200-162365/8 | 0.05 | 0.047925 | 1.25 | 493765.0 | 0.958503 | Y |
| 2 | IC 200-162365/9 | 0.1 | 0.089138 | 1.25 | 635237.0 | 0.89138 | Y |
| 3 | IC 200-162365/10 | 0.5 | 0.435677 | 1.25 | 497203.0 | 0.871354 | Y |
| 4 | ICIS 200-162365/11 | 1.0 | 0.894797 | 1.25 | 496455.0 | 0.894797 | Y |
| 5 | IC 200-162365/12 | 2.5 | 2.188251 | 1.25 | 505699.0 | 0.8753 | Y |
| 6 | IC 200-162365/13 | 10.0 | 9.072165 | 1.25 | 502634.0 | 0.907217 | Y |



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Lab Sample ID: ICV 200-162365/15  Calibration Date: 12/22/2020 13:46

Instrument ID: LC812  Calib Start Date: 12/22/2020 12:48

GC Column: C-18  ID: 4.60(mm)  Calib End Date: 12/22/2020 13:29

Lab File ID: PA201222ICAL015.d  Conc. Units: ng/mL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | AveID | 1.002 | 0.9674 | | 0.965 | 1.00 | -3.5 | 40.0 |
| Perfluoropentanoic acid (PFPeA) | AveID | 1.107 | 1.153 | | 1.05 | 1.01 | 4.2 | 40.0 |
| Perfluorobutanesulfonic acid (PFBS) | AveID | 1.131 | 1.058 | | 0.935 | 1.00 | -6.5 | 40.0 |
| 1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2) | AveID | 1.834 | 1.918 | | 1.05 | 1.00 | 4.6 | 50.0 |
| Perfluorohexanoic acid (PFHxA) | AveID | 1.092 | 1.036 | | 0.958 | 1.01 | -5.2 | 40.0 |
| Perfluoropentanesulfonic acid | AveID | 1.312 | 1.370 | | 1.04 | 1.00 | 4.4 | 50.0 |
| HFPO-DA | AveID | 1.385 | 1.363 | | 0.994 | 1.01 | -1.6 | 40.0 |
| Perfluoroheptanoic acid (PFHpA) | AveID | 1.092 | 1.016 | | 0.931 | 1.00 | -6.9 | 40.0 |
| Perfluorohexanesulfonic acid (PFHxS) | AveID | 1.178 | 1.137 | | 0.975 | 1.01 | -3.5 | 40.0 |
| DONA | AveID | 3.349 | 3.129 | | 0.935 | 1.00 | -6.5 | 50.0 |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | AveID | 1.112 | 1.090 | | 0.980 | 1.00 | -2.0 | 40.0 |
| Perfluoroheptanesulfonic Acid (PFHpS) | AveID | 1.350 | 1.275 | | 0.944 | 1.00 | -5.6 | 50.0 |
| Perfluorooctanoic acid (PFOA) | AveID | 1.084 | 1.062 | | 0.980 | 1.00 | -2.0 | 40.0 |
| Perfluorooctanesulfonic acid (PFOS) | AveID | 1.150 | 0.9652 | | 0.848 | 1.01 | -16.1 | 40.0 |
| Perfluorononanoic acid (PFNA) | AveID | 1.107 | 1.200 | | 1.09 | 1.00 | 8.5 | 40.0 |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid | AveID | 1.283 | 1.300 | | 1.01 | 1.00 | 1.3 | 50.0 |
| Perfluorononanesulfonic acid | AveID | 0.8581 | 0.8222 | | 0.968 | 1.01 | -4.2 | 50.0 |
| Perfluorodecanoic acid (PFDA) | AveID | 1.031 | 1.023 | | 0.993 | 1.00 | -0.7 | 40.0 |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | AveID | 0.6801 | 0.6225 | | 0.924 | 1.01 | -8.5 | 40.0 |
| Perfluorooctanesulfonamide (PFOSA) | AveID | 1.002 | 1.004 | | 1.00 | 1.00 | 0.2 | 40.0 |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | AveID | 0.8864 | 0.8651 | | 0.976 | 1.00 | -2.4 | 40.0 |
| Perfluorodecanesulfonic acid (PFDS) | AveID | 0.6841 | 0.6555 | | 0.968 | 1.01 | -4.2 | 50.0 |
| Perfluoroundecanoic acid (PFUnA) | AveID | 1.020 | 0.9743 | | 0.955 | 1.00 | -4.5 | 40.0 |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | AveID | 0.9257 | 0.8563 | | 0.925 | 1.00 | -7.5 | 40.0 |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid | AveID | 1.331 | 1.310 | | 0.984 | 1.00 | -1.6 | 50.0 |
| Perfluorododecanoic acid (PFDoA) | AveID | 1.100 | 0.9696 | | 0.882 | 1.00 | -11.8 | 40.0 |
| 10:2 FTS | AveID | 0.3501 | 0.3510 | | 0.966 | 0.964 | 0.2 | 50.0 |
| Perfluorododecanesulfonic acid (PFDoS) | AveID | 0.2517 | 0.2191 | | 0.842 | 0.968 | -13.0 | 50.0 |
| Perfluorotridecanoic acid (PFTriA) | AveID | 0.8926 | 0.7434 | | 0.833 | 1.00 | -16.7 | 50.0 |
| Perfluorotetradecanoic acid (PFTeA) | AveID | 0.1855 | 0.2040 | | 1.10 | 1.00 | 10.0 | 40.0 |

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Lab Sample ID: ICV 200-162365/15  Calibration Date: 12/22/2020 13:46

Instrument ID: LC812  Calib Start Date: 12/22/2020 12:48

GC Column: C-18  ID: 4.60(mm)  Calib End Date: 12/22/2020 13:29

Lab File ID: PA201222ICAL015.d  Conc. Units: ng/mL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Perfluoro-n-hexadecanoic acid (PFHxDA) | L1ID | | 0.9228 | | 0.976 | 1.00 | -2.4 | 40.0 |
| Perfluoro-n-octadecanoic acid (PFODA) | AveID | 0.8998 | 0.8197 | | 0.911 | 1.00 | -8.9 | 50.0 |
| 13C4 PFBA | Ave | 1.343 | 1.440 | | 1.34 | 1.25 | 7.2 | 50.0 |
| 13C5 PFPeA | Ave | 0.9710 | 1.024 | | 1.32 | 1.25 | 5.4 | 50.0 |
| 13C3 PFBS | Ave | 1.278 | 1.420 | | 1.29 | 1.16 | 11.1 | 50.0 |
| M2-4:2 FTS | Ave | 0.1066 | 0.1123 | | 1.23 | 1.17 | 5.3 | 50.0 |
| 13C2 PFHxA | Ave | 1.018 | 1.119 | | 1.38 | 1.25 | 10.0 | 50.0 |
| 13C3 HFPO-DA | Ave | 0.1792 | 0.1826 | | 1.27 | 1.25 | 1.9 | 50.0 |
| 13C4 PFHpA | Ave | 0.9742 | 1.059 | | 1.36 | 1.25 | 8.7 | 50.0 |
| 18O2 PFHxS | Ave | 0.9511 | 0.999 | | 1.24 | 1.18 | 5.1 | 50.0 |
| M2-6:2 FTS | Ave | 0.1187 | 0.1266 | | 1.27 | 1.19 | 6.6 | 50.0 |
| 13C4 PFOA | Ave | 0.9896 | 1.051 | | 1.33 | 1.25 | 6.2 | 50.0 |
| 13C4 PFOS | Ave | 0.6528 | 0.7140 | | 1.31 | 1.20 | 9.4 | 50.0 |
| 13C5 PFNA | Ave | 0.8730 | 0.9003 | | 1.29 | 1.25 | 3.1 | 50.0 |
| 13C2 PFDA | Ave | 0.8346 | 0.8982 | | 1.35 | 1.25 | 7.6 | 50.0 |
| M2-8:2 FTS | Ave | 0.1225 | 0.1369 | | 1.34 | 1.20 | 11.8 | 50.0 |
| 13C8 FOSA | Ave | 1.227 | 1.319 | | 1.34 | 1.25 | 7.5 | 50.0 |
| d3-NMeFOSAA | Ave | 0.0605 | 0.0711 | | 1.47 | 1.25 | 17.4 | 50.0 |
| 13C2 PFUnA | Ave | 0.6856 | 0.7424 | | 1.35 | 1.25 | 8.3 | 50.0 |
| d5-NEtFOSAA | Ave | 0.0585 | 0.0669 | | 1.43 | 1.25 | 14.3 | 50.0 |
| 13C2 PFDoA | Ave | 0.7238 | 0.7700 | | 1.33 | 1.25 | 6.4 | 50.0 |
| 13C2 PFTeDA | Ave | 0.5353 | 0.5430 | | 1.27 | 1.25 | 1.4 | 50.0 |
| 13C2 PFHxDA | Ave | 0.5718 | 0.5982 | | 1.31 | 1.25 | 4.6 | 50.0 |

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL015.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 22-Dec-2020 13:46:11 ALS Bottle#: 9 Worklist Smp#: 15
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 200-0044184-015 Plate: 1 Rack: 1
Operator ID: lc812tech Instrument ID: LC812
Sublist:

Method: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 22-Dec-2020 17:35:49 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1625

First Level Reviewer: deannd Date: 22-Dec-2020 14:47:35
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.089 | 2.091 | -0.002 | 0.598 | 1286706 | 1.34 | | 107 | 10620 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | |
| 212.90 > 169.00 | 2.089 | 2.091 | -0.002 | 1.000 | 995801 | 0.9655 | | | 134 | |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.411 | 2.414 | -0.003 | 0.690 | 914675 | 1.32 | | 105 | 3225 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | |
| 262.90 > 219.00 | 2.411 | 2.414 | -0.003 | 1.000 | 852414 | 1.05 | | | 34.1 | |
| D 47 13C3 PFBS | | | | | | | | | | |
| 301.90 > 80.00 | 2.424 | 2.427 | -0.003 | 0.694 | 1179594 | 1.29 | | 111 | 210514 | |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | |
| 298.90 > 80.00 | 2.424 | 2.427 | -0.003 | 1.000 | 1073531 | 0.9352 | Target=2.21 | | 1837 | |
| 298.90 > 99.00 | 2.424 | 2.427 | -0.003 | 1.000 | 477983 | | 2.25(1.11-3.32) | | 479 | |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | |
| 327.00 > 307.00 | 2.732 | 2.735 | -0.003 | 1.000 | 153901 | 1.05 | | | 2132 | |
| D 60 M2-4:2 FTS | | | | | | | | | | M |
| 329.00 > 81.00 | 2.732 | 2.735 | -0.003 | 0.782 | 93671 | 1.23 | | 105 | 95.9 | M |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.768 | 2.771 | -0.003 | 0.793 | 999764 | 1.37 | | 110 | 3166 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | |
| 313.00 > 269.00 | 2.768 | 2.771 | -0.003 | 1.000 | 837002 | 0.9579 | Target=12.83 | | 226 | |
| 313.00 > 119.00 | 2.768 | 2.771 | -0.003 | 1.000 | 69550 | | 12.03(6.42-19.25) | | 131 | |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | |
| 349.00 > 80.00 | 2.768 | 2.771 | -0.003 | 0.884 | 978046 | 1.04 | Target=3.35 | | 1810 | |
| 349.00 > 99.00 | 2.768 | 2.771 | -0.003 | 0.884 | 290538 | | 3.37(1.67-5.02) | | 531 | |
| 67 Perfluoro(2-propoxypropanoic) ac | | | | | | | | | | M |
| 329.10 > 285.00 | 2.878 | 2.881 | -0.003 | 1.004 | 179615 | 0.99 | | | 21.8 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 64 13C3 HFPO-DA | | | | | | | | | | |
| 332.10 > 287.00 | 2.866 | 2.881 | -0.015 | 0.821 | 163101 | 1.27 | | 102 | 882 | |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.132 | 3.133 | -0.001 | 0.897 | 844475 | 1.24 | | 105 | 2048 | |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | |
| 399.00 > 80.00 | 3.132 | 3.133 | -0.001 | 1.000 | 820382 | 0.9748 | Target=4.15 | | 775 | |
| 399.00 > 99.00 | 3.132 | 3.133 | -0.001 | 1.000 | 195522 | | 4.20(2.08-6.23) | | 191 | |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.132 | 3.133 | -0.001 | 0.897 | 946108 | 1.36 | | 109 | 3648 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | |
| 363.00 > 319.00 | 3.132 | 3.133 | -0.001 | 1.000 | 769336 | 0.9306 | Target=3.66 | | 186 | |
| 363.00 > 169.00 | 3.132 | 3.133 | -0.001 | 1.000 | 217871 | | 3.53(1.83-5.49) | | 561 | |
| 77 DONA | | | | | | | | | | M |
| 377.00 > 251.00 | 3.175 | 3.176 | -0.001 | 0.835 | 1596917 | 0.9345 | Target=2.43 | | 1596 | M |
| 377.00 > 85.00 | 3.175 | 3.176 | -0.001 | 0.835 | 673298 | | 2.37(1.22-3.65) | | 635 | |
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | M |
| 449.00 > 80.00 | 3.483 | 3.484 | -0.001 | 0.916 | 650457 | 0.9440 | Target=5.95 | | 1952 | |
| 449.00 > 99.00 | 3.483 | 3.484 | -0.001 | 0.916 | 113064 | | 5.75(2.98-8.93) | | 662 | M |
| D 12 M2-6:2 FTS | | | | | | | | | | |
| 429.00 > 81.00 | 3.483 | 3.484 | -0.001 | 0.997 | 107444 | 1.27 | | 107 | 391 | |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | |
| 427.00 > 407.00 | 3.483 | 3.484 | -0.001 | 1.000 | 98603 | 0.9797 | | | 1058 | |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.492 | 3.493 | -0.001 | 1.000 | 939234 | 1.33 | | 106 | 3545 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.492 | 3.493 | -0.001 | | 893380 | 1.25 | | | 3800 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | M |
| 413.00 > 369.00 | 3.492 | 3.493 | -0.001 | 1.000 | 798260 | 0.9801 | Target=2.58 | | 173 | |
| 413.00 > 169.00 | 3.492 | 3.493 | -0.001 | 1.000 | 313074 | | 2.55(1.29-3.87) | | 556 | M |
| D 18 13C4 PFOS | | | | | | | | | | |
| 503.00 > 80.00 | 3.804 | 3.806 | -0.002 | 1.089 | 609835 | 1.31 | | 109 | 1419 | |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.804 | 3.806 | -0.002 | 1.000 | 497497 | 0.8476 | Target=5.65 | | 745 | M |
| 499.00 > 99.00 | 3.804 | 3.806 | -0.002 | 1.000 | 83138 | | 5.98(2.82-8.47) | | 315 | M |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.825 | 3.826 | -0.001 | 1.095 | 804349 | 1.29 | | 103 | 3803 | |
| 20 Perfluorononanoic acid | | | | | | | | | | |
| 463.00 > 419.00 | 3.825 | 3.826 | -0.001 | 1.000 | 772486 | 1.08 | Target=7.44 | | 124 | |
| 463.00 > 169.00 | 3.825 | 3.826 | -0.001 | 1.000 | 108335 | | 7.13(3.72-11.16) | | 1027 | |
| 69 9-Chlorohexadecafluoro-3-oxanona | | | | | | | | | | M |
| 531.00 > 351.00 | 3.974 | 3.967 | 0.007 | 1.045 | 663606 | 1.01 | | | 2073 | M |
| 68 Perfluorononanesulfonic acid | | | | | | | | | | |
| 549.00 > 80.00 | 4.093 | 4.095 | -0.002 | 1.076 | 423805 | 0.9678 | Target=2.54 | | 2252 | |
| 549.00 > 99.00 | 4.093 | 4.095 | -0.002 | 1.076 | 149231 | | 2.84(1.27-3.81) | | 422 | |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.126 | 4.129 | -0.003 | 1.182 | 802424 | 1.35 | | 108 | 3715 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 24 Perfluorodecanoic acid | | | | | | | | | | |
| 513.00 > 469.00 | 4.126 | 4.129 | -0.003 | 1.000 | 656856 | 0.99 | Target=9.29 | | 415 | |
| 513.00 > 169.00 | 4.126 | 4.129 | -0.003 | 1.000 | 77788 | | 8.44(4.64-13.93) | | 600 | |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | |
| 527.00 > 507.00 | 4.137 | 4.140 | -0.003 | 1.000 | 61523 | 0.9245 | | | 601 | |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.137 | 4.140 | -0.003 | 1.185 | 117176 | 1.34 | | 112 | 929 | |
| D 21 13C8 FOSA | | | | | | | | | | |
| 506.00 > 78.00 | 4.205 | 4.207 | -0.002 | 1.204 | 1178726 | 1.34 | | 108 | 2916 | |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | |
| 498.00 > 78.00 | 4.215 | 4.207 | 0.008 | 1.002 | 946696 | 1.00 | | | 1585 | |
| D 27 d3-NMeFOSAA | | | | | | | | | | |
| 573.00 > 419.00 | 4.268 | 4.272 | -0.004 | 1.222 | 63495 | 1.47 | | 117 | 135 | |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | |
| 570.00 > 419.00 | 4.268 | 4.272 | -0.004 | 1.000 | 43943 | 0.9760 | | | 183 | |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | |
| 599.00 > 80.00 | 4.358 | 4.362 | -0.004 | 1.146 | 337879 | 0.9679 | Target=2.80 | | 1567 | |
| 599.00 > 99.00 | 4.358 | 4.362 | -0.004 | 1.146 | 116326 | | 2.90(1.40-4.19) | | 464 | |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.391 | 4.384 | 0.007 | 1.257 | 663214 | 1.35 | | 108 | 3106 | |
| 31 Perfluoroundecanoic acid | | | | | | | | | | |
| 563.00 > 519.00 | 4.391 | 4.395 | -0.004 | 1.000 | 516949 | 0.9554 | Target=8.12 | | 189 | |
| 563.00 > 169.00 | 4.391 | 4.395 | -0.004 | 1.000 | 63288 | | 8.17(4.06-12.18) | | 786 | |
| D 32 d5-NEtFOSAA | | | | | | | | | | |
| 589.00 > 419.00 | 4.402 | 4.395 | 0.007 | 1.261 | 59742 | 1.43 | | 114 | 454 | |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.402 | 4.406 | -0.004 | 1.000 | 40925 | 0.9250 | | | 425 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | |
| 631.00 > 451.00 | 4.480 | 4.485 | -0.005 | 1.178 | 668588 | 0.9840 | | | 2444 | |
| D 36 13C2 PFDoA | | | | | | | | | | |
| 615.00 > 570.00 | 4.622 | 4.626 | -0.004 | 1.323 | 687932 | 1.33 | | 106 | 2818 | |
| 37 Perfluorododecanoic acid | | | | | | | | | | |
| 613.00 > 569.00 | 4.622 | 4.626 | -0.004 | 1.000 | 533635 | 0.8816 | Target=6.91 | | 129 | |
| 613.00 > 169.00 | 4.622 | 4.626 | -0.004 | 1.000 | 79300 | | 6.73(3.45-10.36) | | 1061 | |
| 74 1H,1H,2H,2H-perfluorododecanesul | | | | | | | | | | |
| 627.00 > 607.00 | 4.642 | 4.637 | 0.005 | 1.122 | 33105 | 0.9662 | | | 862 | |
| 75 Perfluorododecanesulfonic acid ( | | | | | | | | | | |
| 699.00 > 80.00 | 4.801 | 4.797 | 0.004 | 1.262 | 108210 | 0.8425 | Target=0.51 | | 337 | |
| 699.00 > 99.00 | 4.801 | 4.797 | 0.004 | 1.262 | 213860 | | 0.51(0.26-0.77) | | 928 | |
| 41 Perfluorotridecanoic acid | | | | | | | | | | |
| 663.00 > 619.00 | 4.834 | 4.839 | -0.005 | 1.046 | 409140 | 0.8329 | Target=4.39 | | 128 | |
| 663.00 > 169.00 | 4.834 | 4.839 | -0.005 | 1.046 | 96668 | | 4.23(2.20-6.59) | | 916 | |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 5.024 | 5.027 | -0.003 | 1.439 | 485141 | 1.27 | | 101 | 2501 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | |
| 713.00 > 169.00 | 5.033 | 5.027 | 0.006 | 1.002 | 79193 | 1.10 | Target=1.06 | | 1257 | |
| 713.00 > 219.00 | 5.024 | 5.027 | -0.003 | 1.000 | 78129 | | 1.01(0.53-1.59) | | 2313 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.383 | 5.374 | 0.009 | 1.541 | 534444 | 1.31 | | 105 | 2052 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | |
| 813.00 > 769.00 | 5.383 | 5.374 | 0.009 | 1.000 | 394543 | 0.9757 | Target=3.84 | | 122 | |
| 813.00 > 169.00 | 5.383 | 5.374 | 0.009 | 1.000 | 97920 | | 4.03(1.92-5.76) | | 1211 | |
| 46 Perfluorooctadecanoic acid | | | | | | | | | | |
| 913.00 > 869.00 | 5.729 | 5.722 | 0.007 | 1.064 | 350452 | 0.9110 | Target=3.92 | | 214 | |
| 913.00 > 169.00 | 5.720 | 5.722 | -0.002 | 1.063 | 90477 | | 3.87(1.96-5.88) | | 762 | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

## Reagents:

LCPFAS28NCICV_00006 Amount Added: 100.00 Units: uL

Report Date: 22-Dec-2020 17:35:49 Chrom Revision: 2.3 09-Dec-2020 16:22:14

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL015.d

Injection Date: 22-Dec-2020 13:46:11 Instrument ID: LC812

Lims ID: ICV

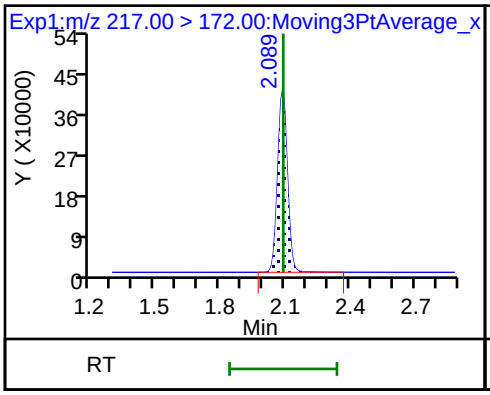
Client ID:

Operator ID: lc812tech ALS Bottle#: 9 Worklist Smp#: 15

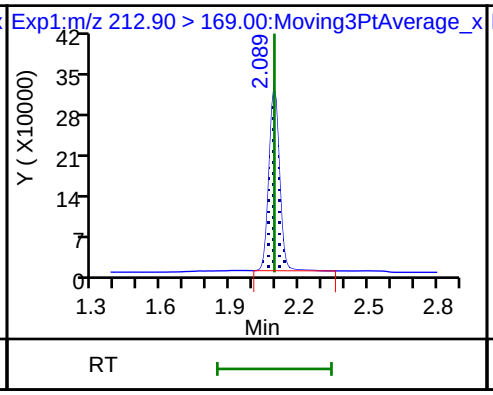
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

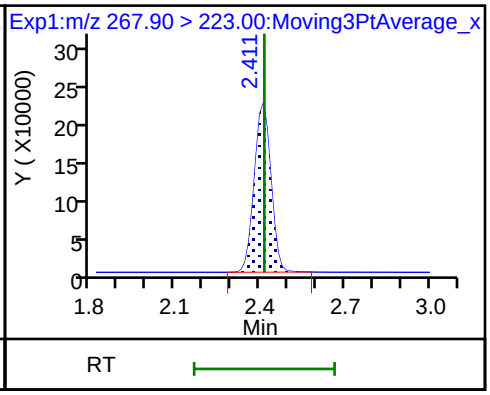
D 1 13C4 PFBA



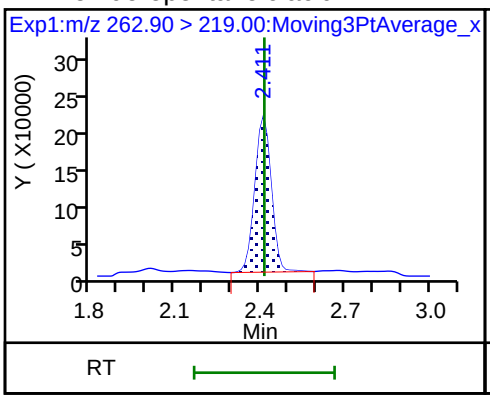

2 Perfluorobutanoic acid



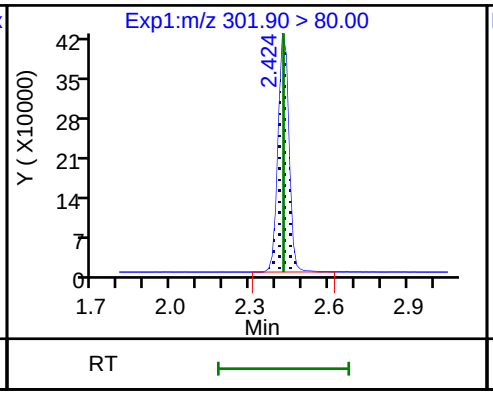

D 3 13C5 PFPeA



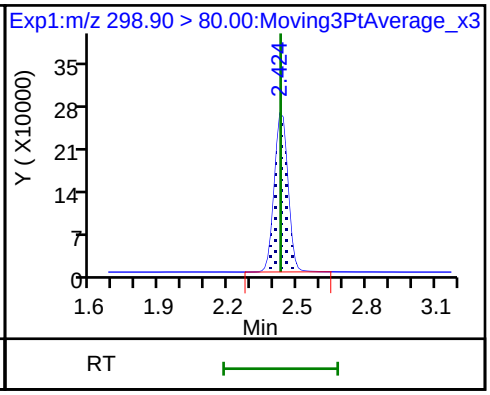

4 Perfluoropentanoic acid



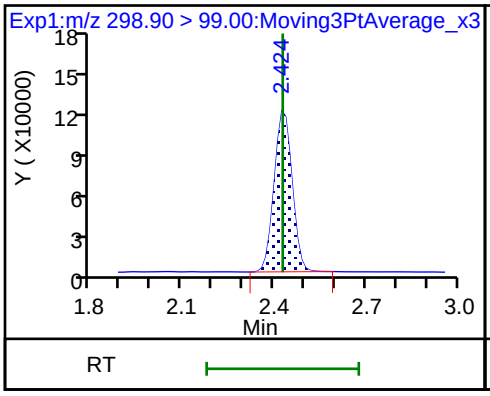

D 47 13C3 PFBS



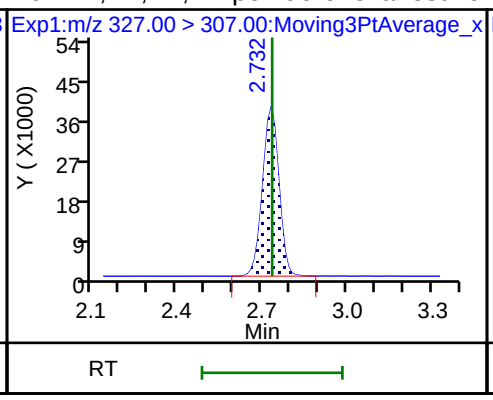

5 Perfluorobutanesulfonic acid



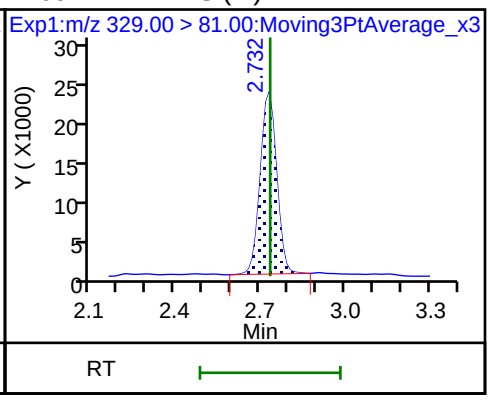

5 Perfluorobutanesulfonic acid



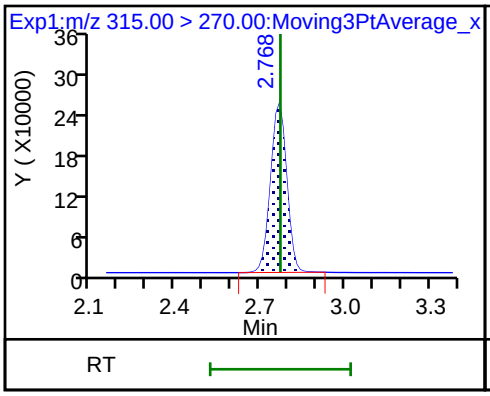

61 1H,1H,2H,2H-perfluorohexanesulfo



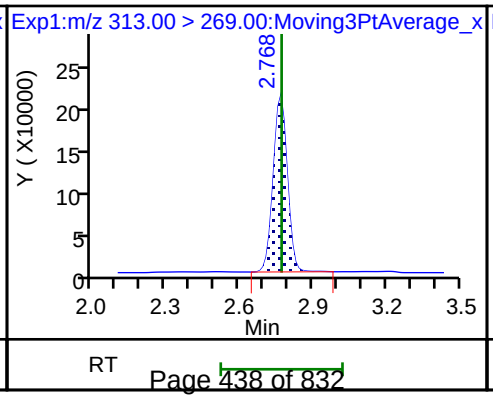

D 60 M2-4:2 FTS (M)



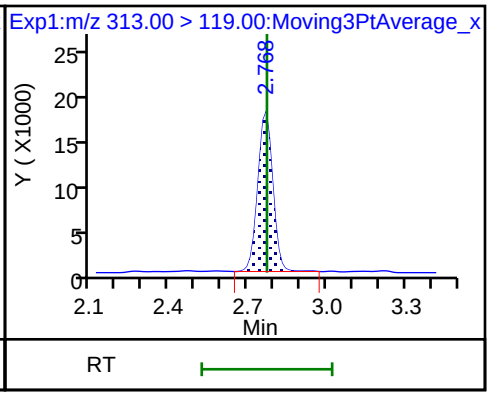

D 7 13C2 PFHxA



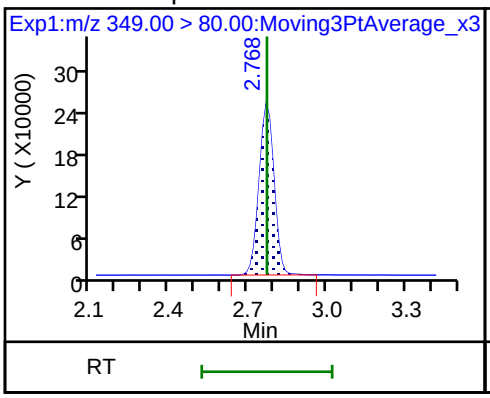

6 Perfluorohexanoic acid



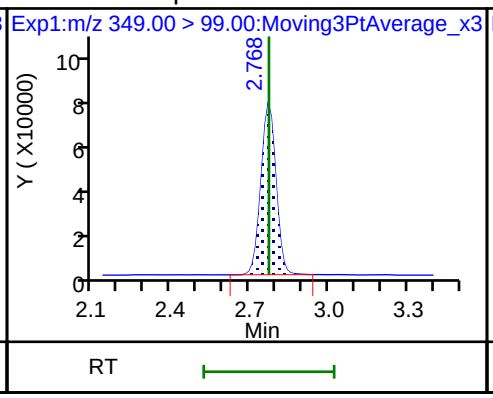

6 Perfluorohexanoic acid



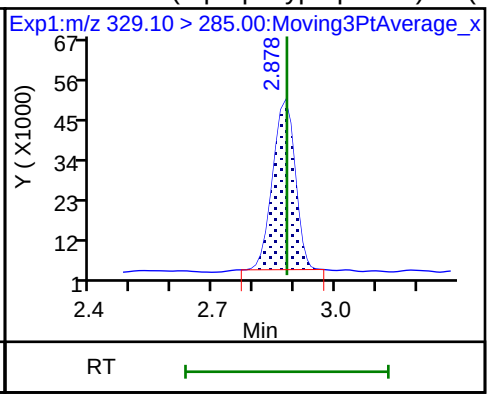
70 Perfluoropentanesulfonic acid



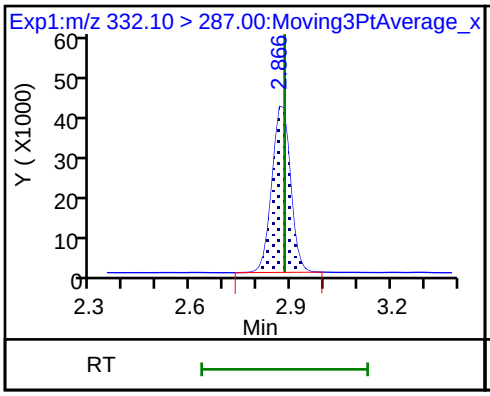

70 Perfluoropentanesulfonic acid



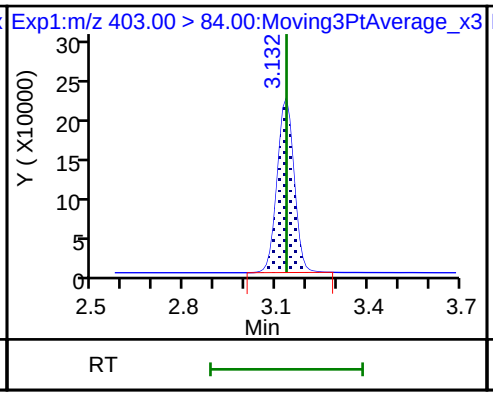

67 Perfluoro(2-propoxypropanoic) ac (M)



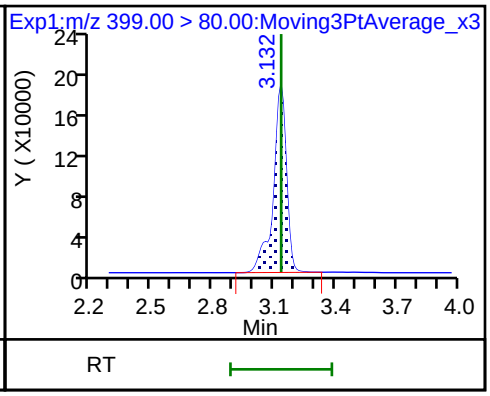

D 64 13C3 HFPO-DA



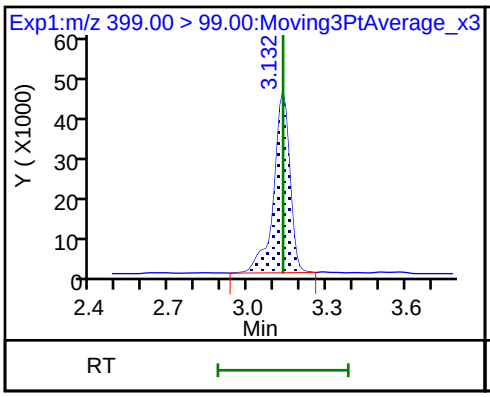

D 11 18O2 PFHxS



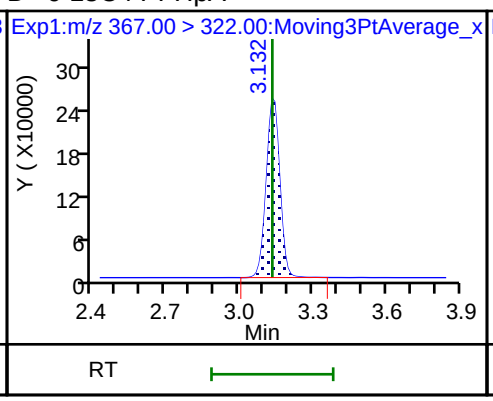

8 Perfluorohexanesulfonic acid



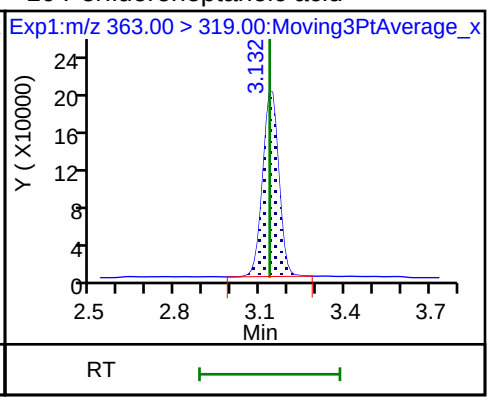

8 Perfluorohexanesulfonic acid



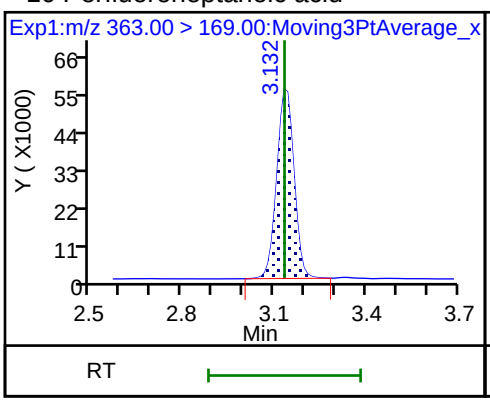

D 9 13C4 PFHpA



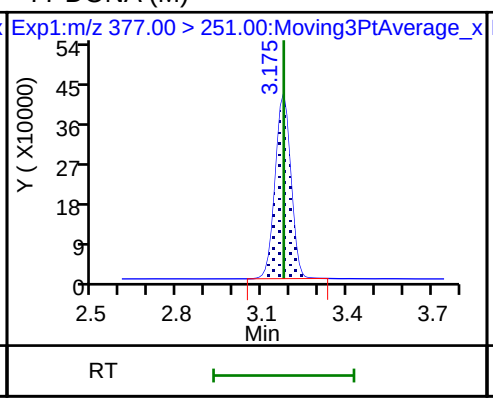

10 Perfluoroheptanoic acid



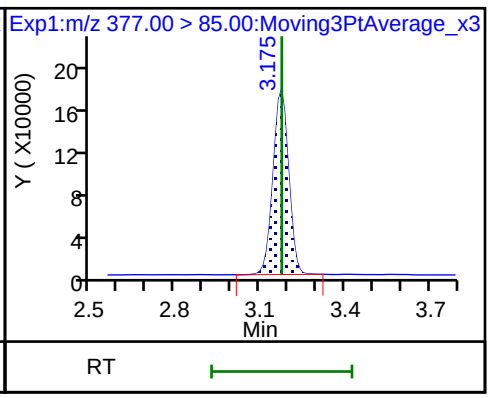

10 Perfluoroheptanoic acid



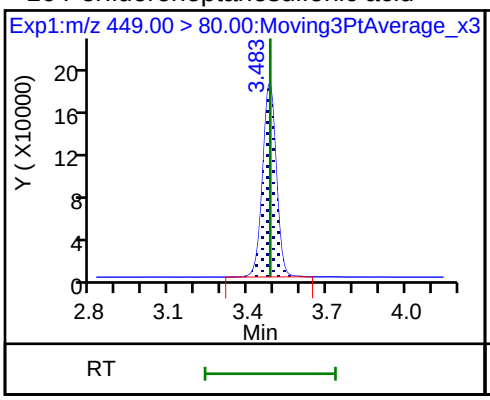

77 DONA (M)



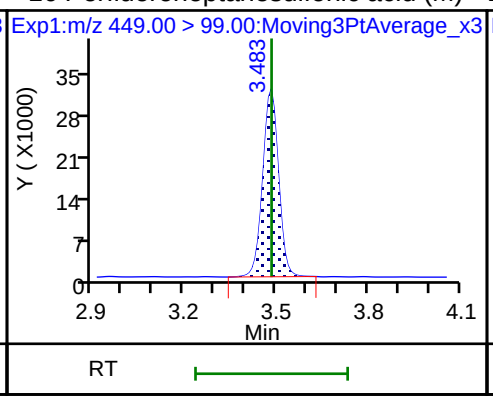

77 DONA



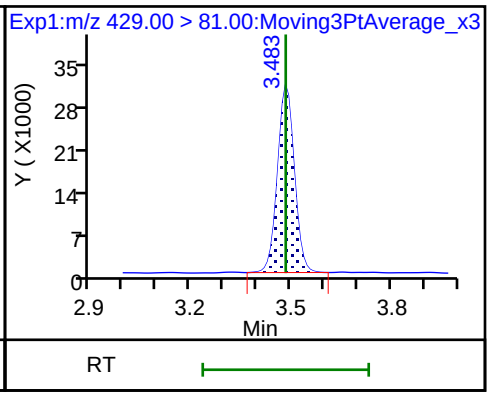
16 Perfluoroheptanesulfonic acid



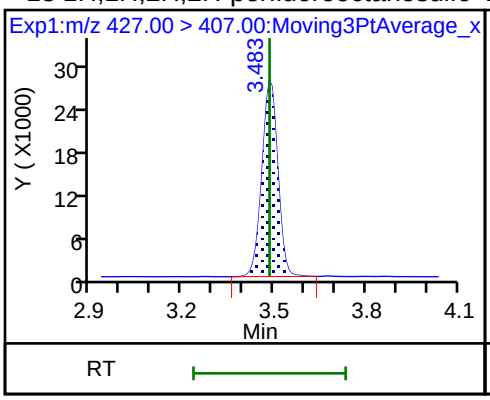

16 Perfluoroheptanesulfonic acid (M)



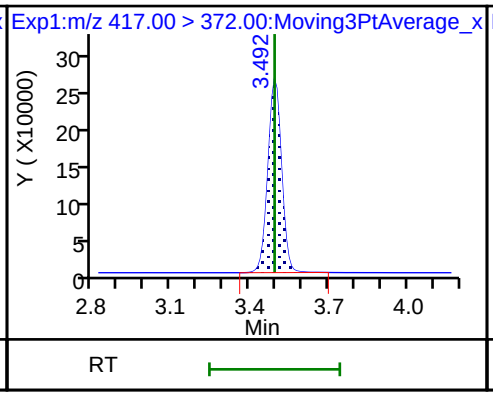

D 12 M2-6:2 FTS



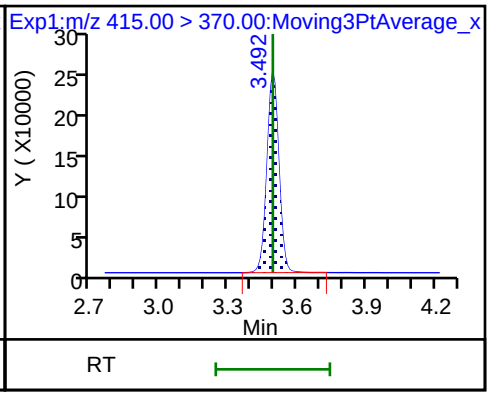

13 1H,1H,2H,2H-perfluorooctanesulfo



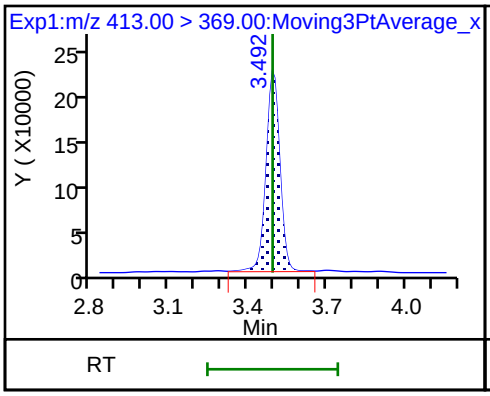

D 14 13C4 PFOA



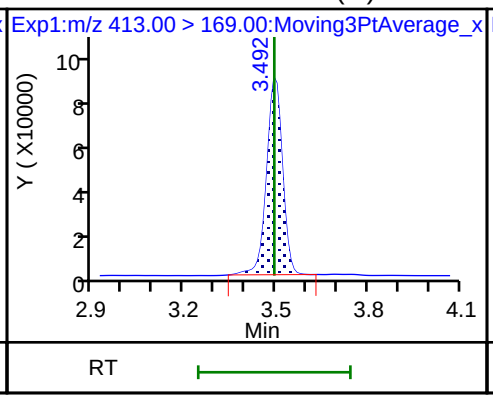

* 62 13C2 PFOA



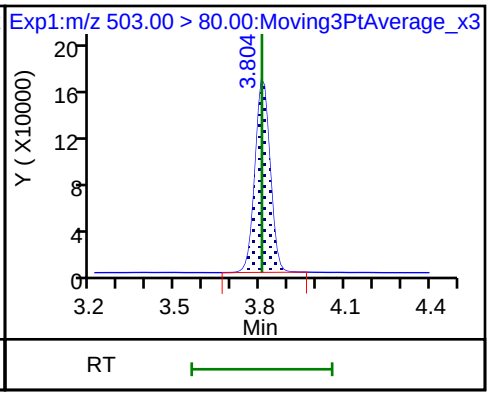

15 Perfluorooctanoic acid



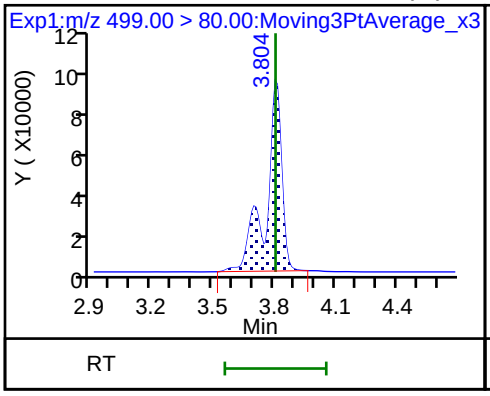

15 Perfluorooctanoic acid (M)



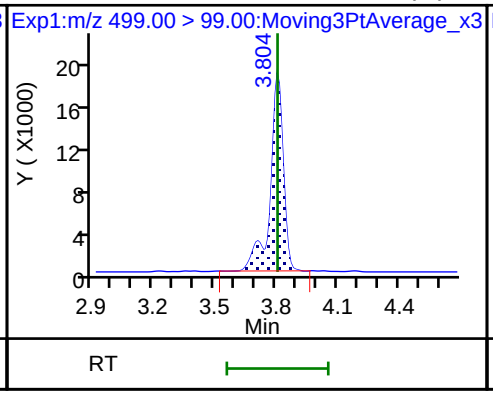

D 18 13C4 PFOS



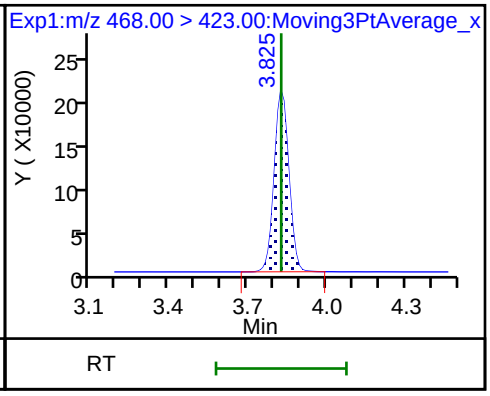

17 Perfluorooctanesulfonic acid (M)



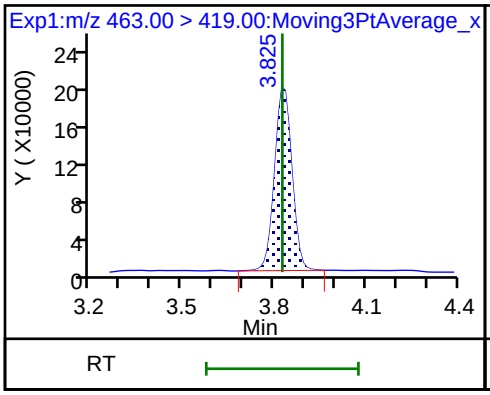

17 Perfluorooctanesulfonic acid (M)



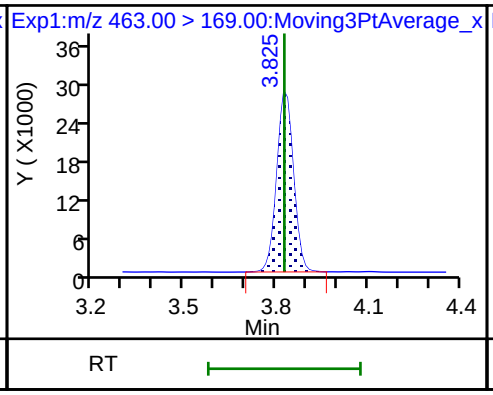

D 19 13C5 PFNA



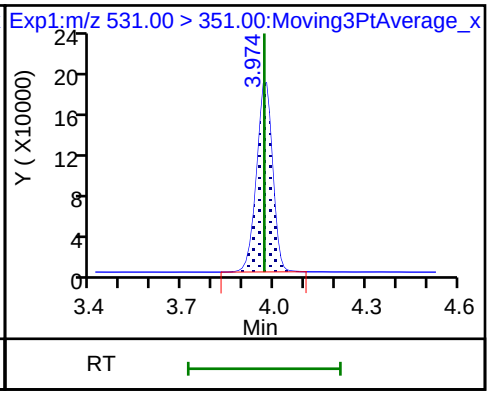
20 Perfluorononanoic acid



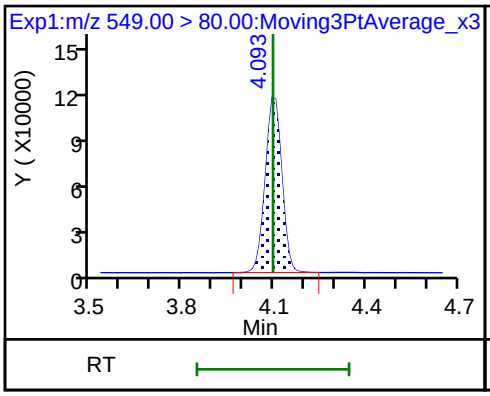

20 Perfluorononanoic acid



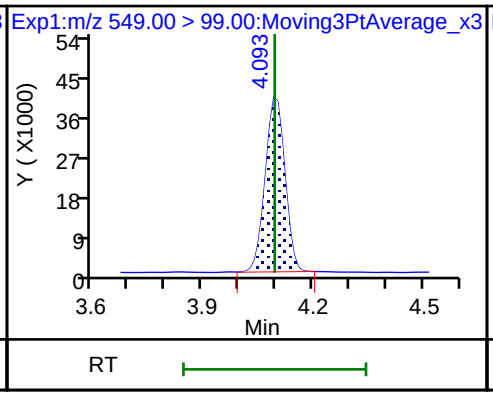

69 9-Chlorohexadecafluoro-3-oxanona (M)



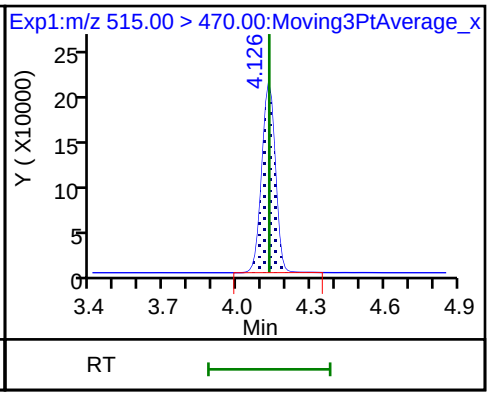

68 Perfluorononanesulfonic acid



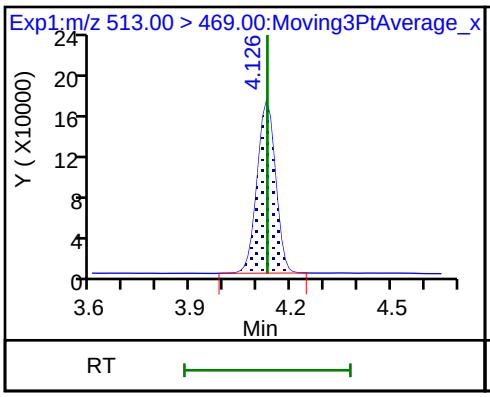

68 Perfluorononanesulfonic acid



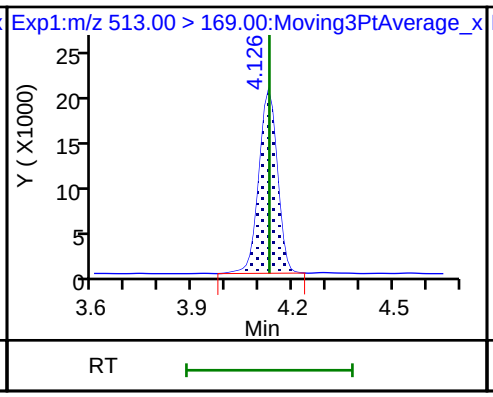

D 23 13C2 PFDA



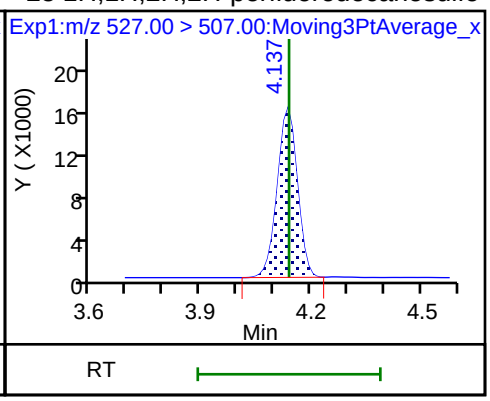

24 Perfluorodecanoic acid



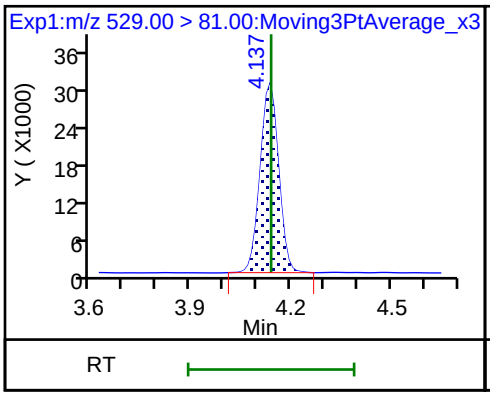

24 Perfluorodecanoic acid



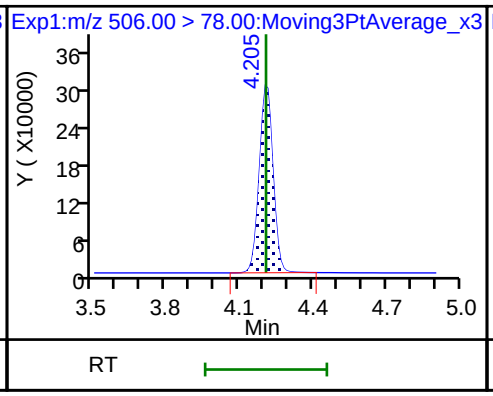

25 1H,1H,2H,2H-perfluorodecanesulfo



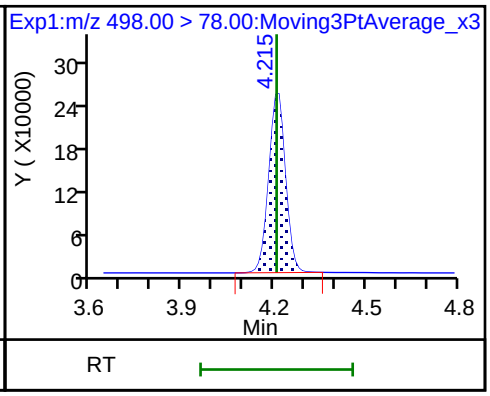

D 26 M2-8:2 FTS



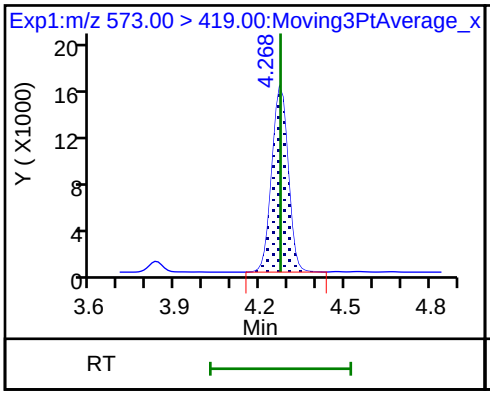

D 21 13C8 FOSA



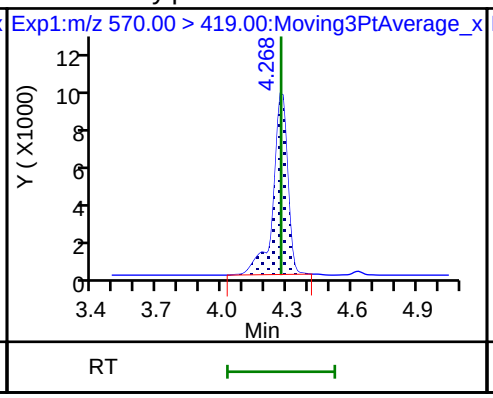

22 Perfluorooctanesulfonamide



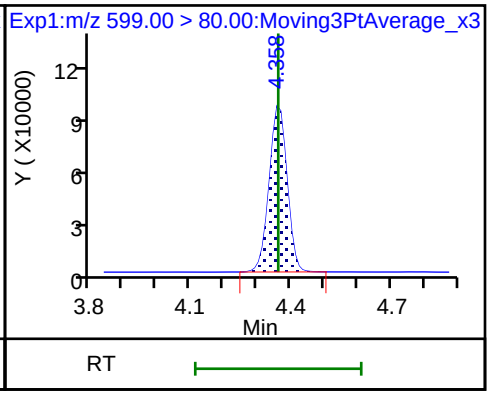
D 27 d3-NMeFOSAA



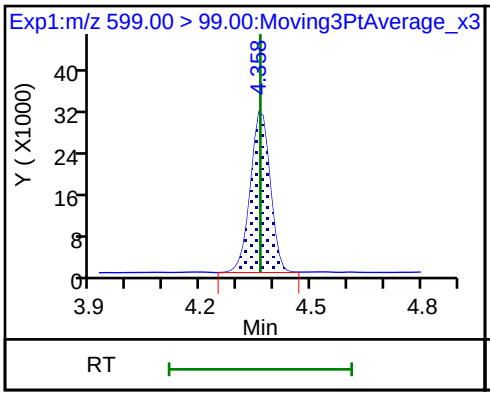

28 N-methylperfluorooctanesulfonami



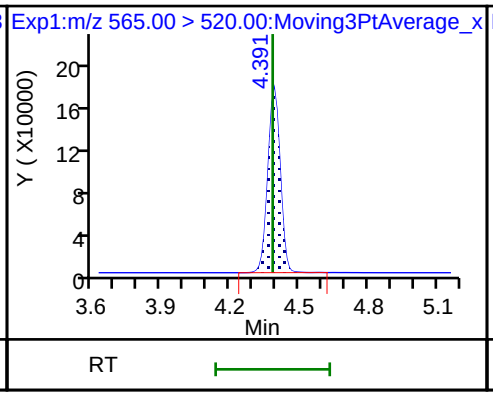

29 Perfluorodecanesulfonic acid



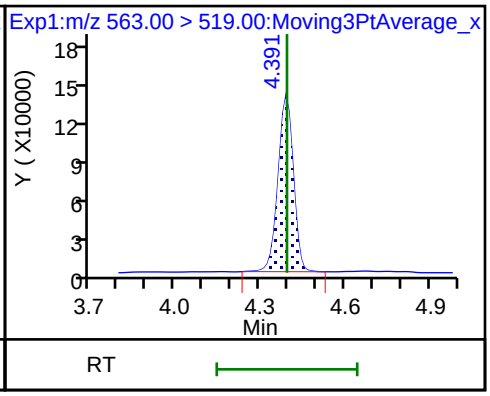

29 Perfluorodecanesulfonic acid



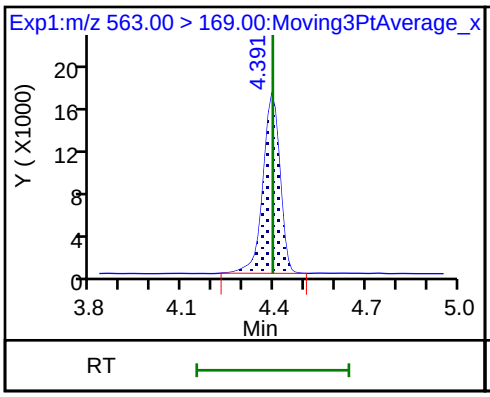

D 30 13C2 PFUnA



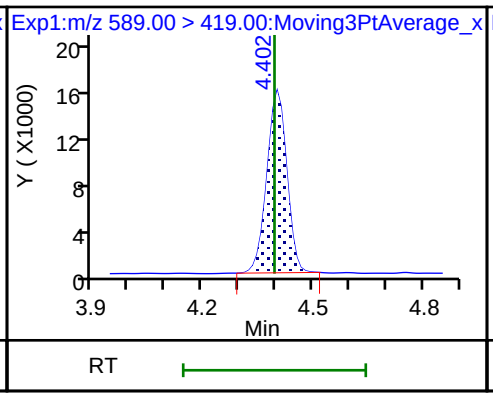

31 Perfluoroundecanoic acid



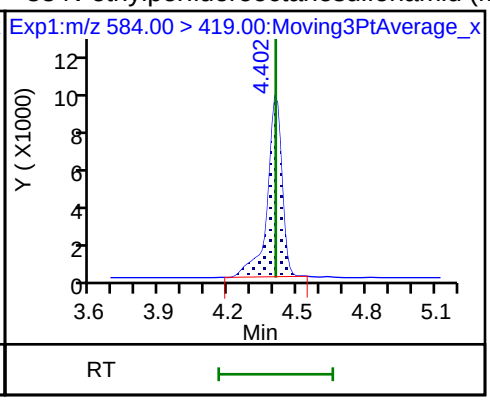

31 Perfluoroundecanoic acid



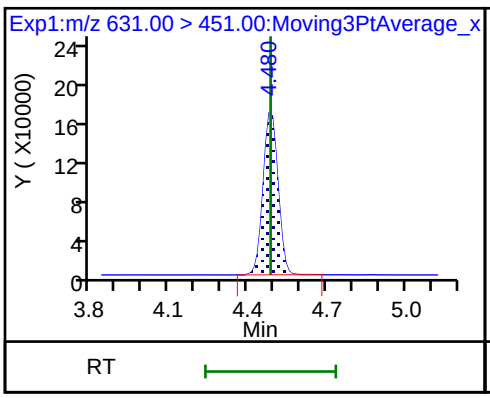

D 32 d5-NEtFOSAA



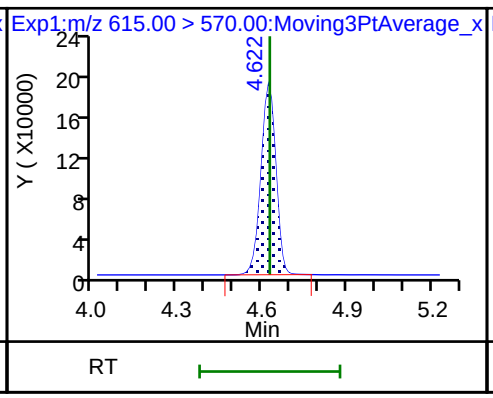

33 N-ethylperfluorooctanesulfonamid (M)



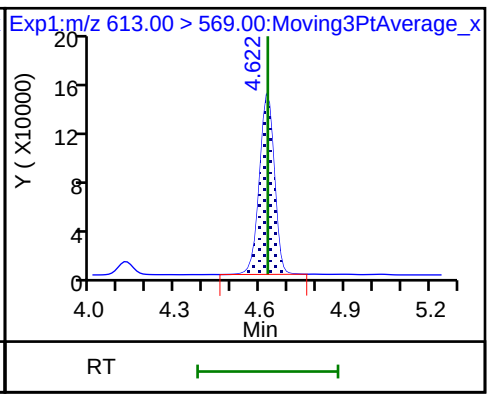

66 11-Chloroeicosafluoro-3-oxaundec



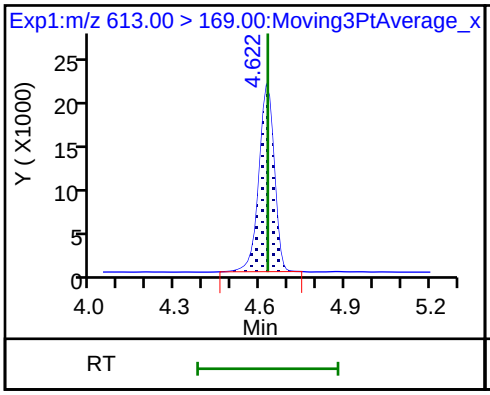

D 36 13C2 PFDoA



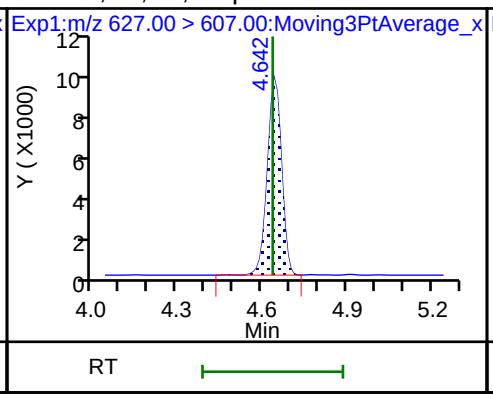

37 Perfluorododecanoic acid



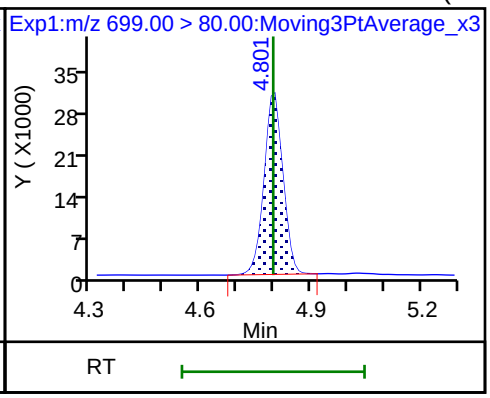
37 Perfluorododecanoic acid



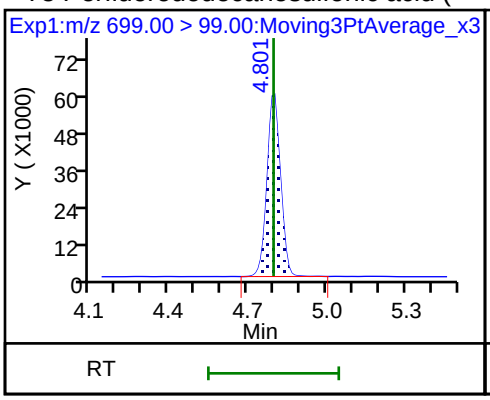

74 1H,1H,2H,2H-perfluorododecanesul



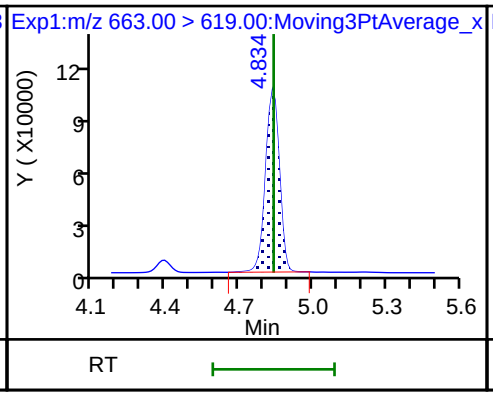

75 Perfluorododecanesulfonic acid (



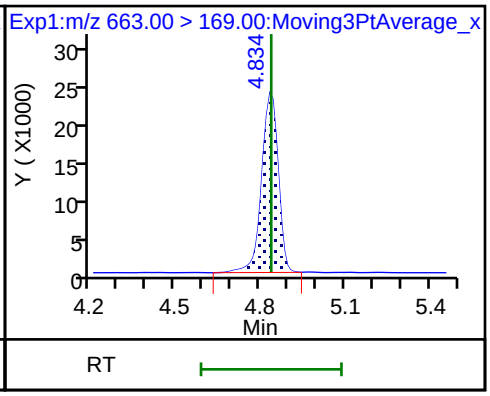

75 Perfluorododecanesulfonic acid (



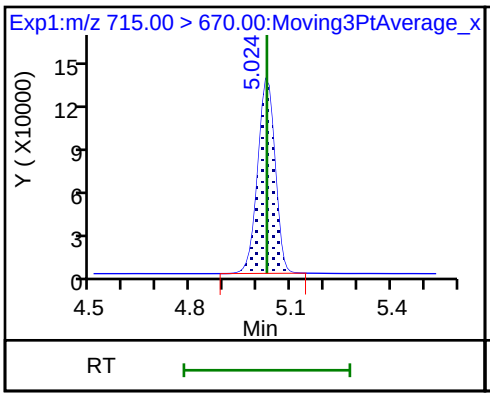

41 Perfluorotridecanoic acid



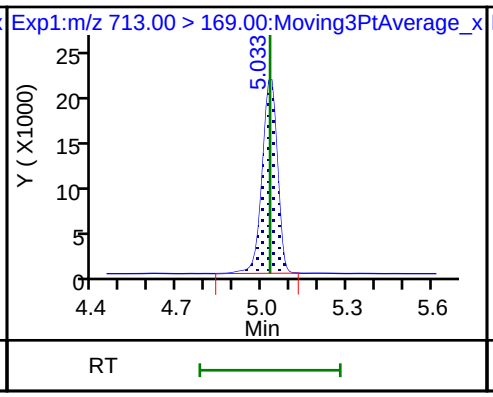

41 Perfluorotridecanoic acid



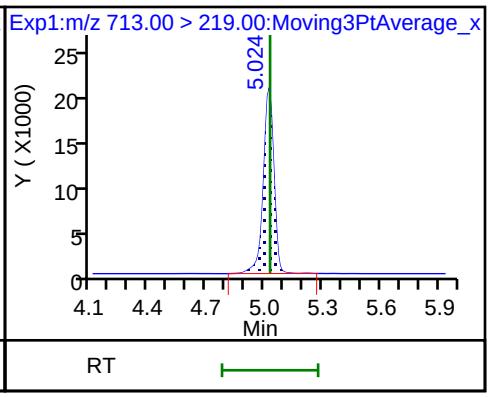

D 43 13C2 PFTeDA



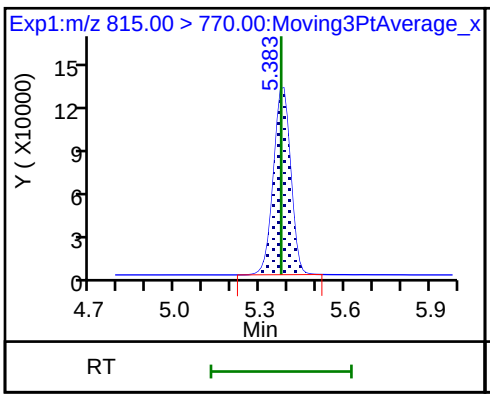

42 Perfluorotetradecanoic acid



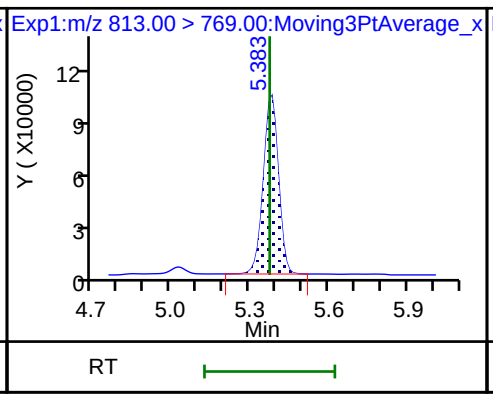

42 Perfluorotetradecanoic acid



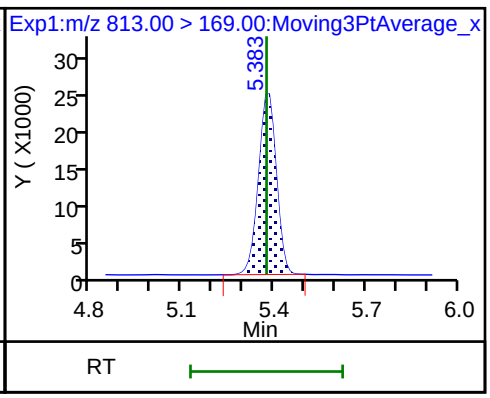

D 44 13C2 PFHxDA



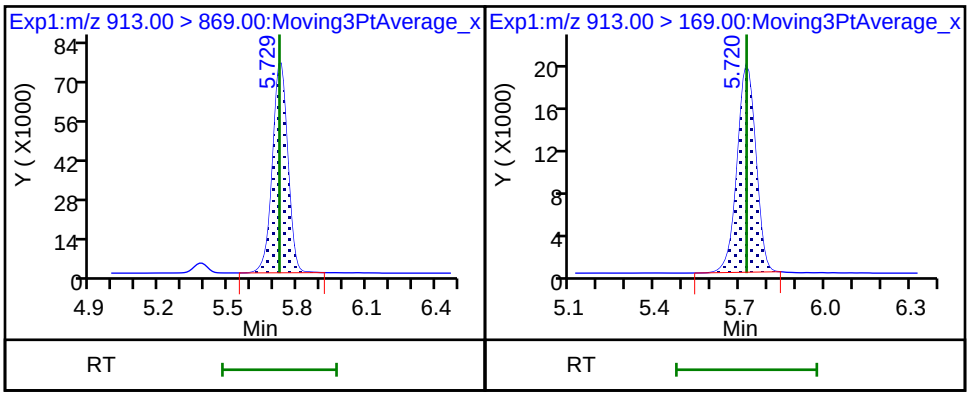

45 Perfluorohexadecanoic acid




45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid




46 Perfluorooctadecanoic acid

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

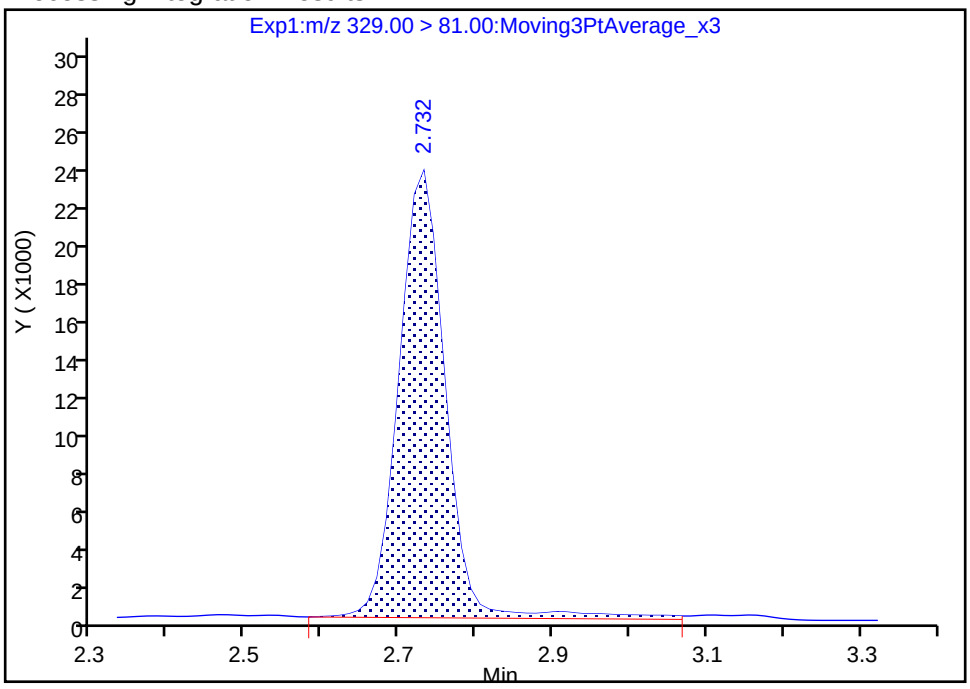
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| Injection Date: | 22-Dec-2020 13:46:11 | Instrument ID: | LC812 | | |
| Lims ID: | ICV | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 9 | Worklist Smp#: | 15 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

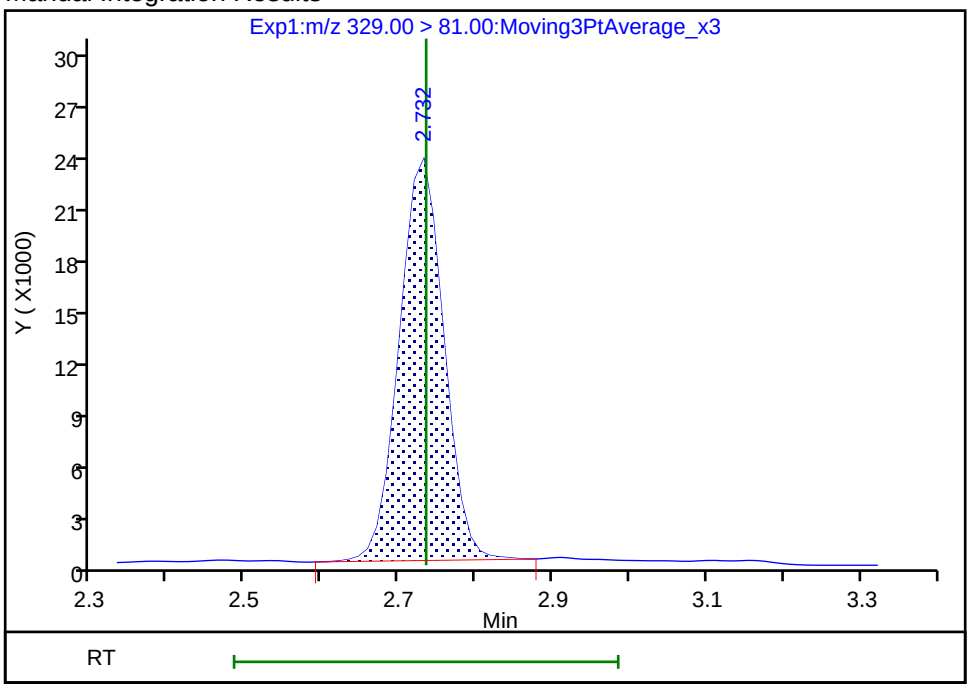
Processing Integration Results

RT: 2.73
Area: 98878
Amount: 1.297723
Amount Units: ng/ml




Manual Integration Results

RT: 2.73
Area: 93671
Amount: 1.229384
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:47:09

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

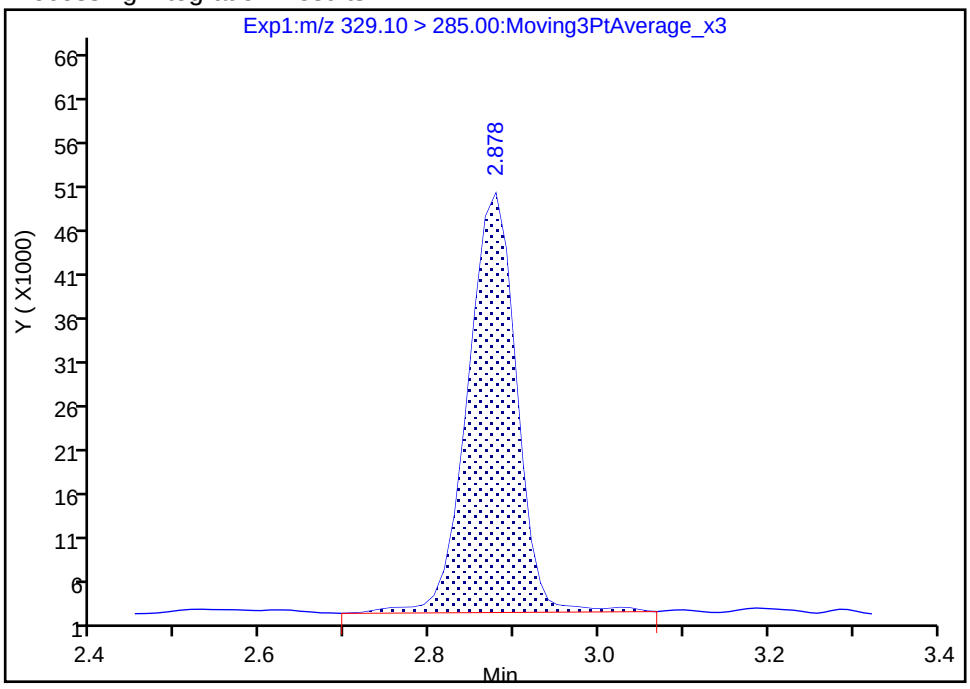
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| Injection Date: | 22-Dec-2020 13:46:11 | Instrument ID: | LC812 | | |
| Lims ID: | ICV | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 9 | Worklist Smp#: | 15 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

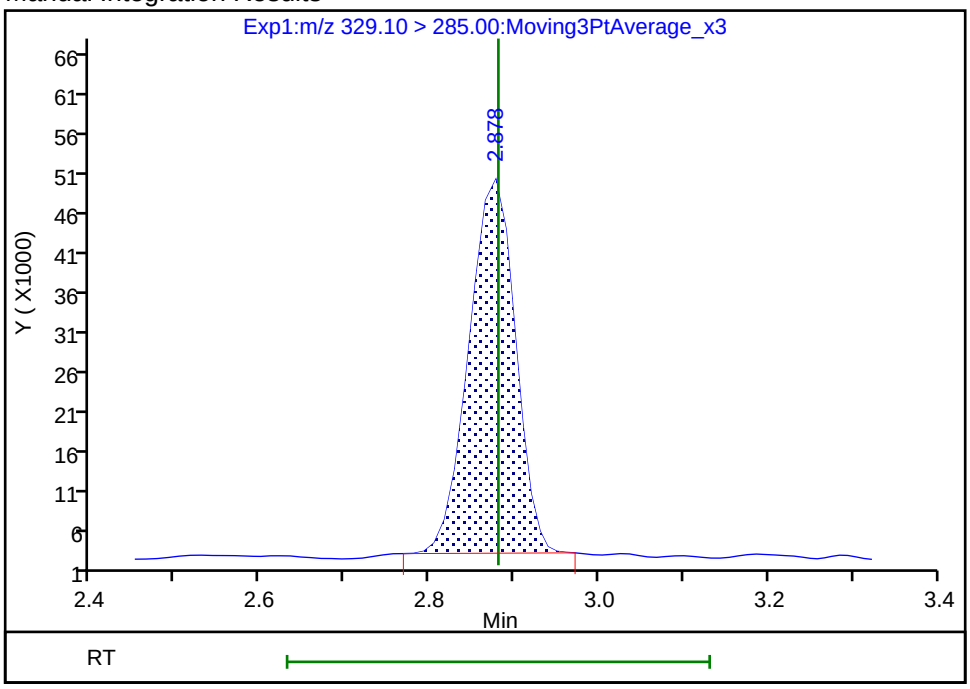
Processing Integration Results

RT: 2.88
Area: 190571
Amount: 1.054238
Amount Units: ng/ml




Manual Integration Results

RT: 2.88
Area: 179615
Amount: 0.993629
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:51:39

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

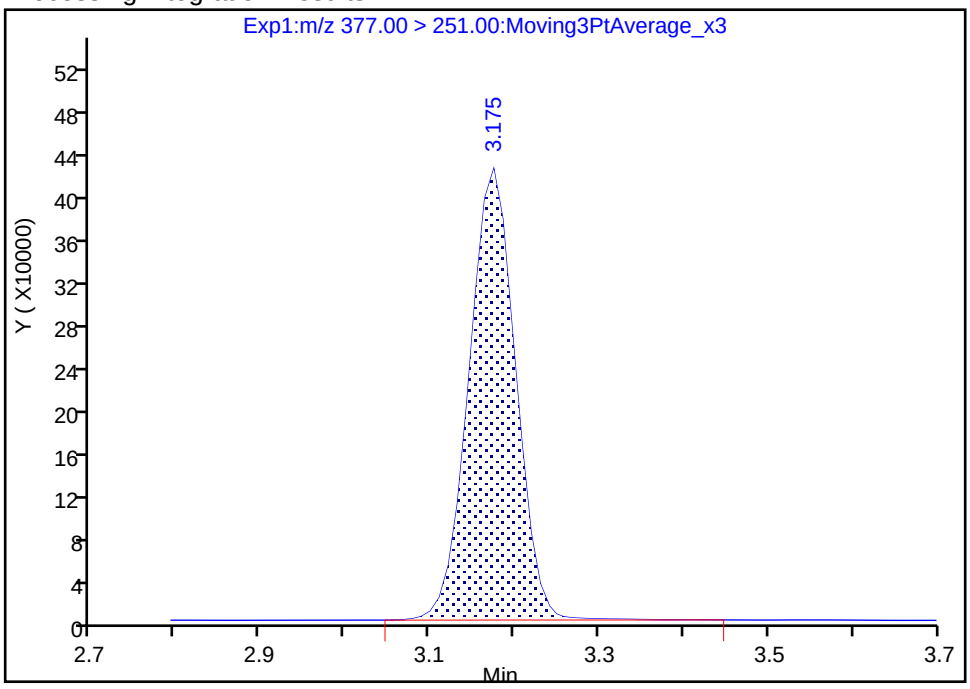
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL015.d | | | | |
| Injection Date: | 22-Dec-2020 13:46:11 | Instrument ID: | LC812 | | |
| Lims ID: | ICV | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 9 | Worklist Smp#: | 15 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 77 DONA, CAS: 919005-14-4

Signal: 1

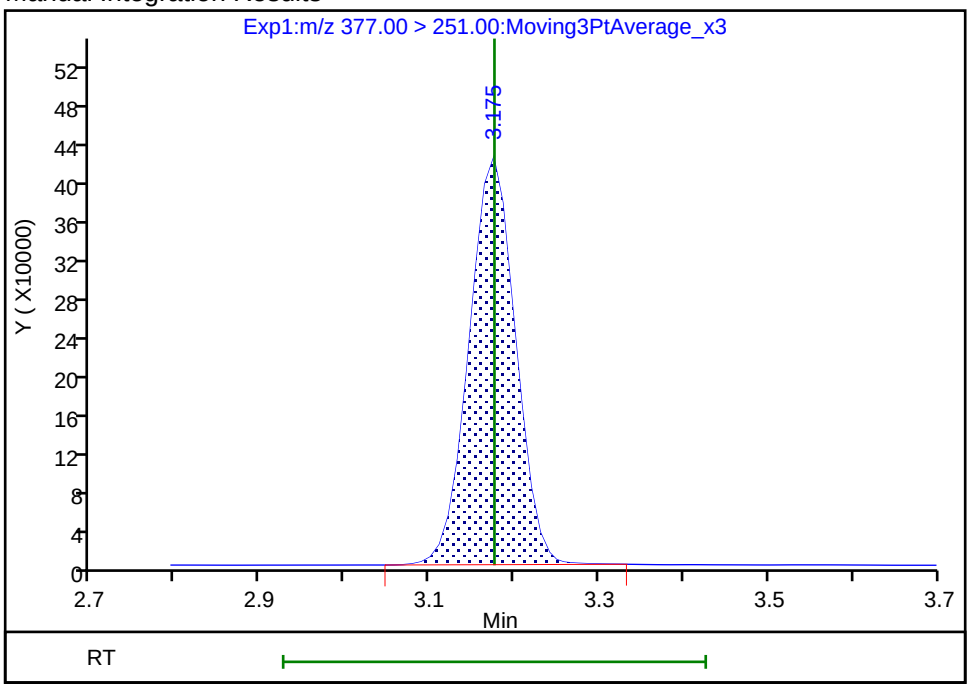
Processing Integration Results

RT: 3.18
Area: 1603901
Amount: 0.938593
Amount Units: ng/ml




Manual Integration Results

RT: 3.18
Area: 1596917
Amount: 0.934506
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:52:01

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

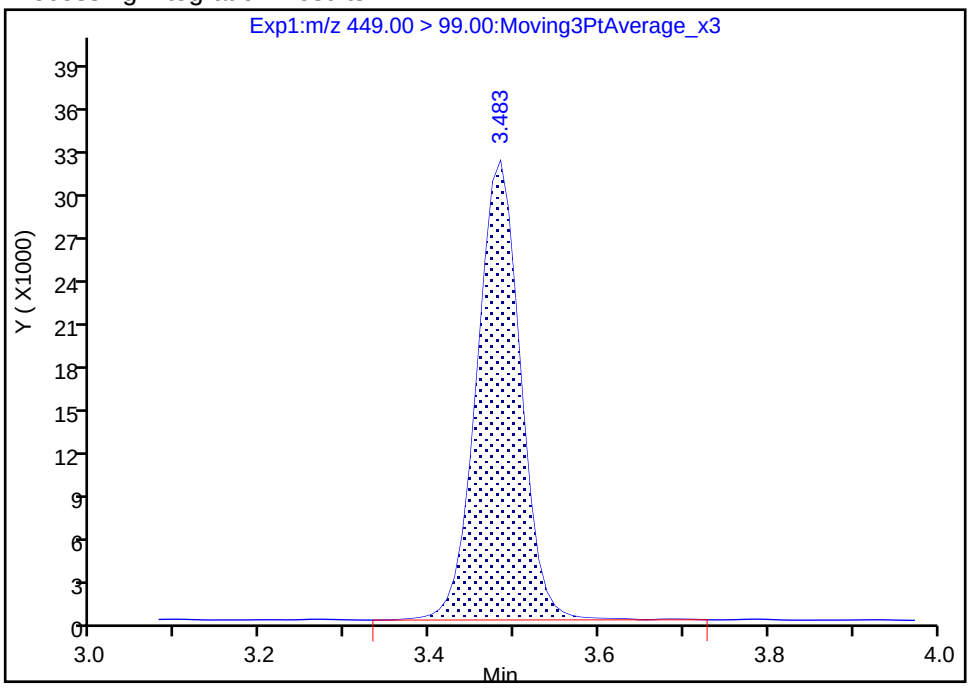
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL015.d | | | | |
| Injection Date: | 22-Dec-2020 13:46:11 | Instrument ID: | LC812 | | |
| Lims ID: | ICV | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 9 | Worklist Smp#: | 15 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

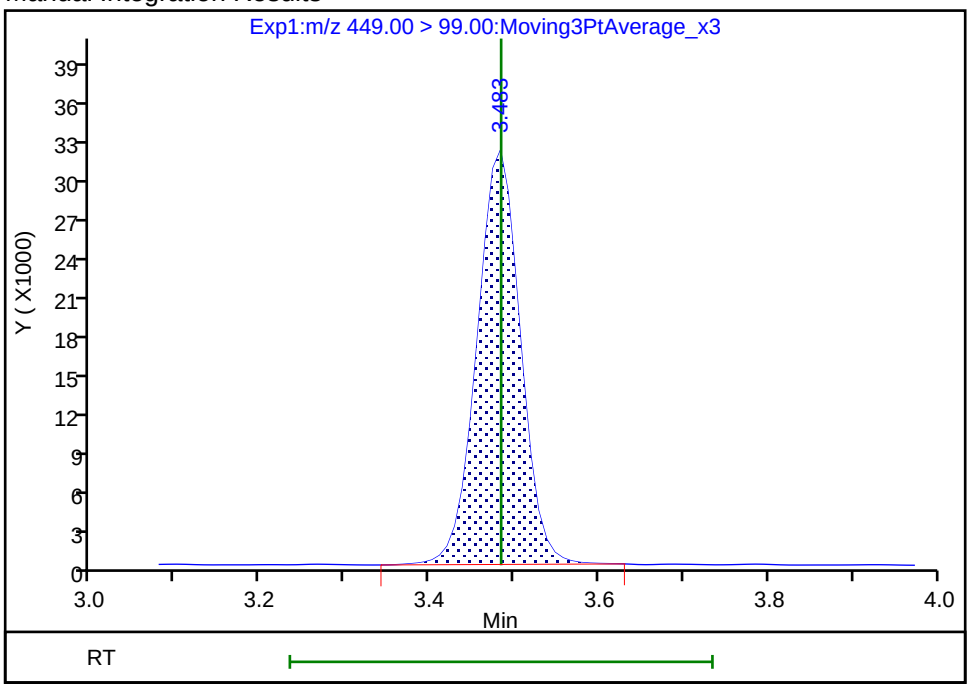
Processing Integration Results

RT: 3.48
Area: 113795
Amount: 0.944028
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 113064
Amount: 0.944028
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 14:52:59
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

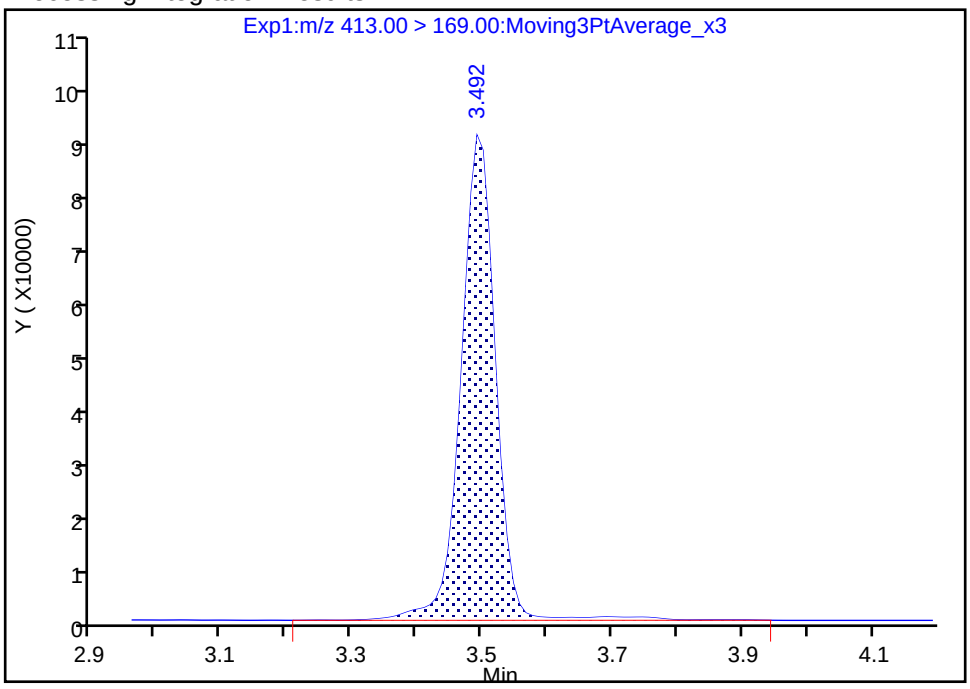
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| Injection Date: | 22-Dec-2020 13:46:11 | Instrument ID: | LC812 | | |
| Lims ID: | ICV | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 9 | Worklist Smp#: | 15 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

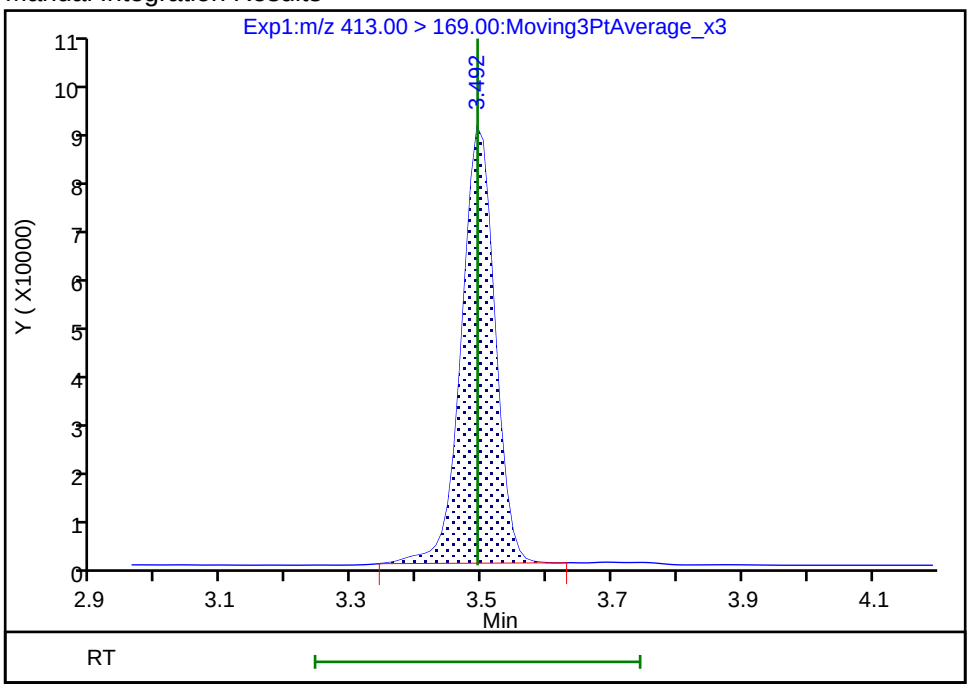
Processing Integration Results

RT: 3.49
Area: 325524
Amount: 0.980093
Amount Units: ng/ml




Manual Integration Results

RT: 3.49
Area: 313074
Amount: 0.980093
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 16:12:49

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

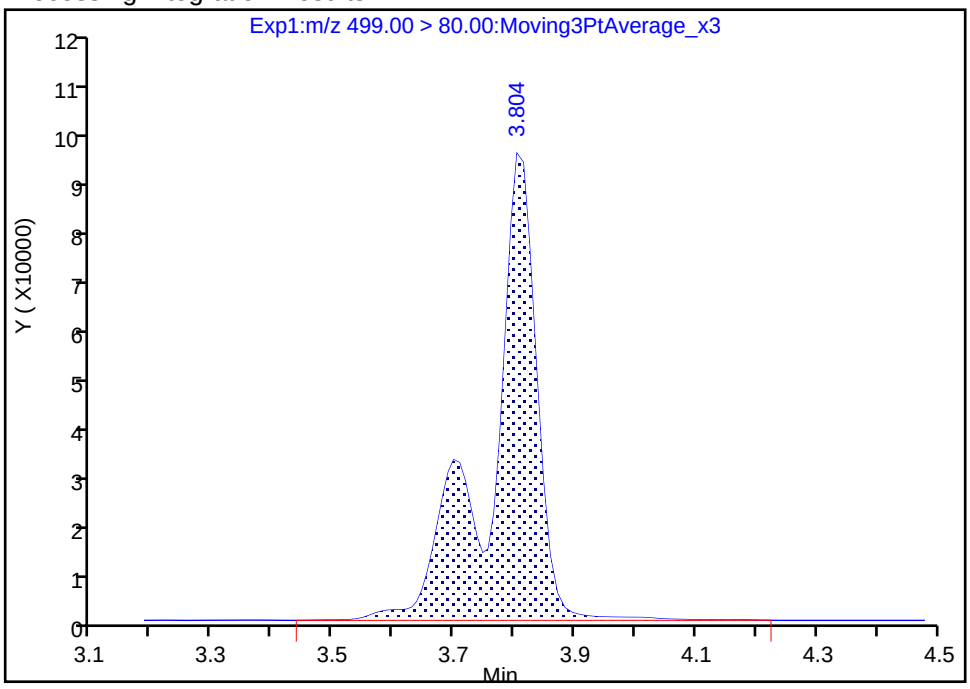
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL015.d | | | | |
| Injection Date: | 22-Dec-2020 13:46:11 | Instrument ID: | LC812 | | |
| Lims ID: | ICV | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 9 | Worklist Smp#: | 15 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

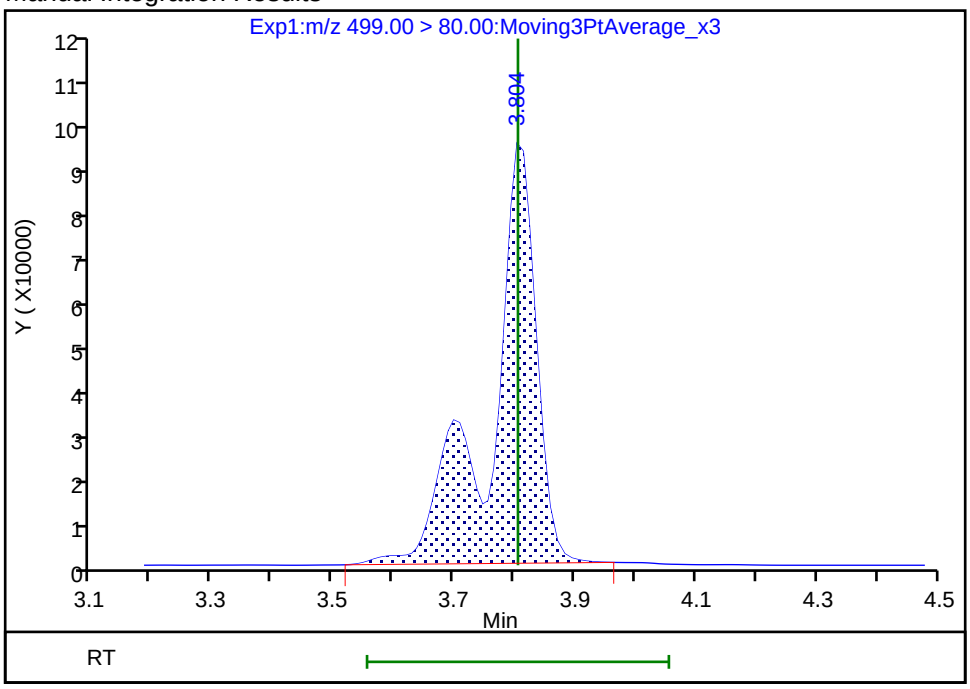
Processing Integration Results

RT: 3.80
Area: 511211
Amount: 0.871004
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 497497
Amount: 0.847638
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 16:12:58
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

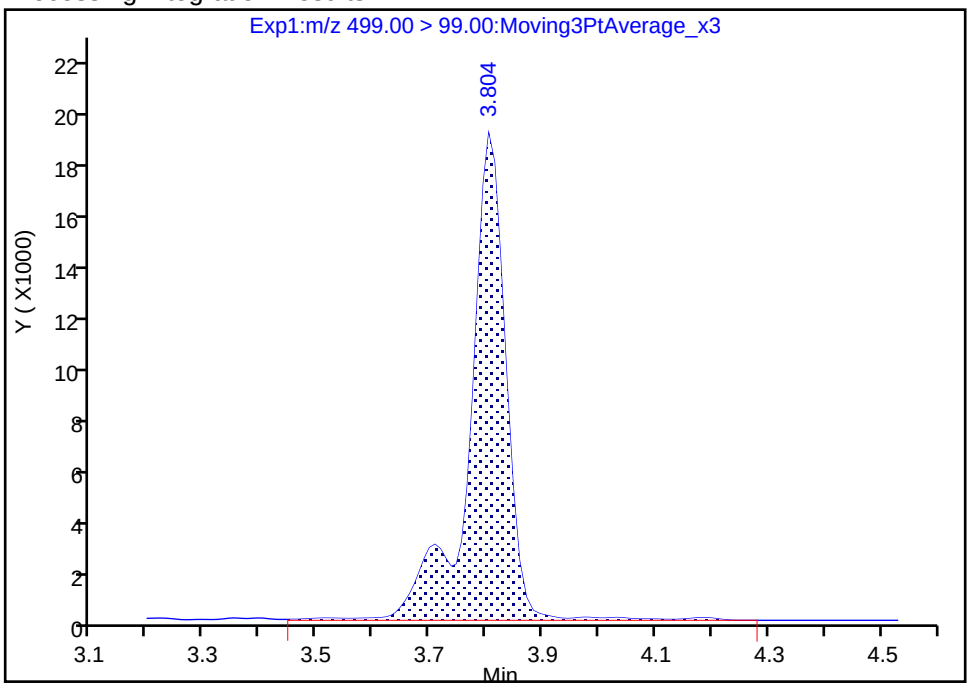
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL015.d | | | | |
| Injection Date: | 22-Dec-2020 13:46:11 | Instrument ID: | LC812 | | |
| Lims ID: | ICV | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 9 | Worklist Smp#: | 15 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

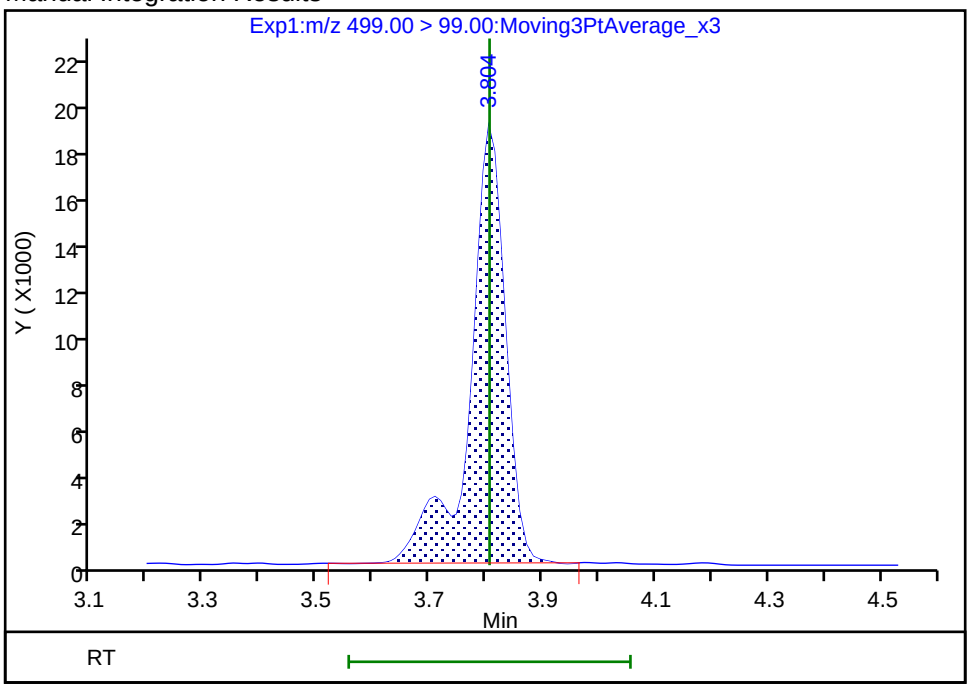
Processing Integration Results

RT: 3.80
Area: 86985
Amount: 0.871004
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 83138
Amount: 0.847638
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 16:13:03

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

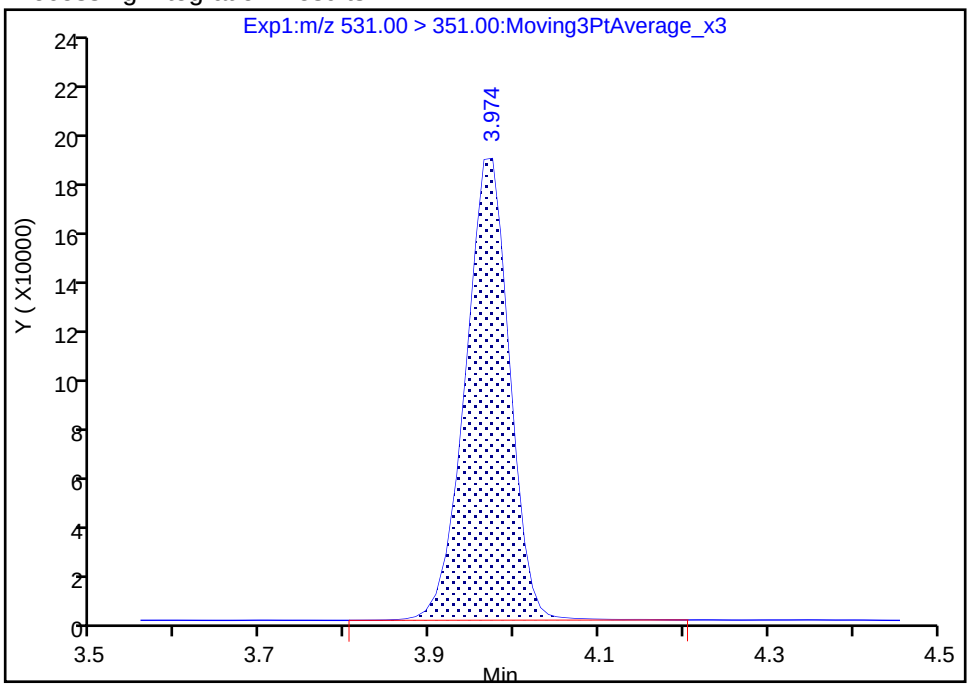
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL015.d | | | | |
| Injection Date: | 22-Dec-2020 13:46:11 | Instrument ID: | LC812 | | |
| Lims ID: | ICV | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 9 | Worklist Smp#: | 15 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 69 9-Chlorohexadecafluoro-3-oxanona, CAS: 756426-58-1

Signal: 1

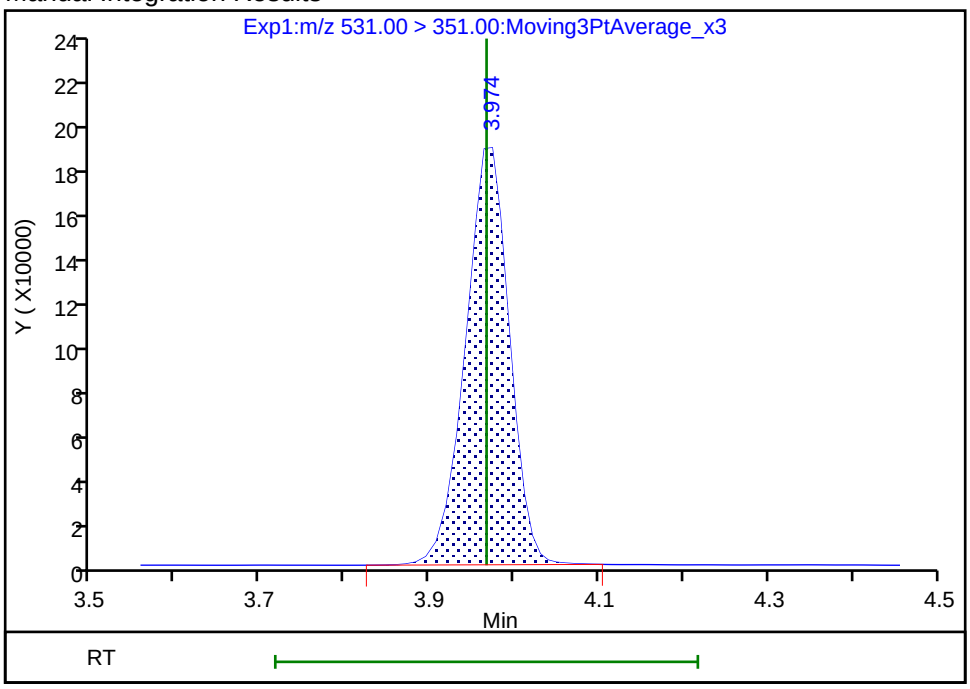
Processing Integration Results

RT: 3.97
Area: 666443
Amount: 1.017705
Amount Units: ng/ml




Manual Integration Results

RT: 3.97
Area: 663606
Amount: 1.013372
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 16:13:11

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

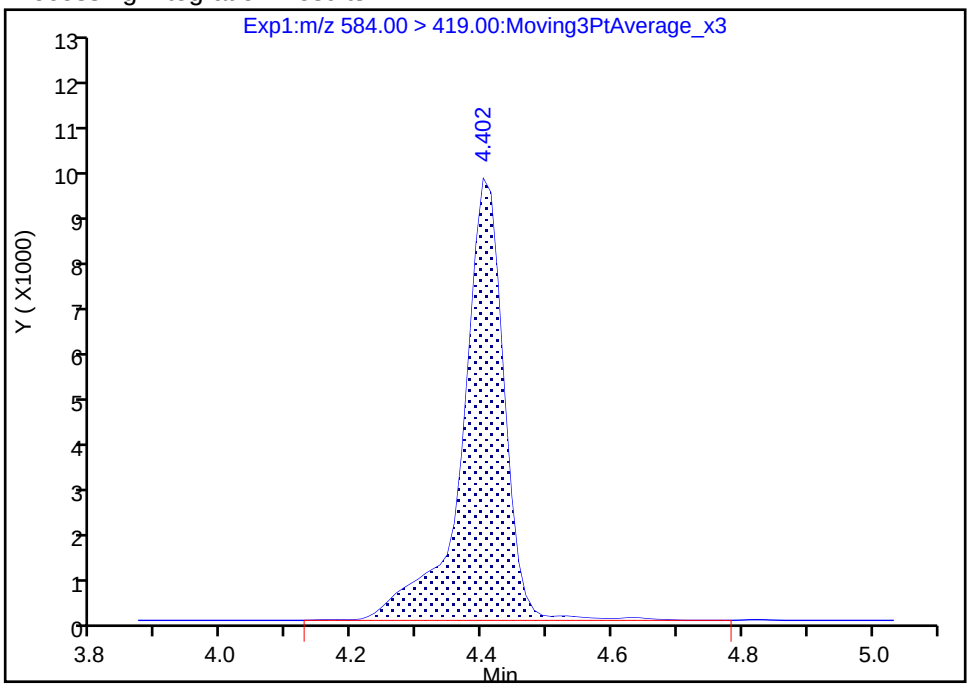
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL015.d | | | | |
| Injection Date: | 22-Dec-2020 13:46:11 | Instrument ID: | LC812 | | |
| Lims ID: | ICV | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 9 | Worklist Smp#: | 15 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

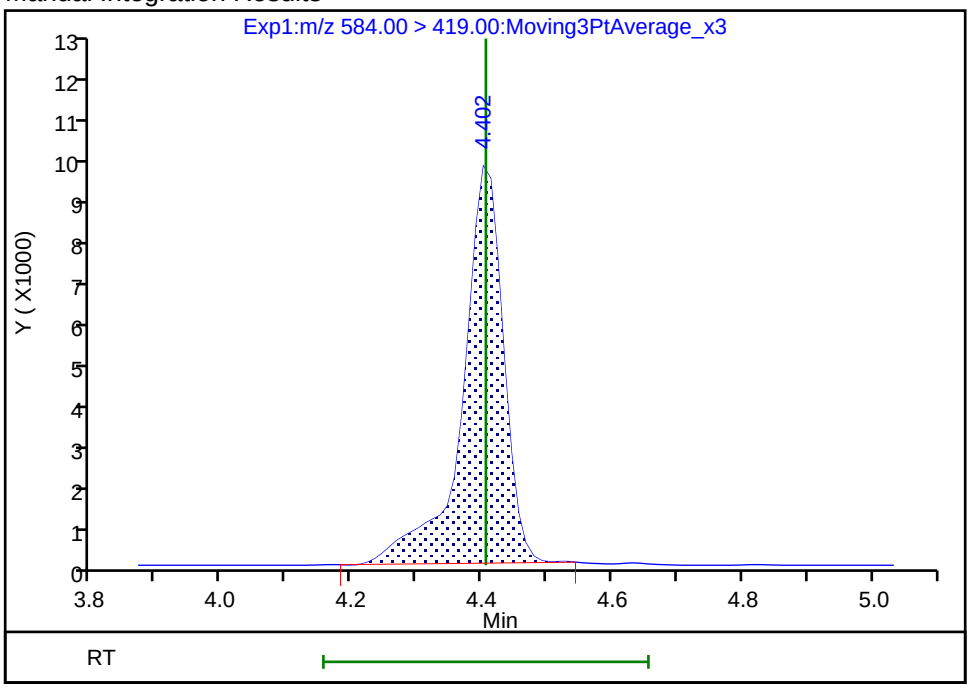
Processing Integration Results

RT: 4.40
Area: 42220
Amount: 0.954286
Amount Units: ng/ml




Manual Integration Results

RT: 4.40
Area: 40925
Amount: 0.925015
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 16:13:33
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Lab Sample ID: CCVL 200-164765/5  Calibration Date: 03/12/2021 10:38

Instrument ID: LC812  Calib Start Date: 12/22/2020 12:48

GC Column: C-18  ID: 4.60(mm)  Calib End Date: 12/22/2020 13:29

Lab File ID: PA210312A05.d  Conc. Units: ng/mL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | AveID | 1.002 | 1.025 | | 0.128 | 0.125 | 2.3 | 50.0 |
| Perfluoropentanoic acid (PFPeA) | AveID | 1.107 | 1.226 | | 0.0553 | 0.0500 | 10.7 | 50.0 |
| Perfluorobutanesulfonic acid (PFBS) | AveID | 1.131 | 1.156 | | 0.0452 | 0.0442 | 2.2 | 50.0 |
| 1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2) | AveID | 1.834 | 1.795 | | 0.0457 | 0.0467 | -2.1 | 50.0 |
| Perfluorohexanoic acid (PFHxA) | AveID | 1.092 | 1.032 | | 0.0472 | 0.0500 | -5.5 | 50.0 |
| Perfluoropentanesulfonic acid | AveID | 1.312 | 1.348 | | 0.0482 | 0.0469 | 2.7 | 50.0 |
| HFPO-DA | AveID | 1.385 | 2.361 | | 0.170 | 0.100 | 70.5* | 50.0 |
| Perfluoroheptanoic acid (PFHpA) | AveID | 1.092 | 1.062 | | 0.0486 | 0.0500 | -2.8 | 50.0 |
| Perfluorohexanesulfonic acid (PFHxS) | AveID | 1.178 | 1.188 | | 0.0459 | 0.0455 | 0.8 | 50.0 |
| DONA | AveID | 3.349 | 3.113 | | 0.0438 | 0.0471 | -7.0 | 50.0 |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | AveID | 1.112 | 1.031 | | 0.110 | 0.119 | -7.3 | 50.0 |
| Perfluoroheptanesulfonic Acid (PFHpS) | AveID | 1.350 | 1.199 | | 0.0423 | 0.0476 | -11.2 | 50.0 |
| Perfluorooctanoic acid (PFOA) | AveID | 1.084 | 1.097 | | 0.0506 | 0.0500 | 1.2 | 50.0 |
| Perfluorooctanesulfonic acid (PFOS) | AveID | 1.150 | 1.109 | | 0.0447 | 0.0464 | -3.6 | 50.0 |
| Perfluorononanoic acid (PFNA) | AveID | 1.107 | 1.064 | | 0.0481 | 0.0500 | -3.8 | 50.0 |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid | AveID | 1.283 | 1.106 | | 0.0402 | 0.0466 | -13.8 | 50.0 |
| Perfluorononanesulfonic acid | AveID | 0.8581 | 0.7798 | | 0.0436 | 0.0480 | -9.1 | 50.0 |
| Perfluorodecanoic acid (PFDA) | AveID | 1.031 | 0.9690 | | 0.0470 | 0.0500 | -6.0 | 50.0 |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | AveID | 0.6801 | 0.7218 | | 0.0508 | 0.0479 | 6.1 | 50.0 |
| Perfluorooctanesulfonamide (PFOSA) | AveID | 1.002 | 0.9938 | | 0.0496 | 0.0500 | -0.8 | 50.0 |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | AveID | 0.8864 | 0.9633 | | 0.136 | 0.125 | 8.7 | 50.0 |
| Perfluorodecanesulfonic acid (PFDS) | AveID | 0.6841 | 0.6646 | | 0.0468 | 0.0482 | -2.8 | 50.0 |
| Perfluoroundecanoic acid (PFUnA) | AveID | 1.020 | 1.025 | | 0.0503 | 0.0500 | 0.6 | 50.0 |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | AveID | 0.9257 | 1.042 | | 0.141 | 0.125 | 12.5 | 50.0 |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid | AveID | 1.331 | 0.9063 | | 0.0321 | 0.0471 | -31.9 | 50.0 |
| Perfluorododecanoic acid (PFDoA) | AveID | 1.100 | 1.054 | | 0.0479 | 0.0500 | -4.2 | 50.0 |
| 10:2 FTS | AveID | 0.3501 | 0.2418 | | 0.0333 | 0.0482 | -30.9 | 50.0 |
| Perfluorododecanesulfonic acid (PFDoS) | AveID | 0.2517 | 0.2329 | | 0.0448 | 0.0484 | -7.5 | 50.0 |
| Perfluorotridecanoic acid (PFTriA) | AveID | 0.8926 | 0.9622 | | 0.0539 | 0.0500 | 7.8 | 50.0 |
| Perfluorotetradecanoic acid (PFTeA) | AveID | 0.1855 | 0.2145 | | 0.0578 | 0.0500 | 15.7 | 50.0 |

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Lab Sample ID: CCVL 200-164765/5  Calibration Date: 03/12/2021 10:38

Instrument ID: LC812  Calib Start Date: 12/22/2020 12:48

GC Column: C-18  ID: 4.60(mm)  Calib End Date: 12/22/2020 13:29

Lab File ID: PA210312A05.d  Conc. Units: ng/mL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Perfluoro-n-hexadecanoic acid (PFHxDA) | L1ID | | 1.216 | | 0.0501 | 0.0500 | 0.1 | 50.0 |
| Perfluoro-n-octadecanoic acid (PFODA) | AveID | 0.8998 | 0.8492 | | 0.0472 | 0.0500 | -5.6 | 50.0 |
| 13C4 PFBA | Ave | 1.343 | 1.310 | | 1.22 | 1.25 | -2.5 | 50.0 |
| 13C5 PFPeA | Ave | 0.9710 | 0.9439 | | 1.22 | 1.25 | -2.8 | 50.0 |
| 13C3 PFBS | Ave | 1.278 | 1.218 | | 1.11 | 1.16 | -4.7 | 50.0 |
| M2-4:2 FTS | Ave | 0.1066 | 0.0969 | | 1.06 | 1.17 | -9.1 | 50.0 |
| 13C2 PFHxA | Ave | 1.018 | 1.013 | | 1.24 | 1.25 | -0.5 | 50.0 |
| 13C3 HFPO-DA | Ave | 0.1792 | 0.0884 | | 0.617 | 1.25 | -50.7* | 50.0 |
| 13C4 PFHpA | Ave | 0.9742 | 0.9858 | | 1.27 | 1.25 | 1.2 | 50.0 |
| 18O2 PFHxS | Ave | 0.9511 | 0.9093 | | 1.13 | 1.18 | -4.4 | 50.0 |
| M2-6:2 FTS | Ave | 0.1187 | 0.1146 | | 1.15 | 1.19 | -3.5 | 50.0 |
| 13C4 PFOA | Ave | 0.9896 | 1.003 | | 1.27 | 1.25 | 1.4 | 50.0 |
| 13C4 PFOS | Ave | 0.6528 | 0.6594 | | 1.21 | 1.20 | 1.0 | 50.0 |
| 13C5 PFNA | Ave | 0.8730 | 0.8170 | | 1.17 | 1.25 | -6.4 | 50.0 |
| 13C2 PFDA | Ave | 0.8346 | 0.7660 | | 1.15 | 1.25 | -8.2 | 50.0 |
| M2-8:2 FTS | Ave | 0.1225 | 0.1190 | | 1.16 | 1.20 | -2.8 | 50.0 |
| 13C8 FOSA | Ave | 1.227 | 1.191 | | 1.21 | 1.25 | -2.9 | 50.0 |
| d3-NMeFOSAA | Ave | 0.0605 | 0.0509 | | 1.05 | 1.25 | -15.9 | 50.0 |
| 13C2 PFUnA | Ave | 0.6856 | 0.5702 | | 1.04 | 1.25 | -16.8 | 50.0 |
| d5-NEtFOSAA | Ave | 0.0585 | 0.0500 | | 1.07 | 1.25 | -14.5 | 50.0 |
| 13C2 PFDoA | Ave | 0.7238 | 0.6015 | | 1.04 | 1.25 | -16.9 | 50.0 |
| 13C2 PFTeDA | Ave | 0.5353 | 0.4067 | | 0.950 | 1.25 | -24.0 | 50.0 |
| 13C2 PFHxDA | Ave | 0.5718 | 0.4201 | | 0.918 | 1.25 | -26.5 | 50.0 |

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 12-Mar-2021 10:38:19 ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCVL
Misc. Info.: 200-0045138-005 Plate: 1 Rack: 1
Operator ID: lc812tech Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 12-Mar-2021 12:59:06 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1632

First Level Reviewer: deannd Date: 12-Mar-2021 11:24:08
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.082 | 2.082 | 0.0 | 0.598 | 1390425 | 1.22 | | 97.5 | 9200 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | M |
| 212.90 > 169.00 | 2.082 | 2.082 | 0.0 | 1.000 | 142463 | 0.1278 | | 102 | 34.6 | M |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.400 | 2.401 | -0.001 | 0.689 | 1001979 | 1.22 | | 97.2 | 3505 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | M |
| 262.90 > 219.00 | 2.400 | 2.401 | -0.001 | 1.000 | 49126 | 0.0553 | | 111 | 4.0 | M |
| D 47 13C3 PFBS | | | | | | | | | | M |
| 301.90 > 80.00 | 2.413 | 2.414 | -0.001 | 0.693 | 1202417 | 1.11 | | 95.3 | 159026 | M |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | M |
| 298.90 > 80.00 | 2.426 | 2.427 | -0.001 | 1.005 | 52853 | 0.0452 | Target=2.21 | 102 | 131 | M |
| 298.90 > 99.00 | 2.426 | 2.427 | -0.001 | 1.005 | 24288 | | 2.18(1.11-3.32) | | 19.5 | M |
| D 60 M2-4:2 FTS | | | | | | | | | | M |
| 329.00 > 81.00 | 2.722 | 2.723 | -0.001 | 0.781 | 96030 | 1.06 | | 90.9 | 178 | M |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | |
| 327.00 > 307.00 | 2.722 | 2.723 | -0.001 | 1.000 | 6894 | 0.0457 | | 97.9 | 154 | |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.758 | 2.759 | -0.001 | 0.792 | 1075457 | 1.24 | | 99.5 | 3081 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | M |
| 313.00 > 269.00 | 2.758 | 2.759 | -0.001 | 1.000 | 44399 | 0.0472 | Target=12.83 | 94.5 | 10.0 | |
| 313.00 > 119.00 | 2.758 | 2.759 | -0.001 | 1.000 | 3433 | | 12.93(6.42-19.25) | | 5.4 | M |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | M |
| 349.00 > 80.00 | 2.758 | 2.759 | -0.001 | 0.884 | 48832 | 0.0482 | Target=3.35 | 103 | 199 | |
| 349.00 > 99.00 | 2.758 | 2.759 | -0.001 | 0.884 | 14955 | | 3.27(1.67-5.02) | | 32.7 | M |
| 67 Perfluoro(2-propoxypropanoic) ac | | | | | | | | | | |
| 329.10 > 285.00 | 2.868 | 2.869 | -0.001 | 1.000 | 17724 | 0.1705 | | 170 | 3.3 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 64 13C3 HFPO-DA | | | | | | | | | | |
| 332.10 > 287.00 | 2.868 | 2.869 | -0.001 | 0.823 | 93819 | 0.6165 | | 49.3 | 681 | |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.121 | 3.123 | -0.002 | 1.000 | 41756 | 0.0459 | Target=4.15 | 101 | 173 | M |
| 399.00 > 99.00 | 3.121 | 3.123 | -0.002 | 1.000 | 11314 | | 3.69(2.08-6.23) | | 17.1 | M |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.121 | 3.123 | -0.002 | 0.896 | 913174 | 1.13 | | 95.6 | 2580 | |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.121 | 3.123 | -0.002 | 0.896 | 1046478 | 1.26 | | 101 | 3081 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | |
| 363.00 > 319.00 | 3.121 | 3.123 | -0.002 | 1.000 | 44451 | 0.0486 | Target=3.66 | 97.2 | 17.0 | |
| 363.00 > 169.00 | 3.121 | 3.123 | -0.002 | 1.000 | 12809 | | 3.47(1.83-5.49) | | 37.4 | |
| 77 DONA | | | | | | | | | | |
| 377.00 > 251.00 | 3.164 | 3.165 | -0.001 | 0.834 | 82098 | 0.0438 | Target=2.43 | 93.0 | 158 | |
| 377.00 > 85.00 | 3.164 | 3.165 | -0.001 | 0.834 | 31356 | | 2.62(1.22-3.65) | | 66.9 | |
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | M |
| 449.00 > 80.00 | 3.474 | 3.475 | -0.001 | 0.916 | 31963 | 0.0423 | Target=5.95 | 88.8 | 332 | |
| 449.00 > 99.00 | 3.465 | 3.475 | -0.010 | 0.913 | 6237 | | 5.12(2.98-8.93) | | 24.4 | M |
| D 12 M2-6:2 FTS | | | | | | | | | | |
| 429.00 > 81.00 | 3.474 | 3.475 | -0.001 | 0.997 | 115556 | 1.15 | | 96.5 | 534 | |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | |
| 427.00 > 407.00 | 3.474 | 3.475 | -0.001 | 1.000 | 11892 | 0.1099 | | 92.7 | 205 | |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.483 | 3.484 | -0.001 | 1.000 | 1064920 | 1.27 | | 101 | 3331 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.483 | 3.484 | -0.001 | | 1061534 | 1.25 | | | 2450 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | M |
| 413.00 > 369.00 | 3.483 | 3.484 | -0.001 | 1.000 | 46725 | 0.0506 | Target=2.58 | 101 | 15.5 | |
| 413.00 > 169.00 | 3.483 | 3.484 | -0.001 | 1.000 | 16361 | | 2.86(1.29-3.87) | | 47.7 | M |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.794 | 3.798 | -0.004 | 1.000 | 28815 | 0.0447 | Target=5.65 | 96.4 | 20.0 | M |
| 499.00 > 99.00 | 3.794 | 3.798 | -0.004 | 1.000 | 5050 | | 5.71(2.82-8.47) | | 19.1 | M |
| D 18 13C4 PFOS | | | | | | | | | | |
| 503.00 > 80.00 | 3.794 | 3.798 | -0.004 | 1.089 | 669176 | 1.21 | | 101 | 3249 | |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.814 | 3.818 | -0.004 | 1.095 | 867258 | 1.17 | | 93.6 | 3921 | |
| 20 Perfluorononanoic acid | | | | | | | | | | |
| 463.00 > 419.00 | 3.814 | 3.818 | -0.004 | 1.000 | 36924 | 0.0481 | Target=7.44 | 96.2 | 7.1 | |
| 463.00 > 169.00 | 3.814 | 3.818 | -0.004 | 1.000 | 4485 | | 8.23(3.72-11.16) | | 64.6 | |
| 69 9-Chlorohexadecafluoro-3-oxanona | | | | | | | | | | |
| 531.00 > 351.00 | 3.964 | 3.959 | 0.005 | 1.045 | 28858 | 0.0402 | | 86.2 | 246 | |
| 68 Perfluorononanesulfonic acid | | | | | | | | | | M |
| 549.00 > 80.00 | 4.081 | 4.086 | -0.005 | 1.076 | 20960 | 0.0436 | Target=2.54 | 90.9 | 345 | |
| 549.00 > 99.00 | 4.093 | 4.086 | 0.007 | 1.079 | 6554 | | 3.20(1.27-3.81) | | 26.9 | M |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.115 | 4.119 | -0.004 | 1.181 | 813166 | 1.15 | | 91.8 | 3635 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 24 Perfluorodecanoic acid | | | | | | | | | | M |
| 513.00 > 469.00 | 4.115 | 4.119 | -0.004 | 1.000 | 31517 | 0.0470 | Target=9.29 | 94.0 | 35.1 | |
| 513.00 > 169.00 | 4.115 | 4.119 | -0.004 | 1.000 | 3399 | | 9.27(4.64-13.93) | | 36.6 | M |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.126 | 4.119 | 0.007 | 1.185 | 121021 | 1.16 | | 97.2 | 489 | |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | |
| 527.00 > 507.00 | 4.126 | 4.119 | 0.007 | 1.000 | 3494 | 0.0508 | | 106 | 90.2 | |
| D 21 13C8 FOSA | | | | | | | | | | M |
| 506.00 > 78.00 | 4.214 | 4.219 | -0.005 | 1.210 | 1264199 | 1.21 | | 97.1 | 2066 | M |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | |
| 498.00 > 78.00 | 4.214 | 4.219 | -0.005 | 1.000 | 50256 | 0.0496 | | 99.2 | 328 | |
| D 27 d3-NMeFOSAA | | | | | | | | | | |
| 573.00 > 419.00 | 4.257 | 4.251 | 0.006 | 1.222 | 54054 | 1.05 | | 84.1 | 660 | |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | M |
| 570.00 > 419.00 | 4.257 | 4.262 | -0.005 | 1.000 | 5207 | 0.1358 | | 109 | 17.7 | M |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | M |
| 599.00 > 80.00 | 4.347 | 4.353 | -0.006 | 1.146 | 17939 | 0.0468 | Target=2.80 | 97.2 | 241 | M |
| 599.00 > 99.00 | 4.347 | 4.353 | -0.006 | 1.146 | 6812 | | 2.63(1.40-4.19) | | 52.1 | M |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.369 | 4.375 | -0.006 | 1.254 | 605290 | 1.04 | | 83.2 | 3724 | |
| 31 Perfluoroundecanoic acid | | | | | | | | | | M |
| 563.00 > 519.00 | 4.369 | 4.375 | -0.006 | 1.000 | 24828 | 0.0503 | Target=8.12 | 101 | 27.4 | M |
| 563.00 > 169.00 | 4.369 | 4.375 | -0.006 | 1.000 | 3785 | | 6.56(4.06-12.18) | | 58.5 | |
| D 32 d5-NEtFOSAA | | | | | | | | | | |
| 589.00 > 419.00 | 4.391 | 4.386 | 0.005 | 1.261 | 53109 | 1.07 | | 85.5 | 550 | |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.391 | 4.398 | -0.007 | 1.000 | 5532 | 0.1407 | | 113 | 109 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | |
| 631.00 > 451.00 | 4.467 | 4.463 | 0.004 | 1.177 | 23905 | 0.0321 | | 68.1 | 701 | |
| D 36 13C2 PFDoA | | | | | | | | | | |
| 615.00 > 570.00 | 4.601 | 4.598 | 0.003 | 1.321 | 638516 | 1.04 | | 83.1 | 2688 | |
| 37 Perfluorododecanoic acid | | | | | | | | | | |
| 613.00 > 569.00 | 4.601 | 4.608 | -0.007 | 1.000 | 26909 | 0.0479 | Target=6.91 | 95.8 | 12.0 | |
| 613.00 > 169.00 | 4.601 | 4.608 | -0.007 | 1.000 | 3966 | | 6.78(3.45-10.36) | | 89.4 | |
| 74 1H,1H,2H,2H-perfluorododecanesul | | | | | | | | | | M |
| 627.00 > 607.00 | 4.622 | 4.619 | 0.003 | 1.120 | 1178 | 0.0333 | | 69.1 | 48.7 | M |
| 75 Perfluorododecanesulfonic acid ( | | | | | | | | | | |
| 699.00 > 80.00 | 4.775 | 4.772 | 0.002 | 1.258 | 6312 | 0.0448 | Target=0.51 | 92.5 | 123 | |
| 699.00 > 99.00 | 4.775 | 4.772 | 0.002 | 1.258 | 11562 | | 0.55(0.26-0.77) | | 76.4 | |
| 41 Perfluorotridecanoic acid | | | | | | | | | | |
| 663.00 > 619.00 | 4.810 | 4.808 | 0.002 | 1.045 | 24575 | 0.0539 | Target=4.39 | 108 | 13.5 | |
| 663.00 > 169.00 | 4.801 | 4.808 | -0.007 | 1.043 | 5803 | | 4.23(2.20-6.59) | | 67.0 | |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 4.995 | 5.000 | -0.005 | 1.434 | 431738 | 0.9497 | | 76.0 | 2894 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | |
| 713.00 > 169.00 | 4.995 | 5.000 | -0.005 | 1.000 | 3704 | 0.0578 | Target=1.06 | 116 | 122 | |
| 713.00 > 219.00 | 4.995 | 5.000 | -0.005 | 1.000 | 3919 | | 0.95(0.53-1.59) | | 117 | |

Report Date: 12-Mar-2021 12:59:06 Chrom Revision: 2.3 05-Feb-2021 00:13:28
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d
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 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.338 | 5.336 | 0.002 | 1.533 | 445934 | 0.9183 | | 73.5 | 2855 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | M |
| 813.00 > 769.00 | 5.338 | 5.336 | 0.002 | 1.000 | 21699 | 0.0501 | Target=3.84 | 100 | 12.2 | M |
| 813.00 > 169.00 | 5.338 | 5.336 | 0.002 | 1.000 | 5925 | | 3.66(1.92-5.76) | | 226 | |
| 46 Perfluorooctadecanoic acid | | | | | | | | | | M |
| 913.00 > 869.00 | 5.646 | 5.654 | -0.008 | 1.058 | 15148 | 0.0472 | Target=3.92 | 94.4 | 22.5 | M |
| 913.00 > 169.00 | 5.646 | 5.654 | -0.008 | 1.058 | 4461 | | 3.40(1.96-5.88) | | 142 | |

## QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

## Reagents:

PFAS32NCLOQV_00013 Amount Added: 100.00 Units: uL

Report Date: 12-Mar-2021 12:59:06 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d

Injection Date: 12-Mar-2021 10:38:19 Instrument ID: LC812

Lims ID: CCVL

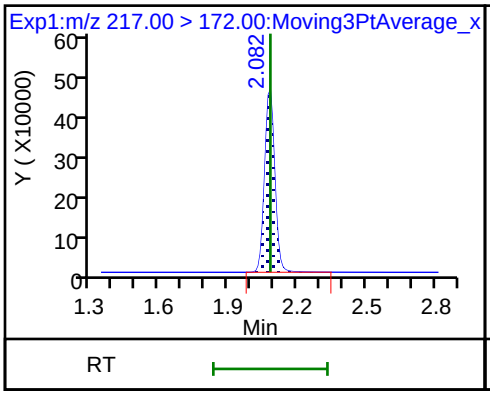
Client ID:

Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 5

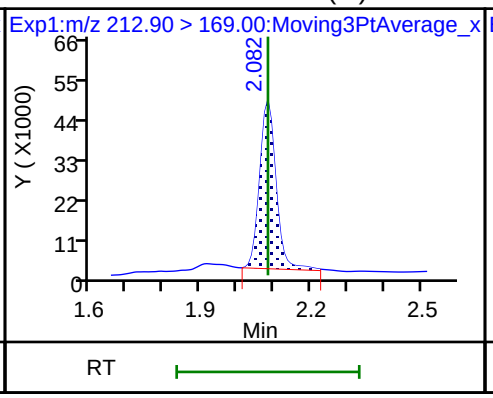
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

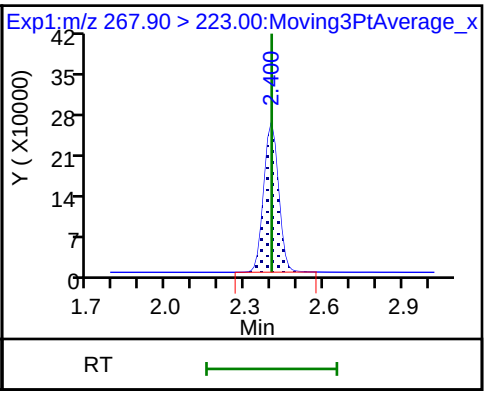
D 1 13C4 PFBA



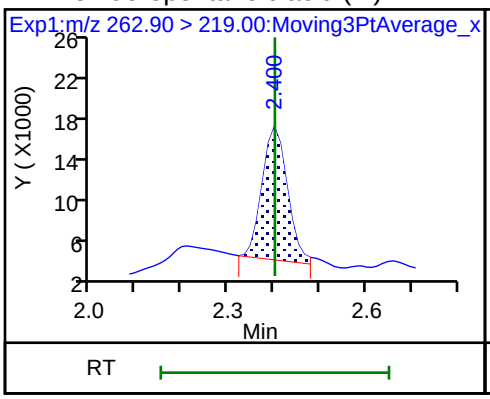

2 Perfluorobutanoic acid (M)



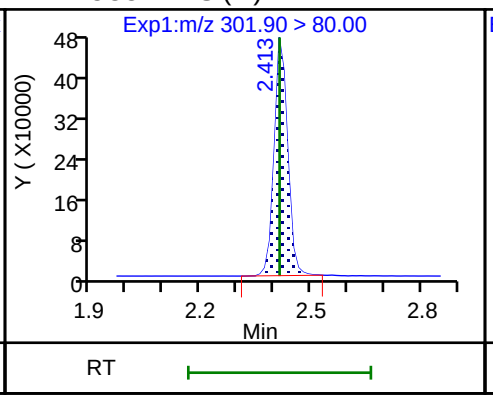

D 3 13C5 PFPeA



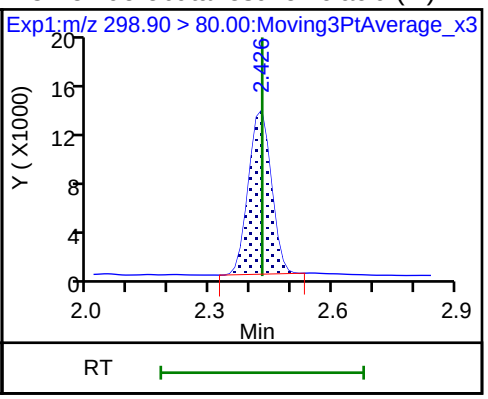

4 Perfluoropentanoic acid (M)



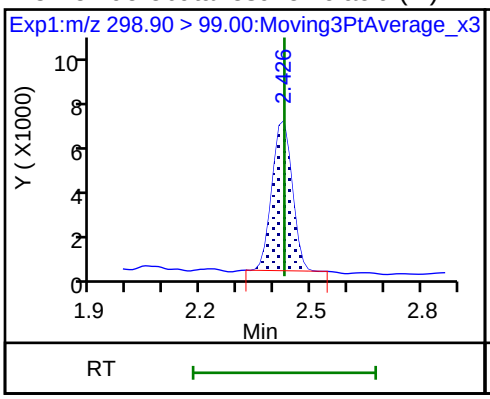

D 47 13C3 PFBS (M)



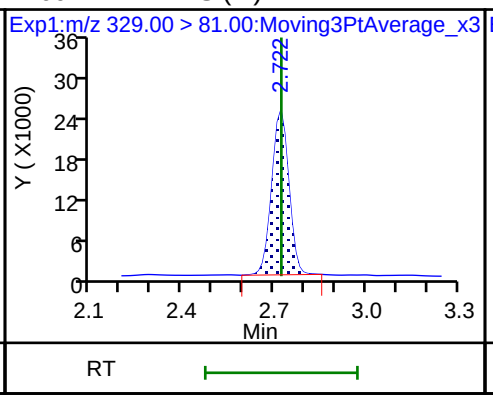

5 Perfluorobutanesulfonic acid (M)



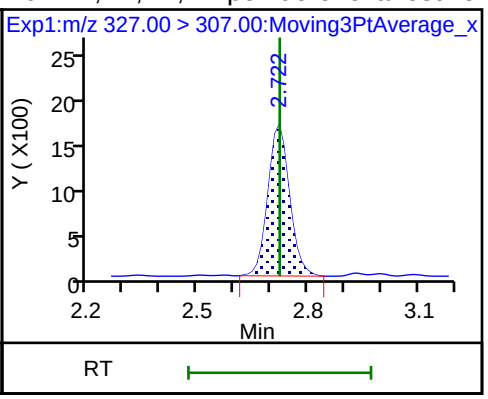

5 Perfluorobutanesulfonic acid (M)



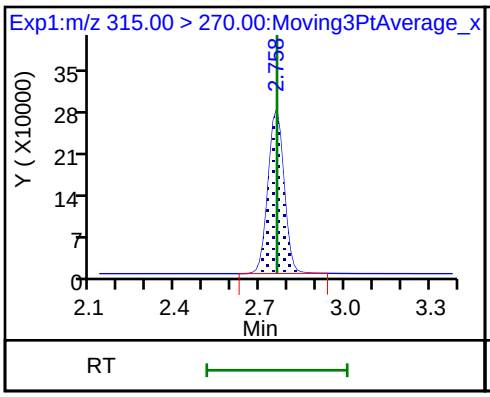

D 60 M2-4:2 FTS (M)



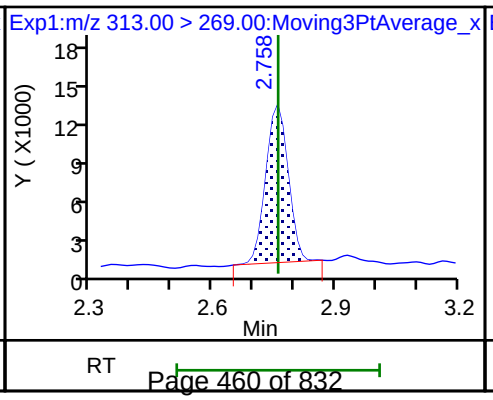

61 1H,1H,2H,2H-perfluorohexanesulfo



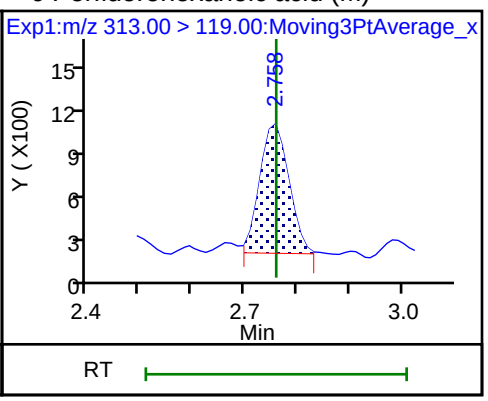

D 7 13C2 PFHxA



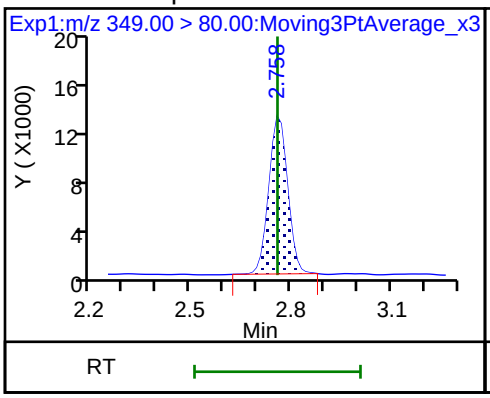

6 Perfluorohexanoic acid



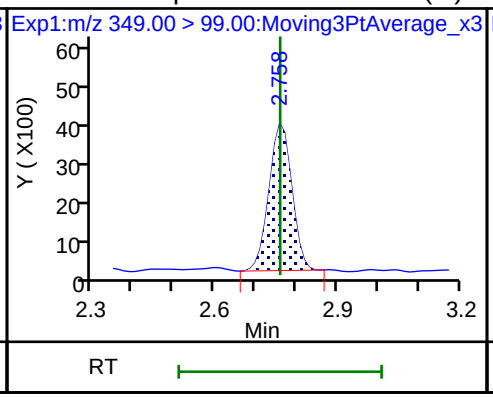

6 Perfluorohexanoic acid (M)



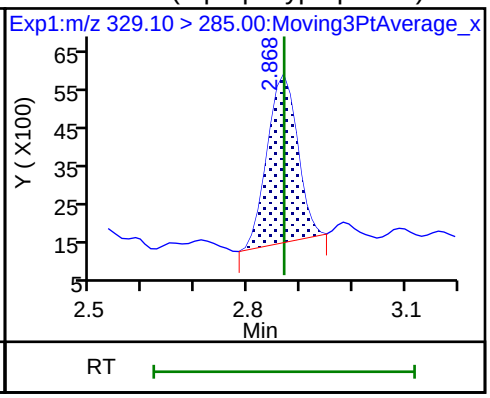
70 Perfluoropentanesulfonic acid



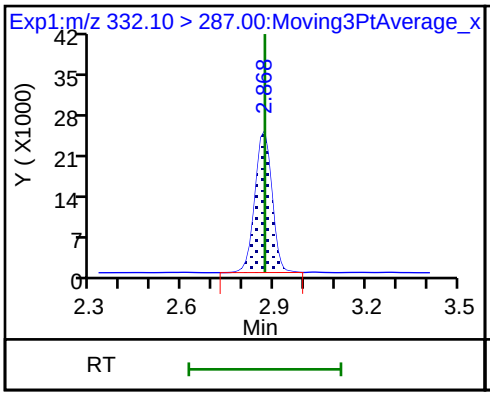

70 Perfluoropentanesulfonic acid (M)



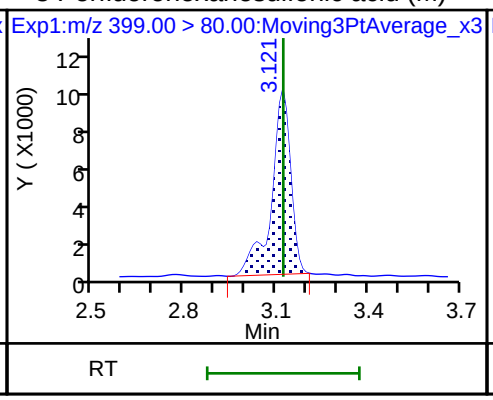

67 Perfluoro(2-propoxypropanoic) ac



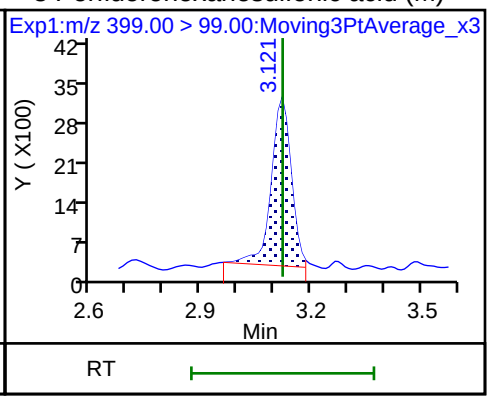

D 64 13C3 HFPO-DA



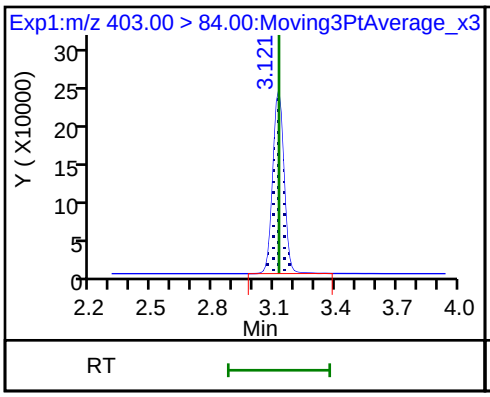

8 Perfluorohexanesulfonic acid (M)



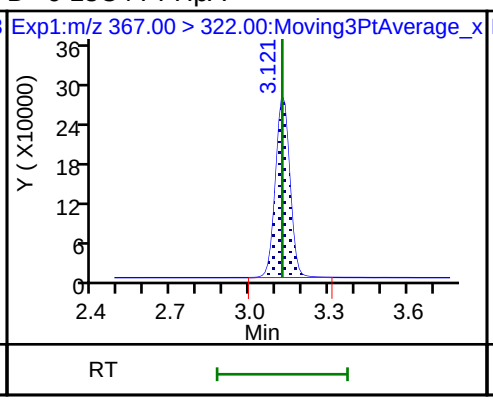

8 Perfluorohexanesulfonic acid (M)



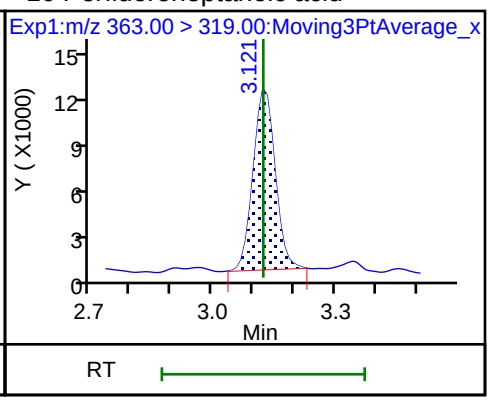

D 11 18O2 PFHxS



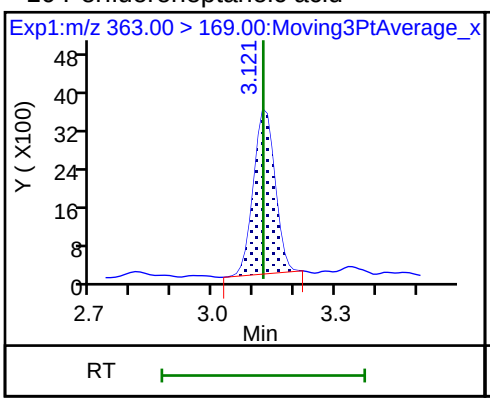

D 9 13C4 PFHpA



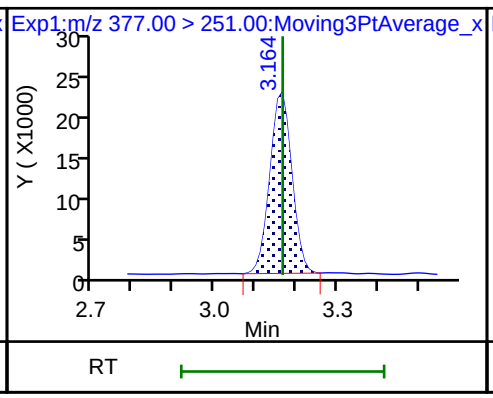

10 Perfluoroheptanoic acid



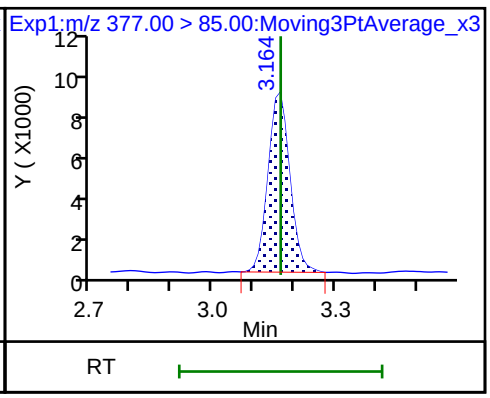

10 Perfluoroheptanoic acid



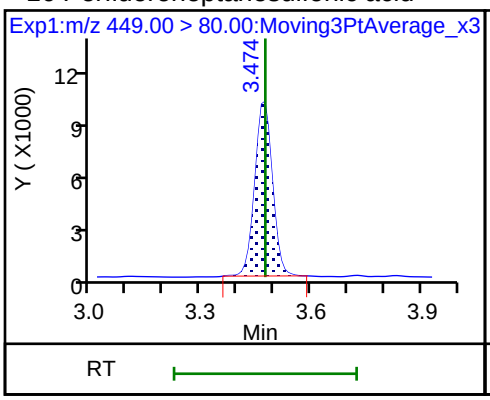

77 DONA



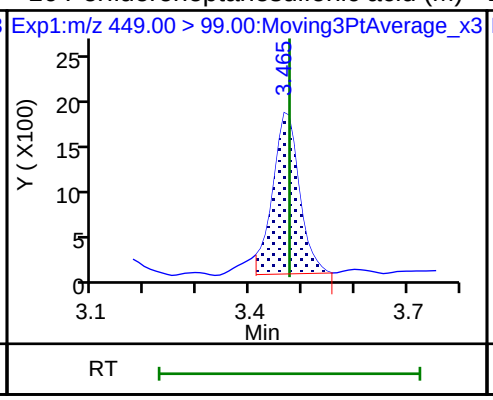

77 DONA



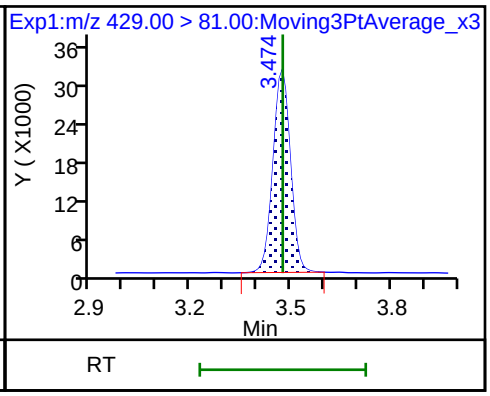
16 Perfluoroheptanesulfonic acid



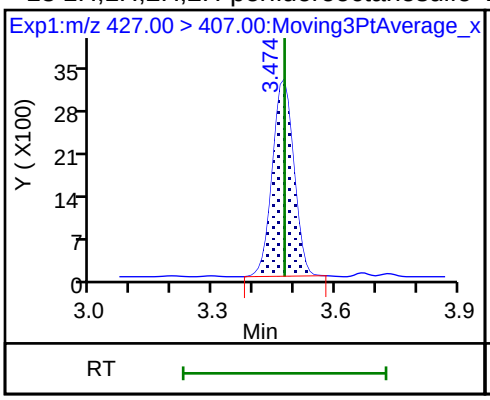

16 Perfluoroheptanesulfonic acid (M)



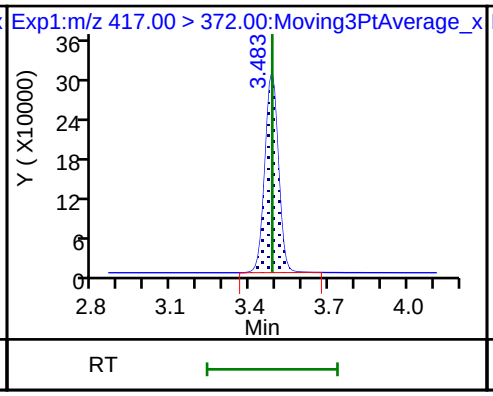

D 12 M2-6:2 FTS



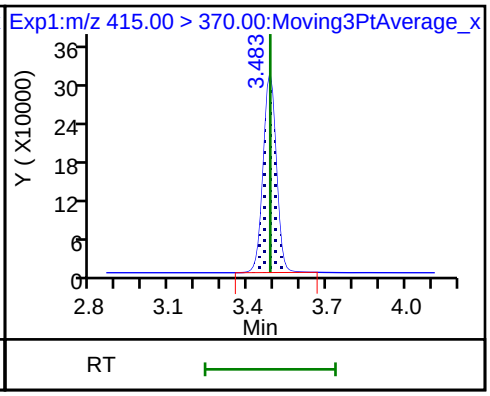

13 1H,1H,2H,2H-perfluorooctanesulfo



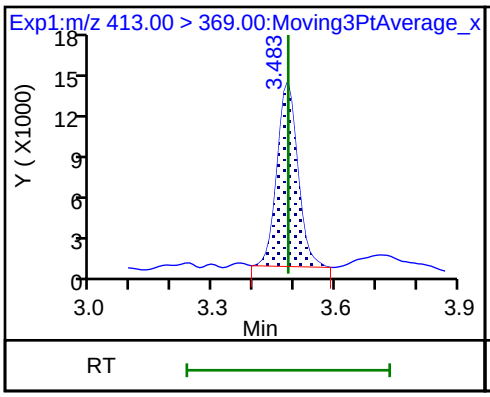

D 14 13C4 PFOA



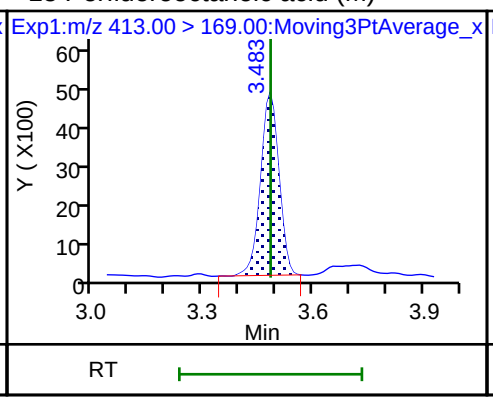

* 62 13C2 PFOA



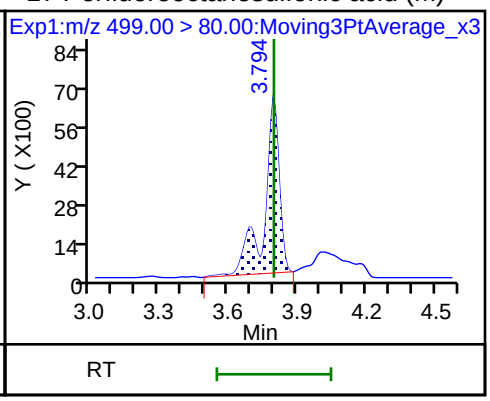

15 Perfluorooctanoic acid



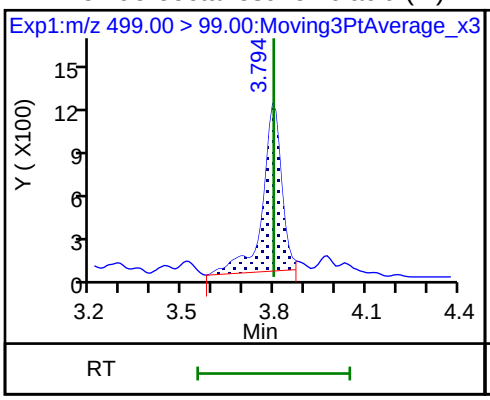

15 Perfluorooctanoic acid (M)



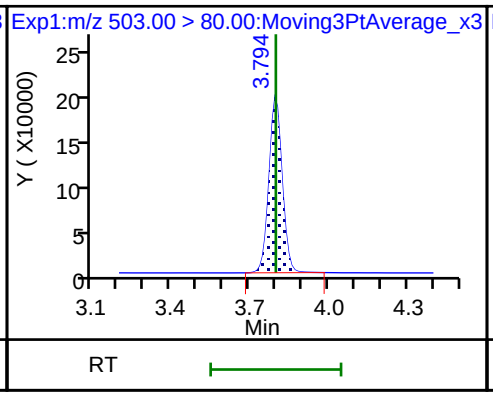

17 Perfluorooctanesulfonic acid (M)



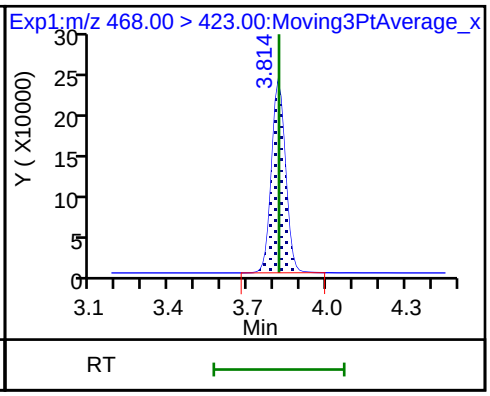

17 Perfluorooctanesulfonic acid (M)



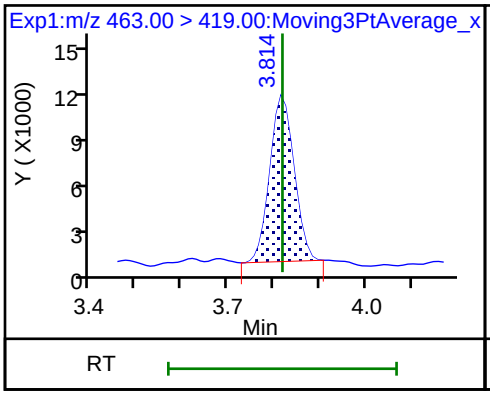

D 18 13C4 PFOS



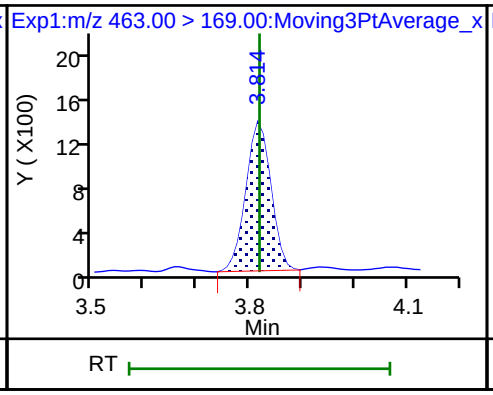

D 19 13C5 PFNA



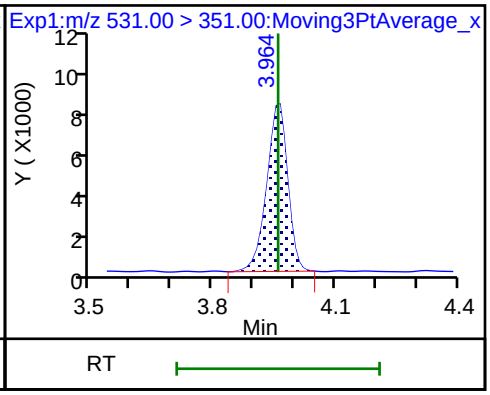
20 Perfluorononanoic acid



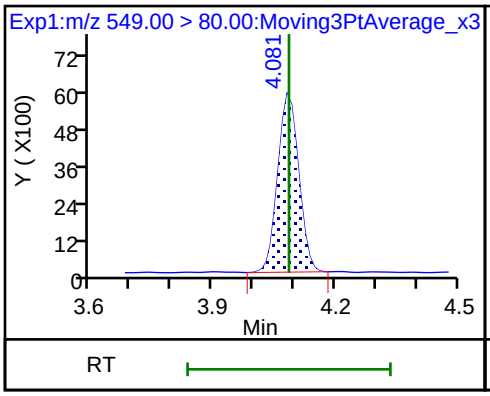

20 Perfluorononanoic acid



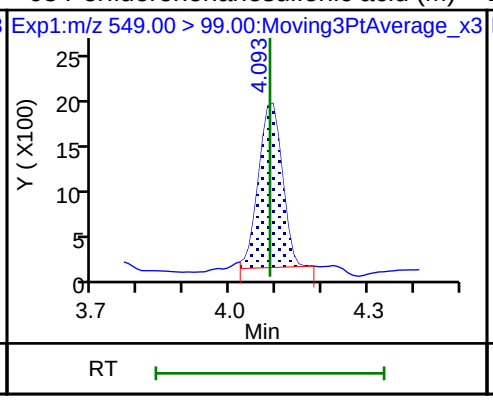

69 9-Chlorohexadecafluoro-3-oxanona



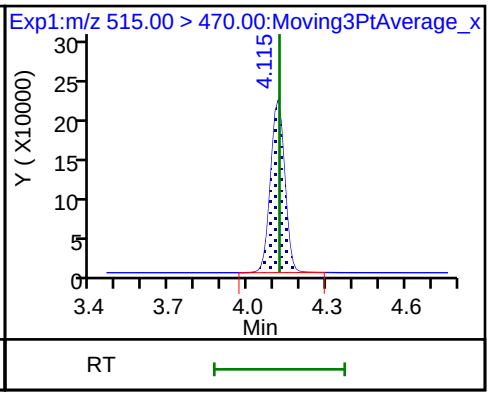

68 Perfluorononanesulfonic acid



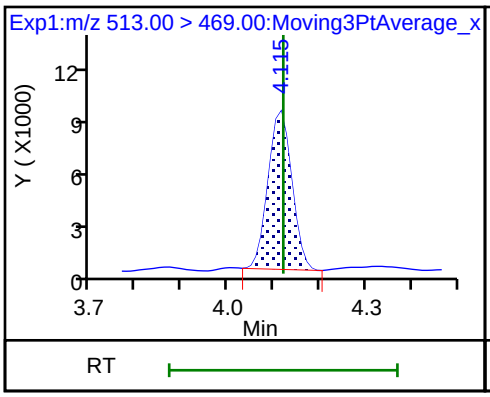

68 Perfluorononanesulfonic acid (M)



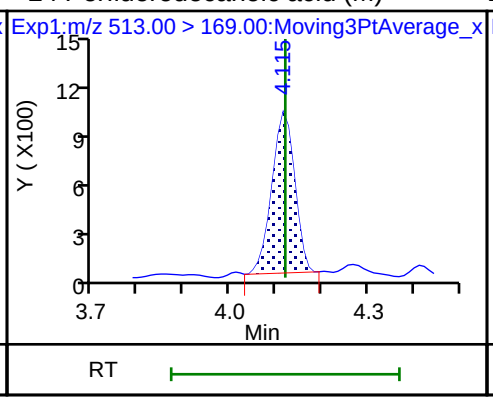

D 23 13C2 PFDA



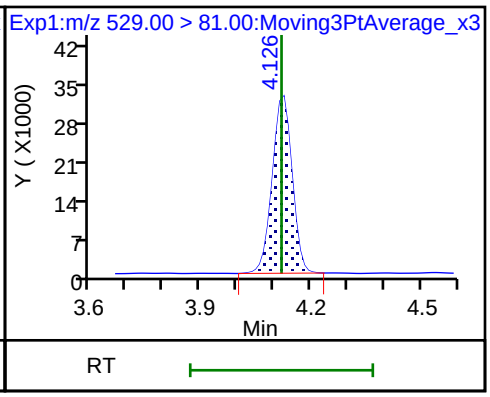

24 Perfluorodecanoic acid



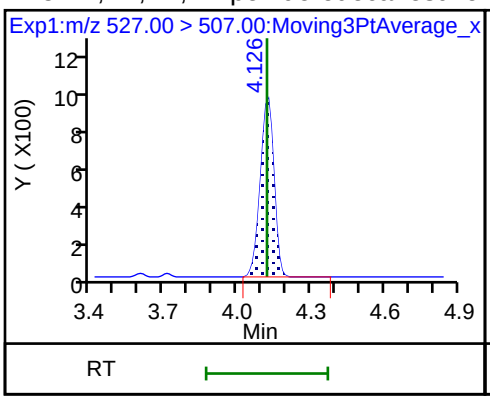

24 Perfluorodecanoic acid (M)



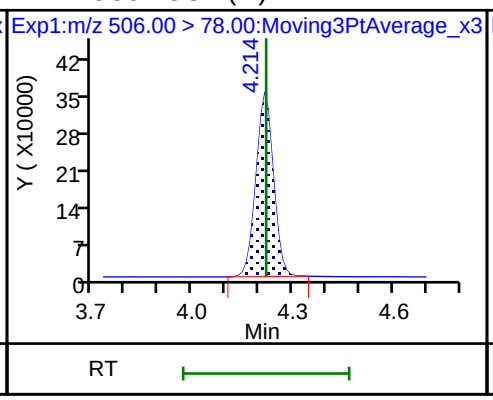

D 26 M2-8:2 FTS



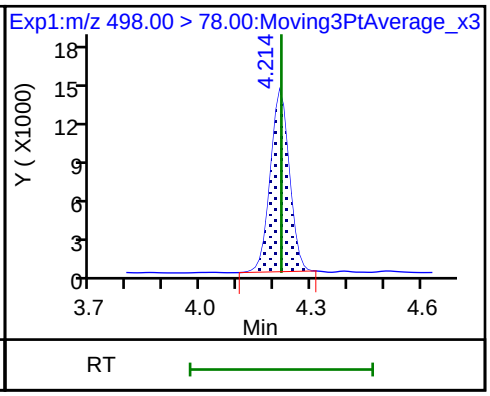

25 1H,1H,2H,2H-perfluorodecanesulfo



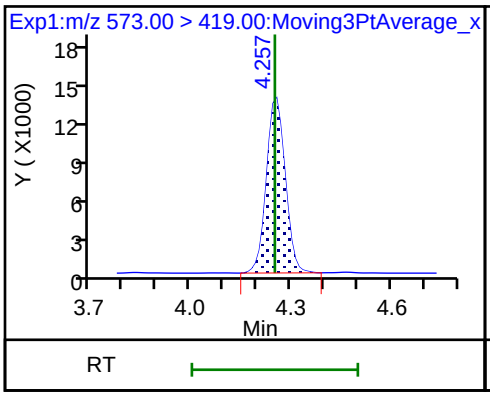

D 21 13C8 FOSA (M)



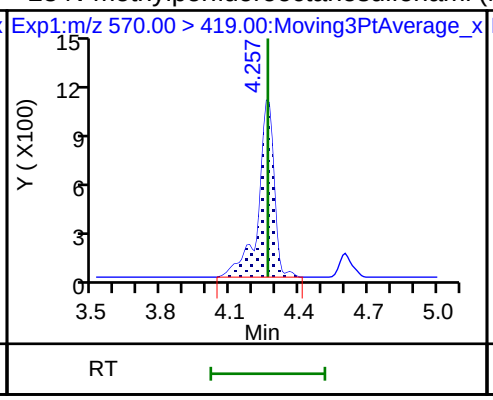

22 Perfluorooctanesulfonamide



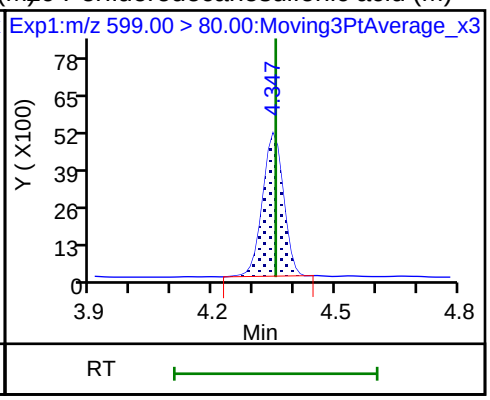
D 27 d3-NMeFOSAA



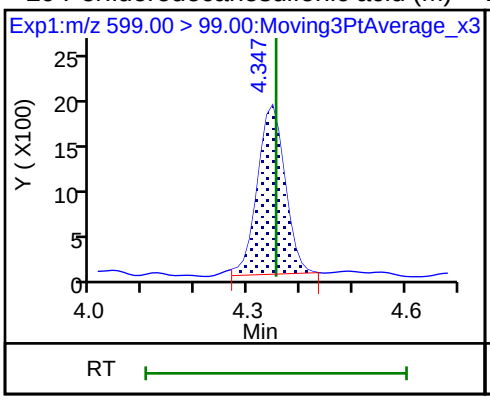

28 N-methylperfluorooctanesulfonami (M)



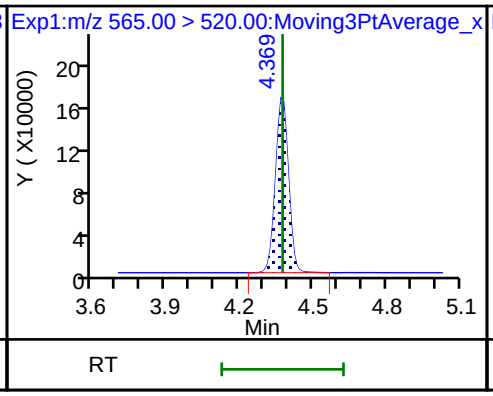

29 Perfluorodecanesulfonic acid (M)



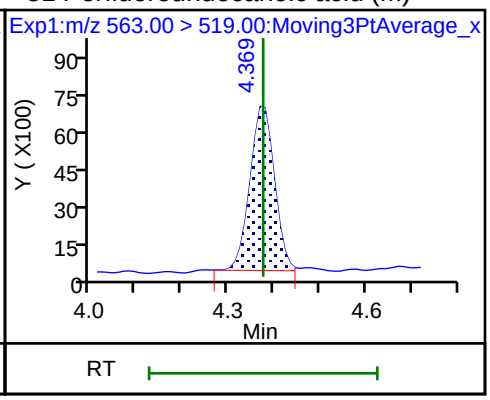

29 Perfluorodecanesulfonic acid (M)



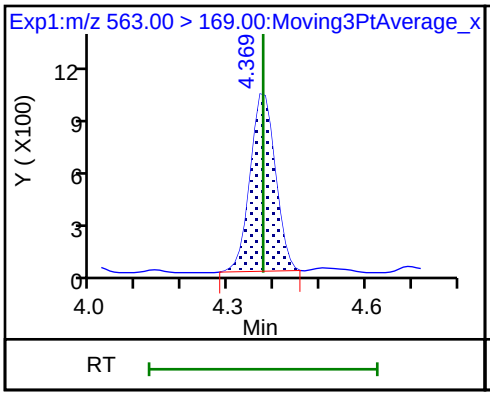

D 30 13C2 PFUnA



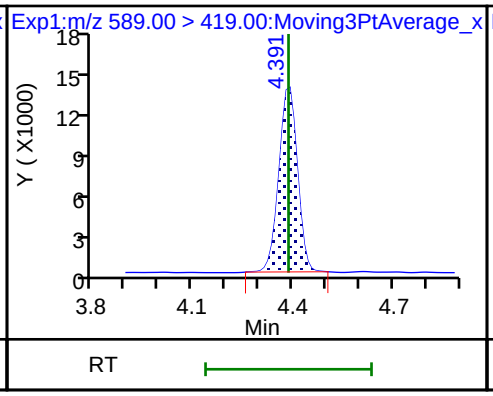

31 Perfluoroundecanoic acid (M)



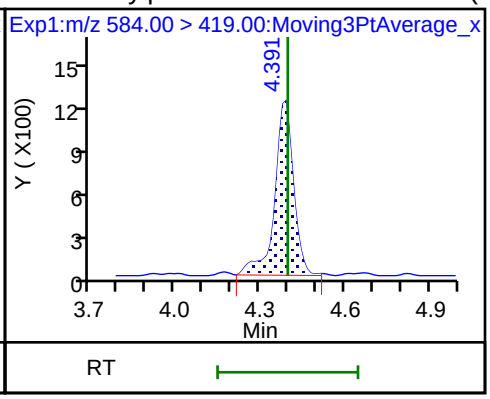

31 Perfluoroundecanoic acid



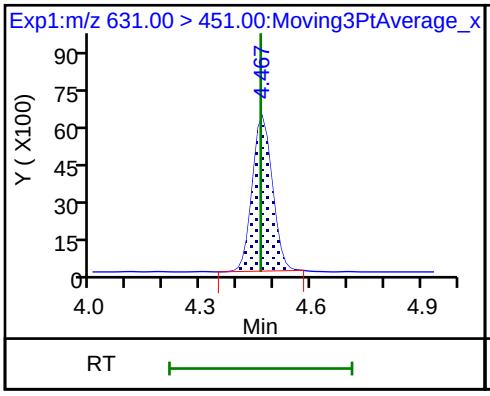

D 32 d5-NEtFOSAA



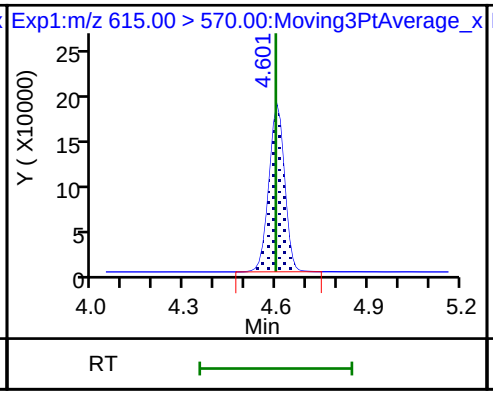

33 N-ethylperfluorooctanesulfonamid (M)



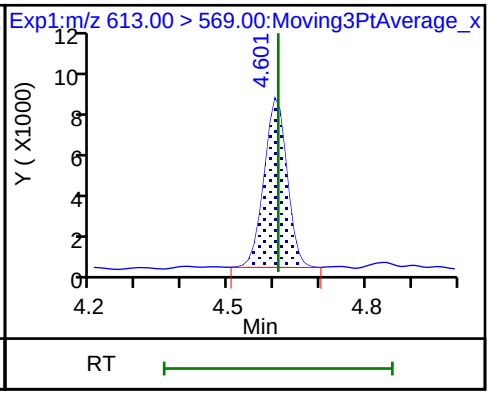

66 11-Chloroeicosafluoro-3-oxaundec



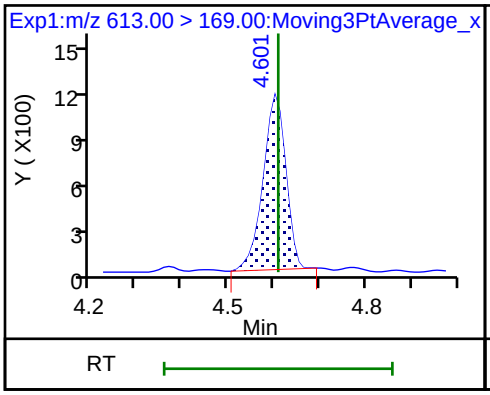

D 36 13C2 PFDoA



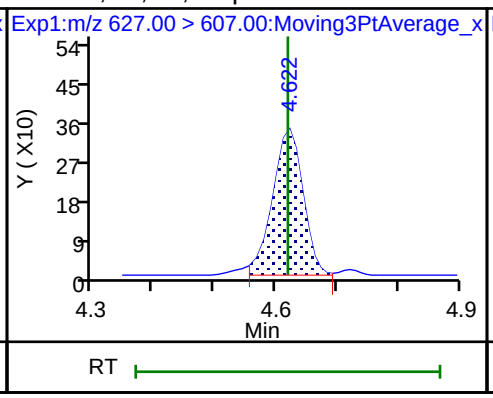

37 Perfluorododecanoic acid



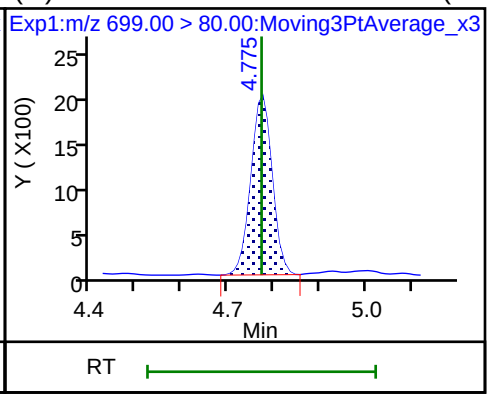
37 Perfluorododecanoic acid



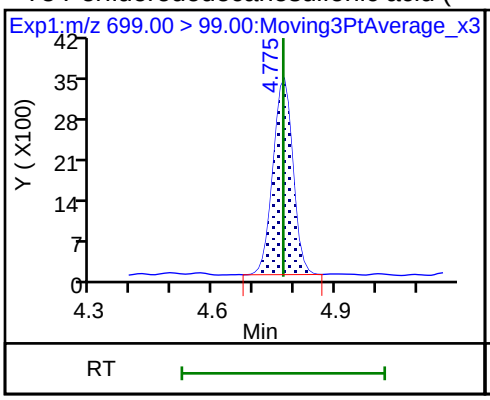

74 1H,1H,2H,2H-perfluorododecanesul (M)



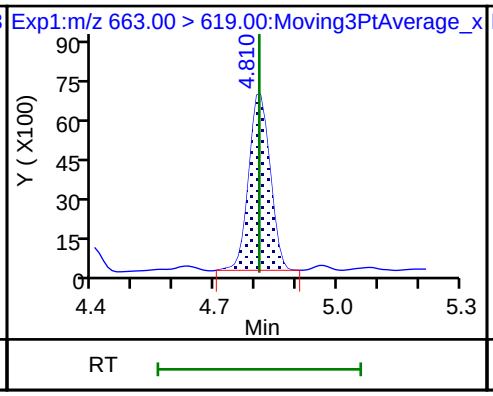

75 Perfluorododecanesulfonic acid (



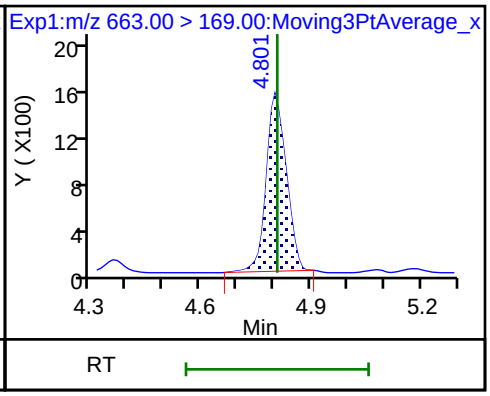

75 Perfluorododecanesulfonic acid (



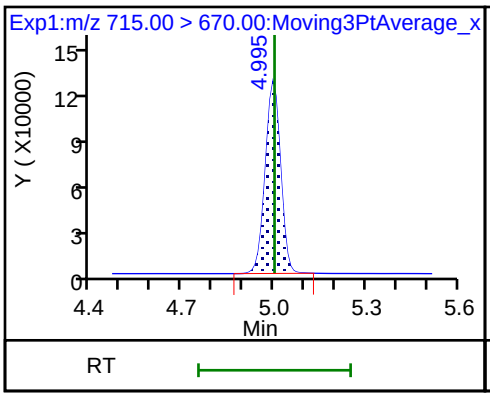

41 Perfluorotridecanoic acid



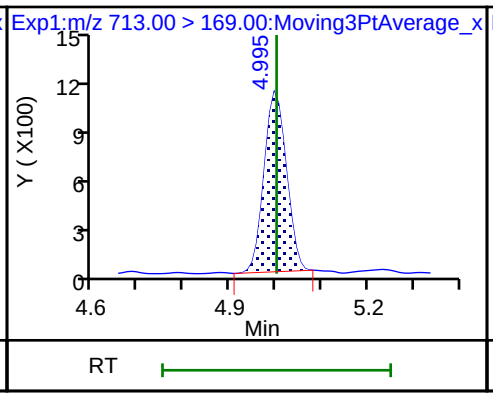

41 Perfluorotridecanoic acid



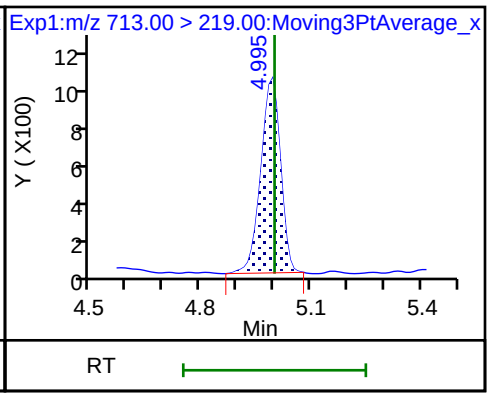

D 43 13C2 PFTeDA



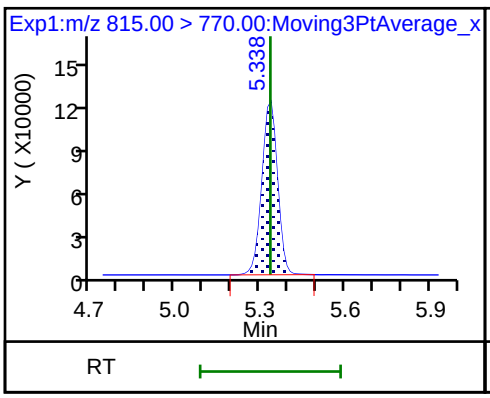

42 Perfluorotetradecanoic acid



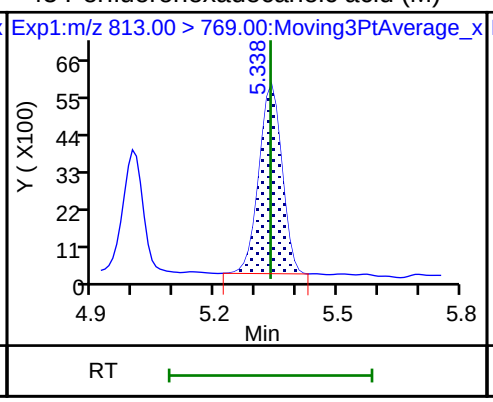

42 Perfluorotetradecanoic acid



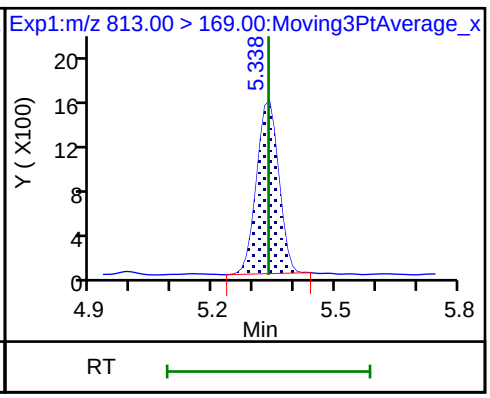

D 44 13C2 PFHxDA



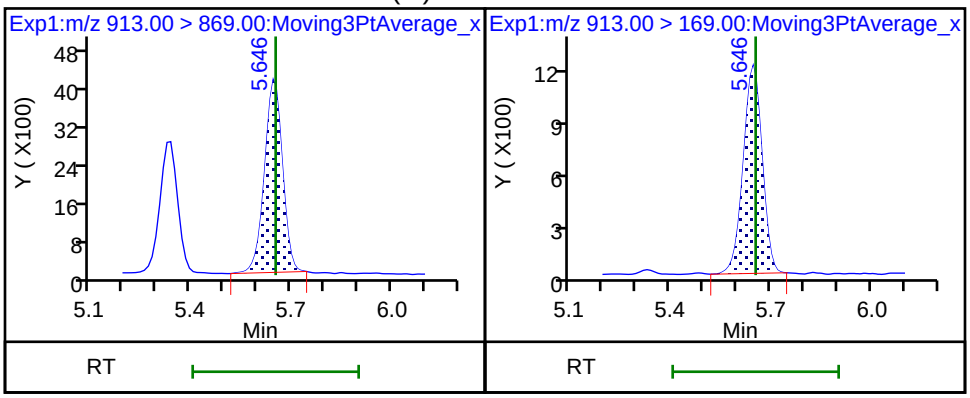

45 Perfluorohexadecanoic acid (M)




45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

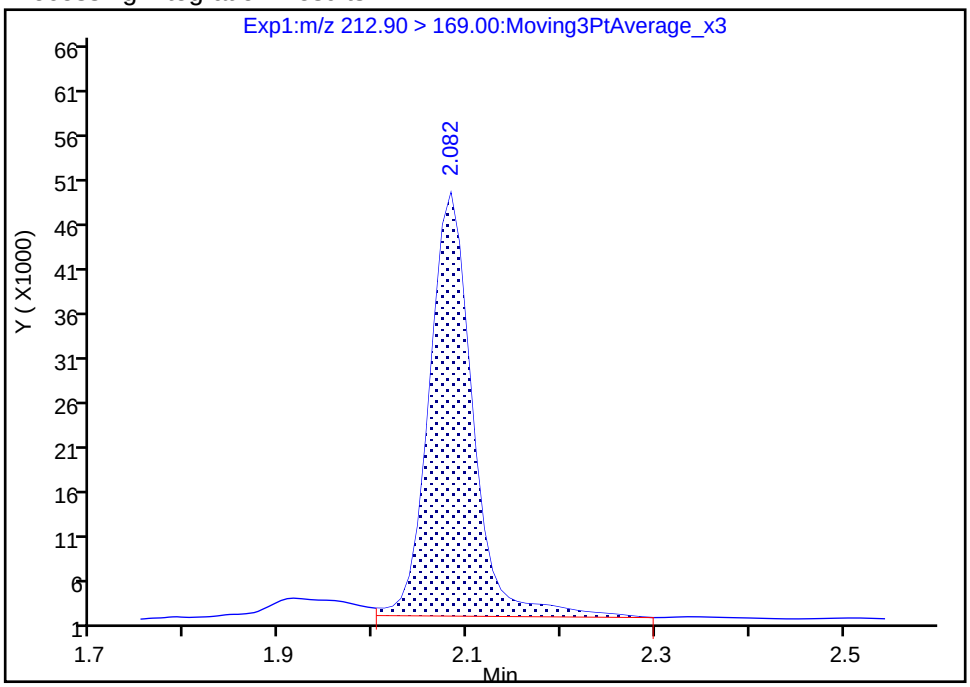
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Injection Date: 12-Mar-2021 10:38:19 Instrument ID: LC812
Lims ID: CCVL
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

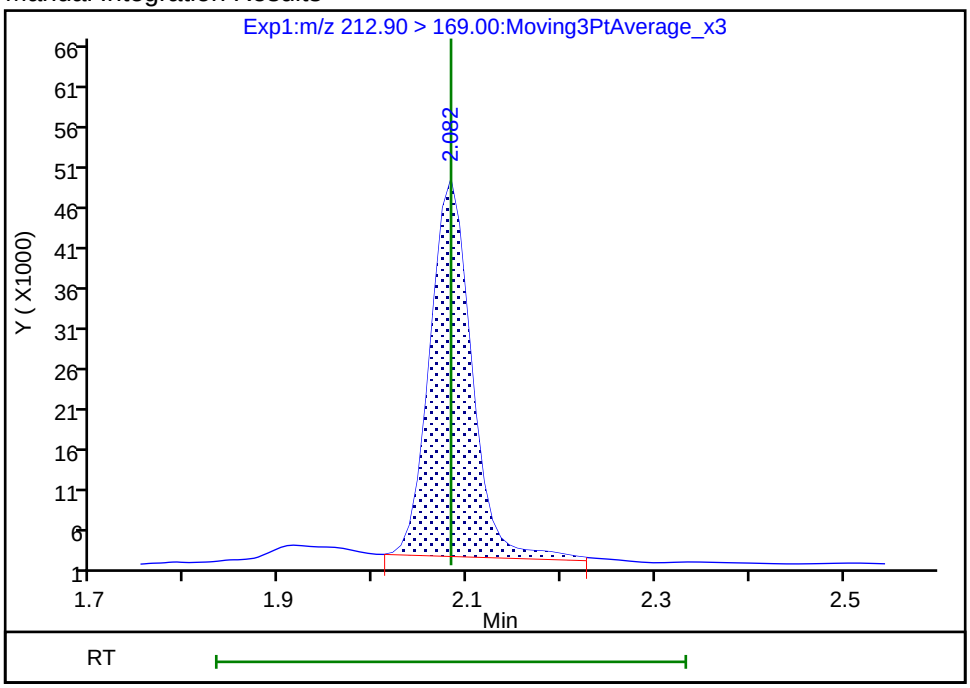
Processing Integration Results

RT: 2.08
Area: 150536
Amount: 0.135061
Amount Units: ng/ml




Manual Integration Results

RT: 2.08
Area: 142463
Amount: 0.127818
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:49:57
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

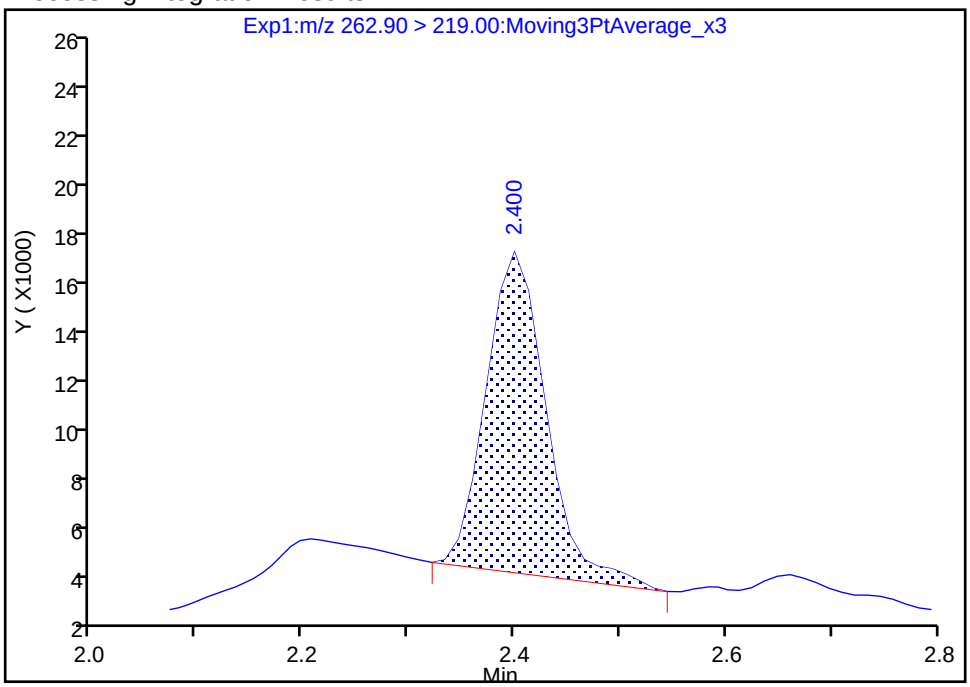
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d
Injection Date: 12-Mar-2021 10:38:19 Instrument ID: LC812
Lims ID: CCVL
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

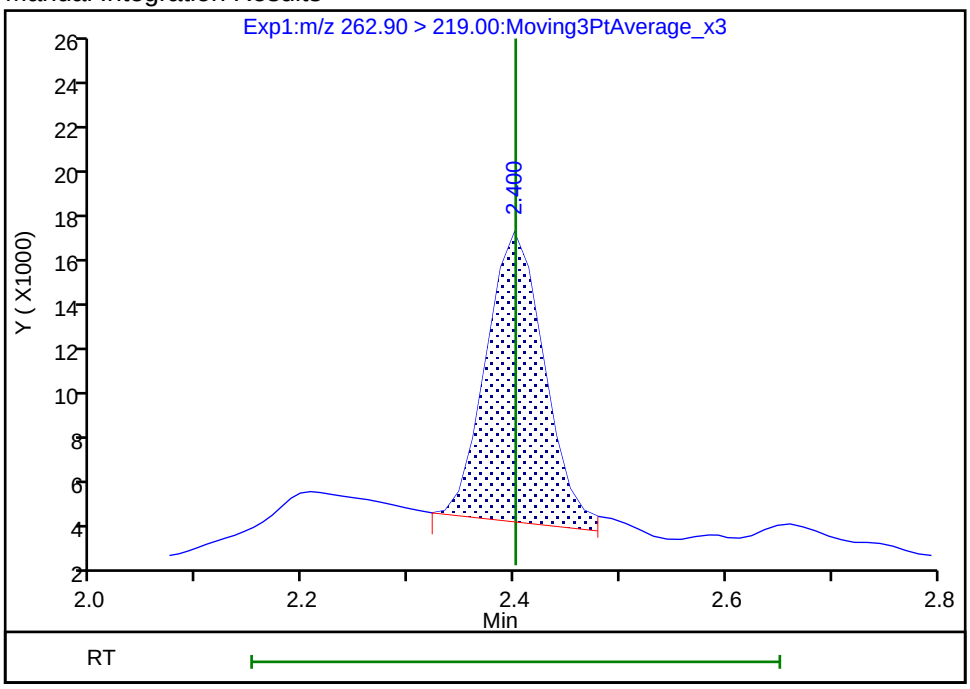
Processing Integration Results

RT: 2.40
Area: 50721
Amount: 0.057145
Amount Units: ng/ml




Manual Integration Results

RT: 2.40
Area: 49126
Amount: 0.055348
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:50:11
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

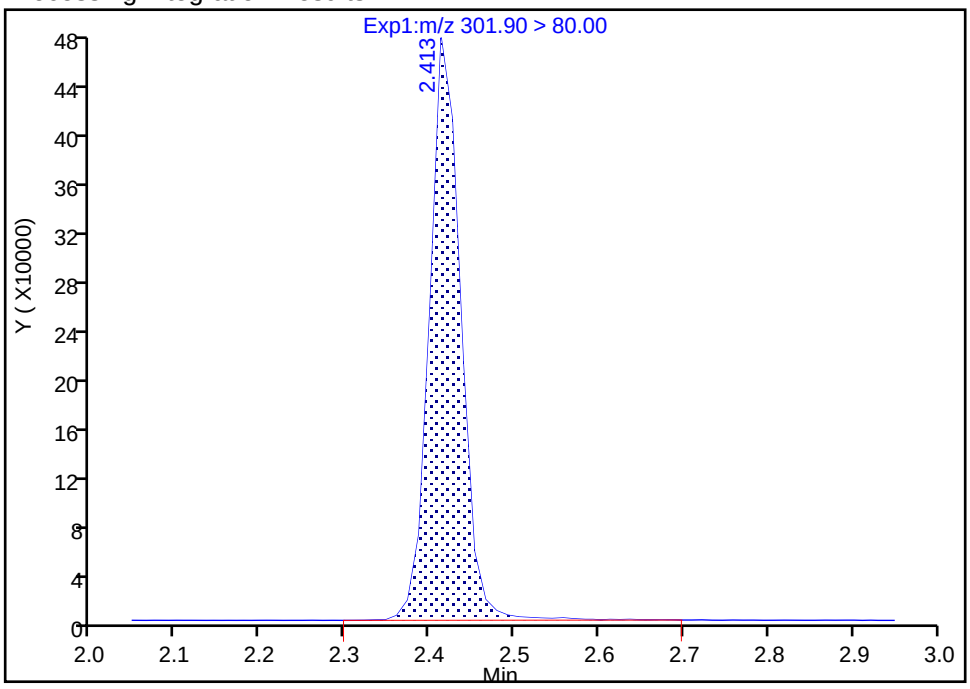
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d
Injection Date: 12-Mar-2021 10:38:19 Instrument ID: LC812
Lims ID: CCVL
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## D 47 13C3 PFBS, CAS: STL02337

Signal: 1

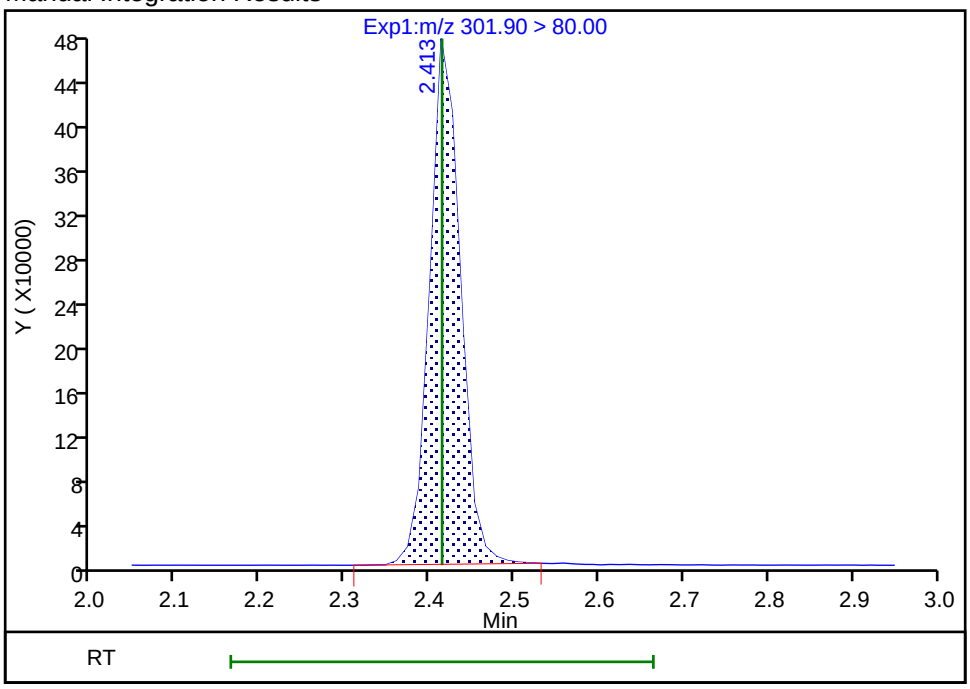
Processing Integration Results

RT: 2.41
Area: 1219548
Amount: 1.123879
Amount Units: ng/ml




Manual Integration Results

RT: 2.41
Area: 1202417
Amount: 1.108092
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:50:18
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

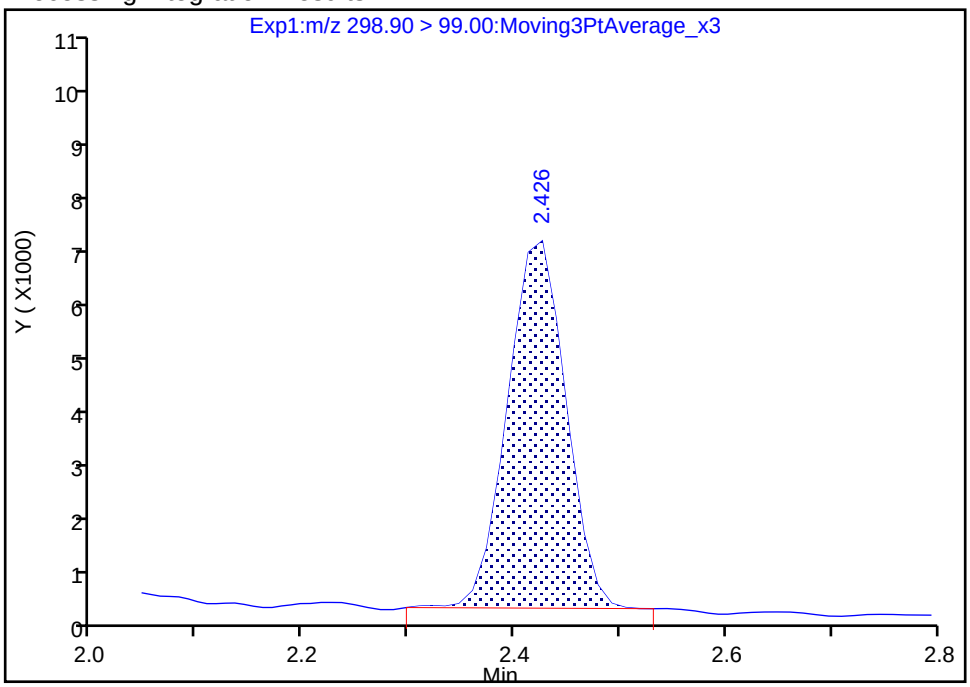
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d
Injection Date: 12-Mar-2021 10:38:19 Instrument ID: LC812
Lims ID: CCVL
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

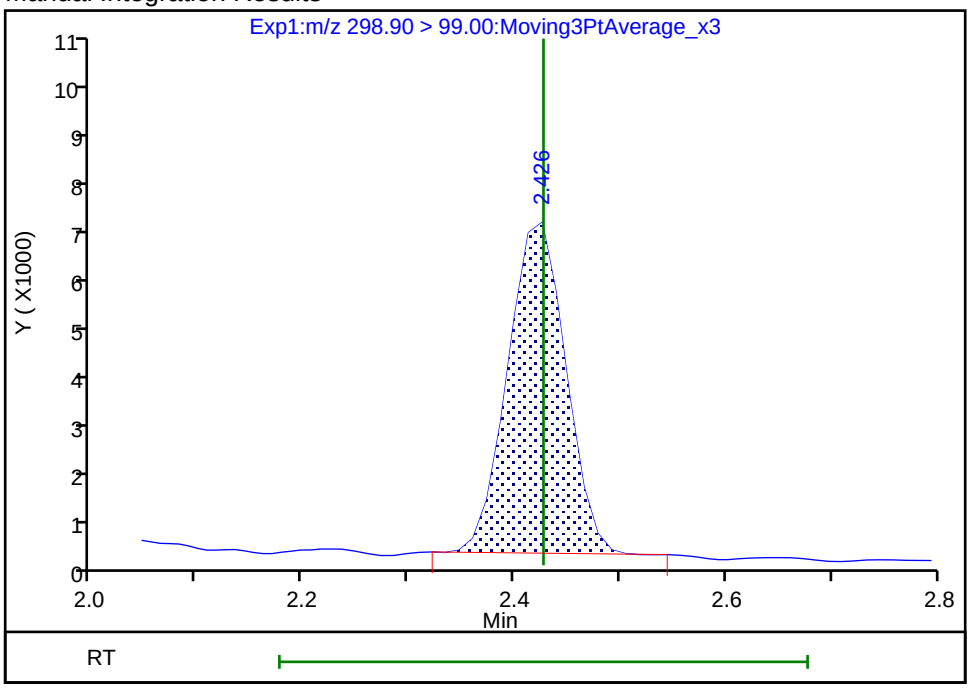
Processing Integration Results

RT: 2.43
Area: 24573
Amount: 0.045747
Amount Units: ng/ml




Manual Integration Results

RT: 2.43
Area: 24288
Amount: 0.045168
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:50:24
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

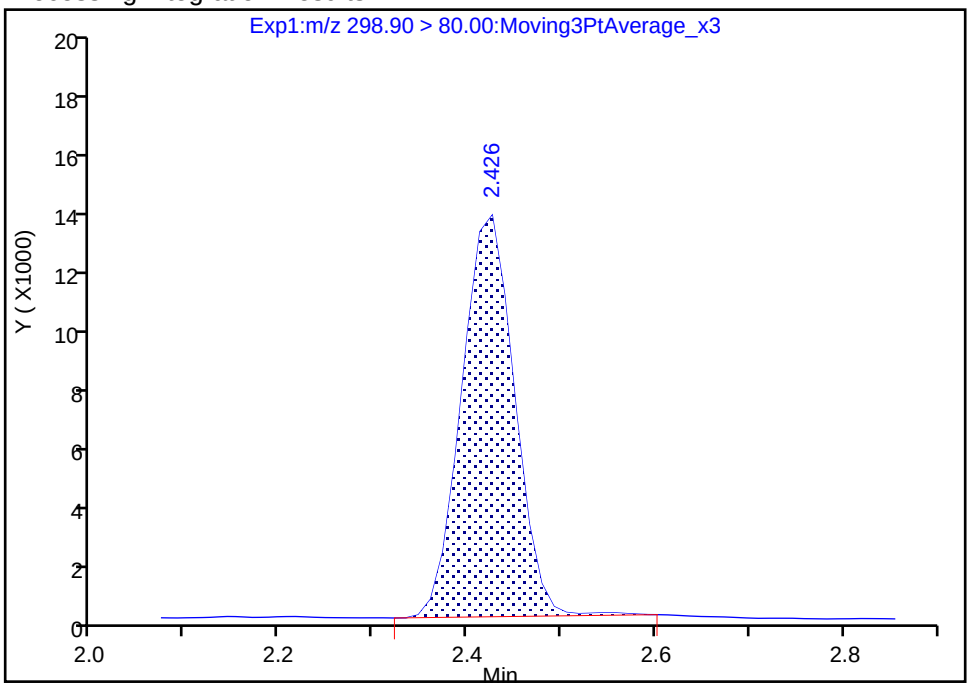
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Injection Date: 12-Mar-2021 10:38:19 Instrument ID: LC812
Lims ID: CCVL
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

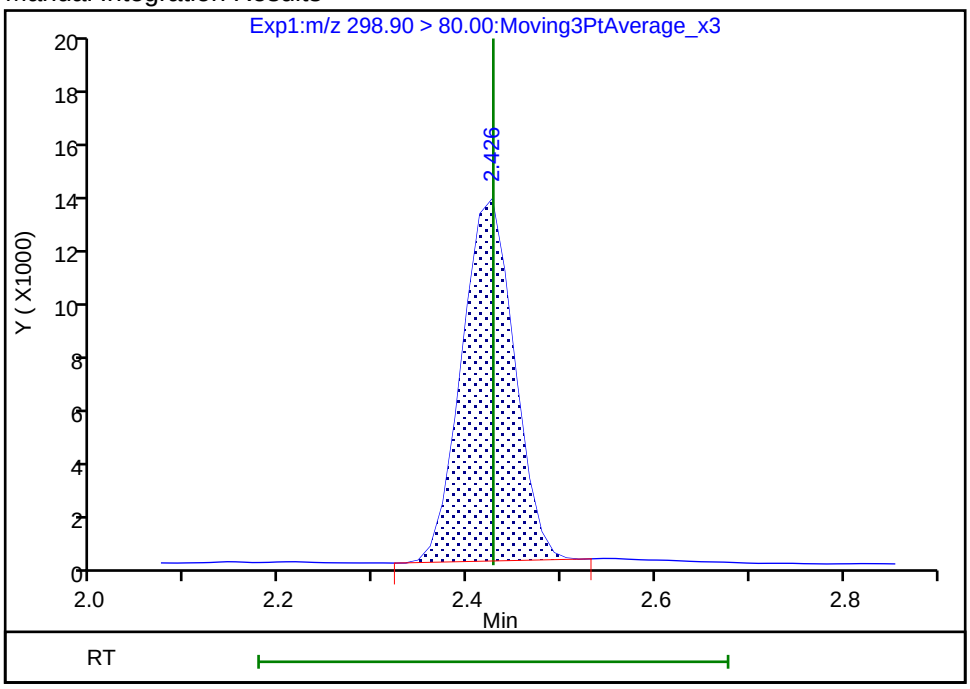
Processing Integration Results

RT: 2.43
Area: 53531
Amount: 0.045747
Amount Units: ng/ml




Manual Integration Results

RT: 2.43
Area: 52853
Amount: 0.045168
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:50:28
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

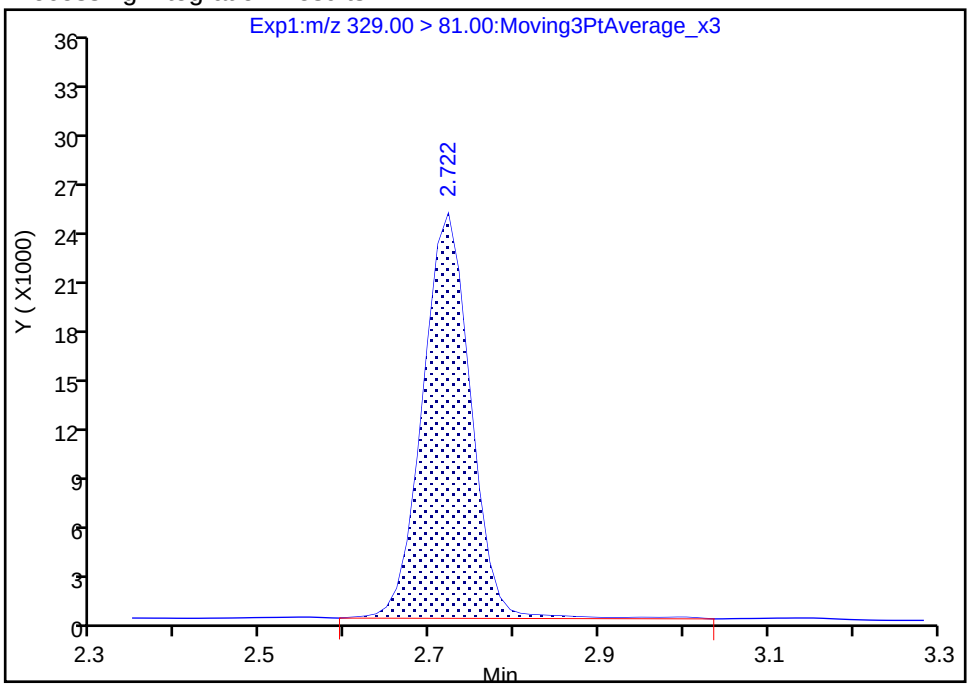
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d
Injection Date: 12-Mar-2021 10:38:19 Instrument ID: LC812
Lims ID: CCVL
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

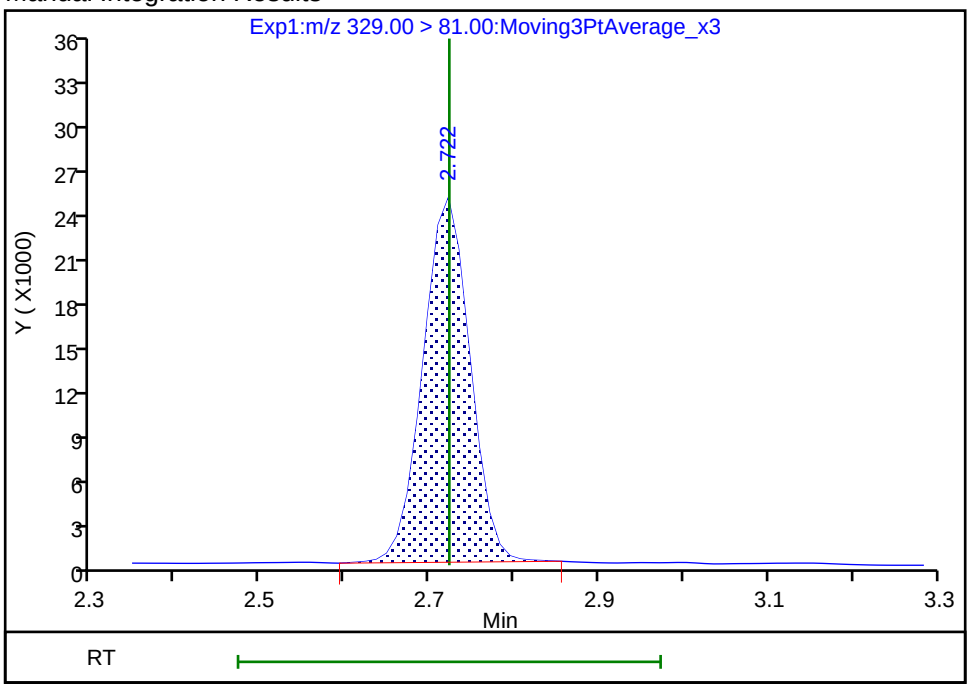
Processing Integration Results

RT: 2.72
Area: 98108
Amount: 1.083650
Amount Units: ng/ml




Manual Integration Results

RT: 2.72
Area: 96030
Amount: 1.060698
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:50:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

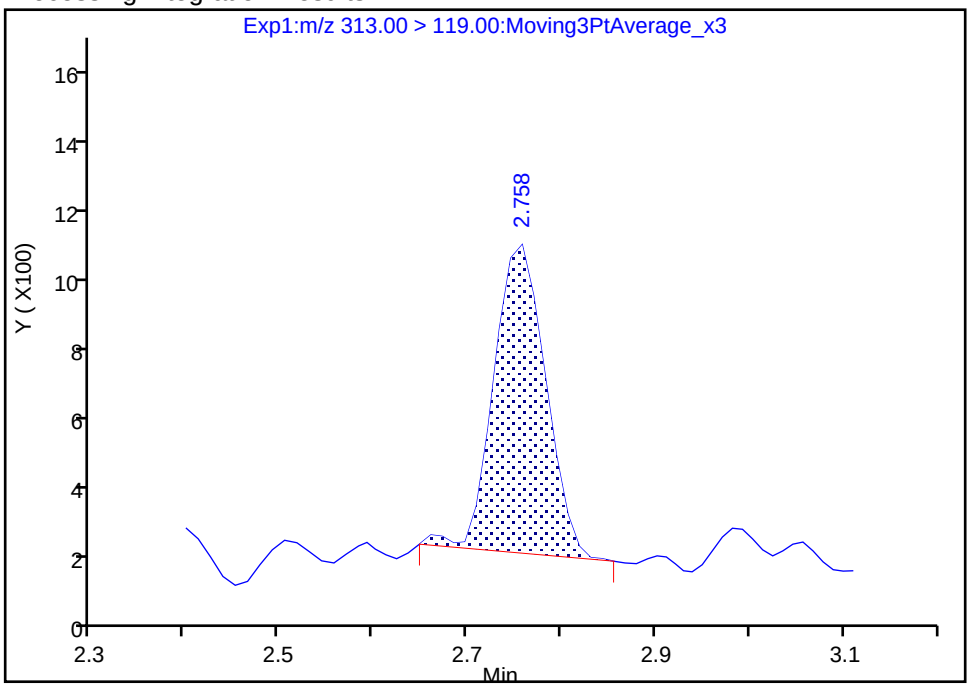
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|---|---|---|---|---|---|
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| Injection Date: | 12-Mar-2021 10:38:19 | Instrument ID: | LC812 | | |
| Lims ID: | CCVL | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

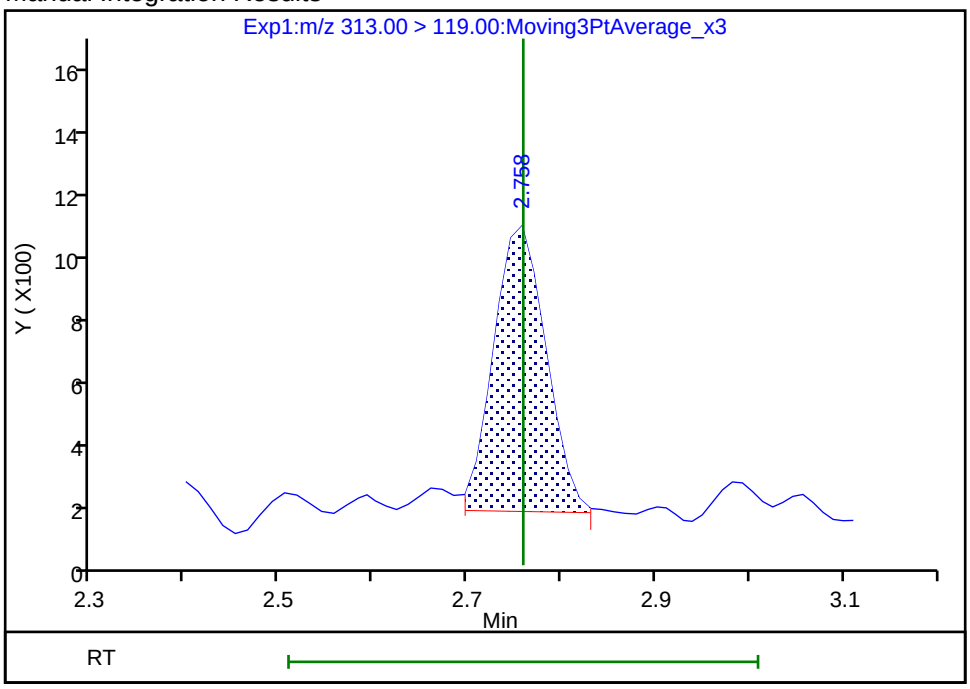
Processing Integration Results

RT: 2.76
Area: 3328
Amount: 0.047238
Amount Units: ng/ml




Manual Integration Results

RT: 2.76
Area: 3433
Amount: 0.047238
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:50:50

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

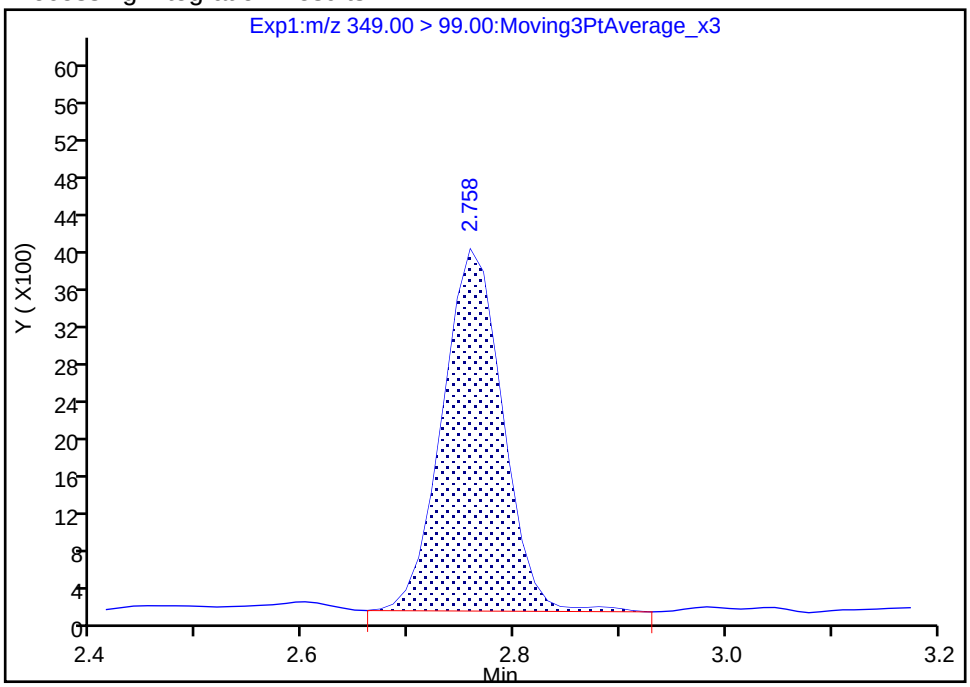
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d | | | | |
| Injection Date: | 12-Mar-2021 10:38:19 | Instrument ID: | LC812 | | |
| Lims ID: | CCVL | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 2

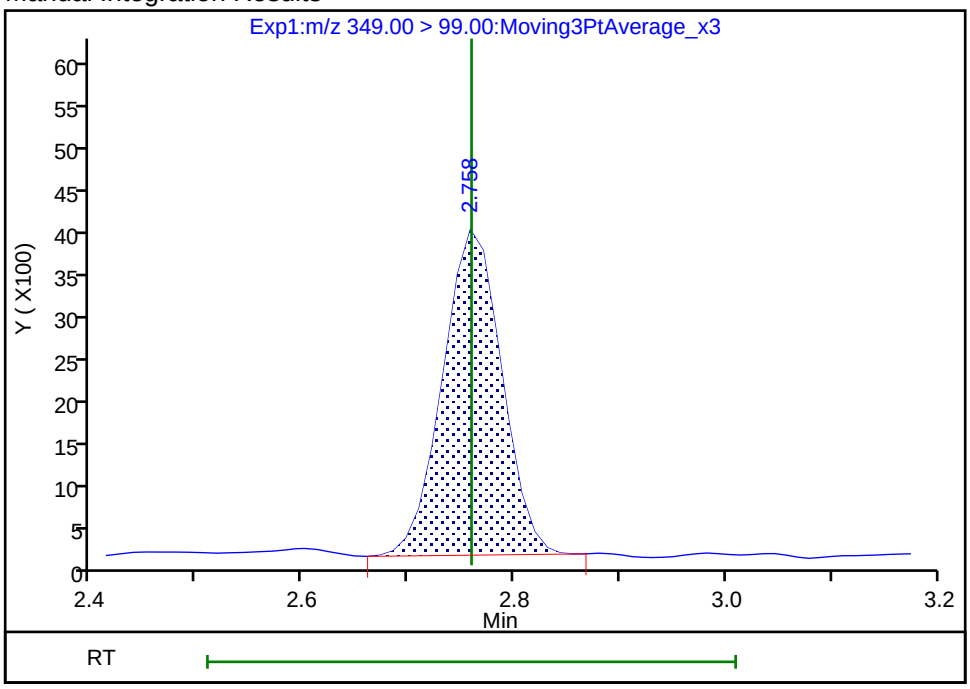
Processing Integration Results

RT: 2.76
Area: 15311
Amount: 0.048185
Amount Units: ng/ml




Manual Integration Results

RT: 2.76
Area: 14955
Amount: 0.048185
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:50:56
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

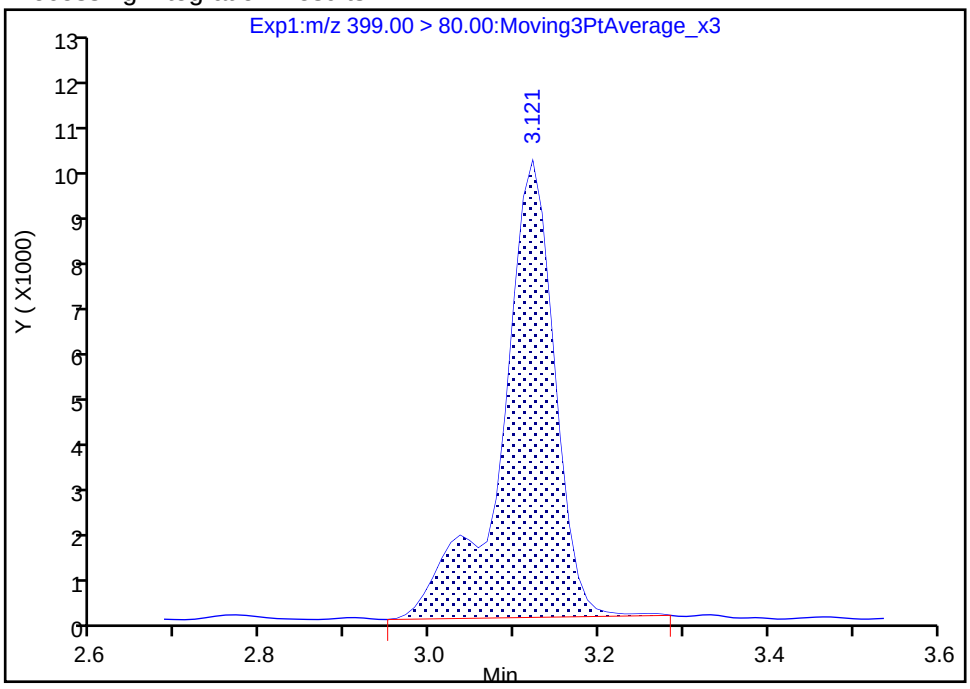
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d | | | | |
| Injection Date: | 12-Mar-2021 10:38:19 | Instrument ID: | LC812 | | |
| Lims ID: | CCVL | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

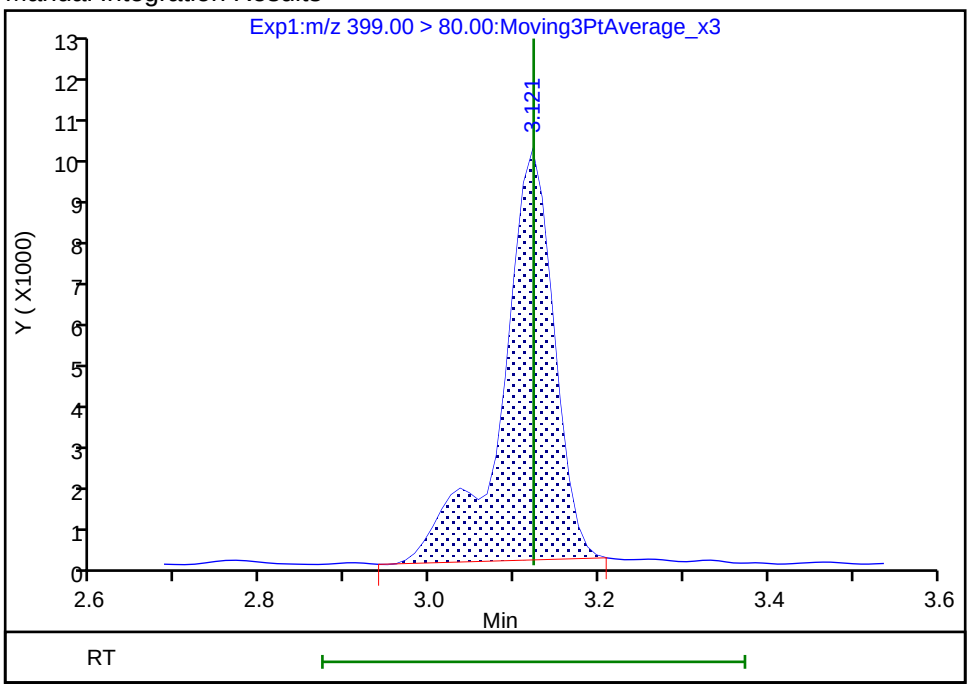
Processing Integration Results

RT: 3.12
Area: 42712
Amount: 0.046933
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 41756
Amount: 0.045882
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:51:08

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

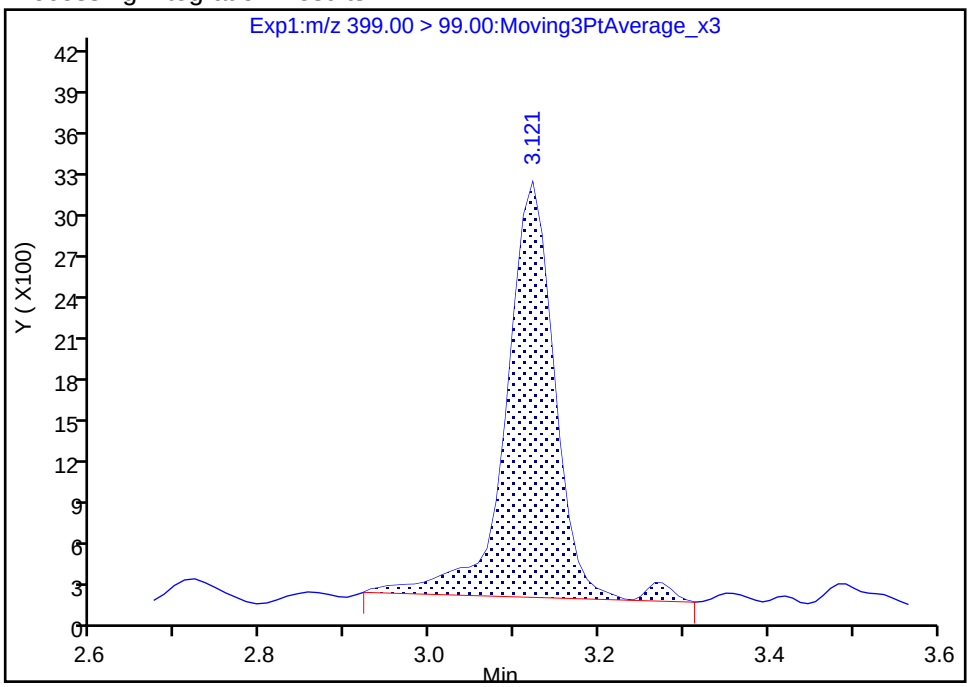
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d
Injection Date: 12-Mar-2021 10:38:19 Instrument ID: LC812
Lims ID: CCVL
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

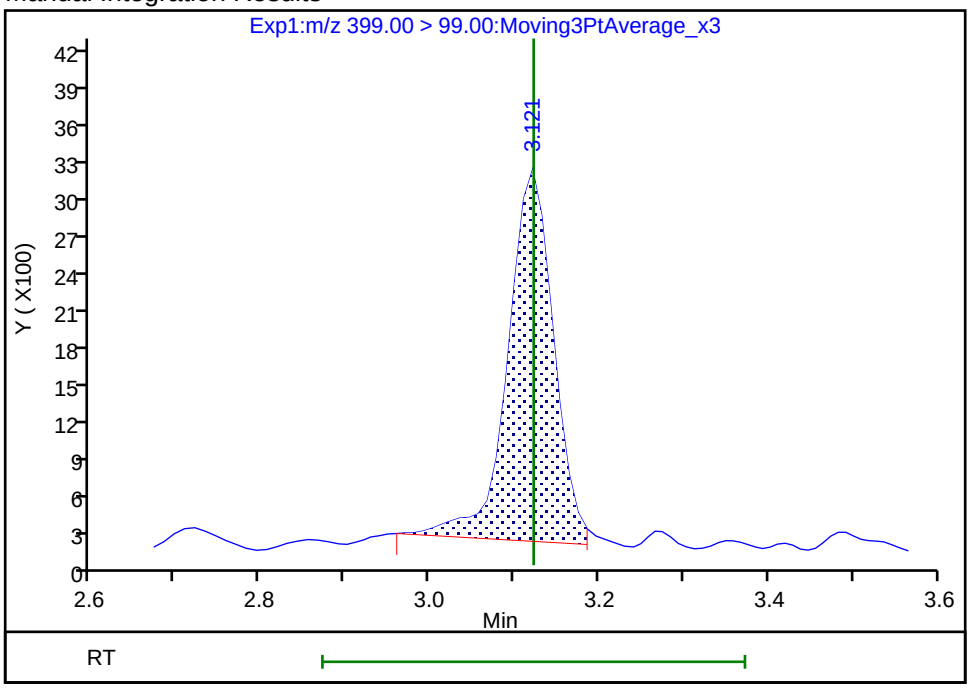
Processing Integration Results

RT: 3.12
Area: 12323
Amount: 0.046933
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 11314
Amount: 0.045882
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:51:17
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

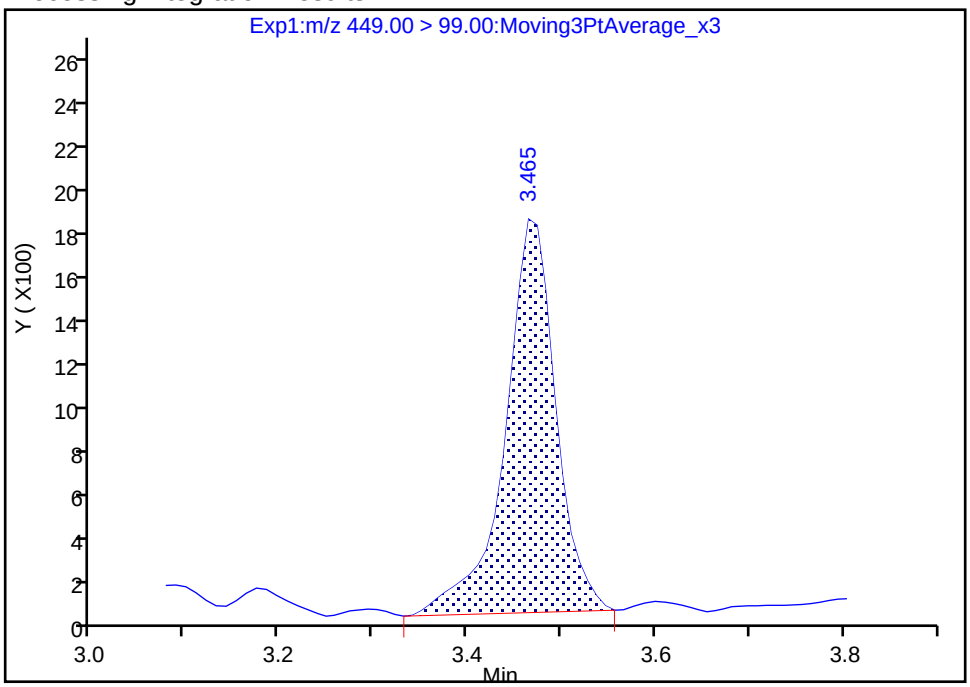
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d
Injection Date: 12-Mar-2021 10:38:19 Instrument ID: LC812
Lims ID: CCVL
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

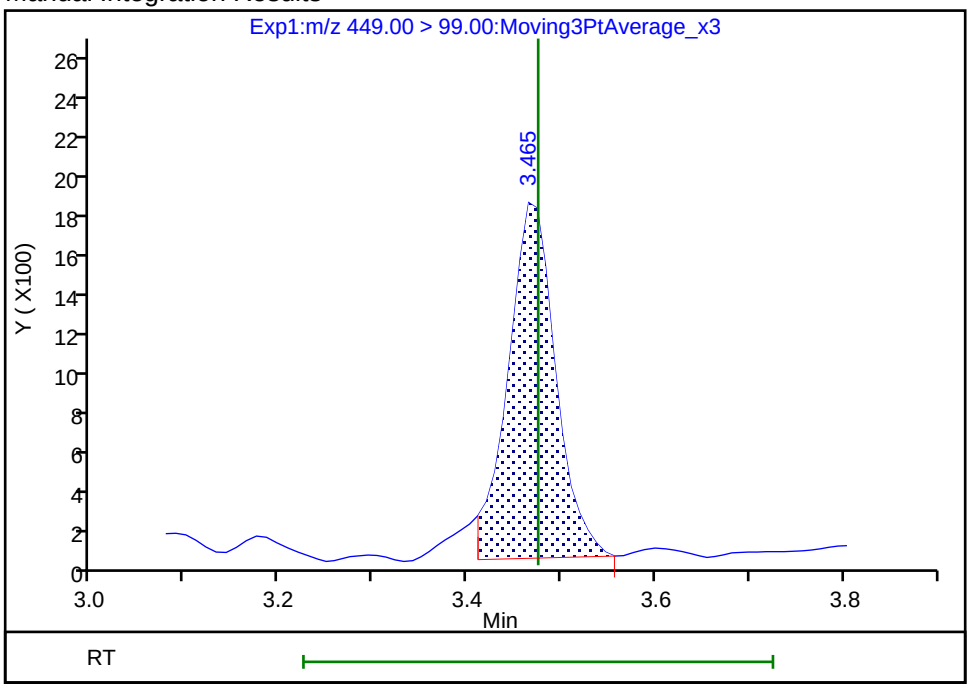
Processing Integration Results

RT: 3.46
Area: 6661
Amount: 0.042275
Amount Units: ng/ml




Manual Integration Results

RT: 3.46
Area: 6237
Amount: 0.042275
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:51:28
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

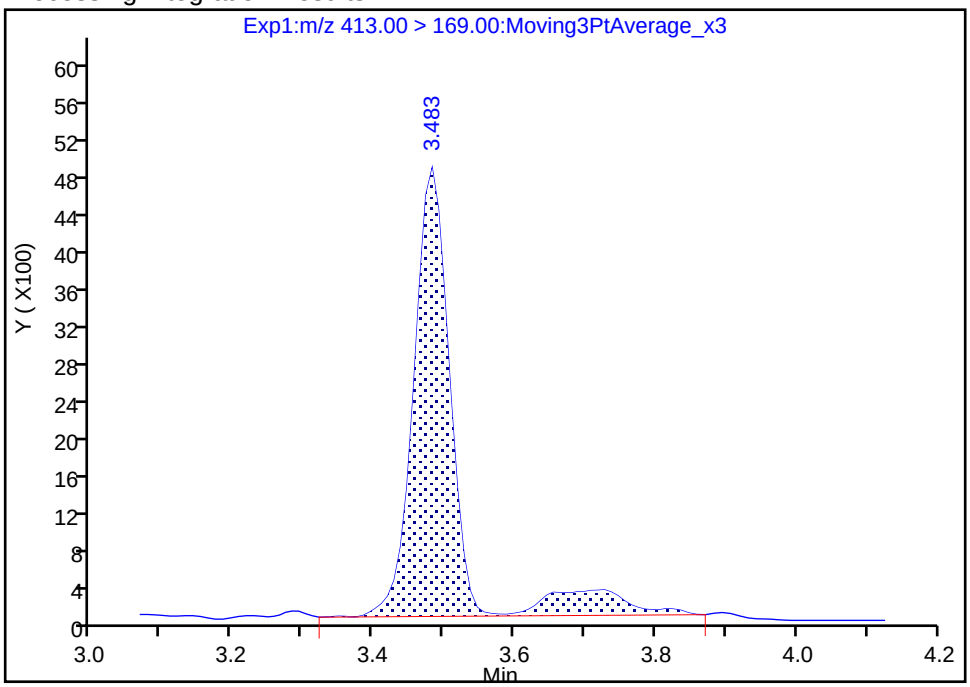
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d | | | | |
| Injection Date: | 12-Mar-2021 10:38:19 | Instrument ID: | LC812 | | |
| Lims ID: | CCVL | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

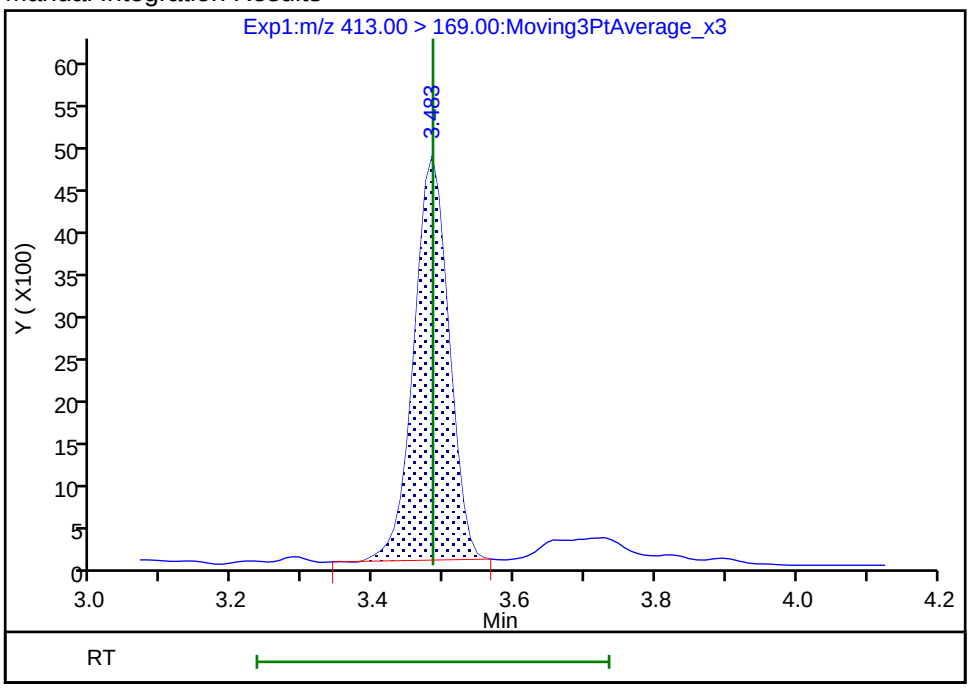
Processing Integration Results

RT: 3.48
Area: 18881
Amount: 0.050597
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 16361
Amount: 0.050597
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:51:39

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

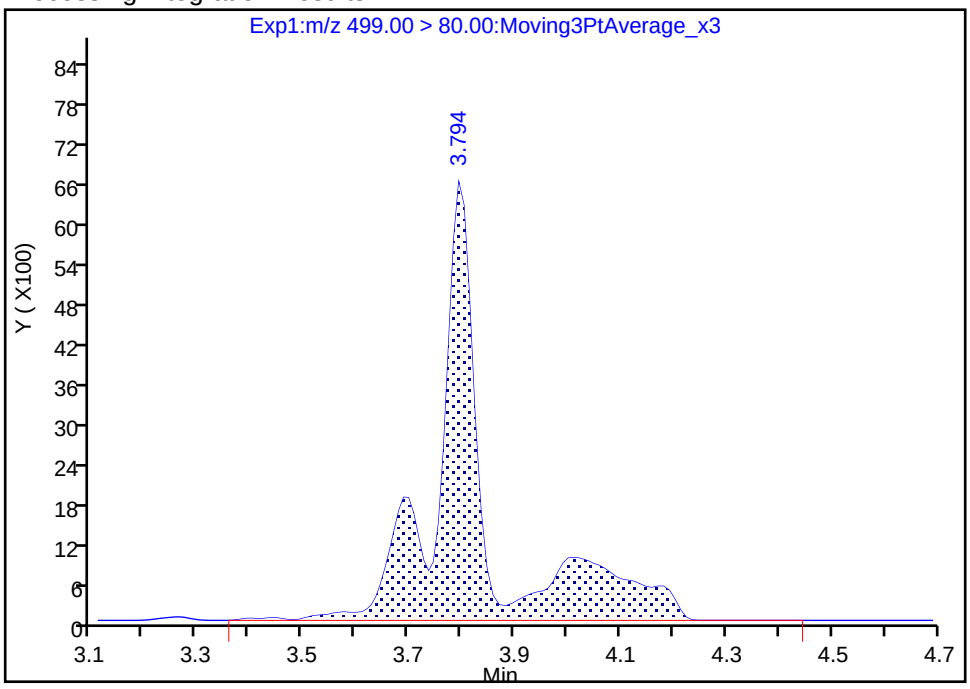
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d
Injection Date: 12-Mar-2021 10:38:19 Instrument ID: LC812
Lims ID: CCVL
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

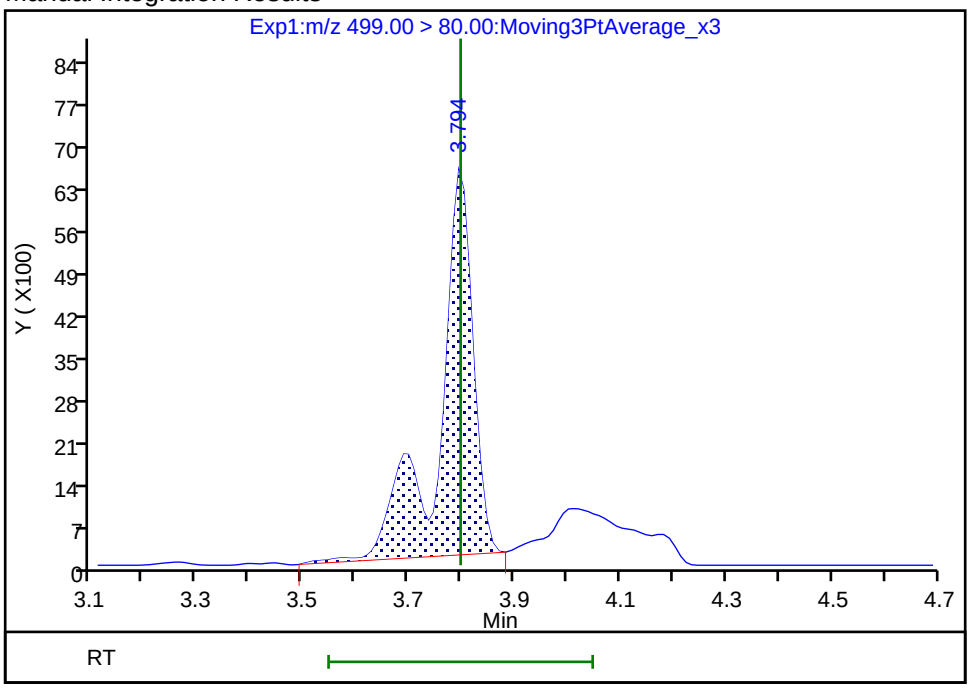
Processing Integration Results

RT: 3.79
Area: 43343
Amount: 0.067299
Amount Units: ng/ml




Manual Integration Results

RT: 3.79
Area: 28815
Amount: 0.044742
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:51:44
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

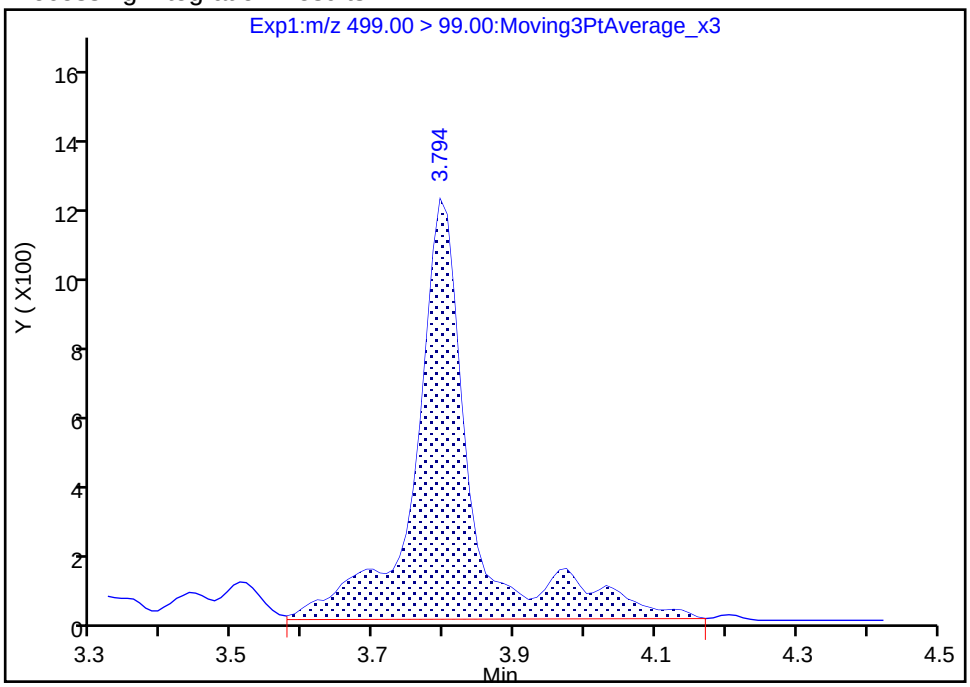
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d
Injection Date: 12-Mar-2021 10:38:19 Instrument ID: LC812
Lims ID: CCVL
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

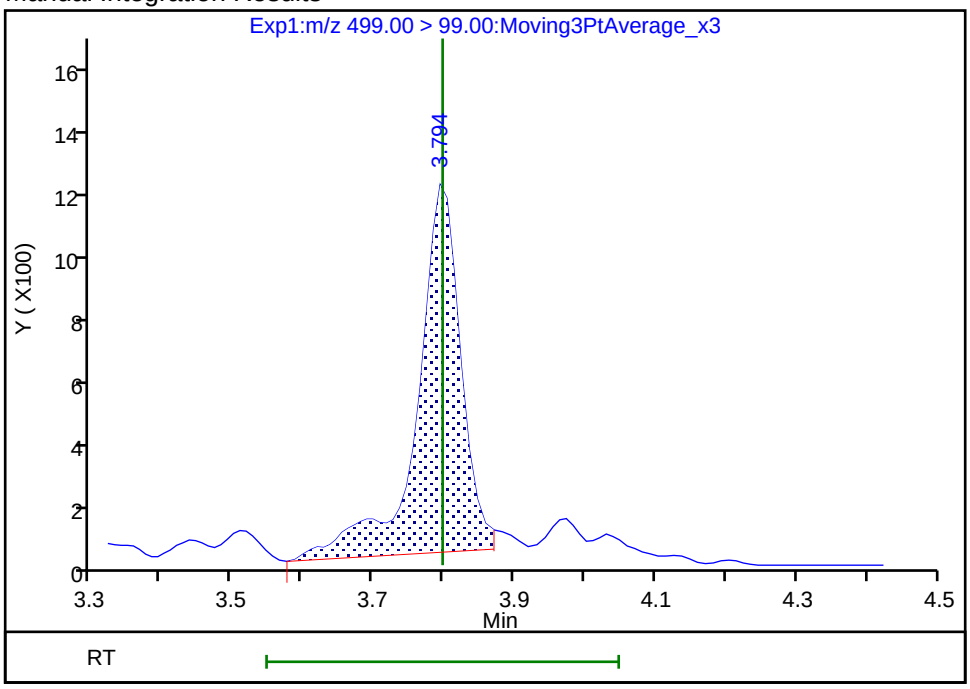
Processing Integration Results

RT: 3.79
Area: 6761
Amount: 0.067299
Amount Units: ng/ml




Manual Integration Results

RT: 3.79
Area: 5050
Amount: 0.044742
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:52:03
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

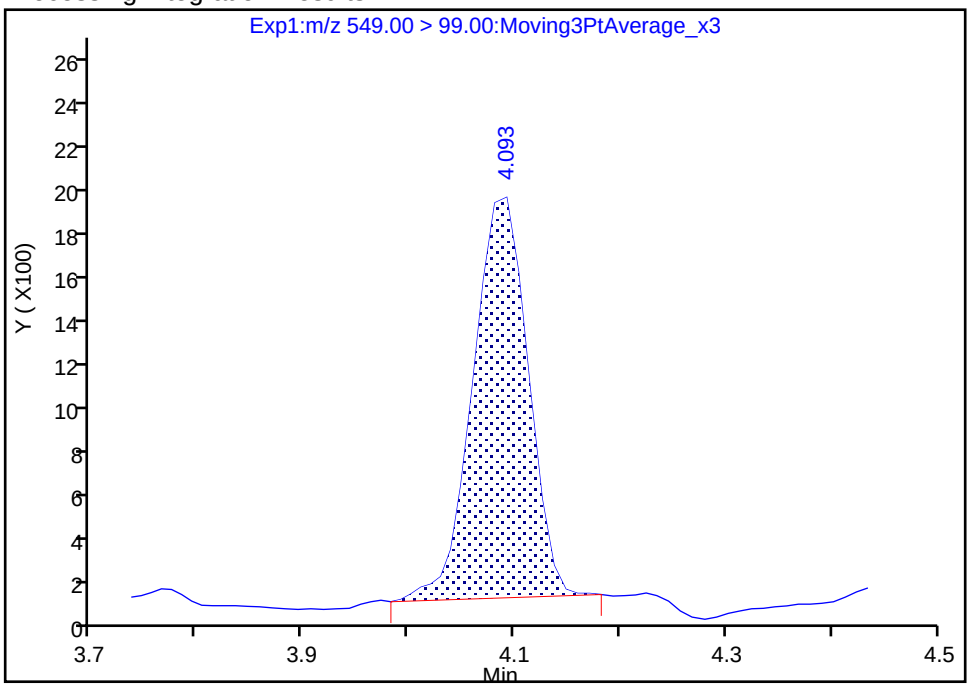
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| Injection Date: | 12-Mar-2021 10:38:19 | Instrument ID: | LC812 | | |
| Lims ID: | CCVL | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

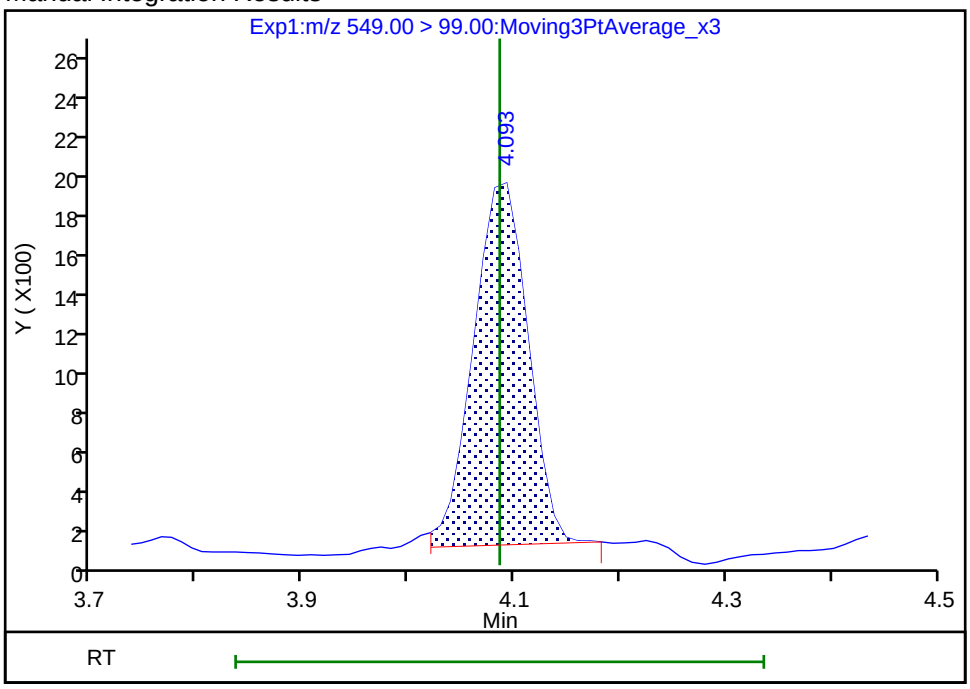
Processing Integration Results

RT: 4.09
Area: 6632
Amount: 0.043621
Amount Units: ng/ml




Manual Integration Results

RT: 4.09
Area: 6554
Amount: 0.043621
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:52:14

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

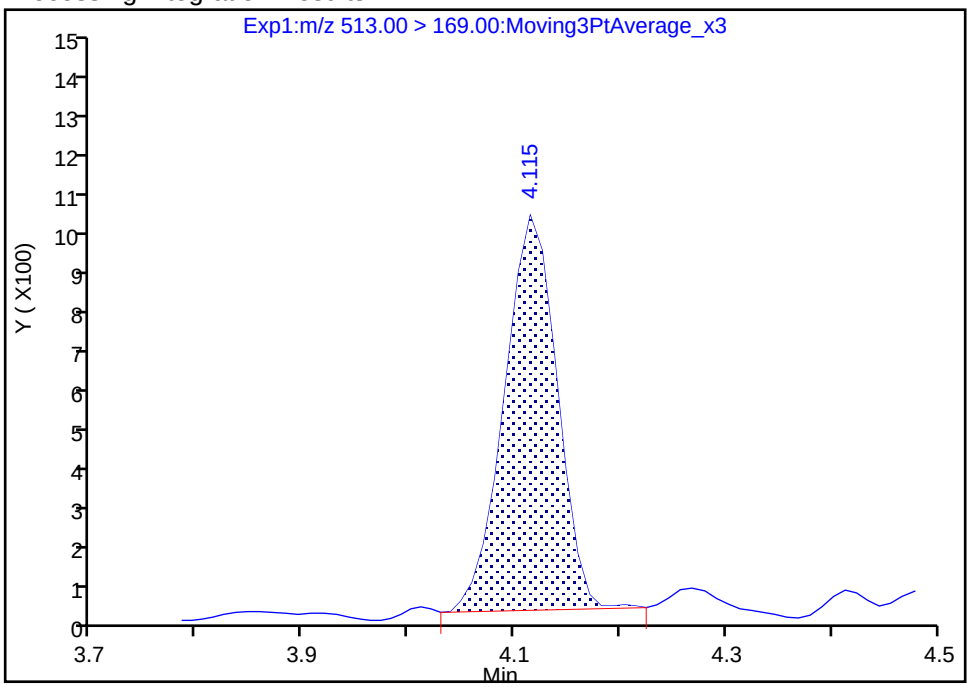
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d | | | | |
| Injection Date: | 12-Mar-2021 10:38:19 | Instrument ID: | LC812 | | |
| Lims ID: | CCVL | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

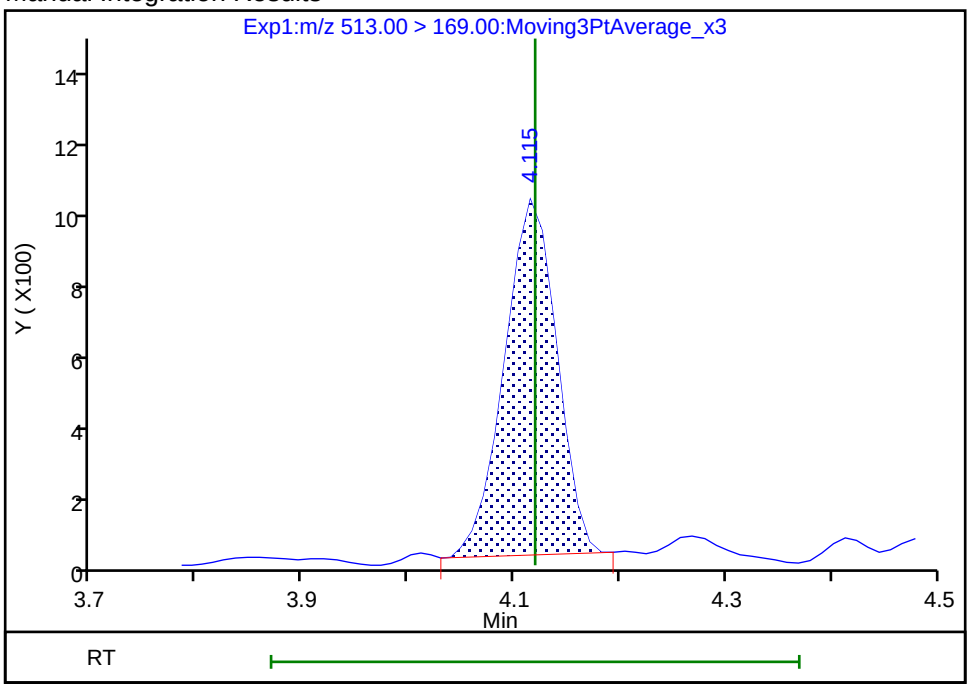
Processing Integration Results

RT: 4.11
Area: 3438
Amount: 0.047013
Amount Units: ng/ml




Manual Integration Results

RT: 4.11
Area: 3399
Amount: 0.047013
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:52:22

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

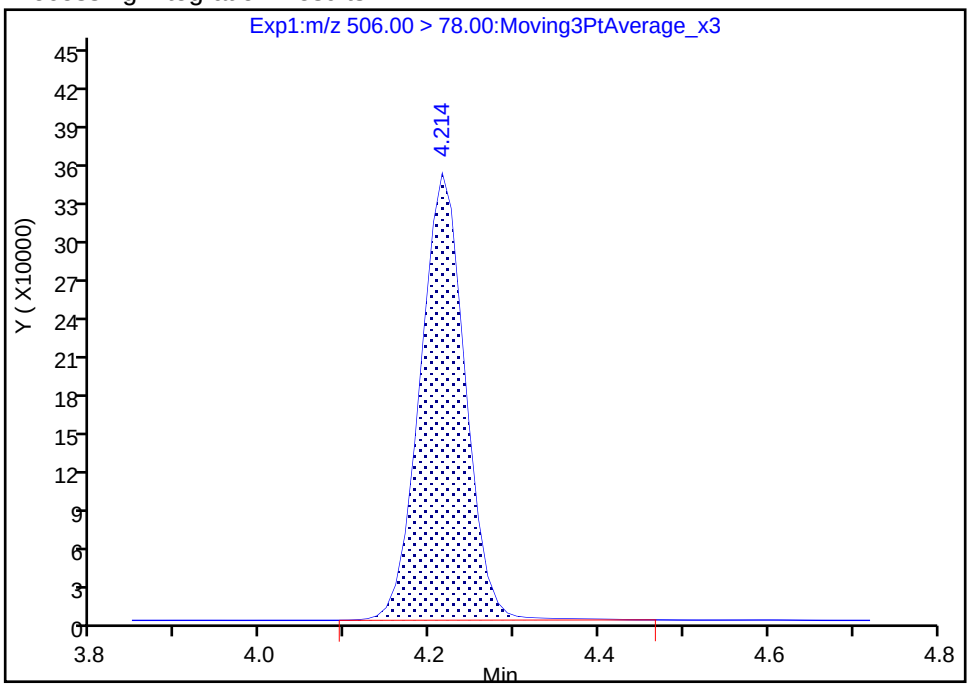
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d
Injection Date: 12-Mar-2021 10:38:19 Instrument ID: LC812
Lims ID: CCVL
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## D 21 13C8 FOSA, CAS: STL01056

Signal: 1

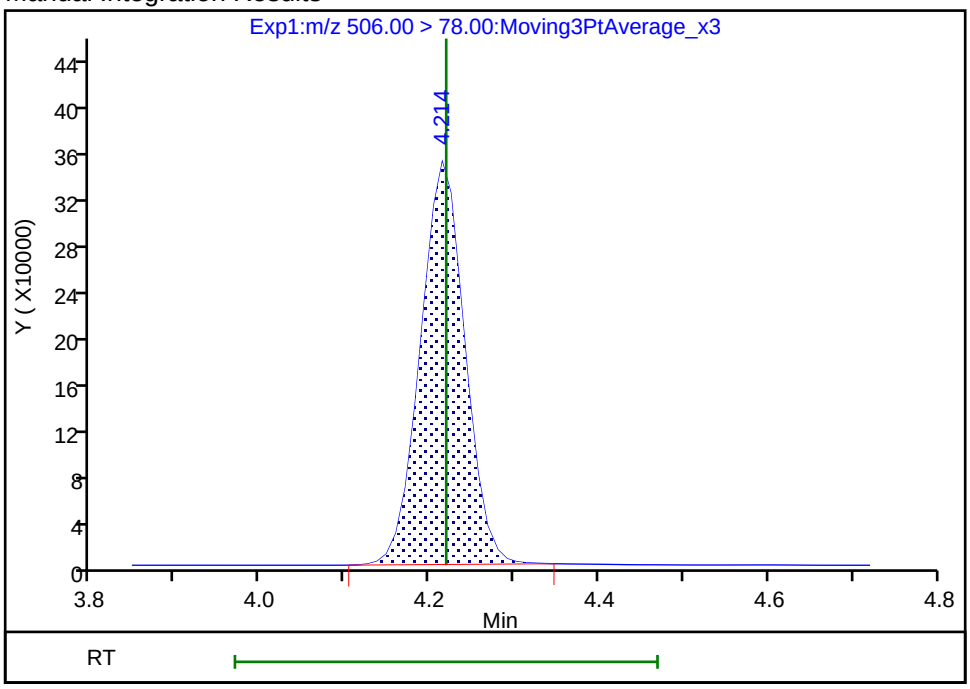
Processing Integration Results

RT: 4.21
Area: 1275402
Amount: 1.224119
Amount Units: ng/ml




Manual Integration Results

RT: 4.21
Area: 1264199
Amount: 1.213367
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:52:31
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

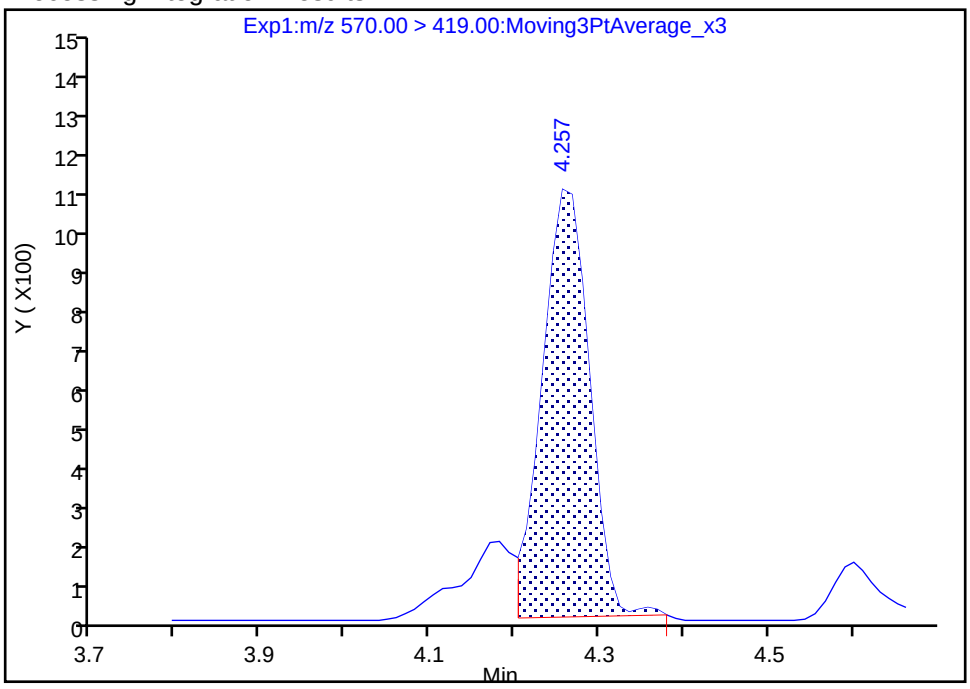
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d | | | | |
| Injection Date: | 12-Mar-2021 10:38:19 | Instrument ID: | LC812 | | |
| Lims ID: | CCVL | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

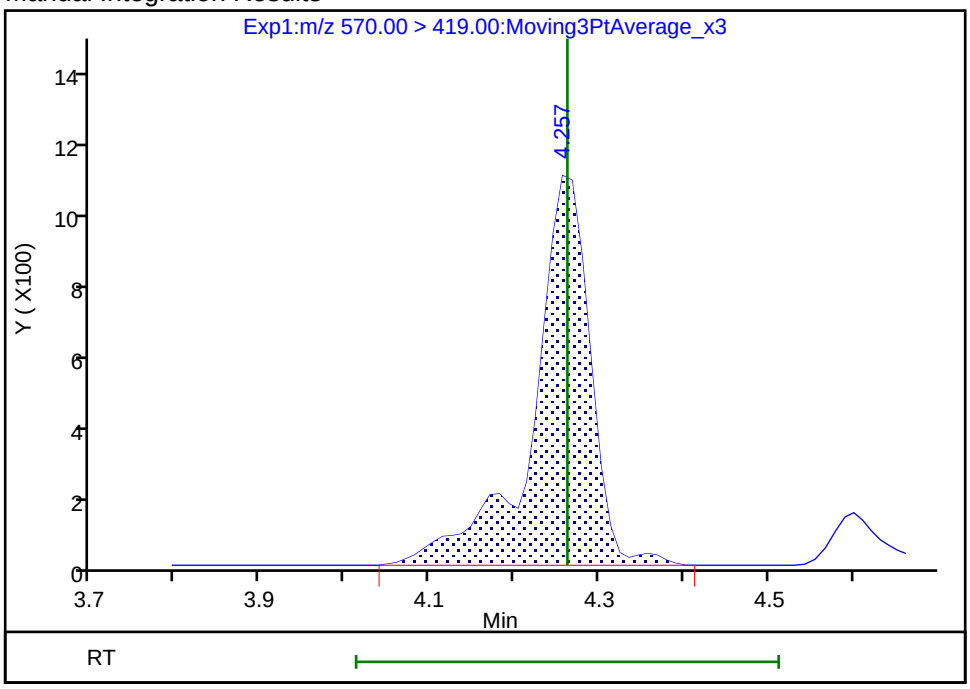
Processing Integration Results

RT: 4.26
Area: 4202
Amount: 0.109629
Amount Units: ng/ml




Manual Integration Results

RT: 4.26
Area: 5207
Amount: 0.135849
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:53:17
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

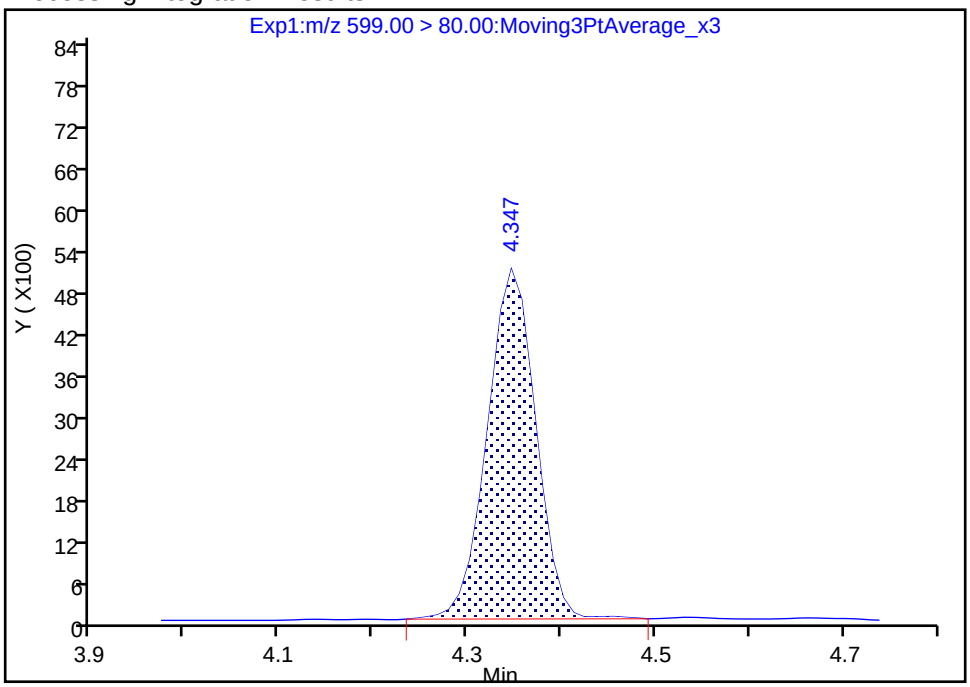
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d
Injection Date: 12-Mar-2021 10:38:19 Instrument ID: LC812
Lims ID: CCVL
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

