



Geosyntec Consultants of NC, P.C.
NC License No.: C-3500 and C-295

INTERIM SEEP REMEDIATION SEEP C EFFECTIVENESS DEMONSTRATION REPORT

Chemours Fayetteville Works

Prepared for

The Chemours Company FC, LLC
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Prepared by

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Geosyntec Project Number TR0795A

April 16, 2021

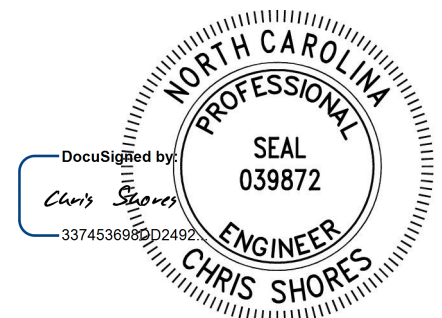


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LIST OF ACRONYMS AND ABBREVIATIONS

CO Addendum	Addendum to Consent Order Paragraph 12
ESB	Effluent Stilling Basin
FTC	flow-through cell
GAC	granular activated carbon
gpm	gallons per minute
HFPO-DA	hexafluoropropylene oxide dimer
IC	Inlet Chamber
ISB	influent Stilling Basin
ng/L	nanograms per liter
NCDEQ	North Carolina Department of Environmental Quality
NCDPS	North Carolina Department of Public Safety
NCNFIP	Division of Emergency Management National Flood Insurance Program
O&M	Operations and Maintenance
PFAS	per- and polyfluoroalkyl substances
PFMOAA	perfluoro-2-methoxyacetic acid
PMPA	perfluoromethoxypropyl carboxylic acid
USACE	United States Army Corps of Engineers
WQC	Water Quality Certification

1 INTRODUCTION

Geosyntec Consultants of NC, PC (Geosyntec) has prepared this Interim Seep Remediation Seep C Effectiveness Demonstration Report (“Effectiveness Report”) on behalf of The Chemours Company FC, LLC (Chemours). This report provides a record of construction completion and demonstration of interim effectiveness for the flow-through cell (FTC) installed as the interim remediation system at Seep C at the Chemours Fayetteville Works Site (the Site).

Pursuant to requirements of Paragraph 2(a)(vi) of the Addendum to Consent Order Paragraph 12 (CO Addendum), within four months after the construction of each seep’s FTC, Chemours shall submit a report demonstrating that:

- i. the FTC intercepted total base flow (during dry weather flow) at each seep; and
- ii. removed per- and polyfluoroalkyl substances (PFAS) - as measured by influent and effluent concentrations of indicator parameters hexafluoropropylene oxide dimer (HFPO-DA), perfluoromethoxypropyl carboxylic acid (PMPA), and perfluoro-2-methoxyacetic acid (PFMOAA) - at a minimum removal efficiency of 80% on a monthly average basis (the “Interim Effectiveness Demonstration”) for each of the second and third full calendar months of operation.

Substantial completion of construction was achieved at Seep C on December 16, 2020, and startup commenced thereafter. Therefore, this Effectiveness Report details the performance record of February and March 2021 (the second and third full calendar months of operation, respectively). Note that the first Operations and Maintenance (O&M) Report for Seep C was submitted on March 31, 2021 (O&M Report #1, Geosyntec, 2021) for the reporting period of December 16, 2020 through February 28, 2021; therefore, some overlap in data presentation (February 2021) is included herein.

As the O&M Report #1 from March 31, 2021 presented FTC performance data for the first time, detailed information was provided on the hydraulic mechanics of the system, flood management practices, data collection methodology and reduction process, and flow calculation formulas. As a simplifying step for presentation clarity, at various sections in this Effectiveness Report, reference is made to these details in O&M Report #1. For an overview of the hydraulic functionality of the system, see Section 1.1 of O&M Report #1.

2 SEEP C CONSTRUCTION

This section describes the regulatory permits that were obtained for the Seep C FTC, and the construction and startup sequence that was performed immediately following.

2.1 Permits Obtained

The following permits were obtained prior to construction:

- September 25, 2020: No-Rise Concurrence Letter from North Carolina Department of Public Safety (NCDPS) Division of Emergency Management National Flood Insurance Program (NCNFIP), provided herein as Appendix A. The NCNFIP review concurred that there was no increase in base flood elevation or floodway elevation from the construction of the FTCs. Note that this hydrologic evaluation required consideration of all four FTCs, thus this concurrence letter will apply to Seeps A, B, and D as well.
- September 28, 2020: Stormwater permit from Bladen County, North Carolina Department of Environmental Quality (NCDEQ), project ID BLADE-2021-004, provided herein as Appendix B. This stormwater permit applied to Seep C only; an additional permit was obtained for Seeps A, B, and D, and will be detailed in the Effectiveness Reports for those FTCs.
- October 5, 2020: Section 401 Water Quality Certification (WQC) and Section 404 Permit, permit number SAW-2019-00206, from NCDEQ and the United States Army Corps of Engineers (USACE) respectively, provided herein as Appendix C. This initial 401 WQC/404 Permit applies to Seep C only; an additional permit was obtained for Seeps A, B, and D, and will be detailed in the Effectiveness Reports for those FTCs. Proof of payment of stream and wetland mitigation credits for Seep C was submitted on October 7, 2020 and the USACE issued approval for in-stream construction that same day. The Certificate of Completion for Seep C was submitted to USACE on April 16, 2021 and is also provided within this appendix.

2.2 Construction and Startup Sequence

Construction initiated with access road and laydown area grading immediately upon receipt of the stormwater permit (i.e., September 28). In-stream construction began on October 7 after USACE approval as noted above.

The in-stream earthwork was complete and sheet pile installation began on October 19. As shown in the civil as-built record drawings (Appendix D), two rows of sheet pile were installed (the upgradient and downgradient faces the FTC). Concrete formwork was initiated November 9 and the slab and walls were poured by November 24. Mechanical work (piping and valving) was complete by December 9. The mechanical as-built record drawings are provided in Appendix E.

Hydrostatic testing to evaluate the water tightness of each FTC chamber was performed over December 14-16. The FTC was put into service on December 16.

During the 11 weeks of construction, the USGS monitoring station at the W.O. Huske Lock and Dam recorded over 14 inches of rain, including 8 inches of rain received in a single storm on November 8. The impact of the numerous wet weather events during startup were documented in O&M Report #1 and also discussed in Section 3 herein. The elevation of the Cape Fear River relative to key elevations of the Seep C FTC for the February-March reporting period is shown in Figure 1.

Some construction elements continued after substantial completion allowed for startup of the system, namely:

- Concrete pours for the maintenance pads
- Surface restoration
- Weir installation (see detailed discussion in Section 1.2 of O&M Report #1)

3 SEEP C PERFORMANCE EVALUATION

The following sections describe the evaluation of base flow capture and PFAS removal efficiency, per the requirements of Paragraph 2(a)(vi).

3.1 Base Flow Capture

3.1.1 System Flowrate

A detailed discussion of pressure transducer water level measurements in the Effluent Stilling Basin (ESB), and the data reduction process to convert these levels to flow rates, is provided in Section 3.1, 3.4.1, and 4.1.1 of O&M Report #1. This data reduction process, updated for the Effectiveness Report period of February-March 2021, is provided in Appendix F.

Figure 2 shows the measurable flowrates through the FTC over the reporting period. For instances where the system was known to be processing base flow but transducer data were not available, flowrate was imputed. The extrapolation from February 1 through March 9, 2021 (i.e., the date of Weir 3 installation completion), utilized the median flowrate from the entire dataset of measurable flowrates.

The median of the measured flowrate through the FTC during the current reporting period was 124 gallons per minute (gpm), and the calculated 95th percentile value was 177 gpm. The design basis of 76 gpm (Geosyntec, 2020) was selected as the 95th percentile value of dry weather base flow from flume pre-design data. Therefore, the system is capable of treating approximately double the design basis under favorable hydraulic conditions.

Using the measured and extrapolated flowrate calculations, approximately 7,200,000 gallons of water was treated by the FTC from February 1 through March 31, 2021.

3.1.2 Bypass Flow

A detailed discussion of pressure transducer water level measurements in the FTC Influent Stilling Basin (ISB), and the data reduction process to convert these levels to the elevation of the bypass spillway, is provided in Section 3.1, 3.4.1, and 4.1.2 of O&M Report #1. This data reduction process, updated for the Effectiveness Report period of February-March 2021, is provided in Appendix F.

The resulting figure for influent water level elevation, and occurrences of bypass flow, is provided in Figure 3. As shown, bypass flow was observed predominately in February due to the extreme weather and flooding in this month (6.3 inches of rain compared to a historical average of 2.9). In March, approximately 2.1 inches of rain fell, similar in magnitude to the historical average of 2.8 inches. Overall, the total rainfall in the reporting period (8.4 inches) was approximately 47% greater than average (5.7 inches).

Bypass flow in March was significantly less frequent than in February due to less rainfall and continuous improvement in the preventative maintenance procedures employed at the FTC. On March 16, 0.88 inches of rain fell in a roughly 8-hour period, and the ISB datalogger subsequently

recorded an increase in the impoundment elevation that peaked on March 17. An In-Situ Aqua TROLL 500 multiparameter sonde had also been installed in the ISB (beginning on March 11) and recorded a significant spike in turbidity that peaked in the evening of March 16, and did not subside back to baseline levels until March 18 (Figure 4).

Maintenance events conducted from March 16-19 allowed for the impoundment level to drop between March 19-21. On March 21, the impoundment level increased again above the spillway until March 23. On March 23, the top layer of granular activated carbon (GAC) was removed from the lead filter bed, and the impoundment level dropped significantly. Overall, during this period of bypass and maintenance, the system processed an average flow rate of approximately 120 gpm. Later in the month, an additional 0.89 inches of rain (cumulative) fell between March 24-31; as shown on Figure 3, wet weather base flow from this cumulative rainfall was fully captured and treated by the FTC.

3.2 PFAS Removal

The sections that follow discuss the FTC performance monitoring sampling procedures, and analytical results, and the overall efficiency of PFAS removal by the FTC.

3.2.1 Performance Monitoring Sampling

Four performance monitoring samples – a minimum of twice per calendar month per CO Addendum Paragraph 2(a)(iii) - were collected during this reporting period (Table 1). Sampling procedures using the Teledyne autosamplers are described in Section 3.3.1 in the O&M Report #1. Samples were stored on wet ice in a cooler until shipment to an external laboratory (Eurofins TestAmerica Laboratories Sacramento or Lancaster). Chain-of-custody documents were completed and included with each shipment. Performance monitoring samples were analyzed for Table 3+ PFAS, as outlined in the *Interim Seep Remediation System Plan* (Geosyntec, 2020). Laboratory analytical reports are provided in Appendix G.

3.2.2 Performance Monitoring Sampling Results

Analytical results for the six composite performance monitoring samples are provided in Table 2 and described below.

Total Table 3+ PFAS compounds (17 compounds) in the influent ranged from 48,000 to 150,000 nanograms per liter (ng/L). The average and median total Table 3+ (17 compounds) concentrations were approximately 112,685 and 140,000 ng/L, respectively¹. The outlier minimum value of 48,000 ng/L was a 24-hour composite sample collected on February 27, 2021 and is suspected to

¹ Due to shipping delays, analytical results for the sample collected on March 31 (SEEP-C-INFLUENT-336-033121 and SEEP-C-EFFLUENT-336-033121) were not yet available for this reporting deadline. As such, statistics and removal percentages presented here include data for samples collected on February 13 and 27, and March 19, 2021. Once available, results for the sample collected on March 31, 2021 will be transmitted to NCDEQ via a report addendum.

be diluted by wet weather flow. Within each influent sample, the constituents of highest concentration were HFPO DA, PFMOAA, and PFO2HxA.

Total Table 3+ PFAS compounds (17 compounds) in the effluent ranged from 210 to 540 ng/L, representing a removal efficiency range of 97.9 to 99.9% in the four composite samples².

3.2.3 System Effectiveness

System effectiveness, defined by the percentage removal of the combined concentrations of the three indicator parameters (HFPO-DA, PFMOAA and PMPA), is determined on a monthly average basis for the system using volume weighted concentrations of the influent and effluent samples. Volume weighted concentrations were developed in the event that either the influent and effluent autosamplers have different compositing durations or that the two composite sampling periods in the month have different durations (e.g. 14 days and 10 days). Both circumstances could arise due to a potential equipment malfunction or severe weather event. Weighting by volume provides a representative assessment of mass present in both the influent and effluent over time; samples corresponding to greater flow volumes will have a proportionately higher weight. System effectiveness is calculated using the equation presented in Section 4.3 of the O&M Report #1.

Based on the system flowrate data (Section 3.1.1) and the performance monitoring composite sample data of the three indicator compounds (Section 3.2.2), the system effectiveness was calculated to be 99.4%². This value is similar to the Table 3+ removal efficiency described in Section 3.2.2 which is due to the fact that the removal efficiency was mostly steady throughout the reporting period, and that the influent and effluent composite periods were nearly identical.

² Due to shipping delays, analytical results for the sample collected on March 31 (SEEP-C-INFLUENT-336-033121 and SEEP-C-EFFLUENT-336-033121) were not yet available for this reporting deadline. As such, statistics and removal percentages presented here include data for samples collected on February 13 and 27, and March 19, 2021. Once available, results for the sample collected on March 31, 2021 will be transmitted to NCDEQ via a report addendum.

4 SUMMARY

The following summarizes the evaluation of Seep C FTC's effectiveness at capturing total baseflow and removing PFAS for the second and third full calendar months of operation (February and March 2021).

- Flow data from the FTC demonstrates the system is capable of treating roughly double the design basis flow rate under favorable hydraulic conditions (i.e., the 95th percentile of measured flow was 177 gpm as compared to the pre-construction estimated 95th percentile of dry weather flow value of 76 gpm). FTC process flow rates can be affected by sediment accumulating within the filter beds and river levels increasing above the discharge pipe, both of which affect the dynamic head losses through the system. Nonetheless, the system has demonstrated the ability to process total base flow, and it will likely treat at least a portion of wet weather flow for the lifetime of the system.
- Performance monitoring results from the composite samples indicate the removal efficiency, based on the Total Table 3+ 17 Compounds, ranged from 97.9 to 99.9% and on average was 99.1%. The System Effectiveness flow-weighted calculation yielded a similar result (99.4%). The system prevented an estimated 6.53 lbs of PFAS from being discharged to the Cape Fear River³.
- Dataloggers within the FTC indicate that large storms result in significant, but transient, spikes of fine-grained sediment into the filter beds. As detailed in the O&M Report #1, maintenance techniques continue to be optimized. To date, the most effective method has been removal of the top few inches of GAC within the lead filter bed after a storm event, as the fine-grained sediment is able to penetrate through the openings of the geocomposite above the GAC. A sand filter layer is currently in the process of being added to the Inlet Chamber (IC), to allow for fine-grained sediment removal prior to the influent reaching the filter beds. This will require frequent maintenance of the sand filter itself but will reduce the amount of sediment loading on the GAC. Additionally, turbidity curtains are being installed within the impoundment to attempt to capture suspended sediment before it enters the FTC. Although the FTC has demonstrated the ability to successfully capture above the design basis flow rate during these storm events, improvements will continue to be developed to mitigate, to the extent possible, sediment accumulation in the GAC and FTC bypass even during wet weather events.

³ Due to shipping delays, analytical results for the sample collected on March 31 (SEEP-C-INFLUENT-336-033121 and SEEP-C-EFFLUENT-336-033121) were not yet available for this reporting deadline. As such, statistics and removal percentages presented here include data for samples collected on February 13 and 27, and March 19, 2021. Once available, results for the sample collected on March 31, 2021, will be transmitted to NCDEQ via a report addendum.

5 REFERENCES

Geosyntec, 2020. Interim Seep Remediation System Plan. Chemours Fayetteville Works. 31 August 2020.

Geosyntec, 2021. Interim Seep Remediation System Plan Operations and Maintenance Report #1. Chemours Fayetteville Works. 31 March 2021.

TABLES

Table 1
Sampling Summary (Feb -Mar 2021)
 Chemours Fayetteville Works
 Fayetteville, North Carolina

Sample ID	Composite Period	Sample Date
SEEP-C-INFLUENT-192-021321 SEEP-C-EFFLUENT-192-021321	February 5-13, 2021 ^[1]	February 13, 2021
SEEP-C-INFLUENT-24-022721 SEEP-C-EFFLUENT-24-022721	February 24-27, 2021 ^[1]	February 27, 2021
SEEP-C-INFLUENT-336-031921 SEEP-C-EFFLUENT-336-031921	March 5-19, 2021 ^[1]	March 19, 2021
SEEP-C-INFLUENT-336-033121 ^[2] SEEP-C-EFFLUENT-336-033121 ^[2]	March 19-31, 2021	March 31, 2021

Notes

- 1 Discontinuities in sample composite period due to removal of autosamplers during river flooding events.
- 2 Due to shipping delays, sample analytical results were not yet available for this reporting deadline. Once available, these results will be transmitted to NCDEQ via a report addendum.
- 3 Sample Identification Label Key: "Seep - [A, B, C, or D] - [Sample Location Inside FTC] - [# of Aliquots in Composite Sample] - [MMDDYY]"

Table 2
Performance Monitoring Analytical Results
February - March 2021
 Chemours Fayetteville Works
 Fayetteville, NC

	SEEP-C-INFLUENT-192-021321	SEEP-C-EFFLUENT-192-021321	Percent Removal Composite Period:	SEEP-C-INFLUENT-24-022721	SEEP-C-EFFLUENT-24-022721	Percent Removal Composite Period:
	Sample Date: 02/13/2021	Sample Date: 02/13/2021	February 5-13, 2021	Sample Date: 02/27/2021	Sample Date: 02/27/2021	February 24-27, 2021
Hfpo Dimer Acid	15,000	59	99.6%	5,600	<81	100%
PFMOAA	71,000	300	99.6%	23,000	280	98.8%
PFO2HxA	25,000	65	99.7%	8,400	83	99.0%
PFO3OA	7,100	31	99.6%	3,000	<39	100%
PFO4DA	2,900	12	99.6%	820	<59	100%
PFO5DA	81	<2	100%	<78	<78	100%
PMPA	7,700	59	99.2%	3,800	660	82.6%
PEPA	3,000	<20	100%	1,200	<20	100%
PS Acid	<9.8	<2	100%	<20	<20	100%
Hydro-PS Acid	330	<2	100%	150	<6.1	100%
R-PSDA	850	4.6	99.5%	380	<71	100%
Hydrolyzed PSDA	1,000	4.3	99.6%	630	<38	100%
R-PSDCA	16	<2	100%	<17	<17	100%
NVHOS	680	2.3	99.7%	260	<15	100%
EVE Acid	<8.7	<2	100%	65	<17	100%
Hydro-EVE Acid	1,100	3.3	99.7%	380	<14	100%
R-EVE	770	3.3	99.6%	370	<72	100%
PES	4.4	<2	100%	<6.7	<6.7	100%
PFECA B	<13	<2	100%	<27	<27	100%
PFECA-G	<24	<2	100%	<48	<48	100%
Total Table 3+ (17 Compounds)*	130,000	530	99.6%	48,055	1,023	97.9%
Total Table 3+ (20 Compounds)*	140,000	540	99.6%	48,055	1,023	97.9%

Notes

The three Table 3+ compounds that are not included in the list of 17, but are included in the list of 20, are R-PSDA, R-EVE, and Hydrolyzed PSDA.

Bold - Analyte detected above associated reporting limit

EPA - Environmental Protection Agency

J - Analyte detected. Reported value may not be accurate or precise

ng/L - nanograms per liter

QA/QC - Quality assurance/ quality control

SOP - standard operating procedure

UJ - Analyte not detected. Reporting limit may not be accurate or precise.

-- - Due to shipping delays, sample analytical results were not yet available for this reporting deadline. Once available, these results will be transmitted to NCDEQ via a report addendum.

< - Analyte not detected above associated reporting limit.

Sample Identification Label Key: "Seep - [A, B, C, or D] - [Sample Location Inside FTC] - [# of Aliquots in Composite Sample] - [MMDDYY]"

Table 2
Performance Monitoring Analytical Results
February - March 2021
 Chemours Fayetteville Works
 Fayetteville, NC

	SEEP-C-INFLUENT-336-031921	SEEP-C-EFFLUENT-336-031921	Percent Removal Composite Period: March 5-19, 2021	SEEP-C-INFLUENT-336-033121	SEEP-C-EFFLUENT-336-033121	Percent Removal Composite Period: March 19-31, 2021
	Sample Date: 03/19/2021	Sample Date: 03/19/2021		Sample Date: 03/31/2021	Sample Date: 03/31/2021	
Hfpo Dimer Acid	18,000	11	100%	--	--	--
PFMOAA	79,000	150	99.8%	--	--	--
PFO2HxA	24,000	18	99.9%	--	--	--
PFO3OA	7,100	4.9	100%	--	--	--
PFO4DA	3,400	<2	100%	--	--	--
PFO5DA	74	<2	100%	--	--	--
PMPA	8,700	18	99.8%	--	--	--
PEPA	3,500	<20	100%	--	--	--
PS Acid	<9.8	<2	100%	--	--	--
Hydro-PS Acid	430	<2	100%	--	--	--
R-PSDA	660	5	100%	--	--	--
Hydrolyzed PSDA	800	<2	100%	--	--	--
R-PSDCA	16	<2	100%	--	--	--
NVHOS	780	<2	100%	--	--	--
EVE Acid	<8.7	<2	100%	--	--	--
Hydro-EVE Acid	1,300	<2	100%	--	--	--
R-EVE	740	<2	100%	--	--	--
PES	<3.4	<2	100%	--	--	--
PFECA B	<13	<2	100%	--	--	--
PFECA-G	<24	<2	100%	--	--	--
Total Table 3+ (17 Compounds)*	150,000	200	99.9%	--	--	--
Total Table 3+ (20 Compounds)*	150,000	210	99.9%	--	--	--

Notes

The three Table 3+ compounds that are not included in the list of 17, but are included in the list of 20, are R-PSDA, R-EVE, and Hydrolyzed PSDA.

Bold - Analyte detected above associated reporting limit

EPA - Environmental Protection Agency

J - Analyte detected. Reported value may not be accurate or precise

ng/L - nanograms per liter

QA/QC - Quality assurance/ quality control

SOP - standard operating procedure

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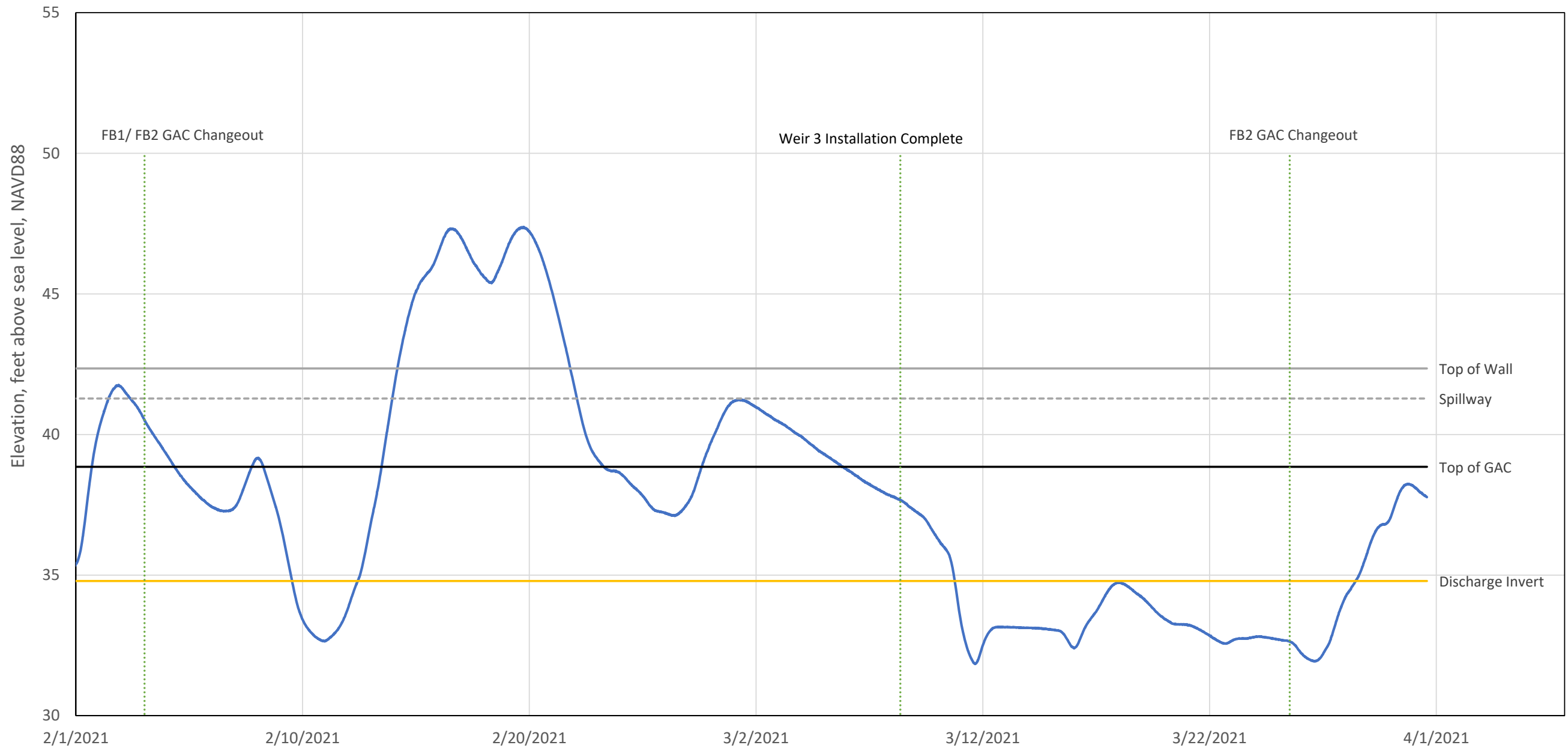
-- - Due to shipping delays, sample analytical results were not yet available for this reporting deadline. Once available, these results will be transmitted to NCDEQ via a report addendum.

< - Analyte not detected above associated reporting limit.

Sample Identification Label Key: "Seep - [A, B, C, or D] - [Sample Location Inside FTC] - [# of Aliquots in Composite Sample] - [MMDDYY]"

FIGURES

River Elevation During Seep C Flow Through Cell Operation (2/1/2021 through 03/31/2021)



Legend
— River

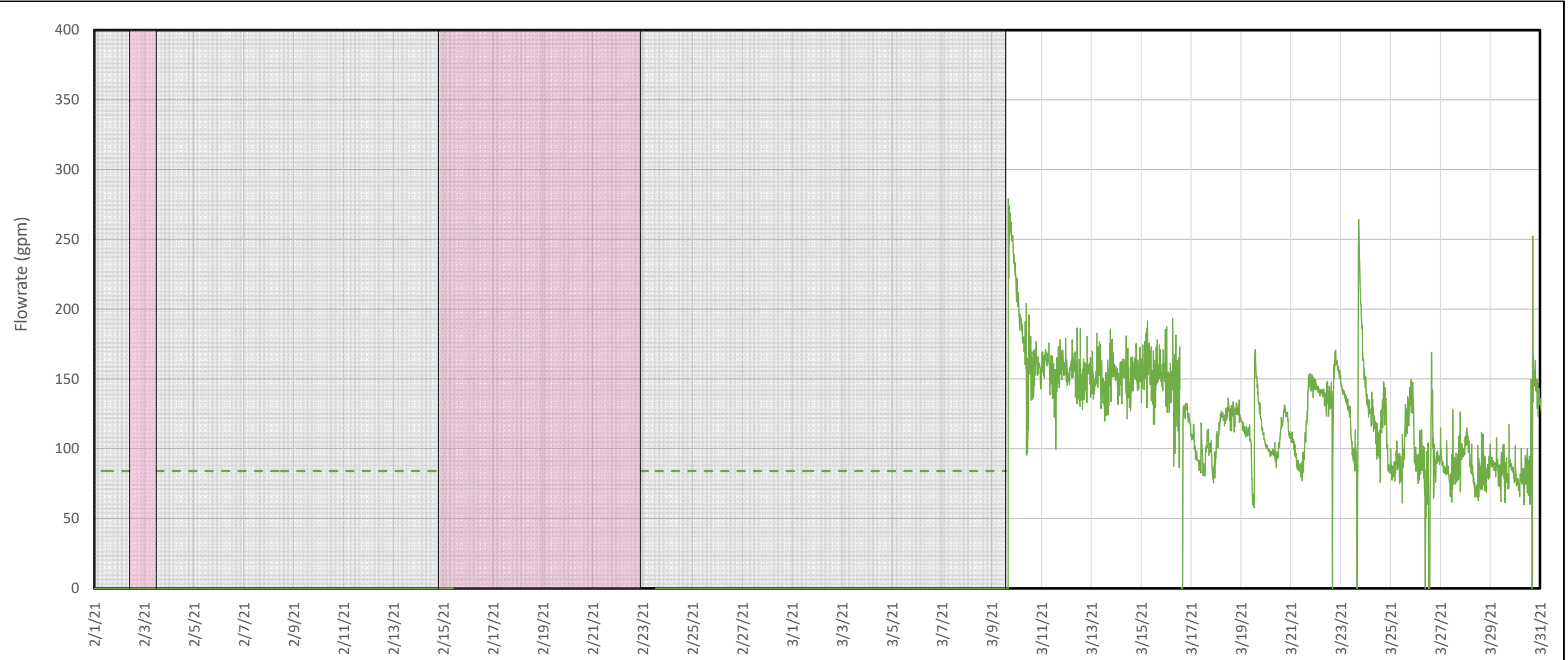
Notes:
 As-built survey information from RMA Surveying October 2020
 River elevation from USGS Huske Lock and Dam site 02105500, converted to NAVD88
 FB1/ FB2 = Filter Bed 1/ Filter Bed 2
 GAC = Granular Activated Carbon

River Level & FTC As-Built Elevations (Feb - Mar 2021) Chemours Fayetteville Works Fayetteville, North Carolina	
Geosyntec consultants	<small>Geosyntec Consultants of NC, P.C. NC License No.: C-3500 and C-295</small>
Raleigh, NC	April 2021

Figure
1

<https://project.saltlab.geosyntec.com/5/PW/Consent/Order/Shared Documents/A2 - Seeps 01MM/03 - Reporting/Effectiveness/2/Figures/Figure 1 - River Figure Update March 31.1.xlsm>

https://projects.leeb.geosyntec.com/5/FW/ConsentOrder/Shared/Documents/A2 - Seeps OMM/05 - Field/Transducers/Transducers Summary Data V3 - Updated Survey (March).xlsx?Fig2 - Qeif



Flowrate Statistics (gpm)

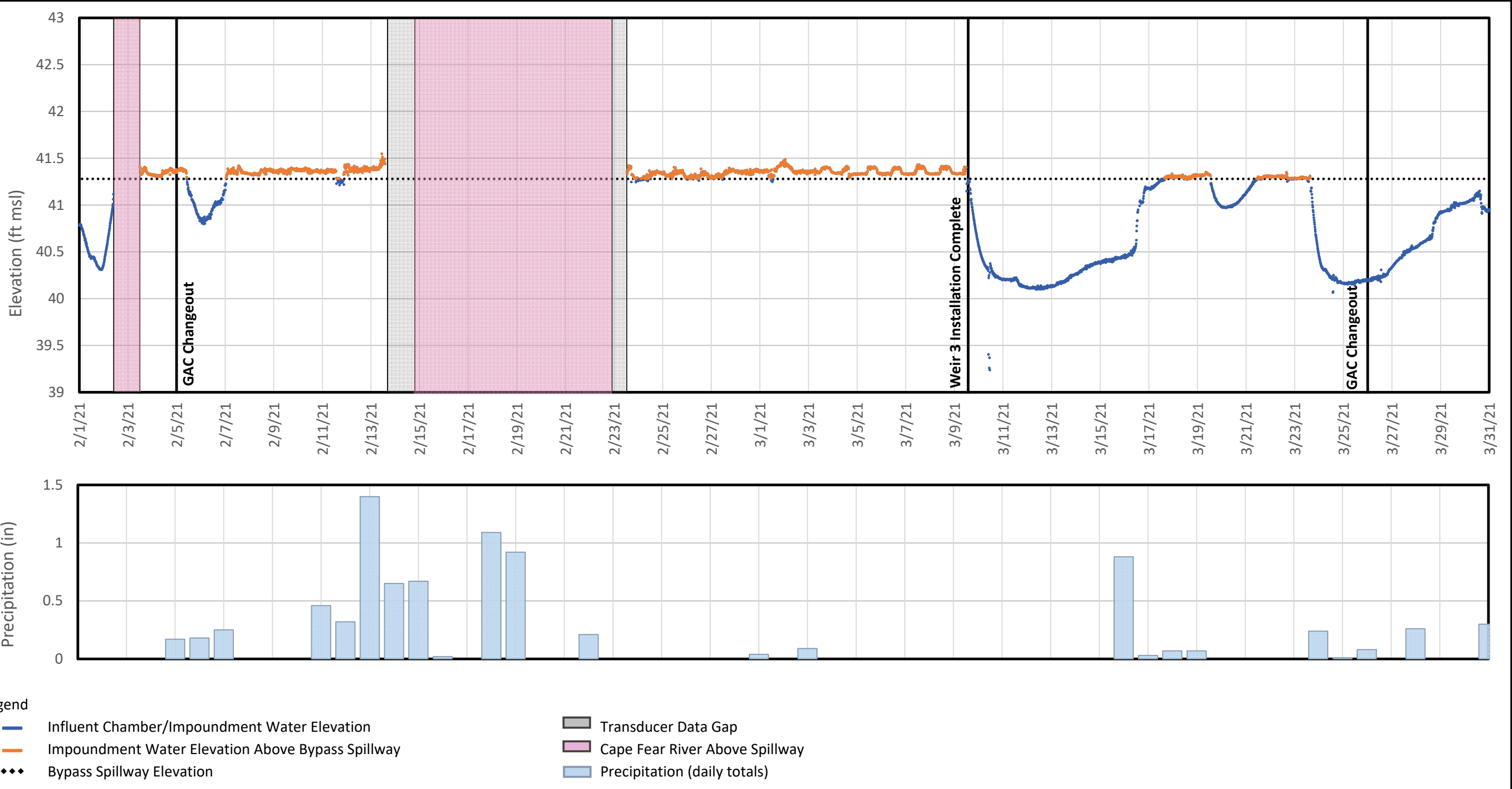
- Legend**
- Measureable Discharge Flowrate
 - - - Imputed Discharge Flowrate
 - Transducer Data Gap
 - Cape Fear River Above Spillway

	Current RP	Since Startup
Median Q	124	103
95 th percentile Q	177	169
Max Q	279	279

Notes:
 Figure 2 depicts the measurable discharge flowrate calculated using the Discharge Basin transducer data (solid green). Where transducer data was missing but flow through the System was observed (i.e., non-flooding conditions), flowrate was extrapolated (dashed green). The extrapolation from 1/29/21 through 3/9/2021 utilized the median flowrate from the entire dataset of measureable flowrates.
 Gaps in the transducer data record (grey shading) are described in Section 3.
 When the river is above the level of the Bypass Spillway, there is no driving flow gradient, and therefore the FTC does not process any flow (pink shading).

Measured and Imputed Discharge Flowrate (Feb - Mar 2021)	
Chemours Fayetteville Works Fayetteville, North Carolina	
Geosyntec [®] consultants <small>Geosyntec Consultants of NC, P.C. NC License No.: C 3500 and C 295</small>	Figure
Raleigh, NC	April 2021
2	

https://projects1esh.geosyntec.com/5/FWContentOrder/Shared Documents/A2 - Seeps OMM/05 - Field/Transducers/Transducers Summary Data V3 - Updated Survey (March).xlsx|Fig.3- Reduced Inf

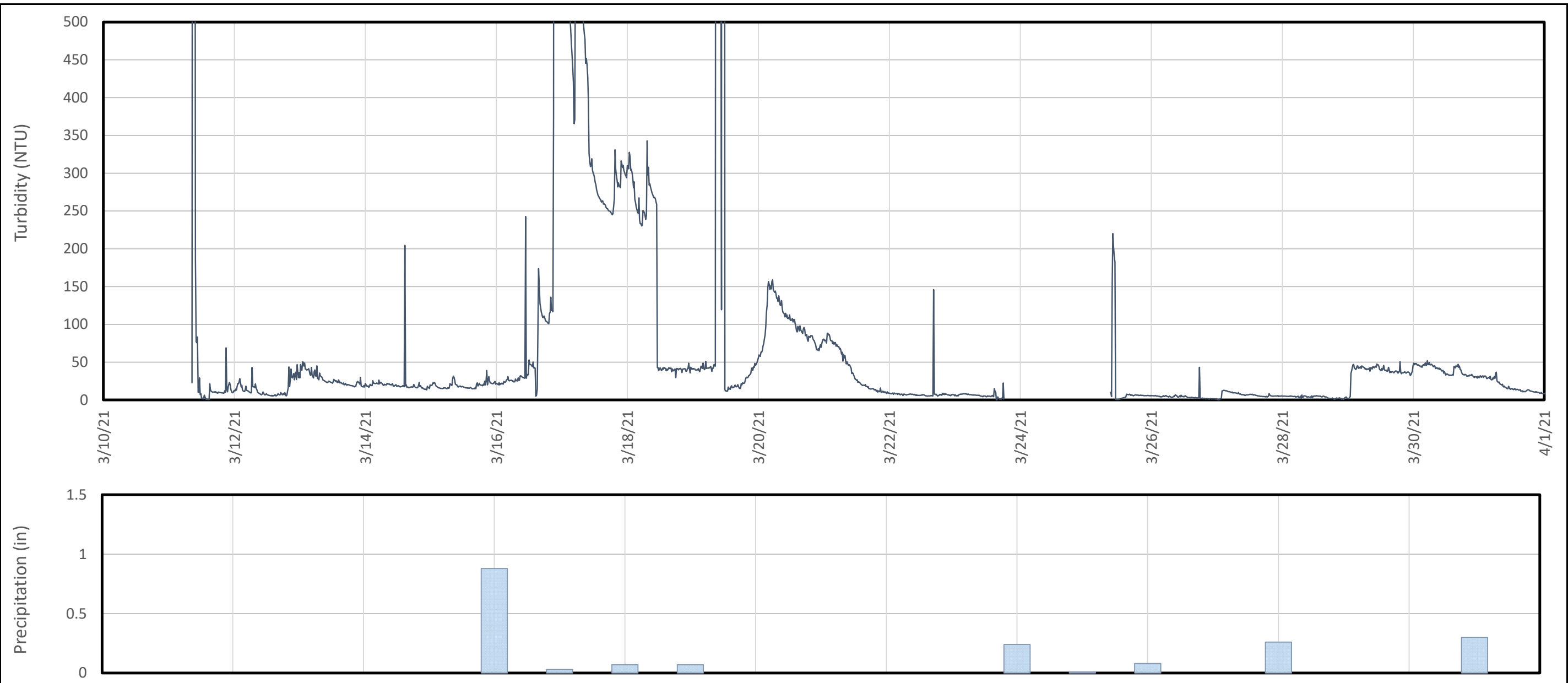


- Legend**
- Influent Chamber/Impoundment Water Elevation
 - Impoundment Water Elevation Above Bypass Spillway
 - ◆◆◆ Bypass Spillway Elevation
 - Transducer Data Gap
 - Cape Fear River Above Spillway
 - Precipitation (daily totals)

Notes:
 Figure 3 shows the influent transducer data that was collected during the reporting period (blue line). Instances of impoundment bypass flow are shown in orange.
 Gaps in the transducer data record (grey shading) are described in Section 3.
 When the river is above the level of the Bypass Spillway, there is no driving flow gradient, and therefore the FTC does not process any flow (pink shading).

Influent Water Elevation and Bypass Flow (Feb - Mar 2021)		Figure 3
Chemours Fayetteville Works Fayetteville, North Carolina		
Geosyntec [®] consultants	Geosyntec Consultants of NC, P.C. NC License No.: C 3500 and C 295	
Raleigh, NC	April 2021	

https://projects.geosyntec.com/5/FWCConsentOrder/Shared Documents/42 - Steps OMM/05 - Field/Turbidity Logging/Turbidity Figure.xlsx Fig 4



Legend
 — Turbidity
 ■ Precipitation (daily totals)

Notes
 NTU - Nephelometric Turbidity Unit
 Turbidity data logged with a AquaTROLL Turbidity Sensor placed in the influent stilling basin.
 The peak values recorded by the turbidity sensor (over 4,500 NTU) may be biased high, as the sensors can become clogged during high sediment-loading events. The interpretation of the turbidity data in the report is largely derived on the timing of the readings (i.e., baseline dry weather turbidity is very low and spikes after rain events). For clarity, the y-axis above is limited to 500 NTU.

Turbidity Logging and Precipitation (March 2021)	
Chemours Fayetteville Works Fayetteville, North Carolina	
Geosyntec consultants	Geosyntec Consultants of NC, P.C. NC License No.: C 3500 and C 295
Raleigh, NC	April 2021
Figure 4	

APPENDICES

APPENDIX A –
NCDPS NO-RISE
CONCURRENCE LETTER



North Carolina Department of Public Safety

Emergency Management

Roy Cooper, Governor
Erik A. Hooks, Secretary

Michael A. Sprayberry, Director

September 25, 2020

Greg Elkins, Planning Director
450 Smith Circle Drive
PO Box 2336
Elizabethtown, NC 28337

Subject: No-Rise Certification Study for Chemours Flow-through Cell Structures Project, Bladen County, North Carolina

Dear Mr. Elkins:

The North Carolina Department of Public Safety Division of Emergency Management Risk Management National Flood Insurance Program (NCNFIP) staff has reviewed the Engineering No-Rise Study Report and Certification for the proposed Chemours Flow-through Cell Structures Project located along Cape Fear River in Bladen County, North Carolina. The Report was prepared by Geosyntec Consultants of NC, P.C., Adrienne Nemura, P.E., dated September 11, 2020. It was received in this office on September 11, 2020.

Based on the information provided, the NCNFIP review indicates the report meets the requirements of the Federal Emergency Management Agency's (FEMA) guidance for a no-rise certification. The NCNFIP finds no objection to the conclusion of no increase in base flood elevation or floodway elevation as contained in the report.

A floodplain development permit will be required prior to starting work.

If you have any questions or concerns with the items herein, please contact me at (919) 825-2317, by email at jintao.wen@ncdps.gov or at the address shown on the footer of this document.

Sincerely,

Jintao Wen, Ph.D., P.E.
NC NFIP Engineer
Emergency Management

MAILING ADDRESS:
4218 Mail Service Center
Raleigh NC 27699-4218
www.ncem.org



An Equal Opportunity Employer

RM OFFICE LOCATION:
4105 Reedy Creek Road
Raleigh, NC 27607
Telephone: (919) 825-2341
Fax: (919) 825-0408

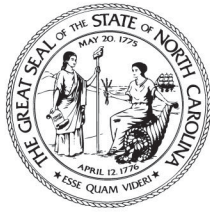
Page 2 of 2
September 25, 2020

cc: Eryn Futral, CFM, Eastern Branch Planner, NC Emergency Management

Geosyntec Consultants of NC, P.C.
Attn: Adrienne Nemura, P.E.,
2501 Blue Ridge Road, Suite 430
Raleigh, NC 27607

File

APPENDIX B –
BLADEN COUNTY NCDEQ
STORMWATER PERMIT



NORTH CAROLINA
Environmental Quality

ROY COOPER

Governor

MICHAEL S. REGAN

Secretary

BRIAN WRENN

Director

September 28, 2020

LETTER OF APPROVAL

Express Option

The Chemours Company
Attn: Brian D. Long, Plant Manager
22828 NC Hwy 87W
Fayetteville, NC 28306

RE: Project Name: Chemours Stormwater Diversion
Acres Approved: 0.91
Project ID: BLADE-2021-004
County: Bladen, City: Hollow Township, Address: NC 87 West
River Basin: Cape Fear
Stream Classification: Other
Submitted By: GEOServices, LLC
Date Received by LQS: September 28, 2020
Plan Type: Express

Dear Mr. Long:

This office has reviewed the subject erosion and sedimentation control plan. We find the plan to be acceptable and hereby issue this Letter of Approval. The enclosed Certificate of Approval must be posted at the job site. This plan shall expire three (3) years following the date of approval, if no land disturbing activity has been undertaken, as required by Title 15A NCAC 4B.0129.

As of April 1, 2019, all new construction activities are required to complete and submit an electronic Notice of Intent (NOI) form requesting a Certificate of Coverage (COC) under the NCG010000 Construction Stormwater General Permit. This form **MUST** be submitted and COC issued prior to the commencement of any land disturbing activity on the above-named project. The NOI form may be accessed at deq.nc.gov/NCG01. Please direct questions about the NOI form to Annette Lucas at Annette.lucas@ncdenr.gov or Paul Clark at Paul.clark@ncdenr.gov. After you submit a complete and correct NOI Form, a COC will be emailed to you within **three business days**. A \$100 fee will be charged annually until a Notice of Termination is issued. This fee is to be sent to the DEMLR Stormwater Central Office staff in Raleigh.

Title 15A NCAC 4B .0118(a) and the NCG01 permit require that the following documentation be kept on file at the job site:

1. The approved E&SC plan as well as any approved deviation.
2. The NCG01 permit and the COC, once it is received.
3. Records of inspections made during the previous 12 months.



This letter gives the notice required by G.S. 113A-61.1(a) of our right of periodic inspection to ensure compliance with the approved plan.

Title 15A NCAC 4B .0118(a) requires that a copy of the approved erosion control plan be on file at the job site. Also, this letter gives the notice required by G.S. 113A-61.1(a) of our right of periodic inspection to ensure compliance with the approved plan.

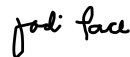
North Carolina's Sedimentation Pollution Control Act is performance-oriented, requiring protection of existing natural resources and adjoining properties. If, following the commencement of this project, it is determined that the erosion and sedimentation control plan is inadequate to meet the requirements of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statute 113A-51 through 66), this office may require revisions to the plan and implementation of the revisions to ensure compliance with the Act.

Acceptance and approval of this plan is conditioned upon your compliance with Federal and State water quality laws, regulations, and rules. In addition, local city or county ordinances or rules may also apply to this land-disturbing activity. This approval does not supersede any other permit or approval.

Please note that this approval is based in part on the accuracy of the information provided in the Financial Responsibility Form, which you provided. You are requested to file an amended form if there is any change in the information included on the form. This permit allows for a land-disturbance, as called for on the application plan, not to exceed the approved acres. Exceeding the acreage will be a violation of this permit and would require a revised plan and additional application fee. In addition, it would be helpful if you notify this office of the proposed starting date for this project. Please notify us if you plan to have a preconstruction conference.

Your cooperation is appreciated.

Sincerely,



Jodi Pace, EI
Regional Engineering Associate
DEMLR

Enclosures: Certificate of Approval
NPDES NCG01 Fact Sheet

cc: Chris Butler, GEOServices, LLC (electronic copy)
Matthew Chadwick, Building Inspector (electronic copy)
DEMLR - Fayetteville Regional Office File

APPENDIX C –
SECTION 401 WQC/SECTION 404 PERMIT
AND CERTIFICATE OF COMPLETION



DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343

October 5, 2020

Regulatory Division

Action ID. SAW-2019-00206

The Chemours Company
Ms. Christel Compton
22828 NC Highway 87 W
Fayetteville, NC 28306
CHRISTEL.E.COMPTON@chemours.com

Dear Ms. Compton,

In accordance with the written request of August 13, 2020, and the ensuing administrative record, enclosed is a permit to permanently impact 330 linear feet of stream channel and 0.22-acre of wetland and temporarily impact 125 linear feet of stream channel and 0.01-acre of wetland for the purpose of constructing an in-stream flow-through cell water treatment system to address PFAS contamination on the project site in accordance with a Consent Order issued by the North Carolina Superior Court for Bladen County.

Any deviation in the authorized work will likely require modification of this permit. If any change in the authorized work is necessary, you should promptly submit revised plans to the Corps showing the proposed changes. You may not undertake the proposed changes until the Corps notifies you that your permit has been modified.

Carefully read your permit. The general and special conditions are important. Your failure to comply with these conditions could result in a violation of Federal law. Certain significant general conditions require that:

- a. You must complete construction before October 5, 2025.
- b. You must notify this office in advance as to when you intend to commence and complete work.
- c. You must allow representatives from this office to make periodic visits to your worksite as deemed necessary to assure compliance with permit plans and conditions.

You should address all questions regarding this authorization to Emily Greer at the Wilmington Regulatory Field Office, telephone 910-251-4567 or email emily.c.greer@usace.army.mil.

Sincerely,

MCLENDON.C.S
COTT.1229682
071

Digitally signed by
MCLENDON.C.SCOTT.1229
682071
Date: 2020.10.05 16:38:44
-04'00'

Scott McLendon
Chief, Regulatory Division
Wilmington District

Enclosures:

Department of the Army Permit
Special Conditions
Project Plans
Mitigation Responsibility Transfer Form
Certificate of Completion
Section 401 Water Quality Certification

Copies Furnished with Special Conditions and Plans:

Mr. Pete Benjamin
U. S. Fish and Wildlife Service
pete_benjamin@fws.gov

Mr. Todd Bowers
U. S. Environmental Protection Agency, Region IV
bowers.todd@epa.gov

Paul Wojoski
NC Division of Water Quality
Paul.wojoski@ncdenr.gov

DEPARTMENT OF THE ARMY PERMIT

Permittee: Chemours Chemical c/o Christel Compton

Permit No.: SAW-2019-00206

Issuing Office: CESAW-RG-L

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: The applicant proposes to permanently impact 330 linear feet of stream channel and 0.16-acre of wetland and temporarily impact 125 linear feet of stream channel and 0.01-acre of wetland for the purpose of constructing an in-stream flow-through cell water treatment system to address PFAS contamination on the project site in accordance with a Consent Order issued by the North Carolina Superior Court for Bladen County.

Project Location: Chemours Chemical Fayetteville Works Facility, Fayetteville, Bladen County, North Carolina.

General Conditions:

- 1. The time limit for completing the work authorized ends on October 5, 2025. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.**
- 2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.**
- 3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.**
- 4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.**
- 5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.**
- 6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.**

Special Conditions:

SEE ATTACHED SPECIAL CONDITIONS

Further Information:

- 1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:**
 - Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
 - Section 404 of the Clean Water Act (33 U.S.C. 1344).

() Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

- a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
- b. This permit does not grant any property rights or exclusive privileges.
- c. This permit does not authorize any injury to the property or rights of others.
- d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
- d. Design or construction deficiencies associated with the permitted work.
- e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit, unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

Christel Compton

Digitally signed by Christel Compton
Date: 2020.10.05 14:14:19 -04'00'

10/05/2020

(PERMITTEE)

(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

MCLENDON.C.SCOTT.12
29682071

Digitally signed by
MCLENDON.C.SCOTT.1229682071
Date: 2020.10.05 16:41:13 -04'00'

(DISTRICT ENGINEER) BENJAMIN A. BENNETT, COLONEL

(DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEREE)

(DATE)

*U.S. GOVERNMENT PRINTING OFFICE: 1986 - 717-425

SPECIAL CONDITIONS
CHEMOURS CHEMICAL SEEP C PILOT STUDY
SAW-2019-00206

1. Compensatory Mitigation: In order to compensate for impacts associated with this permit, mitigation shall be provided in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit.

In order to compensate for the permanent loss of perennial stream and riparian riverine wetland and the functional loss of perennial stream and wetland from the conversion of waters, the Permittee shall debit 400 linear feet of warm water credits from NC DMS ILF in HUC 03030005 and 0.38 credits of riparian riverine wetland from the Lower Cape Fear UMB.

2. Work Limits: All work authorized by this permit shall be performed in strict compliance with the attached permit plans dated 29 September 2020 (revised) which are a part of this permit. The Permittee shall ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Any modification to the attached permit plans must be approved by the U.S. Army Corps of Engineers (Corps) prior to any active construction in waters or wetlands.

3. Permit Distribution: The Permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit. A copy of this permit, including all conditions and drawings, shall be available at the project site during construction and maintenance of this project.

4. Permit Revocation: The Permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work, will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the water or wetland to its pre-project condition.

5. Reporting Violations: Violation of these permit conditions or violation of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act shall be reported to the Corps in writing and by email at emily.c.greer@usace.army.mil within 24 hours of the Permittee's discovery of the violation.

6. Erosion Control: The permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside the permit area. This may include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).

7. Clean Fill: The Permittee shall use only clean fill material for this project. The fill material shall be free of items such as trash, construction debris, metal and plastic products, and concrete block with exposed metal reinforcement bars. Soils used for fill shall not be contaminated with any toxic substance in concentrations governed by Section 307 of the Clean Water Act. Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source.

8. Water Contamination: All mechanized equipment shall be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. In the event of a spill of petroleum products or any other hazardous waste, the Permittee shall immediately report it to the N.C. Division of Water Quality at (919) 733-3300 or (800) 858-0368 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act shall be followed.

9. Compliance Inspection: A representative of the Corps of Engineers will periodically and randomly inspect the work for compliance with these conditions. Deviations from these procedures may result in a directive to cease work until the problem is resolved to the satisfaction of the Corps.

10. Prohibitions on Concrete: The permittee shall take measures to prevent live or fresh concrete, including bags of uncured concrete, from coming into contact with any water in or entering into waters of the United States. Water inside coffer dams or casings that has been in contact with concrete shall only be returned to waters of the United States when it no longer poses a threat to aquatic organisms.

11. Threatened and Endangered Species: All necessary precautions and measures will be implemented so that any activity will not kill, injure, capture, harass, or otherwise harm any protected federally listed species. While accomplishing the authorized work, if the permittee discovers or observes a damaged or hurt listed endangered or threatened species, the District Engineer will be immediately notified to initiate the required Federal coordination.

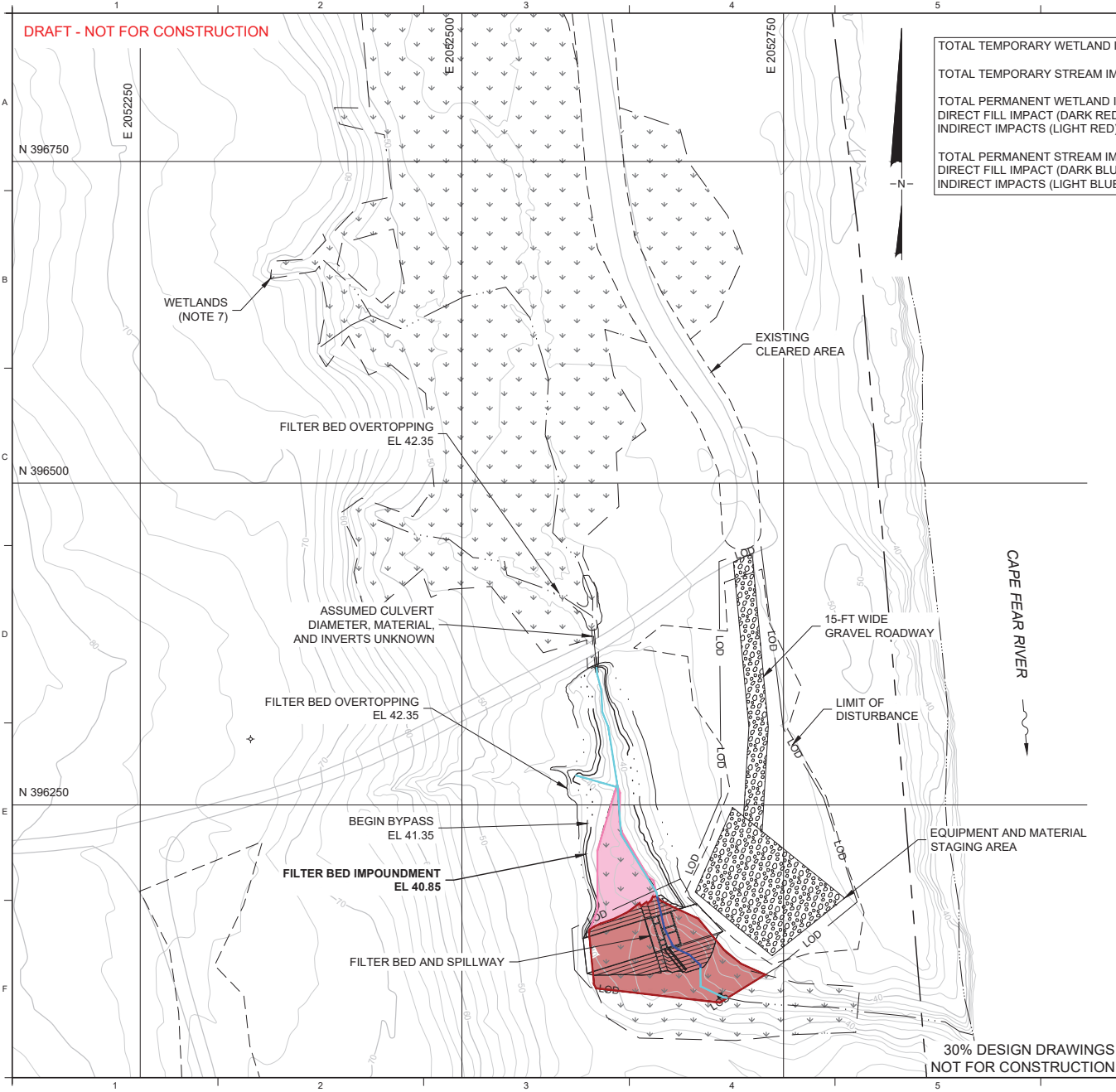
12. Report Address: All reports, documentation and correspondence required by the conditions of this permit shall be submitted to the following address: U.S.

Army Corps of Engineers, Regulatory Division, Wilmington Regulatory Field Office, c/o Ms. Emily Greer, 69 Darlington Avenue, Wilmington, NC 28403 and by email at: emily.c.greer@usace.army.mil. The permittee shall reference the following permit number, SAW-2014-01693, on all submittals.

13. Notification of Construction Commencement and Completion: The Permittee shall notify the U.S. Army Corps of Engineers in writing prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.

14. Compliance with Other Permits: In accordance with 33 U.S.C. 1341(d), all conditions of the North Carolina Division of Water Resources 401 Water Quality Certification #004235, dated 2 October 2020, are incorporated by reference as part of the Department of the Army permit and attached for your convenience. The Corps makes special reference to Water Quality Certification Special Condition #4 with a modification to stipulate that wetland compensatory mitigation for total permanent project impacts exceeding 0.10-acre will be required. Cumulative project impacts automatically require the applicant to provide stream mitigation for any permanent impacts proposed now and in the future or that are incurred after-the-fact.

DRAFT - NOT FOR CONSTRUCTION



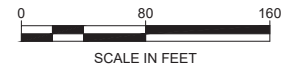
TOTAL TEMPORARY WETLAND IMPACT = 0.01 AC
 TOTAL TEMPORARY STREAM IMPACT = 125 LF
 TOTAL PERMANENT WETLAND IMPACT = 0.22 AC
 DIRECT FILL IMPACT (DARK RED) = 0.16 AC
 INDIRECT IMPACTS (LIGHT RED) = 0.06 AC
 TOTAL PERMANENT STREAM IMPACT = 330 LF
 DIRECT FILL IMPACT (DARK BLUE) = 70 LF
 INDIRECT IMPACTS (LIGHT BLUE) = 260 LF

LEGEND

	40	EXISTING CONTOUR
	40	FINISHED GRADE CONTOUR
		EXISTING CLEARED AREA
		PROPERTY LINE
		EXISTING ROAD
		SEEP CHANNEL / RIVER
		WETLANDS

NOTES:

- GRID COORDINATE SYSTEM CORRESPONDS TO NAD83, NORTH CAROLINA.
- ELEVATIONS PRESENTED ARE IN FEET, NAVD 88.
- TOPOGRAPHIC, ROADS, BUILDINGS, AND PROPERTY LINE INFORMATION OBTAINED FROM FREELAND-CLINK SCALES & ASSOCIATES, INC. OF NC. SURVEY OF THE CHEMOURS FAYETTEVILLE WORKS SITE DATE 7 JANUARY 2019.
- BYPASS SPILLWAY AND SLOPES SHALL BE ARMORED WITH 12-INCH THICK (MIN) LAYER OF RIPRAP AND UNDERLAIN WITH A GEOTEXTILE SEPARATOR.
- MAINTENANCE PLATFORM SHALL BE SURFACED WITH A 6-INCH (MIN) LAYER OF AGGREGATE AND UNDERLAIN WITH A GEOTEXTILE SEPARATOR.
- DISTURBED AREAS NOT SURFACED WITH AGGREGATE OR CONCRETE WILL BE SEEDED AND MULCHED.
- APPROXIMATE EXTENT OF IMPACTED WETLANDS DELINEATED BY PARSONS (AUGUST 2020 WOTUS REPORT, CHEMOURS FAYETTEVILLE WORKS, FLOW THROUGH CELLS, SEEP C PILOT STUDY). APPROXIMATE EXTENT OF UNIMPACTED WETLANDS IN UPLAND LOCATIONS DELINEATED BY GEOSYNTEC, SEPTEMBER 2020 (WOTUS REPORT PENDING FOR SEEPS A, B, AND D PERMIT MODIFICATION).



C	09.29.20	REVISED PERMIT SUBMITTAL II	JFH	CAS
B	09.21.20	REVISED PERMIT SUBMITTAL	JFH	CAS
A	08.12.20	30% DESIGN SUBMITTAL	JFH	CAS
REV	DATE	DESCRIPTION	DRN	APP

Geosyntec consultants
 Geosyntec Consultants of NC, P.C.
 NC License No.: C-3500 and C-295
 ATRIUM AT BLUE RIDGE
 2501 BLUE RIDGE ROAD, SUITE 430
 RALEIGH, NC 27607
 919.870.0576

TITLE: SEEP C INTERIM REMEDIATION SYSTEM
 WETLAND AND STREAM IMPACTS
 PROJECT: THE CHEMOURS COMPANY
 SEEP C INTERIM REMEDIATION SYSTEM

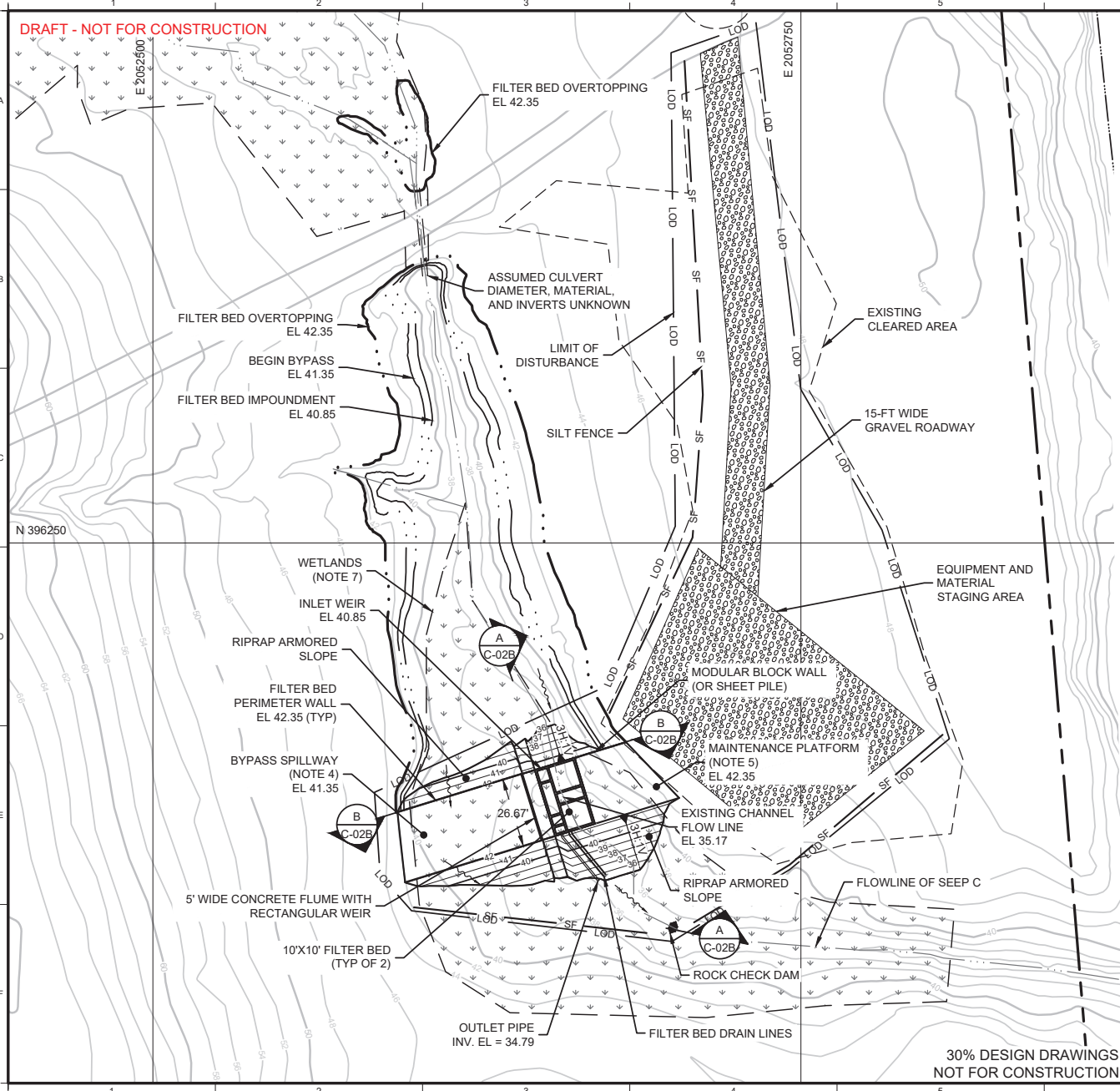
SITE: FAYETTEVILLE WORKS SITE

DESIGN BY:	CMDS	DATE:	SEPTEMBER 2020
DRAWN BY:	JFH	PROJECT NO.:	TR0795
CHECKED BY:	JWE	FILE:	TR0795-C02A.DWG
REVIEWED BY:	JJD	DRAWING NO.:	C-02A
APPROVED BY:	CAS		

30% DESIGN DRAWINGS
 NOT FOR CONSTRUCTION

L:\CAD\00\CHEMOURS\INTERIM SEEP REMEDIATION\PERMIT\TR0795-C02A

DRAFT - NOT FOR CONSTRUCTION

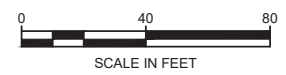


LEGEND

	40	EXISTING CONTOUR
	40	FINISHED GRADE CONTOUR
		EXISTING CLEARED AREA
		EXISTING ROAD
		SEEP CHANNEL / RIVER
		WETLANDS

NOTES:

- GRID COORDINATE SYSTEM CORRESPONDS TO NAD83, NORTH CAROLINA.
- ELEVATIONS PRESENTED ARE IN FEET, NAVD 88.
- TOPOGRAPHIC, ROADS, BUILDINGS, AND PROPERTY LINE INFORMATION OBTAINED FROM FREELAND-CLINK SCALES & ASSOCIATES, INC. OF NC. SURVEY OF THE CHEMOURS FAYETTEVILLE WORKS SITE DATE 7 JANUARY 2019.
- BYPASS SPILLWAY AND SLOPES SHALL BE ARMORED WITH 12-INCH THICK (MIN) LAYER OF RIPRAP AND UNDERLAIN WITH A GEOTEXTILE SEPARATOR.
- MAINTENANCE PLATFORM SHALL BE SURFACED WITH A 6-INCH (MIN) LAYER OF AGGREGATE AND UNDERLAIN WITH A GEOTEXTILE SEPARATOR.
- DISTURBED AREAS NOT SURFACED WITH AGGREGATE OR CONCRETE WILL BE SEEDING AND MULCHED.
- APPROXIMATE EXTENT OF DELINEATED WETLANDS. (WATERS OF THE UNITED STATES TECHNICAL REPORT, THE CHEMOURS COMPANY FAYETTEVILLE WORKS PROJECT: FLOW-THROUGH CELLS, SEEP C PILOT STUDY, AND REVISED SEEP A. PARSONS, AUGUST 2020)



B	09.21.20	REVISED PERMIT SUBMITTAL	JFH	CAS
A	08.12.20	30% DESIGN SUBMITTAL	JFH	CAS
REV	DATE	DESCRIPTION	DRN	APP

Geosyntec consultants

Geosyntec Consultants of NC, P.C.
NC License No.: C-3500 and C-295

ATRIUM AT BLUE RIDGE
2501 BLUE RIDGE ROAD, SUITE 430
RALEIGH, NC 27607
919.870.0576

TITLE: SEEP C INTERIM REMEDIATION SYSTEM PLAN

PROJECT: THE CHEMOURS COMPANY SEEP C INTERIM REMEDIATION SYSTEM

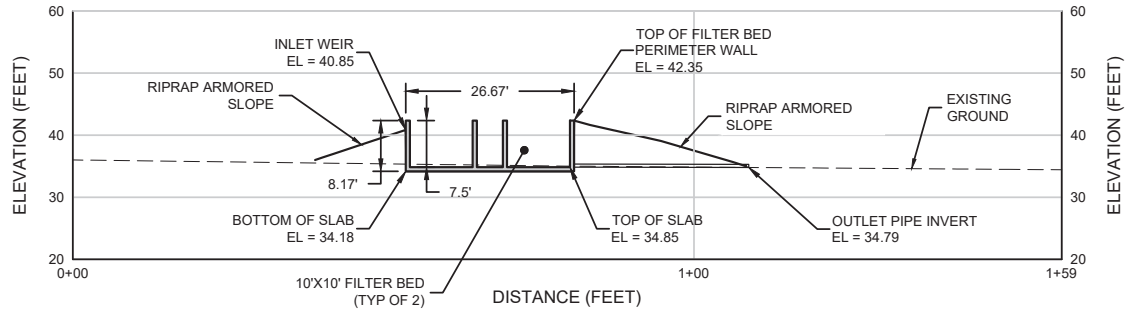
SITE: FAYETTEVILLE WORKS SITE

DESIGN BY:	CMS	DATE:	SEPTEMBER 2020
DRAWN BY:	JFH	PROJECT NO.:	TR0795
CHECKED BY:	JWE	FILE:	TR0795-C02B.DWG
REVIEWED BY:	JJD	DRAWING NO.:	C-02B
APPROVED BY:	CAS		

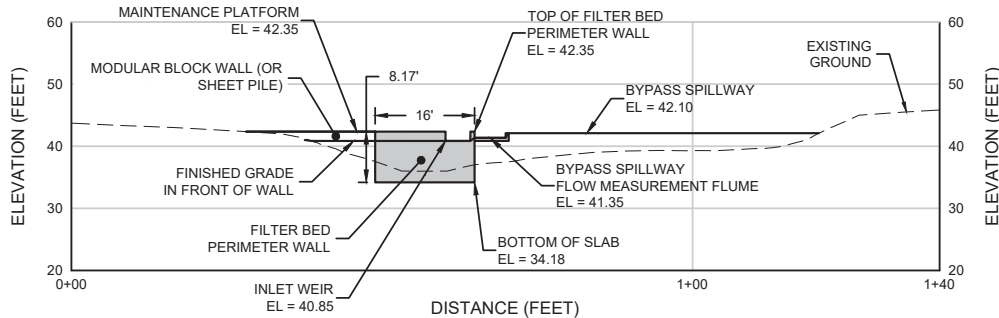
30% DESIGN DRAWINGS
NOT FOR CONSTRUCTION

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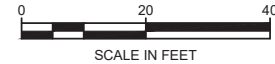
DRAFT - NOT FOR CONSTRUCTION



A
SECTION
SEEP C REMEDIATION
SCALE: 1" = 20'



B
SECTION
SEEP C REMEDIATION
SCALE: 1" = 20'



SCALE IN FEET

B	09.21.20	REVISED PERMIT SUBMITTAL	JFH	CAS
A	08.12.20	30% DESIGN SUBMITTAL	JFH	CAS
REV	DATE	DESCRIPTION	DRN	APP
Geosyntec consultants		Geosyntec Consultants of NC, P.C. NC License No.: C-3500 and C-295	ATRIUM AT BLUE RIDGE 2501 BLUE RIDGE ROAD, SUITE 430 RALEIGH, NC 27607 919.870.0576	
TITLE:		SEEP C INTERIM REMEDIATION SYSTEM SECTIONS		
PROJECT:		THE CHEMOURS COMPANY SEEP C INTERIM REMEDIATION SYSTEM		
SITE:		FAYETTEVILLE WORKS SITE		
		DESIGN BY: CMDS	DATE: SEPTEMBER 2020	
		DRAWN BY: JFH	PROJECT NO.: TR0795	
		CHECKED BY: JWE	FILE: TR0795-C02C.DWG	
		REVIEWED BY: JJD	DRAWING NO.:	
		APPROVED BY: CAS	C-02C	

30% DESIGN DRAWINGS
NOT FOR CONSTRUCTION

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U.S. ARMY CORPS OF ENGINEERS
Wilmington District
Compensatory Mitigation Responsibility Transfer Form

Permittee: Chemours Chemical c/o Christel Compton
Project Name: Chemours Company PFAS Remediation Project

Action ID: SAW-2019-00206
County: Bladen

Instructions to Permittee: The Permittee must provide a copy of this form to the Mitigation Sponsor, either an approved Mitigation Bank or the North Carolina Division of Mitigation Services (NCDMS), who will then sign the form to verify the transfer of the mitigation responsibility. Once the Sponsor has signed this form, it is the Permittee's responsibility to ensure that Wilmington District Project Manager identified on page two is in receipt of a signed copy of this form before conducting authorized impacts, unless otherwise specified below. If more than one Mitigation Sponsor will be used to provide the mitigation associated with the permit, or if the impacts and/or the mitigation will occur in more than one 8-digit Hydrologic Unit Code (HUC), multiple forms will be attached to the permit, and the separate forms for each Sponsor and/or HUC must be provided to the appropriate Mitigation Sponsors.

Instructions to Sponsor: The Sponsor verifies that the mitigation requirements (credits) shown below have been released and are available at the identified site. By signing below, the Sponsor is accepting full responsibility for the identified mitigation, regardless of whether they have received payment from the Permittee. Once the form is signed, the Sponsor must update the bank ledger and provide a copy of the signed form and the updated ledger to the Permittee, the Project Manager who issued the permit, the Bank Project Manager, and the District Mitigation Office (see contact information on page 2). The Sponsor must also comply with all reporting requirements established in their authorizing instrument.

Permitted Impacts and Compensatory Mitigation Requirements

Permitted Impacts Requiring Mitigation*: **8-digit HUC and Basin:** 03030005, Cape Fear River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
			0.22			

*If more than one mitigation sponsor will be used for the permit, only include impacts to be mitigated by this sponsor.

Compensatory Mitigation Requirements: **8-digit HUC and Basin:** 03030005, Cape Fear River Basin

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
			0.38			

Mitigation Site Debited: Lower Cape Fear UMB

(List the name of the bank to be debited. For umbrella banks, also list the specific site. For NCDMS, list NCDMS. If the NCDMS acceptance letter identifies a specific site, also list the specific site to be debited).

Section to be completed by the Mitigation Sponsor

Statement of Mitigation Liability Acceptance: I, the undersigned, verify that I am authorized to approve mitigation transactions for the Mitigation Sponsor shown below, and I certify that the Sponsor agrees to accept full responsibility for providing the mitigation identified in this document (see the table above), associated with the USACE Permittee and Action ID number shown. I also verify that released credits (and/or advance credits for NCDMS), as approved by the Wilmington District, are currently available at the mitigation site identified above. Further, I understand that if the Sponsor fails to provide the required compensatory mitigation, the USACE Wilmington District Engineer may pursue measures against the Sponsor to ensure compliance associated with the mitigation requirements.

Mitigation Sponsor Name: _____

Name of Sponsor's Authorized Representative: _____

Signature of Sponsor's Authorized Representative

Date of Signature

**USACE Wilmington District
Compensatory Mitigation Responsibility Transfer Form, Page 2**

Conditions for Transfer of Compensatory Mitigation Credit:

- Once this document has been signed by the Mitigation Sponsor and the District is in receipt of the signed form, the Permittee is no longer responsible for providing the mitigation identified in this form, though the Permittee remains responsible for any other mitigation requirements stated in the permit conditions.
- Construction within jurisdictional areas authorized by the permit identified on page one of this form can begin only after the District is in receipt of a copy of this document signed by the Sponsor, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein. When NCDMS provides mitigation for authorized impacts conducted by the North Carolina Department of Transportation (NCDOT), construction within jurisdictional areas may proceed upon permit issuance; however, a copy of this form signed by NCDMS must be provided to the District within 30 days of permit issuance. NCDOT remains fully responsible for the mitigation until the District has received this form, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein.
- Signed copies of this document must be retained by the Permittee, Mitigation Sponsor, and in the USACE administrative records for both the permit and the Bank/ILF Instrument. It is the Permittee's responsibility to ensure that the District Project Manager (address below) is provided with a signed copy of this form.
- If changes are proposed to the type, amount, or location of mitigation after this form has been signed and returned to the District, the Sponsor must obtain case-by-case approval from the District Project Manager and/or North Carolina Interagency Review Team (NCIRT). If approved, higher mitigation ratios may be applied, as per current District guidance and a new version of this form must be completed and included in the District administrative records for both the permit and the Bank/ILF Instrument.

Comments/Additional Conditions:

This form is not valid unless signed below by the District Project Manager and by the Mitigation Sponsor on Page 1. ***Once signed, the Sponsor should provide copies of this form along with an updated bank ledger to: 1) the Permittee, 2) the District Project Manager at the address below, 3) the Bank Manager listed in RIBITS, and 4) the Wilmington District Mitigation Office, 3331 Heritage Trade Drive, Suite 105, Wake Forest, NC 27587 (or by email to SAWMIT@usace.army.mil).***

Questions regarding this form or any of the permit conditions may be directed to the District Mitigation Office.

USACE Project Manager: Emily Greer
USACE Field Office: Wilmington Regulatory Field Office
US Army Corps of Engineers
69 Darlington Avenue
Wilmington, NC 28403
Email: emily.c.greer@usace.army.mil

GREER.EMILY.C.138532530 Digitally signed by
GREER.EMILY.C.1385325300
Date: 2020.10.02 18:31:35 -04'00'

0

Wilmington District Project Manager Signature

October 2, 2020

Date of Signature

Current Wilmington District mitigation guidance, including information on mitigation ratios, functional assessments, and mitigation bank location and availability, and credit classifications (including stream temperature and wetland groupings) is available at <http://ribits.usace.army.mil>.

U.S. ARMY CORPS OF ENGINEERS
Wilmington District
Compensatory Mitigation Responsibility Transfer Form

Permittee: Chemours Chemical c/o Christel Compton
Project Name: Chemours Company PFAS Remediation Project

Action ID: SAW-2019-00206
County: Bladen

Instructions to Permittee: The Permittee must provide a copy of this form to the Mitigation Sponsor, either an approved Mitigation Bank or the North Carolina Division of Mitigation Services (NCDMS), who will then sign the form to verify the transfer of the mitigation responsibility. Once the Sponsor has signed this form, it is the Permittee's responsibility to ensure that Wilmington District Project Manager identified on page two is in receipt of a signed copy of this form before conducting authorized impacts, unless otherwise specified below. If more than one Mitigation Sponsor will be used to provide the mitigation associated with the permit, or if the impacts and/or the mitigation will occur in more than one 8-digit Hydrologic Unit Code (HUC), multiple forms will be attached to the permit, and the separate forms for each Sponsor and/or HUC must be provided to the appropriate Mitigation Sponsors.

Instructions to Sponsor: The Sponsor verifies that the mitigation requirements (credits) shown below have been released and are available at the identified site. By signing below, the Sponsor is accepting full responsibility for the identified mitigation, regardless of whether they have received payment from the Permittee. Once the form is signed, the Sponsor must update the bank ledger and provide a copy of the signed form and the updated ledger to the Permittee, the Project Manager who issued the permit, the Bank Project Manager, and the District Mitigation Office (see contact information on page 2). The Sponsor must also comply with all reporting requirements established in their authorizing instrument.

Permitted Impacts and Compensatory Mitigation Requirements

Permitted Impacts Requiring Mitigation*: **8-digit HUC and Basin:** 03030005, Cape Fear River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
330						

*If more than one mitigation sponsor will be used for the permit, only include impacts to be mitigated by this sponsor.

Compensatory Mitigation Requirements: **8-digit HUC and Basin:** 03030005, Cape Fear River Basin

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
400						

Mitigation Site Debited: NC DMS HUC 03030005

(List the name of the bank to be debited. For umbrella banks, also list the specific site. For NCDMS, list NCDMS. If the NCDMS acceptance letter identifies a specific site, also list the specific site to be debited).

Section to be completed by the Mitigation Sponsor

Statement of Mitigation Liability Acceptance: I, the undersigned, verify that I am authorized to approve mitigation transactions for the Mitigation Sponsor shown below, and I certify that the Sponsor agrees to accept full responsibility for providing the mitigation identified in this document (see the table above), associated with the USACE Permittee and Action ID number shown. I also verify that released credits (and/or advance credits for NCDMS), as approved by the Wilmington District, are currently available at the mitigation site identified above. Further, I understand that if the Sponsor fails to provide the required compensatory mitigation, the USACE Wilmington District Engineer may pursue measures against the Sponsor to ensure compliance associated with the mitigation requirements.

Mitigation Sponsor Name: _____

Name of Sponsor's Authorized Representative: _____

Signature of Sponsor's Authorized Representative

Date of Signature

**USACE Wilmington District
Compensatory Mitigation Responsibility Transfer Form, Page 2**

Conditions for Transfer of Compensatory Mitigation Credit:

- Once this document has been signed by the Mitigation Sponsor and the District is in receipt of the signed form, the Permittee is no longer responsible for providing the mitigation identified in this form, though the Permittee remains responsible for any other mitigation requirements stated in the permit conditions.
- Construction within jurisdictional areas authorized by the permit identified on page one of this form can begin only after the District is in receipt of a copy of this document signed by the Sponsor, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein. When NCDMS provides mitigation for authorized impacts conducted by the North Carolina Department of Transportation (NCDOT), construction within jurisdictional areas may proceed upon permit issuance; however, a copy of this form signed by NCDMS must be provided to the District within 30 days of permit issuance. NCDOT remains fully responsible for the mitigation until the District has received this form, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein.
- Signed copies of this document must be retained by the Permittee, Mitigation Sponsor, and in the USACE administrative records for both the permit and the Bank/ILF Instrument. It is the Permittee's responsibility to ensure that the District Project Manager (address below) is provided with a signed copy of this form.
- If changes are proposed to the type, amount, or location of mitigation after this form has been signed and returned to the District, the Sponsor must obtain case-by-case approval from the District Project Manager and/or North Carolina Interagency Review Team (NCIRT). If approved, higher mitigation ratios may be applied, as per current District guidance and a new version of this form must be completed and included in the District administrative records for both the permit and the Bank/ILF Instrument.

Comments/Additional Conditions:

This form is not valid unless signed below by the District Project Manager and by the Mitigation Sponsor on Page 1. ***Once signed, the Sponsor should provide copies of this form along with an updated bank ledger to: 1) the Permittee, 2) the District Project Manager at the address below, 3) the Bank Manager listed in RIBITS, and 4) the Wilmington District Mitigation Office, 3331 Heritage Trade Drive, Suite 105, Wake Forest, NC 27587 (or by email to SAWMIT@usace.army.mil).***

Questions regarding this form or any of the permit conditions may be directed to the District Mitigation Office.

USACE Project Manager: Emily Greer
USACE Field Office: Wilmington Regulatory Field Office
US Army Corps of Engineers
69 Darlington Avenue
Wilmington, NC 28403
Email: emily.c.greer@usace.army.mil

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5325300 GREER.EMILY.C.1385325300
Date: 2020.10.02 18:36:36 -04'00'

Wilmington District Project Manager Signature

**October 2, 2020
Date of Signature**

Current Wilmington District mitigation guidance, including information on mitigation ratios, functional assessments, and mitigation bank location and availability, and credit classifications (including stream temperature and wetland groupings) is available at <http://ribits.usace.army.mil>.

CERTIFICATE OF COMPLETION

Action ID Number: SAW-2019-00206

County: Bladen

Permittee: Chemours Chemical, Christel Compton

Project Name: Chemours Chemical PFAS Remediation Project

Date Verification Issued: 10/5/2020

Project Manager: Emily Greer

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

US ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT
Attn: Emily Greer
Wilmington Regulatory Office
U.S Army Corps of Engineers
69 Darlington Avenue
Wilmington, North Carolina 28403
or
emily.c.greer@usace.army.mil

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers representative. Failure to comply with any terms or conditions of this authorization may result in the Corps suspending, modifying or revoking the authorization and/or issuing a Class I administrative penalty, or initiating other appropriate legal action.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and condition of the said permit, and required mitigation was completed in accordance with the permit conditions.

Christel Compton



ROY COOPER

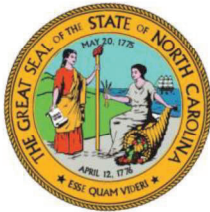
Governor

MICHAEL S. REGAN

Secretary

S. DANIEL SMITH

Director



NORTH CAROLINA
Environmental Quality

October 02, 2020

DWR # 20190752 Ver 4
Bladen County

Chemours Company
Fayetteville Works Facility
ATTN: Ms. Christel E. Compton
22828 NC Highway 87 W.
Fayetteville, NC 28306-7332

Subject: Approval of Individual 401 Water Quality Certification with Additional Conditions
Chemours – Seep C Flow-through Cell – Pilot Study Project
USACE Action ID. No. SAW-2019-00206

Dear Ms. Compton:

Attached hereto is a copy of Certification No. WQC004235 issued to Chemours Company, dated October 02, 2020. Please note that you should get any other federal, state or local permits before proceeding with the subject project, including those required by (but not limited to) Sediment and Erosion Control, Non-Discharge, and Water Supply Watershed regulations.

This approval and its conditions are final and binding unless contested. This Certification can be contested as provided in Articles 3 and 4 of General Statute 150B by filing a written petition for an administrative hearing to the Office of Administrative Hearings (hereby known as OAH) **within sixty (60) calendar days**.

A petition form may be obtained from the OAH at <http://www.ncoah.com/> or by calling the OAH Clerk's Office at (919) 431-3000 for information. A petition is considered filed when the original and one (1) copy along with any applicable OAH filing fee is received in the OAH during normal office hours (Monday through Friday between 8:00am and 5:00pm, excluding official state holidays).

The petition may be faxed to the OAH at (919) 431-3100, provided the original and one copy of the petition along with any applicable OAH filing fee is received by the OAH within five (5) business days following the faxed transmission.



North Carolina Department of Environmental Quality | Division of Water Resources
512 North Salisbury Street | 1617 Mail Service Center | Raleigh, North Carolina 27699-1617
919.707.9000

Mailing address for the OAH:

If sending via US Postal Service:
Office of Administrative Hearings
6714 Mail Service Center
Raleigh, NC 27699-6714

If sending via delivery service (UPS, FedEx, etc):
Office of Administrative Hearings
1711 New Hope Church Road
Raleigh, NC 27609-6285

One (1) copy of the petition must also be served to DEQ:

William F. Lane, General Counsel
Department of Environmental Quality
1601 Mail Service Center
Raleigh, NC 27699-1601

Unless such a petition is filed, this Certification shall be final and binding.

This certification completes the review of the Division under section 401 of the Clean Water Act and 15A NCAC 02H .0500. Contact Paul Wojoski at 919-707-9015 or Paul.Wojoski@ncdenr.gov if you have any questions or concerns.

Sincerely,

DocuSigned by:
Paul Wojoski
949D91BA53EF4E0...

Paul Wojoski, Supervisor
401 & Buffer Permitting Branch

cc: Mr. Luke Eggering, PWS, Parsons (via email)
Ms. Emily Greer, USACE Wilmington Regulatory Field Office (via email)
Todd Bowers, EPA Region 4 (via email)
DWR FRO
DWR 401 & Buffer Permitting Branch files (Laserfiche)

NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

CERTIFICATION #WQC004235 is issued in conformity with the requirements of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to North Carolina’s Regulations in 15 NCAC 02H .0500, to Chemours Company, who has authorization for the impacts listed below, as described within your application received by the N.C. Division of Water Resources (Division) on August 6, 2020 and subsequent information received on September 21, September 24, and September 29, 2020, and by Public Notice issued by the U. S. Army Corps of Engineers and received by the Division on September 1, 2020.

The State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of the Public Laws 92-500 and PL 95-217 if conducted in accordance with the application, the supporting documentation, and conditions hereinafter set forth.

This approval requires you to follow the conditions listed in the certification below.

Conditions of Certification:

1. The following impacts are hereby approved. No other impacts are approved, including incidental impacts. [15A NCAC 02H .0506(b) and/or (c)]

Type of Impact	Amount Approved (units) Permanent	Amount Approved (units) Temporary
Stream		
Seep C – Fill	70 (linear feet)	0 (linear feet)
Seep C – Impoundment	260 (linear feet) ¹	0 (linear feet)
Seep C – Filter Bed Overtopping Level Impoundment	0 (linear feet)	125 (linear feet)
Site C Total	330 (linear feet)	125 (liner feet)
Wetland		
Seep C - W1 Direct Fill	0.16 (acres)	0 (acres)
Seep C - W1 Impoundment	0.06 (acres)	0 (acres)
Seep C – Filter Bed Overtopping Level Impoundment	0 (acres)	0.01 (acres)
Seep C - W1 Total	0.22 (acres)	0.01 (acres)

¹ Permanent impact, not counted as permanent loss for the purposes of mitigation.

2. Mitigation must be provided for the proposed impacts as specified in the table below. The Division has received an acceptance letter from the North Carolina Division of Mitigation Services (DMS) dated September 29, 2020 to meet this mitigation requirement. Until the DMS receives and clears your payment, and proof of payment has been provided to this Office, no impacts specified in this Authorization Certificate shall occur. For accounting purposes, this Authorization Certificate authorizes payment to the DMS to meet the following compensatory mitigation requirement [15A NCAC 02H .0506 (b)(6)]:

	Compensatory Mitigation Required	River and Sub-basin Number
Stream	70 (linear feet) ²	Cape Fear (03030005)

3. This approval is for the purpose and design described in your application and as described in the Public Notice and subsequent Exhibits received by the Division dated “September 2020” (revised) and received by the Division on September 29, 2020. All plans and specifications for this project are incorporated by reference and are an enforceable part of the Certification. Any modifications to the project require notification to DWR and may require an application submittal to DWR with the appropriate fee. [15A NCAC 02H .0501 and .0502]
4. If the project results in steam loss due to flow reduction or a reduction to wetland area (as defined by the 1987 U.S. Army Corps of Engineers Wetland Manual and confirmed by a Corps representative), the impacts shall be considered permanent and shall require a modification of this Certification. These impacts will be counted cumulatively and mitigation will be required for total project permanent impacts to perennial streams exceeding 300 linear feet, and/or total project permanent impacts to wetlands exceeding one acre [15A NCAC 02H .0506 (b)(6) and 15A NCAC 02B .0211 (1) and (2)]
5. All wetlands, streams, and surface waters located within 50 feet of the construction area on the project site shall be clearly marked (example- orange fabric fencing) prior to any land disturbing activities and must be maintained on the property until the project phase is completed. [15A NCAC 02H .0506 (b)(2) and (c)(2) and 15A NCAC 02H .0507 (c)]
6. Any final construction plans for this project must include or reference the application and plans approved by the Division under this authorization letter and certification. The applicant will also be required to evaluate all acquired permits to assure that they are consistent and all relative impacts are accounted for and shown on the construction plans. [15A NCAC 02H .0502 (b) and 15A NCAC 02H .0506 (4)]

² In accordance with documentation and information provided by the U.S. Army Corps Of Engineers, the impacts authorized by General Certification number 4138 issued to Chemours – Fayetteville Works on October 16, 2019 (DWR # 2019-1146) are counted cumulatively with the impacts authorized by this certification for the purposes of determining mitigation thresholds per 15A NCAC 02H .0506(c) and Session Law 2017-10.

7. No waste, spoil, solids, or fill of any kind shall occur in wetlands, waters, or riparian areas beyond the footprint of the impacts depicted in the Pre-Construction Notification for this project. All construction activities, including the design, installation, operation, and maintenance of sediment and erosion control Best Management Practices shall be performed so that no violations of state water quality standards, statutes, or rules occur. [15A NCAC 02H .0501 and .0502]
8. If activities must occur during periods of high biological activity (e. g. sea turtle nesting, fish spawning) then biological monitoring may be required at the request of other state or federal agencies and coordinated with these activities. [15A NCAC 02H 0506(b)(2) and 15A NCAC 04B .0125]

All moratoriums on construction activities established by the NC Wildlife Resources Commission (WRC), US Fish and Wildlife Service (USFWS), NC Division of Marine Fisheries (DMF), or National Marine Fisheries Service (NMFS) shall be implemented. Exceptions to this condition require written approval by the resource agency responsible for the given moratorium. A copy of the approval from the resource agency shall be forwarded to DWR.

9. All construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Sediment and erosion control measures shall not be installed in wetlands or waters with the exception of turbidity curtains. All sediment and erosion control devices shall be removed and the natural grade restored within two (2) months of the date that the Division of Energy, Mineral and Land Resources (DEMRLR) has released the specific area within the project. [15A NCAC 02H .0501 and .0502]
10. An NPDES Construction Stormwater Permit (NCG010000) is required for construction projects that disturb one (1) or more acres of land. The NCG010000 Permit allows stormwater to be discharged during land disturbing construction activities as stipulated in the conditions of the permit. If the project is covered by this permit, full compliance with permit conditions including the erosion & sedimentation control plan, inspections and maintenance, self-monitoring, record keeping and reporting requirements is required. [15A NCAC 02H .0506(b)(5) and (c)(5)]
11. All work in or adjacent to streams shall be conducted so that the flowing stream does not come in contact with the disturbed area. Approved best management practices from the most current version of the *NC Sediment and Erosion Control Manual*, or the *NC DOT Construction and Maintenance Activities Manual*, such as sandbags, rock berms, cofferdams, and other diversion structures shall be used to minimize excavation in flowing water. [15A NCAC 02H .0506(b)(3) and (c)(3)]
12. If concrete is used during construction, then all necessary measures shall be taken to prevent direct contact between uncured or curing concrete and waters of the state. Water that inadvertently contacts uncured concrete shall not be discharged to waters of the state. [15A NCAC 02B .0200]

13. All temporary fill and culverts shall be removed and the impacted area returned to natural conditions, within 60 days of the determination that the temporary impact is no longer necessary. The impacted areas shall be restored to original grade, including the stream's original cross sectional dimensions, plan form pattern, and longitudinal bed and bed profile, and the site shall be stabilized with natural woody vegetation (except approved maintenance areas) and restored to prevent erosion. [15A NCAC 02H .0506(b)(2) and (c)(2)]
14. This Certification does not relieve the applicant of the responsibility to obtain all other required Federal, State, or Local approvals before proceeding with the project, including those required by, but not limited to Sediment and Erosion Control, Non-Discharge, Water Supply Watershed, and Trout Buffer regulations.
15. All mechanized equipment operated near surface waters shall be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids, or other toxic materials. Construction shall be staged in order to minimize the exposure of equipment to surface waters to the maximum extent practicable. Fueling, lubrication and general equipment maintenance shall not take place within 50 feet of a waterbody or wetlands to prevent contamination by fuels and oils. [15A NCAC 02H .0506(b)(3) and (c)(3) and 15A NCAC 02B .0211 (12)]
16. Heavy equipment working in wetlands shall be placed on mats or other measures shall be taken to minimize soil disturbance. [15ANCAC02H .0506(b)(3) and (c)(3)]
17. In accordance with 143-215.85(b), the applicant shall report any petroleum spill of 25 gallons or more; any spill regardless of amount that causes a sheen on surface waters; any petroleum spill regardless of amount occurring within 100 feet of surface waters; and any petroleum spill less than 25 gallons that cannot be cleaned up within 24 hours.
18. Chemours Company shall conduct activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with section 303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. [15A NCAC 02B .0200] If the Division determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the Division may reevaluate and modify this Certification. Before modifying the Certification, the Division shall notify Chemours Company and the U.S. Army Corps of Engineers, provide public notice in accordance with 15A NCAC 02H .0503 and provide opportunity for public hearing in accordance with 15A NCAC 02H .0504. Any new or revised conditions shall be provided to Chemours Company in writing, shall be provided to the U.S. Army Corps of Engineers for reference in any Permit issued pursuant to Section 404 of the Clean Water Act, and shall also become conditions of the 404 Permit for the project.
19. The permittee shall report to the Fayetteville Regional Office at 910-433-3300 (after hours and on weekends call 877-623-6748) any noncompliance with this certification, any violation of stream or wetland standards [15A NCAC 02B .0200] including but not limited to sediment impacts. [15A NCAC 02B .0200]. Information shall be provided orally within 24 hours (or the next business day if a weekend or holiday) from the time the applicant became aware of the circumstances. A written

submission shall also be provided within 5 business days of the time the applicant becomes aware of the circumstances. The written submission shall contain a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, if the noncompliance has not been corrected, the anticipated time compliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Division may waive the written submission requirement on a case-by-case basis.

20. Upon completion of all permitted impacts included within the approval and any subsequent modifications, the applicant shall be required to return a certificate of completion (available on the DWR website <https://edocs.deq.nc.gov/Forms/Certificate-of-Completion>). [15A NCAC 02H .0502(f)]
21. If the property or project is sold or transferred, the new Permittee shall be given a copy of this Certification (and written authorization if applicable) and is responsible for complying with all conditions. [15A NCAC 02H .0501 and .0502]
22. This Certification neither grants nor affirms any property right, license, or privilege in any waters, or any right of use in any waters. This Certification does not authorize any person to interfere with the riparian rights, littoral rights, or water use rights of any other person and this Certification does not create any prescriptive right or any right of priority regarding any usage of water. This Certification shall not be interposed as a defense in any action respecting the determination of riparian or littoral rights or other rights to water use. No consumptive user is deemed by virtue of this Certification to possess any prescriptive or other right of priority with respect to any other consumptive user regardless of the quantity of the withdrawal or the date on which the withdrawal was initiated or expanded.
23. This Certification grants permission to the director, an authorized representative of the Director, or DENR staff, upon the presentation of proper credentials, to enter the property during normal business hours. [15A NCAC 02H .0502(e)]
24. Non-compliance with or violation of the conditions herein set forth by a specific project may result in revocation of this Certification for the project and may also result in criminal and/or civil penalties.

This approval to proceed with your proposed impacts or to conduct impacts to waters as depicted in your application shall expire upon expiration of the 404 or CAMA Permit. The conditions in effect on the date of issuance shall remain in effect for the life of the project, regardless of the expiration date of this Certification. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506]

This the 2nd day of October 2020

DocuSigned by:
Paul Wojoski
949D91BA53EF4E0...

Paul Wojoski, Supervisor
401 & Buffer Permitting Branch

APPENDIX D –
CIVIL AS-BUILT DRAWINGS

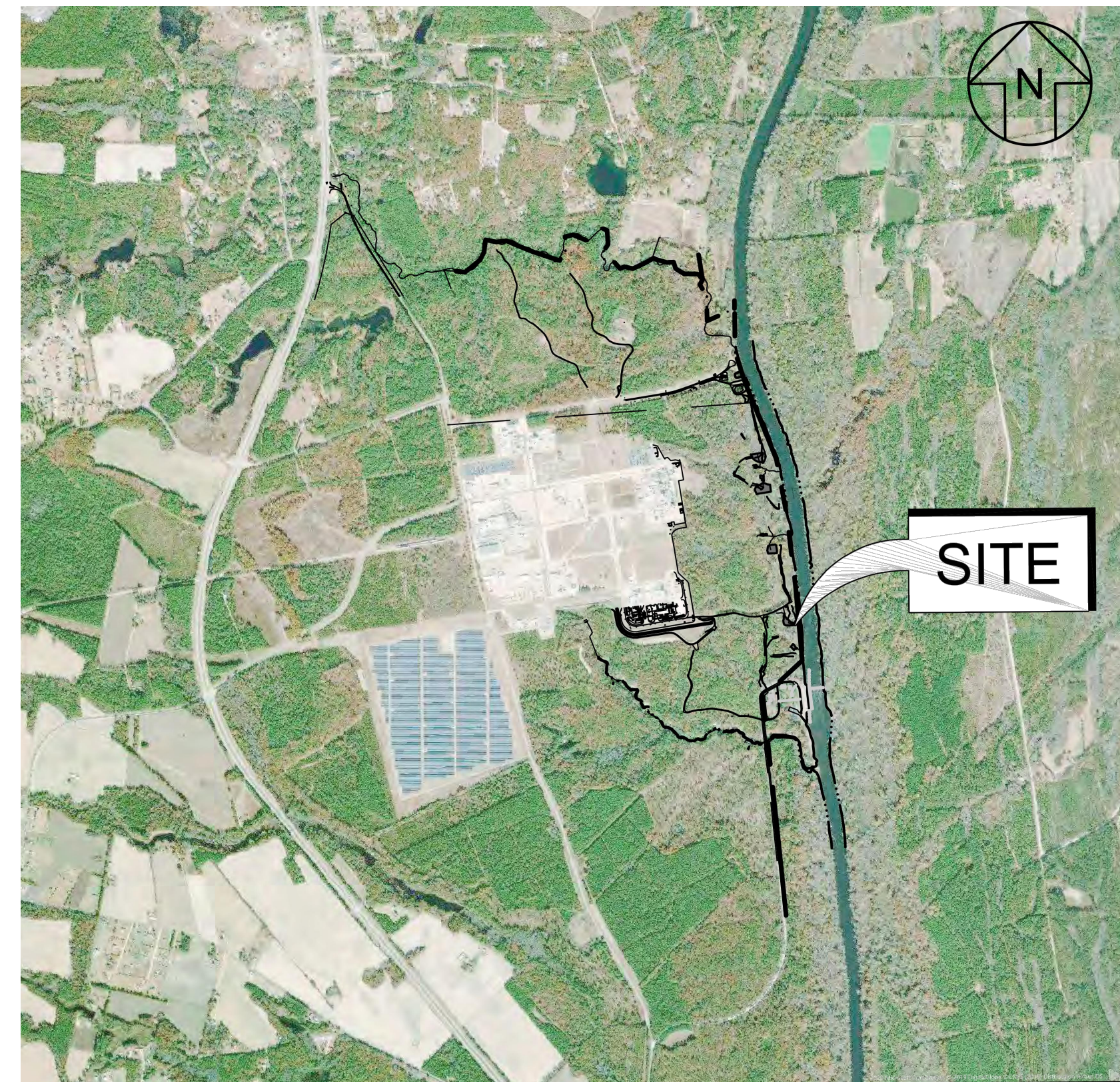
The Chemours Company

Fayetteville, North Carolina

Seep C Interim Remediation System

As-Built

April 14, 2021



DRAWING INDEX

GENERAL

G-1 COVER SHEET

CIVIL

C-1 CIVIL SITE PLAN

C-2 SHEET PILE PLAN AND PROFILE

C-3 IMPOUNDMENT SECTIONS

TYPICAL DETAILS

D-1 TYPICAL DETAILS

D-2 TYPICAL DETAILS



COVER SHEET

Chemours Interim Seep C Remediation Project
Fayetteville, North Carolina

DRAWN BY: NSS

DESIGNED BY: JRW

APPROVED BY: JRW

SCALE: AS SHOWN

DATE: October 28, 2020

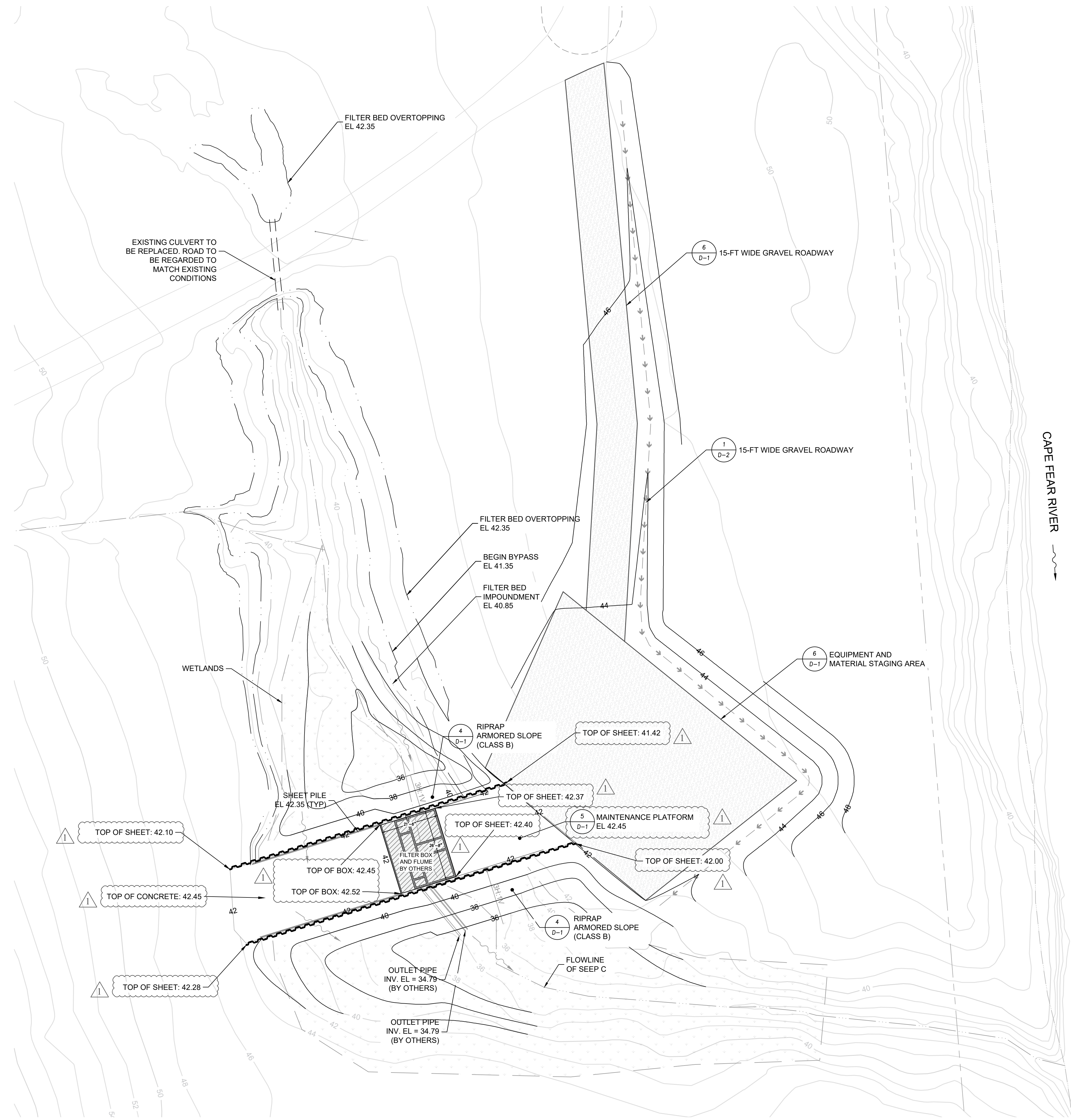
Revisions

No.	Date	Description	By:
1	4/14/2021	As-Built Revisions	CB
2			
3			
4			
5			
6			

DRAWING: G-1

PROJECT NUMBER: 43-20611





LEGEND:
 DRAINAGE SWALE



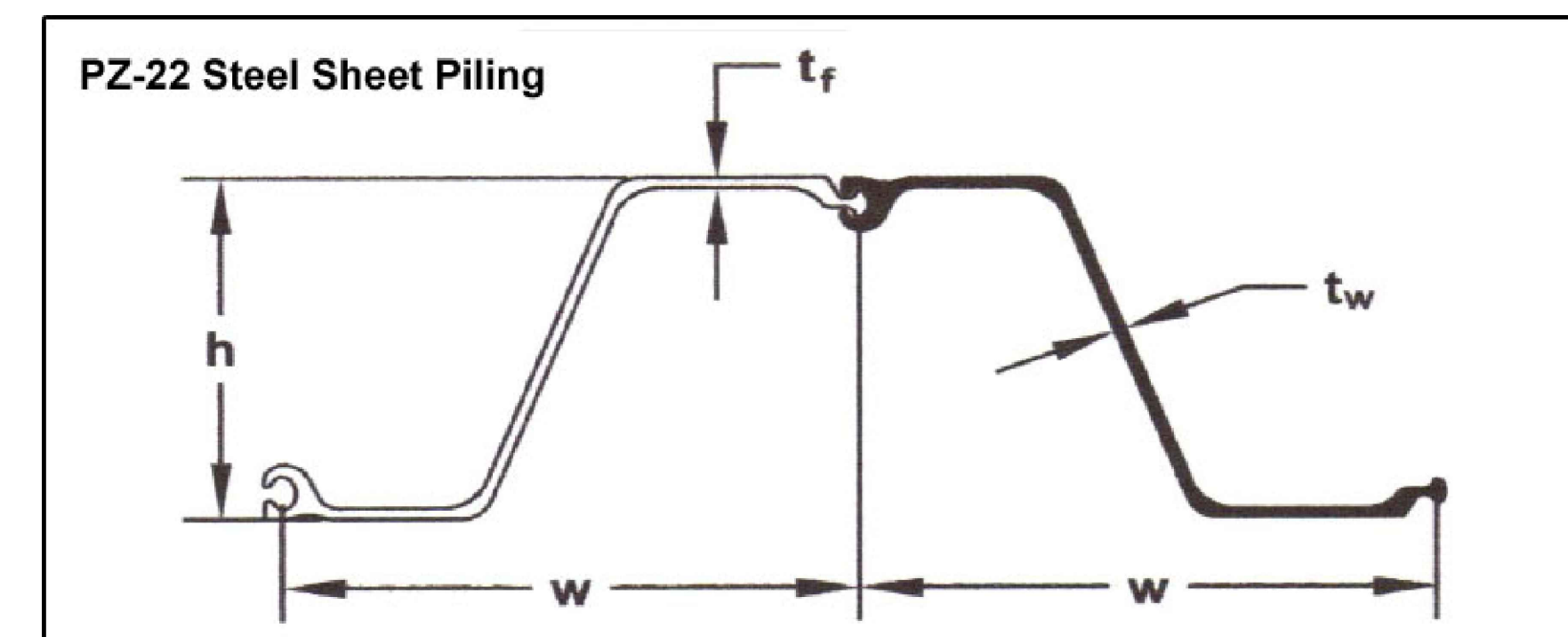
DRAWN BY:	REVIEWED BY:
NSS	JRW
DESIGNED BY:	APPROVED BY:
JRW	JRW
SCALE:	AS SHOWN
DATE:	October 28, 2020

Revisions	
No.	Description
1	As-Built Revisions
2	
3	
4	
5	
6	

DESIGNED BY:	DESIGNED BY:
NSS	JRW
APPROVED BY:	APPROVED BY:
JRW	JRW
SCALE:	AS SHOWN
DATE:	October 28, 2020

Revisions	
No.	Description
1	As-Built Revisions
2	
3	
4	
5	
6	

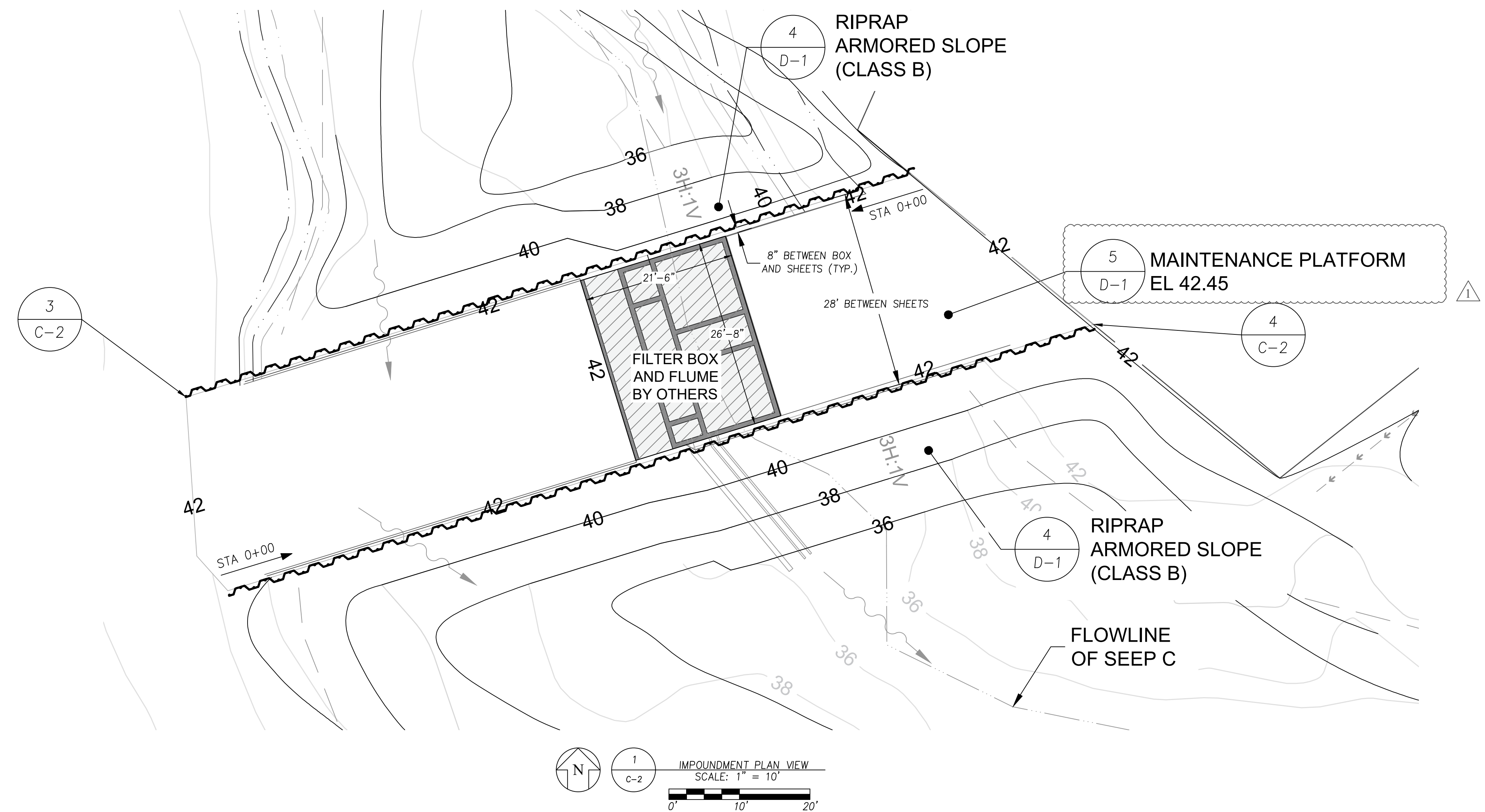
Reference:
 PZ-22 dimensions from Piling and Equipment and Meever USA



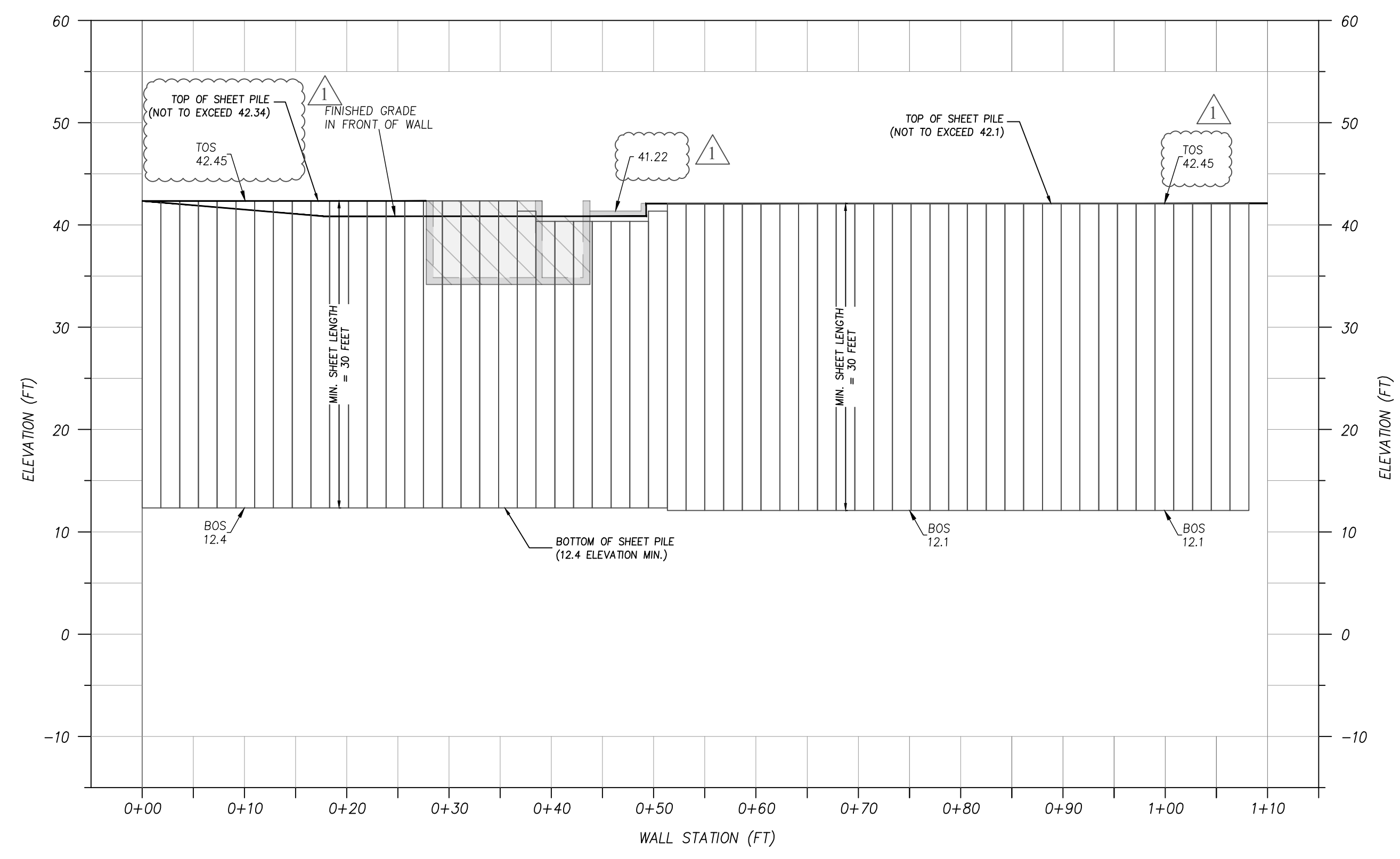
Specification: ASTM A572 Grade 50

Section	Width		Height	Thickness	Cross Sectional Area	Weight		Section Modulus	Moment of Inertia	Coating Area									
	w	in				lb/ft	kg/m ²			ft ² /ft	m ² /m								
PZ-22	22.00	559	9.00	229	0.375	9.50	11.86	40.30	60.00	22.00	107.40	18.10	973	84.40	11500	4.48	1.37	1.22	1.22

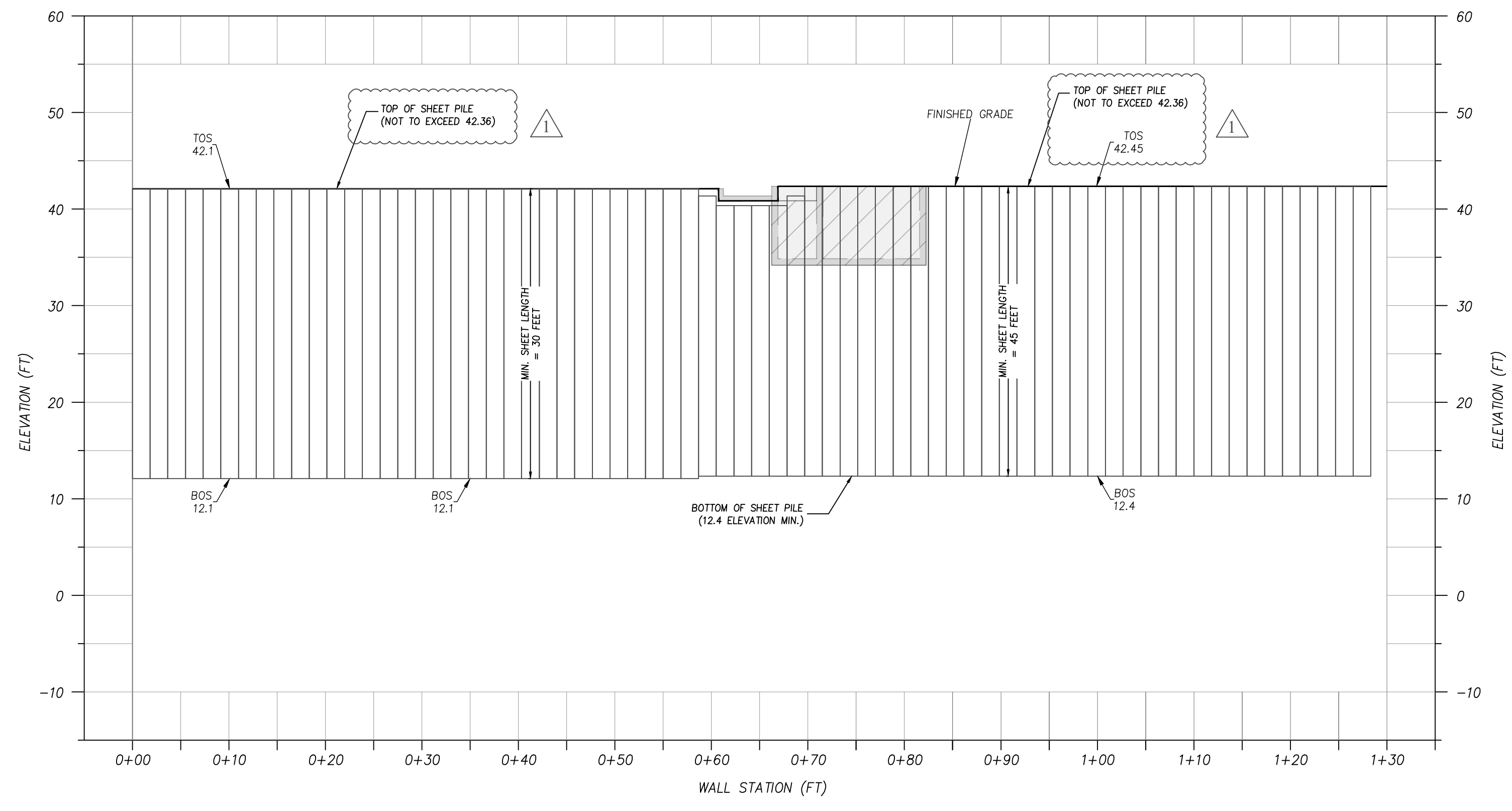
2 PZ-22 SHEET PILE DIMENSIONS
 SCALE: NTS



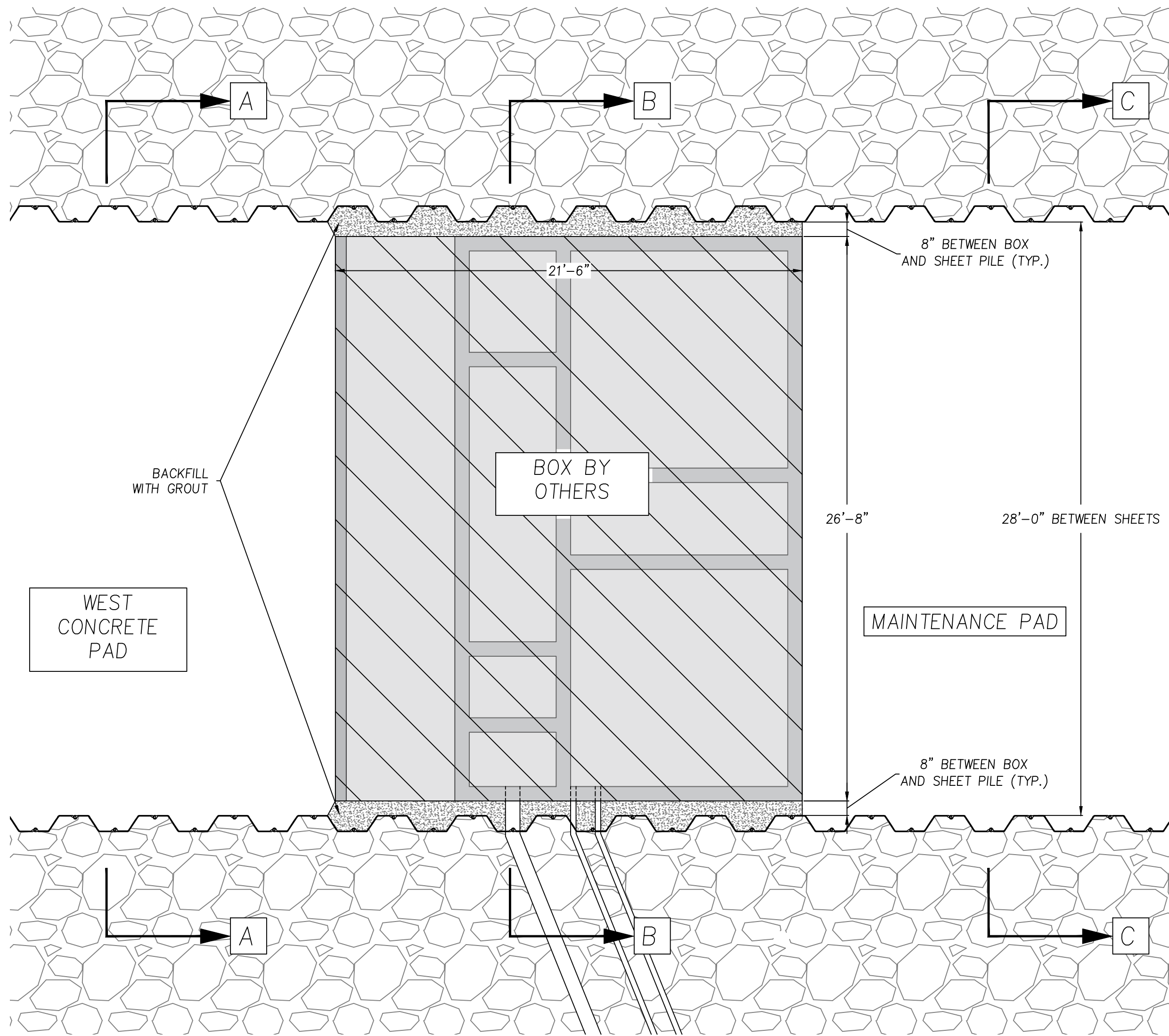
1 IMPOUNDMENT PLAN VIEW
 SCALE: 1" = 10'



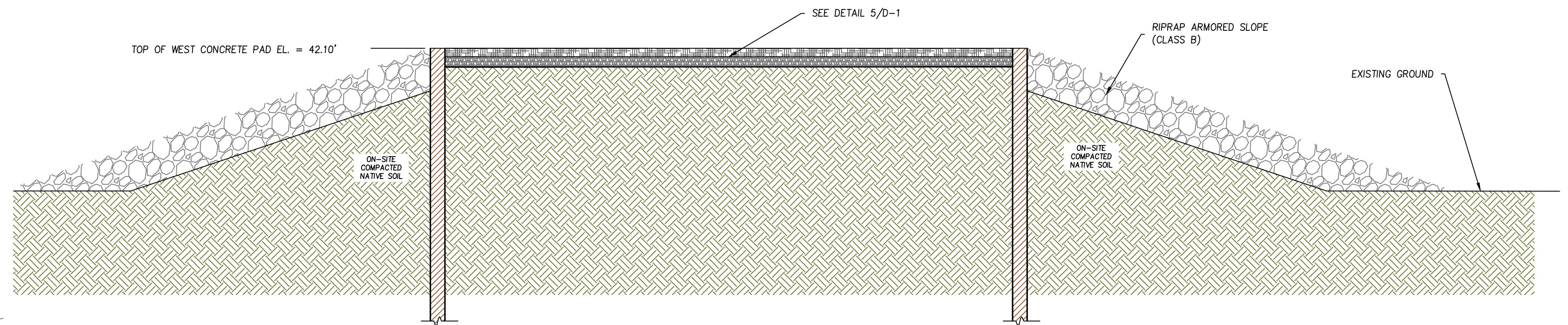
3 NORTH SHEET PILE PROFILE
 SCALE: 1" = 10'



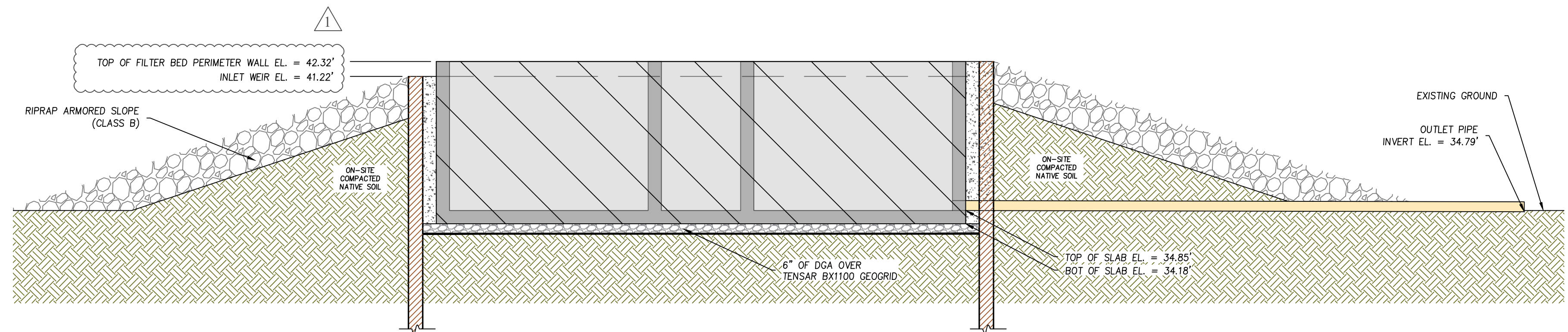
4 SOUTH SHEET PILE PROFILE
 SCALE: 1" = 10'



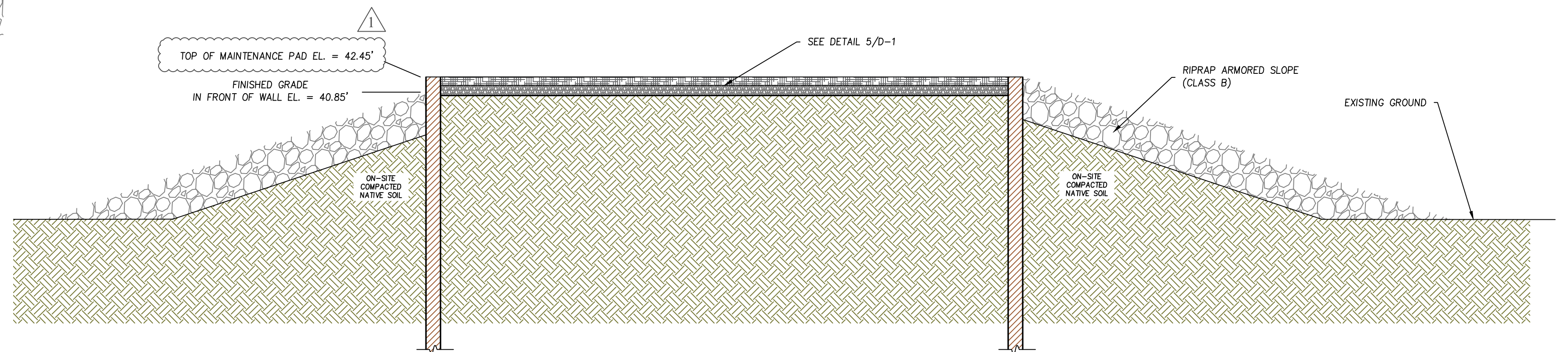
1
 C-3 SHEET PILE WALL AGAINST FILTER BED
 SCALE: NTS



2
 C-3 SECTION A-A
 SCALE: NTS



3
 C-3 SECTION B-B
 SCALE: NTS

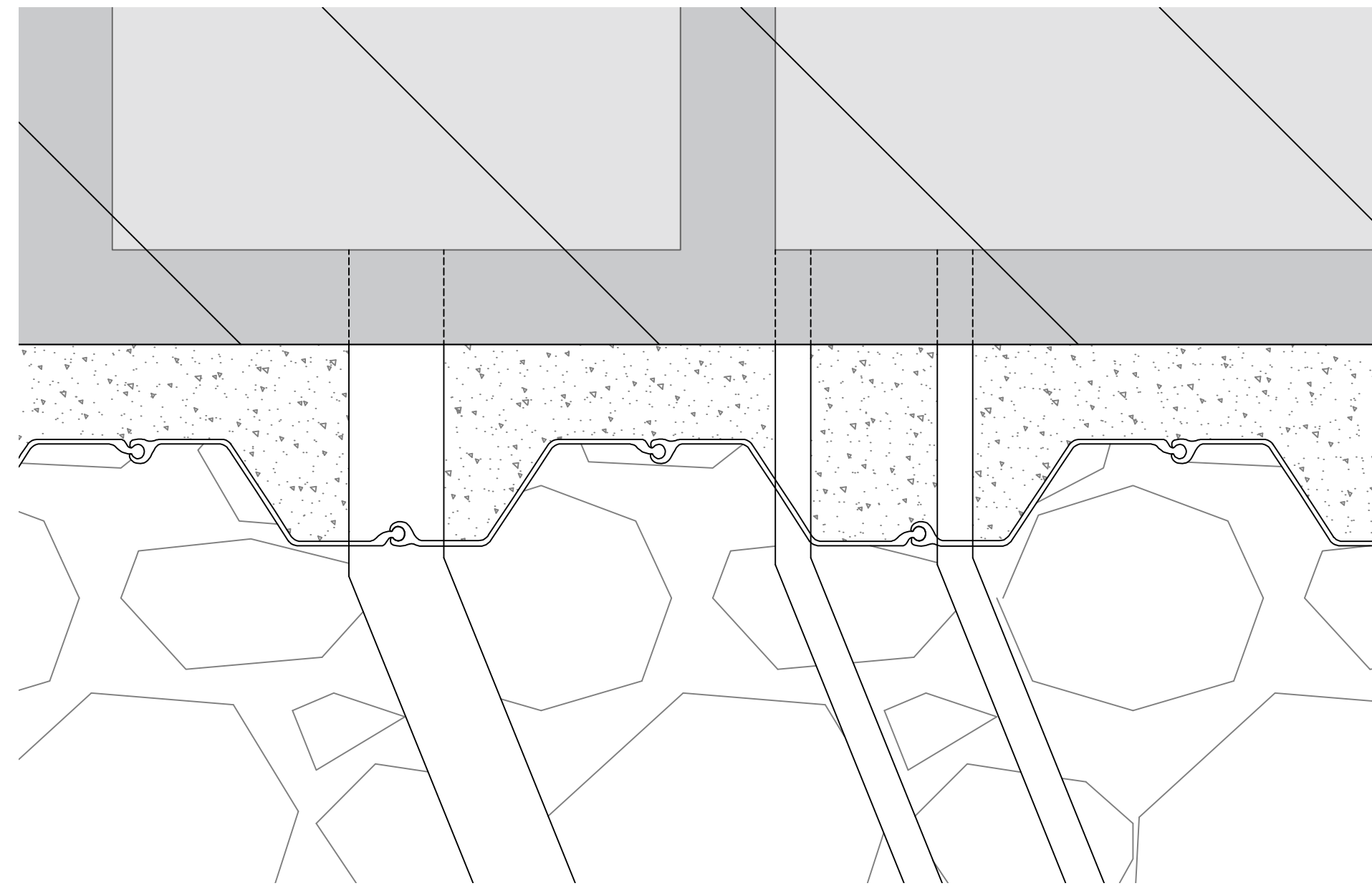


4
 C-3 SECTION C-C
 SCALE: NTS

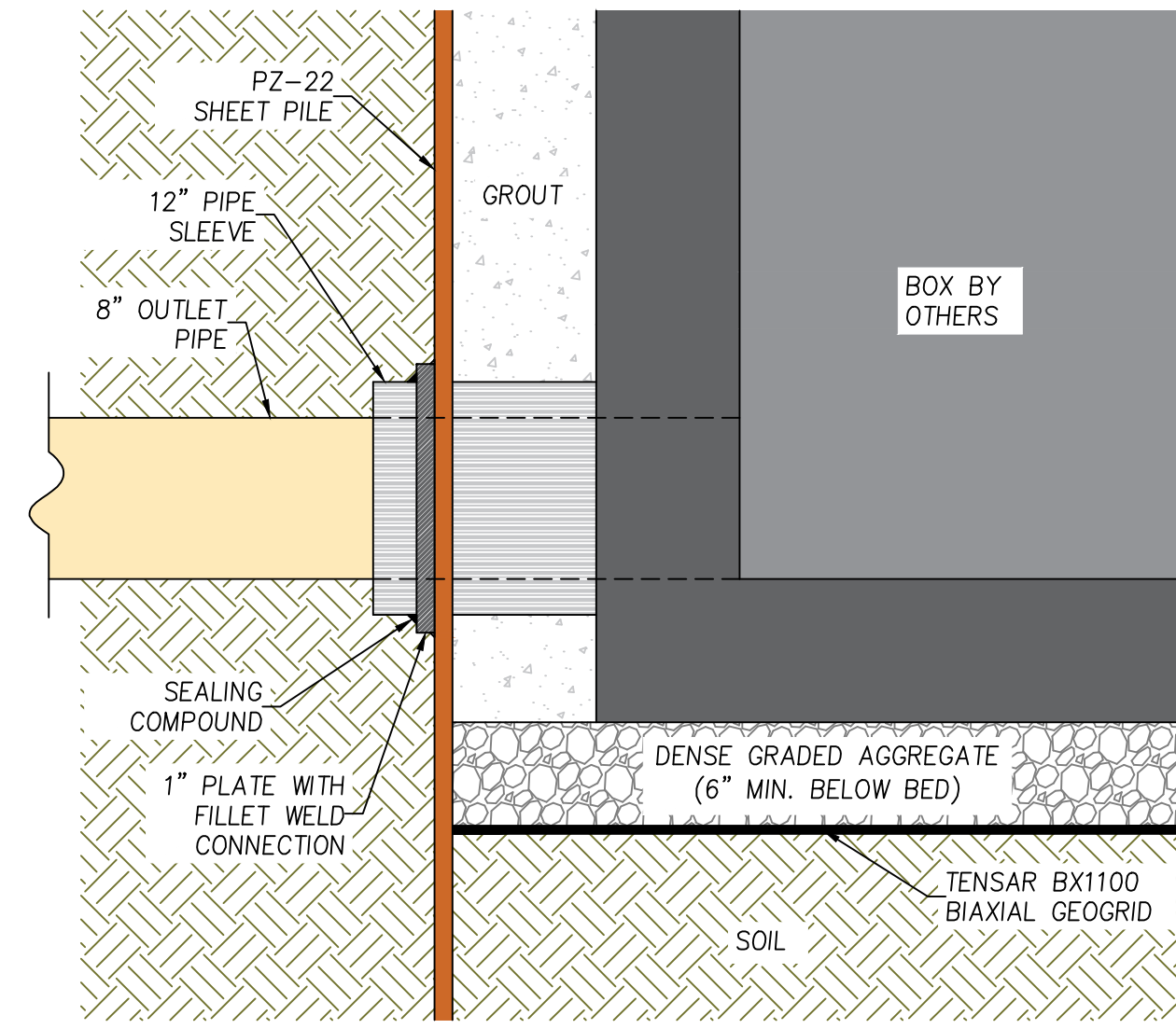
DRAWN BY:	REVIEWED BY:
NSS	JRW
DESIGNED BY:	APPROVED BY:
JRW	JRW
SCALE:	AS SHOWN
DATE:	October 28, 2020

Revisions	
No.	Description
1	As-Built Revisions
2	
3	
4	
5	
6	

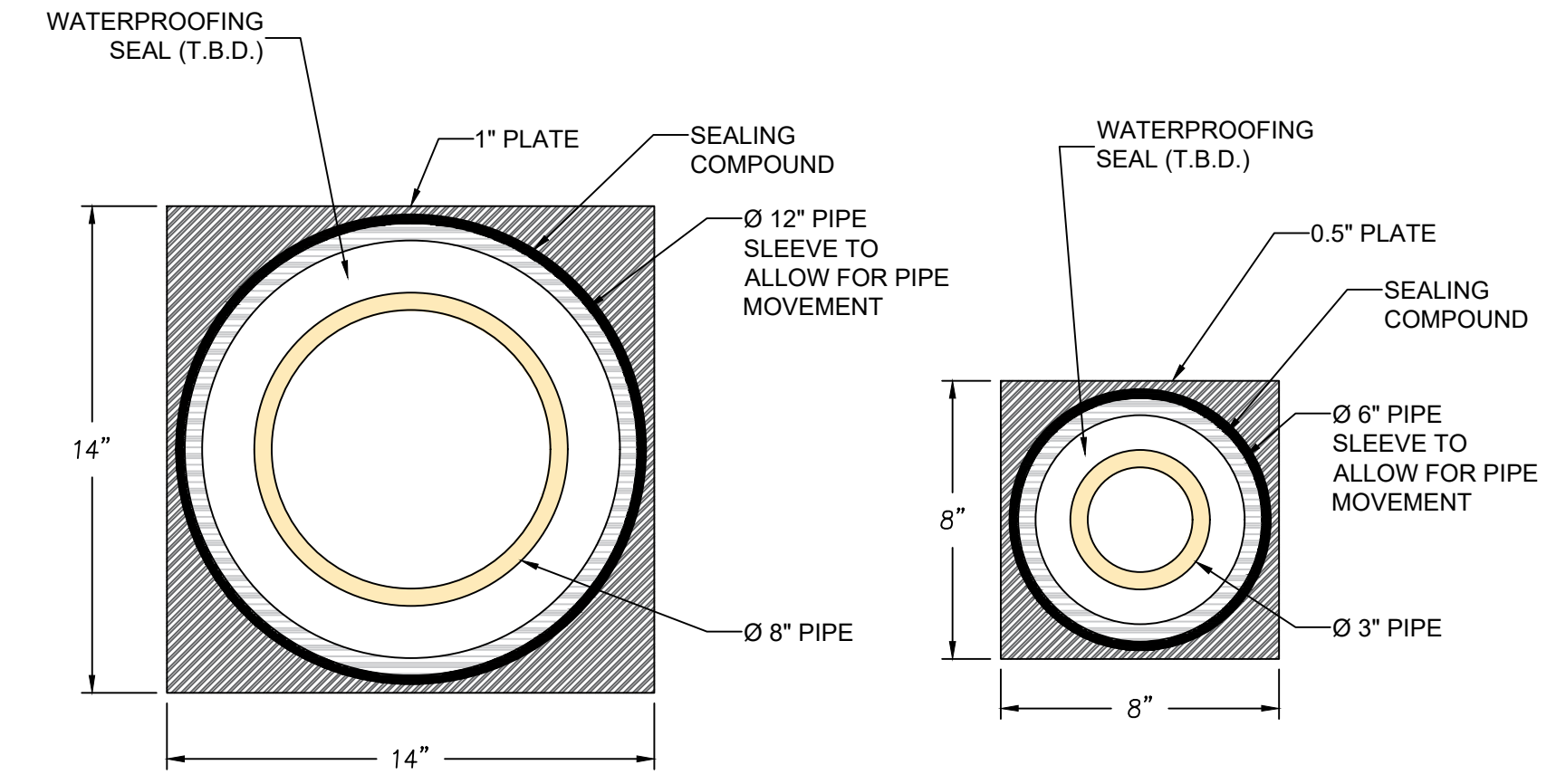
DRAWING: **C-3**
 PROJECT NUMBER: 43-20611



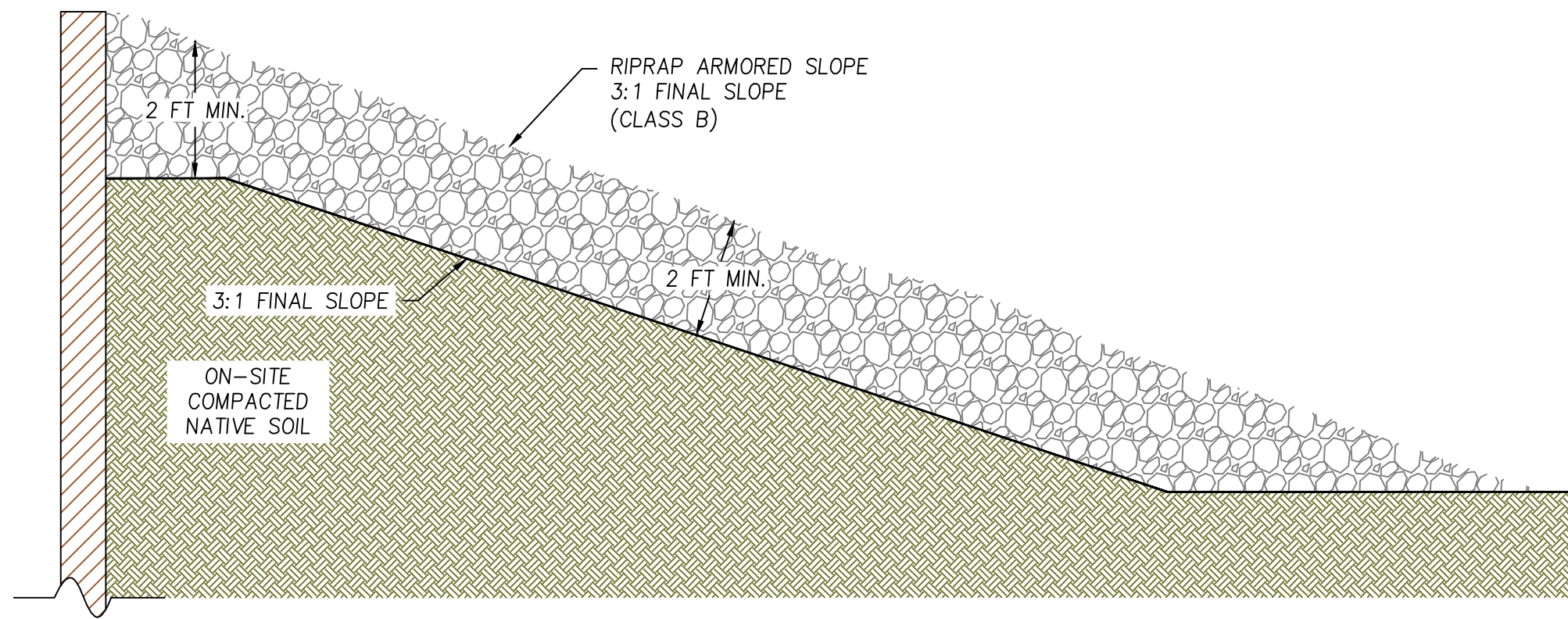
1 BOX TO SHEET PILE CONNECTION
SCALE: NTS



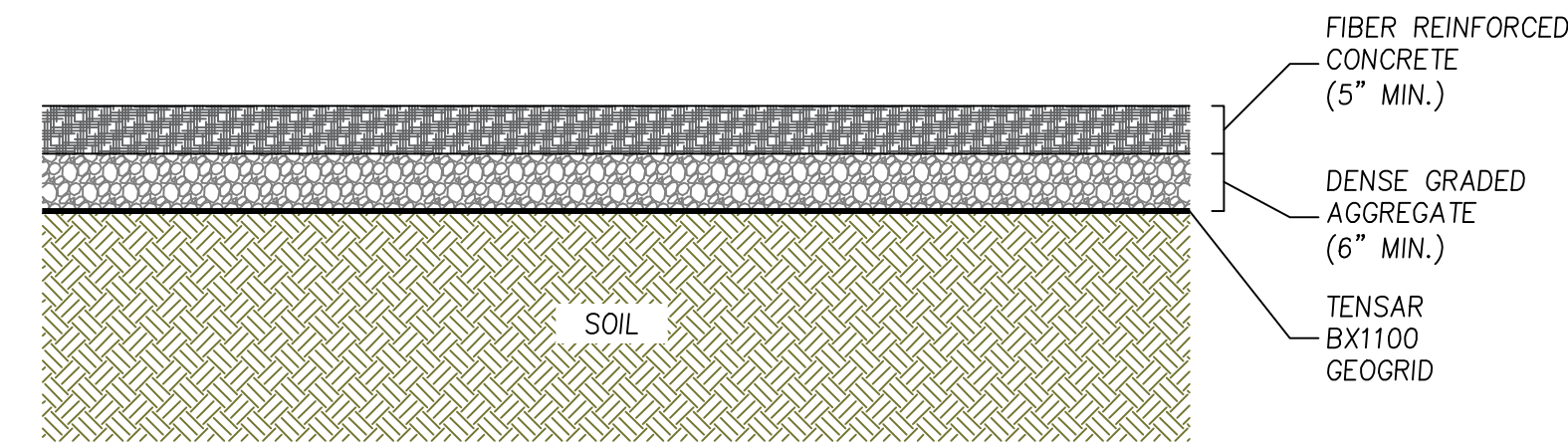
2 PIPE THROUGH SHEET PILE WALL
SCALE: NTS



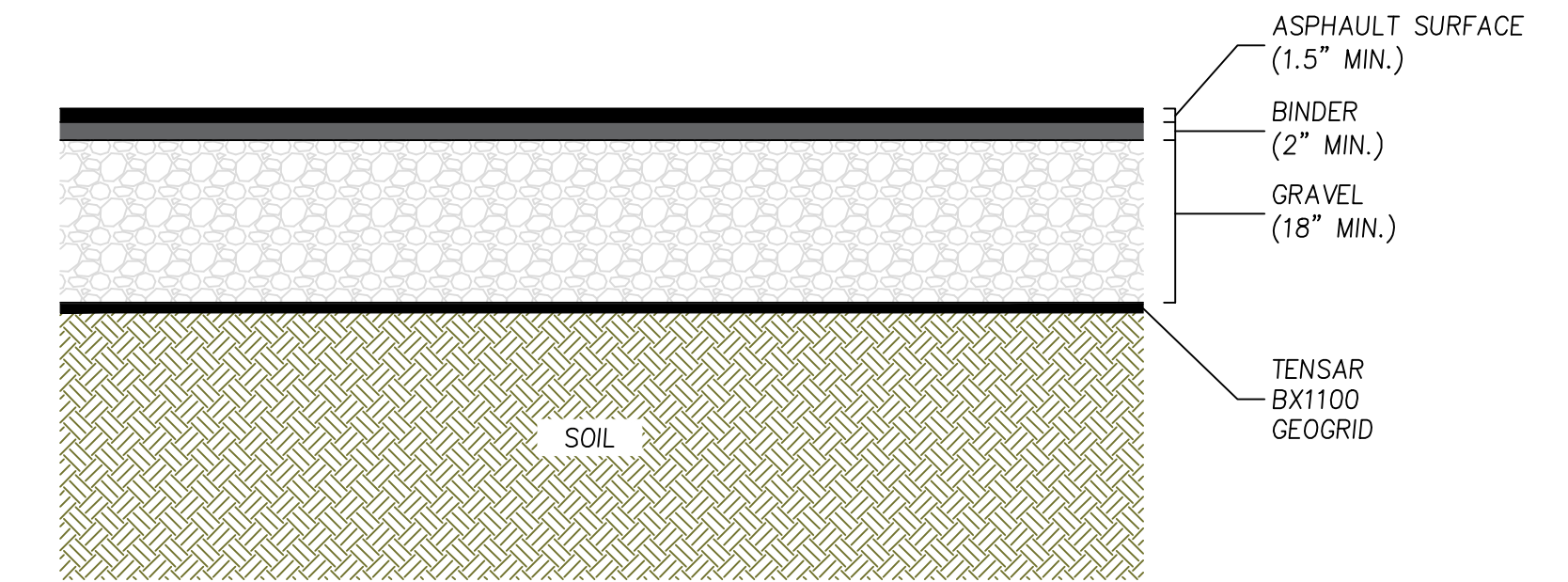
3 OUTLET PIPE AND DRAIN LINE THROUGH SHEET PILE WALL
SCALE: NTS



4 RIPRAP ARMORED SLOPE
SCALE: NTS



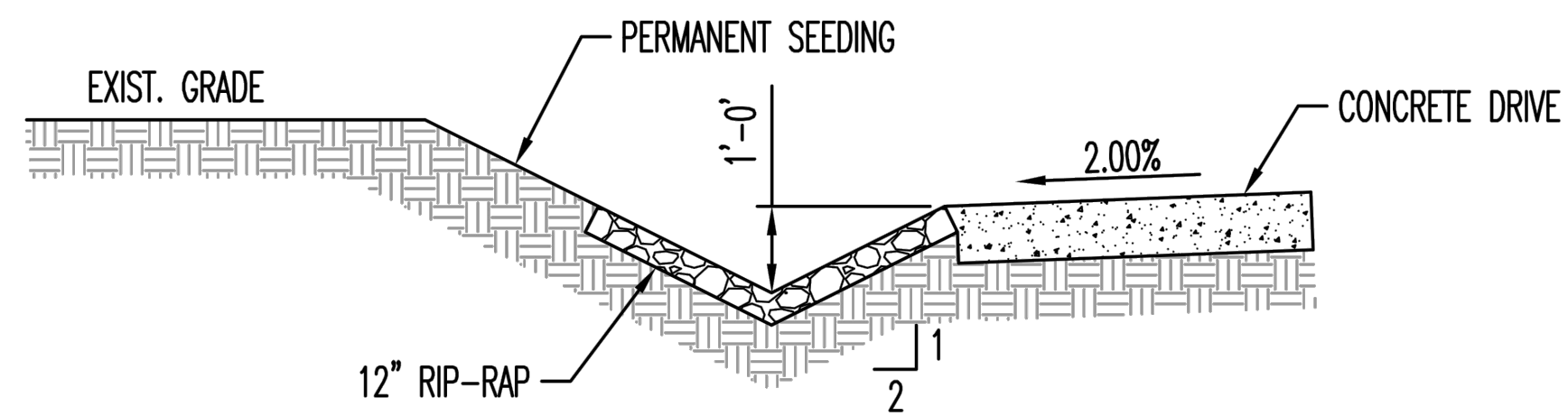
5 MAINTENANCE PAD & WEST CONCRETE PAD SURFACING
SCALE: NTS



6 LAYDOWN PAD & ACCESS ROAD CROSS-SECTION
SCALE: NTS

DRAWN BY:	REVIEWED BY:
NSS	JRW
DESIGNED BY:	APPROVED BY:
JRW	JRW
SCALE:	AS SHOWN
DATE:	October 28, 2020

Revisions	
No.	Description
1	As-Built Revisions
2	
3	
4	
5	
6	



1
0-2 DRAINAGE SWAIL DETAIL
SCALE: NTS

Typical Details

Chemours Interim Seep C Remediation Project
 Fayetteville, North Carolina

DRAWN BY: NSS
 DESIGNED BY: JRW

REVIEWED BY: JRW
 APPROVED BY: JRW

SCALE: AS SHOWN

DATE: October 28, 2020

Revisions		By:
No.	Date	Description
1	4/14/2021	As-Built Revisions
2		
3		
4		
5		
6		

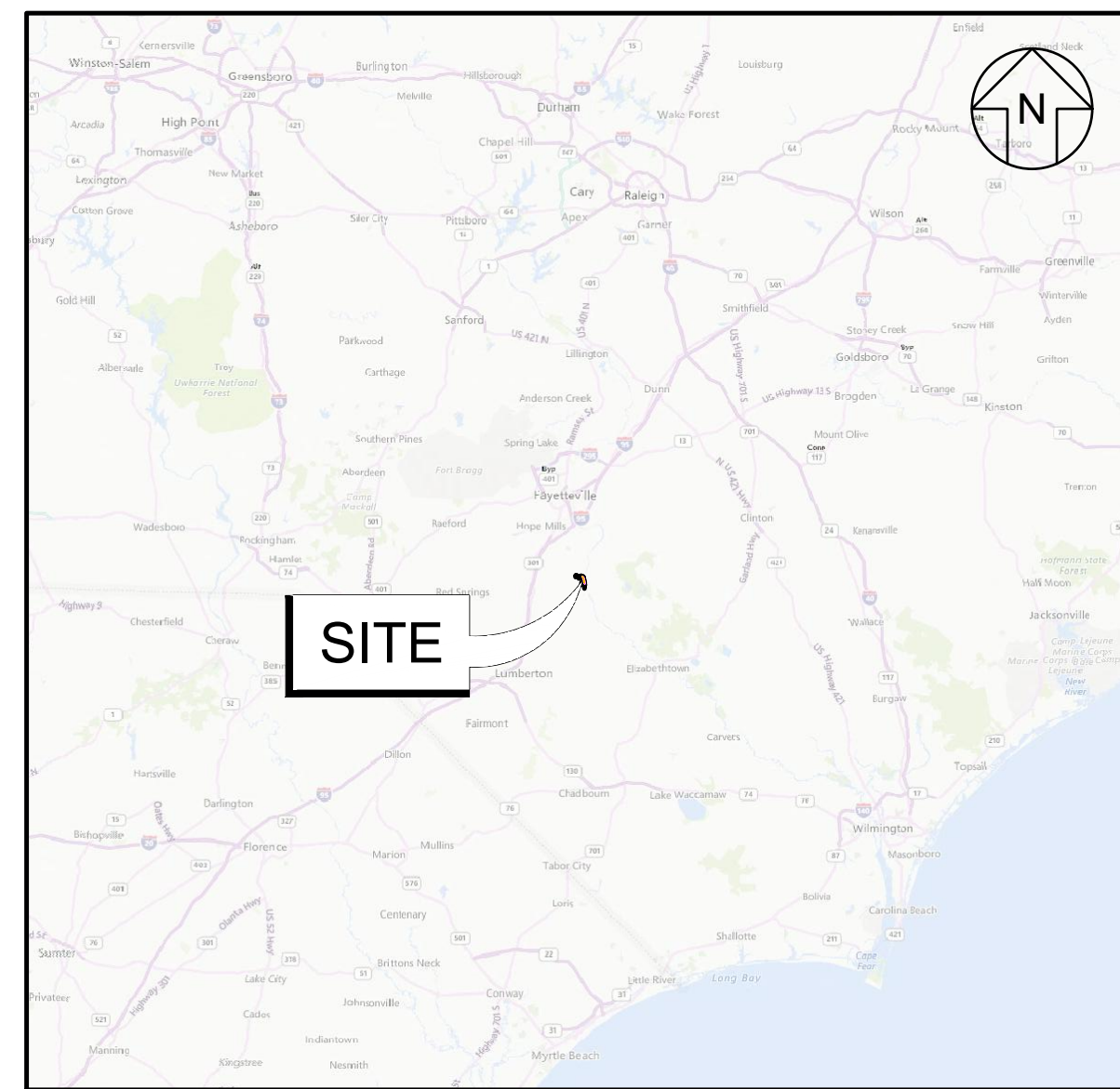
DRAWING: D-2

PROJECT NUMBER: 43-20611

APPENDIX E –
MECHANICAL AS-BUILT DRAWINGS

THE CHEMOURS COMPANY FAYETTEVILLE WORKS PROJECT SEEP C INTERIM REMEDIATION SYSTEM MECHANICAL AS-BUILT RECORD DRAWINGS

WILLIS CREEK AND CAPE FEAR RIVER CORRIDOR FAYETTEVILLE, BLADEN AND CUMBERLAND COUNTIES STATE OF NORTH CAROLINA APRIL 2021



SOURCE: U.S. BUREAU OF THE CENSUS
VICINITY MAP
SCALE: 1" = 30 MILES

INDEX OF DRAWINGS	
DRAWING NO.	DRAWING TITLE
G-01	COVER SHEET
G-02	NOTES AND SYMBOLS
C-01	SEEP C INTERIM REMEDIATION SYSTEM CONSTRUCTION DETAILS I
C-02	SEEP C INTERIM REMEDIATION SYSTEM CONSTRUCTION DETAILS II
C-03	SEEP C INTERIM REDEMIATION SYSTEM CONSTRUCTION DETAILS III
C-04	PLATFORM DETAILS
D-01	SEEP C INTERIM REMEDIATION SYSTEM PROCESS FLOW DIAGRAM



SOURCE: MICROSOFT CORPORATION BING MAPS 2017
LOCATION MAP
SCALE: 1" = 3,000'
SCALE IN FEET

PREPARED FOR:



22828 NC-87
FAYETTEVILLE, NC 28306
910.483.4681

PREPARED BY:



Geosyntec Consultants of NC, P.C.
NC License No.: C-3500 and C-295
ATRIUM AT BLUE RIDGE
2501 BLUE RIDGE ROAD, SUITE 430
RALEIGH, NC 27607
919.870.0576

REV	DATE	DESCRIPTION	DRN	APP
0	04.06.21	AS-BUILT RECORD DRAWINGS SUBMITTAL	JFH	CAS
Geosyntec consultants				
TITLE:		COVER SHEET		
PROJECT:		THE CHEMOURS COMPANY SEEP C INTERIM REMEDIATION SYSTEM		
SITE:		FAYETTEVILLE WORKS SITE		
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY: CMDS	DATE: APRIL 2021	
SIGNATURE _____		DRAWN BY: JFH	PROJECT NO.: TR0795A	
DATE _____		CHECKED BY: JWE	FILE: TR0795-G001.dwg	
		REVIEWED BY: JJD	DRAWING NO.:	
		APPROVED BY: CAS	G-01	

AS-BUILT RECORD DRAWINGS

L:\040\CHEMOURS\INTERIM SEEP REMEDIATION\CONSTRUCTION DRAWINGS\TR0795-G001

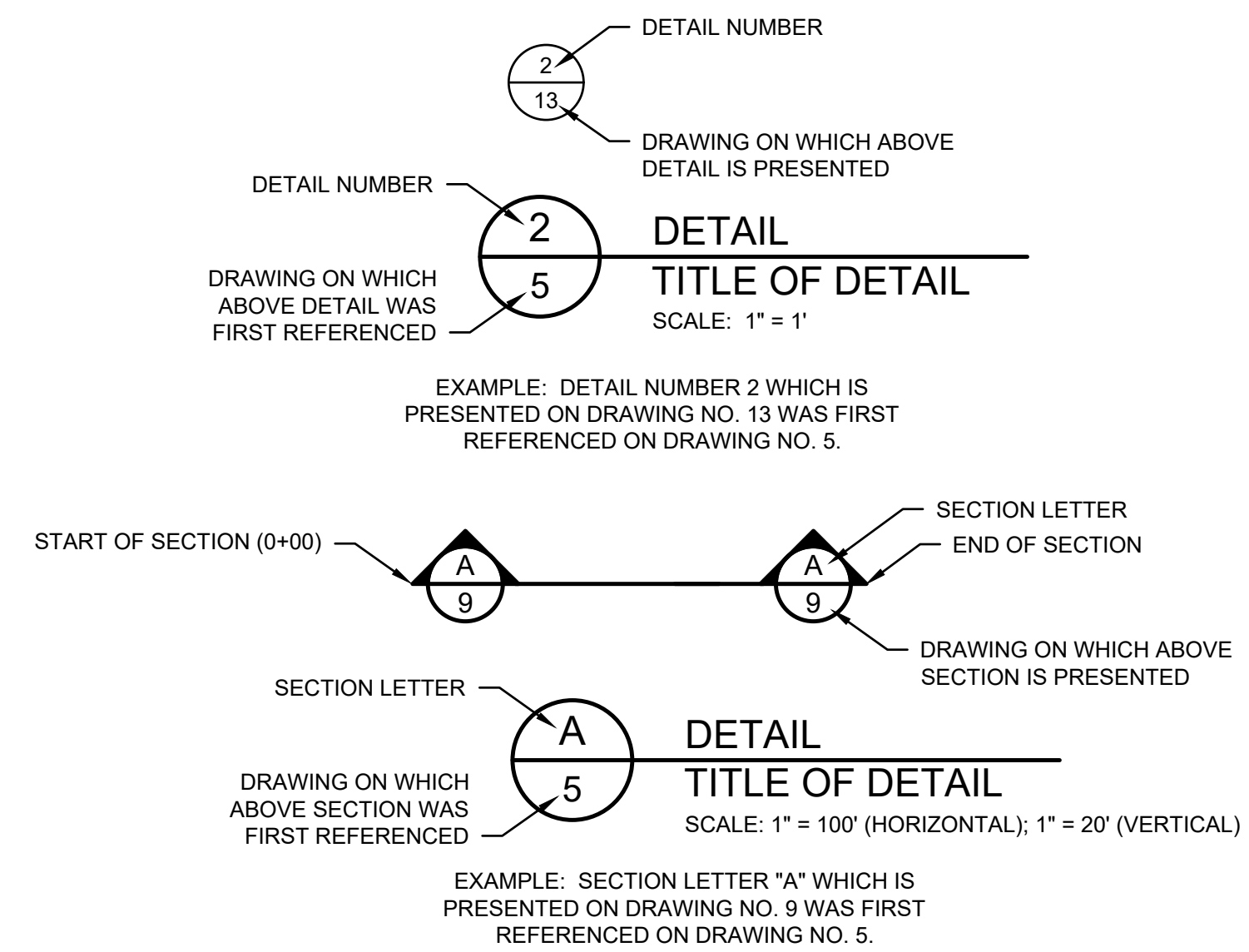
HATCH PATTERN LEGEND

	CONCRETE
	GRAVEL
	PIPE EMBEDMENT FILL
	RIPRAP
	SUBGRADE
	TRENCH BACKFILL / EARTHEN FILL

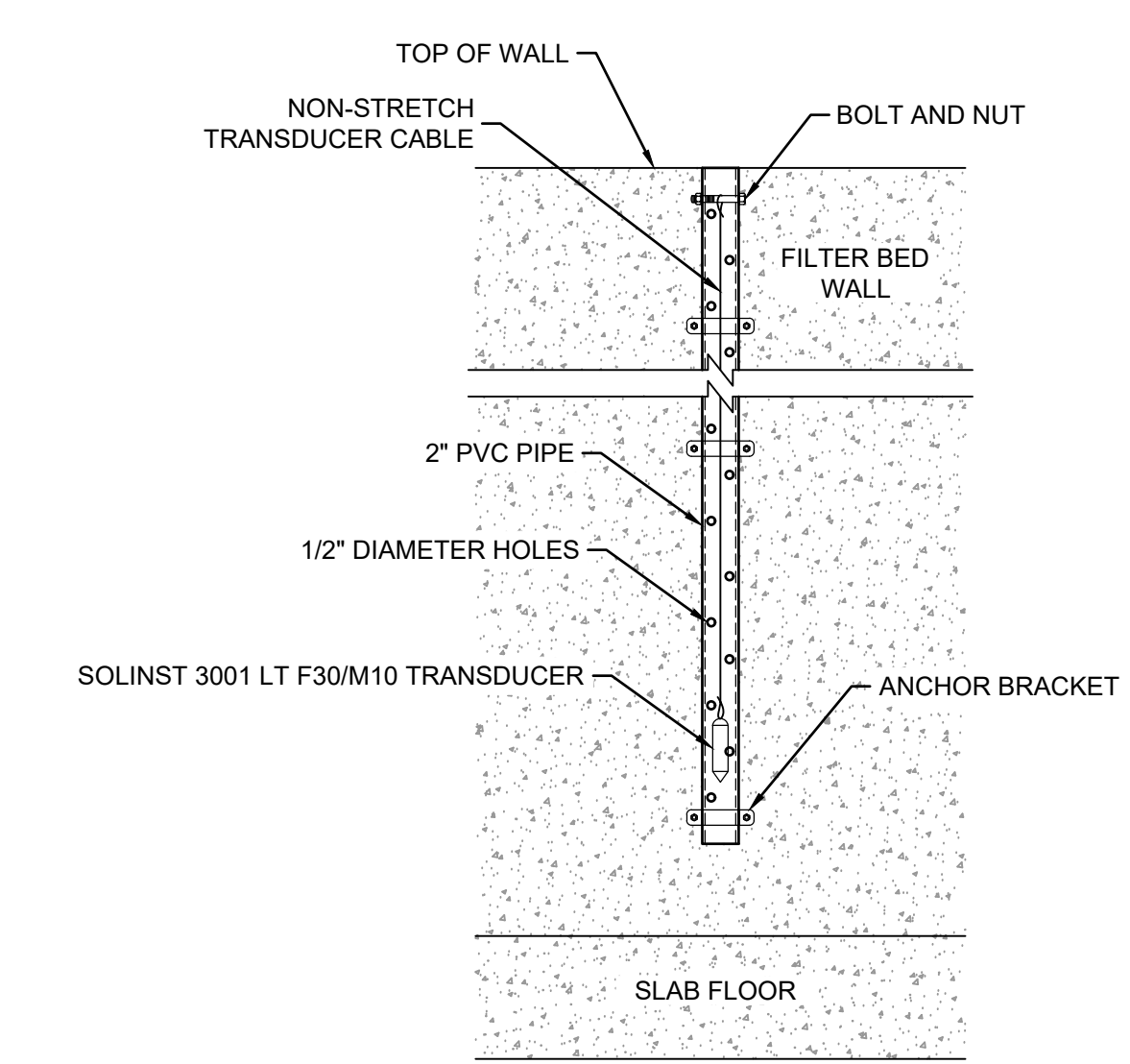
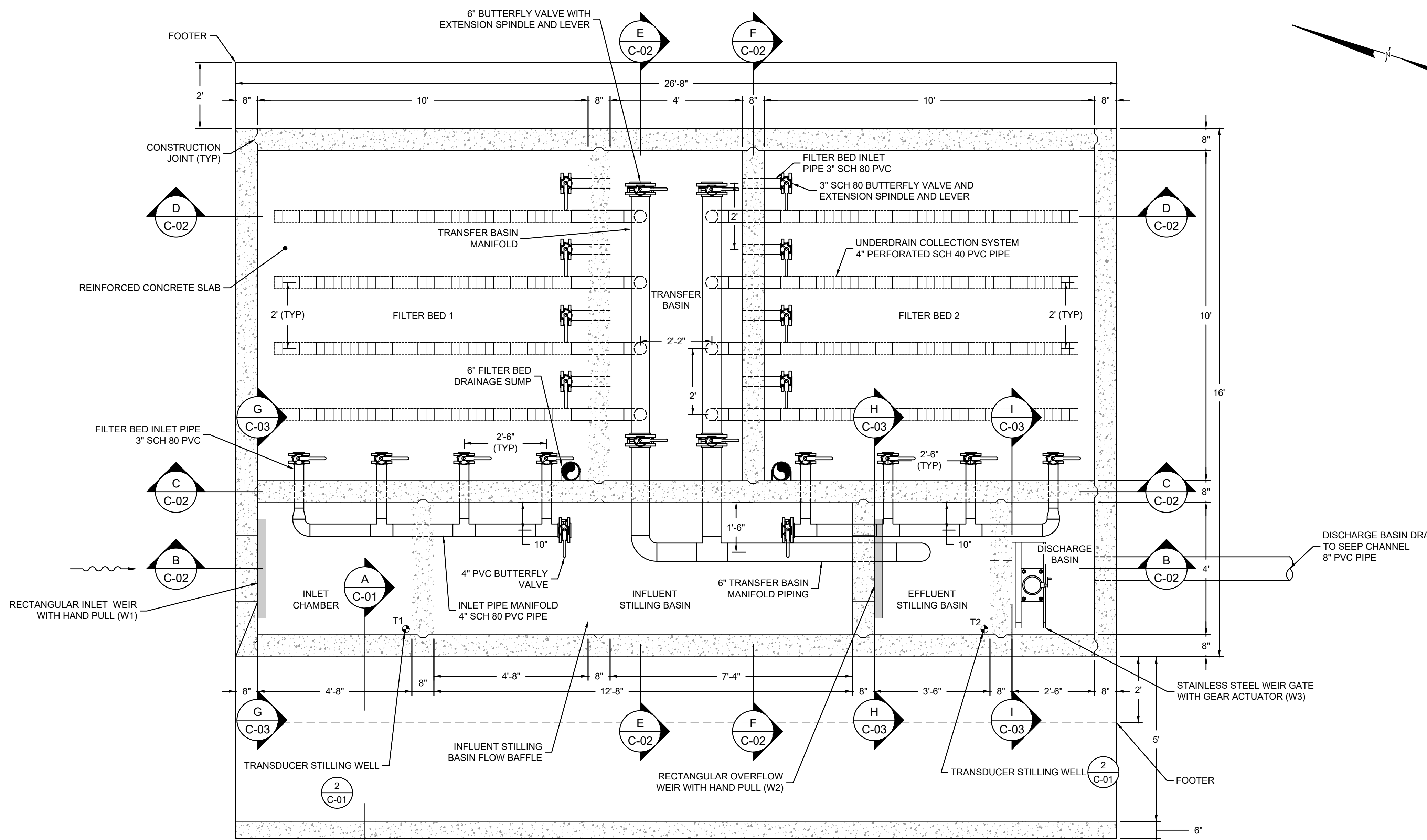
ABBREVIATIONS

APP	APPROVED BY
☷	CENTER LINE
DRN	DRAWN BY
DWG	DRAWING
E	EAST OR EASTING
FT	FEET
HDPE	HIGH DENSITY POLYETHYLENE
IN	INCH
MAX	MAXIMUM
MIN	MINIMUM
N	NORTH OR NORTHING
NO.	NUMBER
OZ	OUNCE
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
REV	REVISION
S	SOUTH
SCH	SCHEDULE
TYP	TYPICAL
U.S.	UNITED STATES
W	WEST
%	PERCENT OR PERCENTILE

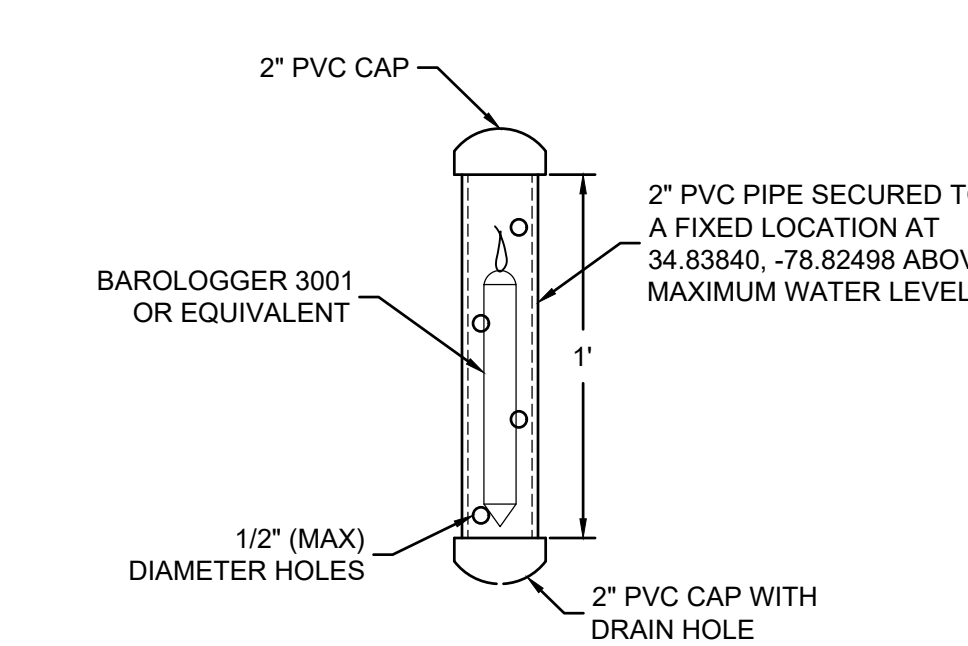
DETAIL AND SECTION IDENTIFICATION LEGEND



0	04.06.21	AS-BUILT RECORD DRAWINGS SUBMITTAL	JFH	CAS	
REV	DATE	DESCRIPTION	DRN	APP	
<p>Geosyntec Consultants of NC, P.C. NC License No.: C-3500 and C-295</p> <p style="text-align: right;"><small>ATRILUM AT BLUE RIDGE 2501 BLUE RIDGE ROAD, SUITE 430 RALEIGH, NC 27607 919.670.0576</small></p>					
TITLE:		NOTES AND SYMBOLS			
PROJECT:		THE CHEMOURS COMPANY SEEP C INTERIM REMEDIATION SYSTEM			
SITE:		FAYETTEVILLE WORKS SITE			
<small>THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.</small> _____ SIGNATURE _____ DATE		DESIGN BY:	CMSD	DATE:	APRIL 2021
		DRAWN BY:	JFH	PROJECT NO.:	TR0795A
		CHECKED BY:	JWE	FILE:	TR0795-G002.dwg
		REVIEWED BY:	JJD	DRAWING NO.:	G-02
APPROVED BY:	CAS				

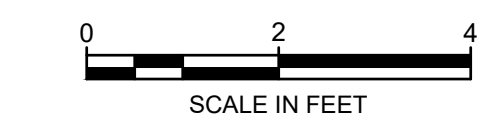


2
C-01
DETAIL
TRANSUDER STILLING WELL
SCALE: 1" = 1"

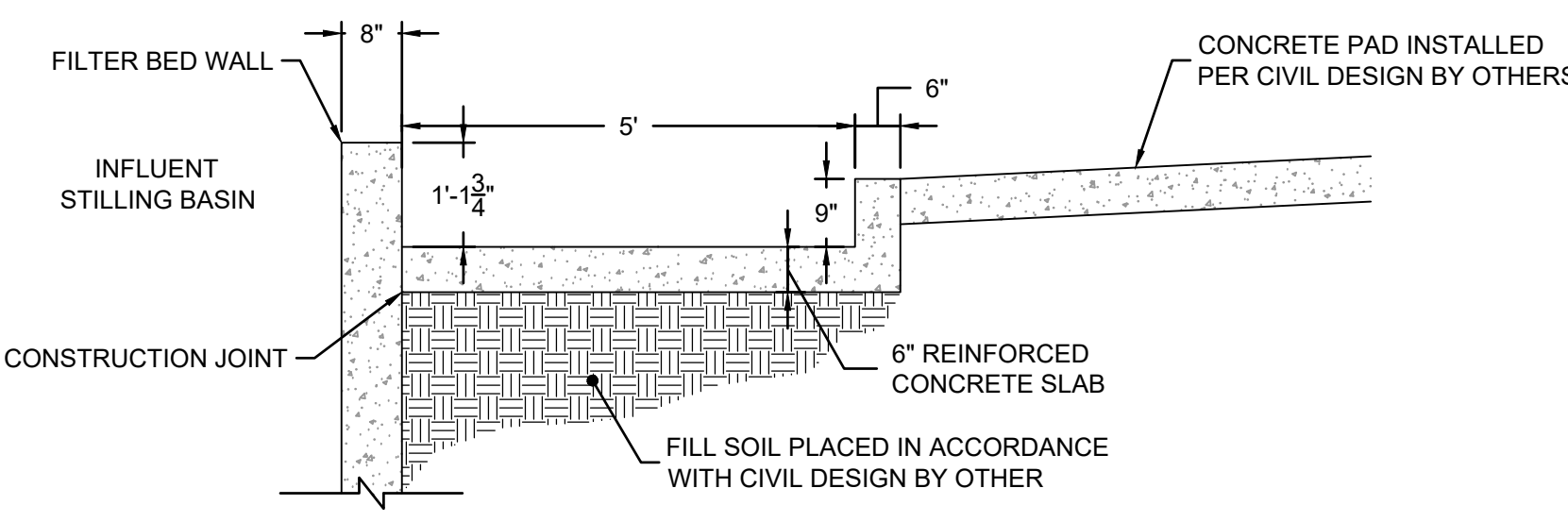


3
C-01
DETAIL
BAROMETRIC PRESSURE
TRANSUDER ENCLOSURE
SCALE: 1" = 6"

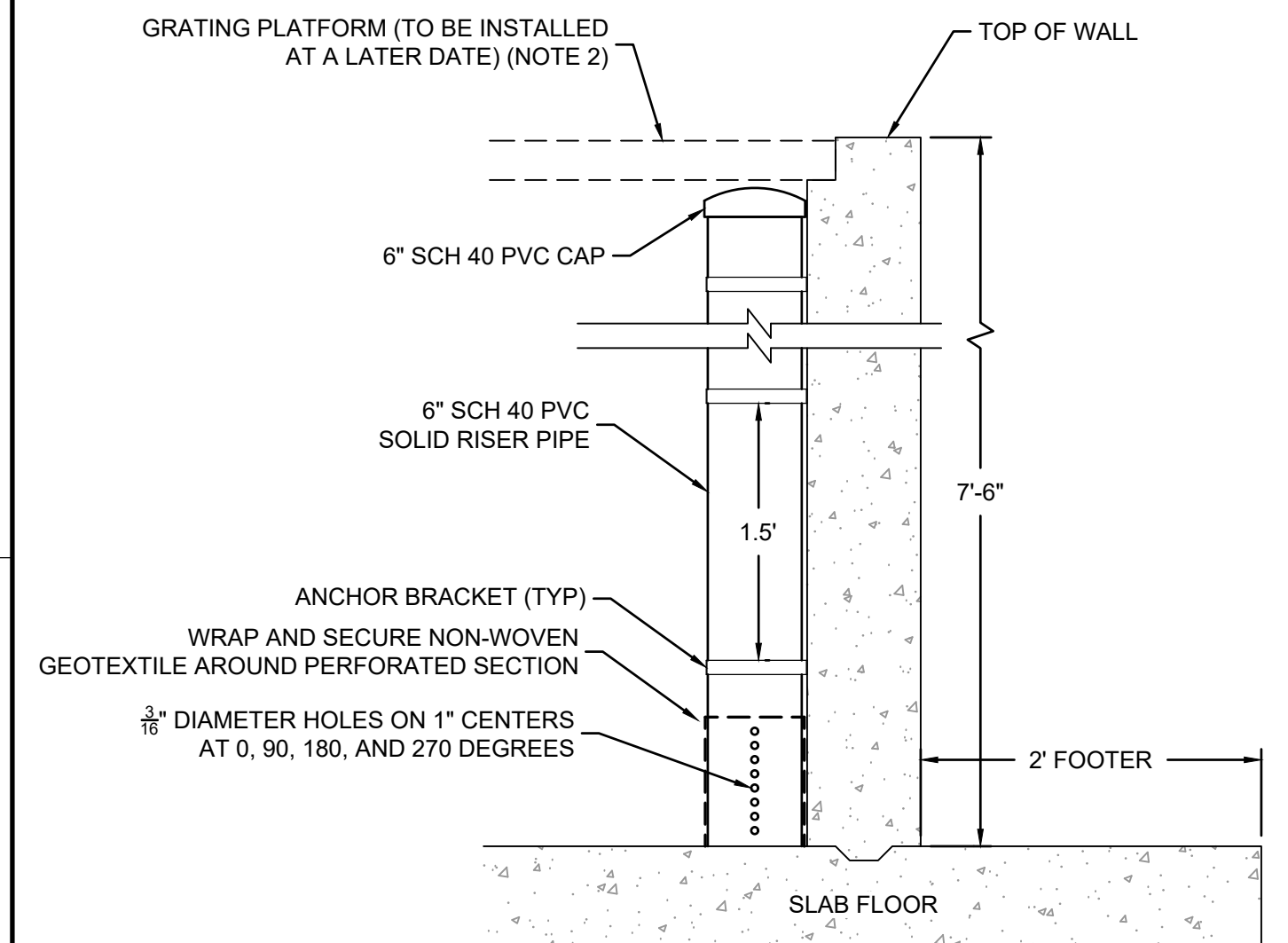
- NOTES:**
- FOR CLARITY OF PRESENTATION, THE INSTALLED SYSTEM OF HORIZONTAL AND VERTICAL BRACES, SUPPORTS, AND STRUTS FOR THE VARIOUS PIPES AND FITTINGS IS NOT SHOWN.
 - ADDITIONAL PLATFORM HAS BEEN PROCURED FOR INSTALLATION OVER FILTER BEDS AT A LATER DATE AS AN ADDITIONAL SAFETY PRECAUTION. GRATING WILL BE SUPPORTED WITH A W8X18 STEEL BEAM (ONE 10-FT SUPPORT IN EACH BED). GRATING IS BEDFORD REINFORCED PLASTICS, PROGRID MOLDED FRP GRATING, 2'X2'X2" SQUARE GRIDS.