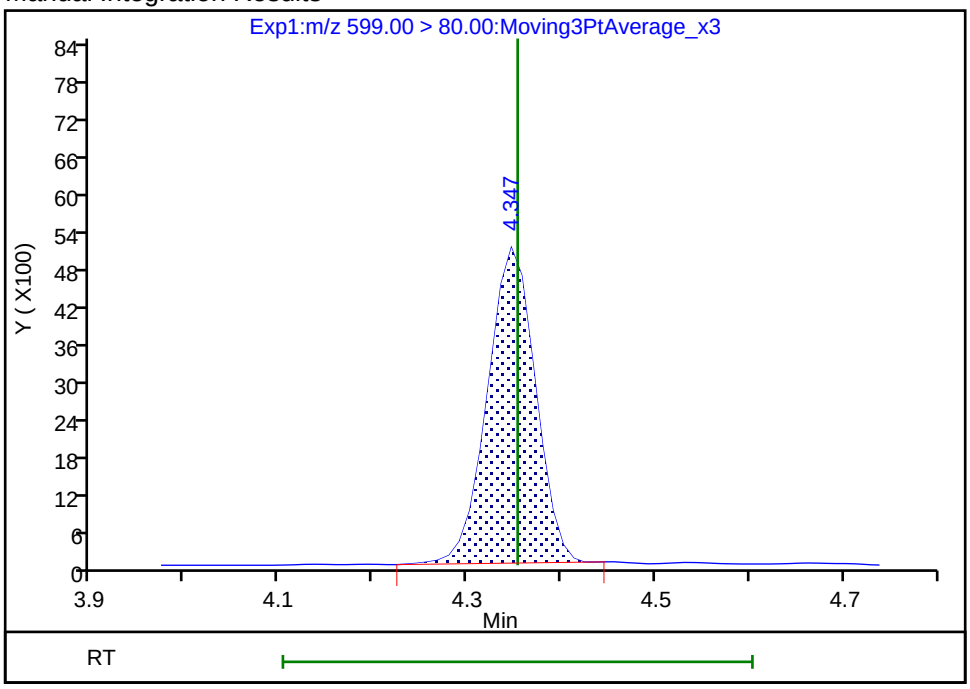
Processing Integration Results

RT: 4.35
Area: 18157
Amount: 0.047398
Amount Units: ng/ml




Manual Integration Results

RT: 4.35
Area: 17939
Amount: 0.046829
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:53:24
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

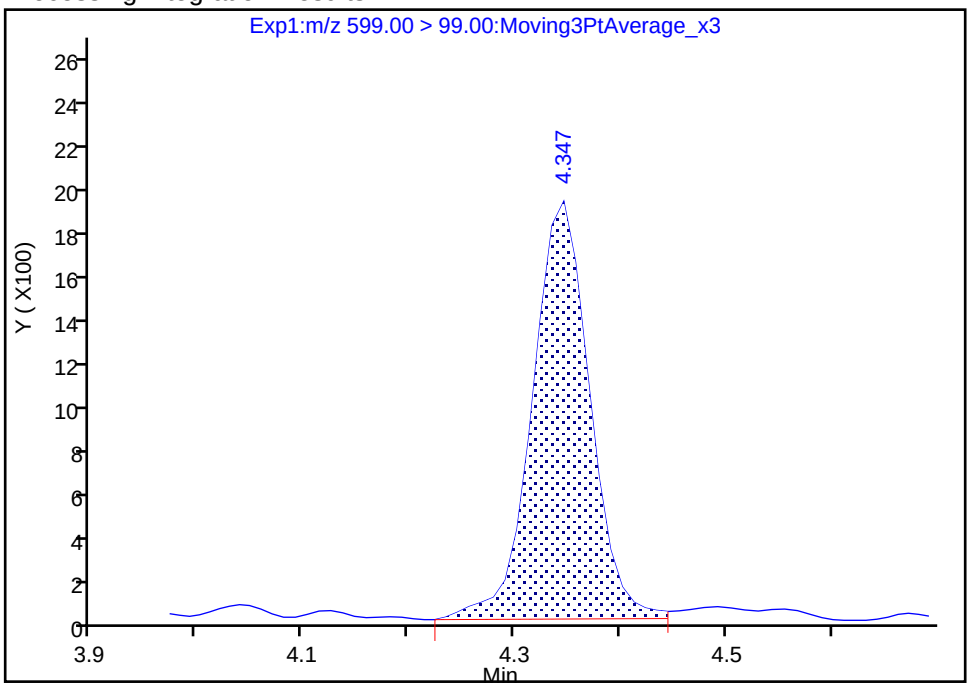
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d
Injection Date: 12-Mar-2021 10:38:19 Instrument ID: LC812
Lims ID: CCVL
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

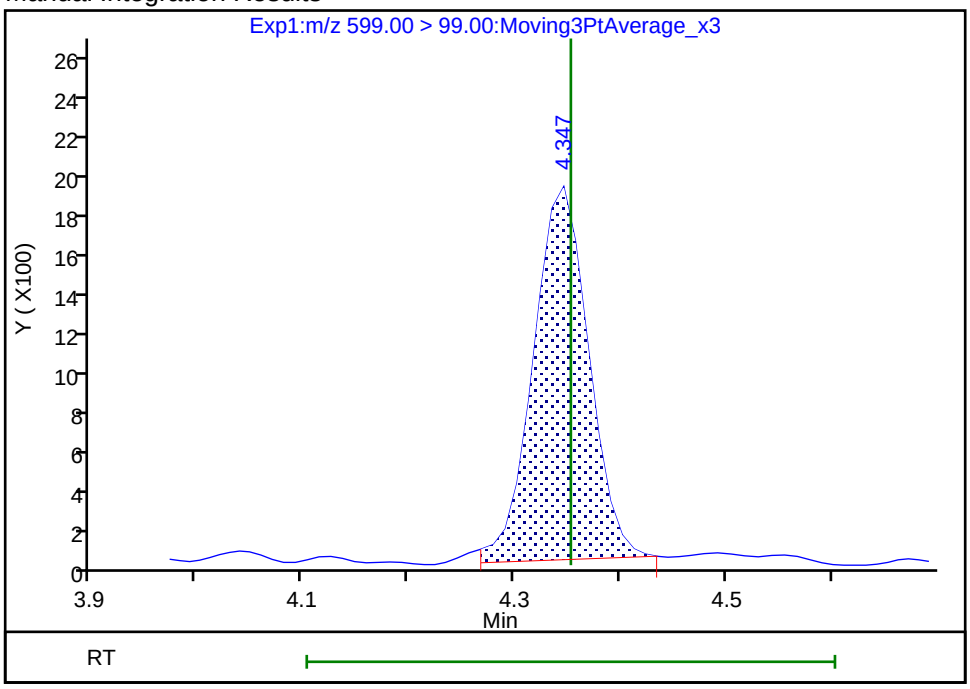
Processing Integration Results

RT: 4.35
Area: 7154
Amount: 0.047398
Amount Units: ng/ml




Manual Integration Results

RT: 4.35
Area: 6812
Amount: 0.046829
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:53:31
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

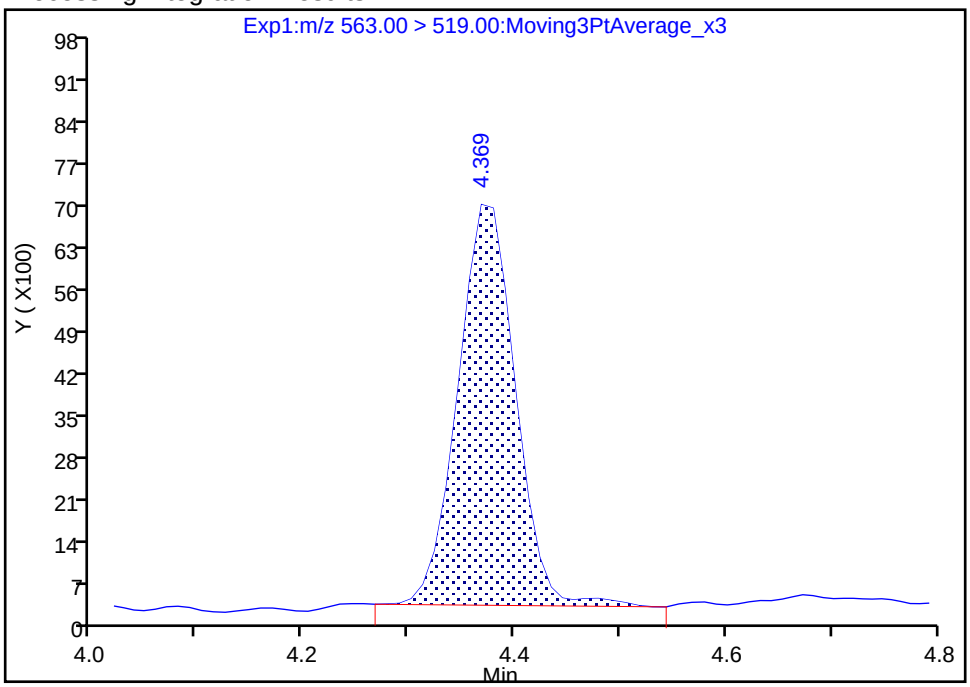
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d | | | | |
| Injection Date: | 12-Mar-2021 10:38:19 | Instrument ID: | LC812 | | |
| Lims ID: | CCVL | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

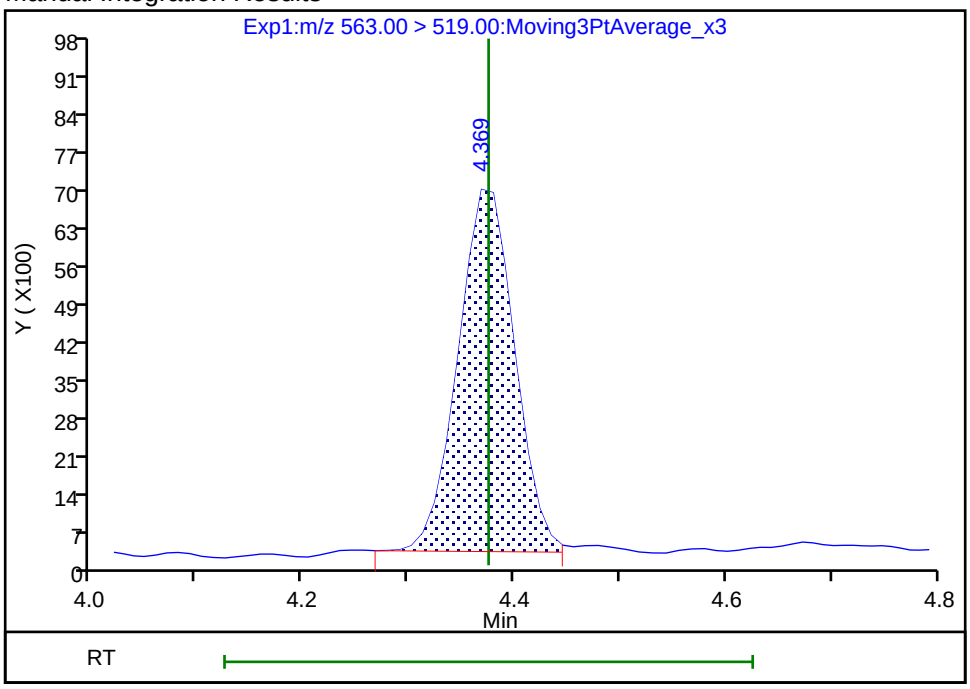
Processing Integration Results

RT: 4.37
Area: 25260
Amount: 0.051150
Amount Units: ng/ml




Manual Integration Results

RT: 4.37
Area: 24828
Amount: 0.050276
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:53:37
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

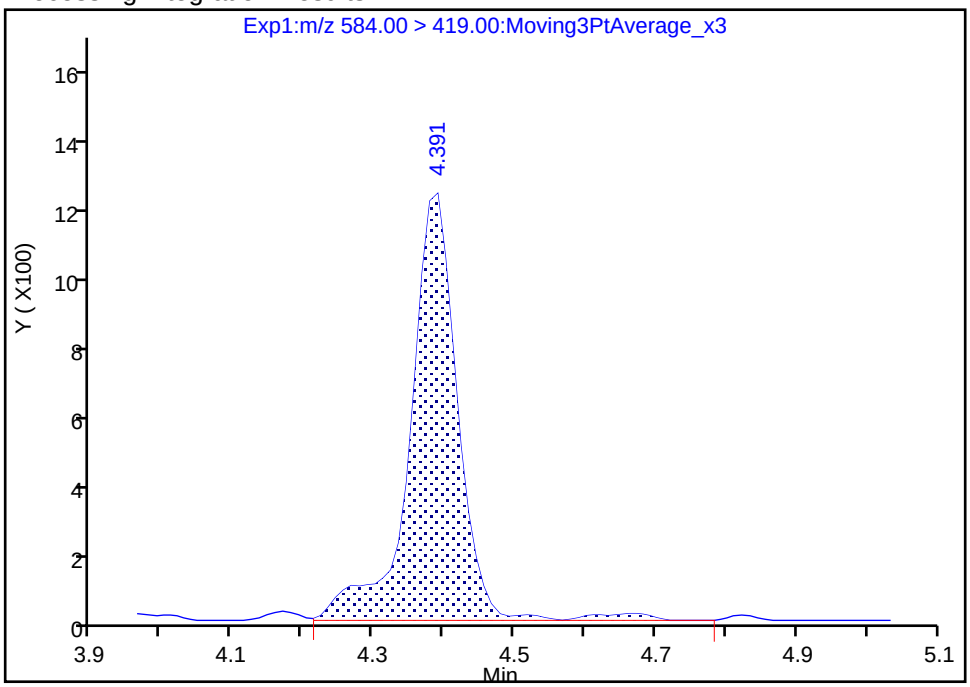
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d | | | | |
| Injection Date: | 12-Mar-2021 10:38:19 | Instrument ID: | LC812 | | |
| Lims ID: | CCVL | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

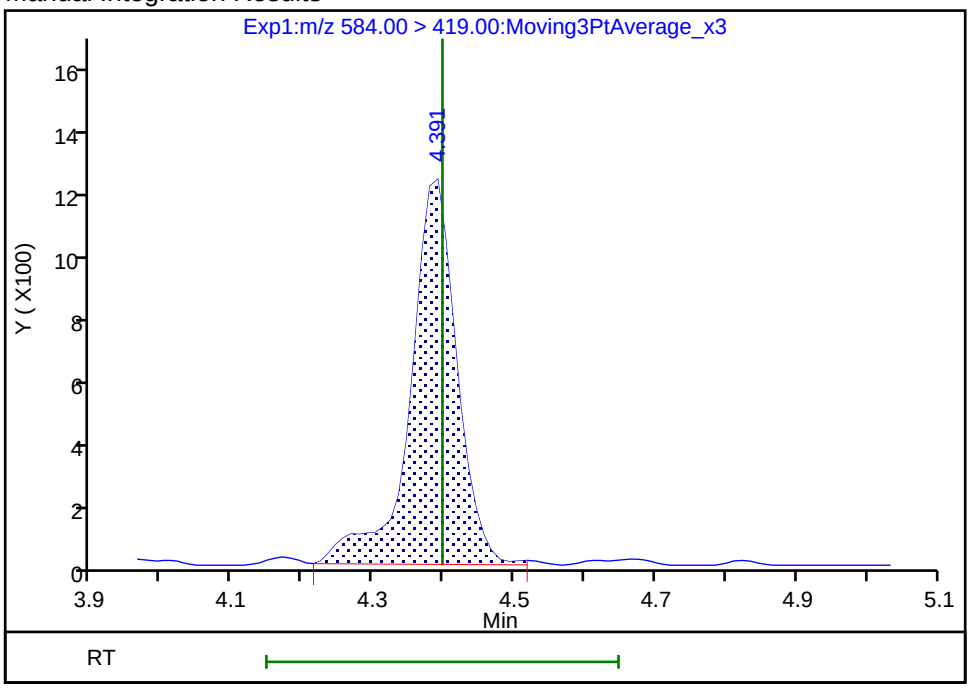
Processing Integration Results

RT: 4.39
Area: 5716
Amount: 0.145333
Amount Units: ng/ml




Manual Integration Results

RT: 4.39
Area: 5532
Amount: 0.140655
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:54:25

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

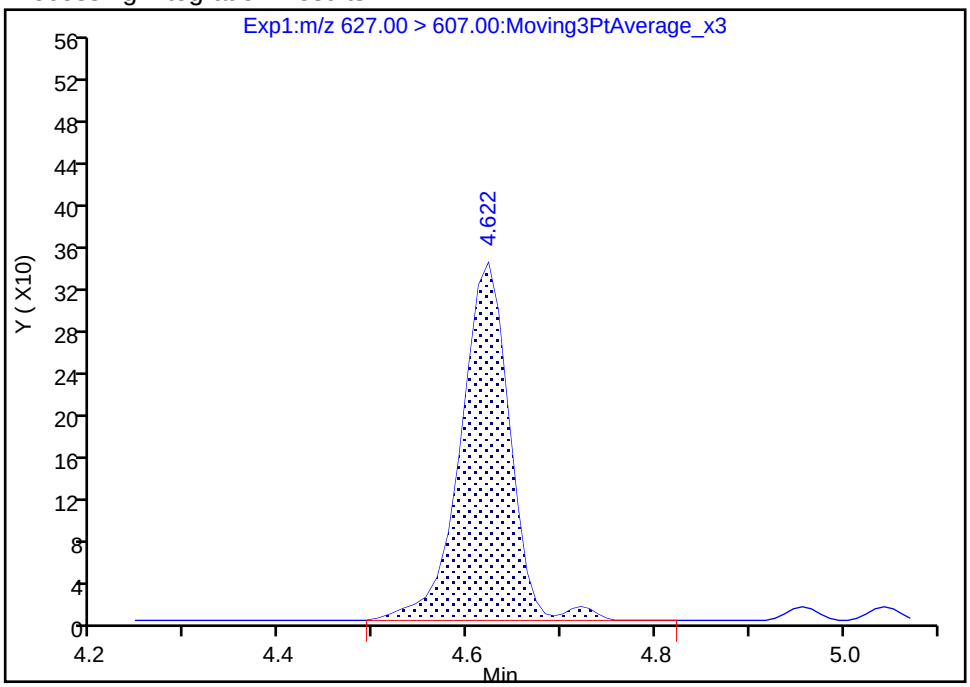
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d | | | | |
| Injection Date: | 12-Mar-2021 10:38:19 | Instrument ID: | LC812 | | |
| Lims ID: | CCVL | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 74 1H,1H,2H,2H-perfluorododecanesul, CAS: 120226-60-0

Signal: 1

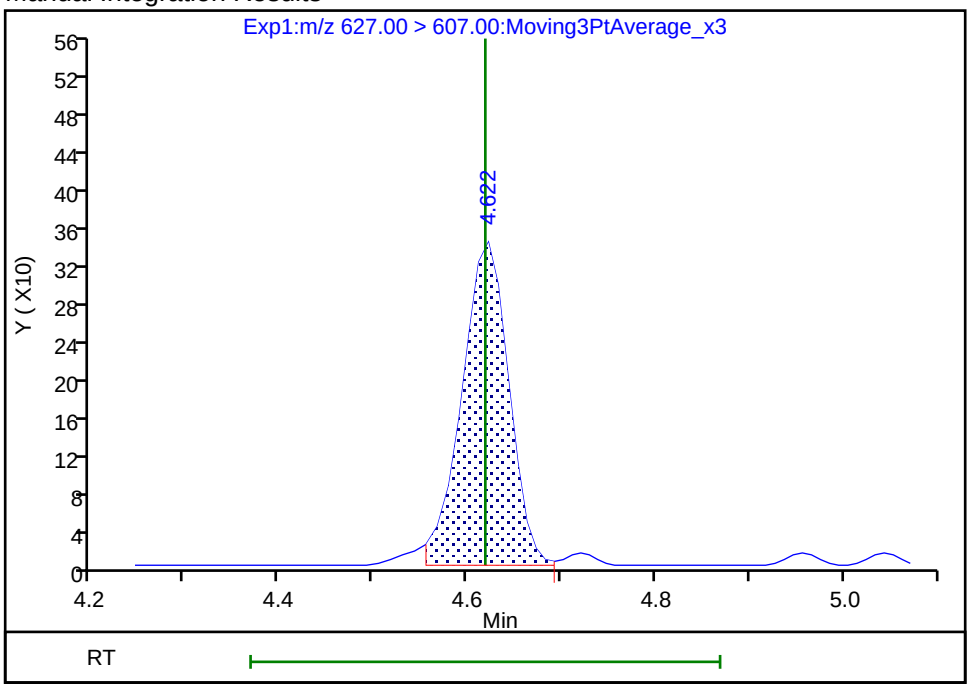
Processing Integration Results

RT: 4.62
Area: 1240
Amount: 0.035042
Amount Units: ng/ml




Manual Integration Results

RT: 4.62
Area: 1178
Amount: 0.033290
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:54:37

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

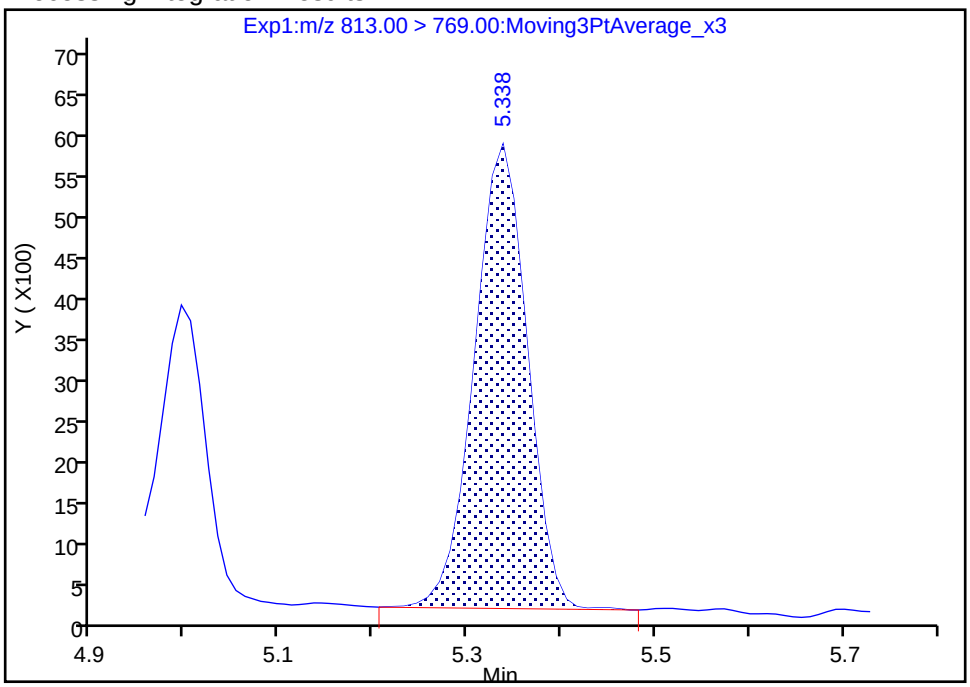
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d | | | | |
| Injection Date: | 12-Mar-2021 10:38:19 | Instrument ID: | LC812 | | |
| Lims ID: | CCVL | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 45 Perfluorohexadecanoic acid, CAS: 67905-19-5

Signal: 1

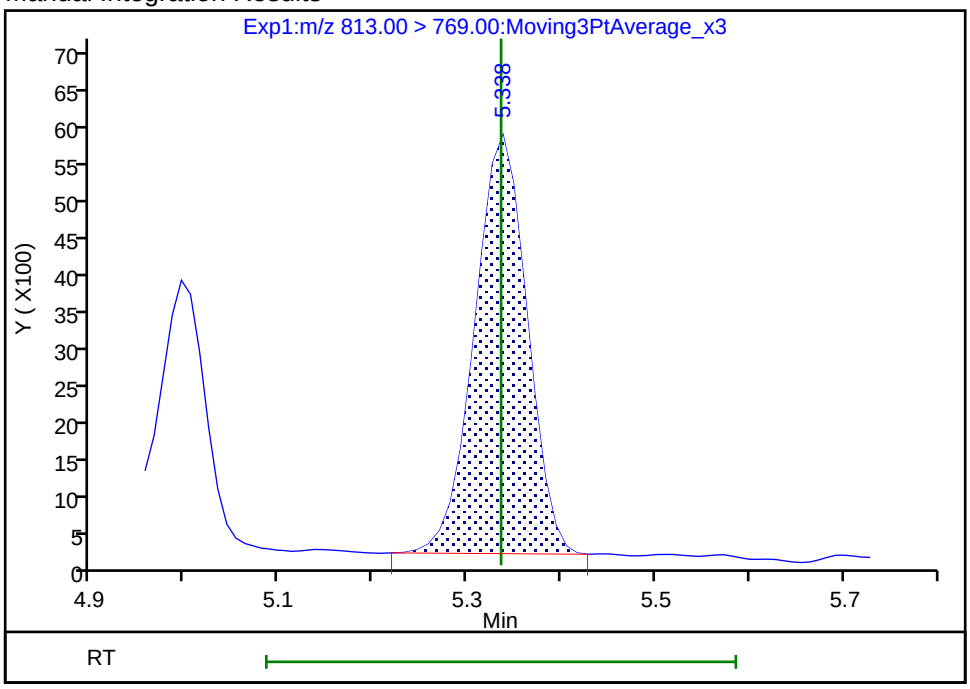
Processing Integration Results

RT: 5.34
Area: 21880
Amount: 0.050607
Amount Units: ng/ml




Manual Integration Results

RT: 5.34
Area: 21699
Amount: 0.050062
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:54:49

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

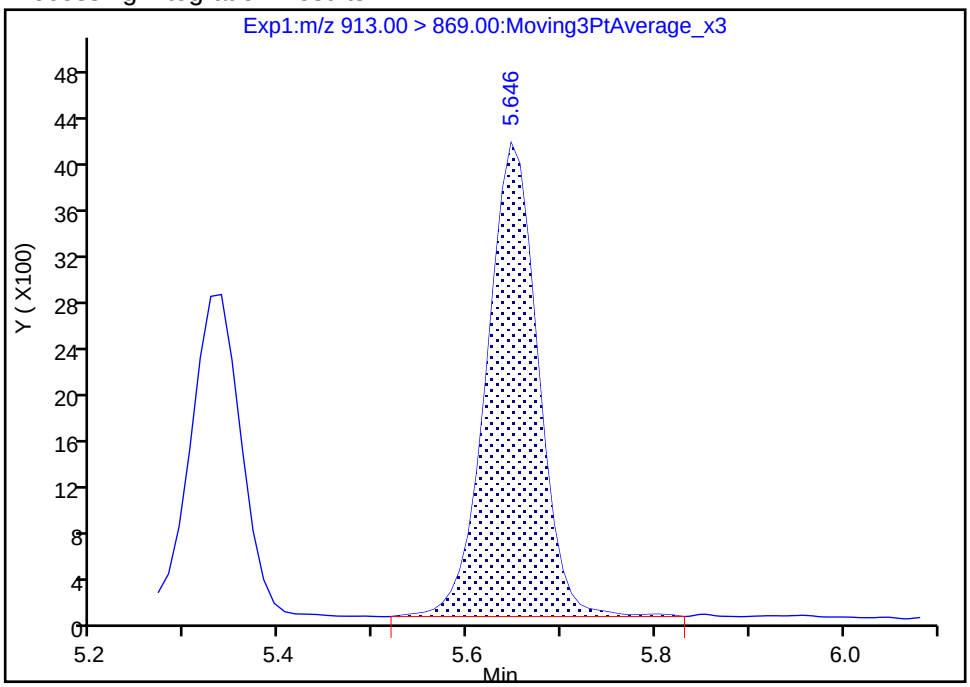
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A05.d | | | | |
| Injection Date: | 12-Mar-2021 10:38:19 | Instrument ID: | LC812 | | |
| Lims ID: | CCVL | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 2 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 46 Perfluorooctadecanoic acid, CAS: 16517-11-6

Signal: 1

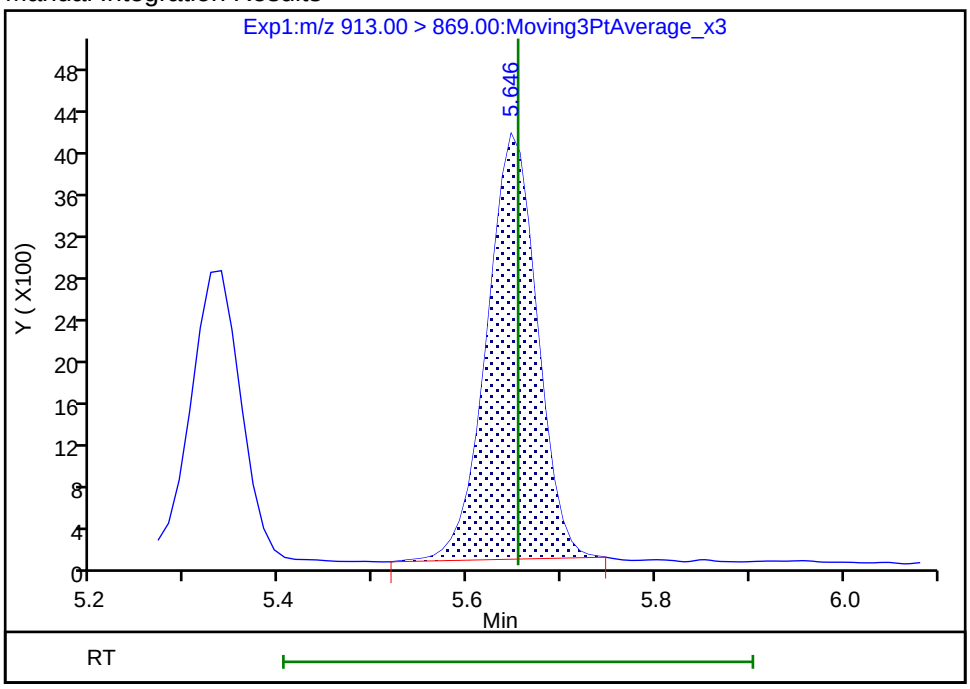
Processing Integration Results

RT: 5.65
Area: 15540
Amount: 0.048413
Amount Units: ng/ml




Manual Integration Results

RT: 5.65
Area: 15148
Amount: 0.047192
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:54:54

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Lab Sample ID: CCVIS 200-164765/9  Calibration Date: 03/12/2021 11:11

Instrument ID: LC812  Calib Start Date: 12/22/2020 12:48

GC Column: C-18  ID: 4.60(mm)  Calib End Date: 12/22/2020 13:29

Lab File ID: PA210312A09.d  Conc. Units: ng/mL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | AveID | 1.002 | 0.9523 | | 0.950 | 1.00 | -5.0 | 40.0 |
| Perfluoropentanoic acid (PFPeA) | AveID | 1.107 | 1.059 | | 0.956 | 1.00 | -4.4 | 40.0 |
| Perfluorobutanesulfonic acid (PFBS) | AveID | 1.131 | 1.085 | | 0.848 | 0.884 | -4.1 | 40.0 |
| 1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2) | AveID | 1.834 | 1.728 | | 0.880 | 0.934 | -5.8 | 50.0 |
| Perfluorohexanoic acid (PFHxA) | AveID | 1.092 | 1.064 | | 0.974 | 1.00 | -2.6 | 40.0 |
| Perfluoropentanesulfonic acid | AveID | 1.312 | 1.301 | | 0.930 | 0.938 | -0.9 | 50.0 |
| HFPO-DA | AveID | 1.385 | 1.725 | | 1.25 | 1.00 | 24.5 | 40.0 |
| Perfluoroheptanoic acid (PFHpA) | AveID | 1.092 | 1.057 | | 0.968 | 1.00 | -3.2 | 40.0 |
| Perfluorohexanesulfonic acid (PFHxS) | AveID | 1.178 | 1.112 | | 0.858 | 0.910 | -5.7 | 40.0 |
| DONA | AveID | 3.349 | 3.416 | | 0.961 | 0.942 | 2.0 | 50.0 |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | AveID | 1.112 | 1.009 | | 0.860 | 0.948 | -9.3 | 40.0 |
| Perfluoroheptanesulfonic Acid (PFHpS) | AveID | 1.350 | 1.342 | | 0.947 | 0.952 | -0.6 | 50.0 |
| Perfluorooctanoic acid (PFOA) | AveID | 1.084 | 1.051 | | 0.970 | 1.00 | -3.0 | 40.0 |
| Perfluorooctanesulfonic acid (PFOS) | AveID | 1.150 | 1.141 | | 0.921 | 0.928 | -0.8 | 40.0 |
| Perfluorononanoic acid (PFNA) | AveID | 1.107 | 1.052 | | 0.951 | 1.00 | -4.9 | 40.0 |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid | AveID | 1.283 | 1.147 | | 0.833 | 0.932 | -10.6 | 50.0 |
| Perfluorononanesulfonic acid | AveID | 0.8581 | 0.8805 | | 0.985 | 0.960 | 2.6 | 50.0 |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | AveID | 0.6801 | 0.5178 | | 0.729 | 0.958 | -23.9 | 40.0 |
| Perfluorodecanoic acid (PFDA) | AveID | 1.031 | 1.010 | | 0.980 | 1.00 | -2.0 | 40.0 |
| Perfluorooctanesulfonamide (PFOSA) | AveID | 1.002 | 1.050 | | 1.05 | 1.00 | 4.8 | 40.0 |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | AveID | 0.8864 | 0.8918 | | 1.01 | 1.00 | 0.6 | 40.0 |
| Perfluorodecanesulfonic acid (PFDS) | AveID | 0.6841 | 0.6808 | | 0.959 | 0.964 | -0.5 | 50.0 |
| Perfluoroundecanoic acid (PFUnA) | AveID | 1.020 | 1.076 | | 1.06 | 1.00 | 5.5 | 40.0 |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | AveID | 0.9257 | 0.8840 | | 0.955 | 1.00 | -4.5 | 40.0 |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid | AveID | 1.331 | 1.043 | | 0.738 | 0.942 | -21.6 | 50.0 |
| Perfluorododecanoic acid (PFDoA) | AveID | 1.100 | 1.015 | | 0.923 | 1.00 | -7.7 | 40.0 |
| 10:2 FTS | AveID | 0.3501 | 0.2849 | | 0.784 | 0.964 | -18.6 | 50.0 |
| Perfluorododecanesulfonic acid (PFDoS) | AveID | 0.2517 | 0.2513 | | 0.967 | 0.968 | -0.1 | 50.0 |
| Perfluorotridecanoic acid (PFTriA) | AveID | 0.8926 | 0.9148 | | 1.03 | 1.00 | 2.5 | 50.0 |
| Perfluorotetradecanoic acid (PFTeA) | AveID | 0.1855 | 0.2008 | | 1.08 | 1.00 | 8.3 | 40.0 |

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Lab Sample ID: CCVIS 200-164765/9  Calibration Date: 03/12/2021 11:11

Instrument ID: LC812  Calib Start Date: 12/22/2020 12:48

GC Column: C-18  ID: 4.60(mm)  Calib End Date: 12/22/2020 13:29

Lab File ID: PA210312A09.d  Conc. Units: ng/mL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Perfluoro-n-hexadecanoic acid (PFHxDA) | L1ID | | 1.001 | | 1.06 | 1.00 | 6.0 | 40.0 |
| Perfluoro-n-octadecanoic acid (PFODA) | AveID | 0.8998 | 0.8648 | | 0.961 | 1.00 | -3.9 | 50.0 |
| 13C4 PFBA | Ave | 1.343 | 1.347 | | 1.25 | 1.25 | 0.3 | 50.0 |
| 13C5 PFPeA | Ave | 0.9710 | 1.016 | | 1.31 | 1.25 | 4.6 | 50.0 |
| 13C3 PFBS | Ave | 1.278 | 1.328 | | 1.21 | 1.16 | 3.9 | 50.0 |
| M2-4:2 FTS | Ave | 0.1066 | 0.1066 | | 1.17 | 1.17 | -0.0 | 50.0 |
| 13C2 PFHxA | Ave | 1.018 | 1.084 | | 1.33 | 1.25 | 6.5 | 50.0 |
| 13C3 HFPO-DA | Ave | 0.1792 | 0.1124 | | 0.784 | 1.25 | -37.3 | 50.0 |
| 13C4 PFHpA | Ave | 0.9742 | 1.041 | | 1.34 | 1.25 | 6.9 | 50.0 |
| 18O2 PFHxS | Ave | 0.9511 | 0.9940 | | 1.24 | 1.18 | 4.5 | 50.0 |
| M2-6:2 FTS | Ave | 0.1187 | 0.1163 | | 1.16 | 1.19 | -2.1 | 50.0 |
| 13C4 PFOA | Ave | 0.9896 | 1.068 | | 1.35 | 1.25 | 8.0 | 50.0 |
| 13C4 PFOS | Ave | 0.6528 | 0.6879 | | 1.26 | 1.20 | 5.4 | 50.0 |
| 13C5 PFNA | Ave | 0.8730 | 0.9174 | | 1.31 | 1.25 | 5.1 | 50.0 |
| 13C2 PFDA | Ave | 0.8346 | 0.8682 | | 1.30 | 1.25 | 4.0 | 50.0 |
| M2-8:2 FTS | Ave | 0.1225 | 0.1336 | | 1.31 | 1.20 | 9.1 | 50.0 |
| 13C8 FOSA | Ave | 1.227 | 1.293 | | 1.32 | 1.25 | 5.4 | 50.0 |
| d3-NMeFOSAA | Ave | 0.0605 | 0.0537 | | 1.11 | 1.25 | -11.3 | 50.0 |
| 13C2 PFUnA | Ave | 0.6856 | 0.6289 | | 1.15 | 1.25 | -8.3 | 50.0 |
| d5-NEtFOSAA | Ave | 0.0585 | 0.0524 | | 1.12 | 1.25 | -10.5 | 50.0 |
| 13C2 PFDoA | Ave | 0.7238 | 0.6839 | | 1.18 | 1.25 | -5.5 | 50.0 |
| 13C2 PFTeDA | Ave | 0.5353 | 0.4765 | | 1.11 | 1.25 | -11.0 | 50.0 |
| 13C2 PFHxDA | Ave | 0.5718 | 0.4914 | | 1.07 | 1.25 | -14.1 | 50.0 |

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A09.d
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 12-Mar-2021 11:11:28 ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0045138-009 Plate: 1 Rack: 1
Operator ID: lc812tech Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 12-Mar-2021 12:59:08 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1632

First Level Reviewer: deannd Date: 12-Mar-2021 12:45:59
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.082 | 2.082 | 0.0 | 0.598 | 1651853 | 1.25 | | 100 | 10463 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | |
| 212.90 > 169.00 | 2.082 | 2.082 | 0.0 | 1.000 | 1258463 | 0.9504 | | 95.0 | 300 | |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.401 | 2.401 | 0.0 | 0.689 | 1246024 | 1.31 | | 105 | 4178 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | |
| 262.90 > 219.00 | 2.401 | 2.401 | 0.0 | 1.000 | 1055524 | 0.9563 | | 95.6 | 83.5 | |
| D 47 13C3 PFBS | | | | | | | | | | |
| 301.90 > 80.00 | 2.414 | 2.414 | 0.0 | 0.693 | 1514847 | 1.21 | | 104 | 295524 | |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | |
| 298.90 > 80.00 | 2.427 | 2.427 | 0.0 | 1.005 | 1250177 | 0.8480 | Target=2.21 | 95.9 | 2458 | |
| 298.90 > 99.00 | 2.427 | 2.427 | 0.0 | 1.005 | 574263 | | 2.18(1.11-3.32) | | 395 | |
| D 60 M2-4:2 FTS | | | | | | | | | | M |
| 329.00 > 81.00 | 2.723 | 2.723 | 0.0 | 0.781 | 122081 | 1.17 | | 100.0 | 182 | M |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | |
| 327.00 > 307.00 | 2.723 | 2.723 | 0.0 | 1.000 | 168744 | 0.8800 | | 94.2 | 2195 | |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.759 | 2.759 | 0.0 | 0.792 | 1329061 | 1.33 | | 106 | 4495 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | |
| 313.00 > 269.00 | 2.759 | 2.759 | 0.0 | 1.000 | 1131758 | 0.9744 | Target=12.83 | 97.4 | 241 | |
| 313.00 > 119.00 | 2.759 | 2.759 | 0.0 | 1.000 | 95100 | | 11.90(6.42-19.25) | | 158 | |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | |
| 349.00 > 80.00 | 2.759 | 2.759 | 0.0 | 0.884 | 1190140 | 0.9298 | Target=3.35 | 99.1 | 1889 | |
| 349.00 > 99.00 | 2.759 | 2.759 | 0.0 | 0.884 | 338862 | | 3.51(1.67-5.02) | | 438 | |
| 67 Perfluoro(2-propoxypropanoic) ac | | | | | | | | | | |
| 329.10 > 285.00 | 2.869 | 2.869 | 0.0 | 1.000 | 190323 | 1.25 | | 125 | 34.3 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 64 13C3 HFPO-DA | | | | | | | | | | |
| 332.10 > 287.00 | 2.869 | 2.869 | 0.0 | 0.823 | 137902 | 0.7843 | | 62.7 | 1286 | |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.123 | 3.123 | 0.0 | 1.000 | 986615 | 0.8584 | Target=4.15 | 94.3 | 1112 | M |
| 399.00 > 99.00 | 3.123 | 3.123 | 0.0 | 1.000 | 231792 | | 4.26(2.08-6.23) | | 262 | M |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.123 | 3.123 | 0.0 | 0.896 | 1153350 | 1.24 | | 105 | 1796 | |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.123 | 3.123 | 0.0 | 0.896 | 1277224 | 1.34 | | 107 | 3469 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | |
| 363.00 > 319.00 | 3.123 | 3.123 | 0.0 | 1.000 | 1080120 | 0.9678 | Target=3.66 | 96.8 | 413 | |
| 363.00 > 169.00 | 3.123 | 3.123 | 0.0 | 1.000 | 300584 | | 3.59(1.83-5.49) | | 739 | |
| 77 DONA | | | | | | | | | | |
| 377.00 > 251.00 | 3.165 | 3.165 | 0.0 | 0.834 | 2172280 | 0.9610 | Target=2.43 | 102 | 2309 | |
| 377.00 > 85.00 | 3.165 | 3.165 | 0.0 | 0.834 | 882958 | | 2.46(1.22-3.65) | | 1232 | |
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | |
| 449.00 > 80.00 | 3.475 | 3.475 | 0.0 | 0.915 | 862641 | 0.9465 | Target=5.95 | 99.4 | 2621 | |
| 449.00 > 99.00 | 3.475 | 3.475 | 0.0 | 0.915 | 136769 | | 6.31(2.98-8.93) | | 552 | |
| D 12 M2-6:2 FTS | | | | | | | | | | |
| 429.00 > 81.00 | 3.475 | 3.475 | 0.0 | 0.997 | 135473 | 1.16 | | 97.9 | 578 | |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | |
| 427.00 > 407.00 | 3.475 | 3.475 | 0.0 | 1.000 | 109143 | 0.8601 | | 90.7 | 997 | |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.484 | 3.484 | 0.0 | 1.000 | 1310424 | 1.35 | | 108 | 1934 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.484 | 3.484 | 0.0 | | 1226573 | 1.25 | | | 3384 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | |
| 413.00 > 369.00 | 3.484 | 3.484 | 0.0 | 1.000 | 1101802 | 0.9696 | Target=2.58 | 97.0 | 364 | |
| 413.00 > 169.00 | 3.484 | 3.484 | 0.0 | 1.000 | 443837 | | 2.48(1.29-3.87) | | 915 | |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.798 | 3.798 | 0.0 | 1.000 | 714958 | 0.9209 | Target=5.65 | 99.2 | 407 | M |
| 499.00 > 99.00 | 3.798 | 3.798 | 0.0 | 1.000 | 122084 | | 5.86(2.82-8.47) | | 392 | M |
| D 18 13C4 PFOS | | | | | | | | | | |
| 503.00 > 80.00 | 3.798 | 3.798 | 0.0 | 1.090 | 806653 | 1.26 | | 105 | 1649 | |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.818 | 3.818 | 0.0 | 1.096 | 1125257 | 1.31 | | 105 | 5681 | |
| 20 Perfluorononanoic acid | | | | | | | | | | |
| 463.00 > 419.00 | 3.818 | 3.818 | 0.0 | 1.000 | 947188 | 0.9506 | Target=7.44 | 95.1 | 190 | |
| 463.00 > 169.00 | 3.818 | 3.818 | 0.0 | 1.000 | 149658 | | 6.33(3.72-11.16) | | 1572 | |
| 69 9-Chlorohexadecafluoro-3-oxanona | | | | | | | | | | |
| 531.00 > 351.00 | 3.959 | 3.959 | 0.0 | 1.042 | 721676 | 0.8332 | | 89.4 | 2916 | |
| 68 Perfluorononanesulfonic acid | | | | | | | | | | |
| 549.00 > 80.00 | 4.086 | 4.086 | 0.0 | 1.076 | 570588 | 0.9851 | Target=2.54 | 103 | 2129 | |
| 549.00 > 99.00 | 4.086 | 4.086 | 0.0 | 1.076 | 188571 | | 3.03(1.27-3.81) | | 625 | |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.119 | 4.119 | 0.0 | 1.182 | 1064867 | 1.30 | | 104 | 3453 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 24 Perfluorodecanoic acid | | | | | | | | | | |
| 513.00 > 469.00 | 4.119 | 4.119 | 0.0 | 1.000 | 860551 | 0.9802 | Target=9.29 | 98.0 | 744 | |
| 513.00 > 169.00 | 4.119 | 4.119 | 0.0 | 1.000 | 109127 | | 7.89(4.64-13.93) | | 682 | |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.119 | 4.119 | 0.0 | 1.182 | 157004 | 1.31 | | 109 | 693 | |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | |
| 527.00 > 507.00 | 4.119 | 4.119 | 0.0 | 1.000 | 65042 | 0.7294 | | 76.1 | 1742 | |
| D 21 13C8 FOSA | | | | | | | | | | |
| 506.00 > 78.00 | 4.219 | 4.219 | 0.0 | 1.211 | 1586511 | 1.32 | | 105 | 3683 | |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | |
| 498.00 > 78.00 | 4.219 | 4.219 | 0.0 | 1.000 | 1332649 | 1.05 | | 105 | 2137 | |
| D 27 d3-NMeFOSAA | | | | | | | | | | |
| 573.00 > 419.00 | 4.251 | 4.251 | 0.0 | 1.220 | 65883 | 1.11 | | 88.7 | 138 | |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | M |
| 570.00 > 419.00 | 4.262 | 4.262 | 0.0 | 1.003 | 47004 | 1.01 | | 101 | 227 | M |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | M |
| 599.00 > 80.00 | 4.353 | 4.353 | 0.0 | 1.146 | 442981 | 0.9593 | Target=2.80 | 99.5 | 2056 | |
| 599.00 > 99.00 | 4.353 | 4.353 | 0.0 | 1.146 | 160511 | | 2.76(1.40-4.19) | | 782 | M |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.375 | 4.375 | 0.0 | 1.256 | 771397 | 1.15 | | 91.7 | 2150 | |
| 31 Perfluoroundecanoic acid | | | | | | | | | | |
| 563.00 > 519.00 | 4.375 | 4.375 | 0.0 | 1.000 | 664066 | 1.06 | Target=8.12 | 106 | 608 | |
| 563.00 > 169.00 | 4.375 | 4.375 | 0.0 | 1.000 | 83418 | | 7.96(4.06-12.18) | | 1006 | |
| D 32 d5-NEtFOSAA | | | | | | | | | | |
| 589.00 > 419.00 | 4.386 | 4.386 | 0.0 | 1.259 | 64212 | 1.12 | | 89.5 | 650 | |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.398 | 4.398 | 0.0 | 1.003 | 45413 | 0.9550 | | 95.5 | 508 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | |
| 631.00 > 451.00 | 4.463 | 4.463 | 0.0 | 1.175 | 663410 | 0.7381 | | 78.4 | 3801 | |
| D 36 13C2 PFDoA | | | | | | | | | | |
| 615.00 > 570.00 | 4.598 | 4.598 | 0.0 | 1.320 | 838838 | 1.18 | | 94.5 | 3394 | |
| 37 Perfluorododecanoic acid | | | | | | | | | | |
| 613.00 > 569.00 | 4.608 | 4.608 | 0.0 | 1.002 | 681013 | 0.9227 | Target=6.91 | 92.3 | 177 | |
| 613.00 > 169.00 | 4.598 | 4.608 | -0.010 | 1.000 | 114249 | | 5.96(3.45-10.36) | | 1093 | |
| 74 1H,1H,2H,2H-perfluorododecanesul | | | | | | | | | | |
| 627.00 > 607.00 | 4.619 | 4.619 | 0.0 | 1.121 | 36005 | 0.7843 | | 81.4 | 1442 | |
| 75 Perfluorododecanesulfonic acid ( | | | | | | | | | | |
| 699.00 > 80.00 | 4.772 | 4.772 | 0.0 | 1.256 | 164218 | 0.9666 | Target=0.51 | 99.9 | 1901 | |
| 699.00 > 99.00 | 4.772 | 4.772 | 0.0 | 1.256 | 329364 | | 0.50(0.26-0.77) | | 1590 | |
| 41 Perfluorotridecanoic acid | | | | | | | | | | |
| 663.00 > 619.00 | 4.808 | 4.808 | 0.0 | 1.046 | 613878 | 1.02 | Target=4.39 | 102 | 256 | |
| 663.00 > 169.00 | 4.808 | 4.808 | 0.0 | 1.046 | 157504 | | 3.90(2.20-6.59) | | 1909 | |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 5.000 | 5.000 | 0.0 | 1.435 | 584477 | 1.11 | | 89.0 | 3322 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | |
| 713.00 > 169.00 | 5.000 | 5.000 | 0.0 | 1.000 | 93904 | 1.08 | Target=1.06 | 108 | 1585 | |
| 713.00 > 219.00 | 4.991 | 5.000 | -0.009 | 0.998 | 89819 | | 1.05(0.53-1.59) | | 1385 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.336 | 5.336 | 0.0 | 1.531 | 602722 | 1.07 | | 85.9 | 2640 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | M |
| 813.00 > 769.00 | 5.336 | 5.336 | 0.0 | 1.000 | 482622 | 1.06 | Target=3.84 | 106 | 192 | |
| 813.00 > 169.00 | 5.336 | 5.336 | 0.0 | 1.000 | 127019 | | 3.80(1.92-5.76) | | 1955 | M |
| 46 Perfluorooctadecanoic acid | | | | | | | | | | |
| 913.00 > 869.00 | 5.654 | 5.654 | 0.0 | 1.060 | 417000 | 0.9612 | Target=3.92 | 96.1 | 330 | |
| 913.00 > 169.00 | 5.645 | 5.654 | -0.009 | 1.058 | 120247 | | 3.47(1.96-5.88) | | 1324 | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

## Reagents:

PFAS32NCIC4_00018 Amount Added: 100.00 Units: uL

Report Date: 12-Mar-2021 12:59:09 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A09.d

Injection Date: 12-Mar-2021 11:11:28 Instrument ID: LC812

Lims ID: CCVIS

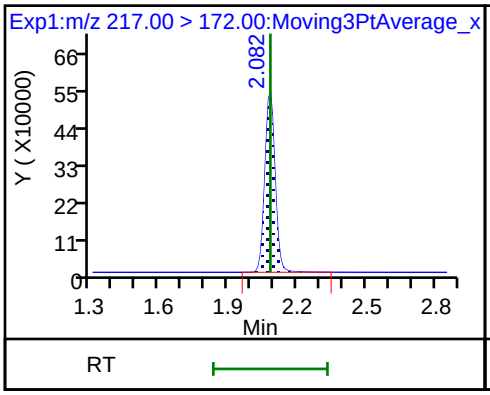
Client ID:

Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 9

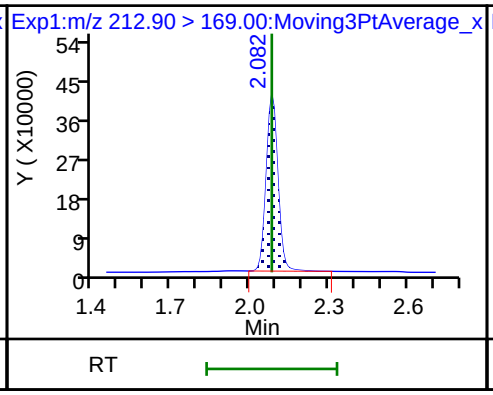
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

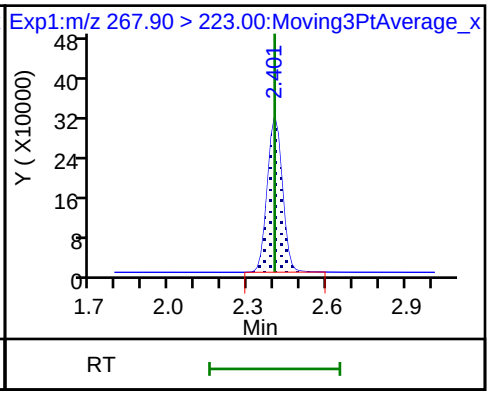
D 1 13C4 PFBA



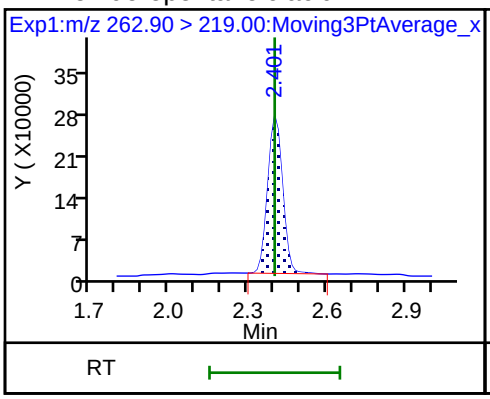

2 Perfluorobutanoic acid



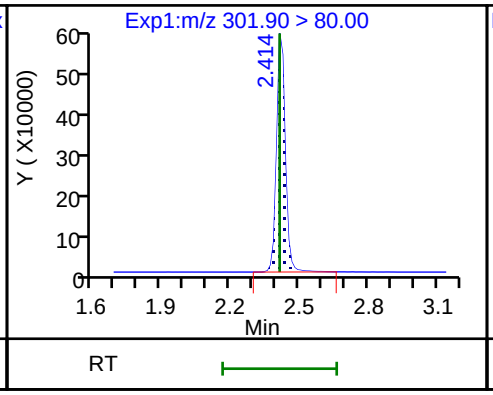

D 3 13C5 PFPeA



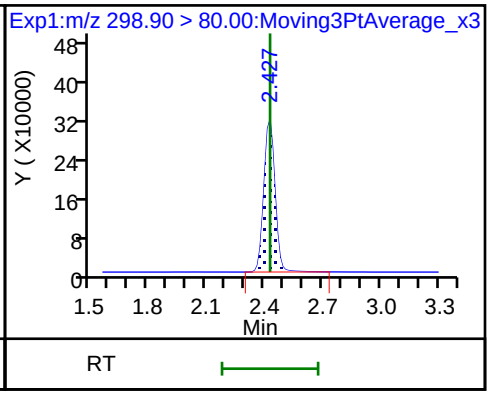

4 Perfluoropentanoic acid



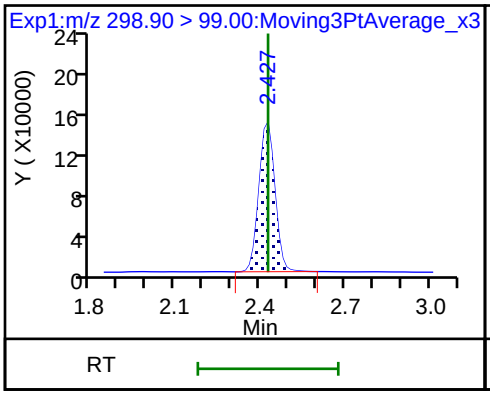

D 47 13C3 PFBS



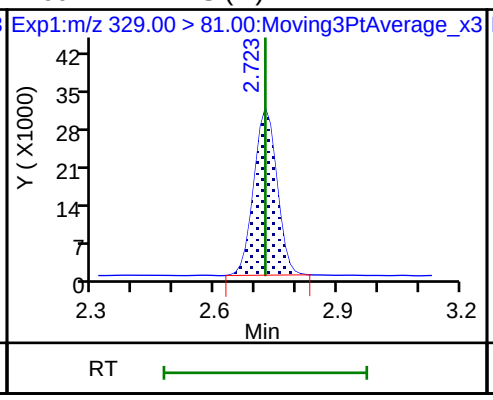

5 Perfluorobutanesulfonic acid



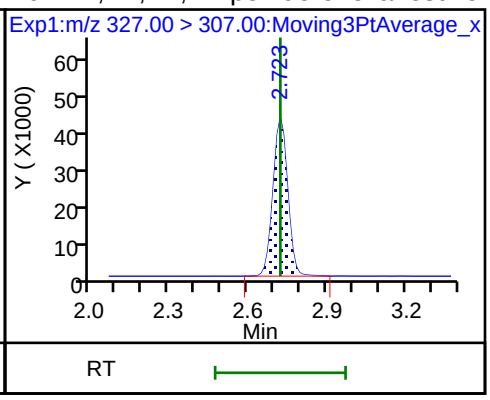

5 Perfluorobutanesulfonic acid



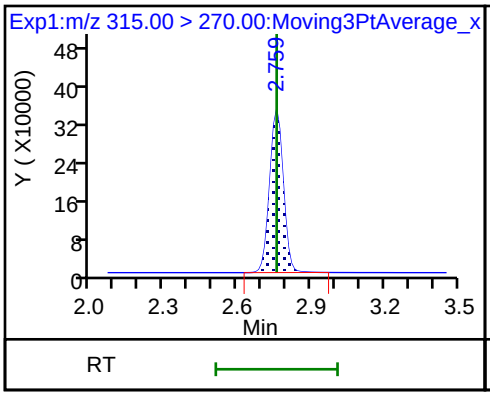

D 60 M2-4:2 FTS (M)



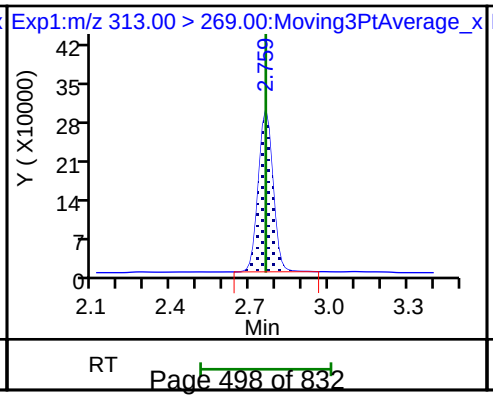

61 1H,1H,2H,2H-perfluorohexanesulfo



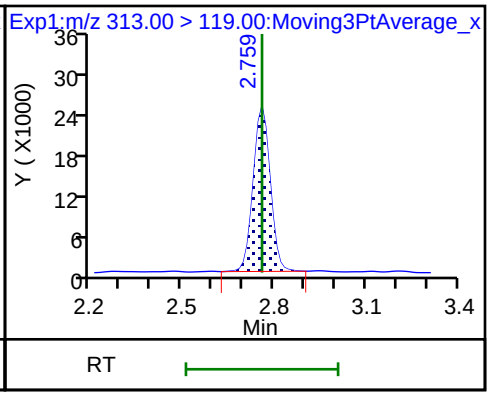

D 7 13C2 PFHxA



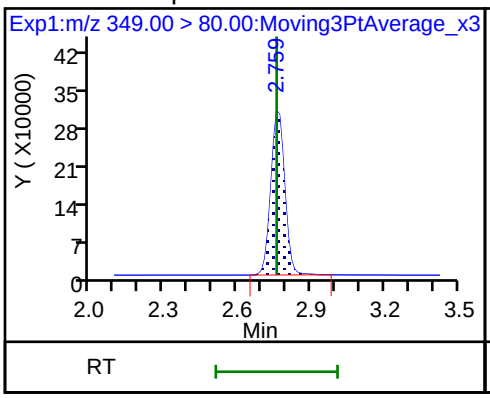

6 Perfluorohexanoic acid



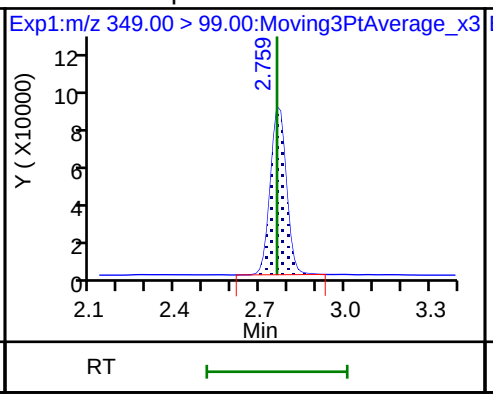

6 Perfluorohexanoic acid



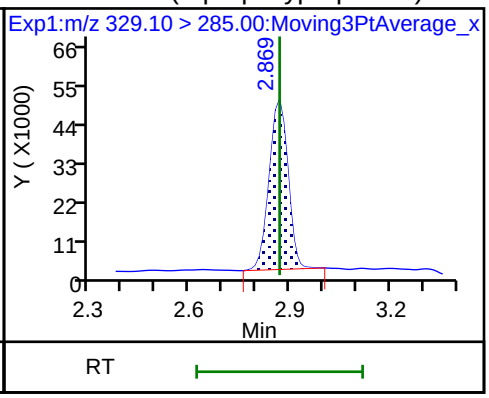
70 Perfluoropentanesulfonic acid



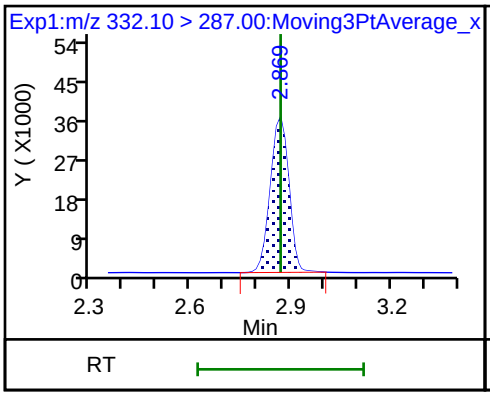

70 Perfluoropentanesulfonic acid



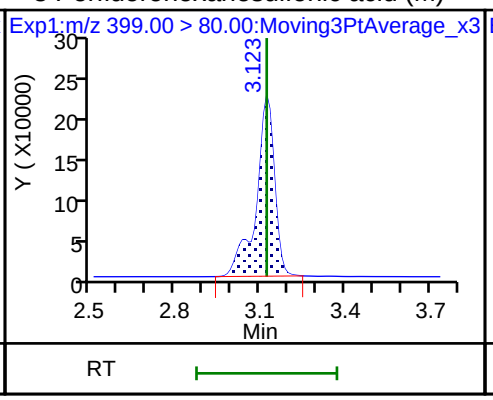

67 Perfluoro(2-propoxypropanoic) ac



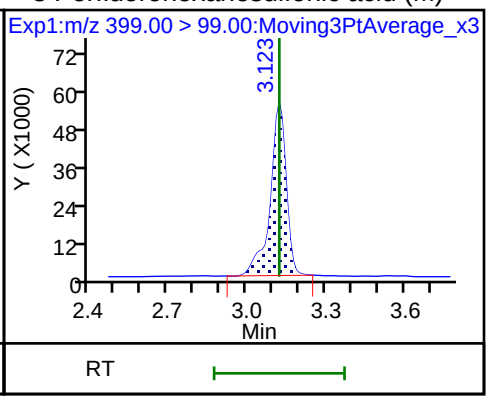

D 64 13C3 HFPO-DA



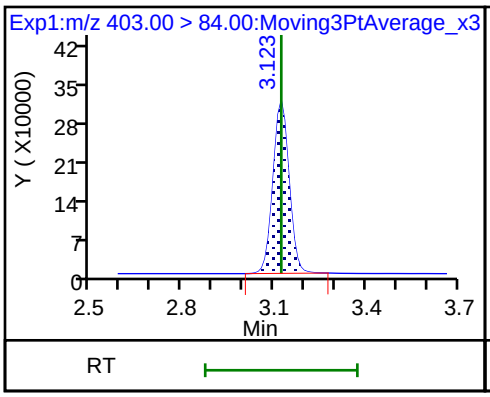

8 Perfluorohexanesulfonic acid (M)



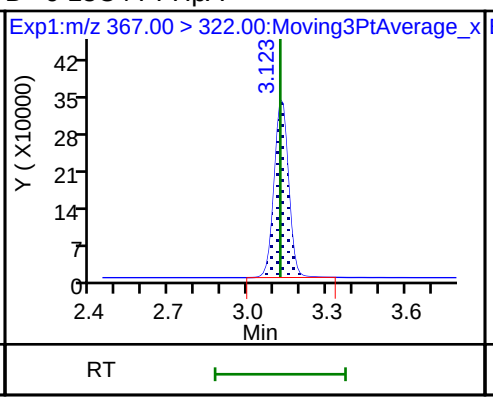

8 Perfluorohexanesulfonic acid (M)



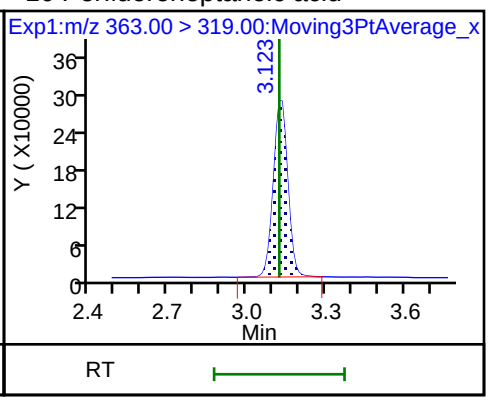

D 11 18O2 PFHxS



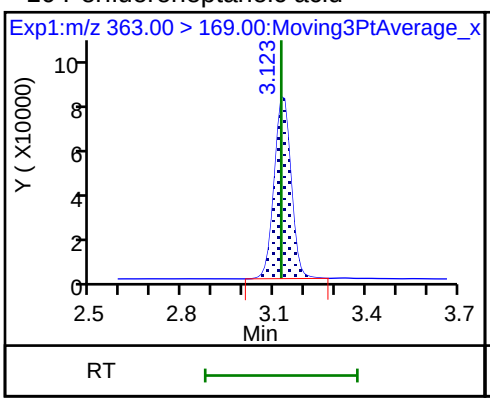

D 9 13C4 PFHpA



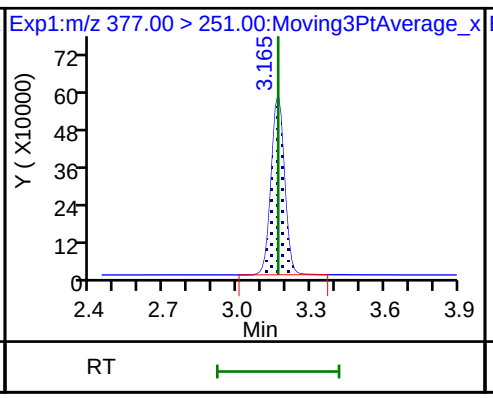

10 Perfluoroheptanoic acid



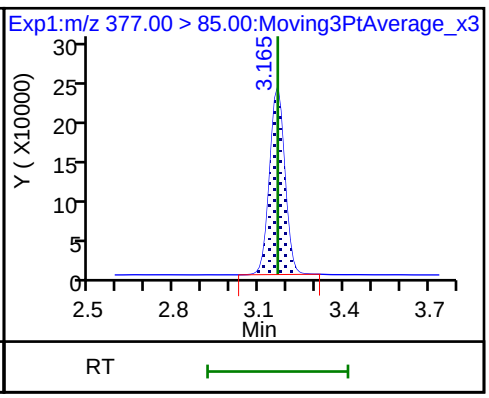

10 Perfluoroheptanoic acid



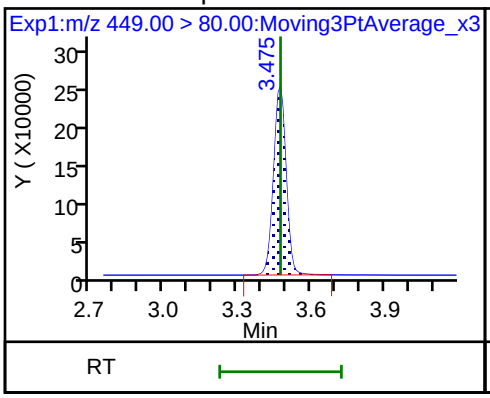

77 DONA



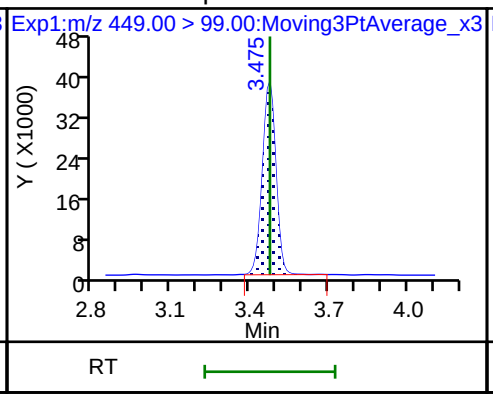

77 DONA



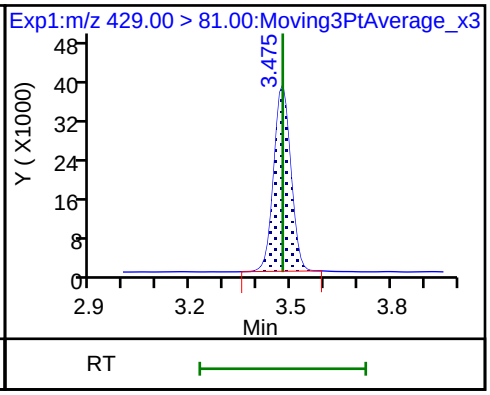
16 Perfluoroheptanesulfonic acid



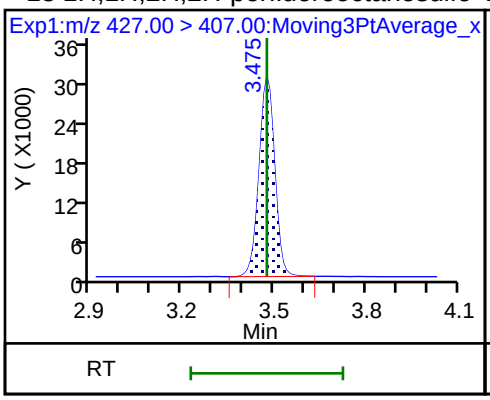

16 Perfluoroheptanesulfonic acid



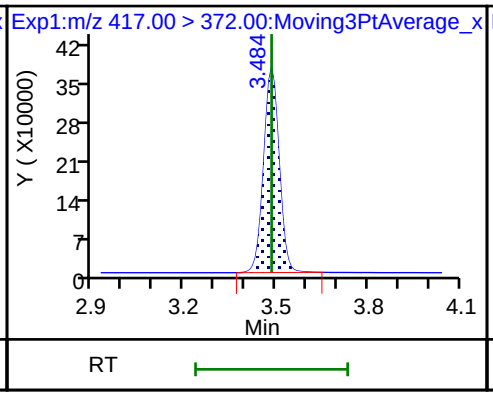

D 12 M2-6:2 FTS



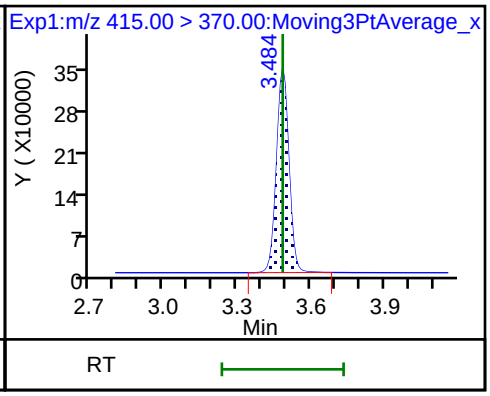

13 1H,1H,2H,2H-perfluorooctanesulfo



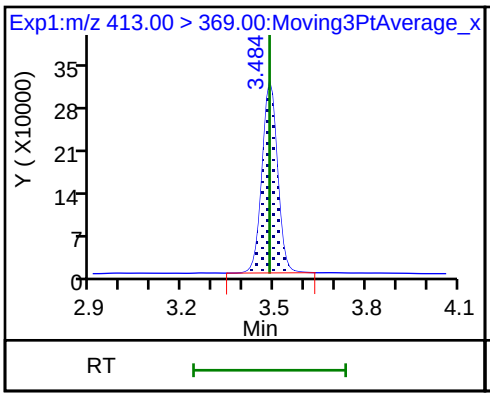

D 14 13C4 PFOA



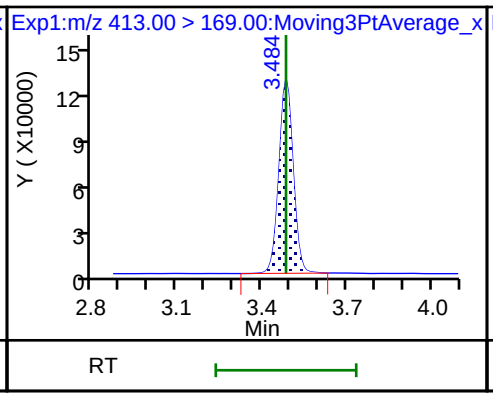

* 62 13C2 PFOA



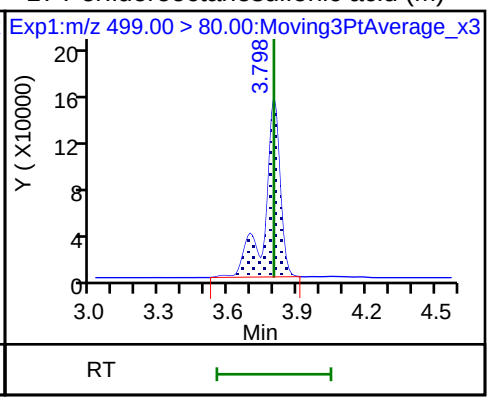

15 Perfluorooctanoic acid



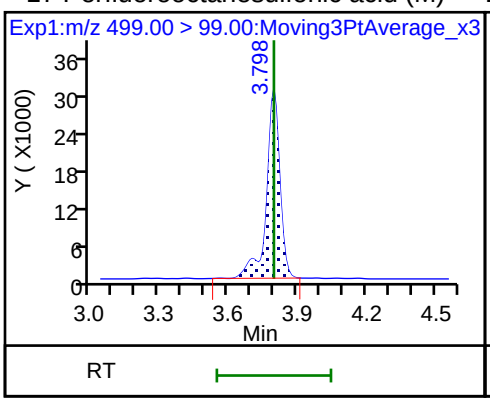

15 Perfluorooctanoic acid



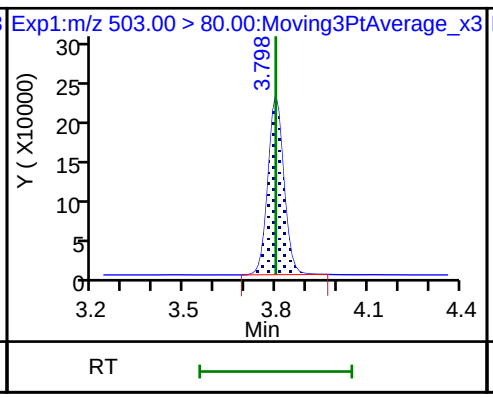

17 Perfluorooctanesulfonic acid (M)



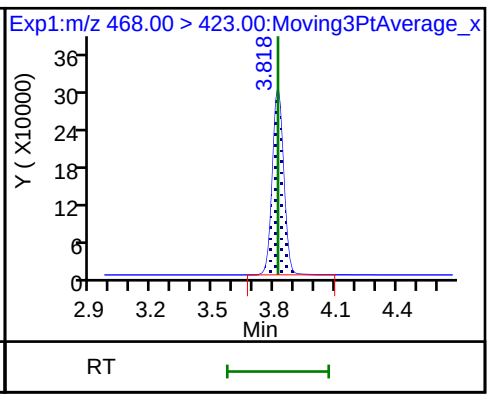

17 Perfluorooctanesulfonic acid (M)



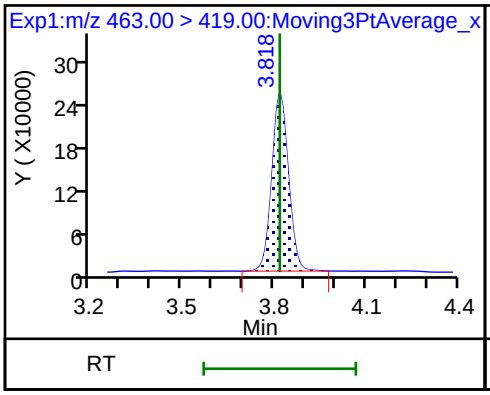

D 18 13C4 PFOS



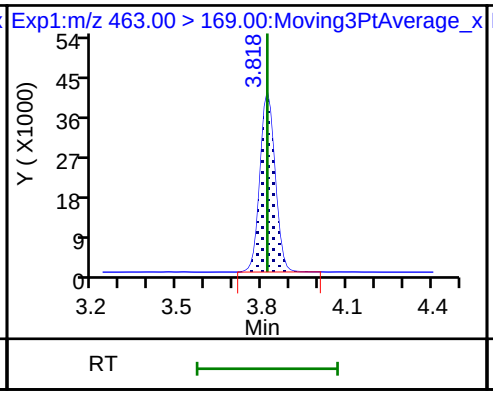

D 19 13C5 PFNA



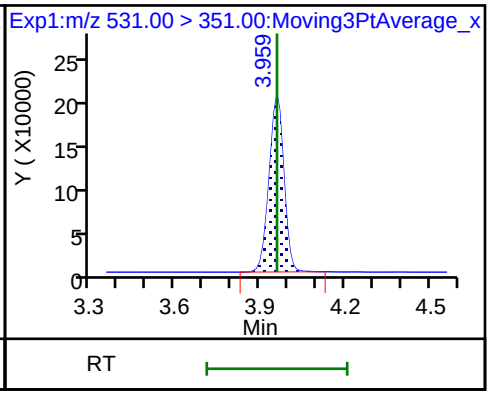
20 Perfluorononanoic acid



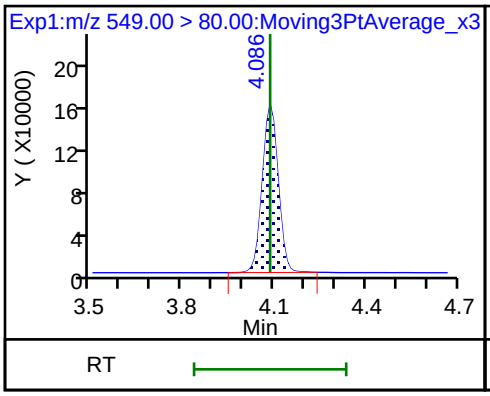

20 Perfluorononanoic acid



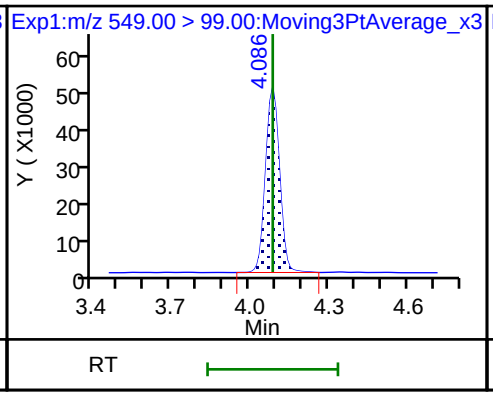

69 9-Chlorohexadecafluoro-3-oxanona



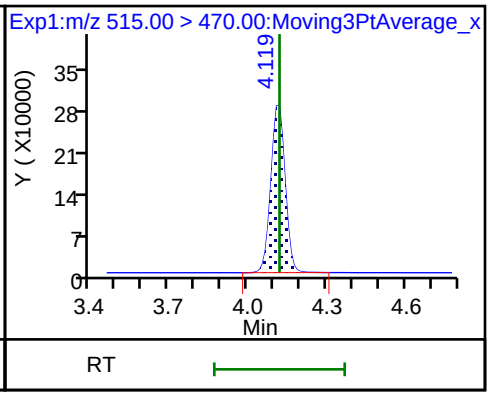

68 Perfluorononanesulfonic acid



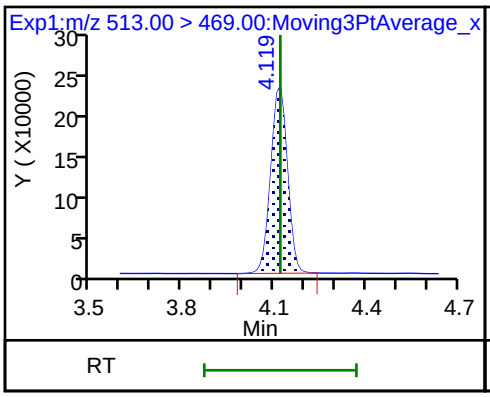

68 Perfluorononanesulfonic acid



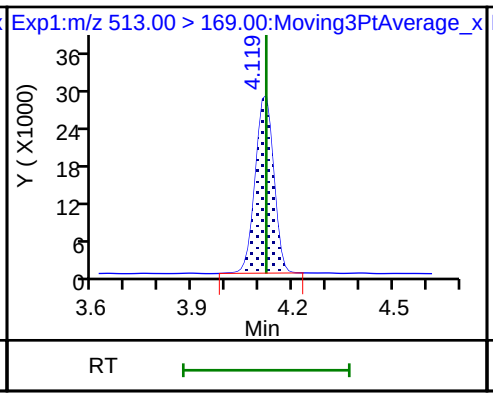

D 23 13C2 PFDA



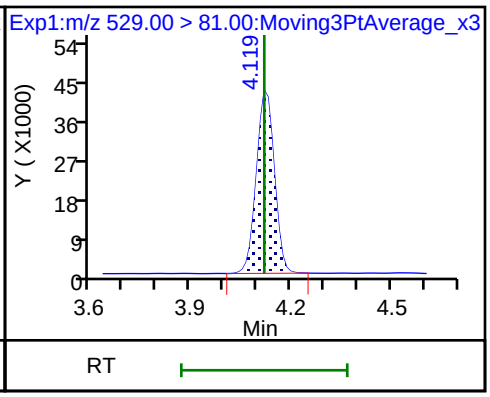

24 Perfluorodecanoic acid



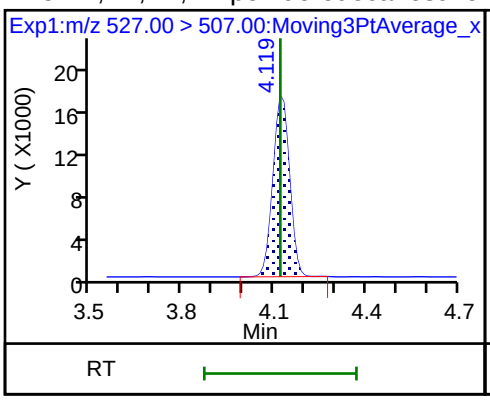

24 Perfluorodecanoic acid



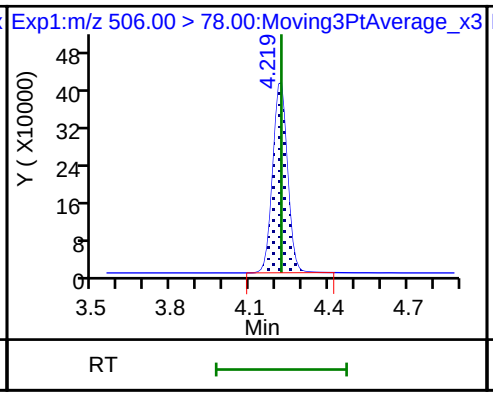

D 26 M2-8:2 FTS



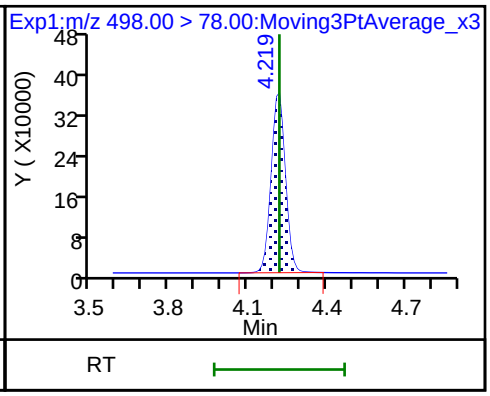

25 1H,1H,2H,2H-perfluorodecanesulfo



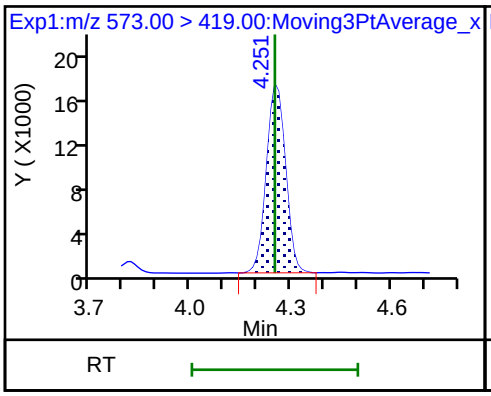

D 21 13C8 FOSA



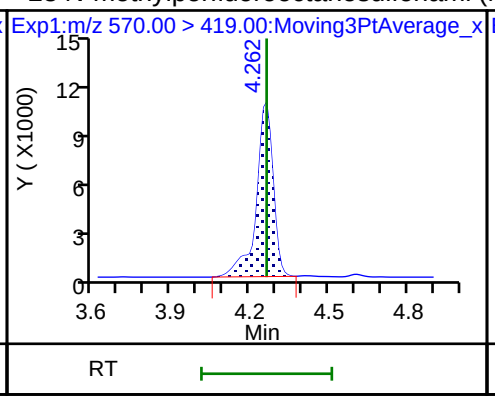

22 Perfluorooctanesulfonamide



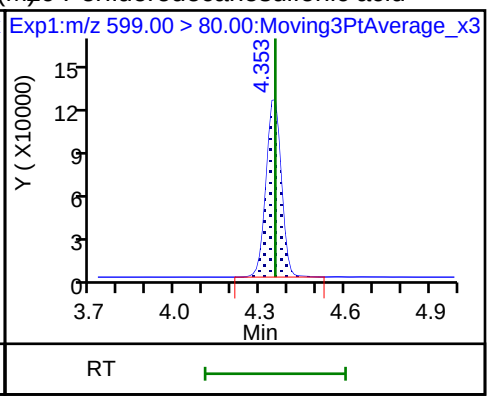
D 27 d3-NMeFOSAA



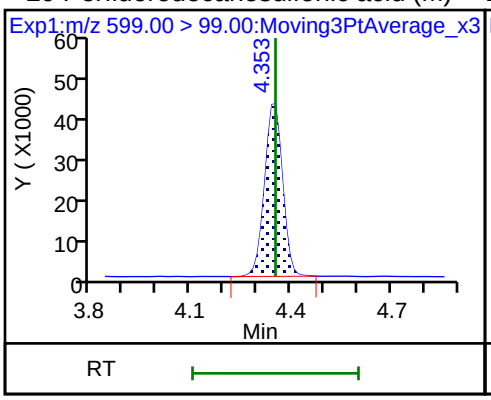

28 N-methylperfluorooctanesulfonami (M)



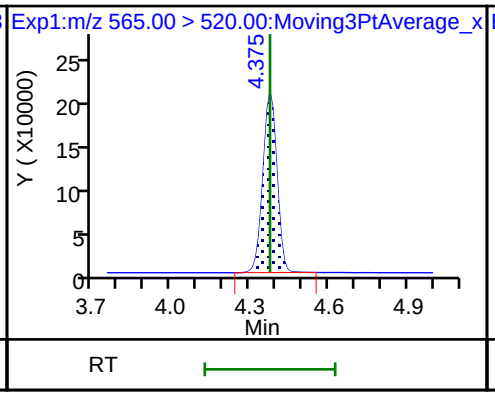

29 Perfluorodecanesulfonic acid



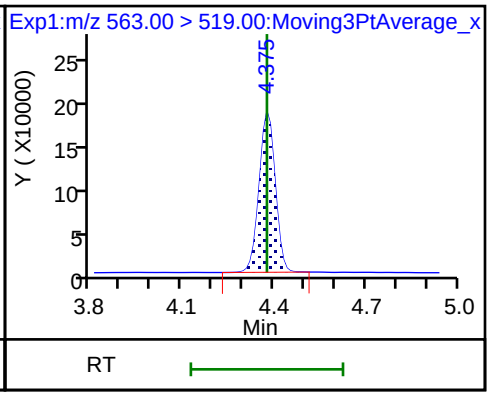

29 Perfluorodecanesulfonic acid (M)



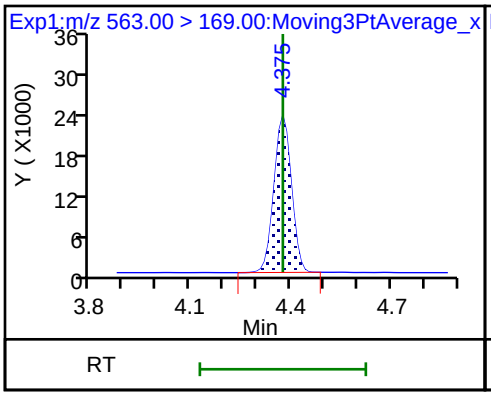

D 30 13C2 PFUnA



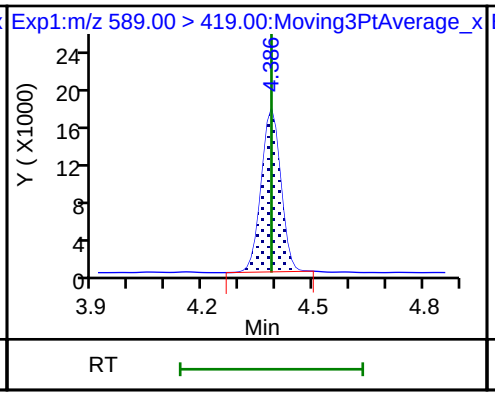

31 Perfluoroundecanoic acid



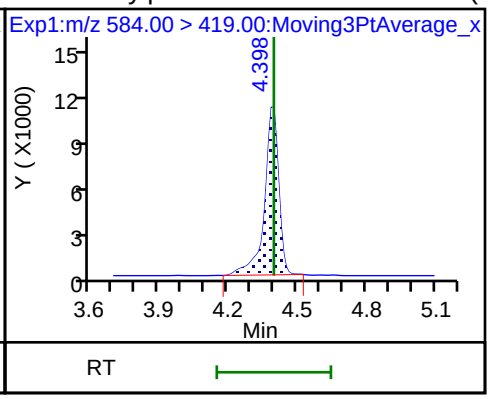

31 Perfluoroundecanoic acid



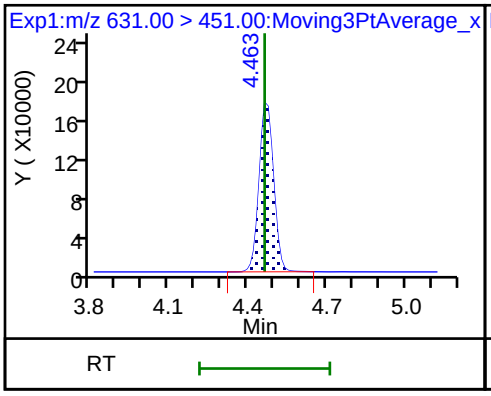

D 32 d5-NEtFOSAA



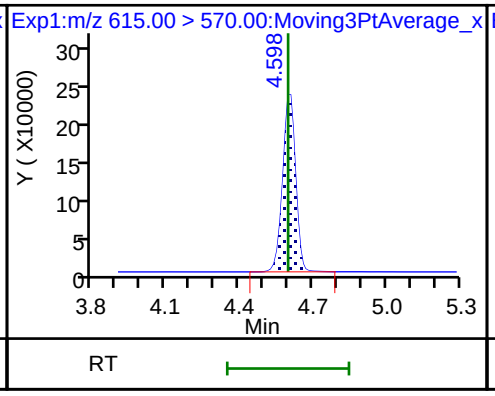

33 N-ethylperfluorooctanesulfonamid (M)



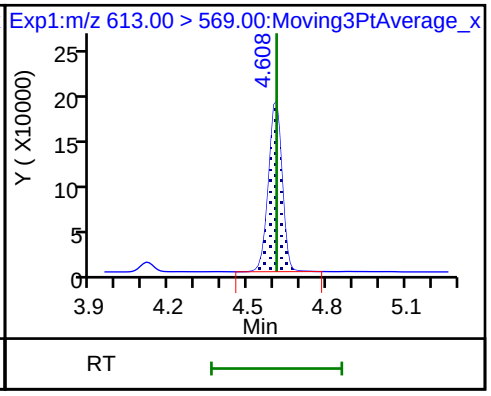

66 11-Chloroeicosafluoro-3-oxaundec



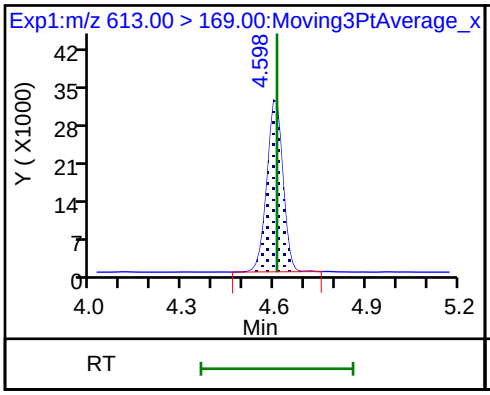

D 36 13C2 PFDoA



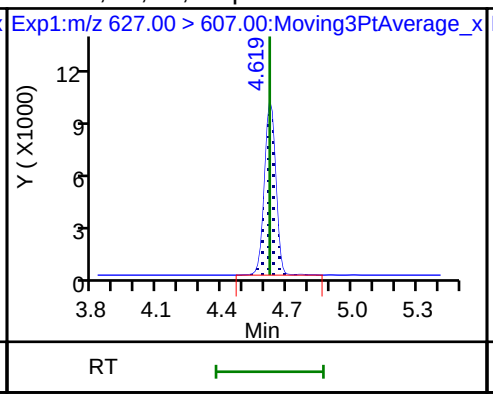

37 Perfluorododecanoic acid



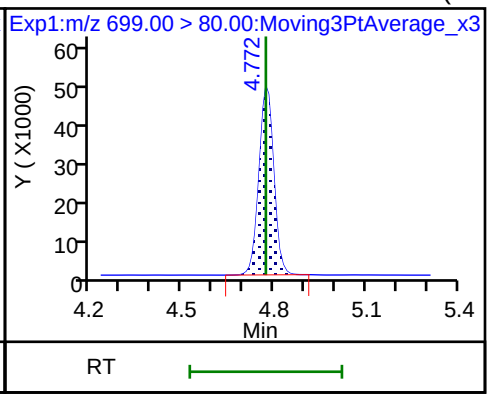
37 Perfluorododecanoic acid



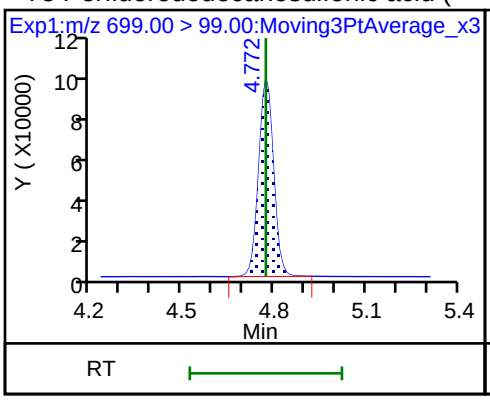

74 1H,1H,2H,2H-perfluorododecanesul



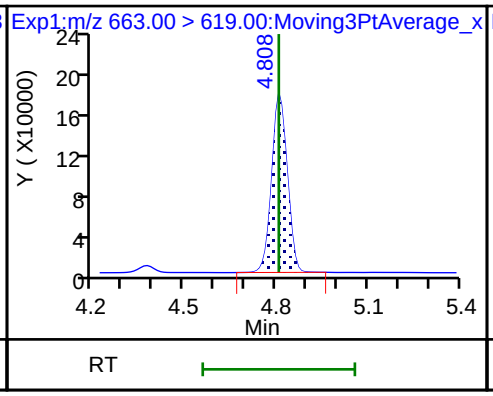

75 Perfluorododecanesulfonic acid (



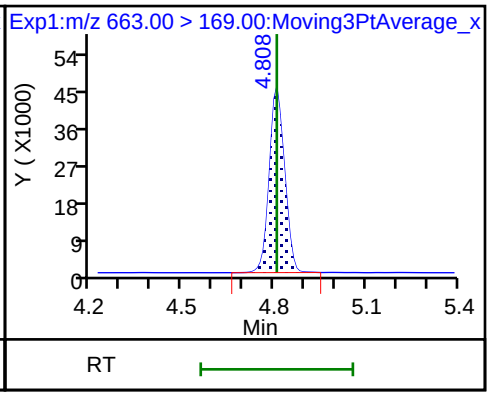

75 Perfluorododecanesulfonic acid (



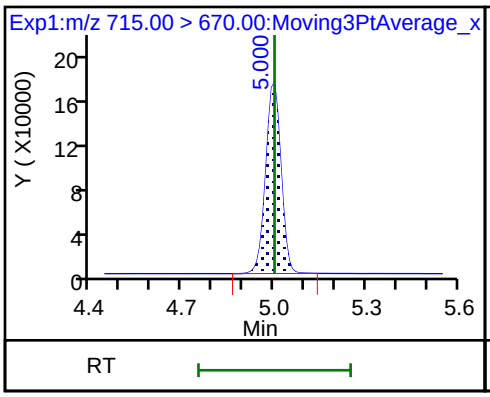

41 Perfluorotridecanoic acid



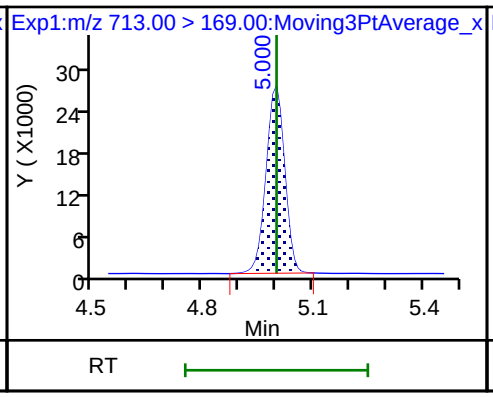

41 Perfluorotridecanoic acid



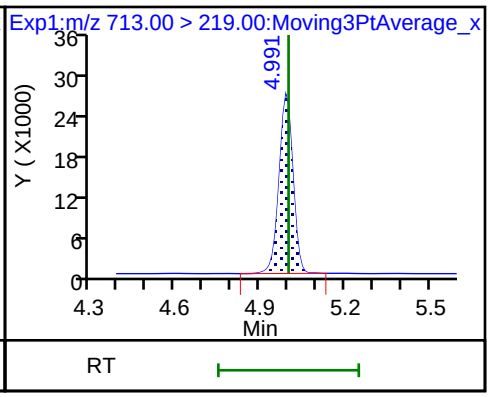

D 43 13C2 PFTeDA



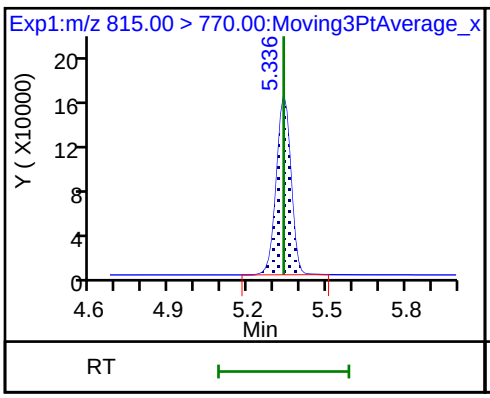

42 Perfluorotetradecanoic acid



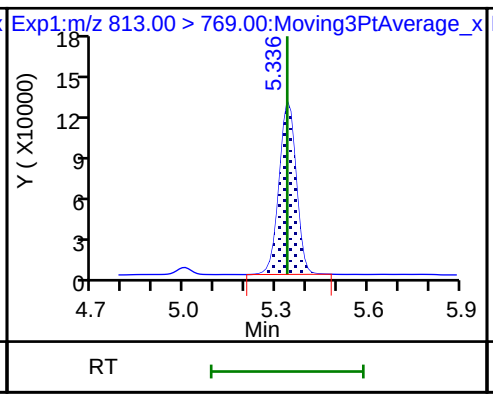

42 Perfluorotetradecanoic acid



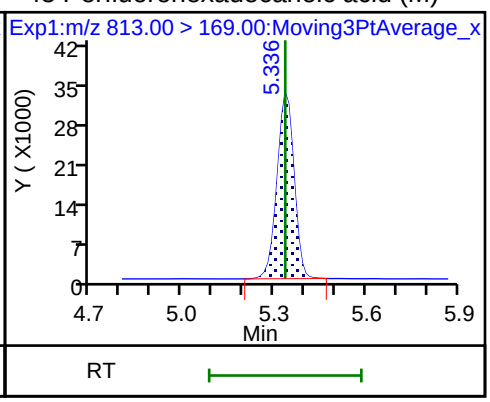

D 44 13C2 PFHxDA



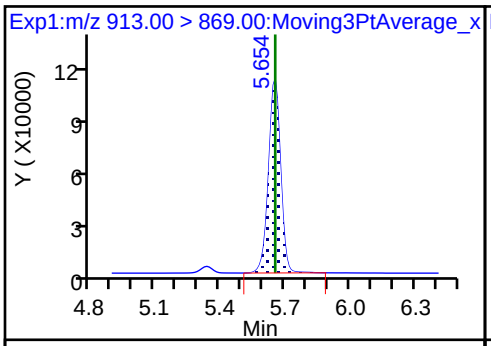

45 Perfluorohexadecanoic acid



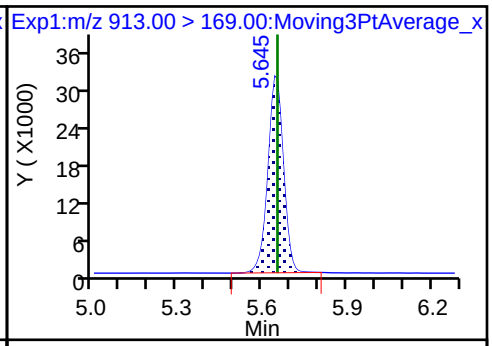

45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid




46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

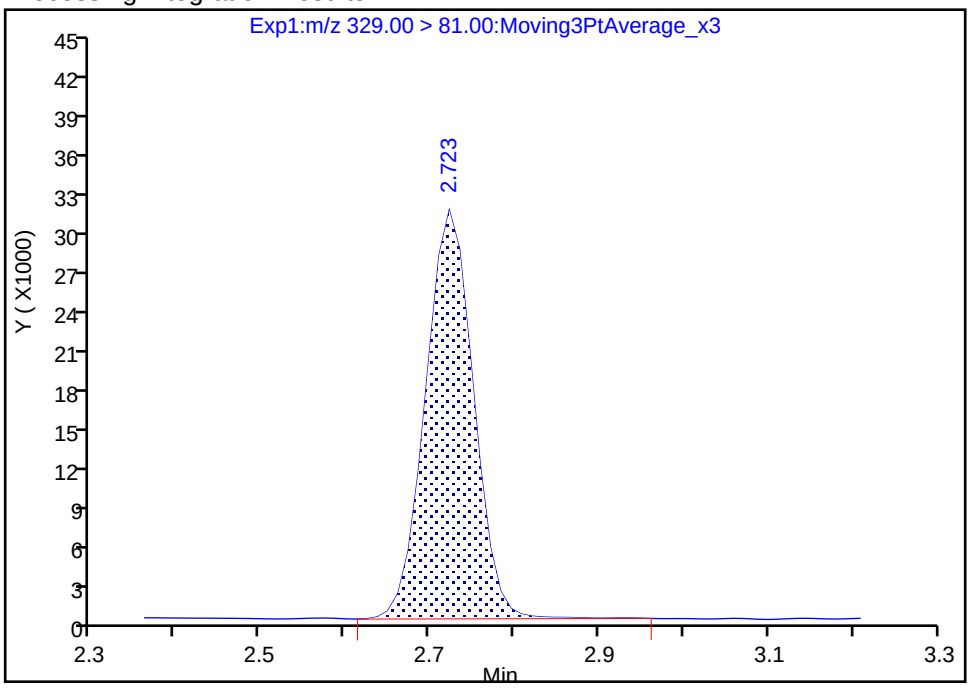
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Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

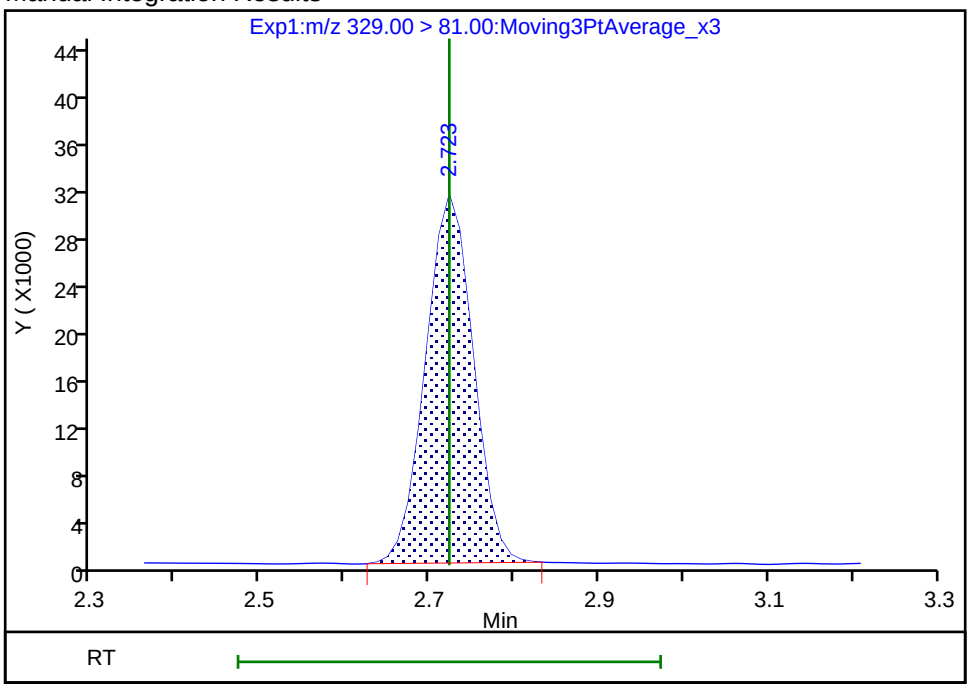
Processing Integration Results

RT: 2.72
Area: 123495
Amount: 1.180523
Amount Units: ng/ml




Manual Integration Results

RT: 2.72
Area: 122081
Amount: 1.167006
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:56:50
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

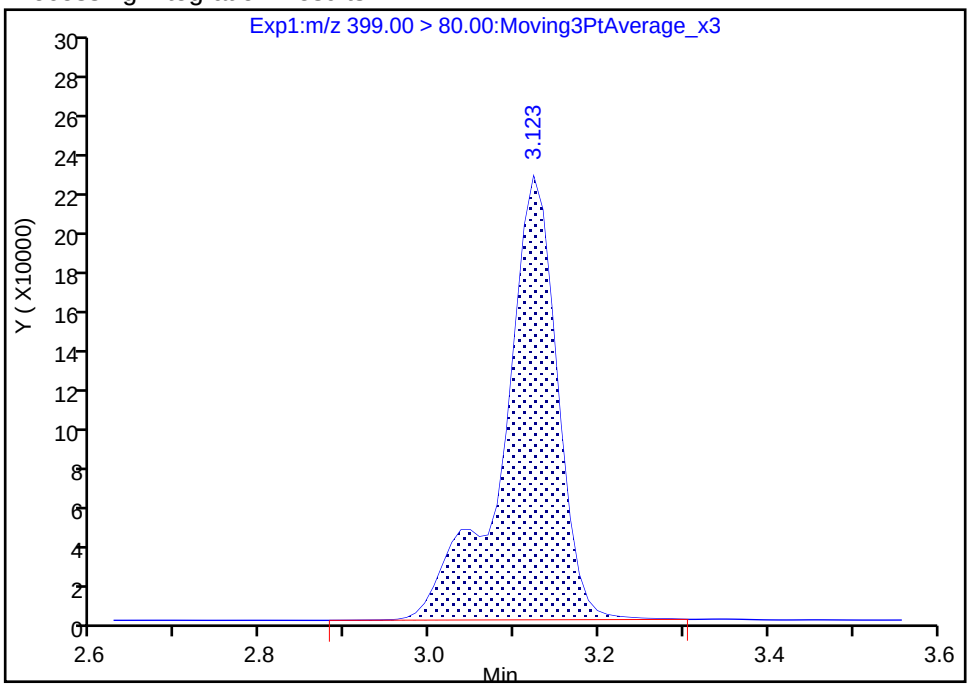
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A09.d
Injection Date: 12-Mar-2021 11:11:28 Instrument ID: LC812
Lims ID: CCVIS
Client ID:
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

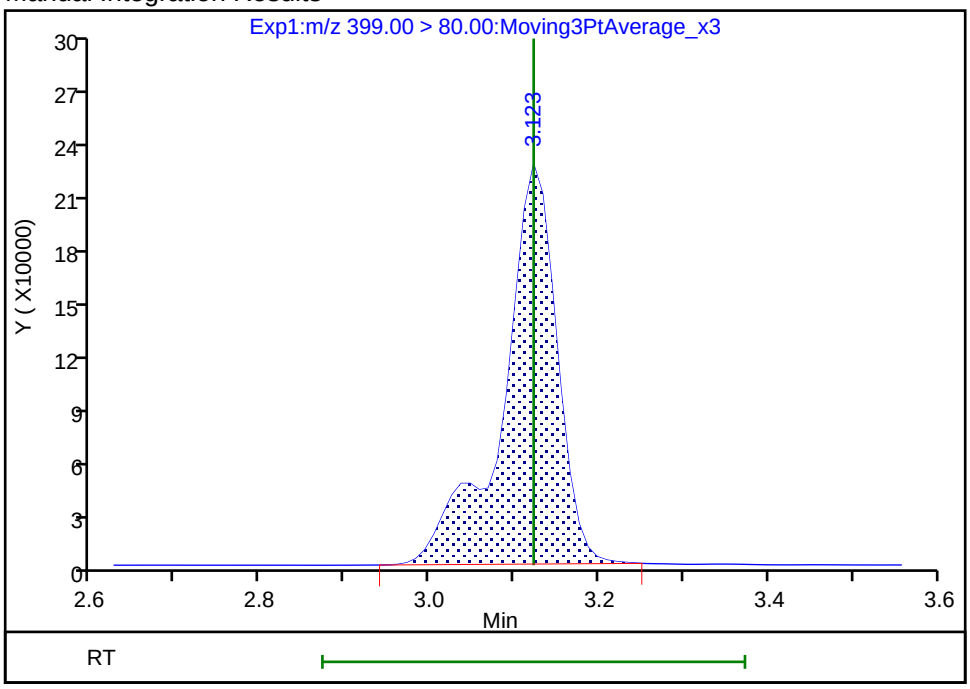
Processing Integration Results

RT: 3.12
Area: 993703
Amount: 0.864517
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 986615
Amount: 0.858350
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:42:25
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

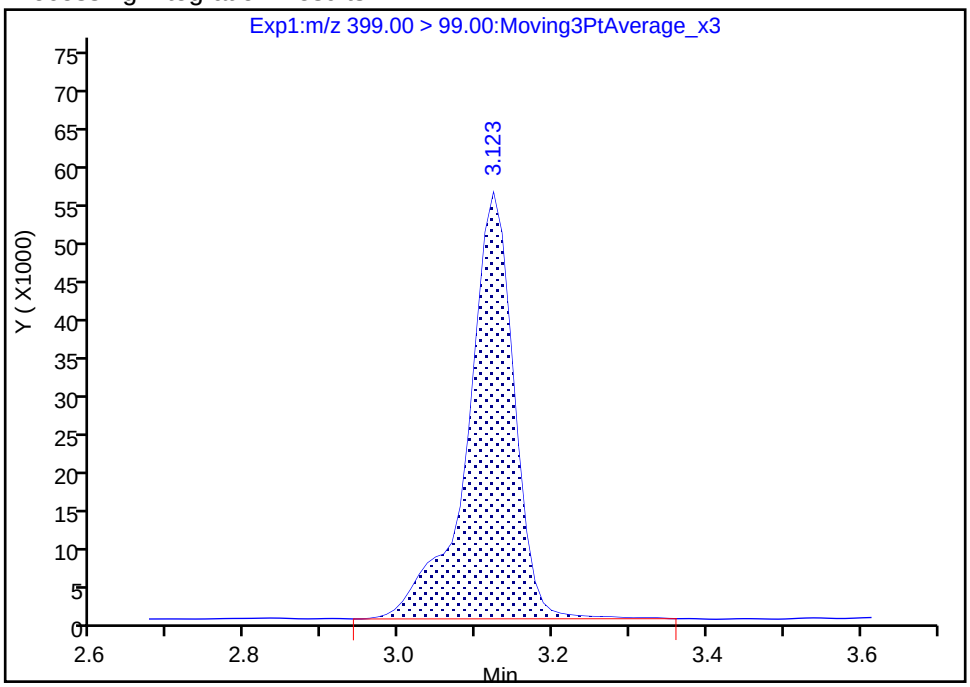
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A09.d
Injection Date: 12-Mar-2021 11:11:28 Instrument ID: LC812
Lims ID: CCVIS
Client ID:
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

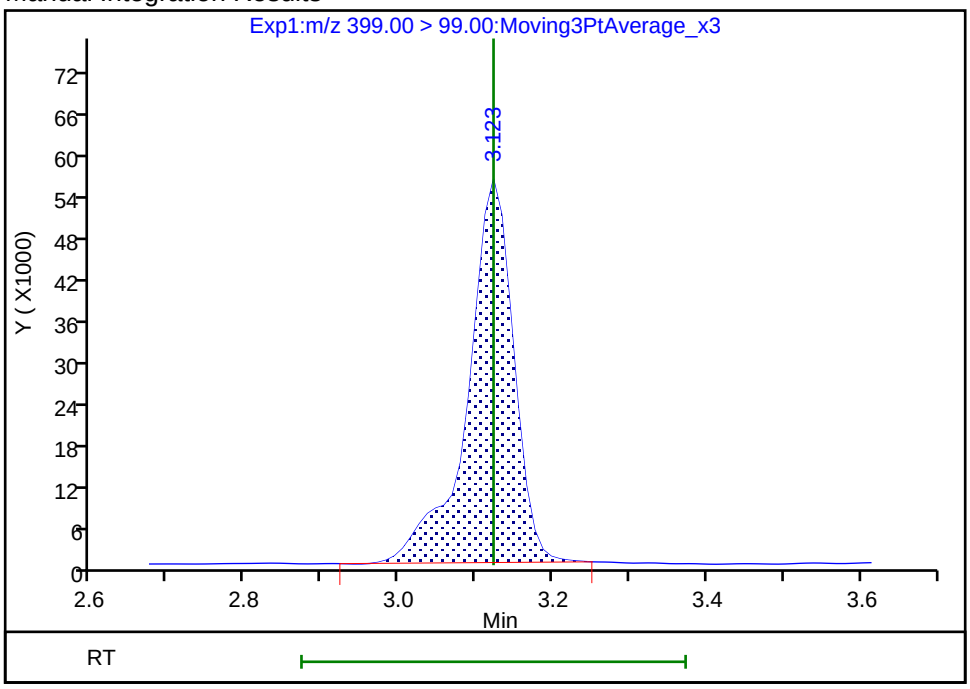
Processing Integration Results

RT: 3.12
Area: 236026
Amount: 0.864517
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 231792
Amount: 0.858350
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:42:29
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

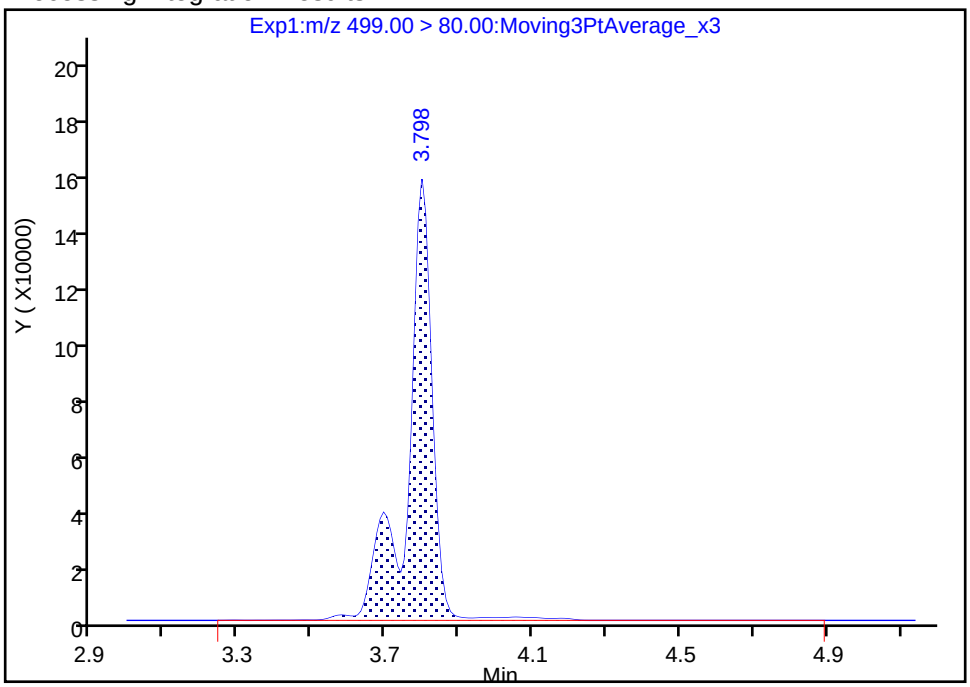
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A09.d | | | | |
| Injection Date: | 12-Mar-2021 11:11:28 | Instrument ID: | LC812 | | |
| Lims ID: | CCVIS | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

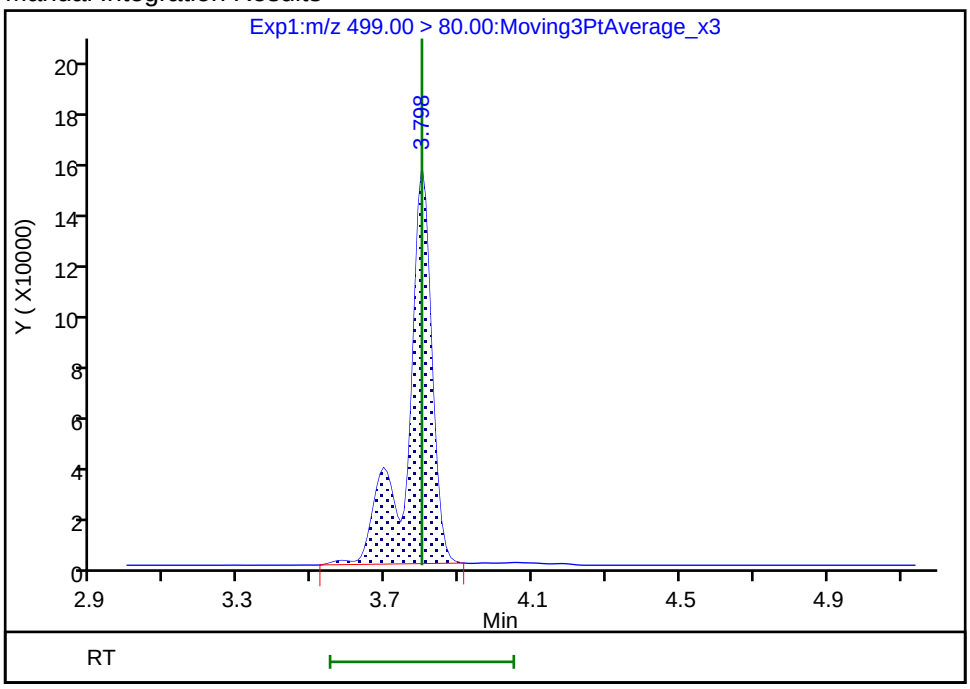
Processing Integration Results

RT: 3.80
Area: 741643
Amount: 0.955302
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 714958
Amount: 0.920929
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:57:12

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

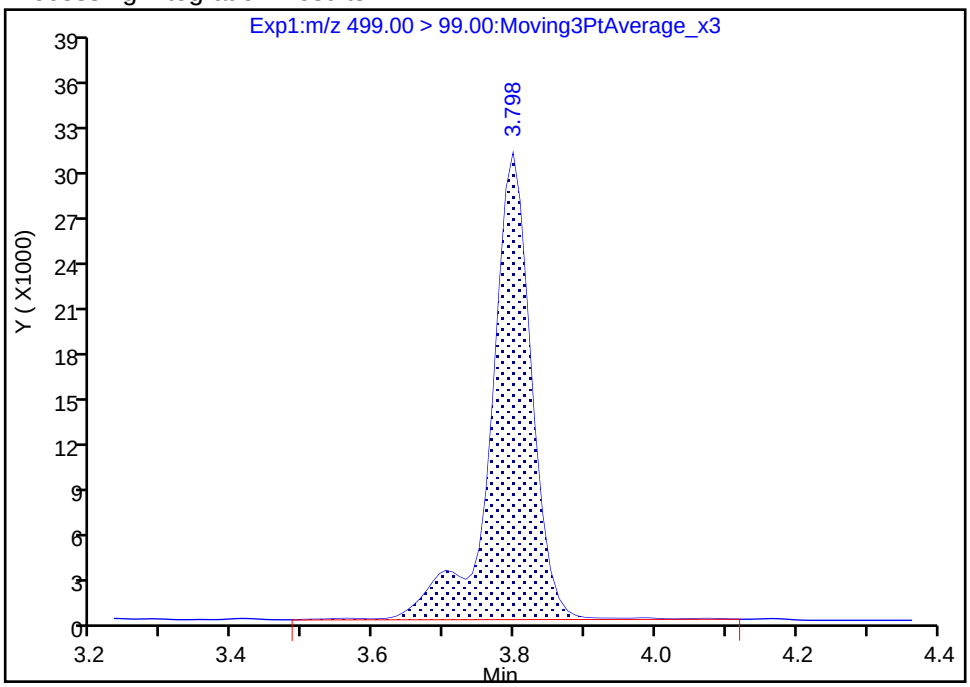
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A09.d | | | | |
| Injection Date: | 12-Mar-2021 11:11:28 | Instrument ID: | LC812 | | |
| Lims ID: | CCVIS | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

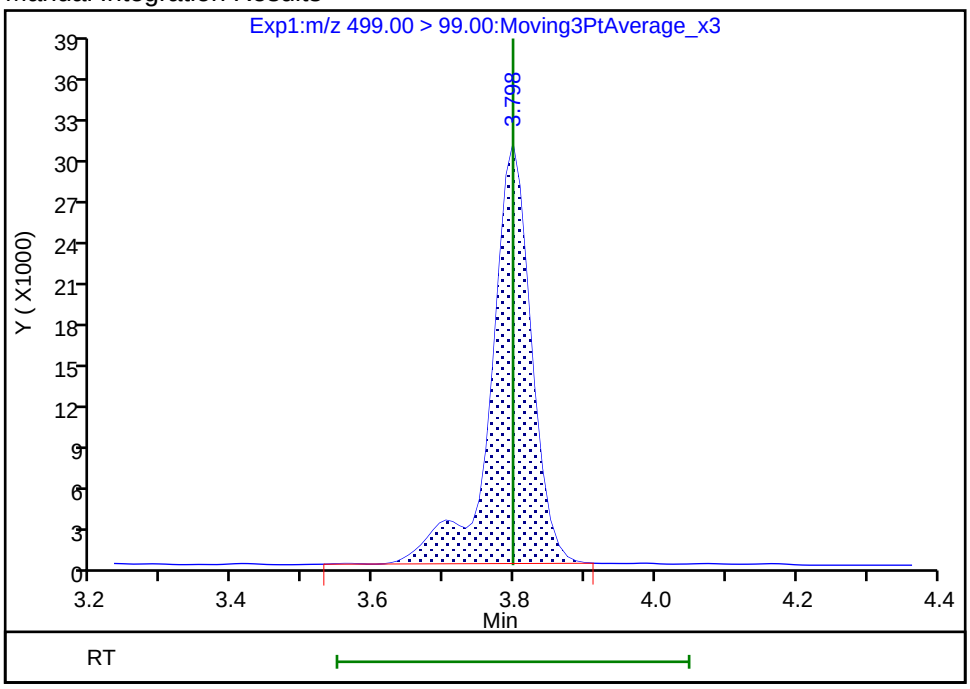
Processing Integration Results

RT: 3.80
Area: 124260
Amount: 0.955302
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 122084
Amount: 0.920929
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:57:16

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

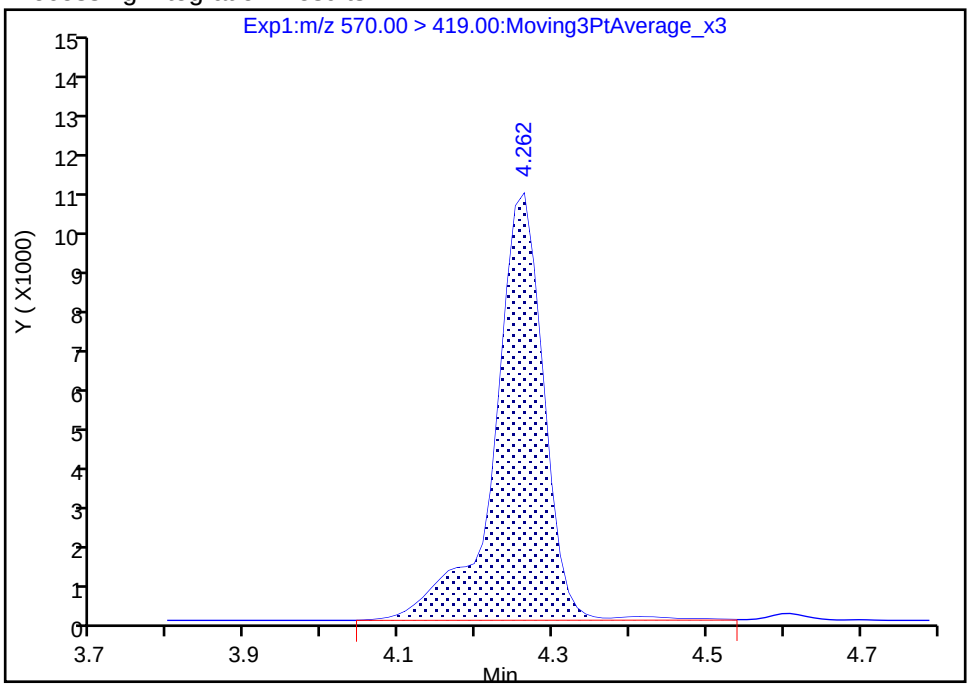
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A09.d | | | | |
| Injection Date: | 12-Mar-2021 11:11:28 | Instrument ID: | LC812 | | |
| Lims ID: | CCVIS | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 9 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

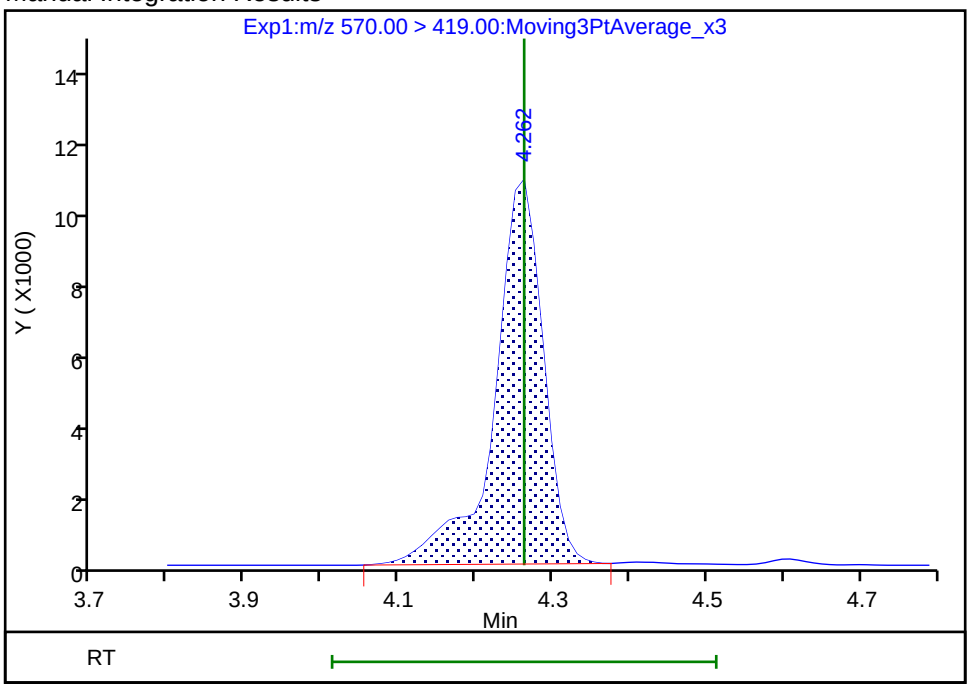
Processing Integration Results

RT: 4.26
Area: 47942
Amount: 1.026217
Amount Units: ng/ml




Manual Integration Results

RT: 4.26
Area: 47004
Amount: 1.006139
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:57:35
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

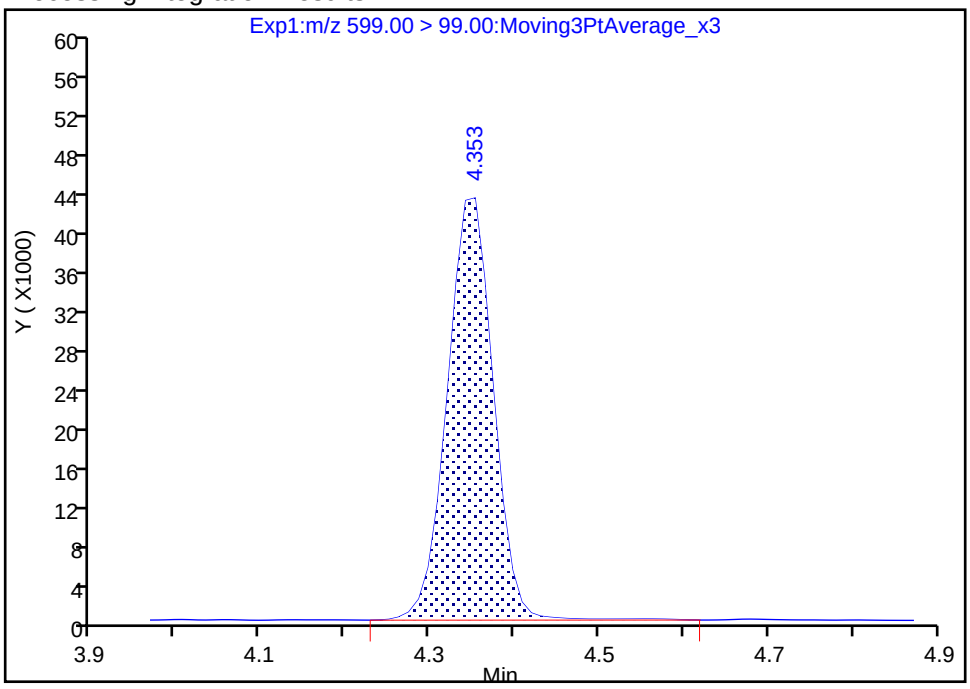
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A09.d
Injection Date: 12-Mar-2021 11:11:28 Instrument ID: LC812
Lims ID: CCVIS
Client ID:
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

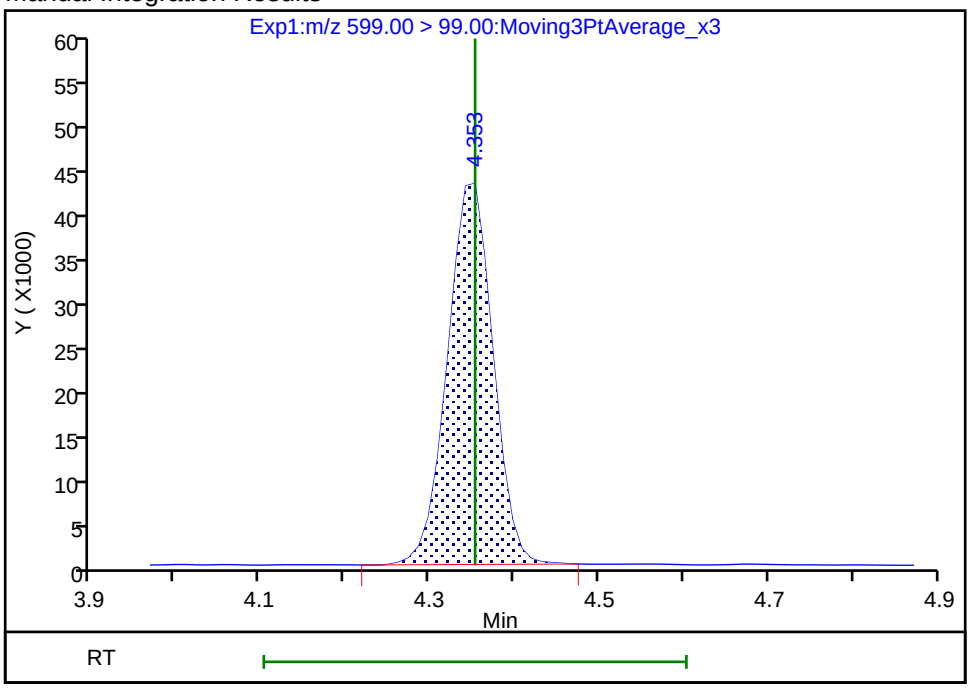
Processing Integration Results

RT: 4.35
Area: 162114
Amount: 0.959309
Amount Units: ng/ml




Manual Integration Results

RT: 4.35
Area: 160511
Amount: 0.959309
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:57:41
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

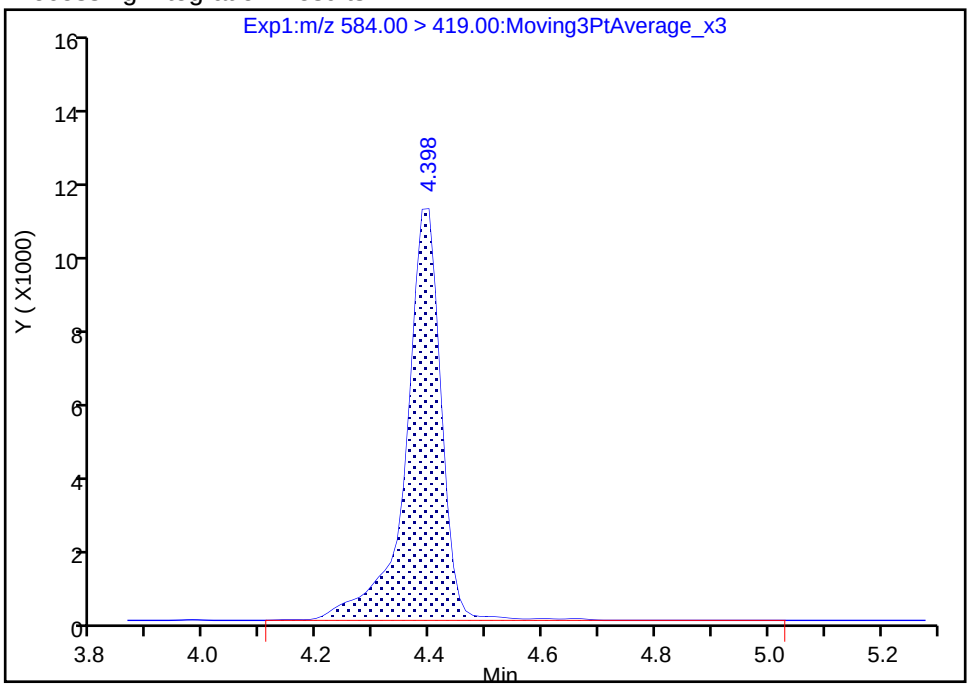
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A09.d
Injection Date: 12-Mar-2021 11:11:28 Instrument ID: LC812
Lims ID: CCVIS
Client ID:
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

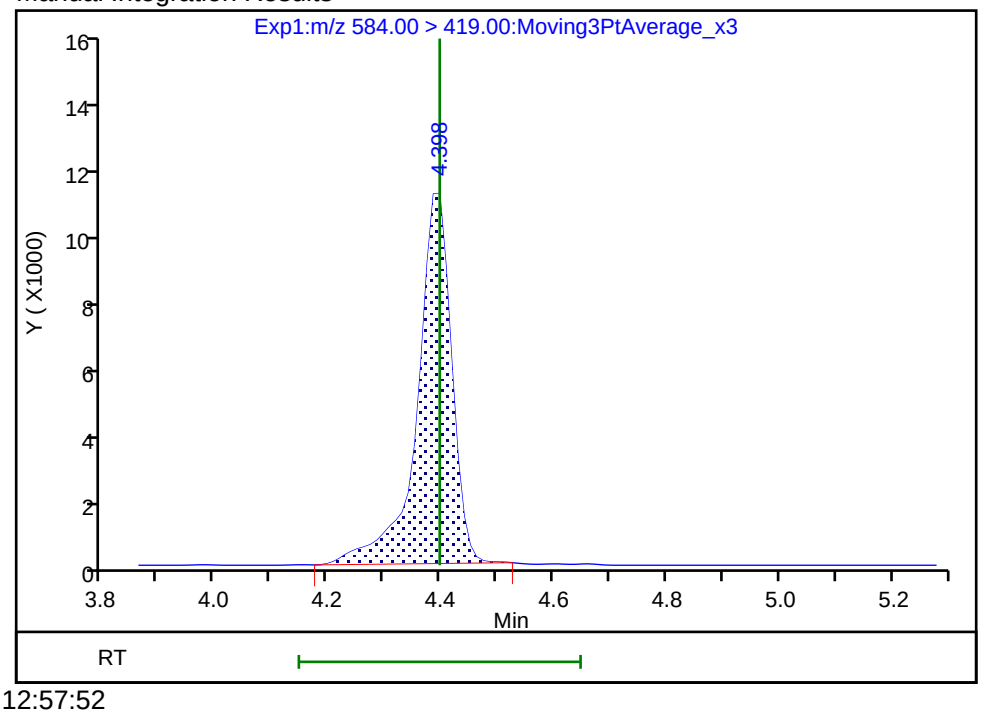
Processing Integration Results

RT: 4.40
Area: 46671
Amount: 0.981456
Amount Units: ng/ml




Manual Integration Results

RT: 4.40
Area: 45413
Amount: 0.955001
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:57:52
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

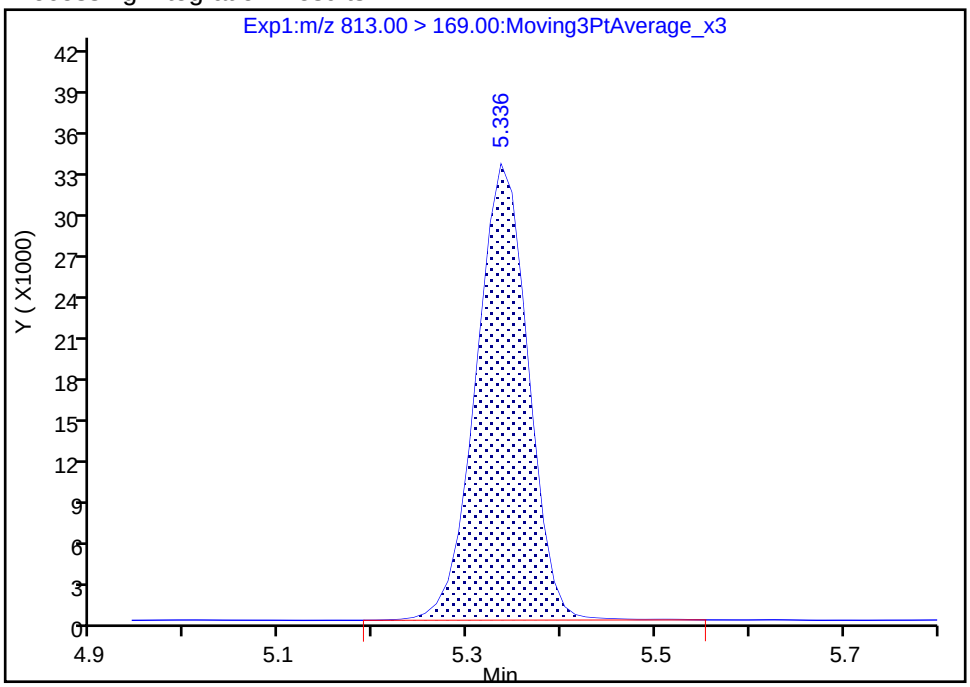
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45138.b\PA210312A09.d
Injection Date: 12-Mar-2021 11:11:28 Instrument ID: LC812
Lims ID: CCVIS
Client ID:
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 45 Perfluorohexadecanoic acid, CAS: 67905-19-5

Signal: 2

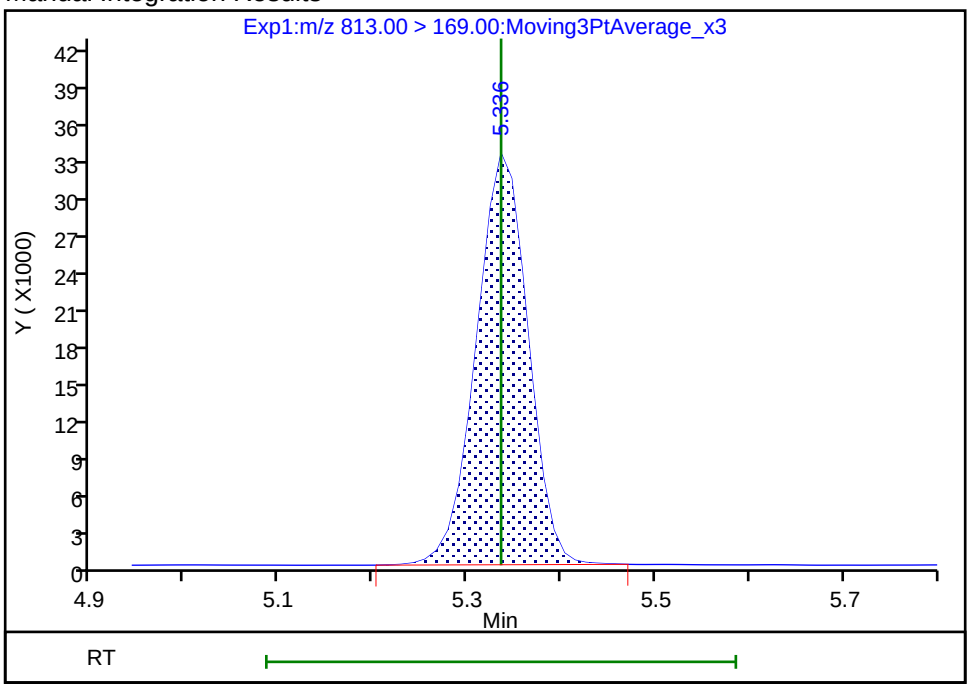
Processing Integration Results

RT: 5.34
Area: 127529
Amount: 1.059609
Amount Units: ng/ml




Manual Integration Results

RT: 5.34
Area: 127019
Amount: 1.059609
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 12:58:10
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Lab Sample ID: CCV 200-164776/1  Calibration Date: 03/12/2021 12:01

Instrument ID: LC812  Calib Start Date: 12/22/2020 12:48

GC Column: C-18  ID: 4.60(mm)  Calib End Date: 12/22/2020 13:29

Lab File ID: PA210312B01.d  Conc. Units: ng/mL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | AveID | 1.002 | 0.9876 | | 2.46 | 2.50 | -1.4 | 40.0 |
| Perfluoropentanoic acid (PFPeA) | AveID | 1.107 | 1.092 | | 2.47 | 2.50 | -1.4 | 40.0 |
| Perfluorobutanesulfonic acid (PFBS) | AveID | 1.131 | 1.070 | | 2.09 | 2.21 | -5.5 | 40.0 |
| 1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2) | AveID | 1.834 | 1.704 | | 2.17 | 2.34 | -7.1 | 50.0 |
| Perfluorohexanoic acid (PFHxA) | AveID | 1.092 | 1.112 | | 2.54 | 2.50 | 1.8 | 40.0 |
| Perfluoropentanesulfonic acid | AveID | 1.312 | 1.279 | | 2.29 | 2.35 | -2.5 | 50.0 |
| HFPO-DA | AveID | 1.385 | 1.533 | | 2.77 | 2.50 | 10.7 | 40.0 |
| Perfluorohexanesulfonic acid (PFHxS) | AveID | 1.178 | 1.131 | | 2.18 | 2.28 | -4.0 | 40.0 |
| Perfluoroheptanoic acid (PFHpA) | AveID | 1.092 | 1.102 | | 2.52 | 2.50 | 0.9 | 40.0 |
| DONA | AveID | 3.349 | 3.313 | | 2.33 | 2.36 | -1.1 | 50.0 |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | AveID | 1.112 | 0.9856 | | 2.10 | 2.37 | -11.4 | 40.0 |
| Perfluoroheptanesulfonic Acid (PFHpS) | AveID | 1.350 | 1.370 | | 2.42 | 2.38 | 1.5 | 50.0 |
| Perfluorooctanoic acid (PFOA) | AveID | 1.084 | 1.130 | | 2.61 | 2.50 | 4.2 | 40.0 |
| Perfluorooctanesulfonic acid (PFOS) | AveID | 1.150 | 1.136 | | 2.29 | 2.32 | -1.2 | 40.0 |
| Perfluorononanoic acid (PFNA) | AveID | 1.107 | 1.084 | | 2.45 | 2.50 | -2.1 | 40.0 |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid | AveID | 1.283 | 1.150 | | 2.09 | 2.33 | -10.4 | 50.0 |
| Perfluorononanesulfonic acid | AveID | 0.8581 | 0.8682 | | 2.43 | 2.40 | 1.2 | 50.0 |
| Perfluorodecanoic acid (PFDA) | AveID | 1.031 | 1.002 | | 2.43 | 2.50 | -2.8 | 40.0 |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | AveID | 0.6801 | 0.5400 | | 1.90 | 2.40 | -20.6 | 40.0 |
| Perfluorooctanesulfonamide (PFOSA) | AveID | 1.002 | 1.038 | | 2.59 | 2.50 | 3.5 | 40.0 |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | AveID | 0.8864 | 0.9313 | | 2.63 | 2.50 | 5.1 | 40.0 |
| Perfluorodecanesulfonic acid (PFDS) | AveID | 0.6841 | 0.6870 | | 2.42 | 2.41 | 0.4 | 50.0 |
| Perfluoroundecanoic acid (PFUnA) | AveID | 1.020 | 1.053 | | 2.58 | 2.50 | 3.2 | 40.0 |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | AveID | 0.9257 | 0.9062 | | 2.45 | 2.50 | -2.1 | 40.0 |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid | AveID | 1.331 | 1.044 | | 1.85 | 2.36 | -21.6 | 50.0 |
| Perfluorododecanoic acid (PFDoA) | AveID | 1.100 | 1.028 | | 2.34 | 2.50 | -6.5 | 40.0 |
| 10:2 FTS | AveID | 0.3501 | 0.3057 | | 2.10 | 2.41 | -12.7 | 50.0 |
| Perfluorododecanesulfonic acid (PFDoS) | AveID | 0.2517 | 0.2537 | | 2.44 | 2.42 | 0.8 | 50.0 |
| Perfluorotridecanoic acid (PFTriA) | AveID | 0.8926 | 0.8973 | | 2.51 | 2.50 | 0.5 | 50.0 |
| Perfluorotetradecanoic acid (PFTeA) | AveID | 0.1855 | 0.2156 | | 2.91 | 2.50 | 16.3 | 40.0 |

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Lab Sample ID: CCV 200-164776/1  Calibration Date: 03/12/2021 12:01

Instrument ID: LC812  Calib Start Date: 12/22/2020 12:48

GC Column: C-18  ID: 4.60(mm)  Calib End Date: 12/22/2020 13:29

Lab File ID: PA210312B01.d  Conc. Units: ng/mL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Perfluoro-n-hexadecanoic acid (PFHxDA) | L1ID | | 1.001 | | 2.67 | 2.50 | 6.9 | 40.0 |
| Perfluoro-n-octadecanoic acid (PFODA) | AveID | 0.8998 | 0.8823 | | 2.45 | 2.50 | -1.9 | 50.0 |
| 13C4 PFBA | Ave | 1.343 | 1.271 | | 1.18 | 1.25 | -5.4 | 50.0 |
| 13C5 PFPeA | Ave | 0.9710 | 0.9267 | | 1.19 | 1.25 | -4.6 | 50.0 |
| 13C3 PFBS | Ave | 1.278 | 1.229 | | 1.12 | 1.16 | -3.8 | 50.0 |
| M2-4:2 FTS | Ave | 0.1066 | 0.1017 | | 1.11 | 1.17 | -4.6 | 50.0 |
| 13C2 PFHxA | Ave | 1.018 | 0.9708 | | 1.19 | 1.25 | -4.6 | 50.0 |
| 13C3 HFPO-DA | Ave | 0.1792 | 0.1242 | | 0.866 | 1.25 | -30.7 | 50.0 |
| 18O2 PFHxS | Ave | 0.9511 | 0.9284 | | 1.15 | 1.18 | -2.4 | 50.0 |
| 13C4 PFHpA | Ave | 0.9742 | 0.9455 | | 1.21 | 1.25 | -2.9 | 50.0 |
| M2-6:2 FTS | Ave | 0.1187 | 0.1070 | | 1.07 | 1.19 | -9.8 | 50.0 |
| 13C4 PFOA | Ave | 0.9896 | 0.9391 | | 1.19 | 1.25 | -5.1 | 50.0 |
| 13C4 PFOS | Ave | 0.6528 | 0.6172 | | 1.13 | 1.20 | -5.4 | 50.0 |
| 13C5 PFNA | Ave | 0.8730 | 0.8338 | | 1.19 | 1.25 | -4.5 | 50.0 |
| 13C2 PFDA | Ave | 0.8346 | 0.7518 | | 1.13 | 1.25 | -9.9 | 50.0 |
| M2-8:2 FTS | Ave | 0.1225 | 0.1141 | | 1.12 | 1.20 | -6.8 | 50.0 |
| 13C8 FOSA | Ave | 1.227 | 1.164 | | 1.19 | 1.25 | -5.2 | 50.0 |
| d3-NMeFOSAA | Ave | 0.0605 | 0.0499 | | 1.03 | 1.25 | -17.6 | 50.0 |
| 13C2 PFUnA | Ave | 0.6856 | 0.5761 | | 1.05 | 1.25 | -16.0 | 50.0 |
| d5-NEtFOSAA | Ave | 0.0585 | 0.0478 | | 1.02 | 1.25 | -18.3 | 50.0 |
| 13C2 PFDoA | Ave | 0.7238 | 0.5912 | | 1.02 | 1.25 | -18.3 | 50.0 |
| 13C2 PFTeDA | Ave | 0.5353 | 0.4049 | | 0.945 | 1.25 | -24.4 | 50.0 |
| 13C2 PFHxDA | Ave | 0.5718 | 0.4250 | | 0.929 | 1.25 | -25.7 | 50.0 |

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B01.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 12-Mar-2021 12:01:08 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: 200-0045149-001 Plate: 1 Rack: 2
Operator ID: lc812tech Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 12-Mar-2021 14:03:44 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1632

First Level Reviewer: deannd Date: 12-Mar-2021 12:47:59
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.074 | 2.091 | -0.017 | 0.597 | 1338639 | 1.18 | | 94.6 | 8414 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | |
| 212.90 > 169.00 | 2.082 | 2.091 | -0.009 | 1.004 | 2643987 | 2.46 | | 98.6 | 624 | |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.401 | 2.413 | -0.012 | 0.691 | 975677 | 1.19 | | 95.4 | 3375 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | |
| 262.90 > 219.00 | 2.401 | 2.413 | -0.012 | 1.000 | 2130928 | 2.47 | | 98.6 | 159 | |
| D 47 13C3 PFBS | | | | | | | | | | |
| 301.90 > 80.00 | 2.414 | 2.426 | -0.012 | 0.695 | 1203730 | 1.12 | | 96.2 | 241888 | |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | M |
| 298.90 > 80.00 | 2.414 | 2.439 | -0.025 | 1.000 | 2447618 | 2.09 | Target=2.21 | 94.5 | 1574 | M |
| 298.90 > 99.00 | 2.414 | 2.439 | -0.025 | 1.000 | 1107265 | | 2.21(1.11-3.32) | | 747 | |
| D 60 M2-4:2 FTS | | | | | | | | | | M |
| 329.00 > 81.00 | 2.711 | 2.734 | -0.023 | 0.780 | 100010 | 1.11 | | 95.4 | 157 | M |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | |
| 327.00 > 307.00 | 2.711 | 2.734 | -0.023 | 1.000 | 340923 | 2.17 | | 92.9 | 2140 | |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.747 | 2.770 | -0.023 | 0.790 | 1022137 | 1.19 | | 95.4 | 5127 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | |
| 313.00 > 269.00 | 2.747 | 2.770 | -0.023 | 1.000 | 2272622 | 2.54 | Target=12.83 | 102 | 443 | |
| 313.00 > 119.00 | 2.747 | 2.770 | -0.023 | 1.000 | 189782 | | 11.97(6.42-19.25) | | 303 | |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | M |
| 349.00 > 80.00 | 2.759 | 2.770 | -0.011 | 0.887 | 2345567 | 2.29 | Target=3.35 | 97.5 | 1625 | M |
| 349.00 > 99.00 | 2.759 | 2.770 | -0.011 | 0.887 | 684195 | | 3.43(1.67-5.02) | | 915 | |
| 67 Perfluoro(2-propoxypropanoic) ac | | | | | | | | | | |
| 329.10 > 285.00 | 2.857 | 2.880 | -0.024 | 1.000 | 401022 | 2.77 | | 111 | 71.9 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 64 13C3 HFPO-DA | | | | | | | | | | |
| 332.10 > 287.00 | 2.857 | 2.880 | -0.024 | 0.822 | 130771 | 0.8664 | | 69.3 | 877 | |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.112 | 3.132 | -0.020 | 1.000 | 2012886 | 2.18 | Target=4.15 | 96.0 | 1165 | M |
| 399.00 > 99.00 | 3.112 | 3.132 | -0.020 | 1.000 | 480117 | | 4.19(2.08-6.23) | | 495 | M |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.112 | 3.132 | -0.020 | 0.895 | 924680 | 1.15 | | 97.6 | 2404 | |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.123 | 3.143 | -0.020 | 0.899 | 995486 | 1.21 | | 97.1 | 3764 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | |
| 363.00 > 319.00 | 3.123 | 3.143 | -0.020 | 1.000 | 2194231 | 2.52 | Target=3.66 | 101 | 687 | |
| 363.00 > 169.00 | 3.123 | 3.143 | -0.020 | 1.000 | 630401 | | 3.48(1.83-5.49) | | 1713 | |
| 77 DONA | | | | | | | | | | |
| 377.00 > 251.00 | 3.155 | 3.175 | -0.020 | 0.833 | 4056148 | 2.33 | Target=2.43 | 98.9 | 4154 | |
| 377.00 > 85.00 | 3.155 | 3.175 | -0.020 | 0.833 | 1750646 | | 2.32(1.22-3.65) | | 2441 | |
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | M |
| 449.00 > 80.00 | 3.466 | 3.483 | -0.017 | 0.915 | 1695517 | 2.42 | Target=5.95 | 101 | 2295 | M |
| 449.00 > 99.00 | 3.466 | 3.483 | -0.017 | 0.915 | 275394 | | 6.16(2.98-8.93) | | 1033 | |
| D 12 M2-6:2 FTS | | | | | | | | | | |
| 429.00 > 81.00 | 3.466 | 3.492 | -0.026 | 0.997 | 107040 | 1.07 | | 90.2 | 563 | |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | M |
| 427.00 > 407.00 | 3.466 | 3.492 | -0.026 | 1.000 | 210561 | 2.10 | | 88.6 | 1341 | M |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.475 | 3.501 | -0.026 | 1.000 | 988768 | 1.19 | | 94.9 | 3455 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.475 | 3.501 | -0.026 | | 1052883 | 1.25 | | | 2563 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | M |
| 413.00 > 369.00 | 3.475 | 3.501 | -0.026 | 1.000 | 2233721 | 2.61 | Target=2.58 | 104 | 694 | |
| 413.00 > 169.00 | 3.475 | 3.501 | -0.026 | 1.000 | 879333 | | 2.54(1.29-3.87) | | 1366 | M |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.788 | 3.814 | -0.026 | 1.000 | 1370801 | 2.29 | Target=5.65 | 98.8 | 568 | M |
| 499.00 > 99.00 | 3.788 | 3.814 | -0.026 | 1.000 | 231697 | | 5.92(2.82-8.47) | | 664 | M |
| D 18 13C4 PFOS | | | | | | | | | | |
| 503.00 > 80.00 | 3.788 | 3.814 | -0.026 | 1.090 | 621296 | 1.13 | | 94.6 | 2161 | |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.807 | 3.824 | -0.017 | 1.096 | 877847 | 1.19 | | 95.5 | 3054 | |
| 20 Perfluorononanoic acid | | | | | | | | | | M |
| 463.00 > 419.00 | 3.807 | 3.824 | -0.017 | 1.000 | 1903148 | 2.45 | Target=7.44 | 97.9 | 347 | |
| 463.00 > 169.00 | 3.807 | 3.824 | -0.017 | 1.000 | 292336 | | 6.51(3.72-11.16) | | 2310 | M |
| 69 9-Chlorohexadecafluoro-3-oxanona | | | | | | | | | | |
| 531.00 > 351.00 | 3.948 | 3.973 | -0.025 | 1.042 | 1392848 | 2.09 | | 89.6 | 3404 | |
| 68 Perfluorononanesulfonic acid | | | | | | | | | | |
| 549.00 > 80.00 | 4.075 | 4.104 | -0.029 | 1.076 | 1083328 | 2.43 | Target=2.54 | 101 | 3518 | |
| 549.00 > 99.00 | 4.075 | 4.104 | -0.029 | 1.076 | 363664 | | 2.98(1.27-3.81) | | 1020 | |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.108 | 4.126 | -0.018 | 1.182 | 791509 | 1.13 | | 90.1 | 3793 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 24 Perfluorodecanoic acid | | | | | | | | | | |
| 513.00 > 469.00 | 4.108 | 4.126 | -0.018 | 1.000 | 1586362 | 2.43 | Target=9.29 | 97.2 | 1228 | |
| 513.00 > 169.00 | 4.108 | 4.126 | -0.018 | 1.000 | 197975 | | 8.01(4.64-13.93) | | 942 | |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.120 | 4.137 | -0.017 | 1.185 | 115079 | 1.12 | | 93.2 | 525 | |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | |
| 527.00 > 507.00 | 4.120 | 4.137 | -0.017 | 1.000 | 124292 | 1.90 | | 79.4 | 1119 | |
| D 21 13C8 FOSA | | | | | | | | | | |
| 506.00 > 78.00 | 4.209 | 4.225 | -0.016 | 1.211 | 1225136 | 1.19 | | 94.8 | 4310 | |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | |
| 498.00 > 78.00 | 4.209 | 4.225 | -0.016 | 1.000 | 2542390 | 2.59 | | 104 | 4453 | |
| D 27 d3-NMeFOSAA | | | | | | | | | | |
| 573.00 > 419.00 | 4.252 | 4.268 | -0.016 | 1.223 | 52544 | 1.03 | | 82.4 | 69.3 | |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | M |
| 570.00 > 419.00 | 4.252 | 4.268 | -0.016 | 1.000 | 97873 | 2.63 | | 105 | 336 | M |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | M |
| 599.00 > 80.00 | 4.342 | 4.358 | -0.016 | 1.146 | 860829 | 2.42 | Target=2.80 | 100 | 3417 | |
| 599.00 > 99.00 | 4.342 | 4.358 | -0.016 | 1.146 | 314796 | | 2.73(1.40-4.19) | | 1313 | M |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.365 | 4.391 | -0.026 | 1.256 | 606553 | 1.05 | | 84.0 | 4685 | |
| 31 Perfluoroundecanoic acid | | | | | | | | | | |
| 563.00 > 519.00 | 4.365 | 4.391 | -0.026 | 1.000 | 1277210 | 2.58 | Target=8.12 | 103 | 1044 | |
| 563.00 > 169.00 | 4.365 | 4.391 | -0.026 | 1.000 | 165250 | | 7.73(4.06-12.18) | | 1712 | |
| D 32 d5-NEtFOSAA | | | | | | | | | | |
| 589.00 > 419.00 | 4.376 | 4.402 | -0.026 | 1.259 | 50312 | 1.02 | | 81.7 | 523 | |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.387 | 4.402 | -0.015 | 1.003 | 91187 | 2.45 | | 97.9 | 619 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | |
| 631.00 > 451.00 | 4.463 | 4.479 | -0.016 | 1.178 | 1278201 | 1.85 | | 78.4 | 3594 | |
| D 36 13C2 PFDoA | | | | | | | | | | |
| 615.00 > 570.00 | 4.598 | 4.622 | -0.024 | 1.323 | 622427 | 1.02 | | 81.7 | 2828 | |
| 37 Perfluorododecanoic acid | | | | | | | | | | M |
| 613.00 > 569.00 | 4.598 | 4.622 | -0.024 | 1.000 | 1279891 | 2.34 | Target=6.91 | 93.5 | 383 | M |
| 613.00 > 169.00 | 4.598 | 4.622 | -0.024 | 1.000 | 217414 | | 5.89(3.45-10.36) | | 2741 | |
| 74 1H,1H,2H,2H-perfluorododecanesul | | | | | | | | | | |
| 627.00 > 607.00 | 4.609 | 4.643 | -0.034 | 1.119 | 70797 | 2.10 | | 87.3 | 1066 | |
| 75 Perfluorododecanesulfonic acid ( | | | | | | | | | | |
| 699.00 > 80.00 | 4.763 | 4.792 | -0.029 | 1.257 | 319145 | 2.44 | Target=0.51 | 101 | 3657 | |
| 699.00 > 99.00 | 4.763 | 4.792 | -0.029 | 1.257 | 633674 | | 0.50(0.26-0.77) | | 2352 | |
| 41 Perfluorotridecanoic acid | | | | | | | | | | |
| 663.00 > 619.00 | 4.799 | 4.822 | -0.023 | 1.044 | 1116991 | 2.51 | Target=4.39 | 101 | 535 | |
| 663.00 > 169.00 | 4.799 | 4.822 | -0.023 | 1.044 | 271603 | | 4.11(2.20-6.59) | | 2587 | |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 4.994 | 5.014 | -0.020 | 1.437 | 426302 | 0.9455 | | 75.6 | 2354 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | |
| 713.00 > 169.00 | 4.994 | 5.014 | -0.020 | 1.000 | 183829 | 2.91 | Target=1.06 | 116 | 1746 | |
| 713.00 > 219.00 | 4.984 | 5.014 | -0.030 | 0.998 | 175389 | | 1.05(0.53-1.59) | | 2784 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.337 | 5.360 | -0.023 | 1.536 | 447485 | 0.9291 | | 74.3 | 2133 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | |
| 813.00 > 769.00 | 5.337 | 5.360 | -0.023 | 1.000 | 895729 | 2.67 | Target=3.84 | 107 | 396 | |
| 813.00 > 169.00 | 5.337 | 5.360 | -0.023 | 1.000 | 237231 | | 3.78(1.92-5.76) | | 2766 | |
| 46 Perfluorooctadecanoic acid | | | | | | | | | | |
| 913.00 > 869.00 | 5.655 | 5.674 | -0.019 | 1.060 | 789665 | 2.45 | Target=3.92 | 98.1 | 639 | |
| 913.00 > 169.00 | 5.646 | 5.674 | -0.028 | 1.058 | 229708 | | 3.44(1.96-5.88) | | 1760 | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

## Reagents:

PFAS32NCIC5_00013 Amount Added: 100.00 Units: uL

Report Date: 12-Mar-2021 14:03:45 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B01.d

Injection Date: 12-Mar-2021 12:01:08 Instrument ID: LC812

Lims ID: CCV L5

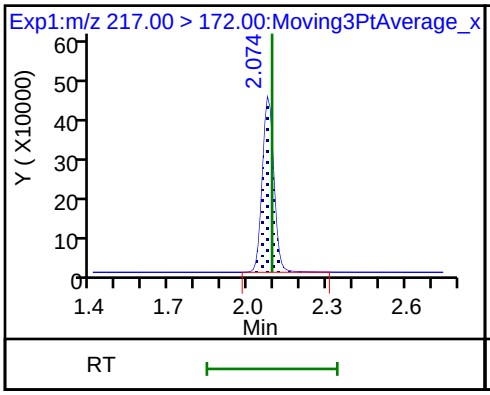
Client ID:

Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 1

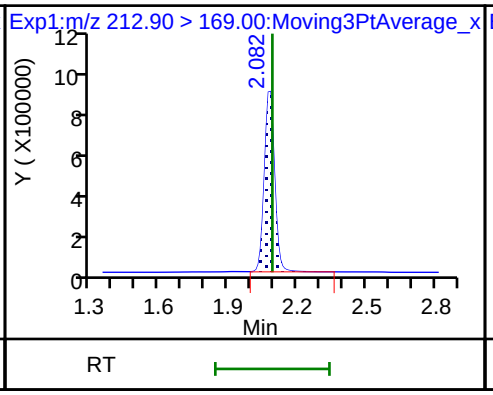
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

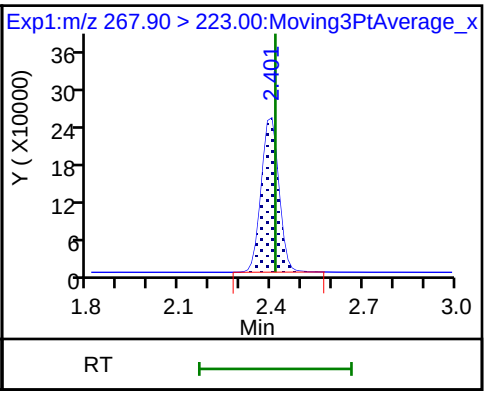
D 1 13C4 PFBA



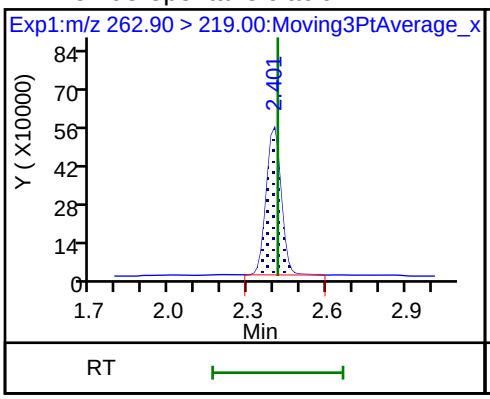

2 Perfluorobutanoic acid



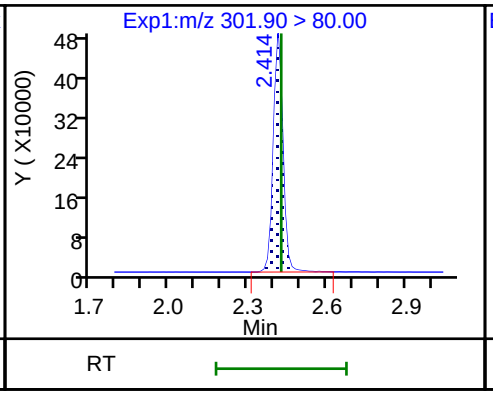

D 3 13C5 PFPeA



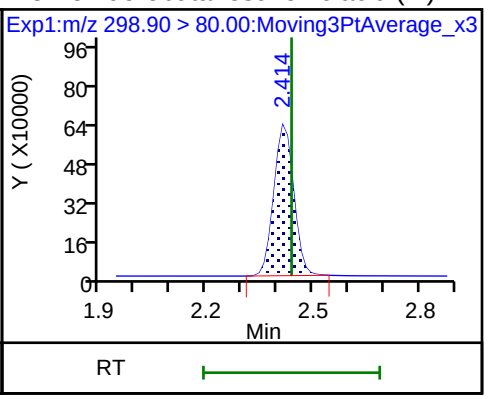

4 Perfluoropentanoic acid



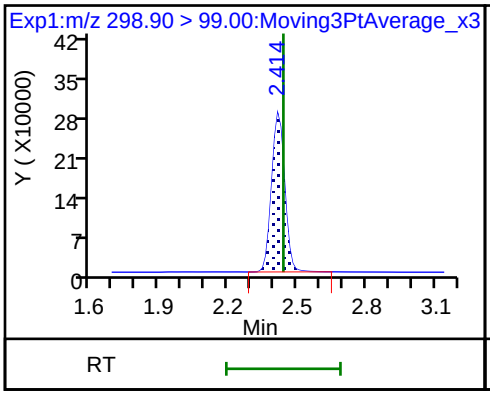

D 47 13C3 PFBS



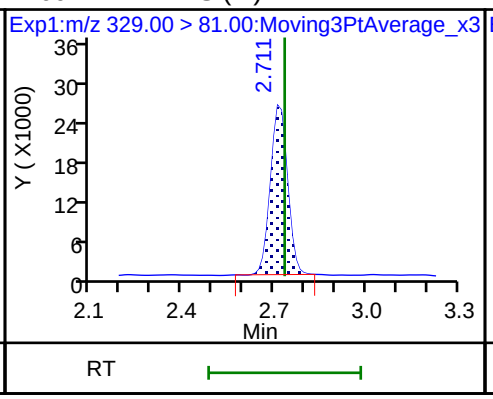

5 Perfluorobutanesulfonic acid (M)



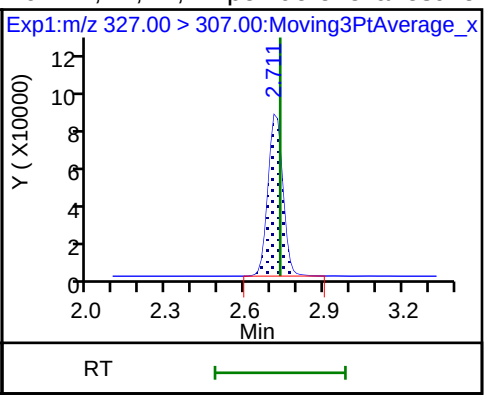

5 Perfluorobutanesulfonic acid



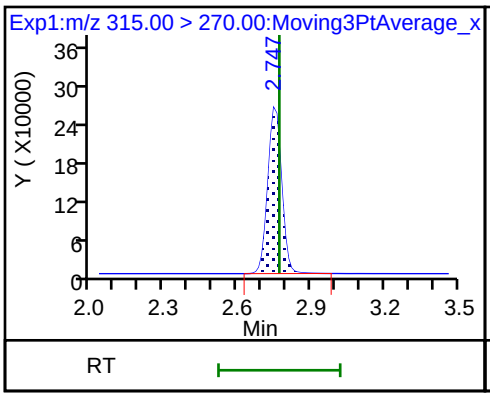

D 60 M2-4:2 FTS (M)



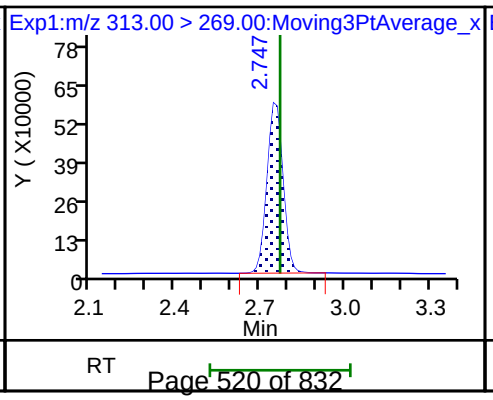

61 1H,1H,2H,2H-perfluorohexanesulfo



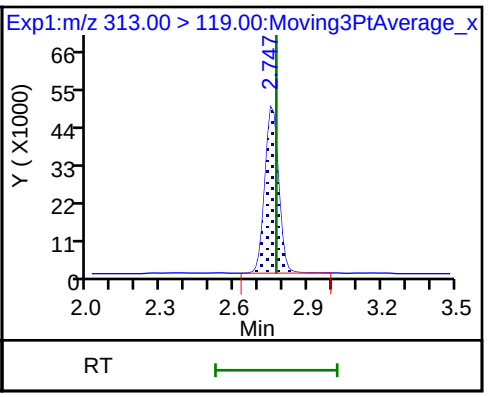

D 7 13C2 PFHxA



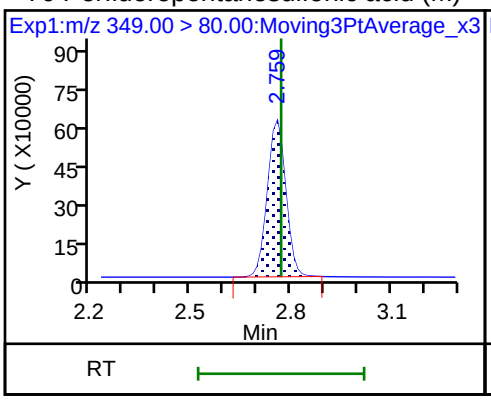

6 Perfluorohexanoic acid



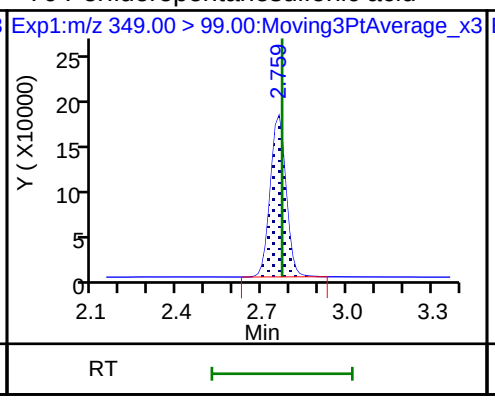

6 Perfluorohexanoic acid



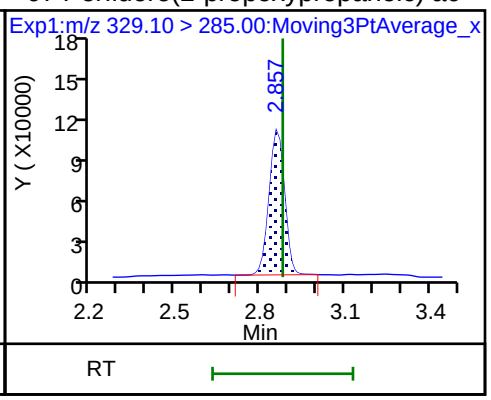
70 Perfluoropentanesulfonic acid (M)



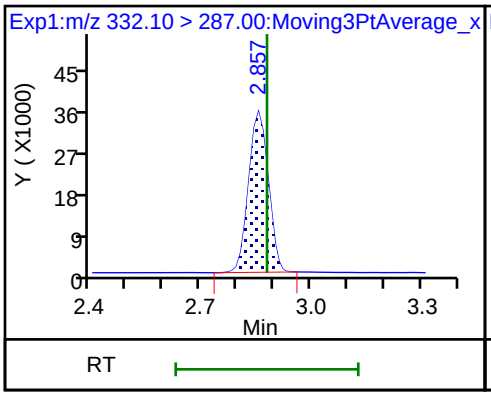

70 Perfluoropentanesulfonic acid



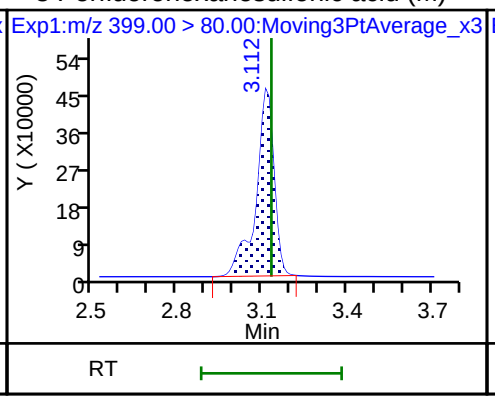

67 Perfluoro(2-propoxypropanoic) ac



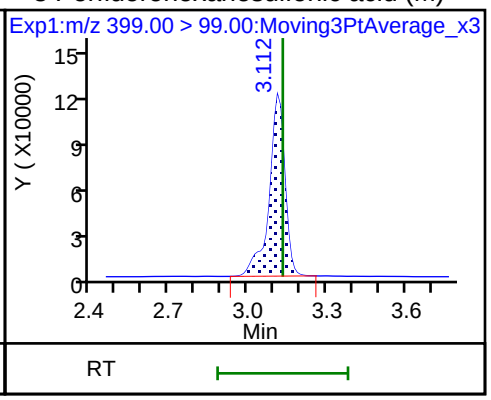

D 64 13C3 HFPO-DA



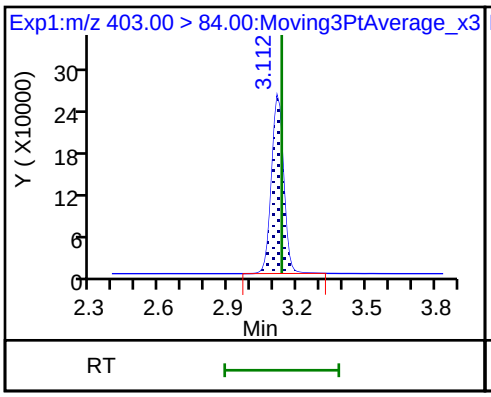

8 Perfluorohexanesulfonic acid (M)



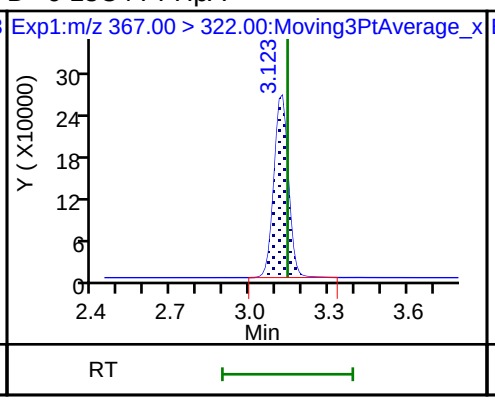

8 Perfluorohexanesulfonic acid (M)



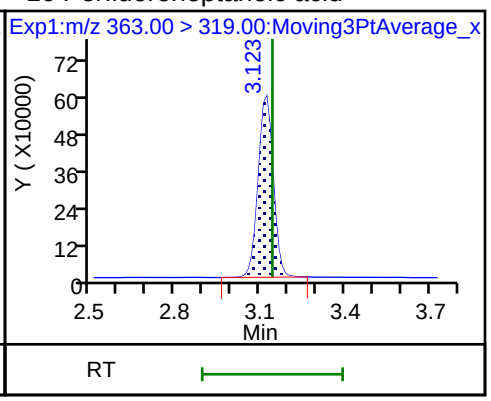

D 11 18O2 PFHxS



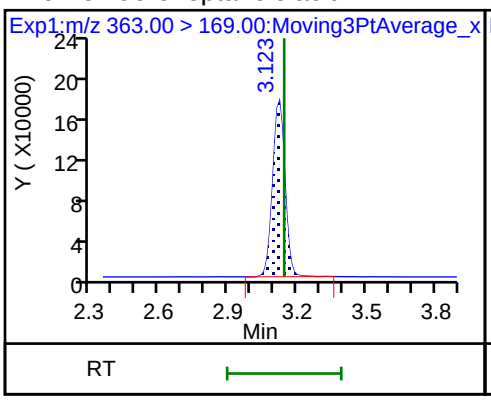

D 9 13C4 PFHpA



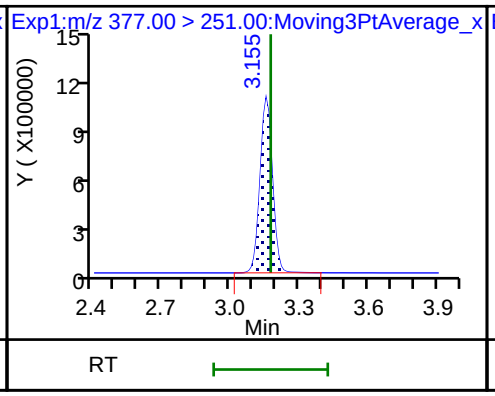

10 Perfluoroheptanoic acid



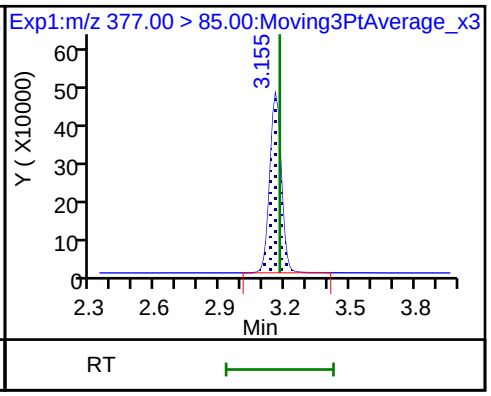

10 Perfluoroheptanoic acid



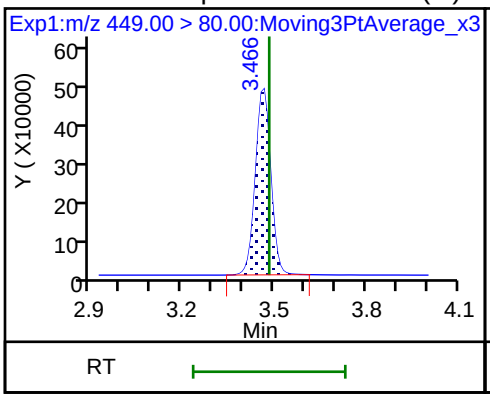

77 DONA



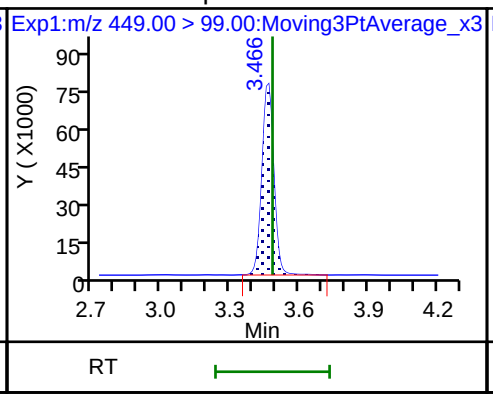

77 DONA



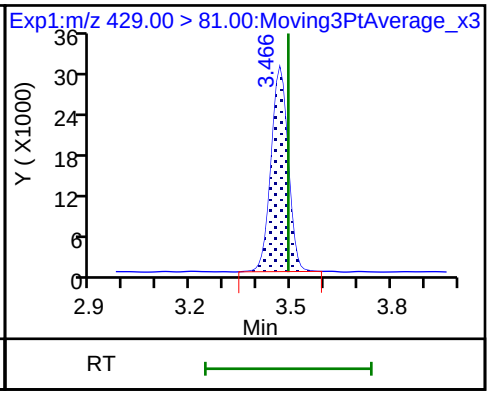
16 Perfluoroheptanesulfonic acid (M)



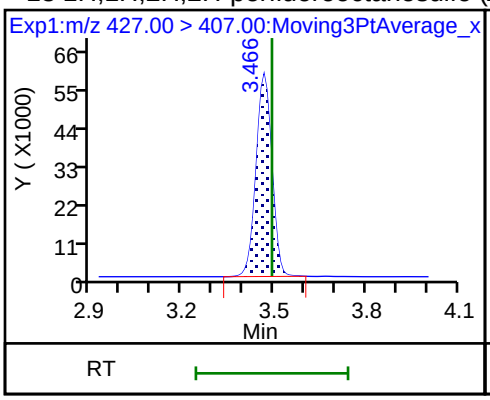

16 Perfluoroheptanesulfonic acid



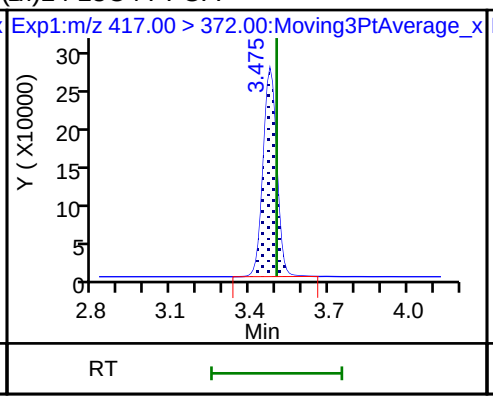

D 12 M2-6:2 FTS



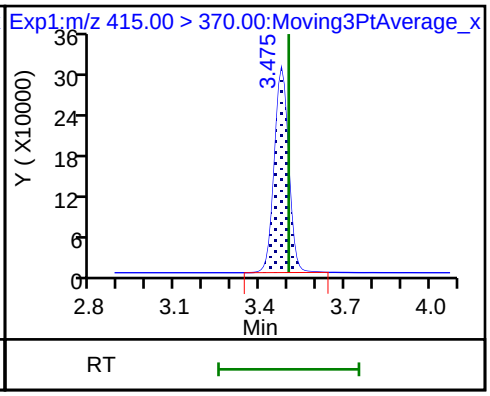

13 1H,1H,2H,2H-perfluorooctanesulfo (M)



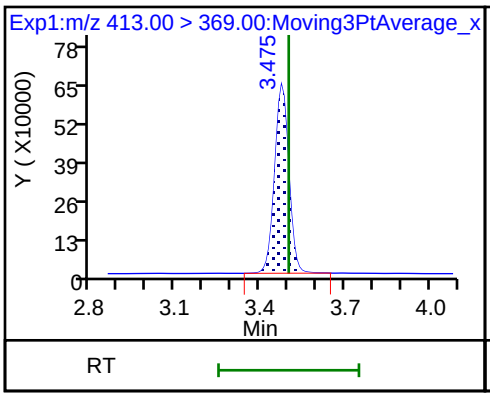

14 13C4 PFOA



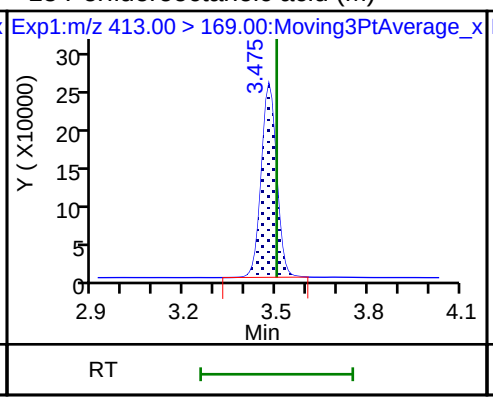

* 62 13C2 PFOA



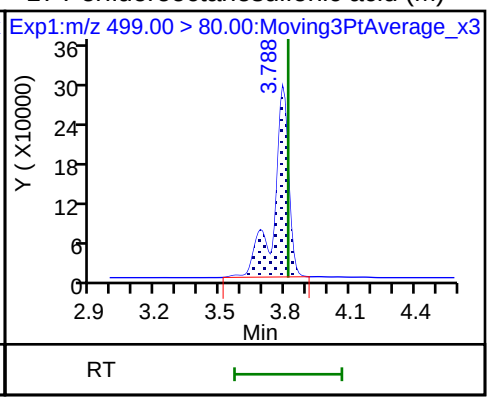

15 Perfluorooctanoic acid



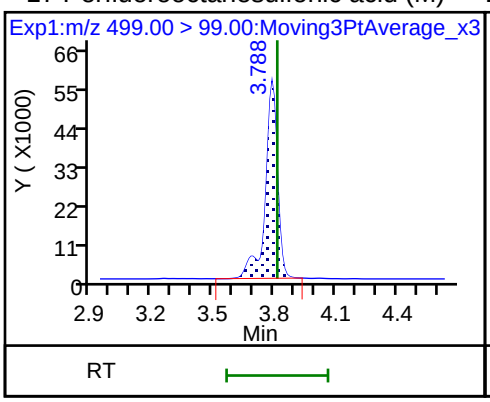

15 Perfluorooctanoic acid (M)



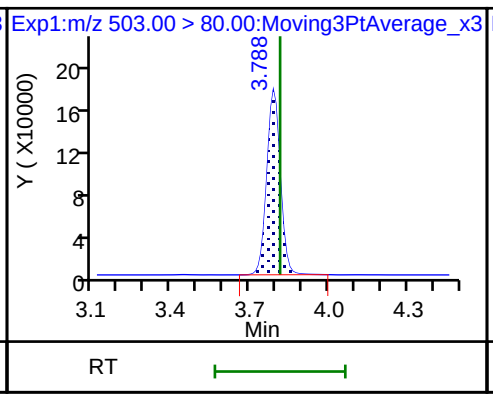

17 Perfluorooctanesulfonic acid (M)



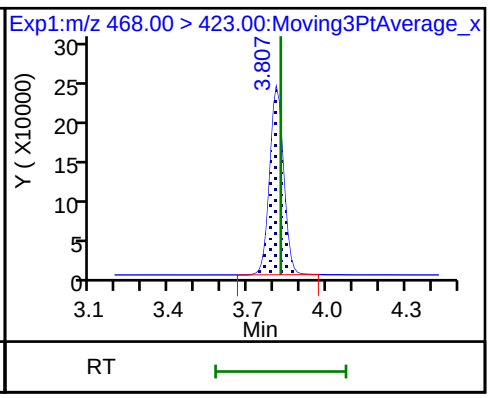

17 Perfluorooctanesulfonic acid (M)



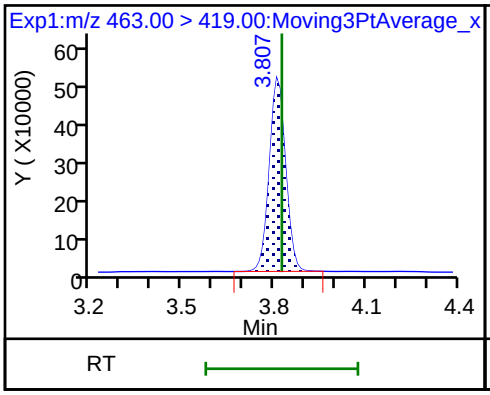

D 18 13C4 PFOS



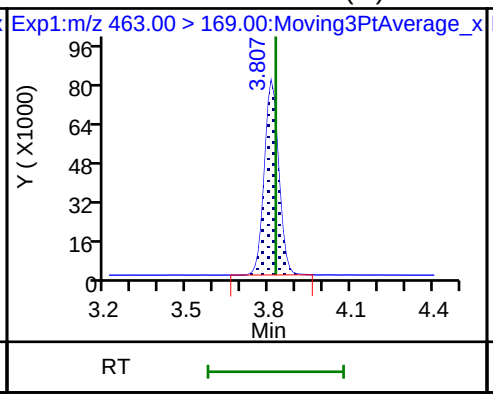

D 19 13C5 PFNA



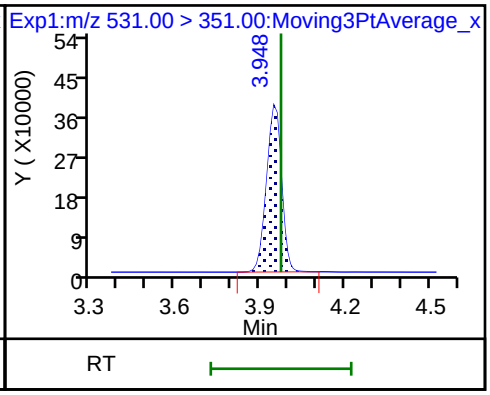
20 Perfluorononanoic acid



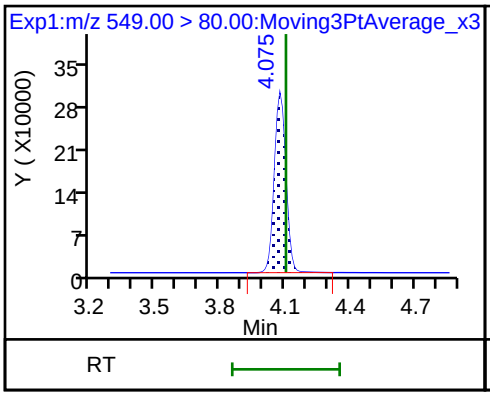

20 Perfluorononanoic acid (M)



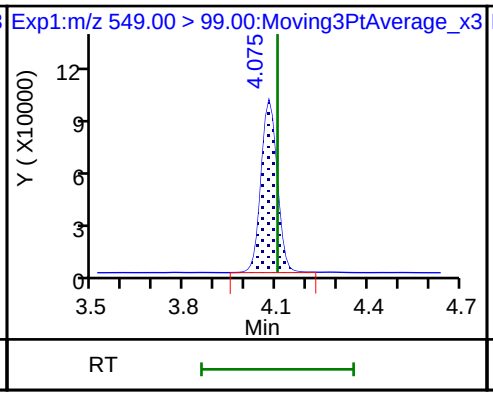

69 9-Chlorohexadecafluoro-3-oxanona



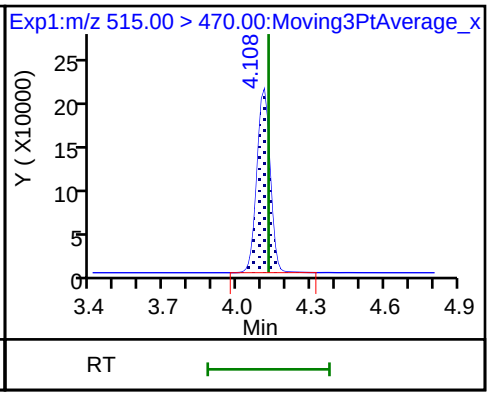

68 Perfluorononanesulfonic acid



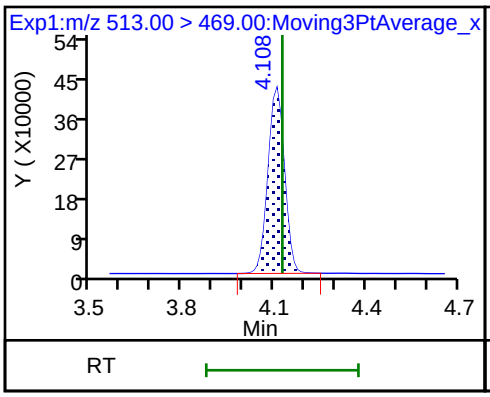

68 Perfluorononanesulfonic acid



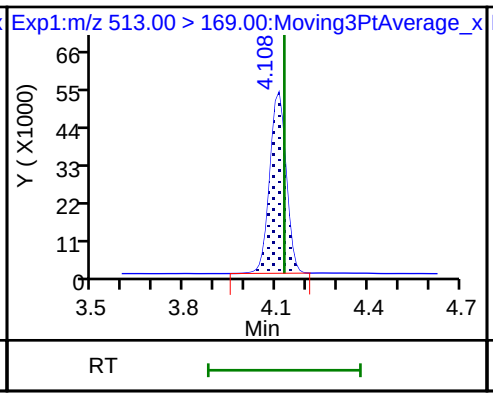

D 23 13C2 PFDA



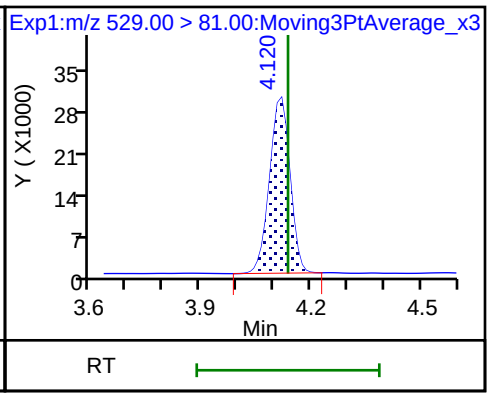

24 Perfluorodecanoic acid



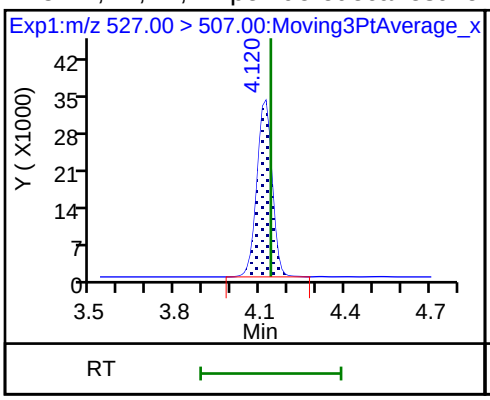

24 Perfluorodecanoic acid



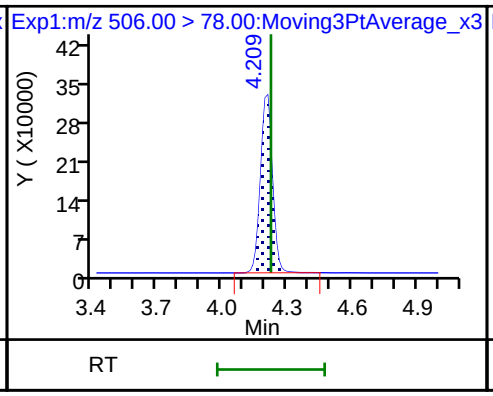

D 26 M2-8:2 FTS



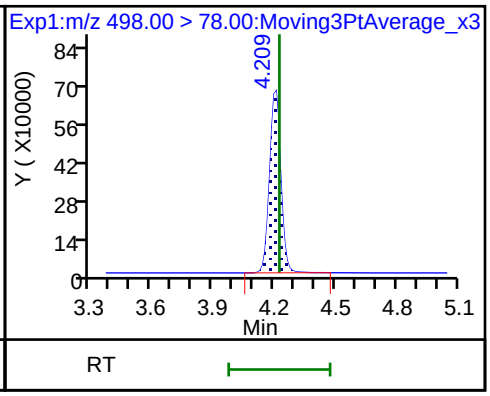

25 1H,1H,2H,2H-perfluorodecanesulfo



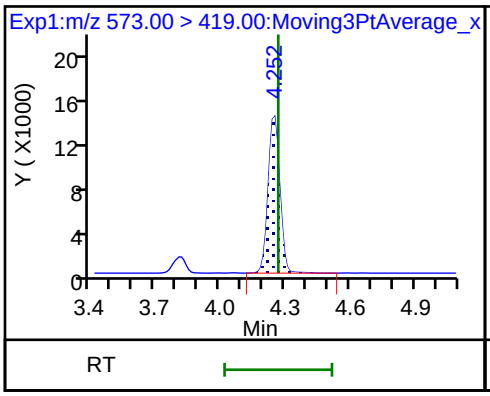

D 21 13C8 FOSA



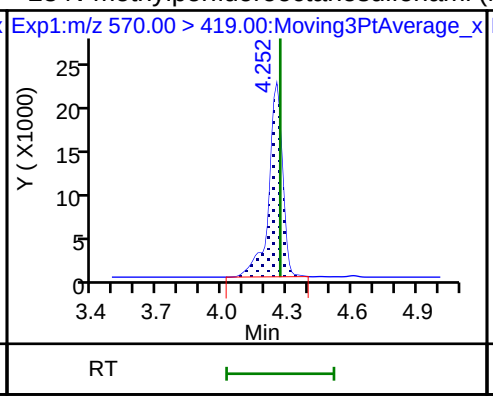

22 Perfluorooctanesulfonamide



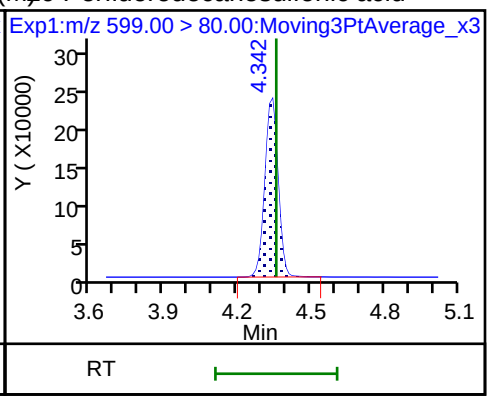
D 27 d3-NMeFOSAA



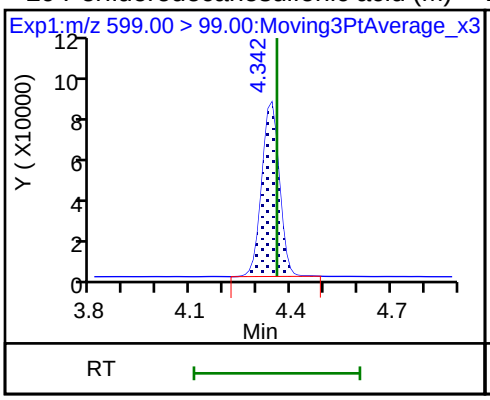

28 N-methylperfluorooctanesulfonami (M)



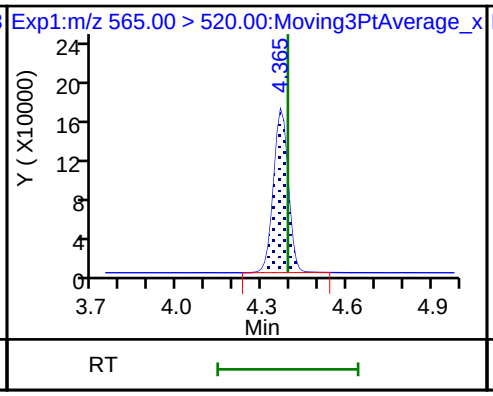

29 Perfluorodecanesulfonic acid



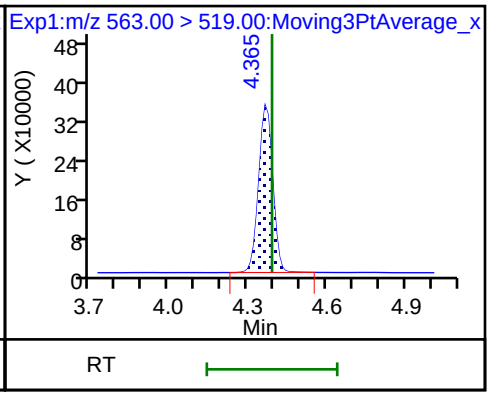

29 Perfluorodecanesulfonic acid (M)



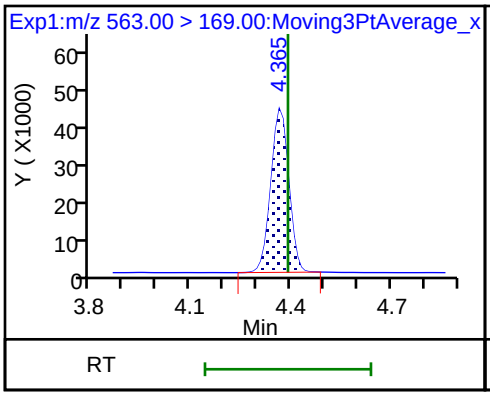

D 30 13C2 PFUnA



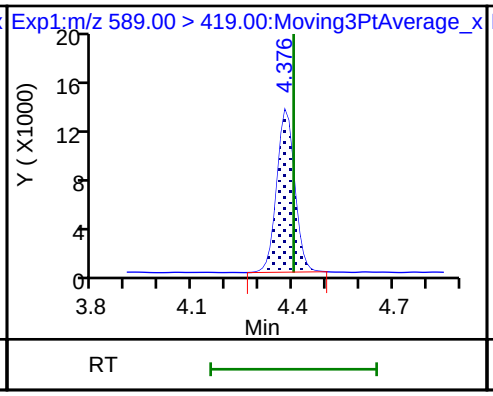

31 Perfluoroundecanoic acid



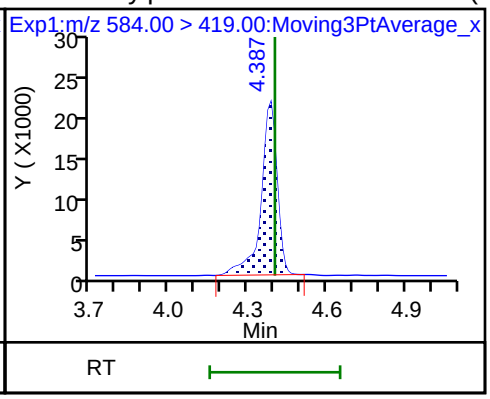

31 Perfluoroundecanoic acid



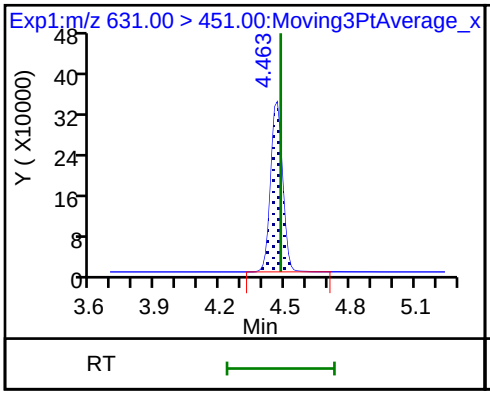

D 32 d5-NEtFOSAA



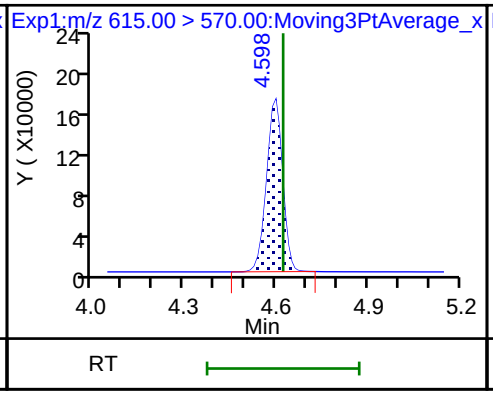

33 N-ethylperfluorooctanesulfonamid (M)



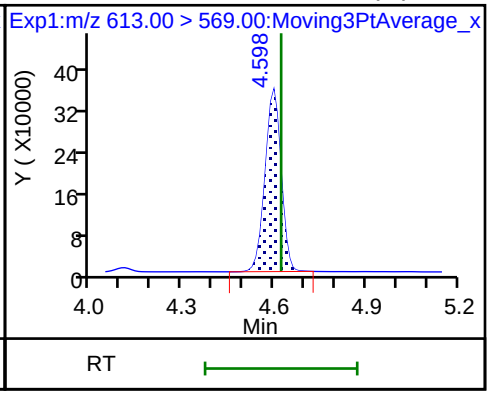

66 11-Chloroeicosafluoro-3-oxaundec



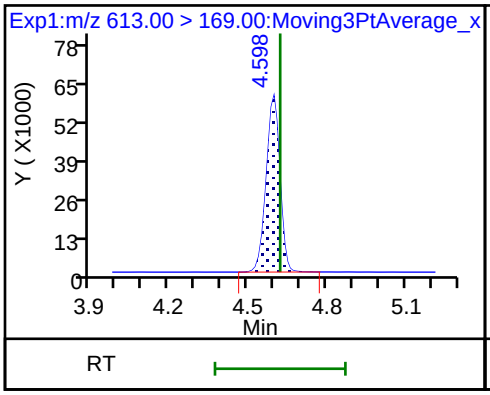

D 36 13C2 PFDoA



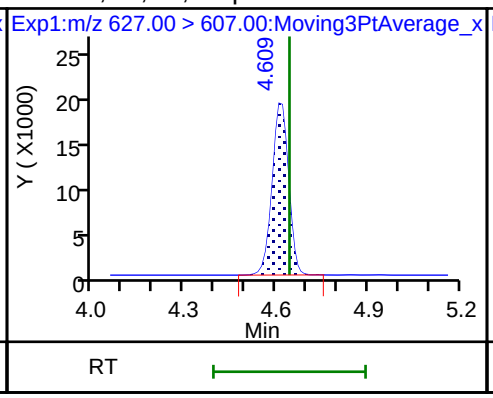

37 Perfluorododecanoic acid (M)



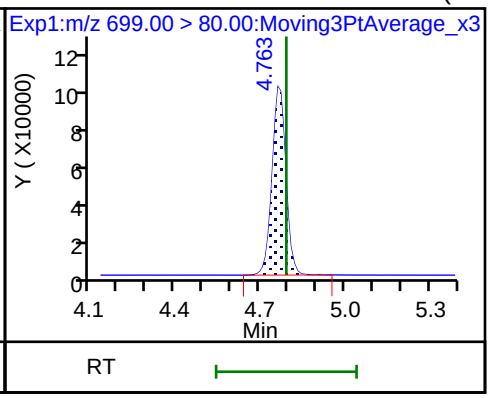
37 Perfluorododecanoic acid



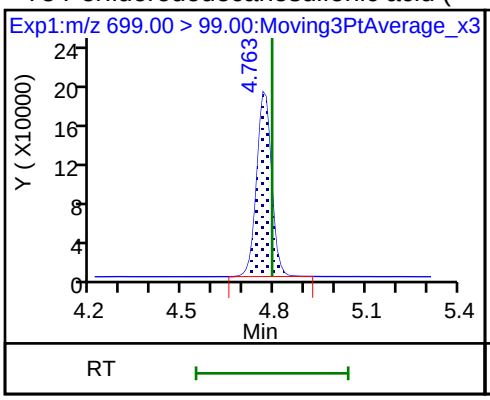

74 1H,1H,2H,2H-perfluorododecanesul



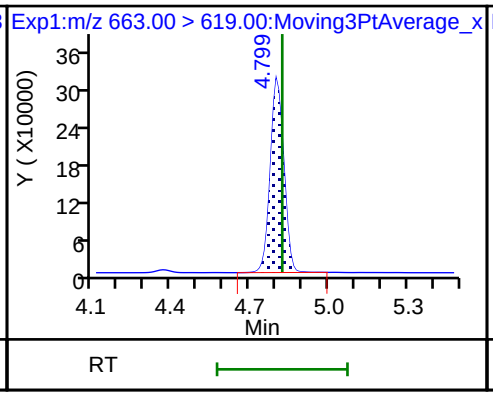

75 Perfluorododecanesulfonic acid (



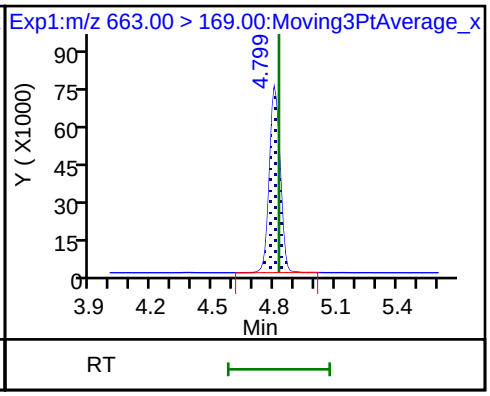

75 Perfluorododecanesulfonic acid (



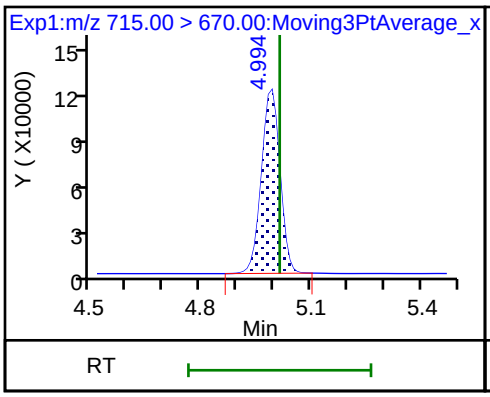

41 Perfluorotridecanoic acid



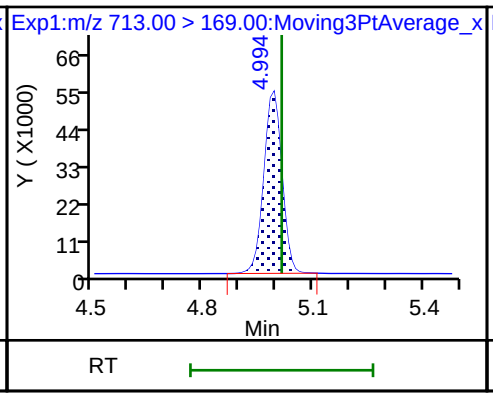

41 Perfluorotridecanoic acid



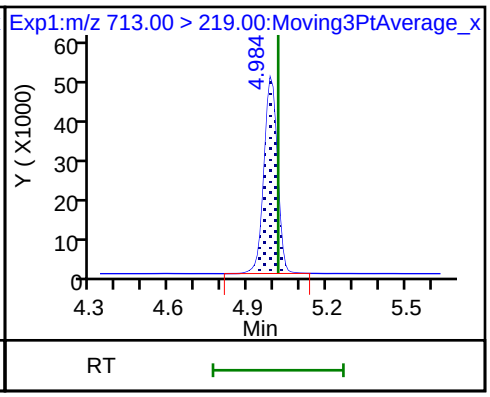

D 43 13C2 PFTeDA



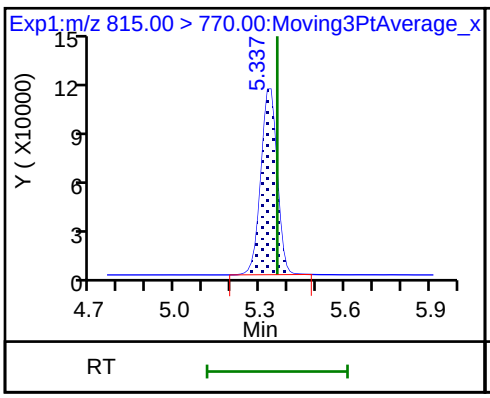

42 Perfluorotetradecanoic acid



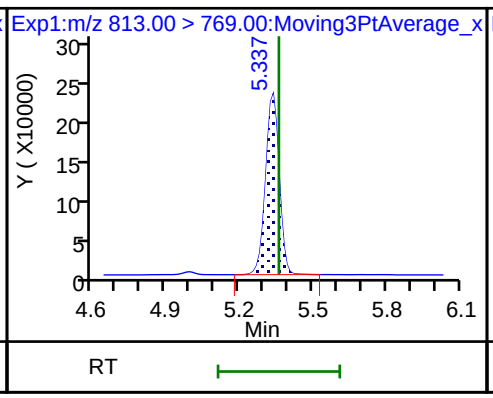

42 Perfluorotetradecanoic acid



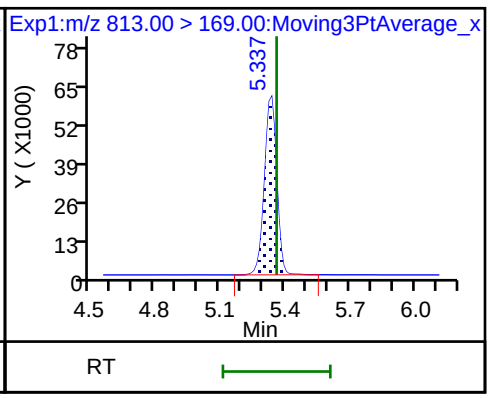

D 44 13C2 PFHxDA



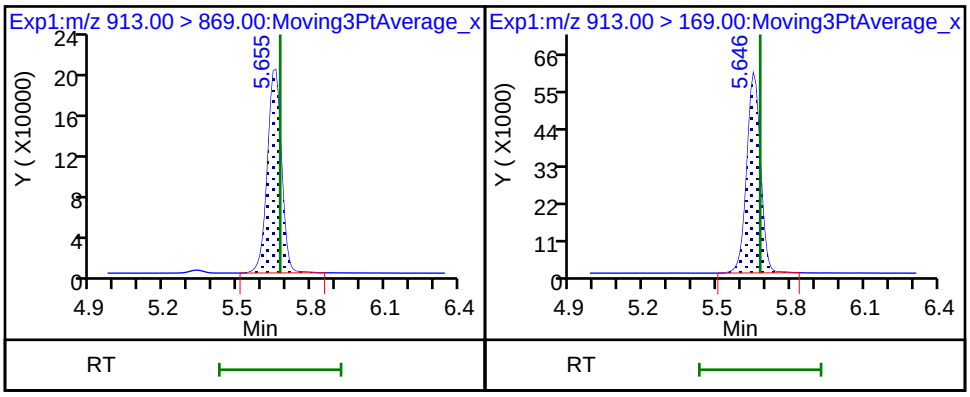

45 Perfluorohexadecanoic acid




45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid




46 Perfluorooctadecanoic acid

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

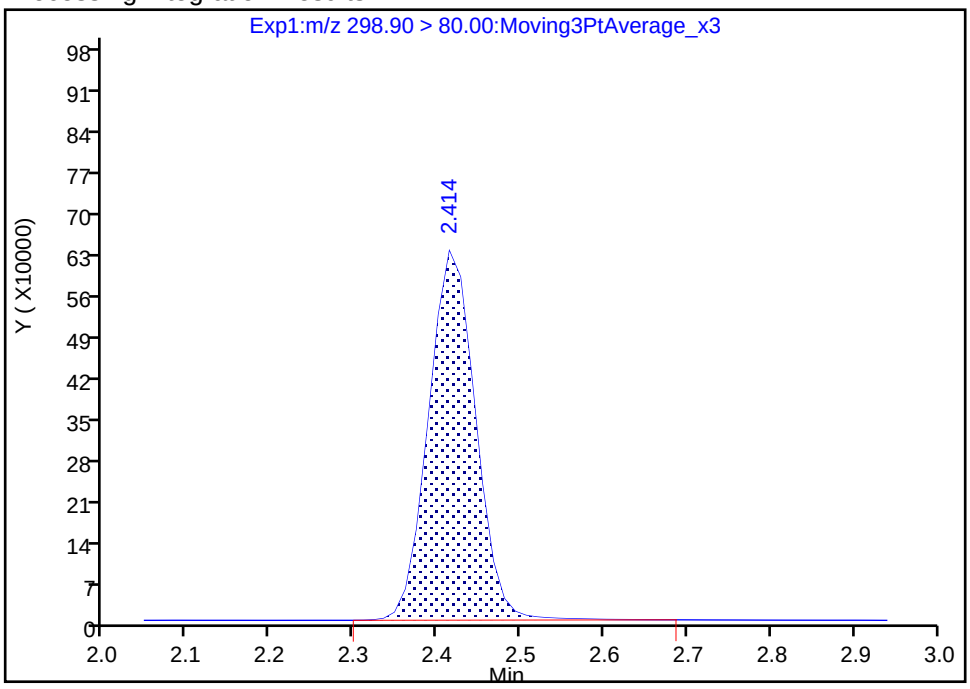
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B01.d
Injection Date: 12-Mar-2021 12:01:08 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

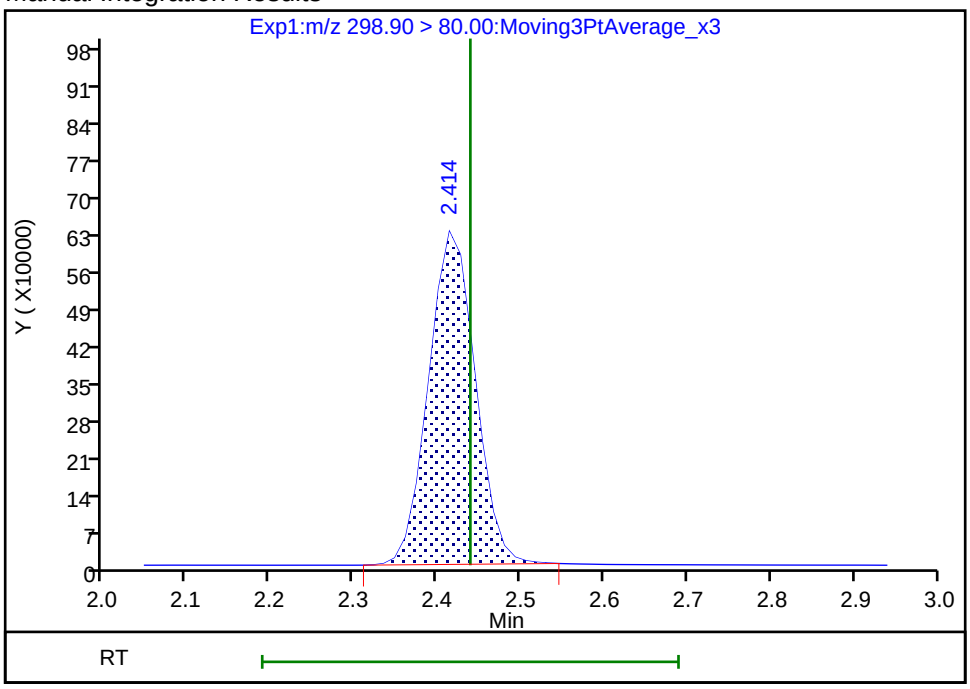
Processing Integration Results

RT: 2.41
Area: 2473947
Amount: 2.111922
Amount Units: ng/ml




Manual Integration Results

RT: 2.41
Area: 2447618
Amount: 2.089446
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 13:53:29
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

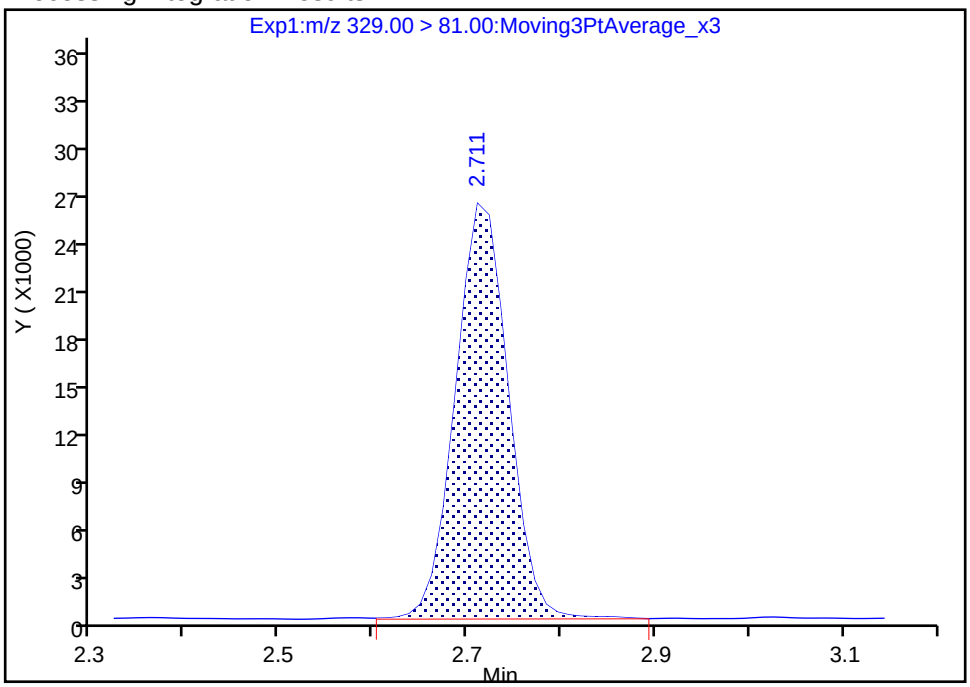
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B01.d | | | | |
| Injection Date: | 12-Mar-2021 12:01:08 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L5 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 1 | Worklist Smp#: | 1 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

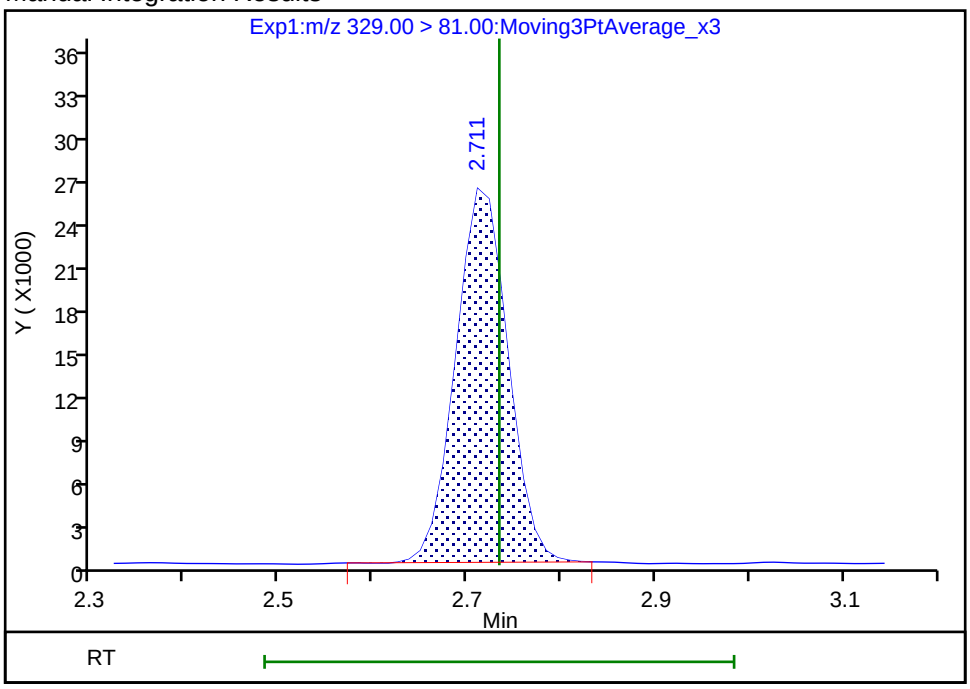
Processing Integration Results

RT: 2.71
Area: 101972
Amount: 1.135584
Amount Units: ng/ml




Manual Integration Results

RT: 2.71
Area: 100010
Amount: 1.113735
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 13:53:35

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

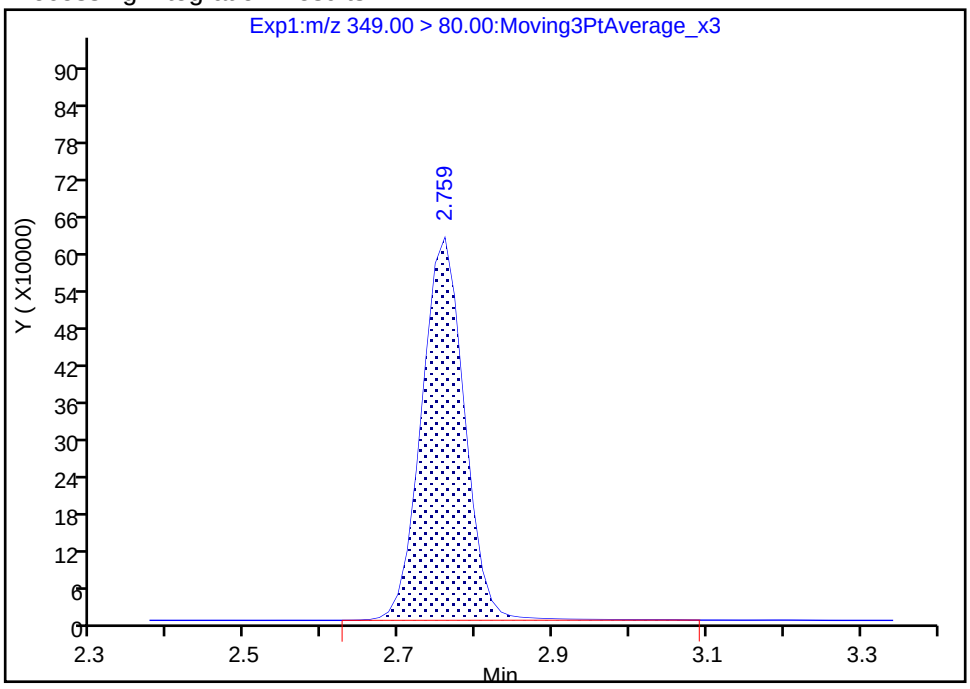
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B01.d | | | | |
| Injection Date: | 12-Mar-2021 12:01:08 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L5 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 1 | Worklist Smp#: | 1 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

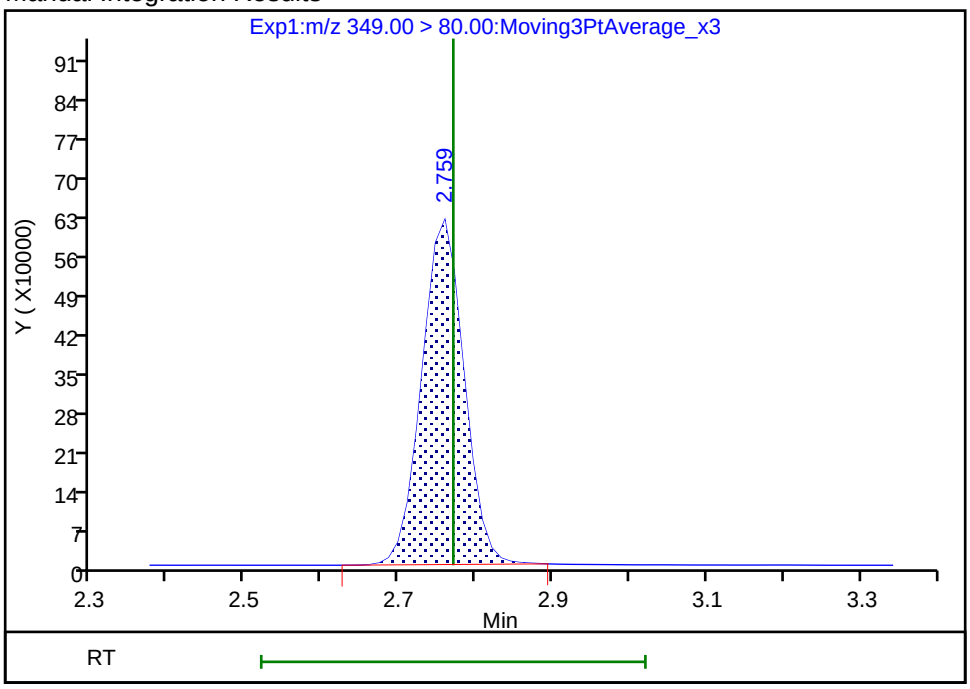
Processing Integration Results

RT: 2.76
Area: 2372308
Amount: 2.311741
Amount Units: ng/ml




Manual Integration Results

RT: 2.76
Area: 2345567
Amount: 2.285683
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 13:53:42

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

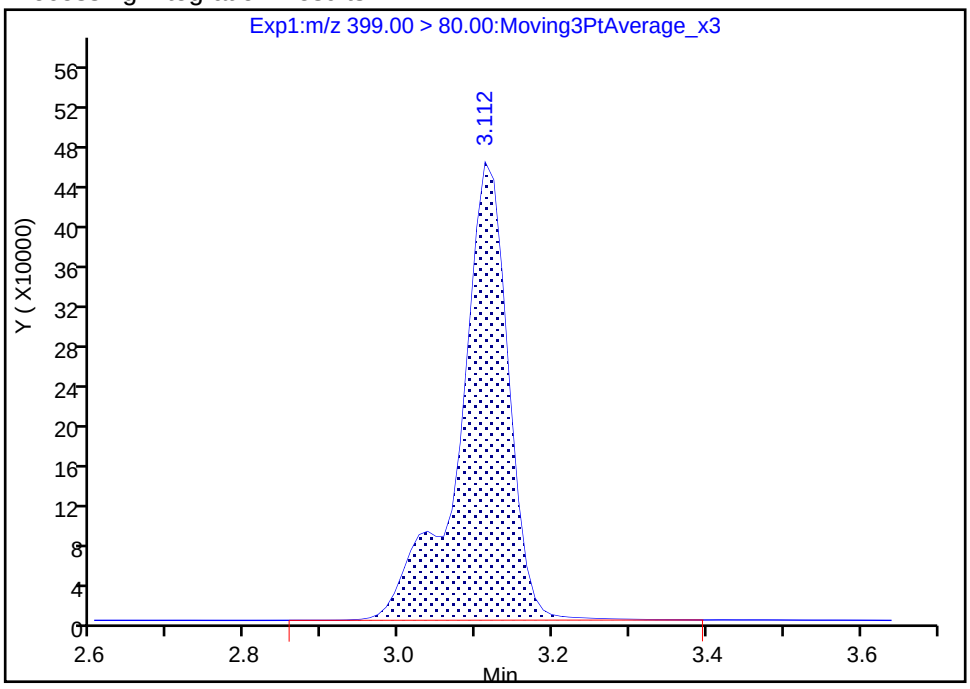
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B01.d | | | | |
| Injection Date: | 12-Mar-2021 12:01:08 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L5 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 1 | Worklist Smp#: | 1 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

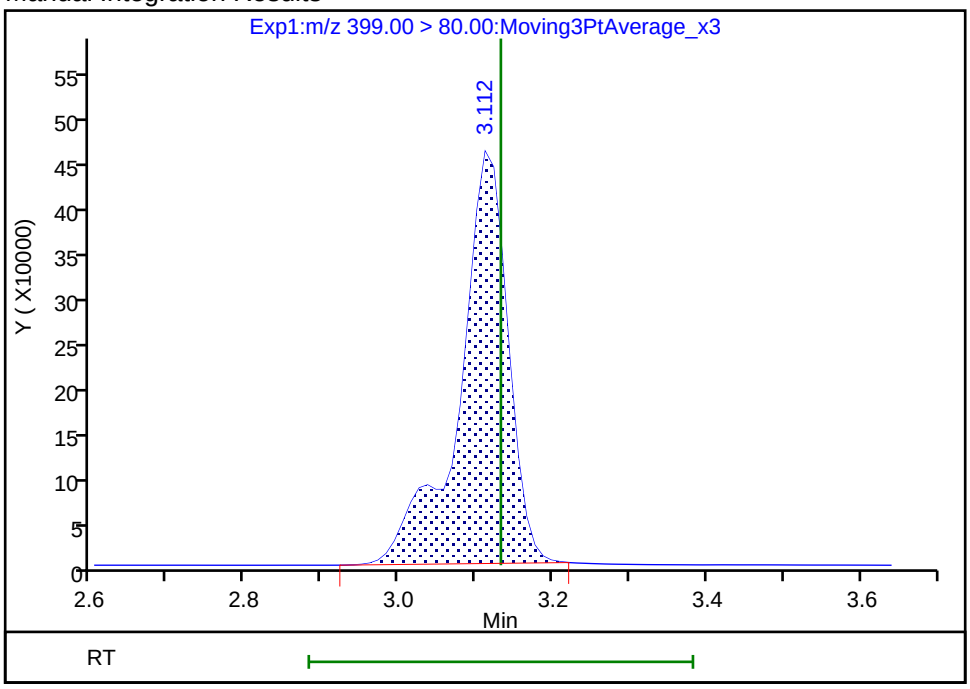
Processing Integration Results

RT: 3.11
Area: 2045767
Amount: 2.219947
Amount Units: ng/ml




Manual Integration Results

RT: 3.11
Area: 2012886
Amount: 2.184267
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 13:53:48

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

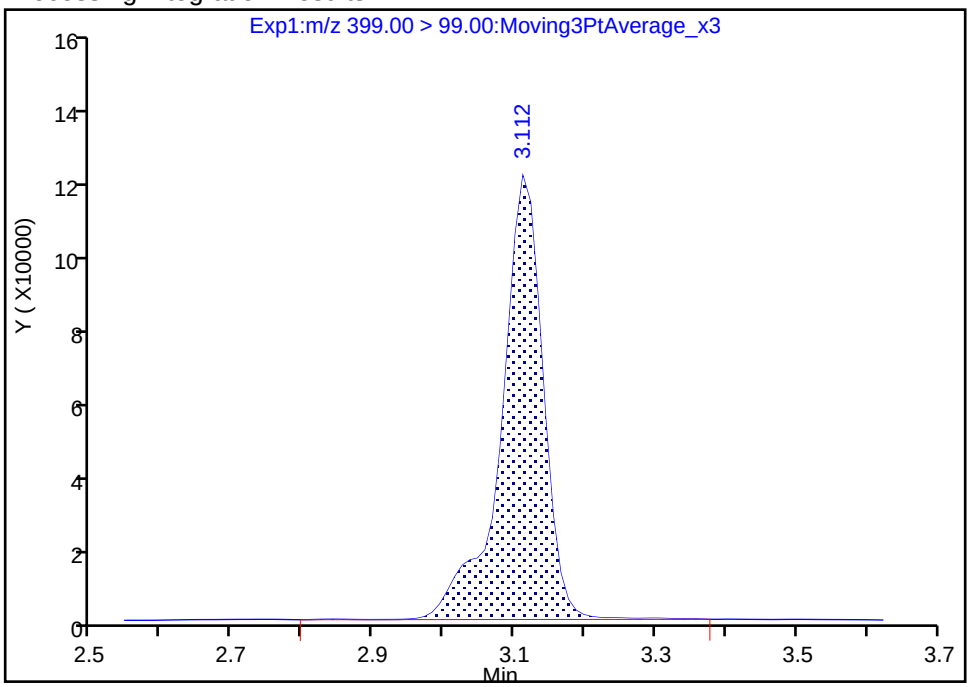
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B01.d
Injection Date: 12-Mar-2021 12:01:08 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

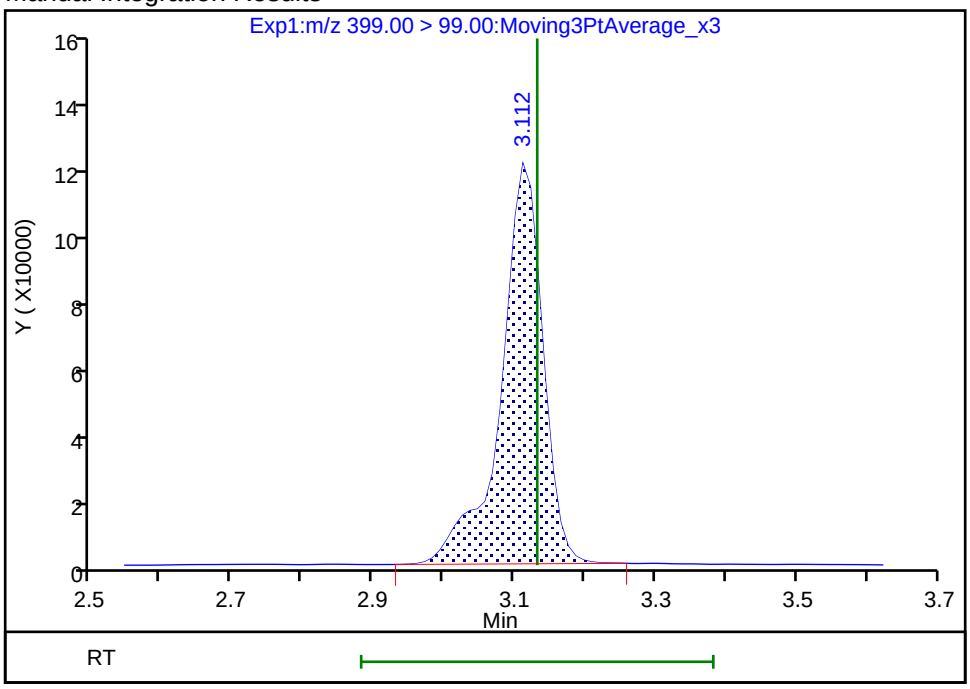
Processing Integration Results

RT: 3.11
Area: 485139
Amount: 2.219947
Amount Units: ng/ml




Manual Integration Results

RT: 3.11
Area: 480117
Amount: 2.184267
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 13:53:51
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

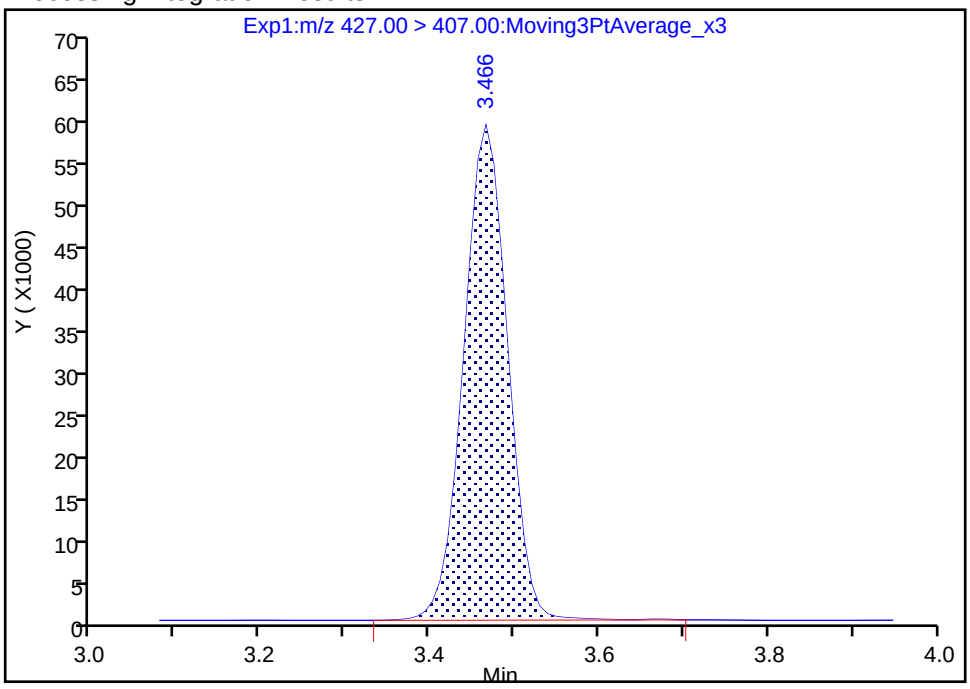
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B01.d
Injection Date: 12-Mar-2021 12:01:08 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

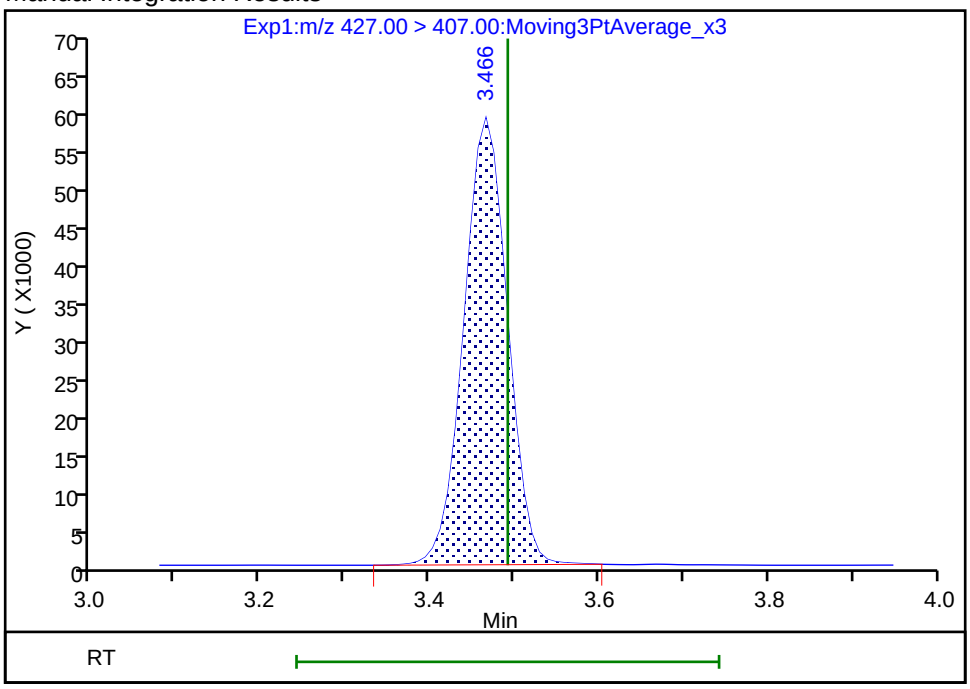
Processing Integration Results

RT: 3.47
Area: 211492
Amount: 2.109317
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 210561
Amount: 2.100032
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 13:54:03
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

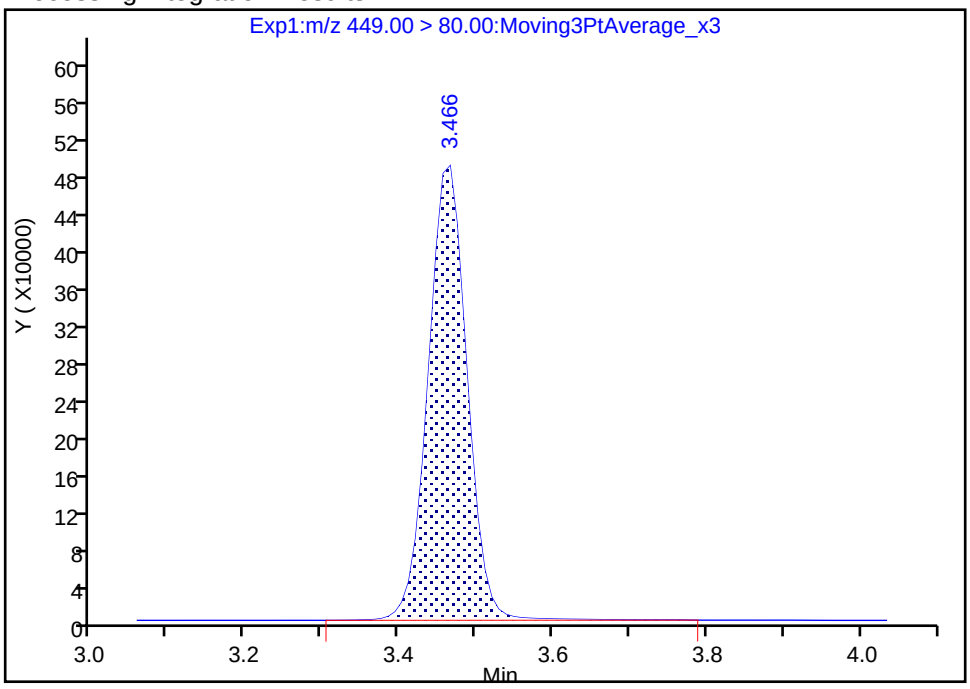
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B01.d
Injection Date: 12-Mar-2021 12:01:08 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

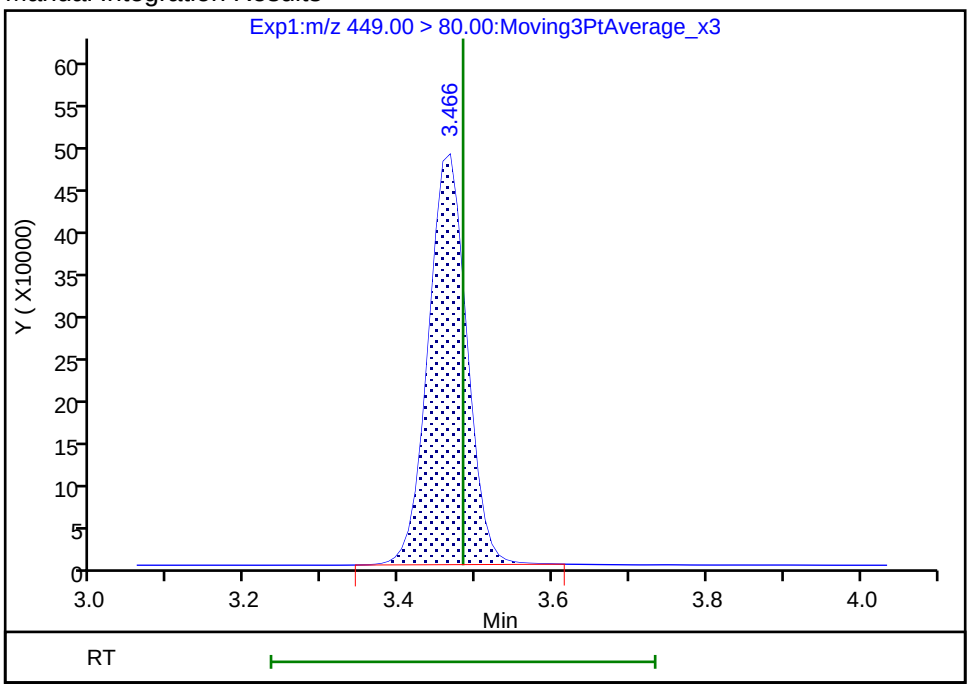
Processing Integration Results

RT: 3.47
Area: 1710432
Amount: 2.436608
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 1695517
Amount: 2.415361
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 13:53:58
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

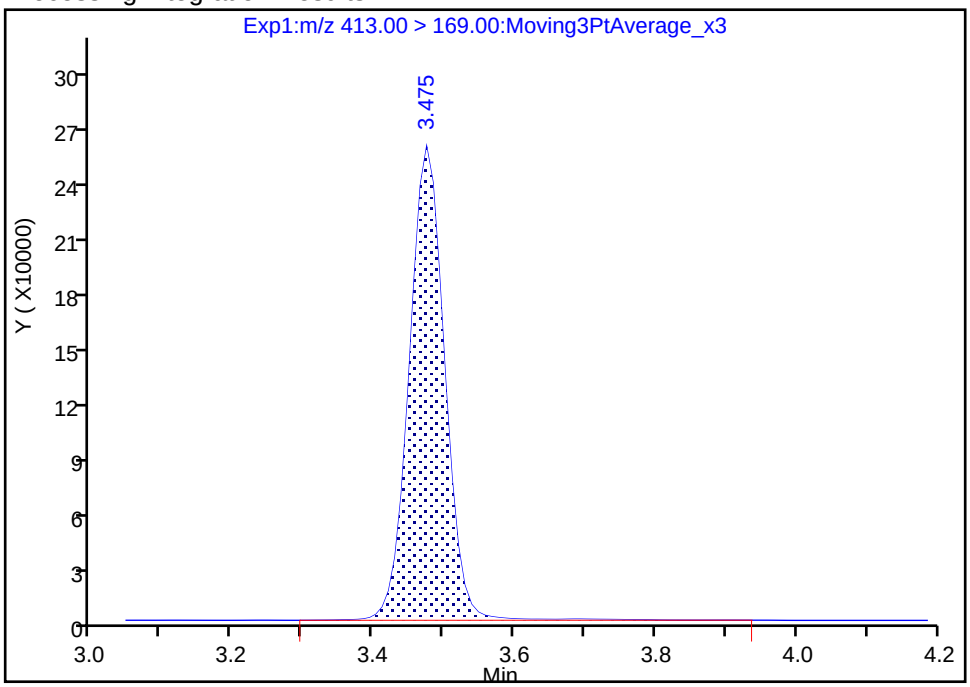
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B01.d
Injection Date: 12-Mar-2021 12:01:08 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

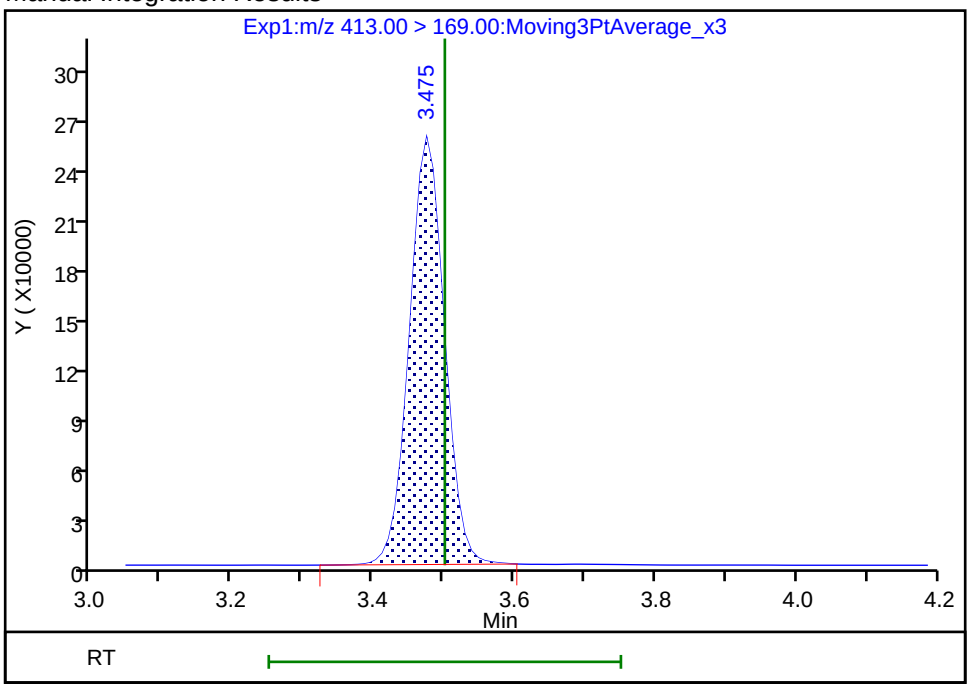
Processing Integration Results

RT: 3.48
Area: 890350
Amount: 2.605141
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 879333
Amount: 2.605141
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 13:54:12
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

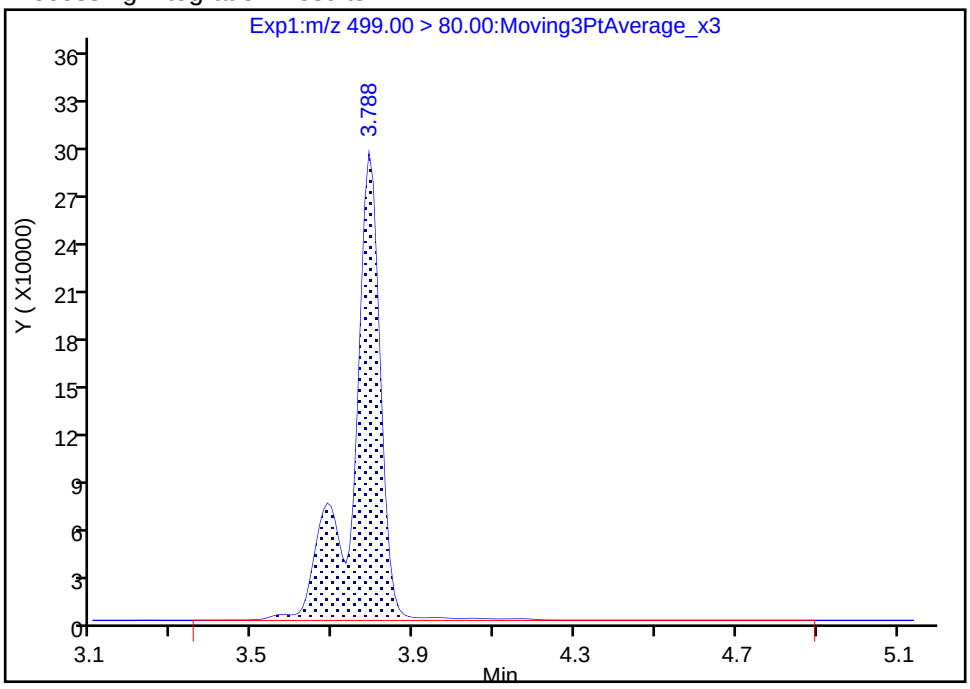
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B01.d | | | | |
| Injection Date: | 12-Mar-2021 12:01:08 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L5 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 1 | Worklist Smp#: | 1 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

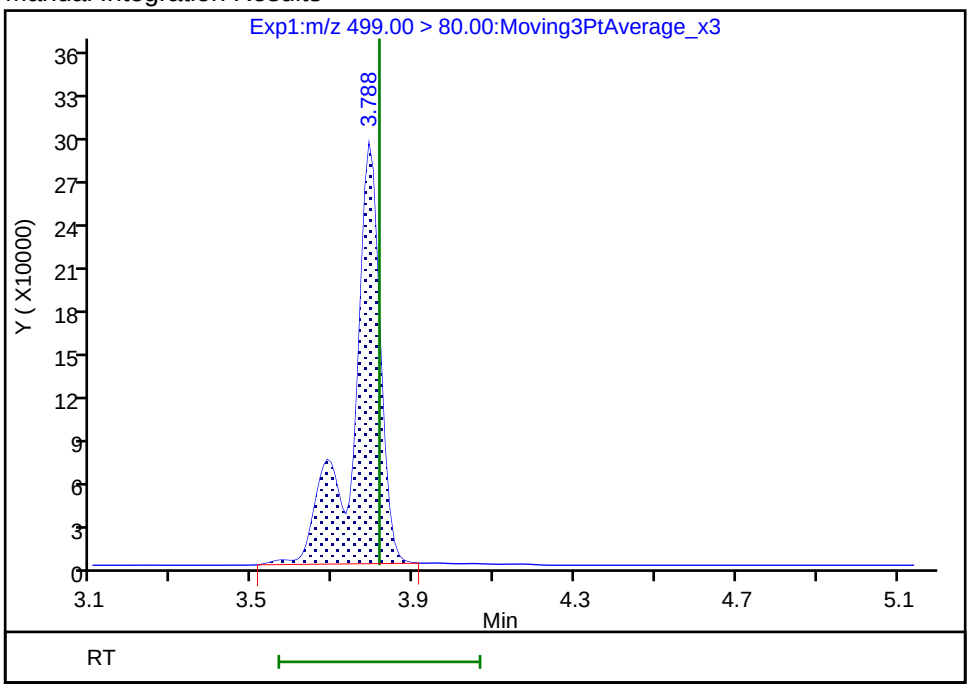
Processing Integration Results

RT: 3.79
Area: 1410145
Amount: 2.358292
Amount Units: ng/ml




Manual Integration Results

RT: 3.79
Area: 1370801
Amount: 2.292494
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 13:54:16

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

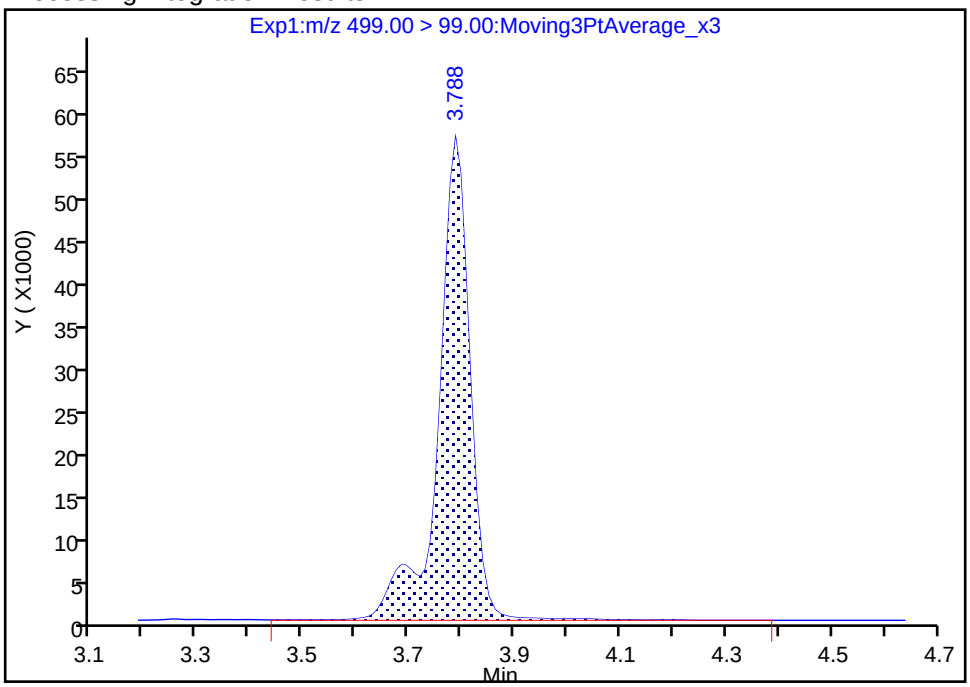
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B01.d
Injection Date: 12-Mar-2021 12:01:08 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

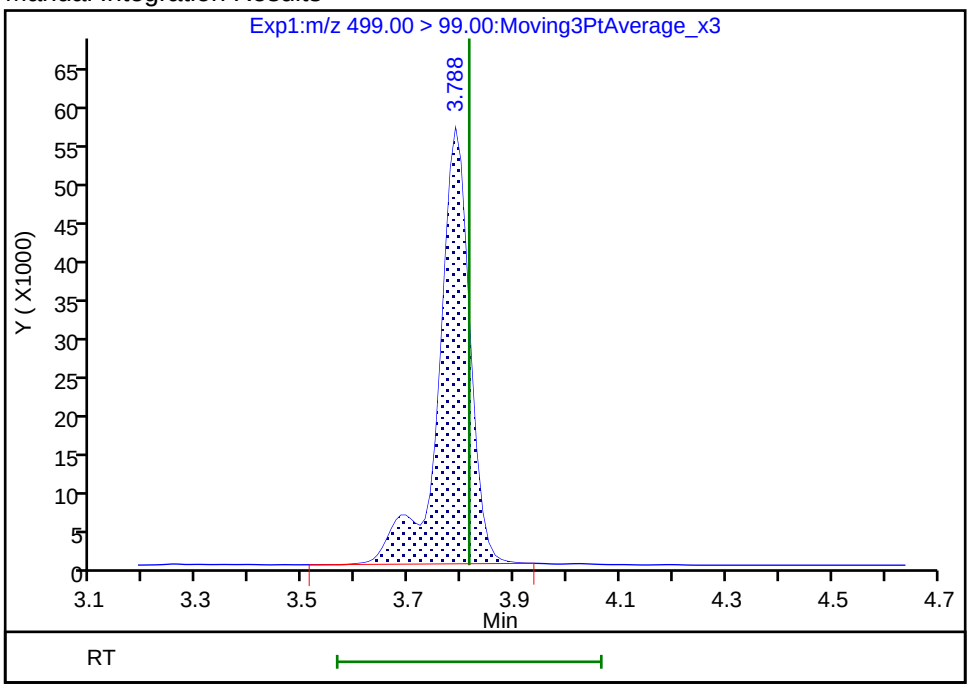
Processing Integration Results

RT: 3.79
Area: 237637
Amount: 2.358292
Amount Units: ng/ml




Manual Integration Results

RT: 3.79
Area: 231697
Amount: 2.292494
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 13:54:19
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

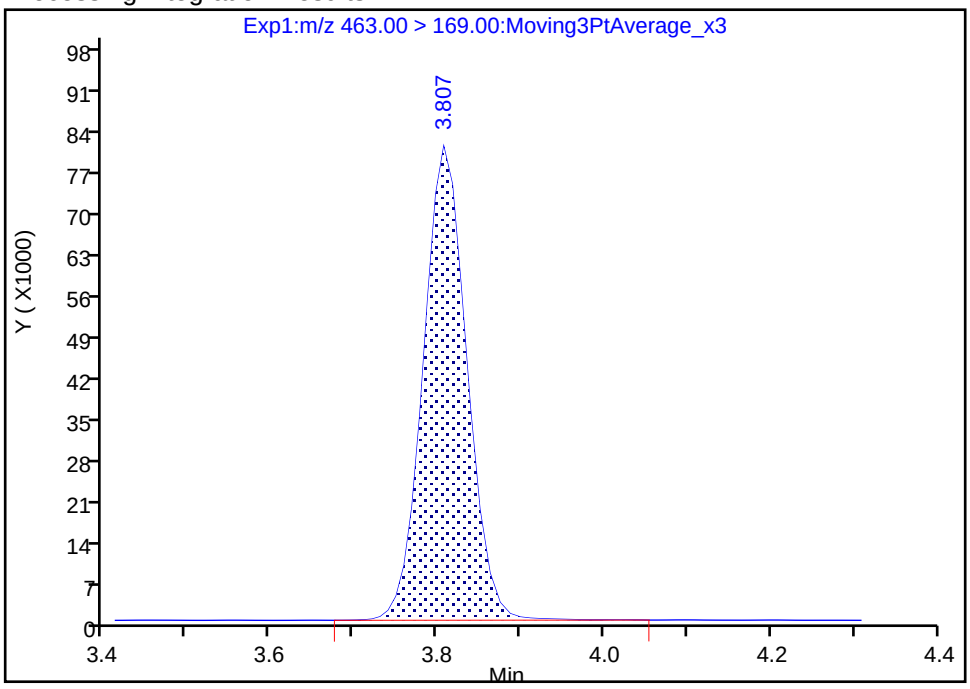
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B01.d
Injection Date: 12-Mar-2021 12:01:08 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

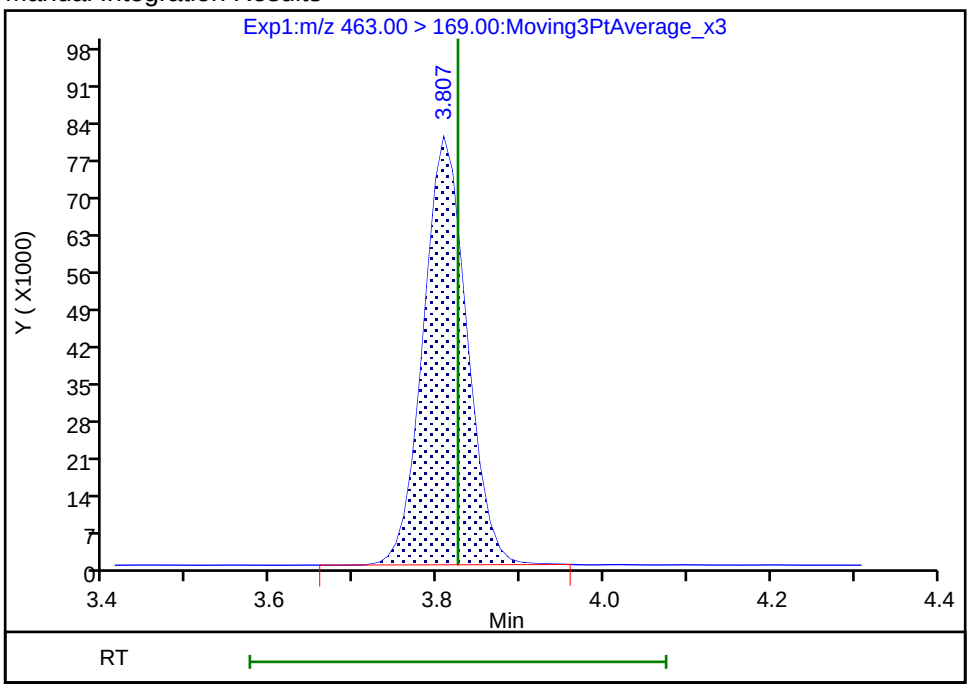
Processing Integration Results

RT: 3.81
Area: 293631
Amount: 2.448317
Amount Units: ng/ml




Manual Integration Results

RT: 3.81
Area: 292336
Amount: 2.448317
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 13:54:26
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

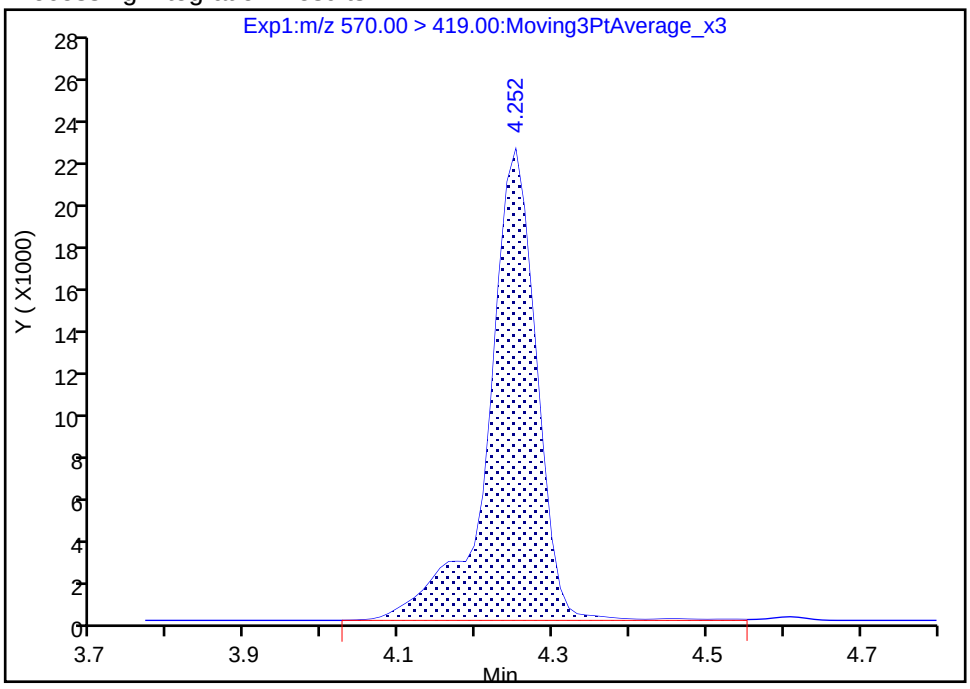
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B01.d
Injection Date: 12-Mar-2021 12:01:08 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

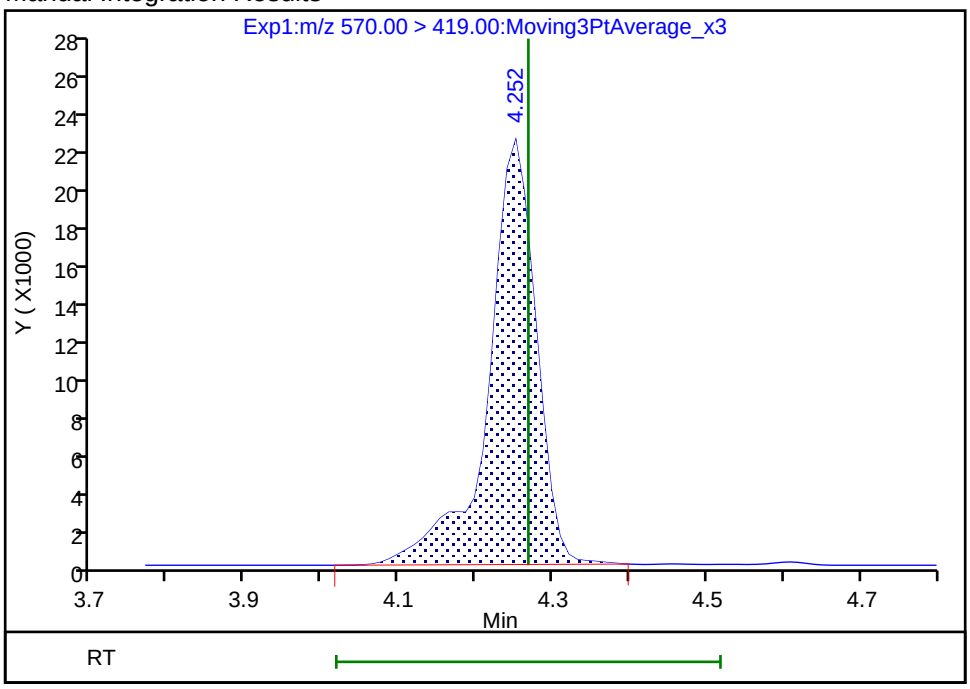
Processing Integration Results

RT: 4.25
Area: 99066
Amount: 2.658875
Amount Units: ng/ml




Manual Integration Results

RT: 4.25
Area: 97873
Amount: 2.626855
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 13:54:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

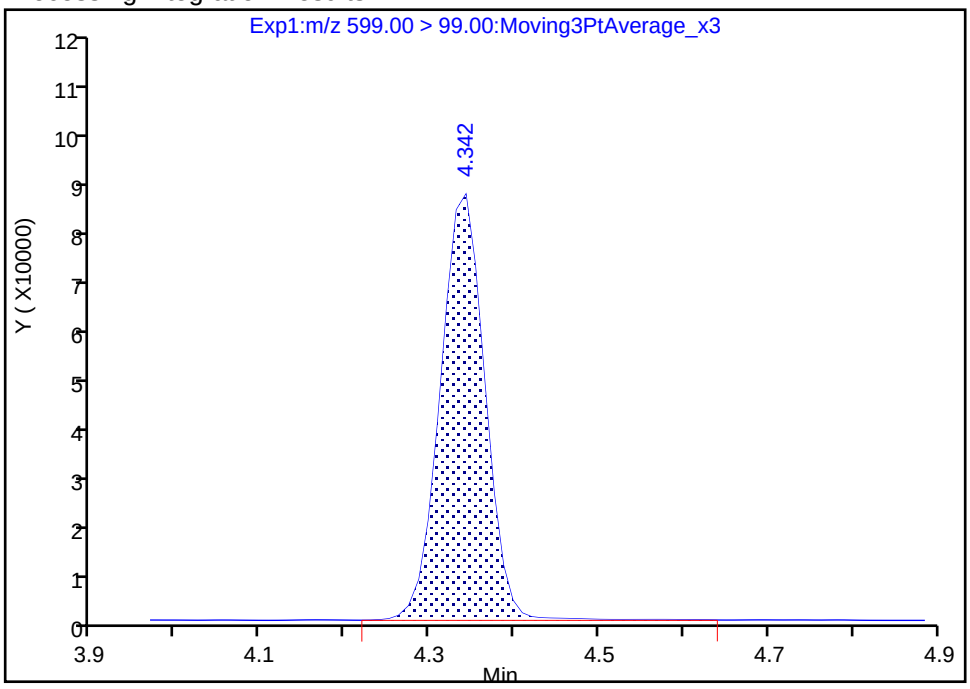
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B01.d | | | | |
| Injection Date: | 12-Mar-2021 12:01:08 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L5 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 1 | Worklist Smp#: | 1 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

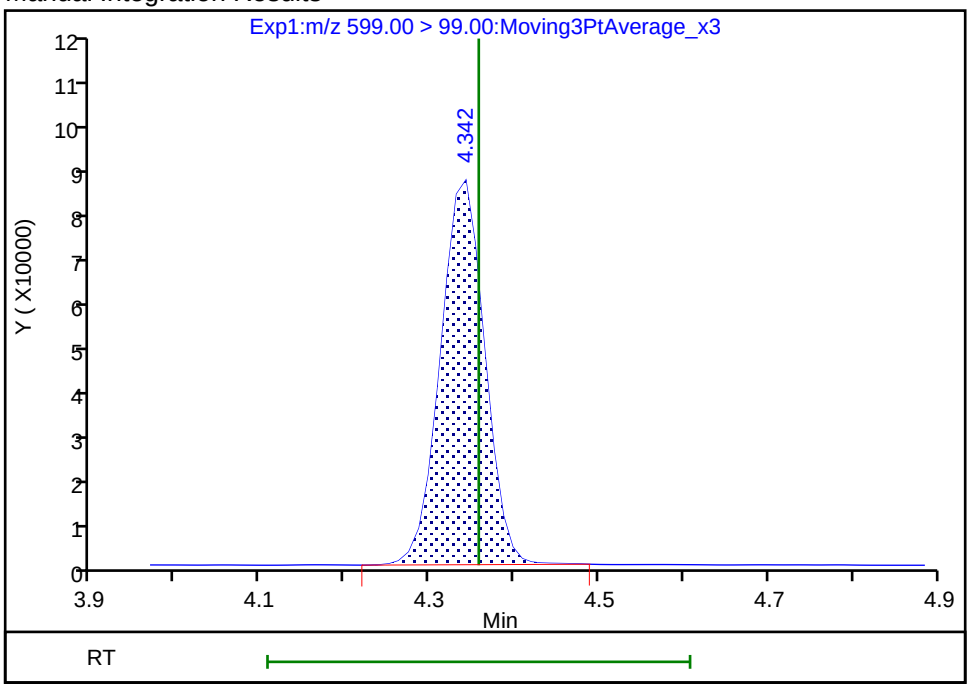
Processing Integration Results

RT: 4.34
Area: 318191
Amount: 2.420352
Amount Units: ng/ml




Manual Integration Results

RT: 4.34
Area: 314796
Amount: 2.420352
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 13:54:41

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

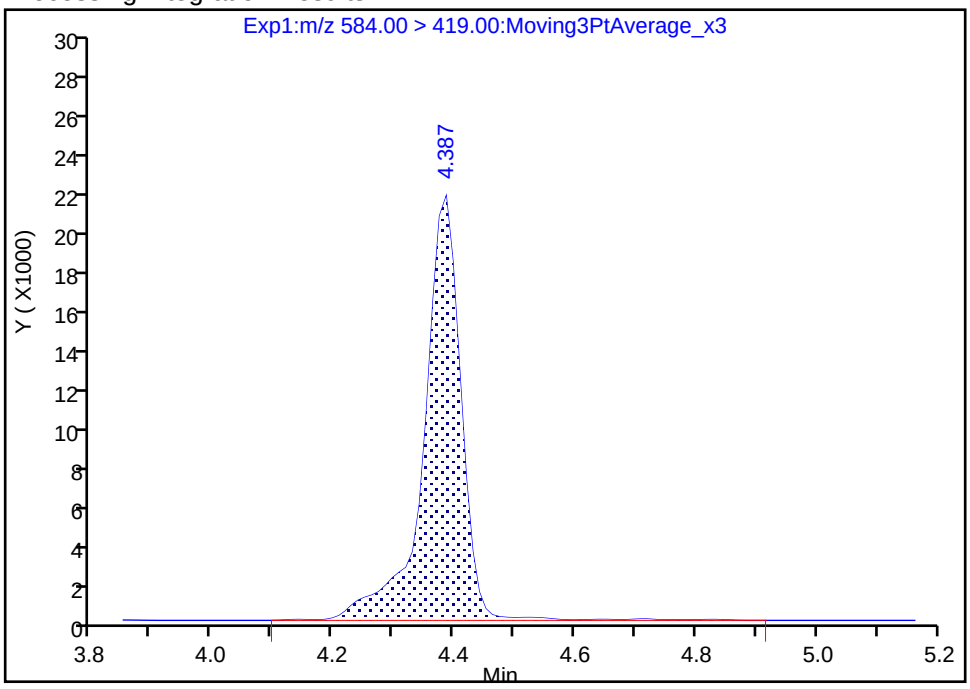
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B01.d
Injection Date: 12-Mar-2021 12:01:08 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

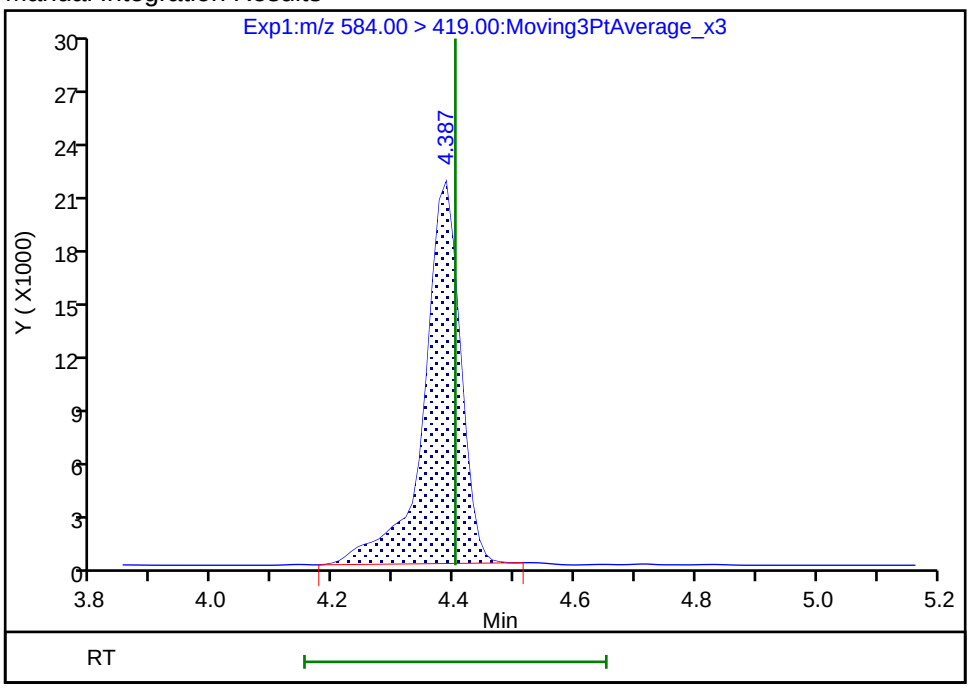
Processing Integration Results

RT: 4.39
Area: 94018
Amount: 2.523361
Amount Units: ng/ml




Manual Integration Results

RT: 4.39
Area: 91187
Amount: 2.447380
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 13:54:49
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

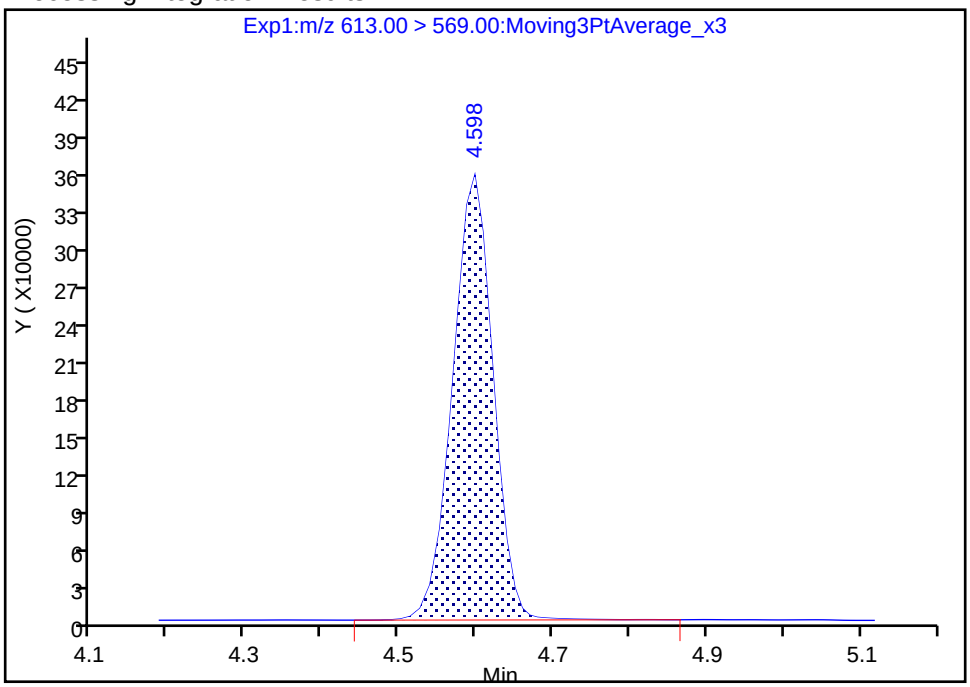
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B01.d
Injection Date: 12-Mar-2021 12:01:08 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

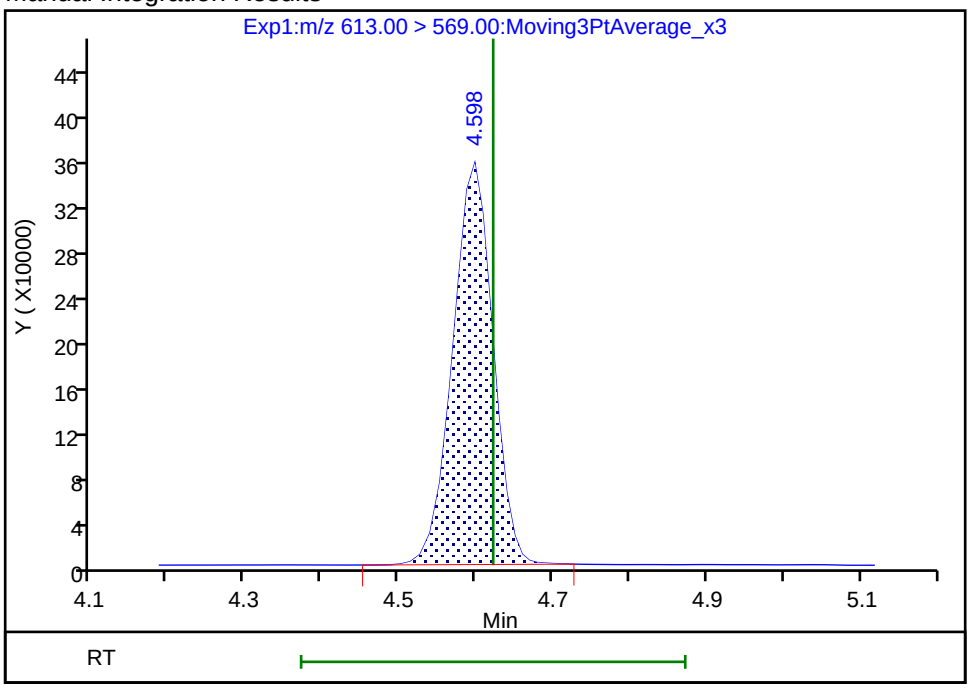
Processing Integration Results

RT: 4.60
Area: 1286570
Amount: 2.349205
Amount Units: ng/ml




Manual Integration Results

RT: 4.60
Area: 1279891
Amount: 2.337009
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 13:55:01
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Lab Sample ID: CCV 200-164776/14  Calibration Date: 03/12/2021 13:48

Instrument ID: LC812  Calib Start Date: 12/22/2020 12:48

GC Column: C-18  ID: 4.60(mm)  Calib End Date: 12/22/2020 13:29

Lab File ID: PA210312B14.d  Conc. Units: ng/mL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | AveID | 1.002 | 0.9814 | | 0.979 | 1.00 | -2.1 | 40.0 |
| Perfluoropentanoic acid (PFPeA) | AveID | 1.107 | 1.079 | | 0.975 | 1.00 | -2.5 | 40.0 |
| Perfluorobutanesulfonic acid (PFBS) | AveID | 1.131 | 1.131 | | 0.884 | 0.884 | -0.0 | 40.0 |
| 1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2) | AveID | 1.834 | 1.764 | | 0.899 | 0.934 | -3.8 | 50.0 |
| Perfluorohexanoic acid (PFHxA) | AveID | 1.092 | 1.086 | | 0.994 | 1.00 | -0.6 | 40.0 |
| Perfluoropentanesulfonic acid | AveID | 1.312 | 1.322 | | 0.945 | 0.938 | 0.7 | 50.0 |
| HFPO-DA | AveID | 1.385 | 1.971 | | 1.42 | 1.00 | 42.3* | 40.0 |
| Perfluoroheptanoic acid (PFHpA) | AveID | 1.092 | 1.076 | | 0.985 | 1.00 | -1.5 | 40.0 |
| Perfluorohexanesulfonic acid (PFHxS) | AveID | 1.178 | 1.168 | | 0.902 | 0.910 | -0.9 | 40.0 |
| DONA | AveID | 3.349 | 3.500 | | 0.985 | 0.942 | 4.5 | 50.0 |
| Perfluoroheptanesulfonic Acid (PFHpS) | AveID | 1.350 | 1.344 | | 0.948 | 0.952 | -0.4 | 50.0 |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | AveID | 1.112 | 1.014 | | 0.865 | 0.948 | -8.8 | 40.0 |
| Perfluorooctanoic acid (PFOA) | AveID | 1.084 | 1.079 | | 0.995 | 1.00 | -0.5 | 40.0 |
| Perfluorooctanesulfonic acid (PFOS) | AveID | 1.150 | 1.146 | | 0.925 | 0.928 | -0.3 | 40.0 |
| Perfluorononanoic acid (PFNA) | AveID | 1.107 | 1.058 | | 0.956 | 1.00 | -4.4 | 40.0 |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid | AveID | 1.283 | 1.154 | | 0.838 | 0.932 | -10.1 | 50.0 |
| Perfluorononanesulfonic acid | AveID | 0.8581 | 0.8829 | | 0.988 | 0.960 | 2.9 | 50.0 |
| Perfluorodecanoic acid (PFDA) | AveID | 1.031 | 0.9869 | | 0.958 | 1.00 | -4.2 | 40.0 |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | AveID | 0.6801 | 0.5362 | | 0.755 | 0.958 | -21.2 | 40.0 |
| Perfluorooctanesulfonamide (PFOSA) | AveID | 1.002 | 1.017 | | 1.02 | 1.00 | 1.5 | 40.0 |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | AveID | 0.8864 | 0.9723 | | 1.10 | 1.00 | 9.7 | 40.0 |
| Perfluorodecanesulfonic acid (PFDS) | AveID | 0.6841 | 0.6901 | | 0.973 | 0.964 | 0.9 | 50.0 |
| Perfluoroundecanoic acid (PFUnA) | AveID | 1.020 | 1.117 | | 1.10 | 1.00 | 9.5 | 40.0 |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | AveID | 0.9257 | 0.9366 | | 1.01 | 1.00 | 1.2 | 40.0 |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid | AveID | 1.331 | 1.099 | | 0.778 | 0.942 | -17.5 | 50.0 |
| Perfluorododecanoic acid (PFDoA) | AveID | 1.100 | 1.033 | | 0.939 | 1.00 | -6.1 | 40.0 |
| 10:2 FTS | AveID | 0.3501 | 0.2934 | | 0.808 | 0.964 | -16.2 | 50.0 |
| Perfluorododecanesulfonic acid (PFDoS) | AveID | 0.2517 | 0.2641 | | 1.02 | 0.968 | 4.9 | 50.0 |
| Perfluorotridecanoic acid (PFTriA) | AveID | 0.8926 | 1.024 | | 1.15 | 1.00 | 14.8 | 50.0 |
| Perfluorotetradecanoic acid (PFTeA) | AveID | 0.1855 | 0.2156 | | 1.16 | 1.00 | 16.3 | 40.0 |

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Lab Sample ID: CCV 200-164776/14  Calibration Date: 03/12/2021 13:48

Instrument ID: LC812  Calib Start Date: 12/22/2020 12:48

GC Column: C-18  ID: 4.60(mm)  Calib End Date: 12/22/2020 13:29

Lab File ID: PA210312B14.d  Conc. Units: ng/mL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Perfluoro-n-hexadecanoic acid (PFHxDA) | L1ID | | 0.9752 | | 1.03 | 1.00 | 3.2 | 40.0 |
| Perfluoro-n-octadecanoic acid (PFODA) | AveID | 0.8998 | 0.8964 | | 0.996 | 1.00 | -0.4 | 50.0 |
| 13C4 PFBA | Ave | 1.343 | 1.373 | | 1.28 | 1.25 | 2.2 | 50.0 |
| 13C5 PFPeA | Ave | 0.9710 | 1.007 | | 1.30 | 1.25 | 3.7 | 50.0 |
| 13C3 PFBS | Ave | 1.278 | 1.270 | | 1.16 | 1.16 | -0.6 | 50.0 |
| M2-4:2 FTS | Ave | 0.1066 | 0.1086 | | 1.19 | 1.17 | 1.9 | 50.0 |
| 13C2 PFHxA | Ave | 1.018 | 1.050 | | 1.29 | 1.25 | 3.2 | 50.0 |
| 13C3 HFPO-DA | Ave | 0.1792 | 0.1002 | | 0.699 | 1.25 | -44.1 | 50.0 |
| 13C4 PFHpA | Ave | 0.9742 | 1.028 | | 1.32 | 1.25 | 5.5 | 50.0 |
| 18O2 PFHxS | Ave | 0.9511 | 0.9703 | | 1.21 | 1.18 | 2.0 | 50.0 |
| M2-6:2 FTS | Ave | 0.1187 | 0.1270 | | 1.27 | 1.19 | 7.0 | 50.0 |
| 13C4 PFOA | Ave | 0.9896 | 1.043 | | 1.32 | 1.25 | 5.4 | 50.0 |
| 13C4 PFOS | Ave | 0.6528 | 0.6628 | | 1.21 | 1.20 | 1.5 | 50.0 |
| 13C5 PFNA | Ave | 0.8730 | 0.9205 | | 1.32 | 1.25 | 5.4 | 50.0 |
| 13C2 PFDA | Ave | 0.8346 | 0.8548 | | 1.28 | 1.25 | 2.4 | 50.0 |
| M2-8:2 FTS | Ave | 0.1225 | 0.1313 | | 1.28 | 1.20 | 7.2 | 50.0 |
| 13C8 FOSA | Ave | 1.227 | 1.245 | | 1.27 | 1.25 | 1.5 | 50.0 |
| d3-NMeFOSAA | Ave | 0.0605 | 0.0535 | | 1.11 | 1.25 | -11.6 | 50.0 |
| 13C2 PFUnA | Ave | 0.6856 | 0.6198 | | 1.13 | 1.25 | -9.6 | 50.0 |
| d5-NEtFOSAA | Ave | 0.0585 | 0.0520 | | 1.11 | 1.25 | -11.1 | 50.0 |
| 13C2 PFDoA | Ave | 0.7238 | 0.6498 | | 1.12 | 1.25 | -10.2 | 50.0 |
| 13C2 PFTeDA | Ave | 0.5353 | 0.5601 | | 1.31 | 1.25 | 4.6 | 50.0 |
| 13C2 PFHxDA | Ave | 0.5718 | 0.4985 | | 1.09 | 1.25 | -12.8 | 50.0 |

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B14.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 12-Mar-2021 13:48:49 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: 200-0045149-014 Plate: 1 Rack: 2
Operator ID: lc812tech Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 12-Mar-2021 14:03:46 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1632

First Level Reviewer: deannd Date: 12-Mar-2021 14:02:59
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.080 | 2.091 | -0.011 | 0.597 | 1421055 | 1.28 | | 102 | 11123 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | |
| 212.90 > 169.00 | 2.080 | 2.091 | -0.011 | 1.000 | 1115709 | 0.9794 | | 97.9 | 273 | |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.398 | 2.413 | -0.015 | 0.688 | 1041821 | 1.30 | | 104 | 3900 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | |
| 262.90 > 219.00 | 2.398 | 2.413 | -0.015 | 1.000 | 899423 | 0.9746 | | 97.5 | 69.8 | |
| D 47 13C3 PFBS | | | | | | | | | | |
| 301.90 > 80.00 | 2.411 | 2.426 | -0.015 | 0.692 | 1222161 | 1.16 | | 99.4 | 236138 | |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | |
| 298.90 > 80.00 | 2.424 | 2.439 | -0.015 | 1.005 | 1050910 | 0.8836 | Target=2.21 | 100.0 | 1393 | |
| 298.90 > 99.00 | 2.424 | 2.439 | -0.015 | 1.005 | 491629 | | 2.14(1.11-3.32) | | 353 | |
| D 60 M2-4:2 FTS | | | | | | | | | | |
| 329.00 > 81.00 | 2.719 | 2.734 | -0.015 | 0.781 | 104977 | 1.19 | | 102 | 144 | |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | M |
| 327.00 > 307.00 | 2.719 | 2.734 | -0.015 | 1.000 | 148170 | 0.8986 | | 96.2 | 1687 | M |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.756 | 2.770 | -0.014 | 0.791 | 1087309 | 1.29 | | 103 | 3432 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | M |
| 313.00 > 269.00 | 2.756 | 2.770 | -0.014 | 1.000 | 944640 | 0.99 | Target=12.83 | 99.4 | 186 | M |
| 313.00 > 119.00 | 2.756 | 2.770 | -0.014 | 1.000 | 80202 | | 11.78(6.42-19.25) | | 119 | |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | |
| 349.00 > 80.00 | 2.756 | 2.770 | -0.014 | 0.883 | 996415 | 0.9450 | Target=3.35 | 101 | 2227 | |
| 349.00 > 99.00 | 2.756 | 2.770 | -0.014 | 0.883 | 284741 | | 3.50(1.67-5.02) | | 472 | |
| 67 Perfluoro(2-propoxypropanoic) ac | | | | | | | | | | M |
| 329.10 > 285.00 | 2.865 | 2.880 | -0.015 | 1.000 | 163566 | 1.42 | | 142 | 30.1 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 64 13C3 HFPO-DA | | | | | | | | | | |
| 332.10 > 287.00 | 2.865 | 2.880 | -0.015 | 0.823 | 103722 | 0.6990 | | 55.9 | 784 | |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.122 | 3.132 | -0.010 | 1.000 | 853837 | 0.9017 | Target=4.15 | 99.1 | 1408 | M |
| 399.00 > 99.00 | 3.122 | 3.132 | -0.010 | 1.000 | 193196 | | 4.42(2.08-6.23) | | 234 | M |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.122 | 3.132 | -0.010 | 0.896 | 950102 | 1.21 | | 102 | 2506 | |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.122 | 3.143 | -0.021 | 0.896 | 1063686 | 1.32 | | 105 | 3304 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | |
| 363.00 > 319.00 | 3.122 | 3.143 | -0.021 | 1.000 | 915776 | 0.9853 | Target=3.66 | 98.5 | 365 | |
| 363.00 > 169.00 | 3.122 | 3.143 | -0.021 | 1.000 | 258949 | | 3.54(1.83-5.49) | | 606 | |
| 77 DONA | | | | | | | | | | |
| 377.00 > 251.00 | 3.164 | 3.175 | -0.011 | 0.834 | 1809361 | 0.9846 | Target=2.43 | 105 | 2205 | |
| 377.00 > 85.00 | 3.164 | 3.175 | -0.011 | 0.834 | 769538 | | 2.35(1.22-3.65) | | 1415 | |
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | |
| 449.00 > 80.00 | 3.465 | 3.483 | -0.018 | 0.913 | 702293 | 0.9478 | Target=5.95 | 99.6 | 2611 | |
| 449.00 > 99.00 | 3.465 | 3.483 | -0.018 | 0.913 | 114895 | | 6.11(2.98-8.93) | | 532 | |
| D 12 M2-6:2 FTS | | | | | | | | | | |
| 429.00 > 81.00 | 3.474 | 3.492 | -0.018 | 0.997 | 124889 | 1.27 | | 107 | 446 | |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | |
| 427.00 > 407.00 | 3.474 | 3.492 | -0.018 | 1.000 | 101141 | 0.8646 | | 91.2 | 940 | |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.483 | 3.501 | -0.018 | 1.000 | 1079230 | 1.32 | | 105 | 2613 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.483 | 3.501 | -0.018 | | 1035074 | 1.25 | | | 2948 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | |
| 413.00 > 369.00 | 3.483 | 3.501 | -0.018 | 1.000 | 931521 | 1.00 | Target=2.58 | 99.5 | 288 | |
| 413.00 > 169.00 | 3.483 | 3.501 | -0.018 | 1.000 | 376860 | | 2.47(1.29-3.87) | | 945 | |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.794 | 3.814 | -0.020 | 1.000 | 583758 | 0.9248 | Target=5.65 | 99.7 | 364 | M |
| 499.00 > 99.00 | 3.794 | 3.814 | -0.020 | 1.000 | 100397 | | 5.81(2.82-8.47) | | 321 | M |
| D 18 13C4 PFOS | | | | | | | | | | |
| 503.00 > 80.00 | 3.794 | 3.814 | -0.020 | 1.089 | 655842 | 1.21 | | 102 | 2481 | |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.814 | 3.824 | -0.010 | 1.095 | 952836 | 1.32 | | 105 | 3705 | |
| 20 Perfluorononanoic acid | | | | | | | | | | M |
| 463.00 > 419.00 | 3.814 | 3.824 | -0.010 | 1.000 | 806340 | 0.9557 | Target=7.44 | 95.6 | 150 | |
| 463.00 > 169.00 | 3.814 | 3.824 | -0.010 | 1.000 | 120845 | | 6.67(3.72-11.16) | | 1124 | M |
| 69 9-Chlorohexadecafluoro-3-oxanona | | | | | | | | | | |
| 531.00 > 351.00 | 3.955 | 3.973 | -0.018 | 1.042 | 590191 | 0.8380 | | 89.9 | 3177 | |
| 68 Perfluorononanesulfonic acid | | | | | | | | | | |
| 549.00 > 80.00 | 4.081 | 4.104 | -0.023 | 1.076 | 465194 | 0.9878 | Target=2.54 | 103 | 2061 | |
| 549.00 > 99.00 | 4.081 | 4.104 | -0.023 | 1.076 | 153738 | | 3.03(1.27-3.81) | | 500 | |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.115 | 4.126 | -0.011 | 1.181 | 884773 | 1.28 | | 102 | 3026 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 24 Perfluorodecanoic acid | | | | | | | | | | |
| 513.00 > 469.00 | 4.115 | 4.126 | -0.011 | 1.000 | 698523 | 0.9576 | Target=9.29 | 95.8 | 545 | |
| 513.00 > 169.00 | 4.115 | 4.126 | -0.011 | 1.000 | 84810 | | 8.24(4.64-13.93) | | 729 | |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.115 | 4.137 | -0.022 | 1.181 | 130236 | 1.28 | | 107 | 656 | |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | |
| 527.00 > 507.00 | 4.126 | 4.137 | -0.011 | 1.003 | 55867 | 0.7553 | | 78.8 | 1360 | |
| D 21 13C8 FOSA | | | | | | | | | | |
| 506.00 > 78.00 | 4.205 | 4.225 | -0.020 | 1.207 | 1289047 | 1.27 | | 102 | 1792 | |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | |
| 498.00 > 78.00 | 4.215 | 4.225 | -0.010 | 1.002 | 1048844 | 1.01 | | 101 | 2101 | |
| D 27 d3-NMeFOSAA | | | | | | | | | | |
| 573.00 > 419.00 | 4.257 | 4.268 | -0.011 | 1.222 | 55369 | 1.10 | | 88.4 | 207 | |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | |
| 570.00 > 419.00 | 4.257 | 4.268 | -0.011 | 1.000 | 43070 | 1.10 | | 110 | 279 | |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | |
| 599.00 > 80.00 | 4.347 | 4.358 | -0.011 | 1.146 | 365119 | 0.9725 | Target=2.80 | 101 | 1456 | |
| 599.00 > 99.00 | 4.347 | 4.358 | -0.011 | 1.146 | 135313 | | 2.70(1.40-4.19) | | 956 | |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.369 | 4.391 | -0.022 | 1.254 | 641515 | 1.13 | | 90.4 | 2473 | |
| 31 Perfluoroundecanoic acid | | | | | | | | | | |
| 563.00 > 519.00 | 4.369 | 4.391 | -0.022 | 1.000 | 573026 | 1.09 | Target=8.12 | 109 | 520 | |
| 563.00 > 169.00 | 4.369 | 4.391 | -0.022 | 1.000 | 69513 | | 8.24(4.06-12.18) | | 939 | |
| D 32 d5-NEtFOSAA | | | | | | | | | | |
| 589.00 > 419.00 | 4.391 | 4.402 | -0.011 | 1.261 | 53871 | 1.11 | | 88.9 | 523 | |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.391 | 4.402 | -0.011 | 1.000 | 40364 | 1.01 | | 101 | 504 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | |
| 631.00 > 451.00 | 4.467 | 4.479 | -0.012 | 1.177 | 568187 | 0.7776 | | 82.5 | 3341 | |
| D 36 13C2 PFDoA | | | | | | | | | | |
| 615.00 > 570.00 | 4.601 | 4.622 | -0.021 | 1.321 | 672567 | 1.12 | | 89.8 | 2229 | |
| 37 Perfluorododecanoic acid | | | | | | | | | | |
| 613.00 > 569.00 | 4.601 | 4.622 | -0.021 | 1.000 | 555836 | 0.9393 | Target=6.91 | 93.9 | 222 | |
| 613.00 > 169.00 | 4.601 | 4.622 | -0.021 | 1.000 | 94484 | | 5.88(3.45-10.36) | | 1538 | |
| 74 1H,1H,2H,2H-perfluorododecanesul | | | | | | | | | | M |
| 627.00 > 607.00 | 4.622 | 4.643 | -0.021 | 1.123 | 30757 | 0.8077 | | 83.8 | 442 | M |
| 75 Perfluorododecanesulfonic acid ( | | | | | | | | | | |
| 699.00 > 80.00 | 4.774 | 4.792 | -0.018 | 1.258 | 140291 | 1.02 | Target=0.51 | 105 | 1237 | |
| 699.00 > 99.00 | 4.774 | 4.792 | -0.018 | 1.258 | 283850 | | 0.49(0.26-0.77) | | 955 | |
| 41 Perfluorotridecanoic acid | | | | | | | | | | |
| 663.00 > 619.00 | 4.810 | 4.822 | -0.012 | 1.045 | 551198 | 1.15 | Target=4.39 | 115 | 269 | |
| 663.00 > 169.00 | 4.801 | 4.822 | -0.021 | 1.043 | 137377 | | 4.01(2.20-6.59) | | 1932 | |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 4.995 | 5.014 | -0.019 | 1.434 | 579773 | 1.31 | | 105 | 2553 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | |
| 713.00 > 169.00 | 4.995 | 5.014 | -0.019 | 1.000 | 100022 | 1.16 | Target=1.06 | 116 | 1977 | |
| 713.00 > 219.00 | 4.995 | 5.014 | -0.019 | 1.000 | 96087 | | 1.04(0.53-1.59) | | 2163 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.338 | 5.360 | -0.022 | 1.533 | 516011 | 1.09 | | 87.2 | 2420 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | |
| 813.00 > 769.00 | 5.338 | 5.360 | -0.022 | 1.000 | 402558 | 1.03 | Target=3.84 | 103 | 218 | |
| 813.00 > 169.00 | 5.338 | 5.360 | -0.022 | 1.000 | 110858 | | 3.63(1.92-5.76) | | 1276 | |
| 46 Perfluorooctadecanoic acid | | | | | | | | | | |
| 913.00 > 869.00 | 5.656 | 5.674 | -0.018 | 1.060 | 370034 | 1.00 | Target=3.92 | 99.6 | 340 | |
| 913.00 > 169.00 | 5.656 | 5.674 | -0.018 | 1.060 | 107643 | | 3.44(1.96-5.88) | | 1138 | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

## Reagents:

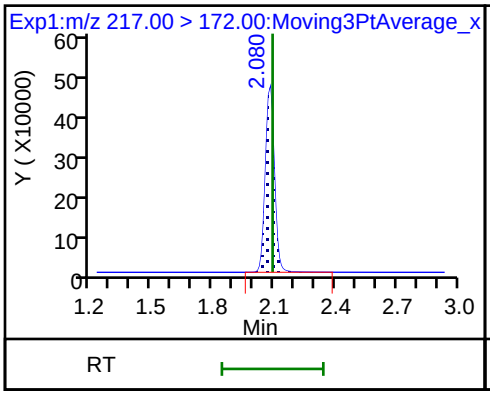
PFAS32NCIC4_00015 Amount Added: 100.00 Units: uL

Report Date: 12-Mar-2021 14:03:46 Chrom Revision: 2.3 05-Feb-2021 00:13:28

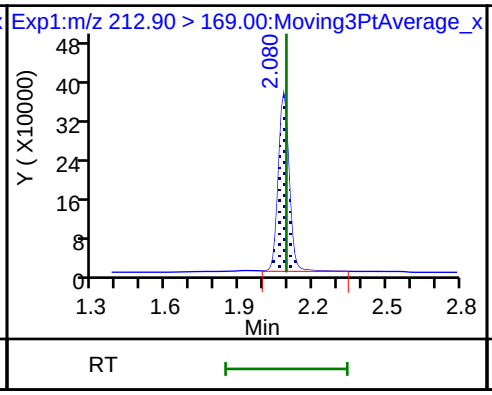
Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B14.d
Injection Date: 12-Mar-2021 13:48:49 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL

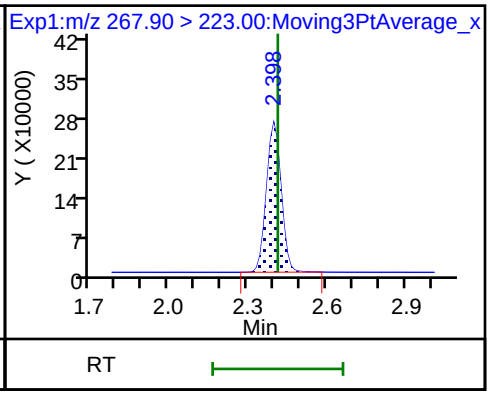
D 1 13C4 PFBA



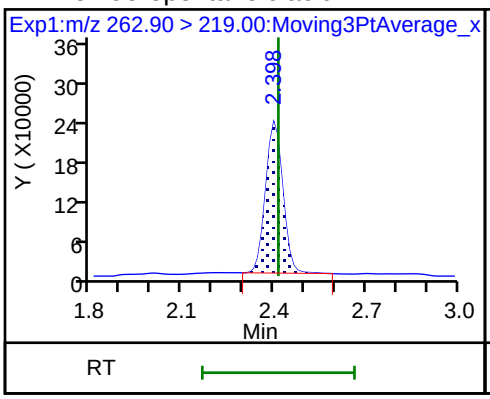

2 Perfluorobutanoic acid



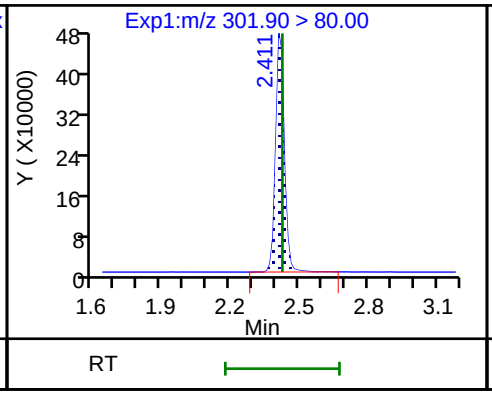

D 3 13C5 PFPeA



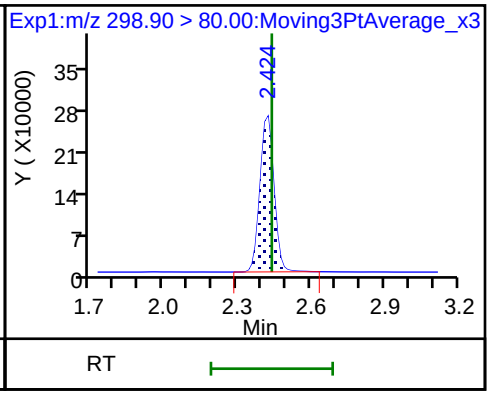

4 Perfluoropentanoic acid



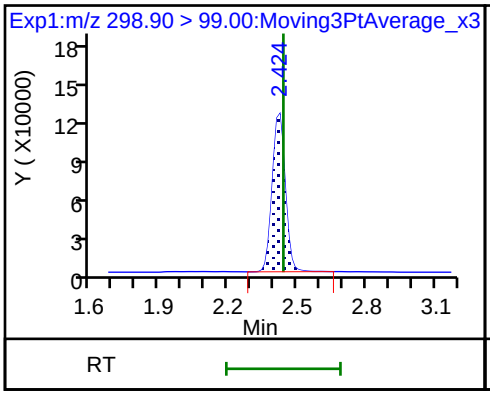

D 47 13C3 PFBS



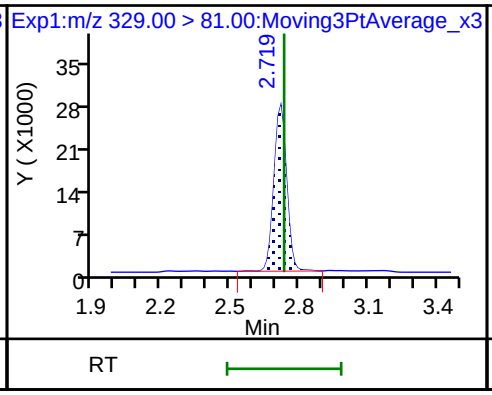

5 Perfluorobutanesulfonic acid



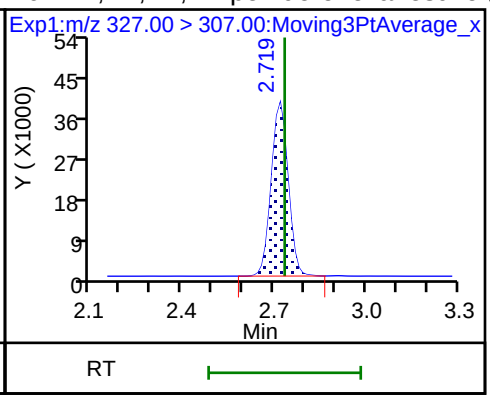

5 Perfluorobutanesulfonic acid



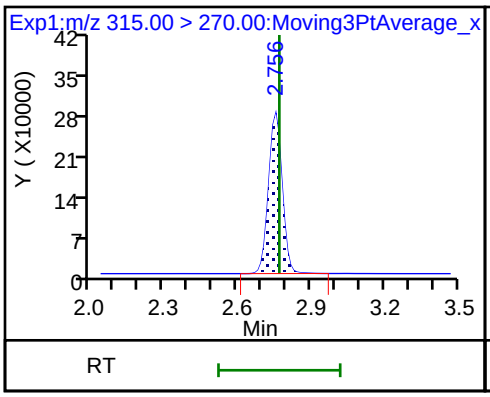

D 60 M2-4:2 FTS



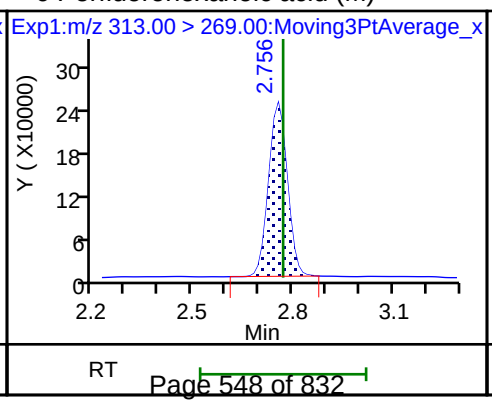

61 1H,1H,2H,2H-perfluorohexanesulfo (M)



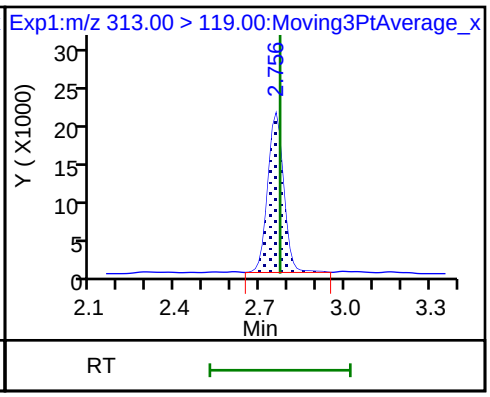

D 7 13C2 PFHxA



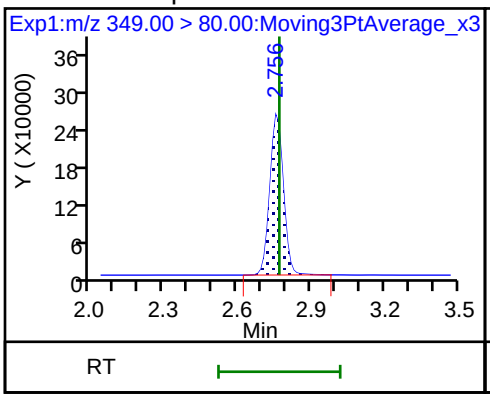

6 Perfluorohexanoic acid (M)



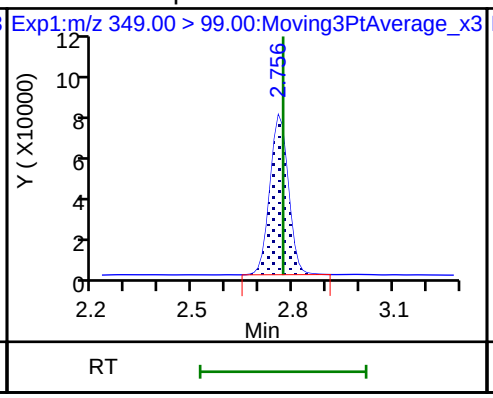

6 Perfluorohexanoic acid



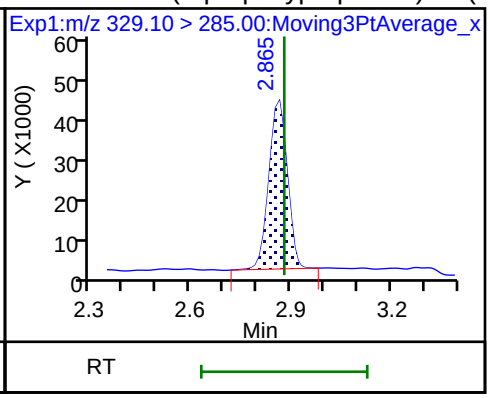
70 Perfluoropentanesulfonic acid



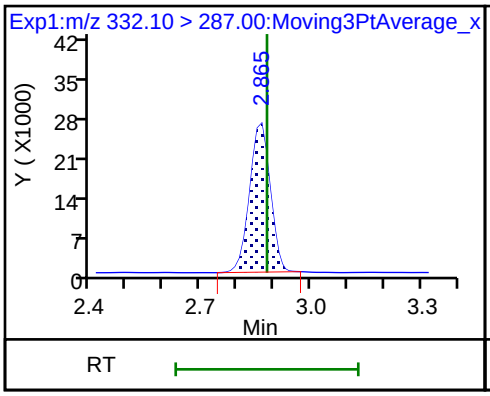

70 Perfluoropentanesulfonic acid



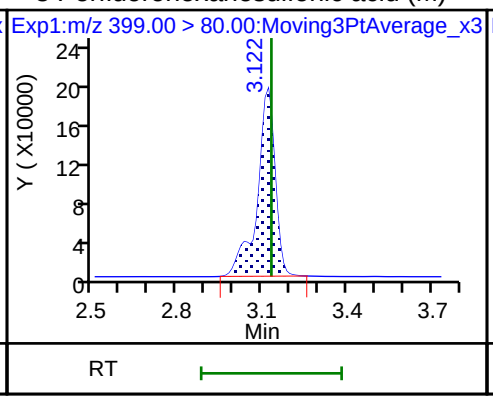

67 Perfluoro(2-propoxypropanoic) ac (M)



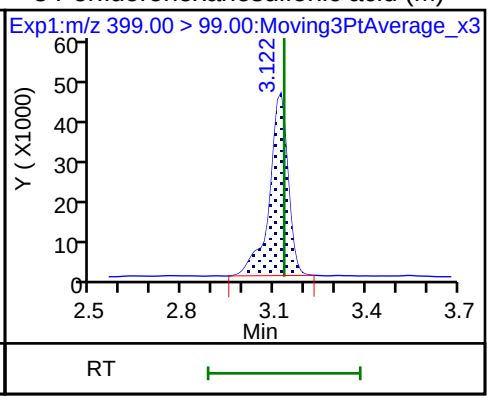

D 64 13C3 HFPO-DA



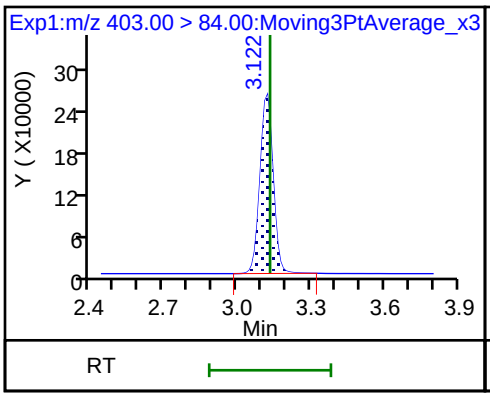

8 Perfluorohexanesulfonic acid (M)



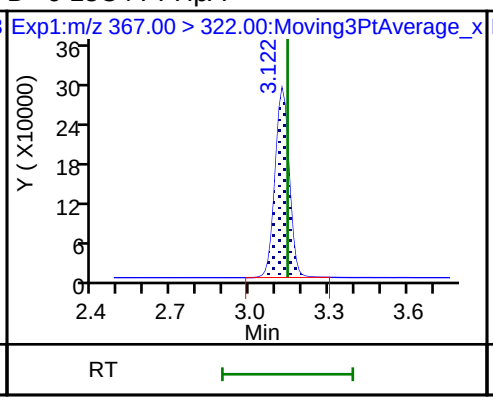

8 Perfluorohexanesulfonic acid (M)



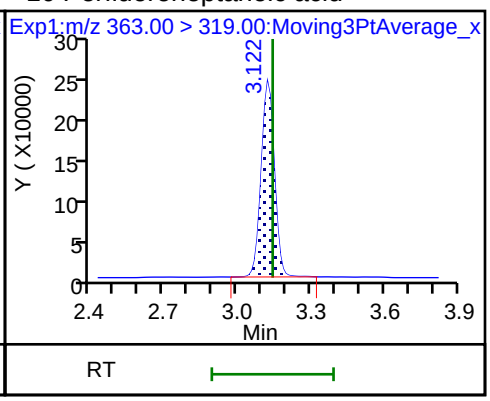

D 11 18O2 PFHxS



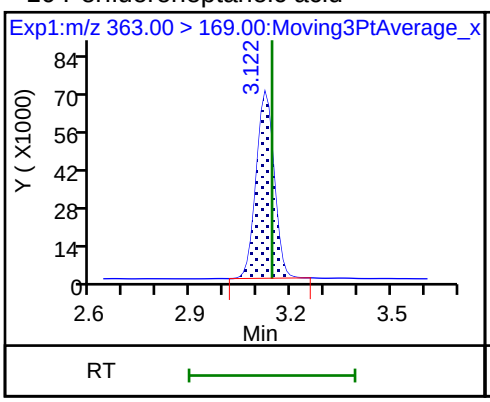

D 9 13C4 PFHpA



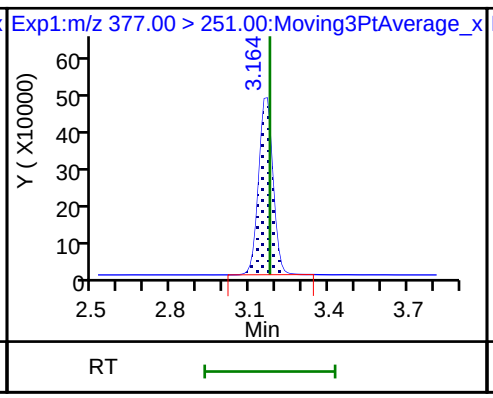

10 Perfluoroheptanoic acid



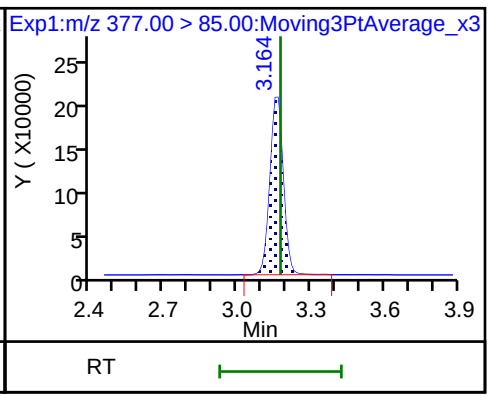

10 Perfluoroheptanoic acid



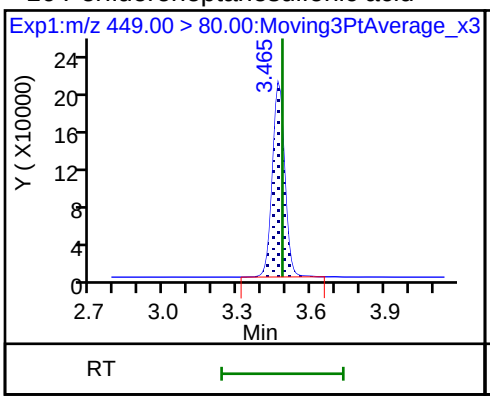

77 DONA



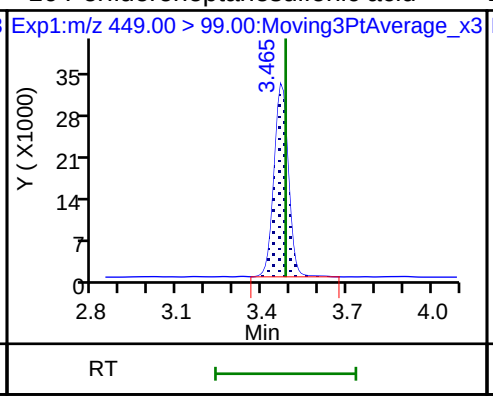

77 DONA



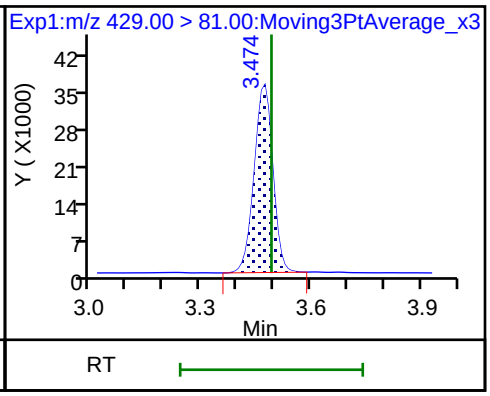
16 Perfluoroheptanesulfonic acid



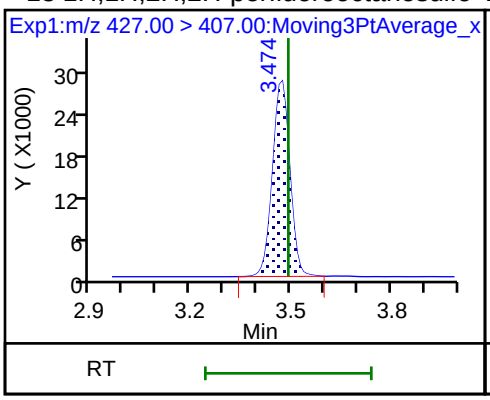

16 Perfluoroheptanesulfonic acid



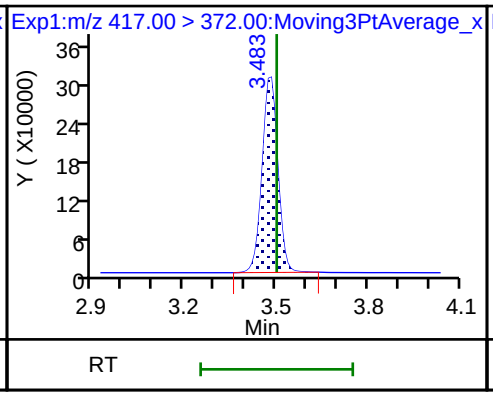

D 12 M2-6:2 FTS



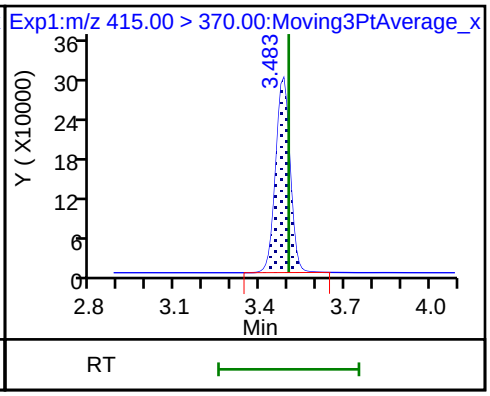

13 1H,1H,2H,2H-perfluorooctanesulfo



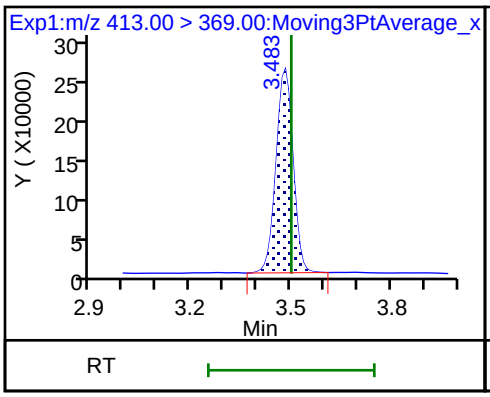

D 14 13C4 PFOA



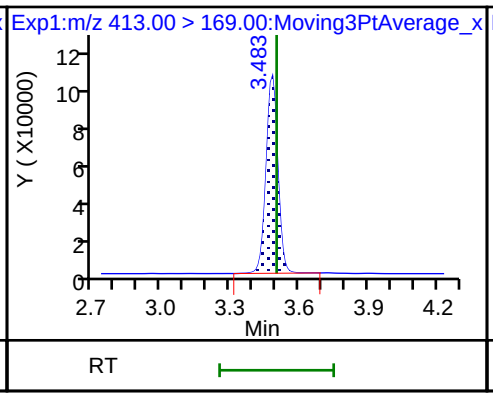

* 62 13C2 PFOA



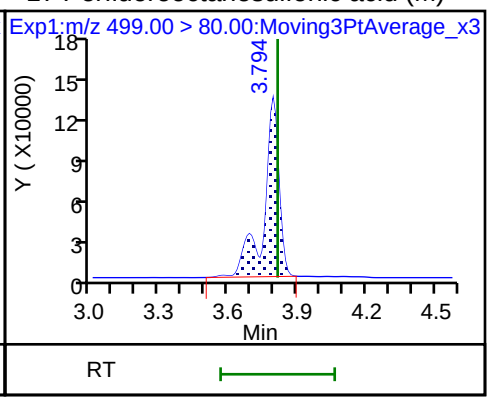

15 Perfluorooctanoic acid



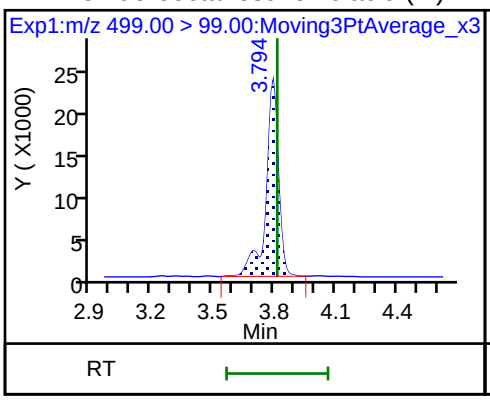

15 Perfluorooctanoic acid



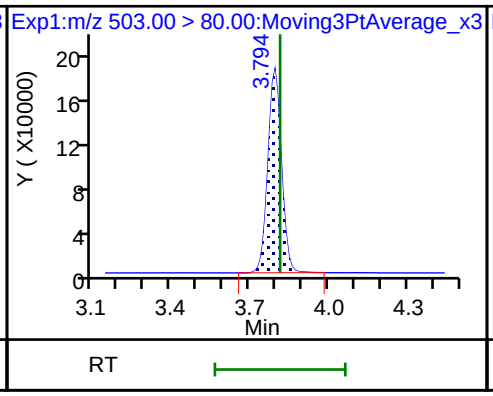

17 Perfluorooctanesulfonic acid (M)



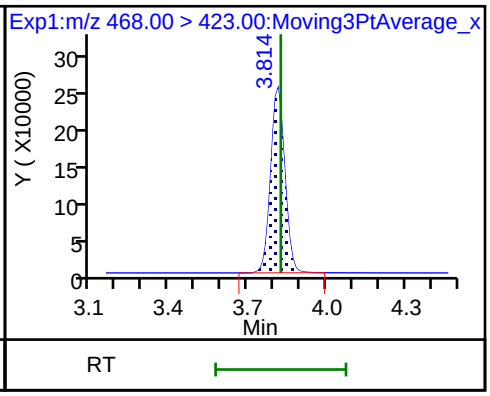

17 Perfluorooctanesulfonic acid (M)



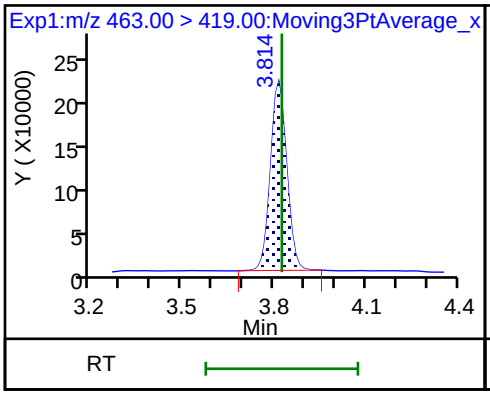

D 18 13C4 PFOS



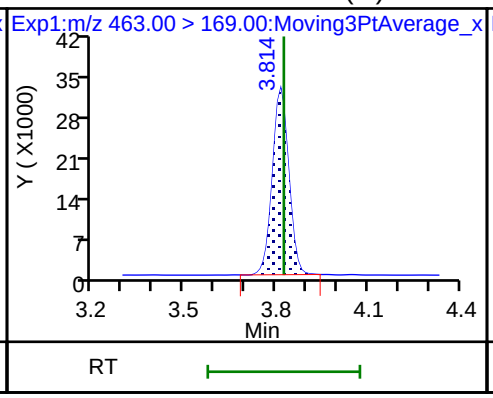

D 19 13C5 PFNA



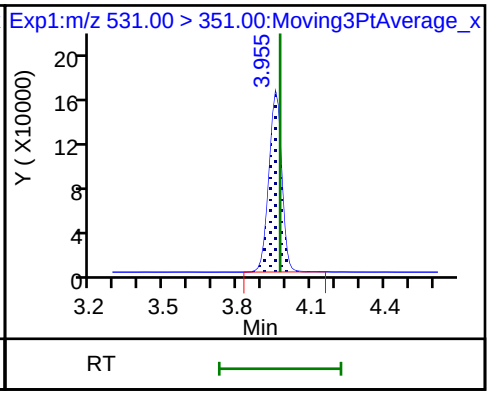
20 Perfluorononanoic acid



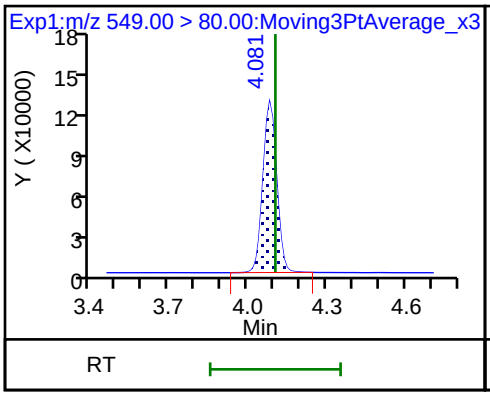

20 Perfluorononanoic acid (M)



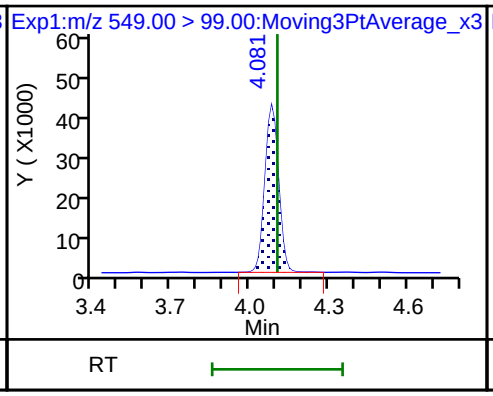

69 9-Chlorohexadecafluoro-3-oxanona



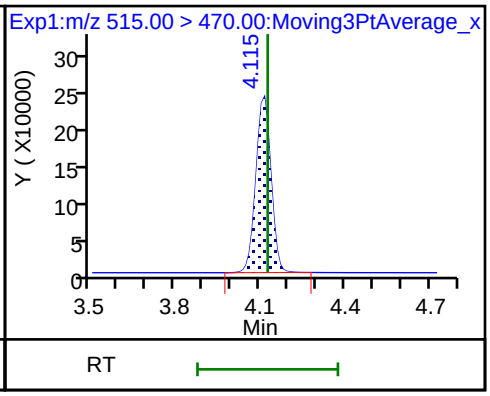

68 Perfluorononanesulfonic acid



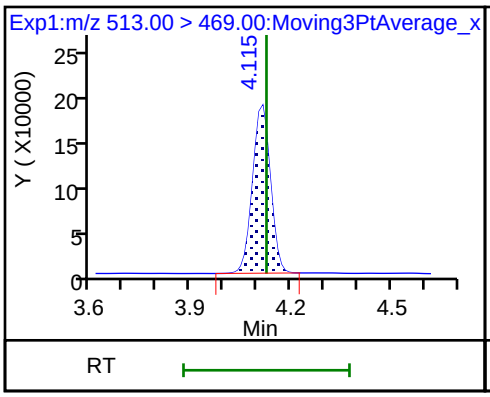

68 Perfluorononanesulfonic acid



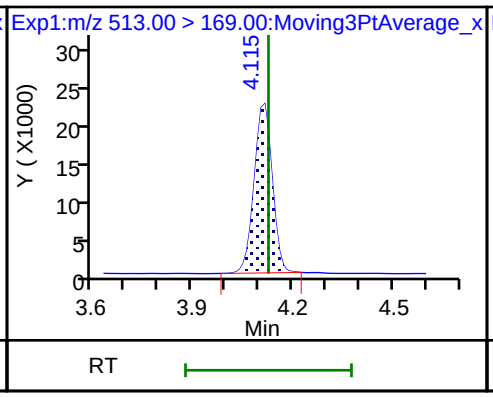

D 23 13C2 PFDA



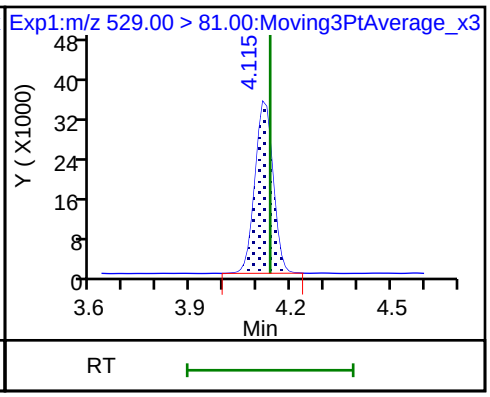

24 Perfluorodecanoic acid



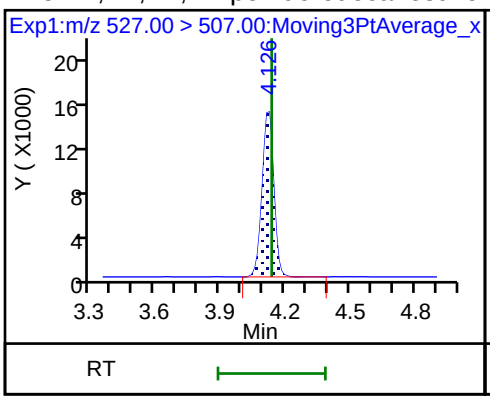

24 Perfluorodecanoic acid



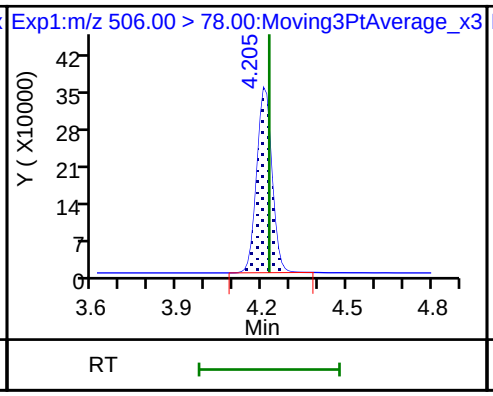

D 26 M2-8:2 FTS



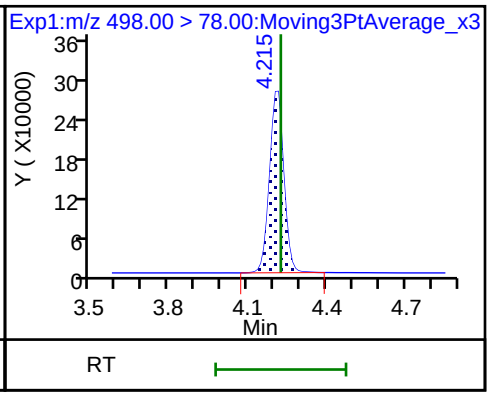

25 1H,1H,2H,2H-perfluorodecanesulfo



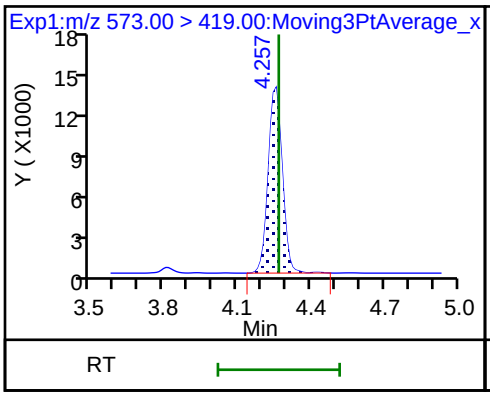

D 21 13C8 FOSA



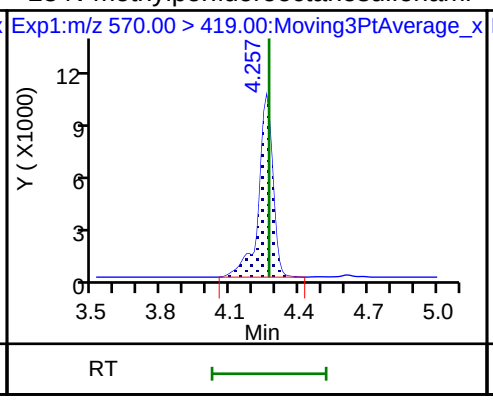

22 Perfluorooctanesulfonamide



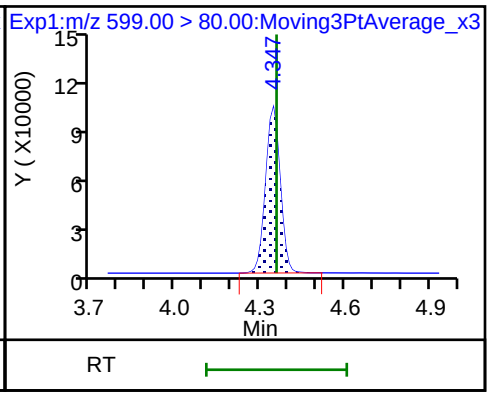
D 27 d3-NMeFOSAA



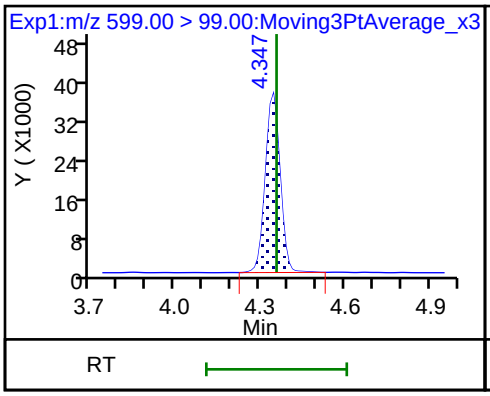

28 N-methylperfluorooctanesulfonami



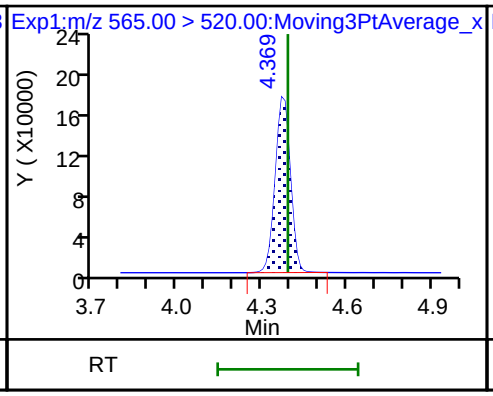

29 Perfluorodecanesulfonic acid



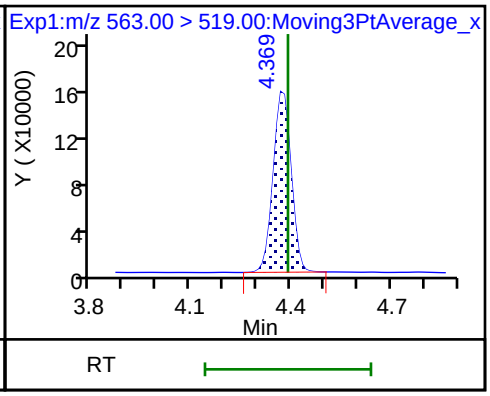

29 Perfluorodecanesulfonic acid



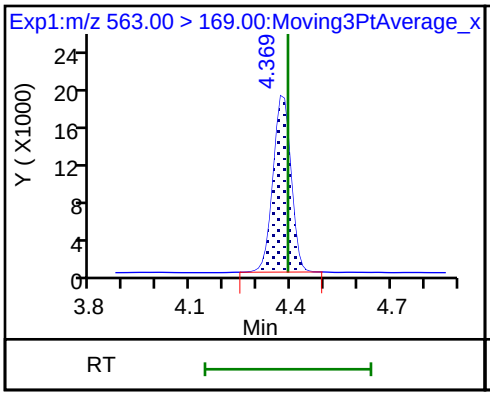

D 30 13C2 PFUnA



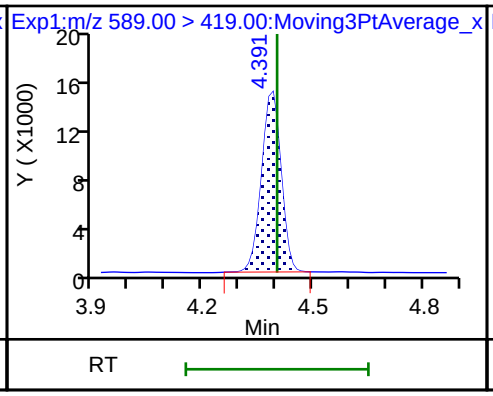

31 Perfluoroundecanoic acid



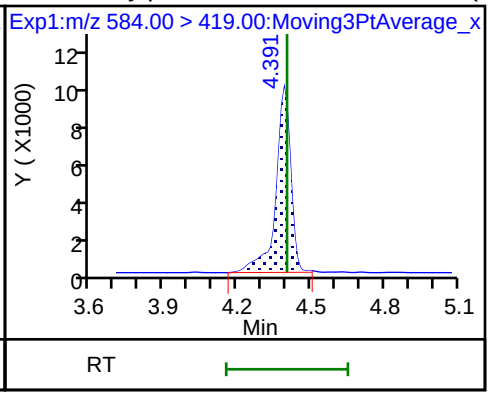

31 Perfluoroundecanoic acid



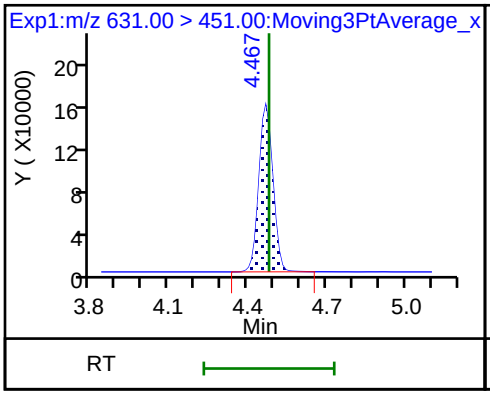

D 32 d5-NEtFOSAA



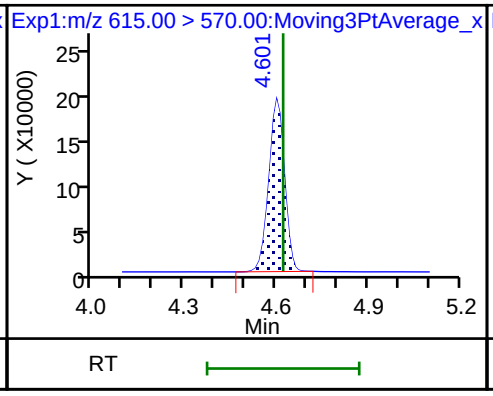

33 N-ethylperfluorooctanesulfonamid (M)



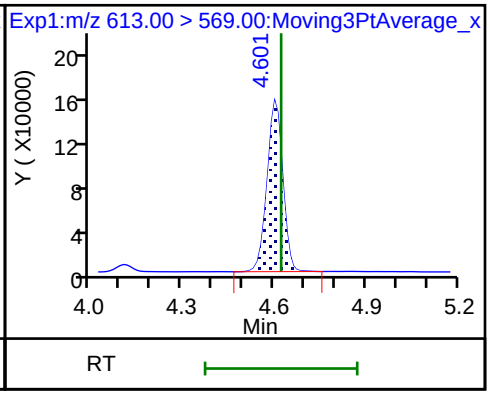

66 11-Chloroeicosafluoro-3-oxaundec



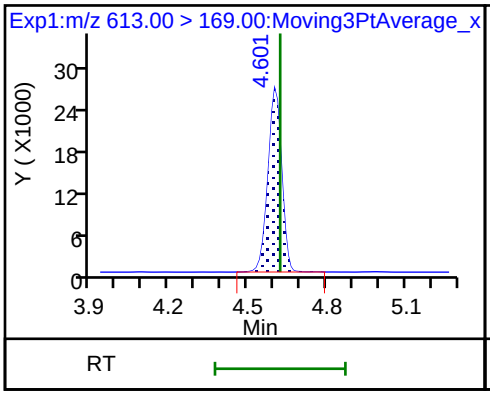

D 36 13C2 PFDoA



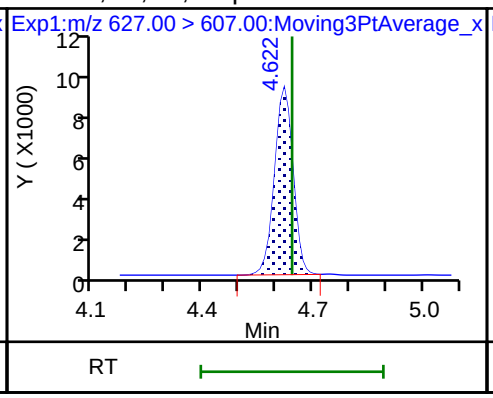

37 Perfluorododecanoic acid



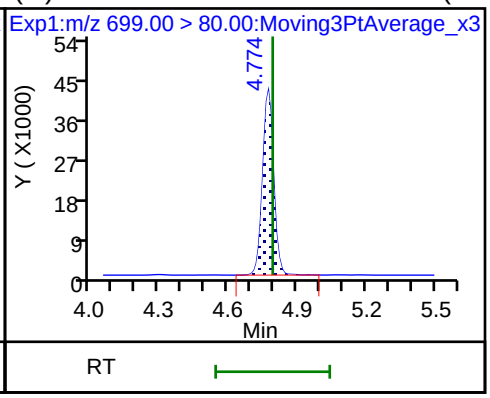
37 Perfluorododecanoic acid



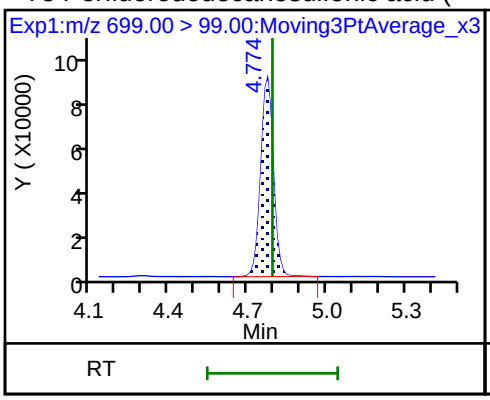

74 1H,1H,2H,2H-perfluorododecanesul (M)



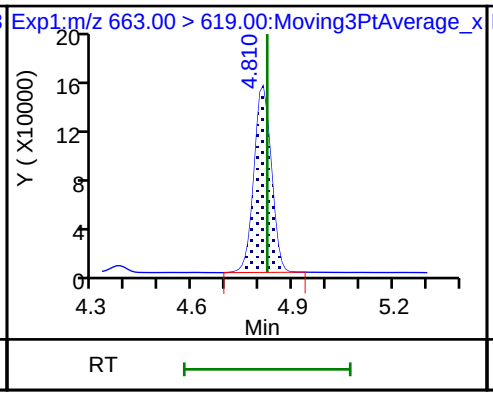

75 Perfluorododecanesulfonic acid (



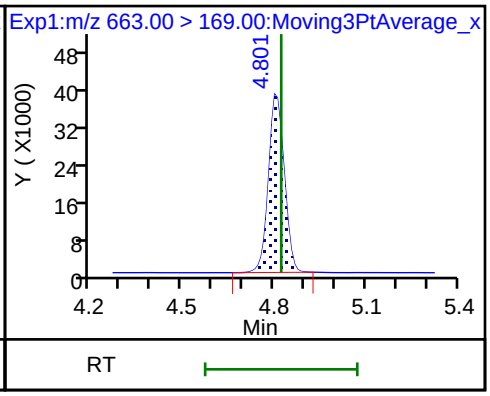

75 Perfluorododecanesulfonic acid (



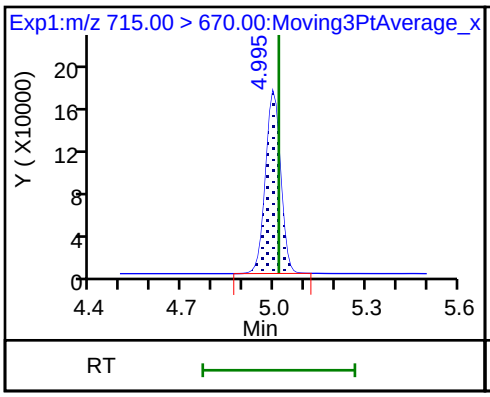

41 Perfluorotridecanoic acid



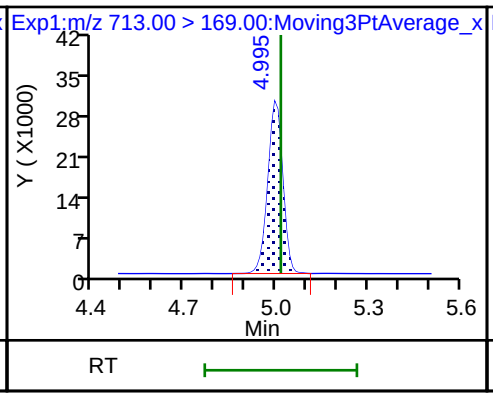

41 Perfluorotridecanoic acid



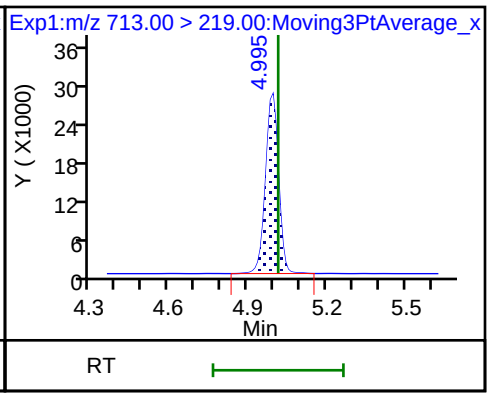

D 43 13C2 PFTeDA



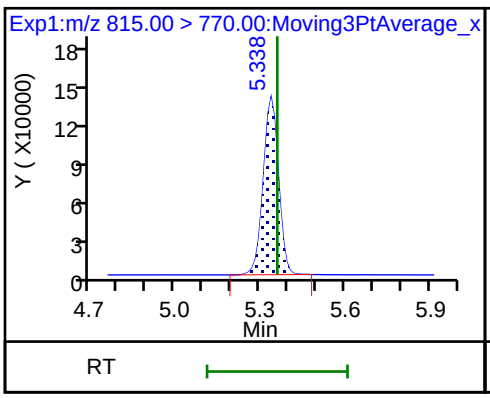

42 Perfluorotetradecanoic acid



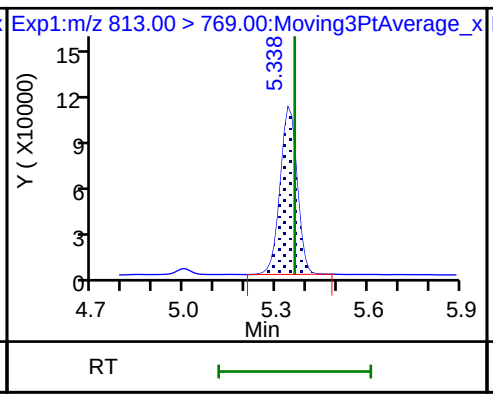

42 Perfluorotetradecanoic acid



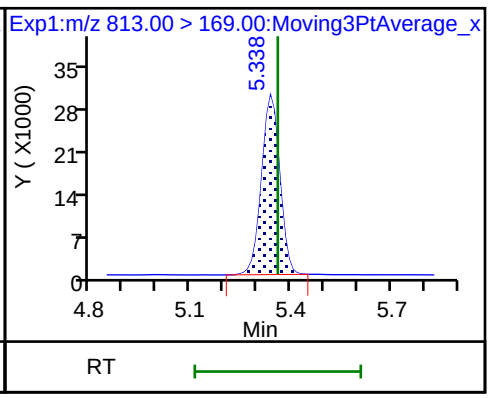

D 44 13C2 PFHxDA



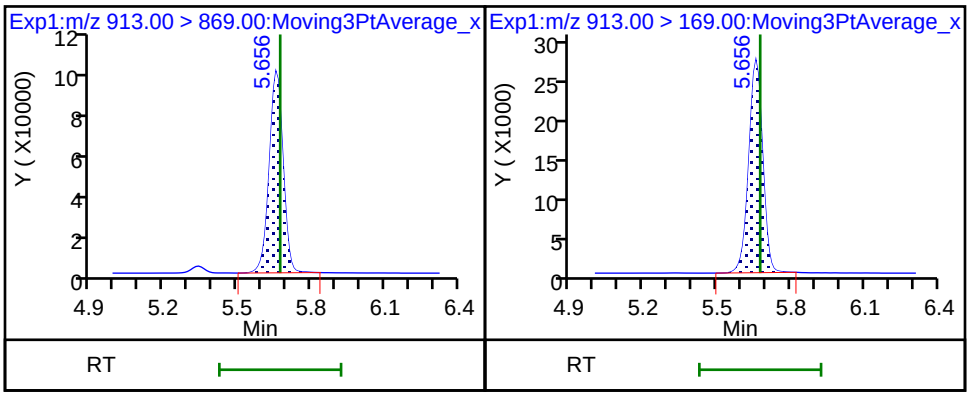

45 Perfluorohexadecanoic acid




45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid




46 Perfluorooctadecanoic acid

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

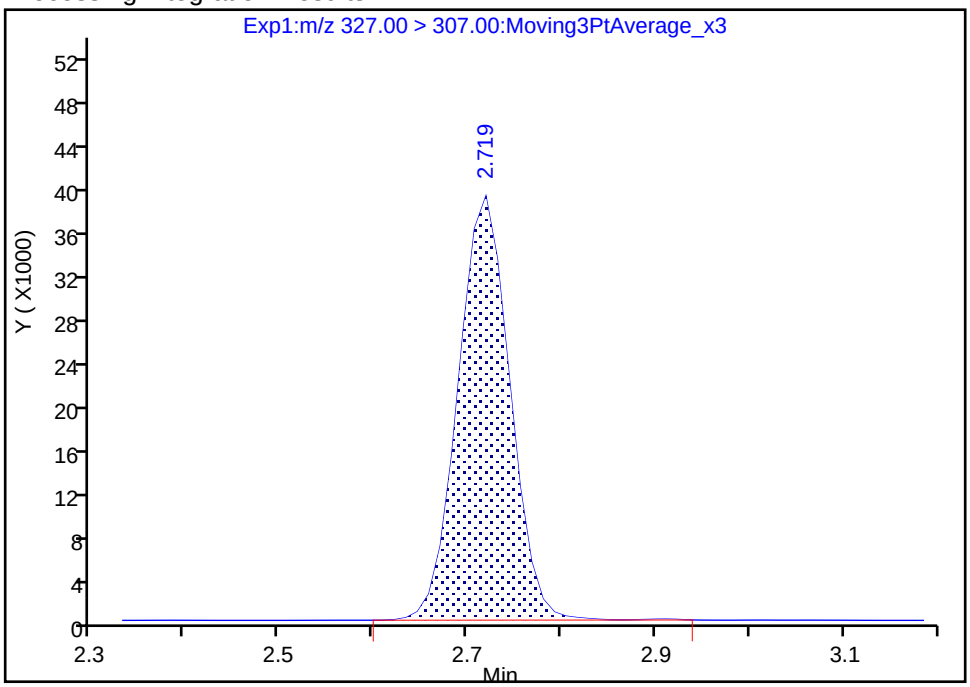
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B14.d
Injection Date: 12-Mar-2021 13:48:49 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

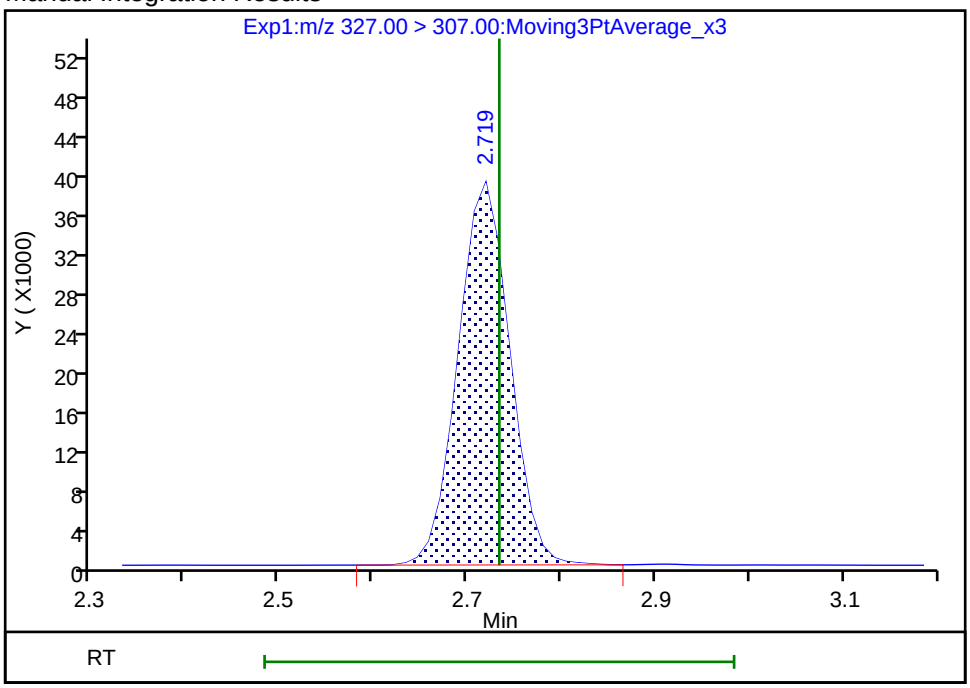
Processing Integration Results

RT: 2.72
Area: 148460
Amount: 0.900398
Amount Units: ng/ml




Manual Integration Results

RT: 2.72
Area: 148170
Amount: 0.898639
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 14:01:14
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

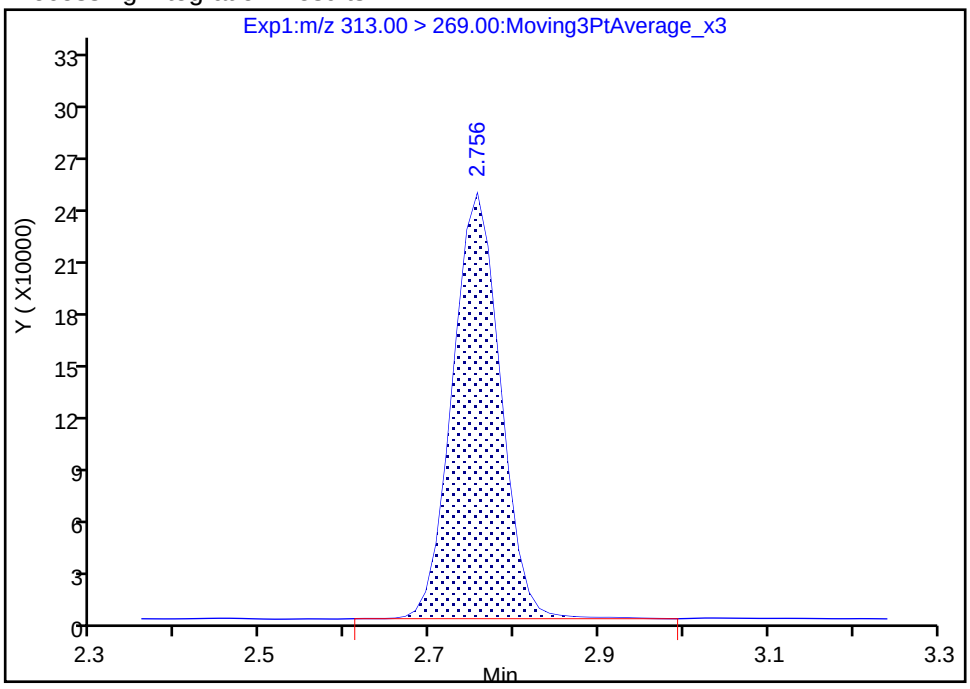
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B14.d | | | | |
| Injection Date: | 12-Mar-2021 13:48:49 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L4 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

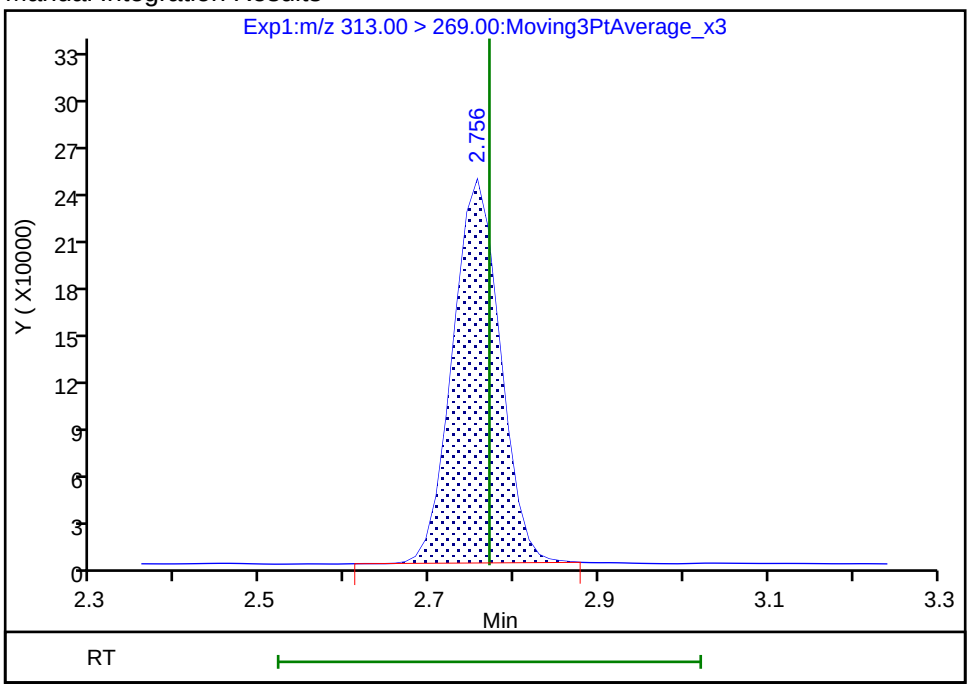
Processing Integration Results

RT: 2.76
Area: 954560
Amount: 1.004523
Amount Units: ng/ml




Manual Integration Results

RT: 2.76
Area: 944640
Amount: 0.994084
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 14:01:20

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

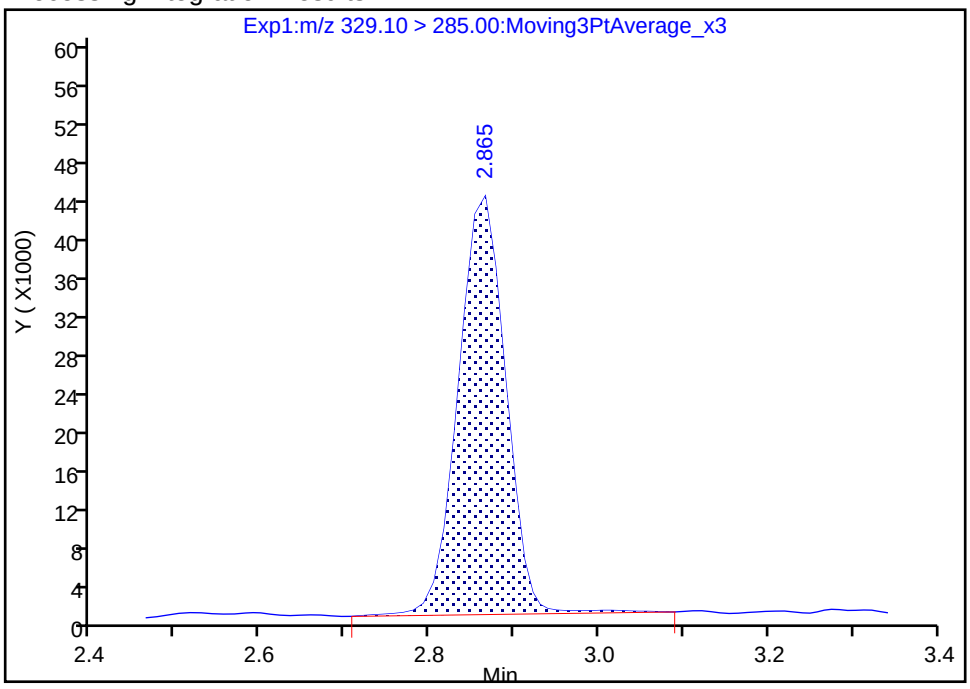
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B14.d | | | | |
| Injection Date: | 12-Mar-2021 13:48:49 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L4 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

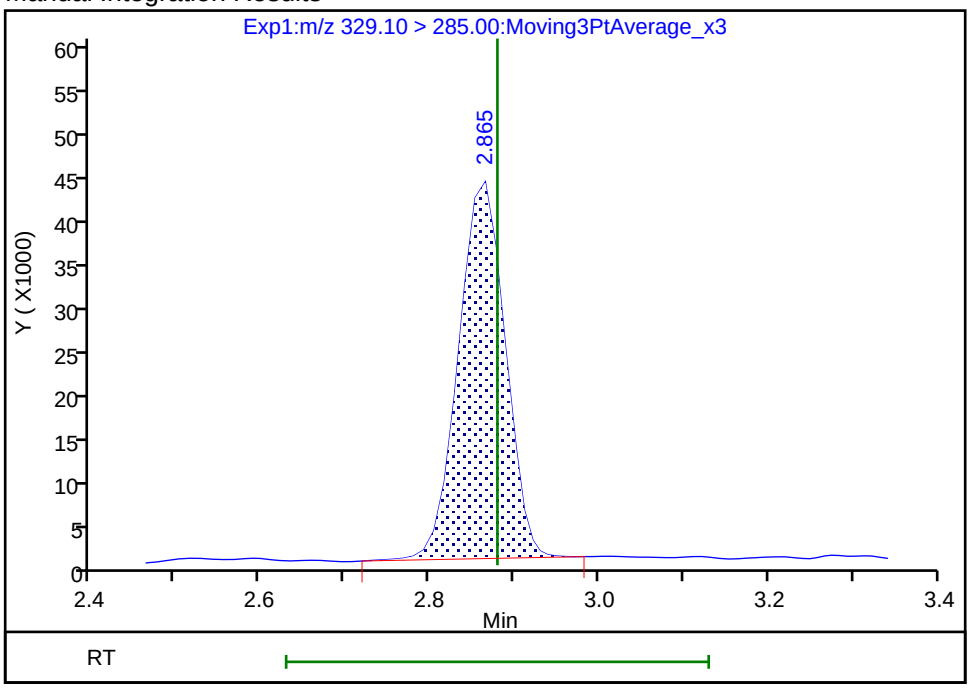
Processing Integration Results

RT: 2.87
Area: 166970
Amount: 1.452466
Amount Units: ng/ml




Manual Integration Results

RT: 2.87
Area: 163566
Amount: 1.422855
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 14:01:27

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

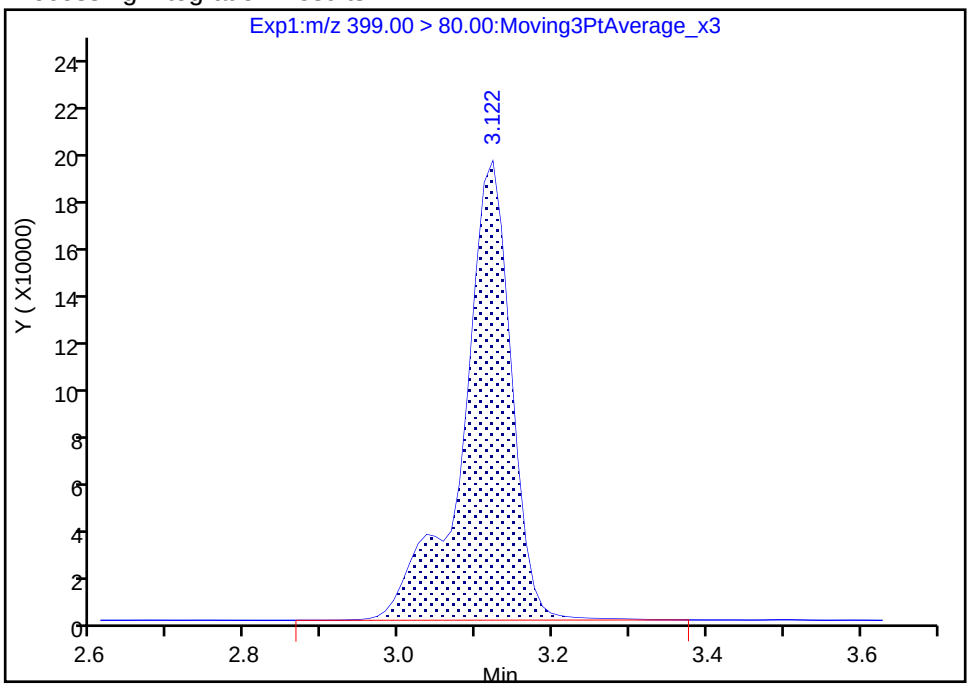
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B14.d
Injection Date: 12-Mar-2021 13:48:49 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

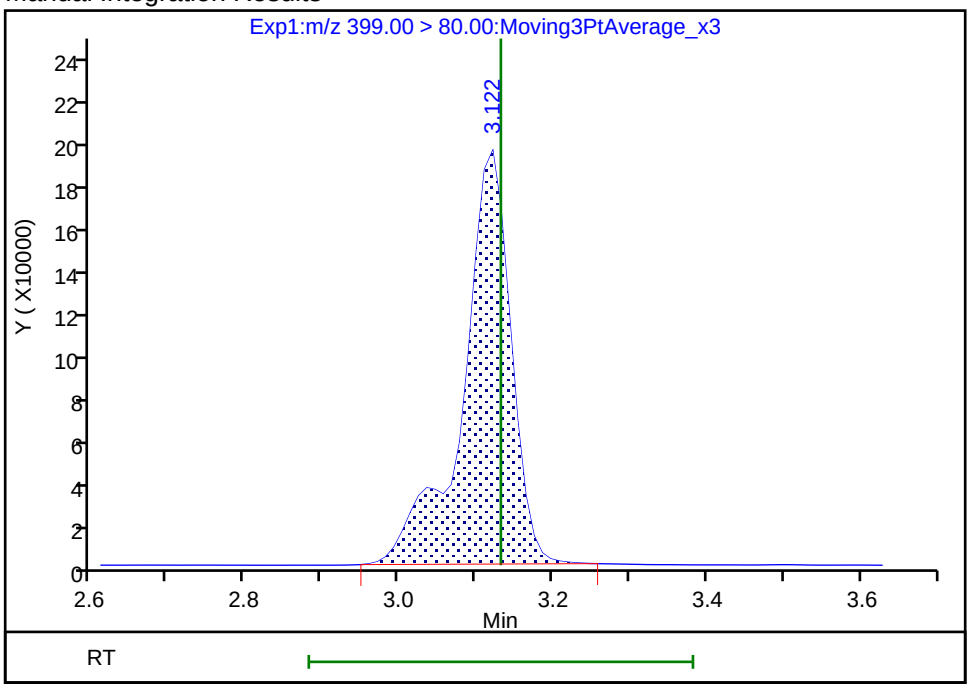
Processing Integration Results

RT: 3.12
Area: 863919
Amount: 0.912391
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 853837
Amount: 0.901743
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 14:01:40
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

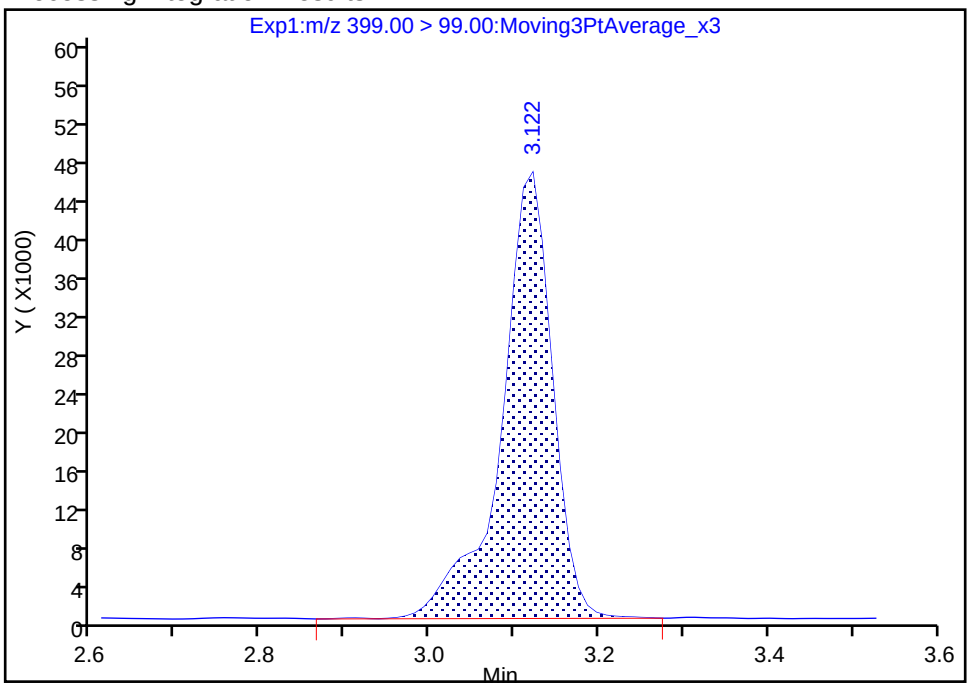
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B14.d
Injection Date: 12-Mar-2021 13:48:49 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

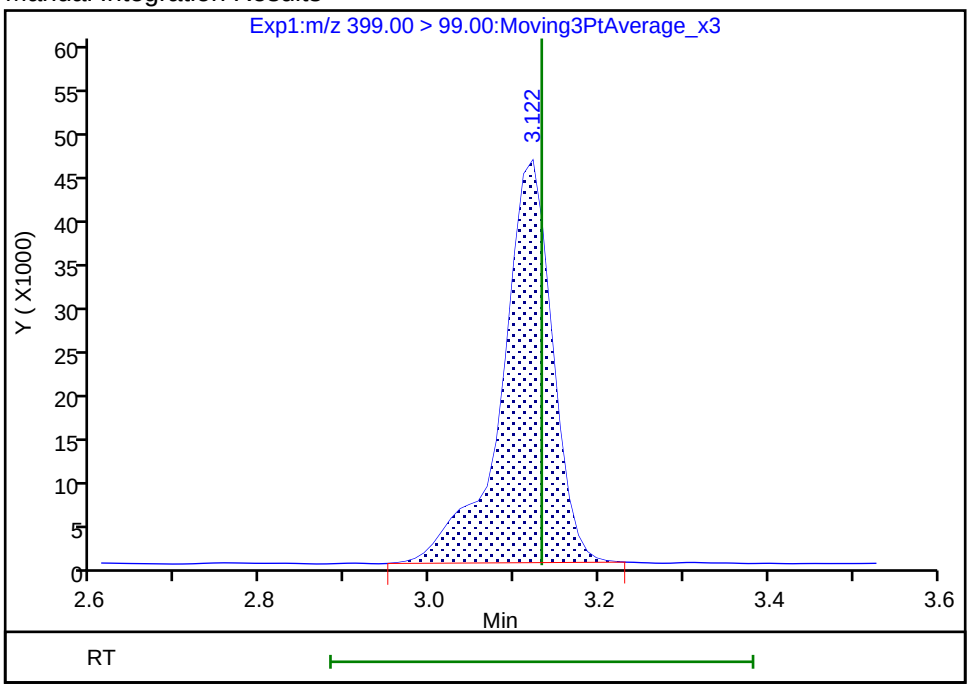
Processing Integration Results

RT: 3.12
Area: 195104
Amount: 0.912391
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 193196
Amount: 0.901743
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 14:01:43
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

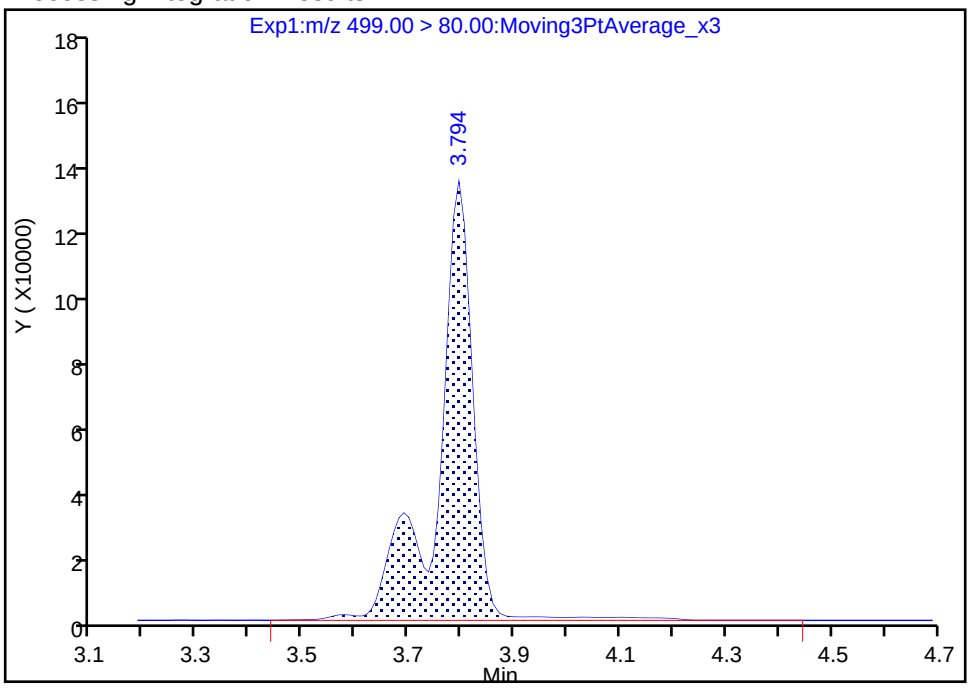
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B14.d | | | | |
| Injection Date: | 12-Mar-2021 13:48:49 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L4 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

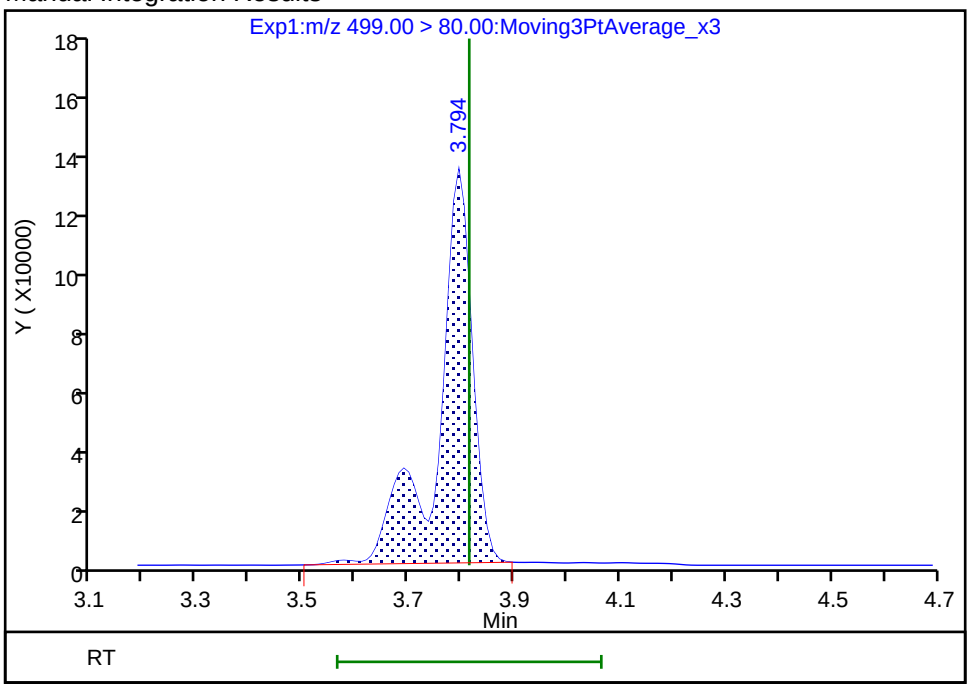
Processing Integration Results

RT: 3.79
Area: 611514
Amount: 0.968812
Amount Units: ng/ml




Manual Integration Results

RT: 3.79
Area: 583758
Amount: 0.924839
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 14:01:59

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

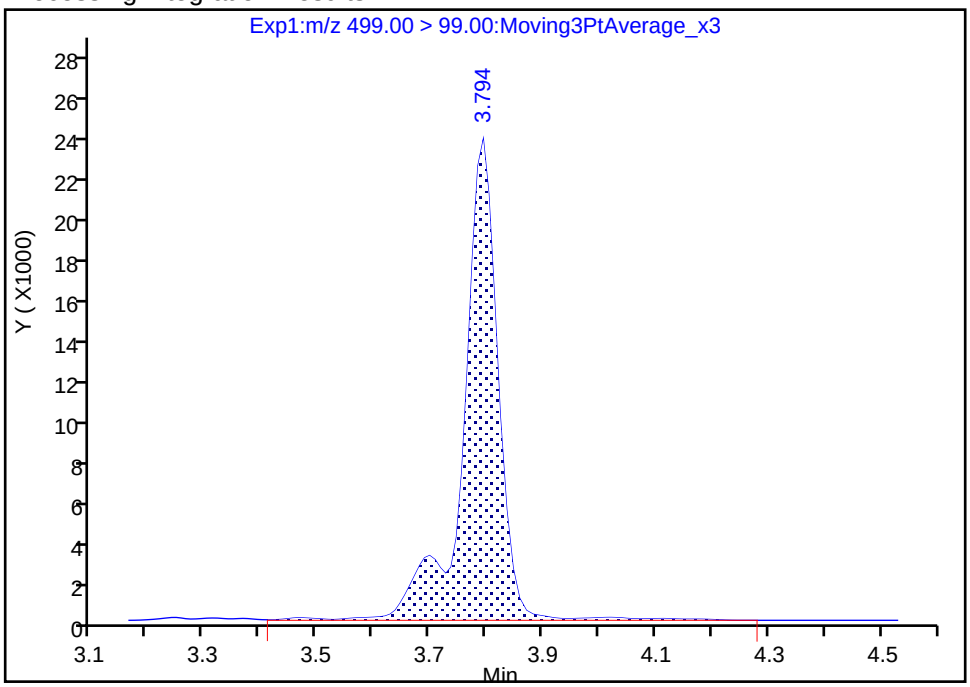
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B14.d | | | | |
| Injection Date: | 12-Mar-2021 13:48:49 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L4 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

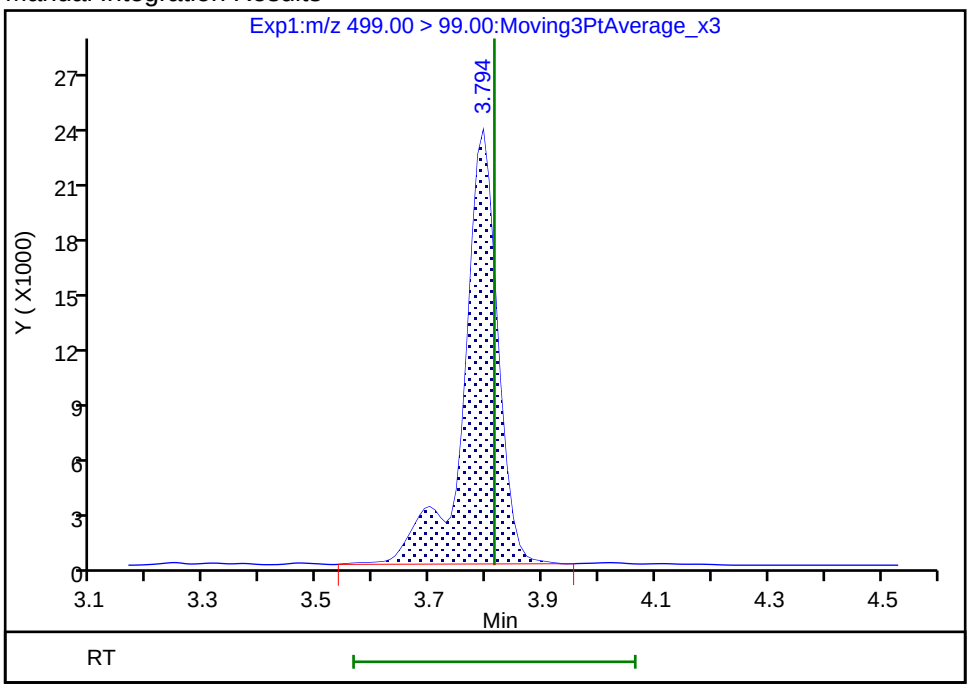
Processing Integration Results

RT: 3.79
Area: 103769
Amount: 0.968812
Amount Units: ng/ml




Manual Integration Results

RT: 3.79
Area: 100397
Amount: 0.924839
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 14:02:02

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

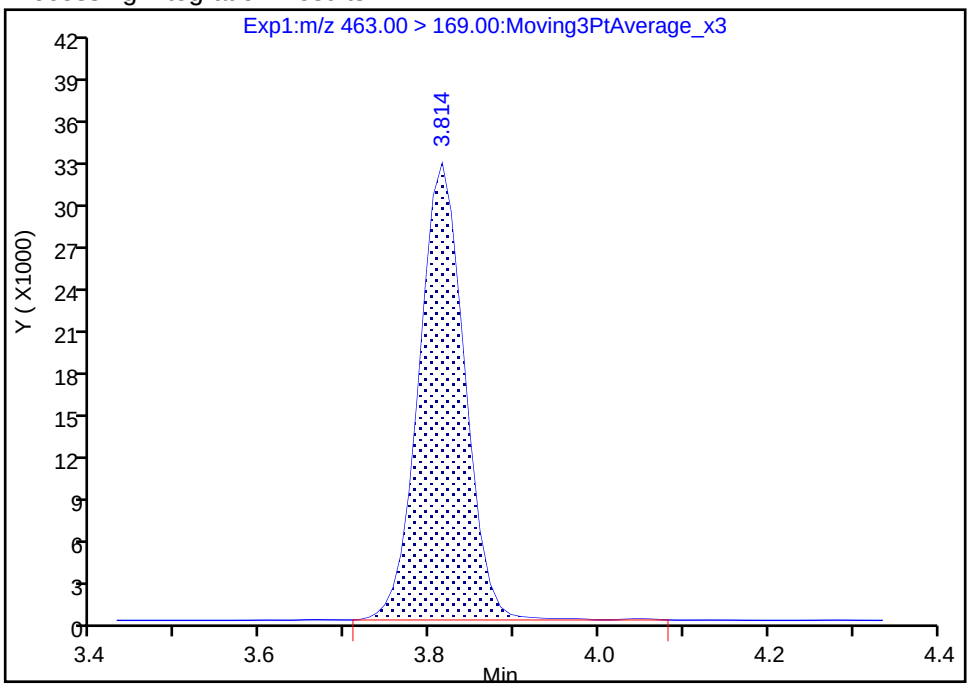
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B14.d | | | | |
| Injection Date: | 12-Mar-2021 13:48:49 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L4 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

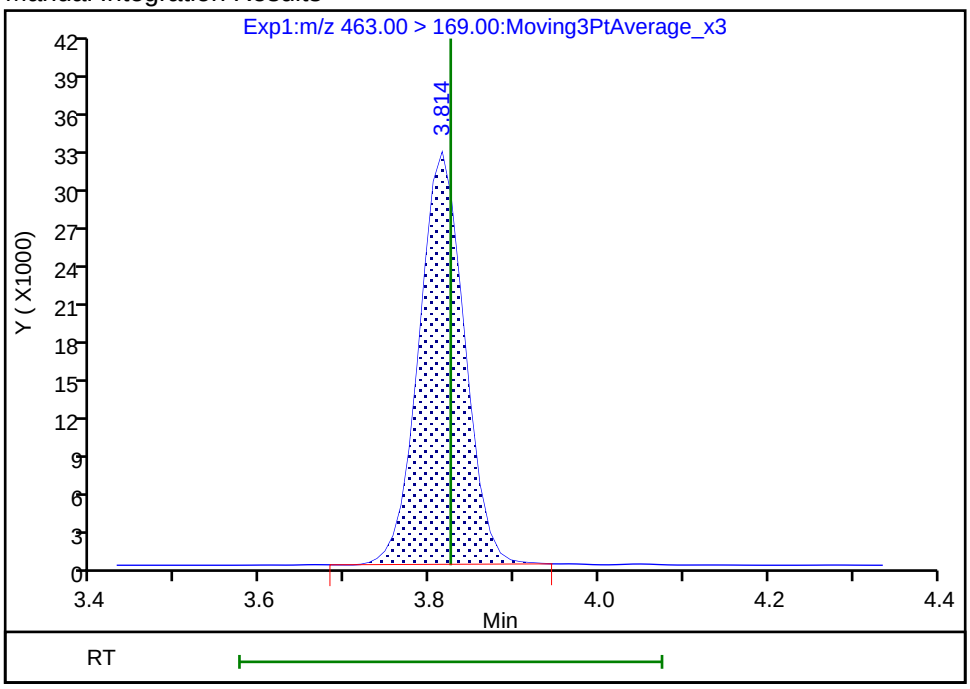
Processing Integration Results

RT: 3.81
Area: 121905
Amount: 0.955683
Amount Units: ng/ml




Manual Integration Results

RT: 3.81
Area: 120845
Amount: 0.955683
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 14:02:08

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

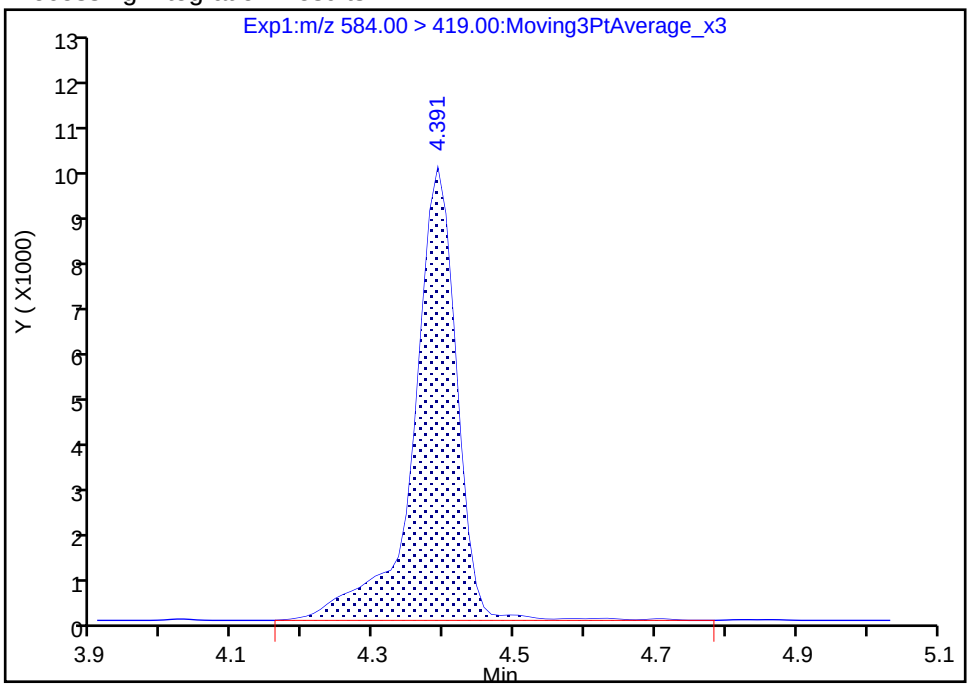
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B14.d | | | | |
| Injection Date: | 12-Mar-2021 13:48:49 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L4 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

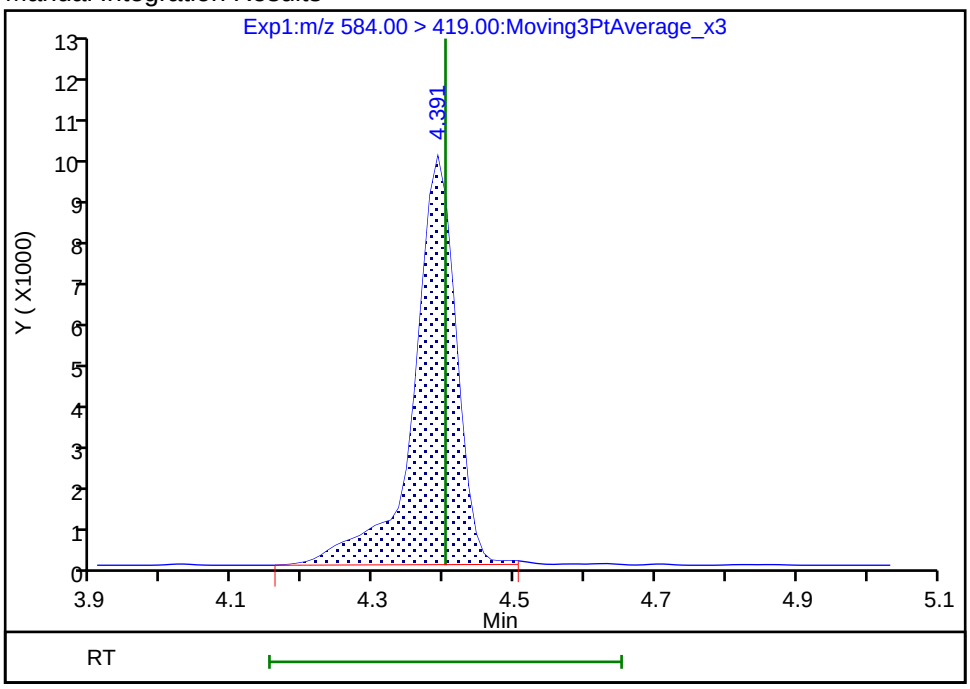
Processing Integration Results

RT: 4.39
Area: 40991
Amount: 1.027480
Amount Units: ng/ml




Manual Integration Results

RT: 4.39
Area: 40364
Amount: 1.011764
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 14:02:37

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

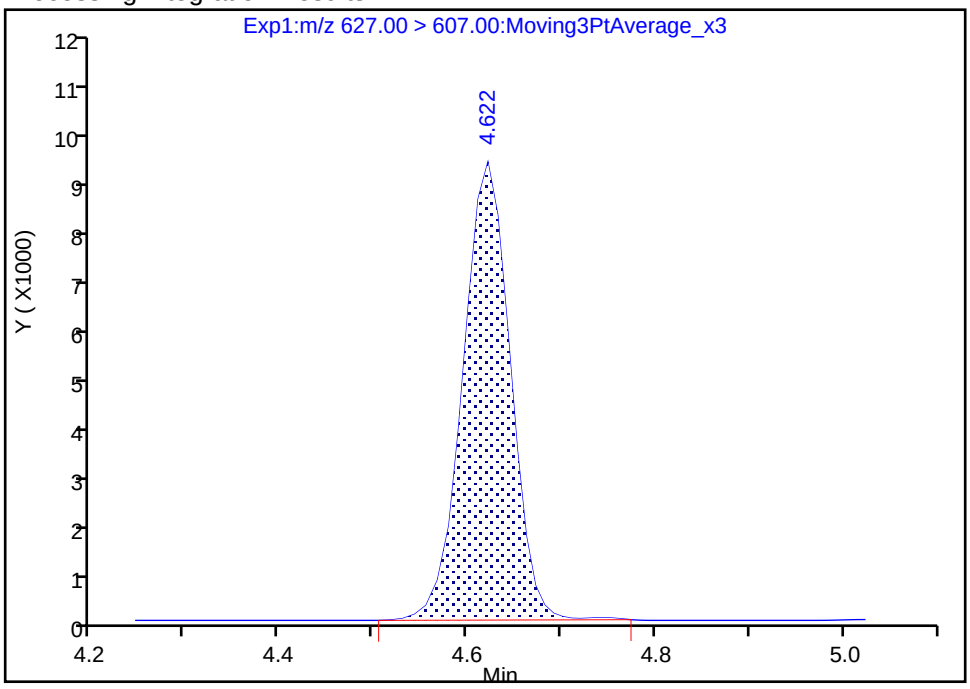
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B14.d | | | | |
| Injection Date: | 12-Mar-2021 13:48:49 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L4 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 74 1H,1H,2H,2H-perfluorododecanesul, CAS: 120226-60-0

Signal: 1

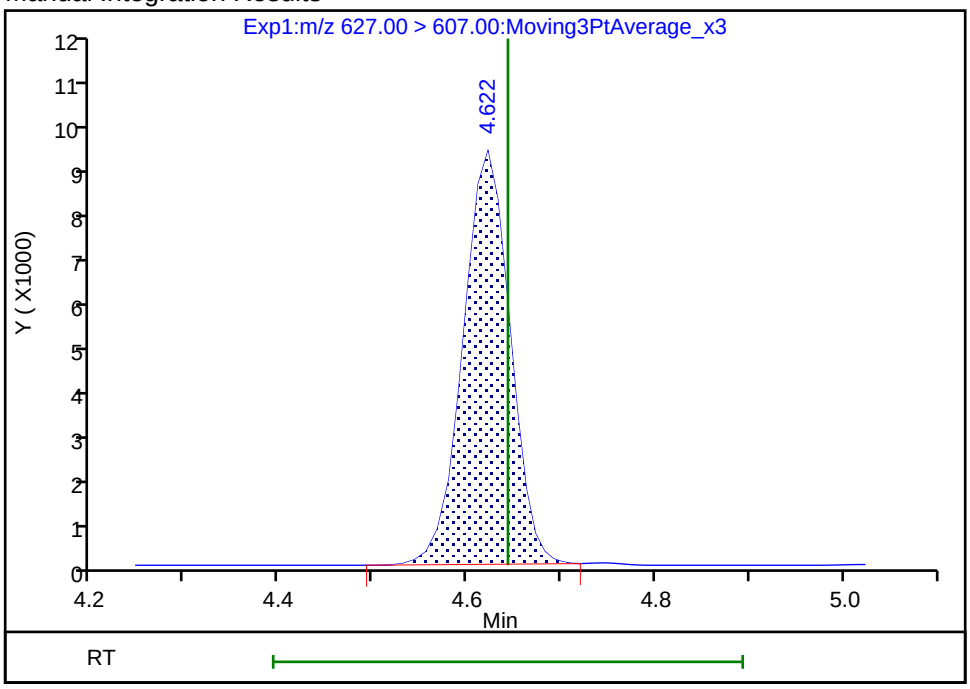
Processing Integration Results

RT: 4.62
Area: 31019
Amount: 0.814575
Amount Units: ng/ml




Manual Integration Results

RT: 4.62
Area: 30757
Amount: 0.807694
Amount Units: ng/ml




Reviewer: deannd, 12-Mar-2021 14:02:45

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Lab Sample ID: CCV 200-164776/23  Calibration Date: 03/12/2021 15:03

Instrument ID: LC812  Calib Start Date: 12/22/2020 12:48

GC Column: C-18  ID: 4.60(mm)  Calib End Date: 12/22/2020 13:29

Lab File ID: PA210312B23.d  Conc. Units: ng/mL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | AveID | 1.002 | 0.995 | | 2.48 | 2.50 | -0.7 | 40.0 |
| Perfluoropentanoic acid (PFPeA) | AveID | 1.107 | 1.065 | | 2.40 | 2.50 | -3.8 | 40.0 |
| Perfluorobutanesulfonic acid (PFBS) | AveID | 1.131 | 1.139 | | 2.23 | 2.21 | 0.7 | 40.0 |
| 1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2) | AveID | 1.834 | 1.888 | | 2.40 | 2.34 | 3.0 | 50.0 |
| Perfluorohexanoic acid (PFHxA) | AveID | 1.092 | 1.121 | | 2.57 | 2.50 | 2.6 | 40.0 |
| Perfluoropentanesulfonic acid | AveID | 1.312 | 1.333 | | 2.38 | 2.35 | 1.6 | 50.0 |
| HFPO-DA | AveID | 1.385 | 1.941 | | 3.50 | 2.50 | 40.1* | 40.0 |
| Perfluorohexanesulfonic acid (PFHxS) | AveID | 1.178 | 1.194 | | 2.31 | 2.28 | 1.4 | 40.0 |
| Perfluoroheptanoic acid (PFHpA) | AveID | 1.092 | 1.100 | | 2.52 | 2.50 | 0.7 | 40.0 |
| DONA | AveID | 3.349 | 3.392 | | 2.39 | 2.36 | 1.3 | 50.0 |
| 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | AveID | 1.112 | 1.002 | | 2.14 | 2.37 | -9.9 | 40.0 |
| Perfluoroheptanesulfonic Acid (PFHpS) | AveID | 1.350 | 1.366 | | 2.41 | 2.38 | 1.1 | 50.0 |
| Perfluorooctanoic acid (PFOA) | AveID | 1.084 | 1.117 | | 2.58 | 2.50 | 3.1 | 40.0 |
| Perfluorooctanesulfonic acid (PFOS) | AveID | 1.150 | 1.138 | | 2.30 | 2.32 | -1.1 | 40.0 |
| Perfluorononanoic acid (PFNA) | AveID | 1.107 | 1.118 | | 2.53 | 2.50 | 1.0 | 40.0 |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid | AveID | 1.283 | 1.193 | | 2.17 | 2.33 | -7.0 | 50.0 |
| Perfluorononanesulfonic acid | AveID | 0.8581 | 0.8485 | | 2.37 | 2.40 | -1.1 | 50.0 |
| Perfluorodecanoic acid (PFDA) | AveID | 1.031 | 1.056 | | 2.56 | 2.50 | 2.5 | 40.0 |
| 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | AveID | 0.6801 | 0.5703 | | 2.01 | 2.40 | -16.1 | 40.0 |
| Perfluorooctanesulfonamide (PFOSA) | AveID | 1.002 | 1.039 | | 2.59 | 2.50 | 3.6 | 40.0 |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | AveID | 0.8864 | 0.8443 | | 2.38 | 2.50 | -4.8 | 40.0 |
| Perfluorodecanesulfonic acid (PFDS) | AveID | 0.6841 | 0.7036 | | 2.48 | 2.41 | 2.8 | 50.0 |
| Perfluoroundecanoic acid (PFUnA) | AveID | 1.020 | 1.065 | | 2.61 | 2.50 | 4.4 | 40.0 |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | AveID | 0.9257 | 0.995 | | 2.69 | 2.50 | 7.5 | 40.0 |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid | AveID | 1.331 | 1.032 | | 1.83 | 2.36 | -22.5 | 50.0 |
| Perfluorododecanoic acid (PFDoA) | AveID | 1.100 | 1.069 | | 2.43 | 2.50 | -2.8 | 40.0 |
| 10:2 FTS | AveID | 0.3501 | 0.3130 | | 2.15 | 2.41 | -10.6 | 50.0 |
| Perfluorododecanesulfonic acid (PFDoS) | AveID | 0.2517 | 0.2485 | | 2.39 | 2.42 | -1.3 | 50.0 |
| Perfluorotridecanoic acid (PFTriA) | AveID | 0.8926 | 0.8876 | | 2.49 | 2.50 | -0.6 | 50.0 |
| Perfluorotetradecanoic acid (PFTeA) | AveID | 0.1855 | 0.2071 | | 2.79 | 2.50 | 11.7 | 40.0 |

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Lab Sample ID: CCV 200-164776/23  Calibration Date: 03/12/2021 15:03

Instrument ID: LC812  Calib Start Date: 12/22/2020 12:48

GC Column: C-18  ID: 4.60(mm)  Calib End Date: 12/22/2020 13:29

Lab File ID: PA210312B23.d  Conc. Units: ng/mL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Perfluoro-n-hexadecanoic acid (PFHxDA) | L1ID | | 0.9641 | | 2.57 | 2.50 | 2.9 | 40.0 |
| Perfluoro-n-octadecanoic acid (PFODA) | AveID | 0.8998 | 0.8506 | | 2.36 | 2.50 | -5.5 | 50.0 |
| 13C4 PFBA | Ave | 1.343 | 1.212 | | 1.13 | 1.25 | -9.7 | 50.0 |
| 13C5 PFPeA | Ave | 0.9710 | 0.8922 | | 1.15 | 1.25 | -8.1 | 50.0 |
| 13C3 PFBS | Ave | 1.278 | 1.120 | | 1.02 | 1.16 | -12.3 | 50.0 |
| M2-4:2 FTS | Ave | 0.1066 | 0.0866 | | 0.948 | 1.17 | -18.8 | 50.0 |
| 13C2 PFHxA | Ave | 1.018 | 0.9574 | | 1.18 | 1.25 | -5.9 | 50.0 |
| 13C3 HFPO-DA | Ave | 0.1792 | 0.0986 | | 0.688 | 1.25 | -45.0 | 50.0 |
| 18O2 PFHxS | Ave | 0.9511 | 0.8343 | | 1.04 | 1.18 | -12.3 | 50.0 |
| 13C4 PFHpA | Ave | 0.9742 | 0.8956 | | 1.15 | 1.25 | -8.1 | 50.0 |
| M2-6:2 FTS | Ave | 0.1187 | 0.1130 | | 1.13 | 1.19 | -4.8 | 50.0 |
| 13C4 PFOA | Ave | 0.9896 | 0.9152 | | 1.16 | 1.25 | -7.5 | 50.0 |
| 13C4 PFOS | Ave | 0.6528 | 0.6002 | | 1.10 | 1.20 | -8.0 | 50.0 |
| 13C5 PFNA | Ave | 0.8730 | 0.7830 | | 1.12 | 1.25 | -10.3 | 50.0 |
| 13C2 PFDA | Ave | 0.8346 | 0.7114 | | 1.07 | 1.25 | -14.8 | 50.0 |
| M2-8:2 FTS | Ave | 0.1225 | 0.1111 | | 1.09 | 1.20 | -9.3 | 50.0 |
| 13C8 FOSA | Ave | 1.227 | 1.082 | | 1.10 | 1.25 | -11.8 | 50.0 |
| d3-NMeFOSAA | Ave | 0.0605 | 0.0510 | | 1.05 | 1.25 | -15.8 | 50.0 |
| 13C2 PFUnA | Ave | 0.6856 | 0.5411 | | 0.987 | 1.25 | -21.1 | 50.0 |
| d5-NEtFOSAA | Ave | 0.0585 | 0.0467 | | 0.997 | 1.25 | -20.2 | 50.0 |
| 13C2 PFDoA | Ave | 0.7238 | 0.5812 | | 1.00 | 1.25 | -19.7 | 50.0 |
| 13C2 PFTeDA | Ave | 0.5353 | 0.4059 | | 0.948 | 1.25 | -24.2 | 50.0 |
| 13C2 PFHxDA | Ave | 0.5718 | 0.4430 | | 0.968 | 1.25 | -22.5 | 50.0 |

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 12-Mar-2021 15:03:25 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: 200-0045149-023 Plate: 1 Rack: 2
Operator ID: lc812tech Instrument ID: LC812
Sublist: chrom-PFC_LC812*sub3

Method: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 15-Mar-2021 17:46:30 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1650

First Level Reviewer: nampitakw Date: 15-Mar-2021 15:01:23
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.080 | 2.091 | -0.011 | 0.597 | 1315686 | 1.13 | | 90.3 | 8719 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | M |
| 212.90 > 169.00 | 2.080 | 2.091 | -0.011 | 1.000 | 2619403 | 2.48 | | 99.3 | 618 | M |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.398 | 2.413 | -0.015 | 0.688 | 968185 | 1.15 | | 91.9 | 3380 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | |
| 262.90 > 219.00 | 2.411 | 2.413 | -0.002 | 1.005 | 2061869 | 2.40 | | 96.2 | 152 | |
| D 47 13C3 PFBS | | | | | | | | | | M |
| 301.90 > 80.00 | 2.424 | 2.426 | -0.002 | 0.696 | 1130764 | 1.02 | | 87.7 | 222792 | M |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | |
| 298.90 > 80.00 | 2.424 | 2.439 | -0.015 | 1.000 | 2448452 | 2.23 | Target=2.21 | 101 | 3760 | |
| 298.90 > 99.00 | 2.424 | 2.439 | -0.015 | 1.000 | 1132023 | | 2.16(1.11-3.32) | | 754 | |
| D 60 M2-4:2 FTS | | | | | | | | | | M |
| 329.00 > 81.00 | 2.720 | 2.734 | -0.014 | 0.781 | 87763 | 0.9483 | | 81.2 | 135 | M |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | M |
| 327.00 > 307.00 | 2.732 | 2.734 | -0.002 | 1.004 | 331389 | 2.40 | | 103 | 1658 | M |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.768 | 2.770 | -0.002 | 0.795 | 1038961 | 1.18 | | 94.1 | 4078 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | M |
| 313.00 > 269.00 | 2.768 | 2.770 | -0.002 | 1.000 | 2330137 | 2.57 | Target=12.83 | 103 | 459 | M |
| 313.00 > 119.00 | 2.756 | 2.770 | -0.014 | 0.996 | 185154 | | 12.58(6.42-19.25) | | 285 | |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | M |
| 349.00 > 80.00 | 2.768 | 2.770 | -0.002 | 0.887 | 2264124 | 2.38 | Target=3.35 | 102 | 1683 | M |
| 349.00 > 99.00 | 2.768 | 2.770 | -0.002 | 0.887 | 659873 | | 3.43(1.67-5.02) | | 894 | |
| 67 Perfluoro(2-propoxypropanoic) ac | | | | | | | | | | M |
| 329.10 > 285.00 | 2.866 | 2.880 | -0.014 | 1.000 | 415620 | 3.50 | | 140 | 72.5 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 64 13C3 HFPO-DA | | | | | | | | | | |
| 332.10 > 287.00 | 2.866 | 2.880 | -0.014 | 0.823 | 107039 | 0.6881 | | 55.0 | 870 | |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.122 | 3.132 | -0.010 | 1.000 | 1968259 | 2.31 | Target=4.15 | 101 | 1416 | M |
| 399.00 > 99.00 | 3.122 | 3.132 | -0.010 | 1.000 | 463537 | | 4.25(2.08-6.23) | | 466 | M |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.122 | 3.132 | -0.010 | 0.896 | 856499 | 1.04 | | 87.7 | 1773 | |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.133 | 3.143 | -0.010 | 0.899 | 971866 | 1.15 | | 91.9 | 4250 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | M |
| 363.00 > 319.00 | 3.133 | 3.143 | -0.010 | 1.000 | 2137543 | 2.52 | Target=3.66 | 101 | 701 | |
| 363.00 > 169.00 | 3.133 | 3.143 | -0.010 | 1.000 | 606001 | | 3.53(1.83-5.49) | | 1251 | M |
| 77 DONA | | | | | | | | | | M |
| 377.00 > 251.00 | 3.165 | 3.175 | -0.010 | 0.834 | 4162261 | 2.39 | Target=2.43 | 101 | 2261 | M |
| 377.00 > 85.00 | 3.165 | 3.175 | -0.010 | 0.834 | 1674850 | | 2.49(1.22-3.65) | | 1368 | M |
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | M |
| 449.00 > 80.00 | 3.474 | 3.483 | -0.009 | 0.916 | 1693586 | 2.41 | Target=5.95 | 101 | 3030 | M |
| 449.00 > 99.00 | 3.474 | 3.483 | -0.009 | 0.916 | 265099 | | 6.39(2.98-8.93) | | 967 | M |
| D 12 M2-6:2 FTS | | | | | | | | | | M |
| 429.00 > 81.00 | 3.474 | 3.492 | -0.018 | 0.997 | 116496 | 1.13 | | 95.2 | 549 | M |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | |
| 427.00 > 407.00 | 3.474 | 3.492 | -0.018 | 1.000 | 233035 | 2.14 | | 90.1 | 1107 | |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.483 | 3.501 | -0.018 | 1.000 | 993164 | 1.16 | | 92.5 | 3379 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.483 | 3.501 | -0.018 | | 1085156 | 1.25 | | | 2776 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | M |
| 413.00 > 369.00 | 3.492 | 3.501 | -0.009 | 1.003 | 2219576 | 2.58 | Target=2.58 | 103 | 652 | |
| 413.00 > 169.00 | 3.492 | 3.501 | -0.009 | 1.003 | 880082 | | 2.52(1.29-3.87) | | 1329 | M |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.804 | 3.814 | -0.010 | 1.003 | 1375628 | 2.30 | Target=5.65 | 98.9 | 663 | M |
| 499.00 > 99.00 | 3.804 | 3.814 | -0.010 | 1.003 | 239388 | | 5.75(2.82-8.47) | | 708 | M |
| D 18 13C4 PFOS | | | | | | | | | | |
| 503.00 > 80.00 | 3.795 | 3.814 | -0.019 | 1.089 | 622702 | 1.10 | | 92.0 | 2236 | |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.815 | 3.824 | -0.009 | 1.095 | 849704 | 1.12 | | 89.7 | 3980 | |
| 20 Perfluorononanoic acid | | | | | | | | | | M |
| 463.00 > 419.00 | 3.825 | 3.824 | 0.001 | 1.003 | 1899851 | 2.53 | Target=7.44 | 101 | 328 | |
| 463.00 > 169.00 | 3.825 | 3.824 | 0.001 | 1.003 | 277688 | | 6.84(3.72-11.16) | | 1482 | M |
| 69 9-Chlorohexadecafluoro-3-oxanona | | | | | | | | | | |
| 531.00 > 351.00 | 3.964 | 3.973 | -0.009 | 1.045 | 1448168 | 2.17 | | 93.0 | 4901 | |
| 68 Perfluorononanesulfonic acid | | | | | | | | | | M |
| 549.00 > 80.00 | 4.093 | 4.104 | -0.011 | 1.079 | 1061152 | 2.37 | Target=2.54 | 98.9 | 2061 | M |
| 549.00 > 99.00 | 4.093 | 4.104 | -0.011 | 1.079 | 367650 | | 2.89(1.27-3.81) | | 1021 | M |
| D 23 13C2 PFDA | | | | | | | | | | M |
| 515.00 > 470.00 | 4.115 | 4.126 | -0.011 | 1.181 | 772002 | 1.07 | | 85.2 | 1905 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 24 Perfluorodecanoic acid | | | | | | | | | | |
| 513.00 > 469.00 | 4.115 | 4.126 | -0.011 | 1.000 | 1630356 | 2.56 | Target=9.29 | 102 | 1145 | |
| 513.00 > 169.00 | 4.115 | 4.126 | -0.011 | 1.000 | 203758 | | 8.00(4.64-13.93) | | 1326 | |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.126 | 4.137 | -0.011 | 1.185 | 115538 | 1.09 | | 90.7 | 555 | |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | |
| 527.00 > 507.00 | 4.126 | 4.137 | -0.011 | 1.000 | 131789 | 2.01 | | 83.9 | 1170 | |
| D 21 13C8 FOSA | | | | | | | | | | M |
| 506.00 > 78.00 | 4.215 | 4.225 | -0.010 | 1.210 | 1174373 | 1.10 | | 88.2 | 2548 | M |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | |
| 498.00 > 78.00 | 4.215 | 4.225 | -0.010 | 1.000 | 2439471 | 2.59 | | 104 | 1920 | |
| D 27 d3-NMeFOSAA | | | | | | | | | | M |
| 573.00 > 419.00 | 4.257 | 4.268 | -0.011 | 1.222 | 55323 | 1.05 | | 84.2 | 92.1 | M |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | M |
| 570.00 > 419.00 | 4.268 | 4.268 | 0.0 | 1.003 | 93414 | 2.38 | | 95.2 | 401 | M |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | M |
| 599.00 > 80.00 | 4.347 | 4.358 | -0.011 | 1.146 | 883569 | 2.48 | Target=2.80 | 103 | 3330 | |
| 599.00 > 99.00 | 4.347 | 4.358 | -0.011 | 1.146 | 305085 | | 2.90(1.40-4.19) | | 1115 | M |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.380 | 4.391 | -0.011 | 1.257 | 587165 | 0.9865 | | 78.9 | 2391 | |
| 31 Perfluoroundecanoic acid | | | | | | | | | | |
| 563.00 > 519.00 | 4.380 | 4.391 | -0.011 | 1.000 | 1250648 | 2.61 | Target=8.12 | 104 | 1097 | |
| 563.00 > 169.00 | 4.380 | 4.391 | -0.011 | 1.000 | 162696 | | 7.69(4.06-12.18) | | 1217 | |
| D 32 d5-NEtFOSAA | | | | | | | | | | |
| 589.00 > 419.00 | 4.391 | 4.402 | -0.011 | 1.261 | 50660 | 1.00 | | 79.8 | 482 | |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.391 | 4.402 | -0.011 | 1.000 | 100847 | 2.69 | | 108 | 794 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | |
| 631.00 > 451.00 | 4.467 | 4.479 | -0.012 | 1.177 | 1265973 | 1.82 | | 77.5 | 3835 | |
| D 36 13C2 PFDoA | | | | | | | | | | |
| 615.00 > 570.00 | 4.612 | 4.622 | -0.010 | 1.324 | 630666 | 1.00 | | 80.3 | 3611 | |
| 37 Perfluorododecanoic acid | | | | | | | | | | M |
| 613.00 > 569.00 | 4.612 | 4.622 | -0.010 | 1.000 | 1348836 | 2.43 | Target=6.91 | 97.2 | 454 | |
| 613.00 > 169.00 | 4.612 | 4.622 | -0.010 | 1.000 | 213702 | | 6.31(3.45-10.36) | | 1686 | M |
| 74 1H,1H,2H,2H-perfluorododecanesul | | | | | | | | | | |
| 627.00 > 607.00 | 4.623 | 4.643 | -0.021 | 1.120 | 72774 | 2.15 | | 89.4 | 1696 | |
| 75 Perfluorododecanesulfonic acid ( | | | | | | | | | | M |
| 699.00 > 80.00 | 4.784 | 4.792 | -0.008 | 1.261 | 313353 | 2.39 | Target=0.51 | 98.7 | 1354 | M |
| 699.00 > 99.00 | 4.784 | 4.792 | -0.008 | 1.261 | 622197 | | 0.50(0.26-0.77) | | 1956 | M |
| 41 Perfluorotridecanoic acid | | | | | | | | | | |
| 663.00 > 619.00 | 4.811 | 4.822 | -0.011 | 1.043 | 1119521 | 2.49 | Target=4.39 | 99.4 | 552 | |
| 663.00 > 169.00 | 4.811 | 4.822 | -0.011 | 1.043 | 289877 | | 3.86(2.20-6.59) | | 2056 | |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 5.005 | 5.014 | -0.009 | 1.437 | 440497 | 0.9479 | | 75.8 | 2919 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | |
| 713.00 > 169.00 | 5.005 | 5.014 | -0.009 | 1.000 | 182492 | 2.79 | Target=1.06 | 112 | 1764 | |
| 713.00 > 219.00 | 4.996 | 5.014 | -0.018 | 0.998 | 177873 | | 1.03(0.53-1.59) | | 2185 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.349 | 5.360 | -0.011 | 1.536 | 480687 | 0.9683 | | 77.5 | 2612 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | |
| 813.00 > 769.00 | 5.349 | 5.360 | -0.011 | 1.000 | 926857 | 2.57 | Target=3.84 | 103 | 447 | |
| 813.00 > 169.00 | 5.349 | 5.360 | -0.011 | 1.000 | 257795 | | 3.60(1.92-5.76) | | 3546 | |
| 46 Perfluorooctadecanoic acid | | | | | | | | | | |
| 913.00 > 869.00 | 5.674 | 5.674 | 0.0 | 1.061 | 817779 | 2.36 | Target=3.92 | 94.5 | 660 | |
| 913.00 > 169.00 | 5.665 | 5.674 | -0.009 | 1.059 | 234986 | | 3.48(1.96-5.88) | | 1630 | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

## Reagents:

PFAS32NCIC5_00013 Amount Added: 100.00 Units: uL

Report Date: 15-Mar-2021 17:46:31 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d

Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812

Lims ID: CCV L5

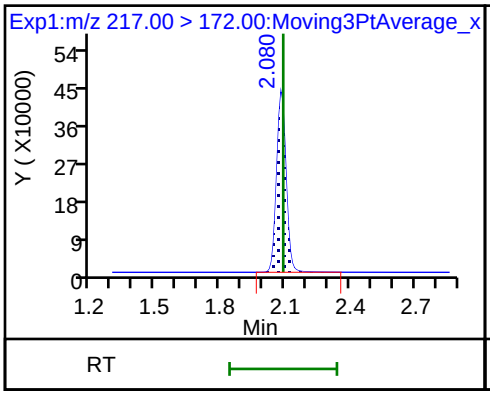
Client ID:

Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23

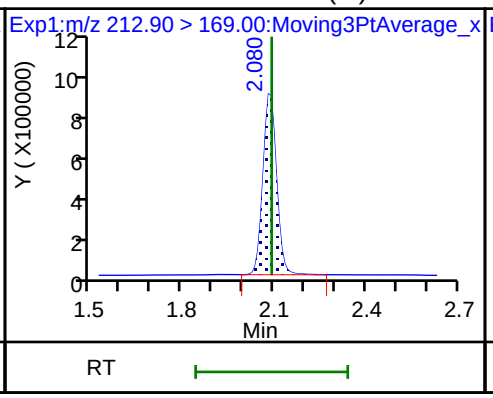
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

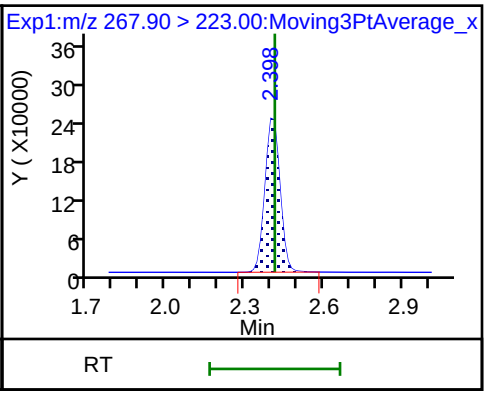
D 1 13C4 PFBA



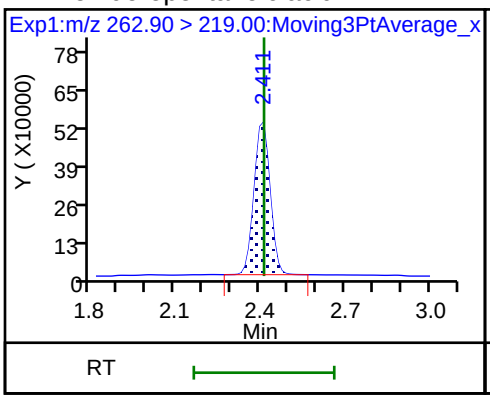

2 Perfluorobutanoic acid (M)



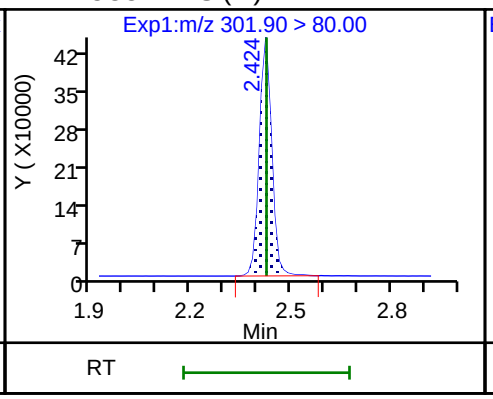

D 3 13C5 PFPeA



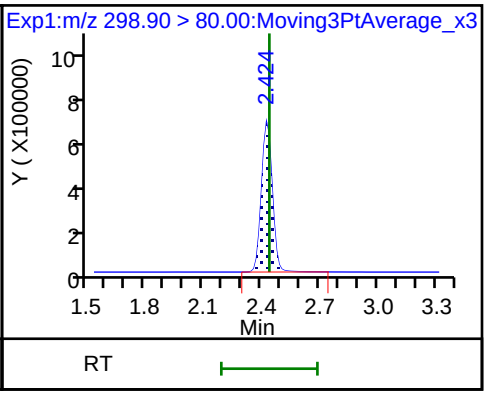

4 Perfluoropentanoic acid



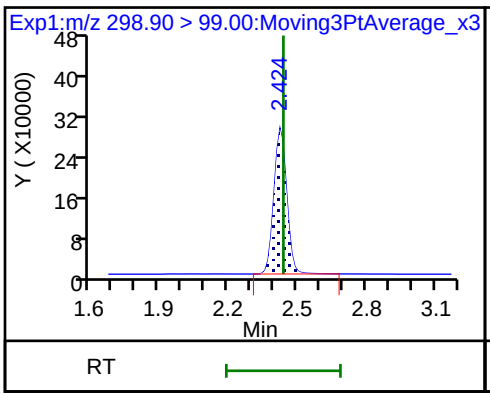

D 47 13C3 PFBS (M)



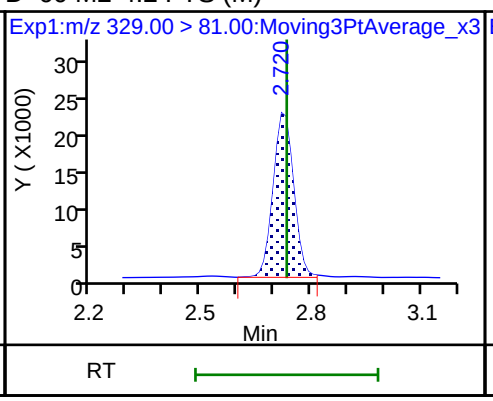

5 Perfluorobutanesulfonic acid



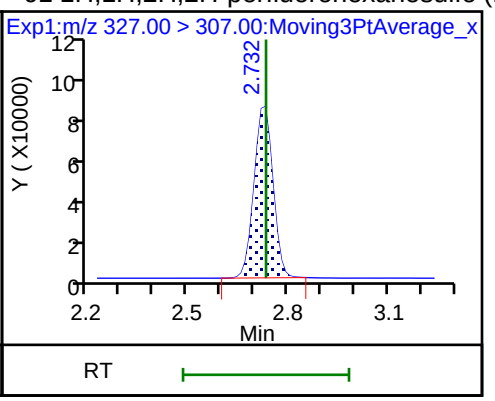

5 Perfluorobutanesulfonic acid



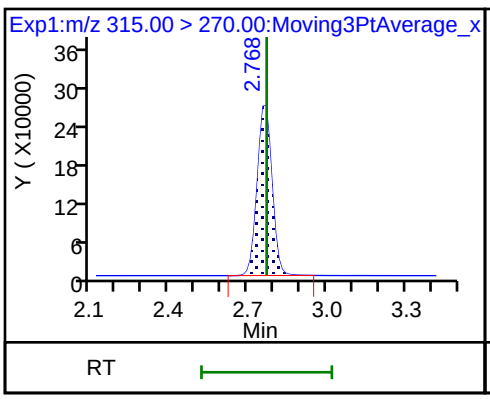

D 60 M2-4:2 FTS (M)



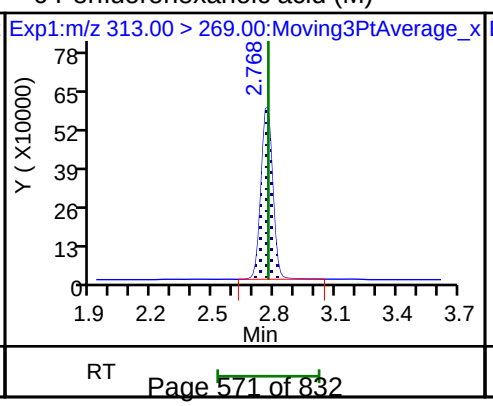

61 1H,1H,2H,2H-perfluorohexanesulfo (M)



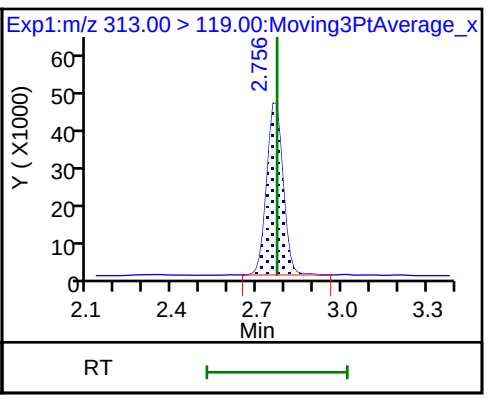

D 7 13C2 PFHxA



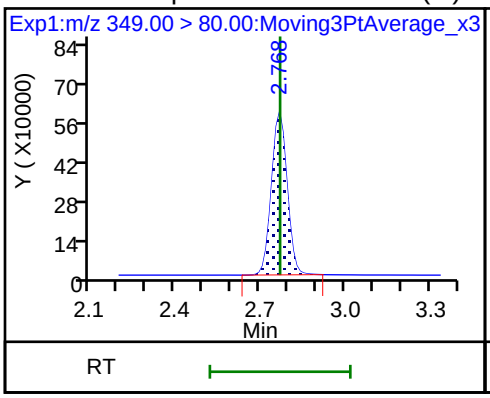

6 Perfluorohexanoic acid (M)



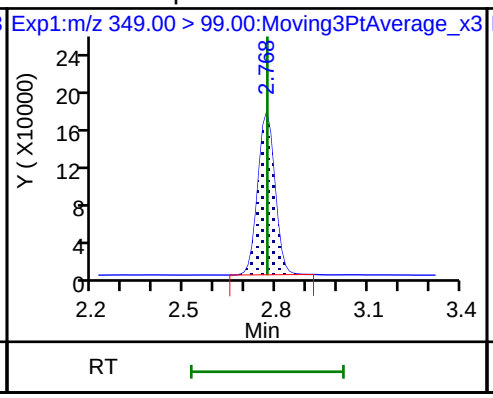

6 Perfluorohexanoic acid



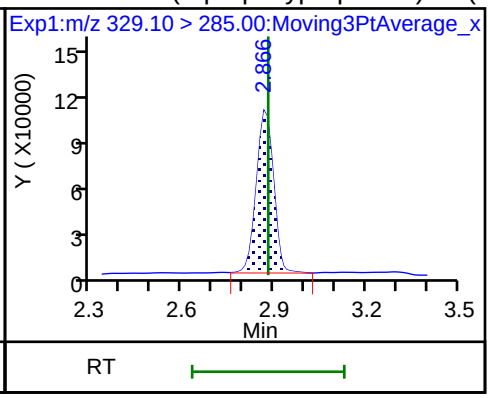
70 Perfluoropentanesulfonic acid (M)



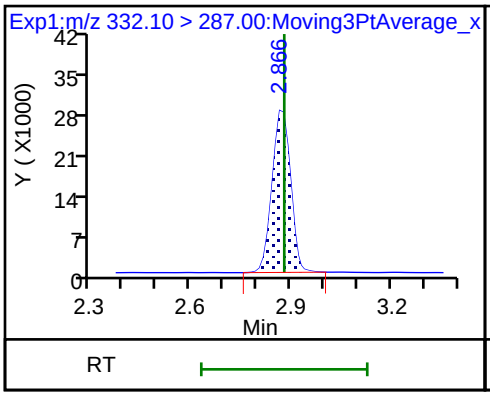

70 Perfluoropentanesulfonic acid



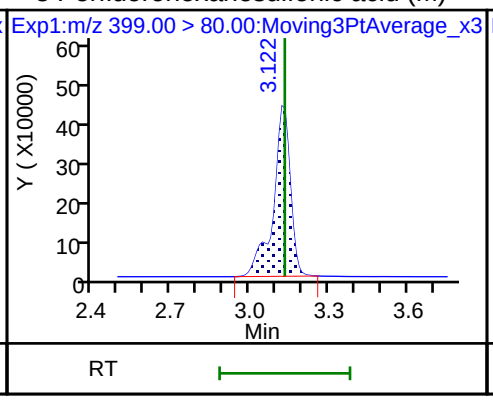

67 Perfluoro(2-propoxypropanoic) ac (M)



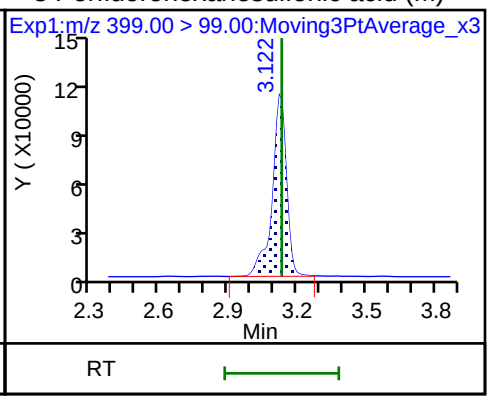

D 64 13C3 HFPO-DA



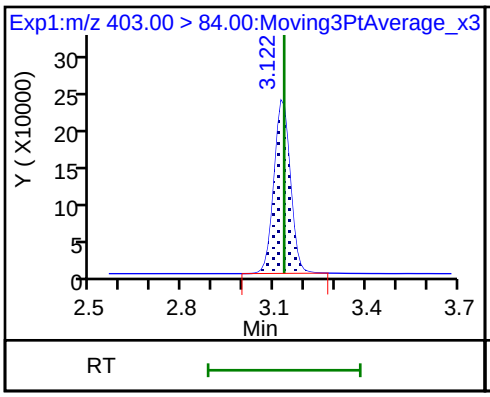

8 Perfluorohexanesulfonic acid (M)



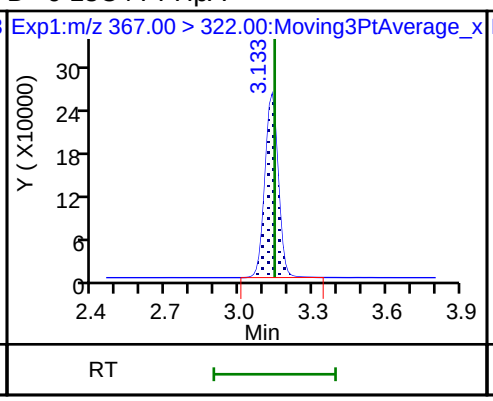

8 Perfluorohexanesulfonic acid (M)



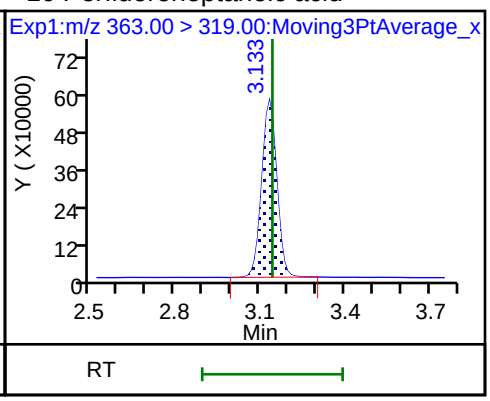

D 11 18O2 PFHxS



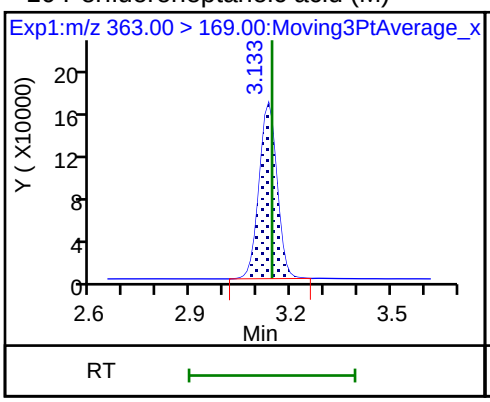

D 9 13C4 PFHpA



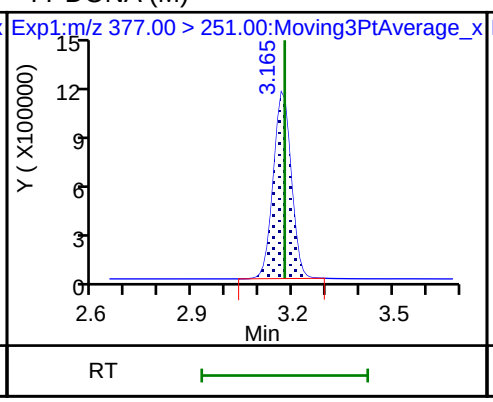

10 Perfluoroheptanoic acid



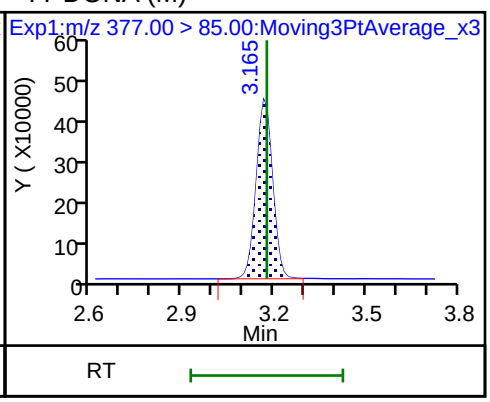

10 Perfluoroheptanoic acid (M)



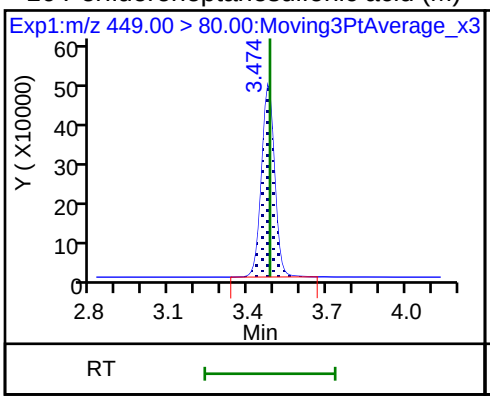

77 DONA (M)



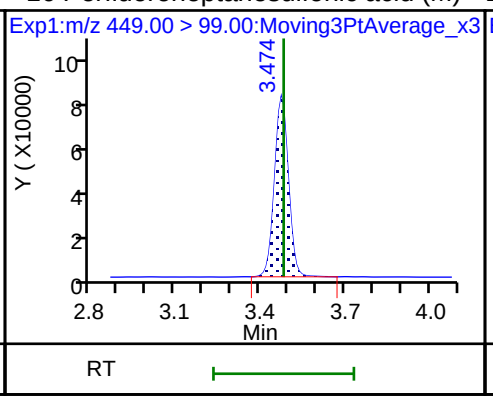

77 DONA (M)



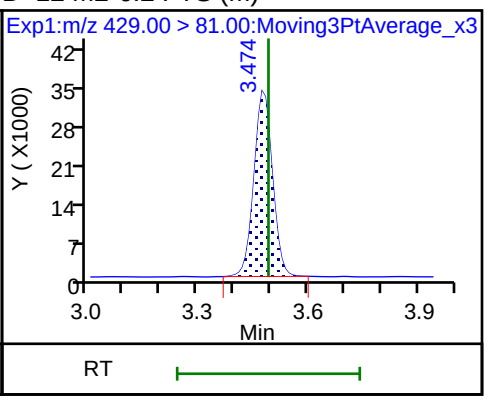
16 Perfluoroheptanesulfonic acid (M)



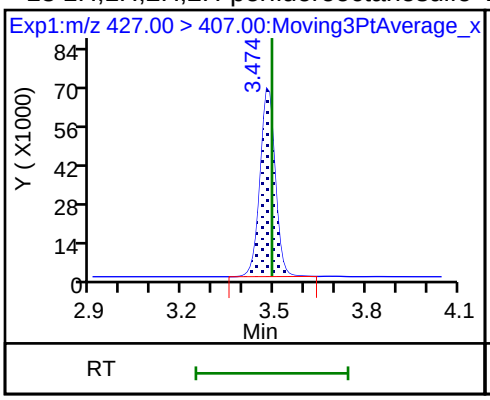

16 Perfluoroheptanesulfonic acid (M)



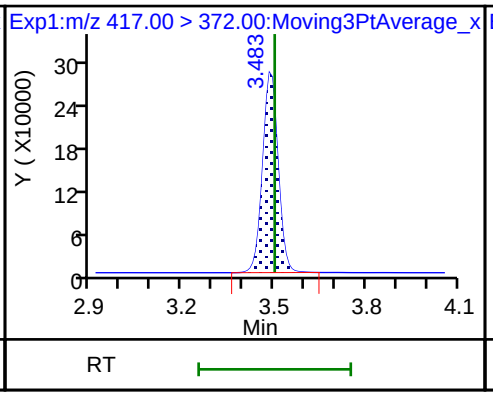

D 12 M2-6:2 FTS (M)



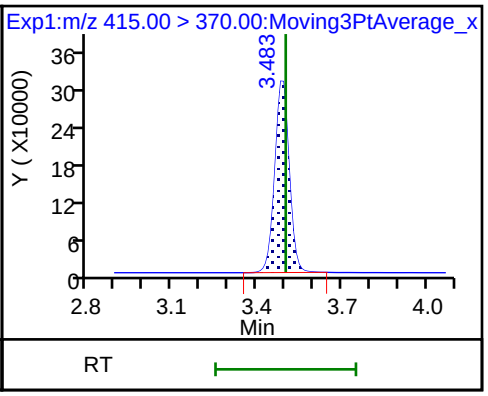

13 1H,1H,2H,2H-perfluorooctanesulfo



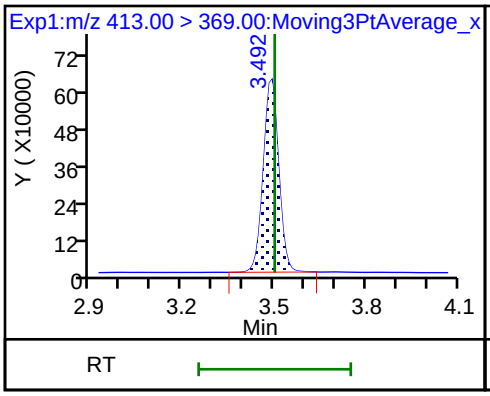

D 14 13C4 PFOA



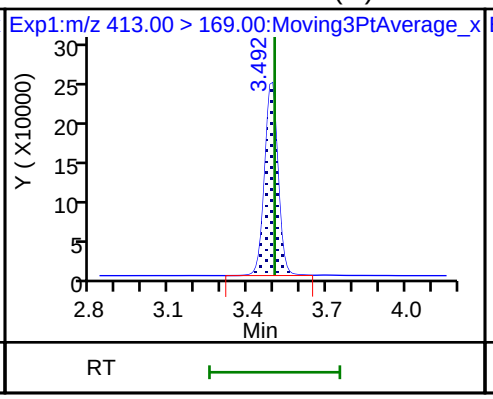

* 62 13C2 PFOA



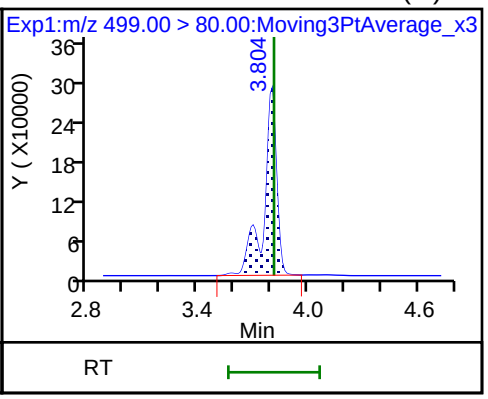

15 Perfluorooctanoic acid



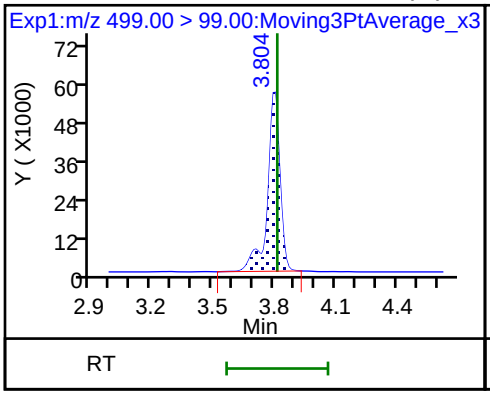

15 Perfluorooctanoic acid (M)



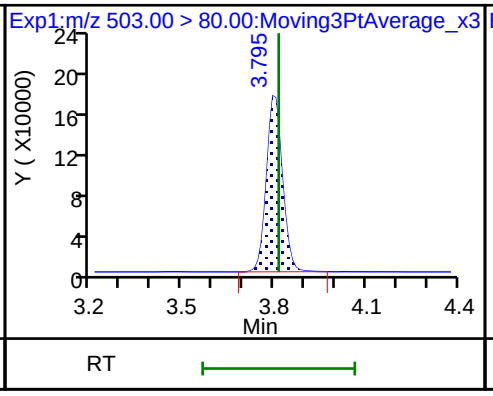

17 Perfluorooctanesulfonic acid (M)



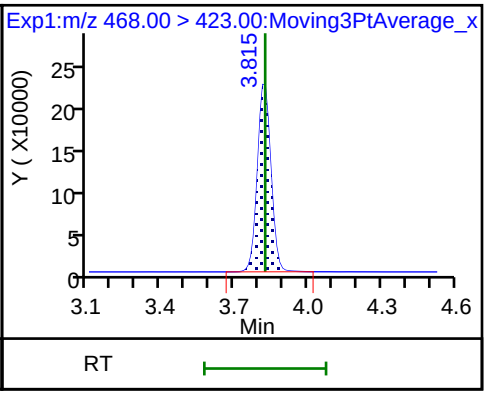

17 Perfluorooctanesulfonic acid (M)



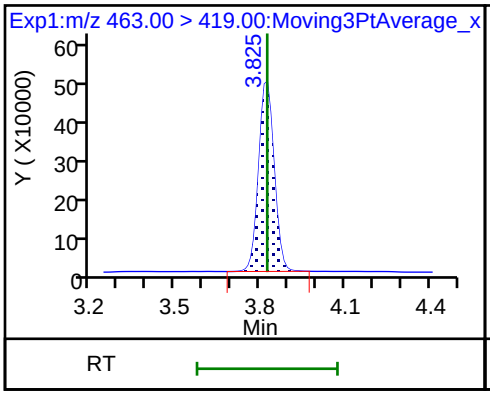

D 18 13C4 PFOS



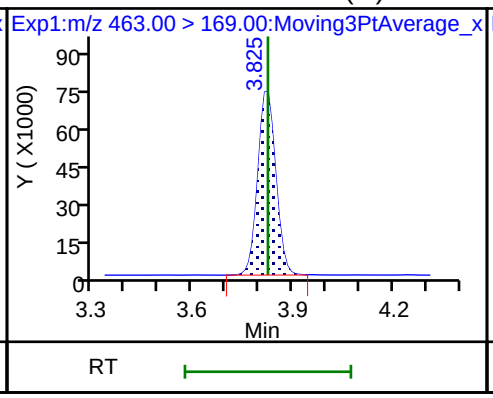

D 19 13C5 PFNA



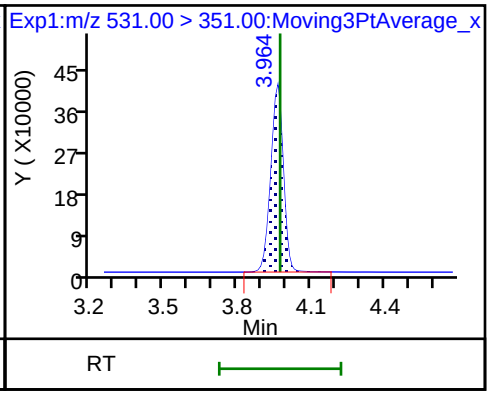
20 Perfluorononanoic acid



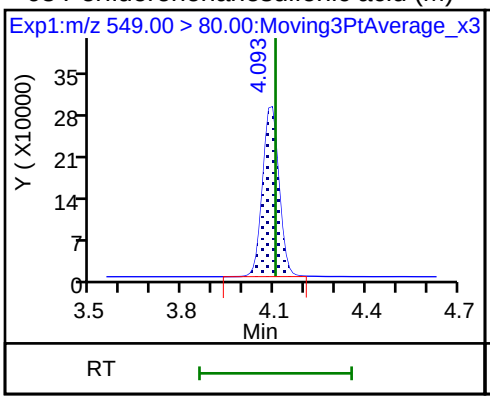

20 Perfluorononanoic acid (M)



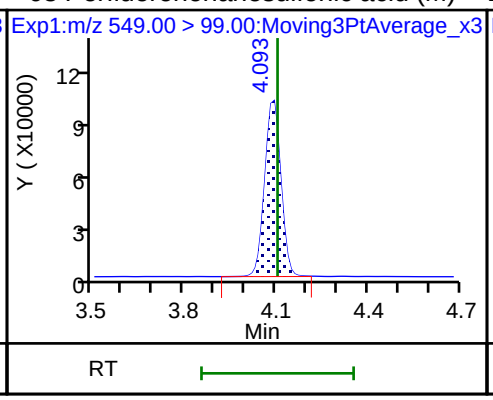

69 9-Chlorohexadecafluoro-3-oxanona



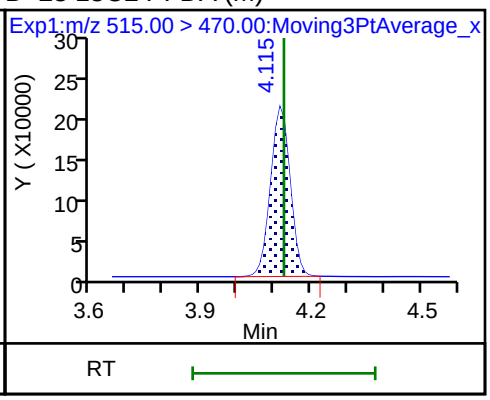

68 Perfluorononanesulfonic acid (M)



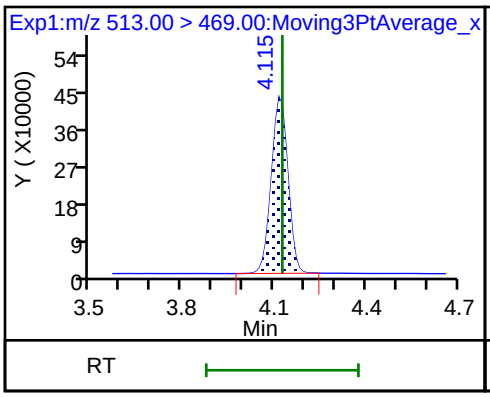

68 Perfluorononanesulfonic acid (M)



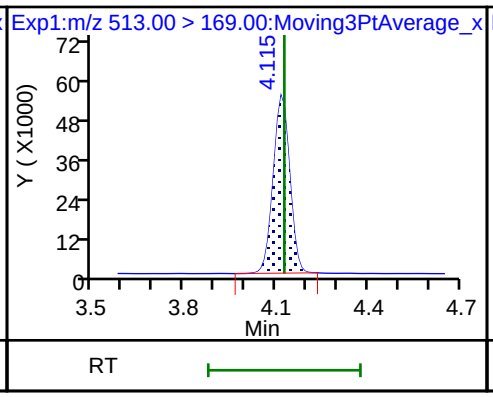

D 23 13C2 PFDA (M)



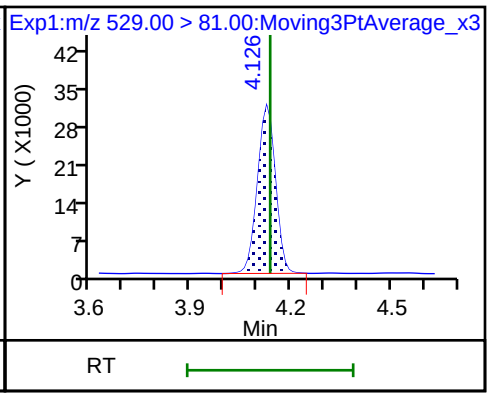

24 Perfluorodecanoic acid



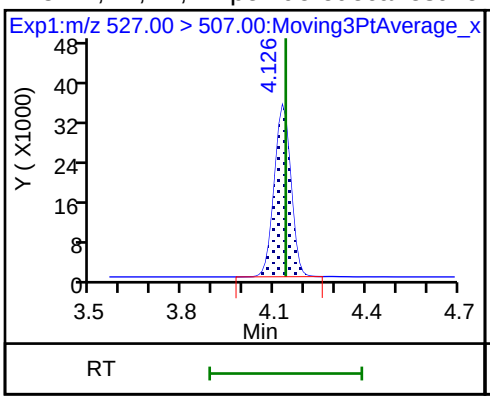

24 Perfluorodecanoic acid



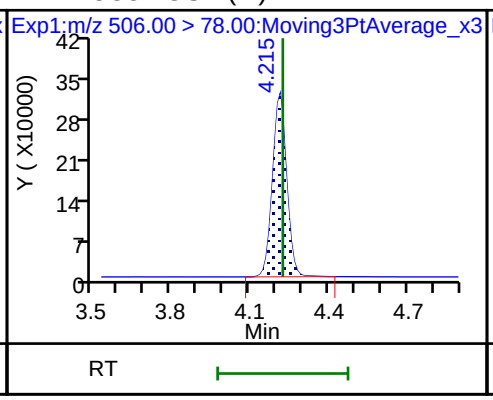

D 26 M2-8:2 FTS



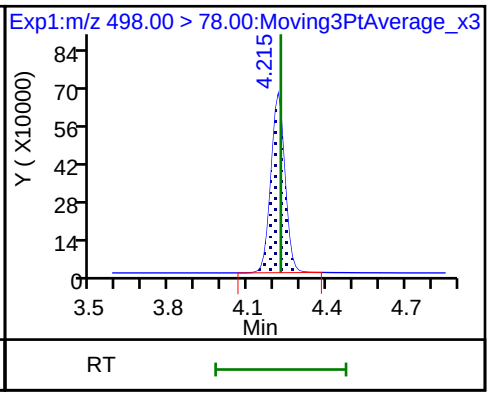

25 1H,1H,2H,2H-perfluorodecanesulfo



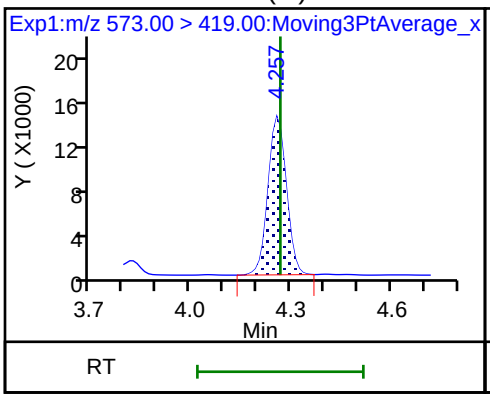

D 21 13C8 FOSA (M)



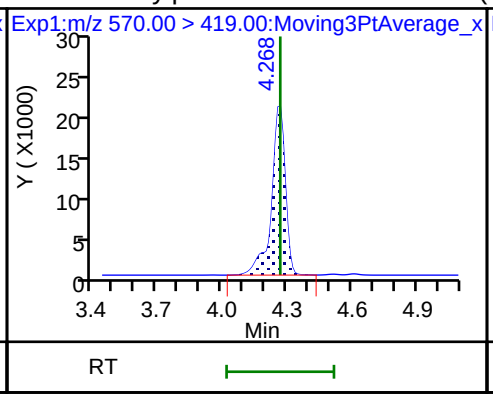

22 Perfluorooctanesulfonamide



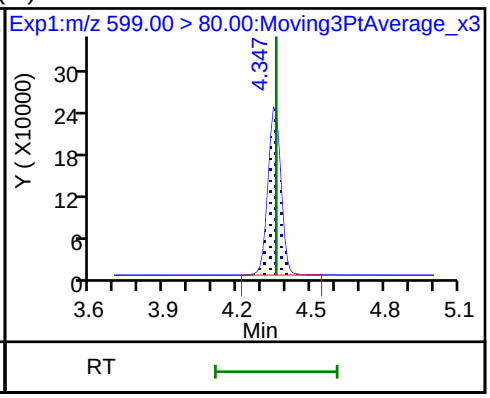
D 27 d3-NMeFOSAA (M)



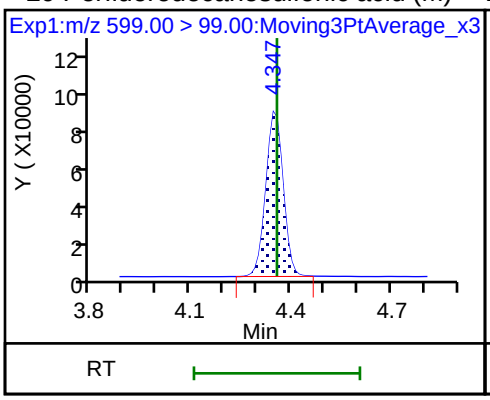

28 N-methylperfluorooctanesulfonami (M)



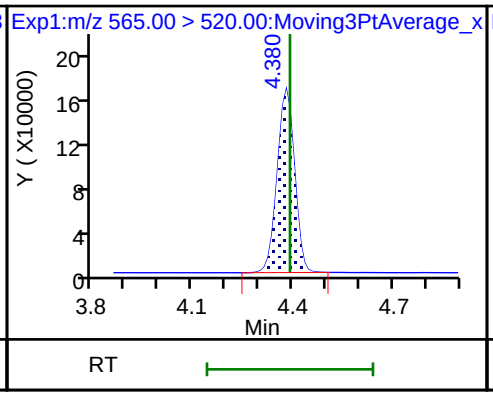

29 Perfluorodecanesulfonic acid



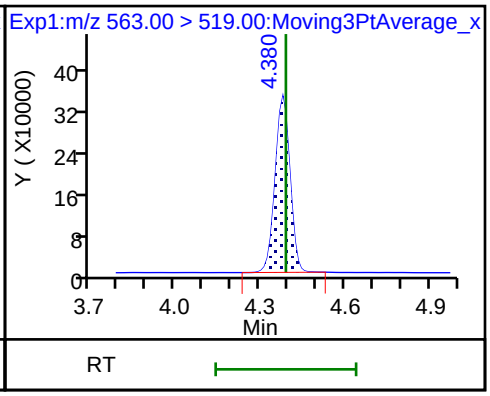

29 Perfluorodecanesulfonic acid (M)



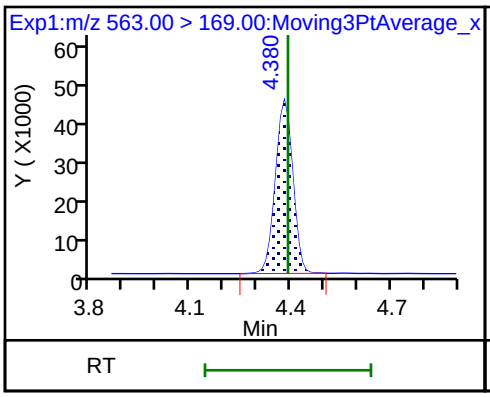

D 30 13C2 PFUnA



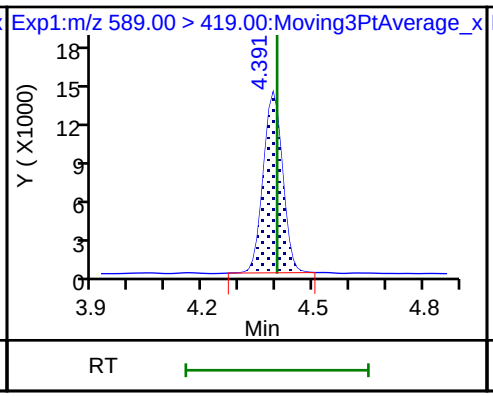

31 Perfluoroundecanoic acid



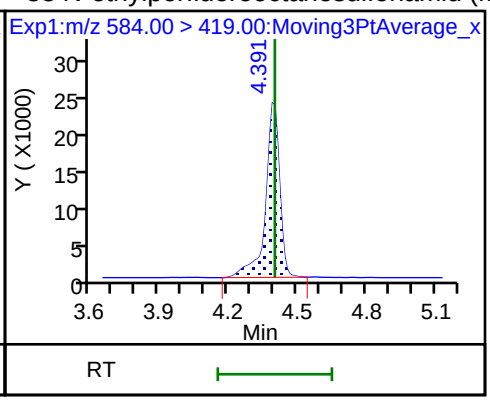

31 Perfluoroundecanoic acid



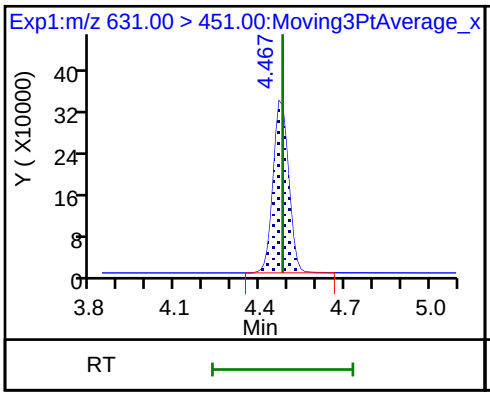

D 32 d5-NEtFOSAA



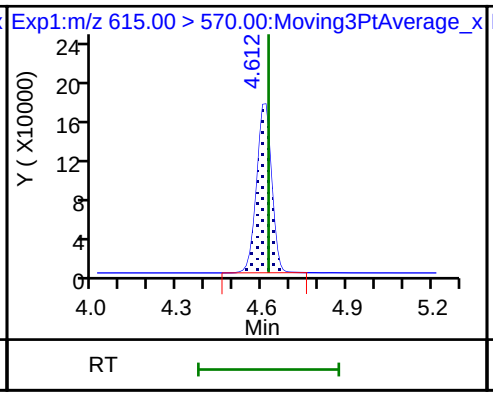

33 N-ethylperfluorooctanesulfonamid (M)



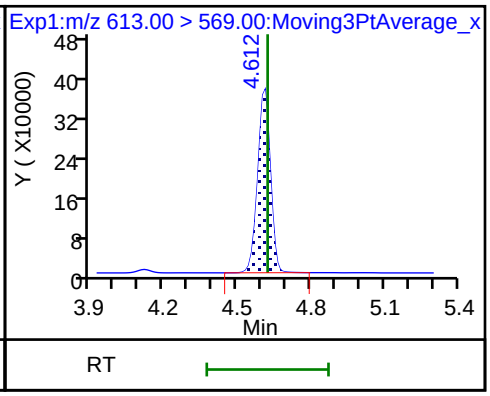

66 11-Chloroeicosafluoro-3-oxaundec



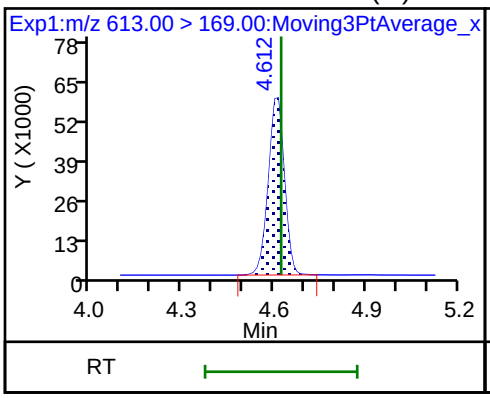

D 36 13C2 PFDoA



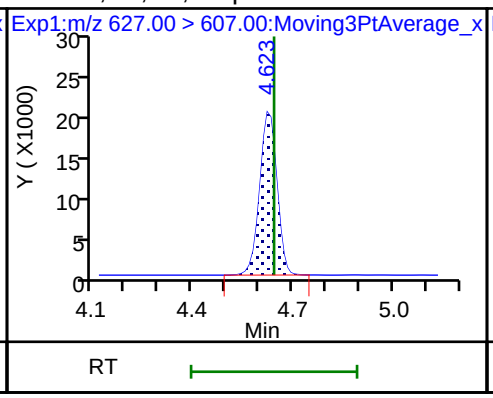

37 Perfluorododecanoic acid



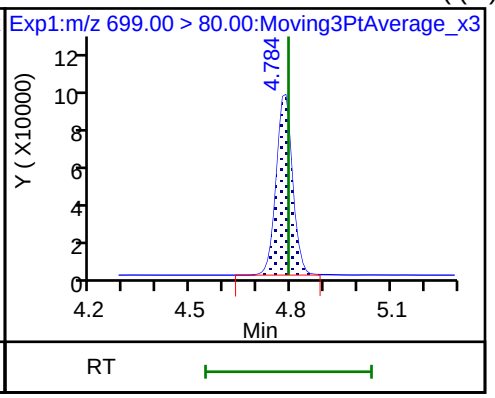
37 Perfluorododecanoic acid (M)



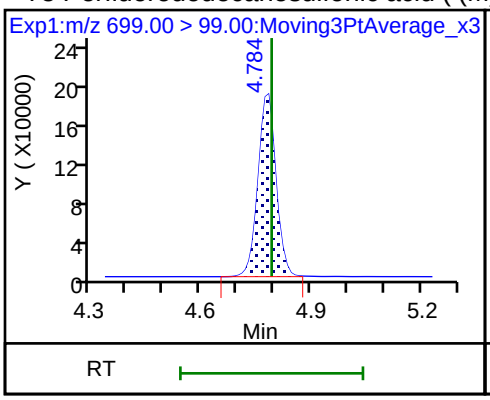

74 1H,1H,2H,2H-perfluorododecanesul



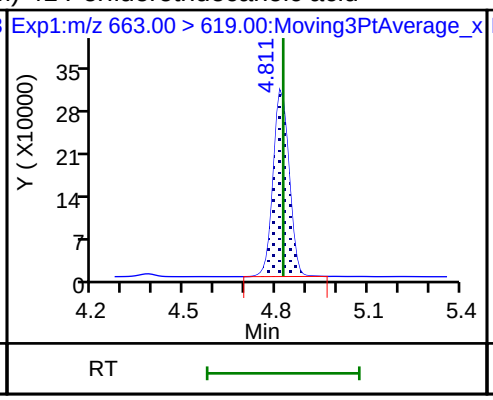

75 Perfluorododecanesulfonic acid ( (M)



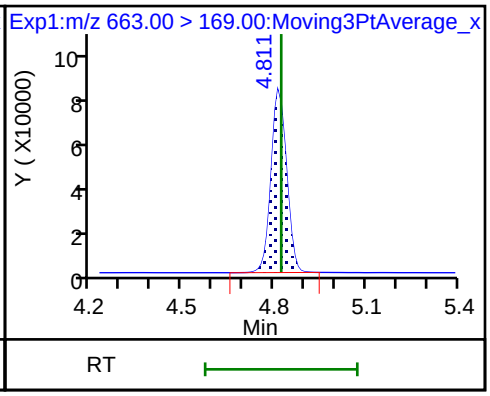

75 Perfluorododecanesulfonic acid ( (M)



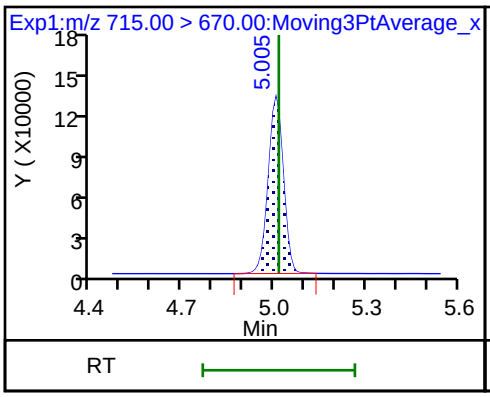

41 Perfluorotridecanoic acid



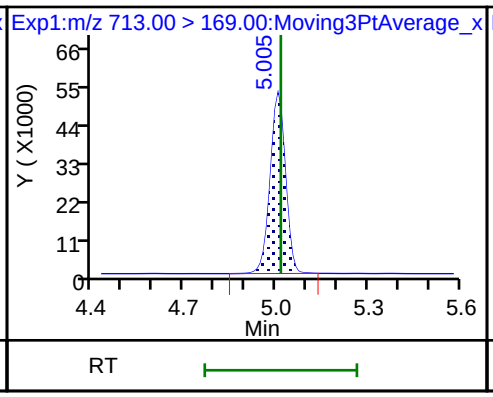

41 Perfluorotridecanoic acid



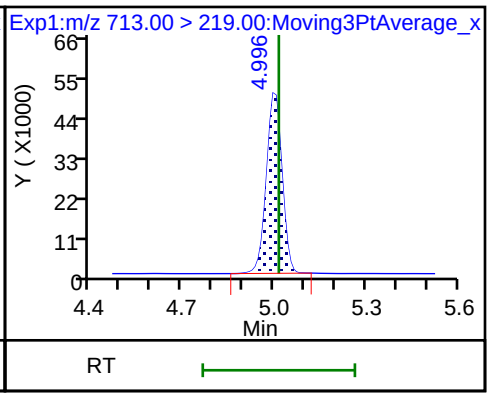

D 43 13C2 PFTeDA



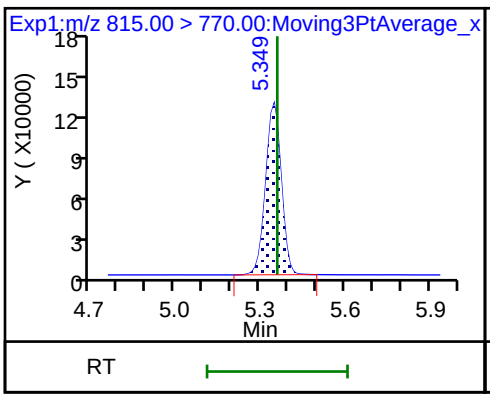

42 Perfluorotetradecanoic acid



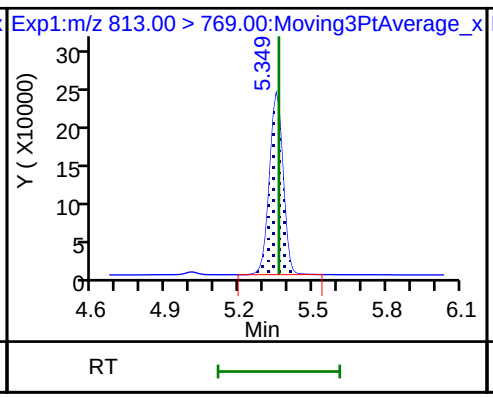

42 Perfluorotetradecanoic acid



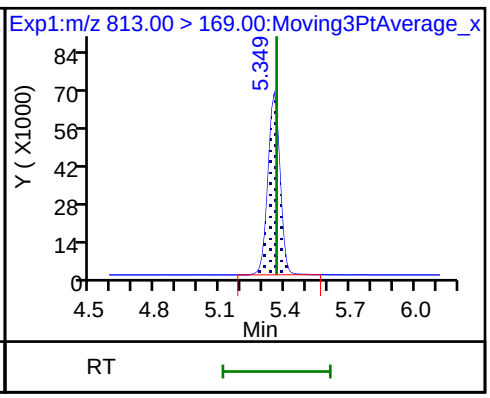

D 44 13C2 PFHxDA



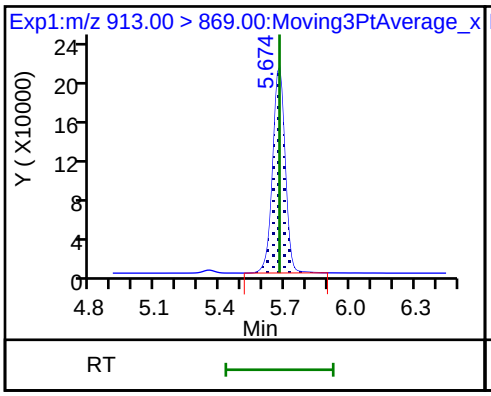

45 Perfluorohexadecanoic acid



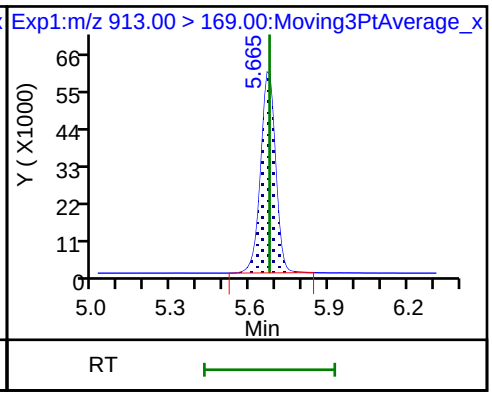

45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid




46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

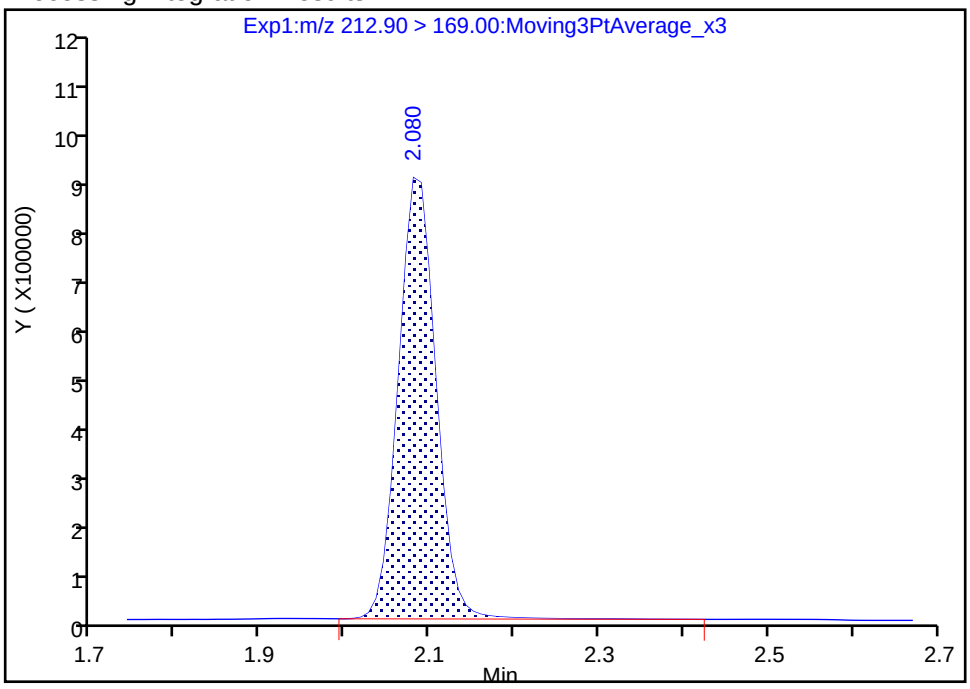
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

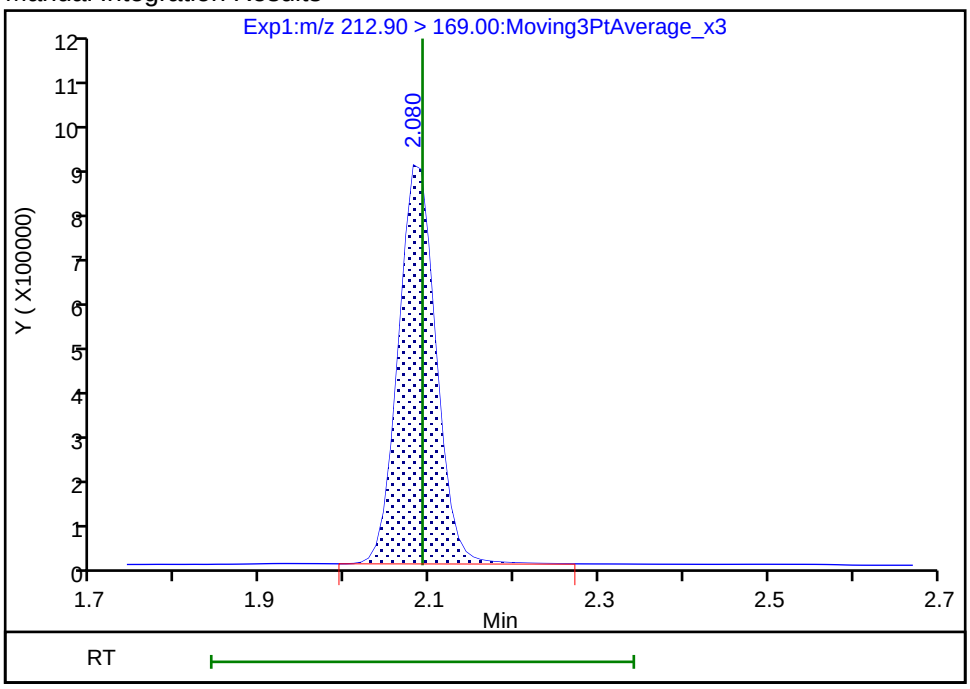
Processing Integration Results

RT: 2.08
Area: 2621968
Amount: 2.486067
Amount Units: ng/ml




Manual Integration Results

RT: 2.08
Area: 2619403
Amount: 2.483635
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:50:09
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

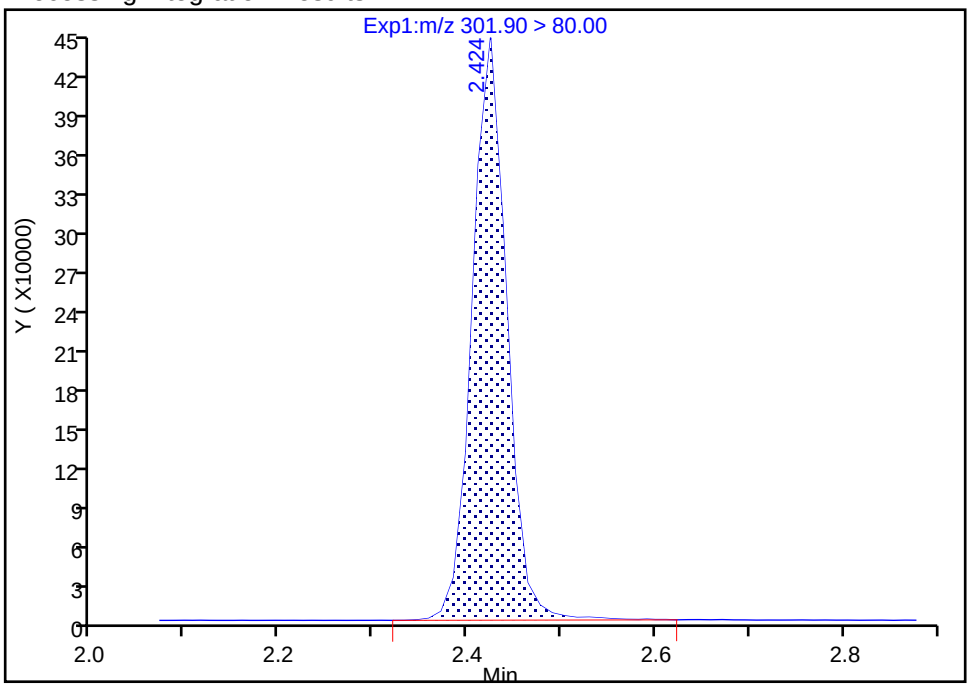
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## D 47 13C3 PFBS, CAS: STL02337

Signal: 1

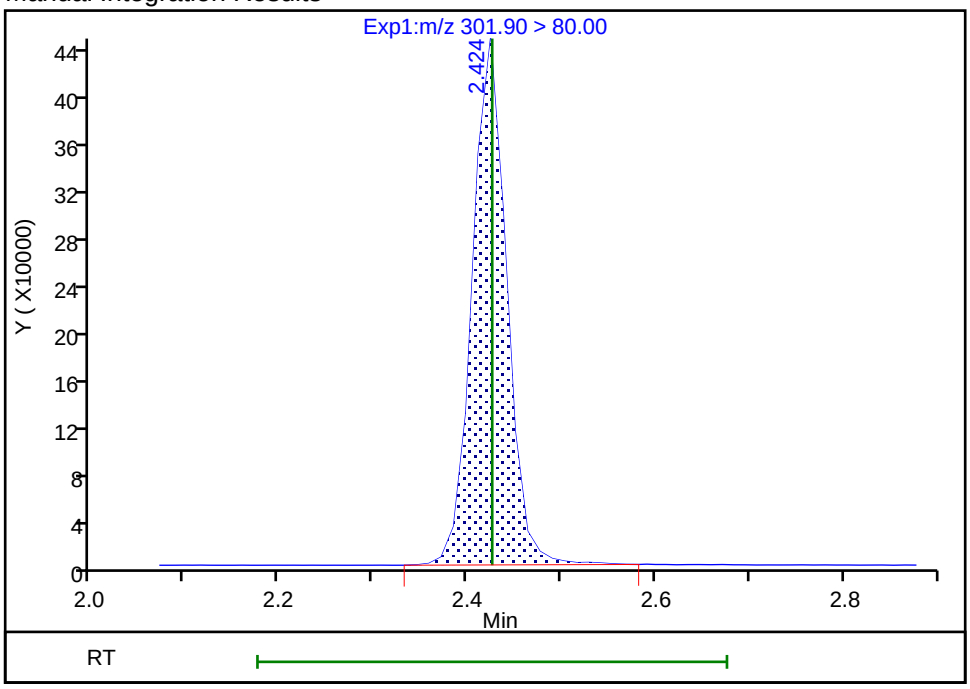
Processing Integration Results

RT: 2.42
Area: 1133884
Amount: 1.022189
Amount Units: ng/ml




Manual Integration Results

RT: 2.42
Area: 1130764
Amount: 1.019376
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:48:13
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

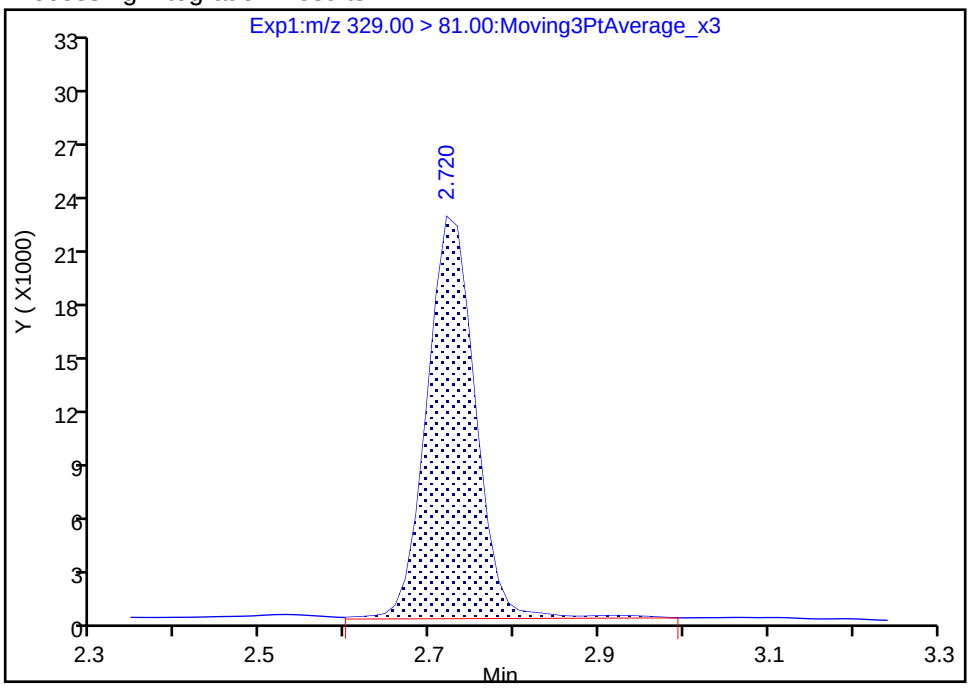
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d | | | | |
| Injection Date: | 12-Mar-2021 15:03:25 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L5 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 23 | Worklist Smp#: | 23 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

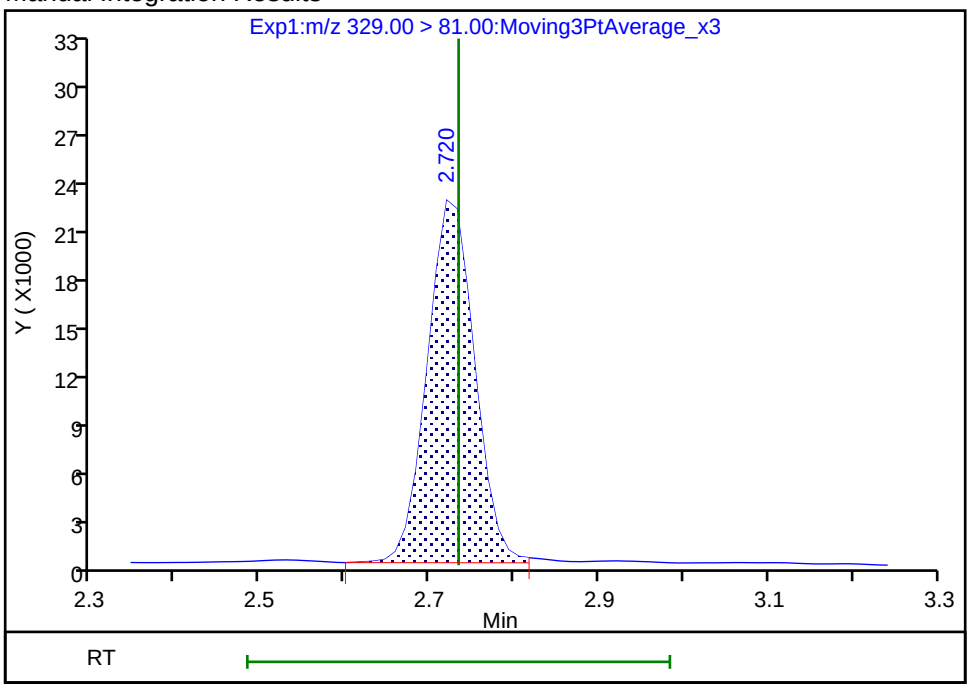
Processing Integration Results

RT: 2.72
Area: 90044
Amount: 0.972929
Amount Units: ng/ml




Manual Integration Results

RT: 2.72
Area: 87763
Amount: 0.948283
Amount Units: ng/ml




Reviewer: deannd, 15-Mar-2021 09:25:10

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

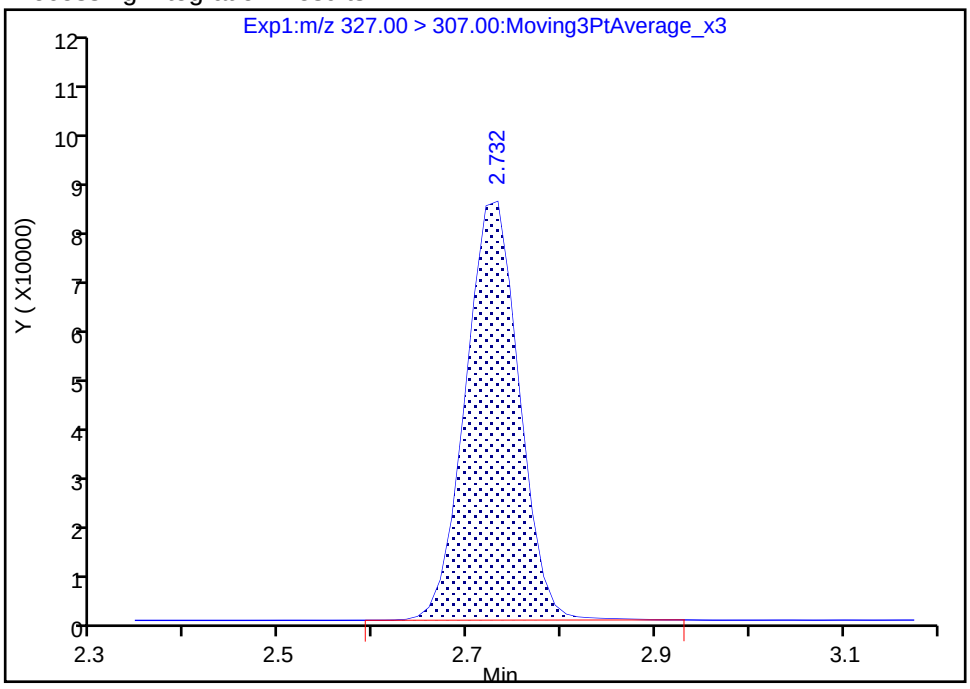
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d | | | | |
| Injection Date: | 12-Mar-2021 15:03:25 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L5 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 23 | Worklist Smp#: | 23 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 61 1H,1H,2H,2H-perfluorohexanesulfo, CAS: 757124-72-4

Signal: 1

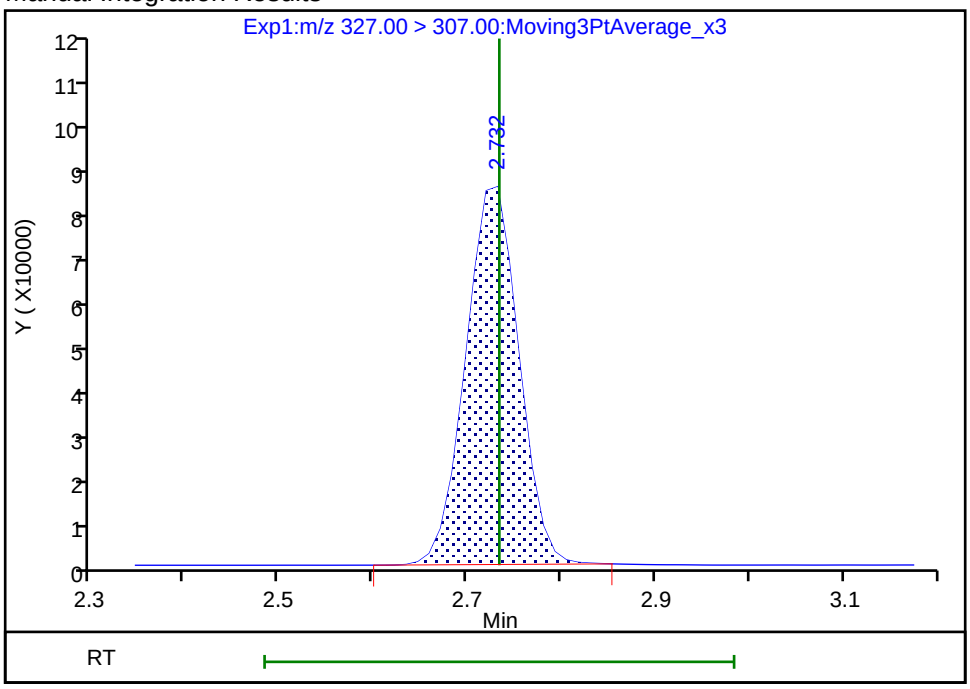
Processing Integration Results

RT: 2.73
Area: 333502
Amount: 2.402393
Amount Units: ng/ml




Manual Integration Results

RT: 2.73
Area: 331389
Amount: 2.404064
Amount Units: ng/ml




Reviewer: deannd, 15-Mar-2021 09:25:16

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

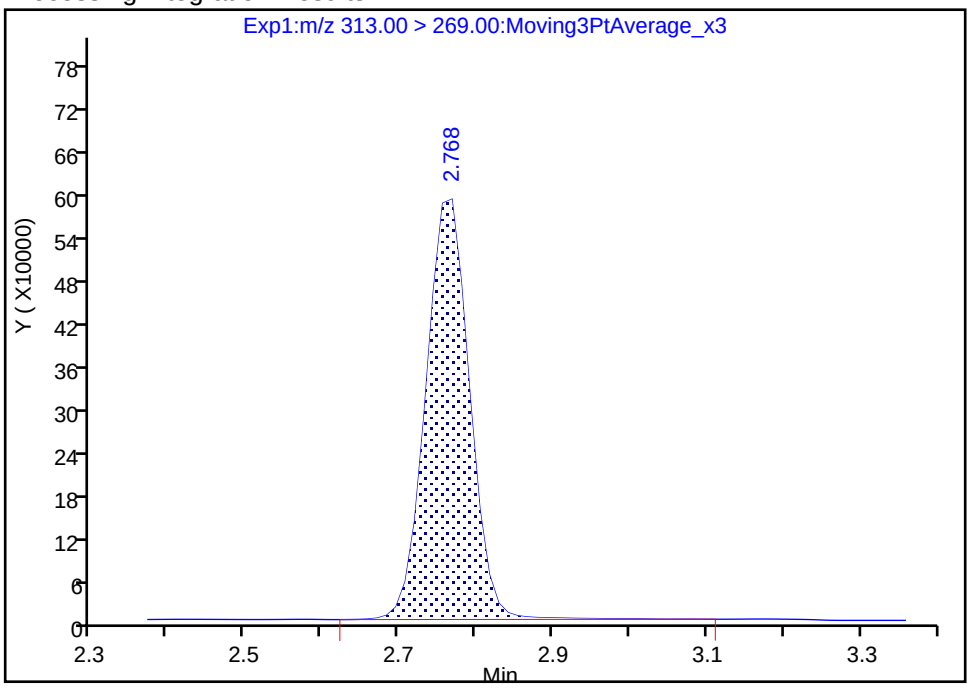
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

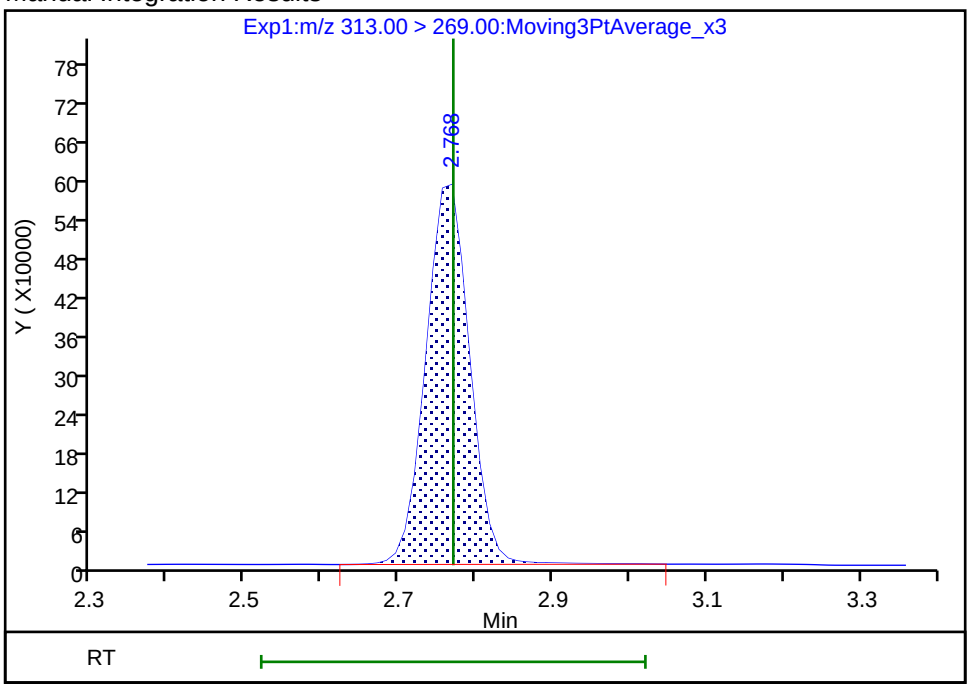
Processing Integration Results

RT: 2.77
Area: 2332354
Amount: 2.568649
Amount Units: ng/ml




Manual Integration Results

RT: 2.77
Area: 2330137
Amount: 2.566208
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:50:59
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

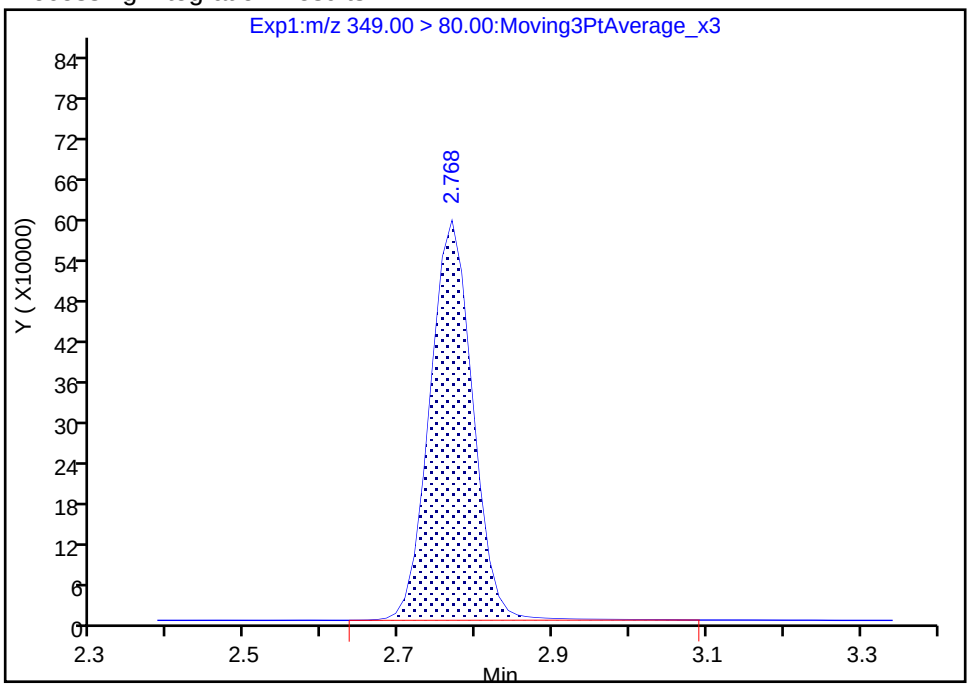
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 70 Perfluoropentanesulfonic acid, CAS: 2706-91-4

Signal: 1

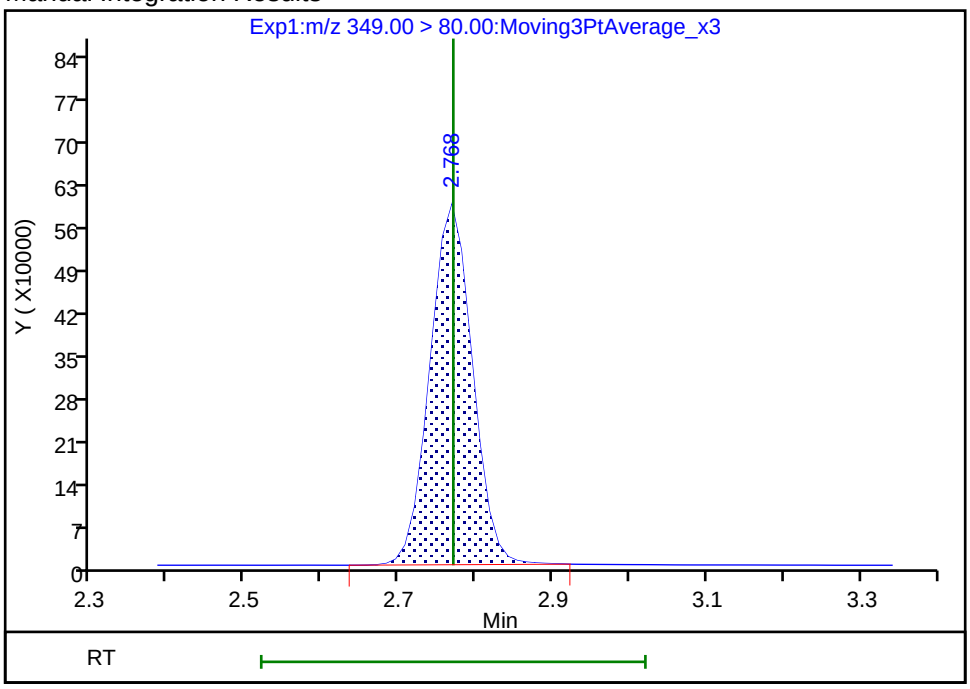
Processing Integration Results

RT: 2.77
Area: 2283342
Amount: 2.402170
Amount Units: ng/ml




Manual Integration Results

RT: 2.77
Area: 2264124
Amount: 2.381952
Amount Units: ng/ml




Reviewer: deannd, 15-Mar-2021 09:25:29
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

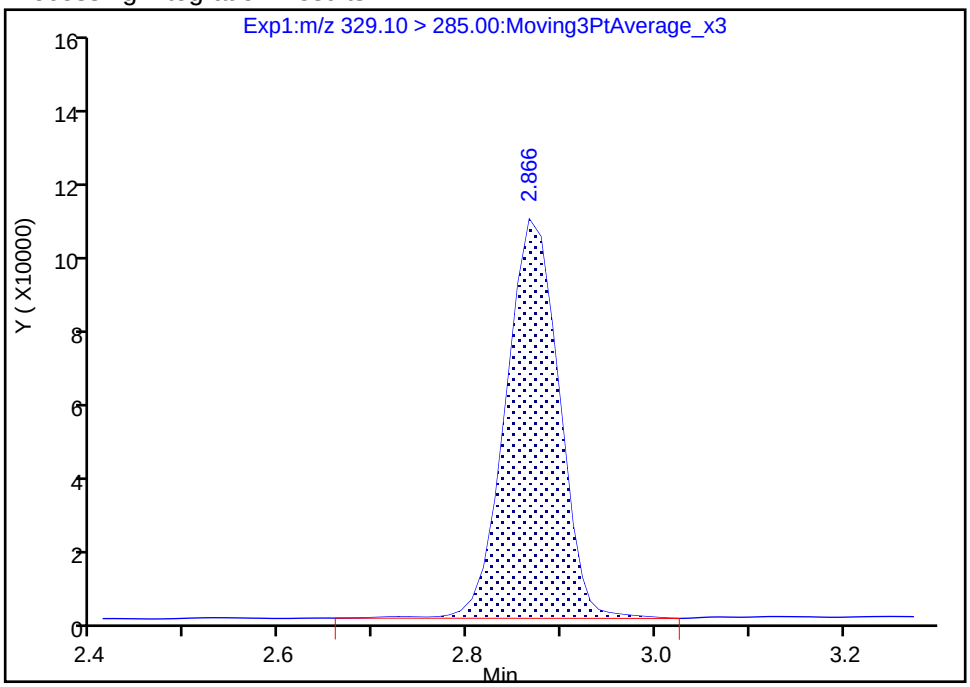
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d | | | | |
| Injection Date: | 12-Mar-2021 15:03:25 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L5 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 23 | Worklist Smp#: | 23 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 67 Perfluoro(2-propoxypropanoic) ac, CAS: 13252-13-6

Signal: 1

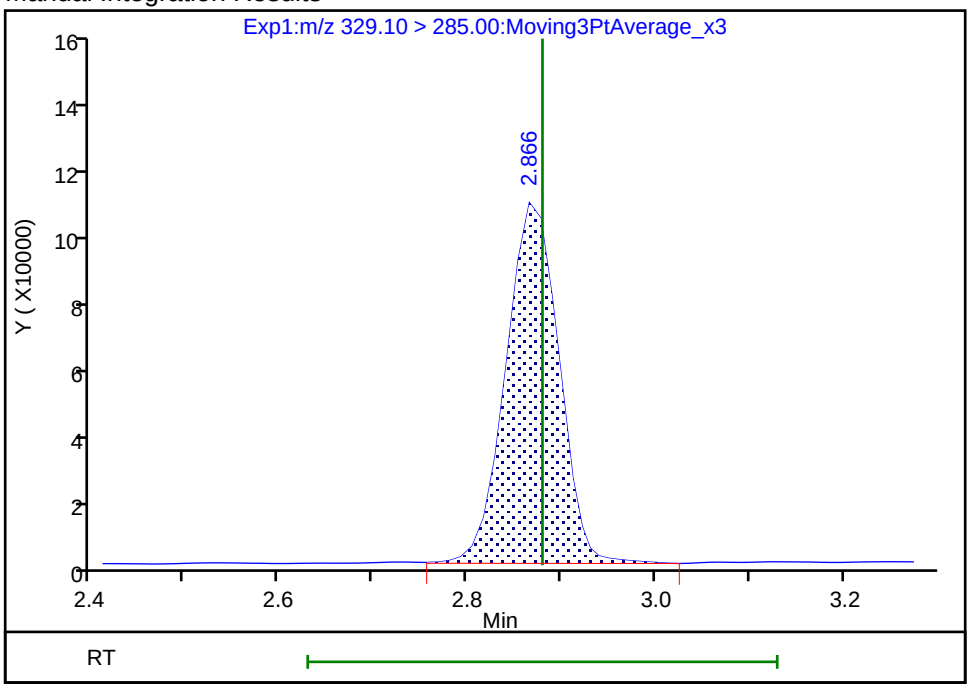
Processing Integration Results

RT: 2.87
Area: 416747
Amount: 3.512925
Amount Units: ng/ml




Manual Integration Results

RT: 2.87
Area: 415620
Amount: 3.503425
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:51:29

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

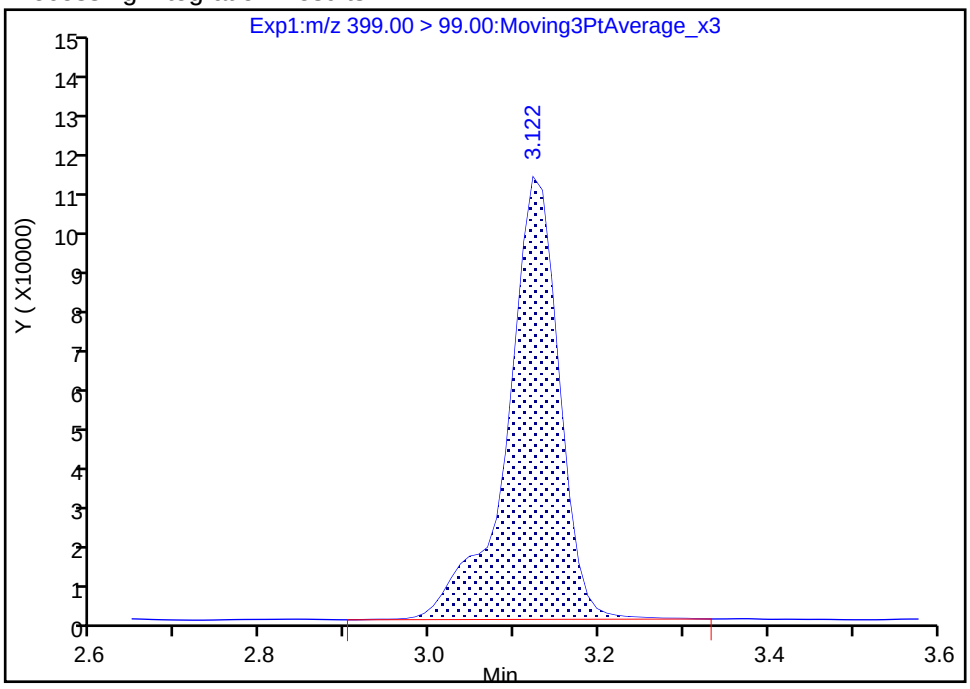
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d | | | | |
| Injection Date: | 12-Mar-2021 15:03:25 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L5 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 23 | Worklist Smp#: | 23 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

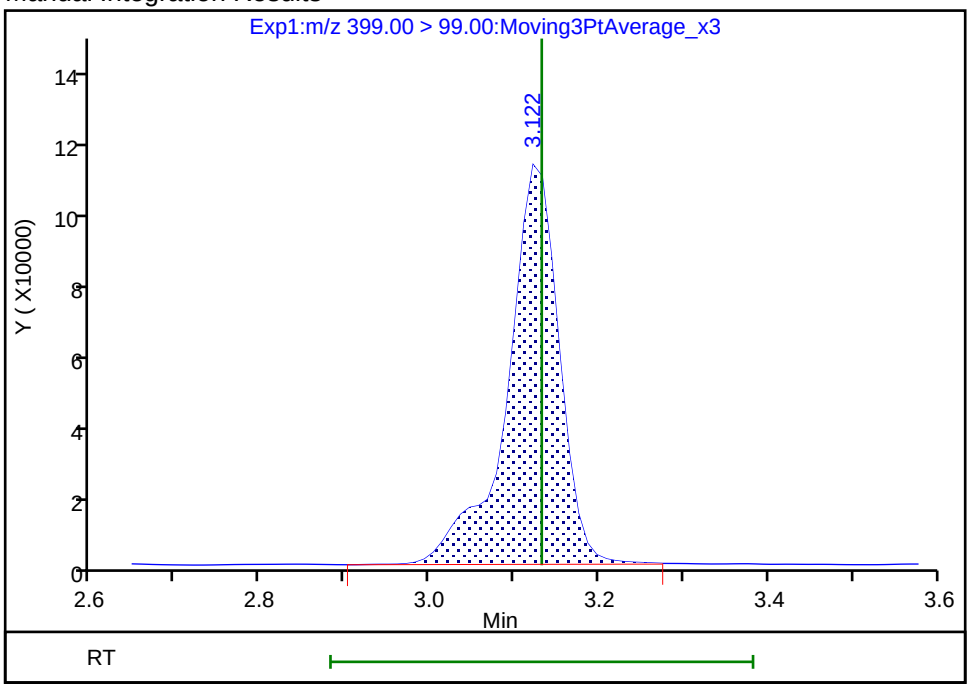
Processing Integration Results

RT: 3.12
Area: 463894
Amount: 2.332615
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 463537
Amount: 2.305862
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:52:17

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

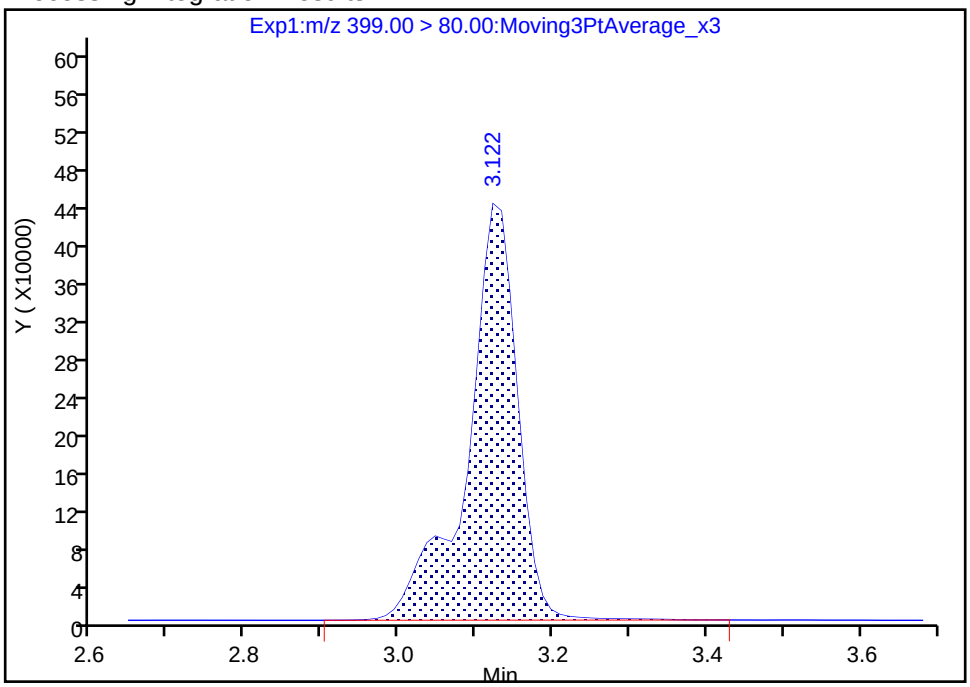
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

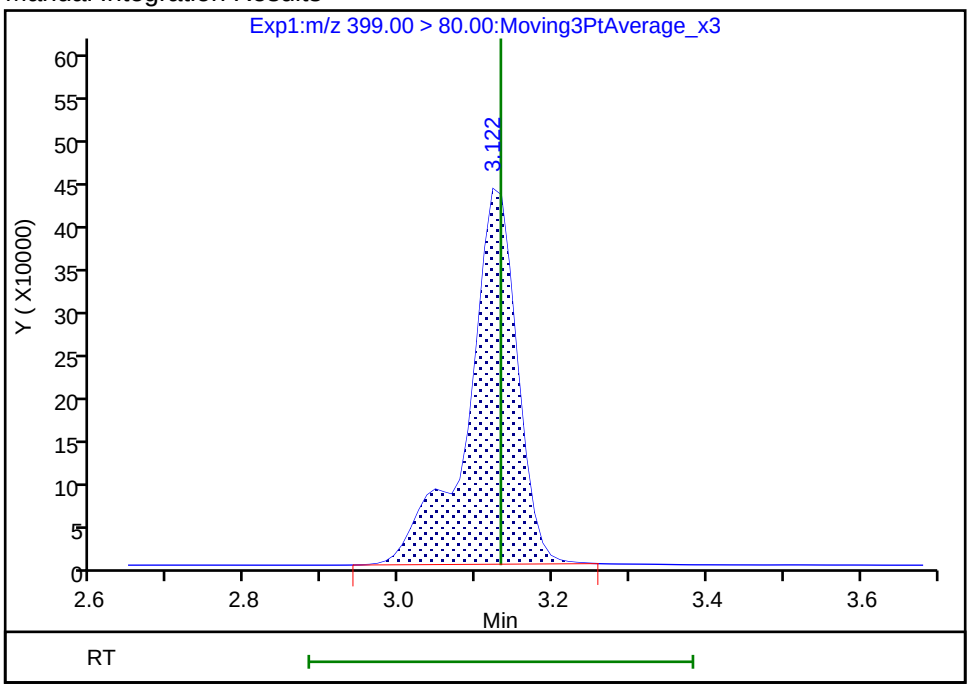
Processing Integration Results

RT: 3.12
Area: 1991095
Amount: 2.332615
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 1968259
Amount: 2.305862
Amount Units: ng/ml




Reviewer: deannd, 15-Mar-2021 09:25:40
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

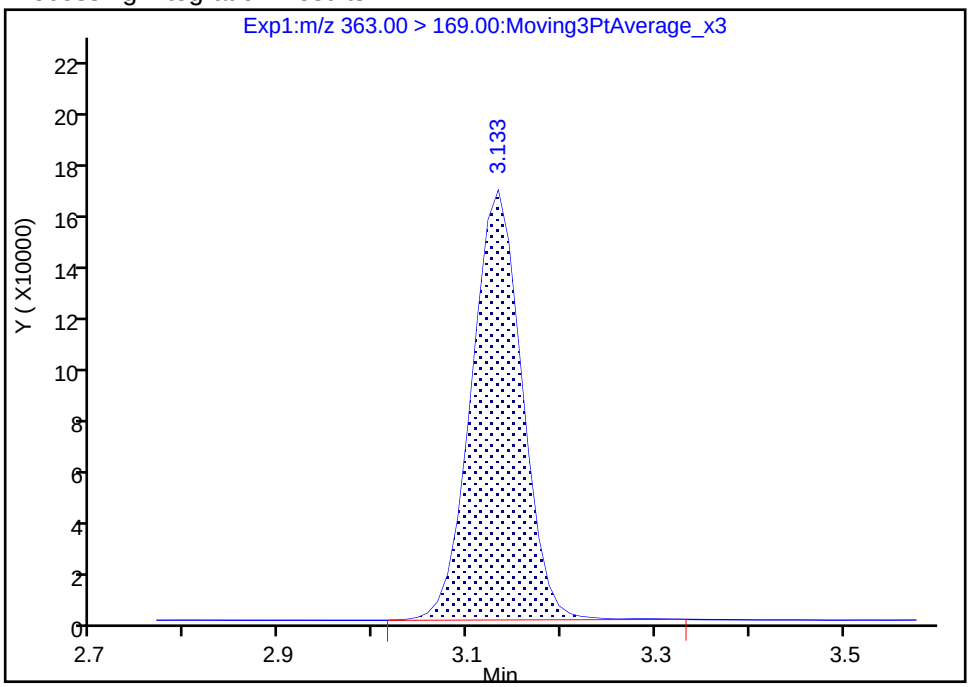
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

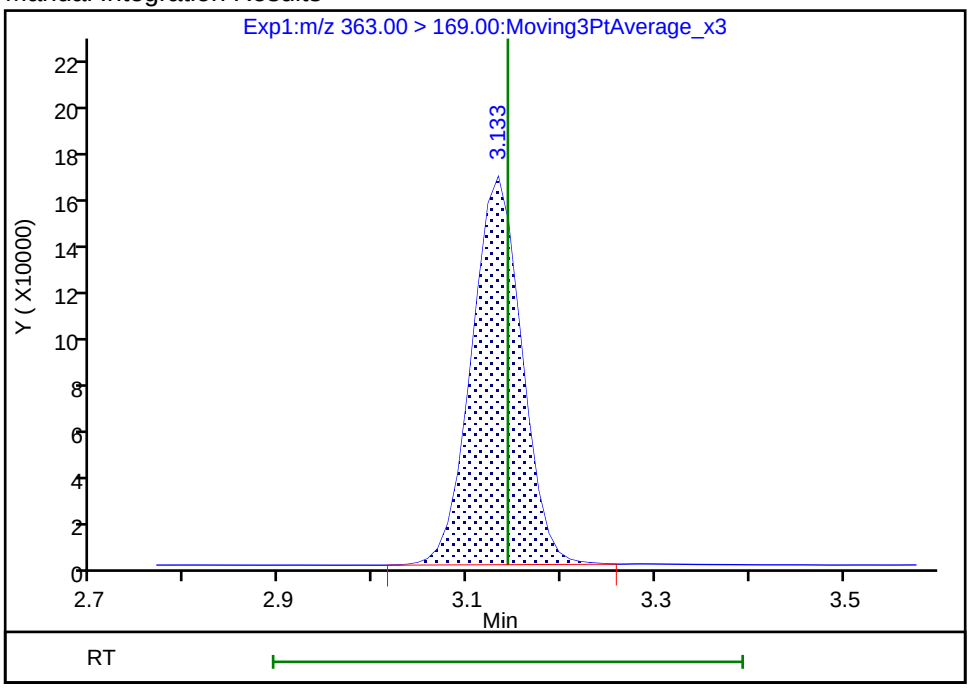
Processing Integration Results

RT: 3.13
Area: 607856
Amount: 2.517158
Amount Units: ng/ml




Manual Integration Results

RT: 3.13
Area: 606001
Amount: 2.517158
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:52:38
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

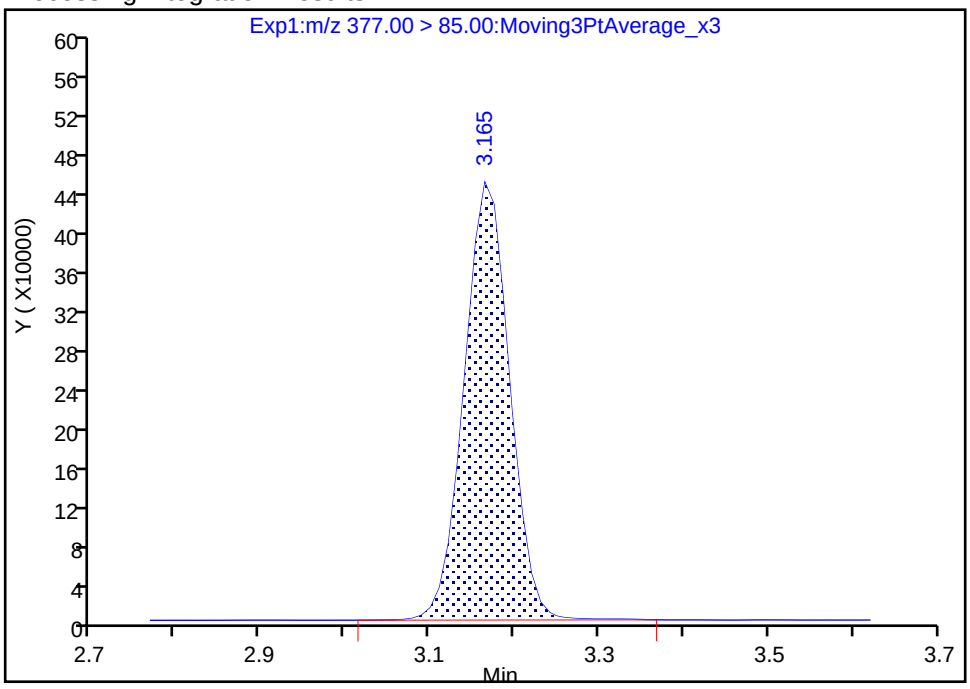
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 77 DONA, CAS: 919005-14-4

Signal: 2

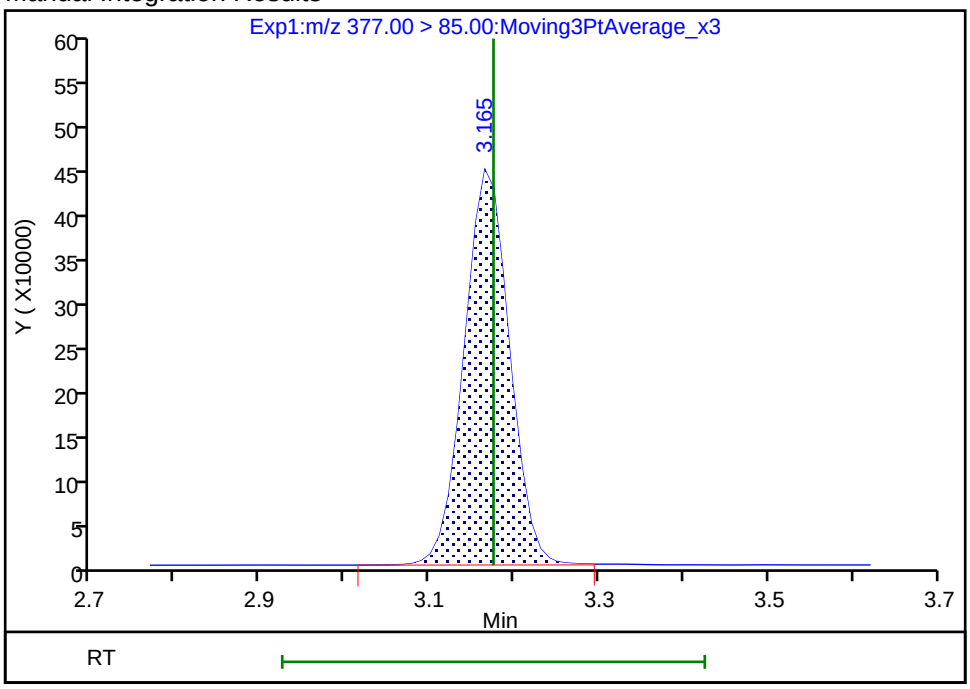
Processing Integration Results

RT: 3.16
Area: 1676388
Amount: 2.404909
Amount Units: ng/ml




Manual Integration Results

RT: 3.16
Area: 1674850
Amount: 2.385399
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:52:50
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

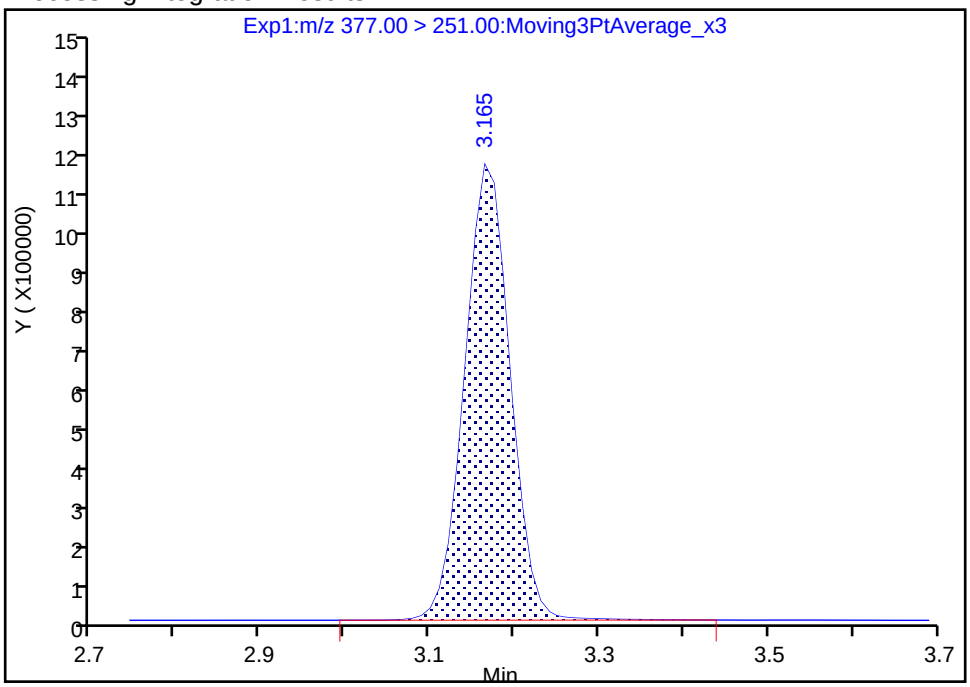
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 77 DONA, CAS: 919005-14-4

Signal: 1

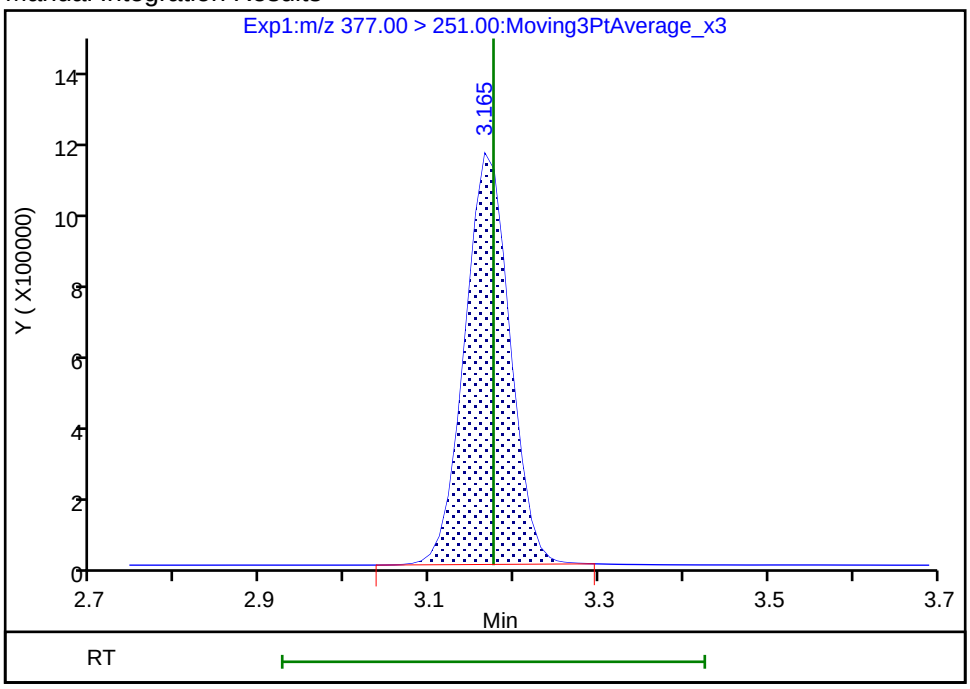
Processing Integration Results

RT: 3.16
Area: 4196303
Amount: 2.404909
Amount Units: ng/ml




Manual Integration Results

RT: 3.16
Area: 4162261
Amount: 2.385399
Amount Units: ng/ml




Reviewer: deannd, 15-Mar-2021 09:25:48
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

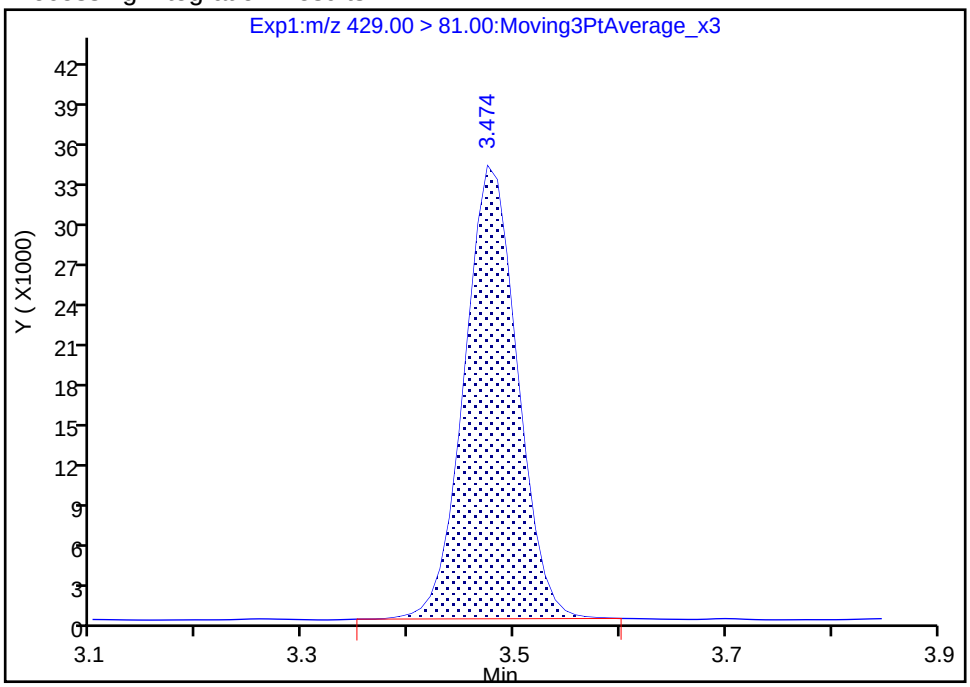
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

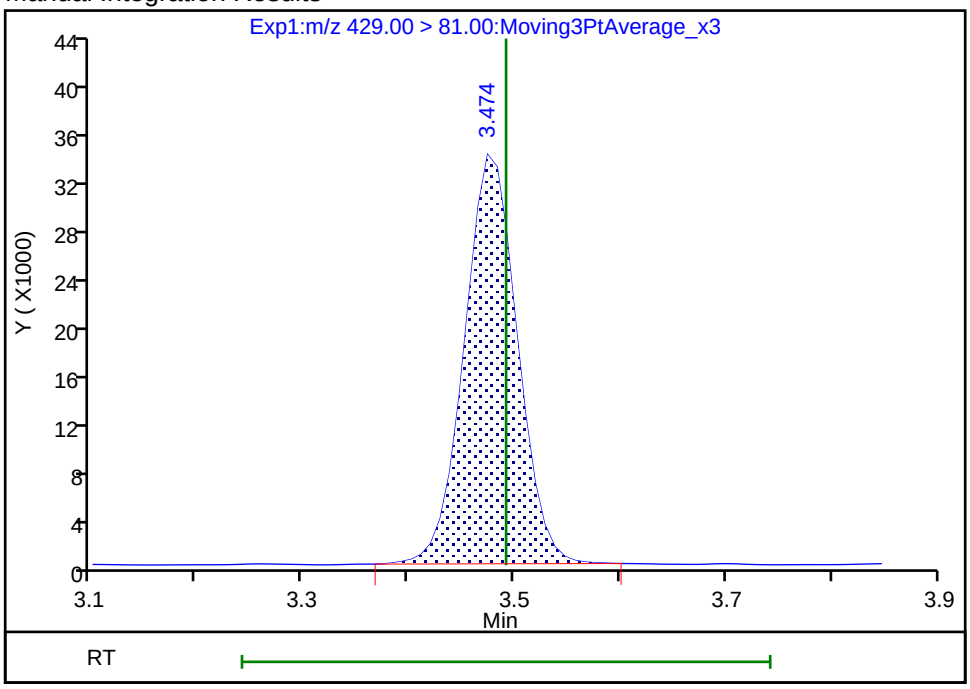
Processing Integration Results

RT: 3.47
Area: 116500
Amount: 1.130514
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 116496
Amount: 1.130476
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:48:42
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

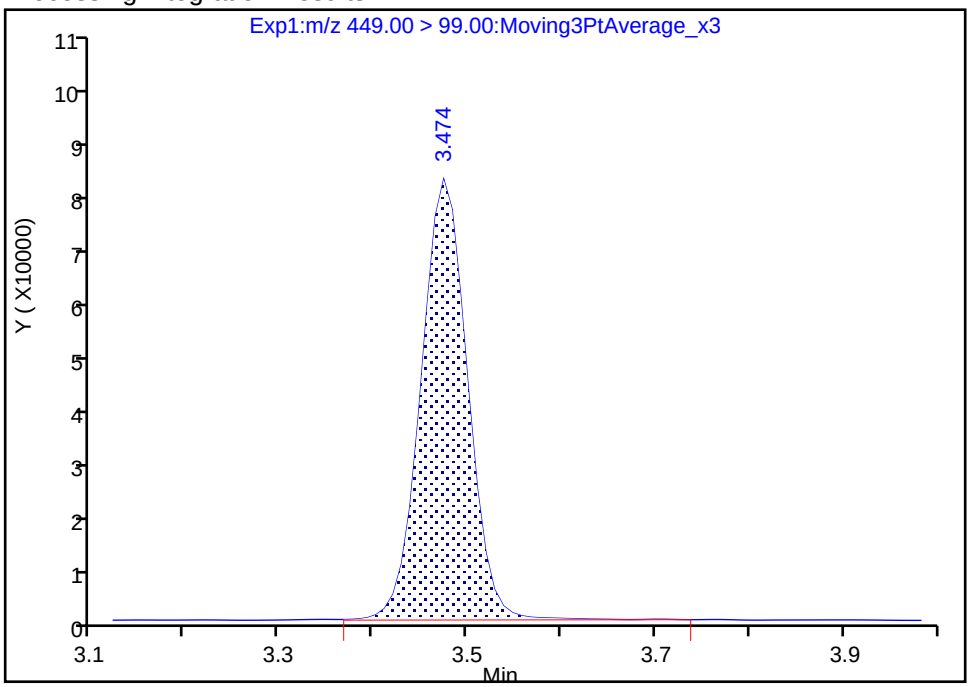
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

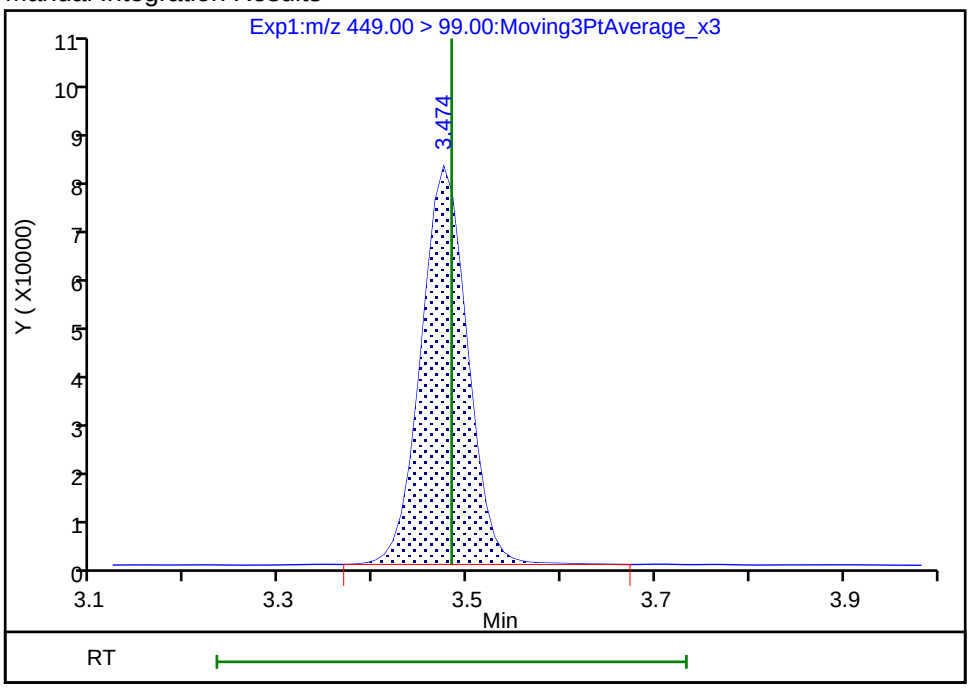
Processing Integration Results

RT: 3.47
Area: 266558
Amount: 2.416283
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 265099
Amount: 2.407163
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:53:03
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

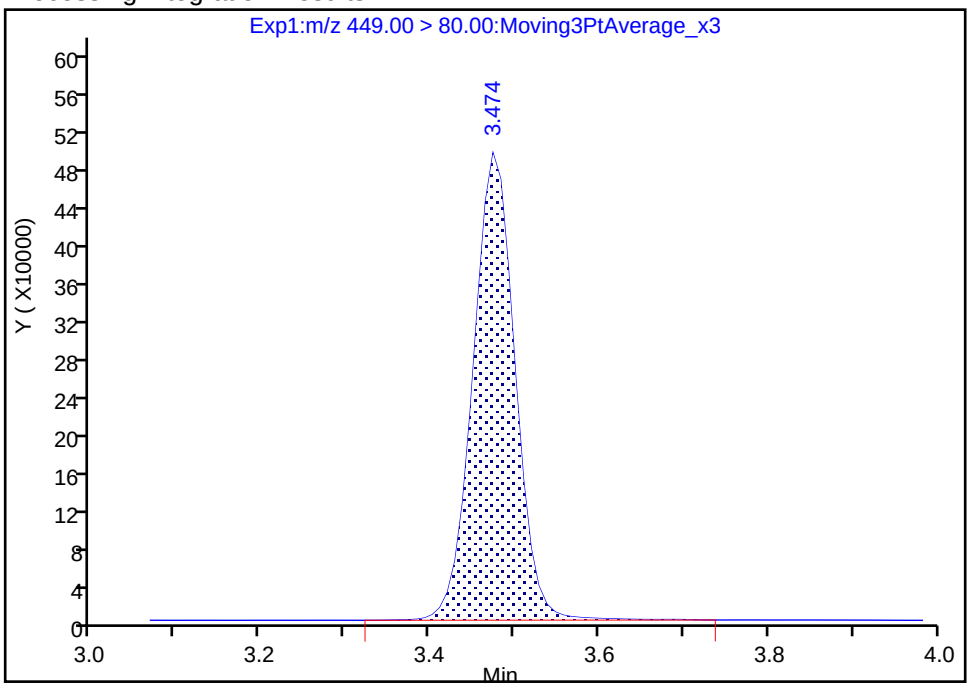
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

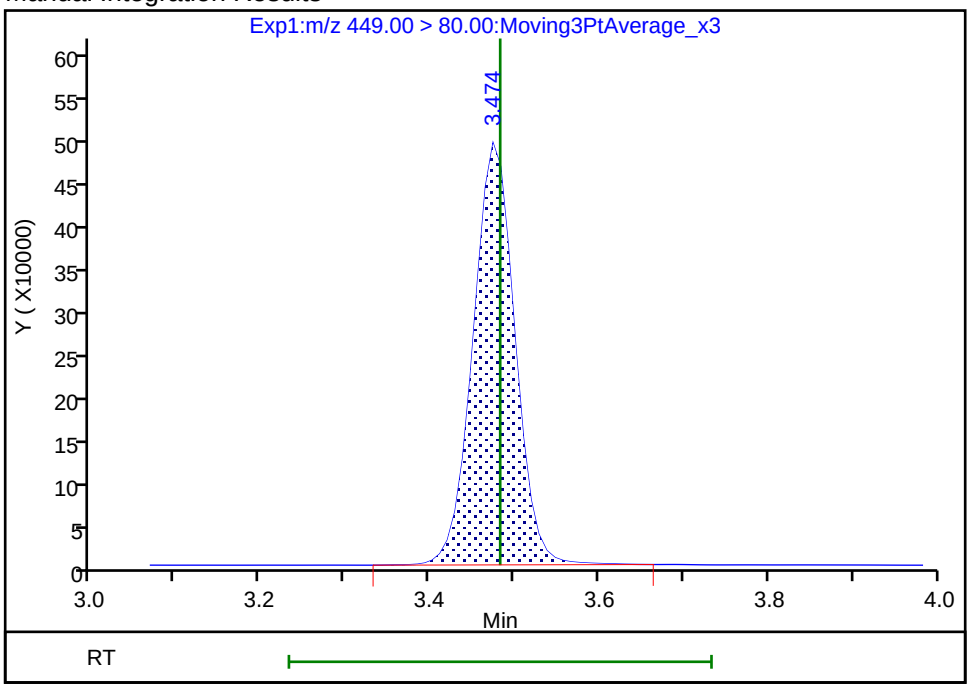
Processing Integration Results

RT: 3.47
Area: 1700003
Amount: 2.416283
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 1693586
Amount: 2.407163
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:53:13
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