1
C-01
DETAIL
FILTER BED
SCALE: 1" = 2"



A
C-01
SECTION
BYPASS SPILLWAY
SCALE: 1" = 2"



4
C-01
DETAIL
FILTER BED DRAINAGE SUMP
SCALE: 1" = 1"

REV	DATE	DESCRIPTION	JFH	CAS
0	04.06.21	AS-BUILT RECORD DRAWINGS SUBMITTAL	JFH	CAS
			DRN	APP

Geosyntec consultants
Geosyntec Consultants of NC, P.C.
NC License No.: C-3500 and C-295

ATRUM AT BLUE RIDGE
2501 BLUE RIDGE ROAD, SUITE 430
RALEIGH, NC 27607
919.870.0576

TITLE: SEEP C INTERIM REMEDIATION SYSTEM
CONSTRUCTION DETAILS I

PROJECT: THE CHEMOURS COMPANY
SEEP C INTERIM REMEDIATION SYSTEM

SITE: FAYETTEVILLE WORKS SITE

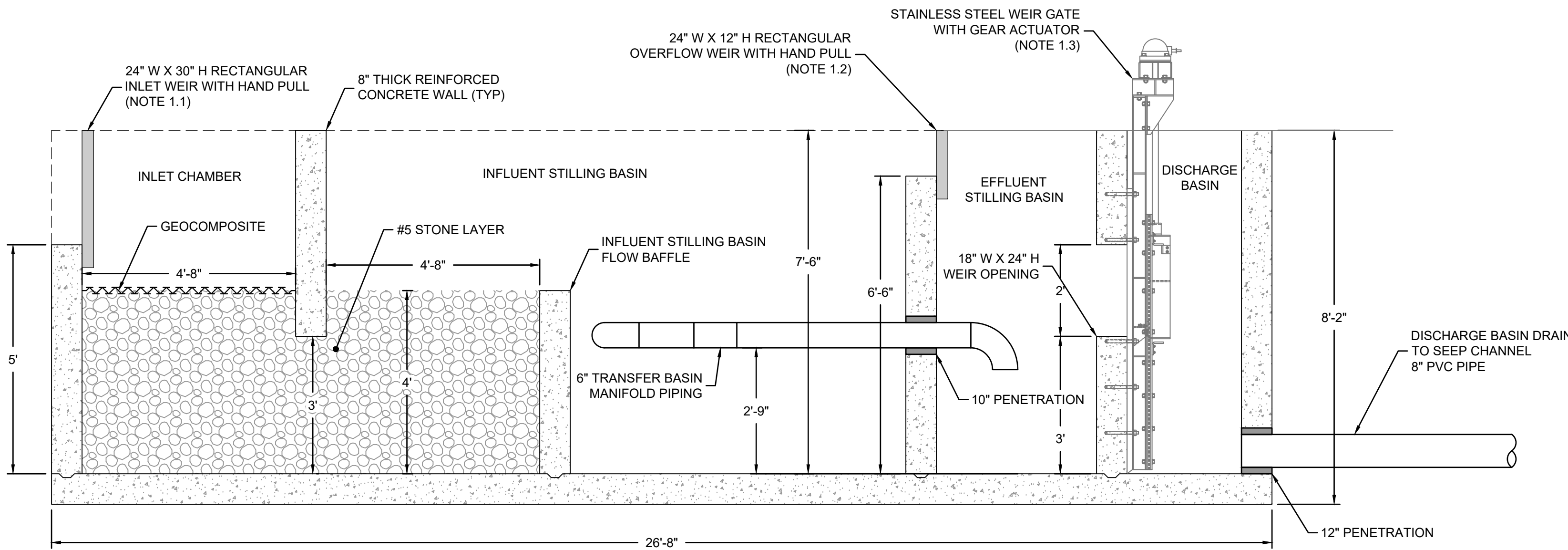
DESIGN BY:	CMDS	DATE:	APRIL 2021
DRAWN BY:	JFH	PROJECT NO.:	TR0795A
CHECKED BY:	JWE	FILE:	TR0795-C501.dwg
REVIEWED BY:	JJD	DRAWING NO.:	C-01
APPROVED BY:	CAS		

THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.

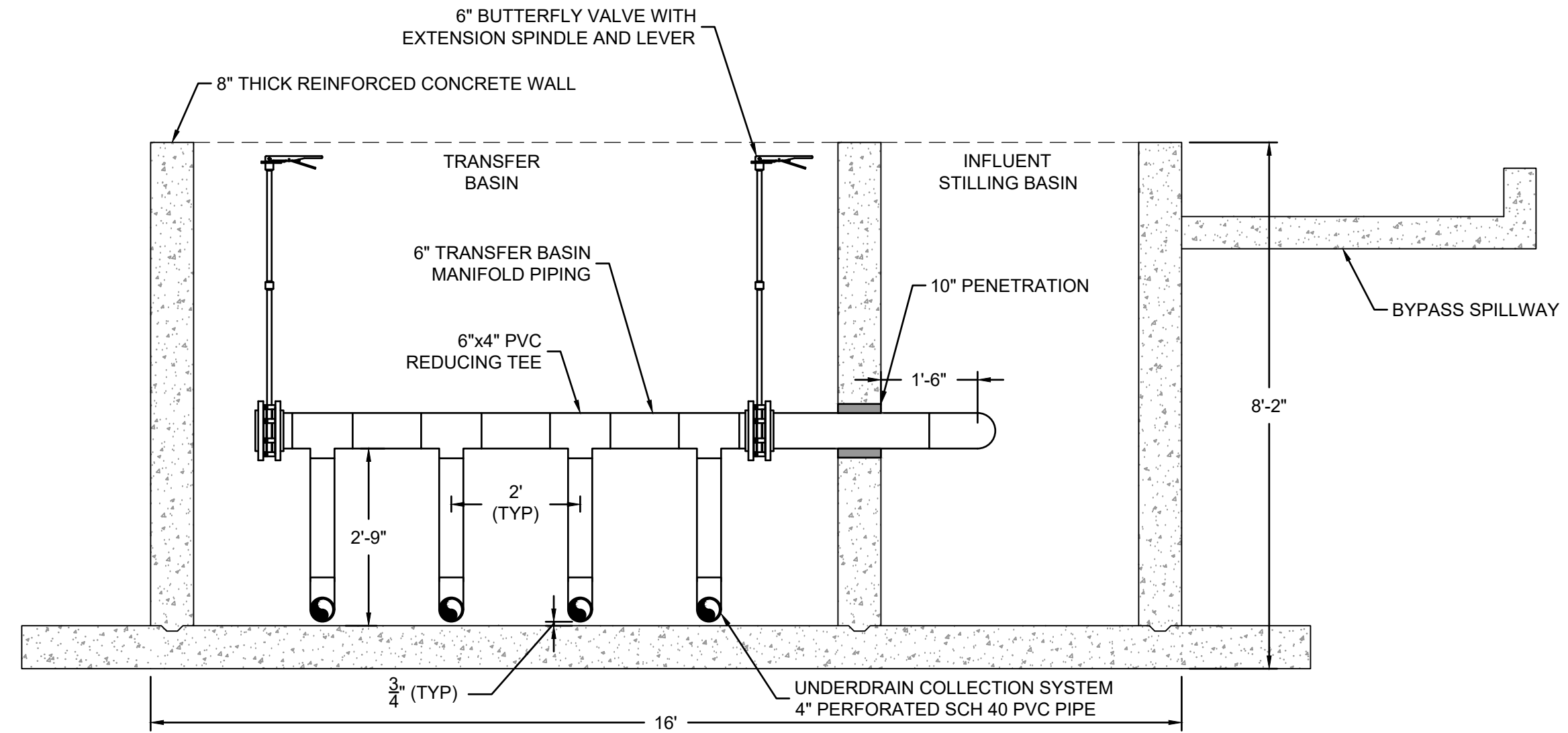
SIGNATURE _____
DATE _____

L:\CAD\CHM\INTERIM SEEP REMEDY\SEEP CONSTRUCTION\CONSTR\TR0795-C501

A

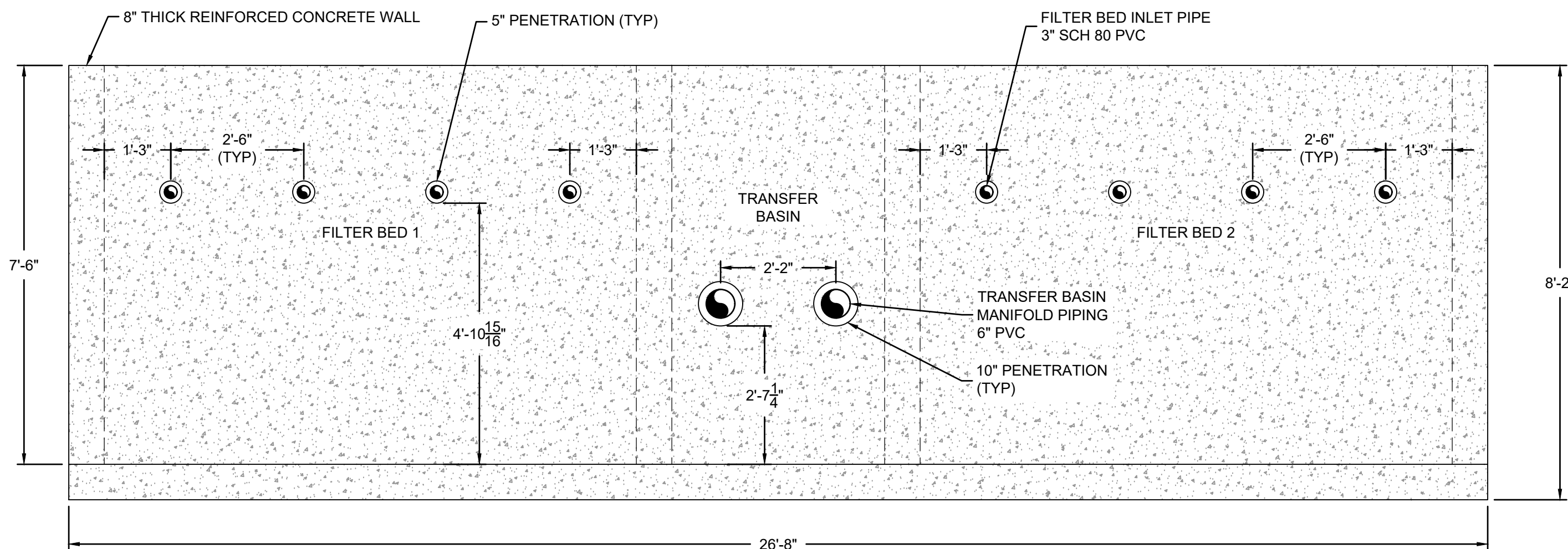


B
SECTION
C-01
FILTER BED
SCALE: 1" = 3'

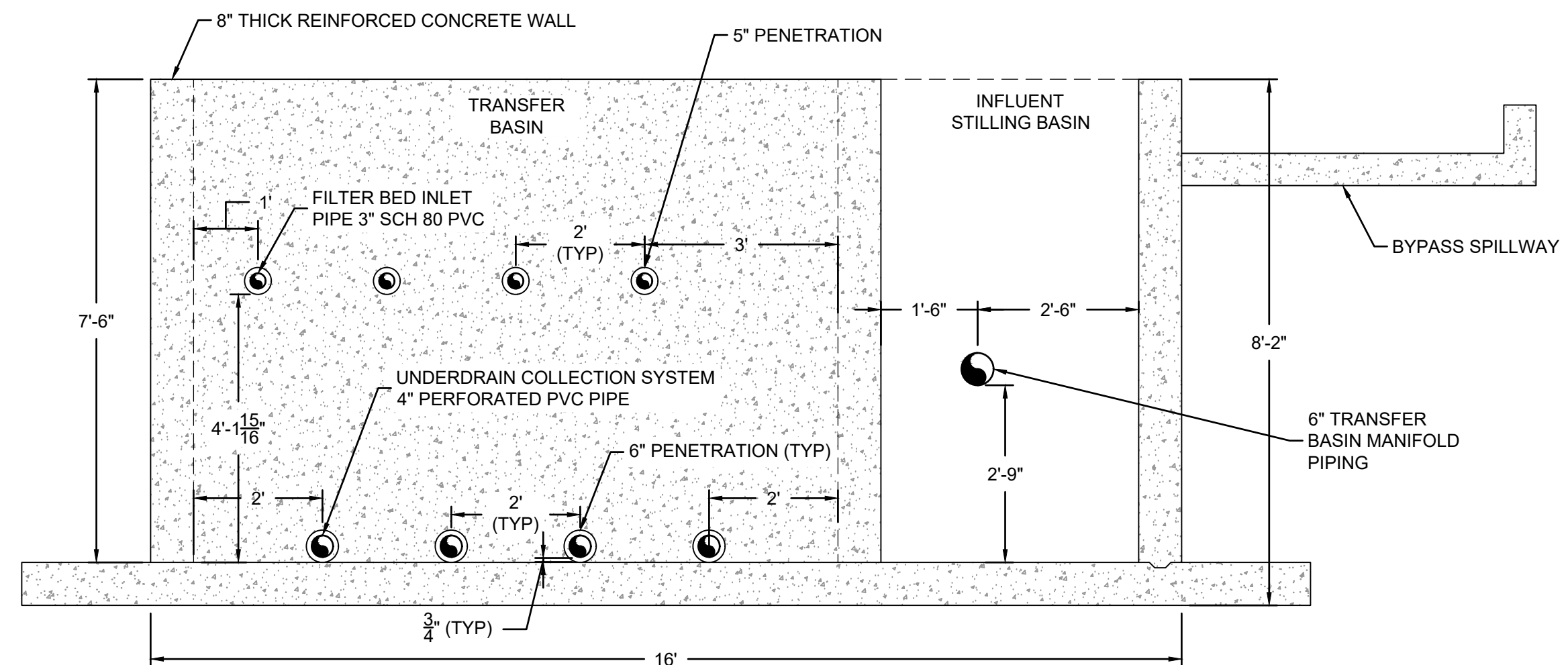


E
SECTION
C-01
FILTER BED
SCALE: 1" = 3'

C

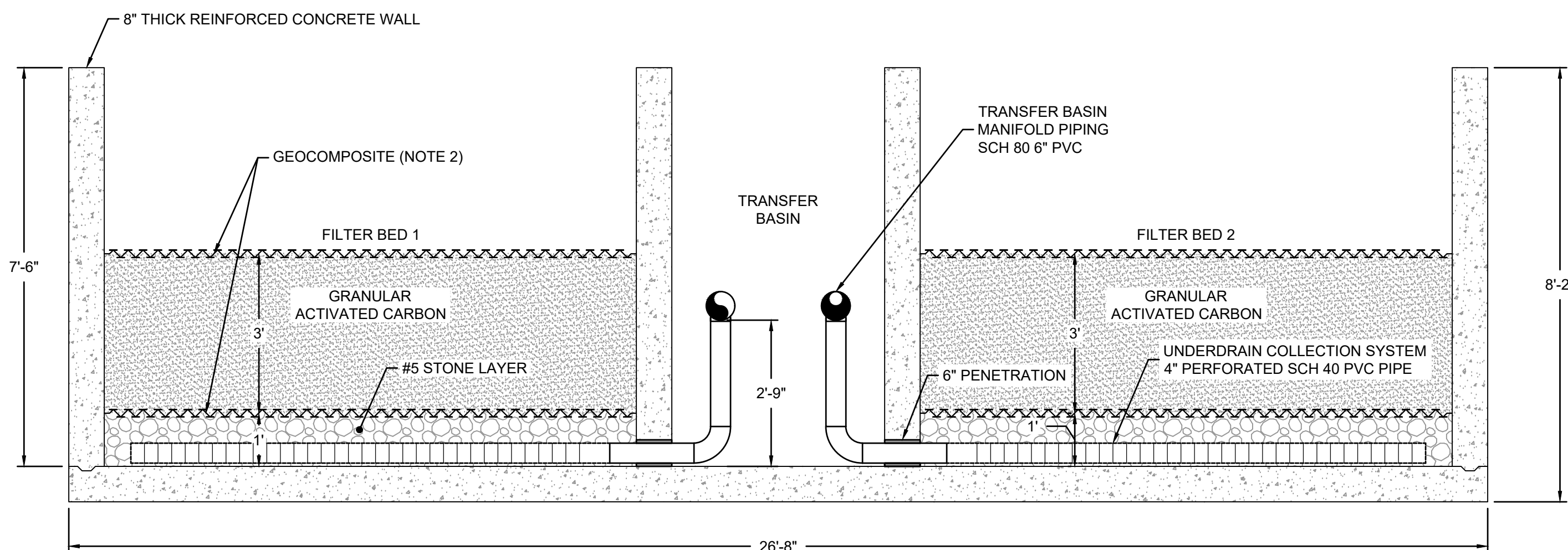


C
SECTION
C-01
FILTER BED
SCALE: 1" = 3'



F
SECTION
C-01
FILTER BED
SCALE: 1" = 3'

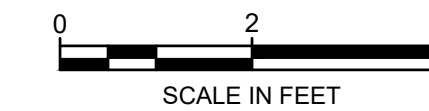
E



D
SECTION
C-01
FILTER BED
SCALE: 1" = 3'

NOTES:

1. THE WEIRS WERE PURCHASED FROM NORTHCOAST VALVE & GATE, INC., AS FOLLOWS:
 - 1.1. THE INLET CHAMBER WEIR (W1) IS A 24"X30" STAINLESS STEEL WEIR GATE, HANDLE LIFT, MANUFACTURER DRAWING NUMBER NVG-6298-1.
 - 1.2. THE OVERFLOW WEIR (W2) IS A 24"X12" STAINLESS STEEL WEIR GATE, HANDLE LIFT, MANUFACTURER DRAWING NVG-6298-1.
 - 1.3. THE DOWNWARD OPENING DISCHARGE WEIR (W3) IS A 18"X24" STAINLESS STEEL WEIR GATE, GEAR OPERATED, MANUFACTURER DRAWING NUMBER NVG-6298.
2. THE GEOCOMPOSITE INSTALLED ABOVE THE STONE LAYERS (INLET CHAMBER AND EACH FILTER BED) AND ABOVE THE GAC LAYERS (FILTER BEDS) WAS 200 MIL GEONET FROM AGRU AMERICA, INC. THE GEOTILE COMPONENT OF THE GEOCOMPOSITE (DOUBLE SIDED) WAS APPARENT OPENING SIZE 0.180 MM AND 8 OZ/ SQUARE YARD MASS PER UNIT AREA.



REV	DATE	DESCRIPTION	JFH	CAS
0	04.06.21	AS-BUILT RECORD DRAWINGS SUBMITTAL	JFH	CAS
			DRN	APP

Geosyntec
consultants

Geosyntec Consultants of NC, P.C.
NC License No.: C-3500 and C-295

ATRIUM AT BLUE RIDGE
2501 BLUE RIDGE ROAD, SUITE 430
RALEIGH, NC 27607
919.870.0576

TITLE: SEEP C INTERIM REMEDIATION SYSTEM CONSTRUCTION DETAILS II			
PROJECT: THE CHEMOURS COMPANY SEEP C INTERIM REMEDIATION SYSTEM			
SITE: FAYETTEVILLE WORKS SITE			
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.	DESIGN BY: CMDS	DATE: APRIL 2021	
SIGNATURE	DRAWN BY: JFH	PROJECT NO.: TR0795A	
DATE	CHECKED BY: JWE	FILE: TR0795-C502.dwg	
	REVIEWED BY: JJD	DRAWING NO.:	
	APPROVED BY: CAS	C-02	

1 2 3 4 5 6 7 8

A

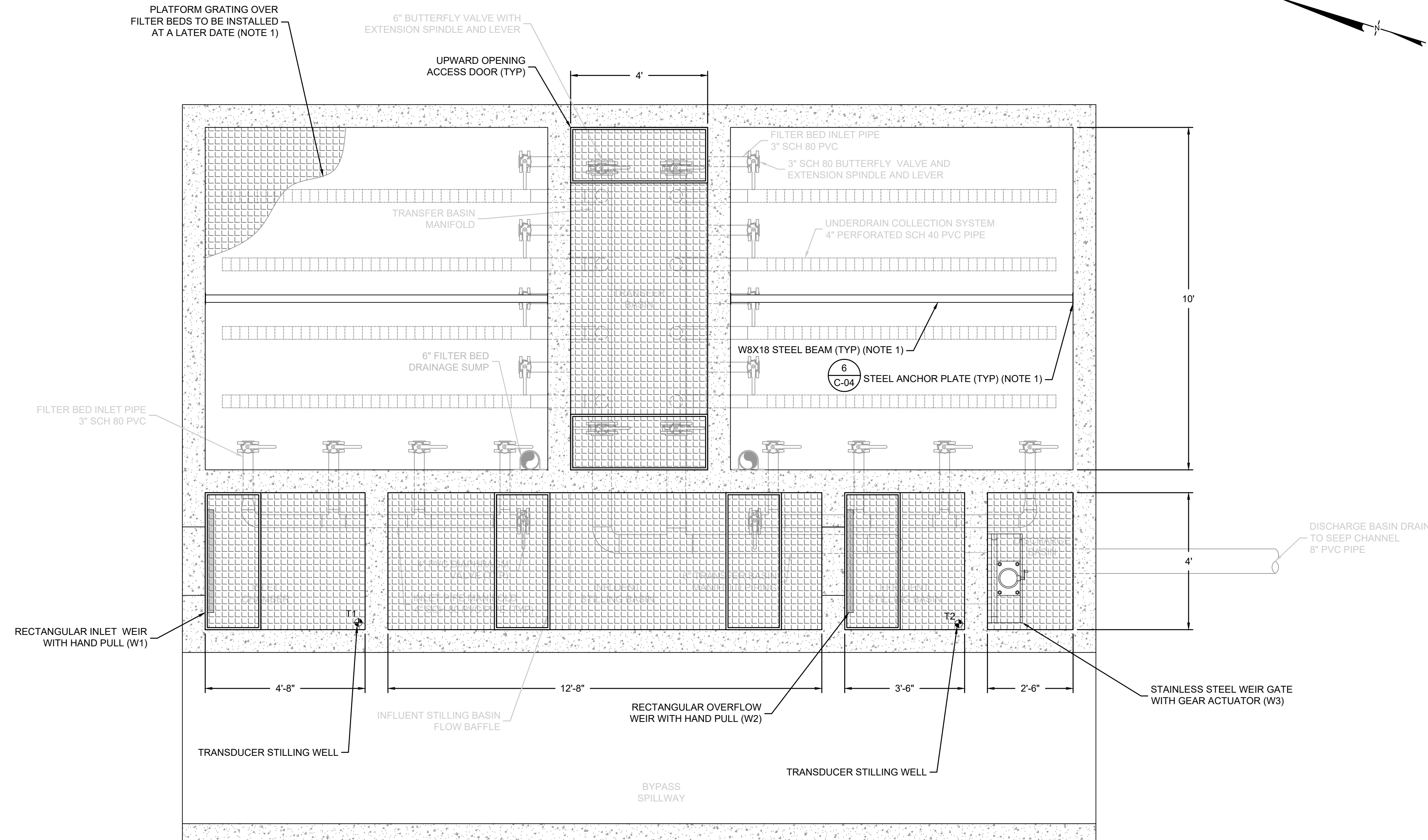
B

C

D

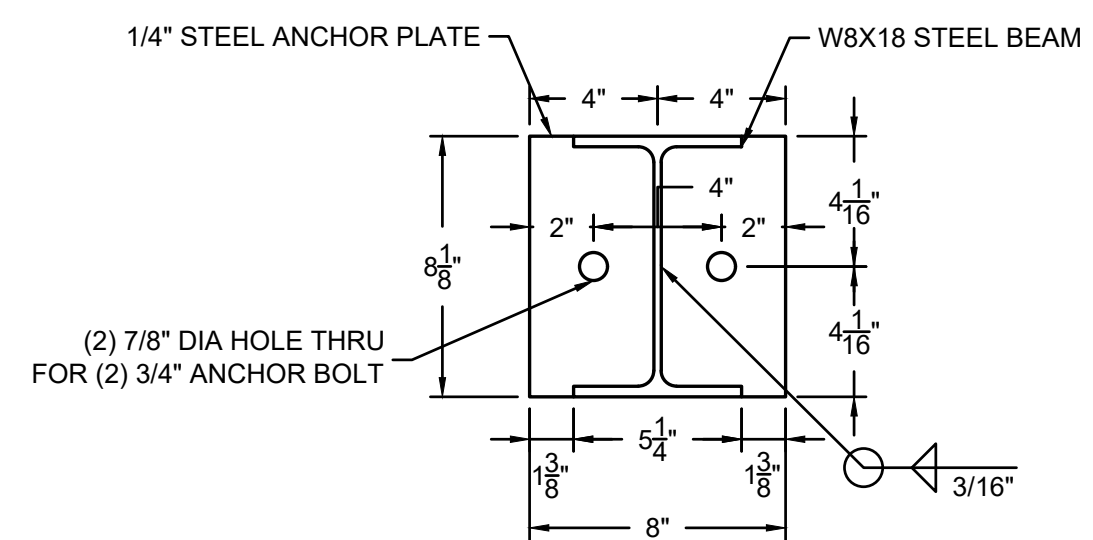
E

F

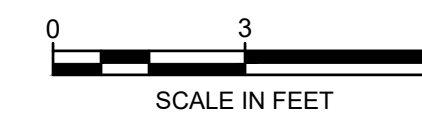


NOTES:
 1. ADDITIONAL PLATFORM HAS BEEN PROCURED FOR INSTALLATION OVER FILTER BEDS AT A LATER DATE AS AN ADDITIONAL SAFETY PRECAUTION. GRATING WILL BE SUPPORTED WITH A W8X18 STEEL BEAM (ONE 10-FT SUPPORT IN EACH BED). GRATING IS BEDFORD REINFORCED PLASTICS, PROGRID MOLDED FRP GRATING, 2"X2"X2" SQUARE GRIDS.

5 PLAN
C-01 PLATFORM
 SCALE: 1" = 2'



6 DETAIL
C-04 STEEL ANCHOR PLATE
 SCALE: 1" = 6"

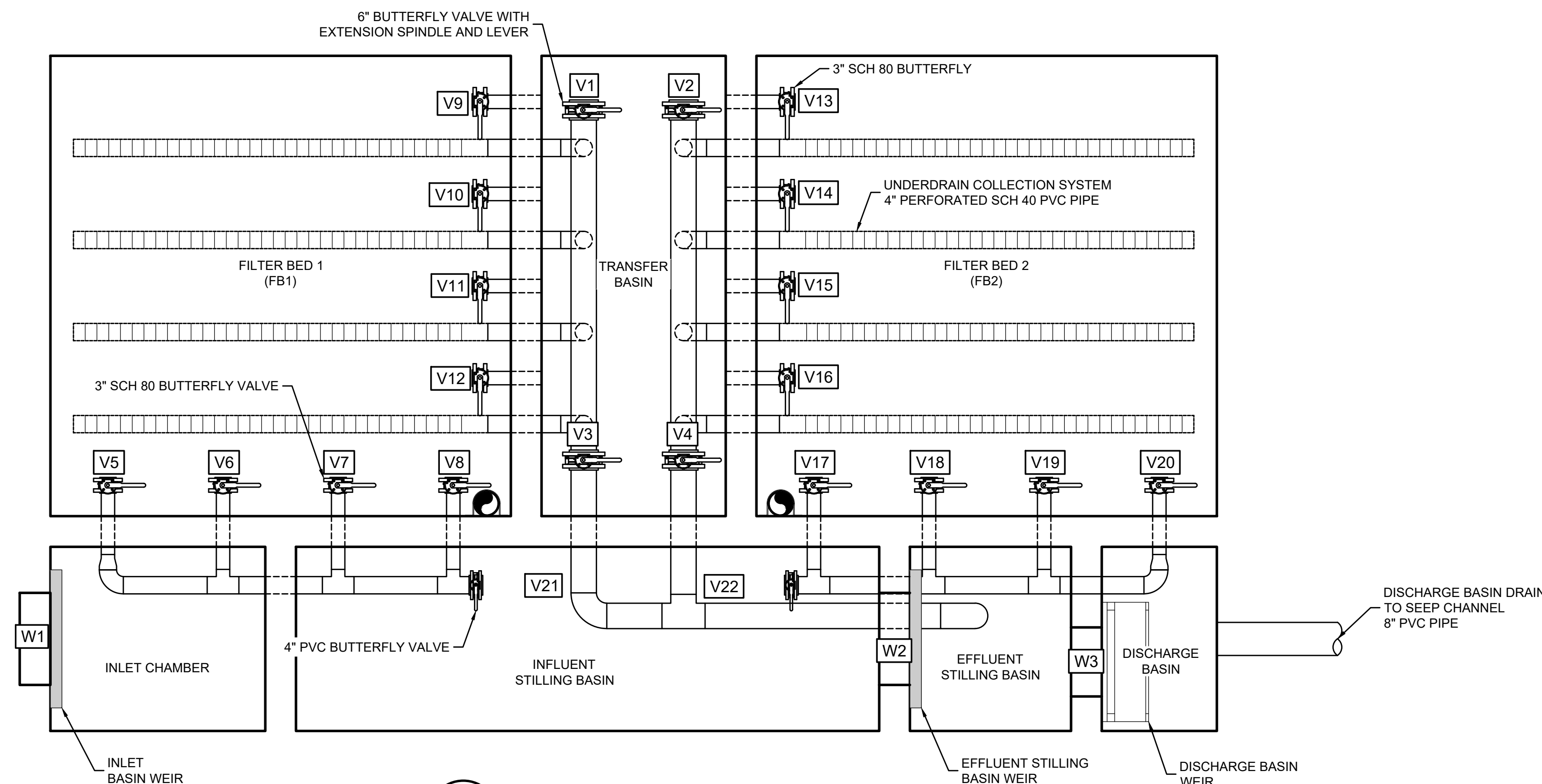


0	04.06.21	AS-BUILT RECORD DRAWINGS SUBMITTAL	JFH	CAS
REV	DATE	DESCRIPTION	DRN	APP
Geosyntec consultants		Geosyntec Consultants of NC, P.C. NC License No.: C-3500 and C-295	ATRIUM AT BLUE RIDGE 2501 BLUE RIDGE ROAD, SUITE 430 RALEIGH, NC 27607 919.870.0576	
TITLE: PLATFORM DETAILS				
PROJECT: THE CHEMOURS COMPANY SEEP C INTERIM REMEDIATION SYSTEM				
SITE: FAYETTEVILLE WORKS SITE				
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY: CMDS	DATE: APRIL 2021	
SIGNATURE _____		DRAWN BY: JFH	PROJECT NO.: TR0795A	
DATE _____		CHECKED BY: JWE	FILE: TR0795-C503.dwg	
		REVIEWED BY: JJD	DRAWING NO.:	
		APPROVED BY: CAS	C-04	

AS-BUILT RECORD DRAWINGS

1 2 3 4 5 6 7 8

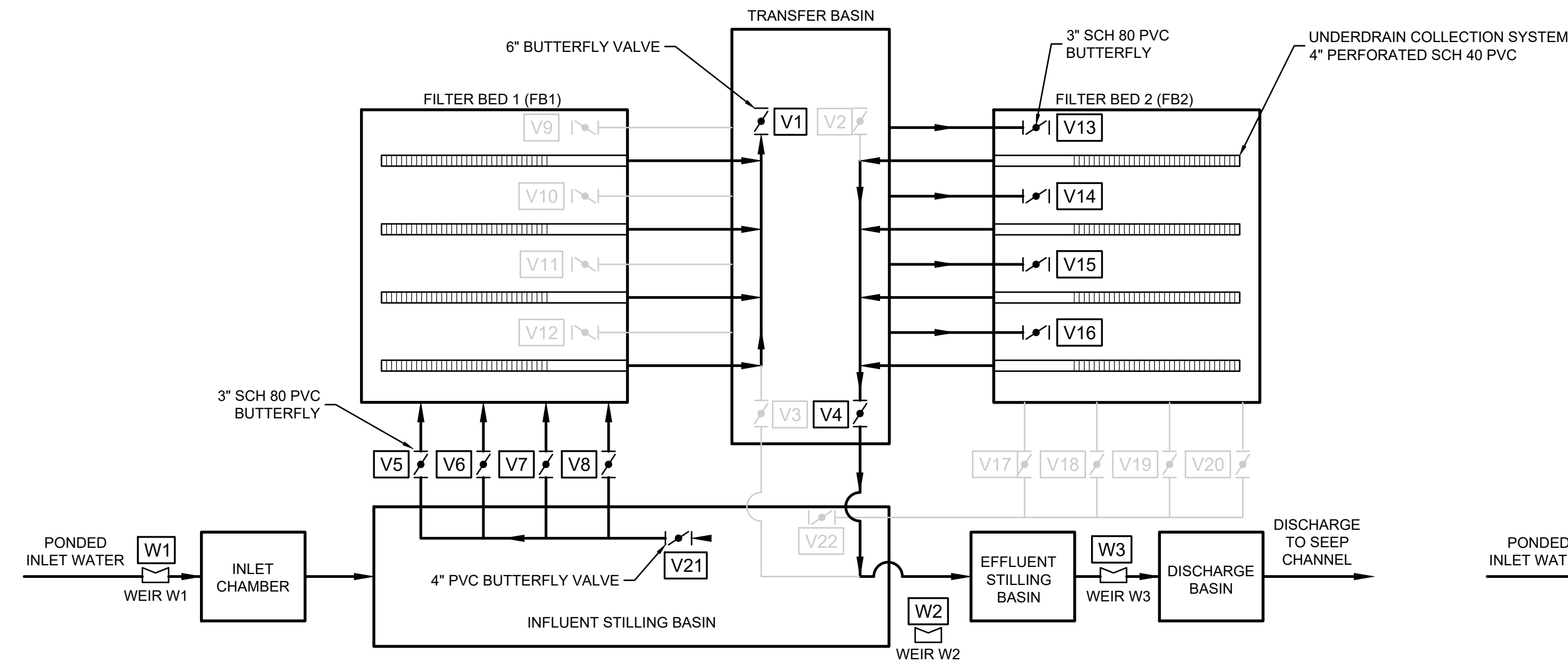
LOAD/CHMOURS/INTERIM SEEP REMEDIATION/SEEP CONSTRUCTION/CONV/1706/0503



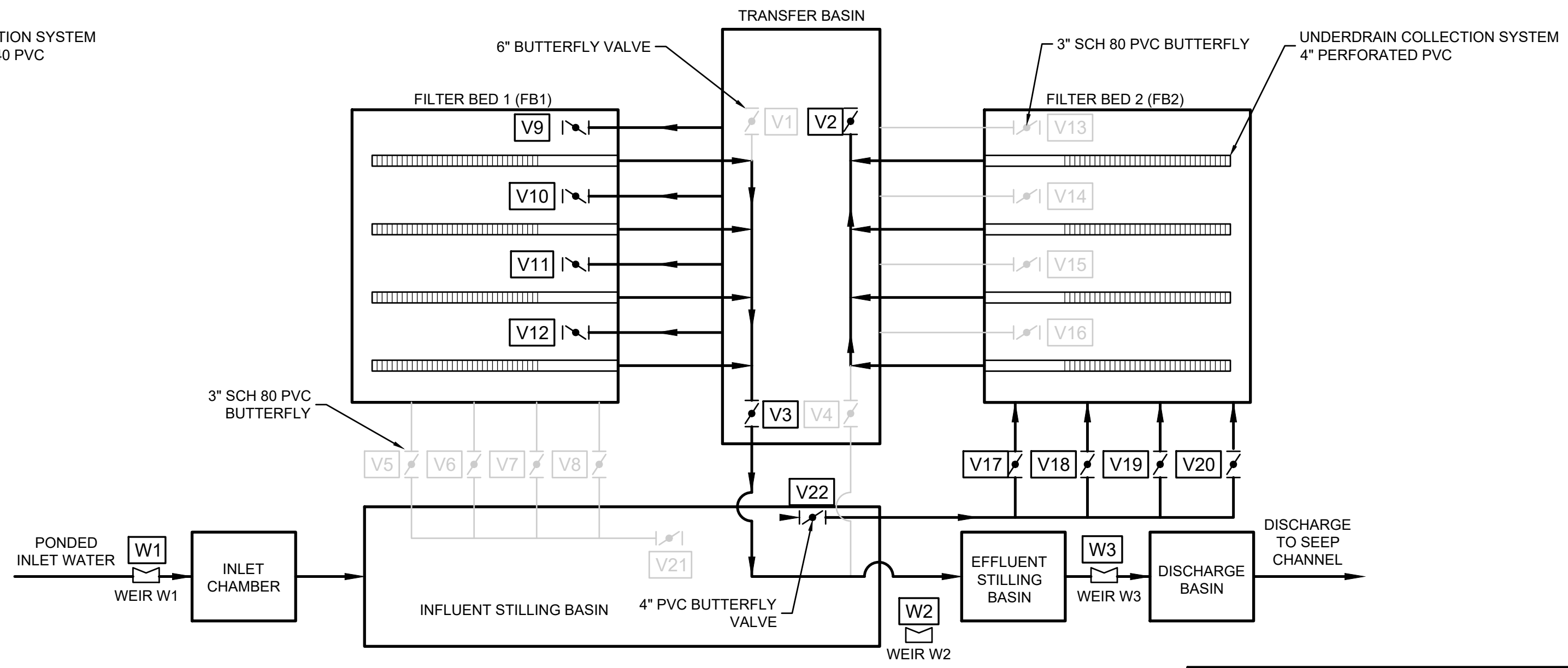
7 PLAN
D-01 FILTER BED VALVE SCHEMATIC

OPERATIONAL MODE				
FLOW CONTROL DEVICE	FB1 LEAD/ FB2 LAG	FB1 LAG/ FB2 LEAD	FB1 CHANGEOUT (FB2 OPEN)	FB2 CHANGEOUT (FB1 OPEN)
VALVE V1	OPEN	CLOSED	CLOSED	CLOSED
VALVE V2	CLOSED	OPEN	CLOSED	CLOSED
VALVE V3	CLOSED	OPEN	CLOSED	OPEN
VALVE V4	OPEN	CLOSED	OPEN	CLOSED
VALVE V5	OPEN	CLOSED	CLOSED	OPEN
VALVE V6	OPEN	CLOSED	CLOSED	OPEN
VALVE V7	OPEN	CLOSED	CLOSED	OPEN
VALVE V8	OPEN	CLOSED	CLOSED	OPEN
VALVE V9	CLOSED	OPEN	CLOSED	CLOSED
VALVE V10	CLOSED	OPEN	CLOSED	CLOSED
VALVE V11	CLOSED	OPEN	CLOSED	CLOSED
VALVE V12	CLOSED	OPEN	CLOSED	CLOSED
VALVE V13	OPEN	CLOSED	CLOSED	CLOSED
VALVE V14	OPEN	CLOSED	CLOSED	CLOSED
VALVE V15	OPEN	CLOSED	CLOSED	CLOSED
VALVE V16	OPEN	CLOSED	CLOSED	CLOSED
VALVE V17	CLOSED	OPEN	OPEN	CLOSED
VALVE V18	CLOSED	OPEN	OPEN	CLOSED
VALVE V19	CLOSED	OPEN	OPEN	CLOSED
VALVE V20	CLOSED	OPEN	OPEN	CLOSED
VALVE V21	OPEN	CLOSED	CLOSED	OPEN
VALVE V22	CLOSED	OPEN	OPEN	CLOSED
WEIR W1	OPEN	OPEN	OPEN	OPEN
WEIR W2	CLOSED	CLOSED	CLOSED	CLOSED
WEIR W3	OPEN	OPEN	OPEN	OPEN

8 TABLE
D-01 OPERATIONAL MODE



9 SCHEMATIC
D-01 FILTER BED SYSTEM FLOW WITH FILTER BED 1 IN LEAD POSITION AND FILTER BED 2 IN LAG POSITION



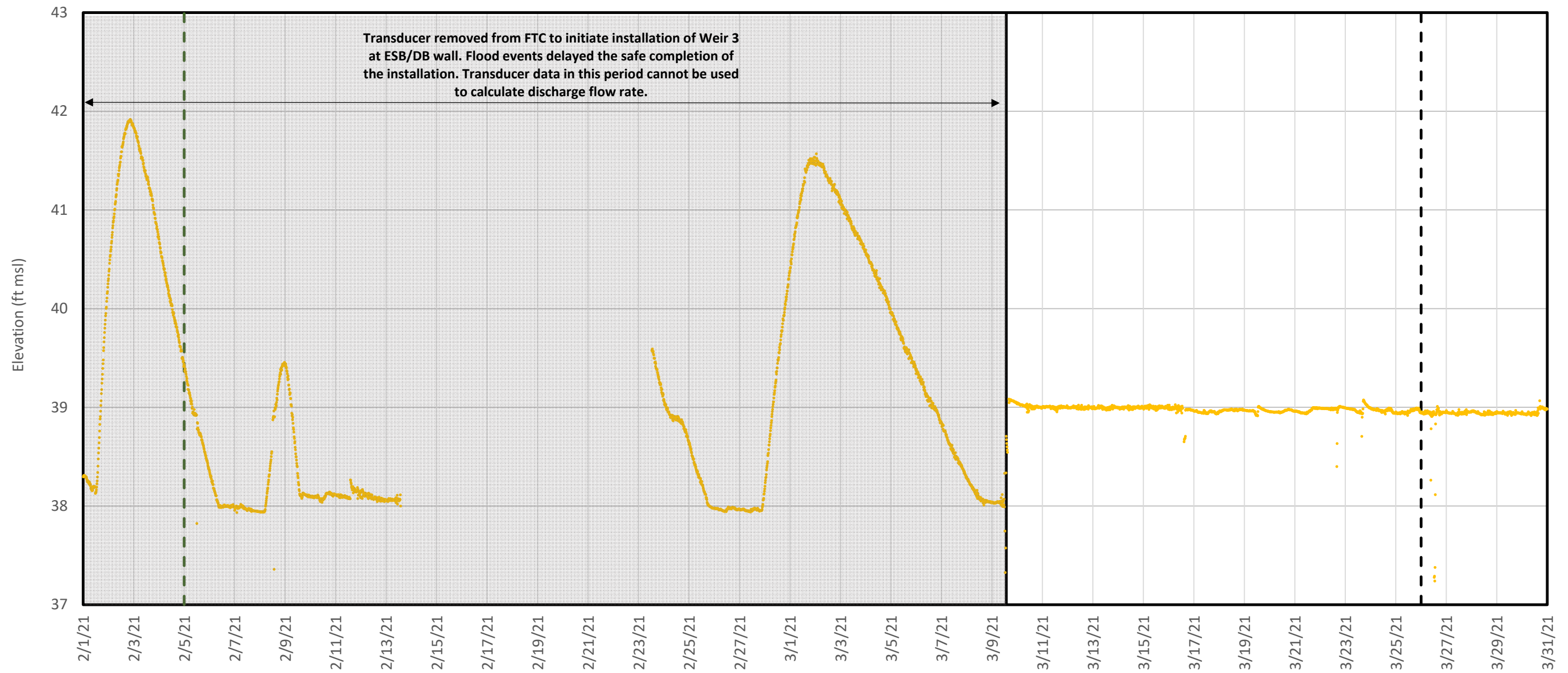
10 SCHEMATIC
D-01 FILTER BED SYSTEM FLOW WITH FILTER BED 2 IN LEAD POSITION AND FILTER BED 1 IN LAG POSITION

0	04.06.21	AS-BUILT RECORD DRAWINGS SUBMITTAL	JFH	CAS
REV	DATE	DESCRIPTION	DRN	APP
Geosyntec consultants		Geosyntec Consultants of NC, P.C. NC License No.: C-3500 and C-295	ATRIUM AT BLUE RIDGE 2501 BLUE RIDGE ROAD, SUITE 430 RALEIGH, NC 27607 919.870.0576	
TITLE: SEEP C INTERIM REMEDIATION SYSTEM PROCESS FLOW DIAGRAM				
PROJECT: THE CHEMOURS COMPANY SEEP C INTERIM REMEDIATION SYSTEM				
SITE: FAYETTEVILLE WORKS SITE				
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY: CMDS	DATE: APRIL 2021	
SIGNATURE		DRAWN BY: JFH	PROJECT NO.: TR0795A	
DATE		CHECKED BY: JWE	FILE: TR0795-D601.dwg	
		REVIEWED BY: JJD	DRAWING NO.:	
		APPROVED BY: CAS	D-01	

AS-BUILT RECORD DRAWINGS

LOAD:CHEMOURS/INTERIM SEEP REMEDIATION/SEEP C CONSTRUCTION ADMIN/210795-D601

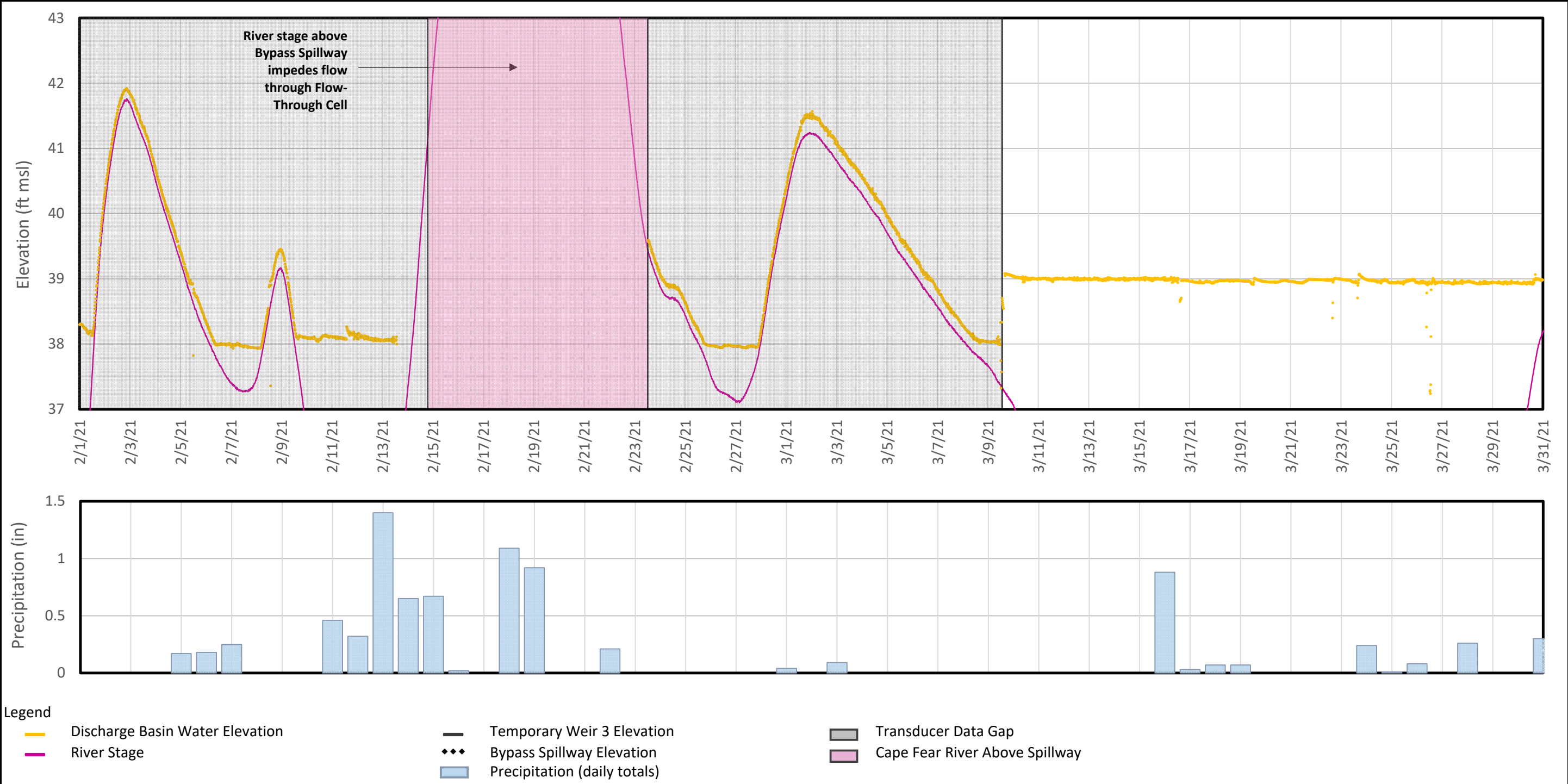
APPENDIX F –
TRANSDUCER DATA REDUCTION



Legend
— Discharge Basin Elevation
 Transducer Data Gap
 GAC Changeout

Note:
 Figure F1 shows the discharge basin transducer data that was collected during the reporting period. Gaps in the data record are shown (grey shading) and described above.

Discharge Basin Water Elevation	
Chemours Fayetteville Works Fayetteville, North Carolina	
Geosyntec [®] consultants	Geosyntec Consultants of NC, P.C. NC License No.: C 3500 and C 295
Raleigh, NC	April 2021
Figure F1	



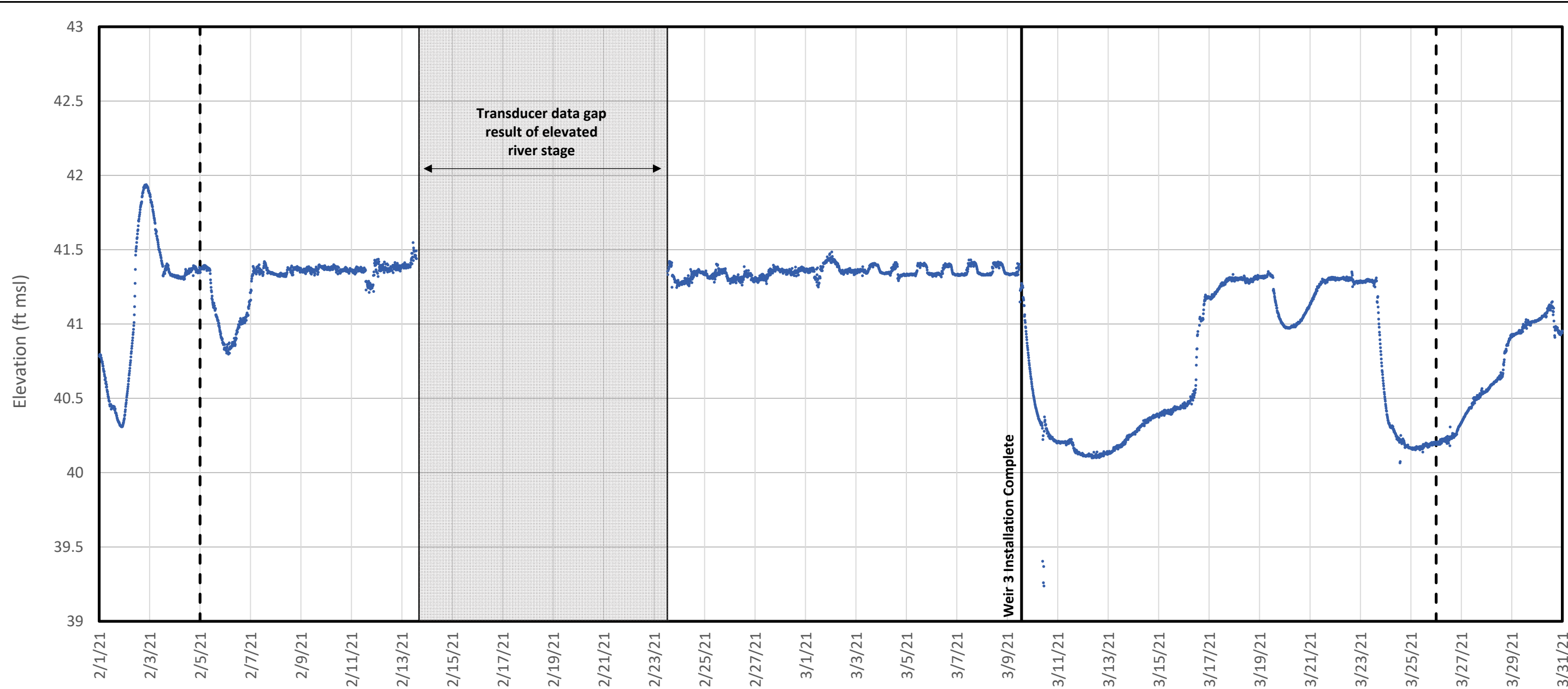
Legend

- Discharge Basin Water Elevation
- River Stage
- Temporary Weir 3 Elevation
- ◆◆◆ Bypass Spillway Elevation
- █ Precipitation (daily totals)
- Transducer Data Gap
- Cape Fear River Above Spillway

Notes:

- 1 - As water can flow through the flow-through cell both as a result of wet weather inflow and elevated river levels from flooding, Figure F2 compares the available transducer data to precipitation and river stage elevation data available from the USGS Huske Lock and Dam.
- 2 - Discharge Basin transducer data that was affected by river flooding (pink shading) is excluded from the dataset, to evaluate only effluent flow measurements that are from the flow-through cell.

Discharge Basin Water Elevation and External Forcings	
Chemours Fayetteville Works Fayetteville, North Carolina	
Geosyntec [®] consultants	Geosyntec Consultants of NC, P.C. <small>NC License No.: C 3500 and C 295</small>
Raleigh, NC	April 2021
Figure F2	

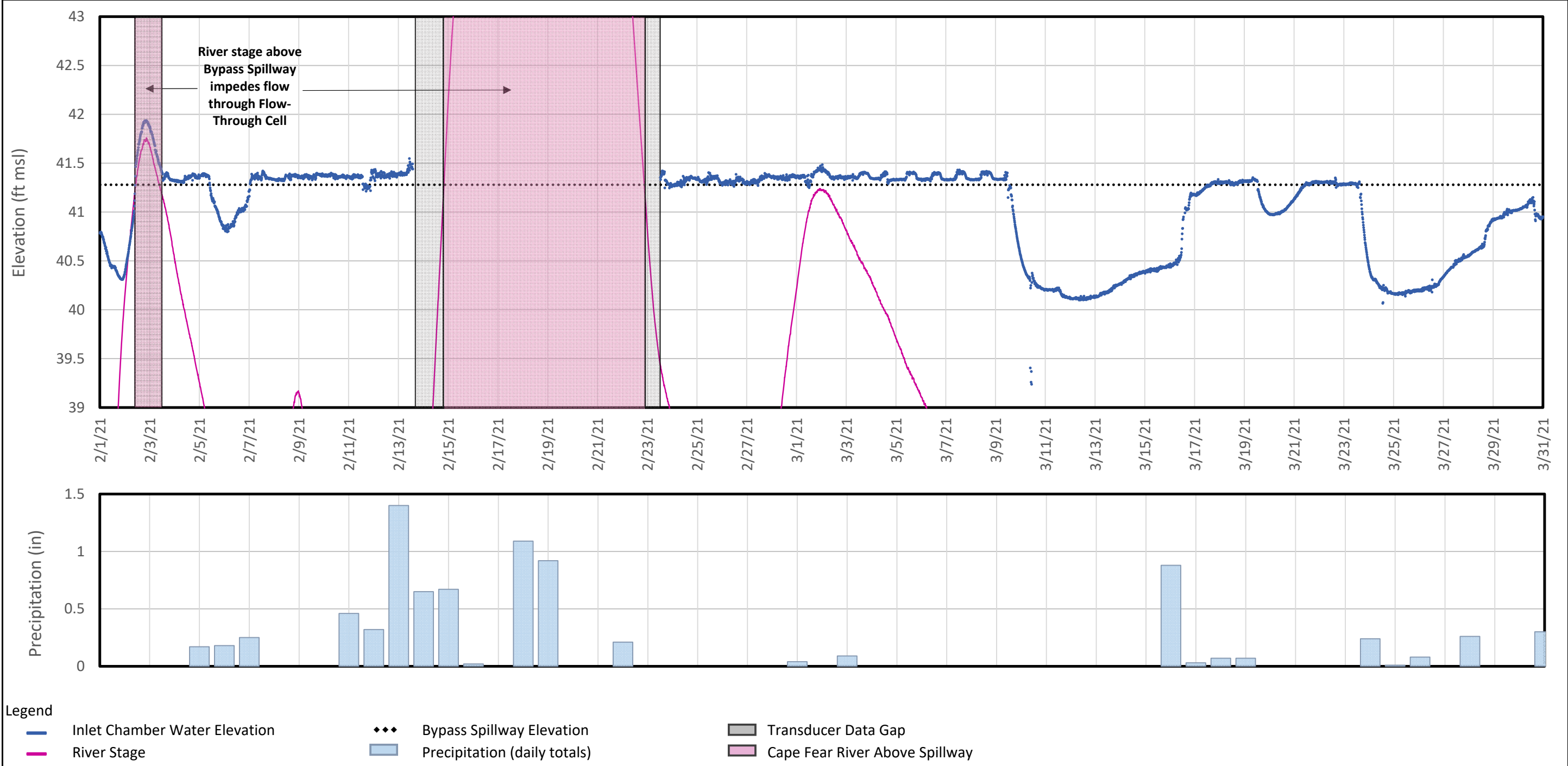


Legend
— Influent Chamber/Impoundment Elevation
 - - - GAC Changeout
 Transducer Data Gap

Note:
 Figure F3 shows the influent transducer data that was collected during the reporting period. Gaps in the data record are shown (grey shading) and described above.

Inlet Chamber Water Elevation	
Chemours Fayetteville Works Fayetteville, North Carolina	
Geosyntec consultants	Geosyntec Consultants of NC, P.C. NC License No.: C 3500 and C 295
Raleigh, NC	April 2021

Figure F3



Notes:

- 1 - As water can flow through the Bypass Spillway both as a result of wet weather inflow and elevated river levels from flooding, Figure F4 compares the available transducer data to precipitation and river stage elevation data available from the USGS Huske Lock and Dam.
- 2 - Inlet Chamber transducer data that was affected by river flooding (pink shading) is excluded from the dataset, to evaluate only bypass flow measurements that are from the impoundment.

Inlet Chamber Water Elevation and External Forcings Chemours Fayetteville Works Fayetteville, North Carolina	
Geosyntec consultants	Geosyntec Consultants of NC, P.C. <small>NC License No.: C 3500 and C 295</small>
Raleigh, NC	April 2021

Figure F4

APPENDIX G –
LABORATORY ANALYTICAL REPORTS

ANALYTICAL REPORT

Job Number: 320-70306-1

Job Description: FAY-Seep Flow Through Cell Sampling 2021

For:

The Chemours Company FC, LLC
c/o AECOM
Sabre Building, Suite 300
4051 Ogletown Road
Newark, DE 19713

Attention: Michael Aucoin



Approved for release.
Michelle A Johnston
Project Manager II
2/27/2021 2:48 PM

Michelle A Johnston, Project Manager II
880 Riverside Parkway, West Sacramento, CA, 95605
(303)736-0110
Michelle.Johnston@Eurofinset.com
02/27/2021

cc: Barbara McGraw
Kelly Rinehimer

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

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.

Eurofins TestAmerica, Sacramento

880 Riverside Parkway, West Sacramento, CA 95605
Tel (916) 373-5600 Fax (916) 372-1059 www.testamericainc.com



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Definitions/Glossary

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Glossary

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

CASE NARRATIVE
Client: The Chemours Company FC, LLC
Project: FAY-Seep Flow Through Cell Sampling 2021
Report Number: 320-70306-1

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

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

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

North Carolina Department of Environmental Quality (NCDEQ) does not offer certification for PFAS testing in Non-Potable Water and Solid matrices.

For samples requiring analysis at a dilution, the dilution factor has been multiplied by the Method Detection Limit (MDL) for each analyte and evaluated versus the project-specific reporting limit (PSRL). If the obtained value is below the PSRL, then the PSRL is preserved as the reporting limit for the diluted result, otherwise, the obtained value becomes the reporting limit. This is done in order to maintain the PSRL to meet project requirements at the request of the client and to report the lowest possible RL for each analyte.

Sample Arrival and Receipt

The samples were received on 2/19/2021 9:50 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.7° C.

Receipt Exceptions

In accordance with the revised Chain-of-Custody received 2/25/2021, the ID for sample SEEP-C-FBLK-012921 (320-70306-6) was revised to SEEP-C-FBLK-021321.

No other anomalies were observed during sample receipt.

Table 3 Fluoroproducts

Samples SEEP-C-EFFLUENT-192-021321 (320-70306-1), SEEP-C-INFLUENT-192-021321 (320-70306-2), SEEP-C-RAIN-EFFLUENT-24-021321 (320-70306-3), SEEP-C-RAIN-INFLUENT-24-021321 (320-70306-4), SEEP-C-EQBLK-ISCO-021321 (320-70306-5), SEEP-C-FBLK-021321 (320-70306-6) and SEEP-C-RAIN-EQBLK-ISCO-021321 (320-70306-7) were analyzed for Table 3 Fluoroproducts in accordance with Chemours 4.3.18. The samples were prepared on 02/22/2021 and analyzed on 02/24/2021 and 02/25/2021.

Results for samples SEEP-C-INFLUENT-192-021321 (320-70306-2) and SEEP-C-RAIN-INFLUENT-24-021321 (320-70306-4) were reported from the analysis of a diluted extract in order to bring the concentration of target analytes within the calibration range. The surrogate recoveries were calculated from diluted samples. The reporting limits have been adjusted relative to the dilutions required.

The project required MS and Sample Duplicate could not be performed for prep batch 320-464016, due to either being from a different job/SDG or due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable LCS/LCSD analyses data.

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

Executive Summary

Client: The Chemours Company FC, LLC

Job Number: 320-70306-1

Chemours (TB3+) : Fluoroproducts Analytical Method – Table 3+

Lab Sample ID	Client Sample ID	Analyte	Individual Result (ug/L)	Final Result (ug/L)	RL
320-70306-1	SEEP-C-EFFLUENT-192-021321	EVE Acid	<0.0020	<0.0020	0.0020
320-70306-1	SEEP-C-EFFLUENT-192-021321	HFPO-DA	0.059	0.059	0.0020
320-70306-1	SEEP-C-EFFLUENT-192-021321	Hydro-EVE Acid	0.0033	0.0033	0.0020
320-70306-1	SEEP-C-EFFLUENT-192-021321	Hydrolyzed PSDA	0.0043	0.0043	0.0020
320-70306-1	SEEP-C-EFFLUENT-192-021321	Hydro-PS Acid	<0.0020	<0.0020	0.0020
320-70306-1	SEEP-C-EFFLUENT-192-021321	NVHOS	0.0023	0.0023	0.0020
320-70306-1	SEEP-C-EFFLUENT-192-021321	PEPA	<0.020	<0.020	0.020
320-70306-1	SEEP-C-EFFLUENT-192-021321	PES	<0.0020	<0.0020	0.0020
320-70306-1	SEEP-C-EFFLUENT-192-021321	PFECA B	<0.0020	<0.0020	0.0020
320-70306-1	SEEP-C-EFFLUENT-192-021321	PFECA G	<0.0020	<0.0020	0.0020
320-70306-1	SEEP-C-EFFLUENT-192-021321	PFMOAA	0.30	0.30	0.0020
320-70306-1	SEEP-C-EFFLUENT-192-021321	PFO2HxA	0.065	0.065	0.0020
320-70306-1	SEEP-C-EFFLUENT-192-021321	PFO3OA	0.031	0.031	0.0020
320-70306-1	SEEP-C-EFFLUENT-192-021321	PFO4DA	0.012	0.012	0.0020
320-70306-1	SEEP-C-EFFLUENT-192-021321	PFO5DA	<0.0020	<0.0020	0.0020
320-70306-1	SEEP-C-EFFLUENT-192-021321	PMPA	0.059	0.059	0.010
320-70306-1	SEEP-C-EFFLUENT-192-021321	PS Acid	<0.0020	<0.0020	0.0020
320-70306-1	SEEP-C-EFFLUENT-192-021321	R-EVE	0.0033	0.0033	0.0020
320-70306-1	SEEP-C-EFFLUENT-192-021321	R-PSDA	0.0046	0.0046	0.0020
320-70306-1	SEEP-C-EFFLUENT-192-021321	R-PSDCA	<0.0020	<0.0020	0.0020
320-70306-2	SEEP-C-INFLUENT-192-021321	EVE Acid	<0.0087	<0.0087	0.0087
320-70306-2	SEEP-C-INFLUENT-192-021321	HFPO-DA	15	15	0.041
320-70306-2	SEEP-C-INFLUENT-192-021321	Hydro-EVE Acid	1.1	1.1	0.0072
320-70306-2	SEEP-C-INFLUENT-192-021321	Hydrolyzed PSDA	1.0	1.0	0.019
320-70306-2	SEEP-C-INFLUENT-192-021321	Hydro-PS Acid	0.33	0.33	0.0031
320-70306-2	SEEP-C-INFLUENT-192-021321	NVHOS	0.68	0.68	0.0073
320-70306-2	SEEP-C-INFLUENT-192-021321	PEPA	3.0	3.0	0.020
320-70306-2	SEEP-C-INFLUENT-192-021321	PES	0.0044	0.0044	0.0034
320-70306-2	SEEP-C-INFLUENT-192-021321	PFECA B	<0.013	<0.013	0.013
320-70306-2	SEEP-C-INFLUENT-192-021321	PFECA G	<0.024	<0.024	0.024
320-70306-2	SEEP-C-INFLUENT-192-021321	PFMOAA	71	71	0.040
320-70306-2	SEEP-C-INFLUENT-192-021321	PFO2HxA	25	25	0.013
320-70306-2	SEEP-C-INFLUENT-192-021321	PFO3OA	7.1	7.1	0.020
320-70306-2	SEEP-C-INFLUENT-192-021321	PFO4DA	2.9	2.9	0.030
320-70306-2	SEEP-C-INFLUENT-192-021321	PFO5DA	0.081	0.081	0.039
320-70306-2	SEEP-C-INFLUENT-192-021321	PMPA	7.7	7.7	0.31
320-70306-2	SEEP-C-INFLUENT-192-021321	PS Acid	<0.0098	<0.0098	0.0098
320-70306-2	SEEP-C-INFLUENT-192-021321	R-EVE	0.77	0.77	0.036
320-70306-2	SEEP-C-INFLUENT-192-021321	R-PSDA	0.85	0.85	0.035
320-70306-2	SEEP-C-INFLUENT-192-021321	R-PSDCA	0.016	0.016	0.0087
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	EVE Acid	<0.0020	<0.0020	0.0020
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	HFPO-DA	0.024	0.024	0.0020

(a) DU indicates a laboratory duplicate.

(b) If the sample and laboratory duplicate are both greater than or equal to 5X their RL and the relative percent difference (RPD) is less than or equal to 20, the average value is reported. If the RPD is greater than 20, the higher value is reported. If the sample or laboratory duplicate is less than 5X their RL, and the absolute difference between the sample and laboratory duplicate is less than or equal to the sample RL, the average value is reported. If the absolute difference is greater than the sample RL, the higher value is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(c) For Table 3 and Table 6 methods, if the sample and laboratory duplicate are greater than their RL, the average is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(d) Moisture Determined by ASTM D2216.

Executive Summary

Client: The Chemours Company FC, LLC

Job Number: 320-70306-1

Chemours (TB3+) : Fluoroproducts Analytical Method – Table 3+

Lab Sample ID	Client Sample ID	Analyte	Individual Result (ug/L)	Final Result (ug/L)	RL
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	Hydro-EVE Acid	<0.0020	<0.0020	0.0020
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	Hydrolyzed PSDA	<0.0020	<0.0020	0.0020
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	Hydro-PS Acid	<0.0020	<0.0020	0.0020
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	NVHOS	<0.0020	<0.0020	0.0020
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	PEPA	<0.020	<0.020	0.020
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	PES	<0.0020	<0.0020	0.0020
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	PFECA B	<0.0020	<0.0020	0.0020
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	PFECA G	<0.0020	<0.0020	0.0020
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	PFMOAA	0.19	0.19	0.0020
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	PFO2HxA	0.039	0.039	0.0020
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	PFO3OA	0.012	0.012	0.0020
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	PFO4DA	0.0039	0.0039	0.0020
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	PFO5DA	<0.0020	<0.0020	0.0020
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	PMPA	0.031	0.031	0.010
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	PS Acid	<0.0020	<0.0020	0.0020
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	R-EVE	<0.0020	<0.0020	0.0020
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	R-PSDA	<0.0020	<0.0020	0.0020
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	R-PSDCA	<0.0020	<0.0020	0.0020
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	EVE Acid	<0.0087	<0.0087	0.0087
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	HFPO-DA	13	13	0.041
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	Hydro-EVE Acid	1.1	1.1	0.0072
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	Hydrolyzed PSDA	1.0	1.0	0.019
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	Hydro-PS Acid	0.34	0.34	0.0031
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	NVHOS	0.67	0.67	0.0073
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	PEPA	2.8	2.8	0.020
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	PES	0.0041	0.0041	0.0034
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	PFECA B	<0.013	<0.013	0.013
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	PFECA G	<0.024	<0.024	0.024
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	PFMOAA	69	69	0.040
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	PFO2HxA	25	25	0.013
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	PFO3OA	6.8	6.8	0.020
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	PFO4DA	3.0	3.0	0.030
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	PFO5DA	0.083	0.083	0.039
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	PMPA	7.3	7.3	0.31
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	PS Acid	<0.0098	<0.0098	0.0098
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	R-EVE	0.77	0.77	0.036
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	R-PSDA	0.81	0.81	0.035
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	R-PSDCA	0.014	0.014	0.0087
320-70306-5	SEEP-C-EQBLK-ISCO-021321	EVE Acid	<0.0020	<0.0020	0.0020
320-70306-5	SEEP-C-EQBLK-ISCO-021321	HFPO-DA	<0.0020	<0.0020	0.0020
320-70306-5	SEEP-C-EQBLK-ISCO-021321	Hydro-EVE Acid	<0.0020	<0.0020	0.0020
320-70306-5	SEEP-C-EQBLK-ISCO-021321	Hydrolyzed PSDA	<0.0020	<0.0020	0.0020

(a) DU indicates a laboratory duplicate.

(b) If the sample and laboratory duplicate are both greater than or equal to 5X their RL and the relative percent difference (RPD) is less than or equal to 20, the average value is reported. If the RPD is greater than 20, the higher value is reported. If the sample or laboratory duplicate is less than 5X their RL, and the absolute difference between the sample and laboratory duplicate is less than or equal to the sample RL, the average value is reported. If the absolute difference is greater than the sample RL, the higher value is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(c) For Table 3 and Table 6 methods, if the sample and laboratory duplicate are greater than their RL, the average is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(d) Moisture Determined by ASTM D2216.

Executive Summary

Client: The Chemours Company FC, LLC

Job Number: 320-70306-1

Chemours (TB3+) : Fluoroproducts Analytical Method – Table 3+

Lab Sample ID	Client Sample ID	Analyte	Individual Result (ug/L)	Final Result (ug/L)	RL
320-70306-5	SEEP-C-EQBLK-ISCO-021321	Hydro-PS Acid	<0.0020	<0.0020	0.0020
320-70306-5	SEEP-C-EQBLK-ISCO-021321	NVHOS	<0.0020	<0.0020	0.0020
320-70306-5	SEEP-C-EQBLK-ISCO-021321	PEPA	<0.020	<0.020	0.020
320-70306-5	SEEP-C-EQBLK-ISCO-021321	PES	<0.0020	<0.0020	0.0020
320-70306-5	SEEP-C-EQBLK-ISCO-021321	PFECA B	<0.0020	<0.0020	0.0020
320-70306-5	SEEP-C-EQBLK-ISCO-021321	PFECA G	<0.0020	<0.0020	0.0020
320-70306-5	SEEP-C-EQBLK-ISCO-021321	PFMOAA	<0.0020	<0.0020	0.0020
320-70306-5	SEEP-C-EQBLK-ISCO-021321	PFO2HxA	<0.0020	<0.0020	0.0020
320-70306-5	SEEP-C-EQBLK-ISCO-021321	PFO3OA	<0.0020	<0.0020	0.0020
320-70306-5	SEEP-C-EQBLK-ISCO-021321	PFO4DA	<0.0020	<0.0020	0.0020
320-70306-5	SEEP-C-EQBLK-ISCO-021321	PFO5DA	<0.0020	<0.0020	0.0020
320-70306-5	SEEP-C-EQBLK-ISCO-021321	PMPA	<0.010	<0.010	0.010
320-70306-5	SEEP-C-EQBLK-ISCO-021321	PS Acid	<0.0020	<0.0020	0.0020
320-70306-5	SEEP-C-EQBLK-ISCO-021321	R-EVE	<0.0020	<0.0020	0.0020
320-70306-5	SEEP-C-EQBLK-ISCO-021321	R-PSDA	<0.0020	<0.0020	0.0020
320-70306-5	SEEP-C-EQBLK-ISCO-021321	R-PSDCA	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	EVE Acid	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	HFPO-DA	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	Hydro-EVE Acid	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	Hydrolyzed PSDA	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	Hydro-PS Acid	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	NVHOS	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	PEPA	<0.020	<0.020	0.020
320-70306-6	SEEP-C-FBLK-021321	PES	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	PFECA B	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	PFECA G	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	PFMOAA	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	PFO2HxA	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	PFO3OA	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	PFO4DA	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	PFO5DA	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	PMPA	<0.010	<0.010	0.010
320-70306-6	SEEP-C-FBLK-021321	PS Acid	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	R-EVE	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	R-PSDA	<0.0020	<0.0020	0.0020
320-70306-6	SEEP-C-FBLK-021321	R-PSDCA	<0.0020	<0.0020	0.0020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	EVE Acid	<0.0020	<0.0020	0.0020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	HFPO-DA	<0.0020	<0.0020	0.0020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	Hydro-EVE Acid	<0.0020	<0.0020	0.0020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	Hydrolyzed PSDA	<0.0020	<0.0020	0.0020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	Hydro-PS Acid	<0.0020	<0.0020	0.0020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	NVHOS	<0.0020	<0.0020	0.0020

(a) DU indicates a laboratory duplicate.

(b) If the sample and laboratory duplicate are both greater than or equal to 5X their RL and the relative percent difference (RPD) is less than or equal to 20, the average value is reported. If the RPD is greater than 20, the higher value is reported. If the sample or laboratory duplicate is less than 5X their RL, and the absolute difference between the sample and laboratory duplicate is less than or equal to the sample RL, the average value is reported. If the absolute difference is greater than the sample RL, the higher value is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(c) For Table 3 and Table 6 methods, if the sample and laboratory duplicate are greater than their RL, the average is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(d) Moisture Determined by ASTM D2216.

Executive Summary

Client: The Chemours Company FC, LLC

Job Number: 320-70306-1

Chemours (TB3+) : Fluoroproducts Analytical Method – Table 3+

Lab Sample ID	Client Sample ID	Analyte	Individual Result (ug/L)	Final Result (ug/L)	RL
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	PEPA	<0.020	<0.020	0.020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	PES	<0.0020	<0.0020	0.0020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	PFECA B	<0.0020	<0.0020	0.0020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	PFECA G	<0.0020	<0.0020	0.0020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	PFMOAA	<0.0020	<0.0020	0.0020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	PFO2HxA	<0.0020	<0.0020	0.0020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	PFO3OA	<0.0020	<0.0020	0.0020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	PFO4DA	<0.0020	<0.0020	0.0020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	PFO5DA	<0.0020	<0.0020	0.0020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	PMPA	<0.010	<0.010	0.010
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	PS Acid	<0.0020	<0.0020	0.0020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	R-EVE	<0.0020	<0.0020	0.0020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	R-PSDA	<0.0020	<0.0020	0.0020
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	R-PSDCA	<0.0020	<0.0020	0.0020

(a) DU indicates a laboratory duplicate.

(b) If the sample and laboratory duplicate are both greater than or equal to 5X their RL and the relative percent difference (RPD) is less than or equal to 20, the average value is reported. If the RPD is greater than 20, the higher value is reported. If the sample or laboratory duplicate is less than 5X their RL, and the absolute difference between the sample and laboratory duplicate is less than or equal to the sample RL, the average value is reported. If the absolute difference is greater than the sample RL, the higher value is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(c) For Table 3 and Table 6 methods, if the sample and laboratory duplicate are greater than their RL, the average is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(d) Moisture Determined by ASTM D2216.

Detection Summary

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Client Sample ID: SEEP-C-EFFLUENT-192-021321

Lab Sample ID: 320-70306-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.059		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
Hydro-EVE Acid	0.0033		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
Hydrolyzed PSDA	0.0043		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
NVHOS	0.0023		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
PFMOAA	0.30		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
PFO2HxA	0.065		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
PFO3OA	0.031		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
PFO4DA	0.012		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
PMPA	0.059		0.010		ug/L	1		Chemours (TB3+)	Total/NA
R-EVE	0.0033		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
R-PSDA	0.0046		0.0020		ug/L	1		Chemours (TB3+)	Total/NA

Client Sample ID: SEEP-C-INFLUENT-192-021321

Lab Sample ID: 320-70306-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	15		0.041		ug/L	50		Chemours (TB3+)	Total/NA
Hydro-EVE Acid	1.1		0.0072		ug/L	50		Chemours (TB3+)	Total/NA
Hydrolyzed PSDA	1.0		0.019		ug/L	50		Chemours (TB3+)	Total/NA
Hydro-PS Acid	0.33		0.0031		ug/L	50		Chemours (TB3+)	Total/NA
NVHOS	0.68		0.0073		ug/L	50		Chemours (TB3+)	Total/NA
PEPA	3.0		0.020		ug/L	50		Chemours (TB3+)	Total/NA
PES	0.0044		0.0034		ug/L	50		Chemours (TB3+)	Total/NA
PFMOAA	71		0.040		ug/L	50		Chemours (TB3+)	Total/NA
PFO2HxA	25		0.013		ug/L	50		Chemours (TB3+)	Total/NA
PFO3OA	7.1		0.020		ug/L	50		Chemours (TB3+)	Total/NA
PFO4DA	2.9		0.030		ug/L	50		Chemours (TB3+)	Total/NA
PFO5DA	0.081		0.039		ug/L	50		Chemours (TB3+)	Total/NA
PMPA	7.7		0.31		ug/L	50		Chemours (TB3+)	Total/NA
R-EVE	0.77		0.036		ug/L	50		Chemours (TB3+)	Total/NA
R-PSDA	0.85		0.035		ug/L	50		Chemours (TB3+)	Total/NA
R-PSDCA	0.016		0.0087		ug/L	50		Chemours (TB3+)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

Detection Summary

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Client Sample ID: SEEP-C-RAIN-EFFLUENT-24-021321

Lab Sample ID: 320-70306-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.024		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
PFMOAA	0.19		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
PFO2HxA	0.039		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
PFO3OA	0.012		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
PFO4DA	0.0039		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
PMPA	0.031		0.010		ug/L	1		Chemours (TB3+)	Total/NA

Client Sample ID: SEEP-C-RAIN-INFLUENT-24-021321

Lab Sample ID: 320-70306-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	13		0.041		ug/L	50		Chemours (TB3+)	Total/NA
Hydro-EVE Acid	1.1		0.0072		ug/L	50		Chemours (TB3+)	Total/NA
Hydrolyzed PSDA	1.0		0.019		ug/L	50		Chemours (TB3+)	Total/NA
Hydro-PS Acid	0.34		0.0031		ug/L	50		Chemours (TB3+)	Total/NA
NVHOS	0.67		0.0073		ug/L	50		Chemours (TB3+)	Total/NA
PEPA	2.8		0.020		ug/L	50		Chemours (TB3+)	Total/NA
PES	0.0041		0.0034		ug/L	50		Chemours (TB3+)	Total/NA
PFMOAA	69		0.040		ug/L	50		Chemours (TB3+)	Total/NA
PFO2HxA	25		0.013		ug/L	50		Chemours (TB3+)	Total/NA
PFO3OA	6.8		0.020		ug/L	50		Chemours (TB3+)	Total/NA
PFO4DA	3.0		0.030		ug/L	50		Chemours (TB3+)	Total/NA
PFO5DA	0.083		0.039		ug/L	50		Chemours (TB3+)	Total/NA
PMPA	7.3		0.31		ug/L	50		Chemours (TB3+)	Total/NA
R-EVE	0.77		0.036		ug/L	50		Chemours (TB3+)	Total/NA
R-PSDA	0.81		0.035		ug/L	50		Chemours (TB3+)	Total/NA
R-PSDCA	0.014		0.0087		ug/L	50		Chemours (TB3+)	Total/NA

Client Sample ID: SEEP-C-EQBLK-ISCO-021321

Lab Sample ID: 320-70306-5

No Detections.

Client Sample ID: SEEP-C-FBLK-021321

Lab Sample ID: 320-70306-6

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Client Sample ID: SEEP-C-RAIN-EQBLK-ISCO-021321

Lab Sample ID: 320-70306-7

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

Client Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Client Sample ID: SEEP-C-EFFLUENT-192-021321

Lab Sample ID: 320-70306-1

Date Collected: 02/13/21 10:00

Matrix: Water

Date Received: 02/19/21 09:50

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
EVE Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
HFPO-DA	0.059		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
Hydro-EVE Acid	0.0033		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
Hydrolyzed PSDA	0.0043		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
Hydro-PS Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
NVHOS	0.0023		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
PEPA	<0.0020		0.020		ug/L		02/22/21 11:40	02/24/21 04:09	1
PES	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
PFECA B	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
PFECA G	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
PFMOAA	0.30		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
PFO2HxA	0.065		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
PFO3OA	0.031		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
PFO4DA	0.012		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
PFO5DA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
PMPA	0.059		0.010		ug/L		02/22/21 11:40	02/24/21 04:09	1
PS Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
R-EVE	0.0033		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
R-PSDA	0.0046		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
R-PSDCA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:09	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	95		25 - 150				02/22/21 11:40	02/24/21 04:09	1

Client Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Client Sample ID: SEEP-C-INFLUENT-192-021321

Lab Sample ID: 320-70306-2

Date Collected: 02/13/21 10:00

Matrix: Water

Date Received: 02/19/21 09:50

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
EVE Acid	<0.0087		0.0087		ug/L		02/22/21 11:40	02/25/21 18:43	50
HFPO-DA	15		0.041		ug/L		02/22/21 11:40	02/25/21 18:43	50
Hydro-EVE Acid	1.1		0.0072		ug/L		02/22/21 11:40	02/25/21 18:43	50
Hydrolyzed PSDA	1.0		0.019		ug/L		02/22/21 11:40	02/25/21 18:43	50
Hydro-PS Acid	0.33		0.0031		ug/L		02/22/21 11:40	02/25/21 18:43	50
NVHOS	0.68		0.0073		ug/L		02/22/21 11:40	02/25/21 18:43	50
PEPA	3.0		0.020		ug/L		02/22/21 11:40	02/25/21 18:43	50
PES	0.0044		0.0034		ug/L		02/22/21 11:40	02/25/21 18:43	50
PFECA B	<0.013		0.013		ug/L		02/22/21 11:40	02/25/21 18:43	50
PFECA G	<0.024		0.024		ug/L		02/22/21 11:40	02/25/21 18:43	50
PFMOAA	71		0.040		ug/L		02/22/21 11:40	02/25/21 18:43	50
PFO2HxA	25		0.013		ug/L		02/22/21 11:40	02/25/21 18:43	50
PFO3OA	7.1		0.020		ug/L		02/22/21 11:40	02/25/21 18:43	50
PFO4DA	2.9		0.030		ug/L		02/22/21 11:40	02/25/21 18:43	50
PFO5DA	0.081		0.039		ug/L		02/22/21 11:40	02/25/21 18:43	50
PMPA	7.7		0.31		ug/L		02/22/21 11:40	02/25/21 18:43	50
PS Acid	<0.0098		0.0098		ug/L		02/22/21 11:40	02/25/21 18:43	50
R-EVE	0.77		0.036		ug/L		02/22/21 11:40	02/25/21 18:43	50
R-PSDA	0.85		0.035		ug/L		02/22/21 11:40	02/25/21 18:43	50
R-PSDCA	0.016		0.0087		ug/L		02/22/21 11:40	02/25/21 18:43	50
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>13C3 HFPO-DA</i>	100		25 - 150				02/22/21 11:40	02/25/21 18:43	50

Client Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Client Sample ID: SEEP-C-RAIN-EFFLUENT-24-021321

Lab Sample ID: 320-70306-3

Date Collected: 02/13/21 10:00

Matrix: Water

Date Received: 02/19/21 09:50

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
EVE Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
HFPO-DA	0.024		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
Hydro-EVE Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
Hydrolyzed PSDA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
Hydro-PS Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
NVHOS	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
PEPA	<0.020		0.020		ug/L		02/22/21 11:40	02/24/21 04:44	1
PES	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
PFECA B	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
PFECA G	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
PFMOAA	0.19		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
PFO2HxA	0.039		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
PFO3OA	0.012		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
PFO4DA	0.0039		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
PFO5DA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
PMPA	0.031		0.010		ug/L		02/22/21 11:40	02/24/21 04:44	1
PS Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
R-EVE	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
R-PSDA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
R-PSDCA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 04:44	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>13C3 HFPO-DA</i>	94		25 - 150				02/22/21 11:40	02/24/21 04:44	1

Client Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Client Sample ID: SEEP-C-RAIN-INFLUENT-24-021321

Lab Sample ID: 320-70306-4

Date Collected: 02/13/21 10:00

Matrix: Water

Date Received: 02/19/21 09:50

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
EVE Acid	<0.0087		0.0087		ug/L		02/22/21 11:40	02/25/21 19:00	50
HFPO-DA	13		0.041		ug/L		02/22/21 11:40	02/25/21 19:00	50
Hydro-EVE Acid	1.1		0.0072		ug/L		02/22/21 11:40	02/25/21 19:00	50
Hydrolyzed PSDA	1.0		0.019		ug/L		02/22/21 11:40	02/25/21 19:00	50
Hydro-PS Acid	0.34		0.0031		ug/L		02/22/21 11:40	02/25/21 19:00	50
NVHOS	0.67		0.0073		ug/L		02/22/21 11:40	02/25/21 19:00	50
PEPA	2.8		0.020		ug/L		02/22/21 11:40	02/25/21 19:00	50
PES	0.0041		0.0034		ug/L		02/22/21 11:40	02/25/21 19:00	50
PFECAB	<0.013		0.013		ug/L		02/22/21 11:40	02/25/21 19:00	50
PFECAG	<0.024		0.024		ug/L		02/22/21 11:40	02/25/21 19:00	50
PFMOAA	69		0.040		ug/L		02/22/21 11:40	02/25/21 19:00	50
PFO2HxA	25		0.013		ug/L		02/22/21 11:40	02/25/21 19:00	50
PFO3OA	6.8		0.020		ug/L		02/22/21 11:40	02/25/21 19:00	50
PFO4DA	3.0		0.030		ug/L		02/22/21 11:40	02/25/21 19:00	50
PFO5DA	0.083		0.039		ug/L		02/22/21 11:40	02/25/21 19:00	50
PMPA	7.3		0.31		ug/L		02/22/21 11:40	02/25/21 19:00	50
PS Acid	<0.0098		0.0098		ug/L		02/22/21 11:40	02/25/21 19:00	50
R-EVE	0.77		0.036		ug/L		02/22/21 11:40	02/25/21 19:00	50
R-PSDA	0.81		0.035		ug/L		02/22/21 11:40	02/25/21 19:00	50
R-PSDCA	0.014		0.0087		ug/L		02/22/21 11:40	02/25/21 19:00	50
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>13C3 HFPO-DA</i>	111		25 - 150				02/22/21 11:40	02/25/21 19:00	50

Client Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Client Sample ID: SEEP-C-EQBLK-ISCO-021321

Lab Sample ID: 320-70306-5

Date Collected: 02/13/21 16:05

Matrix: Water

Date Received: 02/19/21 09:50

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
EVE Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
HFPO-DA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
Hydro-EVE Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
Hydrolyzed PSDA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
Hydro-PS Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
NVHOS	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
PEPA	<0.020		0.020		ug/L		02/22/21 11:40	02/24/21 05:19	1
PES	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
PFECA B	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
PFECA G	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
PFMOAA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
PFO2HxA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
PFO3OA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
PFO4DA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
PFO5DA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
PMPA	<0.010		0.010		ug/L		02/22/21 11:40	02/24/21 05:19	1
PS Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
R-EVE	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
R-PSDA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
R-PSDCA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:19	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	97		25 - 150				02/22/21 11:40	02/24/21 05:19	1

Client Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Client Sample ID: SEEP-C-FBLK-021321

Lab Sample ID: 320-70306-6

Date Collected: 02/13/21 16:10

Matrix: Water

Date Received: 02/19/21 09:50

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
EVE Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
HFPO-DA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
Hydro-EVE Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
Hydrolyzed PSDA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
Hydro-PS Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
NVHOS	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
PEPA	<0.020		0.020		ug/L		02/22/21 11:40	02/24/21 05:36	1
PES	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
PFECA B	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
PFECA G	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
PFMOAA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
PFO2HxA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
PFO3OA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
PFO4DA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
PFO5DA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
PMPA	<0.010		0.010		ug/L		02/22/21 11:40	02/24/21 05:36	1
PS Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
R-EVE	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
R-PSDA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
R-PSDCA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:36	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	97		25 - 150				02/22/21 11:40	02/24/21 05:36	1

Client Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Client Sample ID: SEEP-C-RAIN-EQBLK-ISCO-021321

Lab Sample ID: 320-70306-7

Date Collected: 02/13/21 16:00

Matrix: Water

Date Received: 02/19/21 09:50

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
EVE Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
HFPO-DA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
Hydro-EVE Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
Hydrolyzed PSDA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
Hydro-PS Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
NVHOS	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
PEPA	<0.020		0.020		ug/L		02/22/21 11:40	02/24/21 05:53	1
PES	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
PFECA B	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
PFECA G	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
PFMOAA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
PFO2HxA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
PFO3OA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
PFO4DA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
PFO5DA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
PMPA	<0.010		0.010		ug/L		02/22/21 11:40	02/24/21 05:53	1
PS Acid	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
R-EVE	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
R-PSDA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
R-PSDCA	<0.0020		0.0020		ug/L		02/22/21 11:40	02/24/21 05:53	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	87		25 - 150				02/22/21 11:40	02/24/21 05:53	1

Default Detection Limits

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Prep: PFAS Prep

Analyte	RL	MDL	Units
EVE Acid	0.0020	0.00017	ug/L
HFPO-DA	0.0020	0.00081	ug/L
Hydro-EVE Acid	0.0020	0.00014	ug/L
Hydrolyzed PSDA	0.0020	0.00038	ug/L
Hydro-PS Acid	0.0020	0.000061	ug/L
NVHOS	0.0020	0.00015	ug/L
PEPA	0.020	0.00016	ug/L
PES	0.0020	0.000067	ug/L
PFECA B	0.0020	0.00027	ug/L
PFECA G	0.0020	0.00048	ug/L
PFMOAA	0.0020	0.00080	ug/L
PFO2HxA	0.0020	0.00027	ug/L
PFO3OA	0.0020	0.00039	ug/L
PFO4DA	0.0020	0.00059	ug/L
PFO5DA	0.0020	0.00078	ug/L
PMPA	0.010	0.0062	ug/L
PS Acid	0.0020	0.00020	ug/L
R-EVE	0.0020	0.00072	ug/L
R-PSDA	0.0020	0.00071	ug/L
R-PSDCA	0.0020	0.00017	ug/L

Isotope Dilution Summary

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	HFPODA (25-150)			
320-70306-1	SEEP-C-EFFLUENT-192-02132	95			
320-70306-2	SEEP-C-INFLUENT-192-02132	100			
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-0 1321	94			
320-70306-4	SEEP-C-RAIN-INFLUENT-24-0 1321	111			
320-70306-5	SEEP-C-EQBLK-ISCO-021321	97			
320-70306-6	SEEP-C-FBLK-021321	97			
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-02 321	87			
LCS 320-464016/2-A	Lab Control Sample	92			
LCSD 320-464016/3-A	Lab Control Sample Dup	95			
MB 320-464016/1-A	Method Blank	100			
Surrogate Legend					
HFPODA = 13C3 HFPO-DA					

QC Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Lab Sample ID: MB 320-464016/1-A
Matrix: Water
Analysis Batch: 464205

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 464016

Analyte	MB	MB	RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
EVE Acid	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
HFPO-DA	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
Hydro-EVE Acid	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
Hydrolyzed PSDA	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
Hydro-PS Acid	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
NVHOS	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
PEPA	<0.020		0.020		ug/L		02/22/21 11:39	02/24/21 03:51			1
PES	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
PFECA B	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
PFECA G	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
PFMOAA	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
PFO2HxA	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
PFO3OA	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
PFO4DA	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
PFO5DA	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
PMPA	<0.010		0.010		ug/L		02/22/21 11:39	02/24/21 03:51			1
PS Acid	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
R-EVE	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
R-PSDA	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
R-PSDCA	<0.0020		0.0020		ug/L		02/22/21 11:39	02/24/21 03:51			1
		MB	MB								
Isotope Dilution		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
13C3 HFPO-DA		100		25 - 150			02/22/21 11:39	02/24/21 03:51			1

Lab Sample ID: LCS 320-464016/2-A
Matrix: Water
Analysis Batch: 464205

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 464016

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
EVE Acid	0.200	0.208		ug/L		104	70 - 130	
HFPO-DA	0.200	0.221		ug/L		111	70 - 130	
Hydro-EVE Acid	0.200	0.208		ug/L		104	70 - 130	
Hydrolyzed PSDA	0.200	0.244		ug/L		122	50 - 150	
Hydro-PS Acid	0.200	0.199		ug/L		99	70 - 130	
NVHOS	0.200	0.193		ug/L		97	70 - 130	
PEPA	0.200	0.231		ug/L		115	70 - 130	
PES	0.200	0.201		ug/L		101	70 - 130	
PFECA B	0.200	0.211		ug/L		105	70 - 130	
PFECA G	0.200	0.237		ug/L		118	70 - 130	
PFMOAA	0.200	0.171		ug/L		85	70 - 130	
PFO2HxA	0.200	0.205		ug/L		102	70 - 130	
PFO3OA	0.200	0.192		ug/L		96	70 - 130	
PFO4DA	0.200	0.213		ug/L		107	50 - 150	
PFO5DA	0.200	0.165		ug/L		83	50 - 150	
PMPA	0.200	0.199		ug/L		100	70 - 130	
PS Acid	0.200	0.206		ug/L		103	70 - 130	
R-EVE	0.200	0.216		ug/L		108	50 - 150	
R-PSDA	0.200	0.221		ug/L		111	50 - 150	
R-PSDCA	0.200	0.211		ug/L		106	70 - 130	

QC Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+ (Continued)

<i>Isotope Dilution</i>	<i>LCS</i>	<i>LCS</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>13C3 HFPO-DA</i>	92		25 - 150

Lab Sample ID: LCSD 320-464016/3-A
Matrix: Water
Analysis Batch: 464205

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 464016

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
	Added	Result	Qualifier				Limits	Limits	RPD	Limit
EVE Acid	0.200	0.206		ug/L		103	70 - 130	1	25	
HFPO-DA	0.200	0.211		ug/L		106	70 - 130	5	25	
Hydro-EVE Acid	0.200	0.211		ug/L		106	70 - 130	2	25	
Hydrolyzed PSDA	0.200	0.249		ug/L		125	50 - 150	2	25	
Hydro-PS Acid	0.200	0.202		ug/L		101	70 - 130	2	25	
NVHOS	0.200	0.194		ug/L		97	70 - 130	1	25	
PEPA	0.200	0.230		ug/L		115	70 - 130	1	25	
PES	0.200	0.202		ug/L		101	70 - 130	1	25	
PFECA B	0.200	0.208		ug/L		104	70 - 130	1	25	
PFECA G	0.200	0.229		ug/L		115	70 - 130	3	25	
PFMOAA	0.200	0.175		ug/L		88	70 - 130	3	25	
PFO2HxA	0.200	0.204		ug/L		102	70 - 130	0	25	
PFO3OA	0.200	0.201		ug/L		100	70 - 130	5	25	
PFO4DA	0.200	0.221		ug/L		111	50 - 150	4	25	
PFO5DA	0.200	0.173		ug/L		87	50 - 150	5	25	
PMPA	0.200	0.200		ug/L		100	70 - 130	0	25	
PS Acid	0.200	0.216		ug/L		108	70 - 130	5	25	
R-EVE	0.200	0.215		ug/L		108	50 - 150	1	25	
R-PSDA	0.200	0.222		ug/L		111	50 - 150	0	25	
R-PSDCA	0.200	0.210		ug/L		105	70 - 130	1	25	

<i>Isotope Dilution</i>	<i>LCSD</i>	<i>LCSD</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>13C3 HFPO-DA</i>	95		25 - 150

QC Association Summary

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

LCMS

Prep Batch: 464016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-70306-1	SEEP-C-EFFLUENT-192-021321	Total/NA	Water	PFAS Prep	
320-70306-2	SEEP-C-INFLUENT-192-021321	Total/NA	Water	PFAS Prep	
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	Total/NA	Water	PFAS Prep	
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	Total/NA	Water	PFAS Prep	
320-70306-5	SEEP-C-EQBLK-ISCO-021321	Total/NA	Water	PFAS Prep	
320-70306-6	SEEP-C-FBLK-021321	Total/NA	Water	PFAS Prep	
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	Total/NA	Water	PFAS Prep	
MB 320-464016/1-A	Method Blank	Total/NA	Water	PFAS Prep	
LCS 320-464016/2-A	Lab Control Sample	Total/NA	Water	PFAS Prep	
LCSD 320-464016/3-A	Lab Control Sample Dup	Total/NA	Water	PFAS Prep	

Analysis Batch: 464205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-70306-1	SEEP-C-EFFLUENT-192-021321	Total/NA	Water	Chemours (TB3+)	464016
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	Total/NA	Water	Chemours (TB3+)	464016
320-70306-5	SEEP-C-EQBLK-ISCO-021321	Total/NA	Water	Chemours (TB3+)	464016
320-70306-6	SEEP-C-FBLK-021321	Total/NA	Water	Chemours (TB3+)	464016
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	Total/NA	Water	Chemours (TB3+)	464016
MB 320-464016/1-A	Method Blank	Total/NA	Water	Chemours (TB3+)	464016
LCS 320-464016/2-A	Lab Control Sample	Total/NA	Water	Chemours (TB3+)	464016
LCSD 320-464016/3-A	Lab Control Sample Dup	Total/NA	Water	Chemours (TB3+)	464016

Analysis Batch: 464873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-70306-2	SEEP-C-INFLUENT-192-021321	Total/NA	Water	Chemours (TB3+)	464016
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	Total/NA	Water	Chemours (TB3+)	464016

Lab Chronicle

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Client Sample ID: SEEP-C-EFFLUENT-192-021321

Lab Sample ID: 320-70306-1

Date Collected: 02/13/21 10:00

Matrix: Water

Date Received: 02/19/21 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.50 mL	5.00 mL	464016	02/22/21 11:40	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			464205	02/24/21 04:09	D1R	TAL SAC

Client Sample ID: SEEP-C-INFLUENT-192-021321

Lab Sample ID: 320-70306-2

Date Collected: 02/13/21 10:00

Matrix: Water

Date Received: 02/19/21 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.50 mL	5.00 mL	464016	02/22/21 11:40	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		50			464873	02/25/21 18:43	JD1	TAL SAC

Client Sample ID: SEEP-C-RAIN-EFFLUENT-24-021321

Lab Sample ID: 320-70306-3

Date Collected: 02/13/21 10:00

Matrix: Water

Date Received: 02/19/21 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.50 mL	5.00 mL	464016	02/22/21 11:40	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			464205	02/24/21 04:44	D1R	TAL SAC

Client Sample ID: SEEP-C-RAIN-INFLUENT-24-021321

Lab Sample ID: 320-70306-4

Date Collected: 02/13/21 10:00

Matrix: Water

Date Received: 02/19/21 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.50 mL	5.00 mL	464016	02/22/21 11:40	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		50			464873	02/25/21 19:00	JD1	TAL SAC

Client Sample ID: SEEP-C-EQBLK-ISCO-021321

Lab Sample ID: 320-70306-5

Date Collected: 02/13/21 16:05

Matrix: Water

Date Received: 02/19/21 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.50 mL	5.00 mL	464016	02/22/21 11:40	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			464205	02/24/21 05:19	D1R	TAL SAC

Client Sample ID: SEEP-C-FBLK-021321

Lab Sample ID: 320-70306-6

Date Collected: 02/13/21 16:10

Matrix: Water

Date Received: 02/19/21 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.50 mL	5.00 mL	464016	02/22/21 11:40	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			464205	02/24/21 05:36	D1R	TAL SAC

Lab Chronicle

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Client Sample ID: SEEP-C-RAIN-EQBLK-ISCO-021321

Lab Sample ID: 320-70306-7

Date Collected: 02/13/21 16:00

Matrix: Water

Date Received: 02/19/21 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.50 mL	5.00 mL	464016	02/22/21 11:40	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			464205	02/24/21 05:53	D1R	TAL SAC

Client Sample ID: Method Blank

Lab Sample ID: MB 320-464016/1-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.50 mL	5.00 mL	464016	02/22/21 11:39	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			464205	02/24/21 03:51	D1R	TAL SAC

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 320-464016/2-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.50 mL	5.00 mL	464016	02/22/21 11:40	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			464205	02/24/21 06:11	D1R	TAL SAC

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 320-464016/3-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.50 mL	5.00 mL	464016	02/22/21 11:40	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			464205	02/24/21 06:28	D1R	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Laboratory: Eurofins TestAmerica, Sacramento

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-24
ANAB	Dept. of Defense ELAP	L2468	01-20-24
ANAB	Dept. of Energy	L2468.01	01-20-21 *
ANAB	ISO/IEC 17025	L2468	01-20-21 *
Arizona	State	AZ0708	08-11-21
Arkansas DEQ	State	88-0691	06-17-21
California	State	2897	02-01-23
Colorado	State	CA0004	08-31-21
Connecticut	State	PH-0691	06-30-21
Florida	NELAP	E87570	06-30-21
Georgia	State	4040	01-29-22
Hawaii	State	<cert No.>	01-29-22
Illinois	NELAP	200060	03-17-21
Kansas	NELAP	E-10375	02-01-21 *
Louisiana	NELAP	01944	06-30-21
Maine	State	CA00004	04-14-22
Michigan	State	9947	01-29-21 *
Nevada	State	CA000442021-2	07-31-21
New Hampshire	NELAP	2997	04-18-21
New Jersey	NELAP	CA005	06-30-21
New York	NELAP	11666	04-01-21
Ohio	State	41252	01-29-22
Oregon	NELAP	4040	01-29-22
Pennsylvania	NELAP	68-01272	03-31-21
Texas	NELAP	T104704399-19-13	06-01-21
US Fish & Wildlife	US Federal Programs	58448	07-31-21
USDA	US Federal Programs	P330-18-00239	07-31-21
Utah	NELAP	CA000442019-01	02-28-21
Vermont	State	VT-4040	04-16-21
Virginia	NELAP	460278	03-14-21
Washington	State	C581	05-05-21
West Virginia (DW)	State	9930C	12-31-21
Wisconsin	State	998204680	08-31-21
Wyoming	State Program	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Method	Method Description	Protocol	Laboratory
Chemours (TB3+)	Fluoroproducts Analytical Method – Table 3+	Client	TAL SAC
PFAS Prep	Preparation, Direct Inject PFAS	TAL-SAC	TAL SAC

Protocol References:

Client = Client derived Standard Operating Procedure

TAL-SAC = TestAmerica Laboratories, West Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70306-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-70306-1	SEEP-C-EFFLUENT-192-021321	Water	02/13/21 10:00	02/19/21 09:50	
320-70306-2	SEEP-C-INFLUENT-192-021321	Water	02/13/21 10:00	02/19/21 09:50	
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	Water	02/13/21 10:00	02/19/21 09:50	
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	Water	02/13/21 10:00	02/19/21 09:50	
320-70306-5	SEEP-C-EQBLK-ISCO-021321	Water	02/13/21 16:05	02/19/21 09:50	
320-70306-6	SEEP-C-FBLK-021321	Water	02/13/21 16:10	02/19/21 09:50	
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	Water	02/13/21 16:00	02/19/21 09:50	

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70306-1

SDG No.: _____

Instrument ID: A10 Analysis Batch Number: 463725

Lab Sample ID: IC 320-463725/2 Client Sample ID: _____

Date Analyzed: 02/20/21 10:46 Lab File ID: 2021.02.20_A10_TB3+_ICAL_ GC Column: GeminiC18 3x1 ID: 3 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	2.88	Baseline	roycea	02/20/21 13:26
R-EVE	6.56	Incomplete Integration	roycea	02/20/21 11:42
R-PSDA	6.65	Incomplete Integration	roycea	02/20/21 11:42
Hydrolyzed PSDA	6.75	Incomplete Integration	roycea	02/20/21 11:43
PMPA	6.77	Incomplete Integration	roycea	02/20/21 11:43
NVHOS	7.32	Baseline	roycea	02/20/21 15:04
PFO2HxA	7.93	Incomplete Integration	roycea	02/20/21 11:43
HFPO-DA	9.49	Baseline	roycea	02/20/21 15:05

Lab Sample ID: IC 320-463725/3 Client Sample ID: _____

Date Analyzed: 02/20/21 11:03 Lab File ID: 2021.02.20_A10_TB3+_ICAL_ GC Column: GeminiC18 3x1 ID: 3 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	2.89	Incomplete Integration	roycea	02/20/21 11:44
R-EVE	6.57	Incomplete Integration	roycea	02/20/21 15:01
R-PSDA	6.67	Baseline	roycea	02/20/21 11:44
PMPA	6.75	Baseline	roycea	02/20/21 11:44
NVHOS	7.32	Baseline	roycea	02/20/21 15:04
HFPO-DA	9.49	Baseline	roycea	02/20/21 15:06

Lab Sample ID: IC 320-463725/4 Client Sample ID: _____

Date Analyzed: 02/20/21 11:21 Lab File ID: 2021.02.20_A10_TB3+_ICAL_ GC Column: GeminiC18 3x1 ID: 3 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.00	Incomplete Integration	roycea	02/20/21 13:20
R-EVE	6.62	Incomplete Integration	roycea	02/20/21 13:20
R-PSDA	6.70	Baseline	roycea	02/20/21 13:21
NVHOS	7.34	Baseline	roycea	02/20/21 15:05

Chemours (TB3+)

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70306-1

SDG No.: _____

Instrument ID: A10 Analysis Batch Number: 463725

Lab Sample ID: IC 320-463725/5 Client Sample ID: _____

Date Analyzed: 02/20/21 11:38 Lab File ID: 2021.02.20_A10_TB3+_ICAL_ GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.06	Incomplete Integration	roycea	02/20/21 13:21
R-EVE	6.65	Incomplete Integration	roycea	02/20/21 13:21
NVHOS	7.36	Incomplete Integration	roycea	02/20/21 13:21

Lab Sample ID: IC 320-463725/6 Client Sample ID: _____

Date Analyzed: 02/20/21 11:56 Lab File ID: 2021.02.20_A10_TB3+_ICAL_ GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	2.83	Incomplete Integration	roycea	02/20/21 13:22
R-EVE	6.54	Incomplete Integration	roycea	02/20/21 13:22
Hydrolyzed PSDA	6.72	Baseline	roycea	02/20/21 13:22
NVHOS	7.30	Incomplete Integration	roycea	02/20/21 13:22

Lab Sample ID: IC 320-463725/7 Client Sample ID: _____

Date Analyzed: 02/20/21 12:13 Lab File ID: 2021.02.20_A10_TB3+_ICAL_ GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	2.96	Incomplete Integration	roycea	02/20/21 13:23
R-EVE	6.60	Incomplete Integration	roycea	02/20/21 13:23
NVHOS	7.32	Incomplete Integration	roycea	02/20/21 13:23

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70306-1

SDG No.: _____

Instrument ID: A10 Analysis Batch Number: 463725

Lab Sample ID: IC 320-463725/9 Client Sample ID: _____

Date Analyzed: 02/20/21 12:48 Lab File ID: 2021.02.20_A10_TB3+_ICAL_ GC Column: GeminiC18 3x1 ID: 3 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	2.86	Incomplete Integration	roycea	02/20/21 13:24
R-EVE	6.54	Incomplete Integration	roycea	02/20/21 13:24
Hydrolyzed PSDA	6.73	Incomplete Integration	roycea	02/20/21 13:24
NVHOS	7.30	Incomplete Integration	roycea	02/20/21 13:24

Lab Sample ID: IC 320-463725/11 Client Sample ID: _____

Date Analyzed: 02/20/21 13:23 Lab File ID: 2021.02.20_A10_TB3+_ICAL_ GC Column: GeminiC18 3x1 ID: 3 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	2.83	Incomplete Integration	roycea	02/20/21 14:44
R-EVE	6.54	Incomplete Integration	roycea	02/20/21 14:44
Hydrolyzed PSDA	6.72	Incomplete Integration	roycea	02/20/21 14:44
NVHOS	7.30	Incomplete Integration	roycea	02/20/21 14:44

Lab Sample ID: IC 320-463725/13 Client Sample ID: _____

Date Analyzed: 02/20/21 13:58 Lab File ID: 2021.02.20_A10_TB3+_ICAL_ GC Column: GeminiC18 3x1 ID: 3 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	2.88	Incomplete Integration	roycea	02/20/21 14:46
R-EVE	6.56	Incomplete Integration	roycea	02/20/21 14:46
Hydrolyzed PSDA	6.75	Incomplete Integration	roycea	02/20/21 14:46

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70306-1

SDG No.: _____

Instrument ID: A10 Analysis Batch Number: 463725

Lab Sample ID: IC 320-463725/14 Client Sample ID: _____

Date Analyzed: 02/20/21 14:15 Lab File ID: 2021.02.20_A10_TB3+_ICAL_ GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.03	Incomplete Integration	roycea	02/20/21 14:46
R-EVE	6.62	Incomplete Integration	roycea	02/20/21 14:46

Lab Sample ID: ICV 320-463725/16 Client Sample ID: _____

Date Analyzed: 02/20/21 14:50 Lab File ID: 2021.02.20_A10_TB3+_ICAL_ GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	2.91	Baseline	roycea	02/20/21 15:11
R-EVE	6.56	Baseline	roycea	02/20/21 15:11
NVHOS	7.30	Baseline	roycea	02/20/21 15:11

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70306-1

SDG No.: _____

Instrument ID: A10 Analysis Batch Number: 464205

Lab Sample ID: CCV 320-464205/1 Client Sample ID: _____

Date Analyzed: 02/24/21 03:16 Lab File ID: 2021.02.23_A10_TB3+_B_014 GC Column: GeminiC18 3x1 ID: 3 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	2.72	Baseline	vangmy	02/24/21 09:20
R-EVE	6.46	Baseline	vangmy	02/24/21 09:20
R-PSDA	6.56	Baseline	vangmy	02/24/21 09:20
PMPA	6.65	Baseline	vangmy	02/24/21 09:20
Hydrolyzed PSDA	6.67	Baseline	vangmy	02/24/21 09:20
NVHOS	7.26	Baseline	vangmy	02/24/21 09:20

Lab Sample ID: 320-70306-1 Client Sample ID: SEEP-C-EFFLUENT-192-021321

Date Analyzed: 02/24/21 04:09 Lab File ID: 2021.02.23_A10_TB3+_B_017 GC Column: GeminiC18 3x1 ID: 3 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	2.29	Baseline	ruangyots akuld	02/25/21 07:40
R-EVE	6.22	Baseline	ruangyots akuld	02/25/21 07:40
R-PSDA	6.32	Baseline	ruangyots akuld	02/25/21 07:40
Hydrolyzed PSDA	6.46	Baseline	ruangyots akuld	02/25/21 07:40
PMPA	6.47	Baseline	ruangyots akuld	02/25/21 07:40
NVHOS	7.12	Baseline	ruangyots akuld	02/25/21 07:40
PFO2HxA	7.79	Baseline	ruangyots akuld	02/25/21 07:40
PEPA	8.59	Baseline	ruangyots akuld	02/25/21 07:41

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70306-1

SDG No.: _____

Instrument ID: A10 Analysis Batch Number: 464205

Lab Sample ID: 320-70306-3 Client Sample ID: SEEP-C-RAIN-EFFLUENT-24-021321

Date Analyzed: 02/24/21 04:44 Lab File ID: 2021.02.23_A10_TB3+_B_019 GC Column: GeminiC18 3x1 ID: 3 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	2.49	Baseline	ruangyots akuld	02/25/21 07:42
R-EVE	6.34	Baseline	ruangyots akuld	02/25/21 07:42
R-PSDA	6.46	Baseline	ruangyots akuld	02/25/21 07:42
PMPA	6.55	Baseline	ruangyots akuld	02/25/21 07:42
Hydrolyzed PSDA	6.56	Baseline	ruangyots akuld	02/25/21 07:42
NVHOS	7.20	Baseline	ruangyots akuld	02/25/21 07:42

Lab Sample ID: 320-70306-7 Client Sample ID: SEEP-C-RAIN-EQBLK-ISCO-021321

Date Analyzed: 02/24/21 05:53 Lab File ID: 2021.02.23_A10_TB3+_B_023 GC Column: GeminiC18 3x1 ID: 3 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
NVHOS	7.10	Baseline	ruangyots akuld	02/25/21 07:44
PFO2HxA		Invalid Compound ID	ruangyots akuld	02/25/21 07:44
PMPA		Invalid Compound ID	ruangyots akuld	02/25/21 07:44

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70306-1

SDG No.: _____

Instrument ID: A10 Analysis Batch Number: 464205

Lab Sample ID: LCS 320-464016/2-A Client Sample ID: _____

Date Analyzed: 02/24/21 06:11 Lab File ID: 2021.02.23_A10_TB3+_B_024 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	2.75	Baseline	vangmy	02/24/21 09:23
R-EVE	6.48	Baseline	vangmy	02/24/21 09:23
PMPA	6.67	Baseline	vangmy	02/24/21 09:23
Hydrolyzed PSDA	6.69	Baseline	vangmy	02/24/21 09:23
NVHOS	7.26	Baseline	vangmy	02/24/21 09:23

Lab Sample ID: LCSD 320-464016/3-A Client Sample ID: _____

Date Analyzed: 02/24/21 06:28 Lab File ID: 2021.02.23_A10_TB3+_B_025 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	2.63	Baseline	vangmy	02/24/21 09:23
R-EVE	6.42	Baseline	vangmy	02/24/21 09:23
R-PSDA	6.52	Baseline	vangmy	02/24/21 09:24
PMPA	6.62	Baseline	vangmy	02/24/21 09:24
Hydrolyzed PSDA	6.64	Baseline	vangmy	02/24/21 09:24
NVHOS	7.22	Baseline	vangmy	02/24/21 09:24

Lab Sample ID: CCV 320-464205/14 Client Sample ID: _____

Date Analyzed: 02/24/21 07:03 Lab File ID: 2021.02.23_A10_TB3+_B_027 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.06	Assign Peak	vangmy	02/24/21 09:21
R-EVE	6.64	Assign Peak	vangmy	02/24/21 09:21
PMPA	6.77	Baseline	vangmy	02/24/21 09:21

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70306-1

SDG No.: _____

Instrument ID: A10 Analysis Batch Number: 464205

Lab Sample ID: CCV 320-464205/27 Client Sample ID: _____

Date Analyzed: 02/24/21 10:50 Lab File ID: 2021.02.23_A10_TB3+_B_040 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	2.74	Baseline	ruangyots akuld	02/25/21 07:50
R-EVE	6.48	Baseline	vangmy	02/24/21 11:34
Hydrolyzed PSDA	6.67	Baseline	vangmy	02/24/21 11:34
NVHOS	7.26	Baseline	vangmy	02/24/21 11:34

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70306-1

SDG No.: _____

Instrument ID: A10 Analysis Batch Number: 464873

Lab Sample ID: CCV 320-464873/20 Client Sample ID: _____

Date Analyzed: 02/25/21 17:16 Lab File ID: 2021.02.25_A10_TB3+_C_021 GC Column: GeminiC18 3x1 ID: 3 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.40	Baseline	ruangyots akuld	02/26/21 08:40
R-EVE	6.69	Baseline	ruangyots akuld	02/26/21 08:41
Hydro-PS Acid	9.86	Baseline	dadunj	02/26/21 09:34

Lab Sample ID: 320-70306-2 Client Sample ID: SEEP-C-INFLUENT-192-021321

Date Analyzed: 02/25/21 18:43 Lab File ID: 2021.02.25_A10_TB3+_C_026 GC Column: GeminiC18 3x1 ID: 3 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	2.65	Baseline	dadunj	02/26/21 10:34
R-EVE	6.43	Baseline	dadunj	02/26/21 10:34
R-PSDA	6.54	Baseline	dadunj	02/26/21 10:34
PMPA	6.62	Baseline	dadunj	02/26/21 10:34
Hydrolyzed PSDA	6.64	Baseline	dadunj	02/26/21 10:34
NVHOS	7.24	Baseline	dadunj	02/26/21 10:34
PFO2HxA	7.84	Baseline	dadunj	02/26/21 10:34
PES	8.86	Baseline	dadunj	02/26/21 10:34
R-PSDCA	9.78	Baseline	dadunj	02/26/21 10:34

Lab Sample ID: 320-70306-4 Client Sample ID: SEEP-C-RAIN-INFLUENT-24-021321

Date Analyzed: 02/25/21 19:00 Lab File ID: 2021.02.25_A10_TB3+_C_027 GC Column: GeminiC18 3x1 ID: 3 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.43	Baseline	dadunj	02/26/21 10:35
R-PSDA	6.76	Baseline	dadunj	02/26/21 10:35

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70306-1

SDG No.: _____

Instrument ID: A10 Analysis Batch Number: 464873

Lab Sample ID: CCV 320-464873/29 Client Sample ID: _____

Date Analyzed: 02/25/21 19:53 Lab File ID: 2021.02.25_A10_TB3+_C_030 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	2.50	Baseline	dadunj	02/26/21 11:17
R-EVE	6.32	Baseline	dadunj	02/26/21 11:17
R-PSDA	6.42	Baseline	dadunj	02/26/21 11:17
Hydrolyzed PSDA	6.55	Baseline	dadunj	02/26/21 11:17
PMPA	6.56	Baseline	dadunj	02/26/21 11:17
NVHOS	7.17	Baseline	dadunj	02/26/21 11:17
PFO2HxA	7.81	Baseline	dadunj	02/26/21 11:17
PEPA	8.49	Baseline	dadunj	02/26/21 11:17
Hydro-PS Acid	9.87	Baseline	dadunj	02/26/21 11:18

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
LCMTB3_SU_00022	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
.LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C4 PFHpA	5 ug/L
..LCM3HFPO-DA_00027	10/21/23	WELLINGTON, Lot M3HFPODA1020			(Purchased Reagent)		13C3 HFPO-DA	0.5 ug/mL
..LCM4PFHFA_00035	09/29/25	Wellington Laboratories, Lot M4PFHpA0920			(Purchased Reagent)		13C4 PFHpA	50 ug/mL
LCTB3_LLICV_00047	03/23/21	02/17/21	MeOH/H2O, Lot 202389	10 mL	LCMTB3_SU_00022	500 uL	13C3 HFPO-DA	0.25 ug/L
					LCTB3_ICVSP_00014	200 uL	13C4 PFHpA	0.25 ug/L
							HFPO-DA	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
					.LCMTB3_SU_00022	07/10/21	01/10/21	Methanol, Lot 202389
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	PFO3OA	0.1 ug/L
...LCM3HFPO-DA_00027	10/21/23	WELLINGTON, Lot M3HFPODA1020			(Purchased Reagent)		PFO4DA	0.1 ug/L
..LCM4PFHFA_00035	09/29/25	Wellington Laboratories, Lot M4PFHpA0920			(Purchased Reagent)		PFO5DA	0.1 ug/L
.LCTB3_ICVSP_00014	03/23/21	09/24/20	Methanol, Lot 202389	10 mL	LCTB3_ICVIM2_00010	1 mL	PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
							13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
							13C3 HFPO-DA	0.5 ug/mL
							13C4 PFHpA	0.5 ug/mL
							HFPO-DA	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_ICVIM2_00010	03/23/21	09/23/20	Methanol, Lot 202389	200 mL	LCHFPO-DA_00014	200 uL	HFPO-DA	50 ug/L
					LCTB3_ICVIM_00008	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA_00014	07/09/23		WELLINGTON, Lot HFPODA0720				(Purchased Reagent)	HFPO-DA
...LCTB3_ICVIM_00008	03/23/21	09/23/20	Methanol, Lot 202389	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA_00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS_00001	100 uL	NVHOS	5000 ug/L
					LCPEPA_00002	100 uL	PEPA	5000 ug/L
					LCPEPES_00001	100 uL	PES	5000 ug/L
					LCPFECA_B_00001	100 uL	PFECA B	5000 ug/L
					LCPFECA_G_00001	100 uL	PFECA G	5000 ug/L
					LCPFMCAA_00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA_00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA_00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA_00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DA_00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA_00002	100 uL	PMPA	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD1_00056	03/23/21	02/17/21	MeOH/H2O, Lot 202389	10 mL	LCMTB3_SU_00022	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00066	100 uL	HFPO-DA	0.001 ug/L
							Perfluoroheptanoic acid	0.001 ug/L
							PS Acid	0.001 ug/L
							Hydro-PS Acid	0.001 ug/L
							R-PSDA	0.001 ug/L
							Hydrolyzed PSDA	0.001 ug/L
							R-PSDCA	0.001 ug/L
							EVE Acid	0.001 ug/L
							Hydro-EVE Acid	0.001 ug/L
							NVHOS	0.001 ug/L
							PEPA	0.001 ug/L
							PES	0.001 ug/L
							PFECA B	0.001 ug/L
							PFECA G	0.001 ug/L
							PFMOAA	0.001 ug/L
		PFO2HxA	0.001 ug/L					
		PFO3OA	0.001 ug/L					
		PFO4DA	0.001 ug/L					
		PFO5DA	0.001 ug/L					
		PMPA	0.001 ug/L					
		R-EVE	0.001 ug/L					
.LCMTB3_SU_00022	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA 00035	500 uL	13C4 PFHpA	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHPA 00035	09/29/25		Wellington Laboratories, Lot M4PFHPA0920		(Purchased Reagent)		13C4 PFHPA	50 ug/mL
.LCTB3_SP_00066	03/23/21	09/24/20	Methanol, Lot 202389	250 mL	LCTB3_IM2_00011	0.5 mL	HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
..LCTB3_IM2_00011	03/23/21	09/23/20	Methanol, Lot 202389	200 mL	LCHFPO-DA 00015	200 uL	HFPO-DA	50 ug/L
					LCPFHpA 00020	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00020	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00015	07/09/23		WELLINGTON, Lot HFPODA0720		(Purchased Reagent)		HFPO-DA	50 ug/mL
...LCPFHpA 00020	07/09/25		Wellington Laboratories, Lot PFHPA0620		(Purchased Reagent)		Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00020	03/23/21	09/23/20	Methanol, Lot 202389	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPEPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD10_00041	03/23/21	02/17/21	MeOH/H2O, Lot 202389	10 mL	LCMTB3_SU_00022	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00065	2000 uL	HFPO-DA	1 ug/L
							Perfluoroheptanoic acid	1 ug/L
							PS Acid	1 ug/L
							Hydro-PS Acid	1 ug/L
							R-PSDA	1 ug/L
							Hydrolyzed PSDA	1 ug/L
							R-PSDCA	1 ug/L
							EVE Acid	1 ug/L
							Hydro-EVE Acid	1 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							NVHOS	1 ug/L
							PEPA	1 ug/L
							PES	1 ug/L
							PFECA B	1 ug/L
							PFECA G	1 ug/L
							PFMOAA	1 ug/L
							PFO2HxA	1 ug/L
							PFO3OA	1 ug/L
							PFO4DA	1 ug/L
							PFO5DA	1 ug/L
							PMPA	1 ug/L
							R-EVE	1 ug/L
.LCMTB3_SU_00022	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHFA_00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHFA_00035	09/29/25		Wellington Laboratories, Lot M4PFHpA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00065	03/23/21	09/24/20	Methanol, Lot 202389	250 mL	LCTB3_IM2_00011	25 mL	HFPO-DA	5 ug/L
							Perfluoroheptanoic acid	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_IM2_00011	03/23/21	09/23/20	Methanol, Lot 202389	200 mL	LCHFPO-DA_00015	200 uL	HFPO-DA	50 ug/L
					LCPFHpA_00020	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00020	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00015	07/09/23		WELLINGTON, Lot HFPODA0720			(Purchased Reagent)	HFPO-DA	50 ug/mL
...LCPFHpA 00020	07/09/25		Wellington Laboratories, Lot PFHpA0620			(Purchased Reagent)	Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00020	03/23/21	09/23/20	Methanol, Lot 202389	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMCAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PEPA	1000 ug/mL
....LCPEPES 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA G	1000 ug/mL
....LCPFMCAA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO2HxA	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....LCPFO30A 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO30A	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD2_00046	03/23/21	02/17/21	MeOH/H2O, Lot 202389	10 mL	LCMTB3_SU_00022	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00066	250 uL	HFPO-DA	0.0025 ug/L
							Perfluoroheptanoic acid	0.0025 ug/L
							PS Acid	0.0025 ug/L
							Hydro-PS Acid	0.0025 ug/L
							R-PSDA	0.0025 ug/L
							Hydrolyzed PSDA	0.0025 ug/L
							R-PSDCA	0.0025 ug/L
							EVE Acid	0.0025 ug/L
							Hydro-EVE Acid	0.0025 ug/L
							NVHOS	0.0025 ug/L
							PEPA	0.0025 ug/L
							PES	0.0025 ug/L
							PFECA B	0.0025 ug/L
							PFECA G	0.0025 ug/L
							PFMOAA	0.0025 ug/L
		PFO2HxA	0.0025 ug/L					
		PFO30A	0.0025 ug/L					
		PFO4DA	0.0025 ug/L					
		PFO5DA	0.0025 ug/L					
		PMPA	0.0025 ug/L					
		R-EVE	0.0025 ug/L					
.LCMTB3_SU_00022	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA 00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHPA 00035	09/29/25		Wellington Laboratories, Lot M4PFHPA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00066	03/23/21	09/24/20	Methanol, Lot 202389	250 mL	LCTB3_IM2_00011	0.5 mL	HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
..LCTB3_IM2_00011	03/23/21	09/23/20	Methanol, Lot 202389	200 mL	LCHFPO-DA 00015	200 uL	HFPO-DA	50 ug/L
					LCPFHpA 00020	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00020	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00015	07/09/23		WELLINGTON, Lot HFPODA0720				(Purchased Reagent) HFPO-DA	50 ug/mL
...LCPFHpA 00020	07/09/25		Wellington Laboratories, Lot PFHpA0620				(Purchased Reagent) Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00020	03/23/21	09/23/20	Methanol, Lot 202389	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA_B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA_G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMCAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA_00001	100 uL	PFO5DA	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPMPA_00002	100 uL	PMPA	5000 ug/L
					LCR-EVE_00001	100 uL	R-EVE	5000 ug/L
....LCBP1_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPES_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA_B_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA_G_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD3_00046	03/23/21	02/17/21	MeOH/H2O, Lot 202389	10 mL	LCMTB3_SU_00022	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00066	500 uL	HFPO-DA	0.005 ug/L
							Perfluoroheptanoic acid	0.005 ug/L
							PS Acid	0.005 ug/L
							Hydro-PS Acid	0.005 ug/L
							R-PSDA	0.005 ug/L
							Hydrolyzed PSDA	0.005 ug/L
							R-PSDCA	0.005 ug/L
							EVE Acid	0.005 ug/L
							Hydro-EVE Acid	0.005 ug/L
							NVHOS	0.005 ug/L
							PEPA	0.005 ug/L
							PES	0.005 ug/L
							PFECA B	0.005 ug/L
							PFECA G	0.005 ug/L
							PFMOAA	0.005 ug/L
							PFO2HxA	0.005 ug/L
							PFO3OA	0.005 ug/L
							PFO4DA	0.005 ug/L
							PFO5DA	0.005 ug/L
							PMPA	0.005 ug/L
							R-EVE	0.005 ug/L
.LCMTB3_SU_00022	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		LCM4PFHPA 00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM4PFHPA 00035	09/29/25		Wellington Laboratories, Lot M4PFHpA0920		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
.LCTB3_SP_00066	03/23/21	09/24/20	Methanol, Lot 202389	250 mL	LCTB3_IM2_00011	0.5 mL	13C4 PFHpA	50 ug/mL
							HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
..LCTB3_IM2_00011	03/23/21	09/23/20	Methanol, Lot 202389	200 mL	LCHFPO-DA 00015	200 uL	HFPO-DA	50 ug/L
					LCPFHpA 00020	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00020	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00015	07/09/23		WELLINGTON, Lot HFPODA0720		(Purchased Reagent)		HFPO-DA	50 ug/mL
...LCPFHpA 00020	07/09/25		Wellington Laboratories, Lot PFHpA0620		(Purchased Reagent)		Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00020	03/23/21	09/23/20	Methanol, Lot 202389	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEP 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPEP 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD4_00045	03/23/21	02/17/21	MeOH/H2O, Lot 202389	10 mL	LCMTB3_SU_00022	500 uL	13C3 HFPO-DA	0.25 ug/L
					LCTB3_SP_00066	1000 uL	13C4 PFHpA	0.25 ug/L
							HFPO-DA	0.01 ug/L
							Perfluoroheptanoic acid	0.01 ug/L
							PS Acid	0.01 ug/L
							Hydro-PS Acid	0.01 ug/L
							R-PSDA	0.01 ug/L
							Hydrolyzed PSDA	0.01 ug/L
							R-PSDCA	0.01 ug/L
							EVE Acid	0.01 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hydro-EVE Acid	0.01 ug/L
							NVHOS	0.01 ug/L
							PEPA	0.01 ug/L
							PES	0.01 ug/L
							PFECA B	0.01 ug/L
							PFECA G	0.01 ug/L
							PFMOAA	0.01 ug/L
							PFO2HxA	0.01 ug/L
							PFO3OA	0.01 ug/L
							PFO4DA	0.01 ug/L
							PFO5DA	0.01 ug/L
							PMPA	0.01 ug/L
							R-EVE	0.01 ug/L
.LCMTB3_SU_00022	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA 00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
..LCM4PFHPA 00035	09/29/25		Wellington Laboratories, Lot M4PFHpA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00066	03/23/21	09/24/20	Methanol, Lot 202389	250 mL	LCTB3_IM2_00011	0.5 mL	HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
..LCTB3_IM2_00011	03/23/21	09/23/20	Methanol, Lot 202389	200 mL	LCHFPO-DA 00015	200 uL	HFPO-DA	50 ug/L
					LCPFHpa 00020	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00020	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00015	07/09/23		WELLINGTON, Lot HFPODA0720			(Purchased Reagent)	HFPO-DA	50 ug/mL
...LCPFHpA 00020	07/09/25		Wellington Laboratories, Lot PFHpA0620			(Purchased Reagent)	Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00020	03/23/21	09/23/20	Methanol, Lot 202389	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMCAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PEPA	1000 ug/mL
....LCPEPES 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA G	1000 ug/mL
....LCPFMCAA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFMOAA	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD5_00055	03/23/21	02/17/21	MeOH/H2O, Lot 202389	10 mL	LCMTB3_SU_00022	500 uL	13C3 HFPO-DA	0.25 ug/L
					LCTB3_SP_00066	2500 uL	13C4 PFHpA	0.25 ug/L
							HFPO-DA	0.025 ug/L
							Perfluoroheptanoic acid	0.025 ug/L
							PS Acid	0.025 ug/L
							Hydro-PS Acid	0.025 ug/L
							R-PSDA	0.025 ug/L
							Hydrolyzed PSDA	0.025 ug/L
							R-PSDCA	0.025 ug/L
							EVE Acid	0.025 ug/L
							Hydro-EVE Acid	0.025 ug/L
							NVHOS	0.025 ug/L
							PEPA	0.025 ug/L
							PES	0.025 ug/L
							PFECA B	0.025 ug/L
							PFECA G	0.025 ug/L
							PFMOAA	0.025 ug/L
							PFO2HxA	0.025 ug/L
							PFO3OA	0.025 ug/L
							PFO4DA	0.025 ug/L
		PFO5DA	0.025 ug/L					
		PMPA	0.025 ug/L					
		R-EVE	0.025 ug/L					
.LCMTB3_SU_00022	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA_00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHPA_00035	09/29/25		Wellington Laboratories, Lot M4PFHPA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00066	03/23/21	09/24/20	Methanol, Lot 202389	250 mL	LCTB3_IM2_00011	0.5 mL	HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
..LCTB3_IM2_00011	03/23/21	09/23/20	Methanol, Lot 202389	200 mL	LCHFPO-DA_00015	200 uL	HFPO-DA	50 ug/L
					LCPFHpA_00020	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00020	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA_00015	07/09/23		WELLINGTON, Lot HFPODA0720				(Purchased Reagent) HFPO-DA	50 ug/mL
...LCPFHpA_00020	07/09/25		Wellington Laboratories, Lot PFHpA0620				(Purchased Reagent) Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00020	03/23/21	09/23/20	Methanol, Lot 202389	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA_00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS_00001	100 uL	NVHOS	5000 ug/L
					LCPEPA_00002	100 uL	PEPA	5000 ug/L
					LCPEPES_00001	100 uL	PES	5000 ug/L
					LCPFECA_B_00001	100 uL	PFECA B	5000 ug/L
					LCPFECA_G_00001	100 uL	PFECA G	5000 ug/L
					LCPFMCAA_00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA_00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA_00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA_00002	100 uL	PFO4DA	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD6_00087	03/23/21	02/17/21	MeOH/H2O, Lot 202389	10 mL	LCMTB3_SU_00022	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00065	100 uL	HFPO-DA	0.05 ug/L
							Perfluoroheptanoic acid	0.05 ug/L
							PS Acid	0.05 ug/L
							Hydro-PS Acid	0.05 ug/L
							R-PSDA	0.05 ug/L
							Hydrolyzed PSDA	0.05 ug/L
							R-PSDCA	0.05 ug/L
							EVE Acid	0.05 ug/L
							Hydro-EVE Acid	0.05 ug/L
							NVHOS	0.05 ug/L
							PEPA	0.05 ug/L
							PES	0.05 ug/L
							PFECA B	0.05 ug/L
							PFECA G	0.05 ug/L
							PFMOAA	0.05 ug/L
							PFO2HxA	0.05 ug/L
							PFO3OA	0.05 ug/L
							PFO4DA	0.05 ug/L
							PFO5DA	0.05 ug/L
							PMPA	0.05 ug/L
							R-EVE	0.05 ug/L
.LCMTB3_SU_00022	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHFA_00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23	WELLINGTON, Lot M3HFPODA1020			(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHFA_00035	09/29/25	Wellington Laboratories, Lot M4PFHpA0920			(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00065	03/23/21	09/24/20	Methanol, Lot 202389	250 mL	LCTB3_IM2_00011	25 mL	HFPO-DA	5 ug/L
							Perfluoroheptanoic acid	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO30A	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
PMPA	5 ug/L							
R-EVE	5 ug/L							
..LCTB3_IM2_00011	03/23/21	09/23/20	Methanol, Lot 202389	200 mL	LCTB3_IM2_00011	200 uL	HFPO-DA	50 ug/L
							Perfluoroheptanoic acid	50 ug/L
							PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO30A	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
PMPA	50 ug/L							
R-EVE	50 ug/L							
...LCHFPO-DA_00015	07/09/23	WELLINGTON, Lot HFPODA0720			(Purchased Reagent)		HFPO-DA	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...LCPFHpA 00020	07/09/25	Wellington Laboratories, Lot PFHpA0620			(Purchased Reagent)		Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00020	03/23/21	09/23/20	Methanol, Lot 202389	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMCAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPEPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMCAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD7_00426	03/23/21	02/17/21	MeOH/H2O, Lot 202389	10 mL	LCMTB3_SU_00022	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00065	200 uL	HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
.LCMTB3_SU_00022	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C4 PFHpA	5 ug/L
					LCM4PFHPA 00035	500 uL	13C3 HFPO-DA	0.5 ug/mL
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C4 PFHpA	0.5 ug/mL
..LCM4PFHPA 00035	09/29/25		Wellington Laboratories, Lot M4PFHPA0920		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
.LCTB3_SP_00065	03/23/21	09/24/20	Methanol, Lot 202389	250 mL	LCTB3_IM2_00011	25 mL	13C4 PFHpA	50 ug/mL
							HFPO-DA	5 ug/L
							Perfluoroheptanoic acid	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_IM2_00011	03/23/21	09/23/20	Methanol, Lot 202389	200 mL	LCHFPO-DA 00015	200 uL	HFPO-DA	50 ug/L
					LCPFHpa 00020	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00020	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00015	07/09/23		WELLINGTON, Lot HFPODA0720			(Purchased Reagent)	HFPO-DA	50 ug/mL
...LCPFHpA 00020	07/09/25		Wellington Laboratories, Lot PFHpA0620			(Purchased Reagent)	Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00020	03/23/21	09/23/20	Methanol, Lot 202389	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA_00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS_00001	100 uL	NVHOS	5000 ug/L
					LCPEPA_00002	100 uL	PEPA	5000 ug/L
					LCPEPES_00001	100 uL	PES	5000 ug/L
					LCPFECA_B_00001	100 uL	PFECA B	5000 ug/L
					LCPFECA_G_00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA_00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA_00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA_00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA_00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA_00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA_00002	100 uL	PMPA	5000 ug/L
					LCR-EVE_00001	100 uL	R-EVE	5000 ug/L
....LCBP1_00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PS Acid	1000 ug/mL
....LCBP2_00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-PS Acid	1000 ug/mL
....LCBP4_00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDA	1000 ug/mL
....LCBP5_00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydrolyzed PSDA	1000 ug/mL
....LCBP6_00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDCA	1000 ug/mL
....LCEVEA_00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	EVE Acid	1000 ug/mL
....LCHEVEA_00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-EVE Acid	1000 ug/mL
....LCNVHOS_00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	NVHOS	1000 ug/mL
....LCPEPA_00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PEPA	1000 ug/mL
....LCPEPES_00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PES	1000 ug/mL
....LCPFECA_B_00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA B	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD7_00429	03/23/21	02/17/21	MeOH/H2O, Lot 202389	10 mL	LCMTB3_SU_00022	500 uL	13C3 HFPO-DA	0.25 ug/L
					LCTB3_SP_00065	200 uL	HFPO-DA	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
		PFO4DA	0.1 ug/L					
		PFO5DA	0.1 ug/L					
		PMPA	0.1 ug/L					
		R-EVE	0.1 ug/L					
.LCMTB3_SU_00022	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
.LCTB3_SP_00065	03/23/21	09/24/20	Methanol, Lot 202389	250 mL	LCTB3_IM2_00011	25 mL	HFPO-DA	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
PFO2HxA	5 ug/L							

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFO30A	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_IM2_00011	03/23/21	09/23/20	Methanol, Lot 202389	200 mL	LCHFPO-DA_00015	200 uL	HFPO-DA	50 ug/L
					LCTB3_IM_00020	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO30A	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA_00015	07/09/23		WELLINGTON, Lot HFPODA0720				(Purchased Reagent)	HFPO-DA
...LCTB3_IM_00020	03/23/21	09/23/20	Methanol, Lot 202389	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA_00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS_00001	100 uL	NVHOS	5000 ug/L
					LCPEPA_00002	100 uL	PEPA	5000 ug/L
					LCPEPES_00001	100 uL	PES	5000 ug/L
					LCPPFECA_B_00001	100 uL	PFECA B	5000 ug/L
					LCPPFECA_G_00001	100 uL	PFECA G	5000 ug/L
					LCPPFMOAA_00002	100 uL	PFMOAA	5000 ug/L
					LCPPFO2HxA_00002	100 uL	PFO2HxA	5000 ug/L
					LCPPFO30A_00002	100 uL	PFO30A	5000 ug/L
					LCPPFO4DA_00002	100 uL	PFO4DA	5000 ug/L
					LCPPFO5DoA_00001	100 uL	PFO5DA	5000 ug/L
					LCPPMPA_00002	100 uL	PMPA	5000 ug/L
					LCR-EVE_00001	100 uL	R-EVE	5000 ug/L
....LCBP1_00001	01/23/24		Chemours, Lot NA				(Purchased Reagent)	PS Acid
....LCBP2_00001	01/23/24		Chemours, Lot NA				(Purchased Reagent)	Hydro-PS Acid
....LCBP4_00001	01/23/24		Chemours, Lot NA				(Purchased Reagent)	R-PSDA

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD7_00430	03/23/21	02/17/21	MeOH/H2O, Lot 202389	10 mL	LCMTB3_SU_00022 LCTB3_SP_00065	500 uL 200 uL	13C3 HFPO-DA HFPO-DA PS Acid Hydro-PS Acid R-PSDA Hydrolyzed PSDA R-PSDCA EVE Acid Hydro-EVE Acid NVHOS PEPA PES PFECA B PFECA G PFMOAA PFO2HxA PFO3OA PFO4DA PFO5DA PMPA R-EVE	0.25 ug/L 0.1 ug/L
.LCMTB3_SU_00022	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
.LCTB3_SP_00065	03/23/21	09/24/20	Methanol, Lot 202389	250 mL	LCTB3_IM2_00011	25 mL	HFPO-DA PS Acid Hydro-PS Acid R-PSDA Hydrolyzed PSDA R-PSDCA EVE Acid	5 ug/L 5 ug/L 5 ug/L 5 ug/L 5 ug/L 5 ug/L 5 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_IM2_00011	03/23/21	09/23/20	Methanol, Lot 202389	200 mL	LCHFPO-DA_00015	200 uL	HFPO-DA	50 ug/L
					LCTB3_IM_00020	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA_00015	07/09/23		WELLINGTON, Lot HFPODA0720				(Purchased Reagent)	HFPO-DA
...LCTB3_IM_00020	03/23/21	09/23/20	Methanol, Lot 202389	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA_00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS_00001	100 uL	NVHOS	5000 ug/L
					LCPEPA_00002	100 uL	PEPA	5000 ug/L
					LCPEPES_00001	100 uL	PES	5000 ug/L
					LCPFECA_B_00001	100 uL	PFECA B	5000 ug/L
					LCPFECA_G_00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA_00002	100 uL	PFMOAA	5000 ug/L
					LCPF02HxA_00002	100 uL	PFO2HxA	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFO30A_00002	100 uL	PFO30A	5000 ug/L
					LCPFO4DA_00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA_00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA_00002	100 uL	PMPA	5000 ug/L
					LCR-EVE_00001	100 uL	R-EVE	5000 ug/L
....LCBP1_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPES_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA_B_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA_B	1000 ug/mL
....LCPFECA_G_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA_G	1000 ug/mL
....LCPFMOAA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO30A_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO30A	1000 ug/mL
....LCPFO4DA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD7_00431	03/23/21	02/17/21	MeOH/H2O, Lot 202389	10 mL	LCMTB3_SU_00022	500 uL	13C3 HFPO-DA	0.25 ug/L
					LCTB3_SP_00065	200 uL	HFPO-DA	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA_B	0.1 ug/L
							PFECA_G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO30A	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
.LCMTB3_SU_00022	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
.LCTB3_SP_00065	03/23/21	09/24/20	Methanol, Lot 202389	250 mL	LCTB3_IM2_00011	25 mL	HFPO-DA	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_IM2_00011	03/23/21	09/23/20	Methanol, Lot 202389	200 mL	LCHFPO-DA 00015	200 uL	HFPO-DA	50 ug/L
					LCTB3_IM_00020	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00015	07/09/23		WELLINGTON, Lot HFPODA0720		(Purchased Reagent)		HFPO-DA	50 ug/mL
...LCTB3_IM_00020	03/23/21	09/23/20	Methanol, Lot 202389	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPEPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD7_00434	03/23/21	02/17/21	MeOH/H2O, Lot 202389	10 mL	LCMTB3_SU_00022	500 uL	13C3 HFPO-DA	0.25 ug/L
					LCTB3_SP_00065	200 uL	HFPO-DA	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFO2HxA	0.1 ug/L
							PFO30A	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
.LCMTB3_SU_00022	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
.LCTB3_SP_00065	03/23/21	09/24/20	Methanol, Lot 202389	250 mL	LCTB3_IM2_00011	25 mL	HFPO-DA	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO30A	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_IM2_00011	03/23/21	09/23/20	Methanol, Lot 202389	200 mL	LCHFPO-DA_00015	200 uL	HFPO-DA	50 ug/L
					LCTB3_IM_00020	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO30A	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00015	07/09/23		WELLINGTON, Lot HFPODA0720			(Purchased Reagent)	HFPO-DA	50 ug/mL
...LCTB3_IM_00020	03/23/21	09/23/20	Methanol, Lot 202389	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEP 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PEPA	1000 ug/mL
....LCPEP 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-EVE	1000 ug/mL
LCTB3_LLSTD8_00044	03/23/21	02/17/21	MeOH/H2O, Lot 204513	10 mL	LCMTB3_SU_00022	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00065	500 uL	HFPO-DA	0.25 ug/L
							Perfluoroheptanoic acid	0.25 ug/L
							PS Acid	0.25 ug/L
							Hydro-PS Acid	0.25 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							R-PSDA	0.25 ug/L
							Hydrolyzed PSDA	0.25 ug/L
							R-PSDCA	0.25 ug/L
							EVE Acid	0.25 ug/L
							Hydro-EVE Acid	0.25 ug/L
							NVHOS	0.25 ug/L
							PEPA	0.25 ug/L
							PES	0.25 ug/L
							PFECA B	0.25 ug/L
							PFECA G	0.25 ug/L
							PFMOAA	0.25 ug/L
							PFO2HxA	0.25 ug/L
							PFO3OA	0.25 ug/L
							PFO4DA	0.25 ug/L
							PFO5DA	0.25 ug/L
							PMPA	0.25 ug/L
							R-EVE	0.25 ug/L
.LCMTB3_SU_00022	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA 00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
..LCM4PFHPA 00035	09/29/25		Wellington Laboratories, Lot M4PFHpA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00065	03/23/21	09/24/20	Methanol, Lot 202389	250 mL	LCTB3_IM2_00011	25 mL	HFPO-DA	5 ug/L
							Perfluoroheptanoic acid	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_IM2_00011	03/23/21	09/23/20	Methanol, Lot 202389	200 mL	LCHFPO-DA 00015	200 uL	HFPO-DA	50 ug/L
					LCPFHpA 00020	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00020	2 mL	PS Acid	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00015	07/09/23		WELLINGTON, Lot HFPODA0720			(Purchased Reagent)	HFPO-DA	50 ug/mL
...LCPFHpA 00020	07/09/25		Wellington Laboratories, Lot PFHpA0620			(Purchased Reagent)	Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00020	03/23/21	09/23/20	Methanol, Lot 202389	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PEPA	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....LCPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD9_00042	03/23/21	02/17/21	MeOH/H2O, Lot 204513	10 mL	LCMTB3_SU_00022	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00065	1000 uL	HFPO-DA	0.5 ug/L
							Perfluoroheptanoic acid	0.5 ug/L
							PS Acid	0.5 ug/L
							Hydro-PS Acid	0.5 ug/L
							R-PSDA	0.5 ug/L
							Hydrolyzed PSDA	0.5 ug/L
							R-PSDCA	0.5 ug/L
							EVE Acid	0.5 ug/L
							Hydro-EVE Acid	0.5 ug/L
							NVHOS	0.5 ug/L
							PEPA	0.5 ug/L
							PES	0.5 ug/L
							PFECA B	0.5 ug/L
							PFECA G	0.5 ug/L
							PFMOAA	0.5 ug/L
		PFO2HxA	0.5 ug/L					
		PFO3OA	0.5 ug/L					
		PFO4DA	0.5 ug/L					
		PFO5DA	0.5 ug/L					
		PMPA	0.5 ug/L					
		R-EVE	0.5 ug/L					
.LCMTB3_SU_00022	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHFA 00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHFA 00035	09/29/25		Wellington Laboratories, Lot M4PFHFA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00065	03/23/21	09/24/20	Methanol, Lot 202389	250 mL	LCTB3_IM2_00011	25 mL	HFPO-DA	5 ug/L
							Perfluoroheptanoic acid	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_IM2_00011	03/23/21	09/23/20	Methanol, Lot 202389	200 mL	LCHFPO-DA_00015	200 uL	HFPO-DA	50 ug/L
					LCPFHpA_00020	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00020	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA_00015	07/09/23		WELLINGTON, Lot HFPODA0720				(Purchased Reagent) HFPO-DA	50 ug/mL
...LCPFHpA_00020	07/09/25		Wellington Laboratories, Lot PFHpA0620				(Purchased Reagent) Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00020	03/23/21	09/23/20	Methanol, Lot 202389	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA_00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS_00001	100 uL	NVHOS	5000 ug/L
					LCPEPA_00002	100 uL	PEPA	5000 ug/L
					LCPEPES_00001	100 uL	PES	5000 ug/L
					LCPFPECA_B_00001	100 uL	PFECA B	5000 ug/L
					LCPFPECA_G_00001	100 uL	PFECA G	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFMOAA 00002	100 uL	PFO30A	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO30A 00002	100 uL	PFO30A	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO30A	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO30A 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO30A	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_SP_00063	03/23/21	09/24/20	Methanol, Lot 202389	250 mL	LCTB3_IM2_00011	25 mL	HFPO-DA	5 ug/L
							Perfluoroheptanoic acid	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							DFSA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							MMF	5 ug/L
							MTP	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFO30A	5 ug/L
							PFO2HxA	5 ug/L
							PFO4DA	5 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							PPF Acid	5 ug/L
							R-EVE	5 ug/L
.LCTB3_IM2_00011	03/23/21	09/23/20	Methanol, Lot 202389	200 mL	LCHFPO-DA 00015	200 uL	HFPO-DA	50 ug/L
					LCPFHpA 00020	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00020	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							DFSA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							MMF	50 ug/L
							MTP	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							PPF Acid	50 ug/L
							R-EVE	50 ug/L
..LCHFPO-DA 00015	07/09/23		WELLINGTON, Lot HFPODA0720				(Purchased Reagent) HFPO-DA	50 ug/mL
..LCPFHpA 00020	07/09/25		Wellington Laboratories, Lot PFHpA0620				(Purchased Reagent) Perfluoroheptanoic acid	50 ug/mL
..LCTB3_IM_00020	03/23/21	09/23/20	Methanol, Lot 202389	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCDFSA 00001	100 uL	DFSA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCMMF 00001	100 uL	MMF	5000 ug/L
					LCMTP 00001	100 uL	MTP	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFPECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFPECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPF02HxA_00002	100 uL	PFO2HxA	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFO30A 00002	100 uL	PFO30A	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPPMPA 00002	100 uL	PMPA	5000 ug/L
					LCPPFA 00001	100 uL	PPF Acid	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
...LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
...LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
...LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
...LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
...LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
...LCDFSA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		DFSA	1000 ug/mL
...LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
...LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
...LCMMF 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		MMF	1000 ug/mL
...LCMTP 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		MTP	1000 ug/mL
...LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
...LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
...LCPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
...LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
...LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
...LCPFFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
...LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
...LCPFO30A 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO30A	1000 ug/mL
...LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
...LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
...LCPPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
...LCPPFA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PPF Acid	1000 ug/mL
...LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL

Reagent

LCHFPO-DA_00014



2106190
 ID: LCHFPO-DA_00014
 Exp: 07/09/23 Prpd: YH
 HFPO-DA

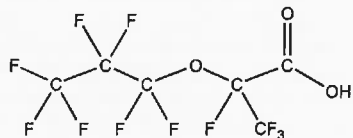


WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: HFPO-DA **LOT NUMBER:** HFPODA0720
COMPOUND: 2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid

STRUCTURE: **CAS #:** 13252-13-6



MOLECULAR FORMULA: C₆H₁₁O₃ **MOLECULAR WEIGHT:** 330.05
CONCENTRATION: 50.0 ± 2.5 µg/ml **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 07/09/2020
EXPIRY DATE: (mm/dd/yyyy) 07/09/2023
RECOMMENDED STORAGE: Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Product is commercially known as GenX.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:  **Date:** 07/16/2020
 B.G. Chittim, General Manager (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

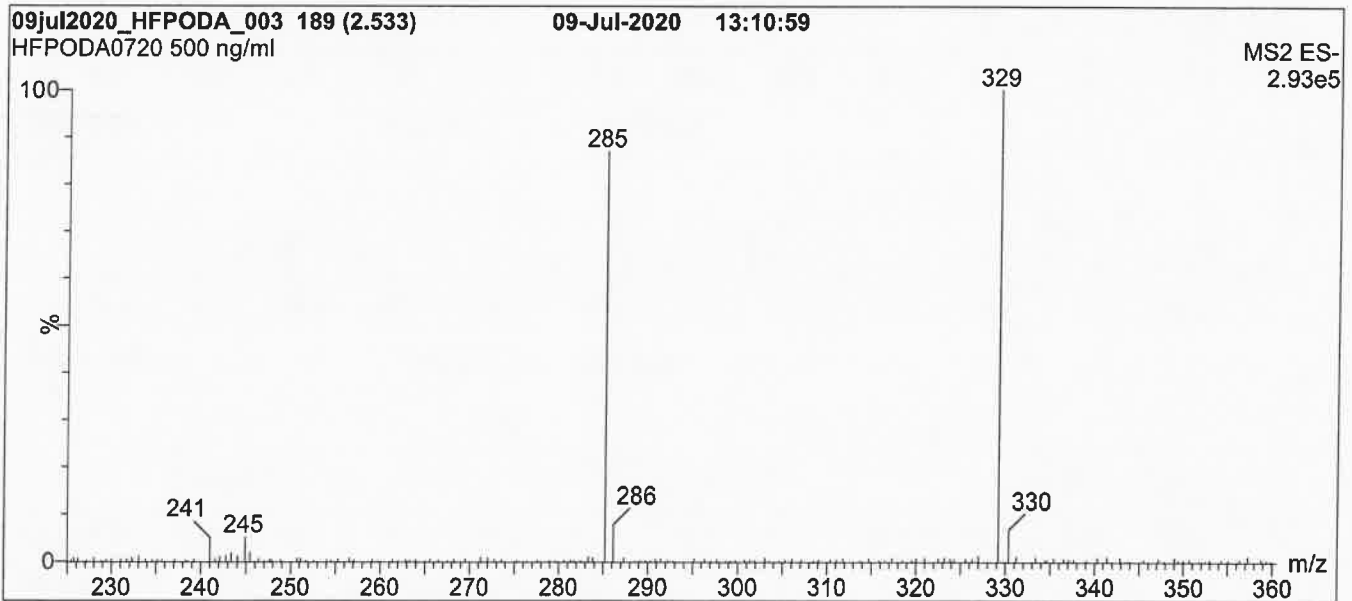
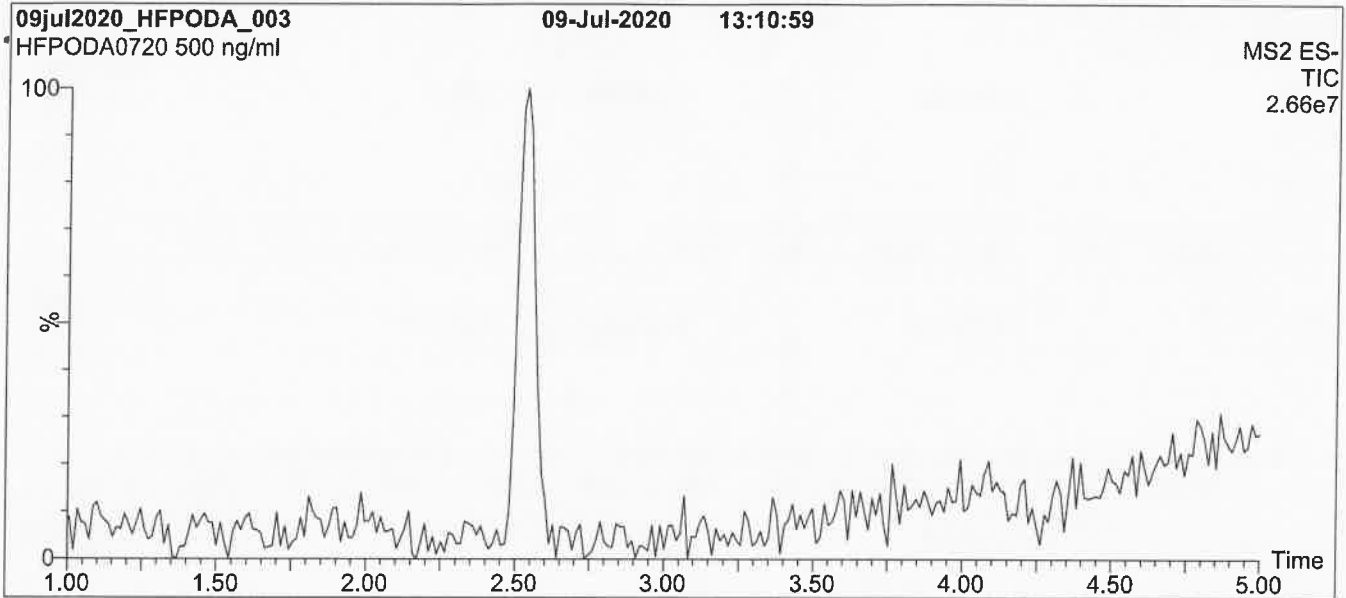
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: HFPO-DA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Waters Xevo TQ-S micro MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 50% (80:20 MeOH:ACN) / 50% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 8 min and hold for
 2 min before returning to initial conditions in 0.75 min.
 Time: 12 min

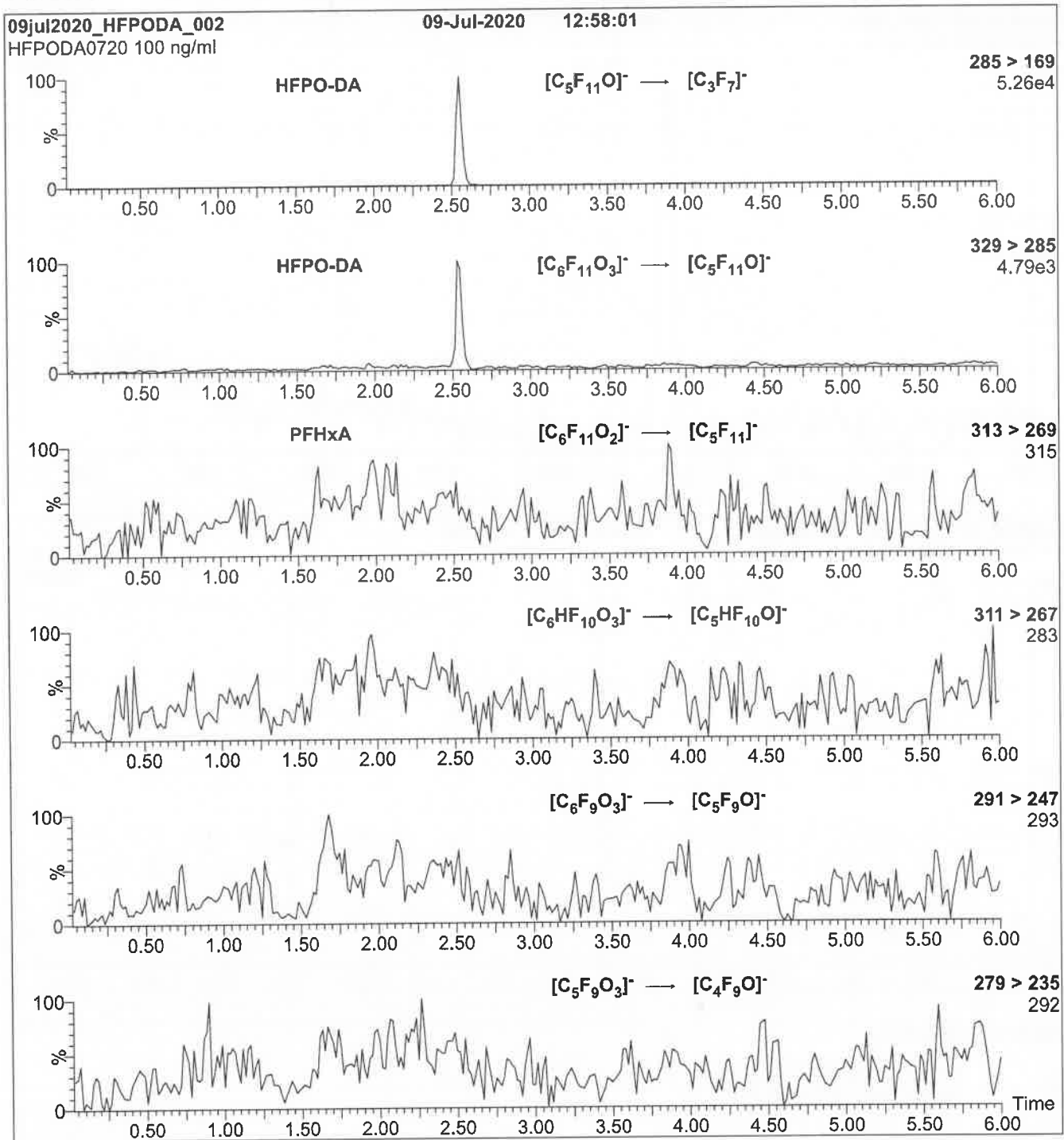
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 3.00
 Cone Voltage (V) = 15.00
 Desolvation Temperature ($^{\circ}$ C) = 300
 Desolvation Gas Flow (l/hr) = 1000

Figure 2: HFPO-DA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: On-column (HFPO-DA)
Mobile phase: Same as Figure 1
Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.29e-3
Collision Energy (eV) = 8

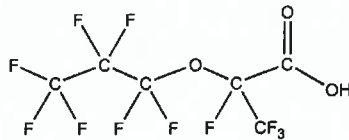
Reagent

LCHFPO-DA_00015



PRODUCT CODE: HFPO-DA **LOT NUMBER:** HFPODA0720
COMPOUND: 2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid

STRUCTURE: **CAS #:** 13252-13-6



MOLECULAR FORMULA: C₆H₁₁F₁₀O₃ **MOLECULAR WEIGHT:** 330.05
CONCENTRATION: 50.0 ± 2.5 µg/ml **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 07/09/2020
EXPIRY DATE: (mm/dd/yyyy) 07/09/2023
RECOMMENDED STORAGE: Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Product is commercially known as GenX.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
B.G. Chittim, General Manager **Date:** 07/16/2020
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

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The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

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LIMITED WARRANTY:

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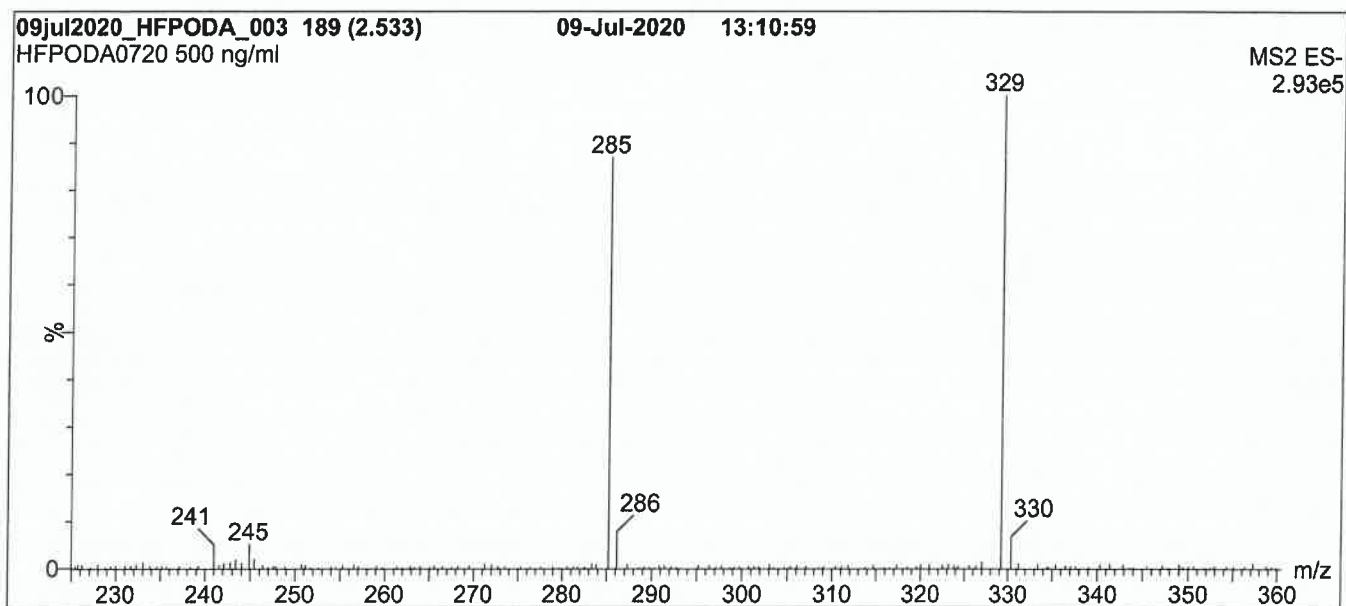
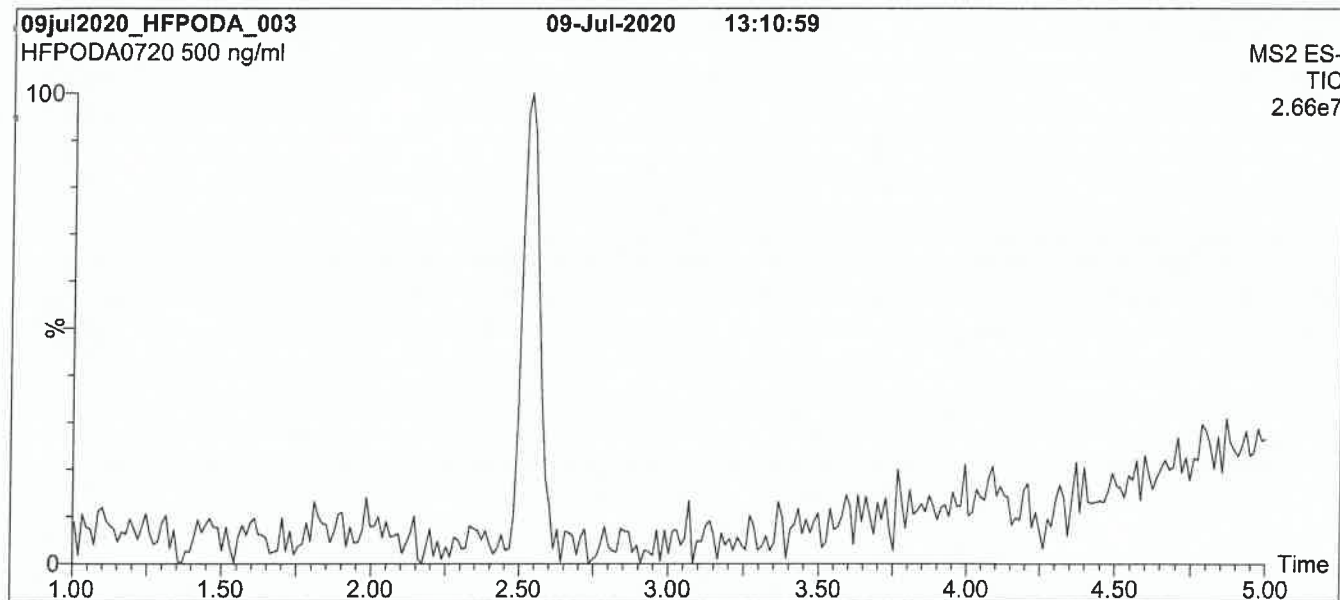
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: HFPO-DA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Waters Xevo TQ-S micro MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

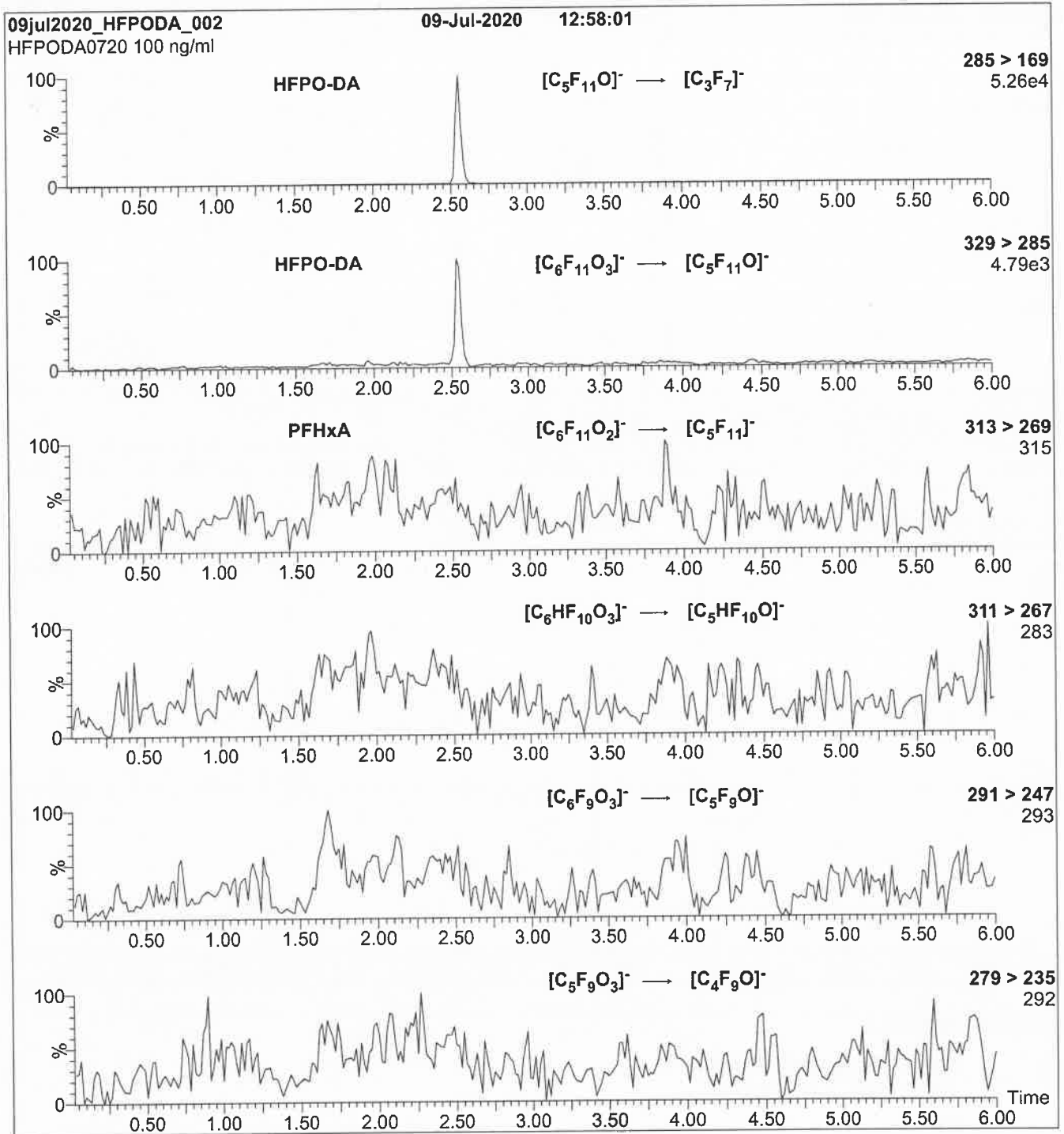
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Desolvation Temperature ($^{\circ}$ C) = 300
Desolvation Gas Flow (l/hr) = 1000

Figure 2: HFPO-DA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: On-column (HFPO-DA)
Mobile phase: Same as Figure 1
Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.29e-3
Collision Energy (eV) = 8

Reagent

LCM3HFPO-DA_00027

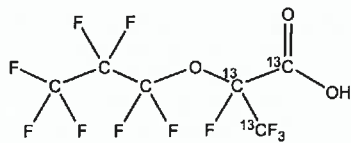


WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M3HFPO-DA **LOT NUMBER:** M3HFPODA1020
COMPOUND: 2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-¹³C₃-propanoic acid

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: ¹³C₃¹²C₃HF₁₁O₃ **MOLECULAR WEIGHT:** 333.03
CONCENTRATION: 50.0 ± 2.5 µg/mL **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
LAST TESTED: (mm/dd/yyyy) 10/21/2020 (¹³C₃)
EXPIRY DATE: (mm/dd/yyyy) 10/21/2023
RECOMMENDED STORAGE: Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Product is commercially known as GenX.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
B.G. Chittim, General Manager

Date: 10/23/2020
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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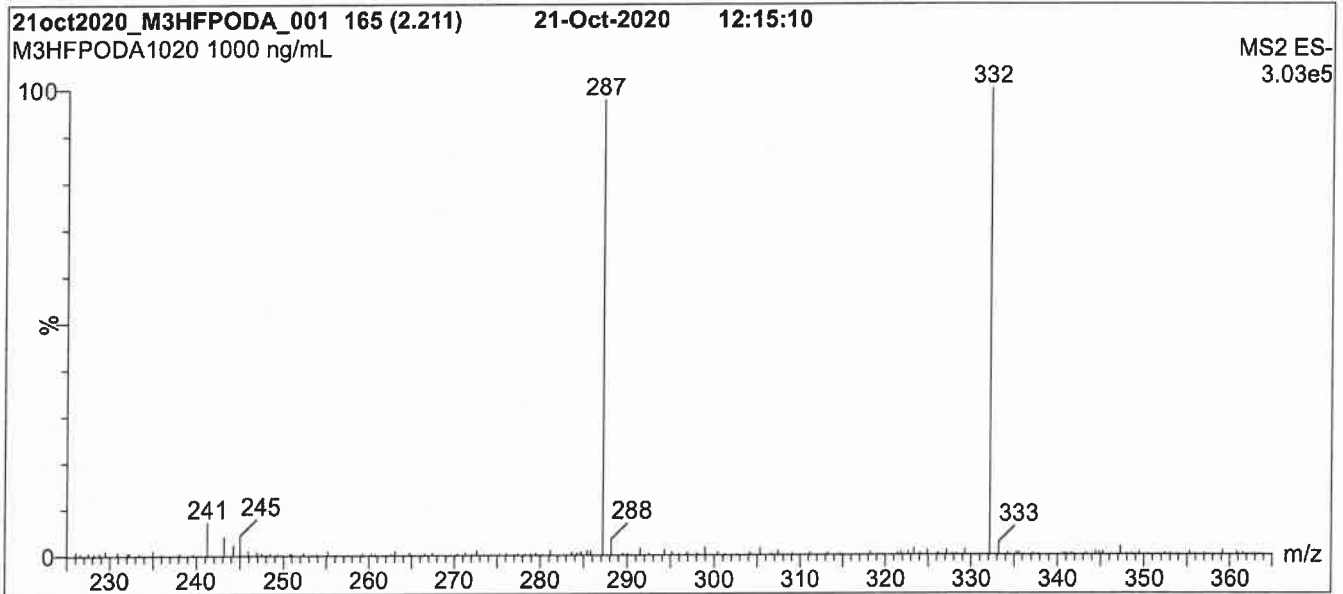
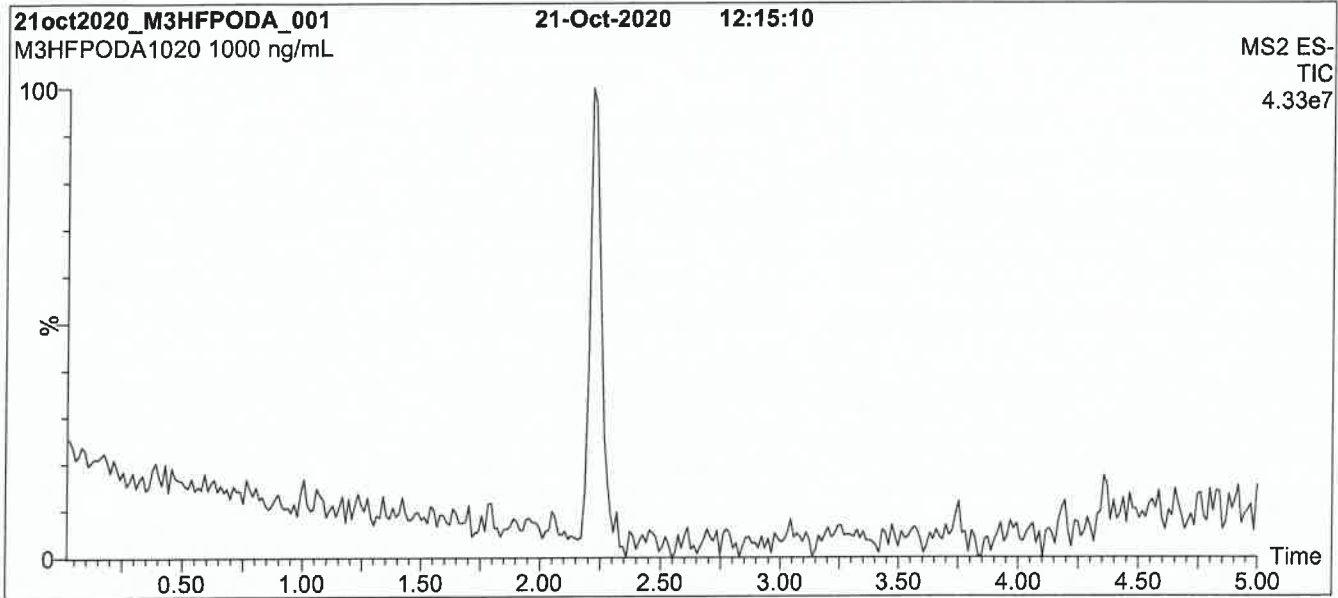
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Figure 1: M3HFPO-DA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% H₂O / 50% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

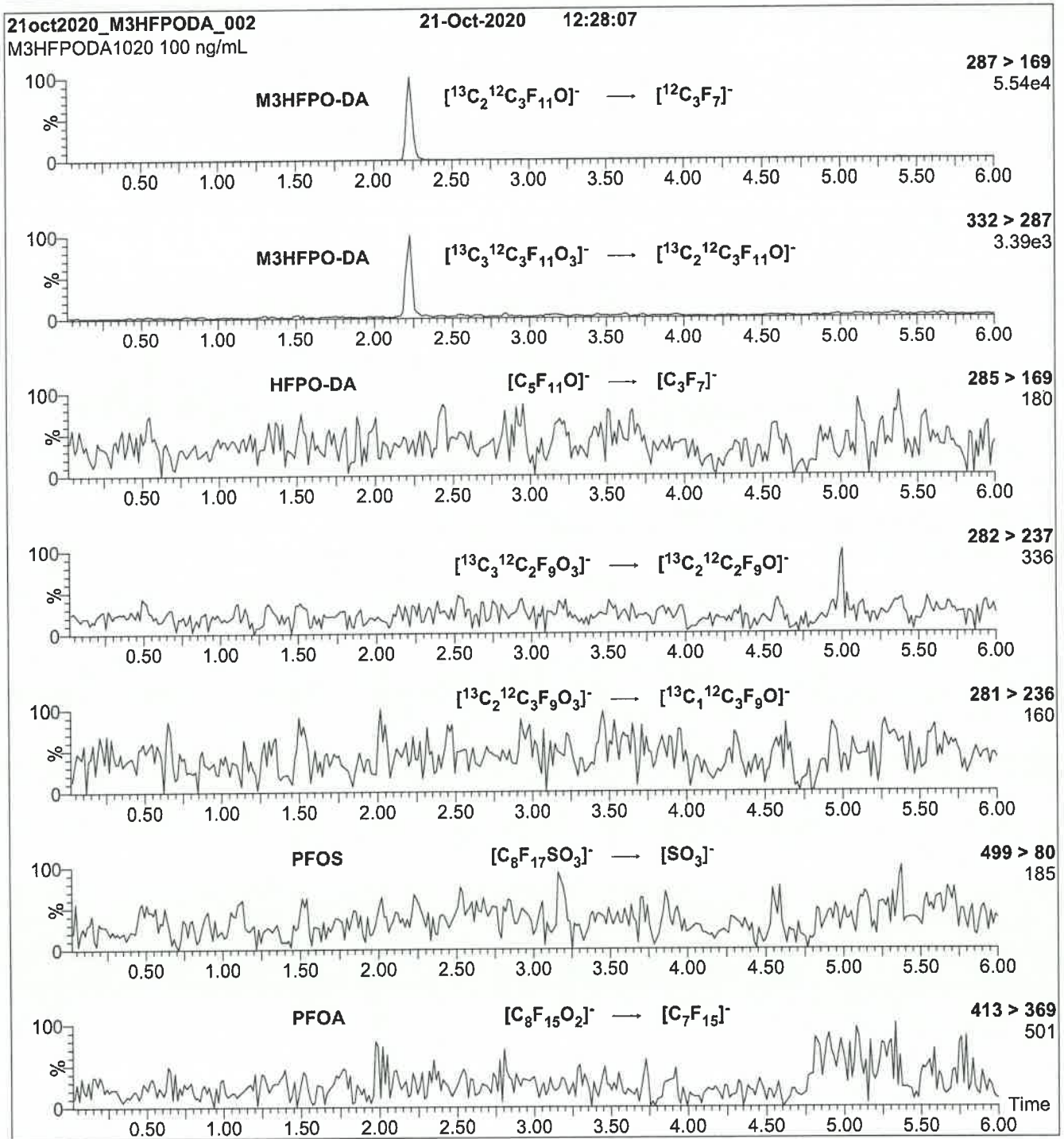
MS Parameters:

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 15.00
Desolvation Temperature (°C) = 300
Desolvation Gas Flow (L/hr) = 1000

Flow: 300 μ L/min

Figure 2: M3HFPO-DA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: On-column (M3HFPO-DA)

Mobile phase: Same as Figure 1

Flow: 300 $\mu\text{L}/\text{min}$

MS Parameters:

Collision Gas (mbar) = 3.41e-3

Collision Energy (eV) = 8

Reagent

LCM4PFHPA_00035

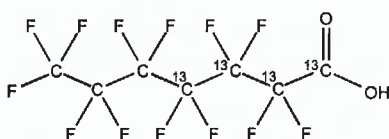


PRODUCT CODE: M4PFHpA
COMPOUND: Perfluoro-n-[1,2,3,4-¹³C₄]heptanoic acid

LOT NUMBER: M4PFHpA0920

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₄¹²C₃HF₁₃O₂
CONCENTRATION: 50.0 ± 2.5 µg/mL

MOLECULAR WEIGHT: 368.03
SOLVENT(S): Methanol
Water (<1%)
ISOTOPIC PURITY: ≥99% ¹³C
(1,2,3,4-¹³C₄)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 09/29/2020
EXPIRY DATE: (mm/dd/yyyy) 09/29/2025
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.03% of perfluoro-n-heptanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
B.G. Chittim, General Manager

Date: 10/22/2020
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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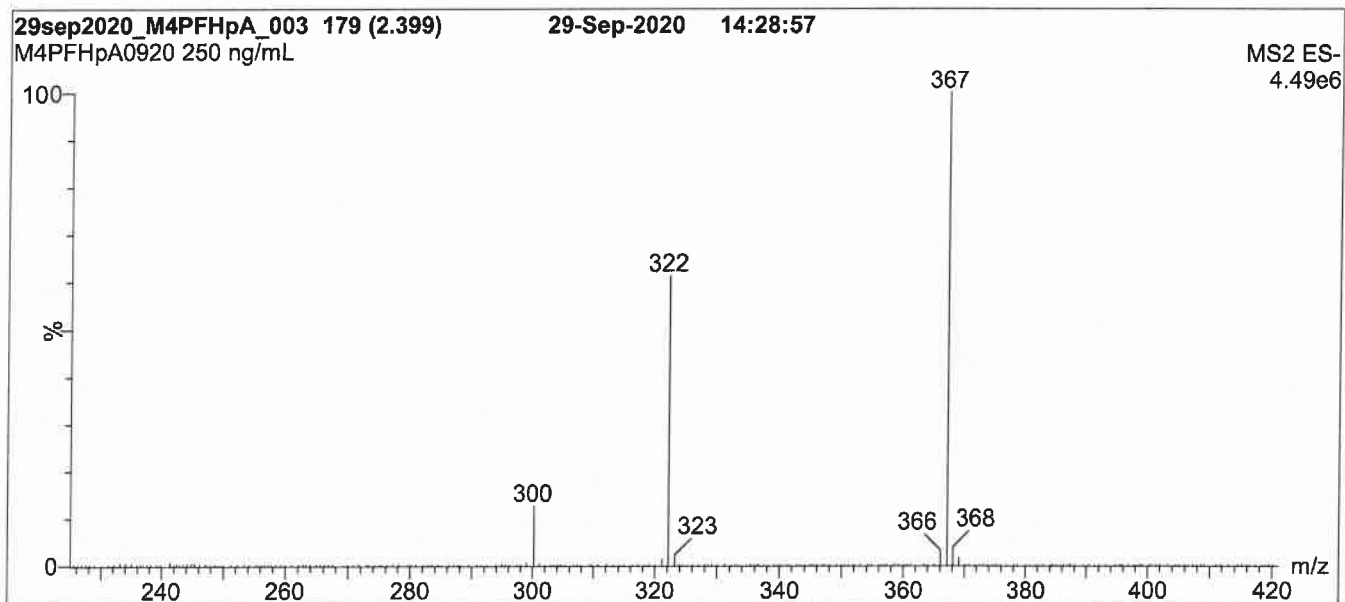
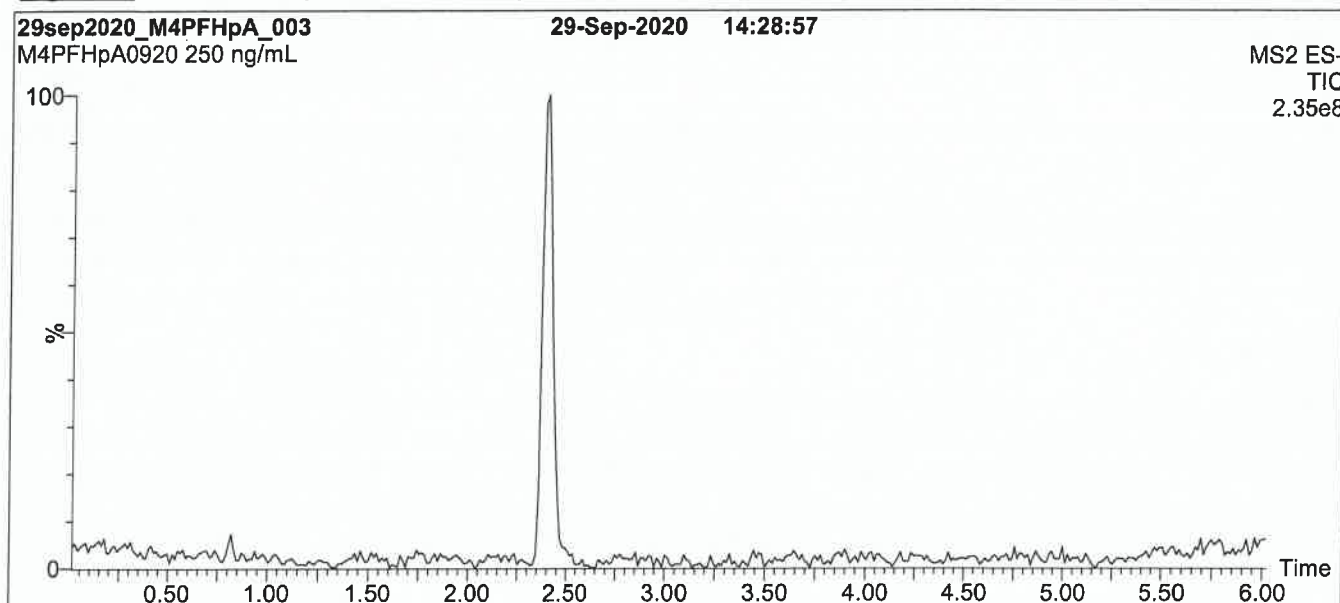
QUALITY MANAGEMENT:

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Figure 1: M4PFHpA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 45% H₂O / 55% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

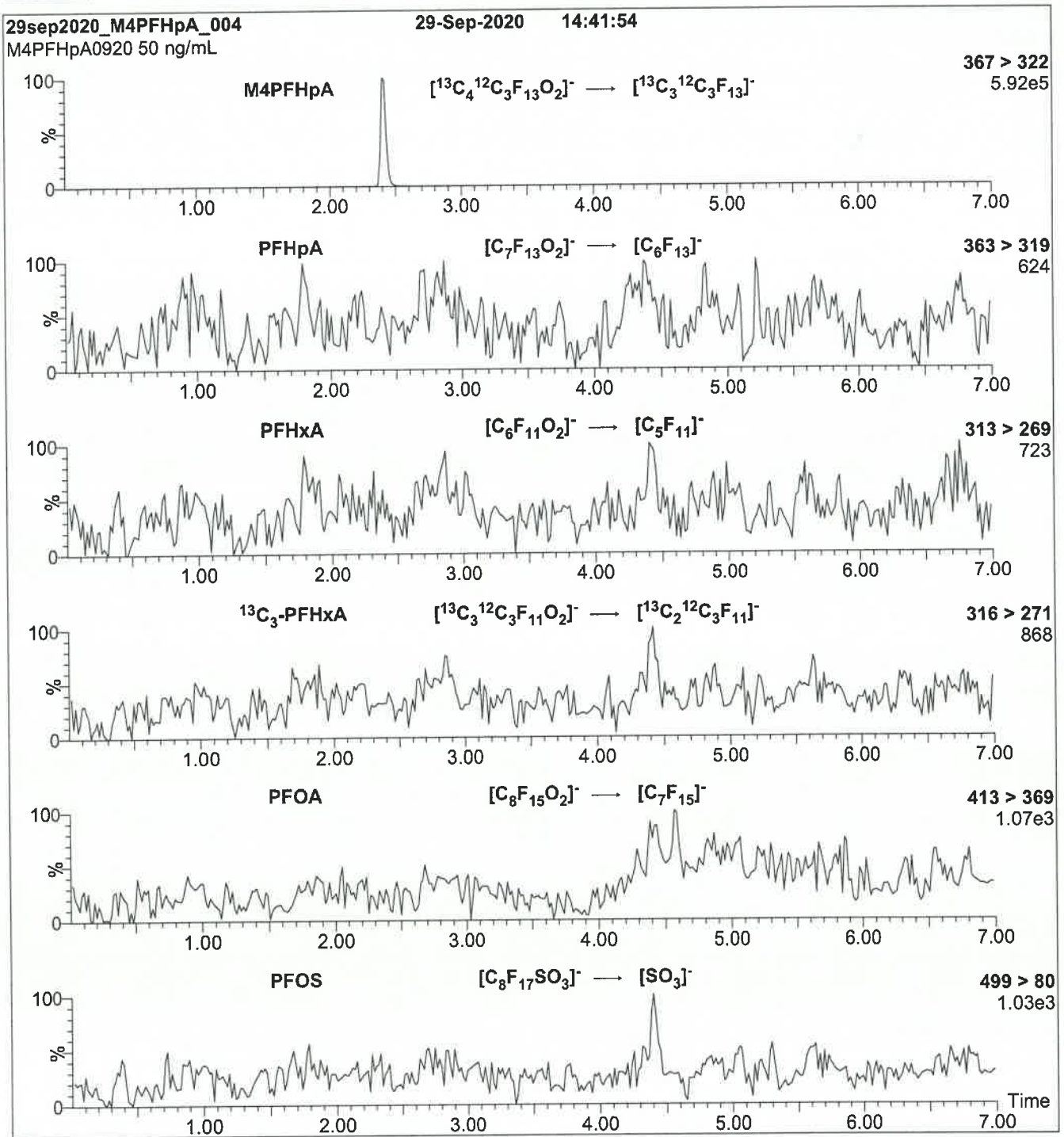
Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 10.00
Desolvation Temperature ($^{\circ}$ C) = 500
Desolvation Gas Flow (L/hr) = 1000

Figure 2: M4PFHpA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: On-column (M4PFHpA)

Mobile phase: Same as Figure 1

Flow: 300 $\mu\text{L}/\text{min}$

MS Parameters:

Collision Gas (mbar) = 3.27e-3

Collision Energy (eV) = 8

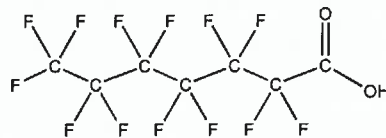
Reagent

LCPFHpA_00020



PRODUCT CODE: PFHpA **LOT NUMBER:** PFHpA0620
COMPOUND: Perfluoro-n-heptanoic acid

STRUCTURE: **CAS #:** 375-85-9



MOLECULAR FORMULA: C₇HF₁₃O₂ **MOLECULAR WEIGHT:** 364.06
CONCENTRATION: 50.0 ± 2.5 µg/ml **SOLVENT(S):** Methanol
Water (<1%)
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 07/09/2020
EXPIRY DATE: (mm/dd/yyyy) 07/09/2025
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

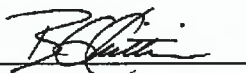
DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
B.G. Chittim, General Manager **Date:** 07/22/2020
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{j=1}^n u(y, x_j)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

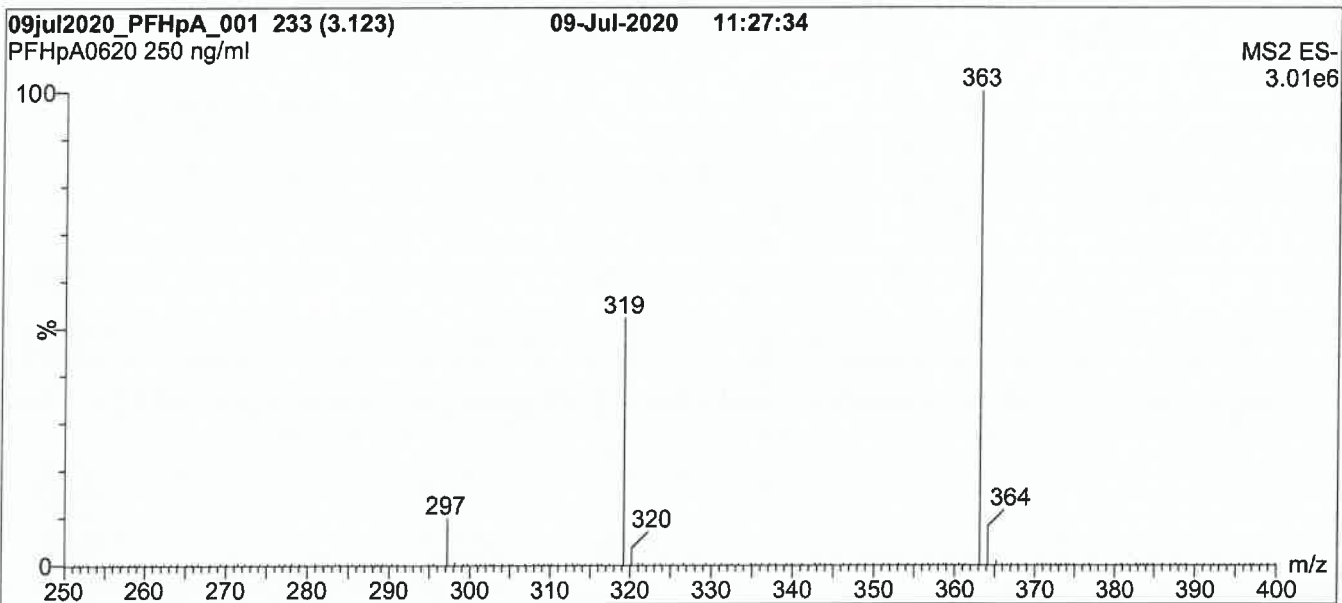
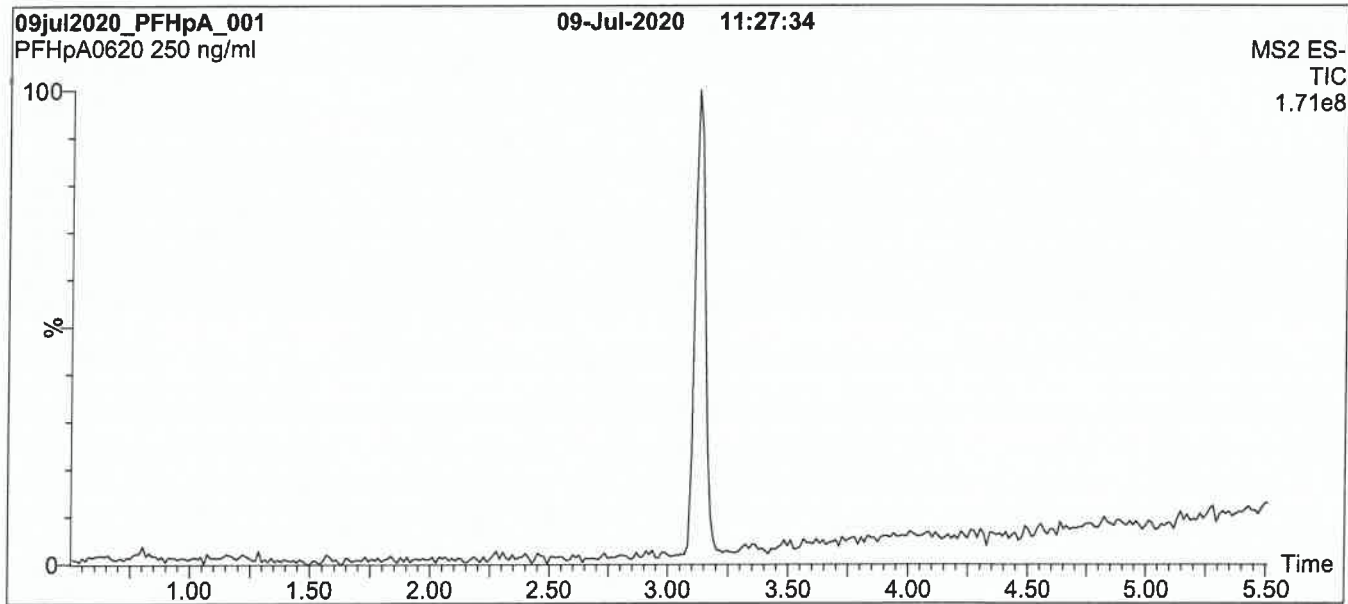
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: PFHpA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Waters Xevo TQ-S micro MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μm, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 50% (80:20 MeOH:ACN) / 50% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 8 min and hold for
 2 min before returning to initial conditions in 0.75 min.
 Time: 12 min

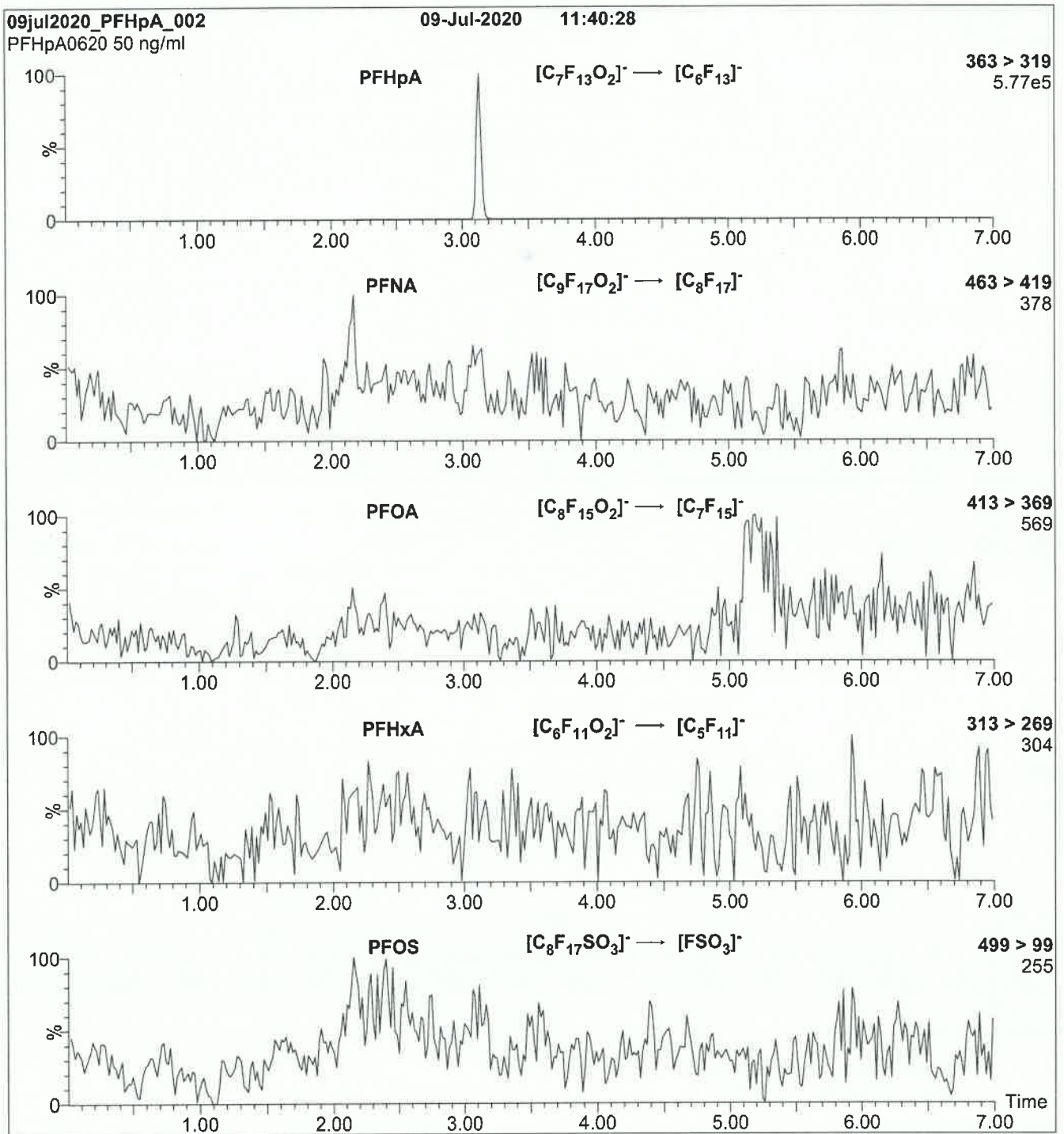
Flow: 300 μl/min

MS Parameters

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 2.00
 Cone Voltage (V) = 10.00
 Desolvation Temperature (°C) = 500
 Desolvation Gas Flow (l/hr) = 1000

Figure 2: PFHpA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: On-column (PFHpA)
Mobile phase: Same as Figure 1
Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.29e-3
Collision Energy (eV) = 8

PFAS_CHEM_TB3P

Fluoroproducts Analytical Method -
Table 3+

FORM II
LCMS SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	HFPODA #
SEEP-C-EFFLUENT-19 2-021321	320-70306-1	95
SEEP-C-INFLUENT-19 2-021321	320-70306-2	100
SEEP-C-RAIN-EFFLUE NT-24-021321	320-70306-3	94
SEEP-C-RAIN-INFLUE NT-24-021321	320-70306-4	111
SEEP-C-EQBLK-ISCO- 021321	320-70306-5	97
SEEP-C-FBLK-021321	320-70306-6	97
SEEP-C-RAIN-EQBLK- ISCO-021321	320-70306-7	87
	MB 320-464016/1-A	100
	LCS 320-464016/2-A	92
	LCSD 320-464016/3-A	95

HFPODA = 13C3 HFPO-DA

QC LIMITS
25-150

Column to be used to flag recovery values

FORM II Chemours (TB3+)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 2021.02.23_A10_TB3+_B_024.d
 Lab ID: LCS 320-464016/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
13C3 HFPO-DA	0.500	0.460	92	25-150	
EVE Acid	0.200	0.208	104	70-130	
HFPO-DA	0.200	0.221	111	70-130	
Hydro-EVE Acid	0.200	0.208	104	70-130	
Hydrolyzed PSDA	0.200	0.244	122	50-150	
Hydro-PS Acid	0.200	0.199	99	70-130	
NVHOS	0.200	0.193	97	70-130	
PEPA	0.200	0.231	115	70-130	
PES	0.200	0.201	101	70-130	
PFECA B	0.200	0.211	105	70-130	
PFECA G	0.200	0.237	118	70-130	
PFMOAA	0.200	0.171	85	70-130	
PFO2HxA	0.200	0.205	102	70-130	
PFO3OA	0.200	0.192	96	70-130	
PFO4DA	0.200	0.213	107	50-150	
PFO5DA	0.200	0.165	83	50-150	
PMPA	0.200	0.199	100	70-130	
PS Acid	0.200	0.206	103	70-130	
R-EVE	0.200	0.216	108	50-150	
R-PSDA	0.200	0.221	111	50-150	
R-PSDCA	0.200	0.211	106	70-130	

Column to be used to flag recovery and RPD values
 FORM III Chemours (TB3+)

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 2021.02.23_A10_TB3+_B_025.d

Lab ID: LCSD 320-464016/3-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
13C3 HFPO-DA	0.500	0.475	95			25-150	
EVE Acid	0.200	0.206	103	1	25	70-130	
HFPO-DA	0.200	0.211	106	5	25	70-130	
Hydro-EVE Acid	0.200	0.211	106	2	25	70-130	
Hydrolyzed PSDA	0.200	0.249	125	2	25	50-150	
Hydro-PS Acid	0.200	0.202	101	2	25	70-130	
NVHOS	0.200	0.194	97	1	25	70-130	
PEPA	0.200	0.230	115	1	25	70-130	
PES	0.200	0.202	101	1	25	70-130	
PFECA B	0.200	0.208	104	1	25	70-130	
PFECA G	0.200	0.229	115	3	25	70-130	
PFMOAA	0.200	0.175	88	3	25	70-130	
PFO2HxA	0.200	0.204	102	0	25	70-130	
PFO3OA	0.200	0.201	100	5	25	70-130	
PFO4DA	0.200	0.221	111	4	25	50-150	
PFO5DA	0.200	0.173	87	5	25	50-150	
PMPA	0.200	0.200	100	0	25	70-130	
PS Acid	0.200	0.216	108	5	25	70-130	
R-EVE	0.200	0.215	108	1	25	50-150	
R-PSDA	0.200	0.222	111	0	25	50-150	
R-PSDCA	0.200	0.210	105	1	25	70-130	

Column to be used to flag recovery and RPD values

FORM III Chemours (TB3+)

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1
 SDG No.: _____
 Lab File ID: 2021.02.23_A10_TB3+_B_016.d Lab Sample ID: MB 320-464016/1-A
 Matrix: Water Date Extracted: 02/22/2021 11:39
 Instrument ID: A10 Date Analyzed: 02/24/2021 03:51
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
SEEP-C-EFFLUENT-192-021321	320-70306-1	2021.02.23_A10_TB3+_B_017.d	02/24/2021 04:09
SEEP-C-RAIN-EFFLUENT-24-021321	320-70306-3	2021.02.23_A10_TB3+_B_019.d	02/24/2021 04:44
SEEP-C-EQBLK-ISCO-021321	320-70306-5	2021.02.23_A10_TB3+_B_021.d	02/24/2021 05:19
SEEP-C-FBLK-021321	320-70306-6	2021.02.23_A10_TB3+_B_022.d	02/24/2021 05:36
SEEP-C-RAIN-EQBLK-ISCO-021321	320-70306-7	2021.02.23_A10_TB3+_B_023.d	02/24/2021 05:53
	LCS 320-464016/2-A	2021.02.23_A10_TB3+_B_024.d	02/24/2021 06:11
	LCSD 320-464016/3-A	2021.02.23_A10_TB3+_B_025.d	02/24/2021 06:28
SEEP-C-INFLUENT-192-021321	320-70306-2	2021.02.25_A10_TB3+_C_026.d	02/25/2021 18:43
SEEP-C-RAIN-INFLUENT-24-021321	320-70306-4	2021.02.25_A10_TB3+_C_027.d	02/25/2021 19:00

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Client Sample ID: SEEP-C-EFFLUENT-192-02132 Lab Sample ID: 320-70306-1
1

Matrix: Water Lab File ID: 2021.02.23_A10_TB3+_B_017.d

Analysis Method: Chemours (TB3+) Date Collected: 02/13/2021 10:00

Extraction Method: PFAS Prep Date Extracted: 02/22/2021 11:40

Sample wt/vol: 2.50 (mL) Date Analyzed: 02/24/2021 04:09

Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1

Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)

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

Analysis Batch No.: 464205 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	<0.0020		0.0020	
13252-13-6	HFPO-DA	0.059		0.0020	
773804-62-9	Hydro-EVE Acid	0.0033		0.0020	
2416366-19-1	Hydrolyzed PSDA	0.0043		0.0020	
749836-20-2	Hydro-PS Acid	<0.0020		0.0020	
1132933-86-8	NVHOS	0.0023		0.0020	
267239-61-2	PEPA	<0.020		0.020	
113507-82-7	PES	<0.0020		0.0020	
151772-58-6	PFECA B	<0.0020		0.0020	
801212-59-9	PFECA G	<0.0020		0.0020	
674-13-5	PFMOAA	0.30		0.0020	
39492-88-1	PFO2HxA	0.065		0.0020	
39492-89-2	PFO3OA	0.031		0.0020	
39492-90-5	PFO4DA	0.012		0.0020	
39492-91-6	PFO5DA	<0.0020		0.0020	
13140-29-9	PMPA	0.059		0.010	
29311-67-9	PS Acid	<0.0020		0.0020	
2416366-22-6	R-EVE	0.0033		0.0020	
2416366-18-0	R-PSDA	0.0046		0.0020	
2416366-21-5	R-PSDCA	<0.0020		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	95		25-150

Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_017.d
 Lims ID: 320-70306-A-1-A
 Client ID: SEEP-C-EFFLUENT-192-021321
 Sample Type: Client
 Inject. Date: 24-Feb-2021 04:09:13 ALS Bottle#: 17 Worklist Smp#: 4
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: 320-70306-a-1-a
 Misc. Info.: Plate: 1 Rack: 2
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Method: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Feb-2021 07:41:18 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1619

First Level Reviewer: ruangyotsakuld Date: 25-Feb-2021 07:41:18
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	2.285	2.716	-0.431		1493285	0.1491		227		M
2 R-EVE										M
405.00 > 217.00	6.220	6.458	-0.238		6740	0.001638		66.0		M
3 R-PSDA										M
440.90 > 241.00	6.318	6.560	-0.242		6248	0.002300		62.0		M
23 PMPA										M
229.00 > 185.00	6.471	6.653	-0.182		393492	0.0294		59.4		M
4 Hydrolyzed PSDA										M
439.00 > 343.00	6.458	6.669	-0.211		17138	0.002158		171		M
5 NVHOS										M
297.00 > 135.00	7.118	7.260	-0.142		8874	0.001158		71.0		M
6 PFO2HxA										M
245.00 > 85.00	7.787	7.863	-0.076		305617	0.0325		2073		M
22 PEPA										M
278.90 > 234.90	8.594	8.521	0.073		27909	0.004991		28.9		M
9 PFO3OA										M
310.90 > 85.00	9.321	9.321	0.0		93934	0.0157		1312		M
D 10 13C3 HFPO-DA										M
287.00 > 169.00	9.432	9.432	0.0		1314965	0.2377		95.1	50349	M
11 HPFO-DA										M
285.00 > 169.00	9.432	9.432	0.0	1.000	168044	0.0293		6444		M
13 Hydro-EVE Acid										M
427.00 > 282.90	9.867	9.849	0.018		129998	0.001646		2072		M
15 Hydro-PS Acid										M
463.00 > 262.90	9.867	9.868	-0.001		7916	0.000312		226		M
18 PFO4DA										M
376.90 > 85.00	10.099	10.100	-0.001		20310	0.005876		192		M

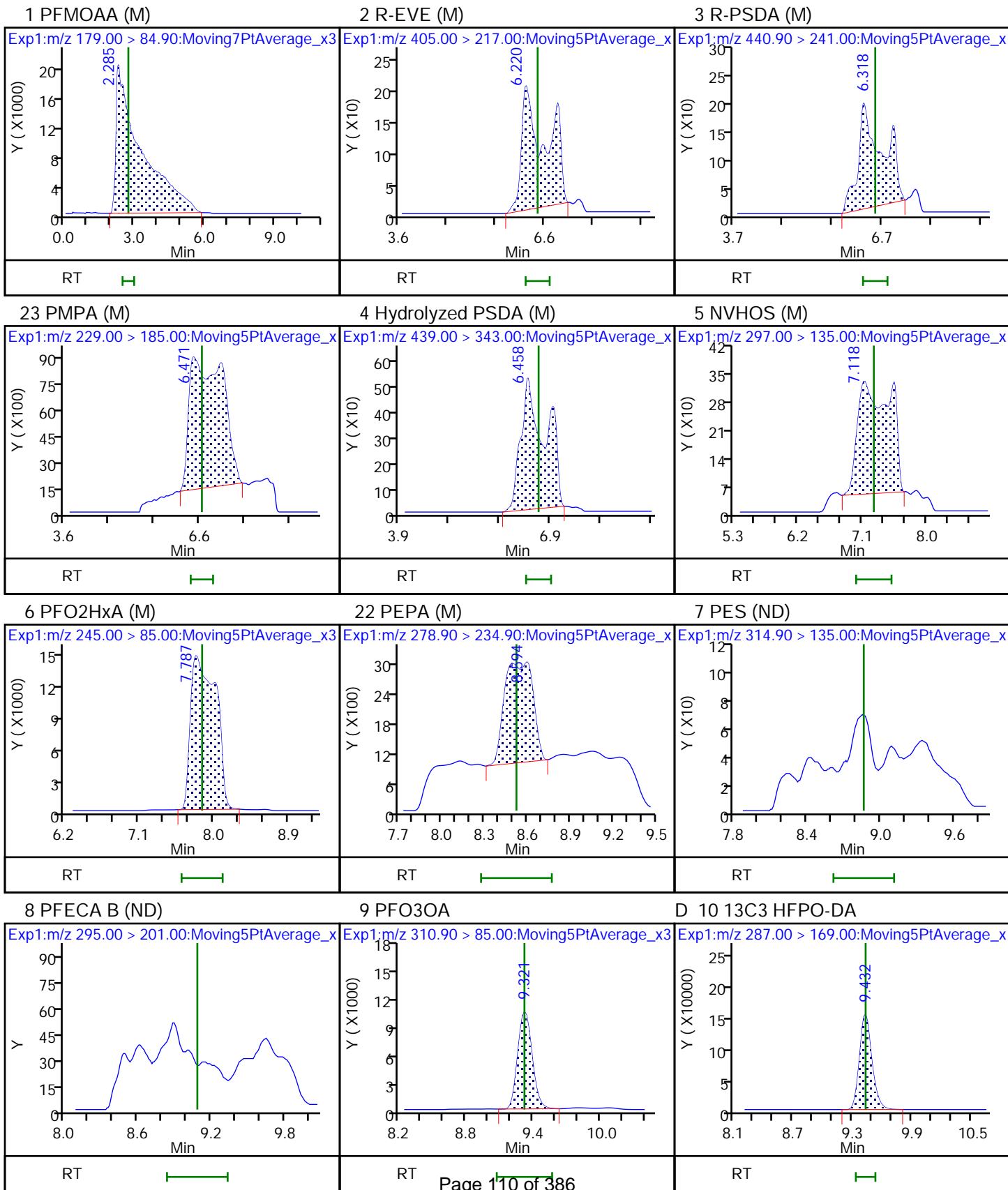
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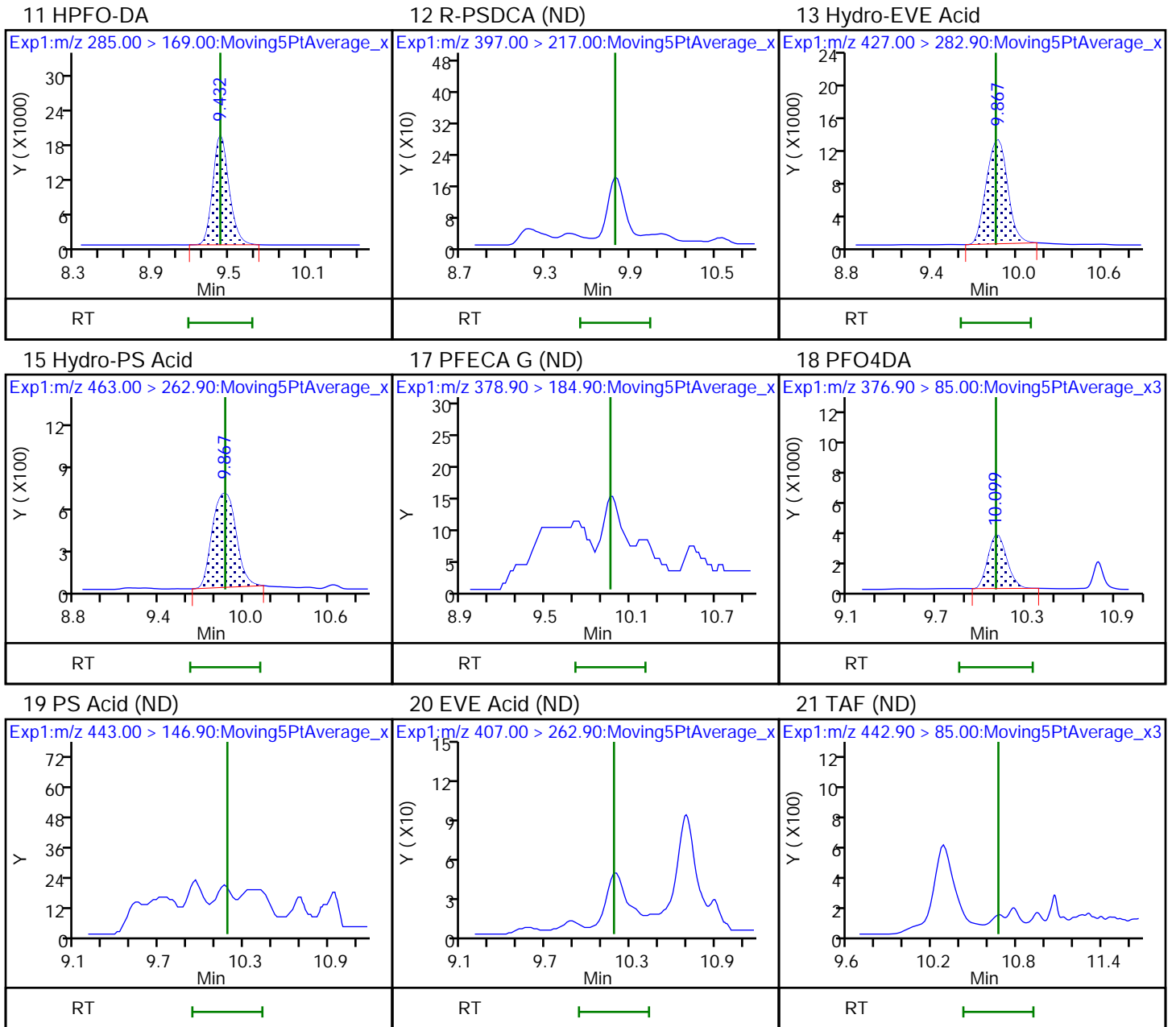
Processing Flags

Review Flags

M - Manually Integrated

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Injection Date: 24-Feb-2021 04:09:13 Instrument ID: A10
Lims ID: 320-70306-A-1-A Lab Sample ID: 320-70306-1
Client ID: SEEP-C-EFFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 17 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

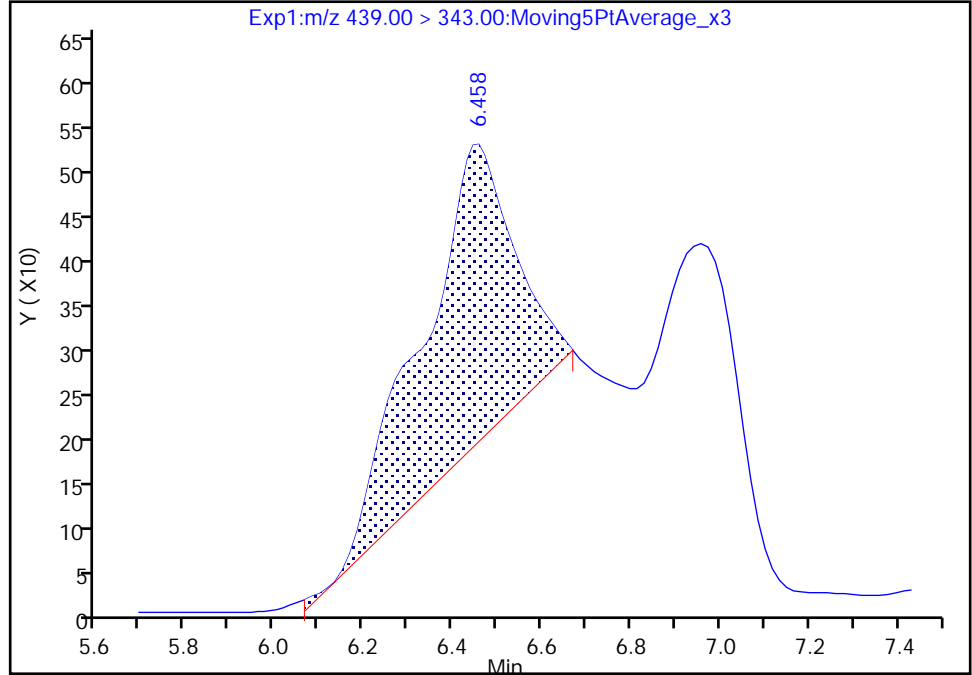
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Lims ID: 320-70306-A-1-A Lab Sample ID: 320-70306-1
Client ID: SEEP-C-EFFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 17 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

4 Hydrolyzed PSDA, CAS: 2416366-19-1

Signal: 1

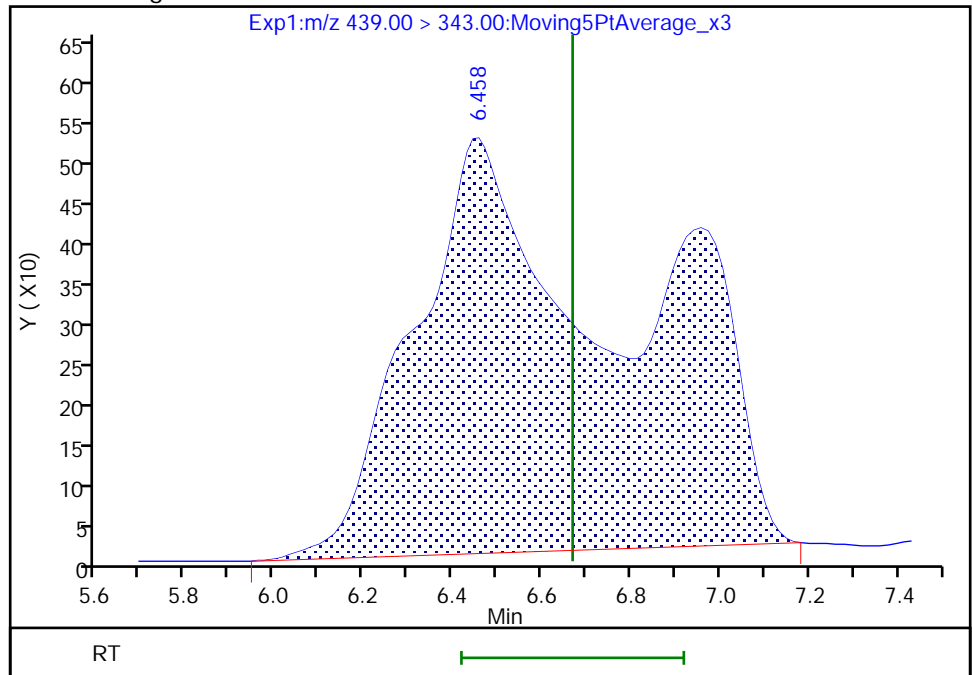
RT: 6.46
Area: 4908
Amount: 0.000618
Amount Units: ng/ml

Processing Integration Results



RT: 6.46
Area: 17138
Amount: 0.002158
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Sacramento

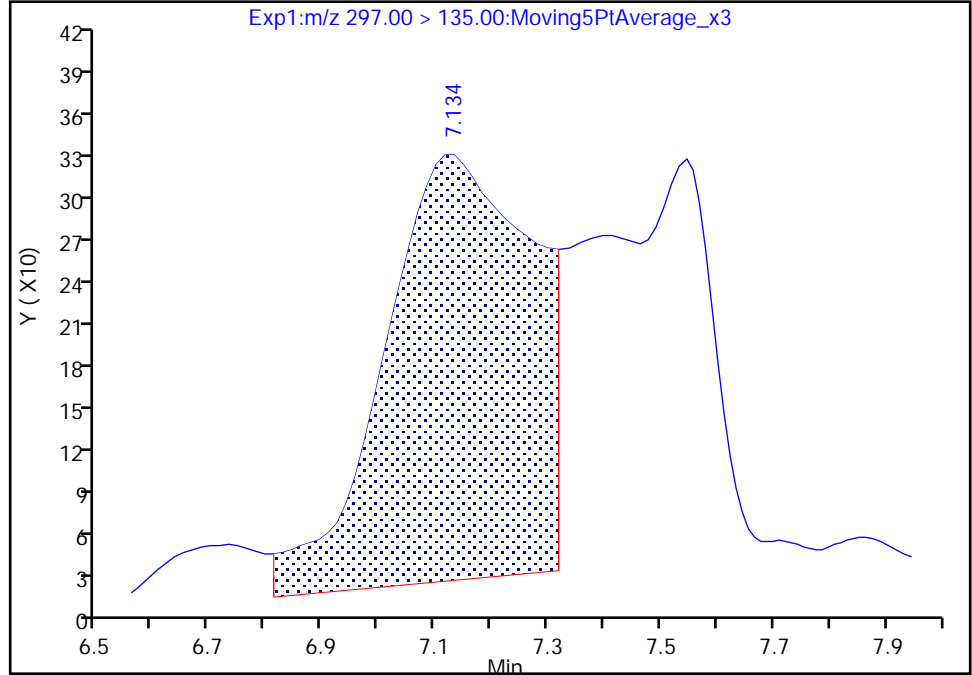
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Lims ID: 320-70306-A-1-A Lab Sample ID: 320-70306-1
Client ID: SEEP-C-EFFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 17 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

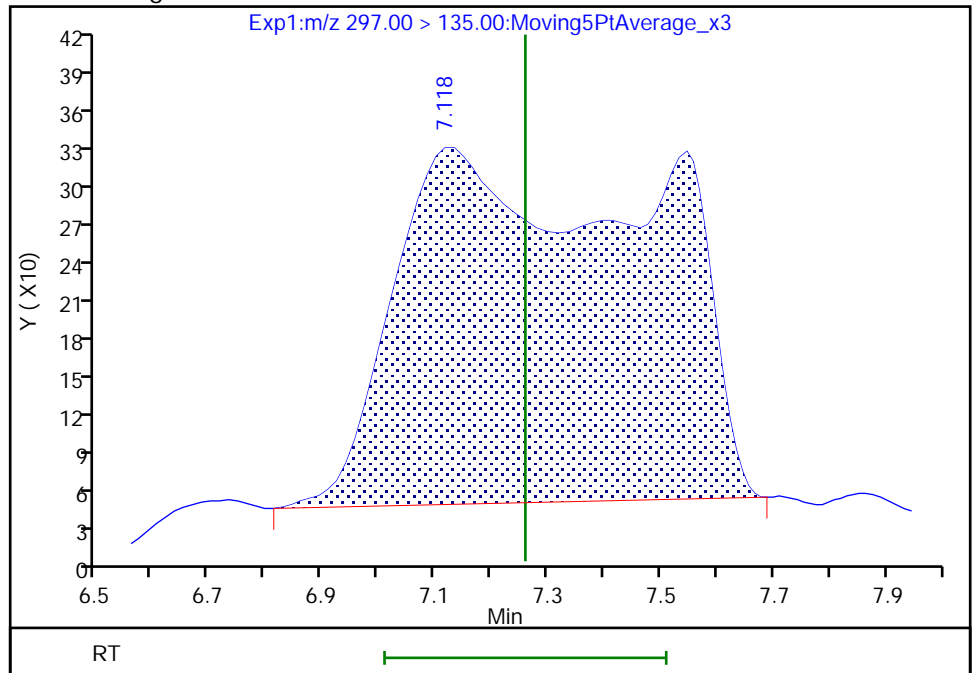
RT: 7.13
Area: 5571
Amount: 0.000727
Amount Units: ng/ml

Processing Integration Results



RT: 7.12
Area: 8874
Amount: 0.001158
Amount Units: ng/ml

Manual Integration Results



Euofins TestAmerica, Sacramento

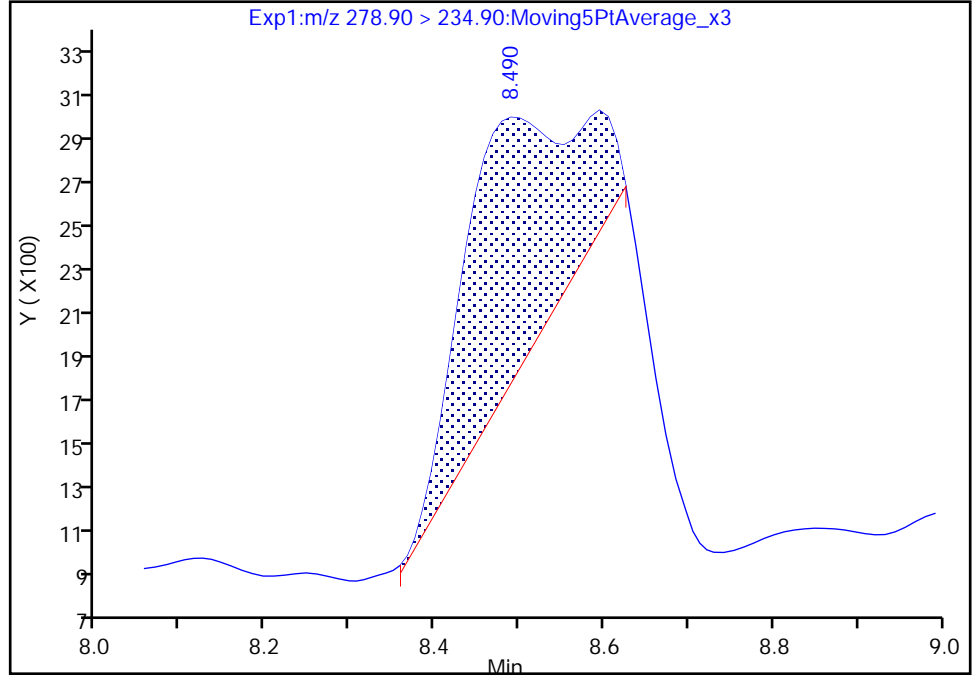
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Injection Date: 24-Feb-2021 04:09:13 Instrument ID: A10
Lims ID: 320-70306-A-1-A Lab Sample ID: 320-70306-1
Client ID: SEEP-C-EFFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 17 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

22 PEPA, CAS: 267239-61-2

Signal: 1

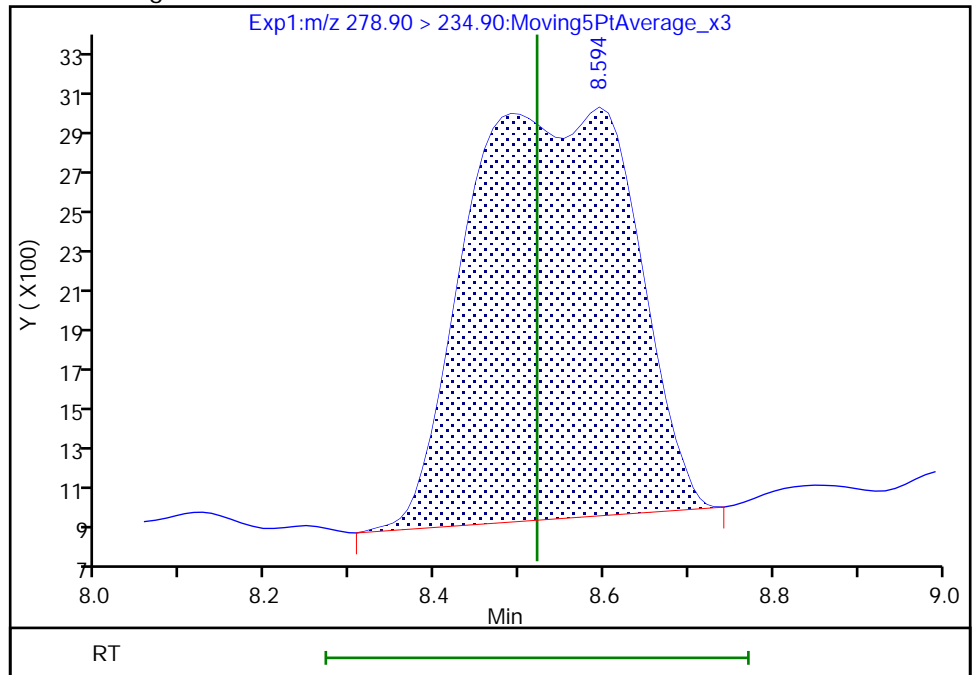
RT: 8.49
Area: 10777
Amount: 0.001927
Amount Units: ng/ml

Processing Integration Results



RT: 8.59
Area: 27909
Amount: 0.004991
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Sacramento

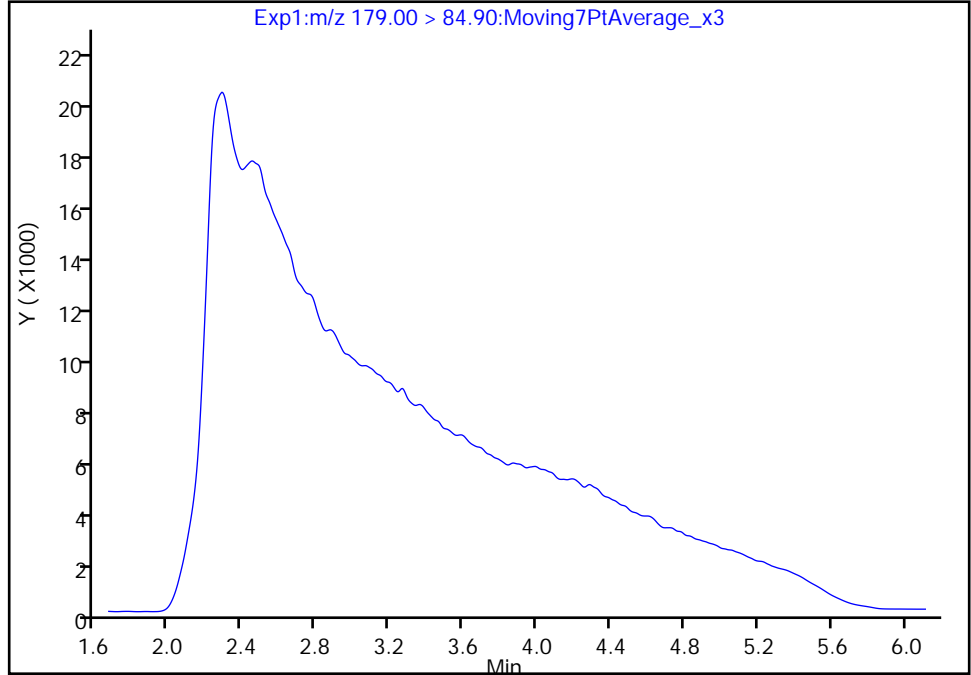
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Lims ID: 320-70306-A-1-A Lab Sample ID: 320-70306-1
Client ID: SEEP-C-EFFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 17 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

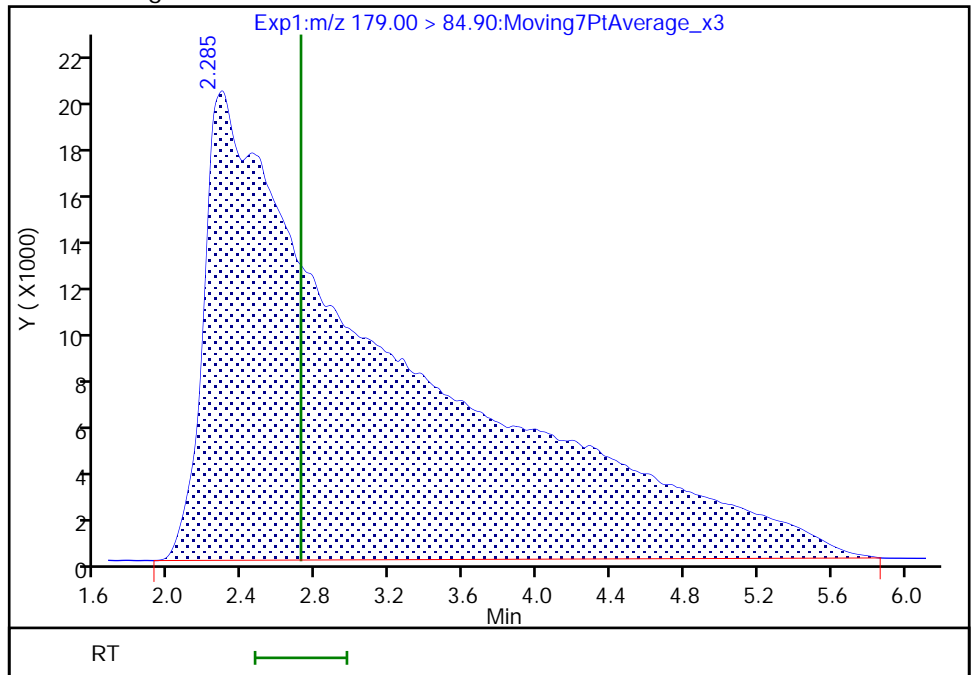
Not Detected
Expected RT: 2.72

Processing Integration Results



Manual Integration Results

RT: 2.29
Area: 1493285
Amount: 0.149147
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 25-Feb-2021 07:40:32
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

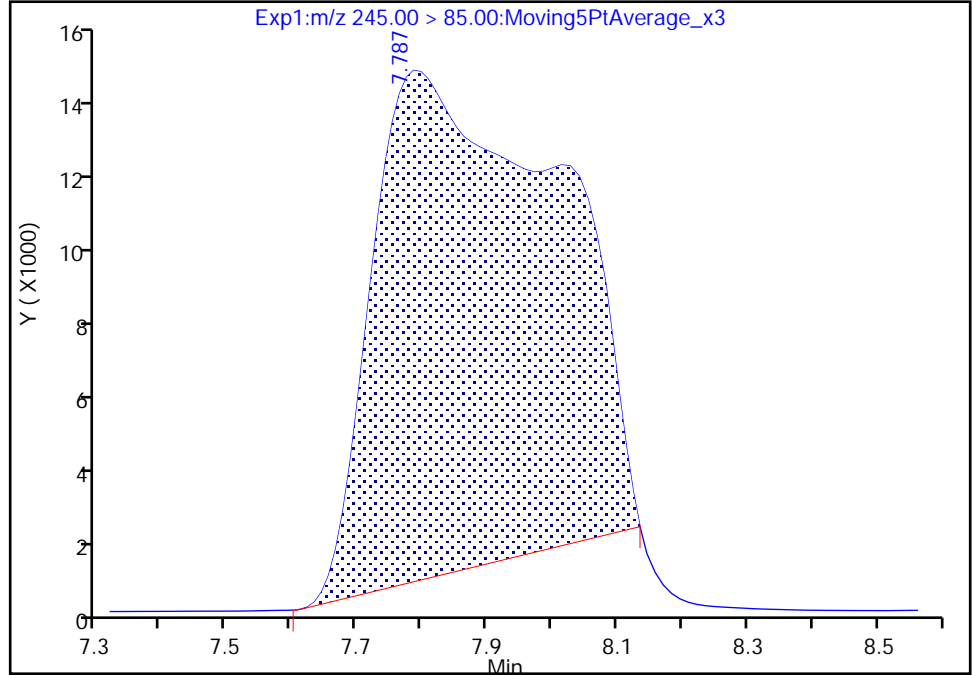
Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_017.d
Injection Date: 24-Feb-2021 04:09:13 Instrument ID: A10
Lims ID: 320-70306-A-1-A Lab Sample ID: 320-70306-1
Client ID: SEEP-C-EFFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 17 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

6 PFO2HxA, CAS: 39492-88-1

Signal: 1

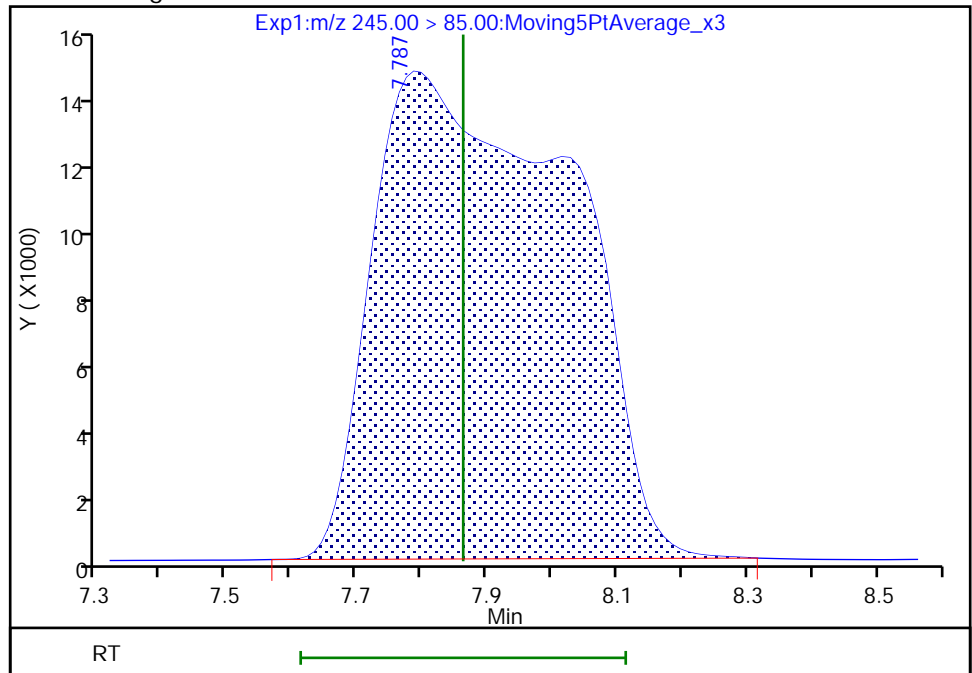
RT: 7.79
Area: 266335
Amount: 0.028360
Amount Units: ng/ml

Processing Integration Results



RT: 7.79
Area: 305617
Amount: 0.032543
Amount Units: ng/ml

Manual Integration Results



Reviewer: ruangyotsakuld, 25-Feb-2021 07:40:57
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

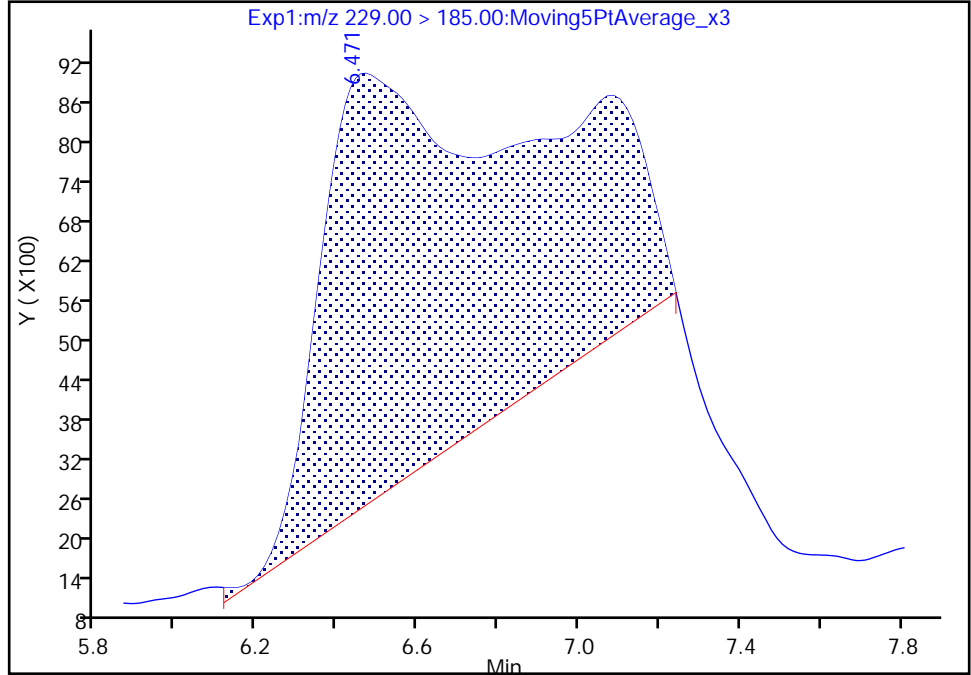
Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_017.d
Injection Date: 24-Feb-2021 04:09:13 Instrument ID: A10
Lims ID: 320-70306-A-1-A Lab Sample ID: 320-70306-1
Client ID: SEEP-C-EFFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 17 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

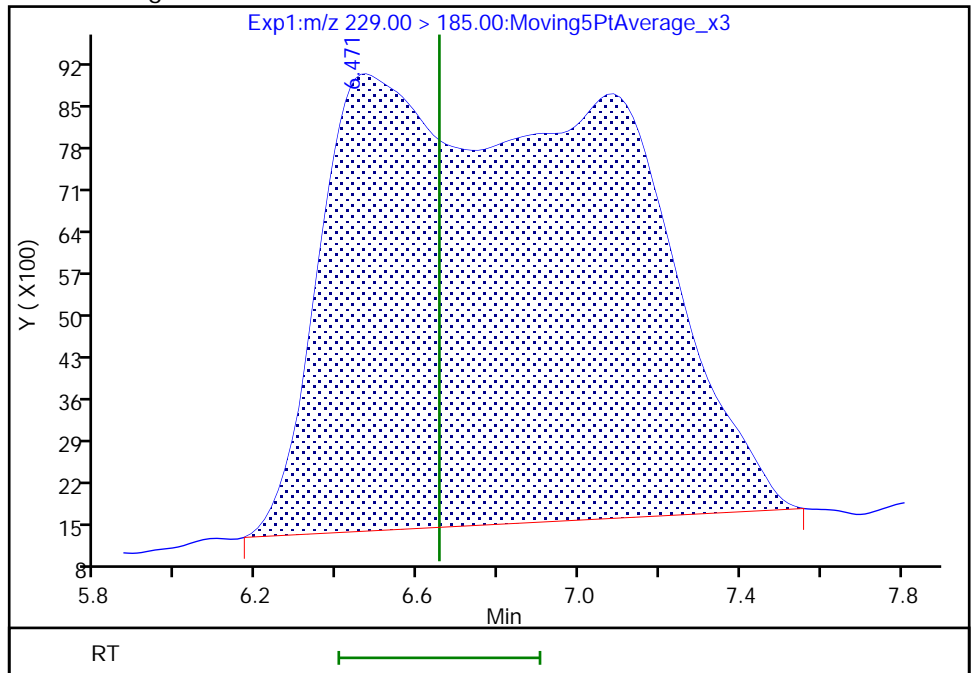
RT: 6.47
Area: 236288
Amount: 0.016738
Amount Units: ng/ml

Processing Integration Results



RT: 6.47
Area: 393492
Amount: 0.029368
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Sacramento

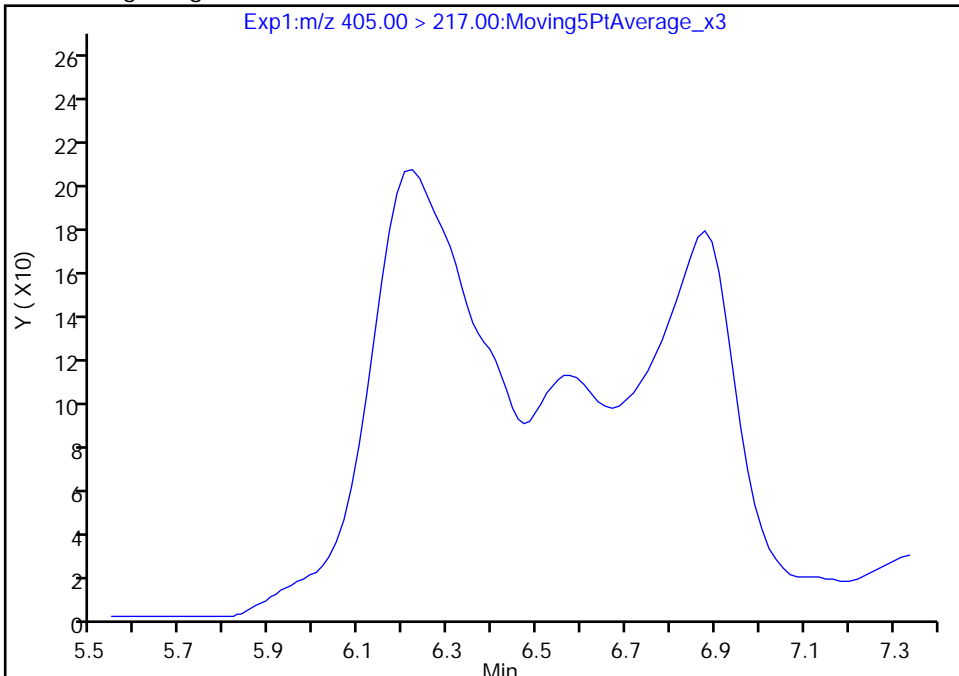
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Injection Date: 24-Feb-2021 04:09:13 Instrument ID: A10
Lims ID: 320-70306-A-1-A Lab Sample ID: 320-70306-1
Client ID: SEEP-C-EFFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 17 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

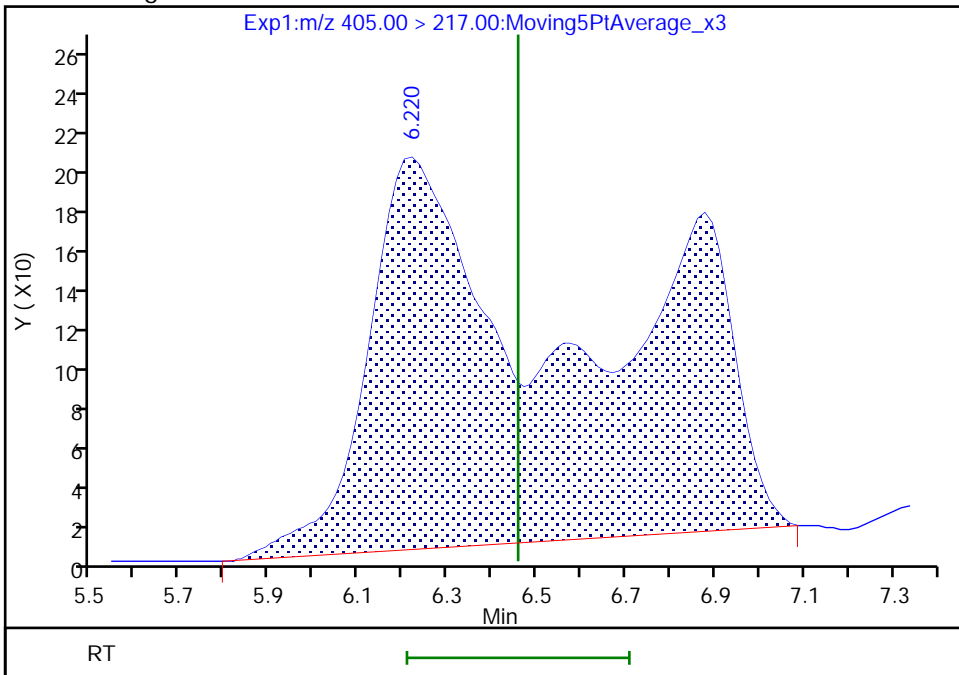
Not Detected
Expected RT: 6.46

Processing Integration Results



Manual Integration Results

RT: 6.22
Area: 6740
Amount: 0.001638
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 25-Feb-2021 07:40:37
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

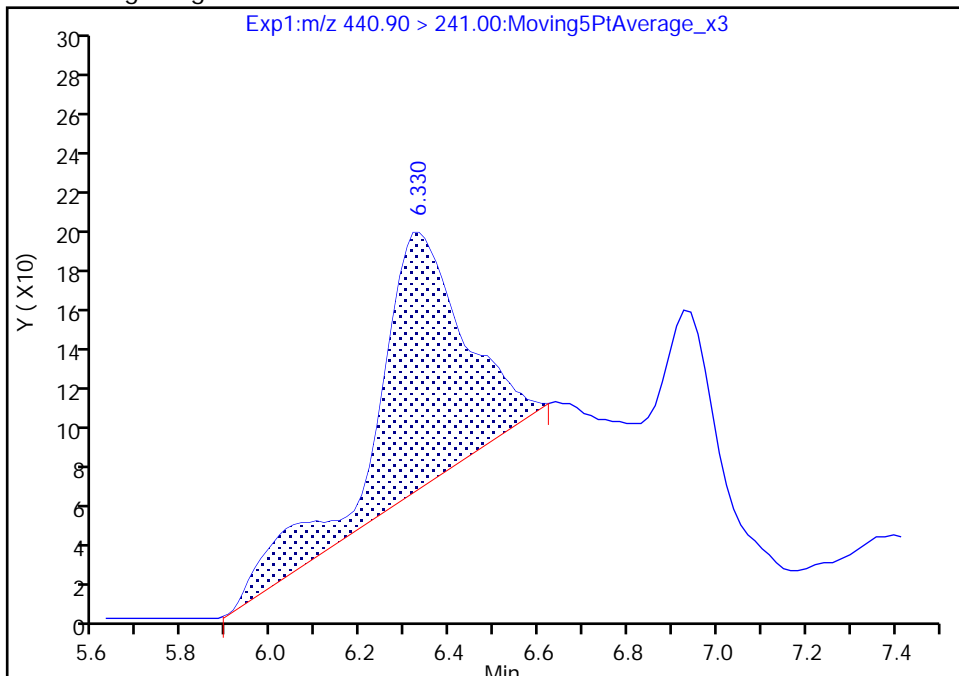
Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_017.d
Injection Date: 24-Feb-2021 04:09:13 Instrument ID: A10
Lims ID: 320-70306-A-1-A Lab Sample ID: 320-70306-1
Client ID: SEEP-C-EFFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 17 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

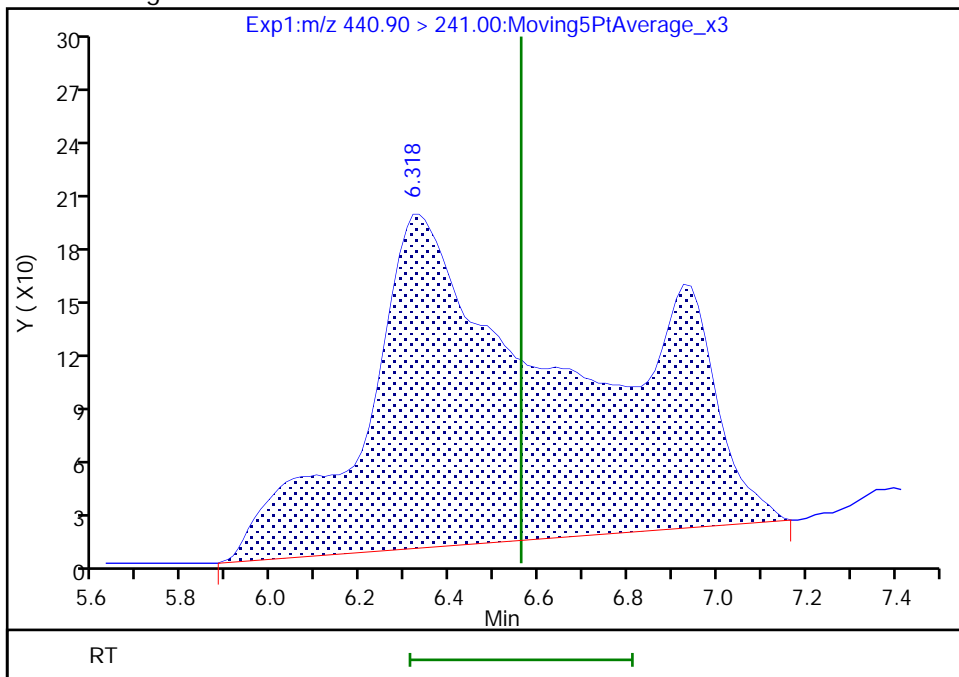
RT: 6.33
Area: 1794
Amount: 0.000660
Amount Units: ng/ml

Processing Integration Results



RT: 6.32
Area: 6248
Amount: 0.002300
Amount Units: ng/ml

Manual Integration Results



Reviewer: ruangyotsakuld, 25-Feb-2021 07:40:41
Audit Action: Manually Integrated

Audit Reason: Baseline
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FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Client Sample ID: SEEP-C-INFLUENT-192-02132 Lab Sample ID: 320-70306-2
1

Matrix: Water Lab File ID: 2021.02.25_A10_TB3+_C_026.d

Analysis Method: Chemours (TB3+) Date Collected: 02/13/2021 10:00

Extraction Method: PFAS Prep Date Extracted: 02/22/2021 11:40

Sample wt/vol: 2.50 (mL) Date Analyzed: 02/25/2021 18:43

Con. Extract Vol.: 5.00 (mL) Dilution Factor: 50

Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)

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

Analysis Batch No.: 464873 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	<0.0087		0.0087	
13252-13-6	HFPO-DA	15		0.041	
773804-62-9	Hydro-EVE Acid	1.1		0.0072	
2416366-19-1	Hydrolyzed PSDA	1.0		0.019	
749836-20-2	Hydro-PS Acid	0.33		0.0031	
1132933-86-8	NVHOS	0.68		0.0073	
267239-61-2	PEPA	3.0		0.020	
113507-82-7	PES	0.0044		0.0034	
151772-58-6	PFECA B	<0.013		0.013	
801212-59-9	PFECA G	<0.024		0.024	
674-13-5	PFMOAA	71		0.040	
39492-88-1	PFO2HxA	25		0.013	
39492-89-2	PFO3OA	7.1		0.020	
39492-90-5	PFO4DA	2.9		0.030	
39492-91-6	PFO5DA	0.081		0.039	
13140-29-9	PMPA	7.7		0.31	
29311-67-9	PS Acid	<0.0098		0.0098	
2416366-22-6	R-EVE	0.77		0.036	
2416366-18-0	R-PSDA	0.85		0.035	
2416366-21-5	R-PSDCA	0.016		0.0087	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	100		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\2021.02.25_A10_TB3+_C_026.d
 Lims ID: 320-70306-A-2-A
 Client ID: SEEP-C-INFLUENT-192-021321
 Sample Type: Client
 Inject. Date: 25-Feb-2021 18:43:25 ALS Bottle#: 26 Worklist Smp#: 25
 Injection Vol: 500.0 ul Dil. Factor: 50.0000
 Sample Info: 320-70306-a-2-a 50X AR
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Method: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 26-Feb-2021 10:35:07 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1686

First Level Reviewer: dadunj Date: 26-Feb-2021 10:35:07
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	2.647	2.716	-0.069		7063290	0.7055		940		M
2 R-EVE										M
405.00 > 217.00	6.433	6.458	-0.025		31637	0.007690		667		M
3 R-PSDA										M
440.90 > 241.00	6.535	6.560	-0.025		23077	0.008496		478		M
23 PMPA										M
229.00 > 185.00	6.621	6.653	-0.032		990898	0.0774		342		M
4 Hydrolyzed PSDA										M
439.00 > 343.00	6.637	6.669	-0.032		82710	0.0104		1229		M
5 NVHOS										M
297.00 > 135.00	7.241	7.260	-0.019		52476	0.006845		804		M
6 PFO2HxA										M
245.00 > 85.00	7.842	7.863	-0.021		2357779	0.2511		17392		M
22 PEPA										M
278.90 > 234.90	8.511	8.521	-0.010		168375	0.0301		239		M
7 PES										M
314.90 > 135.00	8.858	8.860	-0.002		2053	0.00004372		87.3		M
9 PFO3OA										M
310.90 > 85.00	9.314	9.321	-0.007		425170	0.0709		8320		M
D 10 13C3 HFPO-DA										M
287.00 > 169.00	9.423	9.432	-0.009		27524	0.004975		2.0	1129	M
11 HPFO-DA										M
285.00 > 169.00	9.423	9.432	-0.009	1.000	877364	0.1464		35176		M
12 R-PSDCA										M
397.00 > 217.00	9.782	9.792	-0.010		10179	0.000162		314		M
13 Hydro-EVE Acid										M
427.00 > 282.90	9.858	9.849	0.009		882394	0.0113		12144		M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
15 Hydro-PS Acid	463.00 > 262.90	9.858	9.868	-0.010	85116	0.003350			2480	
18 PFO4DA	376.90 > 85.00	10.092	10.100	-0.008	147374	0.0286			2383	
21 TAF	442.90 > 85.00	10.664	10.668	-0.004	3036	0.000810			6.7	

QC Flag Legend

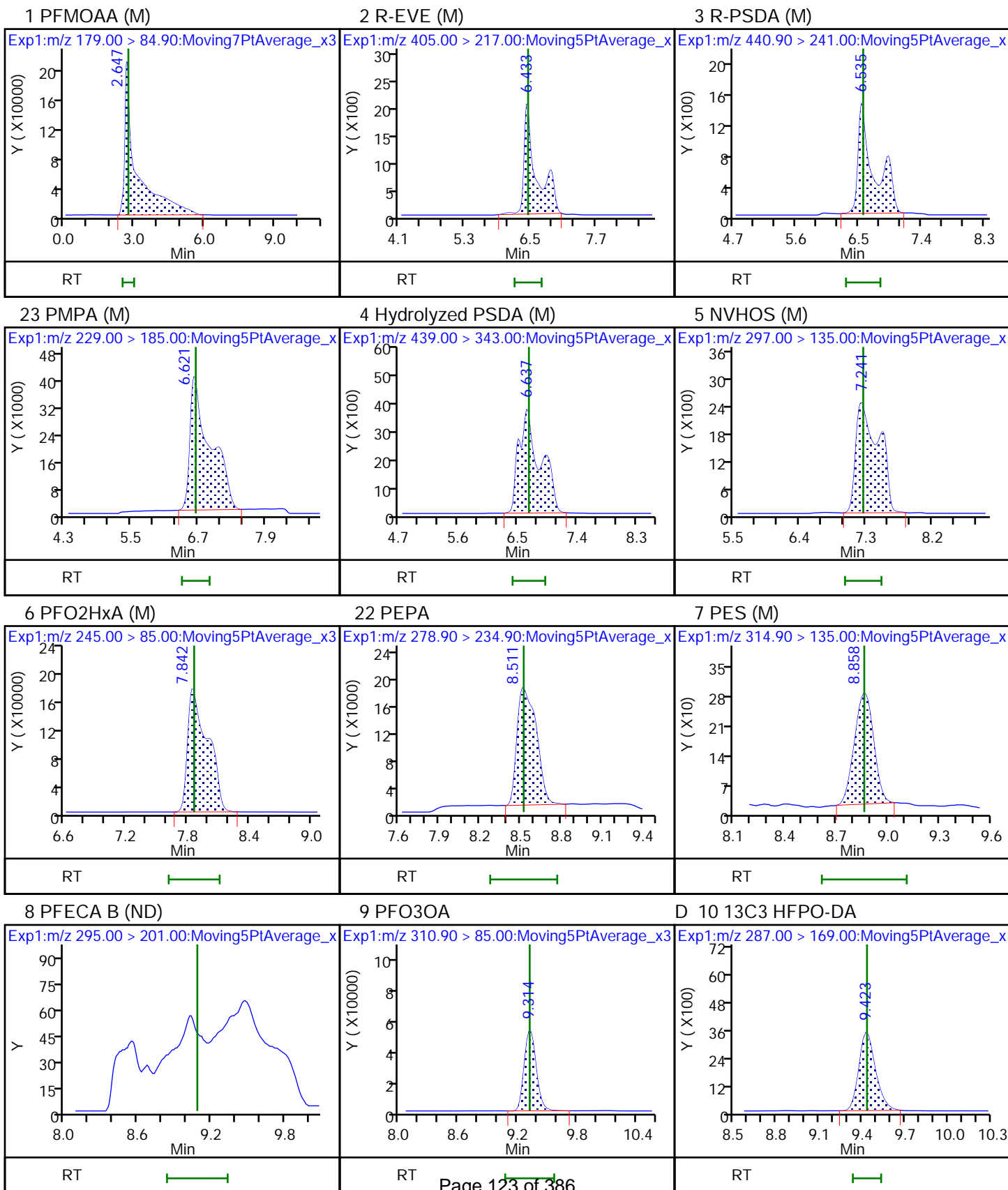
Processing Flags

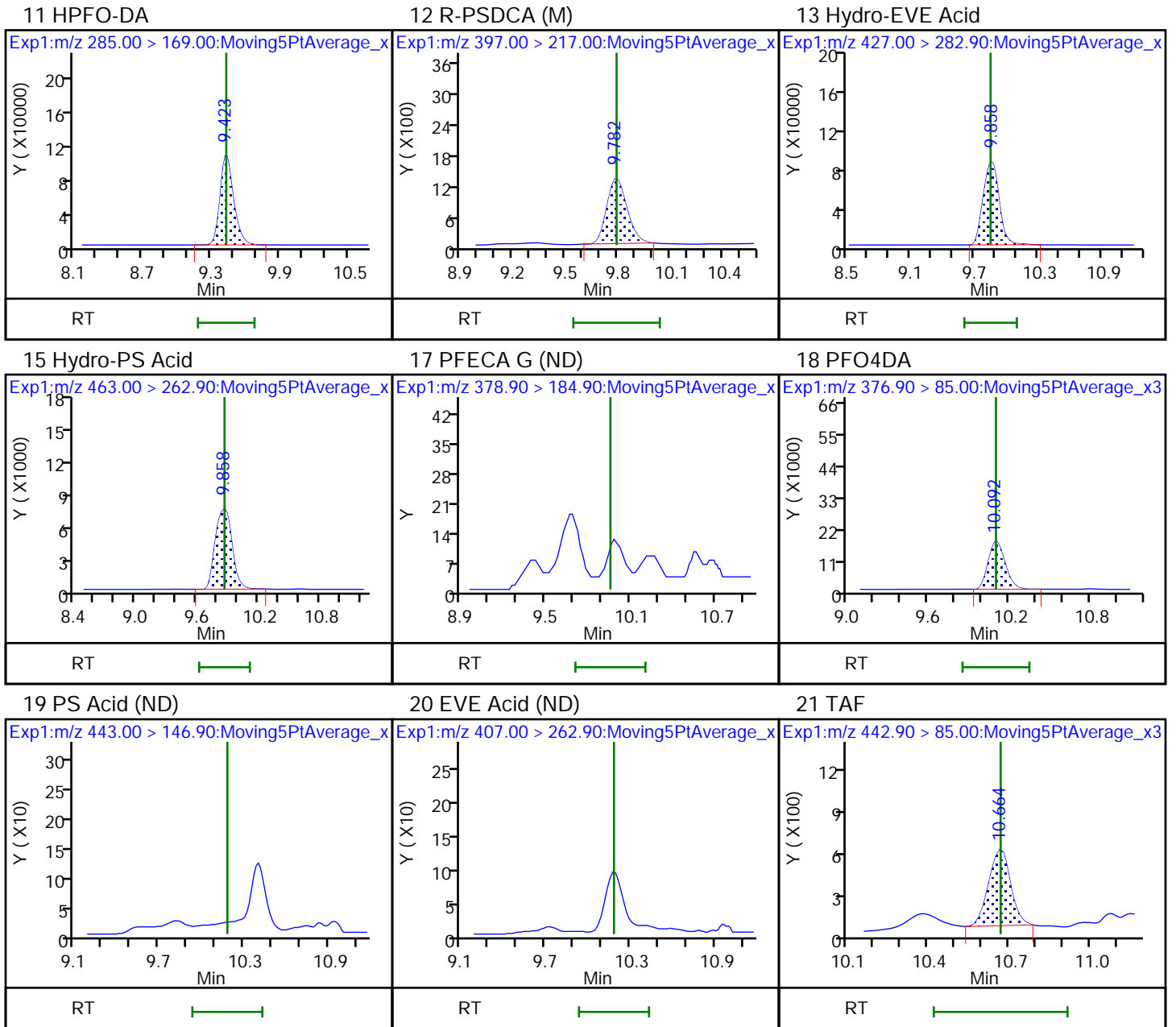
Review Flags

M - Manually Integrated

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\2021.02.25_A10_TB3+_C_026.d
Injection Date: 25-Feb-2021 18:43:25 Instrument ID: A10
Lims ID: 320-70306-A-2-A Lab Sample ID: 320-70306-2
Client ID: SEEP-C-INFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 26 Worklist Smp#: 25
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

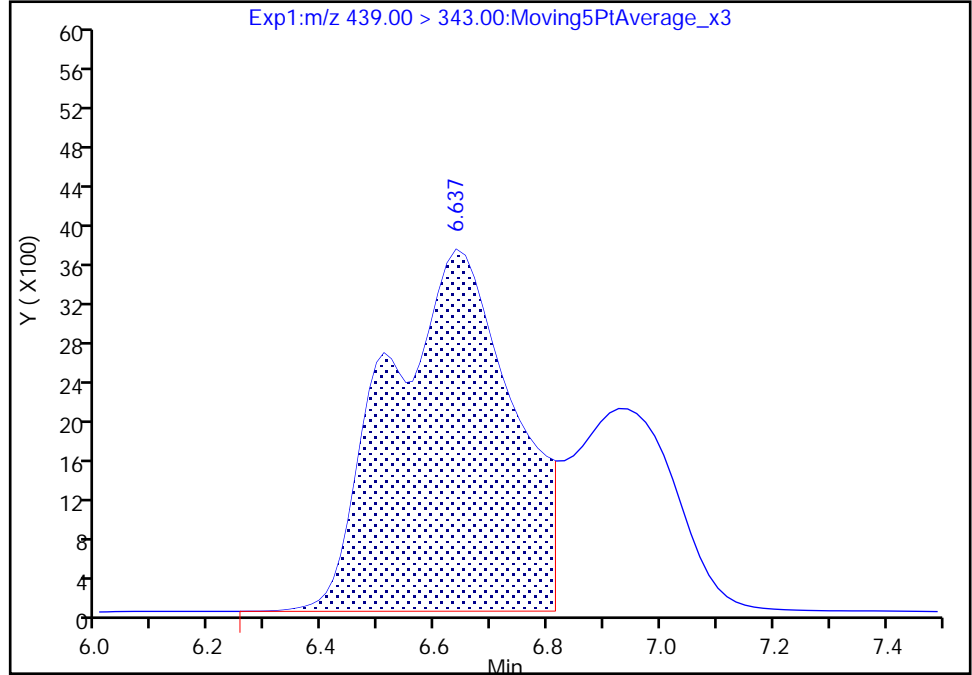
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Injection Date: 25-Feb-2021 18:43:25 Instrument ID: A10
Lims ID: 320-70306-A-2-A Lab Sample ID: 320-70306-2
Client ID: SEEP-C-INFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 26 Worklist Smp#: 25
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

4 Hydrolyzed PSDA, CAS: 2416366-19-1

Signal: 1

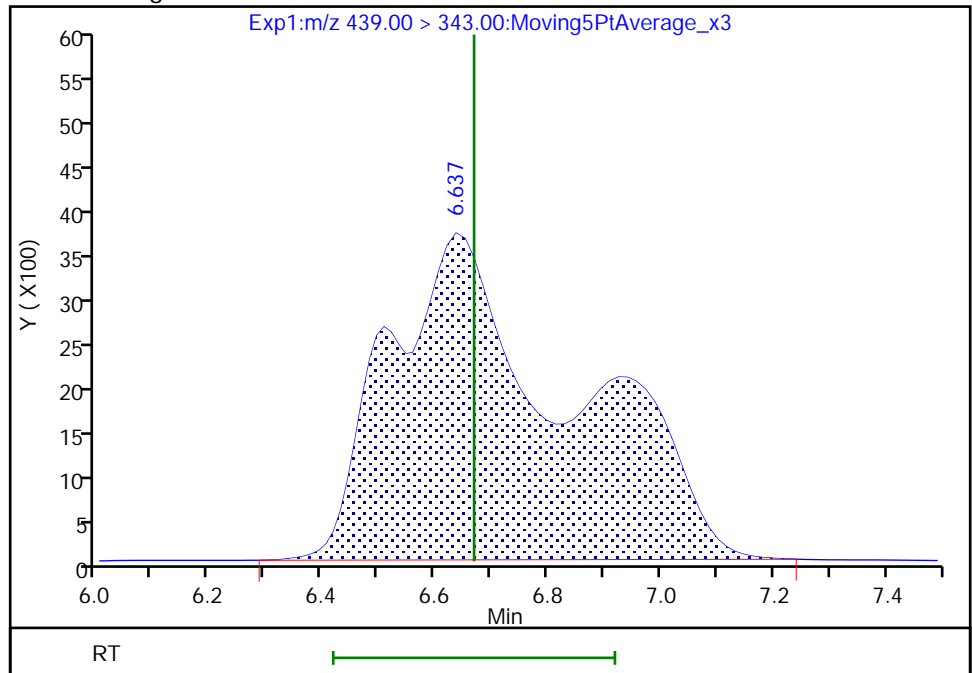
RT: 6.64
Area: 56528
Amount: 0.007118
Amount Units: ng/ml

Processing Integration Results



RT: 6.64
Area: 82710
Amount: 0.010414
Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 10:34:30
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

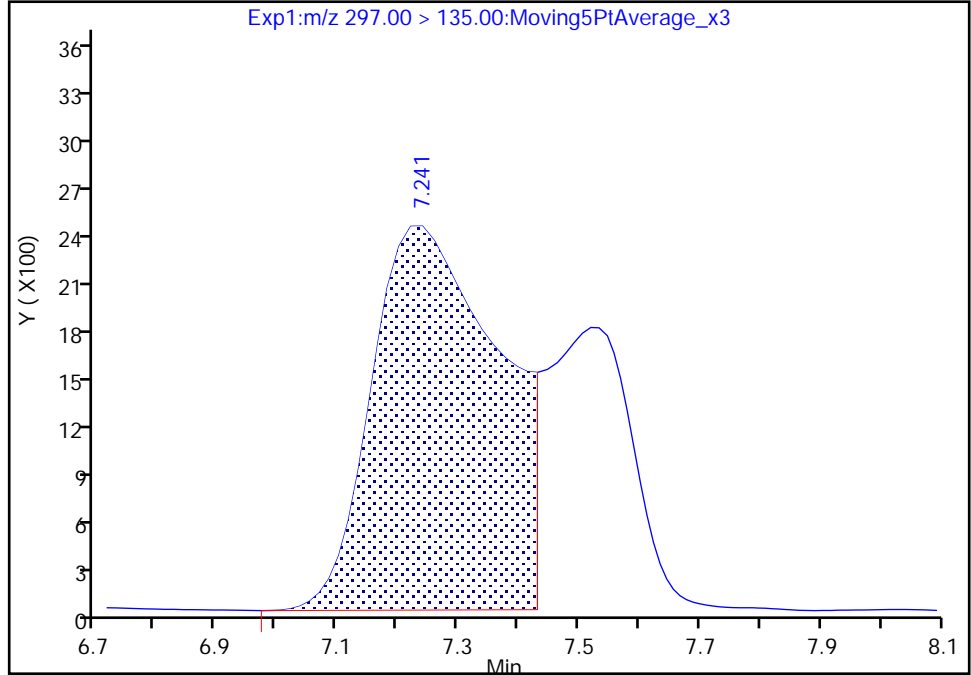
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Injection Date: 25-Feb-2021 18:43:25 Instrument ID: A10
Lims ID: 320-70306-A-2-A Lab Sample ID: 320-70306-2
Client ID: SEEP-C-INFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 26 Worklist Smp#: 25
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

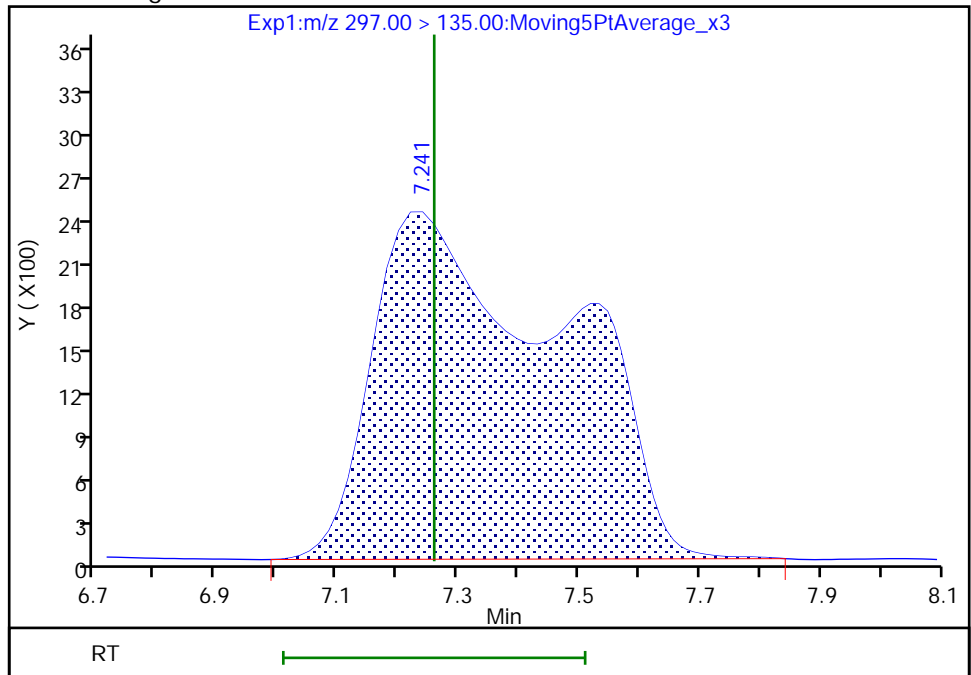
RT: 7.24
Area: 35091
Amount: 0.004577
Amount Units: ng/ml

Processing Integration Results



RT: 7.24
Area: 52476
Amount: 0.006845
Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 10:34:34
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

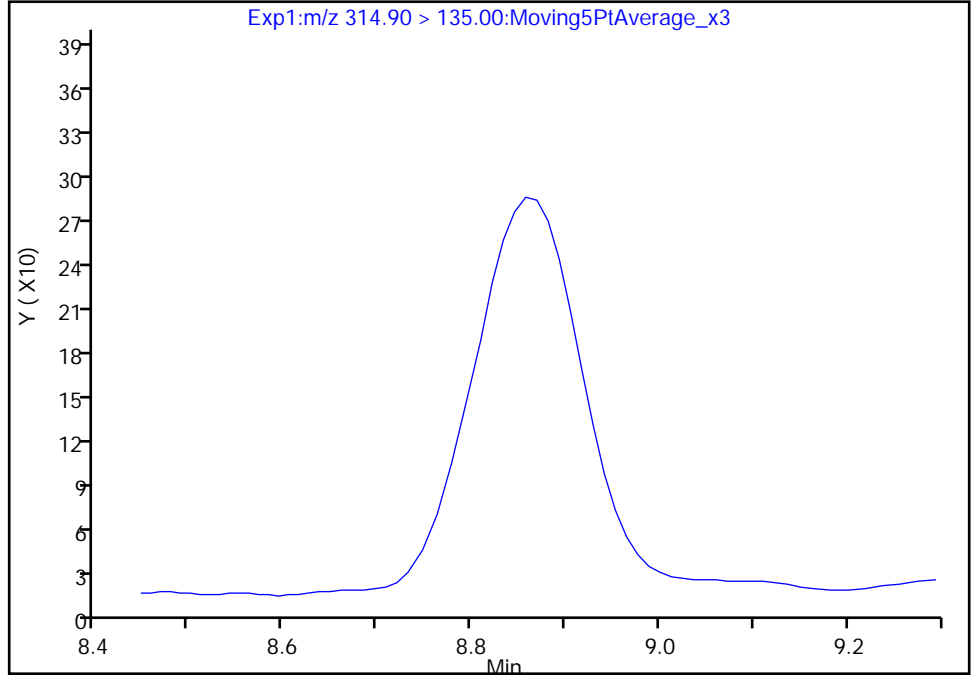
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Injection Date: 25-Feb-2021 18:43:25 Instrument ID: A10
Lims ID: 320-70306-A-2-A Lab Sample ID: 320-70306-2
Client ID: SEEP-C-INFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 26 Worklist Smp#: 25
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

7 PES, CAS: 113507-82-7

Signal: 1

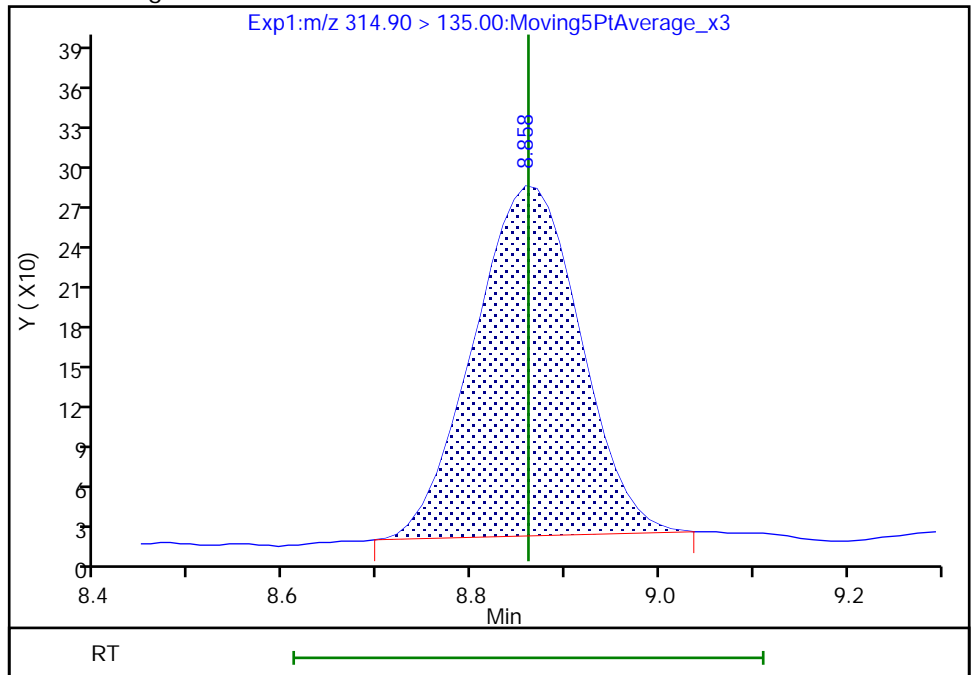
Not Detected
Expected RT: 8.86

Processing Integration Results



Manual Integration Results

RT: 8.86
Area: 2053
Amount: 0.000044
Amount Units: ng/ml



Reviewer: dadunj, 26-Feb-2021 10:34:43
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

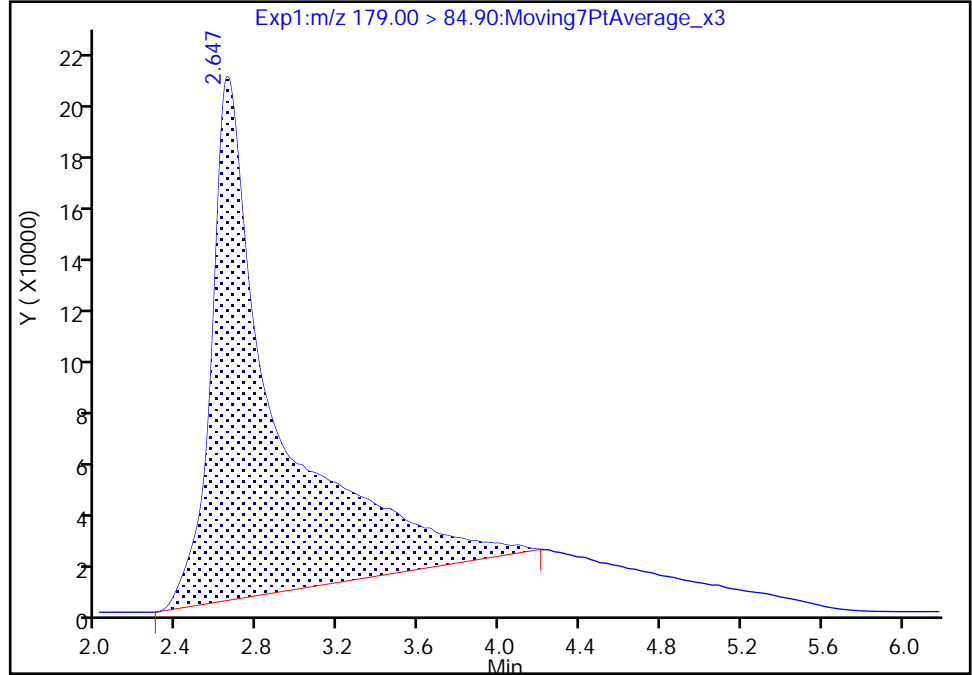
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Injection Date: 25-Feb-2021 18:43:25 Instrument ID: A10
Lims ID: 320-70306-A-2-A Lab Sample ID: 320-70306-2
Client ID: SEEP-C-INFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 26 Worklist Smp#: 25
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

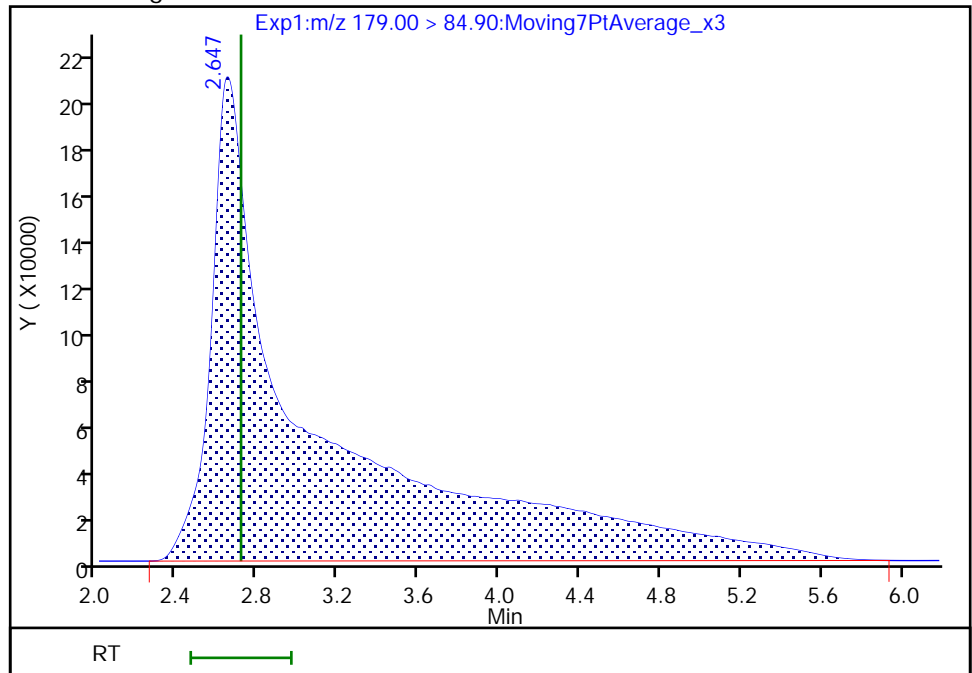
RT: 2.65
Area: 4605905
Amount: 0.460031
Amount Units: ng/ml

Processing Integration Results



RT: 2.65
Area: 7063290
Amount: 0.705471
Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 10:34:12
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Sacramento

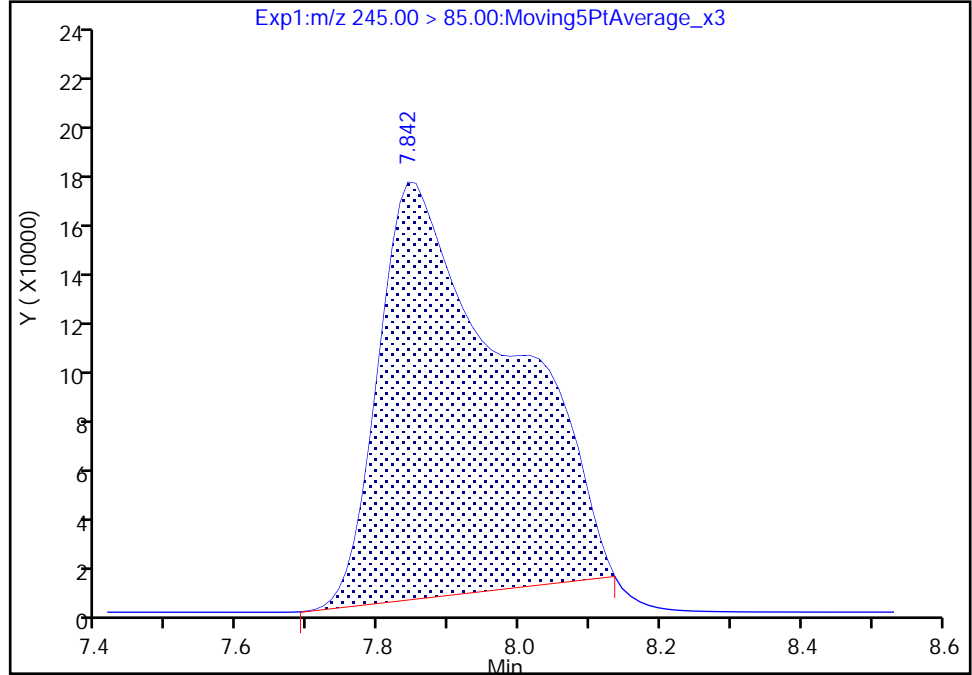
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Injection Date: 25-Feb-2021 18:43:25 Instrument ID: A10
Lims ID: 320-70306-A-2-A Lab Sample ID: 320-70306-2
Client ID: SEEP-C-INFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 26 Worklist Smp#: 25
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

6 PFO2HxA, CAS: 39492-88-1

Signal: 1

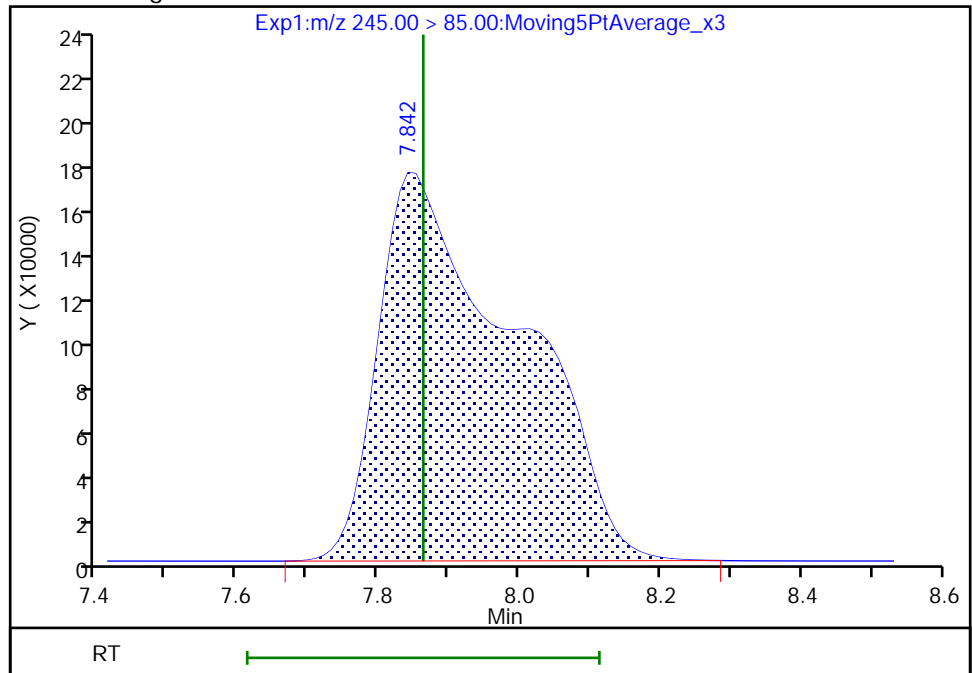
RT: 7.84
Area: 2142788
Amount: 0.228172
Amount Units: ng/ml

Processing Integration Results



RT: 7.84
Area: 2357779
Amount: 0.251065
Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 10:34:38
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

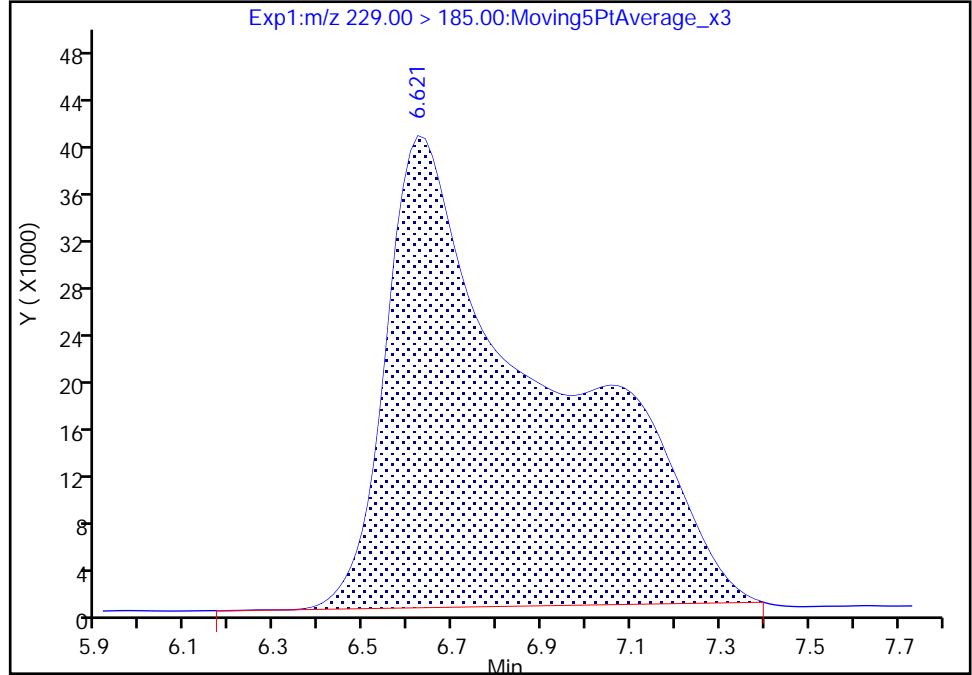
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Injection Date: 25-Feb-2021 18:43:25 Instrument ID: A10
Lims ID: 320-70306-A-2-A Lab Sample ID: 320-70306-2
Client ID: SEEP-C-INFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 26 Worklist Smp#: 25
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

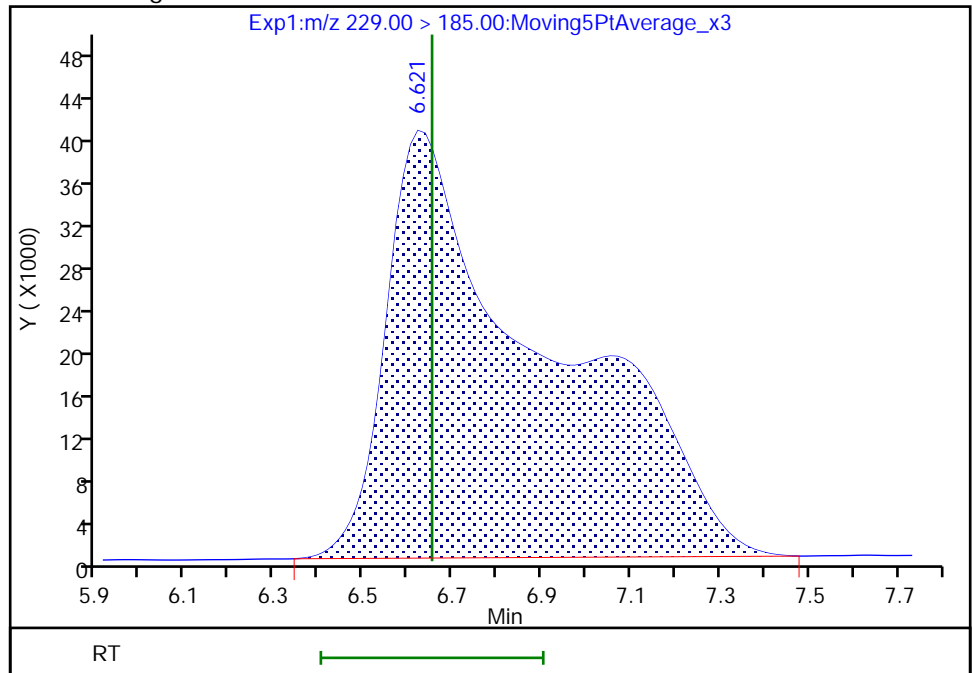
RT: 6.62
Area: 978668
Amount: 0.076380
Amount Units: ng/ml

Processing Integration Results



RT: 6.62
Area: 990898
Amount: 0.077363
Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 10:34:26
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

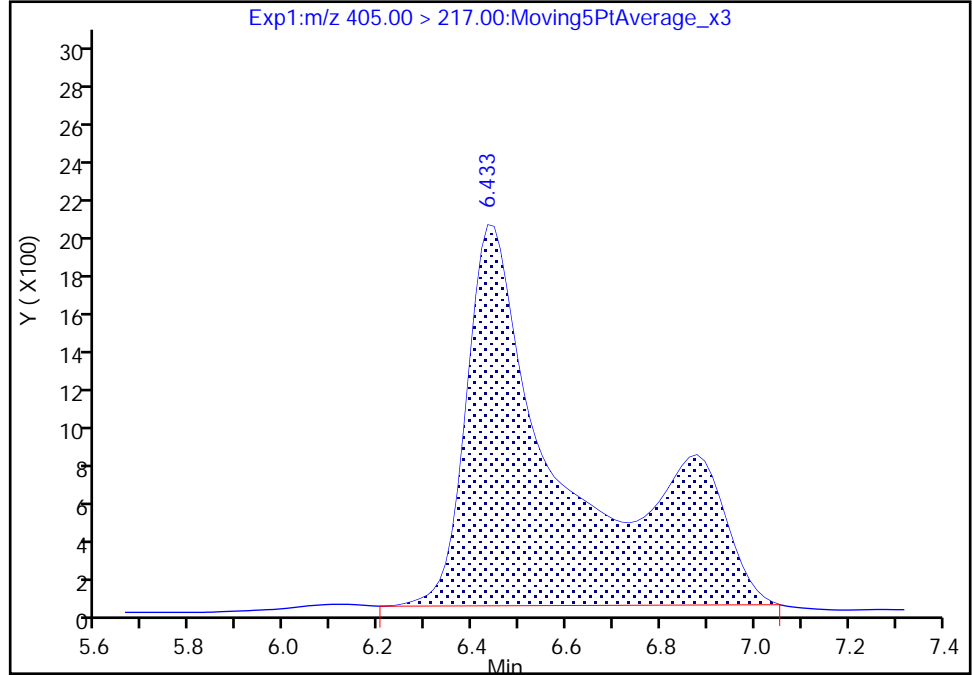
Data File: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\2021.02.25_A10_TB3+_C_026.d
Injection Date: 25-Feb-2021 18:43:25 Instrument ID: A10
Lims ID: 320-70306-A-2-A Lab Sample ID: 320-70306-2
Client ID: SEEP-C-INFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 26 Worklist Smp#: 25
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

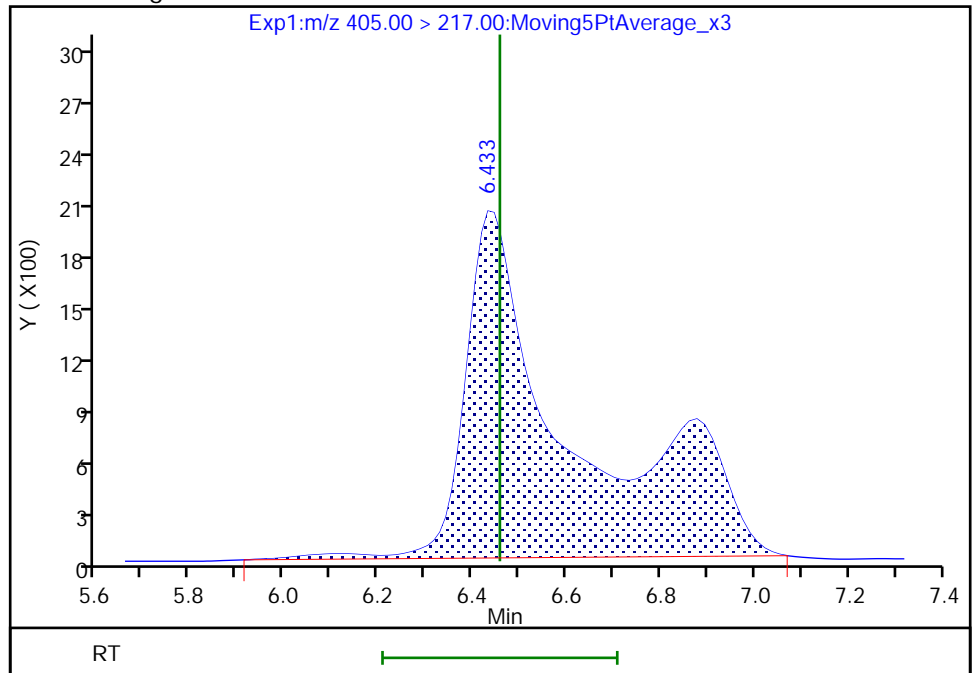
RT: 6.43
Area: 30648
Amount: 0.007450
Amount Units: ng/ml

Processing Integration Results



RT: 6.43
Area: 31637
Amount: 0.007690
Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 10:34:16
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

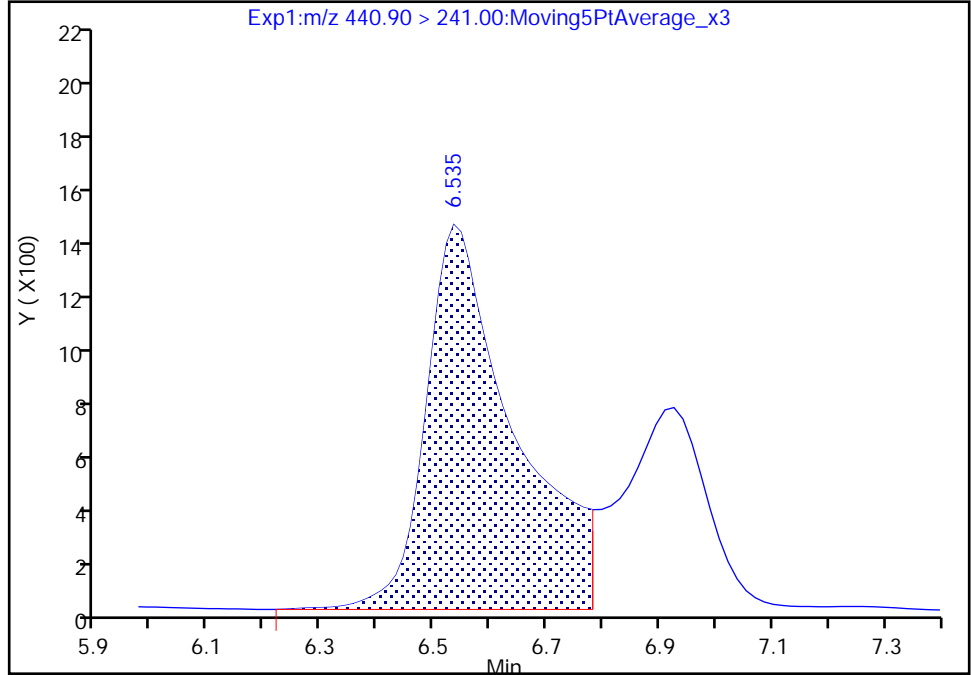
Data File: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\2021.02.25_A10_TB3+_C_026.d
Injection Date: 25-Feb-2021 18:43:25 Instrument ID: A10
Lims ID: 320-70306-A-2-A Lab Sample ID: 320-70306-2
Client ID: SEEP-C-INFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 26 Worklist Smp#: 25
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

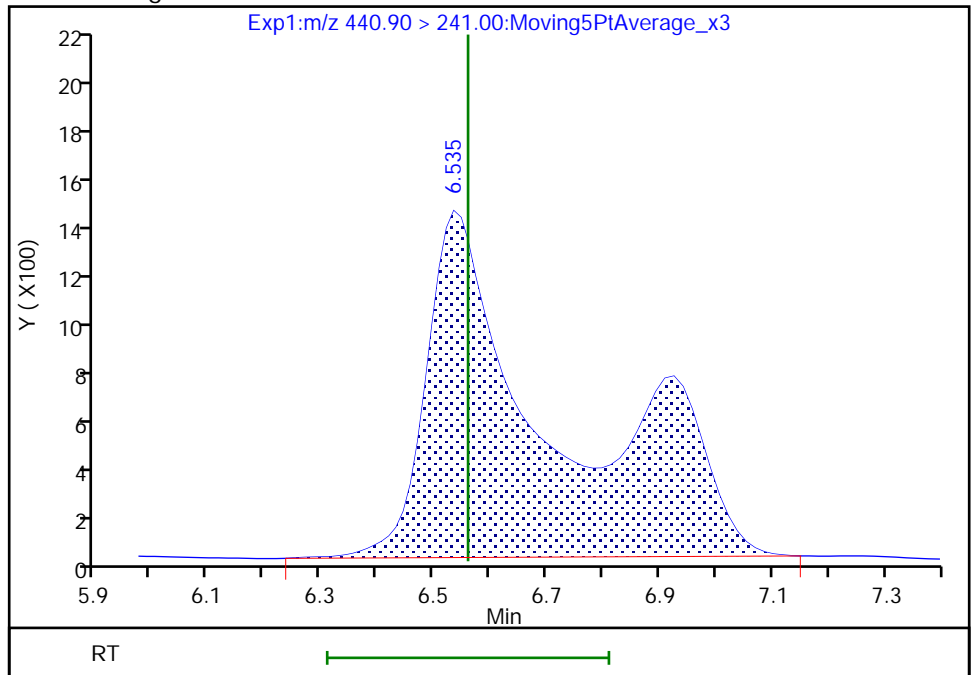
RT: 6.53
Area: 15606
Amount: 0.005746
Amount Units: ng/ml

Processing Integration Results



RT: 6.53
Area: 23077
Amount: 0.008496
Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 10:34:20
Audit Action: Manually Integrated

Audit Reason: Baseline
Page 132 of 386

Eurofins TestAmerica, Sacramento

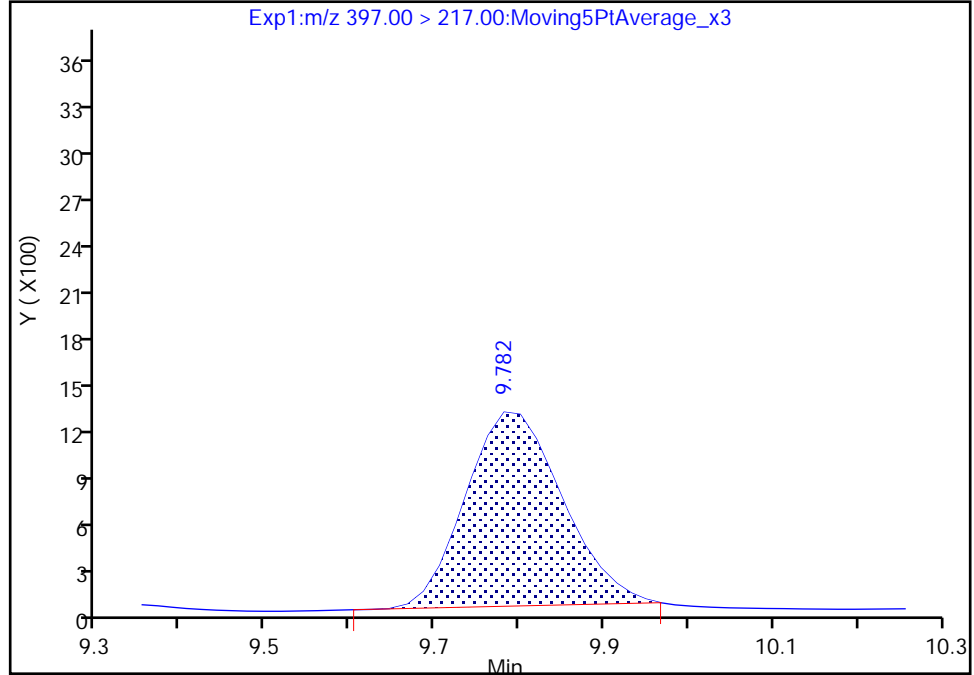
Data File: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\2021.02.25_A10_TB3+_C_026.d
Injection Date: 25-Feb-2021 18:43:25 Instrument ID: A10
Lims ID: 320-70306-A-2-A Lab Sample ID: 320-70306-2
Client ID: SEEP-C-INFLUENT-192-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 26 Worklist Smp#: 25
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

12 R-PSDCA, CAS: 2416366-21-5

Signal: 1

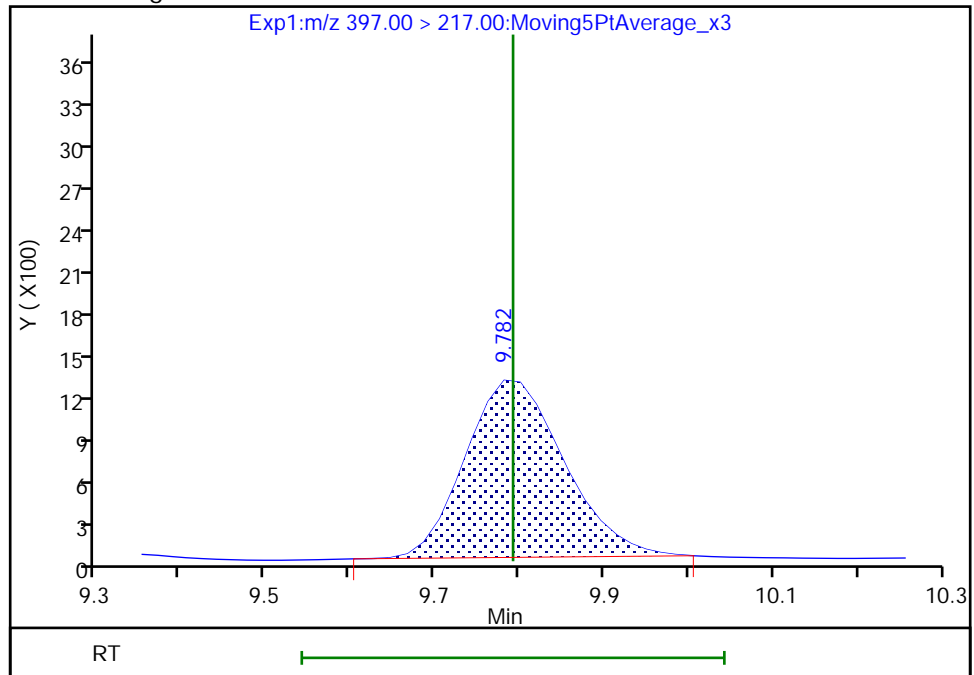
RT: 9.78
Area: 9881
Amount: 0.000157
Amount Units: ng/ml

Processing Integration Results



RT: 9.78
Area: 10179
Amount: 0.000162
Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 10:34:53
Audit Action: Manually Integrated

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Client Sample ID: SEEP-C-RAIN-EFFLUENT-24-0 Lab Sample ID: 320-70306-3
21321

Matrix: Water Lab File ID: 2021.02.23_A10_TB3+_B_019.d

Analysis Method: Chemours (TB3+) Date Collected: 02/13/2021 10:00

Extraction Method: PFAS Prep Date Extracted: 02/22/2021 11:40

Sample wt/vol: 2.50 (mL) Date Analyzed: 02/24/2021 04:44

Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1

Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)

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

Analysis Batch No.: 464205 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	<0.0020		0.0020	
13252-13-6	HFPO-DA	0.024		0.0020	
773804-62-9	Hydro-EVE Acid	<0.0020		0.0020	
2416366-19-1	Hydrolyzed PSDA	<0.0020		0.0020	
749836-20-2	Hydro-PS Acid	<0.0020		0.0020	
1132933-86-8	NVHOS	<0.0020		0.0020	
267239-61-2	PEPA	<0.020		0.020	
113507-82-7	PES	<0.0020		0.0020	
151772-58-6	PFECA B	<0.0020		0.0020	
801212-59-9	PFECA G	<0.0020		0.0020	
674-13-5	PFMOAA	0.19		0.0020	
39492-88-1	PFO2HxA	0.039		0.0020	
39492-89-2	PFO3OA	0.012		0.0020	
39492-90-5	PFO4DA	0.0039		0.0020	
39492-91-6	PFO5DA	<0.0020		0.0020	
13140-29-9	PMPA	0.031		0.010	
29311-67-9	PS Acid	<0.0020		0.0020	
2416366-22-6	R-EVE	<0.0020		0.0020	
2416366-18-0	R-PSDA	<0.0020		0.0020	
2416366-21-5	R-PSDCA	<0.0020		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	94		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfms\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_019.d
 Lims ID: 320-70306-A-3-A
 Client ID: SEEP-C-RAIN-EFFLUENT-24-021321
 Sample Type: Client
 Inject. Date: 24-Feb-2021 04:44:07 ALS Bottle#: 19 Worklist Smp#: 6
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: 320-70306-a-3-a
 Misc. Info.: Plate: 1 Rack: 2
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Method: \\chromfms\Sacramento\ChromData\A10\20210223-113777.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Feb-2021 07:43:02 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfms\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1619

First Level Reviewer: ruangyotsakuld Date: 25-Feb-2021 07:43:02
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	2.492	2.716	-0.224		942096	0.0941		54.6		M
2 R-EVE										M
405.00 > 217.00	6.343	6.458	-0.115		1722	0.000419		29.7		M
3 R-PSDA										M
440.90 > 241.00	6.458	6.560	-0.102		1726	0.000635		32.0		M
23 PMPA										M
229.00 > 185.00	6.548	6.653	-0.105		221023	0.0155		38.9		M
4 Hydrolyzed PSDA										M
439.00 > 343.00	6.561	6.669	-0.108		7655	0.000964		105		M
5 NVHOS										M
297.00 > 135.00	7.202	7.260	-0.058		4613	0.000602		46.8		M
6 PFO2HxA										
245.00 > 85.00	7.820	7.863	-0.043		181558	0.0193		964		
22 PEPA										
278.90 > 234.90	8.511	8.521	-0.010		15463	0.002765		18.4		
9 PFO3OA										
310.90 > 85.00	9.321	9.321	0.0		35882	0.005987		514		
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.432	9.432	0.0		1296855	0.2344		93.8	51021	
11 HPFO-DA										
285.00 > 169.00	9.432	9.432	0.0	1.000	68844	0.0122		2030		
13 Hydro-EVE Acid										
427.00 > 282.90	9.866	9.849	0.017		36775	0.000466		447		
15 Hydro-PS Acid										
463.00 > 262.90	9.866	9.868	-0.002		3782	0.000149		107		
18 PFO4DA										
376.90 > 85.00	10.098	10.100	-0.002		10102	0.001958		67.1		

[QC Flag Legend](#)

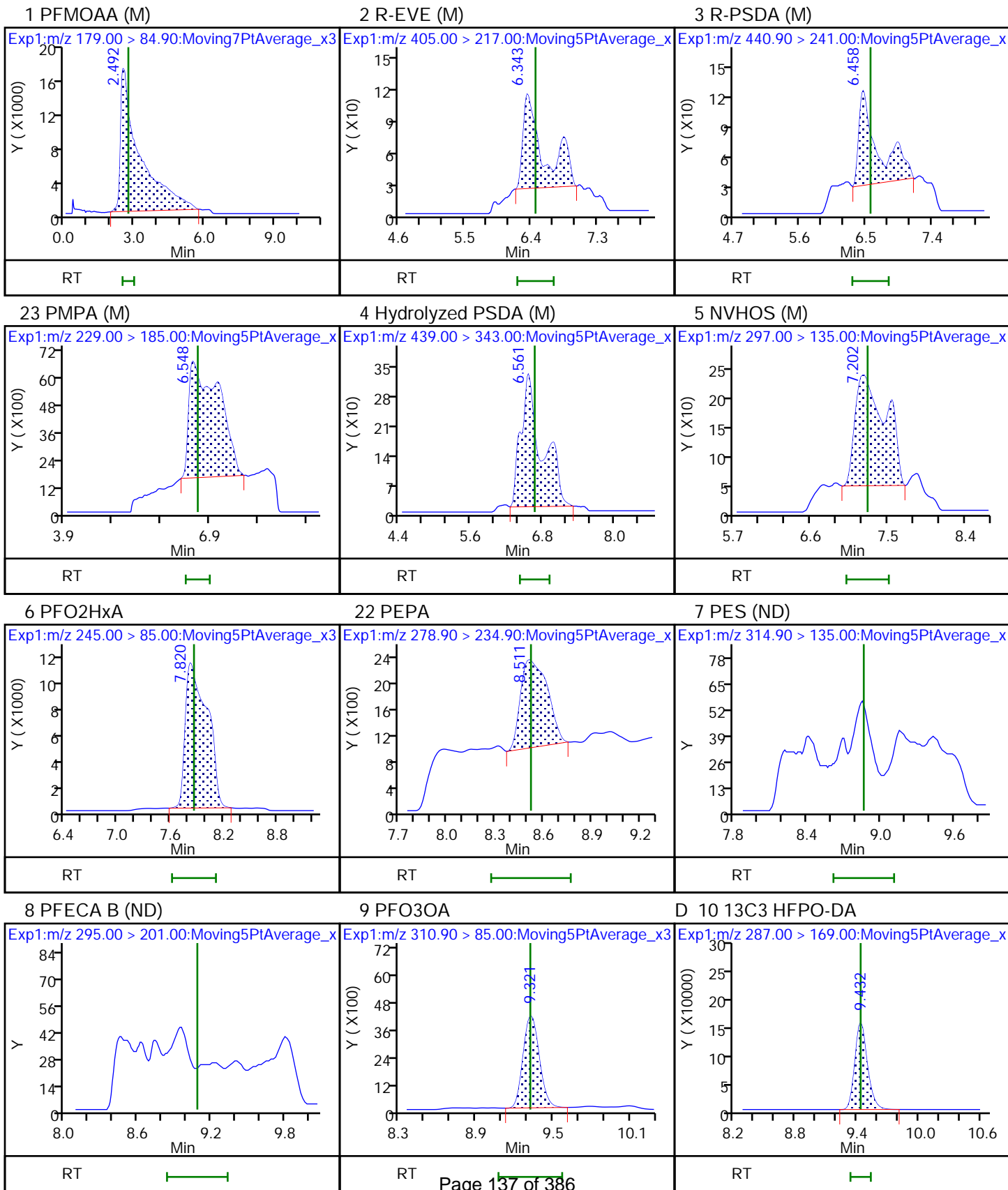
Processing Flags

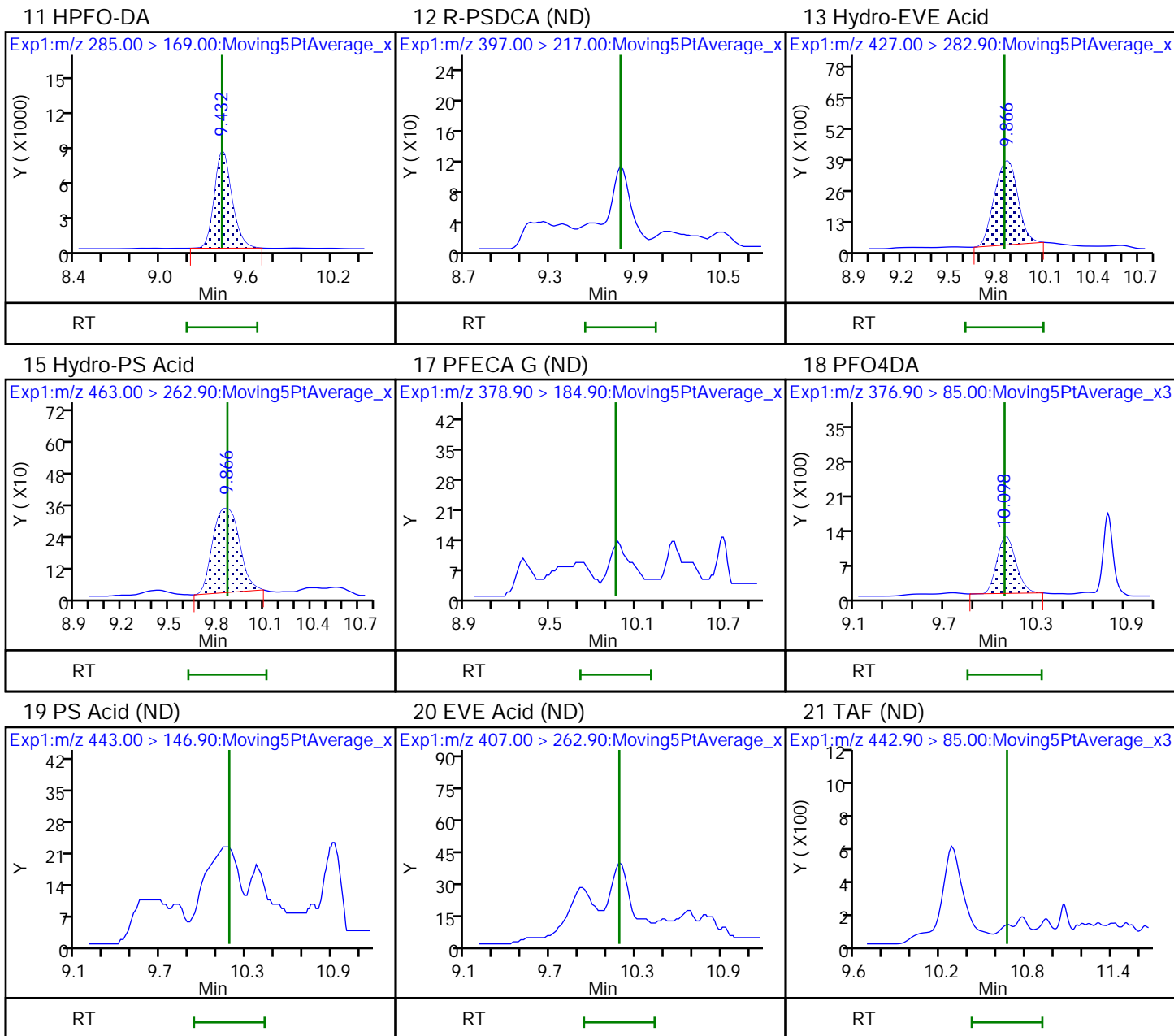
Review Flags

M - Manually Integrated

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_019.d
Injection Date: 24-Feb-2021 04:44:07 Instrument ID: A10
Lims ID: 320-70306-A-3-A Lab Sample ID: 320-70306-3
Client ID: SEEP-C-RAIN-EFFLUENT-24-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 19 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

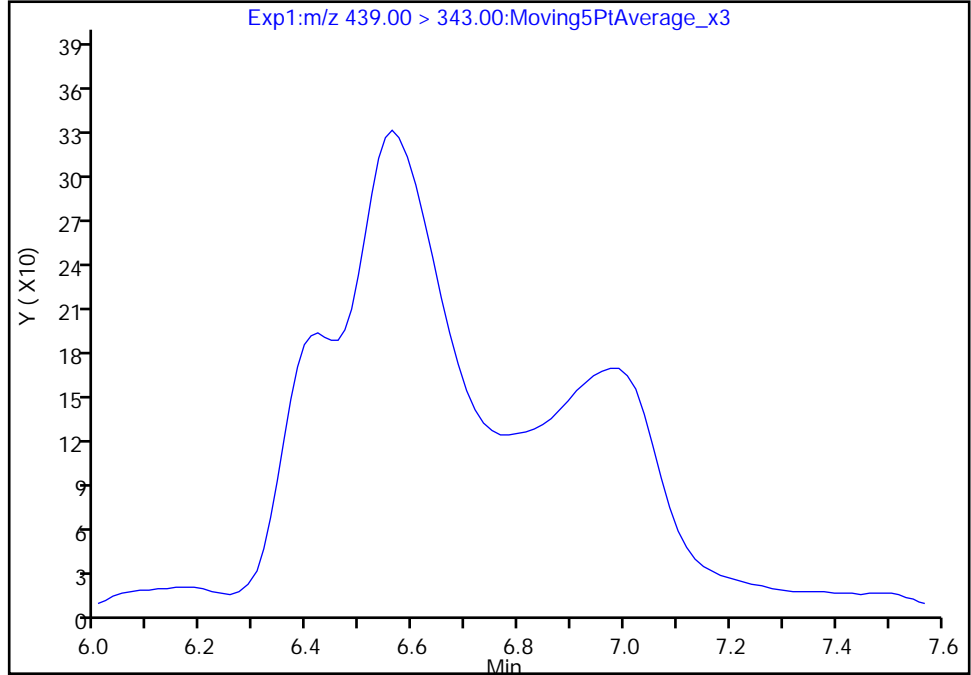
Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_019.d
Injection Date: 24-Feb-2021 04:44:07 Instrument ID: A10
Lims ID: 320-70306-A-3-A Lab Sample ID: 320-70306-3
Client ID: SEEP-C-RAIN-EFFLUENT-24-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 19 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

4 Hydrolyzed PSDA, CAS: 2416366-19-1

Signal: 1

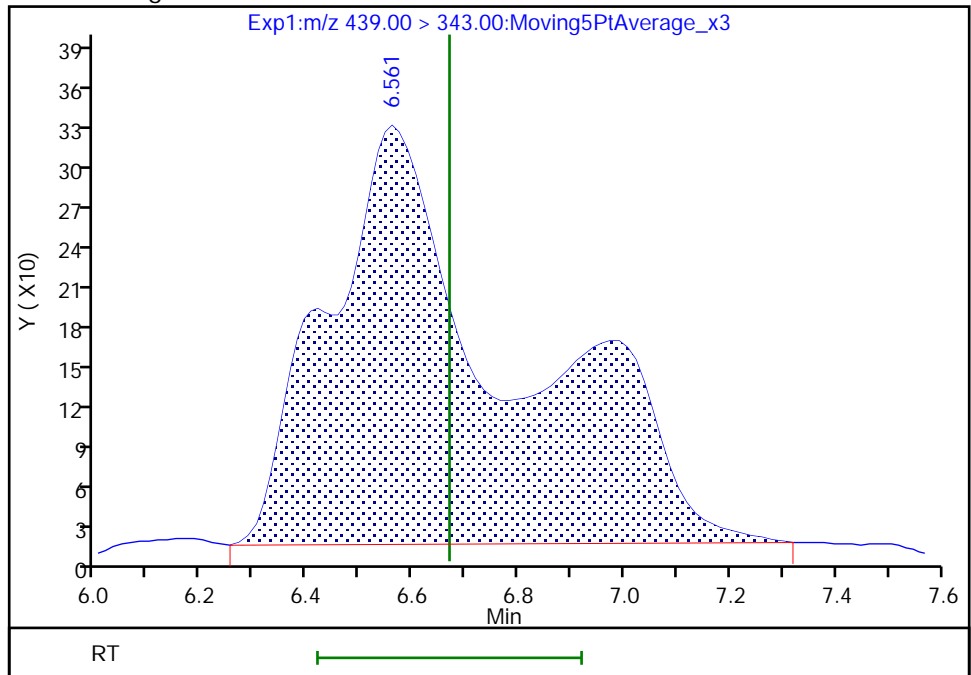
Not Detected
Expected RT: 6.67

Processing Integration Results



Manual Integration Results

RT: 6.56
Area: 7655
Amount: 0.000964
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 25-Feb-2021 07:42:39

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Sacramento

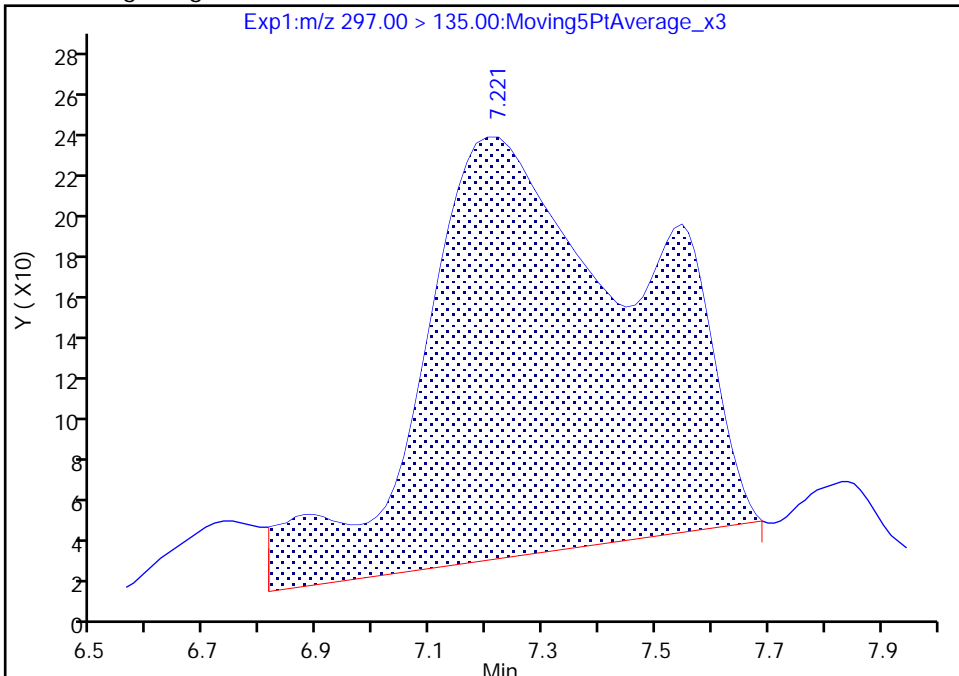
Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_019.d
Injection Date: 24-Feb-2021 04:44:07 Instrument ID: A10
Lims ID: 320-70306-A-3-A Lab Sample ID: 320-70306-3
Client ID: SEEP-C-RAIN-EFFLUENT-24-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 19 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

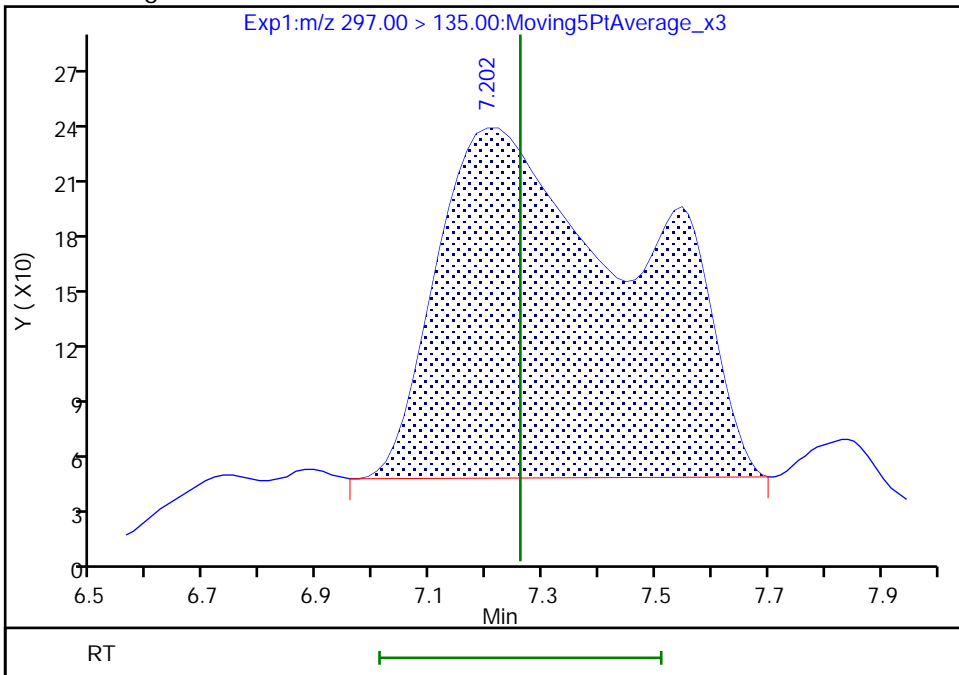
RT: 7.22
Area: 5443
Amount: 0.000710
Amount Units: ng/ml

Processing Integration Results



RT: 7.20
Area: 4613
Amount: 0.000602
Amount Units: ng/ml

Manual Integration Results



Reviewer: ruangyotsakuld, 25-Feb-2021 07:42:44
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

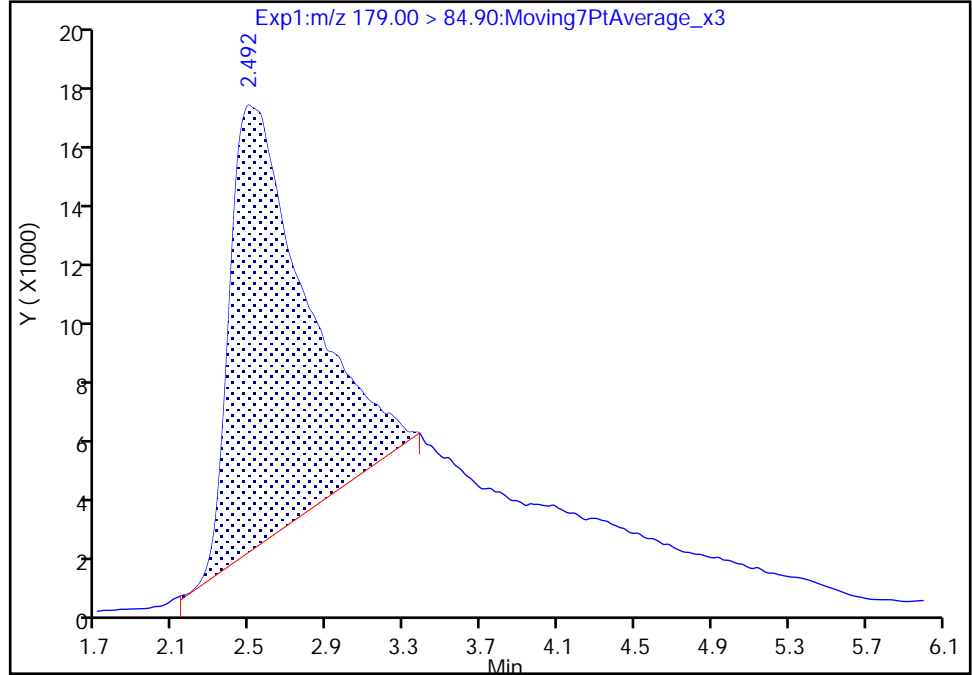
Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_019.d
Injection Date: 24-Feb-2021 04:44:07 Instrument ID: A10
Lims ID: 320-70306-A-3-A Lab Sample ID: 320-70306-3
Client ID: SEEP-C-RAIN-EFFLUENT-24-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 19 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

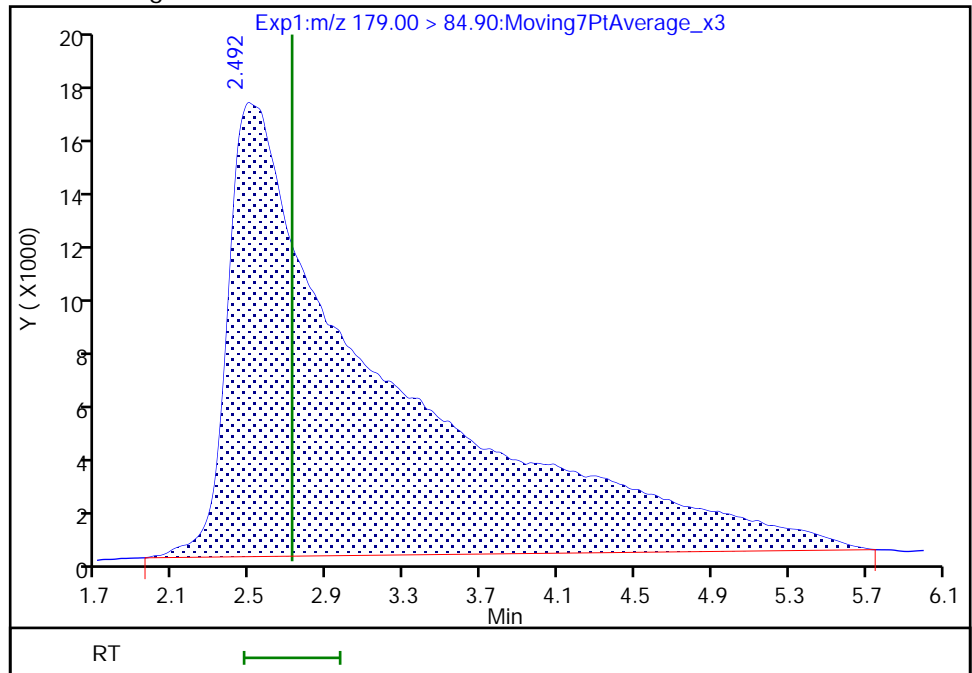
RT: 2.49
Area: 401676
Amount: 0.040119
Amount Units: ng/ml

Processing Integration Results



RT: 2.49
Area: 942096
Amount: 0.094095
Amount Units: ng/ml

Manual Integration Results



Reviewer: ruangyotsakuld, 25-Feb-2021 07:42:15

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Sacramento

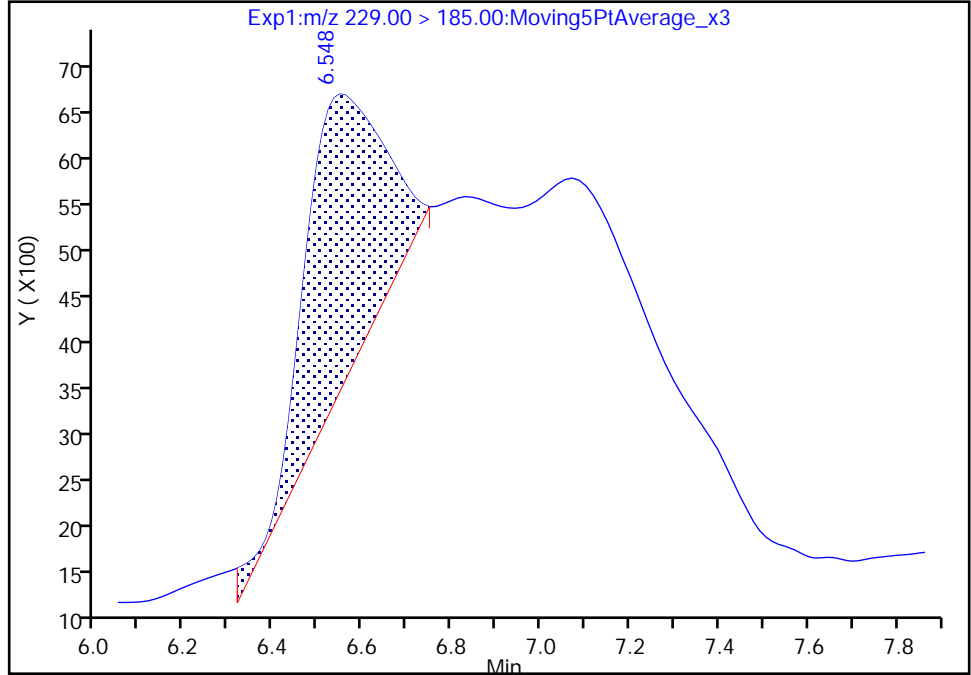
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Injection Date: 24-Feb-2021 04:44:07 Instrument ID: A10
Lims ID: 320-70306-A-3-A Lab Sample ID: 320-70306-3
Client ID: SEEP-C-RAIN-EFFLUENT-24-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 19 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

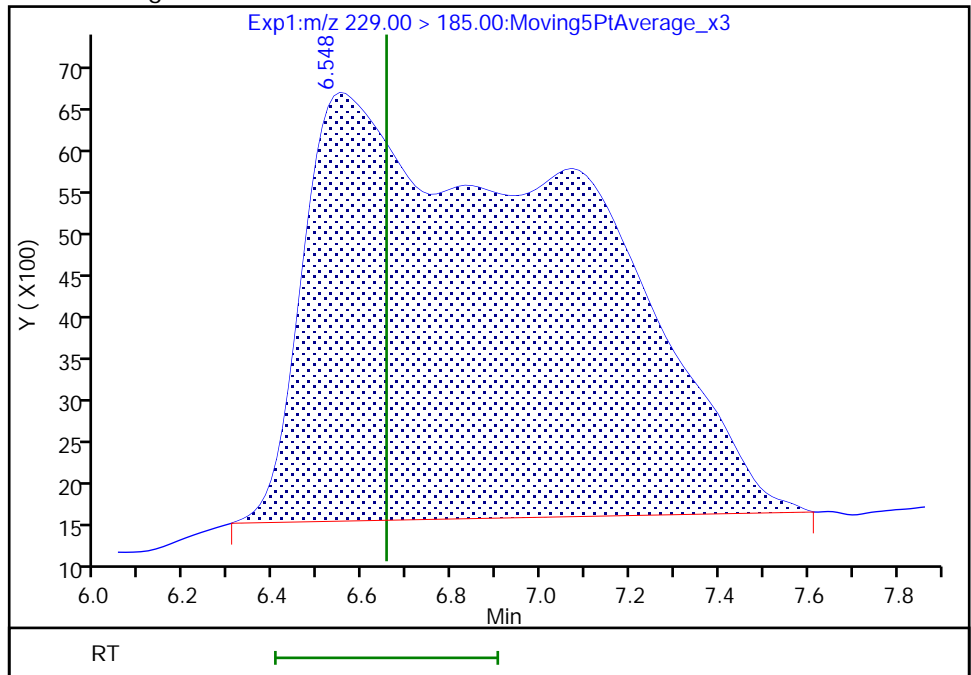
RT: 6.55
Area: 39064
Amount: 0.000893
Amount Units: ng/ml

Processing Integration Results



RT: 6.55
Area: 221023
Amount: 0.015512
Amount Units: ng/ml

Manual Integration Results



Reviewer: ruangyotsakuld, 25-Feb-2021 07:42:34

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Sacramento

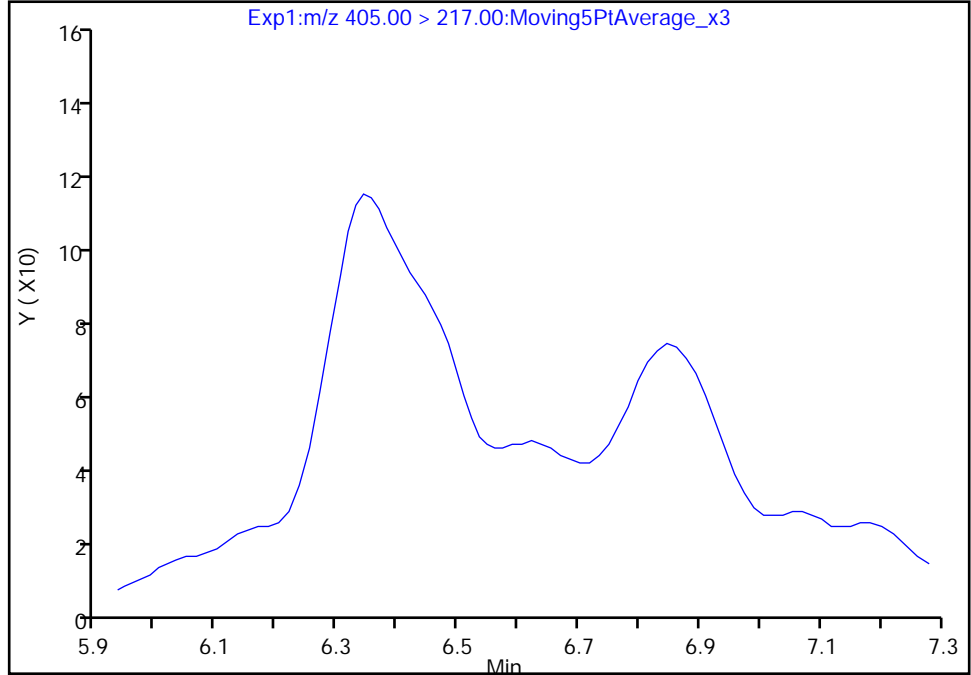
Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_019.d
Injection Date: 24-Feb-2021 04:44:07 Instrument ID: A10
Lims ID: 320-70306-A-3-A Lab Sample ID: 320-70306-3
Client ID: SEEP-C-RAIN-EFFLUENT-24-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 19 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

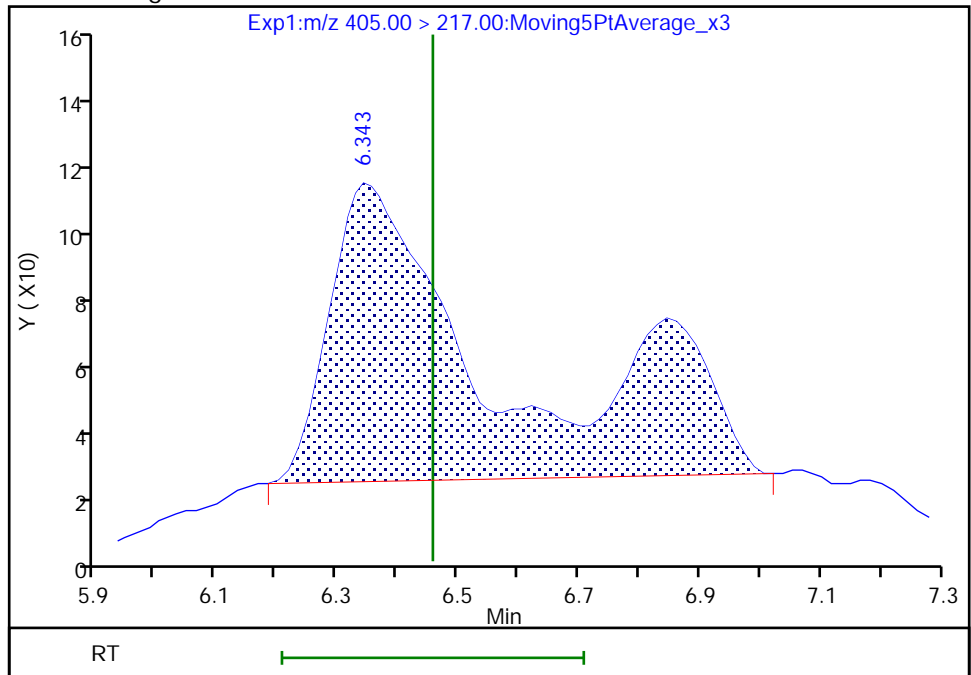
Not Detected
Expected RT: 6.46

Processing Integration Results



Manual Integration Results

RT: 6.34
Area: 1722
Amount: 0.000419
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 25-Feb-2021 07:42:24

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Sacramento

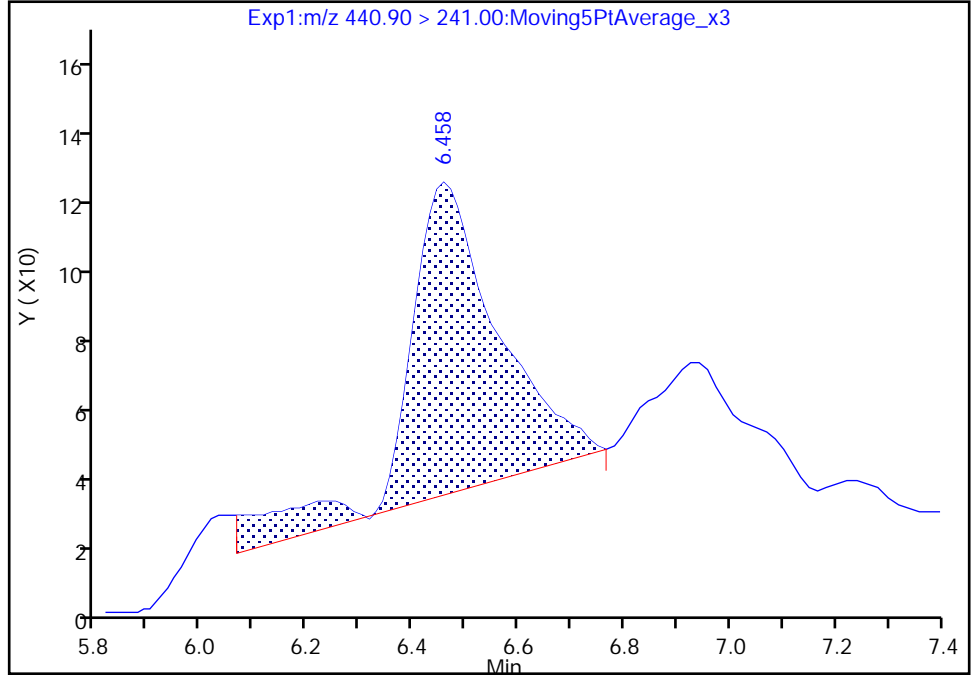
Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_019.d
Injection Date: 24-Feb-2021 04:44:07 Instrument ID: A10
Lims ID: 320-70306-A-3-A Lab Sample ID: 320-70306-3
Client ID: SEEP-C-RAIN-EFFLUENT-24-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 19 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

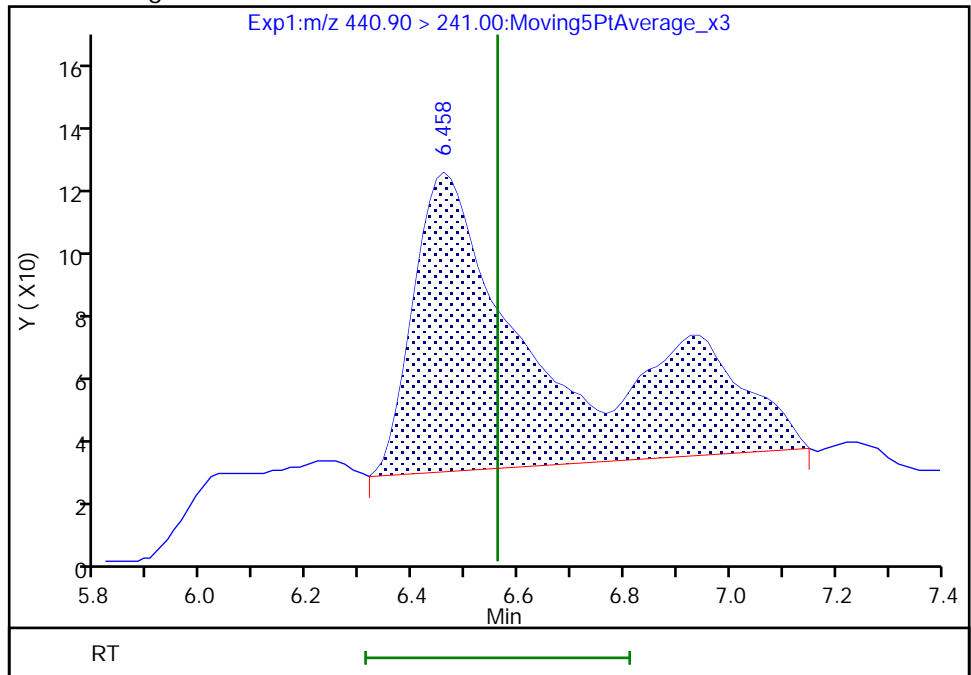
RT: 6.46
Area: 1089
Amount: 0.000401
Amount Units: ng/ml

Processing Integration Results



RT: 6.46
Area: 1726
Amount: 0.000635
Amount Units: ng/ml

Manual Integration Results



Reviewer: ruangyotsakuld, 25-Feb-2021 07:42:30

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>Eurofins TestAmerica, Sacramento</u>	Job No.: <u>320-70306-1</u>
SDG No.: _____	
Client Sample ID: <u>SEEP-C-RAIN-INFLUENT-24-0 21321</u>	Lab Sample ID: <u>320-70306-4</u>
Matrix: <u>Water</u>	Lab File ID: <u>2021.02.25_A10_TB3+_C_027.d</u>
Analysis Method: <u>Chemours (TB3+)</u>	Date Collected: <u>02/13/2021 10:00</u>
Extraction Method: <u>PFAS Prep</u>	Date Extracted: <u>02/22/2021 11:40</u>
Sample wt/vol: <u>2.50 (mL)</u>	Date Analyzed: <u>02/25/2021 19:00</u>
Con. Extract Vol.: <u>5.00 (mL)</u>	Dilution Factor: <u>50</u>
Injection Volume: <u>500 (uL)</u>	GC Column: <u>GeminiC18 3x100 ID: 3 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>464873</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL
69087-46-3	EVE Acid	<0.0087		0.0087
13252-13-6	HFPO-DA	13		0.041
773804-62-9	Hydro-EVE Acid	1.1		0.0072
2416366-19-1	Hydrolyzed PSDA	1.0		0.019
749836-20-2	Hydro-PS Acid	0.34		0.0031
1132933-86-8	NVHOS	0.67		0.0073
267239-61-2	PEPA	2.8		0.020
113507-82-7	PES	0.0041		0.0034
151772-58-6	PFECA B	<0.013		0.013
801212-59-9	PFECA G	<0.024		0.024
674-13-5	PFMOAA	69		0.040
39492-88-1	PFO2HxA	25		0.013
39492-89-2	PFO3OA	6.8		0.020
39492-90-5	PFO4DA	3.0		0.030
39492-91-6	PFO5DA	0.083		0.039
13140-29-9	PMPA	7.3		0.31
29311-67-9	PS Acid	<0.0098		0.0098
2416366-22-6	R-EVE	0.77		0.036
2416366-18-0	R-PSDA	0.81		0.035
2416366-21-5	R-PSDCA	0.014		0.0087

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	111		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\2021.02.25_A10_TB3+_C_027.d
 Lims ID: 320-70306-A-4-A
 Client ID: SEEP-C-RAIN-INFLUENT-24-021321
 Sample Type: Client
 Inject. Date: 25-Feb-2021 19:00:53 ALS Bottle#: 27 Worklist Smp#: 26
 Injection Vol: 500.0 ul Dil. Factor: 50.0000
 Sample Info: 320-70306-a-4-a 50X AR
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Method: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 26-Feb-2021 10:51:48 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1686

First Level Reviewer: dadunj Date: 26-Feb-2021 10:51:48
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.426	2.716	0.710		6912379	0.6904			1219	M
2 R-EVE										
405.00 > 217.00	6.682	6.458	0.224		31479	0.007652			1083	
3 R-PSDA										M
440.90 > 241.00	6.762	6.560	0.202		21892	0.008060			774	M
23 PMPA										
229.00 > 185.00	6.874	6.653	0.221		942555	0.0735			662	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.842	6.669	0.173		82644	0.0104			2061	
5 NVHOS										
297.00 > 135.00	7.395	7.260	0.134		51735	0.006748			1554	
6 PFO2HxA										
245.00 > 85.00	7.942	7.863	0.079		2320028	0.2470			31511	
22 PEPA										
278.90 > 234.90	8.558	8.521	0.037		156919	0.0281			362	
7 PES										
314.90 > 135.00	8.860	8.860	0.0		1934	0.00004118			87.5	
9 PFO3OA										
310.90 > 85.00	9.316	9.321	-0.005		406744	0.0679			8420	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.426	9.432	-0.006		30729	0.005555		2.2	1328	
11 HPFO-DA										
285.00 > 169.00	9.426	9.432	-0.006	1.000	859389	0.1284			36318	
12 R-PSDCA										
397.00 > 217.00	9.784	9.792	-0.008		8756	0.000139			380	
13 Hydro-EVE Acid										
427.00 > 282.90	9.841	9.849	-0.008		880852	0.0112			11951	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
15 Hydro-PS Acid	463.00 > 262.90	9.841	9.868	-0.027	86881	0.003419			2518	
18 PFO4DA	376.90 > 85.00	10.094	10.100	-0.006	152781	0.0296			2915	
21 TAF	442.90 > 85.00	10.651	10.668	-0.017	3123	0.000833			6.7	

QC Flag Legend

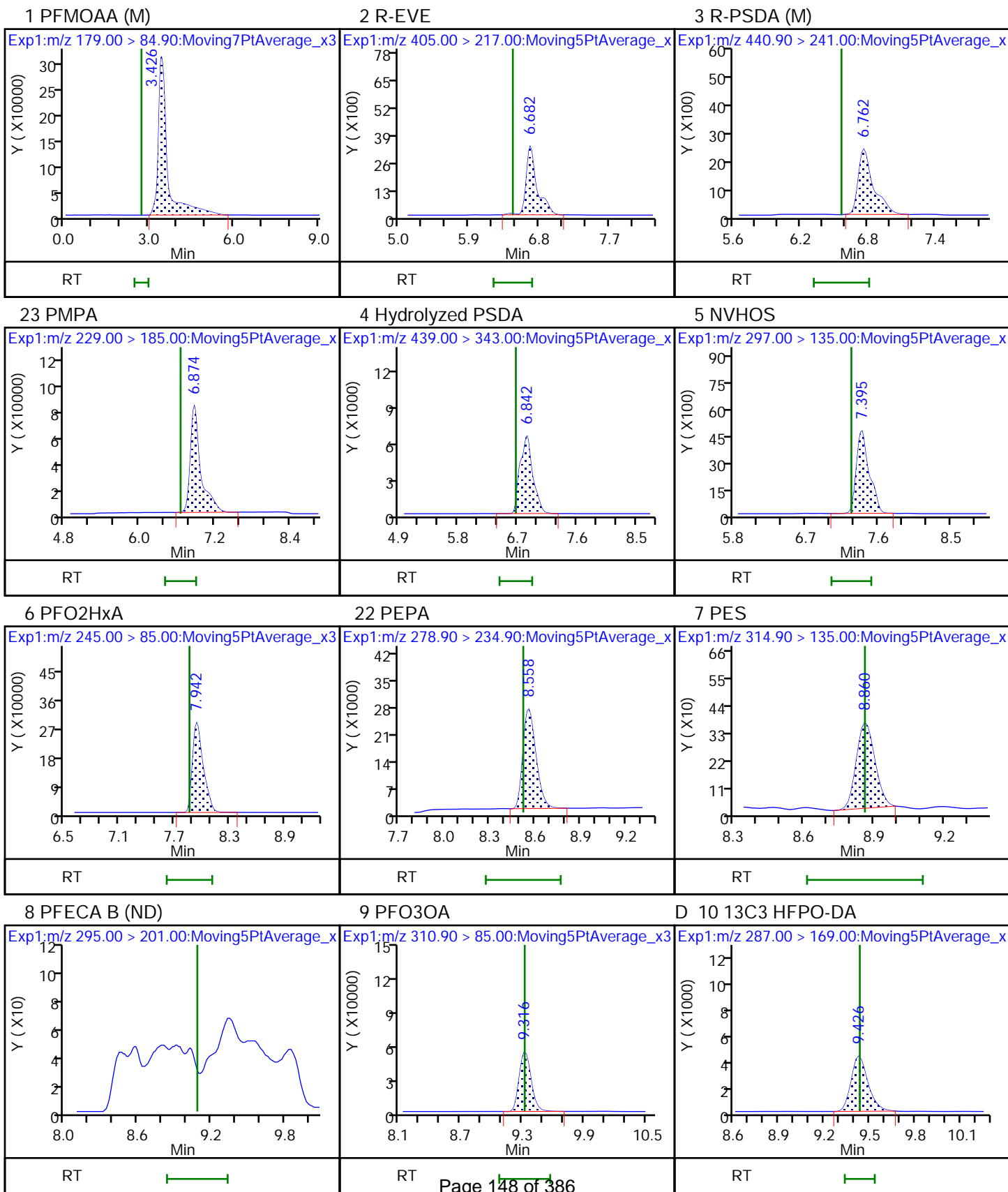
Processing Flags

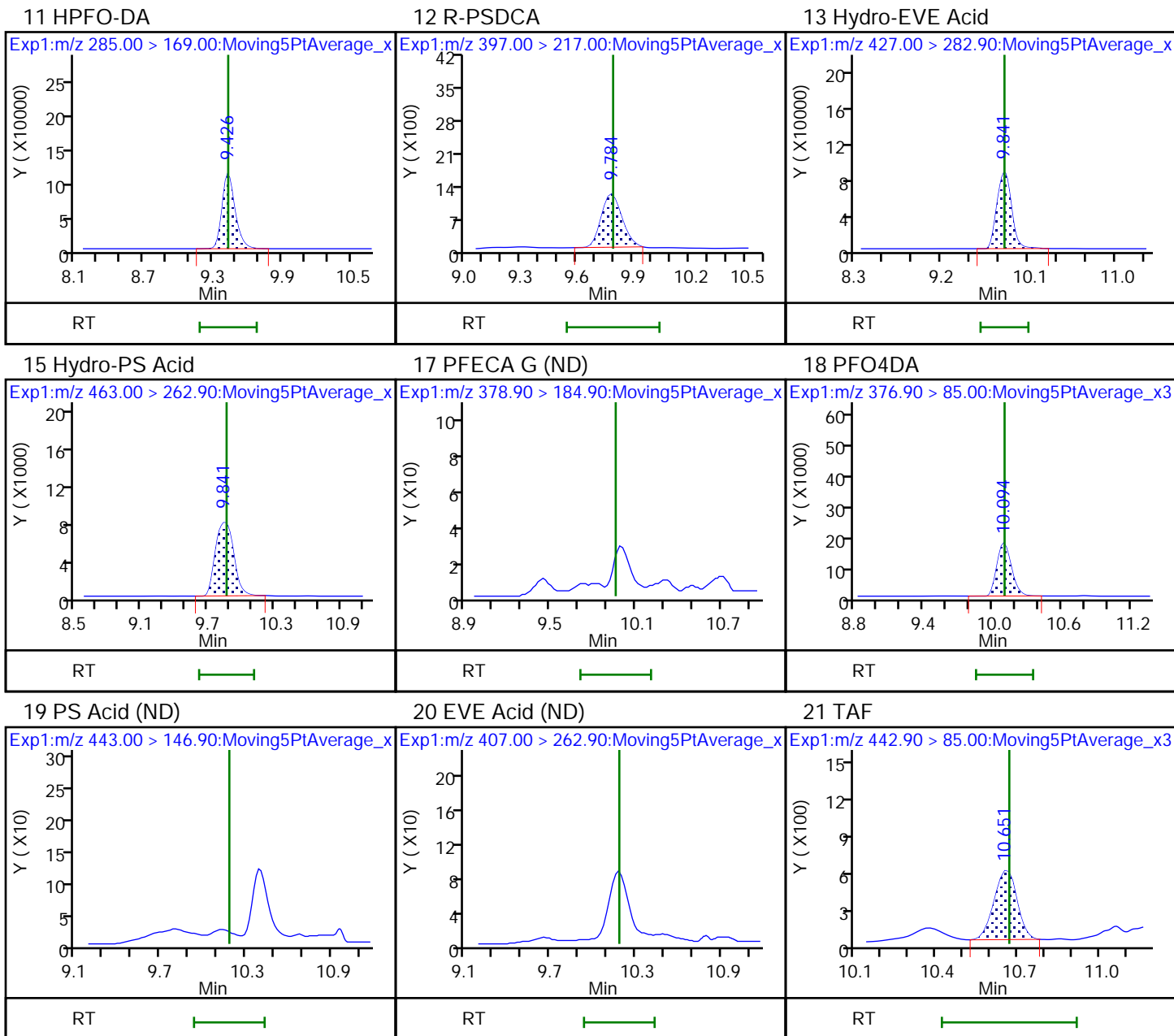
Review Flags

M - Manually Integrated

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\2021.02.25_A10_TB3+_C_027.d
Injection Date: 25-Feb-2021 19:00:53 Instrument ID: A10
Lims ID: 320-70306-A-4-A Lab Sample ID: 320-70306-4
Client ID: SEEP-C-RAIN-INFLUENT-24-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 27 Worklist Smp#: 26
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