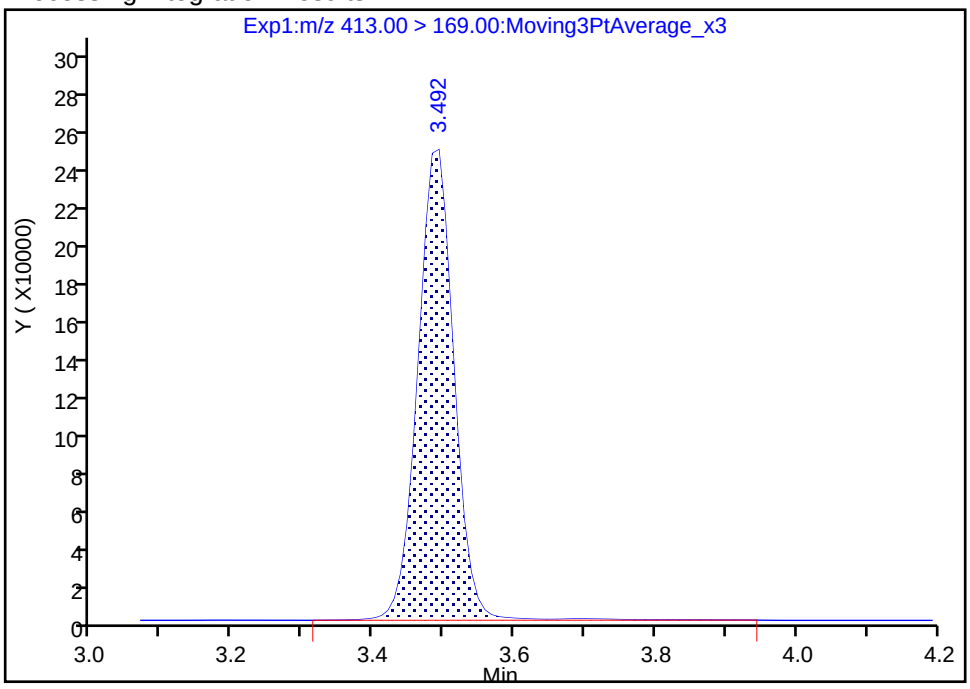
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

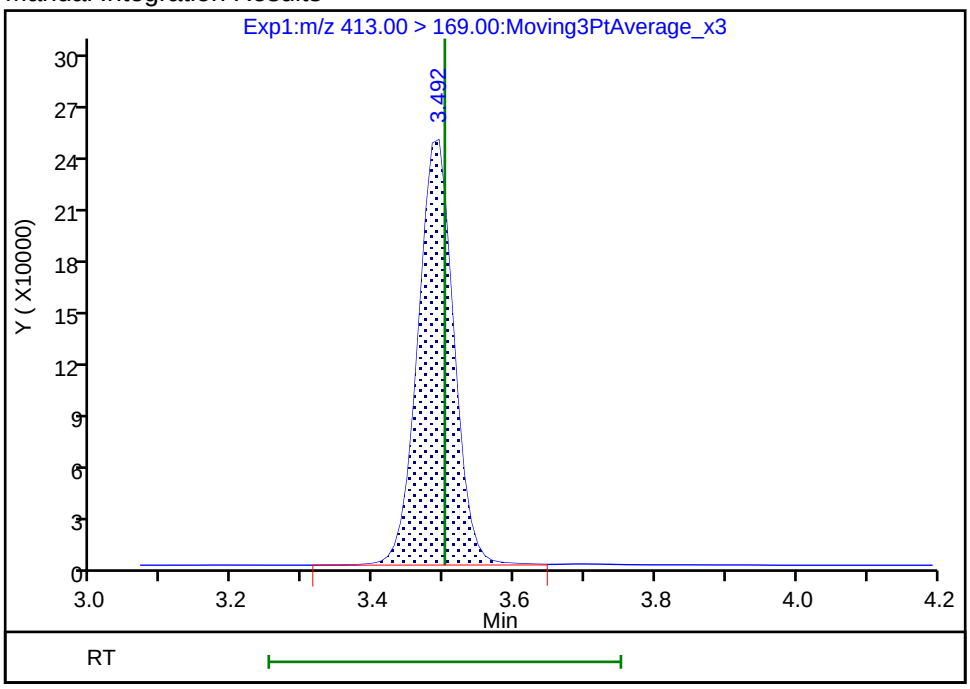
Processing Integration Results

RT: 3.49
Area: 885537
Amount: 2.577186
Amount Units: ng/ml




Manual Integration Results

RT: 3.49
Area: 880082
Amount: 2.577186
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:53:41
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

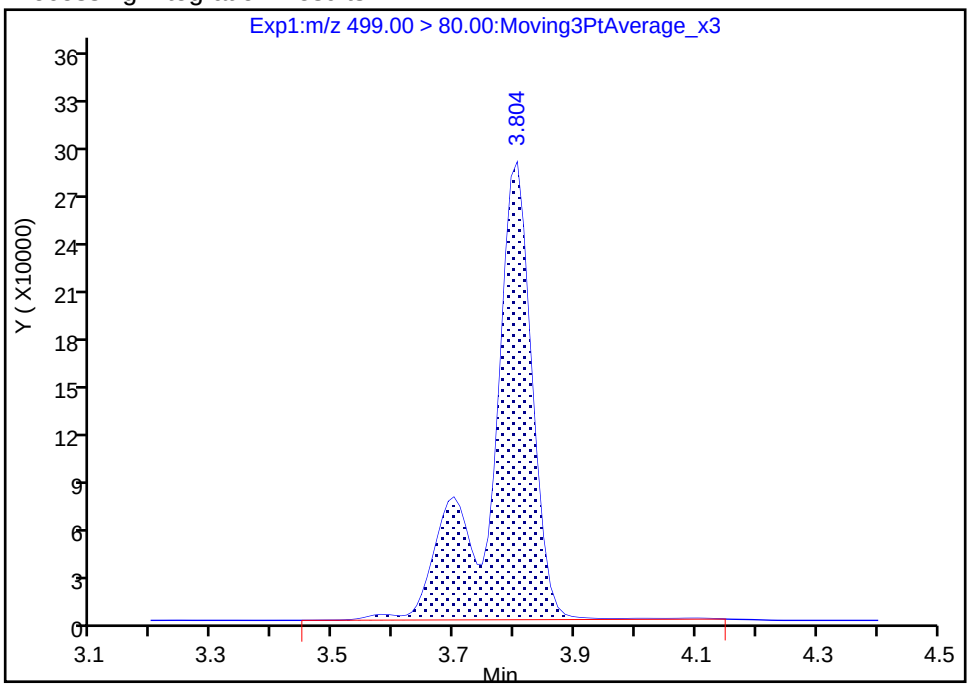
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

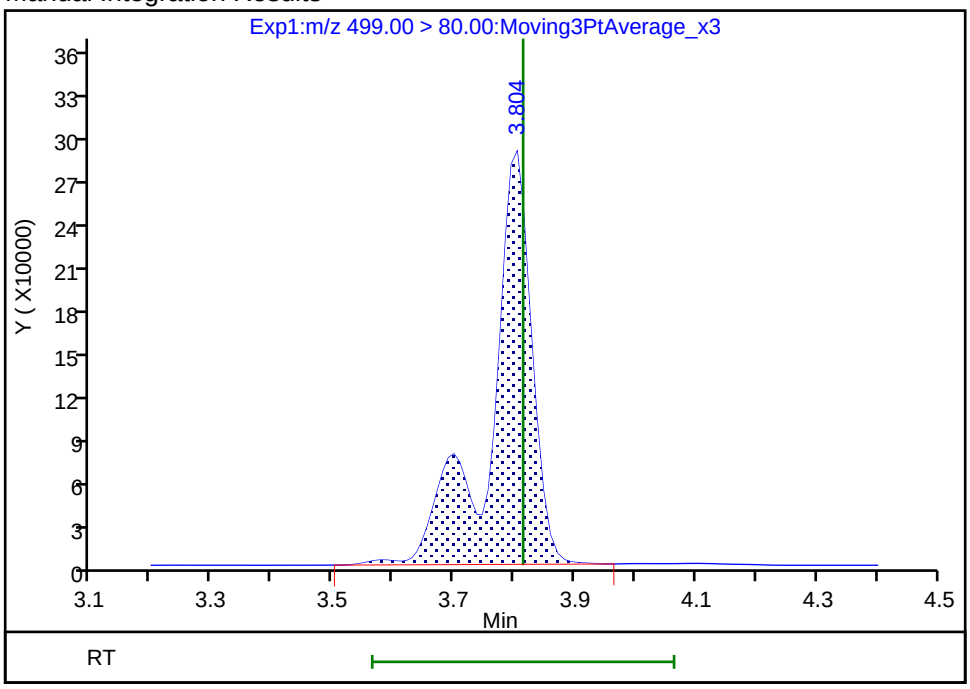
Processing Integration Results

RT: 3.80
Area: 1384749
Amount: 2.310592
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 1375628
Amount: 2.295372
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:54:18
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

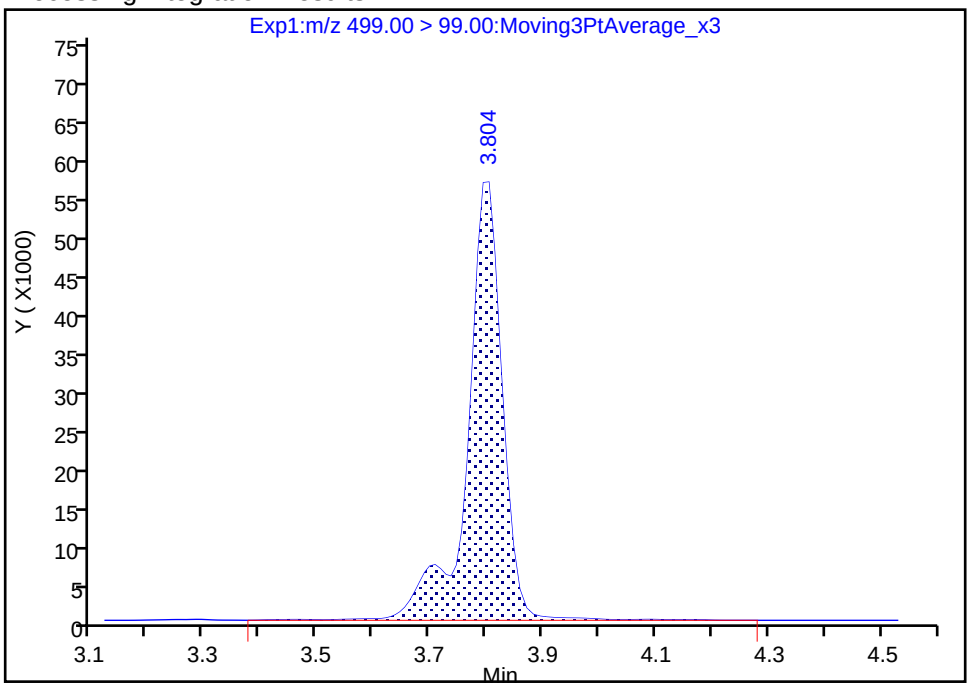
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

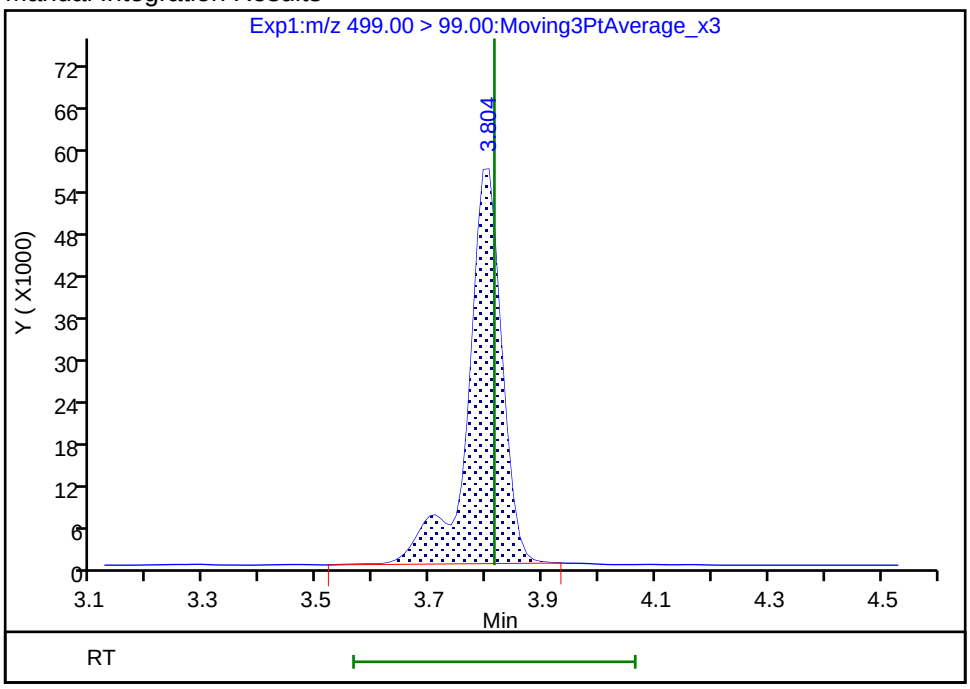
Processing Integration Results

RT: 3.80
Area: 246214
Amount: 2.310592
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 239388
Amount: 2.295372
Amount Units: ng/ml




Reviewer: deannd, 15-Mar-2021 09:26:04
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

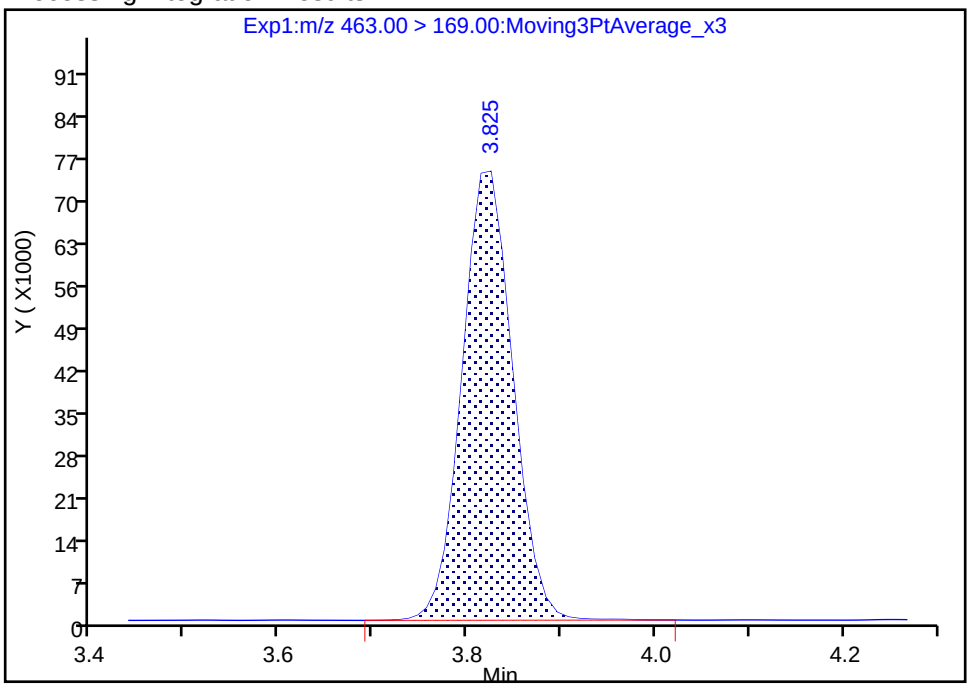
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d | | | | |
| Injection Date: | 12-Mar-2021 15:03:25 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L5 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 23 | Worklist Smp#: | 23 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

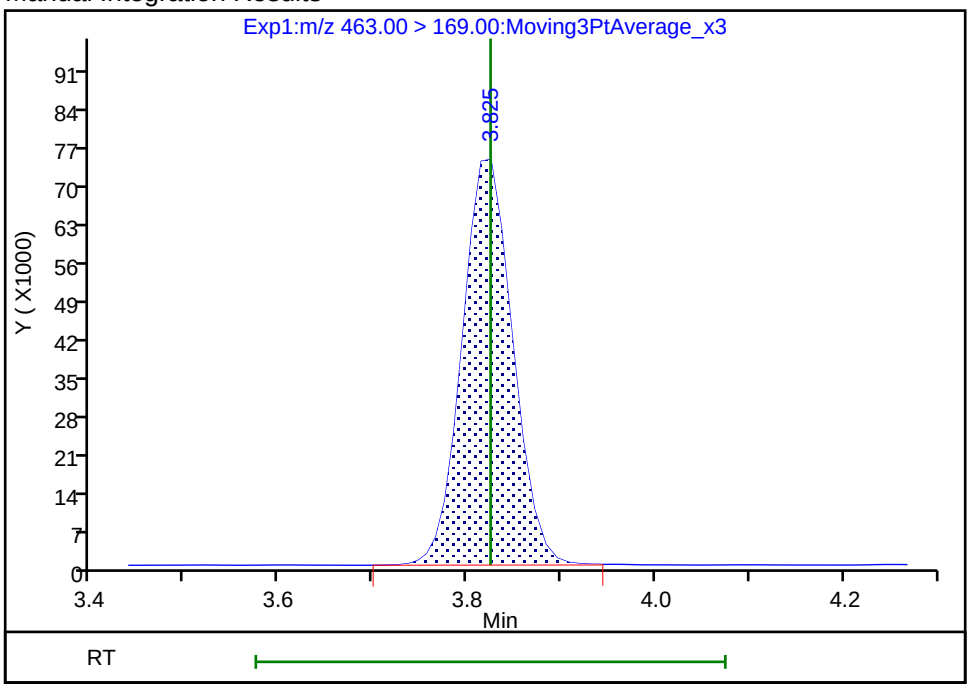
Processing Integration Results

RT: 3.82
Area: 278015
Amount: 2.525026
Amount Units: ng/ml




Manual Integration Results

RT: 3.82
Area: 277688
Amount: 2.525026
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:56:03

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

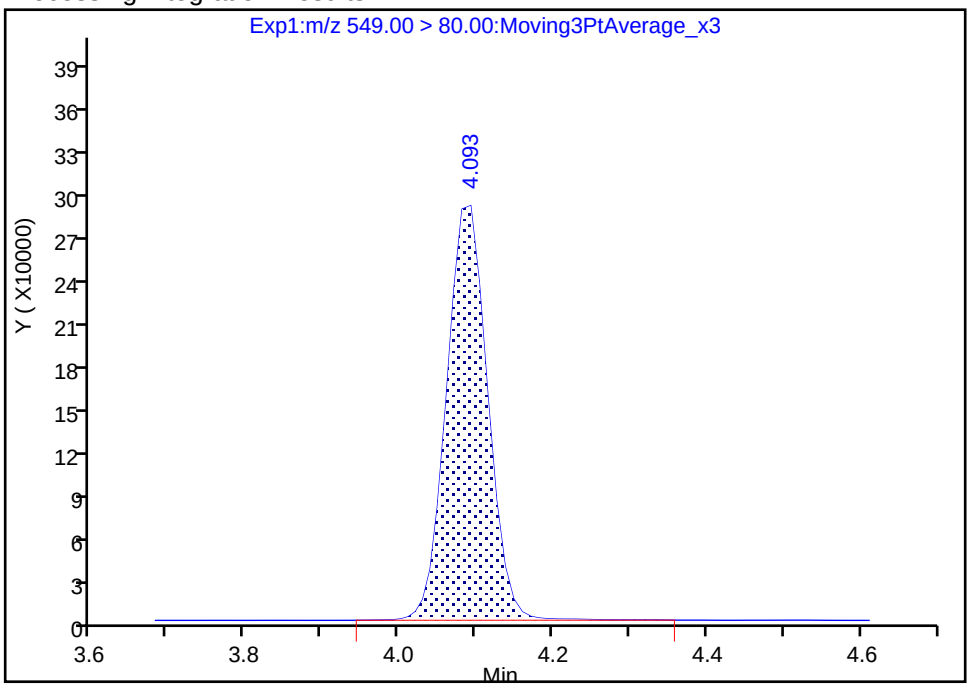
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 1

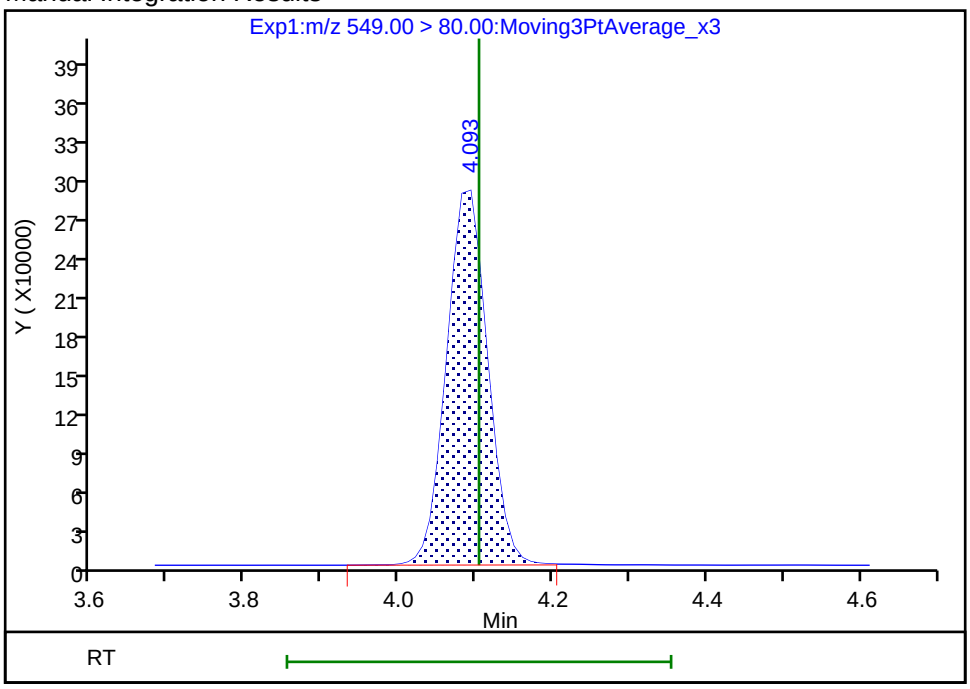
Processing Integration Results

RT: 4.09
Area: 1064750
Amount: 2.381299
Amount Units: ng/ml




Manual Integration Results

RT: 4.09
Area: 1061152
Amount: 2.373253
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:56:58
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

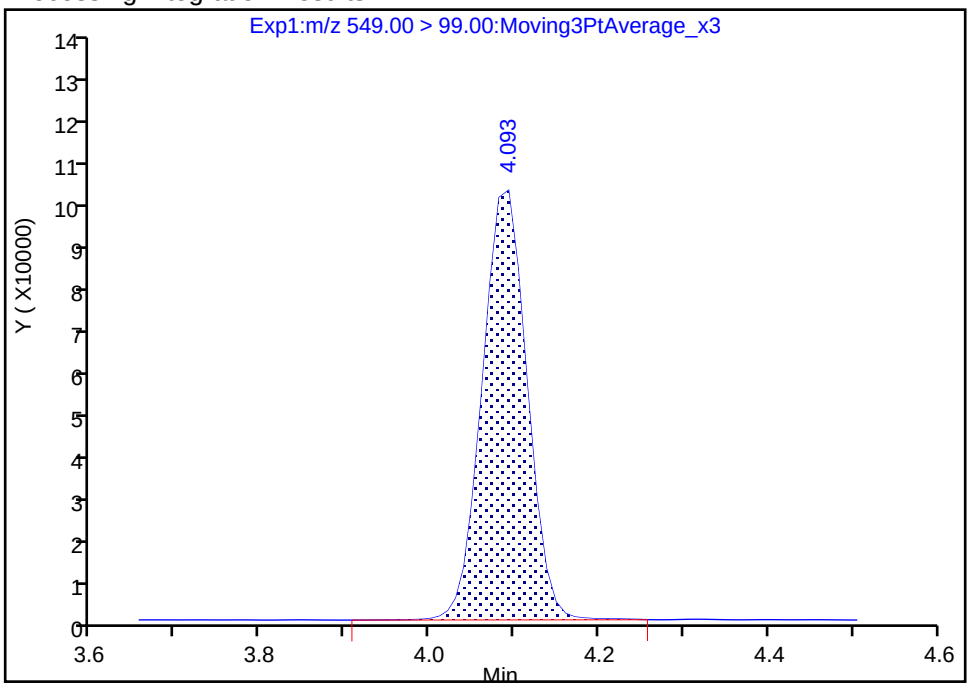
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

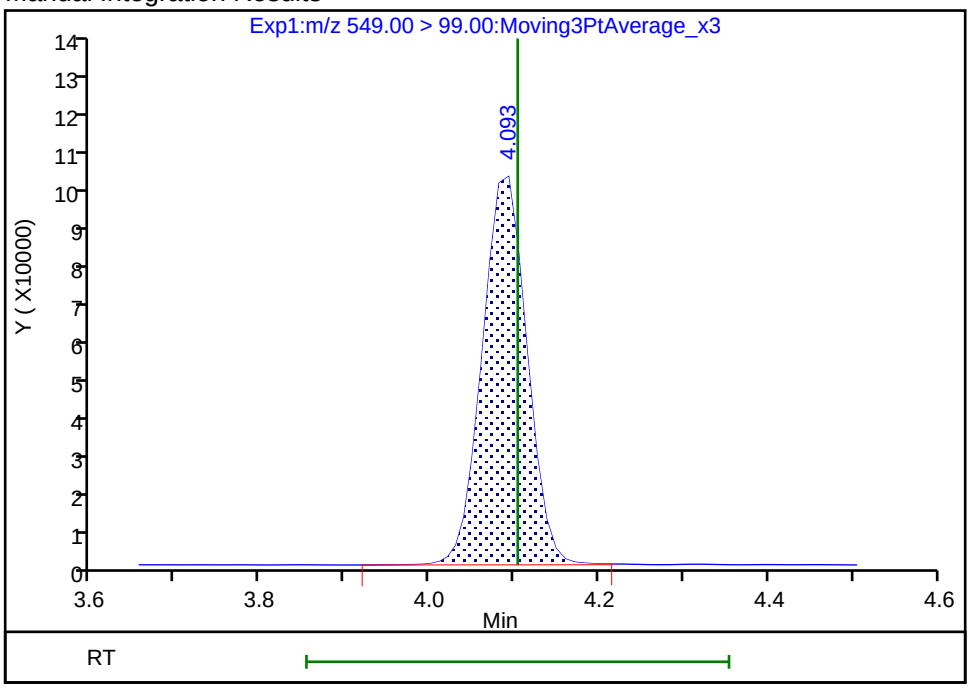
Processing Integration Results

RT: 4.09
Area: 367970
Amount: 2.381299
Amount Units: ng/ml




Manual Integration Results

RT: 4.09
Area: 367650
Amount: 2.373253
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:57:22
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

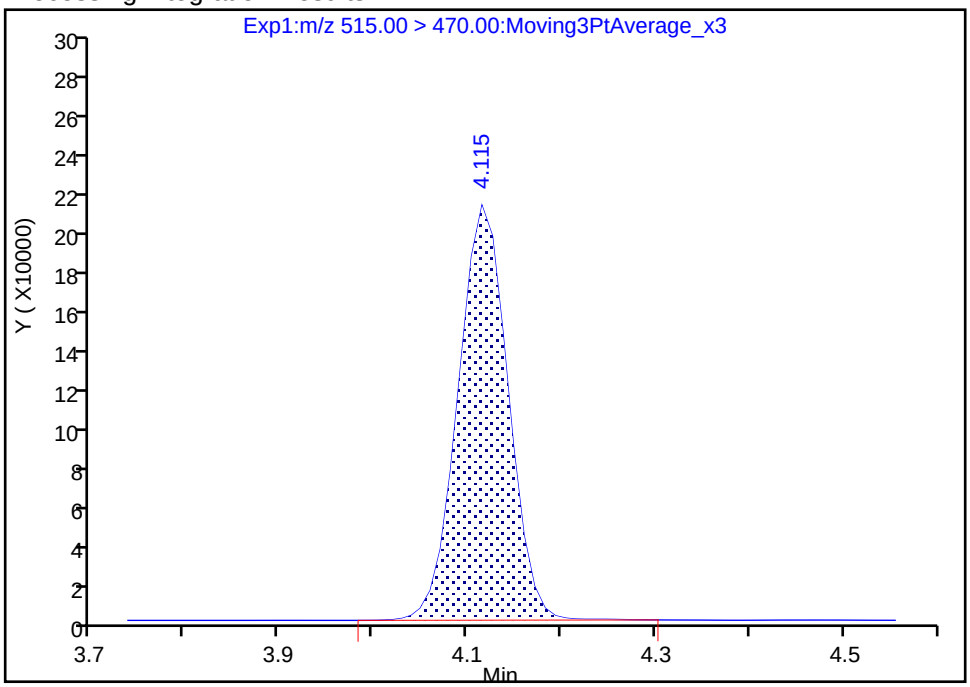
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## D 23 13C2 PFDA, CAS: STL00996

Signal: 1

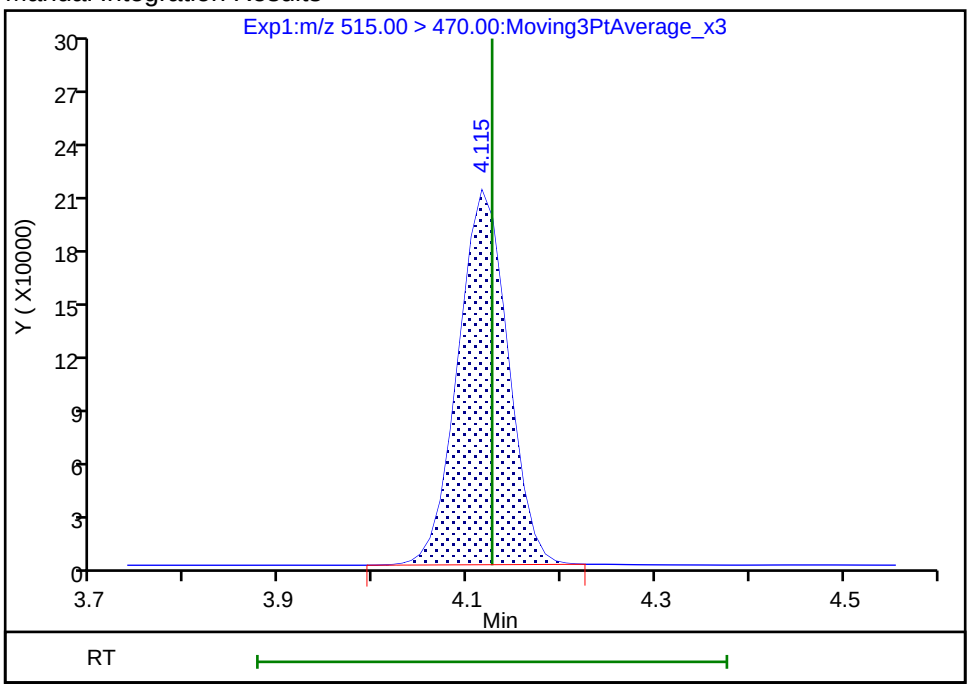
Processing Integration Results

RT: 4.12
Area: 775506
Amount: 1.070300
Amount Units: ng/ml




Manual Integration Results

RT: 4.12
Area: 772002
Amount: 1.065464
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:49:16
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

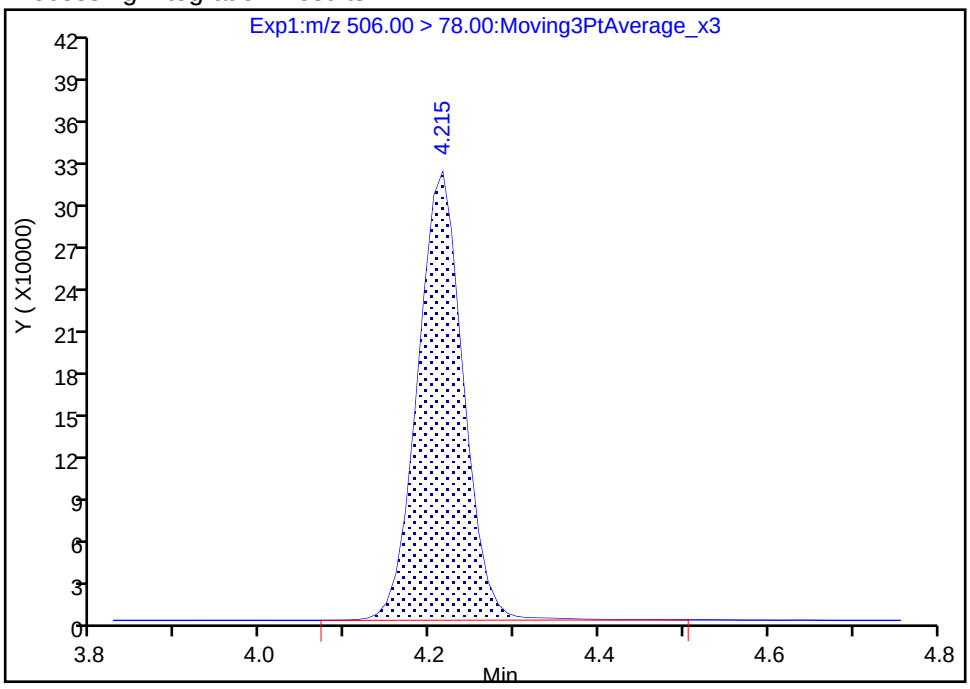
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## D 21 13C8 FOSA, CAS: STL01056

Signal: 1

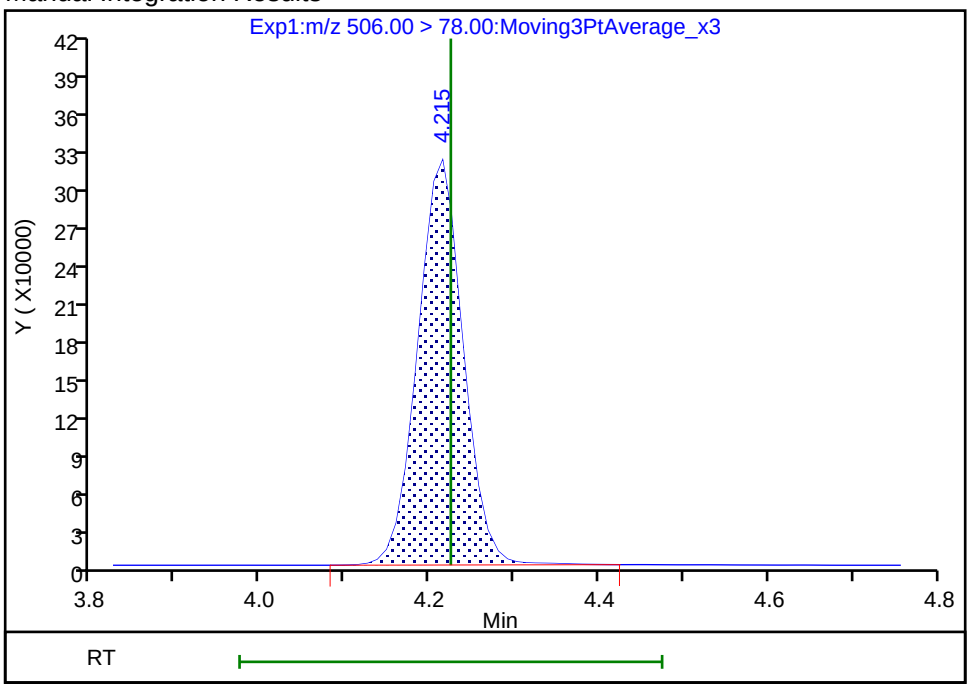
Processing Integration Results

RT: 4.21
Area: 1176805
Amount: 1.104900
Amount Units: ng/ml




Manual Integration Results

RT: 4.21
Area: 1174373
Amount: 1.102616
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:49:31
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

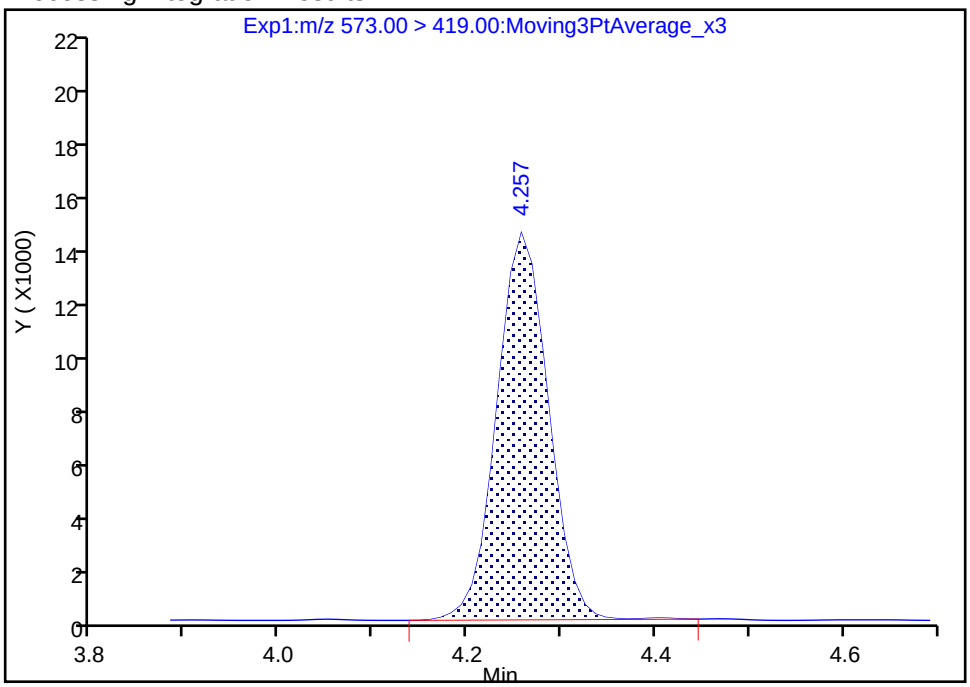
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d | | | | |
| Injection Date: | 12-Mar-2021 15:03:25 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L5 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 23 | Worklist Smp#: | 23 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

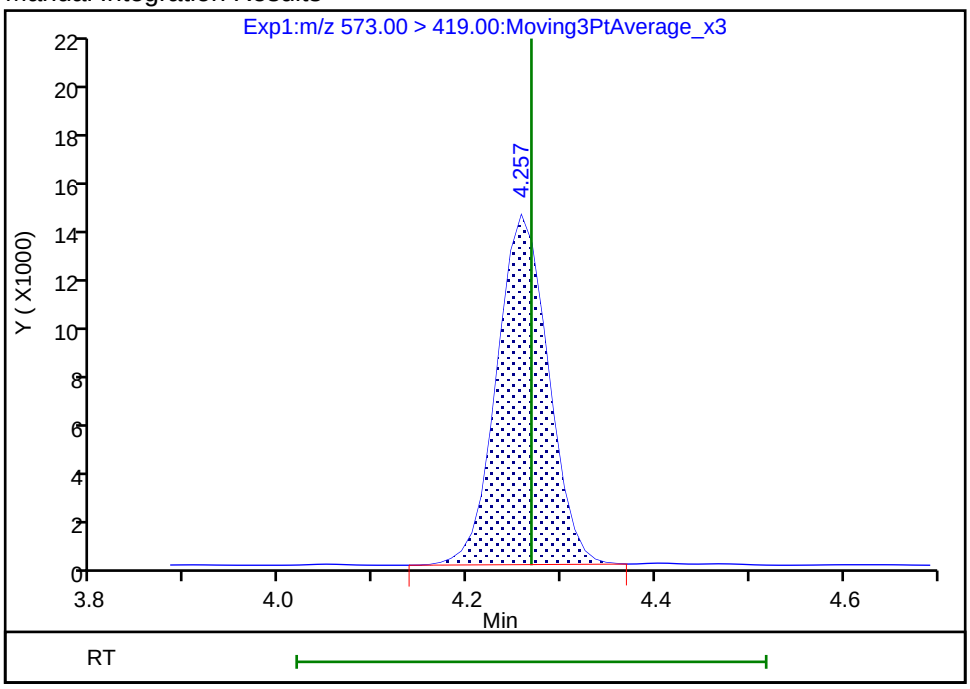
Processing Integration Results

RT: 4.26
Area: 55531
Amount: 1.056641
Amount Units: ng/ml




Manual Integration Results

RT: 4.26
Area: 55323
Amount: 1.052683
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:49:38

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

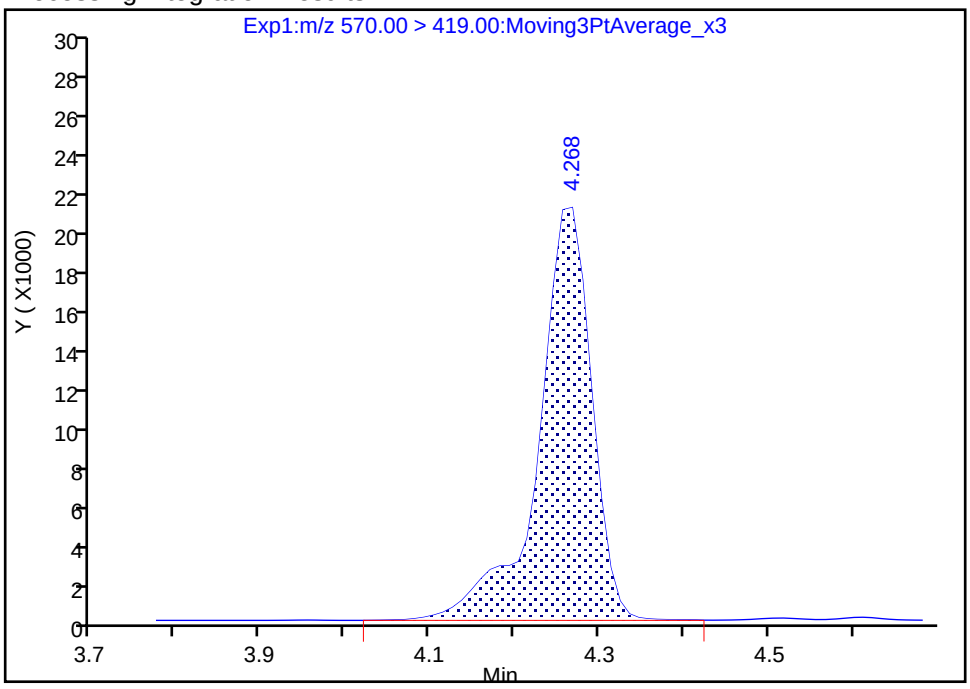
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

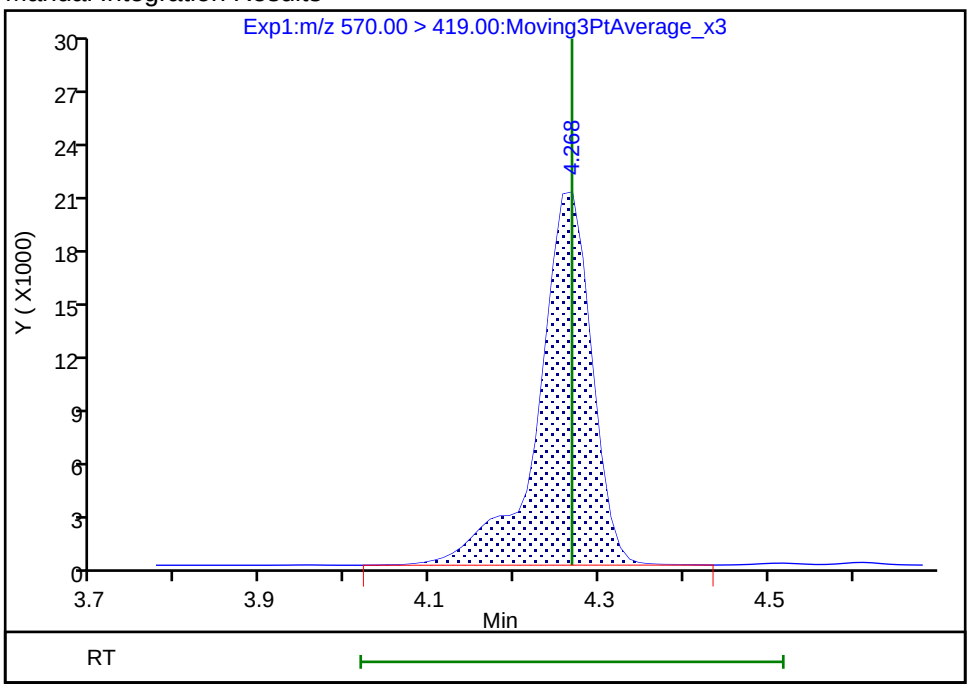
Processing Integration Results

RT: 4.27
Area: 93531
Amount: 2.384220
Amount Units: ng/ml




Manual Integration Results

RT: 4.27
Area: 93414
Amount: 2.381237
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:57:58
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

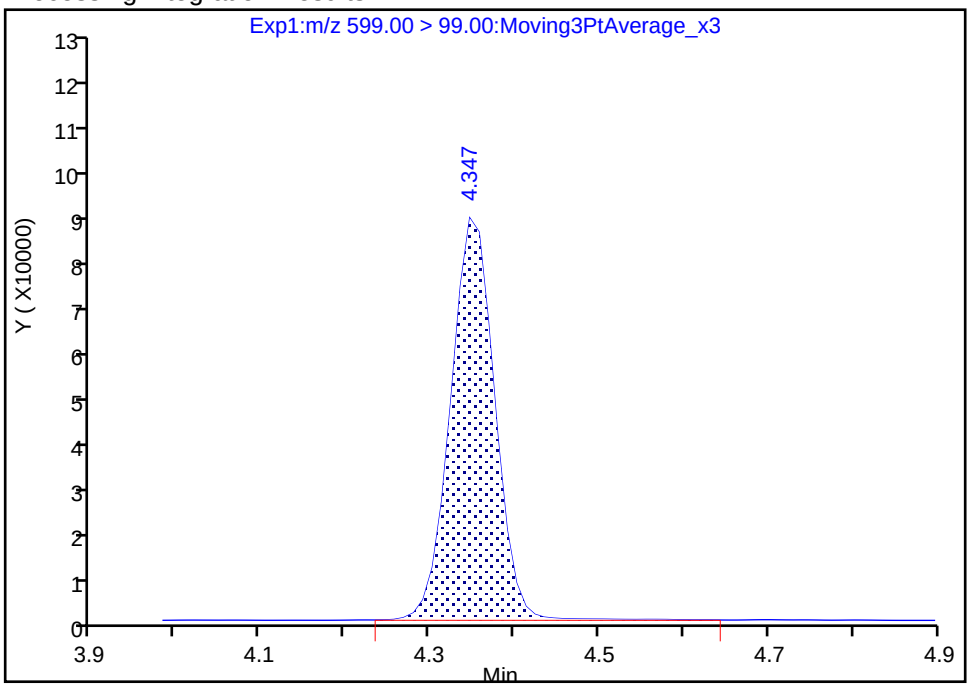
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d | | | | |
| Injection Date: | 12-Mar-2021 15:03:25 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L5 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 23 | Worklist Smp#: | 23 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

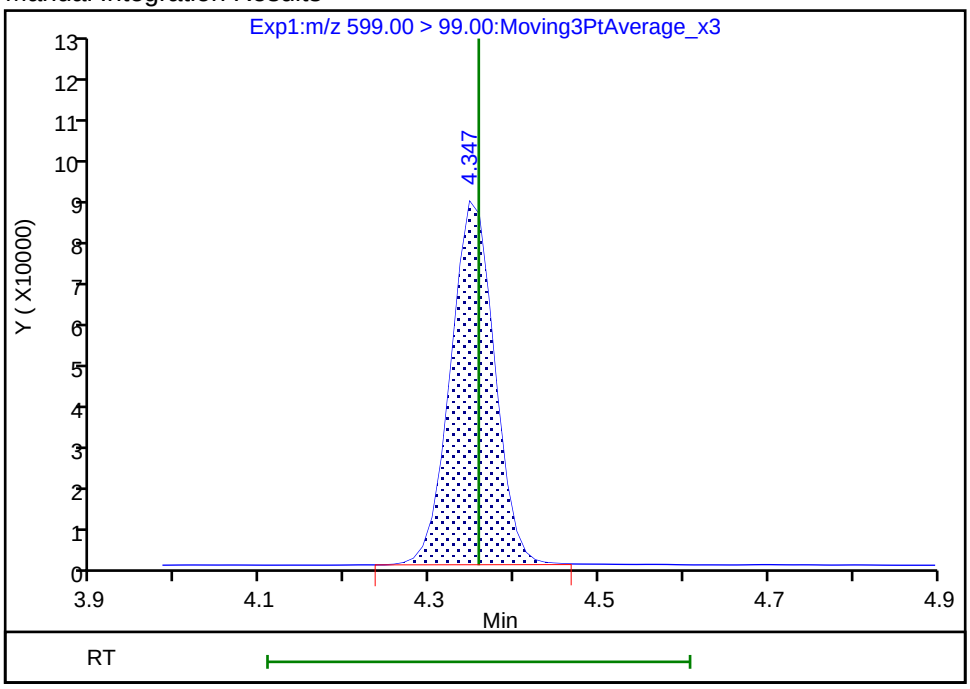
Processing Integration Results

RT: 4.35
Area: 308344
Amount: 2.478679
Amount Units: ng/ml




Manual Integration Results

RT: 4.35
Area: 305085
Amount: 2.478679
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:58:29

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

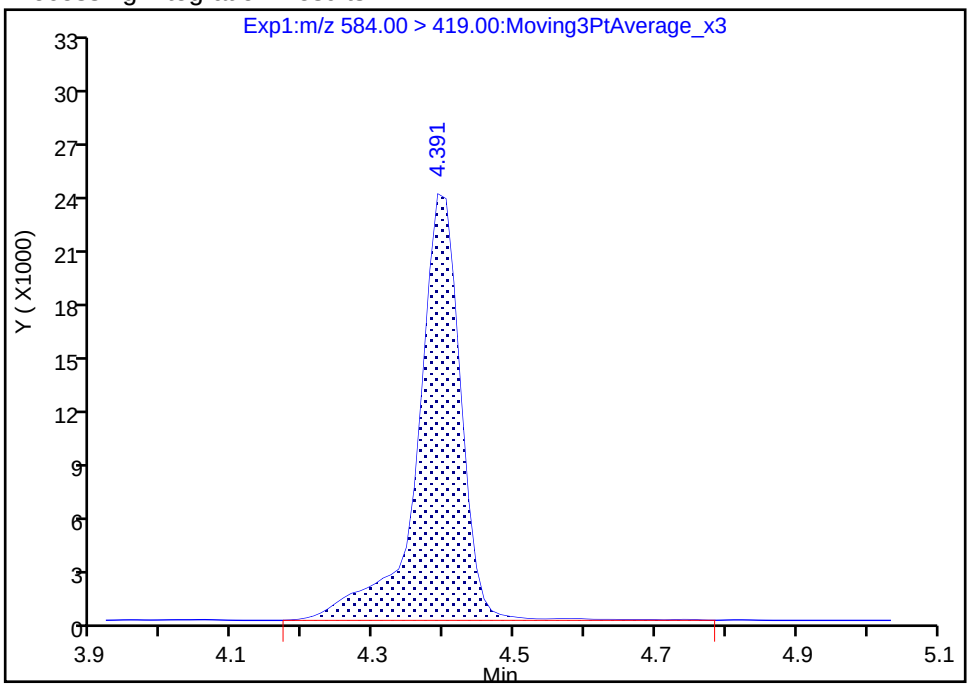
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

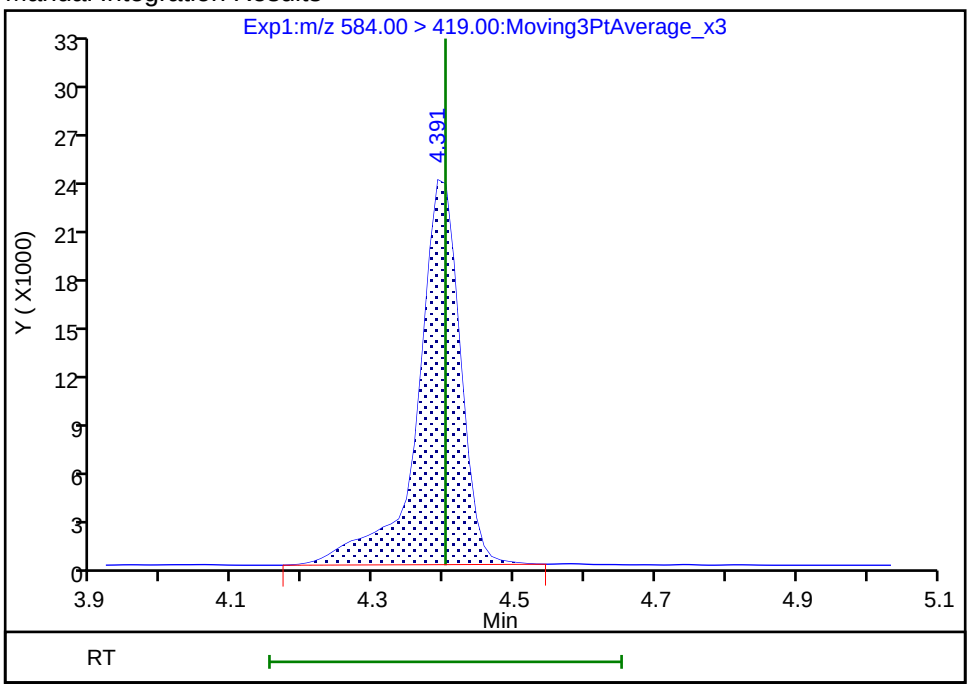
Processing Integration Results

RT: 4.39
Area: 102088
Amount: 2.721131
Amount Units: ng/ml




Manual Integration Results

RT: 4.39
Area: 100847
Amount: 2.688053
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:58:49
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

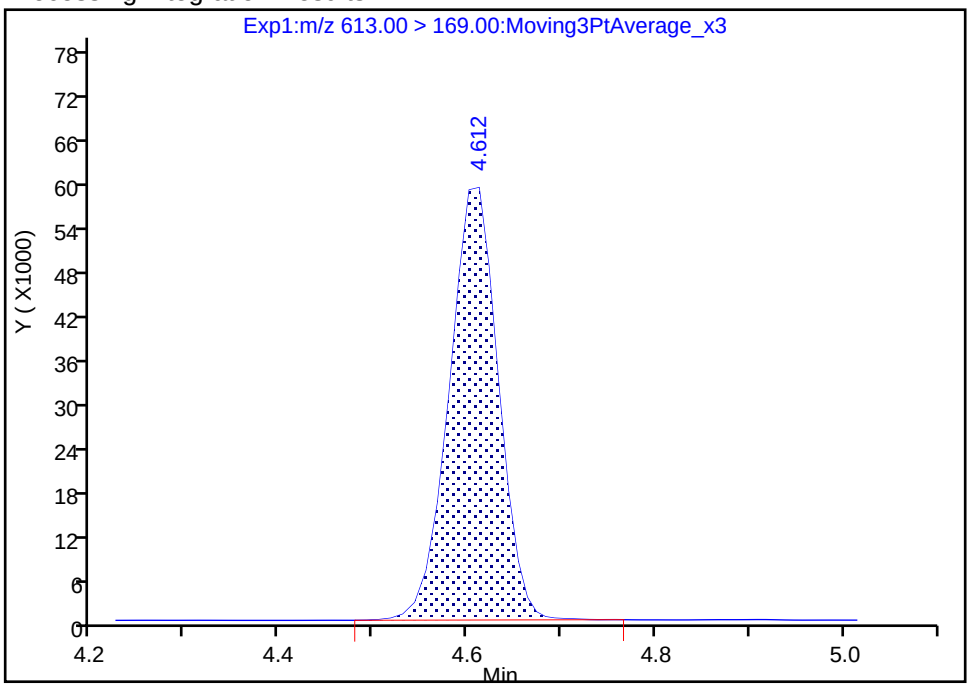
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

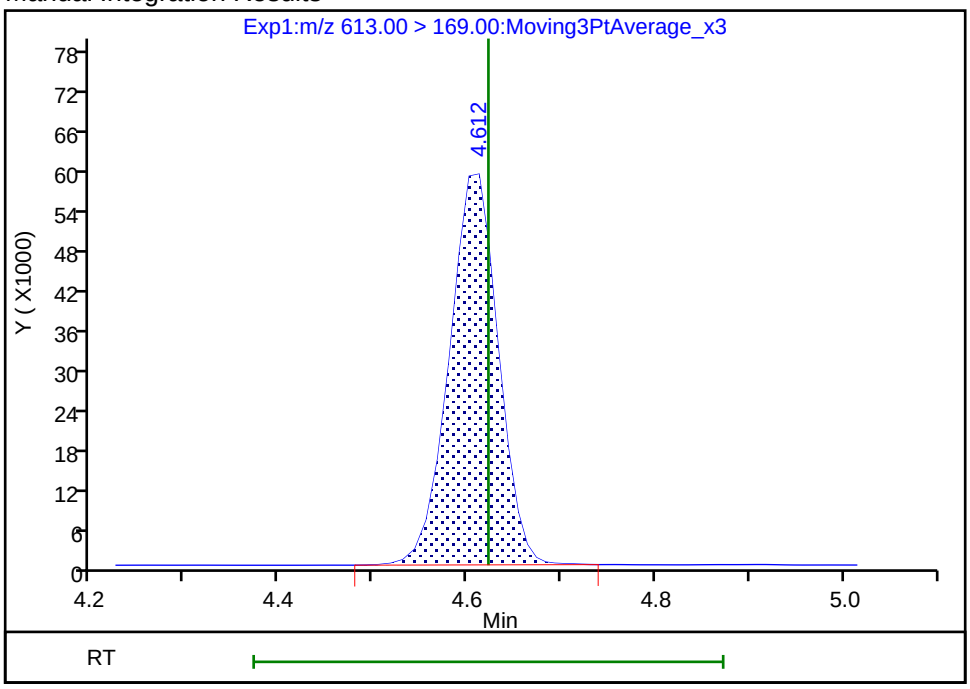
Processing Integration Results

RT: 4.61
Area: 213778
Amount: 2.430724
Amount Units: ng/ml




Manual Integration Results

RT: 4.61
Area: 213702
Amount: 2.430724
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:59:17
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

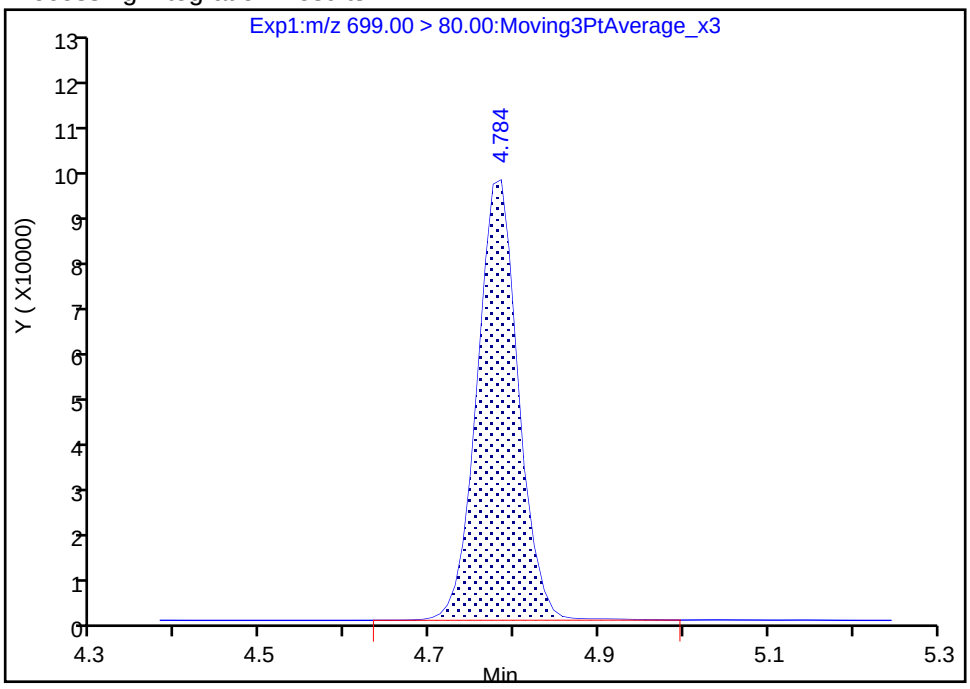
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d | | | | |
| Injection Date: | 12-Mar-2021 15:03:25 | Instrument ID: | LC812 | | |
| Lims ID: | CCV L5 | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 23 | Worklist Smp#: | 23 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 75 Perfluorododecanesulfonic acid (, CAS: 79780-39-5

Signal: 1

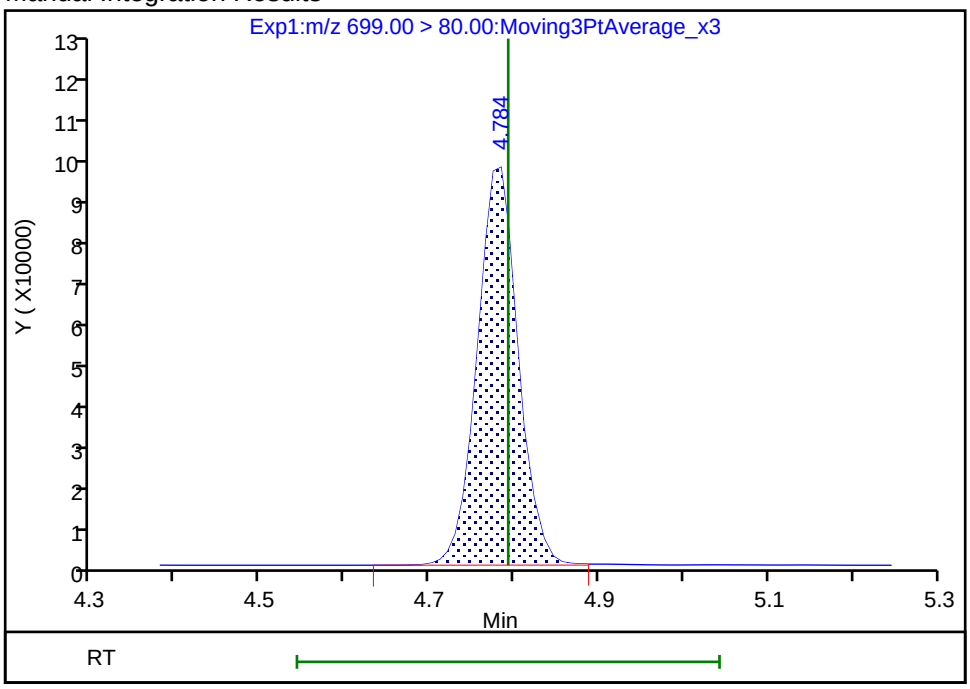
Processing Integration Results

RT: 4.78
Area: 314066
Amount: 2.394710
Amount Units: ng/ml




Manual Integration Results

RT: 4.78
Area: 313353
Amount: 2.389274
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 14:59:39

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

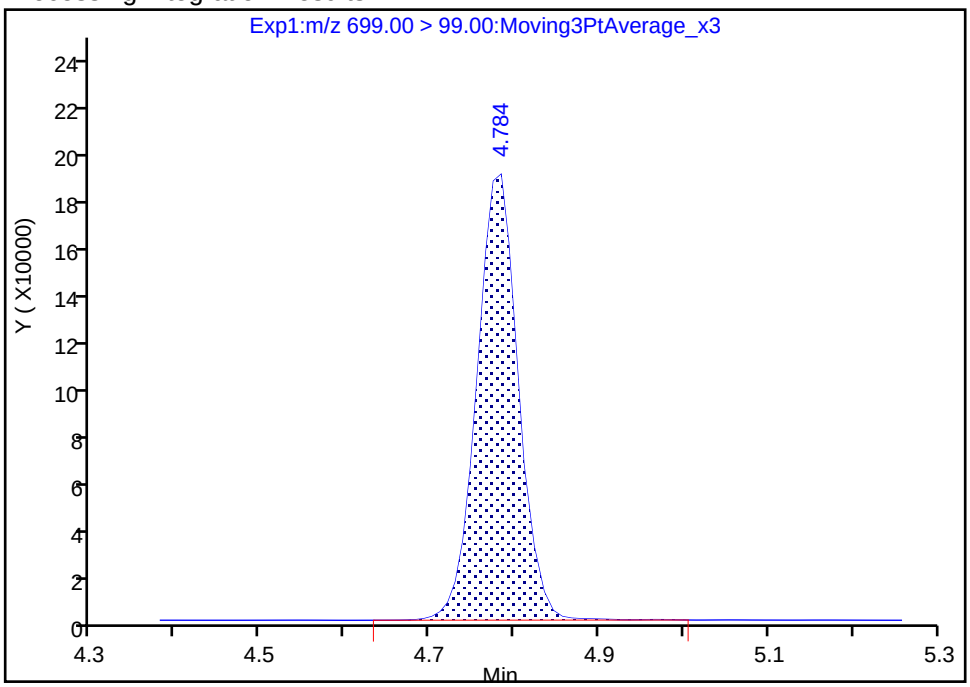
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B23.d
Injection Date: 12-Mar-2021 15:03:25 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 75 Perfluorododecanesulfonic acid (, CAS: 79780-39-5

Signal: 2

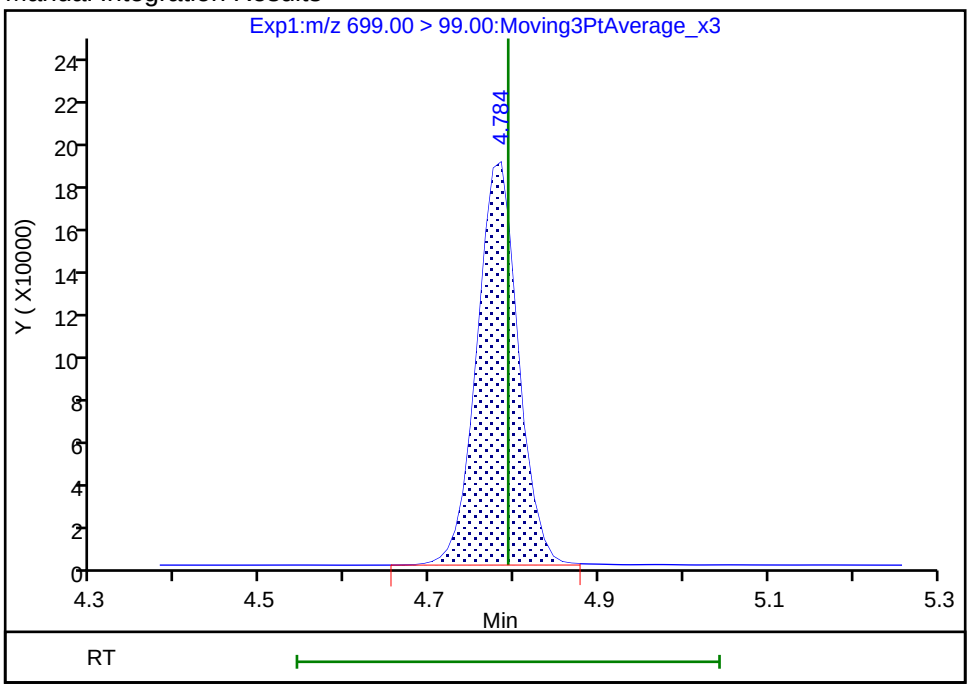
Processing Integration Results

RT: 4.78
Area: 623739
Amount: 2.394710
Amount Units: ng/ml




Manual Integration Results

RT: 4.78
Area: 622197
Amount: 2.389274
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 15:00:37
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID:  Lab Sample ID: MB 200-164654/1-A

Matrix: Water  Lab File ID: PA210312B05.d

Analysis Method: 537 (modified)  Date Collected:

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 250(mL)  Date Analyzed: 03/12/2021 12:34

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 375-22-4 | Perfluorobutanoic acid (PFBA) | 1.13 | U | 5.00 | 1.13 |
| 2706-90-3 | Perfluoropentanoic acid (PFPeA) | 1.08 | U | 2.00 | 1.08 |
| 307-24-4 | Perfluorohexanoic acid (PFHxA) | 0.83 | U | 2.00 | 0.83 |
| 375-85-9 | Perfluoroheptanoic acid (PFHpA) | 0.46 | U | 2.00 | 0.46 |
| 335-67-1 | Perfluorooctanoic acid (PFOA) | 1.615 | J | 2.00 | 0.98 |
| 375-95-1 | Perfluorononanoic acid (PFNA) | 0.58 | U | 2.00 | 0.58 |
| 335-76-2 | Perfluorodecanoic acid (PFDA) | 0.46 | U | 2.00 | 0.46 |
| 2058-94-8 | Perfluoroundecanoic acid (PFUnA) | 0.73 | U | 2.00 | 0.73 |
| 307-55-1 | Perfluorododecanoic acid (PFDoA) | 0.46 | U | 2.00 | 0.46 |
| 72629-94-8 | Perfluorotridecanoic acid (PFTriA) | 0.43 | U | 2.00 | 0.43 |
| 376-06-7 | Perfluorotetradecanoic acid (PFTeA) | 0.59 | U | 2.00 | 0.59 |
| 375-73-5 | Perfluorobutanesulfonic acid (PFBS) | 0.63 | U | 2.00 | 0.63 |
| 355-46-4 | Perfluorohexanesulfonic acid (PFHxS) | 0.67 | U | 2.00 | 0.67 |
| 375-92-8 | Perfluoroheptanesulfonic Acid (PFHpS) | 0.39 | U | 2.00 | 0.39 |
| 1763-23-1 | Perfluorooctanesulfonic acid (PFOS) | 0.87 | U | 2.00 | 0.87 |
| 335-77-3 | Perfluorodecanesulfonic acid (PFDS) | 0.48 | U | 2.00 | 0.48 |
| 754-91-6 | Perfluorooctanesulfonamide (PFOSA) | 0.57 | U | 2.00 | 0.57 |
| 2355-31-9 | N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.79 | U | 5.00 | 0.79 |
| 2991-50-6 | N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 0.93 | U | 5.00 | 0.93 |
| 27619-97-2 | 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 0.72 | U | 5.00 | 0.72 |
| 39108-34-4 | 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 0.66 | U | 2.00 | 0.66 |

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID:  Lab Sample ID: MB 200-164654/1-A

Matrix: Water  Lab File ID: PA210312B05.d

Analysis Method: 537 (modified)  Date Collected:

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 250(mL)  Date Analyzed: 03/12/2021 12:34

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| STL00994 | 18O2 PFHxS | 112 | | 50-150 |
| STL01892 | 13C4 PFHpA | 111 | | 50-150 |
| STL00990 | 13C4 PFOA | 108 | | 50-150 |
| STL00991 | 13C4 PFOS | 110 | | 50-150 |
| STL00995 | 13C5 PFNA | 105 | | 50-150 |
| STL00992 | 13C4 PFBA | 113 | | 25-150 |
| STL00993 | 13C2 PFHxA | 117 | | 50-150 |
| STL00996 | 13C2 PFDA | 99 | | 50-150 |
| STL00997 | 13C2 PFUnA | 74 | | 50-150 |
| STL00998 | 13C2 PFDoA | 63 | | 50-150 |
| STL01056 | 13C8 FOSA | 68 | | 25-150 |
| STL01893 | 13C5 PFPeA | 116 | | 25-150 |
| STL02116 | 13C2 PFTeDA | 60 | | 50-150 |
| STL02118 | d3-NMeFOSAA | 83 | | 50-150 |
| STL02117 | d5-NEtFOSAA | 74 | | 50-150 |
| STL02279 | M2-6:2 FTS | 109 | | 25-150 |
| STL02280 | M2-8:2 FTS | 100 | | 25-150 |
| STL02337 | 13C3 PFBS | 111 | | 50-150 |

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d
Lims ID: MB 200-164654/1-A
Client ID:
Sample Type: MB
Inject. Date: 12-Mar-2021 12:34:17 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: MB 200-164654/1-A
Misc. Info.: 200-0045149-005 Plate: 1 Rack: 2
Operator ID: lc812tech Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 15-Mar-2021 17:46:50 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1650

First Level Reviewer: nampitakw Date: 15-Mar-2021 08:07:10
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.082 | 2.091 | -0.009 | 0.598 | 1450544 | 1.42 | | 113 | 12264 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | M |
| 212.90 > 169.00 | 2.082 | 2.091 | -0.009 | 1.000 | 13915 | 0.0120 | | | 2.9 | M |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.400 | 2.413 | -0.013 | 0.689 | 1070086 | 1.45 | | 116 | 3550 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | M |
| 262.90 > 219.00 | 2.387 | 2.413 | -0.026 | 0.995 | 6212 | 0.006553 | | | 0.3 | M |
| D 47 13C3 PFBS | | | | | | | | | | M |
| 301.90 > 80.00 | 2.413 | 2.426 | -0.013 | 0.693 | 1262547 | 1.30 | | 111 | 237742 | M |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | M |
| 298.90 > 80.00 | 2.426 | 2.439 | -0.013 | 1.005 | 3862 | 0.003143 | Target=2.21 | | 5.9 | M |
| 298.90 > 99.00 | 2.426 | 2.439 | -0.013 | 1.005 | 1750 | | 2.21(1.11-3.32) | | 1.4 | M |
| D 60 M2-4:2 FTS | | | | | | | | | | M |
| 329.00 > 81.00 | 2.722 | 2.734 | -0.012 | 0.781 | 103800 | 1.28 | | 109 | 145 | M |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | M |
| 327.00 > 307.00 | 2.722 | 2.734 | -0.012 | 1.000 | 337 | 0.002067 | | | 9.8 | M |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.758 | 2.770 | -0.012 | 0.792 | 1132067 | 1.46 | | 117 | 4786 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | M |
| 313.00 > 269.00 | 2.758 | 2.770 | -0.012 | 1.000 | 4527 | 0.004576 | Target=12.83 | | 0.8 | M |
| 313.00 > 119.00 | 2.758 | 2.770 | -0.012 | 1.000 | 522 | | 8.67(6.42-19.25) | | 0.9 | M |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | M |
| 349.00 > 80.00 | 2.758 | 2.770 | -0.012 | 0.884 | 1255 | 0.001181 | Target=3.35 | | 3.8 | M |
| 349.00 > 99.00 | 2.770 | 2.770 | 0.0 | 0.888 | 503 | | 2.50(1.67-5.02) | | 1.2 | M |
| D 64 13C3 HFPO-DA | | | | | | | | | | |
| 332.10 > 287.00 | 2.868 | 2.880 | -0.012 | 0.823 | 132803 | 0.9719 | | 77.8 | 959 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.121 | 3.132 | -0.011 | 1.000 | 4211 | 0.004414 | Target=4.15 | | 20.3 | M |
| 399.00 > 99.00 | 3.121 | 3.132 | -0.011 | 1.000 | 1068 | | 3.94(2.08-6.23) | | 1.5 | M |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.121 | 3.132 | -0.011 | 0.896 | 957219 | 1.32 | | 112 | 2146 | |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.121 | 3.143 | -0.022 | 0.896 | 1027604 | 1.38 | | 111 | 3144 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | M |
| 363.00 > 319.00 | 3.121 | 3.143 | -0.022 | 1.000 | 6901 | 0.007686 | Target=3.66 | | 1.9 | M |
| 363.00 > 169.00 | 3.121 | 3.143 | -0.022 | 1.000 | 1864 | | 3.70(1.83-5.49) | | 5.4 | M |
| 77 DONA | | | | | | | | | | M |
| 377.00 > 251.00 | 3.164 | 3.175 | -0.011 | 0.834 | 2379 | 0.001293 | Target=2.43 | | 5.0 | |
| 377.00 > 85.00 | 3.175 | 3.175 | 0.0 | 0.837 | 804 | | 2.96(1.22-3.65) | | 1.9 | M |
| D 12 M2-6:2 FTS | | | | | | | | | | M |
| 429.00 > 81.00 | 3.474 | 3.492 | -0.018 | 0.997 | 116940 | 1.29 | | 109 | 502 | M |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | M |
| 427.00 > 407.00 | 3.474 | 3.492 | -0.018 | 1.000 | 363 | 0.003314 | | | 10.2 | M |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.483 | 3.501 | -0.018 | 1.000 | 1016355 | 1.35 | | 108 | 4000 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.483 | 3.501 | -0.018 | | 953207 | 1.25 | | | 2867 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | M |
| 413.00 > 369.00 | 3.483 | 3.501 | -0.018 | 1.000 | 35588 | 0.0404 | Target=2.58 | | 9.7 | M |
| 413.00 > 169.00 | 3.483 | 3.501 | -0.018 | 1.000 | 15575 | | 2.28(1.29-3.87) | | 36.3 | M |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.794 | 3.814 | -0.020 | 1.000 | 3443 | 0.005449 | Target=5.65 | | 1.4 | M |
| 499.00 > 99.00 | 3.804 | 3.814 | -0.010 | 1.003 | 953 | | 3.61(2.82-8.47) | | 1.7 | M |
| D 18 13C4 PFOS | | | | | | | | | | |
| 503.00 > 80.00 | 3.794 | 3.814 | -0.020 | 1.089 | 656576 | 1.32 | | 110 | 3642 | |
| D 19 13C5 PFNA | | | | | | | | | | M |
| 468.00 > 423.00 | 3.814 | 3.824 | -0.010 | 1.095 | 872768 | 1.31 | | 105 | 2728 | M |
| 20 Perfluorononanoic acid | | | | | | | | | | RM |
| 463.00 > 419.00 | 3.814 | 3.824 | -0.010 | 1.000 | 3499 | 0.004528 | Target=7.44 | | 0.7 | RM |
| 463.00 > 169.00 | 3.825 | 3.824 | 0.0 | 1.003 | 136 | | 25.73(3.72-11.16) | | 1.9 | M |
| 69 9-Chlorohexadecafluoro-3-oxanona | | | | | | | | | | M |
| 531.00 > 351.00 | 3.964 | 3.973 | -0.009 | 1.045 | 475 | 0.000674 | | | 2.9 | M |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.115 | 4.126 | -0.011 | 1.181 | 789174 | 1.24 | | 99.2 | 3062 | |
| 24 Perfluorodecanoic acid | | | | | | | | | | M |
| 513.00 > 469.00 | 4.126 | 4.126 | 0.0 | 1.003 | 1365 | 0.002098 | Target=9.29 | | 1.3 | M |
| 513.00 > 169.00 | 4.115 | 4.126 | -0.011 | 1.000 | 141 | | 9.68(4.64-13.93) | | 1.5 | M |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.115 | 4.137 | -0.022 | 1.181 | 111771 | 1.20 | | 99.9 | 618 | |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | M |
| 527.00 > 507.00 | 4.126 | 4.137 | -0.011 | 1.003 | 134 | 0.002111 | | | 4.6 | M |
| D 21 13C8 FOSA | | | | | | | | | | |
| 506.00 > 78.00 | 4.215 | 4.225 | -0.010 | 1.210 | 799855 | 0.8549 | | 68.4 | 2376 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 22 Perfluorooctanesulfonamide | | | | | | | | | | M |
| 498.00 > 78.00 | 4.215 | 4.225 | -0.010 | 1.000 | 5529 | 0.008622 | | | 37.4 | M |
| D 27 d3-NMeFOSAA | | | | | | | | | | M |
| 573.00 > 419.00 | 4.257 | 4.268 | -0.011 | 1.222 | 47618 | 1.03 | | 82.5 | 796 | M |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | M |
| 570.00 > 419.00 | 4.246 | 4.268 | -0.022 | 0.997 | 167 | 0.004946 | | | 0.9 | M |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | RM |
| 599.00 > 80.00 | 4.347 | 4.358 | -0.011 | 1.146 | 407 | 0.001083 | Target=2.80 | | 8.1 | RM |
| 599.00 > 99.00 | 4.347 | 4.358 | -0.011 | 1.146 | 386 | | 1.05(1.40-4.19) | | 2.9 | M |
| D 30 13C2 PFUnA | | | | | | | | | | M |
| 565.00 > 520.00 | 4.369 | 4.391 | -0.022 | 1.254 | 483704 | 0.9252 | | 74.0 | 3636 | M |
| 31 Perfluoroundecanoic acid | | | | | | | | | | RM |
| 563.00 > 519.00 | 4.380 | 4.391 | -0.011 | 1.003 | 796 | 0.002017 | Target=8.12 | | 0.9 | RM |
| 563.00 > 169.00 | 4.369 | 4.391 | -0.022 | 1.000 | 201 | | 3.96(4.06-12.18) | | 3.3 | M |
| D 32 d5-NEtFOSAA | | | | | | | | | | M |
| 589.00 > 419.00 | 4.380 | 4.402 | -0.022 | 1.257 | 41035 | 0.9196 | | 73.6 | 406 | M |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.391 | 4.402 | -0.011 | 1.003 | 380 | 0.0125 | | | 6.1 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | M |
| 631.00 > 451.00 | 4.467 | 4.479 | -0.012 | 1.177 | 752 | 0.001028 | | | 18.5 | M |
| D 36 13C2 PFDoA | | | | | | | | | | |
| 615.00 > 570.00 | 4.601 | 4.622 | -0.021 | 1.321 | 432570 | 0.7838 | | 62.7 | 2894 | |
| 37 Perfluorododecanoic acid | | | | | | | | | | M |
| 613.00 > 569.00 | 4.601 | 4.622 | -0.021 | 1.000 | 1335 | 0.003508 | Target=6.91 | | 0.7 | M |
| 613.00 > 169.00 | 4.611 | 4.622 | -0.011 | 1.002 | 188 | | 7.10(3.45-10.36) | | 3.8 | M |
| 74 1H,1H,2H,2H-perfluorododecanesul | | | | | | | | | | M |
| 627.00 > 607.00 | 4.653 | 4.643 | 0.010 | 1.131 | 89 | 0.002723 | | | 3.6 | M |
| 41 Perfluorotridecanoic acid | | | | | | | | | | M |
| 663.00 > 619.00 | 4.801 | 4.822 | -0.021 | 1.043 | 847 | 0.002742 | Target=4.39 | | 0.6 | M |
| 663.00 > 169.00 | 4.810 | 4.822 | -0.012 | 1.045 | 152 | | 5.57(2.20-6.59) | | 3.7 | M |
| D 43 13C2 PFTeDA | | | | | | | | | | M |
| 715.00 > 670.00 | 5.004 | 5.014 | -0.010 | 1.437 | 306967 | 0.7520 | | 60.2 | 1995 | M |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | M |
| 713.00 > 169.00 | 5.004 | 5.014 | -0.010 | 1.000 | 174 | 0.003821 | Target=1.06 | | 4.9 | M |
| 713.00 > 219.00 | 5.004 | 5.014 | -0.010 | 1.000 | 292 | | 0.60(0.53-1.59) | | 12.3 | M |
| D 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.338 | 5.360 | -0.022 | 1.533 | 368170 | 0.8443 | | 67.5 | 2305 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | M |
| 813.00 > 769.00 | 5.338 | 5.360 | -0.022 | 1.000 | 3550 | -0.002312 | Target=3.84 | | 2.4 | |
| 813.00 > 169.00 | 5.338 | 5.360 | -0.022 | 1.000 | 931 | | 3.81(1.92-5.76) | | 31.5 | M |

## QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags
M - Manually Integrated

Report Date: 15-Mar-2021 17:46:53 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d

Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812

Lims ID: MB 200-164654/1-A

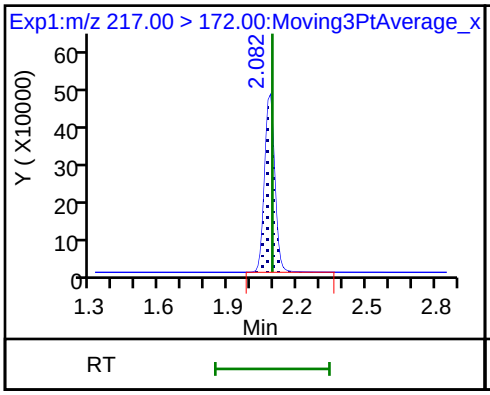
Client ID:

Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5

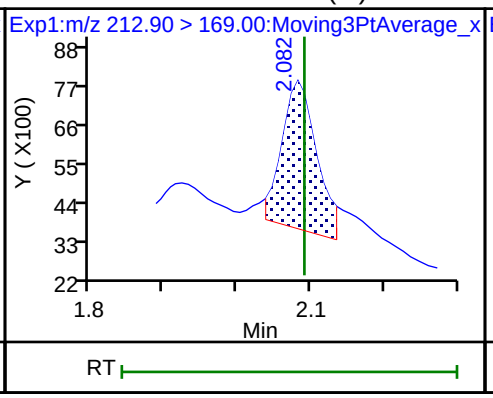
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

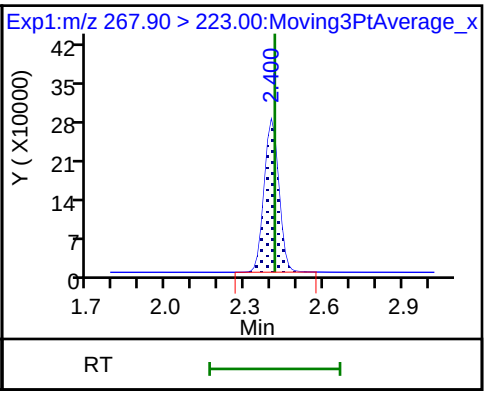
D 1 13C4 PFBA



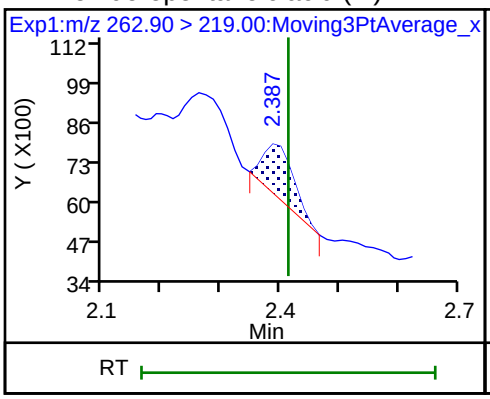

2 Perfluorobutanoic acid (M)



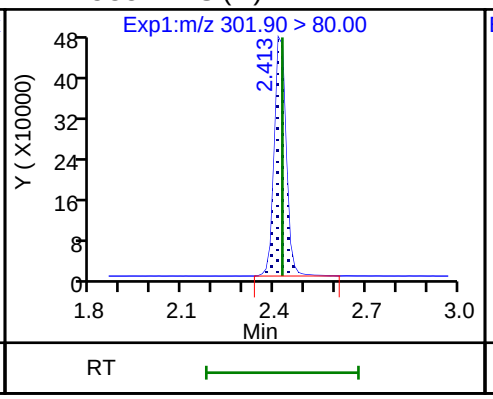

D 3 13C5 PFPeA



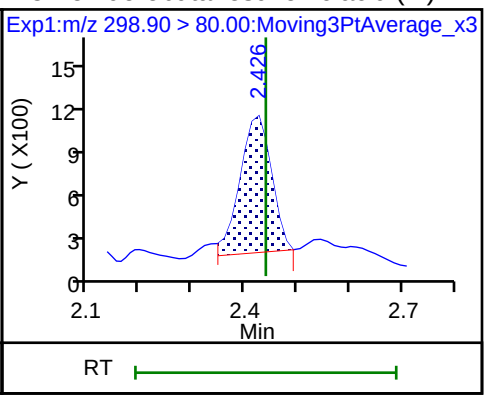

4 Perfluoropentanoic acid (M)



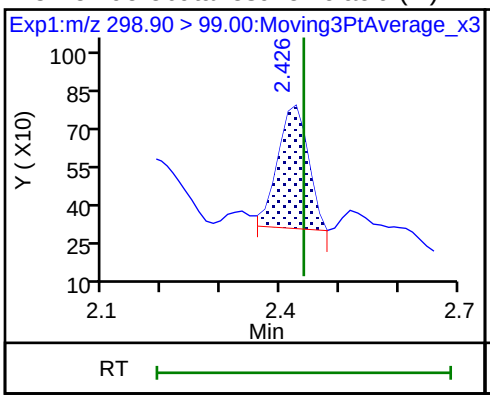

D 47 13C3 PFBS (M)



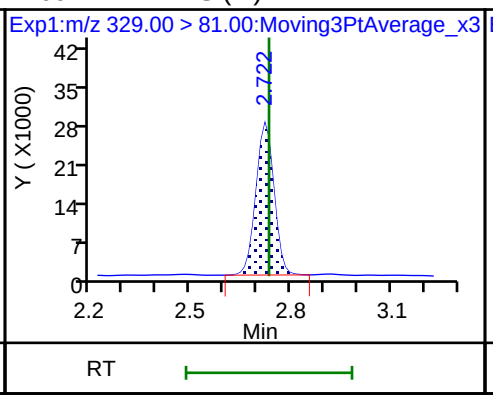

5 Perfluorobutanesulfonic acid (M)



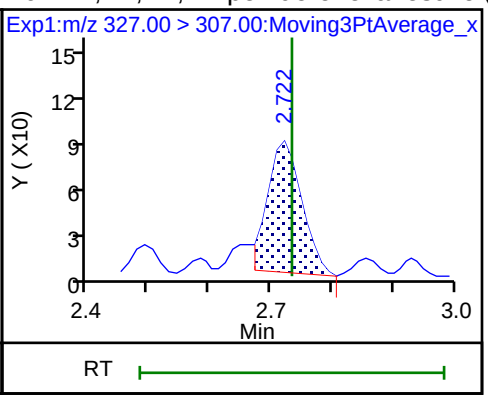

5 Perfluorobutanesulfonic acid (M)



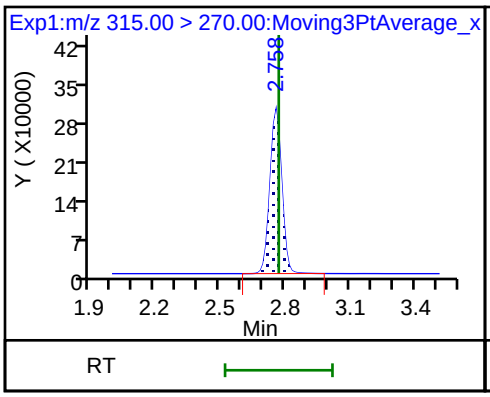

D 60 M2-4:2 FTS (M)



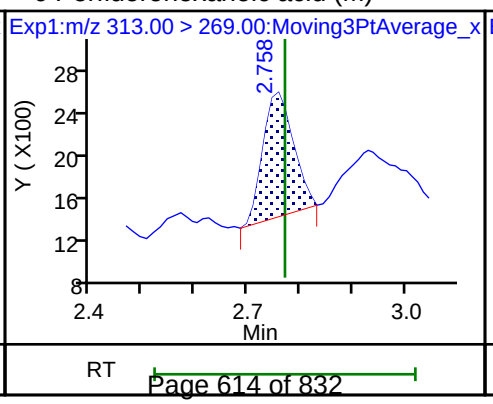

61 1H,1H,2H,2H-perfluorohexanesulfo (M)



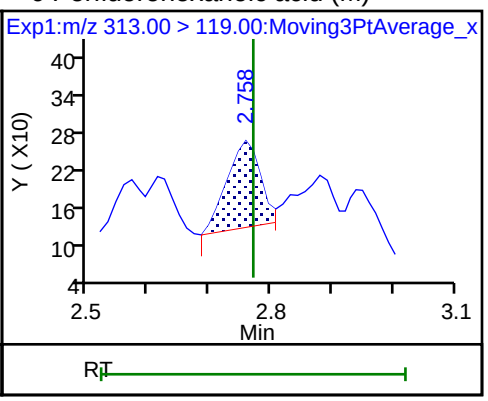

D 7 13C2 PFHxA



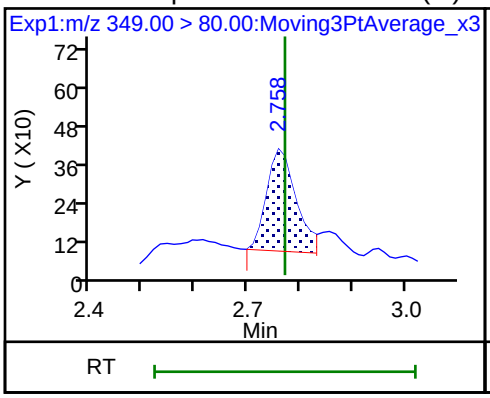

6 Perfluorohexanoic acid (M)



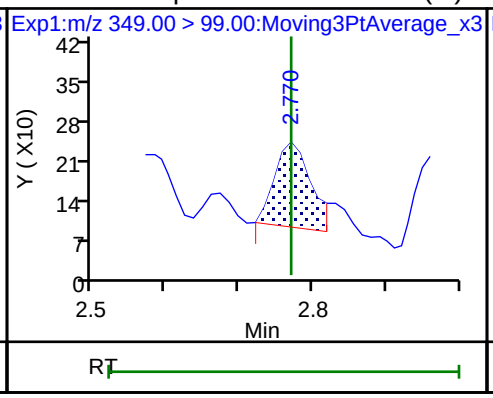

6 Perfluorohexanoic acid (M)



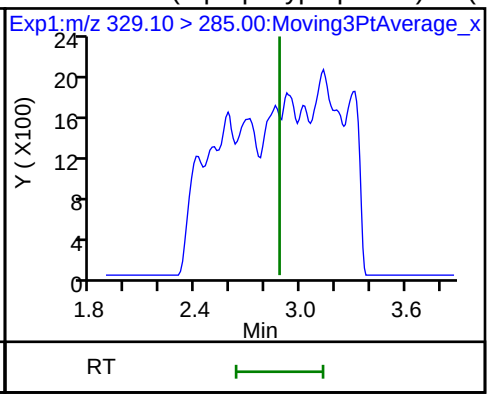
70 Perfluoropentanesulfonic acid (M)



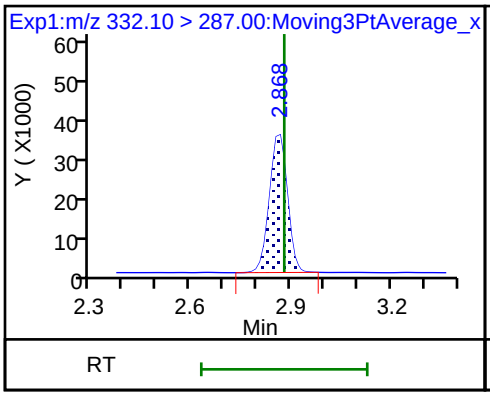

70 Perfluoropentanesulfonic acid (M)



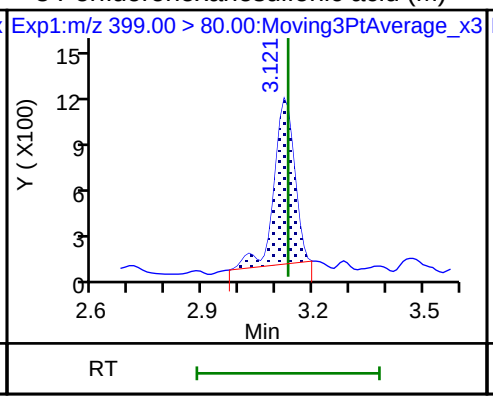

67 Perfluoro(2-propoxypropanoic) ac (ND)



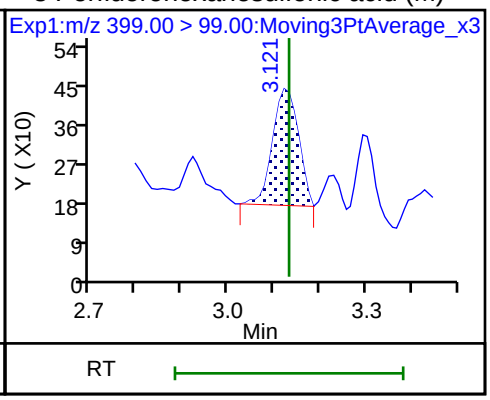

D 64 13C3 HFPO-DA



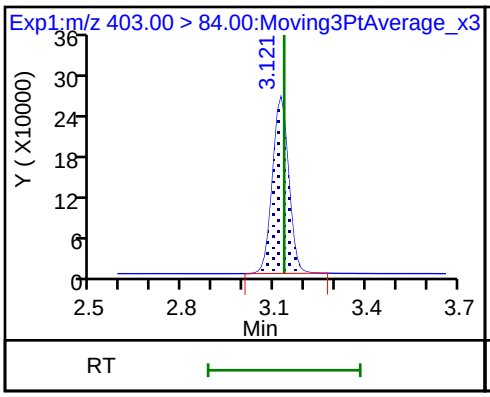

8 Perfluorohexanesulfonic acid (M)



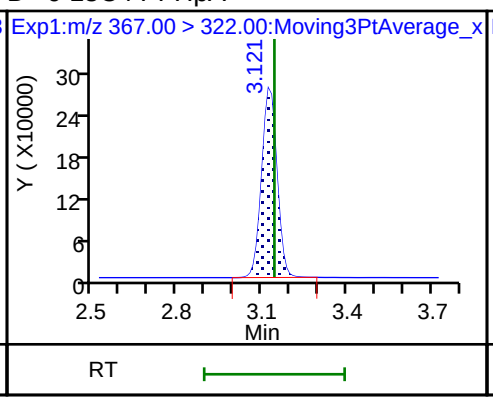

8 Perfluorohexanesulfonic acid (M)



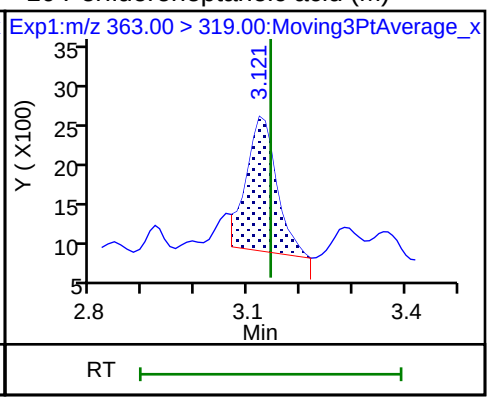

D 11 18O2 PFHxS



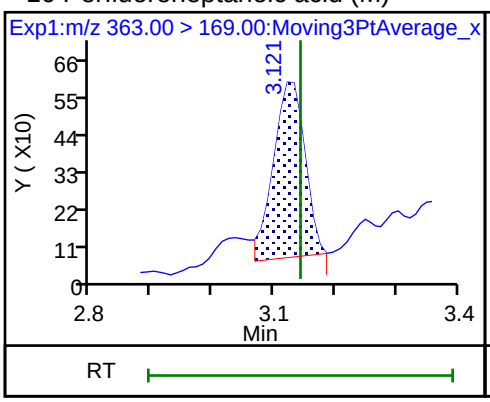

D 9 13C4 PFHpA



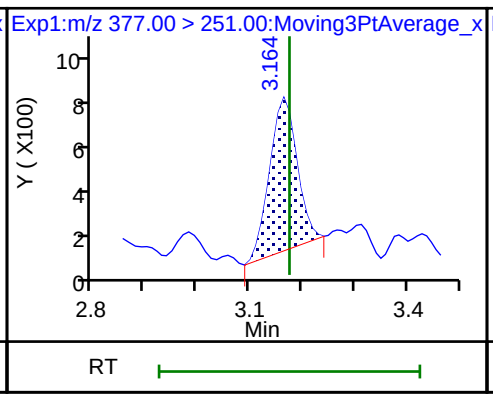

10 Perfluoroheptanoic acid (M)



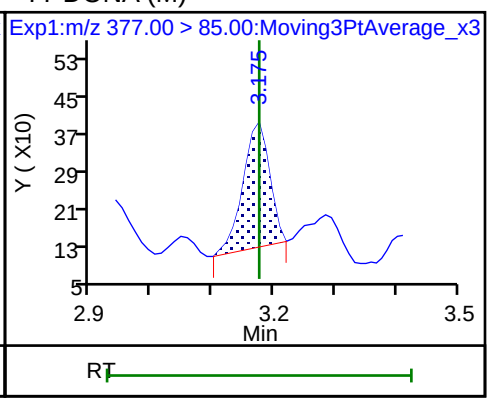

10 Perfluoroheptanoic acid (M)



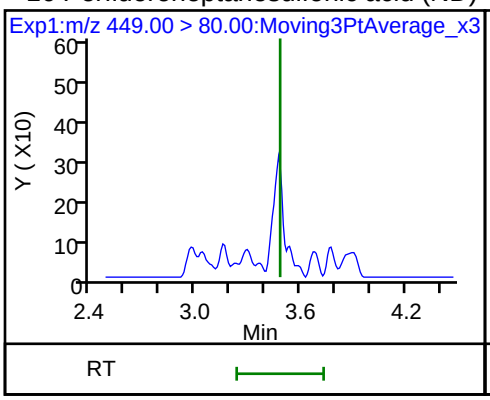

77 DONA



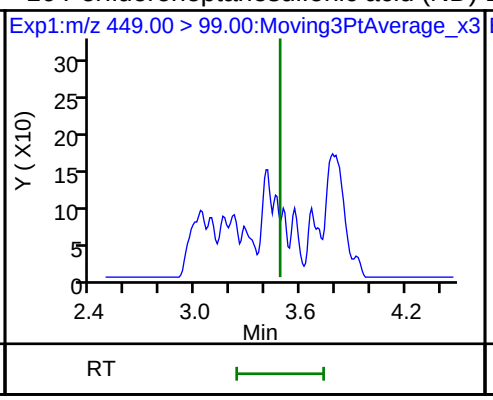

77 DONA (M)

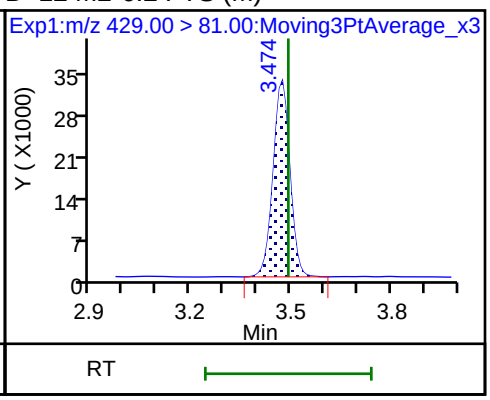


16 Perfluoroheptanesulfonic acid (ND)

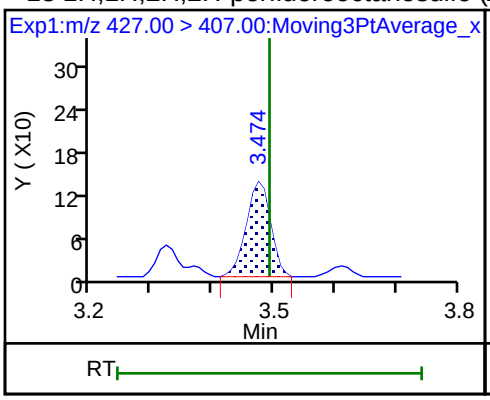



16 Perfluoroheptanesulfonic acid (ND) D 12 M2-6:2 FTS (M)

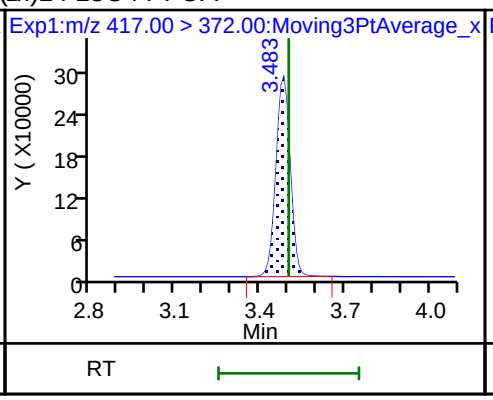


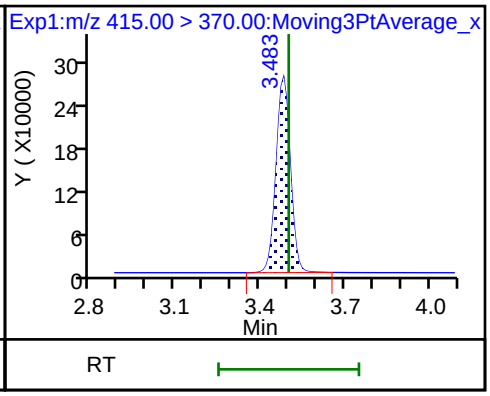

13 1H,1H,2H,2H-perfluorooctanesulfo (M)



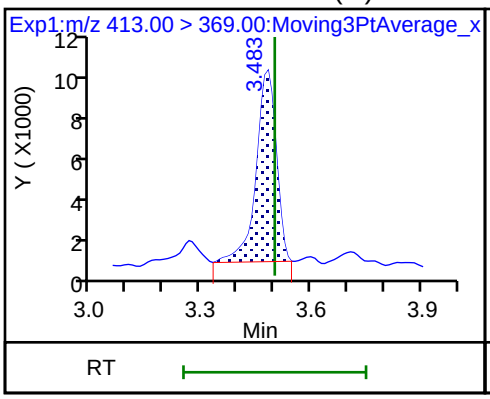

D 14 13C4 PFOA



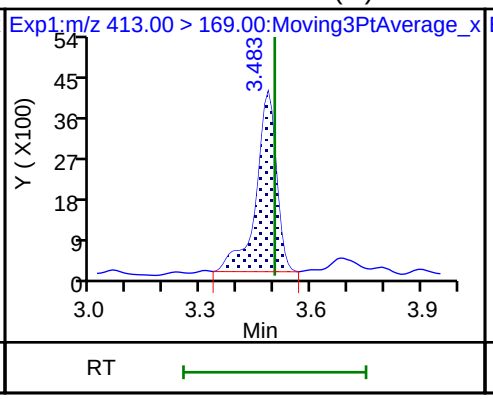

* 62 13C2 PFOA



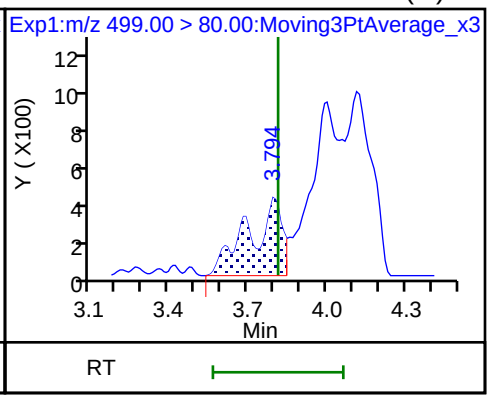

15 Perfluorooctanoic acid (M)



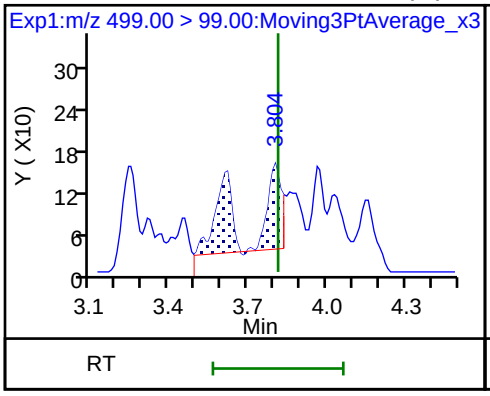

15 Perfluorooctanoic acid (M)



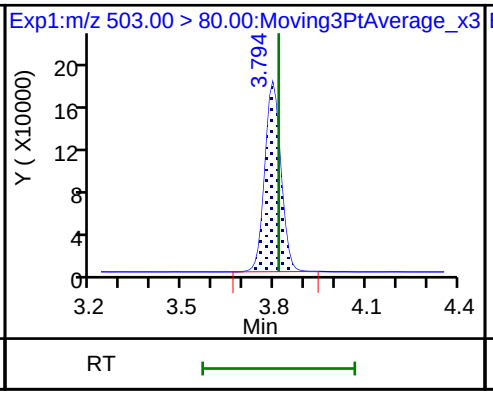

17 Perfluorooctanesulfonic acid (M)



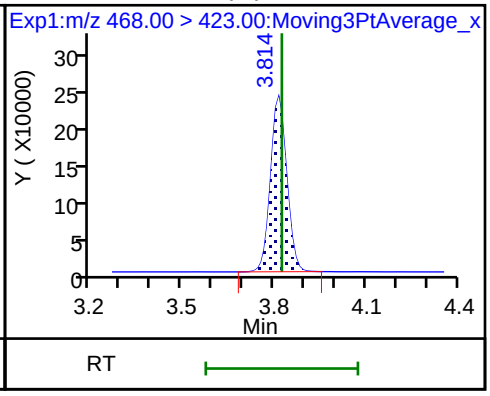

17 Perfluorooctanesulfonic acid (M)



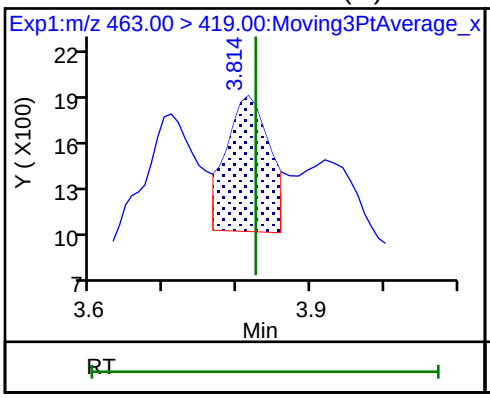

D 18 13C4 PFOS



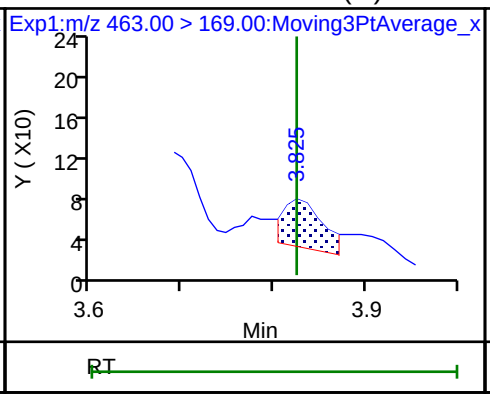

D 19 13C5 PFNA (M)



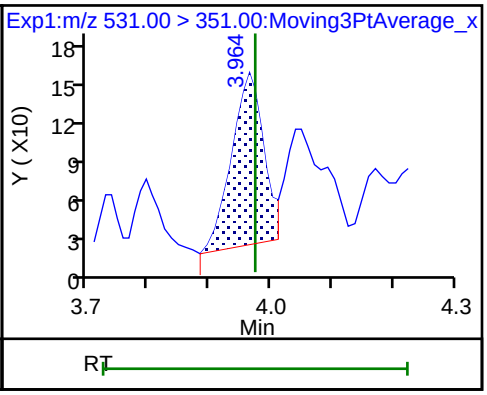
20 Perfluorononanoic acid (M)



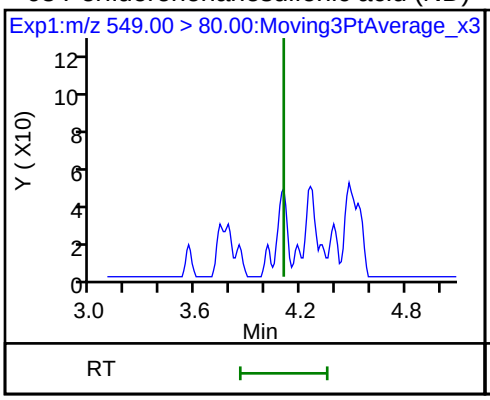

20 Perfluorononanoic acid (M)



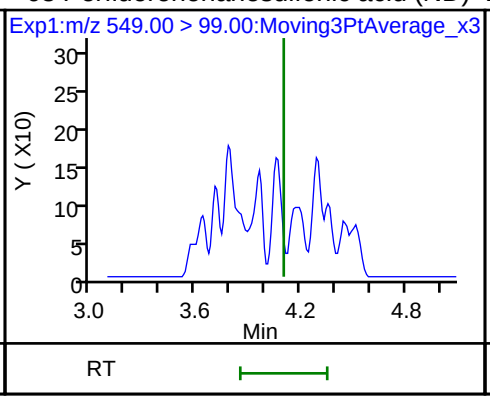

69 9-Chlorohexadecafluoro-3-oxanona (M)



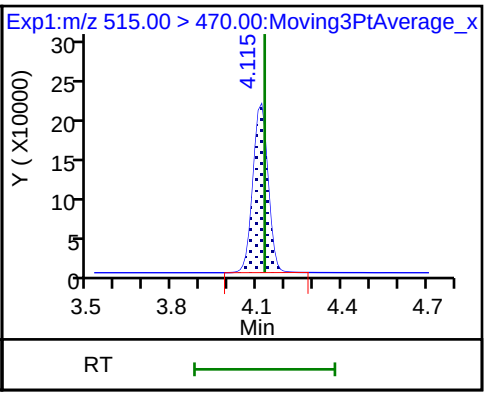

68 Perfluorononanesulfonic acid (ND)



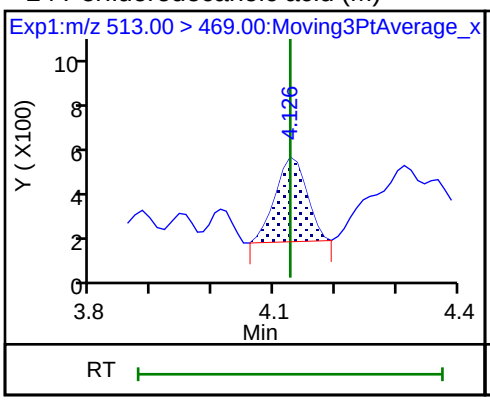

68 Perfluorononanesulfonic acid (ND)



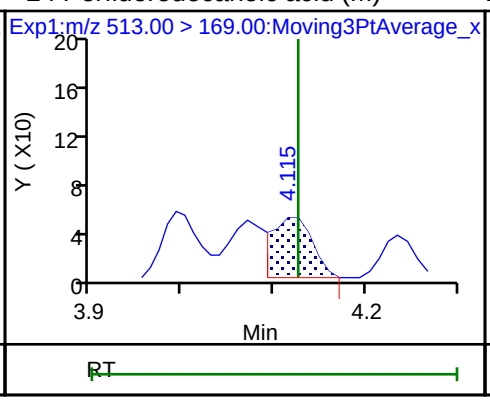

D 23 13C2 PFDA



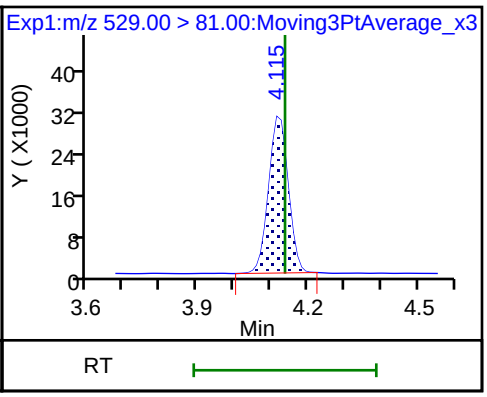

24 Perfluorodecanoic acid (M)



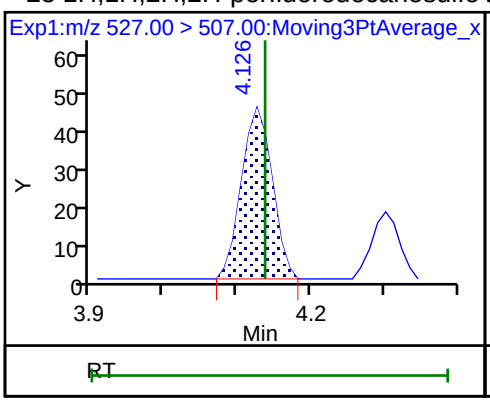

24 Perfluorodecanoic acid (M)



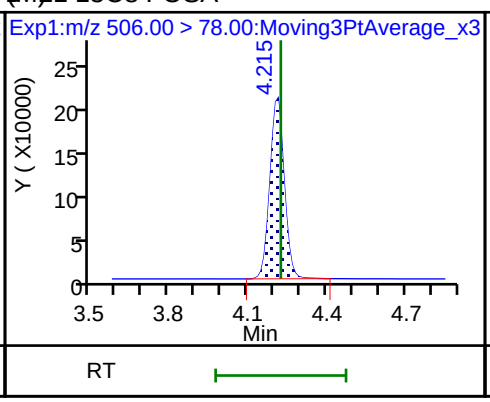

D 26 M2-8:2 FTS



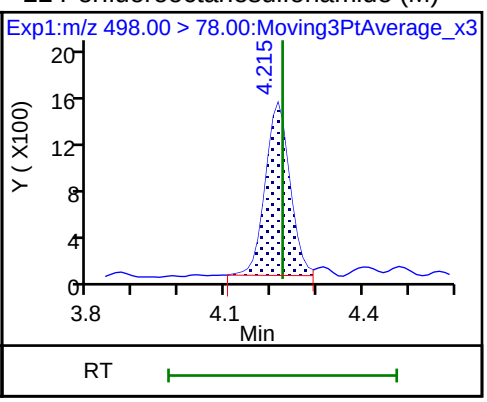

25 1H,1H,2H,2H-perfluorodecanesulfo (M)



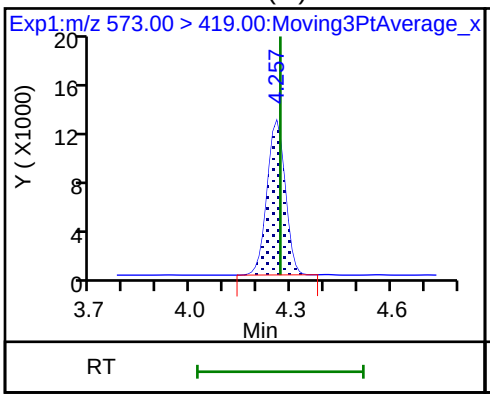

D 21 13C8 FOSA



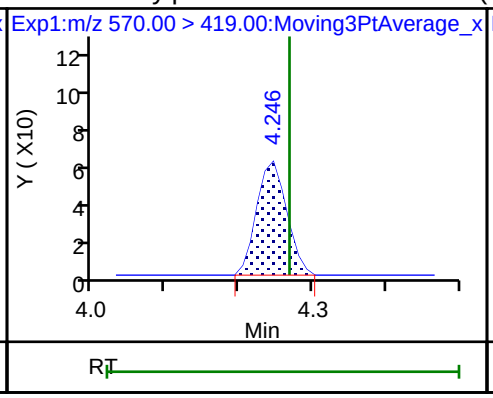

22 Perfluorooctanesulfonamide (M)



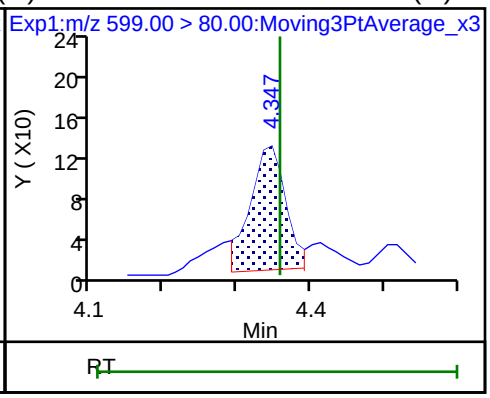
D 27 d3-NMeFOSAA (M)



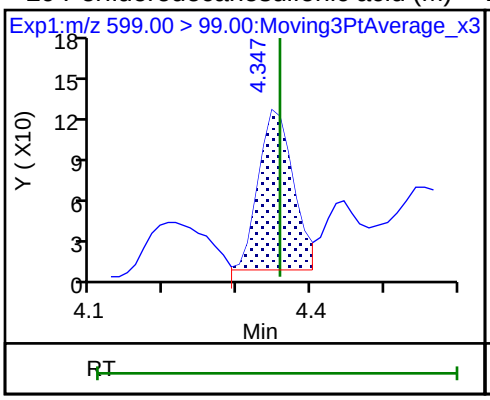

28 N-methylperfluorooctanesulfonami (M)



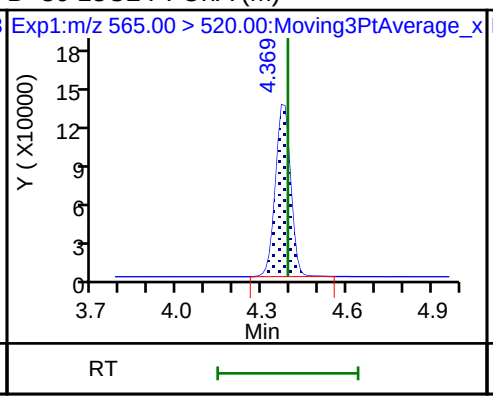

29 Perfluorodecanesulfonic acid (M)



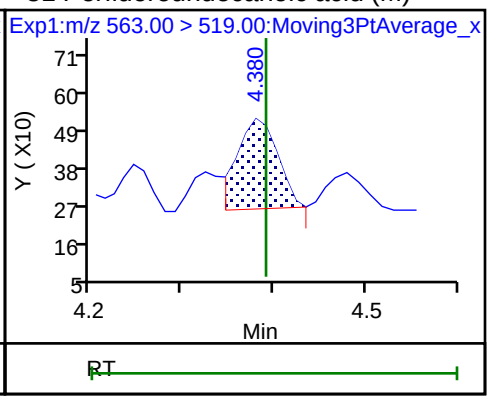

29 Perfluorodecanesulfonic acid (M)



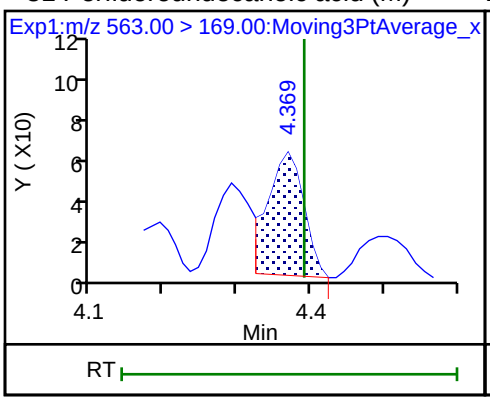

D 30 13C2 PFUnA (M)



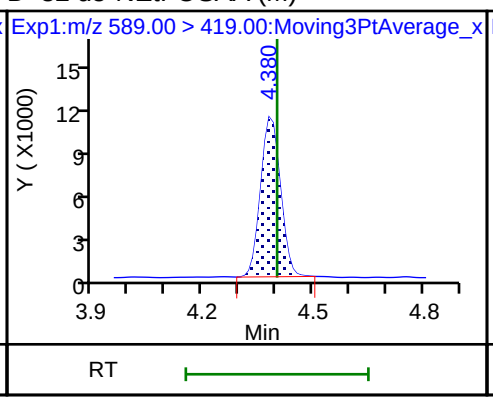

31 Perfluoroundecanoic acid (M)



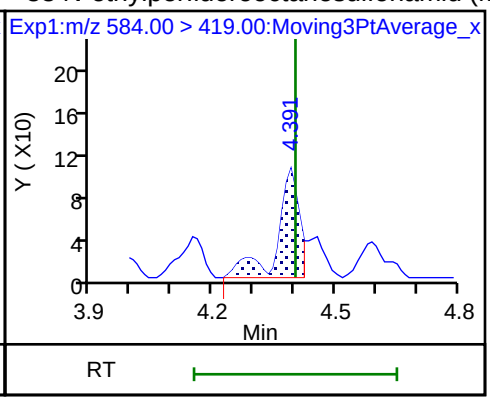

31 Perfluoroundecanoic acid (M)



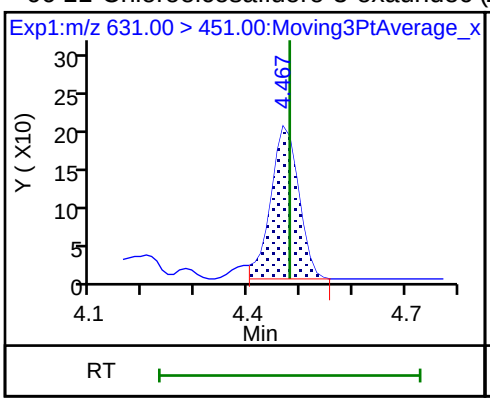

D 32 d5-NEtFOSAA (M)



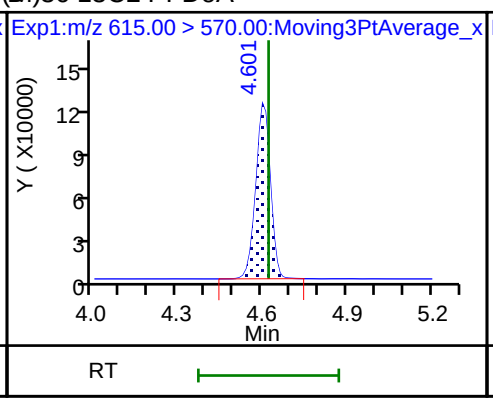

33 N-ethylperfluorooctanesulfonamid (M)



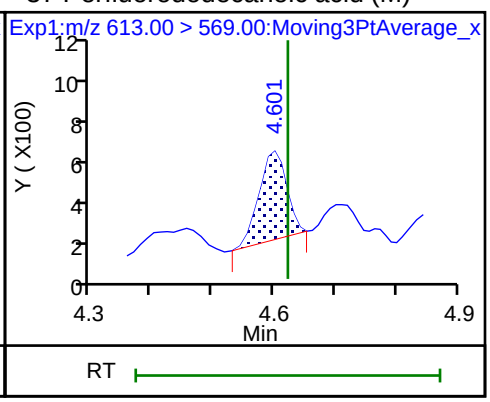

66 11-Chloroeicosafluoro-3-oxaundec (M)



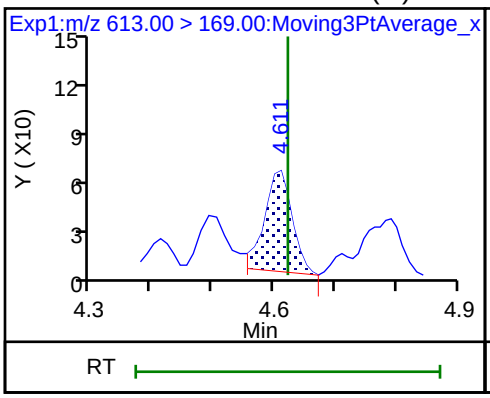

D 36 13C2 PFDoA



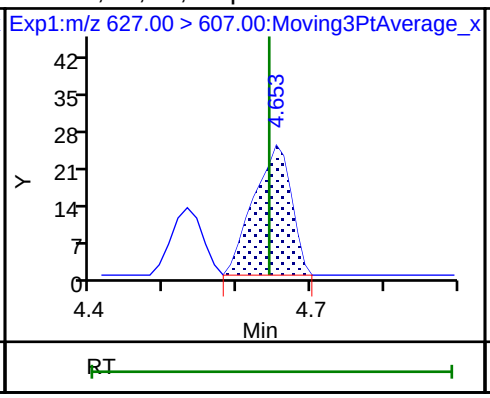

37 Perfluorododecanoic acid (M)



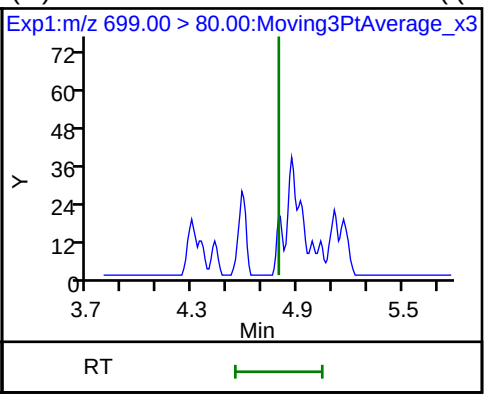
37 Perfluorododecanoic acid (M)



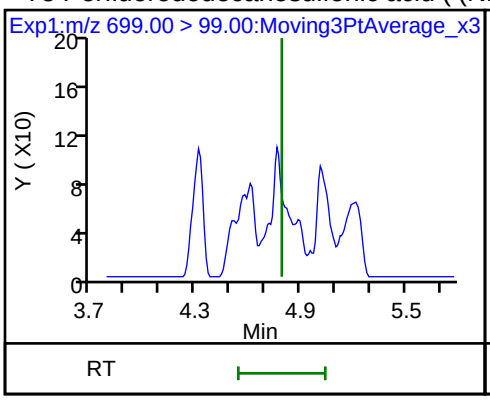

74 1H,1H,2H,2H-perfluorododecanesul (M)



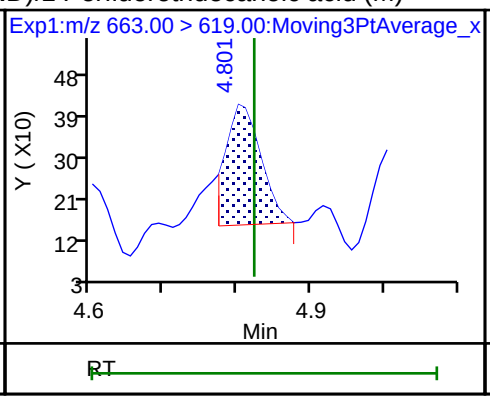

75 Perfluorododecanesulfonic acid ( (ND)



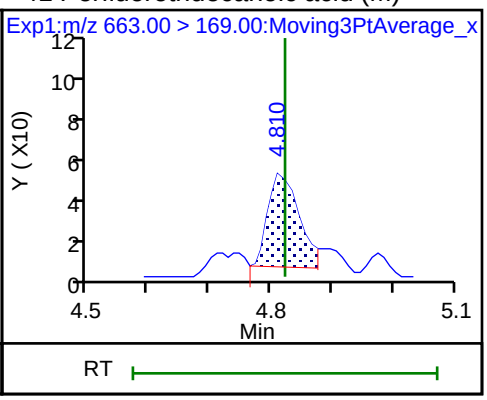

75 Perfluorododecanesulfonic acid ( (ND)



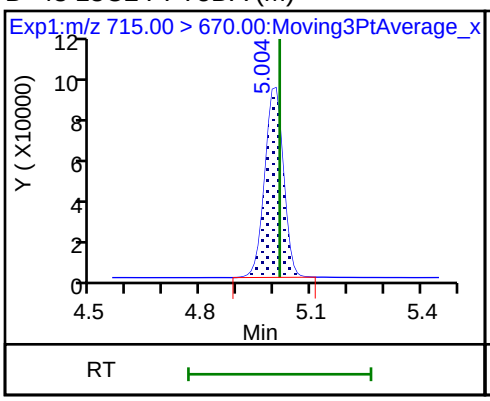

41 Perfluorotridecanoic acid (M)



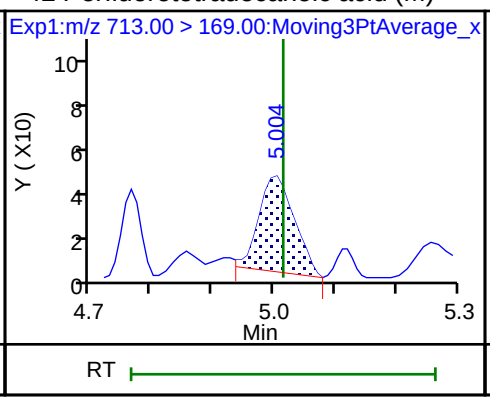

41 Perfluorotridecanoic acid (M)



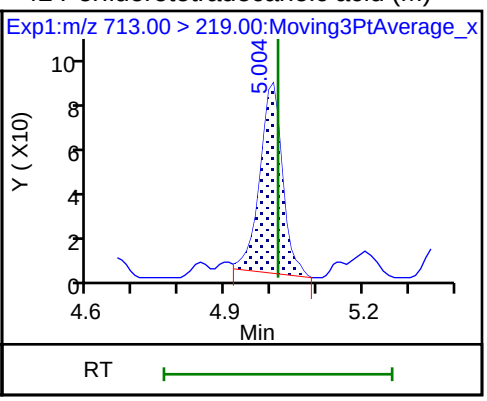

D 43 13C2 PFTeDA (M)



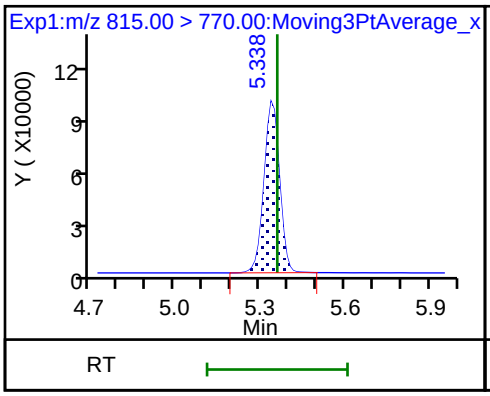

42 Perfluorotetradecanoic acid (M)



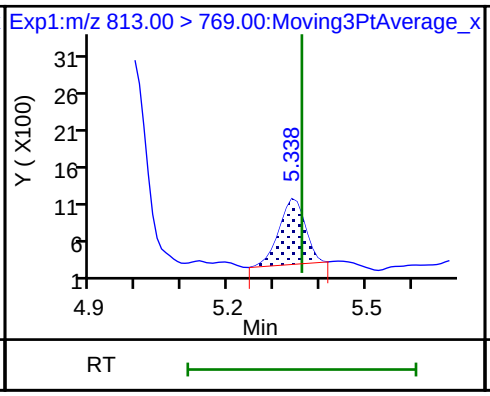

42 Perfluorotetradecanoic acid (M)



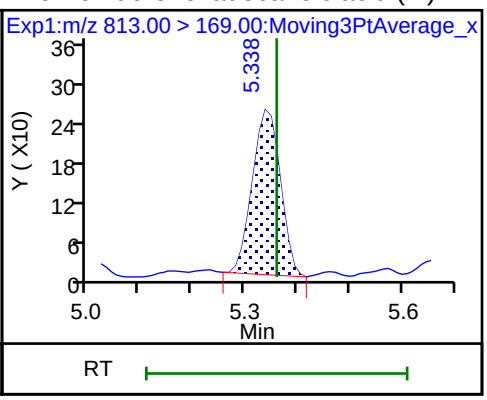

D 44 13C2 PFHxDA



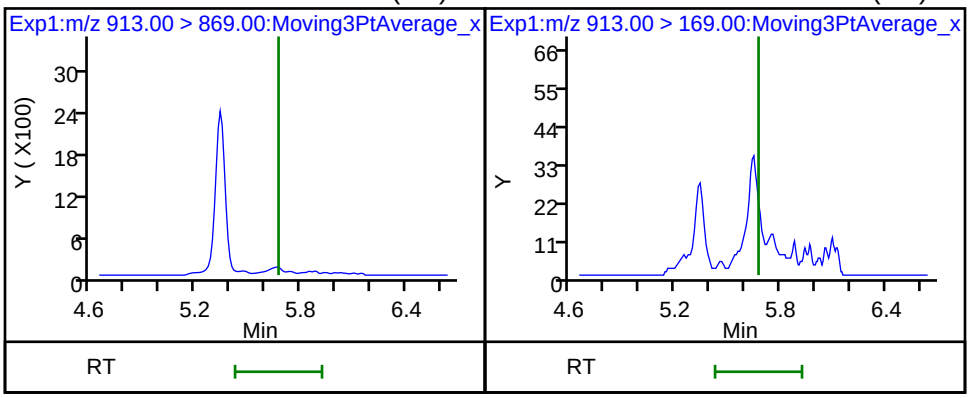

45 Perfluorohexadecanoic acid




45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid (ND) 46 Perfluorooctadecanoic acid (ND)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

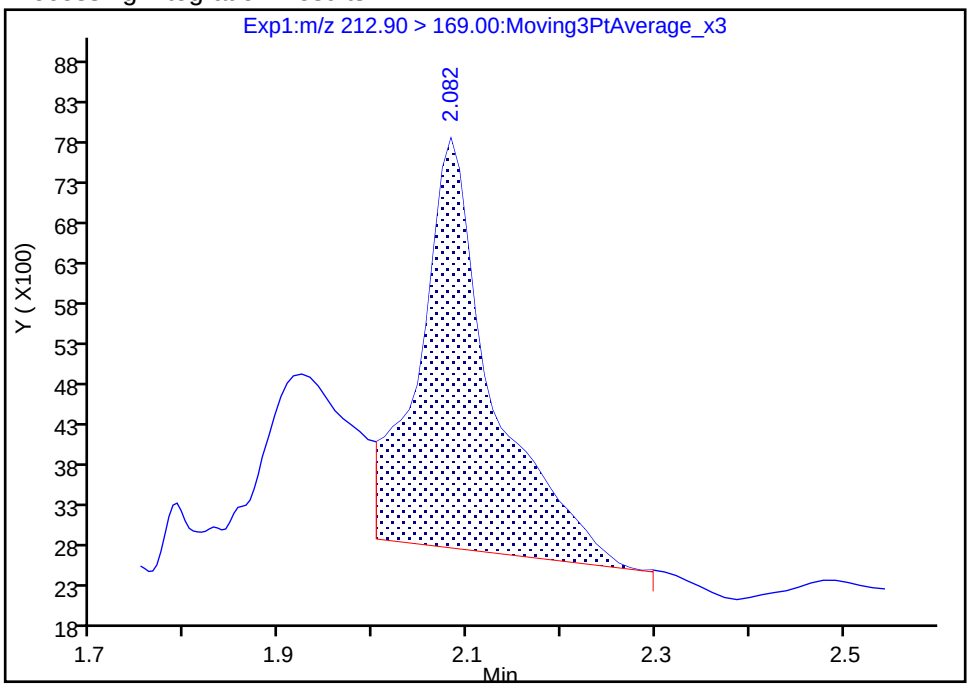
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Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812
Lims ID: MB 200-164654/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

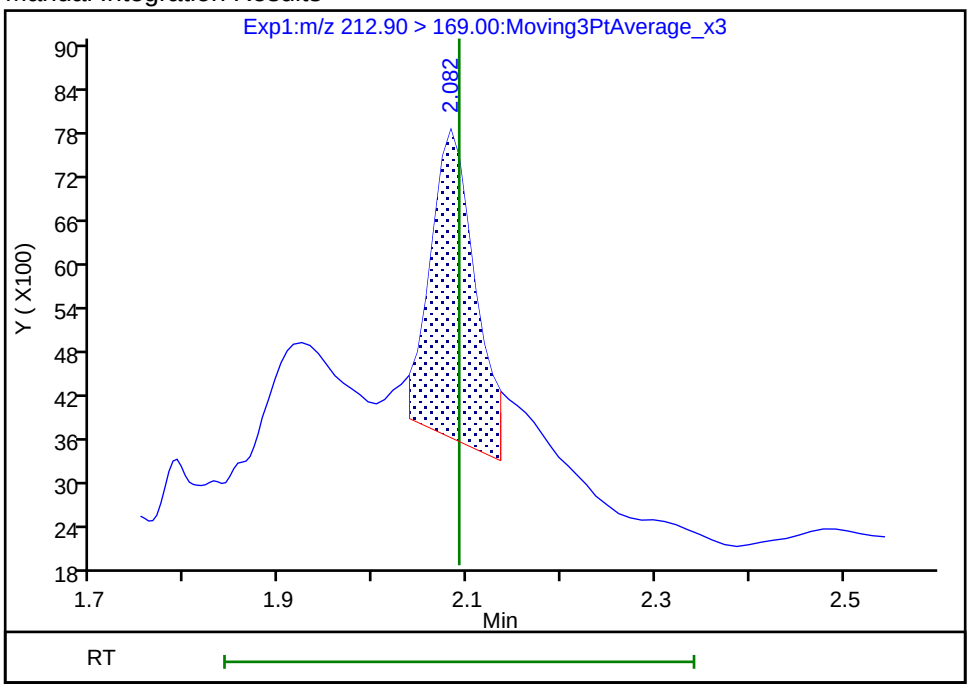
Processing Integration Results

RT: 2.08
Area: 27764
Amount: 0.023878
Amount Units: ng/ml




Manual Integration Results

RT: 2.08
Area: 13915
Amount: 0.011967
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:26:53
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

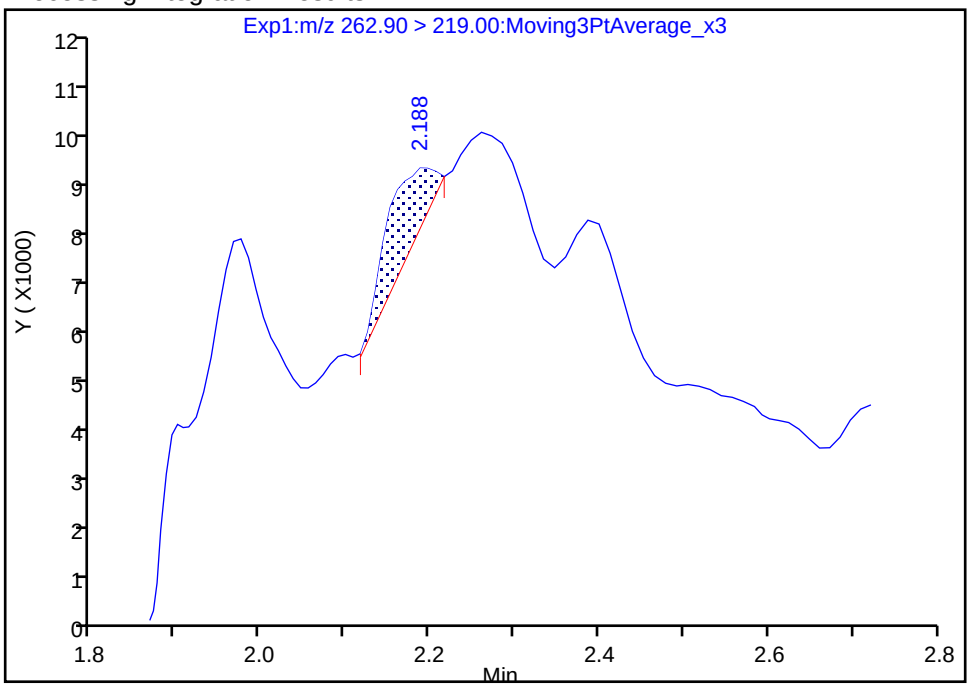
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d
Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812
Lims ID: MB 200-164654/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

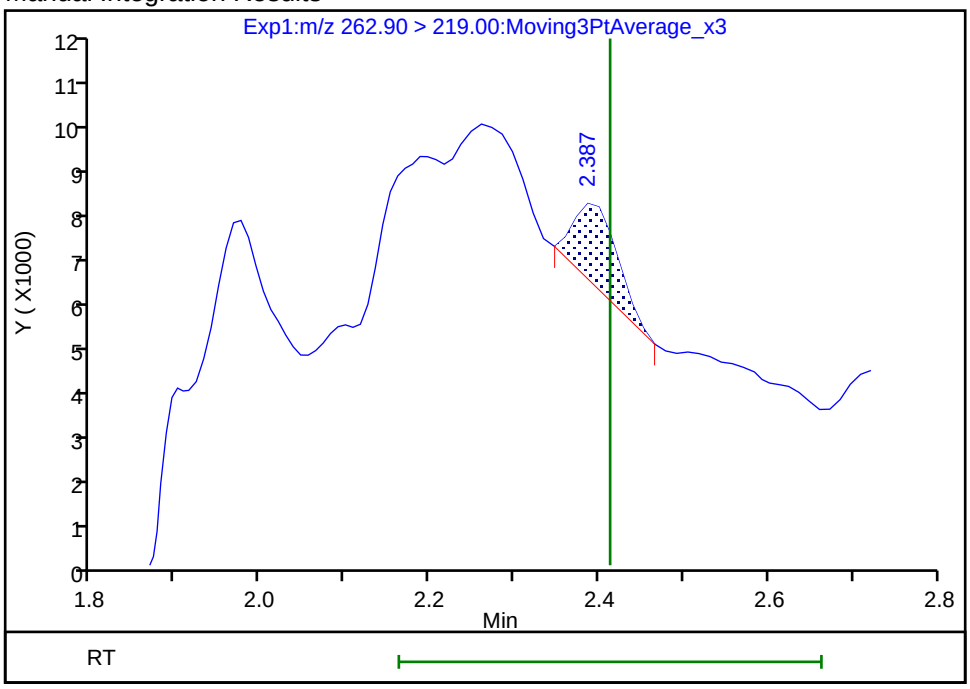
Processing Integration Results

RT: 2.19
Area: 5832
Amount: 0.006152
Amount Units: ng/ml




Manual Integration Results

RT: 2.39
Area: 6212
Amount: 0.006553
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:27:08
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

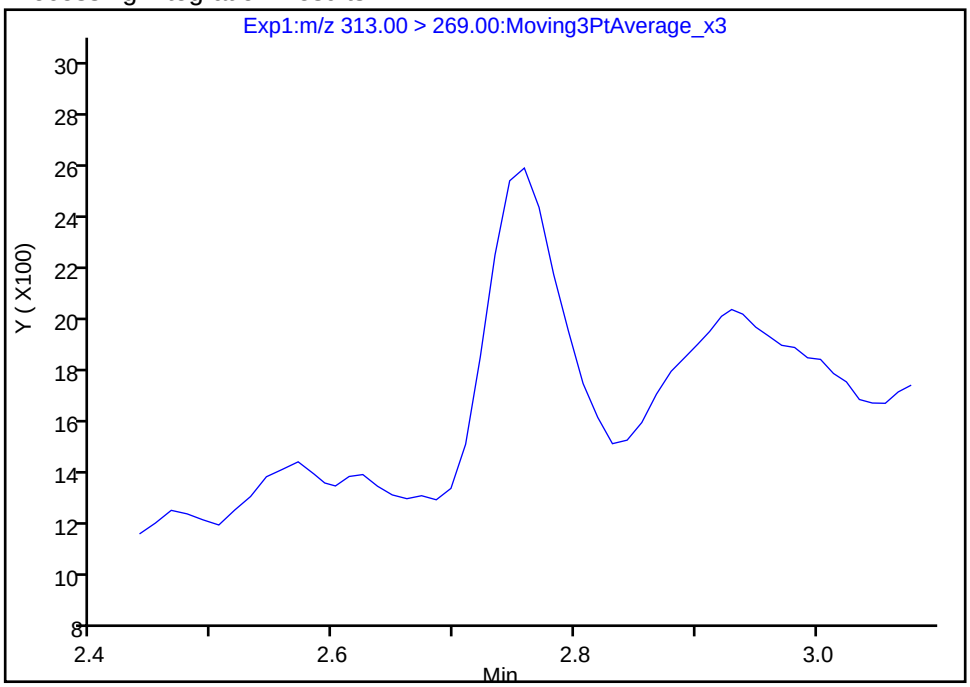
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

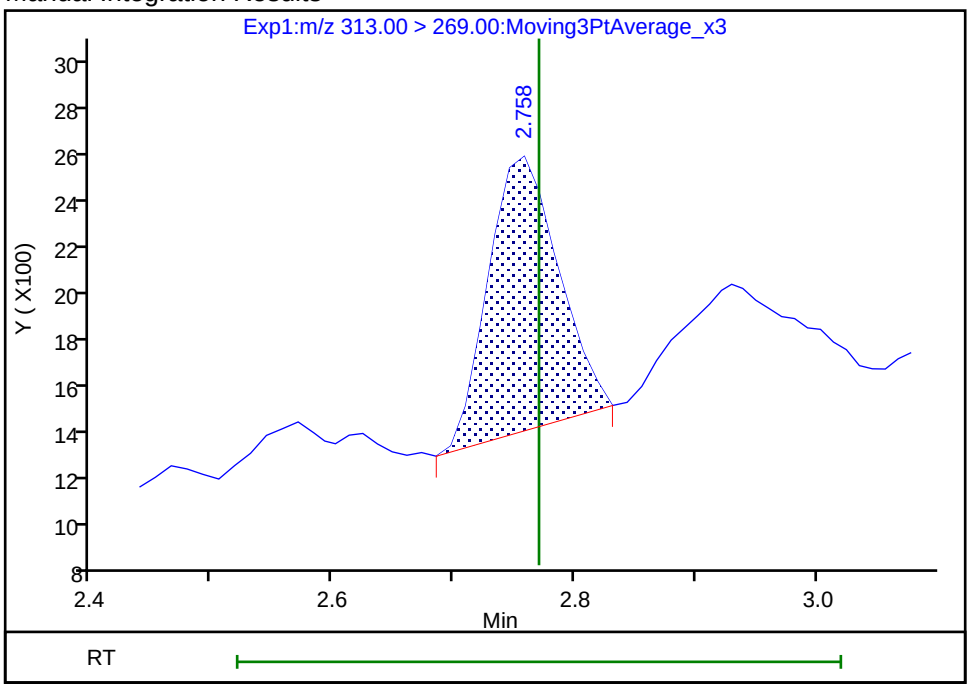
Not Detected
Expected RT: 2.77

Processing Integration Results




Manual Integration Results

RT: 2.76
Area: 4527
Amount: 0.004576
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:37:06
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

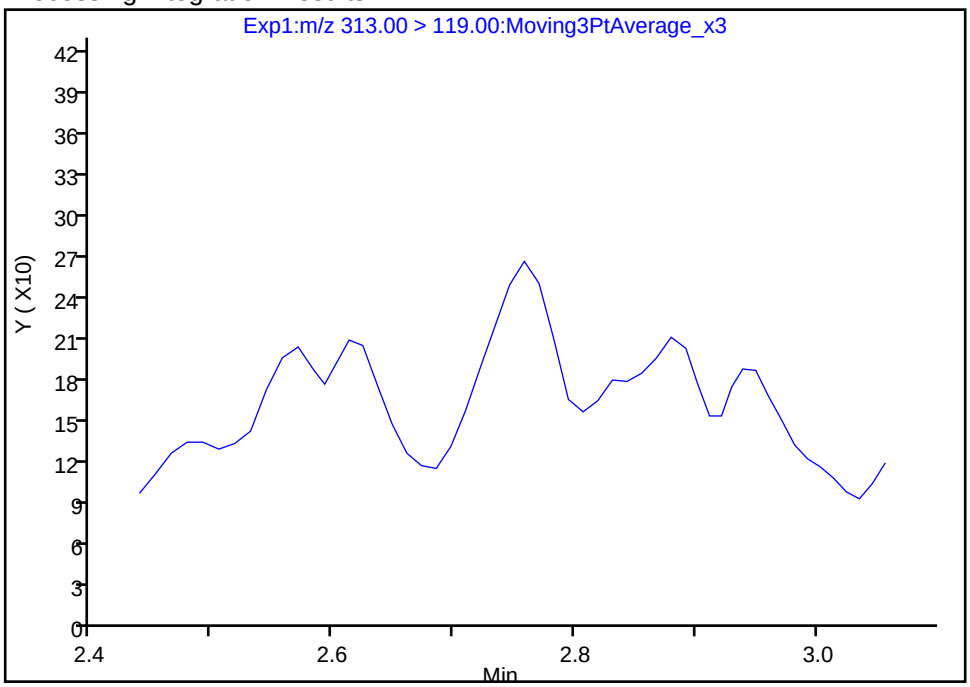
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

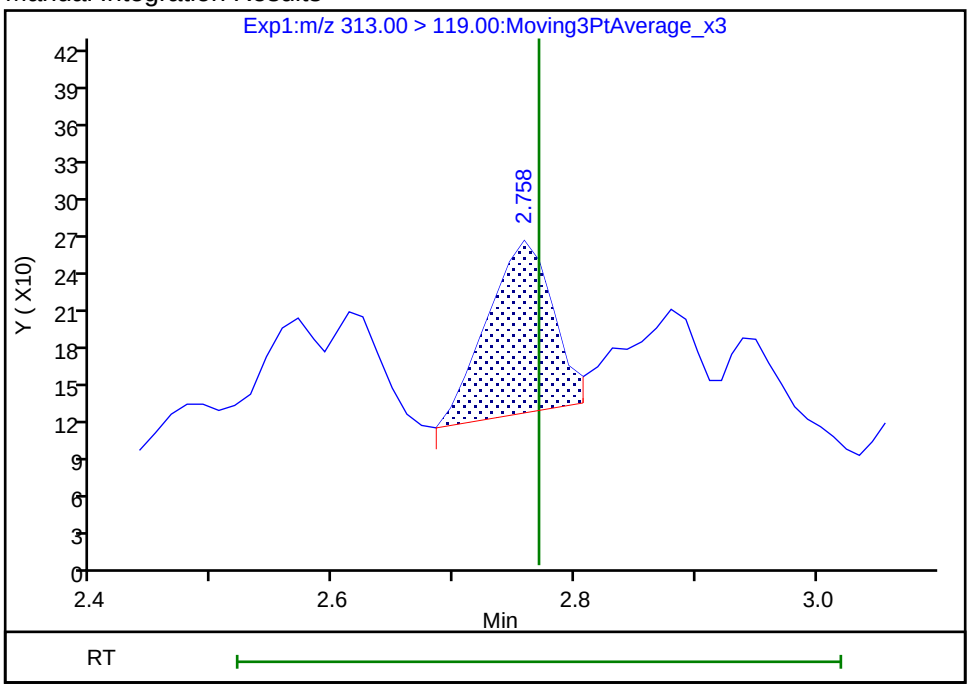
Not Detected
Expected RT: 2.77

Processing Integration Results




Manual Integration Results

RT: 2.76
Area: 522
Amount: 0.004576
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:37:18
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

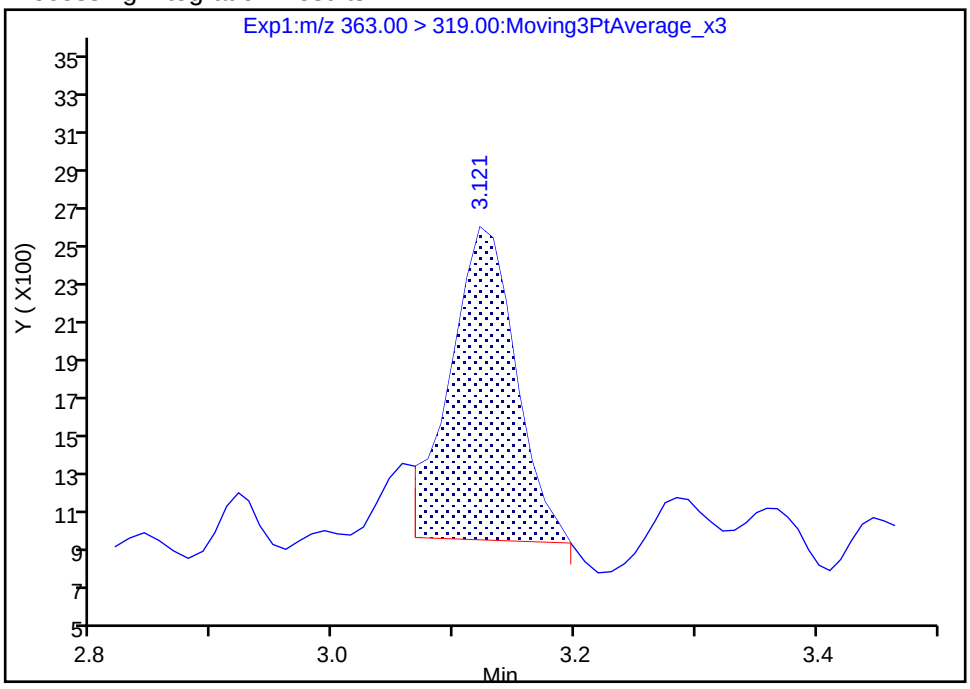
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d
Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812
Lims ID: MB 200-164654/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

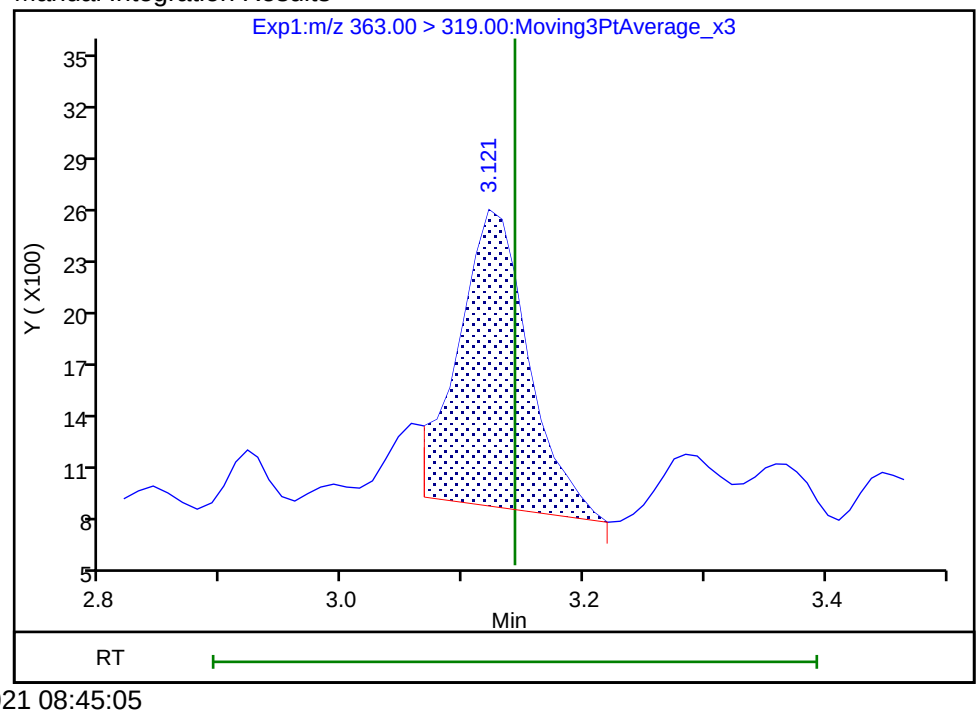
Processing Integration Results

RT: 3.12
Area: 6153
Amount: 0.006853
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 6901
Amount: 0.007686
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:45:05
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

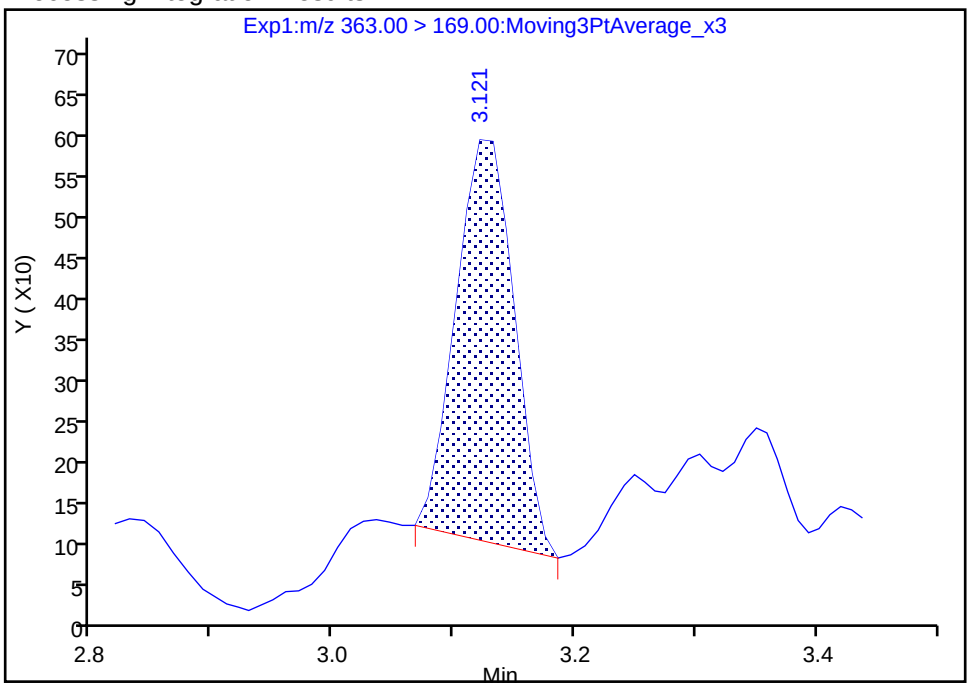
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

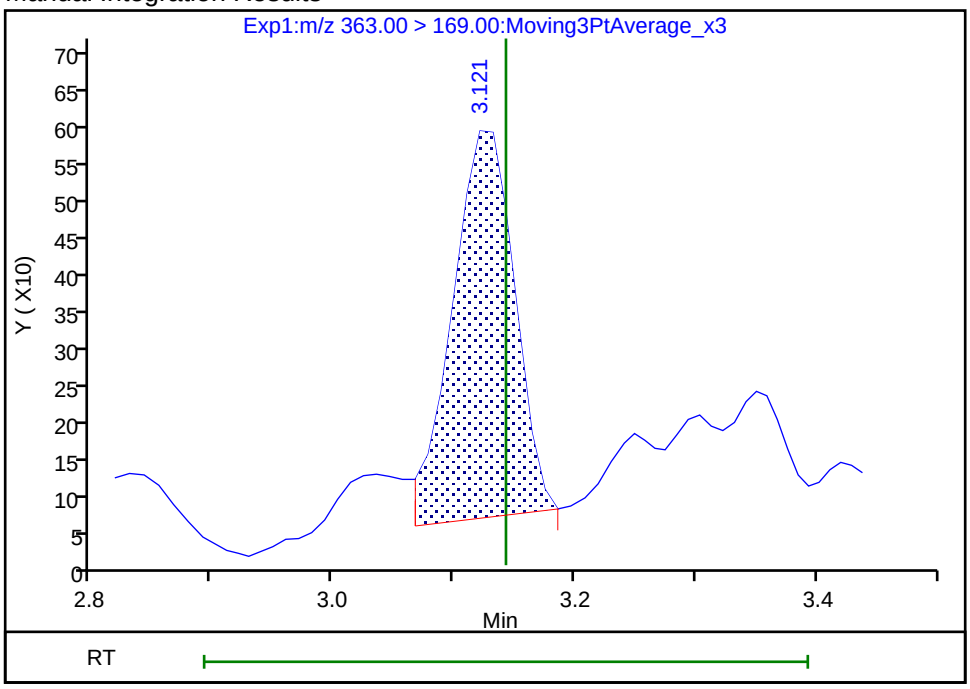
Processing Integration Results

RT: 3.12
Area: 1641
Amount: 0.006853
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 1864
Amount: 0.007686
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:45:26

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

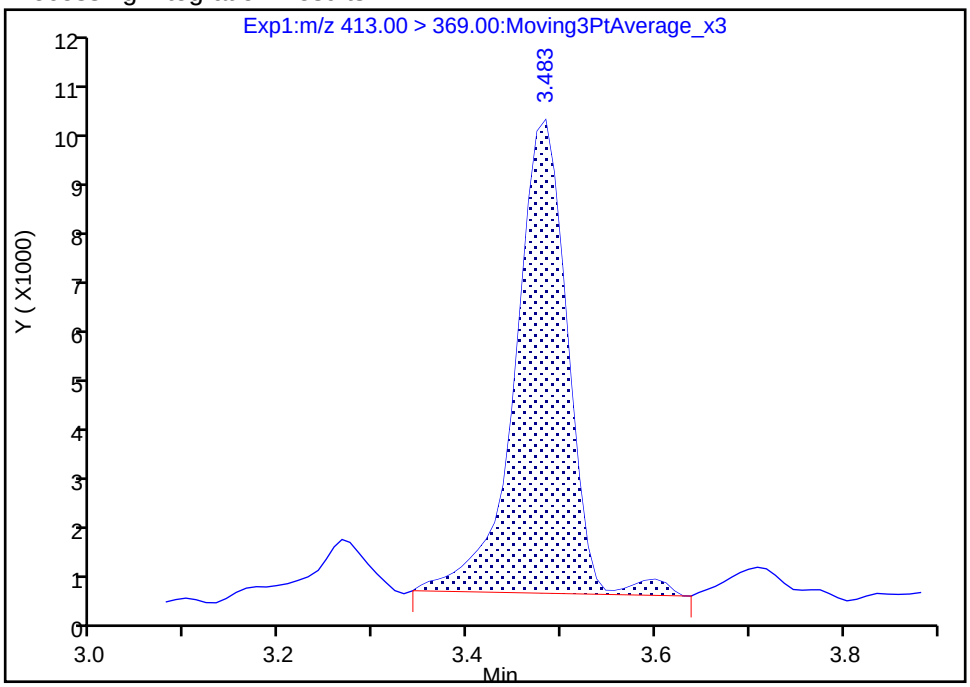
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

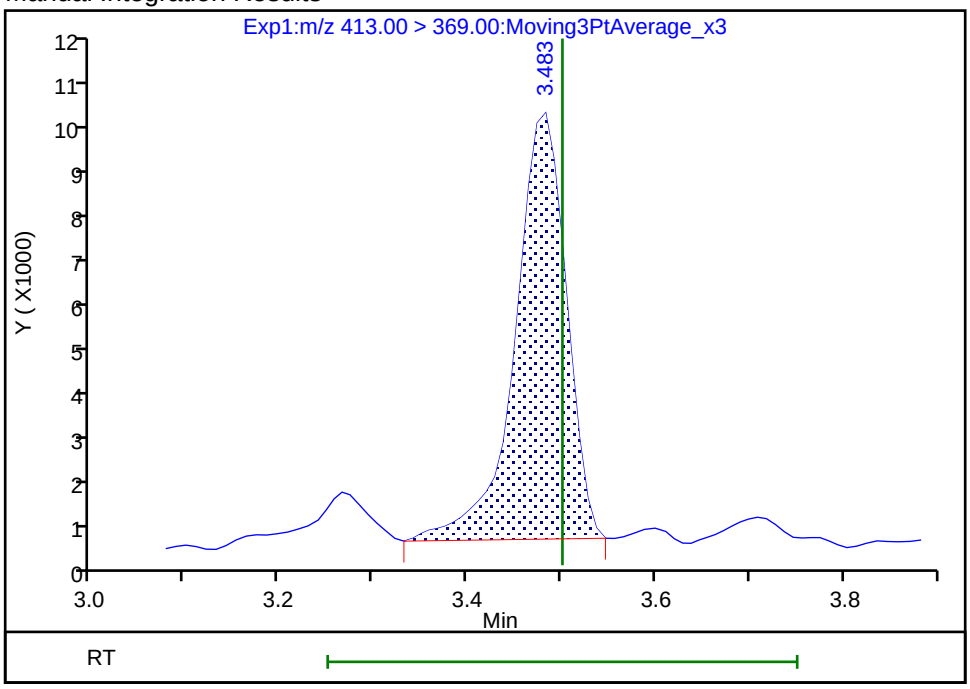
Processing Integration Results

RT: 3.48
Area: 36592
Amount: 0.041518
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 35588
Amount: 0.040379
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:47:19

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

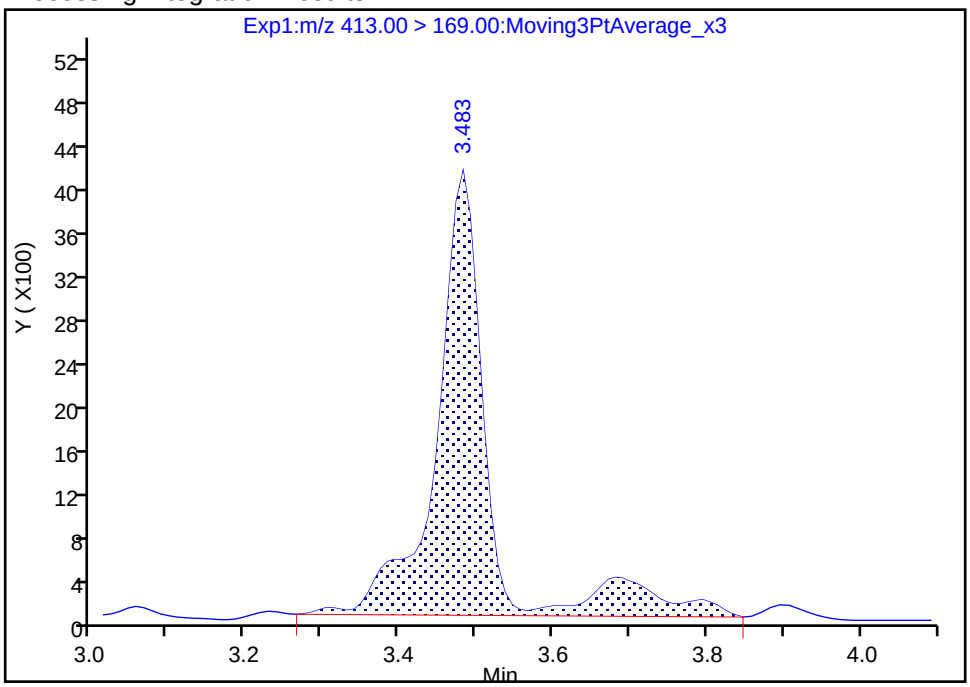
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d
Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812
Lims ID: MB 200-164654/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

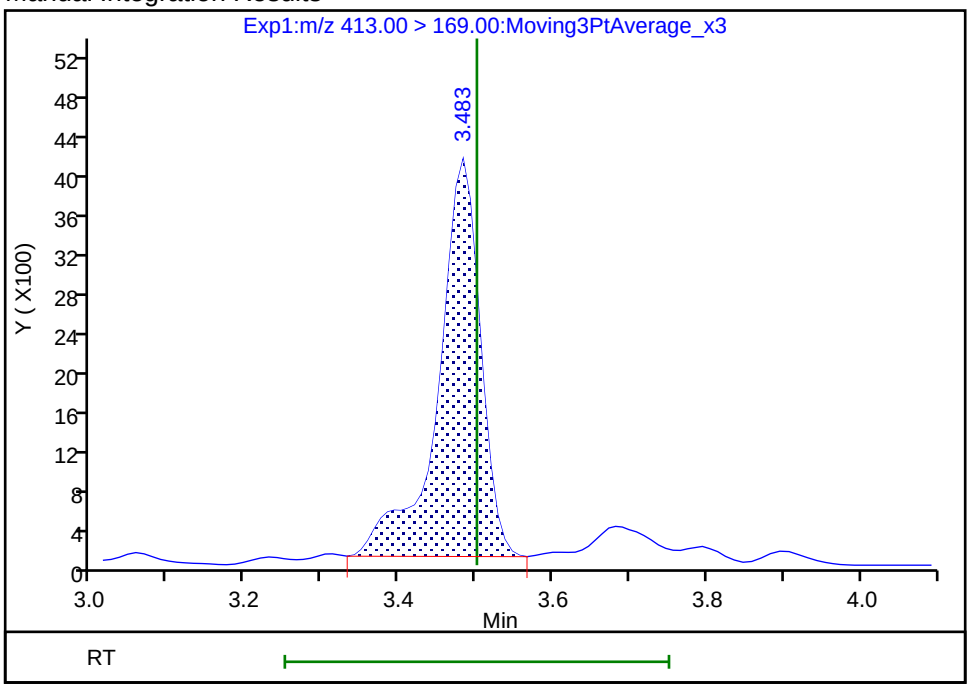
Processing Integration Results

RT: 3.48
Area: 18988
Amount: 0.041518
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 15575
Amount: 0.040379
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:47:43
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

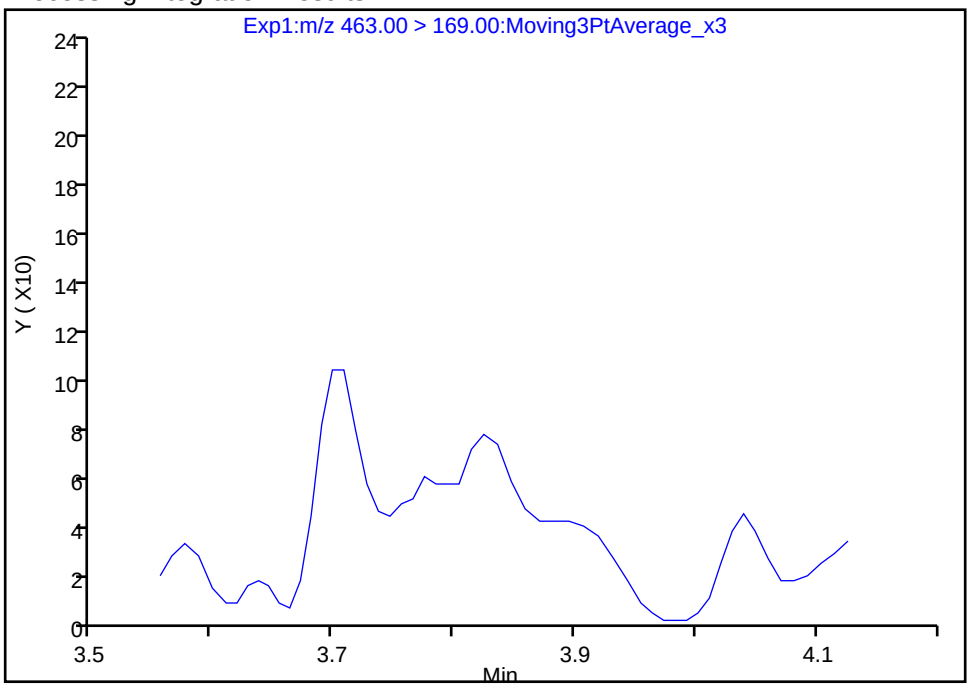
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d
Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812
Lims ID: MB 200-164654/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

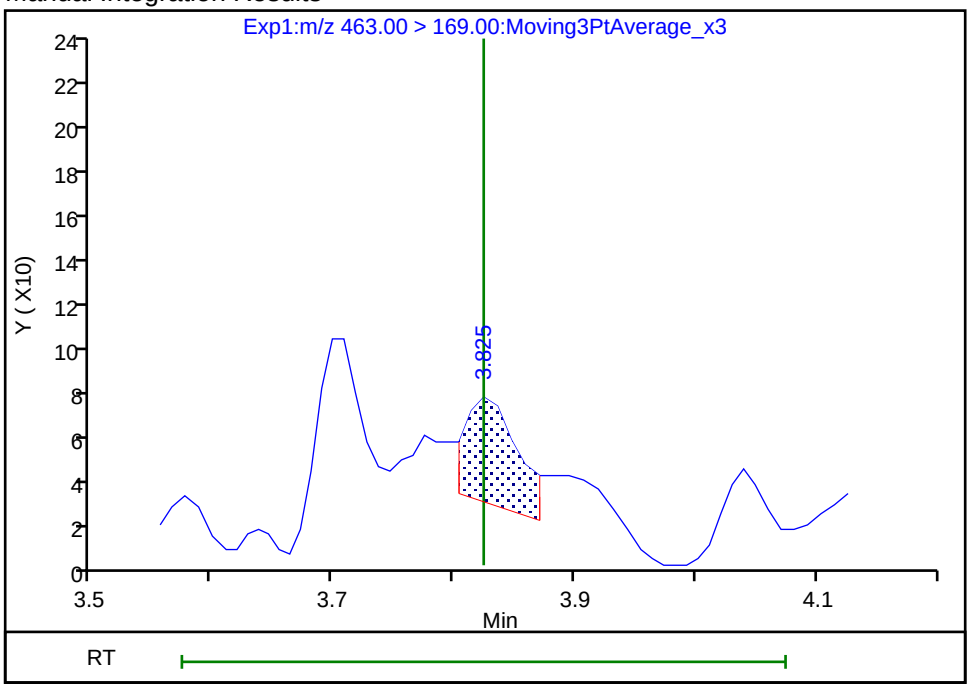
Not Detected
Expected RT: 3.82

Processing Integration Results




Manual Integration Results

RT: 3.82
Area: 136
Amount: 0.004528
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:53:05
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

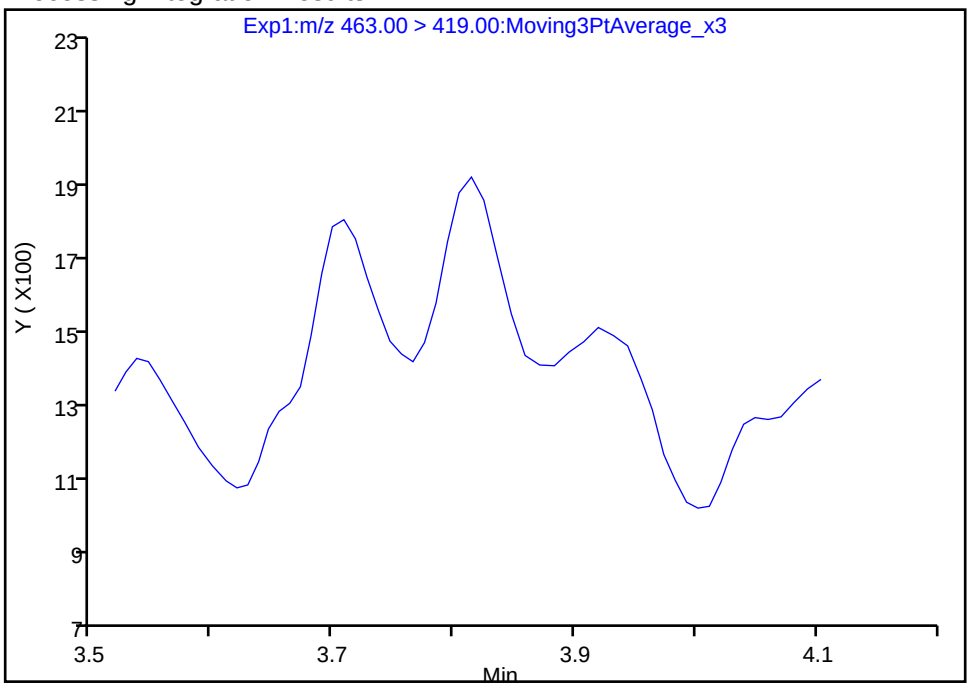
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

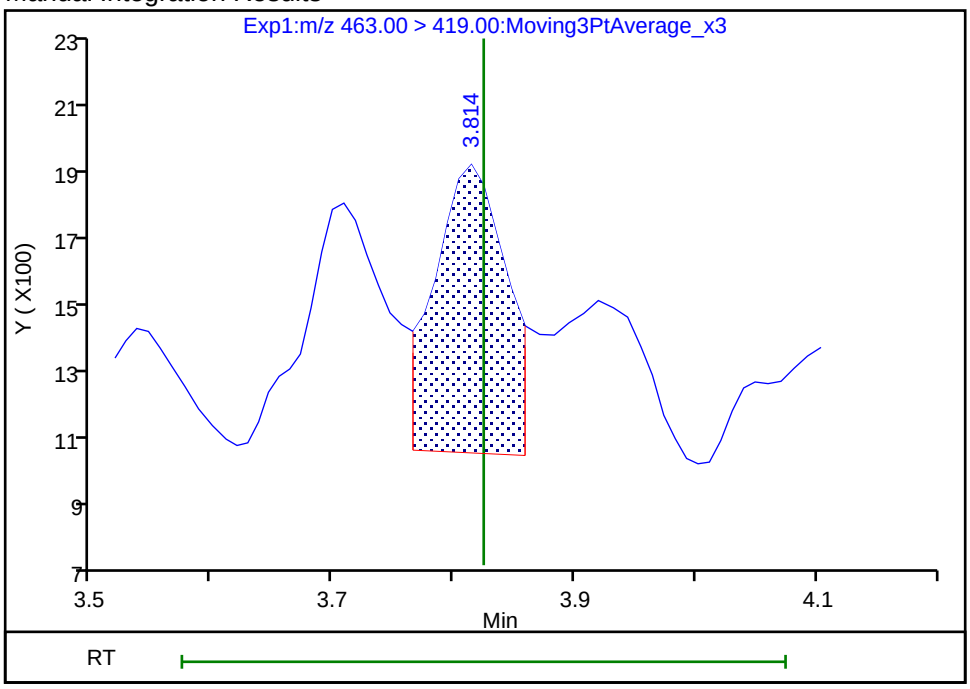
Not Detected
Expected RT: 3.82

Processing Integration Results




Manual Integration Results

RT: 3.81
Area: 3499
Amount: 0.004528
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:53:25
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

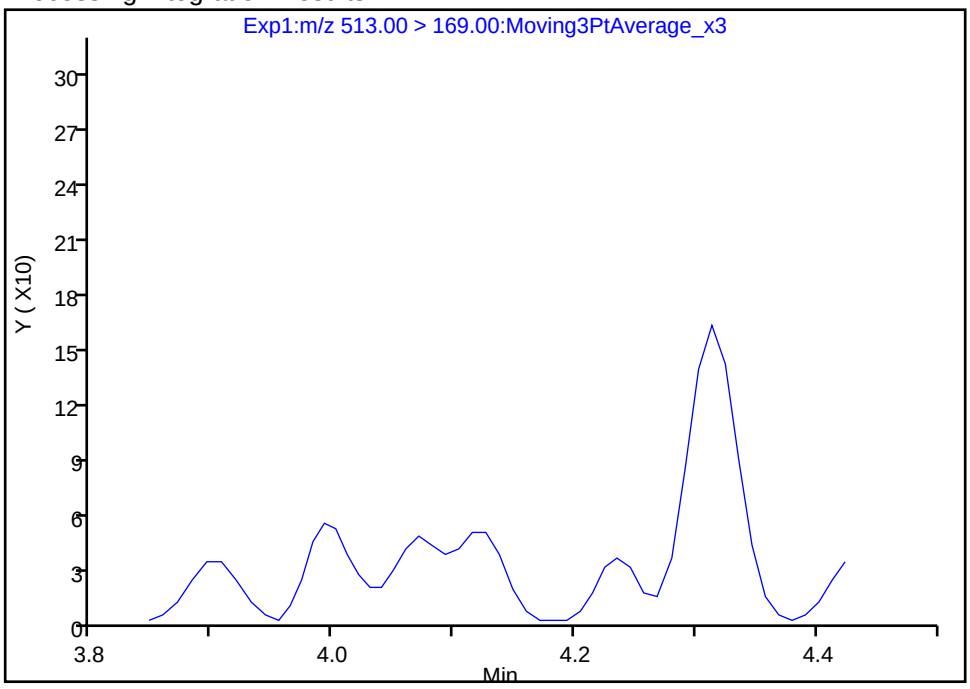
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

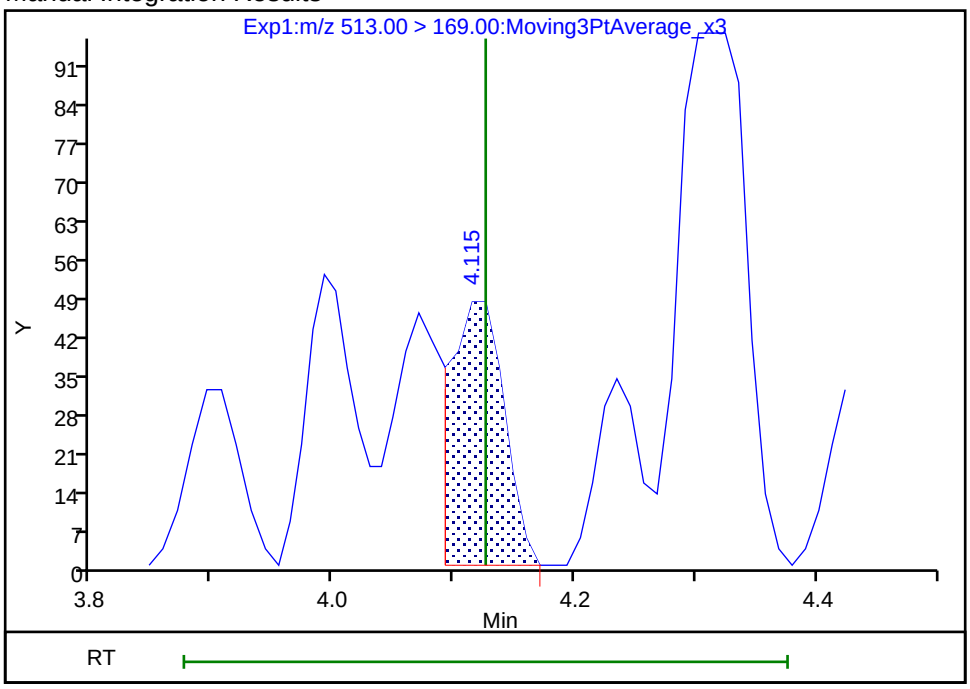
Not Detected
Expected RT: 4.13

Processing Integration Results




Manual Integration Results

RT: 4.11
Area: 141
Amount: 0.002098
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:54:35
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

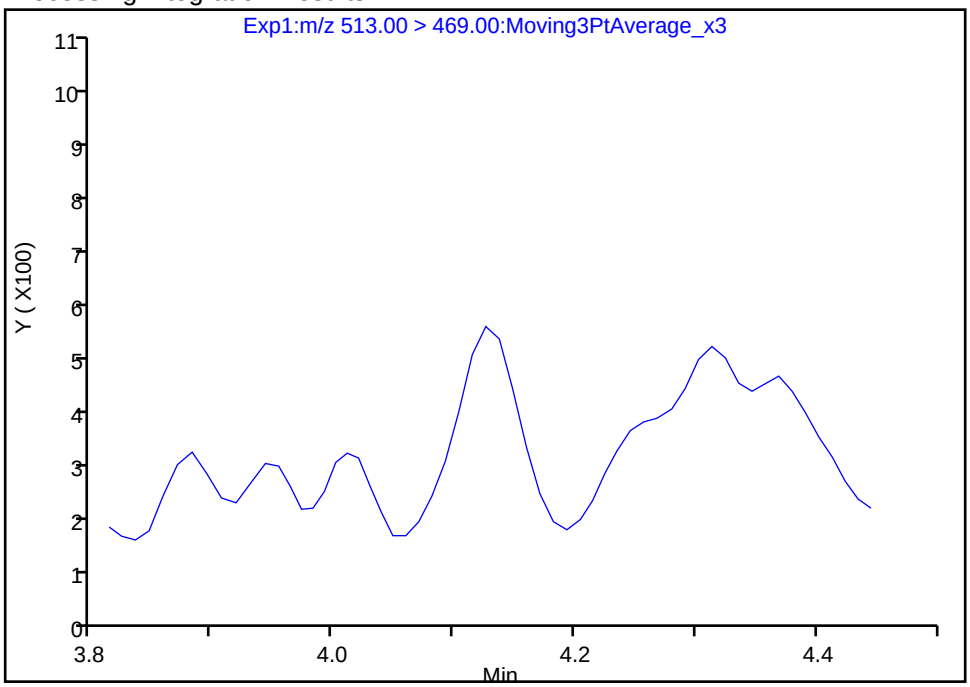
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

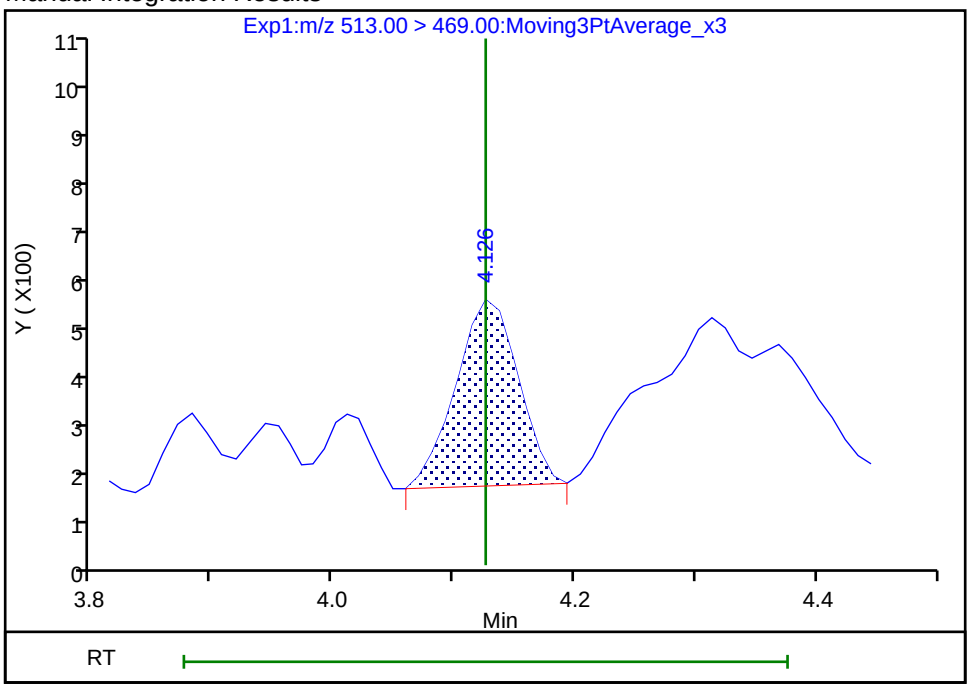
Not Detected
Expected RT: 4.13

Processing Integration Results




Manual Integration Results

RT: 4.13
Area: 1365
Amount: 0.002098
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:54:44
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

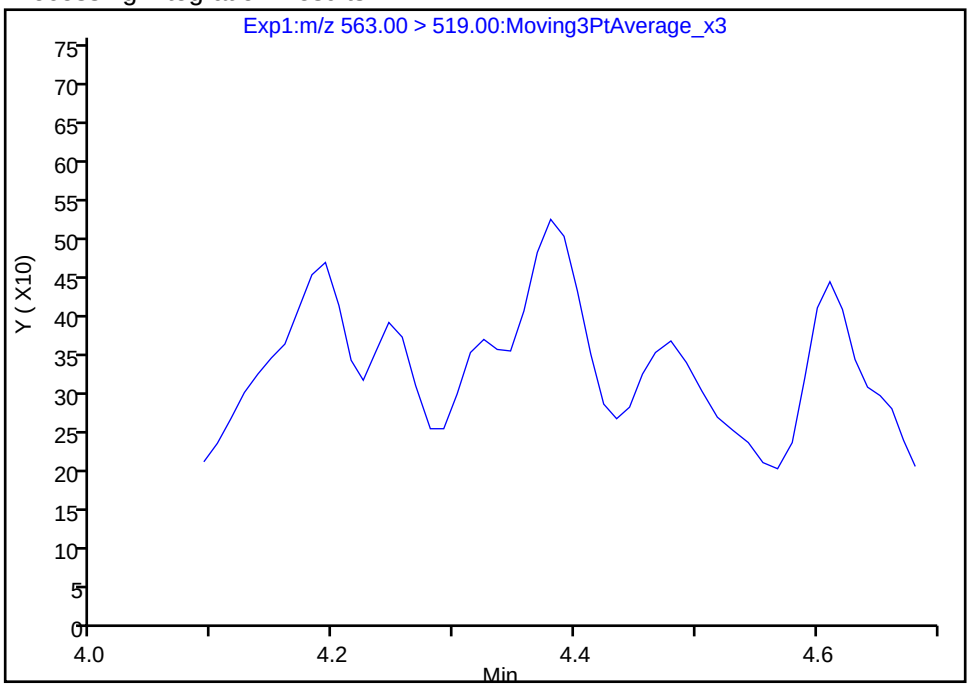
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d
Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812
Lims ID: MB 200-164654/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

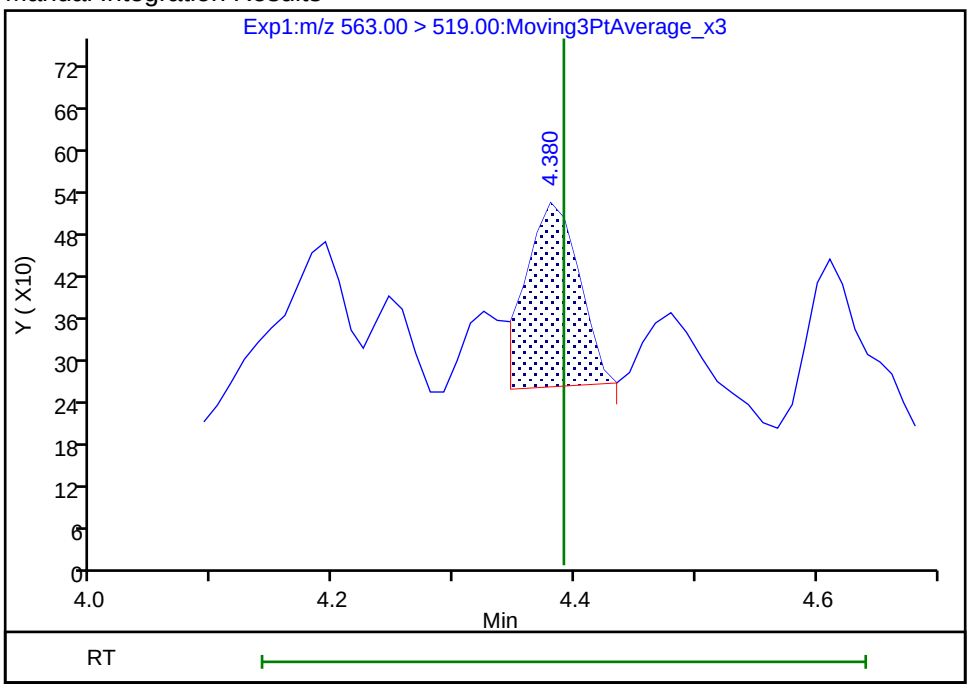
Not Detected
Expected RT: 4.39

Processing Integration Results




Manual Integration Results

RT: 4.38
Area: 796
Amount: 0.002017
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:58:04
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

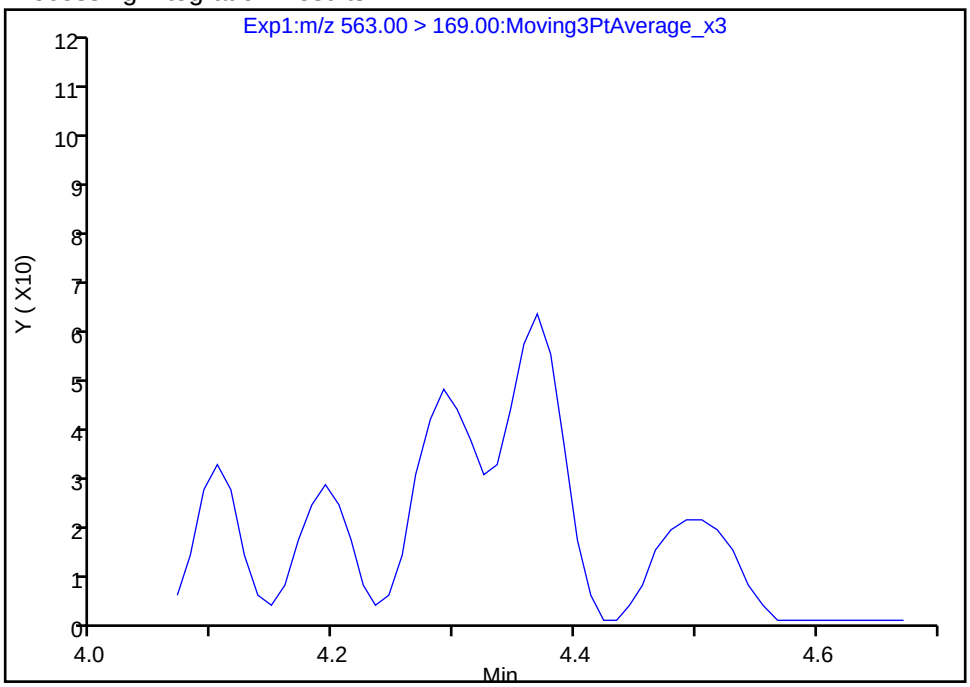
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

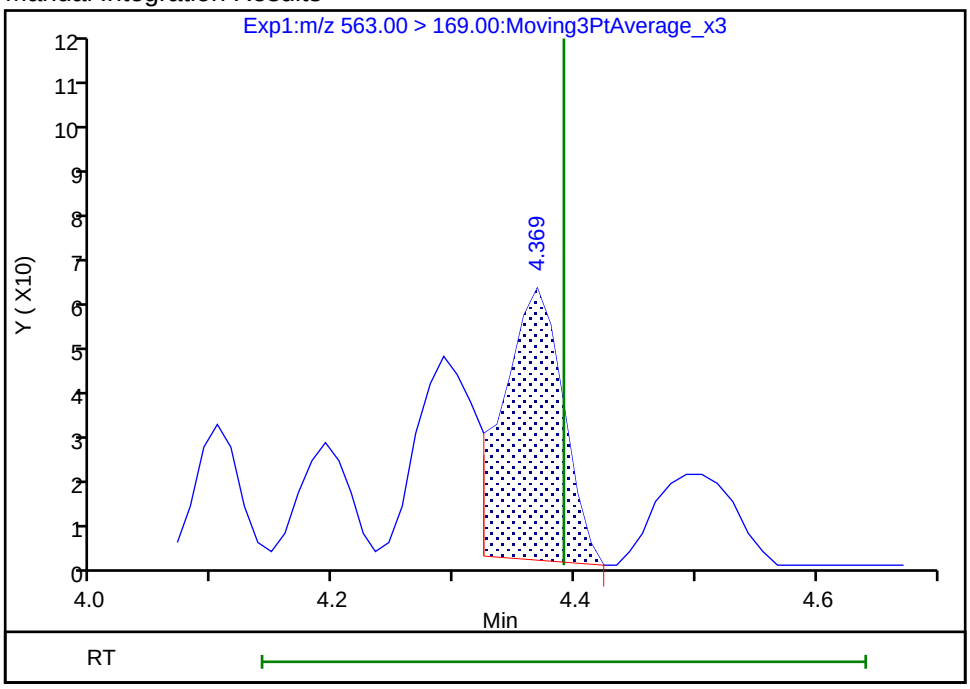
Not Detected
Expected RT: 4.39

Processing Integration Results




Manual Integration Results

RT: 4.37
Area: 201
Amount: 0.002017
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:58:05
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

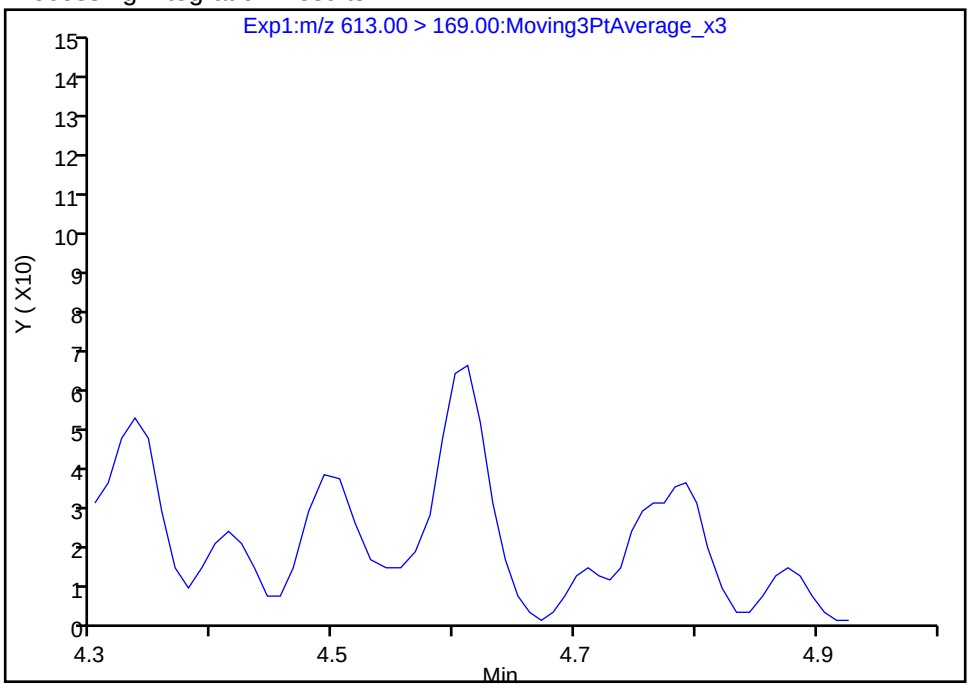
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

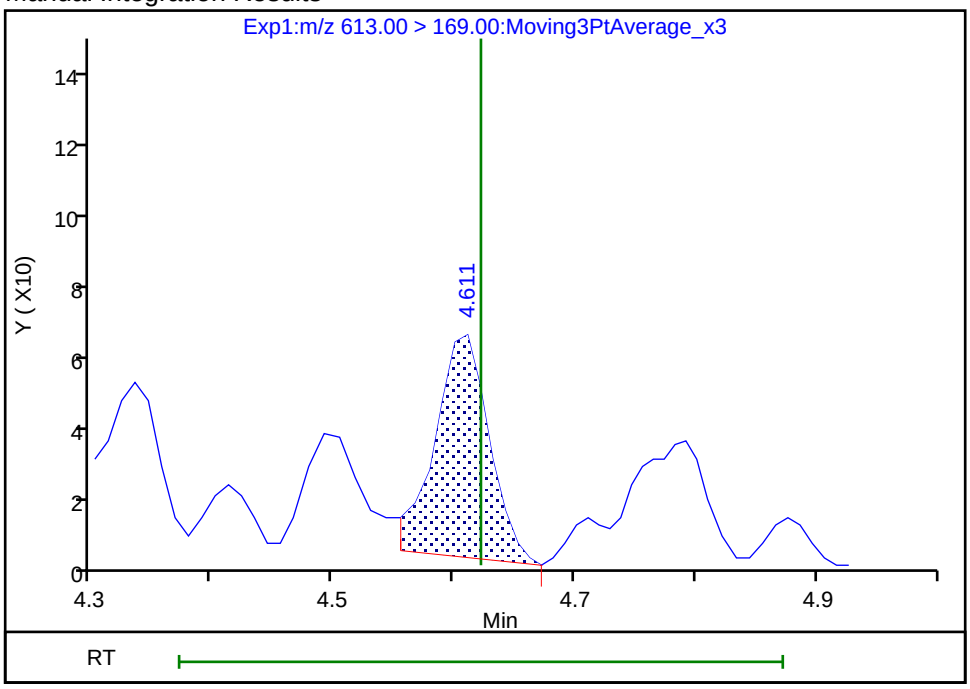
Not Detected
Expected RT: 4.62

Processing Integration Results




Manual Integration Results

RT: 4.61
Area: 188
Amount: 0.003508
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:59:04
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

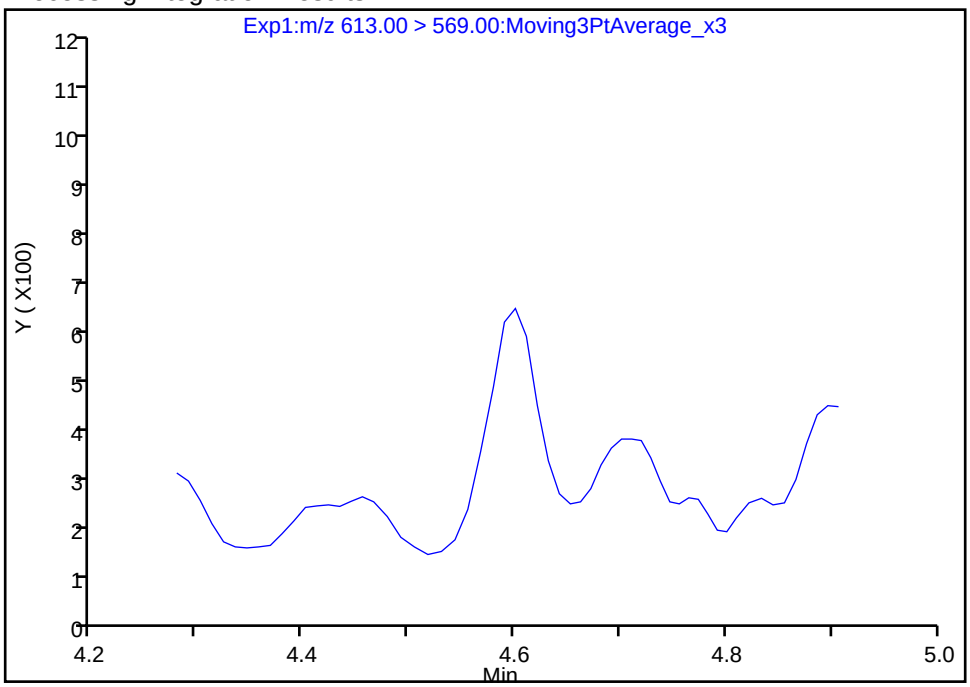
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d
Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812
Lims ID: MB 200-164654/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

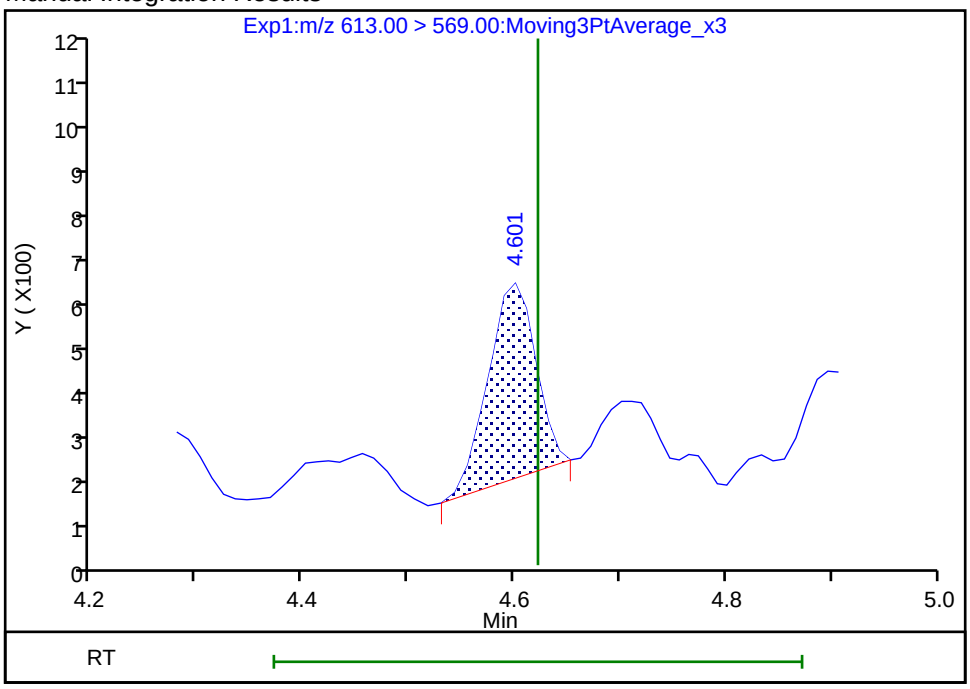
Not Detected
Expected RT: 4.62

Processing Integration Results




Manual Integration Results

RT: 4.60
Area: 1335
Amount: 0.003508
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:59:53
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

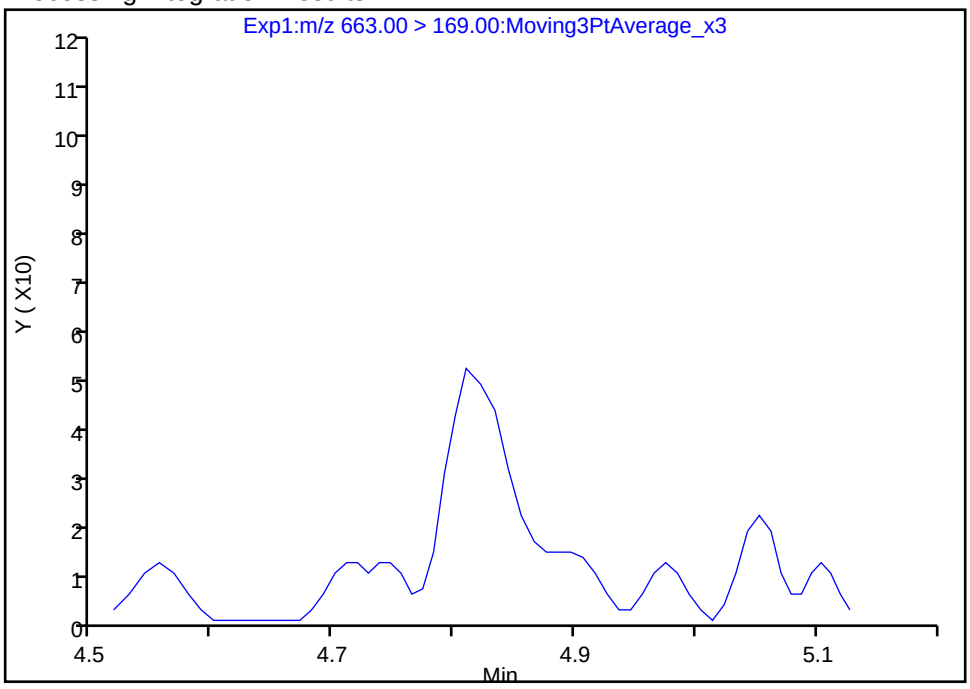
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

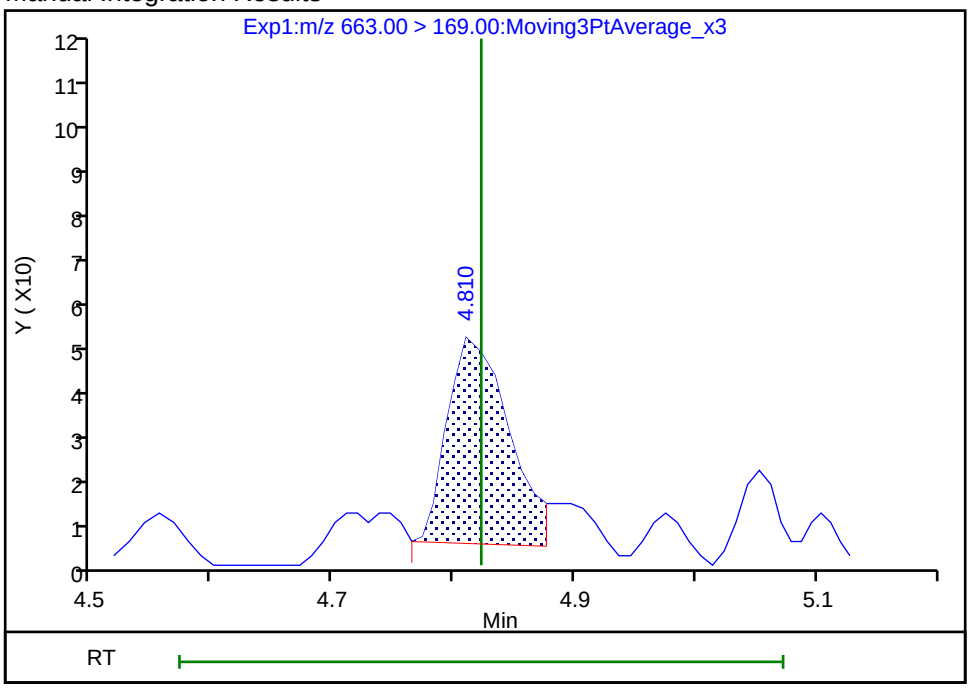
Not Detected
Expected RT: 4.82

Processing Integration Results




Manual Integration Results

RT: 4.81
Area: 152
Amount: 0.002742
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:01:32
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

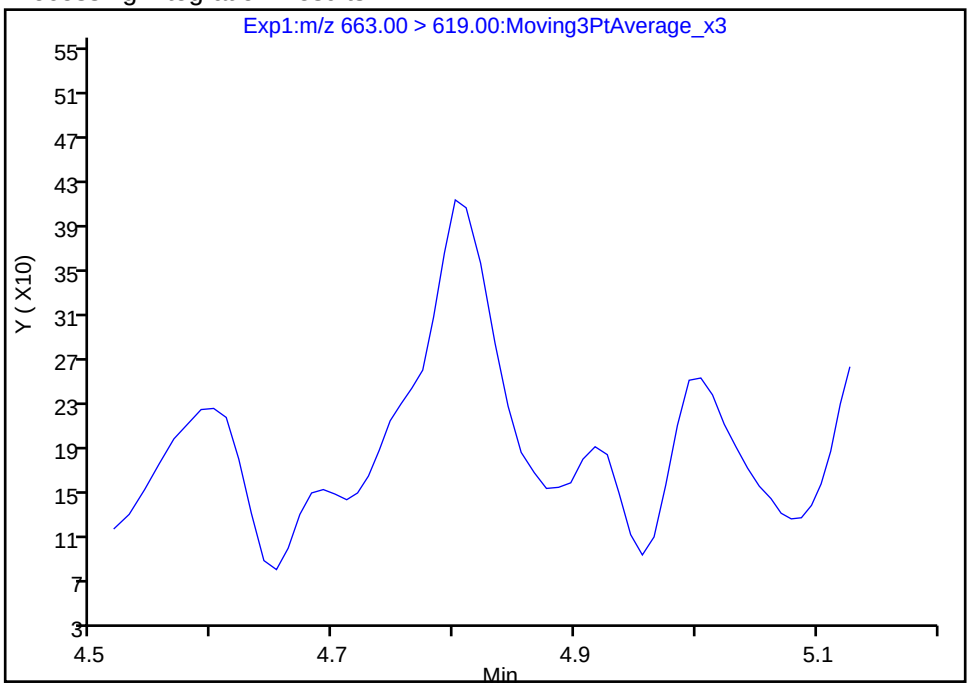
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

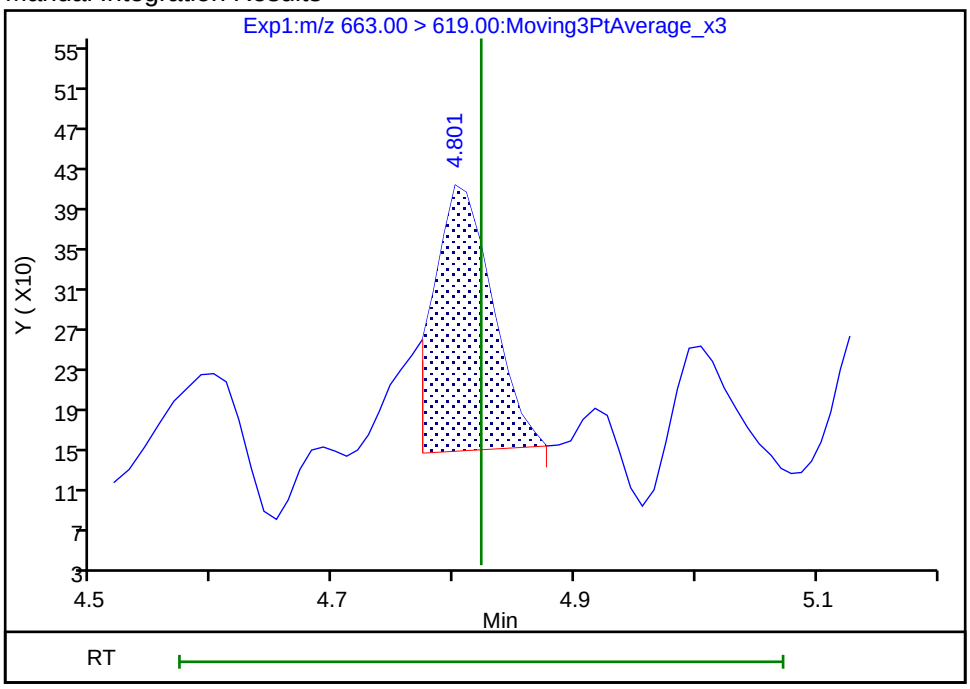
Not Detected
Expected RT: 4.82

Processing Integration Results




Manual Integration Results

RT: 4.80
Area: 847
Amount: 0.002742
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:01:56
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

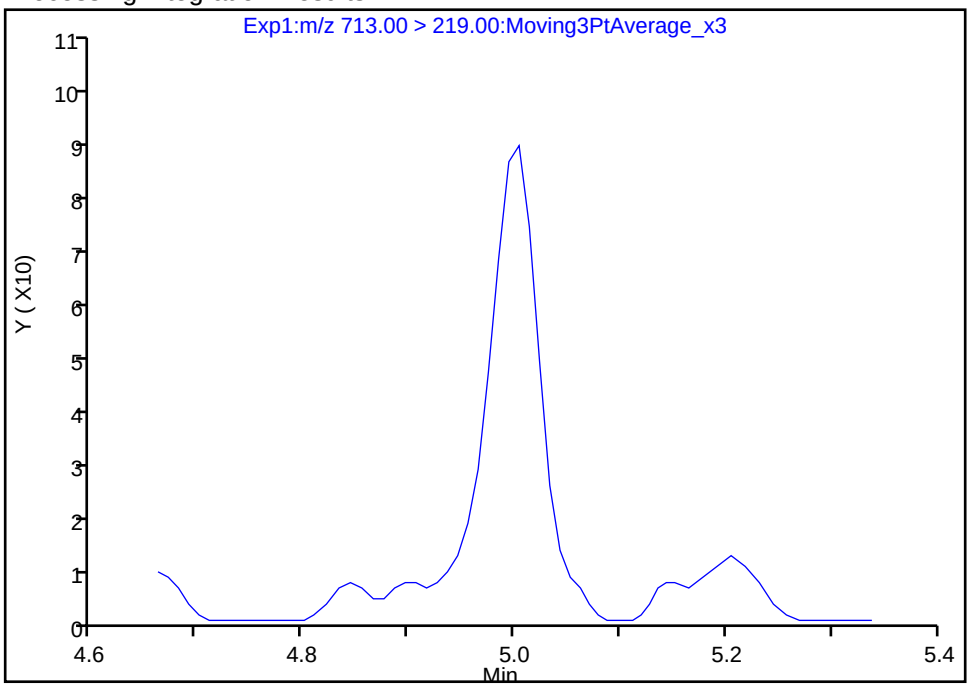
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d
Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812
Lims ID: MB 200-164654/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

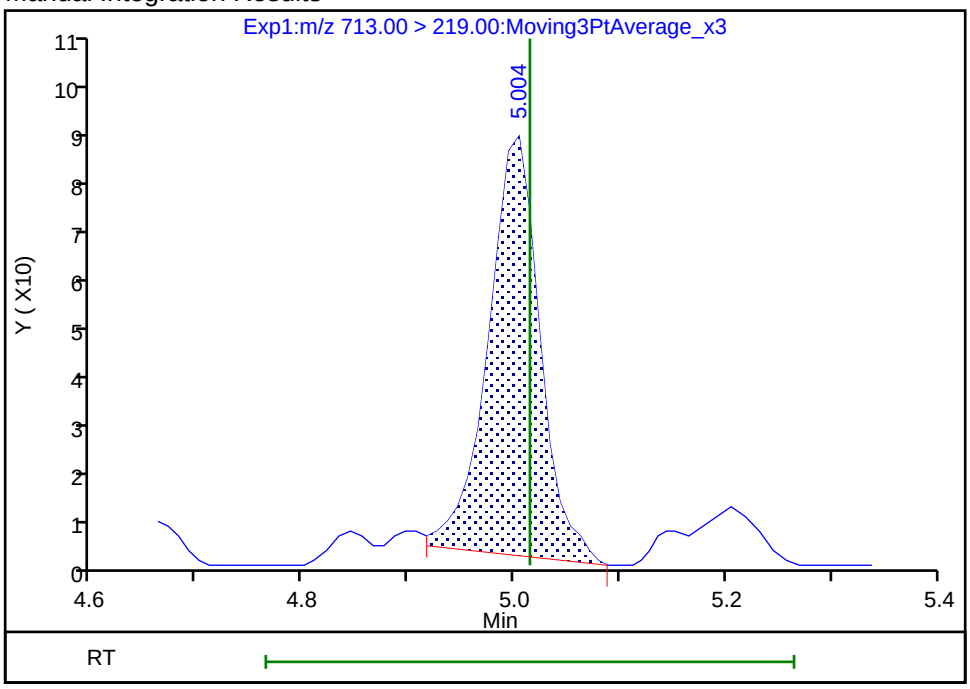
Not Detected
Expected RT: 5.01

Processing Integration Results




Manual Integration Results

RT: 5.00
Area: 292
Amount: 0.003821
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:02:44
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

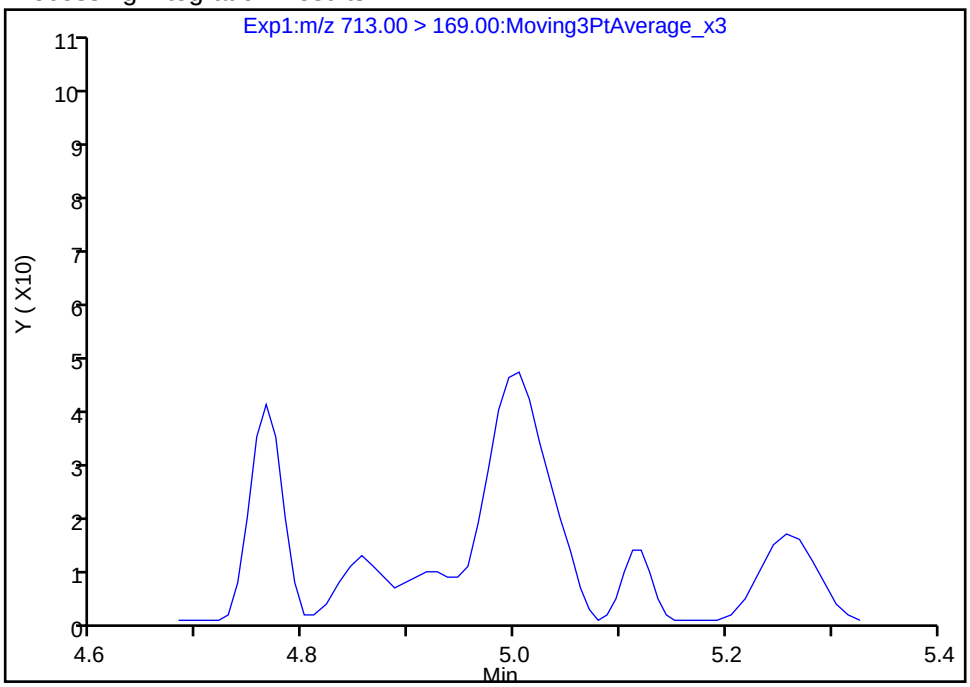
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

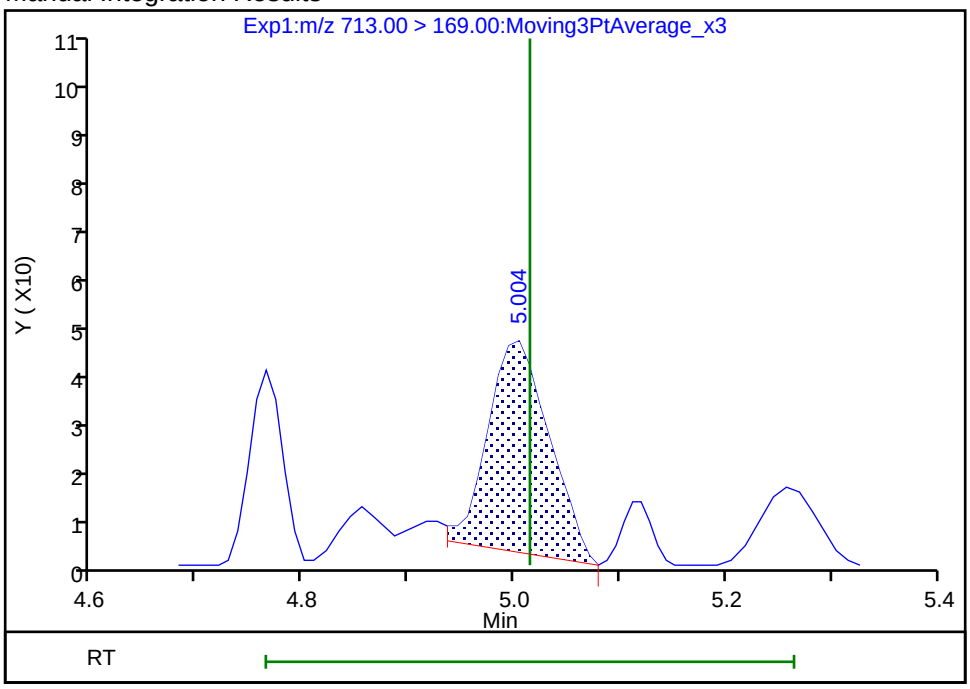
Not Detected
Expected RT: 5.01

Processing Integration Results




Manual Integration Results

RT: 5.00
Area: 174
Amount: 0.003821
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:03:00
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

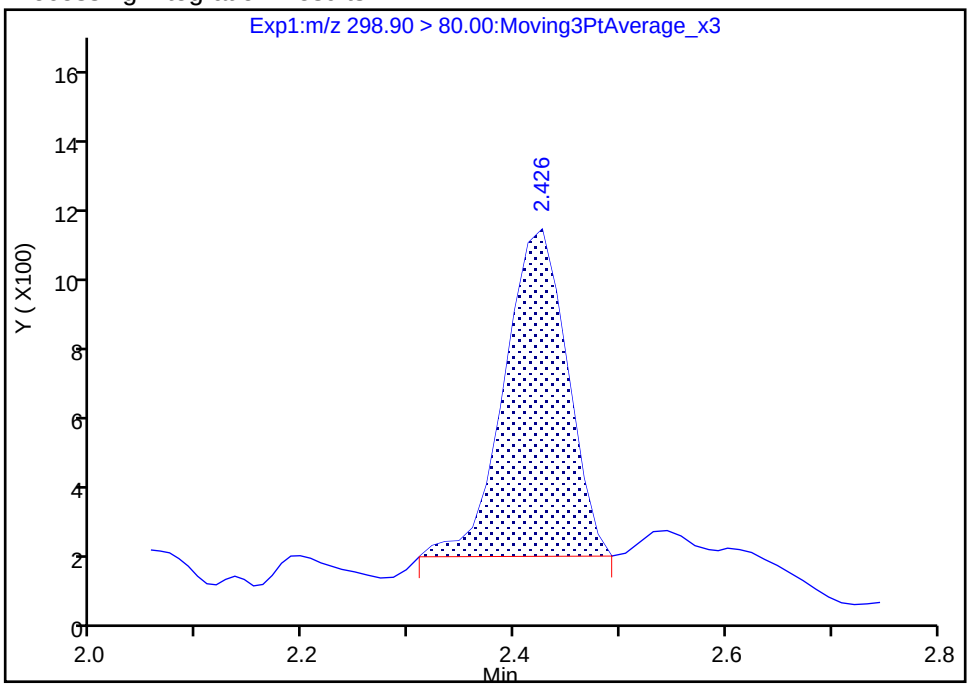
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d
Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812
Lims ID: MB 200-164654/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

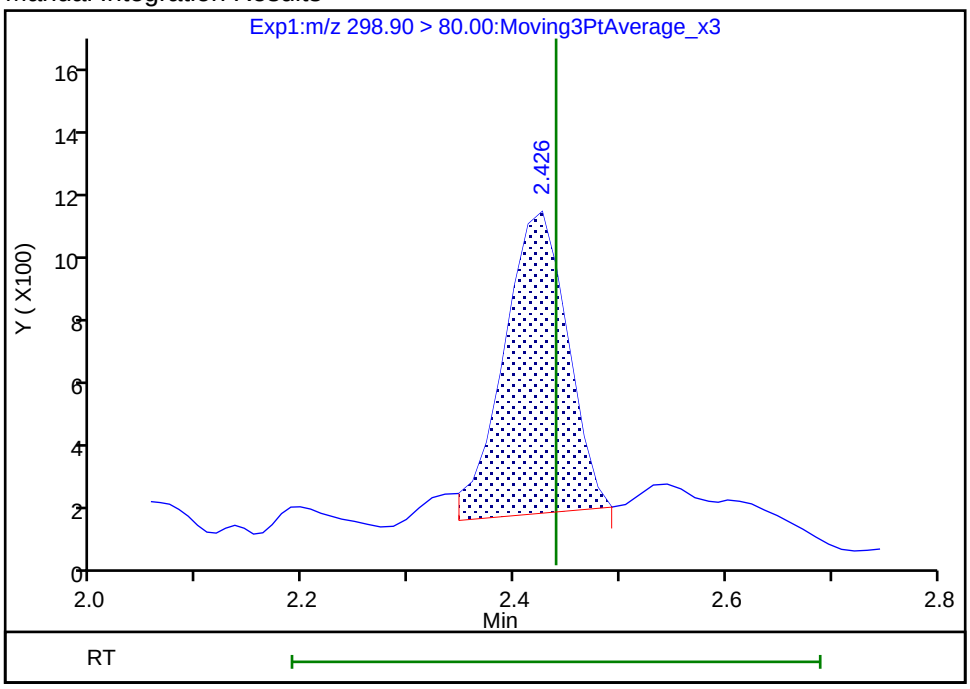
Processing Integration Results

RT: 2.43
Area: 3763
Amount: 0.003063
Amount Units: ng/ml




Manual Integration Results

RT: 2.43
Area: 3862
Amount: 0.003143
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:35:50
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

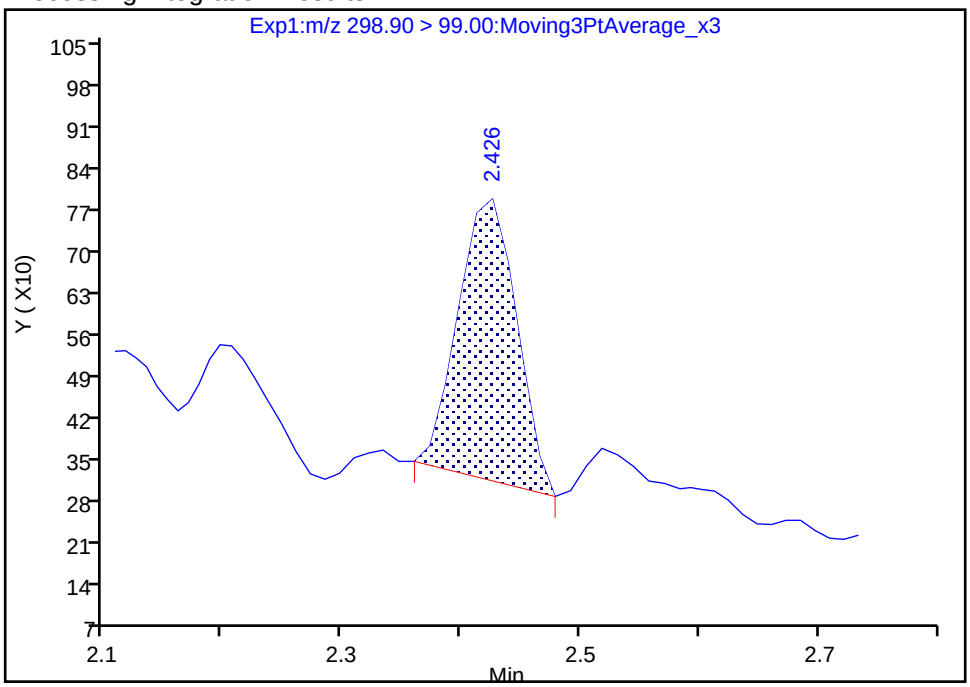
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d
Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812
Lims ID: MB 200-164654/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

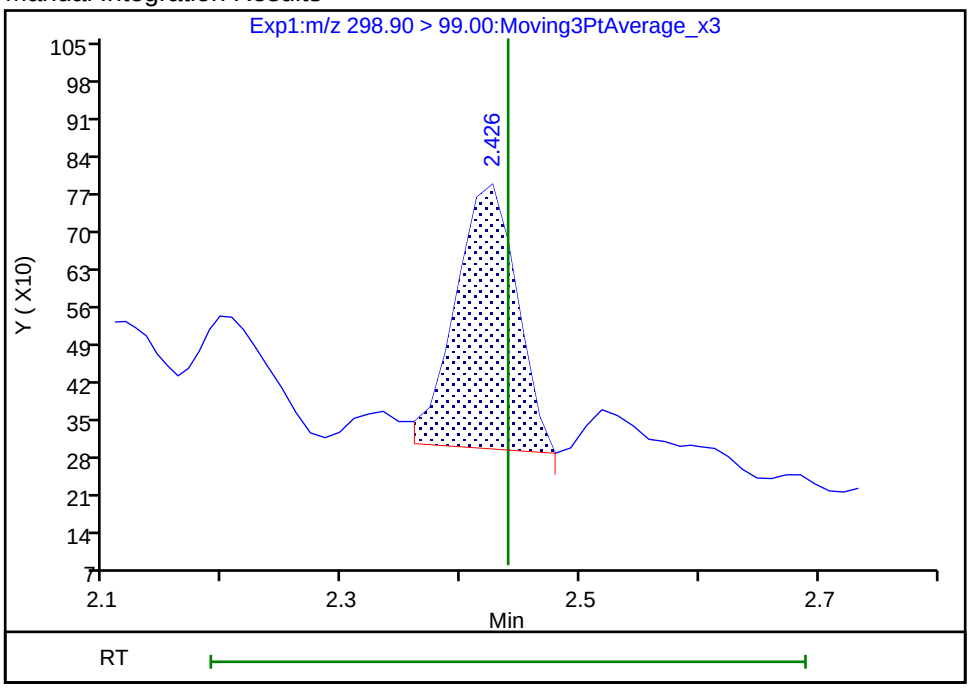
Processing Integration Results

RT: 2.43
Area: 1605
Amount: 0.003063
Amount Units: ng/ml




Manual Integration Results

RT: 2.43
Area: 1750
Amount: 0.003143
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:36:30
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

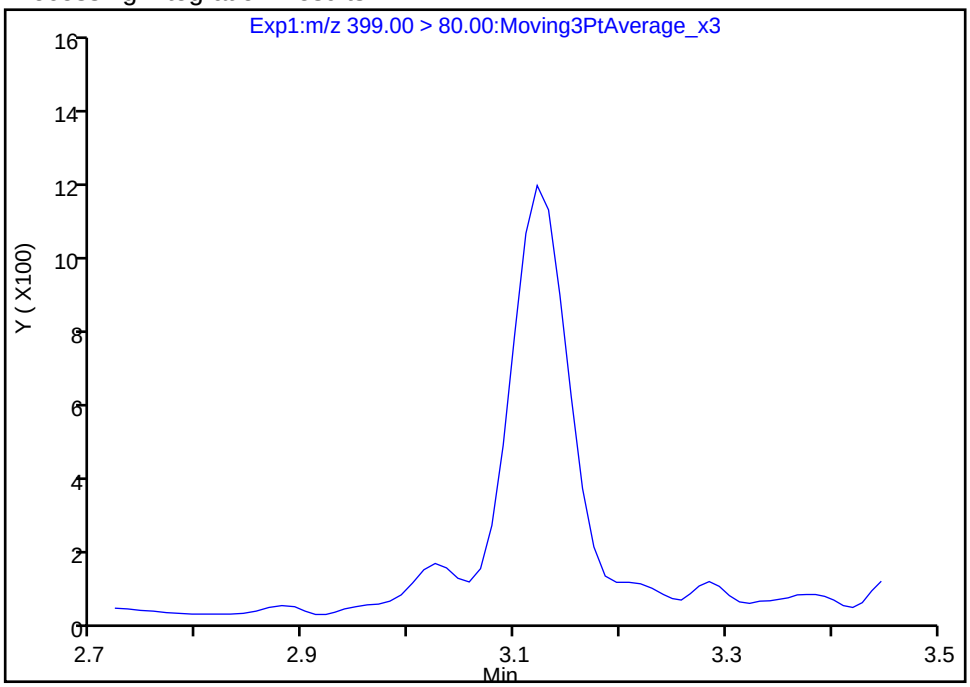
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

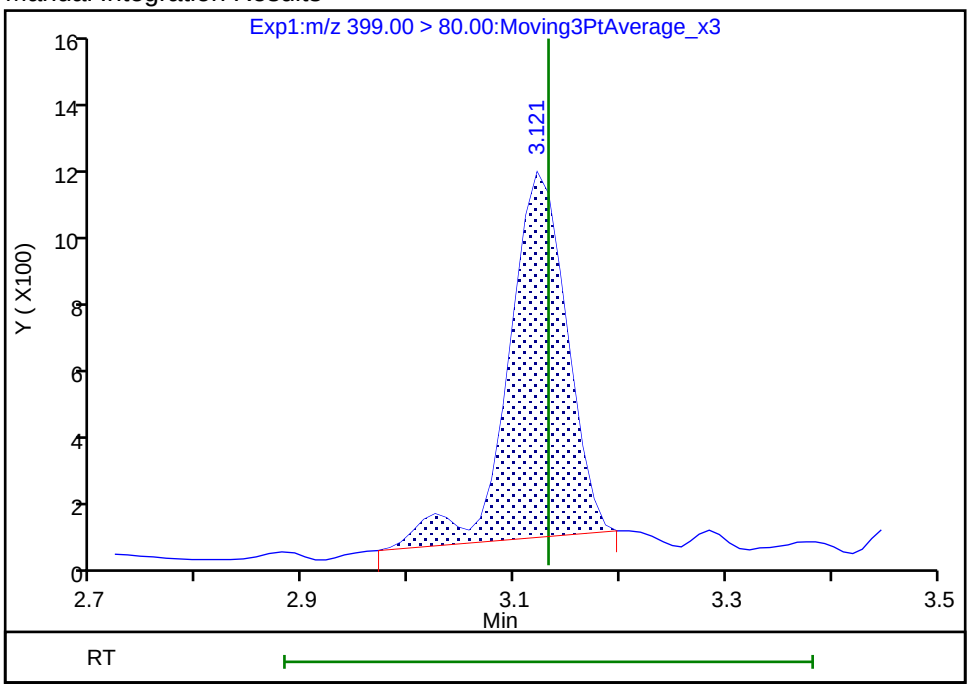
Not Detected
Expected RT: 3.13

Processing Integration Results




Manual Integration Results

RT: 3.12
Area: 4211
Amount: 0.004414
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:38:50
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

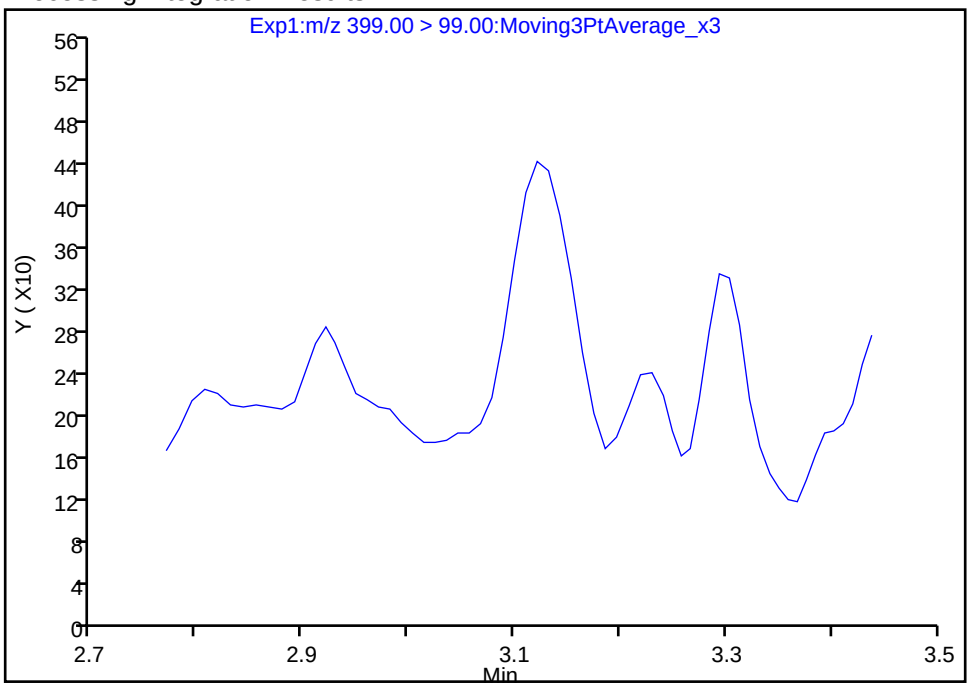
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

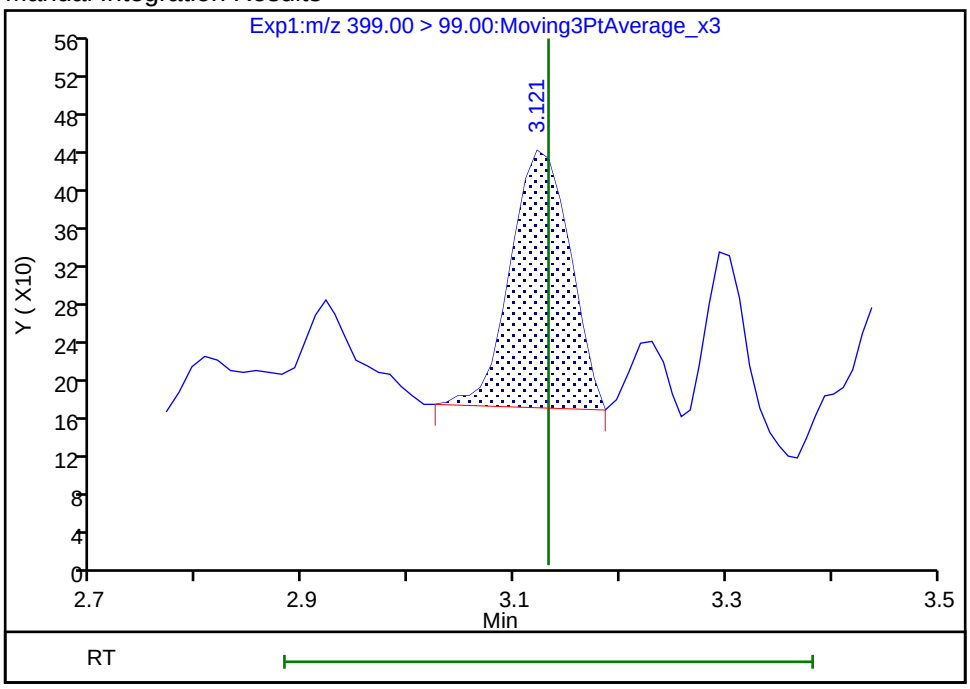
Not Detected
Expected RT: 3.13

Processing Integration Results




Manual Integration Results

RT: 3.12
Area: 1068
Amount: 0.004414
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:39:01
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

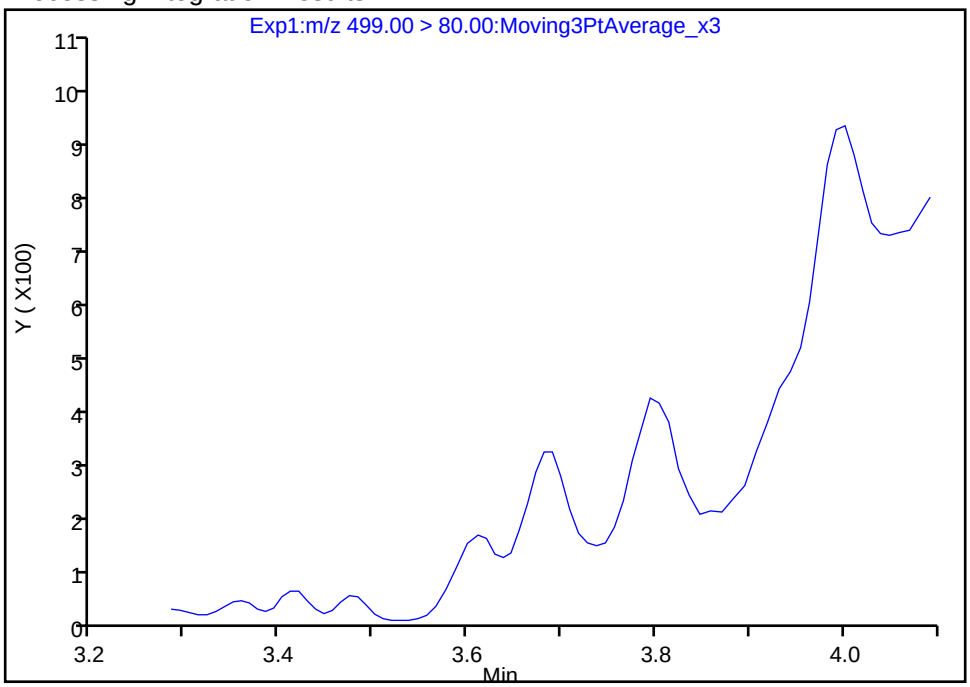
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

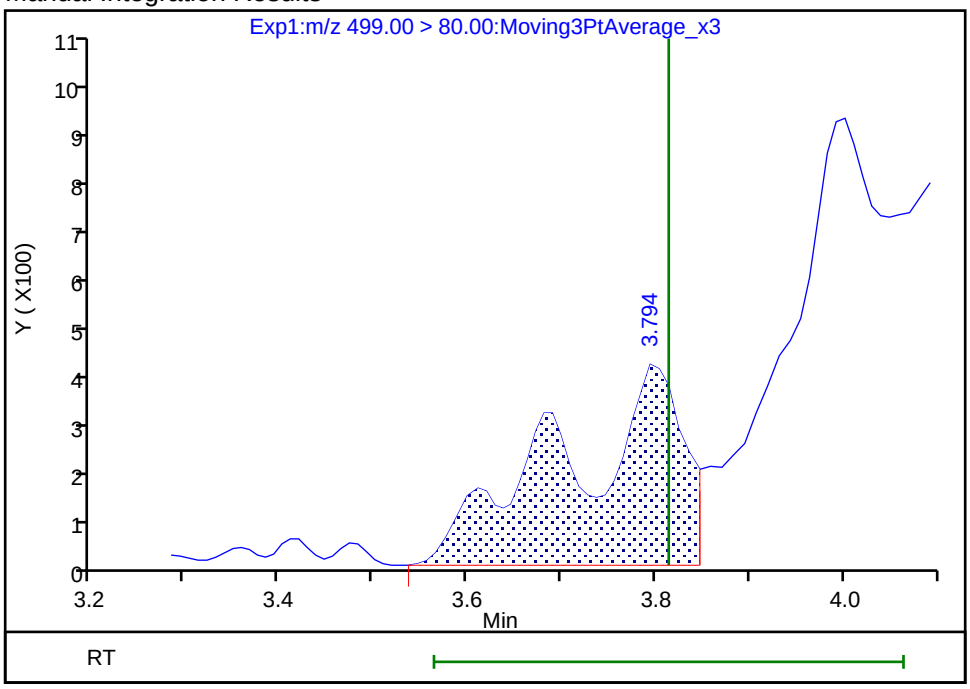
Not Detected
Expected RT: 3.81

Processing Integration Results




Manual Integration Results

RT: 3.79
Area: 3443
Amount: 0.005449
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:52:17
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

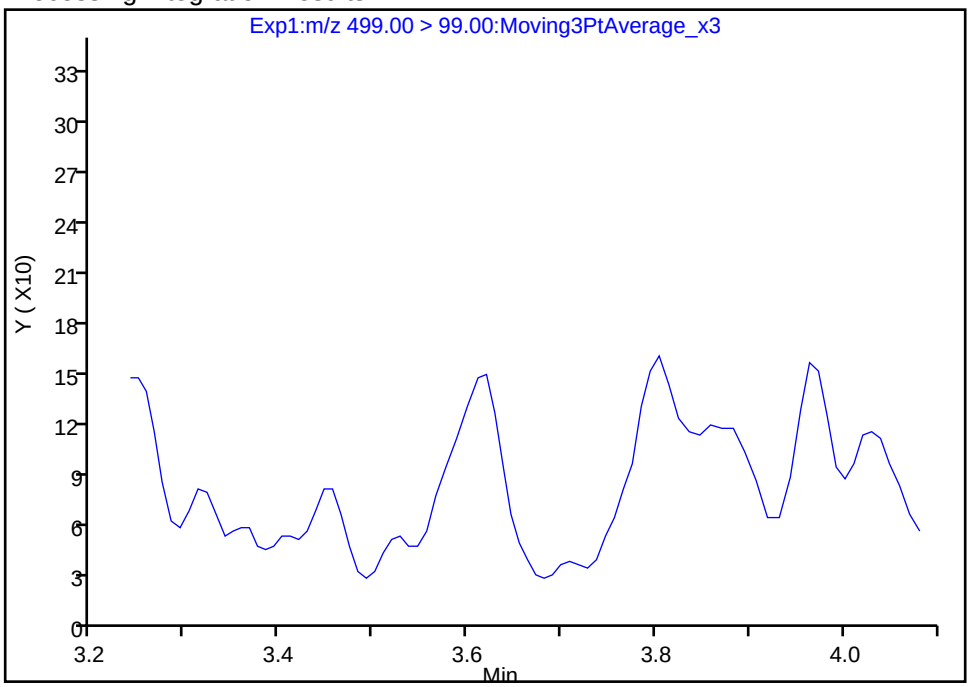
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

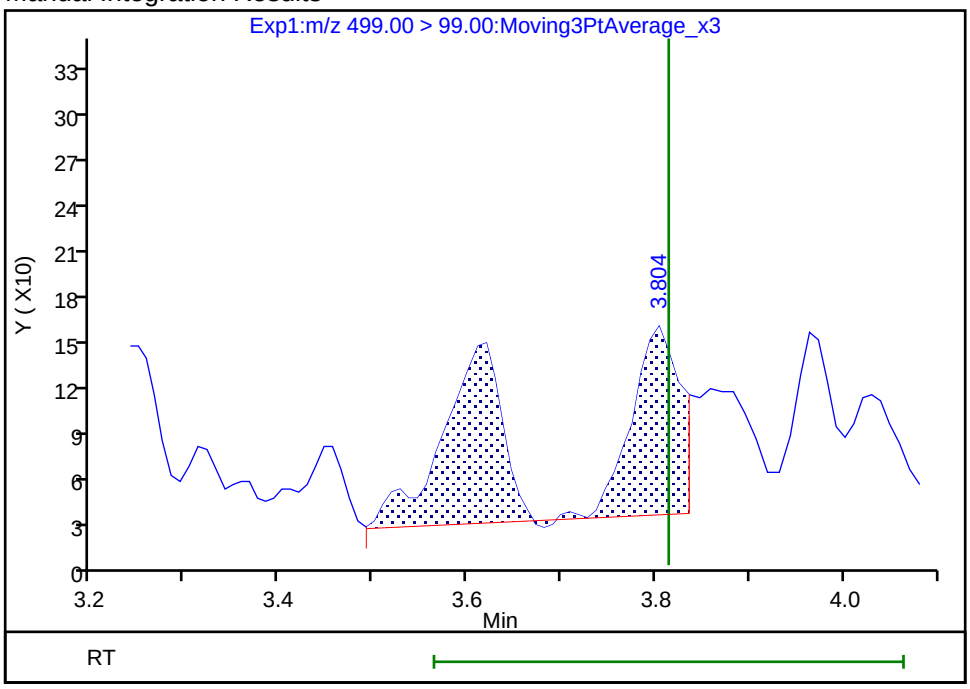
Processing Integration Results

Not Detected
Expected RT: 3.81




Manual Integration Results

RT: 3.80
Area: 953
Amount: 0.005449
Amount Units: ng/ml




Reviewer: deannd, 15-Mar-2021 16:49:14
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

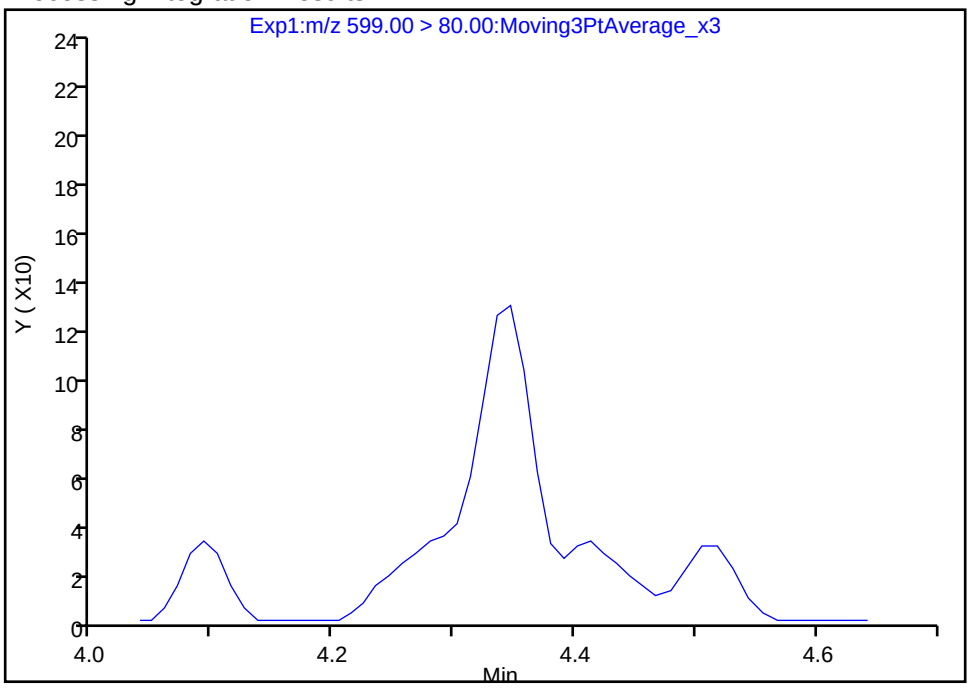
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

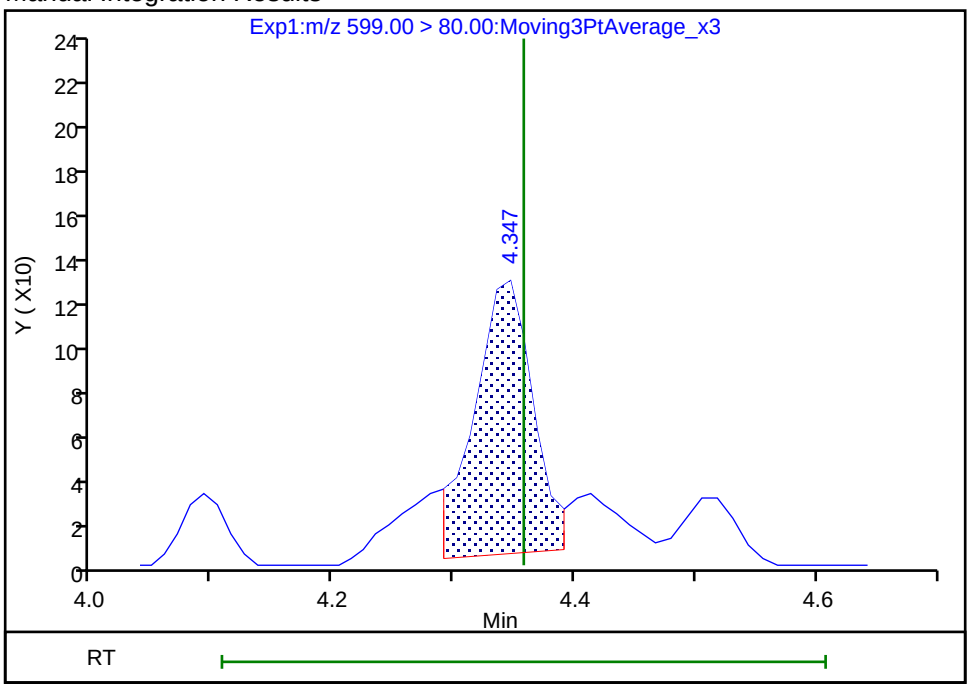
Not Detected
Expected RT: 4.36

Processing Integration Results




Manual Integration Results

RT: 4.35
Area: 407
Amount: 0.001083
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:56:13
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

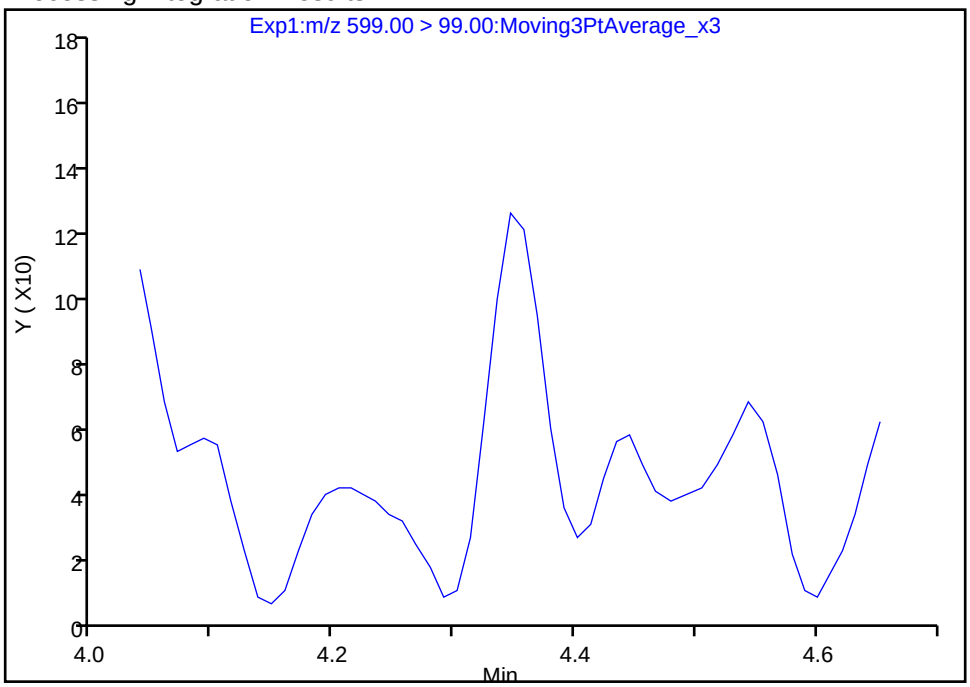
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d
Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812
Lims ID: MB 200-164654/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

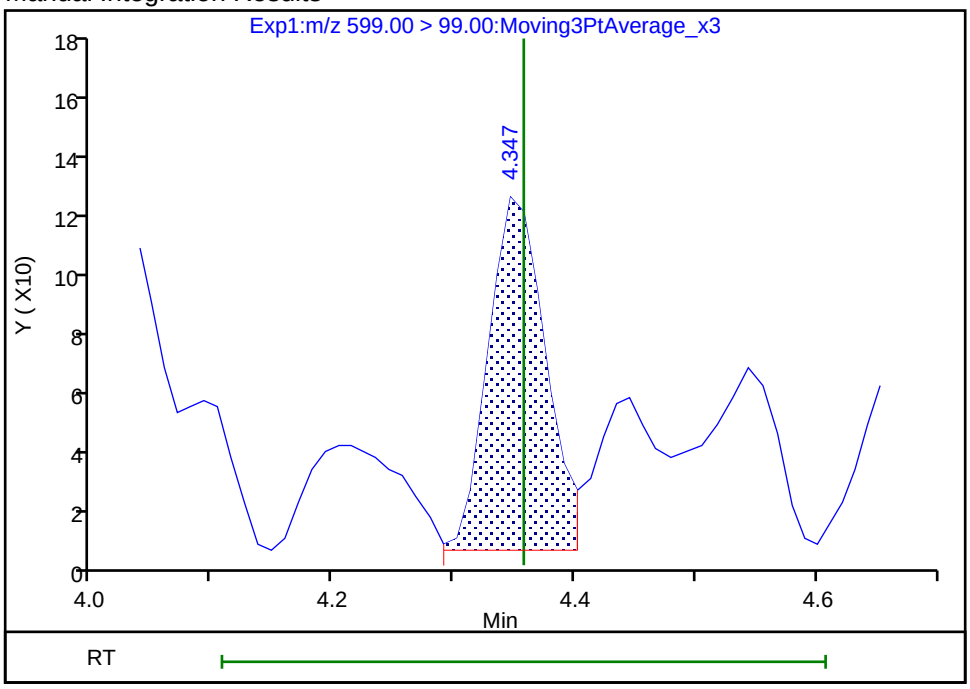
Not Detected
Expected RT: 4.36

Processing Integration Results




Manual Integration Results

RT: 4.35
Area: 386
Amount: 0.001083
Amount Units: ng/ml




Reviewer: deannd, 15-Mar-2021 16:49:42
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

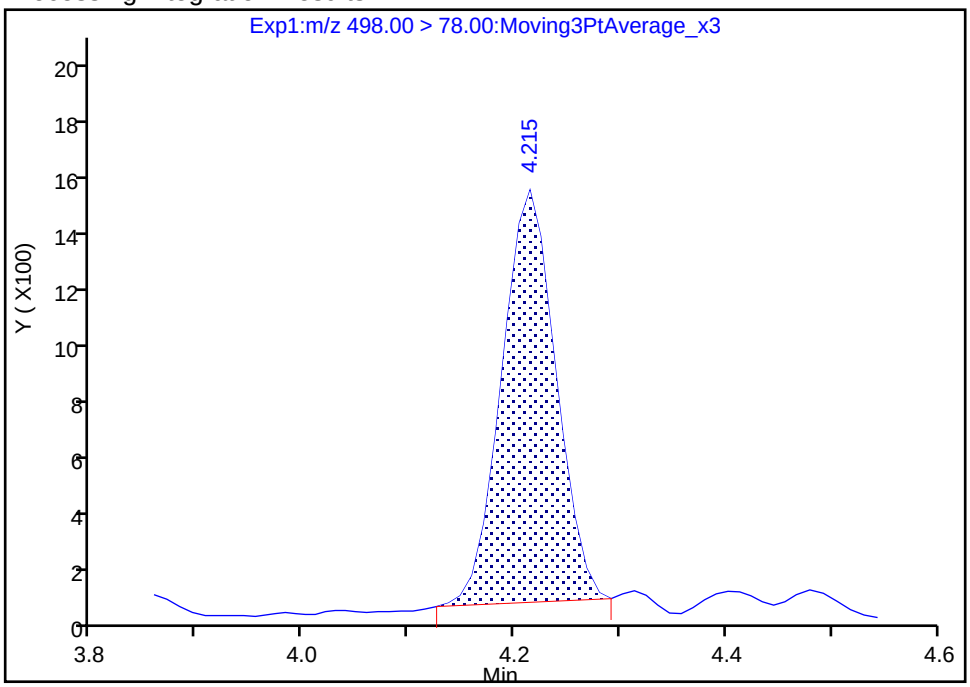
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

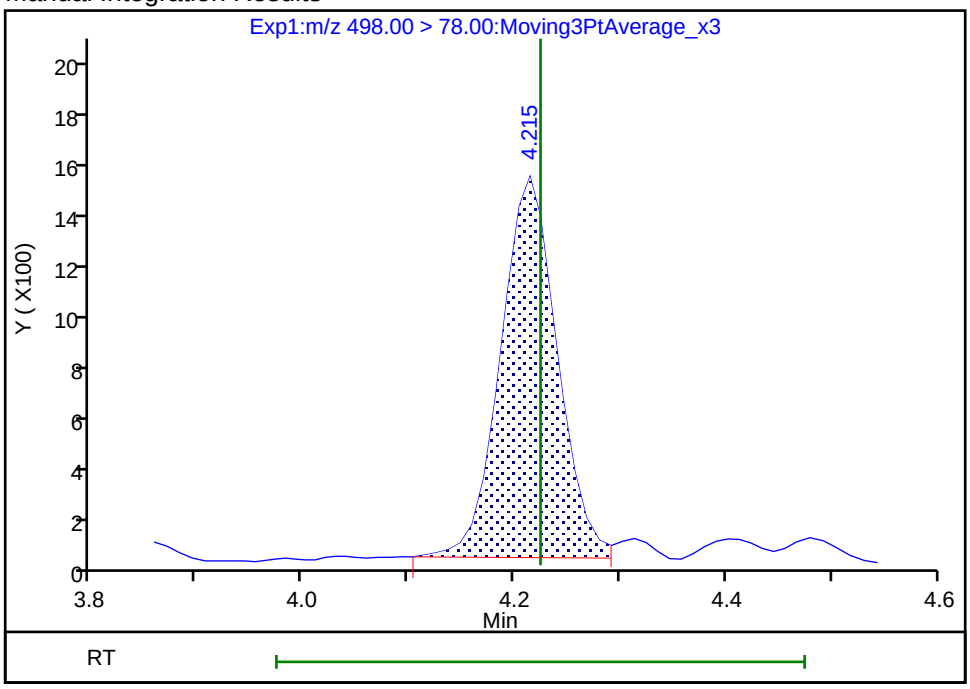
Processing Integration Results

RT: 4.21
Area: 5193
Amount: 0.008098
Amount Units: ng/ml




Manual Integration Results

RT: 4.21
Area: 5529
Amount: 0.008622
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:55:26

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

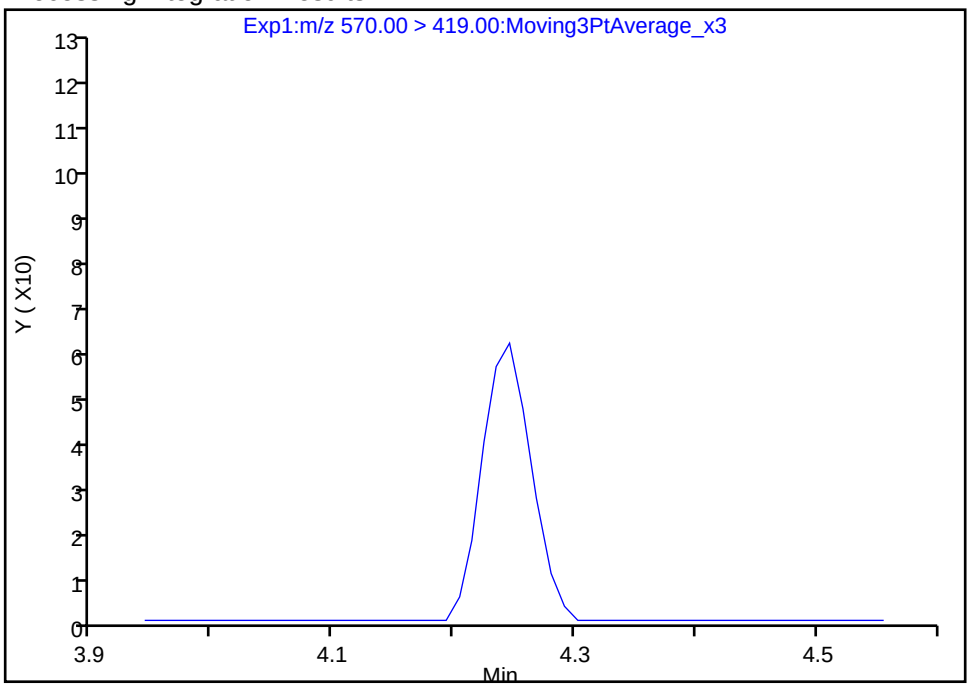
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

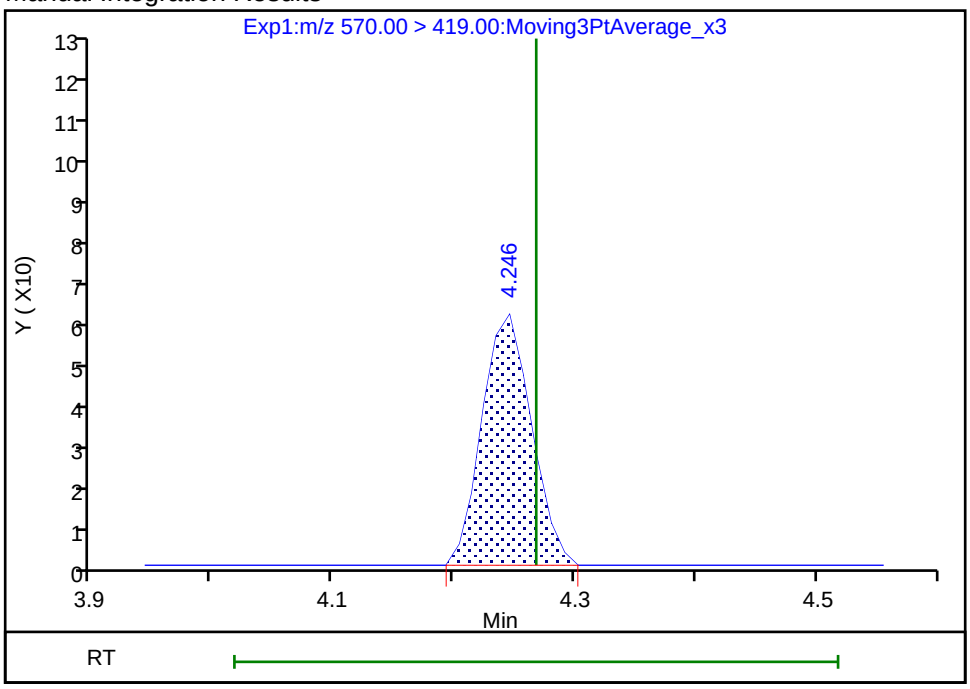
Not Detected
Expected RT: 4.27

Processing Integration Results




Manual Integration Results

RT: 4.25
Area: 167
Amount: 0.004946
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:55:38
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

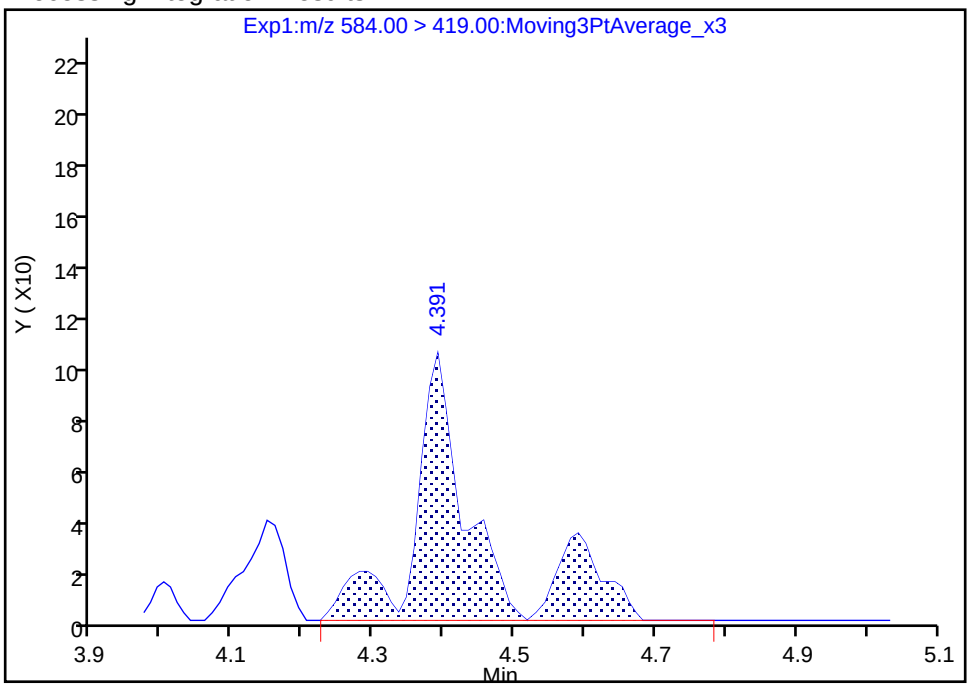
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d
Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812
Lims ID: MB 200-164654/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

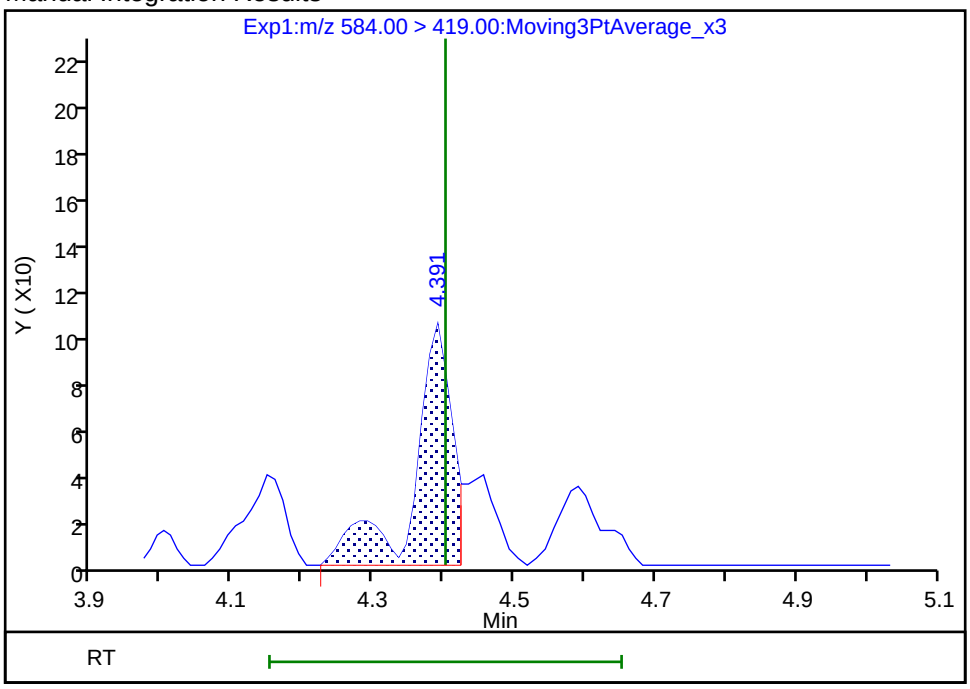
Processing Integration Results

RT: 4.39
Area: 658
Amount: 0.021653
Amount Units: ng/ml




Manual Integration Results

RT: 4.39
Area: 380
Amount: 0.012505
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:58:34
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

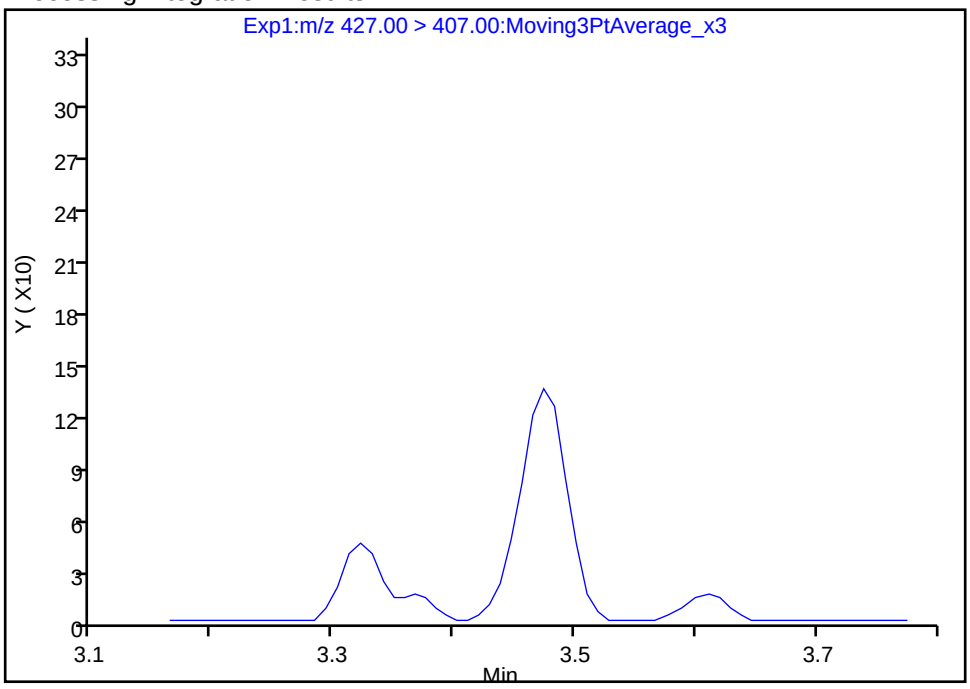
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 13 1H,1H,2H,2H-perfluorooctanesulfo, CAS: 27619-97-2

Signal: 1

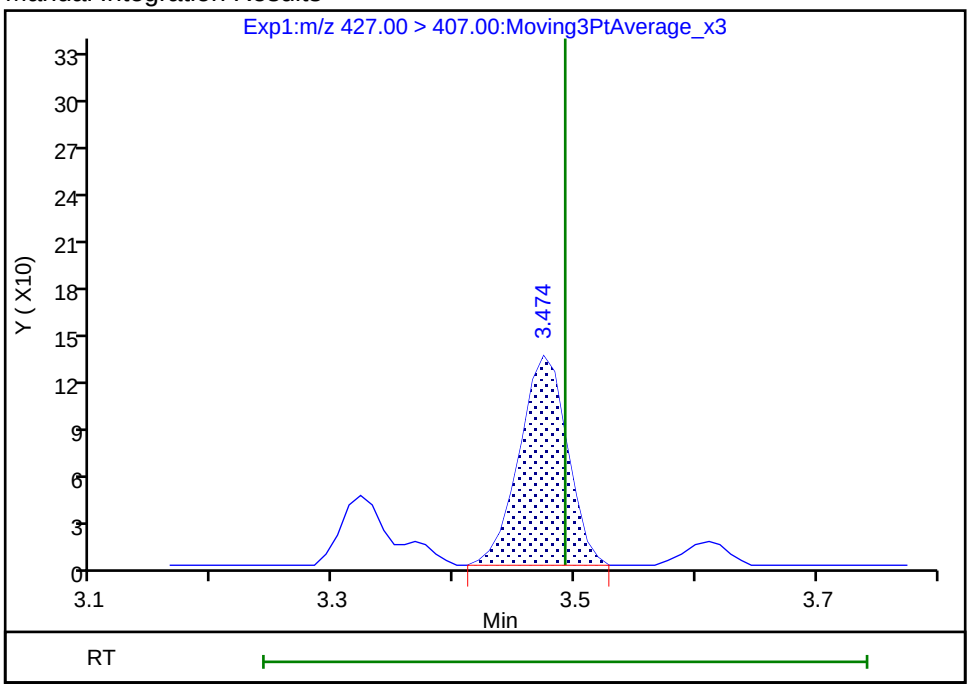
Not Detected
Expected RT: 3.49

Processing Integration Results




Manual Integration Results

RT: 3.47
Area: 363
Amount: 0.003314
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:46:41
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

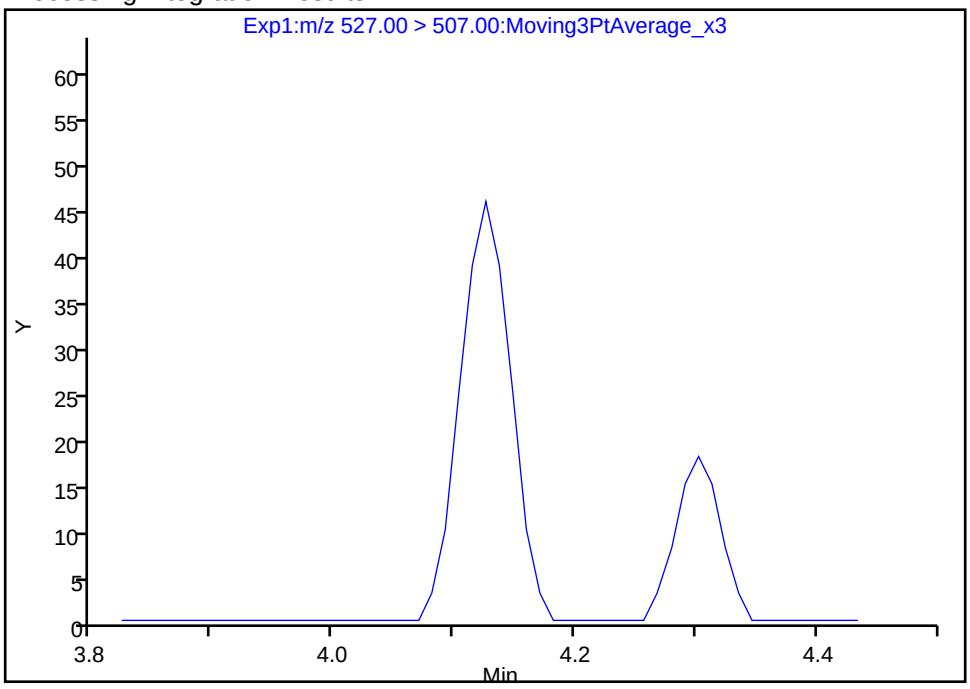
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d
Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812
Lims ID: MB 200-164654/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

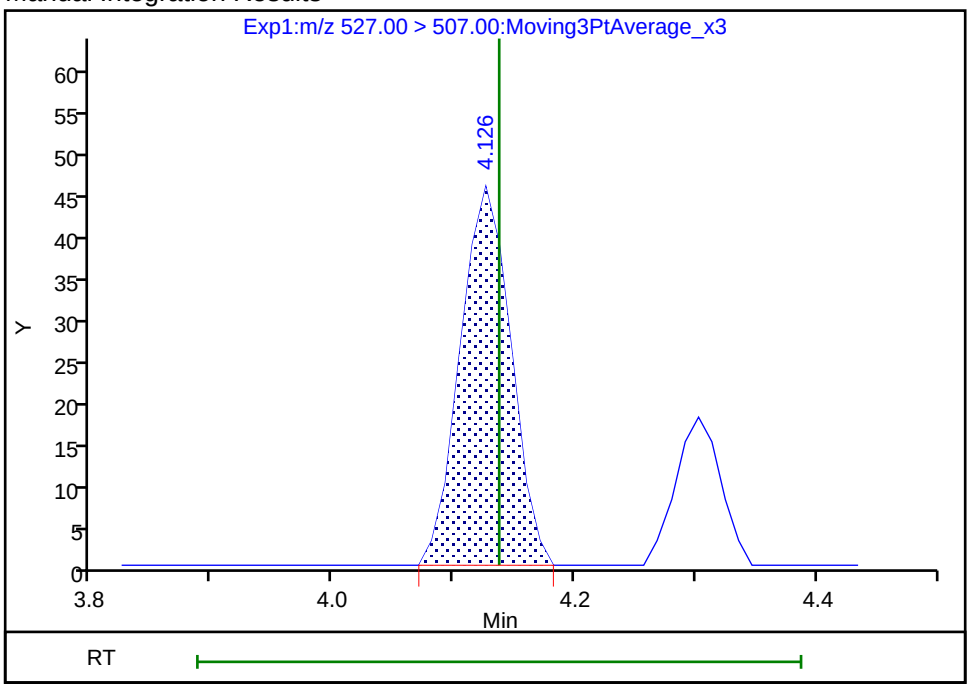
Not Detected
Expected RT: 4.14

Processing Integration Results




Manual Integration Results

RT: 4.13
Area: 134
Amount: 0.002111
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:55:09
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

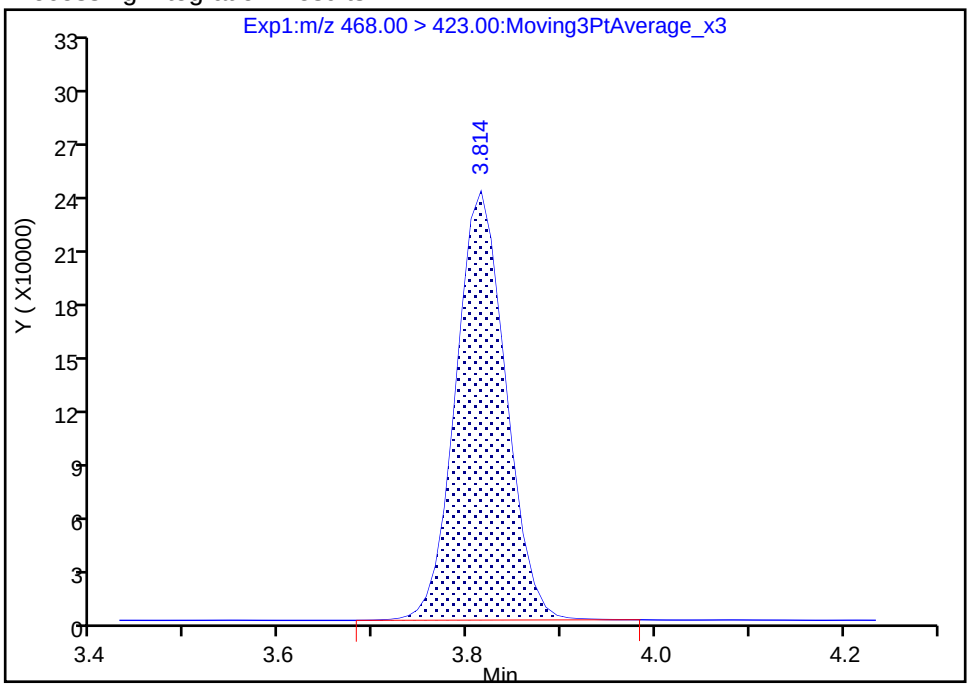
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d
Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812
Lims ID: MB 200-164654/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## D 19 13C5 PFNA, CAS: STL00995

Signal: 1

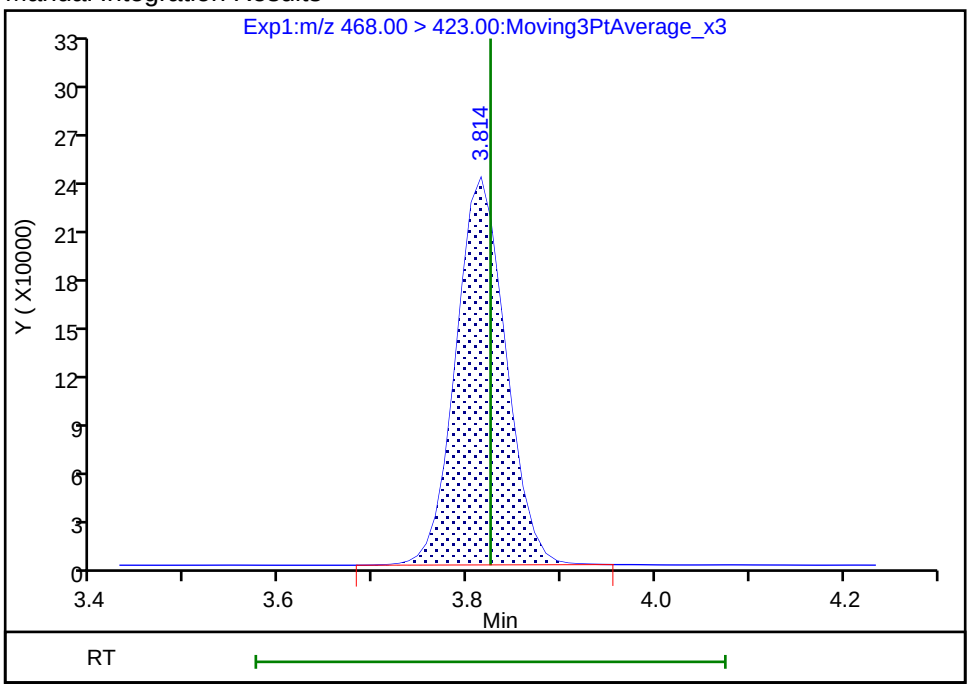
Processing Integration Results

RT: 3.81
Area: 873526
Amount: 1.312123
Amount Units: ng/ml




Manual Integration Results

RT: 3.81
Area: 872768
Amount: 1.310984
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:19:15
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

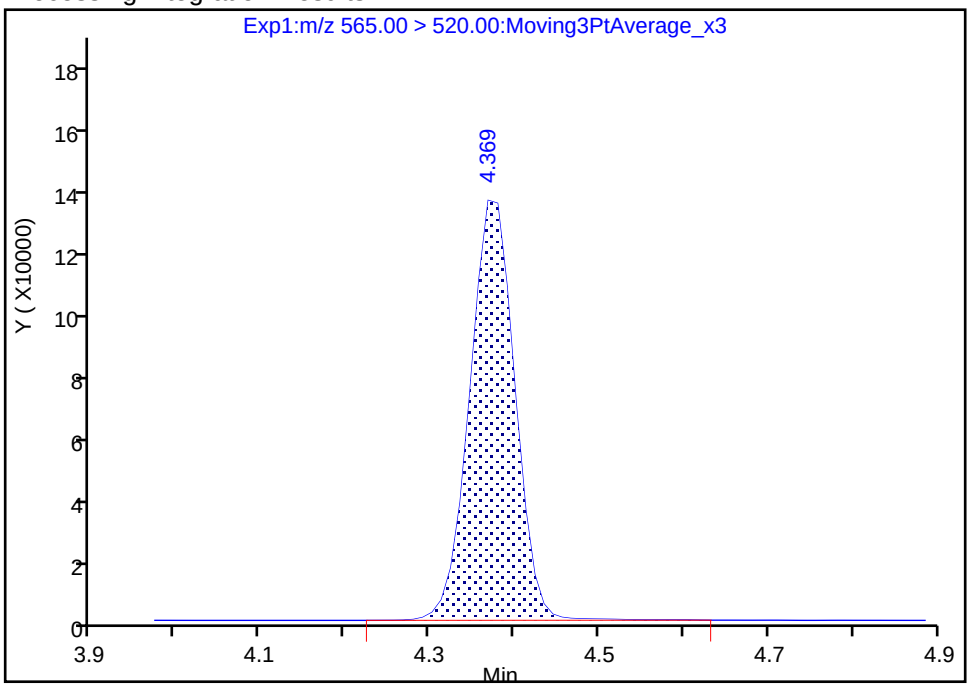
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 30 13C2 PFUnA, CAS: STL00997

Signal: 1

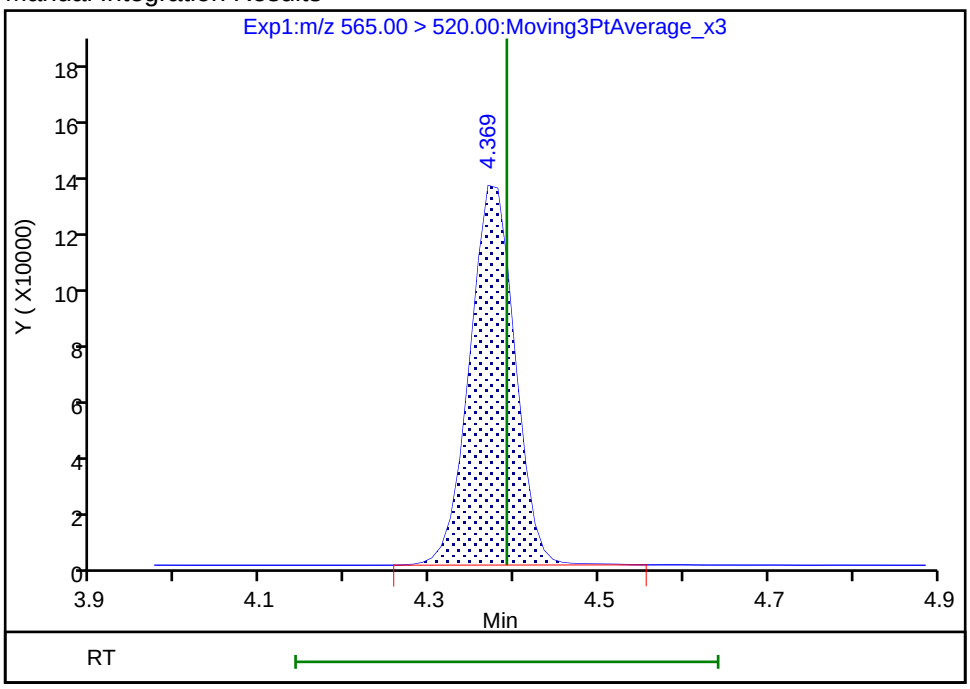
Processing Integration Results

RT: 4.37
Area: 484897
Amount: 0.927485
Amount Units: ng/ml




Manual Integration Results

RT: 4.37
Area: 483704
Amount: 0.925203
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:25:03

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

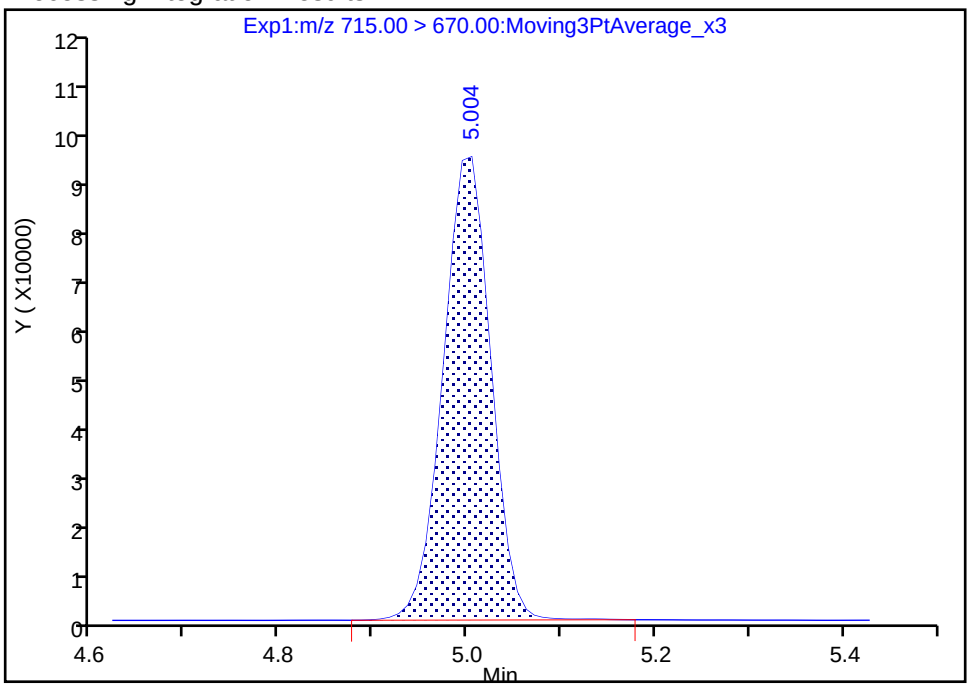
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d
Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812
Lims ID: MB 200-164654/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## D 43 13C2 PFTeDA, CAS: STL02116

Signal: 1

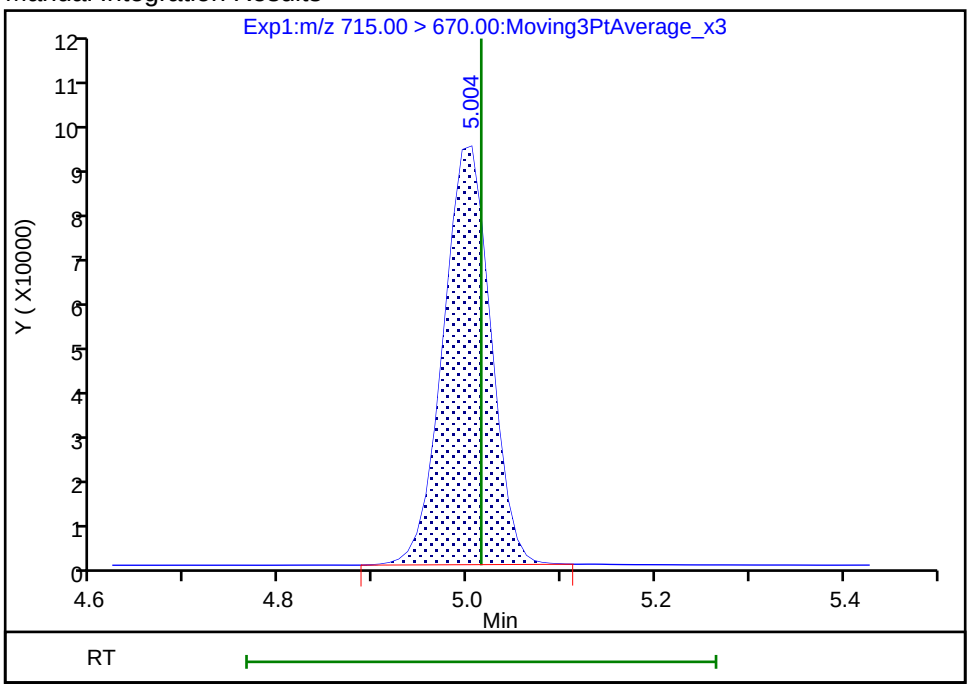
Processing Integration Results

RT: 5.00
Area: 308040
Amount: 0.754642
Amount Units: ng/ml




Manual Integration Results

RT: 5.00
Area: 306967
Amount: 0.752014
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:25:35
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

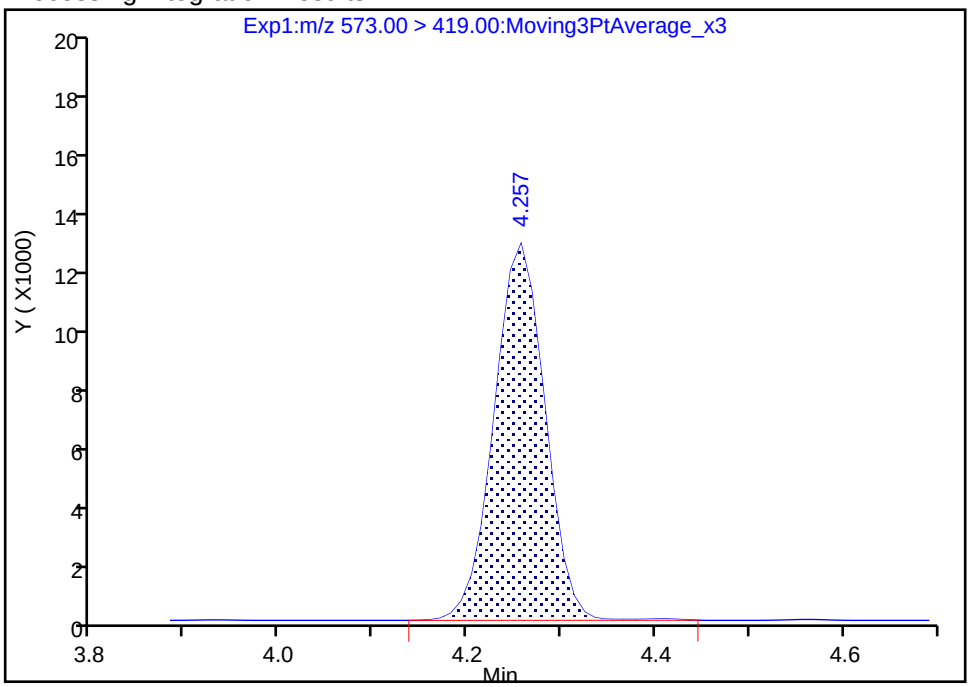
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d
Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812
Lims ID: MB 200-164654/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

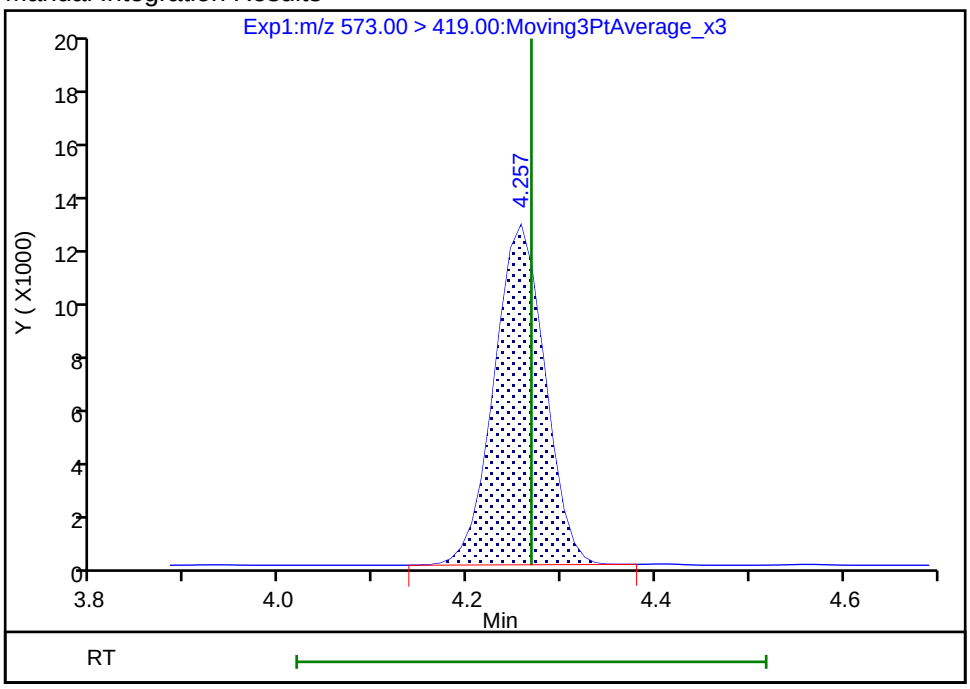
Processing Integration Results

RT: 4.26
Area: 47945
Amount: 1.038581
Amount Units: ng/ml




Manual Integration Results

RT: 4.26
Area: 47618
Amount: 1.031497
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:20:09
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

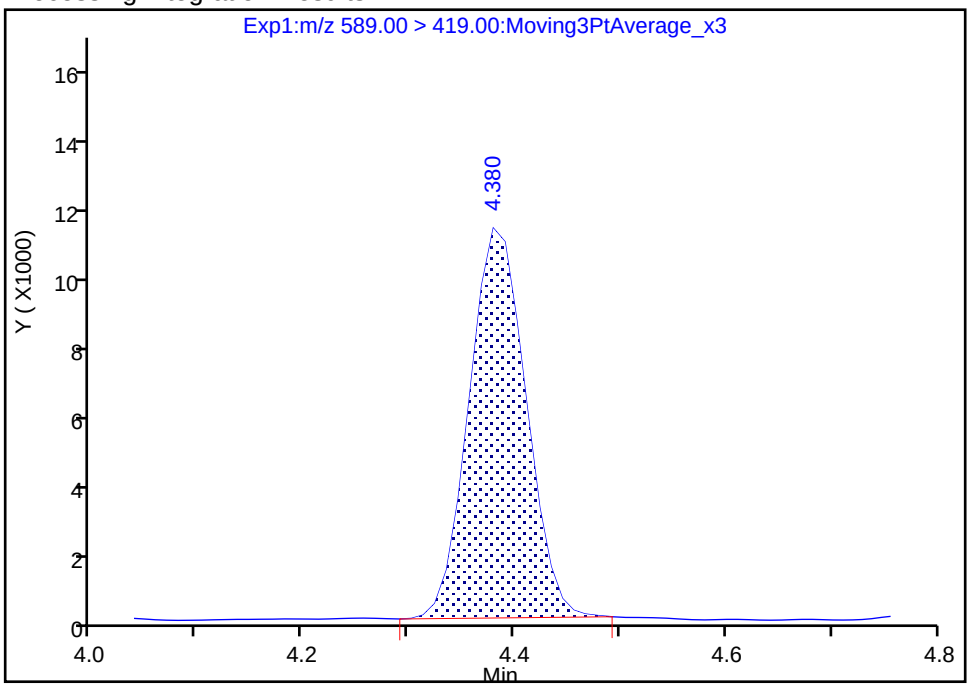
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| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 32 d5-NEtFOSAA, CAS: STL02117

Signal: 1

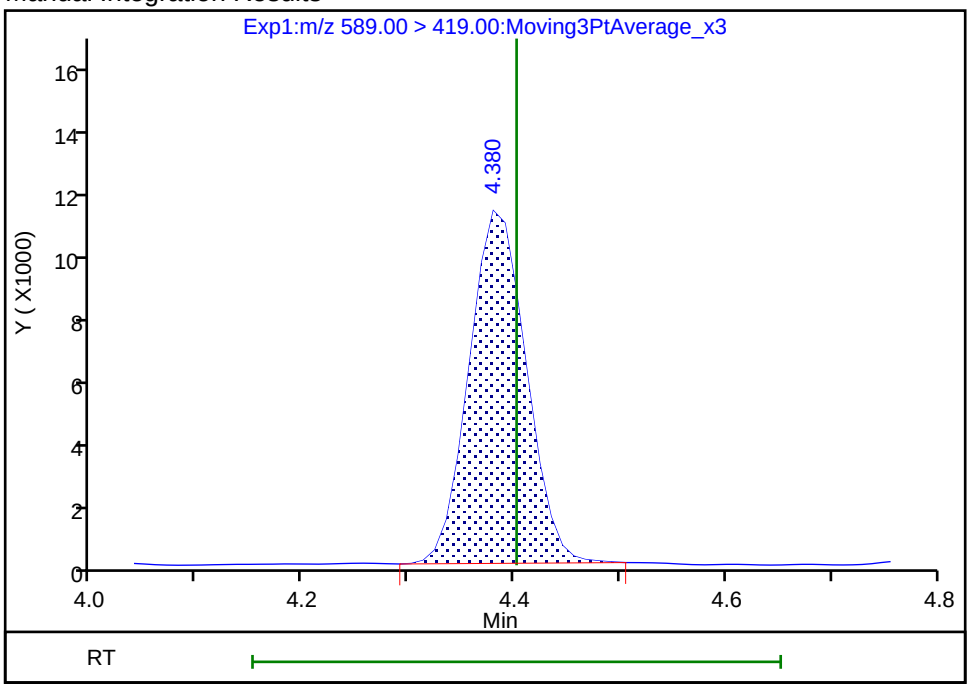
Processing Integration Results

RT: 4.38
Area: 40897
Amount: 0.916459
Amount Units: ng/ml




Manual Integration Results

RT: 4.38
Area: 41035
Amount: 0.919551
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:25:20

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

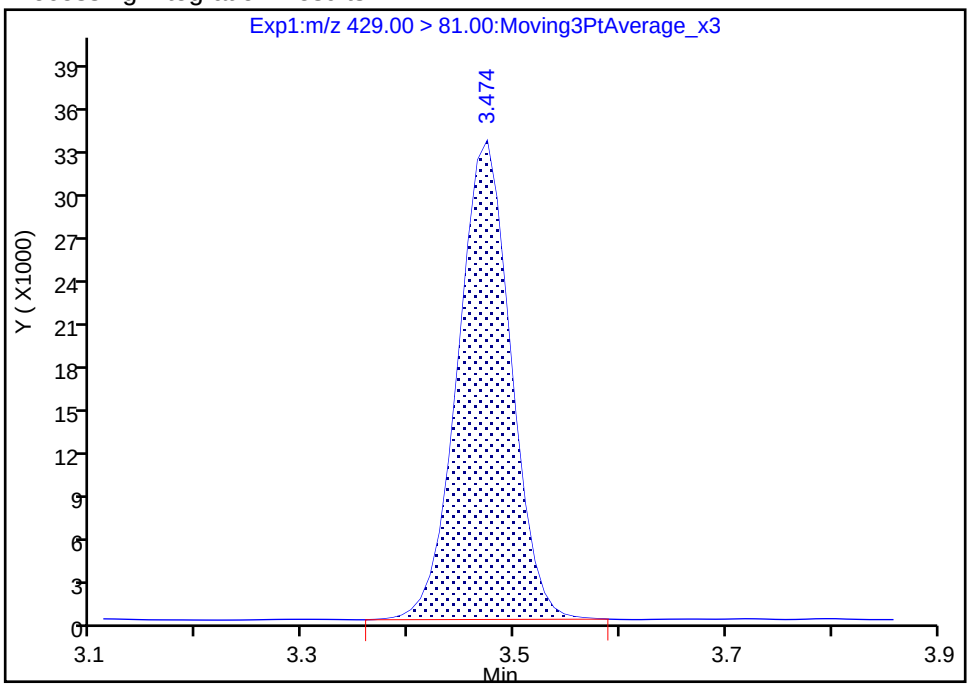
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d | | | | |
| Injection Date: | 12-Mar-2021 12:34:17 | Instrument ID: | LC812 | | |
| Lims ID: | MB 200-164654/1-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

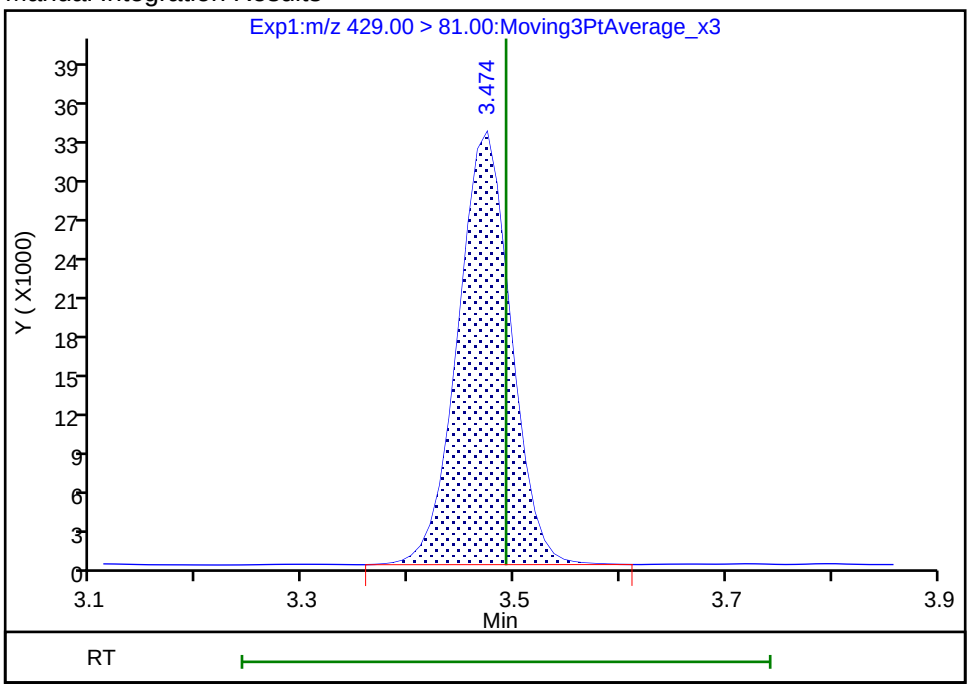
Processing Integration Results

RT: 3.47
Area: 116686
Amount: 1.289062
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 116940
Amount: 1.291868
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:18:41

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

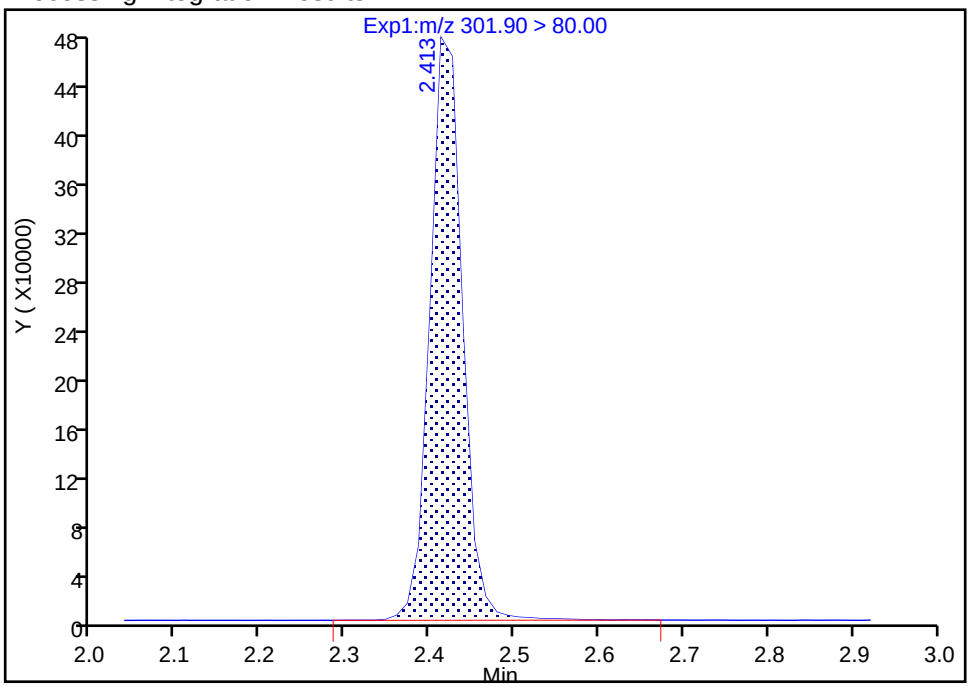
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B05.d
Injection Date: 12-Mar-2021 12:34:17 Instrument ID: LC812
Lims ID: MB 200-164654/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## D 47 13C3 PFBS, CAS: STL02337

Signal: 1

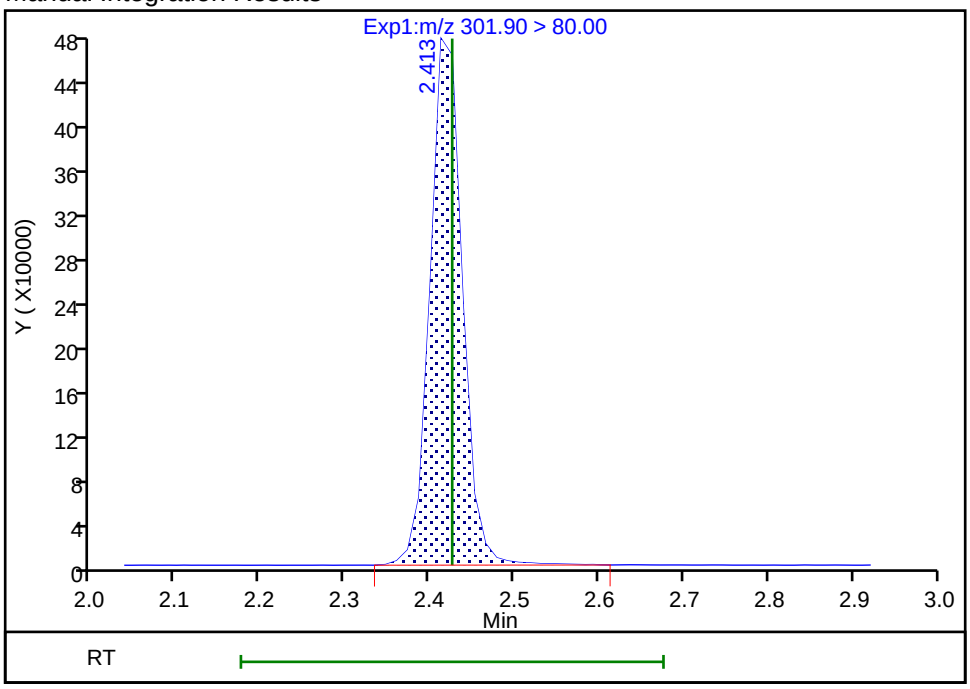
Processing Integration Results

RT: 2.41
Area: 1263630
Amount: 1.296843
Amount Units: ng/ml




Manual Integration Results

RT: 2.41
Area: 1262547
Amount: 1.295732
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 08:07:27
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID:  Lab Sample ID: ICB 200-162365/14

Matrix: Water  Lab File ID: PA201222ICAL014.d

Analysis Method: 537 (modified)  Date Collected:

Extraction Method:  Date Extracted:

Sample wt/vol: 1(mL)  Date Analyzed: 12/22/2020 13:37

Con. Extract Vol.:  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18 ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 162365  Units: ng/mL

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 375-22-4 | Perfluorobutanoic acid (PFBA) | 0.028 | U | 0.13 | 0.028 |
| 2706-90-3 | Perfluoropentanoic acid (PFPeA) | 0.027 | U | 0.050 | 0.027 |
| 307-24-4 | Perfluorohexanoic acid (PFHxA) | 0.021 | U | 0.050 | 0.021 |
| 375-85-9 | Perfluoroheptanoic acid (PFHpA) | 0.012 | U | 0.050 | 0.012 |
| 335-67-1 | Perfluorooctanoic acid (PFOA) | 0.024 | U | 0.050 | 0.024 |
| 375-95-1 | Perfluorononanoic acid (PFNA) | 0.015 | U | 0.050 | 0.015 |
| 335-76-2 | Perfluorodecanoic acid (PFDA) | 0.012 | U | 0.050 | 0.012 |
| 2058-94-8 | Perfluoroundecanoic acid (PFUnA) | 0.018 | U | 0.050 | 0.018 |
| 307-55-1 | Perfluorododecanoic acid (PFDoA) | 0.012 | U | 0.050 | 0.012 |
| 72629-94-8 | Perfluorotridecanoic acid (PFTriA) | 0.011 | U | 0.050 | 0.011 |
| 376-06-7 | Perfluorotetradecanoic acid (PFTeA) | 0.015 | U | 0.050 | 0.015 |
| 375-73-5 | Perfluorobutanesulfonic acid (PFBS) | 0.016 | U | 0.050 | 0.016 |
| 355-46-4 | Perfluorohexanesulfonic acid (PFHxS) | 0.017 | U | 0.050 | 0.017 |
| 375-92-8 | Perfluoroheptanesulfonic Acid (PFHpS) | 0.0097 | U | 0.050 | 0.0097 |
| 1763-23-1 | Perfluorooctanesulfonic acid (PFOS) | 0.022 | U | 0.050 | 0.022 |
| 335-77-3 | Perfluorodecanesulfonic acid (PFDS) | 0.012 | U | 0.050 | 0.012 |
| 754-91-6 | Perfluorooctanesulfonamide (PFOSA) | 0.014 | U | 0.050 | 0.014 |
| 2355-31-9 | N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.020 | U | 0.13 | 0.020 |
| 2991-50-6 | N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 0.023 | U | 0.13 | 0.023 |
| 27619-97-2 | 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 0.018 | U | 0.13 | 0.018 |
| 39108-34-4 | 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 0.017 | U | 0.050 | 0.017 |

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID:  Lab Sample ID: ICB 200-162365/14

Matrix: Water  Lab File ID: PA201222ICAL014.d

Analysis Method: 537 (modified)  Date Collected:

Extraction Method:  Date Extracted:

Sample wt/vol: 1(mL)  Date Analyzed: 12/22/2020 13:37

Con. Extract Vol.:  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 162365  Units: ng/mL

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| STL00994 | 18O2 PFHxS | 97 | | 50-150 |
| STL01892 | 13C4 PFHpA | 100 | | 50-150 |
| STL00990 | 13C4 PFOA | 100 | | 50-150 |
| STL00991 | 13C4 PFOS | 98 | | 50-150 |
| STL00995 | 13C5 PFNA | 99 | | 50-150 |
| STL00992 | 13C4 PFBA | 100 | | 25-150 |
| STL00993 | 13C2 PFHxA | 102 | | 50-150 |
| STL00996 | 13C2 PFDA | 104 | | 50-150 |
| STL00997 | 13C2 PFUnA | 98 | | 50-150 |
| STL00998 | 13C2 PFDoA | 101 | | 50-150 |
| STL01056 | 13C8 FOSA | 103 | | 25-150 |
| STL01893 | 13C5 PFPeA | 102 | | 25-150 |
| STL02116 | 13C2 PFTeDA | 96 | | 50-150 |
| STL02118 | d3-NMeFOSAA | 100 | | 50-150 |
| STL02117 | d5-NEtFOSAA | 99 | | 50-150 |
| STL02279 | M2-6:2 FTS | 109 | | 25-150 |
| STL02280 | M2-8:2 FTS | 103 | | 25-150 |
| STL02337 | 13C3 PFBS | 103 | | 50-150 |

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 22-Dec-2020 13:37:53 ALS Bottle#: 8 Worklist Smp#: 14
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICB
Misc. Info.: 200-0044184-014 Plate: 1 Rack: 1
Operator ID: lc812tech Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 22-Dec-2020 16:15:18 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1625

First Level Reviewer: deannd Date: 22-Dec-2020 15:11:47
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.091 | 2.091 | 0.0 | 0.599 | 1173665 | 1.25 | | 99.8 | 9886 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | M |
| 212.90 > 169.00 | 2.091 | 2.091 | 0.0 | 1.000 | 12982 | 0.0138 | | | 1.6 | M |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.414 | 2.414 | 0.0 | 0.691 | 870248 | 1.28 | | 102 | 3296 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | M |
| 262.90 > 219.00 | 2.427 | 2.414 | 0.013 | 1.005 | 13607 | 0.0177 | | | 0.4 | M |
| D 47 13C3 PFBS | | | | | | | | | | |
| 301.90 > 80.00 | 2.427 | 2.427 | 0.0 | 0.695 | 1071155 | 1.20 | | 103 | 215365 | |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | |
| 298.90 > 80.00 | 2.427 | 2.427 | 0.0 | 1.000 | 9082 | 0.008713 | Target=2.21 | | 22.2 | |
| 298.90 > 99.00 | 2.427 | 2.427 | 0.0 | 1.000 | 4327 | | 2.10(1.11-3.32) | | 5.0 | |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | M |
| 327.00 > 307.00 | 2.735 | 2.735 | 0.0 | 1.000 | 1640 | 0.0131 | | | 42.9 | M |
| D 60 M2-4:2 FTS | | | | | | | | | | M |
| 329.00 > 81.00 | 2.735 | 2.735 | 0.0 | 0.783 | 79652 | 1.07 | | 91.3 | 91.4 | M |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.772 | 2.771 | 0.001 | 0.793 | 905469 | 1.27 | | 102 | 2676 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | M |
| 313.00 > 269.00 | 2.772 | 2.771 | 0.001 | 1.000 | 10584 | 0.0134 | Target=12.83 | | 2.5 | |
| 313.00 > 119.00 | 2.772 | 2.771 | 0.001 | 1.000 | 1355 | | 7.81(6.42-19.25) | | 2.8 | M |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | |
| 349.00 > 80.00 | 2.772 | 2.771 | 0.001 | 0.885 | 8000 | 0.009440 | Target=3.35 | | 32.6 | |
| 349.00 > 99.00 | 2.772 | 2.771 | 0.001 | 0.885 | 1790 | | 4.47(1.67-5.02) | | 4.2 | |
| 67 Perfluoro(2-propoxypropanoic) ac | | | | | | | | | | M |
| 329.10 > 285.00 | 2.869 | 2.881 | -0.012 | 0.996 | 2424 | 0.0118 | | | 0.2 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 64 13C3 HFPO-DA | | | | | | | | | | |
| 332.10 > 287.00 | 2.881 | 2.881 | 0.0 | 0.825 | 185110 | 1.47 | | 118 | 1362 | |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.133 | 3.133 | 0.0 | 0.897 | 763583 | 1.15 | | 96.9 | 2119 | |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.133 | 3.133 | 0.0 | 1.000 | 8748 | 0.0115 | Target=4.15 | | 11.7 | M |
| 399.00 > 99.00 | 3.133 | 3.133 | 0.0 | 1.000 | 1791 | | 4.88(2.08-6.23) | | 1.8 | M |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.133 | 3.133 | 0.0 | 0.897 | 853271 | 1.25 | | 100 | 3488 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | R |
| 363.00 > 319.00 | 3.133 | 3.133 | 0.0 | 1.000 | 8899 | 0.0119 | Target=3.66 | | 2.2 | R |
| 363.00 > 169.00 | 3.133 | 3.133 | 0.0 | 1.000 | 1499 | | 5.94(1.83-5.49) | | 4.3 | |
| 77 DONA | | | | | | | | | | M |
| 377.00 > 251.00 | 3.176 | 3.176 | 0.0 | 0.834 | 15086 | 0.0101 | Target=2.43 | | 20.4 | |
| 377.00 > 85.00 | 3.176 | 3.176 | 0.0 | 0.834 | 6276 | | 2.40(1.22-3.65) | | 7.5 | M |
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | M |
| 449.00 > 80.00 | 3.484 | 3.484 | 0.0 | 0.915 | 5119 | 0.008490 | Target=5.95 | | 44.8 | |
| 449.00 > 99.00 | 3.475 | 3.484 | -0.009 | 0.913 | 729 | | 7.02(2.98-8.93) | | 4.5 | M |
| D 12 M2-6:2 FTS | | | | | | | | | | |
| 429.00 > 81.00 | 3.484 | 3.484 | 0.0 | 0.997 | 108027 | 1.30 | | 109 | 442 | |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | |
| 427.00 > 407.00 | 3.484 | 3.484 | 0.0 | 1.000 | 982 | 0.009705 | | | 21.8 | |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.493 | 3.493 | 0.0 | 1.000 | 869355 | 1.25 | | 100 | 2767 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.493 | 3.493 | 0.0 | | 875786 | 1.25 | | | 3053 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | RM |
| 413.00 > 369.00 | 3.502 | 3.493 | 0.009 | 1.003 | 9141 | 0.0121 | Target=2.58 | | 1.9 | RM |
| 413.00 > 169.00 | 3.493 | 3.493 | 0.0 | 1.000 | 2098 | | 4.36(1.29-3.87) | | 4.5 | M |
| D 18 13C4 PFOS | | | | | | | | | | |
| 503.00 > 80.00 | 3.808 | 3.806 | 0.002 | 1.090 | 533628 | 1.17 | | 97.6 | 1320 | |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.808 | 3.806 | 0.002 | 1.000 | 5152 | 0.0100 | Target=5.65 | | 6.2 | M |
| 499.00 > 99.00 | 3.808 | 3.806 | 0.002 | 1.000 | 1104 | | 4.67(2.82-8.47) | | 3.8 | M |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.828 | 3.826 | 0.002 | 1.096 | 760508 | 1.24 | | 99.5 | 2162 | |
| 20 Perfluorononanoic acid | | | | | | | | | | M |
| 463.00 > 419.00 | 3.828 | 3.826 | 0.002 | 1.000 | 8165 | 0.0121 | Target=7.44 | | 1.2 | |
| 463.00 > 169.00 | 3.828 | 3.826 | 0.002 | 1.000 | 881 | | 9.27(3.72-11.16) | | 12.4 | M |
| 69 9-Chlorohexadecafluoro-3-oxanona | | | | | | | | | | |
| 531.00 > 351.00 | 3.969 | 3.967 | 0.002 | 1.042 | 5164 | 0.009012 | | | 36.7 | |
| 68 Perfluorononanesulfonic acid | | | | | | | | | | M |
| 549.00 > 80.00 | 4.097 | 4.095 | 0.002 | 1.076 | 3234 | 0.008440 | Target=2.54 | | 28.8 | |
| 549.00 > 99.00 | 4.097 | 4.095 | 0.002 | 1.076 | 998 | | 3.24(1.27-3.81) | | 4.3 | M |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.131 | 4.129 | 0.002 | 1.183 | 756796 | 1.29 | | 104 | 2401 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 24 Perfluorodecanoic acid | | | | | | | | | | M |
| 513.00 > 469.00 | 4.131 | 4.129 | 0.002 | 1.000 | 5959 | 0.009551 | Target=9.29 | | 4.8 | |
| 513.00 > 169.00 | 4.131 | 4.129 | 0.002 | 1.000 | 974 | | 6.12(4.64-13.93) | | 7.4 | M |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | M |
| 527.00 > 507.00 | 4.142 | 4.140 | 0.002 | 1.000 | 423 | 0.007027 | | | 10.6 | M |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.142 | 4.140 | 0.002 | 1.186 | 105991 | 1.24 | | 103 | 674 | |
| D 21 13C8 FOSA | | | | | | | | | | |
| 506.00 > 78.00 | 4.209 | 4.207 | 0.002 | 1.205 | 1104824 | 1.29 | | 103 | 2293 | |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | |
| 498.00 > 78.00 | 4.209 | 4.207 | 0.002 | 1.000 | 7326 | 0.008271 | | | 20.9 | |
| D 27 d3-NMeFOSAA | | | | | | | | | | |
| 573.00 > 419.00 | 4.263 | 4.272 | -0.009 | 1.220 | 53054 | 1.25 | | 100 | 542 | |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | M |
| 570.00 > 419.00 | 4.275 | 4.272 | 0.003 | 1.003 | 674 | 0.0179 | | | 6.0 | M |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | |
| 599.00 > 80.00 | 4.365 | 4.362 | 0.003 | 1.146 | 3322 | 0.0109 | Target=2.80 | | 32.2 | |
| 599.00 > 99.00 | 4.365 | 4.362 | 0.003 | 1.146 | 1286 | | 2.58(1.40-4.19) | | 4.8 | |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.387 | 4.384 | 0.003 | 1.256 | 585825 | 1.22 | | 97.6 | 1805 | |
| 31 Perfluoroundecanoic acid | | | | | | | | | | M |
| 563.00 > 519.00 | 4.398 | 4.395 | 0.003 | 1.003 | 5801 | 0.0121 | Target=8.12 | | 2.3 | M |
| 563.00 > 169.00 | 4.398 | 4.395 | 0.003 | 1.003 | 1008 | | 5.75(4.06-12.18) | | 27.5 | M |
| D 32 d5-NEtFOSAA | | | | | | | | | | |
| 589.00 > 419.00 | 4.398 | 4.395 | 0.003 | 1.259 | 50776 | 1.24 | | 99.1 | 423 | |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.398 | 4.406 | -0.008 | 1.000 | 655 | 0.0174 | | | 8.2 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | |
| 631.00 > 451.00 | 4.488 | 4.485 | 0.003 | 1.179 | 4699 | 0.007903 | | | 75.0 | |
| D 36 13C2 PFDoA | | | | | | | | | | |
| 615.00 > 570.00 | 4.619 | 4.626 | -0.007 | 1.322 | 637238 | 1.26 | | 101 | 2862 | |
| 37 Perfluorododecanoic acid | | | | | | | | | | RM |
| 613.00 > 569.00 | 4.619 | 4.626 | -0.007 | 1.000 | 5753 | 0.0103 | Target=6.91 | | 1.7 | R |
| 613.00 > 169.00 | 4.619 | 4.626 | -0.007 | 1.000 | 543 | | 10.59(3.45-10.36) | | 11.2 | M |
| 74 1H,1H,2H,2H-perfluorododecanesul | | | | | | | | | | M |
| 627.00 > 607.00 | 4.640 | 4.637 | 0.003 | 1.120 | 289 | 0.009325 | | | 11.4 | M |
| 75 Perfluorododecanesulfonic acid ( | | | | | | | | | | M |
| 699.00 > 80.00 | 4.790 | 4.797 | -0.007 | 1.258 | 518 | 0.004609 | Target=0.51 | | 2.4 | M |
| 699.00 > 99.00 | 4.799 | 4.797 | 0.002 | 1.260 | 1391 | | 0.37(0.26-0.77) | | 6.4 | M |
| 41 Perfluorotridecanoic acid | | | | | | | | | | |
| 663.00 > 619.00 | 4.841 | 4.839 | 0.002 | 1.048 | 3436 | 0.007551 | Target=4.39 | | 1.6 | |
| 663.00 > 169.00 | 4.841 | 4.839 | 0.002 | 1.048 | 549 | | 6.26(2.20-6.59) | | 10.1 | |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 5.030 | 5.027 | 0.003 | 1.440 | 450010 | 1.20 | | 96.0 | 2567 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | M |
| 713.00 > 169.00 | 5.030 | 5.027 | 0.003 | 1.000 | 718 | 0.0108 | Target=1.06 | | 23.9 | M |
| 713.00 > 219.00 | 5.020 | 5.027 | -0.007 | 0.998 | 467 | | 1.54(0.53-1.59) | | 12.3 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.381 | 5.374 | 0.007 | 1.540 | 505826 | 1.26 | | 101 | 1986 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | |
| 813.00 > 769.00 | 5.381 | 5.374 | 0.007 | 1.000 | 8267 | 0.006683 | Target=3.84 | | 2.5 | |
| 813.00 > 169.00 | 5.381 | 5.374 | 0.007 | 1.000 | 1701 | | 4.86(1.92-5.76) | | 49.2 | |
| 46 Perfluorooctadecanoic acid | | | | | | | | | | |
| 913.00 > 869.00 | 5.727 | 5.722 | 0.005 | 1.064 | 4106 | 0.0113 | Target=3.92 | | 3.5 | |
| 913.00 > 169.00 | 5.727 | 5.722 | 0.005 | 1.064 | 1091 | | 3.76(1.96-5.88) | | 22.6 | |

## QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

## Reagents:

PFAS32NCBLK20_00007 Amount Added: 100.00 Units: uL

Report Date: 22-Dec-2020 17:35:45 Chrom Revision: 2.3 09-Dec-2020 16:22:14

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d

Injection Date: 22-Dec-2020 13:37:53 Instrument ID: LC812

Lims ID: ICB

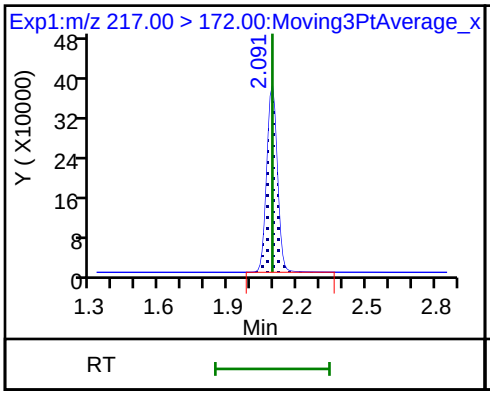
Client ID:

Operator ID: lc812tech ALS Bottle#: 8 Worklist Smp#: 14

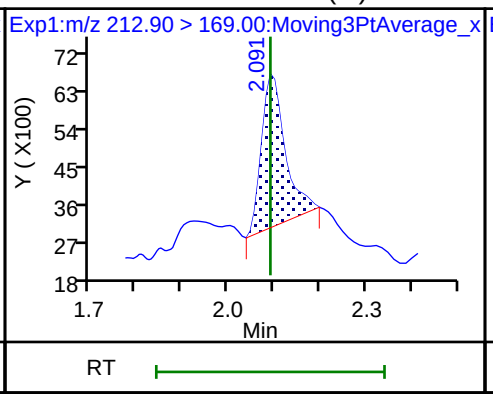
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Method: PFC_LC812 Limit Group: LC_PFC_ICAL

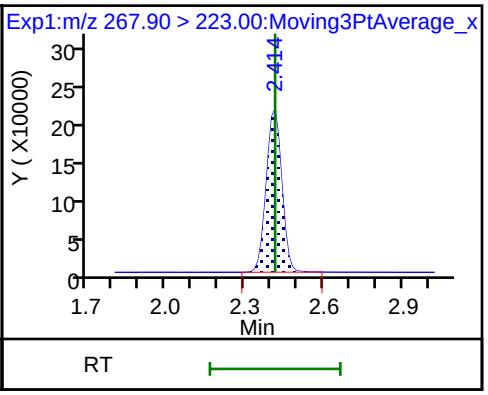
D 1 13C4 PFBA



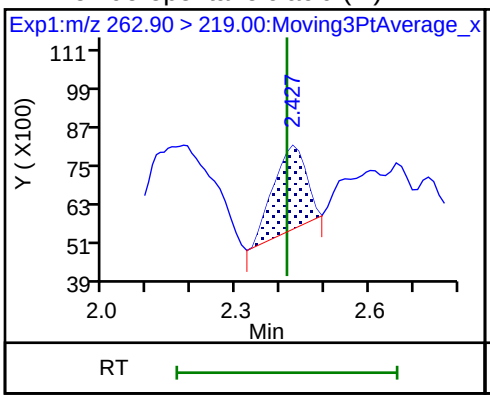

2 Perfluorobutanoic acid (M)



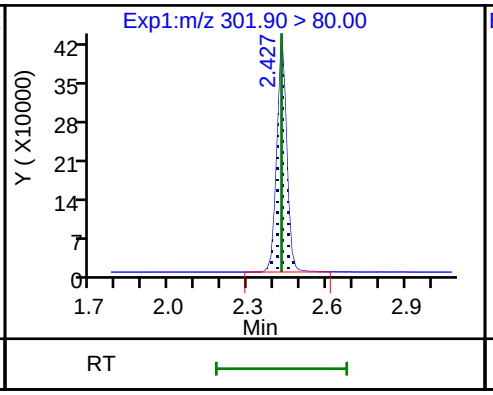

D 3 13C5 PFPeA



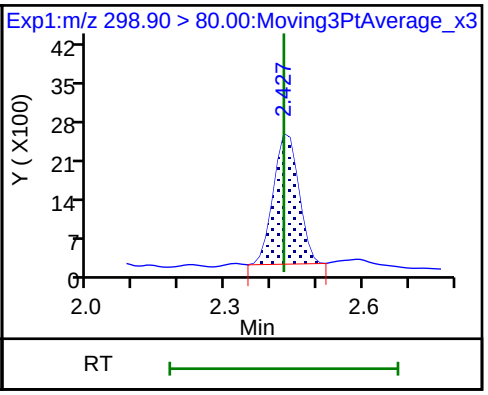

4 Perfluoropentanoic acid (M)



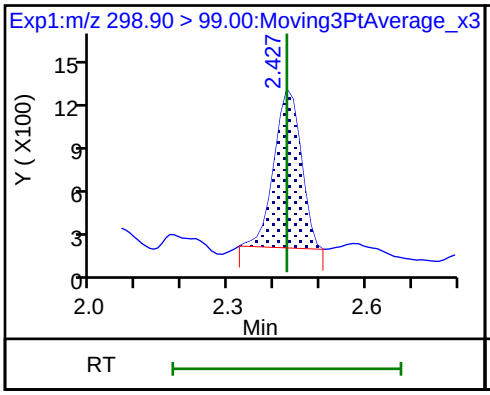

D 47 13C3 PFBS



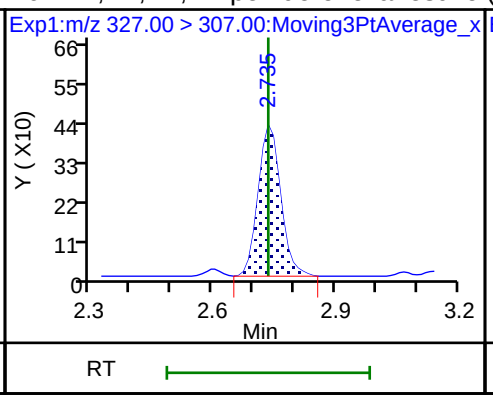

5 Perfluorobutanesulfonic acid



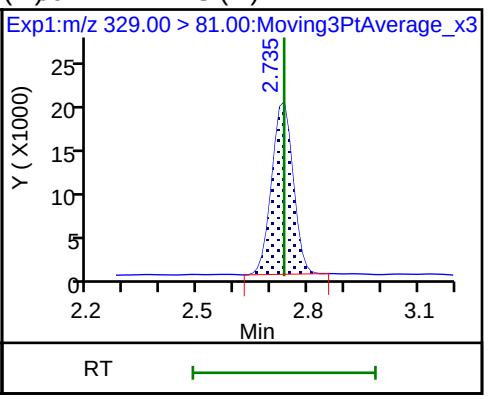

5 Perfluorobutanesulfonic acid



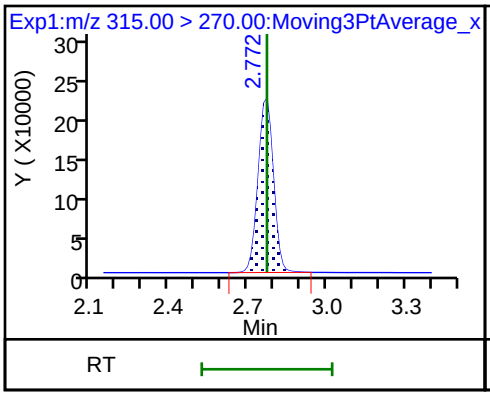

61 1H,1H,2H,2H-perfluorohexanesulfo (M)



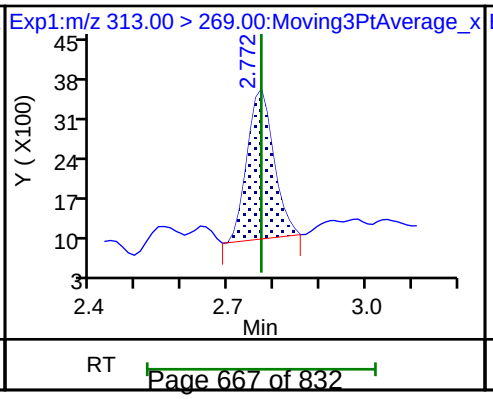

60 M2-4:2 FTS (M)



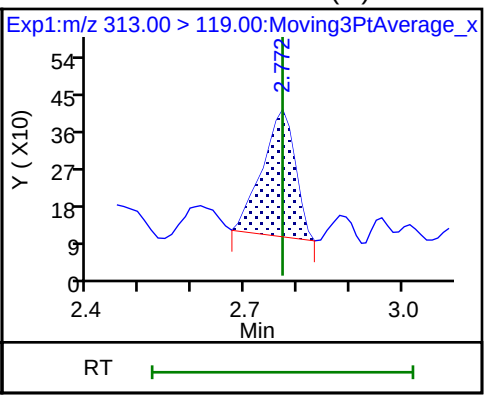

D 7 13C2 PFHxA



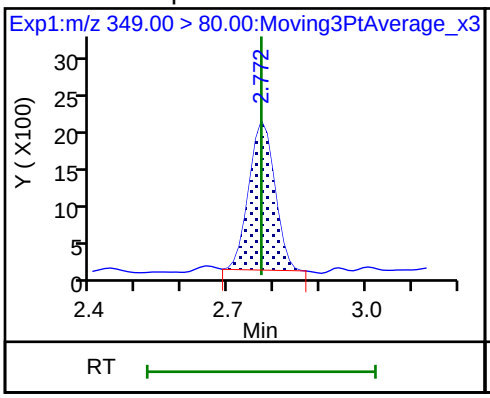

6 Perfluorohexanoic acid



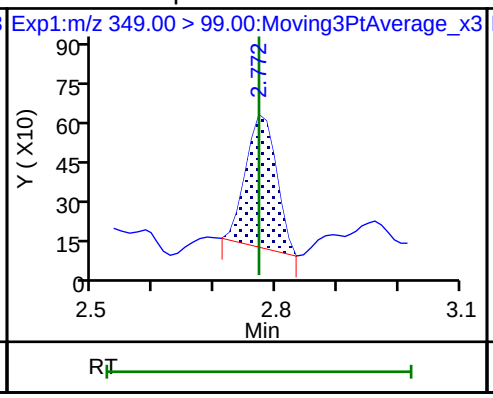

6 Perfluorohexanoic acid (M)



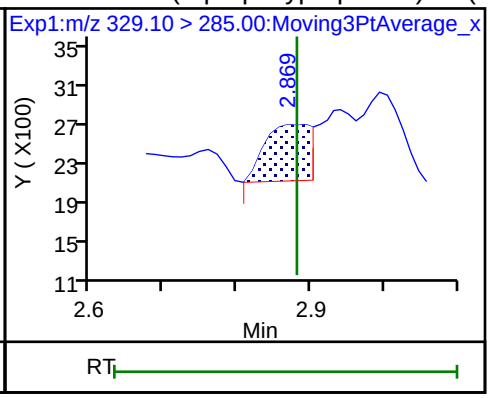
70 Perfluoropentanesulfonic acid



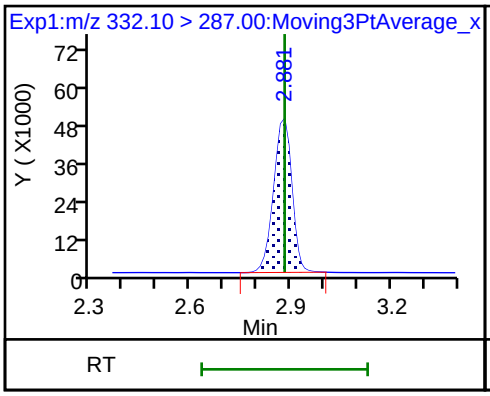

70 Perfluoropentanesulfonic acid



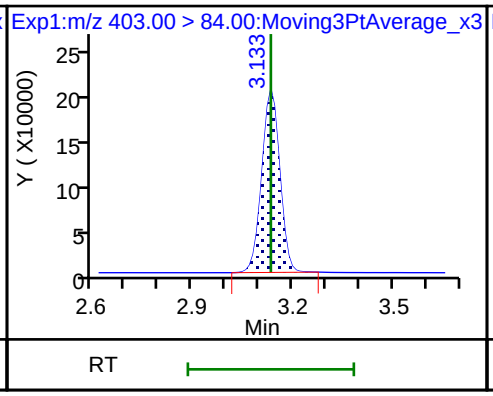

67 Perfluoro(2-propoxypropanoic) ac (M)



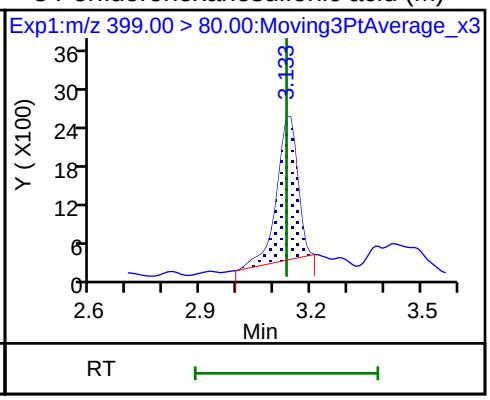

D 64 13C3 HFPO-DA



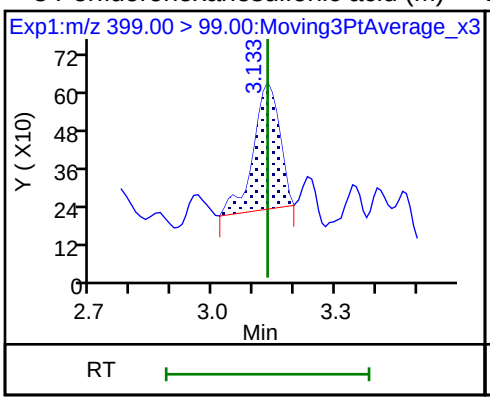

D 11 18O2 PFHxS



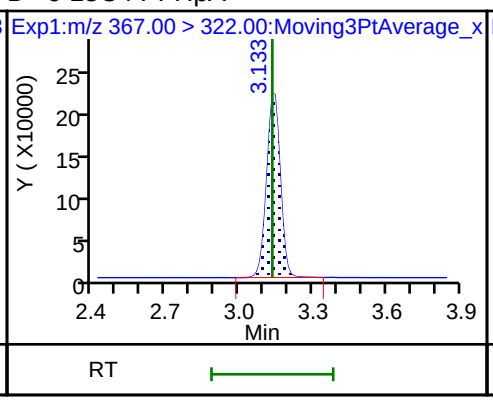

8 Perfluorohexanesulfonic acid (M)



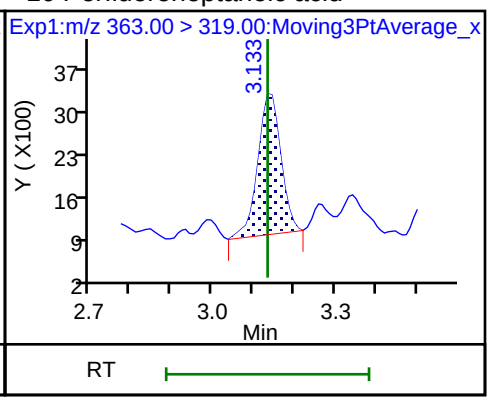

8 Perfluorohexanesulfonic acid (M)



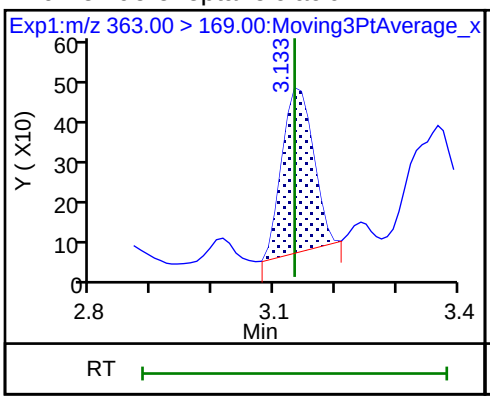

D 9 13C4 PFHpA



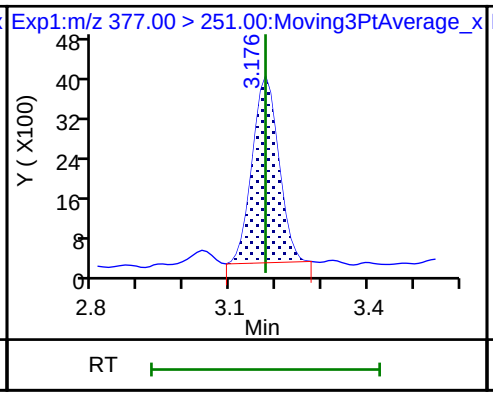

10 Perfluoroheptanoic acid



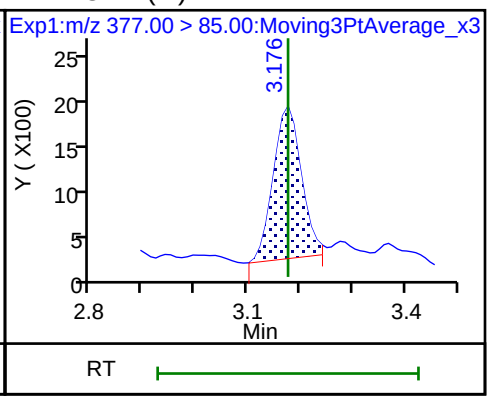

10 Perfluoroheptanoic acid



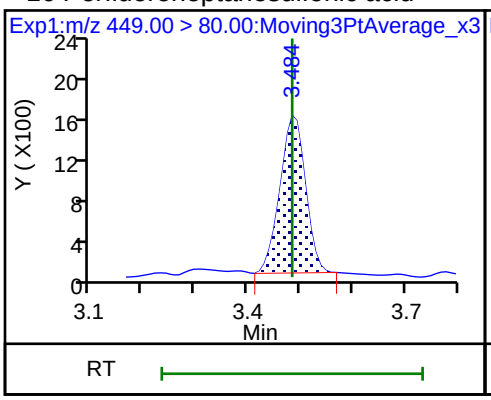

77 DONA



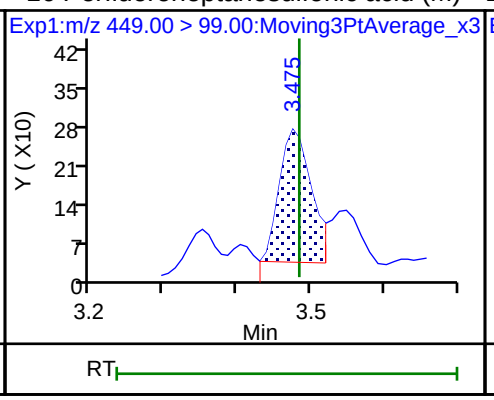

77 DONA (M)



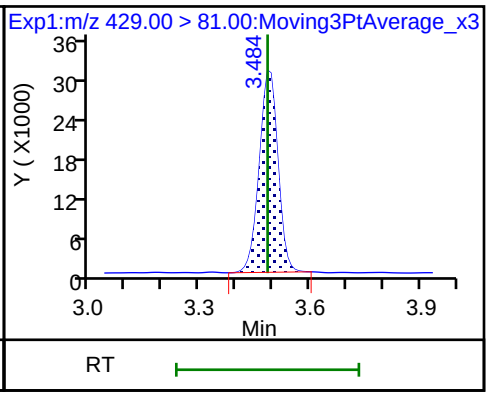
16 Perfluoroheptanesulfonic acid



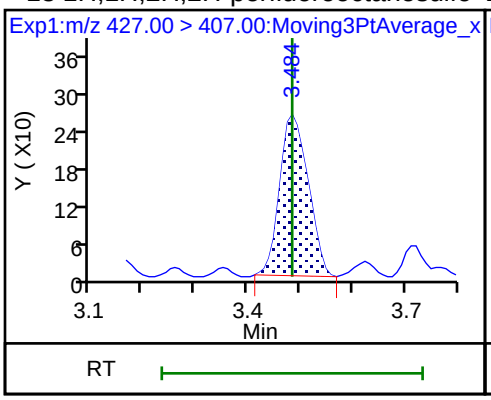

16 Perfluoroheptanesulfonic acid (M)



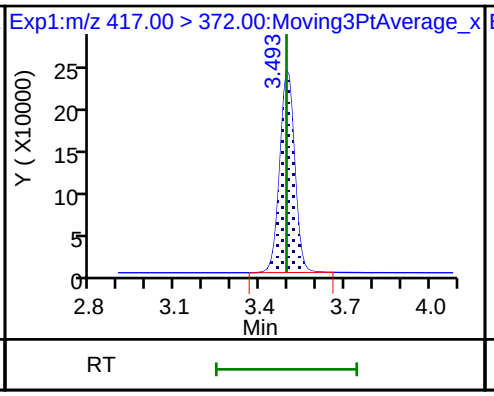

D 12 M2-6:2 FTS



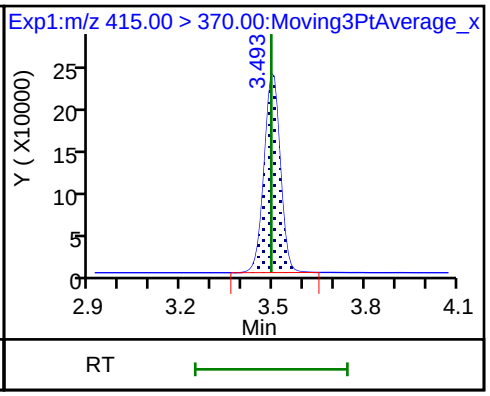

13 1H,1H,2H,2H-perfluorooctanesulfo



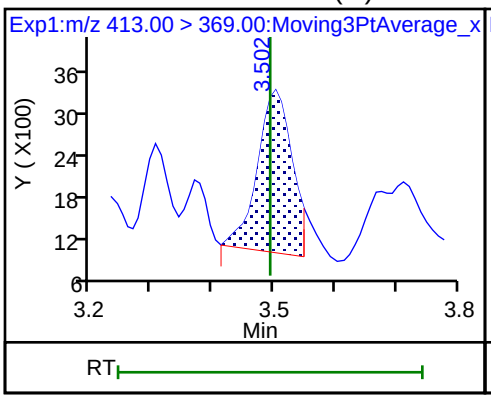

D 14 13C4 PFOA



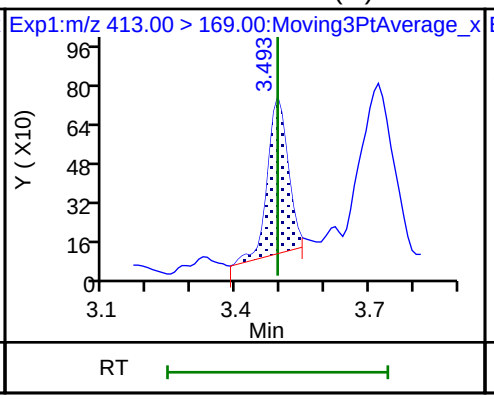

* 62 13C2 PFOA



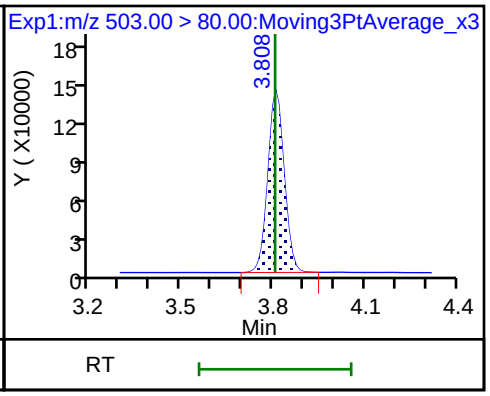

15 Perfluorooctanoic acid (M)



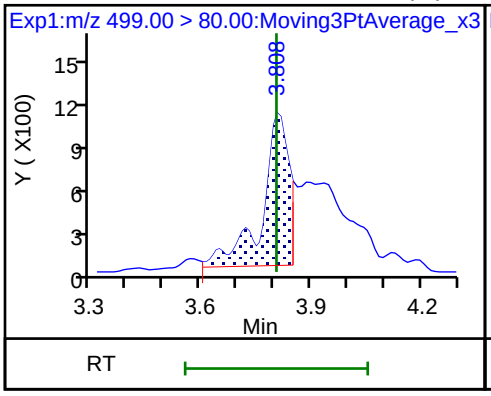

15 Perfluorooctanoic acid (M)



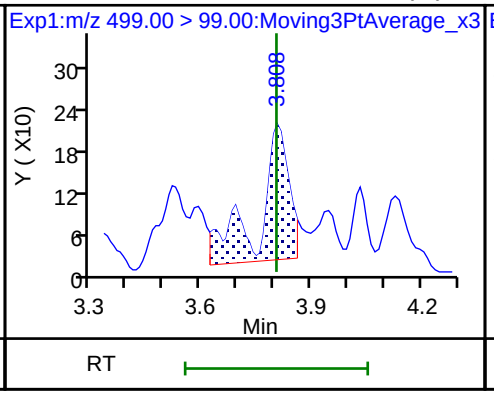

D 18 13C4 PFOS



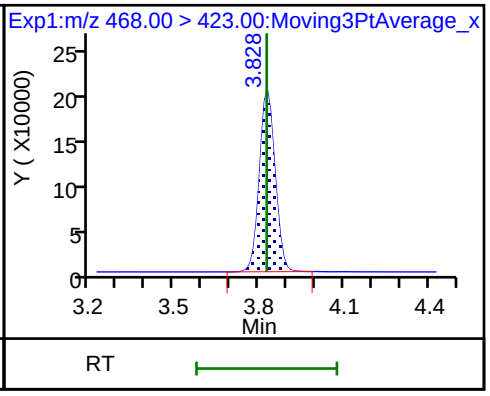

17 Perfluorooctanesulfonic acid (M)



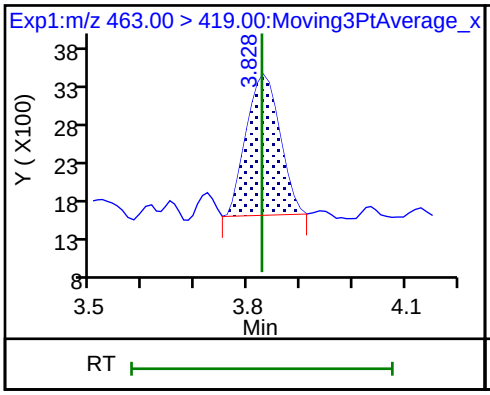

17 Perfluorooctanesulfonic acid (M)



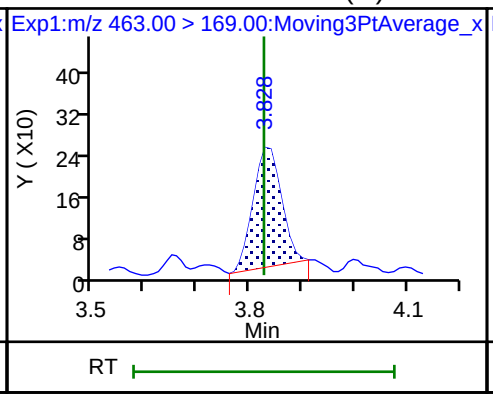

D 19 13C5 PFNA



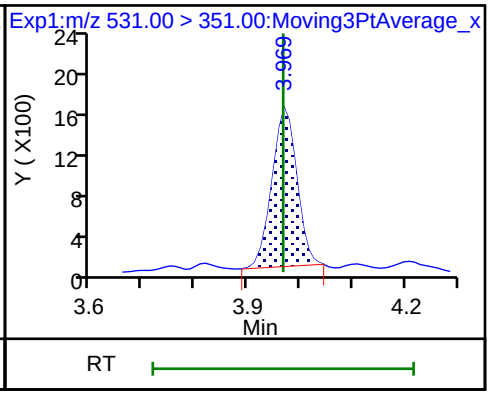
20 Perfluorononanoic acid



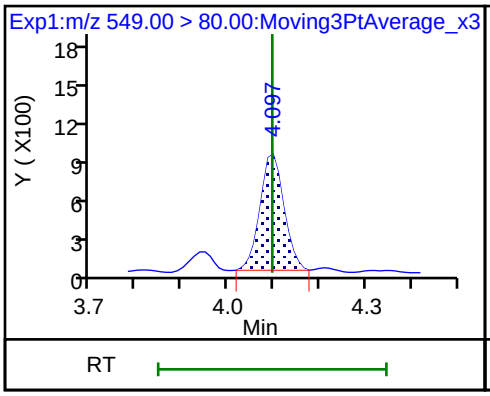

20 Perfluorononanoic acid (M)



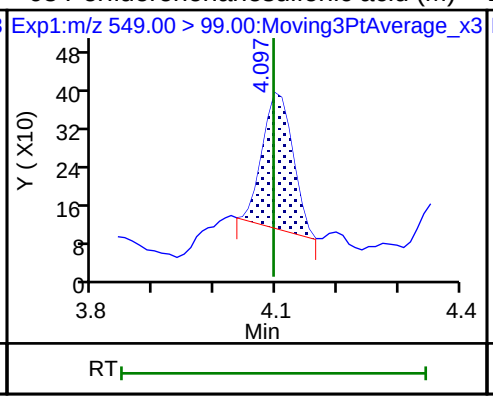

69 9-Chlorohexadecafluoro-3-oxanona



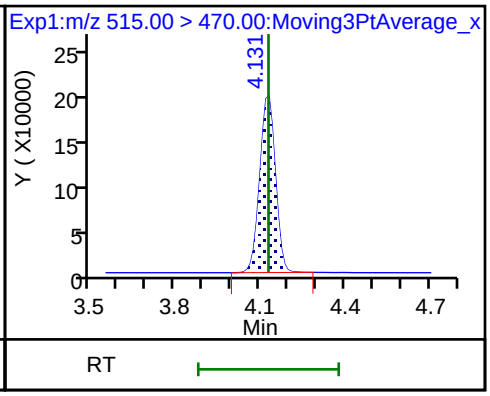

68 Perfluorononanesulfonic acid



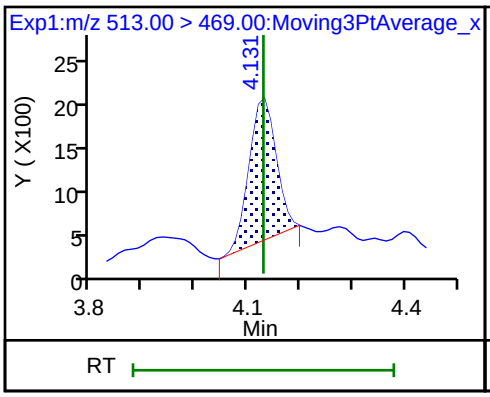

68 Perfluorononanesulfonic acid (M)



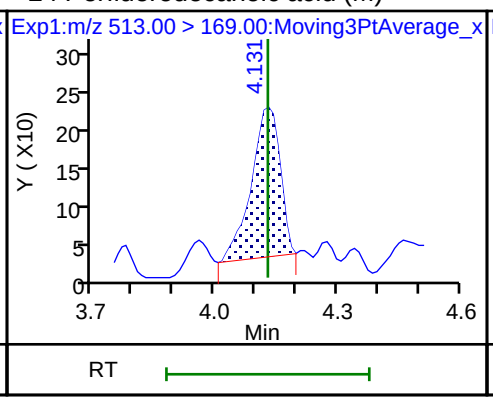

D 23 13C2 PFDA



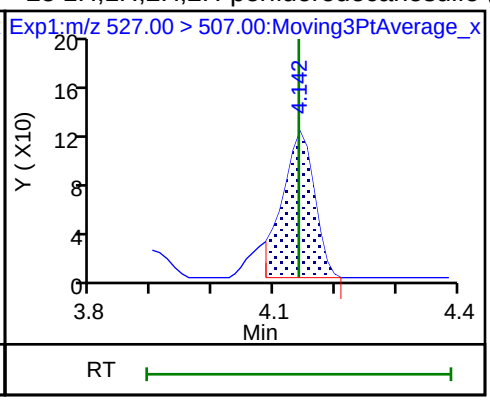

24 Perfluorodecanoic acid



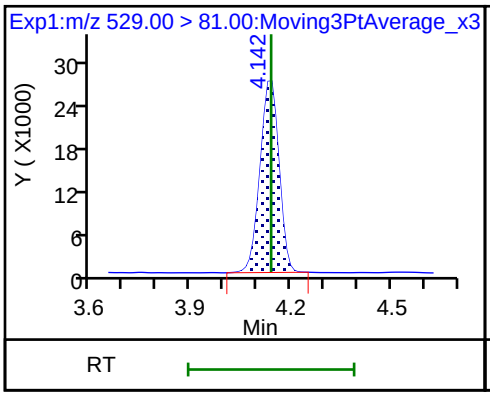

24 Perfluorodecanoic acid (M)



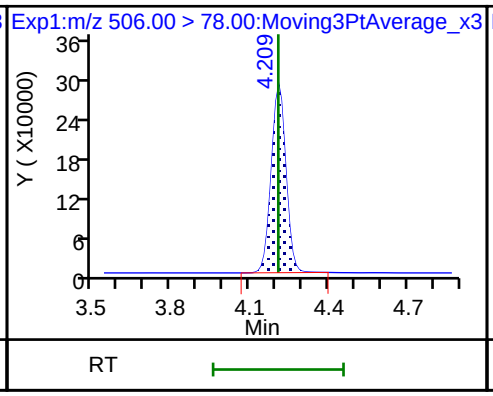

25 1H,1H,2H,2H-perfluorodecanesulfo (M)



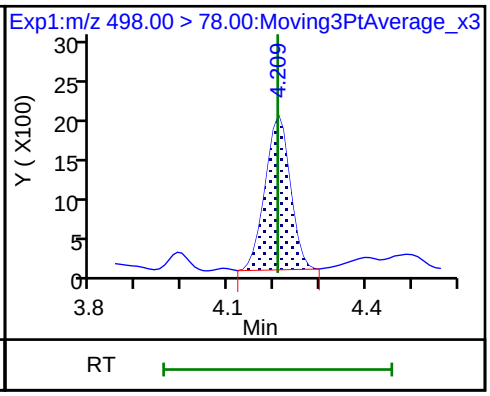

D 26 M2-8:2 FTS



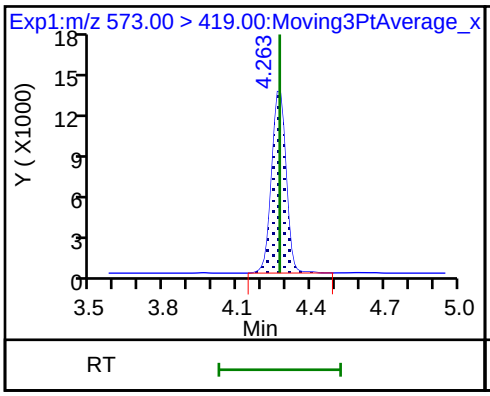

D 21 13C8 FOSA



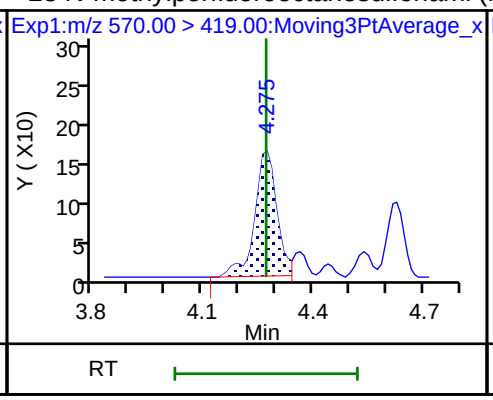

22 Perfluorooctanesulfonamide



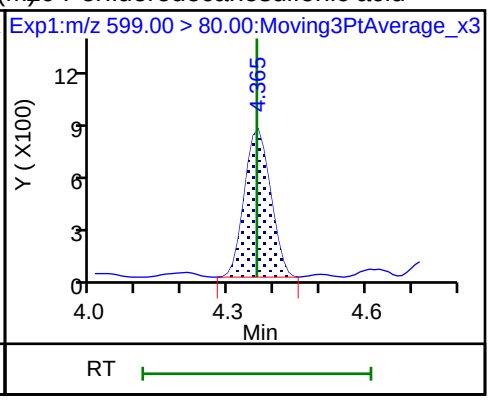
D 27 d3-NMeFOSAA



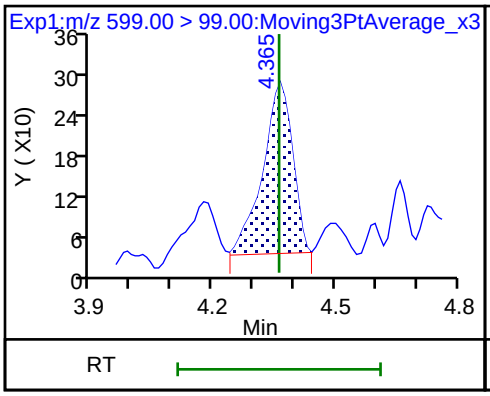

28 N-methylperfluorooctanesulfonami (M)



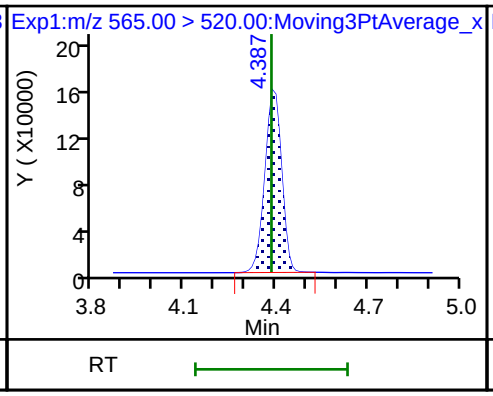

29 Perfluorodecanesulfonic acid



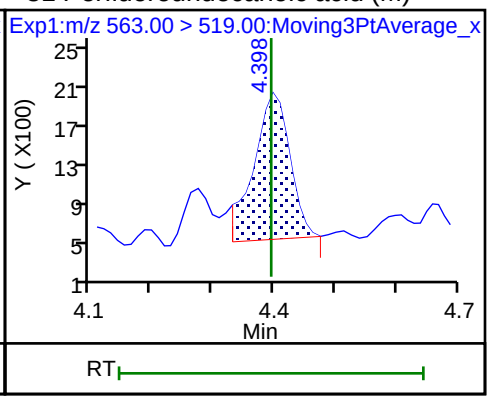

29 Perfluorodecanesulfonic acid



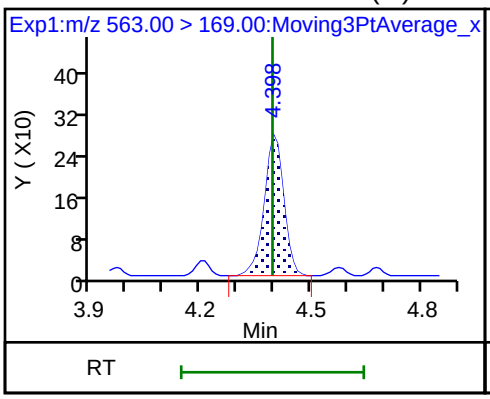

D 30 13C2 PFUnA



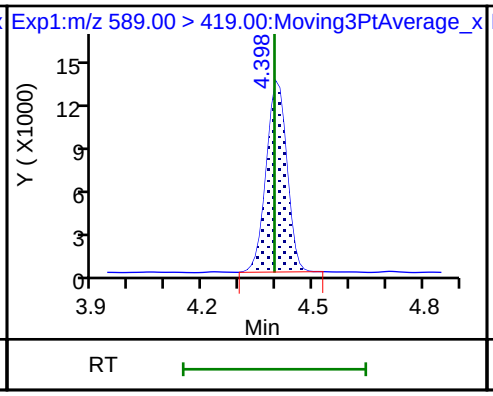

31 Perfluoroundecanoic acid (M)



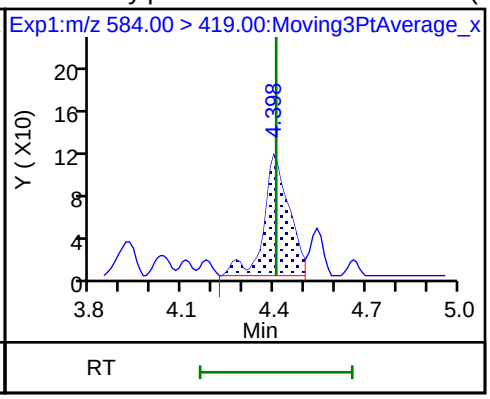

31 Perfluoroundecanoic acid (M)



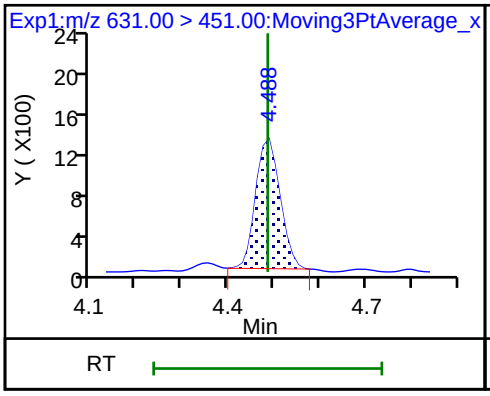

D 32 d5-NEtFOSAA



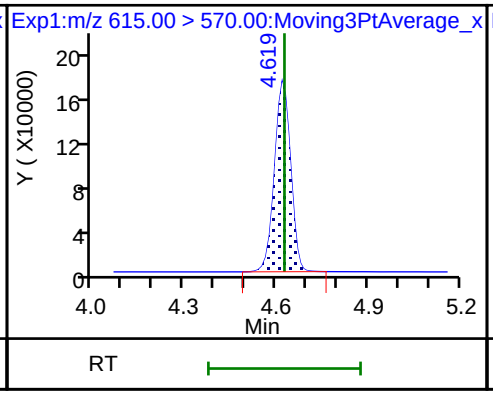

33 N-ethylperfluorooctanesulfonamid (M)



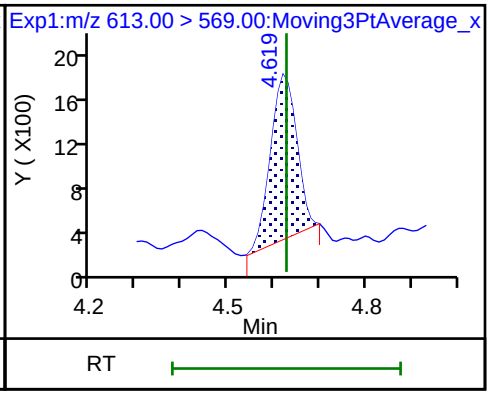

66 11-Chloroeicosafluoro-3-oxaundec



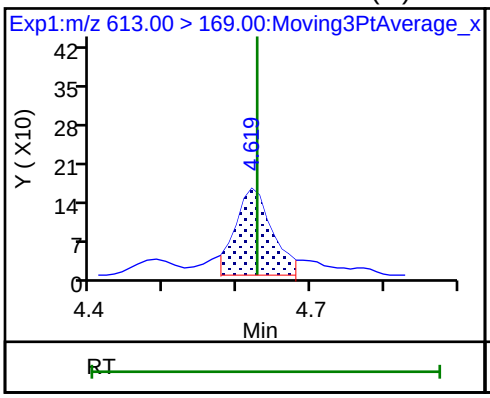

D 36 13C2 PFDoA



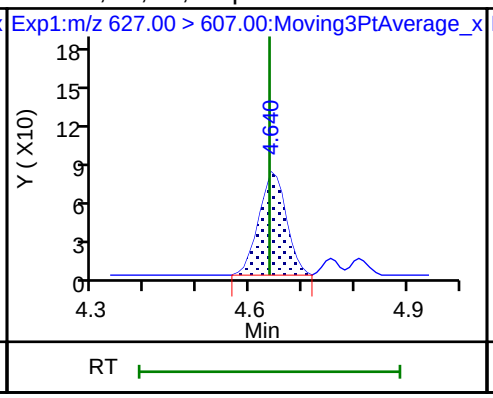

37 Perfluorododecanoic acid



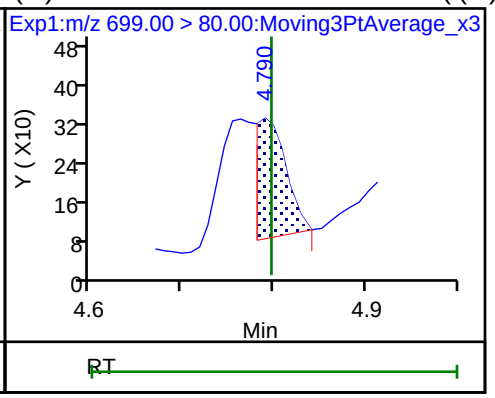
37 Perfluorododecanoic acid (M)



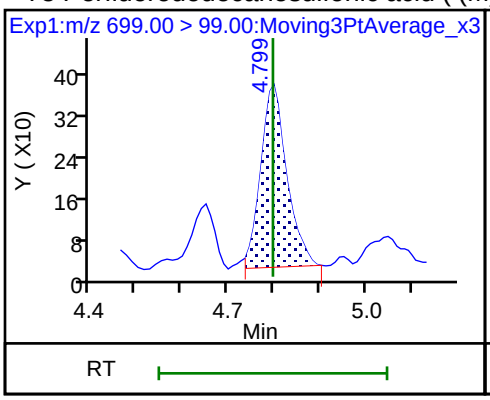

74 1H,1H,2H,2H-perfluorododecanesul (M)



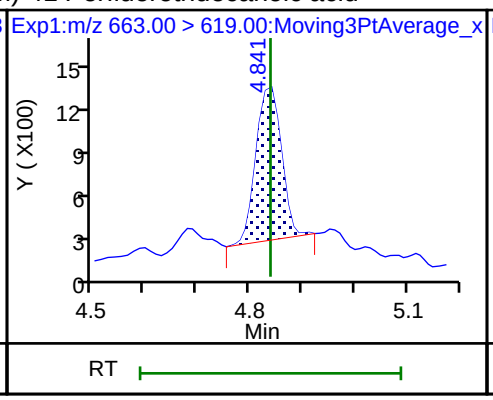

75 Perfluorododecanesulfonic acid ( (M)



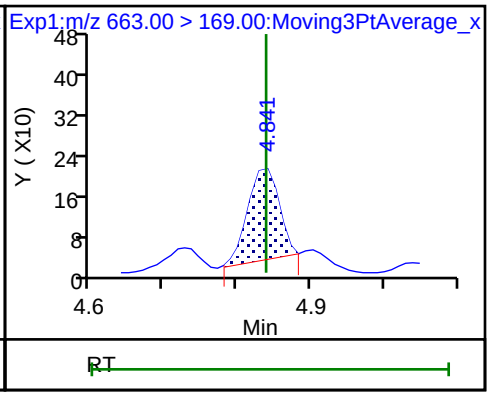

75 Perfluorododecanesulfonic acid ( (M)



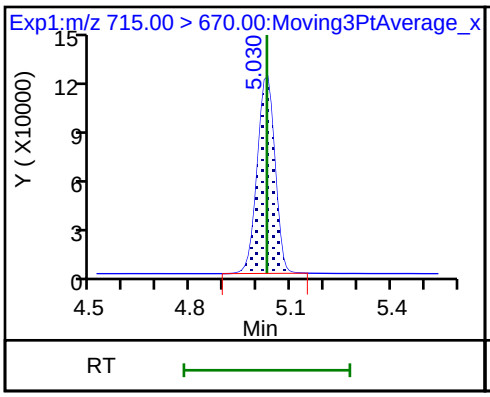

41 Perfluorotridecanoic acid



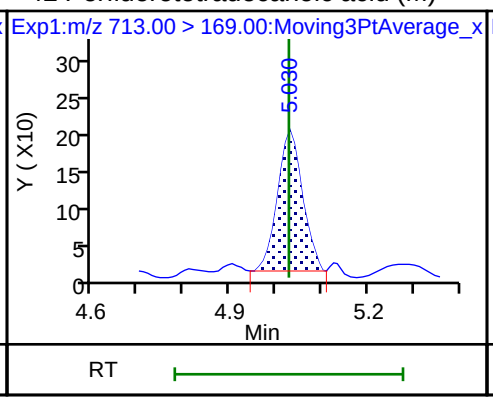

41 Perfluorotridecanoic acid



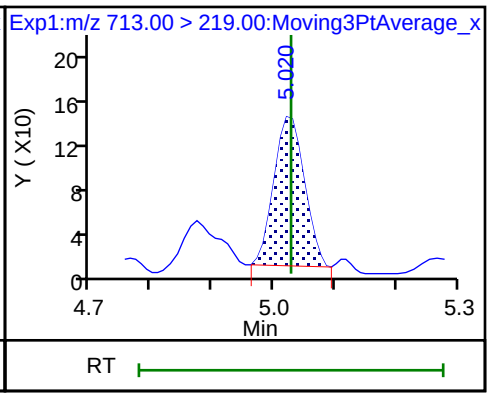

D 43 13C2 PFTeDA



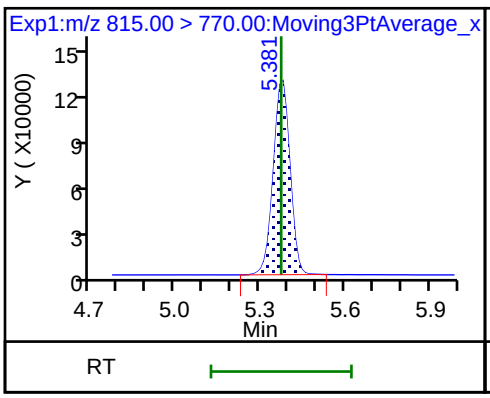

42 Perfluorotetradecanoic acid (M)



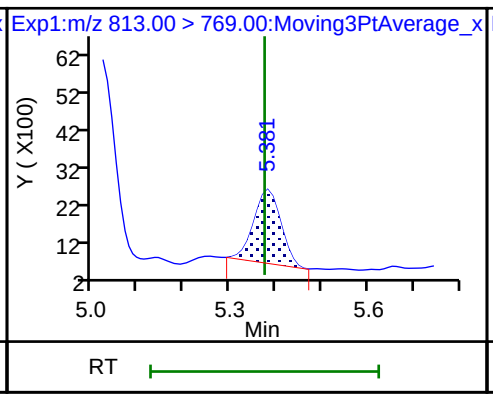

42 Perfluorotetradecanoic acid



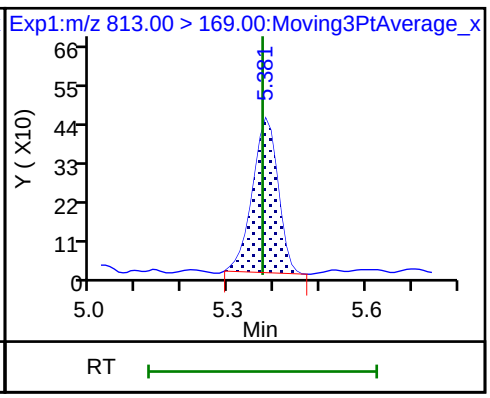

D 44 13C2 PFHxDA



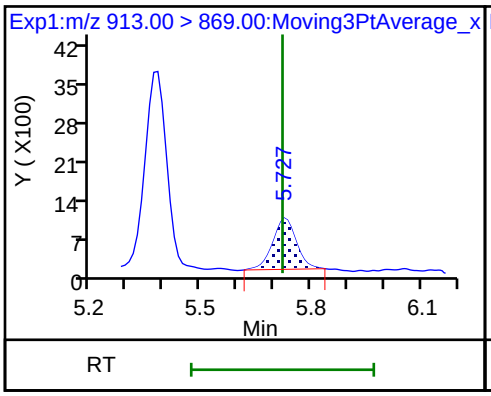

45 Perfluorohexadecanoic acid



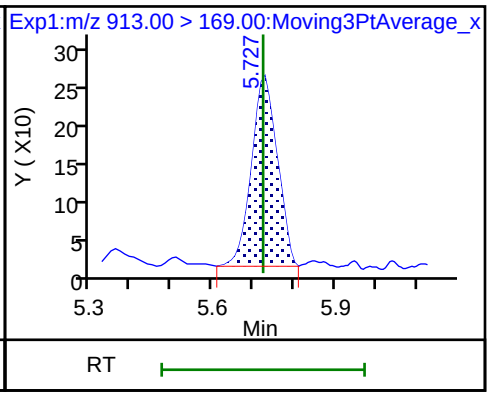

45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid




46 Perfluorooctadecanoic acid



Eurofins TestAmerica, Burlington

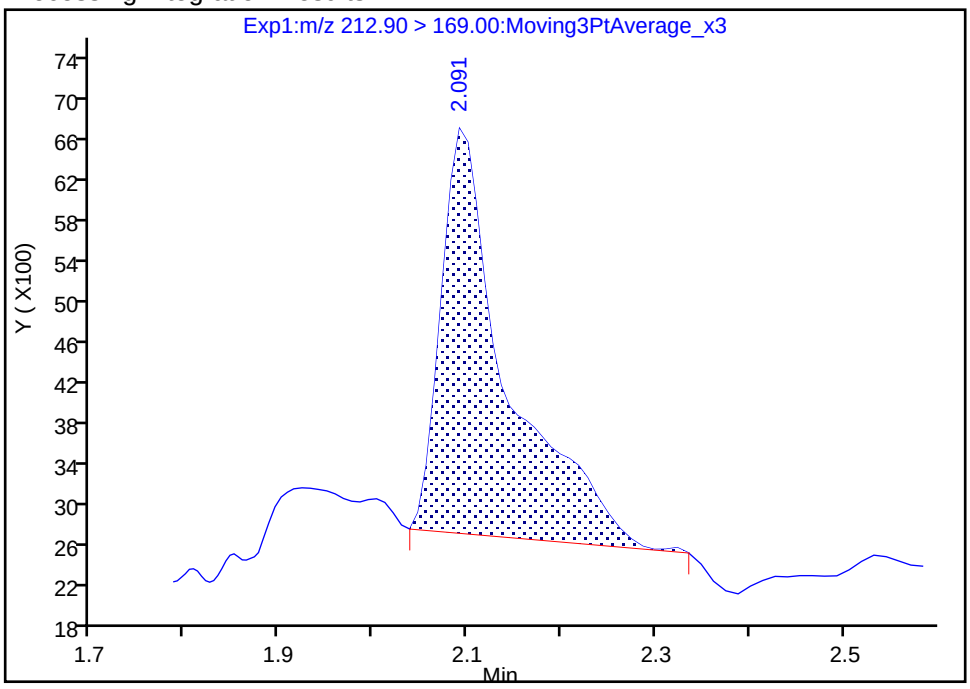
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

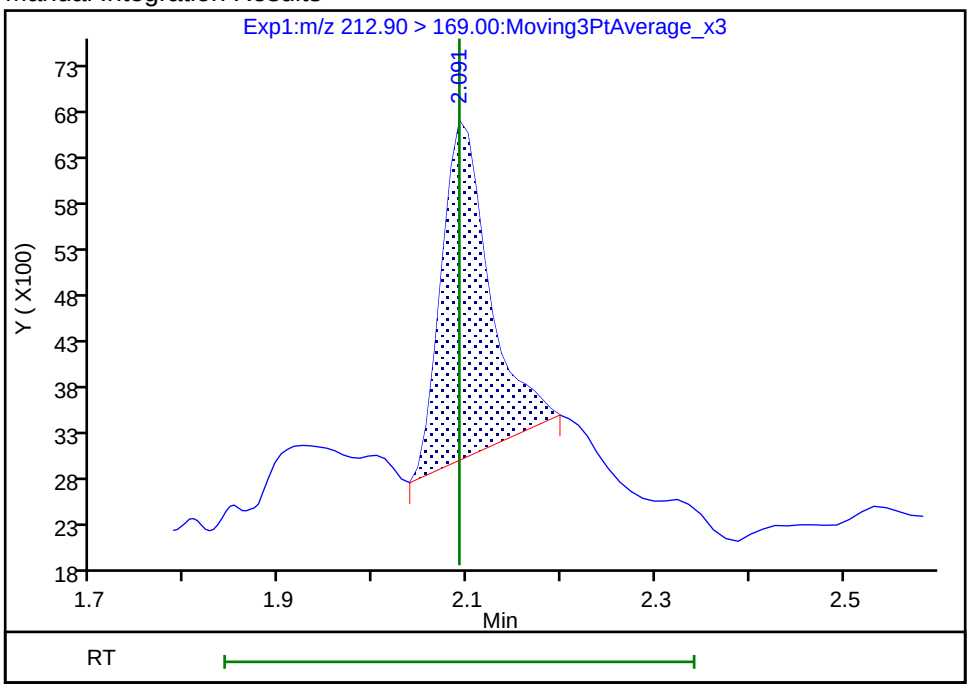
Processing Integration Results

RT: 2.09
Area: 19494
Amount: 0.020720
Amount Units: ng/ml




Manual Integration Results

RT: 2.09
Area: 12982
Amount: 0.013799
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:09:07
Audit Action: Manually Integrated Audit Reason: Missed Peak

Eurofins TestAmerica, Burlington

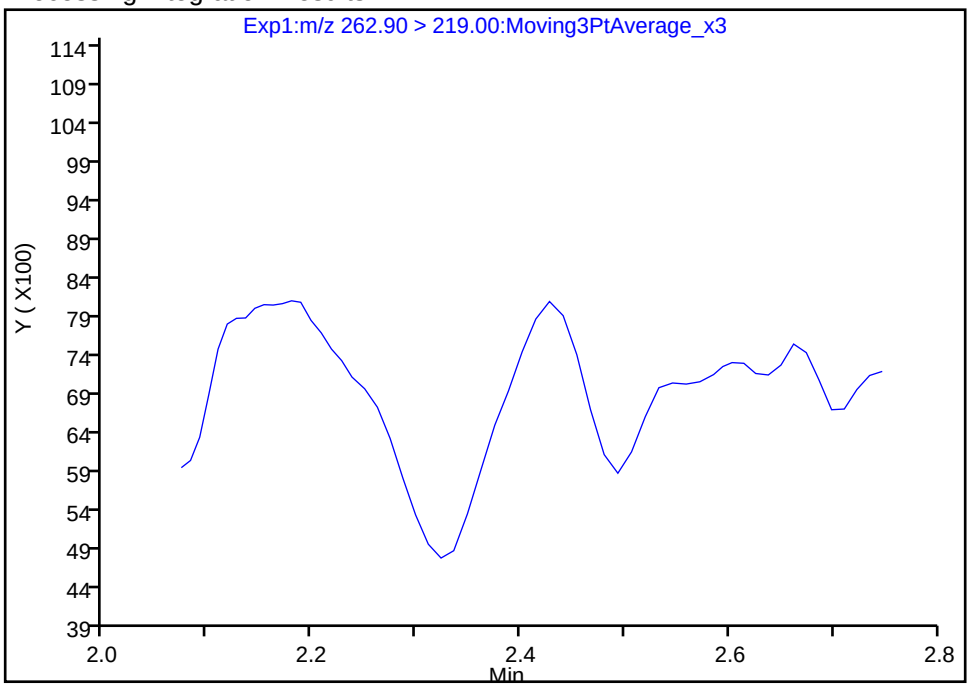
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

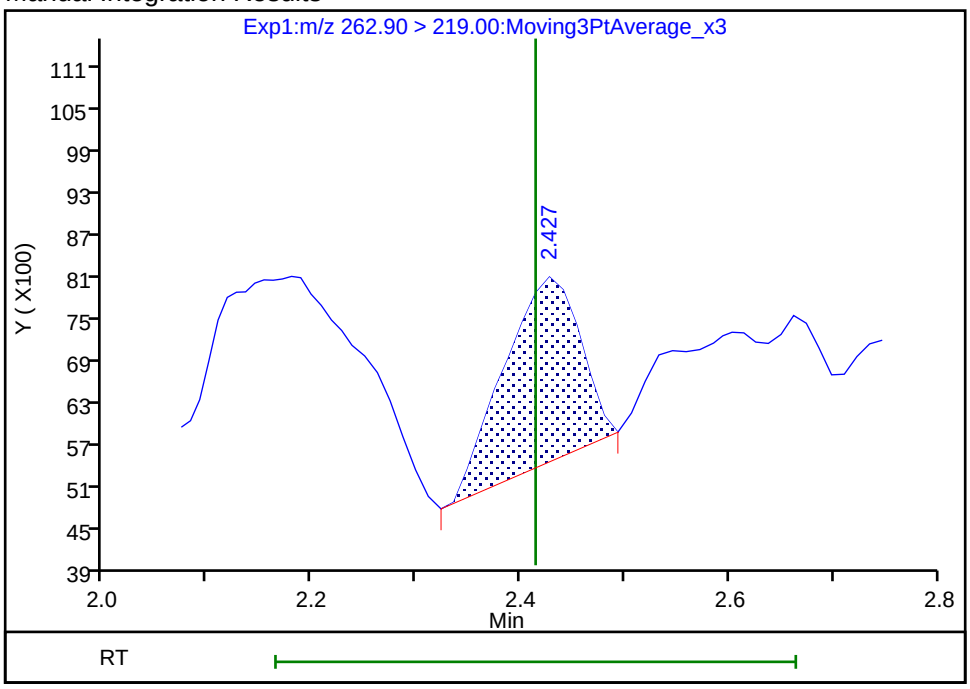
Not Detected
Expected RT: 2.41

Processing Integration Results




Manual Integration Results

RT: 2.43
Area: 13607
Amount: 0.017651
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:08:53
Audit Action: Manually Integrated Audit Reason: Missed Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

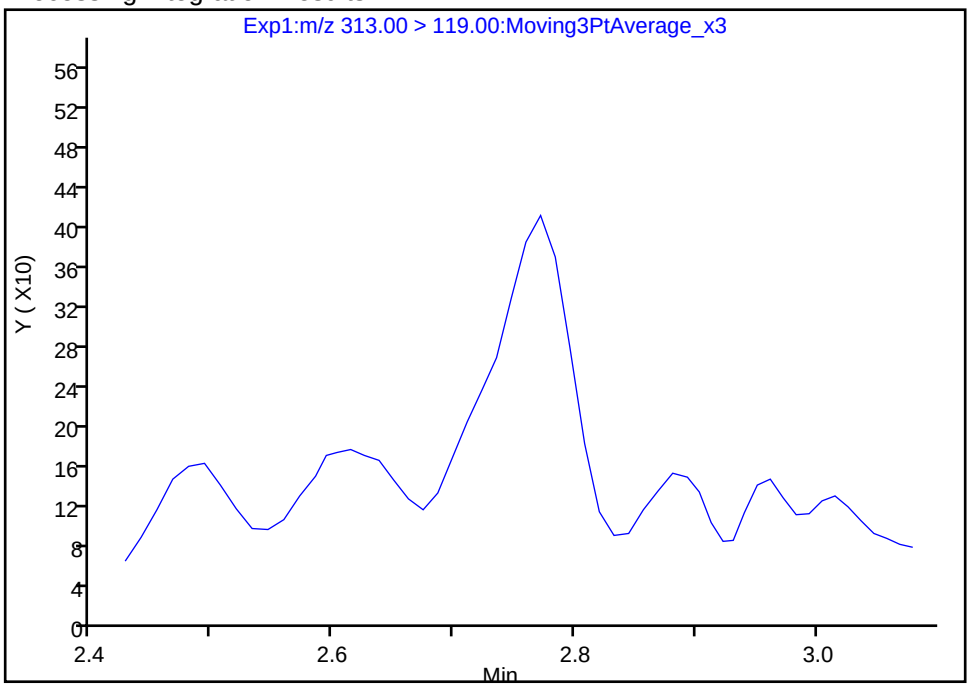
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

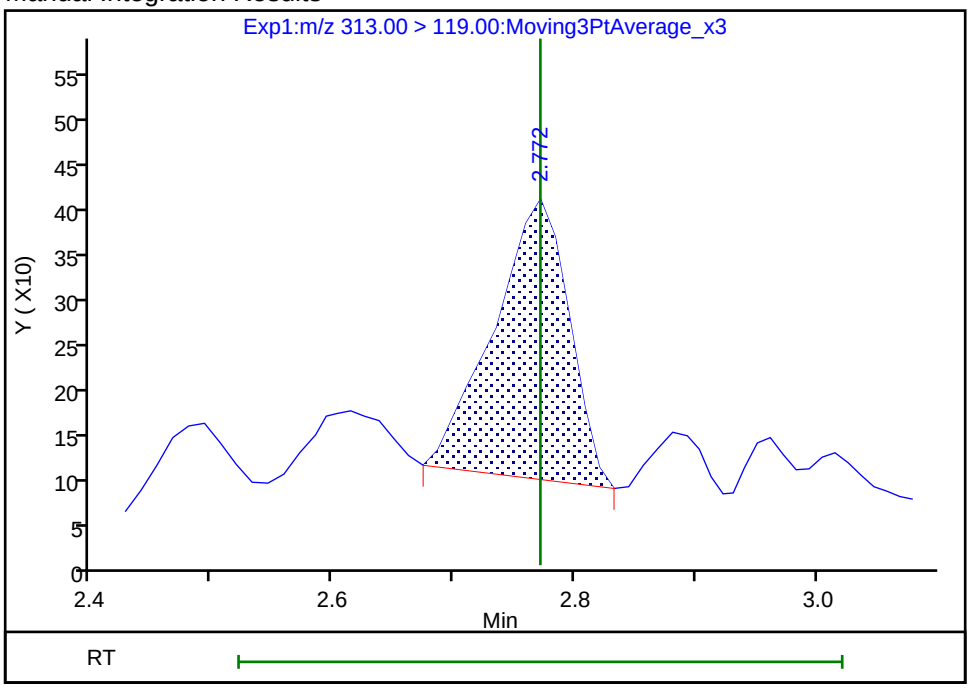
Not Detected
Expected RT: 2.77

Processing Integration Results




Manual Integration Results

RT: 2.77
Area: 1355
Amount: 0.013375
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:09:25
Audit Action: Manually Integrated Audit Reason: Missed Peak

Eurofins TestAmerica, Burlington

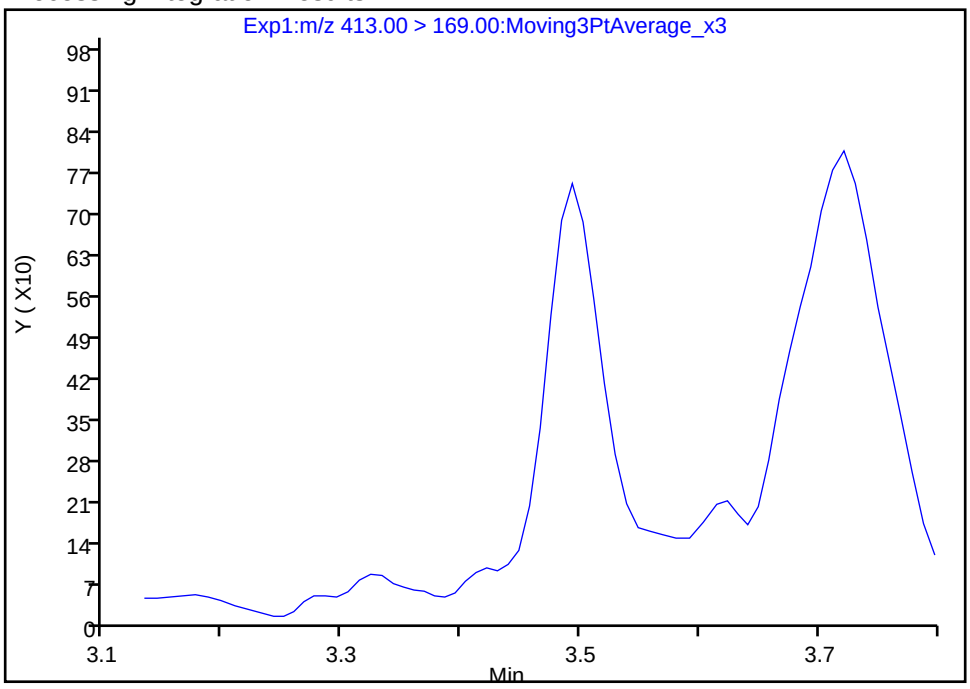
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

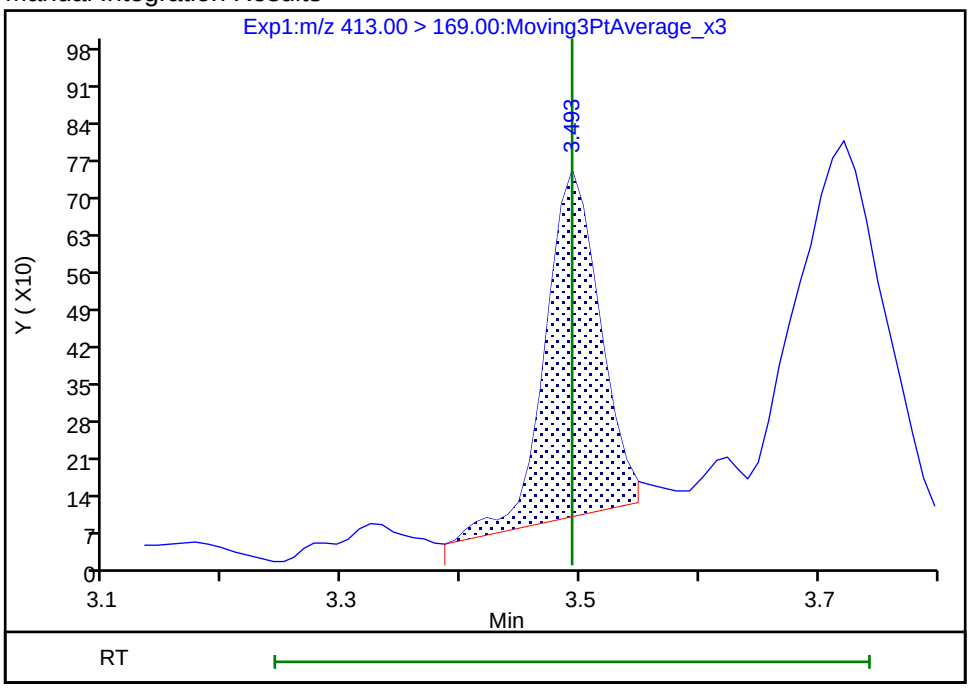
Not Detected
Expected RT: 3.49

Processing Integration Results




Manual Integration Results

RT: 3.49
Area: 2098
Amount: 0.012125
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:10:29
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

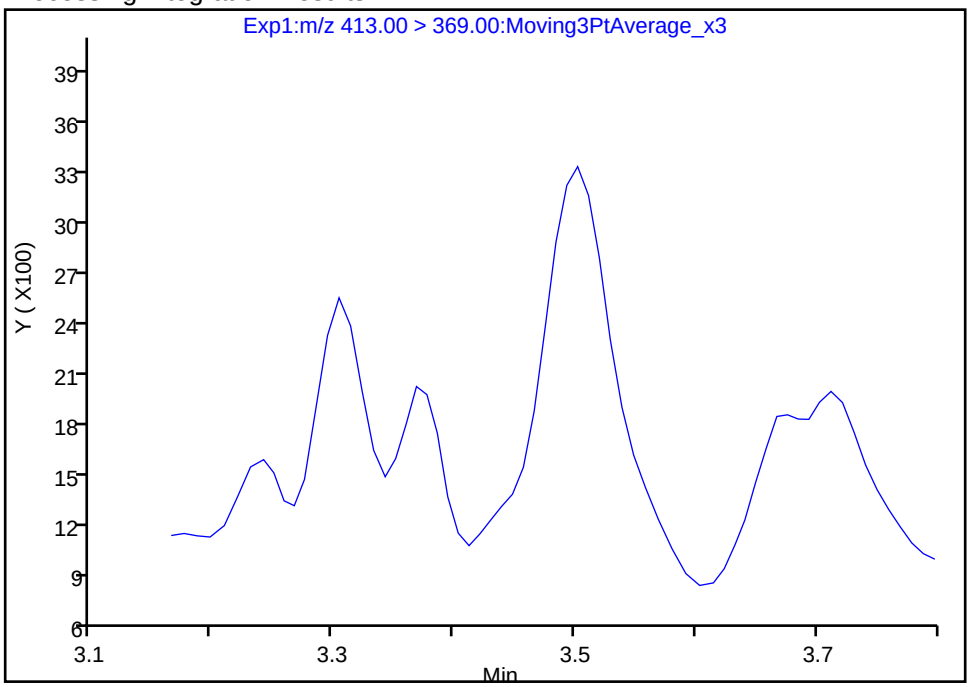
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

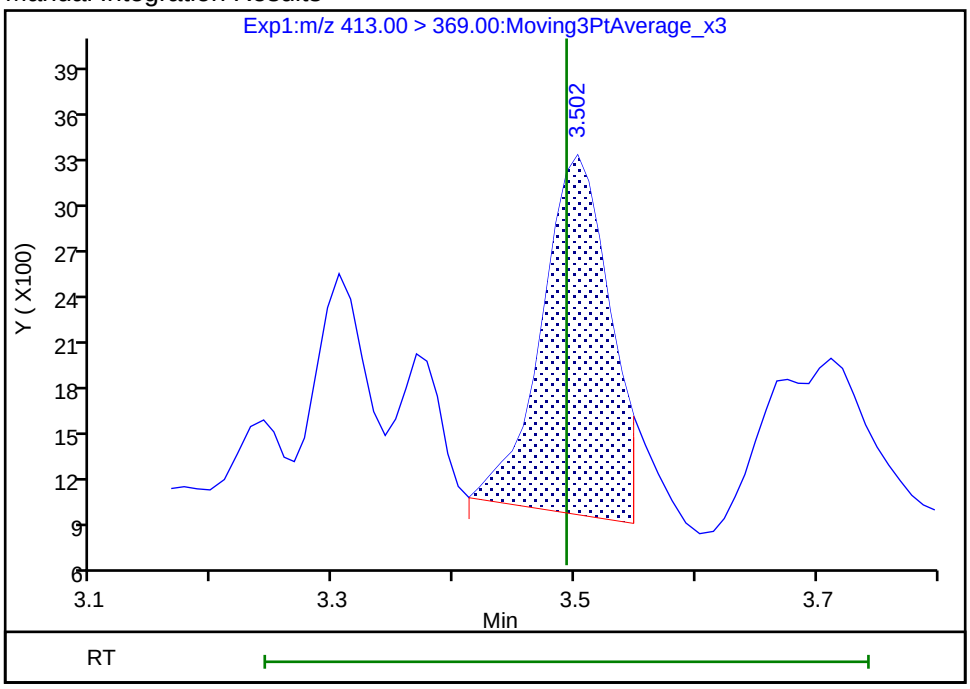
Not Detected
Expected RT: 3.49

Processing Integration Results




Manual Integration Results

RT: 3.50
Area: 9141
Amount: 0.012125
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:10:33
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

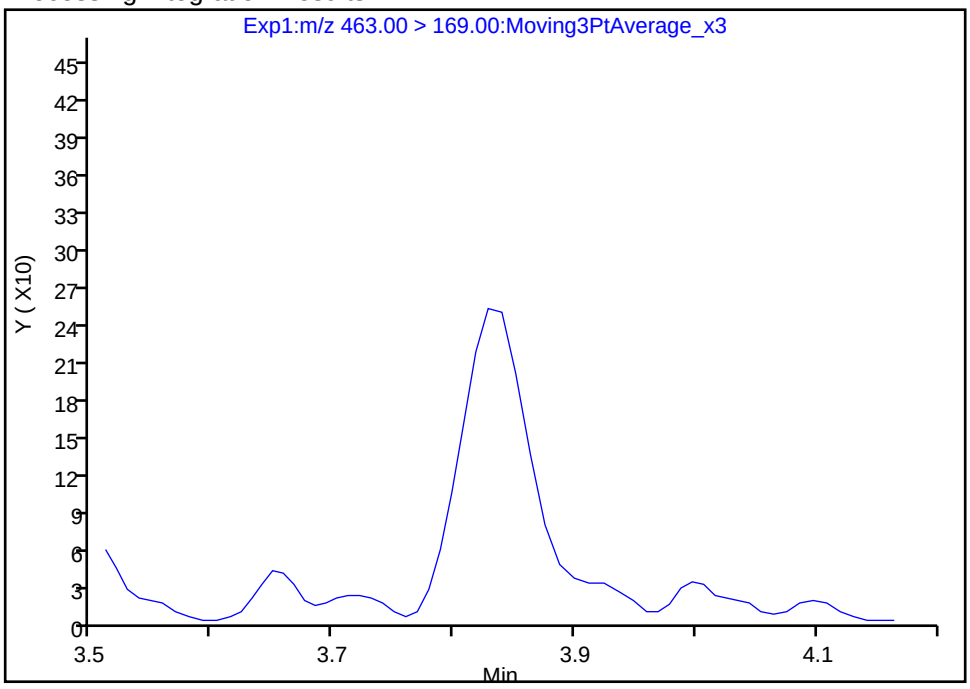
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

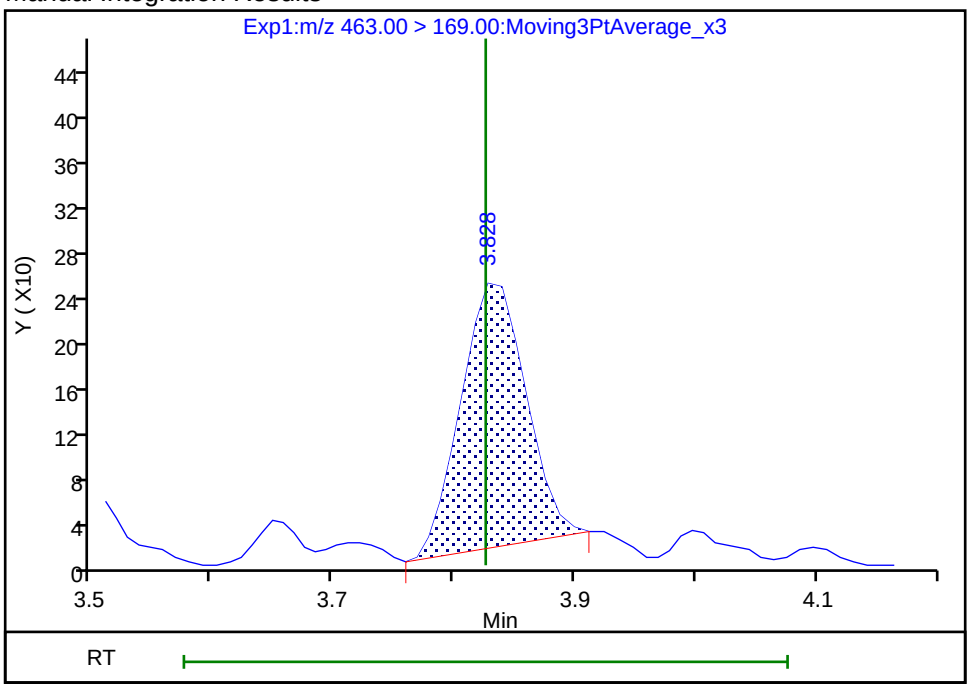
Not Detected
Expected RT: 3.83

Processing Integration Results




Manual Integration Results

RT: 3.83
Area: 881
Amount: 0.012125
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:11:27
Audit Action: Manually Integrated Audit Reason: Missed Peak

Eurofins TestAmerica, Burlington

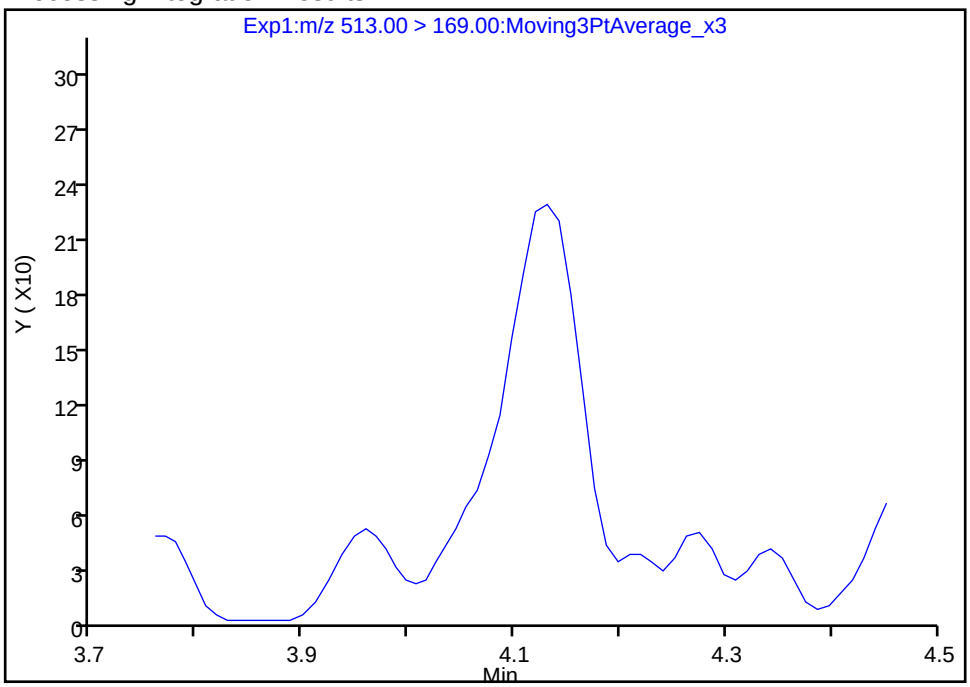
Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d
Injection Date: 22-Dec-2020 13:37:53 Instrument ID: LC812
Lims ID: ICB
Client ID:
Operator ID: lc812tech ALS Bottle#: 8 Worklist Smp#: 14
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

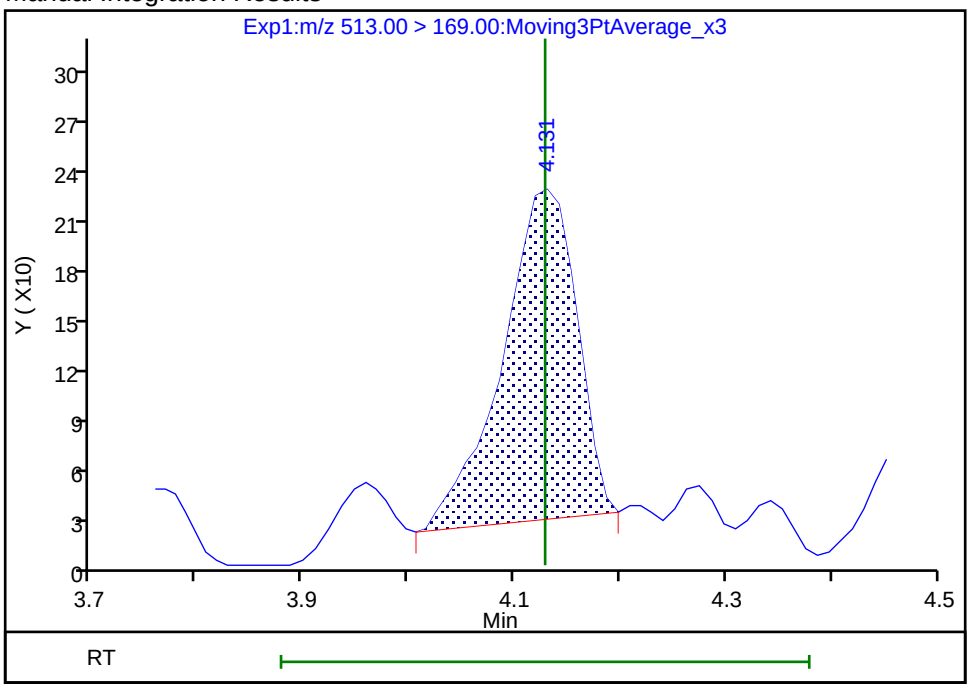
Not Detected
Expected RT: 4.13

Processing Integration Results




Manual Integration Results

RT: 4.13
Area: 974
Amount: 0.009551
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:11:38
Audit Action: Manually Integrated Audit Reason: Missed Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

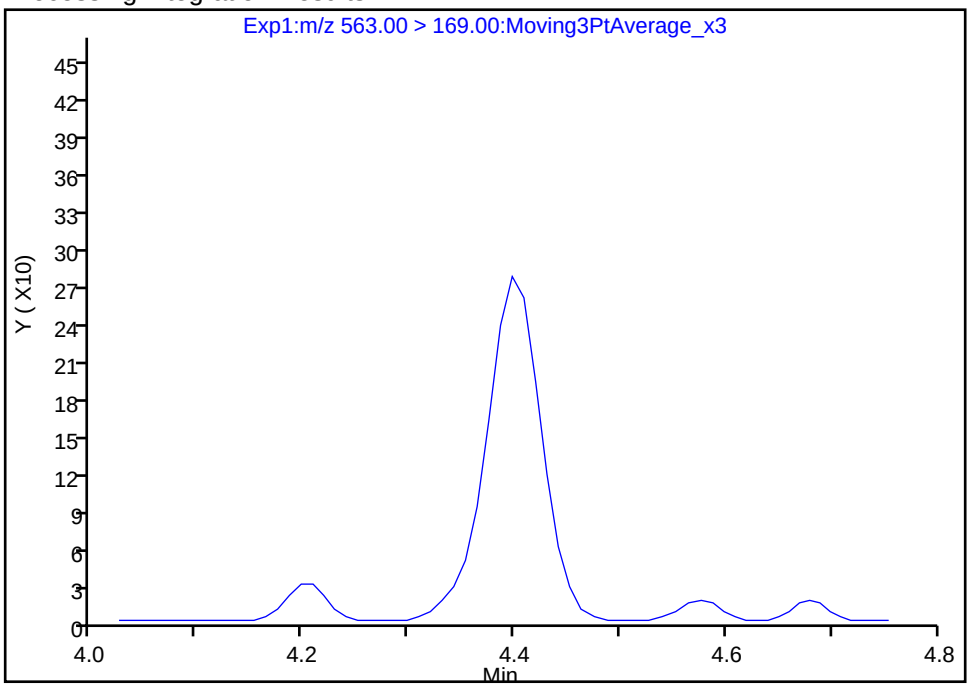
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

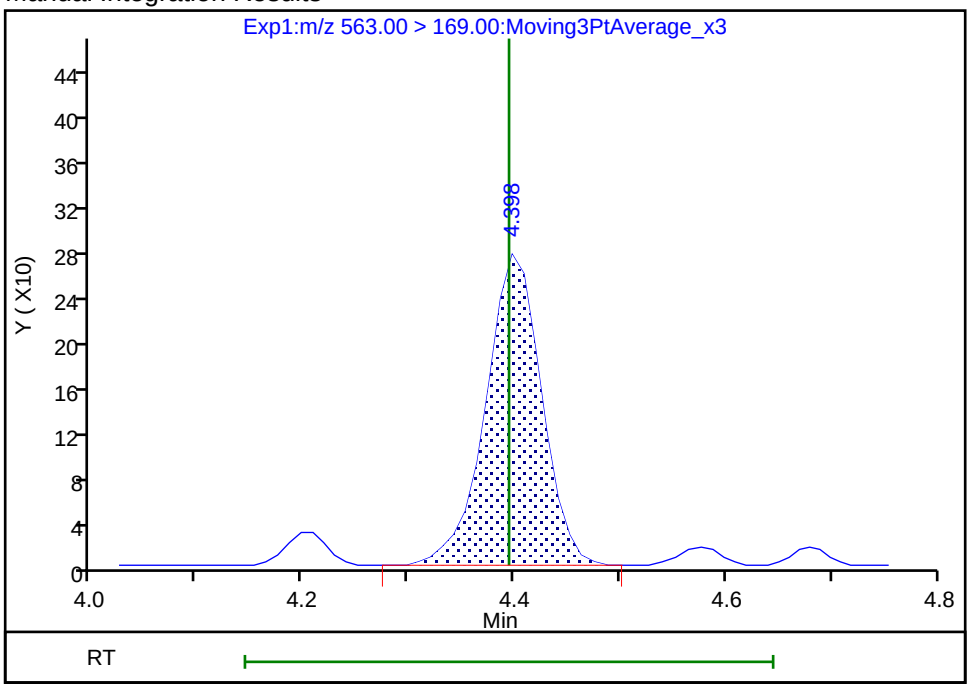
Not Detected
Expected RT: 4.39

Processing Integration Results




Manual Integration Results

RT: 4.40
Area: 1008
Amount: 0.012137
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:14:13
Audit Action: Manually Integrated Audit Reason: Missed Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

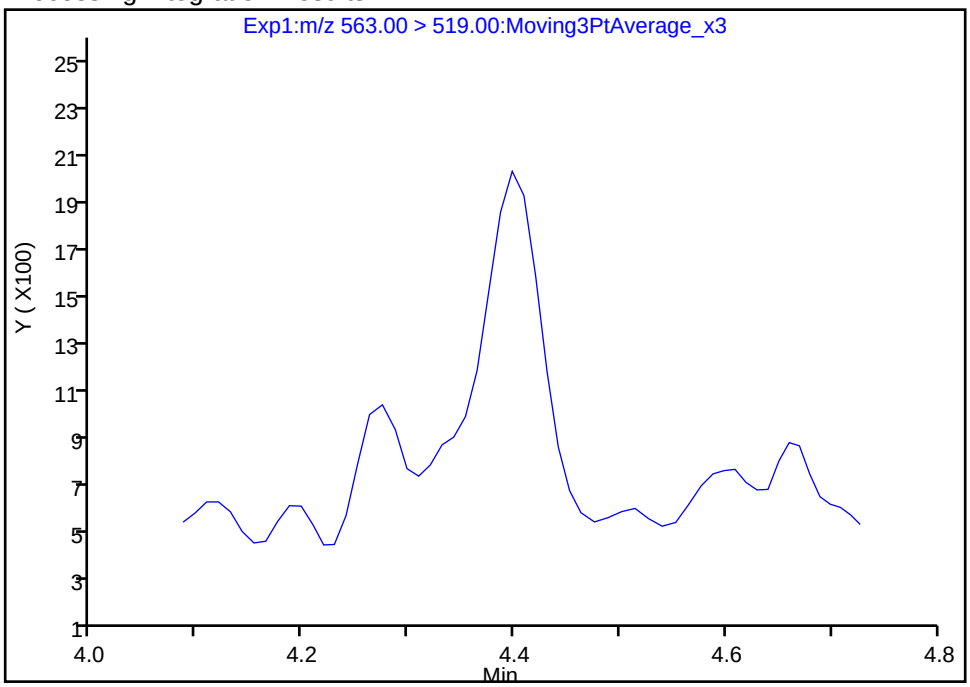
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

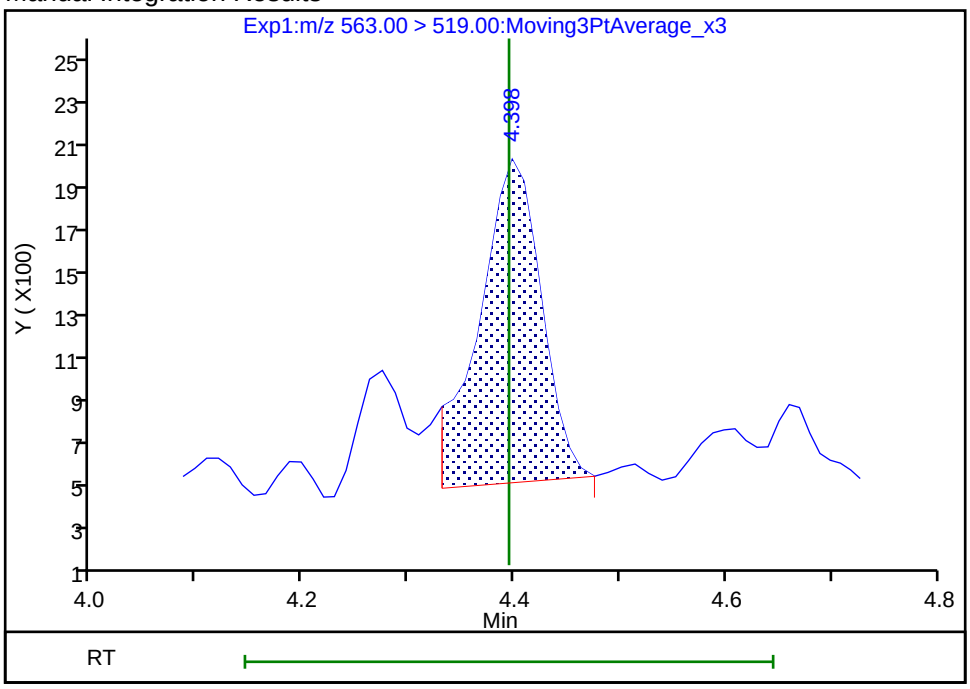
Not Detected
Expected RT: 4.39

Processing Integration Results




Manual Integration Results

RT: 4.40
Area: 5801
Amount: 0.012137
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:14:21
Audit Action: Manually Integrated Audit Reason: Missed Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

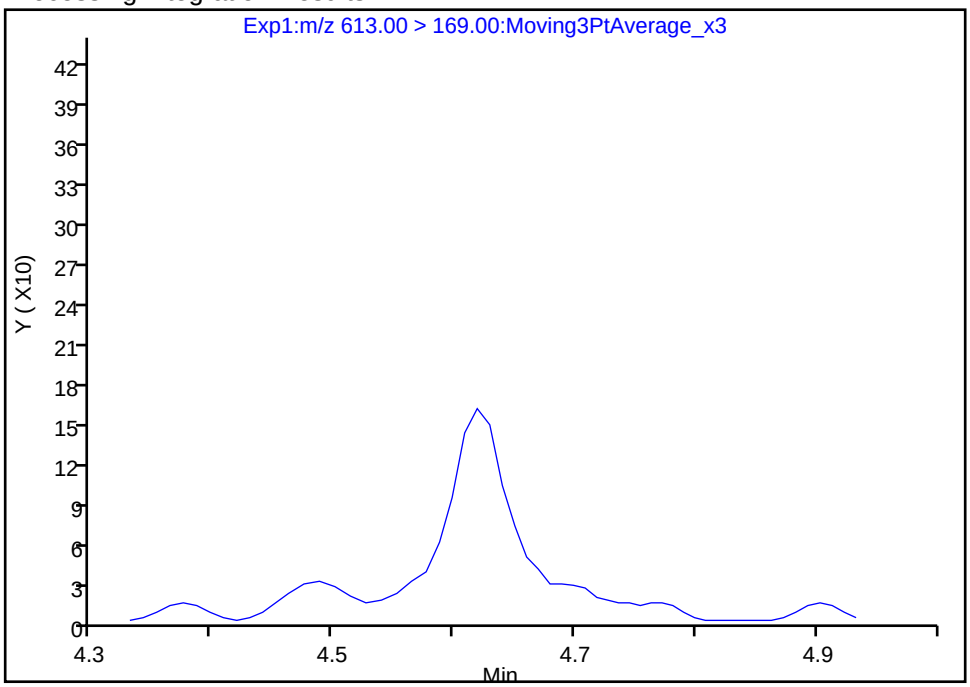
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

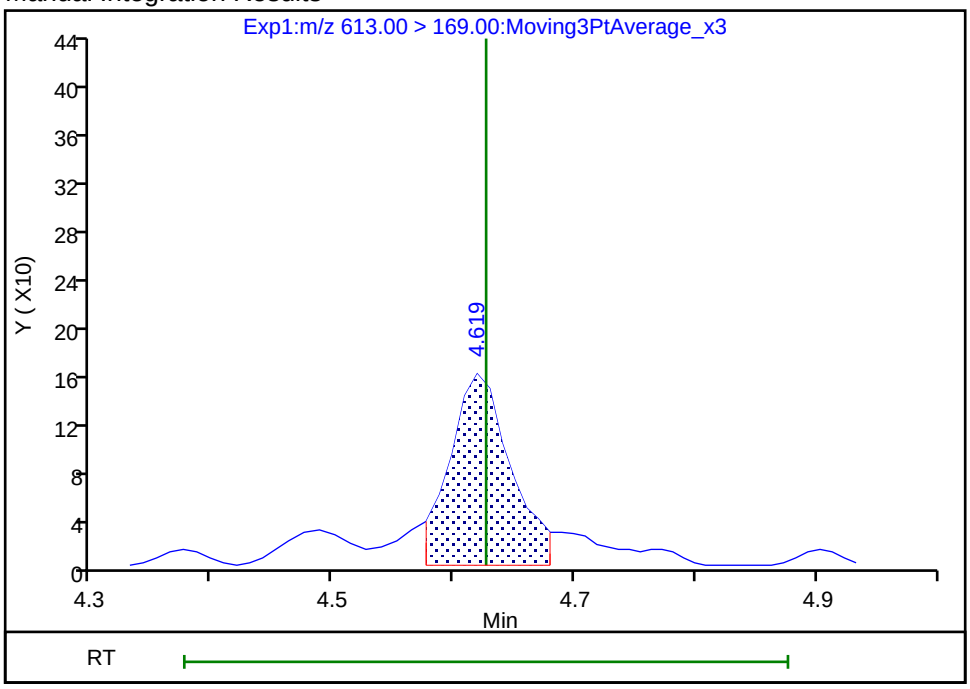
Not Detected
Expected RT: 4.63

Processing Integration Results




Manual Integration Results

RT: 4.62
Area: 543
Amount: 0.010261
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:15:22
Audit Action: Manually Integrated Audit Reason: Missed Peak

Eurofins TestAmerica, Burlington

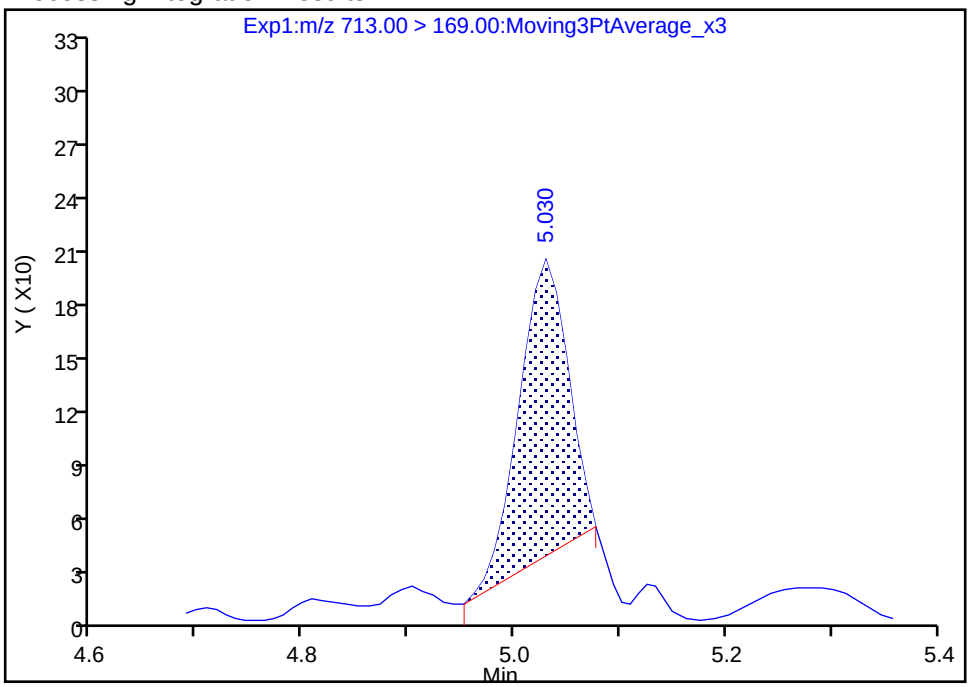
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

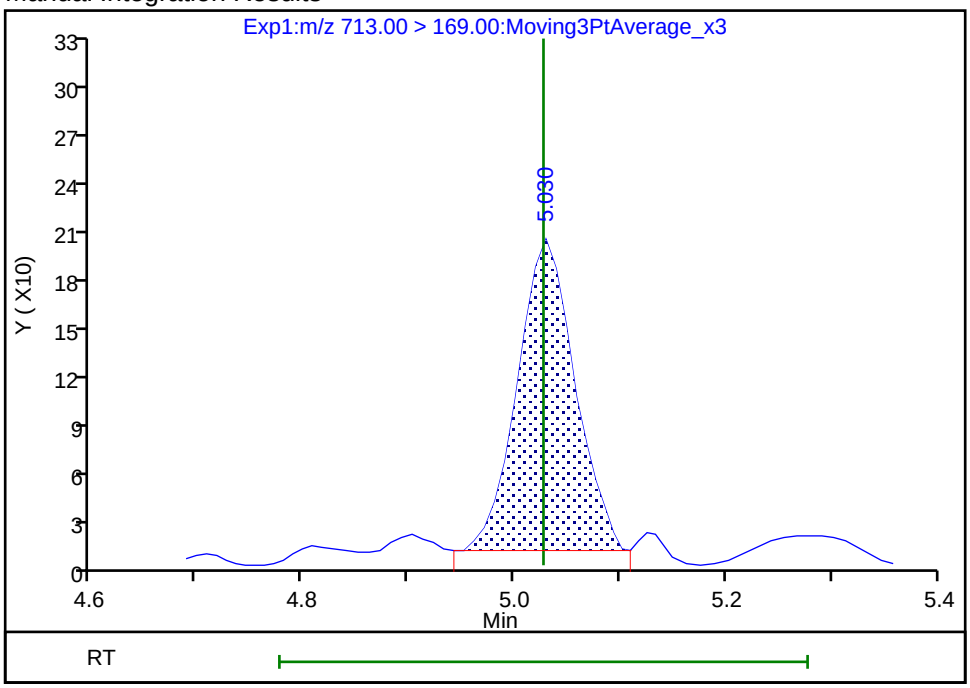
Processing Integration Results

RT: 5.03
Area: 527
Amount: 0.007894
Amount Units: ng/ml




Manual Integration Results

RT: 5.03
Area: 718
Amount: 0.010754
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:16:12
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

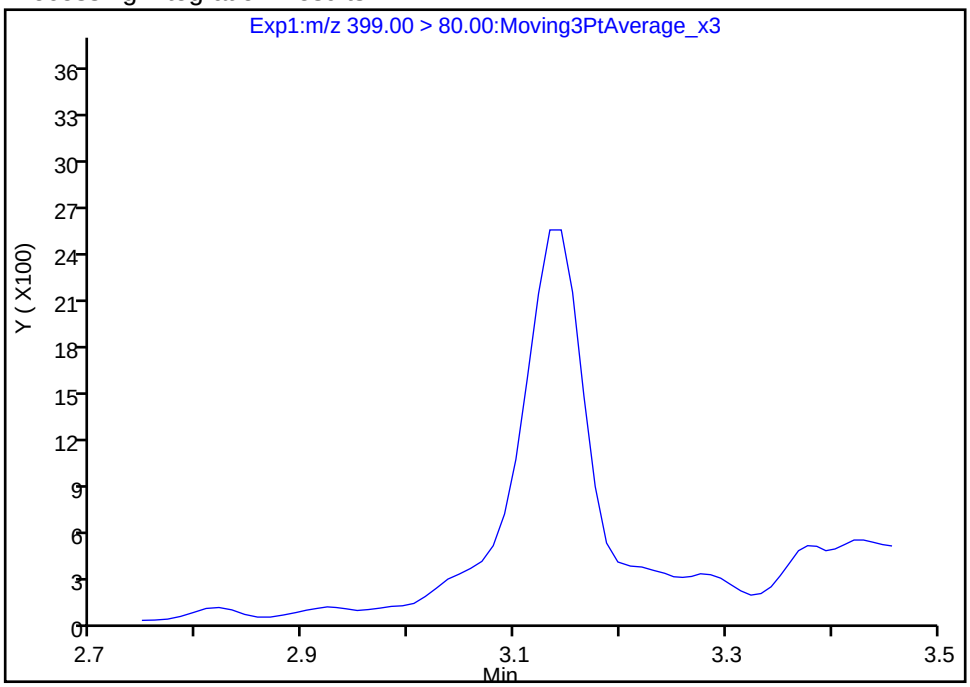
Data File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d
Injection Date: 22-Dec-2020 13:37:53 Instrument ID: LC812
Lims ID: ICB
Client ID:
Operator ID: lc812tech ALS Bottle#: 8 Worklist Smp#: 14
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

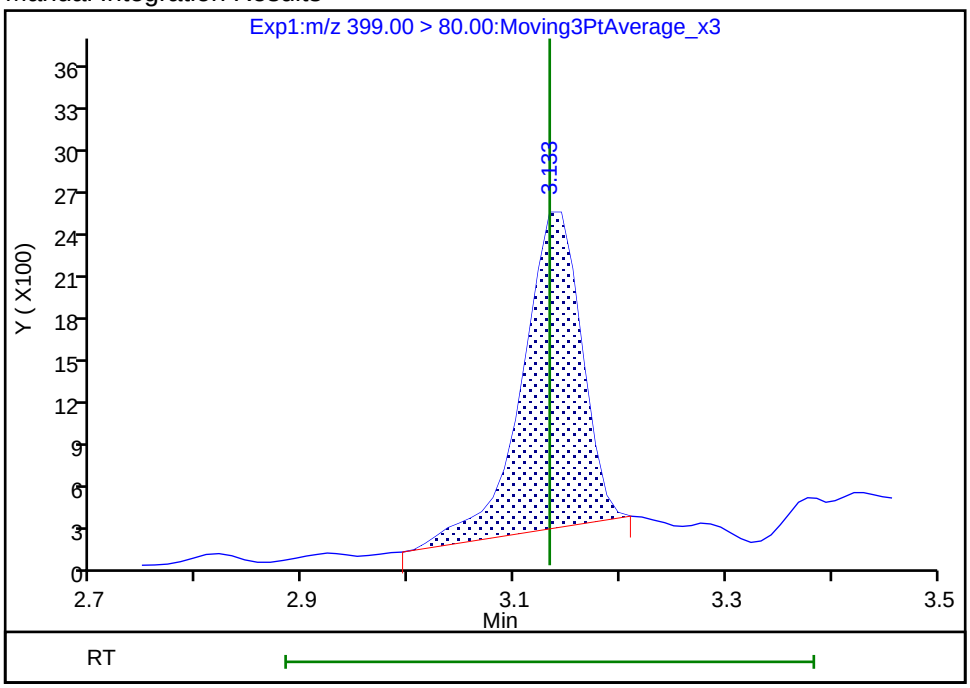
Not Detected
Expected RT: 3.13

Processing Integration Results




Manual Integration Results

RT: 3.13
Area: 8748
Amount: 0.011496
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:09:38
Audit Action: Manually Integrated Audit Reason: Missed Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

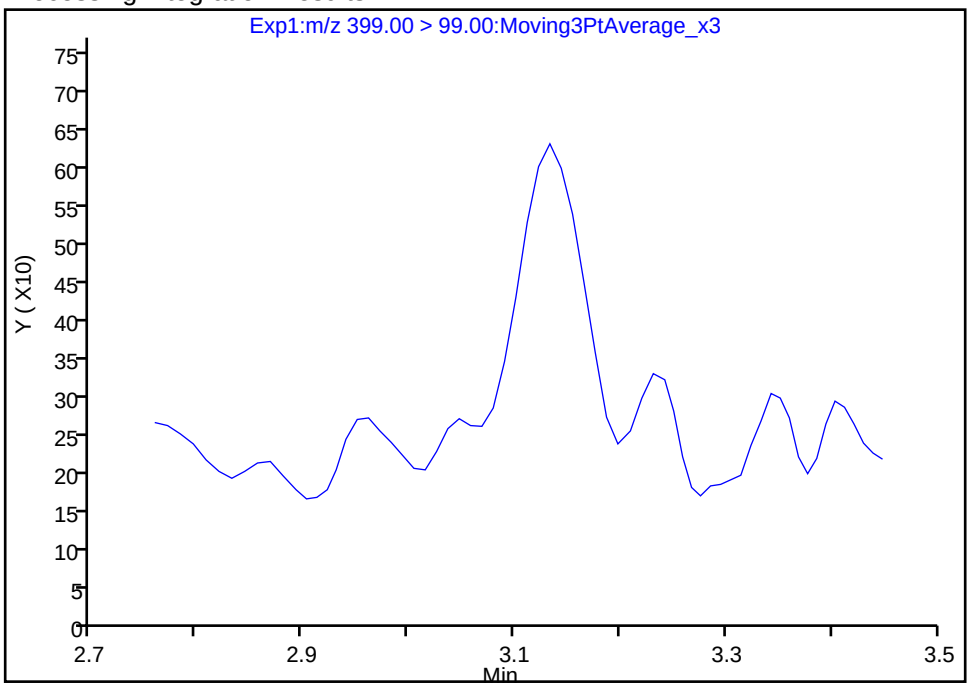
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

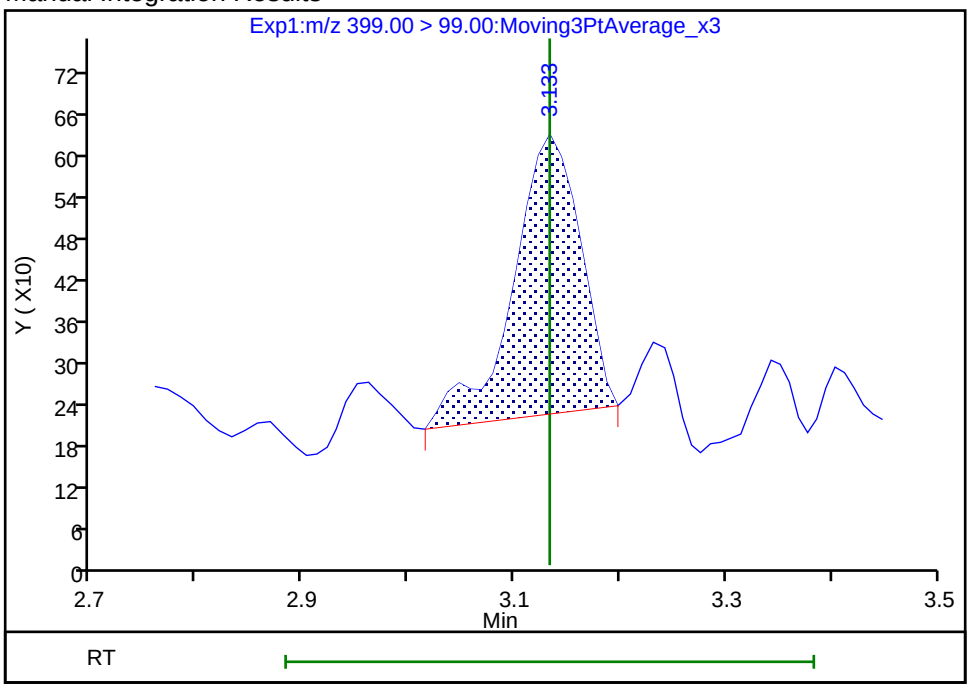
Not Detected
Expected RT: 3.13

Processing Integration Results




Manual Integration Results

RT: 3.13
Area: 1791
Amount: 0.011496
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:09:44
Audit Action: Manually Integrated Audit Reason: Missed Peak

Eurofins TestAmerica, Burlington

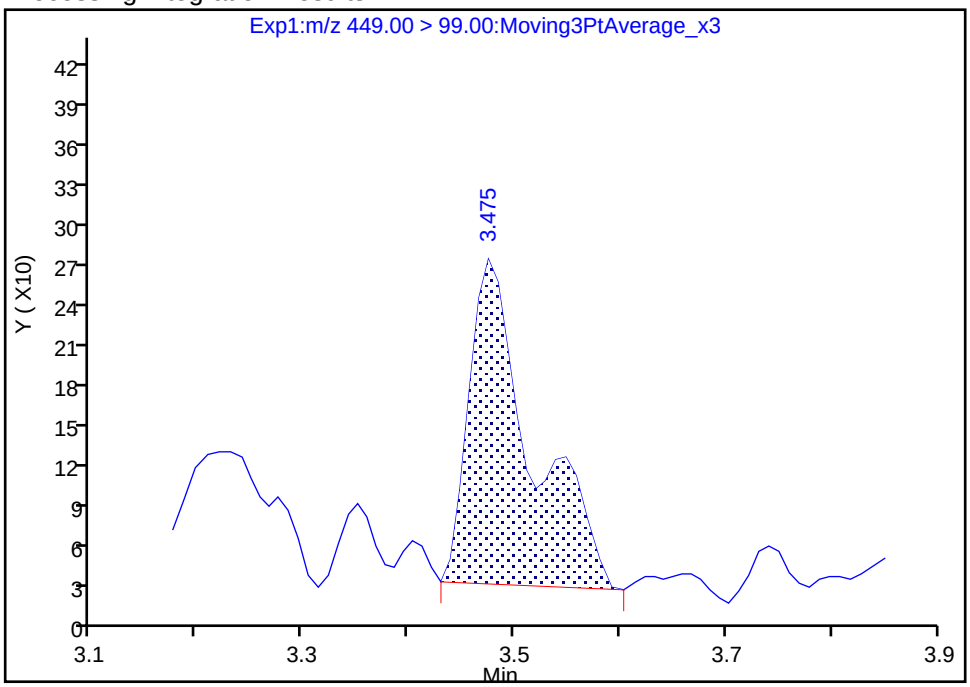
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

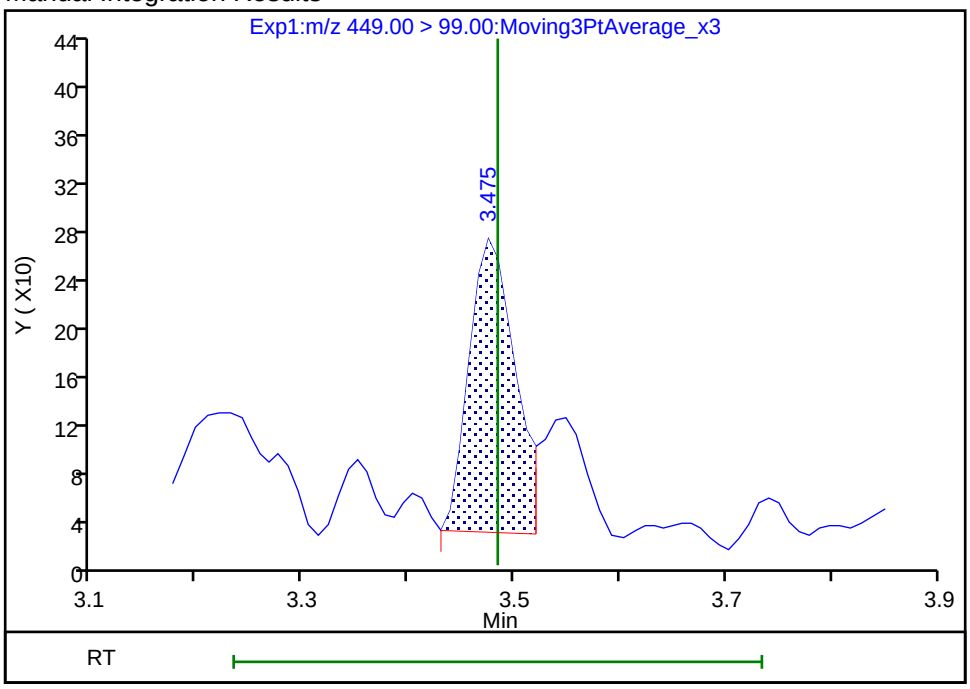
Processing Integration Results

RT: 3.48
Area: 1008
Amount: 0.008490
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 729
Amount: 0.008490
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:09:57
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

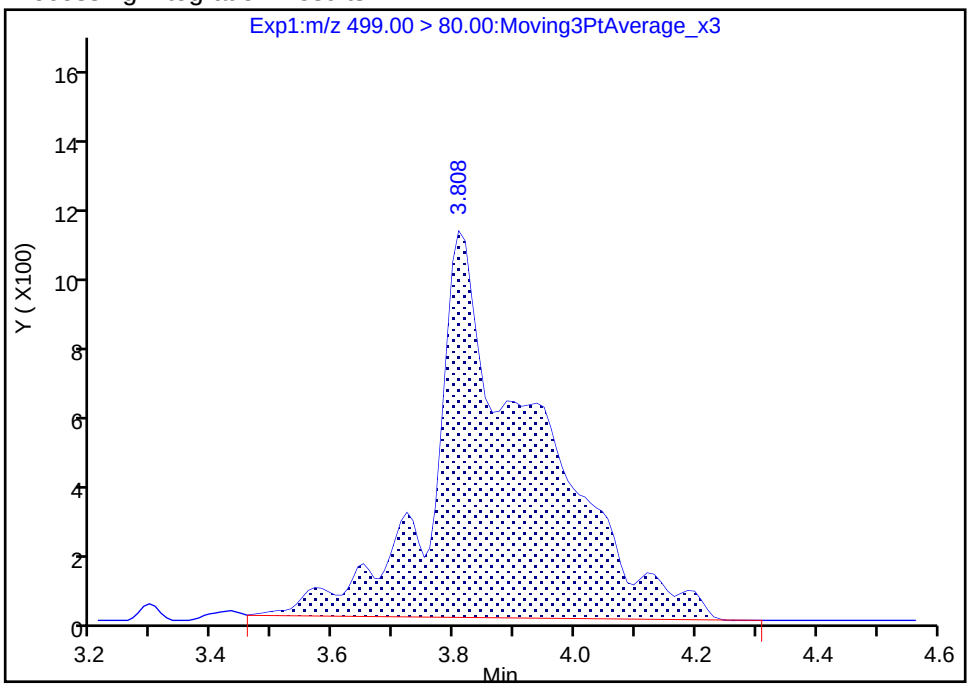
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

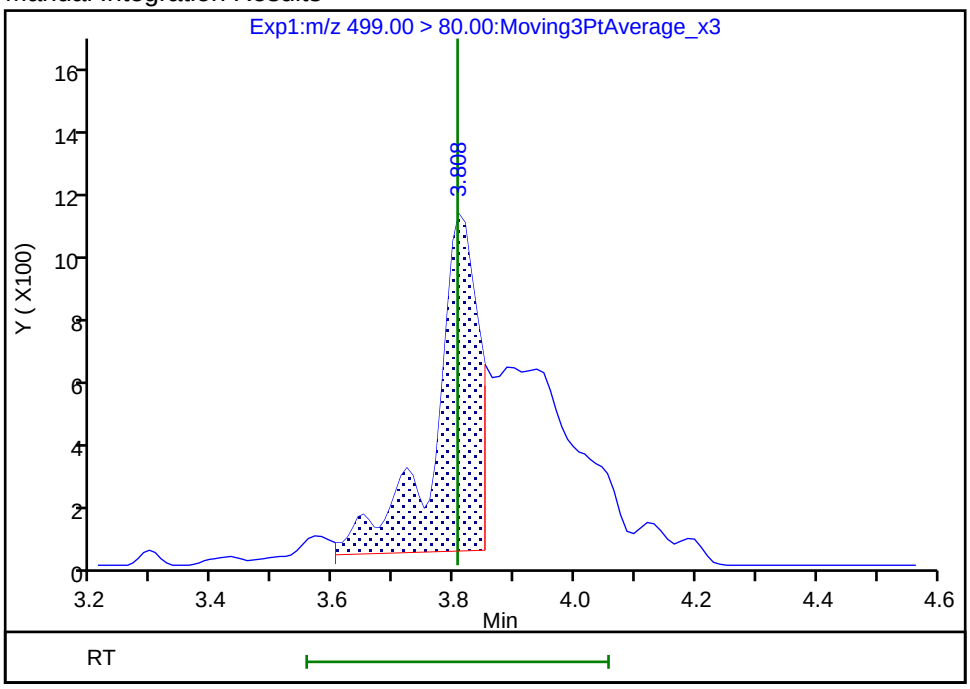
Processing Integration Results

RT: 3.81
Area: 12829
Amount: 0.024980
Amount Units: ng/ml




Manual Integration Results

RT: 3.81
Area: 5152
Amount: 0.010032
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:11:03
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

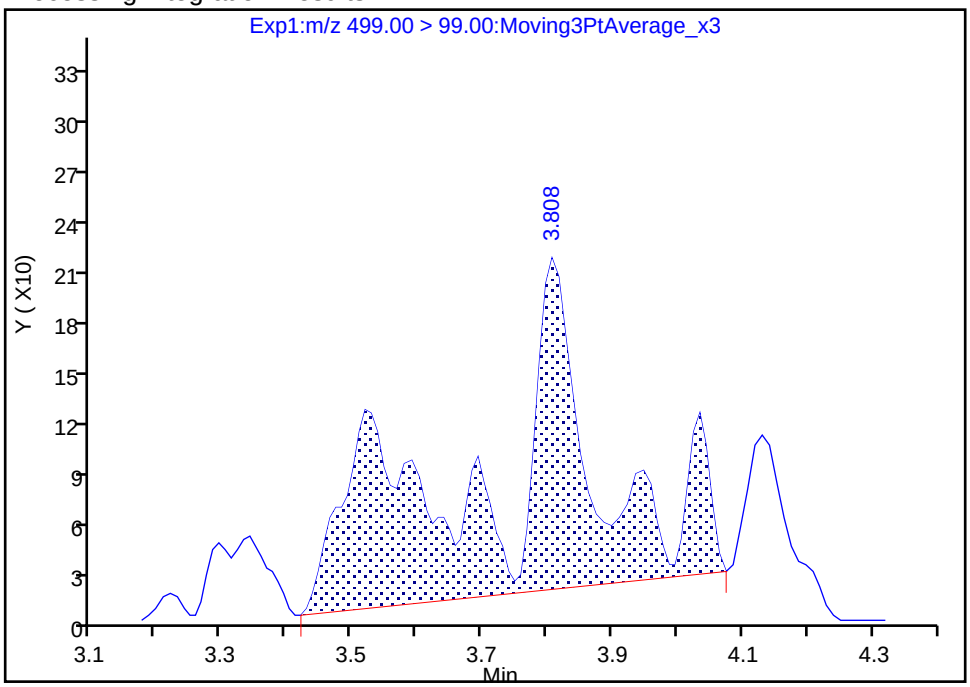
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

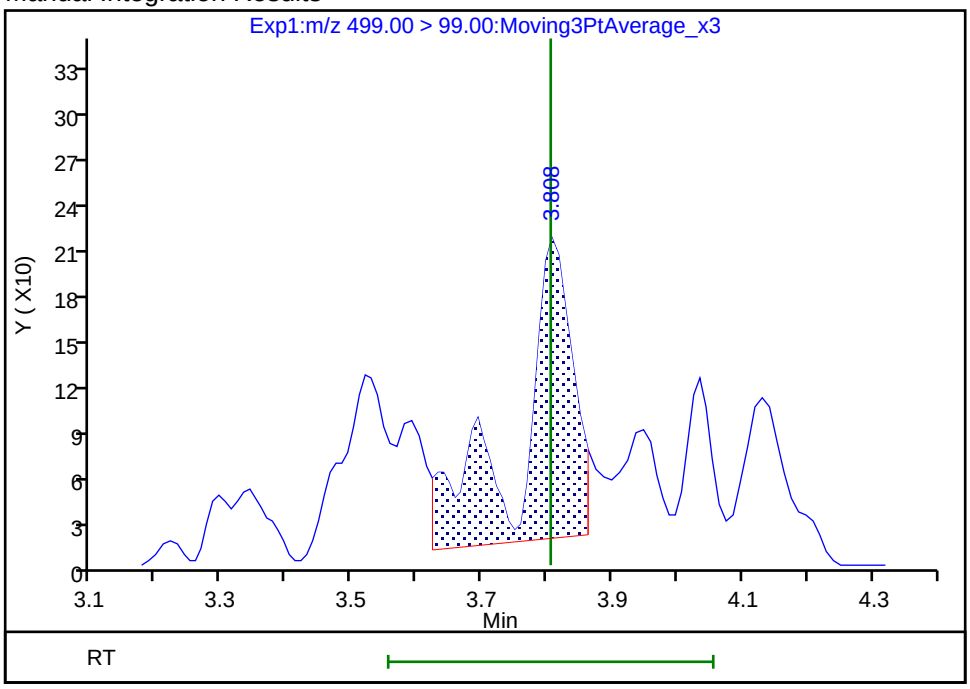
Processing Integration Results

RT: 3.81
Area: 2463
Amount: 0.024980
Amount Units: ng/ml




Manual Integration Results

RT: 3.81
Area: 1104
Amount: 0.010032
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:11:15
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

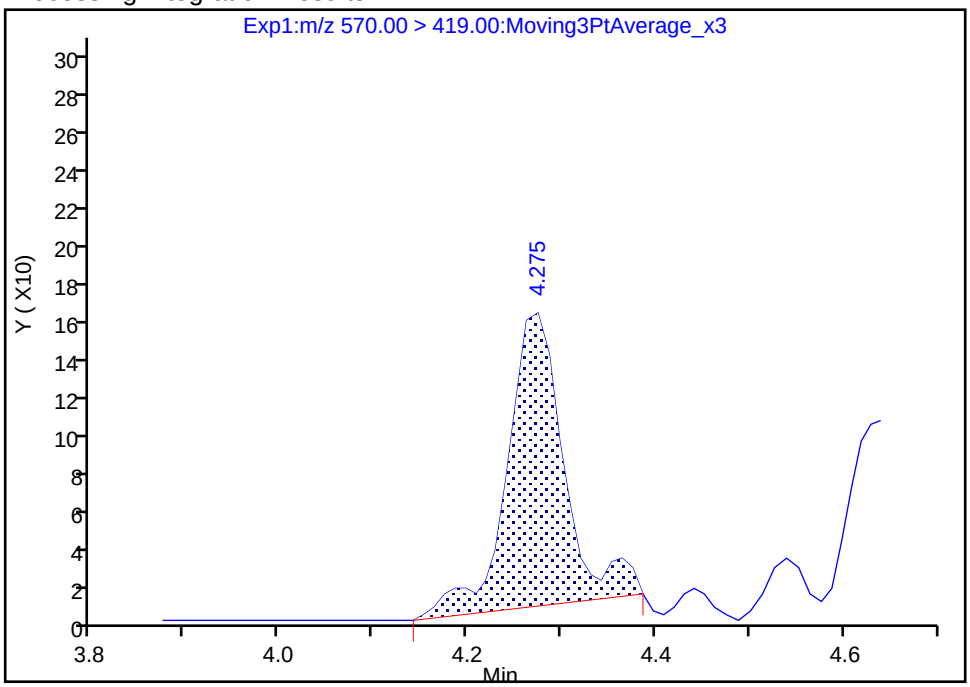
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

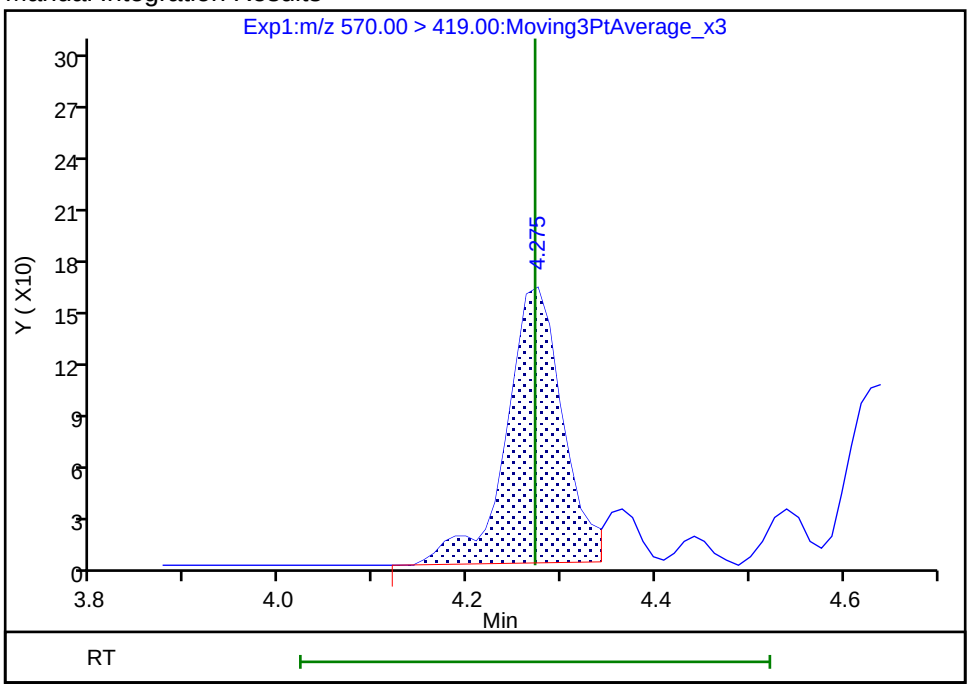
Processing Integration Results

RT: 4.27
Area: 658
Amount: 0.017491
Amount Units: ng/ml




Manual Integration Results

RT: 4.27
Area: 674
Amount: 0.017916
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:14:02
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

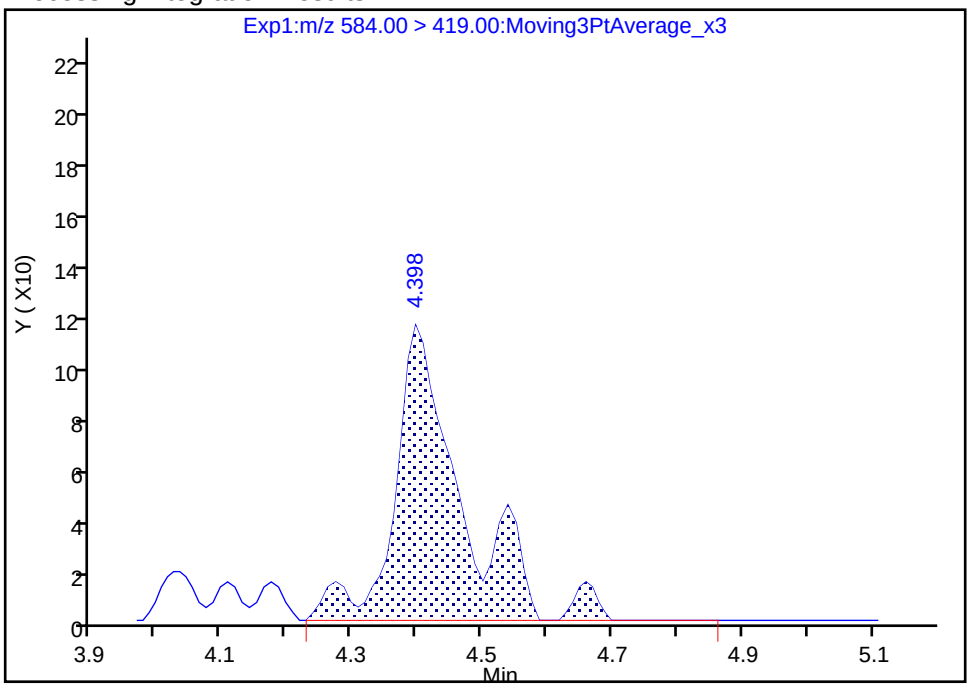
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

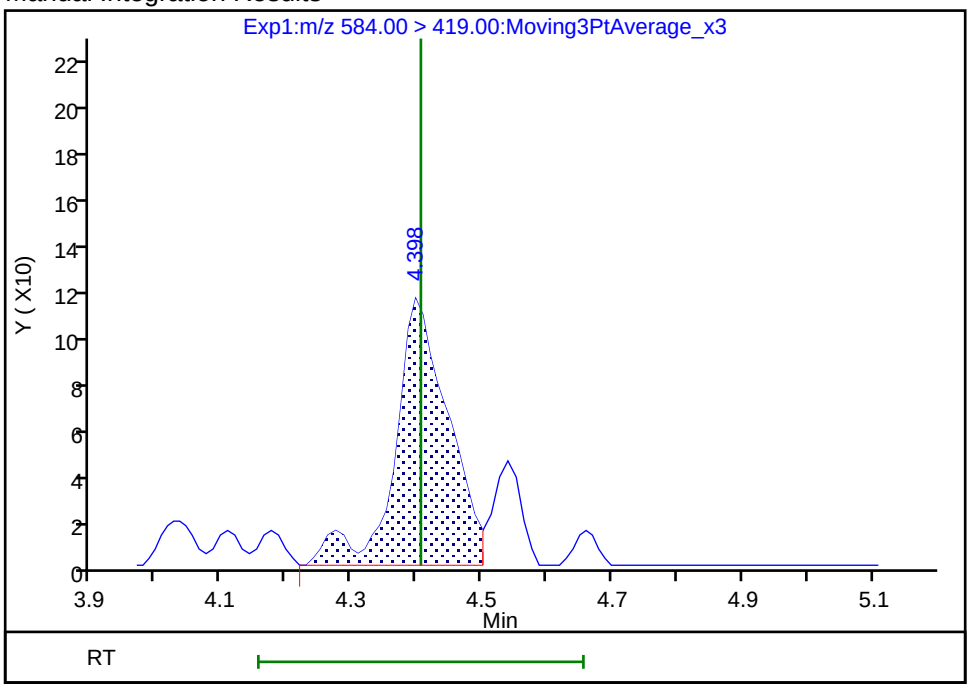
Processing Integration Results

RT: 4.40
Area: 825
Amount: 0.021940
Amount Units: ng/ml




Manual Integration Results

RT: 4.40
Area: 655
Amount: 0.017419
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:14:46
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

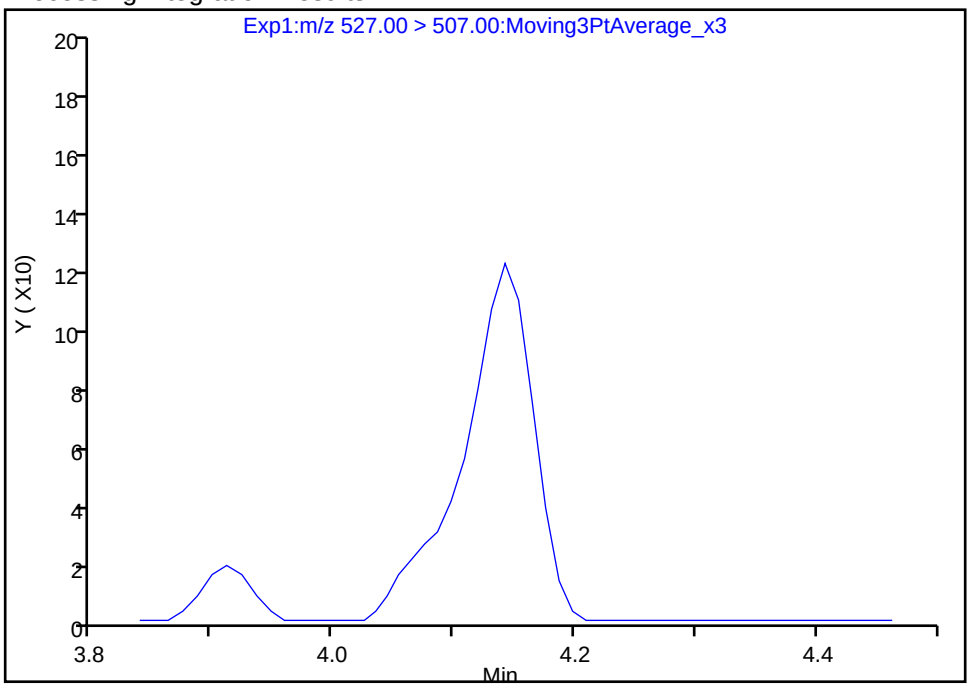
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

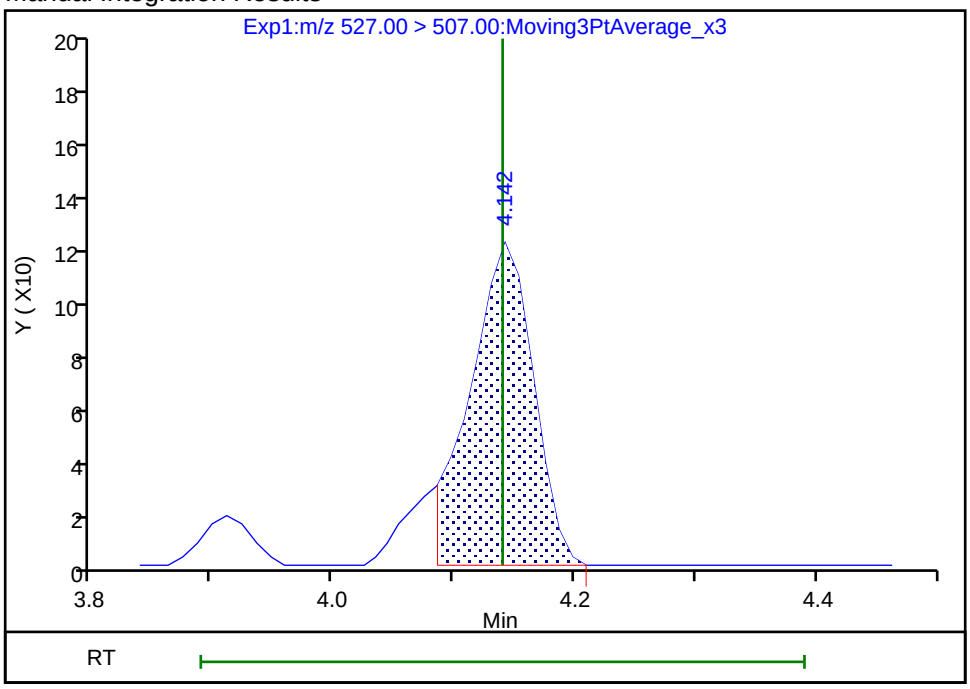
Not Detected
Expected RT: 4.14

Processing Integration Results




Manual Integration Results

RT: 4.14
Area: 423
Amount: 0.007027
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:13:37
Audit Action: Manually Integrated Audit Reason: Missed Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

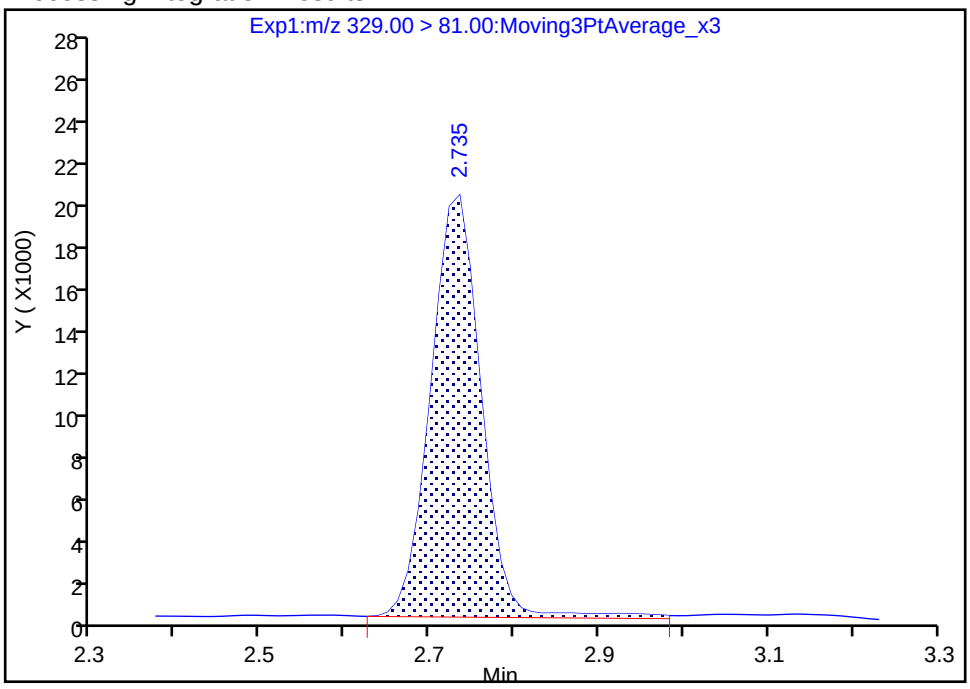
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL014.d | | | | |
| Injection Date: | 22-Dec-2020 13:37:53 | Instrument ID: | LC812 | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 60 M2-4:2 FTS, CAS: STL02395

Signal: 1

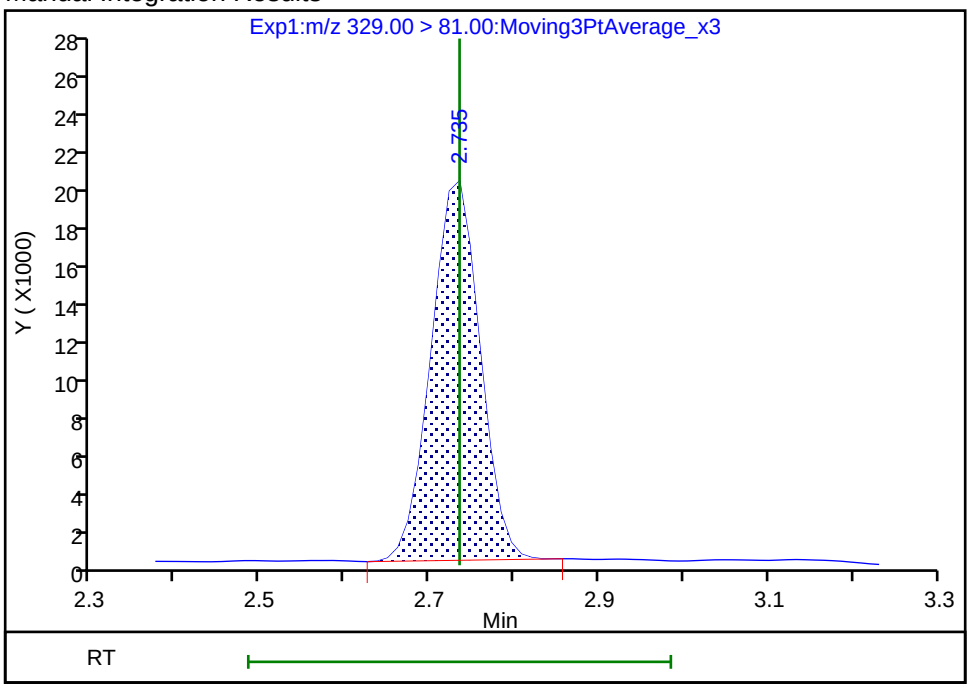
Processing Integration Results

RT: 2.74
Area: 82733
Amount: 1.107642
Amount Units: ng/ml




Manual Integration Results

RT: 2.74
Area: 79652
Amount: 1.066393
Amount Units: ng/ml




Reviewer: deannd, 22-Dec-2020 15:12:28

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID:  Lab Sample ID: LCS 200-164654/2-A

Matrix: Water  Lab File ID: PA210312B06.d

Analysis Method: 537 (modified)  Date Collected:

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 250(mL)  Date Analyzed: 03/12/2021 12:42

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 375-22-4 | Perfluorobutanoic acid (PFBA) | 41.04 | | 5.00 | 1.13 |
| 2706-90-3 | Perfluoropentanoic acid (PFPeA) | 40.18 | | 2.00 | 1.08 |
| 307-24-4 | Perfluorohexanoic acid (PFHxA) | 40.98 | | 2.00 | 0.83 |
| 375-85-9 | Perfluoroheptanoic acid (PFHpA) | 41.77 | | 2.00 | 0.46 |
| 335-67-1 | Perfluorooctanoic acid (PFOA) | 42.88 | | 2.00 | 0.98 |
| 375-95-1 | Perfluorononanoic acid (PFNA) | 42.69 | | 2.00 | 0.58 |
| 335-76-2 | Perfluorodecanoic acid (PFDA) | 42.37 | | 2.00 | 0.46 |
| 2058-94-8 | Perfluoroundecanoic acid (PFUnA) | 43.26 | | 2.00 | 0.73 |
| 307-55-1 | Perfluorododecanoic acid (PFDoA) | 36.63 | | 2.00 | 0.46 |
| 72629-94-8 | Perfluorotridecanoic acid (PFTriA) | 37.68 | | 2.00 | 0.43 |
| 376-06-7 | Perfluorotetradecanoic acid (PFTeA) | 41.37 | | 2.00 | 0.59 |
| 375-73-5 | Perfluorobutanesulfonic acid (PFBS) | 38.69 | | 2.00 | 0.63 |
| 355-46-4 | Perfluorohexanesulfonic acid (PFHxS) | 37.97 | | 2.00 | 0.67 |
| 375-92-8 | Perfluoroheptanesulfonic Acid (PFHpS) | 40.93 | | 2.00 | 0.39 |
| 1763-23-1 | Perfluorooctanesulfonic acid (PFOS) | 39.55 | | 2.00 | 0.87 |
| 335-77-3 | Perfluorodecanesulfonic acid (PFDS) | 33.92 | | 2.00 | 0.48 |
| 754-91-6 | Perfluorooctanesulfonamide (PFOSA) | 36.57 | | 2.00 | 0.57 |
| 2355-31-9 | N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 37.63 | | 5.00 | 0.79 |
| 2991-50-6 | N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 42.34 | | 5.00 | 0.93 |
| 27619-97-2 | 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 33.14 | | 5.00 | 0.72 |
| 39108-34-4 | 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 30.57 | | 2.00 | 0.66 |

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID:  Lab Sample ID: LCS 200-164654/2-A

Matrix: Water  Lab File ID: PA210312B06.d

Analysis Method: 537 (modified)  Date Collected:

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 250(mL)  Date Analyzed: 03/12/2021 12:42

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| STL00994 | 18O2 PFHxS | 105 | | 50-150 |
| STL01892 | 13C4 PFHpA | 108 | | 50-150 |
| STL00990 | 13C4 PFOA | 106 | | 50-150 |
| STL00991 | 13C4 PFOS | 106 | | 50-150 |
| STL00995 | 13C5 PFNA | 98 | | 50-150 |
| STL00992 | 13C4 PFBA | 111 | | 25-150 |
| STL00993 | 13C2 PFHxA | 110 | | 50-150 |
| STL00996 | 13C2 PFDA | 96 | | 50-150 |
| STL00997 | 13C2 PFUnA | 81 | | 50-150 |
| STL00998 | 13C2 PFDoA | 75 | | 50-150 |
| STL01056 | 13C8 FOSA | 75 | | 25-150 |
| STL01893 | 13C5 PFPeA | 107 | | 25-150 |
| STL02116 | 13C2 PFTeDA | 73 | | 50-150 |
| STL02118 | d3-NMeFOSAA | 93 | | 50-150 |
| STL02117 | d5-NEtFOSAA | 80 | | 50-150 |
| STL02279 | M2-6:2 FTS | 108 | | 25-150 |
| STL02280 | M2-8:2 FTS | 103 | | 25-150 |
| STL02337 | 13C3 PFBS | 105 | | 50-150 |

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d
Lims ID: LCS 200-164654/2-A
Client ID:
Sample Type: LCS
Inject. Date: 12-Mar-2021 12:42:33 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCS 200-164654/2-A
Misc. Info.: 200-0045149-006 Plate: 1 Rack: 2
Operator ID: lc812tech Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 15-Mar-2021 17:46:50 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1650

First Level Reviewer: nampitakw Date: 15-Mar-2021 09:26:30
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.074 | 2.091 | -0.017 | 0.597 | 1486485 | 1.39 | | 111 | 11458 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | M |
| 212.90 > 169.00 | 2.074 | 2.091 | -0.017 | 1.000 | 1222427 | 1.03 | | 103 | 281 | M |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.387 | 2.413 | -0.026 | 0.687 | 1031467 | 1.34 | | 107 | 3636 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | M |
| 262.90 > 219.00 | 2.387 | 2.413 | -0.026 | 1.000 | 917811 | 1.00 | | 100 | 47.1 | M |
| D 47 13C3 PFBS | | | | | | | | | | M |
| 301.90 > 80.00 | 2.413 | 2.426 | -0.013 | 0.695 | 1244123 | 1.22 | | 105 | 249522 | M |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | |
| 298.90 > 80.00 | 2.413 | 2.439 | -0.026 | 1.000 | 1171058 | 0.9672 | Target=2.21 | 109 | 2002 | |
| 298.90 > 99.00 | 2.413 | 2.439 | -0.026 | 1.000 | 533827 | | 2.19(1.11-3.32) | | 376 | |
| D 60 M2-4:2 FTS | | | | | | | | | | M |
| 329.00 > 81.00 | 2.710 | 2.734 | -0.024 | 0.780 | 108629 | 1.28 | | 110 | 156 | M |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | |
| 327.00 > 307.00 | 2.710 | 2.734 | -0.024 | 1.000 | 162656 | 0.9533 | | 102 | 1588 | |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.746 | 2.770 | -0.024 | 0.790 | 1109935 | 1.37 | | 110 | 3475 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | M |
| 313.00 > 269.00 | 2.746 | 2.770 | -0.024 | 1.000 | 993899 | 1.02 | Target=12.83 | 102 | 196 | M |
| 313.00 > 119.00 | 2.746 | 2.770 | -0.024 | 1.000 | 82390 | | 12.06(6.42-19.25) | | 150 | M |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | |
| 349.00 > 80.00 | 2.746 | 2.770 | -0.024 | 0.883 | 1028895 | 0.9839 | Target=3.35 | 105 | 2201 | |
| 349.00 > 99.00 | 2.746 | 2.770 | -0.024 | 0.883 | 306083 | | 3.36(1.67-5.02) | | 494 | |
| 67 Perfluoro(2-propoxypropanoic) ac | | | | | | | | | | M |
| 329.10 > 285.00 | 2.855 | 2.880 | -0.025 | 1.000 | 177723 | 1.46 | | 146 | 33.5 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 64 13C3 HFPO-DA | | | | | | | | | | M |
| 332.10 > 287.00 | 2.855 | 2.880 | -0.025 | 0.822 | 110153 | 0.7733 | | 61.9 | 1293 | M |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.111 | 3.132 | -0.021 | 1.000 | 891415 | 0.9493 | Target=4.15 | 104 | 1540 | M |
| 399.00 > 99.00 | 3.111 | 3.132 | -0.021 | 1.000 | 210809 | | 4.23(2.08-6.23) | | 250 | M |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.111 | 3.132 | -0.021 | 0.895 | 942258 | 1.25 | | 105 | 2699 | |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.111 | 3.143 | -0.032 | 0.895 | 1044711 | 1.35 | | 108 | 3473 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | |
| 363.00 > 319.00 | 3.111 | 3.143 | -0.032 | 1.000 | 953140 | 1.04 | Target=3.66 | 104 | 307 | |
| 363.00 > 169.00 | 3.111 | 3.143 | -0.032 | 1.000 | 261355 | | 3.65(1.83-5.49) | | 608 | |
| 77 DONA | | | | | | | | | | |
| 377.00 > 251.00 | 3.154 | 3.175 | -0.021 | 0.833 | 1802973 | 0.9775 | Target=2.43 | 104 | 2474 | |
| 377.00 > 85.00 | 3.154 | 3.175 | -0.021 | 0.833 | 741172 | | 2.43(1.22-3.65) | | 1115 | |
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | M |
| 449.00 > 80.00 | 3.456 | 3.483 | -0.027 | 0.913 | 761015 | 1.02 | Target=5.95 | 107 | 2430 | |
| 449.00 > 99.00 | 3.456 | 3.483 | -0.027 | 0.913 | 128718 | | 5.91(2.98-8.93) | | 516 | M |
| D 12 M2-6:2 FTS | | | | | | | | | | |
| 429.00 > 81.00 | 3.465 | 3.492 | -0.027 | 0.997 | 121540 | 1.29 | | 108 | 598 | |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | |
| 427.00 > 407.00 | 3.465 | 3.492 | -0.027 | 1.000 | 94318 | 0.8285 | | 87.4 | 970 | |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.474 | 3.501 | -0.027 | 1.000 | 1044295 | 1.33 | | 106 | 3017 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.474 | 3.501 | -0.027 | | 993750 | 1.25 | | | 4959 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | M |
| 413.00 > 369.00 | 3.474 | 3.501 | -0.027 | 1.000 | 970746 | 1.07 | Target=2.58 | 107 | 296 | M |
| 413.00 > 169.00 | 3.474 | 3.501 | -0.027 | 1.000 | 400599 | | 2.42(1.29-3.87) | | 835 | M |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.785 | 3.814 | -0.029 | 1.000 | 626341 | 0.9887 | Target=5.65 | 107 | 374 | M |
| 499.00 > 99.00 | 3.785 | 3.814 | -0.029 | 1.000 | 108821 | | 5.76(2.82-8.47) | | 333 | M |
| D 18 13C4 PFOS | | | | | | | | | | |
| 503.00 > 80.00 | 3.785 | 3.814 | -0.029 | 1.089 | 658248 | 1.27 | | 106 | 2576 | |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.804 | 3.824 | -0.020 | 1.095 | 852947 | 1.23 | | 98.3 | 3378 | |
| 20 Perfluorononanoic acid | | | | | | | | | | M |
| 463.00 > 419.00 | 3.804 | 3.824 | -0.020 | 1.000 | 806140 | 1.07 | Target=7.44 | 107 | 181 | M |
| 463.00 > 169.00 | 3.804 | 3.824 | -0.020 | 1.000 | 118358 | | 6.81(3.72-11.16) | | 939 | M |
| 69 9-Chlorohexadecafluoro-3-oxanona | | | | | | | | | | M |
| 531.00 > 351.00 | 3.944 | 3.973 | -0.029 | 1.042 | 588340 | 0.8324 | | 89.3 | 2223 | M |
| 68 Perfluorononanesulfonic acid | | | | | | | | | | M |
| 549.00 > 80.00 | 4.071 | 4.104 | -0.033 | 1.075 | 474030 | 1.00 | Target=2.54 | 104 | 2305 | M |
| 549.00 > 99.00 | 4.071 | 4.104 | -0.033 | 1.075 | 158855 | | 2.98(1.27-3.81) | | 460 | |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.104 | 4.126 | -0.022 | 1.181 | 799671 | 1.21 | | 96.4 | 2744 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 24 Perfluorodecanoic acid | | | | | | | | | | |
| 513.00 > 469.00 | 4.104 | 4.126 | -0.022 | 1.000 | 698283 | 1.06 | Target=9.29 | 106 | 551 | |
| 513.00 > 169.00 | 4.104 | 4.126 | -0.022 | 1.000 | 86024 | | 8.12(4.64-13.93) | | 625 | |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.115 | 4.137 | -0.022 | 1.184 | 119936 | 1.23 | | 103 | 688 | |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | M |
| 527.00 > 507.00 | 4.115 | 4.137 | -0.022 | 1.000 | 52058 | 0.7642 | | 79.8 | 545 | M |
| D 21 13C8 FOSA | | | | | | | | | | M |
| 506.00 > 78.00 | 4.204 | 4.225 | -0.021 | 1.210 | 917731 | 0.9409 | | 75.3 | 2726 | M |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | |
| 498.00 > 78.00 | 4.204 | 4.225 | -0.021 | 1.000 | 672624 | 0.9142 | | 91.4 | 1775 | |
| D 27 d3-NMeFOSAA | | | | | | | | | | |
| 573.00 > 419.00 | 4.246 | 4.268 | -0.022 | 1.222 | 56125 | 1.17 | | 93.3 | 190 | |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | M |
| 570.00 > 419.00 | 4.246 | 4.268 | -0.022 | 1.000 | 37439 | 0.9407 | | 94.1 | 623 | M |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | M |
| 599.00 > 80.00 | 4.336 | 4.358 | -0.022 | 1.145 | 319511 | 0.8479 | Target=2.80 | 88.0 | 2223 | |
| 599.00 > 99.00 | 4.336 | 4.358 | -0.022 | 1.145 | 113947 | | 2.80(1.40-4.19) | | 519 | M |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.369 | 4.391 | -0.022 | 1.258 | 554320 | 1.02 | | 81.4 | 2949 | |
| 31 Perfluoroundecanoic acid | | | | | | | | | | |
| 563.00 > 519.00 | 4.369 | 4.391 | -0.022 | 1.000 | 489104 | 1.08 | Target=8.12 | 108 | 414 | |
| 563.00 > 169.00 | 4.369 | 4.391 | -0.022 | 1.000 | 64576 | | 7.57(4.06-12.18) | | 1093 | |
| D 32 d5-NEtFOSAA | | | | | | | | | | M |
| 589.00 > 419.00 | 4.380 | 4.402 | -0.022 | 1.261 | 46530 | 1.00 | | 80.0 | 436 | M |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.380 | 4.402 | -0.022 | 1.000 | 36475 | 1.06 | | 106 | 478 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | |
| 631.00 > 451.00 | 4.456 | 4.479 | -0.023 | 1.177 | 415863 | 0.5670 | | 60.2 | 1995 | |
| D 36 13C2 PFDoA | | | | | | | | | | M |
| 615.00 > 570.00 | 4.591 | 4.622 | -0.031 | 1.322 | 542563 | 0.9429 | | 75.4 | 2627 | M |
| 37 Perfluorododecanoic acid | | | | | | | | | | |
| 613.00 > 569.00 | 4.591 | 4.622 | -0.031 | 1.000 | 437131 | 0.9157 | Target=6.91 | 91.6 | 171 | |
| 613.00 > 169.00 | 4.591 | 4.622 | -0.031 | 1.000 | 73119 | | 5.98(3.45-10.36) | | 951 | |
| 74 1H,1H,2H,2H-perfluorododecanesul | | | | | | | | | | |
| 627.00 > 607.00 | 4.612 | 4.643 | -0.031 | 1.121 | 23738 | 0.6769 | | 70.2 | 560 | |
| 75 Perfluorododecanesulfonic acid ( | | | | | | | | | | |
| 699.00 > 80.00 | 4.766 | 4.792 | -0.026 | 1.259 | 104373 | 0.7529 | Target=0.51 | 77.8 | 1677 | |
| 699.00 > 99.00 | 4.766 | 4.792 | -0.026 | 1.259 | 203208 | | 0.51(0.26-0.77) | | 973 | |
| 41 Perfluorotridecanoic acid | | | | | | | | | | M |
| 663.00 > 619.00 | 4.802 | 4.822 | -0.020 | 1.046 | 364927 | 0.9419 | Target=4.39 | 94.2 | 193 | |
| 663.00 > 169.00 | 4.802 | 4.822 | -0.020 | 1.046 | 100123 | | 3.64(2.20-6.59) | | 1189 | M |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 4.986 | 5.014 | -0.028 | 1.435 | 388534 | 0.9130 | | 73.0 | 2882 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | M |
| 713.00 > 169.00 | 4.986 | 5.014 | -0.028 | 1.000 | 59614 | 1.03 | Target=1.06 | 103 | 1562 | |
| 713.00 > 219.00 | 4.986 | 5.014 | -0.028 | 1.000 | 58781 | | 1.01(0.53-1.59) | | 1317 | M |

Report Date: 15-Mar-2021 17:46:55 Chrom Revision: 2.3 05-Feb-2021 00:13:28
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d
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 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.327 | 5.360 | -0.033 | 1.533 | 405303 | 0.8916 | | 71.3 | 2096 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | M |
| 813.00 > 769.00 | 5.338 | 5.360 | -0.022 | 1.002 | 319011 | 1.04 | Target=3.84 | 104 | 162 | |
| 813.00 > 169.00 | 5.327 | 5.360 | -0.033 | 1.000 | 87045 | | 3.66(1.92-5.76) | | 2068 | M |
| 46 Perfluorooctadecanoic acid | | | | | | | | | | M |
| 913.00 > 869.00 | 5.646 | 5.674 | -0.028 | 1.060 | 278831 | 0.9558 | Target=3.92 | 95.6 | 317 | M |
| 913.00 > 169.00 | 5.646 | 5.674 | -0.028 | 1.060 | 82631 | | 3.37(1.96-5.88) | | 1274 | M |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Report Date: 15-Mar-2021 17:46:55 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d

Injection Date: 12-Mar-2021 12:42:33 Instrument ID: LC812

Lims ID: LCS 200-164654/2-A

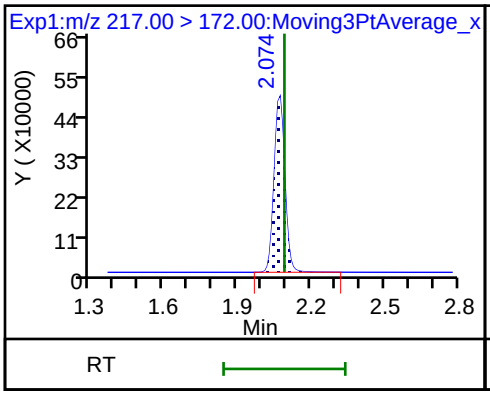
Client ID:

Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 6

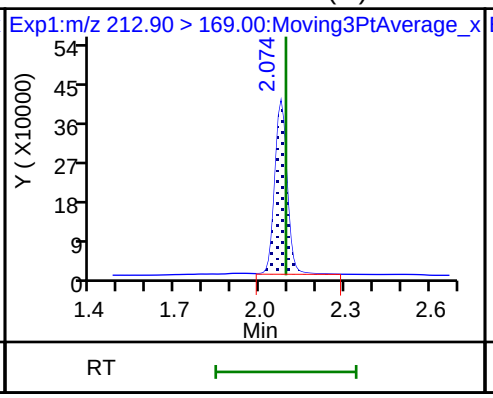
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

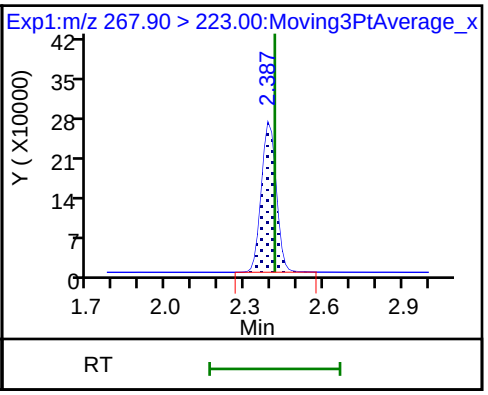
D 1 13C4 PFBA



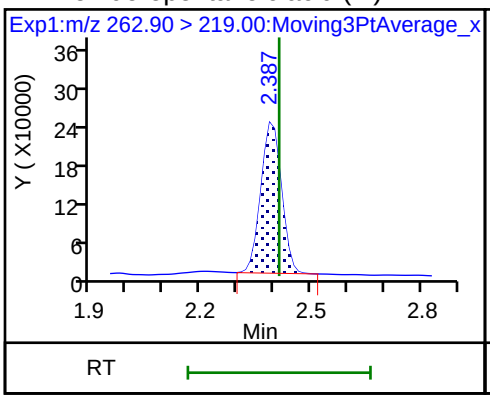

2 Perfluorobutanoic acid (M)



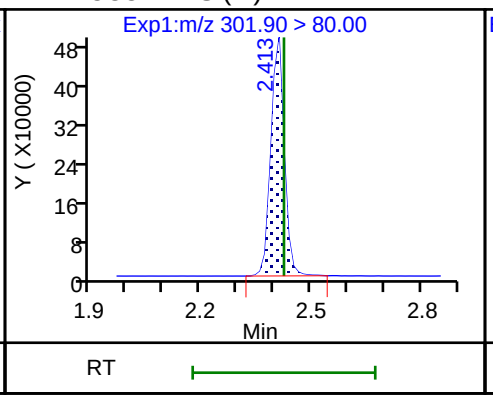

D 3 13C5 PFPeA



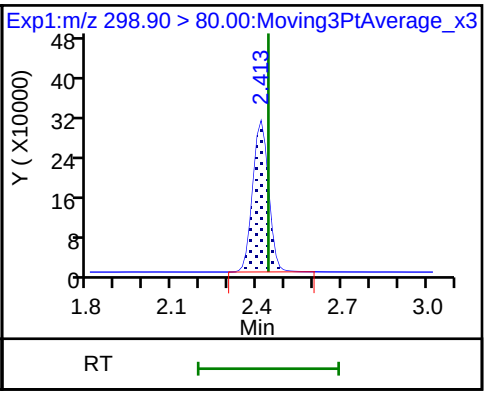

4 Perfluoropentanoic acid (M)



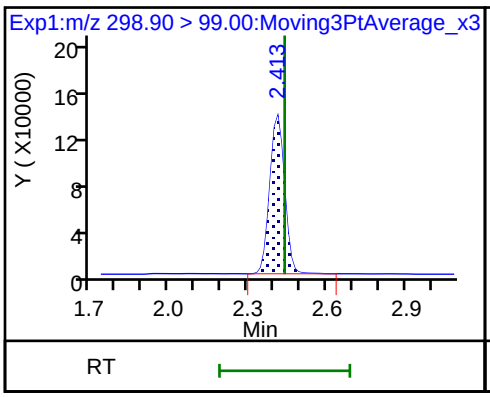

D 47 13C3 PFBS (M)



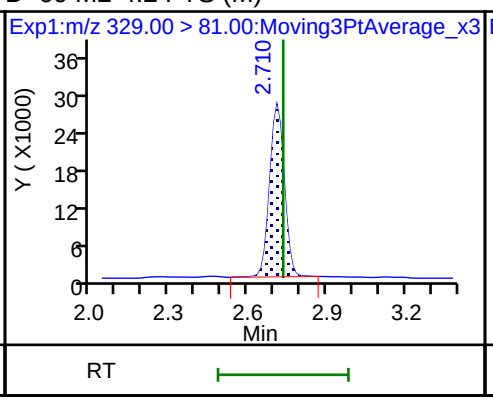

5 Perfluorobutanesulfonic acid



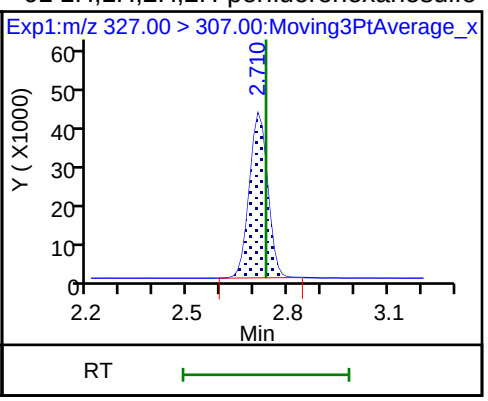

5 Perfluorobutanesulfonic acid



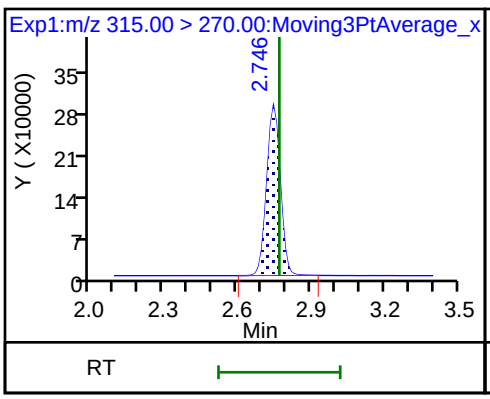

D 60 M2-4:2 FTS (M)



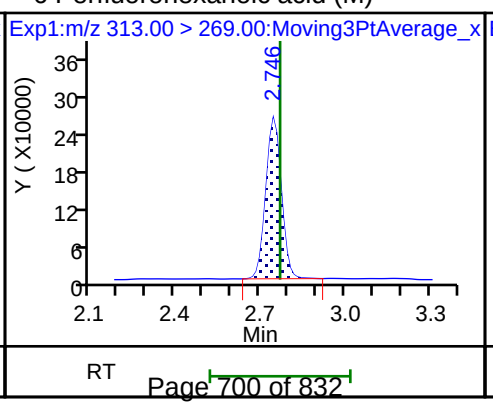

61 1H,1H,2H,2H-perfluorohexanesulfo



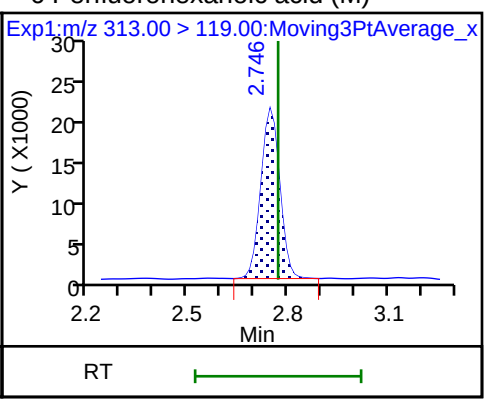

D 7 13C2 PFHxA



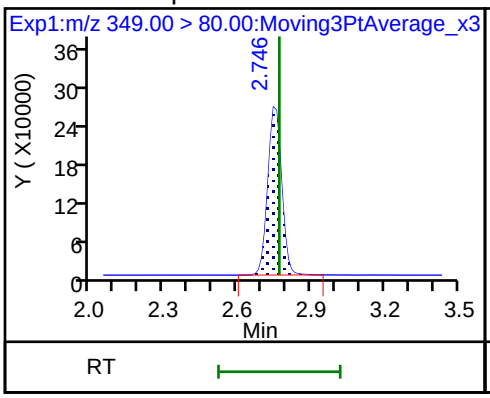

6 Perfluorohexanoic acid (M)



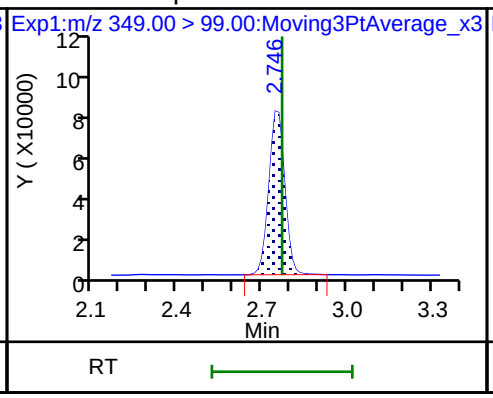

6 Perfluorohexanoic acid (M)



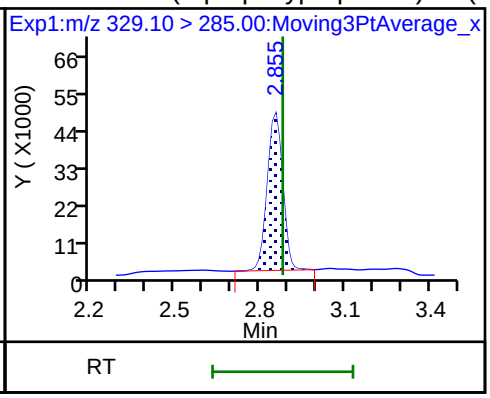
70 Perfluoropentanesulfonic acid



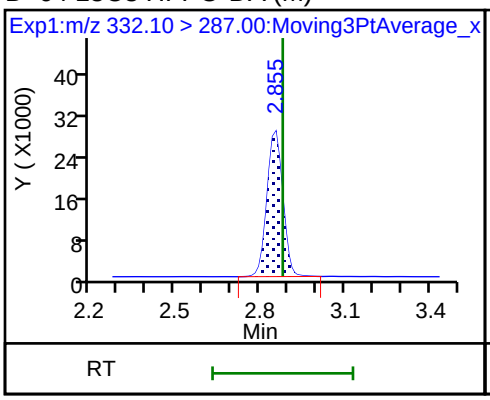

70 Perfluoropentanesulfonic acid



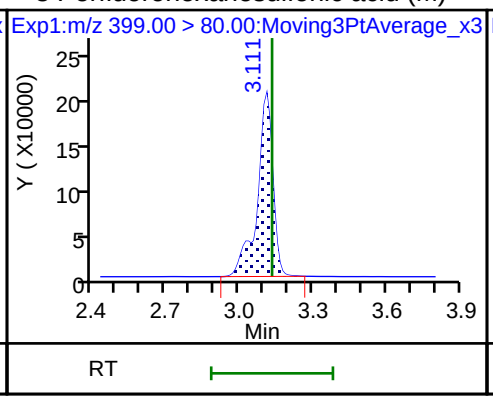

67 Perfluoro(2-propoxypropanoic) ac (M)



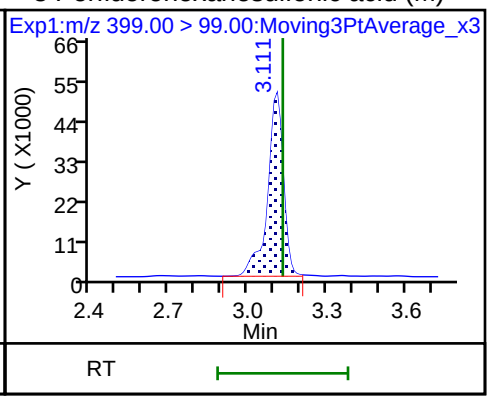

D 64 13C3 HFPO-DA (M)



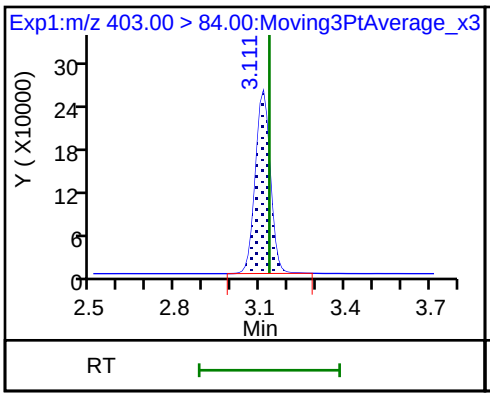

8 Perfluorohexanesulfonic acid (M)



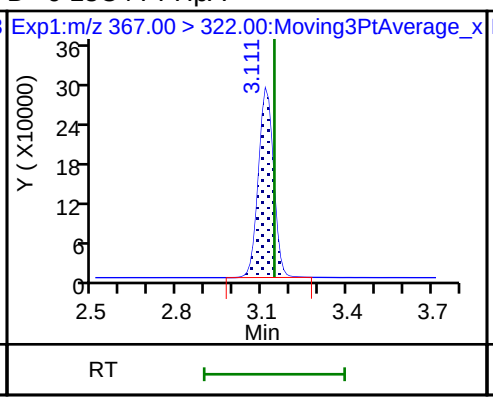

8 Perfluorohexanesulfonic acid (M)



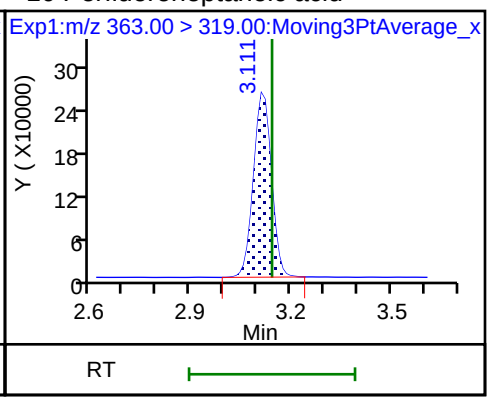

D 11 18O2 PFHxS



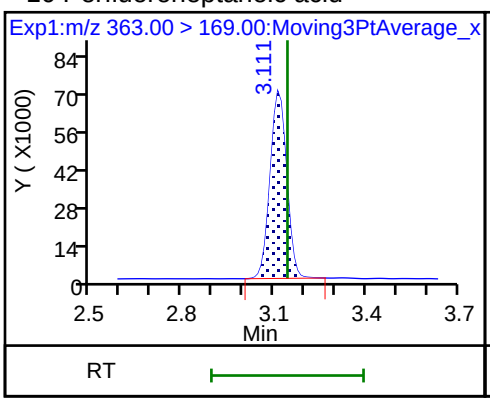

D 9 13C4 PFHpA



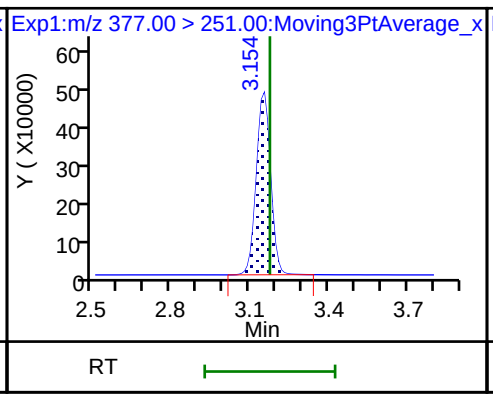

10 Perfluoroheptanoic acid



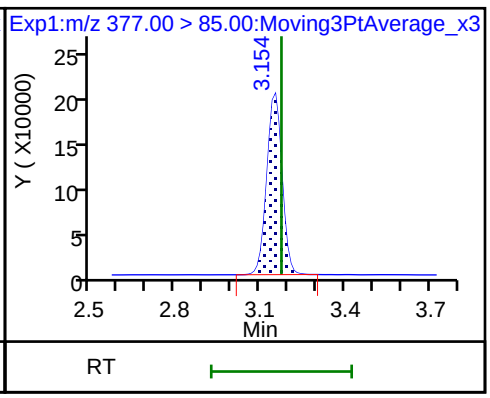

10 Perfluoroheptanoic acid



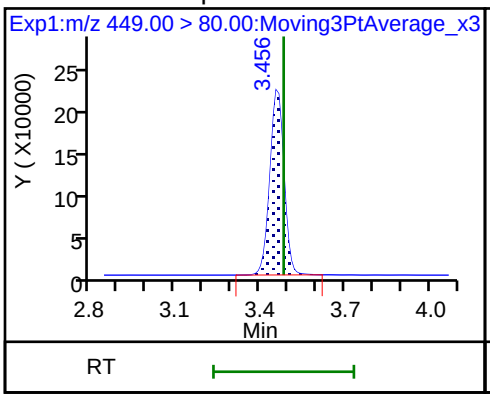

77 DONA



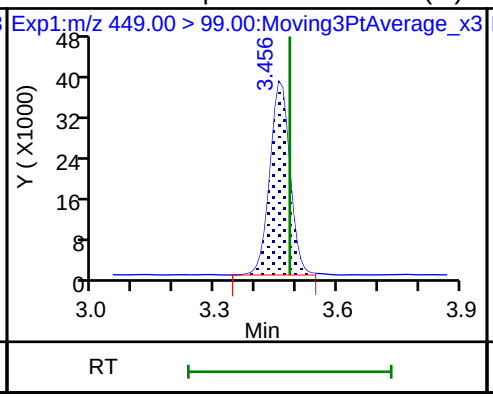

77 DONA



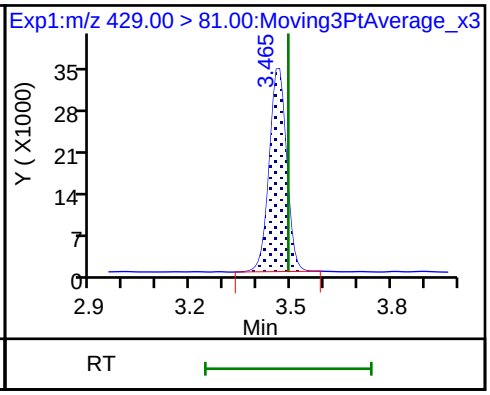
16 Perfluoroheptanesulfonic acid



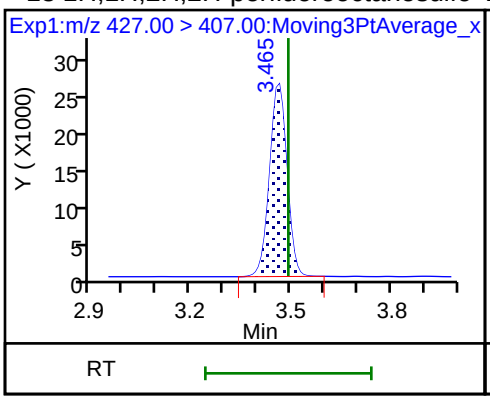

16 Perfluoroheptanesulfonic acid (M)



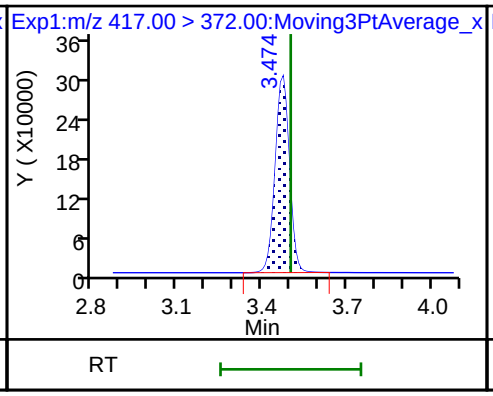

D 12 M2-6:2 FTS



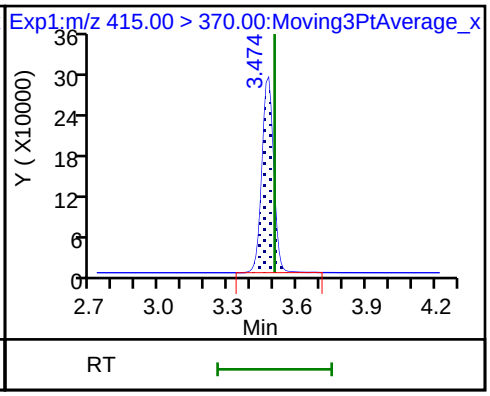

13 1H,1H,2H,2H-perfluorooctanesulfo



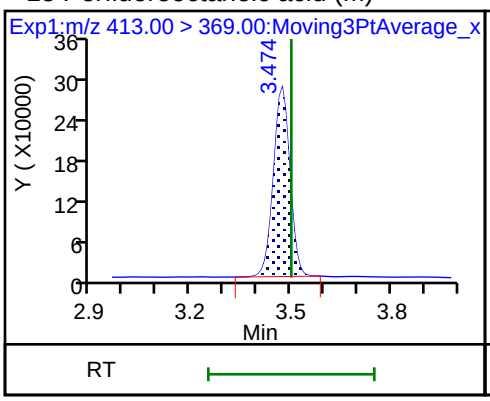

D 14 13C4 PFOA



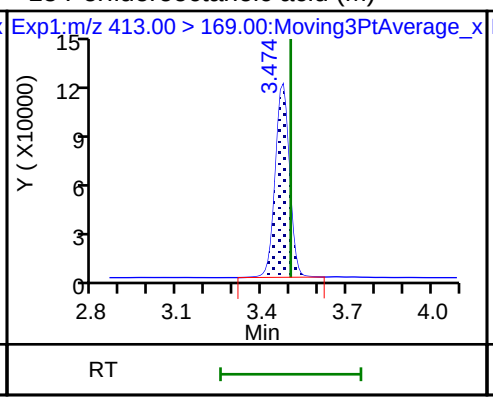

* 62 13C2 PFOA



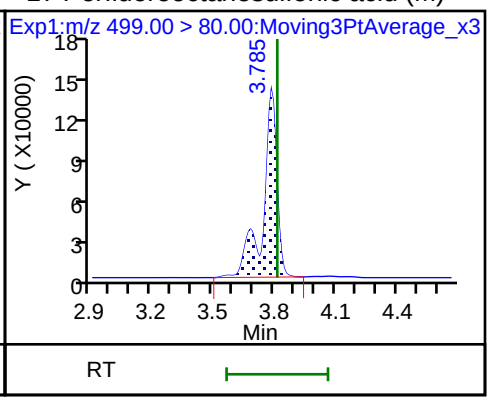

15 Perfluorooctanoic acid (M)



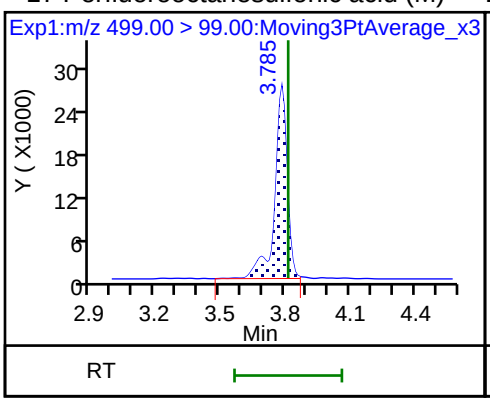

15 Perfluorooctanoic acid (M)



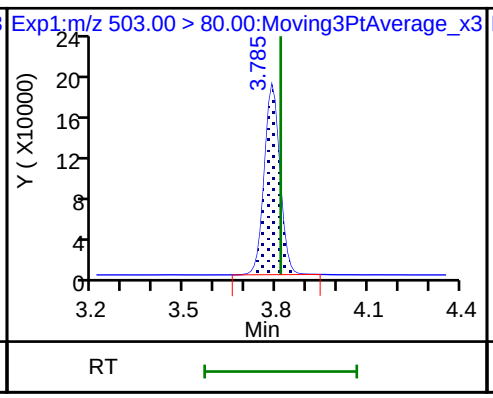

17 Perfluorooctanesulfonic acid (M)



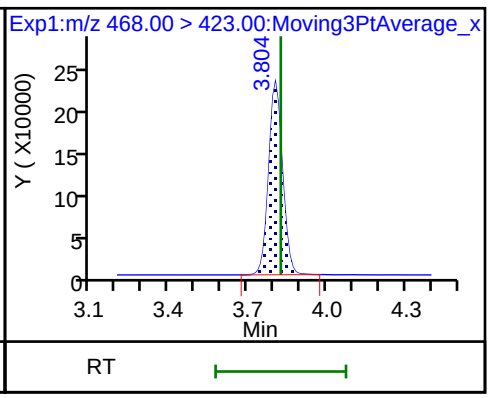

17 Perfluorooctanesulfonic acid (M)



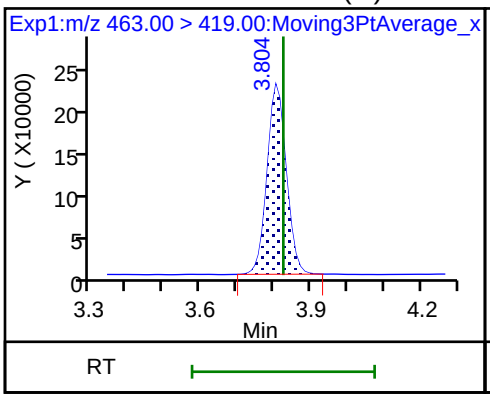

D 18 13C4 PFOS



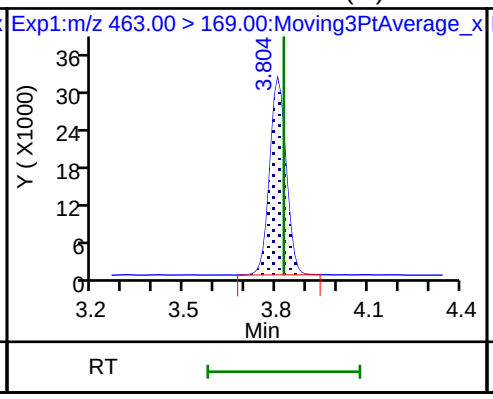

D 19 13C5 PFNA



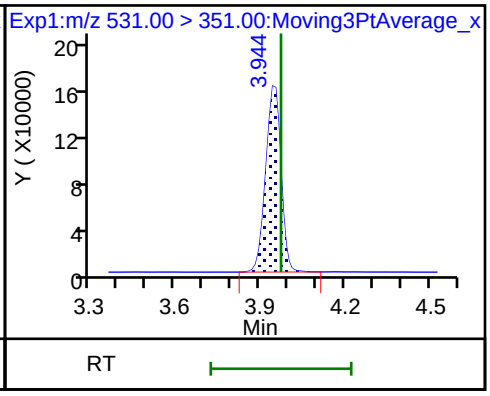
20 Perfluorononanoic acid (M)



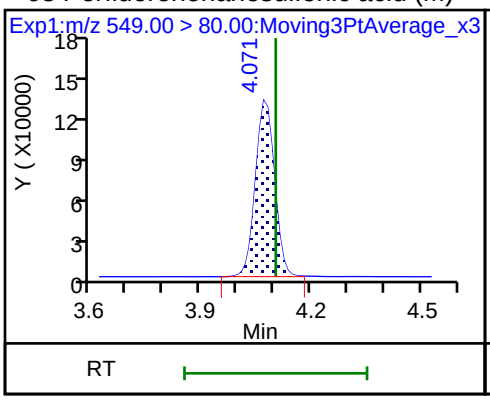

20 Perfluorononanoic acid (M)



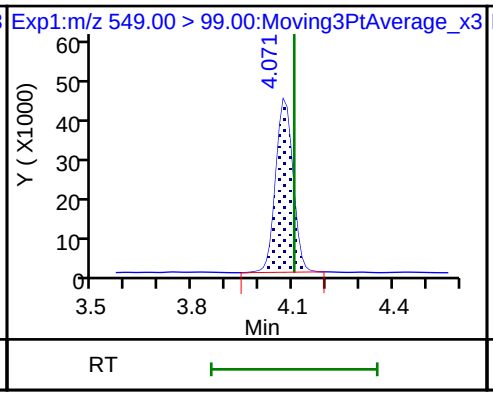

69 9-Chlorohexadecafluoro-3-oxanona (M)



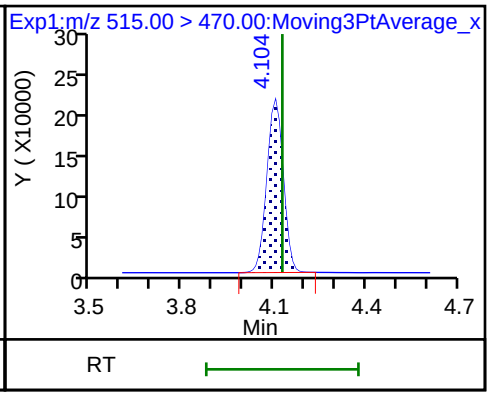

68 Perfluorononanesulfonic acid (M)



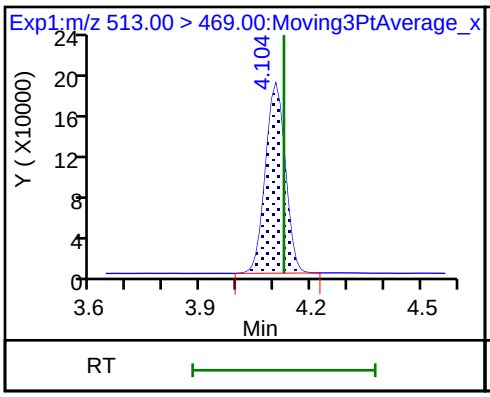

68 Perfluorononanesulfonic acid



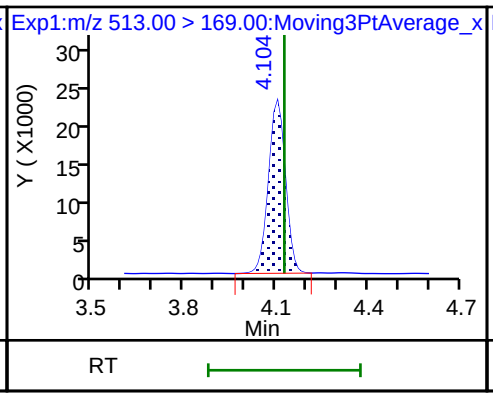

D 23 13C2 PFDA



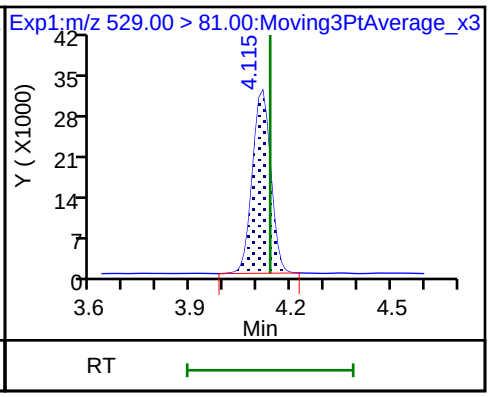

24 Perfluorodecanoic acid



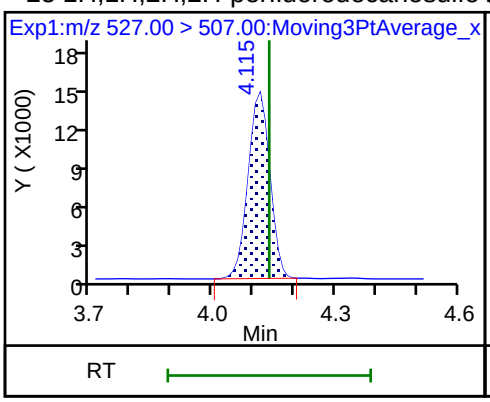

24 Perfluorodecanoic acid



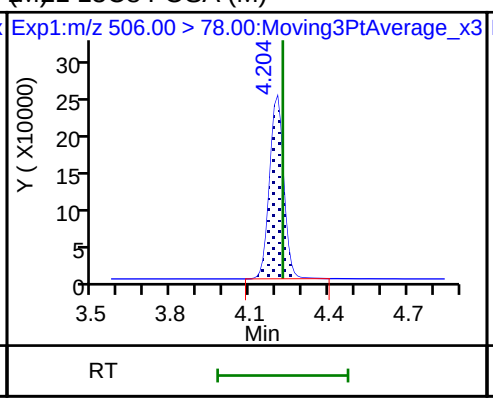

D 26 M2-8:2 FTS



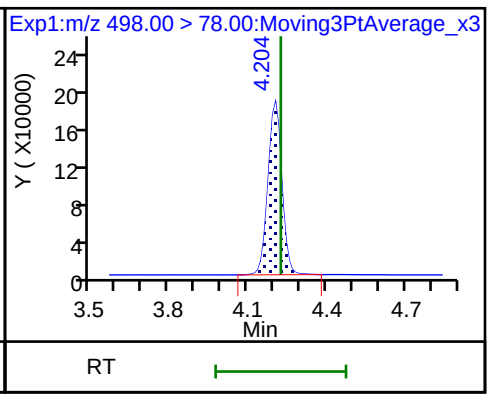

25 1H,1H,2H,2H-perfluorodecanesulfo (M)



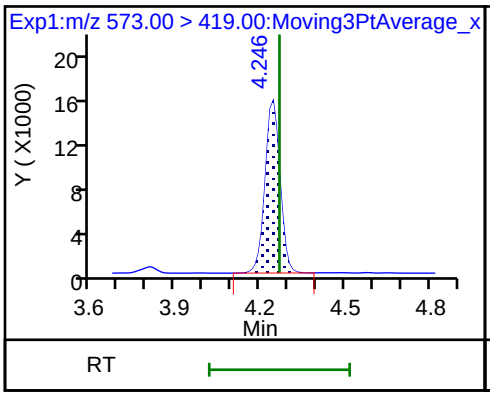

D 21 13C8 FOSA (M)



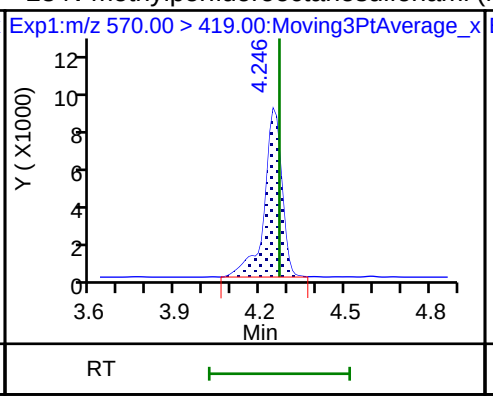

22 Perfluorooctanesulfonamide



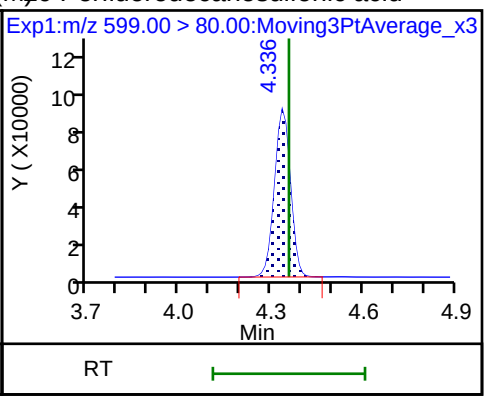
D 27 d3-NMeFOSAA



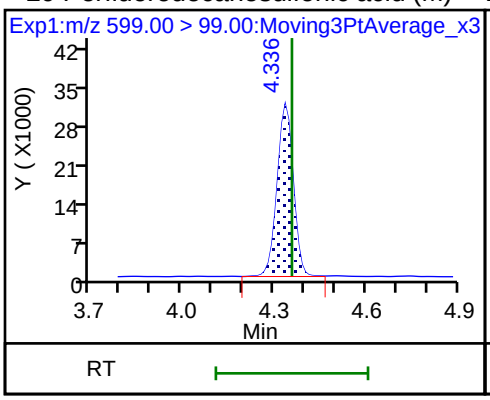

28 N-methylperfluorooctanesulfonami (M)



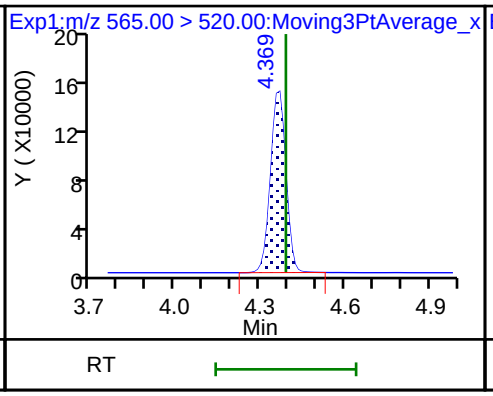

29 Perfluorodecanesulfonic acid



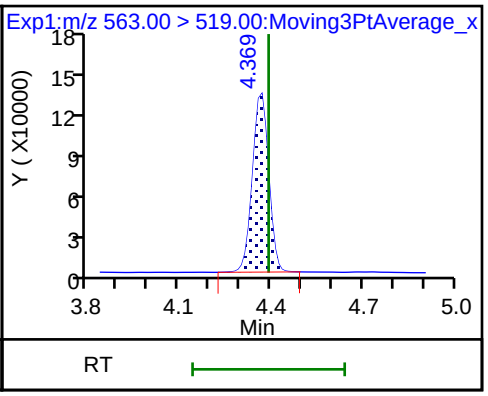

29 Perfluorodecanesulfonic acid (M)



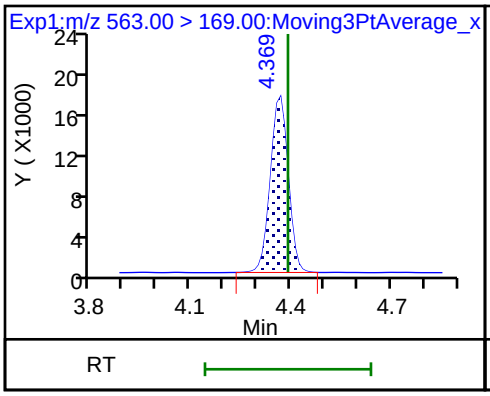

D 30 13C2 PFUnA



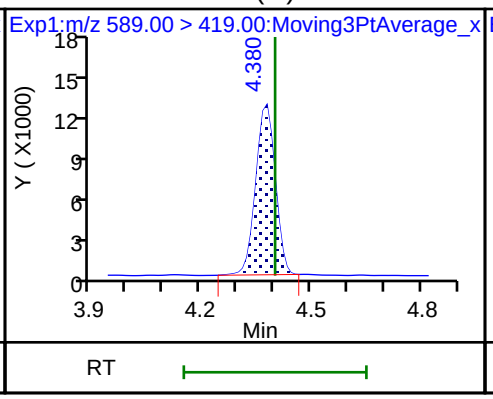

31 Perfluoroundecanoic acid



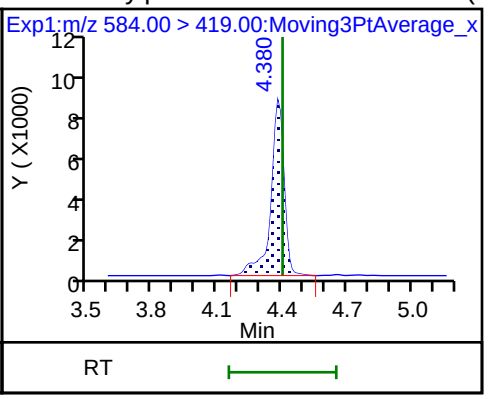

31 Perfluoroundecanoic acid



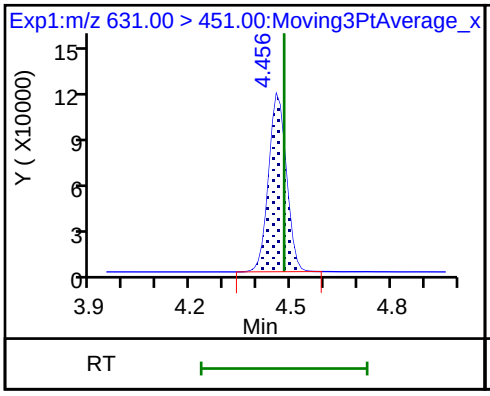

D 32 d5-NEtFOSAA (M)



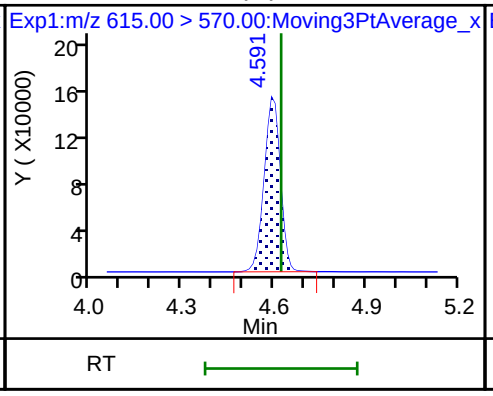

33 N-ethylperfluorooctanesulfonamid (M)



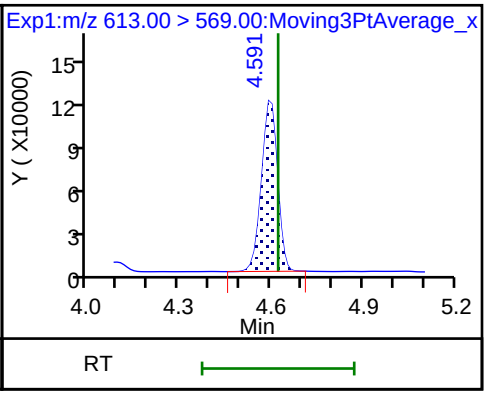

66 11-Chloroeicosafluoro-3-oxaundec



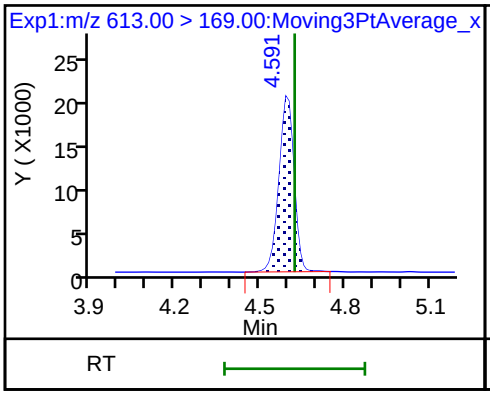

D 36 13C2 PFDoA (M)



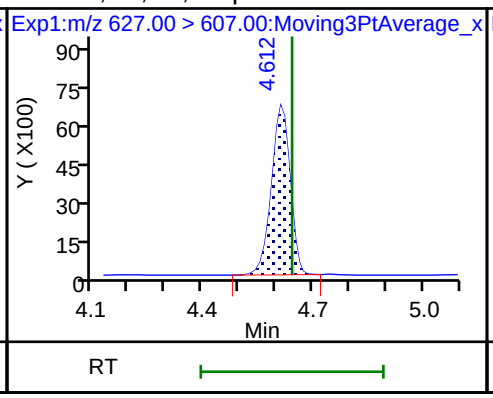

37 Perfluorododecanoic acid



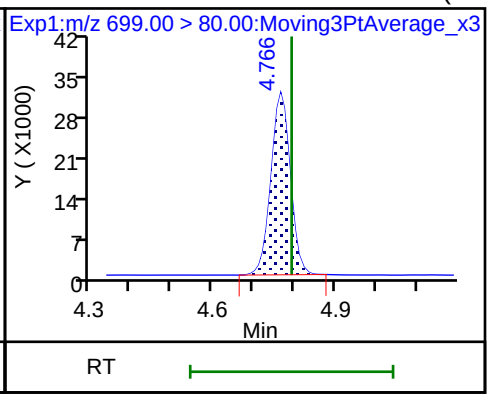
37 Perfluorododecanoic acid



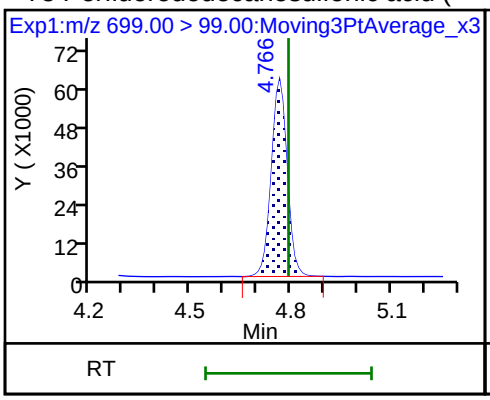

74 1H,1H,2H,2H-perfluorododecanesul



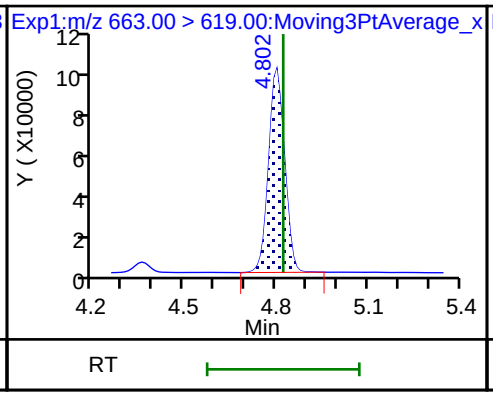

75 Perfluorododecanesulfonic acid (



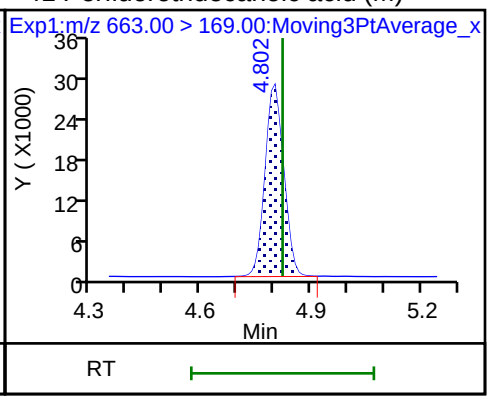

75 Perfluorododecanesulfonic acid (



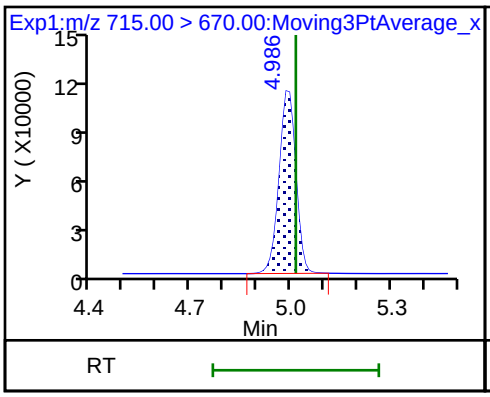

41 Perfluorotridecanoic acid



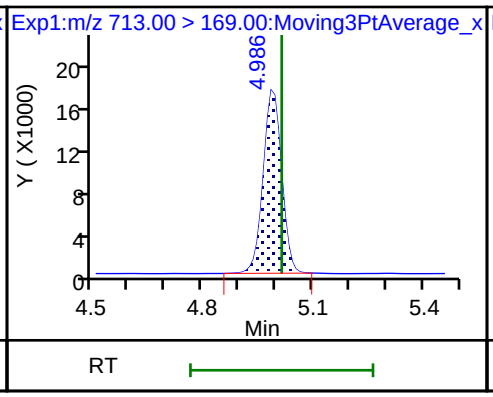

41 Perfluorotridecanoic acid (M)



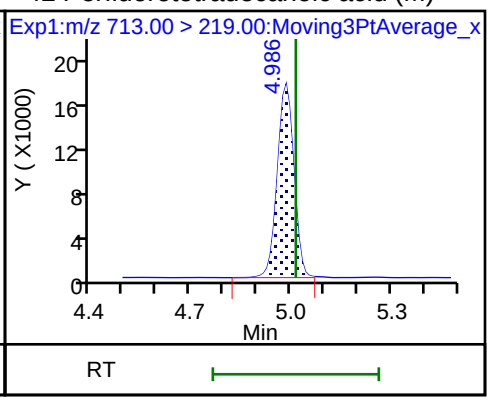

D 43 13C2 PFTeDA



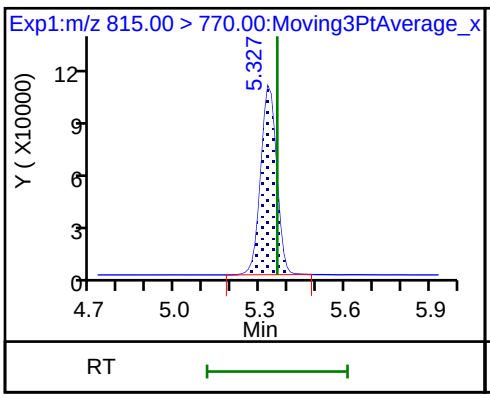

42 Perfluorotetradecanoic acid



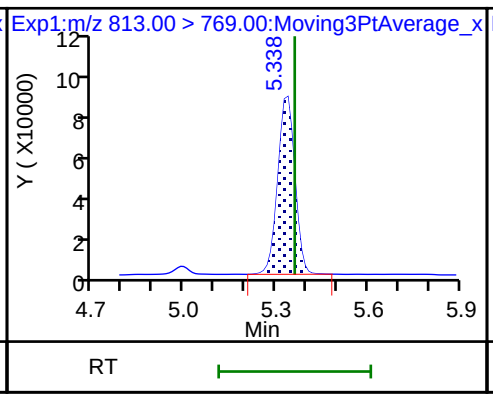

42 Perfluorotetradecanoic acid (M)



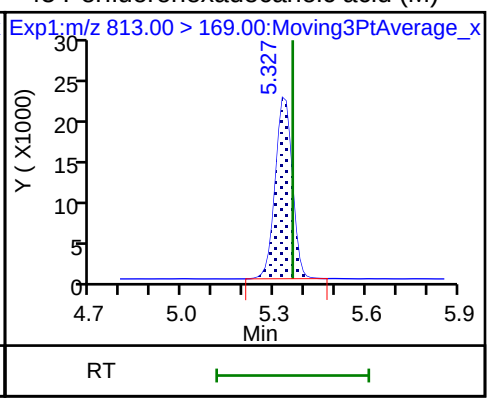

D 44 13C2 PFHxDA



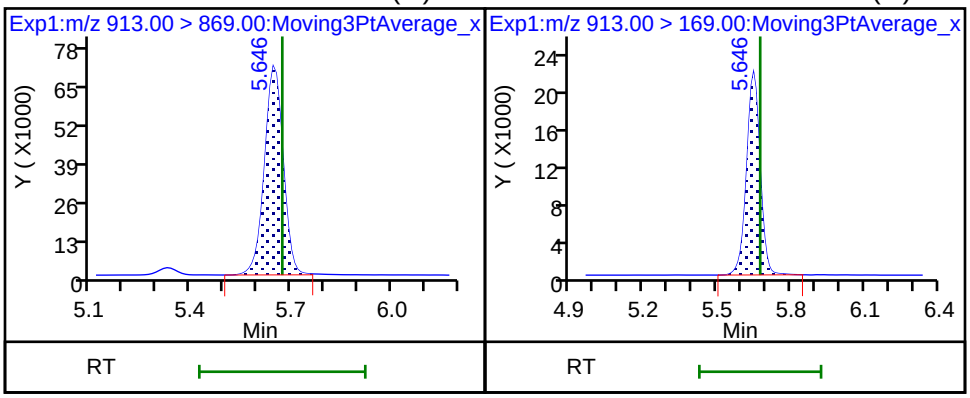

45 Perfluorohexadecanoic acid




45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid (M) 46 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