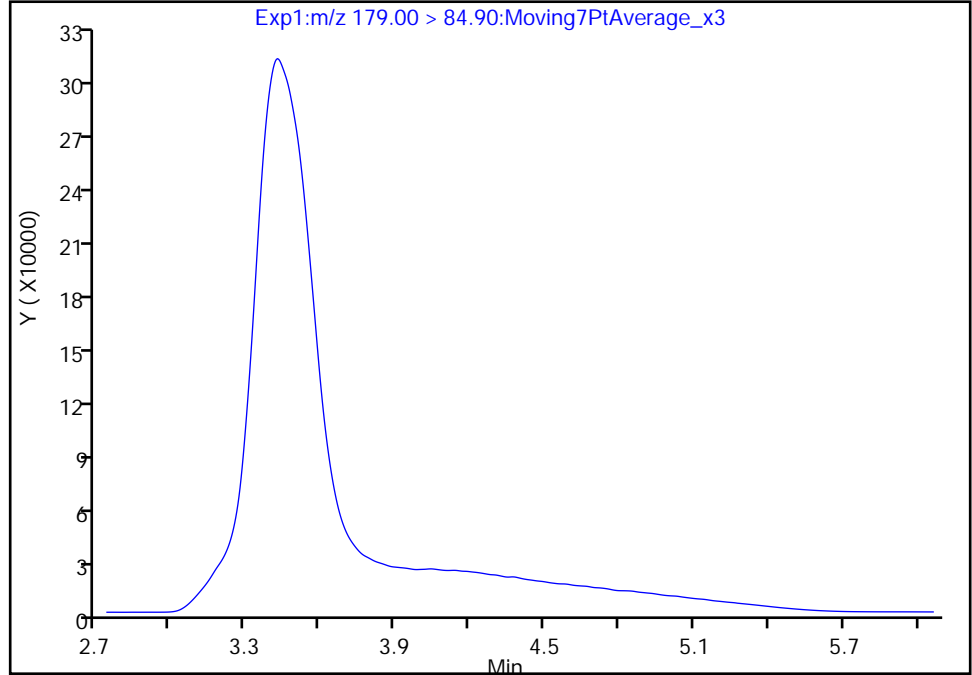
Data File: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\2021.02.25_A10_TB3+_C_027.d
Injection Date: 25-Feb-2021 19:00:53 Instrument ID: A10
Lims ID: 320-70306-A-4-A Lab Sample ID: 320-70306-4
Client ID: SEEP-C-RAIN-INFLUENT-24-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 27 Worklist Smp#: 26
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

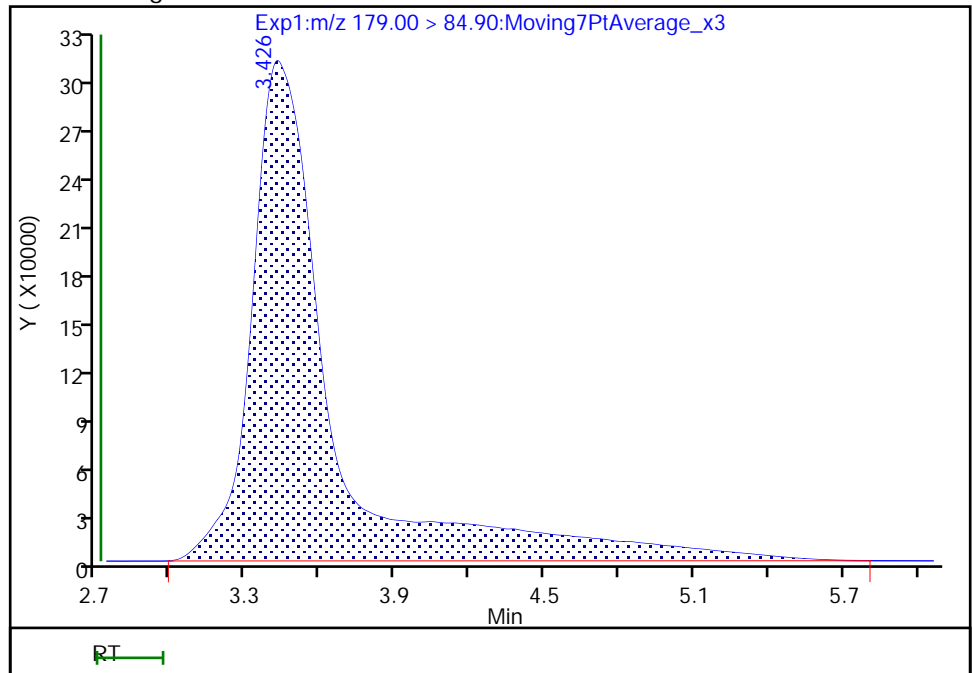
Not Detected
Expected RT: 2.72

Processing Integration Results



RT: 3.43
Area: 6912379
Amount: 0.690398
Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 10:35:21
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

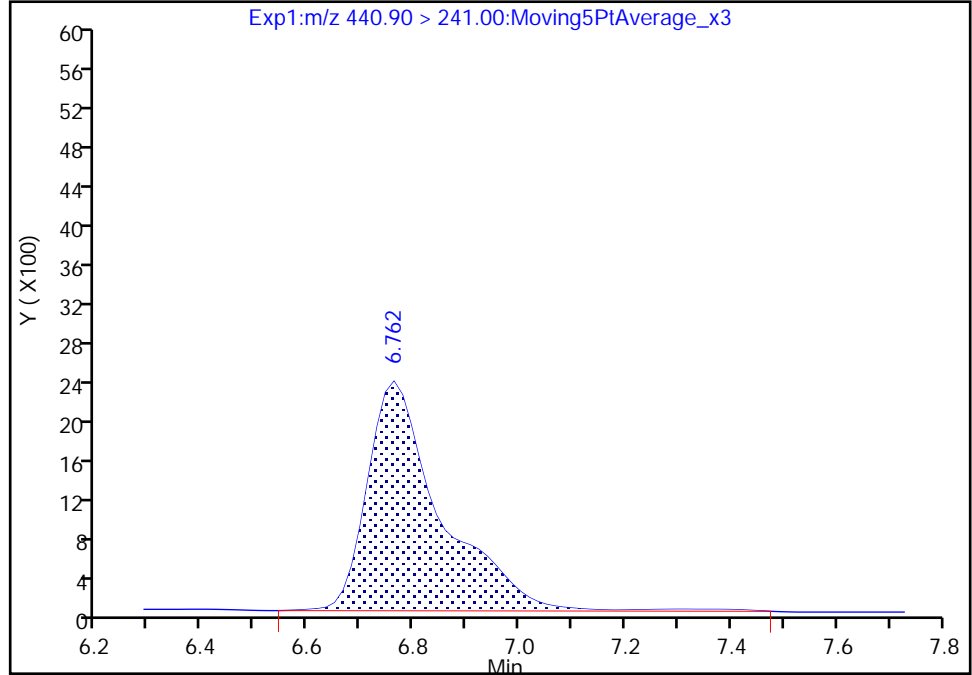
Data File: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\2021.02.25_A10_TB3+_C_027.d
Injection Date: 25-Feb-2021 19:00:53 Instrument ID: A10
Lims ID: 320-70306-A-4-A Lab Sample ID: 320-70306-4
Client ID: SEEP-C-RAIN-INFLUENT-24-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 27 Worklist Smp#: 26
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

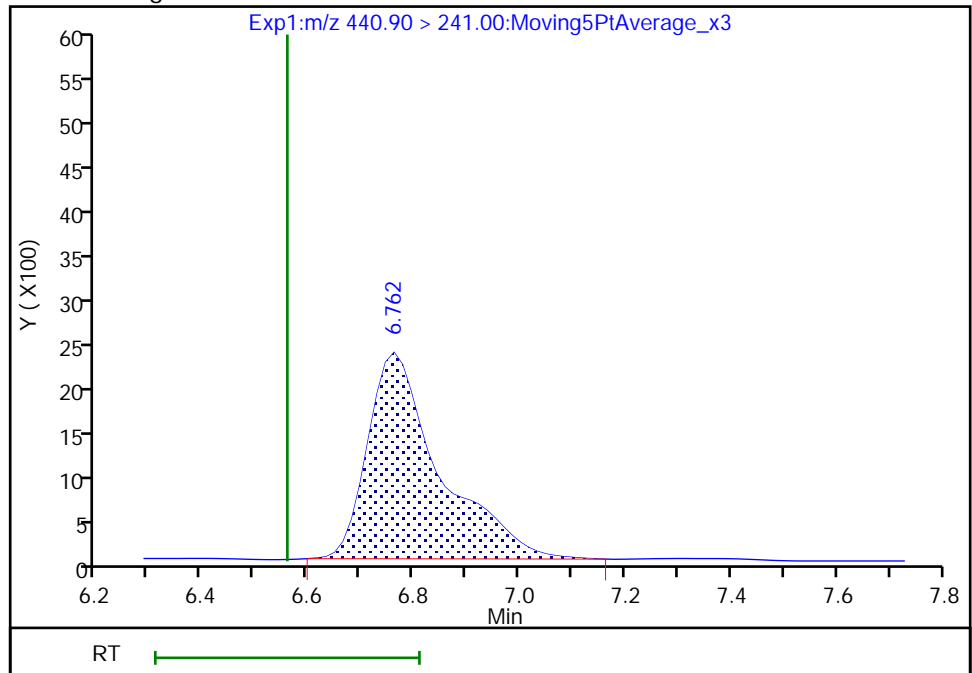
RT: 6.76
Area: 22543
Amount: 0.008300
Amount Units: ng/ml

Processing Integration Results



RT: 6.76
Area: 21892
Amount: 0.008060
Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 10:35:28
Audit Action: Manually Integrated

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1
 SDG No.: _____
 Client Sample ID: SEEP-C-EQBLK-ISCO-021321 Lab Sample ID: 320-70306-5
 Matrix: Water Lab File ID: 2021.02.23_A10_TB3+_B_021.d
 Analysis Method: Chemours (TB3+) Date Collected: 02/13/2021 16:05
 Extraction Method: PFAS Prep Date Extracted: 02/22/2021 11:40
 Sample wt/vol: 2.50 (mL) Date Analyzed: 02/24/2021 05:19
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 464205 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	<0.0020		0.0020	
13252-13-6	HFPO-DA	<0.0020		0.0020	
773804-62-9	Hydro-EVE Acid	<0.0020		0.0020	
2416366-19-1	Hydrolyzed PSDA	<0.0020		0.0020	
749836-20-2	Hydro-PS Acid	<0.0020		0.0020	
1132933-86-8	NVHOS	<0.0020		0.0020	
267239-61-2	PEPA	<0.020		0.020	
113507-82-7	PES	<0.0020		0.0020	
151772-58-6	PFECA B	<0.0020		0.0020	
801212-59-9	PFECA G	<0.0020		0.0020	
674-13-5	PFMOAA	<0.0020		0.0020	
39492-88-1	PFO2HxA	<0.0020		0.0020	
39492-89-2	PFO3OA	<0.0020		0.0020	
39492-90-5	PFO4DA	<0.0020		0.0020	
39492-91-6	PFO5DA	<0.0020		0.0020	
13140-29-9	PMPA	<0.010		0.010	
29311-67-9	PS Acid	<0.0020		0.0020	
2416366-22-6	R-EVE	<0.0020		0.0020	
2416366-18-0	R-PSDA	<0.0020		0.0020	
2416366-21-5	R-PSDCA	<0.0020		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	97		25-150

Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_021.d
 Lims ID: 320-70306-A-5-A
 Client ID: SEEP-C-EQBLK-ISCO-021321
 Sample Type: Client
 Inject. Date: 24-Feb-2021 05:19:04 ALS Bottle#: 21 Worklist Smp#: 8
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: 320-70306-a-5-a
 Misc. Info.: Plate: 1 Rack: 2
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Method: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Feb-2021 07:43:59 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1619

First Level Reviewer: ruangyotsakuld Date: 25-Feb-2021 07:44:12
 Ratio Calibration: Initial Calibration Level: 6

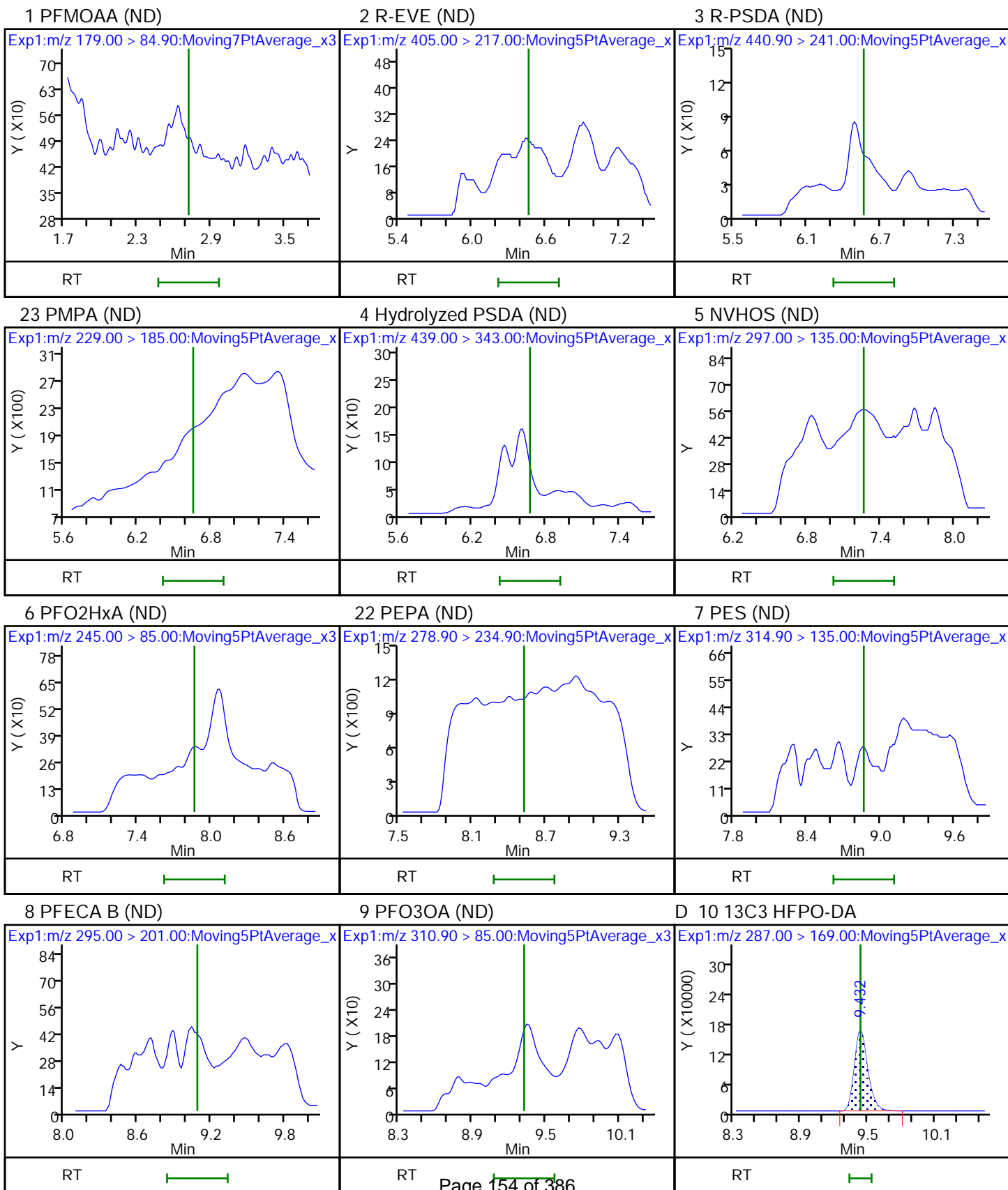
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
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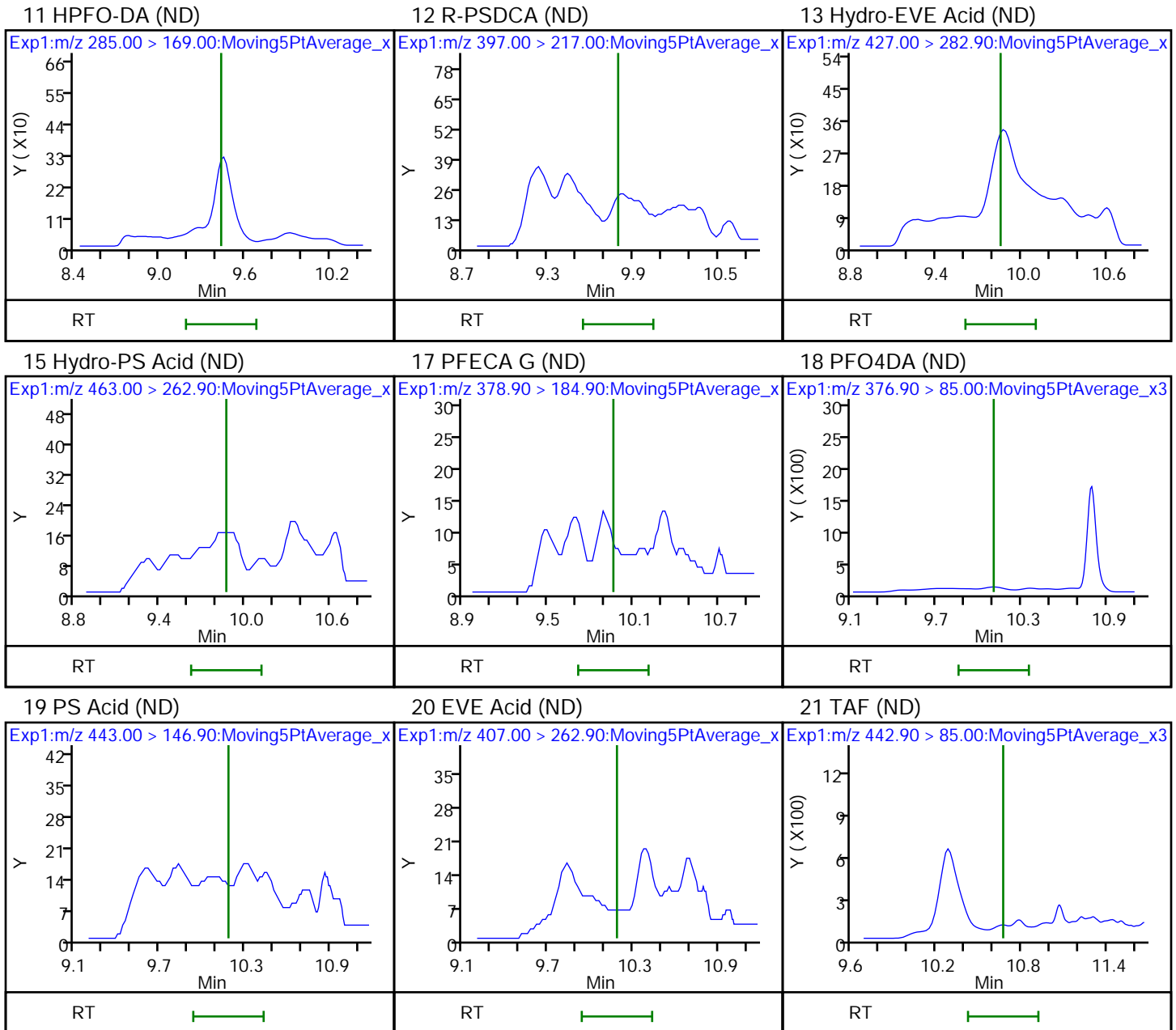
D 10 13C3 HFPO-DA
 287.00 > 169.00 9.432 9.432 0.0 1341828 0.2425 97.0 53844

QC Flag Legend
 Processing Flags

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_021.d
Injection Date: 24-Feb-2021 05:19:04 Instrument ID: A10
Lims ID: 320-70306-A-5-A Lab Sample ID: 320-70306-5
Client ID: SEEP-C-EQBLK-ISCO-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 21 Worklist Smp#: 8
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL





FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1
 SDG No.: _____
 Client Sample ID: SEEP-C-FBLK-021321 Lab Sample ID: 320-70306-6
 Matrix: Water Lab File ID: 2021.02.23_A10_TB3+_B_022.d
 Analysis Method: Chemours (TB3+) Date Collected: 02/13/2021 16:10
 Extraction Method: PFAS Prep Date Extracted: 02/22/2021 11:40
 Sample wt/vol: 2.50 (mL) Date Analyzed: 02/24/2021 05:36
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 464205 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	<0.0020		0.0020	
13252-13-6	HFPO-DA	<0.0020		0.0020	
773804-62-9	Hydro-EVE Acid	<0.0020		0.0020	
2416366-19-1	Hydrolyzed PSDA	<0.0020		0.0020	
749836-20-2	Hydro-PS Acid	<0.0020		0.0020	
1132933-86-8	NVHOS	<0.0020		0.0020	
267239-61-2	PEPA	<0.020		0.020	
113507-82-7	PES	<0.0020		0.0020	
151772-58-6	PFECA B	<0.0020		0.0020	
801212-59-9	PFECA G	<0.0020		0.0020	
674-13-5	PFMOAA	<0.0020		0.0020	
39492-88-1	PFO2HxA	<0.0020		0.0020	
39492-89-2	PFO3OA	<0.0020		0.0020	
39492-90-5	PFO4DA	<0.0020		0.0020	
39492-91-6	PFO5DA	<0.0020		0.0020	
13140-29-9	PMPA	<0.010		0.010	
29311-67-9	PS Acid	<0.0020		0.0020	
2416366-22-6	R-EVE	<0.0020		0.0020	
2416366-18-0	R-PSDA	<0.0020		0.0020	
2416366-21-5	R-PSDCA	<0.0020		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	97		25-150

Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_022.d
 Lims ID: 320-70306-A-6-A
 Client ID: SEEP-C-FBLK-012921
 Sample Type: Client
 Inject. Date: 24-Feb-2021 05:36:31 ALS Bottle#: 22 Worklist Smp#: 9
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: 320-70306-a-6-a
 Misc. Info.: Plate: 1 Rack: 2
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Method: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Feb-2021 07:43:59 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1619

First Level Reviewer: ruangyotsakuld Date: 25-Feb-2021 07:44:25
 Ratio Calibration: Initial Calibration Level: 6

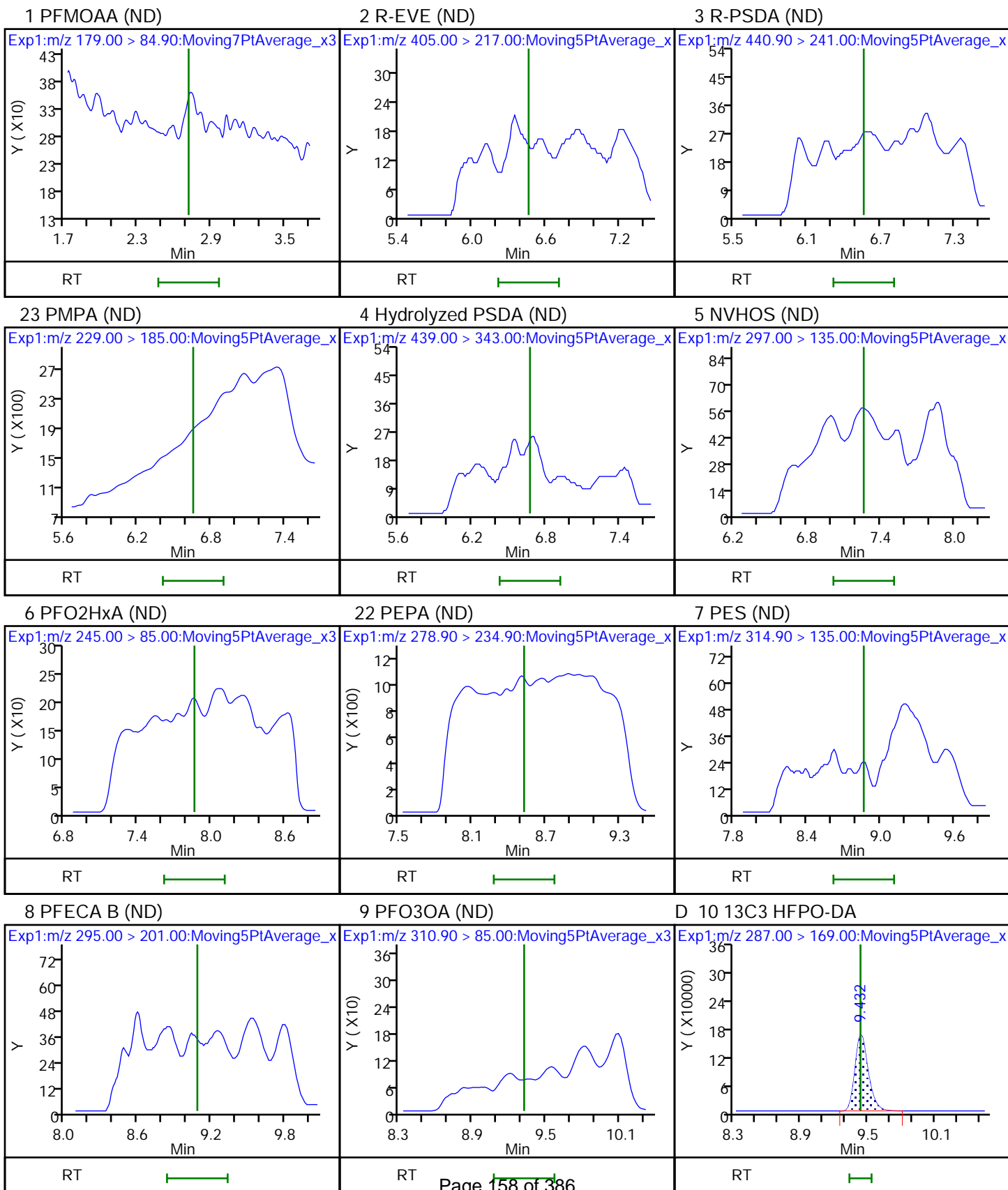
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
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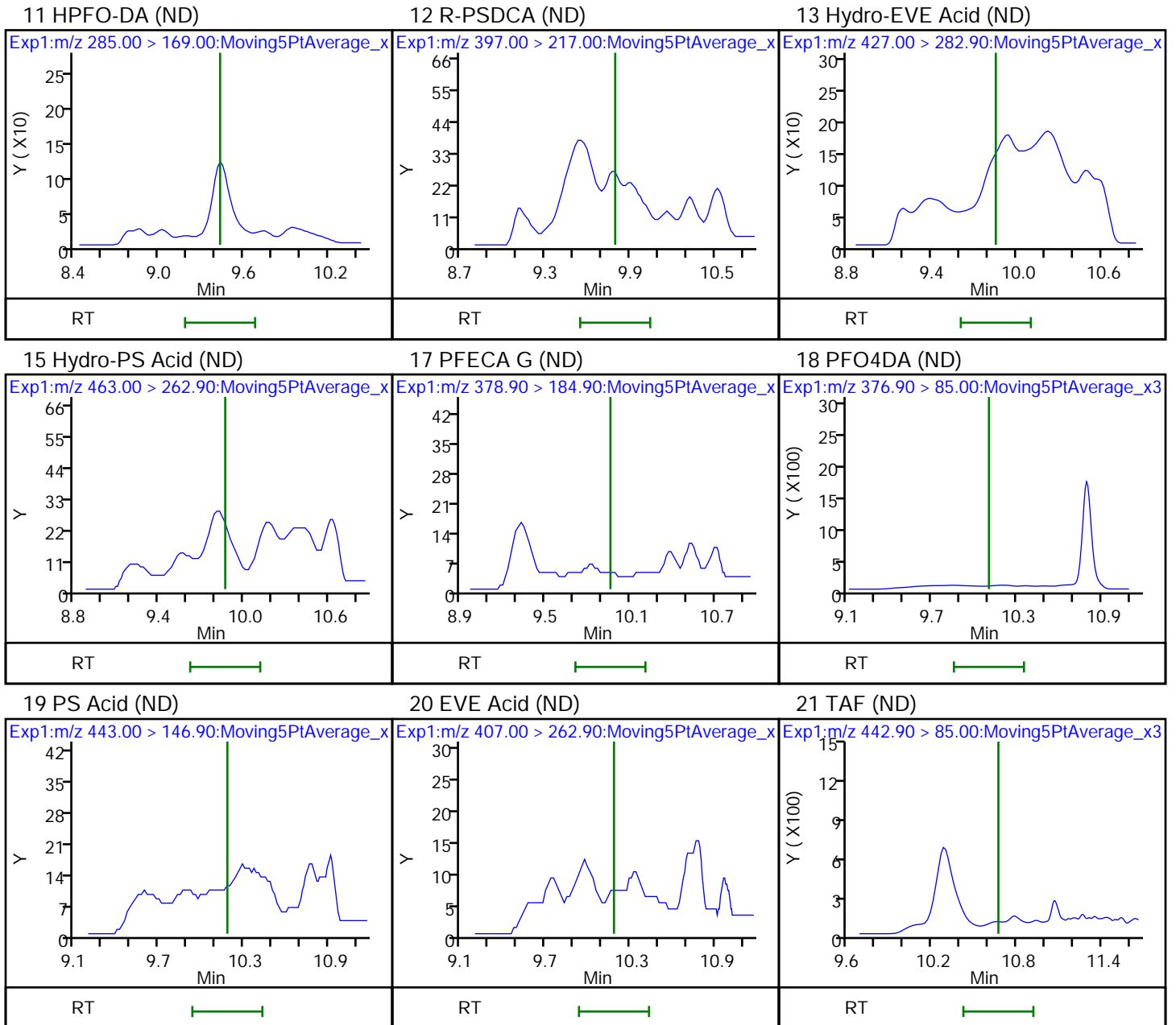
D 10 13C3 HFPO-DA
 287.00 > 169.00 9.432 9.432 0.0 1337265 0.2417 96.7 53972

QC Flag Legend
 Processing Flags

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_022.d
Injection Date: 24-Feb-2021 05:36:31 Instrument ID: A10
Lims ID: 320-70306-A-6-A Lab Sample ID: 320-70306-6
Client ID: SEEP-C-FBLK-012921
Operator ID: Sac_inst_A10 ALS Bottle#: 22 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL





FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1
 SDG No.: _____
 Client Sample ID: SEEP-C-RAIN-EQBLK-ISCO-02 Lab Sample ID: 320-70306-7
 1321
 Matrix: Water Lab File ID: 2021.02.23_A10_TB3+_B_023.d
 Analysis Method: Chemours (TB3+) Date Collected: 02/13/2021 16:00
 Extraction Method: PFAS Prep Date Extracted: 02/22/2021 11:40
 Sample wt/vol: 2.50 (mL) Date Analyzed: 02/24/2021 05:53
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 464205 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	<0.0020		0.0020	
13252-13-6	HFPO-DA	<0.0020		0.0020	
773804-62-9	Hydro-EVE Acid	<0.0020		0.0020	
2416366-19-1	Hydrolyzed PSDA	<0.0020		0.0020	
749836-20-2	Hydro-PS Acid	<0.0020		0.0020	
1132933-86-8	NVHOS	<0.0020		0.0020	
267239-61-2	PEPA	<0.020		0.020	
113507-82-7	PES	<0.0020		0.0020	
151772-58-6	PFECA B	<0.0020		0.0020	
801212-59-9	PFECA G	<0.0020		0.0020	
674-13-5	PFMOAA	<0.0020		0.0020	
39492-88-1	PFO2HxA	<0.0020		0.0020	
39492-89-2	PFO3OA	<0.0020		0.0020	
39492-90-5	PFO4DA	<0.0020		0.0020	
39492-91-6	PFO5DA	<0.0020		0.0020	
13140-29-9	PMPA	<0.010		0.010	
29311-67-9	PS Acid	<0.0020		0.0020	
2416366-22-6	R-EVE	<0.0020		0.0020	
2416366-18-0	R-PSDA	<0.0020		0.0020	
2416366-21-5	R-PSDCA	<0.0020		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	87		25-150

Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_023.d
 Lims ID: 320-70306-A-7-A
 Client ID: SEEP-C-RAIN-EQBLK-ISCO-021321
 Sample Type: Client
 Inject. Date: 24-Feb-2021 05:53:58 ALS Bottle#: 23 Worklist Smp#: 10
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: 320-70306-a-7-a
 Misc. Info.: Plate: 1 Rack: 2
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Method: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Feb-2021 07:44:51 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1619

First Level Reviewer: ruangyotsakuld Date: 25-Feb-2021 07:44:51
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
5 NVHOS										M
297.00 > 135.00	7.102	7.260	-0.158		711	0.00009274			11.0	M
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.432	9.432	0.0		1204424	0.2177		87.1	50097	

QC Flag Legend

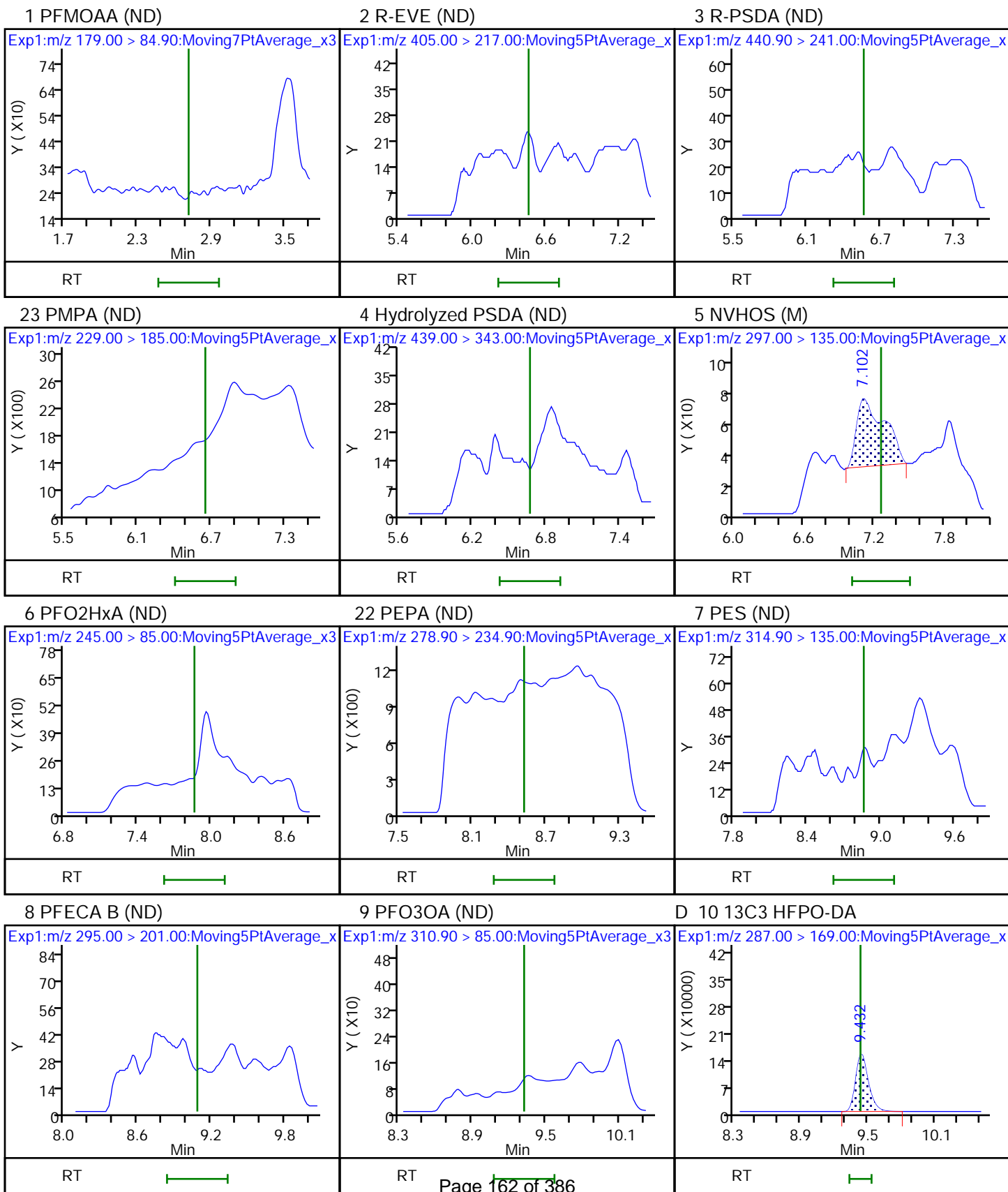
Processing Flags

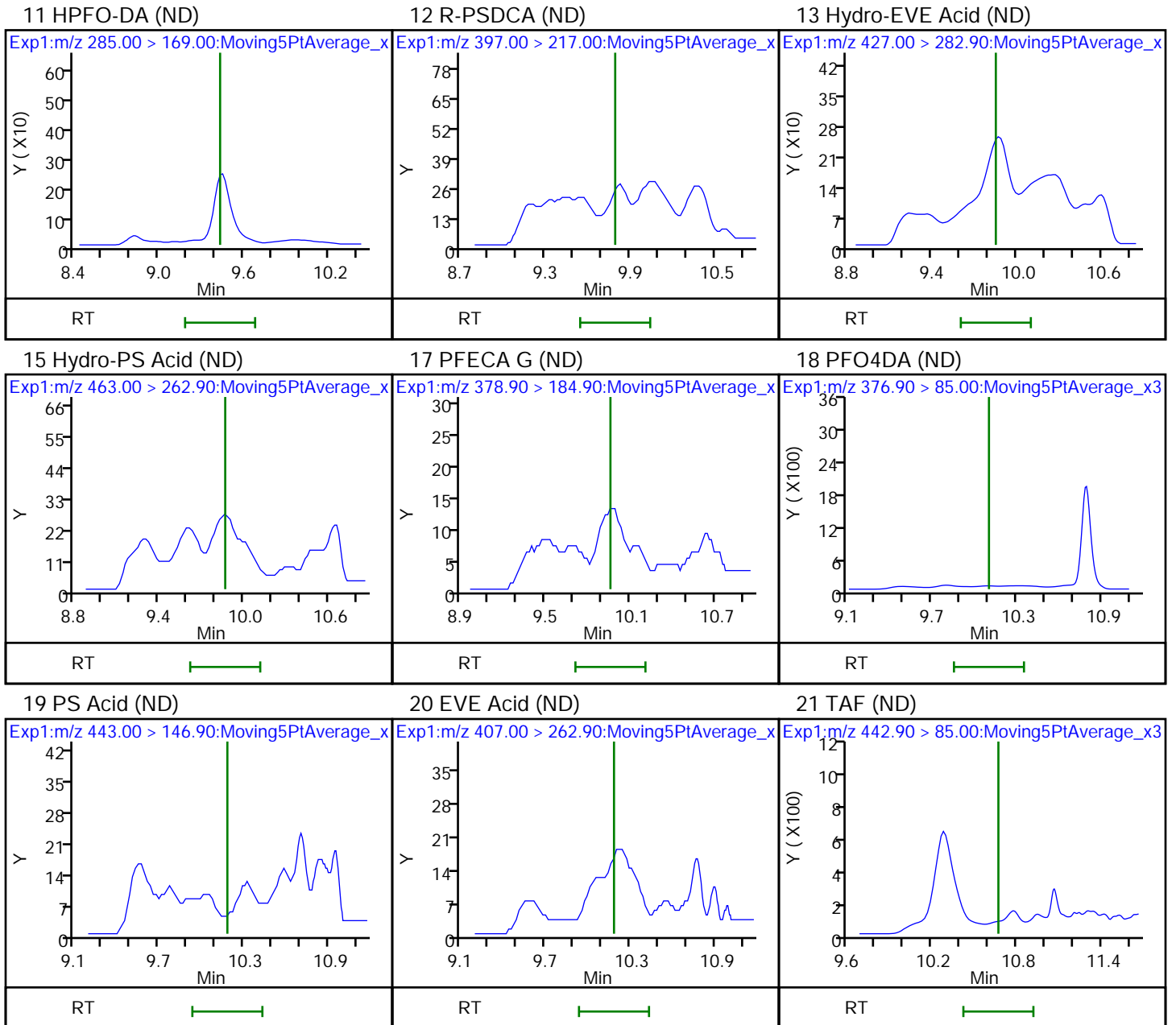
Review Flags

M - Manually Integrated

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_023.d
Injection Date: 24-Feb-2021 05:53:58 Instrument ID: A10
Lims ID: 320-70306-A-7-A Lab Sample ID: 320-70306-7
Client ID: SEEP-C-RAIN-EQBLK-ISCO-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 23 Worklist Smp#: 10
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

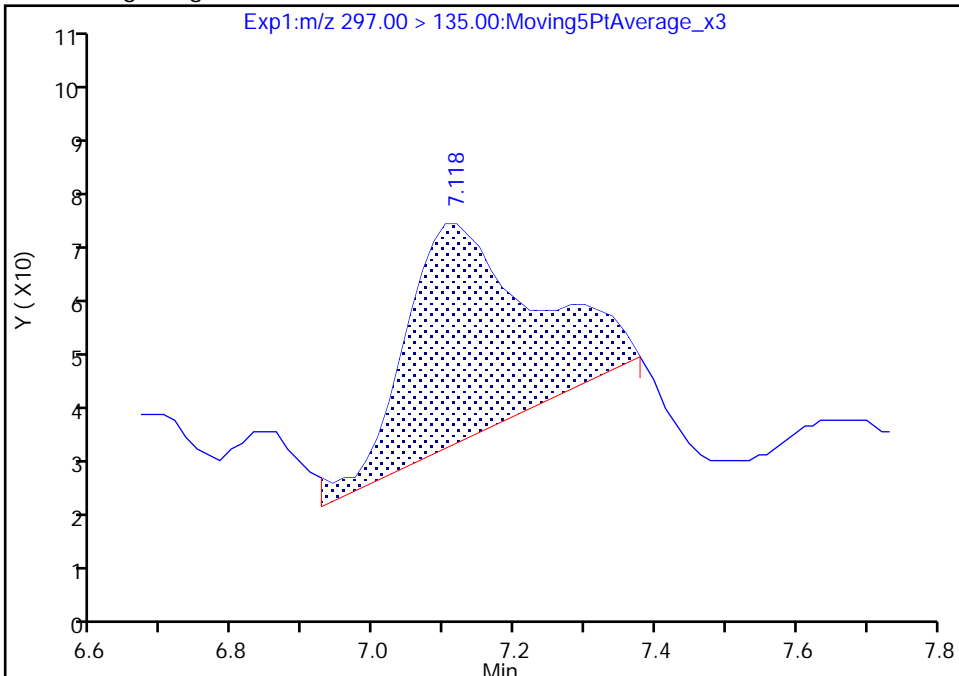
Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_023.d
Injection Date: 24-Feb-2021 05:53:58 Instrument ID: A10
Lims ID: 320-70306-A-7-A Lab Sample ID: 320-70306-7
Client ID: SEEP-C-RAIN-EQBLK-ISCO-021321
Operator ID: Sac_inst_A10 ALS Bottle#: 23 Worklist Smp#: 10
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

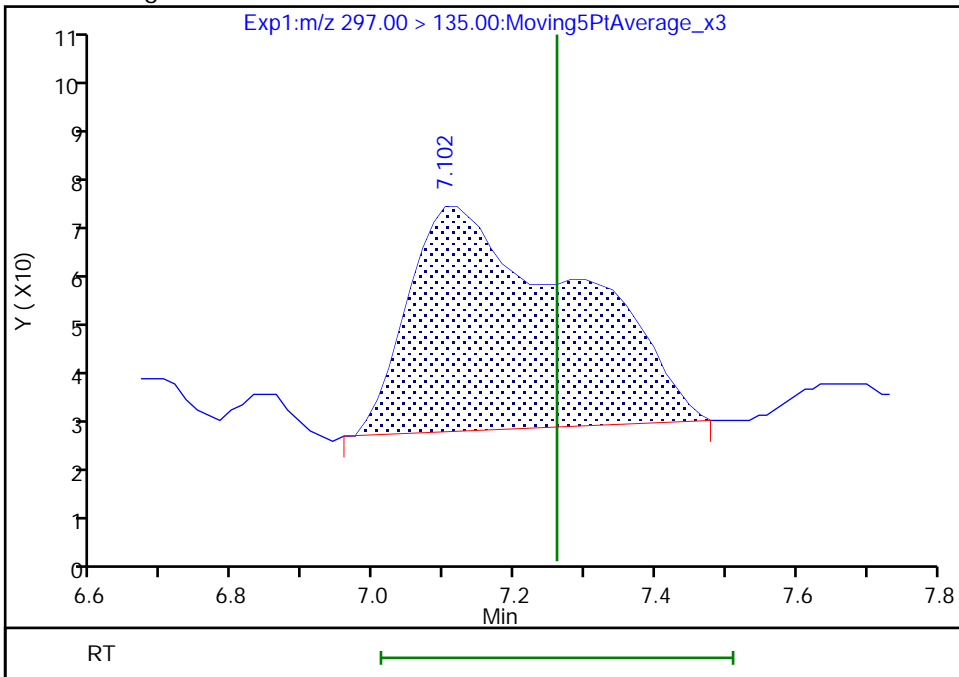
RT: 7.12
Area: 477
Amount: 0.000062
Amount Units: ng/ml

Processing Integration Results



RT: 7.10
Area: 711
Amount: 0.000093
Amount Units: ng/ml

Manual Integration Results



Reviewer: ruangyotsakuld, 25-Feb-2021 07:44:40
Audit Action: Manually Integrated

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1 Analy Batch No.: 463725

SDG No.: _____

Instrument ID: A10 GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/20/2021 10:46 Calibration End Date: 02/20/2021 14:15 Calibration ID: 54188

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-463725/2	2021.02.20_A10_TB3+_ICAL_002.d
Level 2	IC 320-463725/3	2021.02.20_A10_TB3+_ICAL_003.d
Level 3	IC 320-463725/4	2021.02.20_A10_TB3+_ICAL_004.d
Level 4	IC 320-463725/5	2021.02.20_A10_TB3+_ICAL_005.d
Level 5	IC 320-463725/6	2021.02.20_A10_TB3+_ICAL_006.d
Level 6	IC 320-463725/7	2021.02.20_A10_TB3+_ICAL_007.d
Level 7	IC 320-463725/9	2021.02.20_A10_TB3+_ICAL_009.d
Level 8	IC 320-463725/11	2021.02.20_A10_TB3+_ICAL_011.d
Level 9	IC 320-463725/13	2021.02.20_A10_TB3+_ICAL_013.d
Level 10	IC 320-463725/14	2021.02.20_A10_TB3+_ICAL_014.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	RT WINDOW	AVG RT
PFMOAA	2.875	2.892	3.004	3.060	2.828	2.958	2.858	2.832	2.884	3.026	2.625 - 3.125	2.922
R-EVE	6.560	6.574	6.621	6.653	6.535	6.602	6.535	6.535	6.561	6.617	6.310 - 6.810	6.579
R-PSDA	6.653	6.670	6.701	6.733	6.621	6.683	6.637	6.621	6.653	6.697	6.403 - 6.903	6.667
PMPA	++++	6.750	6.781	6.797	6.717	6.747	6.733	6.717	6.734	6.777	6.515 - 7.015	6.750
Hydrolyzed PSDA	6.749	6.750	6.797	6.813	6.717	6.779	6.733	6.717	6.750	6.793	6.499 - 6.999	6.760
NVHOS	7.319	7.320	7.339	7.358	7.299	7.317	7.300	7.300	7.319	7.335	7.069 - 7.569	7.321
PFO2HxA	7.932	7.919	7.946	7.945	7.904	7.915	7.905	7.905	7.905	7.913	7.682 - 8.182	7.919
PEPA	8.584	8.574	8.577	8.583	8.557	8.566	8.563	8.552	8.572	8.568	8.334 - 8.834	8.570
PES	8.908	8.897	8.904	8.903	8.893	8.892	8.881	8.880	8.893	8.881	8.658 - 9.158	8.893
PFECA B	9.139	9.127	9.122	9.133	9.110	9.121	9.110	9.109	9.110	9.110	8.889 - 9.389	9.119
PFO3OA	9.396	9.380	9.371	9.366	9.352	9.368	9.352	9.352	9.352	9.353	9.146 - 9.646	9.364
HFPO-DA	9.486	9.486	9.476	9.475	9.459	9.477	9.459	9.464	9.467	9.450	9.236 - 9.736	9.470
R-PSDCA	9.847	9.848	9.838	9.836	9.823	9.823	9.823	9.829	9.815	++++	9.597 - 10.097	9.831
Perfluoroheptanoic acid	9.904	9.905	9.895	9.893	9.881	9.880	9.881	9.867	9.872	9.873	9.654 - 10.154	9.885
Hydro-EVE Acid	9.904	9.905	9.895	9.893	9.881	9.880	9.881	9.886	9.872	++++	9.654 - 10.154	9.889
Hydro-PS Acid	9.939	9.922	9.931	9.929	9.919	9.918	9.900	9.905	9.911	9.892	9.689 - 10.189	9.917
PFECA G	10.034	10.013	10.000	10.020	9.988	9.987	9.986	9.993	9.999	++++	9.784 - 10.284	10.002
PFO4DA	10.161	10.162	10.151	10.149	10.138	10.138	10.137	10.144	10.128	10.128	9.911 - 10.411	10.144
PS Acid	10.242	10.222	10.231	10.230	10.220	10.220	10.198	10.204	10.211	10.190	9.992 - 10.492	10.217
EVE Acid	10.260	10.242	10.231	10.230	10.220	10.220	10.219	10.224	10.211	++++	10.010 - 10.510	10.229
PFO5DA	10.745	10.734	10.729	10.729	10.717	10.707	10.709	10.700	10.707	++++	10.495 - 10.995	10.720
13C3 HFPO-DA	9.486	9.486	9.476	9.475	9.459	9.459	9.459	9.464	9.467	9.450	9.386 - 9.586	9.468
13C4 PFHpA	9.904	9.905	9.895	9.893	9.881	9.880	9.881	9.867	9.872	9.873	9.804 - 10.004	9.885

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1 Analy Batch No.: 463725

SDG No.: _____

Instrument ID: A10 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/20/2021 10:46 Calibration End Date: 02/20/2021 14:15 Calibration ID: 54188

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-463725/2	2021.02.20_A10_TB3+_ICAL_002.d
Level 2	IC 320-463725/3	2021.02.20_A10_TB3+_ICAL_003.d
Level 3	IC 320-463725/4	2021.02.20_A10_TB3+_ICAL_004.d
Level 4	IC 320-463725/5	2021.02.20_A10_TB3+_ICAL_005.d
Level 5	IC 320-463725/6	2021.02.20_A10_TB3+_ICAL_006.d
Level 6	IC 320-463725/7	2021.02.20_A10_TB3+_ICAL_007.d
Level 7	IC 320-463725/9	2021.02.20_A10_TB3+_ICAL_009.d
Level 8	IC 320-463725/11	2021.02.20_A10_TB3+_ICAL_011.d
Level 9	IC 320-463725/13	2021.02.20_A10_TB3+_ICAL_013.d
Level 10	IC 320-463725/14	2021.02.20_A10_TB3+_ICAL_014.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6 LVL 10	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
PFMOAA	8669000 10756640 10614736	9158000 9634560 10425782	9111400 10401270	10187600 11162636	Ave		10012162.4			8.2		50.0				
R-EVE	3909000 4261000 4336490	4068000 3699840 4342016	3809600 4152360	4091500 4468592	Ave		4113839.80			6.1		50.0				
R-PSDA	2728000 2672640 2792098	2655600 2420260 2992445	2571000 2631610	2849800 2847912	Ave		2716136.50			6.0		50.0				
PMPA	++++ 14153360 12281740	23542400 12048600 12257867	17876400 12485340	15846600 13242548	Lin2	27942.5183	12447279.8			4.6			0.9980		0.9900	
Hydrolyzed PSDA	7023000 8172400 8284182	7884400 7098780 8192250	7962800 7752270	8403400 8644836	Ave		7941831.80			6.7		50.0				
NVHOS	7358000 7960800 7756316	7576400 7135460 7739869	7668800 7645830	7634400 8186532	Ave		7666240.70			3.8		50.0				
PFO2HxA	8834000 9762200 9484988	9507200 8628240 9188527	9372800 9369640	9896100 9867480	Ave		9391117.50			4.5		50.0				
PEPA	4097000 5990520 5574350	5606400 5388360 5634472	5631200 5738860	5903300 6354288	Ave		5591875.00			10.6		50.0				

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1 Analy Batch No.: 463725

SDG No.: _____

Instrument ID: A10 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/20/2021 10:46 Calibration End Date: 02/20/2021 14:15 Calibration ID: 54188

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6 LVL 10	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
PES	45461000 48415400 49003488	45790800 43420840 46061829	46045000 46818260	47394300 51207964	Ave		46961888.1			4.6		50.0				
PFECA B	6266000 6980880 6219438	6338800 6233260 6030771	6425000 6489720	7017200 6910464	Ave		6491153.30			5.4		50.0				
PFO3OA	6555000 6183760 5510656	6603600 5567280 5215960	6020600 5760110	6556200 5959720	Ave		5993288.60			8.1		50.0				
R-PSDCA	62820000 68085040 54950836	65104800 58427020 +++++	63307600 63609540	64346000 65116800	Ave		62863070.7			6.2		50.0				
Hydro-EVE Acid	77876000 84637520 71287774	80908800 74457340 +++++	79831000 79723000	81372600 80568812	Ave		78962538.4			5.0		50.0				
Hydro-PS Acid	24096000 27175720 24958216	25222400 24476160 22932681	24998000 26791150	26287900 27150848	Ave		25408907.5			5.6		50.0				
PFECA G	8436000 10189280 9641060	8194400 8943100 +++++	9014400 10006980	9565700 10552100	Ave		9393668.89			8.5		50.0				
PFO4DA	5293000 5616400 4533726	5401200 4948780 4535169	5281200 5179690	5240800 5554868	Ave		5158483.30			7.3		50.0				
PS Acid	11172000 12393320 10900240	11319200 11143640 9513361	11436800 12101570	11898000 12429436	Ave		11430756.7			7.6		50.0				
EVE Acid	45674000 48935000 38153284	46216400 43354580 +++++	46970800 45357810	46853600 45033320	Ave		45172088.2			6.7		50.0				
PFO5DA	3473000 4074360 3239086	3405200 3732040 +++++	4015800 3877300	4089300 3834256	Ave		3748926.89			8.3		50.0				
13C3 HFPO-DA	5147896 5670128 5565916	5591688 5267304 5487972	5538980 5408528	5785000 5858496	Ave		5532190.80			3.9		50.0				
13C4 PFHpA	26622980 26669364 22923488	26633644 25152868 21514728	26276812 25847808	26772548 25653844	Ave		25406808.4			7.0		50.0				

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
 LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
 CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1 Analy Batch No.: 463725
 SDG No.: _____
 Instrument ID: A10 GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N
 Calibration Start Date: 02/20/2021 10:46 Calibration End Date: 02/20/2021 14:15 Calibration ID: 54188

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10												
HFPO-DA	1.2234	1.1382	1.0346	1.0831	1.0966	AveID		1.0887			5.4		35.0				
Perfluoroheptanoic acid	1.0520	1.0913	1.0960	1.0508	1.0209	L2ID	0.0005	1.0530			3.9		0.9980			0.9900	
	1.5159	1.2361	1.1156	1.1344	1.0921												
	1.0273	1.0448	1.1050	1.0966	0.9806												

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1 Analy Batch No.: 463725

SDG No.: _____

Instrument ID: A10 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/20/2021 10:46 Calibration End Date: 02/20/2021 14:15 Calibration ID: 54188

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-463725/2	2021.02.20_A10_TB3+_ICAL_002.d
Level 2	IC 320-463725/3	2021.02.20_A10_TB3+_ICAL_003.d
Level 3	IC 320-463725/4	2021.02.20_A10_TB3+_ICAL_004.d
Level 4	IC 320-463725/5	2021.02.20_A10_TB3+_ICAL_005.d
Level 5	IC 320-463725/6	2021.02.20_A10_TB3+_ICAL_006.d
Level 6	IC 320-463725/7	2021.02.20_A10_TB3+_ICAL_007.d
Level 7	IC 320-463725/9	2021.02.20_A10_TB3+_ICAL_009.d
Level 8	IC 320-463725/11	2021.02.20_A10_TB3+_ICAL_011.d
Level 9	IC 320-463725/13	2021.02.20_A10_TB3+_ICAL_013.d
Level 10	IC 320-463725/14	2021.02.20_A10_TB3+_ICAL_014.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
		LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
PFMOAA	Ave	8669	22895	45557	101876	268916	0.00100	0.00250	0.00500	0.0100	0.0250
		481728	1040127	2790659	5307368	10425782	0.0500	0.100	0.250	0.500	1.00
R-EVE	Ave	3909	10170	19048	40915	106525	0.00100	0.00250	0.00500	0.0100	0.0250
		184992	415236	1117148	2168245	4342016	0.0500	0.100	0.250	0.500	1.00
R-PSDA	Ave	2728	6639	12855	28498	66816	0.00100	0.00250	0.00500	0.0100	0.0250
		121013	263161	711978	1396049	2992445	0.0500	0.100	0.250	0.500	1.00
PMPA	Lin2	++++	58856	89382	158466	353884	++++	0.00250	0.00500	0.0100	0.0250
		602430	1248534	3310637	6140870	12257867	0.0500	0.100	0.250	0.500	1.00
Hydrolyzed PSDA	Ave	7023	19711	39814	84034	204310	0.00100	0.00250	0.00500	0.0100	0.0250
		354939	775227	2161209	4142091	8192250	0.0500	0.100	0.250	0.500	1.00
NVHOS	Ave	7358	18941	38344	76344	199020	0.00100	0.00250	0.00500	0.0100	0.0250
		356773	764583	2046633	3878158	7739869	0.0500	0.100	0.250	0.500	1.00
PFO2HxA	Ave	8834	23768	46864	98961	244055	0.00100	0.00250	0.00500	0.0100	0.0250
		431412	936964	2466870	4742494	9188527	0.0500	0.100	0.250	0.500	1.00
PEPA	Ave	4097	14016	28156	59033	149763	0.00100	0.00250	0.00500	0.0100	0.0250
		269418	573886	1588572	2787175	5634472	0.0500	0.100	0.250	0.500	1.00
PES	Ave	45461	114477	230225	473943	1210385	0.00100	0.00250	0.00500	0.0100	0.0250
		2171042	4681826	12801991	24501744	46061829	0.0500	0.100	0.250	0.500	1.00
PFECA B	Ave	6266	15847	32125	70172	174522	0.00100	0.00250	0.00500	0.0100	0.0250
		311663	648972	1727616	3109719	6030771	0.0500	0.100	0.250	0.500	1.00
PFO3OA	Ave	6555	16509	30103	65562	154594	0.00100	0.00250	0.00500	0.0100	0.0250
		278364	576011	1489930	2755328	5215960	0.0500	0.100	0.250	0.500	1.00
R-PSDCA	Ave	62820	162762	316538	643460	1702126	0.00100	0.00250	0.00500	0.0100	0.0250
		2921351	6360954	16279200	27475418	++++	0.0500	0.100	0.250	0.500	++++
Hydro-EVE Acid	Ave	77876	202272	399155	813726	2115938	0.00100	0.00250	0.00500	0.0100	0.0250
		3722867	7972300	20142203	35643887	++++	0.0500	0.100	0.250	0.500	++++
Hydro-PS Acid	Ave	24096	63056	124990	262879	679393	0.00100	0.00250	0.00500	0.0100	0.0250
		1223808	2679115	6787712	12479108	22932681	0.0500	0.100	0.250	0.500	1.00

FORM VI
 LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1 Analy Batch No.: 463725

SDG No.: _____

Instrument ID: A10 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/20/2021 10:46 Calibration End Date: 02/20/2021 14:15 Calibration ID: 54188

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
		LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
PFECA G	Ave	8436 447155	20486 1000698	45072 2638025	95657 4820530	254732 ++++	0.00100 0.0500	0.00250 0.100	0.00500 0.250	0.0100 0.500	0.0250 ++++
PFO4DA	Ave	5293 247439	13503 517969	26406 1388717	52408 2266863	140410 4535169	0.00100 0.0500	0.00250 0.100	0.00500 0.250	0.0100 0.500	0.0250 1.00
PS Acid	Ave	11172 557182	28298 1210157	57184 3107359	118980 5450120	309833 9513361	0.00100 0.0500	0.00250 0.100	0.00500 0.250	0.0100 0.500	0.0250 1.00
EVE Acid	Ave	45674 2167729	115541 4535781	234854 11258330	468536 19076642	1223375 ++++	0.00100 0.0500	0.00250 0.100	0.00500 0.250	0.0100 0.500	0.0250 ++++
PFO5DA	Ave	3473 186602	8513 387730	20079 958564	40893 1619543	101859 ++++	0.00100 0.0500	0.00250 0.100	0.00500 0.250	0.0100 0.500	0.0250 ++++
13C3 HFPO-DA	Ave	1286974 1316826	1397922 1352132	1384745 1464624	1446250 1391479	1417532 1371993	0.250 0.250	0.250 0.250	0.250 0.250	0.250 0.250	0.250 0.250
13C4 PFHpA	Ave	6655745 6288217	6658411 6461952	6569203 6413461	6693137 5730872	6667341 5378682	0.250 0.250	0.250 0.250	0.250 0.250	0.250 0.250	0.250 0.250

Curve Type Legend:

Ave = Average
Lin2 = Linear 1/conc^2

FORM VI
 LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
 RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1 Analy Batch No.: 463725

SDG No.: _____

Instrument ID: A10 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/20/2021 10:46 Calibration End Date: 02/20/2021 14:15 Calibration ID: 54188

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-463725/2	2021.02.20_A10_TB3+_ICAL_002.d
Level 2	IC 320-463725/3	2021.02.20_A10_TB3+_ICAL_003.d
Level 3	IC 320-463725/4	2021.02.20_A10_TB3+_ICAL_004.d
Level 4	IC 320-463725/5	2021.02.20_A10_TB3+_ICAL_005.d
Level 5	IC 320-463725/6	2021.02.20_A10_TB3+_ICAL_006.d
Level 6	IC 320-463725/7	2021.02.20_A10_TB3+_ICAL_007.d
Level 7	IC 320-463725/9	2021.02.20_A10_TB3+_ICAL_009.d
Level 8	IC 320-463725/11	2021.02.20_A10_TB3+_ICAL_011.d
Level 9	IC 320-463725/13	2021.02.20_A10_TB3+_ICAL_013.d
Level 10	IC 320-463725/14	2021.02.20_A10_TB3+_ICAL_014.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
HFPO-DA		AveID	6298	15911	28654	62660	155445	0.00100	0.00250	0.00500	0.0100	0.0250
			277056	590223	1605227	2924346	5602406	0.0500	0.100	0.250	0.500	1.00
Perfluoroheptanoic acid		L2ID	40357	82305	146570	303706	728172	0.00100	0.00250	0.00500	0.0100	0.0250
			1291921	2700462	7087162	12569308	21096596	0.0500	0.100	0.250	0.500	1.00

Curve Type Legend:

AveID = Average isotope dilution
 L2ID = Linear 1/conc^2 IsoDil

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_002.d
 Lims ID: IC STD 1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 20-Feb-2021 10:46:28 ALS Bottle#: 4 Worklist Smp#: 2
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC 1 (56)
 Misc. Info.: Plate: 1 Rack: 3
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Sublist: chrom-A10_PFAS_CHEM_TB3+*sub1

Method: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 20-Feb-2021 15:38:34 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICAL File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1681

First Level Reviewer: roycea Date: 20-Feb-2021 11:43:14

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	2.875	2.875	0.0		8669	0.000866		86.6	2.1	M
2 R-EVE										M
405.00 > 217.00	6.560	6.560	0.0		3909	0.000950		95.0	94.0	M
3 R-PSDA										M
440.90 > 241.00	6.653	6.653	0.0		2728	0.001004		100	58.7	M
4 Hydrolyzed PSDA										M
439.00 > 343.00	6.749	6.749	0.0		7023	0.000884		88.4	138	M
23 PMPA										M
229.00 > 185.00	6.765	6.765	0.0		37469	0.000765		76.5	8.5	M
5 NVHOS										M
297.00 > 135.00	7.319	7.319	0.0		7358	0.000960		96.0	140	M
6 PFO2HxA										M
245.00 > 85.00	7.932	7.932	0.0		8834	0.000941		94.1	123	M
22 PEPA										M
278.90 > 234.90	8.584	8.584	0.0		4097	0.000733		73.3	7.4	M
7 PES										M
314.90 > 135.00	8.908	8.908	0.0		45461	0.000968		96.8	1612	M
8 PFECA B										M
295.00 > 201.00	9.139	9.139	0.0		6266	0.000965		96.5	209	M
9 PFO3OA										M
310.90 > 85.00	9.396	9.396	0.0		6555	0.001094		109	96.4	M
D 10 13C3 HFPO-DA										M
287.00 > 169.00	9.486	9.486	0.0		1286974	0.2326		93.1	50579	M
11 HPFO-DA										M
285.00 > 169.00	9.486	9.486	0.0	1.000	6298	0.001124		112	244	M

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.847	9.847	0.0		62820	0.000999		99.9	1976	
13 Hydro-EVE Acid										
427.00 > 282.90	9.904	9.904	0.0		77876	0.000986		98.6	1448	
D 14 13C4 PFHpA										
367.00 > 322.00	9.904	9.904	0.0		6655745	0.2620		105	140233	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.904	9.904	0.0	1.000	40357	0.001002	Target=0.00	100	197	
363.00 > 169.00	9.904	9.904	0.0	1.000	16784		2.40(0.00-0.00)	100	723	
15 Hydro-PS Acid										
463.00 > 262.90	9.939	9.939	0.0		24096	0.000948		94.8	681	
17 PFECA G										
378.90 > 184.90	10.034	10.034	0.0		8436	0.000898		89.8	332	
18 PFO4DA										
376.90 > 85.00	10.161	10.161	0.0		5293	0.001026		103	61.0	
19 PS Acid										
443.00 > 146.90	10.242	10.242	0.0		11172	0.000977		97.7	365	
20 EVE Acid										
407.00 > 262.90	10.260	10.260	0.0		45674	0.001011		101	1967	
21 TAF										
442.90 > 85.00	10.745	10.745	0.0		3473	0.000926		92.6	11.1	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD1_00056

Amount Added: 1.00

Units: mL

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_002.d

Injection Date: 20-Feb-2021 10:46:28

Instrument ID: A10

Lims ID: IC STD 1

Client ID:

Operator ID: Sac_inst_A10

ALS Bottle#: 4

Worklist Smp#: 2

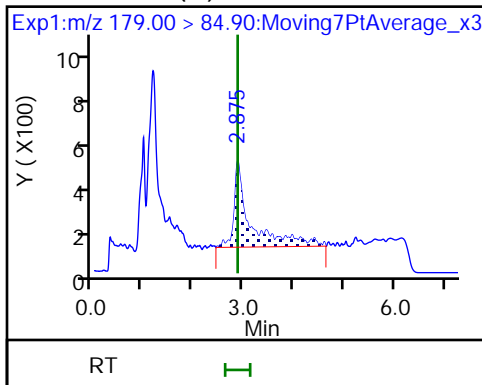
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

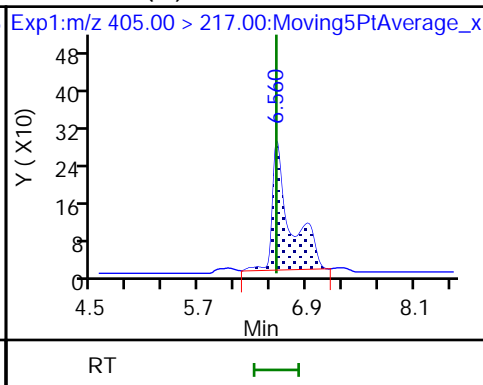
Method: A10_PFA5_CHEM_TB3+

Limit Group: LC PFA5_TB3P - ICAL

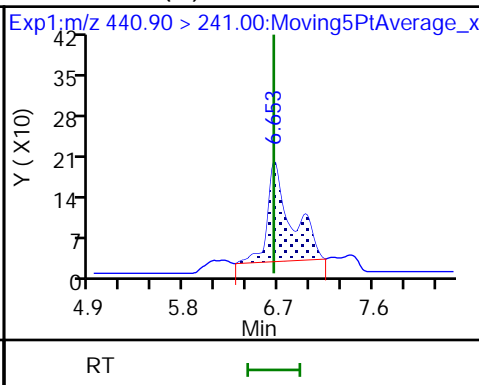
1 PFM0AA (M)



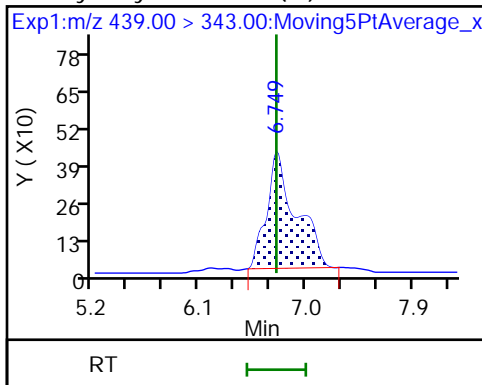
2 R-EVE (M)



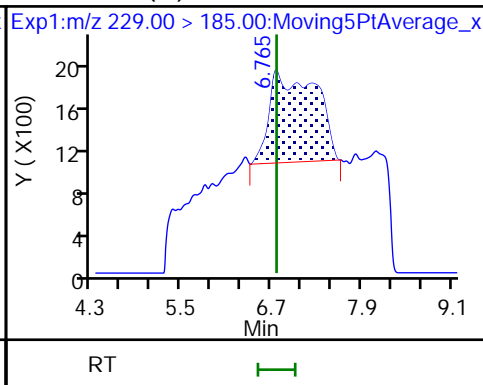
3 R-PSDA (M)



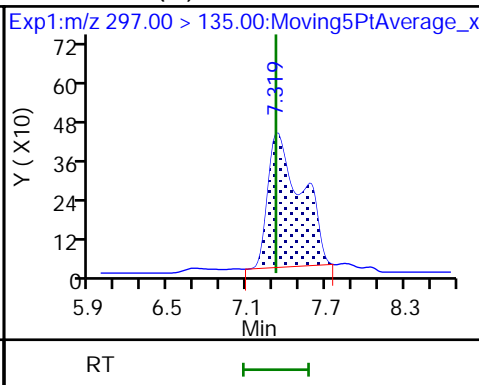
4 Hydrolyzed PSDA (M)



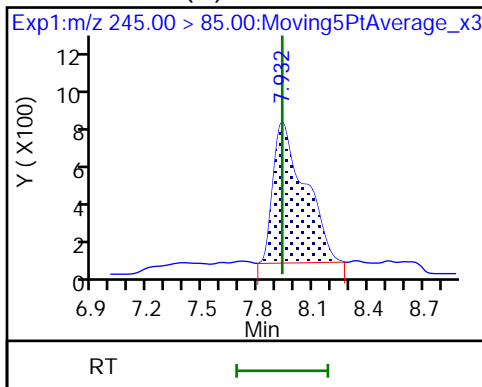
23 PMPA (M)



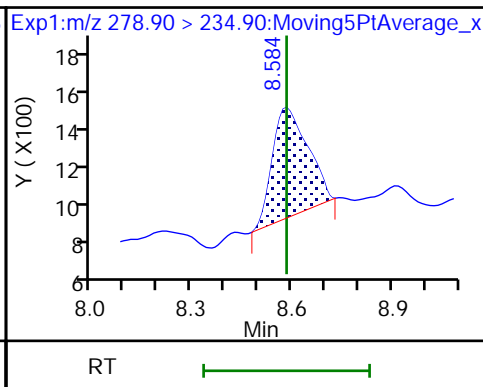
5 NVHOS (M)



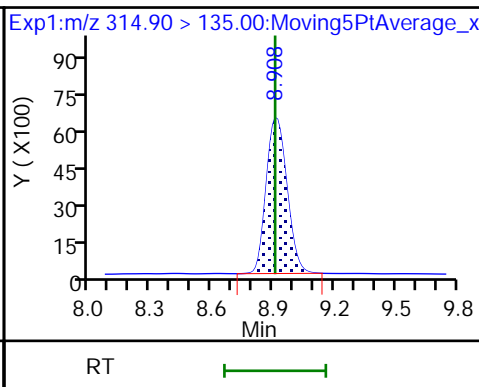
6 PFO2HxA (M)



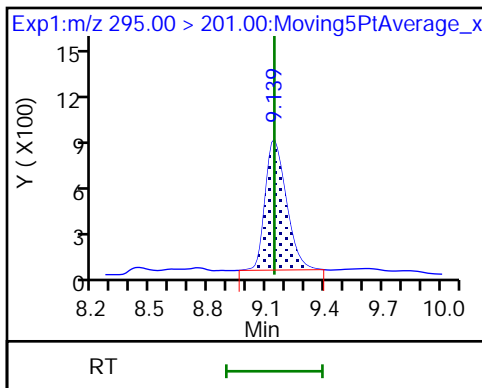
22 PEPA



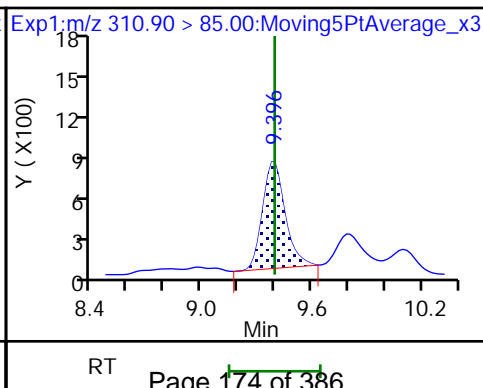
7 PES



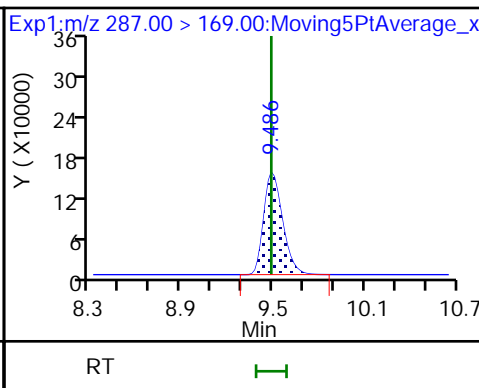
8 PFECAB

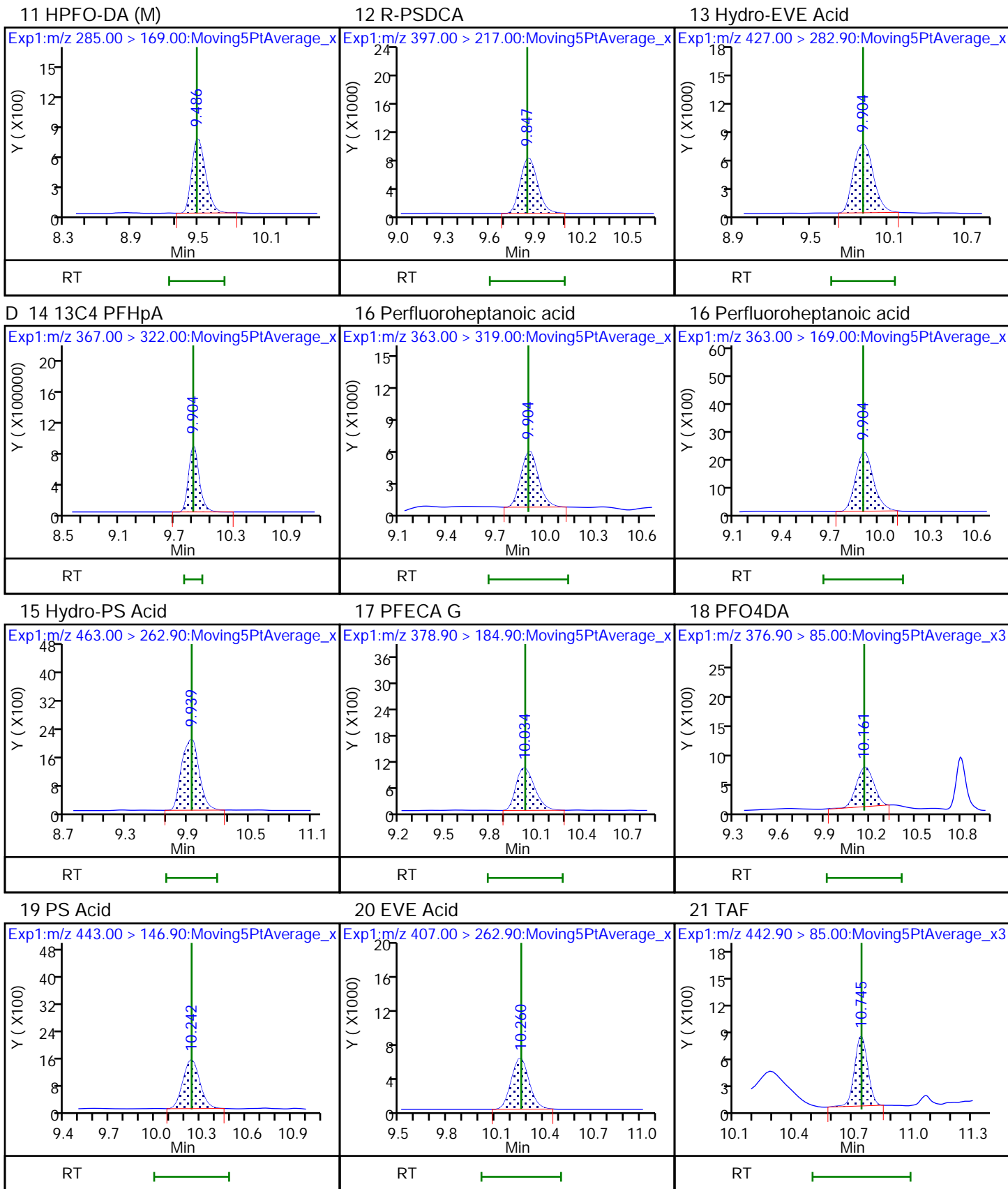


9 PFO3OA



D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

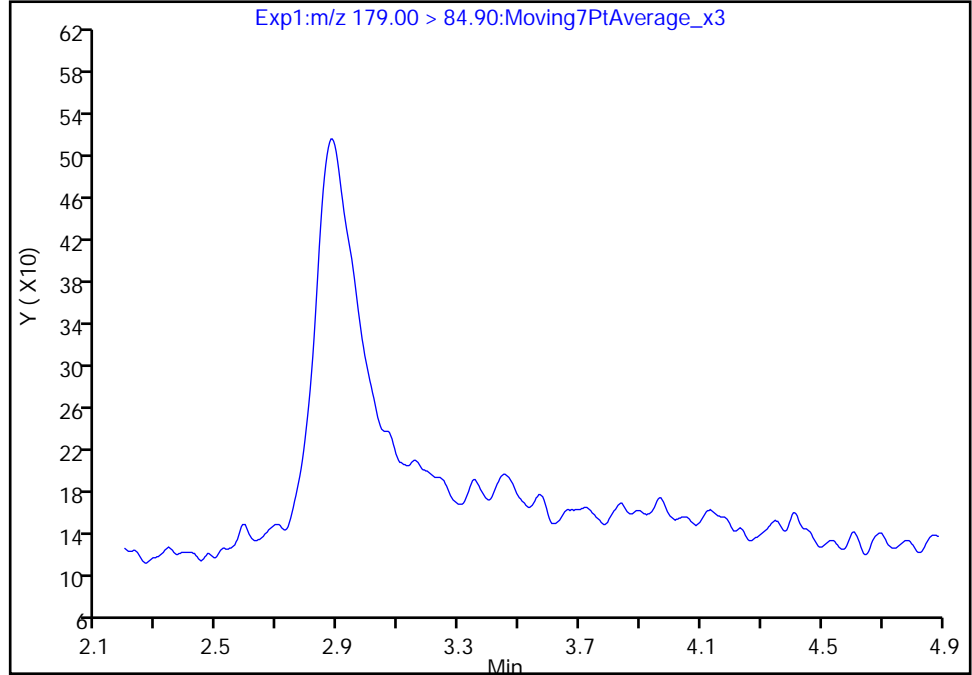
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_002.d
Injection Date: 20-Feb-2021 10:46:28 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

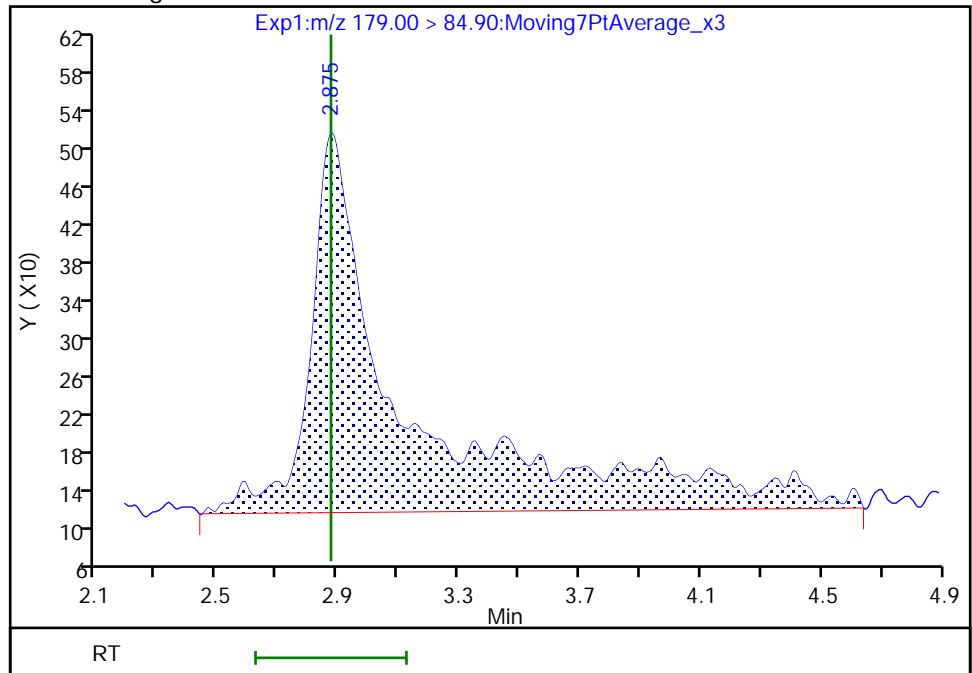
Not Detected
Expected RT: 2.88

Processing Integration Results



Manual Integration Results

RT: 2.88
Area: 8669
Amount: 0.000866
Amount Units: ng/ml



Reviewer: roycea, 20-Feb-2021 13:26:38
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

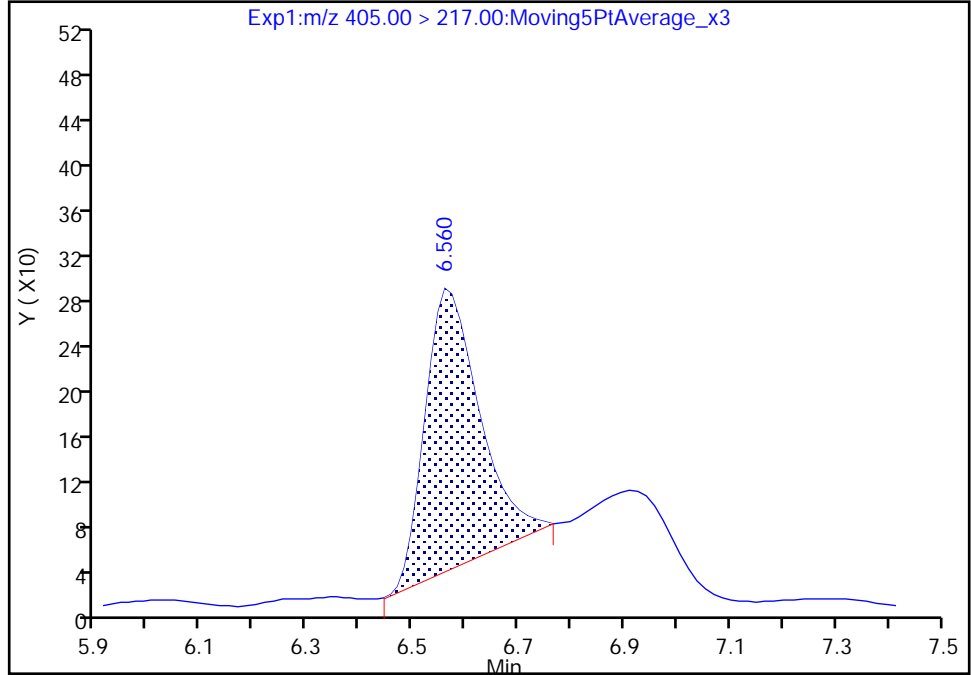
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_002.d
Injection Date: 20-Feb-2021 10:46:28 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

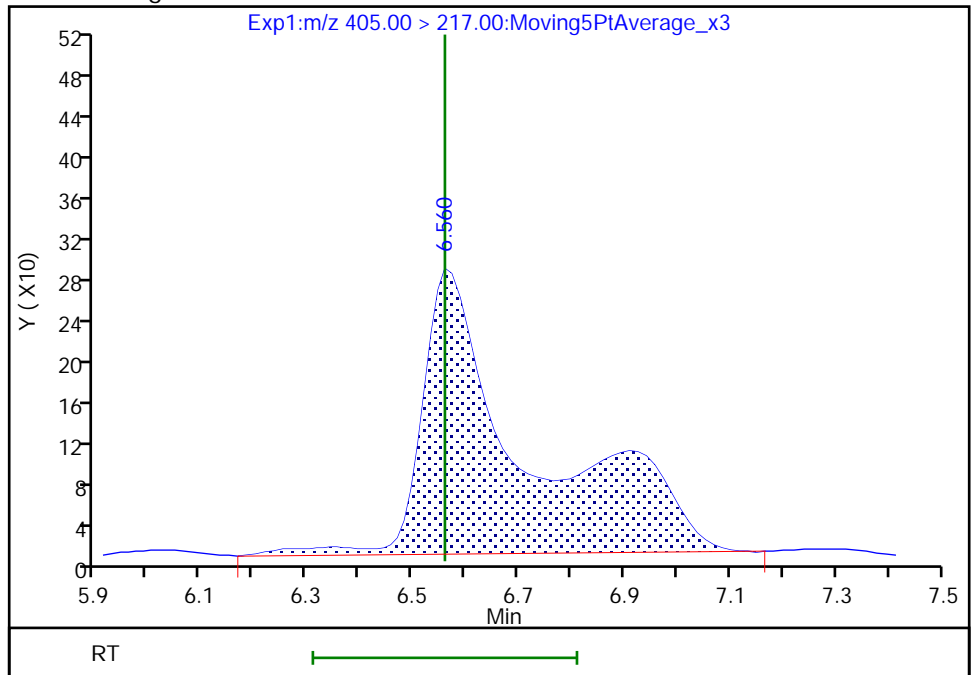
RT: 6.56
Area: 1799
Amount: 0.000620
Amount Units: ng/ml

Processing Integration Results



RT: 6.56
Area: 3909
Amount: 0.000950
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 11:42:45
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Sacramento

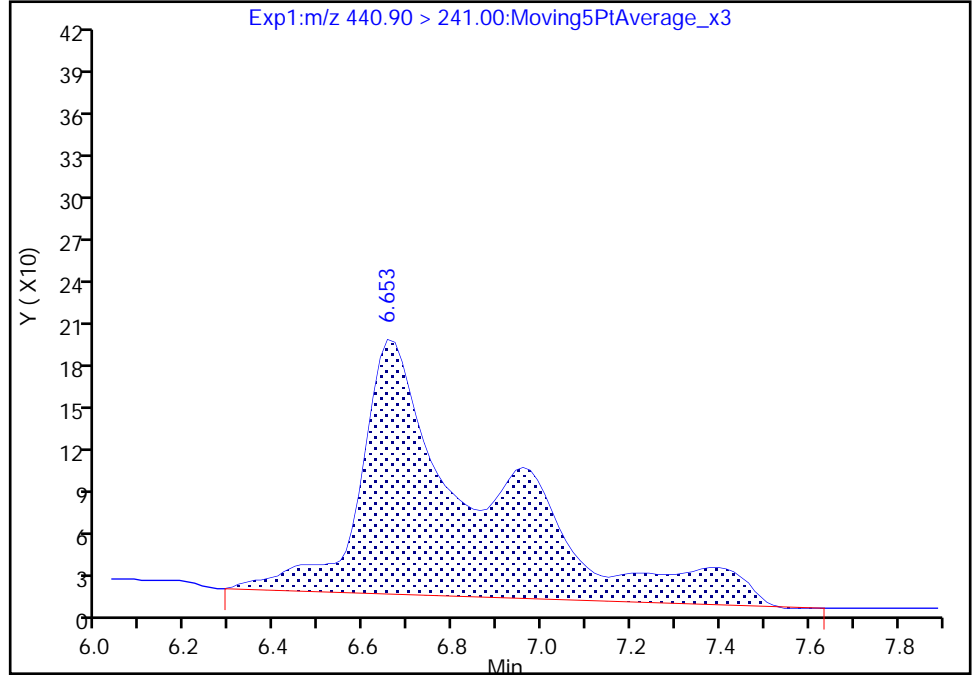
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_002.d
Injection Date: 20-Feb-2021 10:46:28 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

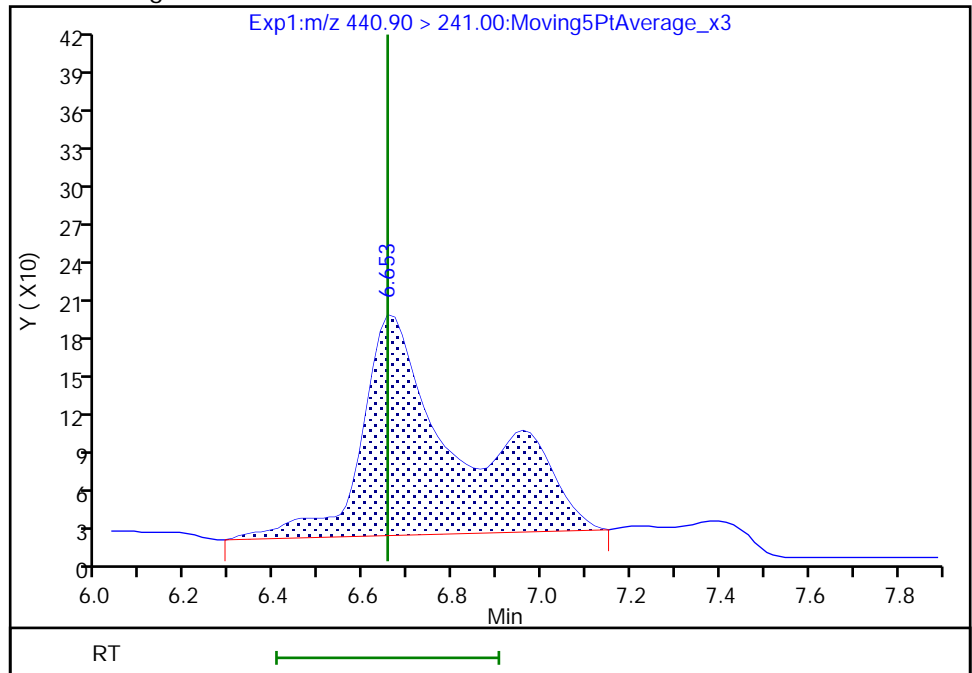
RT: 6.65
Area: 3599
Amount: 0.001136
Amount Units: ng/ml

Processing Integration Results



RT: 6.65
Area: 2728
Amount: 0.001004
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 11:42:55
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento

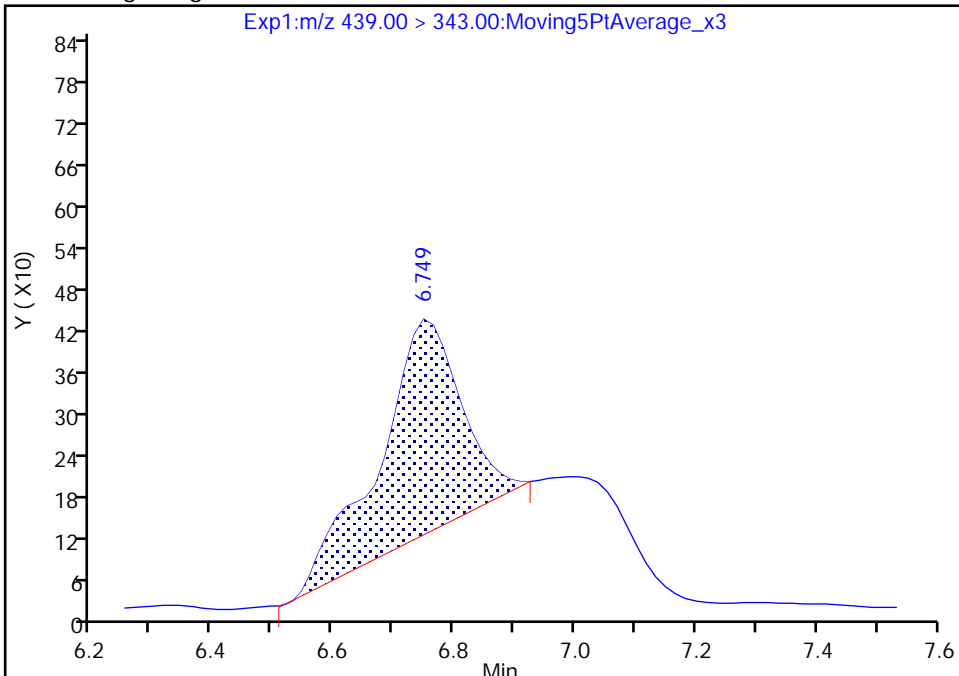
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_002.d
Injection Date: 20-Feb-2021 10:46:28 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

4 Hydrolyzed PSDA, CAS: 2416366-19-1

Signal: 1

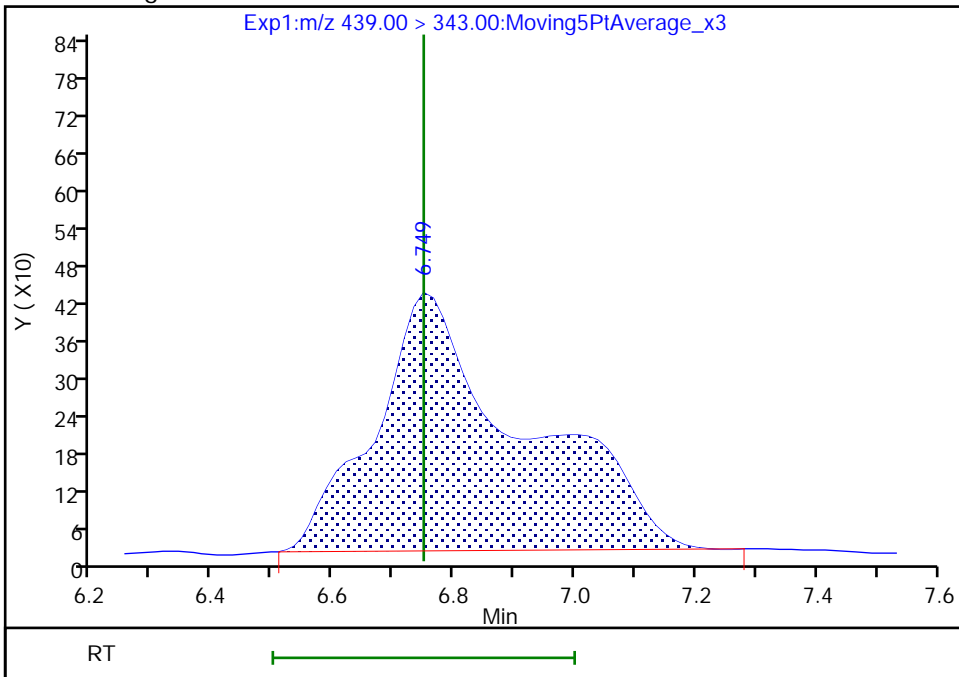
RT: 6.75
Area: 2913
Amount: 0.000540
Amount Units: ng/ml

Processing Integration Results



RT: 6.75
Area: 7023
Amount: 0.000884
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 11:43:02
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento

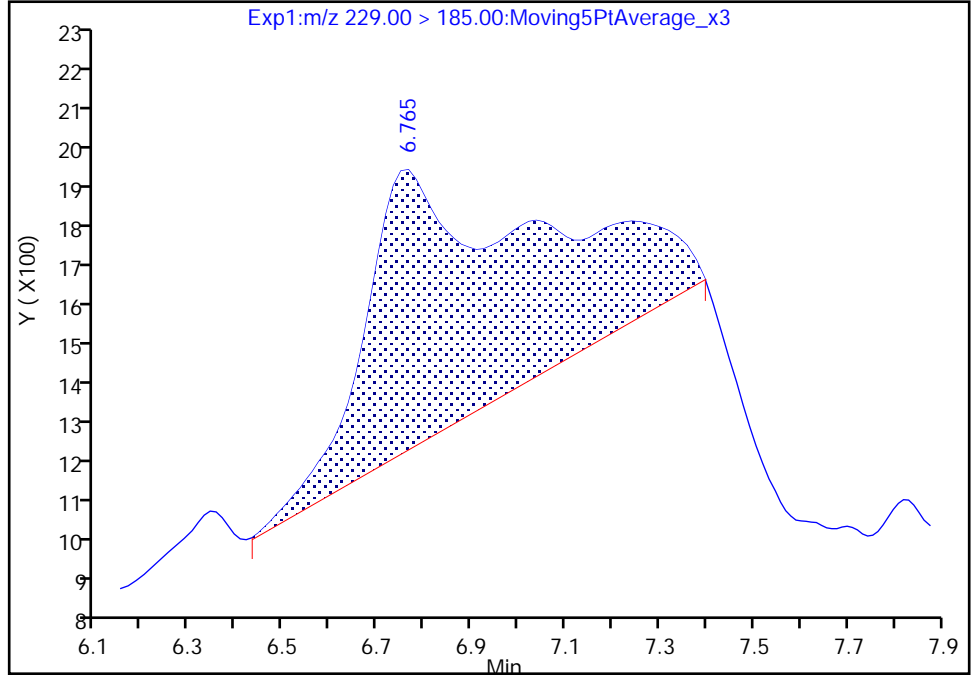
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_002.d
Injection Date: 20-Feb-2021 10:46:28 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

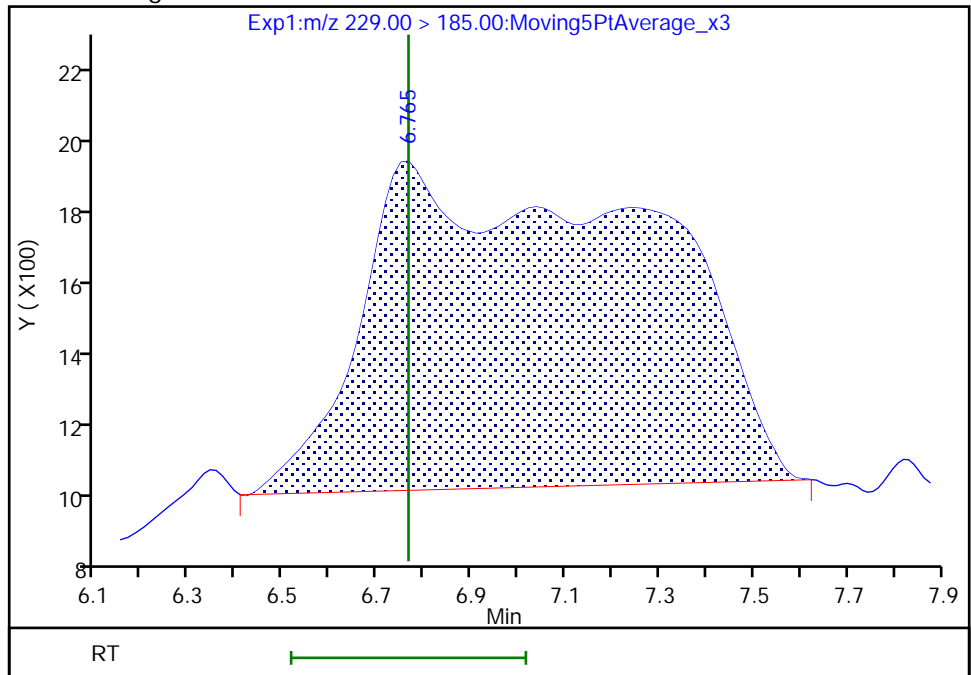
RT: 6.77
Area: 17148
Amount: 0.000913
Amount Units: ng/ml

Processing Integration Results



RT: 6.77
Area: 37469
Amount: 0.000765
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 11:43:08
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Sacramento

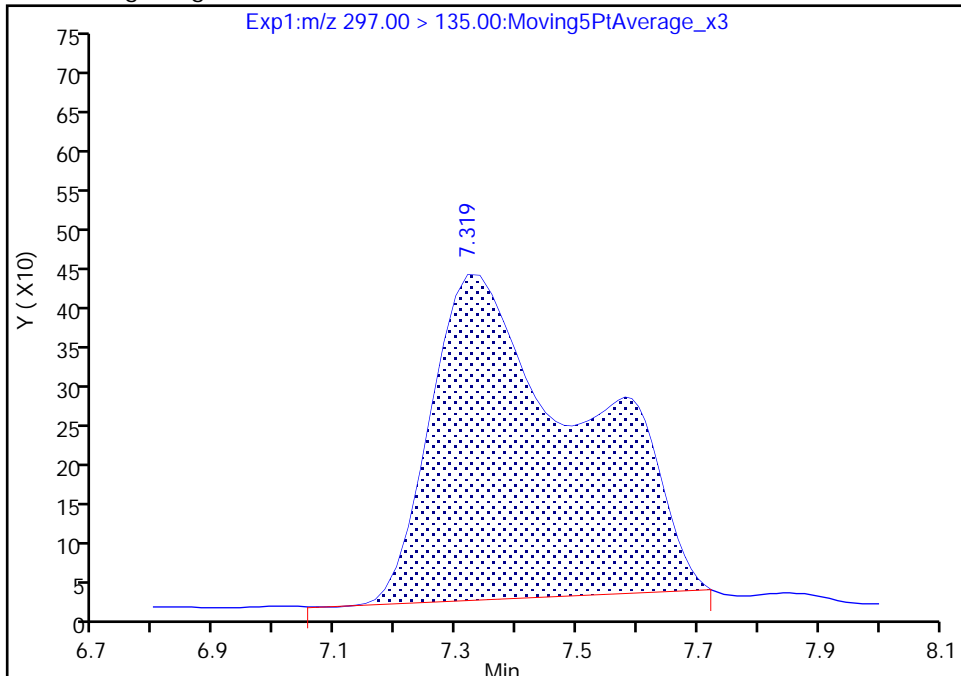
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_002.d
Injection Date: 20-Feb-2021 10:46:28 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

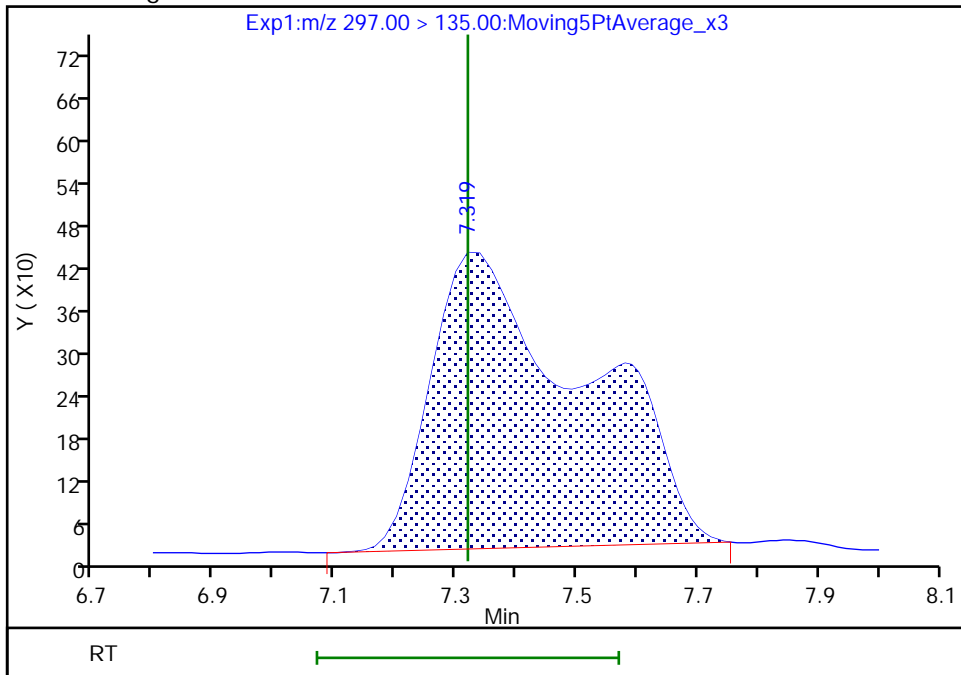
RT: 7.32
Area: 7203
Amount: 0.000944
Amount Units: ng/ml

Processing Integration Results



RT: 7.32
Area: 7358
Amount: 0.000960
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 15:04:38
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

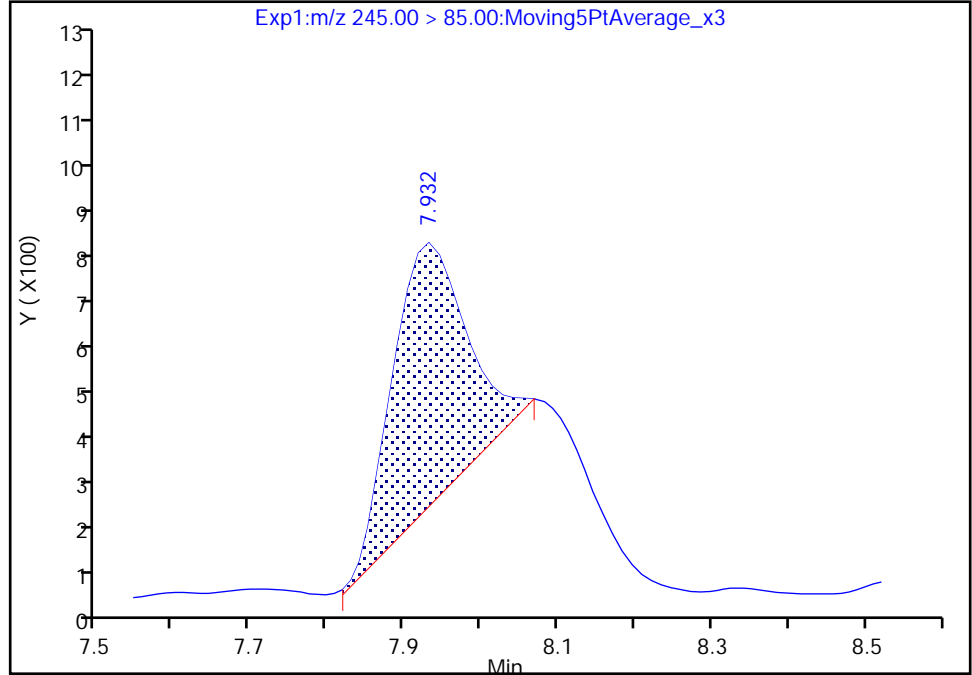
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_002.d
Injection Date: 20-Feb-2021 10:46:28 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

6 PFO2HxA, CAS: 39492-88-1

Signal: 1

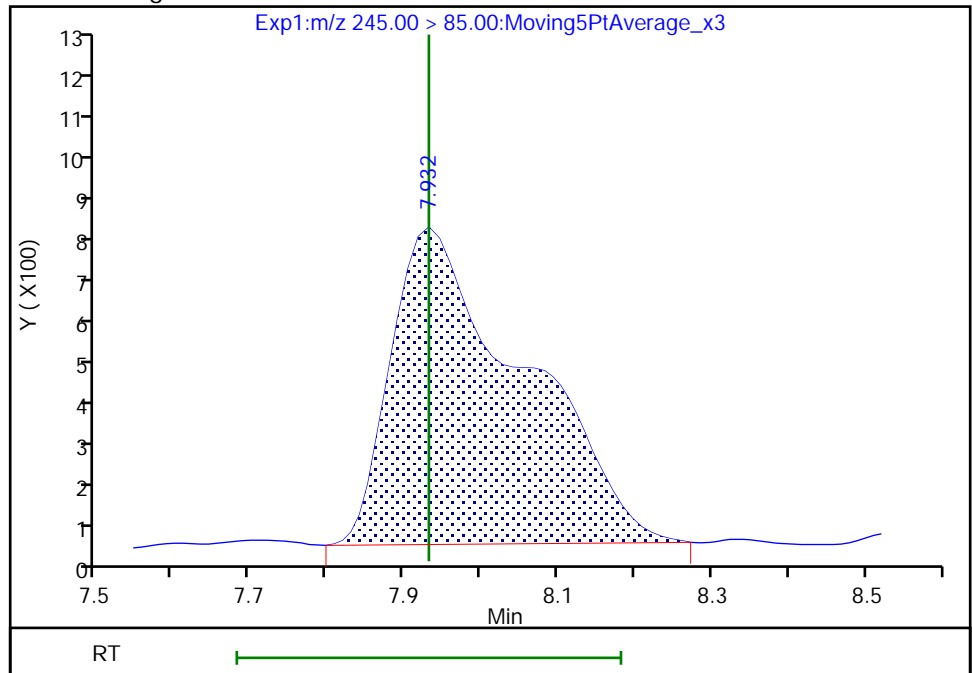
RT: 7.93
Area: 3730
Amount: 0.000564
Amount Units: ng/ml

Processing Integration Results



RT: 7.93
Area: 8834
Amount: 0.000941
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 11:43:35
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Sacramento

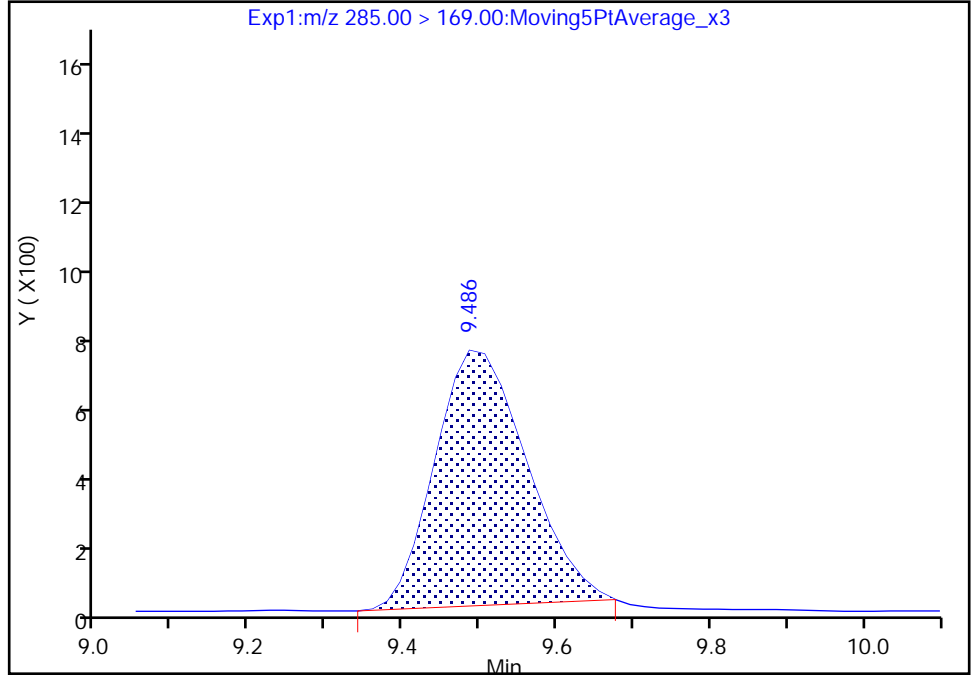
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_002.d
Injection Date: 20-Feb-2021 10:46:28 Instrument ID: A10
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 4 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

11 HPFO-DA, CAS: 13252-13-6

Signal: 1

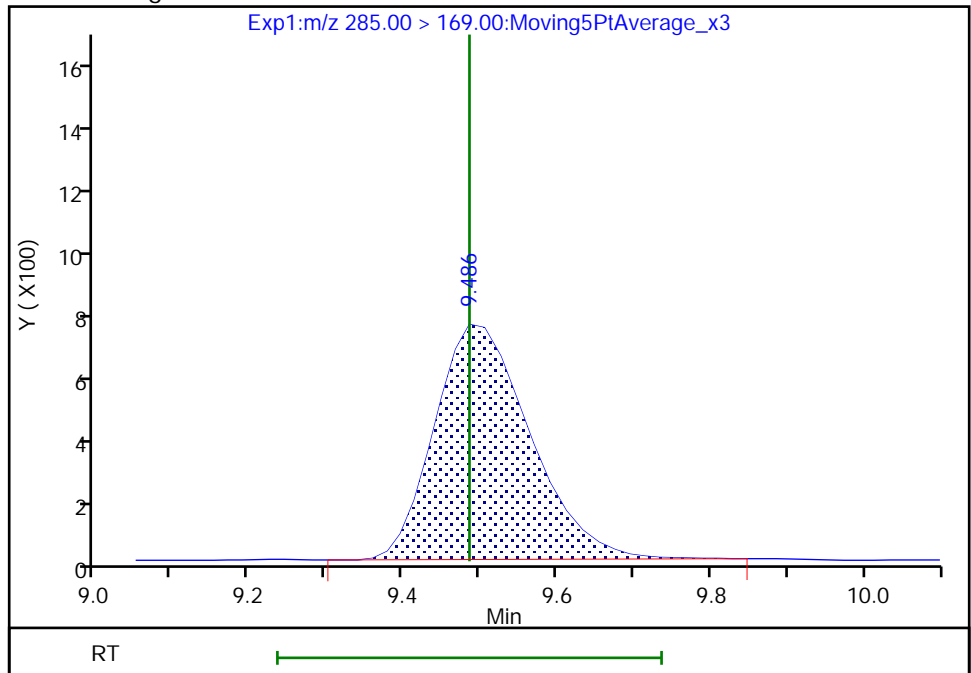
RT: 9.49
Area: 5946
Amount: 0.001072
Amount Units: ng/ml

Processing Integration Results



RT: 9.49
Area: 6298
Amount: 0.001124
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 15:05:55
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_003.d
 Lims ID: IC STD 2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 20-Feb-2021 11:03:56 ALS Bottle#: 5 Worklist Smp#: 3
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC 2 (46)
 Misc. Info.: Plate: 1 Rack: 3
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Sublist: chrom-A10_PFAS_CHEM_TB3+*sub1

Method: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 20-Feb-2021 15:38:35 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICAL File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1681

First Level Reviewer: roycea Date: 20-Feb-2021 11:40:57

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	2.892	2.875	0.017		22895	0.002287		91.5	4.1	M
2 R-EVE										M
405.00 > 217.00	6.574	6.560	0.014		10170	0.002472		98.9	257	M
3 R-PSDA										M
440.90 > 241.00	6.670	6.653	0.017		6639	0.002444		97.8	155	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.750	6.749	0.001		19711	0.002482		99.3	364	
23 PMPA										M
229.00 > 185.00	6.750	6.765	-0.015		58856	0.002484		99.3	19.8	M
5 NVHOS										M
297.00 > 135.00	7.320	7.319	0.001		18941	0.002471		98.8	361	M
6 PFO2HxA										
245.00 > 85.00	7.919	7.932	-0.013		23768	0.002531		101	328	
22 PEPA										
278.90 > 234.90	8.574	8.584	-0.010		14016	0.002506		100	22.3	
7 PES										
314.90 > 135.00	8.897	8.908	-0.011		114477	0.002438		97.5	5373	
8 PFECA B										
295.00 > 201.00	9.127	9.139	-0.012		15847	0.002441		97.7	544	
9 PFO3OA										
310.90 > 85.00	9.380	9.396	-0.016		16509	0.002755		110	216	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.486	9.486	0.0		1397922	0.2527		101	55095	
11 HPFO-DA										M
285.00 > 169.00	9.486	9.486	0.0	1.000	15911	0.002614		105	615	M

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.848	9.847	0.001		162762	0.002589		104	5156	
13 Hydro-EVE Acid										
427.00 > 282.90	9.905	9.904	0.001		202272	0.002562		102	3778	
D 14 13C4 PFHpA										
367.00 > 322.00	9.905	9.904	0.001		6658411	0.2621		105	139800	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.905	9.904	0.001	1.000	82305	0.002498	Target=0.00	99.9	441	
363.00 > 169.00	9.905	9.904	0.001	1.000	34567		2.38(0.00-0.00)	99.9	1109	
15 Hydro-PS Acid										
463.00 > 262.90	9.922	9.939	-0.017		63056	0.002482		99.3	1781	
17 PFECA G										
378.90 > 184.90	10.013	10.034	-0.021		20486	0.002181		87.2	820	
18 PFO4DA										
376.90 > 85.00	10.162	10.161	0.001		13503	0.002618		105	96.5	
19 PS Acid										
443.00 > 146.90	10.222	10.242	-0.020		28298	0.002476		99.0	898	
20 EVE Acid										
407.00 > 262.90	10.242	10.260	-0.018		115541	0.002558		102	5014	
21 TAF										
442.90 > 85.00	10.734	10.745	-0.011		8513	0.002271		90.8	25.8	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD2_00046

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_003.d

Injection Date: 20-Feb-2021 11:03:56

Instrument ID: A10

Lims ID: IC STD 2

Client ID:

Operator ID: Sac_inst_A10

ALS Bottle#: 5

Worklist Smp#: 3

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

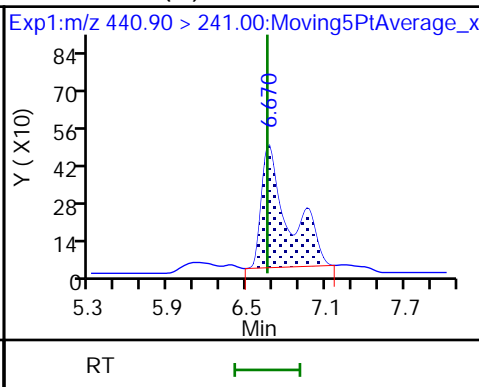
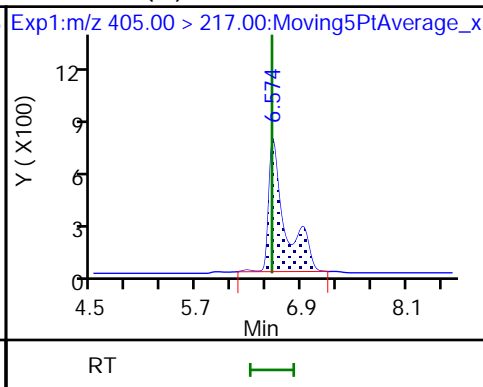
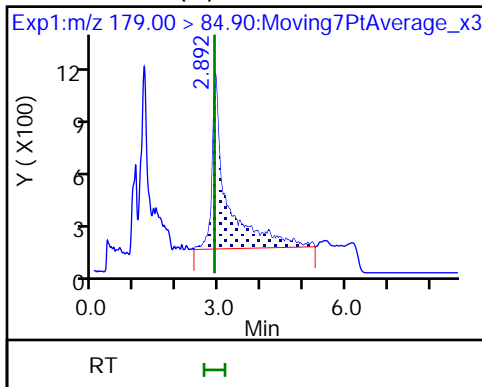
Method: A10_PFAS_CHEM_TB3+

Limit Group: LC PFAS_TB3P - ICAL

1 PFMOAA (M)

2 R-EVE (M)

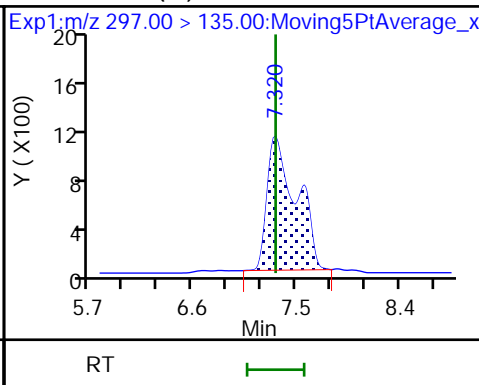
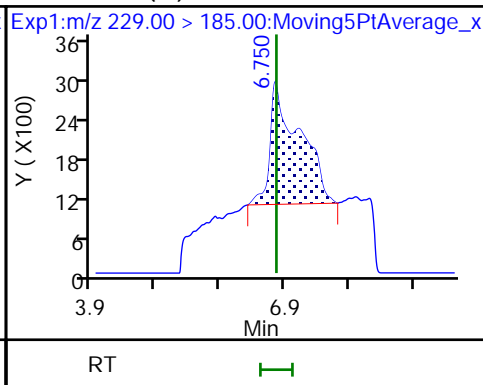
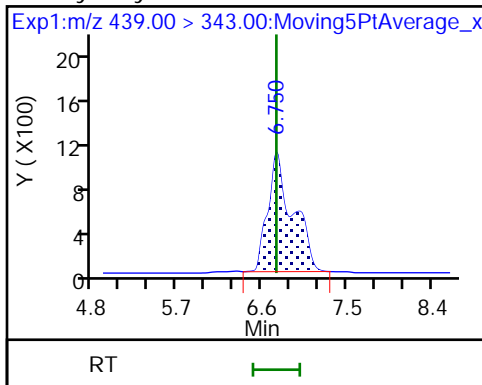
3 R-PSDA (M)



4 Hydrolyzed PSDA

23 PMPA (M)

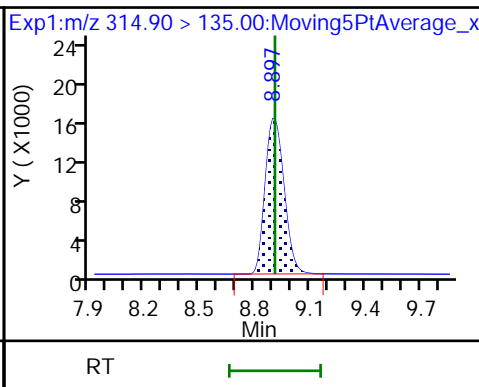
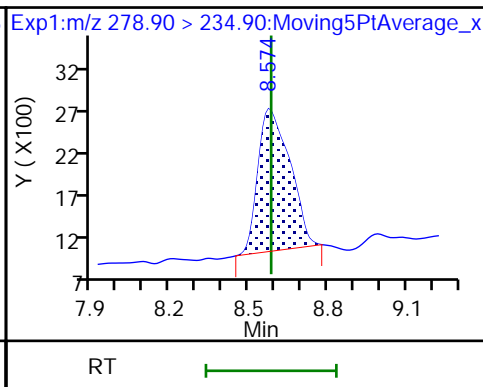
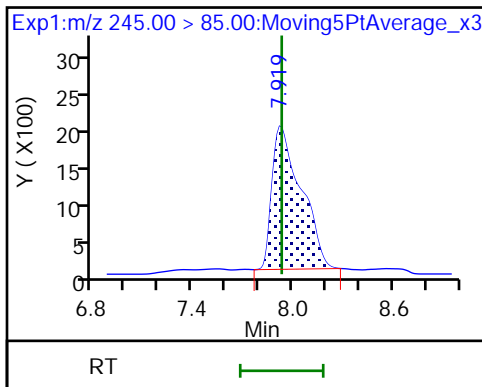
5 NVHOS (M)



6 PFO2HxA

22 PEPA

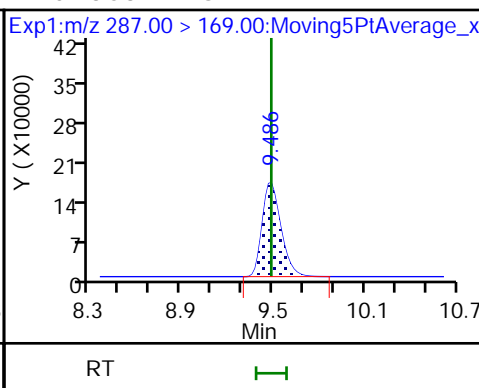
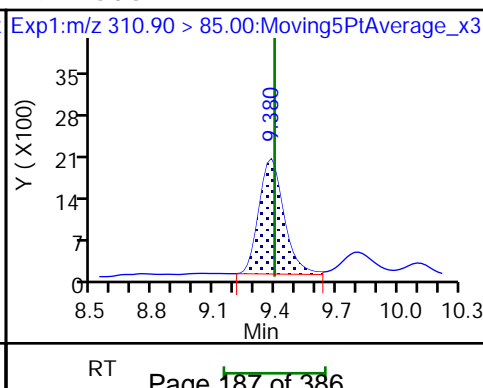
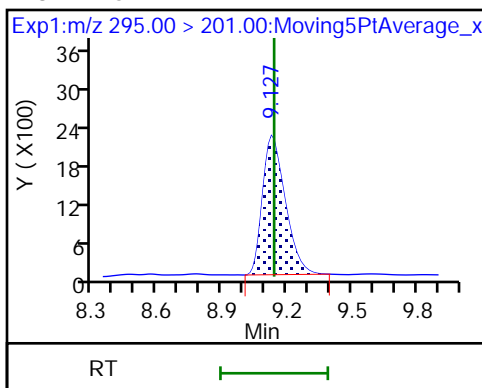
7 PES

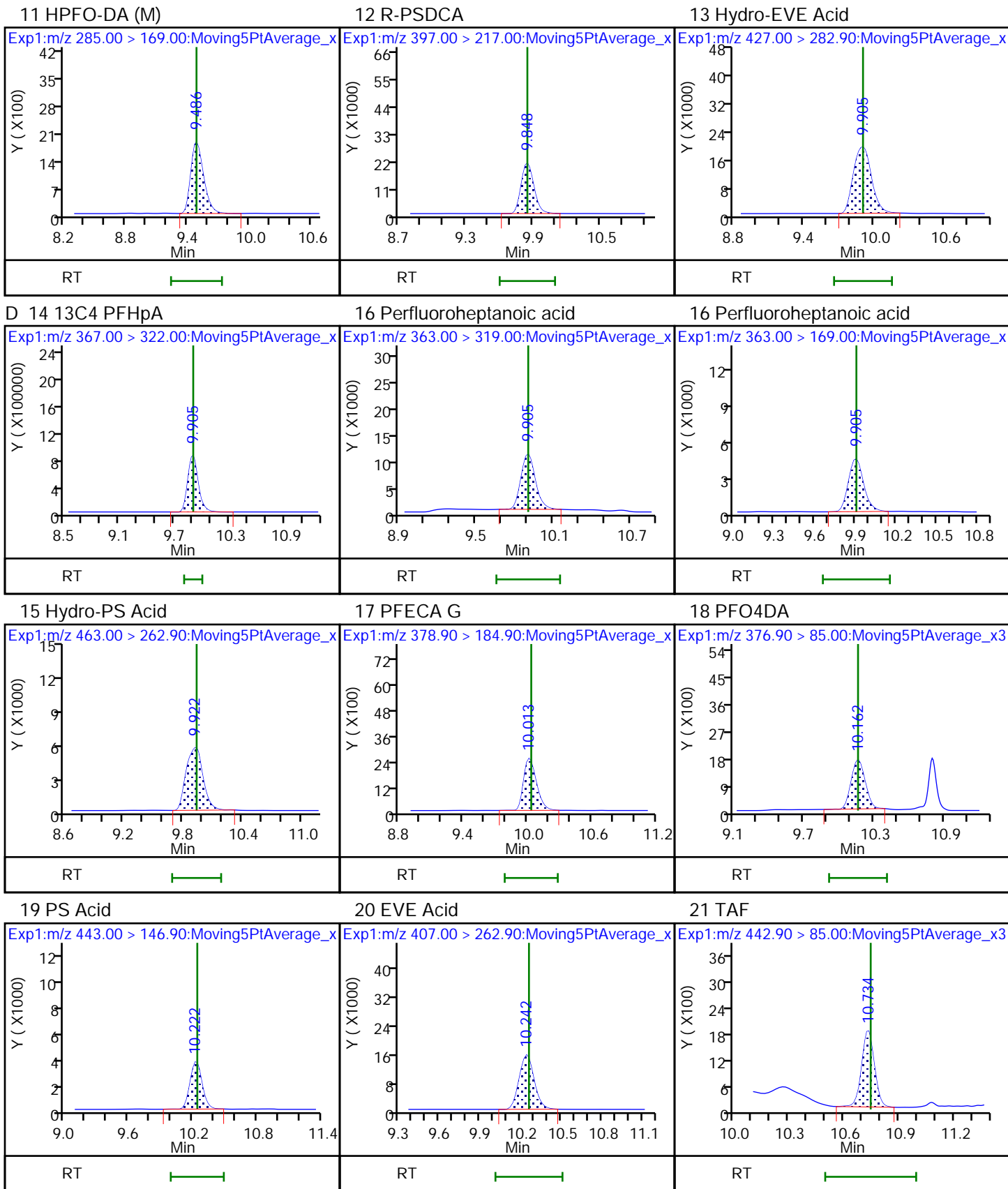


8 PFECA B

9 PFO3OA

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

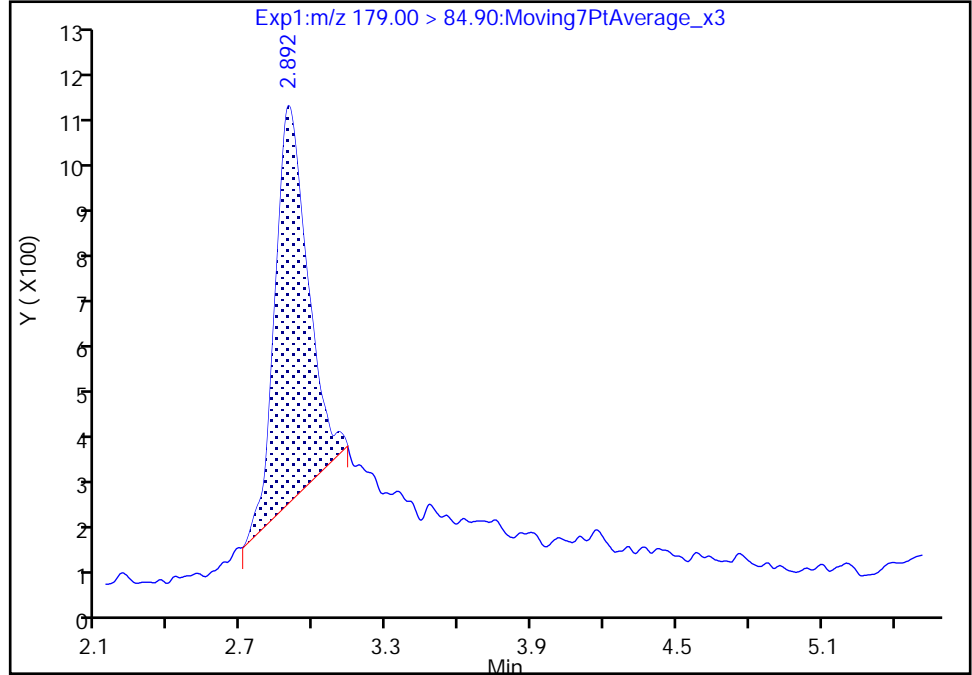
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_003.d
Injection Date: 20-Feb-2021 11:03:56 Instrument ID: A10
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

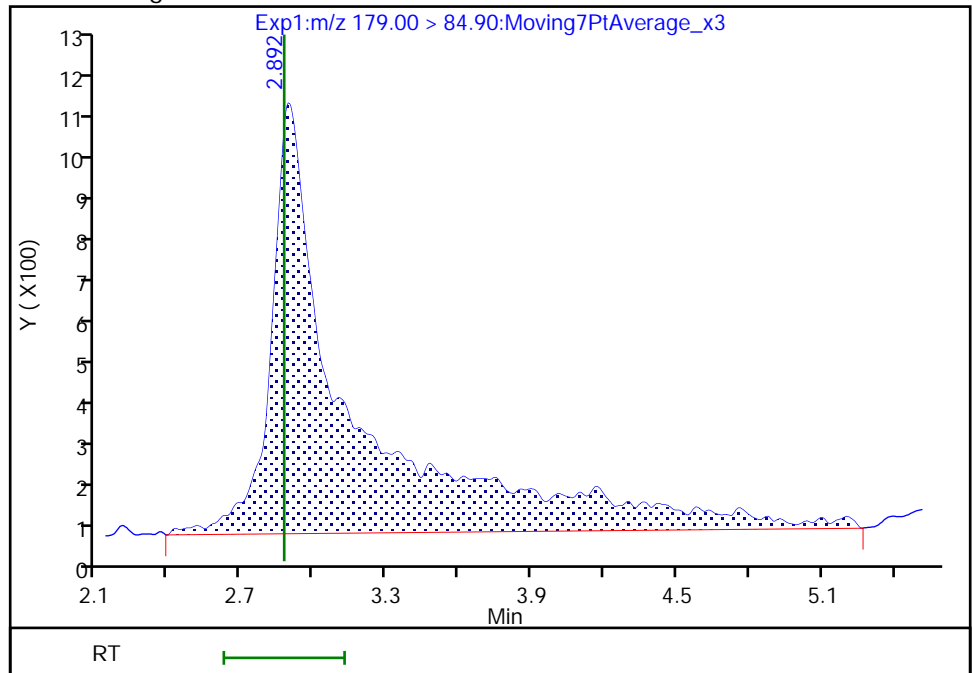
RT: 2.89
Area: 7512
Amount: 0.001590
Amount Units: ng/ml

Processing Integration Results



RT: 2.89
Area: 22895
Amount: 0.002287
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 11:44:08
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Sacramento

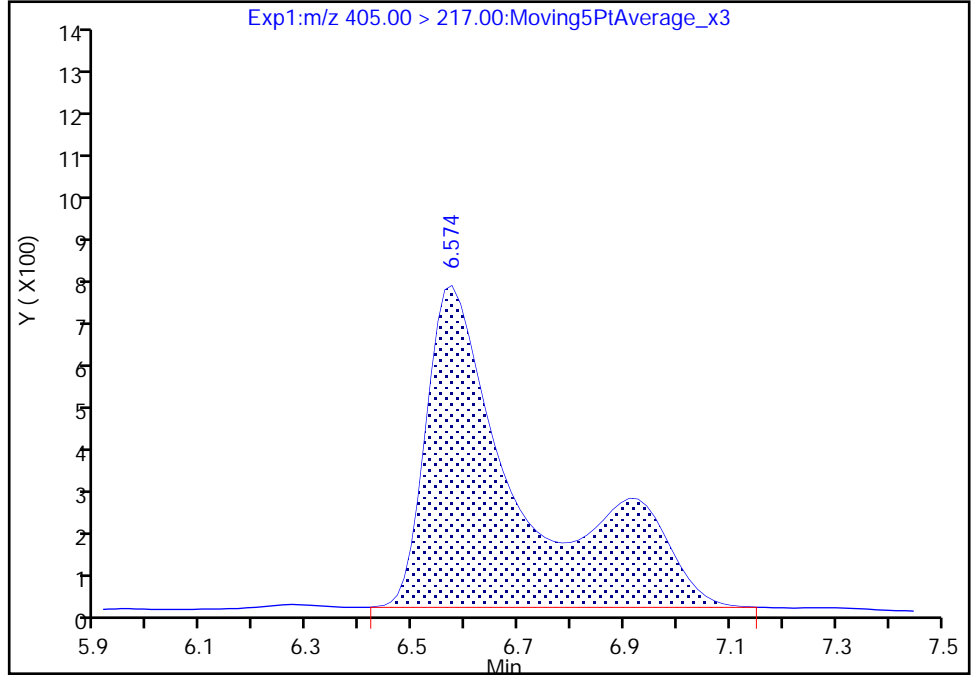
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_003.d
Injection Date: 20-Feb-2021 11:03:56 Instrument ID: A10
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

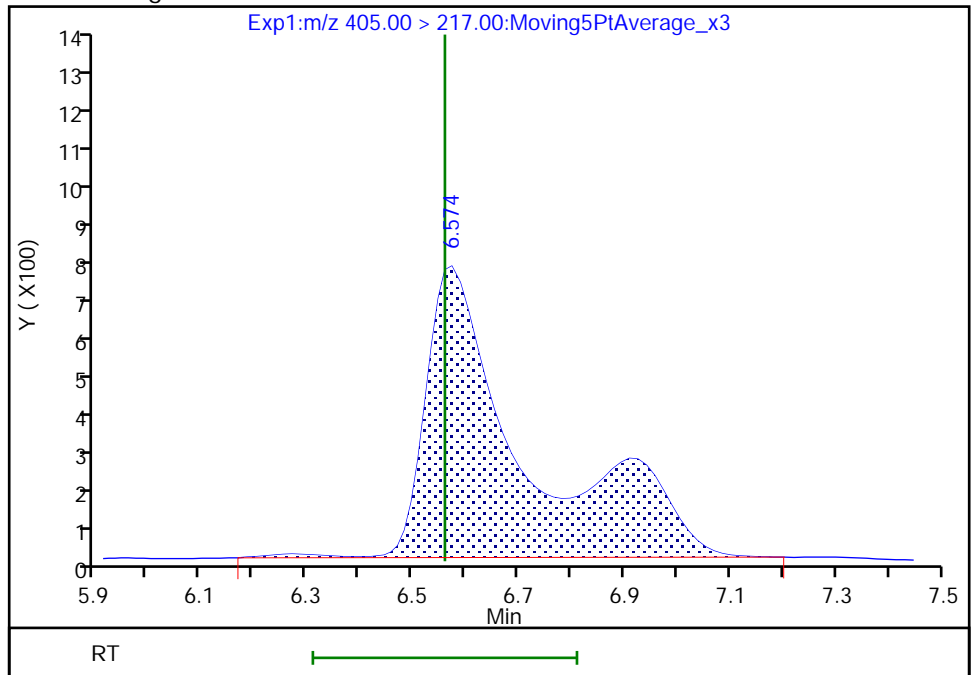
RT: 6.57
Area: 10013
Amount: 0.002438
Amount Units: ng/ml

Processing Integration Results



RT: 6.57
Area: 10170
Amount: 0.002472
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 15:01:50
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento

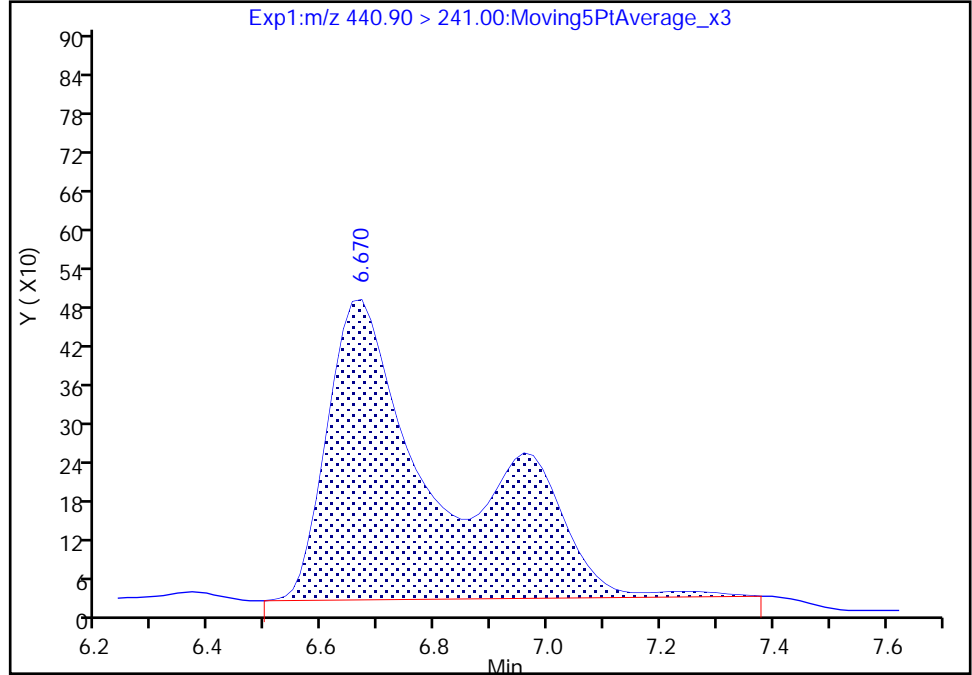
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_003.d
Injection Date: 20-Feb-2021 11:03:56 Instrument ID: A10
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

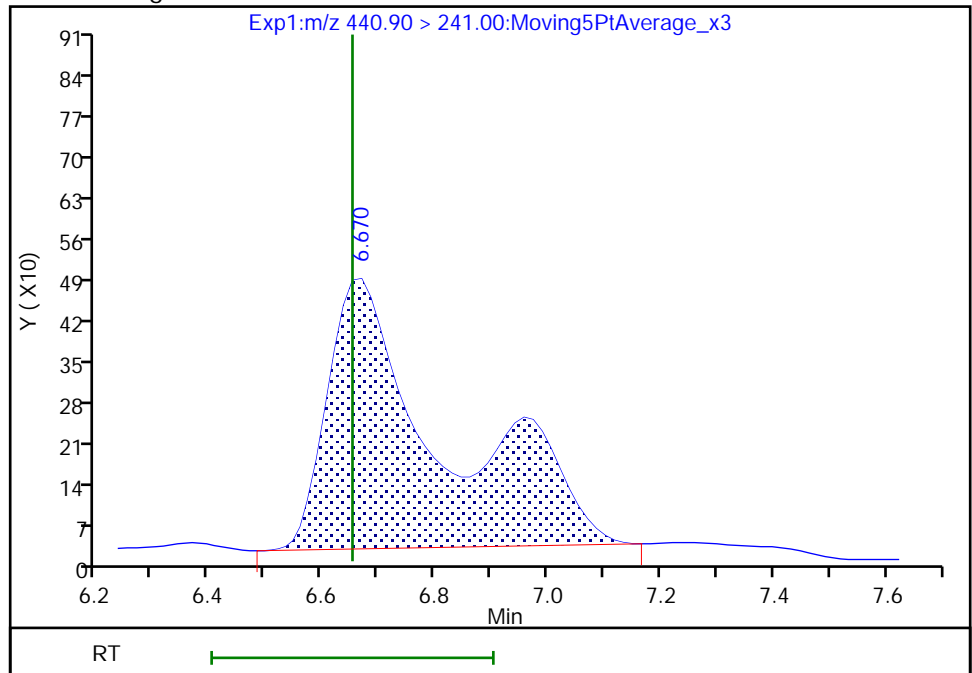
RT: 6.67
Area: 6849
Amount: 0.002505
Amount Units: ng/ml

Processing Integration Results



RT: 6.67
Area: 6639
Amount: 0.002444
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 11:44:18
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

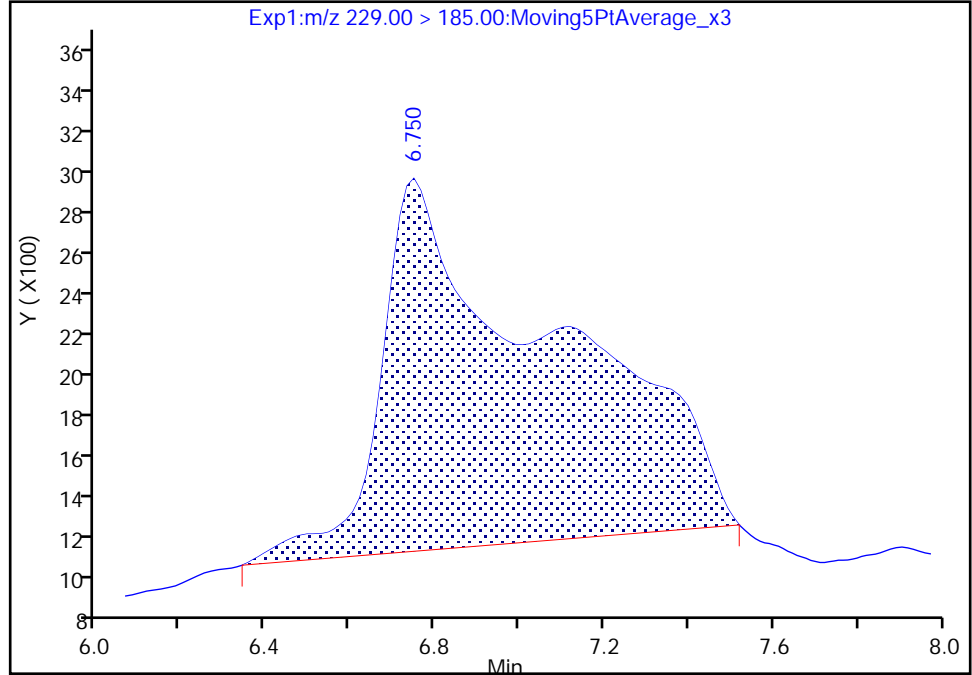
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_003.d
Injection Date: 20-Feb-2021 11:03:56 Instrument ID: A10
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

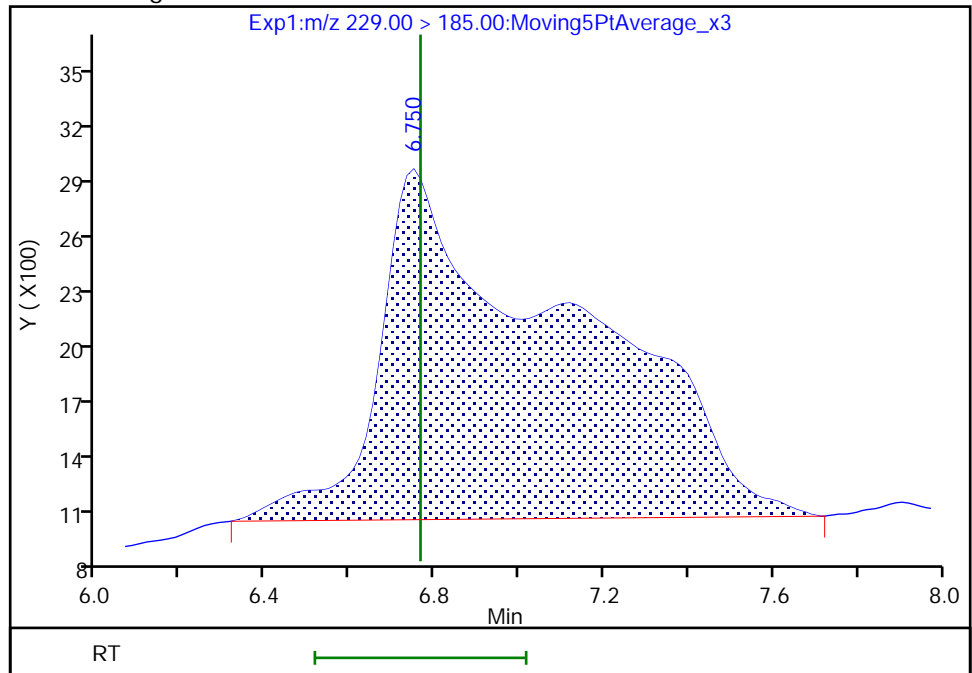
RT: 6.75
Area: 51018
Amount: 0.001763
Amount Units: ng/ml

Processing Integration Results



RT: 6.75
Area: 58856
Amount: 0.002484
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 11:44:27
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

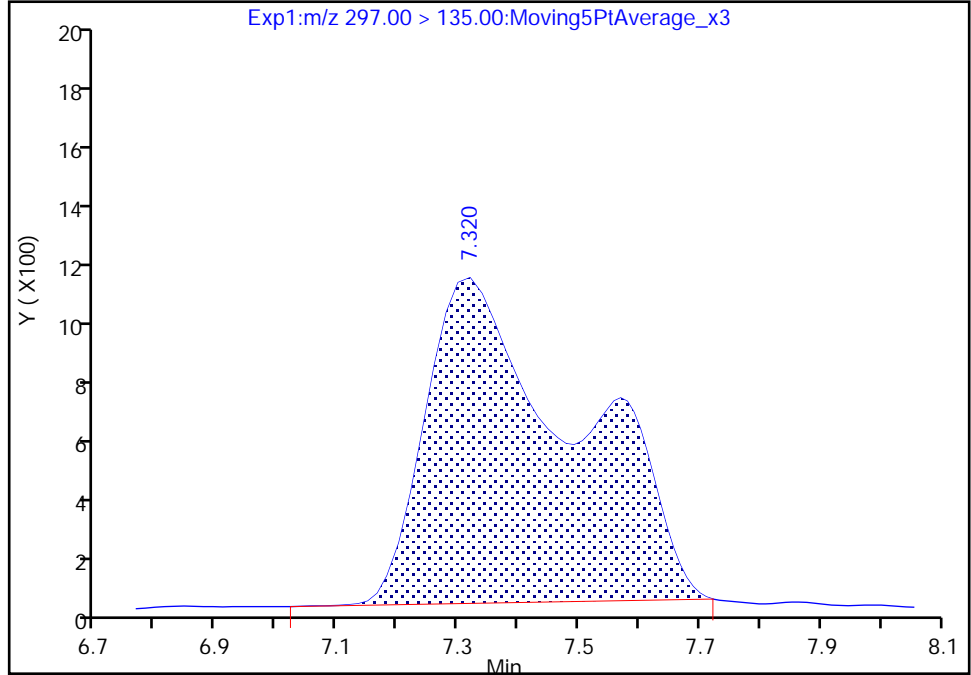
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 Injection Date: 20-Feb-2021 11:03:56 Instrument ID: A10
 Lims ID: IC STD 2
 Client ID:
 Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
 Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

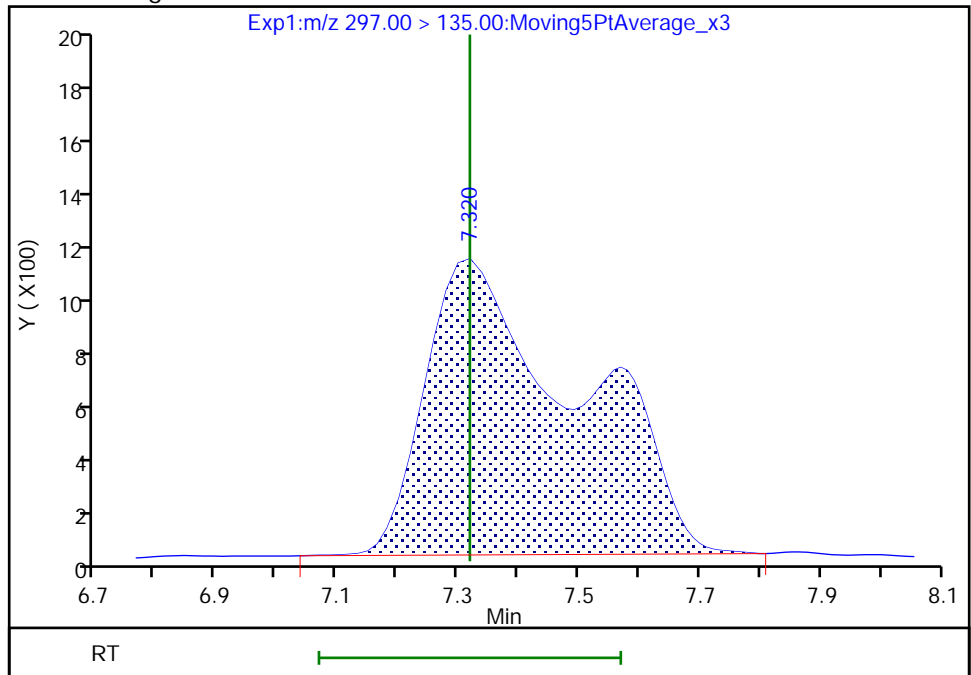
RT: 7.32
 Area: 18568
 Amount: 0.002429
 Amount Units: ng/ml

Processing Integration Results



RT: 7.32
 Area: 18941
 Amount: 0.002471
 Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 15:04:54
 Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

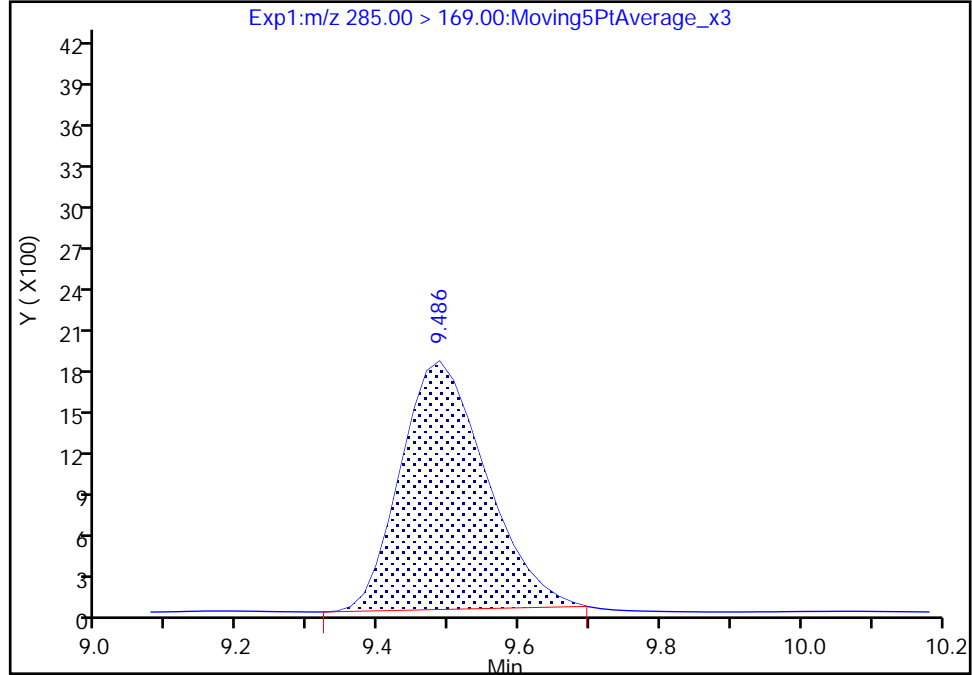
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_003.d
Injection Date: 20-Feb-2021 11:03:56 Instrument ID: A10
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 5 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

11 HPFO-DA, CAS: 13252-13-6

Signal: 1

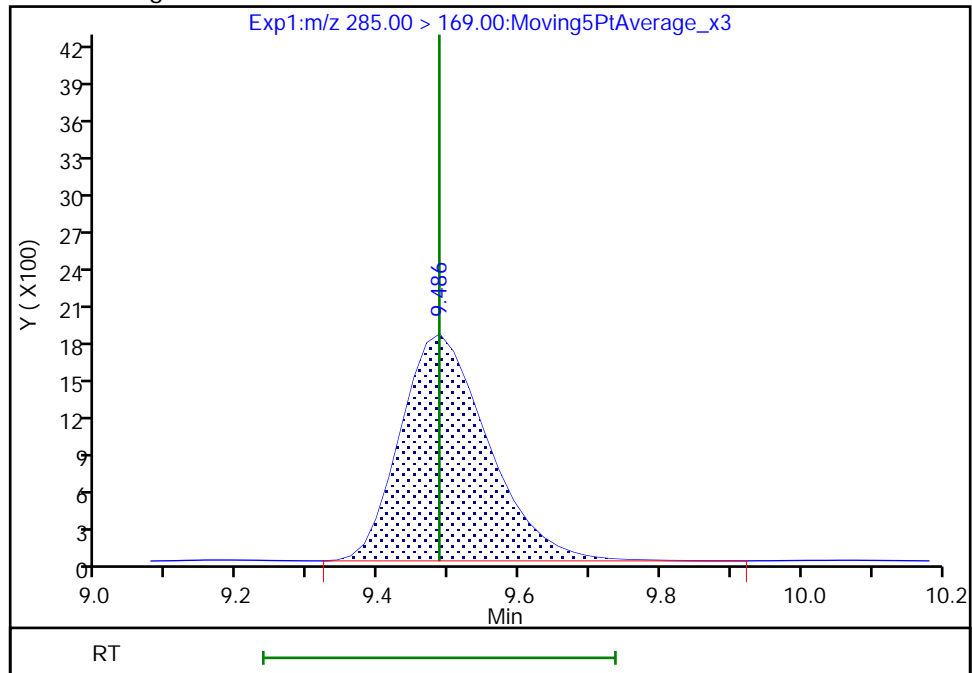
RT: 9.49
Area: 15350
Amount: 0.002531
Amount Units: ng/ml

Processing Integration Results



RT: 9.49
Area: 15911
Amount: 0.002614
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 15:06:08
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_004.d
 Lims ID: IC STD 3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 20-Feb-2021 11:21:24 ALS Bottle#: 6 Worklist Smp#: 4
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC 3 (46)
 Misc. Info.: Plate: 1 Rack: 3
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Sublist: chrom-A10_PFAS_CHEM_TB3+*sub1

Method: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 20-Feb-2021 15:38:36 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICAL File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1681

First Level Reviewer: roycea Date: 20-Feb-2021 13:21:27

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.004	2.875	0.129		45557	0.004550		91.0	5.9	M
2 R-EVE										M
405.00 > 217.00	6.621	6.560	0.061		19048	0.004630		92.6	480	M
3 R-PSDA										M
440.90 > 241.00	6.701	6.653	0.048		12855	0.004733		94.7	328	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.797	6.749	0.048		39814	0.005013		100	808	
23 PMPA										
229.00 > 185.00	6.781	6.765	0.016		89382	0.004936		98.7	35.7	
5 NVHOS										M
297.00 > 135.00	7.339	7.319	0.020		38344	0.005002		100	790	M
6 PFO2HxA										
245.00 > 85.00	7.946	7.932	0.014		46864	0.004990		99.8	577	
22 PEPA										
278.90 > 234.90	8.577	8.584	-0.007		28156	0.005035		101	47.1	
7 PES										
314.90 > 135.00	8.904	8.908	-0.004		230225	0.004902		98.0	8587	
8 PFECA B										
295.00 > 201.00	9.122	9.139	-0.017		32125	0.004949		99.0	1103	
9 PFO3OA										
310.90 > 85.00	9.371	9.396	-0.025		30103	0.005023		100	469	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.476	9.486	-0.010		1384745	0.2503		100	55239	
11 HPFO-DA										
285.00 > 169.00	9.476	9.486	-0.010	1.000	28654	0.004752		95.0	1136	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.838	9.847	-0.009		316538	0.005035		101	9974	
13 Hydro-EVE Acid										
427.00 > 282.90	9.895	9.904	-0.009		399155	0.005055		101	6295	
D 14 13C4 PFHpA										
367.00 > 322.00	9.895	9.904	-0.009		6569203	0.2586		103	118950	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.895	9.904	-0.009	1.000	146570	0.004860	Target=0.00	97.2	780	
363.00 > 169.00	9.895	9.904	-0.009	1.000	64390		2.28(0.00-0.00)	97.2	2760	
15 Hydro-PS Acid										
463.00 > 262.90	9.931	9.939	-0.008		124990	0.004919		98.4	3578	
17 PFECA G										
378.90 > 184.90	10.000	10.034	-0.034		45072	0.004798		96.0	1809	
18 PFO4DA										
376.90 > 85.00	10.151	10.161	-0.010		26406	0.005119		102	259	
19 PS Acid										
443.00 > 146.90	10.231	10.242	-0.011		57184	0.005003		100	1797	
20 EVE Acid										
407.00 > 262.90	10.231	10.260	-0.029		234854	0.005199		104	9869	
21 TAF										
442.90 > 85.00	10.729	10.745	-0.016		20079	0.005356		107	61.0	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD3_00046

Amount Added: 1.00

Units: mL

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_004.d

Injection Date: 20-Feb-2021 11:21:24

Instrument ID: A10

Lims ID: IC STD 3

Client ID:

Operator ID: Sac_inst_A10

ALS Bottle#: 6

Worklist Smp#: 4

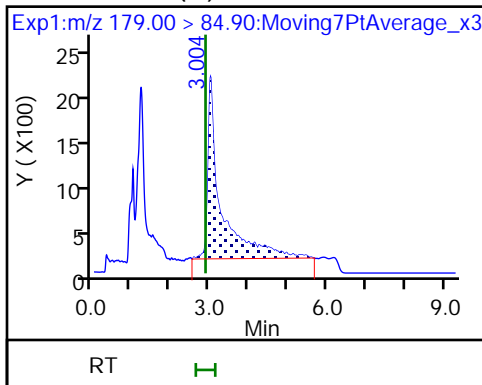
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

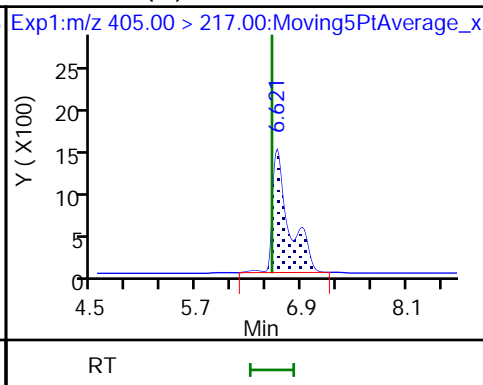
Method: A10_PFA5_CHEM_TB3+

Limit Group: LC PFA5_TB3P - ICAL

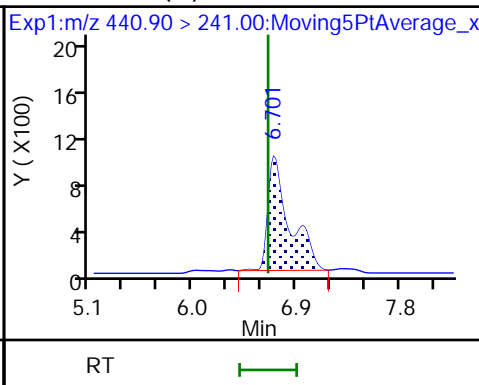
1 PFMOAA (M)



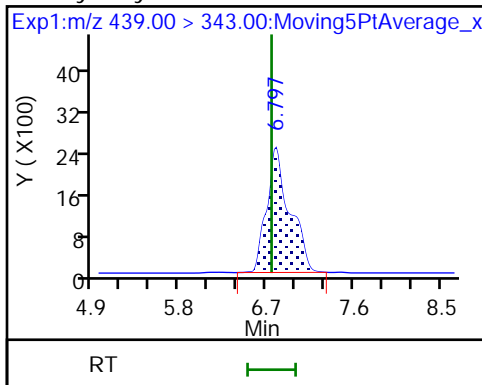
2 R-EVE (M)



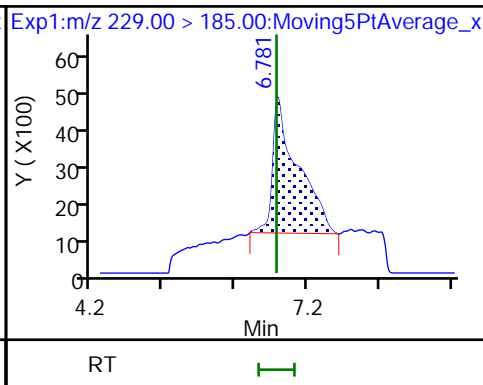
3 R-PSDA (M)



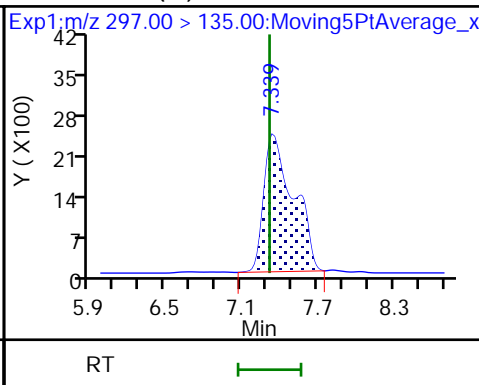
4 Hydrolyzed PSDA



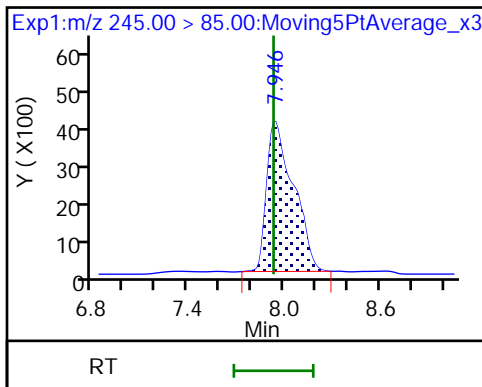
23 PMPA



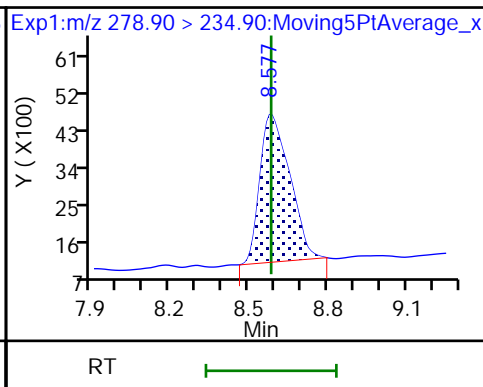
5 NVHOS (M)



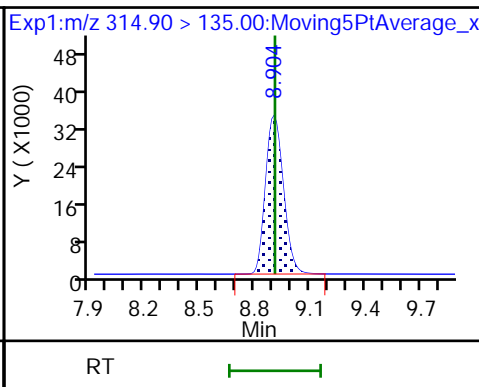
6 PFO2HxA



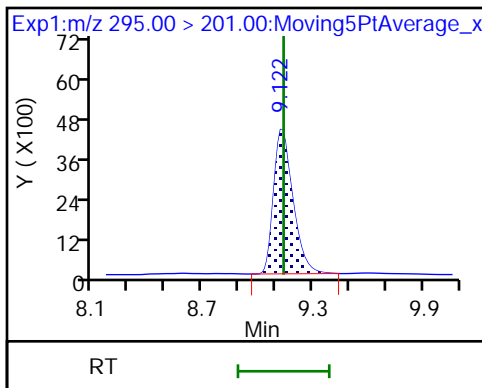
22 PEPA



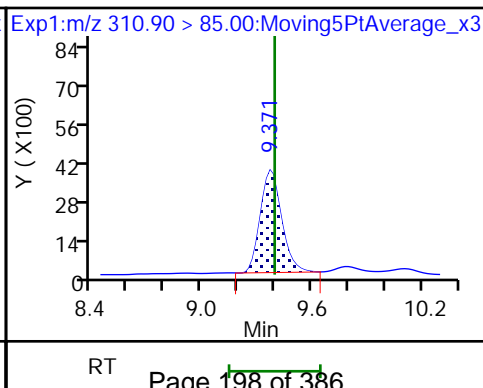
7 PES



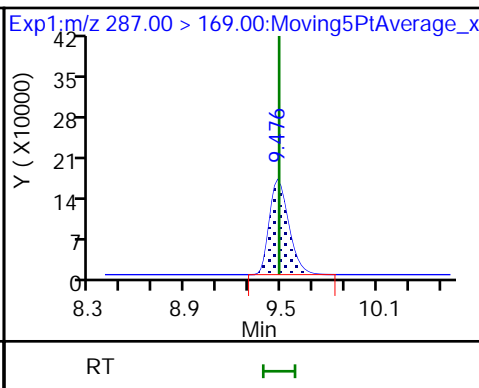
8 PFECA B

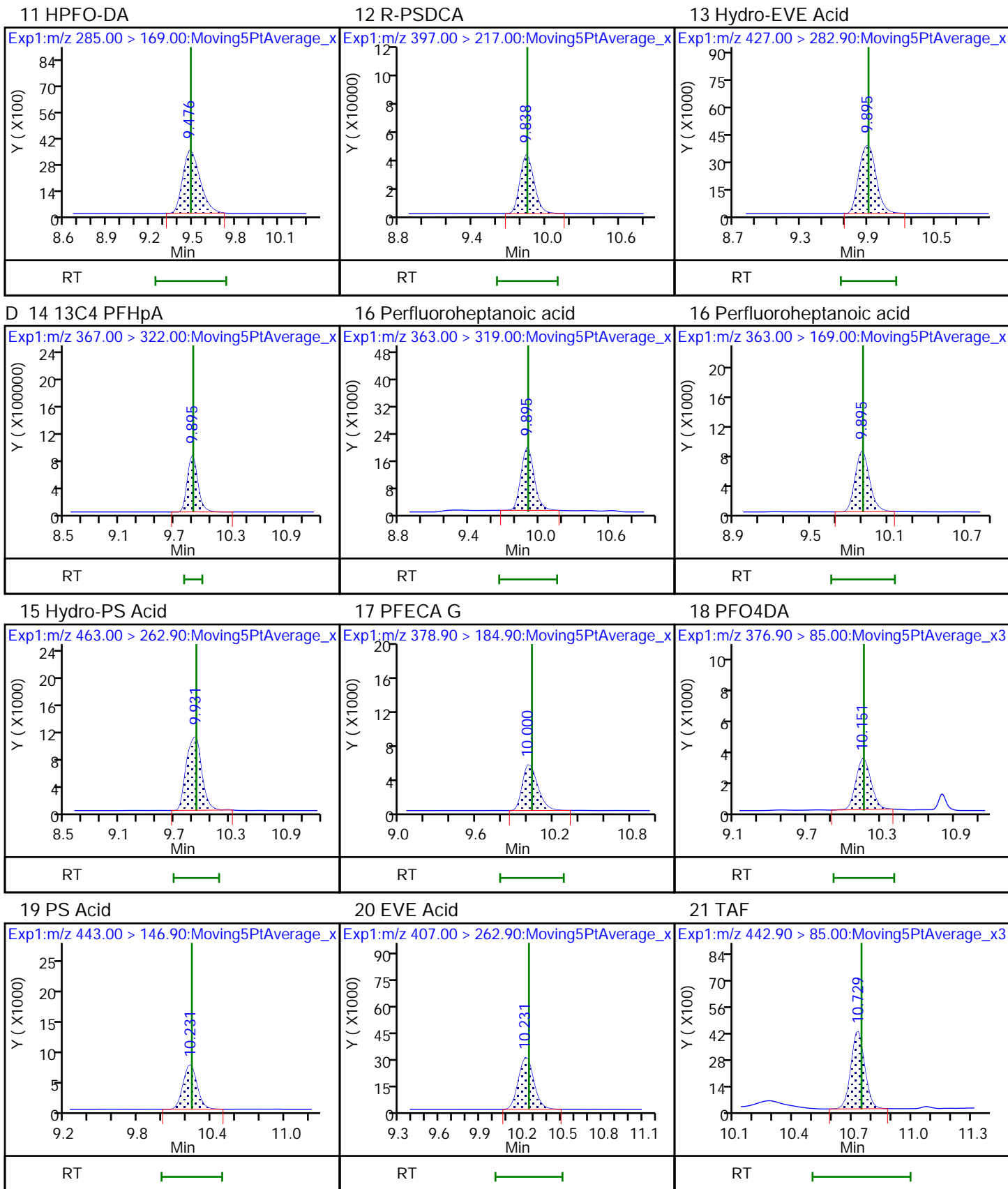


9 PFO3OA



D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

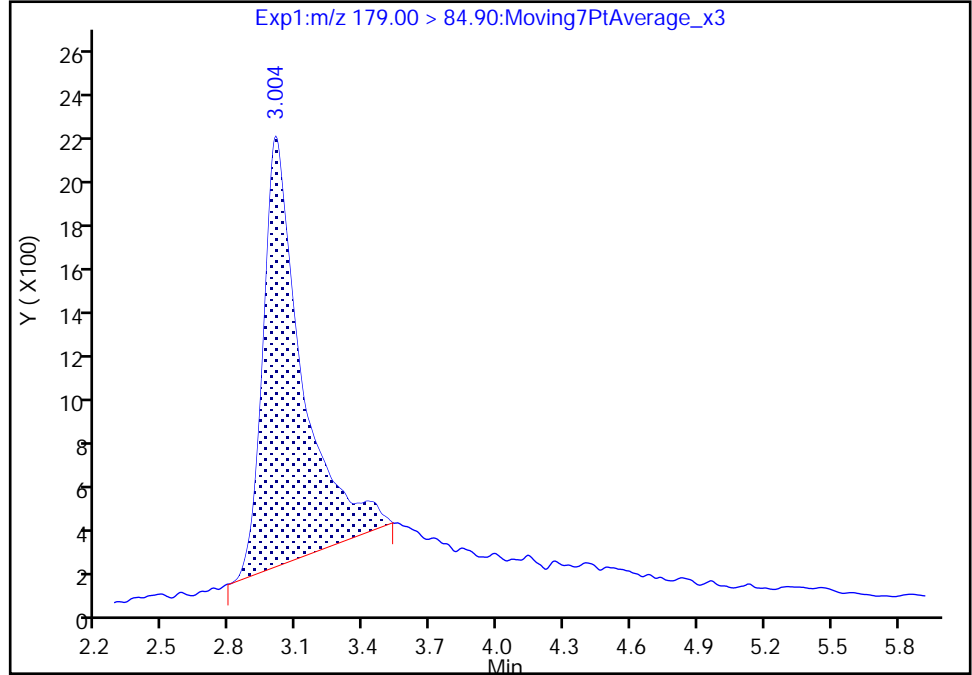
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_004.d
Injection Date: 20-Feb-2021 11:21:24 Instrument ID: A10
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

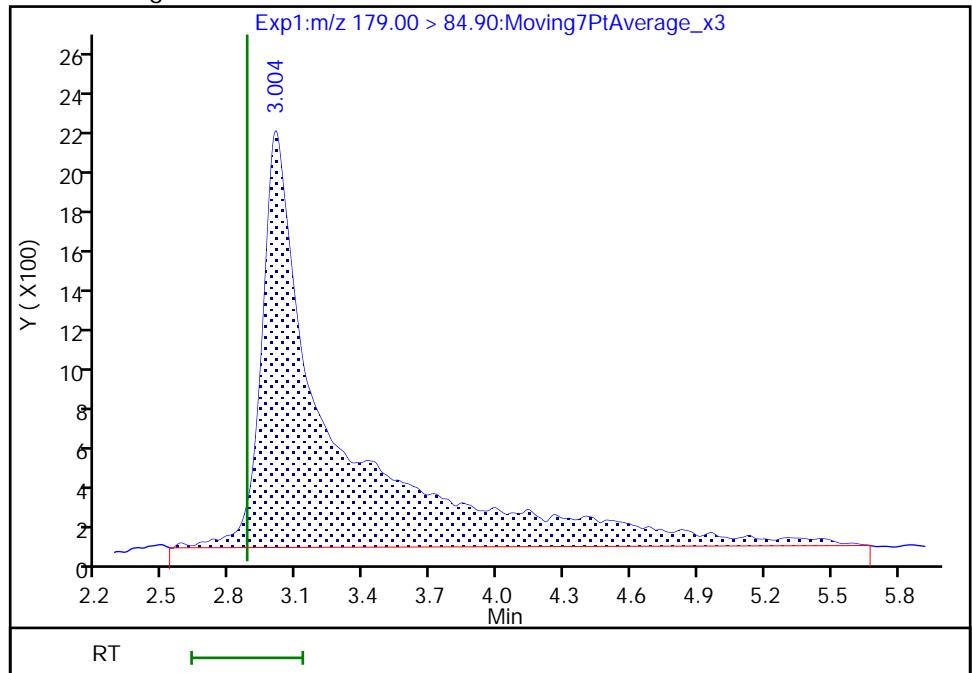
RT: 3.00
Area: 22553
Amount: 0.003686
Amount Units: ng/ml

Processing Integration Results



RT: 3.00
Area: 45557
Amount: 0.004550
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 13:20:49
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Sacramento

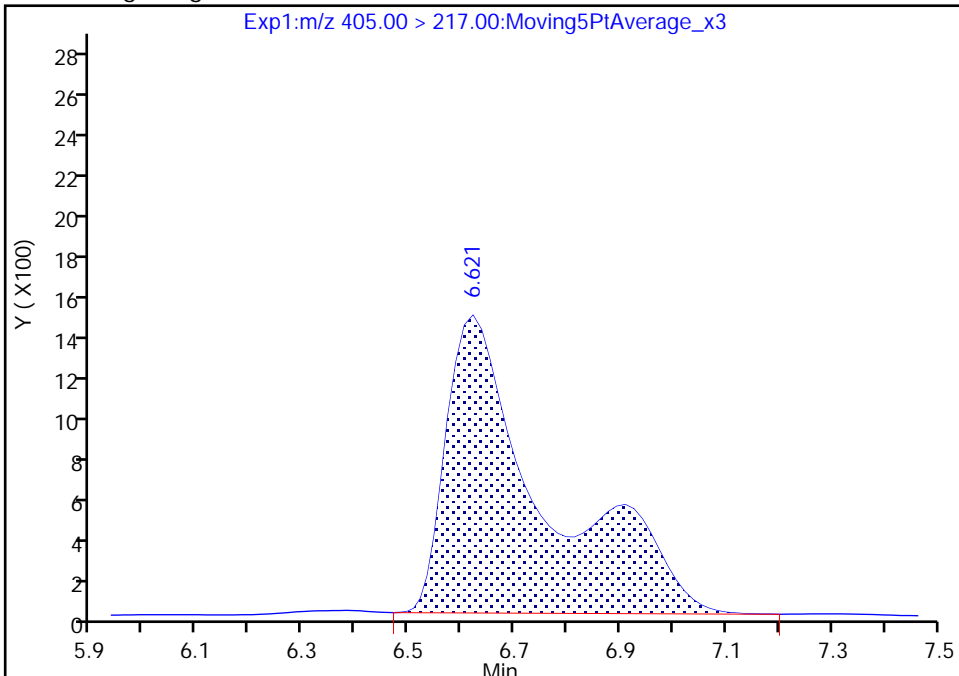
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_004.d
Injection Date: 20-Feb-2021 11:21:24 Instrument ID: A10
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

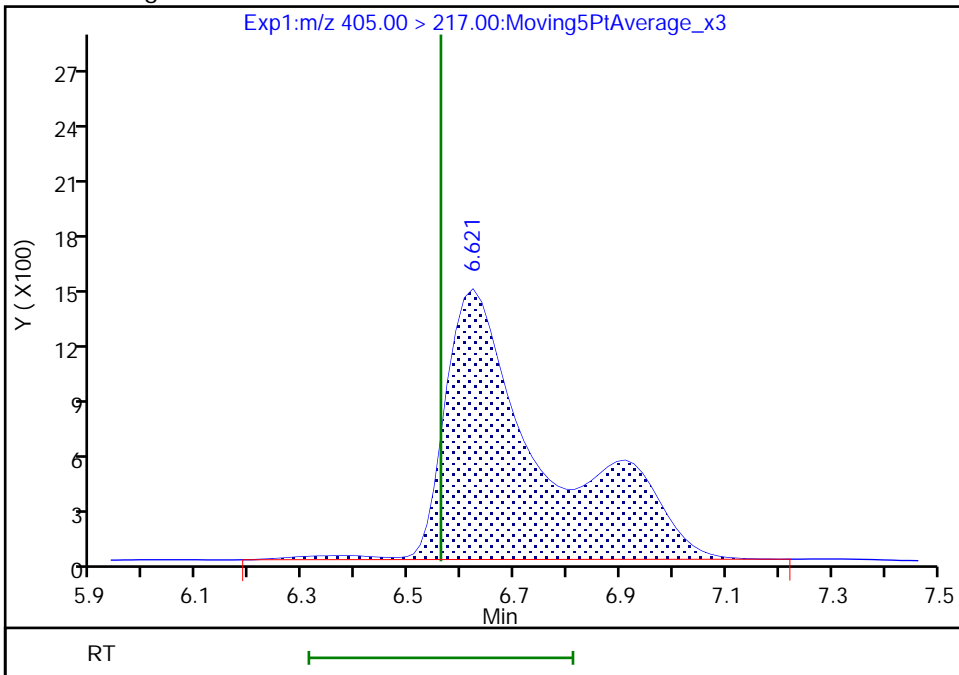
RT: 6.62
Area: 18659
Amount: 0.005207
Amount Units: ng/ml

Processing Integration Results



RT: 6.62
Area: 19048
Amount: 0.004630
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 13:20:58
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento

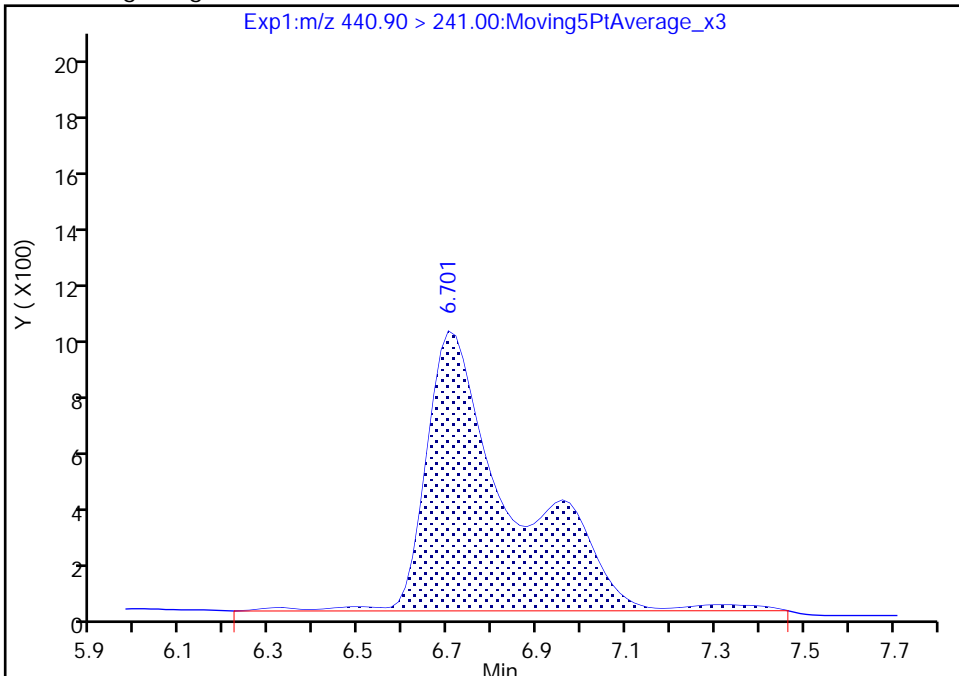
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_004.d
Injection Date: 20-Feb-2021 11:21:24 Instrument ID: A10
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

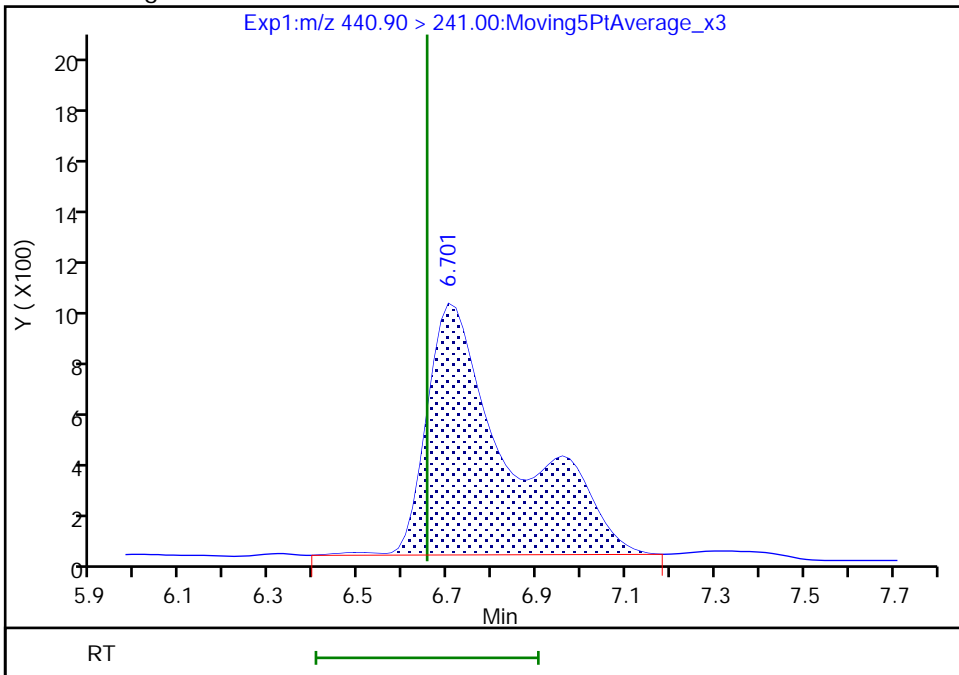
RT: 6.70
Area: 13422
Amount: 0.005040
Amount Units: ng/ml

Processing Integration Results



RT: 6.70
Area: 12855
Amount: 0.004733
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 13:21:11
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

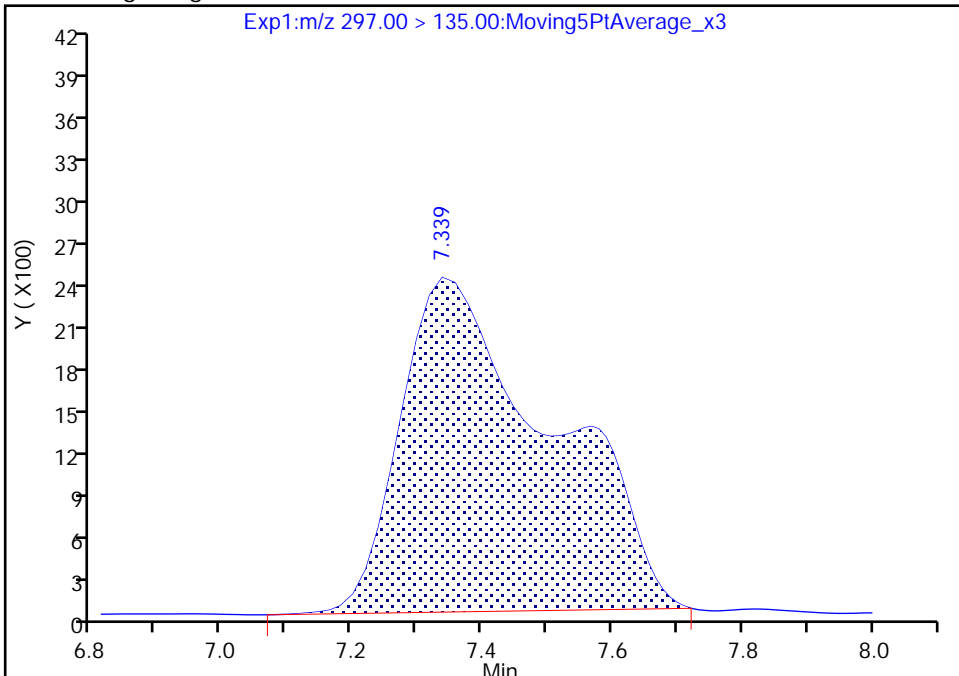
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_004.d
Injection Date: 20-Feb-2021 11:21:24 Instrument ID: A10
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 6 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

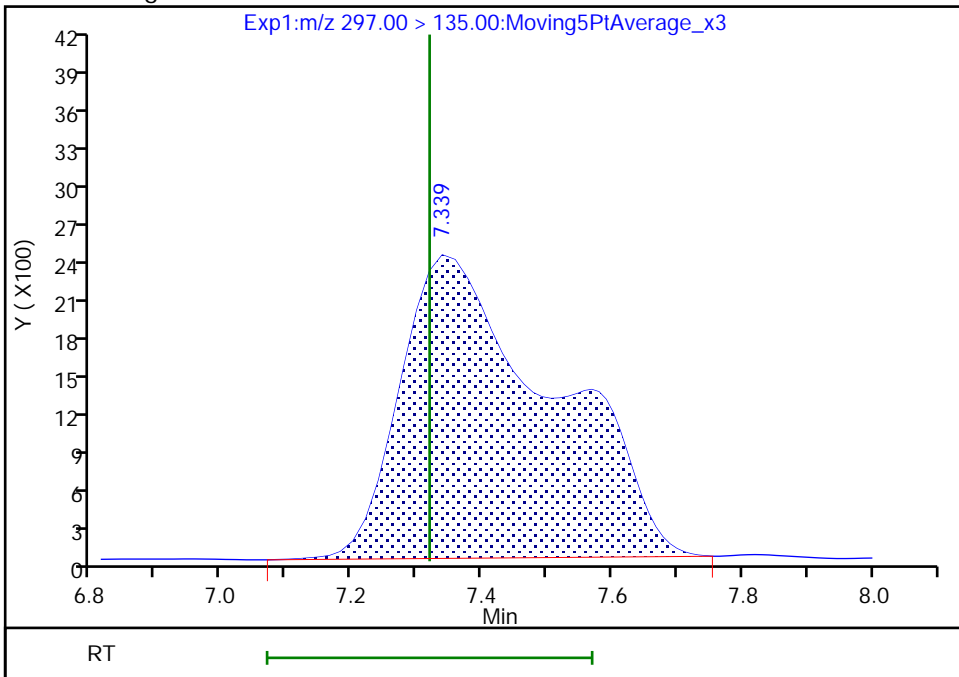
RT: 7.34
Area: 37952
Amount: 0.004956
Amount Units: ng/ml

Processing Integration Results



RT: 7.34
Area: 38344
Amount: 0.005002
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 15:05:07
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_005.d
 Lims ID: IC STD 4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 20-Feb-2021 11:38:51 ALS Bottle#: 7 Worklist Smp#: 5
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC 4 (45)
 Misc. Info.: Plate: 1 Rack: 3
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Sublist: chrom-A10_PFAS_CHEM_TB3+*sub1

Method: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 20-Feb-2021 15:38:37 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1681

First Level Reviewer: roycea Date: 20-Feb-2021 13:22:07

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.060	2.875	0.185		101876	0.0102		102	7.9	M
2 R-EVE										M
405.00 > 217.00	6.653	6.560	0.093		40915	0.0099		99.5	1074	M
3 R-PSDA										
440.90 > 241.00	6.733	6.653	0.080		28498	0.0105		105	775	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.813	6.749	0.064		84034	0.0106		106	1808	
23 PMPA										
229.00 > 185.00	6.797	6.765	0.032		158466	0.0105		105	75.7	
5 NVHOS										M
297.00 > 135.00	7.358	7.319	0.039		76344	0.0100		99.6	1586	M
6 PFO2HxA										
245.00 > 85.00	7.945	7.932	0.013		98961	0.0105		105	1286	
22 PEPA										
278.90 > 234.90	8.583	8.584	-0.001		59033	0.0106		106	101	
7 PES										
314.90 > 135.00	8.903	8.908	-0.005		473943	0.0101		101	18163	
8 PFECA B										
295.00 > 201.00	9.133	9.139	-0.006		70172	0.0108		108	2477	
9 PFO3OA										
310.90 > 85.00	9.366	9.396	-0.030		65562	0.0109		109	710	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.475	9.486	-0.011		1446250	0.2614		105	57580	
11 HPFO-DA										
285.00 > 169.00	9.475	9.486	-0.011	1.000	62660	0.0099		99.5	2490	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.836	9.847	-0.011		643460	0.0102		102	20149	
13 Hydro-EVE Acid										
427.00 > 282.90	9.893	9.904	-0.011		813726	0.0103		103	12754	
D 14 13C4 PFHpA										
367.00 > 322.00	9.893	9.904	-0.011		6693137	0.2634		105	141513	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.893	9.904	-0.011	1.000	303706	0.0103	Target=0.00	103	1672	
363.00 > 169.00	9.893	9.904	-0.011	1.000	126499		2.40(0.00-0.00)	103	5377	
15 Hydro-PS Acid										
463.00 > 262.90	9.929	9.939	-0.010		262879	0.0103		103	5713	
17 PFECA G										
378.90 > 184.90	10.020	10.034	-0.014		95657	0.0102		102	3818	
18 PFO4DA										
376.90 > 85.00	10.149	10.161	-0.012		52408	0.0102		102	322	
19 PS Acid										
443.00 > 146.90	10.230	10.242	-0.012		118980	0.0104		104	3764	
20 EVE Acid										
407.00 > 262.90	10.230	10.260	-0.030		468536	0.0104		104	14670	
21 TAF										
442.90 > 85.00	10.729	10.745	-0.016		40893	0.0109		109	117	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD4_00045

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_005.d

Injection Date: 20-Feb-2021 11:38:51

Instrument ID: A10

Lims ID: IC STD 4

Client ID:

Operator ID: Sac_inst_A10

ALS Bottle#: 7

Worklist Smp#: 5

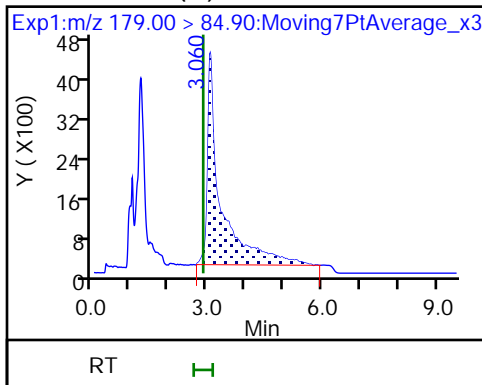
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

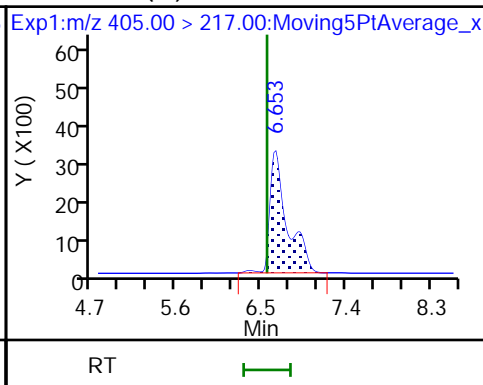
Method: A10_PFA5_CHEM_TB3+

Limit Group: LC PFA5_TB3P - ICAL

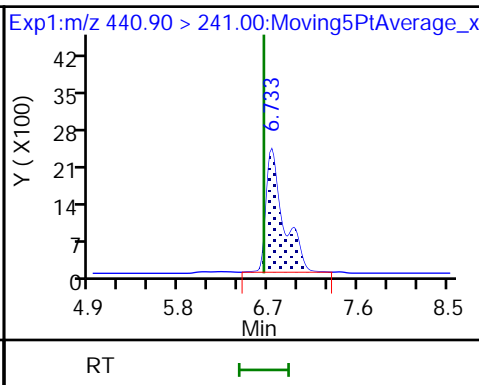
1 PFMOAA (M)



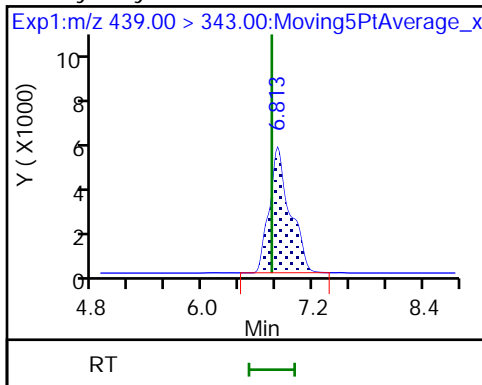
2 R-EVE (M)



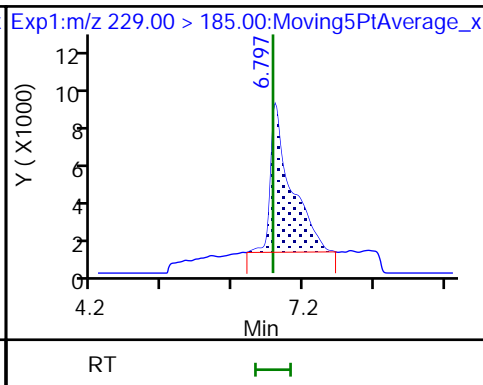
3 R-PSDA



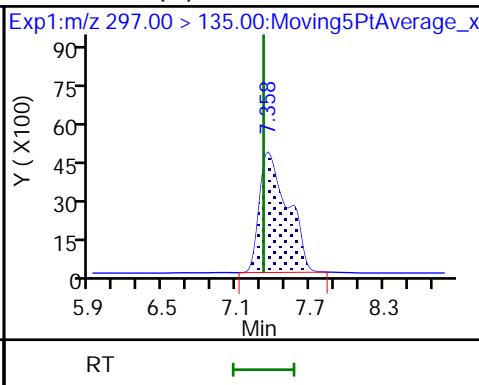
4 Hydrolyzed PSDA



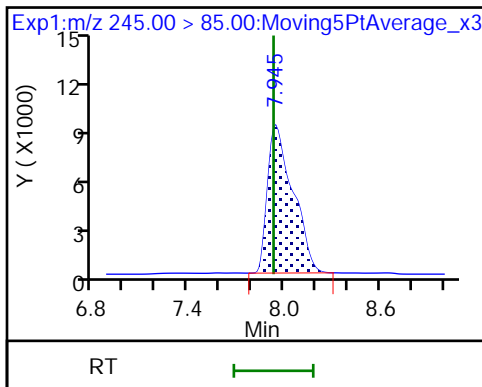
23 PMPA



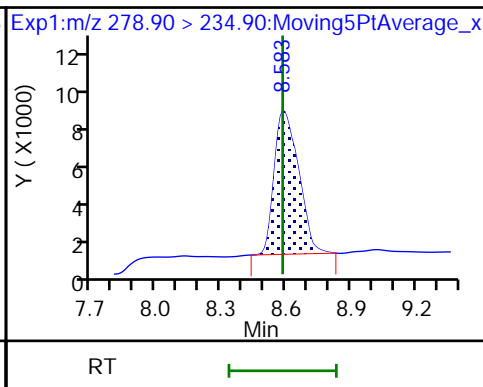
5 NVHOS (M)



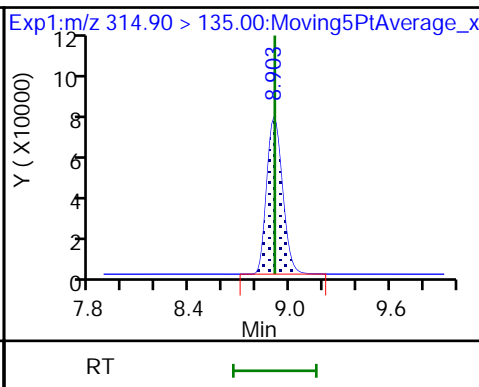
6 PFO2HxA



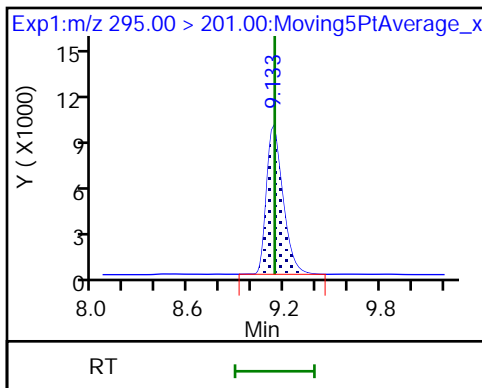
22 PEPA



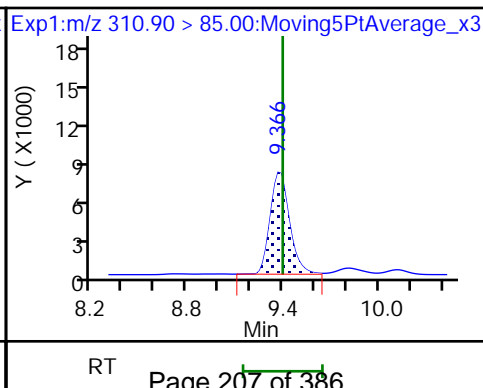
7 PES



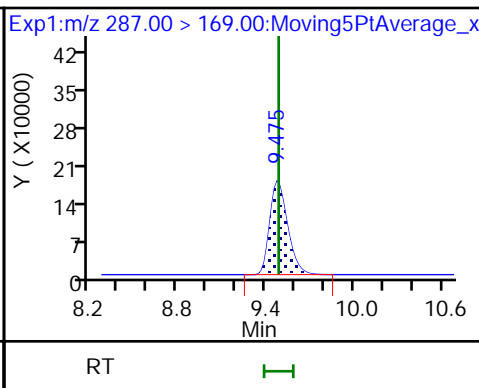
8 PFECA B

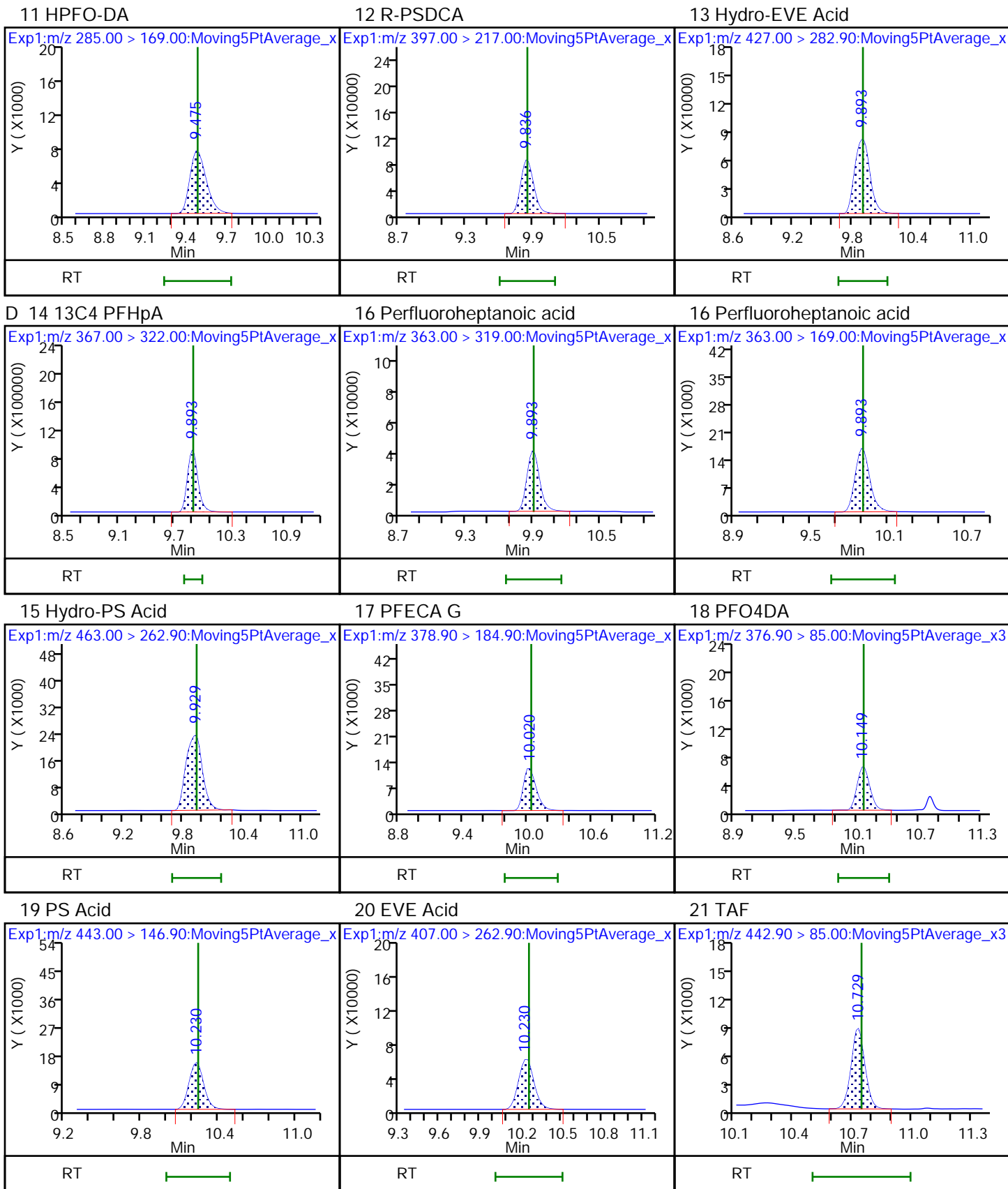


9 PFO3OA



D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

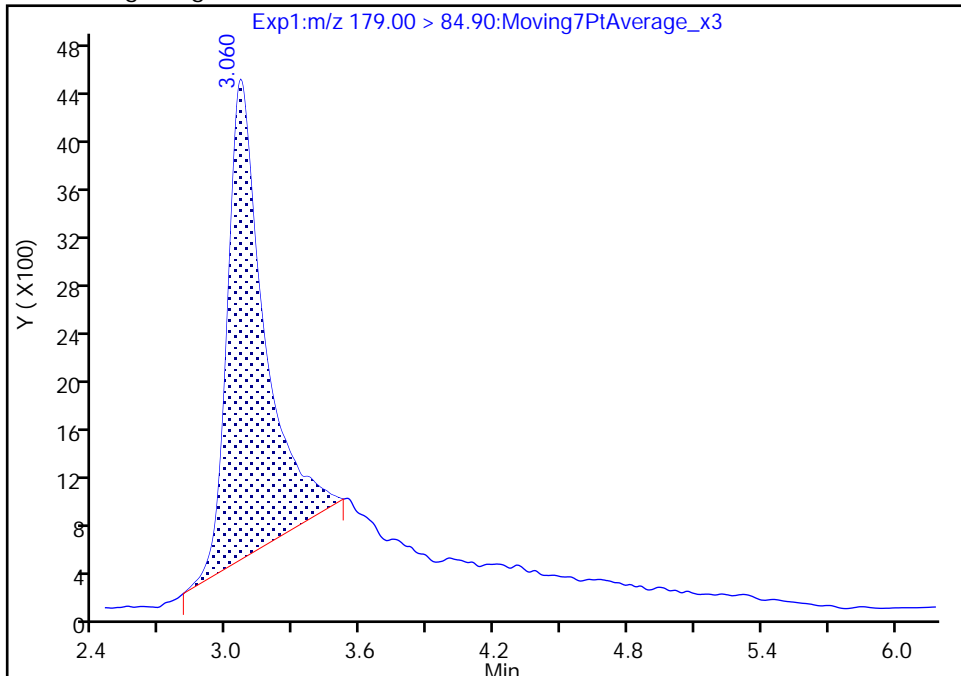
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_005.d
Injection Date: 20-Feb-2021 11:38:51 Instrument ID: A10
Lims ID: IC STD 4
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 7 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

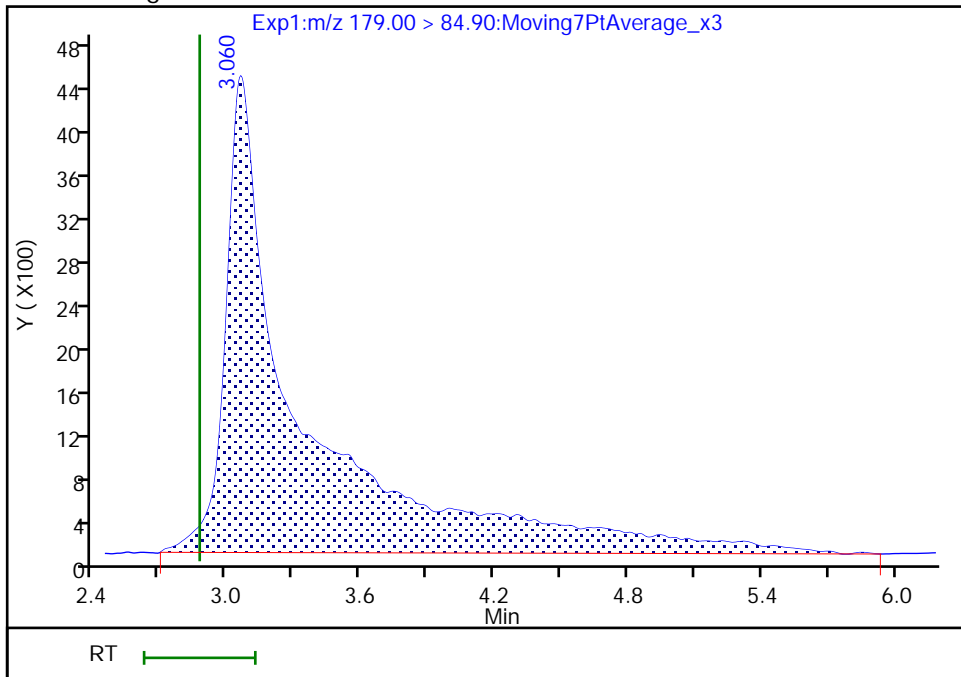
RT: 3.06
Area: 45006
Amount: 0.006643
Amount Units: ng/ml

Processing Integration Results



RT: 3.06
Area: 101876
Amount: 0.010175
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 13:21:38
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

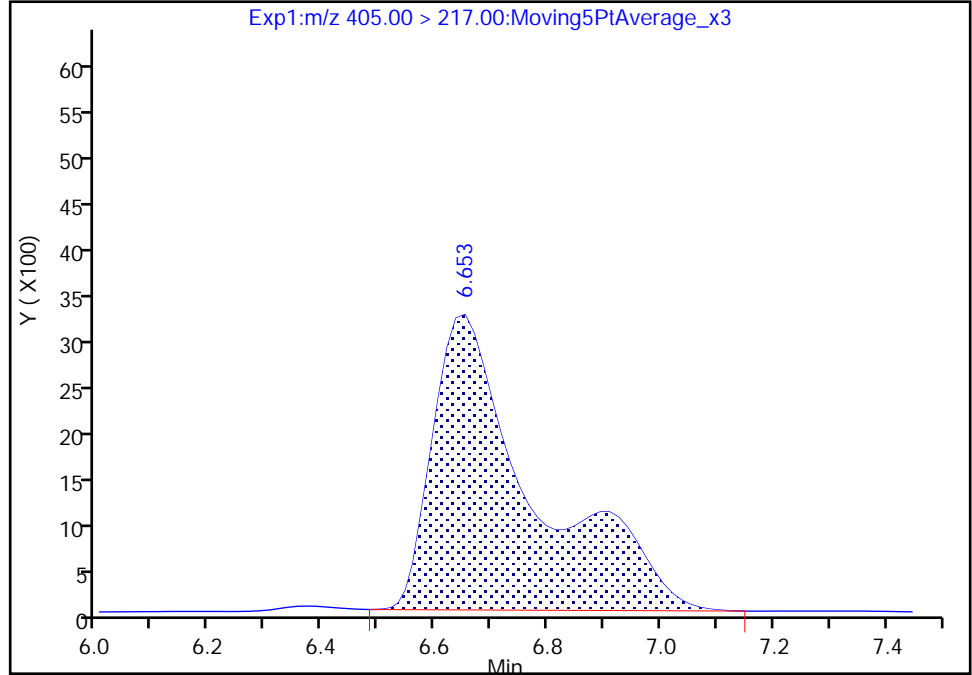
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_005.d
Injection Date: 20-Feb-2021 11:38:51 Instrument ID: A10
Lims ID: IC STD 4
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 7 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

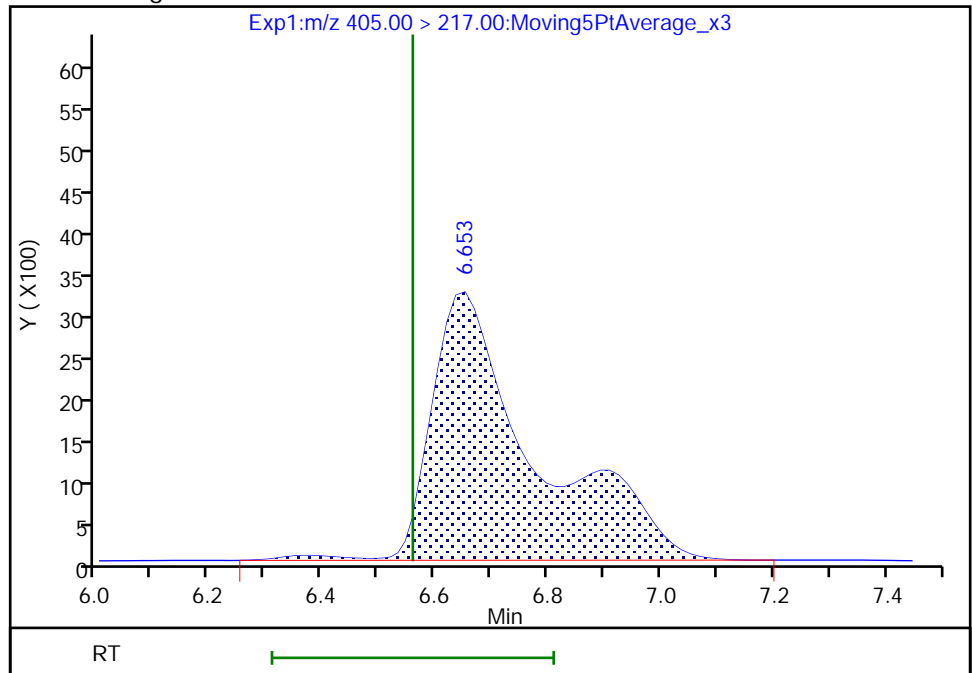
RT: 6.65
Area: 40071
Amount: 0.011148
Amount Units: ng/ml

Processing Integration Results



RT: 6.65
Area: 40915
Amount: 0.009946
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 13:21:47
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento

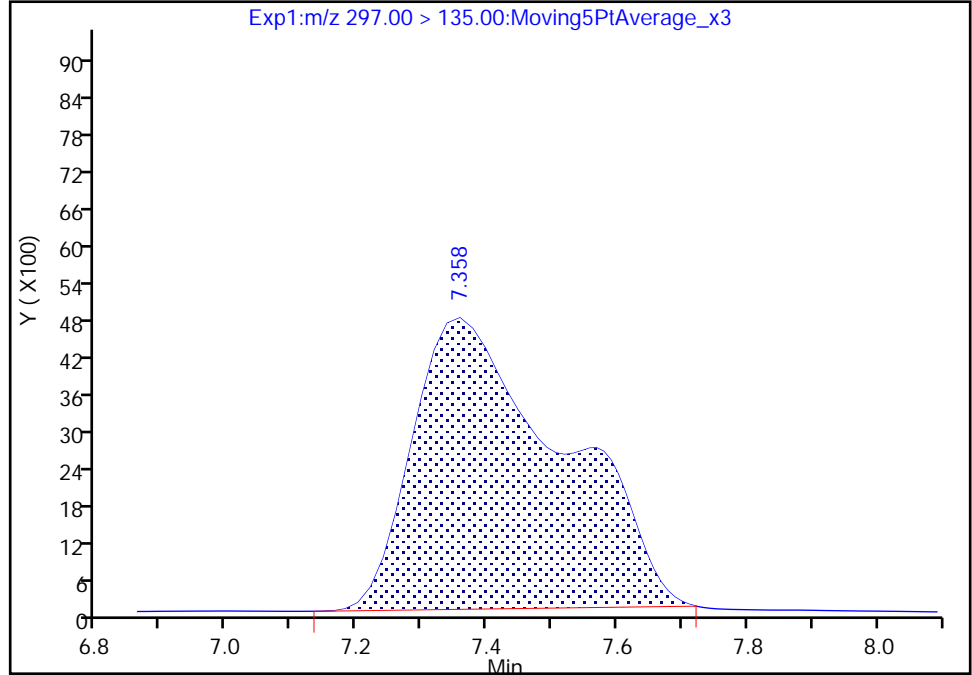
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_005.d
Injection Date: 20-Feb-2021 11:38:51 Instrument ID: A10
Lims ID: IC STD 4
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 7 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

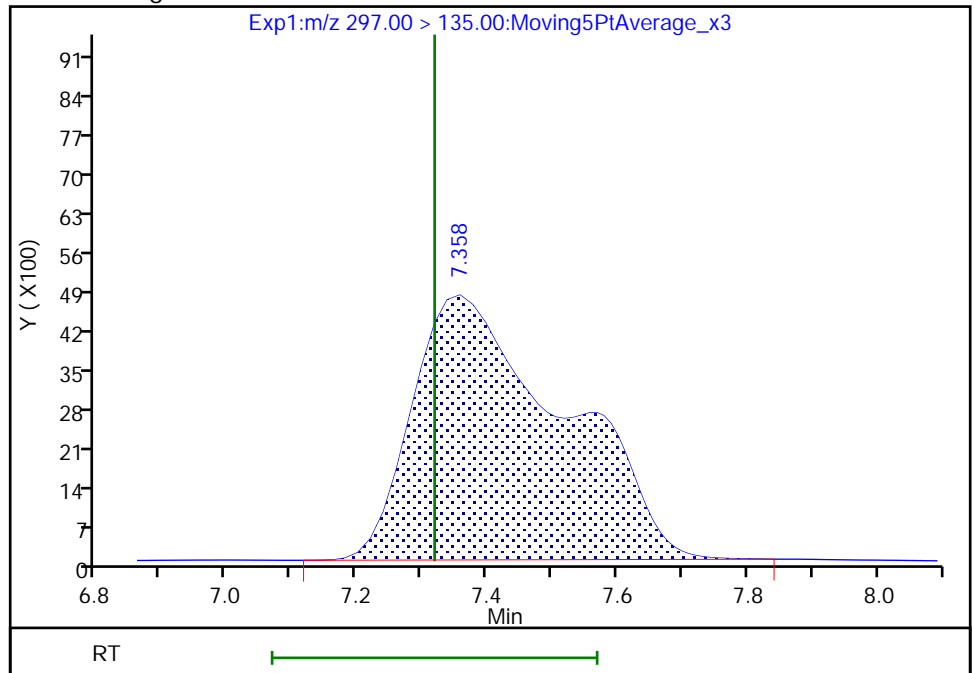
RT: 7.36
Area: 75038
Amount: 0.011541
Amount Units: ng/ml

Processing Integration Results



RT: 7.36
Area: 76344
Amount: 0.009958
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 13:21:56
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_006.d
 Lims ID: IC STD 5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 20-Feb-2021 11:56:20 ALS Bottle#: 8 Worklist Smp#: 6
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC 5 (55)
 Misc. Info.: Plate: 1 Rack: 3
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Sublist: chrom-A10_PFAS_CHEM_TB3+*sub1

Method: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 20-Feb-2021 15:38:38 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1681

First Level Reviewer: roycea Date: 20-Feb-2021 13:22:55

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	2.828	2.875	-0.047		268916	0.0269		107	25.2	M
2 R-EVE										M
405.00 > 217.00	6.535	6.560	-0.025		106525	0.0259		104	2650	M
3 R-PSDA										
440.90 > 241.00	6.621	6.653	-0.032		66816	0.0246		98.4	1548	
4 Hydrolyzed PSDA										M
439.00 > 343.00	6.717	6.749	-0.032		204310	0.0257		103	3731	M
23 PMPA										
229.00 > 185.00	6.717	6.765	-0.048		353884	0.0262		105	175	
5 NVHOS										M
297.00 > 135.00	7.299	7.319	-0.020		199020	0.0260		104	3643	M
6 PFO2HxA										
245.00 > 85.00	7.904	7.932	-0.028		244055	0.0260		104	3349	
22 PEPA										
278.90 > 234.90	8.557	8.584	-0.027		149763	0.0268		107	224	
7 PES										
314.90 > 135.00	8.893	8.908	-0.015		1210385	0.0258		103	42089	
8 PFECA B										
295.00 > 201.00	9.110	9.139	-0.029		174522	0.0269		108	5930	
9 PFO3OA										
310.90 > 85.00	9.352	9.396	-0.044		154594	0.0258		103	1851	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.459	9.486	-0.027		1417532	0.2562		102	56503	
11 HPFO-DA										
285.00 > 169.00	9.459	9.486	-0.027	1.000	155445	0.0252		101	6108	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.823	9.847	-0.024		1702126	0.0271		108	52957	
13 Hydro-EVE Acid										
427.00 > 282.90	9.881	9.904	-0.023		2115938	0.0268		107	33106	
D 14 13C4 PFHpA										
367.00 > 322.00	9.881	9.904	-0.023		6667341	0.2624		105	139502	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.881	9.904	-0.023	1.000	728172	0.0255	Target=0.00	102	3976	
363.00 > 169.00	9.881	9.904	-0.023	1.000	311948		2.33(0.00-0.00)	102	9794	
15 Hydro-PS Acid										
463.00 > 262.90	9.919	9.939	-0.020		679393	0.0267		107	19445	
17 PFECA G										
378.90 > 184.90	9.988	10.034	-0.046		254732	0.0271		108	10117	
18 PFO4DA										
376.90 > 85.00	10.138	10.161	-0.023		140410	0.0272		109	957	
19 PS Acid										
443.00 > 146.90	10.220	10.242	-0.022		309833	0.0271		108	9679	
20 EVE Acid										
407.00 > 262.90	10.220	10.260	-0.040		1223375	0.0271		108	38303	
21 TAF										
442.90 > 85.00	10.717	10.745	-0.028		101859	0.0272		109	270	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD5_00055

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_006.d

Injection Date: 20-Feb-2021 11:56:20

Instrument ID: A10

Lims ID: IC STD 5

Client ID:

Operator ID: Sac_inst_A10

ALS Bottle#: 8

Worklist Smp#: 6

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

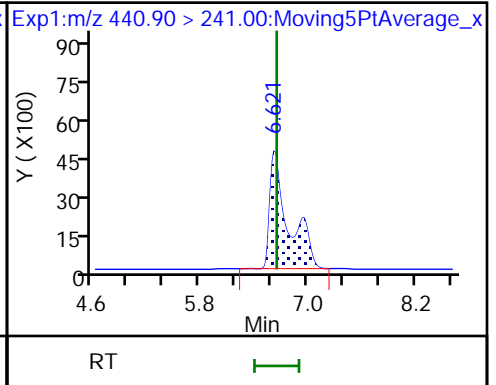
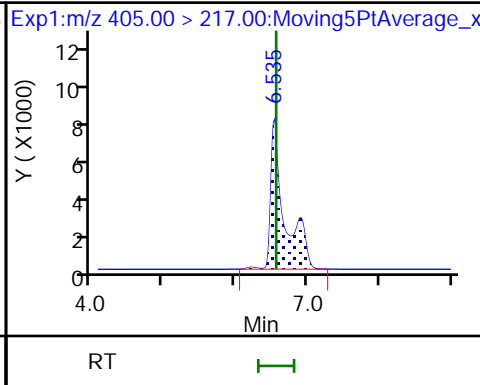
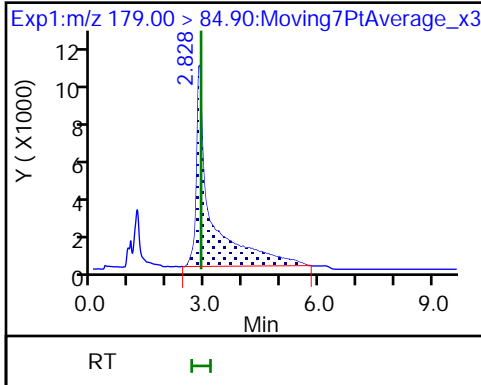
Method: A10_PFA5_CHEM_TB3+

Limit Group: LC PFA5_TB3P - ICAL

1 PFMOAA (M)

2 R-EVE (M)

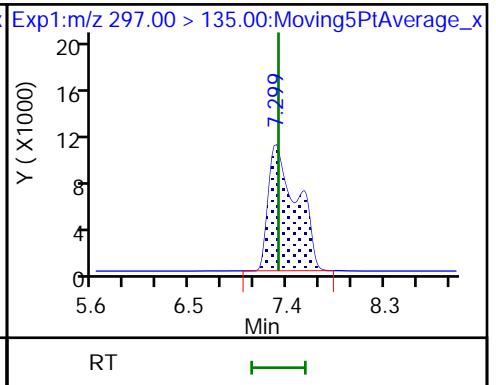
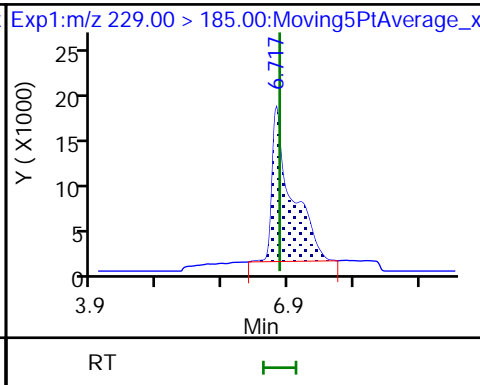
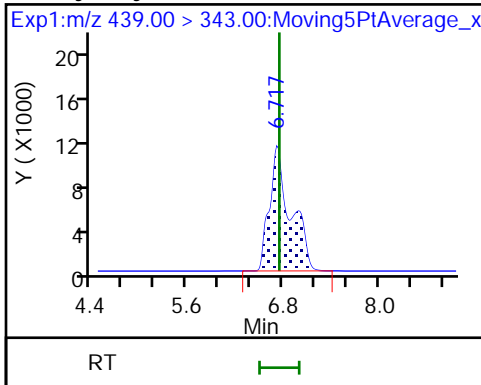
3 R-PSDA



4 Hydrolyzed PSDA (M)

23 PMPA

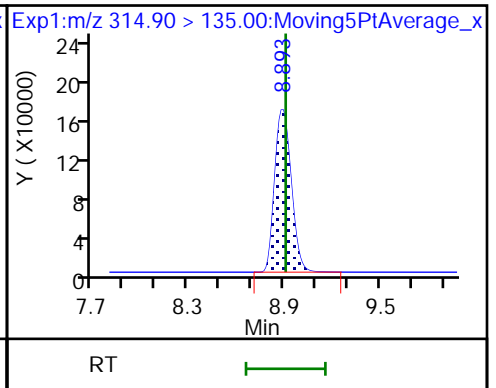
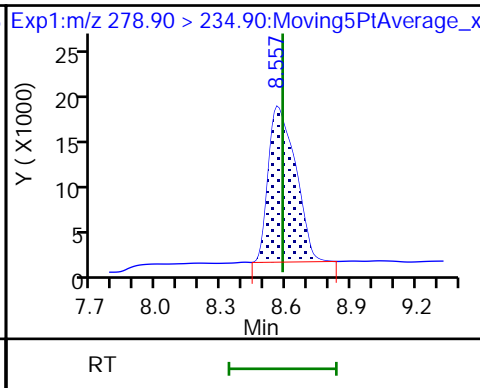
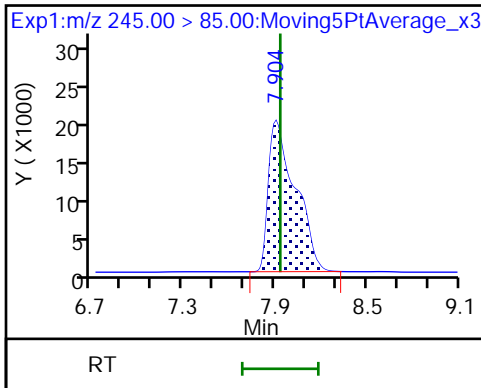
5 NVHOS (M)



6 PFO2HxA

22 PEPA

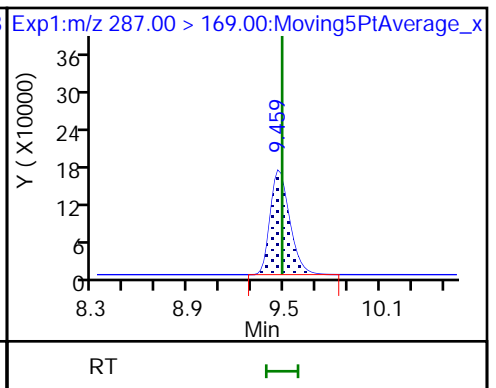
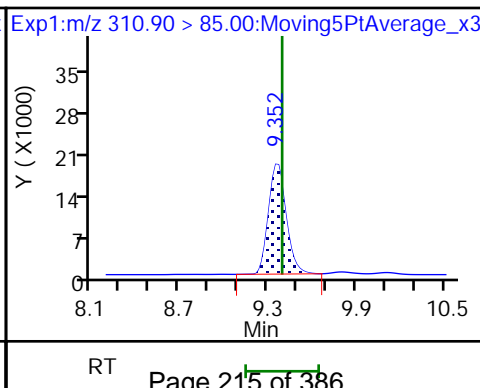
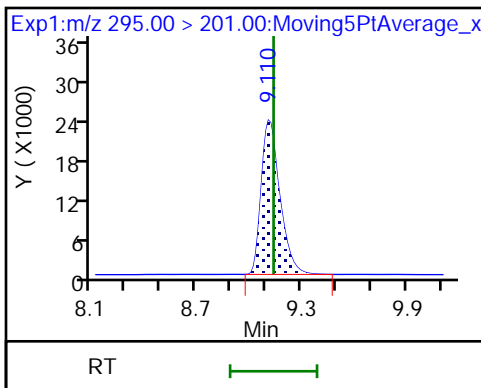
7 PES

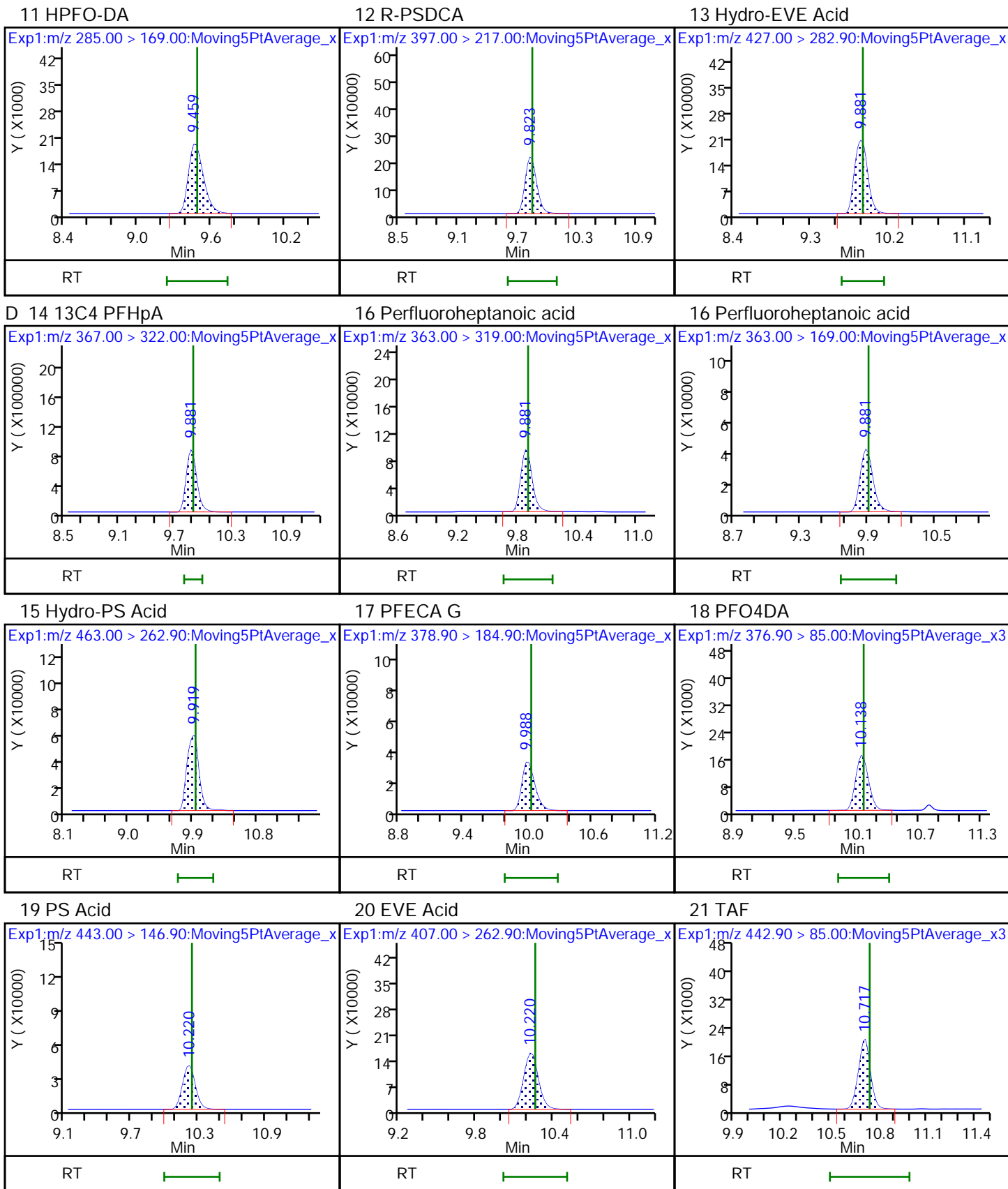


8 PFECA B

9 PFO3OA

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

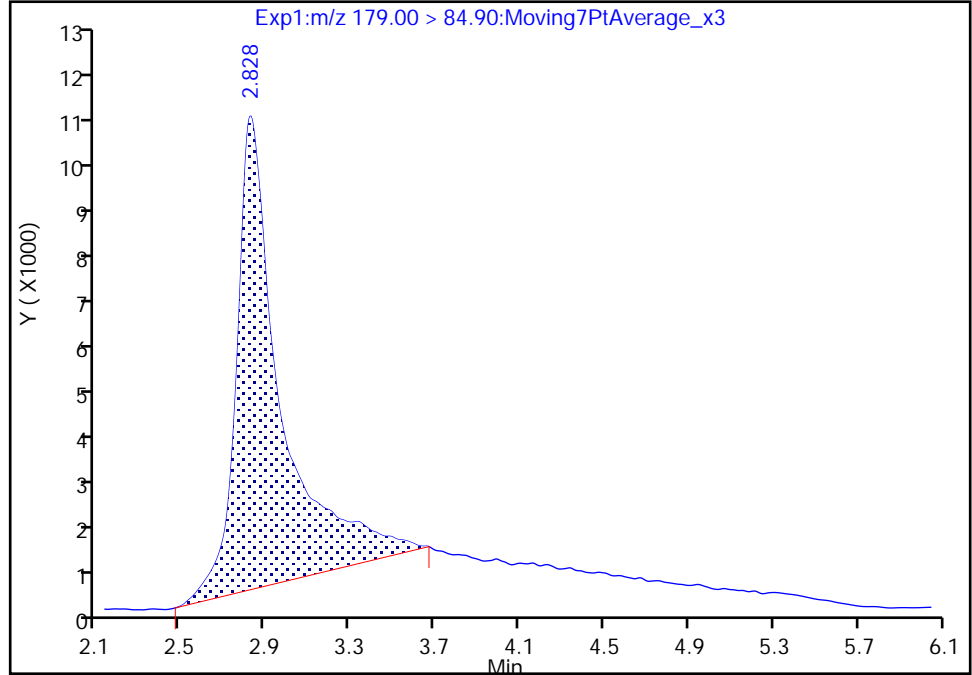
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Injection Date: 20-Feb-2021 11:56:20 Instrument ID: A10
Lims ID: IC STD 5
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 8 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

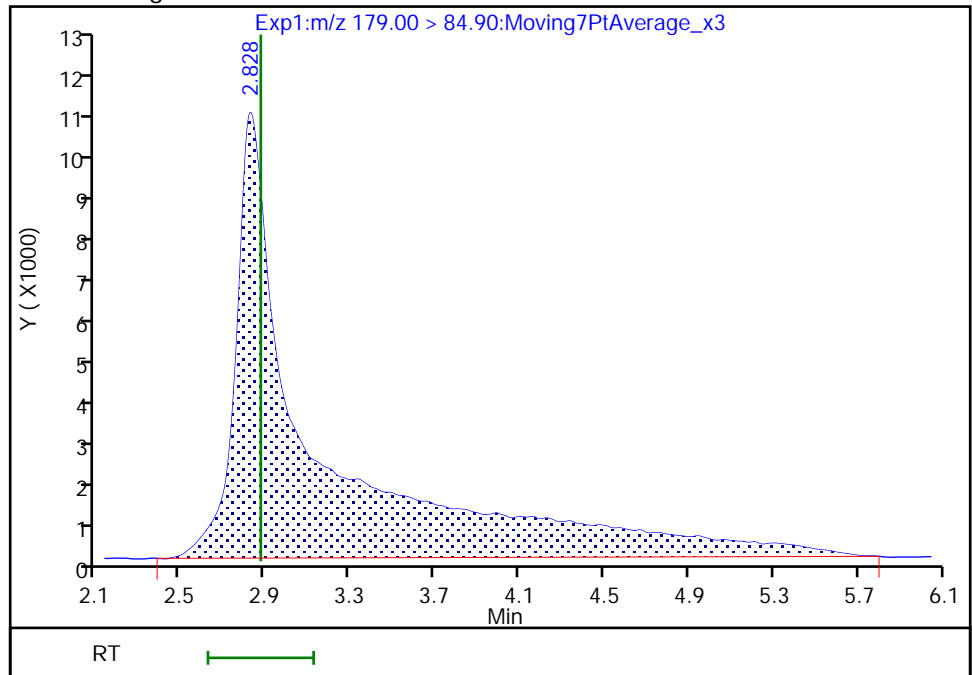
RT: 2.83
Area: 146752
Amount: 0.019341
Amount Units: ng/ml

Processing Integration Results



RT: 2.83
Area: 268916
Amount: 0.026859
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 13:22:19
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Sacramento

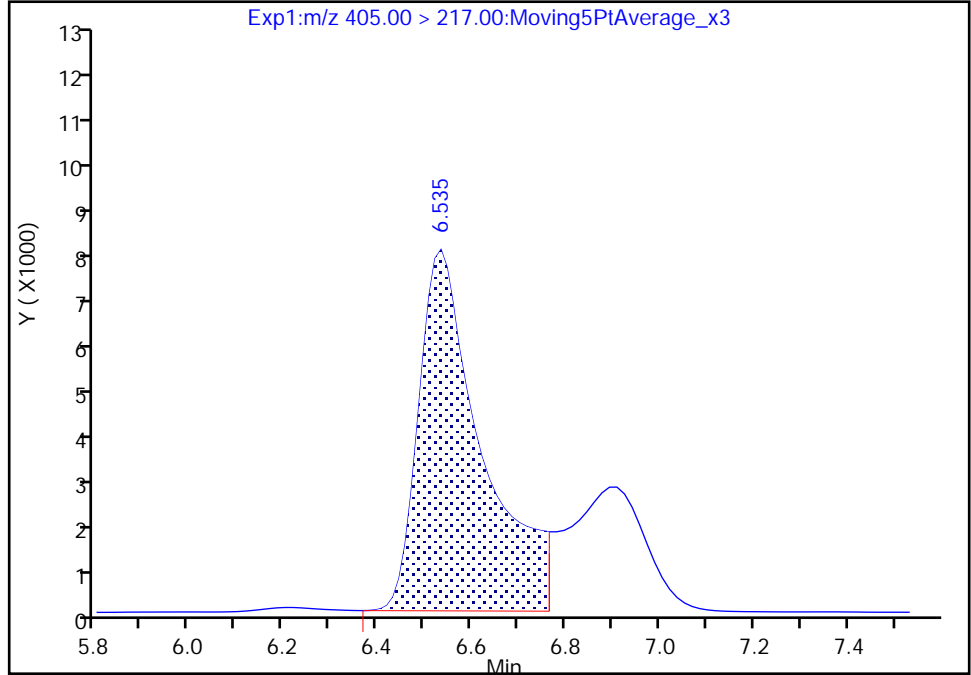
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Injection Date: 20-Feb-2021 11:56:20 Instrument ID: A10
Lims ID: IC STD 5
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 8 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

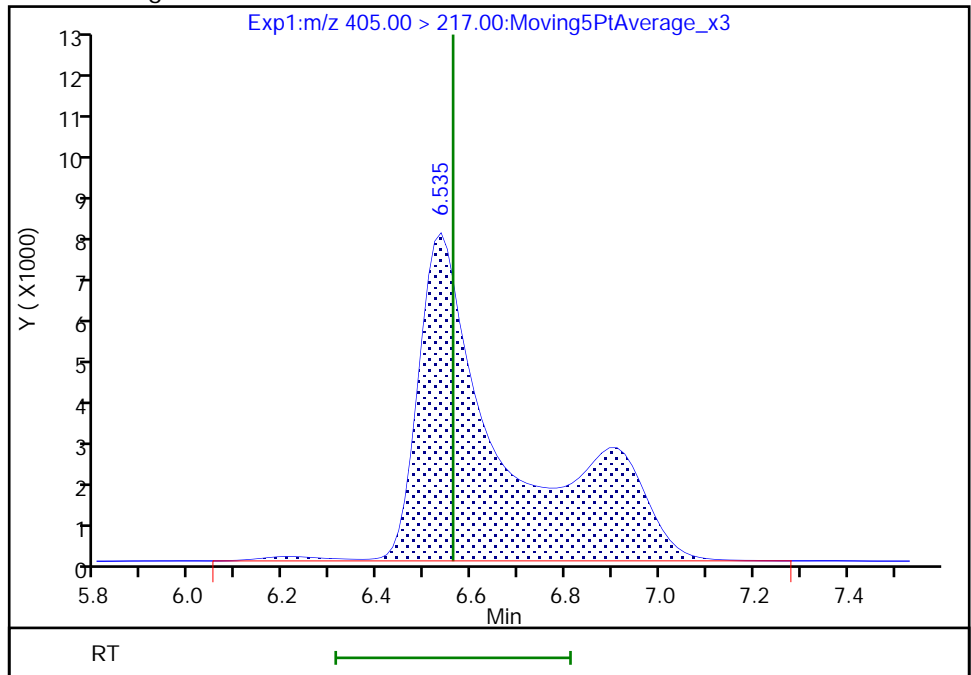
RT: 6.53
Area: 73769
Amount: 0.020455
Amount Units: ng/ml

Processing Integration Results



RT: 6.53
Area: 106525
Amount: 0.025894
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 13:22:24
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento

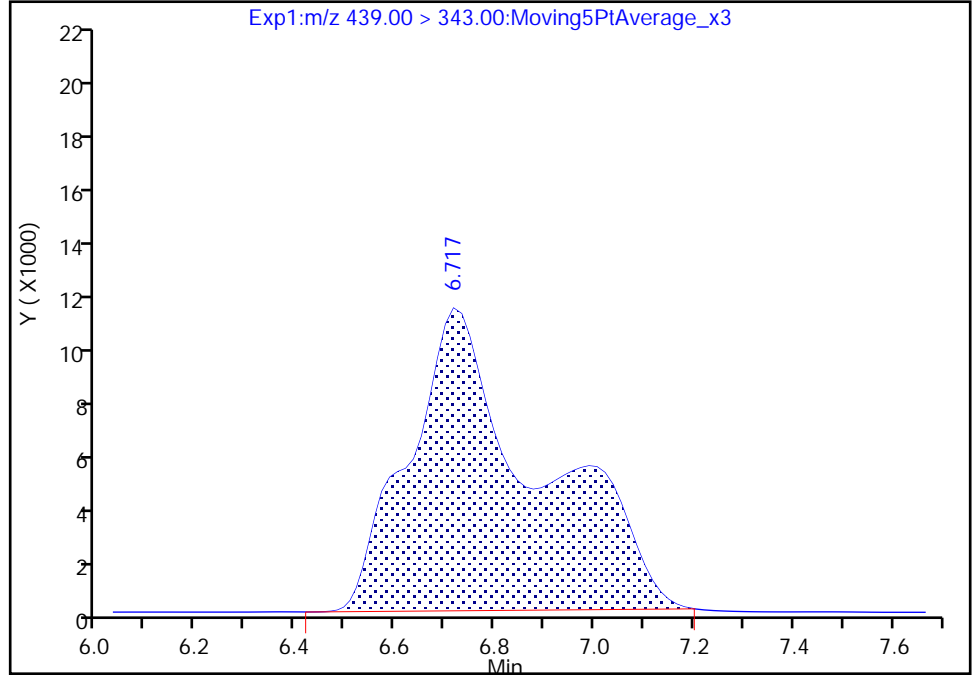
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Injection Date: 20-Feb-2021 11:56:20 Instrument ID: A10
Lims ID: IC STD 5
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 8 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

4 Hydrolyzed PSDA, CAS: 2416366-19-1

Signal: 1

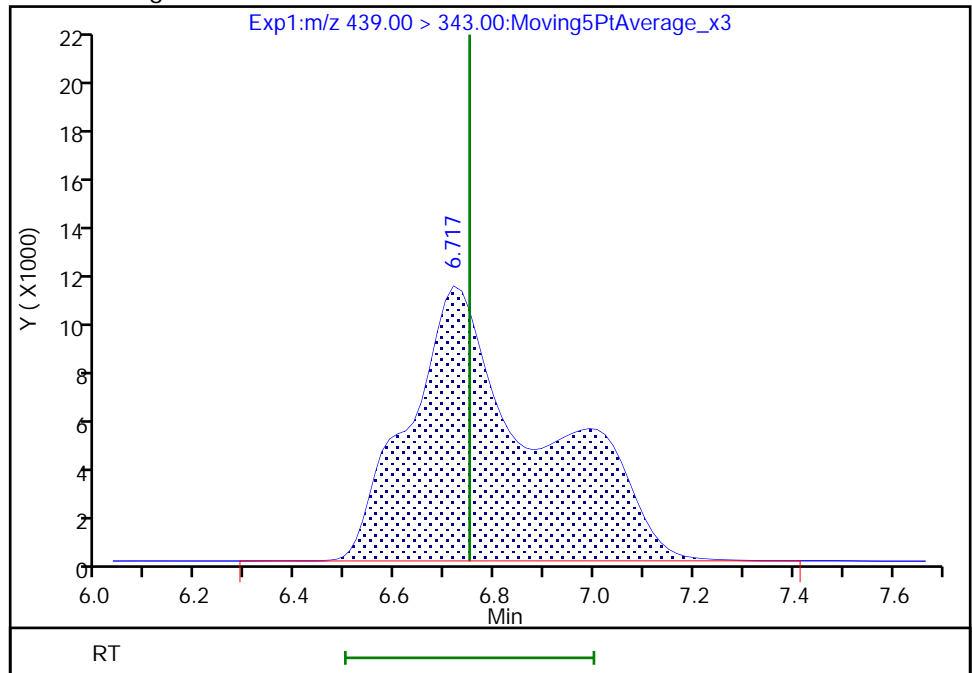
RT: 6.72
Area: 201288
Amount: 0.027276
Amount Units: ng/ml

Processing Integration Results



RT: 6.72
Area: 204310
Amount: 0.025726
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 13:22:33
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

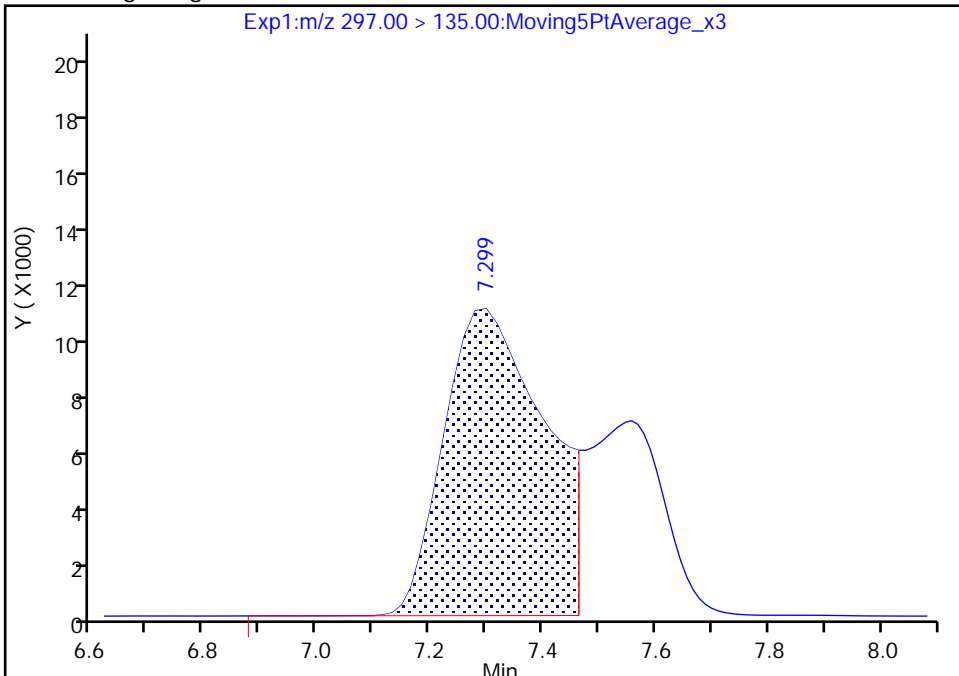
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Injection Date: 20-Feb-2021 11:56:20 Instrument ID: A10
Lims ID: IC STD 5
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 8 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

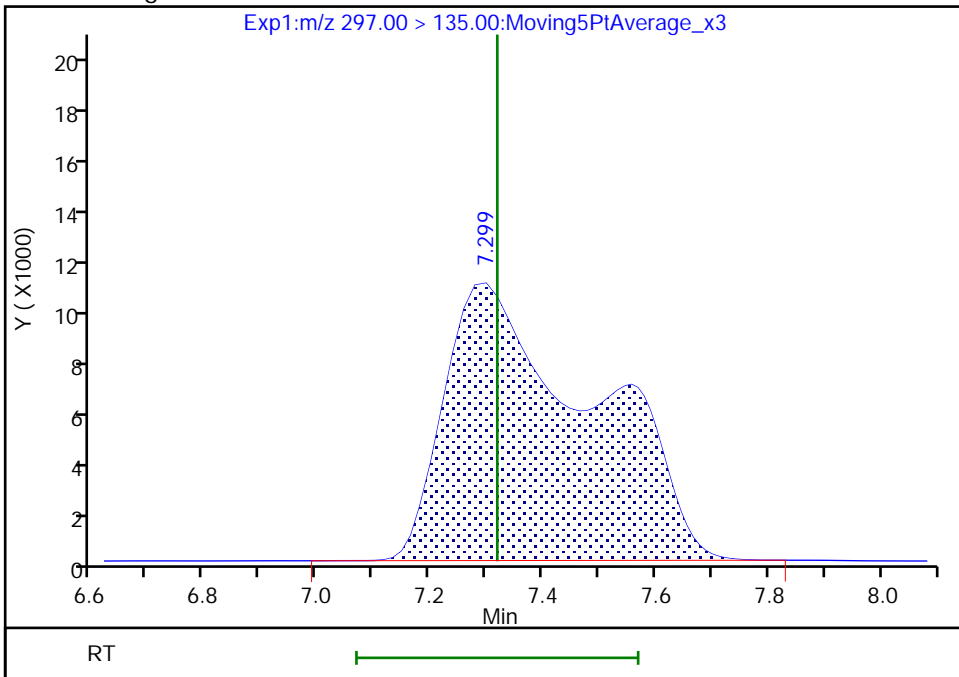
RT: 7.30
Area: 134201
Amount: 0.020581
Amount Units: ng/ml

Processing Integration Results



RT: 7.30
Area: 199020
Amount: 0.025961
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 13:22:41
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_007.d
 Lims ID: IC STD 6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 20-Feb-2021 12:13:47 ALS Bottle#: 9 Worklist Smp#: 7
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC 6 (87)
 Misc. Info.: Plate: 1 Rack: 3
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Sublist: chrom-A10_PFAS_CHEM_TB3+*sub1

Method: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 20-Feb-2021 15:38:40 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1681

First Level Reviewer: roycea Date: 20-Feb-2021 13:23:28

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	2.958	2.875	0.083		481728	0.0481		96.2	43.1	M
2 R-EVE										M
405.00 > 217.00	6.602	6.560	0.042		184992	0.0450		89.9	4372	M
3 R-PSDA										
440.90 > 241.00	6.683	6.653	0.029		121013	0.0446		89.1	2857	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.779	6.749	0.030		354939	0.0447		89.4	6808	
23 PMPA										
229.00 > 185.00	6.747	6.765	-0.018		602430	0.0462		92.3	332	
5 NVHOS										M
297.00 > 135.00	7.317	7.319	-0.002		356773	0.0465		93.1	6228	M
6 PFO2HxA										
245.00 > 85.00	7.915	7.932	-0.017		431412	0.0459		91.9	5499	
22 PEPA										
278.90 > 234.90	8.566	8.584	-0.018		269418	0.0482		96.4	415	
7 PES										
314.90 > 135.00	8.892	8.908	-0.016		2171042	0.0462		92.5	76223	
8 PFECA B										
295.00 > 201.00	9.121	9.139	-0.018		311663	0.0480		96.0	10646	
9 PFO3OA										
310.90 > 85.00	9.368	9.396	-0.028		278364	0.0464		92.9	5438	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.459	9.486	-0.028		1316826	0.2380		95.2	52165	
11 HPFO-DA										
285.00 > 169.00	9.477	9.486	-0.009	1.002	277056	0.0483		96.6	10780	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.823	9.847	-0.024		2921351	0.0465		92.9	72720	
13 Hydro-EVE Acid										
427.00 > 282.90	9.880	9.904	-0.024		3722867	0.0471		94.3	58360	
D 14 13C4 PFHpA										
367.00 > 322.00	9.880	9.904	-0.024		6288217	0.2475		99.0	131243	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.880	9.904	-0.024	1.000	1291921	0.0483	Target=0.00	96.7	7358	
363.00 > 169.00	9.880	9.904	-0.024	1.000	549634		2.35(0.00-0.00)	96.7	17284	
15 Hydro-PS Acid										
463.00 > 262.90	9.918	9.939	-0.021		1223808	0.0482		96.3	34846	
17 PFECA G										
378.90 > 184.90	9.987	10.034	-0.047		447155	0.0476		95.2	17857	
18 PFO4DA										
376.90 > 85.00	10.138	10.161	-0.023		247439	0.0480		95.9	2386	
19 PS Acid										
443.00 > 146.90	10.220	10.242	-0.022		557182	0.0487		97.5	17249	
20 EVE Acid										
407.00 > 262.90	10.220	10.260	-0.040		2167729	0.0480		96.0	54333	
21 TAF										
442.90 > 85.00	10.707	10.745	-0.038		186602	0.0498		99.5	464	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD6_00087

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_007.d

Injection Date: 20-Feb-2021 12:13:47

Instrument ID: A10

Lims ID: IC STD 6

Client ID:

Operator ID: Sac_inst_A10

ALS Bottle#: 9

Worklist Smp#: 7

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

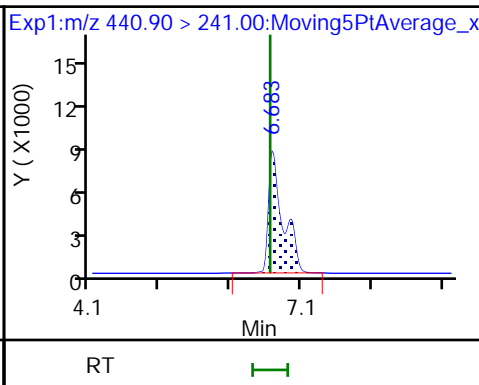
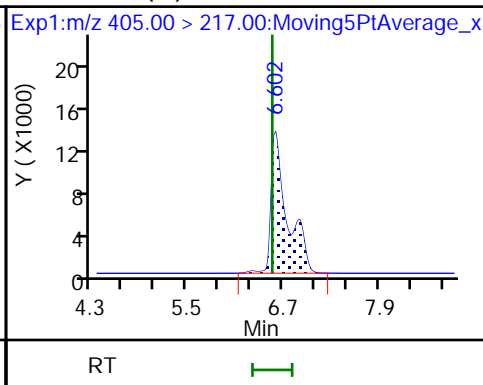
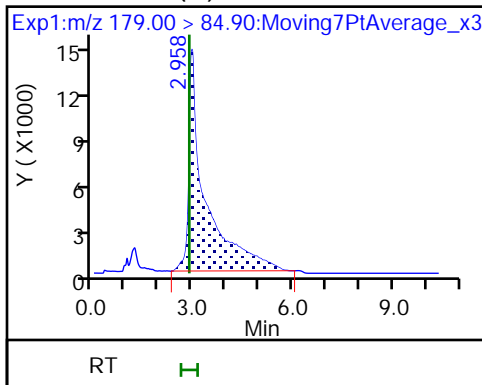
Method: A10_PFA5_CHEM_TB3+

Limit Group: LC PFA5_TB3P - ICAL

1 PFM0AA (M)

2 R-EVE (M)

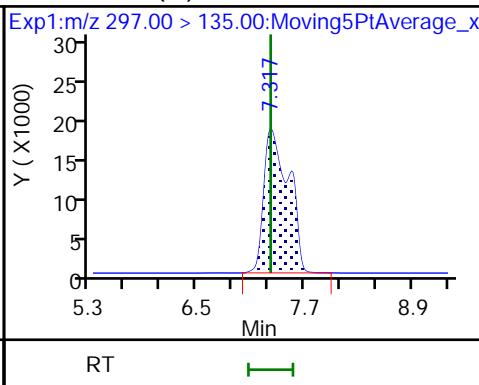
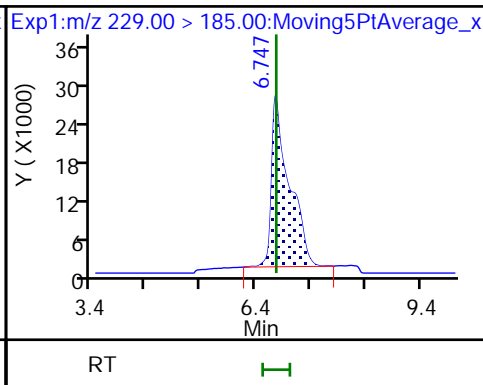
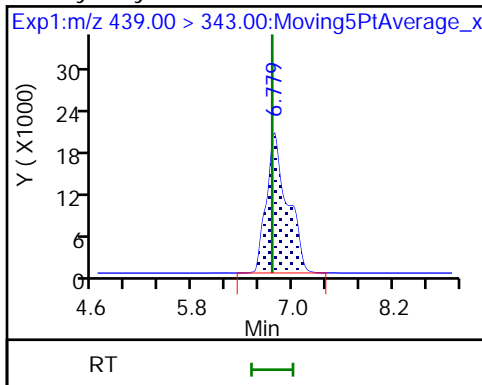
3 R-PSDA



4 Hydrolyzed PSDA

23 PMPA

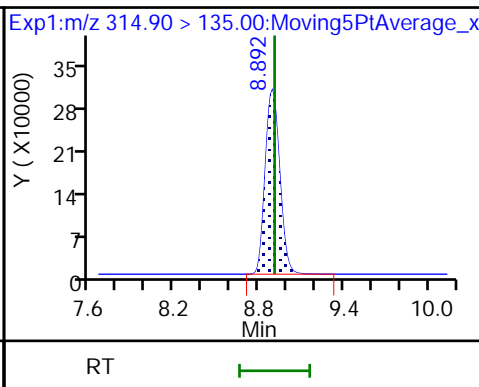
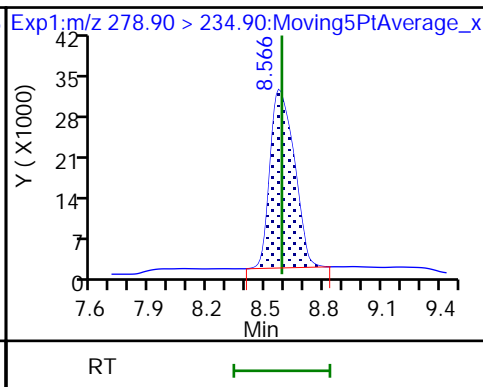
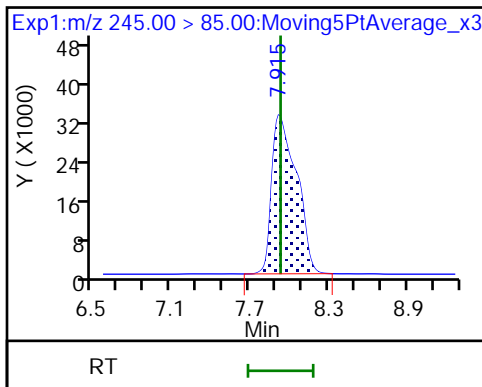
5 NVHOS (M)



6 PFO2HxA

22 PEPA

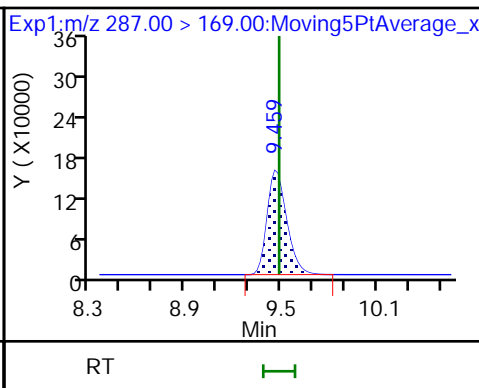
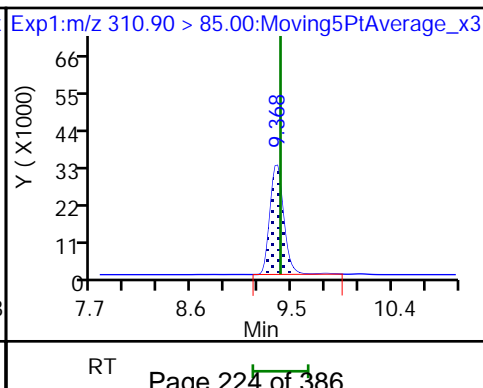
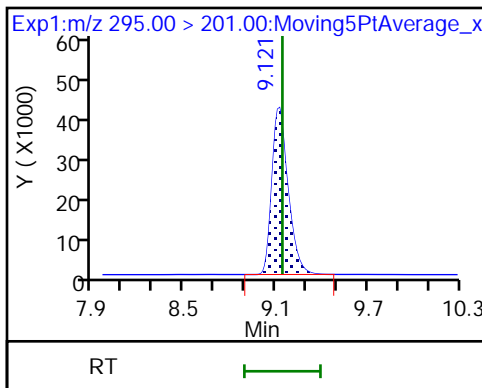
7 PES

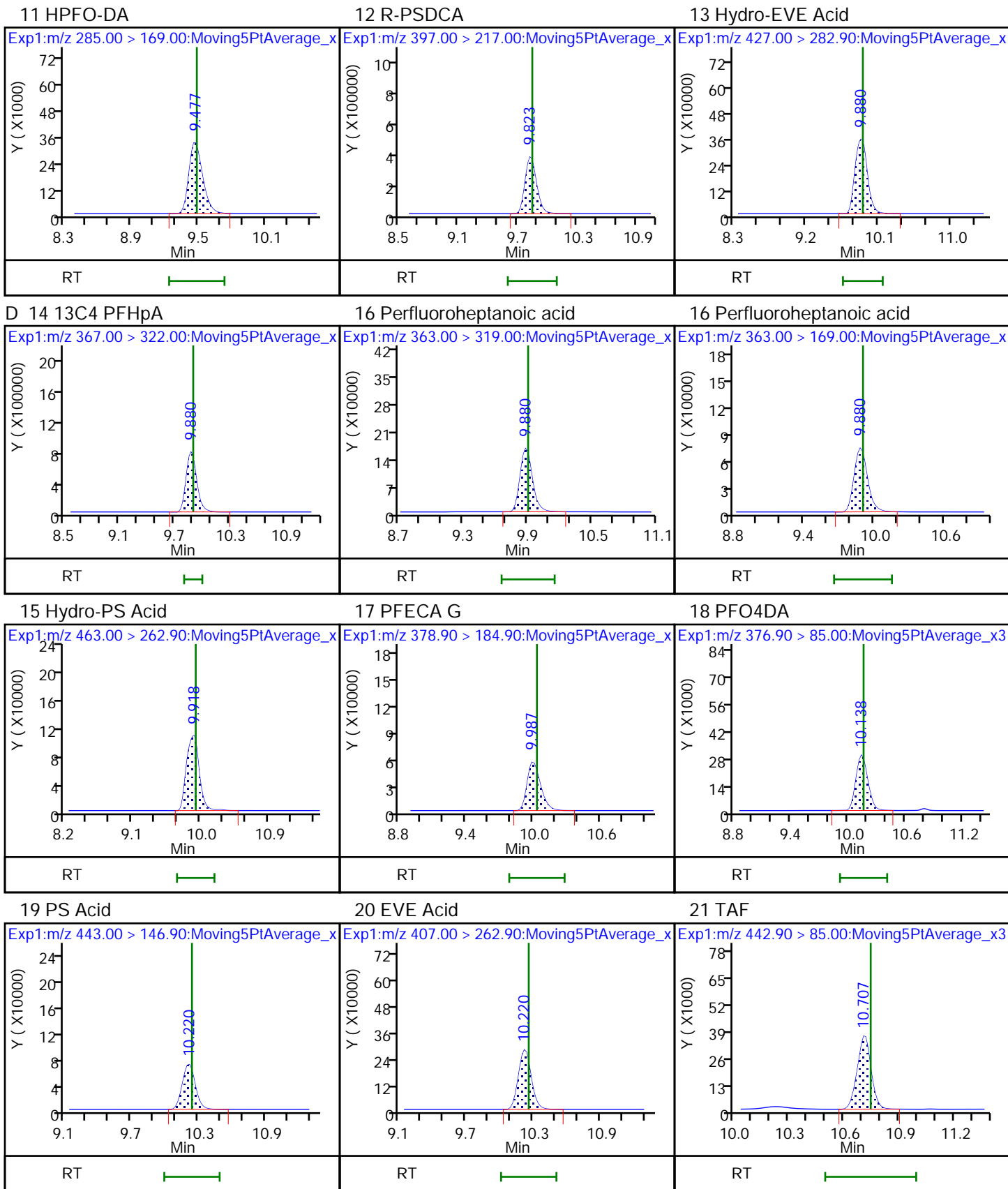


8 PFECAB

9 PFO3OA

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

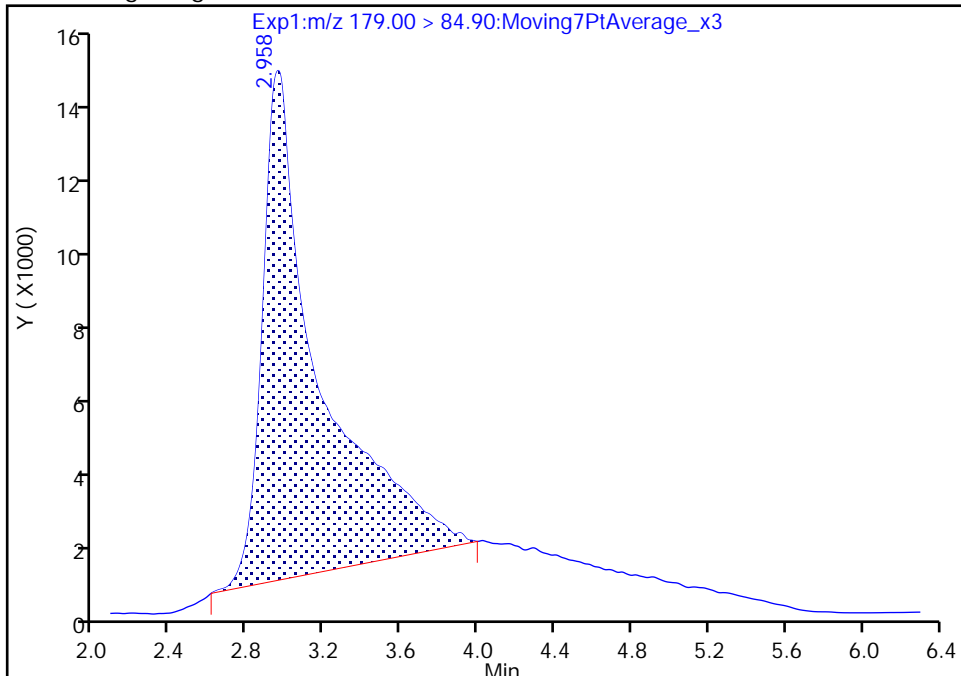
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Injection Date: 20-Feb-2021 12:13:47 Instrument ID: A10
Lims ID: IC STD 6
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 9 Worklist Smp#: 7
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

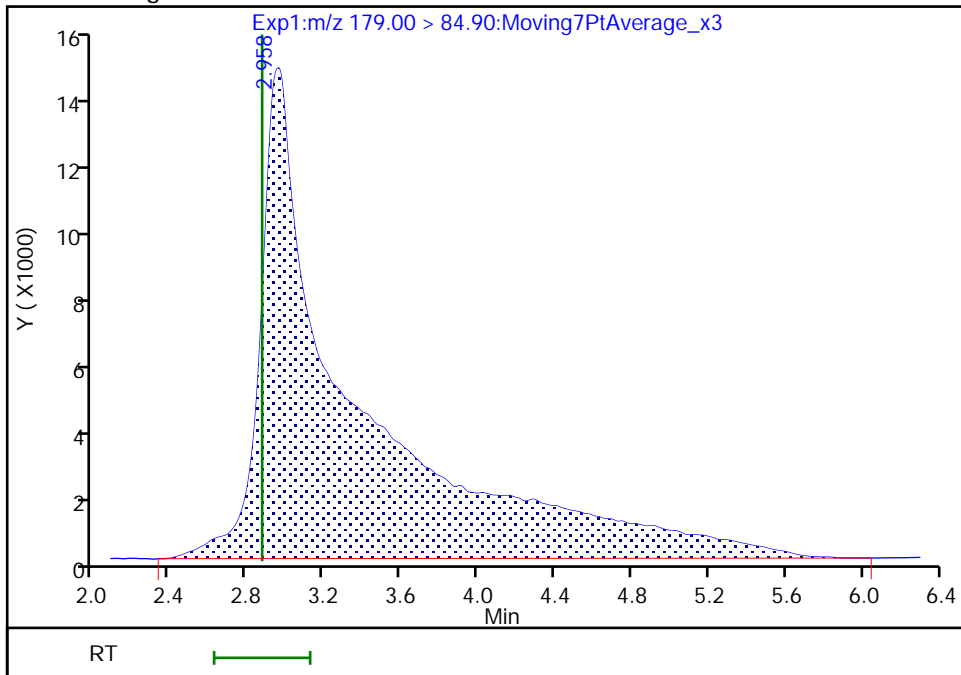
RT: 2.96
Area: 277204
Amount: 0.033456
Amount Units: ng/ml

Processing Integration Results



RT: 2.96
Area: 481728
Amount: 0.048114
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 13:23:03
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento

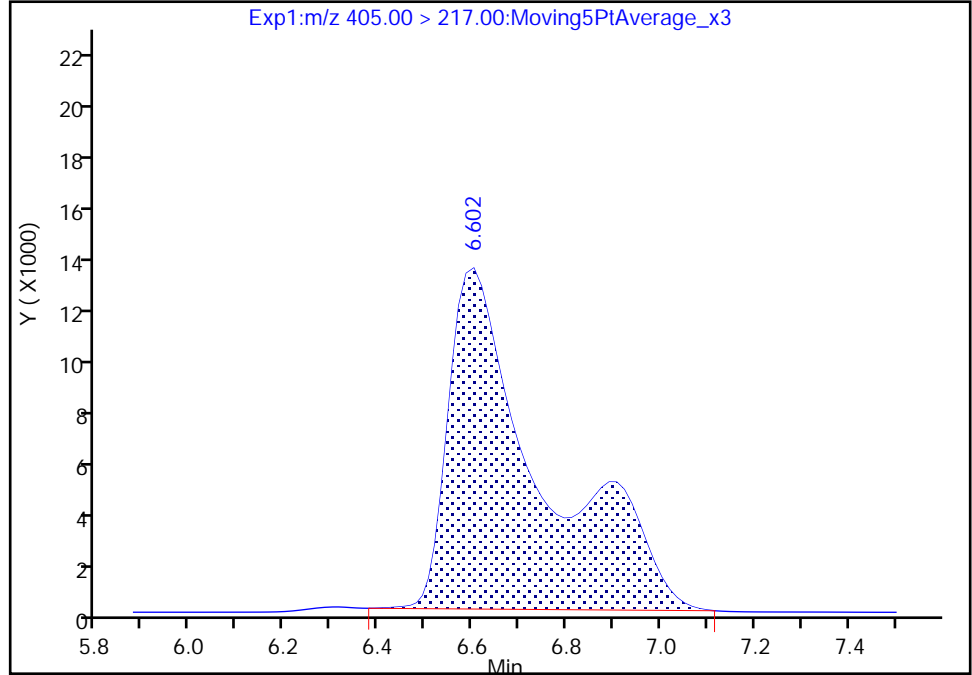
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Injection Date: 20-Feb-2021 12:13:47 Instrument ID: A10
Lims ID: IC STD 6
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 9 Worklist Smp#: 7
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

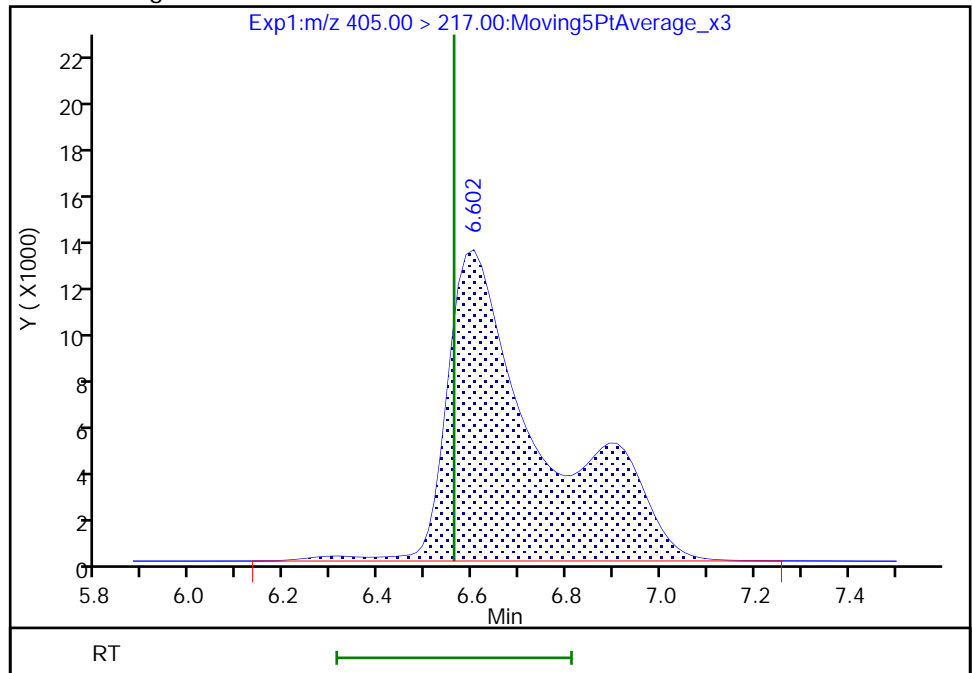
RT: 6.60
Area: 179069
Amount: 0.047203
Amount Units: ng/ml

Processing Integration Results



RT: 6.60
Area: 184992
Amount: 0.044968
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 13:23:10
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento

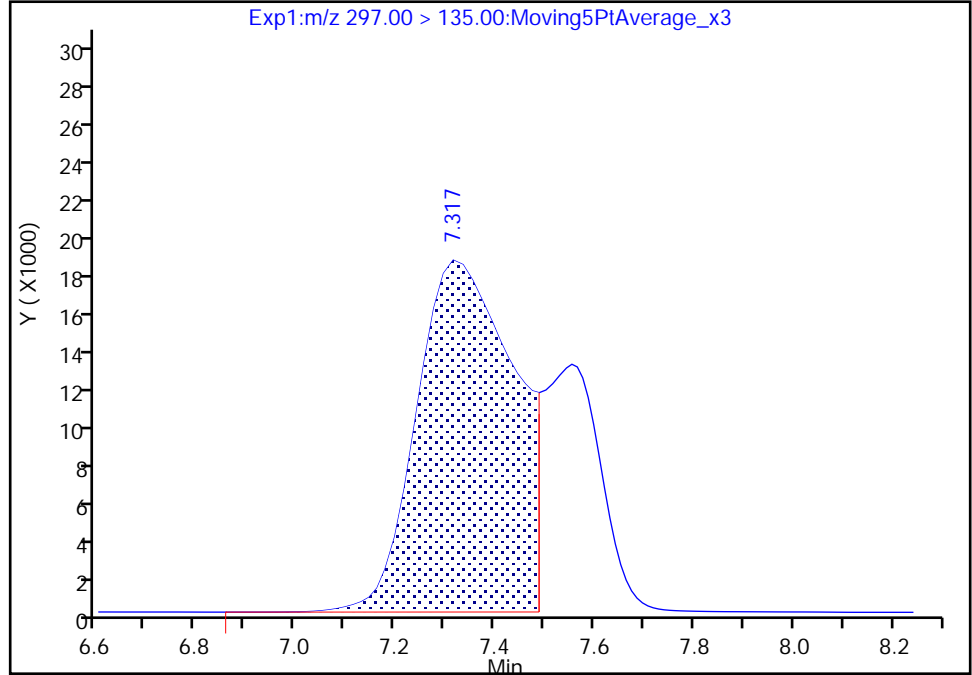
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Injection Date: 20-Feb-2021 12:13:47 Instrument ID: A10
Lims ID: IC STD 6
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 9 Worklist Smp#: 7
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

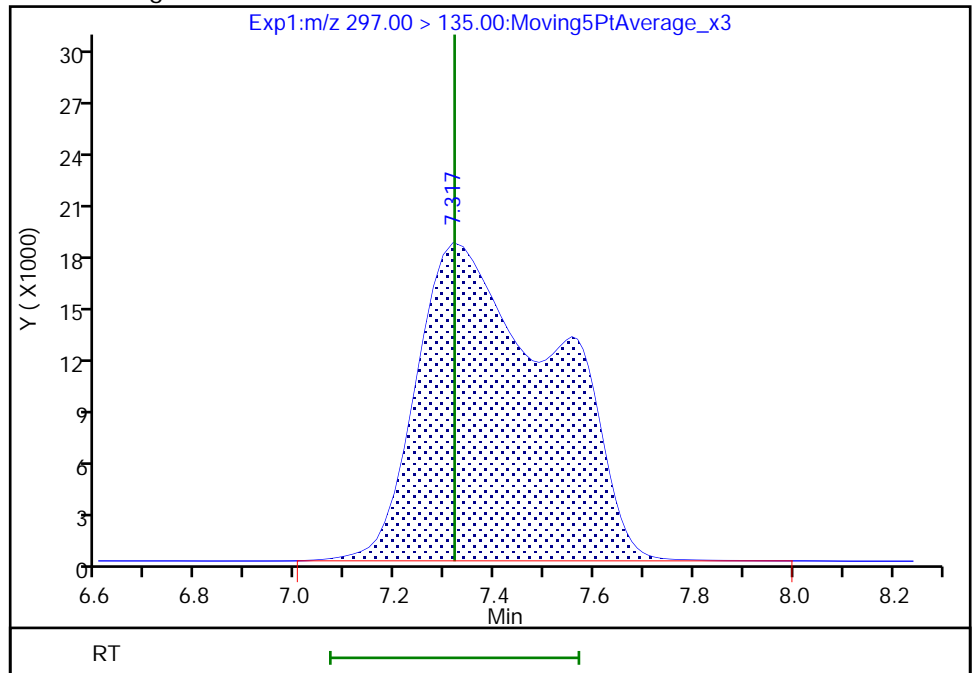
RT: 7.32
Area: 252576
Amount: 0.036653
Amount Units: ng/ml

Processing Integration Results



RT: 7.32
Area: 356773
Amount: 0.046538
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 13:23:15
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_009.d
 Lims ID: IC STD 7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 20-Feb-2021 12:48:42 ALS Bottle#: 11 Worklist Smp#: 9
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC 7 (426)
 Misc. Info.: Plate: 1 Rack: 3
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Sublist: chrom-A10_PFAS_CHEM_TB3+*sub1

Method: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 20-Feb-2021 15:38:41 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1681

First Level Reviewer: roycea Date: 20-Feb-2021 13:26:25

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	2.858	2.875	-0.017		1040127	0.1039		104	152	M
2 R-EVE										M
405.00 > 217.00	6.535	6.560	-0.025		415236	0.1009		101	10064	M
3 R-PSDA										
440.90 > 241.00	6.637	6.653	-0.016		263161	0.0969		96.9	6047	
4 Hydrolyzed PSDA										M
439.00 > 343.00	6.733	6.749	-0.016		775227	0.0976		97.6	13997	M
23 PMPA										
229.00 > 185.00	6.733	6.765	-0.032		1248534	0.0981		98.1	687	
5 NVHOS										M
297.00 > 135.00	7.300	7.319	-0.019		764583	0.0997		99.7	14210	M
6 PFO2HxA										
245.00 > 85.00	7.905	7.932	-0.027		936964	0.0998		99.8	10971	
22 PEPA										
278.90 > 234.90	8.563	8.584	-0.021		573886	0.1026		103	984	
7 PES										
314.90 > 135.00	8.881	8.908	-0.027		4681826	0.0997		99.7	163925	
8 PFECA B										
295.00 > 201.00	9.110	9.139	-0.029		648972	0.1000		100.0	22256	
9 PFO3OA										
310.90 > 85.00	9.352	9.396	-0.044		576011	0.0961		96.1	11467	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.459	9.486	-0.027		1352132	0.2444		97.8	54311	
11 HPFO-DA										
285.00 > 169.00	9.459	9.486	-0.027	1.000	590223	0.1002		100	23519	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.823	9.847	-0.024		6360954	0.1012		101	159752	
13 Hydro-EVE Acid										
427.00 > 282.90	9.881	9.904	-0.023		7972300	0.1010		101	125655	
D 14 13C4 PFHpA										
367.00 > 322.00	9.881	9.904	-0.023		6461952	0.2543		102	135750	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.881	9.904	-0.023	1.000	2700462	0.0988	Target=0.00	98.8	15550	
363.00 > 169.00	9.881	9.904	-0.023	1.000	1166983		2.31(0.00-0.00)	98.8	29589	
15 Hydro-PS Acid										
463.00 > 262.90	9.900	9.939	-0.039		2679115	0.1054		105	76134	
17 PFECA G										
378.90 > 184.90	9.986	10.034	-0.048		1000698	0.1065		107	40245	
18 PFO4DA										
376.90 > 85.00	10.137	10.161	-0.024		517969	0.1004		100	4615	
19 PS Acid										
443.00 > 146.90	10.198	10.242	-0.044		1210157	0.1059		106	36574	
20 EVE Acid										
407.00 > 262.90	10.219	10.260	-0.041		4535781	0.1004		100	93444	
21 TAF										
442.90 > 85.00	10.709	10.745	-0.036		387730	0.1034		103	873	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD7_00426

Amount Added: 1.00

Units: mL

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_009.d

Injection Date: 20-Feb-2021 12:48:42

Instrument ID: A10

Lims ID: IC STD 7

Client ID:

Operator ID: Sac_inst_A10

ALS Bottle#: 11

Worklist Smp#: 9

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

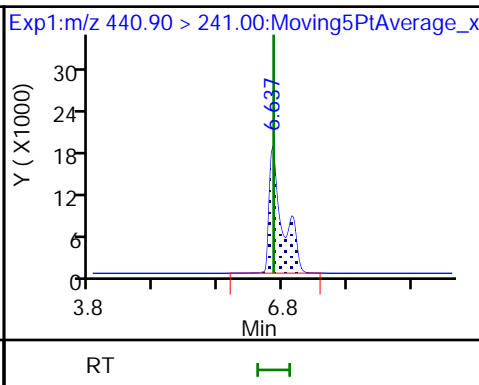
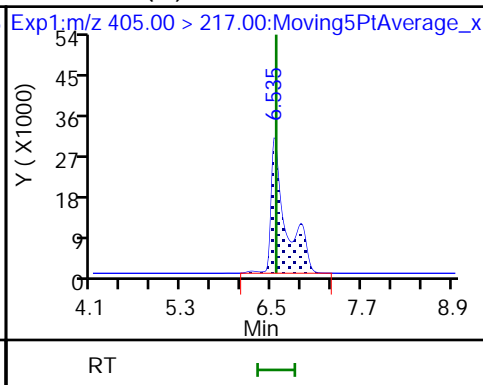
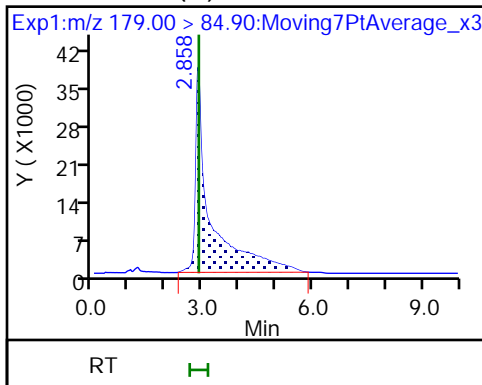
Method: A10_PFAS_CHEM_TB3+

Limit Group: LC PFAS_TB3P - ICAL

1 PFM0AA (M)

2 R-EVE (M)

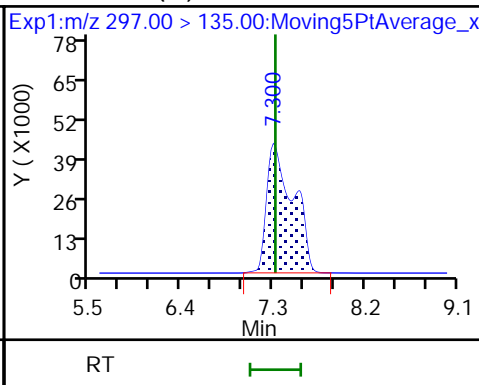
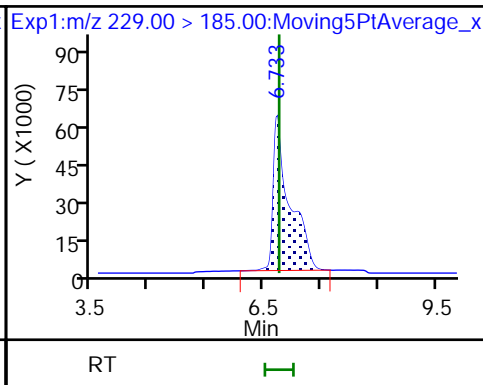
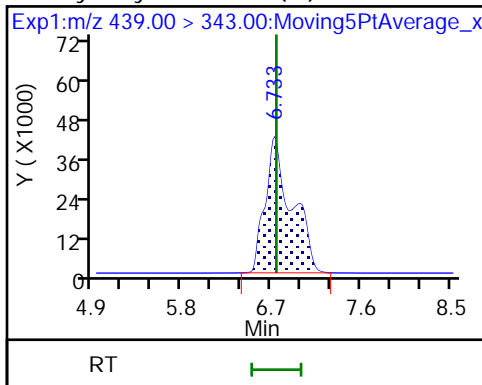
3 R-PSDA



4 Hydrolyzed PSDA (M)

23 PMPA

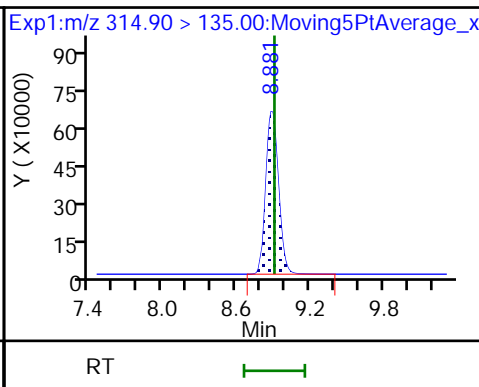
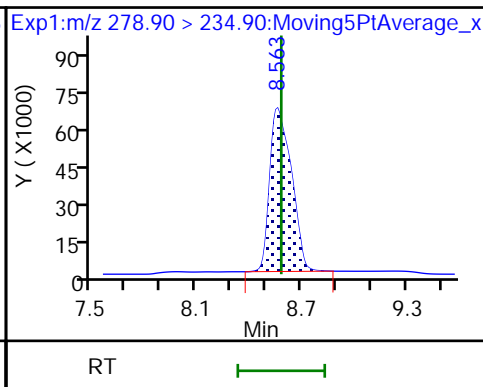
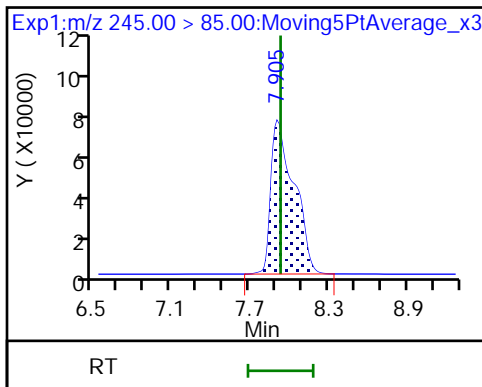
5 NVHOS (M)



6 PFO2HxA

22 PEPA

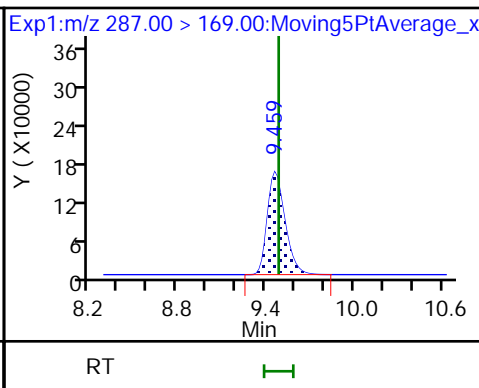
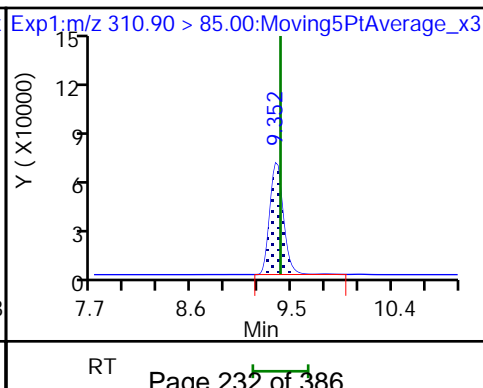
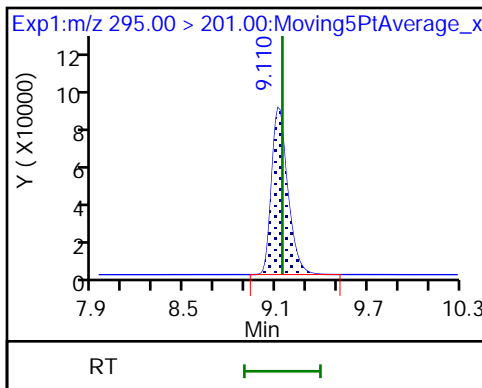
7 PES

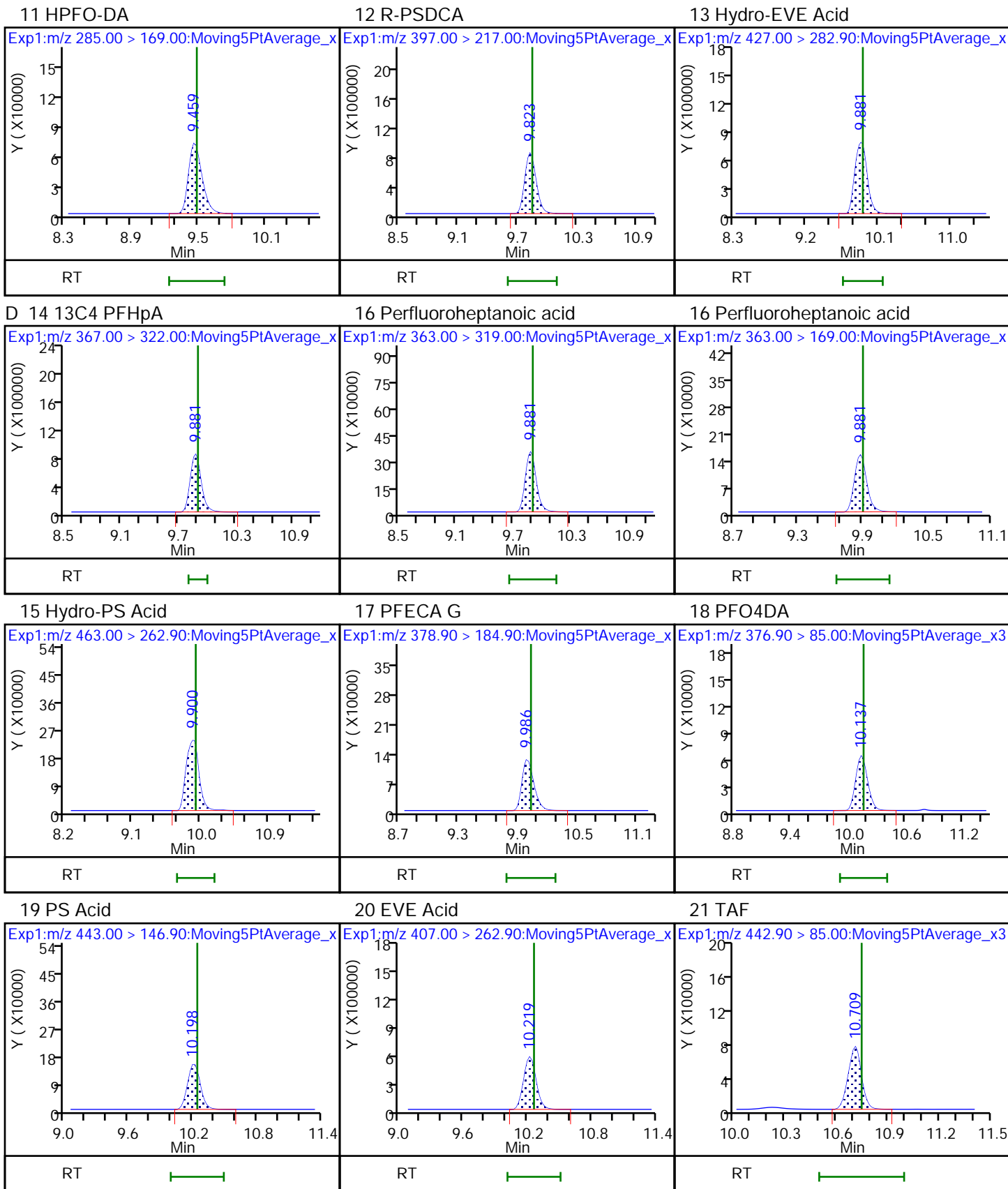


8 PFECA B

9 PFO3OA

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

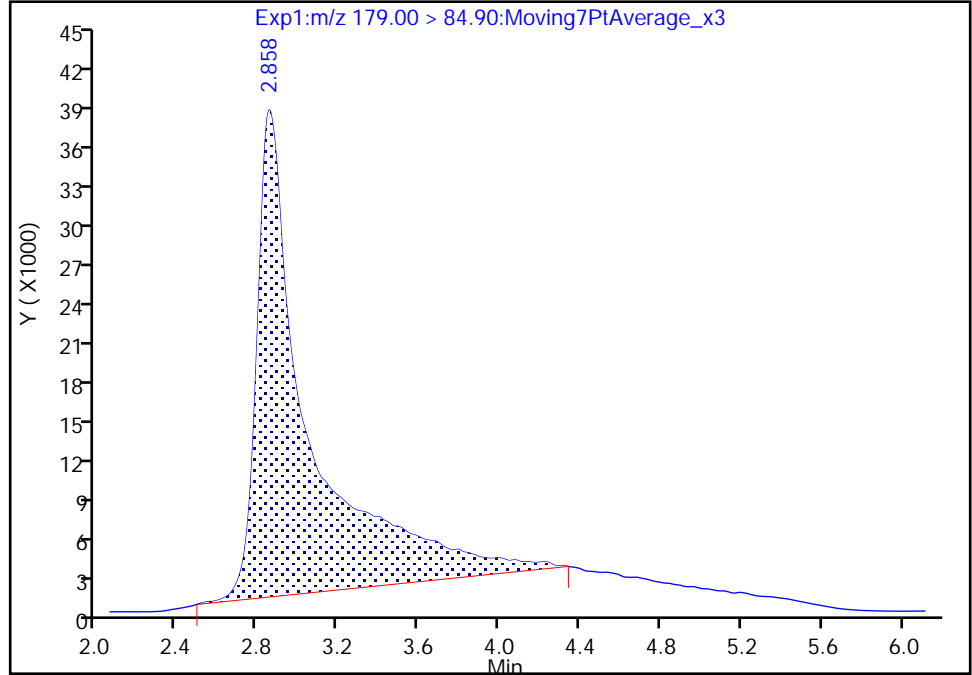
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Injection Date: 20-Feb-2021 12:48:42 Instrument ID: A10
Lims ID: IC STD 7
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 11 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

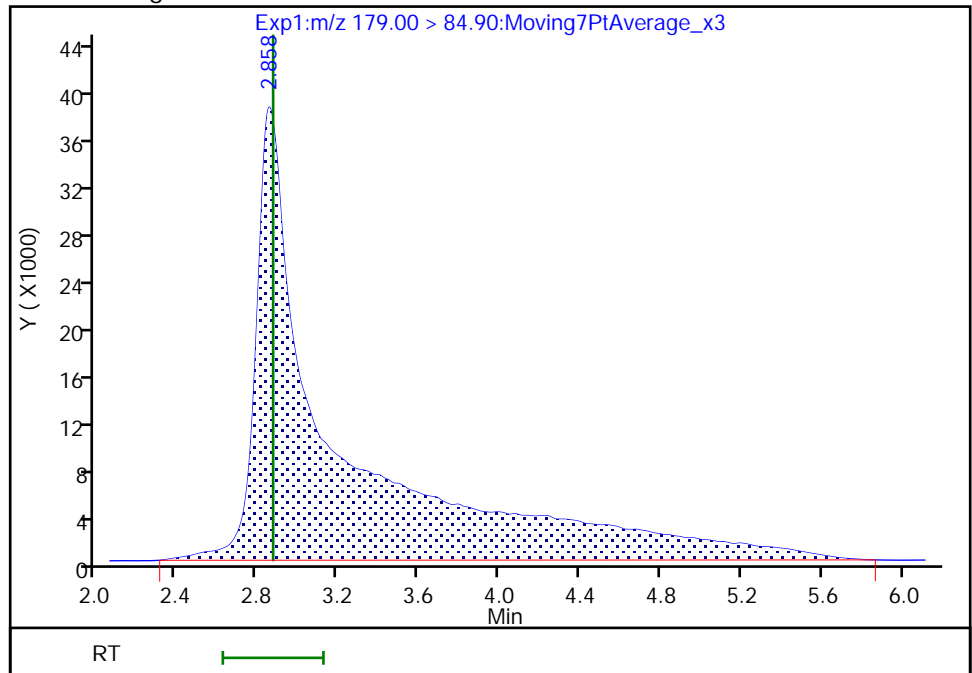
RT: 2.86
Area: 679492
Amount: 0.076607
Amount Units: ng/ml

Processing Integration Results



RT: 2.86
Area: 1040127
Amount: 0.103886
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 13:24:18
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Sacramento

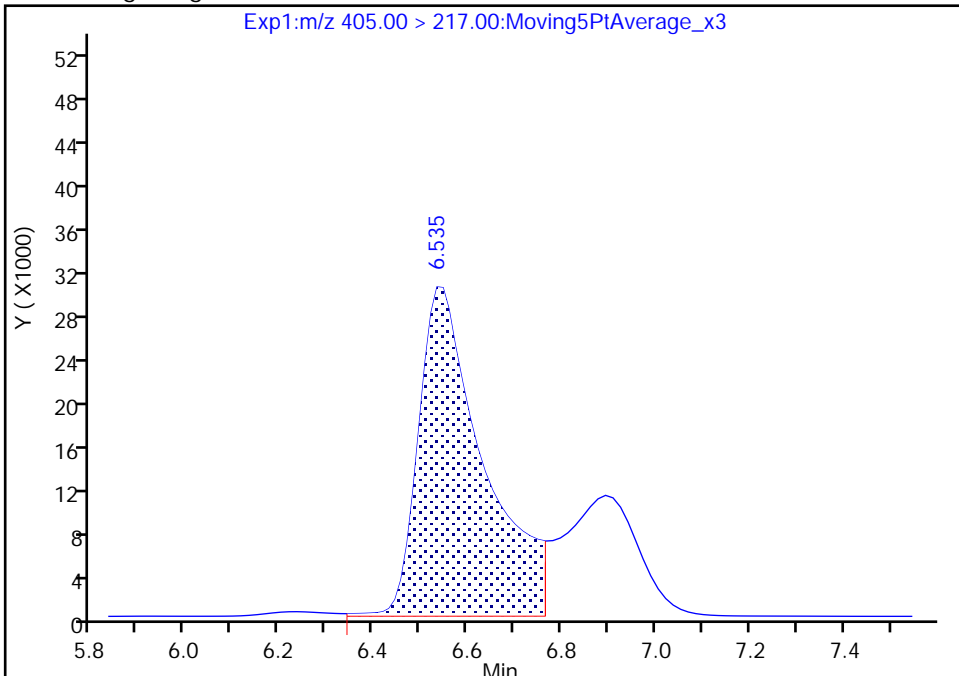
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Injection Date: 20-Feb-2021 12:48:42 Instrument ID: A10
Lims ID: IC STD 7
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 11 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

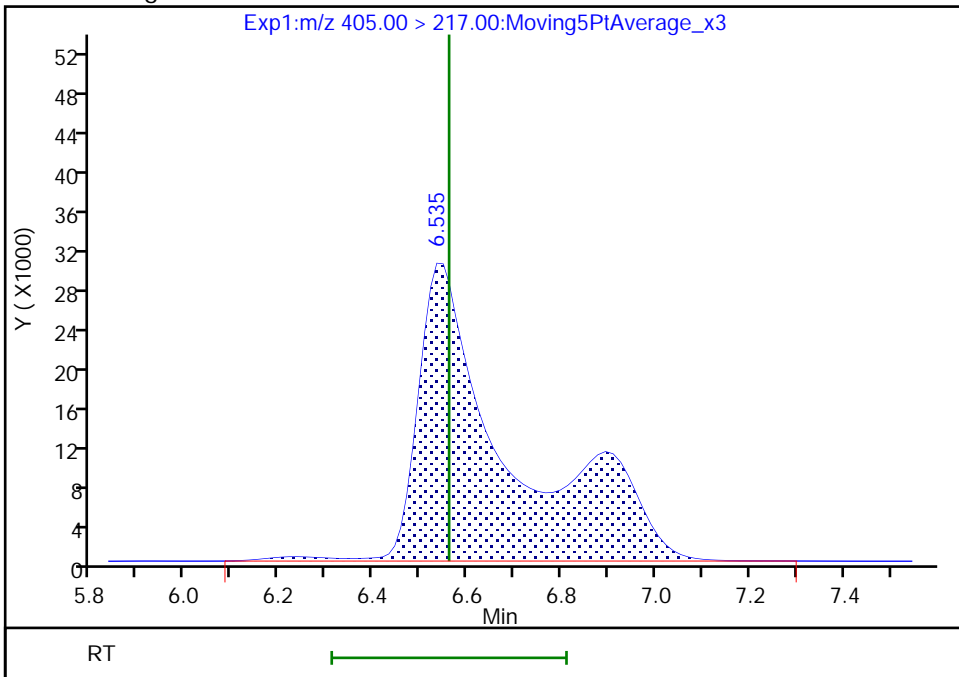
RT: 6.53
Area: 289755
Amount: 0.076041
Amount Units: ng/ml

Processing Integration Results



RT: 6.53
Area: 415236
Amount: 0.100936
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 13:24:22
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento

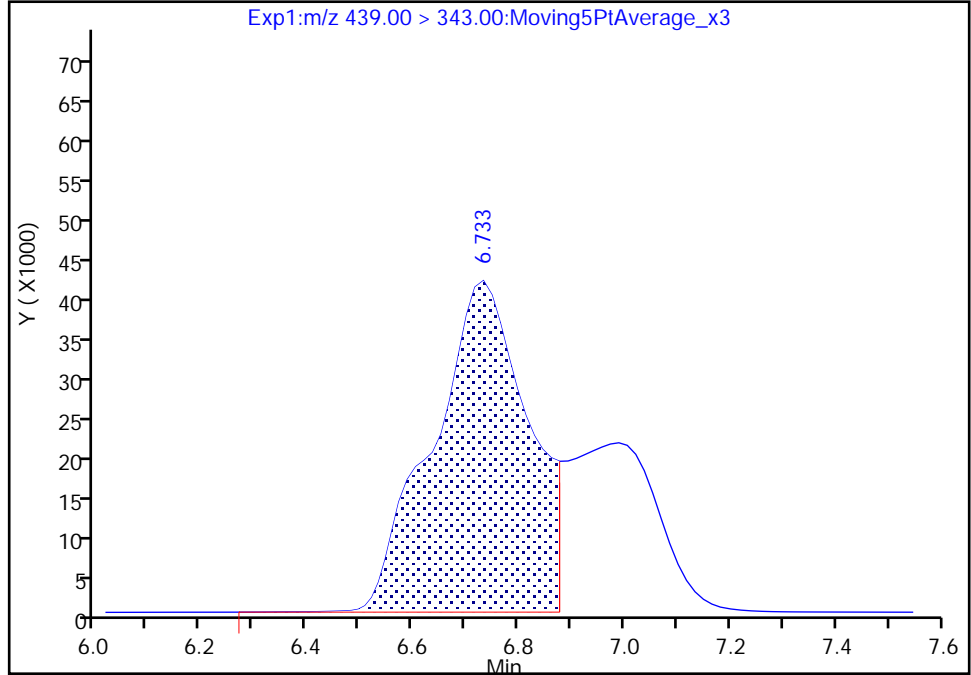
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Injection Date: 20-Feb-2021 12:48:42 Instrument ID: A10
Lims ID: IC STD 7
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 11 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

4 Hydrolyzed PSDA, CAS: 2416366-19-1

Signal: 1

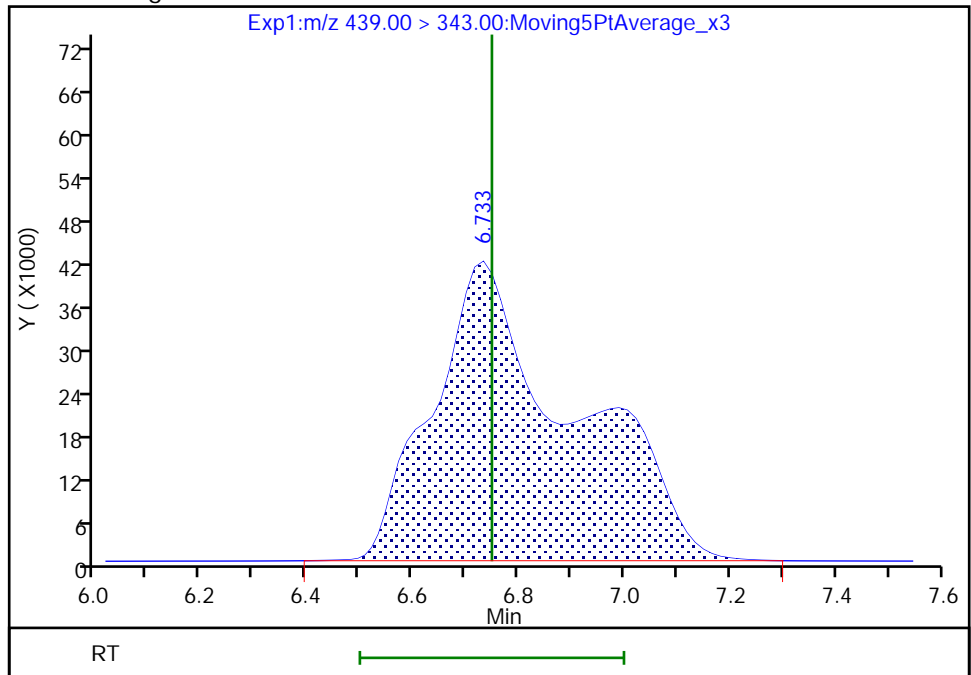
RT: 6.73
Area: 523418
Amount: 0.070761
Amount Units: ng/ml

Processing Integration Results



RT: 6.73
Area: 775227
Amount: 0.097613
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 13:24:27
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

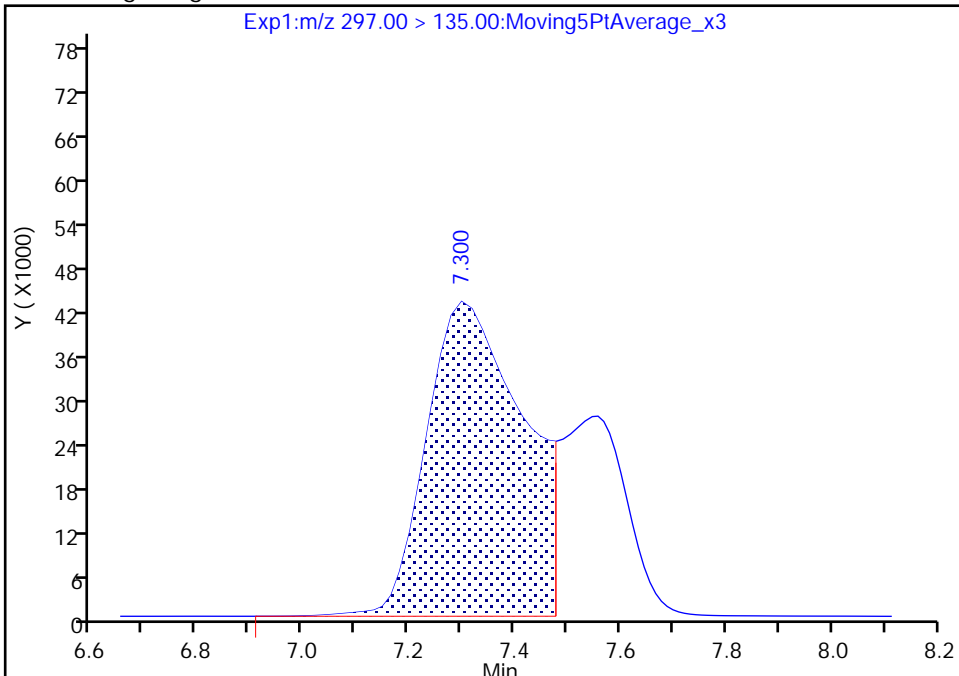
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Injection Date: 20-Feb-2021 12:48:42 Instrument ID: A10
Lims ID: IC STD 7
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 11 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

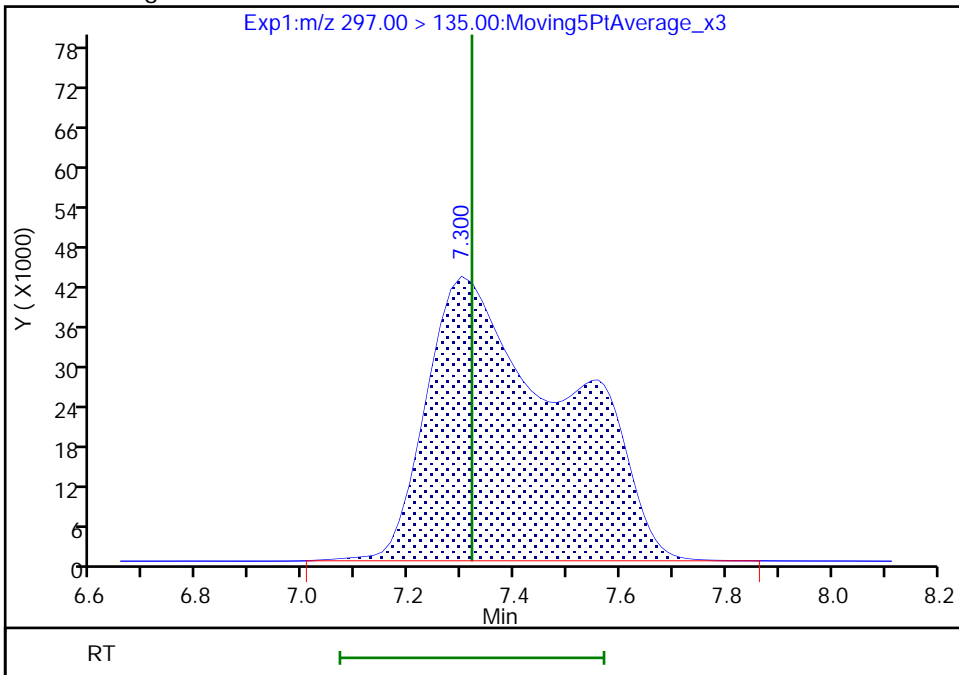
RT: 7.30
Area: 537013
Amount: 0.074702
Amount Units: ng/ml

Processing Integration Results



RT: 7.30
Area: 764583
Amount: 0.099734
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 13:24:31
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 238 of 386

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_011.d
 Lims ID: IC STD 8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 20-Feb-2021 13:23:37 ALS Bottle#: 13 Worklist Smp#: 11
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC 8 (44)
 Misc. Info.: Plate: 1 Rack: 3
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Sublist: chrom-A10_PFAS_CHEM_TB3+*sub1

Method: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 20-Feb-2021 15:38:42 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1681

First Level Reviewer: roycea Date: 20-Feb-2021 14:45:03

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	2.832	2.875	-0.043		2790659	0.2787		111	494	M
2 R-EVE										M
405.00 > 217.00	6.535	6.560	-0.025		1117148	0.2716		109	27812	M
3 R-PSDA										
440.90 > 241.00	6.621	6.653	-0.032		711978	0.2621		105	17081	
4 Hydrolyzed PSDA										M
439.00 > 343.00	6.717	6.749	-0.032		2161209	0.2721		109	40061	M
23 PMPA										
229.00 > 185.00	6.717	6.765	-0.048		3310637	0.2637		105	1511	
5 NVHOS										M
297.00 > 135.00	7.300	7.319	-0.019		2046633	0.2670		107	29036	M
6 PFO2HxA										
245.00 > 85.00	7.905	7.932	-0.027		2466870	0.2627		105	22760	
22 PEPA										
278.90 > 234.90	8.552	8.584	-0.032		1588572	0.2841		114	2805	
7 PES										
314.90 > 135.00	8.880	8.908	-0.028		12801991	0.2726		109	430050	
8 PFECA B										
295.00 > 201.00	9.109	9.139	-0.030		1727616	0.2661		106	47875	
9 PFO3OA										
310.90 > 85.00	9.352	9.396	-0.044		1489930	0.2486		99.4	21993	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.464	9.486	-0.022		1464624	0.2647		106	57777	
11 HPFO-DA										
285.00 > 169.00	9.464	9.486	-0.022	1.000	1605227	0.2517		101	63525	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.829	9.847	-0.018		16279200	0.2590		104	333963	
13 Hydro-EVE Acid										
427.00 > 282.90	9.886	9.904	-0.018		20142203	0.2551		102	189030	
D 14 13C4 PFHpA										
367.00 > 322.00	9.867	9.904	-0.037		6413461	0.2524		101	132443	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.867	9.904	-0.037	1.000	7087162	0.2619	Target=0.00	105	39737	
363.00 > 169.00	9.867	9.904	-0.037	1.000	3030025		2.34(0.00-0.00)	105	93419	
15 Hydro-PS Acid										
463.00 > 262.90	9.905	9.939	-0.034		6787712	0.2671		107	145437	
17 PFECA G										
378.90 > 184.90	9.993	10.034	-0.041		2638025	0.2808		112	107435	
18 PFO4DA										
376.90 > 85.00	10.144	10.161	-0.017		1388717	0.2692		108	12360	
19 PS Acid										
443.00 > 146.90	10.204	10.242	-0.038		3107359	0.2718		109	76661	
20 EVE Acid										
407.00 > 262.90	10.224	10.260	-0.036		11258330	0.2492		99.7	125260	
21 TAF										
442.90 > 85.00	10.700	10.745	-0.045		958564	0.2557		102	1618	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD8_00044

Amount Added: 1.00

Units: mL

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_011.d

Injection Date: 20-Feb-2021 13:23:37

Instrument ID: A10

Lims ID: IC STD 8

Client ID:

Operator ID: Sac_inst_A10

ALS Bottle#: 13

Worklist Smp#: 11

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

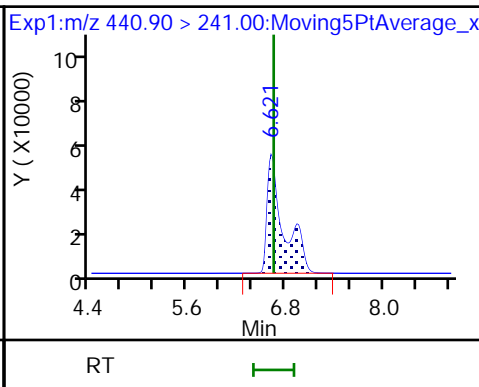
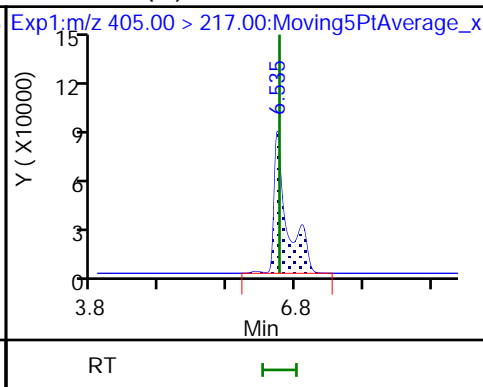
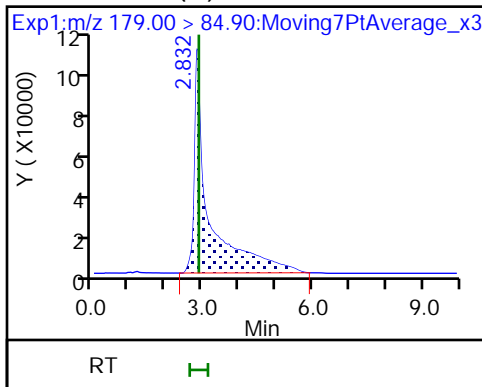
Method: A10_PFAS_CHEM_TB3+

Limit Group: LC PFAS_TB3P - ICAL

1 PFMOAA (M)

2 R-EVE (M)

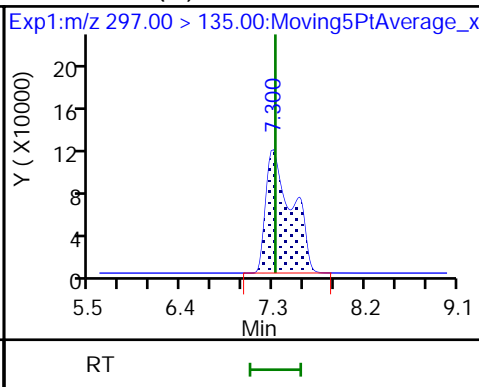
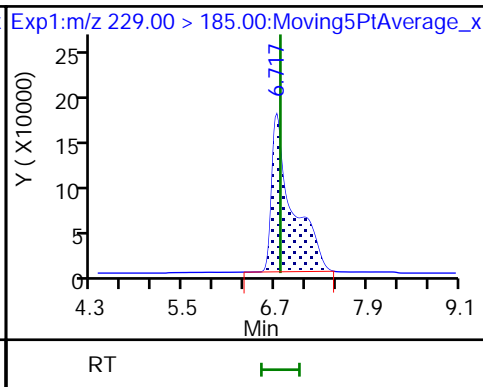
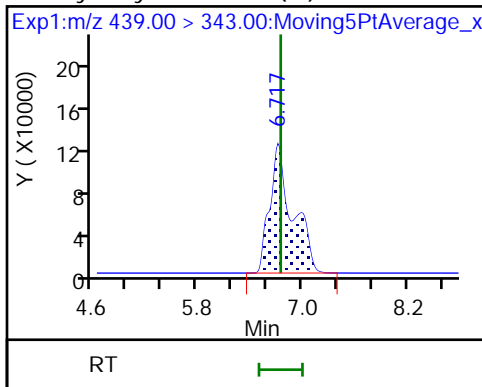
3 R-PSDA



4 Hydrolyzed PSDA (M)

23 PMPA

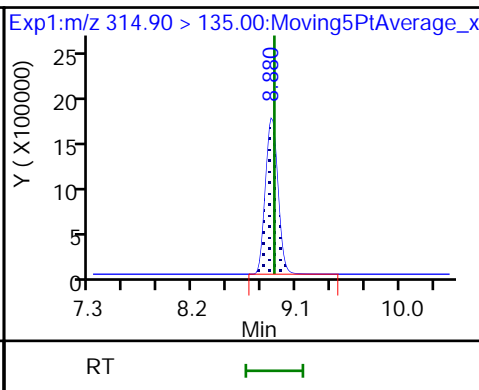
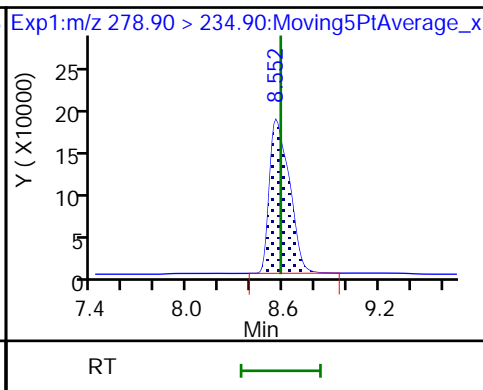
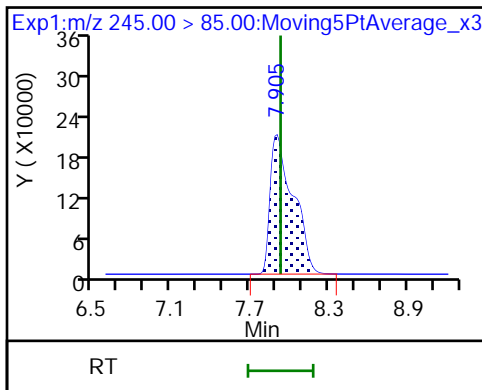
5 NVHOS (M)



6 PFO2HxA

22 PEPA

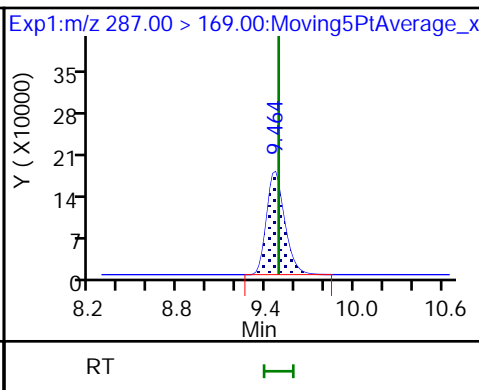
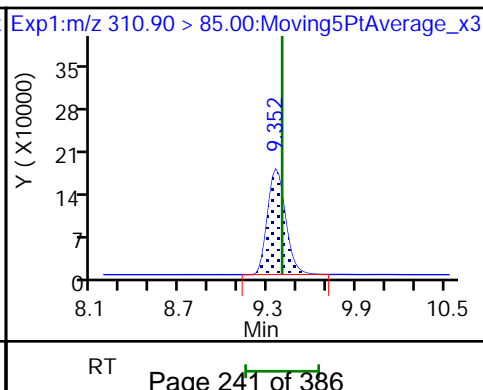
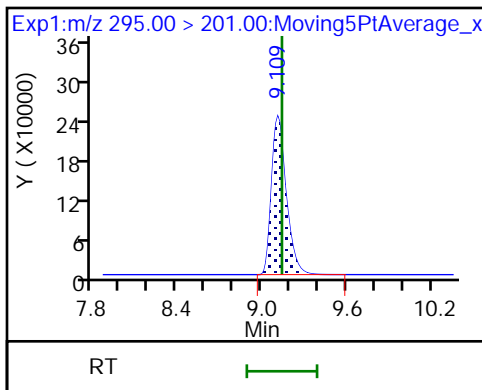
7 PES

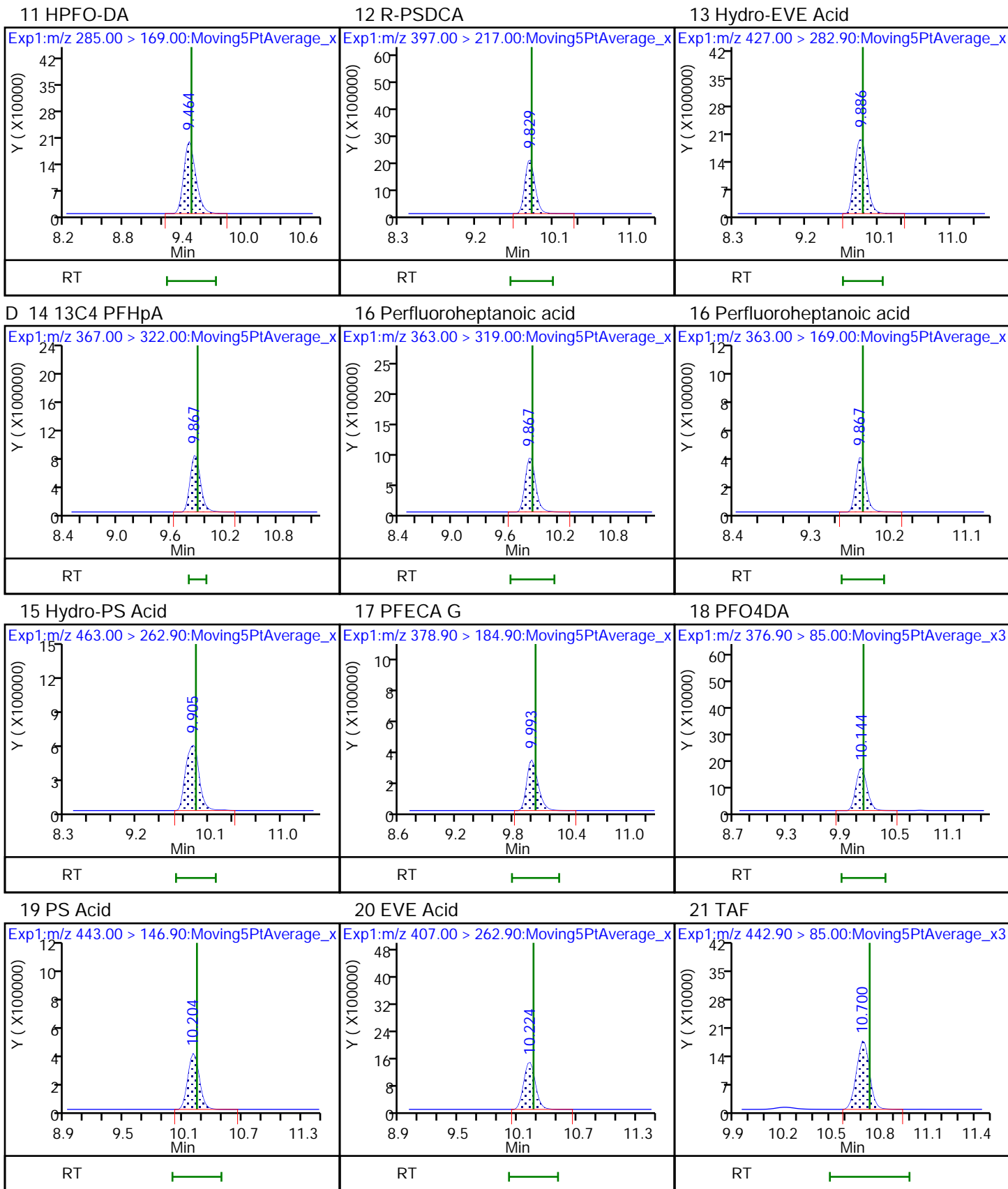


8 PFECA B

9 PFO3OA

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

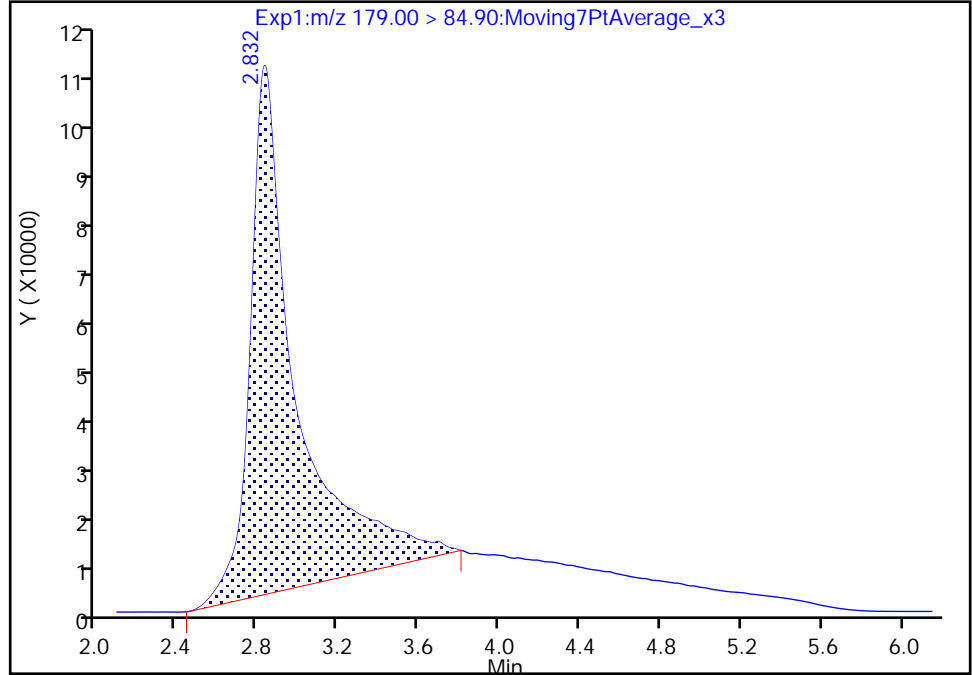
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Injection Date: 20-Feb-2021 13:23:37 Instrument ID: A10
Lims ID: IC STD 8
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 13 Worklist Smp#: 11
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

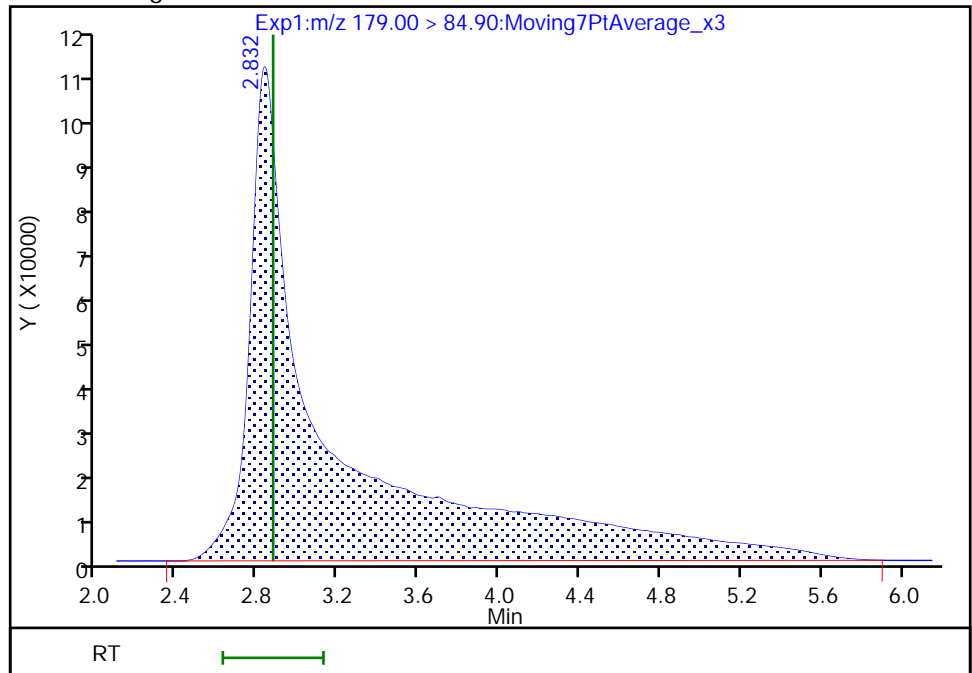
RT: 2.83
Area: 1614405
Amount: 0.182300
Amount Units: ng/ml

Processing Integration Results



RT: 2.83
Area: 2790659
Amount: 0.278727
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 14:44:35
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento

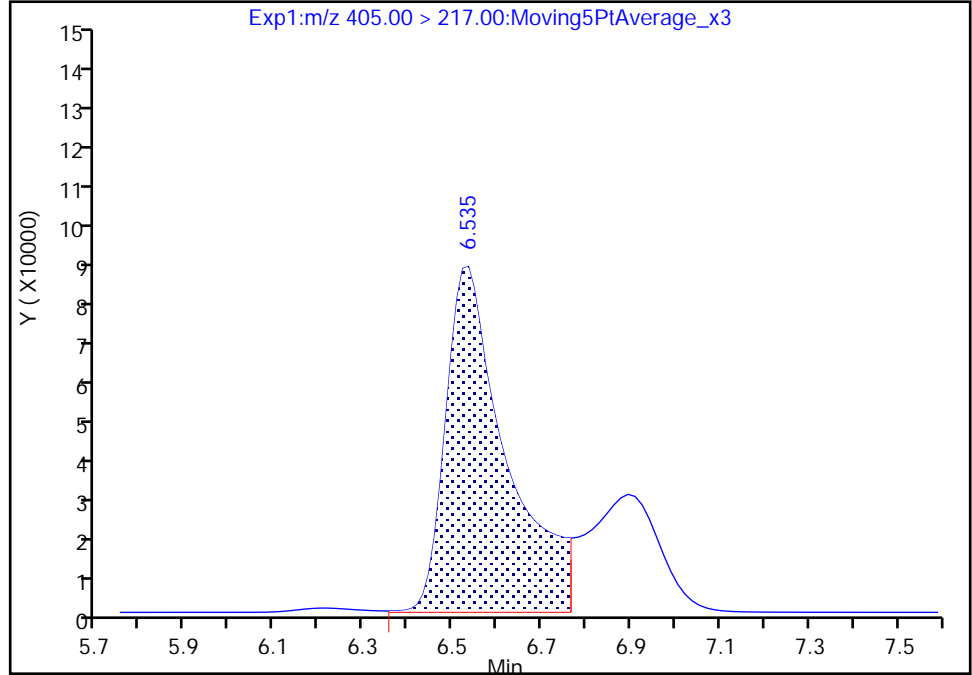
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_011.d
Injection Date: 20-Feb-2021 13:23:37 Instrument ID: A10
Lims ID: IC STD 8
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 13 Worklist Smp#: 11
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

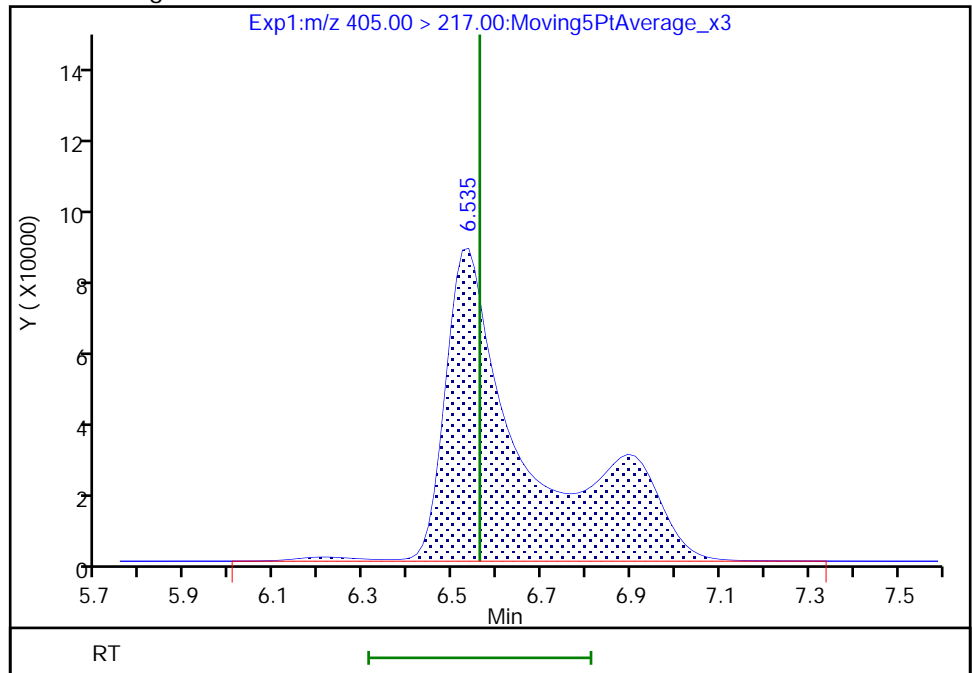
RT: 6.53
Area: 790185
Amount: 0.210516
Amount Units: ng/ml

Processing Integration Results



RT: 6.53
Area: 1117148
Amount: 0.271558
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 14:44:40
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

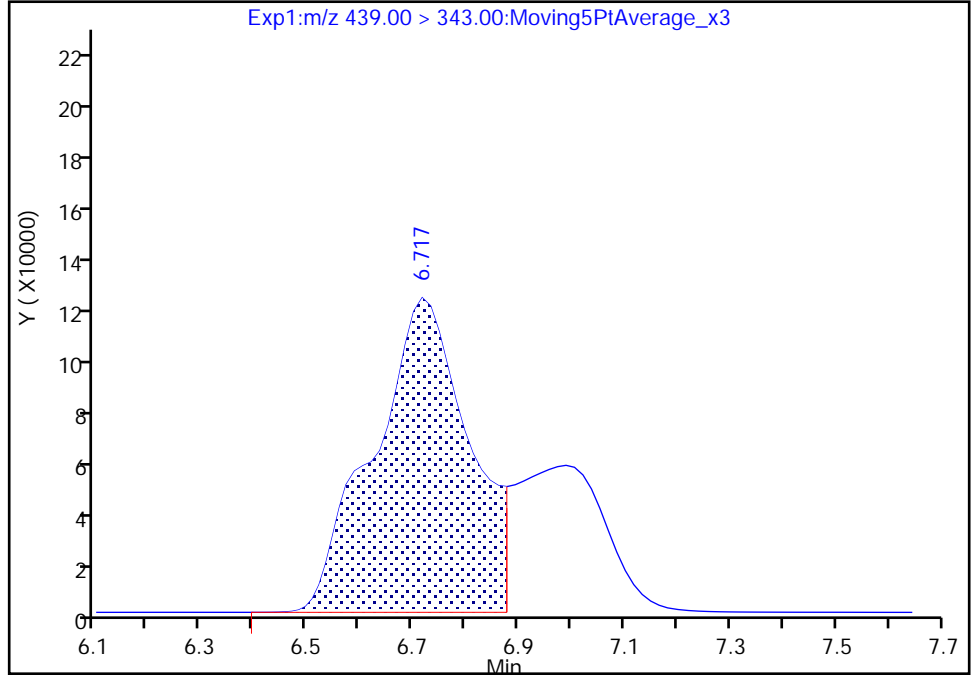
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_011.d
Injection Date: 20-Feb-2021 13:23:37 Instrument ID: A10
Lims ID: IC STD 8
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 13 Worklist Smp#: 11
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

4 Hydrolyzed PSDA, CAS: 2416366-19-1

Signal: 1

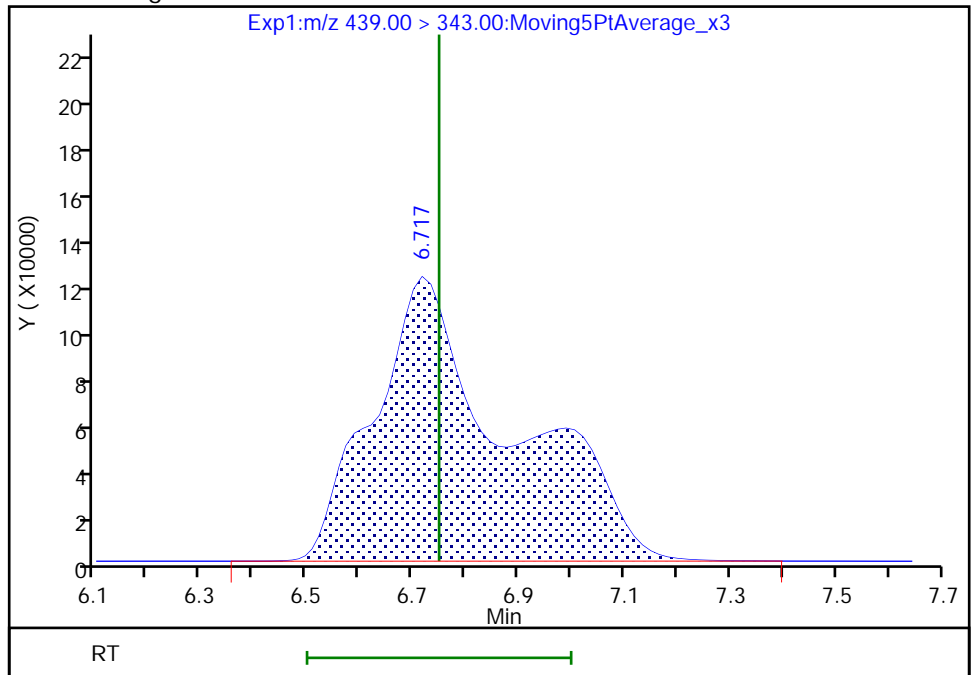
RT: 6.72
Area: 1499776
Amount: 0.201195
Amount Units: ng/ml

Processing Integration Results



RT: 6.72
Area: 2161209
Amount: 0.272130
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 14:44:44
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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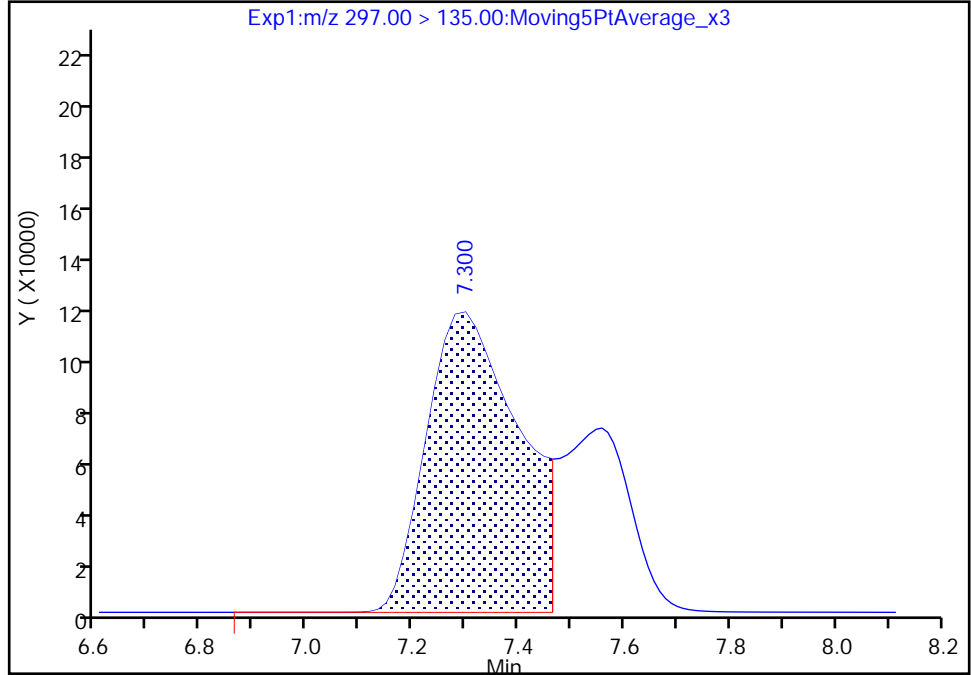
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_011.d
Injection Date: 20-Feb-2021 13:23:37 Instrument ID: A10
Lims ID: IC STD 8
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 13 Worklist Smp#: 11
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

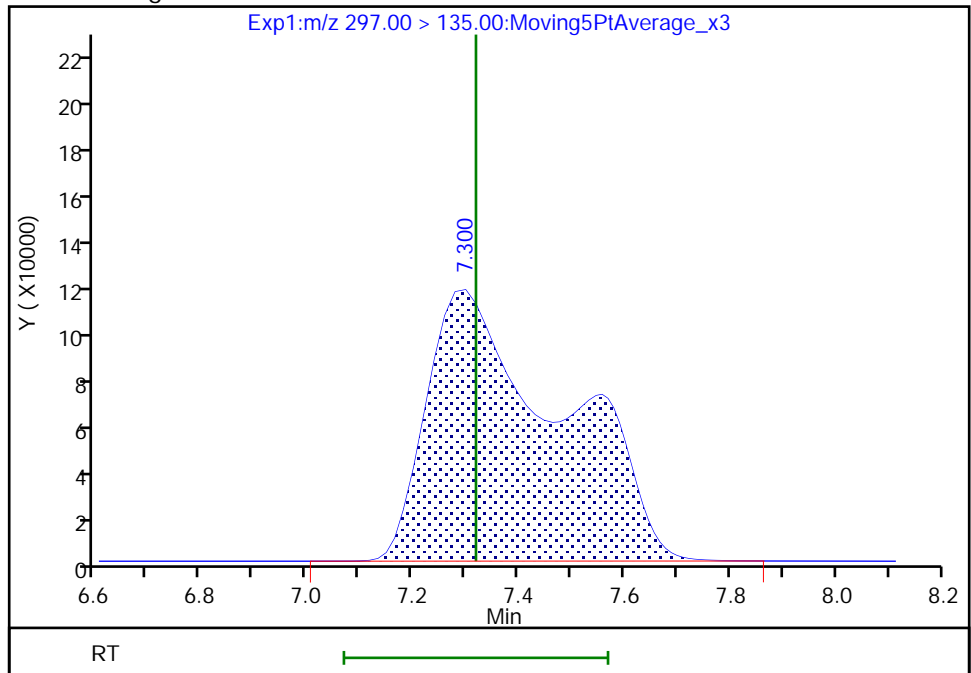
RT: 7.30
Area: 1398177
Amount: 0.189748
Amount Units: ng/ml

Processing Integration Results



RT: 7.30
Area: 2046633
Amount: 0.266967
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 14:44:51
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_013.d
 Lims ID: IC STD 9
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 20-Feb-2021 13:58:31 ALS Bottle#: 15 Worklist Smp#: 13
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC 9 (42)
 Misc. Info.: Plate: 1 Rack: 3
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Sublist: chrom-A10_PFAS_CHEM_TB3+*sub1

Method: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 20-Feb-2021 15:38:43 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1681

First Level Reviewer: roycea Date: 20-Feb-2021 14:46:19

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	2.884	2.875	0.009		5307368	0.5301		106	703	M
2 R-EVE										M
405.00 > 217.00	6.561	6.560	0.001		2168245	0.5271		105	54428	M
3 R-PSDA										
440.90 > 241.00	6.653	6.653	0.0		1396049	0.5140		103	34059	
4 Hydrolyzed PSDA										M
439.00 > 343.00	6.750	6.749	0.001		4142091	0.5216		104	47195	M
23 PMPA										
229.00 > 185.00	6.734	6.765	-0.031		6140870	0.4911		98.2	2884	
5 NVHOS										
297.00 > 135.00	7.319	7.319	0.0		3878158	0.5059		101	37217	
6 PFO2HxA										
245.00 > 85.00	7.905	7.932	-0.027		4742494	0.5050		101	48622	
22 PEPA										
278.90 > 234.90	8.572	8.584	-0.012		2787175	0.4984		99.7	5435	
7 PES										
314.90 > 135.00	8.893	8.908	-0.015		24501744	0.5217		104	670305	
8 PFECA B										
295.00 > 201.00	9.110	9.139	-0.029		3109719	0.4791		95.8	86181	
9 PFO3OA										
310.90 > 85.00	9.352	9.396	-0.044		2755328	0.4597		91.9	80759	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.467	9.486	-0.019		1391479	0.2515		101	54184	
11 HPFO-DA										
285.00 > 169.00	9.467	9.486	-0.019	1.000	2924346	0.4826		96.5	114348	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.815	9.847	-0.032		27475418	0.4371		87.4	373132	
13 Hydro-EVE Acid										
427.00 > 282.90	9.872	9.904	-0.032		35643887	0.4514		90.3	239826	
D 14 13C4 PFHpA										
367.00 > 322.00	9.872	9.904	-0.032		5730872	0.2256		90.2	119096	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.872	9.904	-0.032	1.000	12569308	0.5203	Target=0.00	104	71261	
363.00 > 169.00	9.872	9.904	-0.032	1.000	5210927		2.41(0.00-0.00)	104	129640	
15 Hydro-PS Acid										
463.00 > 262.90	9.911	9.939	-0.028		12479108	0.4911		98.2	180107	
17 PFECA G										
378.90 > 184.90	9.999	10.034	-0.035		4820530	0.5132		103	146182	
18 PFO4DA										
376.90 > 85.00	10.128	10.161	-0.033		2266863	0.4394		87.9	12869	
19 PS Acid										
443.00 > 146.90	10.211	10.242	-0.031		5450120	0.4768		95.4	110074	
20 EVE Acid										
407.00 > 262.90	10.211	10.260	-0.049		19076642	0.4223		84.5	127490	
21 TAF										
442.90 > 85.00	10.707	10.745	-0.038		1619543	0.4320		86.4	2112	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

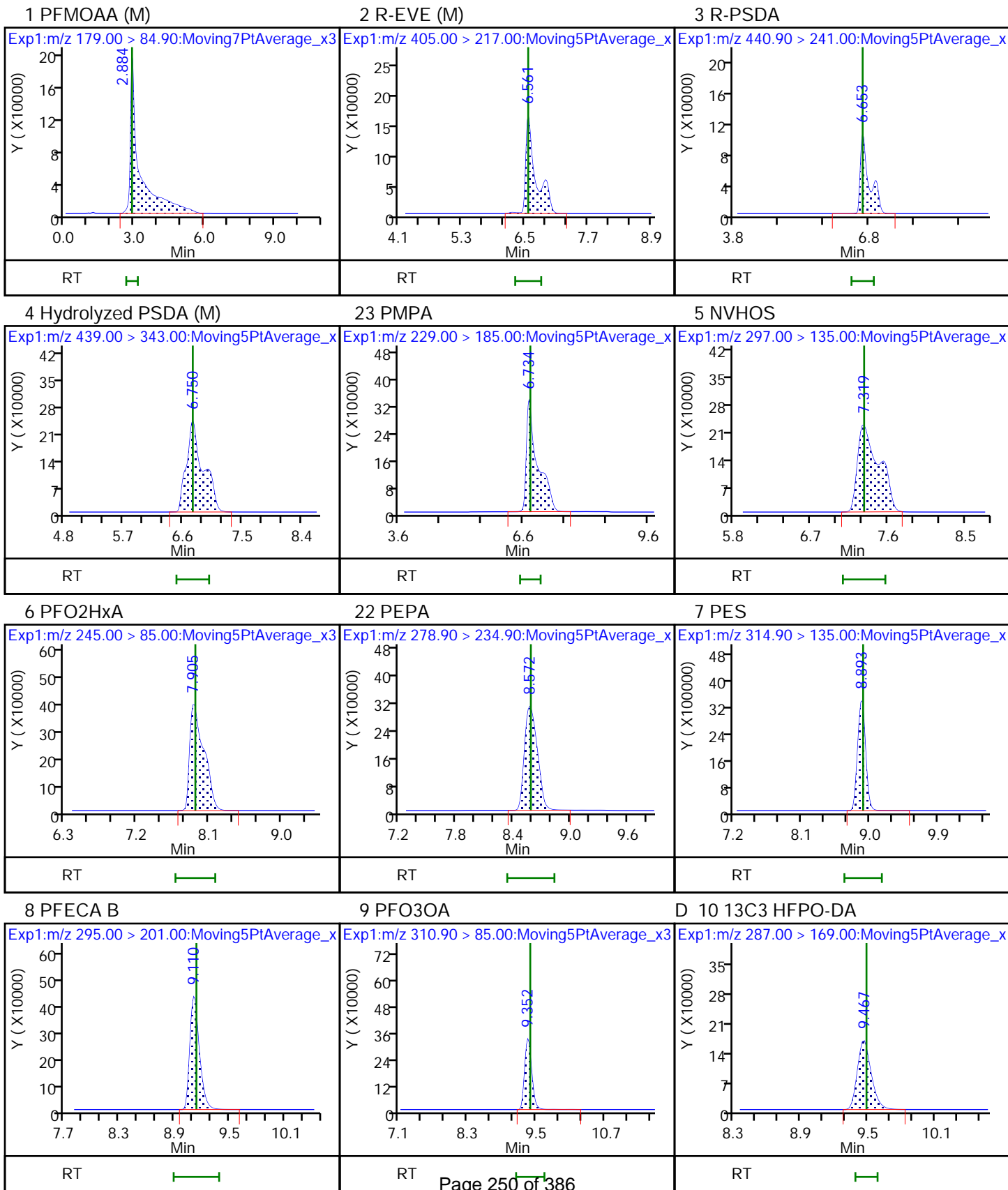
Reagents:

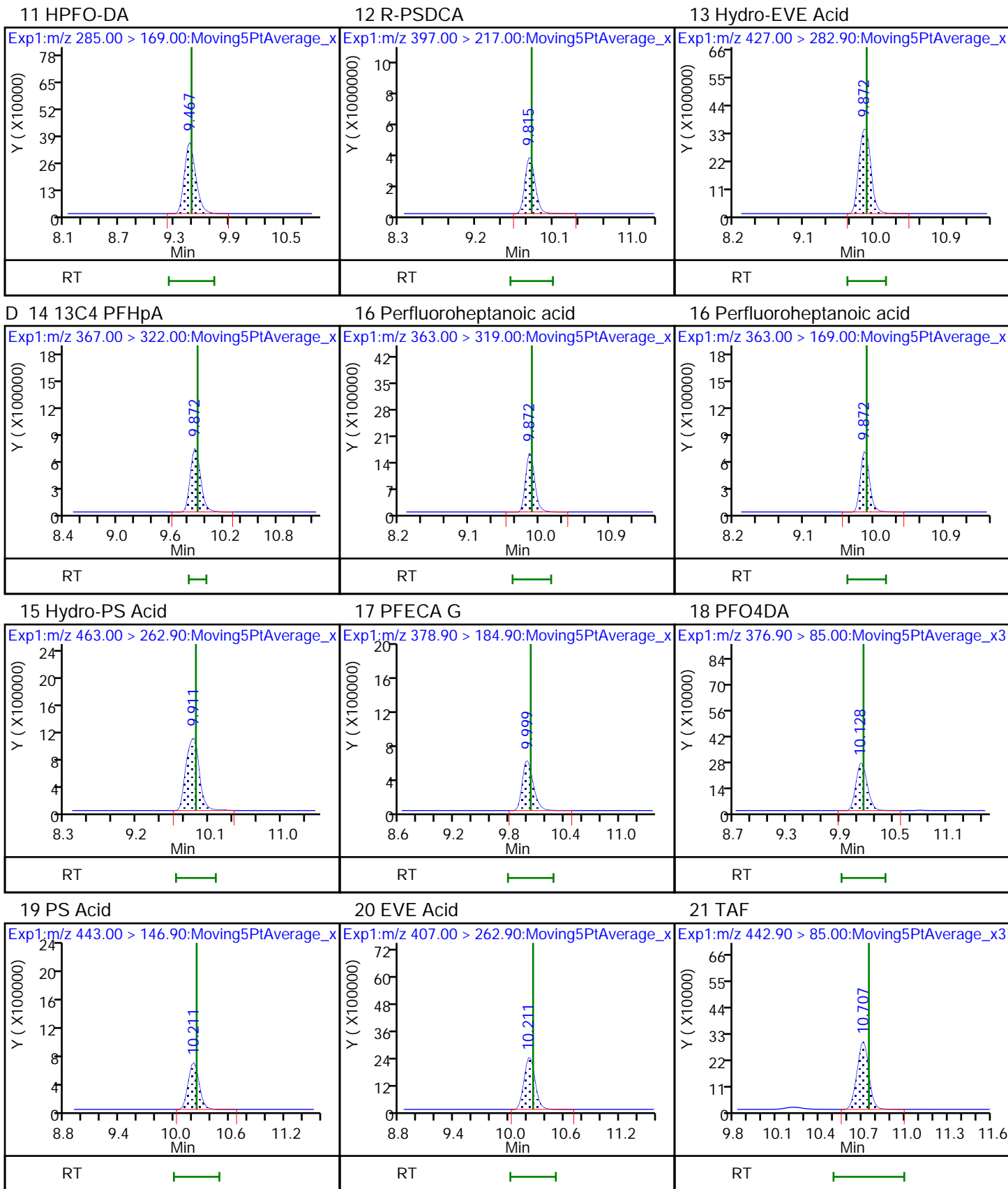
LCTB3_LLSTD9_00042

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_013.d
Injection Date: 20-Feb-2021 13:58:31 Instrument ID: A10
Lims ID: IC STD 9
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 15 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

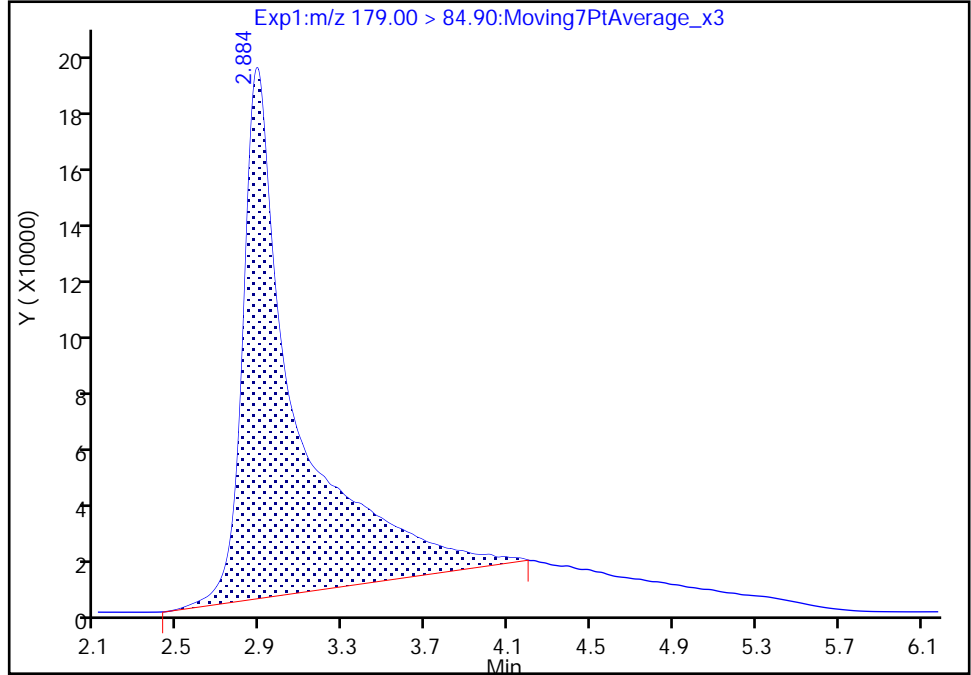
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_013.d
Injection Date: 20-Feb-2021 13:58:31 Instrument ID: A10
Lims ID: IC STD 9
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 15 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

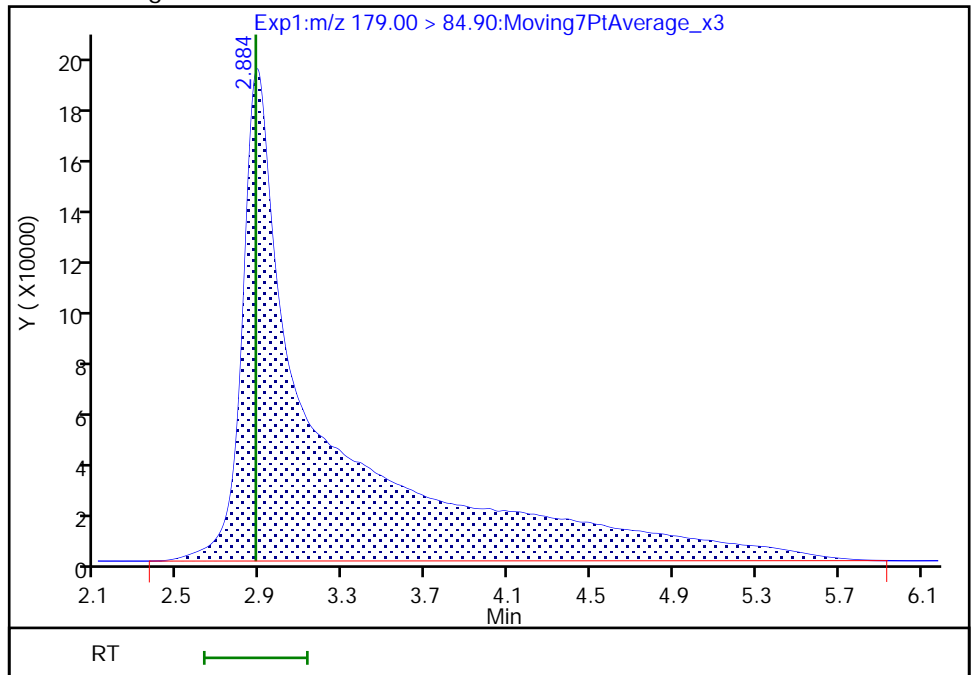
RT: 2.88
Area: 3470297
Amount: 0.372099
Amount Units: ng/ml

Processing Integration Results



RT: 2.88
Area: 5307368
Amount: 0.530092
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 14:46:00
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

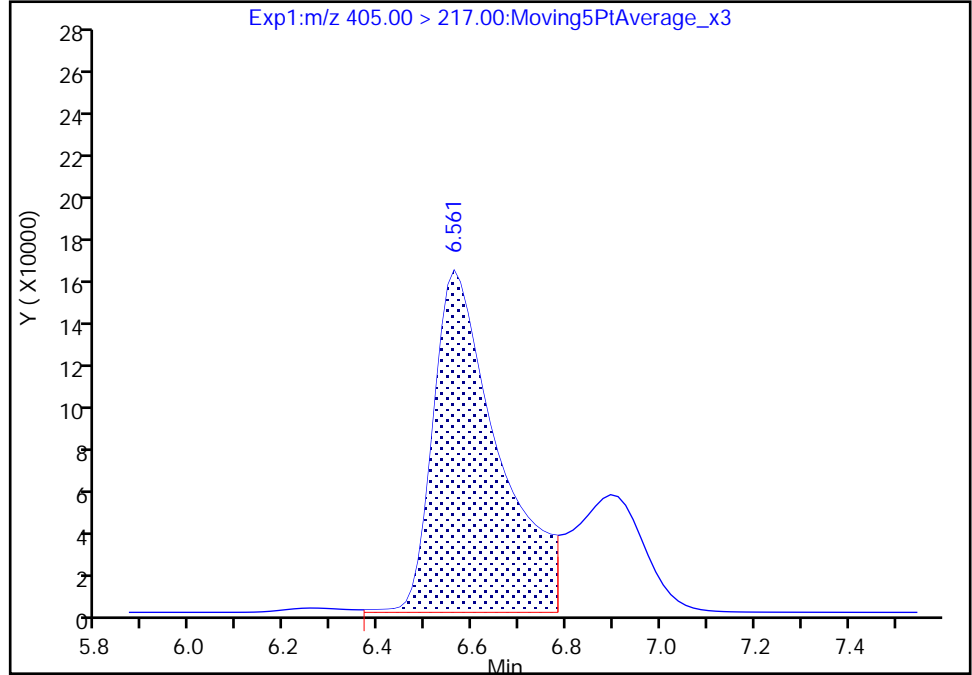
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_013.d
Injection Date: 20-Feb-2021 13:58:31 Instrument ID: A10
Lims ID: IC STD 9
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 15 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

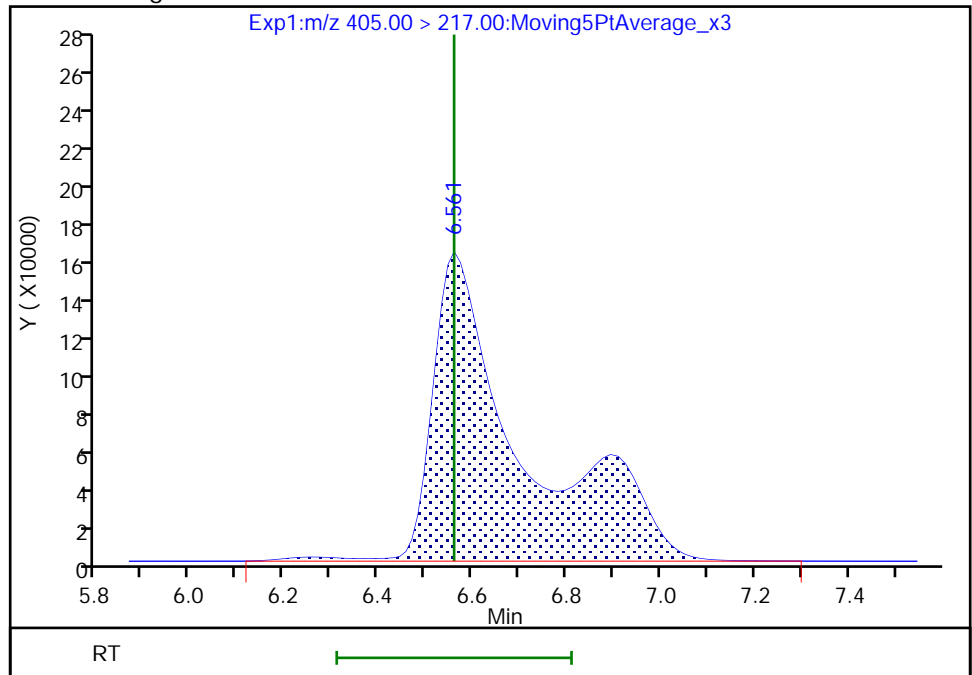
RT: 6.56
Area: 1561384
Amount: 0.401968
Amount Units: ng/ml