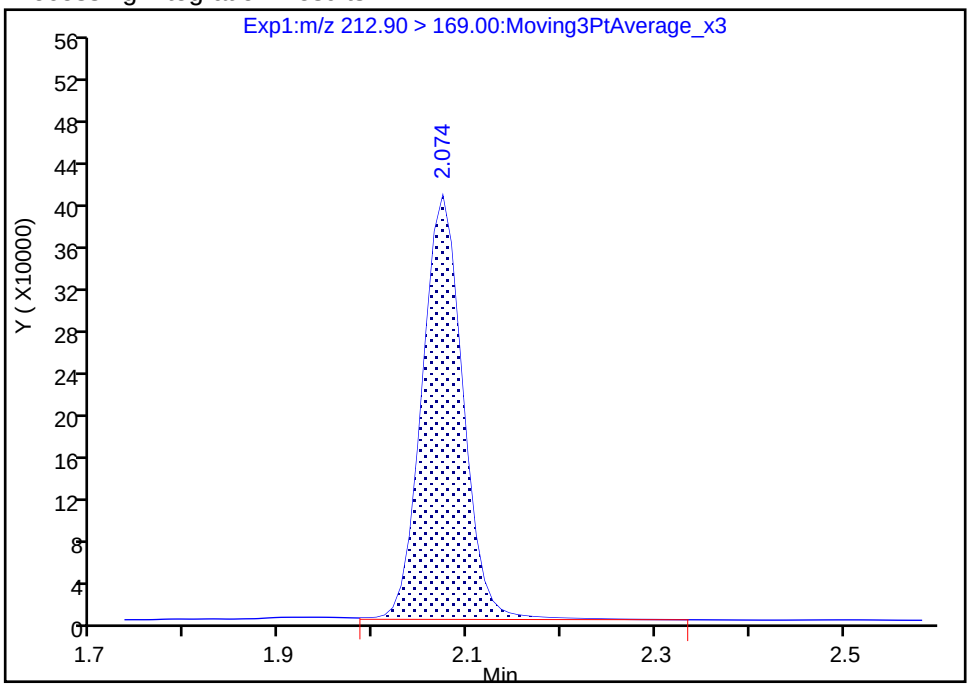
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d
Injection Date: 12-Mar-2021 12:42:33 Instrument ID: LC812
Lims ID: LCS 200-164654/2-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

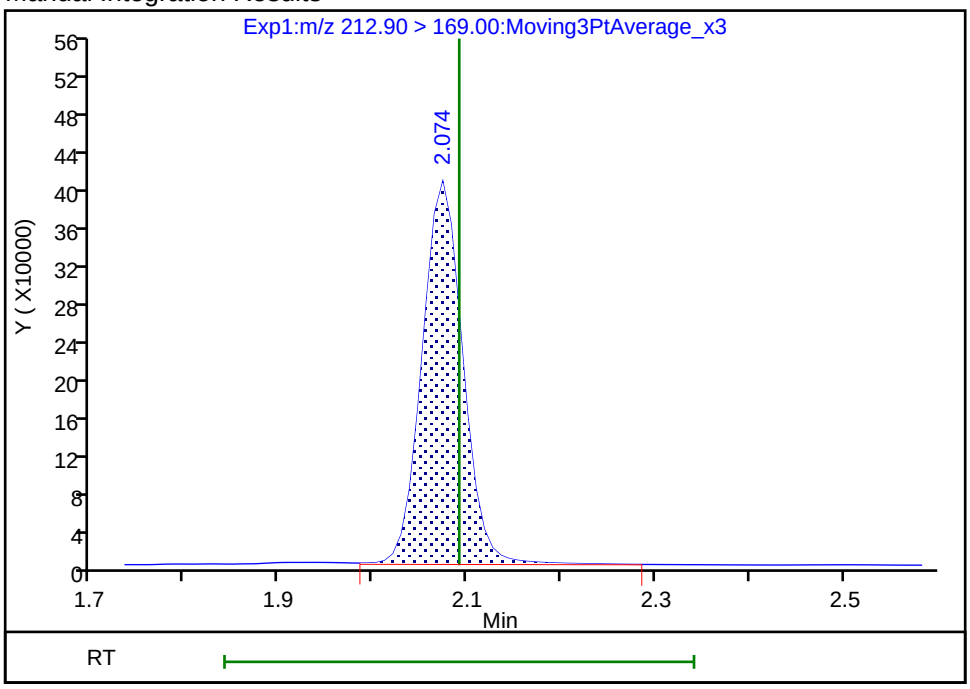
Processing Integration Results

RT: 2.07
Area: 1220340
Amount: 1.024137
Amount Units: ng/ml




Manual Integration Results

RT: 2.07
Area: 1222427
Amount: 1.025889
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:12:05
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

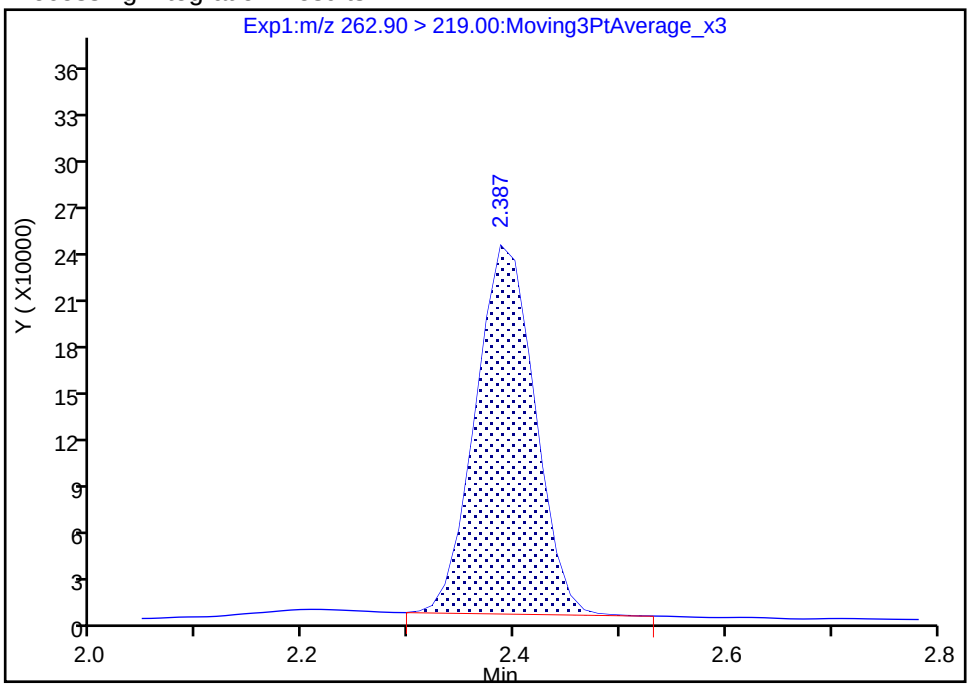
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d | | | | |
| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

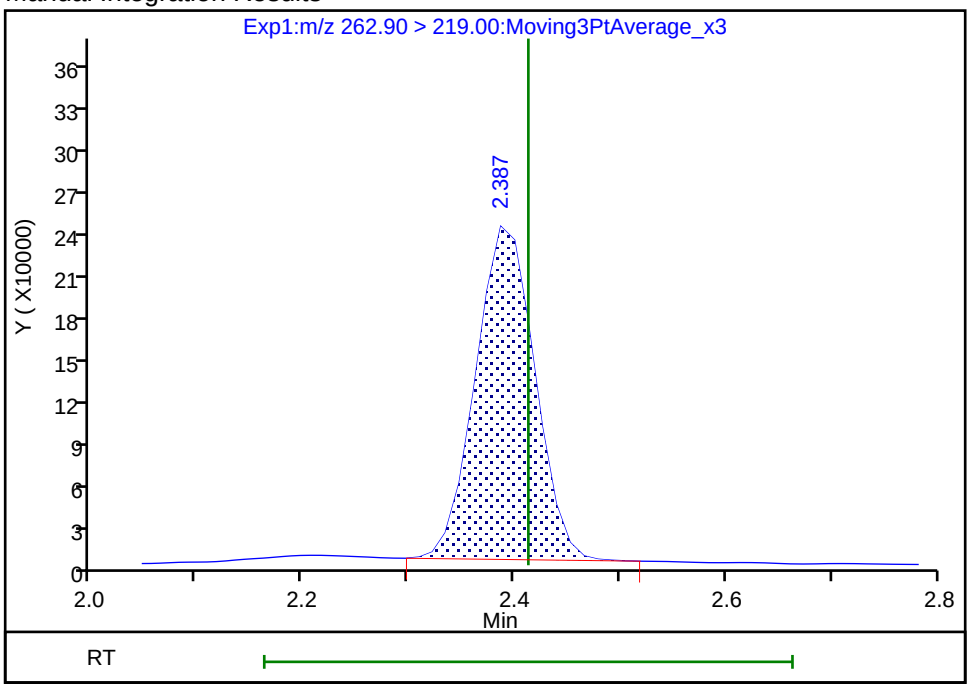
Processing Integration Results

RT: 2.39
Area: 918597
Amount: 1.005357
Amount Units: ng/ml




Manual Integration Results

RT: 2.39
Area: 917811
Amount: 1.004497
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:12:39

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

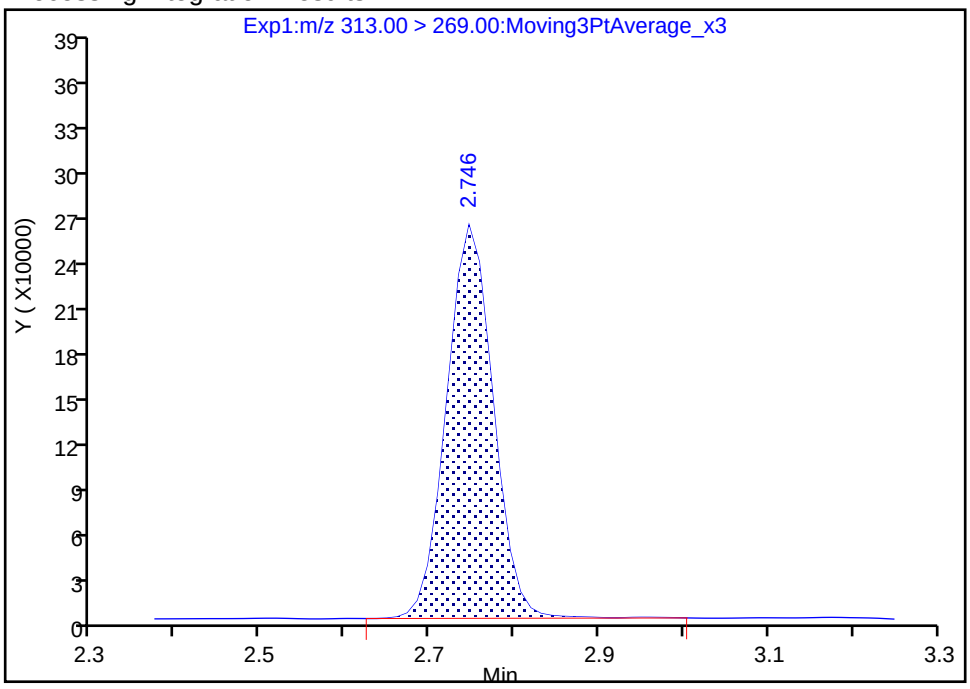
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d | | | | |
| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

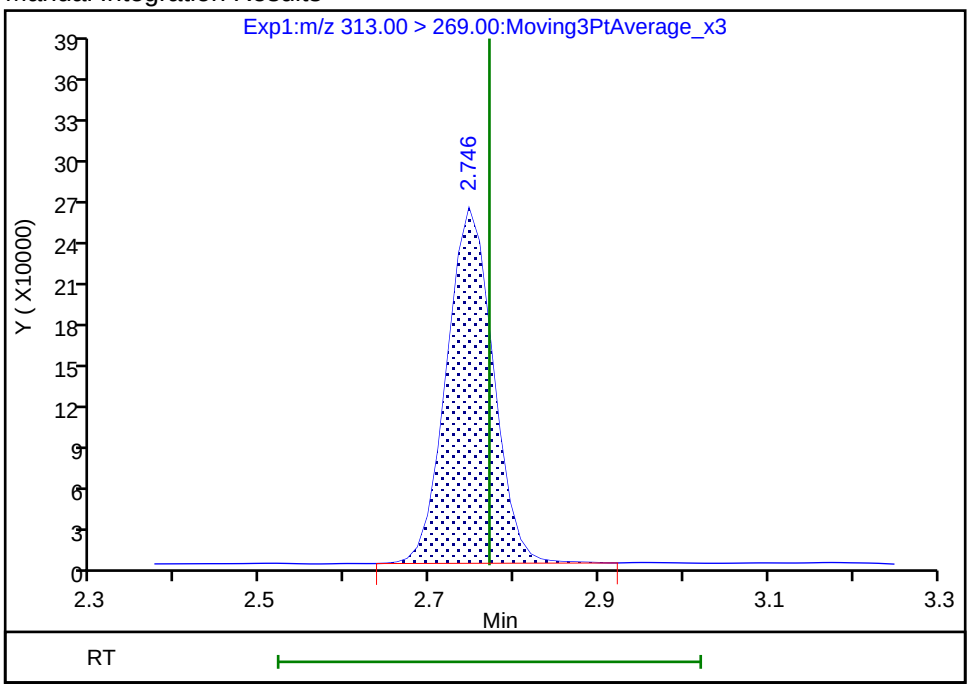
Processing Integration Results

RT: 2.75
Area: 996634
Amount: 1.027419
Amount Units: ng/ml




Manual Integration Results

RT: 2.75
Area: 993899
Amount: 1.024600
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:13:34

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

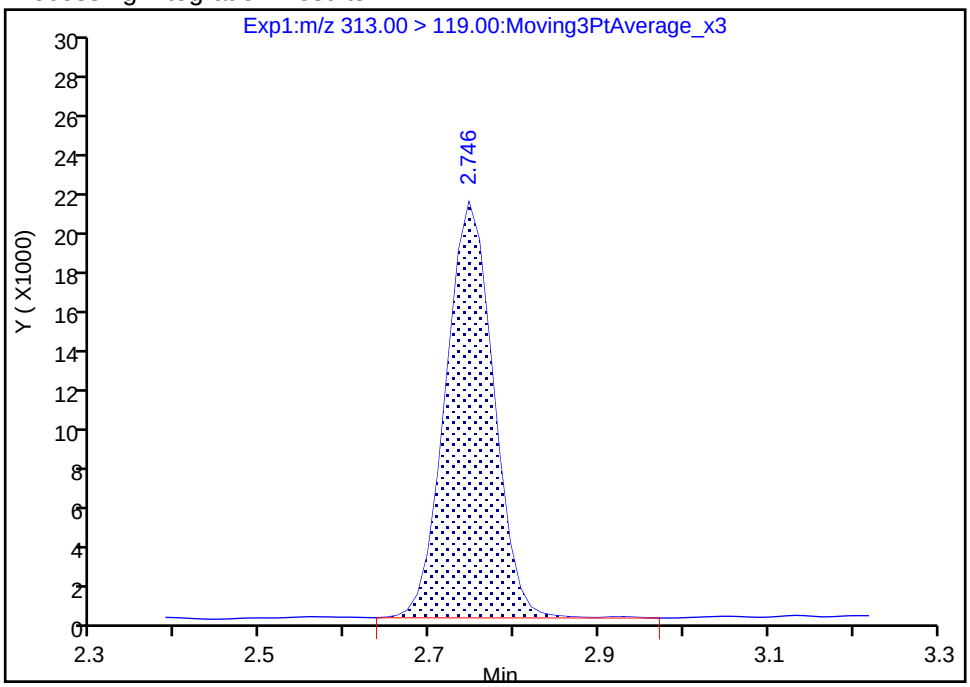
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d
Injection Date: 12-Mar-2021 12:42:33 Instrument ID: LC812
Lims ID: LCS 200-164654/2-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

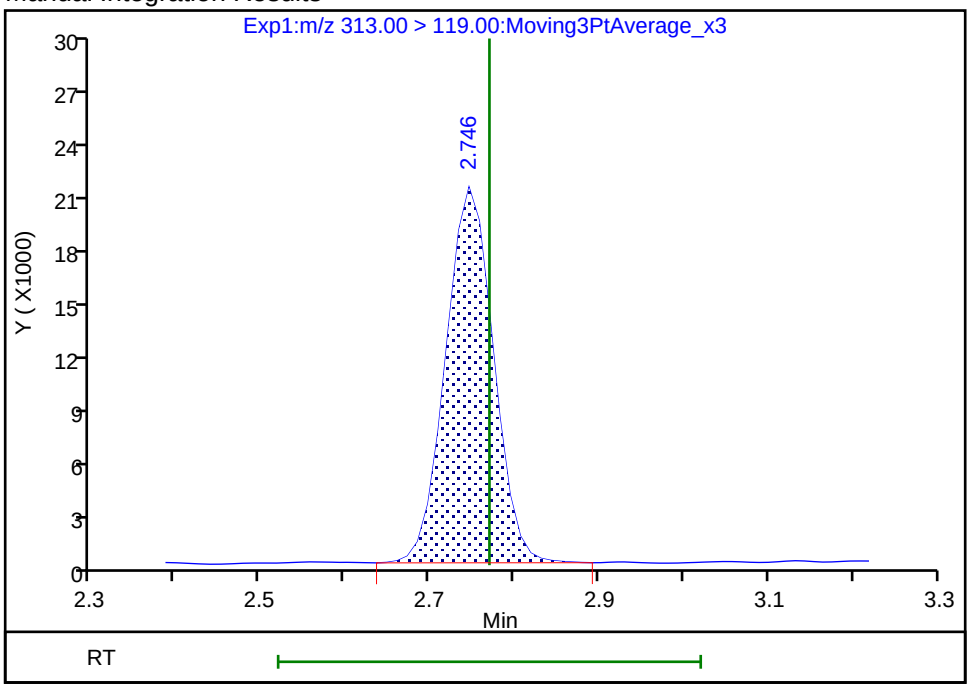
Processing Integration Results

RT: 2.75
Area: 82717
Amount: 1.027419
Amount Units: ng/ml




Manual Integration Results

RT: 2.75
Area: 82390
Amount: 1.024600
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:13:43
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

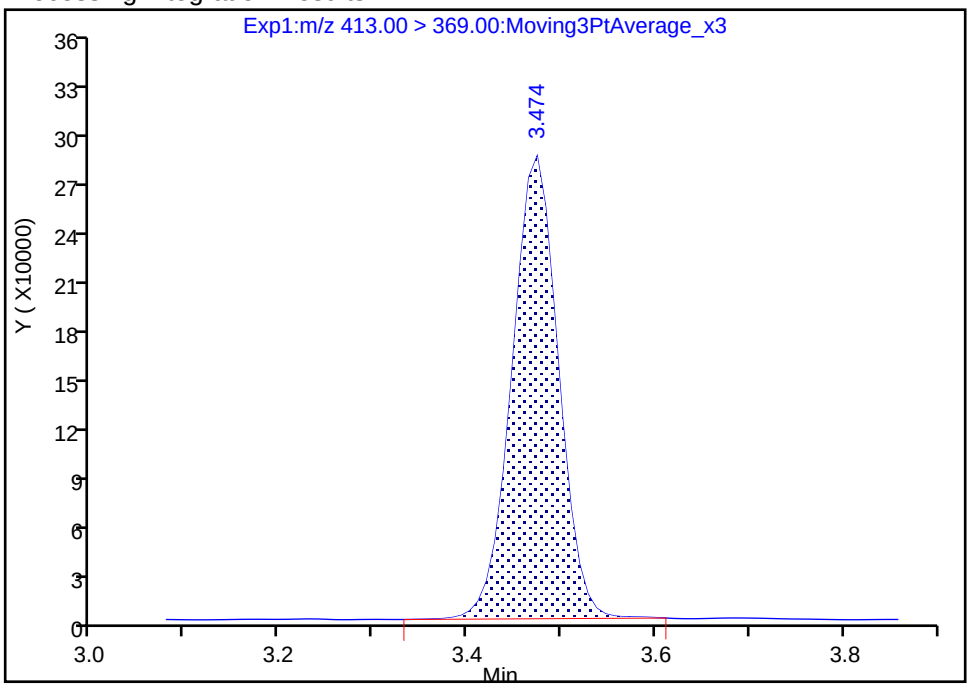
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d | | | | |
| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

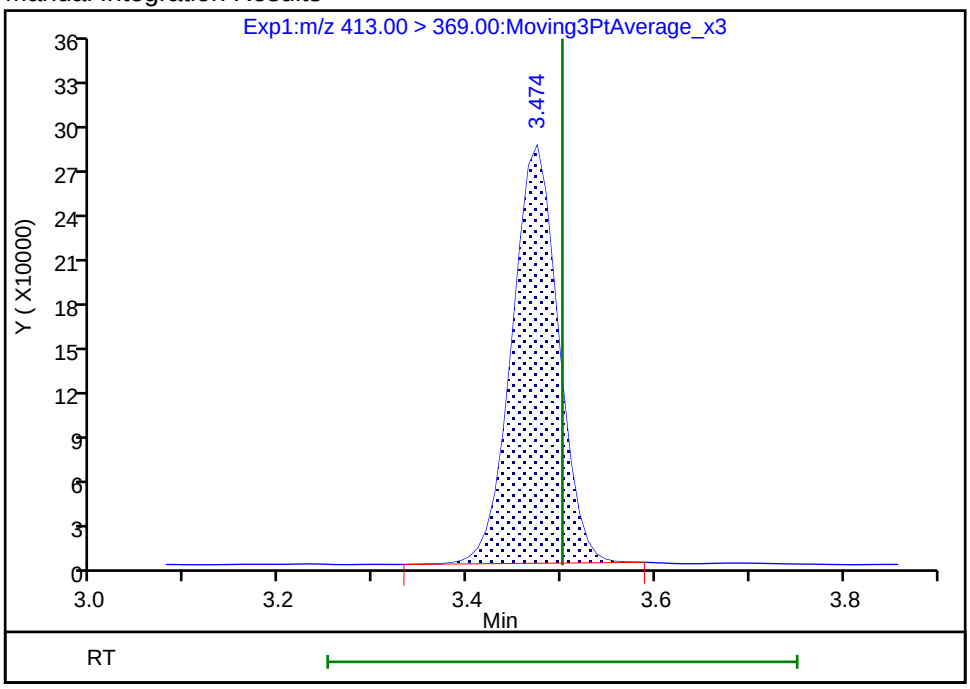
Processing Integration Results

RT: 3.47
Area: 976074
Amount: 1.077845
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 970746
Amount: 1.071961
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:18:50

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

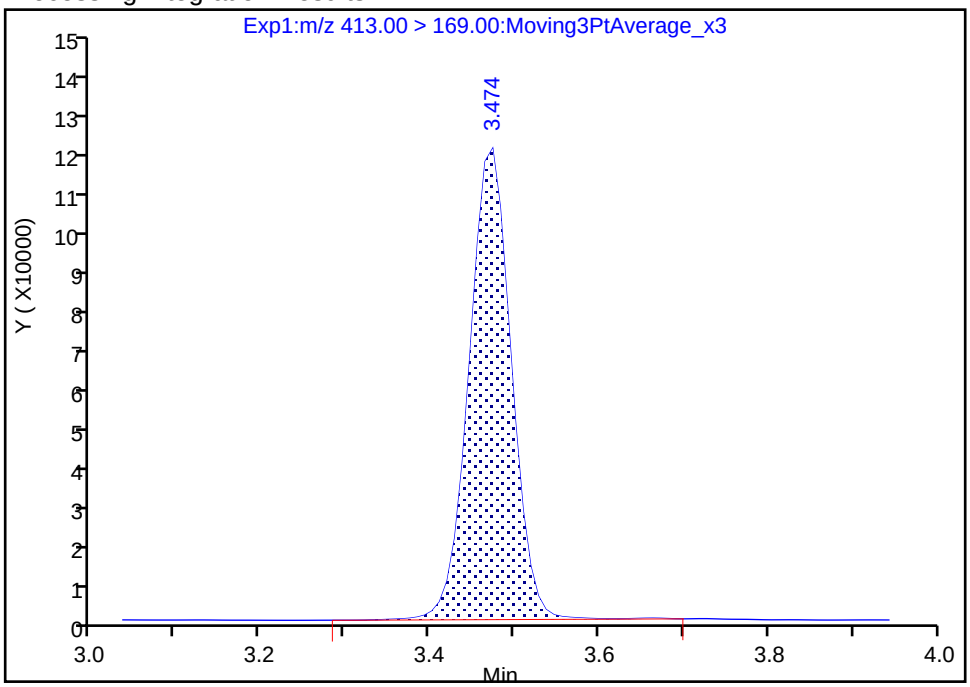
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d | | | | |
| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

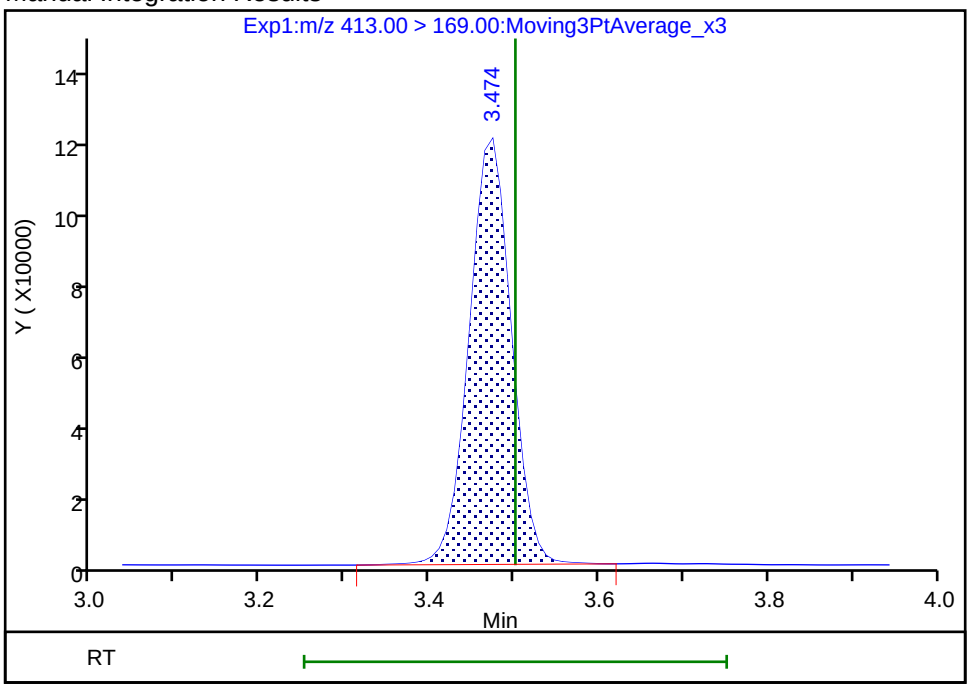
Processing Integration Results

RT: 3.47
Area: 401966
Amount: 1.077845
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 400599
Amount: 1.071961
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:19:02

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

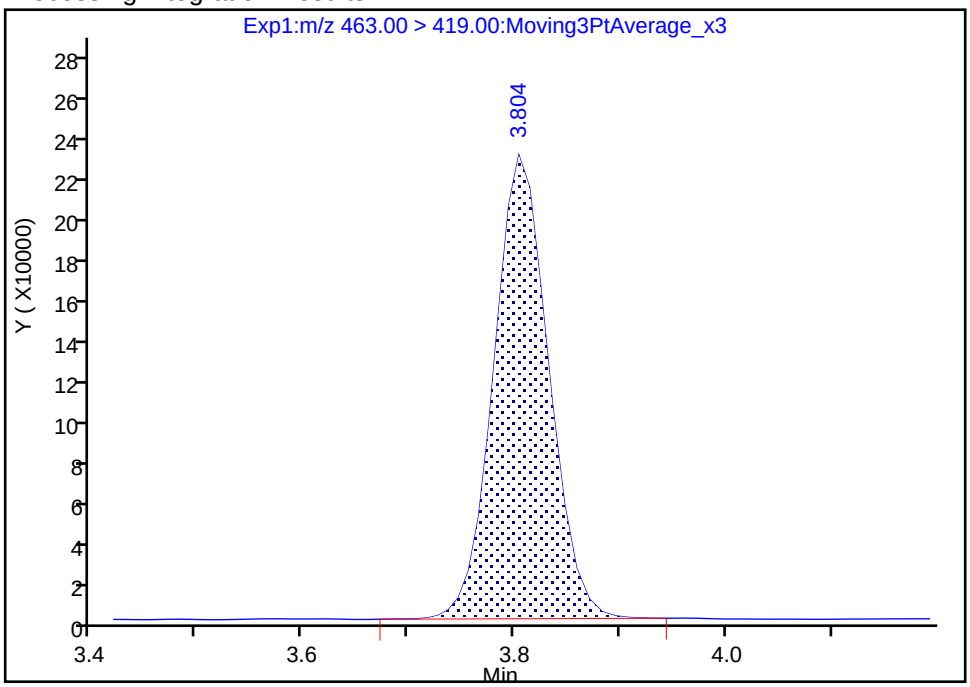
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d | | | | |
| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

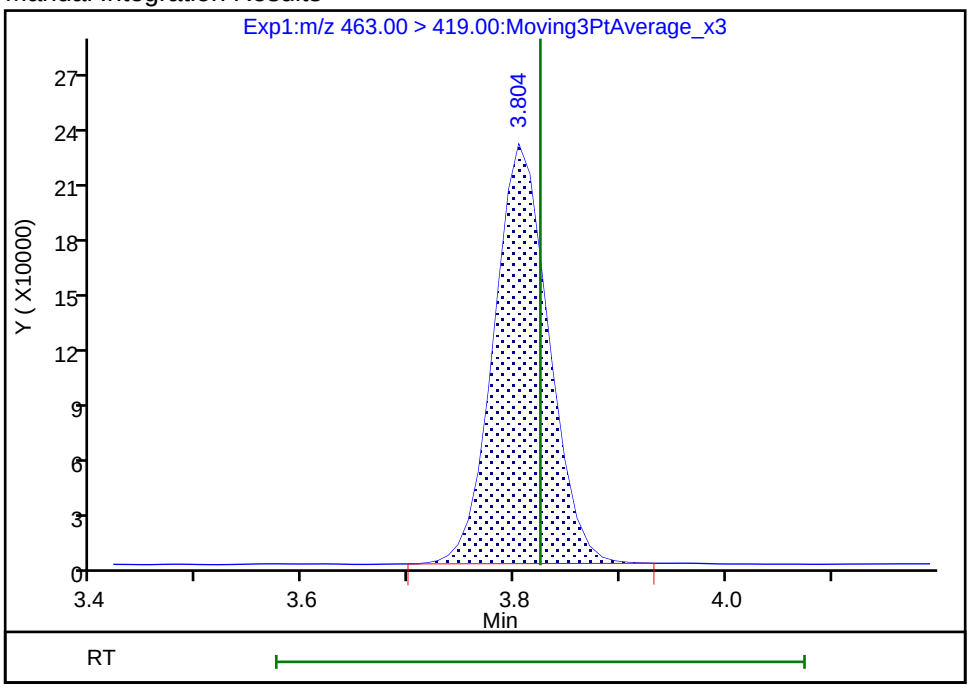
Processing Integration Results

RT: 3.80
Area: 807202
Amount: 1.068745
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 806140
Amount: 1.067339
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:21:21

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

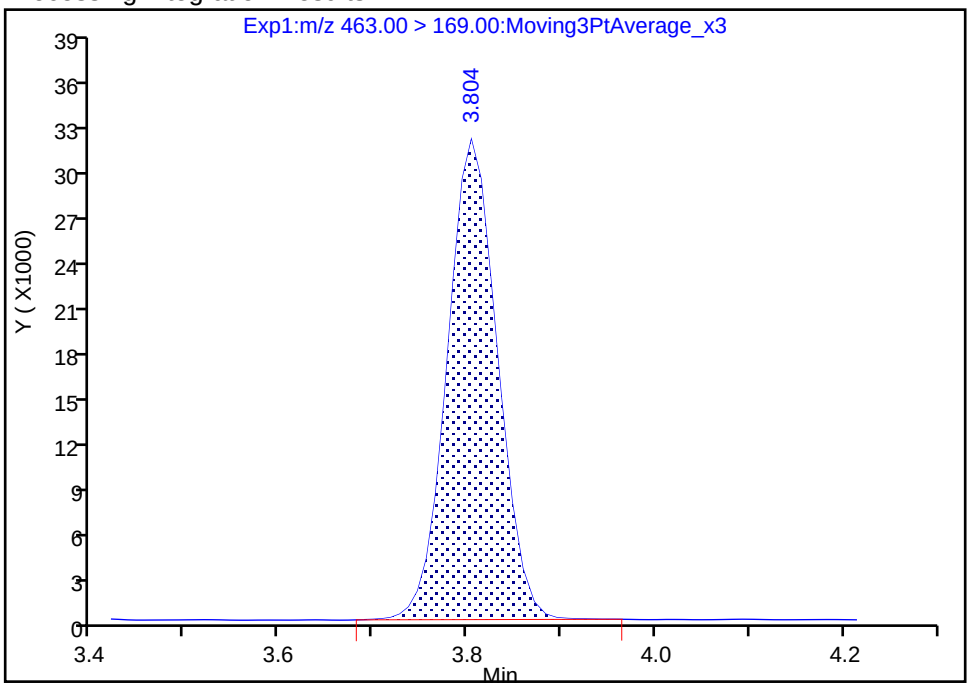
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d | | | | |
| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

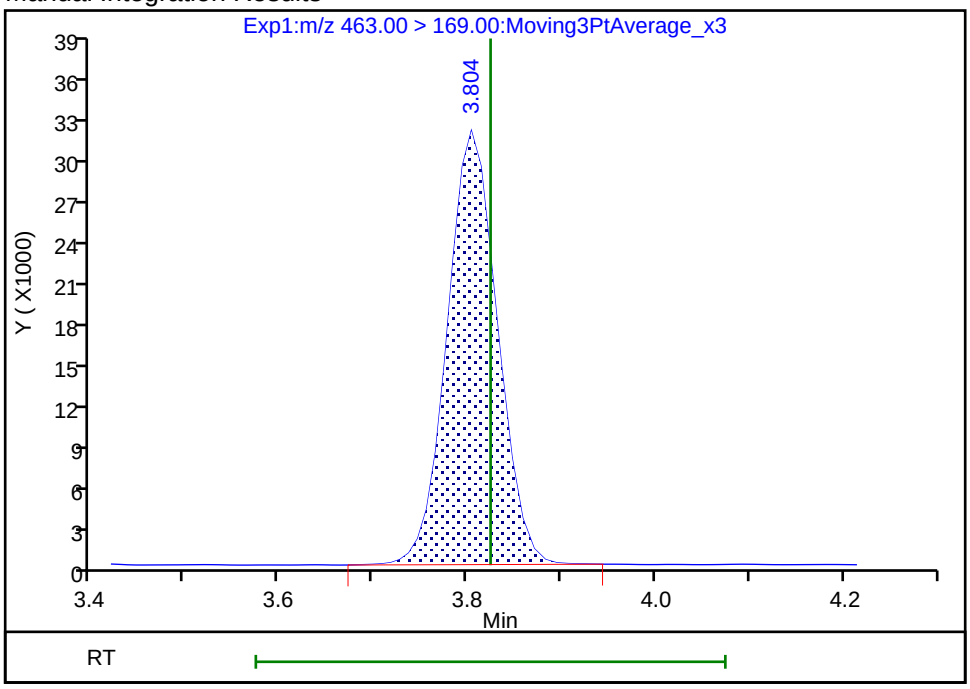
Processing Integration Results

RT: 3.80
Area: 118304
Amount: 1.068745
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 118358
Amount: 1.067339
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:21:34

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

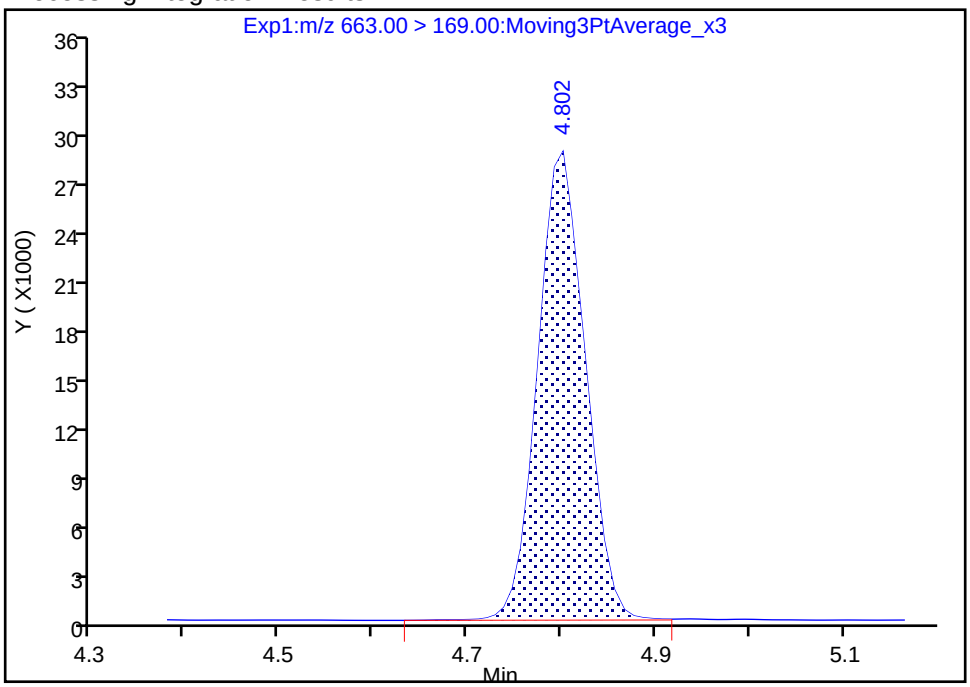
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d | | | | |
| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

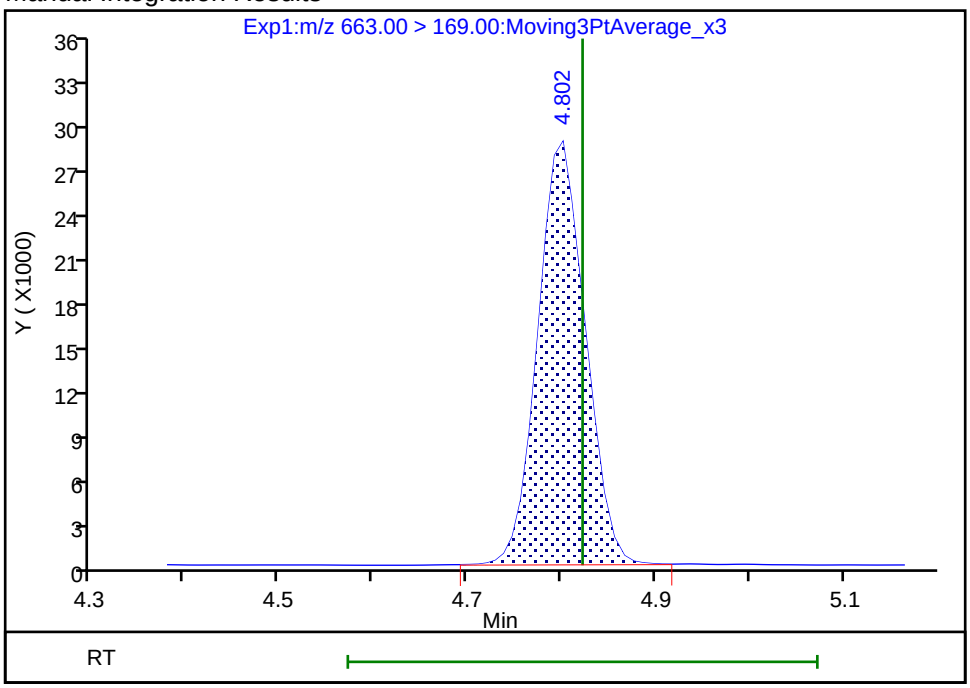
Processing Integration Results

RT: 4.80
Area: 100316
Amount: 0.941924
Amount Units: ng/ml




Manual Integration Results

RT: 4.80
Area: 100123
Amount: 0.941924
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:25:16
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

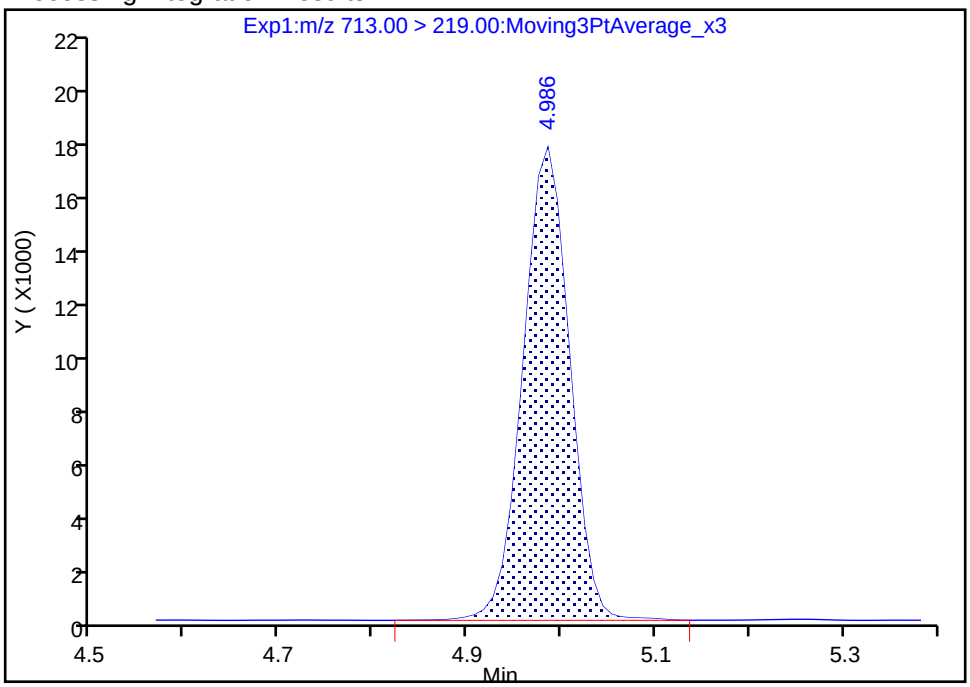
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d
Injection Date: 12-Mar-2021 12:42:33 Instrument ID: LC812
Lims ID: LCS 200-164654/2-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

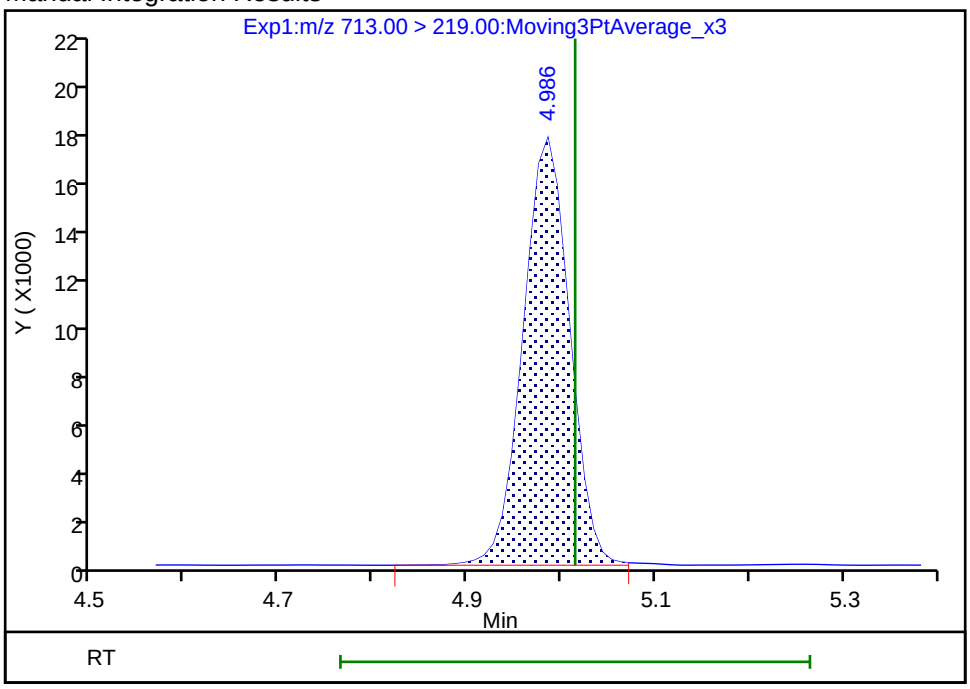
Processing Integration Results

RT: 4.99
Area: 58953
Amount: 1.034193
Amount Units: ng/ml




Manual Integration Results

RT: 4.99
Area: 58781
Amount: 1.034193
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:25:41
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

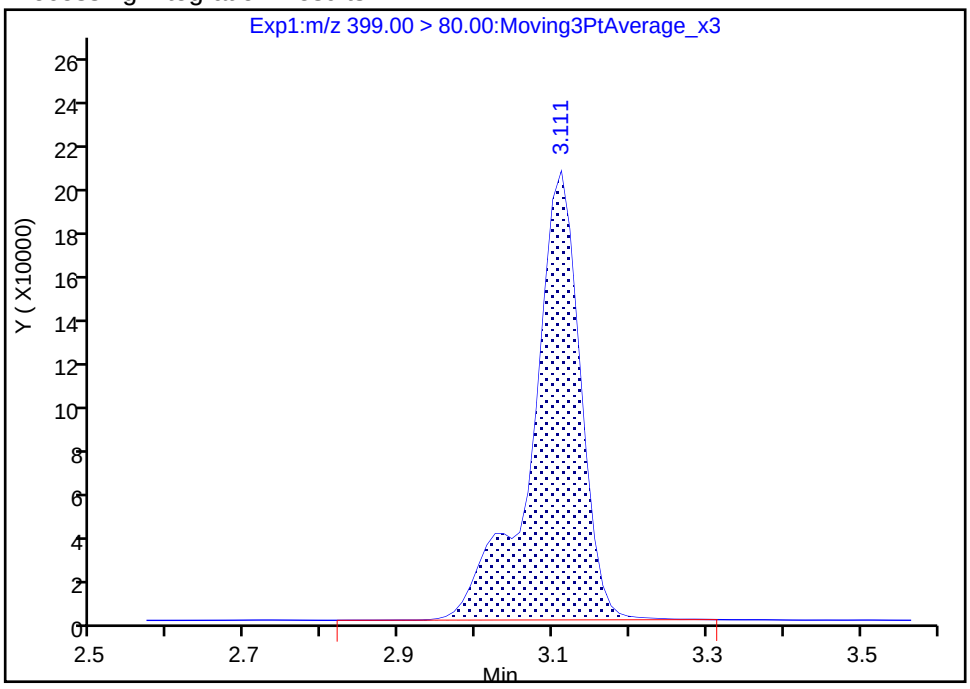
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|---|---|---|---|---|---|
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| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

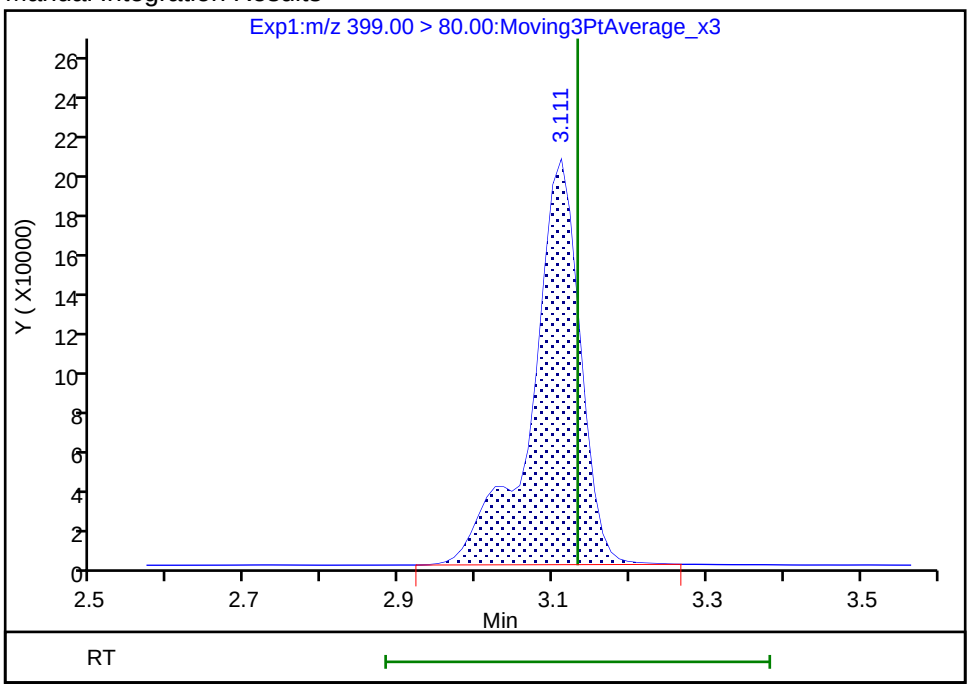
Processing Integration Results

RT: 3.11
Area: 893295
Amount: 0.951268
Amount Units: ng/ml




Manual Integration Results

RT: 3.11
Area: 891415
Amount: 0.949266
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:16:09
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

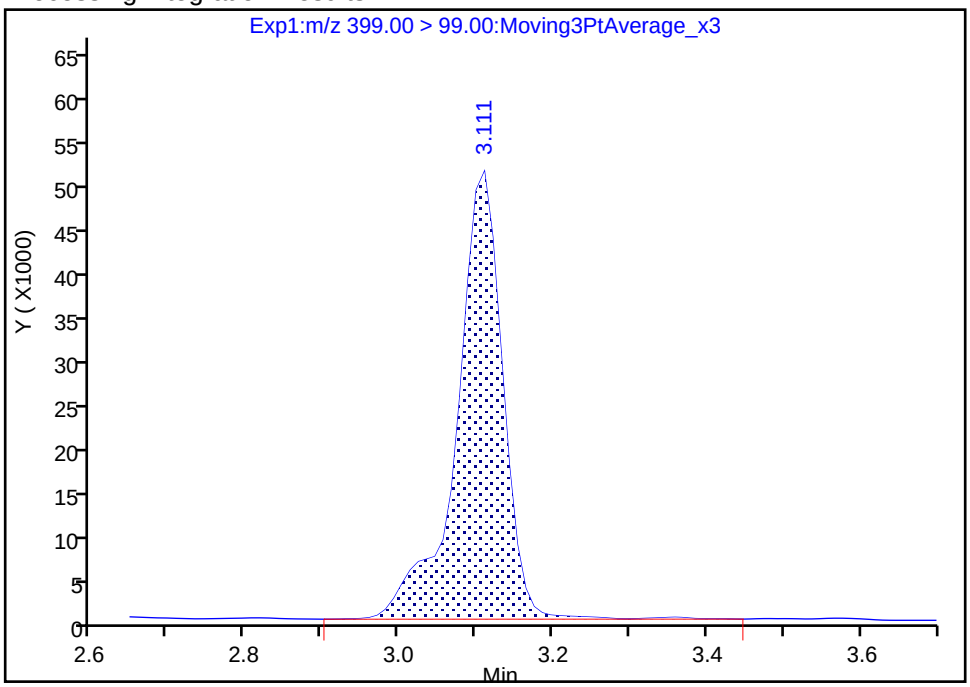
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Injection Date: 12-Mar-2021 12:42:33 Instrument ID: LC812
Lims ID: LCS 200-164654/2-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

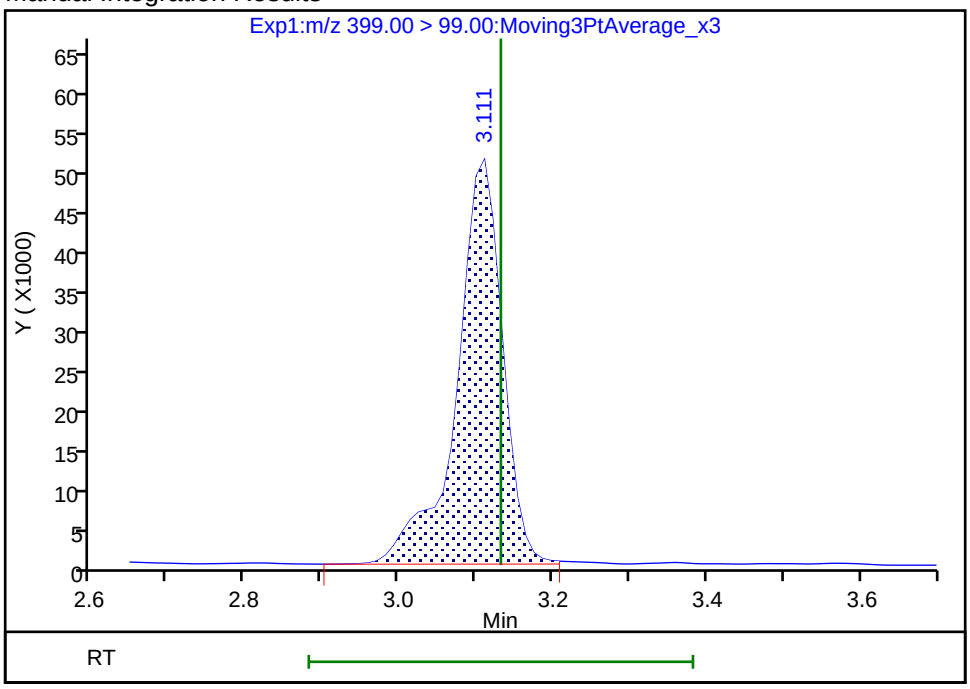
Processing Integration Results

RT: 3.11
Area: 212712
Amount: 0.951268
Amount Units: ng/ml




Manual Integration Results

RT: 3.11
Area: 210809
Amount: 0.949266
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:16:53
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

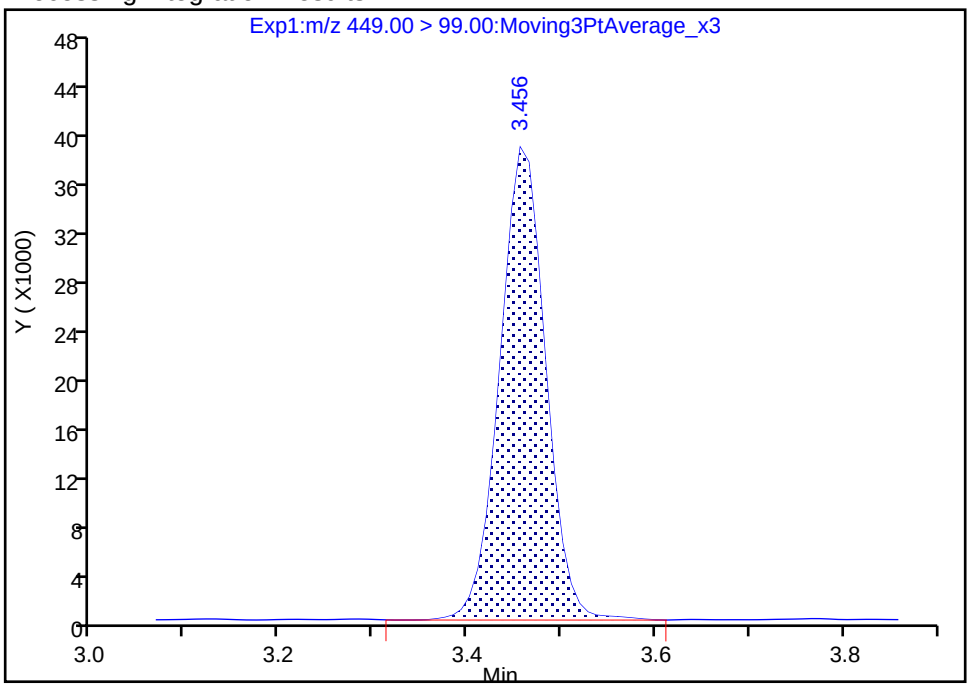
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d | | | | |
| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

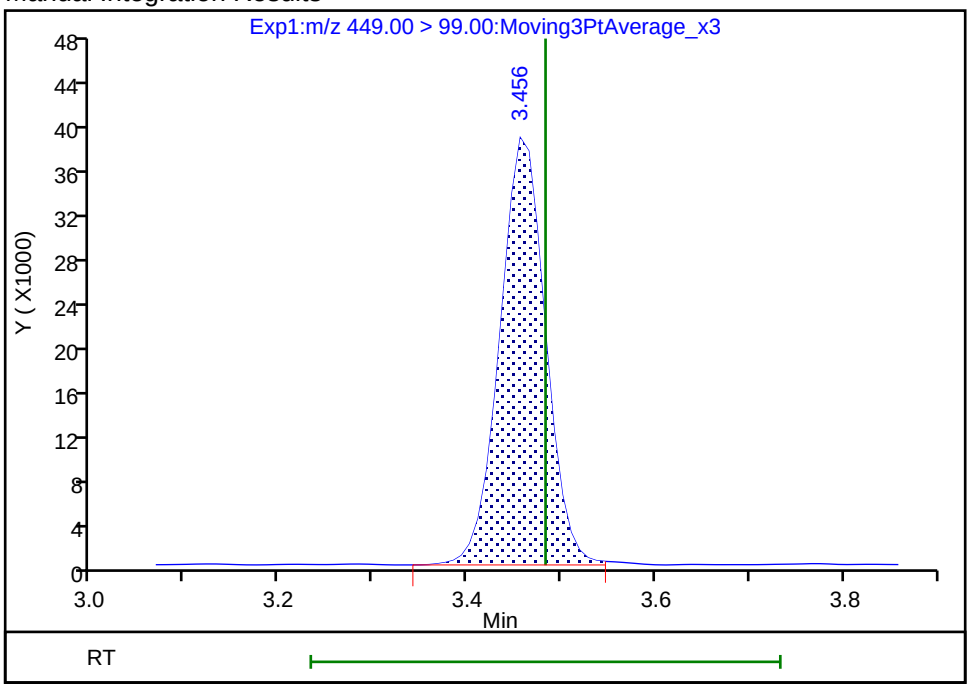
Processing Integration Results

RT: 3.46
Area: 129282
Amount: 1.023251
Amount Units: ng/ml




Manual Integration Results

RT: 3.46
Area: 128718
Amount: 1.023251
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:18:01

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

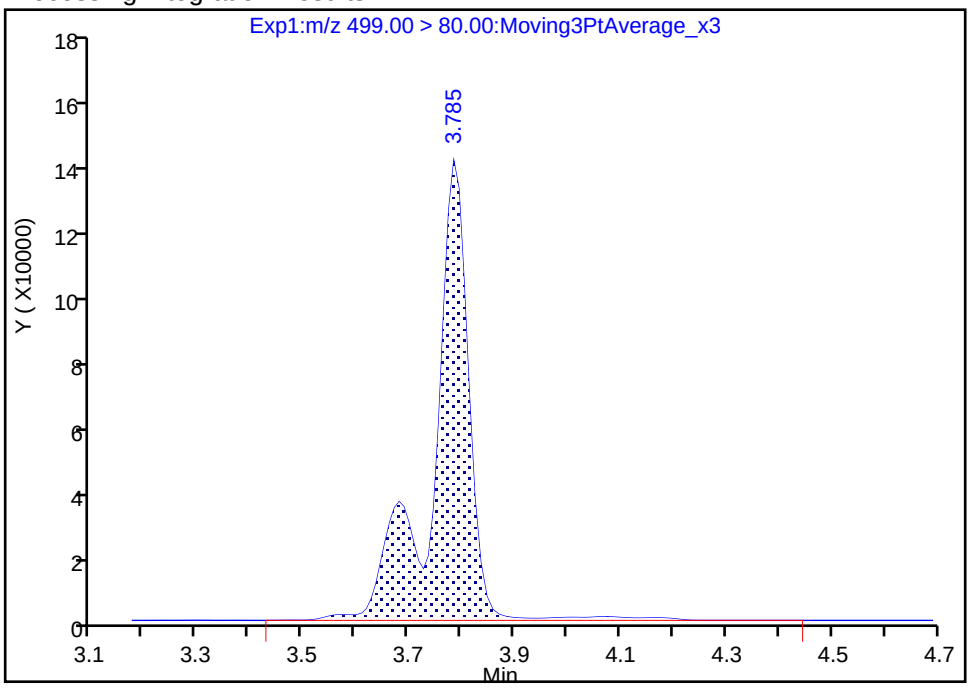
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d | | | | |
| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

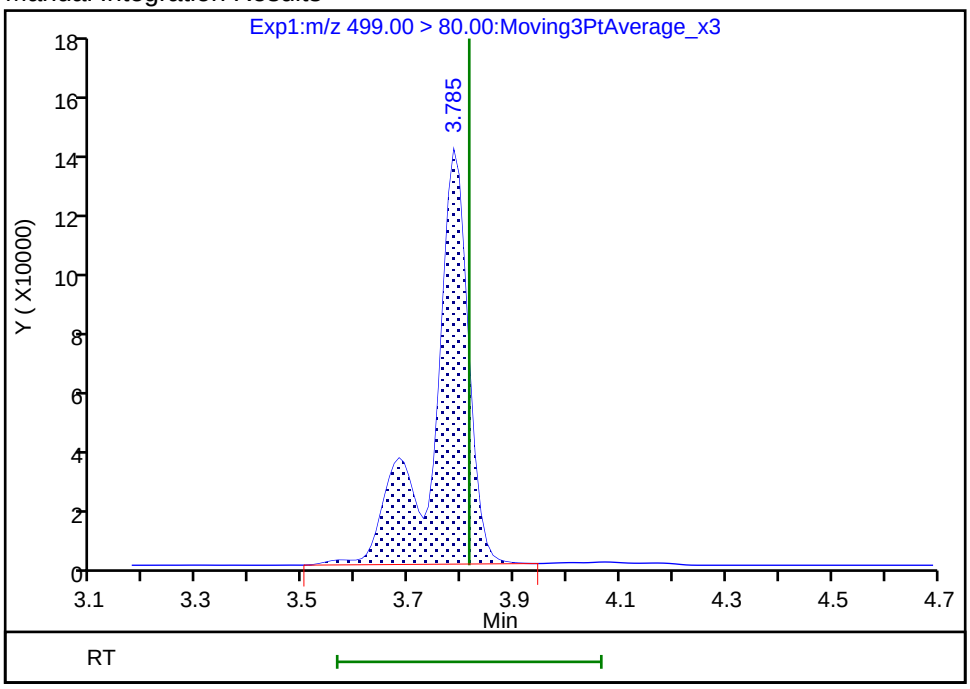
Processing Integration Results

RT: 3.78
Area: 646534
Amount: 1.020550
Amount Units: ng/ml




Manual Integration Results

RT: 3.78
Area: 626341
Amount: 0.988675
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:19:25

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

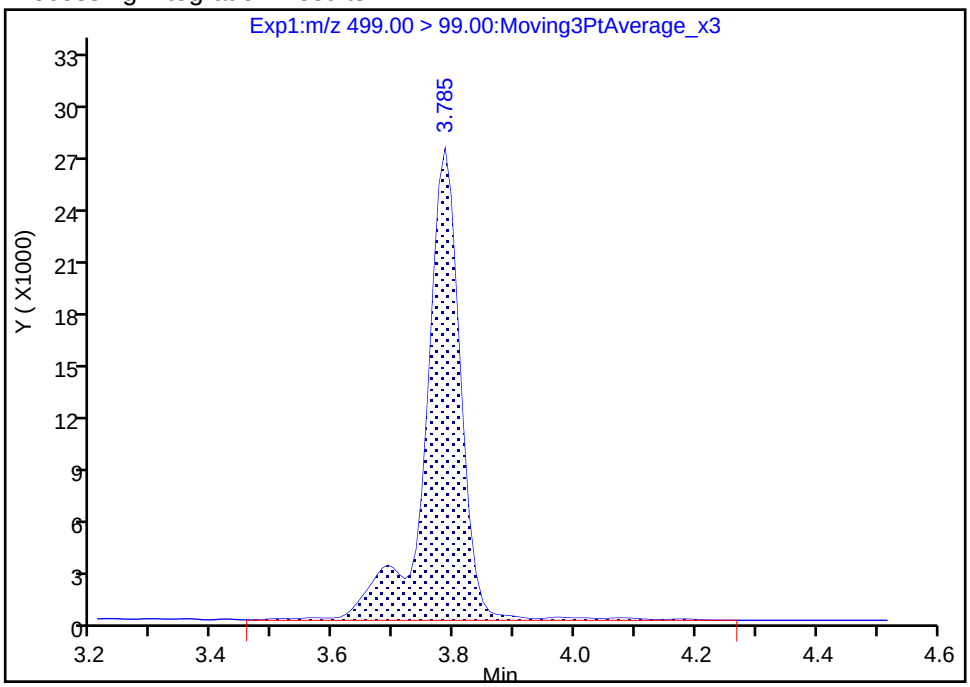
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d | | | | |
| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

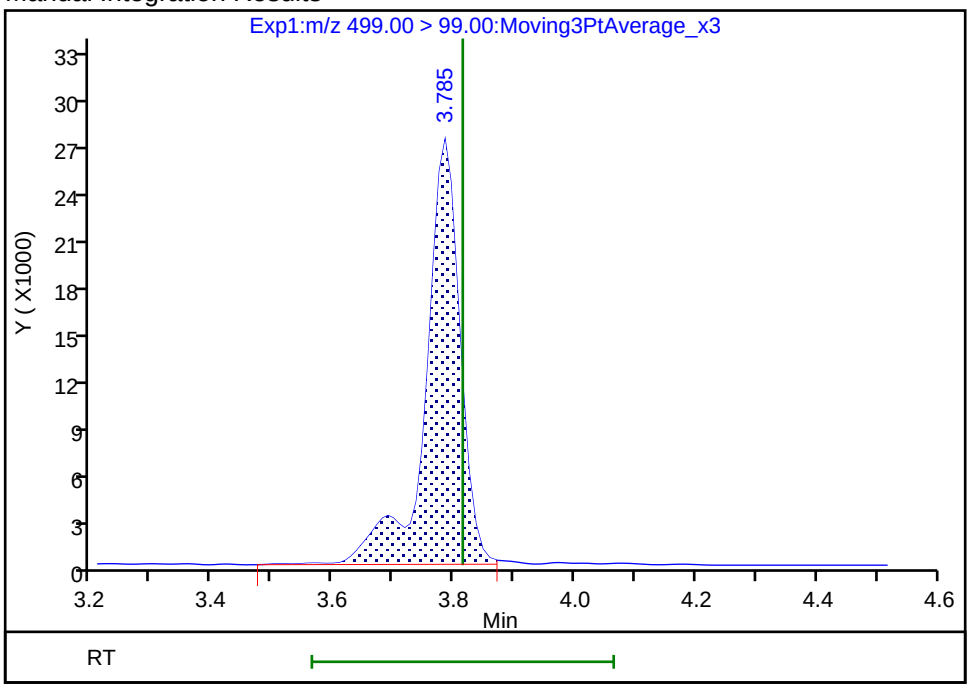
Processing Integration Results

RT: 3.78
Area: 112225
Amount: 1.020550
Amount Units: ng/ml




Manual Integration Results

RT: 3.78
Area: 108821
Amount: 0.988675
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:20:56

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

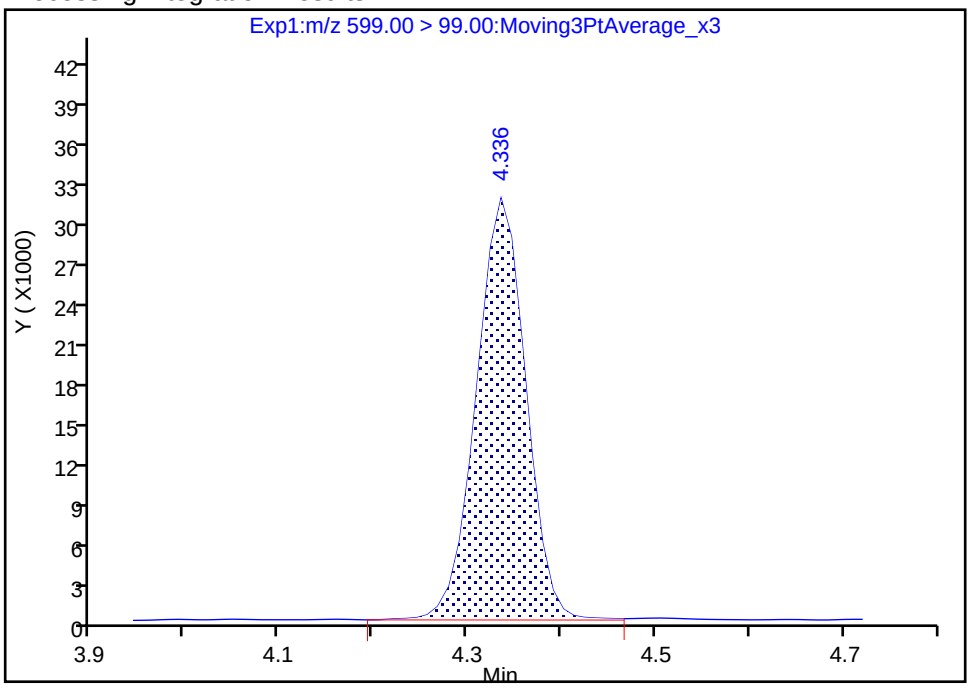
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d | | | | |
| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

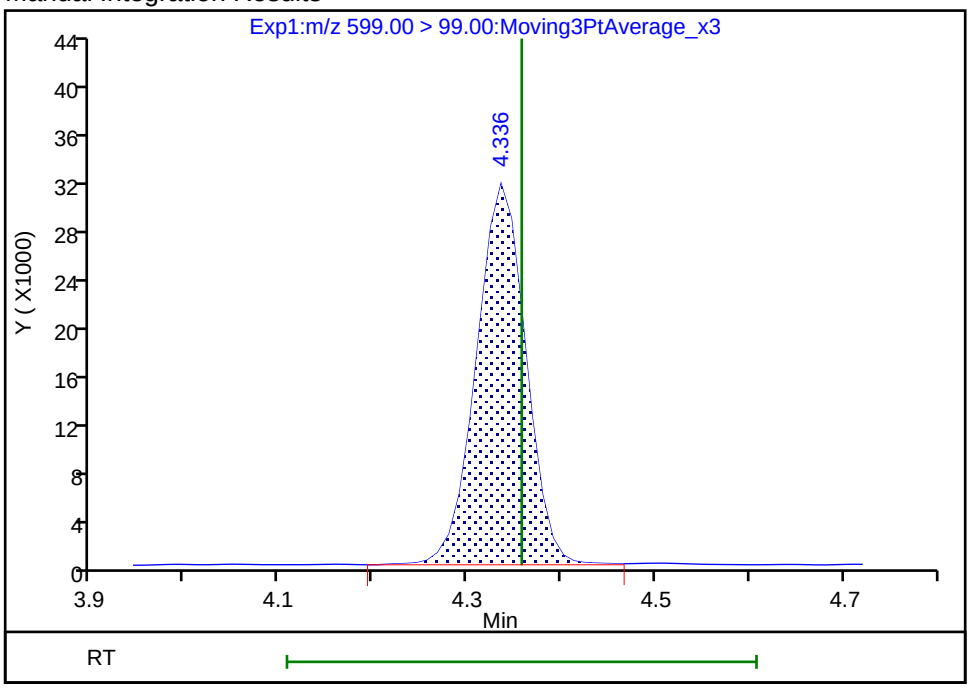
Processing Integration Results

RT: 4.34
Area: 114070
Amount: 0.847923
Amount Units: ng/ml




Manual Integration Results

RT: 4.34
Area: 113947
Amount: 0.847923
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:23:18

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

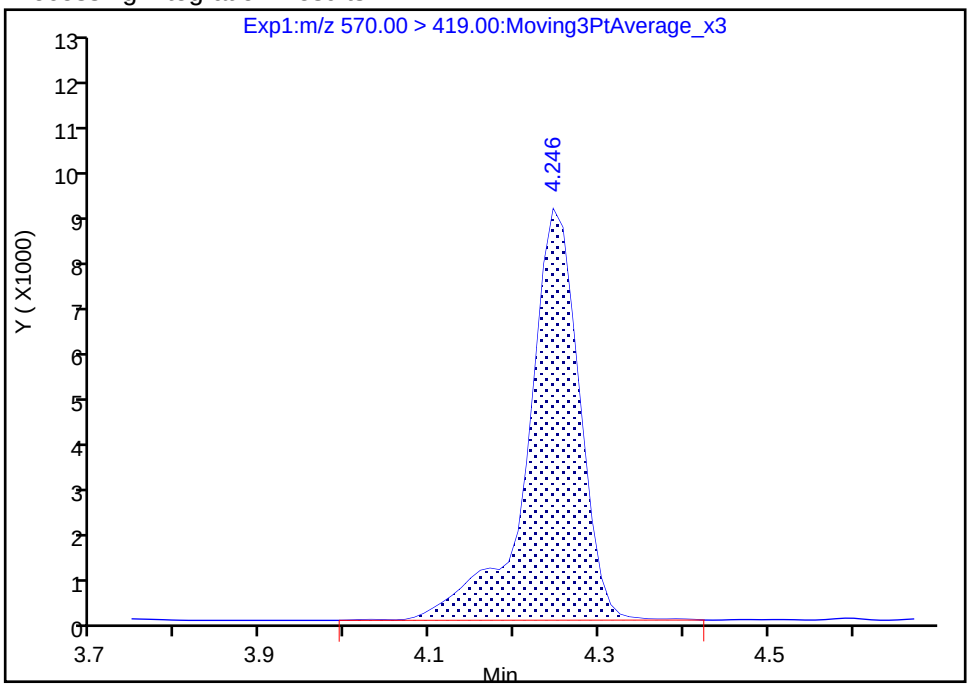
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d | | | | |
| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

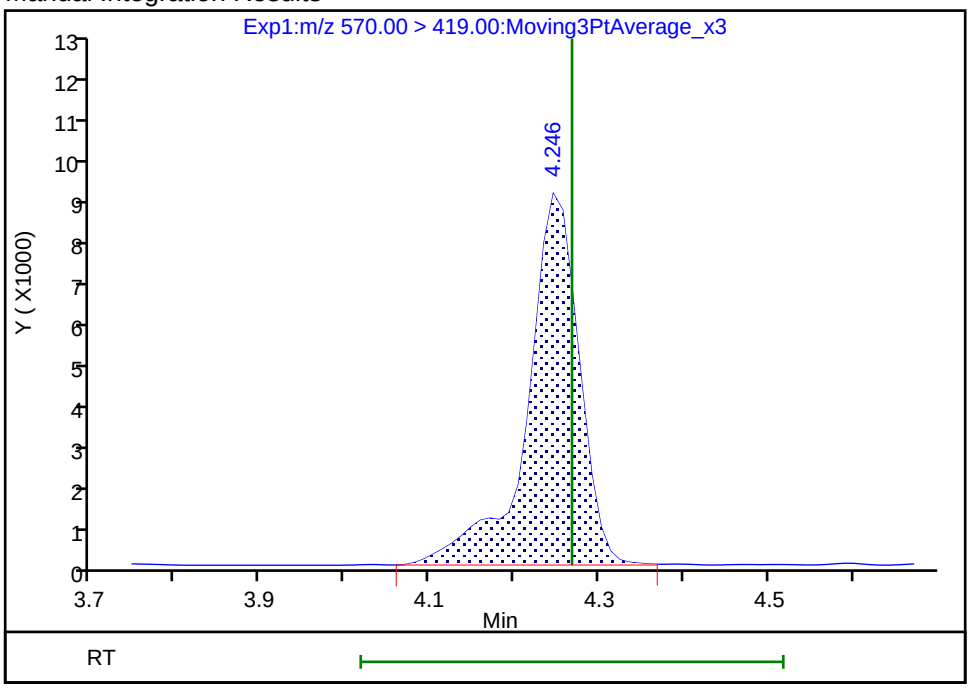
Processing Integration Results

RT: 4.25
Area: 37549
Amount: 0.943492
Amount Units: ng/ml




Manual Integration Results

RT: 4.25
Area: 37439
Amount: 0.940728
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:22:49
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

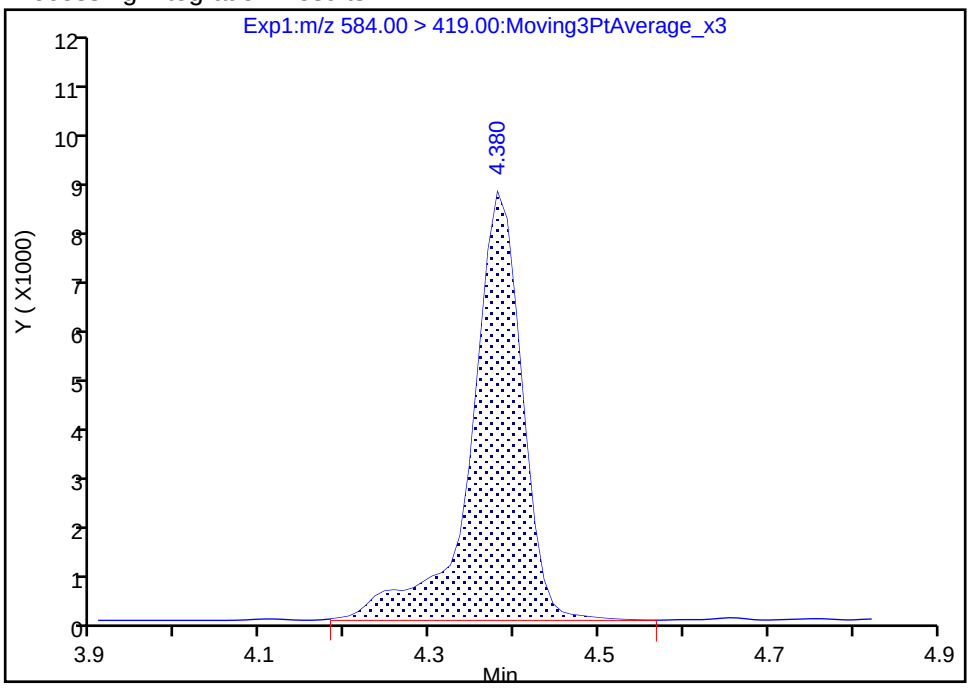
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d | | | | |
| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

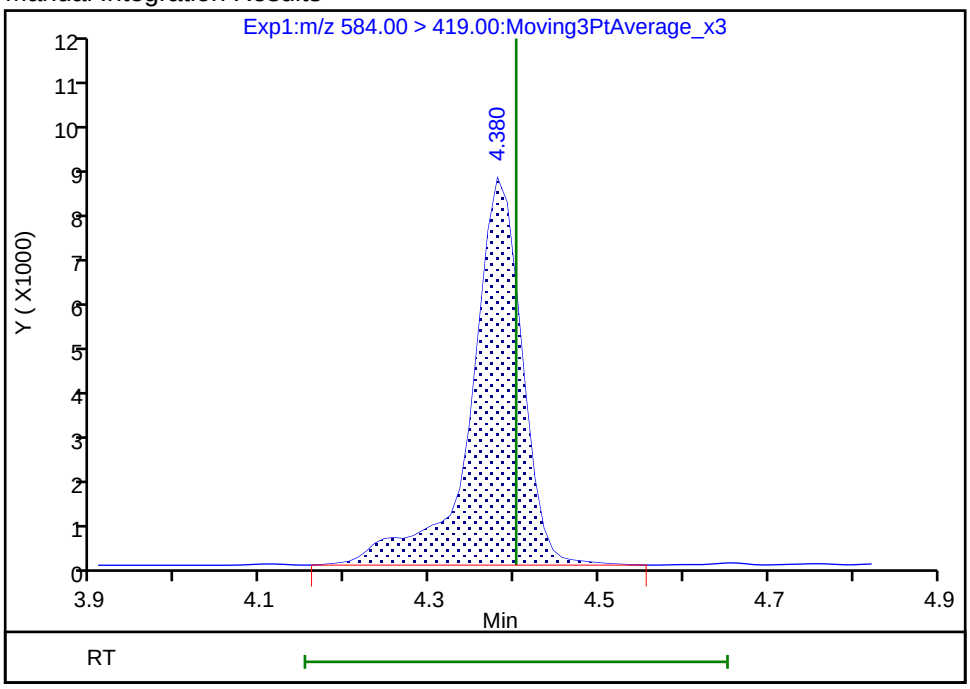
Processing Integration Results

RT: 4.38
Area: 36531
Amount: 1.060153
Amount Units: ng/ml




Manual Integration Results

RT: 4.38
Area: 36475
Amount: 1.058528
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:24:06
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

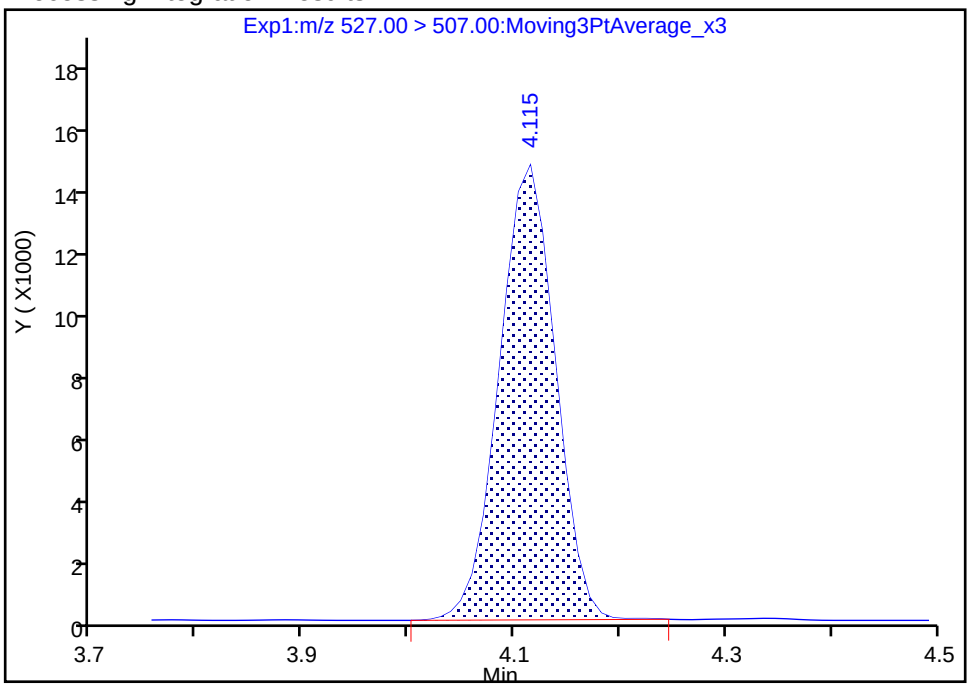
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d | | | | |
| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

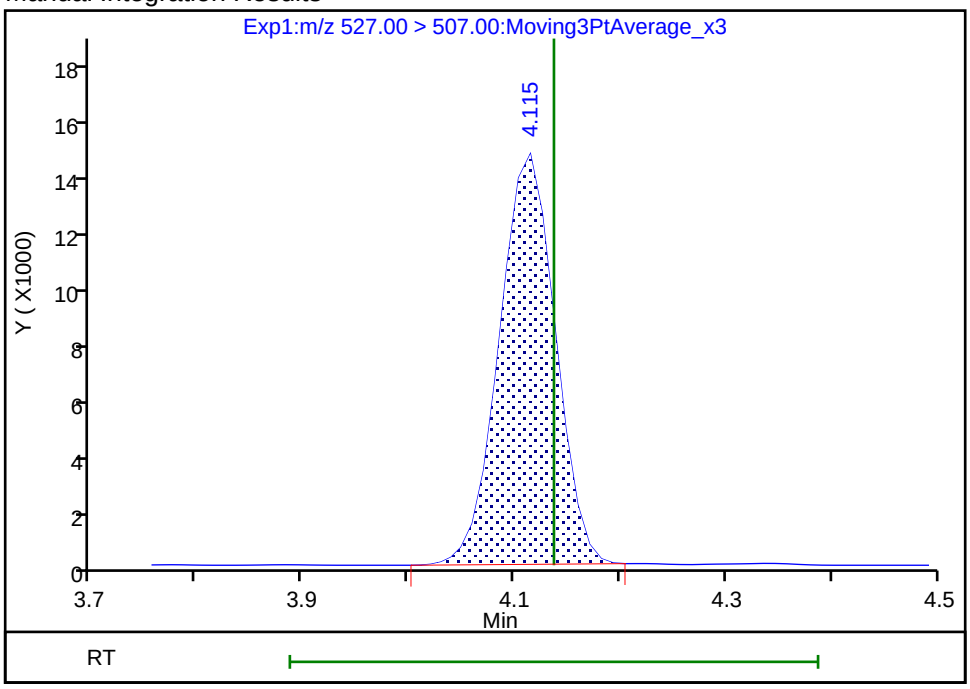
Processing Integration Results

RT: 4.11
Area: 52272
Amount: 0.767387
Amount Units: ng/ml




Manual Integration Results

RT: 4.11
Area: 52058
Amount: 0.764245
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:22:25

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

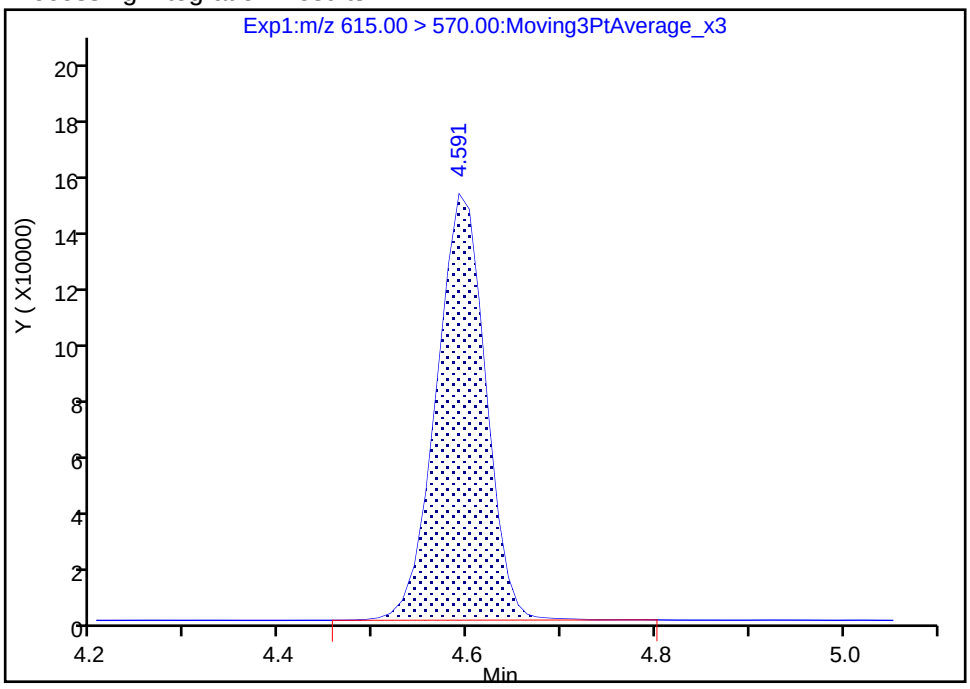
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d | | | | |
| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 36 13C2 PFDoA, CAS: STL00998

Signal: 1

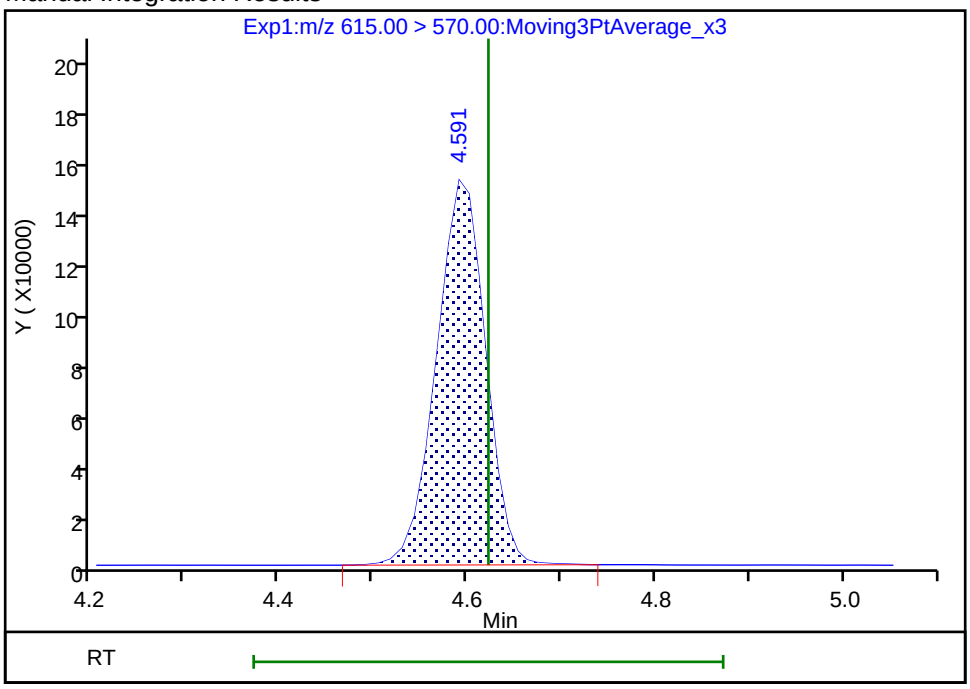
Processing Integration Results

RT: 4.59
Area: 543244
Amount: 0.944129
Amount Units: ng/ml




Manual Integration Results

RT: 4.59
Area: 542563
Amount: 0.942945
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:11:14

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

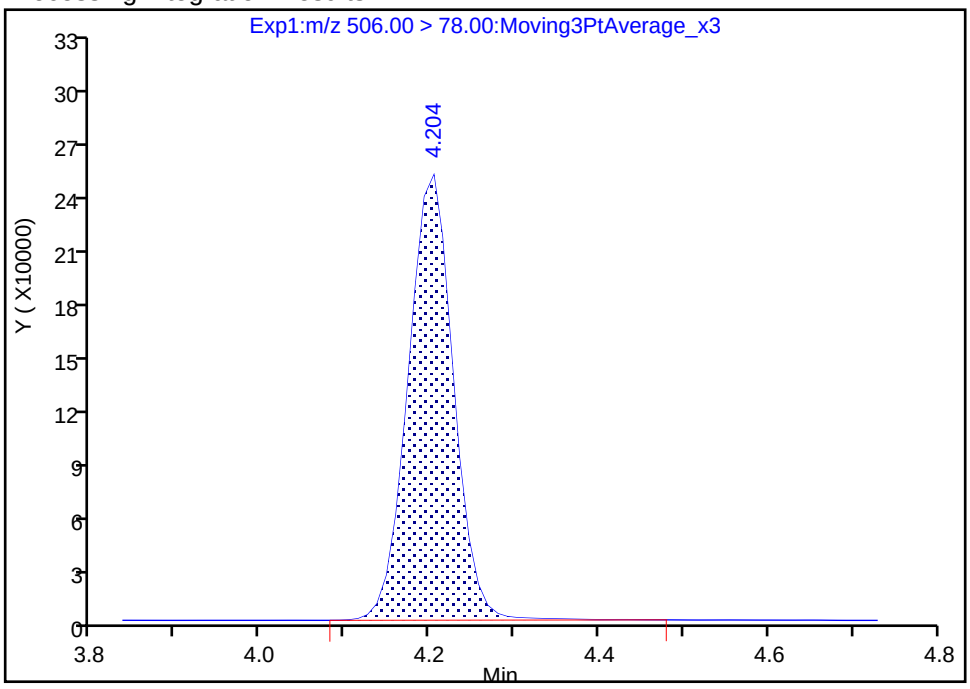
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d | | | | |
| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 21 13C8 FOSA, CAS: STL01056

Signal: 1

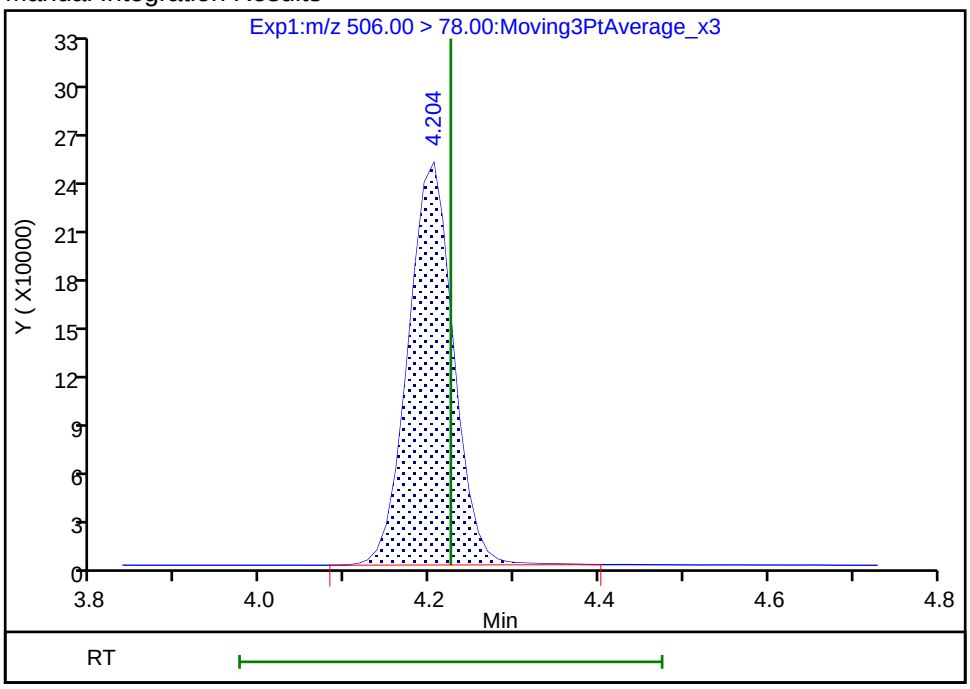
Processing Integration Results

RT: 4.20
Area: 919538
Amount: 0.942764
Amount Units: ng/ml




Manual Integration Results

RT: 4.20
Area: 917731
Amount: 0.940911
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:10:39

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

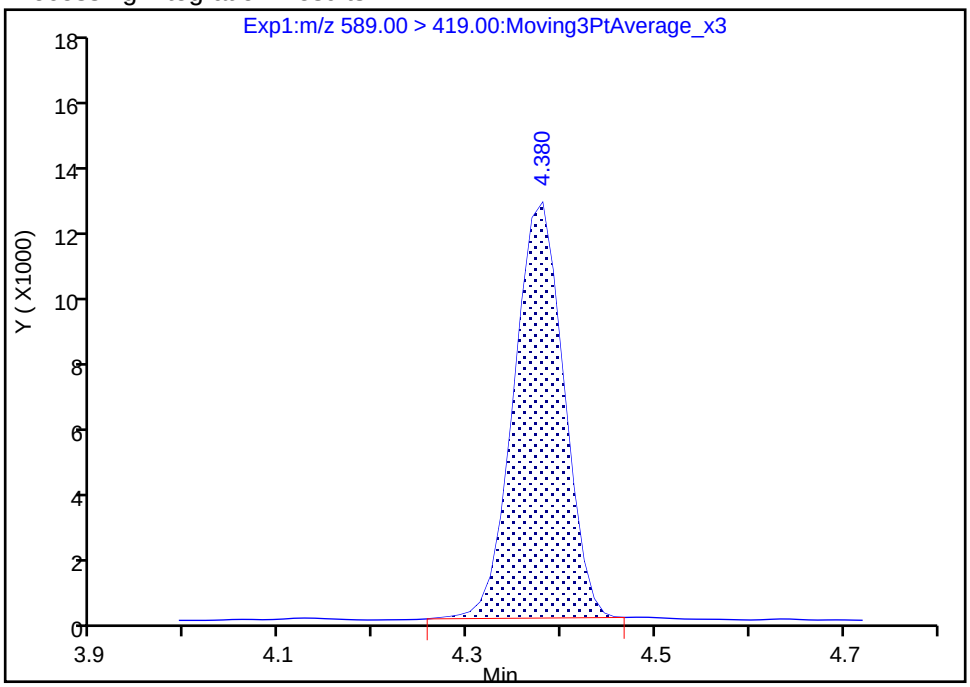
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d | | | | |
| Injection Date: | 12-Mar-2021 12:42:33 | Instrument ID: | LC812 | | |
| Lims ID: | LCS 200-164654/2-A | | | | |
| Client ID: | | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 6 | Worklist Smp#: | 6 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 32 d5-NEtFOSAA, CAS: STL02117

Signal: 1

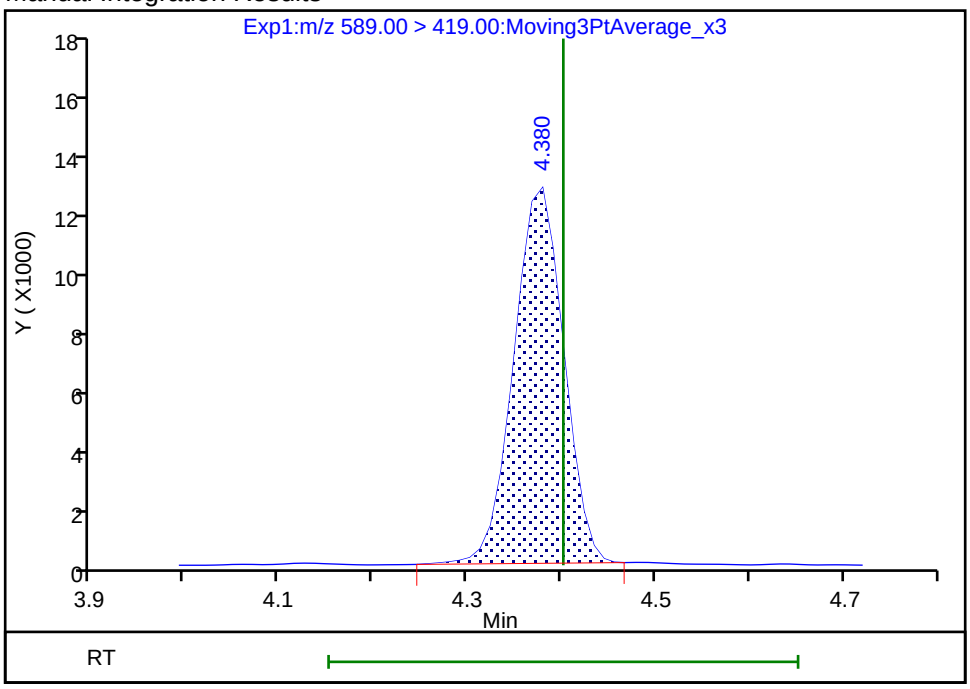
Processing Integration Results

RT: 4.38
Area: 46438
Amount: 0.998171
Amount Units: ng/ml




Manual Integration Results

RT: 4.38
Area: 46530
Amount: 1.000149
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:11:01

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

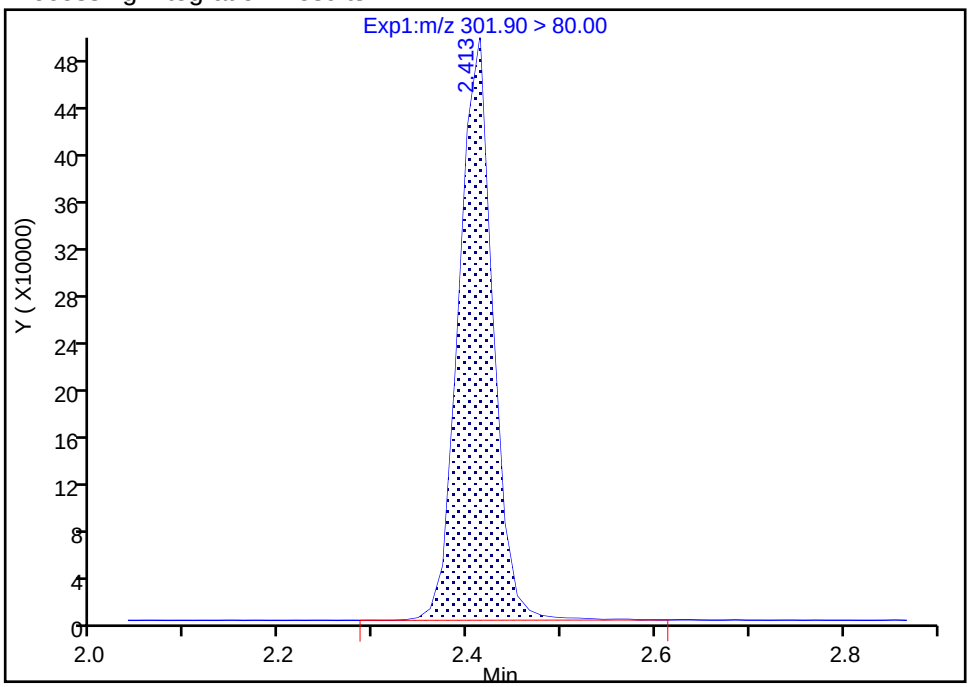
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B06.d
Injection Date: 12-Mar-2021 12:42:33 Instrument ID: LC812
Lims ID: LCS 200-164654/2-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## D 47 13C3 PFBS, CAS: STL02337

Signal: 1

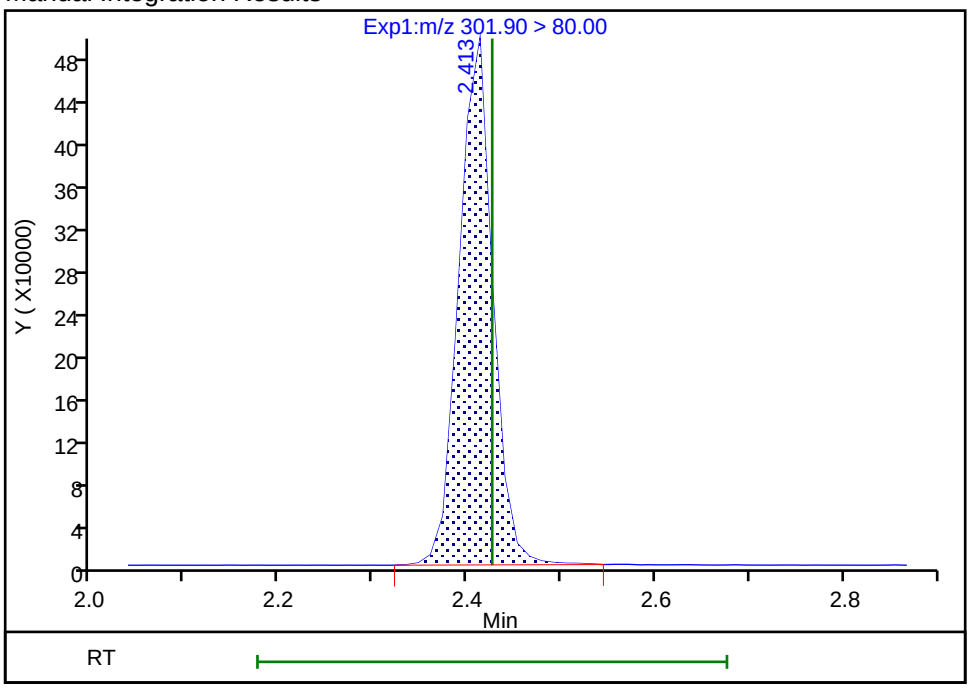
Processing Integration Results

RT: 2.41
Area: 1248044
Amount: 1.228591
Amount Units: ng/ml




Manual Integration Results

RT: 2.41
Area: 1244123
Amount: 1.224732
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 09:08:06
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID: HEX-MW12-030321 MS  Lab Sample ID: 460-229152-2 MS

Matrix: Water  Lab File ID: PA210312B18.d

Analysis Method: 537 (modified)  Date Collected: 03/03/2021 11:45

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 305.2(mL)  Date Analyzed: 03/12/2021 14:21

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 375-22-4 | Perfluorobutanoic acid (PFBA) | 52.25 | | 4.10 | 0.93 |
| 2706-90-3 | Perfluoropentanoic acid (PFPeA) | 80.21 | | 1.64 | 0.88 |
| 307-24-4 | Perfluorohexanoic acid (PFHxA) | 61.15 | | 1.64 | 0.68 |
| 375-85-9 | Perfluoroheptanoic acid (PFHpA) | 62.58 | | 1.64 | 0.38 |
| 335-67-1 | Perfluorooctanoic acid (PFOA) | 70.71 | | 1.64 | 0.80 |
| 375-95-1 | Perfluorononanoic acid (PFNA) | 38.25 | | 1.64 | 0.48 |
| 335-76-2 | Perfluorodecanoic acid (PFDA) | 27.06 | | 1.64 | 0.38 |
| 2058-94-8 | Perfluoroundecanoic acid (PFUnA) | 28.40 | | 1.64 | 0.60 |
| 307-55-1 | Perfluorododecanoic acid (PFDoA) | 27.20 | | 1.64 | 0.38 |
| 72629-94-8 | Perfluorotridecanoic acid (PFTriA) | 28.84 | | 1.64 | 0.35 |
| 376-06-7 | Perfluorotetradecanoic acid (PFTeA) | 32.82 | | 1.64 | 0.48 |
| 375-73-5 | Perfluorobutanesulfonic acid (PFBS) | 42.74 | | 1.64 | 0.52 |
| 355-46-4 | Perfluorohexanesulfonic acid (PFHxS) | 38.05 | | 1.64 | 0.55 |
| 375-92-8 | Perfluoroheptanesulfonic Acid (PFHpS) | 38.07 | | 1.64 | 0.32 |
| 1763-23-1 | Perfluorooctanesulfonic acid (PFOS) | 67.21 | | 1.64 | 0.71 |
| 335-77-3 | Perfluorodecanesulfonic acid (PFDS) | 26.77 | | 1.64 | 0.39 |
| 754-91-6 | Perfluorooctanesulfonamide (PFOSA) | 24.38 | | 1.64 | 0.47 |
| 2355-31-9 | N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 27.67 | | 4.10 | 0.65 |
| 2991-50-6 | N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 26.42 | | 4.10 | 0.76 |
| 27619-97-2 | 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 33.16 | | 4.10 | 0.59 |
| 39108-34-4 | 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 24.31 | | 1.64 | 0.54 |

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID: HEX-MW12-030321 MS  Lab Sample ID: 460-229152-2 MS

Matrix: Water  Lab File ID: PA210312B18.d

Analysis Method: 537 (modified)  Date Collected: 03/03/2021 11:45

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 305.2(mL)  Date Analyzed: 03/12/2021 14:21

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| STL00994 | 18O2 PFHxS | 93 | | 50-150 |
| STL01892 | 13C4 PFHpA | 95 | | 50-150 |
| STL00990 | 13C4 PFOA | 90 | | 50-150 |
| STL00991 | 13C4 PFOS | 77 | | 50-150 |
| STL00995 | 13C5 PFNA | 83 | | 50-150 |
| STL00992 | 13C4 PFBA | 77 | | 25-150 |
| STL00993 | 13C2 PFHxA | 99 | | 50-150 |
| STL00996 | 13C2 PFDA | 69 | | 50-150 |
| STL00997 | 13C2 PFUnA | 66 | | 50-150 |
| STL00998 | 13C2 PFDoA | 67 | | 50-150 |
| STL01056 | 13C8 FOSA | 66 | | 25-150 |
| STL01893 | 13C5 PFPeA | 89 | | 25-150 |
| STL02116 | 13C2 PFTeDA | 70 | | 50-150 |
| STL02118 | d3-NMeFOSAA | 66 | | 50-150 |
| STL02117 | d5-NEtFOSAA | 66 | | 50-150 |
| STL02279 | M2-6:2 FTS | 102 | | 25-150 |
| STL02280 | M2-8:2 FTS | 75 | | 25-150 |
| STL02337 | 13C3 PFBS | 96 | | 50-150 |

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d
Lims ID: 460-229152-A-2-B MS
Client ID: HEX-MW12-030321
Sample Type: MS
Inject. Date: 12-Mar-2021 14:21:56 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-229152-A-2-B MS
Misc. Info.: 200-0045149-018 Plate: 1 Rack: 2
Operator ID: lc812tech Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 15-Mar-2021 17:45:51 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1650

First Level Reviewer: nampitakw Date: 15-Mar-2021 13:41:21
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.080 | 2.091 | -0.011 | 0.597 | 968117 | 0.9658 | | 77.3 | 5196 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | M |
| 212.90 > 169.00 | 2.080 | 2.091 | -0.011 | 1.000 | 1237457 | 1.59 | | 159 | 122 | M |
| D 3 13C5 PFPeA | | | | | | | | | | M |
| 267.90 > 223.00 | 2.398 | 2.413 | -0.015 | 0.688 | 805119 | 1.11 | | 88.9 | 555 | M |
| 4 Perfluoropentanoic acid | | | | | | | | | | M |
| 262.90 > 219.00 | 2.398 | 2.413 | -0.015 | 1.000 | 1745851 | 2.45 | | 245 | 19.1 | M |
| D 47 13C3 PFBS | | | | | | | | | | M |
| 301.90 > 80.00 | 2.424 | 2.426 | -0.002 | 0.696 | 1058964 | 1.11 | | 95.5 | 28479 | M |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | M |
| 298.90 > 80.00 | 2.424 | 2.439 | -0.015 | 1.000 | 1344244 | 1.30 | Target=2.21 | 148 | 50.5 | M |
| 298.90 > 99.00 | 2.424 | 2.439 | -0.015 | 1.000 | 599514 | | 2.24(1.11-3.32) | | 88.3 | M |
| D 60 M2-4:2 FTS | | | | | | | | | | M |
| 329.00 > 81.00 | 2.720 | 2.734 | -0.014 | 0.781 | 101996 | 1.28 | | 110 | 12.7 | M |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | M |
| 327.00 > 307.00 | 2.720 | 2.734 | -0.014 | 1.000 | 157772 | 0.9848 | | 105 | 555 | M |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.756 | 2.770 | -0.014 | 0.791 | 935424 | 1.23 | | 98.5 | 2714 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | M |
| 313.00 > 269.00 | 2.756 | 2.770 | -0.014 | 1.000 | 1525718 | 1.87 | Target=12.83 | 187 | 32.1 | M |
| 313.00 > 119.00 | 2.756 | 2.770 | -0.014 | 1.000 | 126496 | | 12.06(6.42-19.25) | | 97.3 | |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | |
| 349.00 > 80.00 | 2.768 | 2.770 | -0.002 | 0.887 | 949748 | 1.09 | Target=3.35 | 117 | 90.6 | |
| 349.00 > 99.00 | 2.768 | 2.770 | -0.002 | 0.887 | 278912 | | 3.41(1.67-5.02) | | 102 | |
| 67 Perfluoro(2-propoxypropanoic) ac | | | | | | | | | | M |
| 329.10 > 285.00 | 2.865 | 2.880 | -0.015 | 1.000 | 145750 | 1.44 | | 144 | 15.6 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 64 13C3 HFPO-DA | | | | | | | | | | |
| 332.10 > 287.00 | 2.865 | 2.880 | -0.015 | 0.823 | 91198 | 0.6821 | | 54.6 | 237 | |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.122 | 3.132 | -0.010 | 1.000 | 905307 | 1.16 | Target=4.15 | 128 | 92.6 | M |
| 399.00 > 99.00 | 3.122 | 3.132 | -0.010 | 1.000 | 219298 | | 4.13(2.08-6.23) | | 121 | M |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.122 | 3.132 | -0.010 | 0.896 | 782230 | 1.10 | | 93.2 | 2109 | |
| D 9 13C4 PFHpA | | | | | | | | | | M |
| 367.00 > 322.00 | 3.132 | 3.143 | -0.011 | 0.899 | 867761 | 1.19 | | 95.5 | 2557 | M |
| 10 Perfluoroheptanoic acid | | | | | | | | | | M |
| 363.00 > 319.00 | 3.132 | 3.143 | -0.011 | 1.000 | 1448196 | 1.91 | Target=3.66 | 191 | 55.1 | M |
| 363.00 > 169.00 | 3.132 | 3.143 | -0.011 | 1.000 | 407768 | | 3.55(1.83-5.49) | | 547 | M |
| 77 DONA | | | | | | | | | | |
| 377.00 > 251.00 | 3.164 | 3.175 | -0.011 | 0.834 | 1527566 | 1.22 | Target=2.43 | 130 | 838 | |
| 377.00 > 85.00 | 3.164 | 3.175 | -0.011 | 0.834 | 622012 | | 2.46(1.22-3.65) | | 337 | |
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | M |
| 449.00 > 80.00 | 3.474 | 3.483 | -0.009 | 0.916 | 586296 | 1.16 | Target=5.95 | 122 | 145 | M |
| 449.00 > 99.00 | 3.474 | 3.483 | -0.009 | 0.916 | 96149 | | 6.10(2.98-8.93) | | 101 | M |
| D 12 M2-6:2 FTS | | | | | | | | | | M |
| 429.00 > 81.00 | 3.474 | 3.492 | -0.018 | 0.997 | 107038 | 1.21 | | 102 | 38.6 | M |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | |
| 427.00 > 407.00 | 3.474 | 3.492 | -0.018 | 1.000 | 101482 | 1.01 | | 107 | 870 | |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.483 | 3.501 | -0.018 | 1.000 | 834986 | 1.13 | | 90.5 | 4231 | |
| * 62 13C2 PFOA | | | | | | | | | | M |
| 415.00 > 370.00 | 3.483 | 3.501 | -0.018 | | 932748 | 1.25 | | | 3838 | M |
| 15 Perfluorooctanoic acid | | | | | | | | | | M |
| 413.00 > 369.00 | 3.483 | 3.501 | -0.018 | 1.000 | 1562646 | 2.16 | Target=2.58 | 216 | 110 | M |
| 413.00 > 169.00 | 3.483 | 3.501 | -0.018 | 1.000 | 642954 | | 2.43(1.29-3.87) | | 860 | M |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.804 | 3.814 | -0.010 | 1.003 | 881558 | 2.05 | Target=5.65 | 221 | 174 | M |
| 499.00 > 99.00 | 3.794 | 3.814 | -0.020 | 1.000 | 129068 | | 6.83(2.82-8.47) | | 185 | M |
| D 18 13C4 PFOS | | | | | | | | | | M |
| 503.00 > 80.00 | 3.794 | 3.814 | -0.020 | 1.089 | 446575 | 0.9168 | | 76.7 | 200 | M |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.814 | 3.824 | -0.010 | 1.095 | 678098 | 1.04 | | 83.3 | 2459 | |
| 20 Perfluorononanoic acid | | | | | | | | | | M |
| 463.00 > 419.00 | 3.825 | 3.824 | 0.001 | 1.003 | 700929 | 1.17 | Target=7.44 | 117 | 72.3 | M |
| 463.00 > 169.00 | 3.825 | 3.824 | 0.001 | 1.003 | 108303 | | 6.47(3.72-11.16) | | 515 | M |
| 69 9-Chlorohexadecafluoro-3-oxanona | | | | | | | | | | |
| 531.00 > 351.00 | 3.964 | 3.973 | -0.009 | 1.045 | 327096 | 0.6821 | | 73.2 | 657 | |
| 68 Perfluorononanesulfonic acid | | | | | | | | | | M |
| 549.00 > 80.00 | 4.093 | 4.104 | -0.011 | 1.079 | 231599 | 0.7223 | Target=2.54 | 75.2 | 214 | |
| 549.00 > 99.00 | 4.093 | 4.104 | -0.011 | 1.079 | 80041 | | 2.89(1.27-3.81) | | 161 | M |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.115 | 4.126 | -0.011 | 1.181 | 533940 | 0.8573 | | 68.6 | 3035 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 24 Perfluorodecanoic acid | | | | | | | | | | M |
| 513.00 > 469.00 | 4.115 | 4.126 | -0.011 | 1.000 | 363587 | 0.8260 | Target=9.29 | 82.6 | 92.8 | |
| 513.00 > 169.00 | 4.115 | 4.126 | -0.011 | 1.000 | 43497 | | 8.36(4.64-13.93) | | 243 | M |
| D 26 M2-8:2 FTS | | | | | | | | | | M |
| 529.00 > 81.00 | 4.126 | 4.137 | -0.011 | 1.185 | 82624 | 0.9040 | | 75.5 | 68.9 | M |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | M |
| 527.00 > 507.00 | 4.126 | 4.137 | -0.011 | 1.000 | 34818 | 0.7420 | | 77.5 | 537 | M |
| D 21 13C8 FOSA | | | | | | | | | | |
| 506.00 > 78.00 | 4.215 | 4.225 | -0.010 | 1.210 | 759111 | 0.8292 | | 66.3 | 2240 | |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | |
| 498.00 > 78.00 | 4.215 | 4.225 | -0.010 | 1.000 | 452850 | 0.7441 | | 74.4 | 1276 | |
| D 27 d3-NMeFOSAA | | | | | | | | | | M |
| 573.00 > 419.00 | 4.257 | 4.268 | -0.011 | 1.222 | 37161 | 0.8226 | | 65.8 | 148 | M |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | M |
| 570.00 > 419.00 | 4.268 | 4.268 | 0.0 | 1.003 | 22252 | 0.8445 | | 84.4 | 183 | M |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | M |
| 599.00 > 80.00 | 4.347 | 4.358 | -0.011 | 1.146 | 208878 | 0.8171 | Target=2.80 | 84.8 | 569 | M |
| 599.00 > 99.00 | 4.347 | 4.358 | -0.011 | 1.146 | 72152 | | 2.89(1.40-4.19) | | 341 | M |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.380 | 4.391 | -0.011 | 1.257 | 422542 | 0.8259 | | 66.1 | 2621 | |
| 31 Perfluoroundecanoic acid | | | | | | | | | | |
| 563.00 > 519.00 | 4.380 | 4.391 | -0.011 | 1.000 | 298773 | 0.8667 | Target=8.12 | 86.7 | 164 | |
| 563.00 > 169.00 | 4.380 | 4.391 | -0.011 | 1.000 | 37781 | | 7.91(4.06-12.18) | | 414 | |
| D 32 d5-NEtFOSAA | | | | | | | | | | M |
| 589.00 > 419.00 | 4.391 | 4.402 | -0.011 | 1.261 | 35848 | 0.8209 | | 65.7 | 375 | M |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.402 | 4.402 | 0.0 | 1.003 | 21409 | 0.8064 | | 80.6 | 193 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | M |
| 631.00 > 451.00 | 4.467 | 4.479 | -0.012 | 1.177 | 308627 | 0.6203 | | 65.8 | 1728 | M |
| D 36 13C2 PFDoA | | | | | | | | | | M |
| 615.00 > 570.00 | 4.611 | 4.622 | -0.011 | 1.324 | 450024 | 0.8333 | | 66.7 | 1675 | M |
| 37 Perfluorododecanoic acid | | | | | | | | | | M |
| 613.00 > 569.00 | 4.611 | 4.622 | -0.011 | 1.000 | 328709 | 0.8301 | Target=6.91 | 83.0 | 142 | M |
| 613.00 > 169.00 | 4.611 | 4.622 | -0.011 | 1.000 | 54197 | | 6.07(3.45-10.36) | | 737 | M |
| 74 1H,1H,2H,2H-perfluorododecanesul | | | | | | | | | | M |
| 627.00 > 607.00 | 4.622 | 4.643 | -0.021 | 1.120 | 17887 | 0.7404 | | 76.8 | 568 | M |
| 75 Perfluorododecanesulfonic acid ( | | | | | | | | | | |
| 699.00 > 80.00 | 4.783 | 4.792 | -0.009 | 1.261 | 75180 | 0.7993 | Target=0.51 | 82.6 | 1224 | |
| 699.00 > 99.00 | 4.783 | 4.792 | -0.009 | 1.261 | 156842 | | 0.48(0.26-0.77) | | 943 | |
| 41 Perfluorotridecanoic acid | | | | | | | | | | M |
| 663.00 > 619.00 | 4.810 | 4.822 | -0.012 | 1.043 | 282852 | 0.8802 | Target=4.39 | 88.0 | 174 | |
| 663.00 > 169.00 | 4.810 | 4.822 | -0.012 | 1.043 | 73212 | | 3.86(2.20-6.59) | | 1014 | M |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 5.004 | 5.014 | -0.010 | 1.437 | 348720 | 0.8730 | | 69.8 | 2606 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | M |
| 713.00 > 169.00 | 5.004 | 5.014 | -0.010 | 1.000 | 51815 | 1.00 | Target=1.06 | 100 | 997 | M |
| 713.00 > 219.00 | 4.995 | 5.014 | -0.019 | 0.998 | 47481 | | 1.09(0.53-1.59) | | 1367 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.350 | 5.360 | -0.010 | 1.536 | 332269 | 0.7787 | | 62.3 | 2394 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | |
| 813.00 > 769.00 | 5.350 | 5.360 | -0.010 | 1.000 | 238030 | 0.9464 | Target=3.84 | 94.6 | 154 | |
| 813.00 > 169.00 | 5.350 | 5.360 | -0.010 | 1.000 | 65900 | | 3.61(1.92-5.76) | | 1310 | |
| 46 Perfluorooctadecanoic acid | | | | | | | | | | M |
| 913.00 > 869.00 | 5.665 | 5.674 | -0.009 | 1.059 | 222417 | 0.9300 | Target=3.92 | 93.0 | 317 | |
| 913.00 > 169.00 | 5.665 | 5.674 | -0.009 | 1.059 | 62069 | | 3.58(1.96-5.88) | | 929 | M |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Report Date: 15-Mar-2021 17:46:21 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d

Injection Date: 12-Mar-2021 14:21:56 Instrument ID: LC812

Lims ID: 460-229152-A-2-B MS

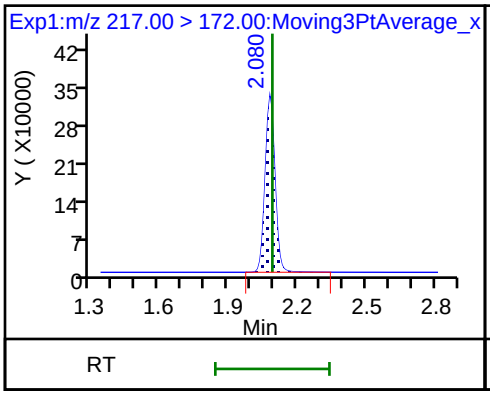
Client ID: HEX-MW12-030321

Operator ID: lc812tech ALS Bottle#: 18 Worklist Smp#: 18

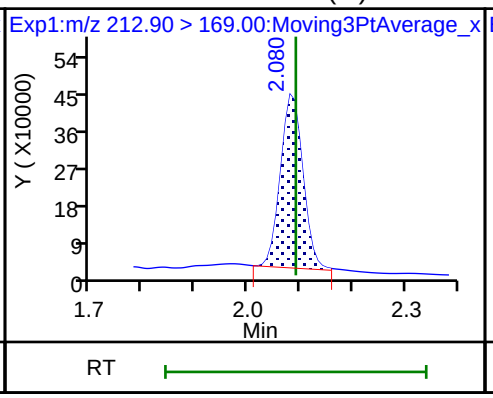
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

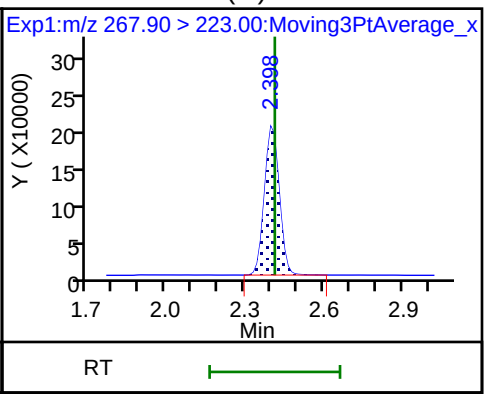
D 1 13C4 PFBA



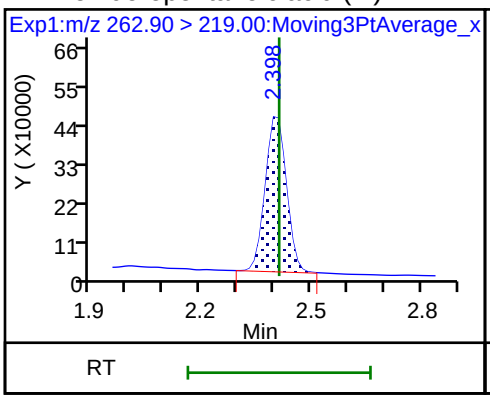

2 Perfluorobutanoic acid (M)



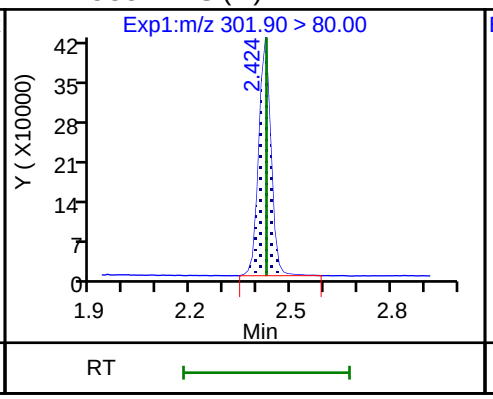

D 3 13C5 PFPeA (M)



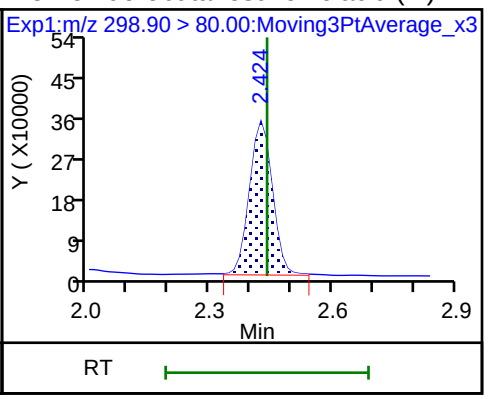

4 Perfluoropentanoic acid (M)



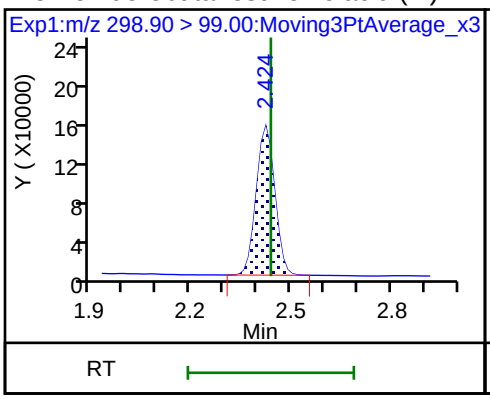

D 47 13C3 PFBS (M)



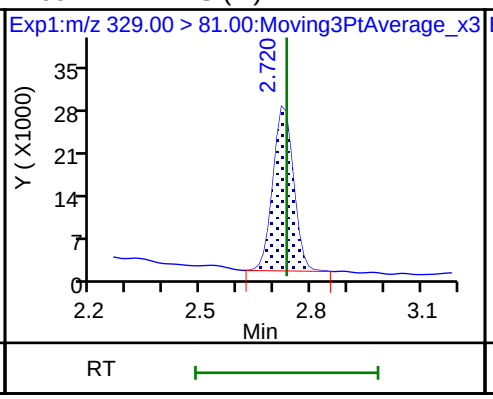

5 Perfluorobutanesulfonic acid (M)



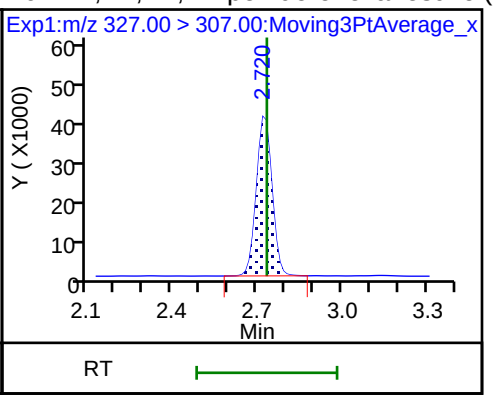

5 Perfluorobutanesulfonic acid (M)



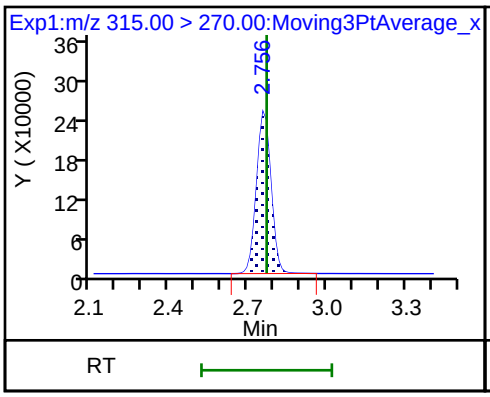

D 60 M2-4:2 FTS (M)



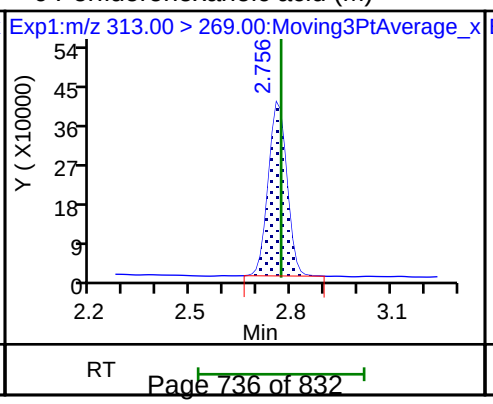

61 1H,1H,2H,2H-perfluorohexanesulfo (M)



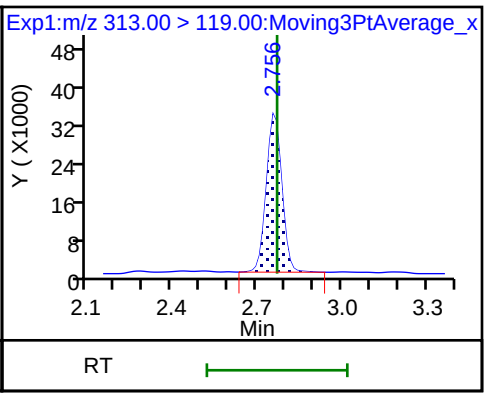

D 7 13C2 PFHxA



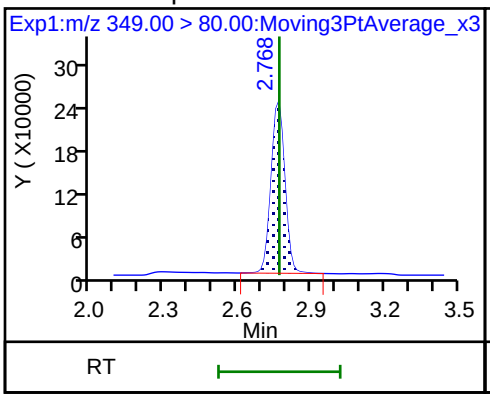

6 Perfluorohexanoic acid (M)



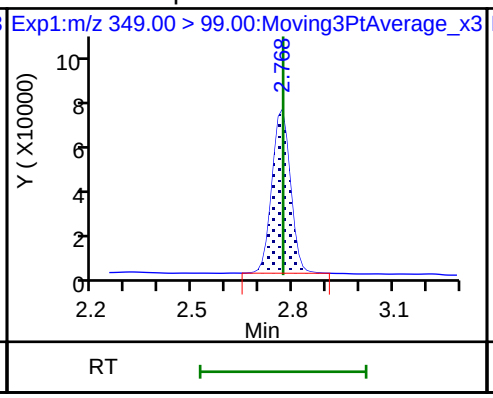

6 Perfluorohexanoic acid



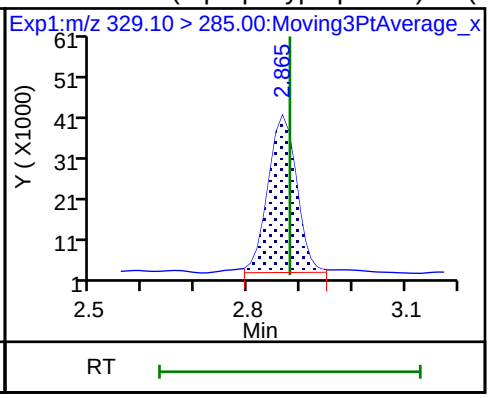
70 Perfluoropentanesulfonic acid



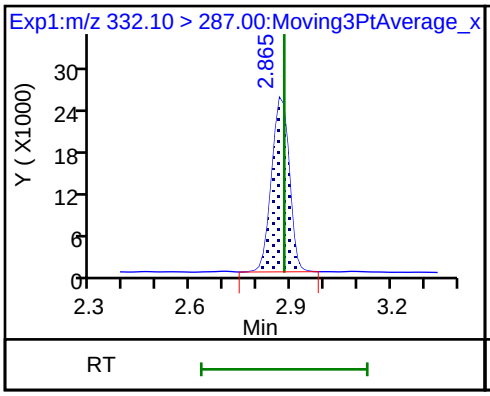

70 Perfluoropentanesulfonic acid



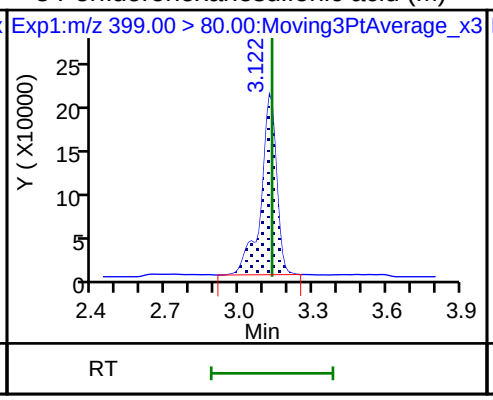

67 Perfluoro(2-propoxypropanoic) ac (M)



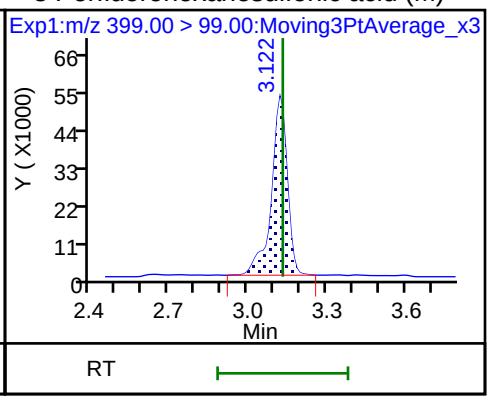

D 64 13C3 HFPO-DA



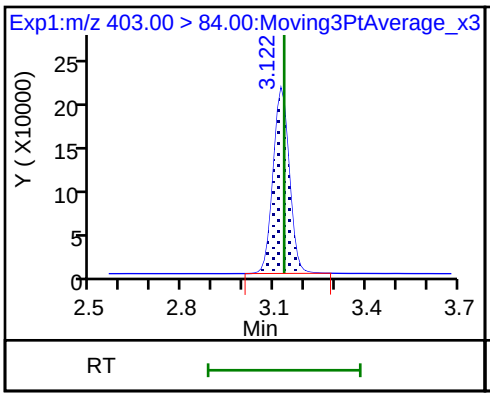

8 Perfluorohexanesulfonic acid (M)



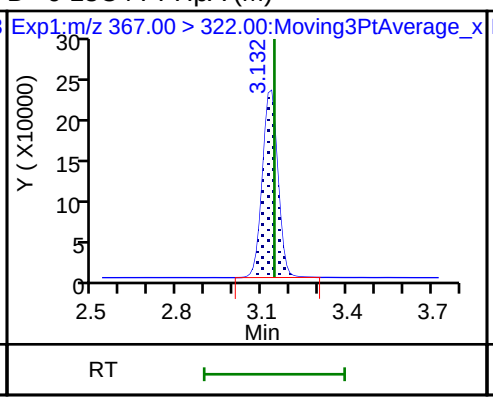

8 Perfluorohexanesulfonic acid (M)



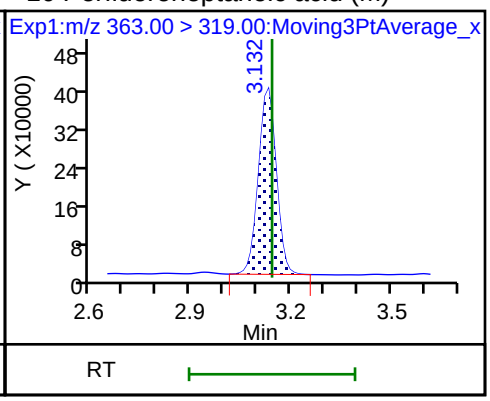

D 11 18O2 PFHxS



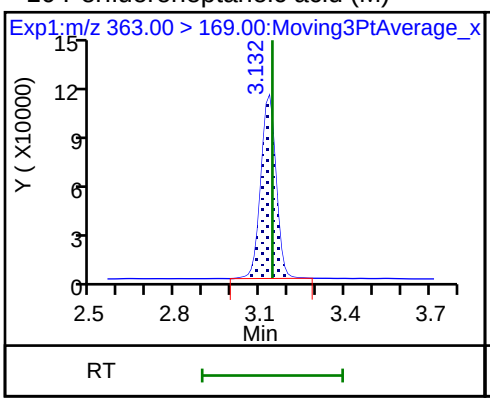

D 9 13C4 PFHpA (M)



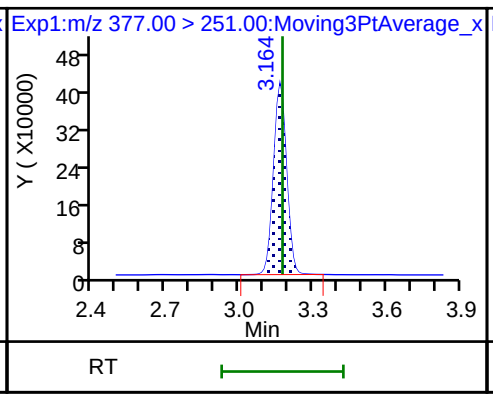

10 Perfluoroheptanoic acid (M)



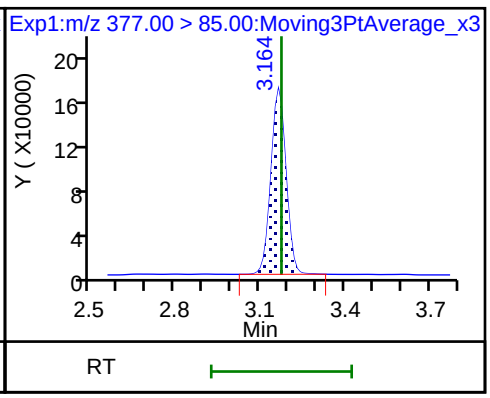

10 Perfluoroheptanoic acid (M)



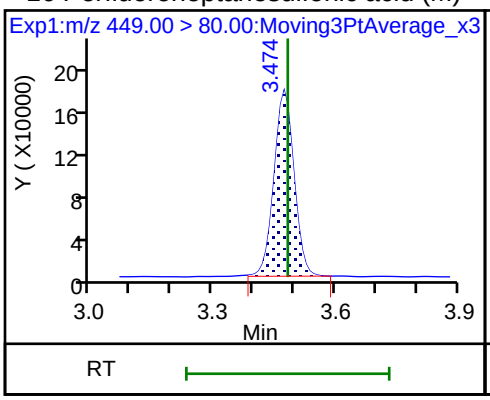

77 DONA



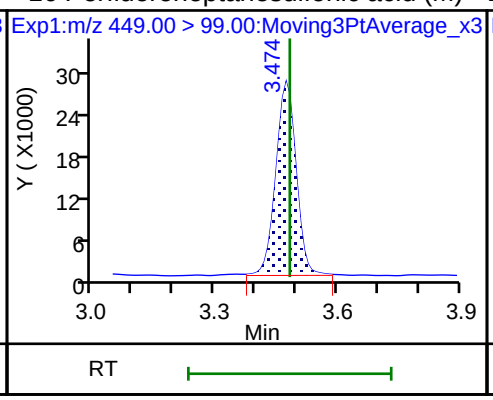

77 DONA



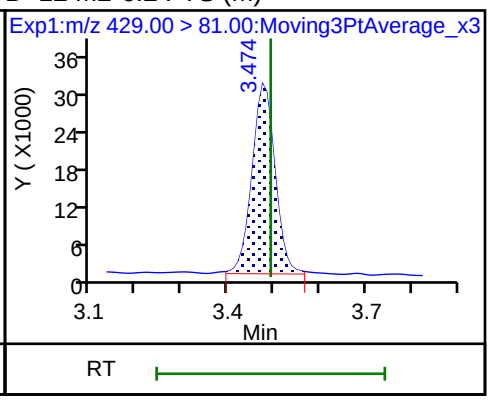
16 Perfluoroheptanesulfonic acid (M)



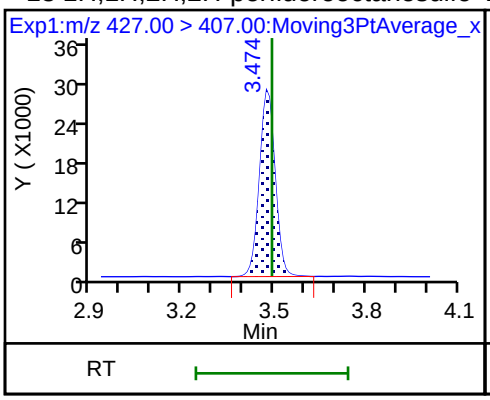

16 Perfluoroheptanesulfonic acid (M)



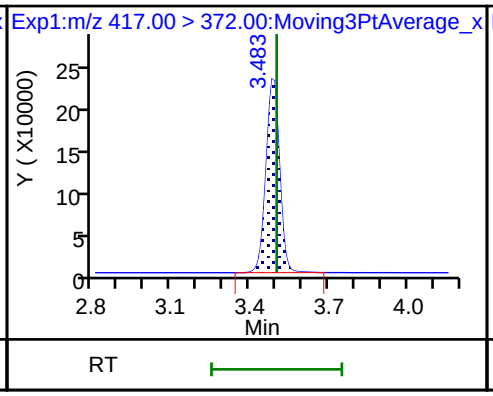

D 12 M2-6:2 FTS (M)



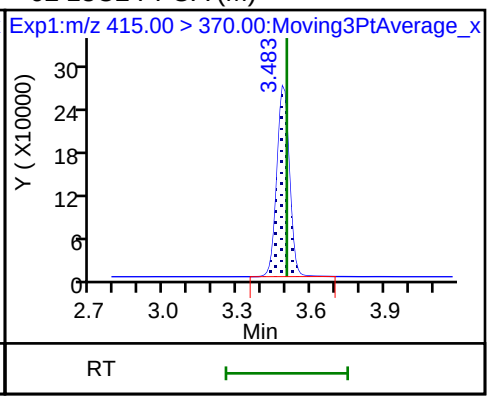

13 1H,1H,2H,2H-perfluorooctanesulfo



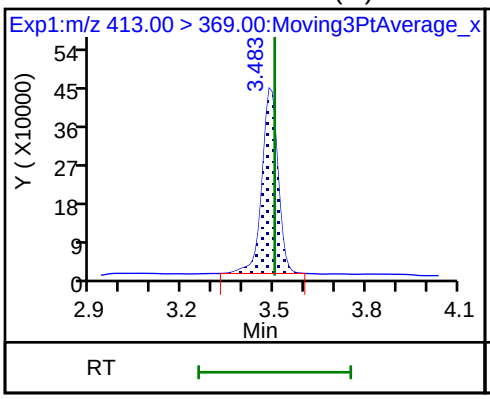

D 14 13C4 PFOA



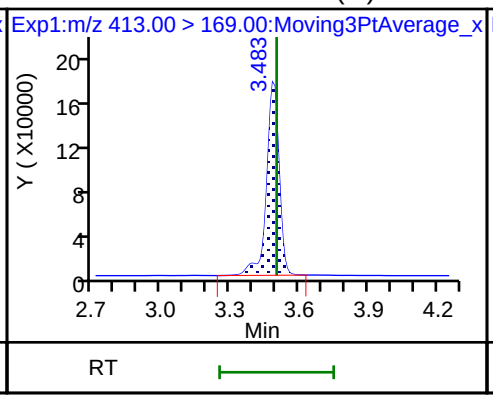

* 62 13C2 PFOA (M)



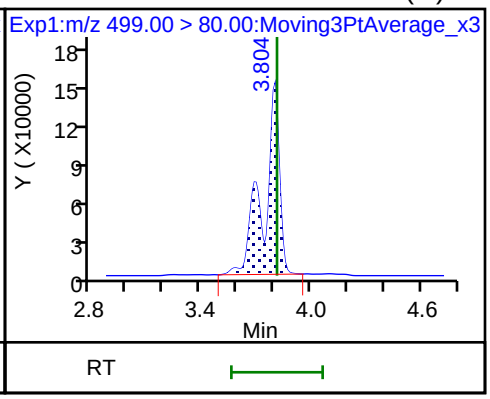

15 Perfluorooctanoic acid (M)



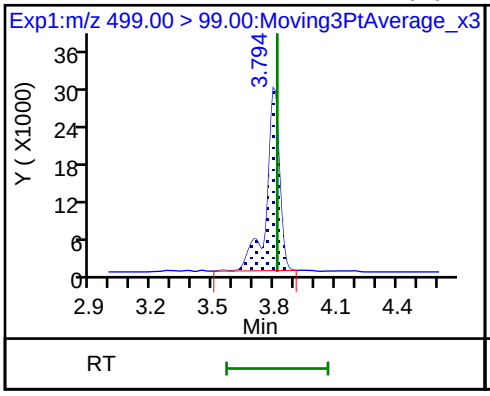

15 Perfluorooctanoic acid (M)



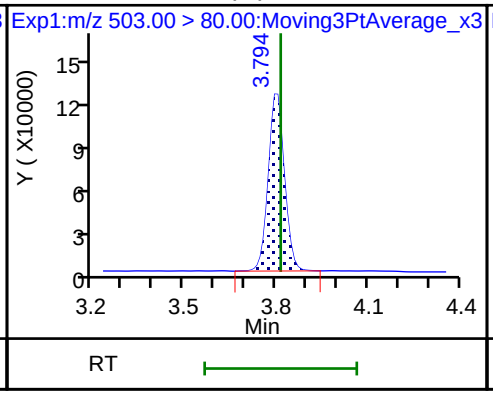

17 Perfluorooctanesulfonic acid (M)



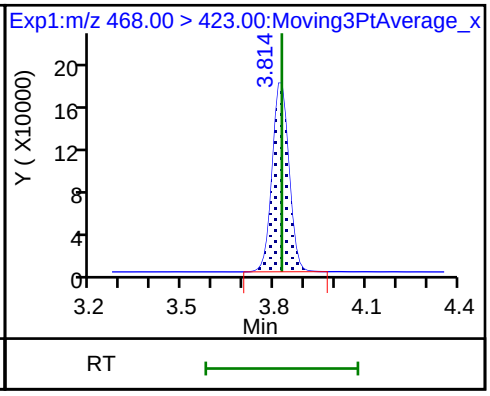

17 Perfluorooctanesulfonic acid (M)



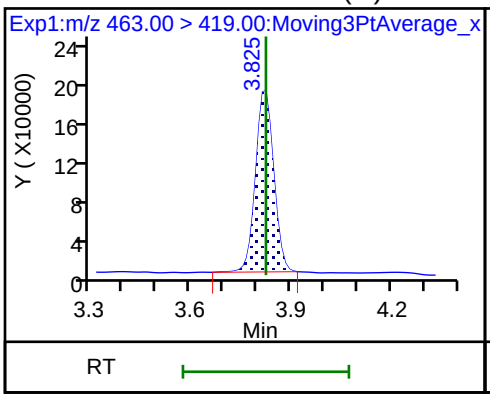

D 18 13C4 PFOS (M)



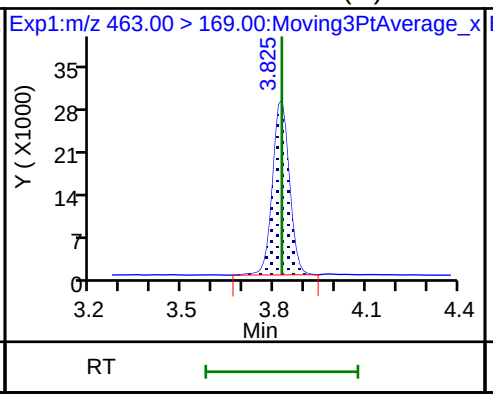

D 19 13C5 PFNA



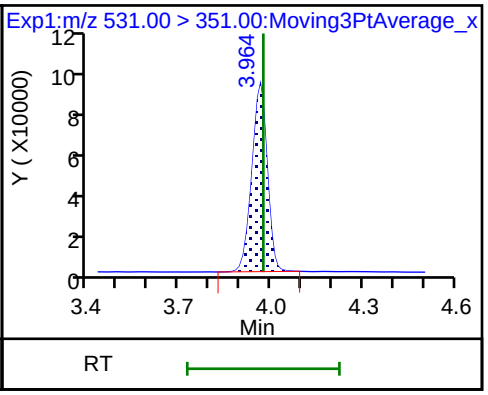
20 Perfluorononanoic acid (M)



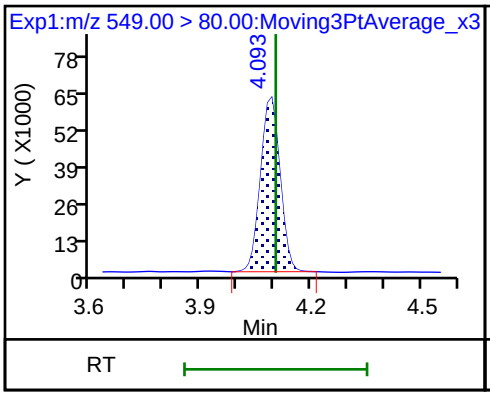

20 Perfluorononanoic acid (M)



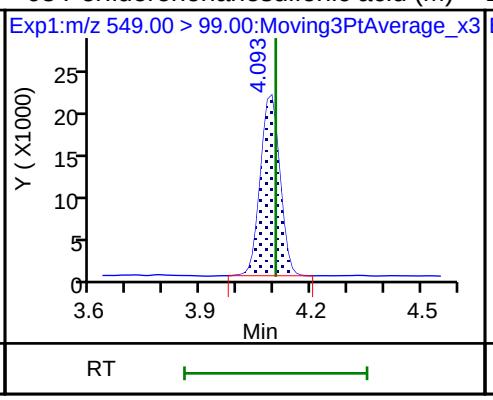

69 9-Chlorohexadecafluoro-3-oxanona



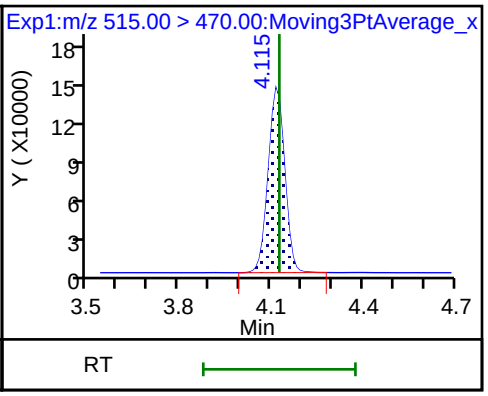

68 Perfluorononanesulfonic acid



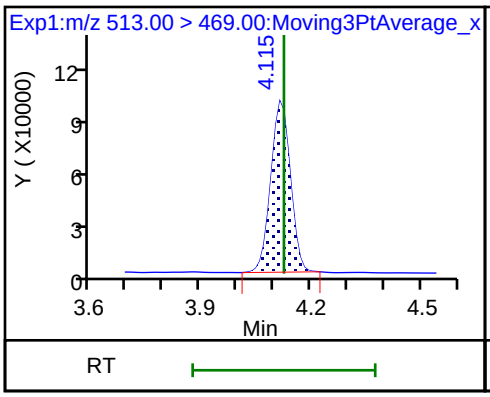

68 Perfluorononanesulfonic acid (M)



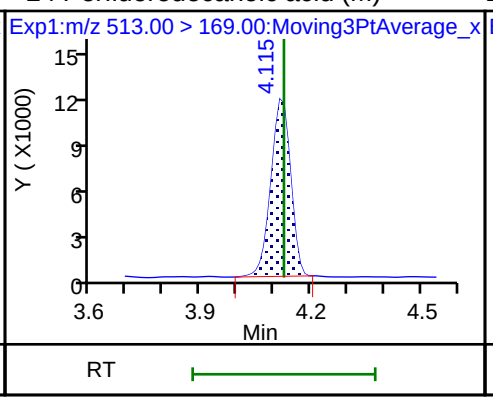

D 23 13C2 PFDA



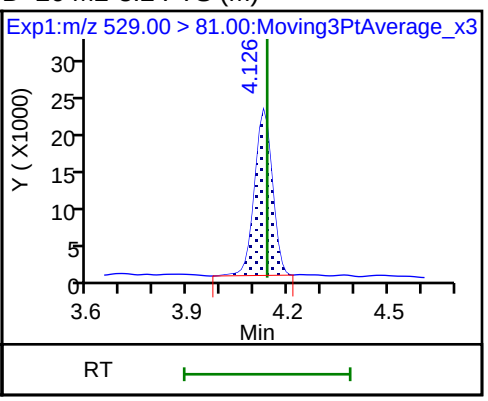

24 Perfluorodecanoic acid



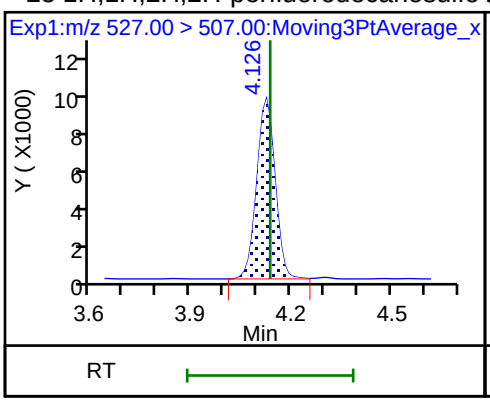

24 Perfluorodecanoic acid (M)



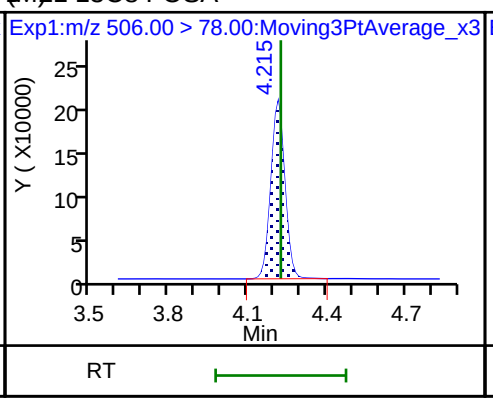

D 26 M2-8:2 FTS (M)



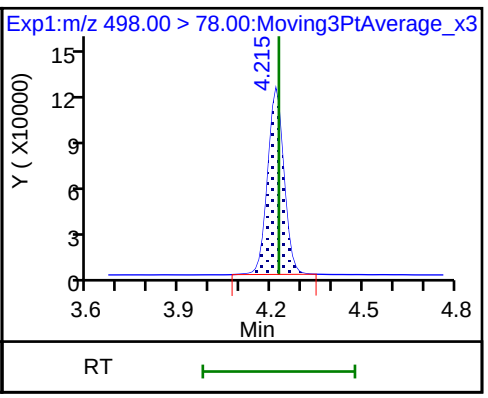

25 1H,1H,2H,2H-perfluorodecanesulfo (M)



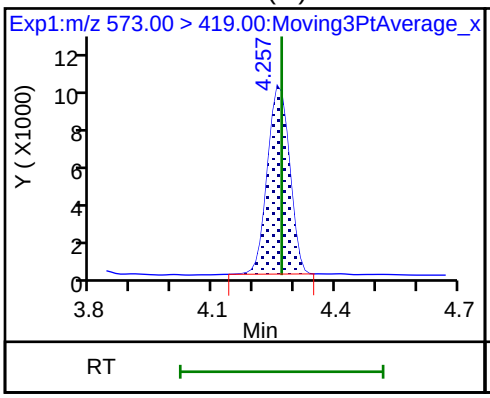

D 21 13C8 FOSA



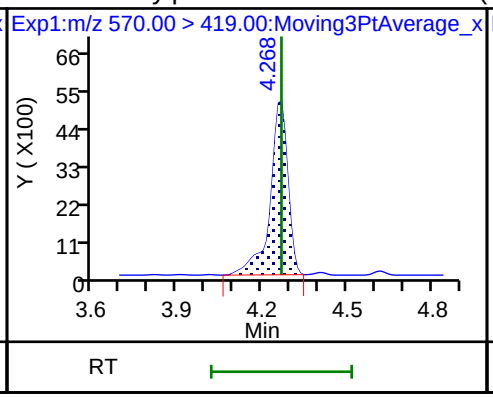

22 Perfluorooctanesulfonamide



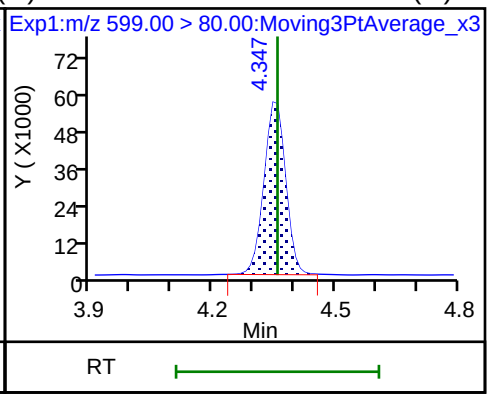
D 27 d3-NMeFOSAA (M)



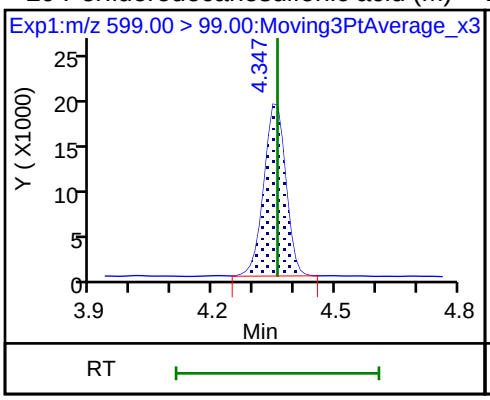

28 N-methylperfluorooctanesulfonami (M)



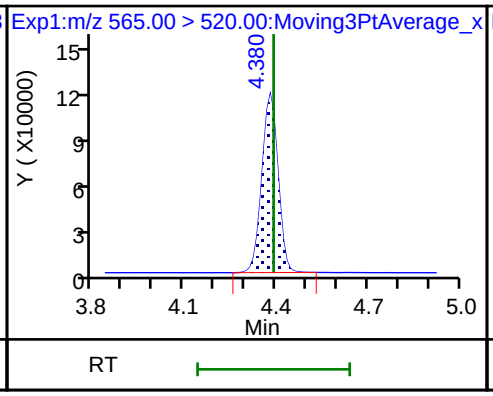

29 Perfluorodecanesulfonic acid (M)



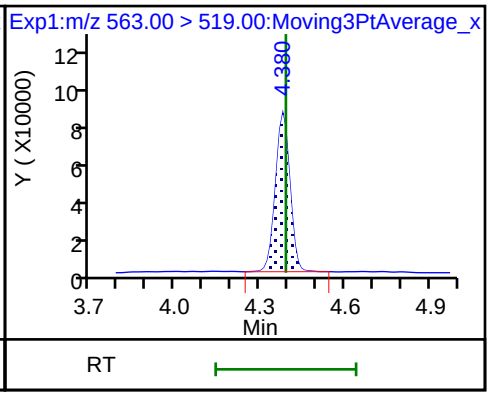

29 Perfluorodecanesulfonic acid (M)



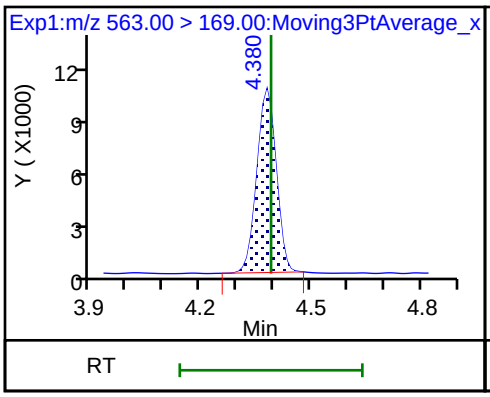

D 30 13C2 PFUnA



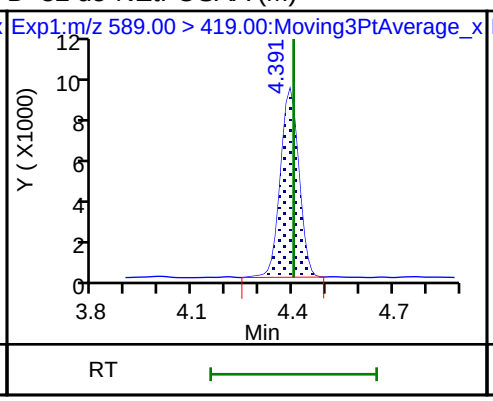

31 Perfluoroundecanoic acid



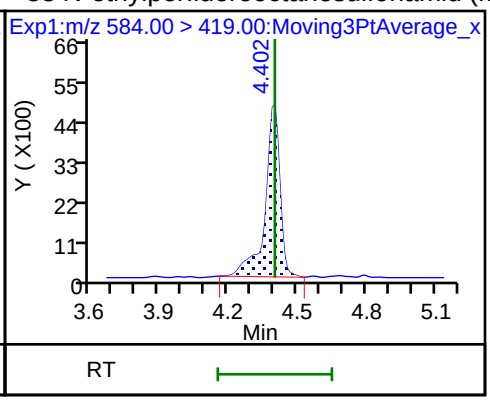

31 Perfluoroundecanoic acid



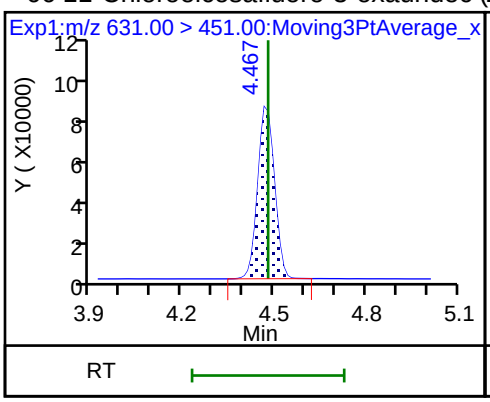

D 32 d5-NEtFOSAA (M)



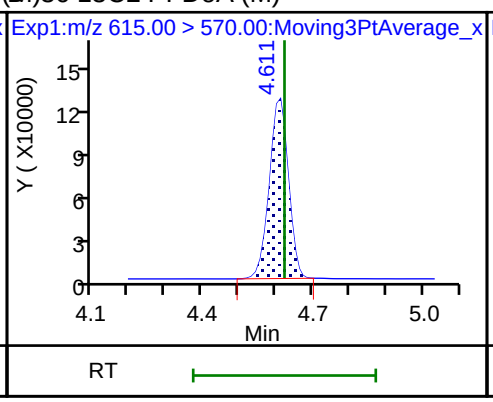

33 N-ethylperfluorooctanesulfonamid (M)



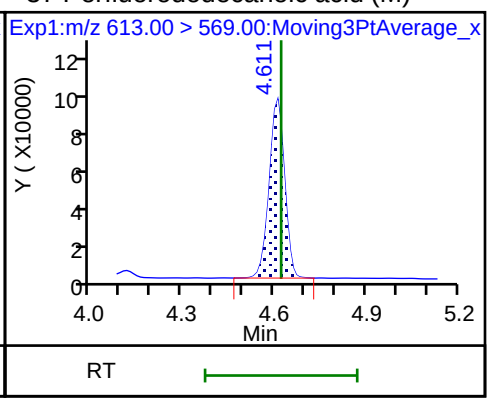

66 11-Chloroeicosafluoro-3-oxaundec (M)



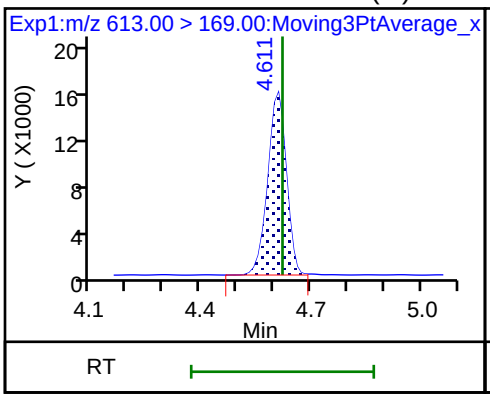

D 36 13C2 PFDoA (M)



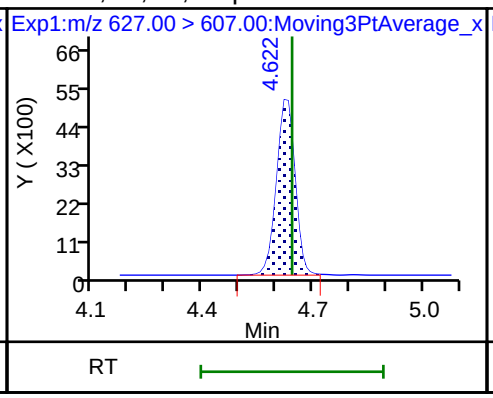

37 Perfluorododecanoic acid (M)



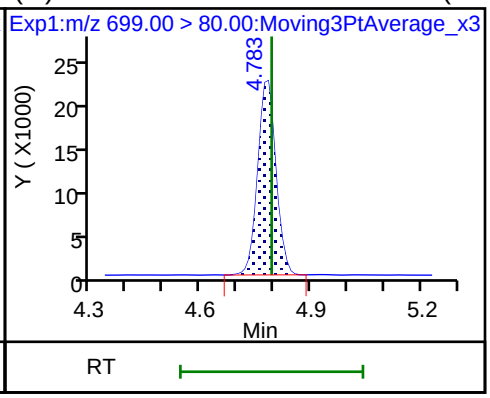
37 Perfluorododecanoic acid (M)



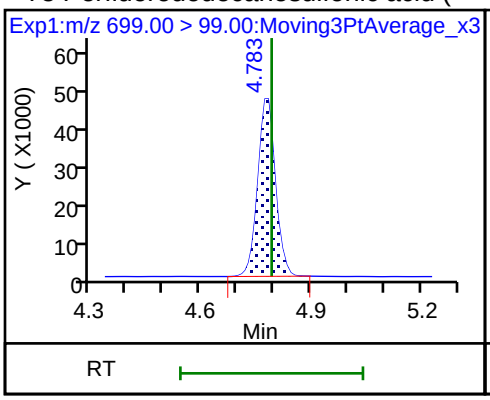

74 1H,1H,2H,2H-perfluorododecanesul (M)



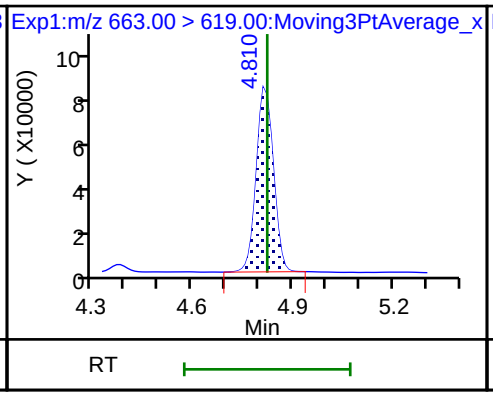

75 Perfluorododecanesulfonic acid (



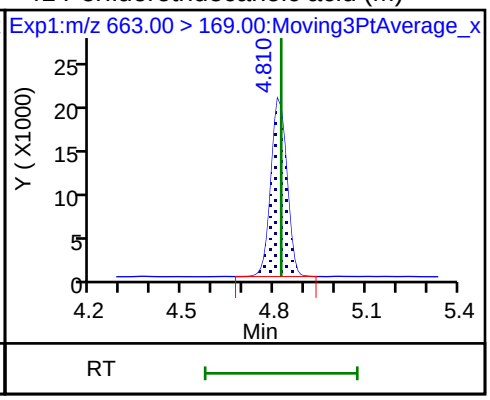

75 Perfluorododecanesulfonic acid (



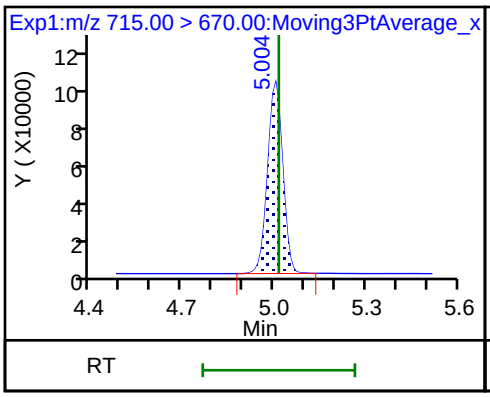

41 Perfluorotridecanoic acid



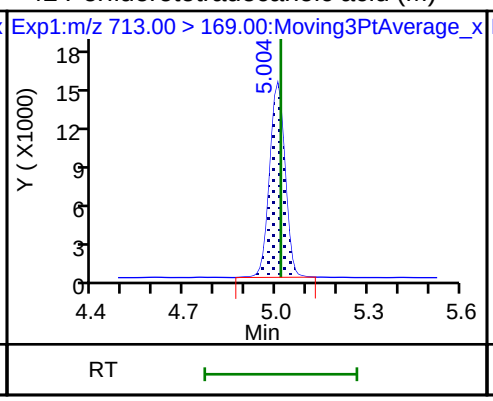

41 Perfluorotridecanoic acid (M)



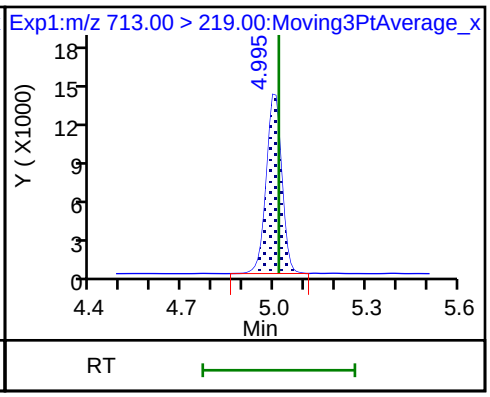

D 43 13C2 PFTeDA



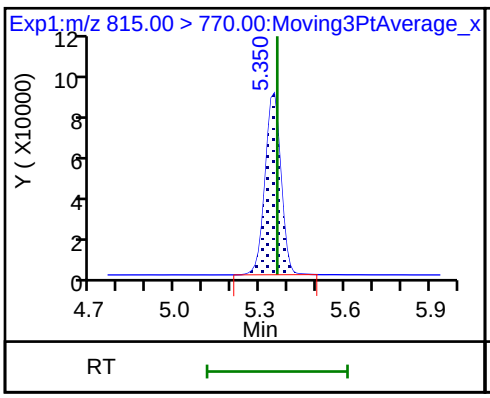

42 Perfluorotetradecanoic acid (M)



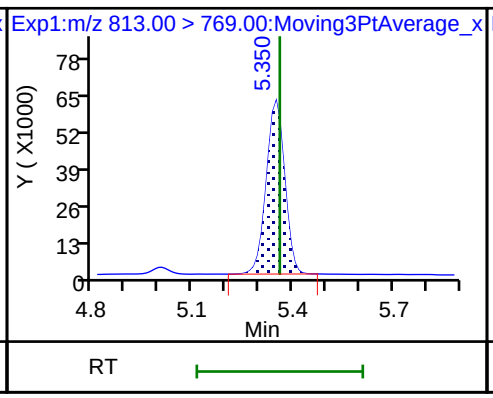

42 Perfluorotetradecanoic acid



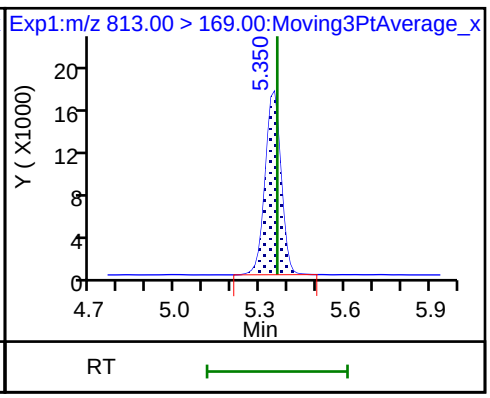

D 44 13C2 PFHxDA



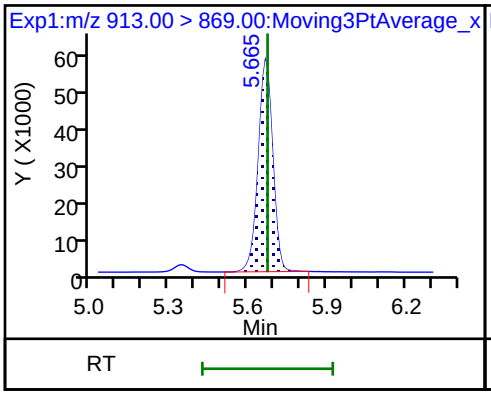

45 Perfluorohexadecanoic acid



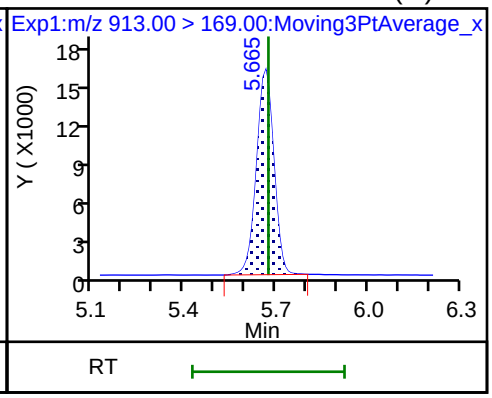

45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid




46 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

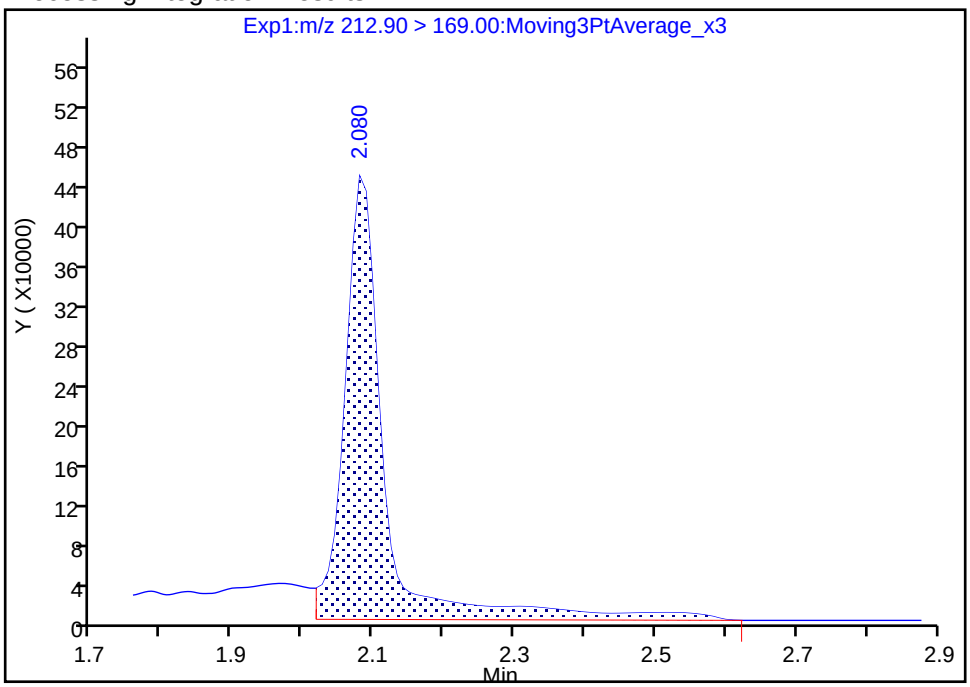
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

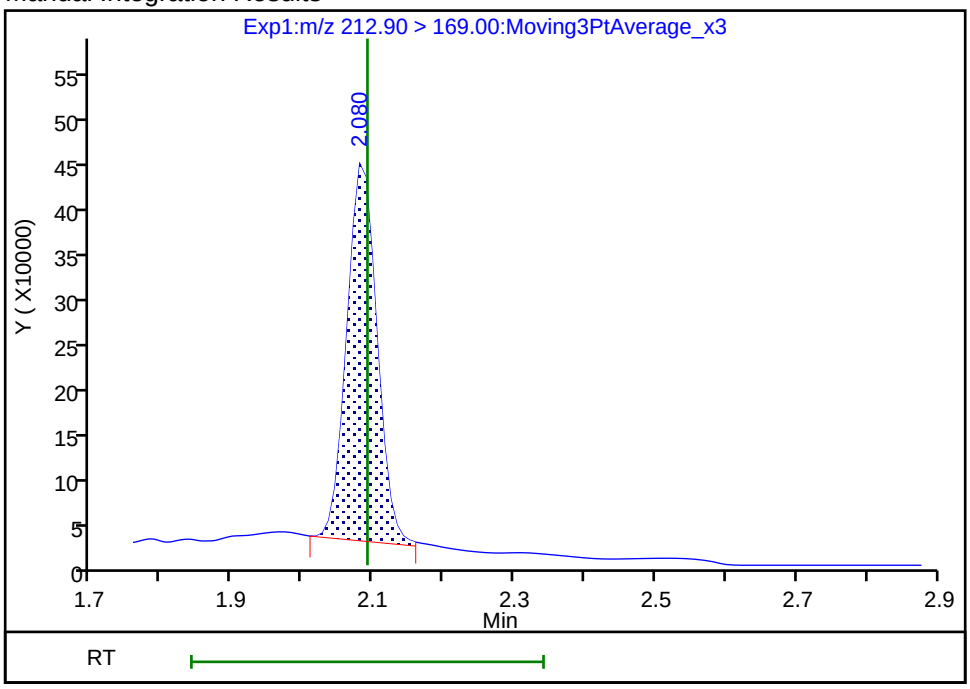
Processing Integration Results

RT: 2.08
Area: 1736787
Amount: 2.237981
Amount Units: ng/ml




Manual Integration Results

RT: 2.08
Area: 1237457
Amount: 1.594557
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:27:06

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

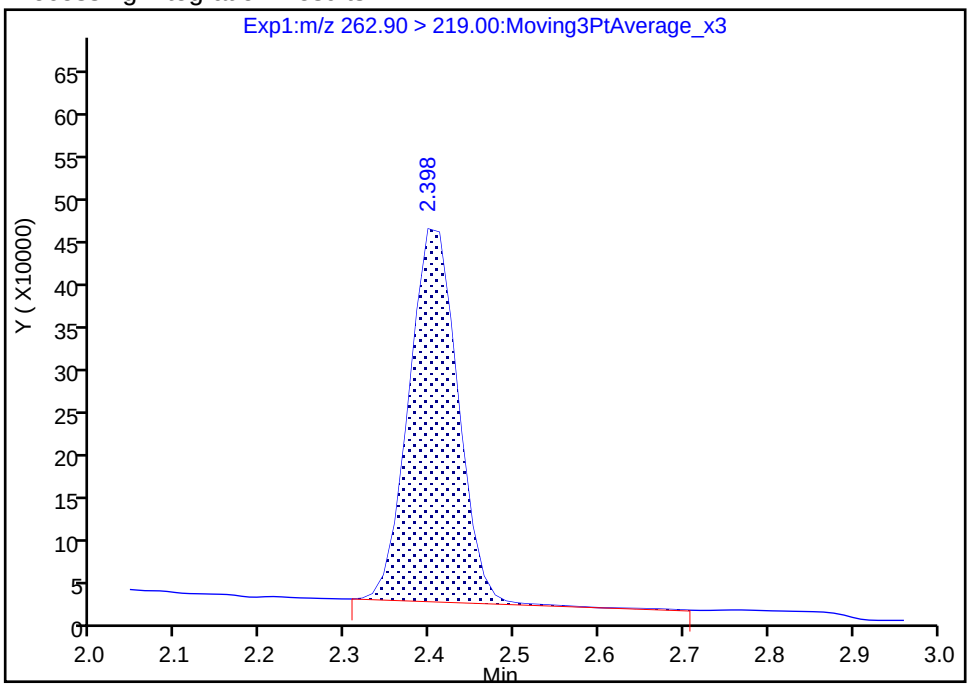
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

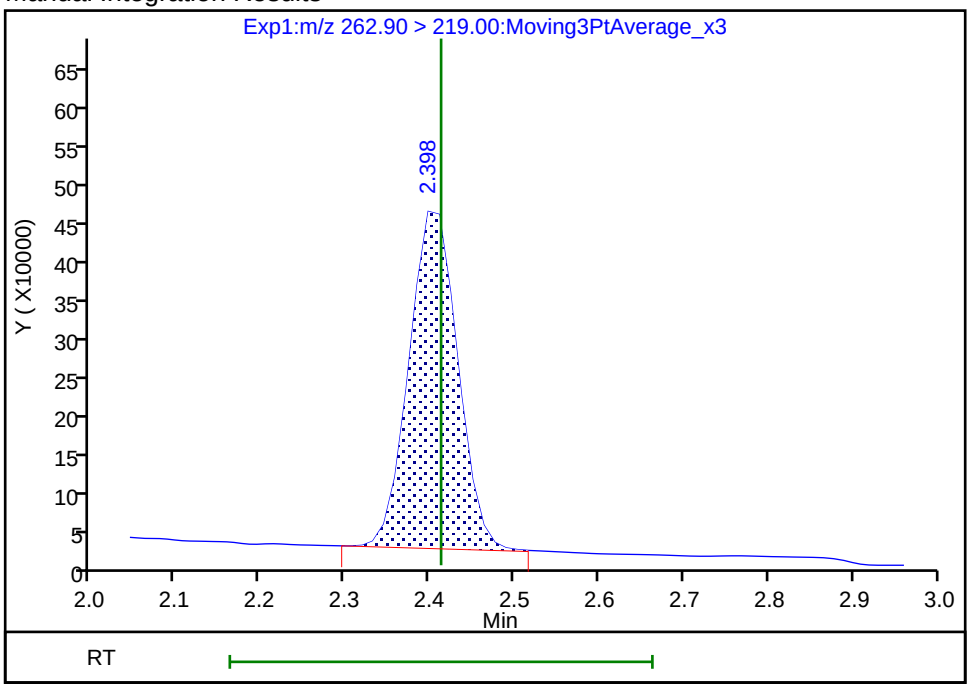
Processing Integration Results

RT: 2.40
Area: 1753362
Amount: 2.458455
Amount Units: ng/ml




Manual Integration Results

RT: 2.40
Area: 1745851
Amount: 2.447924
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:27:23

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

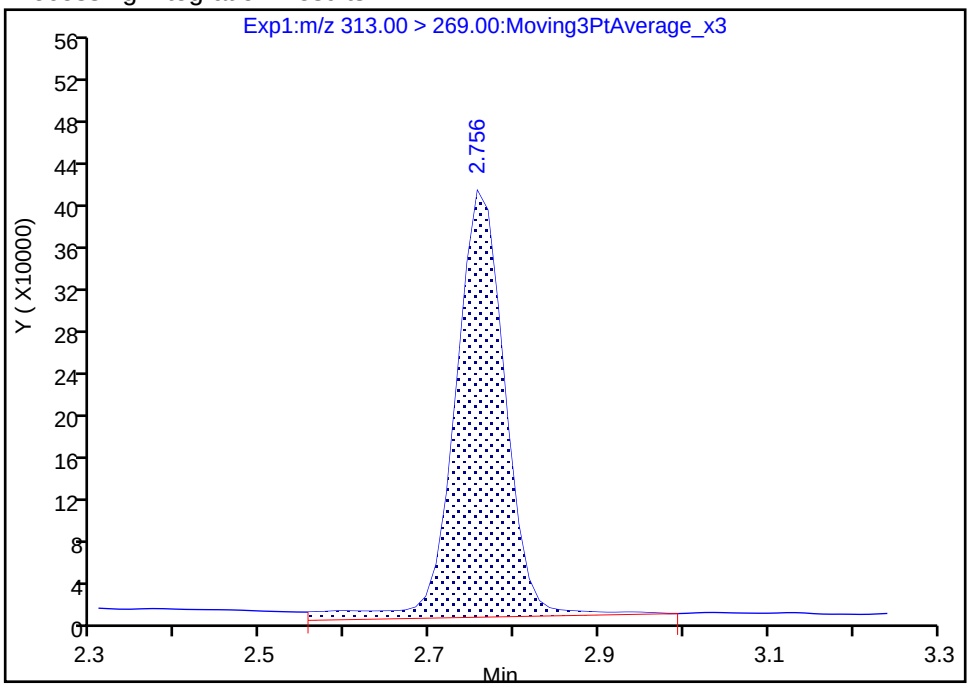
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

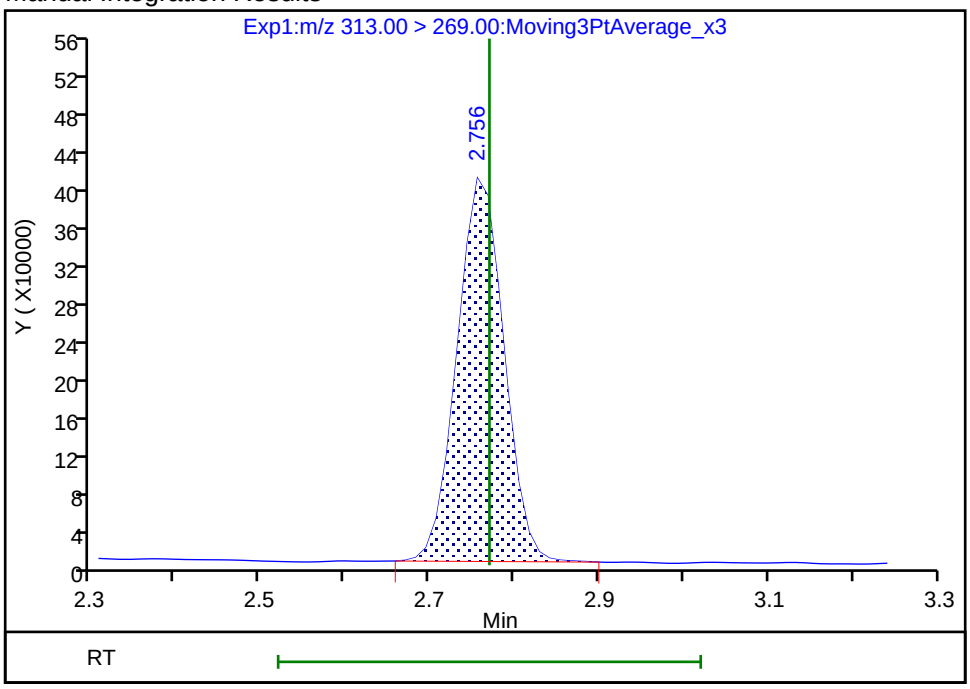
Processing Integration Results

RT: 2.76
Area: 1654431
Amount: 2.023717
Amount Units: ng/ml




Manual Integration Results

RT: 2.76
Area: 1525718
Amount: 1.866274
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:28:50

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

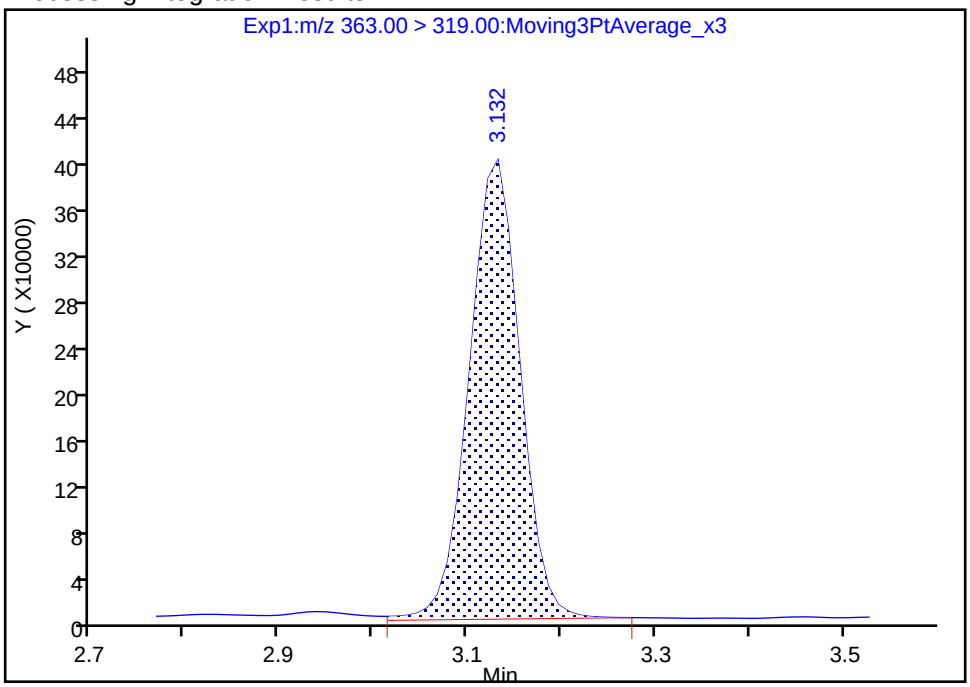
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

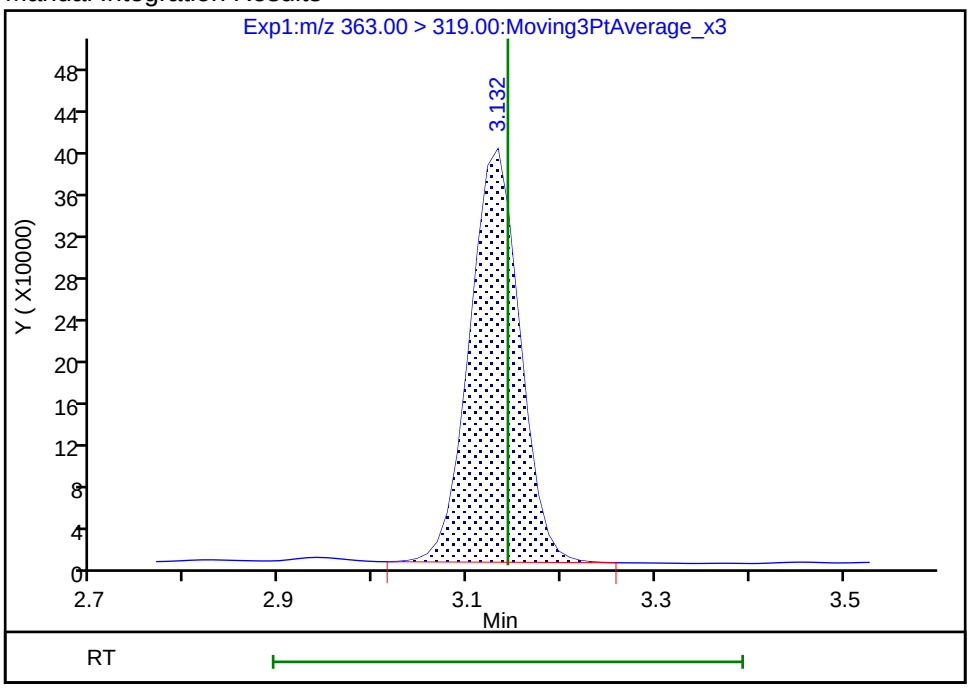
Processing Integration Results

RT: 3.13
Area: 1475239
Amount: 1.945648
Amount Units: ng/ml




Manual Integration Results

RT: 3.13
Area: 1448196
Amount: 1.909982
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:31:50

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

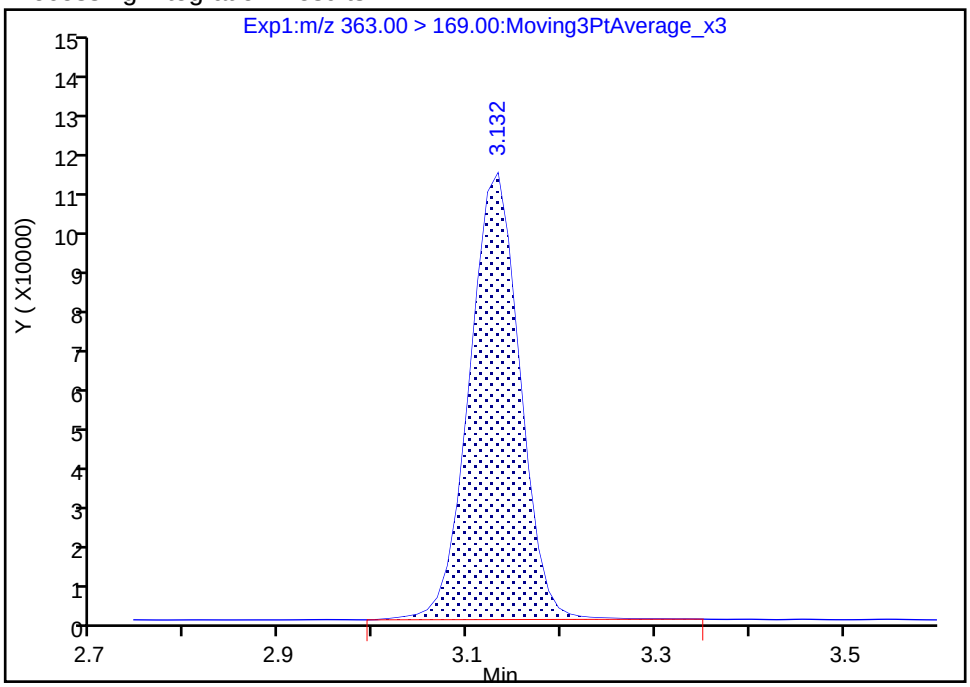
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|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

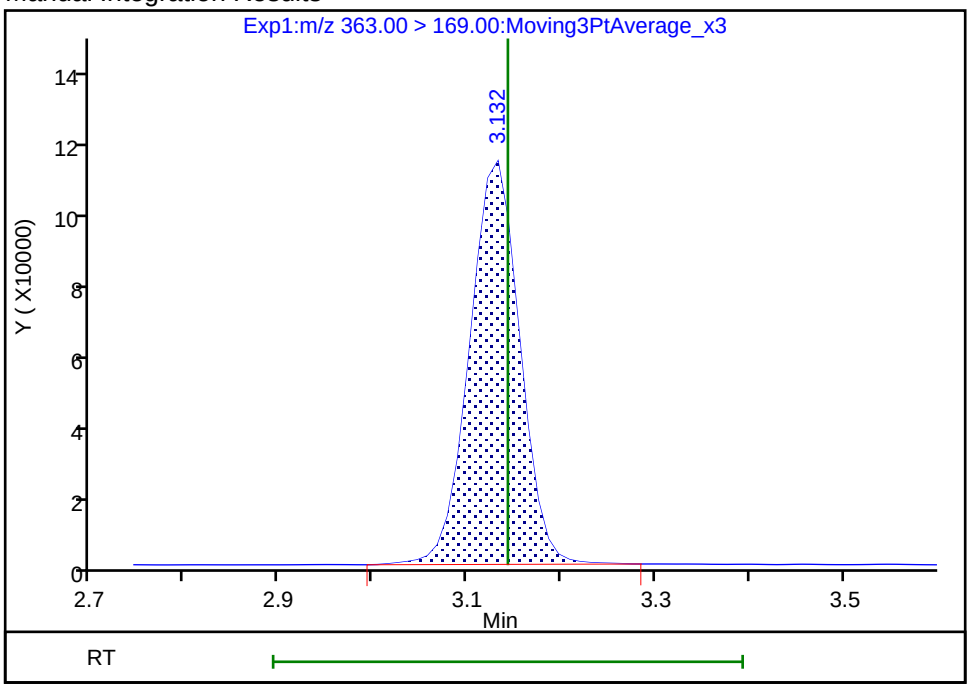
Processing Integration Results

RT: 3.13
Area: 408560
Amount: 1.945648
Amount Units: ng/ml




Manual Integration Results

RT: 3.13
Area: 407768
Amount: 1.909982
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:32:02

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

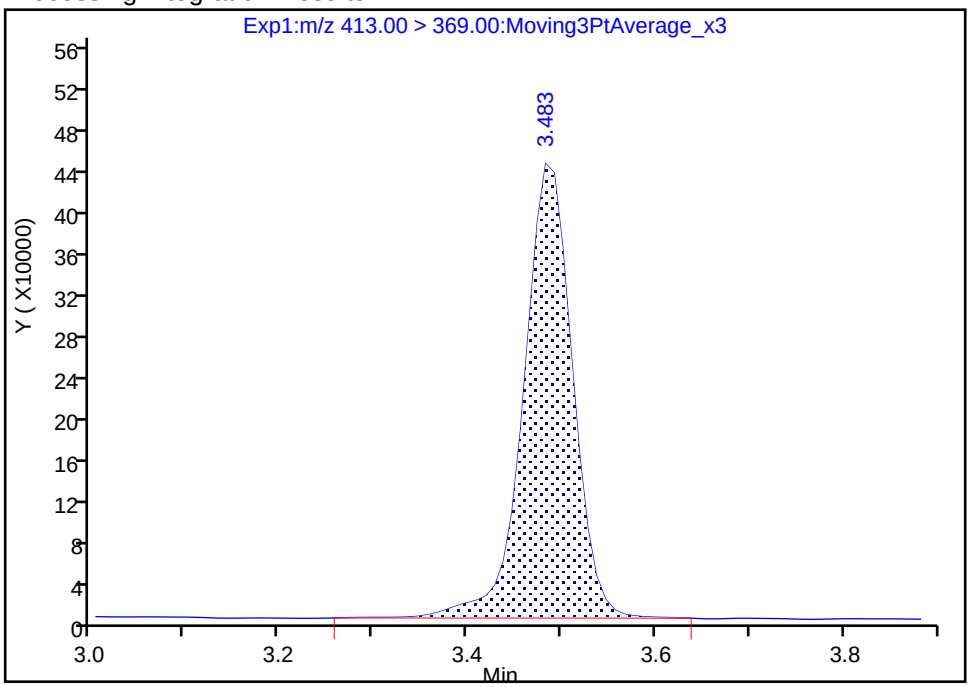
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| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

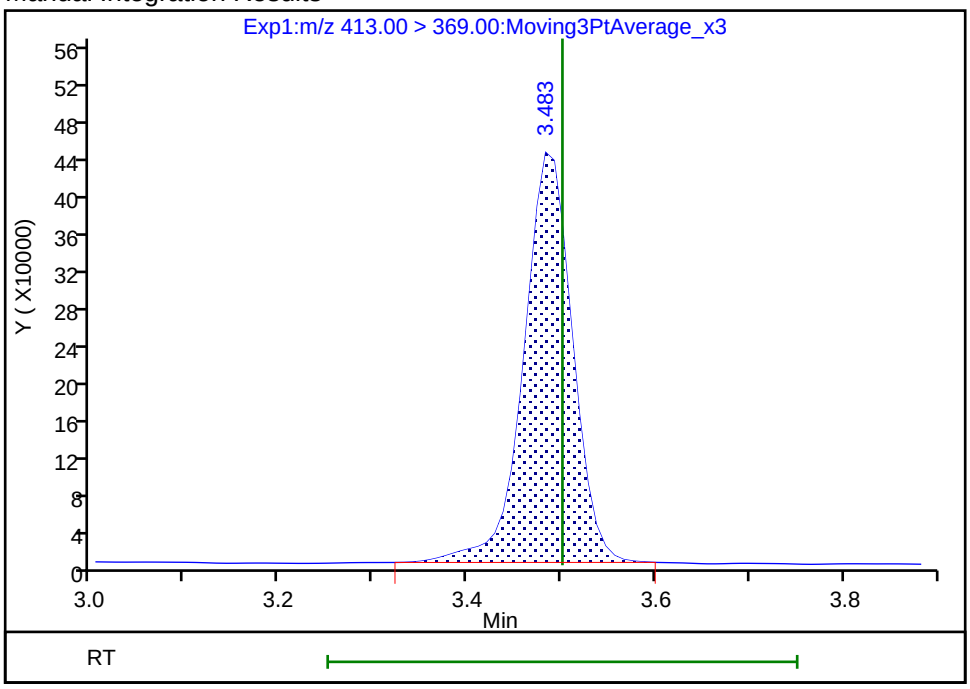
Processing Integration Results

RT: 3.48
Area: 1578461
Amount: 2.179974
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 1562646
Amount: 2.158132
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:33:52
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

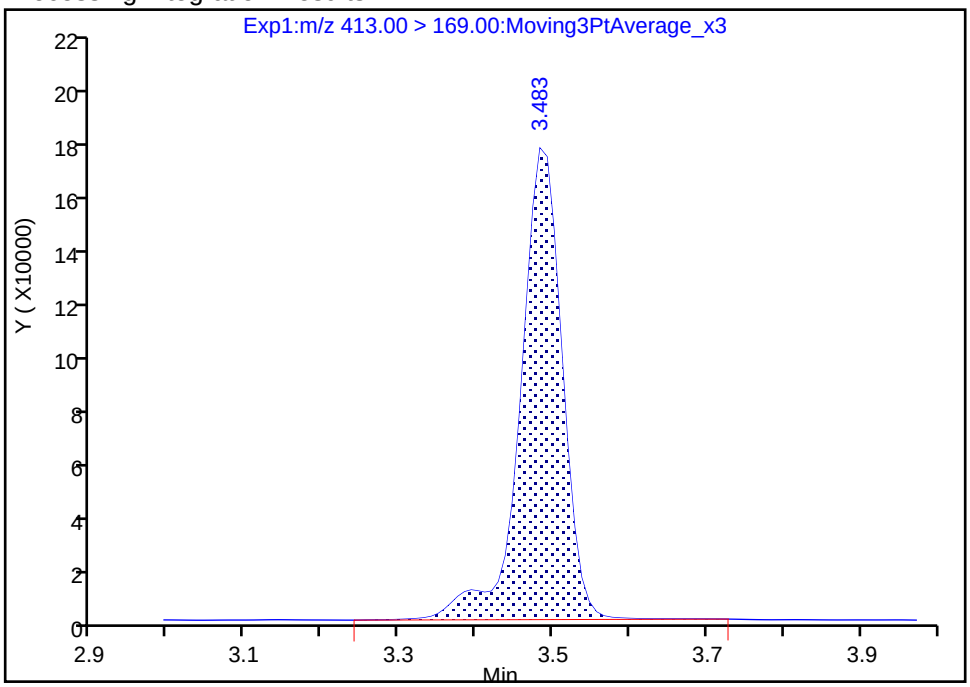
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

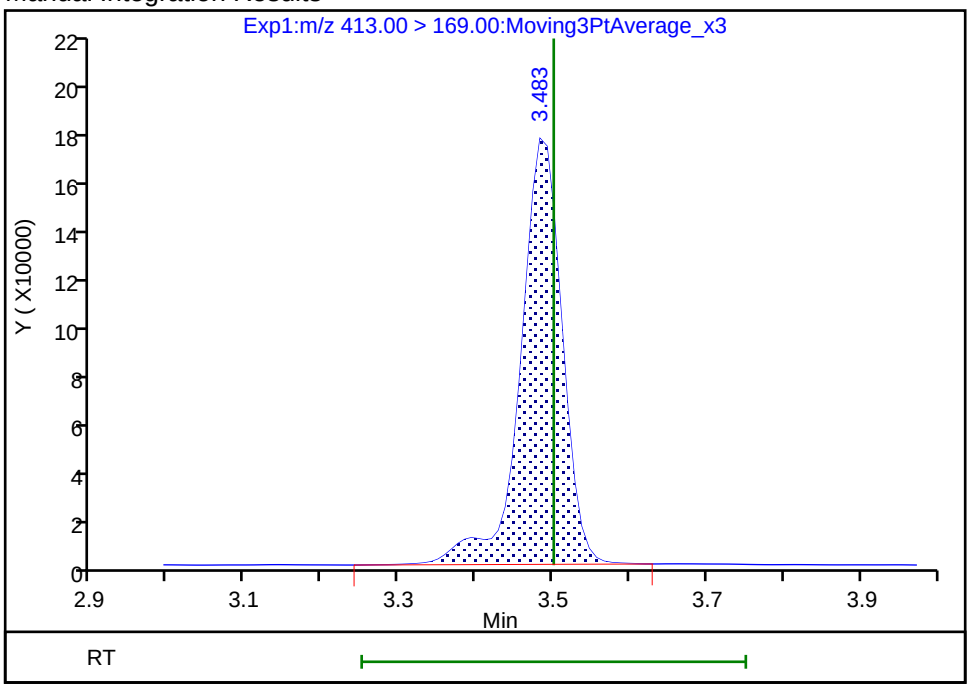
Processing Integration Results

RT: 3.48
Area: 645005
Amount: 2.179974
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 642954
Amount: 2.158132
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:34:09

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

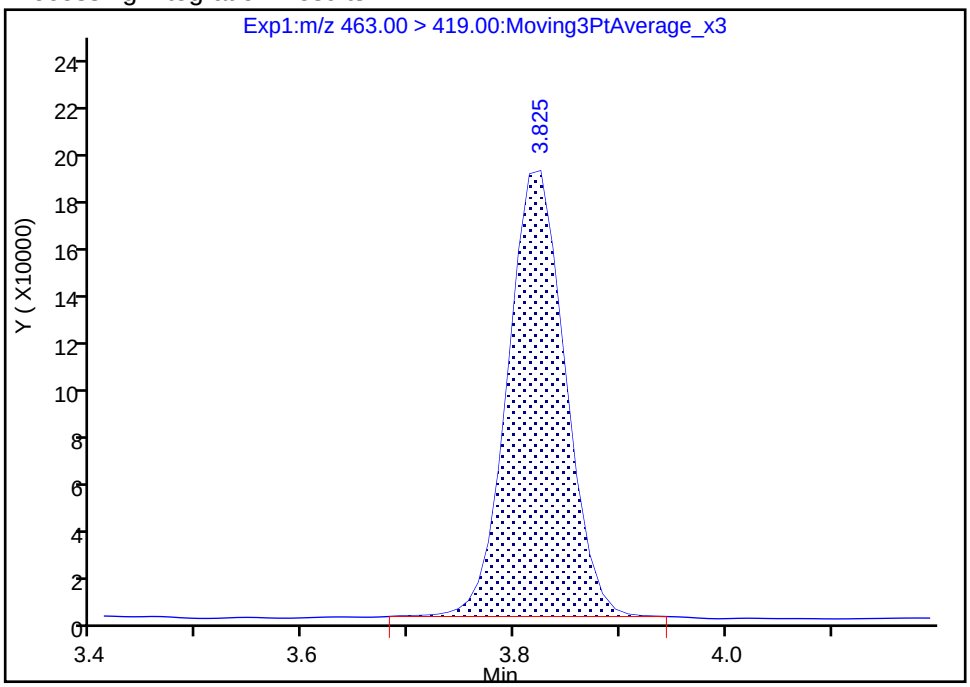
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

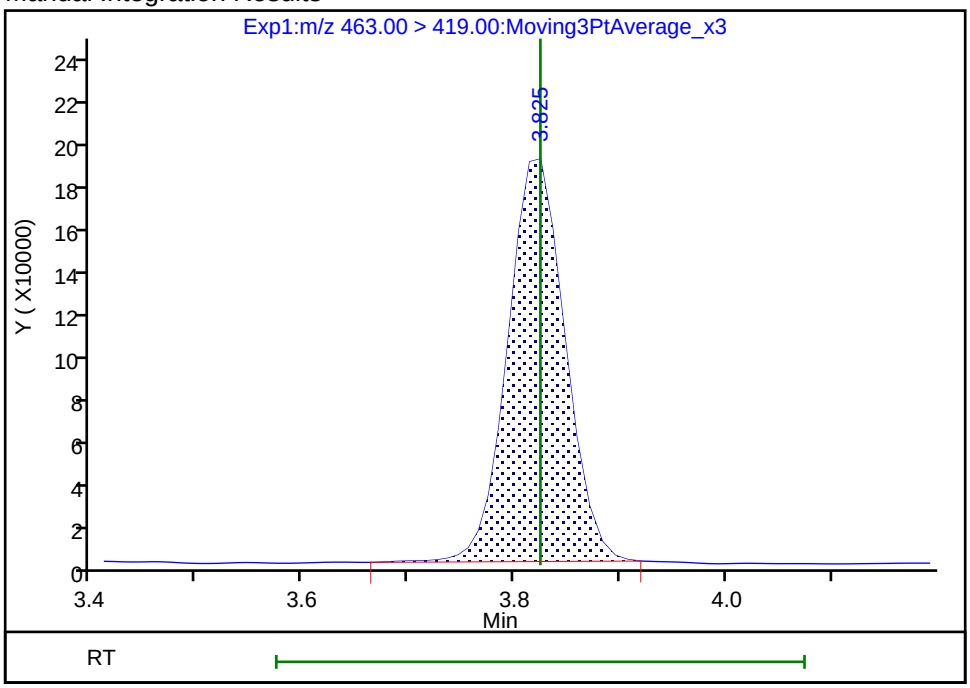
Processing Integration Results

RT: 3.82
Area: 701647
Amount: 1.168531
Amount Units: ng/ml




Manual Integration Results

RT: 3.82
Area: 700929
Amount: 1.167335
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:35:32

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

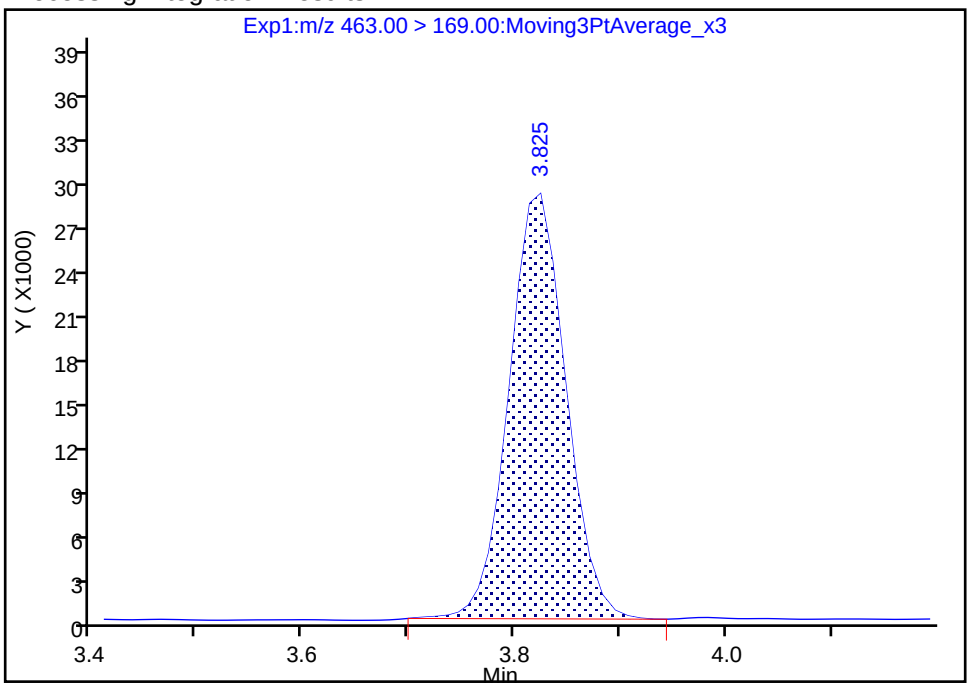
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| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

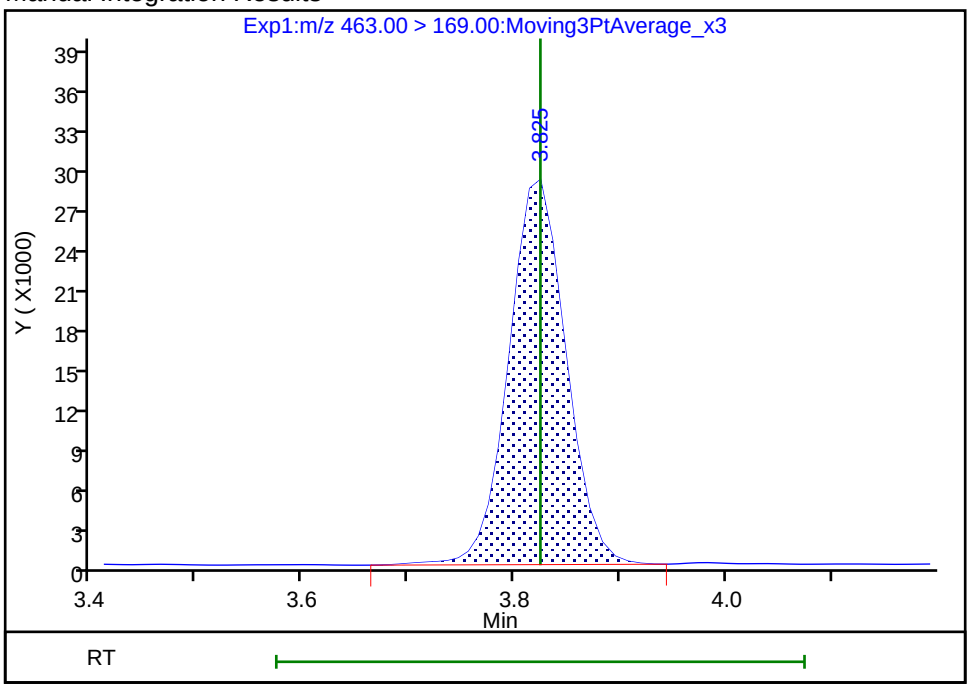
Processing Integration Results

RT: 3.82
Area: 107381
Amount: 1.168531
Amount Units: ng/ml




Manual Integration Results

RT: 3.82
Area: 108303
Amount: 1.167335
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:35:49

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

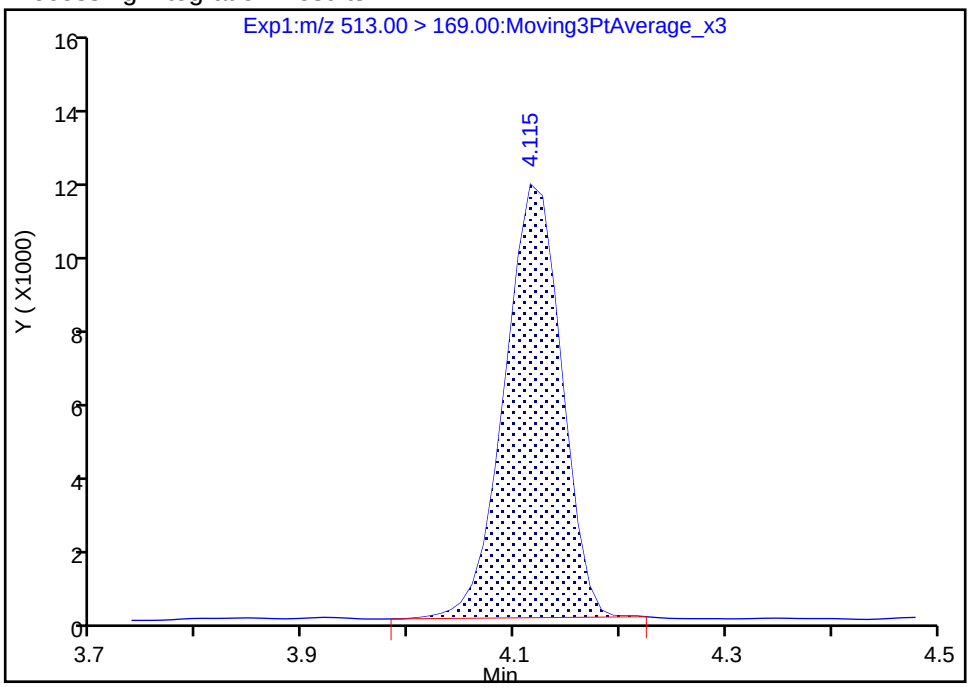
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| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

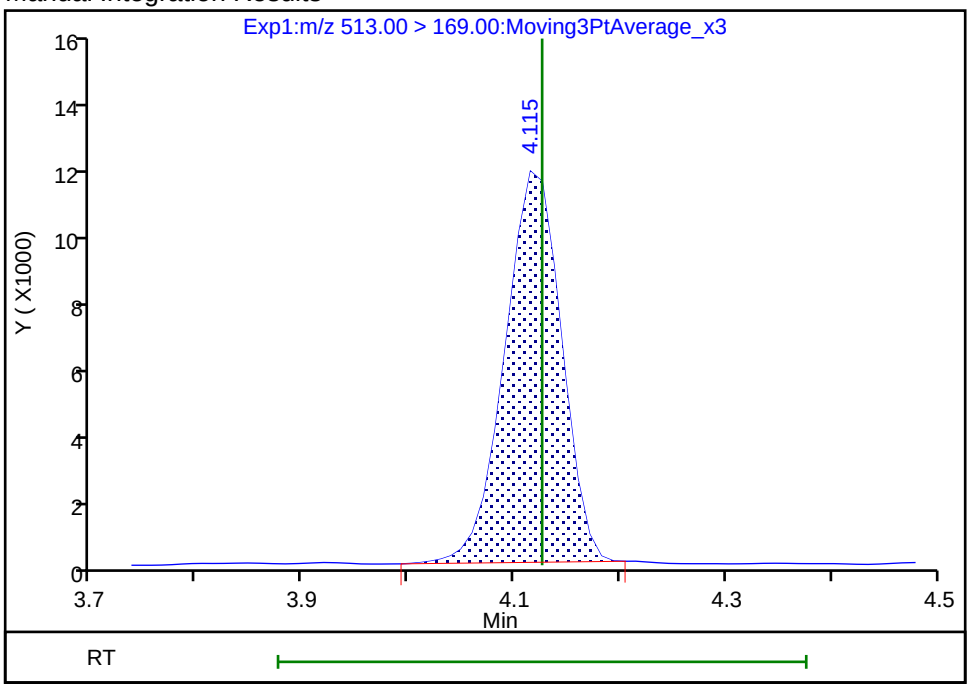
Processing Integration Results

RT: 4.12
Area: 43683
Amount: 0.825976
Amount Units: ng/ml




Manual Integration Results

RT: 4.12
Area: 43497
Amount: 0.825976
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:36:24

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

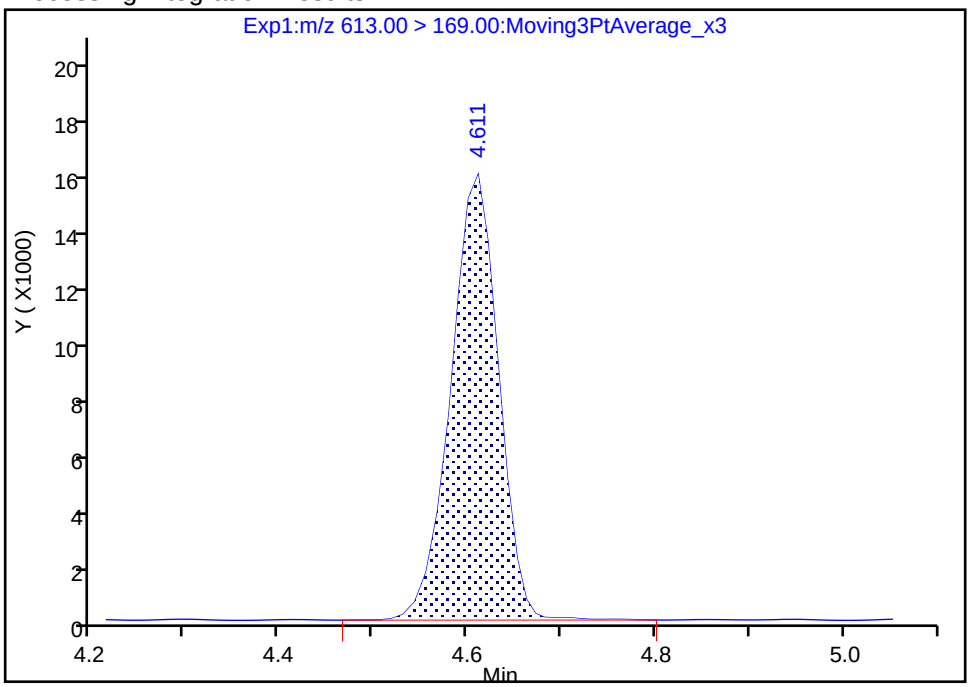
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| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

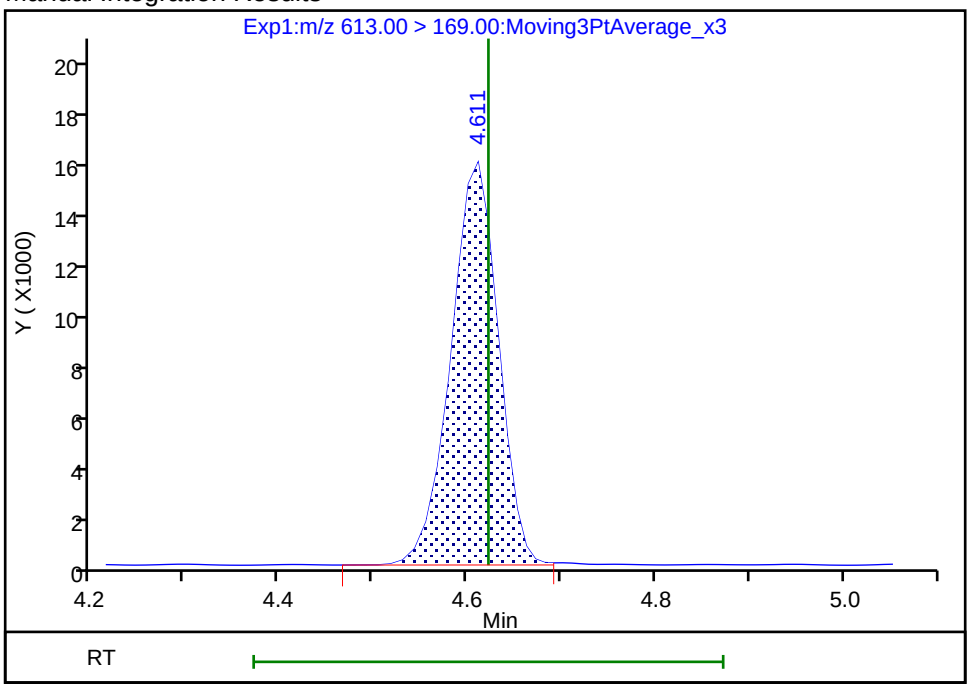
Processing Integration Results

RT: 4.61
Area: 54411
Amount: 0.831840
Amount Units: ng/ml




Manual Integration Results

RT: 4.61
Area: 54197
Amount: 0.830141
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:39:46

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

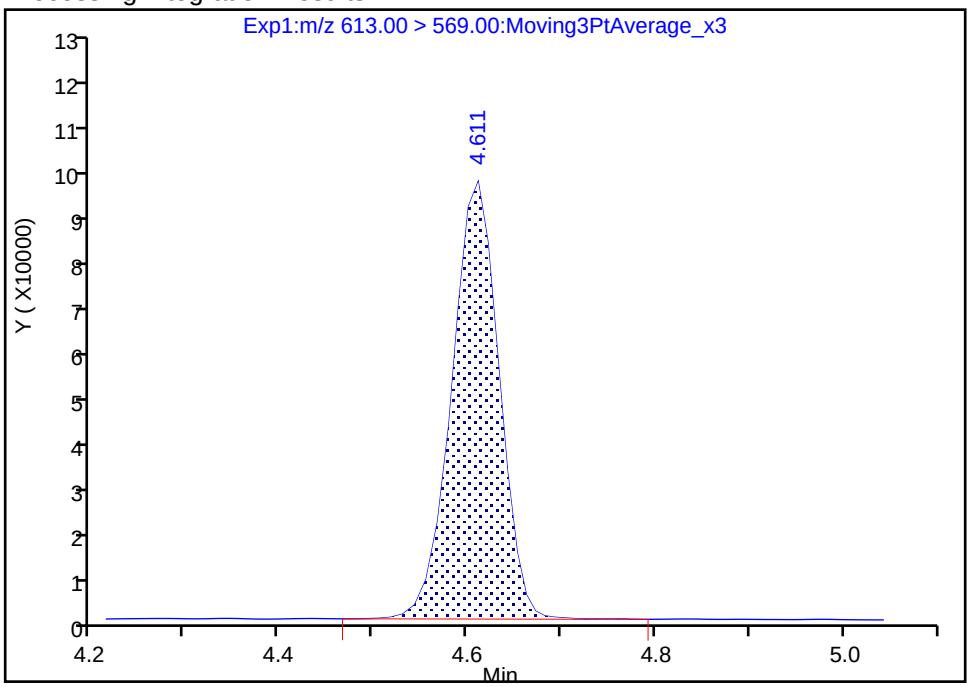
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| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

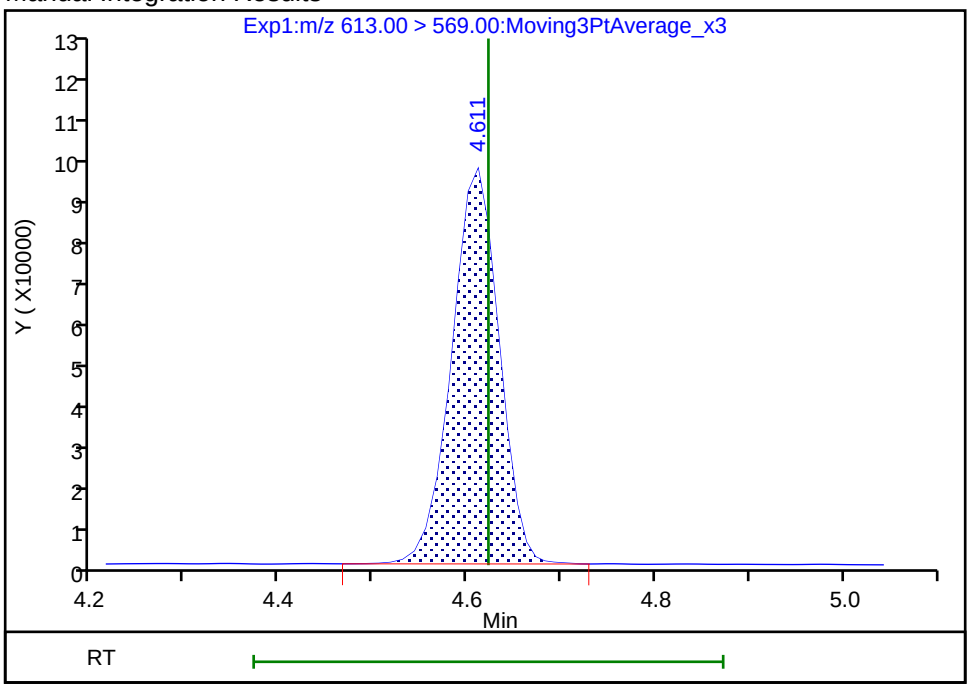
Processing Integration Results

RT: 4.61
Area: 329382
Amount: 0.831840
Amount Units: ng/ml




Manual Integration Results

RT: 4.61
Area: 328709
Amount: 0.830141
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:40:08

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

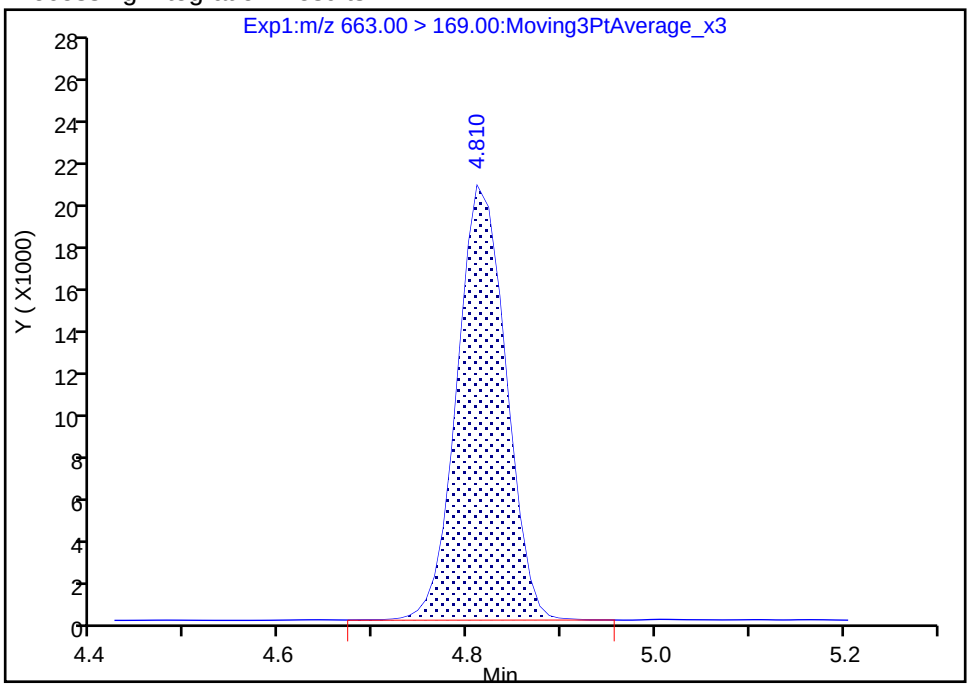
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| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

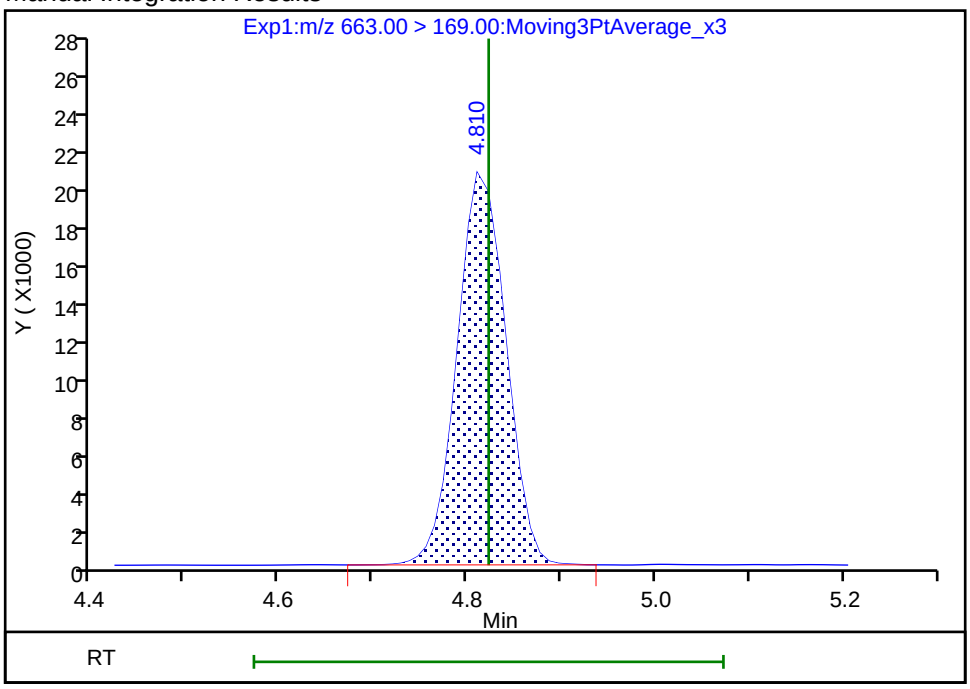
Processing Integration Results

RT: 4.81
Area: 73332
Amount: 0.880205
Amount Units: ng/ml




Manual Integration Results

RT: 4.81
Area: 73212
Amount: 0.880205
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:40:38

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

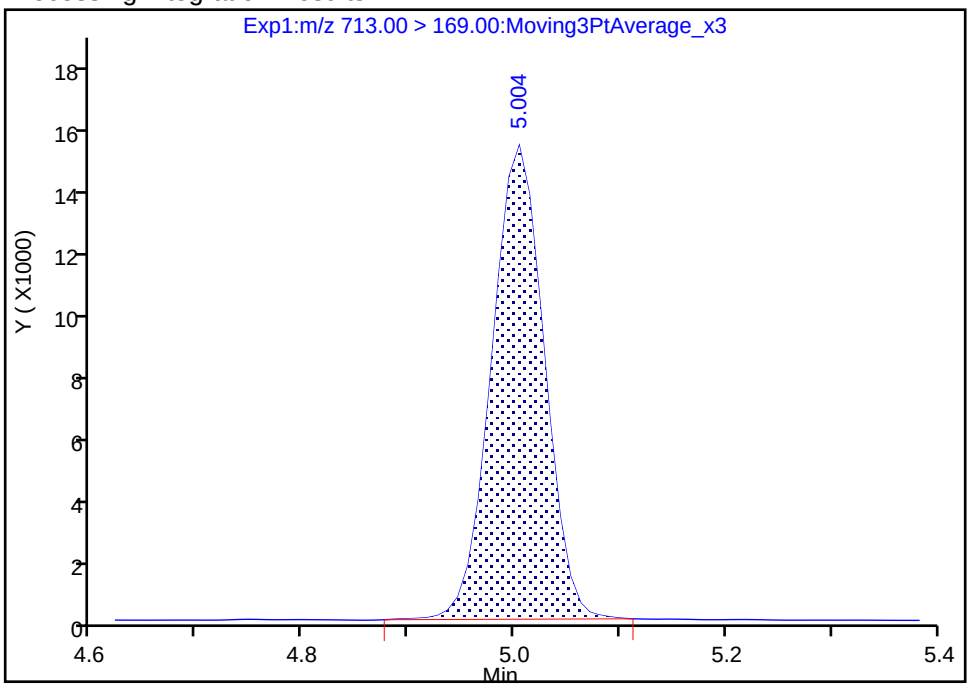
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| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

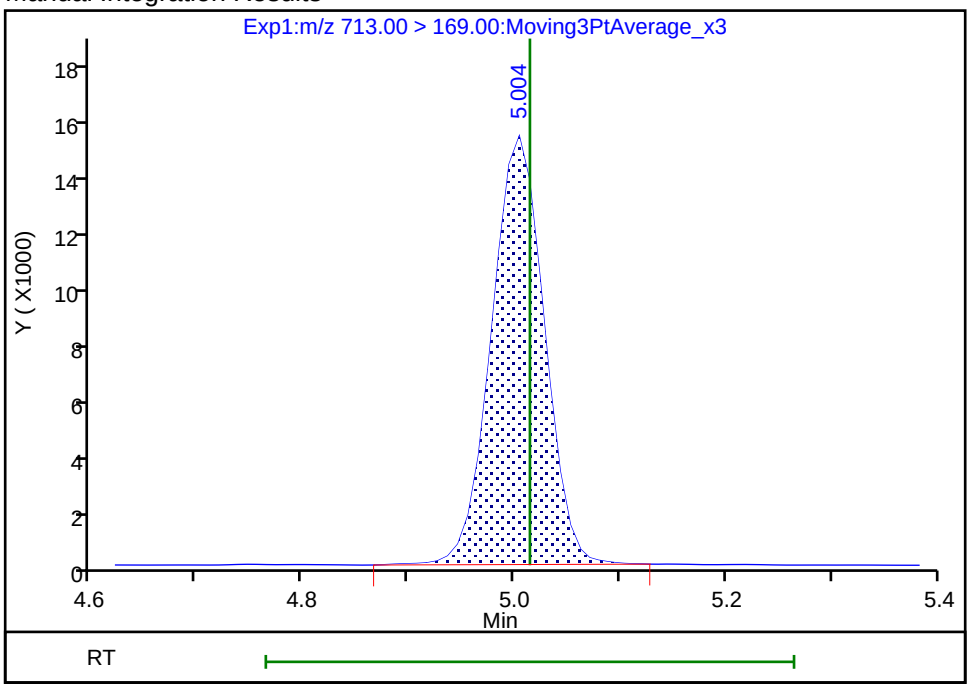
Processing Integration Results

RT: 5.00
Area: 51639
Amount: 0.998122
Amount Units: ng/ml




Manual Integration Results

RT: 5.00
Area: 51815
Amount: 1.001523
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:40:58
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

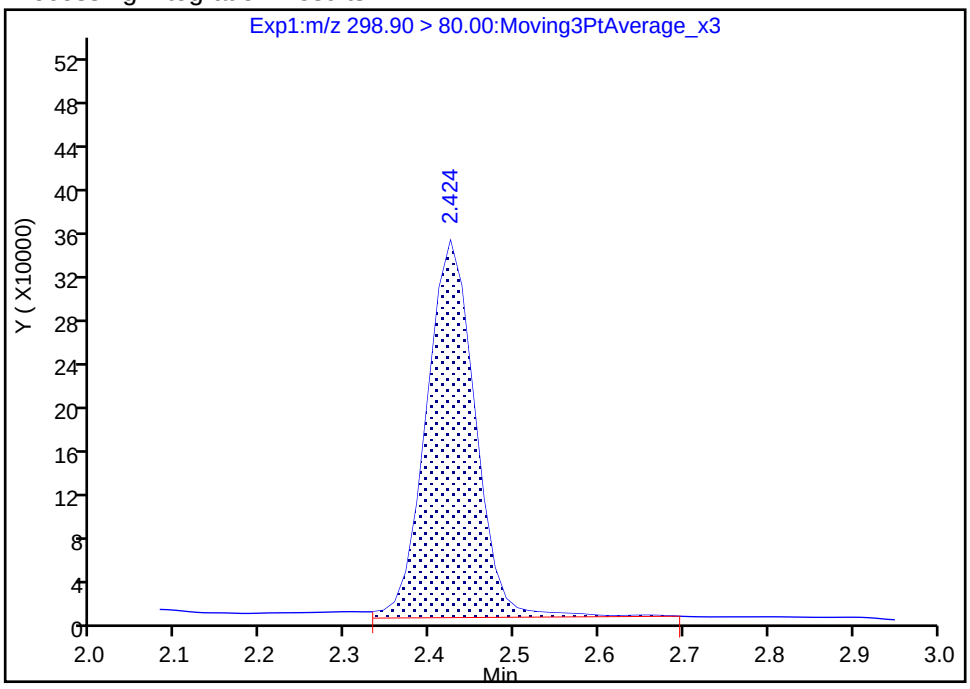
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

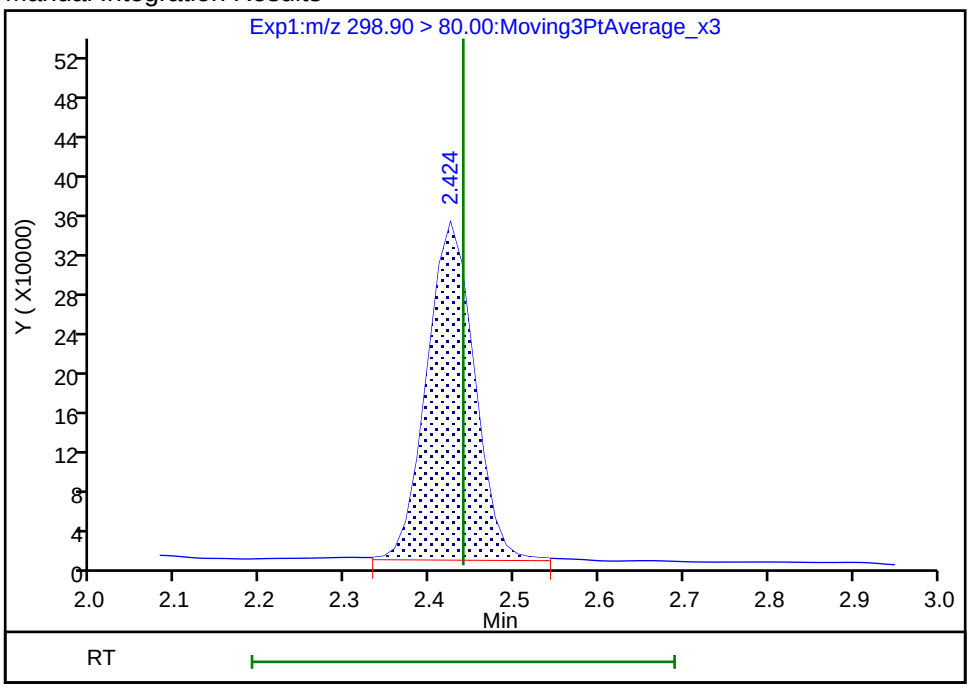
Processing Integration Results

RT: 2.42
Area: 1390990
Amount: 1.349769
Amount Units: ng/ml




Manual Integration Results

RT: 2.42
Area: 1344244
Amount: 1.304408
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:28:14

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

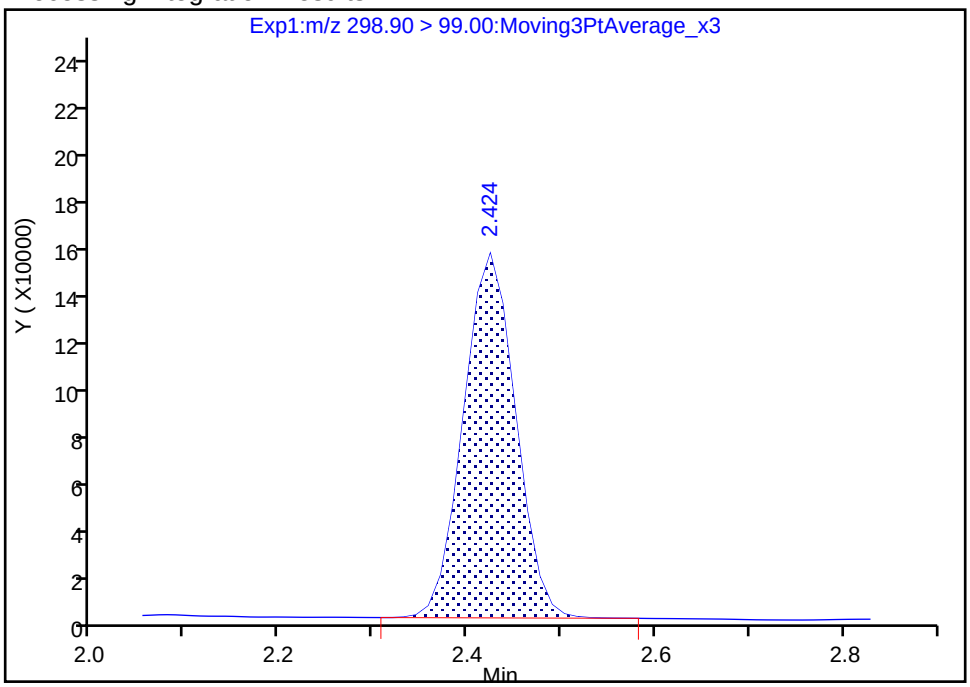
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

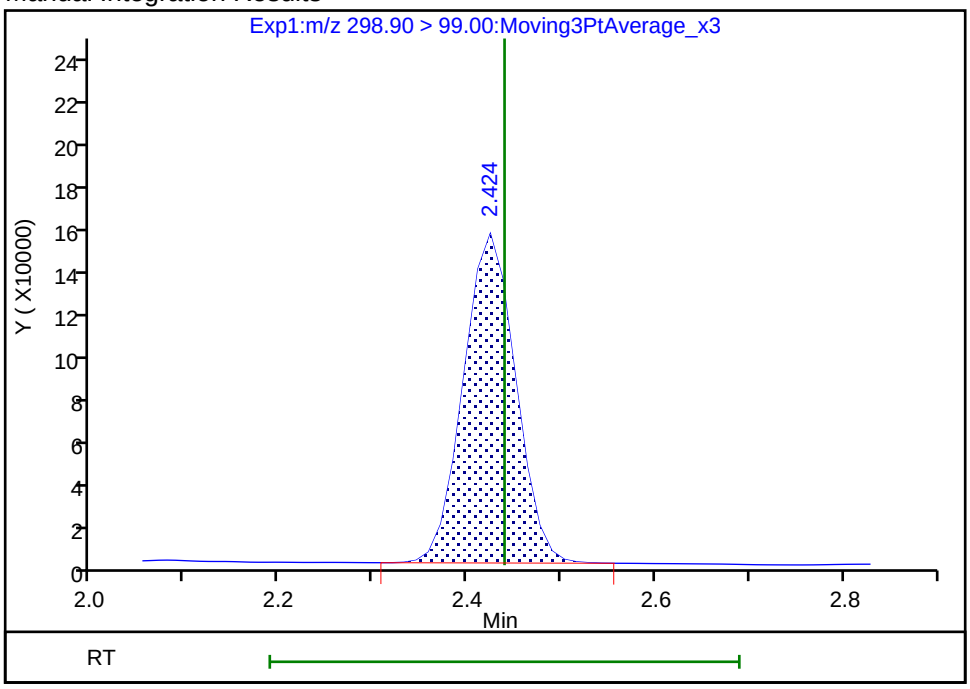
Processing Integration Results

RT: 2.42
Area: 599757
Amount: 1.349769
Amount Units: ng/ml




Manual Integration Results

RT: 2.42
Area: 599514
Amount: 1.304408
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:28:29

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

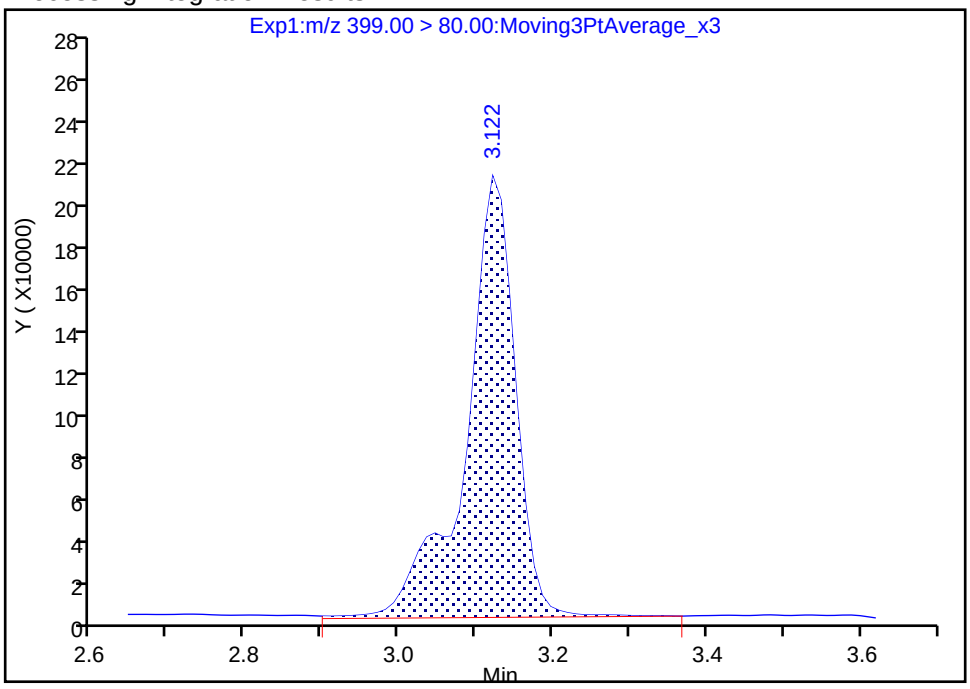
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| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

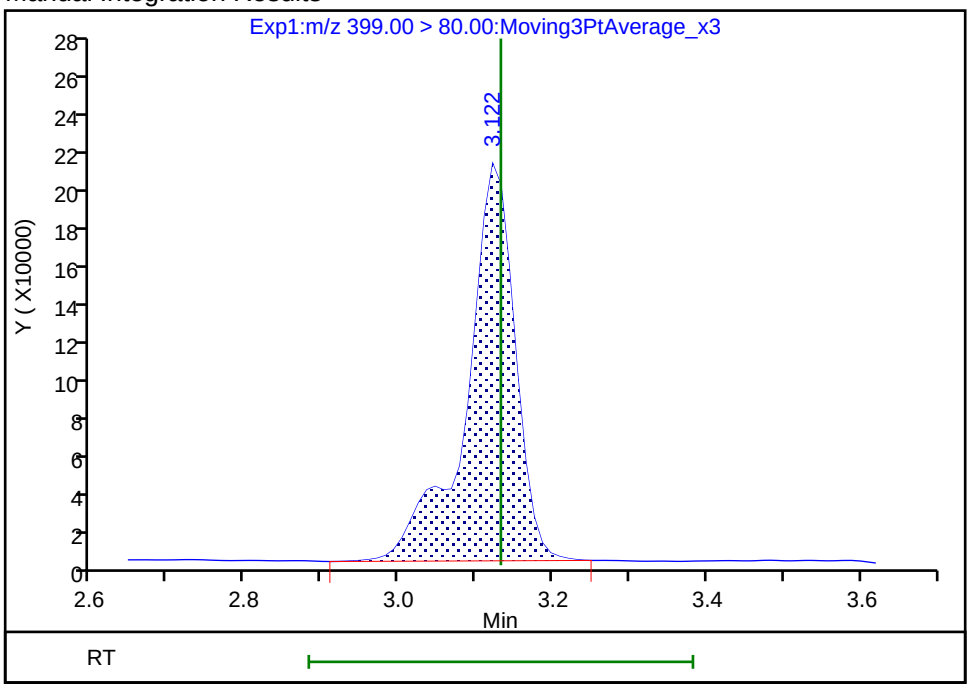
Processing Integration Results

RT: 3.12
Area: 927835
Amount: 1.190184
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 905307
Amount: 1.161287
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:31:12

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

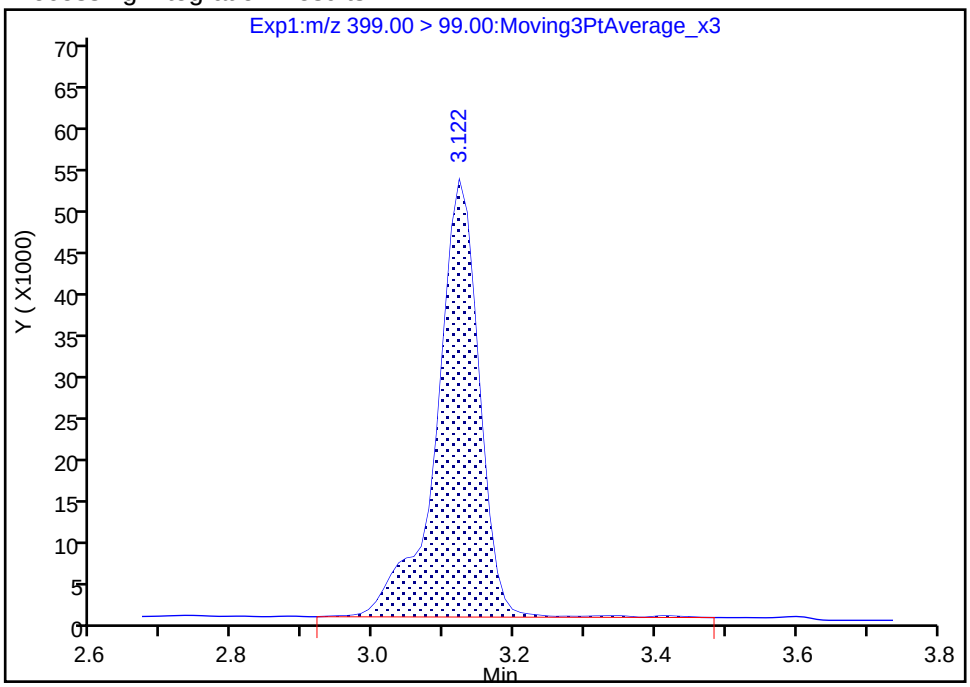
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| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

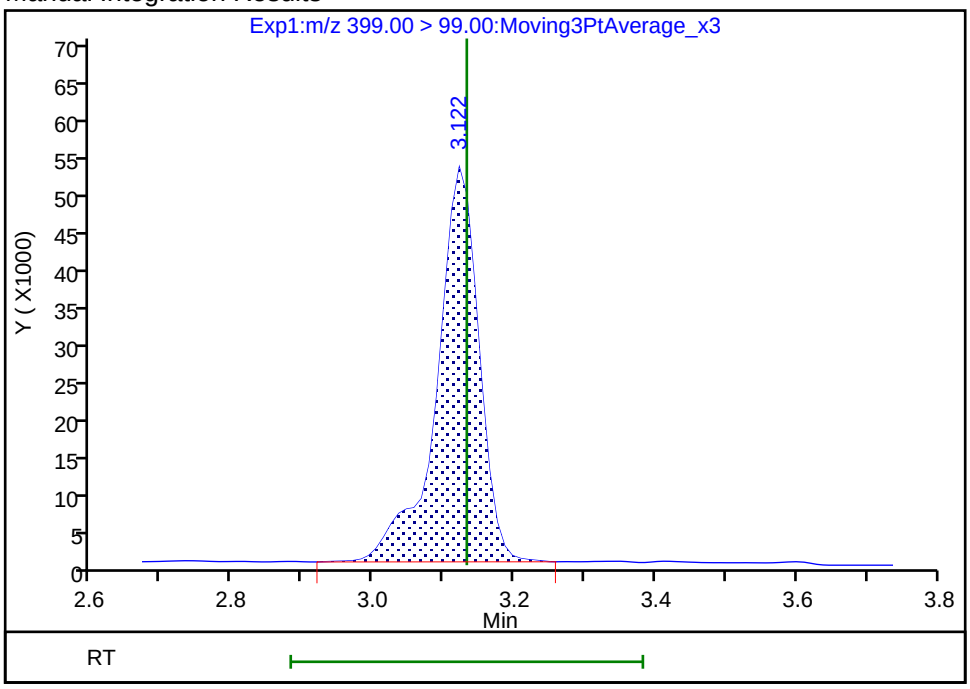
Processing Integration Results

RT: 3.12
Area: 221461
Amount: 1.190184
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 219298
Amount: 1.161287
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:31:23

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

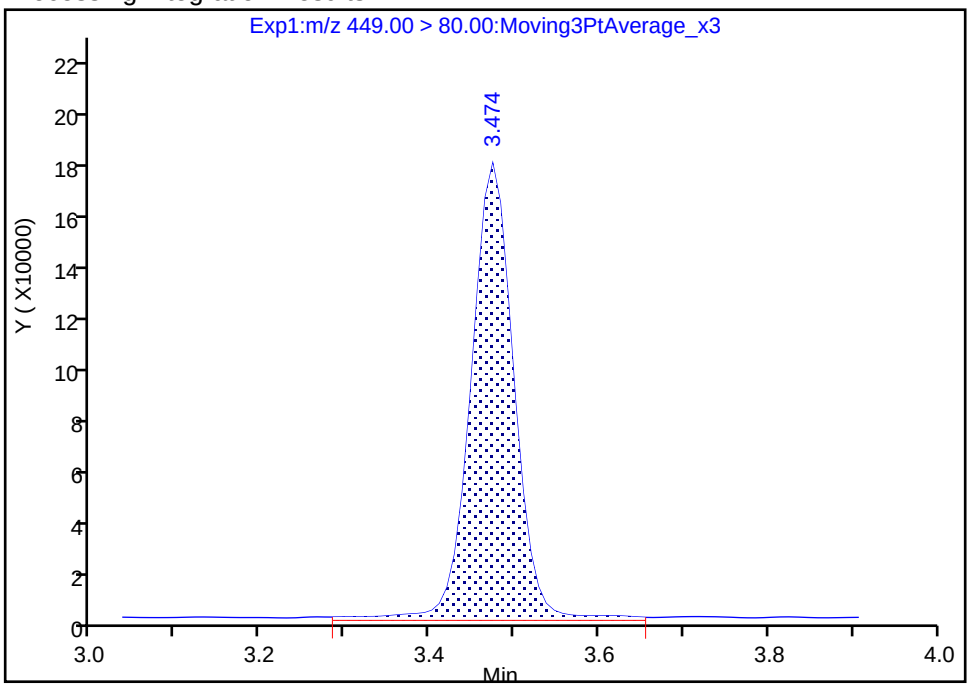
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| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

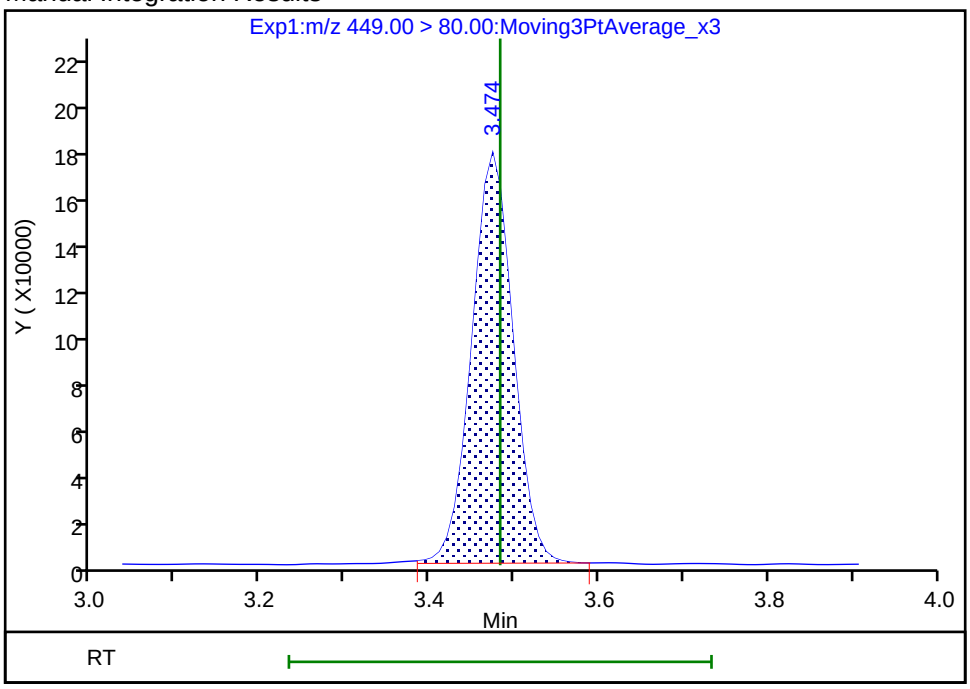
Processing Integration Results

RT: 3.47
Area: 622046
Amount: 1.232840
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 586296
Amount: 1.161986
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:32:56

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

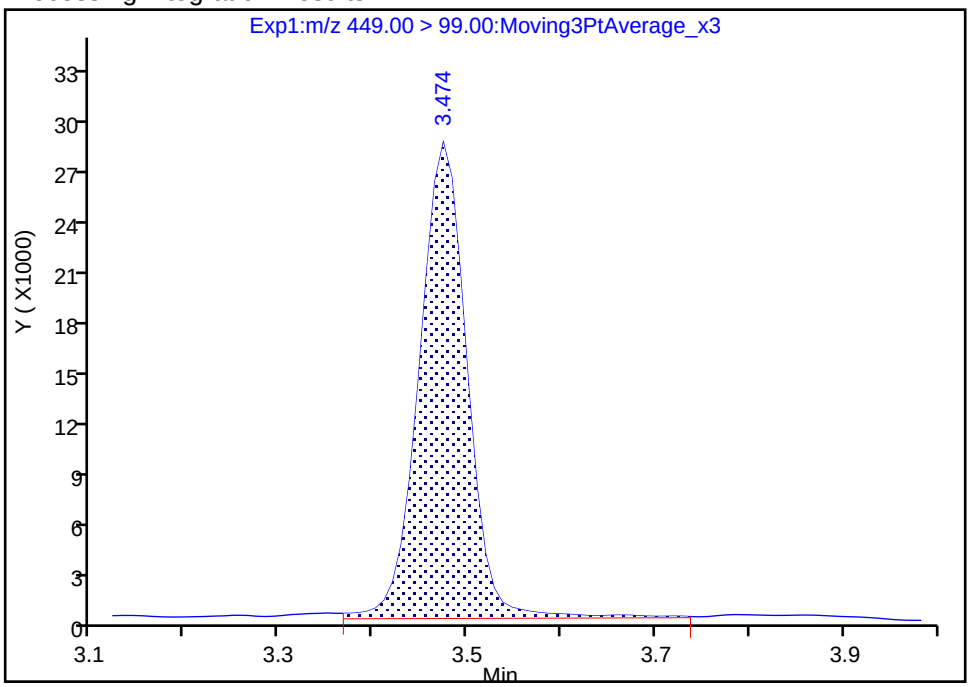
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| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

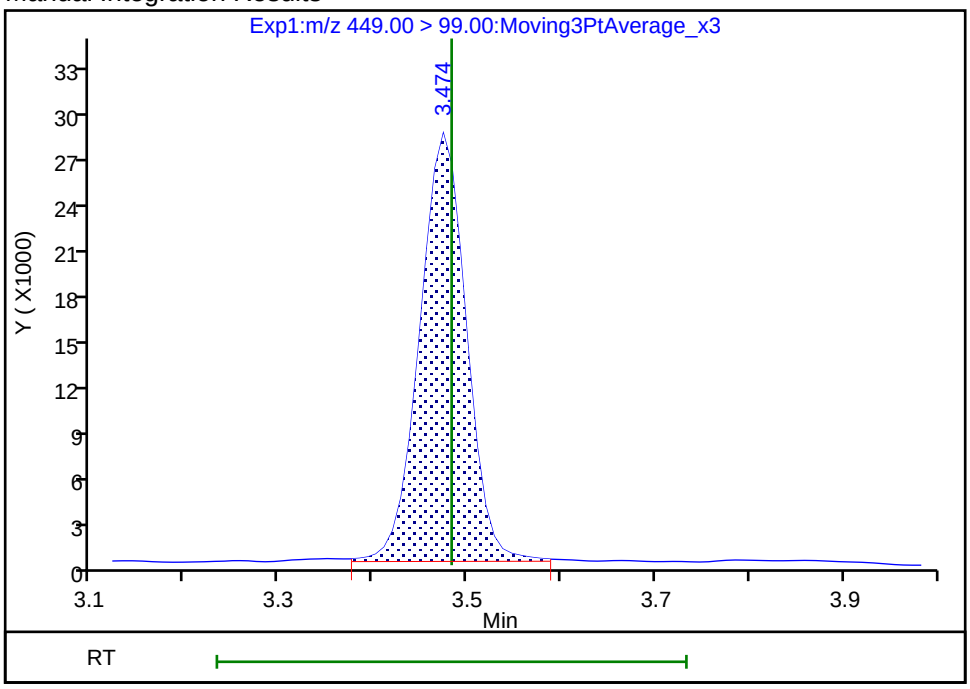
Processing Integration Results

RT: 3.47
Area: 99334
Amount: 1.232840
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 96149
Amount: 1.161986
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:33:12
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

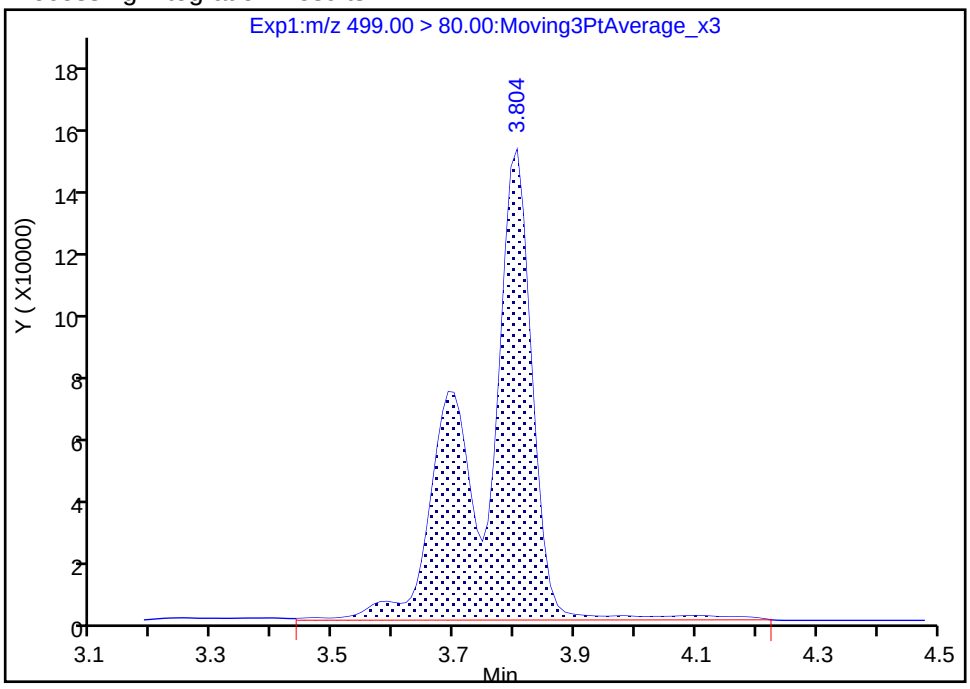
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| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

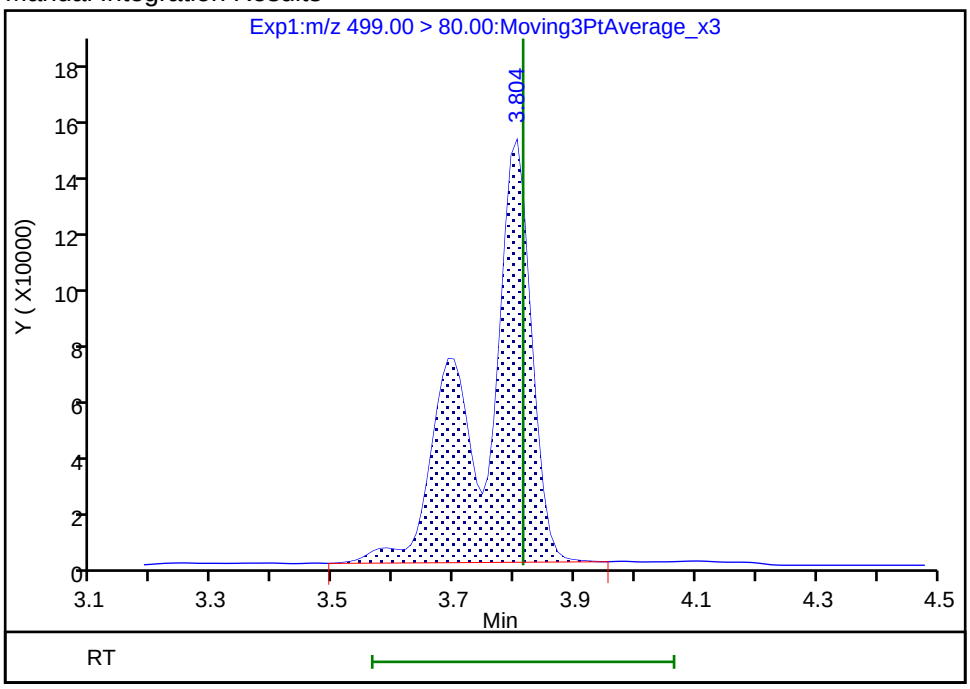
Processing Integration Results

RT: 3.80
Area: 923837
Amount: 2.149480
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 881558
Amount: 2.051110
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:34:43
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

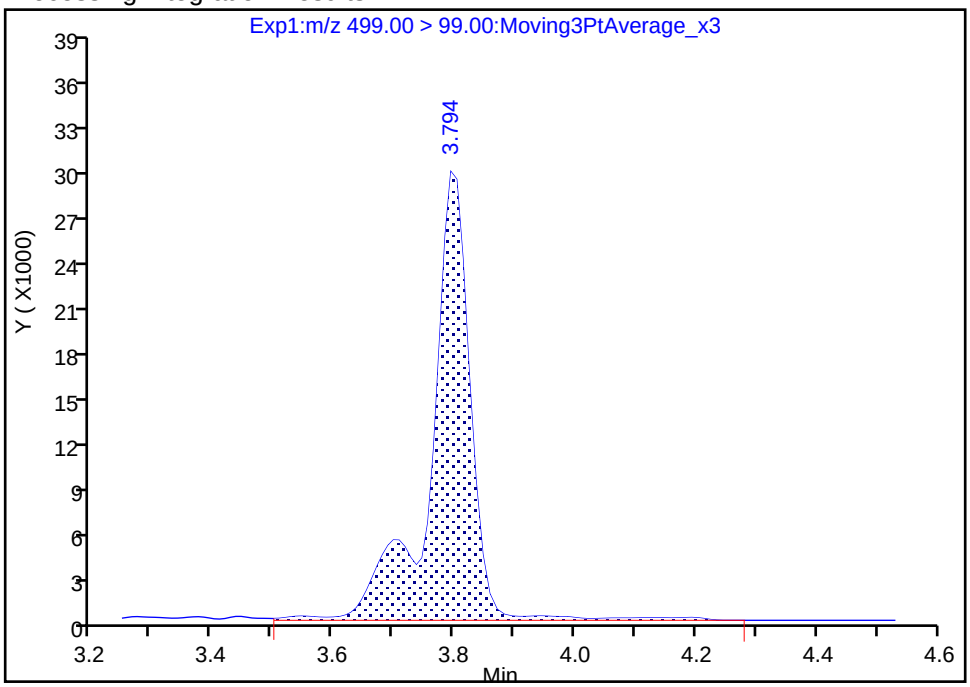
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

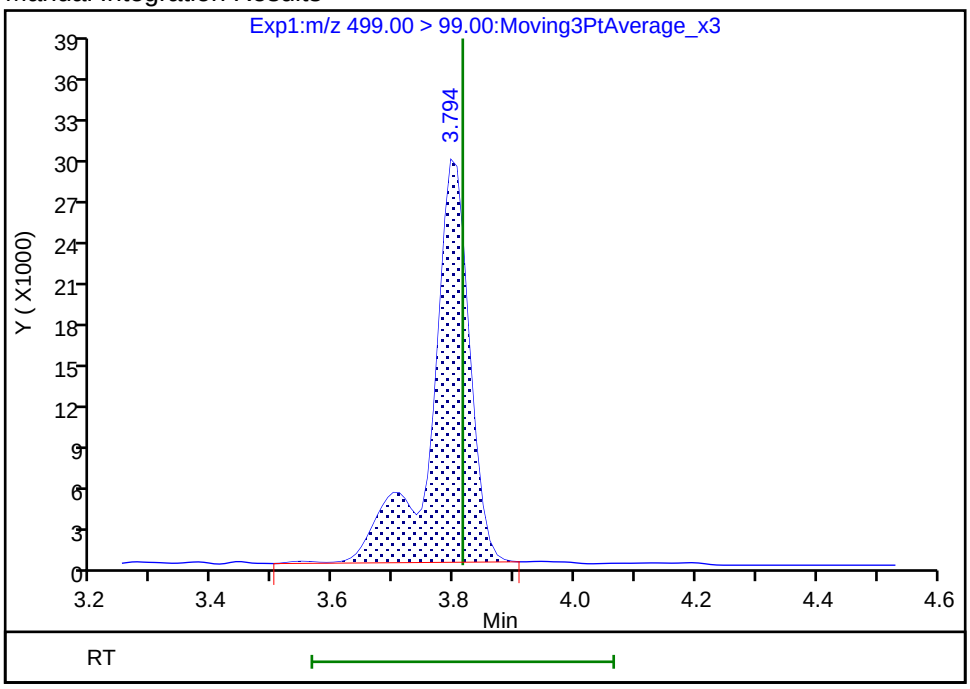
Processing Integration Results

RT: 3.79
Area: 136775
Amount: 2.149480
Amount Units: ng/ml




Manual Integration Results

RT: 3.79
Area: 129068
Amount: 2.051110
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:34:57

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

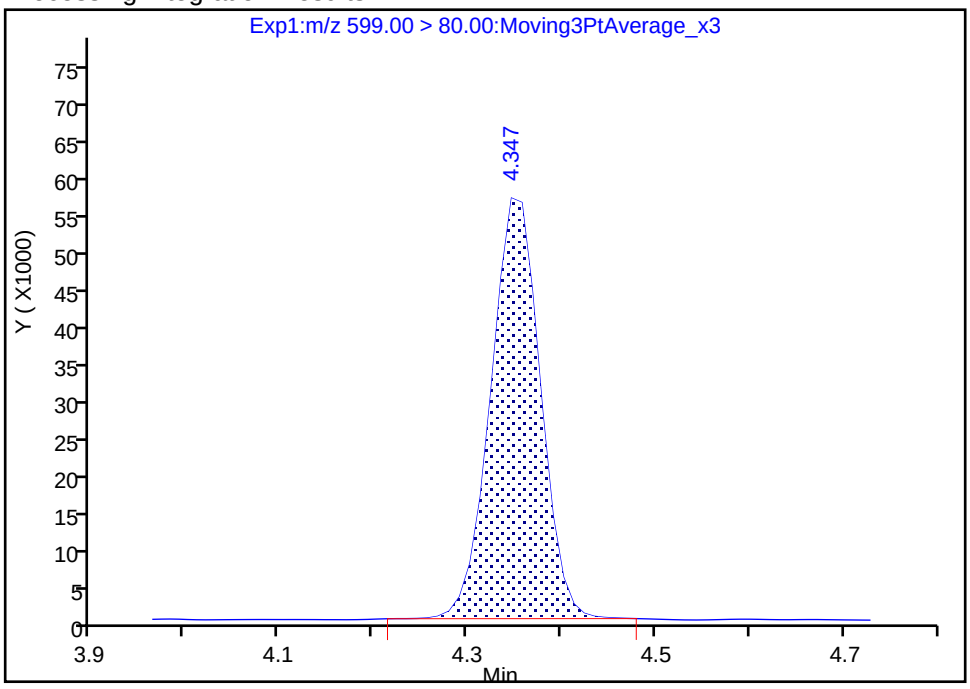
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