Processing Integration Results



RT: 6.56
Area: 2168245
Amount: 0.527061
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 14:46:04
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento

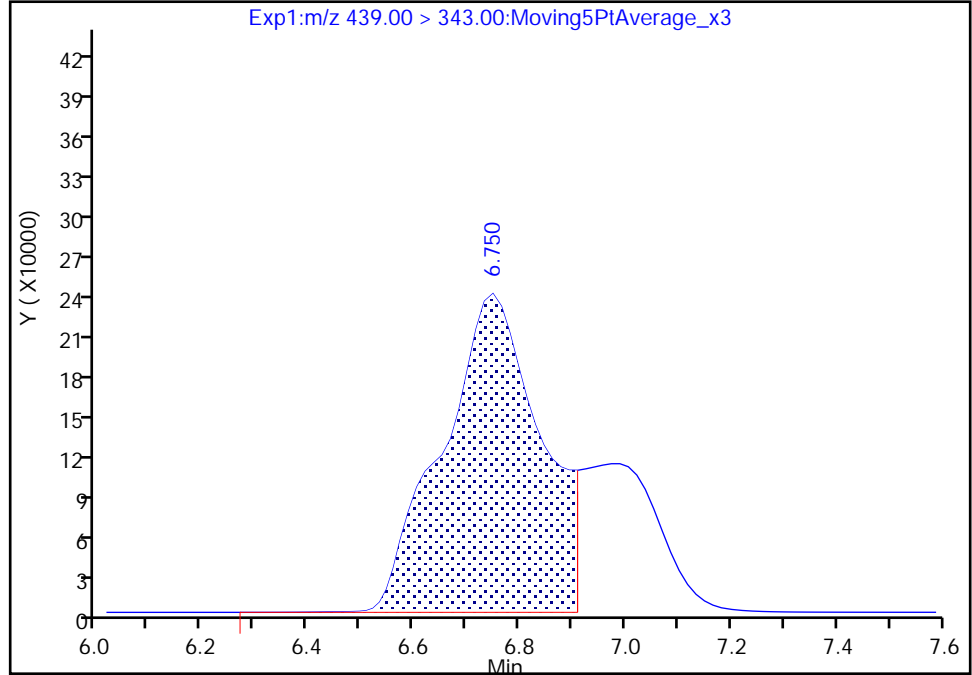
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_013.d
Injection Date: 20-Feb-2021 13:58:31 Instrument ID: A10
Lims ID: IC STD 9
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 15 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

4 Hydrolyzed PSDA, CAS: 2416366-19-1

Signal: 1

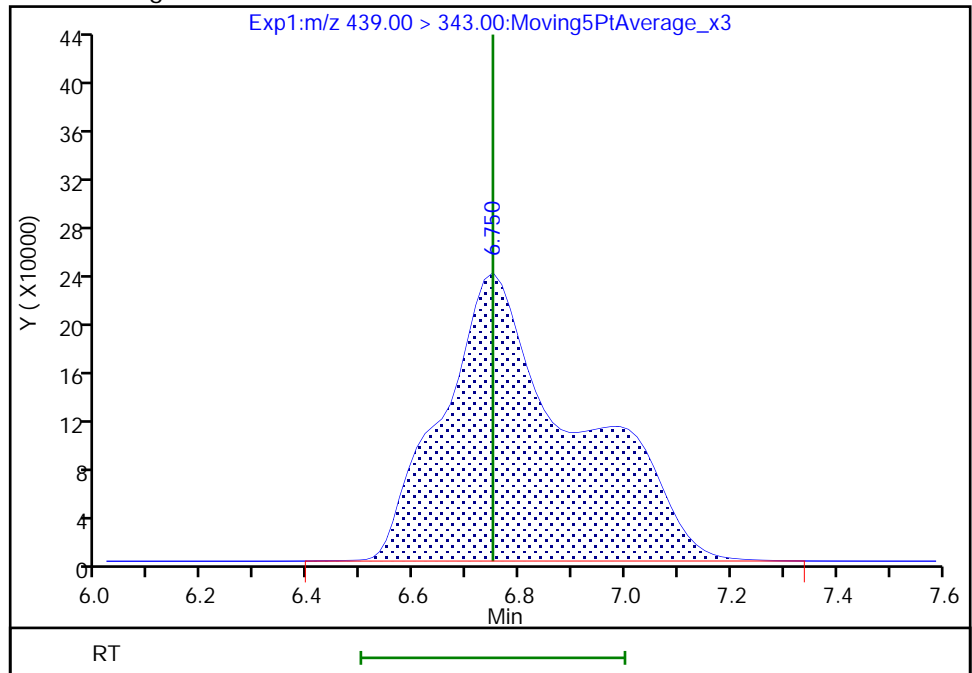
RT: 6.75
Area: 3027444
Amount: 0.392212
Amount Units: ng/ml

Processing Integration Results



RT: 6.75
Area: 4142091
Amount: 0.521554
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 14:46:08
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Lims ID: IC STD 10
 Client ID:
 Sample Type: IC Calib Level: 10
 Inject. Date: 20-Feb-2021 14:15:58 ALS Bottle#: 16 Worklist Smp#: 14
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC 10 (41)
 Misc. Info.: Plate: 1 Rack: 3
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Sublist: chrom-A10_PFAS_CHEM_TB3+*sub1

Method: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 20-Feb-2021 15:38:44 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1681

First Level Reviewer: roycea Date: 20-Feb-2021 14:46:42

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.026	2.875	0.151		10425782	1.04		104	1164	M
2 R-EVE										M
405.00 > 217.00	6.617	6.560	0.057		4342016	1.06		106	68205	M
3 R-PSDA										
440.90 > 241.00	6.697	6.653	0.044		2992445	1.10		110	82689	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.793	6.749	0.044		8192250	1.03		103	126155	
23 PMPA										
229.00 > 185.00	6.777	6.765	0.012		12257867	0.9825		98.3	5724	
5 NVHOS										
297.00 > 135.00	7.335	7.319	0.016		7739869	1.01		101	159291	
6 PFO2HxA										
245.00 > 85.00	7.913	7.932	-0.019		9188527	0.9784		97.8	89078	
22 PEPA										
278.90 > 234.90	8.568	8.584	-0.016		5634472	1.01		101	10354	
7 PES										
314.90 > 135.00	8.881	8.908	-0.027		46061829	0.9808		98.1	1271979	
8 PFECA B										
295.00 > 201.00	9.110	9.139	-0.029		6030771	0.9291		92.9	172314	
9 PFO3OA										
310.90 > 85.00	9.353	9.396	-0.043		5215960	0.8703		87.0	102465	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.450	9.486	-0.036		1371993	0.2480		99.2	54087	
11 HPFO-DA										
285.00 > 169.00	9.450	9.486	-0.036	1.000	5602406	0.9377		93.8	131140	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.816	9.847	-0.031		43924298	0.6987		69.9	411630	
13 Hydro-EVE Acid										
427.00 > 282.90	9.873	9.904	-0.031		60448615	0.7655		76.6	335658	
D 14 13C4 PFHpA										
367.00 > 322.00	9.873	9.904	-0.031		5378682	0.2117		84.7	111044	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.873	9.904	-0.031	1.000	21096596	0.9307	Target=0.00	93.1	104915	
363.00 > 169.00	9.873	9.904	-0.031	1.000	9143877		2.31(0.00-0.00)	93.1	161840	
15 Hydro-PS Acid										
463.00 > 262.90	9.892	9.939	-0.047		22932681	0.9025		90.3	248937	
17 PFECA G										
378.90 > 184.90	9.982	10.034	-0.052		9044053	0.9628		96.3	223020	
18 PFO4DA										
376.90 > 85.00	10.128	10.161	-0.033		4535169	0.8792		87.9	37379	
19 PS Acid										
443.00 > 146.90	10.190	10.242	-0.052		9513361	0.8323		83.2	126552	
20 EVE Acid										
407.00 > 262.90	10.210	10.260	-0.050		30733220	0.6804		68.0	119959	
21 TAF										
442.90 > 85.00	10.694	10.745	-0.051		2732758	0.7289		72.9	2431	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD10_00041

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d

Injection Date: 20-Feb-2021 14:15:58

Instrument ID: A10

Lims ID: IC STD 10

Client ID:

Operator ID: Sac_inst_A10

ALS Bottle#: 16

Worklist Smp#: 14

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

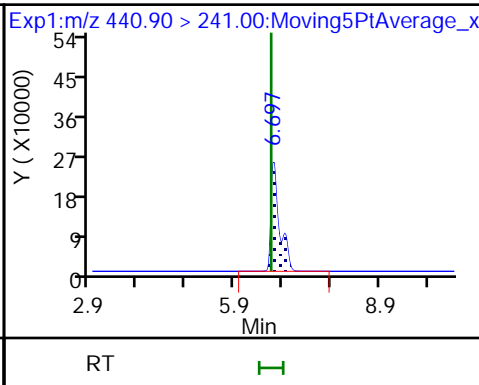
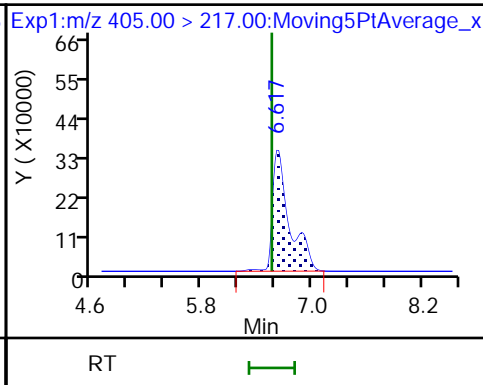
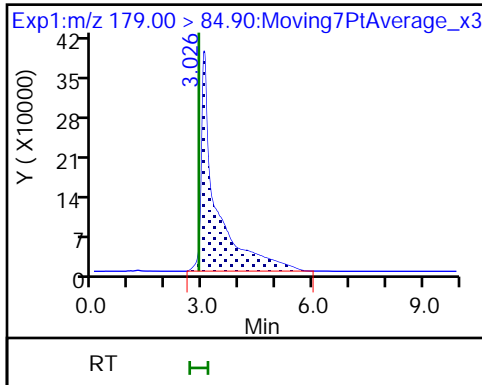
Method: A10_PFAS_CHEM_TB3+

Limit Group: LC PFAS_TB3P - ICAL

1 PFMOAA (M)

2 R-EVE (M)

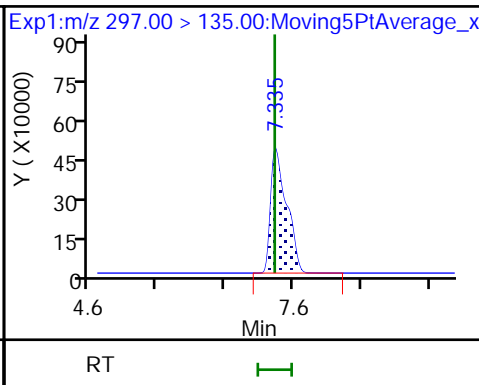
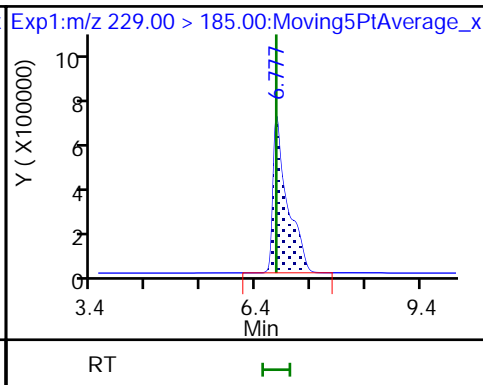
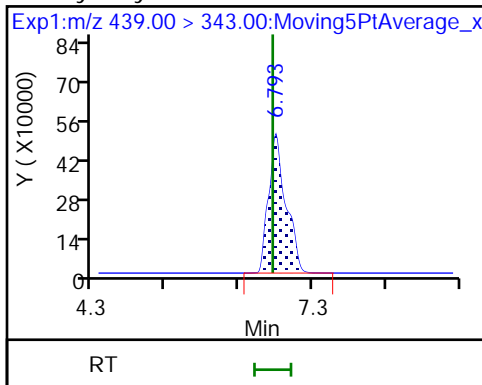
3 R-PSDA



4 Hydrolyzed PSDA

23 PMPA

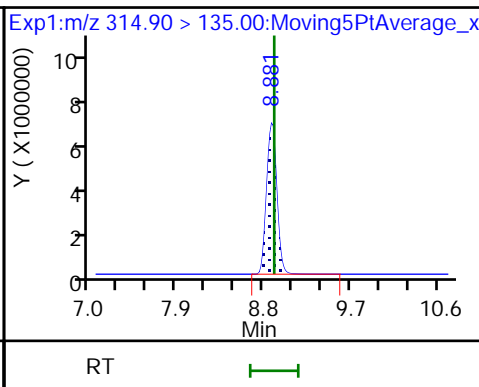
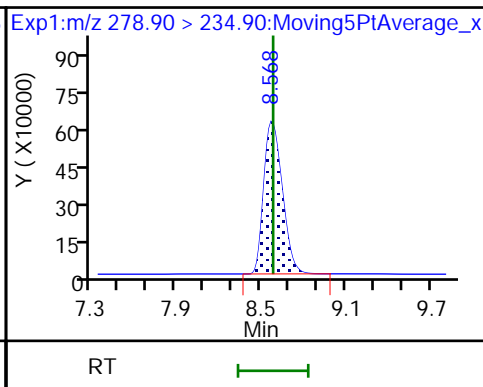
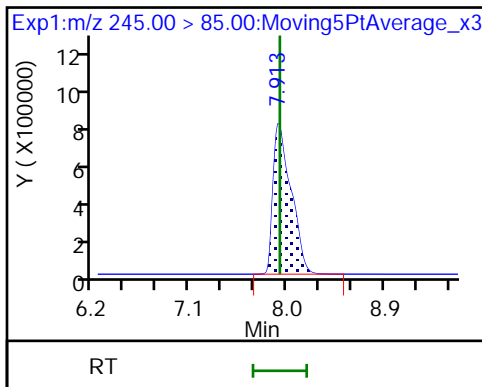
5 NVHOS



6 PFO2HxA

22 PEPA

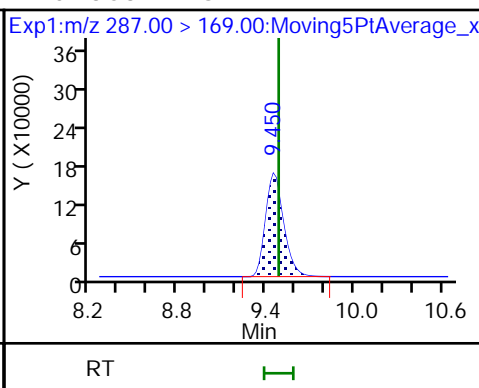
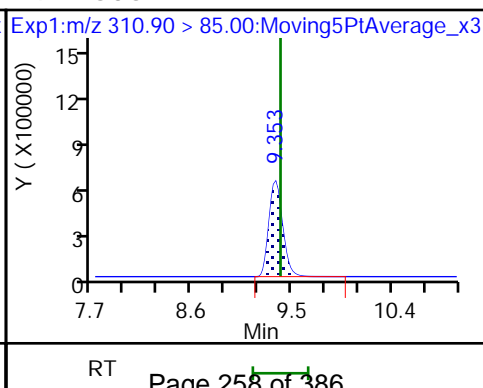
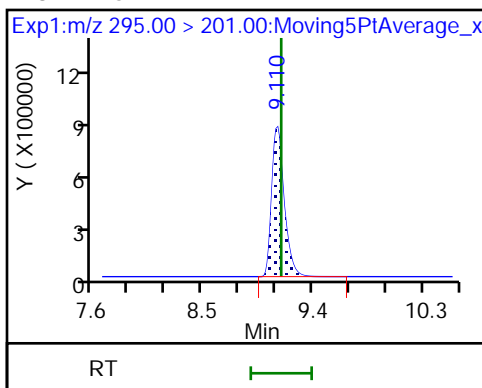
7 PES

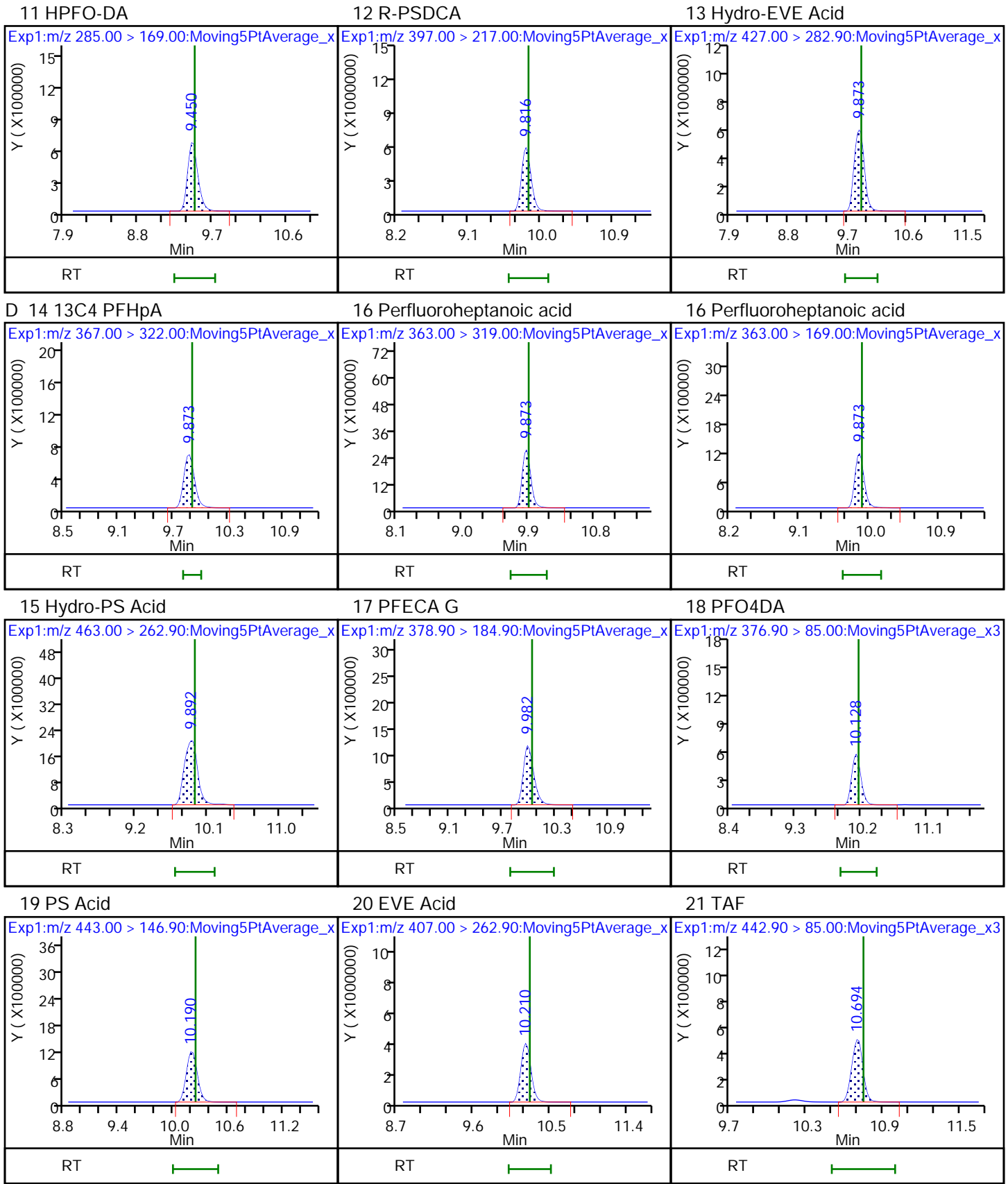


8 PFECA B

9 PFO3OA

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

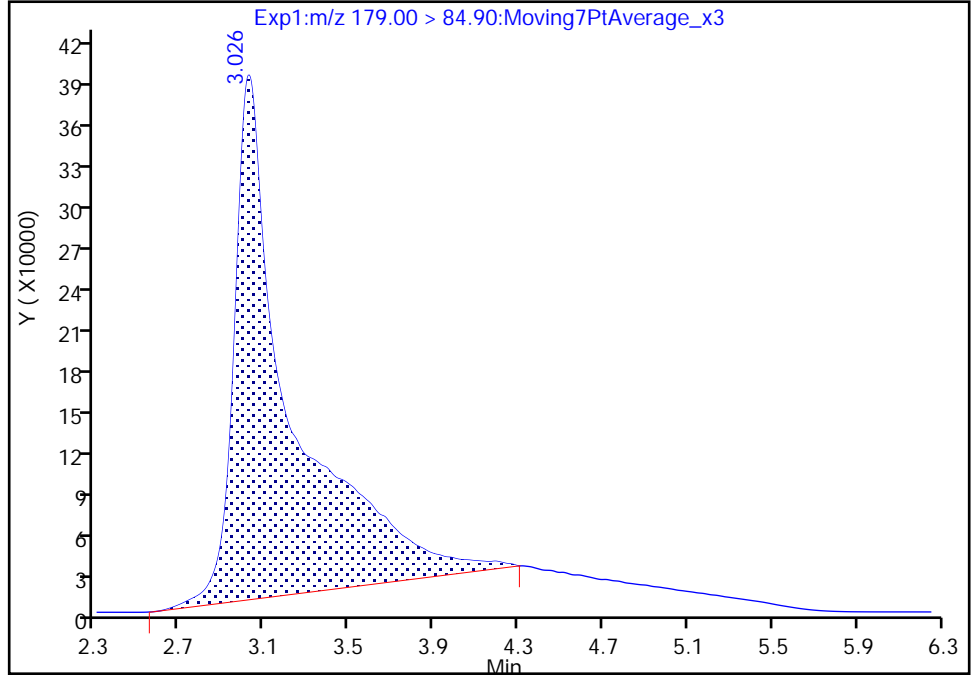
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
Injection Date: 20-Feb-2021 14:15:58 Instrument ID: A10
Lims ID: IC STD 10
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 16 Worklist Smp#: 14
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

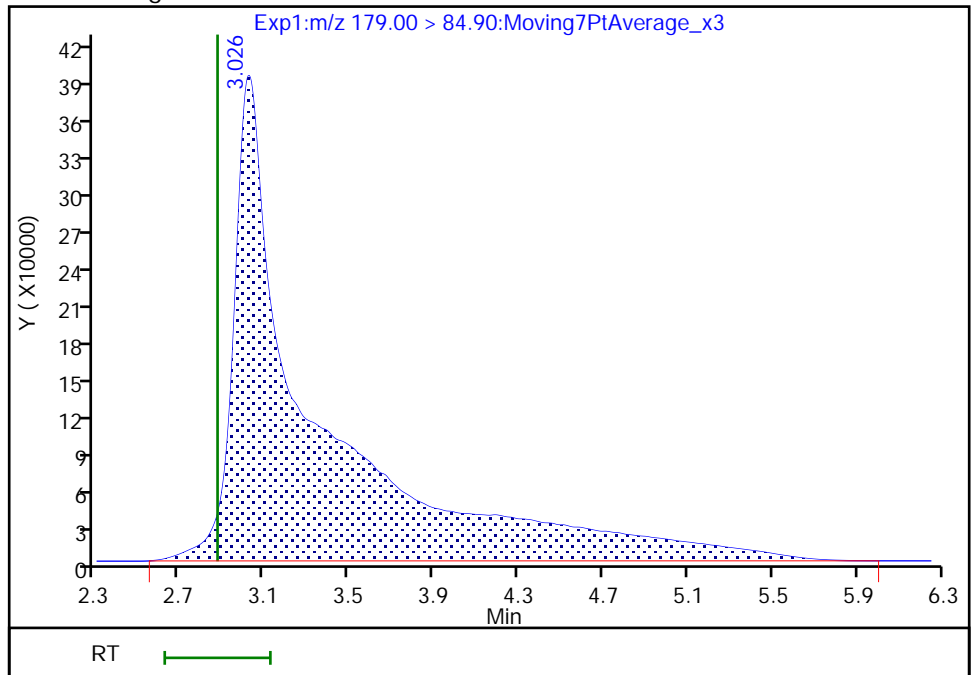
RT: 3.03
Area: 7241022
Amount: 0.746983
Amount Units: ng/ml

Processing Integration Results



RT: 3.03
Area: 10425782
Amount: 1.041312
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 14:46:28
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

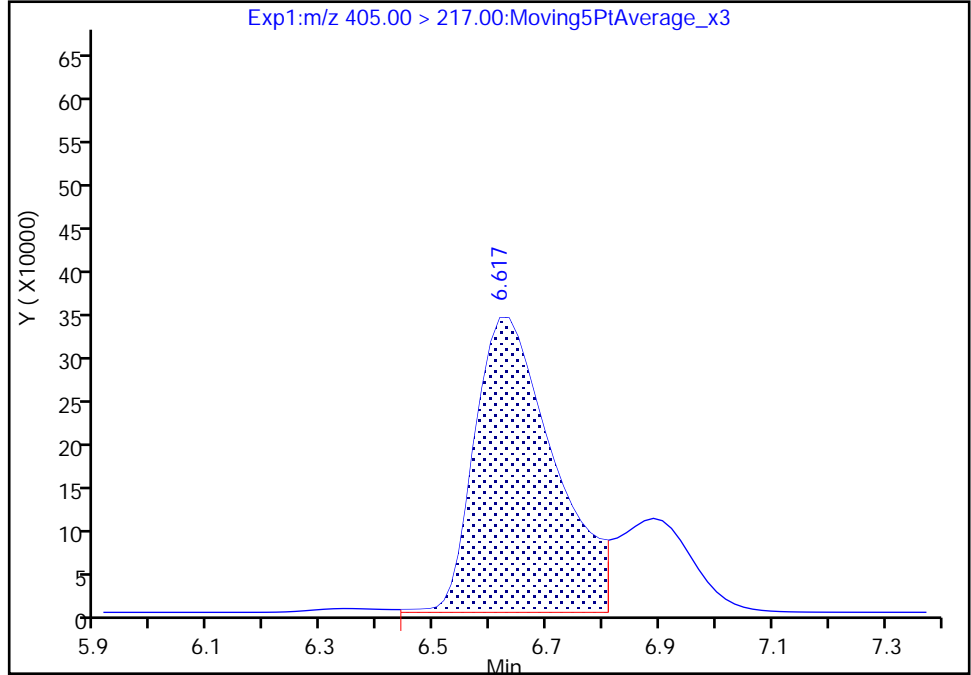
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
Injection Date: 20-Feb-2021 14:15:58 Instrument ID: A10
Lims ID: IC STD 10
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 16 Worklist Smp#: 14
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

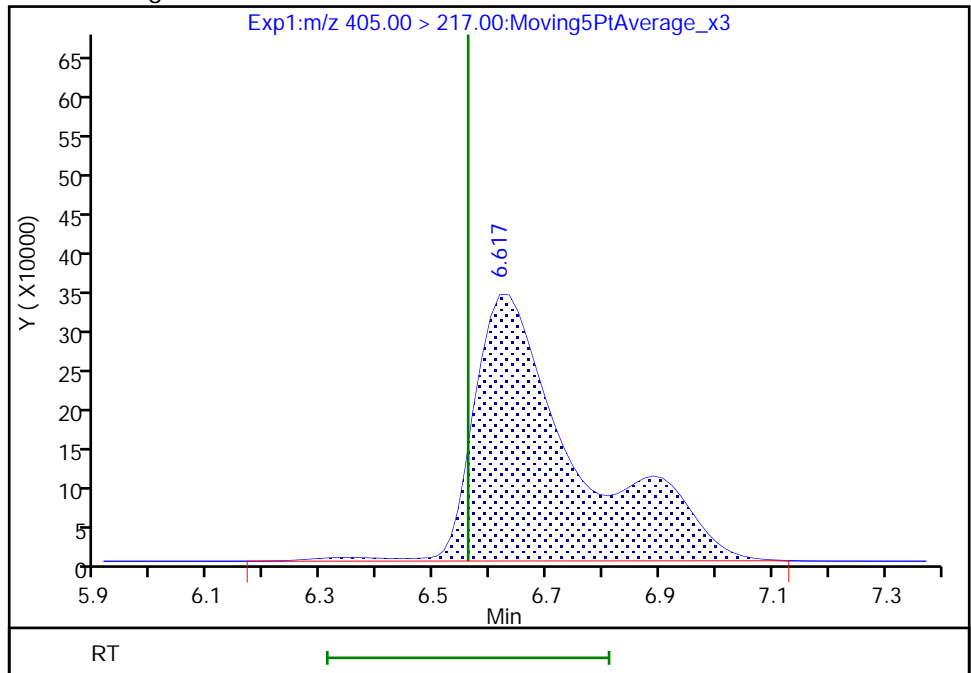
RT: 6.62
Area: 3323637
Amount: 0.829722
Amount Units: ng/ml

Processing Integration Results



RT: 6.62
Area: 4342016
Amount: 1.055466
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 14:46:32
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 262 of 386

Calibration

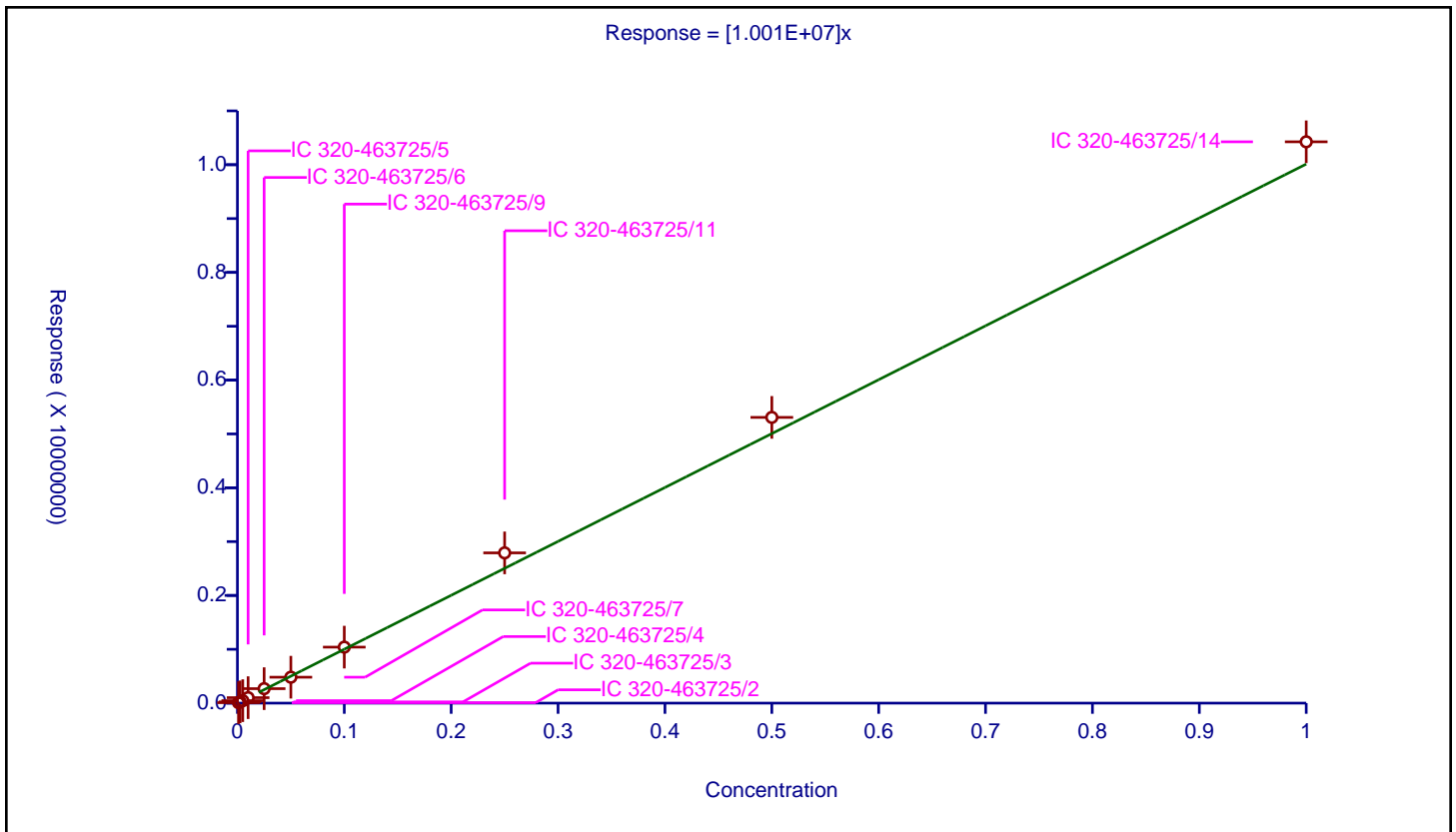
/ PFMOAA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.001E+07

Error Coefficients	
Standard Error:	196000
Relative Standard Error:	8.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	8669.0			8669000.0	Y
2	IC 320-463725/3	0.0025	22895.0			9158000.0	Y
3	IC 320-463725/4	0.005	45557.0			9111400.0	Y
4	IC 320-463725/5	0.01	101876.0			10187600.0	Y
5	IC 320-463725/6	0.025	268916.0			10756640.0	Y
6	IC 320-463725/7	0.05	481728.0			9634560.0	Y
7	IC 320-463725/9	0.1	1040127.0			10401270.0	Y
8	IC 320-463725/11	0.25	2790659.0			11162636.0	Y
9	IC 320-463725/13	0.5	5307368.0			10614736.0	Y
10	IC 320-463725/14	1.0	10425782.0			10425782.0	Y



Calibration

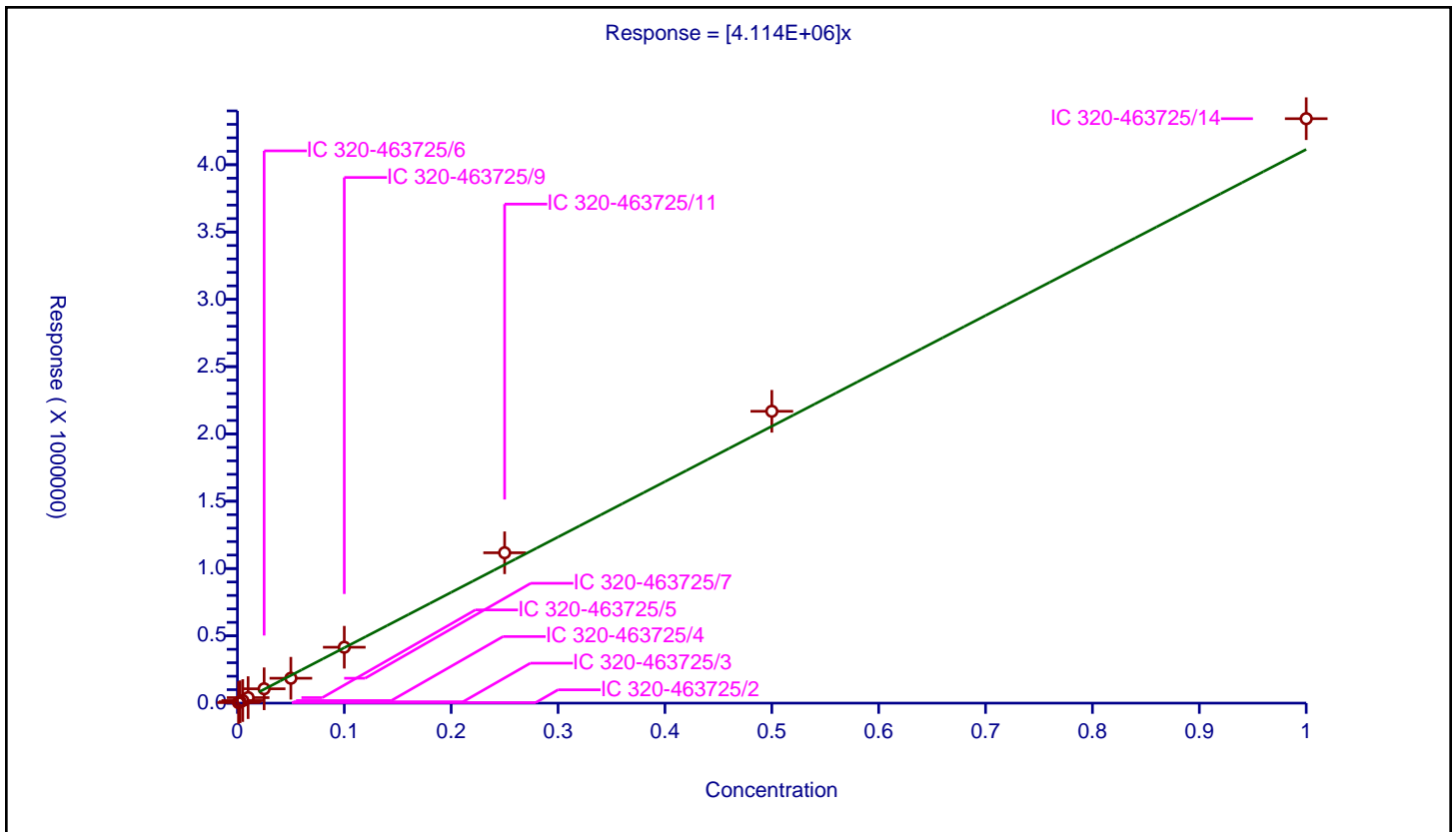
/ R-EVE

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.114E+06

Error Coefficients	
Standard Error:	89900
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	3909.0			3909000.0	Y
2	IC 320-463725/3	0.0025	10170.0			4068000.0	Y
3	IC 320-463725/4	0.005	19048.0			3809600.0	Y
4	IC 320-463725/5	0.01	40915.0			4091500.0	Y
5	IC 320-463725/6	0.025	106525.0			4261000.0	Y
6	IC 320-463725/7	0.05	184992.0			3699840.0	Y
7	IC 320-463725/9	0.1	415236.0			4152360.0	Y
8	IC 320-463725/11	0.25	1117148.0			4468592.0	Y
9	IC 320-463725/13	0.5	2168245.0			4336490.0	Y
10	IC 320-463725/14	1.0	4342016.0			4342016.0	Y



Calibration

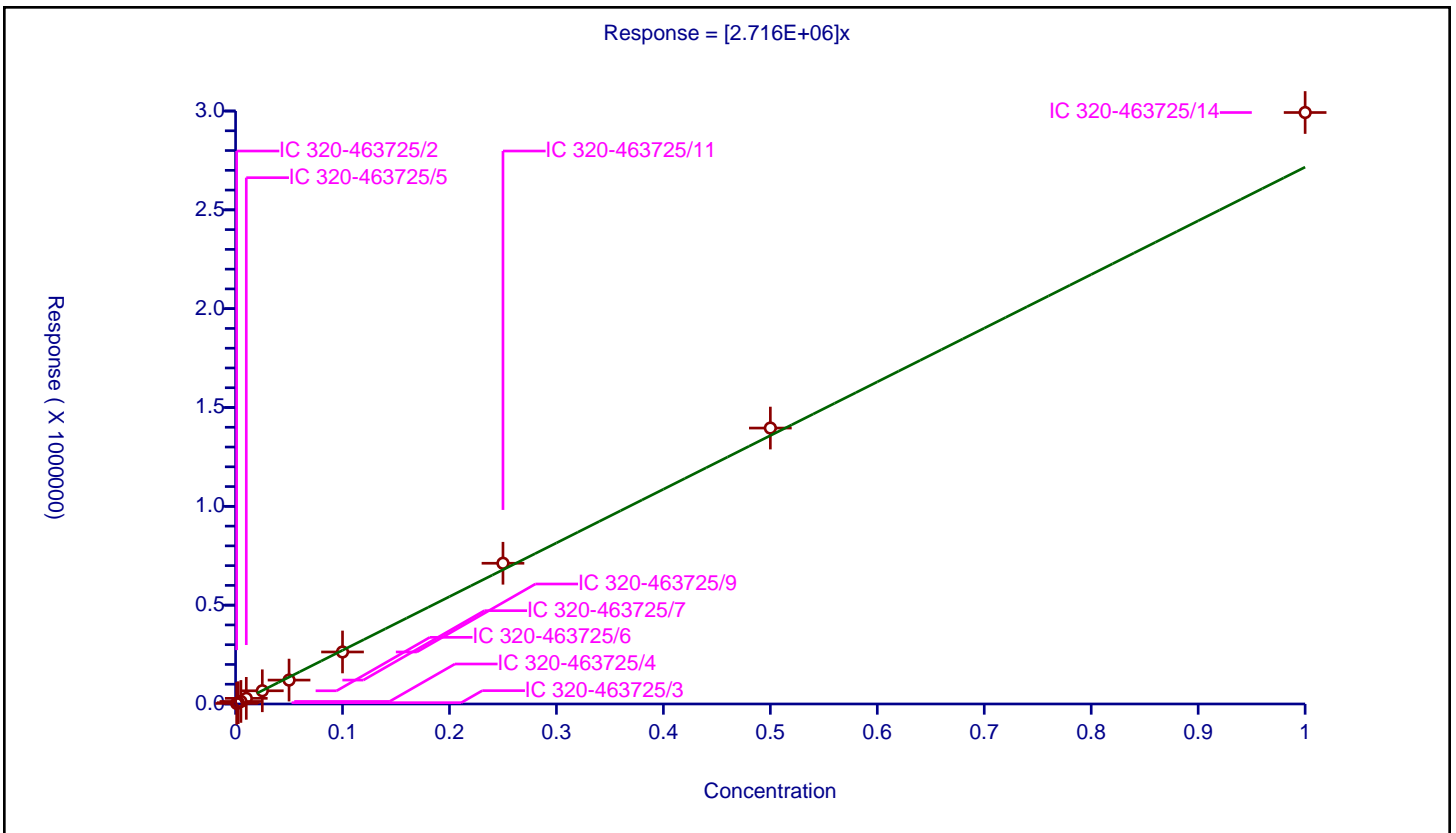
/ R-PSDA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.716E+06

Error Coefficients	
Standard Error:	93800
Relative Standard Error:	6.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	2728.0			2728000.0	Y
2	IC 320-463725/3	0.0025	6639.0			2655600.0	Y
3	IC 320-463725/4	0.005	12855.0			2571000.0	Y
4	IC 320-463725/5	0.01	28498.0			2849800.0	Y
5	IC 320-463725/6	0.025	66816.0			2672640.0	Y
6	IC 320-463725/7	0.05	121013.0			2420260.0	Y
7	IC 320-463725/9	0.1	263161.0			2631610.0	Y
8	IC 320-463725/11	0.25	711978.0			2847912.0	Y
9	IC 320-463725/13	0.5	1396049.0			2792098.0	Y
10	IC 320-463725/14	1.0	2992445.0			2992445.0	Y



Calibration

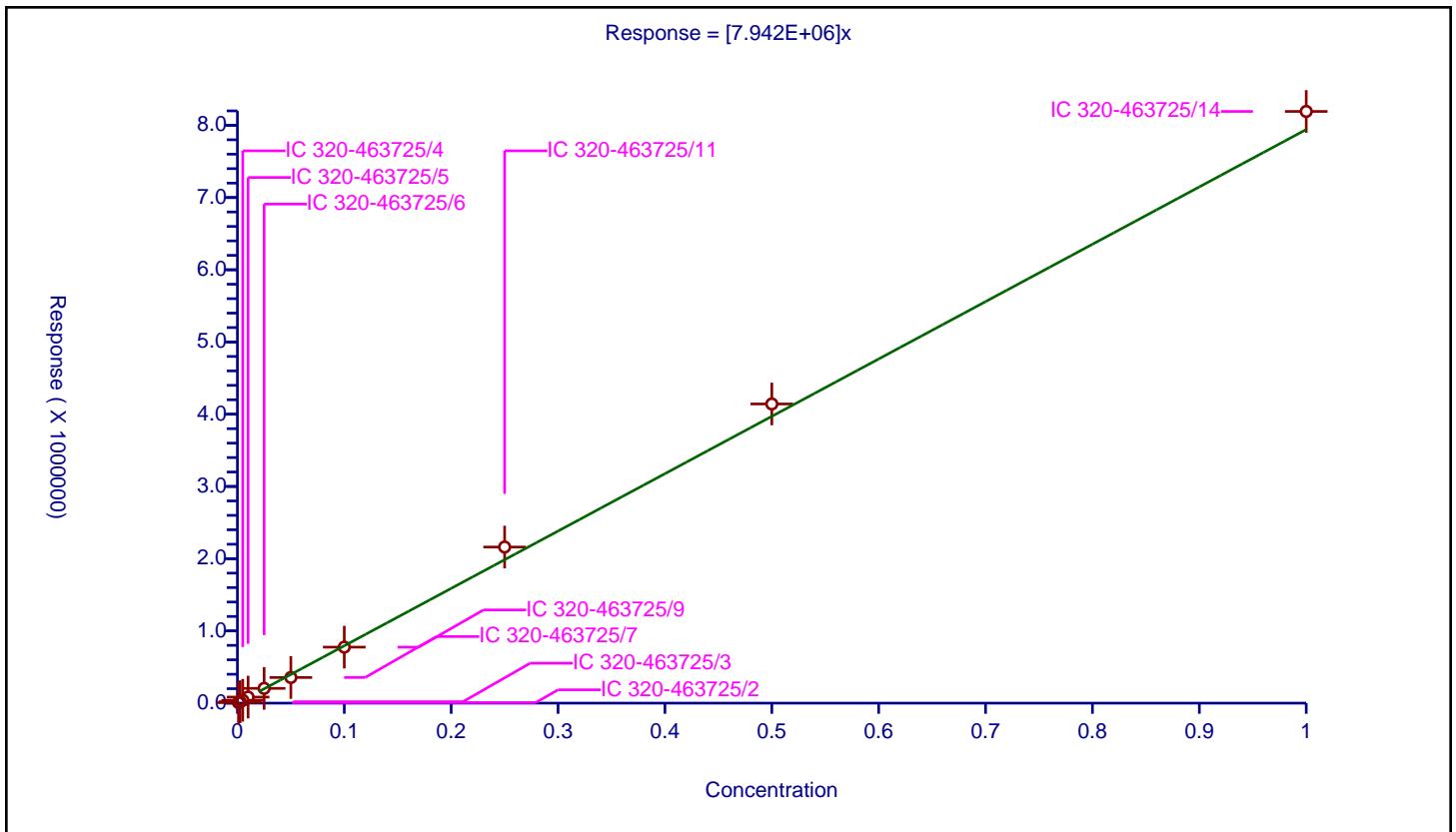
/ Hydrolyzed PSDA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	7.942E+06

Error Coefficients	
Standard Error:	118000
Relative Standard Error:	6.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	7023.0			7023000.0	Y
2	IC 320-463725/3	0.0025	19711.0			7884400.0	Y
3	IC 320-463725/4	0.005	39814.0			7962800.0	Y
4	IC 320-463725/5	0.01	84034.0			8403400.0	Y
5	IC 320-463725/6	0.025	204310.0			8172400.0	Y
6	IC 320-463725/7	0.05	354939.0			7098780.0	Y
7	IC 320-463725/9	0.1	775227.0			7752270.0	Y
8	IC 320-463725/11	0.25	2161209.0			8644836.0	Y
9	IC 320-463725/13	0.5	4142091.0			8284182.0	Y
10	IC 320-463725/14	1.0	8192250.0			8192250.0	Y



Calibration

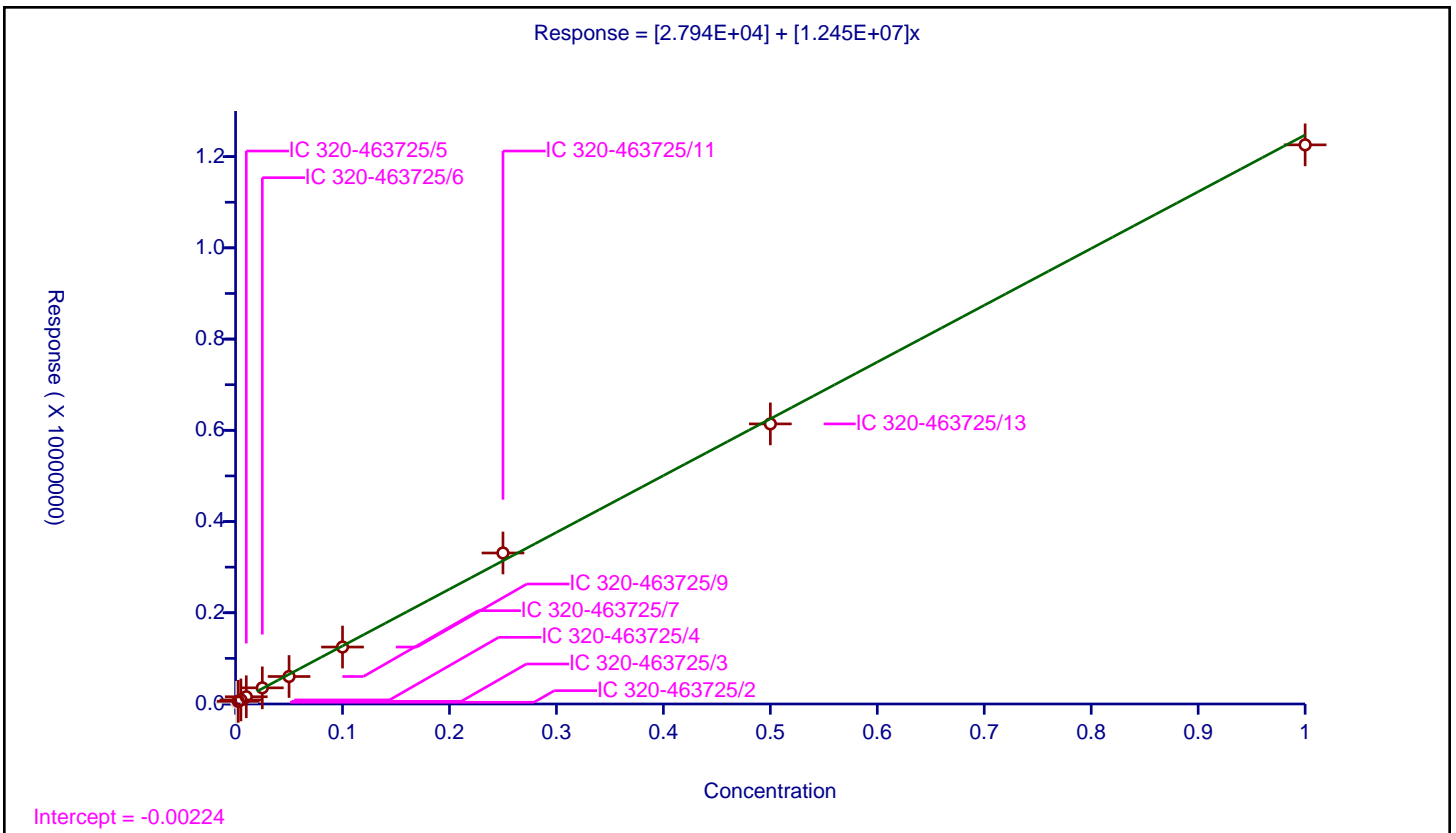
/ PMPA

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	2.794E+04
Slope:	1.245E+07

Error Coefficients	
Standard Error:	115000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	37469.0			37469000.0	N
2	IC 320-463725/3	0.0025	58856.0			23542400.0	Y
3	IC 320-463725/4	0.005	89382.0			17876400.0	Y
4	IC 320-463725/5	0.01	158466.0			15846600.0	Y
5	IC 320-463725/6	0.025	353884.0			14155360.0	Y
6	IC 320-463725/7	0.05	602430.0			12048600.0	Y
7	IC 320-463725/9	0.1	1248534.0			12485340.0	Y
8	IC 320-463725/11	0.25	3310637.0			13242548.0	Y
9	IC 320-463725/13	0.5	6140870.0			12281740.0	Y
10	IC 320-463725/14	1.0	12257867.0			12257867.0	Y



Calibration

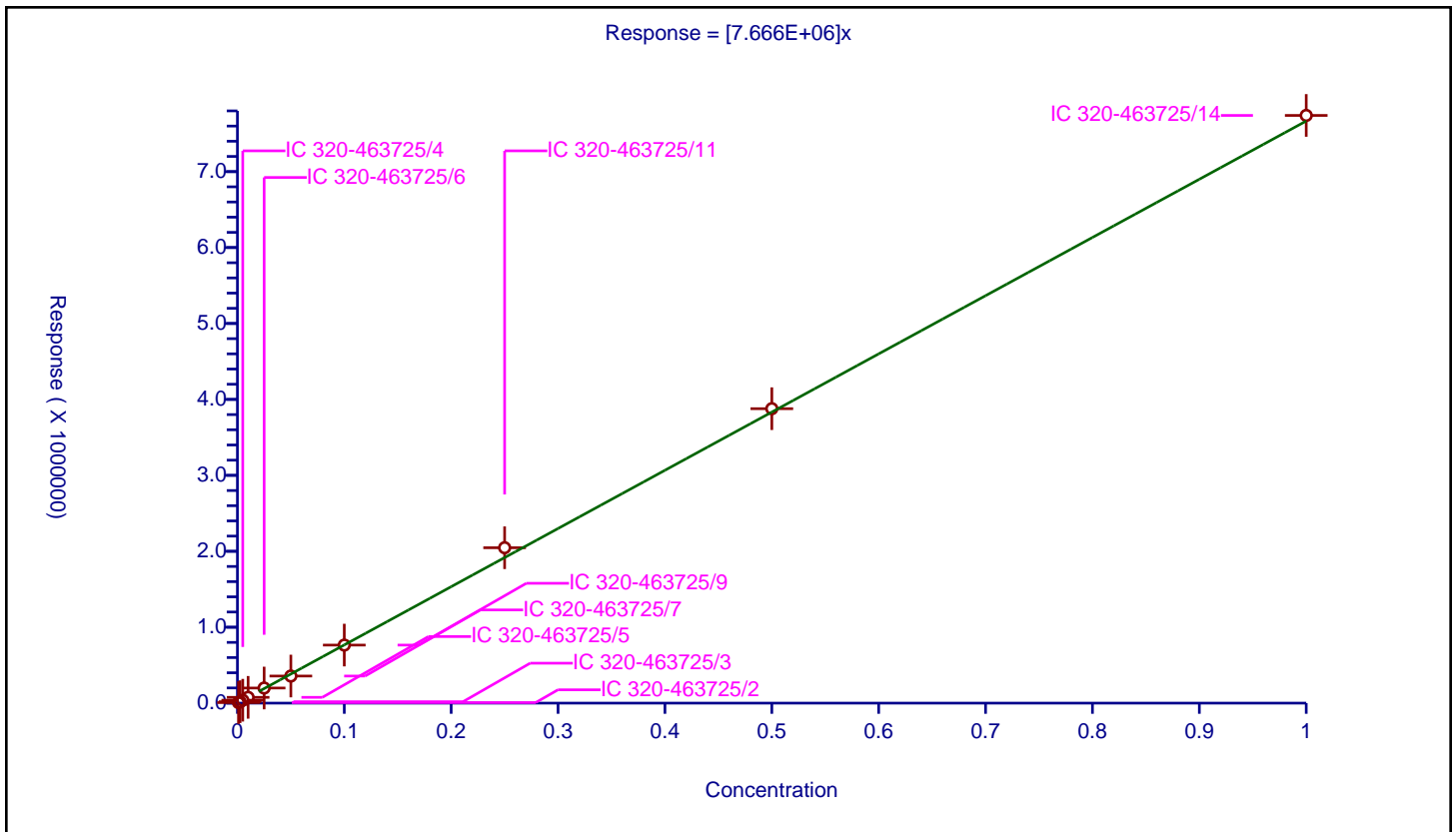
/ NVHOS

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	7.666E+06

Error Coefficients	
Standard Error:	52800
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	7358.0			7358000.0	Y
2	IC 320-463725/3	0.0025	18941.0			7576400.0	Y
3	IC 320-463725/4	0.005	38344.0			7668800.0	Y
4	IC 320-463725/5	0.01	76344.0			7634400.0	Y
5	IC 320-463725/6	0.025	199020.0			7960800.0	Y
6	IC 320-463725/7	0.05	356773.0			7135460.0	Y
7	IC 320-463725/9	0.1	764583.0			7645830.0	Y
8	IC 320-463725/11	0.25	2046633.0			8186532.0	Y
9	IC 320-463725/13	0.5	3878158.0			7756316.0	Y
10	IC 320-463725/14	1.0	7739869.0			7739869.0	Y



Calibration

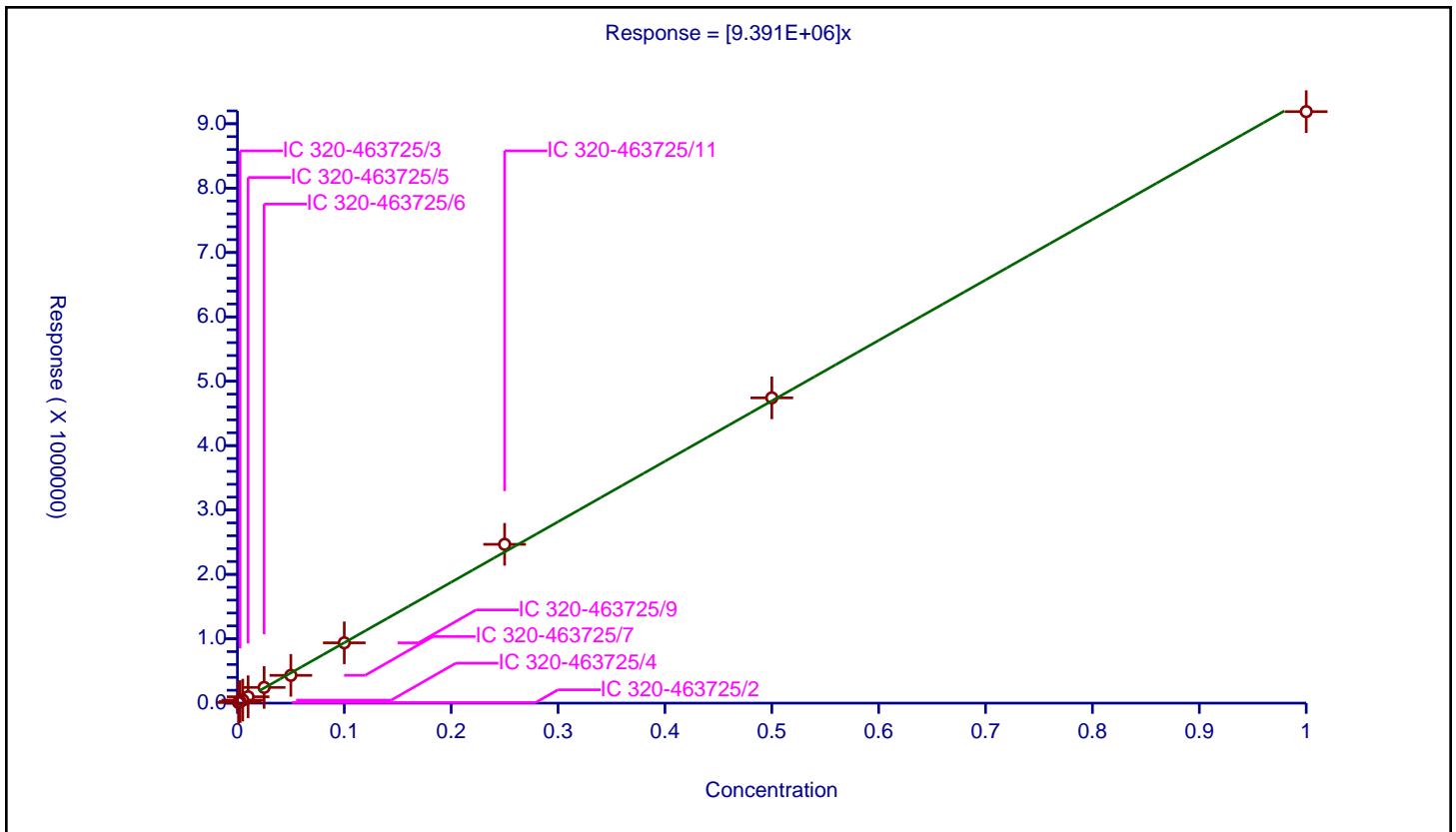
/ PFO2HxA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	9.391E+06

Error Coefficients	
Standard Error:	81000
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	8834.0			8834000.0	Y
2	IC 320-463725/3	0.0025	23768.0			9507200.0	Y
3	IC 320-463725/4	0.005	46864.0			9372800.0	Y
4	IC 320-463725/5	0.01	98961.0			9896100.0	Y
5	IC 320-463725/6	0.025	244055.0			9762200.0	Y
6	IC 320-463725/7	0.05	431412.0			8628240.0	Y
7	IC 320-463725/9	0.1	936964.0			9369640.0	Y
8	IC 320-463725/11	0.25	2466870.0			9867480.0	Y
9	IC 320-463725/13	0.5	4742494.0			9484988.0	Y
10	IC 320-463725/14	1.0	9188527.0			9188527.0	Y



Calibration

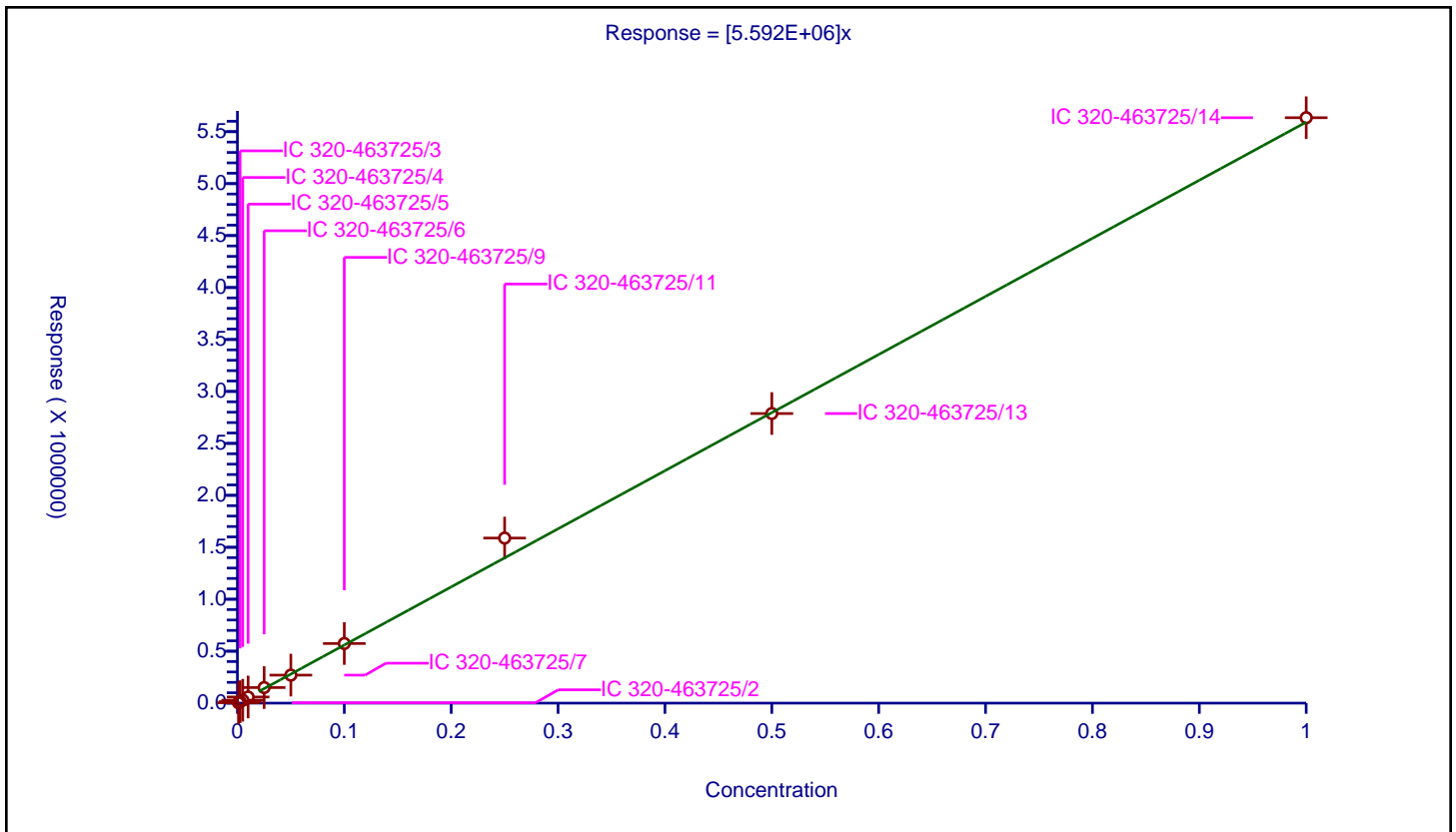
/ PEPA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.592E+06

Error Coefficients	
Standard Error:	65500
Relative Standard Error:	10.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	4097.0			4097000.0	Y
2	IC 320-463725/3	0.0025	14016.0			5606400.0	Y
3	IC 320-463725/4	0.005	28156.0			5631200.0	Y
4	IC 320-463725/5	0.01	59033.0			5903300.0	Y
5	IC 320-463725/6	0.025	149763.0			5990520.0	Y
6	IC 320-463725/7	0.05	269418.0			5388360.0	Y
7	IC 320-463725/9	0.1	573886.0			5738860.0	Y
8	IC 320-463725/11	0.25	1588572.0			6354288.0	Y
9	IC 320-463725/13	0.5	2787175.0			5574350.0	Y
10	IC 320-463725/14	1.0	5634472.0			5634472.0	Y



Calibration

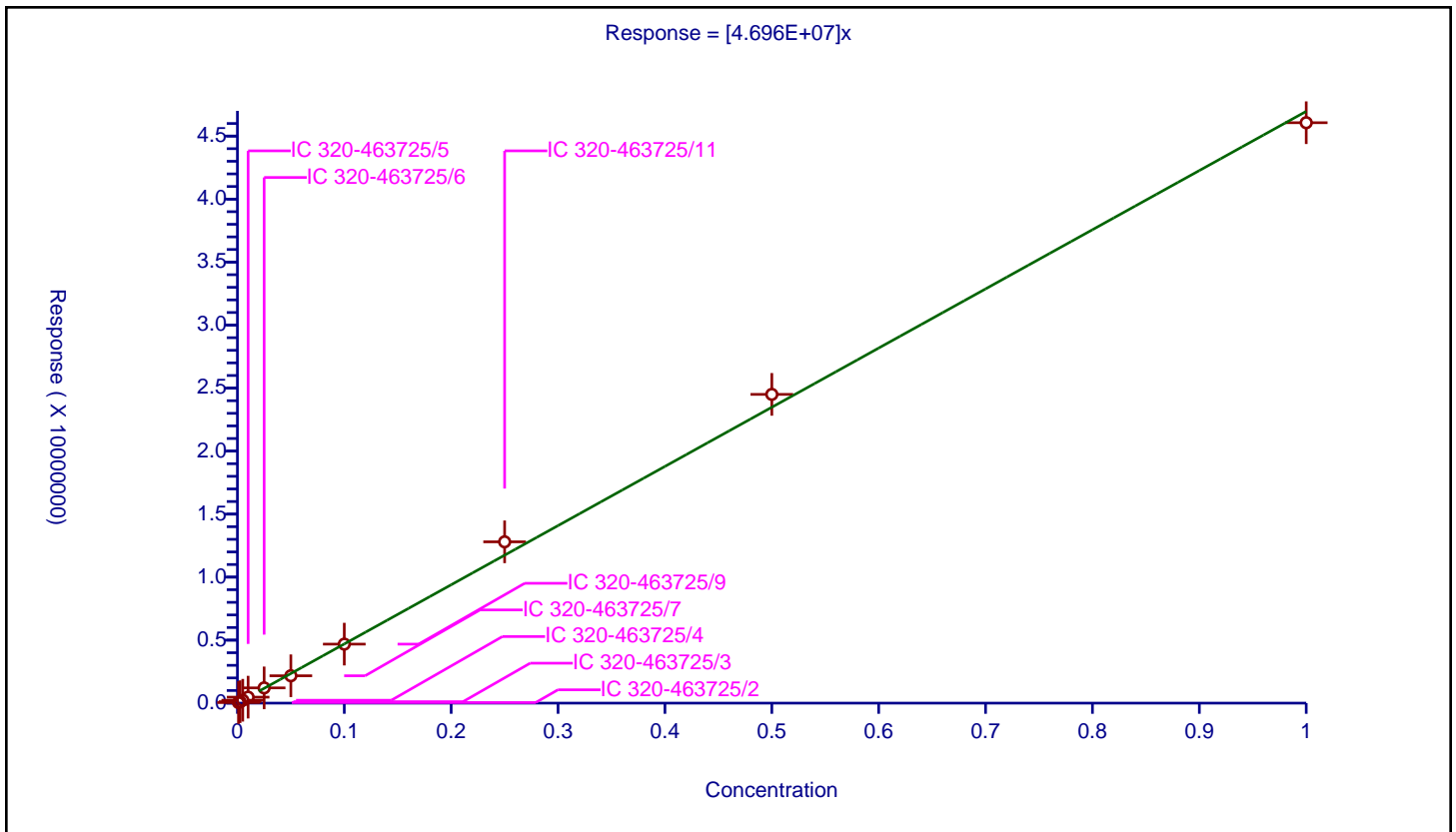
/ PES

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.696E+07

Error Coefficients	
Standard Error:	578000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	45461.0			45461000.0	Y
2	IC 320-463725/3	0.0025	114477.0			45790800.0	Y
3	IC 320-463725/4	0.005	230225.0			46045000.0	Y
4	IC 320-463725/5	0.01	473943.0			47394300.0	Y
5	IC 320-463725/6	0.025	1210385.0			48415400.0	Y
6	IC 320-463725/7	0.05	2171042.0			43420840.0	Y
7	IC 320-463725/9	0.1	4681826.0			46818260.0	Y
8	IC 320-463725/11	0.25	12801991.0			51207964.0	Y
9	IC 320-463725/13	0.5	24501744.0			49003488.0	Y
10	IC 320-463725/14	1.0	46061829.0			46061829.0	Y



Calibration

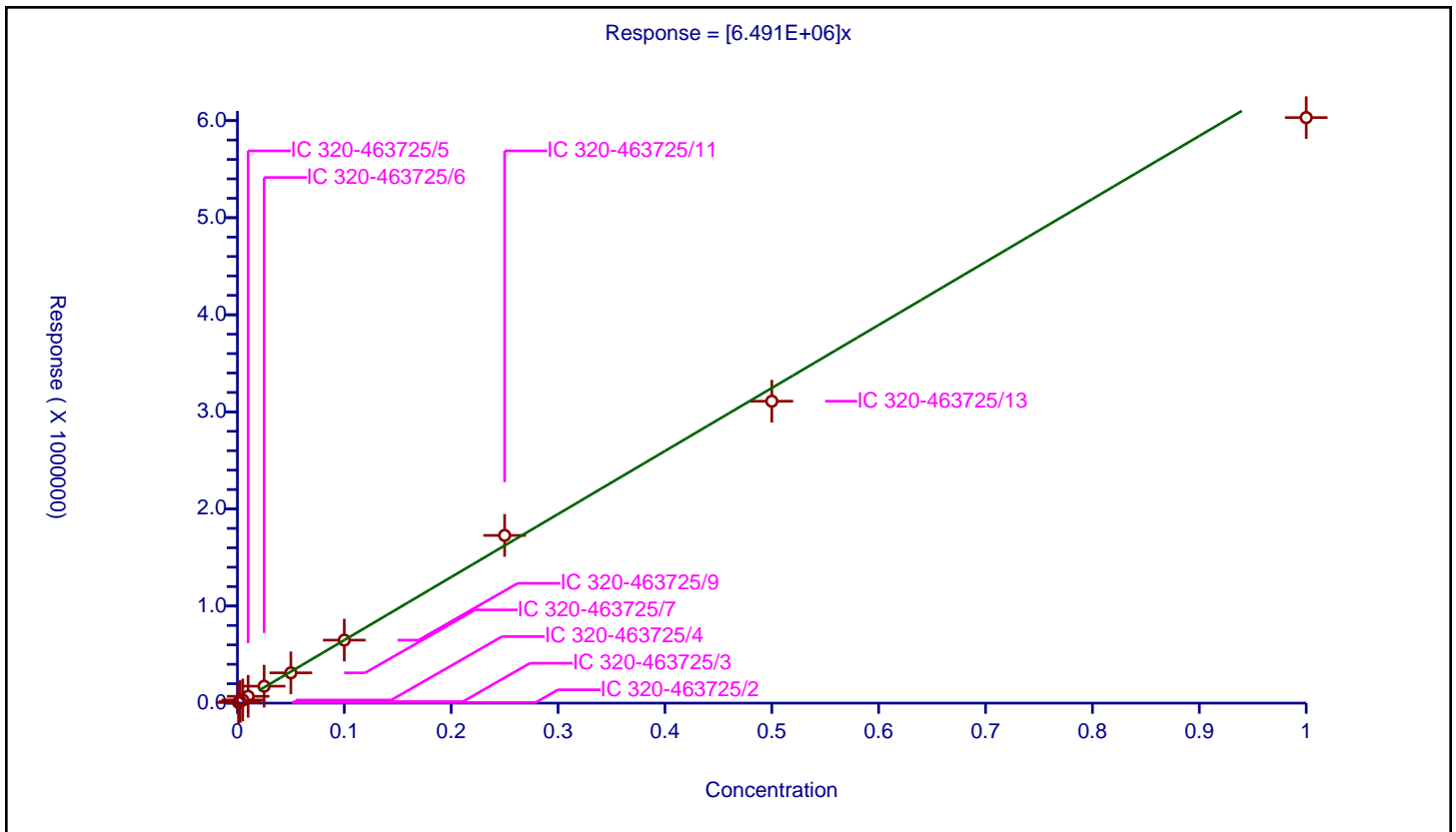
/ PFECA B

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	6.491E+06

Error Coefficients	
Standard Error:	164000
Relative Standard Error:	5.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	6266.0			6266000.0	Y
2	IC 320-463725/3	0.0025	15847.0			6338800.0	Y
3	IC 320-463725/4	0.005	32125.0			6425000.0	Y
4	IC 320-463725/5	0.01	70172.0			7017200.0	Y
5	IC 320-463725/6	0.025	174522.0			6980880.0	Y
6	IC 320-463725/7	0.05	311663.0			6233260.0	Y
7	IC 320-463725/9	0.1	648972.0			6489720.0	Y
8	IC 320-463725/11	0.25	1727616.0			6910464.0	Y
9	IC 320-463725/13	0.5	3109719.0			6219438.0	Y
10	IC 320-463725/14	1.0	6030771.0			6030771.0	Y



Calibration

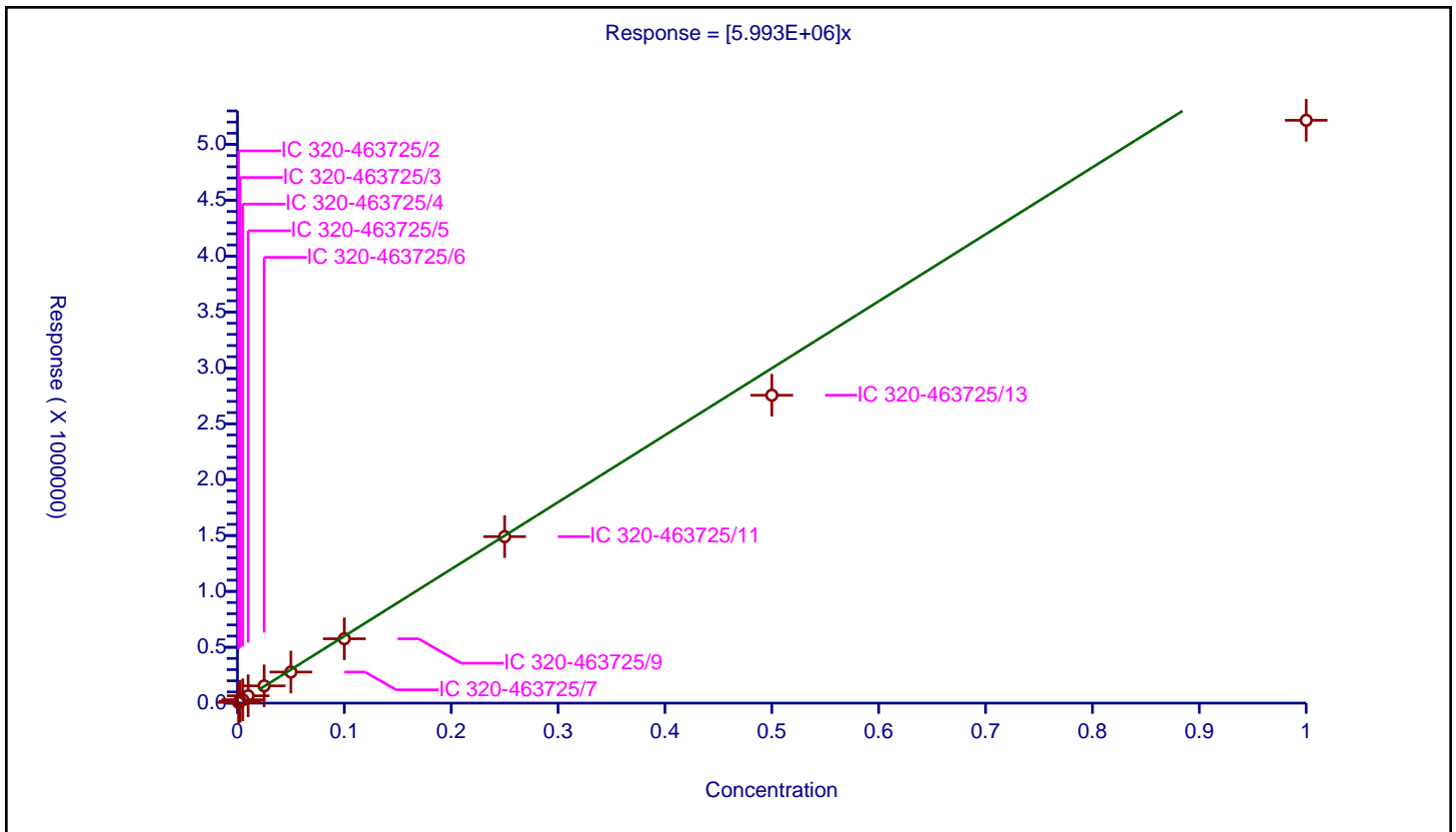
/ PFO3OA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.993E+06

Error Coefficients	
Standard Error:	272000
Relative Standard Error:	8.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	6555.0			6555000.0	Y
2	IC 320-463725/3	0.0025	16509.0			6603600.0	Y
3	IC 320-463725/4	0.005	30103.0			6020600.0	Y
4	IC 320-463725/5	0.01	65562.0			6556200.0	Y
5	IC 320-463725/6	0.025	154594.0			6183760.0	Y
6	IC 320-463725/7	0.05	278364.0			5567280.0	Y
7	IC 320-463725/9	0.1	576011.0			5760110.0	Y
8	IC 320-463725/11	0.25	1489930.0			5959720.0	Y
9	IC 320-463725/13	0.5	2755328.0			5510656.0	Y
10	IC 320-463725/14	1.0	5215960.0			5215960.0	Y



Calibration

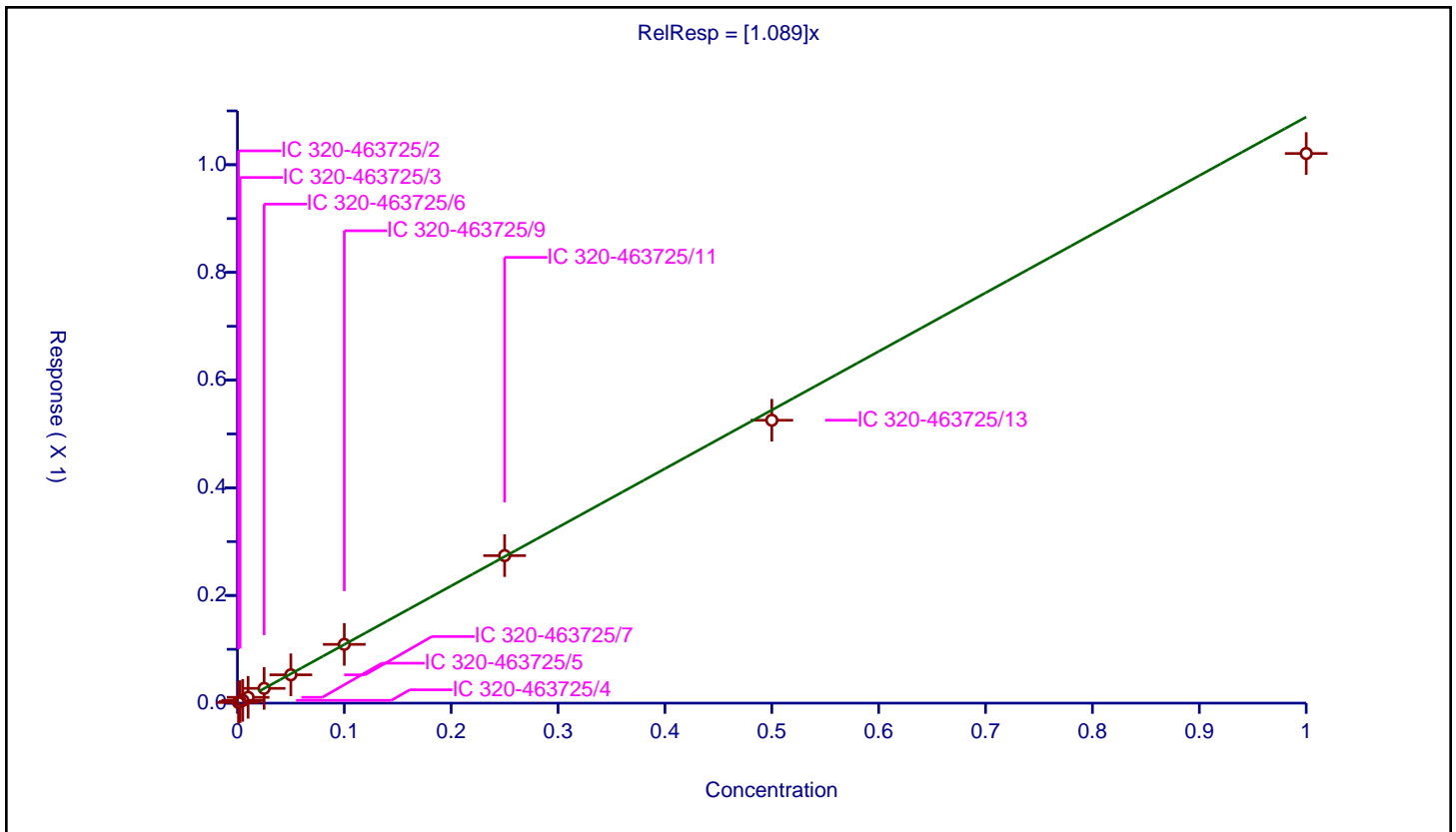
/ Perfluoro(2-propoxypropanoic) acid

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: IsoDil
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.089

Error Coefficients	
Standard Error:	2190000
Relative Standard Error:	5.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 320-463725/2	0.001	0.001223	0.25	1286974.0	1.223412	Y
2	IC 320-463725/3	0.0025	0.002845	0.25	1397922.0	1.138189	Y
3	IC 320-463725/4	0.005	0.005173	0.25	1384745.0	1.034631	Y
4	IC 320-463725/5	0.01	0.010831	0.25	1446250.0	1.083146	Y
5	IC 320-463725/6	0.025	0.027415	0.25	1417532.0	1.096589	Y
6	IC 320-463725/7	0.05	0.052599	0.25	1316826.0	1.051984	Y
7	IC 320-463725/9	0.1	0.109128	0.25	1352132.0	1.091282	Y
8	IC 320-463725/11	0.25	0.274	0.25	1464624.0	1.095999	Y
9	IC 320-463725/13	0.5	0.525402	0.25	1391479.0	1.050805	Y
10	IC 320-463725/14	1.0	1.020852	0.25	1371993.0	1.020852	Y



Calibration

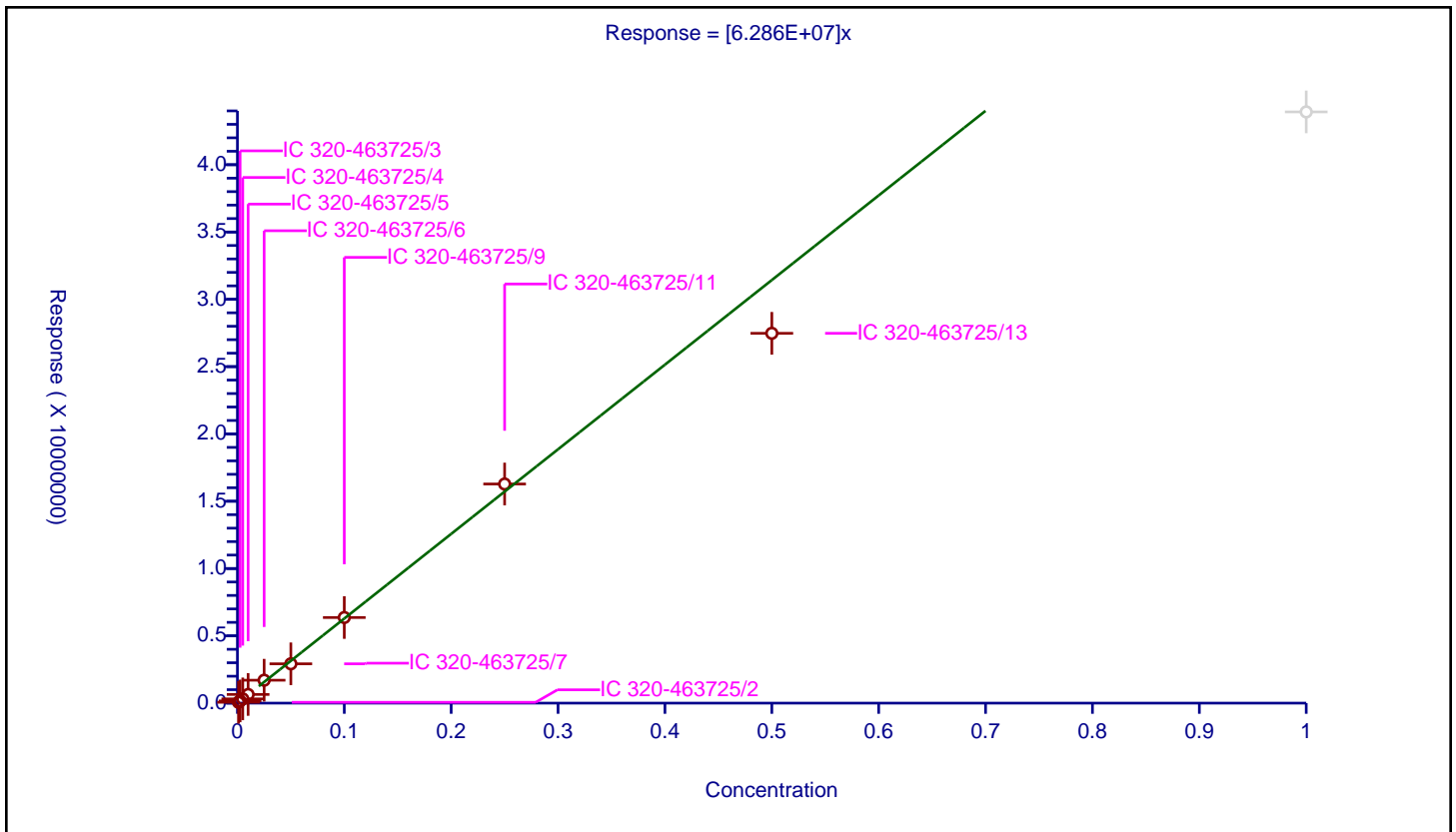
/ R-PSDCA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	6.286E+07

Error Coefficients	
Standard Error:	1420000
Relative Standard Error:	6.2
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	62820.0			62820000.0	Y
2	IC 320-463725/3	0.0025	162762.0			65104800.0	Y
3	IC 320-463725/4	0.005	316538.0			63307600.0	Y
4	IC 320-463725/5	0.01	643460.0			64346000.0	Y
5	IC 320-463725/6	0.025	1702126.0			68085040.0	Y
6	IC 320-463725/7	0.05	2921351.0			58427020.0	Y
7	IC 320-463725/9	0.1	6360954.0			63609540.0	Y
8	IC 320-463725/11	0.25	16279200.0			65116800.0	Y
9	IC 320-463725/13	0.5	27475418.0			54950836.0	Y
10	IC 320-463725/14	1.0	43924298.0			43924298.0	N



Calibration

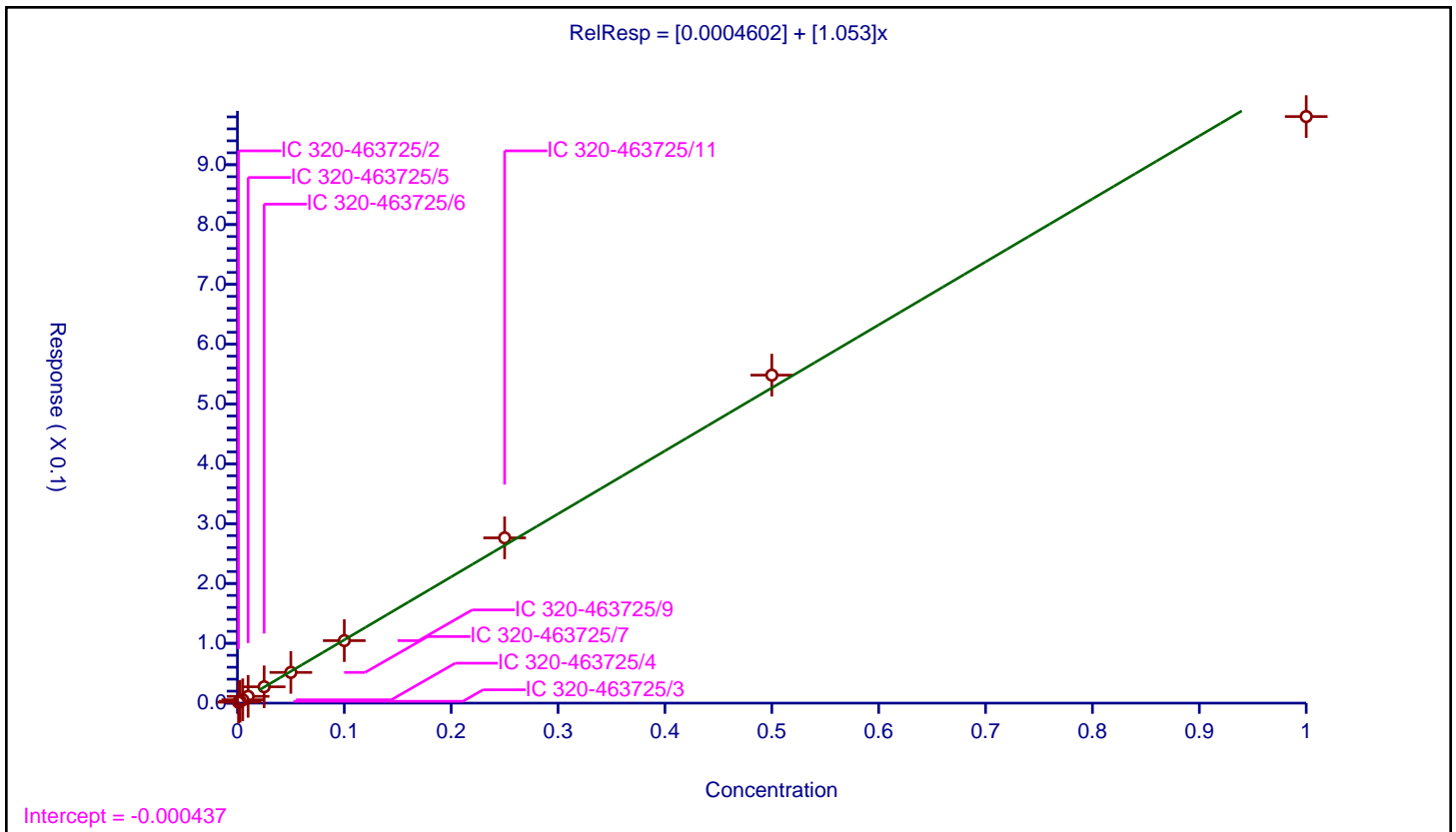
/ Perfluoroheptanoic acid

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: IsoDil
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0.0004602
Slope:	1.053

Error Coefficients	
Standard Error:	9100000
Relative Standard Error:	3.9
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 320-463725/2	0.001	0.001516	0.25	6655745.0	1.515871	Y
2	IC 320-463725/3	0.0025	0.00309	0.25	6658411.0	1.236106	Y
3	IC 320-463725/4	0.005	0.005578	0.25	6569203.0	1.115584	Y
4	IC 320-463725/5	0.01	0.011344	0.25	6693137.0	1.134393	Y
5	IC 320-463725/6	0.025	0.027304	0.25	6667341.0	1.092148	Y
6	IC 320-463725/7	0.05	0.051363	0.25	6288217.0	1.027255	Y
7	IC 320-463725/9	0.1	0.104475	0.25	6461952.0	1.044755	Y
8	IC 320-463725/11	0.25	0.276261	0.25	6413461.0	1.105045	Y
9	IC 320-463725/13	0.5	0.548316	0.25	5730872.0	1.096631	Y
10	IC 320-463725/14	1.0	0.980565	0.25	5378682.0	0.980565	Y



Calibration

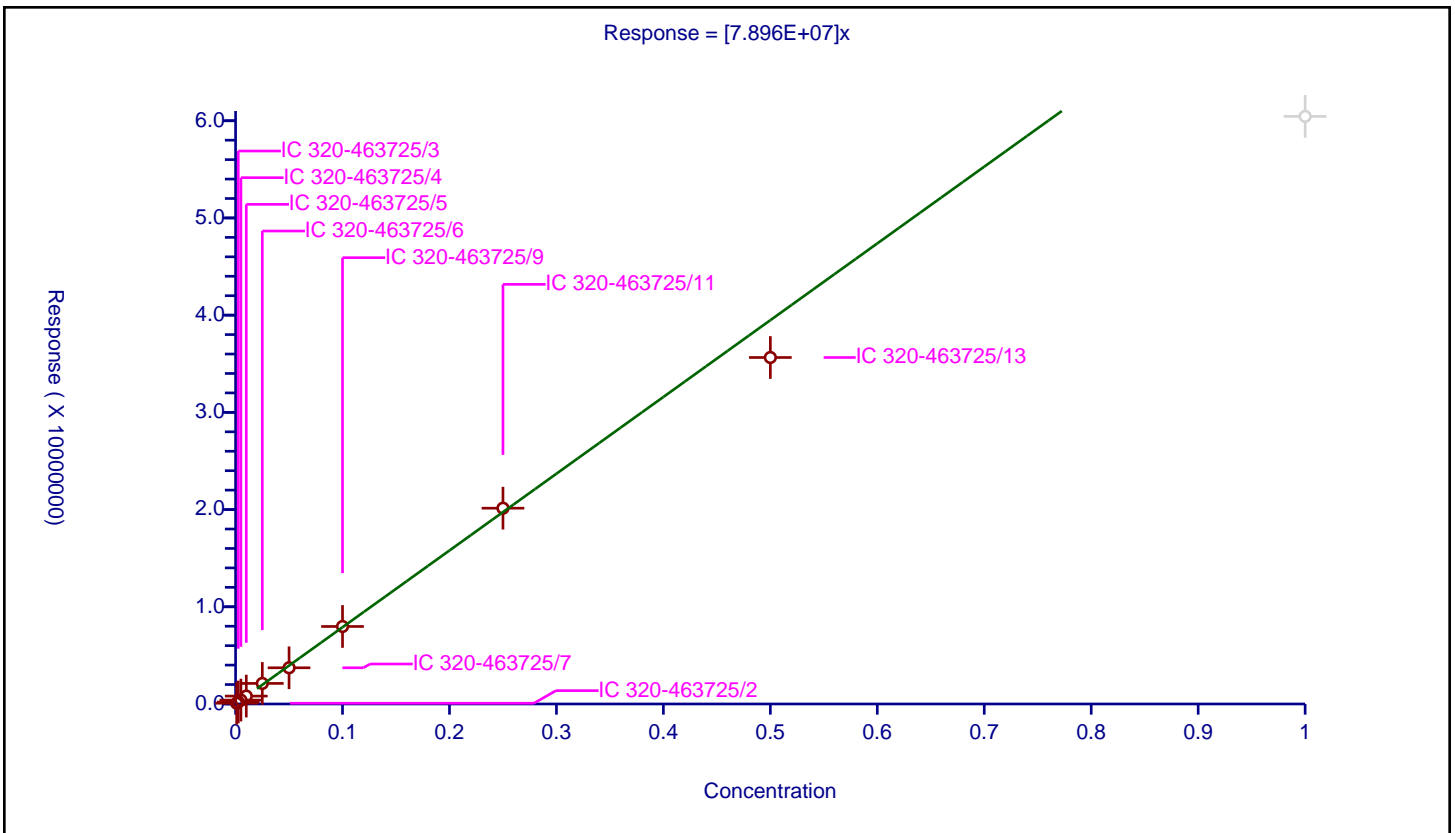
/ Hydro-EVE Acid

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	7.896E+07

Error Coefficients	
Standard Error:	1370000
Relative Standard Error:	5.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	77876.0			77876000.0	Y
2	IC 320-463725/3	0.0025	202272.0			80908800.0	Y
3	IC 320-463725/4	0.005	399155.0			79831000.0	Y
4	IC 320-463725/5	0.01	813726.0			81372600.0	Y
5	IC 320-463725/6	0.025	2115938.0			84637520.0	Y
6	IC 320-463725/7	0.05	3722867.0			74457340.0	Y
7	IC 320-463725/9	0.1	7972300.0			79723000.0	Y
8	IC 320-463725/11	0.25	20142203.0			80568812.0	Y
9	IC 320-463725/13	0.5	35643887.0			71287774.0	Y
10	IC 320-463725/14	1.0	60448615.0			60448615.0	N



Calibration

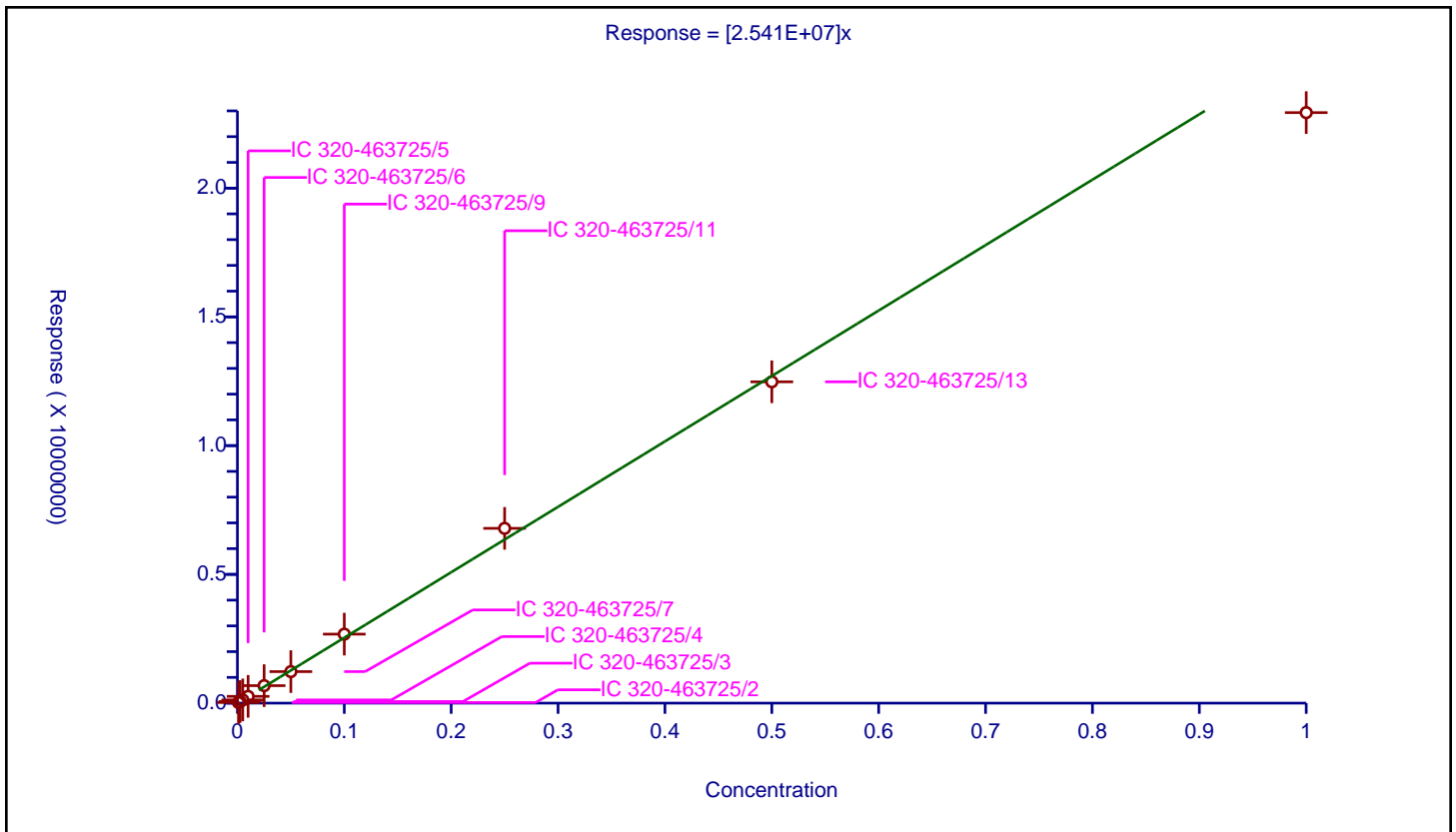
/ Hydro-PS Acid

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.541E+07

Error Coefficients	
Standard Error:	843000
Relative Standard Error:	5.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	24096.0			24096000.0	Y
2	IC 320-463725/3	0.0025	63056.0			25222400.0	Y
3	IC 320-463725/4	0.005	124990.0			24998000.0	Y
4	IC 320-463725/5	0.01	262879.0			26287900.0	Y
5	IC 320-463725/6	0.025	679393.0			27175720.0	Y
6	IC 320-463725/7	0.05	1223808.0			24476160.0	Y
7	IC 320-463725/9	0.1	2679115.0			26791150.0	Y
8	IC 320-463725/11	0.25	6787712.0			27150848.0	Y
9	IC 320-463725/13	0.5	12479108.0			24958216.0	Y
10	IC 320-463725/14	1.0	22932681.0			22932681.0	Y



Calibration

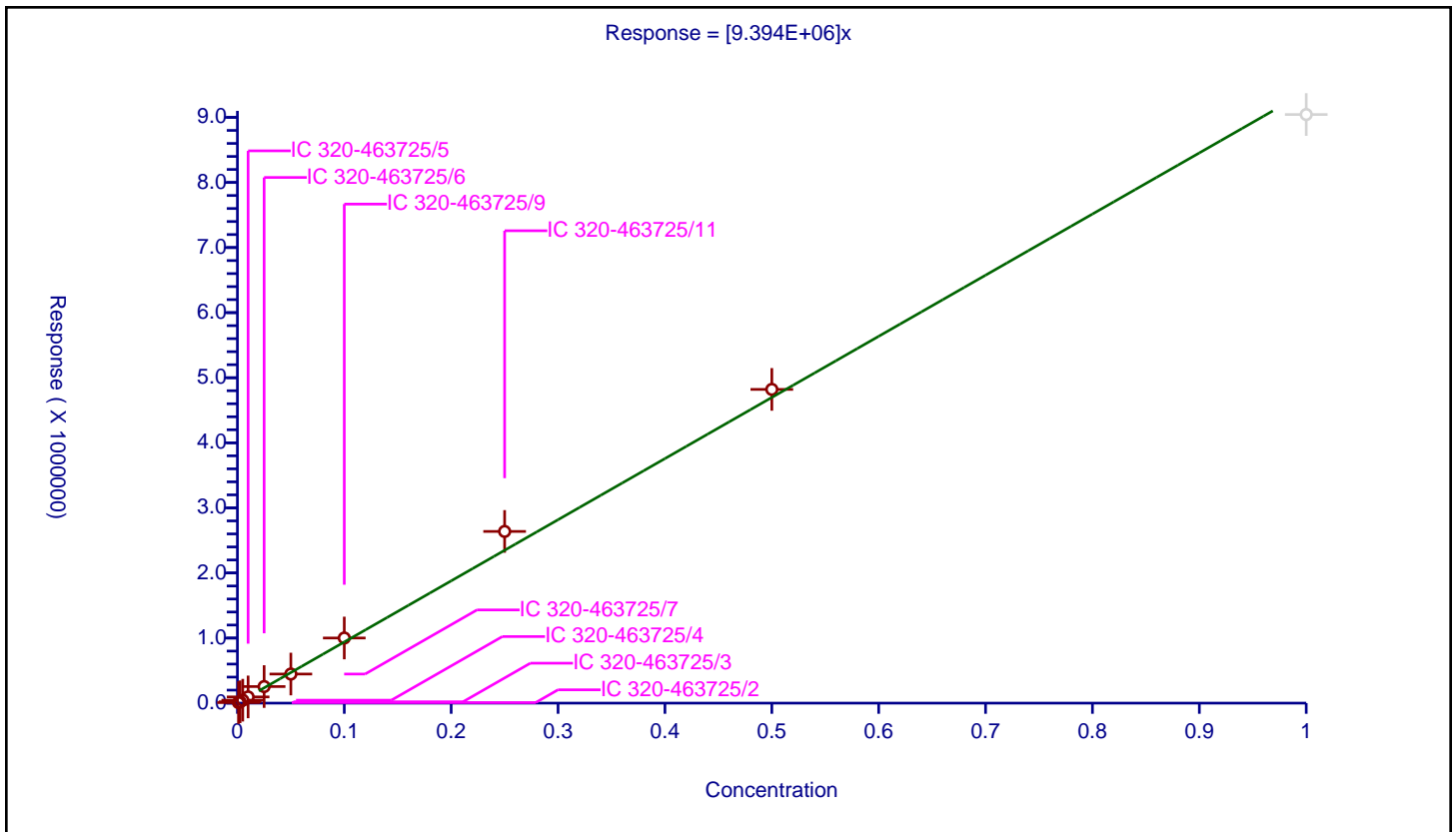
/ PFECA G

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	9.394E+06

Error Coefficients	
Standard Error:	114000
Relative Standard Error:	8.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	8436.0			8436000.0	Y
2	IC 320-463725/3	0.0025	20486.0			8194400.0	Y
3	IC 320-463725/4	0.005	45072.0			9014400.0	Y
4	IC 320-463725/5	0.01	95657.0			9565700.0	Y
5	IC 320-463725/6	0.025	254732.0			10189280.0	Y
6	IC 320-463725/7	0.05	447155.0			8943100.0	Y
7	IC 320-463725/9	0.1	1000698.0			10006980.0	Y
8	IC 320-463725/11	0.25	2638025.0			10552100.0	Y
9	IC 320-463725/13	0.5	4820530.0			9641060.0	Y
10	IC 320-463725/14	1.0	9044053.0			9044053.0	N



Calibration

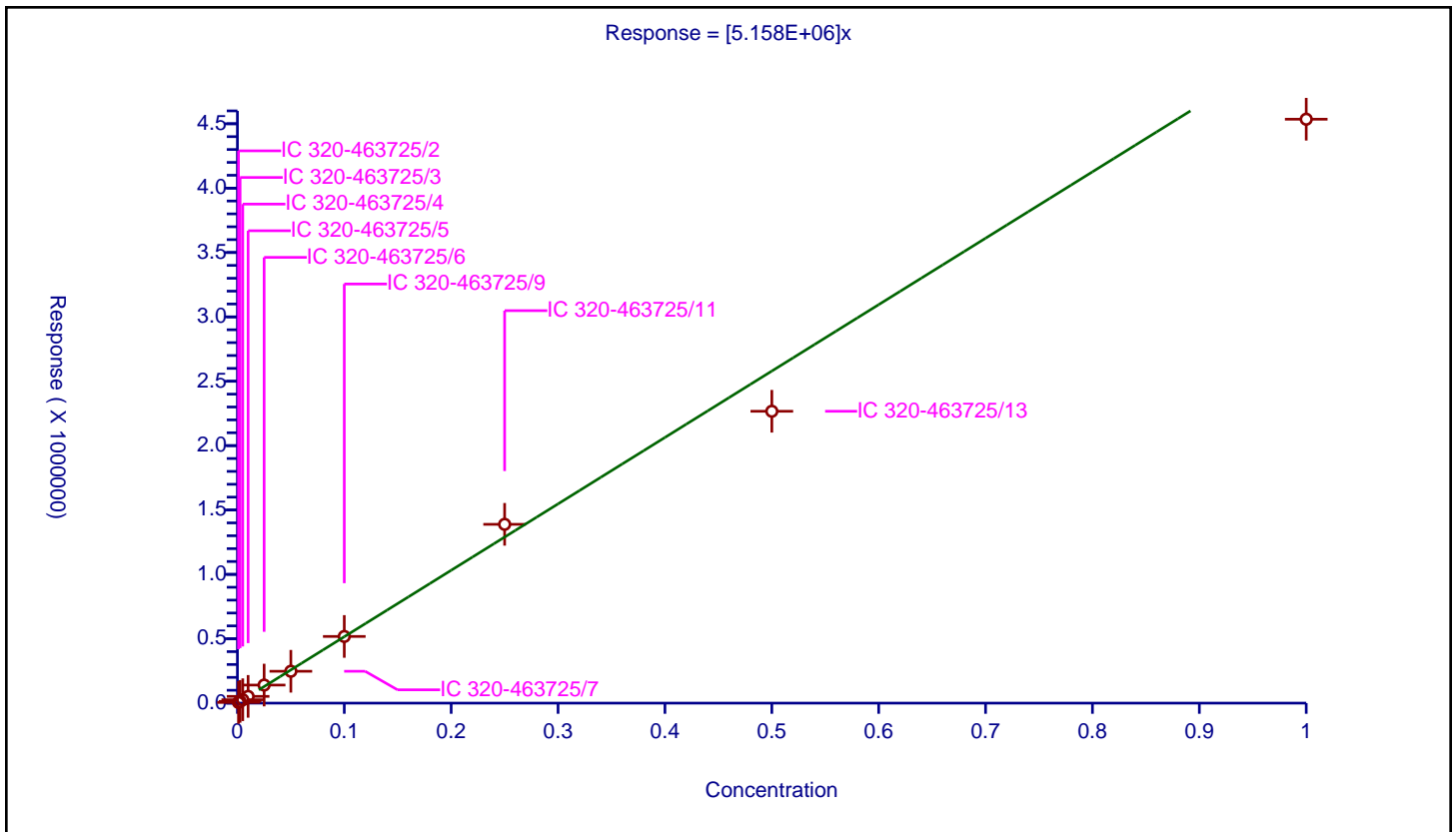
/ PFO4DA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.158E+06

Error Coefficients	
Standard Error:	235000
Relative Standard Error:	7.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	5293.0			5293000.0	Y
2	IC 320-463725/3	0.0025	13503.0			5401200.0	Y
3	IC 320-463725/4	0.005	26406.0			5281200.0	Y
4	IC 320-463725/5	0.01	52408.0			5240800.0	Y
5	IC 320-463725/6	0.025	140410.0			5616400.0	Y
6	IC 320-463725/7	0.05	247439.0			4948780.0	Y
7	IC 320-463725/9	0.1	517969.0			5179690.0	Y
8	IC 320-463725/11	0.25	1388717.0			5554868.0	Y
9	IC 320-463725/13	0.5	2266863.0			4533726.0	Y
10	IC 320-463725/14	1.0	4535169.0			4535169.0	Y



Calibration

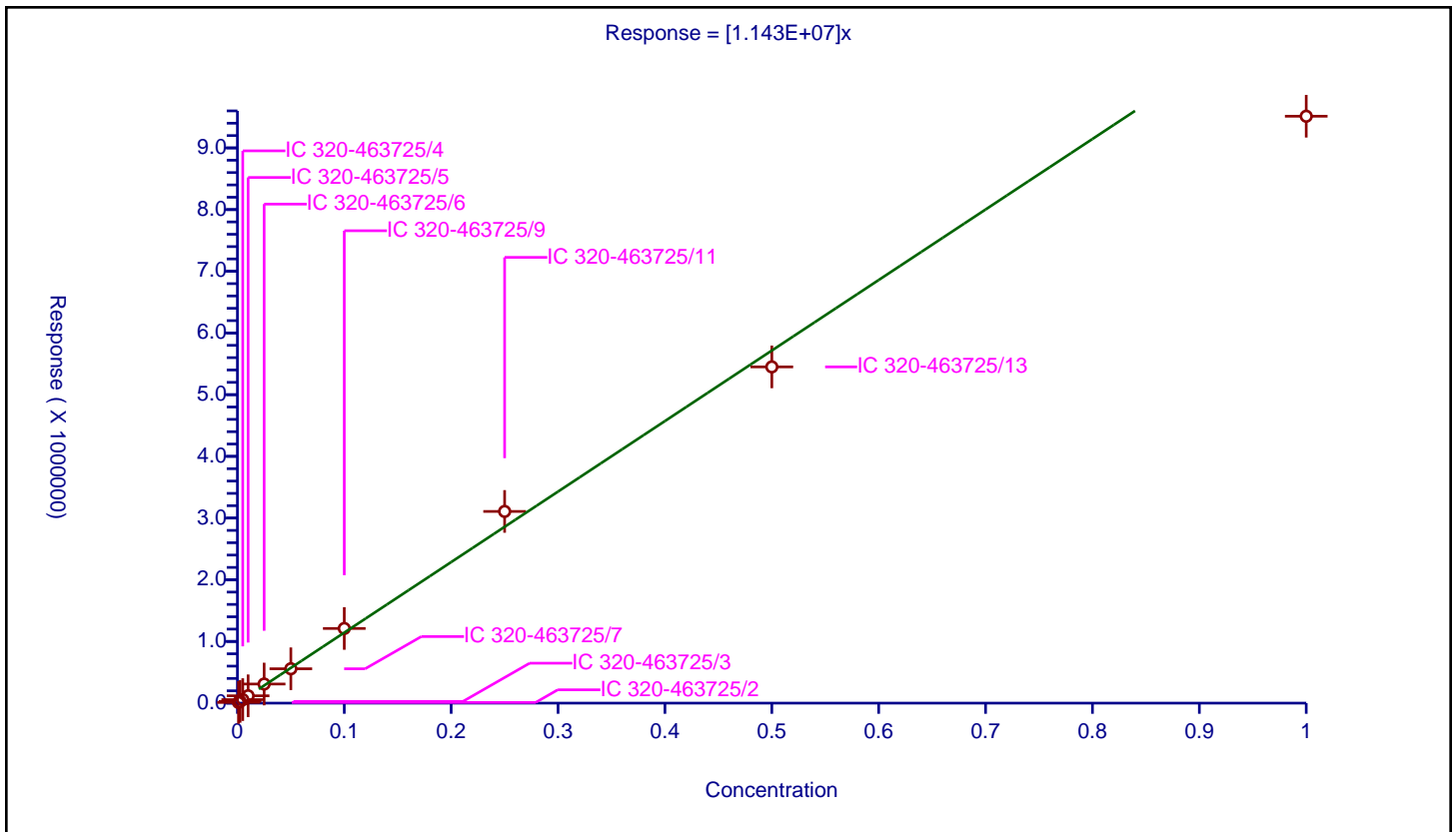
/ PS Acid

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.143E+07

Error Coefficients	
Standard Error:	651000
Relative Standard Error:	7.6
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	11172.0			11172000.0	Y
2	IC 320-463725/3	0.0025	28298.0			11319200.0	Y
3	IC 320-463725/4	0.005	57184.0			11436800.0	Y
4	IC 320-463725/5	0.01	118980.0			11898000.0	Y
5	IC 320-463725/6	0.025	309833.0			12393320.0	Y
6	IC 320-463725/7	0.05	557182.0			11143640.0	Y
7	IC 320-463725/9	0.1	1210157.0			12101570.0	Y
8	IC 320-463725/11	0.25	3107359.0			12429436.0	Y
9	IC 320-463725/13	0.5	5450120.0			10900240.0	Y
10	IC 320-463725/14	1.0	9513361.0			9513361.0	Y



Calibration

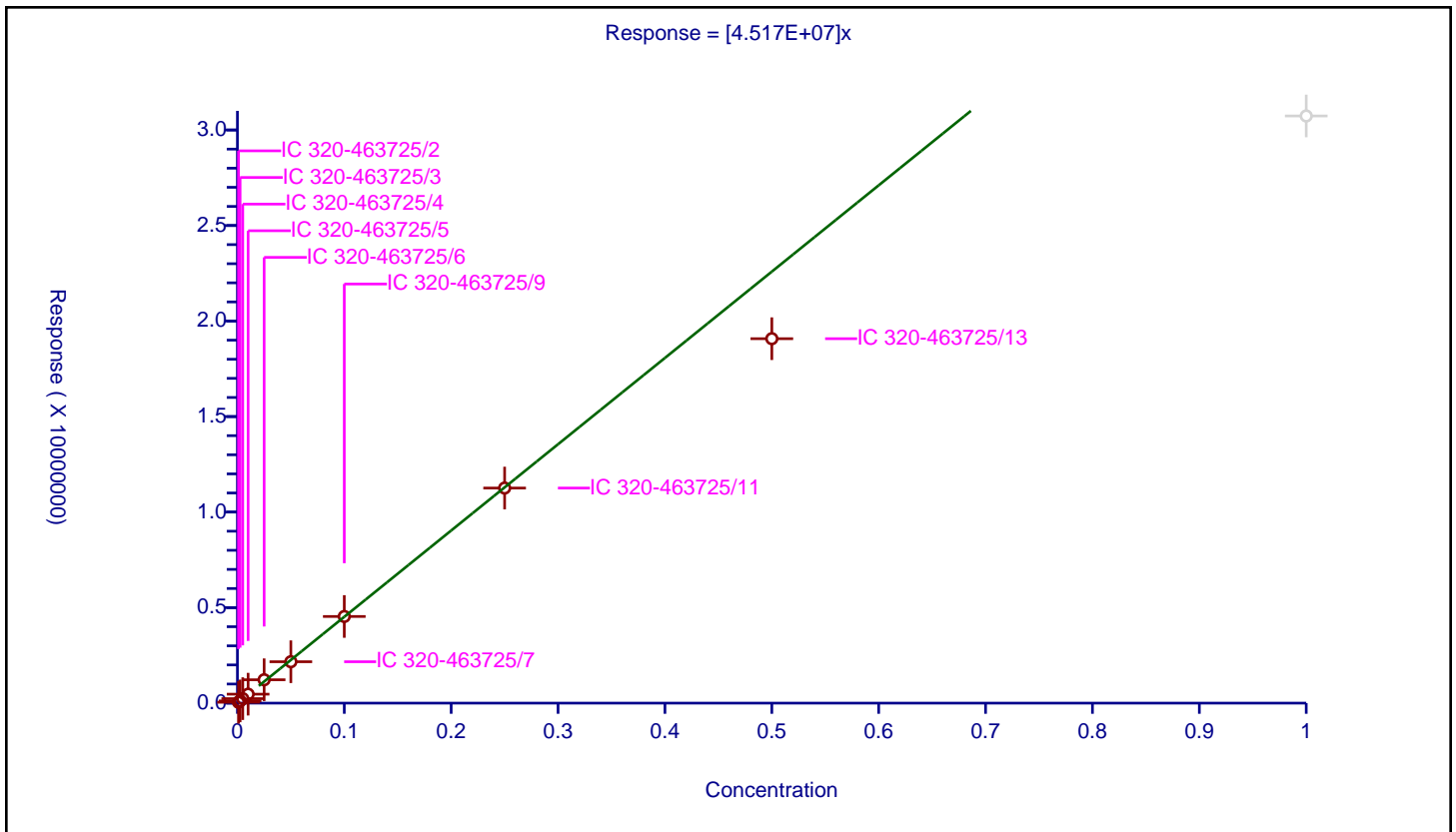
/ EVE Acid

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ESTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.517E+07

Error Coefficients	
Standard Error:	1240000
Relative Standard Error:	6.7
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	45674.0			45674000.0	Y
2	IC 320-463725/3	0.0025	115541.0			46216400.0	Y
3	IC 320-463725/4	0.005	234854.0			46970800.0	Y
4	IC 320-463725/5	0.01	468536.0			46853600.0	Y
5	IC 320-463725/6	0.025	1223375.0			48935000.0	Y
6	IC 320-463725/7	0.05	2167729.0			43354580.0	Y
7	IC 320-463725/9	0.1	4535781.0			45357810.0	Y
8	IC 320-463725/11	0.25	11258330.0			45033320.0	Y
9	IC 320-463725/13	0.5	19076642.0			38153284.0	Y
10	IC 320-463725/14	1.0	30733220.0			30733220.0	N



Calibration

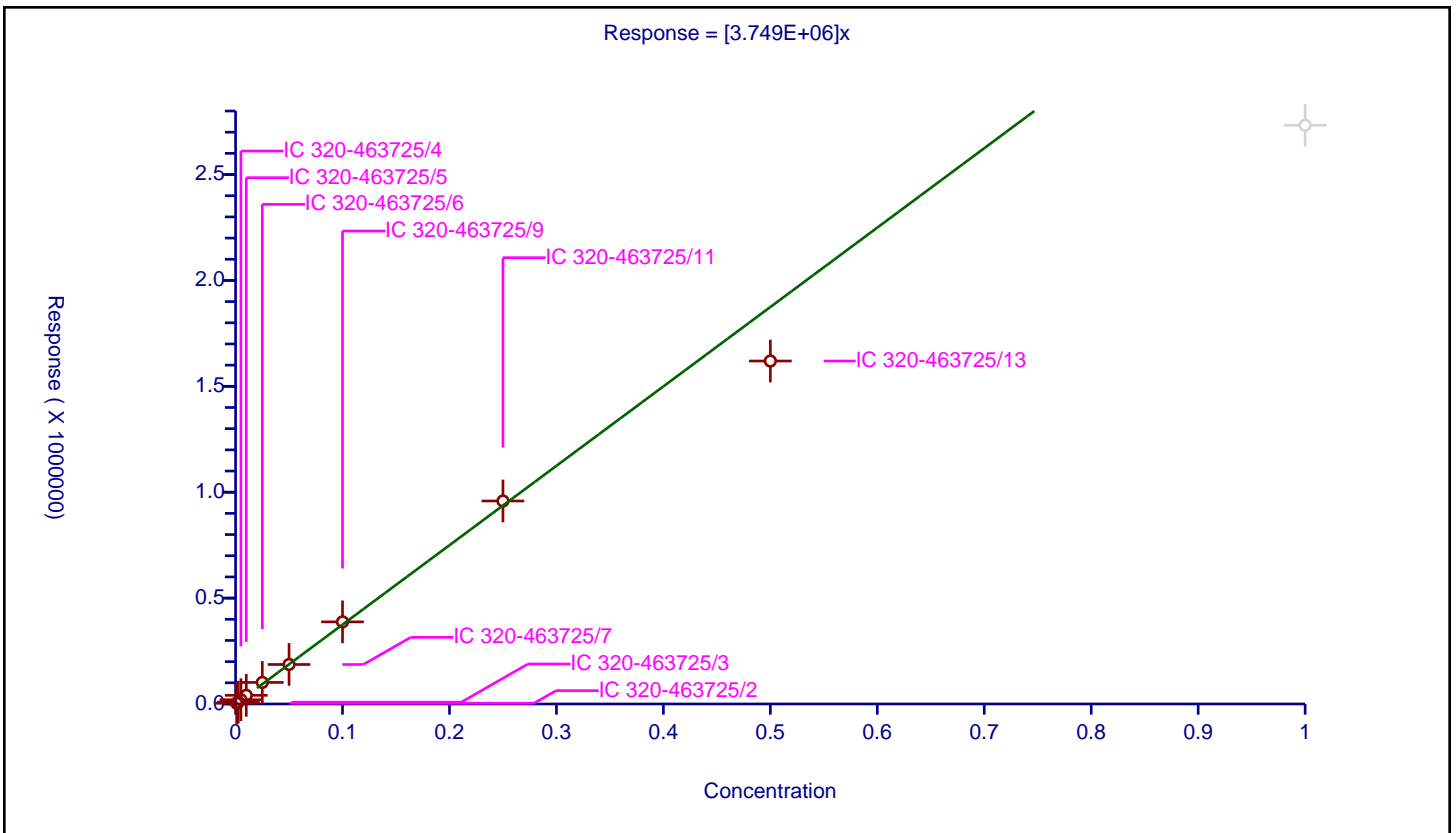
/ TAF

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.749E+06

Error Coefficients	
Standard Error:	90600
Relative Standard Error:	8.3
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-463725/2	0.001	3473.0			3473000.0	Y
2	IC 320-463725/3	0.0025	8513.0			3405200.0	Y
3	IC 320-463725/4	0.005	20079.0			4015800.0	Y
4	IC 320-463725/5	0.01	40893.0			4089300.0	Y
5	IC 320-463725/6	0.025	101859.0			4074360.0	Y
6	IC 320-463725/7	0.05	186602.0			3732040.0	Y
7	IC 320-463725/9	0.1	387730.0			3877300.0	Y
8	IC 320-463725/11	0.25	958564.0			3834256.0	Y
9	IC 320-463725/13	0.5	1619543.0			3239086.0	Y
10	IC 320-463725/14	1.0	2732758.0			2732758.0	N



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1
 SDG No.: _____
 Lab Sample ID: ICV 320-463725/16 Calibration Date: 02/20/2021 14:50
 Instrument ID: A10 Calib Start Date: 02/20/2021 10:46
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 02/20/2021 14:15
 Lab File ID: 2021.02.20_A10_TB3+_ICAL_016.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PFMOAA	Ave	10012162	10664500		107	100	6.5	30.0
R-EVE	Ave	4113840	4308280		105	100	4.7	50.0
R-PSDA	Ave	2716137	2749210		101	100	1.2	50.0
PMPA	Lin2		12904460		101	100	1.4	30.0
Hydrolyzed PSDA	Ave	7941832	8278370		104	100	4.2	50.0
NVHOS	Ave	7666241	7843110		102	100	2.3	30.0
PFO2HxA	Ave	9391118	9323650		99.3	100	-0.7	30.0
PEPA	Ave	5591875	6041300		108	100	8.0	30.0
PES	Ave	46961888	47412450		101	100	1.0	30.0
PFECA B	Ave	6491153	7013010		108	100	8.0	30.0
PFO3OA	Ave	5993289	5900050		98.4	100	-1.6	30.0
HFPO-DA	AveID	1.089	1.080		99.2	100	-0.8	40.0
R-PSDCA	Ave	62863071	61899810		98.5	100	-1.5	30.0
Hydro-EVE Acid	Ave	78962538	78801160		99.8	100	-0.2	30.0
Perfluoroheptanoic acid	L2ID		1.062		100	100	0.4	40.0
Hydro-PS Acid	Ave	25408908	25717300		101	100	1.2	30.0
PFECA G	Ave	9393669	11064400		118	100	17.8	30.0
PFO4DA	Ave	5158483	5251910		102	100	1.8	30.0
EVE Acid	Ave	45172088	46201390		102	100	2.3	30.0
PS Acid	Ave	11430757	11981840		105	100	4.8	30.0
PFO5DA	Ave	3748927	3474940		92.7	100	-7.3	50.0
13C3 HFPO-DA	Ave	5532191	5771720		261	250	4.3	50.0
13C4 PFHpA	Ave	25406808	26039760		256	250	2.5	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_016.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 20-Feb-2021 14:50:54 ALS Bottle#: 18 Worklist Smp#: 16
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: ICV (47)
 Misc. Info.: Plate: 1 Rack: 3
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Sublist:

Method: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 20-Feb-2021 15:40:16 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1681

First Level Reviewer: roycea Date: 20-Feb-2021 15:11:56

Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA	179.00 > 84.90	2.914	2.875	0.039	1066450	0.1065		107		M
2 R-EVE	405.00 > 217.00	6.561	6.560	0.001	430828	0.1047		11284		M
3 R-PSDA	440.90 > 241.00	6.653	6.653	0.0	274921	0.1012		6890		
4 Hydrolyzed PSDA	439.00 > 343.00	6.750	6.749	0.001	827837	0.1042		12653		
23 PMPA	229.00 > 185.00	6.734	6.765	-0.031	1290446	0.1014		679		
5 NVHOS	297.00 > 135.00	7.300	7.319	-0.019	784311	0.1023		15291		M
6 PFO2HxA	245.00 > 85.00	7.905	7.932	-0.027	932365	0.0993		11424		
22 PEPA	278.90 > 234.90	8.553	8.584	-0.031	604130	0.1080		969		
7 PES	314.90 > 135.00	8.885	8.908	-0.023	4741245	0.1010		171146		
8 PFECA B	295.00 > 201.00	9.101	9.139	-0.038	701301	0.1080		19661		
9 PFO3OA	310.90 > 85.00	9.360	9.396	-0.036	590005	0.0984		11635		
D 10 13C3 HFPO-DA	287.00 > 169.00	9.450	9.486	-0.036	1442930	0.2608		104	58202	
11 HPFO-DA	285.00 > 169.00	9.450	9.486	-0.036	623213	0.0992	1.000		24891	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.812	9.847	-0.035		6189981	0.0985			128087	
13 Hydro-EVE Acid										
427.00 > 282.90	9.869	9.904	-0.035		7880116	0.0998			82959	
D 14 13C4 PFHpA										
367.00 > 322.00	9.869	9.904	-0.035		6509940	0.2562		102	136795	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.869	9.904	-0.035	1.000	2765427	0.1004	Target=0.00		15851	
363.00 > 169.00	9.869	9.904	-0.035	1.000	1151922		2.40(0.00-0.00)		29159	
15 Hydro-PS Acid										
463.00 > 262.90	9.907	9.939	-0.032		2571730	0.1012			74658	
17 PFECA G										
378.90 > 184.90	9.993	10.034	-0.041		1106440	0.1178			45141	
18 PFO4DA										
376.90 > 85.00	10.122	10.161	-0.039		525191	0.1018			4653	
19 PS Acid										
443.00 > 146.90	10.204	10.242	-0.038		1198184	0.1048			37180	
20 EVE Acid										
407.00 > 262.90	10.204	10.260	-0.056		4620139	0.1023			81393	
21 TAF										
442.90 > 85.00	10.697	10.745	-0.048		347494	0.0927			755	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLICV_00047

Amount Added: 1.00

Units: mL

Data File: \\chromf\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_016.d

Injection Date: 20-Feb-2021 14:50:54

Instrument ID: A10

Lims ID: ICV

Client ID:

Operator ID: Sac_inst_A10

ALS Bottle#: 18

Worklist Smp#: 16

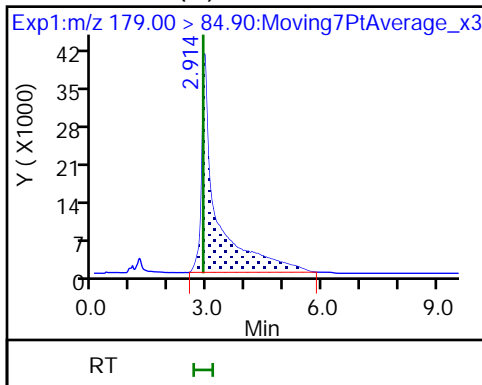
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

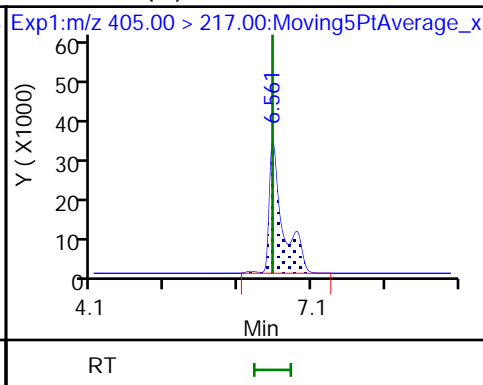
Method: A10_PFA5_CHEM_TB3+

Limit Group: LC PFA5_TB3P - ICAL

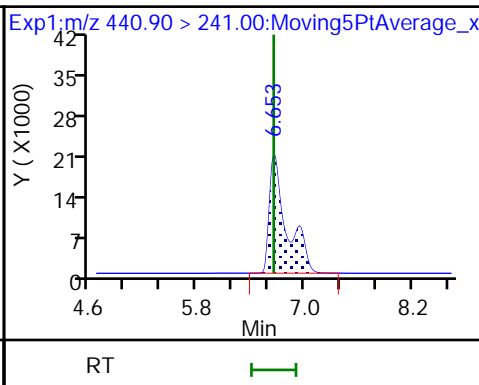
1 PFMOAA (M)



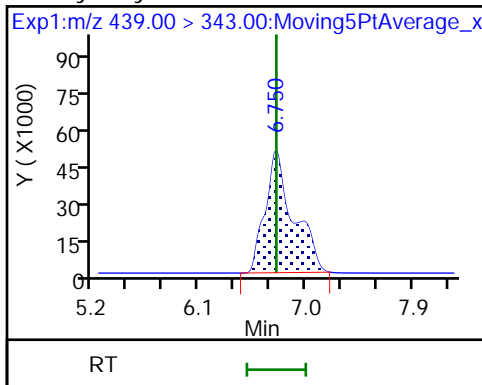
2 R-EVE (M)



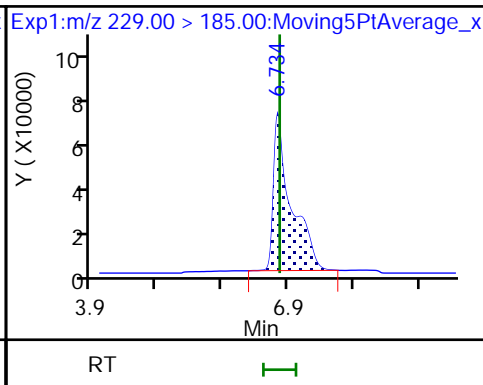
3 R-PSDA



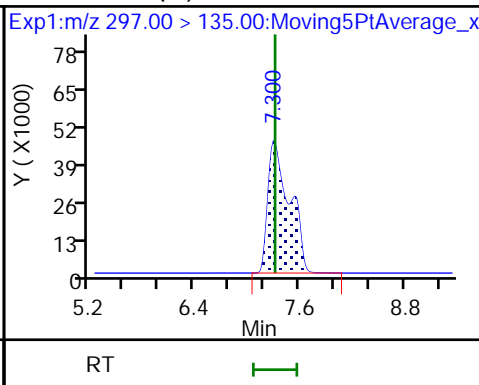
4 Hydrolyzed PSDA



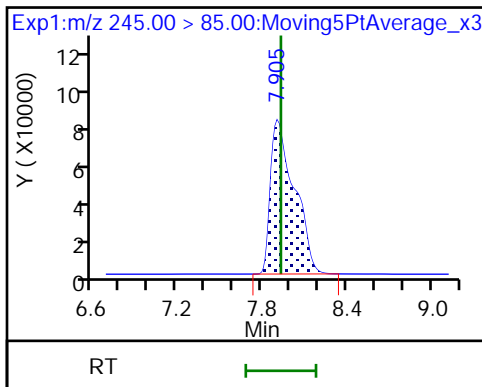
23 PMPA



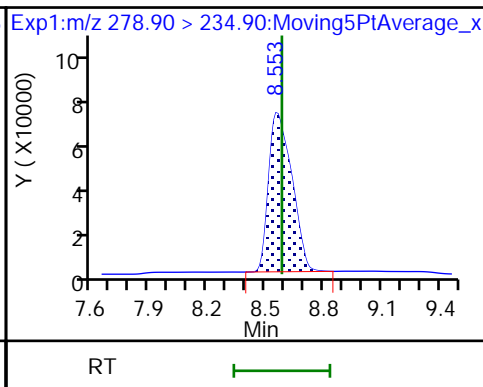
5 NVHOS (M)



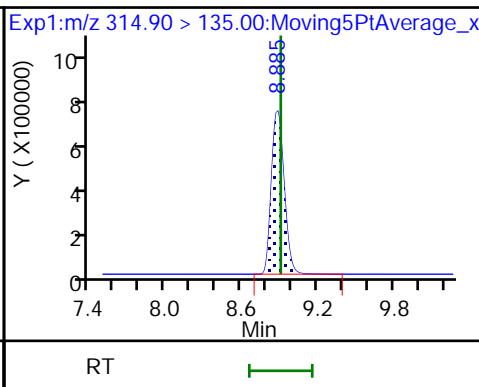
6 PFO2HxA



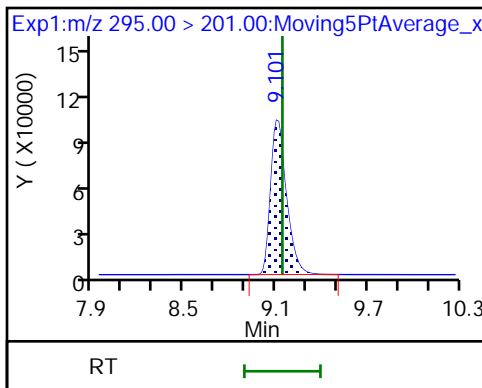
22 PEPA



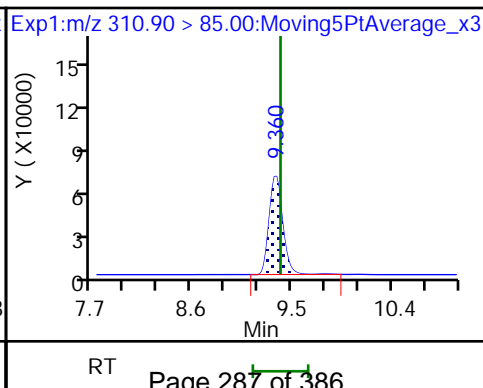
7 PES



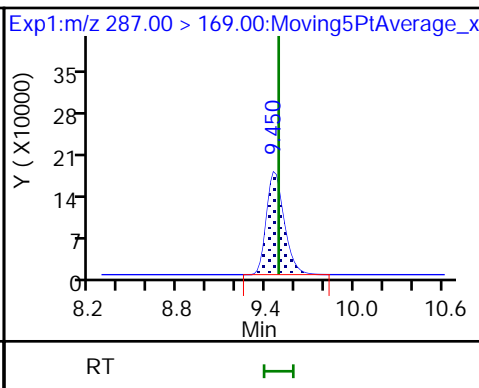
8 PFECA B

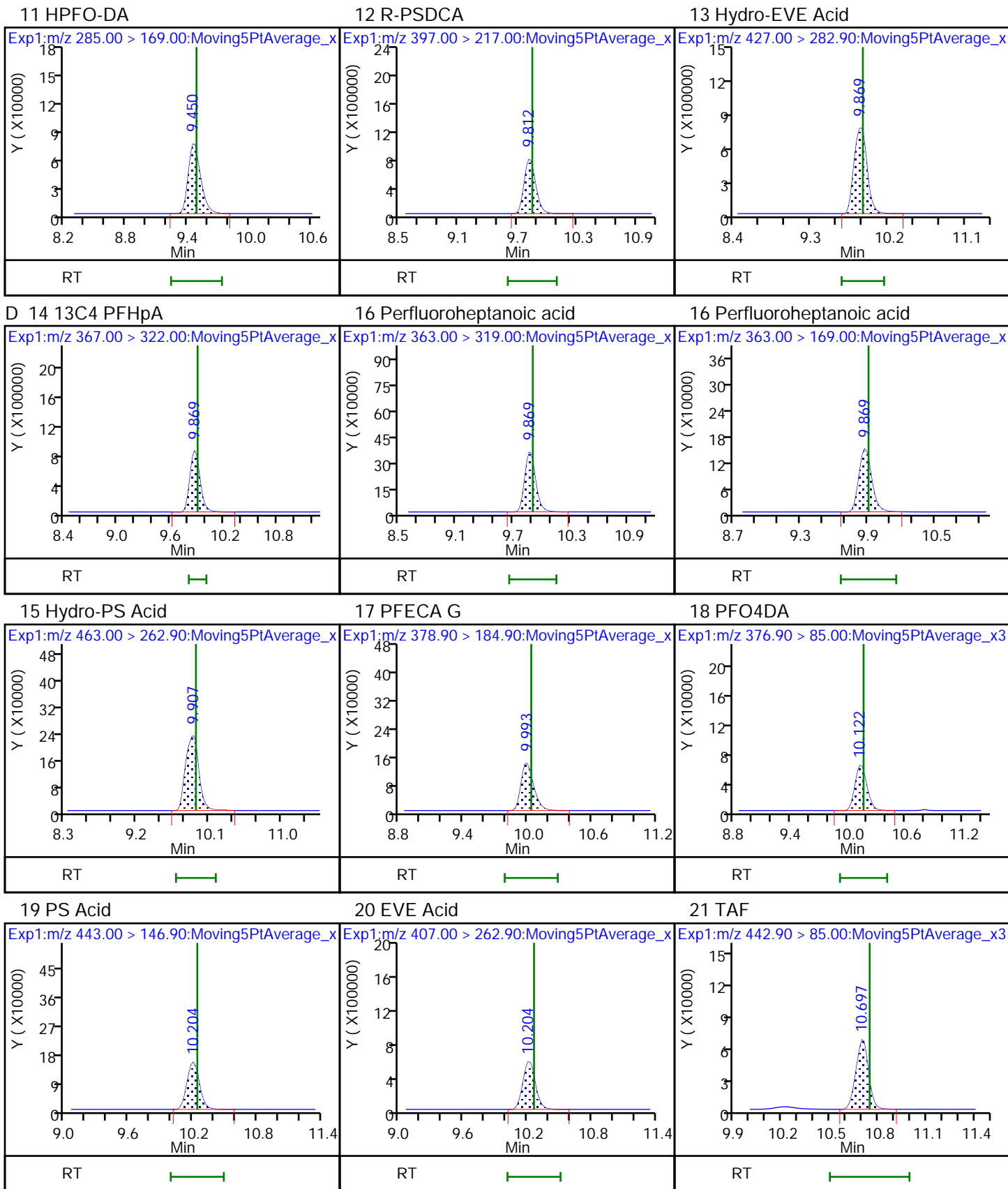


9 PFO3OA



D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

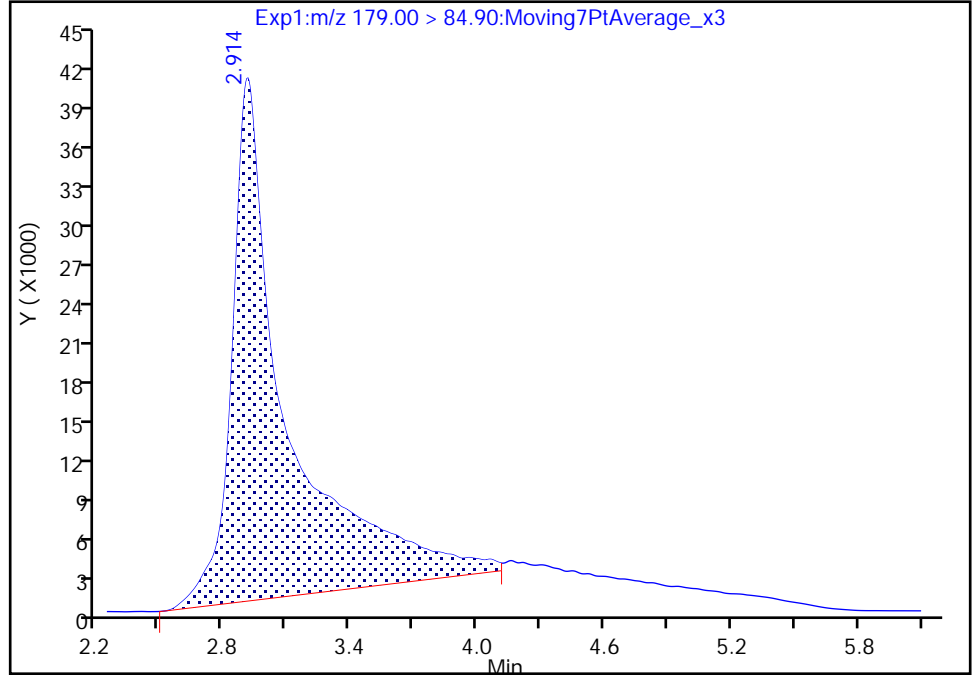
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Injection Date: 20-Feb-2021 14:50:54 Instrument ID: A10
Lims ID: ICV
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 18 Worklist Smp#: 16
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

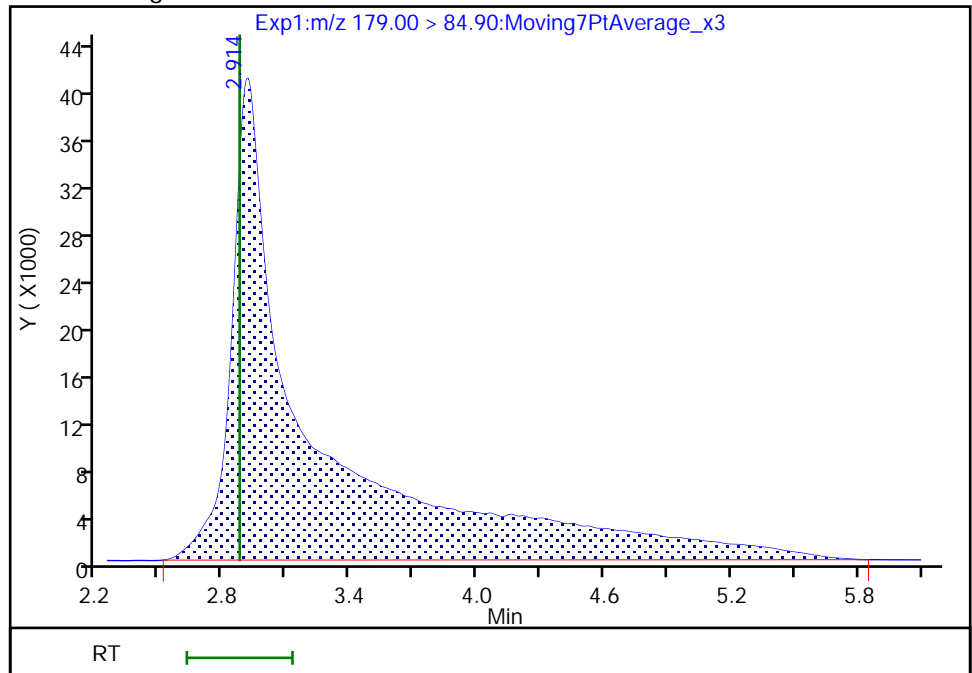
RT: 2.91
Area: 731613
Amount: 0.073072
Amount Units: ng/ml

Processing Integration Results



RT: 2.91
Area: 1066450
Amount: 0.106515
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 15:11:25
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

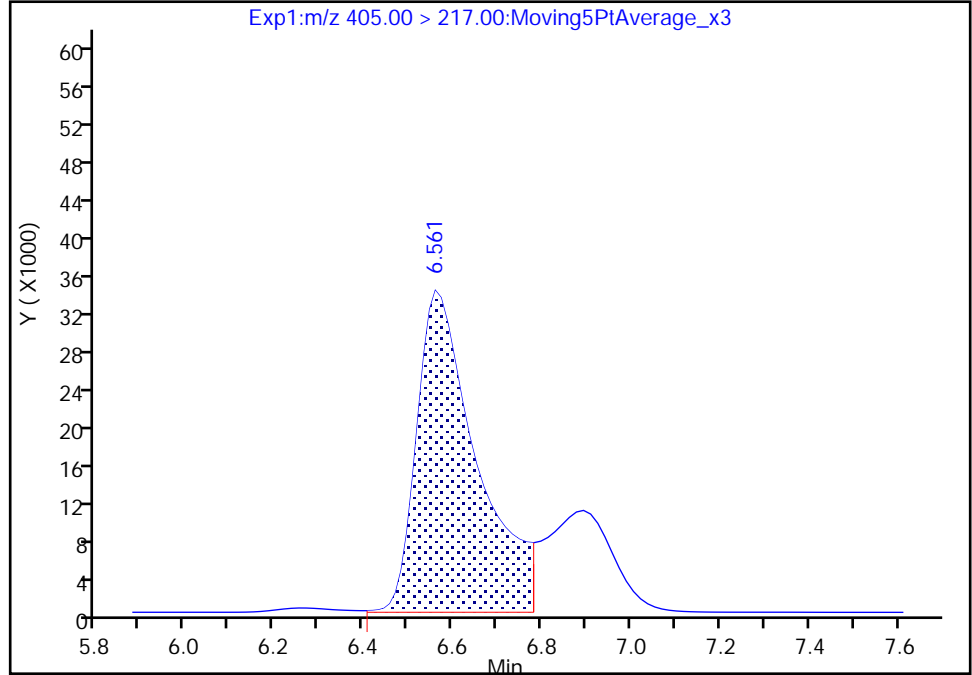
Data File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_016.d
Injection Date: 20-Feb-2021 14:50:54 Instrument ID: A10
Lims ID: ICV
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 18 Worklist Smp#: 16
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

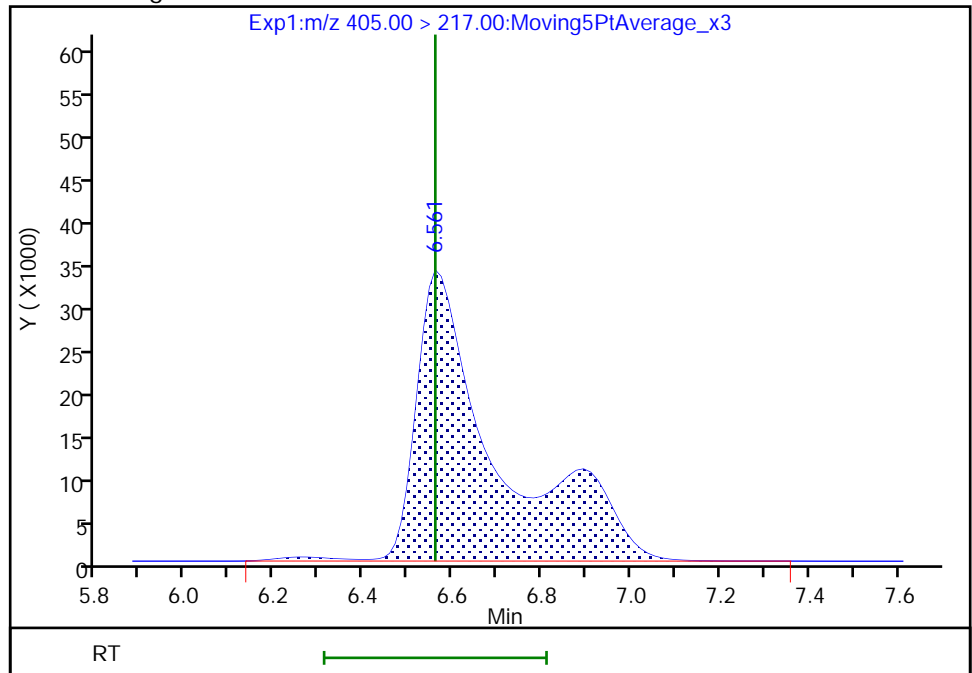
RT: 6.56
Area: 315843
Amount: 0.076776
Amount Units: ng/ml

Processing Integration Results



RT: 6.56
Area: 430828
Amount: 0.104726
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 15:11:27
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

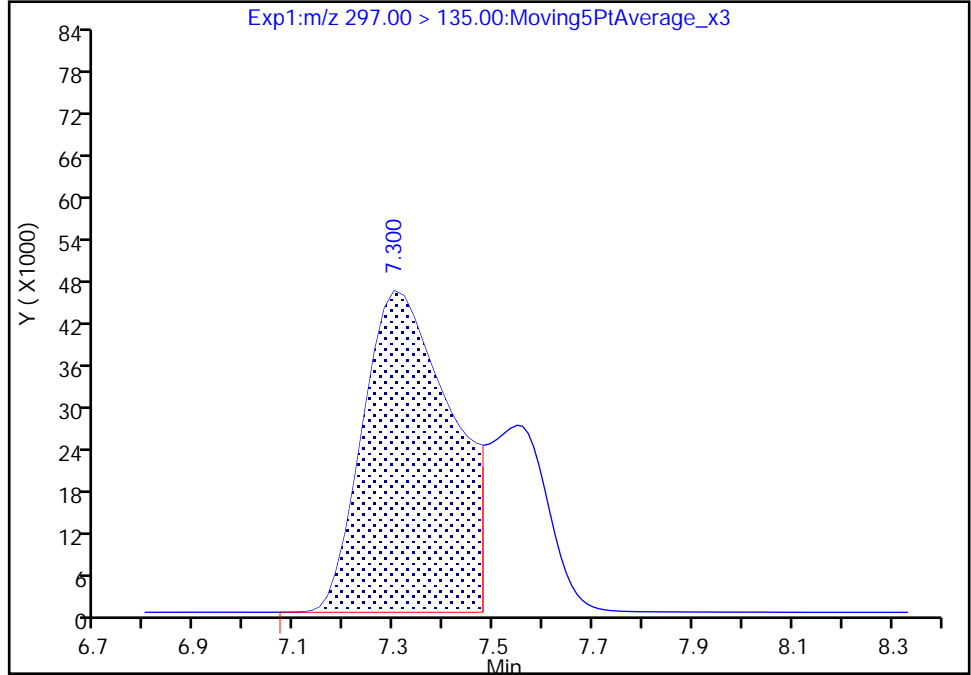
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Injection Date: 20-Feb-2021 14:50:54 Instrument ID: A10
Lims ID: ICV
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 18 Worklist Smp#: 16
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

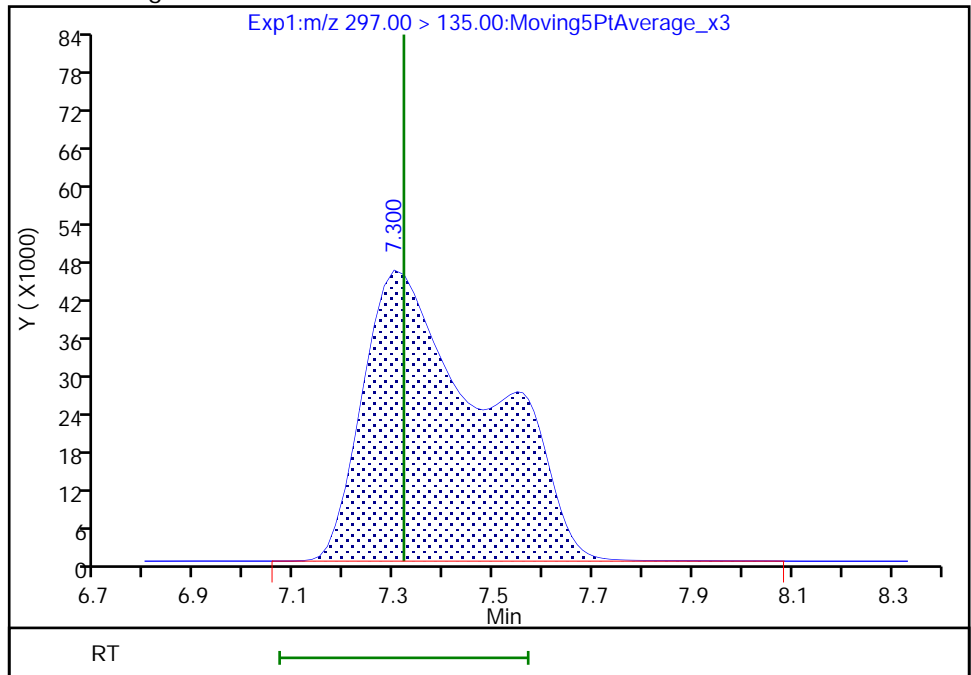
RT: 7.30
Area: 563000
Amount: 0.073439
Amount Units: ng/ml

Processing Integration Results



RT: 7.30
Area: 784311
Amount: 0.102307
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 20-Feb-2021 15:11:33
Audit Action: Manually Integrated

Audit Reason: Baseline
Page 292 of 386

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1
 SDG No.: _____
 Lab Sample ID: CCV 320-464205/1 Calibration Date: 02/24/2021 03:16
 Instrument ID: A10 Calib Start Date: 02/20/2021 10:46
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 02/20/2021 14:15
 Lab File ID: 2021.02.23_A10_TB3+_B_014.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PFMOAA	Ave	10012162	8354530		83.4	100	-16.6	30.0
R-EVE	Ave	4113840	4084290		99.3	100	-0.7	50.0
R-PSDA	Ave	2716137	2740410		101	100	0.9	50.0
PMPA	Lin2		11749000		92.1	100	-7.9	30.0
Hydrolyzed PSDA	Ave	7941832	7927710		99.8	100	-0.2	50.0
NVHOS	Ave	7666241	7293730		95.1	100	-4.9	30.0
PFO2HxA	Ave	9391118	9364320		99.7	100	-0.3	30.0
PEPA	Ave	5591875	6202480		111	100	10.9	30.0
PES	Ave	46961888	46810930		99.7	100	-0.3	30.0
PFECA B	Ave	6491153	6765510		104	100	4.2	30.0
PFO3OA	Ave	5993289	5930480		99.0	100	-1.0	30.0
HFPO-DA	AveID	1.089	1.028		94.4	100	-5.6	40.0
R-PSDCA	Ave	62863071	59812580		95.1	100	-4.9	30.0
Hydro-EVE Acid	Ave	78962538	74564560		94.4	100	-5.6	30.0
Perfluoroheptanoic acid	L2ID		1.032		97.6	100	-2.4	40.0
Hydro-PS Acid	Ave	25408908	24095220		94.8	100	-5.2	30.0
PFECA G	Ave	9393669	11464330		122	100	22.0	30.0
PFO4DA	Ave	5158483	5155760		99.9	100	-0.0	30.0
EVE Acid	Ave	45172088	45493390		101	100	0.7	30.0
PS Acid	Ave	11430757	11358450		99.4	100	-0.6	30.0
PFO5DA	Ave	3748927	3119100		83.2	100	-16.8	50.0
13C3 HFPO-DA	Ave	5532191	5729616		259	250	3.6	50.0
13C4 PFHpA	Ave	25406808	26260116		258	250	3.4	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_014.d
 Lims ID: CCV L7 (430)
 Client ID:
 Sample Type: CCV
 Inject. Date: 24-Feb-2021 03:16:49 ALS Bottle#: 14 Worklist Smp#: 1
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L7 (430)
 Misc. Info.: Plate: 1 Rack: 2
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Sublist: chrom-A10_PFAS_CHEM_TB3+*sub1
 Method: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Feb-2021 07:39:55 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICAL File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1619

First Level Reviewer: ruangyotsakuld Date: 25-Feb-2021 07:39:55

Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	2.716	2.716	0.0		835453	0.0834		83.4	133	M
2 R-EVE										M
405.00 > 217.00	6.458	6.458	0.0		408429	0.0993		99.3	9594	M
3 R-PSDA										M
440.90 > 241.00	6.560	6.560	0.0		274041	0.1009		101	6691	M
23 PMPA										M
229.00 > 185.00	6.653	6.653	0.0		1174900	0.0921		92.1	460	M
4 Hydrolyzed PSDA										M
439.00 > 343.00	6.669	6.669	0.0		792771	0.0998		99.8	13747	M
5 NVHOS										M
297.00 > 135.00	7.260	7.260	0.0		729373	0.0951		95.1	12865	M
6 PFO2HxA										
245.00 > 85.00	7.863	7.863	0.0		936432	0.0997		99.7	9601	
22 PEPA										
278.90 > 234.90	8.521	8.521	0.0		620248	0.1109		111	861	
7 PES										
314.90 > 135.00	8.860	8.860	0.0		4681093	0.0997		99.7	160052	
8 PFECA B										
295.00 > 201.00	9.087	9.087	0.0		676551	0.1042		104	23804	
9 PFO3OA										
310.90 > 85.00	9.321	9.321	0.0		593048	0.0990		99.0	11676	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.432	9.432	0.0		1432404	0.2589		104	58380	
11 HPFO-DA										
285.00 > 169.00	9.432	9.432	0.0	1.000	588787	0.0944		94.4	23895	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.792	9.792	0.0		5981258	0.0951		95.1	148404	
13 Hydro-EVE Acid										
427.00 > 282.90	9.849	9.849	0.0		7456456	0.0944		94.4	101695	
D 14 13C4 PFHpA										
367.00 > 322.00	9.849	9.849	0.0		6565029	0.2584		103	137091	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.849	9.849	0.0	1.000	2709917	0.0976	Target=0.00	97.6	18899	
363.00 > 169.00	9.849	9.849	0.0	1.000	1145791		2.37(0.00-0.00)		28785	
15 Hydro-PS Acid										
463.00 > 262.90	9.868	9.868	0.0		2409522	0.0948		94.8	69472	
17 PFECA G										
378.90 > 184.90	9.958	9.958	0.0		1146433	0.1220		122	47681	
18 PFO4DA										
376.90 > 85.00	10.100	10.100	0.0		515576	0.0999		99.9	4205	
19 PS Acid										
443.00 > 146.90	10.184	10.184	0.0		1135845	0.0994		99.4	34148	
20 EVE Acid										
407.00 > 262.90	10.184	10.184	0.0		4549339	0.1007		101	91551	
21 TAF										
442.90 > 85.00	10.668	10.668	0.0		311910	0.0832		83.2	555	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD7_00430

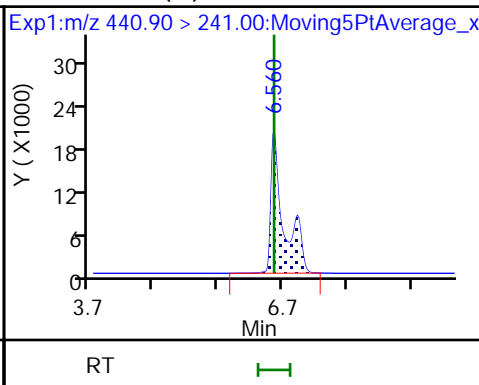
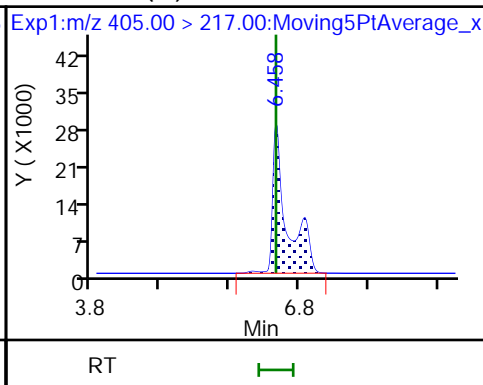
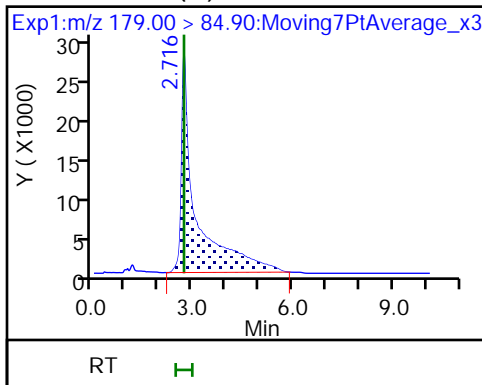
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Units: mL

1 PFMOAA (M)

2 R-EVE (M)

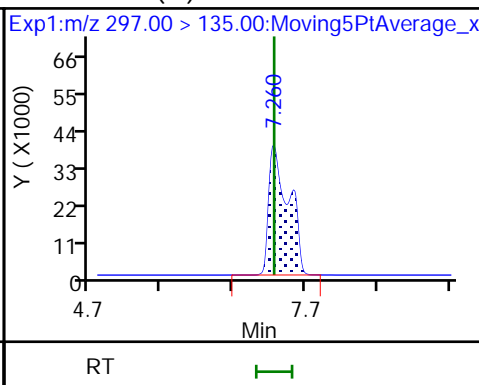
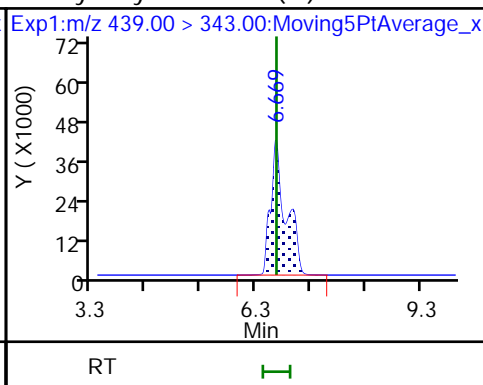
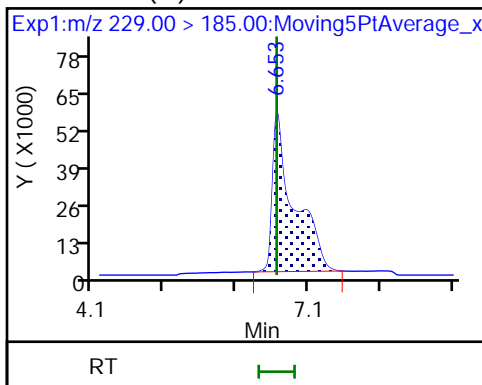
3 R-PSDA (M)



23 PMPA (M)

4 Hydrolyzed PSDA (M)

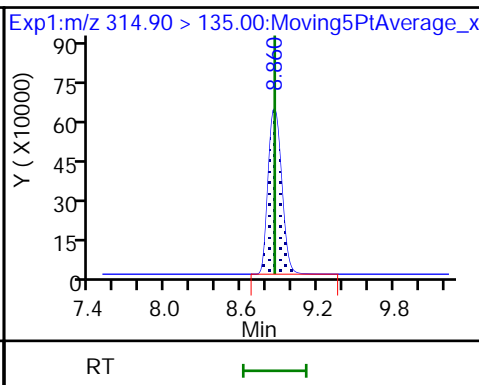
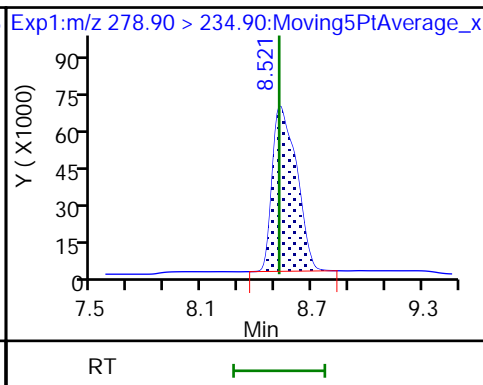
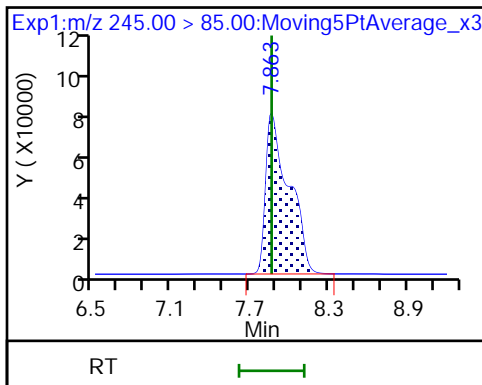
5 NVHOS (M)



6 PFO2HxA

22 PEPA

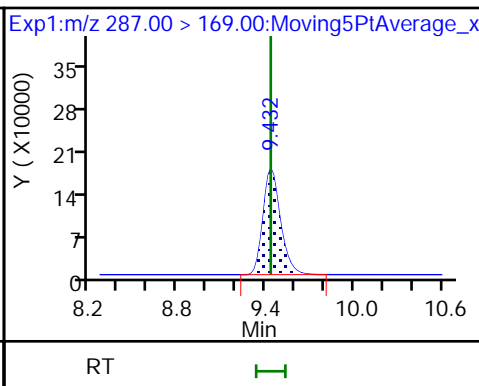
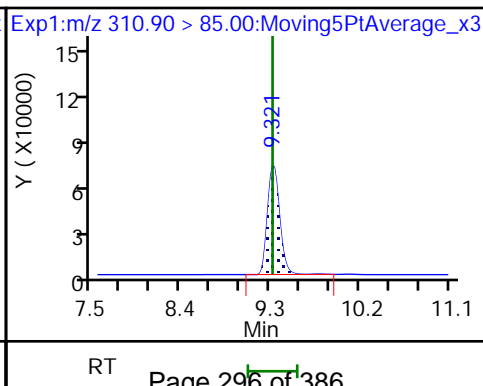
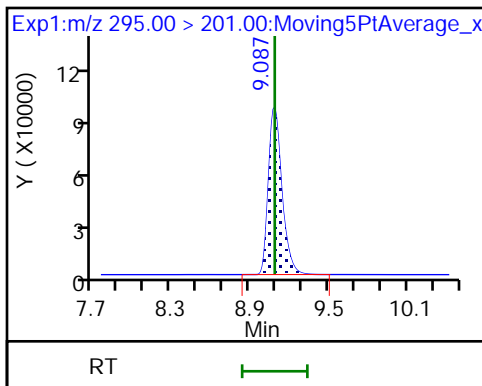
7 PES

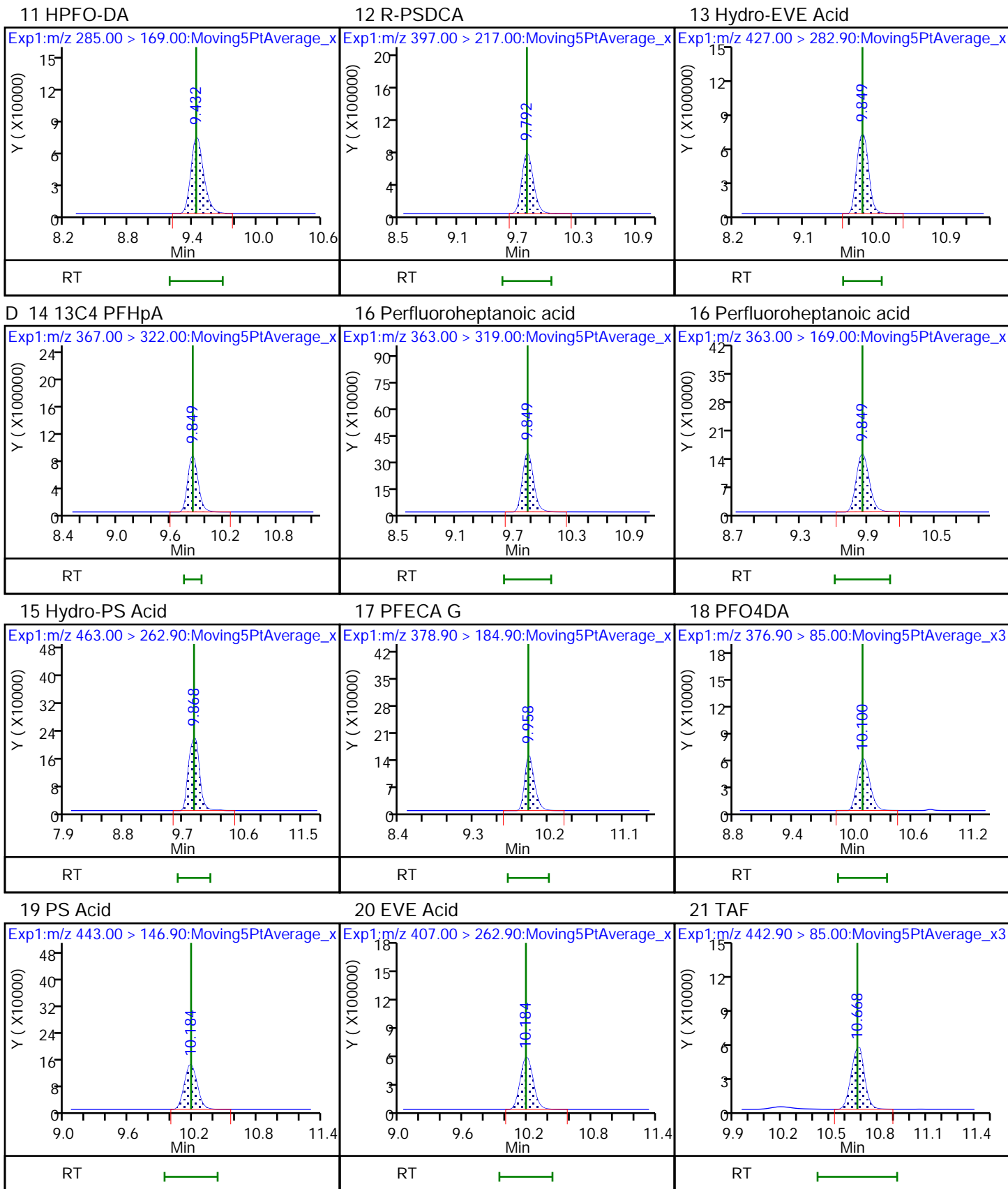


8 PFECA B

9 PFO3OA

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

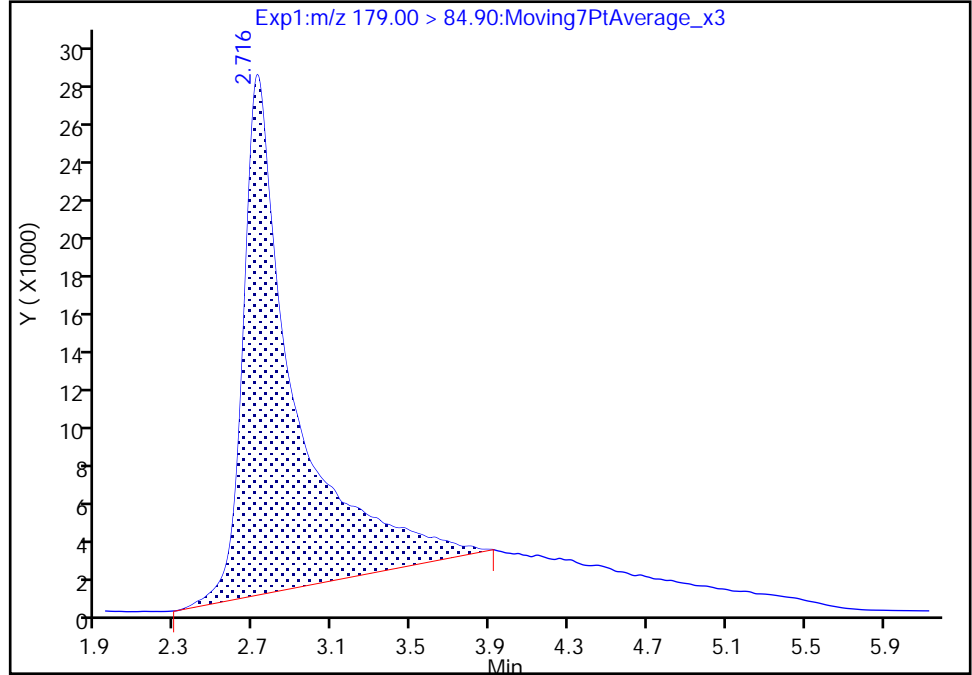
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Lims ID: CCV L7 (430)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 14 Worklist Smp#: 1
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

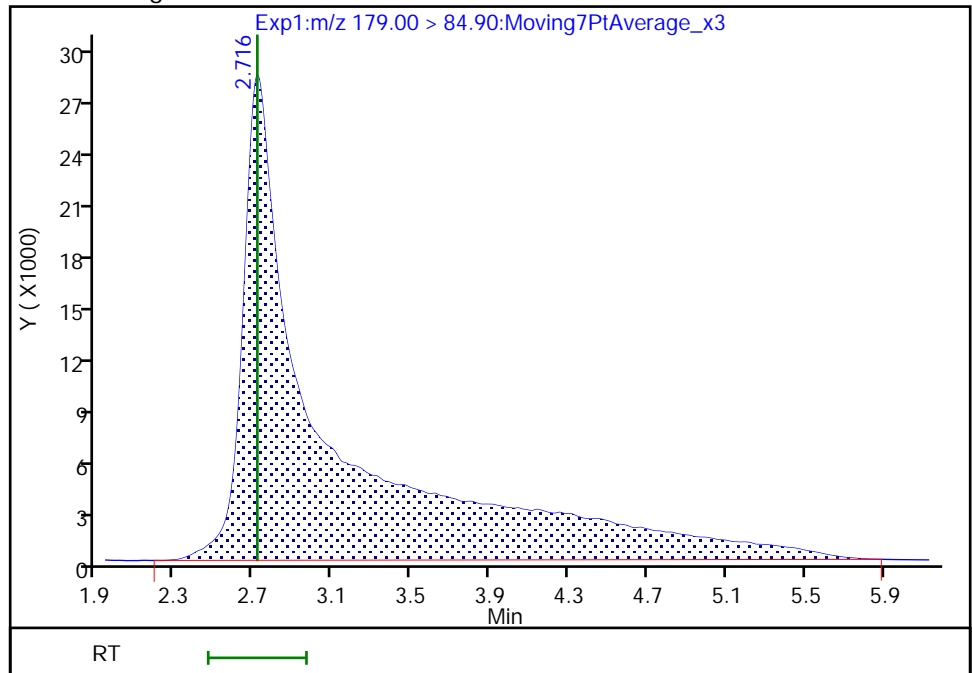
RT: 2.72
Area: 501113
Amount: 0.050050
Amount Units: ng/ml

Processing Integration Results



RT: 2.72
Area: 835453
Amount: 0.083444
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 09:20:12
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

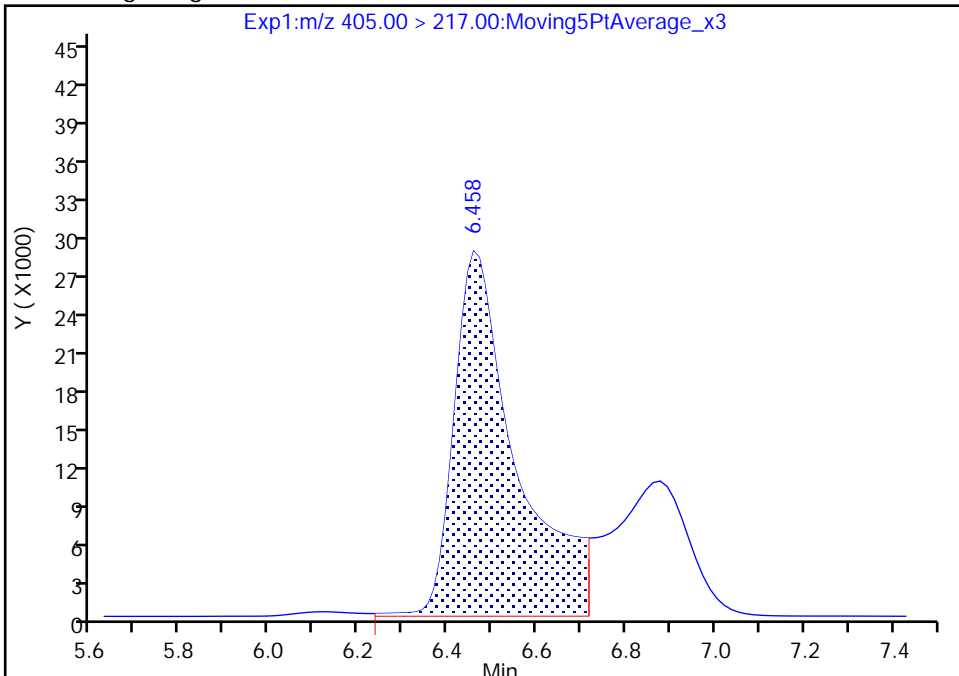
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 Injection Date: 24-Feb-2021 03:16:49 Instrument ID: A10
 Lims ID: CCV L7 (430)
 Client ID:
 Operator ID: Sac_inst_A10 ALS Bottle#: 14 Worklist Smp#: 1
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
 Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

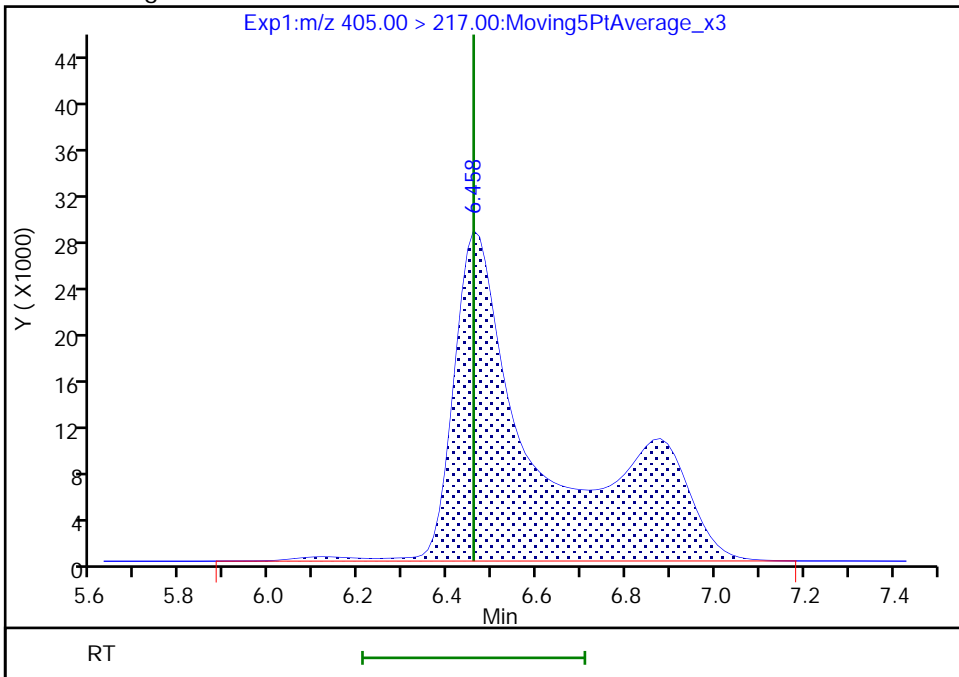
RT: 6.46
 Area: 278618
 Amount: 0.067727
 Amount Units: ng/ml

Processing Integration Results



RT: 6.46
 Area: 408429
 Amount: 0.099282
 Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 09:20:17
 Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

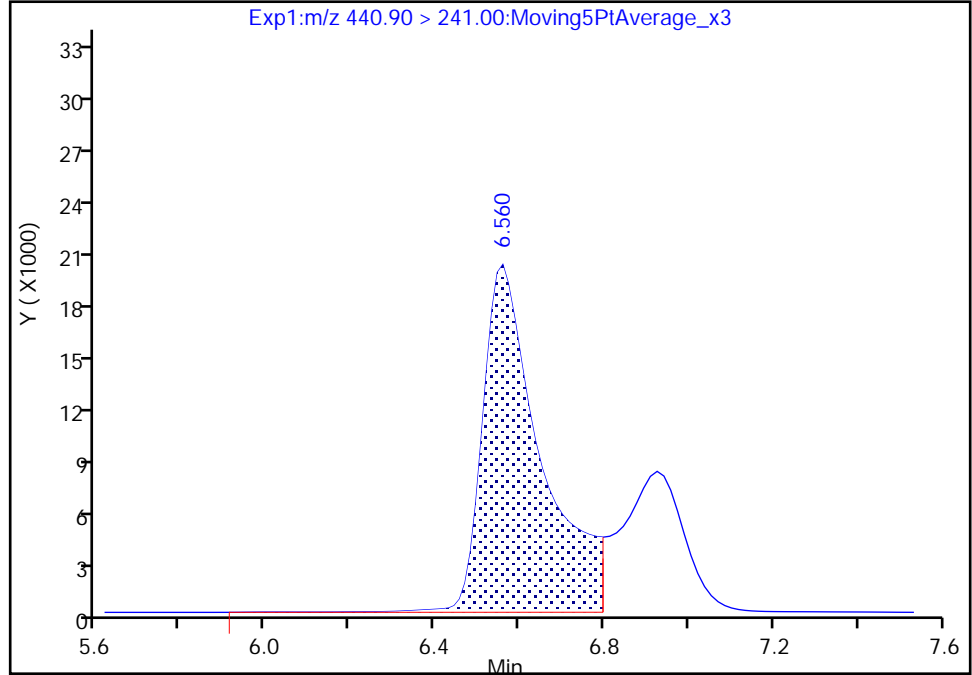
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Injection Date: 24-Feb-2021 03:16:49 Instrument ID: A10
Lims ID: CCV L7 (430)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 14 Worklist Smp#: 1
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

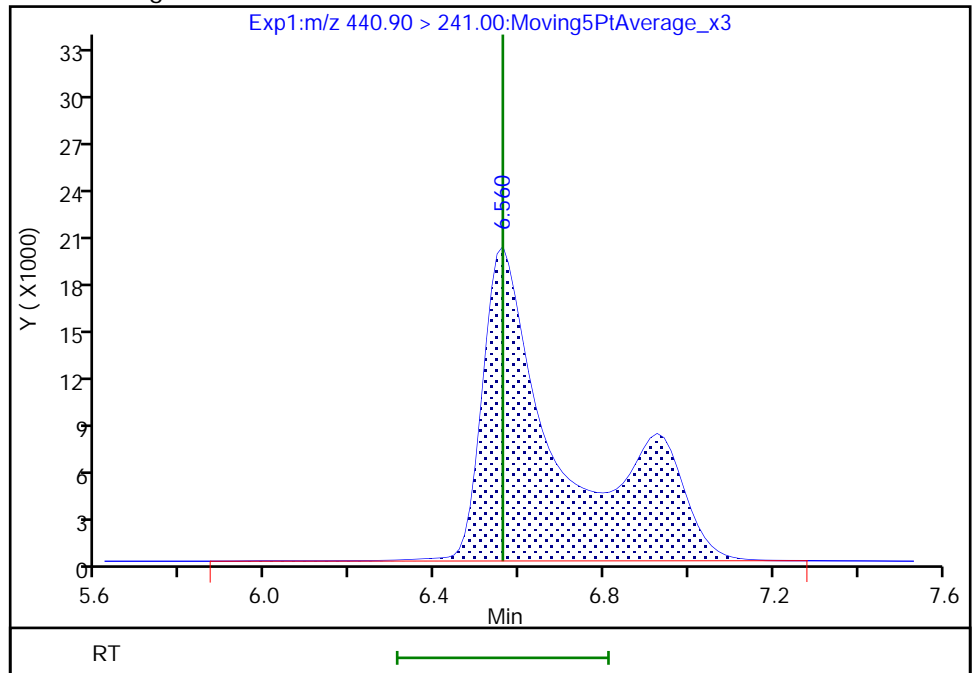
RT: 6.56
Area: 192144
Amount: 0.070742
Amount Units: ng/ml

Processing Integration Results



RT: 6.56
Area: 274041
Amount: 0.100894
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 09:20:20
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

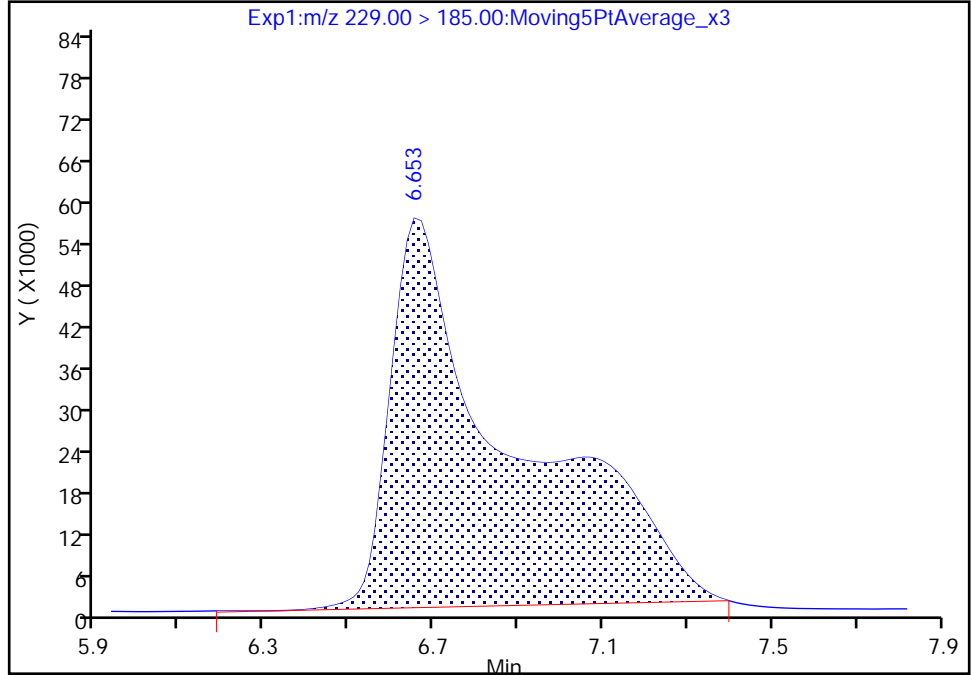
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 Lims ID: CCV L7 (430)
 Client ID:
 Operator ID: Sac_inst_A10 ALS Bottle#: 14 Worklist Smp#: 1
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
 Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

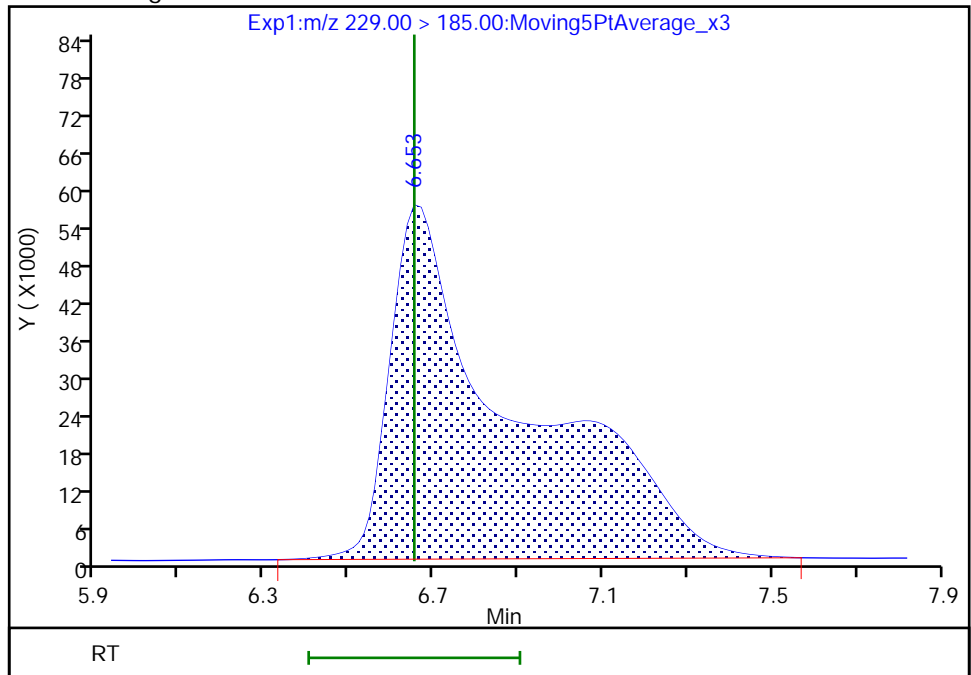
RT: 6.65
 Area: 1134962
 Amount: 0.088937
 Amount Units: ng/ml

Processing Integration Results



RT: 6.65
 Area: 1174900
 Amount: 0.092145
 Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 09:20:24
 Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

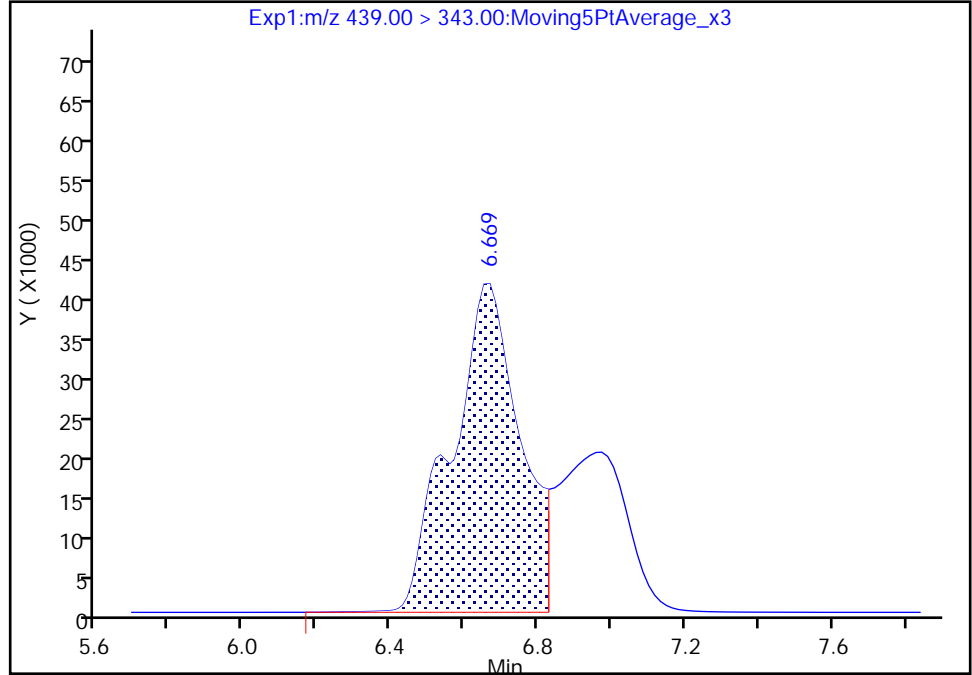
Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_014.d
Injection Date: 24-Feb-2021 03:16:49 Instrument ID: A10
Lims ID: CCV L7 (430)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 14 Worklist Smp#: 1
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

4 Hydrolyzed PSDA, CAS: 2416366-19-1

Signal: 1

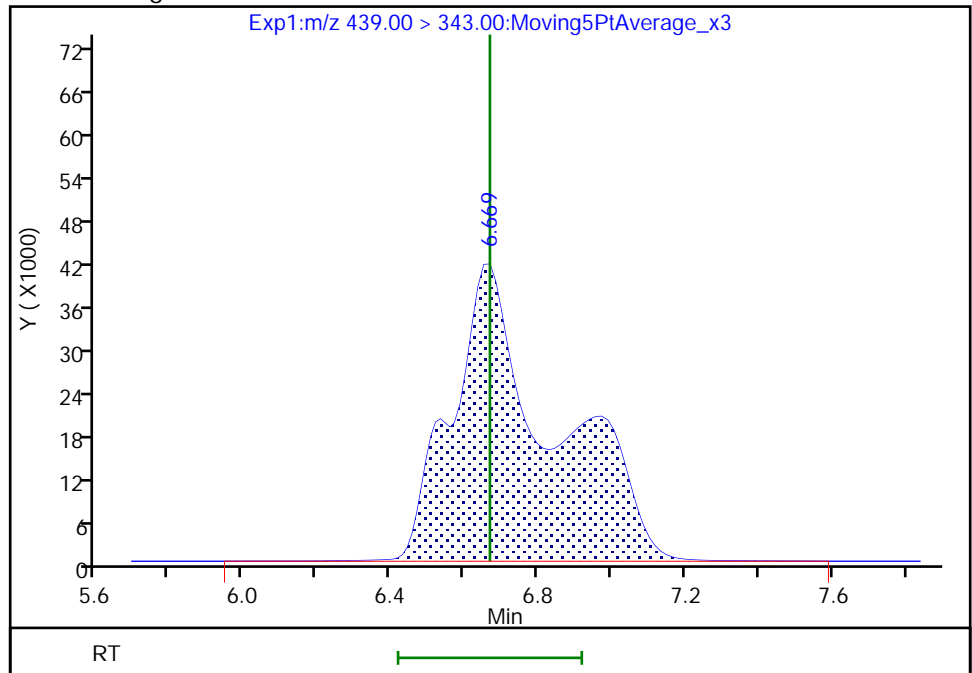
RT: 6.67
Area: 531468
Amount: 0.066920
Amount Units: ng/ml

Processing Integration Results



RT: 6.67
Area: 792771
Amount: 0.099822
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 09:20:27
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

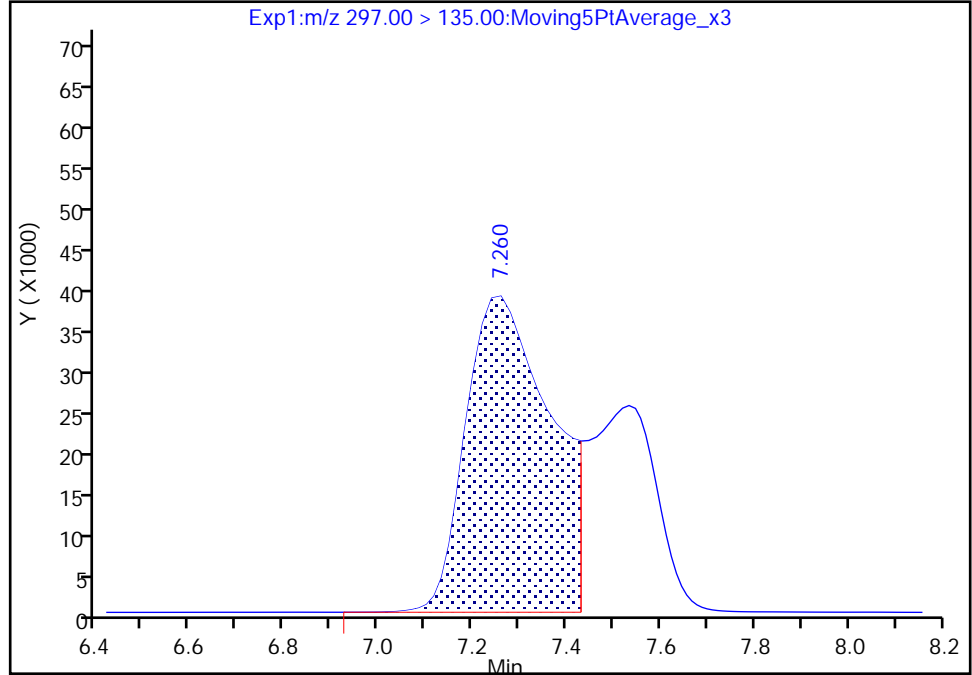
Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_014.d
Injection Date: 24-Feb-2021 03:16:49 Instrument ID: A10
Lims ID: CCV L7 (430)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 14 Worklist Smp#: 1
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

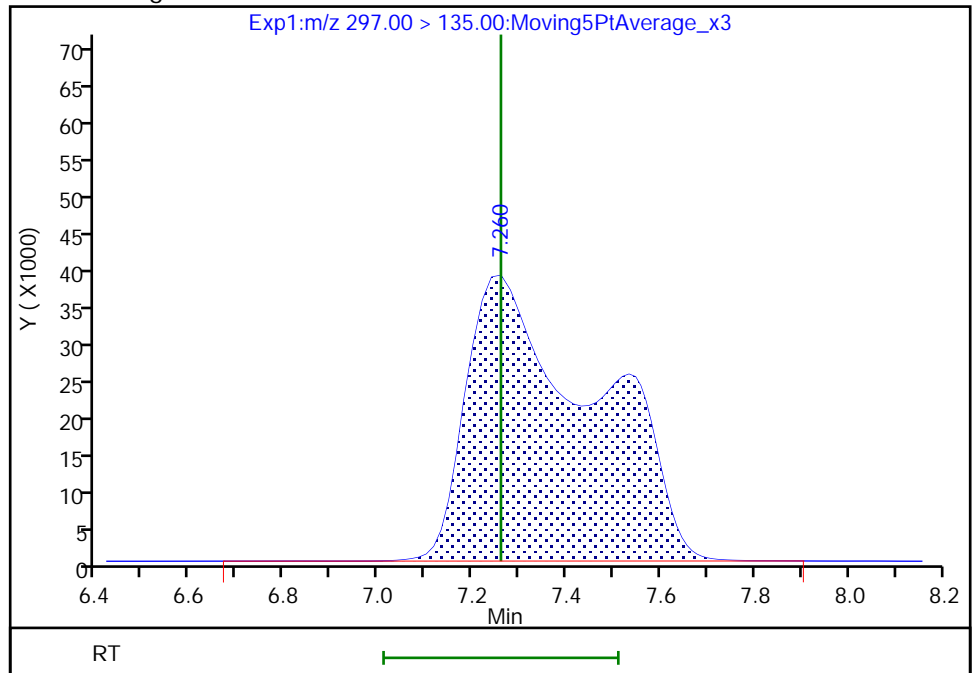
RT: 7.26
Area: 480898
Amount: 0.062729
Amount Units: ng/ml

Processing Integration Results



RT: 7.26
Area: 729373
Amount: 0.095141
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 09:20:30
Audit Action: Manually Integrated

Audit Reason: Baseline
Page 304 of 386

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1
 SDG No.: _____
 Lab Sample ID: CCV 320-464205/14 Calibration Date: 02/24/2021 07:03
 Instrument ID: A10 Calib Start Date: 02/20/2021 10:46
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 02/20/2021 14:15
 Lab File ID: 2021.02.23_A10_TB3+_B_027.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PFMOAA	Ave	10012162	8408480		84.0	100	-16.0	30.0
R-EVE	Ave	4113840	4219260		103	100	2.6	50.0
R-PSDA	Ave	2716137	2804170		103	100	3.2	50.0
PMPA	Lin2		12218880		95.9	100	-4.1	30.0
Hydrolyzed PSDA	Ave	7941832	8293010		104	100	4.4	50.0
NVHOS	Ave	7666241	7472810		97.5	100	-2.5	30.0
PFO2HxA	Ave	9391118	9453870		101	100	0.7	30.0
PEPA	Ave	5591875	6401410		114	100	14.5	30.0
PES	Ave	46961888	46897940		99.9	100	-0.1	30.0
PFECA B	Ave	6491153	6451730		99.4	100	-0.6	30.0
PFO3OA	Ave	5993289	5585760		93.2	100	-6.8	30.0
HFPO-DA	AveID	1.089	1.012		92.9	100	-7.1	40.0
R-PSDCA	Ave	62863071	58159130		92.5	100	-7.5	30.0
Hydro-EVE Acid	Ave	78962538	74014270		93.7	100	-6.3	30.0
Perfluoroheptanoic acid	L2ID		1.045		98.8	100	-1.2	40.0
Hydro-PS Acid	Ave	25408908	23998010		94.4	100	-5.6	30.0
PFECA G	Ave	9393669	11172050		119	100	18.9	30.0
PFO4DA	Ave	5158483	4683140		90.8	100	-9.2	30.0
PS Acid	Ave	11430757	11931380		104	100	4.4	30.0
EVE Acid	Ave	45172088	46262210		102	100	2.4	30.0
PFO5DA	Ave	3748927	3313440		88.4	100	-11.6	50.0
13C3 HFPO-DA	Ave	5532191	5737272		259	250	3.7	50.0
13C4 PFHpA	Ave	25406808	25414888		250	250	0.0	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_027.d
 Lims ID: CCV L7 (431)
 Client ID:
 Sample Type: CCV
 Inject. Date: 24-Feb-2021 07:03:49 ALS Bottle#: 27 Worklist Smp#: 14
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L7 (431)
 Misc. Info.: Plate: 1 Rack: 2
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Sublist: chrom-A10_PFAS_CHEM_TB3+*sub1

Method: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Feb-2021 07:45:31 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1619

First Level Reviewer: vangmy Date: 24-Feb-2021 09:22:08
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.056	2.716	0.340		840848	0.0840		84.0	49.7	M
2 R-EVE										M
405.00 > 217.00	6.638	6.458	0.180		421926	0.1026		103	12518	M
3 R-PSDA										
440.90 > 241.00	6.718	6.560	0.158		280417	0.1032		103	8486	
23 PMPA										M
229.00 > 185.00	6.766	6.653	0.113		1221888	0.0959		95.9	578	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.798	6.669	0.129		829301	0.1044		104	19613	
5 NVHOS										
297.00 > 135.00	7.319	7.260	0.059		747281	0.0975		97.5	16271	
6 PFO2HxA										
245.00 > 85.00	7.910	7.863	0.047		945387	0.1007		101	9066	
22 PEPA										
278.90 > 234.90	8.544	8.521	0.023		640141	0.1145		114	1050	
7 PES										
314.90 > 135.00	8.854	8.860	-0.006		4689794	0.0999		99.9	178165	
8 PFECA B										
295.00 > 201.00	9.081	9.087	-0.006		645173	0.0994		99.4	19662	
9 PFO3OA										
310.90 > 85.00	9.327	9.321	0.006		558576	0.0932		93.2	11195	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.438	9.432	0.006		1434318	0.2593		104	58679	
11 HPFO-DA										
285.00 > 169.00	9.438	9.432	0.006	1.000	580433	0.0929		92.9	23769	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.799	9.792	0.007		5815913	0.0925		92.5	144505	
13 Hydro-EVE Acid										
427.00 > 282.90	9.856	9.849	0.007		7401427	0.0937		93.7	88434	
D 14 13C4 PFHpA										
367.00 > 322.00	9.856	9.849	0.007		6353722	0.2501		100	130581	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.856	9.849	0.007	1.000	2656965	0.0988	Target=0.00	98.8	20704	
363.00 > 169.00	9.856	9.849	0.007	1.000	1139349		2.33(0.00-0.00)		28379	
15 Hydro-PS Acid										
463.00 > 262.90	9.875	9.868	0.007		2399801	0.0944		94.4	52231	
17 PFECA G										
378.90 > 184.90	9.965	9.958	0.007		1117205	0.1189		119	47291	
18 PFO4DA										
376.90 > 85.00	10.107	10.100	0.007		468314	0.0908		90.8	4126	
19 PS Acid										
443.00 > 146.90	10.171	10.184	-0.013		1193138	0.1044		104	35578	
20 EVE Acid										
407.00 > 262.90	10.191	10.184	0.007		4626221	0.1024		102	92819	
21 TAF										
442.90 > 85.00	10.674	10.668	0.006		331344	0.0884		88.4	607	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD7_00431

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_027.d

Injection Date: 24-Feb-2021 07:03:49

Instrument ID: A10

Lims ID: CCV L7 (431)

Client ID:

Operator ID: Sac_inst_A10

ALS Bottle#: 27

Worklist Smp#: 14

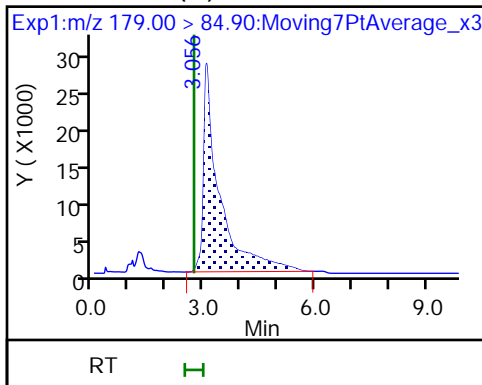
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

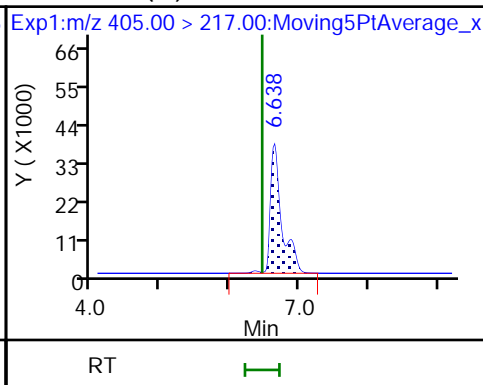
Method: A10_PFA5_CHEM_TB3+

Limit Group: LC PFA5_TB3P - ICAL

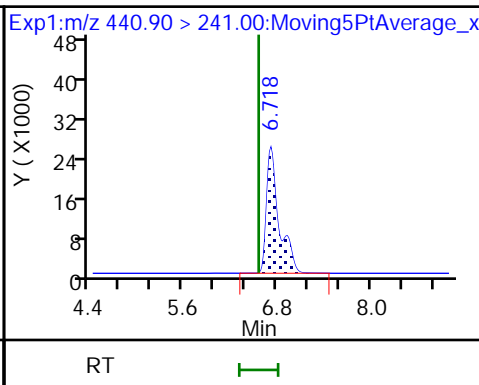
1 PFMOAA (M)



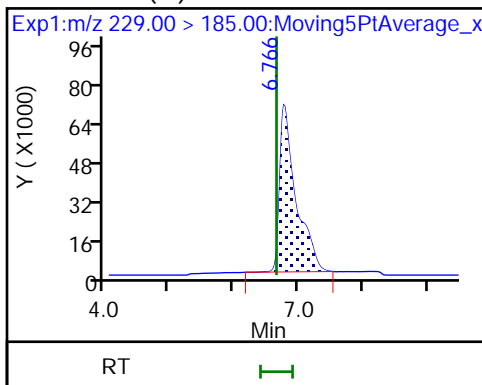
2 R-EVE (M)



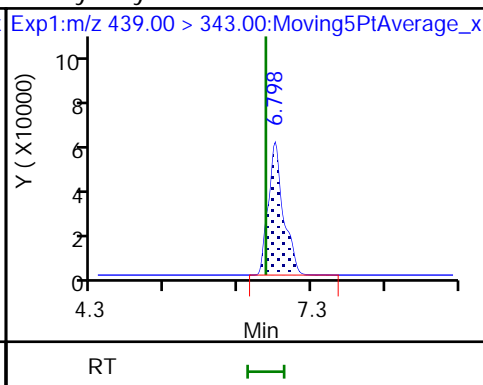
3 R-PSDA



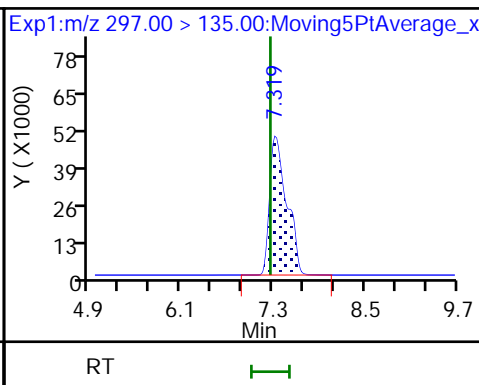
23 PMPA (M)



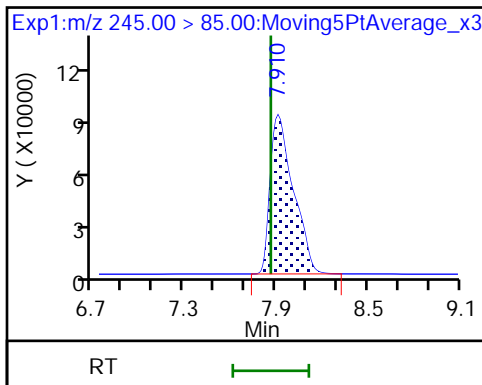
4 Hydrolyzed PSDA



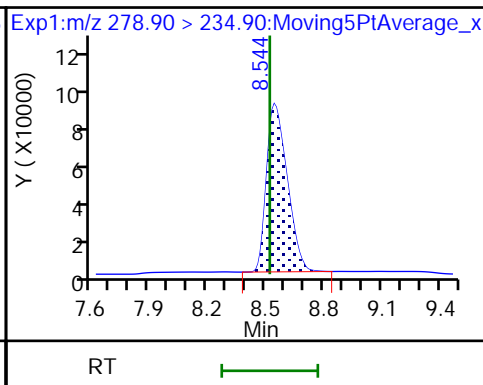
5 NVHOS



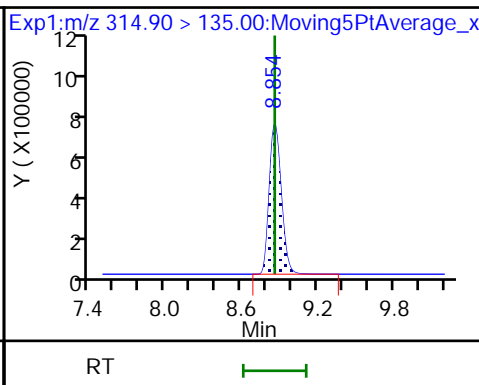
6 PFO2HxA



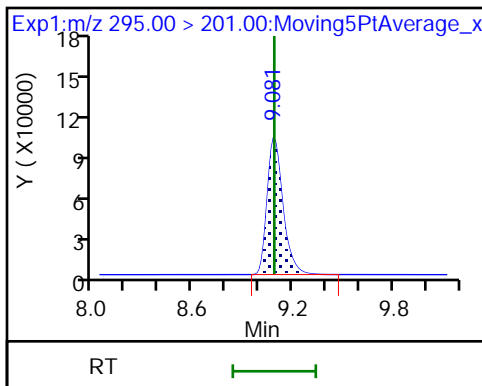
22 PEPA



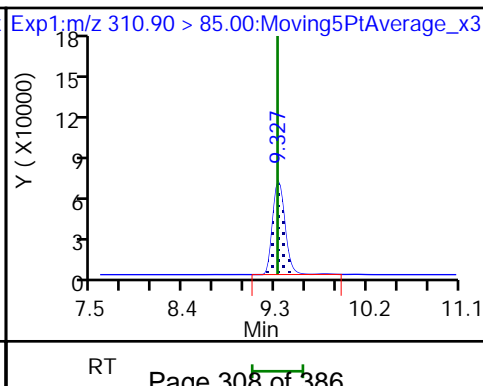
7 PES



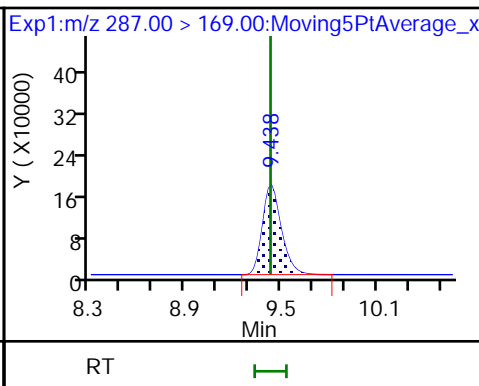
8 PFECA B

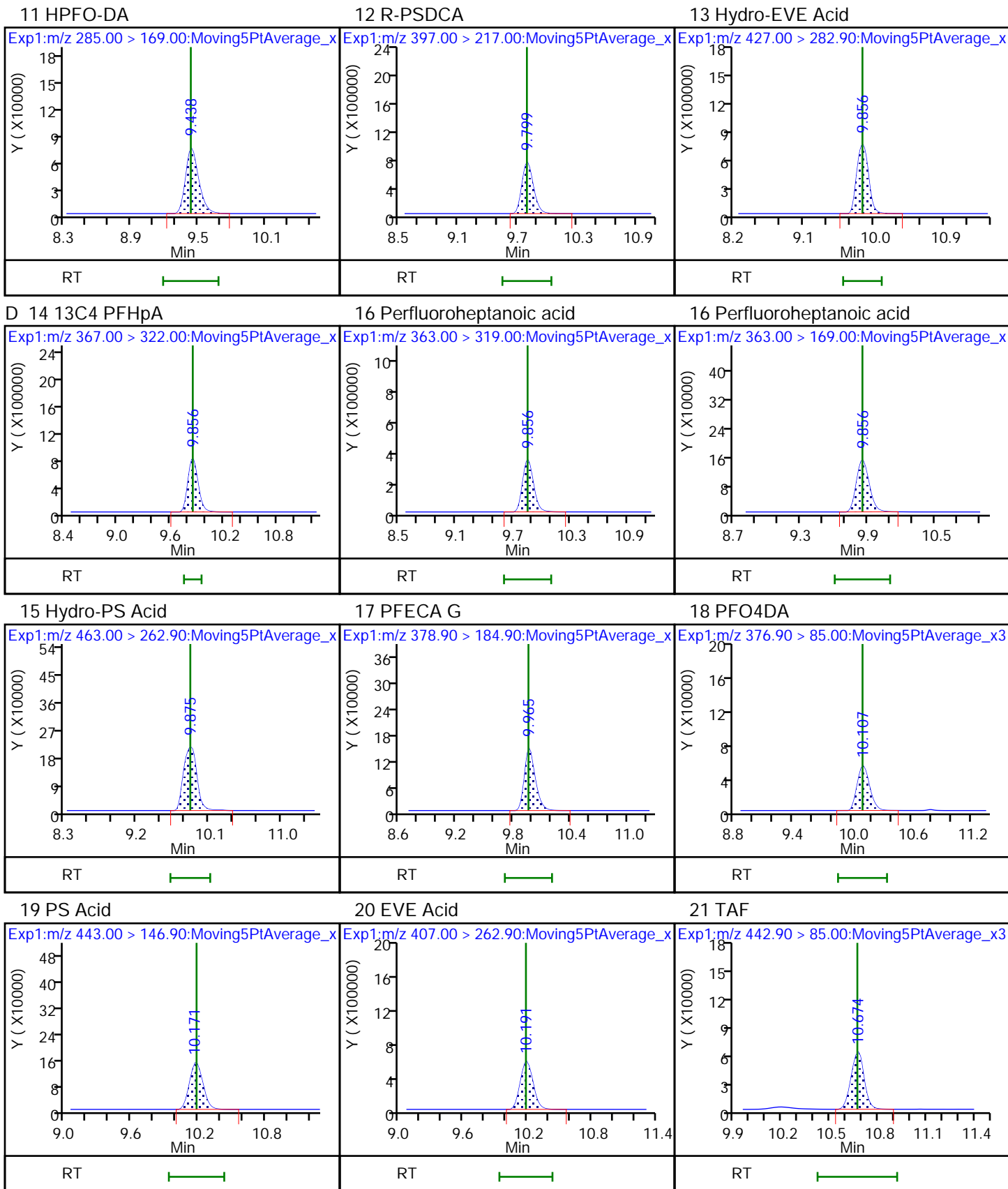


9 PFO3OA



D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

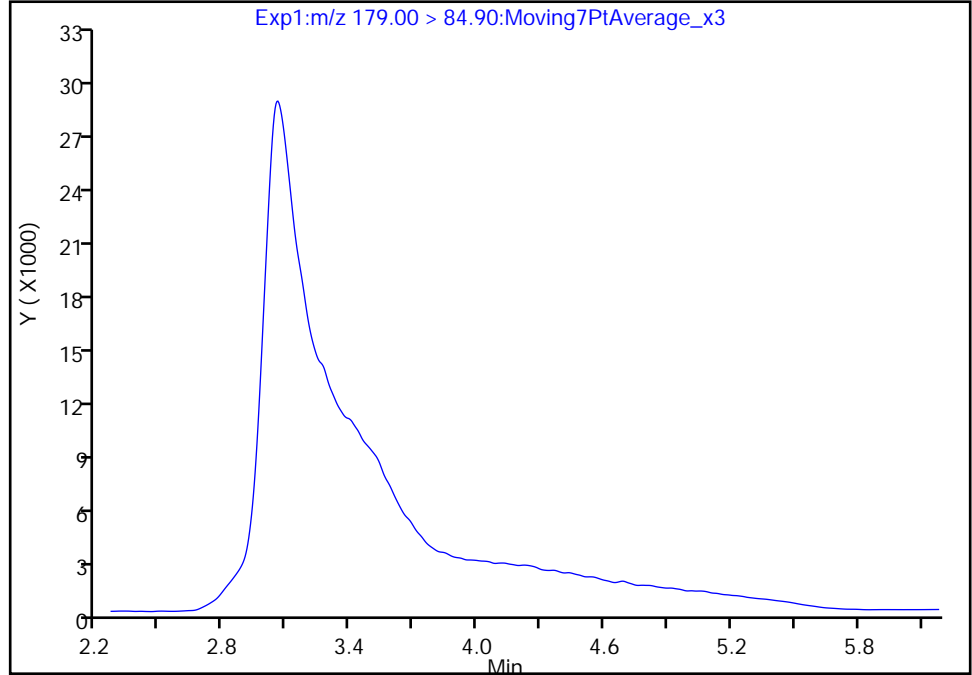
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Injection Date: 24-Feb-2021 07:03:49 Instrument ID: A10
Lims ID: CCV L7 (431)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 27 Worklist Smp#: 14
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

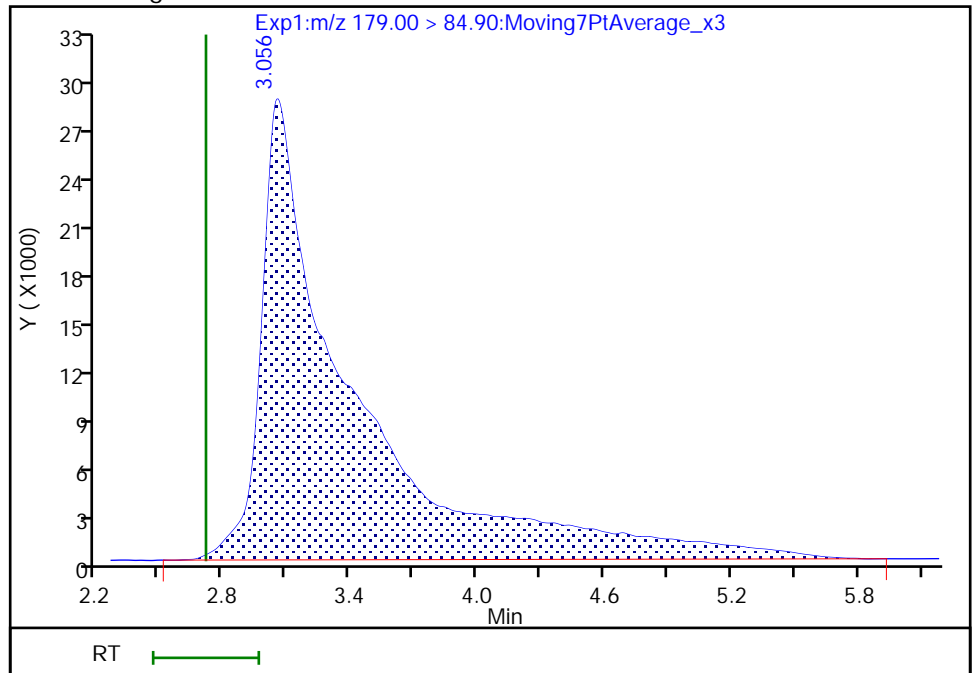
Not Detected
Expected RT: 2.72

Processing Integration Results



Manual Integration Results

RT: 3.06
Area: 840848
Amount: 0.083983
Amount Units: ng/ml



Reviewer: vangmy, 24-Feb-2021 09:21:36
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

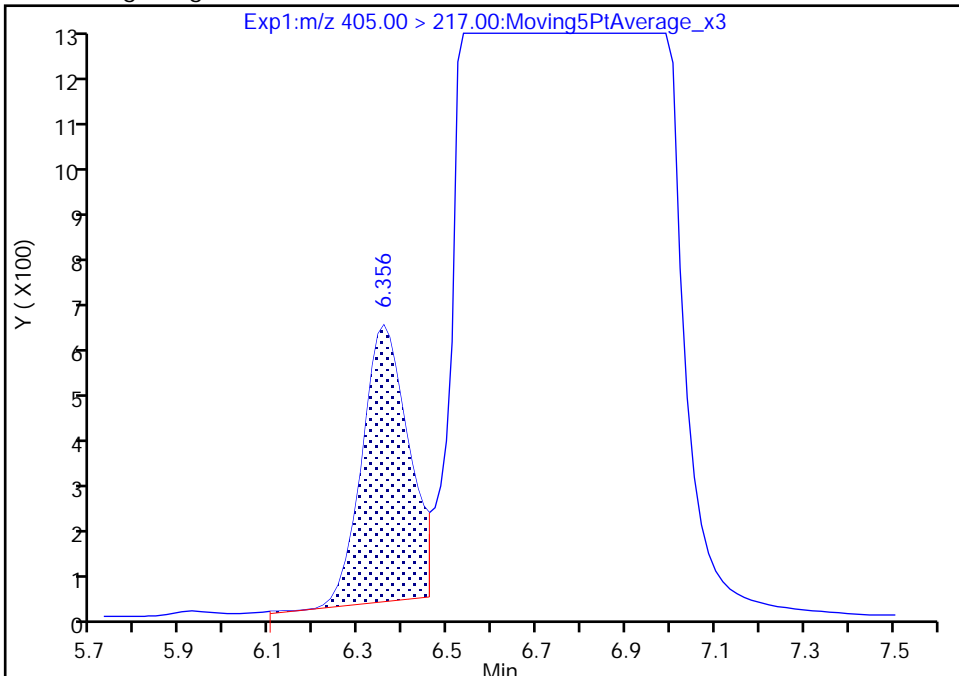
Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_027.d
Injection Date: 24-Feb-2021 07:03:49 Instrument ID: A10
Lims ID: CCV L7 (431)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 27 Worklist Smp#: 14
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

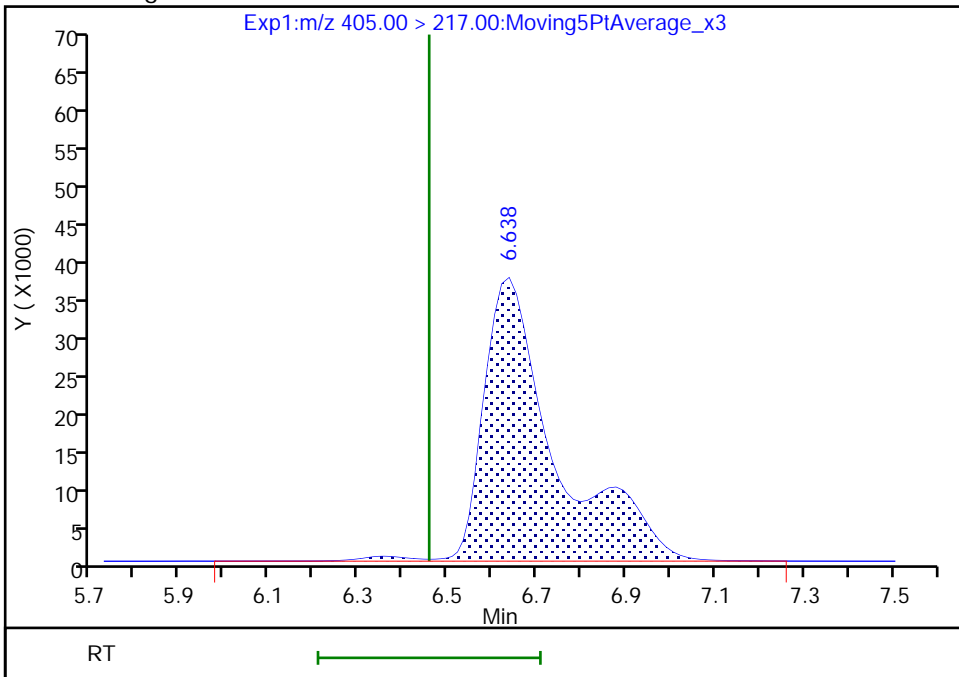
RT: 6.36
Area: 4316
Amount: 0.001049
Amount Units: ng/ml

Processing Integration Results



RT: 6.64
Area: 421926
Amount: 0.102563
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 09:21:39
Audit Action: Manually Integrated

Euofins TestAmerica, Sacramento

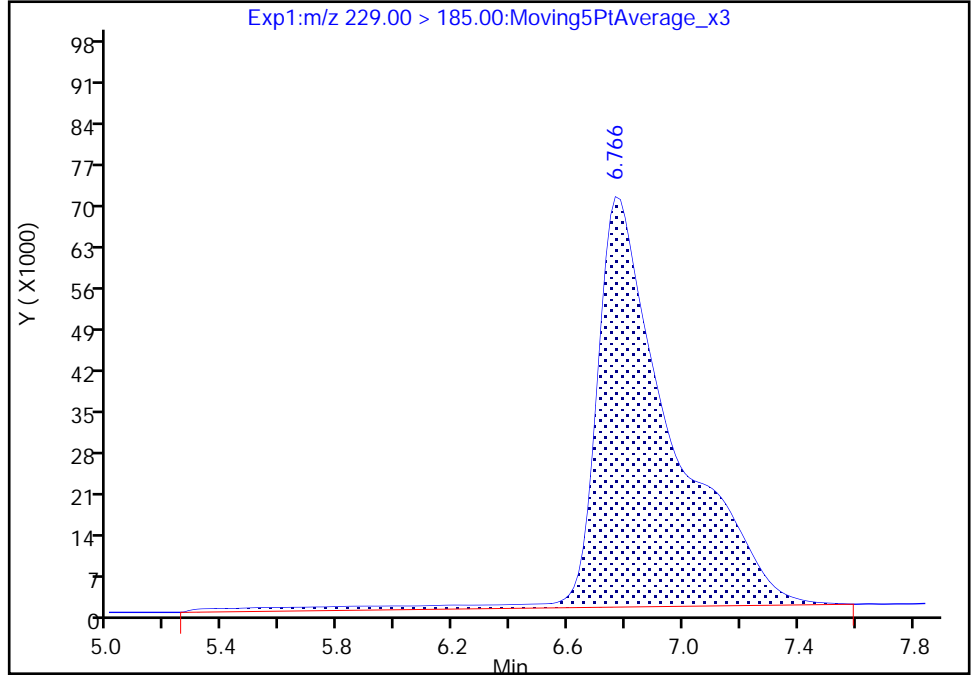
Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_027.d
Injection Date: 24-Feb-2021 07:03:49 Instrument ID: A10
Lims ID: CCV L7 (431)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 27 Worklist Smp#: 14
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

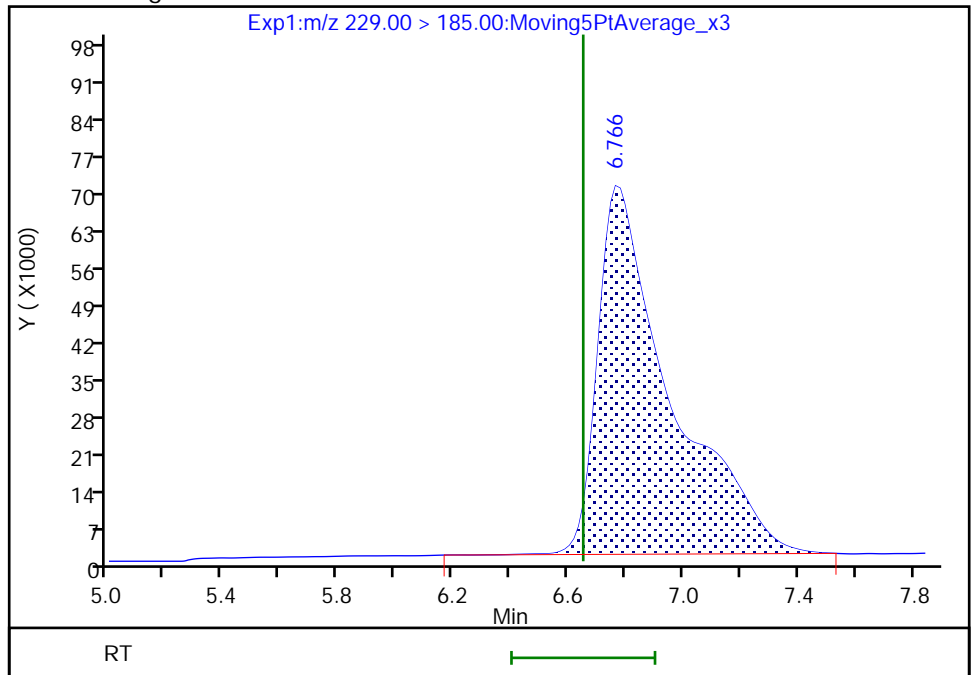
RT: 6.77
Area: 1284007
Amount: 0.100911
Amount Units: ng/ml

Processing Integration Results



RT: 6.77
Area: 1221888
Amount: 0.095920
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 09:21:47
Audit Action: Manually Integrated

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1
 SDG No.: _____
 Lab Sample ID: CCV 320-464205/27 Calibration Date: 02/24/2021 10:50
 Instrument ID: A10 Calib Start Date: 02/20/2021 10:46
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 02/20/2021 14:15
 Lab File ID: 2021.02.23_A10_TB3+_B_040.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PFMOAA	Ave	10012162	8149790		81.4	100	-18.6	30.0
R-EVE	Ave	4113840	4125360		100	100	0.3	50.0
R-PSDA	Ave	2716137	2753480		101	100	1.4	50.0
Hydrolyzed PSDA	Ave	7941832	8258170		104	100	4.0	50.0
PMPA	Lin2		11412490		89.4	100	-10.6	30.0
NVHOS	Ave	7666241	7063990		92.1	100	-7.9	30.0
PFO2HxA	Ave	9391118	8947150		95.3	100	-4.7	30.0
PEPA	Ave	5591875	6035290		108	100	7.9	30.0
PES	Ave	46961888	45029760		95.9	100	-4.1	30.0
PFECA B	Ave	6491153	6370760		98.1	100	-1.9	30.0
PFO3OA	Ave	5993289	5482420		91.5	100	-8.5	30.0
HFPO-DA	AveID	1.089	1.057		97.1	100	-2.9	40.0
R-PSDCA	Ave	62863071	57165040		90.9	100	-9.1	30.0
Hydro-EVE Acid	Ave	78962538	70278360		89.0	100	-11.0	30.0
Perfluoroheptanoic acid	L2ID		1.055		99.7	100	-0.3	40.0
Hydro-PS Acid	Ave	25408908	23670710		93.2	100	-6.8	30.0
PFECA G	Ave	9393669	10935460		116	100	16.4	30.0
PFO4DA	Ave	5158483	4489160		87.0	100	-13.0	30.0
EVE Acid	Ave	45172088	45191430		100	100	0.0	30.0
PS Acid	Ave	11430757	11518680		101	100	0.8	30.0
PFO5DA	Ave	3748927	2750720		73.4	100	-26.6	50.0
13C3 HFPO-DA	Ave	5532191	5488136		248	250	-0.8	50.0
13C4 PFHpA	Ave	25406808	24634244		242	250	-3.0	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_040.d
 Lims ID: CCV L7 (434)
 Client ID:
 Sample Type: CCV
 Inject. Date: 24-Feb-2021 10:50:47 ALS Bottle#: 40 Worklist Smp#: 27
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L7 (434)
 Misc. Info.: Plate: 1 Rack: 2
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Sublist: chrom-A10_PFAS_CHEM_TB3+*sub1

Method: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Feb-2021 07:50:16 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1619

First Level Reviewer: vangmy Date: 24-Feb-2021 11:35:04

Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	2.741	2.716	0.025		814979	0.0814		81.4	112	M
2 R-EVE										M
405.00 > 217.00	6.484	6.458	0.026		412536	0.1003		100	9813	M
3 R-PSDA										
440.90 > 241.00	6.573	6.560	0.013		275348	0.1014		101	6654	
23 PMPA										
229.00 > 185.00	6.669	6.653	0.016		1141249	0.0894		89.4	483	
4 Hydrolyzed PSDA										M
439.00 > 343.00	6.669	6.669	0.0		825817	0.1040		104	14738	M
5 NVHOS										M
297.00 > 135.00	7.260	7.260	0.0		706399	0.0921		92.1	12652	M
6 PFO2HxA										
245.00 > 85.00	7.863	7.863	0.0		894715	0.0953		95.3	9073	
22 PEPA										
278.90 > 234.90	8.521	8.521	0.0		603529	0.1079		108	948	
7 PES										
314.90 > 135.00	8.861	8.860	0.001		4502976	0.0959		95.9	152929	
8 PFECA B										
295.00 > 201.00	9.087	9.087	0.0		637076	0.0981		98.1	17772	
9 PFO3OA										
310.90 > 85.00	9.321	9.321	0.0		548242	0.0915		91.5	5901	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.432	9.432	0.0		1372034	0.2480		99.2	55664	
11 HPFO-DA										
285.00 > 169.00	9.432	9.432	0.0	1.000	580114	0.0971		97.1	23456	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.792	9.792	0.0		5716504	0.0909		90.9	177074	
13 Hydro-EVE Acid										
427.00 > 282.90	9.850	9.849	0.001		7027836	0.0890		89.0	95717	
D 14 13C4 PFHpA										
367.00 > 322.00	9.850	9.849	0.001		6158561	0.2424		97.0	128308	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.850	9.849	0.001	1.000	2598734	0.0997	Target=0.00	99.7	18097	
363.00 > 169.00	9.850	9.849	0.001	1.000	1092554		2.38(0.00-0.00)		27419	
15 Hydro-PS Acid										
463.00 > 262.90	9.888	9.868	0.020		2367071	0.0932		93.2	51519	
17 PFECA G										
378.90 > 184.90	9.959	9.958	0.0		1093546	0.1164		116	45414	
18 PFO4DA										
376.90 > 85.00	10.101	10.100	0.001		448916	0.0870		87.0	3005	
19 PS Acid										
443.00 > 146.90	10.184	10.184	0.0		1151868	0.1008		101	34689	
20 EVE Acid										
407.00 > 262.90	10.184	10.184	0.0		4519143	0.1000		100	90986	
21 TAF										
442.90 > 85.00	10.683	10.668	0.015		275072	0.0734		73.4	487	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD7_00434

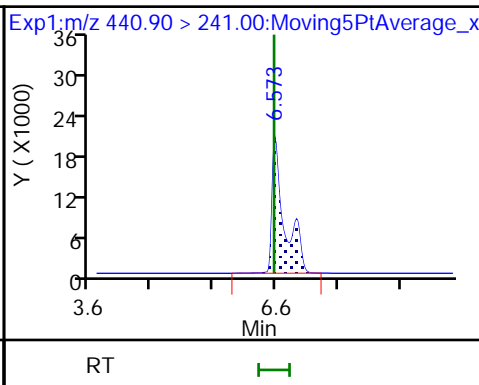
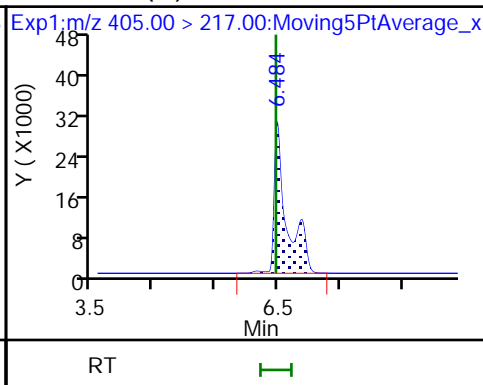
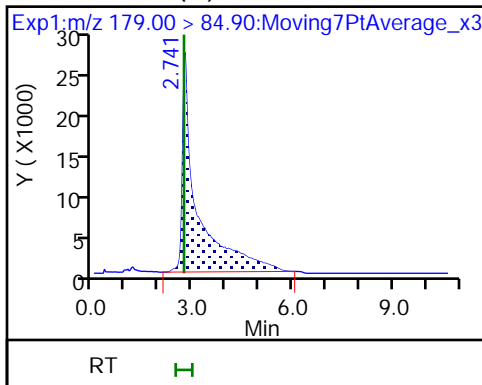
Amount Added: 1.00

Units: mL

1 PFMOAA (M)

2 R-EVE (M)

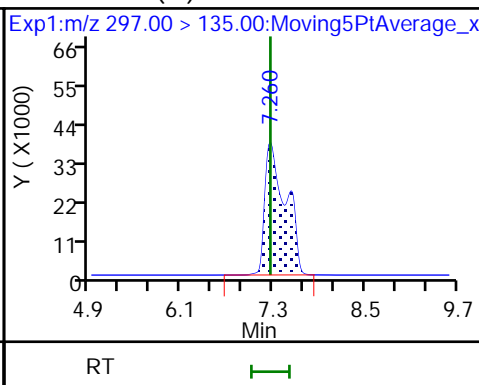
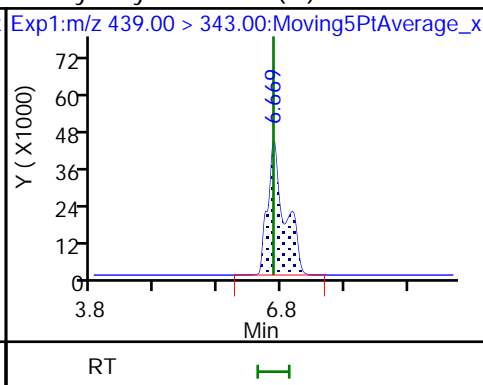
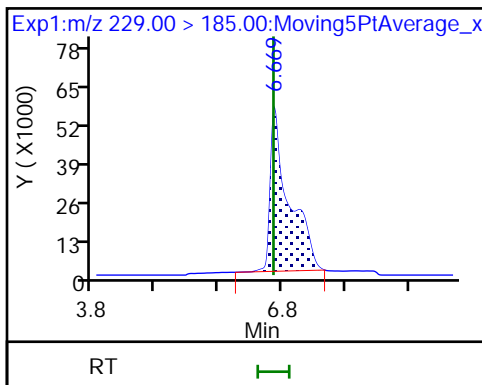
3 R-PSDA



23 PMPA

4 Hydrolyzed PSDA (M)

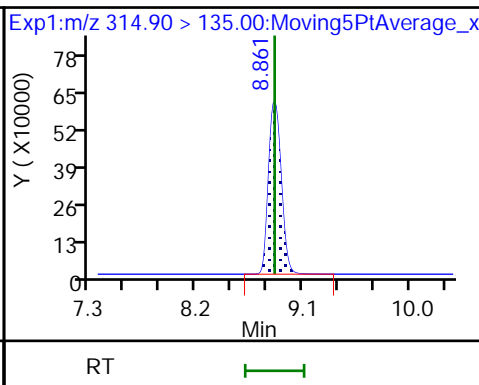
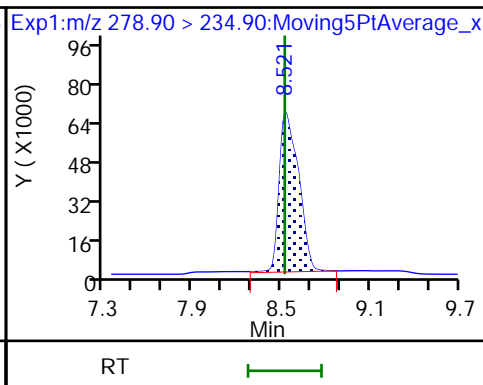
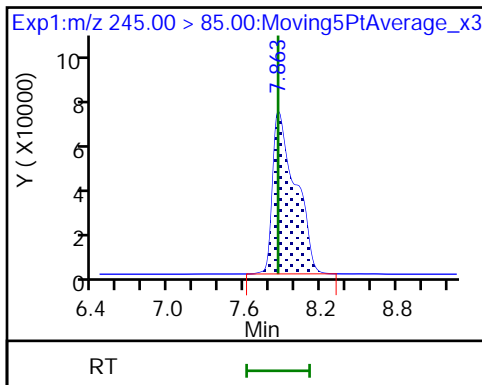
5 NVHOS (M)



6 PFO2HxA

22 PEPA

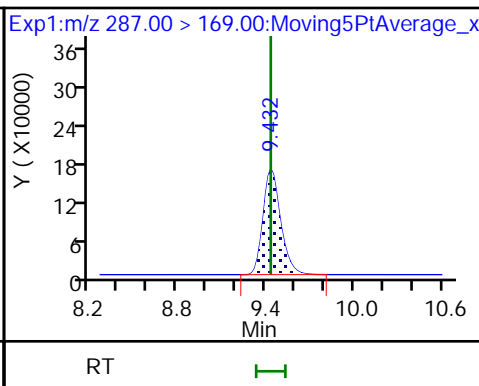
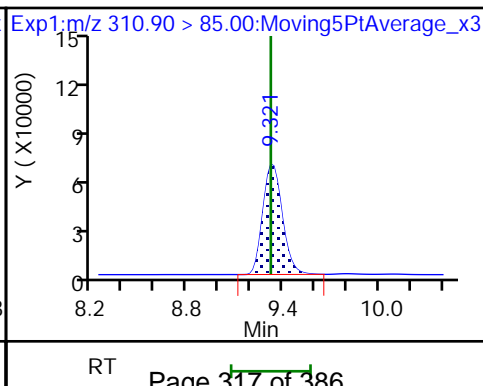
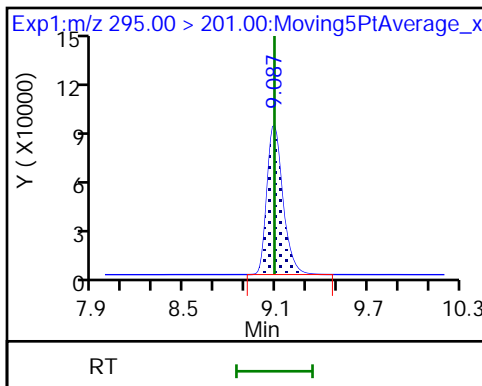
7 PES

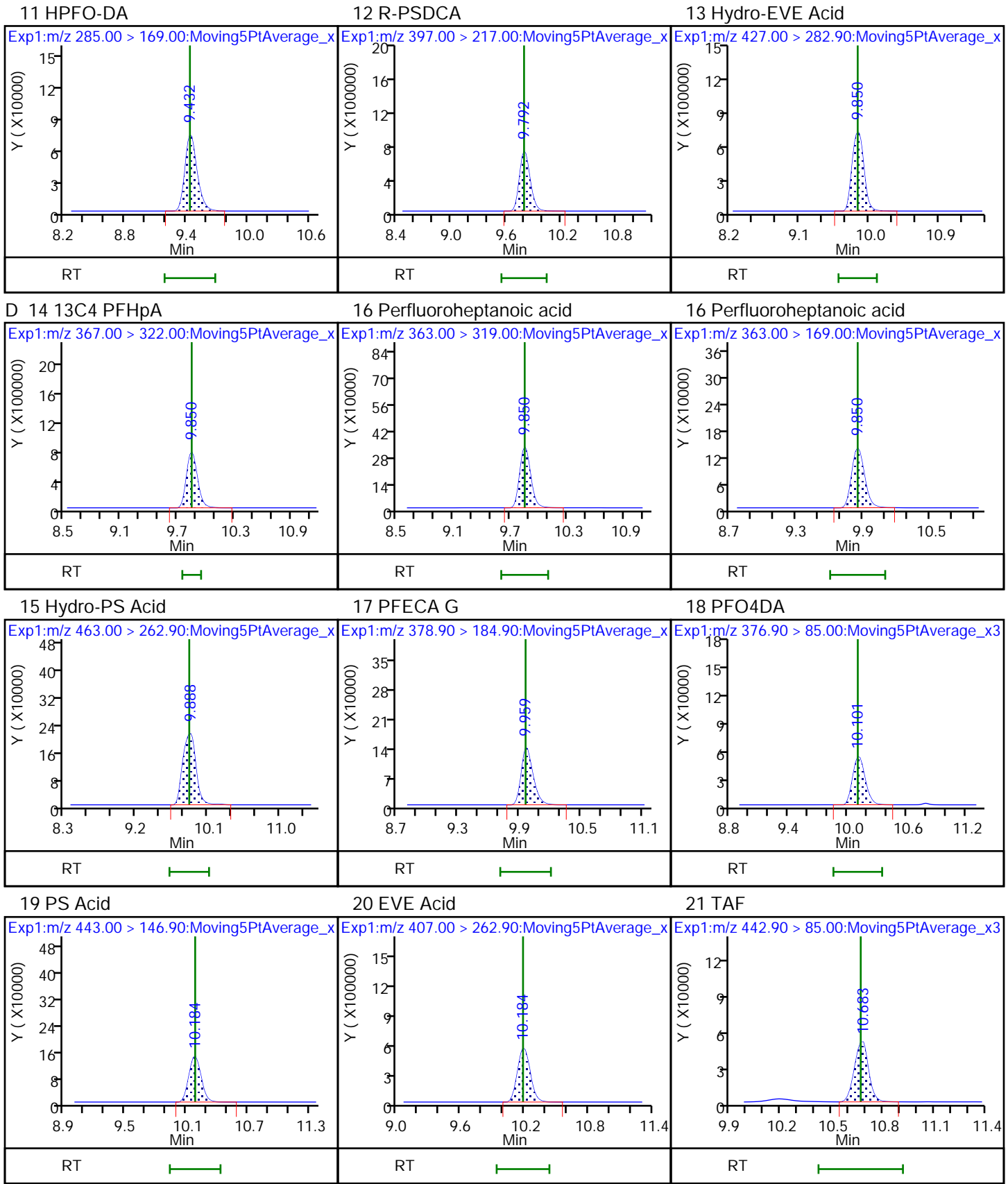


8 PFECA B

9 PFO3OA

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

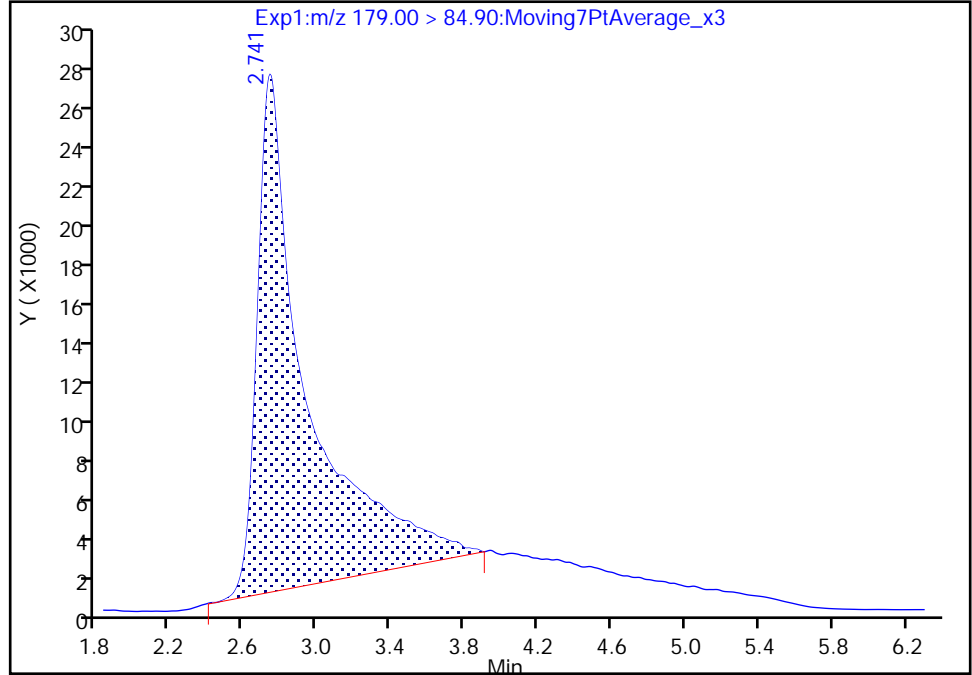
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Injection Date: 24-Feb-2021 10:50:47 Instrument ID: A10
Lims ID: CCV L7 (434)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 40 Worklist Smp#: 27
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

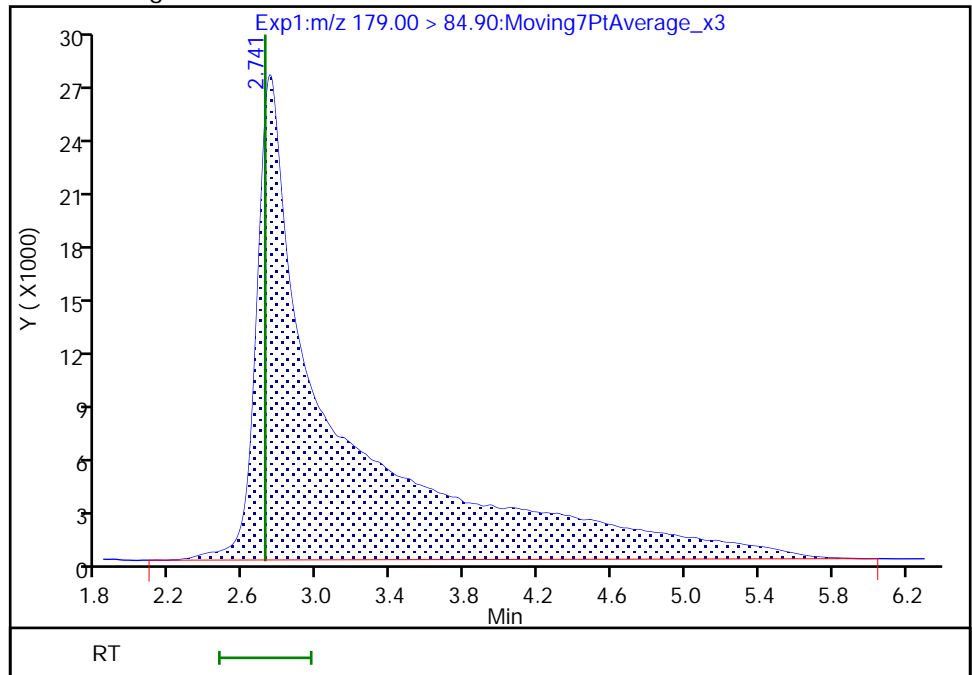
RT: 2.74
Area: 493401
Amount: 0.049280
Amount Units: ng/ml

Processing Integration Results



RT: 2.74
Area: 814979
Amount: 0.081399
Amount Units: ng/ml

Manual Integration Results



Reviewer: ruangyotsakuld, 25-Feb-2021 07:50:06

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Sacramento

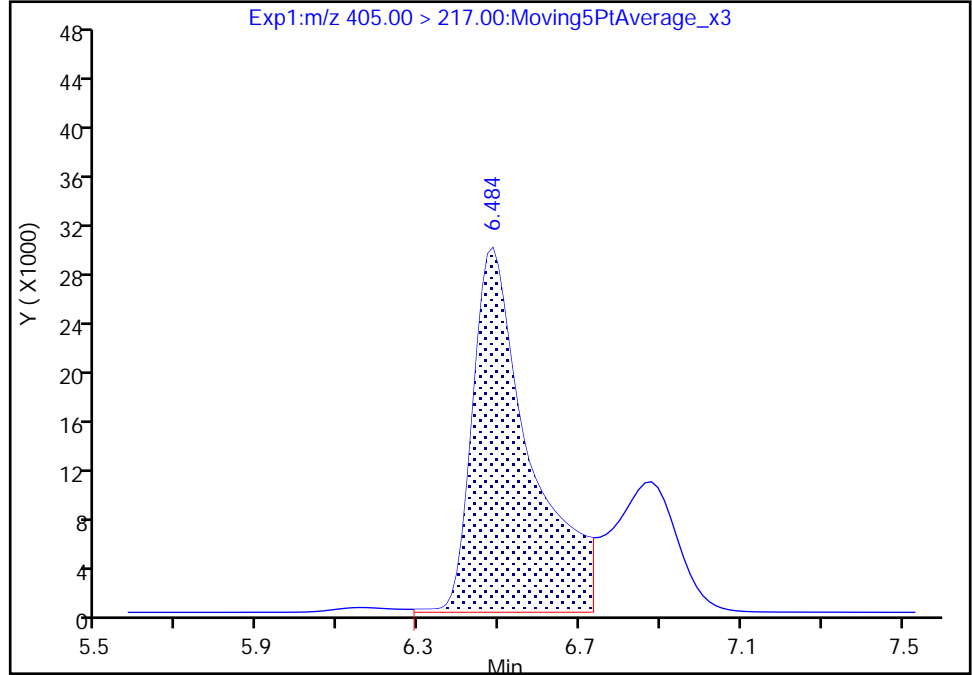
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Injection Date: 24-Feb-2021 10:50:47 Instrument ID: A10
Lims ID: CCV L7 (434)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 40 Worklist Smp#: 27
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

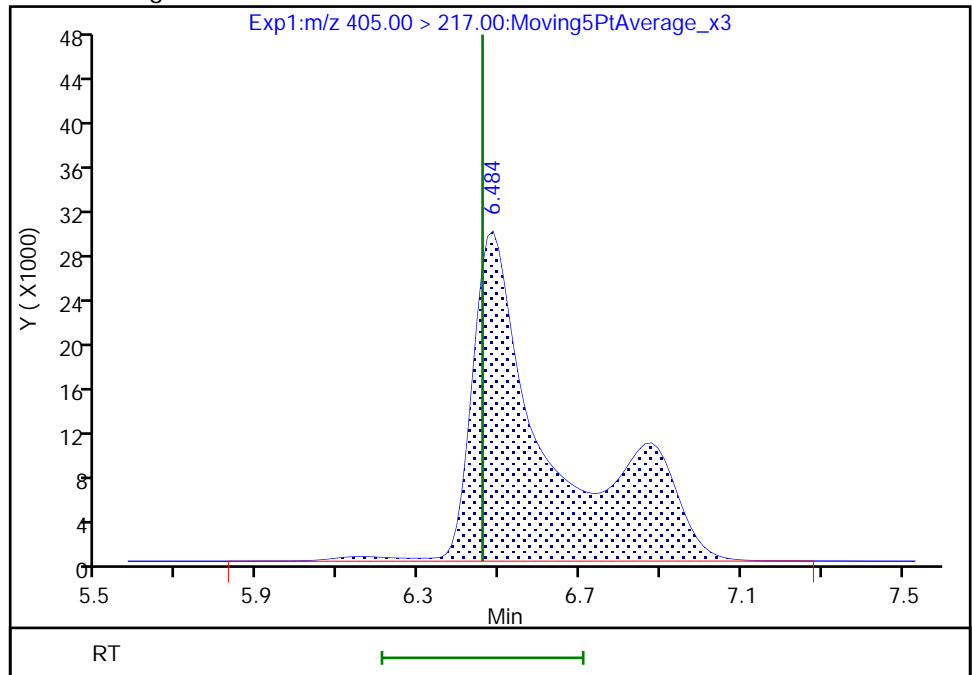
RT: 6.48
Area: 289769
Amount: 0.070438
Amount Units: ng/ml

Processing Integration Results



RT: 6.48
Area: 412536
Amount: 0.100280
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 11:34:32
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

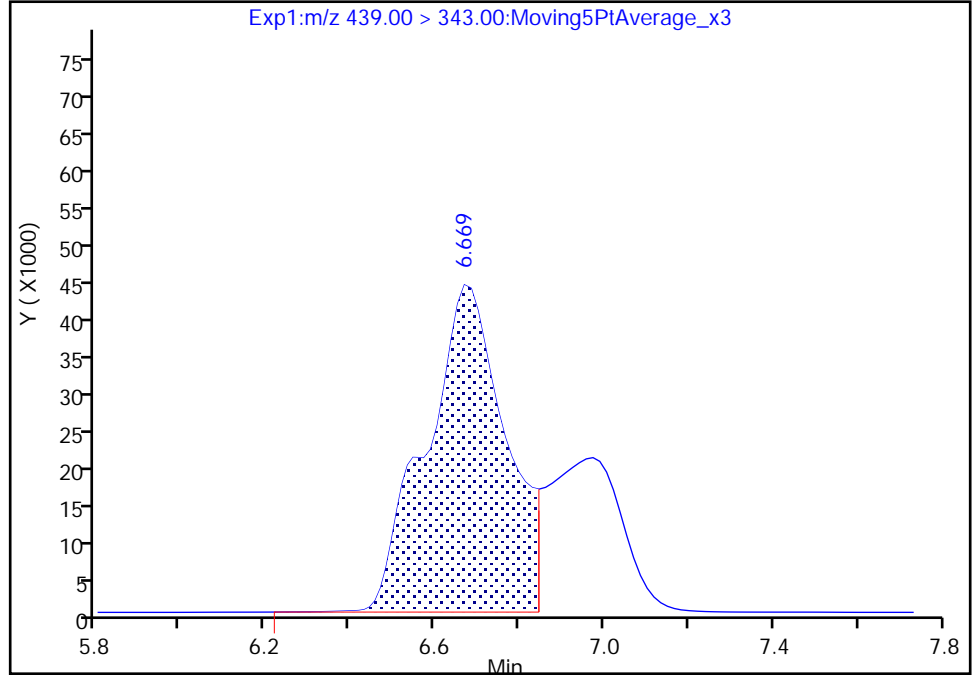
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Injection Date: 24-Feb-2021 10:50:47 Instrument ID: A10
Lims ID: CCV L7 (434)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 40 Worklist Smp#: 27
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

4 Hydrolyzed PSDA, CAS: 2416366-19-1

Signal: 1

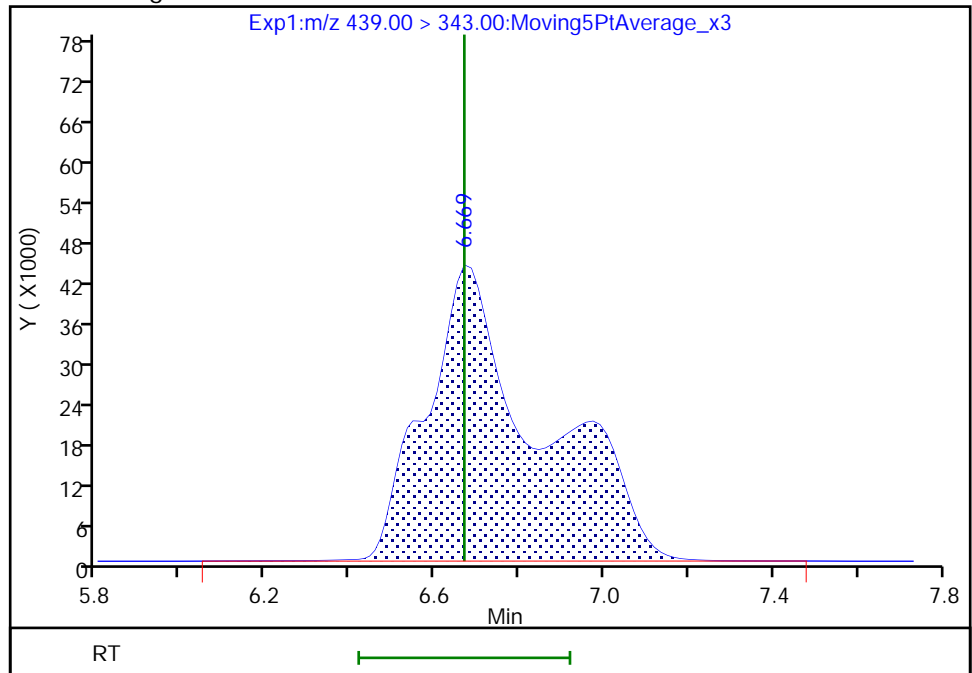
RT: 6.67
Area: 573431
Amount: 0.072204
Amount Units: ng/ml

Processing Integration Results



RT: 6.67
Area: 825817
Amount: 0.103983
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 11:34:37
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

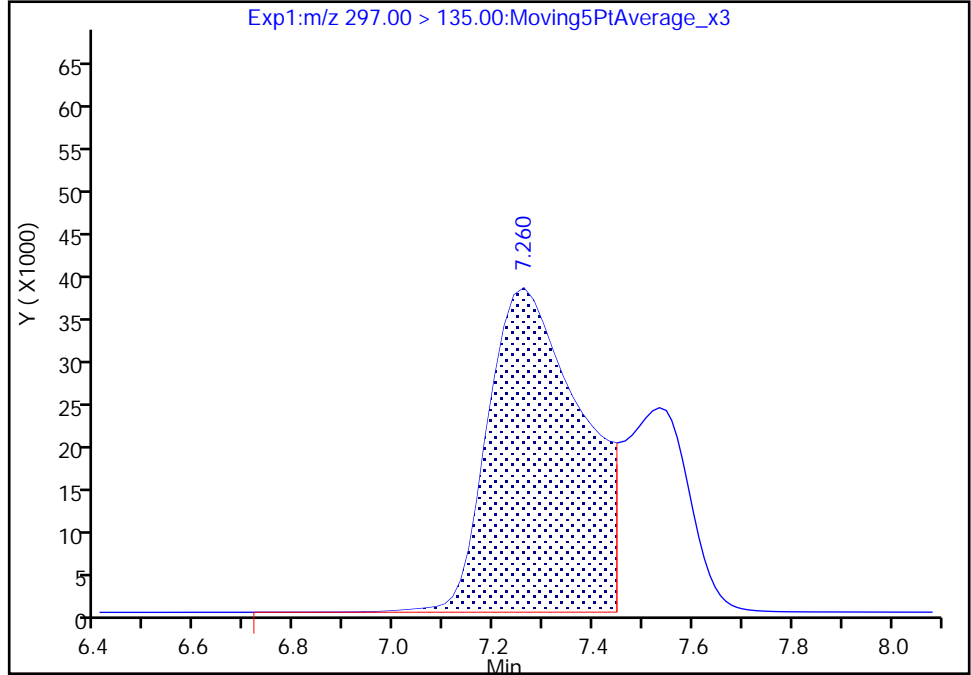
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Injection Date: 24-Feb-2021 10:50:47 Instrument ID: A10
Lims ID: CCV L7 (434)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 40 Worklist Smp#: 27
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

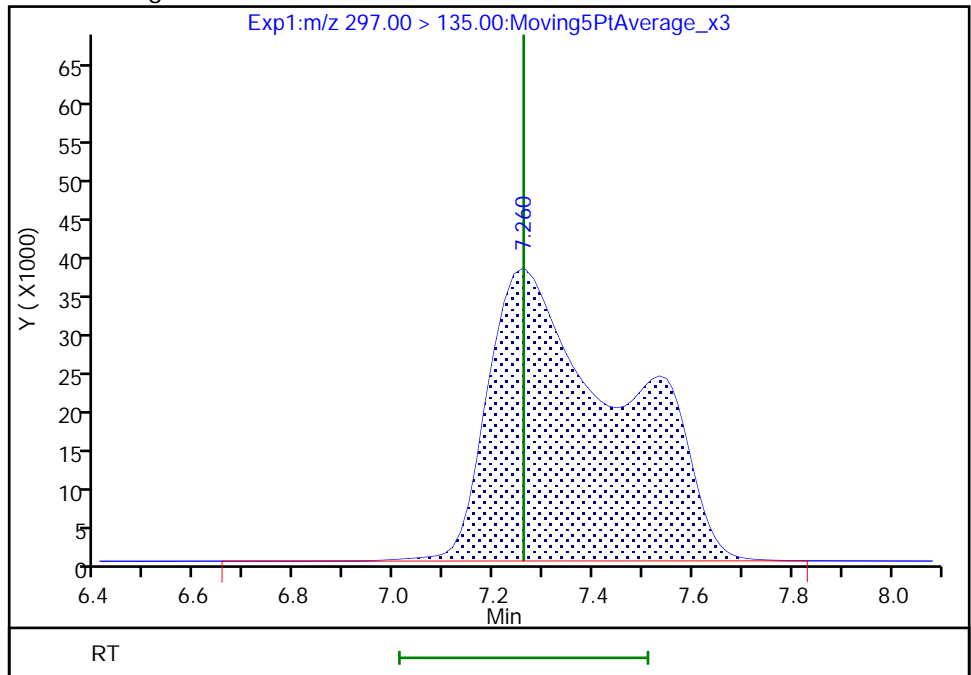
RT: 7.26
Area: 492664
Amount: 0.064264
Amount Units: ng/ml

Processing Integration Results



RT: 7.26
Area: 706399
Amount: 0.092144
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 11:34:40
Audit Action: Manually Integrated

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1
 SDG No.: _____
 Lab Sample ID: CCV 320-464873/20 Calibration Date: 02/25/2021 17:16
 Instrument ID: A10 Calib Start Date: 02/20/2021 10:46
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 02/20/2021 14:15
 Lab File ID: 2021.02.25_A10_TB3+_C_021.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PFMOAA	Ave	10012162	9460530		94.5	100	-5.5	30.0
R-EVE	Ave	4113840	4387600		107	100	6.7	50.0
R-PSDA	Ave	2716137	2806950		103	100	3.3	50.0
Hydrolyzed PSDA	Ave	7941832	8669620		109	100	9.2	50.0
PMPA	Lin2		12408740		97.4	100	-2.6	30.0
NVHOS	Ave	7666241	7149930		93.3	100	-6.7	30.0
PFO2HxA	Ave	9391118	10366130		110	100	10.4	30.0
PEPA	Ave	5591875	6064640		108	100	8.5	30.0
PES	Ave	46961888	45061860		96.0	100	-4.0	30.0
PFECA B	Ave	6491153	7186110		111	100	10.7	30.0
PFO3OA	Ave	5993289	6584450		110	100	9.9	30.0
HFPO-DA	AveID	1.089	1.031		94.7	100	-5.3	40.0
R-PSDCA	Ave	62863071	60984470		97.0	100	-3.0	30.0
Hydro-EVE Acid	Ave	78962538	75640650		95.8	100	-4.2	30.0
Perfluoroheptanoic acid	L2ID		1.034		97.8	100	-2.2	40.0
Hydro-PS Acid	Ave	25408908	23815210		93.7	100	-6.3	30.0
PFECA G	Ave	9393669	11891050		127	100	26.6	30.0
PFO4DA	Ave	5158483	6180890		120	100	19.8	30.0
EVE Acid	Ave	45172088	48859400		108	100	8.2	30.0
PS Acid	Ave	11430757	12080090		106	100	5.7	30.0
PFO5DA	Ave	3748927	3856540		103	100	2.9	50.0
13C3 HFPO-DA	Ave	5532191	5584176		252	250	0.9	50.0
13C4 PFHpA	Ave	25406808	25404444		250	250	-0.0	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\2021.02.25_A10_TB3+_C_021.d
 Lims ID: CCV L7 (429)
 Client ID:
 Sample Type: CCV
 Inject. Date: 25-Feb-2021 17:16:04 ALS Bottle#: 21 Worklist Smp#: 20
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L7 (429)
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Sublist: chrom-A10_PFAS_CHEM_TB3+*sub1

Method: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 26-Feb-2021 09:34:40 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1686

First Level Reviewer: ruangyotsakuld Date: 26-Feb-2021 08:41:10
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.404	2.716	0.688		946053	0.0945		94.5	152	M
2 R-EVE										M
405.00 > 217.00	6.685	6.458	0.227		438760	0.1067		107	15071	M
3 R-PSDA										
440.90 > 241.00	6.749	6.560	0.189		280695	0.1033		103	9761	
23 PMPA										
229.00 > 185.00	6.862	6.653	0.209		1240874	0.0974		97.4	900	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.829	6.669	0.160		866962	0.1092		109	23422	
5 NVHOS										
297.00 > 135.00	7.378	7.260	0.118		714993	0.0933		93.3	20404	
6 PFO2HxA										
245.00 > 85.00	7.941	7.863	0.078		1036613	0.1104		110	15339	
22 PEPA										
278.90 > 234.90	8.557	8.521	0.036		606464	0.1085		108	1438	
7 PES										
314.90 > 135.00	8.856	8.860	-0.004		4506186	0.0960		96.0	190037	
8 PFECA B										
295.00 > 201.00	9.083	9.087	-0.004		718611	0.1107		111	23664	
9 PFO3OA										
310.90 > 85.00	9.329	9.321	0.008		658445	0.1099		110	13392	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.422	9.432	-0.010		1396044	0.2523		101	58245	
11 HPFO-DA										
285.00 > 169.00	9.422	9.432	-0.010	1.000	575873	0.0947		94.7	23820	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.781	9.792	-0.011		6098447	0.0970		97.0	152400	
13 Hydro-EVE Acid										
427.00 > 282.90	9.838	9.849	-0.011		7564065	0.0958		95.8	103360	
D 14 13C4 PFHpA										
367.00 > 322.00	9.838	9.849	-0.011		6351111	0.2500		100	133128	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.838	9.849	-0.011	1.000	2627052	0.0978	Target=0.00	97.8	20679	
363.00 > 169.00	9.838	9.849	-0.011	1.000	1117940		2.35(0.00-0.00)		28202	
15 Hydro-PS Acid										M
463.00 > 262.90	9.857	9.868	-0.011		2381521	0.0937		93.7	12412	M
17 PFECA G										
378.90 > 184.90	9.948	9.958	-0.010		1189105	0.1266		127	50203	
18 PFO4DA										
376.90 > 85.00	10.086	10.100	-0.014		618089	0.1198		120	4358	
19 PS Acid										
443.00 > 146.90	10.171	10.184	-0.013		1208009	0.1057		106	35959	
20 EVE Acid										
407.00 > 262.90	10.171	10.184	-0.013		4885940	0.1082		108	96719	
21 TAF										
442.90 > 85.00	10.659	10.668	-0.009		385654	0.1029		103	658	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD7_00429

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\2021.02.25_A10_TB3+_C_021.d

Injection Date: 25-Feb-2021 17:16:04

Instrument ID: A10

Lims ID: CCV L7 (429)

Client ID:

Operator ID: Sac_inst_A10

ALS Bottle#: 21

Worklist Smp#: 20

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

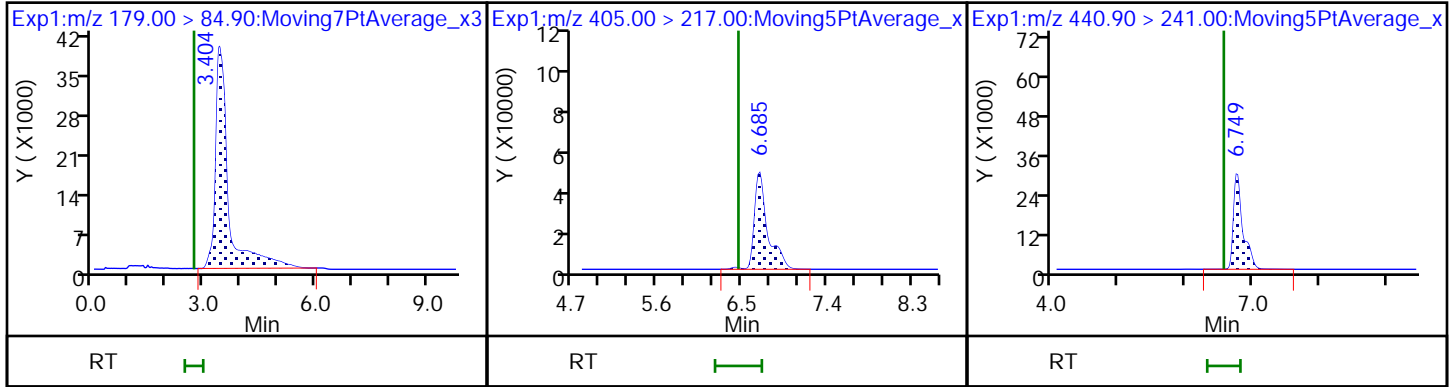
Method: A10_PFA5_CHEM_TB3+

Limit Group: LC PFA5_TB3P - ICAL

1 PFMOAA (M)

2 R-EVE (M)

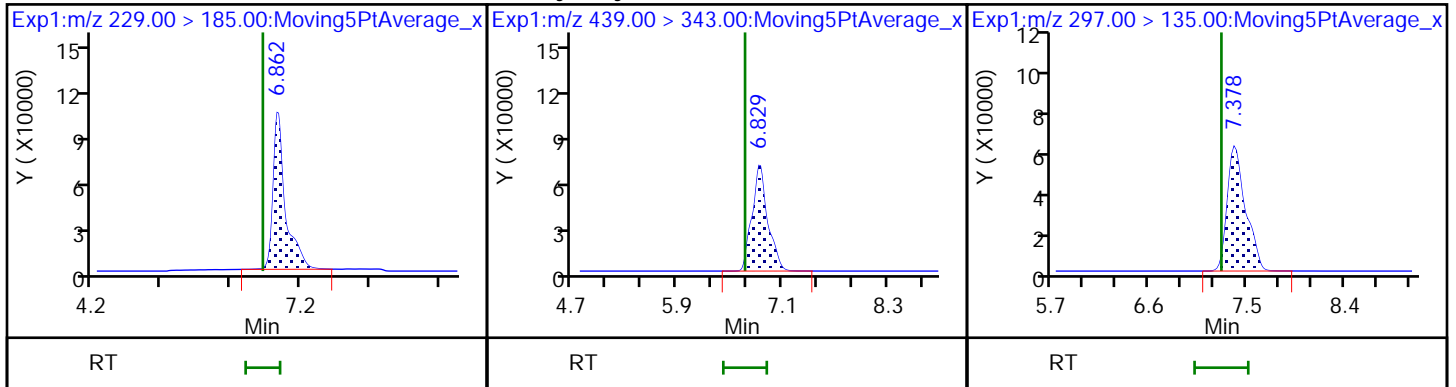
3 R-PSDA



23 PMPA

4 Hydrolyzed PSDA

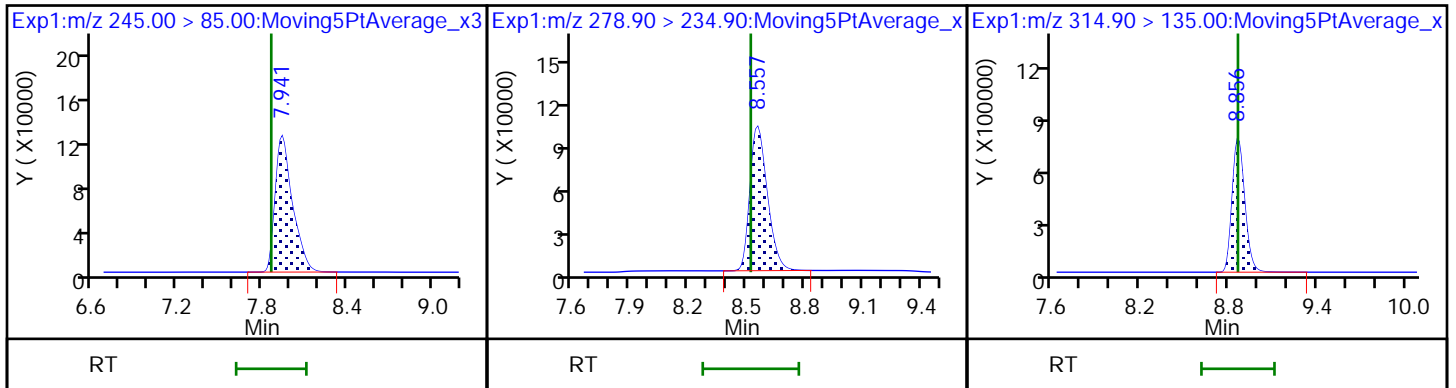
5 NVHOS



6 PFO2HxA

22 PEPA

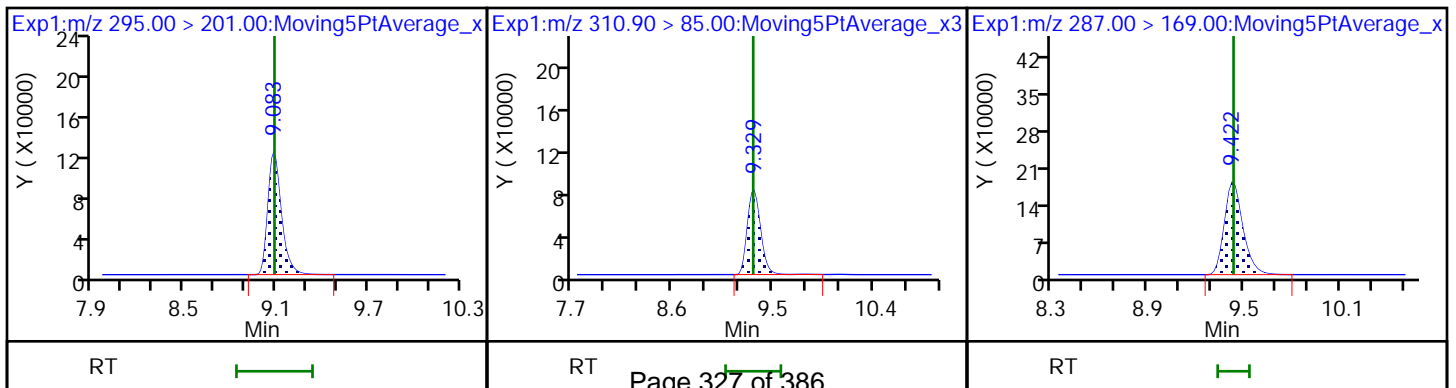
7 PES

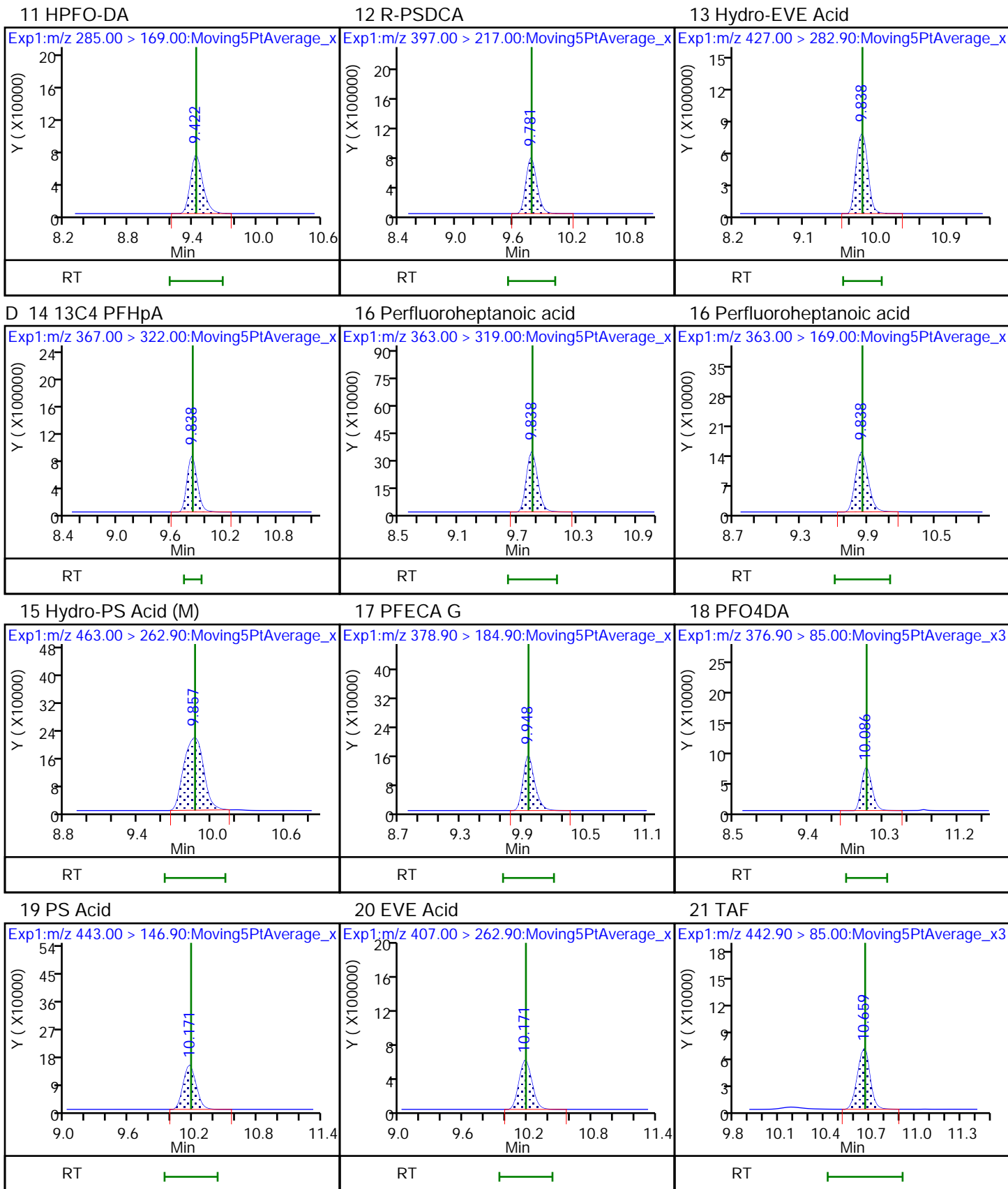


8 PFECA B

9 PFO3OA

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

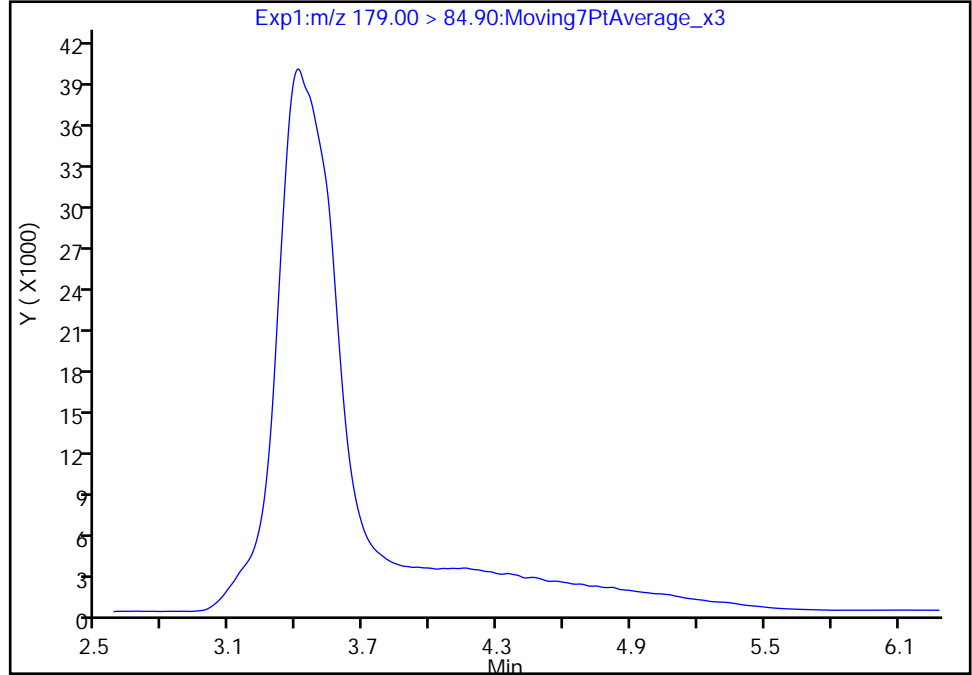
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Injection Date: 25-Feb-2021 17:16:04 Instrument ID: A10
Lims ID: CCV L7 (429)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 21 Worklist Smp#: 20
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

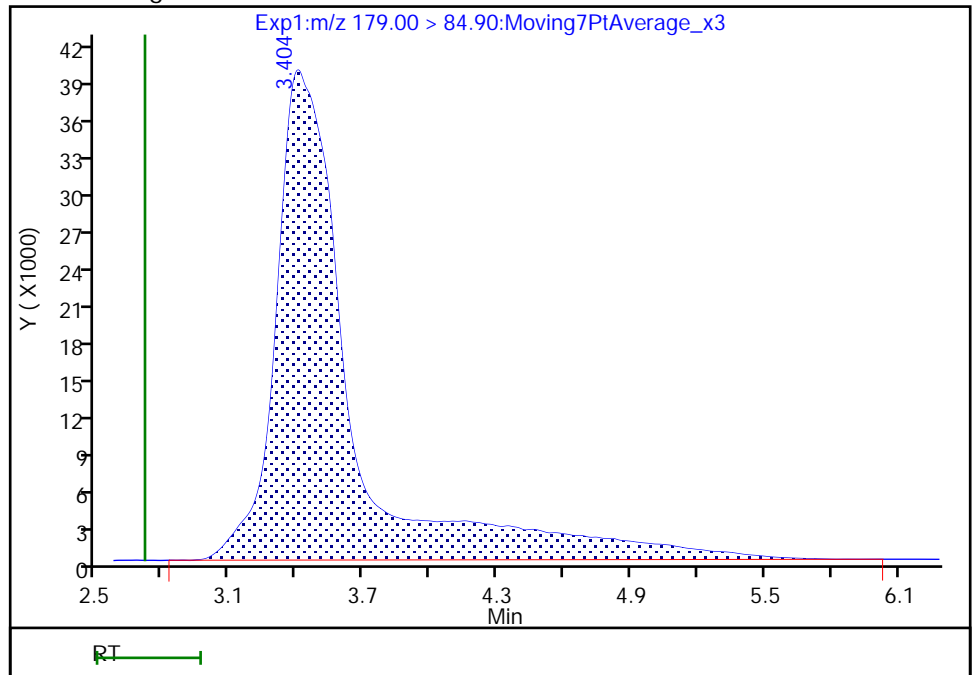
Not Detected
Expected RT: 2.72

Processing Integration Results



Manual Integration Results

RT: 3.40
Area: 946053
Amount: 0.094490
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 26-Feb-2021 08:40:59

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Sacramento

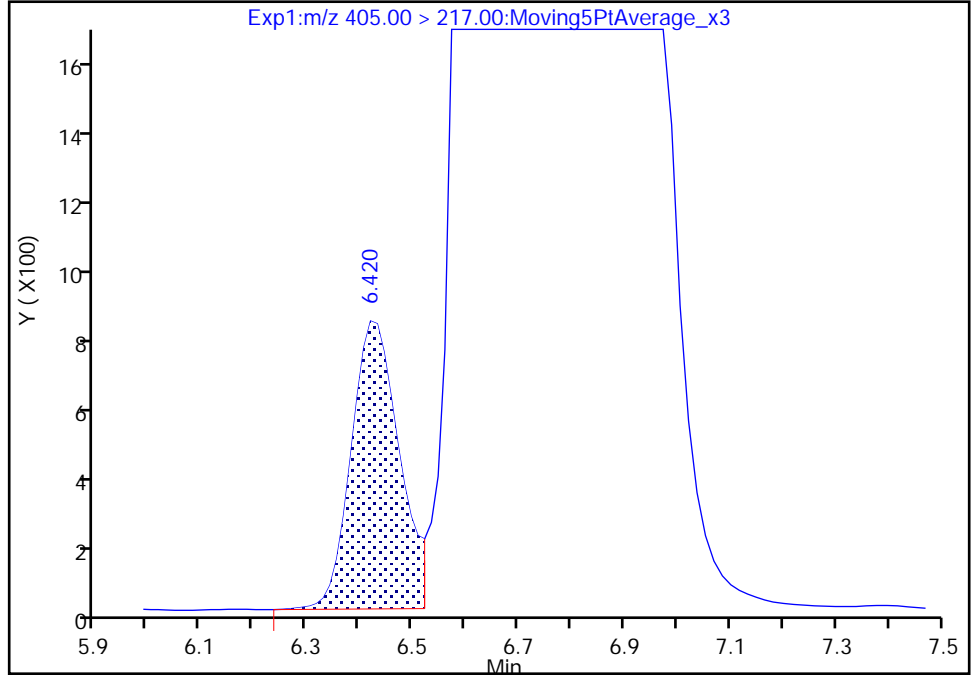
Data File: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\2021.02.25_A10_TB3+_C_021.d
Injection Date: 25-Feb-2021 17:16:04 Instrument ID: A10
Lims ID: CCV L7 (429)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 21 Worklist Smp#: 20
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

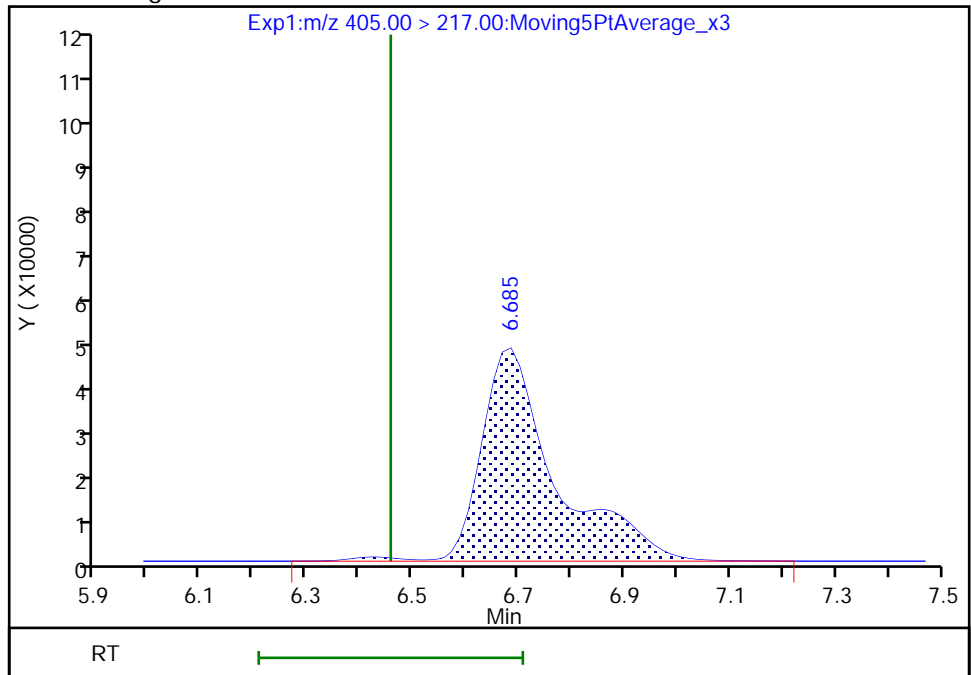
RT: 6.42
Area: 5241
Amount: 0.001274
Amount Units: ng/ml

Processing Integration Results



RT: 6.69
Area: 438760
Amount: 0.106655
Amount Units: ng/ml

Manual Integration Results



Reviewer: ruangyotsakuld, 26-Feb-2021 08:41:02

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Sacramento

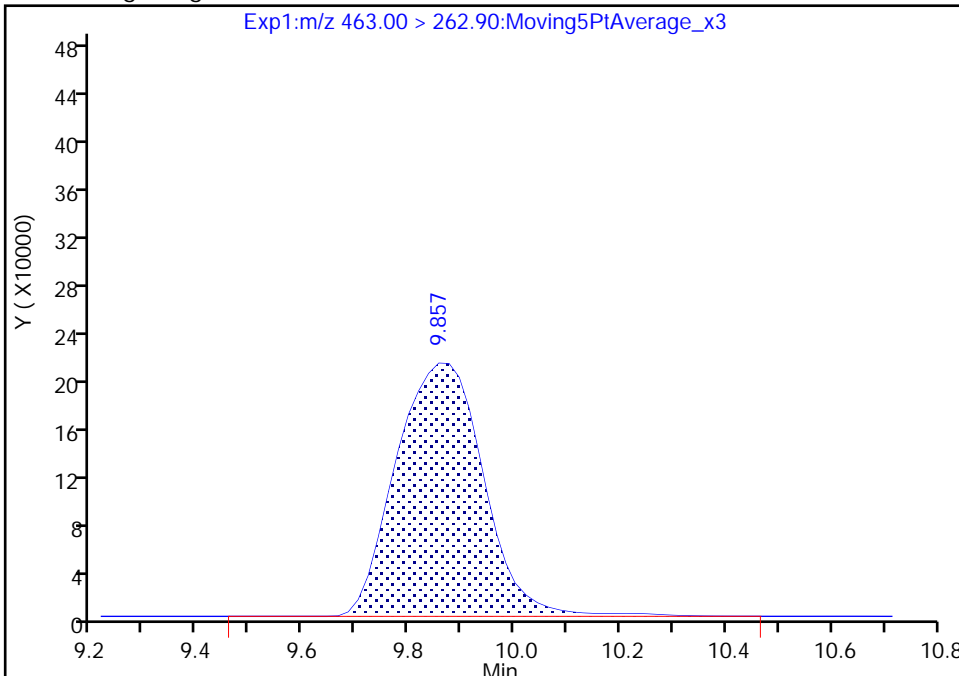
Data File: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\2021.02.25_A10_TB3+_C_021.d
Injection Date: 25-Feb-2021 17:16:04 Instrument ID: A10
Lims ID: CCV L7 (429)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 21 Worklist Smp#: 20
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

15 Hydro-PS Acid, CAS: 749836-20-2

Signal: 1

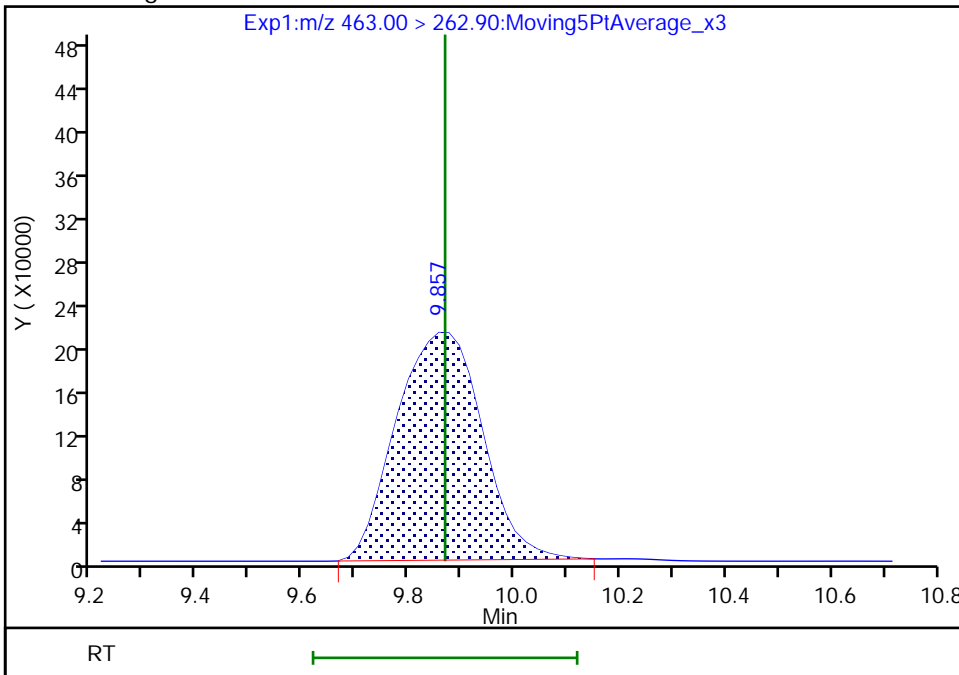
RT: 9.86
Area: 2434454
Amount: 0.095811
Amount Units: ng/ml

Processing Integration Results



RT: 9.86
Area: 2381521
Amount: 0.093728
Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 09:34:31
Audit Action: Manually Integrated

Audit Reason: Baseline
Page 332 of 386

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1
 SDG No.: _____
 Lab Sample ID: CCV 320-464873/29 Calibration Date: 02/25/2021 19:53
 Instrument ID: A10 Calib Start Date: 02/20/2021 10:46
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 02/20/2021 14:15
 Lab File ID: 2021.02.25_A10_TB3+_C_030.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PFMOAA	Ave	10012162	9008800		90.0	100	-10.0	30.0
R-EVE	Ave	4113840	3960420		96.3	100	-3.7	50.0
R-PSDA	Ave	2716137	2508360		92.4	100	-7.6	50.0
Hydrolyzed PSDA	Ave	7941832	7734620		97.4	100	-2.6	50.0
PMPA	Lin2		11818610		92.7	100	-7.3	30.0
NVHOS	Ave	7666241	6692390		87.3	100	-12.7	30.0
PFO2HxA	Ave	9391118	9775760		104	100	4.1	30.0
PEPA	Ave	5591875	5923710		106	100	5.9	30.0
PES	Ave	46961888	41845680		89.1	100	-10.9	30.0
PFECA B	Ave	6491153	6778810		104	100	4.4	30.0
PFO3OA	Ave	5993289	6314770		105	100	5.4	30.0
HFPO-DA	AveID	1.089	1.032		94.8	100	-5.2	40.0
R-PSDCA	Ave	62863071	57854470		92.0	100	-8.0	30.0
Perfluoroheptanoic acid	L2ID		1.007		95.2	100	-4.8	40.0
Hydro-EVE Acid	Ave	78962538	68241510		86.4	100	-13.6	30.0
Hydro-PS Acid	Ave	25408908	22310070		87.8	100	-12.2	30.0
PFECA G	Ave	9393669	11512650		123	100	22.6	30.0
PFO4DA	Ave	5158483	5554240		108	100	7.7	30.0
PS Acid	Ave	11430757	11544780		101	100	1.0	30.0
EVE Acid	Ave	45172088	44486990		98.5	100	-1.5	30.0
PFO5DA	Ave	3748927	3687810		98.4	100	-1.6	50.0
13C3 HFPO-DA	Ave	5532191	5408136		244	250	-2.2	50.0
13C4 PFHpA	Ave	25406808	23906096		235	250	-5.9	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\2021.02.25_A10_TB3+_C_030.d
 Lims ID: CCV L7 (434)
 Client ID:
 Sample Type: CCV
 Inject. Date: 25-Feb-2021 19:53:16 ALS Bottle#: 30 Worklist Smp#: 29
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L7 (434)
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Sublist: chrom-A10_PFAS_CHEM_TB3+*sub1

Method: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 26-Feb-2021 11:18:25 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICAL File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1686

First Level Reviewer: dadunj Date: 26-Feb-2021 11:18:25

Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	2.501	2.716	-0.215		900880	0.0900		90.0	93.8	M
2 R-EVE										M
405.00 > 217.00	6.317	6.458	-0.141		396042	0.0963		96.3	6382	M
3 R-PSDA										M
440.90 > 241.00	6.420	6.560	-0.140		250836	0.0924		92.4	4546	M
23 PMPA										M
229.00 > 185.00	6.560	6.653	-0.093		1181861	0.0927		92.7	344	M
4 Hydrolyzed PSDA										M
439.00 > 343.00	6.548	6.669	-0.121		773462	0.0974		97.4	11150	M
5 NVHOS										M
297.00 > 135.00	7.166	7.260	-0.094		669239	0.0873		87.3	8488	M
6 PFO2HxA										M
245.00 > 85.00	7.809	7.863	-0.054		977576	0.1041		104	10101	M
22 PEPA										M
278.90 > 234.90	8.490	8.521	-0.031		592371	0.1059		106	780	M
7 PES										M
314.90 > 135.00	8.849	8.860	-0.011		4184568	0.0891		89.1	122671	
8 PFECA B										M
295.00 > 201.00	9.075	9.087	-0.012		677881	0.1044		104	21673	
9 PFO3OA										M
310.90 > 85.00	9.321	9.321	0.0		631477	0.1054		105	11974	
D 10 13C3 HFPO-DA										M
287.00 > 169.00	9.414	9.432	-0.018		1352034	0.2444		97.8	53526	
11 HPFO-DA										M
285.00 > 169.00	9.414	9.432	-0.018	1.000	558070	0.0948		94.8	21899	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.790	9.792	-0.002		5785447	0.0920		92.0	140337	
13 Hydro-EVE Acid										
427.00 > 282.90	9.847	9.849	-0.002		6824151	0.0864		86.4	92036	
D 14 13C4 PFHpA										
367.00 > 322.00	9.828	9.849	-0.021		5976524	0.2352		94.1	147262	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.828	9.849	-0.021	1.000	2408168	0.0952	Target=0.00	95.2	18457	
363.00 > 169.00	9.828	9.849	-0.021	1.000	1043062		2.31(0.00-0.00)		32098	
15 Hydro-PS Acid										M
463.00 > 262.90	9.866	9.868	-0.002		2231007	0.0878		87.8	11579	M
17 PFECA G										
378.90 > 184.90	9.956	9.958	-0.002		1151265	0.1226		123	48364	
18 PFO4DA										
376.90 > 85.00	10.098	10.100	-0.002		555424	0.1077		108	4194	
19 PS Acid										
443.00 > 146.90	10.162	10.184	-0.022		1154478	0.1010		101	34466	
20 EVE Acid										
407.00 > 262.90	10.182	10.184	-0.002		4448699	0.0985		98.5	88003	
21 TAF										
442.90 > 85.00	10.665	10.668	-0.003		368781	0.0984		98.4	624	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD7_00434

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\2021.02.25_A10_TB3+_C_030.d

Injection Date: 25-Feb-2021 19:53:16

Instrument ID: A10

Lims ID: CCV L7 (434)

Client ID:

Operator ID: Sac_inst_A10

ALS Bottle#: 30

Worklist Smp#: 29

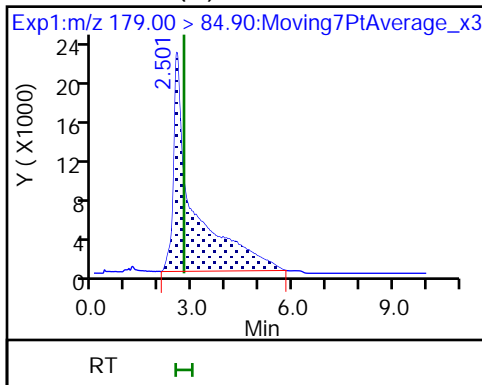
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

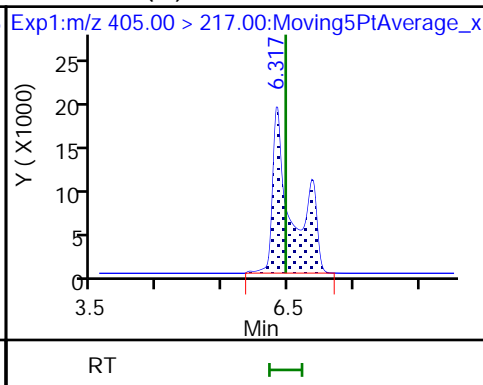
Method: A10_PFA5_CHEM_TB3+

Limit Group: LC PFAS_TB3P - ICAL

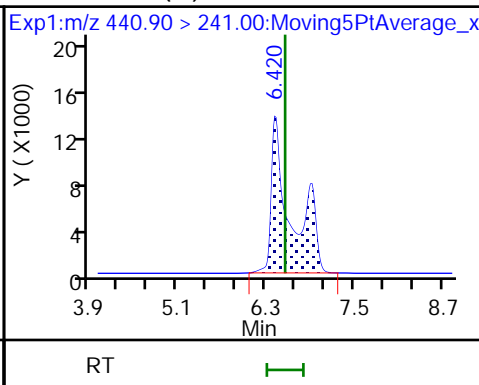
1 PFMOAA (M)



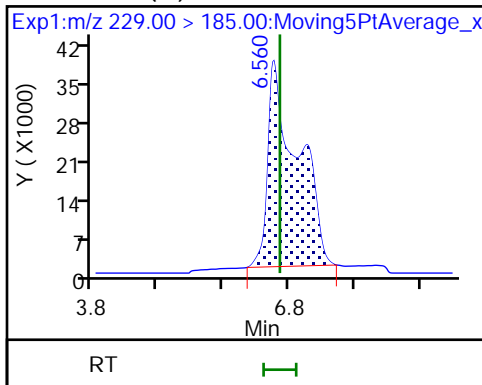
2 R-EVE (M)



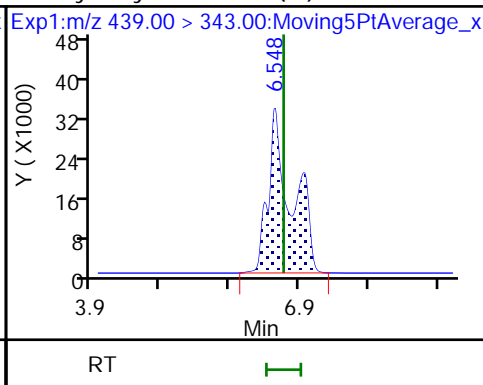
3 R-PSDA (M)



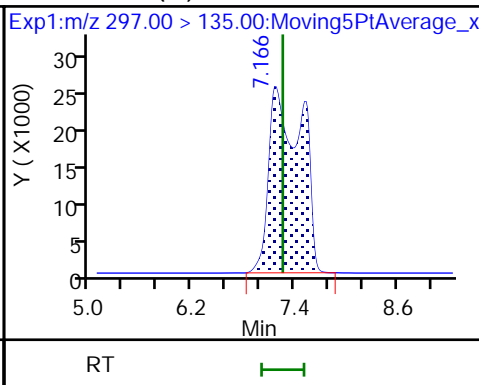
23 PMPA (M)



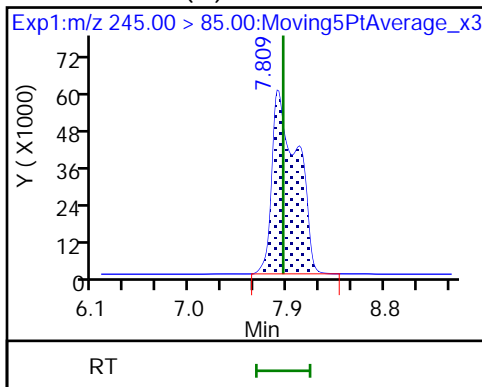
4 Hydrolyzed PSDA (M)



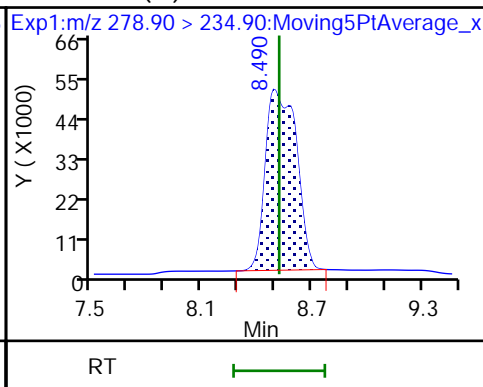
5 NVHOS (M)



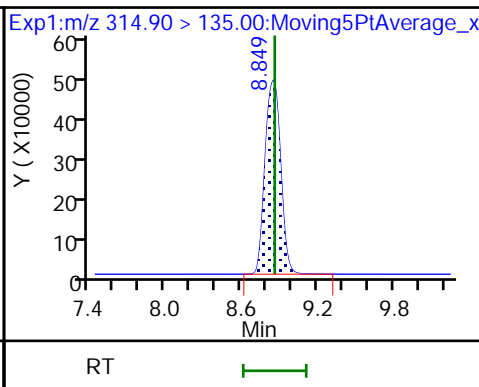
6 PFO2HxA (M)



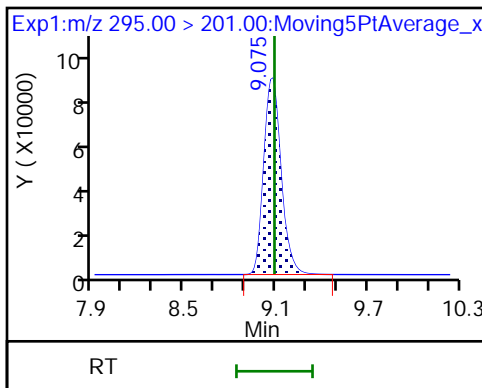
22 PEPA (M)



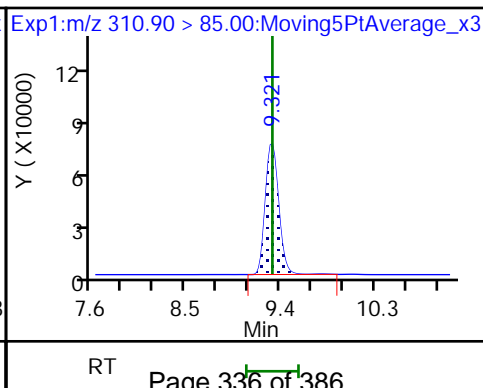
7 PES



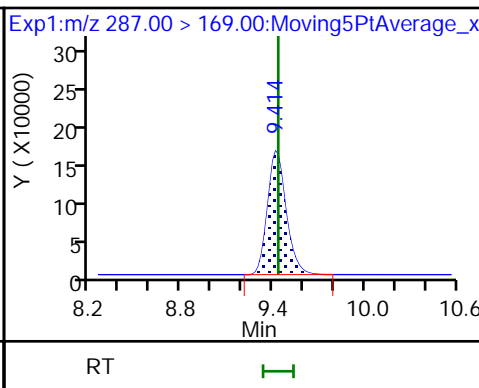
8 PFECA B

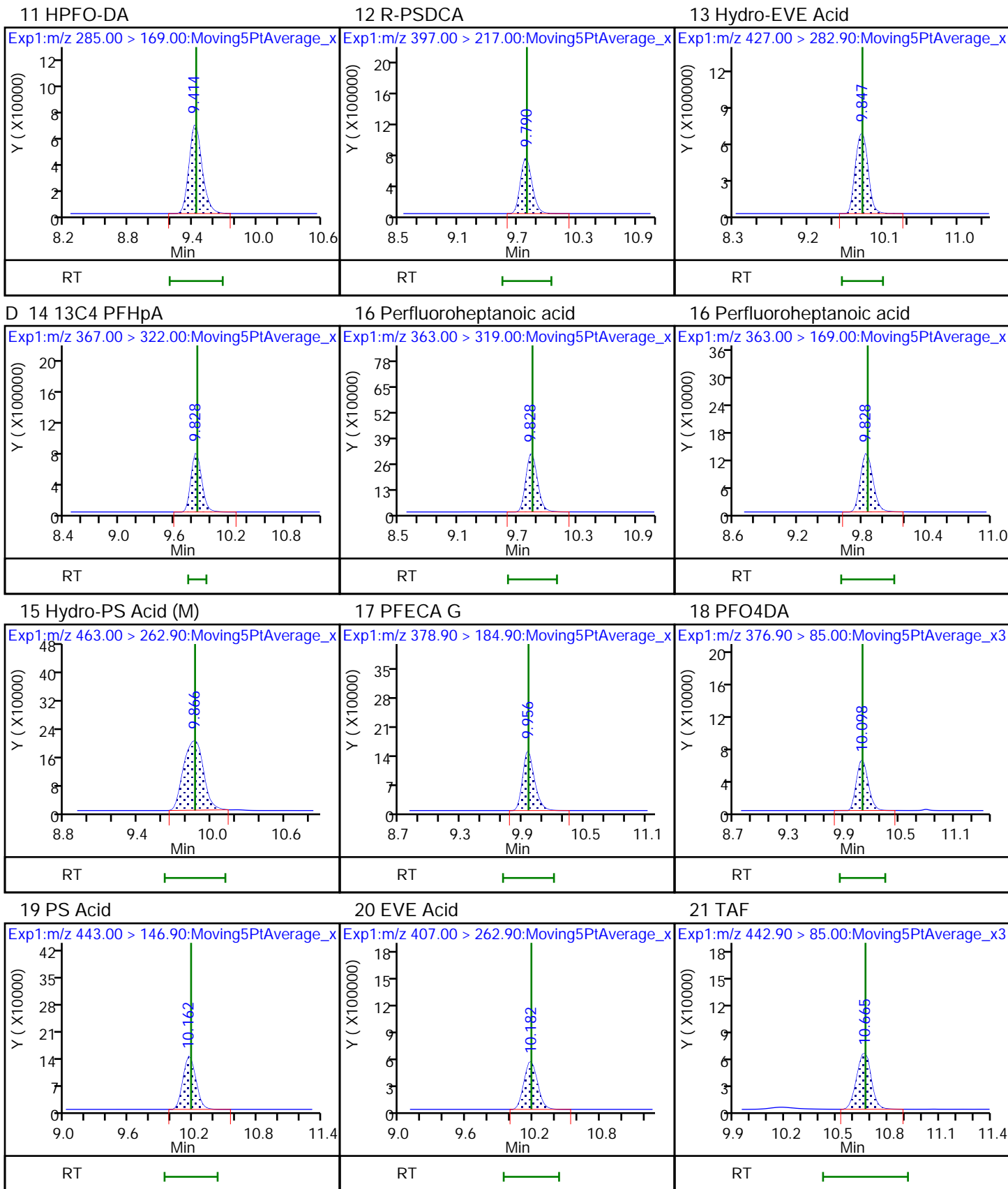


9 PFO3OA



D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

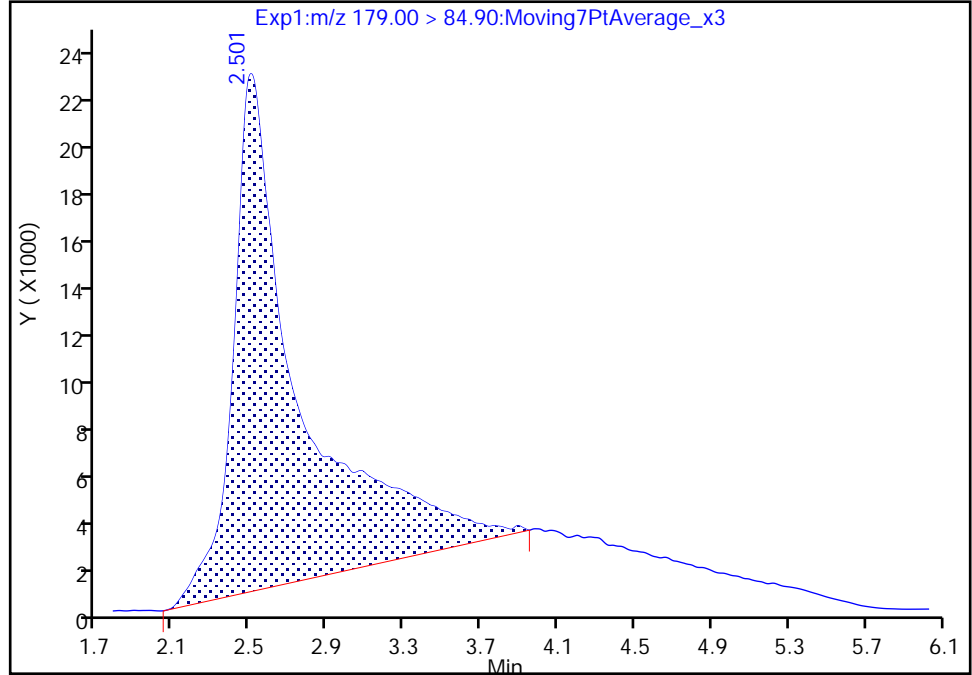
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Injection Date: 25-Feb-2021 19:53:16 Instrument ID: A10
Lims ID: CCV L7 (434)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 30 Worklist Smp#: 29
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

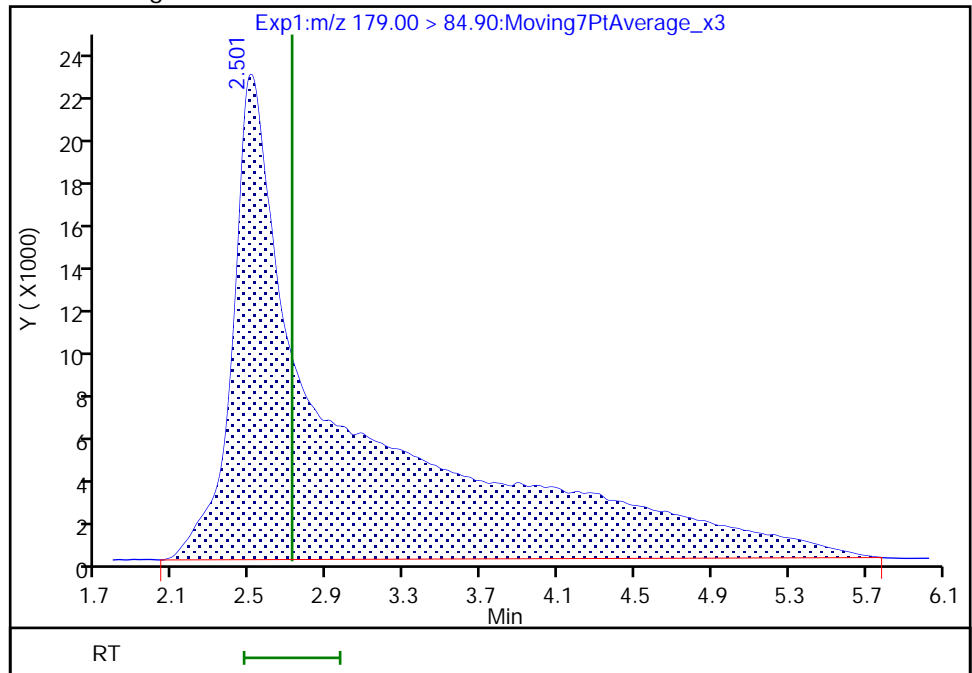
RT: 2.50
Area: 525438
Amount: 0.052480
Amount Units: ng/ml

Processing Integration Results



RT: 2.50
Area: 900880
Amount: 0.089979
Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 11:17:34
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

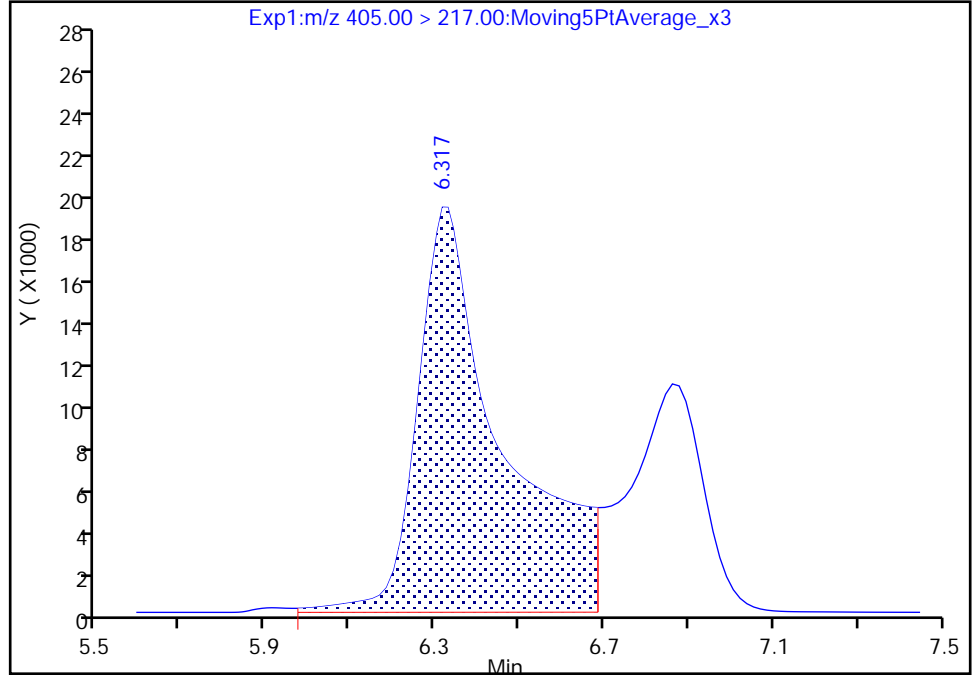
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Injection Date: 25-Feb-2021 19:53:16 Instrument ID: A10
Lims ID: CCV L7 (434)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 30 Worklist Smp#: 29
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

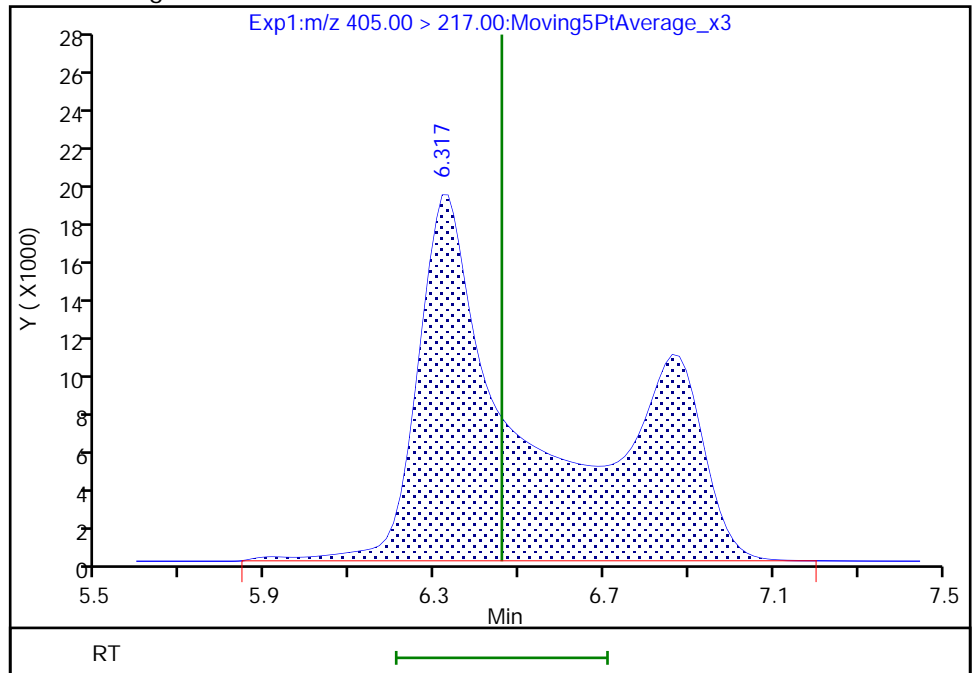
RT: 6.32
Area: 266660
Amount: 0.064820
Amount Units: ng/ml

Processing Integration Results



RT: 6.32
Area: 396042
Amount: 0.096271
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Sacramento

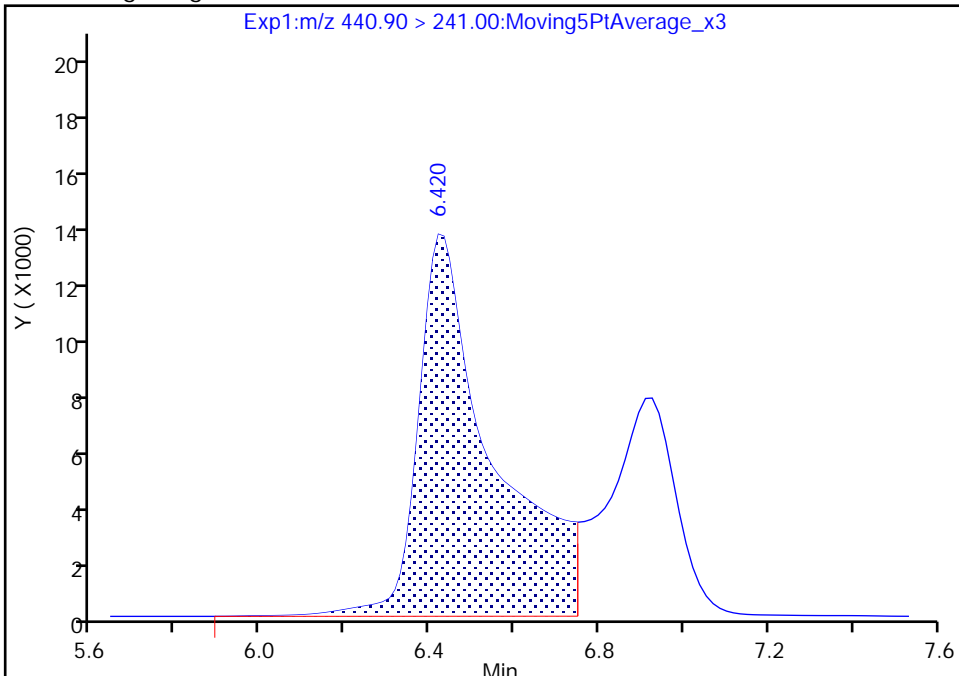
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 Injection Date: 25-Feb-2021 19:53:16 Instrument ID: A10
 Lims ID: CCV L7 (434)
 Client ID:
 Operator ID: Sac_inst_A10 ALS Bottle#: 30 Worklist Smp#: 29
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
 Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

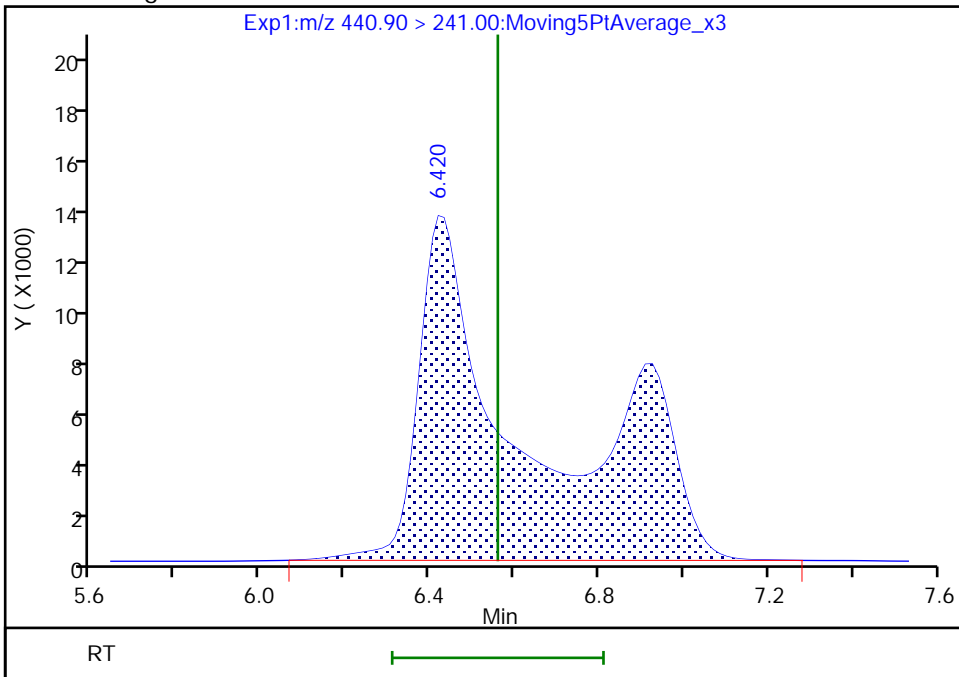
RT: 6.42
 Area: 166698
 Amount: 0.061373
 Amount Units: ng/ml

Processing Integration Results



RT: 6.42
 Area: 250836
 Amount: 0.092350
 Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 11:17:41
 Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

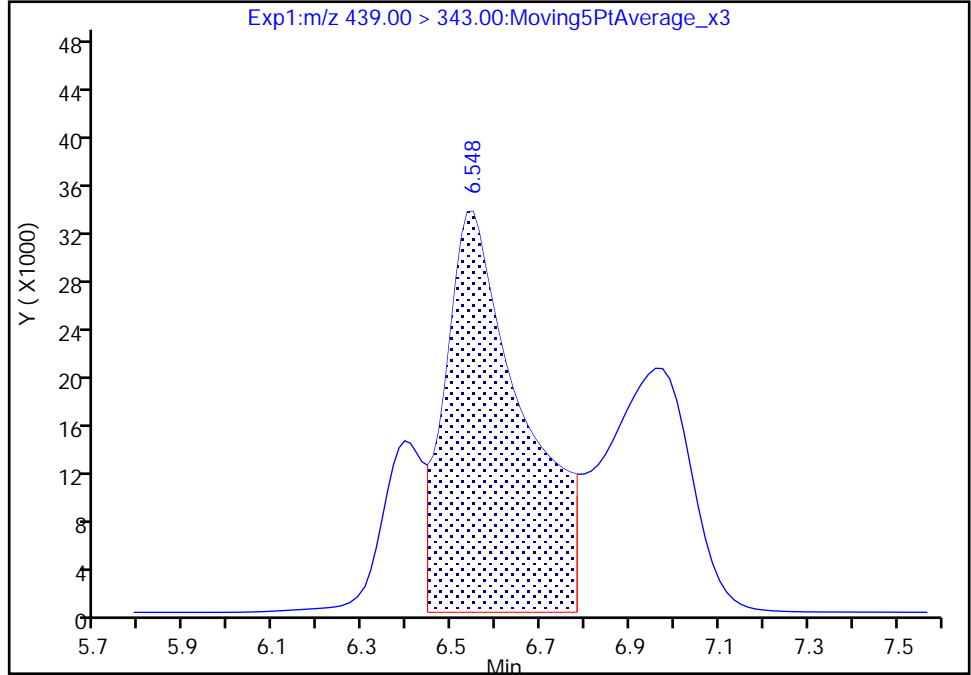
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Injection Date: 25-Feb-2021 19:53:16 Instrument ID: A10
Lims ID: CCV L7 (434)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 30 Worklist Smp#: 29
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

4 Hydrolyzed PSDA, CAS: 2416366-19-1

Signal: 1

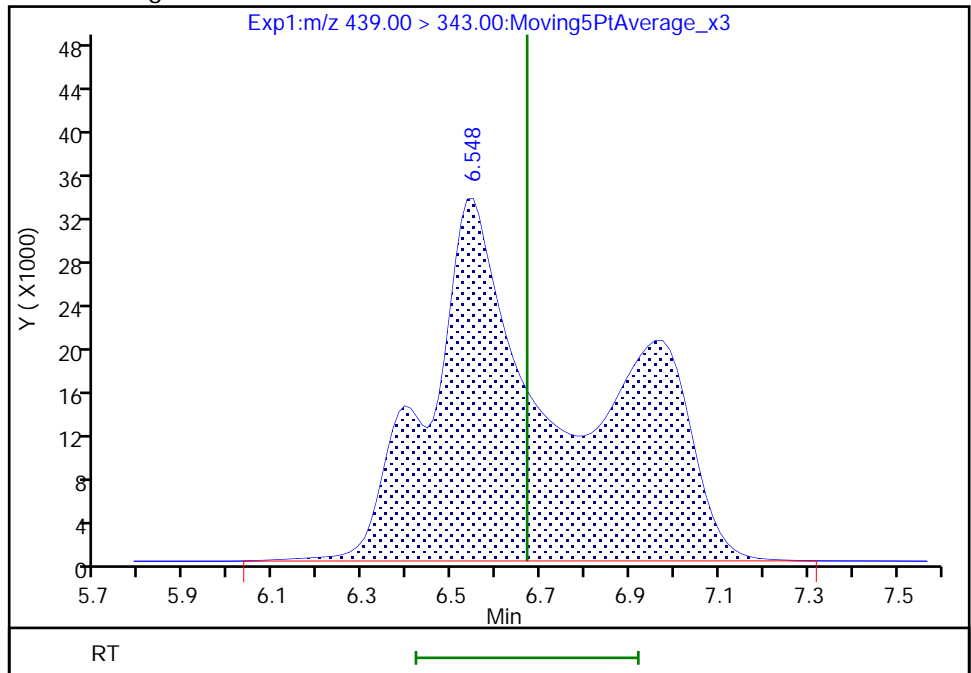
RT: 6.55
Area: 402445
Amount: 0.050674
Amount Units: ng/ml

Processing Integration Results



RT: 6.55
Area: 773462
Amount: 0.097391
Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 11:17:48
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

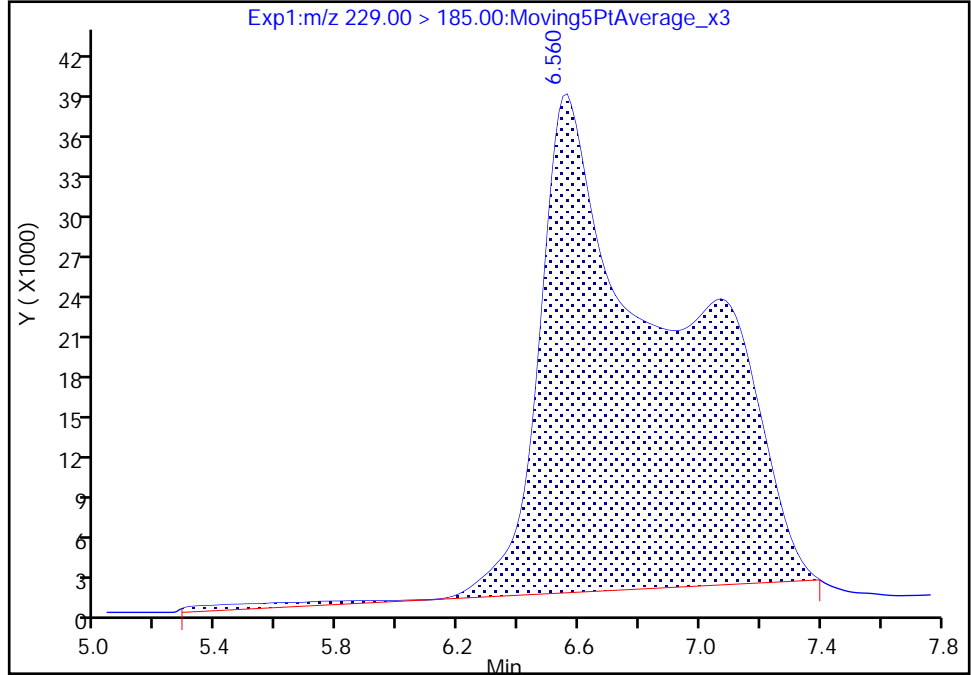
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Injection Date: 25-Feb-2021 19:53:16 Instrument ID: A10
Lims ID: CCV L7 (434)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 30 Worklist Smp#: 29
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

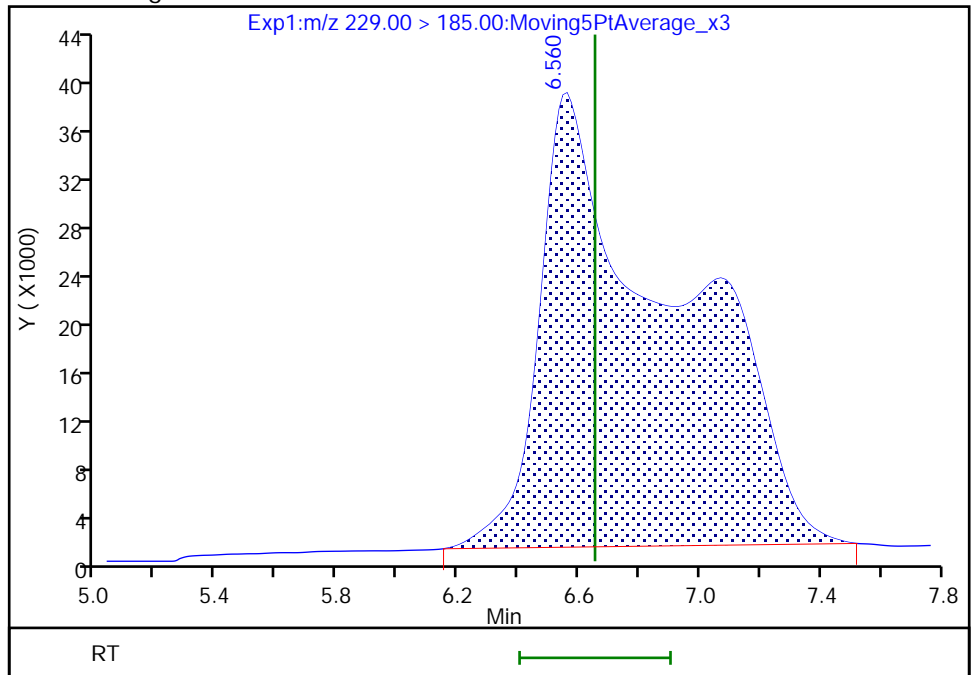
RT: 6.56
Area: 1155361
Amount: 0.090575
Amount Units: ng/ml

Processing Integration Results



RT: 6.56
Area: 1181861
Amount: 0.092704
Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 11:17:45
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

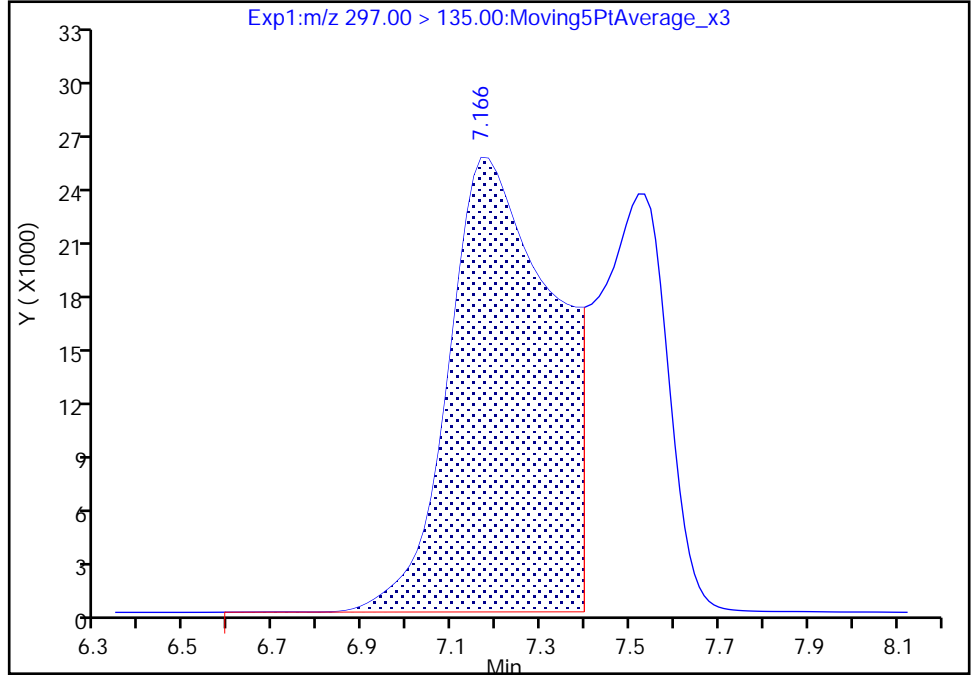
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Injection Date: 25-Feb-2021 19:53:16 Instrument ID: A10
Lims ID: CCV L7 (434)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 30 Worklist Smp#: 29
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

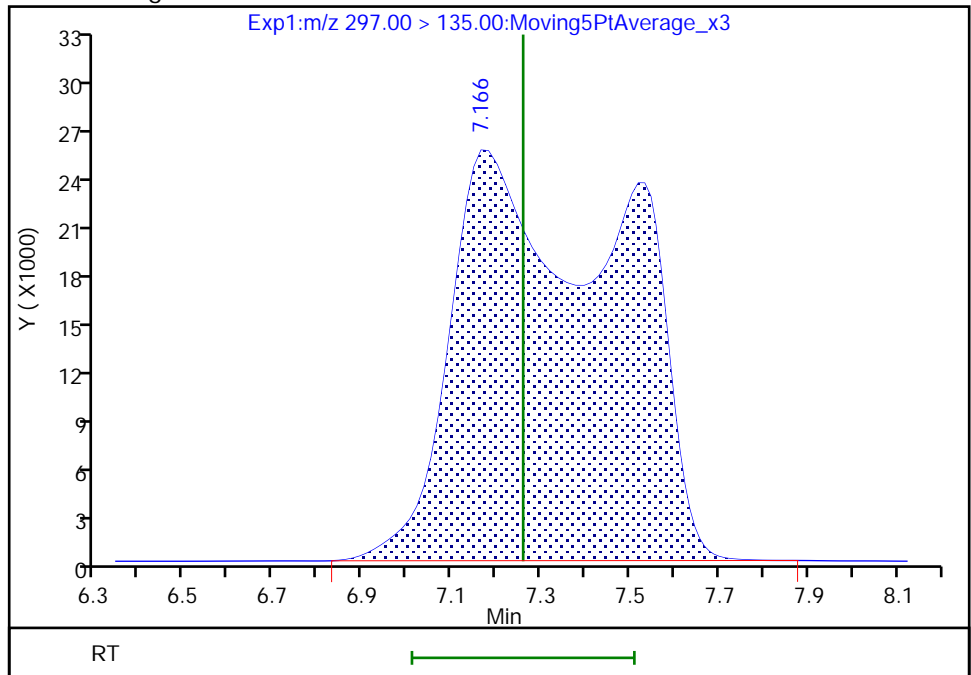
RT: 7.17
Area: 416678
Amount: 0.054352
Amount Units: ng/ml

Processing Integration Results



RT: 7.17
Area: 669239
Amount: 0.087297
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Sacramento

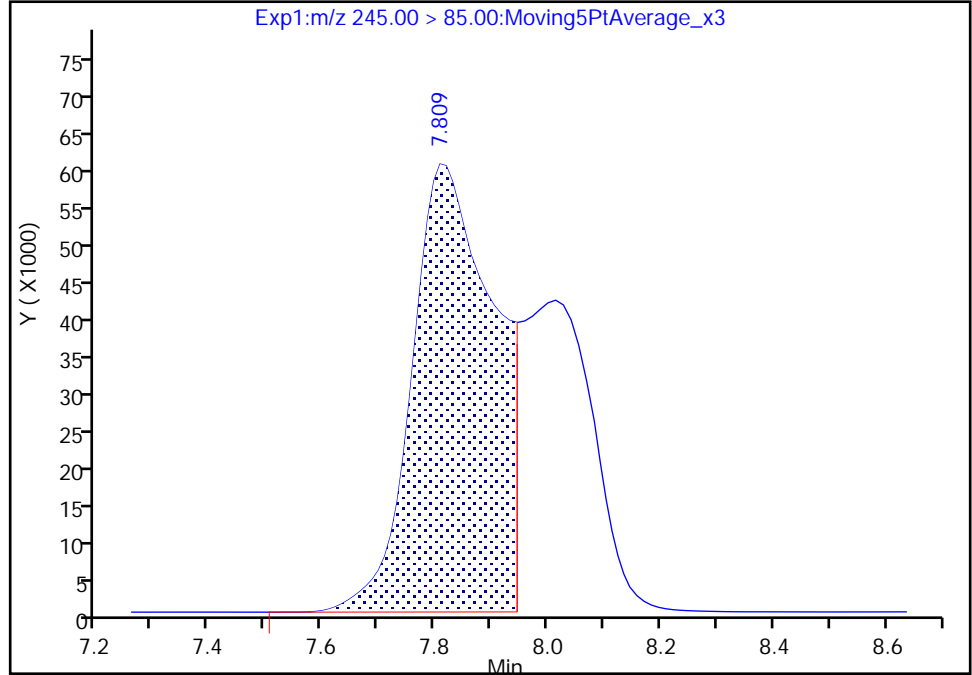
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Injection Date: 25-Feb-2021 19:53:16 Instrument ID: A10
Lims ID: CCV L7 (434)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 30 Worklist Smp#: 29
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

6 PFO2HxA, CAS: 39492-88-1

Signal: 1

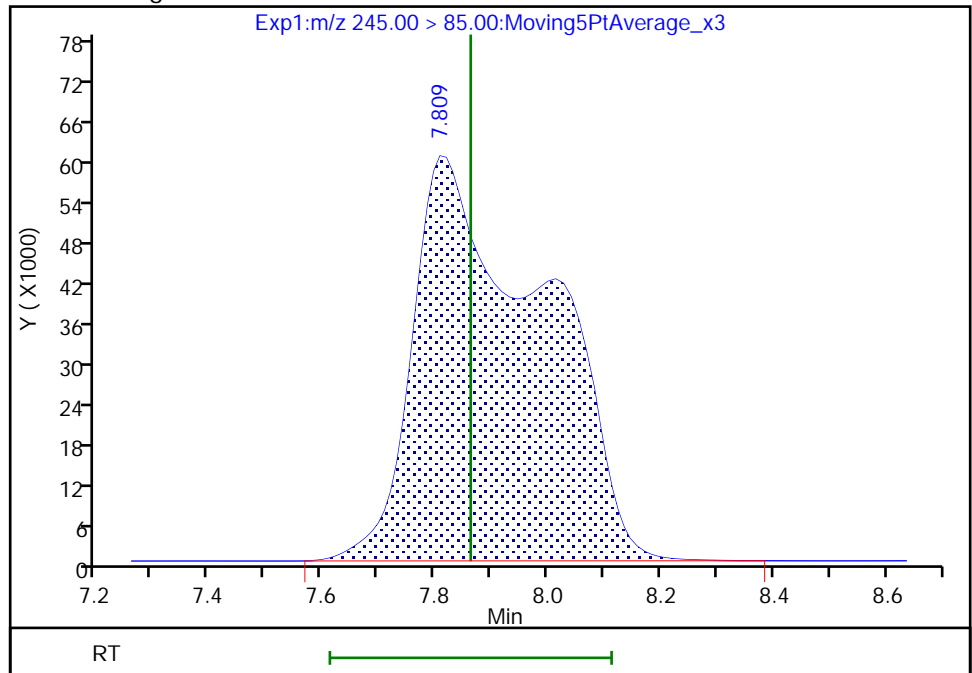
RT: 7.81
Area: 608375
Amount: 0.064782
Amount Units: ng/ml

Processing Integration Results



RT: 7.81
Area: 977576
Amount: 0.104096
Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 11:17:56
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

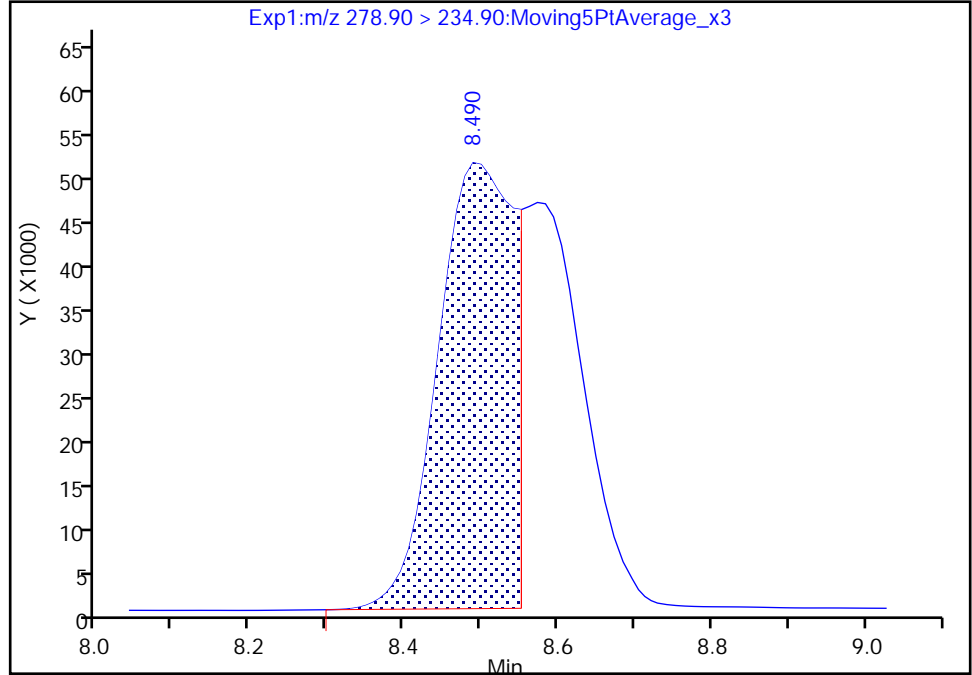
Data File: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\2021.02.25_A10_TB3+_C_030.d
Injection Date: 25-Feb-2021 19:53:16 Instrument ID: A10
Lims ID: CCV L7 (434)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 30 Worklist Smp#: 29
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

22 PEPA, CAS: 267239-61-2

Signal: 1

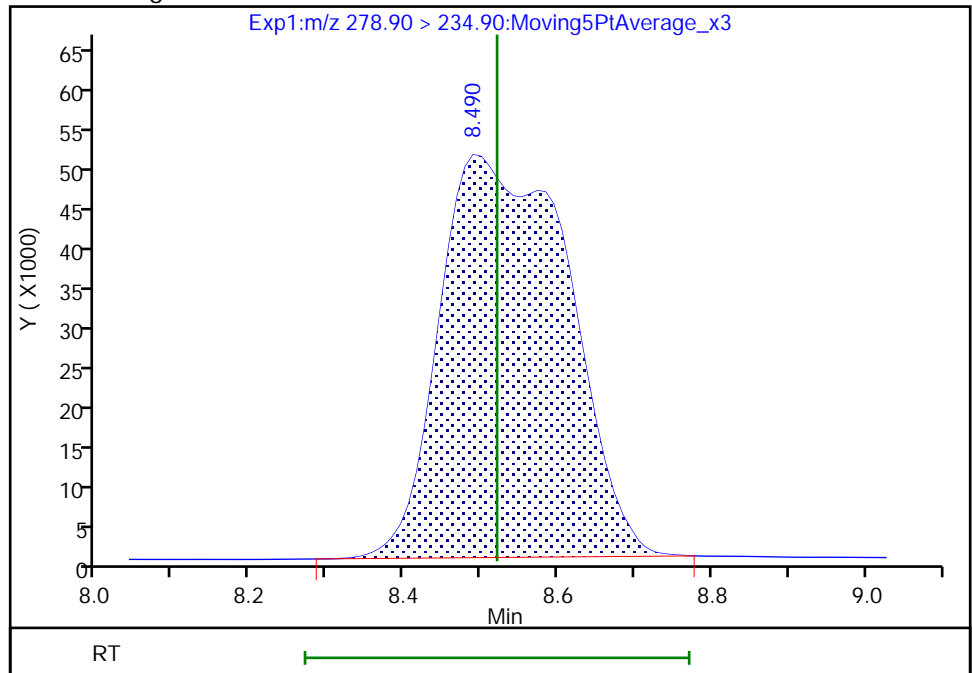
RT: 8.49
Area: 344149
Amount: 0.061544
Amount Units: ng/ml

Processing Integration Results



RT: 8.49
Area: 592371
Amount: 0.105934
Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 11:17:59
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

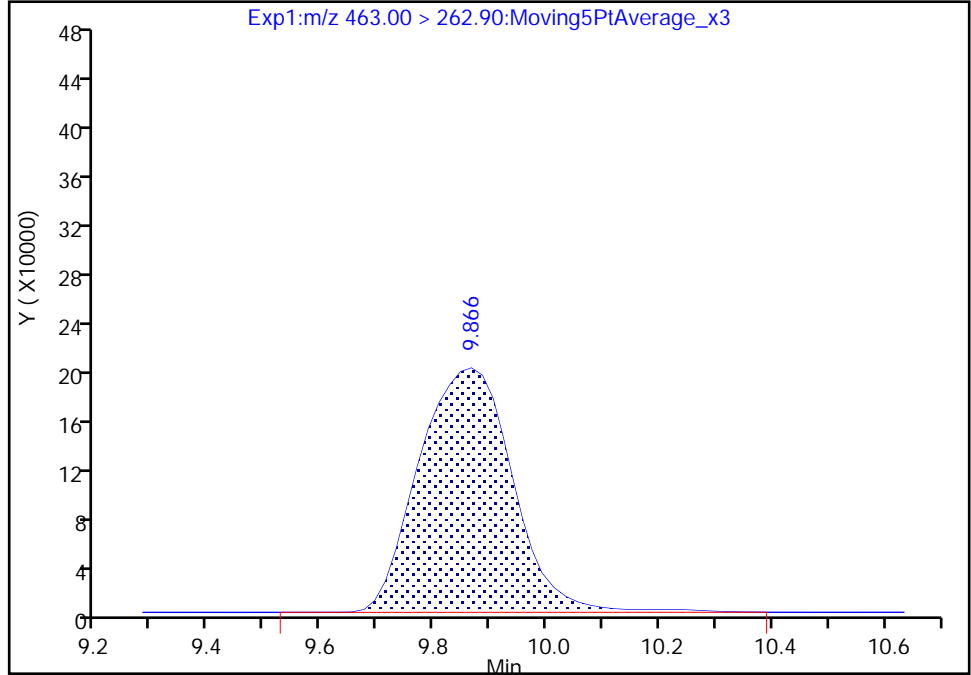
Data File: \\chromfs\Sacramento\ChromData\A10\20210224-113911.b\2021.02.25_A10_TB3+_C_030.d
Injection Date: 25-Feb-2021 19:53:16 Instrument ID: A10
Lims ID: CCV L7 (434)
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 30 Worklist Smp#: 29
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

15 Hydro-PS Acid, CAS: 749836-20-2

Signal: 1

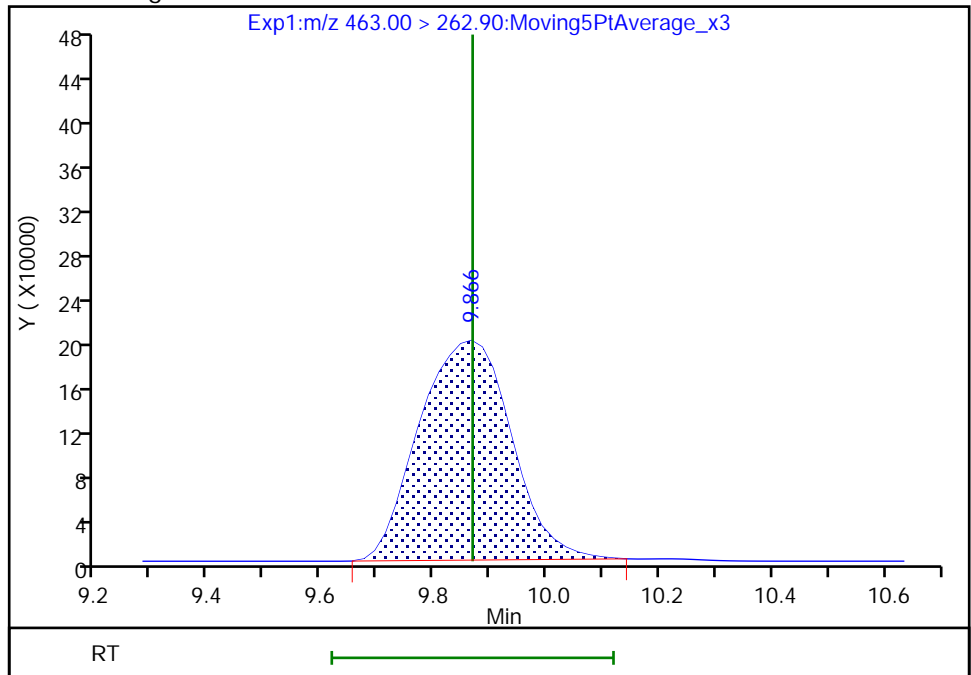
RT: 9.87
Area: 2281756
Amount: 0.089801
Amount Units: ng/ml

Processing Integration Results



RT: 9.87
Area: 2231007
Amount: 0.087804
Amount Units: ng/ml

Manual Integration Results



Reviewer: dadunj, 26-Feb-2021 11:18:15
Audit Action: Manually Integrated

Audit Reason: Baseline
Page 347 of 386

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 320-464016/1-A
 Matrix: Water Lab File ID: 2021.02.23_A10_TB3+_B_016.d
 Analysis Method: Chemours (TB3+) Date Collected: _____
 Extraction Method: PFAS Prep Date Extracted: 02/22/2021 11:39
 Sample wt/vol: 2.50 (mL) Date Analyzed: 02/24/2021 03:51
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 464205 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	<0.0020		0.0020	
13252-13-6	HFPO-DA	<0.0020		0.0020	
773804-62-9	Hydro-EVE Acid	<0.0020		0.0020	
2416366-19-1	Hydrolyzed PSDA	<0.0020		0.0020	
749836-20-2	Hydro-PS Acid	<0.0020		0.0020	
1132933-86-8	NVHOS	<0.0020		0.0020	
267239-61-2	PEPA	<0.020		0.020	
113507-82-7	PES	<0.0020		0.0020	
151772-58-6	PFECA B	<0.0020		0.0020	
801212-59-9	PFECA G	<0.0020		0.0020	
674-13-5	PFMOAA	<0.0020		0.0020	
39492-88-1	PFO2HxA	<0.0020		0.0020	
39492-89-2	PFO3OA	<0.0020		0.0020	
39492-90-5	PFO4DA	<0.0020		0.0020	
39492-91-6	PFO5DA	<0.0020		0.0020	
13140-29-9	PMPA	<0.010		0.010	
29311-67-9	PS Acid	<0.0020		0.0020	
2416366-22-6	R-EVE	<0.0020		0.0020	
2416366-18-0	R-PSDA	<0.0020		0.0020	
2416366-21-5	R-PSDCA	<0.0020		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	100		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_016.d
 Lims ID: MB 320-464016/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 24-Feb-2021 03:51:46 ALS Bottle#: 16 Worklist Smp#: 3
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: mb 320-464016/1-a TB3+W DUE 3/12
 Misc. Info.: Plate: 1 Rack: 2
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Method: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Feb-2021 07:39:55 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1619

First Level Reviewer: vangmy Date: 24-Feb-2021 09:22:22
 Ratio Calibration: Initial Calibration Level: 6

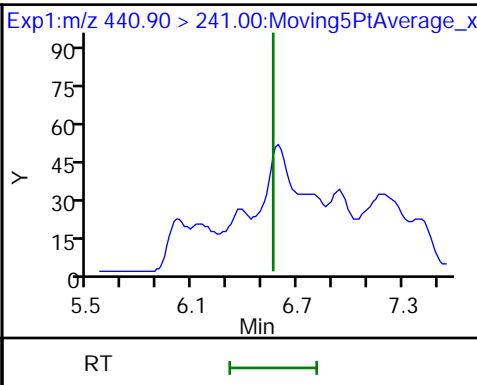
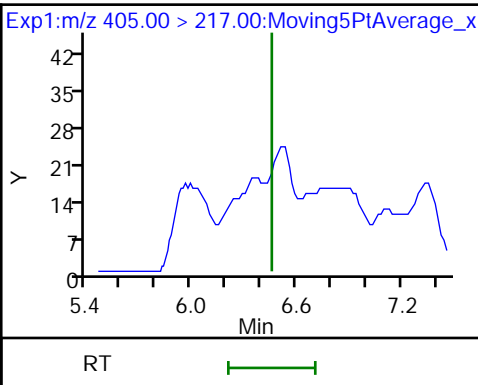
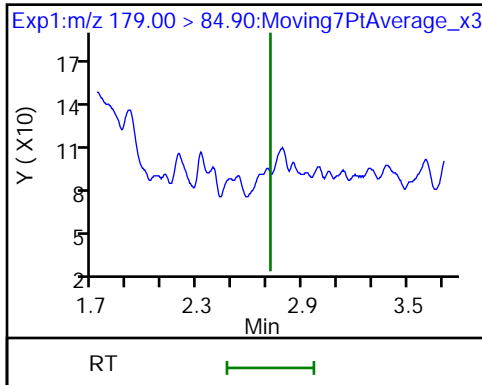
Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 10 13C3 HFPO-DA	287.00 > 169.00	9.432	9.432	0.0	1385478	0.2504		100	55641	
D 14 13C4 PFHpA	367.00 > 322.00	9.848	9.849	-0.001	6568710	0.2585		103	135975	
16 Perfluoroheptanoic acid	363.00 > 319.00	9.867	9.849	0.018	25352	0.000479	Target=0.00		212	
	363.00 > 169.00	9.867	9.849	0.018	10723		2.36(0.00-0.00)		339	

QC Flag Legend
Processing Flags

1 PFM0AA (ND)

2 R-EVE (ND)

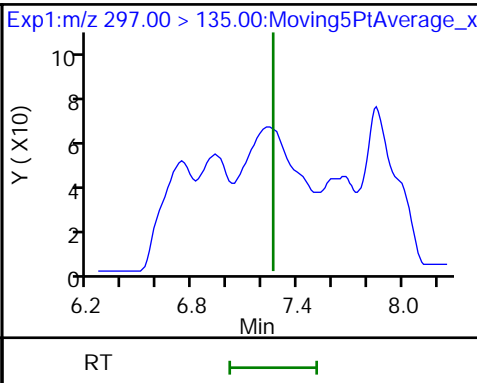
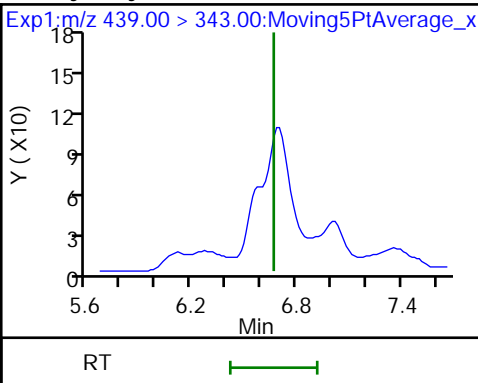
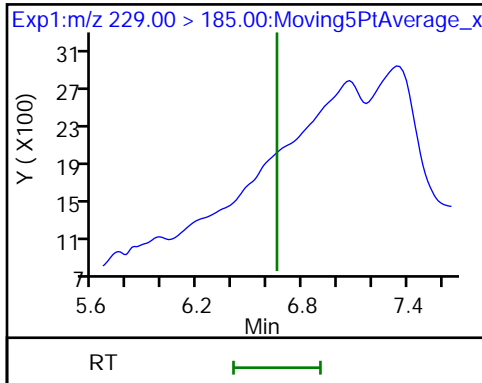
3 R-PSDA (ND)



23 PMPA (ND)

4 Hydrolyzed PSDA (ND)

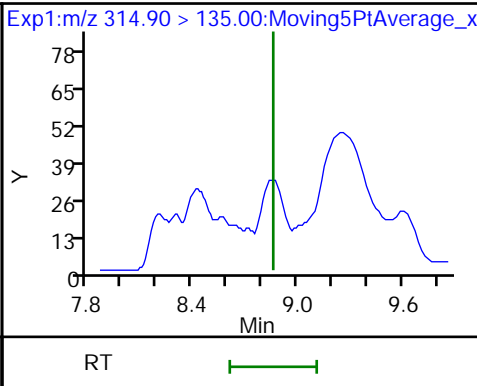
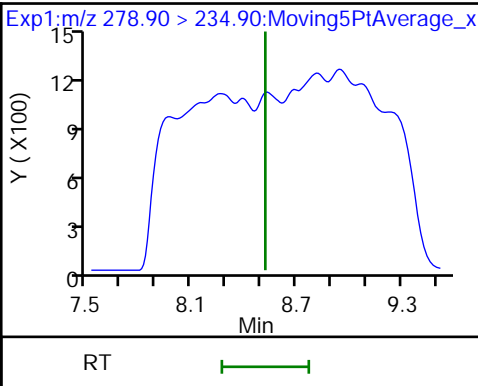
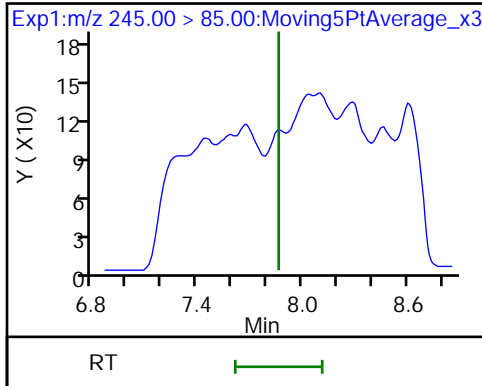
5 NVHOS (ND)