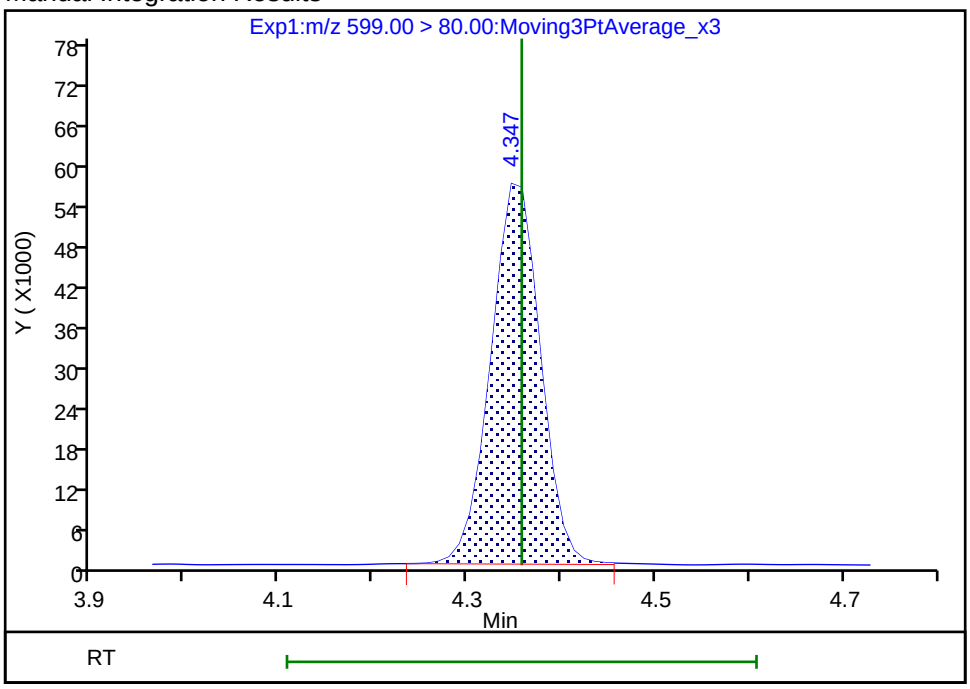
Processing Integration Results

RT: 4.35
Area: 208183
Amount: 0.814350
Amount Units: ng/ml




Manual Integration Results

RT: 4.35
Area: 208878
Amount: 0.817068
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:37:56

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

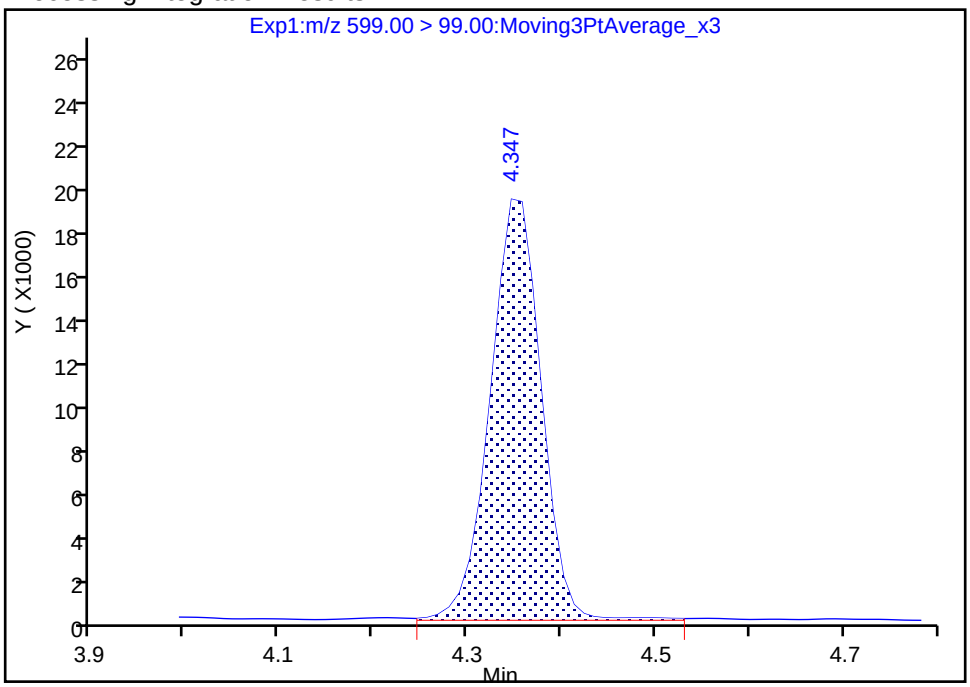
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

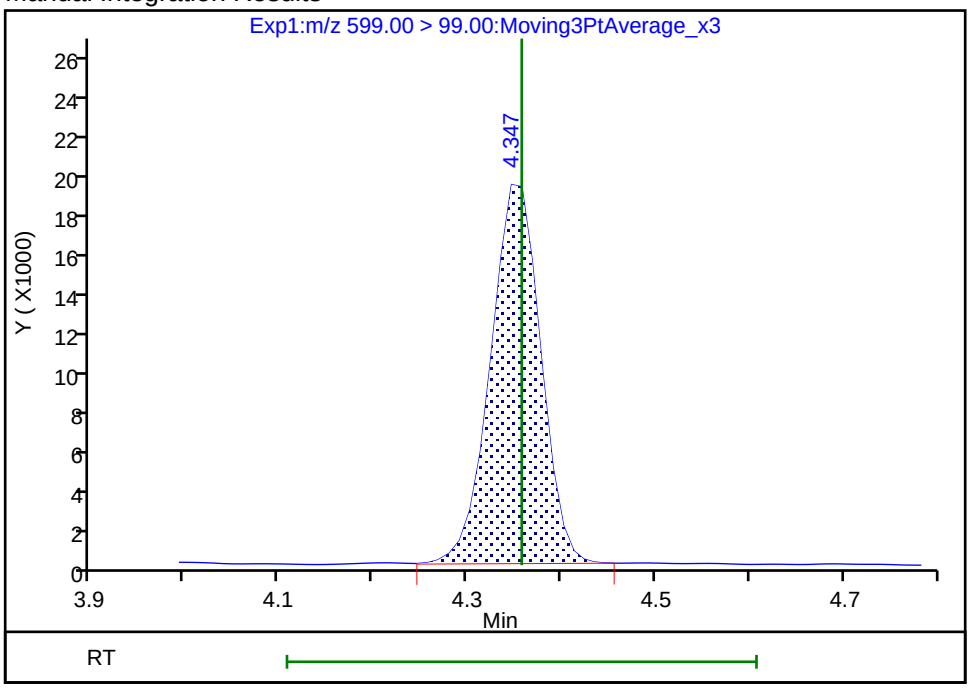
Processing Integration Results

RT: 4.35
Area: 73572
Amount: 0.814350
Amount Units: ng/ml




Manual Integration Results

RT: 4.35
Area: 72152
Amount: 0.817068
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:38:16

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

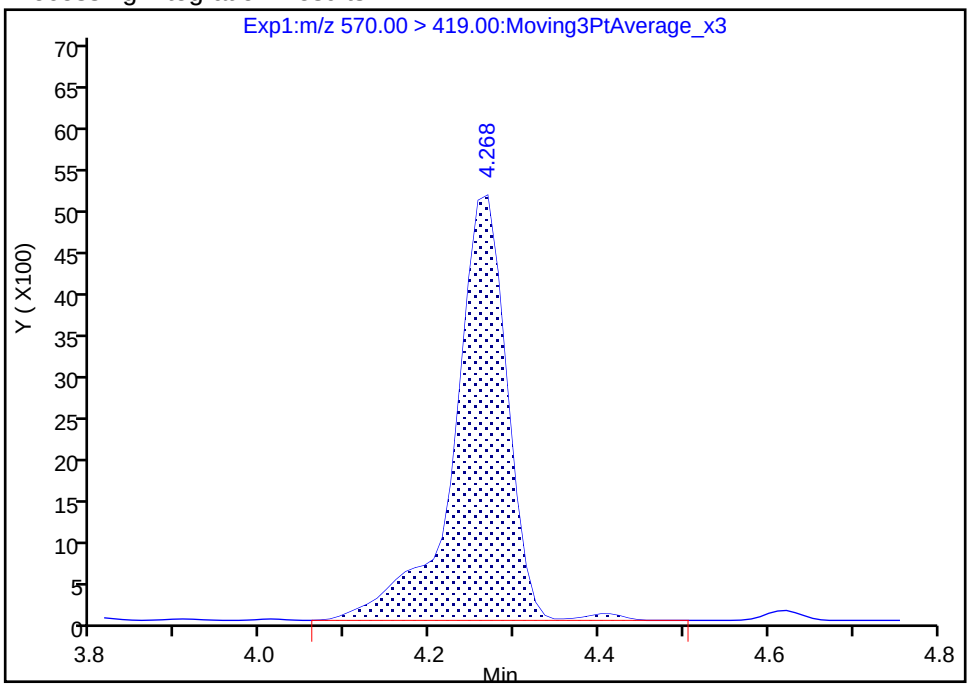
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 28 N-methylperfluorooctanesulfonami, CAS: 2355-31-9

Signal: 1

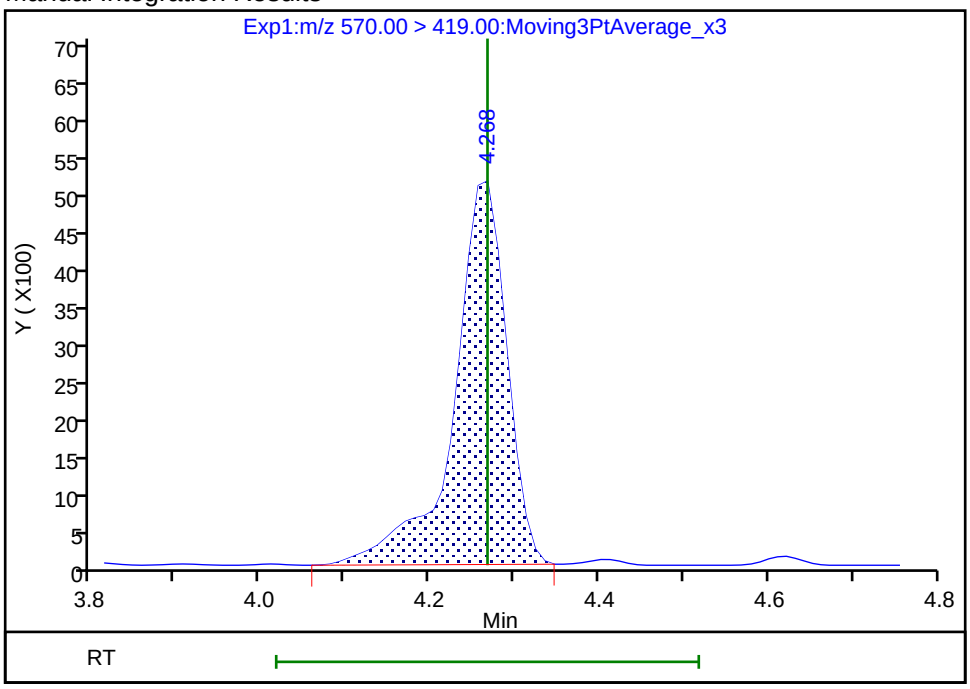
Processing Integration Results

RT: 4.27
Area: 22619
Amount: 0.858386
Amount Units: ng/ml




Manual Integration Results

RT: 4.27
Area: 22252
Amount: 0.844458
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:37:25

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

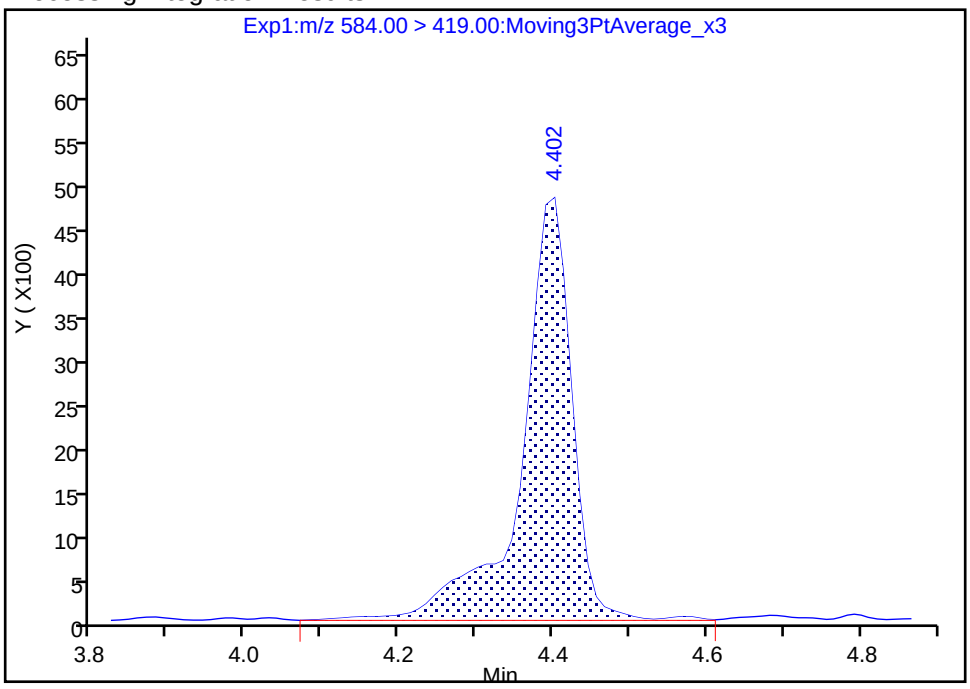
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

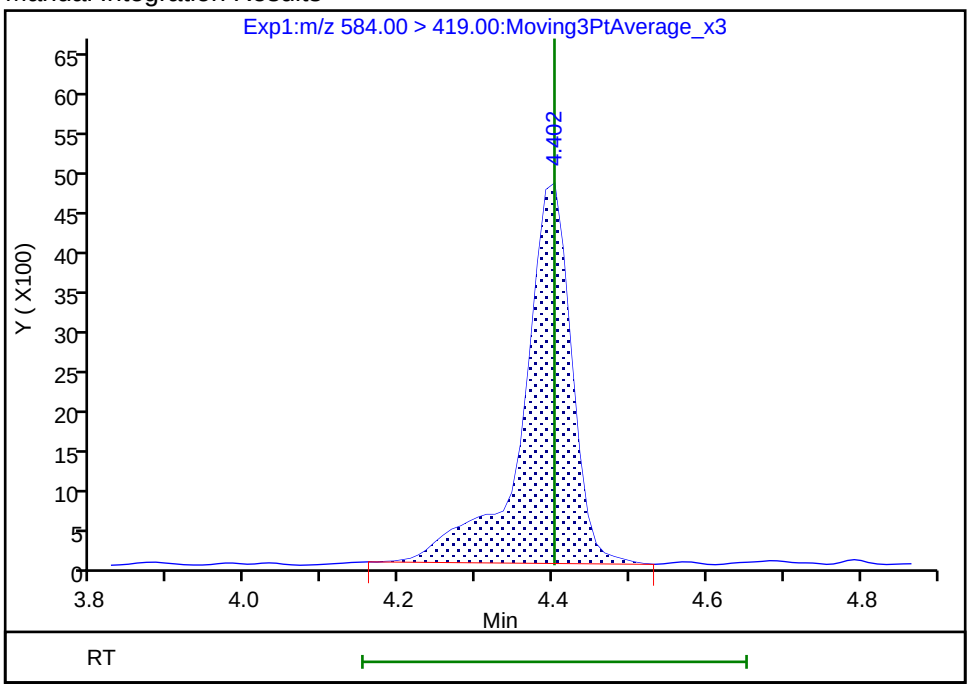
Processing Integration Results

RT: 4.40
Area: 22246
Amount: 0.837967
Amount Units: ng/ml




Manual Integration Results

RT: 4.40
Area: 21409
Amount: 0.806439
Amount Units: ng/ml




Reviewer: deannd, 15-Mar-2021 17:23:15

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

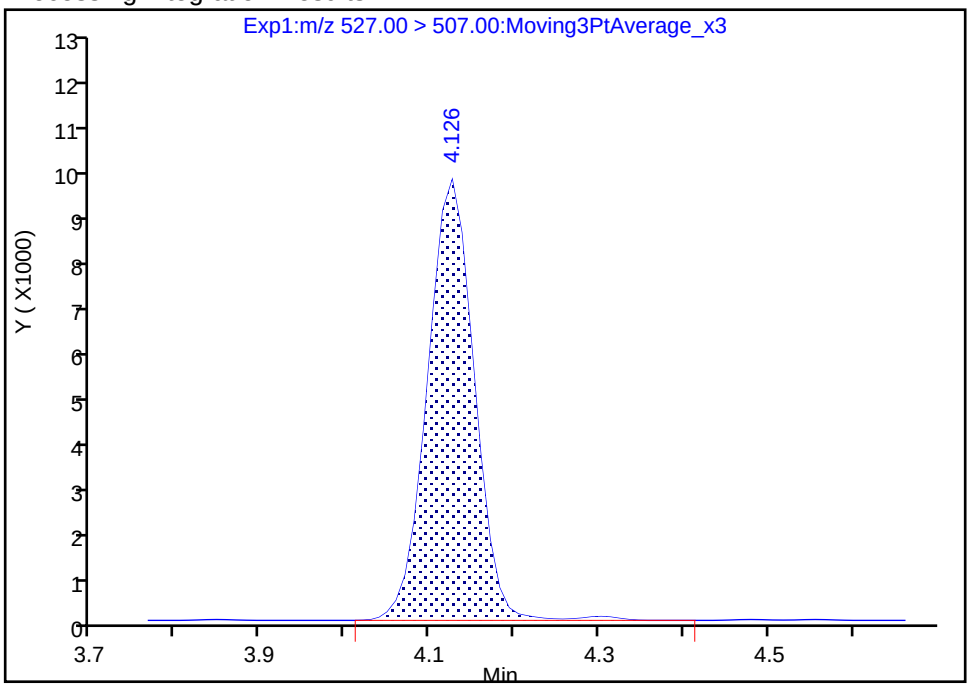
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

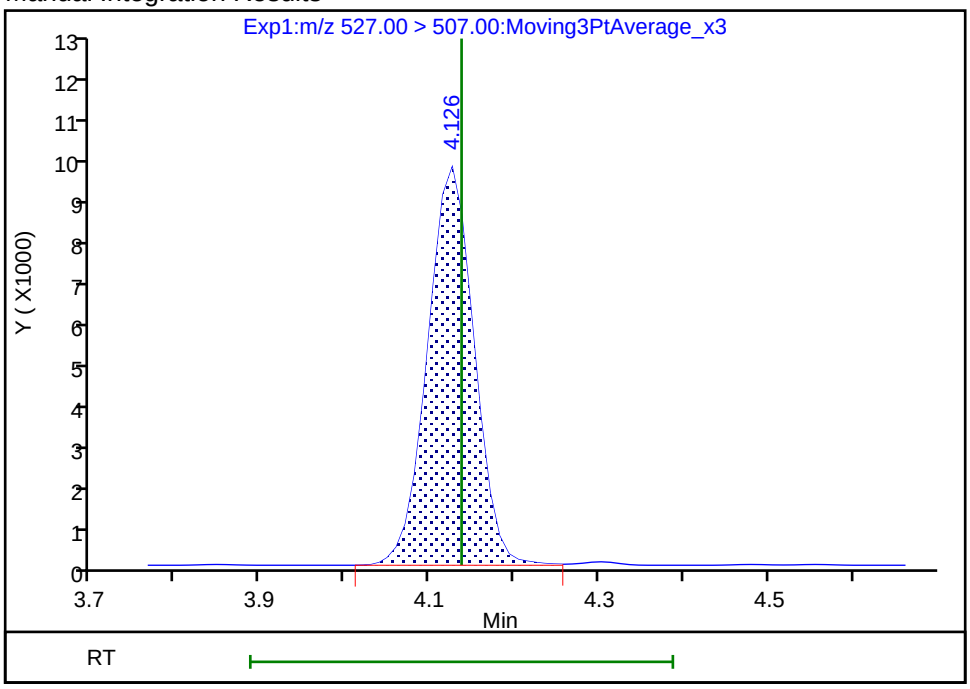
Processing Integration Results

RT: 4.13
Area: 35059
Amount: 0.747116
Amount Units: ng/ml




Manual Integration Results

RT: 4.13
Area: 34818
Amount: 0.741980
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:36:46

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

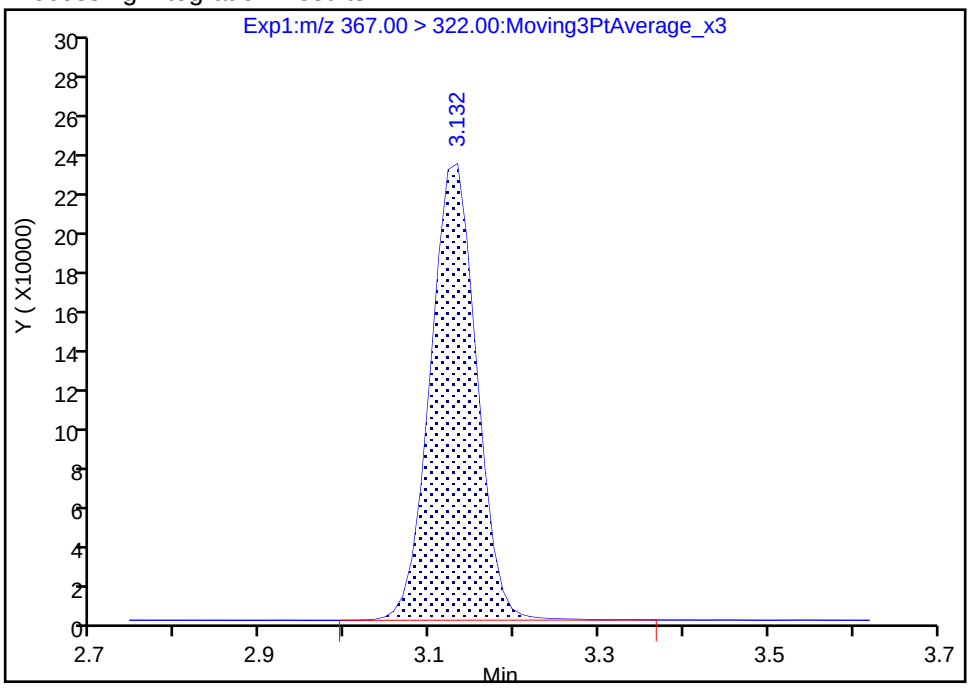
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 9 13C4 PFHpA, CAS: STL01892

Signal: 1

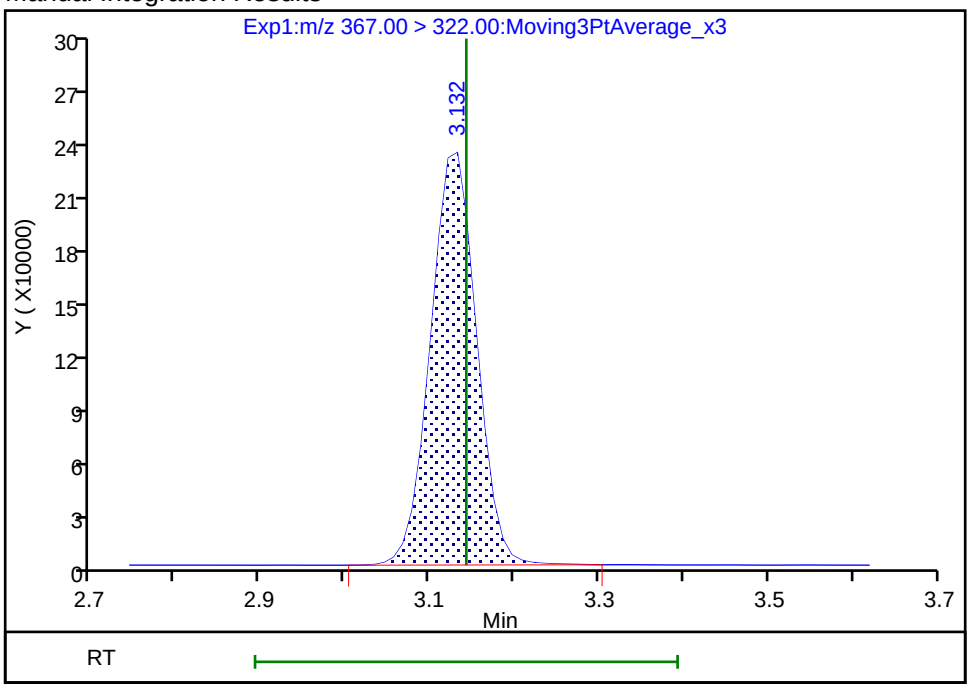
Processing Integration Results

RT: 3.13
Area: 868983
Amount: 1.198604
Amount Units: ng/ml




Manual Integration Results

RT: 3.13
Area: 867761
Amount: 1.193703
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:24:53

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

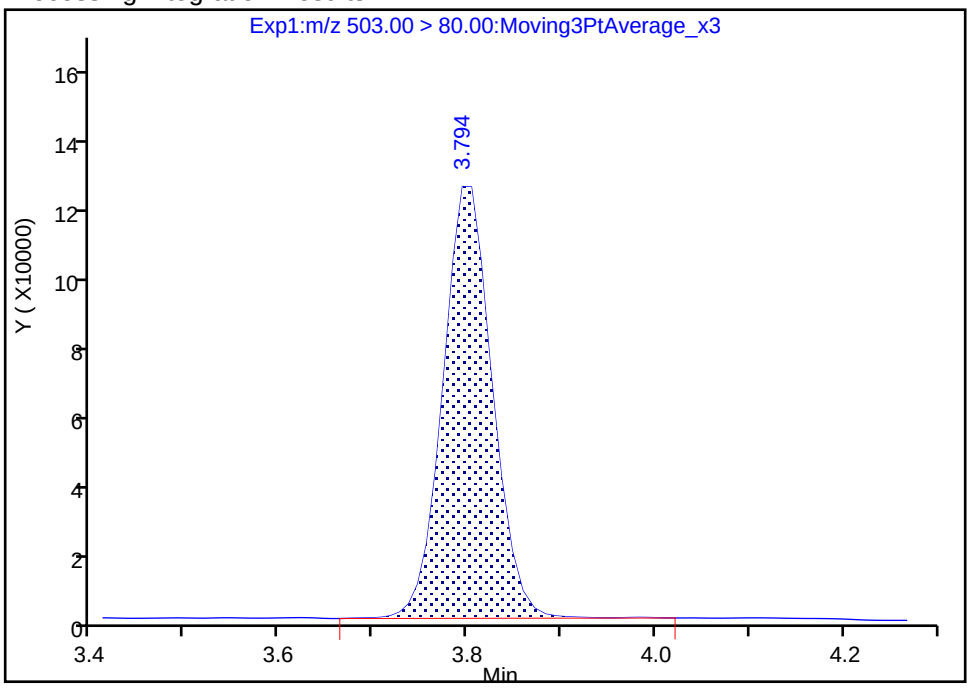
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 18 13C4 PFOS, CAS: STL00991

Signal: 1

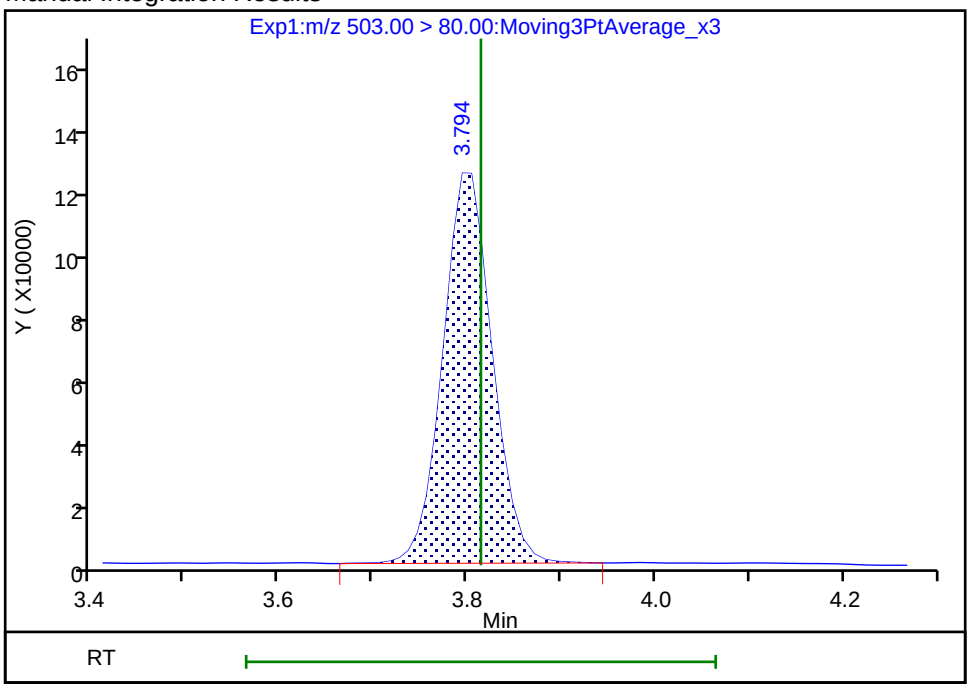
Processing Integration Results

RT: 3.79
Area: 447696
Amount: 0.921569
Amount Units: ng/ml




Manual Integration Results

RT: 3.79
Area: 446575
Amount: 0.916792
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:25:21

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

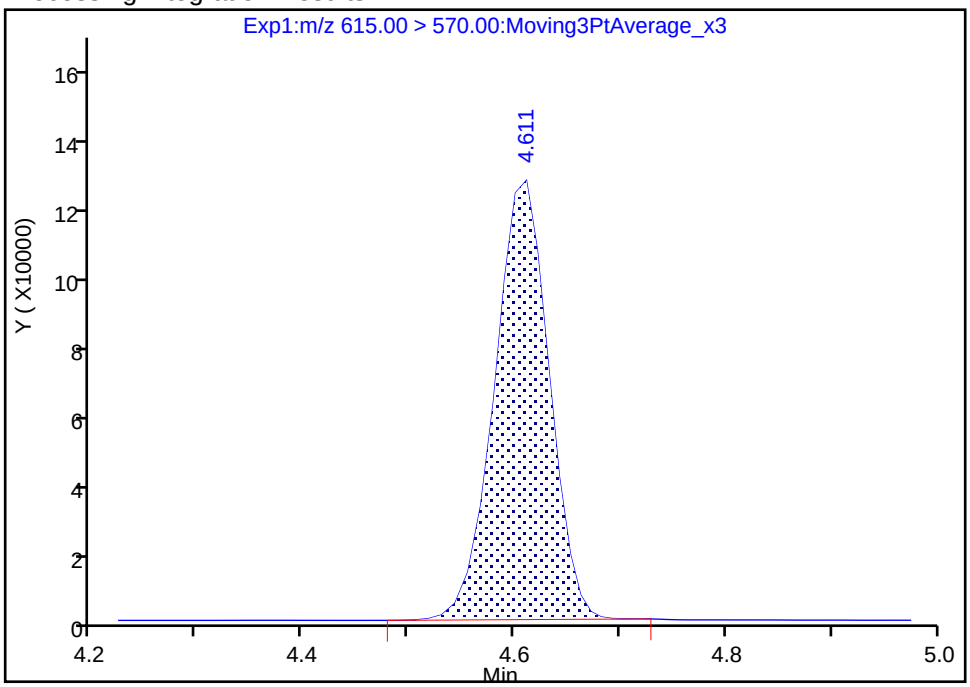
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 36 13C2 PFDoA, CAS: STL00998

Signal: 1

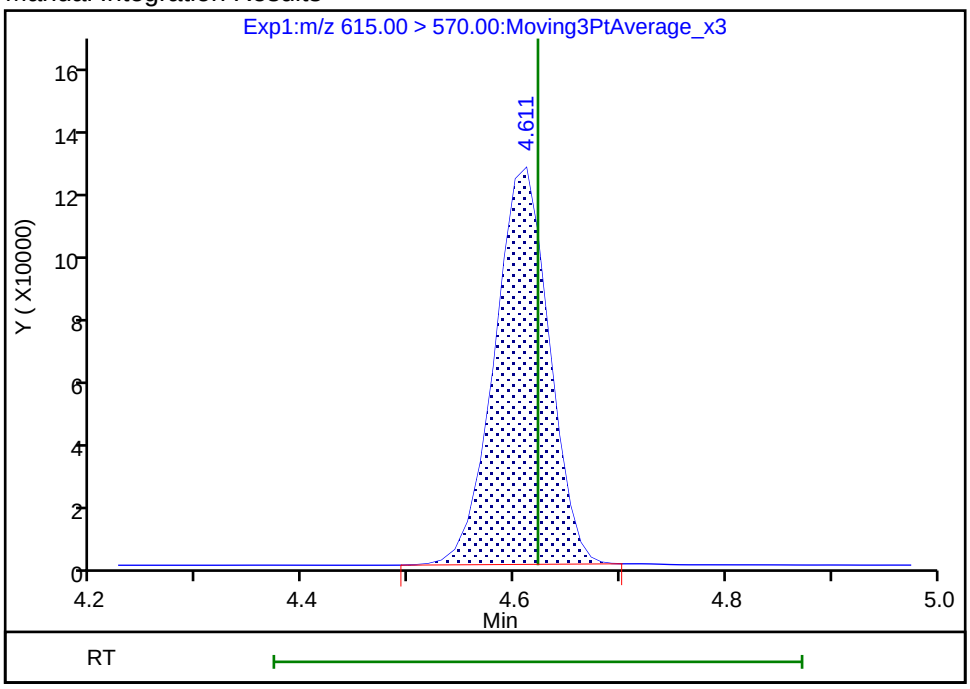
Processing Integration Results

RT: 4.61
Area: 450705
Amount: 0.836777
Amount Units: ng/ml




Manual Integration Results

RT: 4.61
Area: 450024
Amount: 0.833268
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:26:34

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

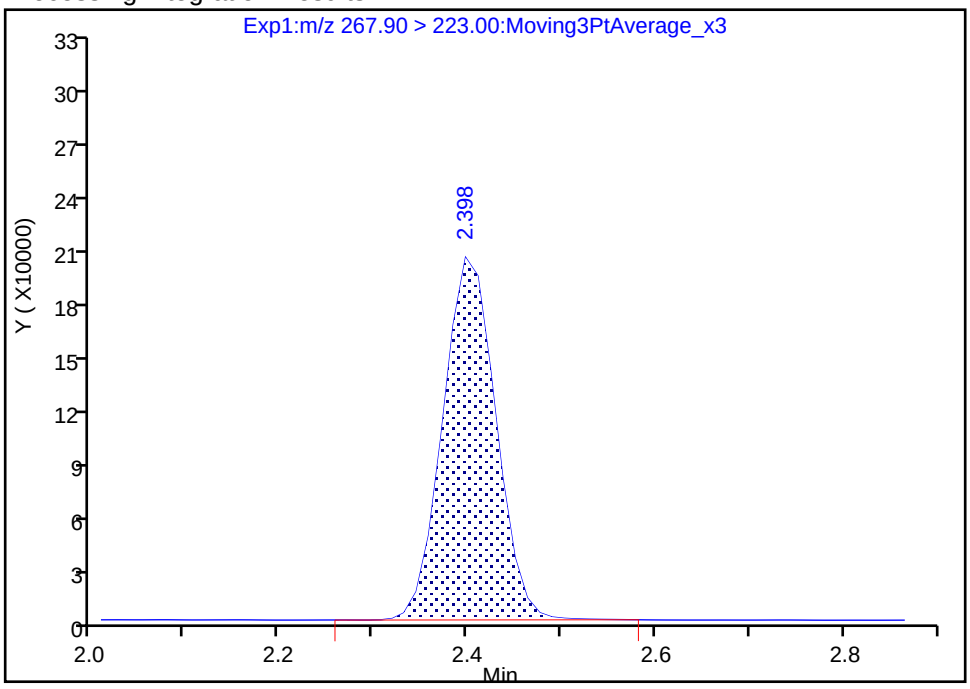
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 3 13C5 PFPeA, CAS: STL01893

Signal: 1

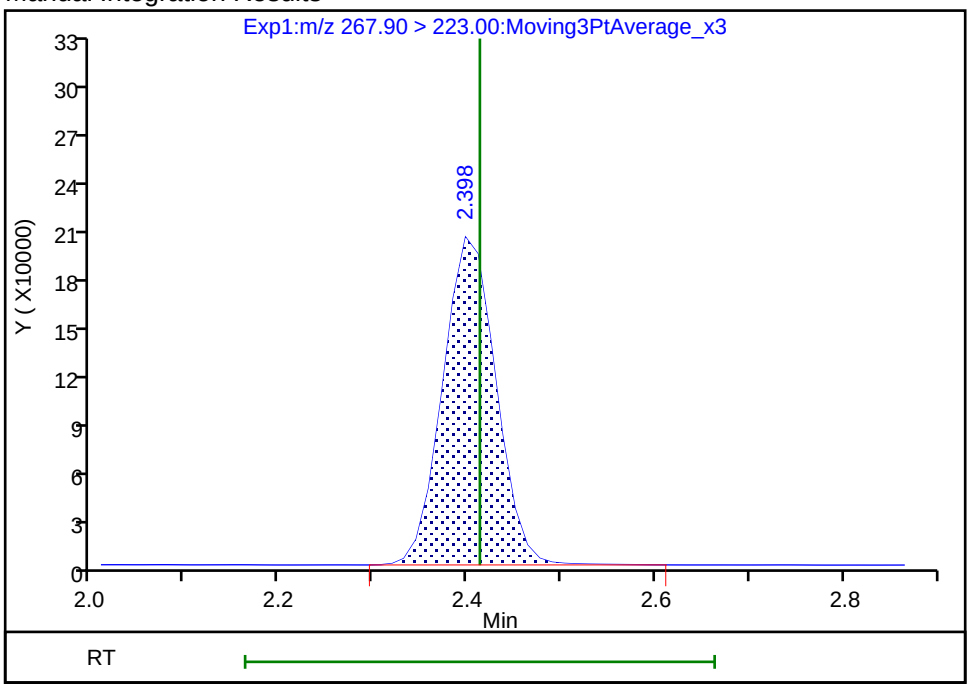
Processing Integration Results

RT: 2.40
Area: 803925
Amount: 1.112496
Amount Units: ng/ml




Manual Integration Results

RT: 2.40
Area: 805119
Amount: 1.111155
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:23:40

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

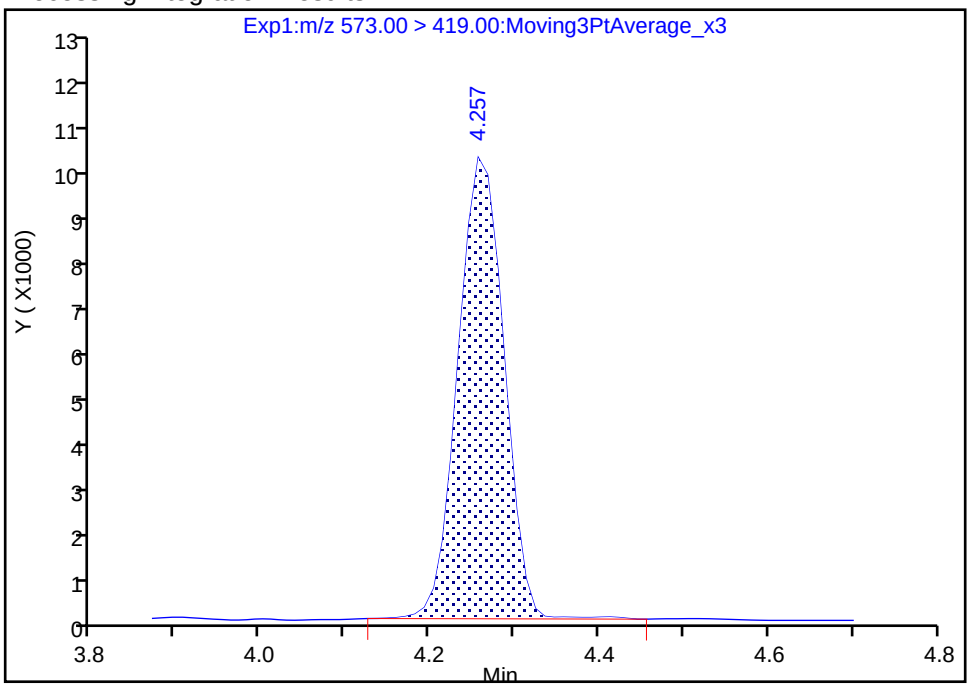
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 27 d3-NMeFOSAA, CAS: STL02118

Signal: 1

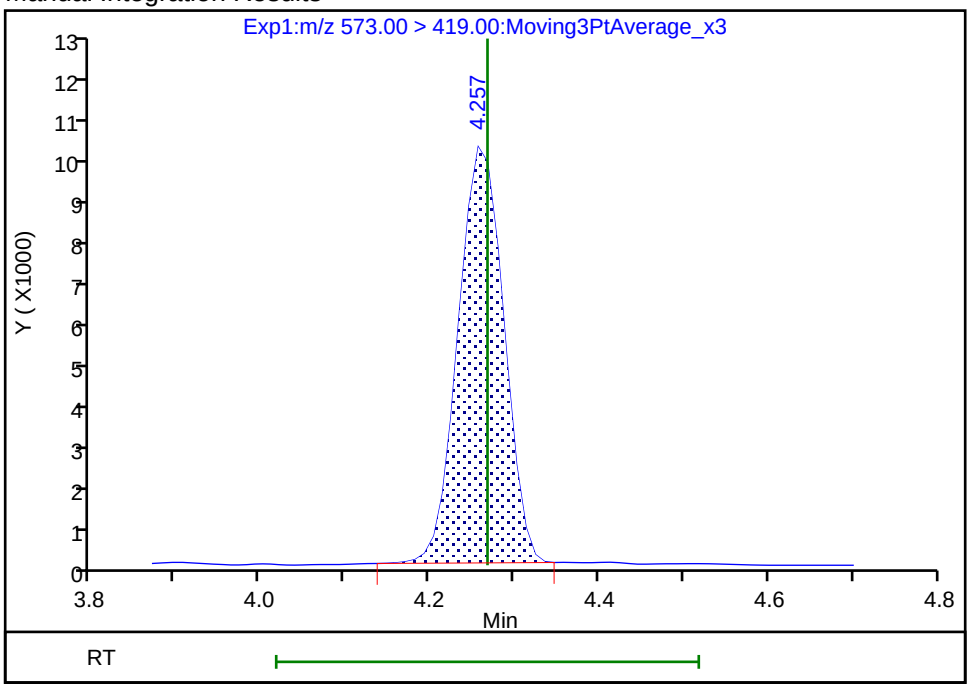
Processing Integration Results

RT: 4.26
Area: 37582
Amount: 0.834196
Amount Units: ng/ml




Manual Integration Results

RT: 4.26
Area: 37161
Amount: 0.822635
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:25:52

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

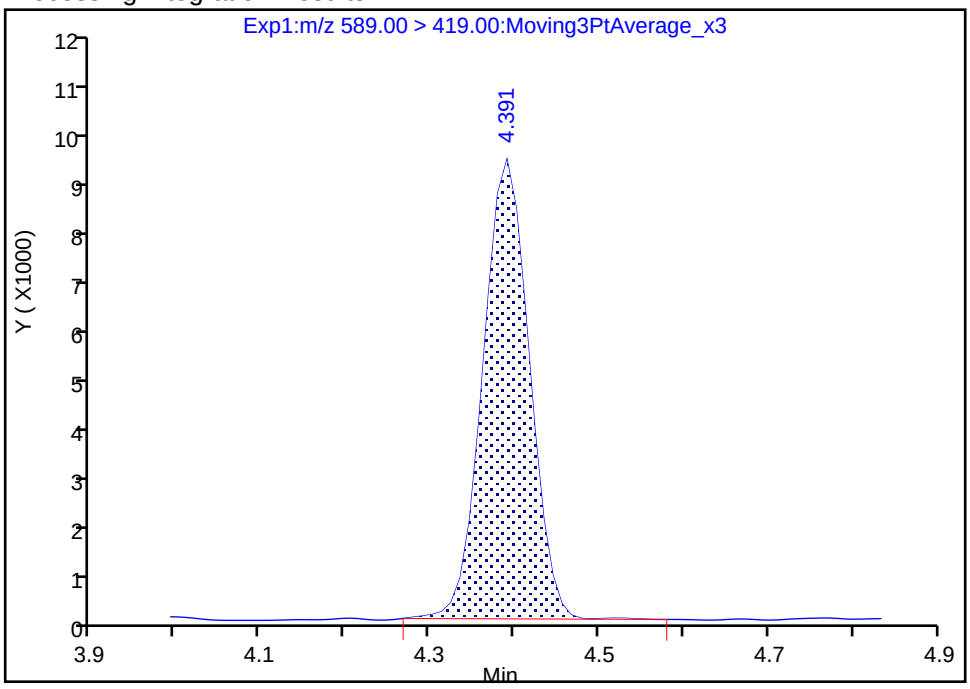
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 32 d5-NEtFOSAA, CAS: STL02117

Signal: 1

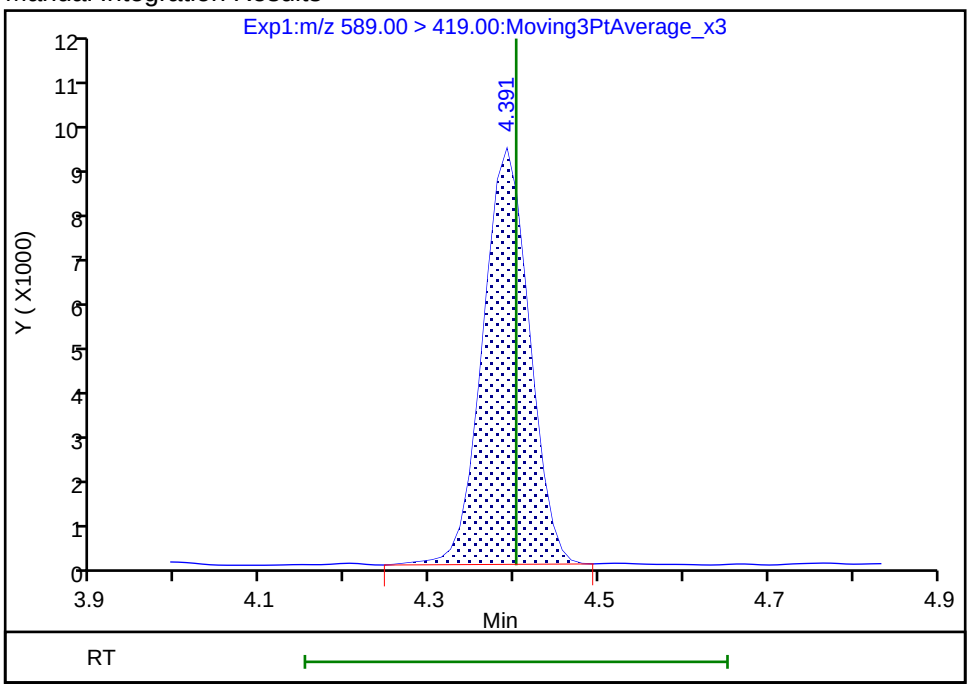
Processing Integration Results

RT: 4.39
Area: 35709
Amount: 0.819956
Amount Units: ng/ml




Manual Integration Results

RT: 4.39
Area: 35848
Amount: 0.820936
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:26:26

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

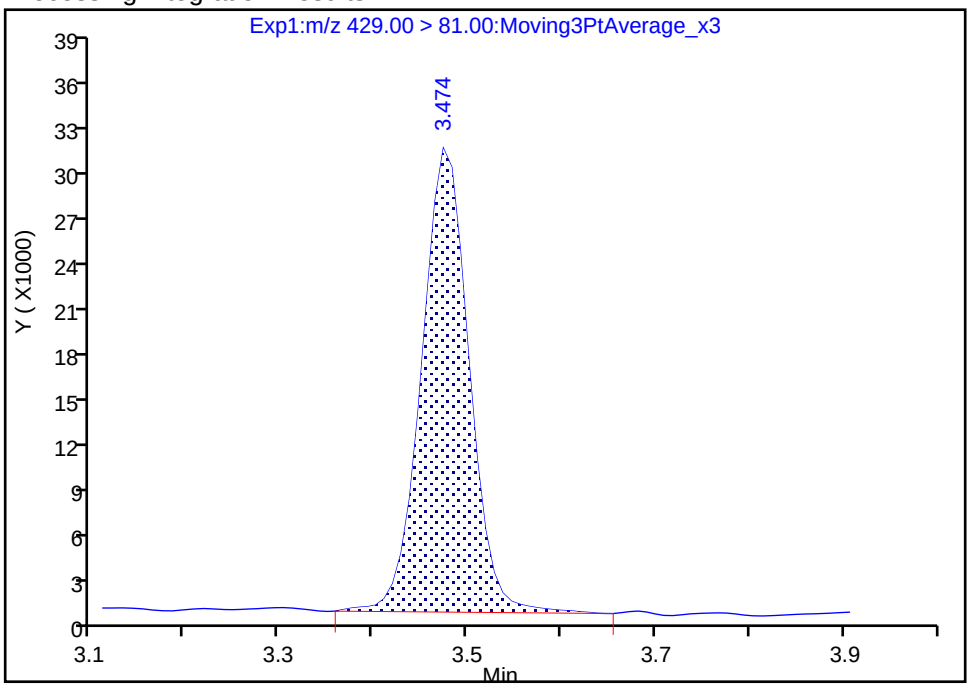
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

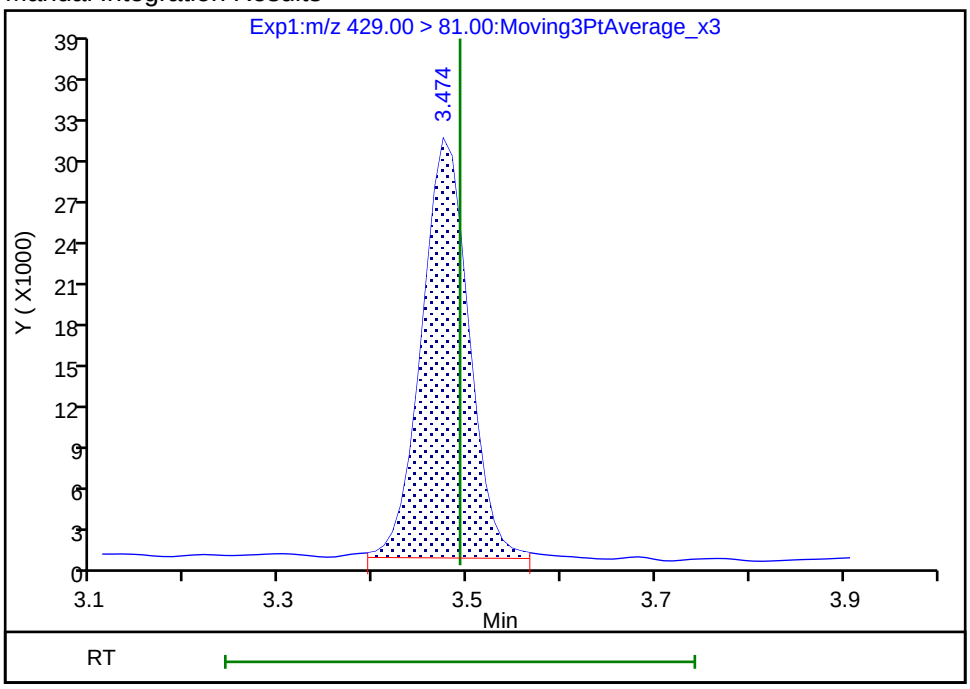
Processing Integration Results

RT: 3.47
Area: 108074
Amount: 1.220111
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 107038
Amount: 1.208415
Amount Units: ng/ml




Reviewer: deannd, 15-Mar-2021 17:22:38

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

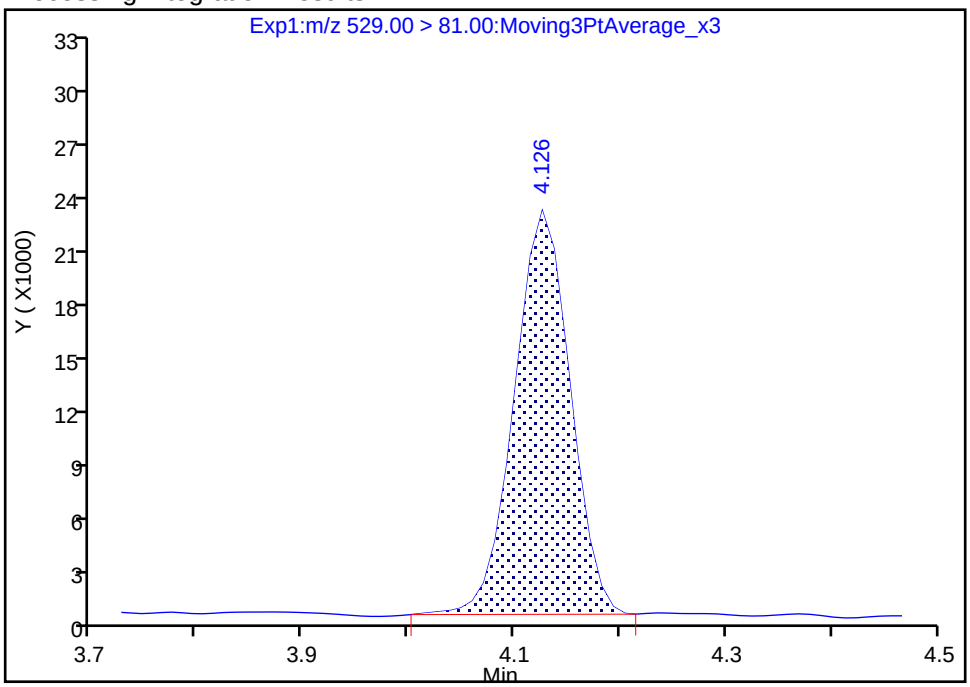
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 26 M2-8:2 FTS, CAS: STL02280

Signal: 1

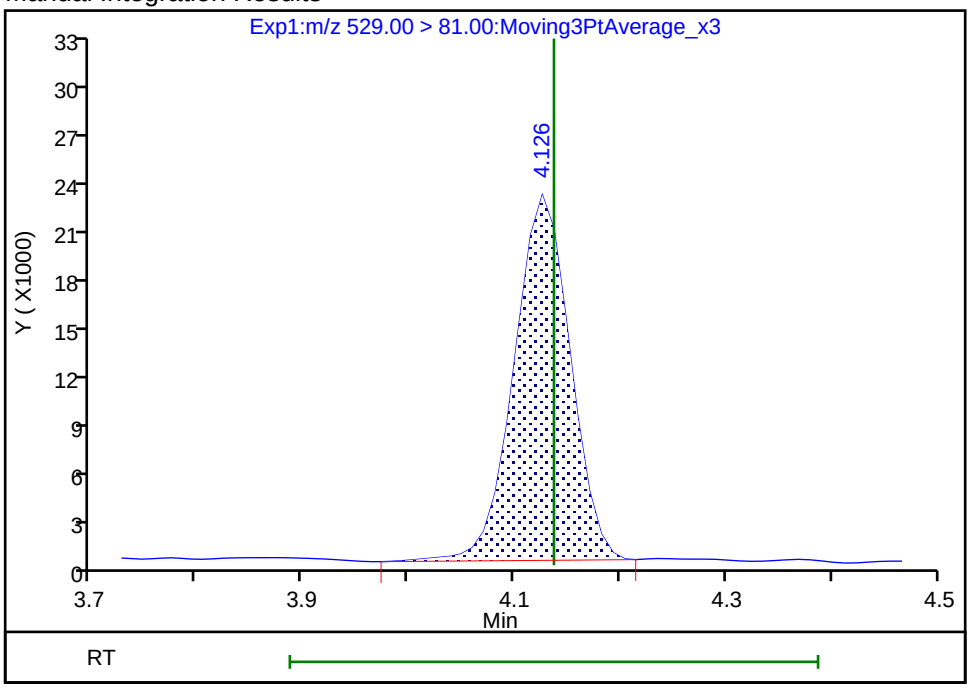
Processing Integration Results

RT: 4.13
Area: 82016
Amount: 0.899807
Amount Units: ng/ml




Manual Integration Results

RT: 4.13
Area: 82624
Amount: 0.904042
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:25:36

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

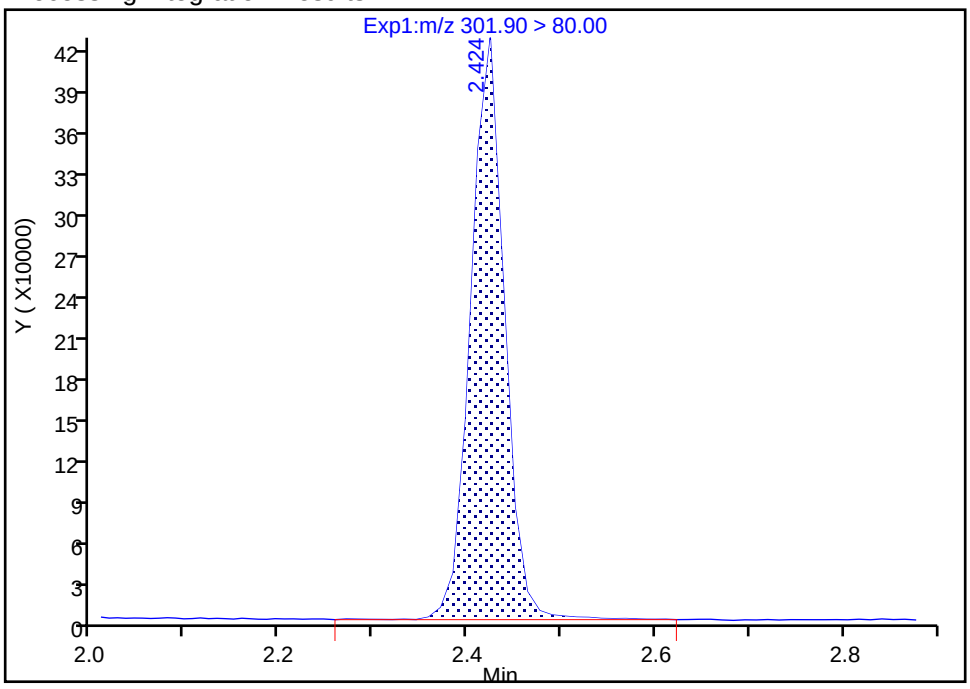
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d | | | | |
| Injection Date: | 12-Mar-2021 14:21:56 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-B MS | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 18 | Worklist Smp#: | 18 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 47 13C3 PFBS, CAS: STL02337

Signal: 1

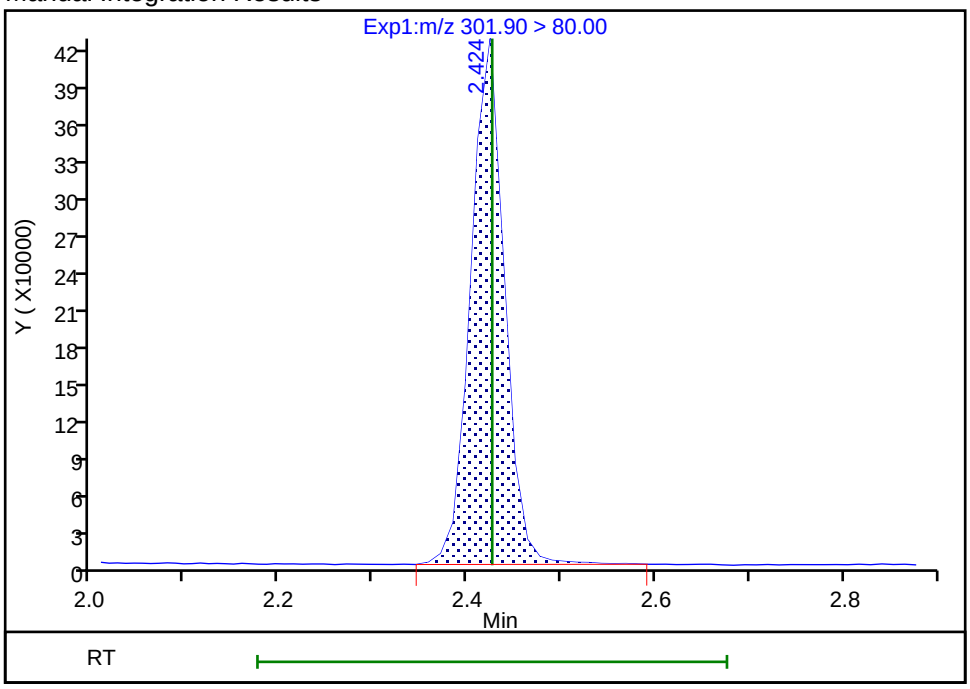
Processing Integration Results

RT: 2.42
Area: 1063114
Amount: 1.117992
Amount Units: ng/ml




Manual Integration Results

RT: 2.42
Area: 1058964
Amount: 1.110636
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:23:55

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

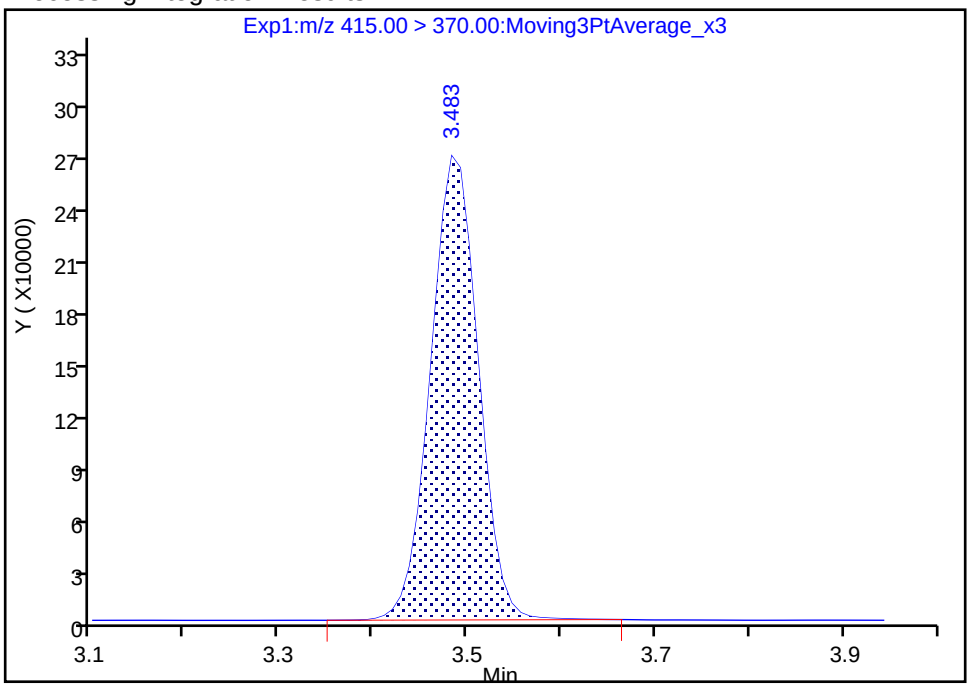
Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B18.d
Injection Date: 12-Mar-2021 14:21:56 Instrument ID: LC812
Lims ID: 460-229152-A-2-B MS
Client ID: HEX-MW12-030321
Operator ID: lc812tech ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 ( 4.60 mm) Detector EXP1

## * 62 13C2 PFOA, CAS: STL00623

Signal: 1

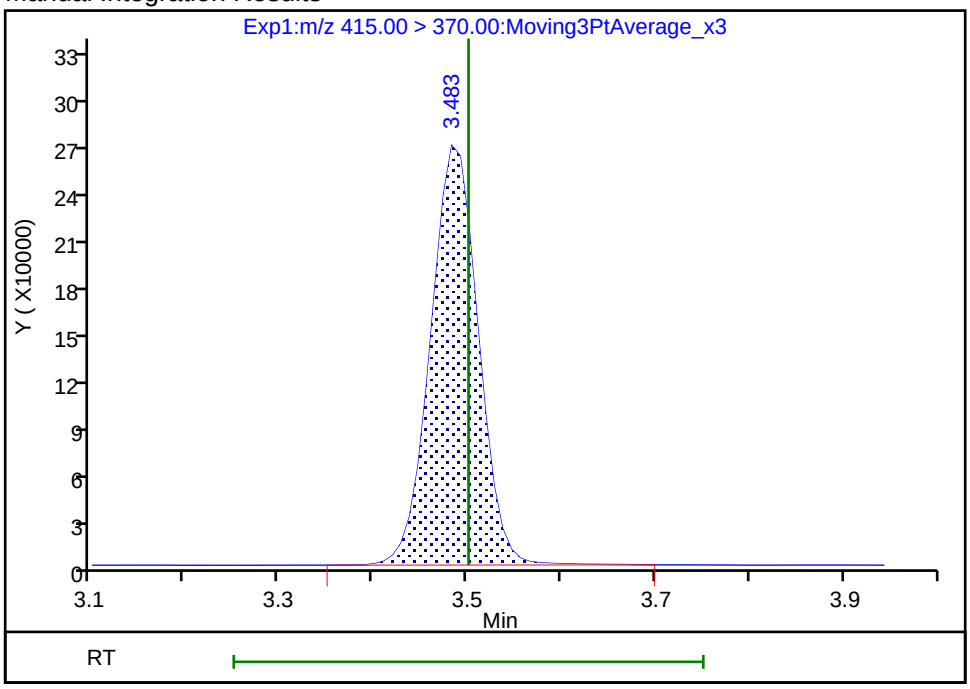
Processing Integration Results

RT: 3.48
Area: 930242
Amount: 1.250000
Amount Units: ng/ml




Manual Integration Results

RT: 3.48
Area: 932748
Amount: 1.250000
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:26:47
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID: HEX-MW12-030321 MSD  Lab Sample ID: 460-229152-2 MSD

Matrix: Water  Lab File ID: PA210312B19.d

Analysis Method: 537 (modified)  Date Collected: 03/03/2021 11:45

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 301.4(mL)  Date Analyzed: 03/12/2021 14:30

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 375-22-4 | Perfluorobutanoic acid (PFBA) | 51.63 | | 4.15 | 0.94 |
| 2706-90-3 | Perfluoropentanoic acid (PFPeA) | 80.88 | | 1.66 | 0.90 |
| 307-24-4 | Perfluorohexanoic acid (PFHxA) | 63.55 | | 1.66 | 0.69 |
| 375-85-9 | Perfluoroheptanoic acid (PFHpA) | 62.68 | | 1.66 | 0.38 |
| 335-67-1 | Perfluorooctanoic acid (PFOA) | 68.38 | | 1.66 | 0.81 |
| 375-95-1 | Perfluorononanoic acid (PFNA) | 41.06 | | 1.66 | 0.48 |
| 335-76-2 | Perfluorodecanoic acid (PFDA) | 26.47 | | 1.66 | 0.38 |
| 2058-94-8 | Perfluoroundecanoic acid (PFUnA) | 27.66 | | 1.66 | 0.61 |
| 307-55-1 | Perfluorododecanoic acid (PFDoA) | 28.71 | | 1.66 | 0.38 |
| 72629-94-8 | Perfluorotridecanoic acid (PFTriA) | 30.74 | | 1.66 | 0.36 |
| 376-06-7 | Perfluorotetradecanoic acid (PFTeA) | 34.22 | | 1.66 | 0.49 |
| 375-73-5 | Perfluorobutanesulfonic acid (PFBS) | 44.13 | | 1.66 | 0.52 |
| 355-46-4 | Perfluorohexanesulfonic acid (PFHxS) | 38.46 | | 1.66 | 0.56 |
| 375-92-8 | Perfluoroheptanesulfonic Acid (PFHpS) | 37.49 | | 1.66 | 0.32 |
| 1763-23-1 | Perfluorooctanesulfonic acid (PFOS) | 65.45 | | 1.66 | 0.72 |
| 335-77-3 | Perfluorodecanesulfonic acid (PFDS) | 26.15 | | 1.66 | 0.40 |
| 754-91-6 | Perfluorooctanesulfonamide (PFOSA) | 26.42 | | 1.66 | 0.47 |
| 2355-31-9 | N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 29.14 | | 4.15 | 0.66 |
| 2991-50-6 | N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 30.49 | | 4.15 | 0.77 |
| 27619-97-2 | 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 33.98 | | 4.15 | 0.60 |
| 39108-34-4 | 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 21.49 | | 1.66 | 0.55 |

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID: HEX-MW12-030321 MSD  Lab Sample ID: 460-229152-2 MSD

Matrix: Water  Lab File ID: PA210312B19.d

Analysis Method: 537 (modified)  Date Collected: 03/03/2021 11:45

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 301.4(mL)  Date Analyzed: 03/12/2021 14:30

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| STL00994 | 18O2 PFHxS | 96 | | 50-150 |
| STL01892 | 13C4 PFHpA | 98 | | 50-150 |
| STL00990 | 13C4 PFOA | 92 | | 50-150 |
| STL00991 | 13C4 PFOS | 80 | | 50-150 |
| STL00995 | 13C5 PFNA | 79 | | 50-150 |
| STL00992 | 13C4 PFBA | 79 | | 25-150 |
| STL00993 | 13C2 PFHxA | 100 | | 50-150 |
| STL00996 | 13C2 PFDA | 73 | | 50-150 |
| STL00997 | 13C2 PFUnA | 67 | | 50-150 |
| STL00998 | 13C2 PFDoA | 67 | | 50-150 |
| STL01056 | 13C8 FOSA | 67 | | 25-150 |
| STL01893 | 13C5 PFPeA | 90 | | 25-150 |
| STL02116 | 13C2 PFTeDA | 68 | | 50-150 |
| STL02118 | d3-NMeFOSAA | 70 | | 50-150 |
| STL02117 | d5-NEtFOSAA | 69 | | 50-150 |
| STL02279 | M2-6:2 FTS | 97 | | 25-150 |
| STL02280 | M2-8:2 FTS | 80 | | 25-150 |
| STL02337 | 13C3 PFBS | 96 | | 50-150 |

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d
Lims ID: 460-229152-A-2-C MSD
Client ID: HEX-MW12-030321
Sample Type: MSD
Inject. Date: 12-Mar-2021 14:30:13 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 460-229152-A-2-C MSD
Misc. Info.: 200-0045149-019 Plate: 1 Rack: 2
Operator ID: lc812tech Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 15-Mar-2021 17:45:51 Calib Date: 22-Dec-2020 13:29:37
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20201222-44184.b\PA201222ICAL013.d

Column 1 : C-18 ( 4.60 mm) Det: EXP1
Process Host: CTX1650

First Level Reviewer: nampitakw Date: 15-Mar-2021 13:57:01
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 1 13C4 PFBA | | | | | | | | | | |
| 217.00 > 172.00 | 2.082 | 2.091 | -0.009 | 0.598 | 981871 | 0.9876 | | 79.0 | 4457 | |
| 2 Perfluorobutanoic acid | | | | | | | | | | M |
| 212.90 > 169.00 | 2.082 | 2.091 | -0.009 | 1.000 | 1224690 | 1.56 | | 156 | 125 | M |
| D 3 13C5 PFPeA | | | | | | | | | | |
| 267.90 > 223.00 | 2.400 | 2.413 | -0.013 | 0.689 | 805579 | 1.12 | | 89.7 | 531 | |
| 4 Perfluoropentanoic acid | | | | | | | | | | M |
| 262.90 > 219.00 | 2.400 | 2.413 | -0.013 | 1.000 | 1739650 | 2.44 | | 244 | 19.6 | M |
| D 47 13C3 PFBS | | | | | | | | | | M |
| 301.90 > 80.00 | 2.413 | 2.426 | -0.013 | 0.693 | 1054703 | 1.12 | | 95.9 | 27677 | M |
| 5 Perfluorobutanesulfonic acid | | | | | | | | | | M |
| 298.90 > 80.00 | 2.426 | 2.439 | -0.013 | 1.005 | 1365068 | 1.33 | Target=2.21 | 150 | 52.1 | M |
| 298.90 > 99.00 | 2.426 | 2.439 | -0.013 | 1.005 | 612566 | | 2.23(1.11-3.32) | | 88.8 | M |
| D 60 M2-4:2 FTS | | | | | | | | | | M |
| 329.00 > 81.00 | 2.722 | 2.734 | -0.012 | 0.781 | 93464 | 1.18 | | 101 | 11.6 | M |
| 61 1H,1H,2H,2H-perfluorohexanesulfo | | | | | | | | | | M |
| 327.00 > 307.00 | 2.722 | 2.734 | -0.012 | 1.000 | 148662 | 1.01 | | 108 | 525 | M |
| D 7 13C2 PFHxA | | | | | | | | | | |
| 315.00 > 270.00 | 2.758 | 2.770 | -0.012 | 0.792 | 945238 | 1.26 | | 100 | 1937 | |
| 6 Perfluorohexanoic acid | | | | | | | | | | M |
| 313.00 > 269.00 | 2.758 | 2.770 | -0.012 | 1.000 | 1582274 | 1.92 | Target=12.83 | 192 | 35.5 | M |
| 313.00 > 119.00 | 2.758 | 2.770 | -0.012 | 1.000 | 127592 | | 12.40(6.42-19.25) | | 92.6 | M |
| 70 Perfluoropentanesulfonic acid | | | | | | | | | | M |
| 349.00 > 80.00 | 2.770 | 2.770 | 0.0 | 0.887 | 932656 | 1.05 | Target=3.35 | 112 | 89.4 | M |
| 349.00 > 99.00 | 2.758 | 2.770 | -0.012 | 0.884 | 266729 | | 3.50(1.67-5.02) | | 93.1 | M |
| 67 Perfluoro(2-propoxypropanoic) ac | | | | | | | | | | M |
| 329.10 > 285.00 | 2.868 | 2.880 | -0.012 | 1.000 | 146637 | 1.56 | | 156 | 16.2 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 64 13C3 HFPO-DA | | | | | | | | | | M |
| 332.10 > 287.00 | 2.868 | 2.880 | -0.012 | 0.823 | 84848 | 0.6398 | | 51.2 | 213 | M |
| 8 Perfluorohexanesulfonic acid | | | | | | | | | | M |
| 399.00 > 80.00 | 3.121 | 3.132 | -0.011 | 1.000 | 921017 | 1.16 | Target=4.15 | 127 | 95.0 | M |
| 399.00 > 99.00 | 3.121 | 3.132 | -0.011 | 1.000 | 219181 | | 4.20(2.08-6.23) | | 128 | M |
| D 11 18O2 PFHxS | | | | | | | | | | |
| 403.00 > 84.00 | 3.121 | 3.132 | -0.011 | 0.896 | 797324 | 1.13 | | 95.8 | 2015 | |
| D 9 13C4 PFHpA | | | | | | | | | | |
| 367.00 > 322.00 | 3.132 | 3.143 | -0.011 | 0.899 | 882607 | 1.22 | | 97.9 | 3603 | |
| 10 Perfluoroheptanoic acid | | | | | | | | | | M |
| 363.00 > 319.00 | 3.132 | 3.143 | -0.011 | 1.000 | 1457007 | 1.89 | Target=3.66 | 189 | 56.3 | M |
| 363.00 > 169.00 | 3.132 | 3.143 | -0.011 | 1.000 | 397699 | | 3.66(1.83-5.49) | | 475 | M |
| 77 DONA | | | | | | | | | | M |
| 377.00 > 251.00 | 3.164 | 3.175 | -0.011 | 0.832 | 1488311 | 1.15 | Target=2.43 | 123 | 799 | M |
| 377.00 > 85.00 | 3.164 | 3.175 | -0.011 | 0.832 | 613384 | | 2.43(1.22-3.65) | | 317 | |
| 16 Perfluoroheptanesulfonic acid | | | | | | | | | | M |
| 449.00 > 80.00 | 3.474 | 3.483 | -0.009 | 0.913 | 587111 | 1.13 | Target=5.95 | 119 | 148 | M |
| 449.00 > 99.00 | 3.474 | 3.483 | -0.009 | 0.913 | 95162 | | 6.17(2.98-8.93) | | 110 | |
| D 12 M2-6:2 FTS | | | | | | | | | | M |
| 429.00 > 81.00 | 3.474 | 3.492 | -0.018 | 0.997 | 101473 | 1.16 | | 97.3 | 37.7 | M |
| 13 1H,1H,2H,2H-perfluorooctanesulfo | | | | | | | | | | |
| 427.00 > 407.00 | 3.474 | 3.492 | -0.018 | 1.000 | 97355 | 1.02 | | 108 | 1297 | |
| D 14 13C4 PFOA | | | | | | | | | | |
| 417.00 > 372.00 | 3.483 | 3.501 | -0.018 | 1.000 | 846262 | 1.16 | | 92.4 | 3120 | |
| * 62 13C2 PFOA | | | | | | | | | | |
| 415.00 > 370.00 | 3.483 | 3.501 | -0.018 | | 925076 | 1.25 | | | 2854 | |
| 15 Perfluorooctanoic acid | | | | | | | | | | M |
| 413.00 > 369.00 | 3.492 | 3.501 | -0.009 | 1.003 | 1512365 | 2.06 | Target=2.58 | 206 | 114 | M |
| 413.00 > 169.00 | 3.492 | 3.501 | -0.009 | 1.003 | 618009 | | 2.45(1.29-3.87) | | 890 | M |
| 17 Perfluorooctanesulfonic acid | | | | | | | | | | M |
| 499.00 > 80.00 | 3.804 | 3.814 | -0.010 | 1.000 | 873041 | 1.97 | Target=5.65 | 213 | 158 | M |
| 499.00 > 99.00 | 3.804 | 3.814 | -0.010 | 1.000 | 130499 | | 6.69(2.82-8.47) | | 202 | M |
| D 18 13C4 PFOS | | | | | | | | | | |
| 503.00 > 80.00 | 3.804 | 3.814 | -0.010 | 1.092 | 459875 | 0.9519 | | 79.7 | 209 | |
| D 19 13C5 PFNA | | | | | | | | | | |
| 468.00 > 423.00 | 3.824 | 3.824 | 0.0 | 1.098 | 635007 | 0.9828 | | 78.6 | 2386 | |
| 20 Perfluorononanoic acid | | | | | | | | | | M |
| 463.00 > 419.00 | 3.824 | 3.824 | 0.0 | 1.000 | 695806 | 1.24 | Target=7.44 | 124 | 70.3 | |
| 463.00 > 169.00 | 3.824 | 3.824 | 0.0 | 1.000 | 98775 | | 7.04(3.72-11.16) | | 435 | M |
| 69 9-Chlorohexadecafluoro-3-oxanona | | | | | | | | | | |
| 531.00 > 351.00 | 3.964 | 3.973 | -0.009 | 1.042 | 313840 | 0.6355 | | 68.2 | 646 | |
| 68 Perfluorononanesulfonic acid | | | | | | | | | | M |
| 549.00 > 80.00 | 4.092 | 4.104 | -0.012 | 1.076 | 221328 | 0.6703 | Target=2.54 | 69.8 | 183 | M |
| 549.00 > 99.00 | 4.092 | 4.104 | -0.012 | 1.076 | 81737 | | 2.71(1.27-3.81) | | 153 | |
| D 23 13C2 PFDA | | | | | | | | | | |
| 515.00 > 470.00 | 4.115 | 4.126 | -0.011 | 1.181 | 564012 | 0.9131 | | 73.0 | 2813 | |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| 24 Perfluorodecanoic acid | | | | | | | | | | |
| 513.00 > 469.00 | 4.115 | 4.126 | -0.011 | 1.000 | 371024 | 0.7979 | Target=9.29 | 79.8 | 98.1 | |
| 513.00 > 169.00 | 4.115 | 4.126 | -0.011 | 1.000 | 46742 | | 7.94(4.64-13.93) | | 229 | |
| D 26 M2-8:2 FTS | | | | | | | | | | |
| 529.00 > 81.00 | 4.126 | 4.137 | -0.011 | 1.185 | 87146 | 0.9614 | | 80.3 | 71.9 | |
| 25 1H,1H,2H,2H-perfluorodecanesulfo | | | | | | | | | | M |
| 527.00 > 507.00 | 4.126 | 4.137 | -0.011 | 1.000 | 32065 | 0.6479 | | 67.6 | 391 | M |
| D 21 13C8 FOSA | | | | | | | | | | |
| 506.00 > 78.00 | 4.214 | 4.225 | -0.011 | 1.210 | 759189 | 0.8361 | | 66.9 | 2866 | |
| 22 Perfluorooctanesulfonamide | | | | | | | | | | M |
| 498.00 > 78.00 | 4.214 | 4.225 | -0.011 | 1.000 | 484588 | 0.7962 | | 79.6 | 1416 | M |
| D 27 d3-NMeFOSAA | | | | | | | | | | |
| 573.00 > 419.00 | 4.257 | 4.268 | -0.011 | 1.222 | 39237 | 0.8758 | | 70.1 | 182 | |
| 28 N-methylperfluorooctanesulfonami | | | | | | | | | | |
| 570.00 > 419.00 | 4.268 | 4.268 | 0.0 | 1.003 | 24436 | 0.8783 | | 87.8 | 151 | |
| 29 Perfluorodecanesulfonic acid | | | | | | | | | | M |
| 599.00 > 80.00 | 4.347 | 4.358 | -0.012 | 1.143 | 207484 | 0.7881 | Target=2.80 | 81.8 | 487 | M |
| 599.00 > 99.00 | 4.347 | 4.358 | -0.012 | 1.143 | 73701 | | 2.82(1.40-4.19) | | 380 | M |
| D 30 13C2 PFUnA | | | | | | | | | | |
| 565.00 > 520.00 | 4.380 | 4.391 | -0.011 | 1.257 | 426496 | 0.8406 | | 67.2 | 2869 | |
| 31 Perfluoroundecanoic acid | | | | | | | | | | M |
| 563.00 > 519.00 | 4.380 | 4.391 | -0.011 | 1.000 | 290096 | 0.8337 | Target=8.12 | 83.4 | 149 | |
| 563.00 > 169.00 | 4.380 | 4.391 | -0.011 | 1.000 | 38904 | | 7.46(4.06-12.18) | | 472 | M |
| D 32 d5-NEtFOSAA | | | | | | | | | | |
| 589.00 > 419.00 | 4.391 | 4.402 | -0.011 | 1.261 | 37553 | 0.8671 | | 69.4 | 304 | |
| 33 N-ethylperfluorooctanesulfonamid | | | | | | | | | | M |
| 584.00 > 419.00 | 4.402 | 4.402 | 0.0 | 1.003 | 25557 | 0.9190 | | 91.9 | 265 | M |
| 66 11-Chloroeicosafluoro-3-oxaundec | | | | | | | | | | |
| 631.00 > 451.00 | 4.467 | 4.479 | -0.013 | 1.174 | 329152 | 0.6424 | | 68.2 | 2352 | |
| D 36 13C2 PFDoA | | | | | | | | | | |
| 615.00 > 570.00 | 4.612 | 4.622 | -0.010 | 1.324 | 448898 | 0.8381 | | 67.0 | 2731 | |
| 37 Perfluorododecanoic acid | | | | | | | | | | M |
| 613.00 > 569.00 | 4.612 | 4.622 | -0.010 | 1.000 | 341753 | 0.8652 | Target=6.91 | 86.5 | 142 | M |
| 613.00 > 169.00 | 4.612 | 4.622 | -0.010 | 1.000 | 58313 | | 5.86(3.45-10.36) | | 880 | |
| 74 1H,1H,2H,2H-perfluorododecanesul | | | | | | | | | | |
| 627.00 > 607.00 | 4.622 | 4.643 | -0.021 | 1.120 | 19794 | 0.7768 | | 80.6 | 784 | |
| 75 Perfluorododecanesulfonic acid ( | | | | | | | | | | M |
| 699.00 > 80.00 | 4.783 | 4.792 | -0.009 | 1.258 | 84508 | 0.8725 | Target=0.51 | 90.1 | 739 | M |
| 699.00 > 99.00 | 4.783 | 4.792 | -0.009 | 1.258 | 161126 | | 0.52(0.26-0.77) | | 938 | |
| 41 Perfluorotridecanoic acid | | | | | | | | | | M |
| 663.00 > 619.00 | 4.810 | 4.822 | -0.012 | 1.043 | 296959 | 0.9264 | Target=4.39 | 92.6 | 202 | M |
| 663.00 > 169.00 | 4.810 | 4.822 | -0.012 | 1.043 | 76774 | | 3.87(2.20-6.59) | | 1770 | M |
| D 43 13C2 PFTeDA | | | | | | | | | | |
| 715.00 > 670.00 | 5.005 | 5.014 | -0.009 | 1.437 | 337294 | 0.8514 | | 68.1 | 2660 | |
| 42 Perfluorotetradecanoic acid | | | | | | | | | | M |
| 713.00 > 169.00 | 5.005 | 5.014 | -0.009 | 1.000 | 51615 | 1.03 | Target=1.06 | 103 | 1083 | M |
| 713.00 > 219.00 | 4.995 | 5.014 | -0.019 | 0.998 | 50874 | | 1.01(0.53-1.59) | | 1038 | M |

| Signal | RT | EXP RT | DLT RT | REL RT | Response | Amount ng/ml | Ratio(Limits) | %Rec | S/N | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D 44 13C2 PFHxDA | | | | | | | | | | |
| 815.00 > 770.00 | 5.349 | 5.360 | -0.011 | 1.536 | 347953 | 0.8222 | | 65.8 | 1984 | |
| 45 Perfluorohexadecanoic acid | | | | | | | | | | M |
| 813.00 > 769.00 | 5.349 | 5.360 | -0.011 | 1.000 | 251201 | 0.9538 | Target=3.84 | 95.4 | 159 | |
| 813.00 > 169.00 | 5.349 | 5.360 | -0.011 | 1.000 | 69023 | | 3.64(1.92-5.76) | | 1507 | M |
| 46 Perfluorooctadecanoic acid | | | | | | | | | | |
| 913.00 > 869.00 | 5.665 | 5.674 | -0.009 | 1.059 | 223742 | 0.8933 | Target=3.92 | 89.3 | 286 | |
| 913.00 > 169.00 | 5.665 | 5.674 | -0.009 | 1.059 | 65301 | | 3.43(1.96-5.88) | | 1123 | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Report Date: 15-Mar-2021 17:46:23 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Burlington

Data File: \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d

Injection Date: 12-Mar-2021 14:30:13 Instrument ID: LC812

Lims ID: 460-229152-A-2-C MSD

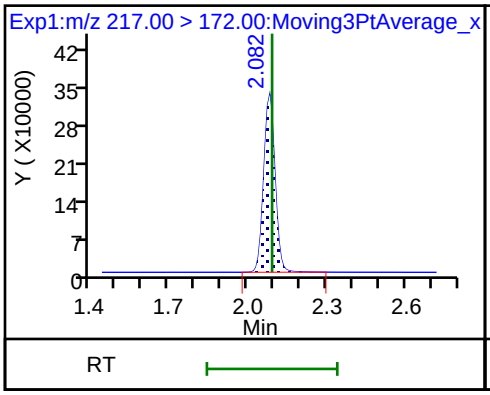
Client ID: HEX-MW12-030321

Operator ID: lc812tech ALS Bottle#: 19 Worklist Smp#: 19

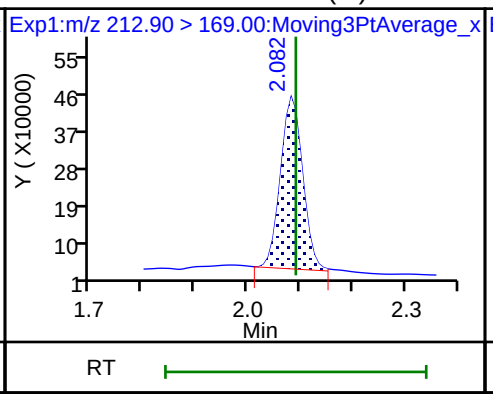
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFC_LC812 Limit Group: LC_PFC_ICAL

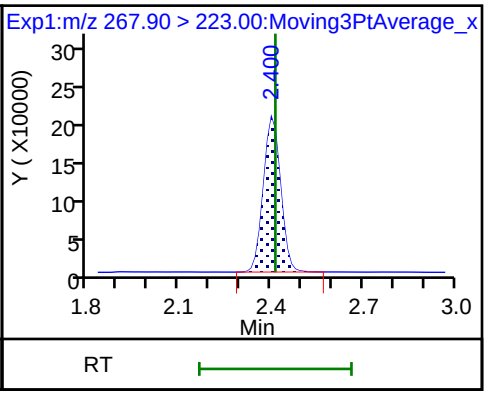
D 1 13C4 PFBA



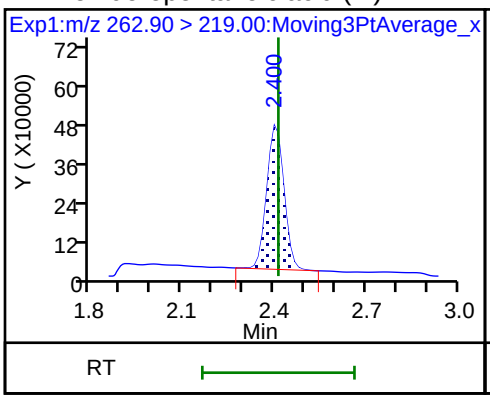

2 Perfluorobutanoic acid (M)



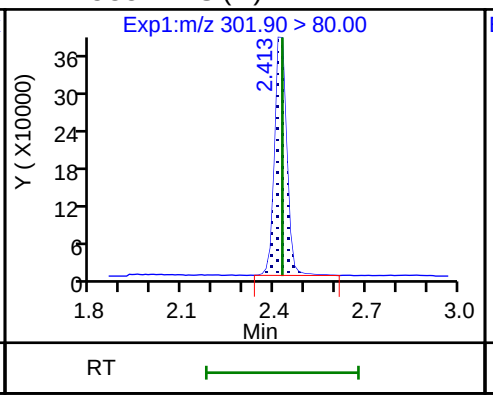

D 3 13C5 PFPeA



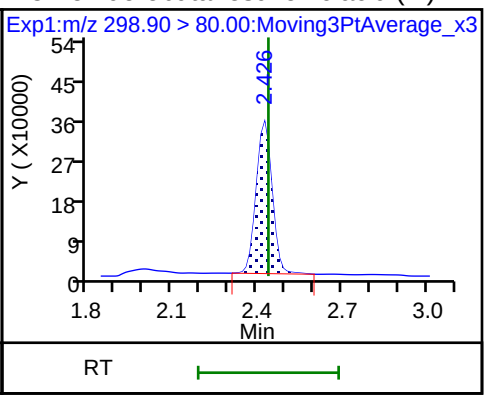

4 Perfluoropentanoic acid (M)



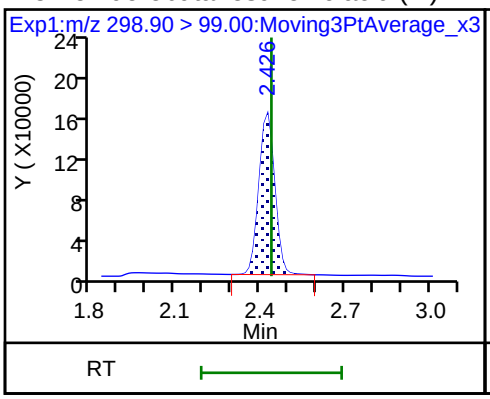

D 47 13C3 PFBS (M)



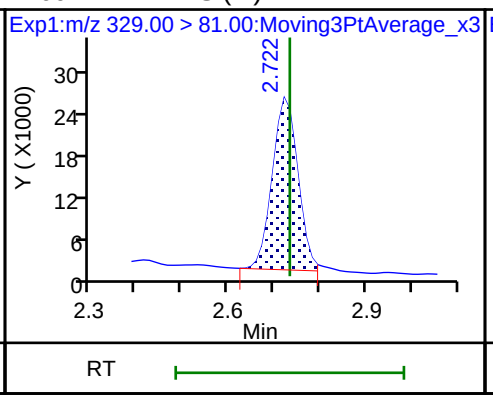

5 Perfluorobutanesulfonic acid (M)



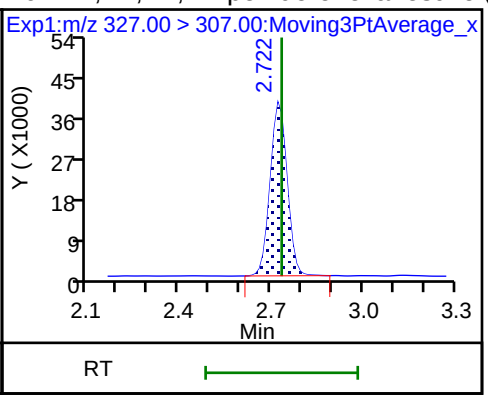

5 Perfluorobutanesulfonic acid (M)



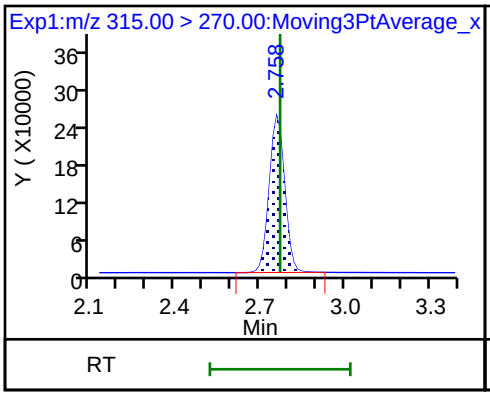

D 60 M2-4:2 FTS (M)



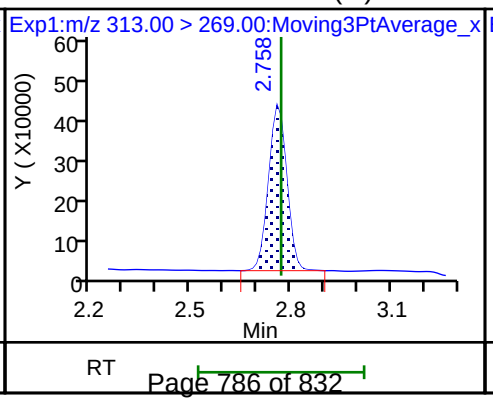

61 1H,1H,2H,2H-perfluorohexanesulfo (M)



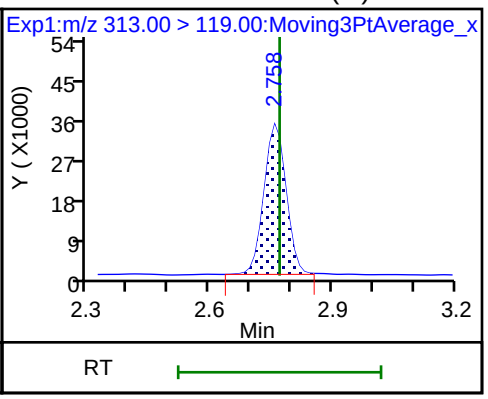

D 7 13C2 PFHxA



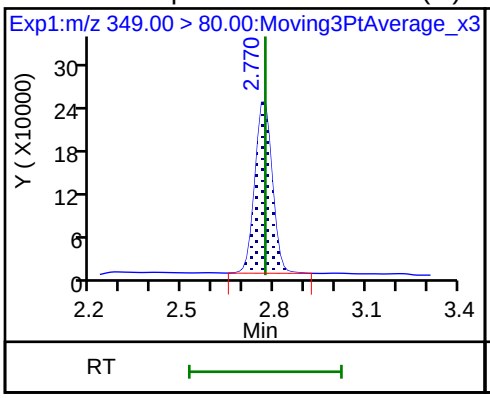

6 Perfluorohexanoic acid (M)



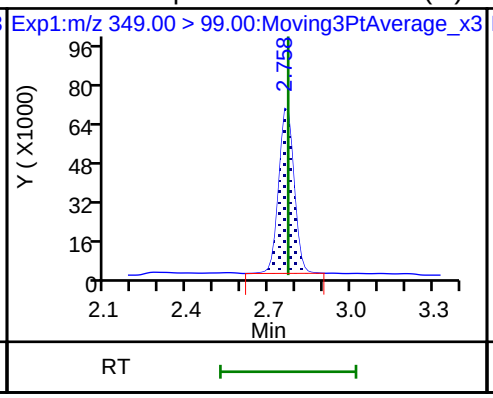

6 Perfluorohexanoic acid (M)



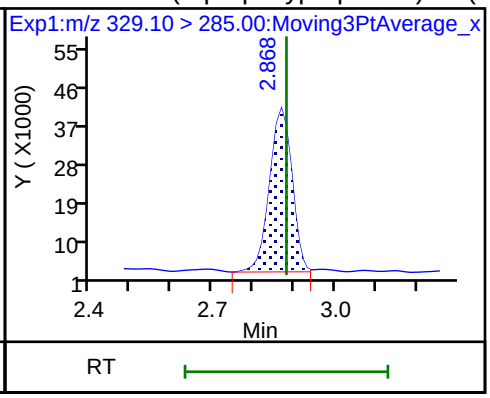
70 Perfluoropentanesulfonic acid (M)



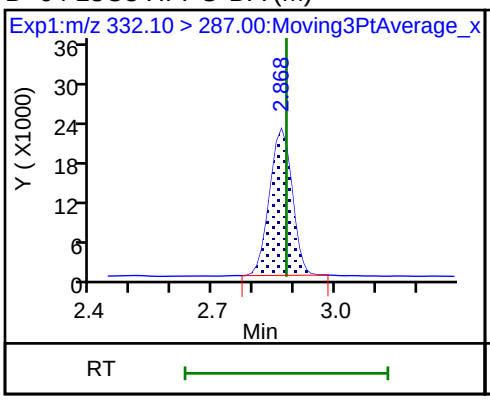

70 Perfluoropentanesulfonic acid (M)



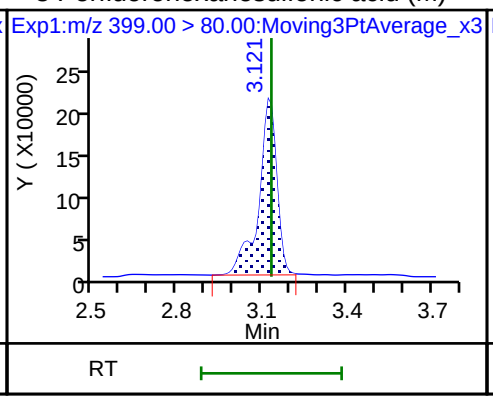

67 Perfluoro(2-propoxypropanoic) ac (M)



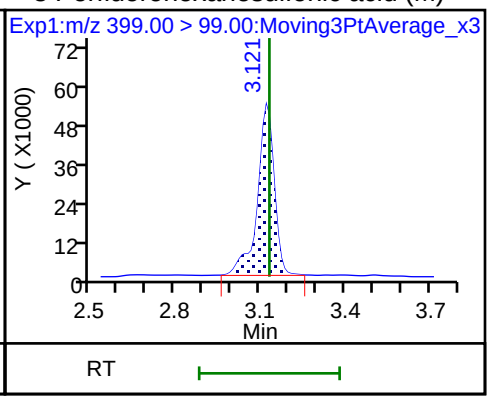

D 64 13C3 HFPO-DA (M)



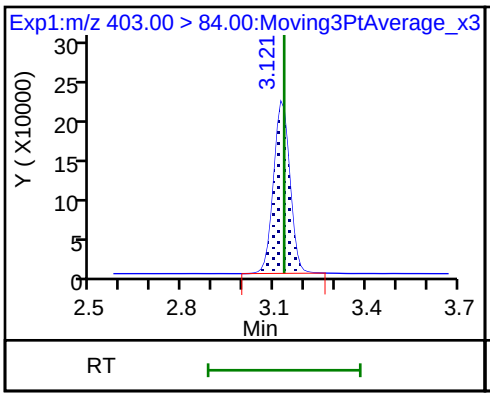

8 Perfluorohexanesulfonic acid (M)



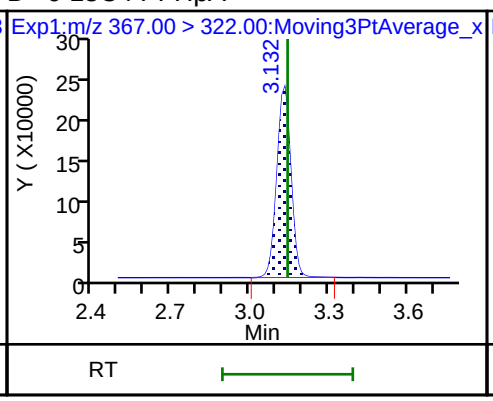

8 Perfluorohexanesulfonic acid (M)



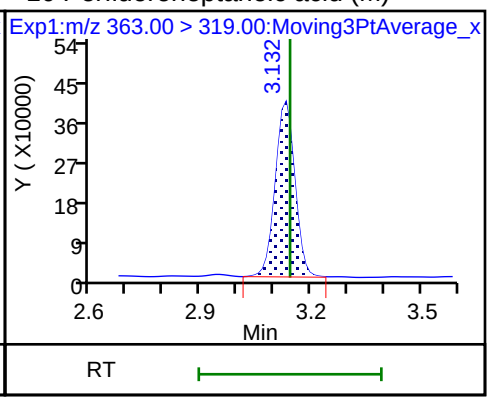

D 11 18O2 PFHxS



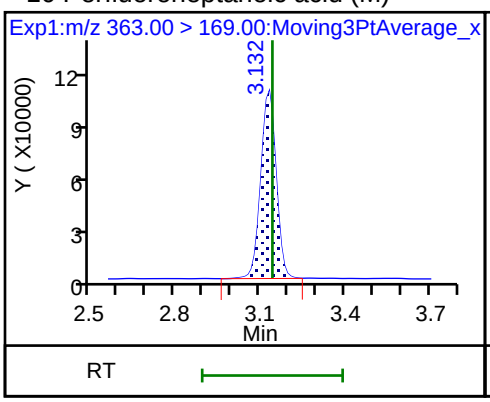

D 9 13C4 PFHpA



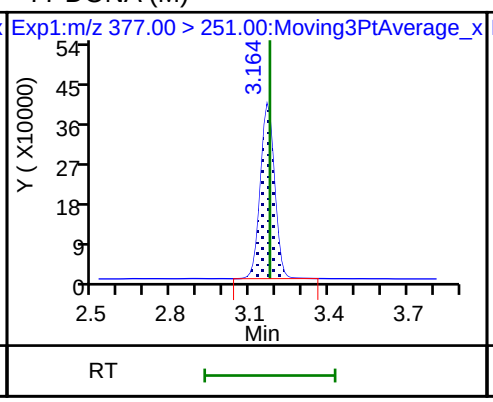

10 Perfluoroheptanoic acid (M)



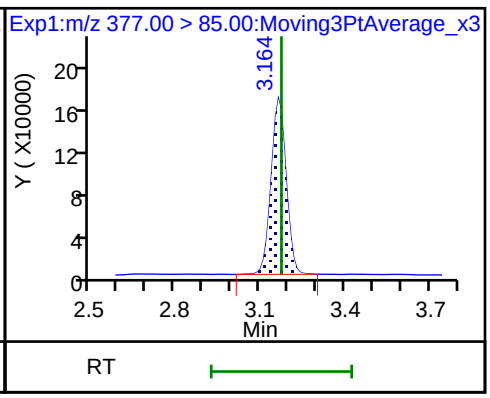

10 Perfluoroheptanoic acid (M)



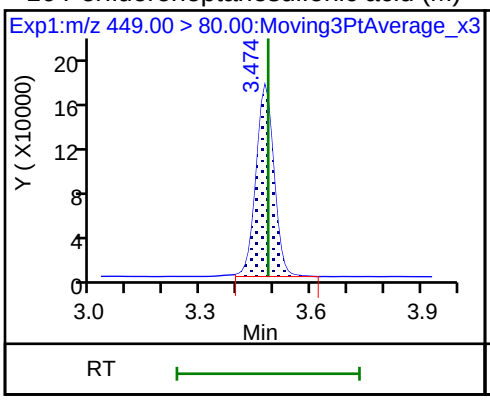

77 DONA (M)



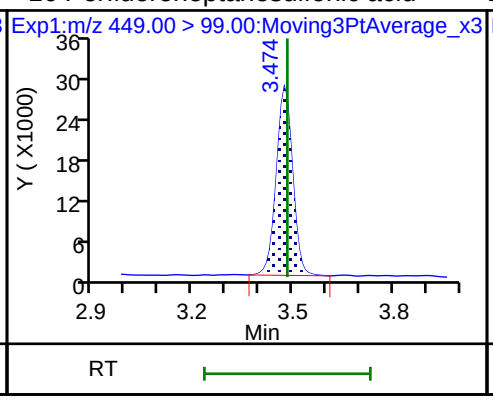

77 DONA



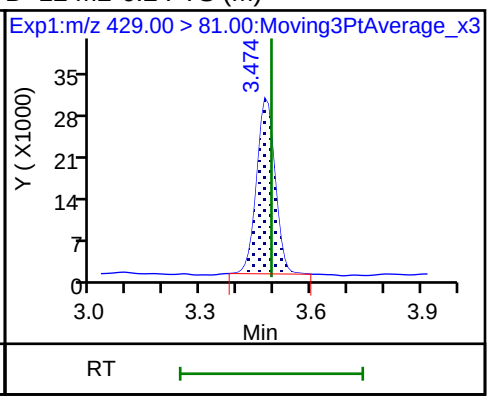
16 Perfluoroheptanesulfonic acid (M)



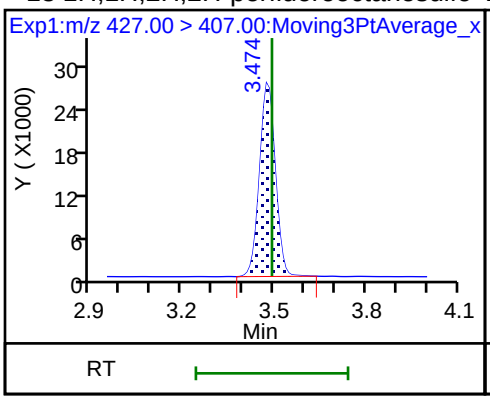

16 Perfluoroheptanesulfonic acid



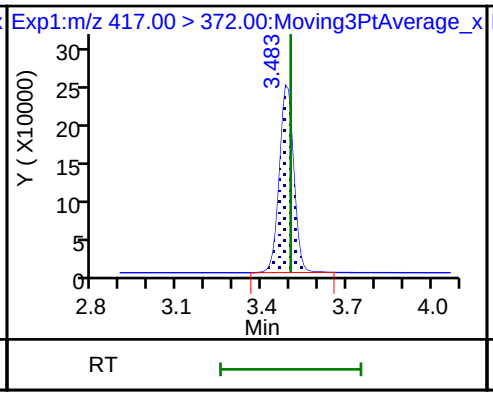

D 12 M2-6:2 FTS (M)



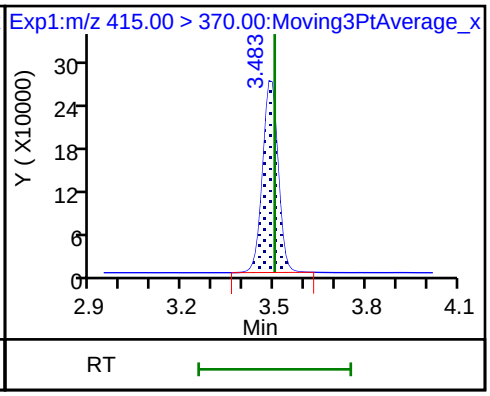

13 1H,1H,2H,2H-perfluorooctanesulfo



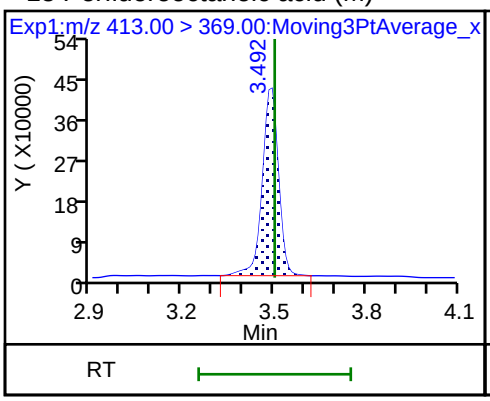

D 14 13C4 PFOA



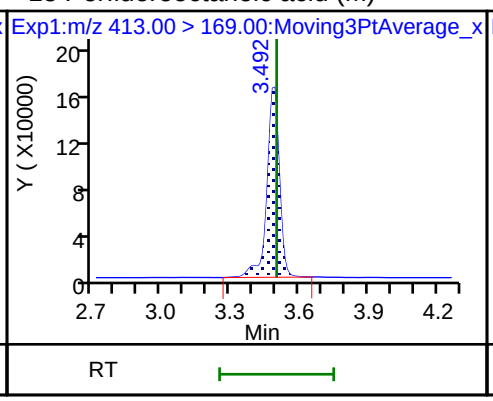

* 62 13C2 PFOA



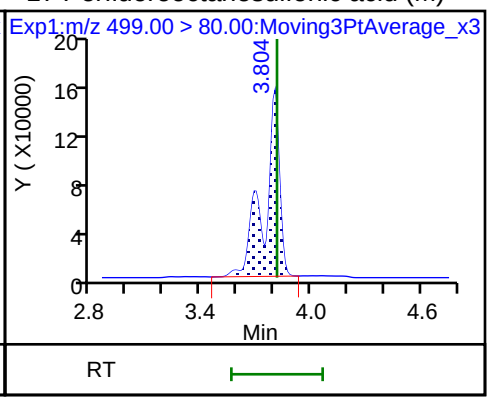

15 Perfluorooctanoic acid (M)



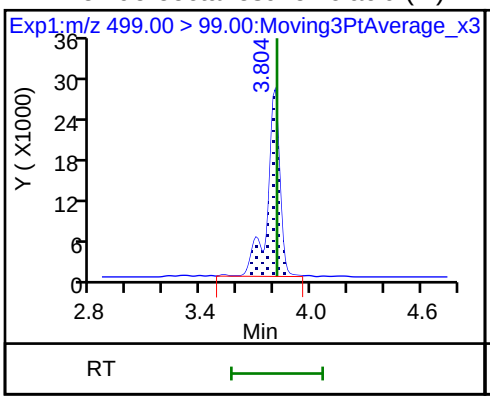

15 Perfluorooctanoic acid (M)



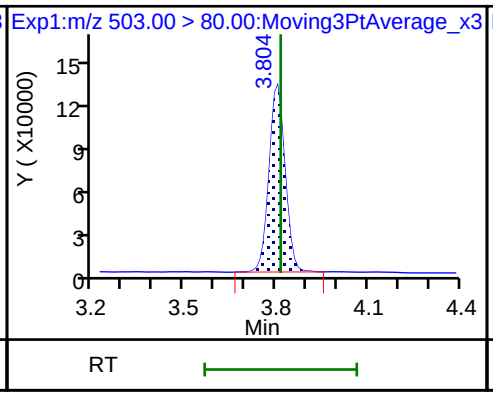

17 Perfluorooctanesulfonic acid (M)



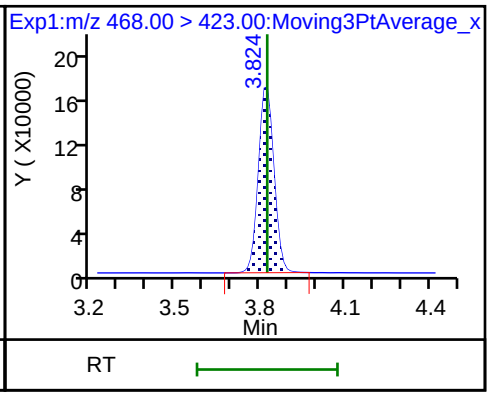

17 Perfluorooctanesulfonic acid (M)



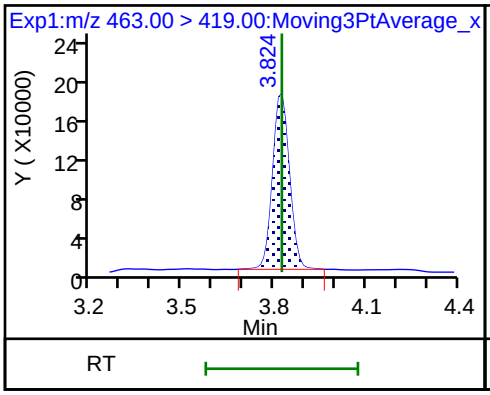

D 18 13C4 PFOS



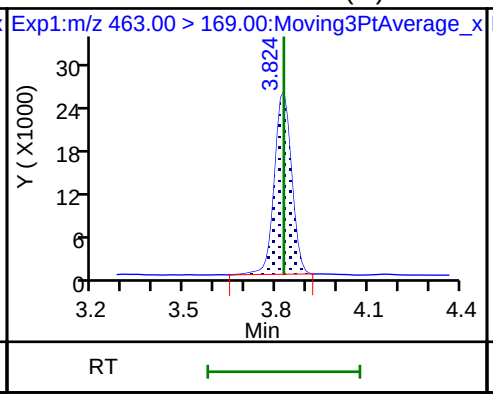

D 19 13C5 PFNA



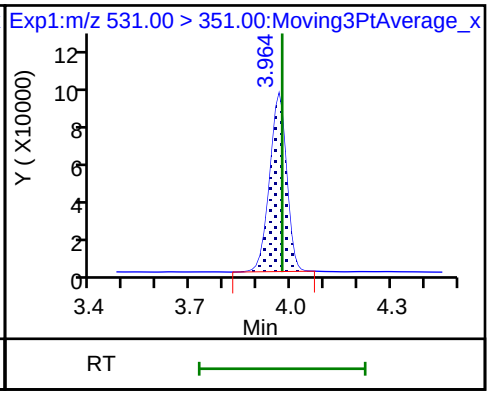
20 Perfluorononanoic acid



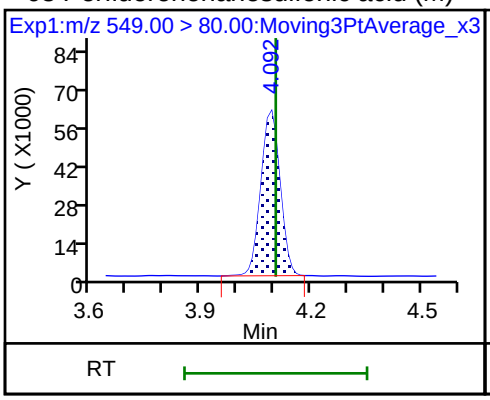

20 Perfluorononanoic acid (M)



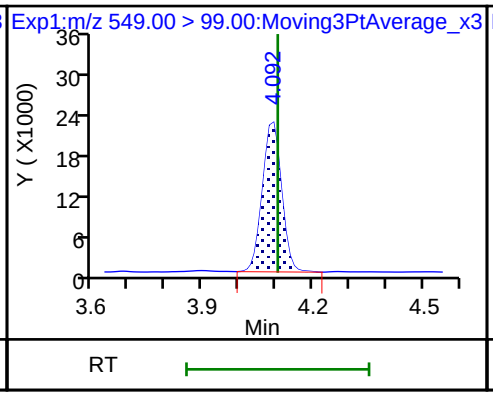

69 9-Chlorohexadecafluoro-3-oxanona



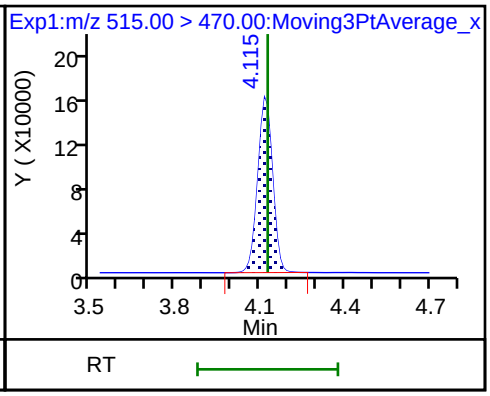

68 Perfluorononanesulfonic acid (M)



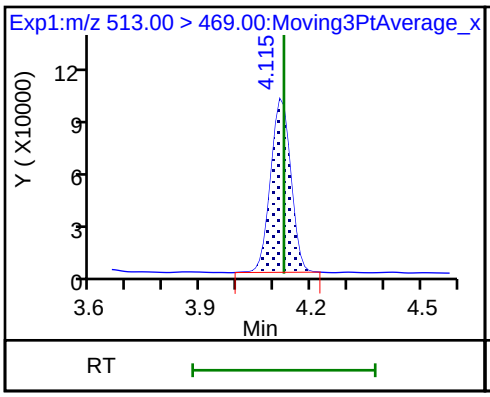

68 Perfluorononanesulfonic acid



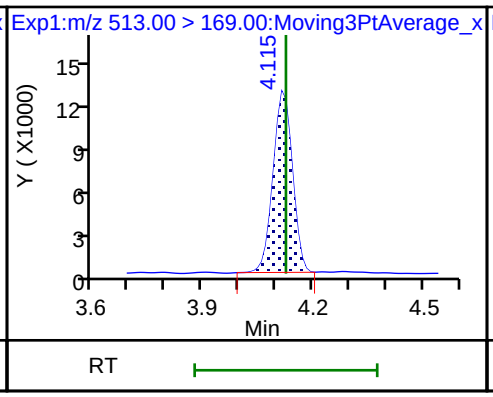

D 23 13C2 PFDA



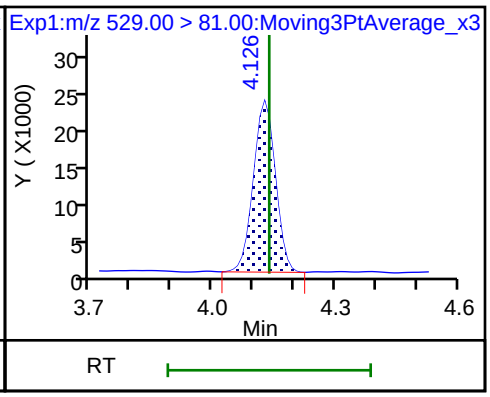

24 Perfluorodecanoic acid



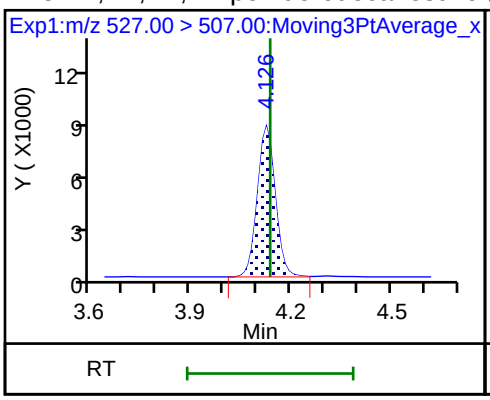

24 Perfluorodecanoic acid



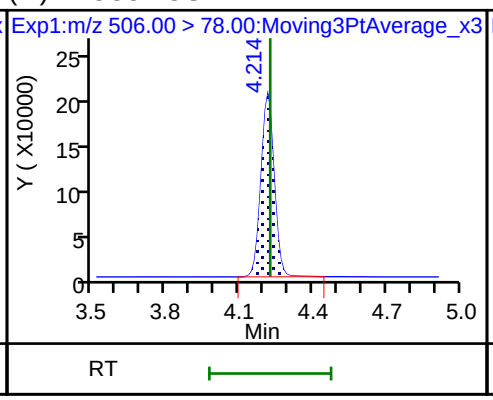

D 26 M2-8:2 FTS



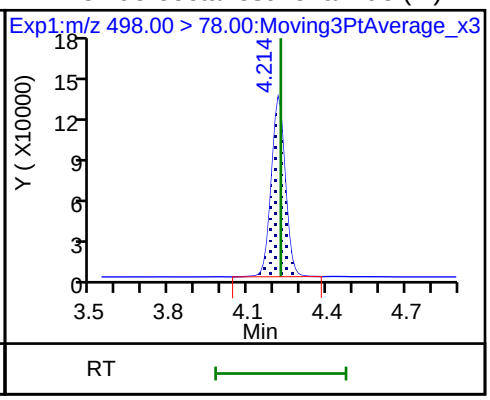

25 1H,1H,2H,2H-perfluorodecanesulfo (M)



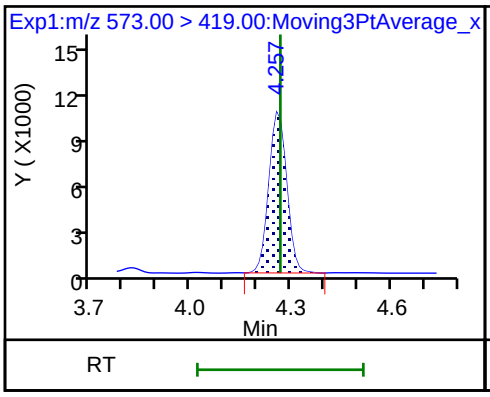

D 21 13C8 FOSA



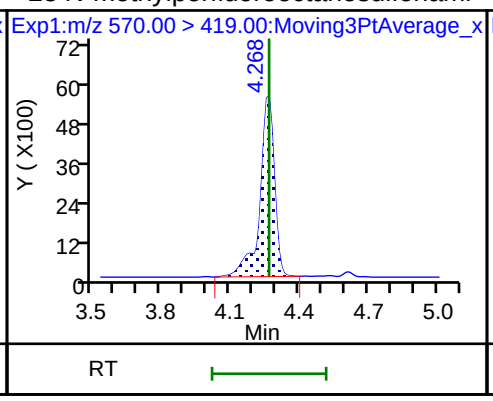

22 Perfluorooctanesulfonamide (M)



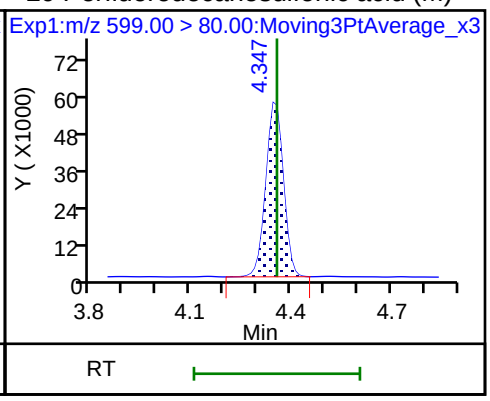
D 27 d3-NMeFOSAA



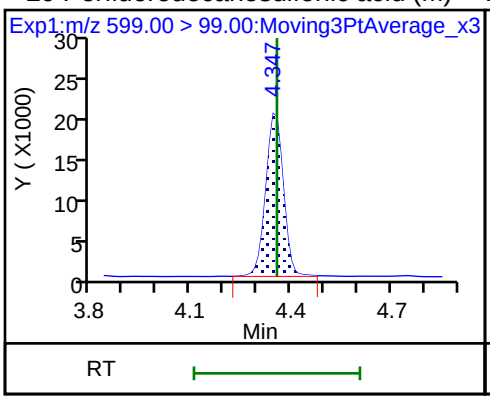

28 N-methylperfluorooctanesulfonami



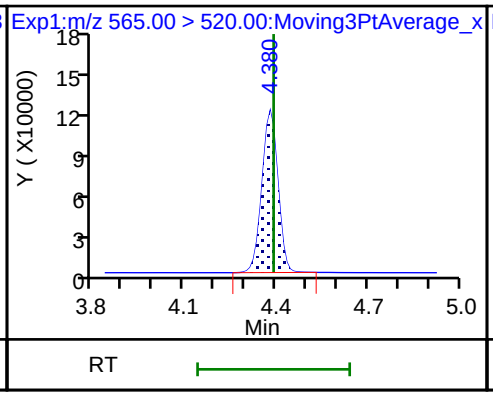

29 Perfluorodecanesulfonic acid (M)



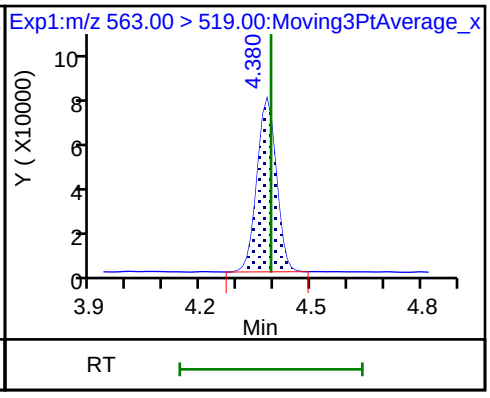

29 Perfluorodecanesulfonic acid (M)



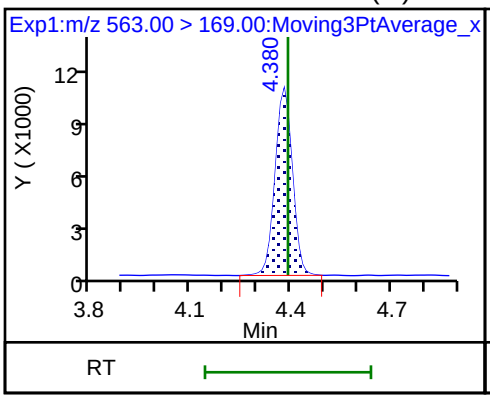

D 30 13C2 PFUnA



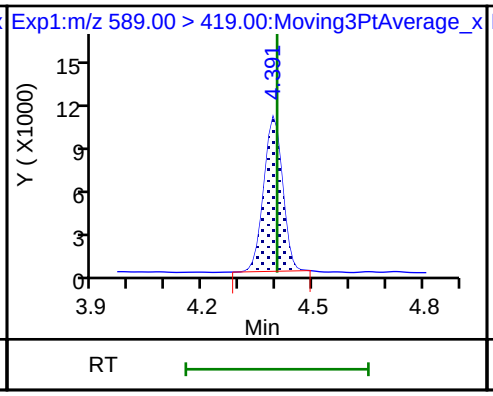

31 Perfluoroundecanoic acid



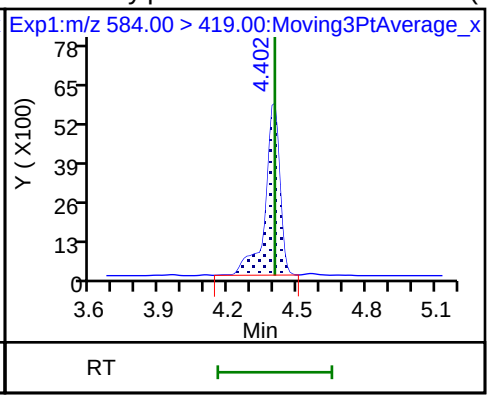

31 Perfluoroundecanoic acid (M)



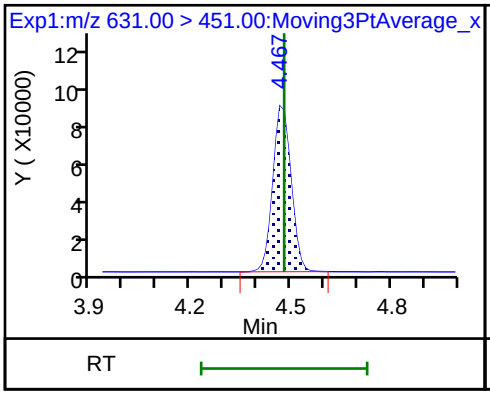

D 32 d5-NEtFOSAA



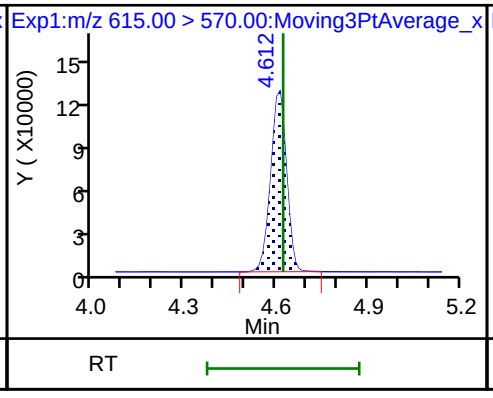

33 N-ethylperfluorooctanesulfonamid (M)



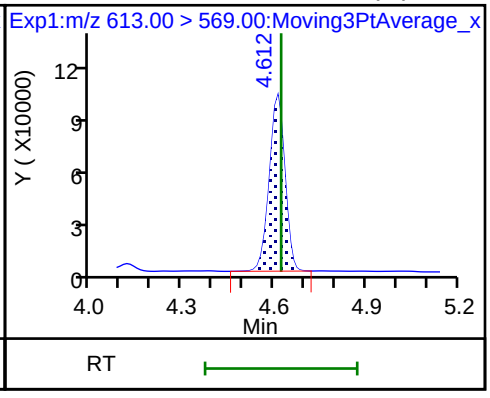

66 11-Chloroeicosafluoro-3-oxaundec



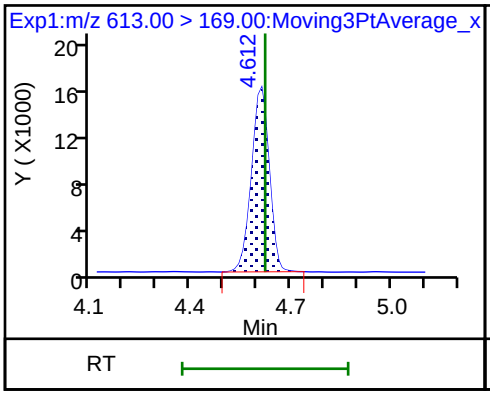

D 36 13C2 PFDoA



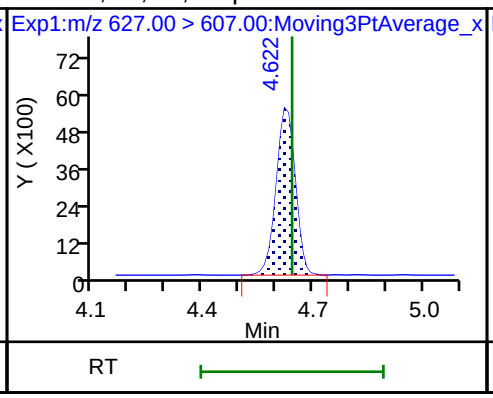

37 Perfluorododecanoic acid (M)



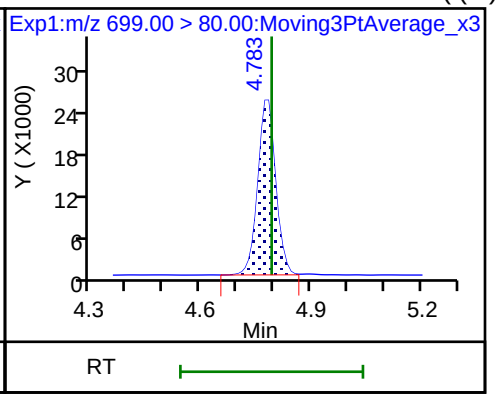
37 Perfluorododecanoic acid



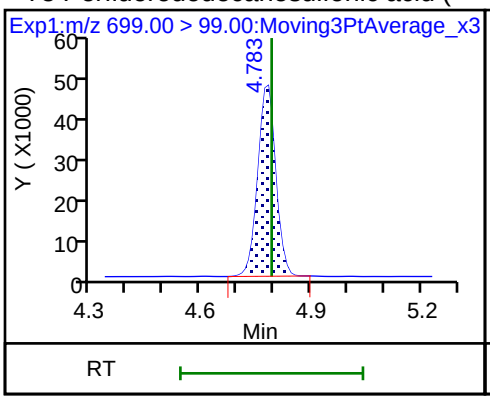

74 1H,1H,2H,2H-perfluorododecanesul



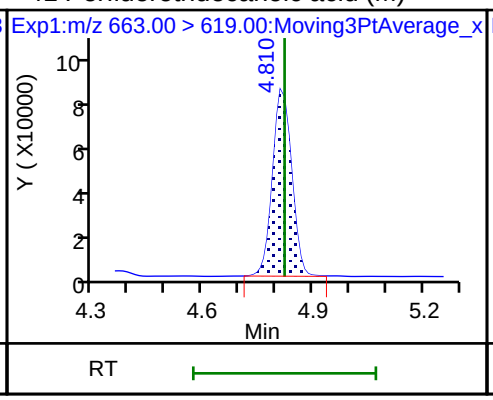

75 Perfluorododecanesulfonic acid ( (M)



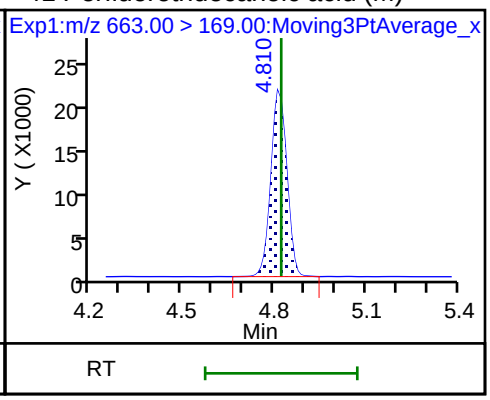

75 Perfluorododecanesulfonic acid (



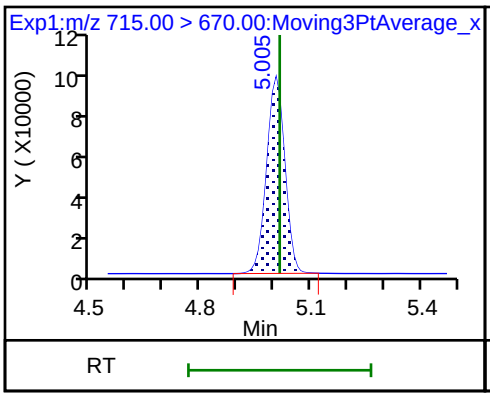

41 Perfluorotridecanoic acid (M)



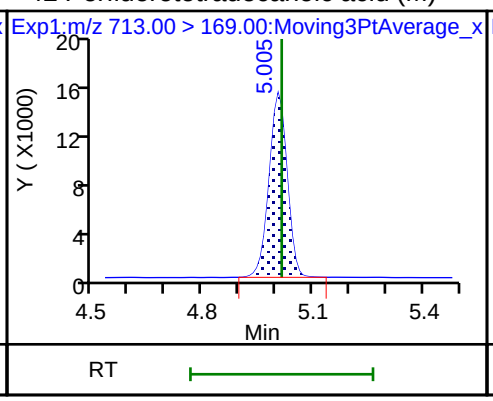

41 Perfluorotridecanoic acid (M)



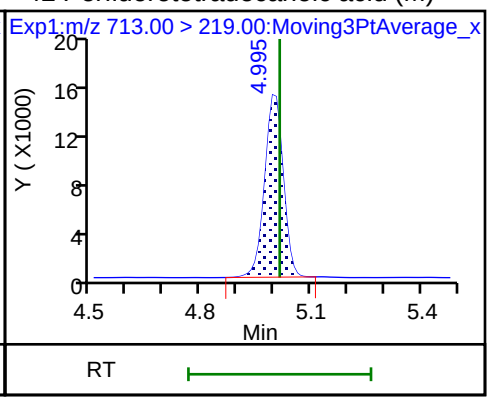

D 43 13C2 PFTeDA



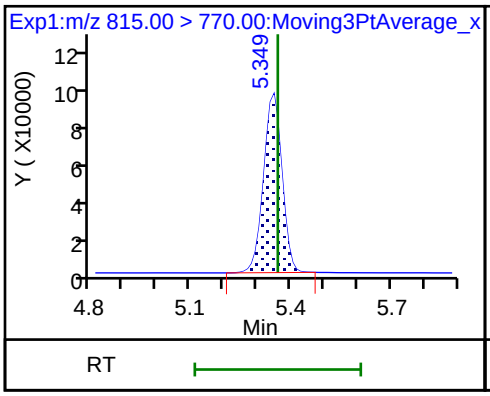

42 Perfluorotetradecanoic acid (M)



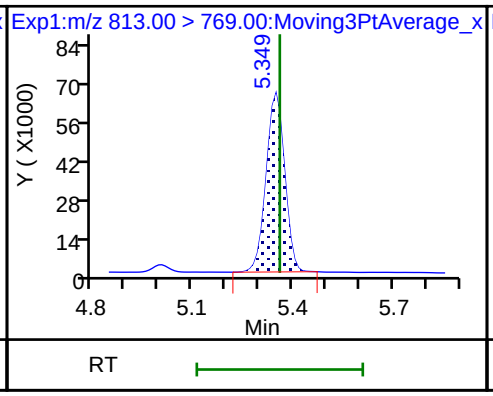

42 Perfluorotetradecanoic acid (M)



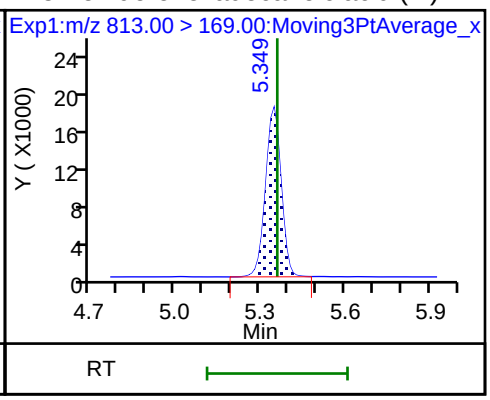

D 44 13C2 PFHxDA



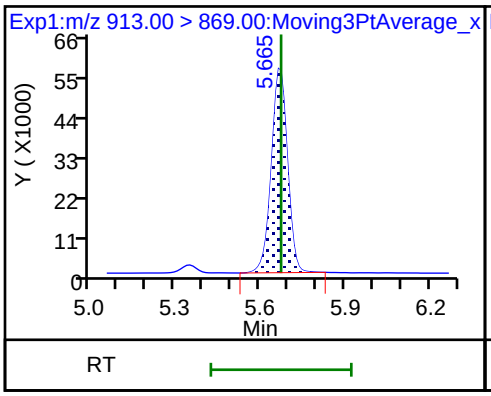

45 Perfluorohexadecanoic acid



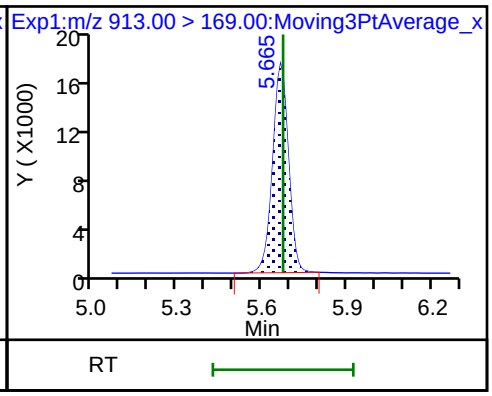

45 Perfluorohexadecanoic acid (M)



46 Perfluorooctadecanoic acid




46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

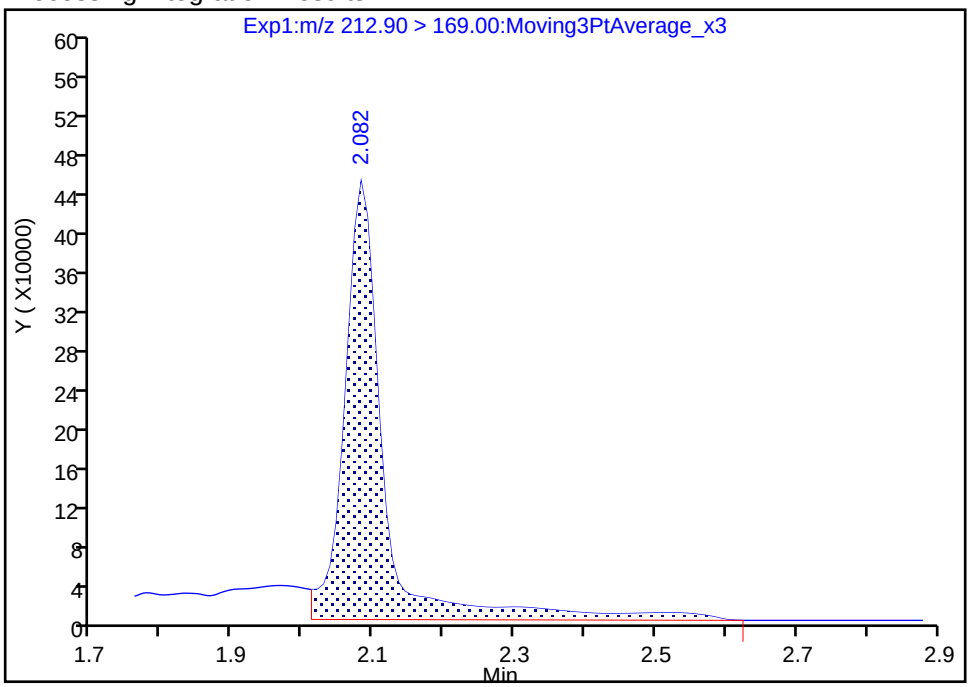
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| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

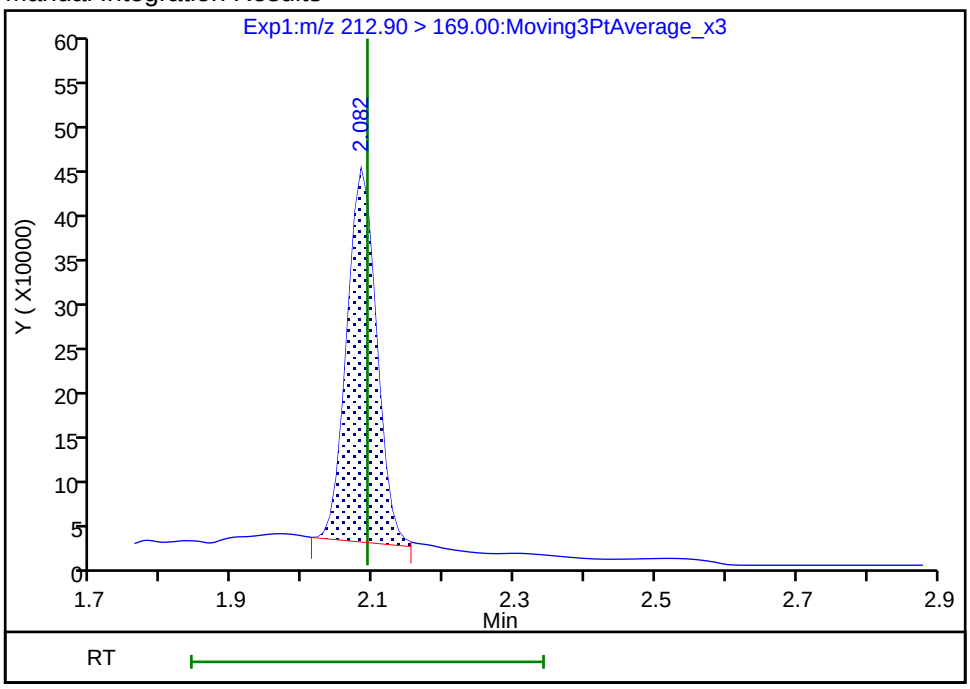
Processing Integration Results

RT: 2.08
Area: 1723288
Amount: 2.189481
Amount Units: ng/ml




Manual Integration Results

RT: 2.08
Area: 1224690
Amount: 1.556000
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:43:56

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

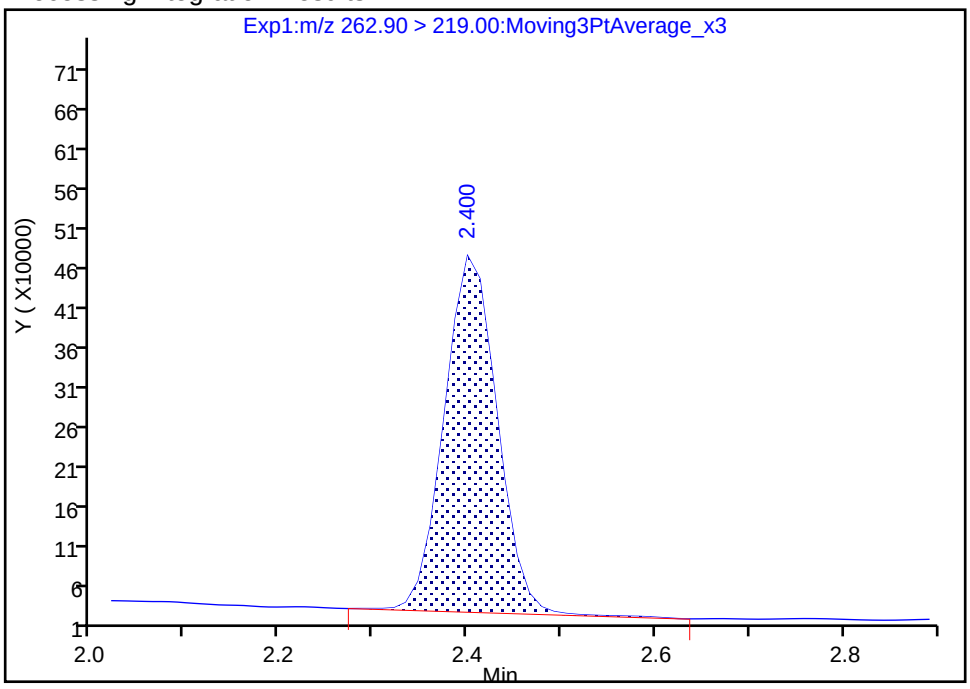
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| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

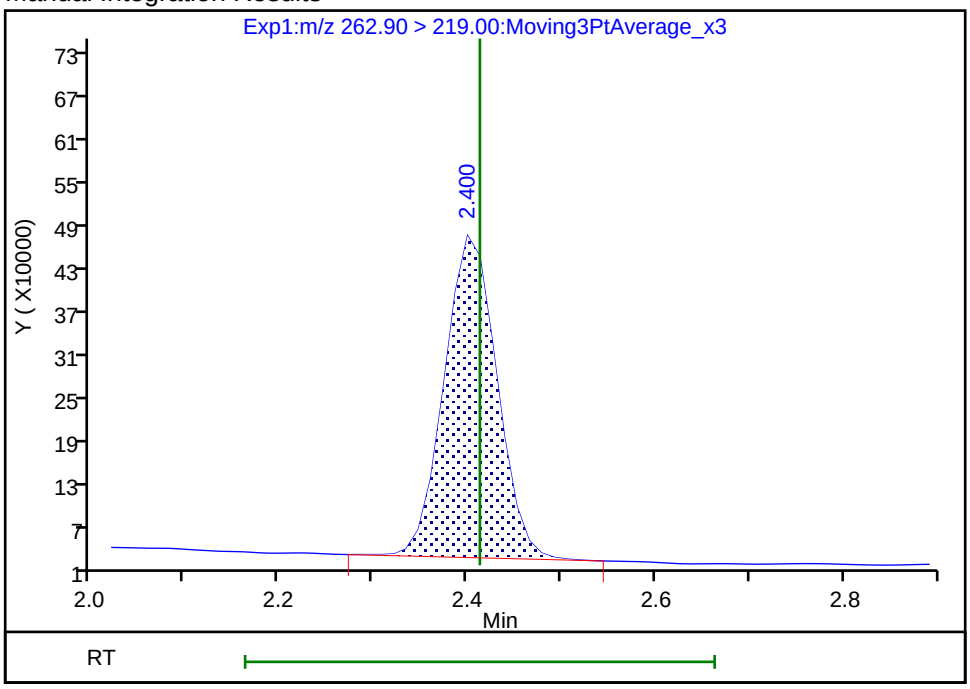
Processing Integration Results

RT: 2.40
Area: 1754787
Amount: 2.459048
Amount Units: ng/ml




Manual Integration Results

RT: 2.40
Area: 1739650
Amount: 2.437836
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:44:18

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

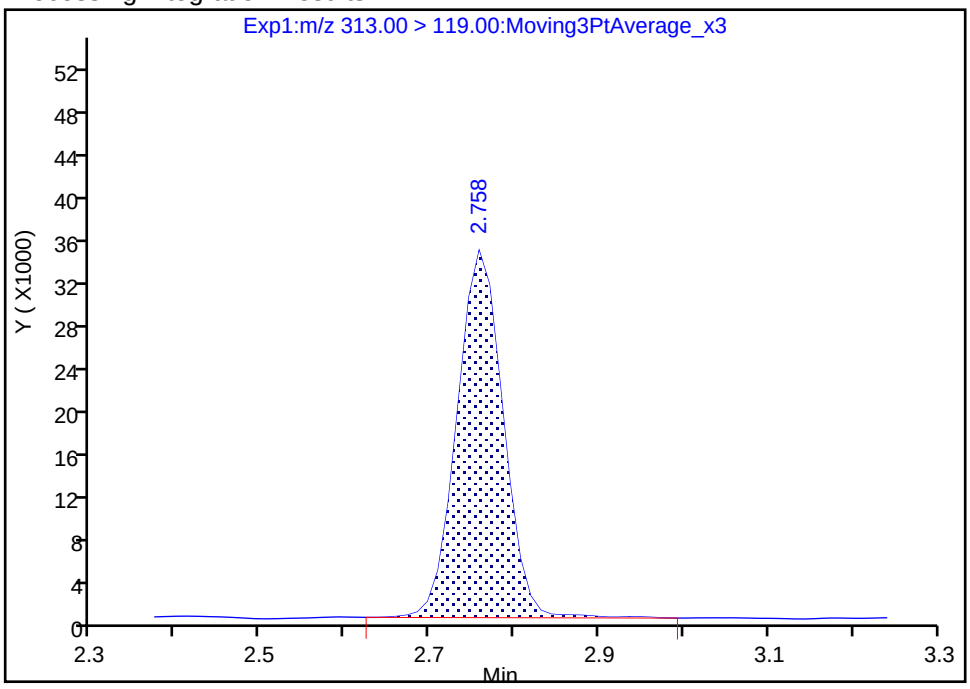
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| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

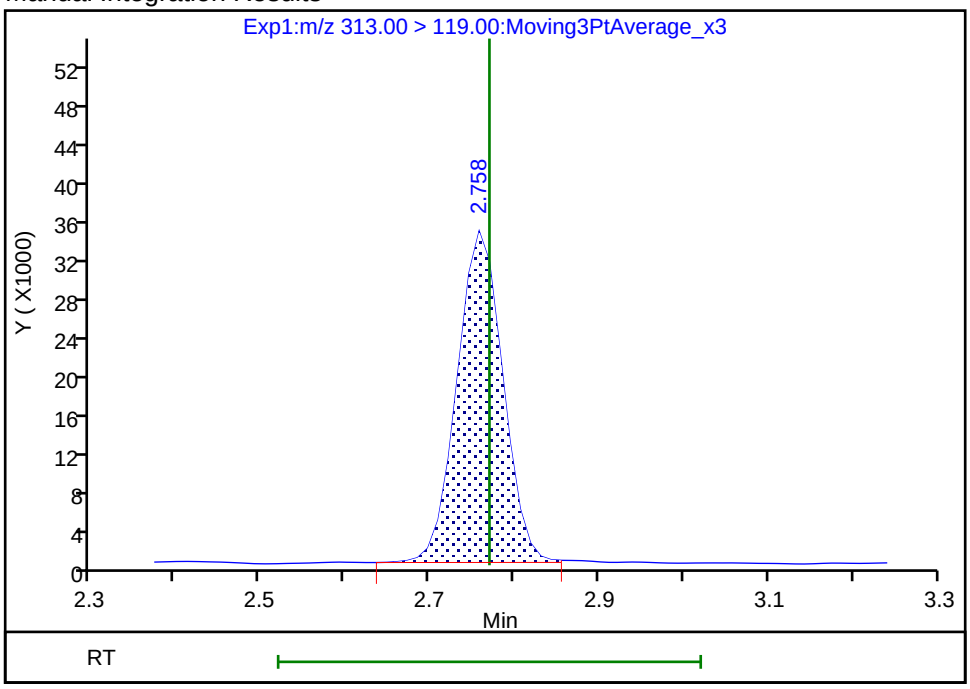
Processing Integration Results

RT: 2.76
Area: 128939
Amount: 1.930995
Amount Units: ng/ml




Manual Integration Results

RT: 2.76
Area: 127592
Amount: 1.915359
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:45:29

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

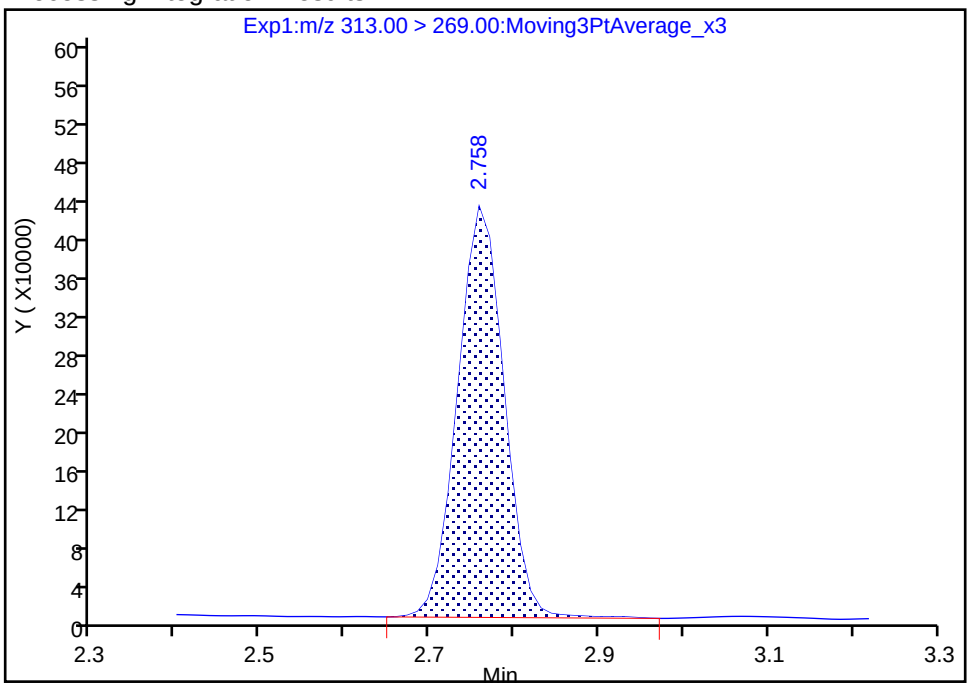
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| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

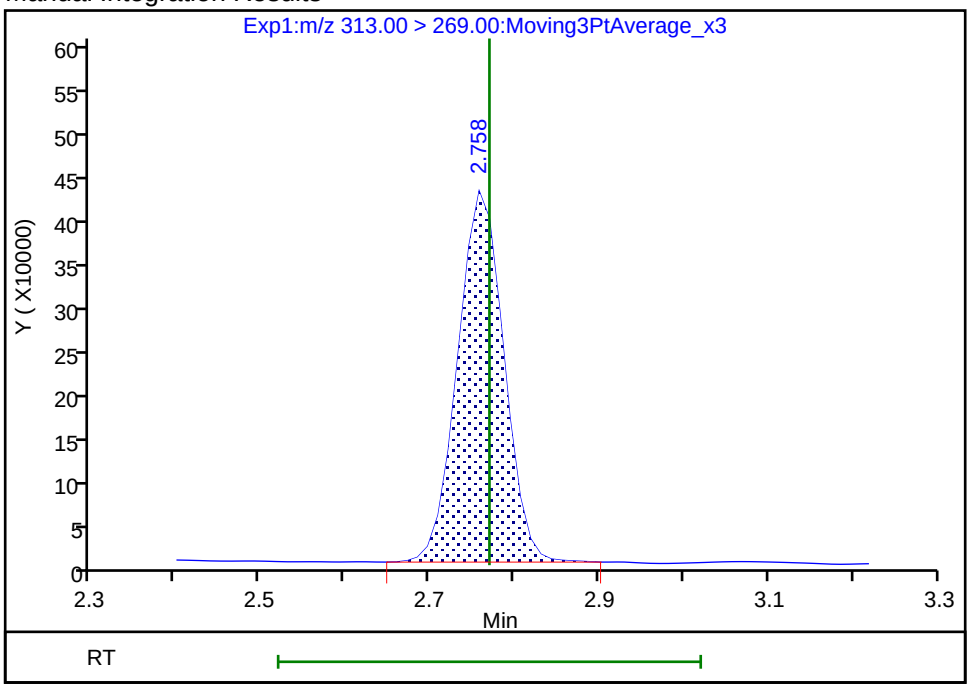
Processing Integration Results

RT: 2.76
Area: 1595191
Amount: 1.930995
Amount Units: ng/ml




Manual Integration Results

RT: 2.76
Area: 1582274
Amount: 1.915359
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:45:38

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

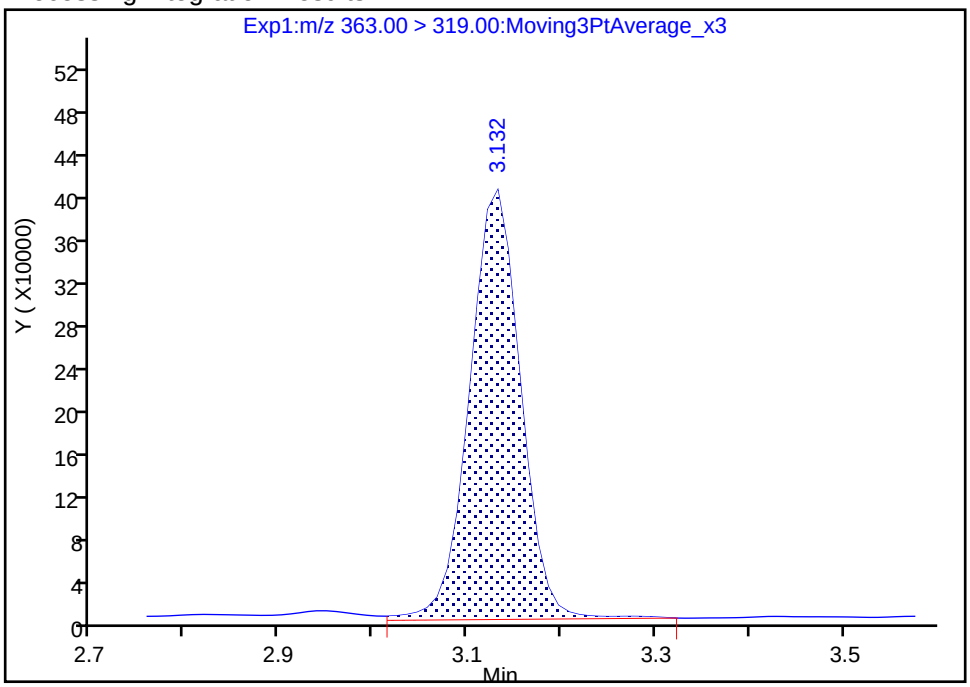
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| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

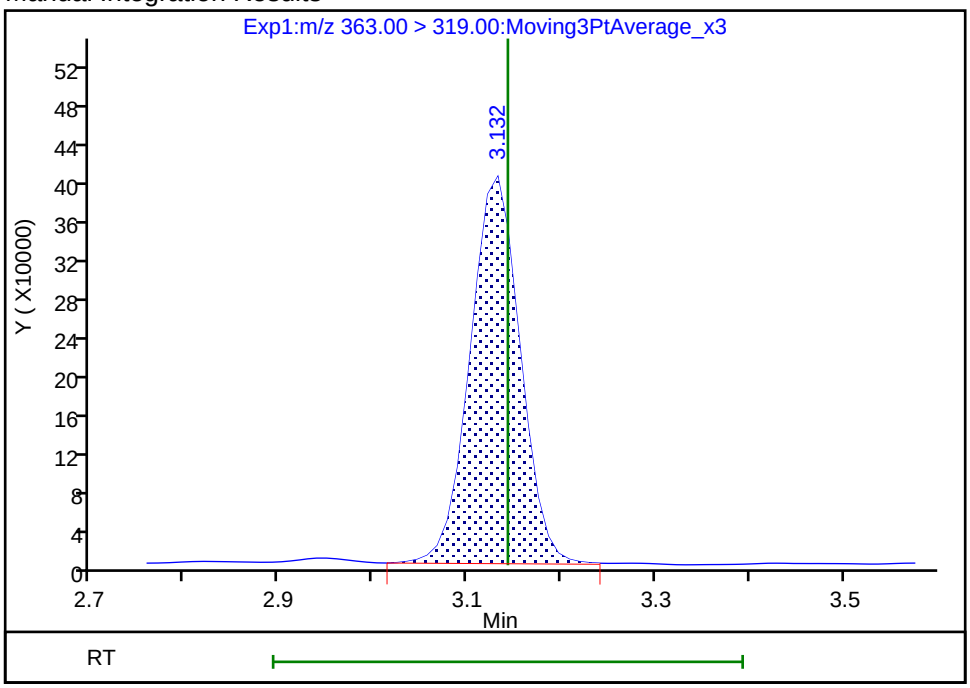
Processing Integration Results

RT: 3.13
Area: 1496828
Amount: 1.940915
Amount Units: ng/ml




Manual Integration Results

RT: 3.13
Area: 1457007
Amount: 1.889280
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:47:35
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

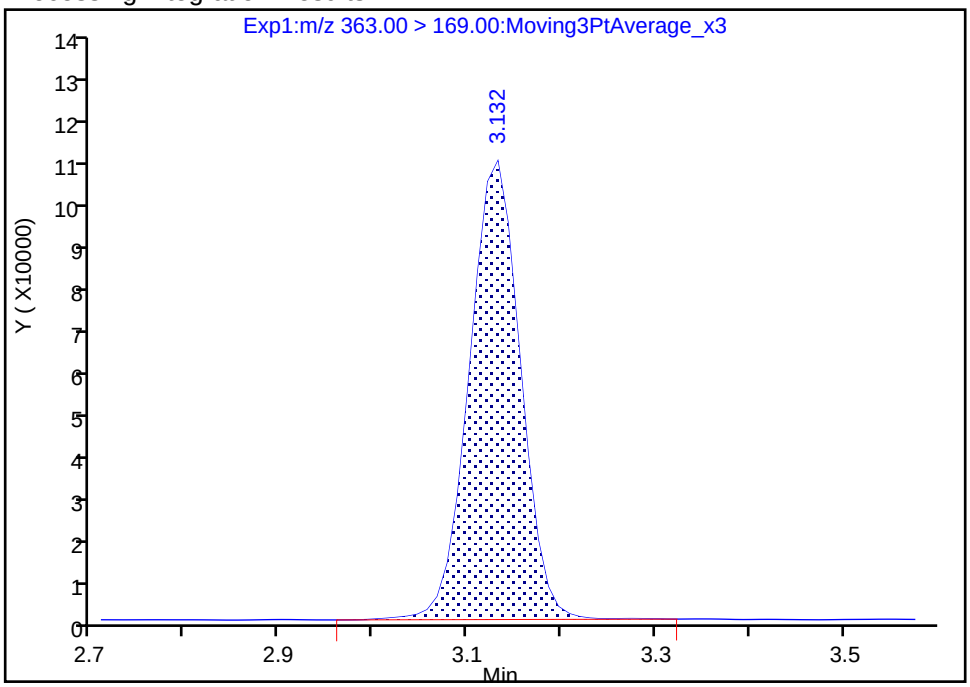
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

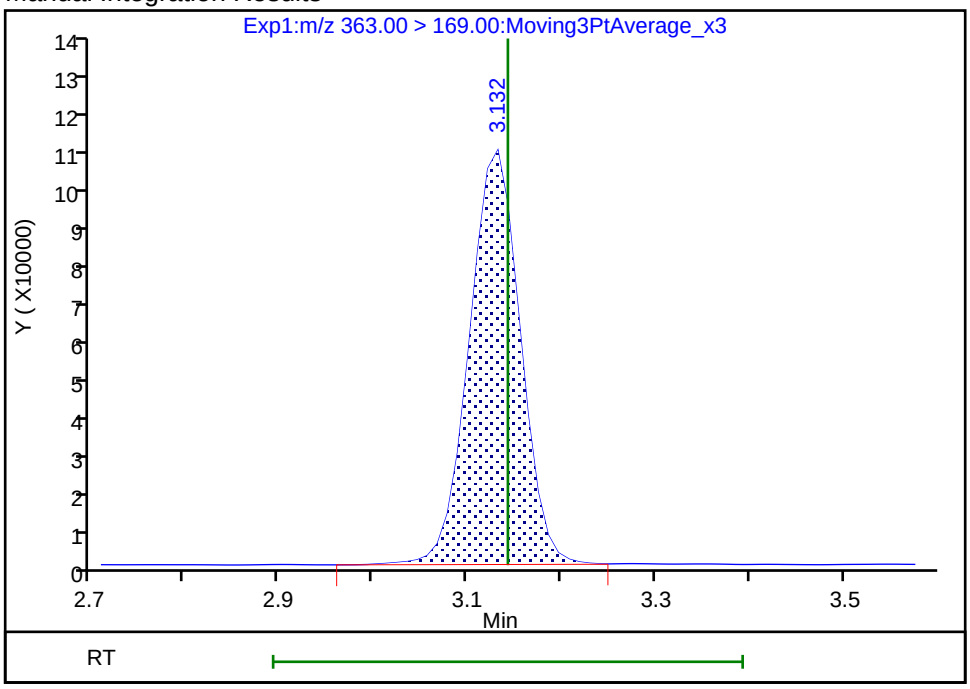
Processing Integration Results

RT: 3.13
Area: 398083
Amount: 1.940915
Amount Units: ng/ml




Manual Integration Results

RT: 3.13
Area: 397699
Amount: 1.889280
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:47:43
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

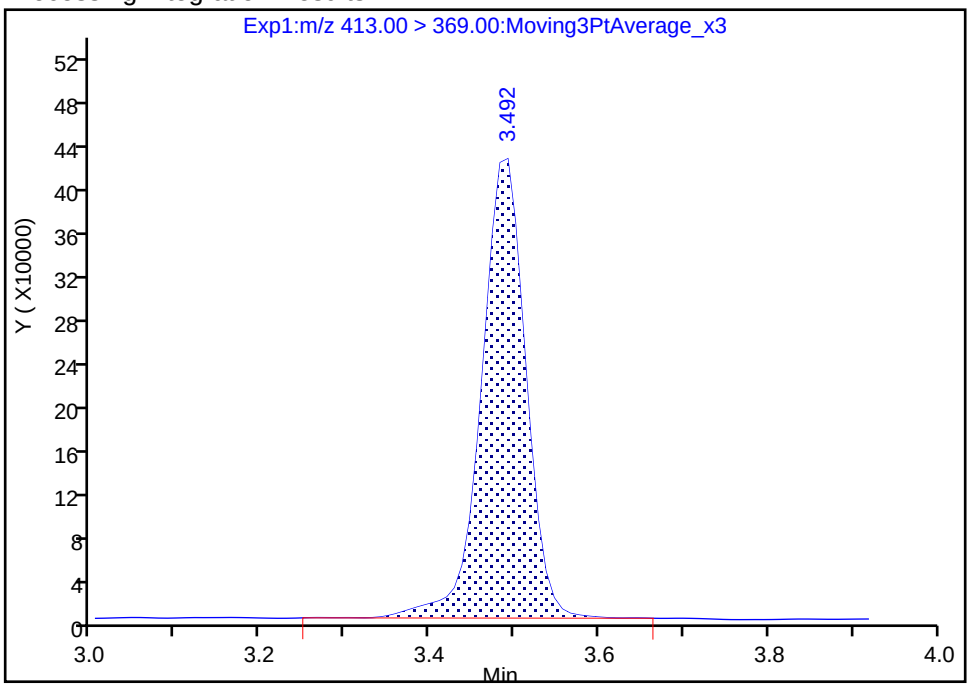
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

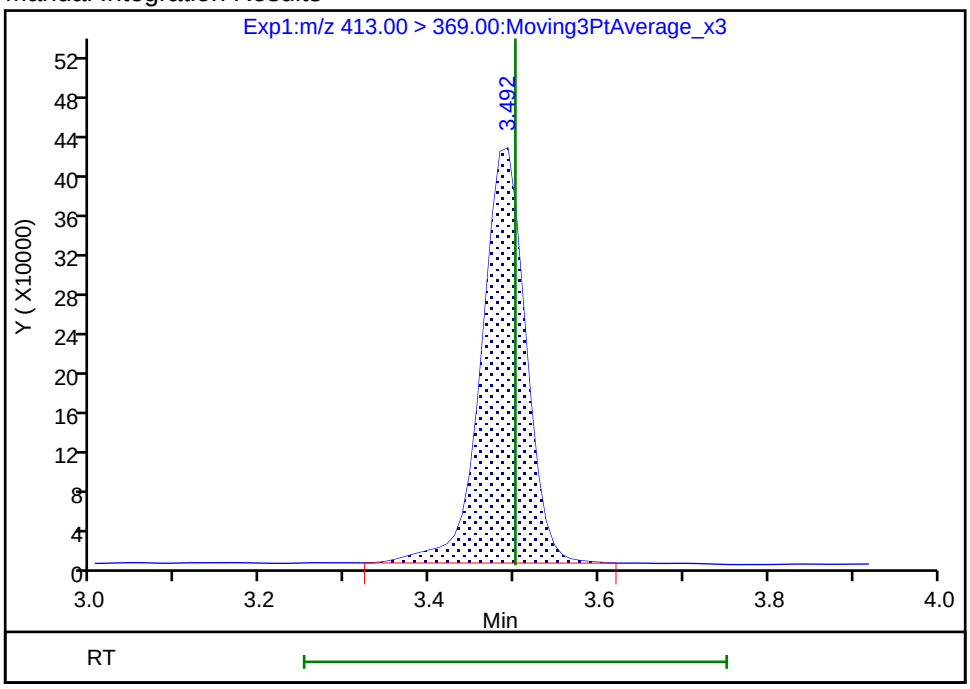
Processing Integration Results

RT: 3.49
Area: 1516012
Amount: 2.065829
Amount Units: ng/ml




Manual Integration Results

RT: 3.49
Area: 1512365
Amount: 2.060860
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:48:37

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

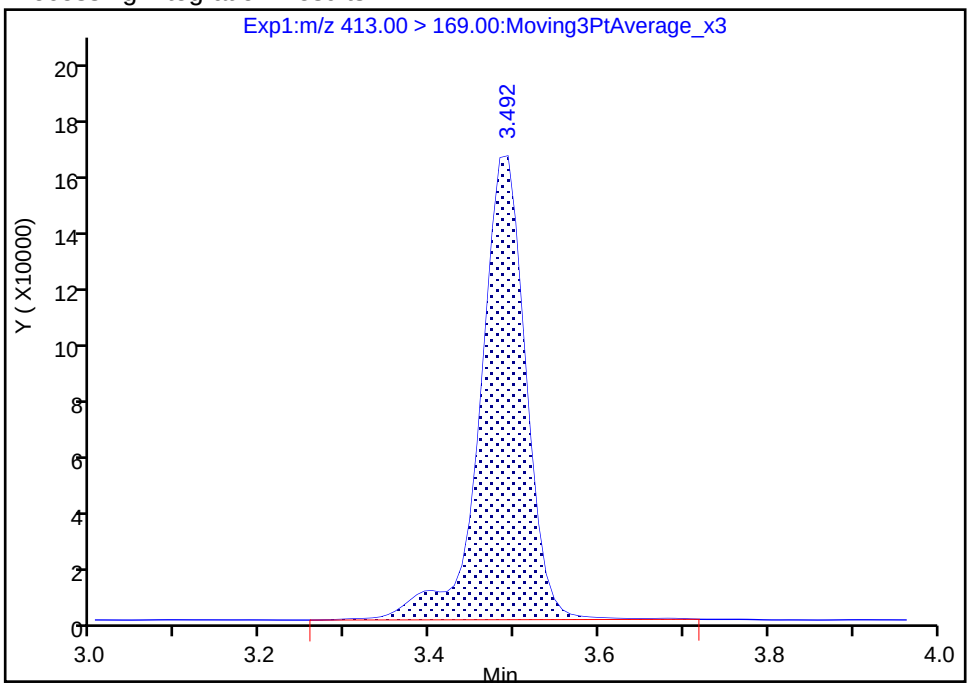
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

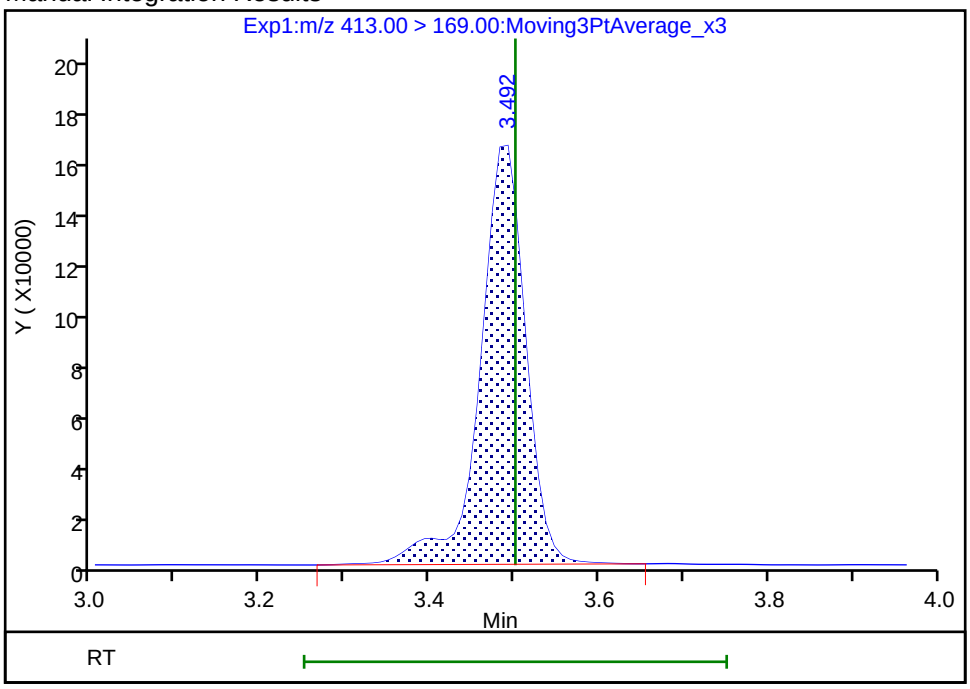
Processing Integration Results

RT: 3.49
Area: 621517
Amount: 2.065829
Amount Units: ng/ml




Manual Integration Results

RT: 3.49
Area: 618009
Amount: 2.060860
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:48:53

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

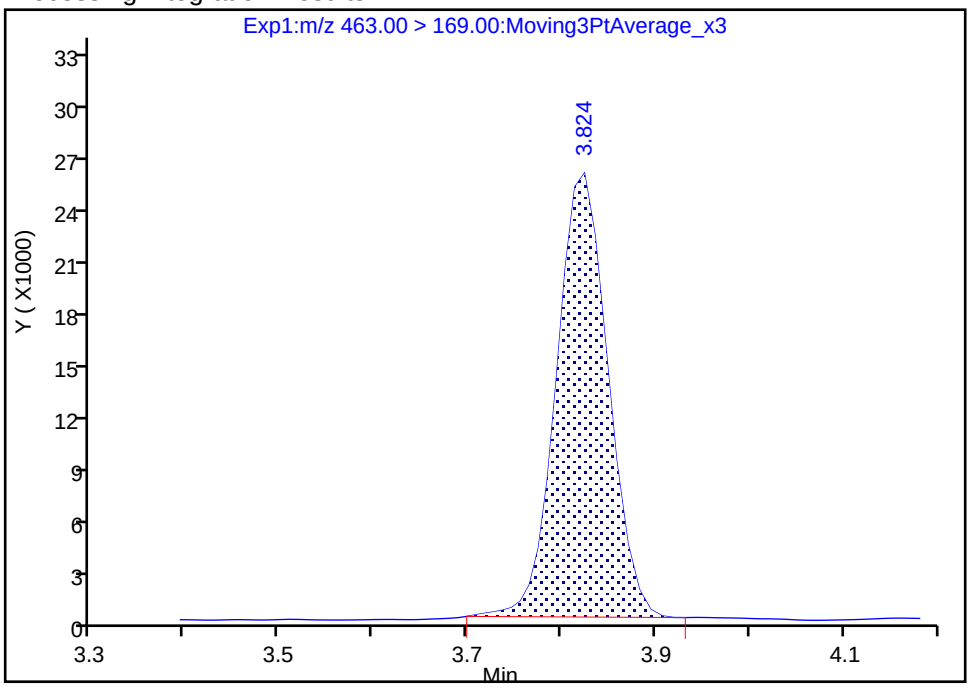
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

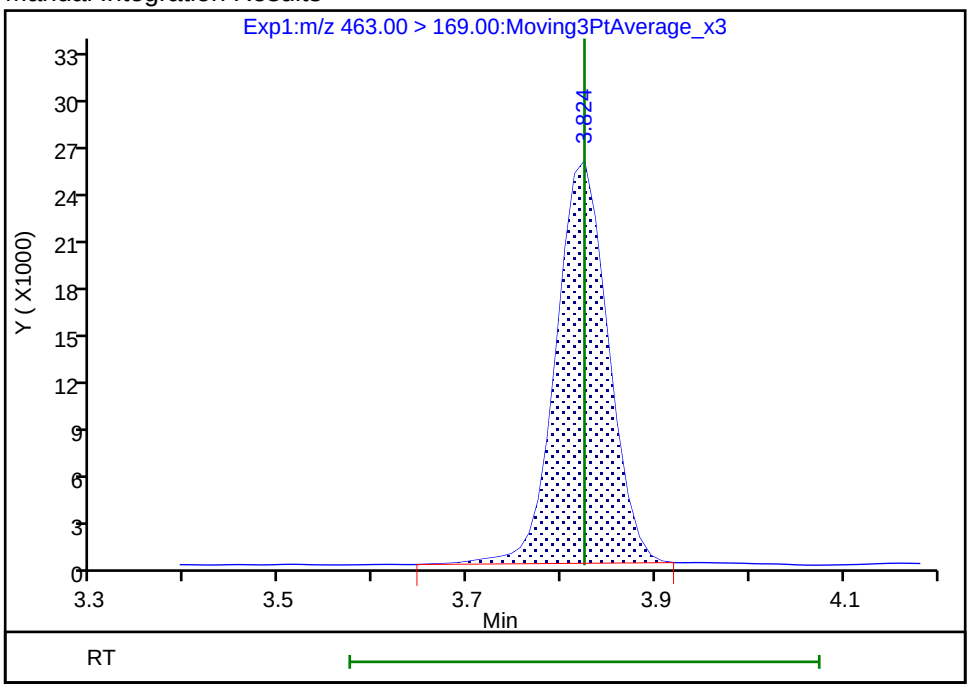
Processing Integration Results

RT: 3.82
Area: 97562
Amount: 1.237438
Amount Units: ng/ml




Manual Integration Results

RT: 3.82
Area: 98775
Amount: 1.237438
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:50:32

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

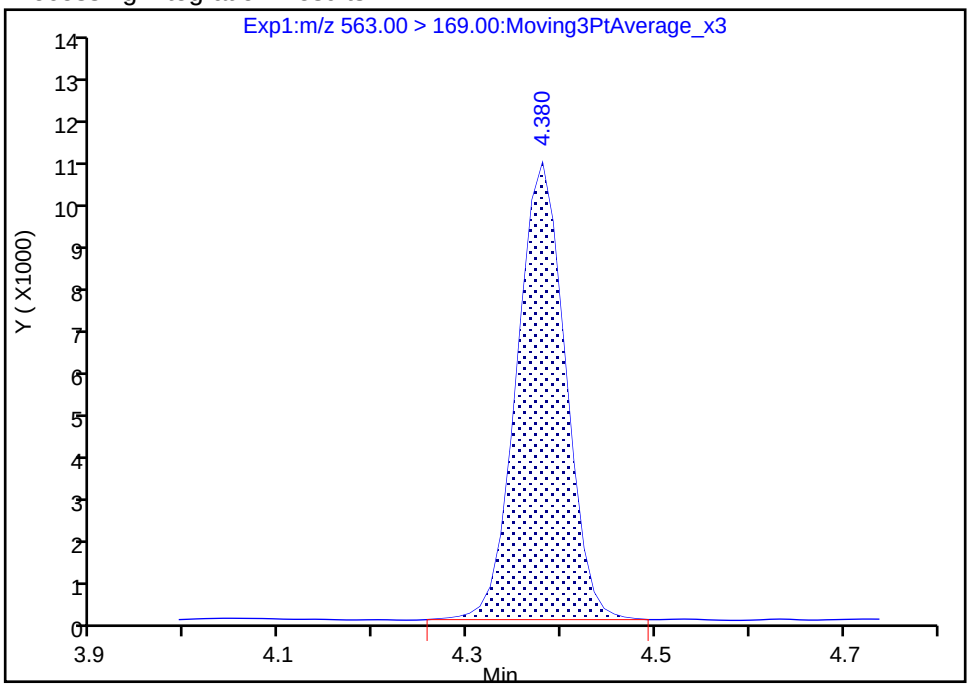
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

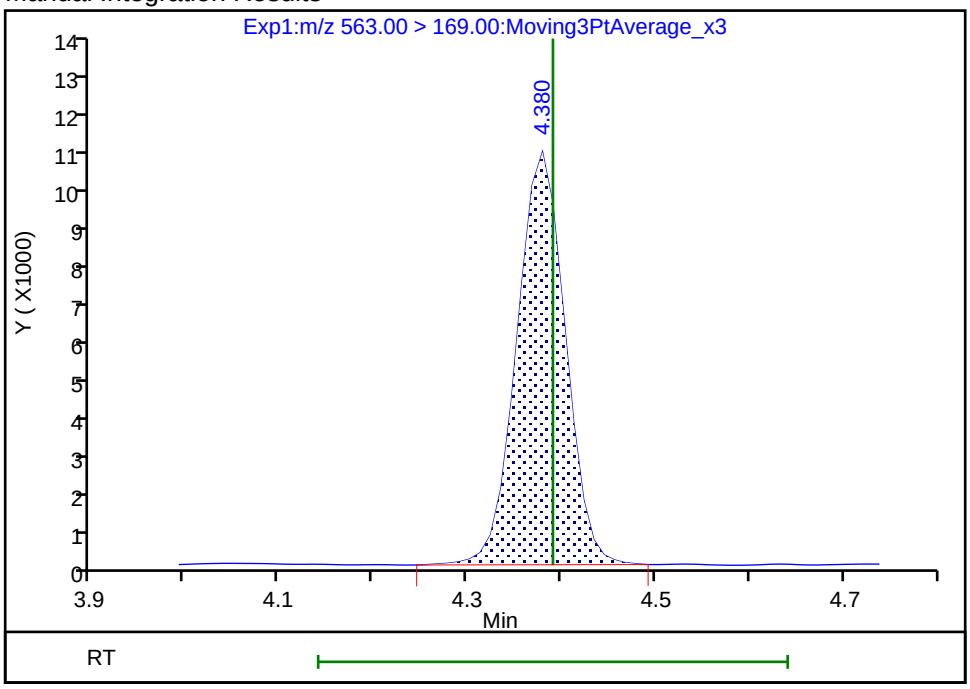
Processing Integration Results

RT: 4.38
Area: 38827
Amount: 0.833691
Amount Units: ng/ml




Manual Integration Results

RT: 4.38
Area: 38904
Amount: 0.833691
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:53:06

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

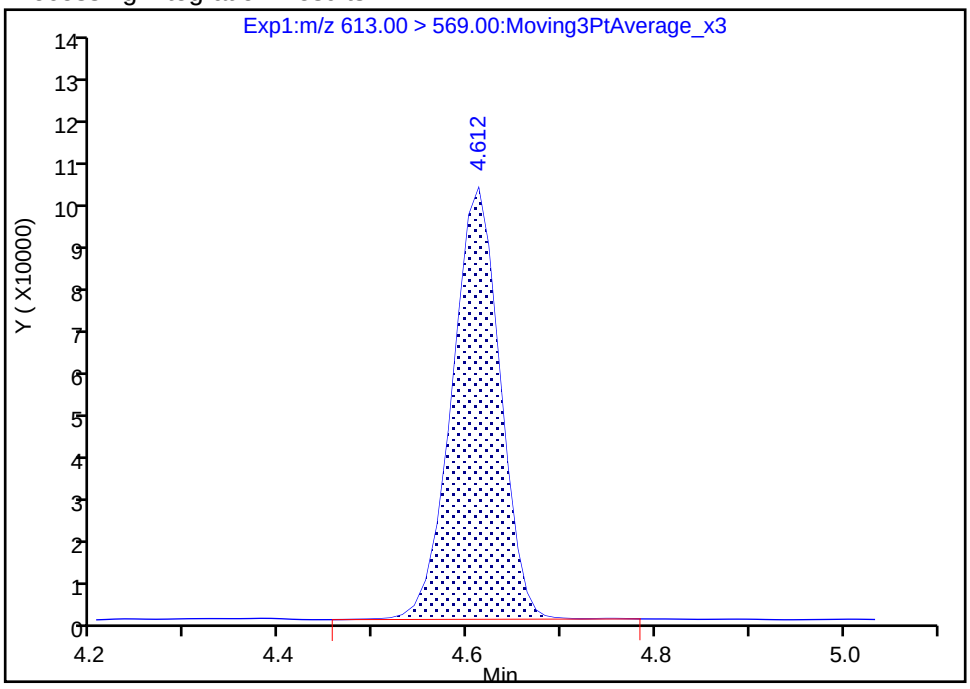
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

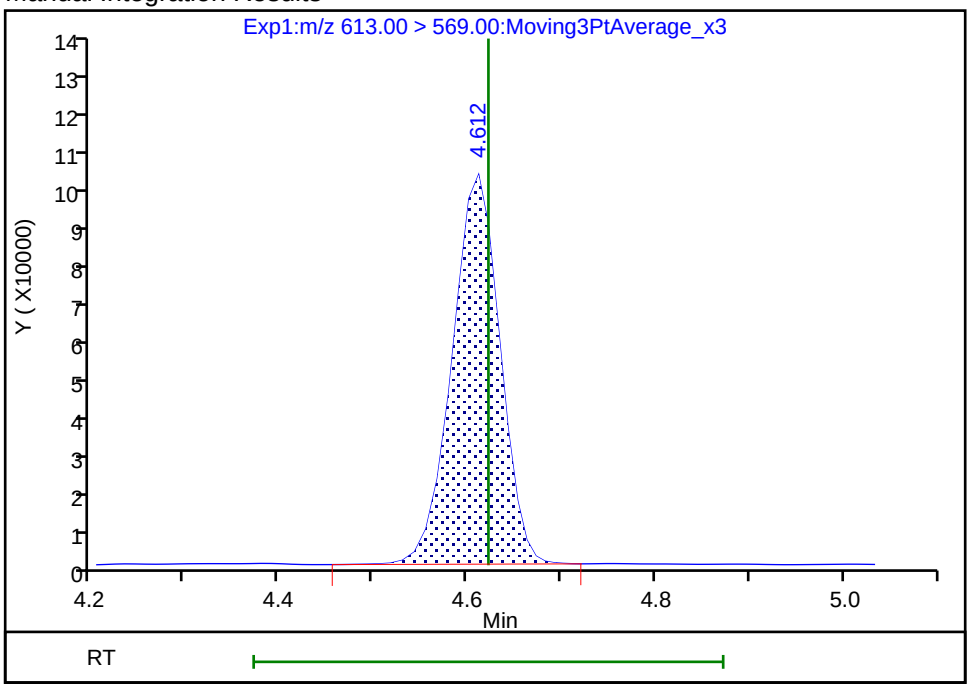
Processing Integration Results

RT: 4.61
Area: 342387
Amount: 0.866853
Amount Units: ng/ml




Manual Integration Results

RT: 4.61
Area: 341753
Amount: 0.865248
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:53:33

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

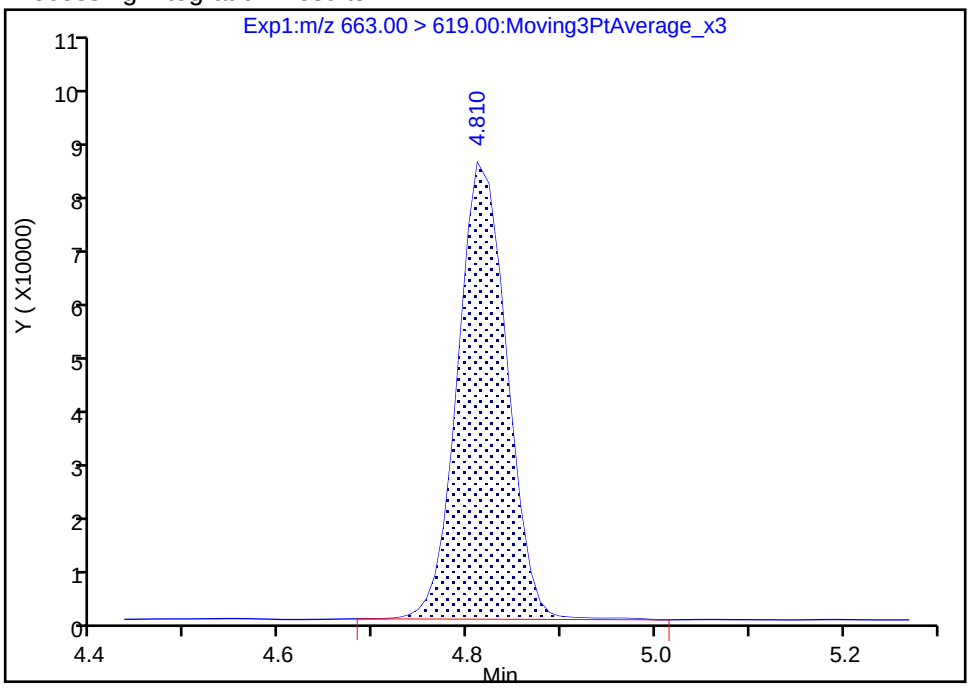
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

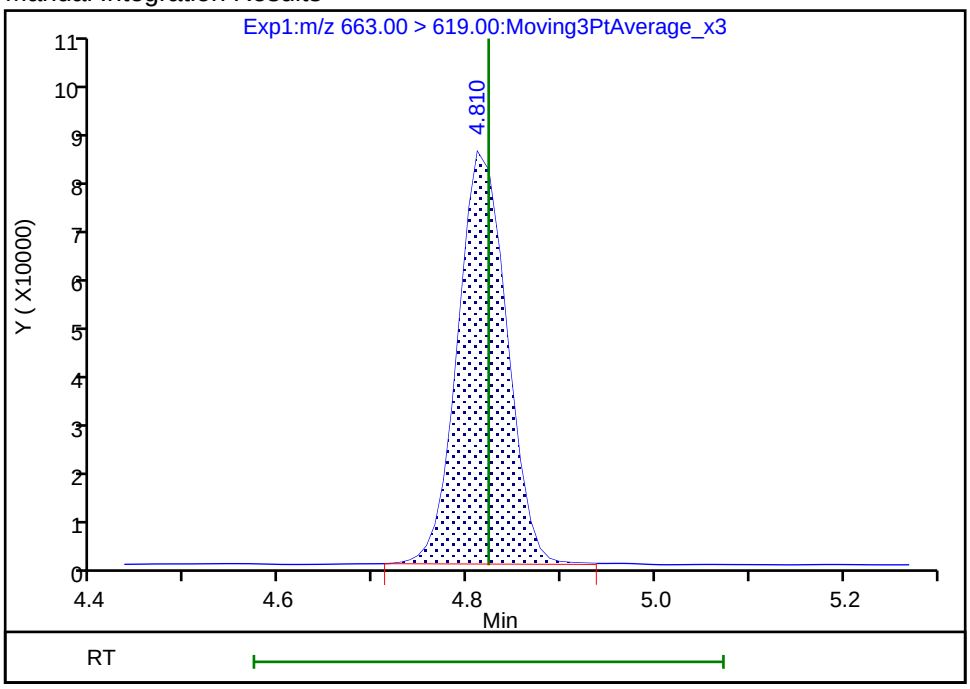
Processing Integration Results

RT: 4.81
Area: 298047
Amount: 0.929817
Amount Units: ng/ml




Manual Integration Results

RT: 4.81
Area: 296959
Amount: 0.926422
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:55:21

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

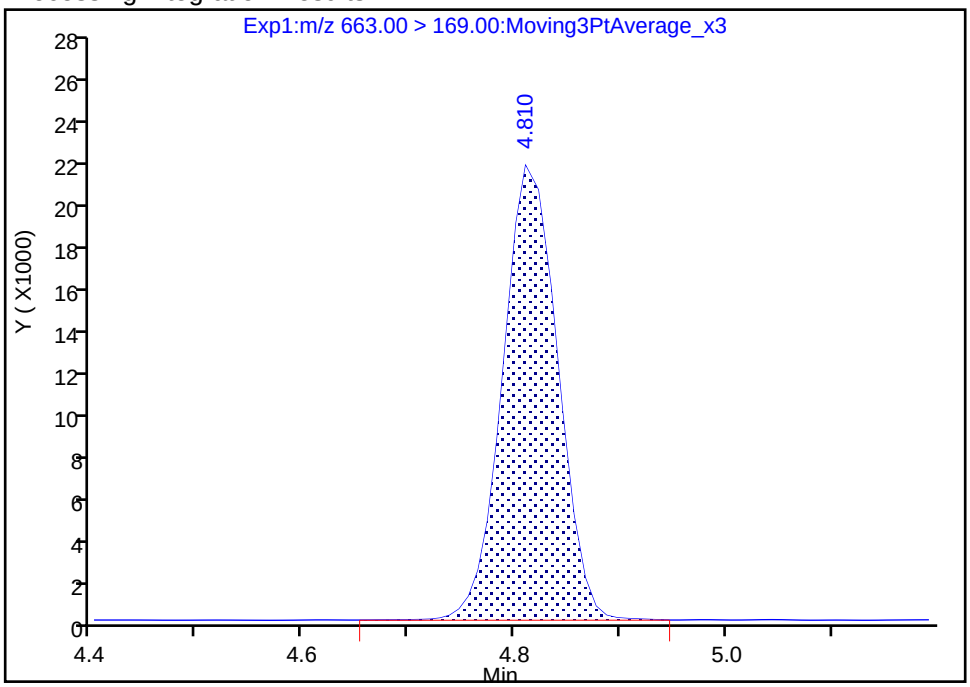
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

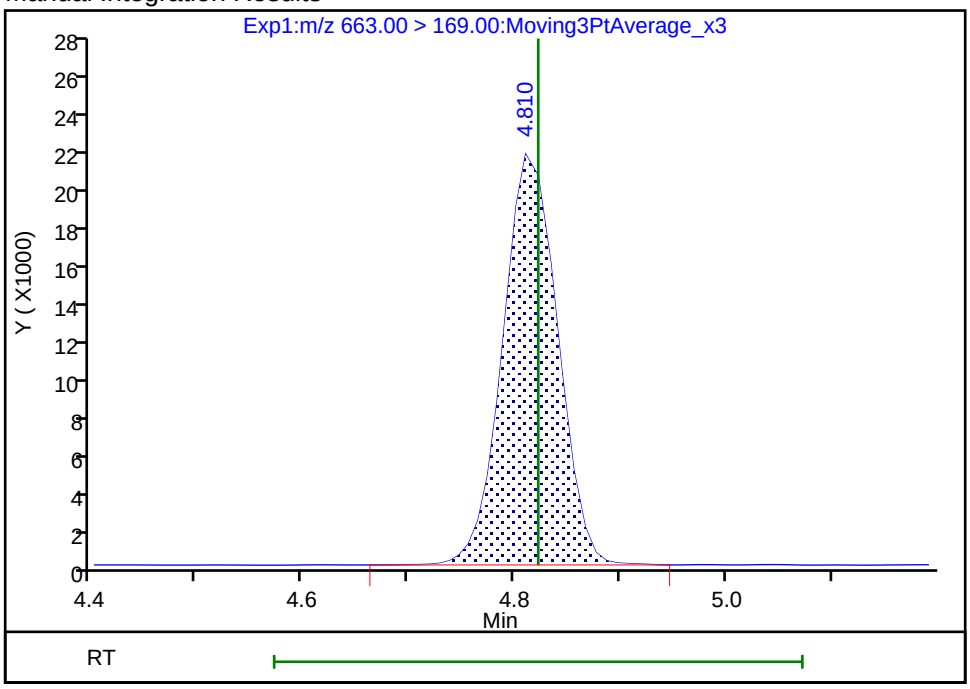
Processing Integration Results

RT: 4.81
Area: 76932
Amount: 0.929817
Amount Units: ng/ml




Manual Integration Results

RT: 4.81
Area: 76774
Amount: 0.926422
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:55:31

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

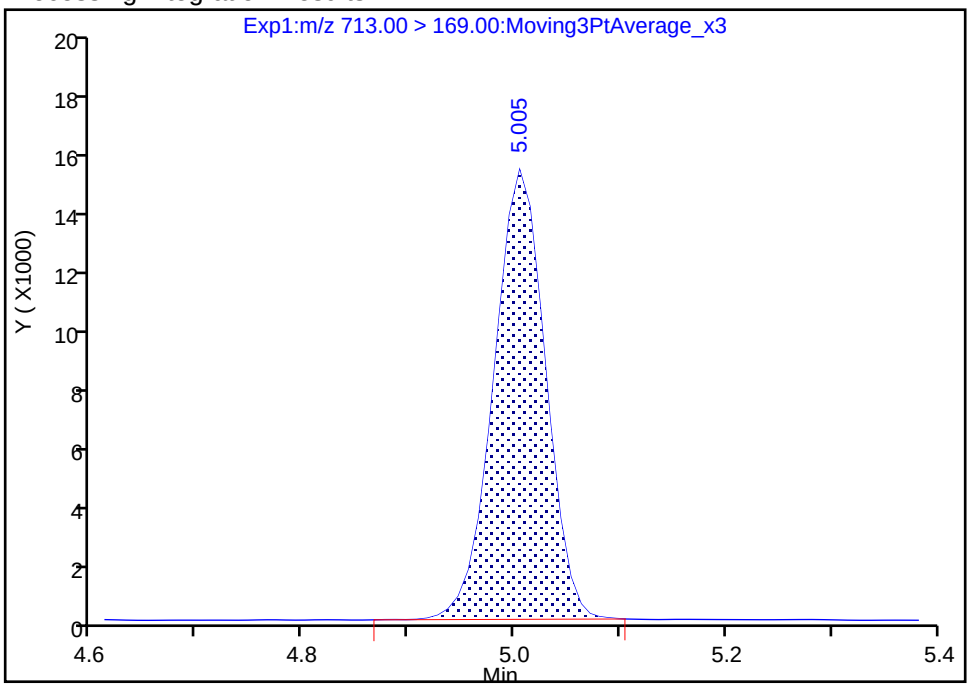
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

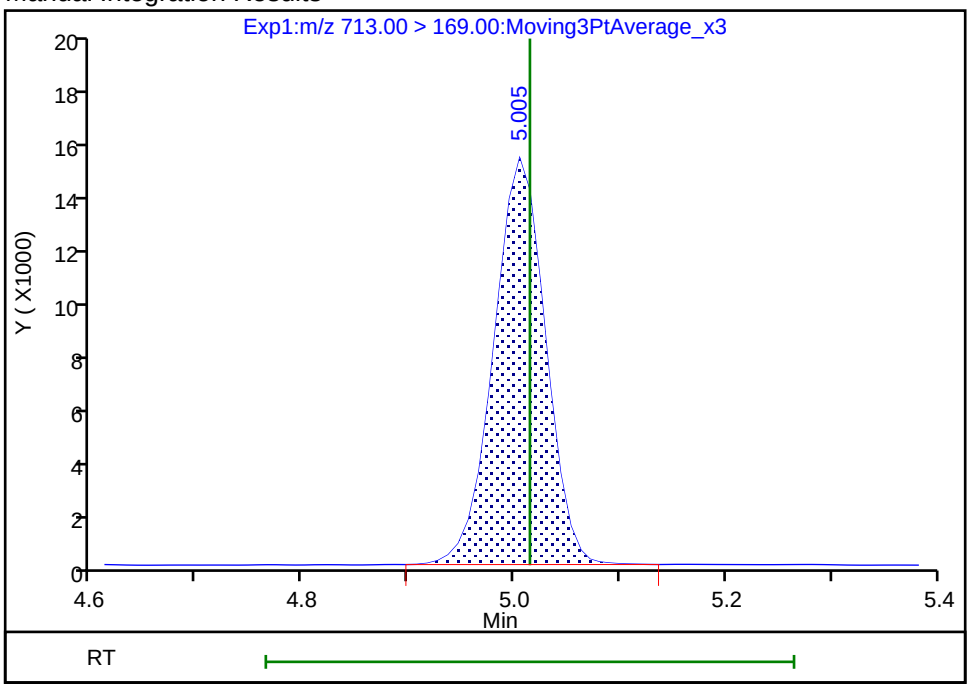
Processing Integration Results

RT: 5.00
Area: 51502
Amount: 1.029196
Amount Units: ng/ml




Manual Integration Results

RT: 5.00
Area: 51615
Amount: 1.031454
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:56:13
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

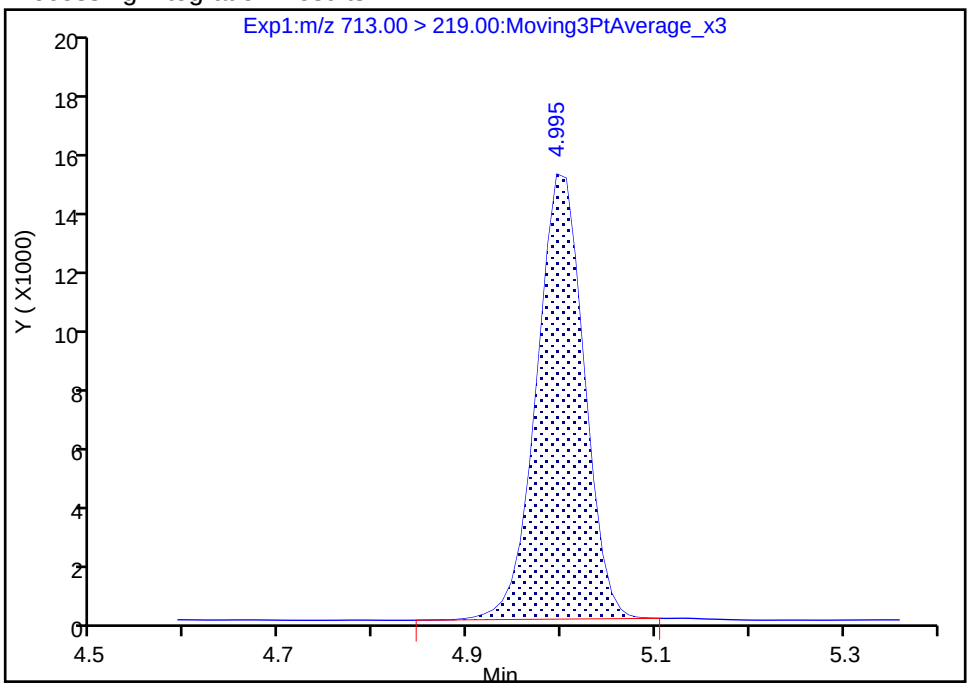
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

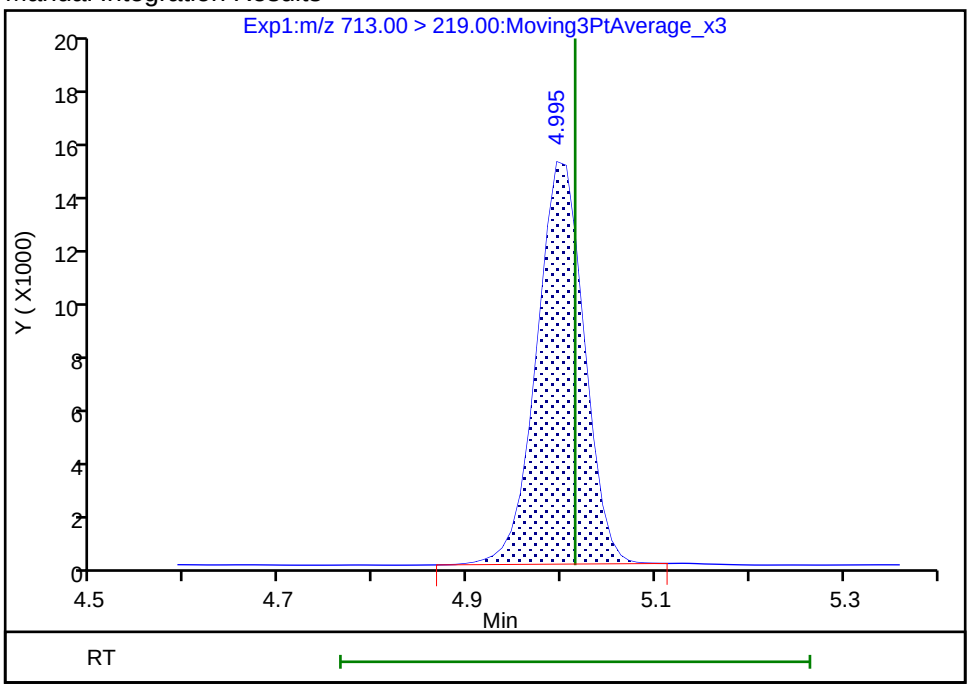
Processing Integration Results

RT: 5.00
Area: 50862
Amount: 1.029196
Amount Units: ng/ml




Manual Integration Results

RT: 5.00
Area: 50874
Amount: 1.031454
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:56:28

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

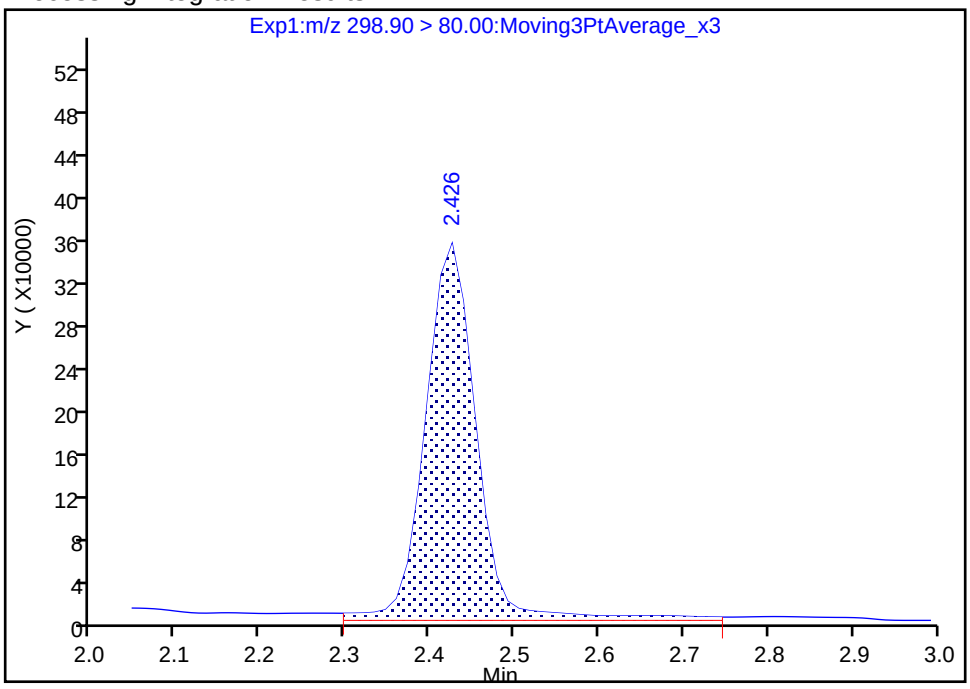
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

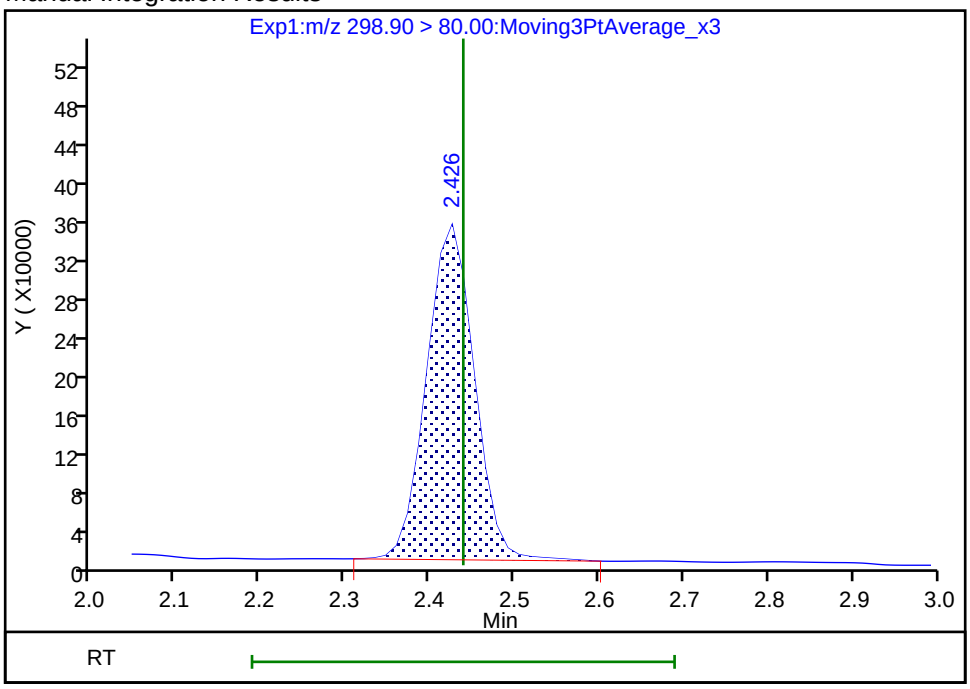
Processing Integration Results

RT: 2.43
Area: 1500498
Amount: 1.461914
Amount Units: ng/ml




Manual Integration Results

RT: 2.43
Area: 1365068
Amount: 1.329966
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:44:53

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

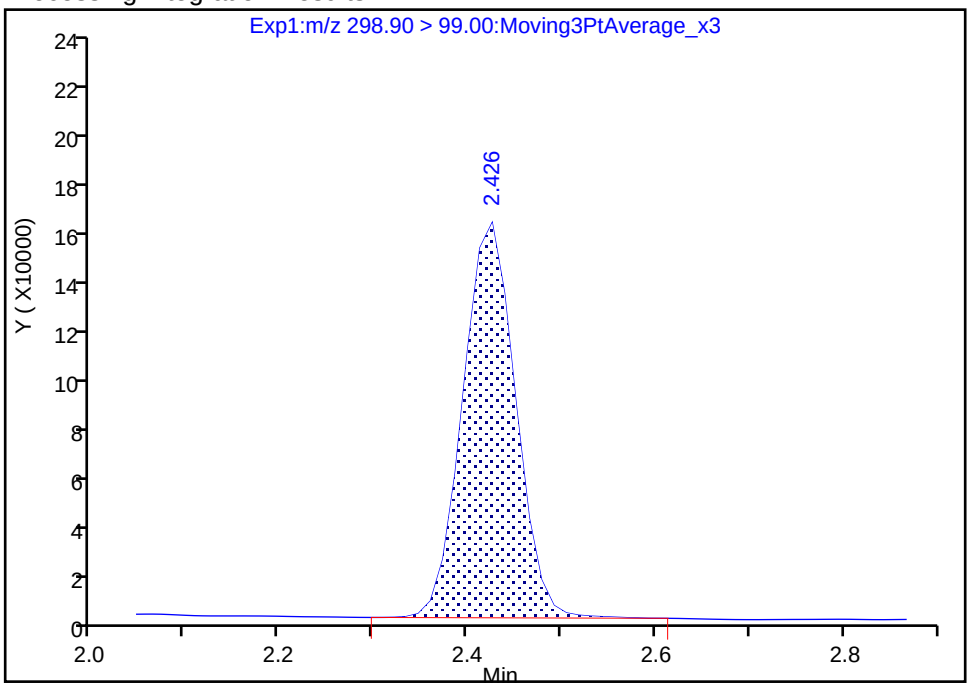
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

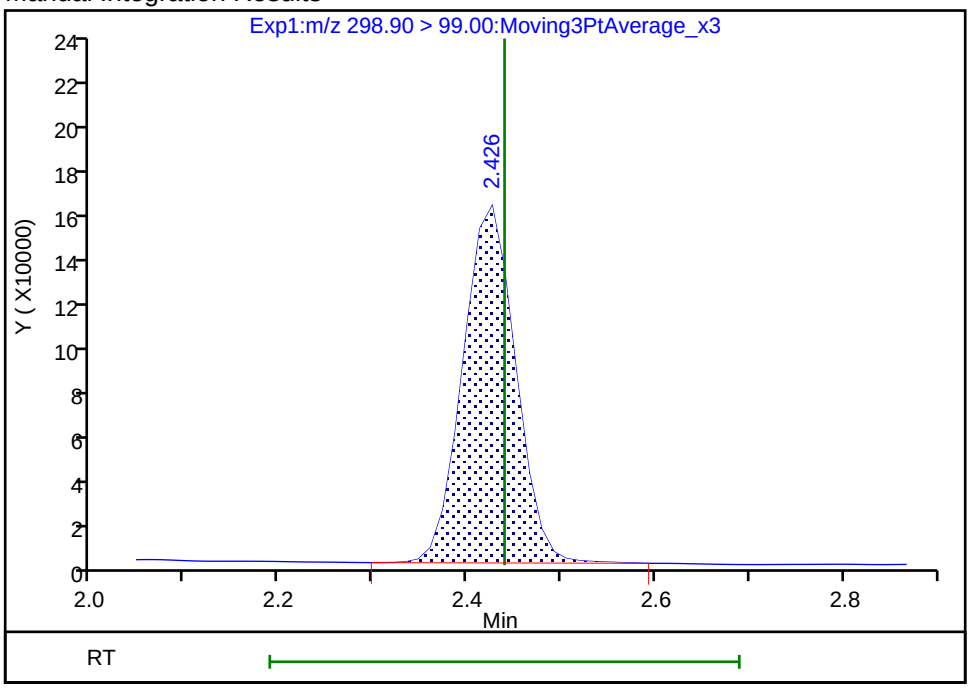
Processing Integration Results

RT: 2.43
Area: 612559
Amount: 1.461914
Amount Units: ng/ml




Manual Integration Results

RT: 2.43
Area: 612566
Amount: 1.329966
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:45:08

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

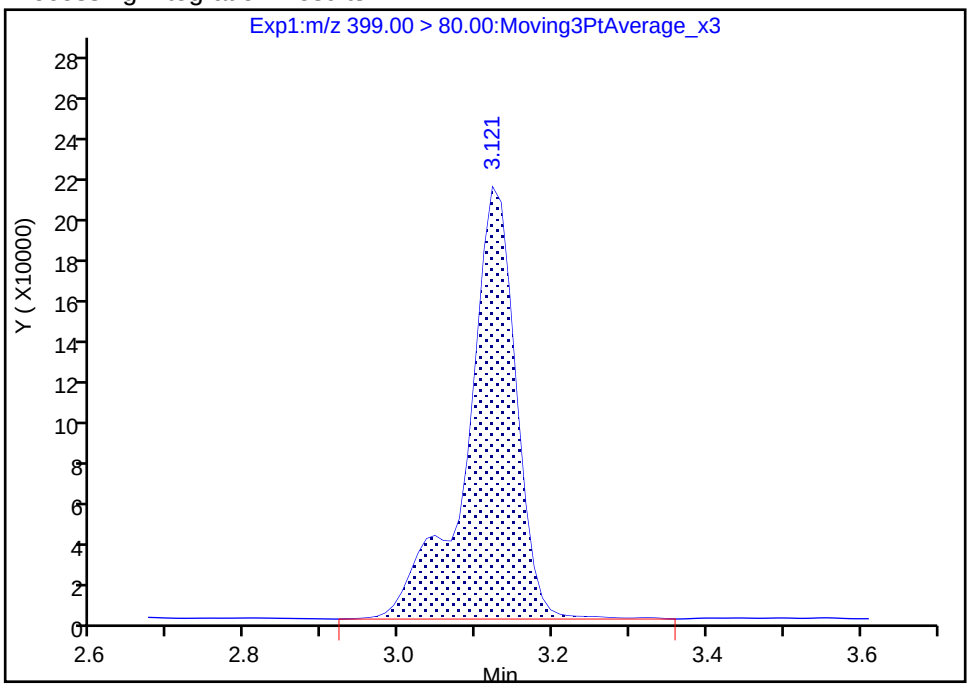
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

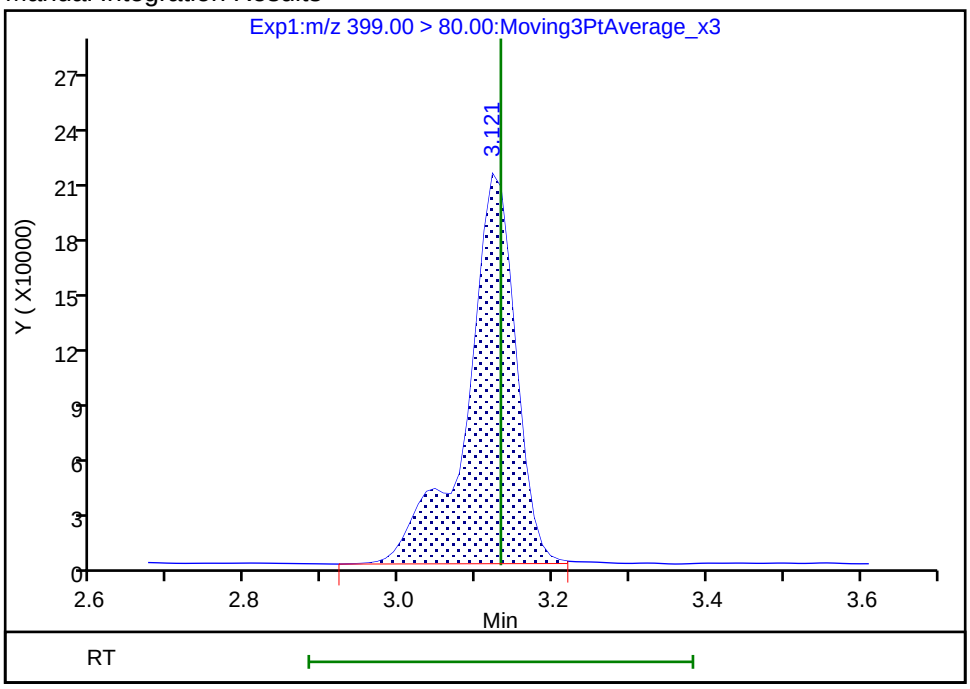
Processing Integration Results

RT: 3.12
Area: 928918
Amount: 1.169016
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 921017
Amount: 1.159073
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:46:51

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

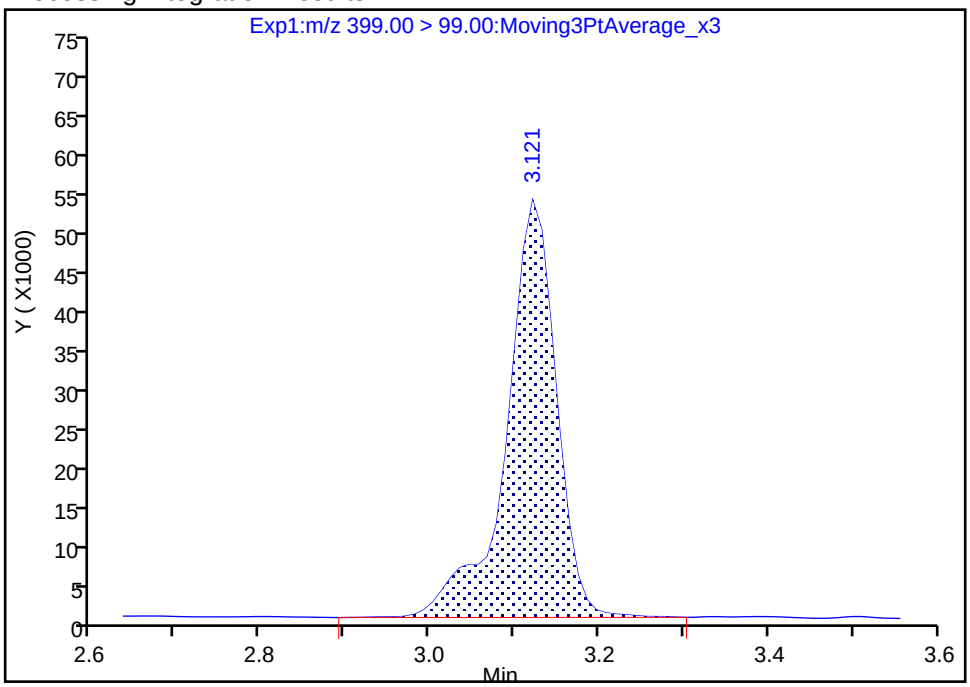
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

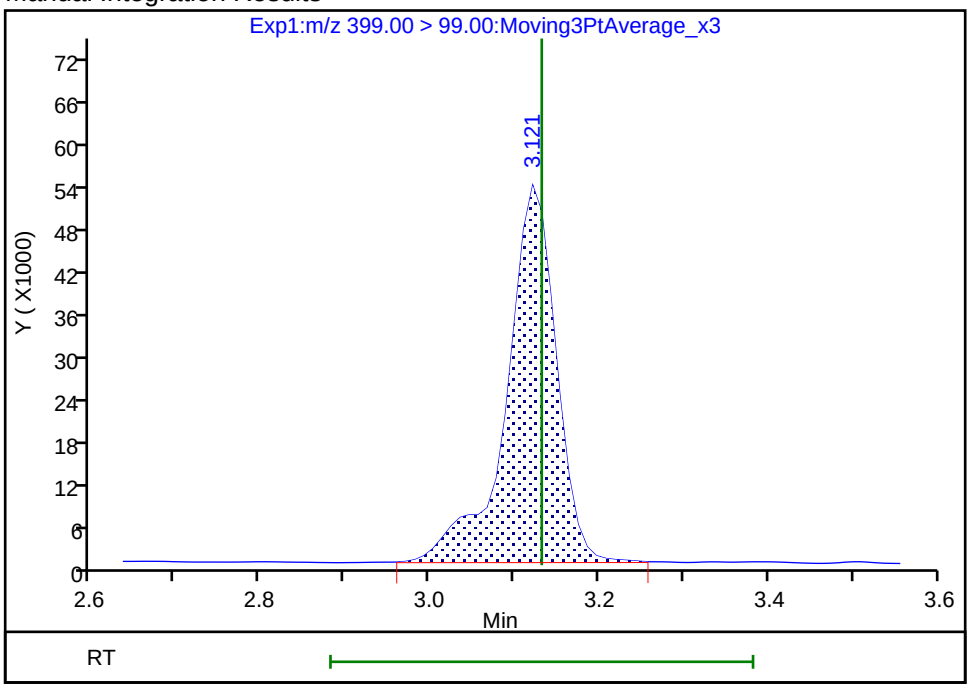
Processing Integration Results

RT: 3.12
Area: 219546
Amount: 1.169016
Amount Units: ng/ml




Manual Integration Results

RT: 3.12
Area: 219181
Amount: 1.159073
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:47:12

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

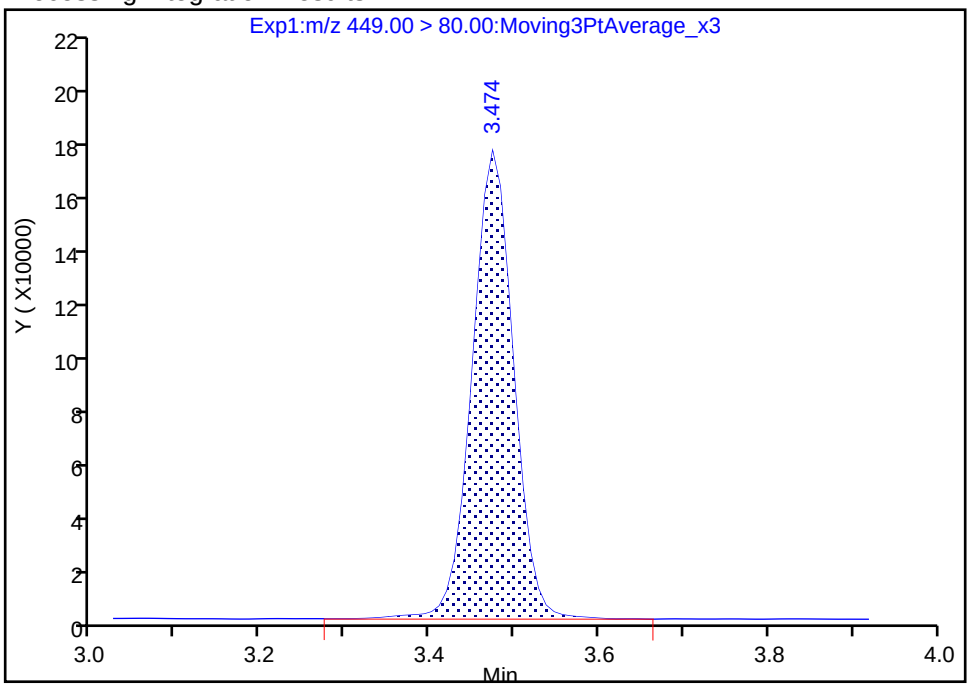
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

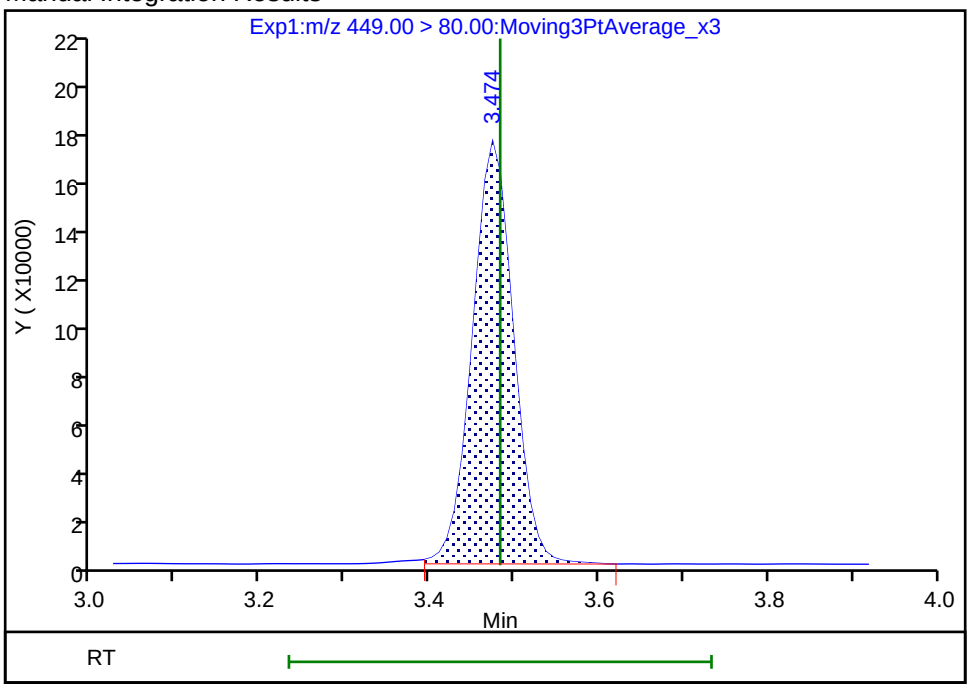
Processing Integration Results

RT: 3.47
Area: 593189
Amount: 1.141647
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 587111
Amount: 1.129949
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:48:16
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

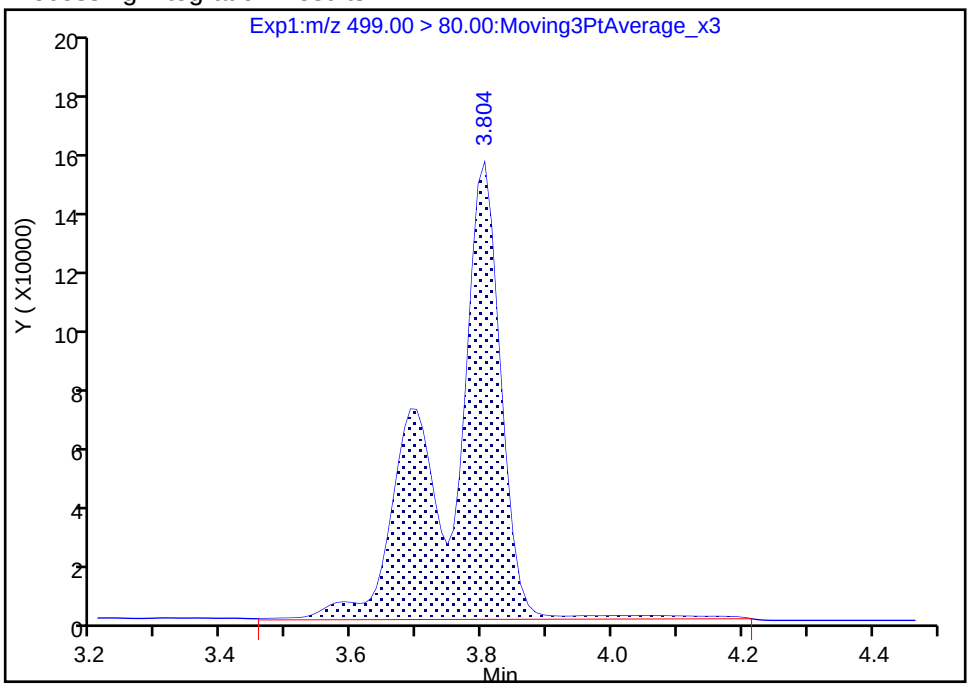
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

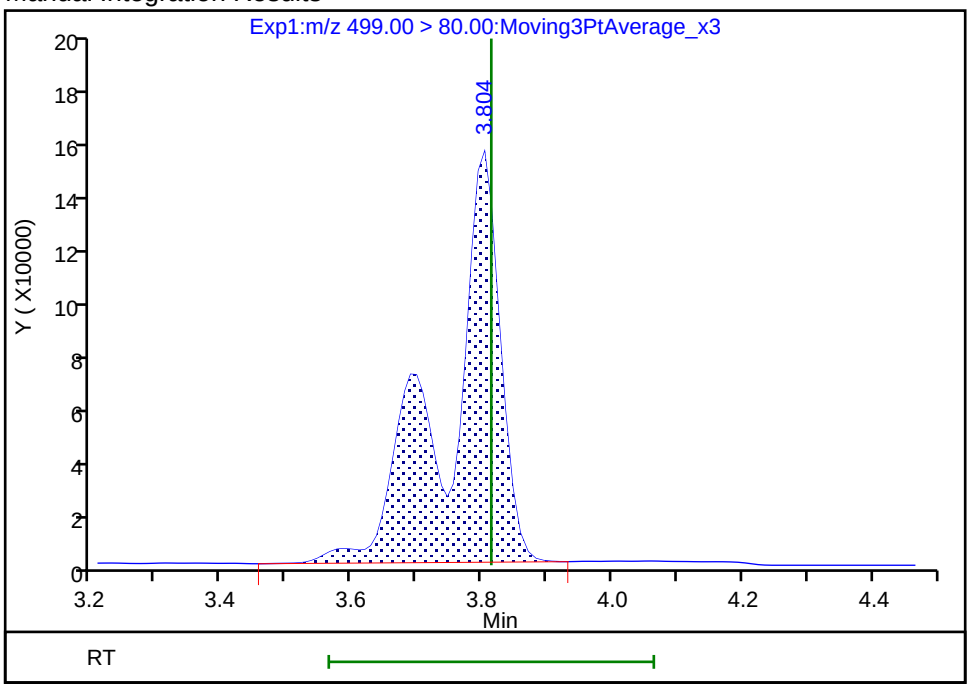
Processing Integration Results

RT: 3.80
Area: 907226
Amount: 2.049784
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 873041
Amount: 1.972546
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:49:18

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

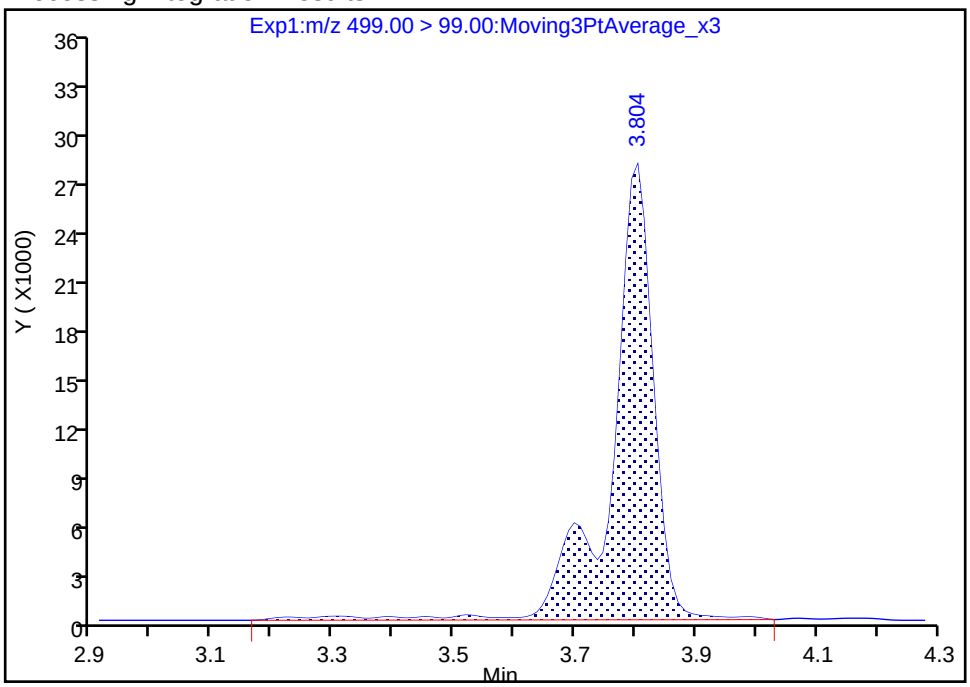
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

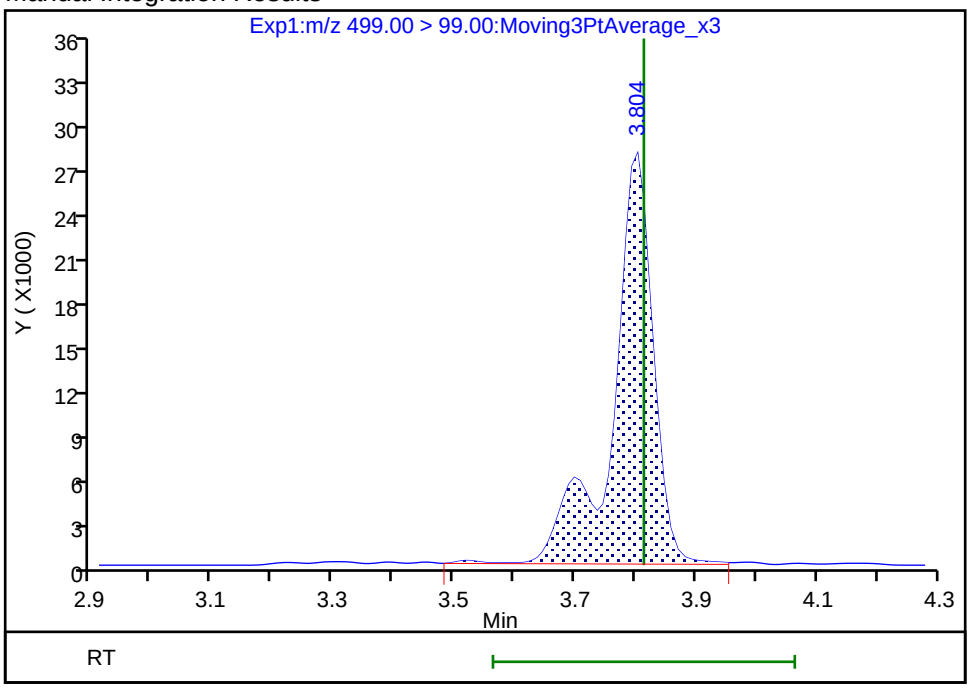
Processing Integration Results

RT: 3.80
Area: 135543
Amount: 2.049784
Amount Units: ng/ml




Manual Integration Results

RT: 3.80
Area: 130499
Amount: 1.972546
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:50:04

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

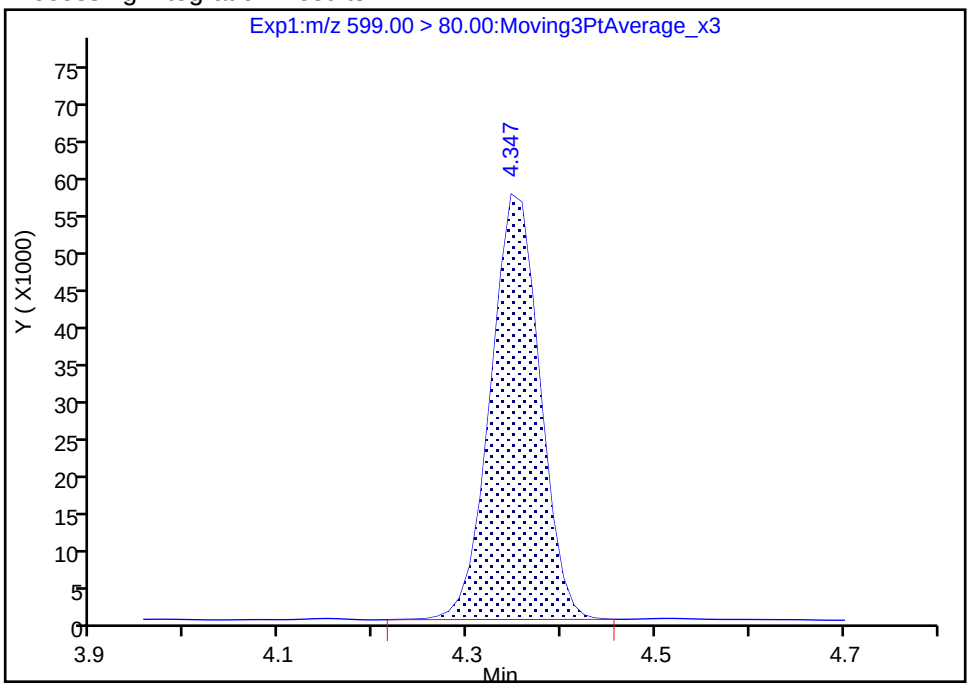
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

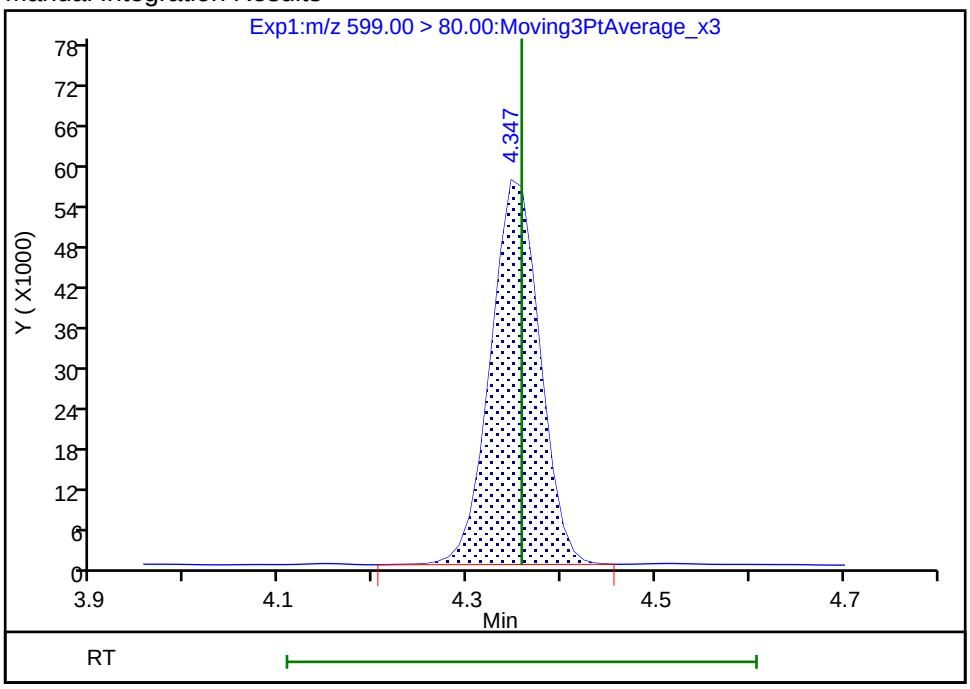
Processing Integration Results

RT: 4.35
Area: 207322
Amount: 0.787527
Amount Units: ng/ml




Manual Integration Results

RT: 4.35
Area: 207484
Amount: 0.788143
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:52:22

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

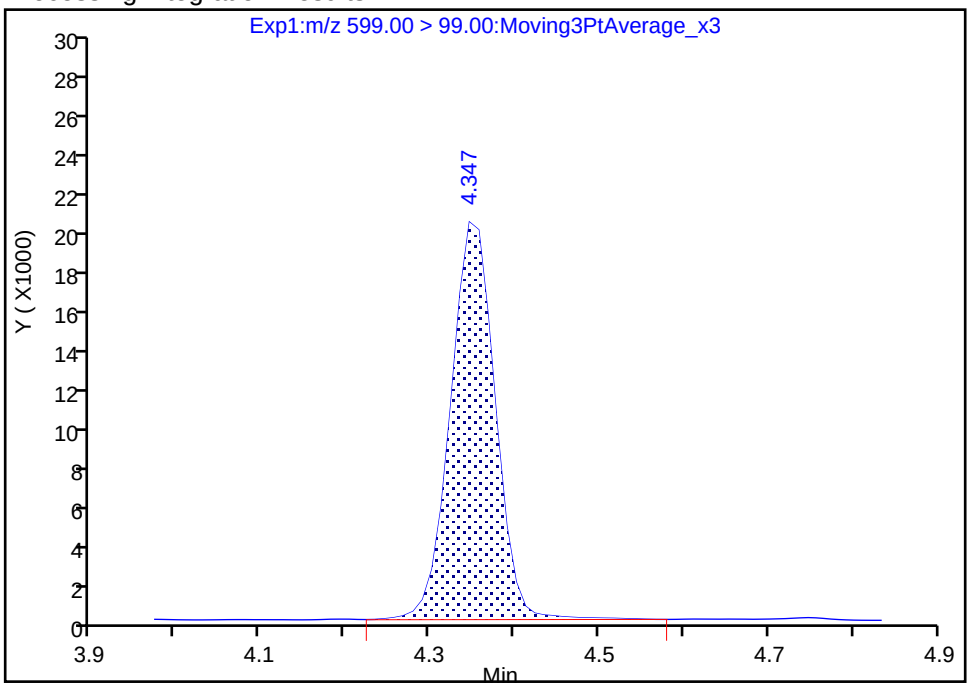
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 2

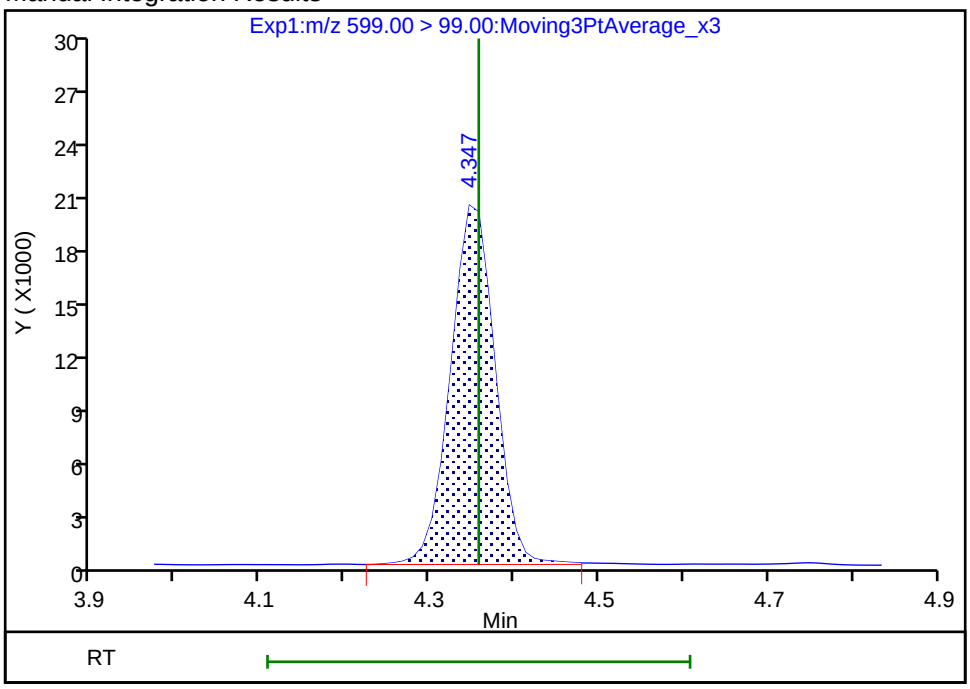
Processing Integration Results

RT: 4.35
Area: 74057
Amount: 0.787527
Amount Units: ng/ml




Manual Integration Results

RT: 4.35
Area: 73701
Amount: 0.788143
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:52:44

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

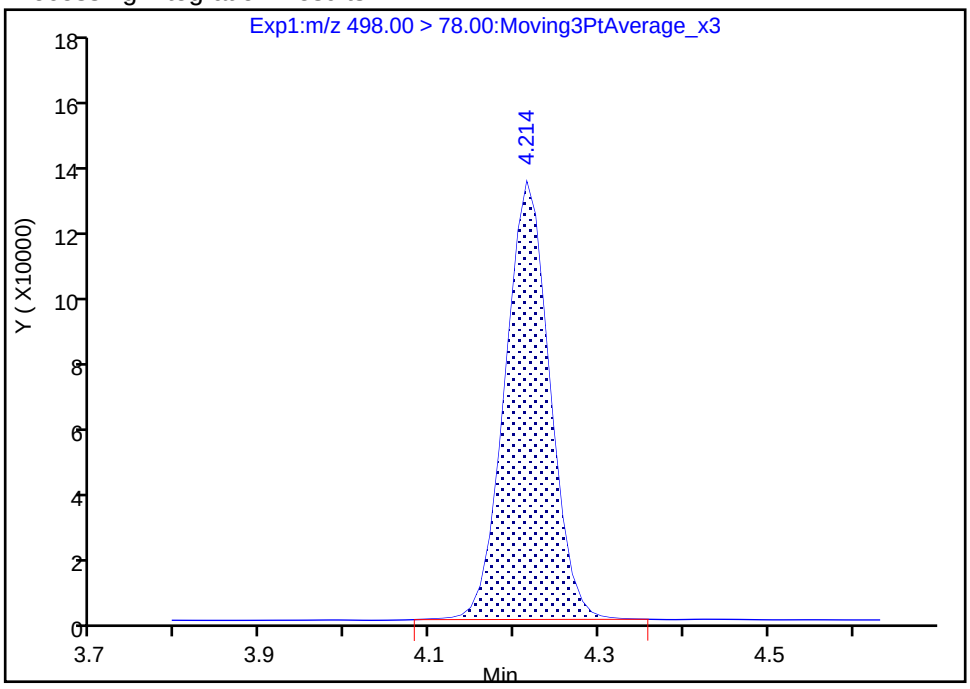
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

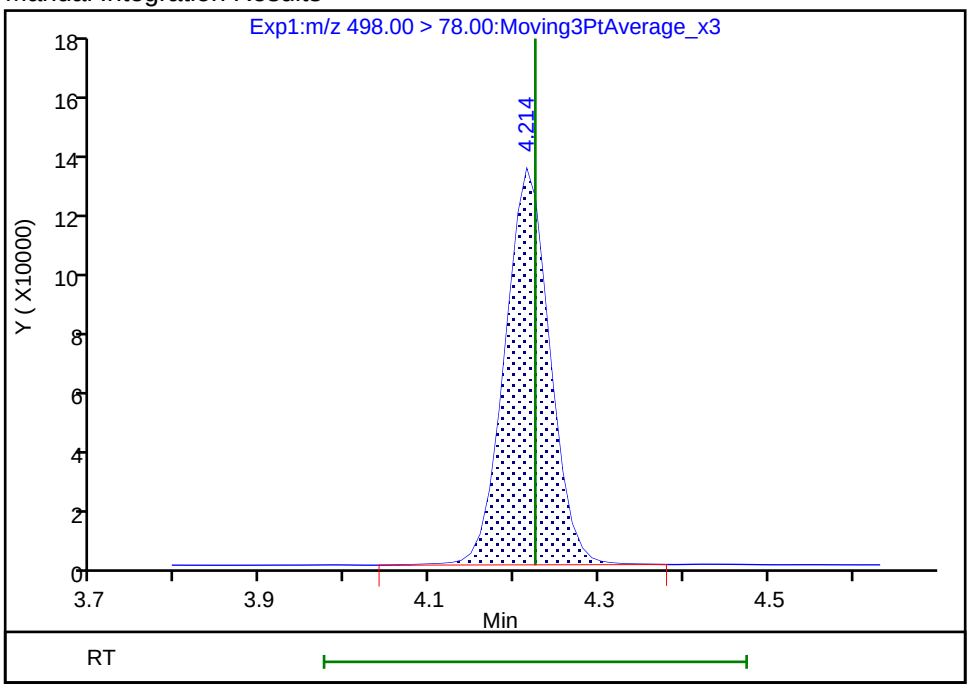
Processing Integration Results

RT: 4.21
Area: 482056
Amount: 0.792005
Amount Units: ng/ml




Manual Integration Results

RT: 4.21
Area: 484588
Amount: 0.796165
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:52:06

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

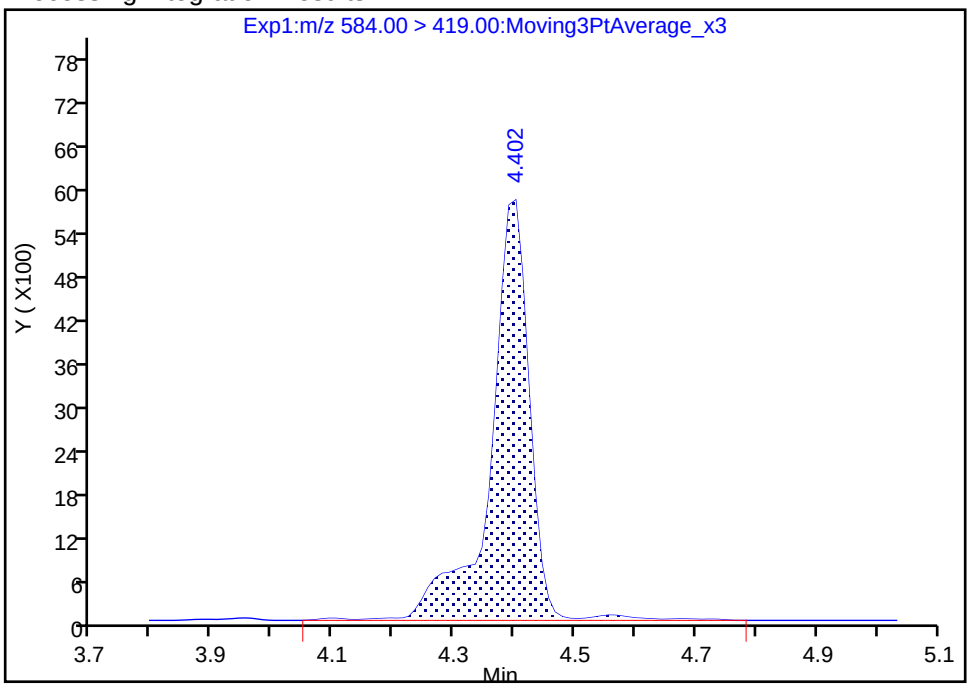
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 33 N-ethylperfluorooctanesulfonamid, CAS: 2991-50-6

Signal: 1

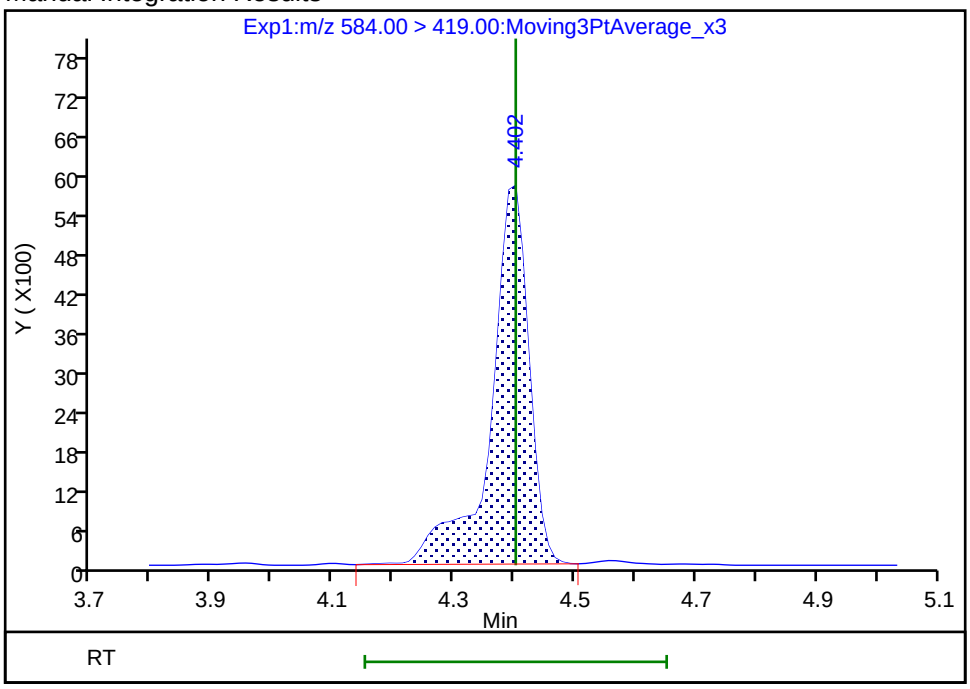
Processing Integration Results

RT: 4.40
Area: 26426
Amount: 0.950226
Amount Units: ng/ml




Manual Integration Results

RT: 4.40
Area: 25557
Amount: 0.918978
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:53:15
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

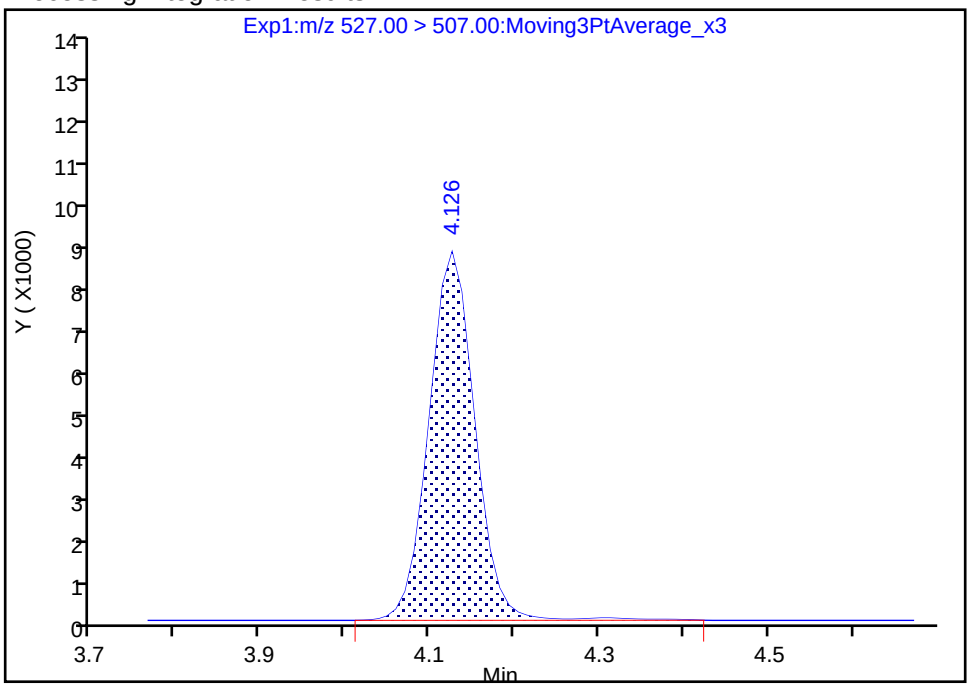
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## 25 1H,1H,2H,2H-perfluorodecanesulfo, CAS: 39108-34-4

Signal: 1

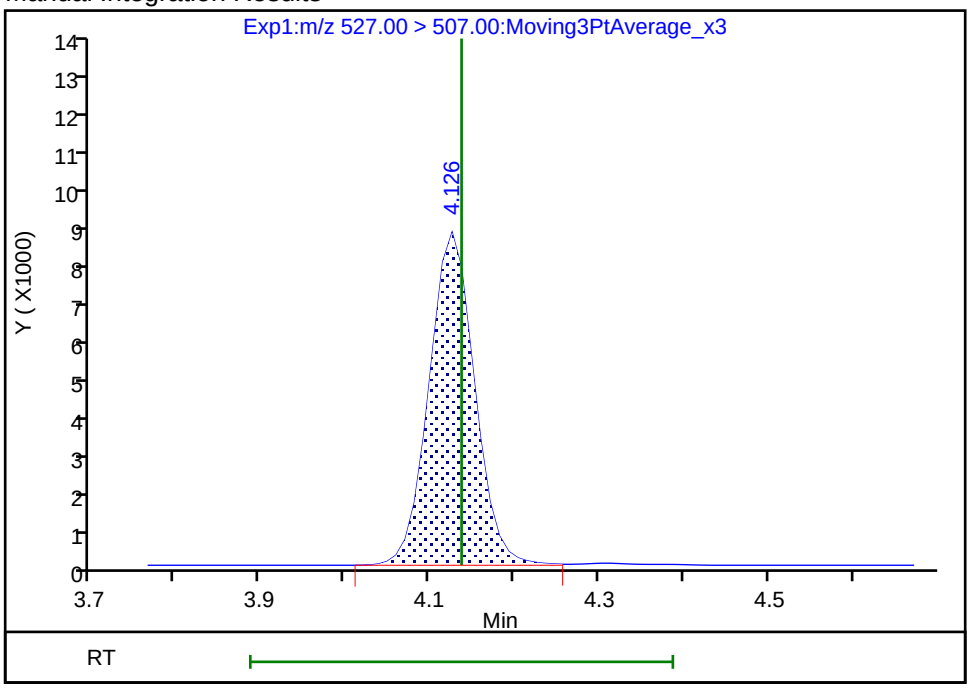
Processing Integration Results

RT: 4.13
Area: 32315
Amount: 0.652907
Amount Units: ng/ml




Manual Integration Results

RT: 4.13
Area: 32065
Amount: 0.647856
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:51:55

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

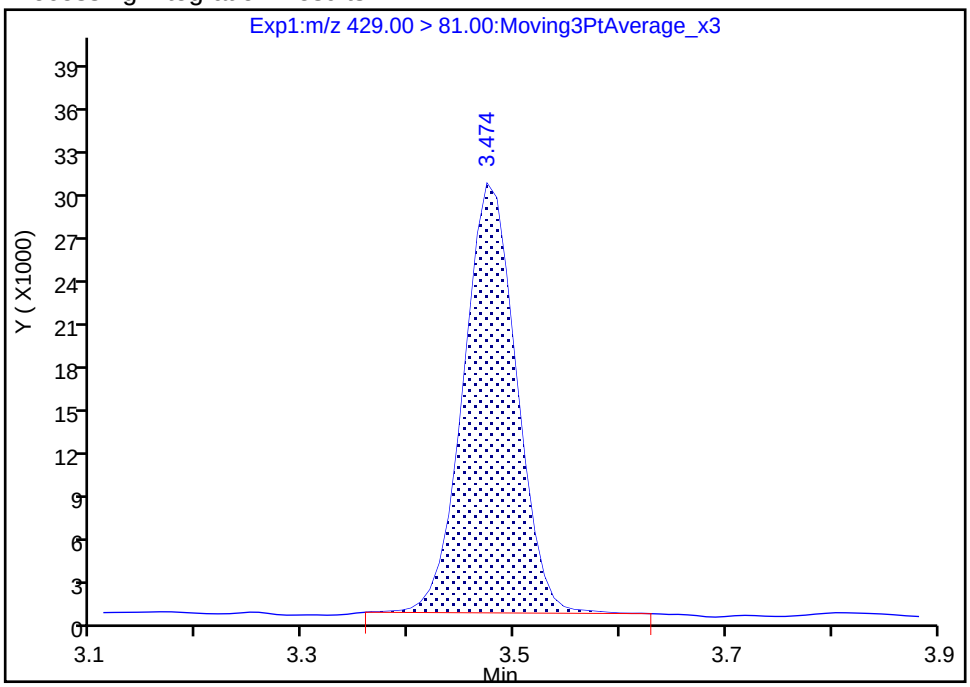
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

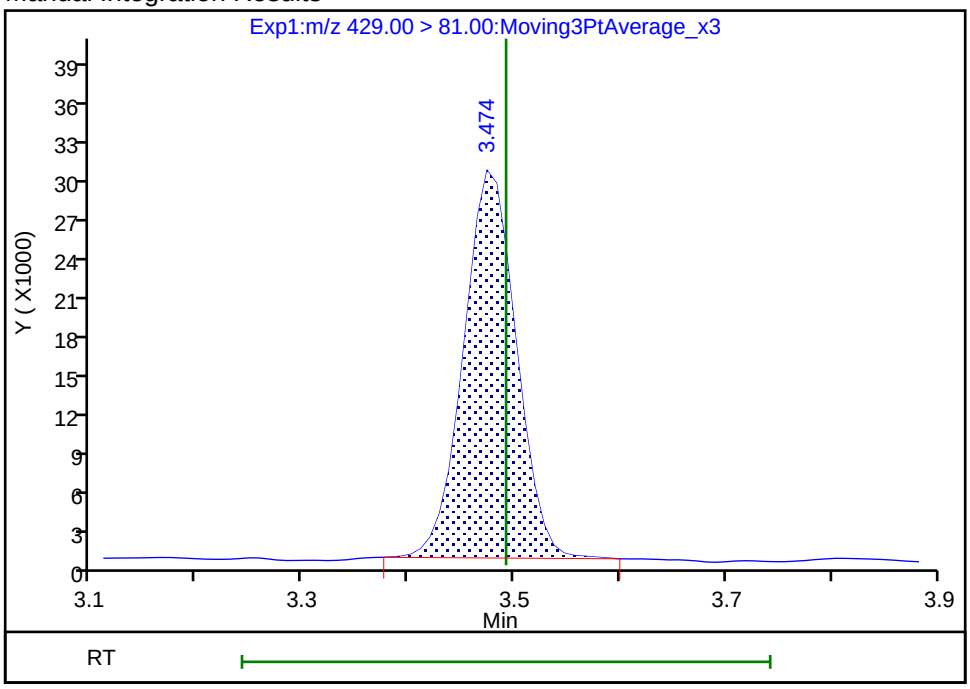
Processing Integration Results

RT: 3.47
Area: 101996
Amount: 1.161042
Amount Units: ng/ml




Manual Integration Results

RT: 3.47
Area: 101473
Amount: 1.155089
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:42:16

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Burlington

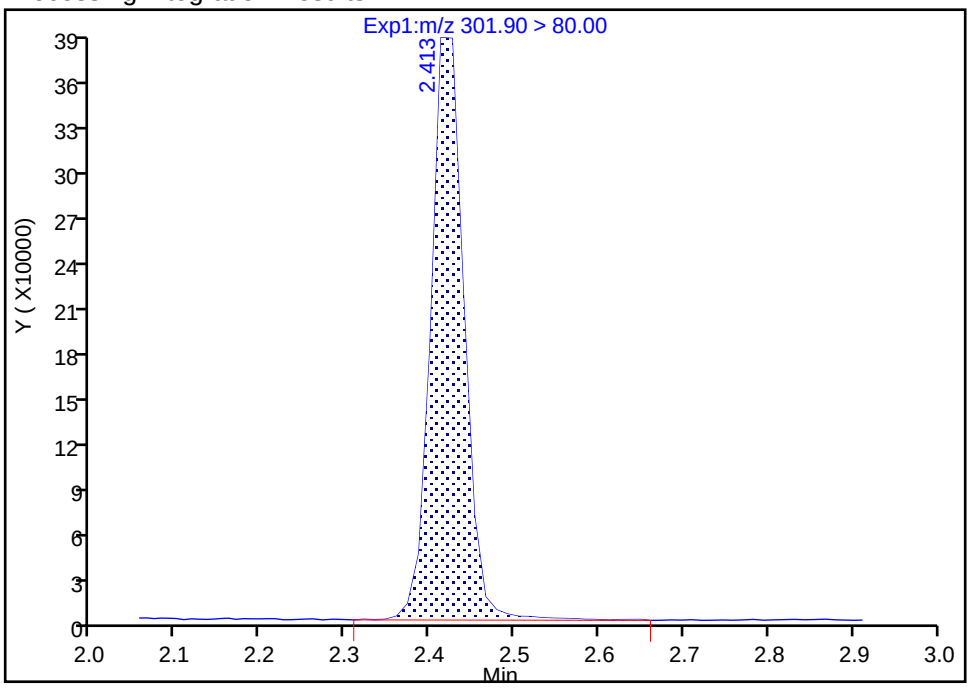
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Burlington\ChromData\LC812\20210312-45149.b\PA210312B19.d | | | | |
| Injection Date: | 12-Mar-2021 14:30:13 | Instrument ID: | LC812 | | |
| Lims ID: | 460-229152-A-2-C MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | lc812tech | ALS Bottle#: | 19 | Worklist Smp#: | 19 |
| Injection Vol: | 20.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | PFC_LC812 | Limit Group: | LC_PFC_ICAL | | |
| Column: | C-18 ( 4.60 mm) | Detector | EXP1 | | |

## D 47 13C3 PFBS, CAS: STL02337

Signal: 1

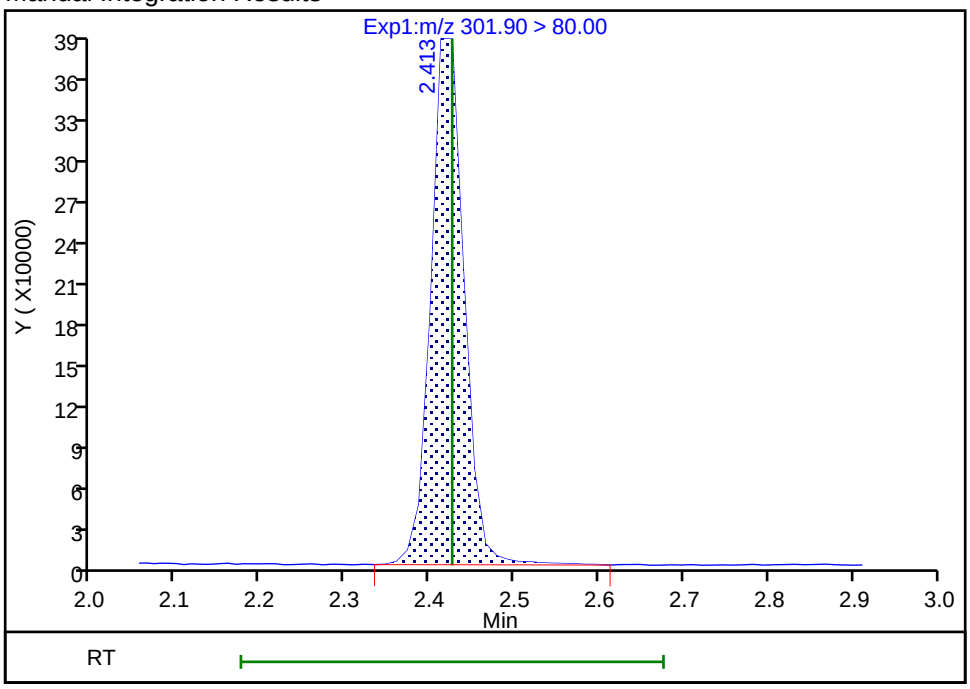
Processing Integration Results

RT: 2.41
Area: 1058392
Amount: 1.119242
Amount Units: ng/ml




Manual Integration Results

RT: 2.41
Area: 1054703
Amount: 1.115341
Amount Units: ng/ml




Reviewer: nampitakw, 15-Mar-2021 13:41:41

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Instrument ID: LC812  Start Date: 12/22/2020 11:50

Analysis Batch Number: 162365  End Date: 12/22/2020 13:54

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| ZZZZZ | | 12/22/2020 11:50 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 12/22/2020 11:58 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 12/22/2020 12:06 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 12/22/2020 12:15 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 12/22/2020 12:23 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 12/22/2020 12:31 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 12/22/2020 12:39 | 1 | | C-18 4.6(mm) |
| IC 200-162365/8 | | 12/22/2020 12:48 | 1 | PA201222ICAL008.d | C-18 4.6(mm) |
| IC 200-162365/9 | | 12/22/2020 12:56 | 1 | PA201222ICAL009.d | C-18 4.6(mm) |
| IC 200-162365/10 | | 12/22/2020 13:04 | 1 | PA201222ICAL010.d | C-18 4.6(mm) |
| ICIS 200-162365/11 | | 12/22/2020 13:13 | 1 | PA201222ICAL011.d | C-18 4.6(mm) |
| IC 200-162365/12 | | 12/22/2020 13:21 | 1 | PA201222ICAL012.d | C-18 4.6(mm) |
| IC 200-162365/13 | | 12/22/2020 13:29 | 1 | PA201222ICAL013.d | C-18 4.6(mm) |
| ICB 200-162365/14 | | 12/22/2020 13:37 | 1 | PA201222ICAL014.d | C-18 4.6(mm) |
| ICV 200-162365/15 | | 12/22/2020 13:46 | 1 | PA201222ICAL015.d | C-18 4.6(mm) |
| ZZZZZ | | 12/22/2020 13:54 | 1 | | C-18 4.6(mm) |

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Instrument ID: LC812  Start Date: 03/12/2021 10:05

Analysis Batch Number: 164765  End Date: 03/12/2021 11:11

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| ZZZZZ | | 03/12/2021 10:05 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 10:13 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 10:21 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 10:30 | 1 | | C-18 4.6(mm) |
| CCVL 200-164765/5 | | 03/12/2021 10:38 | 1 | PA210312A05.d | C-18 4.6(mm) |
| CCVIS 200-164765/9 | | 03/12/2021 11:11 | 1 | PA210312A09.d | C-18 4.6(mm) |

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Instrument ID: LC812  Start Date: 03/12/2021 12:01

Analysis Batch Number: 164776  End Date: 03/12/2021 16:42

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| CCV 200-164776/1 | | 03/12/2021 12:01 | 1 | PA210312B01.d | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 12:09 | 20 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 12:17 | 5 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 12:26 | 5 | | C-18 4.6(mm) |
| MB 200-164654/1-A | | 03/12/2021 12:34 | 1 | PA210312B05.d | C-18 4.6(mm) |
| LCS 200-164654/2-A | | 03/12/2021 12:42 | 1 | PA210312B06.d | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 12:50 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 12:59 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 13:07 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 13:15 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 13:23 | 5 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 13:32 | 10 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 13:40 | 1 | | C-18 4.6(mm) |
| CCV 200-164776/14 | | 03/12/2021 13:48 | 1 | PA210312B14.d | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 13:57 | 1 | | C-18 4.6(mm) |
| 460-229152-1 | HEX-MW06-030321 | 03/12/2021 14:05 | 1 | PA210312B16.d | C-18 4.6(mm) |
| 460-229152-2 | HEX-MW12-030321 | 03/12/2021 14:13 | 1 | PA210312B17.d | C-18 4.6(mm) |
| 460-229152-2 MS | HEX-MW12-030321 MS | 03/12/2021 14:21 | 1 | PA210312B18.d | C-18 4.6(mm) |
| 460-229152-2 MSD | HEX-MW12-030321 MSD | 03/12/2021 14:30 | 1 | PA210312B19.d | C-18 4.6(mm) |
| 460-229152-3 | HEX-MWX-030321 | 03/12/2021 14:38 | 1 | PA210312B20.d | C-18 4.6(mm) |
| 460-229152-4 | HEX-EQUIPMENTBLANK-030321 | 03/12/2021 14:46 | 1 | PA210312B21.d | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 14:55 | 1 | | C-18 4.6(mm) |
| CCV 200-164776/23 | | 03/12/2021 15:03 | 1 | PA210312B23.d | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 15:11 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 15:20 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 15:28 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 15:36 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 15:44 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 15:53 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 16:01 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 16:09 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 16:18 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 16:26 | 1 | | C-18 4.6(mm) |
| ZZZZZ | | 03/12/2021 16:34 | 1 | | C-18 4.6(mm) |
| CCV 200-164776/35 | | 03/12/2021 16:42 | 1 | | C-18 4.6(mm) |

537 (modified)

# LCMS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Burlingt  Job No.: 460-229152-1

SDG No.:

Batch Number: 164654  Batch Start Date: 03/09/21 13:56  Batch Analyst: Kane, Elizabeth

Batch Method: 3535  Batch End Date: 03/09/21 17:30

| Lab Sample ID | Client Sample ID | Method Chain | Basis | GrossWeight | TareWeight | InitialAmount | FinalAmount | LCMPFCIDA21 00029 | LCPFC32MTXStk 00031 |
|---|---|---|---|---|---|---|---|---|---|
| MB 200-164654/1 | | 3535, 537 (modified) | | 250 g | 0 g | 250 mL | 10 mL | 100 uL | |
| LCS 200-164654/2 | | 3535, 537 (modified) | | 250 g | 0 g | 250 mL | 10 mL | 100 uL | 25 uL |
| 460-229152-A-1 | HEX-MW06-030321 | 3535, 537 (modified) | T | 334.92 g | 27.10 g | 307.8 mL | 10 mL | 100 uL | |
| 460-229152-A-2 | HEX-MW12-030321 | 3535, 537 (modified) | T | 330.15 g | 27.01 g | 303.1 mL | 10 mL | 100 uL | |
| 460-229152-A-2 MS | HEX-MW12-030321 | 3535, 537 (modified) | T | 332.48 g | 27.28 g | 305.2 mL | 10 mL | 100 uL | 25 uL |
| 460-229152-A-2 MSD | HEX-MW12-030321 | 3535, 537 (modified) | T | 329.60 g | 28.16 g | 301.4 mL | 10 mL | 100 uL | 25 uL |
| 460-229152-A-3 | HEX-MWX-030321 | 3535, 537 (modified) | T | 329.38 g | 26.78 g | 302.6 mL | 10 mL | 100 uL | |
| 460-229152-A-4 | HEX-EQUIPMENTBLANK-030321 | 3535, 537 (modified) | T | 325.44 g | 27.07 g | 298.4 mL | 10 mL | 100 uL | |

| Lab Sample ID | Client Sample ID | Method Chain | Basis | PFAS21 IS Stk 00031 | AnalysisComment | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MB 200-164654/1 | | 3535, 537 (modified) | | 100 uL | | | | | |
| LCS 200-164654/2 | | 3535, 537 (modified) | | 100 uL | | | | | |
| 460-229152-A-1 | HEX-MW06-030321 | 3535, 537 (modified) | T | 100 uL | | | | | |
| 460-229152-A-2 | HEX-MW12-030321 | 3535, 537 (modified) | T | 100 uL | Sediment Discarded. 299.52g of sample extracted. | | | | |
| 460-229152-A-2 MS | HEX-MW12-030321 | 3535, 537 (modified) | T | 100 uL | Sediment Discarded. 304.23g of sample extracted. | | | | |
| 460-229152-A-2 MSD | HEX-MW12-030321 | 3535, 537 (modified) | T | 100 uL | Sediment Discarded. 298.60g of sample extracted. | | | | |

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.

# LCMS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Burlingt  Job No.: 460-229152-1

SDG No.:

Batch Number: 164654  Batch Start Date: 03/09/21 13:56  Batch Analyst: Kane, Elizabeth

Batch Method: 3535  Batch End Date: 03/09/21 17:30

| Lab Sample ID | Client Sample ID | Method Chain | Basis | PFAS21 IS Stk 00031 | AnalysisComment | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 460-229152-A-3 | HEX-MWX-030321 | 3535, 537 (modified) | T | 100 uL | Sediment Discarded. 301.56g of sample extracted. | | | | |
| 460-229152-A-4 | HEX-EQUIPMENTBLANK-030321 | 3535, 537 (modified) | T | 100 uL | | | | | |

| Batch Notes | |
|---|---|
| Balance ID | M02926 |
| Manifold ID | IDA 3 & 4 |
| Pipette/Syringe/Dispenser ID | QH77727 |
| Rinse Solvent Lot | 1464320 |
| Rinse Solvent Name | Hexane |
| Solvent Lot # | 1470031 |
| Solvent Name | Methanol (0.3% NH4OH) |
| SPE Cartridge Lot ID | 006030211A |
| SPE Cartridge Type | Strata PFAS(WAX/GCB), 500mg/ 50mg/ 6mL |
| Analyst ID - Spike Analyst | EK |
| Analyst ID - Spike Witness Analyst | NDD |

| 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 478440

eurofins | Environment Testing TestAmerica

PFAS

NYSDEC

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other:

TAL-8210

| Client Contact | Project Manager: STEVE GOETZ | Site Contact: | Date: 3/3/21 | COC No: |
|---|---|---|---|---|
| Company Name: EAR | Tel/Email: | Lab Contact: | Carrier: NYC 22 | 1 of 1 COCs |
| Address: 225 ATLANTIC AVE | Analysis Turnaround Time | | | Sampler: |
| City/State/Zip: PATCHOGUE N.Y. 11772 | ☐ CALENDAR DAYS ☐ WORKING DAYS | | | For Lab Use Only: |
| Phone: (631) 447-6400 | TAT if different from Below 10-DAY | | | Walk-in Client: |
| Fax: | ☐ 2 weeks | | | Lab Sampling: |
| Project Name: DEC-BRONX 3536 | ☐ 1 week | | | |
| Site: 203003 | ☐ 2 days | | | Job / SDG No.: |
| P O # | ☐ 1 day | | | |

| 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 EPA 537 | Sample Specific Notes: |
|---|---|---|---|---|---|---|---|---|---|
| HEX-MW06-030321 | 3/3/21 | 8:55 | G | AQ | 2 | N | N | 2 | |
| HEX-MW12-030321 | ↓ | 11:45 | ↓ | ↓ | 6 | N | Y | 6 | |
| HEX-MWX-030321 | ↓ | — | ↓ | ↓ | 2 | N | N | 2 | |
| HEX-EQUIPMENTBLANK-030321 | ↓ | 12:10 | ↓ | ↓ | 2 | N | N | 2 | |
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| | | | | | | | | 6 | |

460-229152 COC

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other NONE

**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:**
CAT "B" DELIVERABLES

| Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____ | | |
|---|---|---|---|---|---|
| Relinquished by: | Company: EAR | Date/Time: 3/3/21 14:30 | Received by: EAR FRIDGE | Company: EAR | Date/Time: 3/3/21 14:30 |
| Relinquished by: (FROM SAMPLE FRIDGE) | Company: EAR | Date/Time: 3-4-21 1045 | Received by: | Company: | Date/Time: 3/4/21 1045 |
| Relinquished by: | Company: | Date/Time: 3/4/21 1700 | Received in Laboratory by: | Company: TARUR | Date/Time: 3/5/21 11:00 |

ORIGIN ID:AIVA (646) 745-0906
TESTAMERICA NYC

47-32 32ND PLACE,
SUITE 1141
LONG ISLAND CITY, NY 11101
UNITED STATES US

SHIP DATE: 04MAR21
ACTWGT: 35.00 LB
CAD: 112977992/INET4340
DIMS: 24x20x18 IN

BILL RECIPIENT

TO **SAMPLING RECEIVING BVT**
**TESTAMERICA**
**530 COMMUNITY DR STE 11**

**SOUTH BURLINGTON VT 05403**
(802) 923-1026 REF:
INV:
PO DEPT:

56DJ3/AC39/FE4A

FedEx Express

J211121011901uu

FedEx Ship Manager - Print Your Label(s)

**FRI - 05 MAR 10:30A**
**PRIORITY OVERNIGHT**

TRK# 0201 **7730 7319 1832**

**DSR**

**NL BTVA**

**05403**
VT-US **BTV**

3/4/2021

# Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 460-229152-1

**Login Number: 229152**
**List Number: 1**
**Creator: Callahan, April R**

**List Source: Eurofins TestAmerica, 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: New York State D.E.C. Job Number: 460-229152-1

**Login Number: 229152** **List Source: Eurofins TestAmerica, Burlington**
**List Number: 2** **List Creation: 03/05/21 03:27 PM**
**Creator: Cunningham, Caroline R**

| 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. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 0.4ºC |
| 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 | Received project as a subcontract. |
| 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"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# ANALYTICAL REPORT

Job Number: 460-229278-1

Job Description: DEC - BRONX3536 SITE: 203003

Contract Number: C100700

For:
New York State D.E.C.
625 Broadway
Division of Environmental Remediation
Albany, NY 12233-7014

Attention: Charles Gregory



Approved for release.
Julie L Gilmore
Project Manager I
3/8/2021 4:52 PM

Julie L Gilmore, Project Manager I
777 New Durham Road, Edison, NJ, 08817
(484)685-0865
Julie.Gilmore@Eurofinset.com
03/08/2021

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

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

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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# CASE NARRATIVE

## Client: New York State D.E.C.

## Project: DEC - BRONX3536 SITE: 203003

## Report Number: 460-229278-1

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 03/04/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.2 C.

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.

**SEMIVOLATILE ORGANIC COMPOUNDS - SELECTED ION MODE (SIM) - ISOTOPE DILUTION - 1,4 DIOXANE**

Samples HEX-MW06-030321 (460-229278-1), HEX-MW12-030321 (460-229278-2), HEX-MWX-030321 (460-229278-3) and HEX-EQUIPMENT BLANK-030321 (460-229278-4) were analyzed for semivolatile organic compounds - Selected Ion Mode (SIM) - Isotope Dilution - 1,4 Dioxane in accordance with EPA SW-846 Method 8270E SIM 1,4Dioxane. The samples were prepared and analyzed on 03/06/2021.

No difficulties were encountered during the 1,4 Dioxane analysis.

All quality control parameters were within the acceptance limits.

# Sample Summary

Client: New York State D.E.C.
Job ID: 460-229278-1
Project/Site: DEC - BRONX3536 SITE: 203003

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 460-229278-1 | HEX-MW06-030321 | Water | 03/03/21 08:55 | 03/04/21 18:00 | |
| 460-229278-2 | HEX-MW12-030321 | Water | 03/03/21 11:45 | 03/04/21 18:00 | |
| 460-229278-3 | HEX-MWX-030321 | Water | 03/03/21 00:00 | 03/04/21 18:00 | |
| 460-229278-4 | HEX-EQUIPMENT BLANK-030321 | Water | 03/03/21 12:10 | 03/04/21 18:00 | |

# Detection Summary

Client: New York State D.E.C.
Job ID: 460-229278-1
Project/Site: DEC - BRONX3536 SITE: 203003

## Client Sample ID: HEX-MW06-030321
## Lab Sample ID: 460-229278-1

No Detections.

## Client Sample ID: HEX-MW12-030321
## Lab Sample ID: 460-229278-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 1.5 | | 0.20 | 0.016 | ug/L | 1 | | 8270E SIM ID | Total/NA |

## Client Sample ID: HEX-MWX-030321
## Lab Sample ID: 460-229278-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 1.5 | | 0.20 | 0.016 | ug/L | 1 | | 8270E SIM ID | Total/NA |

## Client Sample ID: HEX-EQUIPMENT BLANK-030321
## Lab Sample ID: 460-229278-4

No Detections.

This Detection Summary does not include radiochemical test results.

# Method Summary

Client: New York State D.E.C.
Job ID: 460-229278-1
Project/Site: DEC - BRONX3536 SITE: 203003

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8270E SIM ID | Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) | SW846 | TAL EDI |
| 3510C | Liquid-Liquid Extraction (Separatory Funnel) | SW846 | TAL EDI |

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

## Client Sample ID: HEX-MW06-030321 — Lab Sample ID: 460-229278-1

**Date Collected: 03/03/21 08:55** — **Matrix: Water**
**Date Received: 03/04/21 18:00**

### Method: 8270E SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 0.016 | U | 0.20 | 0.016 | ug/L | | 03/06/21 08:30 | 03/06/21 22:23 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8* | *40* | | *10 - 150* | *03/06/21 08:30* | *03/06/21 22:23* | *1* |

## Client Sample ID: HEX-MW12-030321 — Lab Sample ID: 460-229278-2

**Date Collected: 03/03/21 11:45** — **Matrix: Water**
**Date Received: 03/04/21 18:00**

### Method: 8270E SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **1,4-Dioxane** | **1.5** | | 0.20 | 0.016 | ug/L | | 03/06/21 08:30 | 03/06/21 19:47 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8* | *32* | | *10 - 150* | *03/06/21 08:30* | *03/06/21 19:47* | *1* |

## Client Sample ID: HEX-MWX-030321 — Lab Sample ID: 460-229278-3

**Date Collected: 03/03/21 00:00** — **Matrix: Water**
**Date Received: 03/04/21 18:00**

### Method: 8270E SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **1,4-Dioxane** | **1.5** | | 0.20 | 0.016 | ug/L | | 03/06/21 08:30 | 03/06/21 22:38 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8* | *32* | | *10 - 150* | *03/06/21 08:30* | *03/06/21 22:38* | *1* |

## Client Sample ID: HEX-EQUIPMENT BLANK-030321 — Lab Sample ID: 460-229278-4

**Date Collected: 03/03/21 12:10** — **Matrix: Water**
**Date Received: 03/04/21 18:00**

### Method: 8270E SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 0.016 | U | 0.20 | 0.016 | ug/L | | 03/06/21 08:30 | 03/06/21 22:54 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8* | *37* | | *10 - 150* | *03/06/21 08:30* | *03/06/21 22:54* | *1* |

# Isotope Dilution Summary

Client: New York State D.E.C.
Job ID: 460-229278-1
Project/Site: DEC - BRONX3536 SITE: 203003

## Method: 8270E SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | DXE (10-150) | | | | | | | |
| 460-229278-1 | HEX-MW06-030321 | 40 | | | | | | | |
| 460-229278-2 | HEX-MW12-030321 | 32 | | | | | | | |
| 460-229278-2 MS | HEX-MW12-030321 | 36 | | | | | | | |
| 460-229278-2 MSD | HEX-MW12-030321 | 33 | | | | | | | |
| 460-229278-3 | HEX-MWX-030321 | 32 | | | | | | | |
| 460-229278-4 | HEX-EQUIPMENT BLANK-030321 | 37 | | | | | | | |
| MB 460-762870/1-A | Method Blank | 41 | | | | | | | |

**Surrogate Legend**

DXE = 1,4-Dioxane-d8

## Method: 8270E SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | DXE (10-200) | | | | | | | |
| LCS 460-762870/2-A | Lab Control Sample | 36 | | | | | | | |
| LCSD 460-762870/3-A | Lab Control Sample Dup | 43 | | | | | | | |

**Surrogate Legend**

DXE = 1,4-Dioxane-d8

## Method: 8270E SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Lab Sample ID: MB 460-762870/1-A**
**Matrix: Water**
**Analysis Batch: 762930**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 762870**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 0.016 | U | 0.20 | 0.016 | ug/L | | 03/06/21 08:30 | 03/06/21 17:27 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8* | *41* | | *10 - 150* | *03/06/21 08:30* | *03/06/21 17:27* | *1* |

**Lab Sample ID: LCS 460-762870/2-A**
**Matrix: Water**
**Analysis Batch: 762930**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 762870**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | | | 1.60 | 1.71 | | ug/L | | 107 | 10 - 200 | | |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,4-Dioxane-d8* | *36* | | *10 - 200* |

**Lab Sample ID: LCSD 460-762870/3-A**
**Matrix: Water**
**Analysis Batch: 762930**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 762870**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | | | 1.60 | 1.83 | | ug/L | | 114 | 10 - 200 | 6 | 50 |

| *Isotope Dilution* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,4-Dioxane-d8* | *43* | | *10 - 200* |

**Lab Sample ID: 460-229278-2 MS**
**Matrix: Water**
**Analysis Batch: 762930**

**Client Sample ID: HEX-MW12-030321**
**Prep Type: Total/NA**
**Prep Batch: 762870**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 1.5 | | 1.60 | 2.75 | | ug/L | | 79 | 70 - 130 | | |

| *Isotope Dilution* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1,4-Dioxane-d8* | *36* | | *10 - 150* |

**Lab Sample ID: 460-229278-2 MSD**
**Matrix: Water**
**Analysis Batch: 762930**

**Client Sample ID: HEX-MW12-030321**
**Prep Type: Total/NA**
**Prep Batch: 762870**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 1.5 | | 1.60 | 2.92 | | ug/L | | 90 | 70 - 130 | 6 | 20 |

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,4-Dioxane-d8* | *33* | | *10 - 150* |

## Qualifiers

### GC/MS Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| 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 |

# QC Association Summary

Client: New York State D.E.C.
Job ID: 460-229278-1
Project/Site: DEC - BRONX3536 SITE: 203003

## GC/MS Semi VOA

### Prep Batch: 762870

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 460-229278-1 | HEX-MW06-030321 | Total/NA | Water | 3510C | |
| 460-229278-2 | HEX-MW12-030321 | Total/NA | Water | 3510C | |
| 460-229278-3 | HEX-MWX-030321 | Total/NA | Water | 3510C | |
| 460-229278-4 | HEX-EQUIPMENT BLANK-030321 | Total/NA | Water | 3510C | |
| MB 460-762870/1-A | Method Blank | Total/NA | Water | 3510C | |
| LCS 460-762870/2-A | Lab Control Sample | Total/NA | Water | 3510C | |
| LCSD 460-762870/3-A | Lab Control Sample Dup | Total/NA | Water | 3510C | |
| 460-229278-2 MS | HEX-MW12-030321 | Total/NA | Water | 3510C | |
| 460-229278-2 MSD | HEX-MW12-030321 | Total/NA | Water | 3510C | |

### Analysis Batch: 762930

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 460-229278-1 | HEX-MW06-030321 | Total/NA | Water | 8270E SIM ID | 762870 |
| 460-229278-2 | HEX-MW12-030321 | Total/NA | Water | 8270E SIM ID | 762870 |
| 460-229278-3 | HEX-MWX-030321 | Total/NA | Water | 8270E SIM ID | 762870 |
| 460-229278-4 | HEX-EQUIPMENT BLANK-030321 | Total/NA | Water | 8270E SIM ID | 762870 |
| MB 460-762870/1-A | Method Blank | Total/NA | Water | 8270E SIM ID | 762870 |
| LCS 460-762870/2-A | Lab Control Sample | Total/NA | Water | 8270E SIM ID | 762870 |
| LCSD 460-762870/3-A | Lab Control Sample Dup | Total/NA | Water | 8270E SIM ID | 762870 |
| 460-229278-2 MS | HEX-MW12-030321 | Total/NA | Water | 8270E SIM ID | 762870 |
| 460-229278-2 MSD | HEX-MW12-030321 | Total/NA | Water | 8270E SIM ID | 762870 |

# Lab Chronicle

Client: New York State D.E.C.
Job ID: 460-229278-1
Project/Site: DEC - BRONX3536 SITE: 203003

## Client Sample ID: HEX-MW06-030321
**Lab Sample ID: 460-229278-1**
**Date Collected: 03/03/21 08:55**
**Matrix: Water**
**Date Received: 03/04/21 18:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3510C | | | 762870 | 03/06/21 08:30 | DXD | TAL EDI |
| Total/NA | Analysis | 8270E SIM ID | | 1 | 762930 | 03/06/21 22:23 | YAH | TAL EDI |

## Client Sample ID: HEX-MW12-030321
**Lab Sample ID: 460-229278-2**
**Date Collected: 03/03/21 11:45**
**Matrix: Water**
**Date Received: 03/04/21 18:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3510C | | | 762870 | 03/06/21 08:30 | DXD | TAL EDI |
| Total/NA | Analysis | 8270E SIM ID | | 1 | 762930 | 03/06/21 19:47 | YAH | TAL EDI |

## Client Sample ID: HEX-MWX-030321
**Lab Sample ID: 460-229278-3**
**Date Collected: 03/03/21 00:00**
**Matrix: Water**
**Date Received: 03/04/21 18:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3510C | | | 762870 | 03/06/21 08:30 | DXD | TAL EDI |
| Total/NA | Analysis | 8270E SIM ID | | 1 | 762930 | 03/06/21 22:38 | YAH | TAL EDI |

## Client Sample ID: HEX-EQUIPMENT BLANK-030321
**Lab Sample ID: 460-229278-4**
**Date Collected: 03/03/21 12:10**
**Matrix: Water**
**Date Received: 03/04/21 18:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3510C | | | 762870 | 03/06/21 08:30 | DXD | TAL EDI |
| Total/NA | Analysis | 8270E SIM ID | | 1 | 762930 | 03/06/21 22:54 | YAH | TAL EDI |

**Laboratory References:**

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

# Accreditation/Certification Summary

Client: New York State D.E.C. Job ID: 460-229278-1
Project/Site: DEC - BRONX3536 SITE: 203003

## Laboratory: Eurofins TestAmerica, Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Connecticut | State | PH-0200 | 09-30-22 |
| DE Haz. Subst. Cleanup Act (HSCA) | State | N/A | 12-31-21 |
| Georgia | State | 12028 (NJ) | 07-01-21 |
| Massachusetts | State | M-NJ312 | 06-30-21 |
| New Jersey | NELAP | 12028 | 06-30-21 |
| New York | NELAP | 11452 | 04-01-21 |
| Pennsylvania | NELAP | 68-00522 | 02-28-22 |
| Rhode Island | State | LAO00132 | 12-30-21 |
| USDA | US Federal Programs | P330-20-00244 | 11-03-23 |

# 8270E_SIM_MS_ID

## Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Matrix: Water  Level: Low

GC Column (1): Rtxi-5Sil M  ID: 0.25(mm)

| Client Sample ID | Lab Sample ID | DXE # |
|---|---|---|
| HEX-MW06-030321 | 460-229278-1 | 40 |
| HEX-MW12-030321 | 460-229278-2 | 32 |
| HEX-MWX-030321 | 460-229278-3 | 32 |
| HEX-EQUIPMENT BLANK-030321 | 460-229278-4 | 37 |
| | MB 460-762870/1-A | 41 |
| HEX-MW12-030321 MS | 460-229278-2 MS | 36 |
| HEX-MW12-030321 MSD | 460-229278-2 MSD | 33 |

| | QC LIMITS |
|---|---|
| DXE = 1,4-Dioxane-d8 | 10-150 |

# Column to be used to flag recovery values

FORM II 8270E SIM ID

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Matrix: Water  Level: Low

GC Column (1): Rtxi-5Sil M  ID: 0.25(mm)

| Client Sample ID | Lab Sample ID | DXE # |
|---|---|---|
| | LCS 460-762870/2-A | 36 |
| | LCSD 460-762870/3-A | 43 |

| | QC LIMITS |
|---|---|
| DXE = 1,4-Dioxane-d8 | 10-200 |

# Column to be used to flag recovery values

FORM II 8270E SIM ID

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-229278-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C5149.D

Lab ID: LCS 460-762870/2-A Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| 1,4-Dioxane | 1.60 | 1.71 | 107 | 10-200 | |
| 1,4-Dioxane-d8 | 32.0 | 11.4 | 36 | 10-200 | |

# Column to be used to flag recovery and RPD values

FORM III 8270E SIM ID

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-229278-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C5150.D

Lab ID: LCSD 460-762870/3-A Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | LCSD CONCENTRATION (ug/L) | LCSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 1.60 | 1.83 | 114 | 6 | 50 | 10-200 | |
| 1,4-Dioxane-d8 | 32.0 | 13.7 | 43 | | | 10-200 | |

# Column to be used to flag recovery and RPD values

FORM III 8270E SIM ID

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: C5158.D

Lab ID: 460-229278-2 MS  Client ID: HEX-MW12-030321 MS

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| 1,4-Dioxane | 1.60 | 1.5 | 2.75 | 79 | 70-130 | |
| 1,4-Dioxane-d8 | 32.0 | 10 | 11.6 | 36 | 10-150 | |

# Column to be used to flag recovery and RPD values

FORM III 8270E SIM ID

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-229278-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C5159.D

Lab ID: 460-229278-2 MSD Client ID: HEX-MW12-030321 MSD

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 1.60 | 2.92 | 90 | 6 | 20 | 70-130 | |
| 1,4-Dioxane-d8 | 32.0 | 10.6 | 33 | | | 10-150 | |

# Column to be used to flag recovery and RPD values

FORM III 8270E SIM ID

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Lab File ID: C5148.D  Lab Sample ID: MB 460-762870/1-A

Matrix: Water  Date Extracted: 03/06/2021 08:30

Instrument ID: CBNAMS13  Date Analyzed: 03/06/2021 17:27

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| | LCS 460-762870/2-A | C5149.D | 03/06/2021 17:43 |
| | LCSD 460-762870/3-A | C5150.D | 03/06/2021 17:58 |
| HEX-MW12-030321 | 460-229278-2 | C5157.D | 03/06/2021 19:47 |
| HEX-MW12-030321 MS | 460-229278-2 MS | C5158.D | 03/06/2021 20:03 |
| HEX-MW12-030321 MSD | 460-229278-2 MSD | C5159.D | 03/06/2021 20:18 |
| HEX-MW06-030321 | 460-229278-1 | C5167.D | 03/06/2021 22:23 |
| HEX-MWX-030321 | 460-229278-3 | C5168.D | 03/06/2021 22:38 |
| HEX-EQUIPMENT BLANK-030321 | 460-229278-4 | C5169.D | 03/06/2021 22:54 |

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Lab File ID: C2827.D  DFTPP Injection Date: 11/03/2020

Instrument ID: CBNAMS13  DFTPP Injection Time: 12:12

Analysis Batch No.: 737017

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 68 | Less than 2.0 % of mass 69 | 0.7 | (1.6) 1 |
| 69 | Mass 69 relative abundance | 44.1 | |
| 70 | Less than 2.0 % of mass 69 | 0.3 | (0.7) 1 |
| 197 | Less than 1.0 % of mass 198 | 0.6 | |
| 198 | Base Peak, 100 % relative abundance | 100.0 | |
| 199 | 5.0- 9.0 % of mass 198 | 6.6 | |
| 365 | Greater than 1.0 % of mass 198 | 2.9 | |
| 441 | Present but less than mass 443 | 13.2 | (79.8) 3 |
| 442 | Greater than 40.0 % of mass 198 | 82.7 | |
| 443 | 17.0 - 23.0 % of mass 442 | 16.6 | (20.0) 2 |

1-Value is % mass 69  2-Value is % mass 442  3-Value is % mass 443

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 |
|---|---|---|---|---|
| | ICIS 460-737017/2 | C2828.D | 11/03/2020 | 12:24 |
| | STD9 460-737017/3 | C2829.D | 11/03/2020 | 12:40 |
| | STD8 460-737017/4 | C2830.D | 11/03/2020 | 12:56 |
| | STD7 460-737017/5 | C2831.D | 11/03/2020 | 13:12 |
| | STD6 460-737017/6 | C2832.D | 11/03/2020 | 13:28 |
| | STD4 460-737017/7 | C2833.D | 11/03/2020 | 13:44 |
| | STD3 460-737017/8 | C2834.D | 11/03/2020 | 14:00 |
| | STD2 460-737017/9 | C2835.D | 11/03/2020 | 14:15 |
| | STD1 460-737017/10 | C2836.D | 11/03/2020 | 14:31 |
| | ICV 460-737017/11 | C2837.D | 11/03/2020 | 14:47 |

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Sample No.: ICIS 460-737017/2  Date Analyzed: 11/03/2020 12:24

Instrument ID: CBNAMS13  GC Column: Rtxi-5Sil MS  ID: 0.25(mm)

Lab File ID (Standard): C2828.D  Heated Purge: (Y/N) N

Calibration ID: 82666

| | | DCBd4 | | | | | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | # | RT # | # | RT # |
| INITIAL CALIBRATION MID-POINT | | 13720 | 5.60 | | | | |
| UPPER LIMIT | | 27440 | 6.10 | | | | |
| LOWER LIMIT | | 6860 | 5.10 | | | | |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| ICV 460-737017/11 | | 15401 | 5.60 | | | | |

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270E SIM ID

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Sample No.: CCVIS 460-762930/2  Date Analyzed: 03/06/2021 17:05

Instrument ID: CBNAMS13  GC Column: Rtxi-5Sil MS  ID: 0.25(mm)

Lab File ID (Standard): C5147.D  Heated Purge: (Y/N) N

Calibration ID: 82666

| | | DCBd4 | | | | | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | # | RT # | # | RT # |
| 12/24 HOUR STD | | 9760 | 5.51 | | | | |
| UPPER LIMIT | | 19520 | 6.01 | | | | |
| LOWER LIMIT | | 4880 | 5.01 | | | | |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| MB 460-762870/1-A | | 10422 | 5.51 | | | | |
| LCS 460-762870/2-A | | 15080 | 5.51 | | | | |
| LCSD 460-762870/3-A | | 9134 | 5.51 | | | | |
| 460-229278-2 | HEX-MW12-030321 | 13509 | 5.50 | | | | |
| 460-229278-2 MS | HEX-MW12-030321 MS | 11061 | 5.50 | | | | |
| 460-229278-2 MSD | HEX-MW12-030321 MSD | 10749 | 5.50 | | | | |
| 460-229278-1 | HEX-MW06-030321 | 13292 | 5.50 | | | | |
| 460-229278-3 | HEX-MWX-030321 | 14788 | 5.50 | | | | |
| 460-229278-4 | HEX-EQUIPMENT BLANK-030321 | 13075 | 5.50 | | | | |

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270E SIM ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Client Sample ID: HEX-MW06-030321  Lab Sample ID: 460-229278-1

Matrix: Water  Lab File ID: C5167.D

Analysis Method: 8270E SIM ID  Date Collected: 03/03/2021 08:55

Extract. Method: 3510C  Date Extracted: 03/06/2021 08:30

Sample wt/vol: 250(mL)  Date Analyzed: 03/06/2021 22:23

Con. Extract Vol.: 2(mL)  Dilution Factor: 1

Injection Volume: 5(uL)  Level: (low/med) Low

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 762930  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 123-91-1 | 1,4-Dioxane | 0.016 | U | 0.20 | 0.016 |

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17647-74-4 | 1,4-Dioxane-d8 | 40 | | 10-150 |

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5167.D | | | | |
| Lims ID: | 460-229278-A-1-A | | | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Sample Type: | Client | | | | |
| Inject. Date: | 06-Mar-2021 22:23:30 | ALS Bottle#: | 22 | Worklist Smp#: | 22 |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 460-0125035-022 | | | | |
| Operator ID: | | Instrument ID: | CBNAMS13 | | |
| Method: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\8270_Isotope.m | | | | |
| Limit Group: | MSS 8270 Isotope Dilution IS | | | | |
| Last Update: | 06-Mar-2021 22:58:18 | Calib Date: | 03-Nov-2020 14:31:30 | | |
| Integrator: | RTE | ID Type: | RT Order ID | | |
| Quant Method: | Isotopic Dilution | Quant By: | Initial Calibration | | |
| Last ICal File: | \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D | | | | |
| Column 1 : | Rtxi-5Sil MS ( 0.25 mm) | | Det: MS SCAN | | |
| Process Host: | CTX1626 | | | | |
| First Level Reviewer: hamziy | | Date: | 06-Mar-2021 22:58:18 | | |

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/ml | %Rec | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.876 | 1.867 | 0.007 | 8 | 24043 | 1.58 | 39.6 | |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.502 | 5.506 | -0.004 | 1 | 13292 | 0.2000 | | |

## QC Flag Legend

Processing Flags

## Reagents:

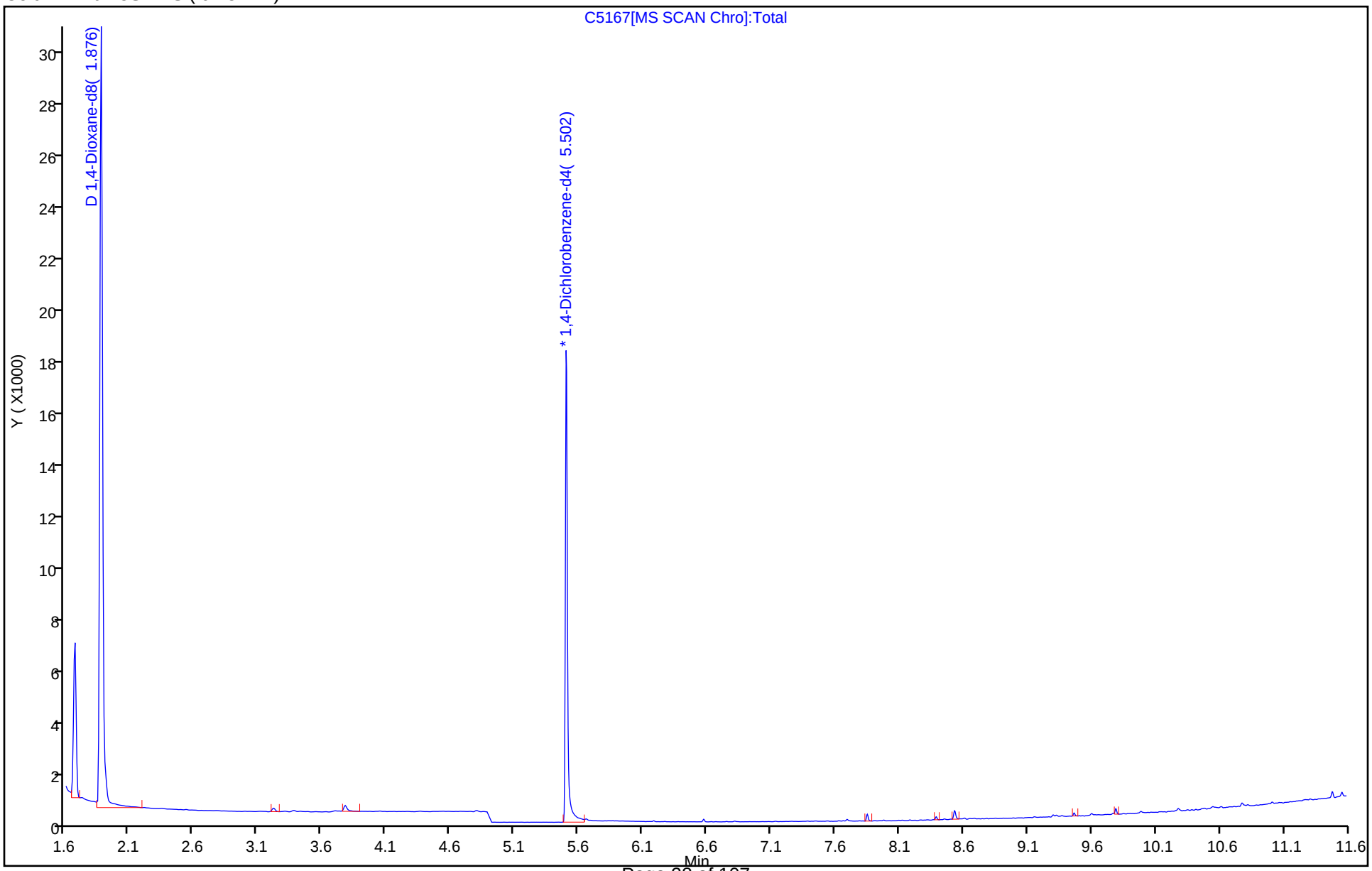
SM_iso_d4istd_00007 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Mar-2021 22:58:18 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Edison

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5167.D | | | | |
| Injection Date: | 06-Mar-2021 22:23:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | 460-229278-A-1-A | Lab Sample ID: | 460-229278-1 | Worklist Smp#: | 22 |
| Client ID: | HEX-MW06-030321 | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 22 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)

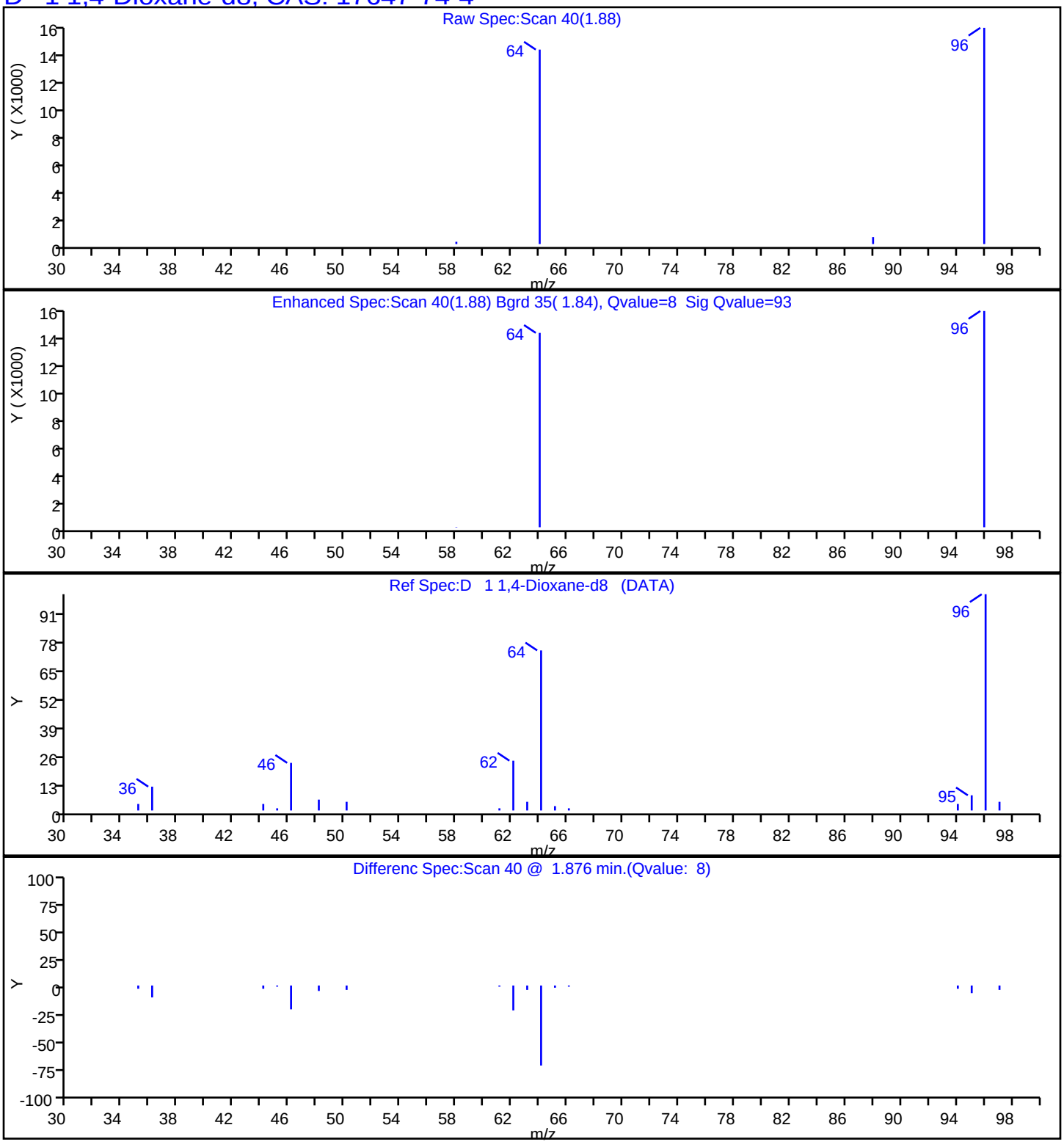


Report Date: 06-Mar-2021 22:58:18 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Edison

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5167.D | | | | |
| Injection Date: | 06-Mar-2021 22:23:30 | Instrument ID: | CBNAMS13 | | |
| Lims ID: | 460-229278-A-1-A | Lab Sample ID: | 460-229278-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | | ALS Bottle#: | 22 | Worklist Smp#: | 22 |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |
| Column: | Rtxi-5Sil MS ( 0.25 mm) | Detector | MS SCAN | | |

## D 1 1,4-Dioxane-d8, CAS: 17647-74-4



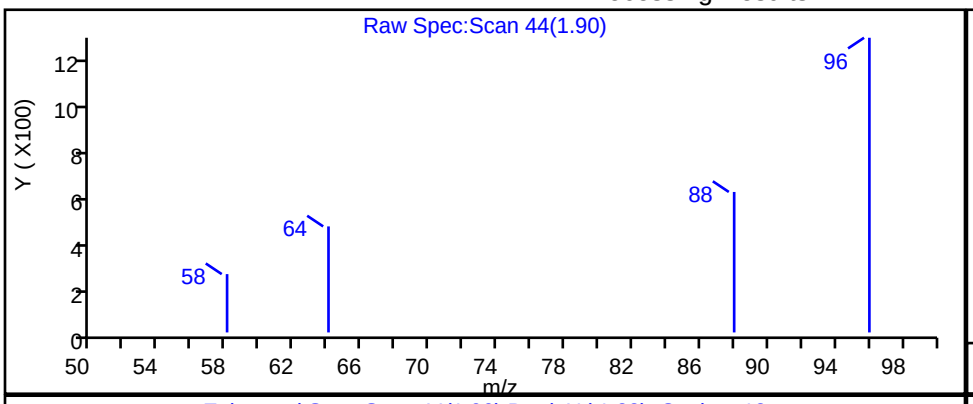
User Disabled Compound Report

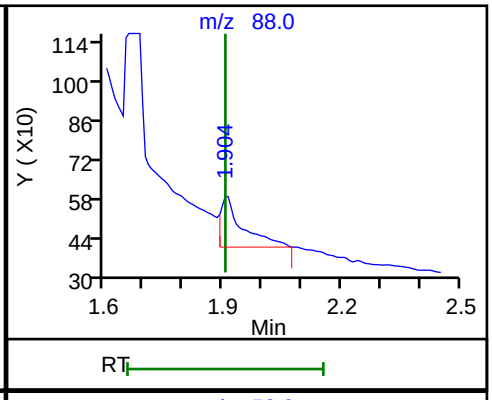
Eurofins TestAmerica, Edison

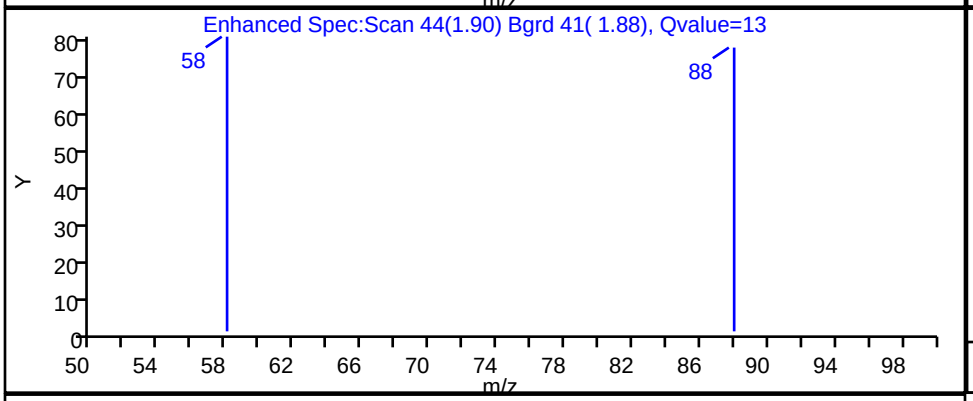
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5167.D | | | | |
| Injection Date: | 06-Mar-2021 22:23:30 | Instrument ID: | CBNAMS13 | | |
| Lims ID: | 460-229278-A-1-A | Lab Sample ID: | 460-229278-1 | | |
| Client ID: | HEX-MW06-030321 | | | | |
| Operator ID: | | ALS Bottle#: | 22 | Worklist Smp#: | 22 |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |
| Column: | Rtxi-5Sil MS ( 0.25 mm) | Detector | MS SCAN | | |

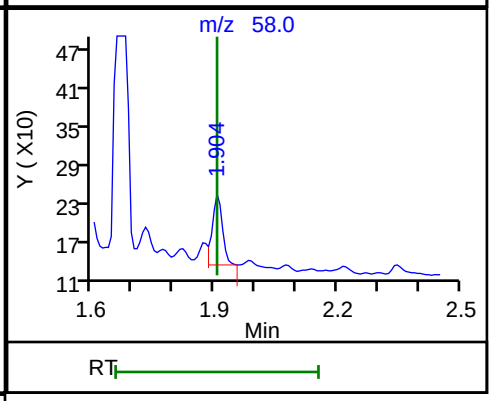
## 2 1,4-Dioxane, CAS: 123-91-1

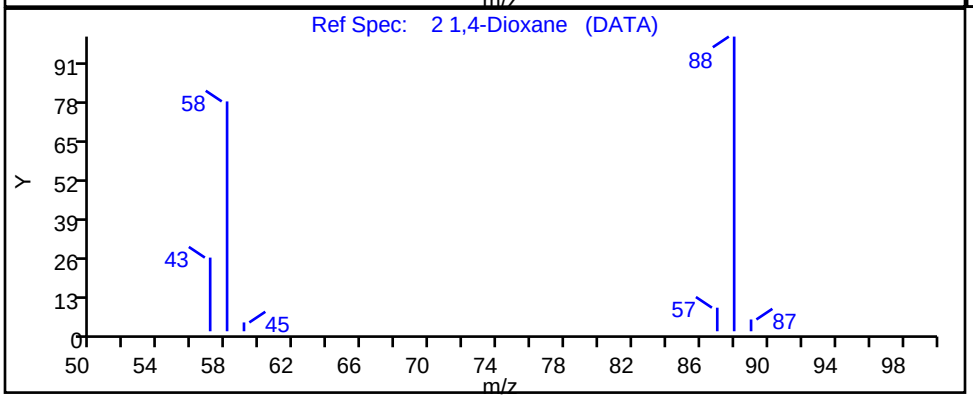
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 1.90 | 88.00 | 707 | 0.098212 |
| 1.90 | 58.00 | 188 | |

Reviewer: hamziy, 06-Mar-2021 22:58:13

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

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Client Sample ID: HEX-MW12-030321  Lab Sample ID: 460-229278-2

Matrix: Water  Lab File ID: C5157.D

Analysis Method: 8270E SIM ID  Date Collected: 03/03/2021 11:45

Extract. Method: 3510C  Date Extracted: 03/06/2021 08:30

Sample wt/vol: 250(mL)  Date Analyzed: 03/06/2021 19:47

Con. Extract Vol.: 2(mL)  Dilution Factor: 1

Injection Volume: 5(uL)  Level: (low/med) Low

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 762930  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 123-91-1 | 1,4-Dioxane | 1.5 | | 0.20 | 0.016 |

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17647-74-4 | 1,4-Dioxane-d8 | 32 | | 10-150 |

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5157.D | | | | |
| Lims ID: | 460-229278-A-2-A | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Sample Type: | Client | | | | |
| Inject. Date: | 06-Mar-2021 19:47:30 | ALS Bottle#: | 12 | Worklist Smp#: | 12 |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 460-0125035-012 | | | | |
| Operator ID: | | Instrument ID: | CBNAMS13 | | |
| Method: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\8270_Isotope.m | | | | |
| Limit Group: | MSS 8270 Isotope Dilution IS | | | | |
| Last Update: | 08-Mar-2021 06:28:10 | Calib Date: | 03-Nov-2020 14:31:30 | | |
| Integrator: | RTE | ID Type: | RT Order ID | | |
| Quant Method: | Isotopic Dilution | Quant By: | Initial Calibration | | |
| Last ICal File: | \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D | | | | |
| Column 1 : | Rtxi-5Sil MS ( 0.25 mm) | | Det: MS SCAN | | |
| Process Host: | CTX1639 | | | | |
| First Level Reviewer: hamziy | | Date: | 06-Mar-2021 22:57:03 | | |

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/ml | %Rec | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.876 | 1.867 | 0.007 | 8 | 19946 | 1.29 | 32.3 | |
| | 2 1,4-Dioxane | 88 | 1.911 | 1.911 | 0.007 | 17 | 1107 | 0.1854 | | M |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.502 | 5.506 | -0.004 | 1 | 13509 | 0.2000 | | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

## Reagents:

SM_iso_d4istd_00007 Amount Added: 20.00 Units: uL Run Reagent

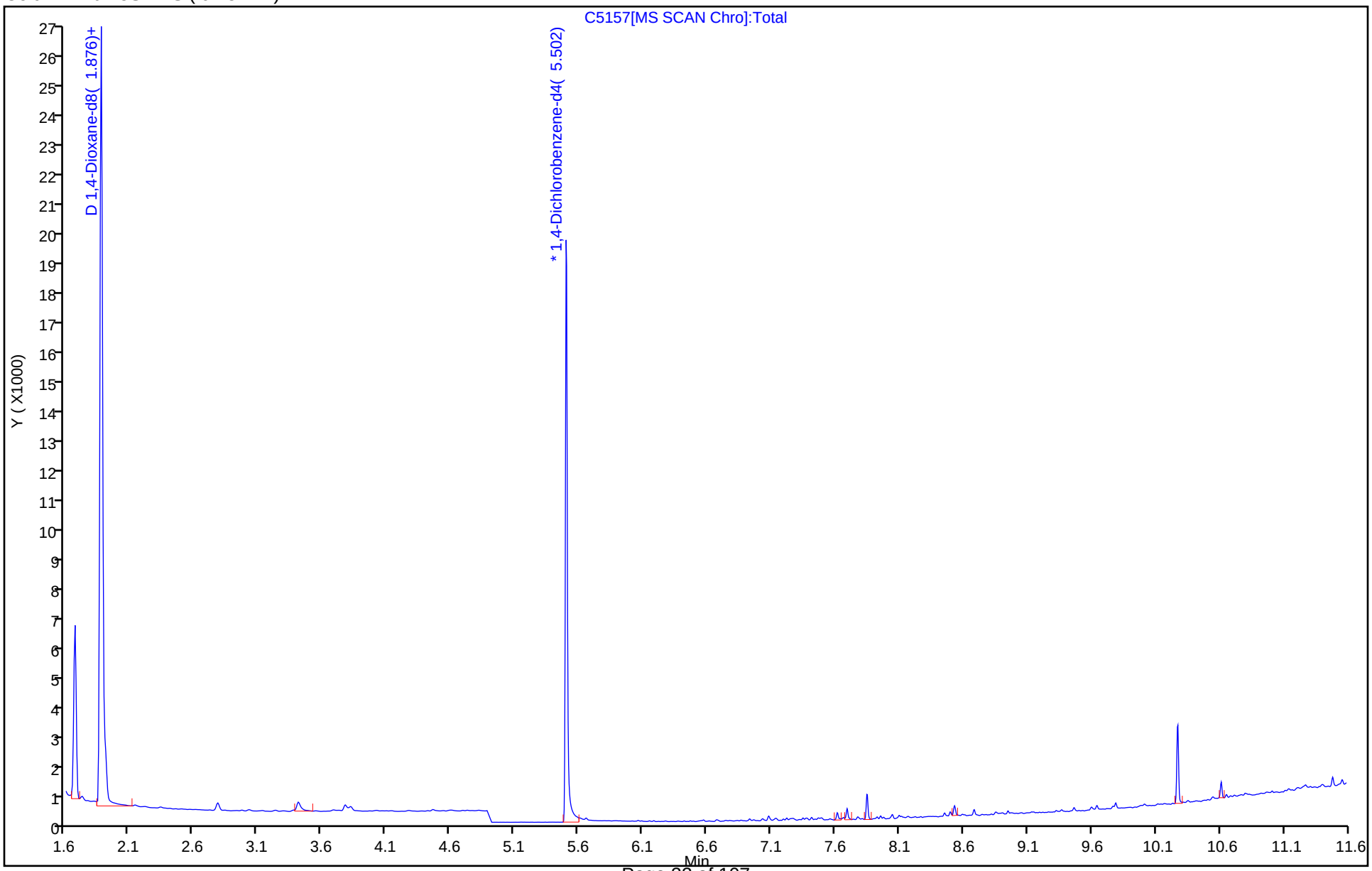
Report Date: 08-Mar-2021 06:28:10 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5157.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 06-Mar-2021 19:47:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | 460-229278-A-2-A | Lab Sample ID: | 460-229278-2 | Worklist Smp#: | 12 |
| Client ID: | HEX-MW12-030321 | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 12 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)

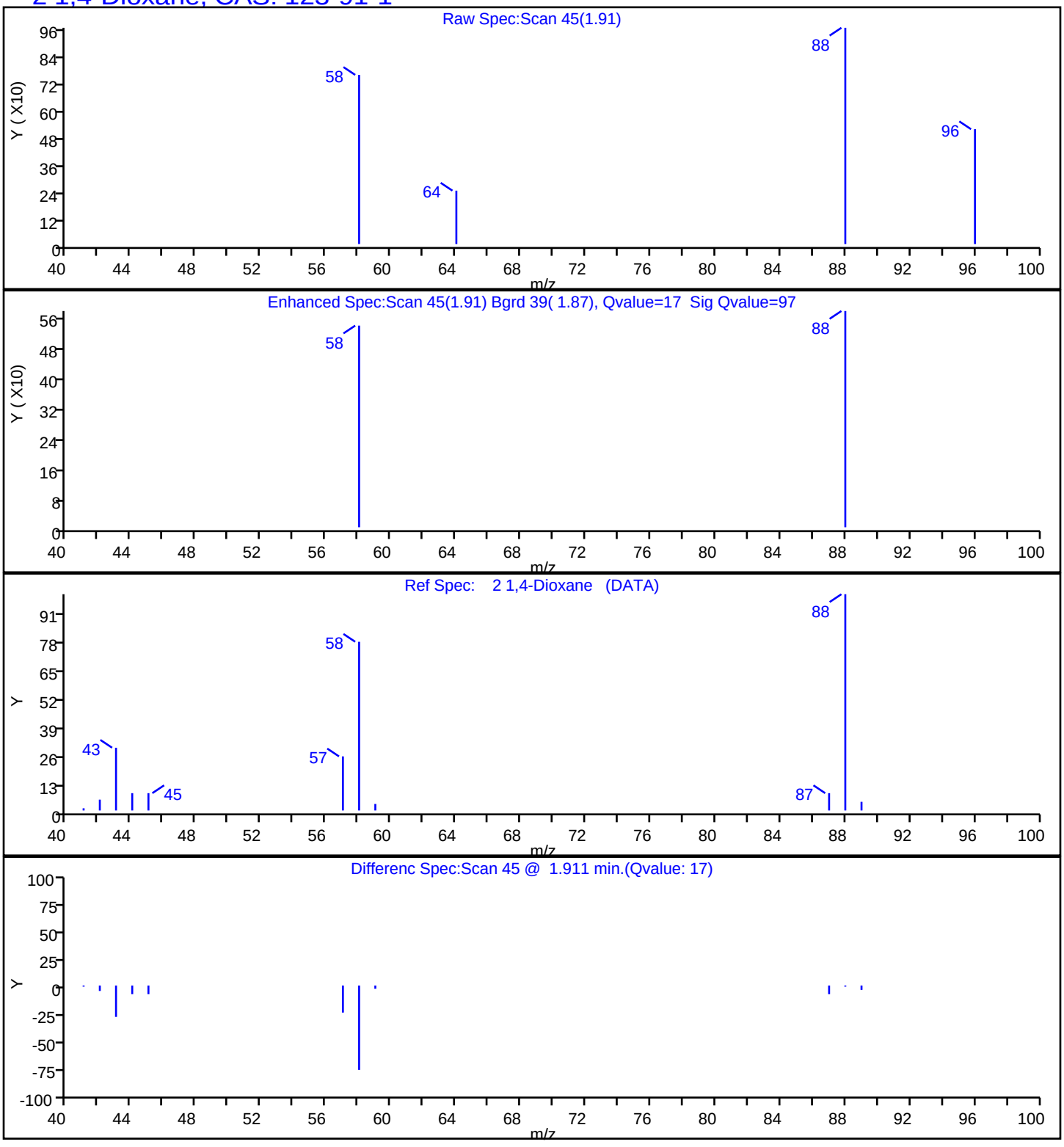


Report Date: 08-Mar-2021 06:28:10 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Edison

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5157.D | | | | |
| Injection Date: | 06-Mar-2021 19:47:30 | Instrument ID: | CBNAMS13 | | |
| Lims ID: | 460-229278-A-2-A | Lab Sample ID: | 460-229278-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | | ALS Bottle#: | 12 | Worklist Smp#: | 12 |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |
| Column: | Rtxi-5Sil MS ( 0.25 mm) | Detector | MS SCAN | | |

## 2 1,4-Dioxane, CAS: 123-91-1

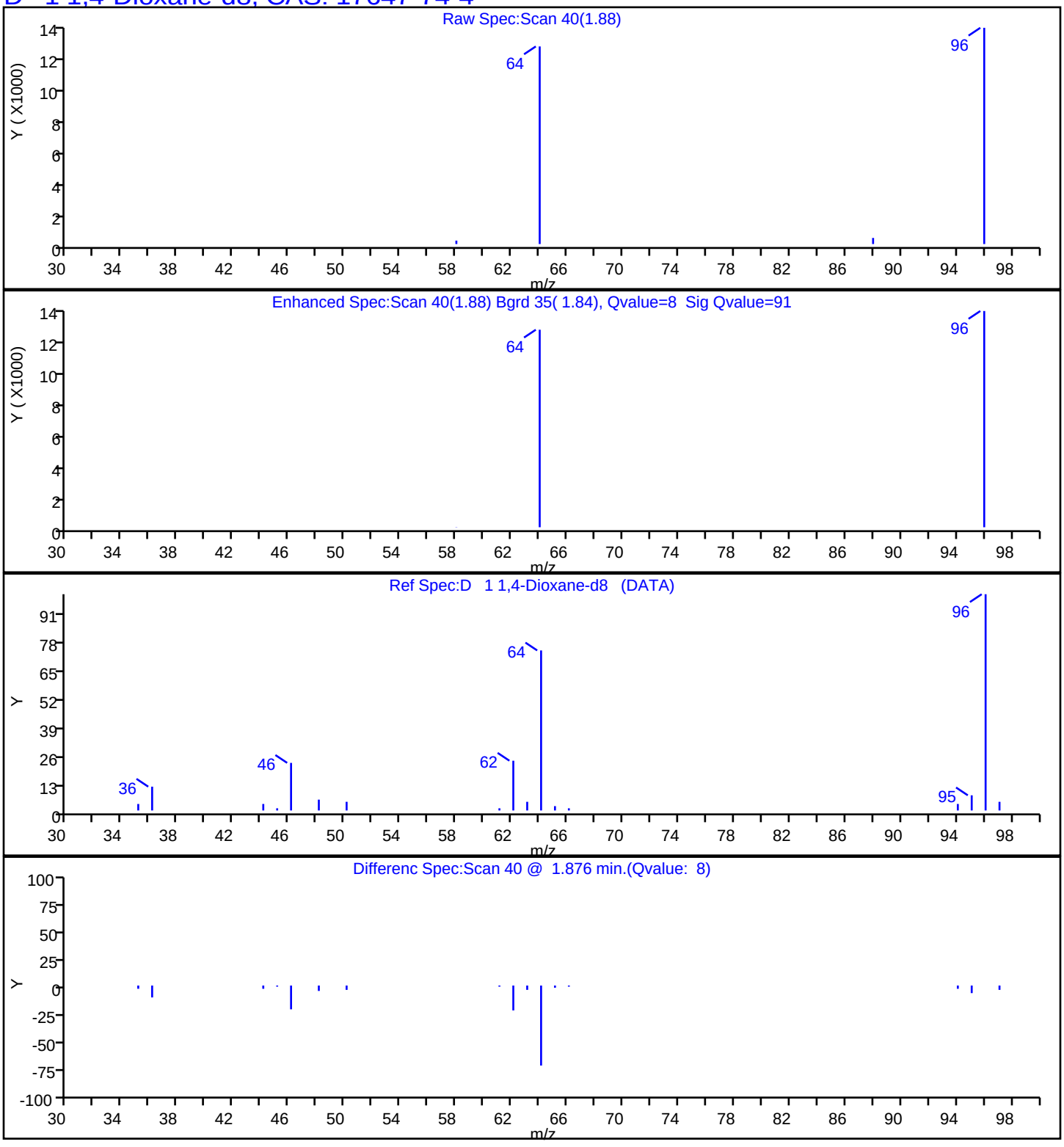


Report Date: 08-Mar-2021 06:28:10 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Edison

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5157.D | | | | |
| Injection Date: | 06-Mar-2021 19:47:30 | Instrument ID: | CBNAMS13 | | |
| Lims ID: | 460-229278-A-2-A | Lab Sample ID: | 460-229278-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | | ALS Bottle#: | 12 | Worklist Smp#: | 12 |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |
| Column: | Rtxi-5Sil MS ( 0.25 mm) | Detector | MS SCAN | | |

## D 1 1,4-Dioxane-d8, CAS: 17647-74-4



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

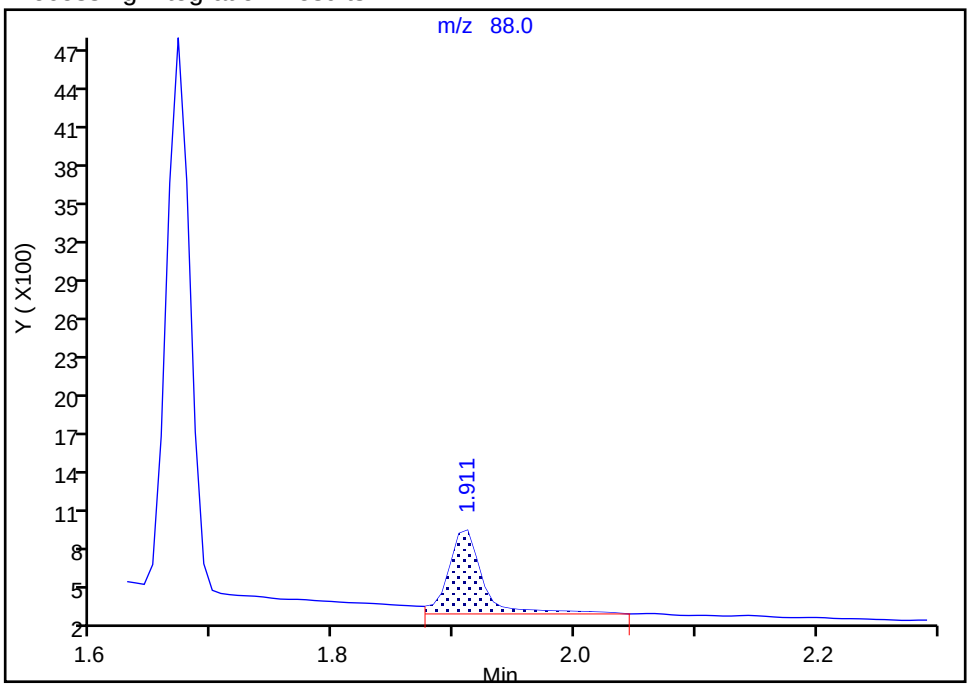
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5157.D | | | | |
| Injection Date: | 06-Mar-2021 19:47:30 | Instrument ID: | CBNAMS13 | | |
| Lims ID: | 460-229278-A-2-A | Lab Sample ID: | 460-229278-2 | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | | ALS Bottle#: | 12 | Worklist Smp#: | 12 |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |
| Column: | Rtxi-5Sil MS ( 0.25 mm) | Detector | MS SCAN | | |

## 2 1,4-Dioxane, CAS: 123-91-1

Signal: 1

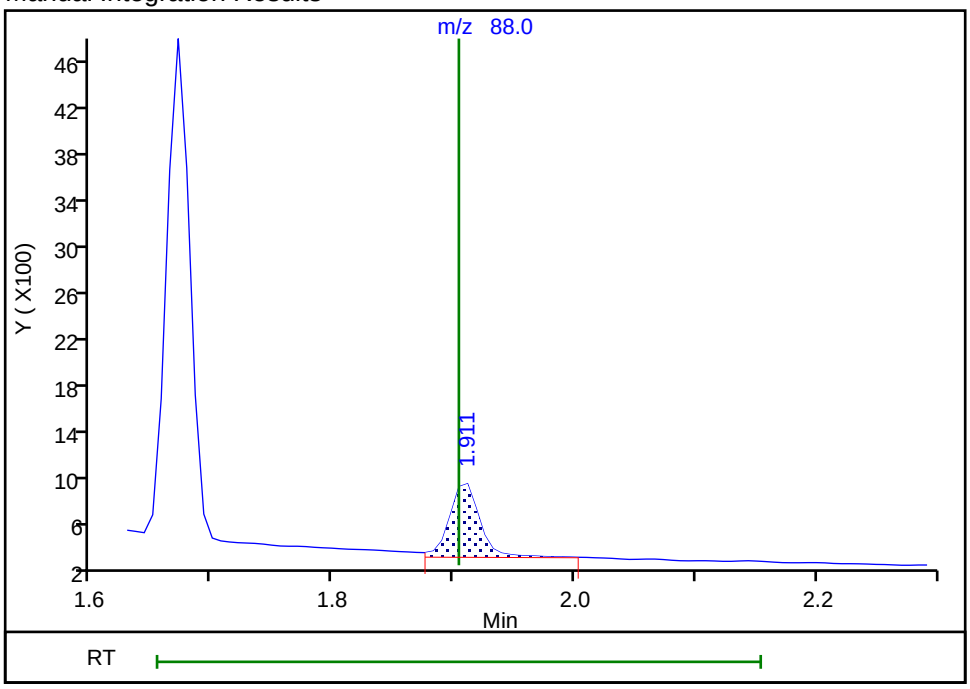
Processing Integration Results

RT: 1.91
Area: 1264
Amount: 0.211653
Amount Units: ug/ml




Manual Integration Results

RT: 1.91
Area: 1107
Amount: 0.185364
Amount Units: ug/ml




Reviewer: khlungprakhons, 08-Mar-2021 06:28:08

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Client Sample ID: HEX-MWX-030321  Lab Sample ID: 460-229278-3

Matrix: Water  Lab File ID: C5168.D

Analysis Method: 8270E SIM ID  Date Collected: 03/03/2021 00:00

Extract. Method: 3510C  Date Extracted: 03/06/2021 08:30

Sample wt/vol: 250(mL)  Date Analyzed: 03/06/2021 22:38

Con. Extract Vol.: 2(mL)  Dilution Factor: 1

Injection Volume: 5(uL)  Level: (low/med) Low

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 762930  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 123-91-1 | 1,4-Dioxane | 1.5 | | 0.20 | 0.016 |

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17647-74-4 | 1,4-Dioxane-d8 | 32 | | 10-150 |

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5168.D | | | | |
| Lims ID: | 460-229278-A-3-A | | | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Sample Type: | Client | | | | |
| Inject. Date: | 06-Mar-2021 22:38:30 | ALS Bottle#: | 23 | Worklist Smp#: | 23 |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 460-0125035-023 | | | | |
| Operator ID: | | Instrument ID: | CBNAMS13 | | |
| Method: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\8270_Isotope.m | | | | |
| Limit Group: | MSS 8270 Isotope Dilution IS | | | | |
| Last Update: | 06-Mar-2021 22:58:18 | Calib Date: | 03-Nov-2020 14:31:30 | | |
| Integrator: | RTE | ID Type: | RT Order ID | | |
| Quant Method: | Isotopic Dilution | Quant By: | Initial Calibration | | |
| Last ICal File: | \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D | | | | |
| Column 1 : | Rtxi-5Sil MS ( 0.25 mm) | | Det: MS SCAN | | |
| Process Host: | CTX1626 | | | | |
| First Level Reviewer: hamziy | | Date: | 06-Mar-2021 22:58:32 | | |

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/ml | %Rec | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.876 | 1.867 | 0.007 | 8 | 21439 | 1.27 | 31.7 | |
| | 2 1,4-Dioxane | 88 | 1.904 | 1.911 | 0.000 | 11 | 1240 | 0.1932 | | |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.502 | 5.506 | -0.004 | 1 | 14788 | 0.2000 | | |

## QC Flag Legend

Processing Flags

## Reagents:

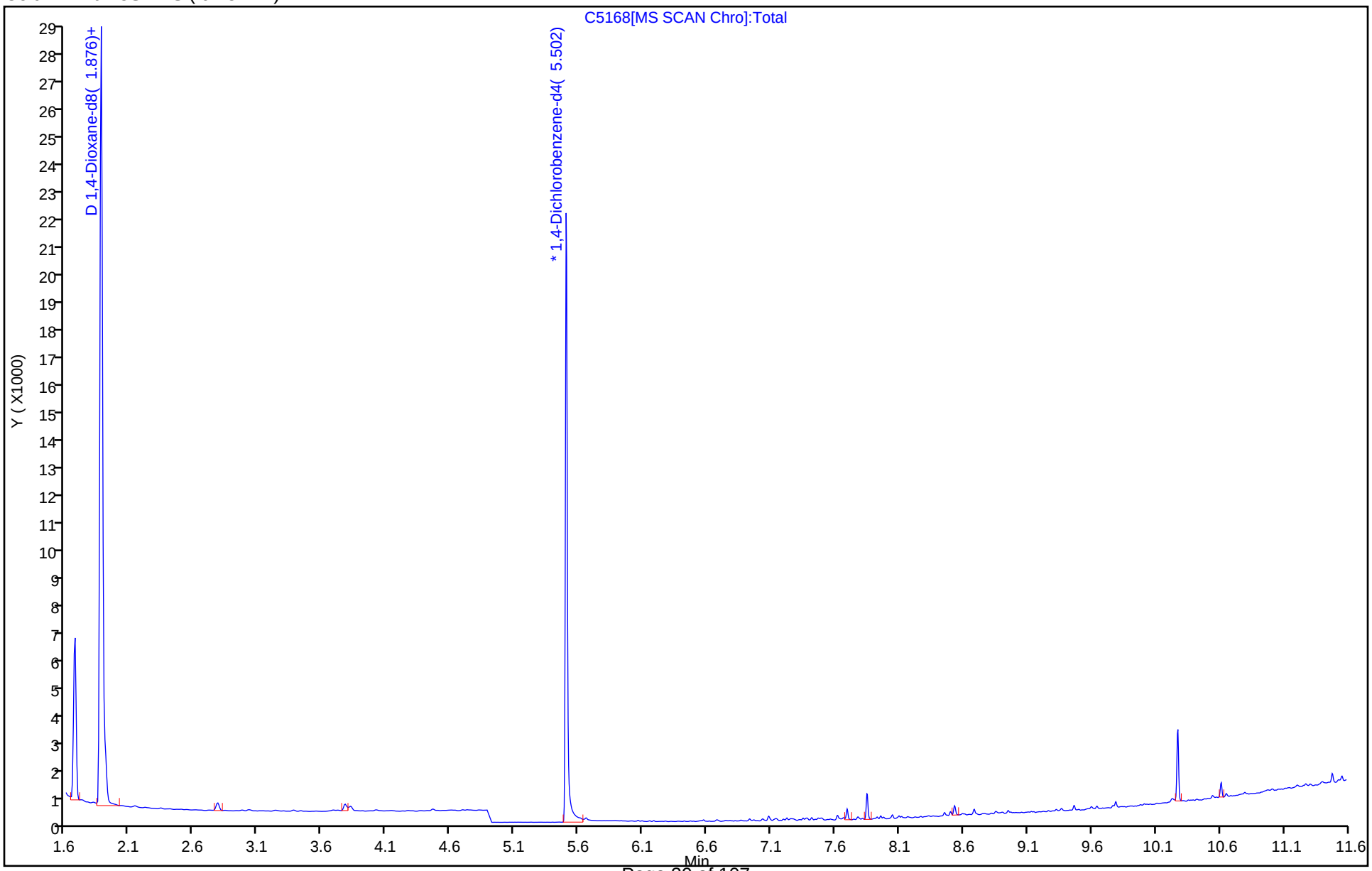
SM_iso_d4istd_00007 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Mar-2021 22:58:32 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Edison

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5168.D | | | | |
| Injection Date: | 06-Mar-2021 22:38:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | 460-229278-A-3-A | Lab Sample ID: | 460-229278-3 | Worklist Smp#: | 23 |
| Client ID: | HEX-MWX-030321 | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 23 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)

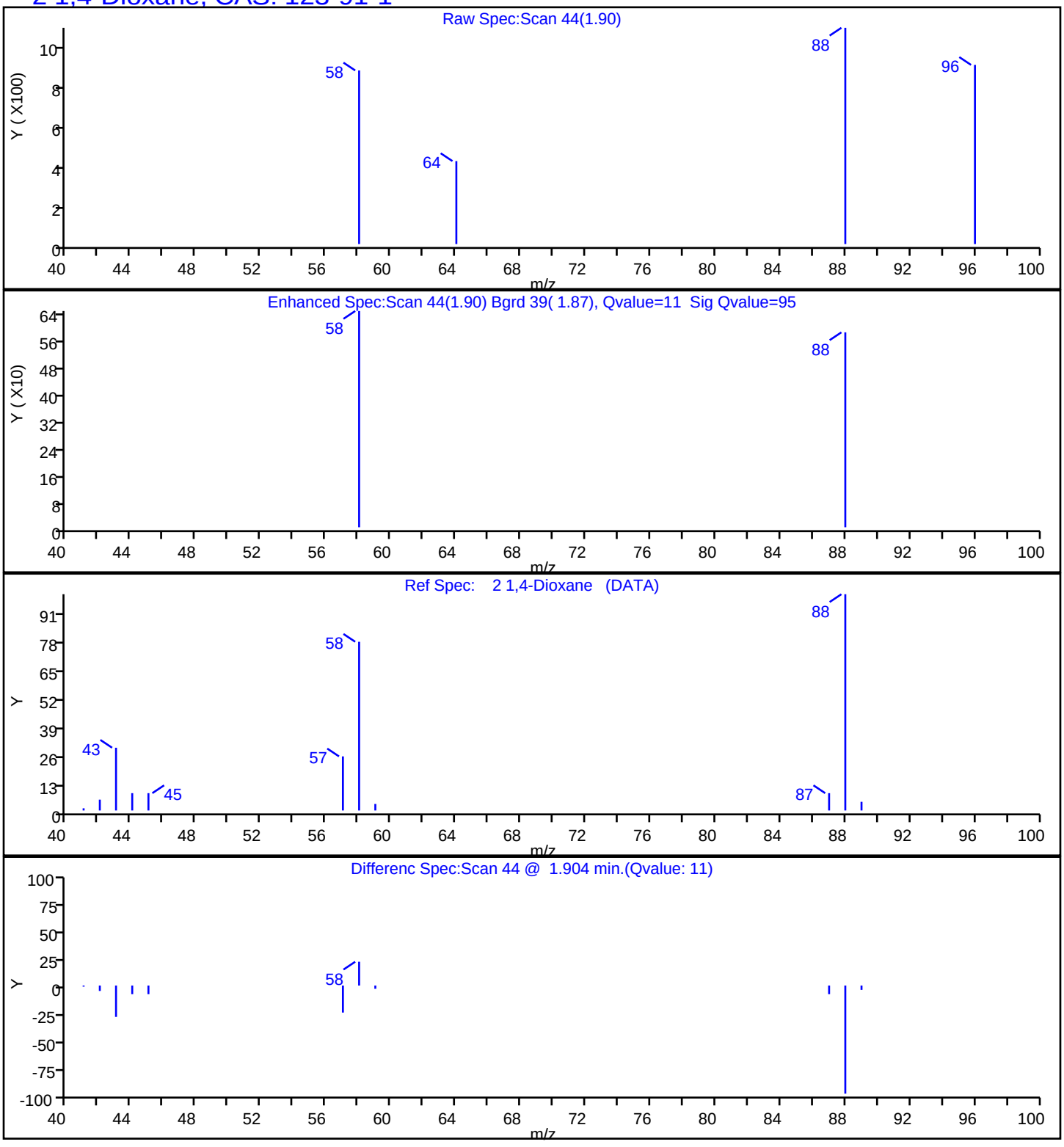


Report Date: 06-Mar-2021 22:58:32 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Edison

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5168.D | | | | |
| Injection Date: | 06-Mar-2021 22:38:30 | Instrument ID: | CBNAMS13 | | |
| Lims ID: | 460-229278-A-3-A | Lab Sample ID: | 460-229278-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | | ALS Bottle#: | 23 | Worklist Smp#: | 23 |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |
| Column: | Rtxi-5Sil MS ( 0.25 mm) | Detector | MS SCAN | | |

## 2 1,4-Dioxane, CAS: 123-91-1

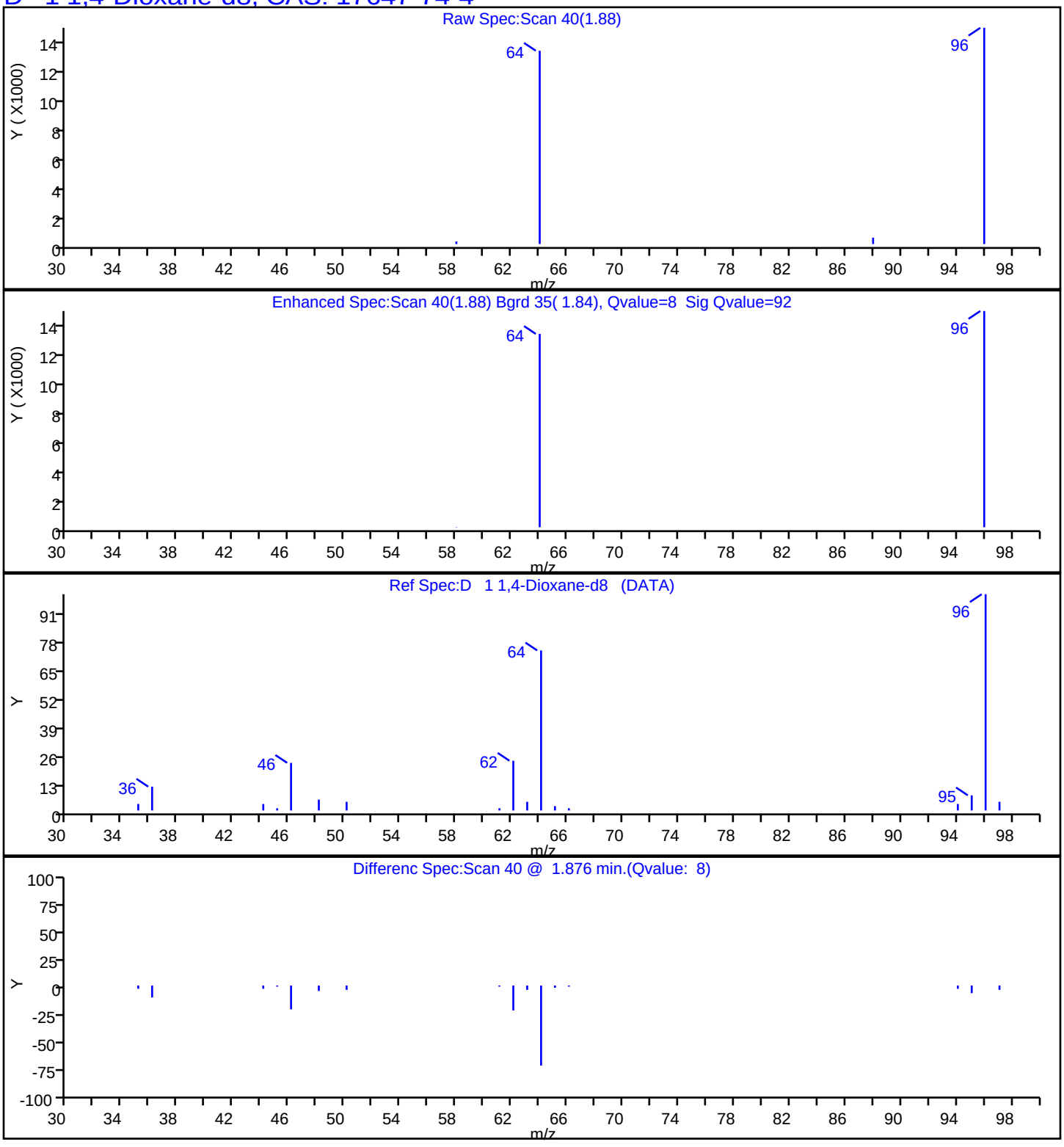


Report Date: 06-Mar-2021 22:58:32 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Edison

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5168.D | | | | |
| Injection Date: | 06-Mar-2021 22:38:30 | Instrument ID: | CBNAMS13 | | |
| Lims ID: | 460-229278-A-3-A | Lab Sample ID: | 460-229278-3 | | |
| Client ID: | HEX-MWX-030321 | | | | |
| Operator ID: | | ALS Bottle#: | 23 | Worklist Smp#: | 23 |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |
| Column: | Rtxi-5Sil MS ( 0.25 mm) | Detector | MS SCAN | | |

## D 1 1,4-Dioxane-d8, CAS: 17647-74-4



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Client Sample ID: HEX-EQUIPMENT BLANK-030321  Lab Sample ID: 460-229278-4

Matrix: Water  Lab File ID: C5169.D

Analysis Method: 8270E SIM ID  Date Collected: 03/03/2021 12:10

Extract. Method: 3510C  Date Extracted: 03/06/2021 08:30

Sample wt/vol: 250(mL)  Date Analyzed: 03/06/2021 22:54

Con. Extract Vol.: 2(mL)  Dilution Factor: 1

Injection Volume: 5(uL)  Level: (low/med) Low

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 762930  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 123-91-1 | 1,4-Dioxane | 0.016 | U | 0.20 | 0.016 |

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17647-74-4 | 1,4-Dioxane-d8 | 37 | | 10-150 |

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5169.D | | | | |
| Lims ID: | 460-229278-A-4-A | | | | |
| Client ID: | HEX-EQUIPMENT BLANK-030321 | | | | |
| Sample Type: | Client | | | | |
| Inject. Date: | 06-Mar-2021 22:54:30 | ALS Bottle#: | 24 | Worklist Smp#: | 24 |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 460-0125035-024 | | | | |
| Operator ID: | | Instrument ID: | CBNAMS13 | | |
| Method: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\8270_Isotope.m | | | | |
| Limit Group: | MSS 8270 Isotope Dilution IS | | | | |
| Last Update: | 06-Mar-2021 23:13:16 | Calib Date: | 03-Nov-2020 14:31:30 | | |
| Integrator: | RTE | ID Type: | RT Order ID | | |
| Quant Method: | Isotopic Dilution | Quant By: | Initial Calibration | | |
| Last ICal File: | \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D | | | | |
| Column 1 : | Rtxi-5Sil MS ( 0.25 mm) | | Det: MS SCAN | | |
| Process Host: | CTX1626 | | | | |
| First Level Reviewer: hamziy | | Date: | 06-Mar-2021 23:13:16 | | |

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/ml | %Rec | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.876 | 1.867 | 0.007 | 7 | 22005 | 1.47 | 36.9 | |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.502 | 5.506 | -0.004 | 1 | 13075 | 0.2000 | | |

## QC Flag Legend

Processing Flags

## Reagents:

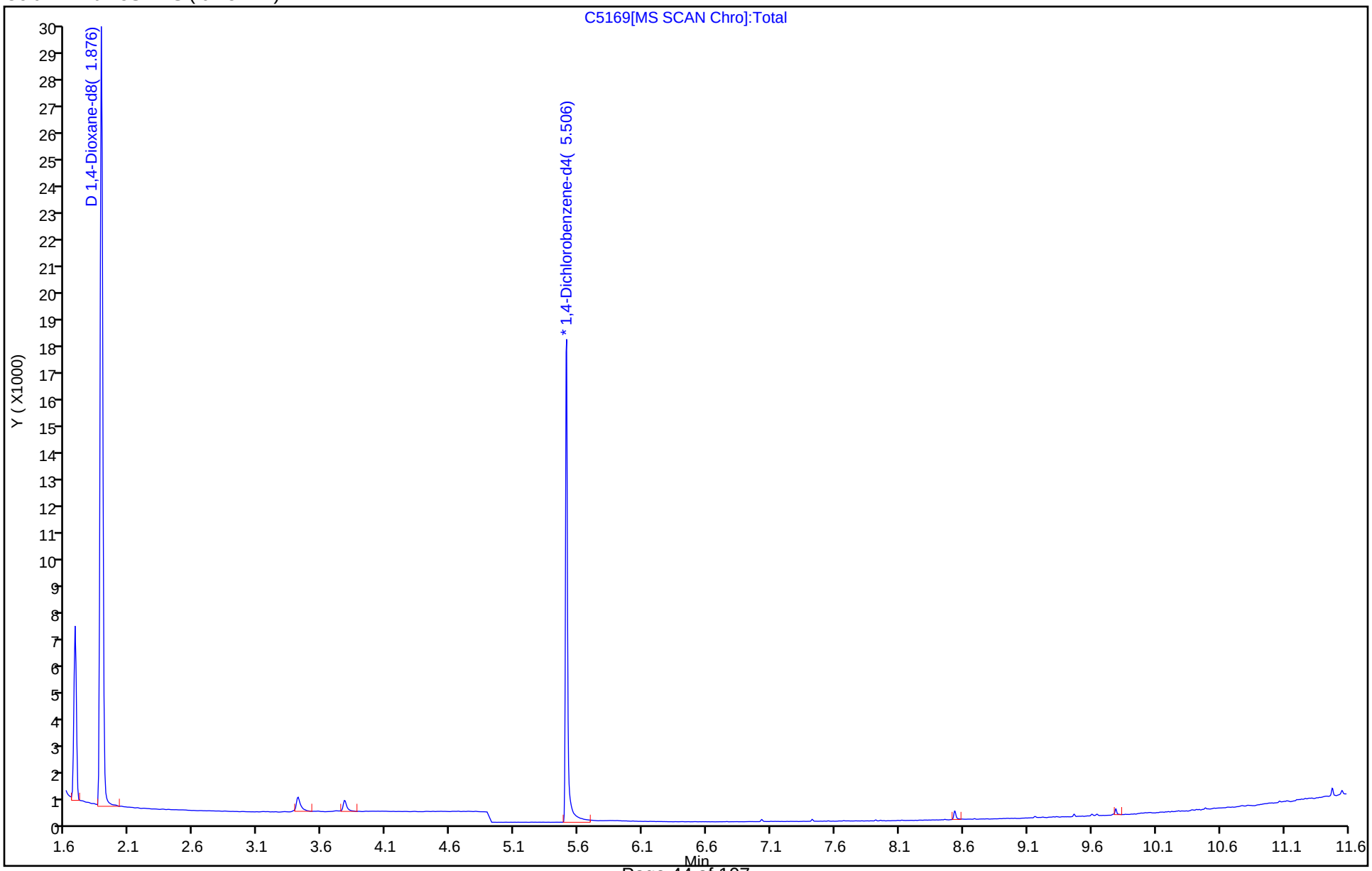
SM_iso_d4istd_00007 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Mar-2021 23:13:16 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Edison

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5169.D | | | | |
| Injection Date: | 06-Mar-2021 22:54:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | 460-229278-A-4-A | Lab Sample ID: | 460-229278-4 | Worklist Smp#: | 24 |
| Client ID: | HEX-EQUIPMENT BLANK-030321 | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 24 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)

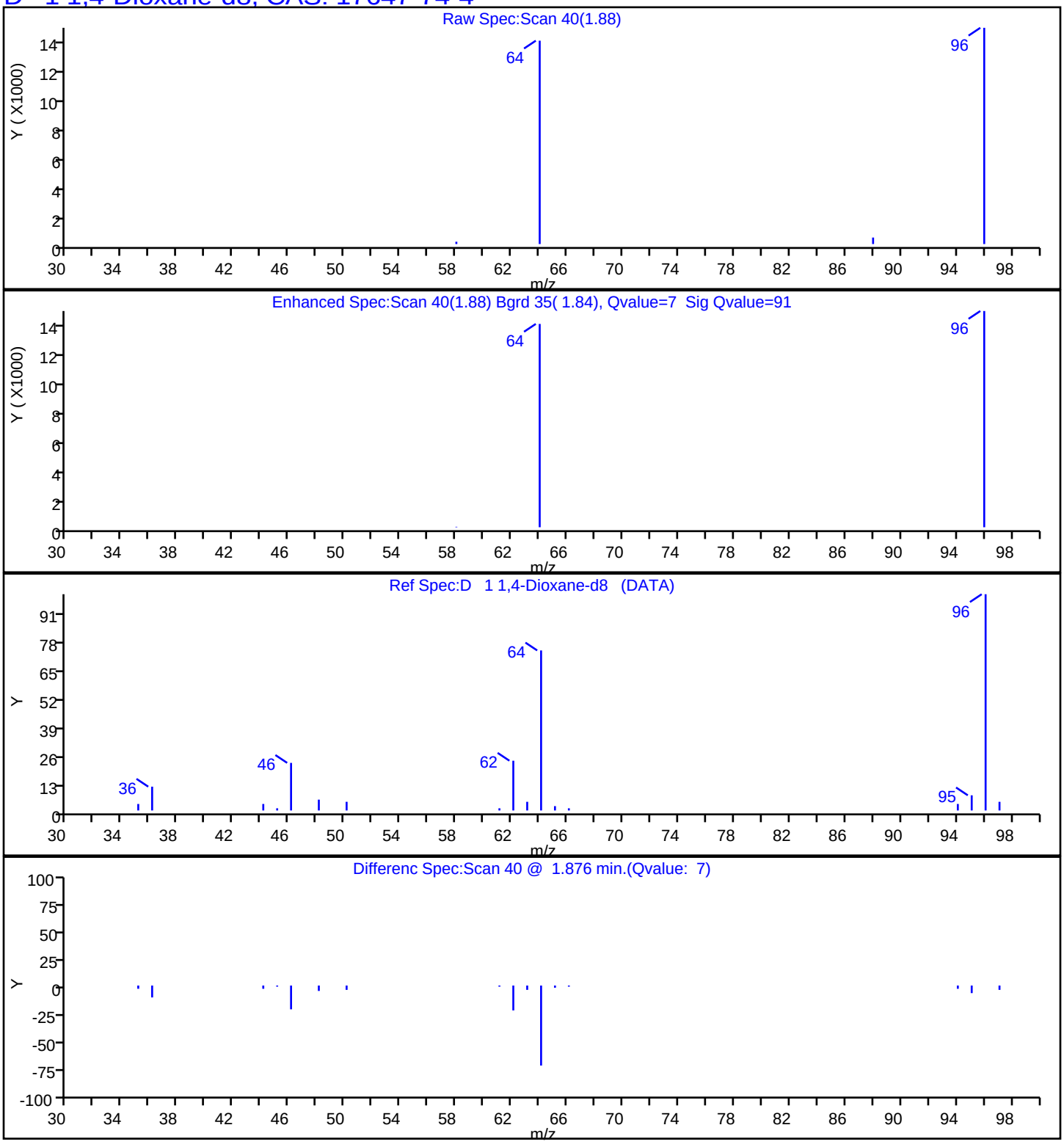


Report Date: 06-Mar-2021 23:13:16 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Edison

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5169.D | | | | |
| Injection Date: | 06-Mar-2021 22:54:30 | Instrument ID: | CBNAMS13 | | |
| Lims ID: | 460-229278-A-4-A | Lab Sample ID: | 460-229278-4 | | |
| Client ID: | HEX-EQUIPMENT BLANK-030321 | | | | |
| Operator ID: | | ALS Bottle#: | 24 | Worklist Smp#: | 24 |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |
| Column: | Rtxi-5Sil MS ( 0.25 mm) | Detector | MS SCAN | | |

## D 1 1,4-Dioxane-d8, CAS: 17647-74-4



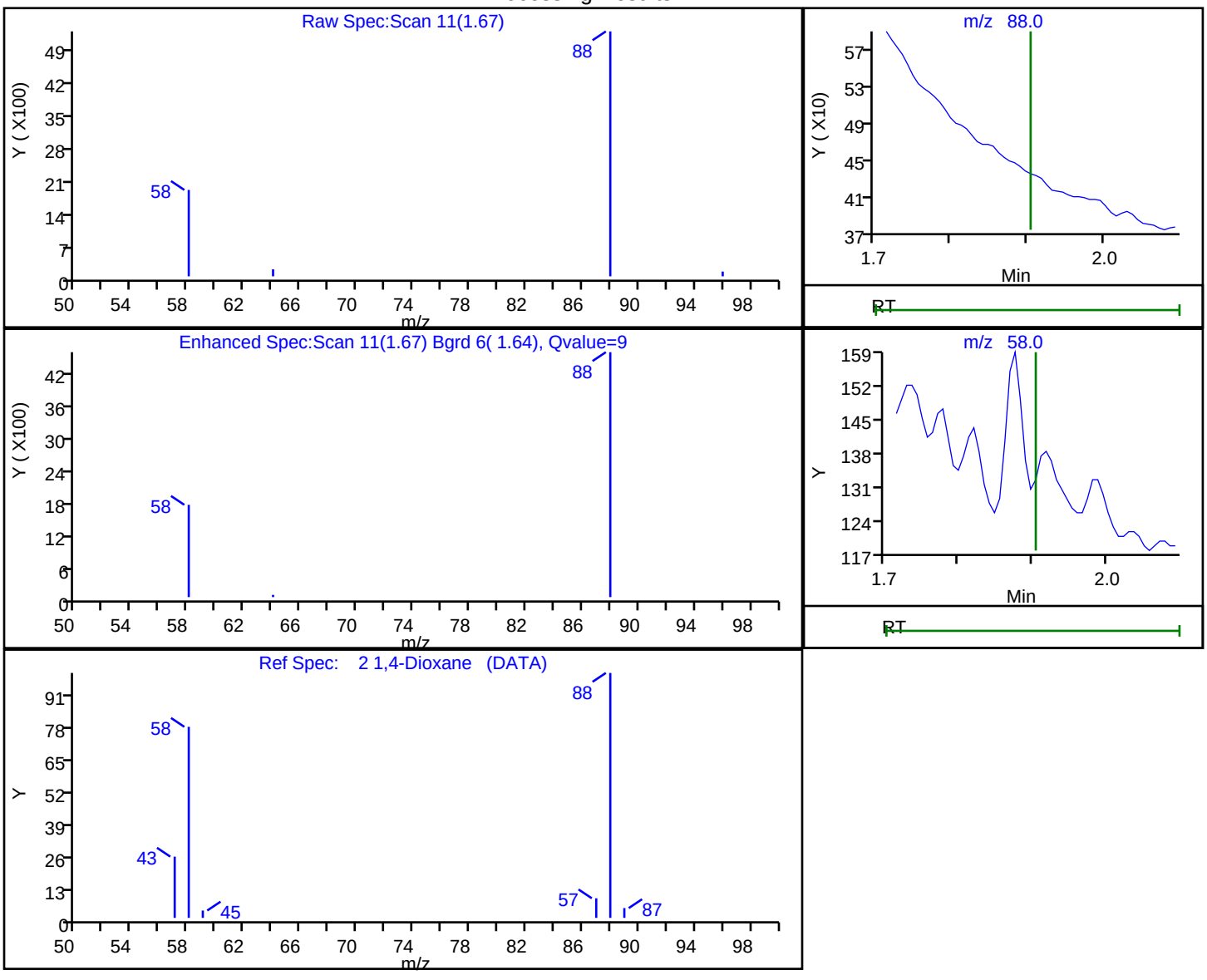
User Disabled Compound Report

Eurofins TestAmerica, Edison

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5169.D | | | | |
| Injection Date: | 06-Mar-2021 22:54:30 | Instrument ID: | CBNAMS13 | | |
| Lims ID: | 460-229278-A-4-A | Lab Sample ID: | 460-229278-4 | | |
| Client ID: | HEX-EQUIPMENT BLANK-030321 | | | | |
| Operator ID: | | ALS Bottle#: | 24 | Worklist Smp#: | 24 |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |
| Column: | Rtxi-5Sil MS ( 0.25 mm) | Detector | MS SCAN | | |

## 2 1,4-Dioxane, CAS: 123-91-1

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 1.67 | 88.00 | 6423 | 0.974877 |
| 1.67 | 58.00 | 2341 | |

Reviewer: hamziy, 06-Mar-2021 23:13:12

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

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-229278-1 Analy Batch No.: 737017

SDG No.:

Instrument ID: CBNAMS13 GC Column: Rtxi-5Sil M ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/03/2020 12:24 Calibration End Date: 11/03/2020 14:31 Calibration ID: 82666

Calibration Files

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 460-737017/10 | C2836.D |
| Level 2 | STD2 460-737017/9 | C2835.D |
| Level 3 | STD3 460-737017/8 | C2834.D |
| Level 4 | STD4 460-737017/7 | C2833.D |
| Level 5 | ICIS 460-737017/2 | C2828.D |
| Level 6 | STD6 460-737017/6 | C2832.D |
| Level 7 | STD7 460-737017/5 | C2831.D |
| Level 8 | STD8 460-737017/4 | C2830.D |
| Level 9 | STD9 460-737017/3 | C2829.D |

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 1,4-Dioxane | 1.2686<br>1.1458 | 1.3600<br>1.1541 | 1.2771<br>1.1232 | 1.1551<br>1.0303 | 1.2646 | AveID | | 1.1976 | | | | 8.5 | | 50.0 | | | |
| 1,4-Dioxane-d8 | 0.2343<br>0.2290 | 0.2325<br>0.2340 | 0.2276<br>0.2285 | 0.2327<br>0.2151 | 0.2216 | Ave | | 0.2283 | | | | 2.8 | | 50.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-229278-1 Analy Batch No.: 737017

SDG No.:

Instrument ID: CBNAMS13 GC Column: Rtxi-5Sil M ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/03/2020 12:24 Calibration End Date: 11/03/2020 14:31 Calibration ID: 82666

Calibration Files

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 460-737017/10 | C2836.D |
| Level 2 | STD2 460-737017/9 | C2835.D |
| Level 3 | STD3 460-737017/8 | C2834.D |
| Level 4 | STD4 460-737017/7 | C2833.D |
| Level 5 | ICIS 460-737017/2 | C2828.D |
| Level 6 | STD6 460-737017/6 | C2832.D |
| Level 7 | STD7 460-737017/5 | C2831.D |
| Level 8 | STD8 460-737017/4 | C2830.D |
| Level 9 | STD9 460-737017/3 | C2829.D |

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/ML) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1 LVL 6 | LVL 2 LVL 7 | LVL 3 LVL 8 | LVL 4 LVL 9 | LVL 5 | LVL 1 LVL 6 | LVL 2 LVL 7 | LVL 3 LVL 8 | LVL 4 LVL 9 | LVL 5 |
| 1,4-Dioxane | | AveID | 399 | 872 | 2042 | 3991 | 9614 | 0.0200 | 0.0400 | 0.100 | 0.200 | 0.500 |
| | | | 19321 | 38953 | 184684 | 1611749 | | 1.00 | 2.00 | 10.0 | 100 | |
| 1,4-Dioxane-d8 | DCBd4 | Ave | 62904 | 64116 | 63958 | 69104 | 60818 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| | | | 67452 | 67504 | 65768 | 62577 | | 4.00 | 4.00 | 4.00 | 4.00 | |

Curve Type Legend

Ave = Average ISTD
AveID = Average isotope dilution

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2828.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 03-Nov-2020 12:24:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0119513-002
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 03-Nov-2020 15:04:51 Calib Date: 03-Nov-2020 14:31:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D

Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: johnstonm1 Date: 03-Nov-2020 12:42:05

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.989 | 1.989 | 0.000 | 13 | 60818 | 4.00 | 3.88 | |
| | 2 1,4-Dioxane | 88 | 2.017 | 2.017 | 0.000 | 14 | 9614 | 0.5000 | 0.5280 | |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.598 | 5.598 | 0.000 | 1 | 13720 | 0.2000 | 0.2000 | |

## QC Flag Legend

Processing Flags

## Reagents:

SM_ISOTOPL5_00007 Amount Added: 1.00 Units: mL

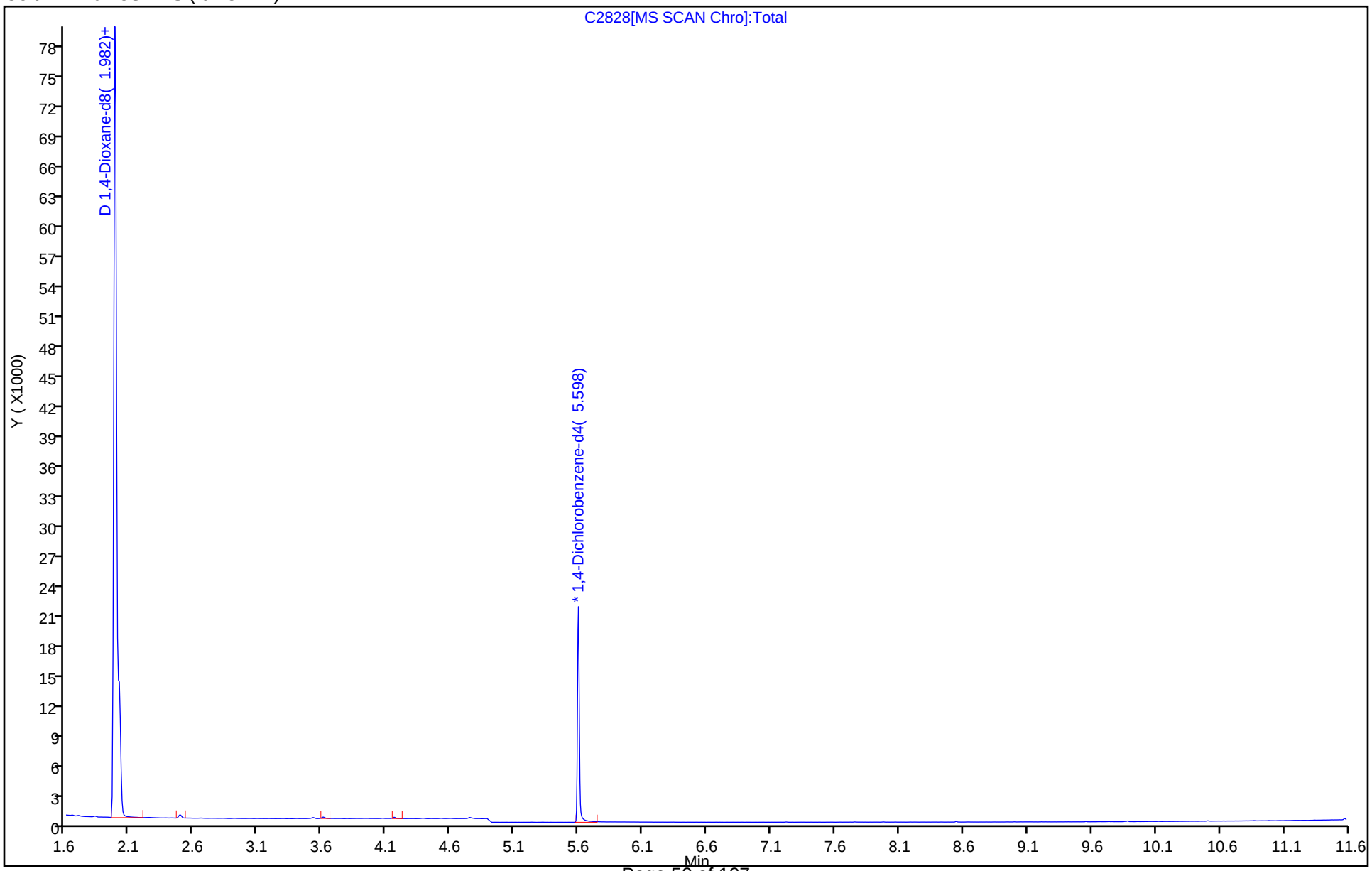
Report Date: 03-Nov-2020 15:04:51 Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2828.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 03-Nov-2020 12:24:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | icis | | | Worklist Smp#: | 2 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 2 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)



Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2829.D
Lims ID: STD9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 03-Nov-2020 12:40:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0119513-003
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 03-Nov-2020 15:04:52 Calib Date: 03-Nov-2020 14:31:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D

Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: johnstonm1 Date: 03-Nov-2020 12:59:49

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.981 | 1.989 | -0.008 | 1 | 62577 | 4.00 | 3.77 | |
| | 2 1,4-Dioxane | 88 | 2.003 | 2.017 | -0.014 | 14 | 1611749 | 100.0 | 86.0 | |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.598 | 5.598 | 0.000 | 1 | 14549 | 0.2000 | 0.2000 | |

## QC Flag Legend

Processing Flags

## Reagents:

SM_ISOTOPL9_00001 Amount Added: 1.00 Units: mL

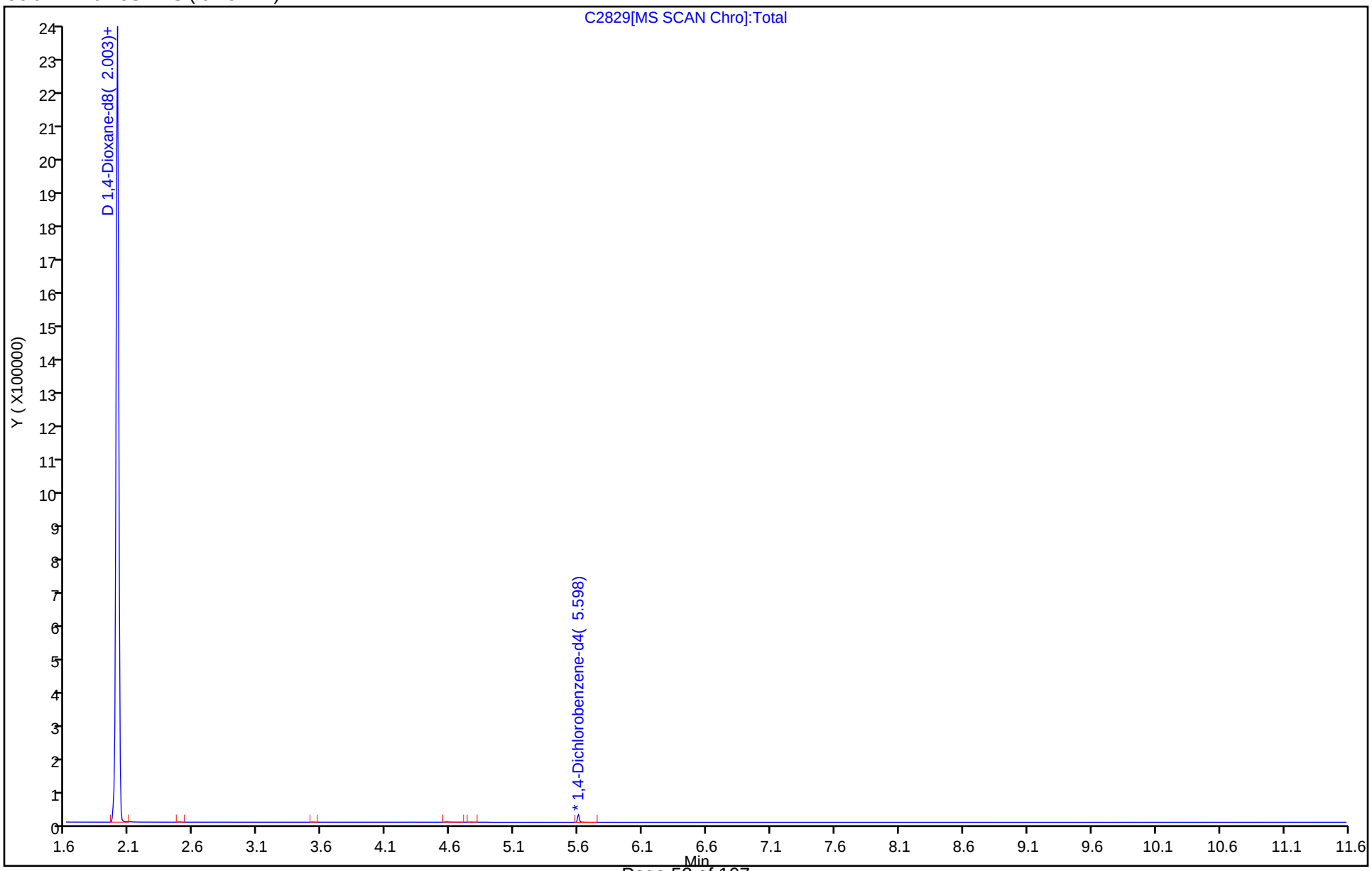
Report Date: 03-Nov-2020 15:04:52 Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2829.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 03-Nov-2020 12:40:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | STD9 | | | Worklist Smp#: | 3 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 3 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)



Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2830.D
Lims ID: STD8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 03-Nov-2020 12:56:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0119513-004
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 03-Nov-2020 15:04:53 Calib Date: 03-Nov-2020 14:31:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D

Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: johnstonm1 Date: 03-Nov-2020 13:14:16

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.982 | 1.989 | -0.007 | 6 | 65768 | 4.00 | 4.00 | |
| | 2 1,4-Dioxane | 88 | 2.010 | 2.017 | -0.007 | 13 | 184684 | 10.0 | 9.38 | |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.598 | 5.598 | 0.000 | 1 | 14390 | 0.2000 | 0.2000 | |

## QC Flag Legend

Processing Flags

## Reagents:

SM_ISOTOPL8_00006 Amount Added: 1.00 Units: mL

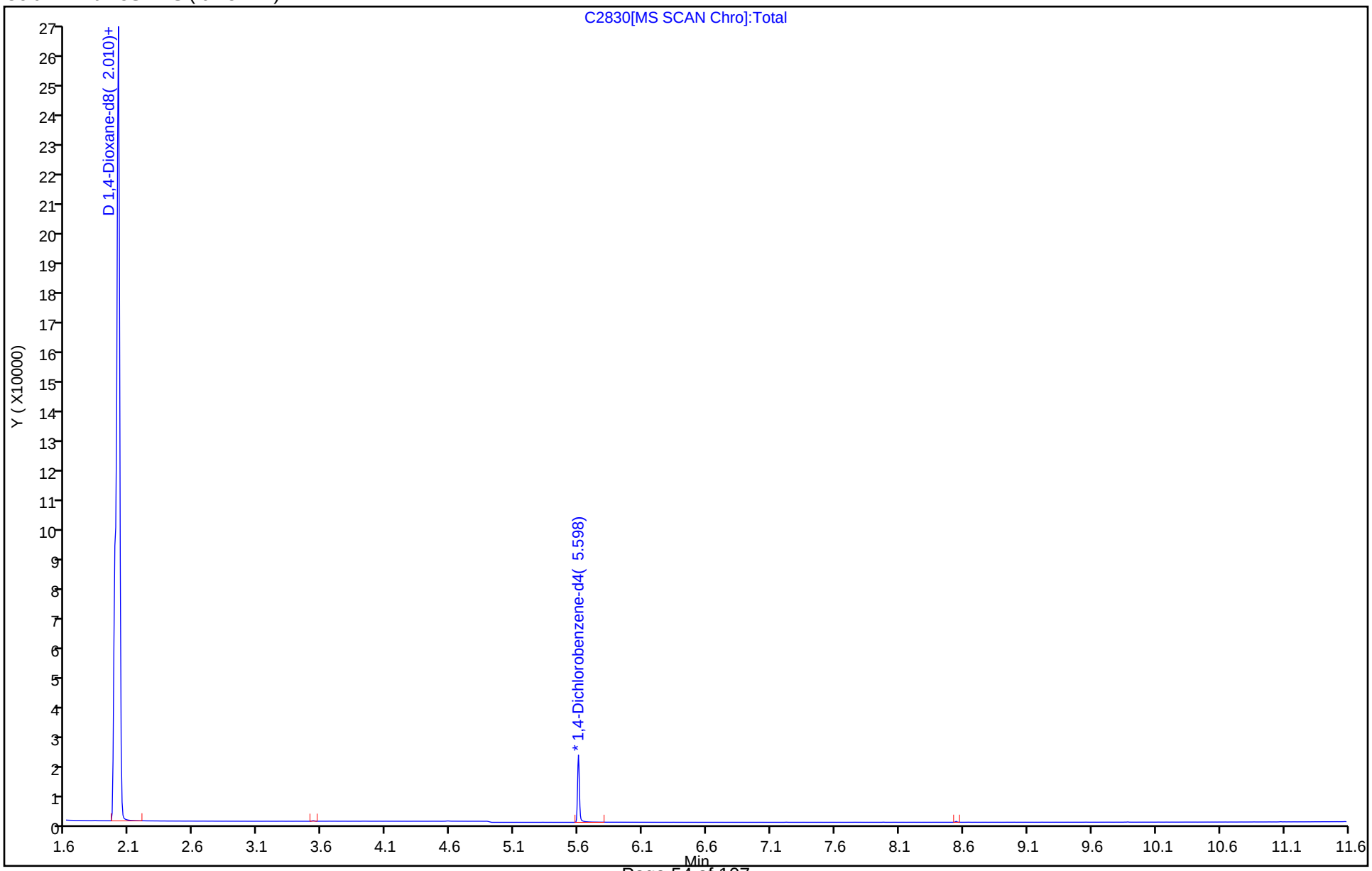
Report Date: 03-Nov-2020 15:04:53 Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2830.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 03-Nov-2020 12:56:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | STD8 | | | Worklist Smp#: | 4 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 4 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)



Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2831.D
Lims ID: STD7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 03-Nov-2020 13:12:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0119513-005
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 03-Nov-2020 15:04:53 Calib Date: 03-Nov-2020 14:31:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D

Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: johnstonm1 Date: 03-Nov-2020 13:35:32

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.989 | 1.989 | -0.001 | 7 | 67504 | 4.00 | 4.10 | |
| | 2 1,4-Dioxane | 88 | 2.024 | 2.017 | 0.007 | 18 | 38953 | 2.00 | 1.93 | |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.598 | 5.598 | 0.000 | 1 | 14425 | 0.2000 | 0.2000 | |

## QC Flag Legend

Processing Flags

## Reagents:

SM_ISOTOPL7_00006 Amount Added: 1.00 Units: mL

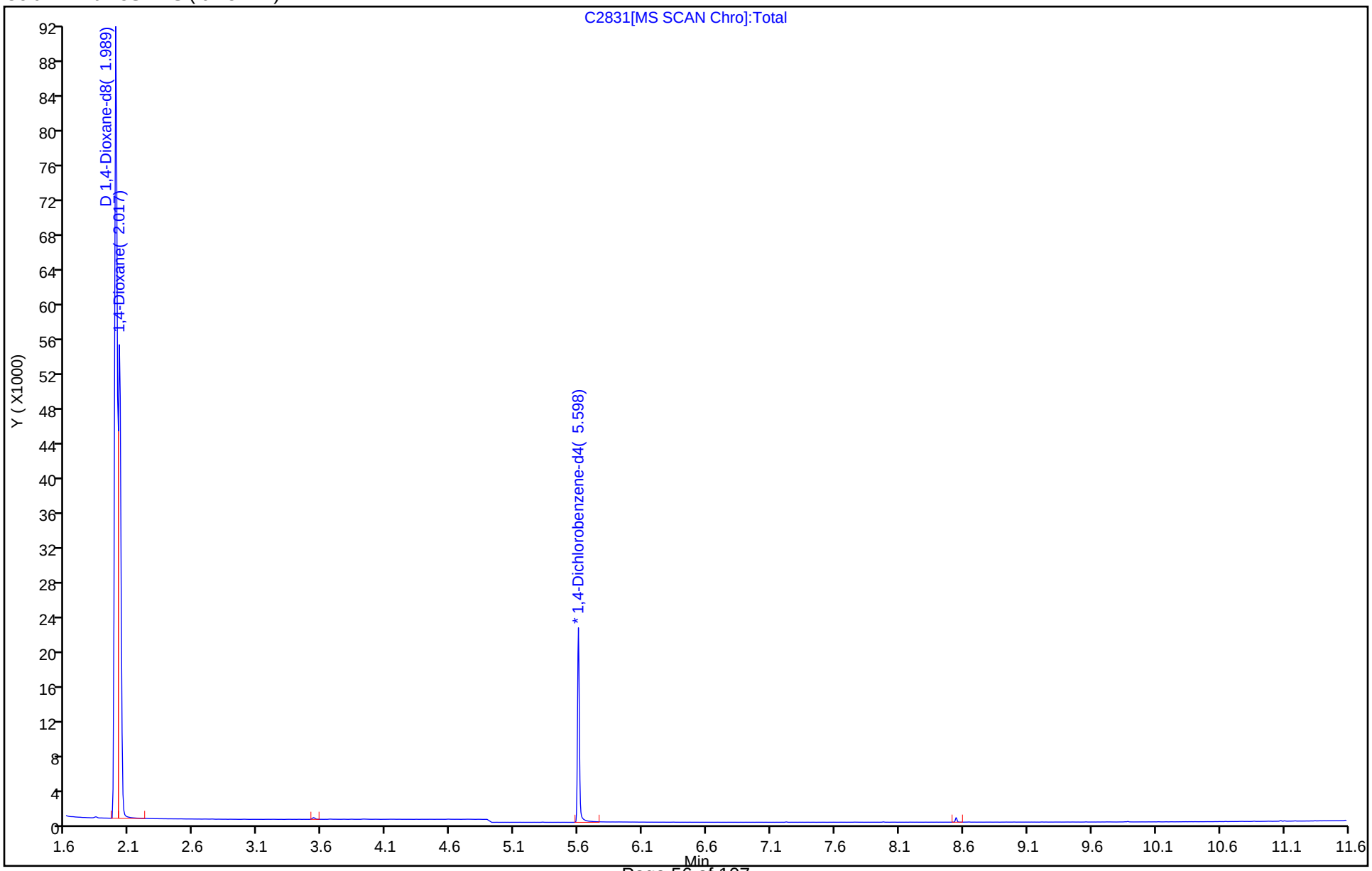
Report Date: 03-Nov-2020 15:04:53 Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2831.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 03-Nov-2020 13:12:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | STD7 | | | Worklist Smp#: | 5 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 5 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)



Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2832.D
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Nov-2020 13:28:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0119513-006
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 03-Nov-2020 15:04:53 Calib Date: 03-Nov-2020 14:31:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D

Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: johnstonm1 Date: 03-Nov-2020 14:04:24

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.989 | 1.989 | 0.000 | 6 | 67452 | 4.00 | 4.01 | |
| | 2 1,4-Dioxane | 88 | 2.024 | 2.017 | 0.007 | 16 | 19321 | 1.00 | 0.9567 | |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.598 | 5.598 | 0.000 | 1 | 14730 | 0.2000 | 0.2000 | |

## QC Flag Legend
Processing Flags

## Reagents:
SM_ISOTOPL6_00007 Amount Added: 1.00 Units: mL

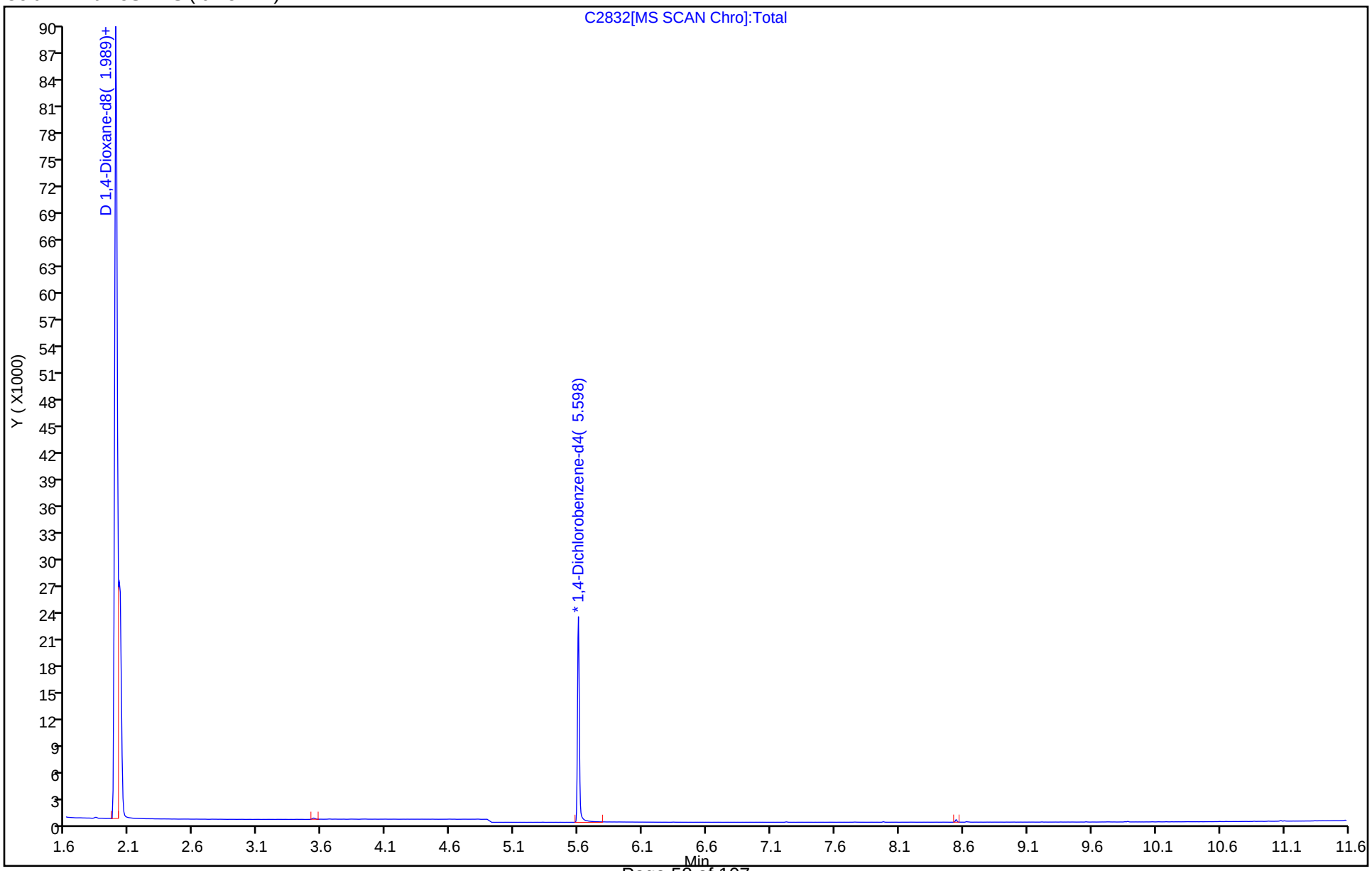
Report Date: 03-Nov-2020 15:04:53 Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2832.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 03-Nov-2020 13:28:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | STD6 | | | Worklist Smp#: | 6 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 6 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)



Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2833.D
Lims ID: STD4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Nov-2020 13:44:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0119513-007
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 03-Nov-2020 15:04:54 Calib Date: 03-Nov-2020 14:31:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D

Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: johnstonm1 Date: 03-Nov-2020 14:04:28

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.989 | 1.989 | 0.000 | 7 | 69104 | 4.00 | 4.08 | |
| | 2 1,4-Dioxane | 88 | 2.024 | 2.017 | 0.007 | 14 | 3991 | 0.2000 | 0.1929 | |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.598 | 5.598 | 0.000 | 1 | 14851 | 0.2000 | 0.2000 | |

## QC Flag Legend

Processing Flags

## Reagents:

SM_ISOTOPL4_00006 Amount Added: 1.00 Units: mL

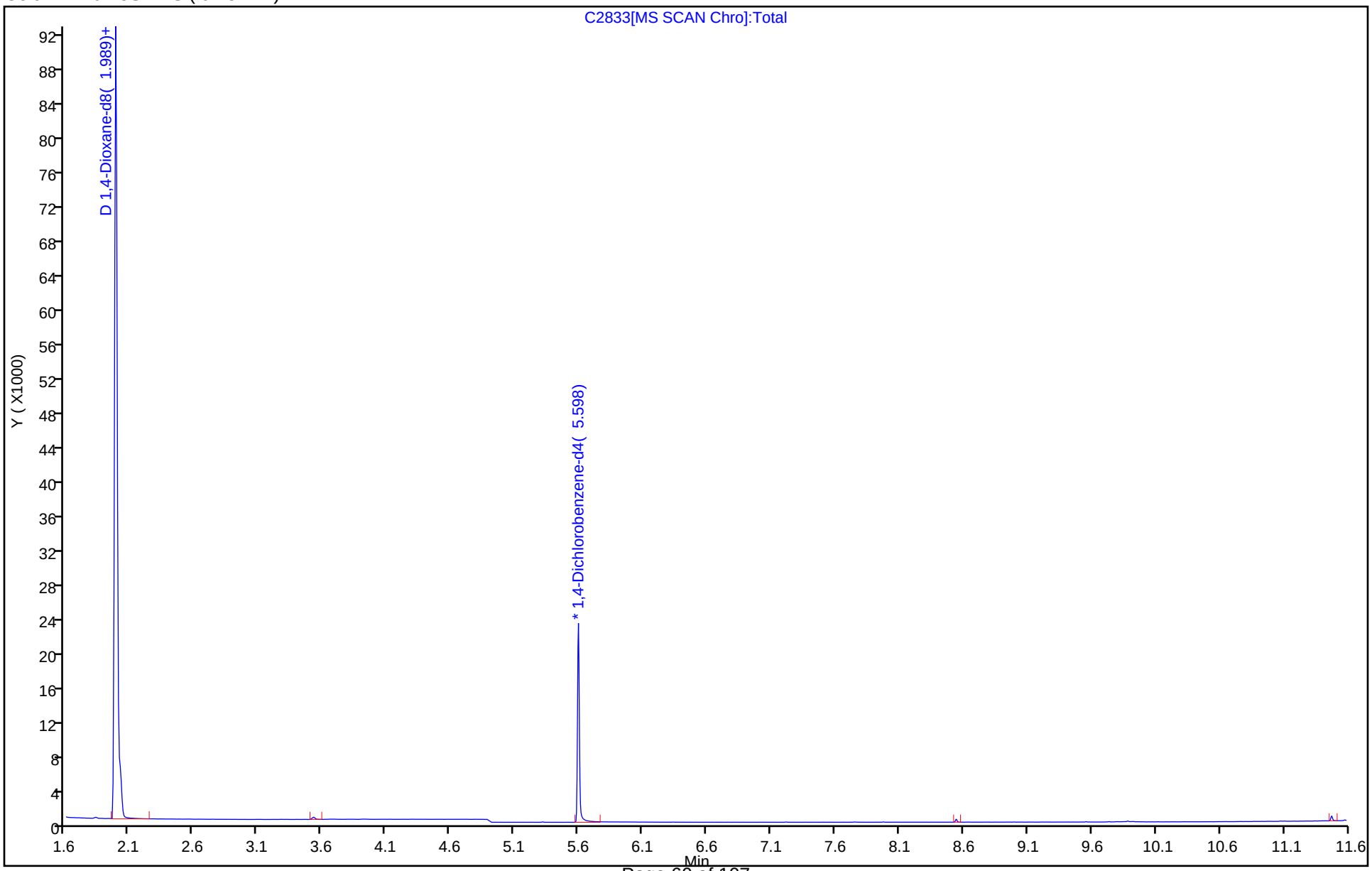
Report Date: 03-Nov-2020 15:04:54 Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2833.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 03-Nov-2020 13:44:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | STD4 | | | Worklist Smp#: | 7 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 7 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)



Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2834.D
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Nov-2020 14:00:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0119513-008
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 03-Nov-2020 15:04:54 Calib Date: 03-Nov-2020 14:31:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D

Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: johnstonm1 Date: 03-Nov-2020 14:16:59

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.989 | 1.989 | 0.000 | 7 | 63958 | 4.00 | 3.99 | |
| | 2 1,4-Dioxane | 88 | 2.024 | 2.024 | 0.000 | 15 | 2042 | 0.1000 | 0.1066 | |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.598 | 5.598 | 0.000 | 1 | 14052 | 0.2000 | 0.2000 | |

## QC Flag Legend

Processing Flags

## Reagents:

SM_ISOTOPL3_00006 Amount Added: 1.00 Units: mL

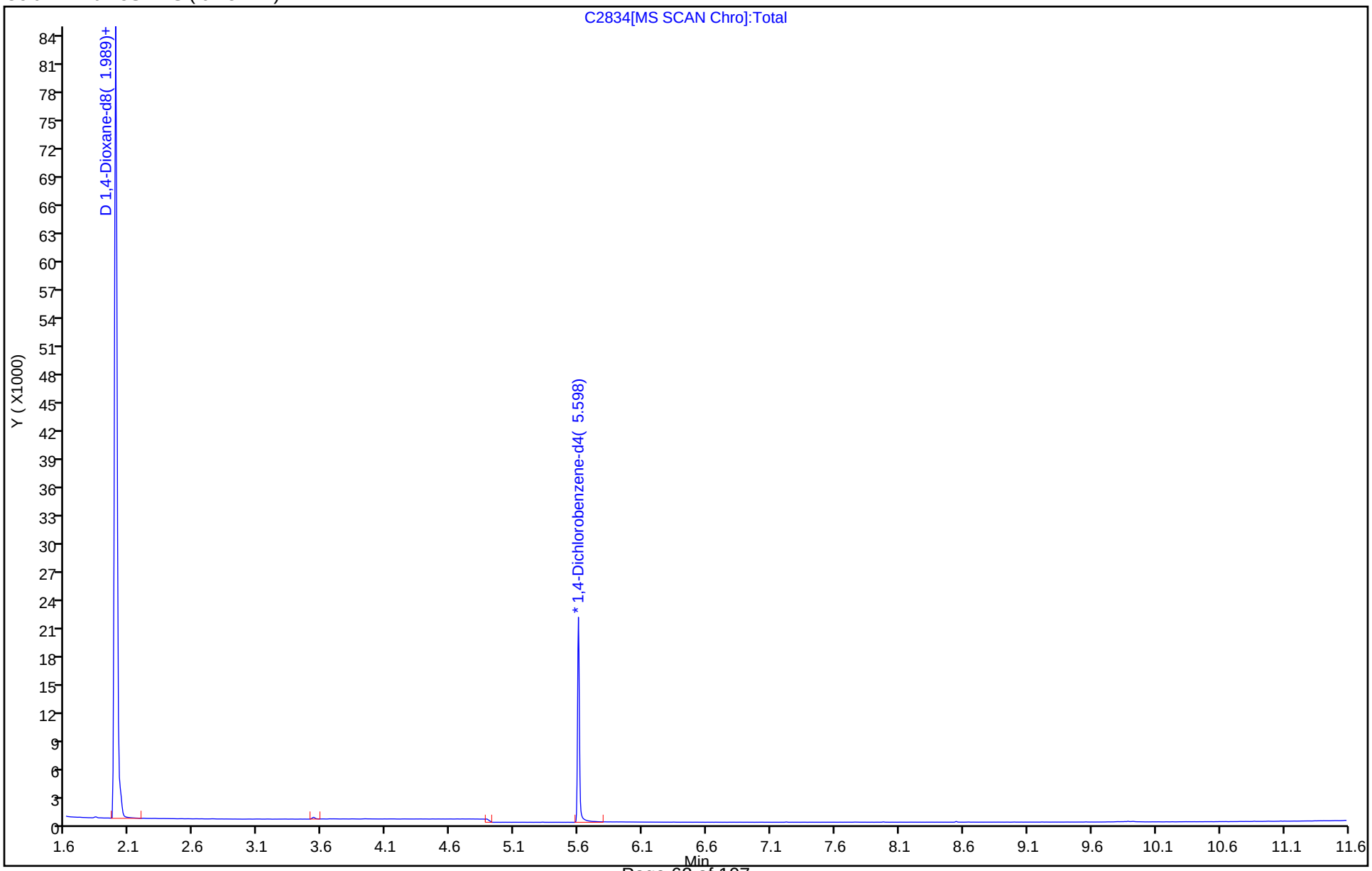
Report Date: 03-Nov-2020 15:04:54 Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2834.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 03-Nov-2020 14:00:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | STD3 | | | Worklist Smp#: | 8 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 8 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)



Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2835.D
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Nov-2020 14:15:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0119513-009
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 03-Nov-2020 15:04:54 Calib Date: 03-Nov-2020 14:31:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D

Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: johnstonm1 Date: 03-Nov-2020 14:32:05

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.988 | 1.989 | -0.001 | 8 | 64116 | 4.00 | 4.07 | |
| | 2 1,4-Dioxane | 88 | 2.024 | 2.024 | 0.000 | 19 | 872 | 0.0400 | 0.0454 | |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.598 | 5.598 | 0.000 | 1 | 13791 | 0.2000 | 0.2000 | |

## QC Flag Legend
Processing Flags

## Reagents:
SM_ISOTOPL2_00006 Amount Added: 1.00 Units: mL

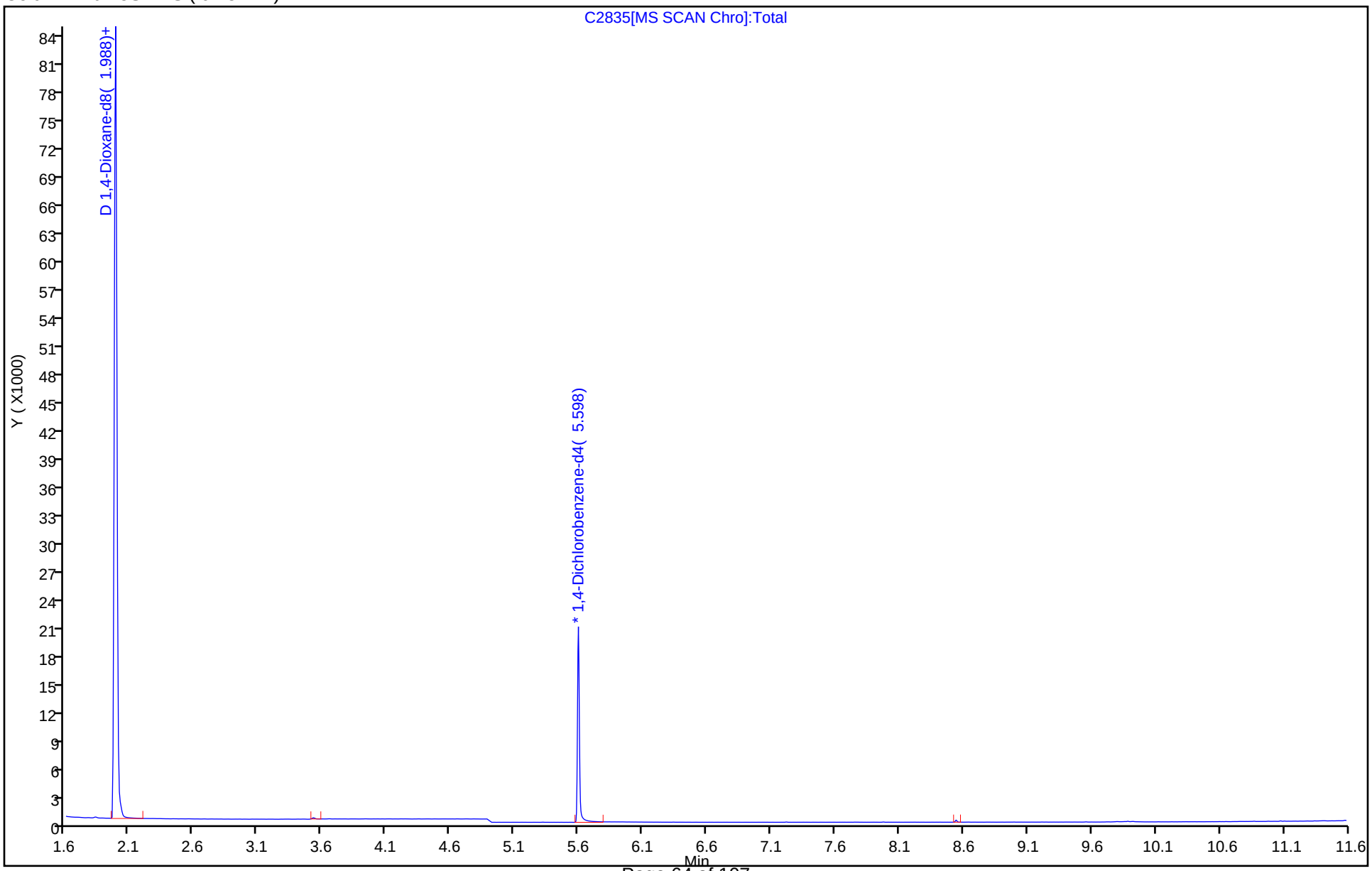
Report Date: 03-Nov-2020 15:04:54 Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2835.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 03-Nov-2020 14:15:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | STD2 | | | Worklist Smp#: | 9 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 9 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)



Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Nov-2020 14:31:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0119513-010
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 03-Nov-2020 15:04:55 Calib Date: 03-Nov-2020 14:31:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D

Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: johnstonm1 Date: 03-Nov-2020 15:03:24

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.989 | 1.989 | 0.000 | 9 | 62904 | 4.00 | 4.10 | |
| | 2 1,4-Dioxane | 88 | 2.024 | 2.024 | 0.000 | 20 | 399 | 0.0200 | 0.0212 | |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.598 | 5.598 | 0.000 | 1 | 13425 | 0.2000 | 0.2000 | |

## QC Flag Legend

Processing Flags

## Reagents:

SM_ISOTOPL1_00007 Amount Added: 1.00 Units: mL

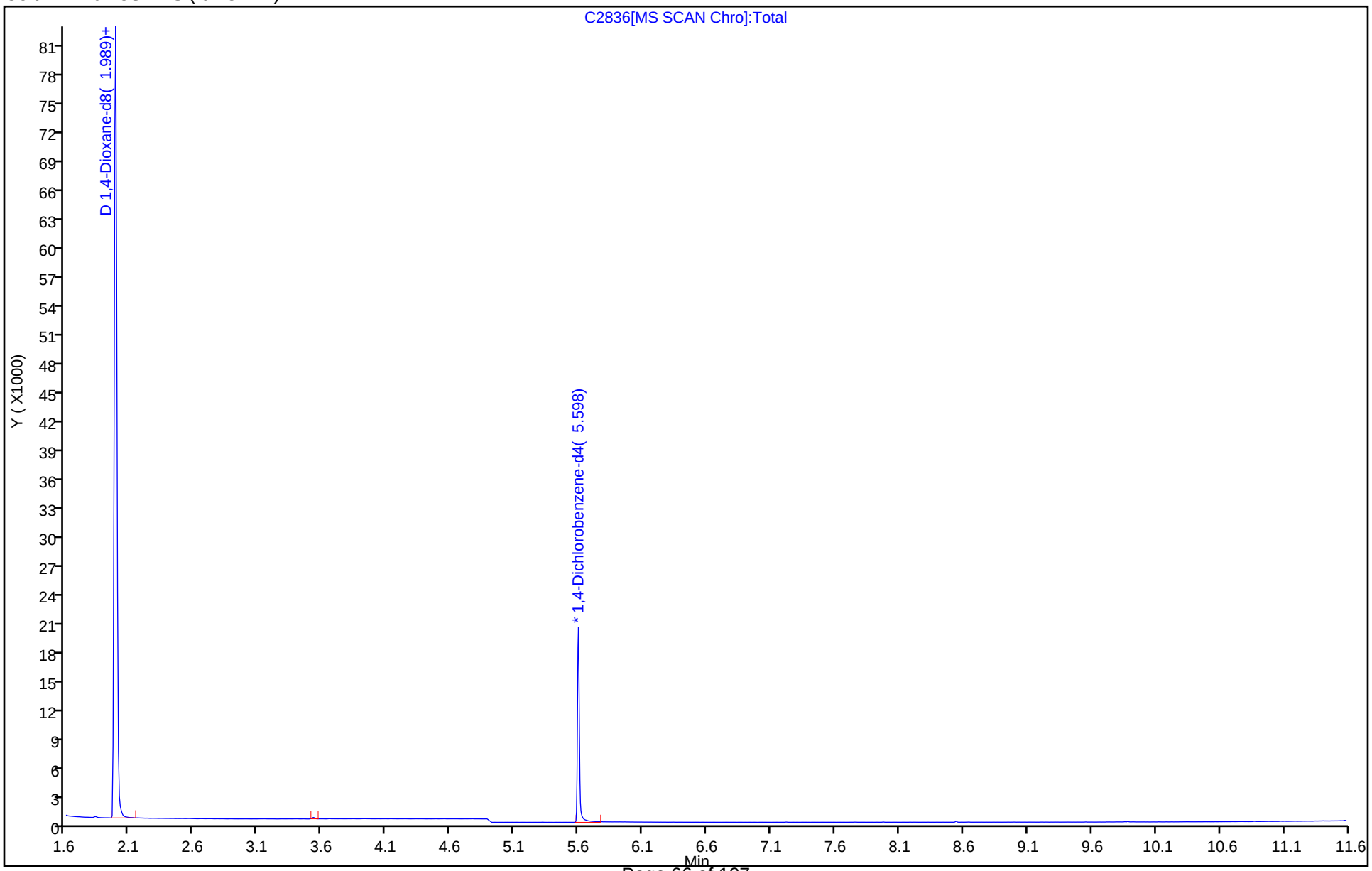
Report Date: 03-Nov-2020 15:04:55 Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 03-Nov-2020 14:31:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | STD1 | | | Worklist Smp#: | 10 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 10 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)



## Calibration / 1,4-Dioxane

| | |
|---|---|
| **Curve Type:** | Average |
| **Weighting:** | Conc_Sq |
| **Origin:** | Force |
| **Dependency:** | Response |
| **Calib Mode:** | IsoDil |
| **Response Base:** | AREA |
| **RF Rounding:** | 0 |

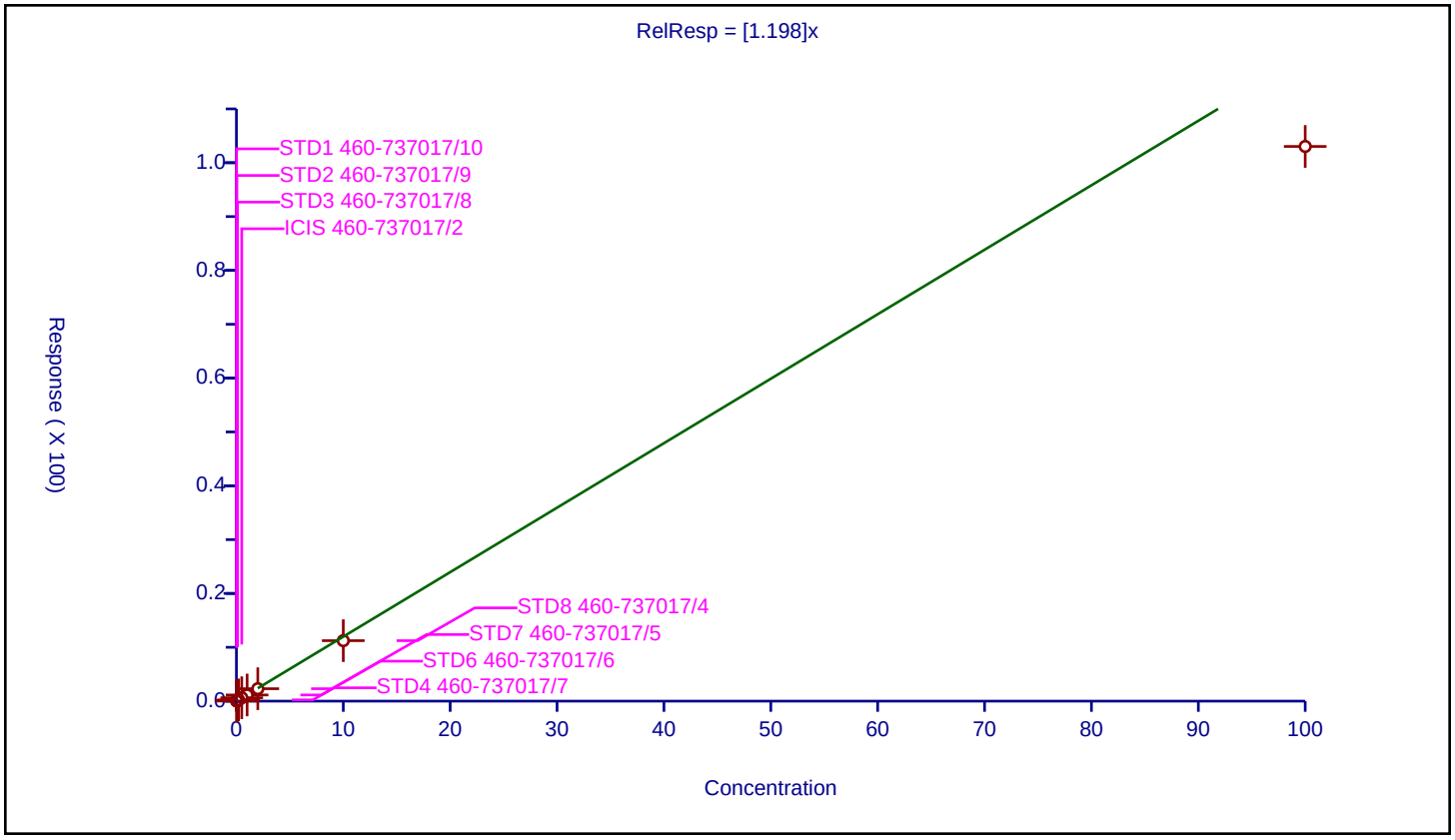
**Curve Coefficients**

| | |
|---|---|
| **Intercept:** | 0 |
| **Slope:** | 1.198 |

**Error Coefficients**

| | |
|---|---|
| **Standard Error:** | 574000 |
| **Relative Standard Error:** | 8.5 |
| **Correlation Coefficient:** | 1.000 |
| **Coefficient of Determination (Adjusted):** | 0.990 |

| ID | Level | Concentration | Rel. Resp. | IS Amount | IS Response | RRF | Used |
|---|---|---|---|---|---|---|---|
| 1 | STD1 460-737017/10 | 0.02 | 0.025372 | 4.0 | 62904.0 | 1.2686 | Y |
| 2 | STD2 460-737017/9 | 0.04 | 0.054401 | 4.0 | 64116.0 | 1.360035 | Y |
| 3 | STD3 460-737017/8 | 0.1 | 0.127709 | 4.0 | 63958.0 | 1.277088 | Y |
| 4 | STD4 460-737017/7 | 0.2 | 0.231014 | 4.0 | 69104.0 | 1.155071 | Y |
| 5 | ICIS 460-737017/2 | 0.5 | 0.632313 | 4.0 | 60818.0 | 1.264626 | Y |
| 6 | STD6 460-737017/6 | 1.0 | 1.145763 | 4.0 | 67452.0 | 1.145763 | Y |
| 7 | STD7 460-737017/5 | 2.0 | 2.308189 | 4.0 | 67504.0 | 1.154095 | Y |
| 8 | STD8 460-737017/4 | 10.0 | 11.232453 | 4.0 | 65768.0 | 1.123245 | Y |
| 9 | STD9 460-737017/3 | 100.0 | 103.025009 | 4.0 | 62577.0 | 1.03025 | Y |



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Lab Sample ID: ICV 460-737017/11  Calibration Date: 11/03/2020 14:47

Instrument ID: CBNAMS13  Calib Start Date: 11/03/2020 12:24

GC Column: Rtxi-5Sil MS  ID: 0.25(mm)  Calib End Date: 11/03/2020 14:31

Lab File ID: C2837.D  Conc. Units: ug/L

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | AveID | 1.198 | 1.017 | | 170 | 200 | -15.1 | 50.0 |
| 1,4-Dioxane-d8 | Ave | 0.2283 | 0.2469 | | 4330 | 4000 | 8.1 | 50.0 |

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2837.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 03-Nov-2020 14:47:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0119513-011
Operator ID: Instrument ID: CBNAMS13
Sublist:

Method: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 03-Nov-2020 13:17:14 Calib Date: 03-Nov-2020 14:31:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D

Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: johnstonm1 Date: 03-Nov-2020 15:17:53

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.988 | 1.989 | -0.001 | 11 | 76061 | 4.00 | 4.33 | |
| | 2 1,4-Dioxane | 88 | 2.024 | 2.024 | 0.000 | 18 | 3867 | 0.2000 | 0.1698 | |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.598 | 5.598 | 0.000 | 1 | 15401 | 0.2000 | 0.2000 | |

## QC Flag Legend

Processing Flags

## Reagents:

SM_SIMICV_LVI_00031 Amount Added: 1.00 Units: mL

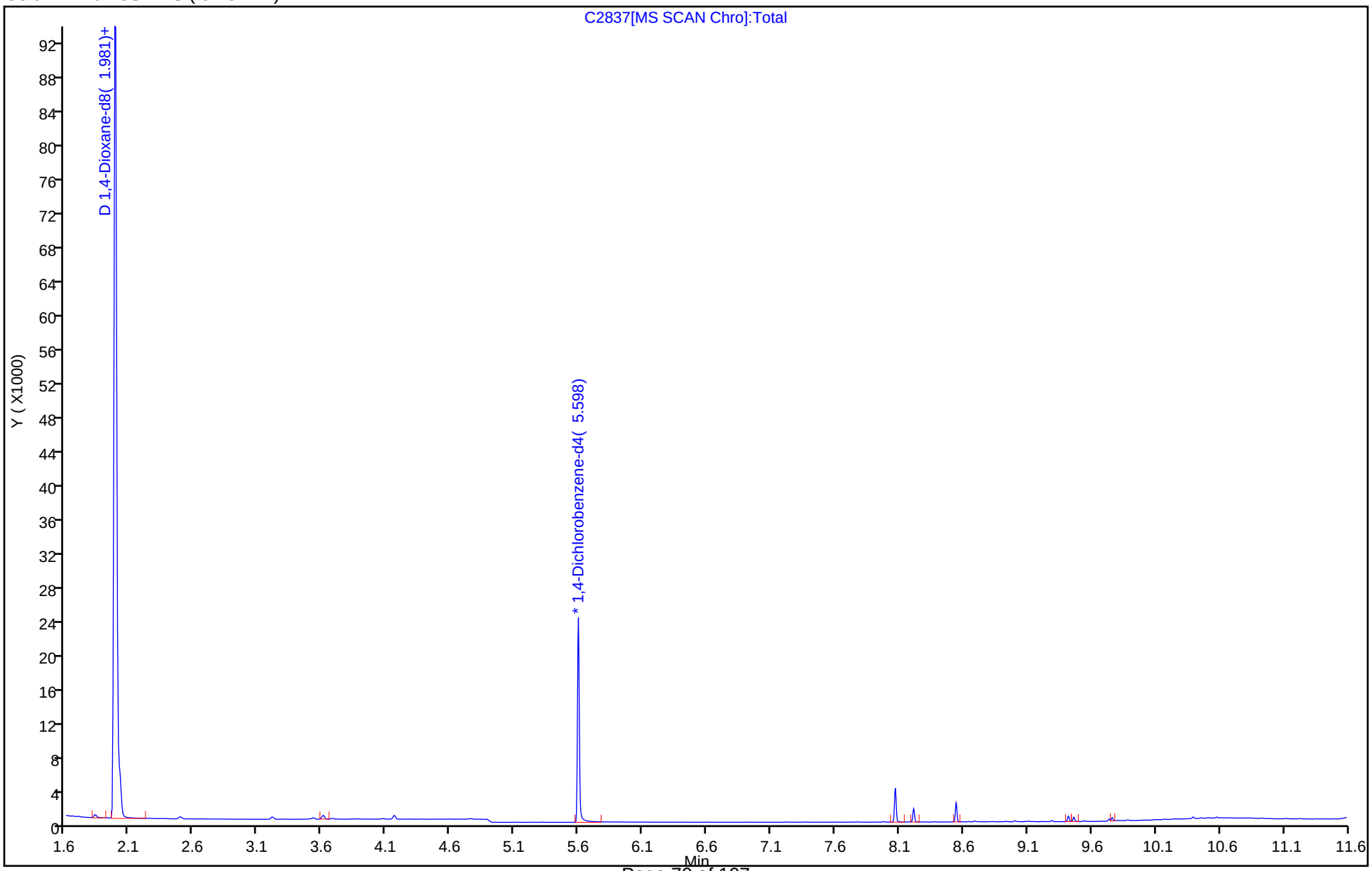
Report Date: 03-Nov-2020 15:17:53 Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2837.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 03-Nov-2020 14:47:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | icv | | | Worklist Smp#: | 11 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 11 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Lab Sample ID: CCVIS 460-762930/2  Calibration Date: 03/06/2021 17:05

Instrument ID: CBNAMS13  Calib Start Date: 11/03/2020 12:24

GC Column: Rtxi-5Sil MS  ID: 0.25(mm)  Calib End Date: 11/03/2020 14:31

Lab File ID: C5147.D  Conc. Units: ug/L

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | AveID | 1.198 | 1.375 | | 574 | 500 | 14.8 | 50.0 |
| 1,4-Dioxane-d8 | Ave | 0.2283 | 0.2415 | | 4230 | 4000 | 5.7 | 50.0 |

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5147.D
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 06-Mar-2021 17:05:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0125035-002
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 06-Mar-2021 18:30:15 Calib Date: 03-Nov-2020 14:31:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D

Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN
Process Host: CTX1644

First Level Reviewer: hamziy Date: 06-Mar-2021 18:30:15

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.869 | 1.869 | 0.000 | 6 | 47135 | 4.00 | 4.23 | |
| | 2 1,4-Dioxane | 88 | 1.904 | 1.904 | 0.000 | 17 | 8103 | 0.5000 | 0.5742 | |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.506 | 5.506 | 0.000 | 1 | 9760 | 0.2000 | 0.2000 | |

## QC Flag Legend
Processing Flags

## Reagents:
SM_ISOTOPL5_00007 Amount Added: 1.00 Units: mL

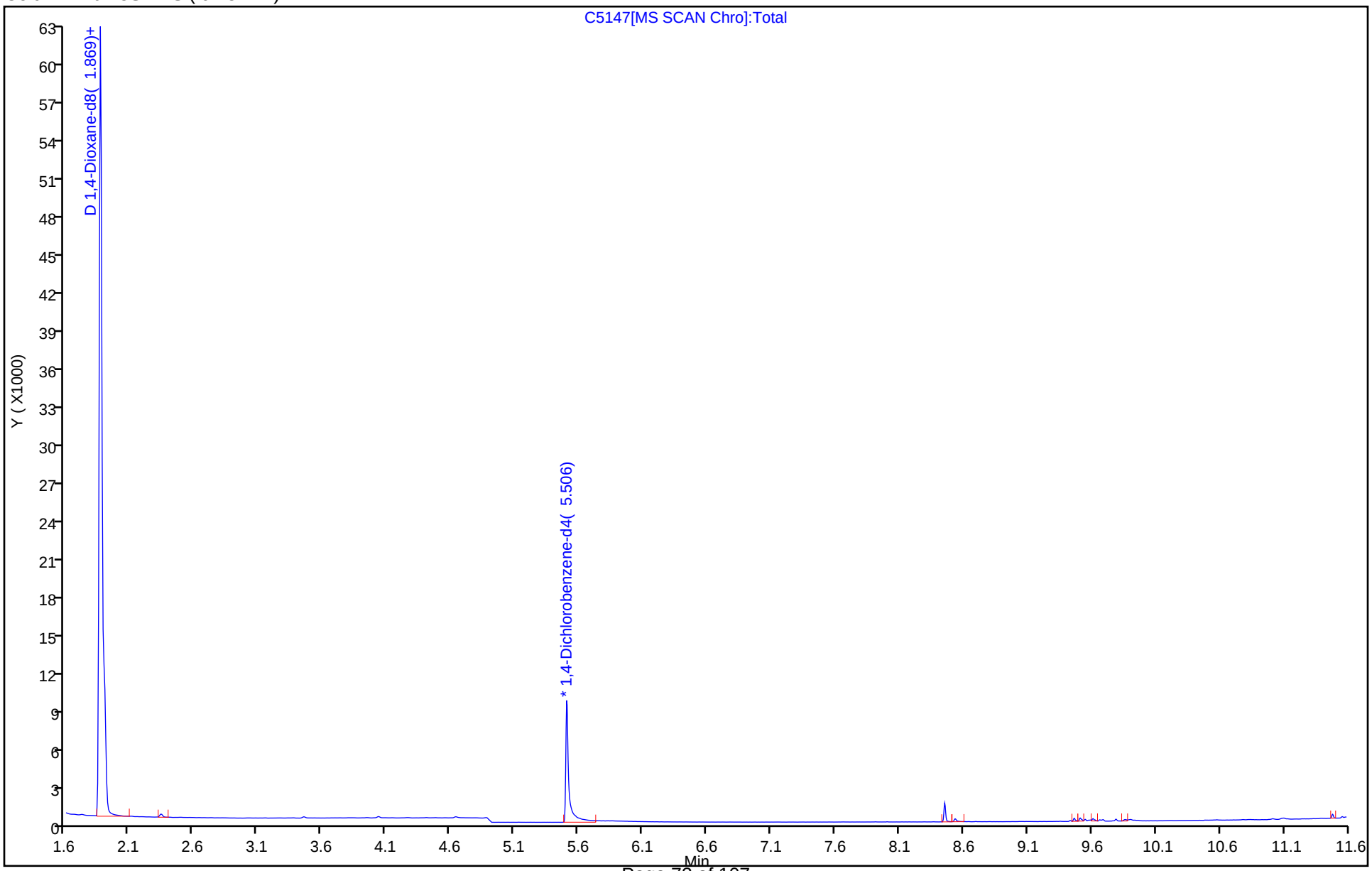
Report Date: 06-Mar-2021 18:30:16 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5147.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 06-Mar-2021 17:05:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | ccvis | | | Worklist Smp#: | 2 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 2 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)



Eurofins TestAmerica, Edison
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2827.D | | | | |
| Lims ID: | DFTPP | | | | |
| Client ID: | | | | | |
| Sample Type: | DFTPP | | | | |
| Inject. Date: | 03-Nov-2020 12:12:30 | ALS Bottle#: | 1 | Worklist Smp#: | 1 |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 460-0119513-001 | | | | |
| Operator ID: | | Instrument ID: | CBNAMS13 | | |
| Method: | \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\8270_Isotope.m | | | | |
| Limit Group: | MSS 8270 Isotope Dilution IS | | | | |
| Last Update: | 03-Nov-2020 15:09:28 | Calib Date: | 03-Nov-2020 14:31:30 | | |
| Integrator: | RTE | ID Type: | Deconvolution ID | | |
| Quant Method: | Isotopic Dilution | Quant By: | Initial Calibration | | |
| Last ICal File: | \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D | | | | |
| Column 1 : | Rtxi-5Sil MS ( 0.25 mm) | | Det: MS SCAN | | |
| Process Host: | CTX1659 | | | | |
| First Level Reviewer: johnstonm1 | | Date: | 03-Nov-2020 15:09:28 | | |

| Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|---|

3 DFTPP

## QC Flag Legend

Processing Flags

## Reagents:

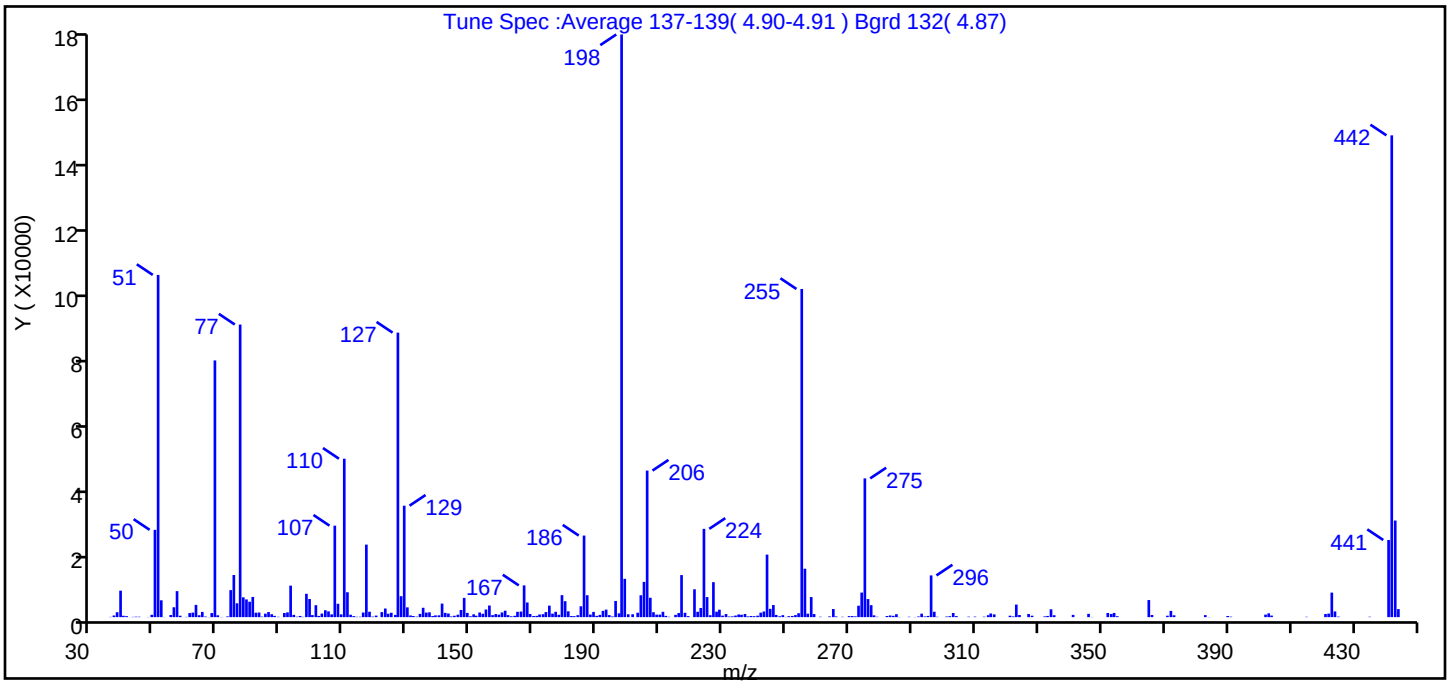
SMDFTP_CH_00031 Amount Added: 1.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2827.D
Injection Date: 03-Nov-2020 12:12:30 Instrument ID: CBNAMS13
Lims ID: DFTPP
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: 8270_Isotope Limit Group: MSS 8270 Isotope Dilution IS
Tune Method: DFTPP Method 8270E, BP 198

3 DFTPP




| m/z | Ion Abundance Criteria | % Relative Abundance |
|---|---|---|
| 198 | Base peak or present | 100.0 |
| 68 | <2% of m/z 69 | 0.7 (1.6) |
| 69 | Present | 44.1 |
| 70 | <2% of m/z 69 | 0.3 (0.7) |
| 197 | <2% of m/z 198 | 0.6 |
| 199 | 5-9% of m/z 198 | 6.6 |
| 365 | >1% of m/z 198 | 2.9 |
| 441 | <150% of m/z 443 | 13.2 (79.8) |
| 442 | Present | 82.7 |
| 443 | 15-24% of m/z 442 | 16.6 (20.0) |

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2827.D\8270_Isotope.rslt\spectra.d
Injection Date: 03-Nov-2020 12:12:30
Spectrum: Tune Spec :Average 137-139( 4.90-4.91 ) Bgrd 132( 4.87)
Base Peak: 197.90
Minimum % Base Peak: 0
Number of Points: 294

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 72 | 115.00 | 119 | 190.00 | 377 | 272.00 | 222 |
| 37.00 | 478 | 116.00 | 1342 | 191.00 | 658 | 273.00 | 3345 |
| 38.00 | 1439 | 117.00 | 21216 | 192.00 | 1846 | 274.00 | 7189 |
| 39.00 | 7744 | 118.00 | 1584 | 193.00 | 2204 | 275.00 | 40584 |
| 40.00 | 403 | 119.00 | 157 | 194.00 | 594 | 276.00 | 5295 |
| 41.00 | 300 | 120.00 | 455 | 195.00 | 197 | 277.00 | 3503 |
| 42.00 | 16 | 122.00 | 1479 | 196.00 | 4739 | 278.00 | 527 |
| 43.00 | 79 | 123.00 | 2519 | 197.00 | 1103 | 279.00 | 109 |
| 44.00 | 137 | 124.00 | 994 | 198.00 | 170432 | 282.00 | 331 |
| 45.00 | 124 | 125.00 | 1279 | 199.00 | 11210 | 283.00 | 488 |
| 48.00 | 52 | 126.00 | 653 | 200.00 | 840 | 284.00 | 386 |
| 49.00 | 680 | 127.00 | 83224 | 201.00 | 846 | 285.00 | 858 |
| 50.00 | 25536 | 128.00 | 6124 | 203.00 | 1293 | 286.00 | 56 |
| 51.00 | 100096 | 129.00 | 32600 | 204.00 | 6404 | 289.00 | 117 |
| 52.00 | 4926 | 130.00 | 2858 | 205.00 | 10312 | 291.00 | 51 |
| 53.00 | 31 | 131.00 | 491 | 206.00 | 42872 | 292.00 | 194 |
| 55.00 | 625 | 132.00 | 322 | 207.00 | 5666 | 293.00 | 1013 |
| 56.00 | 2890 | 133.00 | 142 | 208.00 | 1445 | 294.00 | 194 |
| 57.00 | 7607 | 134.00 | 952 | 209.00 | 737 | 295.00 | 354 |
| 58.00 | 411 | 135.00 | 2742 | 210.00 | 744 | 296.00 | 12205 |
| 59.00 | 17 | 136.00 | 1339 | 211.00 | 1563 | 297.00 | 1577 |
| 60.00 | 73 | 137.00 | 1407 | 212.00 | 369 | 298.00 | 110 |
| 61.00 | 1196 | 138.00 | 323 | 213.00 | 112 | 301.00 | 178 |
| 62.00 | 1326 | 139.00 | 516 | 215.00 | 664 | 302.00 | 277 |
| 63.00 | 3583 | 140.00 | 528 | 216.00 | 1198 | 303.00 | 1206 |
| 64.00 | 558 | 141.00 | 3966 | 217.00 | 12305 | 304.00 | 307 |
| 65.00 | 1530 | 142.00 | 1261 | 218.00 | 1277 | 308.00 | 136 |
| 66.00 | 178 | 143.00 | 1060 | 219.00 | 310 | 310.00 | 157 |
| 67.00 | 43 | 144.00 | 200 | 221.00 | 8149 | 313.00 | 137 |
| 68.00 | 1195 | 145.00 | 410 | 222.00 | 1574 | 314.00 | 571 |
| 69.00 | 75088 | 146.00 | 714 | 223.00 | 2679 | 315.00 | 1072 |
| 70.00 | 537 | 147.00 | 2096 | 224.00 | 25832 | 316.00 | 804 |
| 71.00 | 54 | 148.00 | 5630 | 225.00 | 5870 | 321.00 | 420 |

Report Date: 03-Nov-2020 15:09:28 Chrom Revision: 2.3 14-Oct-2020 14:51:38
Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2827.D\8270_Isotope.rslt\spectra.d
Injection Date: 03-Nov-2020 12:12:30
Spectrum: Tune Spec :Average 137-139( 4.90-4.91 ) Bgrd 132( 4.87)
Base Peak: 197.90
Minimum % Base Peak: 0
Number of Points: 294

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 73.00 | 211 | 149.00 | 1240 | 226.00 | 560 | 322.00 | 212 |
| 74.00 | 7908 | 150.00 | 257 | 227.00 | 10232 | 323.00 | 3677 |
| 75.00 | 12325 | 151.00 | 822 | 228.00 | 1587 | 324.00 | 626 |
| 76.00 | 4045 | 152.00 | 423 | 229.00 | 2177 | 327.00 | 920 |
| 77.00 | 85592 | 153.00 | 1361 | 230.00 | 440 | 328.00 | 421 |
| 78.00 | 5798 | 154.00 | 987 | 231.00 | 904 | 332.00 | 215 |
| 79.00 | 5185 | 155.00 | 2232 | 232.00 | 184 | 333.00 | 352 |
| 80.00 | 4511 | 156.00 | 3400 | 233.00 | 231 | 334.00 | 2293 |
| 81.00 | 5911 | 157.00 | 592 | 234.00 | 461 | 335.00 | 562 |
| 82.00 | 1296 | 158.00 | 896 | 235.00 | 779 | 341.00 | 659 |
| 83.00 | 1346 | 159.00 | 727 | 236.00 | 699 | 346.00 | 965 |
| 84.00 | 153 | 160.00 | 1373 | 237.00 | 918 | 347.00 | 54 |
| 85.00 | 1011 | 161.00 | 1885 | 238.00 | 215 | 352.00 | 1219 |
| 86.00 | 1487 | 162.00 | 594 | 239.00 | 332 | 353.00 | 931 |
| 87.00 | 851 | 163.00 | 251 | 240.00 | 289 | 354.00 | 1230 |
| 88.00 | 368 | 164.00 | 386 | 241.00 | 429 | 355.00 | 268 |
| 89.00 | 103 | 165.00 | 1557 | 242.00 | 1310 | 365.00 | 5001 |
| 91.00 | 1218 | 166.00 | 1631 | 243.00 | 1655 | 366.00 | 625 |
| 92.00 | 1400 | 167.00 | 9287 | 244.00 | 18288 | 371.00 | 419 |
| 93.00 | 9215 | 168.00 | 4291 | 245.00 | 2430 | 372.00 | 1829 |
| 94.00 | 666 | 169.00 | 917 | 246.00 | 3541 | 373.00 | 543 |
| 95.00 | 132 | 170.00 | 337 | 247.00 | 656 | 383.00 | 592 |
| 96.00 | 353 | 171.00 | 385 | 248.00 | 260 | 384.00 | 51 |
| 97.00 | 78 | 172.00 | 778 | 249.00 | 579 | 390.00 | 331 |
| 98.00 | 6832 | 173.00 | 872 | 250.00 | 56 | 391.00 | 140 |
| 99.00 | 5311 | 174.00 | 1487 | 251.00 | 289 | 402.00 | 736 |
| 100.00 | 599 | 175.00 | 3367 | 252.00 | 346 | 403.00 | 1113 |
| 101.00 | 3497 | 176.00 | 1023 | 253.00 | 599 | 404.00 | 458 |
| 102.00 | 361 | 177.00 | 1563 | 254.00 | 1143 | 415.00 | 106 |
| 103.00 | 1044 | 178.00 | 701 | 255.00 | 95992 | 421.00 | 914 |
| 104.00 | 2023 | 179.00 | 6436 | 256.00 | 14167 | 422.00 | 1035 |
| 105.00 | 1685 | 180.00 | 4669 | 257.00 | 1015 | 423.00 | 7178 |
| 106.00 | 811 | 181.00 | 1706 | 258.00 | 5879 | 424.00 | 1676 |
| 107.00 | 26760 | 182.00 | 321 | 259.00 | 904 | 425.00 | 157 |

Report Date: 03-Nov-2020 15:09:28 Chrom Revision: 2.3 14-Oct-2020 14:51:38
Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2827.D\8270_Isotope.rslt\spectra.d
Injection Date: 03-Nov-2020 12:12:30
Spectrum: Tune Spec :Average 137-139( 4.90-4.91 ) Bgrd 132( 4.87)
Base Peak: 197.90
Minimum % Base Peak: 0
Number of Points: 294

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 108.00 | 3914 | 183.00 | 283 | 261.00 | 115 | 435.00 | 116 |
| 109.00 | 812 | 184.00 | 575 | 264.00 | 216 | 441.00 | 22560 |
| 110.00 | 46344 | 185.00 | 3175 | 265.00 | 2377 | 442.00 | 140928 |
| 111.00 | 7285 | 186.00 | 23864 | 266.00 | 208 | 443.00 | 28256 |
| 112.00 | 705 | 187.00 | 6408 | 268.00 | 100 | 444.00 | 2356 |
| 113.00 | 297 | 188.00 | 761 | 270.00 | 304 | | |
| 114.00 | 109 | 189.00 | 1531 | 271.00 | 314 | | |

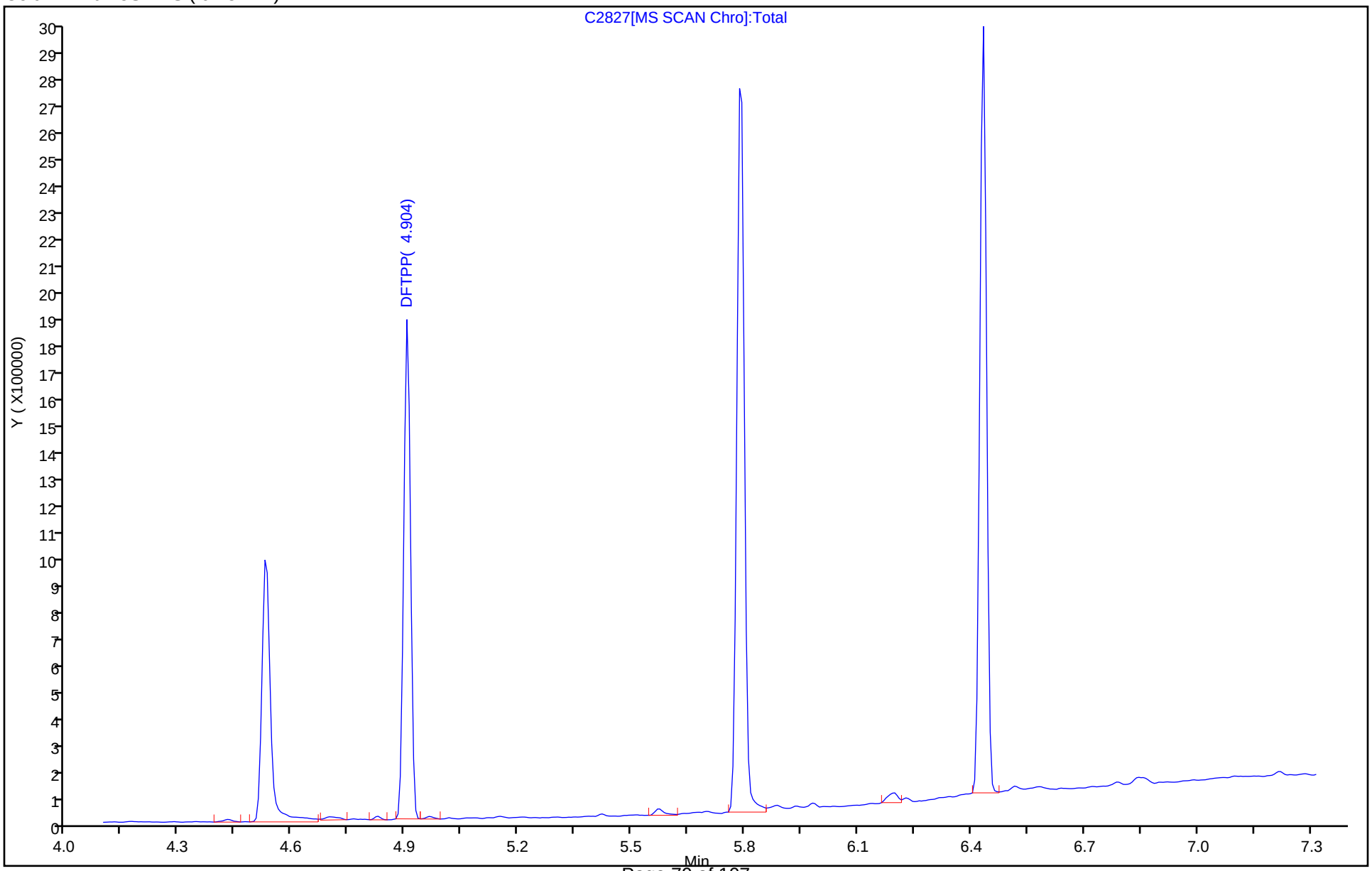
Report Date: 03-Nov-2020 15:09:28 Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2827.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 03-Nov-2020 12:12:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | DFTPP | | | Worklist Smp#: | 1 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 1 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Client Sample ID:  Lab Sample ID: MB 460-762870/1-A

Matrix: Water  Lab File ID: C5148.D

Analysis Method: 8270E SIM ID  Date Collected:

Extract. Method: 3510C  Date Extracted: 03/06/2021 08:30

Sample wt/vol: 250(mL)  Date Analyzed: 03/06/2021 17:27

Con. Extract Vol.: 2(mL)  Dilution Factor: 1

Injection Volume: 5(uL)  Level: (low/med) Low

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 762930  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 123-91-1 | 1,4-Dioxane | 0.016 | U | 0.20 | 0.016 |

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17647-74-4 | 1,4-Dioxane-d8 | 41 | | 10-150 |

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5148.D
Lims ID: MB 460-762870/1-A
Client ID:
Sample Type: MB
Inject. Date: 06-Mar-2021 17:27:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0125035-003
Operator ID: Instrument ID: CBNAMS13

Method: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 06-Mar-2021 18:30:23 Calib Date: 03-Nov-2020 14:31:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D

Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN
Process Host: CTX1644

First Level Reviewer: hamziy Date: 06-Mar-2021 18:30:23

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.876 | 1.869 | 0.007 | 7 | 19697 | 4.00 | 1.66 | |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.506 | 5.506 | 0.000 | 1 | 10422 | 0.2000 | 0.2000 | |

## QC Flag Legend

Processing Flags

## Reagents:

SM_iso_d4istd_00007 Amount Added: 20.00 Units: uL Run Reagent

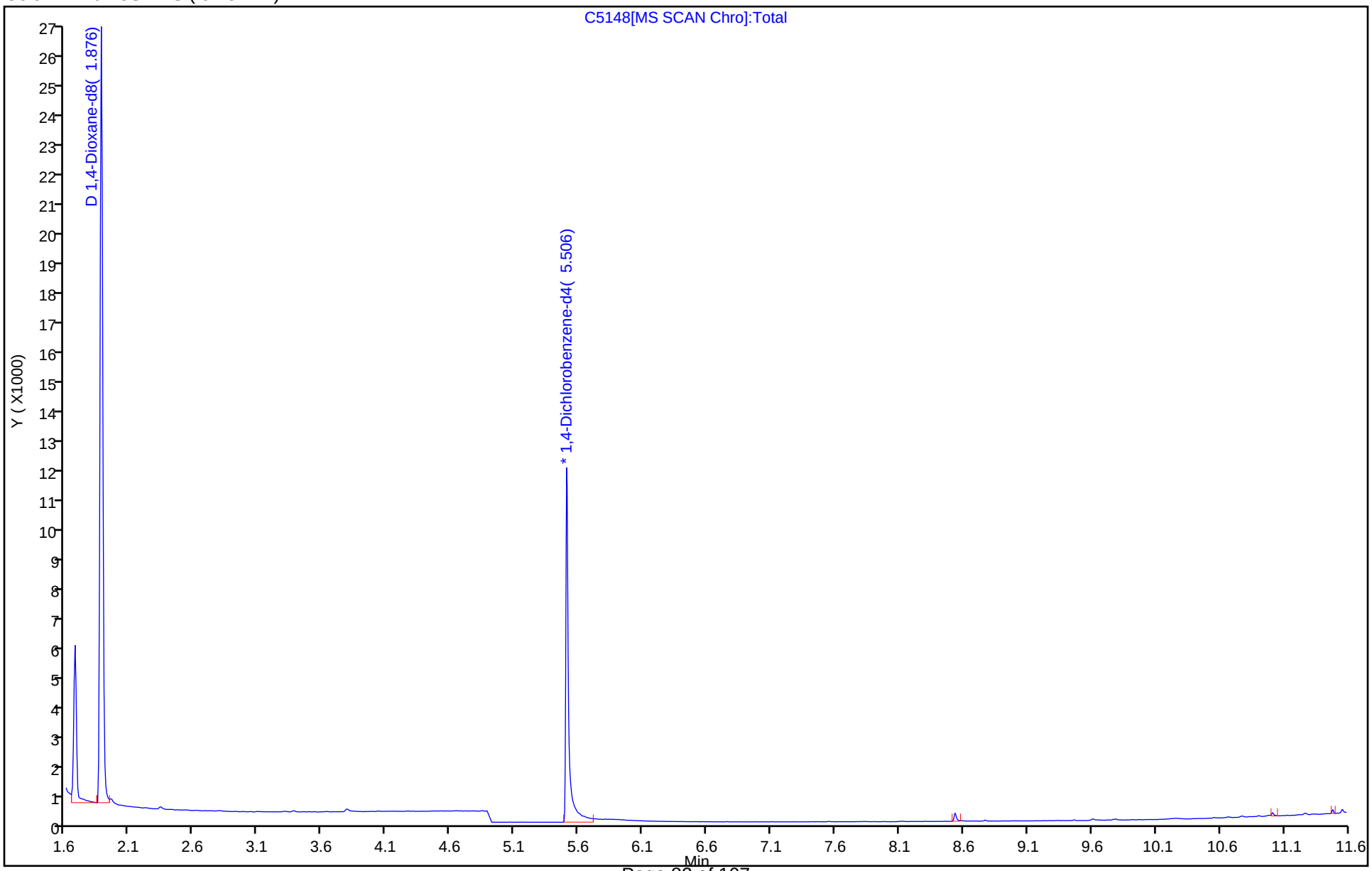
Report Date: 06-Mar-2021 18:30:23 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5148.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 06-Mar-2021 17:27:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | MB 460-762870/1-A | | | Worklist Smp#: | 3 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 3 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)



Report Date: 06-Mar-2021 18:30:23 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5148.D

Injection Date: 06-Mar-2021 17:27:30 Instrument ID: CBNAMS13

Lims ID: MB 460-762870/1-A

Client ID:

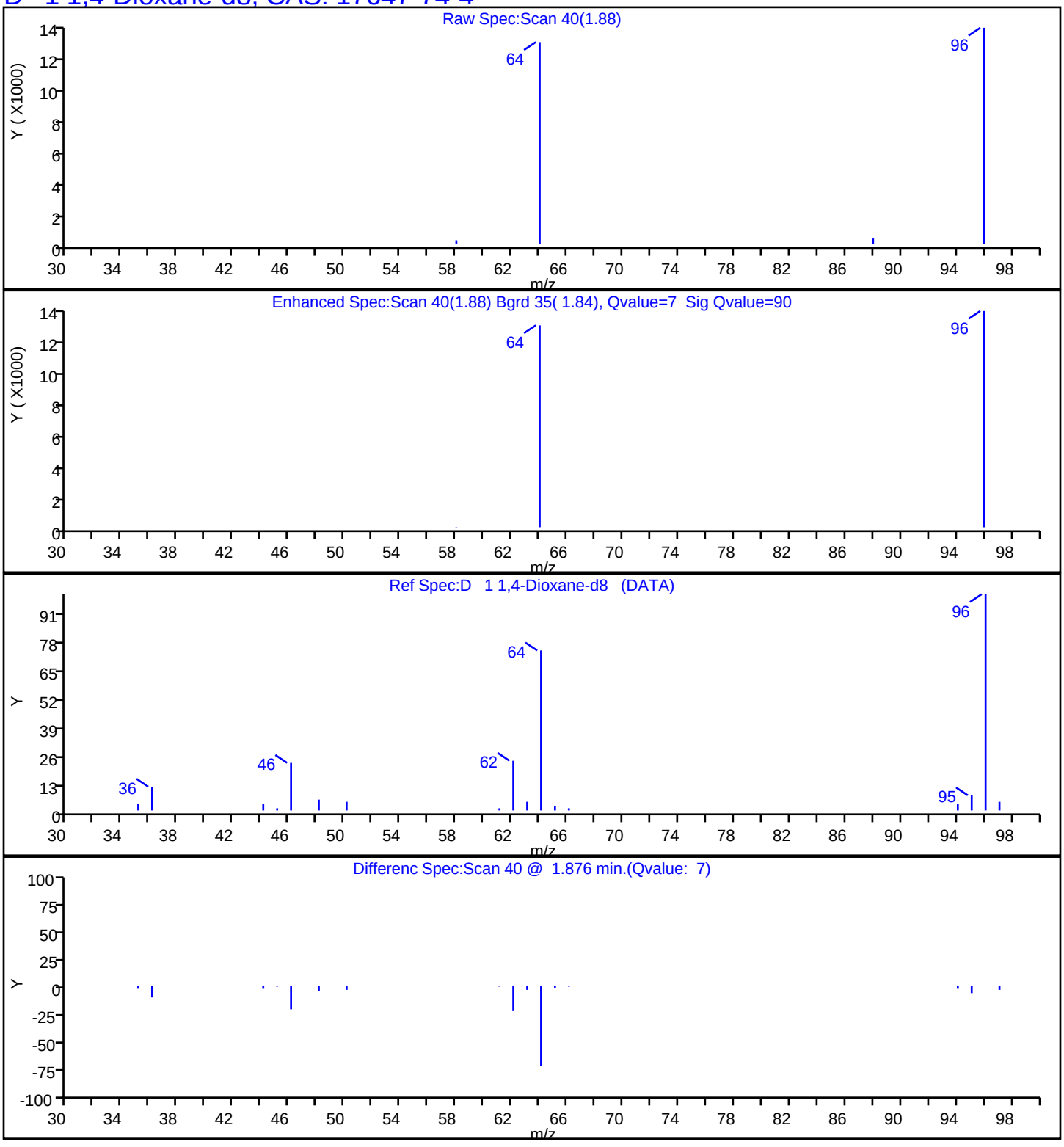
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: 8270_Isotope Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm) Detector MS SCAN

## D 1 1,4-Dioxane-d8, CAS: 17647-74-4



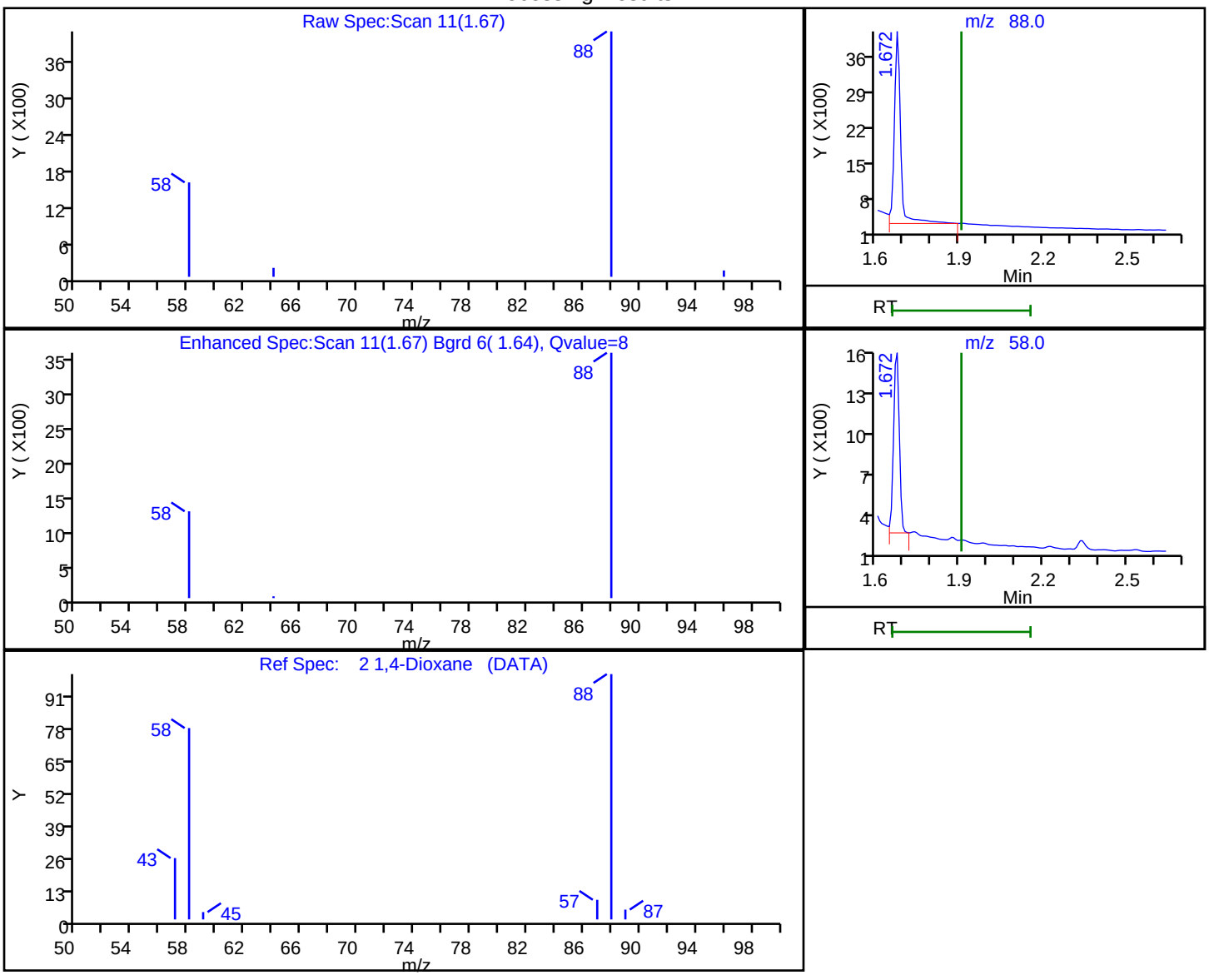
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5148.D
Injection Date: 06-Mar-2021 17:27:30 Instrument ID: CBNAMS13
Lims ID: MB 460-762870/1-A
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: 8270_Isotope Limit Group: MSS 8270 Isotope Dilution IS
Column: Rtxi-5Sil MS ( 0.25 mm) Detector MS SCAN

## 2 1,4-Dioxane, CAS: 123-91-1

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 1.67 | 88.00 | 5957 | 1.010092 |
| 1.67 | 58.00 | 1897 | |

Reviewer: hamziy, 06-Mar-2021 18:30:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Client Sample ID:  Lab Sample ID: LCS 460-762870/2-A

Matrix: Water  Lab File ID: C5149.D

Analysis Method: 8270E SIM ID  Date Collected:

Extract. Method: 3510C  Date Extracted: 03/06/2021 08:30

Sample wt/vol: 250(mL)  Date Analyzed: 03/06/2021 17:43

Con. Extract Vol.: 2(mL)  Dilution Factor: 1

Injection Volume: 5(uL)  Level: (low/med) Low

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 762930  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 123-91-1 | 1,4-Dioxane | 1.71 | | 0.20 | 0.016 |

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17647-74-4 | 1,4-Dioxane-d8 | 36 | | 10-200 |

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5149.D
Lims ID: LCS 460-762870/2-A
Client ID:
Sample Type: LCS
Inject. Date: 06-Mar-2021 17:43:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0125035-004
Operator ID: Instrument ID: CBNAMS13

Method: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 08-Mar-2021 06:31:49 Calib Date: 03-Nov-2020 14:31:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D

Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN
Process Host: CTX1639

First Level Reviewer: hamziy Date: 06-Mar-2021 18:30:30

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.876 | 1.867 | 0.007 | 8 | 24579 | 4.00 | 1.43 | |
| | 2 1,4-Dioxane | 88 | 1.911 | 1.911 | 0.007 | 18 | 1577 | 0.2000 | 0.2143 | |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.506 | 5.506 | 0.000 | 1 | 15080 | 0.2000 | 0.2000 | |

## QC Flag Legend

Processing Flags

## Reagents:

SM_iso_d4istd_00007 Amount Added: 20.00 Units: uL Run Reagent

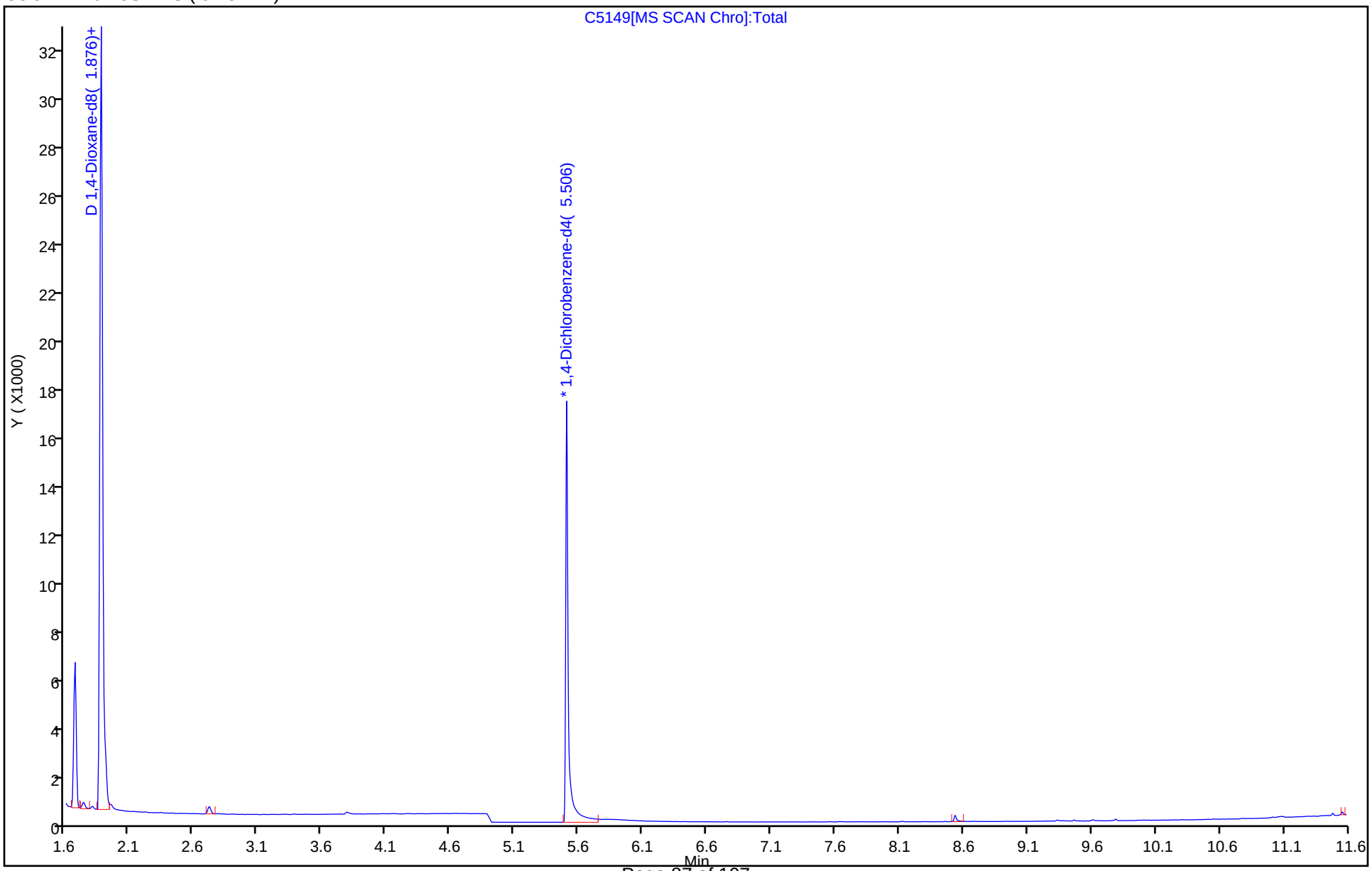
Report Date: 08-Mar-2021 06:35:48 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5149.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 06-Mar-2021 17:43:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | LCS 460-762870/2-A | | | Worklist Smp#: | 4 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 4 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Client Sample ID:  Lab Sample ID: LCSD 460-762870/3-A

Matrix: Water  Lab File ID: C5150.D

Analysis Method: 8270E SIM ID  Date Collected:

Extract. Method: 3510C  Date Extracted: 03/06/2021 08:30

Sample wt/vol: 250(mL)  Date Analyzed: 03/06/2021 17:58

Con. Extract Vol.: 2(mL)  Dilution Factor: 1

Injection Volume: 5(uL)  Level: (low/med) Low

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 762930  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 123-91-1 | 1,4-Dioxane | 1.83 | | 0.20 | 0.016 |

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17647-74-4 | 1,4-Dioxane-d8 | 43 | | 10-200 |

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5150.D
Lims ID: LCSD 460-762870/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 06-Mar-2021 17:58:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0125035-005
Operator ID: Instrument ID: CBNAMS13

Method: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 08-Mar-2021 06:31:49 Calib Date: 03-Nov-2020 14:31:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D

Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN
Process Host: CTX1639

First Level Reviewer: hamziy Date: 06-Mar-2021 18:30:40

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.883 | 1.867 | 0.014 | 12 | 17853 | 4.00 | 1.71 | |
| | 2 1,4-Dioxane | 88 | 1.911 | 1.911 | 0.007 | 15 | 1222 | 0.2000 | 0.2286 | M |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.506 | 5.506 | 0.000 | 1 | 9134 | 0.2000 | 0.2000 | |

## QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

## Reagents:

SM_iso_d4istd_00007 Amount Added: 20.00 Units: uL Run Reagent

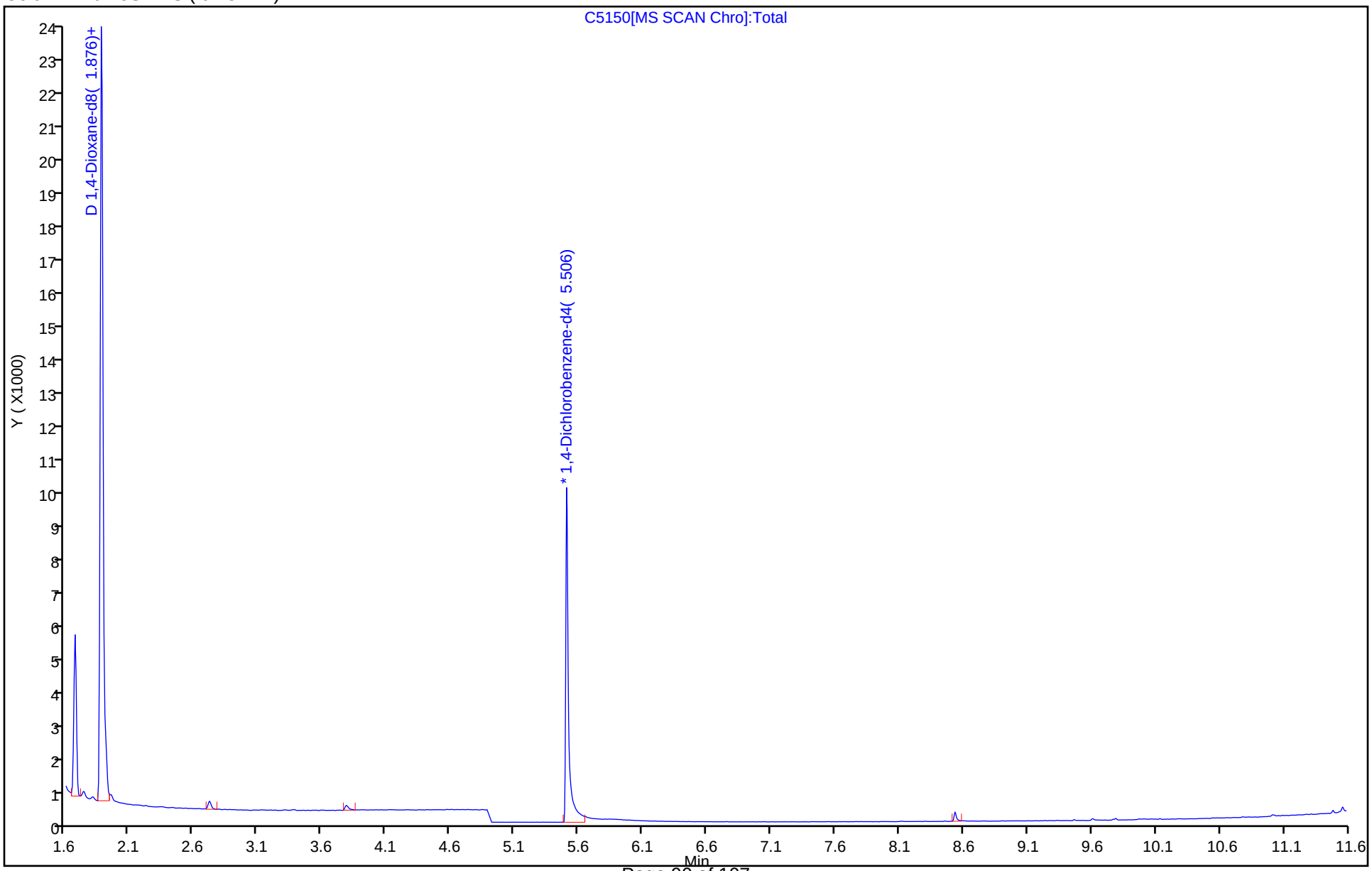
Report Date: 08-Mar-2021 06:31:49 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5150.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 06-Mar-2021 17:58:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | LCSD 460-762870/3-A | | | Worklist Smp#: | 5 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 5 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

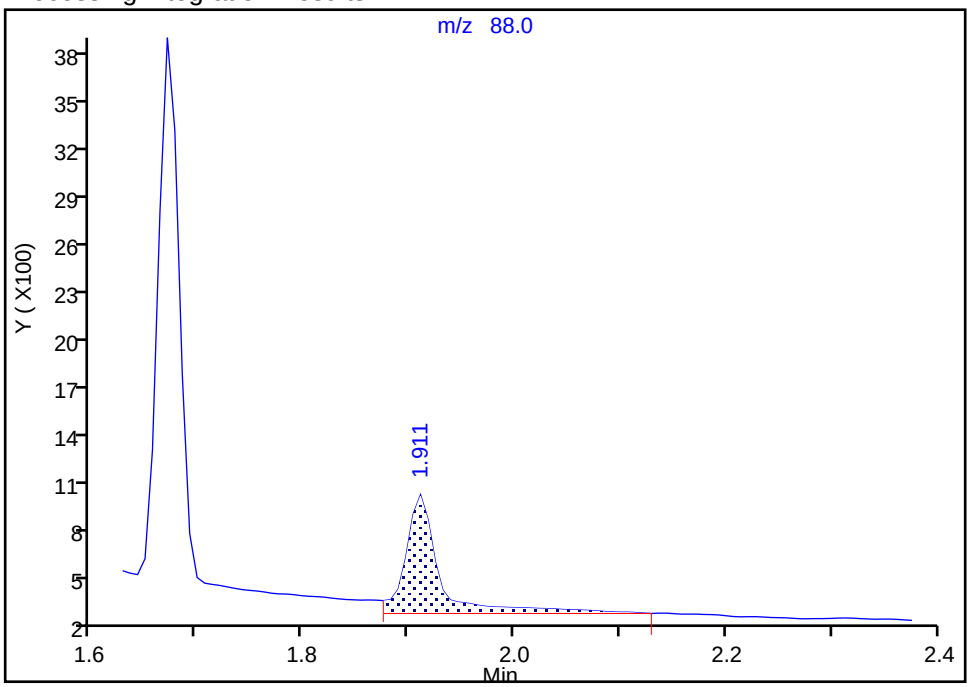
| | | | |
|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5150.D | | |
| Injection Date: | 06-Mar-2021 17:58:30 | Instrument ID: | CBNAMS13 |
| Lims ID: | LCSD 460-762870/3-A | | |
| Client ID: | | | |
| Operator ID: | | ALS Bottle#: | 5 Worklist Smp#: 5 |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS |
| Column: | Rtxi-5Sil MS ( 0.25 mm) | Detector | MS SCAN |

## 2 1,4-Dioxane, CAS: 123-91-1

Signal: 1

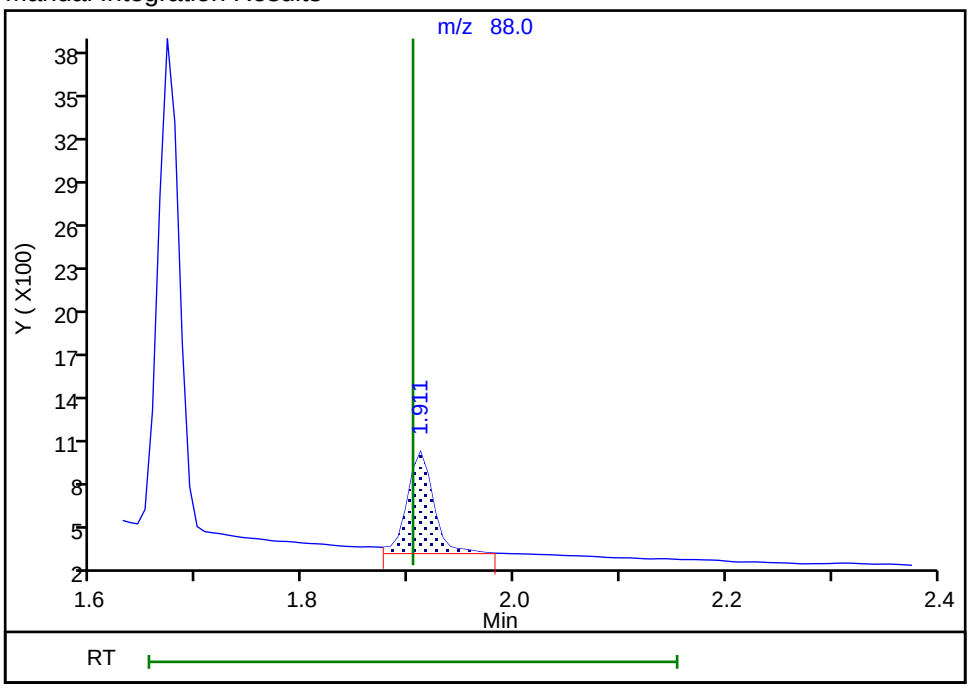
Processing Integration Results

RT: 1.91
Area: 1656
Amount: 0.309801
Amount Units: ug/ml




Manual Integration Results

RT: 1.91
Area: 1222
Amount: 0.228609
Amount Units: ug/ml




Reviewer: khlungprakhons, 08-Mar-2021 06:31:47

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Client Sample ID: HEX-MW12-030321 MS  Lab Sample ID: 460-229278-2 MS

Matrix: Water  Lab File ID: C5158.D

Analysis Method: 8270E SIM ID  Date Collected: 03/03/2021 11:45

Extract. Method: 3510C  Date Extracted: 03/06/2021 08:30

Sample wt/vol: 250(mL)  Date Analyzed: 03/06/2021 20:03

Con. Extract Vol.: 2(mL)  Dilution Factor: 1

Injection Volume: 5(uL)  Level: (low/med) Low

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 762930  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 123-91-1 | 1,4-Dioxane | 2.75 | | 0.20 | 0.016 |

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17647-74-4 | 1,4-Dioxane-d8 | 36 | | 10-150 |

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5158.D
Lims ID: 460-229278-B-2-A MS
Client ID: HEX-MW12-030321
Sample Type: MS
Inject. Date: 06-Mar-2021 20:03:30 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0125035-013
Operator ID: Instrument ID: CBNAMS13

Method: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 08-Mar-2021 06:28:29 Calib Date: 03-Nov-2020 14:31:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D

Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN
Process Host: CTX1639

First Level Reviewer: hamziy Date: 06-Mar-2021 22:57:09

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.876 | 1.867 | 0.007 | 7 | 18281 | 4.00 | 1.45 | |
| | 2 1,4-Dioxane | 88 | 1.911 | 1.911 | 0.007 | 17 | 1881 | 0.2000 | 0.3437 | M |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.502 | 5.506 | -0.004 | 1 | 11061 | 0.2000 | 0.2000 | |

## QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

## Reagents:

SM_iso_d4istd_00007 Amount Added: 20.00 Units: uL Run Reagent

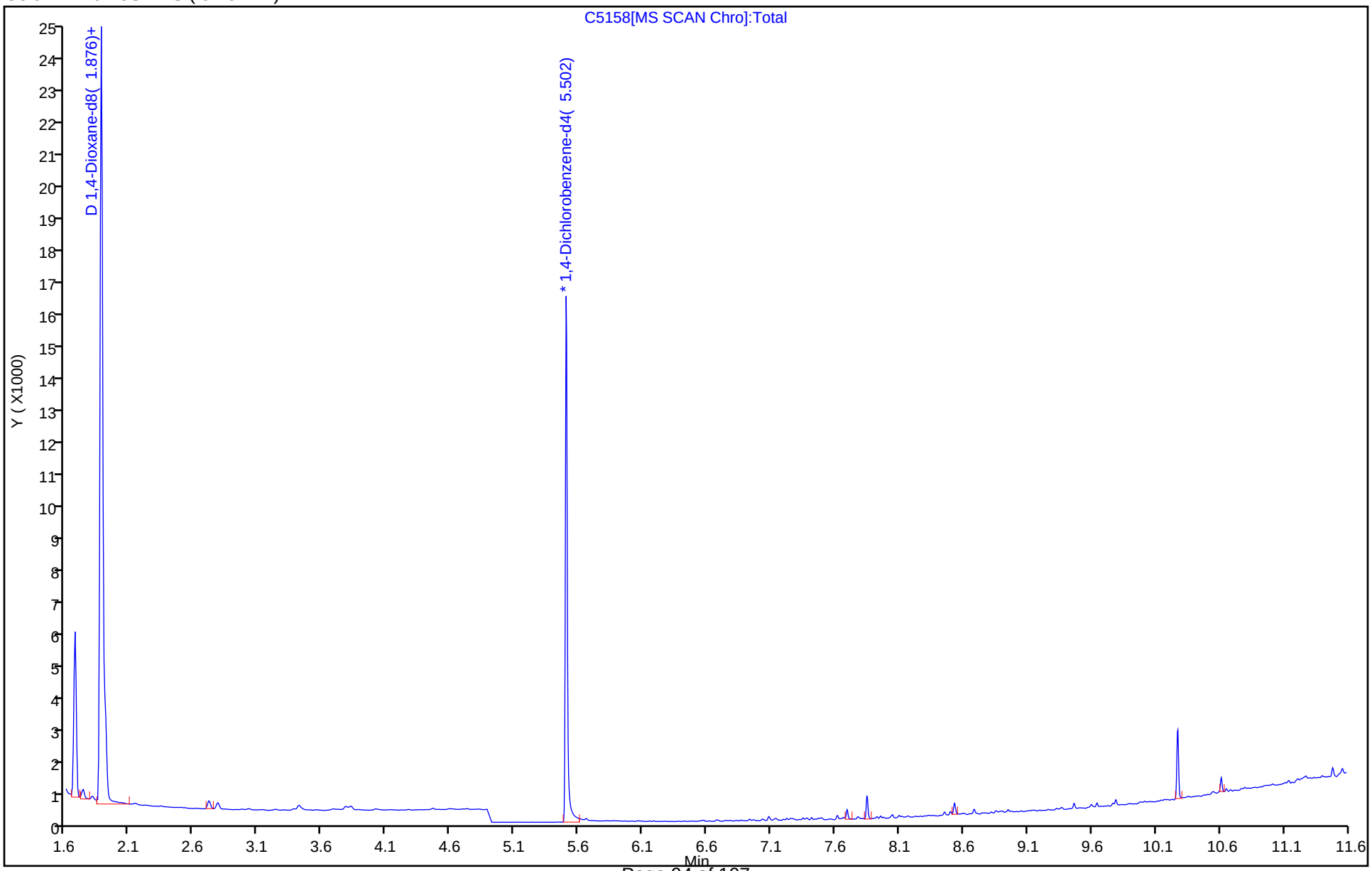
Report Date: 08-Mar-2021 06:28:29 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5158.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 06-Mar-2021 20:03:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | 460-229278-B-2-A MS | | | Worklist Smp#: | 13 |
| Client ID: | HEX-MW12-030321 | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 13 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

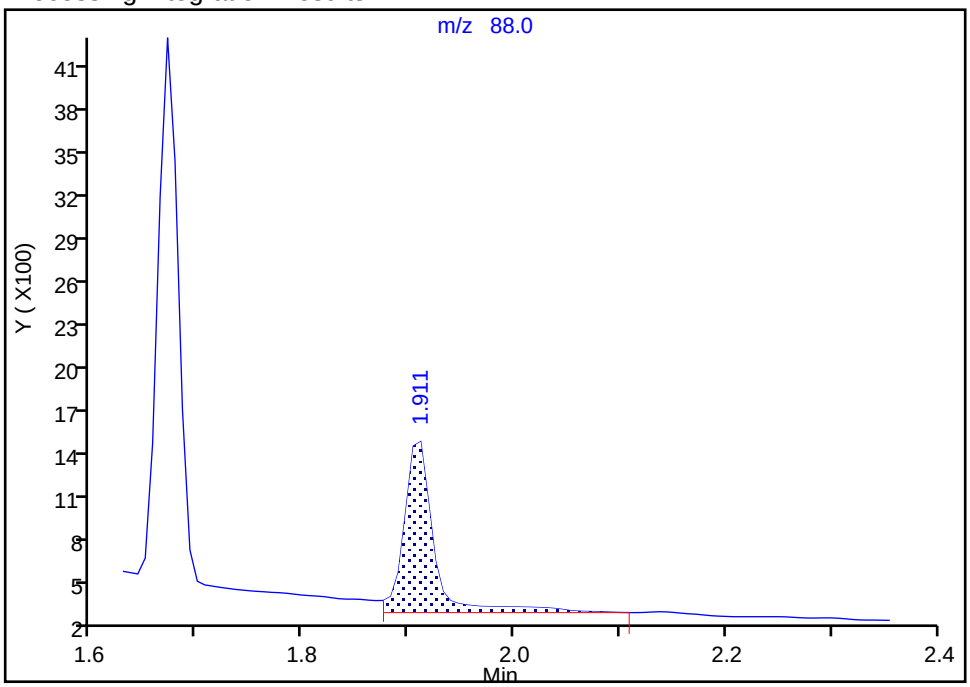
| | | | |
|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5158.D | | |
| Injection Date: | 06-Mar-2021 20:03:30 | Instrument ID: | CBNAMS13 |
| Lims ID: | 460-229278-B-2-A MS | | |
| Client ID: | HEX-MW12-030321 | | |
| Operator ID: | | ALS Bottle#: | 13 Worklist Smp#: 13 |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS |
| Column: | Rtxi-5Sil MS ( 0.25 mm) | Detector | MS SCAN |

## 2 1,4-Dioxane, CAS: 123-91-1

Signal: 1

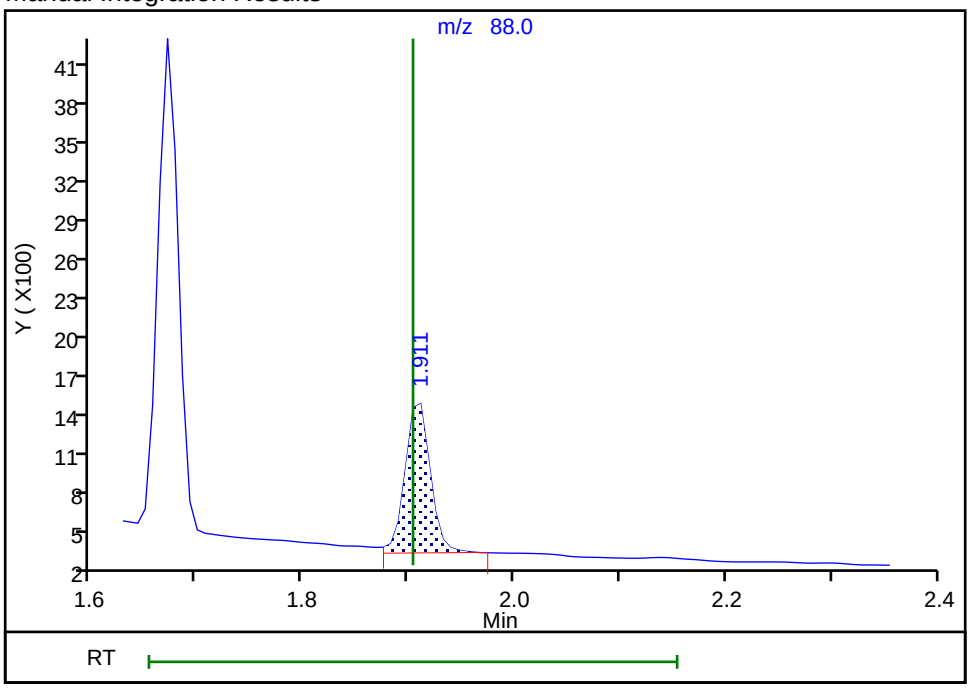
Processing Integration Results

RT: 1.91
Area: 2309
Amount: 0.421849
Amount Units: ug/ml




Manual Integration Results

RT: 1.91
Area: 1881
Amount: 0.343655
Amount Units: ug/ml




Reviewer: khlungprakhons, 08-Mar-2021 06:28:27

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Client Sample ID: HEX-MW12-030321 MSD  Lab Sample ID: 460-229278-2 MSD

Matrix: Water  Lab File ID: C5159.D

Analysis Method: 8270E SIM ID  Date Collected: 03/03/2021 11:45

Extract. Method: 3510C  Date Extracted: 03/06/2021 08:30

Sample wt/vol: 250(mL)  Date Analyzed: 03/06/2021 20:18

Con. Extract Vol.: 2(mL)  Dilution Factor: 1

Injection Volume: 5(uL)  Level: (low/med) Low

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 762930  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 123-91-1 | 1,4-Dioxane | 2.92 | | 0.20 | 0.016 |

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17647-74-4 | 1,4-Dioxane-d8 | 33 | | 10-150 |

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5159.D
Lims ID: 460-229278-B-2-B MSD
Client ID: HEX-MW12-030321
Sample Type: MSD
Inject. Date: 06-Mar-2021 20:18:30 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0125035-014
Operator ID: Instrument ID: CBNAMS13

Method: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 08-Mar-2021 06:28:46 Calib Date: 03-Nov-2020 14:31:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CBNAMS13\20201103-119513.b\C2836.D

Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN
Process Host: CTX1639

First Level Reviewer: hamziy Date: 06-Mar-2021 22:57:18

| | Compound | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 1,4-Dioxane-d8 | 96 | 1.876 | 1.867 | 0.007 | 7 | 16312 | 4.00 | 1.33 | |
| | 2 1,4-Dioxane | 88 | 1.911 | 1.911 | 0.007 | 17 | 1781 | 0.2000 | 0.3647 | M |
| * | 4 1,4-Dichlorobenzene-d4 | 150 | 5.502 | 5.506 | -0.004 | 1 | 10749 | 0.2000 | 0.2000 | |

## QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

## Reagents:

SM_iso_d4istd_00007 Amount Added: 20.00 Units: uL Run Reagent

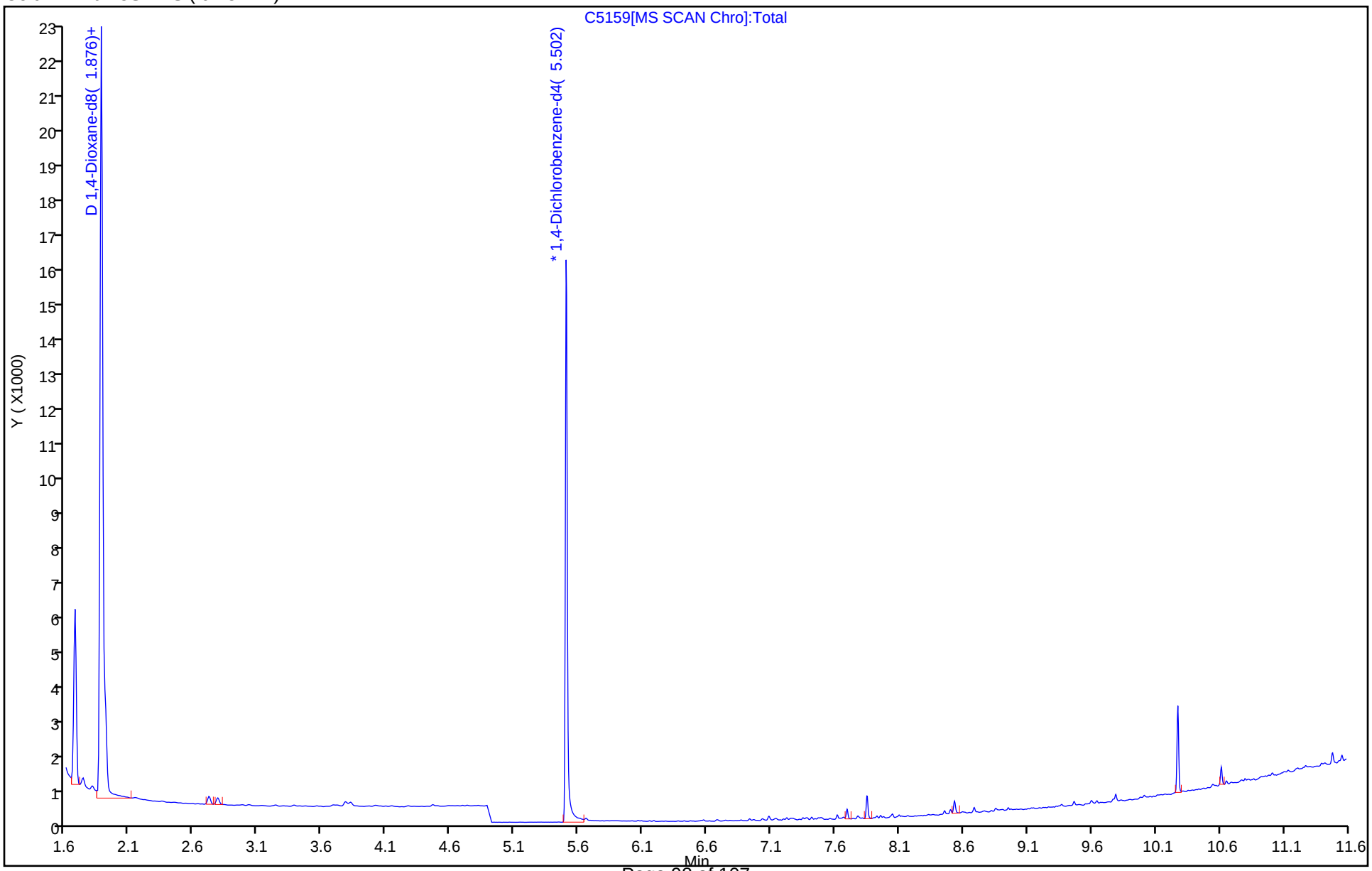
Report Date: 08-Mar-2021 06:28:46 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5159.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 06-Mar-2021 20:18:30 | Instrument ID: | CBNAMS13 | Operator ID: | |
| Lims ID: | 460-229278-B-2-B MSD | | | Worklist Smp#: | 14 |
| Client ID: | HEX-MW12-030321 | | | | |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 14 |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |

Column: Rtxi-5Sil MS ( 0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

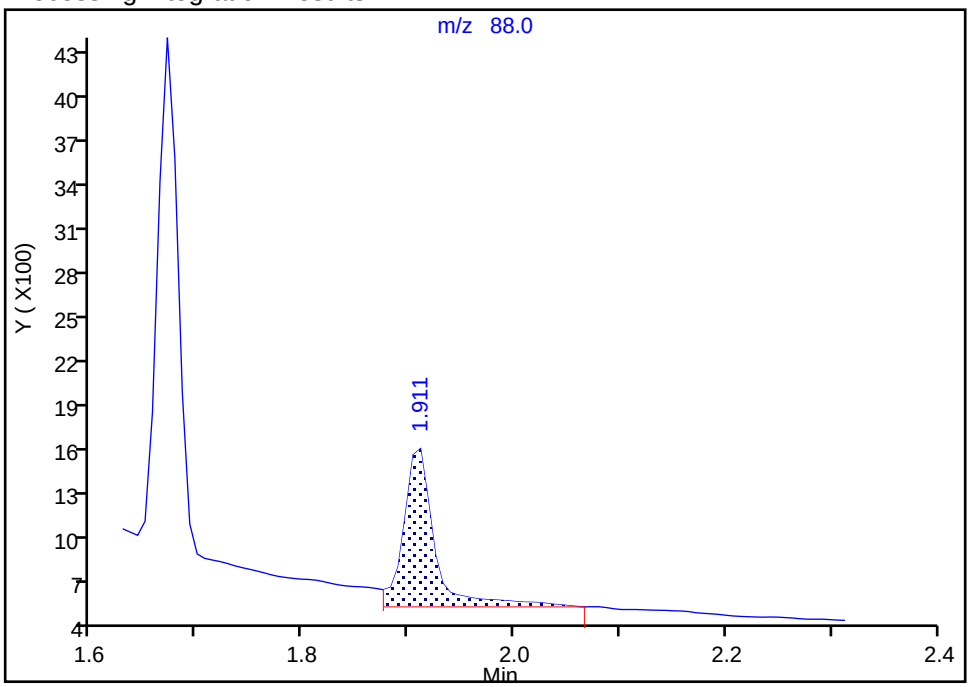
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\Edison\ChromData\CBNAMS13\20210306-125035.b\C5159.D | | | | |
| Injection Date: | 06-Mar-2021 20:18:30 | Instrument ID: | CBNAMS13 | | |
| Lims ID: | 460-229278-B-2-B MSD | | | | |
| Client ID: | HEX-MW12-030321 | | | | |
| Operator ID: | | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Injection Vol: | 5.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | 8270_Isotope | Limit Group: | MSS 8270 Isotope Dilution IS | | |
| Column: | Rtxi-5Sil MS ( 0.25 mm) | Detector | MS SCAN | | |

## 2 1,4-Dioxane, CAS: 123-91-1

Signal: 1

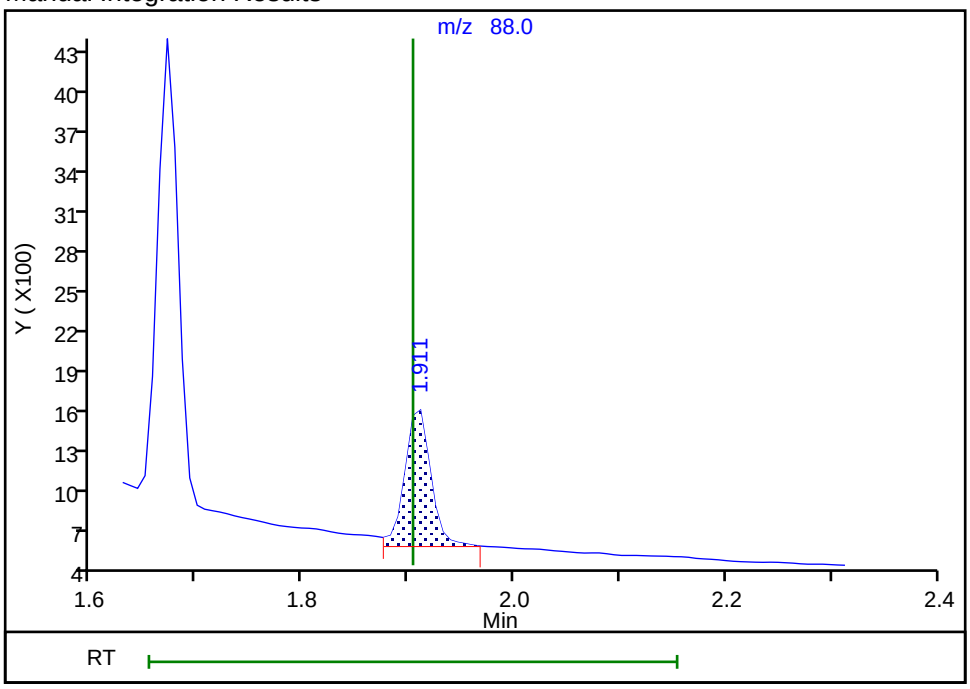
Processing Integration Results

RT: 1.91
Area: 2228
Amount: 0.456185
Amount Units: ug/ml




Manual Integration Results

RT: 1.91
Area: 1781
Amount: 0.364662
Amount Units: ug/ml




Reviewer: khlungprakhons, 08-Mar-2021 06:28:44

Audit Action: Manually Integrated Audit Reason: Baseline

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-229278-1

SDG No.:

Instrument ID: CBNAMS13 Start Date: 11/03/2020 12:12

Analysis Batch Number: 737017 End Date: 11/03/2020 20:56

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| DFTPP 460-737017/1 | | 11/03/2020 12:12 | 1 | C2827.D | Rtxi-5Sil MS 0.25(mm) |
| ICIS 460-737017/2 | | 11/03/2020 12:24 | 1 | C2828.D | Rtxi-5Sil MS 0.25(mm) |
| STD9 460-737017/3 IC | | 11/03/2020 12:40 | 1 | C2829.D | Rtxi-5Sil MS 0.25(mm) |
| STD8 460-737017/4 IC | | 11/03/2020 12:56 | 1 | C2830.D | Rtxi-5Sil MS 0.25(mm) |
| STD7 460-737017/5 IC | | 11/03/2020 13:12 | 1 | C2831.D | Rtxi-5Sil MS 0.25(mm) |
| STD6 460-737017/6 IC | | 11/03/2020 13:28 | 1 | C2832.D | Rtxi-5Sil MS 0.25(mm) |
| STD4 460-737017/7 IC | | 11/03/2020 13:44 | 1 | C2833.D | Rtxi-5Sil MS 0.25(mm) |
| STD3 460-737017/8 IC | | 11/03/2020 14:00 | 1 | C2834.D | Rtxi-5Sil MS 0.25(mm) |
| STD2 460-737017/9 IC | | 11/03/2020 14:15 | 1 | C2835.D | Rtxi-5Sil MS 0.25(mm) |
| STD1 460-737017/10 IC | | 11/03/2020 14:31 | 1 | C2836.D | Rtxi-5Sil MS 0.25(mm) |
| ICV 460-737017/11 | | 11/03/2020 14:47 | 1 | C2837.D | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 15:07 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 15:23 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 15:39 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 15:55 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 16:11 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 16:26 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 16:42 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 16:58 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 17:14 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 17:30 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 17:46 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 18:02 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 18:17 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 18:33 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 18:49 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 19:05 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 19:21 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 19:37 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 19:52 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 20:08 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 20:24 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 20:40 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 11/03/2020 20:56 | 1 | | Rtxi-5Sil MS 0.25(mm) |

8270E SIM ID

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-229278-1

SDG No.:

Instrument ID: CBNAMS13 Start Date: 03/06/2021 17:05

Analysis Batch Number: 762930 End Date: 03/06/2021 23:40

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| CCVIS 460-762930/2 | | 03/06/2021 17:05 | 1 | C5147.D | Rtxi-5Sil MS 0.25(mm) |
| MB 460-762870/1-A | | 03/06/2021 17:27 | 1 | C5148.D | Rtxi-5Sil MS 0.25(mm) |
| LCS 460-762870/2-A | | 03/06/2021 17:43 | 1 | C5149.D | Rtxi-5Sil MS 0.25(mm) |
| LCSD 460-762870/3-A | | 03/06/2021 17:58 | 1 | C5150.D | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 03/06/2021 18:14 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 03/06/2021 18:29 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 03/06/2021 18:45 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 03/06/2021 19:01 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 03/06/2021 19:16 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 03/06/2021 19:32 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| 460-229278-2 | HEX-MW12-030321 | 03/06/2021 19:47 | 1 | C5157.D | Rtxi-5Sil MS 0.25(mm) |
| 460-229278-2 MS | HEX-MW12-030321 MS | 03/06/2021 20:03 | 1 | C5158.D | Rtxi-5Sil MS 0.25(mm) |
| 460-229278-2 MSD | HEX-MW12-030321 MSD | 03/06/2021 20:18 | 1 | C5159.D | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 03/06/2021 20:34 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 03/06/2021 20:49 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 03/06/2021 21:05 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 03/06/2021 21:20 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 03/06/2021 21:36 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 03/06/2021 21:52 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 03/06/2021 22:07 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| 460-229278-1 | HEX-MW06-030321 | 03/06/2021 22:23 | 1 | C5167.D | Rtxi-5Sil MS 0.25(mm) |
| 460-229278-3 | HEX-MWX-030321 | 03/06/2021 22:38 | 1 | C5168.D | Rtxi-5Sil MS 0.25(mm) |
| 460-229278-4 | HEX-EQUIPMENT BLANK-030321 | 03/06/2021 22:54 | 1 | C5169.D | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 03/06/2021 23:09 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 03/06/2021 23:25 | 1 | | Rtxi-5Sil MS 0.25(mm) |
| ZZZZZ | | 03/06/2021 23:40 | 1 | | Rtxi-5Sil MS 0.25(mm) |

8270E SIM ID

# GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Batch Number: 762870  Batch Start Date: 03/06/21 08:29  Batch Analyst: Dekkar, Djedjiga X

Batch Method: 3510C  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | ReceivedpH | FirstAdjustpH | SecondAdjustpH | OP_1,4-DX_SP 00005 |
|---|---|---|---|---|---|---|---|---|---|
| MB 460-762870/1 | | 3510C, 8270E SIM ID | | 250 mL | 2 mL | 7 SU | <2 SU | >12 SU | |
| LCS 460-762870/2 | | 3510C, 8270E SIM ID | | 250 mL | 2 mL | 7 SU | <2 SU | >12 SU | 200 uL |
| LCSD 460-762870/3 | | 3510C, 8270E SIM ID | | 250 mL | 2 mL | 7 SU | <2 SU | >12 SU | 200 uL |
| 460-229278-B-2 MS | HEX-MW12-030321 | 3510C, 8270E SIM ID | T | 250 mL | 2 mL | 7 SU | <2 SU | >12 SU | 200 uL |
| 460-229278-B-2 MSD | HEX-MW12-030321 | 3510C, 8270E SIM ID | T | 250 mL | 2 mL | 7 SU | <2 SU | >12 SU | 200 uL |
| 460-229278-A-1 | HEX-MW06-030321 | 3510C, 8270E SIM ID | T | 250 mL | 2 mL | 7 SU | <2 SU | >12 SU | |
| 460-229278-A-2 | HEX-MW12-030321 | 3510C, 8270E SIM ID | T | 250 mL | 2 mL | 7 SU | <2 SU | >12 SU | |
| 460-229278-A-3 | HEX-MWX-030321 | 3510C, 8270E SIM ID | T | 250 mL | 2 mL | 7 SU | <2 SU | >12 SU | |
| 460-229278-A-4 | HEX-EQUIPMENT BLANK-030321 | 3510C, 8270E SIM ID | T | 250 mL | 2 mL | 5 SU | <2 SU | >12 SU | |

| Lab Sample ID | Client Sample ID | Method Chain | Basis | OP_14-DX_surr 00007 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MB 460-762870/1 | | 3510C, 8270E SIM ID | | 20 uL | | | | | |
| LCS 460-762870/2 | | 3510C, 8270E SIM ID | | 20 uL | | | | | |
| LCSD 460-762870/3 | | 3510C, 8270E SIM ID | | 20 uL | | | | | |
| 460-229278-B-2 MS | HEX-MW12-030321 | 3510C, 8270E SIM ID | T | 20 uL | | | | | |
| 460-229278-B-2 MSD | HEX-MW12-030321 | 3510C, 8270E SIM ID | T | 20 uL | | | | | |
| 460-229278-A-1 | HEX-MW06-030321 | 3510C, 8270E SIM ID | T | 20 uL | | | | | |
| 460-229278-A-2 | HEX-MW12-030321 | 3510C, 8270E SIM ID | T | 20 uL | | | | | |
| 460-229278-A-3 | HEX-MWX-030321 | 3510C, 8270E SIM ID | T | 20 uL | | | | | |
| 460-229278-A-4 | HEX-EQUIPMENT BLANK-030321 | 3510C, 8270E SIM ID | T | 20 uL | | | | | |

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.

8270E SIM ID

# GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Batch Number: 762870  Batch Start Date: 03/06/21 08:29  Batch Analyst: Dekkar, Djedjiga X

Batch Method: 3510C  Batch End Date:

| Batch Notes | |
|---|---|
| Acid Used for pH Adjustment ID | 257458 |
| Base Used to Adjust pH ID | OP2984 |
| Batch Comment | BNA 8270 ISOTOPE |
| Analyst ID - Concentration | OS |
| Concentration 1 Corrected Temperature | 35 Degrees C |
| Equipment ID - Concentration 1 | 31869 |
| Analyst ID - Extraction | OS |
| Method/Fraction | 3510C LVI / 8270 Isotope |
| Na2SO4 ID | 201198 |
| pH Indicator ID | HC-022887 |
| Prep Solvent ID | Methylene Chloride: 272760 |
| Prep Solvent Volume Used | 180 mL |
| Analyst ID - Spike Analyst | OS |
| Analyst ID - Spike Witness Analyst | ZB |
| Sufficient Volume for Batch QC | Yes |
| Thermometer ID - Concentration 1 | 31869 |
| Concentration 1 Uncorrected Temperature | 35 Degrees C |
| Vial Lot Number | 20046103 |

| 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.

# Shipping and Receiving Documents

# Chain of Custody Record 478439

eurofins | Environment Testing TestAmerica

1,4 DIOXANE

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other: NYSDEC

TAL-8210

| Client Contact | Project Manager: STEVE GOETZ | Site Contact: NYC | Date: | COC No: |
|---|---|---|---|---|
| Company Name: EAR | Tel/Email: | Lab Contact: | Carrier: | 1 of 1 COCs |
| Address: 225 ATLANTEC AVE, | Analysis Turnaround Time | | | Sampler: |
| City/State/Zip: PATCHOGUE, N.Y. 11772 | ☐ CALENDAR DAYS ☐ WORKING DAYS | | | For Lab Use Only: |
| Phone: (631) 447-6400 | TAT if different from Below 10-DAY | | | Walk-in Client: |
| Fax: | ☐ 2 weeks | | | Lab Sampling: |
| Project Name: DEC-BRONX 3536 | ☐ 1 week | | | |
| Site: 203003 | ☐ 2 days | | | Job / SDG No.: 229278 |
| P O # | ☐ 1 day | | | |

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=Grab) | Matrix | # of Cont. | Filtered Sample (Y/N) | Perform MS / MSD (Y/N) | 1,4 Dioxane 8270 SIM 22 | Sample Specific Notes: |
|---|---|---|---|---|---|---|---|---|---|
| HEX-MW06-030321 | 3/3/21 | 8:55 | G | AQ | 3 | N | N | 2 | -1 |
| HEX-MW12-030321 | | 11:45 | | | 6 | N | N | 6 | -2 |
| HEX-MWX-030321 | | — | | | 2 | N | N | 2 | -3 |
| HEX-EQUIPMENTBLANK-030321 | | 12:10 | | | 2 | N | N | 2 | -4 |
| | | | | | | | | | |
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460-229278 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other NONE — 6

**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:**
CAT "B" DELIVERABLES

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
|---|---|---|---|---|---|
| [signature] | EAR | 3/3/21 14:30 | EAR FRIDGE | EAR | 3/3/21 14:30 |
| [signature] (FROM SAMPLE FRIDGE) | EAR | 3-4-21 10:45 | [signature] | EAR | 3/4/21 10:45 |
| Relinquished by: | Company: | Date/Time: | Received in Laboratory by: | Company: | Date/Time: |
| [signature] | EAR | 3-4-21 1600 | [signature] | TAL | 3/4/21 1600 |

formal 3.2 IR 11 Joseph Sa TAL 3/4/21 1800

**Eurofins TestAmerica Edison**
**Receipt Temperature and pH Log**

**Job Number:** 229278

**Number of Coolers:** 1 **IR Gun #** 11

## Cooler Temperatures

| | RAW | CORRECTED | | RAW | CORRECTED | | RAW | CORRECTED |
|---|---|---|---|---|---|---|---|---|
| Cooler #1: | 3.2 °C | 3.2 °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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | |
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**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.*

EDS-WI-038, Rev 4.1
10/22/2019

**Initials:** [signature] **Date:** 3/4/21

# Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 460-229278-1

**Login Number: 229278**
**List Number: 1**
**Creator: Lysy, Susan**

**List Source: Eurofins TestAmerica, 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"). | N/A | |
| Multiphasic samples are not present. | N/A | |
| Samples do not require splitting or compositing. | N/A | |
| Residual Chlorine Checked. | N/A | |

# APPENDIX E

ENVIRONMENTAL
Data Services, Inc.

# DATA USABILITY SUMMARY REPORT
# BRONX3536, NEW YORK

Client: Environmental Assessment & Remediations, Patchogue, New York
SDG: 460-229152-1
Laboratory: Eurofins Test America., Edison, New Jersey & Burlington, Vermont
Site: DEC-Bronx3536, New York
Date: April 6, 2021

| EDS ID | Client Sample ID | Laboratory Sample ID | Matrix |
|---|---|---|---|
| 1 | HEX-MW06-030321 | 460-229152-1 | Water |
| 2 | HEX-MW12-030321 | 460-229152-2 | Water |
| 2MS | HEX-MW12-030321MS | 460-229152-2MS | Water |
| 2MSD | HEX-MW12-030321MSD | 460-229152-2MSD | Water |
| 3 | HEX-MWX-030321 | 460-229152-3 | Water |
| 4 | HEX-EQUIPMENT BLANK-030321 | 460-229152-4 | Water |

A Data Usability Summary Review was performed on the analytical data for three water samples and one aqueous equipment blank sample collected on March 3, 2021 by Environmental Assessment & Remediations at the Bronx3536 site in New York. The samples were analyzed under the USEPA Method Determination of Selected Per- and Polyfluorinated Alkyl Substances in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS).

Specific method references are as follows:

| *Analysis* | *Method References* |
|---|---|
| PFAS | USEPA Method 537 Modified |

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Data Review and Validation Guidelines as follows:

- USEPA Data Review and Validation Guidelines for Perfluoroalkyl Substances (PFAS) Analyzed Using EPA Method 537, November 2018;
- and the reviewer's professional judgment.

The following items/criteria were reviewed for this report:

***PFAS***

- Holding times and sample preservation
- Liquid Chromatography/Mass Spectrometry (GC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field QC blank contamination

- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample (LCS) recoveries
- Internal standard area and retention time summary forms
- Target Compound Identification
- Compound Quantitation
- Field Duplicate sample precision

## Data Usability Assessment

There were no rejections of data.

The data are acceptable for the intended purposes. There were no qualifications.

## Perfluorinated Alkyl Substances (PFAS)

### Holding Times

- All samples were extracted within 14 days for water samples and analyzed within 28 days.

### LC/MS Tuning

- All criteria were met.

### Initial Calibration

- All relative standard deviation (%RSD) and/or correlation coefficients and mean RRF criteria were met.

### Continuing Calibration

- All percent difference (%D) and RRF criteria were met.

### Method Blank

- The method blanks exhibited the following contamination.

| Blank ID | Compound | Conc. ng/L | Qualifier | Affected Samples |
|---|---|---|---|---|
| 200-164654/1-A | PFOA | 1.615 | None | All Samples >10X |

## Field Blank

- Field QC samples are summarized below.

| Blank ID | Compound | Conc. ng/L | Qualifier | Affected Samples |
|---|---|---|---|---|
| HEX-EQUIPMENT BLANK-030321 | None - ND | - | - | - |

## Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate percent recoveries (%R).

## Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The MS/MSD samples acceptable percent recoveries (%R) and RPD values.

## Laboratory Control Samples

- The LCS samples exhibited acceptable percent recoveries (%R).

## Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

## Target Compound Identification

- All mass spectra and quantitation criteria were met.

## Compound Quantitation

- All criteria were met.

## Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision was acceptable.

| PFAS | | | | |
|---|---|---|---|---|
| Compound | HEX-MW12-030321 ng/L | HEX-MWX-030321 ng/L | RPD | Qualifier |
| PFBA | 19.5 | 21.2 | 8% | None |
| PFPeA | 50.3 | 46.0 | 9% | |
| PFHxA | 29.9 | 28.1 | 6% | |
| PFHpA | 27.9 | 28.4 | 2% | |
| PFOA | 33.1 | 35.4 | 7% | |
| PFNA | 7.59 | 8.81 | 15% | |
| PFDA | 1.11 | 1.10 | 1% | |
| PFBS | 13.5 | 13.7 | 1% | |
| PFHxS | 6.73 | 7.57 | 12% | |
| PFHpS | 0.72 | 0.97 | 30% | |
| PFOS | 42.4 | 44.9 | 6% | |
| 6:2 FTS | 3.00 | 3.33 | 10% | |
| 8:2 FTS | 1.40 | 1.34 | 4% | |

Please contact the undersigned at (561) 475-2000 if you have any questions or need further information.

Signed: Nancy Weaver Dated: 4/7/21

Nancy Weaver
Senior Chemist

| Data Qualifier | Definition |
|---|---|
| U | The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit. |
| J | The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. |
| J+ | The result is an estimated quantity, but the result may be biased high. |
| J- | The result is an estimated quantity, but the result may be biased low. |
| NJ | The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples. |
| UJ | The analyte was analyzed for but was not detected. The reported quantitation limits is approximate and may be inaccurate or imprecise. |
| R | The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples. |

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1
SDG No.:
Client Sample ID: HEX-MW06-030321  Lab Sample ID: 460-229152-1
Matrix: Water  Lab File ID: PA210312B16.d
Analysis Method: 537 (modified)  Date Collected: 03/03/2021 08:55
Extraction Method: 3535  Date Extracted: 03/09/2021 13:56
Sample wt/vol: 307.8(mL)  Date Analyzed: 03/12/2021 14:05
Con. Extract Vol.: 10(mL)  Dilution Factor: 1
Injection Volume: 20(uL)  GC Column: C-18 ID: 4.6(mm)
% Moisture:  GPC Cleanup:(Y/N) N
Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 375-22-4 | Perfluorobutanoic acid (PFBA) | 24.7 | | 4.06 | 0.92 |
| 2706-90-3 | Perfluoropentanoic acid (PFPeA) | 25.2 | | 1.62 | 0.88 |
| 307-24-4 | Perfluorohexanoic acid (PFHxA) | 16.8 | | 1.62 | 0.67 |
| 375-85-9 | Perfluoroheptanoic acid (PFHpA) | 10.9 | | 1.62 | 0.37 |
| 335-67-1 | Perfluorooctanoic acid (PFOA) | 16.7 | B | 1.62 | 0.80 |
| 375-95-1 | Perfluorononanoic acid (PFNA) | 4.17 | | 1.62 | 0.47 |
| 335-76-2 | Perfluorodecanoic acid (PFDA) | 5.76 | | 1.62 | 0.37 |
| 2058-94-8 | Perfluoroundecanoic acid (PFUnA) | 0.59 | U | 1.62 | 0.59 |
| 307-55-1 | Perfluorododecanoic acid (PFDoA) | 0.37 | U | 1.62 | 0.37 |
| 72629-94-8 | Perfluorotridecanoic acid (PFTriA) | 0.35 | U | 1.62 | 0.35 |
| 376-06-7 | Perfluorotetradecanoic acid (PFTeA) | 0.48 | U | 1.62 | 0.48 |
| 375-73-5 | Perfluorobutanesulfonic acid (PFBS) | 31.6 | | 1.62 | 0.51 |
| 355-46-4 | Perfluorohexanesulfonic acid (PFHxS) | 2.57 | | 1.62 | 0.54 |
| 375-92-8 | Perfluoroheptanesulfonic Acid (PFHpS) | 0.32 | U | 1.62 | 0.32 |
| 1763-23-1 | Perfluorooctanesulfonic acid (PFOS) | 40.8 | | 1.62 | 0.71 |
| 335-77-3 | Perfluorodecanesulfonic acid (PFDS) | 0.39 | U | 1.62 | 0.39 |
| 754-91-6 | Perfluorooctanesulfonamide (PFOSA) | 0.46 | U | 1.62 | 0.46 |
| 2355-31-9 | N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.64 | U | 4.06 | 0.64 |
| 2991-50-6 | N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 0.76 | U | 4.06 | 0.76 |
| 27619-97-2 | 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 0.58 | U | 4.06 | 0.58 |
| 39108-34-4 | 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 0.54 | U | 1.62 | 0.54 |

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

2

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID: HEX-MW12-030321  Lab Sample ID: 460-229152-2

Matrix: Water  Lab File ID: PA210312B17.d

Analysis Method: 537 (modified)  Date Collected: 03/03/2021 11:45

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 303.1(mL)  Date Analyzed: 03/12/2021 14:13

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18 ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 375-22-4 | Perfluorobutanoic acid (PFBA) | 19.5 | | 4.12 | 0.93 |
| 2706-90-3 | Perfluoropentanoic acid (PFPeA) | 50.3 | | 1.65 | 0.89 |
| 307-24-4 | Perfluorohexanoic acid (PFHxA) | 29.9 | | 1.65 | 0.68 |
| 375-85-9 | Perfluoroheptanoic acid (PFHpA) | 27.9 | | 1.65 | 0.38 |
| 335-67-1 | Perfluorooctanoic acid (PFOA) | 33.1 | B | 1.65 | 0.81 |
| 375-95-1 | Perfluorononanoic acid (PFNA) | 7.59 | | 1.65 | 0.48 |
| 335-76-2 | Perfluorodecanoic acid (PFDA) | 1.11 | J | 1.65 | 0.38 |
| 2058-94-8 | Perfluoroundecanoic acid (PFUnA) | 0.60 | U | 1.65 | 0.60 |
| 307-55-1 | Perfluorododecanoic acid (PFDoA) | 0.38 | U | 1.65 | 0.38 |
| 72629-94-8 | Perfluorotridecanoic acid (PFTriA) | 0.35 | U | 1.65 | 0.35 |
| 376-06-7 | Perfluorotetradecanoic acid (PFTeA) | 0.49 | U | 1.65 | 0.49 |
| 375-73-5 | Perfluorobutanesulfonic acid (PFBS) | 13.5 | | 1.65 | 0.52 |
| 355-46-4 | Perfluorohexanesulfonic acid (PFHxS) | 6.73 | | 1.65 | 0.55 |
| 375-92-8 | Perfluoroheptanesulfonic Acid (PFHpS) | 0.72 | J | 1.65 | 0.32 |
| 1763-23-1 | Perfluorooctanesulfonic acid (PFOS) | 42.4 | | 1.65 | 0.72 |
| 335-77-3 | Perfluorodecanesulfonic acid (PFDS) | 0.40 | U | 1.65 | 0.40 |
| 754-91-6 | Perfluorooctanesulfonamide (PFOSA) | 0.47 | U | 1.65 | 0.47 |
| 2355-31-9 | N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.65 | U | 4.12 | 0.65 |
| 2991-50-6 | N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 0.77 | U | 4.12 | 0.77 |
| 27619-97-2 | 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 3.00 | J | 4.12 | 0.59 |
| 39108-34-4 | 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 1.40 | J | 1.65 | 0.54 |

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

3

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID: HEX-MWX-030321  Lab Sample ID: 460-229152-3

Matrix: Water  Lab File ID: PA210312B20.d

Analysis Method: 537 (modified)  Date Collected: 03/03/2021 00:00

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 302.6(mL)  Date Analyzed: 03/12/2021 14:38

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18  ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 375-22-4 | Perfluorobutanoic acid (PFBA) | 21.2 | | 4.13 | 0.93 |
| 2706-90-3 | Perfluoropentanoic acid (PFPeA) | 46.0 | | 1.65 | 0.89 |
| 307-24-4 | Perfluorohexanoic acid (PFHxA) | 28.1 | | 1.65 | 0.69 |
| 375-85-9 | Perfluoroheptanoic acid (PFHpA) | 28.4 | | 1.65 | 0.38 |
| 335-67-1 | Perfluorooctanoic acid (PFOA) | 35.4 | F | 1.65 | 0.81 |
| 375-95-1 | Perfluorononanoic acid (PFNA) | 8.81 | | 1.65 | 0.48 |
| 335-76-2 | Perfluorodecanoic acid (PFDA) | 1.10 | J | 1.65 | 0.38 |
| 2058-94-8 | Perfluoroundecanoic acid (PFUnA) | 0.60 | U | 1.65 | 0.60 |
| 307-55-1 | Perfluorododecanoic acid (PFDoA) | 0.38 | U | 1.65 | 0.38 |
| 72629-94-8 | Perfluorotridecanoic acid (PFTriA) | 0.36 | U | 1.65 | 0.36 |
| 376-06-7 | Perfluorotetradecanoic acid (PFTeA) | 0.49 | U | 1.65 | 0.49 |
| 375-73-5 | Perfluorobutanesulfonic acid (PFBS) | 13.7 | | 1.65 | 0.52 |
| 355-46-4 | Perfluorohexanesulfonic acid (PFHxS) | 7.57 | | 1.65 | 0.55 |
| 375-92-8 | Perfluoroheptanesulfonic Acid (PFHpS) | 0.97 | J | 1.65 | 0.32 |
| 1763-23-1 | Perfluorooctanesulfonic acid (PFOS) | 44.9 | | 1.65 | 0.72 |
| 335-77-3 | Perfluorodecanesulfonic acid (PFDS) | 0.40 | U | 1.65 | 0.40 |
| 754-91-6 | Perfluorooctanesulfonamide (PFOSA) | 0.47 | U | 1.65 | 0.47 |
| 2355-31-9 | N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.65 | U | 4.13 | 0.65 |
| 2991-50-6 | N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 0.77 | U | 4.13 | 0.77 |
| 27619-97-2 | 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 3.33 | J | 4.13 | 0.59 |
| 39108-34-4 | 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 1.34 | J | 1.65 | 0.55 |

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

4

Lab Name: Eurofins TestAmerica, Burlington  Job No.: 460-229152-1

SDG No.:

Client Sample ID: HEX-EQUIPMENTBLANK-030321  Lab Sample ID: 460-229152-4

Matrix: Water  Lab File ID: PA210312B21.d

Analysis Method: 537 (modified)  Date Collected: 03/03/2021 12:10

Extraction Method: 3535  Date Extracted: 03/09/2021 13:56

Sample wt/vol: 298.4(mL)  Date Analyzed: 03/12/2021 14:46

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 20(uL)  GC Column: C-18 ID: 4.6(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 164776  Units: ng/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 375-22-4 | Perfluorobutanoic acid (PFBA) | 0.95 | U | 4.19 | 0.95 |
| 2706-90-3 | Perfluoropentanoic acid (PFPeA) | 0.90 | U | 1.68 | 0.90 |
| 307-24-4 | Perfluorohexanoic acid (PFHxA) | 0.70 | U | 1.68 | 0.70 |
| 375-85-9 | Perfluoroheptanoic acid (PFHpA) | 0.39 | U | 1.68 | 0.39 |
| 335-67-1 | Perfluorooctanoic acid (PFOA) | 0.82 | U | 1.68 | 0.82 |
| 375-95-1 | Perfluorononanoic acid (PFNA) | 0.49 | U | 1.68 | 0.49 |
| 335-76-2 | Perfluorodecanoic acid (PFDA) | 0.39 | U | 1.68 | 0.39 |
| 2058-94-8 | Perfluoroundecanoic acid (PFUnA) | 0.61 | U | 1.68 | 0.61 |
| 307-55-1 | Perfluorododecanoic acid (PFDoA) | 0.39 | U | 1.68 | 0.39 |
| 72629-94-8 | Perfluorotridecanoic acid (PFTriA) | 0.36 | U | 1.68 | 0.36 |
| 376-06-7 | Perfluorotetradecanoic acid (PFTeA) | 0.49 | U | 1.68 | 0.49 |
| 375-73-5 | Perfluorobutanesulfonic acid (PFBS) | 0.53 | U | 1.68 | 0.53 |
| 355-46-4 | Perfluorohexanesulfonic acid (PFHxS) | 0.56 | U | 1.68 | 0.56 |
| 375-92-8 | Perfluoroheptanesulfonic Acid (PFHpS) | 0.33 | U | 1.68 | 0.33 |
| 1763-23-1 | Perfluorooctanesulfonic acid (PFOS) | 0.73 | U | 1.68 | 0.73 |
| 335-77-3 | Perfluorodecanesulfonic acid (PFDS) | 0.40 | U | 1.68 | 0.40 |
| 754-91-6 | Perfluorooctanesulfonamide (PFOSA) | 0.48 | U | 1.68 | 0.48 |
| 2355-31-9 | N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 0.66 | U | 4.19 | 0.66 |
| 2991-50-6 | N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA) | 0.78 | U | 4.19 | 0.78 |
| 27619-97-2 | 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2) | 0.60 | U | 4.19 | 0.60 |
| 39108-34-4 | 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2) | 0.55 | U | 1.68 | 0.55 |

ENVIRONMENTAL
Data Services, Inc.

# DATA USABILITY SUMMARY REPORT
# BRONX3536, NEW YORK

Client: Environmental Assessment & Remediations, Patchogue, New York
SDG: 460-229278-1
Laboratory: Eurofins Test America., Edison, New Jersey
Site: DEC-Bronx3536, New York
Date: April 6, 2021

| EDS ID | Client Sample ID | Laboratory Sample ID | Matrix |
|---|---|---|---|
| 1 | HEX-MW06-030321 | 460-229278-1 | Water |
| 2 | HEX-MW12-030321 | 460-229278-2 | Water |
| 2MS | HEX-MW12-030321MS | 460-229278-2MS | Water |
| 2MSD | HEX-MW12-030321MSD | 460-229278-2MSD | Water |
| 3 | HEX-MWX-030321 | 460-229278-3 | Water |
| 4 | HEX-EQUIPMENT BLANK-030321 | 460-229278-4 | Water |

A Data Usability Summary Review was performed on the analytical data for three water samples and one aqueous equipment blank sample collected on March 3, 2021 by Environmental Assessment & Remediations at the Bronx3536 site in New York. The samples were analyzed under Environmental Protection Agency (USEPA) "Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions".

Specific method references are as follows:

| *Analysis* | *Method References* |
|---|---|
| 1,4-Dioxane | USEPA SW-846 Method 8270E-SIM |

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-35A, Revision 1, September 2016: Semivolatile Data Validation;
- and the reviewer's professional judgment.

The following items/criteria were reviewed for this report:

***Organics***

- Data Completeness
- Holding times and sample preservation
- Gas Chromatography (GC)/Mass Spectroscopy (MS) tuning
- Initial and Continuing Calibration summaries
- Method blank and field blank contamination

- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample (LCS) recoveries
- Internal standard area and retention time summary forms
- Compound Quantitation
- Tentatively Identified Compounds (TICs)
- Field Duplicate sample precision

## Data Usability Assessment

There were no rejections of data.

The data are acceptable for the intended purposes. There were no qualifications.

## Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

## Semivolatile Organic Compounds by SIM (1,4-Dioxane)

## Holding Times

- All samples were extracted within 7 days for water samples and analyzed within 40 days.

## GC/MS Tuning

- All criteria were met.

## Initial Calibration

- The initial calibrations exhibited acceptable %RSD and/or correlation coefficients and mean RRF values.

## Continuing Calibration

- The continuing calibrations exhibited acceptable %D and RRF values.

## Method Blank

- The method blanks were free of contamination.

## Field Blank

- Field QC sample HEX-EQUIPMENT BLANK-030321 was free of contamination.

## Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate percent recoveries (%R).

## Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The MS/MSD samples acceptable percent recoveries (%R) and RPD values.

## Laboratory Control Samples

- The LCS samples exhibited acceptable percent recoveries (%R).

## Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

## Compound Quantitation

- All criteria were met.

## Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision was acceptable.

| 1,4-Dioxane | | | | |
|---|---|---|---|---|
| Compound | HEX-MW12-030321 ug/L | HEX-MWX-030321 ug/L | RPD | Qualifier |
| 1,4-Dioxane | 1.5 | 1.5 | 0% | None |

Please contact the undersigned at (561) 475-2000 if you have any questions or need further information.

Signed: Nancy Weaver Dated: 4/7/21

Nancy Weaver
Senior Chemist

| Data Qualifier | Definition |
|---|---|
| U | The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit. |
| J | The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. |
| J+ | The result is an estimated quantity, but the result may be biased high. |
| J- | The result is an estimated quantity, but the result may be biased low. |
| NJ | The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples. |
| UJ | The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise. |
| R | The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples. |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1
SDG No.:
Client Sample ID: HEX-MW06-030321  Lab Sample ID: 460-229278-1
Matrix: Water  Lab File ID: C5167.D
Analysis Method: 8270E SIM ID  Date Collected: 03/03/2021 08:55
Extract. Method: 3510C  Date Extracted: 03/06/2021 08:30
Sample wt/vol: 250(mL)  Date Analyzed: 03/06/2021 22:23
Con. Extract Vol.: 2(mL)  Dilution Factor: 1
Injection Volume: 5(uL)  Level: (low/med) Low
% Moisture:  GPC Cleanup:(Y/N) N
Analysis Batch No.: 762930  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 123-91-1 | 1,4-Dioxane | 0.016 | U | 0.20 | 0.016 |

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17647-74-4 | 1,4-Dioxane-d8 | 40 | | 10-150 |



MW 4/6/21

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

2

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Client Sample ID: HEX-MW12-030321  Lab Sample ID: 460-229278-2

Matrix: Water  Lab File ID: C5157.D

Analysis Method: 8270E SIM ID  Date Collected: 03/03/2021 11:45

Extract. Method: 3510C  Date Extracted: 03/06/2021 08:30

Sample wt/vol: 250(mL)  Date Analyzed: 03/06/2021 19:47

Con. Extract Vol.: 2(mL)  Dilution Factor: 1

Injection Volume: 5(uL)  Level: (low/med) Low

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 762930  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 123-91-1 | 1,4-Dioxane | 1.5 | | 0.20 | 0.016 |

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17647-74-4 | 1,4-Dioxane-d8 | 32 | | 10-150 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

3

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Client Sample ID: HEX-MWX-030321  Lab Sample ID: 460-229278-3

Matrix: Water  Lab File ID: C5168.D

Analysis Method: 8270E SIM ID  Date Collected: 03/03/2021 00:00

Extract. Method: 3510C  Date Extracted: 03/06/2021 08:30

Sample wt/vol: 250(mL)  Date Analyzed: 03/06/2021 22:38

Con. Extract Vol.: 2(mL)  Dilution Factor: 1

Injection Volume: 5(uL)  Level: (low/med) Low

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 762930  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 123-91-1 | 1,4-Dioxane | 1.5 | | 0.20 | 0.016 |

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17647-74-4 | 1,4-Dioxane-d8 | 32 | | 10-150 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

4

Lab Name: Eurofins TestAmerica, Edison  Job No.: 460-229278-1

SDG No.:

Client Sample ID: HEX-EQUIPMENT BLANK-030321  Lab Sample ID: 460-229278-4

Matrix: Water  Lab File ID: C5169.D

Analysis Method: 8270E SIM ID  Date Collected: 03/03/2021 12:10

Extract. Method: 3510C  Date Extracted: 03/06/2021 08:30

Sample wt/vol: 250(mL)  Date Analyzed: 03/06/2021 22:54

Con. Extract Vol.: 2(mL)  Dilution Factor: 1

Injection Volume: 5(uL)  Level: (low/med) Low

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 762930  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 123-91-1 | 1,4-Dioxane | 0.016 | U | 0.20 | 0.016 |

| CAS NO. | ISOTOPE DILUTION | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17647-74-4 | 1,4-Dioxane-d8 | 37 | | 10-150 |

# Appendix B

# Institutional/Engineering Control Certification

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**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**
Division of Environmental Remediation
625 Broadway, 11th Floor, Albany, NY 12233-720
P: (518)402-9543 | F: (518)402-9547
www.dec.ny.gov

Standby Consultant/Contractor Reminder Notice: 10/4/2021
Site Management Periodic Review

Liane Desantis
EA Engineering
269 west jefferson st
Syracuse, NY 13202
ldesantis@eaest.com

**Site Name:** Hexagon Laboratories
**Site No.:** 203003
**Site Address:** 3536 Pear Tree Avenue
Bronx, NY 10475

Dear Liane Desantis:

This letter and attached certification have been mailed to you because you are the listed standby consultant/contractor for a state-funded State Superfund site that is currently in the site management (SM) phase of remediation, This letter is intended to serve as a reminder that sites in active Site Management undergo a periodic review to ensure that the selected remedy continues to be protective and that a report is due. This review and resulting report, referred to as the Periodic Review Report (PRR), will document the implementation and compliance with site specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (http://www.dec.ny.gov/docs/remediation_hudson_pdf/der10.pdf) provides guidance regarding the information that should be included in the PRR. A generic outline is attached as Enclosure 3 "Periodic Review Report (PRR) General Outline" .

Please provide a PRR and sign and date the attached certification (Enclosure 1 "Engineering Controls - Standby Consultant/Contractor") by July 30, 2021. The PRR shall encompass the entire reporting period as indicated on the enclosed certification. If there has been a change in standby consultants/contractors during the reporting period, the certification you provide may rely on reports and documentation issued by previous consultants/contractors. In this instance, the DEC understands that data and material included in previous consultants/contractors' reports and documentation was not created by you, but that it has been reviewed and accepted as valid by you, to the best of your knowledge.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for the site was completed, SM may be governed by multiple individual documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan; etc.) or one comprehensive Site Management Plan.

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan").

Additionally, the technical requirements and objectives for SM are stated in the decision document (e.g., Record of Decision).

When you submit the PRR, include the enclosed form (Enclosure 1), signed, certifying that all SM requirements are being met. The Engineering Controls (ECs) portion of the form must be signed by a Qualified Environmental Professional. If you cannot certify that all SM requirements are being met, a Corrective Measures Work Plan will be developed in conjunction with the DEC. This work plan shall include scheduling of activities as well as detailed cost information in a proposed budget. The work plan will be subject to final review and must be approved by the Department before any work included in the Work Plan shall commence. Instructions for completing the enclosed form are included as Enclosure 2 "Certification Instructions."

The certification form and PRR shall be submitted in electronic format unless a hard copy is specified by the DEC project manager. All supporting documentation (e.g., data, reports, etc.) should be submitted in electronic format only. These documents and electronic submissions should be sent to Sarah Saucier, Project Manager.

New York State Department of Environmental Conservation
Division of Environmental Remediation, BURE
625 Broadway
Albany, NY 12233-7017

Phone number: 518-402-9675. E-mail: sarah.saucier@dec.ny.gov

Enclosures

ec: Sarah Saucier, Project Manager / Sarah Saucier, Section Chief

**Enclosure 1**
**Engineering Controls - Standby Consultant/Contractor Certification Form**

**Site Details** **Box 1**

**Site No. 203003**

**Site Name Hexagon Laboratories**

Site Address: 3536 Pear Tree Avenue Zip Code: 10475
City/Town: Bronx
County: Bronx
Site Acreage: 1.0

Reporting Period: January 15, 2012 to June 30, 2021

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

**Box 2**

| | YES | NO |
|---|---|---|
| 6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial | ☒ | ☐ |
| 7. Are all ICs/ECs in place and functioning as designed? | ☒ | ☐ |

**IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.**

Signature of Standby Consultant/Contractor Date

**SITE NO. 203003** (BOX 3)

**Description of Institutional Controls**

| Parcel | Owner | Institutional Control |
|---|---|---|
| **52830043** | Louis Weiner | Site Management Plan<br>Landuse Restriction<br><br>Ground Water Use Restriction |

There is an environmental notice and a site management plan which restricts groundwater use on the site.

**Description of Engineering Controls** (BOX 4)

| Parcel | Engineering Control |
|---|---|
| **52830043** | Cover System<br>Fencing/Access Control |

On site there is a soil cover system comprised of a minimum of 24 inches of clean soil, a geotextile fabric layer, and 6 inches of crushed bluestone gravel. This ~~cape~~ 2 cap should be monitored annually. gcu

Exposure to remaining contamination is prevented through a well cover system that is comprised of a locked J-plug and a bolted flush mounted cover which is over the well.

The site is enclosed in a chain-link fence topped with barbed wire to ensure no public access to the site.

(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 certification, including data and material prepared by previous

   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

| YES | NO |
|---|---|
| ☒ | ☐ |

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or 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) nothing has occurred that would constitute a failure to comply with the Site Management Plan, or equivalent if no Site Management Plan exists.

| YES | NO |
|---|---|
| ☒ | ☐ |

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.**

Signature of Standby Consultant/Contractor

Date

Box 6

## IC/EC CERTIFICATIONS

### Qualified Environmental Professional Signature

I certify that all information in Boxes 2 through 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 JAMES C. HAYWARD at 269 WEST JEFFERSON ST
print name

SYRACUSE, NY 13202

(EA ENGINEERING, P.C.)
(print business address)

am certifying as a Qualified Environmental Professional.

James C. Hayward
Signature of Qualified Environmental Professional

STATE OF NEW YORK
JAMES C HAYWARD
LICENSED PROFESSIONAL ENGINEER
079439
Stamp (Required for PE)

Date 10/5/2021

**Enclosure 2**

**Certification Instructions**

**I. Verification of Site Details** (Box 1 and Box 2):

Answer the "YES/NO" questions in the Verification of Site Details Section. The Engineering Standby Contractor may include handwritten changes and/or other supporting documentation, as necessary.

**II. Certification of Institutional Controls/ Engineering Controls** (Boxes 3, 4, and 5)

1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Engineering Standby Contractor should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered. The DEC PM should be contacted to begin development of a plan of proposed corrective measures and an associated schedule for completing the corrective measures, including detailed cost information in a proposed budget. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule and budget, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a revised Periodic Review Report (with a signed IC/EC Certification) must be submitted which covers both the period for which a certification initially could not be provided and the ensuing time period until the correction measure was completed. This revised PRR should be submitted within 45 days after completion of the corrective measures to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

**III. IC/EC Certification by Signature (**Box 6**):**

Where the site has Institutional and Engineering Controls, the certification statement in Box 6 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.

If you certified "YES" for each Institutional and Engineering Control, please complete and sign the IC/EC Certification page.

**IV. Certification Form Modifications**

Changes to the Certification Form shall be discussed with the Project Manager prior to submission. Any approved changes must be made on the Certification Form provided by Site Control and supporting documentation or reasoning shall be attached.

**Enclosure 3**
**Periodic Review Report (PRR) General Guidance**

I. Executive Summary: (1/2-page or less)
   A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
   B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
      1. progress made during the reporting period toward meeting the remedial objectives for the site
      2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
   C. Compliance
      1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
      2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
   D. Recommendations
      1. recommend whether any changes to the SMP are needed
      2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
      3. recommend whether the requirements for discontinuing site management have been met.

II. Site Overview (one page or less)
   A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
   B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness
   Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.

IV. IC/EC Plan Compliance Report (if applicable)
   A. IC/EC Requirements and Compliance
      1. Describe each control, its objective, and how performance of the control is evaluated.
      2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
      3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
      4. Conclusions and recommendations for changes.
   B. IC/EC Certification
      The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).

V. Monitoring Plan Compliance Report (if applicable)
   A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
   B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
   C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
   D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
   E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.

VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
   A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities,

frequencies, recordkeeping, etc.

B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.

C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.

D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.

E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;

1. whether all requirements of each plan were met during the reporting period
2. any requirements not met
3. proposed plans and a schedule for coming into full compliance.

B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals

1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.