6 PFO2HxA (ND)

22 PEPA (ND)

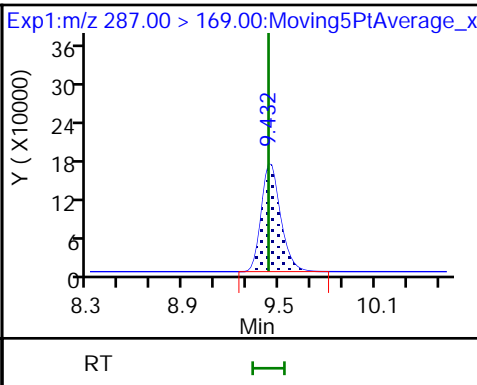
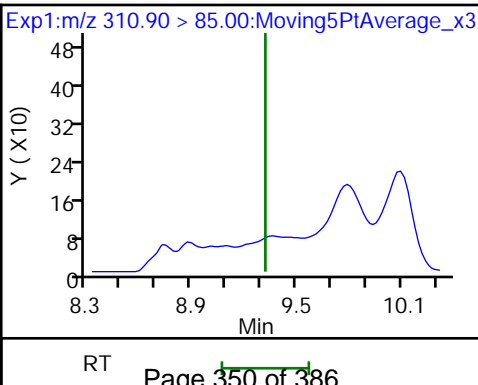
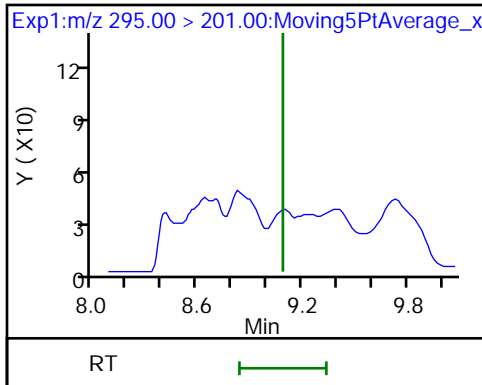
7 PES (ND)

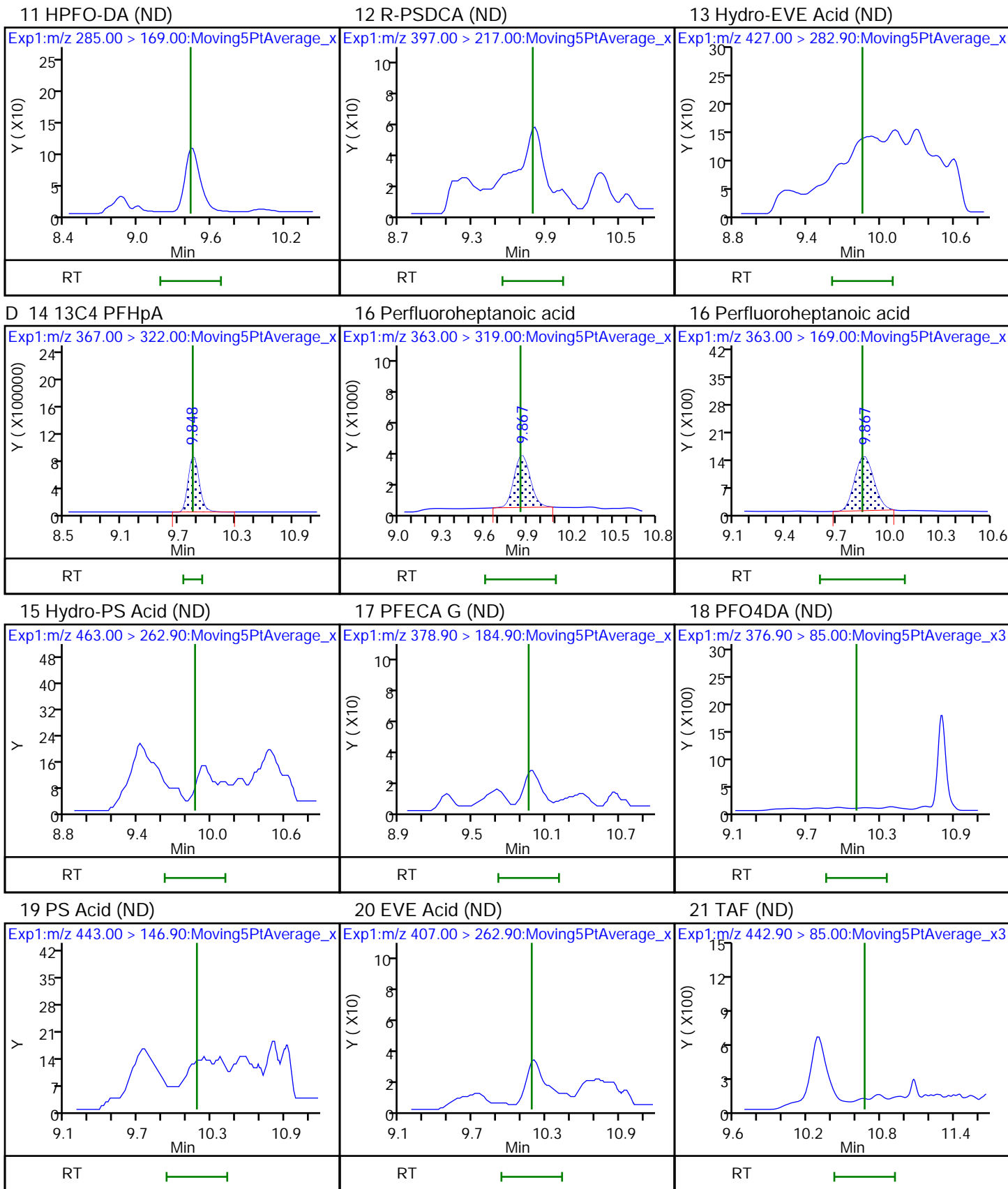


8 PFECA B (ND)

9 PFO3OA (ND)

D 10 13C3 HFPO-DA





FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 320-464016/2-A
 Matrix: Water Lab File ID: 2021.02.23_A10_TB3+_B_024.d
 Analysis Method: Chemours (TB3+) Date Collected: _____
 Extraction Method: PFAS Prep Date Extracted: 02/22/2021 11:40
 Sample wt/vol: 2.50 (mL) Date Analyzed: 02/24/2021 06:11
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 464205 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	0.208		0.0020	
13252-13-6	HFPO-DA	0.221		0.0020	
773804-62-9	Hydro-EVE Acid	0.208		0.0020	
2416366-19-1	Hydrolyzed PSDA	0.244		0.0020	
749836-20-2	Hydro-PS Acid	0.199		0.0020	
1132933-86-8	NVHOS	0.193		0.0020	
267239-61-2	PEPA	0.231		0.020	
113507-82-7	PES	0.201		0.0020	
151772-58-6	PFECA B	0.211		0.0020	
801212-59-9	PFECA G	0.237		0.0020	
674-13-5	PFMOAA	0.171		0.0020	
39492-88-1	PFO2HxA	0.205		0.0020	
39492-89-2	PFO3OA	0.192		0.0020	
39492-90-5	PFO4DA	0.213		0.0020	
39492-91-6	PFO5DA	0.165		0.0020	
13140-29-9	PMPA	0.199		0.010	
29311-67-9	PS Acid	0.206		0.0020	
2416366-22-6	R-EVE	0.216		0.0020	
2416366-18-0	R-PSDA	0.221		0.0020	
2416366-21-5	R-PSDCA	0.211		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	92		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_024.d
 Lims ID: LCS 320-464016/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 24-Feb-2021 06:11:27 ALS Bottle#: 24 Worklist Smp#: 11
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: lcs 320-464016/2-a
 Misc. Info.: Plate: 1 Rack: 2
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Method: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Feb-2021 07:44:51 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1619

First Level Reviewer: vangmy Date: 24-Feb-2021 09:23:45
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	2.750	2.716	0.034		855976	0.0855		85.5	69.5	M
2 R-EVE										M
405.00 > 217.00	6.484	6.458	0.026		444997	0.1082		108	10794	M
3 R-PSDA										
440.90 > 241.00	6.573	6.560	0.013		300486	0.1106		111	7183	
23 PMPA										M
229.00 > 185.00	6.669	6.653	0.016		1268792	0.0997		99.7	492	M
4 Hydrolyzed PSDA										M
439.00 > 343.00	6.686	6.669	0.017		968637	0.1220		122	17728	M
5 NVHOS										M
297.00 > 135.00	7.261	7.260	0.001		741524	0.0967		96.7	13030	M
6 PFO2HxA										
245.00 > 85.00	7.853	7.863	-0.010		960383	0.1023		102	8762	
22 PEPA										
278.90 > 234.90	8.521	8.521	0.0		645584	0.1155		115	1050	
7 PES										
314.90 > 135.00	8.849	8.860	-0.011		4720901	0.1005		101	159845	
8 PFECA B										
295.00 > 201.00	9.076	9.087	-0.011		683644	0.1053		105	24147	
9 PFO3OA										
310.90 > 85.00	9.322	9.321	0.001		574591	0.0959		95.9	13581	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.432	9.432	0.0		1272972	0.2301		92.0	51647	
11 HPFO-DA										
285.00 > 169.00	9.432	9.432	0.0	1.000	613792	0.1107		111	24939	
12 R-PSDCA										
397.00 > 217.00	9.791	9.792	-0.001		6636142	0.1056		106	165332	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Hydro-EVE Acid										
427.00 > 282.90	9.848	9.849	-0.001		8200333	0.1039		104	129884	
D 14 13C4 PFHpA										
367.00 > 322.00	9.848	9.849	-0.001		6077779	0.2392		95.7	126517	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.848	9.849	-0.001	1.000	2785463	0.1084	Target=0.00	108	24898	
363.00 > 169.00	9.848	9.849	-0.001	1.000	1190813		2.34(0.00-0.00)		29899	
15 Hydro-PS Acid										
463.00 > 262.90	9.867	9.868	-0.001		2525293	0.0994		99.4	72682	
17 PFECA G										
378.90 > 184.90	9.957	9.958	-0.001		1112316	0.1184		118	46364	
18 PFO4DA										
376.90 > 85.00	10.099	10.100	-0.001		549606	0.1065		107	3306	
19 PS Acid										
443.00 > 146.90	10.182	10.184	-0.002		1174638	0.1028		103	35293	
20 EVE Acid										
407.00 > 262.90	10.182	10.184	-0.002		4699304	0.1040		104	94542	
21 TAF										
442.90 > 85.00	10.666	10.668	-0.002		309947	0.0827		82.7	594	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_024.d

Injection Date: 24-Feb-2021 06:11:27

Instrument ID: A10

Lims ID: LCS 320-464016/2-A

Client ID:

Operator ID: Sac_inst_A10

ALS Bottle#: 24

Worklist Smp#: 11

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

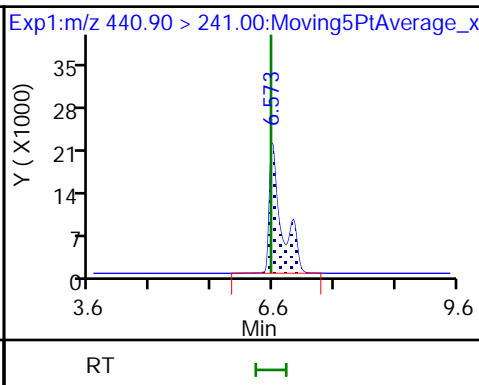
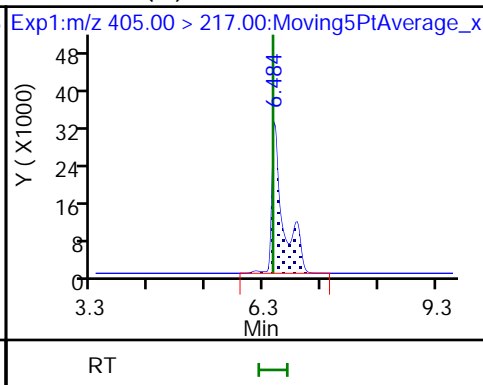
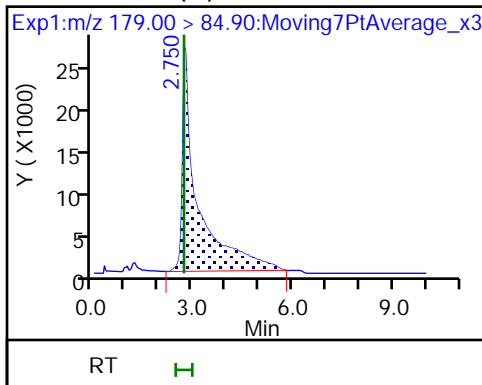
Method: A10_PFAAS_CHEM_TB3+

Limit Group: LC PFAS_TB3P - ICAL

1 PFM0AA (M)

2 R-EVE (M)

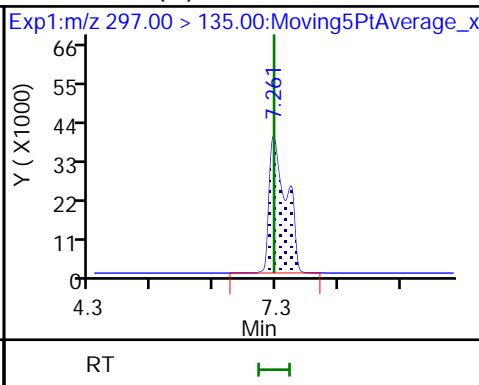
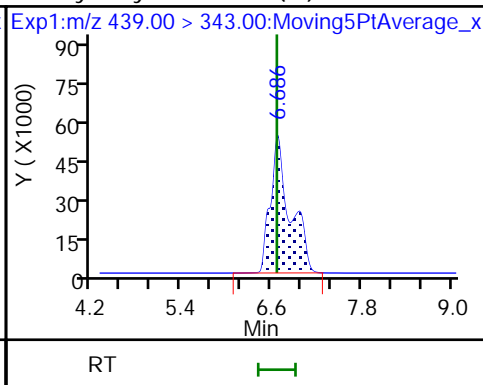
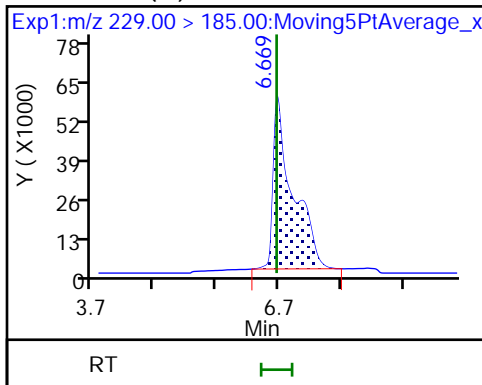
3 R-PSDA



23 PMPA (M)

4 Hydrolyzed PSDA (M)

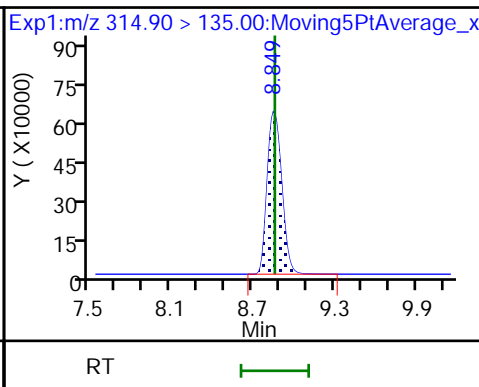
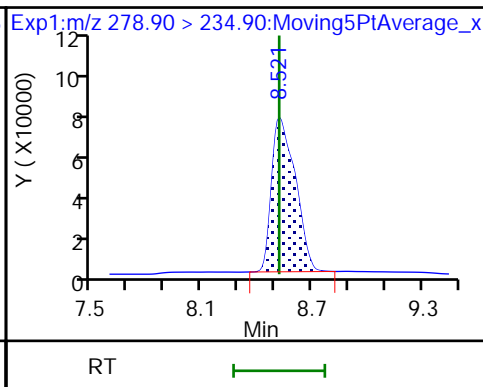
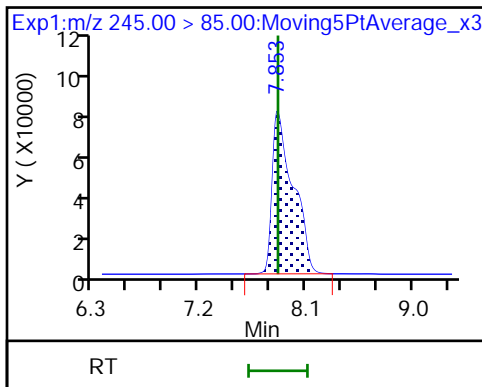
5 NVHOS (M)



6 PFO2HxA

22 PEPA

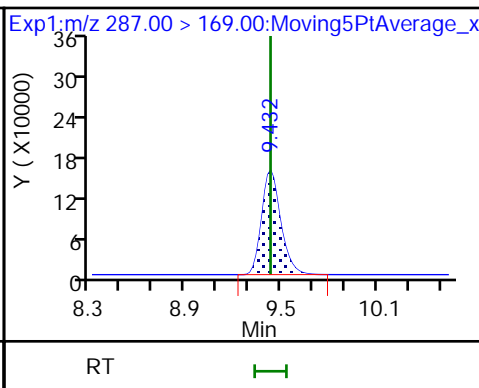
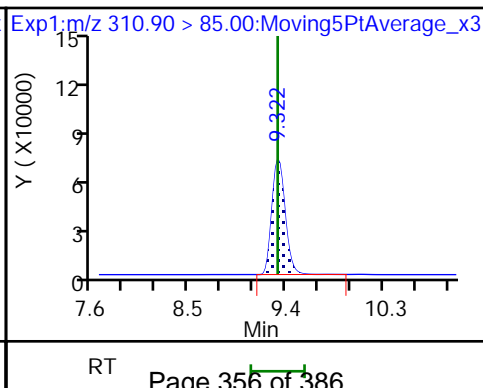
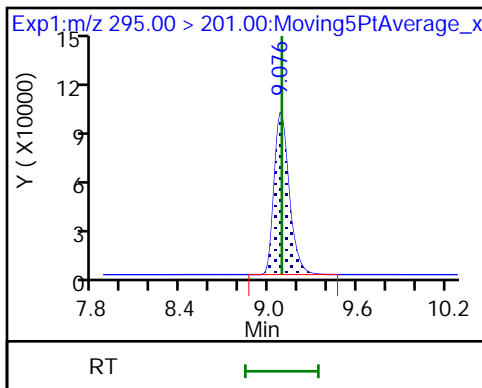
7 PES

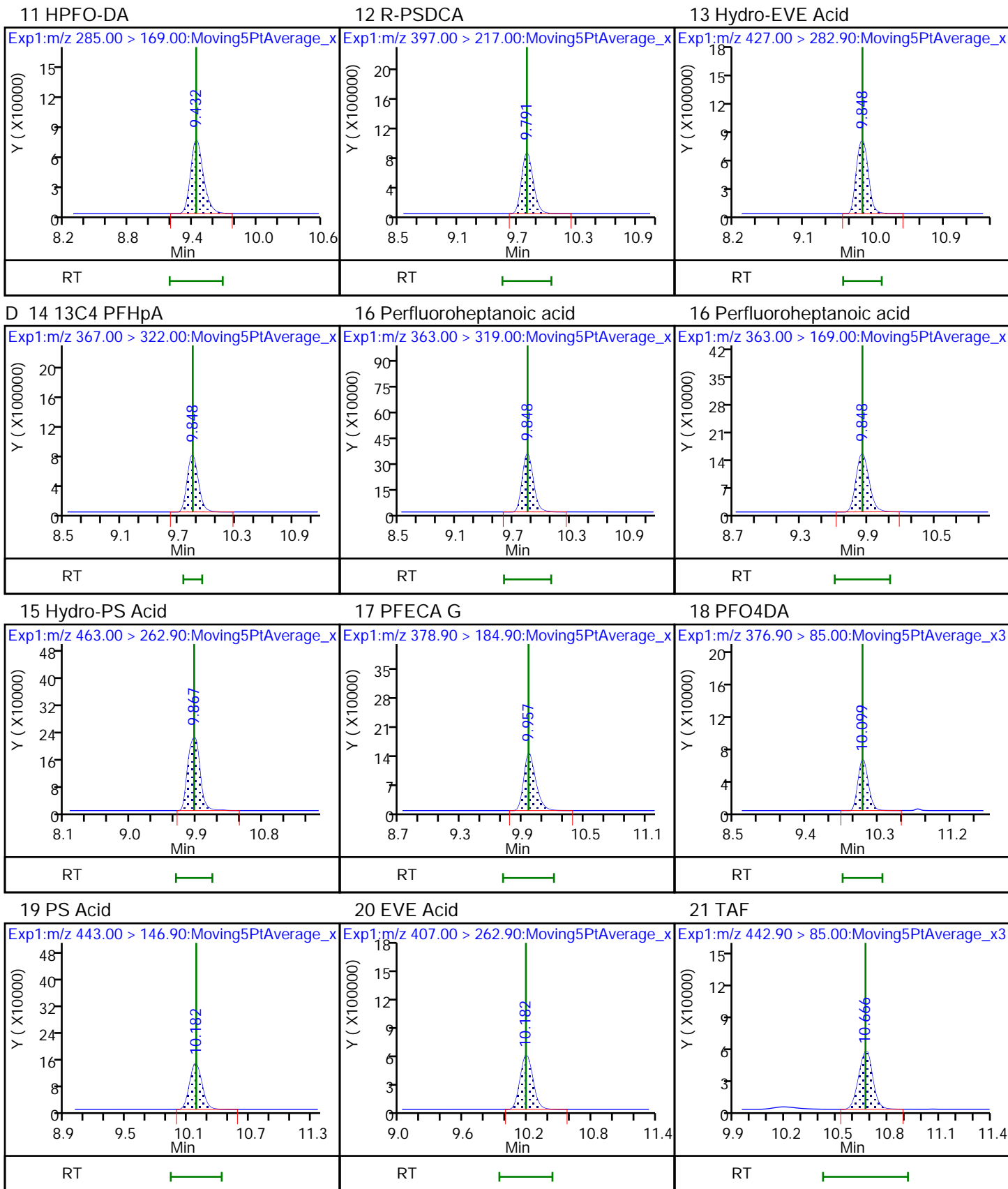


8 PFECAB

9 PFO3OA

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

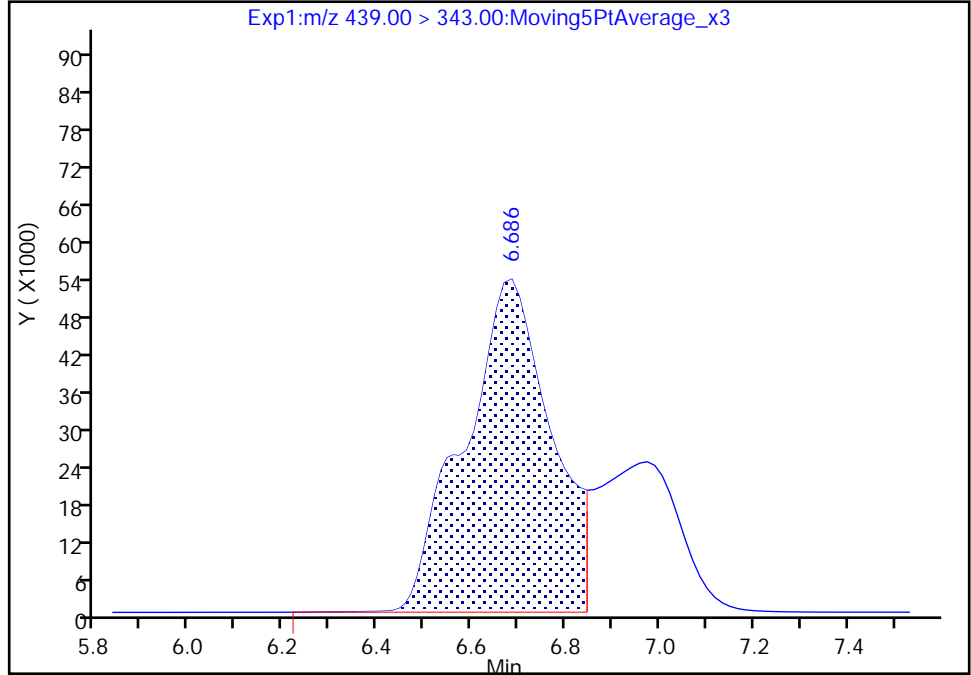
Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_024.d
Injection Date: 24-Feb-2021 06:11:27 Instrument ID: A10
Lims ID: LCS 320-464016/2-A
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 24 Worklist Smp#: 11
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

4 Hydrolyzed PSDA, CAS: 2416366-19-1

Signal: 1

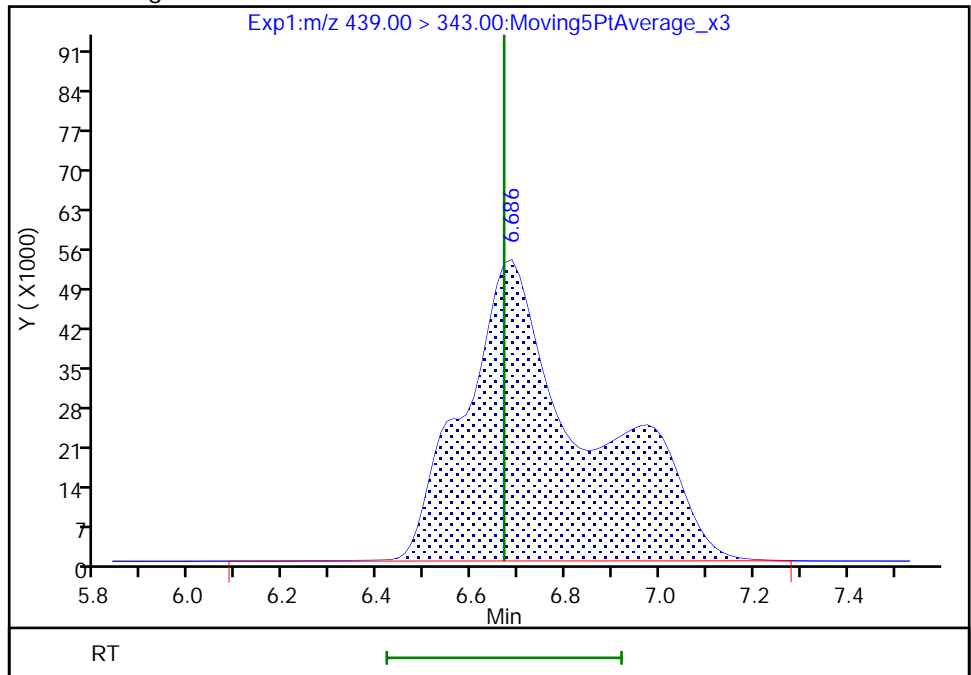
RT: 6.69
Area: 680313
Amount: 0.085662
Amount Units: ng/ml

Processing Integration Results



RT: 6.69
Area: 968637
Amount: 0.121966
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 09:23:28
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

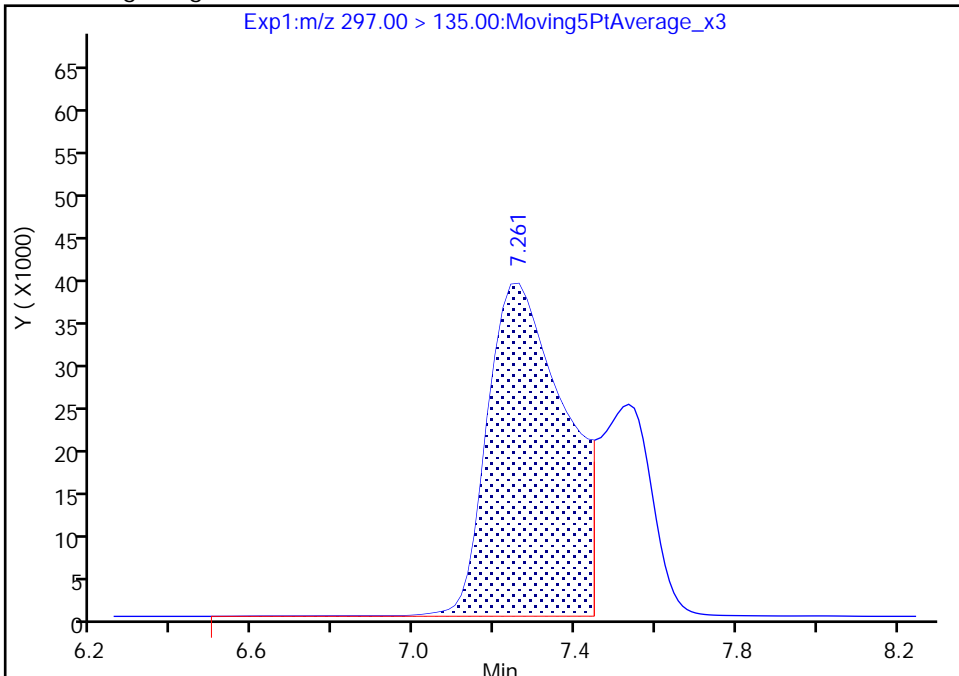
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Injection Date: 24-Feb-2021 06:11:27 Instrument ID: A10
Lims ID: LCS 320-464016/2-A
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 24 Worklist Smp#: 11
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

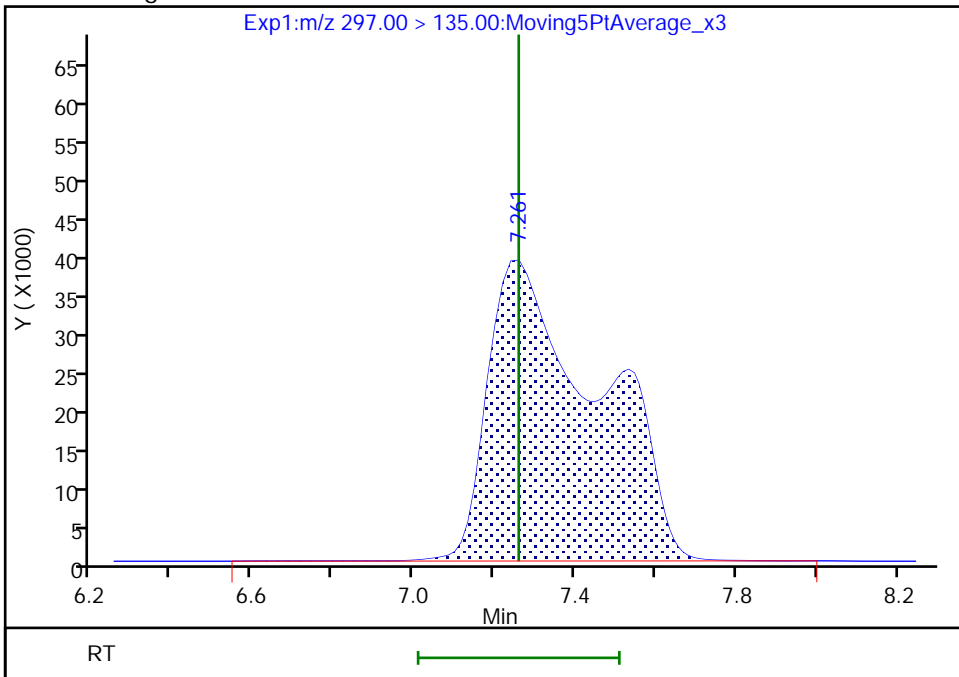
RT: 7.26
Area: 521832
Amount: 0.068069
Amount Units: ng/ml

Processing Integration Results



RT: 7.26
Area: 741524
Amount: 0.096726
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 09:23:31
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

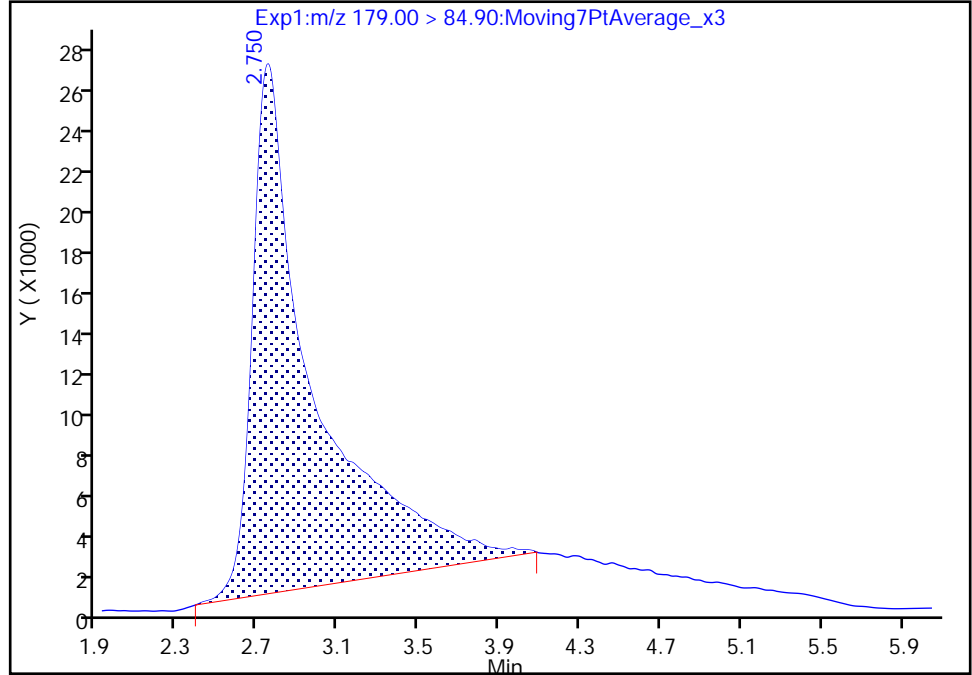
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Injection Date: 24-Feb-2021 06:11:27 Instrument ID: A10
Lims ID: LCS 320-464016/2-A
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 24 Worklist Smp#: 11
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

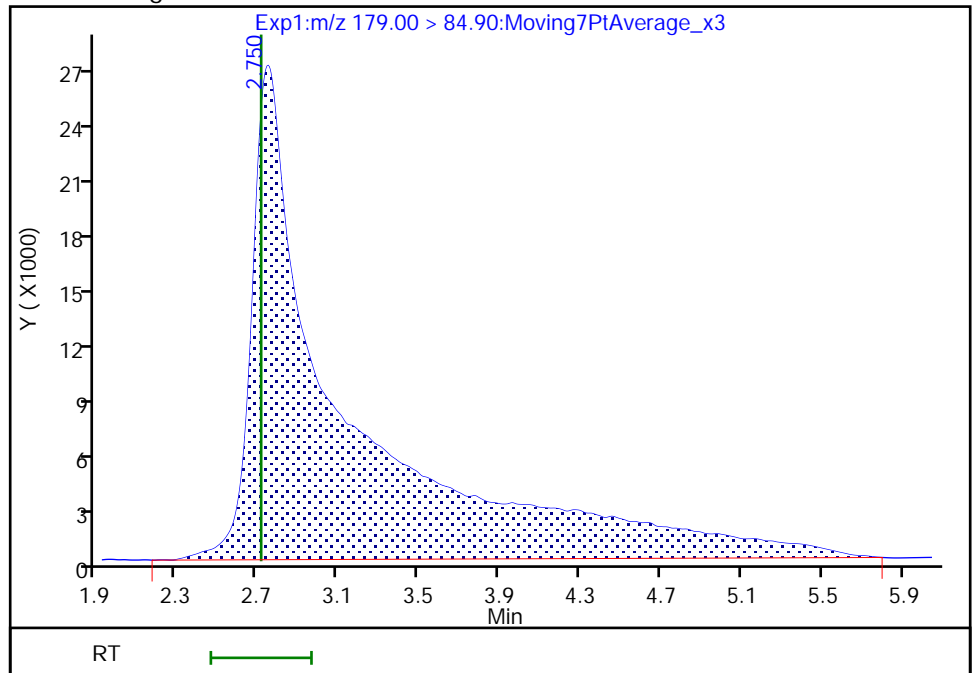
RT: 2.75
Area: 555696
Amount: 0.055502
Amount Units: ng/ml

Processing Integration Results



RT: 2.75
Area: 855976
Amount: 0.085494
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 09:23:17
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

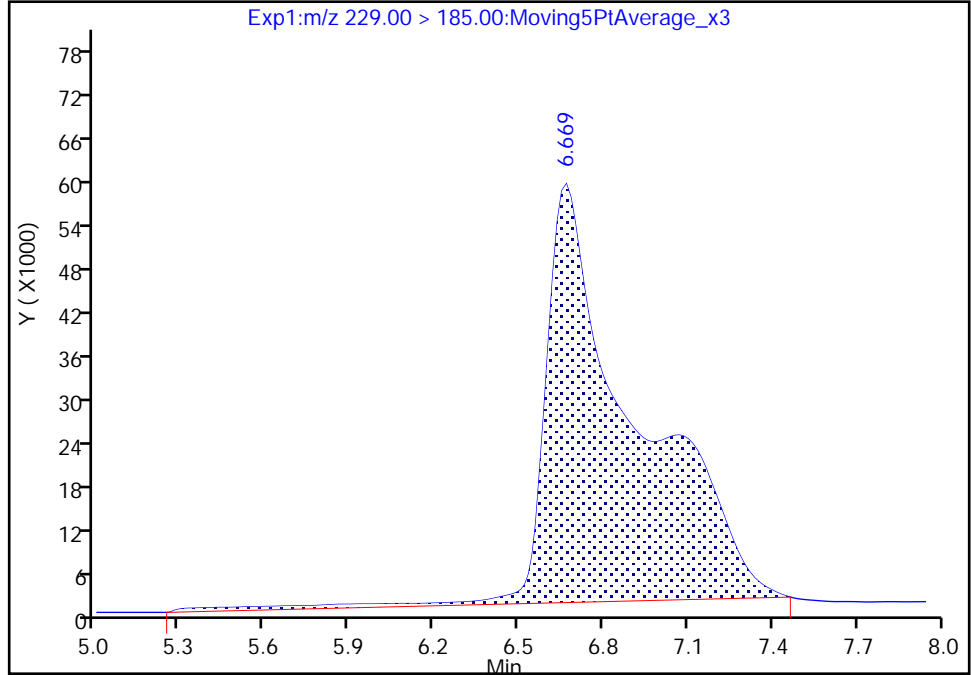
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Injection Date: 24-Feb-2021 06:11:27 Instrument ID: A10
Lims ID: LCS 320-464016/2-A
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 24 Worklist Smp#: 11
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

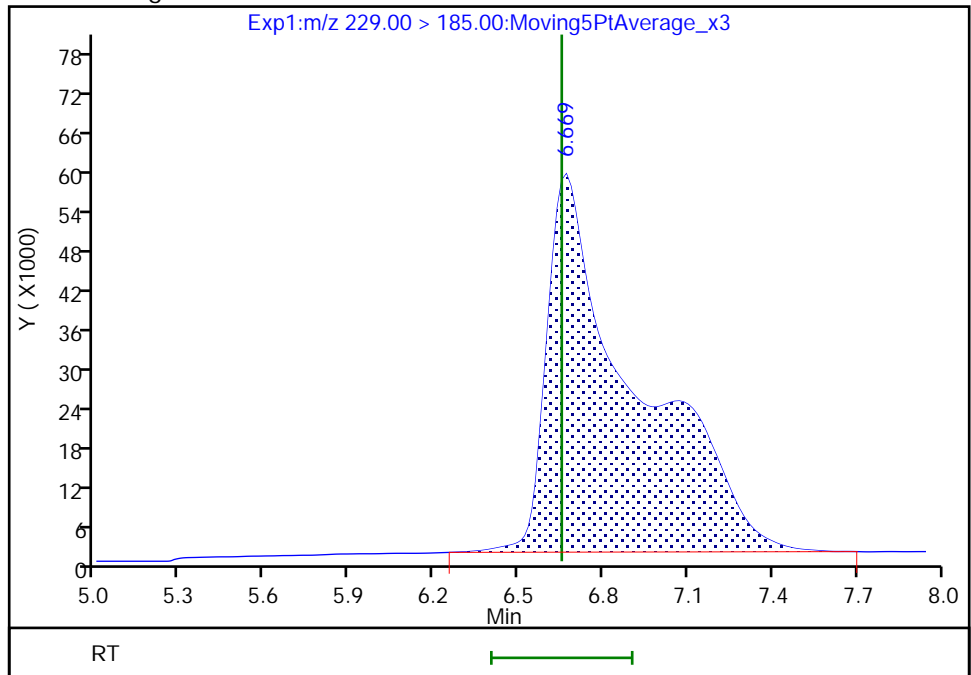
RT: 6.67
Area: 1283234
Amount: 0.100849
Amount Units: ng/ml

Processing Integration Results



RT: 6.67
Area: 1268792
Amount: 0.099688
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Sacramento

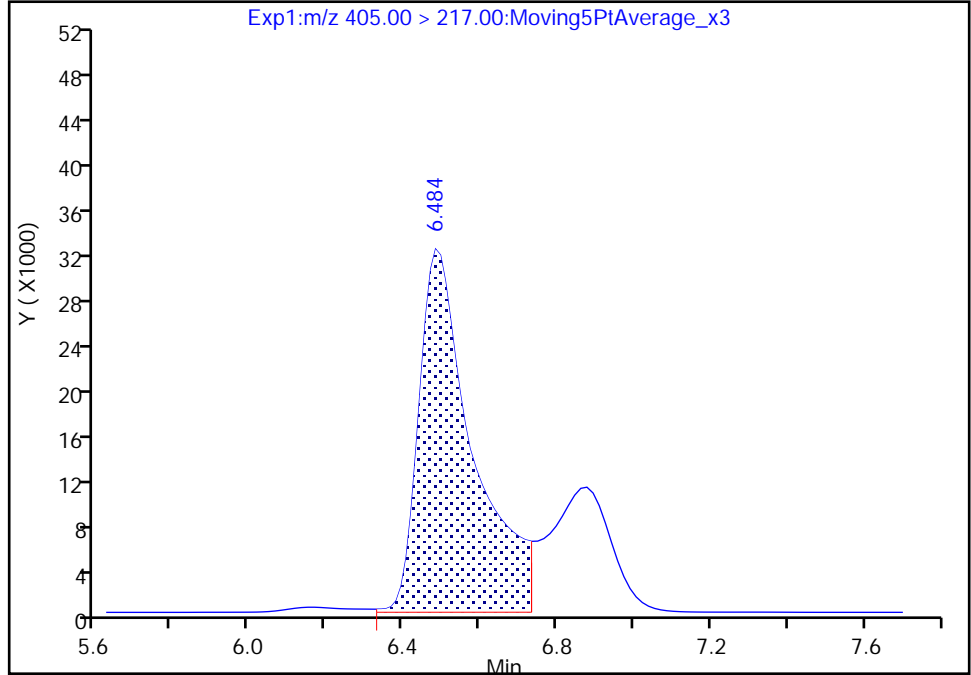
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Injection Date: 24-Feb-2021 06:11:27 Instrument ID: A10
Lims ID: LCS 320-464016/2-A
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 24 Worklist Smp#: 11
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

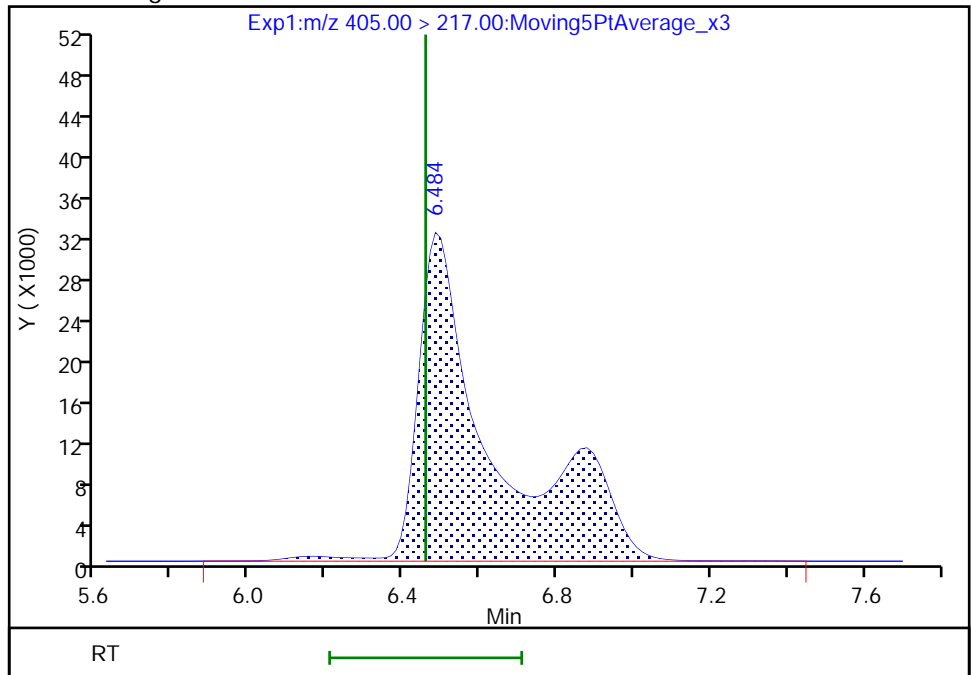
RT: 6.48
Area: 314723
Amount: 0.076503
Amount Units: ng/ml

Processing Integration Results



RT: 6.48
Area: 444997
Amount: 0.108171
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 09:23:20
Audit Action: Manually Integrated

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 320-464016/3-A
 Matrix: Water Lab File ID: 2021.02.23_A10_TB3+_B_025.d
 Analysis Method: Chemours (TB3+) Date Collected: _____
 Extraction Method: PFAS Prep Date Extracted: 02/22/2021 11:40
 Sample wt/vol: 2.50 (mL) Date Analyzed: 02/24/2021 06:28
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 464205 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	0.206		0.0020	
13252-13-6	HFPO-DA	0.211		0.0020	
773804-62-9	Hydro-EVE Acid	0.211		0.0020	
2416366-19-1	Hydrolyzed PSDA	0.249		0.0020	
749836-20-2	Hydro-PS Acid	0.202		0.0020	
1132933-86-8	NVHOS	0.194		0.0020	
267239-61-2	PEPA	0.230		0.020	
113507-82-7	PES	0.202		0.0020	
151772-58-6	PFECA B	0.208		0.0020	
801212-59-9	PFECA G	0.229		0.0020	
674-13-5	PFMOAA	0.175		0.0020	
39492-88-1	PFO2HxA	0.204		0.0020	
39492-89-2	PFO3OA	0.201		0.0020	
39492-90-5	PFO4DA	0.221		0.0020	
39492-91-6	PFO5DA	0.173		0.0020	
13140-29-9	PMPA	0.200		0.010	
29311-67-9	PS Acid	0.216		0.0020	
2416366-22-6	R-EVE	0.215		0.0020	
2416366-18-0	R-PSDA	0.222		0.0020	
2416366-21-5	R-PSDCA	0.210		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	95		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_025.d
 Lims ID: LCSD 320-464016/3-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 24-Feb-2021 06:28:56 ALS Bottle#: 25 Worklist Smp#: 12
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: lcsd 320-464016/3-a
 Misc. Info.: Plate: 1 Rack: 2
 Operator ID: Sac_inst_A10 Instrument ID: A10
 Method: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\A10_PFAS_CHEM_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Feb-2021 07:44:51 Calib Date: 20-Feb-2021 14:15:58
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A10\20210220-113676.b\2021.02.20_A10_TB3+_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1619

First Level Reviewer: vangmy Date: 24-Feb-2021 09:24:23
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	2.634	2.716	-0.082		878371	0.0877		87.7	87.9	M
2 R-EVE										M
405.00 > 217.00	6.420	6.458	-0.038		442554	0.1076		108	9928	M
3 R-PSDA										M
440.90 > 241.00	6.522	6.560	-0.038		301825	0.1111		111	7066	M
23 PMPA										M
229.00 > 185.00	6.622	6.653	-0.031		1272270	0.1000		100.0	478	M
4 Hydrolyzed PSDA										M
439.00 > 343.00	6.638	6.669	-0.031		989994	0.1247		125	17019	M
5 NVHOS										M
297.00 > 135.00	7.222	7.260	-0.038		745499	0.0972		97.2	13008	M
6 PFO2HxA										
245.00 > 85.00	7.842	7.863	-0.021		959491	0.1022		102	7775	
22 PEPA										
278.90 > 234.90	8.511	8.521	-0.010		641914	0.1148		115	1014	
7 PES										
314.90 > 135.00	8.849	8.860	-0.011		4748937	0.1011		101	154697	
8 PFECA B										
295.00 > 201.00	9.076	9.087	-0.011		674120	0.1039		104	18498	
9 PFO3OA										
310.90 > 85.00	9.322	9.321	0.001		601338	0.1003		100	14038	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.432	9.432	0.0		1314455	0.2376		95.0	52993	
11 HPFO-DA										
285.00 > 169.00	9.432	9.432	0.0	1.000	603931	0.1055		106	24243	
12 R-PSDCA										
397.00 > 217.00	9.793	9.792	0.001		4594328	0.1049		105	163141	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Hydro-EVE Acid										
427.00 > 282.90	9.850	9.849	0.001		8332559	0.1055		106	112912	
D 14 13C4 PFHpA										
367.00 > 322.00	9.850	9.849	0.001		6061078	0.2386		95.4	125930	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.850	9.849	0.001	1.000	2851893	0.1113	Target=0.00	111	25483	
363.00 > 169.00	9.850	9.849	0.001	1.000	1182561		2.41(0.00-0.00)		29579	
15 Hydro-PS Acid										
463.00 > 262.90	9.869	9.868	0.001		2568358	0.1011		101	73733	
17 PFECA G										
378.90 > 184.90	9.976	9.958	0.018		1075744	0.1145		115	44346	
18 PFO4DA										
376.90 > 85.00	10.122	10.100	0.022		571164	0.1107		111	3599	
19 PS Acid										
443.00 > 146.90	10.184	10.184	0.0		1237279	0.1082		108	37519	
20 EVE Acid										
407.00 > 262.90	10.184	10.184	0.0		4652741	0.1030		103	93232	
21 TAF										
442.90 > 85.00	10.683	10.668	0.015		325078	0.0867		86.7	647	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_025.d

Injection Date: 24-Feb-2021 06:28:56

Instrument ID: A10

Lims ID: LCSD 320-464016/3-A

Client ID:

Operator ID: Sac_inst_A10

ALS Bottle#: 25

Worklist Smp#: 12

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

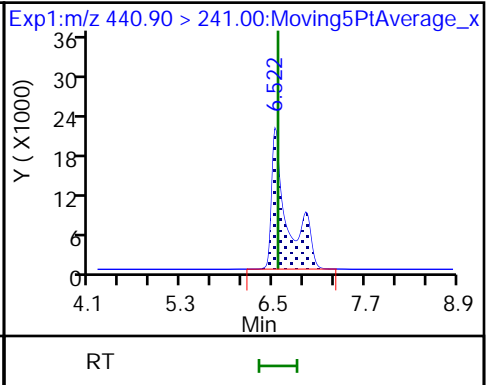
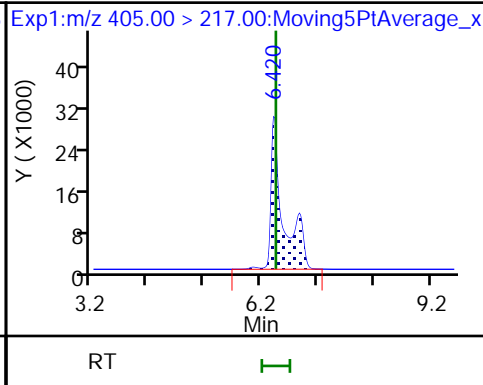
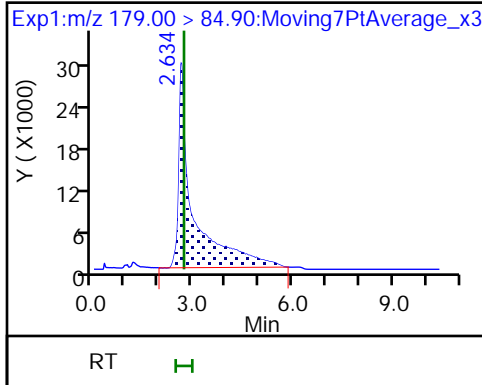
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Limit Group: LC PFAS_TB3P - ICAL

1 PFM0AA (M)

2 R-EVE (M)

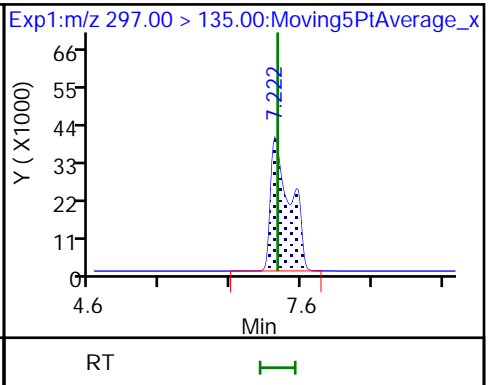
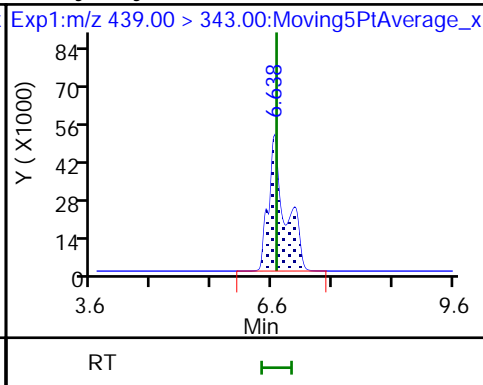
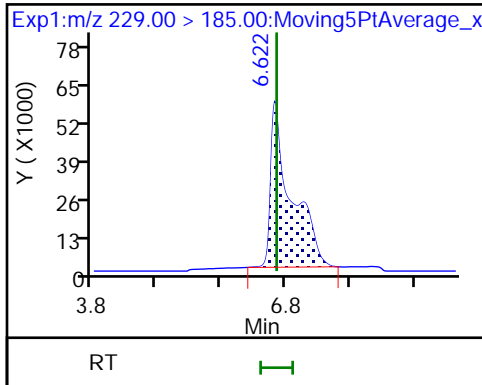
3 R-PSDA (M)



23 PMPA (M)

4 Hydrolyzed PSDA (M)

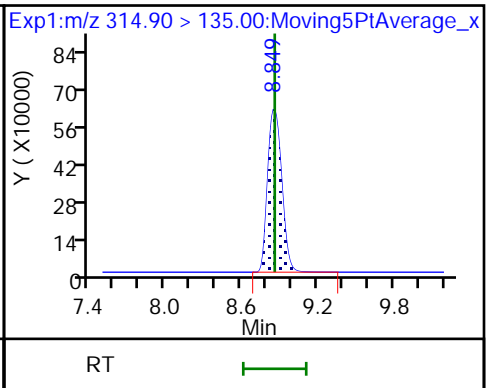
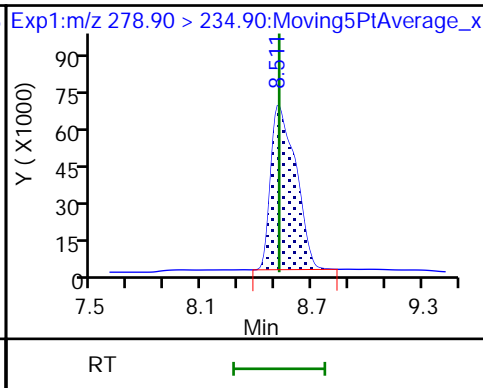
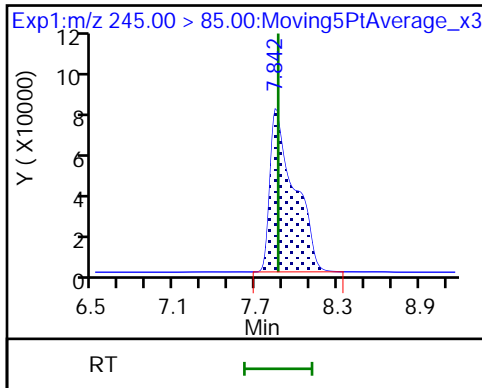
5 NVHOS (M)



6 PFO2HxA

22 PEPA

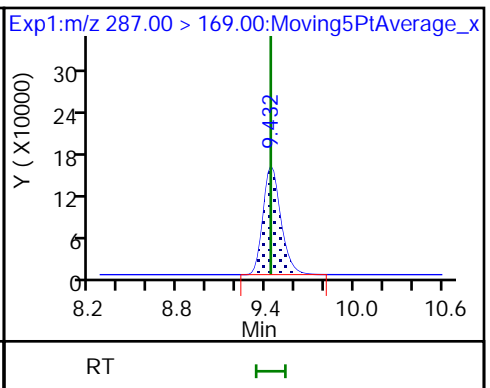
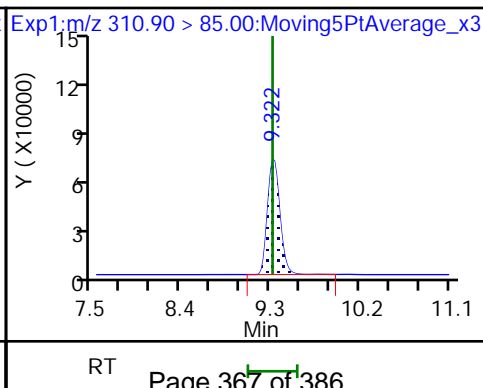
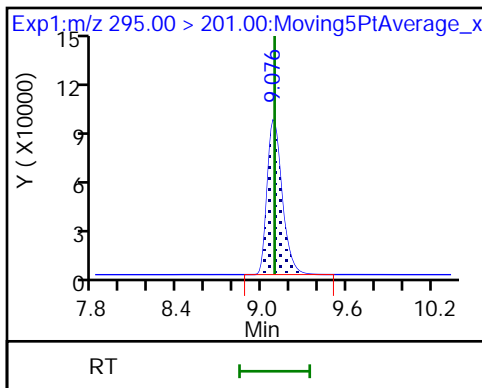
7 PES

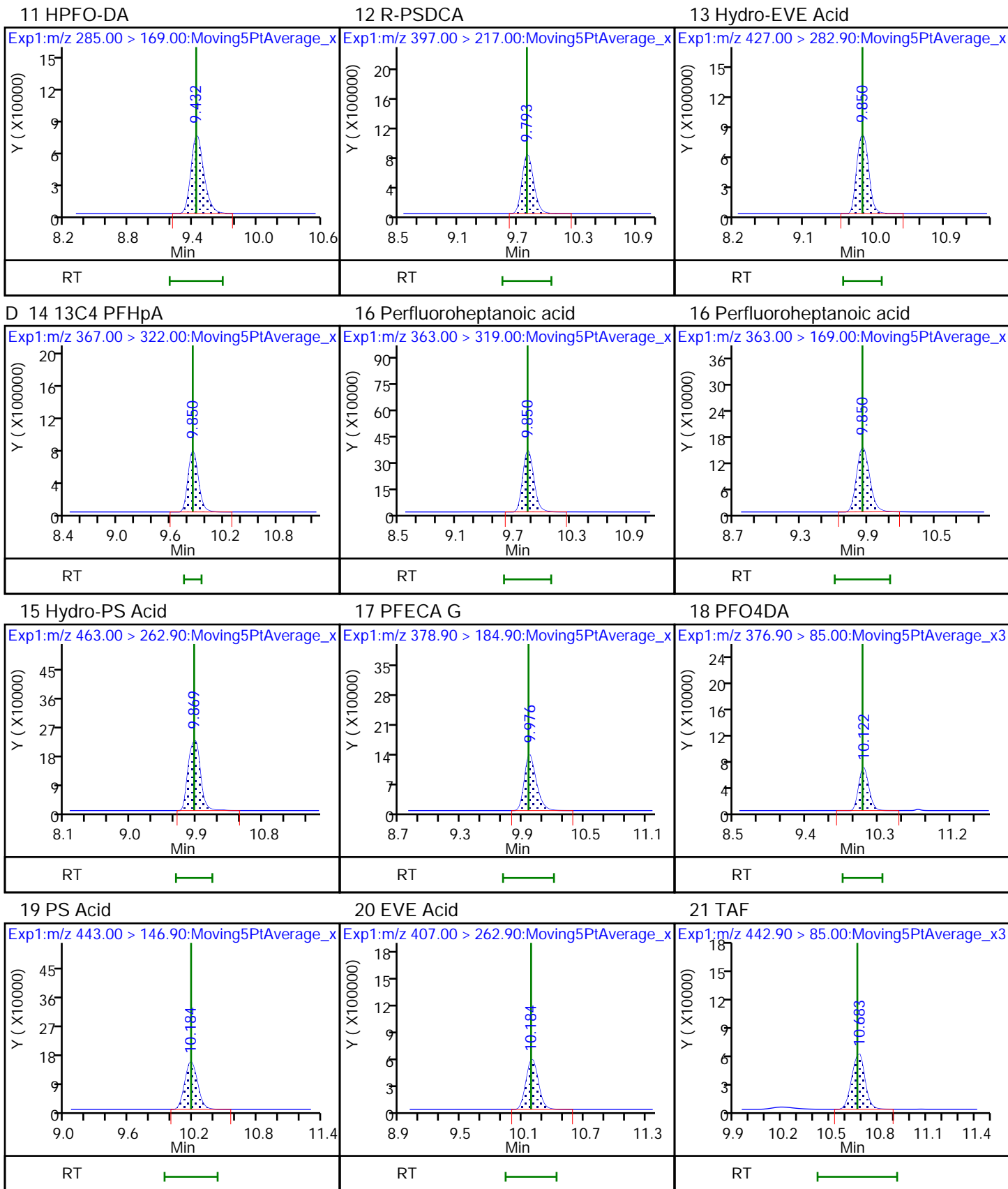


8 PFECAB

9 PFO3OA

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

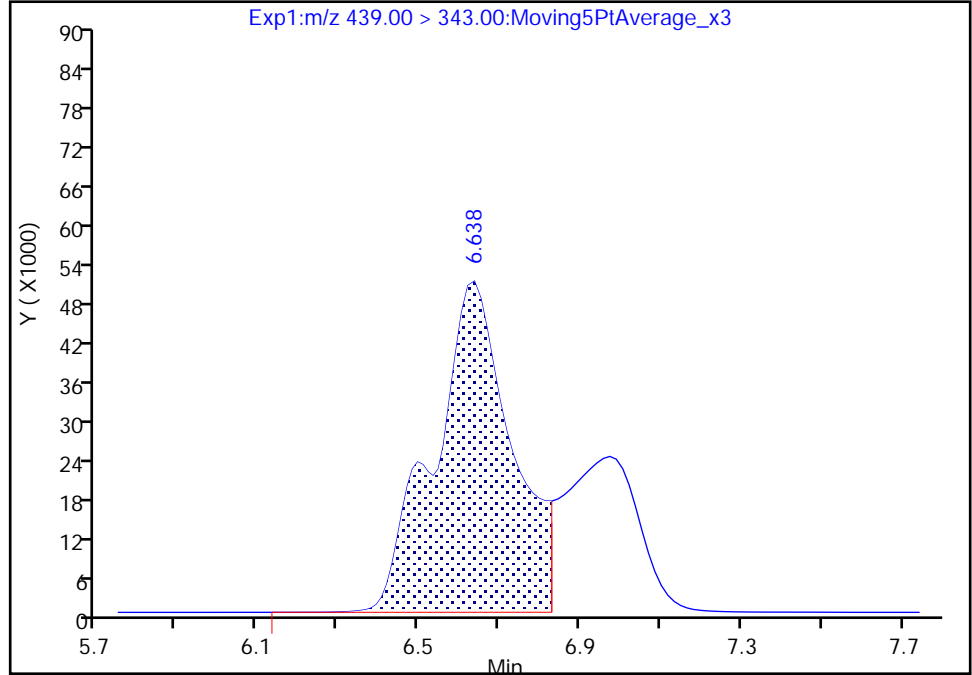
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Injection Date: 24-Feb-2021 06:28:56 Instrument ID: A10
Lims ID: LCSD 320-464016/3-A
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 25 Worklist Smp#: 12
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

4 Hydrolyzed PSDA, CAS: 2416366-19-1

Signal: 1

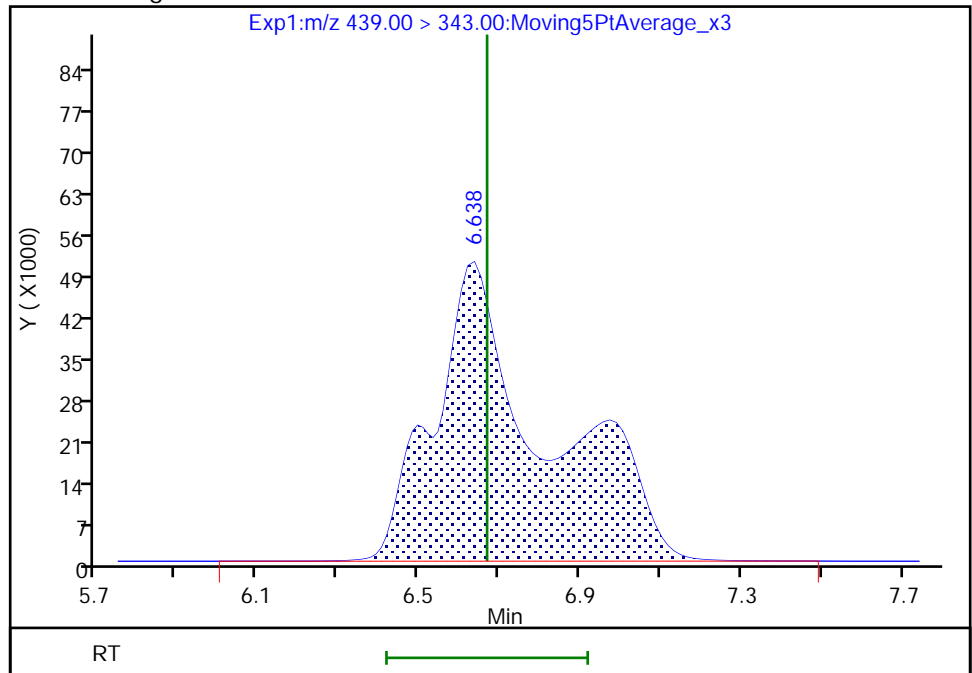
RT: 6.64
Area: 683552
Amount: 0.086070
Amount Units: ng/ml

Processing Integration Results



RT: 6.64
Area: 989994
Amount: 0.124656
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 09:24:09
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

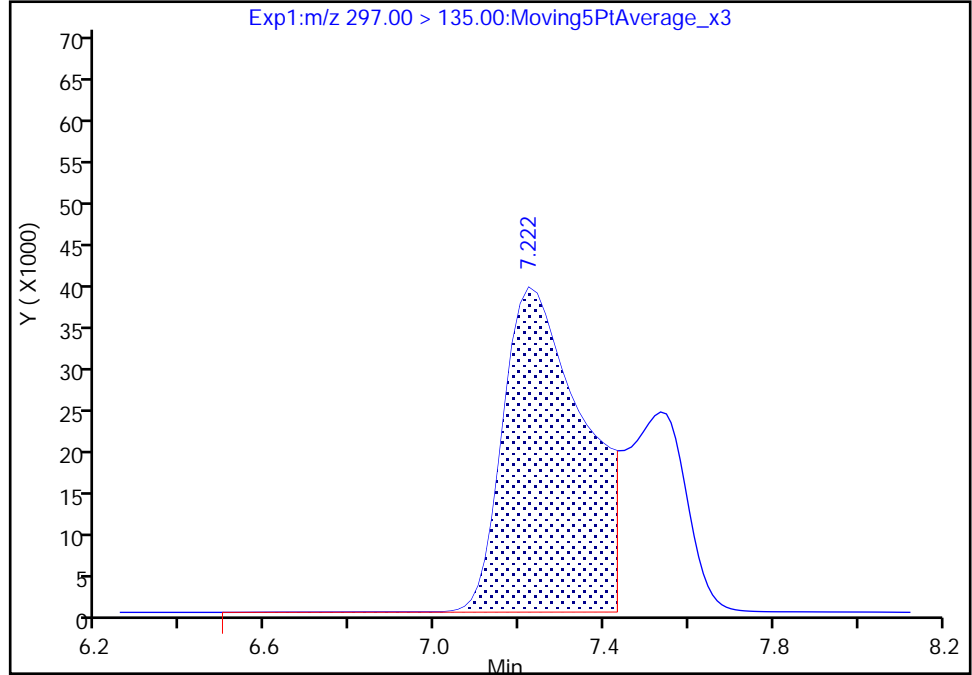
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Lims ID: LCSD 320-464016/3-A
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 25 Worklist Smp#: 12
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

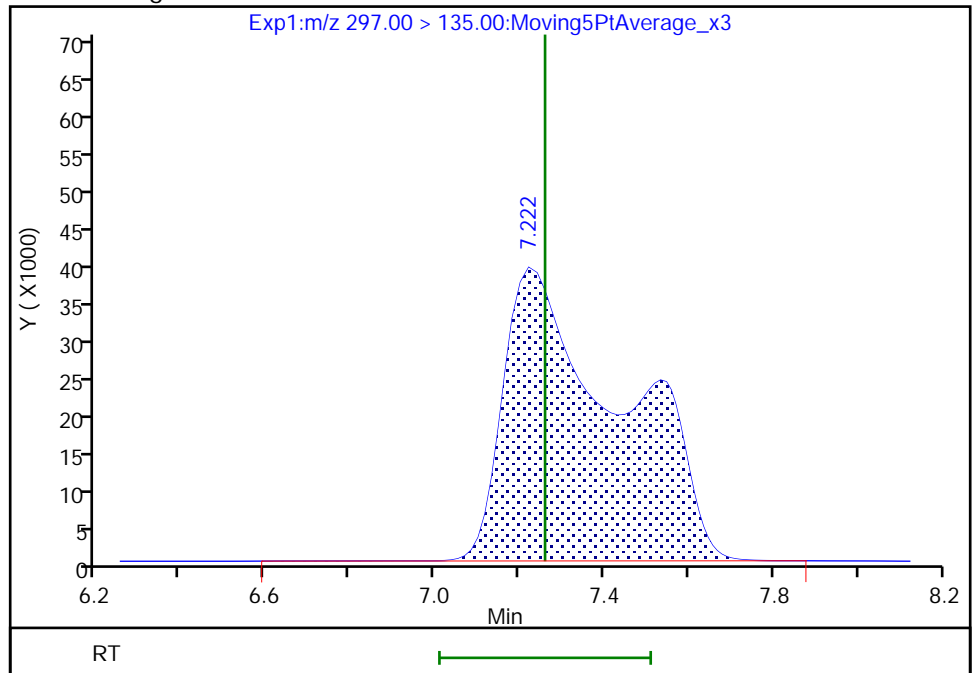
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Area: 510676
Amount: 0.066614
Amount Units: ng/ml

Processing Integration Results



RT: 7.22
Area: 745499
Amount: 0.097244
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 09:24:12
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

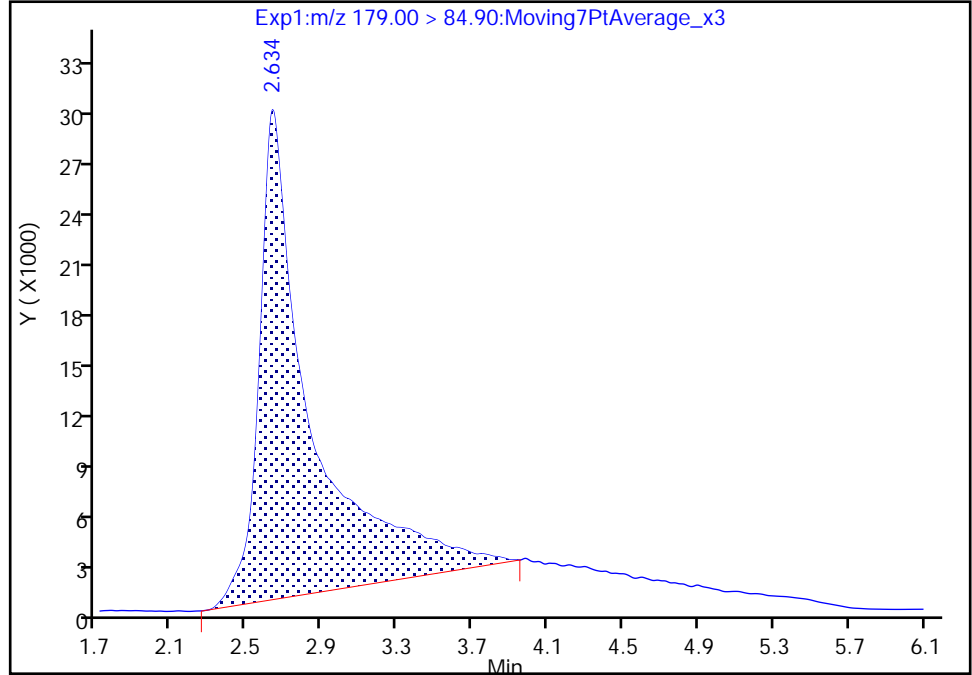
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Lims ID: LCSD 320-464016/3-A
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 25 Worklist Smp#: 12
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

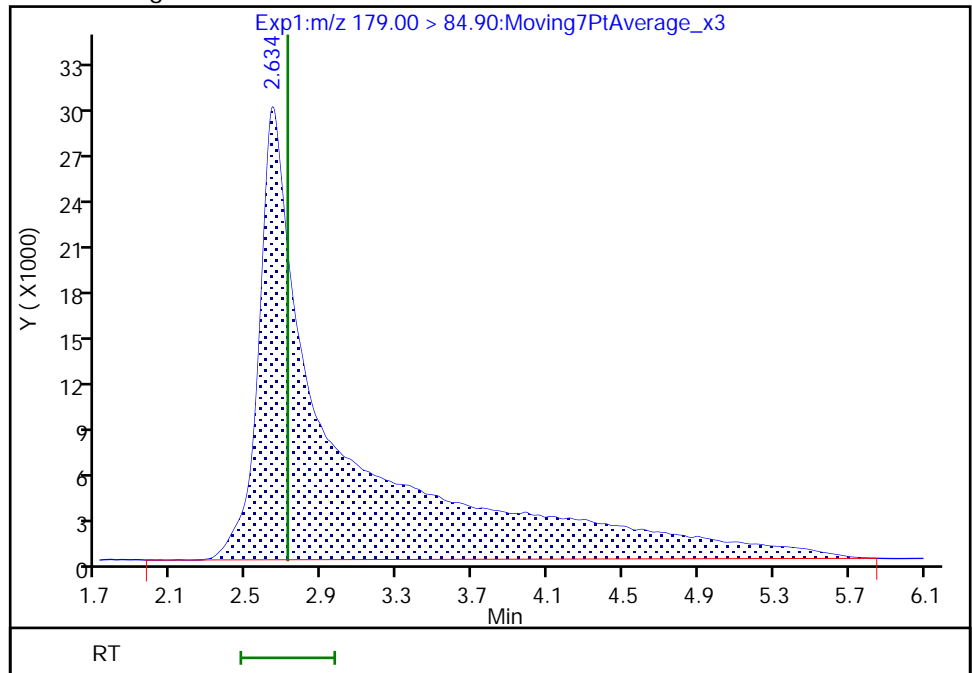
RT: 2.63
Area: 563477
Amount: 0.056279
Amount Units: ng/ml

Processing Integration Results



RT: 2.63
Area: 878371
Amount: 0.087730
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 09:23:56
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

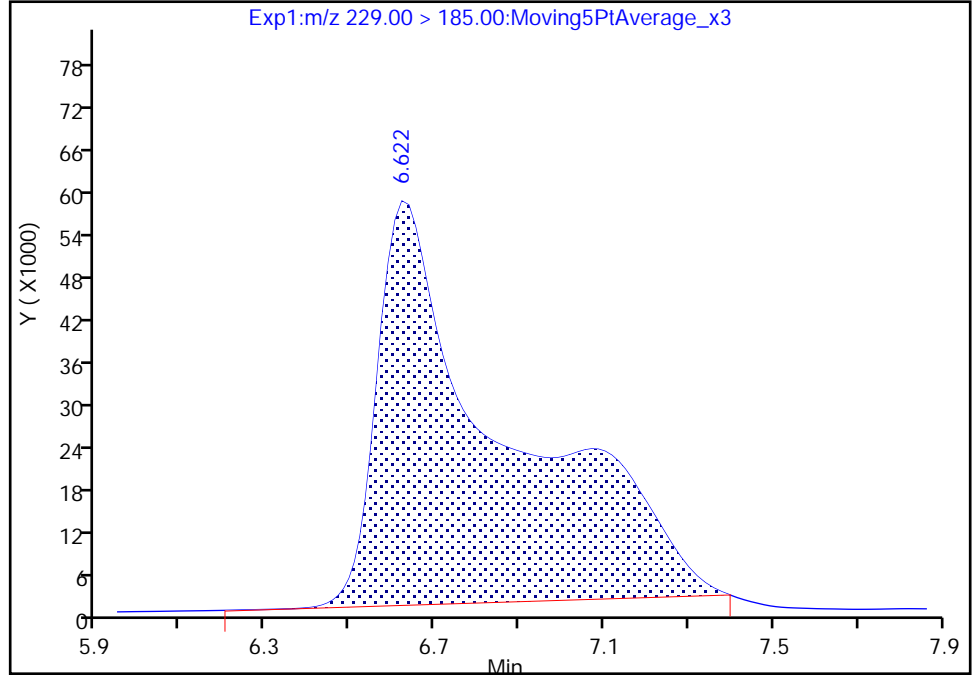
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Injection Date: 24-Feb-2021 06:28:56 Instrument ID: A10
Lims ID: LCSD 320-464016/3-A
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 25 Worklist Smp#: 12
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

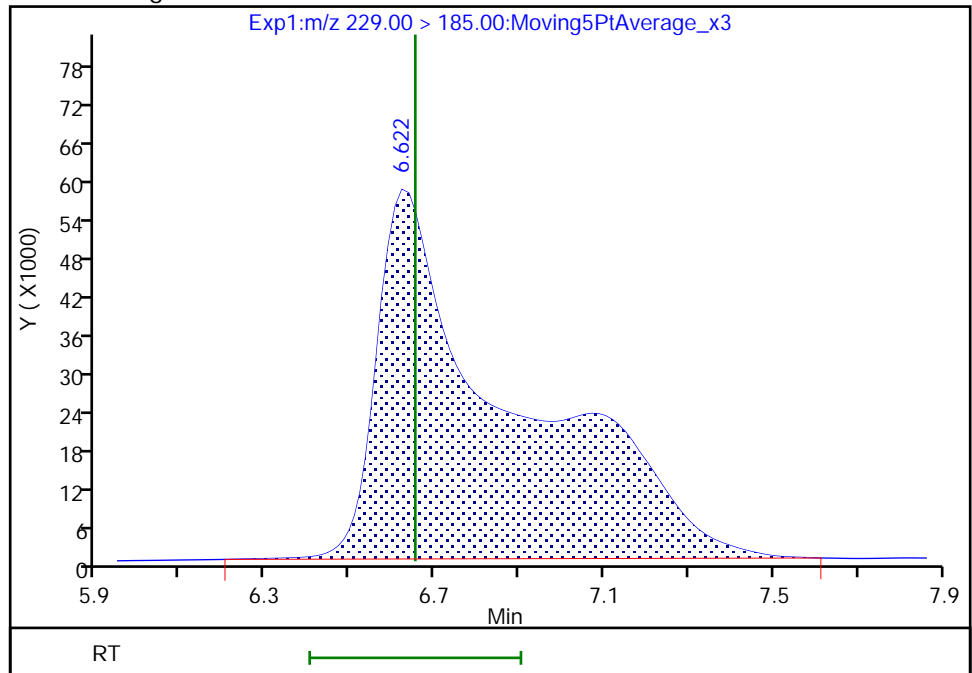
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Area: 1198141
Amount: 0.094012
Amount Units: ng/ml

Processing Integration Results



RT: 6.62
Area: 1272270
Amount: 0.099968
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 09:24:06
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

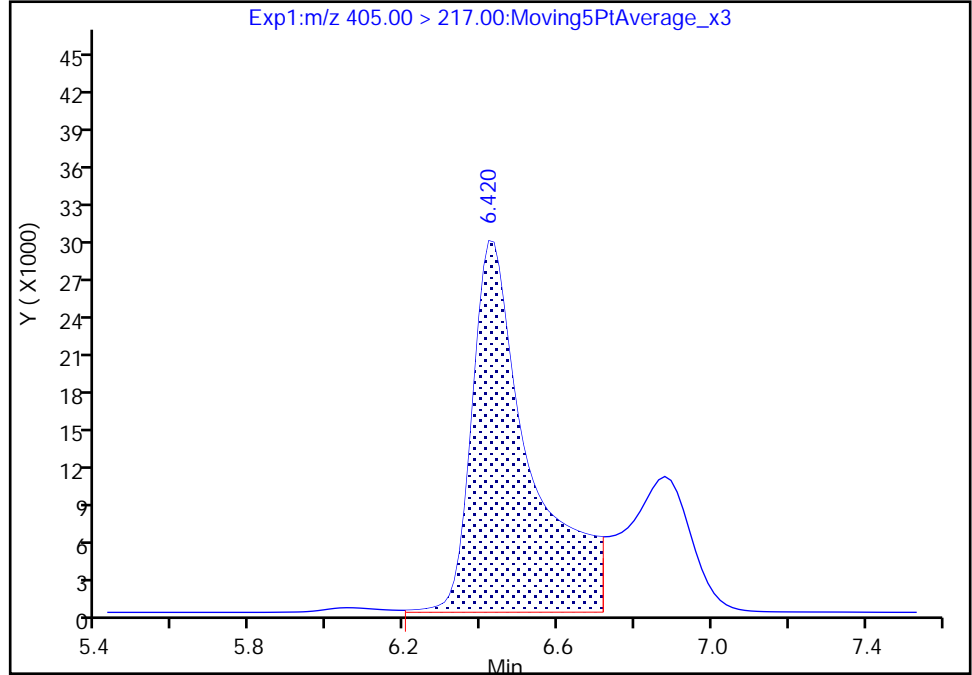
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Lims ID: LCSD 320-464016/3-A
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 25 Worklist Smp#: 12
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

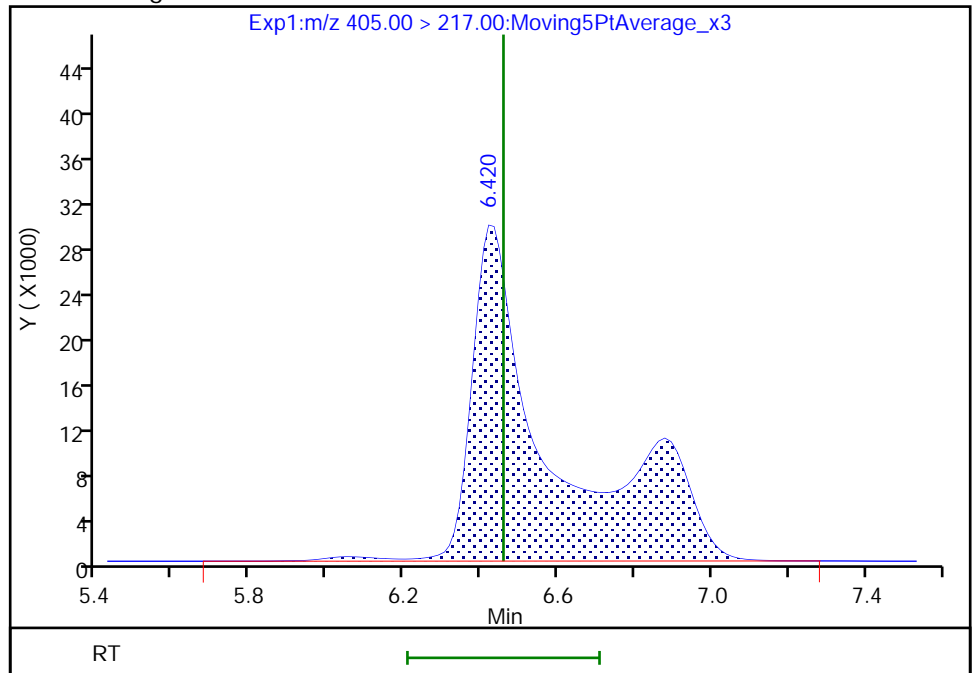
RT: 6.42
Area: 310117
Amount: 0.075384
Amount Units: ng/ml

Processing Integration Results



RT: 6.42
Area: 442554
Amount: 0.107577
Amount Units: ng/ml

Manual Integration Results



Reviewer: vangmy, 24-Feb-2021 09:23:58
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

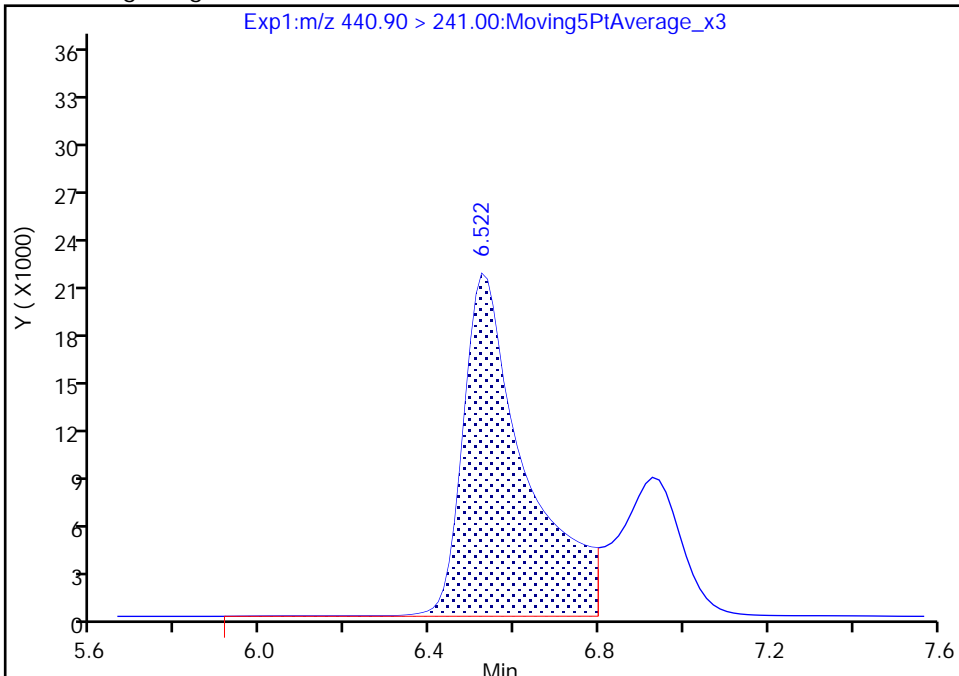
Data File: \\chromfs\Sacramento\ChromData\A10\20210223-113777.b\2021.02.23_A10_TB3+_B_025.d
Injection Date: 24-Feb-2021 06:28:56 Instrument ID: A10
Lims ID: LCSD 320-464016/3-A
Client ID:
Operator ID: Sac_inst_A10 ALS Bottle#: 25 Worklist Smp#: 12
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: A10_PFAS_CHEM_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

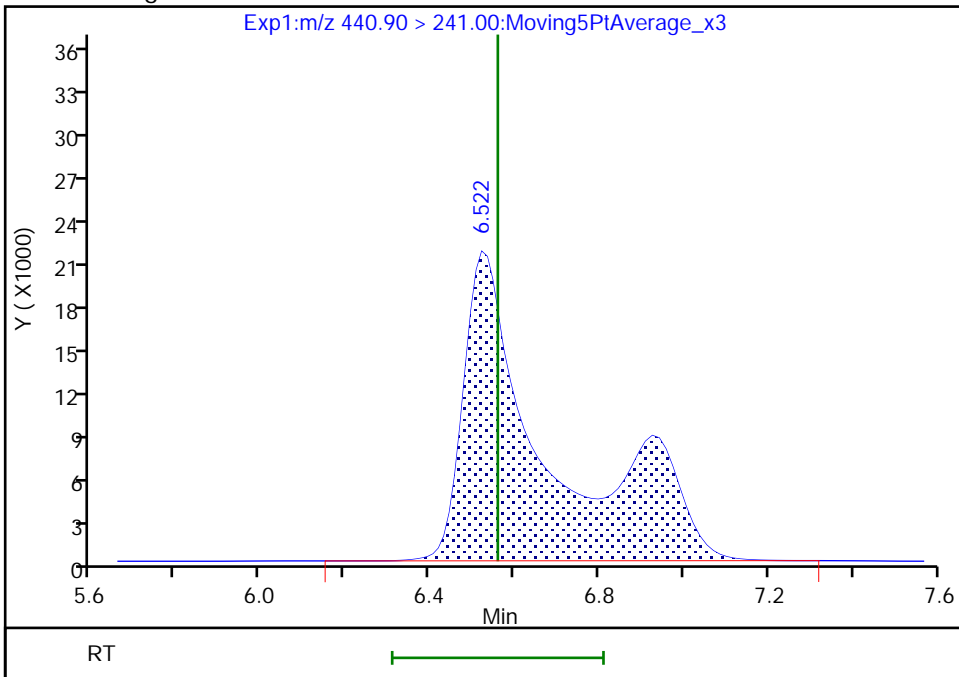
RT: 6.52
Area: 215862
Amount: 0.079474
Amount Units: ng/ml

Processing Integration Results



RT: 6.52
Area: 301825
Amount: 0.111123
Amount Units: ng/ml

Manual Integration Results



LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Instrument ID: A10 Start Date: 02/20/2021 10:46

Analysis Batch Number: 463725 End Date: 02/20/2021 14:50

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-463725/2		02/20/2021 10:46	1	2021.02.20_A10_TB3+ ICAL_002.d	GeminiC18 3x100 3(mm)
IC 320-463725/3		02/20/2021 11:03	1	2021.02.20_A10_TB3+ ICAL_003.d	GeminiC18 3x100 3(mm)
IC 320-463725/4		02/20/2021 11:21	1	2021.02.20_A10_TB3+ ICAL_004.d	GeminiC18 3x100 3(mm)
IC 320-463725/5		02/20/2021 11:38	1	2021.02.20_A10_TB3+ ICAL_005.d	GeminiC18 3x100 3(mm)
IC 320-463725/6		02/20/2021 11:56	1	2021.02.20_A10_TB3+ ICAL_006.d	GeminiC18 3x100 3(mm)
IC 320-463725/7		02/20/2021 12:13	1	2021.02.20_A10_TB3+ ICAL_007.d	GeminiC18 3x100 3(mm)
ZZZZZ		02/20/2021 12:31	1		GeminiC18 3x100 3(mm)
IC 320-463725/9		02/20/2021 12:48	1	2021.02.20_A10_TB3+ ICAL_009.d	GeminiC18 3x100 3(mm)
ZZZZZ		02/20/2021 13:06	1		GeminiC18 3x100 3(mm)
IC 320-463725/11		02/20/2021 13:23	1	2021.02.20_A10_TB3+ ICAL_011.d	GeminiC18 3x100 3(mm)
ZZZZZ		02/20/2021 13:41	1		GeminiC18 3x100 3(mm)
IC 320-463725/13		02/20/2021 13:58	1	2021.02.20_A10_TB3+ ICAL_013.d	GeminiC18 3x100 3(mm)
IC 320-463725/14		02/20/2021 14:15	1	2021.02.20_A10_TB3+ ICAL_014.d	GeminiC18 3x100 3(mm)
ZZZZZ		02/20/2021 14:33	1		GeminiC18 3x100 3(mm)
ICV 320-463725/16		02/20/2021 14:50	1	2021.02.20_A10_TB3+ ICAL_016.d	GeminiC18 3x100 3(mm)

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Instrument ID: A10 Start Date: 02/24/2021 03:16

Analysis Batch Number: 464205 End Date: 02/24/2021 11:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 320-464205/1		02/24/2021 03:16	1	2021.02.23_A10_TB3+ B 014.d	GeminiC18 3x100 3(mm)
ZZZZZ		02/24/2021 03:34	1		GeminiC18 3x100 3(mm)
MB 320-464016/1-A		02/24/2021 03:51	1	2021.02.23_A10_TB3+ B 016.d	GeminiC18 3x100 3(mm)
320-70306-1	SEEP-C-EFFLUENT-192-021321	02/24/2021 04:09	1	2021.02.23_A10_TB3+ B 017.d	GeminiC18 3x100 3(mm)
ZZZZZ		02/24/2021 04:26	1		GeminiC18 3x100 3(mm)
320-70306-3	SEEP-C-RAIN-EFFLUENT-24-021321	02/24/2021 04:44	1	2021.02.23_A10_TB3+ B 019.d	GeminiC18 3x100 3(mm)
ZZZZZ		02/24/2021 05:01	1		GeminiC18 3x100 3(mm)
320-70306-5	SEEP-C-EQBLK-ISCO-021321	02/24/2021 05:19	1	2021.02.23_A10_TB3+ B 021.d	GeminiC18 3x100 3(mm)
320-70306-6	SEEP-C-FBLK-021321	02/24/2021 05:36	1	2021.02.23_A10_TB3+ B 022.d	GeminiC18 3x100 3(mm)
320-70306-7	SEEP-C-RAIN-EQBLK-ISCO-021321	02/24/2021 05:53	1	2021.02.23_A10_TB3+ B 023.d	GeminiC18 3x100 3(mm)
LCS 320-464016/2-A		02/24/2021 06:11	1	2021.02.23_A10_TB3+ B 024.d	GeminiC18 3x100 3(mm)
LCSD 320-464016/3-A		02/24/2021 06:28	1	2021.02.23_A10_TB3+ B 025.d	GeminiC18 3x100 3(mm)
ZZZZZ		02/24/2021 06:46	1		GeminiC18 3x100 3(mm)
CCV 320-464205/14		02/24/2021 07:03	1	2021.02.23_A10_TB3+ B 027.d	GeminiC18 3x100 3(mm)
ZZZZZ		02/24/2021 07:21	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/24/2021 07:38	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/24/2021 07:56	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/24/2021 08:13	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/24/2021 08:31	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/24/2021 08:48	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/24/2021 09:06	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/24/2021 09:23	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/24/2021 09:40	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/24/2021 09:58	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/24/2021 10:15	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/24/2021 10:33	1		GeminiC18 3x100 3(mm)
CCV 320-464205/27		02/24/2021 10:50	1	2021.02.23_A10_TB3+ B 040.d	GeminiC18 3x100 3(mm)
ZZZZZ		02/24/2021 11:08	1		GeminiC18 3x100 3(mm)

Chemours (TB3+)

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Instrument ID: A10 Start Date: 02/25/2021 11:44

Analysis Batch Number: 464873 End Date: 02/26/2021 08:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 320-464873/1		02/25/2021 11:44	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 12:01	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 12:19	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 12:36	20		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 12:53	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 13:11	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 13:28	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 13:46	1		GeminiC18 3x100 3(mm)
CCV 320-464873/9		02/25/2021 14:03	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 14:21	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 14:38	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 14:56	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 15:13	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 15:31	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 15:48	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 16:06	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 16:23	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 16:41	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 16:58	1		GeminiC18 3x100 3(mm)
CCV 320-464873/20		02/25/2021 17:16	1	2021.02.25_A10_TB3+ C 021.d	GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 17:33	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 17:51	10		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 18:08	20		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 18:25	20		GeminiC18 3x100 3(mm)
320-70306-2	SEEP-C-INFLUENT-192-021321	02/25/2021 18:43	50	2021.02.25_A10_TB3+ C 026.d	GeminiC18 3x100 3(mm)
320-70306-4	SEEP-C-RAIN-INFLUENT-24-021321	02/25/2021 19:00	50	2021.02.25_A10_TB3+ C 027.d	GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 19:18	100		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 19:35	1		GeminiC18 3x100 3(mm)
CCV 320-464873/29		02/25/2021 19:53	1	2021.02.25_A10_TB3+ C 030.d	GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 20:10	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 20:28	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 20:45	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 21:03	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 21:20	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 21:38	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 21:55	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 22:13	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 22:30	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 22:48	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 23:05	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 23:22	1		GeminiC18 3x100 3(mm)
CCV 320-464873/42		02/25/2021 23:40	1		GeminiC18 3x100 3(mm)
ZZZZZ		02/25/2021 23:57	1		GeminiC18 3x100 3(mm)

Chemours (TB3+)

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70306-1

SDG No.: _____

Instrument ID: A10 Start Date: 02/25/2021 11:44

Analysis Batch Number: 464873 End Date: 02/26/2021 08:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		02/26/2021 00:15	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 00:32	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 00:50	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 01:07	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 01:25	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 01:42	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 02:00	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 02:17	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 02:35	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 02:52	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 03:10	1		GeminiC18 3x100 3 (mm)
CCV 320-464873/55		02/26/2021 03:27	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 03:44	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 04:02	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 04:19	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 04:37	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 04:54	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 05:12	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 05:29	1		GeminiC18 3x100 3 (mm)
CCV 320-464873/63		02/26/2021 05:47	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 06:04	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 06:22	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 06:39	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 06:57	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 07:14	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 07:32	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 07:49	1		GeminiC18 3x100 3 (mm)
ZZZZZ		02/26/2021 08:07	1		GeminiC18 3x100 3 (mm)
CCV 320-464873/76		02/26/2021 08:24	1		GeminiC18 3x100 3 (mm)

LCMS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Sacramen Job No.: 320-70306-1

SDG No.: _____

Batch Number: 464016 Batch Start Date: 02/22/21 12:39 Batch Analyst: Duong, Stephanie A

Batch Method: PFAS Prep Batch End Date: 02/22/21 16:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	LCMTB3_SU 00022	LCTB3_SP 00063	AnalysisComment	
MB 320-464016/1		PFAS Prep, Chemours (TB3+)		2.50 mL	5.00 mL	250 uL		H2O/MeOH	
LCS 320-464016/2		PFAS Prep, Chemours (TB3+)		2.50 mL	5.00 mL	250 uL	100 uL		
LCSD 320-464016/3		PFAS Prep, Chemours (TB3+)		2.50 mL	5.00 mL	250 uL	100 uL		
320-70306-A-1	SEEP-C-EFFLUENT-192-021321	PFAS Prep, Chemours (TB3+)	T	2.50 mL	5.00 mL	250 uL		pH = 7	
320-70306-A-2	SEEP-C-INFLUENT-192-021321	PFAS Prep, Chemours (TB3+)	T	2.50 mL	5.00 mL	250 uL		pH = 7	
320-70306-A-3	SEEP-C-RAIN-EFFLUENT-24-021321	PFAS Prep, Chemours (TB3+)	T	2.50 mL	5.00 mL	250 uL		pH = 7	
320-70306-A-4	SEEP-C-RAIN-INFLUENT-24-021321	PFAS Prep, Chemours (TB3+)	T	2.50 mL	5.00 mL	250 uL		pH = 7	
320-70306-A-5	SEEP-C-EQBLK-ISCO-021321	PFAS Prep, Chemours (TB3+)	T	2.50 mL	5.00 mL	250 uL		pH = 7	
320-70306-A-6	SEEP-C-FBLK-021321	PFAS Prep, Chemours (TB3+)	T	2.50 mL	5.00 mL	250 uL		pH = 7	
320-70306-A-7	SEEP-C-RAIN-EQBLK-ISCO-021321	PFAS Prep, Chemours (TB3+)	T	2.50 mL	5.00 mL	250 uL		pH = 7	

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Chemours (TB3+)



This form must be used when making dilutions. It must be attached to the original bench sheet.

The following is a flow chart for making dilutions based on an original extract with a 1000 uL final volume. All dilutions (unless labeled as serial dilutions) are based on removing an aliquot from the original extract.

Dilutions are made in a 1.5 mL injection vial.

All volumes are in uL

Dilution Required	Amount of 50:50 MeOH/Water	Amount of Sample
2X	750	750
5X	1200	300
10X	1350	150
20X	1425	75
50X	1470	30
100X	1485	15

Job Number	Sample ID	Dilution Made	Reagent (Solvent)/ IS ID*	Pipette/ Syringe ID	Analyst	Date
320-70306	A-4	20x	LC_50:50_00044	ISO1531/I46126	AJE	2/24
↓	A-2	1000x	↓	↓	↓	↓

*Log solvents into TALS, use TALS Reagent ID here; if adding IS, also input TALS Reagent ID for IS.

Shipping and Receiving Documents

TestAmerica Sacramento
880 Riverside Parkway West
Sacramento, CA 95605
(916) 373-5600

Chain of Custody Record

*Revised
2/25/21
PJ4*

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Client Contact
Chemours
2282B NC HWY 87 W
Fayetteville, NC 28306
910-678-1213
Project Name: Seep Flow Through Cell Sampling 2021
Site: Chemours Fayetteville Works Plant
P O #

Regulatory Program: DW HPCES RCRA Other:

Lab Contact: Christel Compton
Date: 02/16/2021
Carrier: FedEx

Sampler Initials:
Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below
2 weeks
1 week
2 days
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)	Table 3 (20) HL	Table 3 (20) LL
2/13/2021	10:00	C	W	8	N	N	X	X
2/13/2021	10:00	C	W	8	N	N	X	X
2/13/2021	10:00	C	W	8	N	N	X	X
2/13/2021	10:00	C	W	8	N	N	X	X
2/13/2021	16:05	G	W	8	N	N	X	X
2/13/2021	16:10	G	W	8	N	N	X	X
2/13/2021	16:00	G	W	8	N	N	X	X

Sample Specific Notes:
Hold All Remaining Volumes as Relains

Barcode: 320-70306 Chain of Custody

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4= HNO3, 5= NaOH, 6= Other
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown

Relinquished by: [Signature] Date/Time: 2/16/21 10:00 AM
Company: PARSONS
Custody Seal No. [Blank]
Received by: [Signature] Date/Time: 2-19-21 9:50 AM
Company: ETASAC
Cooler Temp (C) Obs'd: 17
Therm ID No.: L-01

Disposition: Return to Client Rejected by Lab Archive for Months

Sample Disposal: (A fee may be assessed if samples are retained longer than 1 month)

Sacramento, CA 95605
(916) 373-5600

Regulatory Program: DW NPDES RCRA Other:

Client Contact			Site Contact: Christel Compton			Date: 02/16/2021			Carrier: FedEx			
Chemours			Lab Contact:			COC No: PAR-050720-2			1 of 1 COCs			
22828 NC HWY 87 W			Sampler Initials:			For Lab Use Only:			Walker Client:			
Fayetteville, NC 28306			Analysis Turnaround Time			Lab Sampling:			Job / SDG No.:			
910-678-1213			<input checked="" type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS			TAT if different from Below						
Project Name: Seep Flow Through Cell Sampling 2021			<input type="checkbox"/> 2 weeks									
Site: Chemours Fayetteville Works Plant			<input type="checkbox"/> 1 week									
P O #			<input type="checkbox"/> 2 days									
			<input type="checkbox"/> 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)	Table 3+ (20) HL	Table 3+ (20) LL
SEEP-C-EFFLUENT-192-021321				2/13/2021	10:00 C	C	W	8	N	N	X	
SEEP-C-INFLUENT-192-021321				2/13/2021	10:00 C	C	W	8	N	N	X	
SEEP-C-RAIN-EFFLUENT-24-021321				2/13/2021	10:00 C	C	W	8	N	N	X	
SEEP-C-RAIN-INFLUENT-24-021321				2/13/2021	10:00 C	C	W	8	N	N	X	
SEEP-C-EQBLK-ISCO-021321				2/13/2021	16:05 G	G	W	8	N	N	X	
SEEP-C-FBLK-012921				2/13/2021	16:10 G	G	W	8	N	N	X	
SEEP-C-RAIN-EQBLK-ISCO-021321				2/13/2021	16:00 G	G	W	8	N	N	X	
<p>Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other</p> <p>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.</p> <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown												
<p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</p> <input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months												
Custody Seal No.:			Cooler Temp. (°C): Obs'd: 117			Therm ID No.: 5-01			Date/Time: 2-19-21 9:50AM			
Relinquished by: <i>[Signature]</i>			Received by: <i>[Signature]</i>			Company: ETASAC			Company: ETASAC			
Relinquished by:			Received by:			Company:			Company:			
Relinquished by:			Received in Laboratory by:			Company:			Company:			

Login Sample Receipt Checklist

Client: The Chemours Company FC, LLC

Job Number: 320-70306-1

Login Number: 70306

List Source: Eurofins TestAmerica, Sacramento

List Number: 1

Creator: Oropeza, Salvador

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	1547028
Sample custody seals, if present, are intact.	N/A	
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?	False	
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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (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: 320-70652-1

Job Description: FAY-Seep Flow Through Cell Sampling 2021

For:

The Chemours Company FC, LLC
c/o AECOM
Sabre Building, Suite 300
4051 Ogletown Road
Newark, DE 19713

Attention: Michael Aucoin



Approved for release.
Michelle A Johnston
Project Manager II
3/15/2021 2:03 PM

Michelle A Johnston, Project Manager II
880 Riverside Parkway, West Sacramento, CA, 95605
(303)736-0110
Michelle.Johnston@Eurofinset.com
03/15/2021

cc: Barbara McGraw
Kelly Rinehimer

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

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.

Eurofins TestAmerica, Sacramento

880 Riverside Parkway, West Sacramento, CA 95605

Tel (916) 373-5600 Fax (916) 372-1059 www.testamericainc.com



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Definitions/Glossary

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70652-1

Glossary

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

CASE NARRATIVE
Client: The Chemours Company FC, LLC
Project: FAY-Seep Flow Through Cell Sampling 2021
Report Number: 320-70652-1

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

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

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

North Carolina Department of Environmental Quality (NCDEQ) does not offer certification for PFAS testing in Non-Potable Water and Solid matrices.

For samples requiring analysis at a dilution, the dilution factor has been multiplied by the Method Detection Limit (MDL) for each analyte and evaluated versus the project-specific reporting limit (PSRL). If the obtained value is below the PSRL, then the PSRL is preserved as the reporting limit for the diluted result, otherwise, the obtained value becomes the reporting limit. This is done in order to maintain the PSRL to meet project requirements at the request of the client and to report the lowest possible RL for each analyte.

Sample Arrival and Receipt

The samples were received on 3/2/2021 11:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.4° C.

No anomalies were observed during sample receipt.

Table 3 Fluoroproducts

Samples SEEP-C-Effluent-24-022721 (320-70652-1), SEEP-C-Influent-24-022721 (320-70652-2), Seep-C-EQBLK-ISCO-022721 (320-70652-3) and SEEP-C-FBLK-022721 (320-70652-4) were analyzed for Table 3 Fluoroproducts in accordance with Chemours 4.3.18. The samples were prepared on 03/03/2021 and analyzed on 03/10/2021.

The project required MS and Sample Duplicate could not be performed for prep batch 320-467237, due to either being from a different job/SDG or due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable LCS/LCSD analyses data.

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

Executive Summary

Client: The Chemours Company FC, LLC

Job Number: 320-70652-1

Chemours (TB3+) : Fluoroproducts Analytical Method – Table 3+

Lab Sample ID	Client Sample ID	Analyte	Individual Result (ug/L)	Final Result (ug/L)	RL
320-70652-1	SEEP-C-Effluent-24-022721	EVE Acid	<0.017	<0.017	0.017
320-70652-1	SEEP-C-Effluent-24-022721	HFPO-DA	<0.081	<0.081	0.081
320-70652-1	SEEP-C-Effluent-24-022721	Hydro-EVE Acid	<0.014	<0.014	0.014
320-70652-1	SEEP-C-Effluent-24-022721	Hydrolyzed PSDA	<0.038	<0.038	0.038
320-70652-1	SEEP-C-Effluent-24-022721	Hydro-PS Acid	<0.0061	<0.0061	0.0061
320-70652-1	SEEP-C-Effluent-24-022721	NVHOS	<0.015	<0.015	0.015
320-70652-1	SEEP-C-Effluent-24-022721	PEPA	<0.020	<0.020	0.020
320-70652-1	SEEP-C-Effluent-24-022721	PES	<0.0067	<0.0067	0.0067
320-70652-1	SEEP-C-Effluent-24-022721	PFECA B	<0.027	<0.027	0.027
320-70652-1	SEEP-C-Effluent-24-022721	PFECA G	<0.048	<0.048	0.048
320-70652-1	SEEP-C-Effluent-24-022721	PFMOAA	0.28	0.28	0.080
320-70652-1	SEEP-C-Effluent-24-022721	PFO2HxA	0.083	0.083	0.027
320-70652-1	SEEP-C-Effluent-24-022721	PFO3OA	<0.039	<0.039	0.039
320-70652-1	SEEP-C-Effluent-24-022721	PFO4DA	<0.059	<0.059	0.059
320-70652-1	SEEP-C-Effluent-24-022721	PFO5DA	<0.078	<0.078	0.078
320-70652-1	SEEP-C-Effluent-24-022721	PMPA	0.66	0.66	0.62
320-70652-1	SEEP-C-Effluent-24-022721	PS Acid	<0.020	<0.020	0.020
320-70652-1	SEEP-C-Effluent-24-022721	R-EVE	<0.072	<0.072	0.072
320-70652-1	SEEP-C-Effluent-24-022721	R-PSDA	<0.071	<0.071	0.071
320-70652-1	SEEP-C-Effluent-24-022721	R-PSDCA	<0.017	<0.017	0.017
320-70652-2	SEEP-C-Influent-24-022721	EVE Acid	0.065	0.065	0.017
320-70652-2	SEEP-C-Influent-24-022721	HFPO-DA	5.6	5.6	0.081
320-70652-2	SEEP-C-Influent-24-022721	Hydro-EVE Acid	0.38	0.38	0.014
320-70652-2	SEEP-C-Influent-24-022721	Hydrolyzed PSDA	0.63	0.63	0.038
320-70652-2	SEEP-C-Influent-24-022721	Hydro-PS Acid	0.15	0.15	0.0061
320-70652-2	SEEP-C-Influent-24-022721	NVHOS	0.26	0.26	0.015
320-70652-2	SEEP-C-Influent-24-022721	PEPA	1.2	1.2	0.020
320-70652-2	SEEP-C-Influent-24-022721	PES	<0.0067	<0.0067	0.0067
320-70652-2	SEEP-C-Influent-24-022721	PFECA B	<0.027	<0.027	0.027
320-70652-2	SEEP-C-Influent-24-022721	PFECA G	<0.048	<0.048	0.048
320-70652-2	SEEP-C-Influent-24-022721	PFMOAA	23	23	0.080
320-70652-2	SEEP-C-Influent-24-022721	PFO2HxA	8.4	8.4	0.027
320-70652-2	SEEP-C-Influent-24-022721	PFO3OA	3.0	3.0	0.039
320-70652-2	SEEP-C-Influent-24-022721	PFO4DA	0.82	0.82	0.059
320-70652-2	SEEP-C-Influent-24-022721	PFO5DA	<0.078	<0.078	0.078
320-70652-2	SEEP-C-Influent-24-022721	PMPA	3.8	3.8	0.62
320-70652-2	SEEP-C-Influent-24-022721	PS Acid	<0.020	<0.020	0.020
320-70652-2	SEEP-C-Influent-24-022721	R-EVE	0.37	0.37	0.072
320-70652-2	SEEP-C-Influent-24-022721	R-PSDA	0.38	0.38	0.071
320-70652-2	SEEP-C-Influent-24-022721	R-PSDCA	<0.017	<0.017	0.017
320-70652-3	Seep-C-EQBLK-ISCO-022721	EVE Acid	<0.0020	<0.0020	0.0020
320-70652-3	Seep-C-EQBLK-ISCO-022721	HFPO-DA	<0.0020	<0.0020	0.0020

(a) DU indicates a laboratory duplicate.

(b) If the sample and laboratory duplicate are both greater than or equal to 5X their RL and the relative percent difference (RPD) is less than or equal to 20, the average value is reported. If the RPD is greater than 20, the higher value is reported. If the sample or laboratory duplicate is less than 5X their RL, and the absolute difference between the sample and laboratory duplicate is less than or equal to the sample RL, the average value is reported. If the absolute difference is greater than the sample RL, the higher value is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(c) For Table 3 and Table 6 methods, if the sample and laboratory duplicate are greater than their RL, the average is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(d) Moisture Determined by ASTM D2216.

Executive Summary

Client: The Chemours Company FC, LLC

Job Number: 320-70652-1

Chemours (TB3+) : Fluoroproducts Analytical Method – Table 3+

Lab Sample ID	Client Sample ID	Analyte	Individual Result (ug/L)	Final Result (ug/L)	RL
320-70652-3	Seep-C-EQBLK-ISCO-022721	Hydro-EVE Acid	<0.0020	<0.0020	0.0020
320-70652-3	Seep-C-EQBLK-ISCO-022721	Hydrolyzed PSDA	<0.0020	<0.0020	0.0020
320-70652-3	Seep-C-EQBLK-ISCO-022721	Hydro-PS Acid	<0.0020	<0.0020	0.0020
320-70652-3	Seep-C-EQBLK-ISCO-022721	NVHOS	<0.0020	<0.0020	0.0020
320-70652-3	Seep-C-EQBLK-ISCO-022721	PEPA	<0.020	<0.020	0.020
320-70652-3	Seep-C-EQBLK-ISCO-022721	PES	<0.0020	<0.0020	0.0020
320-70652-3	Seep-C-EQBLK-ISCO-022721	PFECA B	<0.0020	<0.0020	0.0020
320-70652-3	Seep-C-EQBLK-ISCO-022721	PFECA G	<0.0020	<0.0020	0.0020
320-70652-3	Seep-C-EQBLK-ISCO-022721	PFMOAA	<0.0020	<0.0020	0.0020
320-70652-3	Seep-C-EQBLK-ISCO-022721	PFO2HxA	<0.0020	<0.0020	0.0020
320-70652-3	Seep-C-EQBLK-ISCO-022721	PFO3OA	<0.0020	<0.0020	0.0020
320-70652-3	Seep-C-EQBLK-ISCO-022721	PFO4DA	<0.0020	<0.0020	0.0020
320-70652-3	Seep-C-EQBLK-ISCO-022721	PFO5DA	<0.0020	<0.0020	0.0020
320-70652-3	Seep-C-EQBLK-ISCO-022721	PMPA	<0.010	<0.010	0.010
320-70652-3	Seep-C-EQBLK-ISCO-022721	PS Acid	<0.0020	<0.0020	0.0020
320-70652-3	Seep-C-EQBLK-ISCO-022721	R-EVE	<0.0020	<0.0020	0.0020
320-70652-3	Seep-C-EQBLK-ISCO-022721	R-PSDA	<0.0020	<0.0020	0.0020
320-70652-3	Seep-C-EQBLK-ISCO-022721	R-PSDCA	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	EVE Acid	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	HFPO-DA	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	Hydro-EVE Acid	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	Hydrolyzed PSDA	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	Hydro-PS Acid	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	NVHOS	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	PEPA	<0.020	<0.020	0.020
320-70652-4	SEEP-C-FBLK-022721	PES	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	PFECA B	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	PFECA G	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	PFMOAA	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	PFO2HxA	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	PFO3OA	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	PFO4DA	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	PFO5DA	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	PMPA	<0.010	<0.010	0.010
320-70652-4	SEEP-C-FBLK-022721	PS Acid	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	R-EVE	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	R-PSDA	<0.0020	<0.0020	0.0020
320-70652-4	SEEP-C-FBLK-022721	R-PSDCA	<0.0020	<0.0020	0.0020

(a) DU indicates a laboratory duplicate.

(b) If the sample and laboratory duplicate are both greater than or equal to 5X their RL and the relative percent difference (RPD) is less than or equal to 20, the average value is reported. If the RPD is greater than 20, the higher value is reported. If the sample or laboratory duplicate is less than 5X their RL, and the absolute difference between the sample and laboratory duplicate is less than or equal to the sample RL, the average value is reported. If the absolute difference is greater than the sample RL, the higher value is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(c) For Table 3 and Table 6 methods, if the sample and laboratory duplicate are greater than their RL, the average is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(d) Moisture Determined by ASTM D2216.

Detection Summary

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70652-1

Client Sample ID: SEEP-C-Effluent-24-022721

Lab Sample ID: 320-70652-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PFMOAA	0.28		0.080		ug/L	1		Chemours (TB3+)	Total/NA
PFO2HxA	0.083		0.027		ug/L	1		Chemours (TB3+)	Total/NA
PMPA	0.66		0.62		ug/L	1		Chemours (TB3+)	Total/NA

Client Sample ID: SEEP-C-Influent-24-022721

Lab Sample ID: 320-70652-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
EVE Acid	0.065		0.017		ug/L	1		Chemours (TB3+)	Total/NA
HFPO-DA	5.6		0.081		ug/L	1		Chemours (TB3+)	Total/NA
Hydro-EVE Acid	0.38		0.014		ug/L	1		Chemours (TB3+)	Total/NA
Hydrolyzed PSDA	0.63		0.038		ug/L	1		Chemours (TB3+)	Total/NA
Hydro-PS Acid	0.15		0.0061		ug/L	1		Chemours (TB3+)	Total/NA
NVHOS	0.26		0.015		ug/L	1		Chemours (TB3+)	Total/NA
PEPA	1.2		0.020		ug/L	1		Chemours (TB3+)	Total/NA
PFMOAA	23		0.080		ug/L	1		Chemours (TB3+)	Total/NA
PFO2HxA	8.4		0.027		ug/L	1		Chemours (TB3+)	Total/NA
PFO3OA	3.0		0.039		ug/L	1		Chemours (TB3+)	Total/NA
PFO4DA	0.82		0.059		ug/L	1		Chemours (TB3+)	Total/NA
PMPA	3.8		0.62		ug/L	1		Chemours (TB3+)	Total/NA
R-EVE	0.37		0.072		ug/L	1		Chemours (TB3+)	Total/NA
R-PSDA	0.38		0.071		ug/L	1		Chemours (TB3+)	Total/NA

Client Sample ID: Seep-C-EQBLK-ISCO-022721

Lab Sample ID: 320-70652-3

No Detections.

Client Sample ID: SEEP-C-FBLK-022721

Lab Sample ID: 320-70652-4

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70652-1

Client Sample ID: SEEP-C-Effluent-24-022721

Lab Sample ID: 320-70652-1

Date Collected: 02/27/21 16:00

Matrix: Water

Date Received: 03/02/21 11:00

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
EVE Acid	<0.017		0.017		ug/L		03/03/21 20:42	03/10/21 05:48	1
HFPO-DA	<0.081		0.081		ug/L		03/03/21 20:42	03/10/21 05:48	1
Hydro-EVE Acid	<0.014		0.014		ug/L		03/03/21 20:42	03/10/21 05:48	1
Hydrolyzed PSDA	<0.038		0.038		ug/L		03/03/21 20:42	03/10/21 05:48	1
Hydro-PS Acid	<0.0061		0.0061		ug/L		03/03/21 20:42	03/10/21 05:48	1
NVHOS	<0.015		0.015		ug/L		03/03/21 20:42	03/10/21 05:48	1
PEPA	<0.020		0.020		ug/L		03/03/21 20:42	03/10/21 05:48	1
PES	<0.0067		0.0067		ug/L		03/03/21 20:42	03/10/21 05:48	1
PFECA B	<0.027		0.027		ug/L		03/03/21 20:42	03/10/21 05:48	1
PFECA G	<0.048		0.048		ug/L		03/03/21 20:42	03/10/21 05:48	1
PFMOAA	0.28		0.080		ug/L		03/03/21 20:42	03/10/21 05:48	1
PFO2HxA	0.083		0.027		ug/L		03/03/21 20:42	03/10/21 05:48	1
PFO3OA	<0.039		0.039		ug/L		03/03/21 20:42	03/10/21 05:48	1
PFO4DA	<0.059		0.059		ug/L		03/03/21 20:42	03/10/21 05:48	1
PFO5DA	<0.078		0.078		ug/L		03/03/21 20:42	03/10/21 05:48	1
PMPA	0.66		0.62		ug/L		03/03/21 20:42	03/10/21 05:48	1
PS Acid	<0.020		0.020		ug/L		03/03/21 20:42	03/10/21 05:48	1
R-EVE	<0.072		0.072		ug/L		03/03/21 20:42	03/10/21 05:48	1
R-PSDA	<0.071		0.071		ug/L		03/03/21 20:42	03/10/21 05:48	1
R-PSDCA	<0.017		0.017		ug/L		03/03/21 20:42	03/10/21 05:48	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	105		25 - 150				03/03/21 20:42	03/10/21 05:48	1

Client Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70652-1

Client Sample ID: SEEP-C-Influent-24-022721

Lab Sample ID: 320-70652-2

Date Collected: 02/27/21 16:00

Matrix: Water

Date Received: 03/02/21 11:00

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
EVE Acid	0.065		0.017		ug/L		03/03/21 20:42	03/10/21 06:05	1
HFPO-DA	5.6		0.081		ug/L		03/03/21 20:42	03/10/21 06:05	1
Hydro-EVE Acid	0.38		0.014		ug/L		03/03/21 20:42	03/10/21 06:05	1
Hydrolyzed PSDA	0.63		0.038		ug/L		03/03/21 20:42	03/10/21 06:05	1
Hydro-PS Acid	0.15		0.0061		ug/L		03/03/21 20:42	03/10/21 06:05	1
NVHOS	0.26		0.015		ug/L		03/03/21 20:42	03/10/21 06:05	1
PEPA	1.2		0.020		ug/L		03/03/21 20:42	03/10/21 06:05	1
PES	<0.0067		0.0067		ug/L		03/03/21 20:42	03/10/21 06:05	1
PFECA B	<0.027		0.027		ug/L		03/03/21 20:42	03/10/21 06:05	1
PFECA G	<0.048		0.048		ug/L		03/03/21 20:42	03/10/21 06:05	1
PFMOAA	23		0.080		ug/L		03/03/21 20:42	03/10/21 06:05	1
PFO2HxA	8.4		0.027		ug/L		03/03/21 20:42	03/10/21 06:05	1
PFO3OA	3.0		0.039		ug/L		03/03/21 20:42	03/10/21 06:05	1
PFO4DA	0.82		0.059		ug/L		03/03/21 20:42	03/10/21 06:05	1
PFO5DA	<0.078		0.078		ug/L		03/03/21 20:42	03/10/21 06:05	1
PMPA	3.8		0.62		ug/L		03/03/21 20:42	03/10/21 06:05	1
PS Acid	<0.020		0.020		ug/L		03/03/21 20:42	03/10/21 06:05	1
R-EVE	0.37		0.072		ug/L		03/03/21 20:42	03/10/21 06:05	1
R-PSDA	0.38		0.071		ug/L		03/03/21 20:42	03/10/21 06:05	1
R-PSDCA	<0.017		0.017		ug/L		03/03/21 20:42	03/10/21 06:05	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
¹³ C3 HFPO-DA	109		25 - 150				03/03/21 20:42	03/10/21 06:05	1

Client Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70652-1

Client Sample ID: Seep-C-EQBLK-ISCO-022721

Lab Sample ID: 320-70652-3

Date Collected: 02/27/21 16:45

Matrix: Water

Date Received: 03/02/21 11:00

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
EVE Acid	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
HFPO-DA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
Hydro-EVE Acid	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
Hydrolyzed PSDA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
Hydro-PS Acid	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
NVHOS	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
PEPA	<0.020		0.020		ug/L		03/03/21 20:42	03/10/21 06:23	1
PES	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
PFECA B	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
PFECA G	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
PFMOAA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
PFO2HxA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
PFO3OA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
PFO4DA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
PFO5DA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
PMPA	<0.010		0.010		ug/L		03/03/21 20:42	03/10/21 06:23	1
PS Acid	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
R-EVE	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
R-PSDA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
R-PSDCA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:23	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	102		25 - 150				03/03/21 20:42	03/10/21 06:23	1

Client Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70652-1

Client Sample ID: SEEP-C-FBLK-022721

Lab Sample ID: 320-70652-4

Date Collected: 02/27/21 16:50

Matrix: Water

Date Received: 03/02/21 11:00

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
EVE Acid	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
HFPO-DA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
Hydro-EVE Acid	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
Hydrolyzed PSDA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
Hydro-PS Acid	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
NVHOS	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
PEPA	<0.020		0.020		ug/L		03/03/21 20:42	03/10/21 06:40	1
PES	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
PFECA B	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
PFECA G	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
PFMOAA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
PFO2HxA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
PFO3OA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
PFO4DA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
PFO5DA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
PMPA	<0.010		0.010		ug/L		03/03/21 20:42	03/10/21 06:40	1
PS Acid	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
R-EVE	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
R-PSDA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
R-PSDCA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 06:40	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
¹³ C3 HFPO-DA	106		25 - 150				03/03/21 20:42	03/10/21 06:40	1

Default Detection Limits

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70652-1

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Prep: PFAS Prep

Analyte	RL	MDL	Units
EVE Acid	0.0020	0.00017	ug/L
HFPO-DA	0.0020	0.00081	ug/L
Hydro-EVE Acid	0.0020	0.00014	ug/L
Hydrolyzed PSDA	0.0020	0.00038	ug/L
Hydro-PS Acid	0.0020	0.000061	ug/L
NVHOS	0.0020	0.00015	ug/L
PEPA	0.020	0.00016	ug/L
PES	0.0020	0.000067	ug/L
PFECA B	0.0020	0.00027	ug/L
PFECA G	0.0020	0.00048	ug/L
PFMOAA	0.0020	0.00080	ug/L
PFO2HxA	0.0020	0.00027	ug/L
PFO3OA	0.0020	0.00039	ug/L
PFO4DA	0.0020	0.00059	ug/L
PFO5DA	0.0020	0.00078	ug/L
PMPA	0.010	0.0062	ug/L
PS Acid	0.0020	0.00020	ug/L
R-EVE	0.0020	0.00072	ug/L
R-PSDA	0.0020	0.00071	ug/L
R-PSDCA	0.0020	0.00017	ug/L

Isotope Dilution Summary

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70652-1

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	HFPODA (25-150)
320-70652-1	SEEP-C-Effluent-24-022721	105
320-70652-2	SEEP-C-Influent-24-022721	109
320-70652-3	Seep-C-EQBLK-ISCO-022721	102
320-70652-4	SEEP-C-FBLK-022721	106
LCS 320-467237/2-A	Lab Control Sample	81
LCSD 320-467237/3-A	Lab Control Sample Dup	78
MB 320-467237/1-A	Method Blank	96

Surrogate Legend

HFPODA = 13C3 HFPO-DA

QC Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70652-1

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Lab Sample ID: MB 320-467237/1-A

Matrix: Water

Analysis Batch: 468770

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 467237

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
EVE Acid	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
HFPO-DA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
Hydro-EVE Acid	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
Hydrolyzed PSDA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
Hydro-PS Acid	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
NVHOS	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
PEPA	<0.020		0.020		ug/L		03/03/21 20:42	03/10/21 00:12	1
PES	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
PFECA B	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
PFECA G	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
PFMOAA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
PFO2HxA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
PFO3OA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
PFO4DA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
PFO5DA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
PMPA	<0.010		0.010		ug/L		03/03/21 20:42	03/10/21 00:12	1
PS Acid	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
R-EVE	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
R-PSDA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
R-PSDCA	<0.0020		0.0020		ug/L		03/03/21 20:42	03/10/21 00:12	1
		MB	MB						
Isotope Dilution		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA		96		25 - 150			03/03/21 20:42	03/10/21 00:12	1

Lab Sample ID: LCS 320-467237/2-A

Matrix: Water

Analysis Batch: 469973

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 467237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
HFPO-DA	0.200	0.212		ug/L		106	70 - 130	
Hydro-EVE Acid	0.200	0.150		ug/L		75	70 - 130	
Hydrolyzed PSDA	0.200	0.186		ug/L		93	50 - 150	
Hydro-PS Acid	0.200	0.177		ug/L		88	70 - 130	
NVHOS	0.200	0.183		ug/L		91	70 - 130	
PEPA	0.200	0.176		ug/L		88	70 - 130	
PES	0.200	0.191		ug/L		95	70 - 130	
PFECA B	0.200	0.186		ug/L		93	70 - 130	
PFECA G	0.200	0.163		ug/L		82	70 - 130	
PFMOAA	0.200	0.227		ug/L		113	70 - 130	
PFO2HxA	0.200	0.208		ug/L		104	70 - 130	
PFO3OA	0.200	0.210		ug/L		105	70 - 130	
PFO4DA	0.200	0.136		ug/L		68	50 - 150	
PFO5DA	0.200	0.156		ug/L		78	50 - 150	
PMPA	0.200	0.202		ug/L		101	70 - 130	
PS Acid	0.200	0.178		ug/L		89	70 - 130	
R-EVE	0.200	0.207		ug/L		104	50 - 150	
R-PSDA	0.200	0.170		ug/L		85	50 - 150	
R-PSDCA	0.200	0.139		ug/L		70	70 - 130	

Eurofins TestAmerica, Sacramento

QC Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70652-1

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+ (Continued)

<i>Isotope Dilution</i>	<i>LCS</i>	<i>LCS</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>13C3 HFPO-DA</i>	81		25 - 150

Lab Sample ID: LCSD 320-467237/3-A
Matrix: Water
Analysis Batch: 469973

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 467237

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
	Added	Result	Qualifier				Limits	RPD		
EVE Acid	0.200	0.161		ug/L		81	70 - 130	11		25
HFPO-DA	0.200	0.228		ug/L		114	70 - 130	7		25
Hydro-EVE Acid	0.200	0.148		ug/L		74	70 - 130	1		25
Hydrolyzed PSDA	0.200	0.204		ug/L		102	50 - 150	9		25
Hydro-PS Acid	0.200	0.168		ug/L		84	70 - 130	5		25
NVHOS	0.200	0.172		ug/L		86	70 - 130	6		25
PEPA	0.200	0.158		ug/L		79	70 - 130	11		25
PES	0.200	0.171		ug/L		86	70 - 130	11		25
PFECA B	0.200	0.178		ug/L		89	70 - 130	4		25
PFECA G	0.200	0.146		ug/L		73	70 - 130	11		25
PFMOAA	0.200	0.212		ug/L		106	70 - 130	7		25
PFO2HxA	0.200	0.190		ug/L		95	70 - 130	9		25
PFO3OA	0.200	0.178		ug/L		89	70 - 130	17		25
PFO4DA	0.200	0.122		ug/L		61	50 - 150	10		25
PFO5DA	0.200	0.128		ug/L		64	50 - 150	19		25
PMPA	0.200	0.186		ug/L		93	70 - 130	8		25
PS Acid	0.200	0.166		ug/L		83	70 - 130	7		25
R-EVE	0.200	0.220		ug/L		110	50 - 150	6		25
R-PSDA	0.200	0.188		ug/L		94	50 - 150	10		25
R-PSDCA	0.200	0.143		ug/L		71	70 - 130	3		25

<i>Isotope Dilution</i>	<i>LCSD</i>	<i>LCSD</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>13C3 HFPO-DA</i>	78		25 - 150

QC Association Summary

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70652-1

LCMS

Prep Batch: 467237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-70652-1	SEEP-C-Effluent-24-022721	Total/NA	Water	PFAS Prep	
320-70652-2	SEEP-C-Influent-24-022721	Total/NA	Water	PFAS Prep	
320-70652-3	Seep-C-EQBLK-ISCO-022721	Total/NA	Water	PFAS Prep	
320-70652-4	SEEP-C-FBLK-022721	Total/NA	Water	PFAS Prep	
MB 320-467237/1-A	Method Blank	Total/NA	Water	PFAS Prep	
LCS 320-467237/2-A	Lab Control Sample	Total/NA	Water	PFAS Prep	
LCSD 320-467237/3-A	Lab Control Sample Dup	Total/NA	Water	PFAS Prep	

Analysis Batch: 468770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-70652-1	SEEP-C-Effluent-24-022721	Total/NA	Water	Chemours (TB3+)	467237
320-70652-2	SEEP-C-Influent-24-022721	Total/NA	Water	Chemours (TB3+)	467237
320-70652-3	Seep-C-EQBLK-ISCO-022721	Total/NA	Water	Chemours (TB3+)	467237
320-70652-4	SEEP-C-FBLK-022721	Total/NA	Water	Chemours (TB3+)	467237
MB 320-467237/1-A	Method Blank	Total/NA	Water	Chemours (TB3+)	467237

Analysis Batch: 469973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 320-467237/2-A	Lab Control Sample	Total/NA	Water	Chemours (TB3+)	467237
LCSD 320-467237/3-A	Lab Control Sample Dup	Total/NA	Water	Chemours (TB3+)	467237

Lab Chronicle

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70652-1

Client Sample ID: SEEP-C-Effluent-24-022721

Lab Sample ID: 320-70652-1

Date Collected: 02/27/21 16:00

Matrix: Water

Date Received: 03/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			0.025 mL	5.00 mL	467237	03/03/21 20:42	FX	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			468770	03/10/21 05:48	GMK	TAL SAC

Client Sample ID: SEEP-C-Influent-24-022721

Lab Sample ID: 320-70652-2

Date Collected: 02/27/21 16:00

Matrix: Water

Date Received: 03/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			0.025 mL	5.00 mL	467237	03/03/21 20:42	FX	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			468770	03/10/21 06:05	GMK	TAL SAC

Client Sample ID: Seep-C-EQBLK-ISCO-022721

Lab Sample ID: 320-70652-3

Date Collected: 02/27/21 16:45

Matrix: Water

Date Received: 03/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.50 mL	5.00 mL	467237	03/03/21 20:42	FX	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			468770	03/10/21 06:23	GMK	TAL SAC

Client Sample ID: SEEP-C-FBLK-022721

Lab Sample ID: 320-70652-4

Date Collected: 02/27/21 16:50

Matrix: Water

Date Received: 03/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.50 mL	5.00 mL	467237	03/03/21 20:42	FX	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			468770	03/10/21 06:40	GMK	TAL SAC

Client Sample ID: Method Blank

Lab Sample ID: MB 320-467237/1-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.50 mL	5.00 mL	467237	03/03/21 20:42	FX	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			468770	03/10/21 00:12	GMK	TAL SAC

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 320-467237/2-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.50 mL	5.00 mL	467237	03/03/21 20:42	FX	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			469973	03/13/21 07:41	JY1	TAL SAC

Lab Chronicle

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70652-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 320-467237/3-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dil Factor</u>	<u>Initial Amount</u>	<u>Final Amount</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	PFAS Prep			2.50 mL	5.00 mL	467237	03/03/21 20:42	FX	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			469973	03/13/21 07:59	JY1	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70652-1

Laboratory: Eurofins TestAmerica, Sacramento

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-24
ANAB	Dept. of Defense ELAP	L2468	01-20-24
ANAB	Dept. of Energy	L2468.01	01-20-24
ANAB	ISO/IEC 17025	L2468	01-20-24
Arizona	State	AZ0708	08-11-21
Arkansas DEQ	State	88-0691	06-17-21
California	State	2897	02-01-23
Colorado	State	CA0004	08-31-21
Connecticut	State	PH-0691	06-30-21
Florida	NELAP	E87570	06-30-21
Georgia	State	4040	01-29-22
Hawaii	State	<cert No.>	01-29-22
Illinois	NELAP	200060	03-17-21
Kansas	NELAP	E-10375	02-01-21 *
Louisiana	NELAP	01944	06-30-21
Maine	State	CA00004	04-14-22
Michigan	State	9947	01-29-22
Nevada	State	CA000442021-2	07-31-21
New Hampshire	NELAP	2997	04-18-21
New Jersey	NELAP	CA005	06-30-21
New York	NELAP	11666	04-01-21
Ohio	State	41252	01-29-22
Oregon	NELAP	4040	01-29-22
Pennsylvania	NELAP	68-01272	03-31-21
Texas	NELAP	T104704399-19-13	06-01-21
US Fish & Wildlife	US Federal Programs	58448	07-31-21
USDA	US Federal Programs	P330-18-00239	07-31-21
Utah	NELAP	CA000442019-01	02-28-21 *
Vermont	State	VT-4040	04-16-21
Virginia	NELAP	460278	03-14-21
Washington	State	C581	05-05-21
West Virginia (DW)	State	9930C	12-31-21
Wisconsin	State	998204680	08-31-21
Wyoming	State Program	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70652-1

Method	Method Description	Protocol	Laboratory
Chemours (TB3+)	Fluoroproducts Analytical Method – Table 3+	Client	TAL SAC
PFAS Prep	Preparation, Direct Inject PFAS	TAL-SAC	TAL SAC

Protocol References:

Client = Client derived Standard Operating Procedure

TAL-SAC = TestAmerica Laboratories, West Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-70652-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-70652-1	SEEP-C-Effluent-24-022721	Water	02/27/21 16:00	03/02/21 11:00	
320-70652-2	SEEP-C-Influent-24-022721	Water	02/27/21 16:00	03/02/21 11:00	
320-70652-3	Seep-C-EQBLK-ISCO-022721	Water	02/27/21 16:45	03/02/21 11:00	
320-70652-4	SEEP-C-FBLK-022721	Water	02/27/21 16:50	03/02/21 11:00	

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70652-1

SDG No.: _____

Instrument ID: A12 Analysis Batch Number: 468521

Lab Sample ID: IC 320-468521/2 Client Sample ID: _____

Date Analyzed: 03/08/21 14:45 Lab File ID: 2021.03.08_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.34	Assign Peak	fariasa	03/09/21 06:32
R-PSDA	6.64	Baseline	fariasa	03/09/21 06:33
PMPA	6.88	Assign Peak	fariasa	03/09/21 06:32
NVHOS	7.26	Baseline	fariasa	03/09/21 06:33
PEPA	8.43	Assign Peak	fariasa	03/09/21 06:33
HFPO-DA	9.30	Baseline	fariasa	03/09/21 06:33
Perfluoroheptanoic acid	9.70	Baseline	fariasa	03/09/21 06:33

Lab Sample ID: IC 320-468521/3 Client Sample ID: _____

Date Analyzed: 03/08/21 15:03 Lab File ID: 2021.03.08_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.35	Assign Peak	fariasa	03/09/21 06:34
R-PSDA	6.64	Baseline	fariasa	03/09/21 06:34
PMPA	6.90	Baseline	fariasa	03/09/21 06:34
NVHOS	7.26	Baseline	fariasa	03/09/21 06:34

Lab Sample ID: IC 320-468521/4 Client Sample ID: _____

Date Analyzed: 03/08/21 15:21 Lab File ID: 2021.03.08_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.40	Incomplete Integration	fariasa	03/09/21 06:34
R-PSDA	6.61	Baseline	fariasa	03/09/21 06:35

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70652-1

SDG No.: _____

Instrument ID: A12 Analysis Batch Number: 468521

Lab Sample ID: IC 320-468521/5 Client Sample ID: _____

Date Analyzed: 03/08/21 15:38 Lab File ID: 2021.03.08_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.08	Assign Peak	fariasa	03/09/21 06:35
R-PSDA	6.57	Baseline	fariasa	03/09/21 06:35

Lab Sample ID: IC 320-468521/6 Client Sample ID: _____

Date Analyzed: 03/08/21 15:56 Lab File ID: 2021.03.08_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.33	Incomplete Integration	fariasa	03/09/21 04:09

Lab Sample ID: IC 320-468521/8 Client Sample ID: _____

Date Analyzed: 03/08/21 16:32 Lab File ID: 2021.03.08_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.35	Incomplete Integration	fariasa	03/09/21 06:36

Lab Sample ID: IC 320-468521/10 Client Sample ID: _____

Date Analyzed: 03/08/21 17:07 Lab File ID: 2021.03.08_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.26	Incomplete Integration	fariasa	03/09/21 06:36

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70652-1

SDG No.: _____

Instrument ID: A12 Analysis Batch Number: 468521

Lab Sample ID: IC 320-468521/12 Client Sample ID: _____

Date Analyzed: 03/08/21 17:42 Lab File ID: 2021.03.08_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.74	Assign Peak	fariasa	03/09/21 06:37
13C3 HFPO-DA	9.17	Assign Peak	fariasa	03/09/21 06:36
13C4 PFHpA	9.60	Assign Peak	fariasa	03/09/21 06:36

Lab Sample ID: IC 320-468521/14 Client Sample ID: _____

Date Analyzed: 03/08/21 18:17 Lab File ID: 2021.03.08_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.28	Incomplete Integration	fariasa	03/09/21 06:37
13C3 HFPO-DA	9.16	Assign Peak	fariasa	03/09/21 06:37
13C4 PFHpA	9.59	Assign Peak	fariasa	03/09/21 06:37

Lab Sample ID: IC 320-468521/15 Client Sample ID: _____

Date Analyzed: 03/08/21 18:35 Lab File ID: 2021.03.08_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.15	Assign Peak	fariasa	03/09/21 06:38
13C3 HFPO-DA	9.16	Assign Peak	fariasa	03/09/21 06:37
13C4 PFHpA	9.59	Assign Peak	fariasa	03/09/21 06:37

Lab Sample ID: ICV 320-468521/17 Client Sample ID: _____

Date Analyzed: 03/08/21 19:10 Lab File ID: 2021.03.08_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.24	Assign Peak	fariasa	03/09/21 06:38
13C3 HFPO-DA	9.13	Assign Peak	fariasa	03/09/21 06:38
13C4 PFHpA	9.56	Assign Peak	fariasa	03/09/21 06:38

Chemours (TB3+)

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70652-1

SDG No.: _____

Instrument ID: A12 Analysis Batch Number: 468770

Lab Sample ID: CCV 320-468770/1 Client Sample ID: _____

Date Analyzed: 03/09/21 23:37 Lab File ID: 2021.03.09_TB3_A12_AB_029 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.03	Baseline	ruangyots akuld	03/10/21 15:13
13C3 HFPO-DA	9.13	Peak assignment corrected	ruangyots akuld	03/10/21 15:12
13C4 PFHpA	9.56	Peak assignment corrected	ruangyots akuld	03/10/21 15:12

Lab Sample ID: MB 320-467237/1-A Client Sample ID: _____

Date Analyzed: 03/10/21 00:12 Lab File ID: 2021.03.09_TB3_A12_AB_031 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PMPA	6.95	Baseline	ruangyots akuld	03/10/21 15:44
13C3 HFPO-DA	9.13	Peak assignment corrected	ruangyots akuld	03/10/21 15:43

Lab Sample ID: CCV 320-468770/14 Client Sample ID: _____

Date Analyzed: 03/10/21 03:26 Lab File ID: 2021.03.09_TB3_A12_AB_042 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.14	Assign Peak	kwongg	03/10/21 11:24
13C3 HFPO-DA	9.24	Assign Peak	kwongg	03/10/21 11:24

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70652-1

SDG No.: _____

Instrument ID: A12 Analysis Batch Number: 468770

Lab Sample ID: 320-70652-1 Client Sample ID: SEEP-C-Effluent-24-022721

Date Analyzed: 03/10/21 05:48 Lab File ID: 2021.03.09_TB3_A12_AB_050 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.12	Assign Peak	kwongg	03/10/21 12:14
PMPA	7.11	Assign Peak	kwongg	03/10/21 12:14
PFO2HxA	7.83	Assign Peak	kwongg	03/10/21 12:14
13C3 HFPO-DA	9.24	Assign Peak	kwongg	03/10/21 12:14

Lab Sample ID: 320-70652-2 Client Sample ID: SEEP-C-Influent-24-022721

Date Analyzed: 03/10/21 06:05 Lab File ID: 2021.03.09_TB3_A12_AB_051 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.12	Assign Peak	kwongg	03/10/21 12:15
R-PSDA	6.55	Baseline	kwongg	03/10/21 12:15
13C3 HFPO-DA	9.25	Assign Peak	kwongg	03/10/21 12:14

Lab Sample ID: 320-70652-3 Client Sample ID: Seep-C-EQBLK-ISCO-022721

Date Analyzed: 03/10/21 06:23 Lab File ID: 2021.03.09_TB3_A12_AB_052 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
13C3 HFPO-DA	9.24	Assign Peak	kwongg	03/10/21 12:32

Lab Sample ID: 320-70652-4 Client Sample ID: SEEP-C-FBLK-022721

Date Analyzed: 03/10/21 06:40 Lab File ID: 2021.03.09_TB3_A12_AB_053 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PMPA	7.09	Assign Peak	kwongg	03/10/21 12:32

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70652-1

SDG No.: _____

Instrument ID: A12 Analysis Batch Number: 468770

Lab Sample ID: CCV 320-468770/27 Client Sample ID: _____

Date Analyzed: 03/10/21 07:16 Lab File ID: 2021.03.09_TB3_A12_AB_055 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.10	Assign Peak	kwongg	03/10/21 12:33
13C3 HFPO-DA	9.25	Assign Peak	kwongg	03/10/21 12:33

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70652-1

SDG No.: _____

Instrument ID: A12 Analysis Batch Number: 469371

Lab Sample ID: IC 320-469371/3 Client Sample ID: _____

Date Analyzed: 03/11/21 12:14 Lab File ID: 2021.03.11_A12_TB3_ICAL_A GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.24	Assign Peak	yu	03/12/21 11:30
R-EVE	6.39	Baseline	yu	03/12/21 11:31
R-PSDA	6.45	Baseline	yu	03/12/21 11:31
PMPA	6.78	Baseline	yu	03/12/21 11:31

Lab Sample ID: IC 320-469371/4 Client Sample ID: _____

Date Analyzed: 03/11/21 12:32 Lab File ID: 2021.03.11_A12_TB3_ICAL_A GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.08	Assign Peak	yu	03/11/21 15:44
R-PSDA	6.43	Baseline	yu	03/11/21 15:40
PMPA	6.76	Baseline	yu	03/11/21 15:40
NVHOS	7.14	Baseline	yu	03/11/21 15:40

Lab Sample ID: IC 320-469371/5 Client Sample ID: _____

Date Analyzed: 03/11/21 12:50 Lab File ID: 2021.03.11_A12_TB3_ICAL_A GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.30	Incomplete Integration	yu	03/11/21 15:41
R-PSDA	6.45	Baseline	yu	03/11/21 15:42
PMPA	6.81	Baseline	yu	03/11/21 15:46

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70652-1

SDG No.: _____

Instrument ID: A12 Analysis Batch Number: 469371

Lab Sample ID: IC 320-469371/6 Client Sample ID: _____

Date Analyzed: 03/11/21 13:07 Lab File ID: 2021.03.11_A12_TB3_ICAL_A GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.64	Assign Peak	yu	03/11/21 15:42
R-EVE	6.29	Isomers	yu	03/11/21 15:42
R-PSDA	6.35	Isomers	yu	03/11/21 15:42
PMPA	6.68	Baseline	yu	03/11/21 15:46
NVHOS	7.09	Baseline	yu	03/11/21 15:42

Lab Sample ID: IC 320-469371/7 Client Sample ID: _____

Date Analyzed: 03/11/21 13:25 Lab File ID: 2021.03.11_A12_TB3_ICAL_A GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.10	Incomplete Integration	yu	03/11/21 15:48
R-PSDA	6.43	Baseline	yu	03/11/21 15:49

Lab Sample ID: IC 320-469371/9 Client Sample ID: _____

Date Analyzed: 03/11/21 14:00 Lab File ID: 2021.03.11_A12_TB3_ICAL_A GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.96	Assign Peak	yu	03/11/21 16:23
R-PSDA	6.41	Baseline	yu	03/11/21 16:24

Lab Sample ID: IC 320-469371/11 Client Sample ID: _____

Date Analyzed: 03/11/21 14:36 Lab File ID: 2021.03.11_A12_TB3_ICAL_A GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.92	Assign Peak	yu	03/11/21 16:56
R-EVE	6.39	Isomers	yu	03/11/21 16:56

Chemours (TB3+)

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70652-1

SDG No.: _____

Instrument ID: A12 Analysis Batch Number: 469371

Lab Sample ID: IC 320-469371/13 Client Sample ID: _____

Date Analyzed: 03/11/21 15:11 Lab File ID: 2021.03.11_A12_TB3_ICAL_A GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.31	Incomplete Integration	yuj	03/11/21 17:34

Lab Sample ID: IC 320-469371/15 Client Sample ID: _____

Date Analyzed: 03/11/21 15:46 Lab File ID: 2021.03.11_A12_TB3_ICAL_A GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.29	Incomplete Integration	kwongg	03/11/21 16:36

Lab Sample ID: IC 320-469371/16 Client Sample ID: _____

Date Analyzed: 03/11/21 16:03 Lab File ID: 2021.03.11_A12_TB3_ICAL_A GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.78	Assign Peak	kwongg	03/11/21 16:42

Lab Sample ID: ICV 320-469371/18 Client Sample ID: _____

Date Analyzed: 03/11/21 16:39 Lab File ID: 2021.03.11_A12_TB3_ICAL_A GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.78	Assign Peak	kwongg	03/11/21 17:00
R-EVE	6.37	Incomplete Integration	kwongg	03/11/21 17:00

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-70652-1

SDG No.: _____

Instrument ID: A12 Analysis Batch Number: 469973

Lab Sample ID: CCV 320-469973/1 Client Sample ID: _____

Date Analyzed: 03/13/21 05:56 Lab File ID: 2021.03.12_A12_TB3_C_002. GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.24	Incomplete Integration	yuj	03/13/21 09:41
R-EVE	6.45	Isomers	yuj	03/13/21 09:42

Lab Sample ID: LCS 320-467237/2-A Client Sample ID: _____

Date Analyzed: 03/13/21 07:41 Lab File ID: 2021.03.12_A12_TB3_C_008. GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.89	Assign Peak	yuj	03/13/21 11:05
R-EVE	6.37	Isomers	yuj	03/13/21 11:05
R-PSDA	6.41	Isomers	yuj	03/13/21 11:05

Lab Sample ID: LCSD 320-467237/3-A Client Sample ID: _____

Date Analyzed: 03/13/21 07:59 Lab File ID: 2021.03.12_A12_TB3_C_009. GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.00	Incomplete Integration	yuj	03/13/21 11:06
R-EVE	6.37	Isomers	yuj	03/13/21 11:06
R-PSDA	6.41	Isomers	yuj	03/13/21 11:06

Lab Sample ID: CCV 320-469973/11 Client Sample ID: _____

Date Analyzed: 03/13/21 08:52 Lab File ID: 2021.03.12_A12_TB3_C_012. GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.13	Incomplete Integration	yuj	03/13/21 11:17

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
LCMTB3_SU_00022	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
.LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C4 PFHpA	5 ug/L
..LCM3HFPO-DA_00027	10/21/23	WELLINGTON, Lot M3HFPODA1020			(Purchased Reagent)		13C3 HFPO-DA	0.5 ug/mL
..LCM4PFHFA_00035	09/29/25	Wellington Laboratories, Lot M4PFHpA0920			(Purchased Reagent)		13C4 PFHpA	50 ug/mL
LCTB3_LLCCV_00028	07/10/21	03/01/21	MeOH/H2O, Lot 204519	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
					LCTB3_SP_00068	150 uL	13C4 PFHpA	0.25 ug/L
							HFPO-DA	0.075 ug/L
							PS Acid	0.075 ug/L
							Hydro-PS Acid	0.075 ug/L
							R-PSDA	0.075 ug/L
							Hydrolyzed PSDA	0.075 ug/L
							R-PSDCA	0.075 ug/L
							EVE Acid	0.075 ug/L
							Hydro-EVE Acid	0.075 ug/L
							NVHOS	0.075 ug/L
							PEPA	0.075 ug/L
							PES	0.075 ug/L
							PFECA B	0.075 ug/L
							PFECA G	0.075 ug/L
							PFMOAA	0.075 ug/L
							PFO2HxA	0.075 ug/L
							PFO3OA	0.075 ug/L
							PFO4DA	0.075 ug/L
							PFO5DA	0.075 ug/L
							PMPA	0.075 ug/L
							R-EVE	0.075 ug/L
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C4 PFHpA	5 ug/L
..LCM3HFPO-DA_00027	10/21/23	WELLINGTON, Lot M3HFPODA1020			(Purchased Reagent)		13C3 HFPO-DA	0.5 ug/mL
..LCM4PFHFA_00035	09/29/25	Wellington Laboratories, Lot M4PFHpA0920			(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00068	08/23/21	02/28/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	25 mL	HFPO-DA	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA_00017	200 uL	HFPO-DA	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA_00017	11/13/23		WELLINGTON, Lot HFPODA1120				(Purchased Reagent)	HFPO-DA
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA_00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS_00001	100 uL	NVHOS	5000 ug/L
					LCPEPA_00002	100 uL	PEPA	5000 ug/L
					LCPEPES_00001	100 uL	PES	5000 ug/L
					LCPFECA_B_00001	100 uL	PFECA B	5000 ug/L
					LCPFECA_G_00001	100 uL	PFECA G	5000 ug/L
					LCPFMCAA_00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA_00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA_00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA_00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DA_00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA_00002	100 uL	PMPA	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFM0AA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFM0AA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO30A 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO30A	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLCCV_00041	07/10/21	03/08/21	MeOH/H2O, Lot 204519	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00068	150 uL	HFPO-DA	0.075 ug/L
							PS Acid	0.075 ug/L
							Hydro-PS Acid	0.075 ug/L
							R-PSDA	0.075 ug/L
							Hydrolyzed PSDA	0.075 ug/L
							R-PSDCA	0.075 ug/L
							EVE Acid	0.075 ug/L
							Hydro-EVE Acid	0.075 ug/L
							NVHOS	0.075 ug/L
							PEPA	0.075 ug/L
							PES	0.075 ug/L
							PFECA B	0.075 ug/L
							PFECA G	0.075 ug/L
							PFM0AA	0.075 ug/L
							PFO2HxA	0.075 ug/L
PFO30A	0.075 ug/L							
PFO4DA	0.075 ug/L							
PFO5DA	0.075 ug/L							
PMPA	0.075 ug/L							
R-EVE	0.075 ug/L							
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA 00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...LCM4PFHPA 00035	09/29/25		Wellington Laboratories, Lot M4PFHPA0920		(Purchased Reagent)		13C4 PFHPA	50 ug/mL
.LCTB3_SP_00068	08/23/21	02/28/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	25 mL	HFPO-DA	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA 00017	200 uL	HFPO-DA	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120		(Purchased Reagent)		HFPO-DA	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFCECA B 00001	100 uL	PFCECA B	5000 ug/L
					LCPFCECA G 00001	100 uL	PFCECA G	5000 ug/L
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPEPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFCECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFCECA B	1000 ug/mL
....LCPFCECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFCECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLICV_00049	07/10/21	03/07/21	MeOH/H2O, Lot 204519	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_ICVSP_00015	200 uL	HFPO-DA	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFCECA B	0.1 ug/L
							PFCECA G	0.1 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA 00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
..LCM4PFHPA 00035	09/29/25		Wellington Laboratories, Lot M4PFHpA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_ICVSP_00015	08/23/21	02/28/21	Methanol, Lot 204519	10 mL	LCTB3_ICVIM2_00011	1 mL	HFPO-DA	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_ICVIM2_00011	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA 00017	200 uL	HFPO-DA	50 ug/L
					LCTB3_ICVIM_00009	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120			(Purchased Reagent)	HFPO-DA	50 ug/mL
...LCTB3_ICVIM_00009	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA_B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA_G 00001	100 uL	PFECA G	5000 ug/L
					LCPFM0AA 00002	100 uL	PFM0AA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCMPMA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PEPA	1000 ug/mL
....LCPEPES 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA G	1000 ug/mL
....LCPFM0AA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFM0AA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO5DA	1000 ug/mL
....LCMPMA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-EVE	1000 ug/mL
LCTB3_LLICV_00050	07/10/21	03/10/21	MeOH/H2O, Lot 206204	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCTB3_ICVSP_00015	200 uL	HFPO-DA	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHFA_00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHFA_00035	09/29/25		Wellington Laboratories, Lot M4PFHFA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_ICVSP_00015	08/23/21	02/28/21	Methanol, Lot 204519	10 mL	LCTB3_ICVIM2_00011	1 mL	HFPO-DA	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_ICVIM2_00011	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA_00017	200 uL	HFPO-DA	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
					LCTB3_ICVIM_00009	2 mL	PS Acid	50 ug/L	
							Hydro-PS Acid	50 ug/L	
							R-PSDA	50 ug/L	
							Hydrolyzed PSDA	50 ug/L	
							R-PSDCA	50 ug/L	
							EVE Acid	50 ug/L	
							Hydro-EVE Acid	50 ug/L	
							NVHOS	50 ug/L	
							PEPA	50 ug/L	
							PES	50 ug/L	
							PFECA B	50 ug/L	
							PFECA G	50 ug/L	
							PFMOAA	50 ug/L	
							PFO2HxA	50 ug/L	
							PFO3OA	50 ug/L	
							PFO4DA	50 ug/L	
							PFO5DA	50 ug/L	
							PMPA	50 ug/L	
							R-EVE	50 ug/L	
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120				(Purchased Reagent)	HFPO-DA	50 ug/mL
...LCTB3_ICVIM_00009	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L	
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L	
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L	
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L	
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L	
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L	
					LCHEVEA_00001	100 uL	Hydro-EVE Acid	5000 ug/L	
					LCNVHOS_00001	100 uL	NVHOS	5000 ug/L	
					LCPEPA_00002	100 uL	PEPA	5000 ug/L	
					LCPEPES_00001	100 uL	PES	5000 ug/L	
					LCPFECA_B_00001	100 uL	PFECA B	5000 ug/L	
					LCPFECA_G_00001	100 uL	PFECA G	5000 ug/L	
					LCPFMOAA_00002	100 uL	PFMOAA	5000 ug/L	
					LCPPFO2HxA_00002	100 uL	PFO2HxA	5000 ug/L	
					LCPPFO3OA_00002	100 uL	PFO3OA	5000 ug/L	
					LCPPFO4DA_00002	100 uL	PFO4DA	5000 ug/L	
					LCPPFO5DoA_00001	100 uL	PFO5DA	5000 ug/L	
					LCPPMPA_00002	100 uL	PMPA	5000 ug/L	
					LCR-EVE_00001	100 uL	R-EVE	5000 ug/L	
....LCBP1_00001	01/23/24		Chemours, Lot NA				(Purchased Reagent)	PS Acid	1000 ug/mL
....LCBP2_00001	01/23/24		Chemours, Lot NA				(Purchased Reagent)	Hydro-PS Acid	1000 ug/mL
....LCBP4_00001	01/23/24		Chemours, Lot NA				(Purchased Reagent)	R-PSDA	1000 ug/mL
....LCBP5_00001	01/23/24		Chemours, Lot NA				(Purchased Reagent)	Hydrolyzed PSDA	1000 ug/mL
....LCBP6_00001	01/23/24		Chemours, Lot NA				(Purchased Reagent)	R-PSDCA	1000 ug/mL
....LCEVEA_00001	01/23/24		Chemours, Lot NA				(Purchased Reagent)	EVE Acid	1000 ug/mL
....LCHEVEA_00001	01/23/24		Chemours, Lot NA				(Purchased Reagent)	Hydro-EVE Acid	1000 ug/mL
....LCNVHOS_00001	01/23/24		Chemours, Lot NA				(Purchased Reagent)	NVHOS	1000 ug/mL
....LCPEPA_00002	01/23/24		Chemours, Lot NA				(Purchased Reagent)	PEPA	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....LCPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFM0AA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFM0AA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO30A 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO30A	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD1_00060	07/10/21	03/07/21	MeOH/H2O, Lot 204519	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00069	100 uL	HFPO-DA	0.001 ug/L
							Perfluoroheptanoic acid	0.001 ug/L
							PS Acid	0.001 ug/L
							Hydro-PS Acid	0.001 ug/L
							R-PSDA	0.001 ug/L
							Hydrolyzed PSDA	0.001 ug/L
							R-PSDCA	0.001 ug/L
							EVE Acid	0.001 ug/L
							Hydro-EVE Acid	0.001 ug/L
							NVHOS	0.001 ug/L
							PEPA	0.001 ug/L
							PES	0.001 ug/L
							PFECA B	0.001 ug/L
							PFECA G	0.001 ug/L
							PFM0AA	0.001 ug/L
							PFO2HxA	0.001 ug/L
							PFO30A	0.001 ug/L
							PFO4DA	0.001 ug/L
		PFO5DA	0.001 ug/L					
		PMPA	0.001 ug/L					
		R-EVE	0.001 ug/L					
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA 00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHPA 00035	09/29/25		Wellington Laboratories, Lot M4PFHPA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00069	08/23/21	03/01/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	0.5 mL	HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA_00017	200 uL	HFPO-DA	50 ug/L
					LCPFHpA_00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA_00017	11/13/23		WELLINGTON, Lot HFPODA1120				(Purchased Reagent) HFPO-DA	50 ug/mL
...LCPFHpA_00024	07/09/25		Wellington Laboratories, Lot PFHpA0620				(Purchased Reagent) Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA_00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS_00001	100 uL	NVHOS	5000 ug/L
					LCPEPA_00002	100 uL	PEPA	5000 ug/L
					LCPEPES_00001	100 uL	PES	5000 ug/L
					LCPFPECA_B_00001	100 uL	PFECA B	5000 ug/L
					LCPFPECA_G_00001	100 uL	PFECA G	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD10_00043	07/10/21	03/07/21	MeOH/H2O, Lot 204519	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
					LCTB3_SP_00068	2000 uL	13C4 PFHpA	0.25 ug/L
							HFPO-DA	1 ug/L
							Perfluoroheptanoic acid	1 ug/L
							PS Acid	1 ug/L
							Hydro-PS Acid	1 ug/L
							R-PSDA	1 ug/L
							Hydrolyzed PSDA	1 ug/L
							R-PSDCA	1 ug/L
							EVE Acid	1 ug/L
							Hydro-EVE Acid	1 ug/L
							NVHOS	1 ug/L
							PEPA	1 ug/L
							PES	1 ug/L
							PFECA B	1 ug/L
							PFECA G	1 ug/L
							PFMOAA	1 ug/L
							PFO2HxA	1 ug/L
							PFO3OA	1 ug/L
							PFO4DA	1 ug/L
							PFO5DA	1 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PMPA	1 ug/L
							R-EVE	1 ug/L
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHFA_00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23	WELLINGTON, Lot M3HFPODA1020			(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHFA_00035	09/29/25	Wellington Laboratories, Lot M4PFHpA0920			(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00068	08/23/21	02/28/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	25 mL	HFPO-DA	5 ug/L
							Perfluoroheptanoic acid	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA_00017	200 uL	HFPO-DA	50 ug/L
					LCPFHpA_00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120			(Purchased Reagent)	HFPO-DA	50 ug/mL
...LCPFHpA 00024	07/09/25		Wellington Laboratories, Lot PFHpA0620			(Purchased Reagent)	Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFMOAA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFMOAA 00002	100 uL	PFO30A	5000 ug/L
					LCPFMOAA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFMOAA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PEPA	1000 ug/mL
....LCPEPES 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFMOAA	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO2HxA	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO30A	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO4DA	1000 ug/mL
....LCPFMOAA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-EVE	1000 ug/mL
LCTB3_LLSTD2_00048	07/10/21	03/07/21	MeOH/H2O, Lot 204519	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00069	250 uL	HFPO-DA	0.0025 ug/L
							Perfluoroheptanoic acid	0.0025 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PS Acid	0.0025 ug/L
							Hydro-PS Acid	0.0025 ug/L
							R-PSDA	0.0025 ug/L
							Hydrolyzed PSDA	0.0025 ug/L
							R-PSDCA	0.0025 ug/L
							EVE Acid	0.0025 ug/L
							Hydro-EVE Acid	0.0025 ug/L
							NVHOS	0.0025 ug/L
							PEPA	0.0025 ug/L
							PES	0.0025 ug/L
							PFECA B	0.0025 ug/L
							PFECA G	0.0025 ug/L
							PFMOAA	0.0025 ug/L
							PFO2HxA	0.0025 ug/L
							PFO3OA	0.0025 ug/L
							PFO4DA	0.0025 ug/L
							PFO5DA	0.0025 ug/L
							PMPA	0.0025 ug/L
							R-EVE	0.0025 ug/L
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C4 PFHpA	5 ug/L
					LCM4PFHPA 00035	500 uL	13C3 HFPO-DA	0.5 ug/mL
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C4 PFHpA	0.5 ug/mL
..LCM4PFHPA 00035	09/29/25		Wellington Laboratories, Lot M4PFHpA0920		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
.LCTB3_SP_00069	08/23/21	03/01/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	0.5 mL	13C4 PFHpA	50 ug/mL
							HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFO-DA_00017	200 uL	HFPO-DA	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFHpa 00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
		PFO5DA	50 ug/L					
		PMPA	50 ug/L					
		R-EVE	50 ug/L					
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120		(Purchased Reagent)		HFPO-DA	50 ug/mL
...LCPFHpa 00024	07/09/25		Wellington Laboratories, Lot PFHpA0620		(Purchased Reagent)		Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMCAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
		LCR-EVE 00001	100 uL	R-EVE	5000 ug/L			
....LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD3_00048	07/10/21	03/07/21	MeOH/H2O, Lot 204519	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00069	500 uL	HFPO-DA	0.005 ug/L
							Perfluoroheptanoic acid	0.005 ug/L
							PS Acid	0.005 ug/L
							Hydro-PS Acid	0.005 ug/L
							R-PSDA	0.005 ug/L
							Hydrolyzed PSDA	0.005 ug/L
							R-PSDCA	0.005 ug/L
							EVE Acid	0.005 ug/L
							Hydro-EVE Acid	0.005 ug/L
							NVHOS	0.005 ug/L
							PEPA	0.005 ug/L
							PES	0.005 ug/L
							PFECA B	0.005 ug/L
							PFECA G	0.005 ug/L
							PFMOAA	0.005 ug/L
		PFO2HxA	0.005 ug/L					
		PFO3OA	0.005 ug/L					
		PFO4DA	0.005 ug/L					
		PFO5DA	0.005 ug/L					
		PMPA	0.005 ug/L					
		R-EVE	0.005 ug/L					
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA_00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHPA_00035	09/29/25		Wellington Laboratories, Lot M4PFHPA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00069	08/23/21	03/01/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	0.5 mL	HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
...LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA 00017	200 uL	HFPO-DA	50 ug/L
					LCPFHpA 00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120				HFPO-DA	50 ug/mL
...LCPFHpA 00024	07/09/25		Wellington Laboratories, Lot PFHpA0620				Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA_00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS_00001	100 uL	NVHOS	5000 ug/L
					LCPEPA_00002	100 uL	PEPA	5000 ug/L
					LCPEPES_00001	100 uL	PES	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD4_00047	07/10/21	03/07/21	MeOH/H2O, Lot 204519	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00069	1000 uL	HFPO-DA	0.01 ug/L
							Perfluoroheptanoic acid	0.01 ug/L
							PS Acid	0.01 ug/L
							Hydro-PS Acid	0.01 ug/L
							R-PSDA	0.01 ug/L
							Hydrolyzed PSDA	0.01 ug/L
							R-PSDCA	0.01 ug/L
							EVE Acid	0.01 ug/L
							Hydro-EVE Acid	0.01 ug/L
							NVHOS	0.01 ug/L
							PEPA	0.01 ug/L
							PES	0.01 ug/L
							PFECA B	0.01 ug/L
							PFECA G	0.01 ug/L
							PFMOAA	0.01 ug/L
							PFO2HxA	0.01 ug/L
							PFO3OA	0.01 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFO4DA	0.01 ug/L
							PFO5DA	0.01 ug/L
							PMPA	0.01 ug/L
							R-EVE	0.01 ug/L
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHFA_00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23	WELLINGTON, Lot M3HFPODA1020			(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHFA_00035	09/29/25	Wellington Laboratories, Lot M4PFHFA0920			(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00069	08/23/21	03/01/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	0.5 mL	HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA_00017	200 uL	HFPO-DA	50 ug/L
					LCPFHpA_00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFO30A	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120			(Purchased Reagent)	HFPO-DA	50 ug/mL
...LCPFHpa 00024	07/09/25		Wellington Laboratories, Lot PFHpA0620			(Purchased Reagent)	Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEP 00001	100 uL	PES	5000 ug/L
					LCPFECA_B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA_G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO30A 00002	100 uL	PFO30A	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PEPA	1000 ug/mL
....LCPEP 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PES	1000 ug/mL
....LCPFECA_B 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA B	1000 ug/mL
....LCPFECA_G 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO2HxA	1000 ug/mL
....LCPFO30A 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO30A	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-EVE	1000 ug/mL
LCTB3_LLSTD5_00057	07/10/21	03/07/21	MeOH/H2O, Lot 204519	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCTB3_SP_00069	2500 uL	HFPO-DA	0.025 ug/L
							Perfluoroheptanoic acid	0.025 ug/L
							PS Acid	0.025 ug/L
							Hydro-PS Acid	0.025 ug/L
							R-PSDA	0.025 ug/L
							Hydrolyzed PSDA	0.025 ug/L
							R-PSDCA	0.025 ug/L
							EVE Acid	0.025 ug/L
							Hydro-EVE Acid	0.025 ug/L
							NVHOS	0.025 ug/L
							PEPA	0.025 ug/L
							PES	0.025 ug/L
							PFECA B	0.025 ug/L
							PFECA G	0.025 ug/L
							PFMOAA	0.025 ug/L
							PFO2HxA	0.025 ug/L
PFO3OA	0.025 ug/L							
PFO4DA	0.025 ug/L							
PFO5DA	0.025 ug/L							
PMPA	0.025 ug/L							
R-EVE	0.025 ug/L							
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA 00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
..LCM4PFHPA_00035	09/29/25		Wellington Laboratories, Lot M4PFHpA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00069	08/23/21	03/01/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	0.5 mL	HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
PFO4DA	0.1 ug/L							
PFO5DA	0.1 ug/L							
PMPA	0.1 ug/L							

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA 00017	200 uL	R-EVE	0.1 ug/L
					LCPFHpA 00024	200 uL	HFPO-DA	50 ug/L
					LCTB3_IM_00022	2 mL	Perfluoroheptanoic acid	50 ug/L
							PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
PFO2HxA	50 ug/L							
PFO3OA	50 ug/L							
PFO4DA	50 ug/L							
PFO5DA	50 ug/L							
PMPA	50 ug/L							
R-EVE	50 ug/L							
...LCHFPO-DA 00017	11/13/23	WELLINGTON, Lot HFPODA1120			(Purchased Reagent)	HFPO-DA	50 ug/mL	
...LCPFHpA 00024	07/09/25	Wellington Laboratories, Lot PFHpA0620			(Purchased Reagent)	Perfluoroheptanoic acid	50 ug/mL	
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
				LCBP1 00001	01/23/24	Chemours, Lot NA	
....LCBP2 00001	01/23/24	Chemours, Lot NA			(Purchased Reagent)	Hydro-PS Acid	1000 ug/mL	
....LCBP4 00001	01/23/24	Chemours, Lot NA			(Purchased Reagent)	R-PSDA	1000 ug/mL	
....LCBP5 00001	01/23/24	Chemours, Lot NA			(Purchased Reagent)	Hydrolyzed PSDA	1000 ug/mL	
....LCBP6 00001	01/23/24	Chemours, Lot NA			(Purchased Reagent)	R-PSDCA	1000 ug/mL	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD6_00090	07/10/21	03/07/21	MeOH/H2O, Lot 204519	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00068	100 uL	HFPO-DA	0.05 ug/L
							Perfluoroheptanoic acid	0.05 ug/L
							PS Acid	0.05 ug/L
							Hydro-PS Acid	0.05 ug/L
							R-PSDA	0.05 ug/L
							Hydrolyzed PSDA	0.05 ug/L
							R-PSDCA	0.05 ug/L
							EVE Acid	0.05 ug/L
							Hydro-EVE Acid	0.05 ug/L
							NVHOS	0.05 ug/L
							PEPA	0.05 ug/L
							PES	0.05 ug/L
							PFECA B	0.05 ug/L
							PFECA G	0.05 ug/L
							PFMOAA	0.05 ug/L
PFO2HxA	0.05 ug/L							
PFO3OA	0.05 ug/L							
PFO4DA	0.05 ug/L							
PFO5DA	0.05 ug/L							
PMPA	0.05 ug/L							
R-EVE	0.05 ug/L							
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHFA 00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHFA 00035	09/29/25		Wellington Laboratories, Lot M4PFHFA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00068	08/23/21	02/28/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	25 mL	HFPO-DA	5 ug/L
							Perfluoroheptanoic acid	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
...LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA 00017	200 uL	HFPO-DA	50 ug/L
					LCPFHpA 00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120				(Purchased Reagent) HFPO-DA	50 ug/mL
...LCPFHpA 00024	07/09/25		Wellington Laboratories, Lot PFHpA0620				(Purchased Reagent) Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS_00001	100 uL	NVHOS	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPEPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD7_00443	07/10/21	03/07/21	MeOH/H2O, Lot 204519	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00068	200 uL	HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFO2HxA	0.1 ug/L
							PFO30A	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA_00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23	WELLINGTON, Lot M3HFPODA1020			(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHPA_00035	09/29/25	Wellington Laboratories, Lot M4PFHpA0920			(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00068	08/23/21	02/28/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	25 mL	HFPO-DA	5 ug/L
							Perfluoroheptanoic acid	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO30A	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA_00017	200 uL	HFPO-DA	50 ug/L
					LCPFHpA_00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120			(Purchased Reagent)	HFPO-DA	50 ug/mL
...LCPFHpA 00024	07/09/25		Wellington Laboratories, Lot PFHpA0620			(Purchased Reagent)	Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMCAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PEPA	1000 ug/mL
....LCPEPES 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA G	1000 ug/mL
....LCPFMCAA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-EVE	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
LCTB3_LLSTD8_00046	07/10/21	03/07/21	MeOH/H2O, Lot 204519	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
					LCTB3_SP_00068	500 uL	13C4 PFHpA	0.25 ug/L
							HFPO-DA	0.25 ug/L
							Perfluoroheptanoic acid	0.25 ug/L
							PS Acid	0.25 ug/L
							Hydro-PS Acid	0.25 ug/L
							R-PSDA	0.25 ug/L
							Hydrolyzed PSDA	0.25 ug/L
							R-PSDCA	0.25 ug/L
							EVE Acid	0.25 ug/L
							Hydro-EVE Acid	0.25 ug/L
							NVHOS	0.25 ug/L
							PEPA	0.25 ug/L
							PES	0.25 ug/L
							PFECA B	0.25 ug/L
							PFECA G	0.25 ug/L
							PFMOAA	0.25 ug/L
PFO2HxA	0.25 ug/L							
PFO3OA	0.25 ug/L							
PFO4DA	0.25 ug/L							
PFO5DA	0.25 ug/L							
PMPA	0.25 ug/L							
R-EVE	0.25 ug/L							
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA_00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23	WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL	
..LCM4PFHPA_00035	09/29/25	Wellington Laboratories, Lot M4PFHpA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL	
.LCTB3_SP_00068	08/23/21	02/28/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	25 mL	HFPO-DA	5 ug/L
							Perfluoroheptanoic acid	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
PFO4DA	5 ug/L							

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA 00017	200 uL	HFPO-DA	50 ug/L
					LCPFHpA 00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120				HFPO-DA	50 ug/mL
...LCPFHpA 00024	07/09/25		Wellington Laboratories, Lot PFHpA0620				Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA_00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS_00001	100 uL	NVHOS	5000 ug/L
					LCPEPA_00002	100 uL	PEPA	5000 ug/L
					LCPEPES_00001	100 uL	PES	5000 ug/L
					LCPFECA_B_00001	100 uL	PFECA B	5000 ug/L
					LCPFECA_G_00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA_00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA_00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA_00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA_00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA_00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA_00002	100 uL	PMPA	5000 ug/L
					LCR-EVE_00001	100 uL	R-EVE	5000 ug/L
....LCBP1_00001	01/23/24		Chemours, Lot NA				PS Acid	1000 ug/mL
....LCBP2_00001	01/23/24		Chemours, Lot NA				Hydro-PS Acid	1000 ug/mL
....LCBP4_00001	01/23/24		Chemours, Lot NA				R-PSDA	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD9_00044	07/10/21	03/07/21	MeOH/H2O, Lot 204519	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00068	1000 uL	HFPO-DA	0.5 ug/L
							Perfluoroheptanoic acid	0.5 ug/L
							PS Acid	0.5 ug/L
							Hydro-PS Acid	0.5 ug/L
							R-PSDA	0.5 ug/L
							Hydrolyzed PSDA	0.5 ug/L
							R-PSDCA	0.5 ug/L
							EVE Acid	0.5 ug/L
							Hydro-EVE Acid	0.5 ug/L
							NVHOS	0.5 ug/L
							PEPA	0.5 ug/L
							PES	0.5 ug/L
							PFECA B	0.5 ug/L
							PFECA G	0.5 ug/L
							PFMOAA	0.5 ug/L
							PFO2HxA	0.5 ug/L
							PFO3OA	0.5 ug/L
							PFO4DA	0.5 ug/L
							PFO5DA	0.5 ug/L
							PMPA	0.5 ug/L
							R-EVE	0.5 ug/L
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA_00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHPA_00035	09/29/25		Wellington Laboratories, Lot M4PFHPA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00068	08/23/21	02/28/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	25 mL	HFPO-DA	5 ug/L
							Perfluoroheptanoic acid	5 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
...LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA 00017	200 uL	HFPO-DA	50 ug/L
					LCPFHpA 00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120				HFPO-DA	50 ug/mL
...LCPFHpA 00024	07/09/25		Wellington Laboratories, Lot PFHpA0620				Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPEPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_SP_00063	03/23/21	09/24/20	Methanol, Lot 202389	250 mL	LCTB3_IM2_00011	25 mL	HFPO-DA	5 ug/L
							Perfluoroheptanoic acid	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							DFSA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							MMF	5 ug/L
							MTP	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							PPF Acid	5 ug/L
							R-EVE	5 ug/L
.LCTB3_IM2_00011	03/23/21	09/23/20	Methanol, Lot 202389	200 mL	LCHFPO-DA 00015	200 uL	HFPO-DA	50 ug/L
					LCPFHpA 00020	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00020	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							DFSA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							MMF	50 ug/L
							MTP	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							PPF Acid	50 ug/L
							R-EVE	50 ug/L
..LCHFPO-DA 00015	07/09/23		WELLINGTON, Lot HFPODA0720			(Purchased Reagent)	HFPO-DA	50 ug/mL
..LCPFHpA 00020	07/09/25		Wellington Laboratories, Lot PFHpA0620			(Purchased Reagent)	Perfluoroheptanoic acid	50 ug/mL
..LCTB3_IM_00020	03/23/21	09/23/20	Methanol, Lot 202389	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCDFSA 00001	100 uL	DFSA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCMMF 00001	100 uL	MMF	5000 ug/L
					LCMTP 00001	100 uL	MTP	5000 ug/L
					LCNVHOS_00001	100 uL	NVHOS	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCPPPFA 00001	100 uL	PPF Acid	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
...LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
...LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
...LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
...LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
...LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
...LCDFSA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		DFSA	1000 ug/mL
...LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
...LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
...LCMMF 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		MMF	1000 ug/mL
...LCMTP 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		MTP	1000 ug/mL
...LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
...LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
...LCPEPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
...LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
...LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
...LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
...LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
...LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
...LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
...LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
...LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
...LCPPPFA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PPF Acid	1000 ug/mL
...LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL

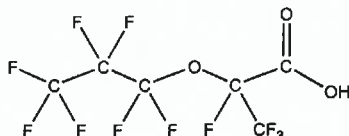
Reagent

LCHFPO-DA_00015



PRODUCT CODE: HFPO-DA **LOT NUMBER:** HFPODA0720
COMPOUND: 2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid

STRUCTURE: **CAS #:** 13252-13-6



MOLECULAR FORMULA: C₆H₁₁F₁₀O₃ **MOLECULAR WEIGHT:** 330.05
CONCENTRATION: 50.0 ± 2.5 µg/ml **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 07/09/2020
EXPIRY DATE: (mm/dd/yyyy) 07/09/2023
RECOMMENDED STORAGE: Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Product is commercially known as GenX.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
B.G. Chittim, General Manager **Date:** 07/16/2020
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

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UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

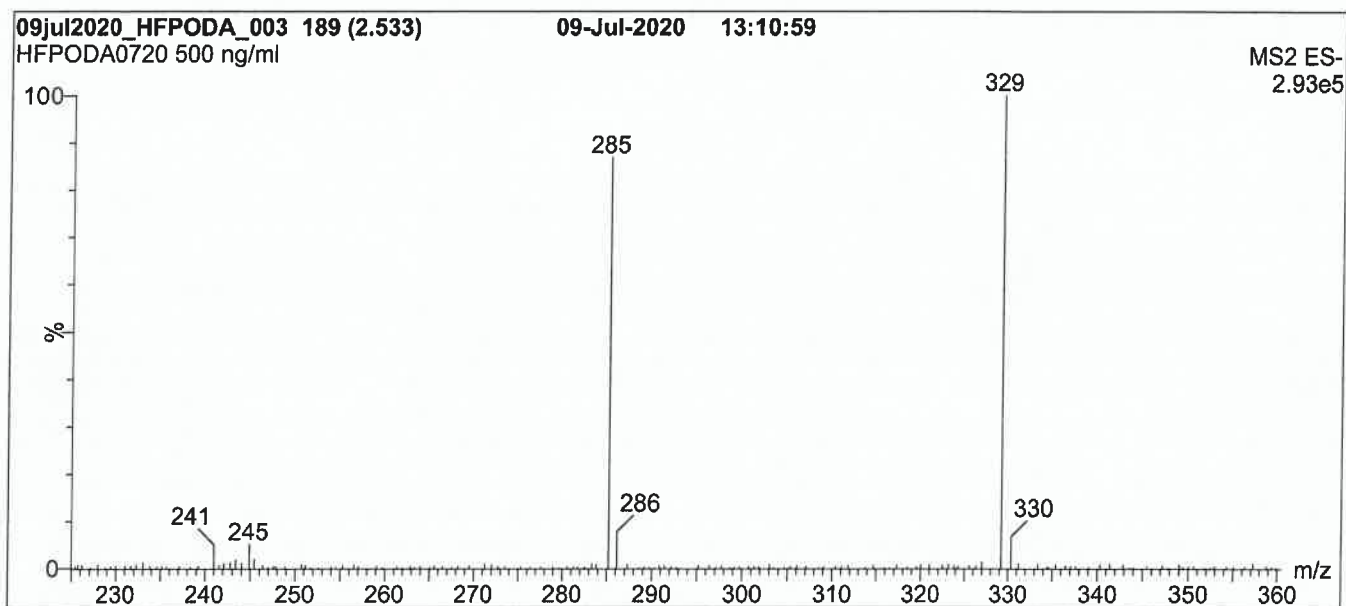
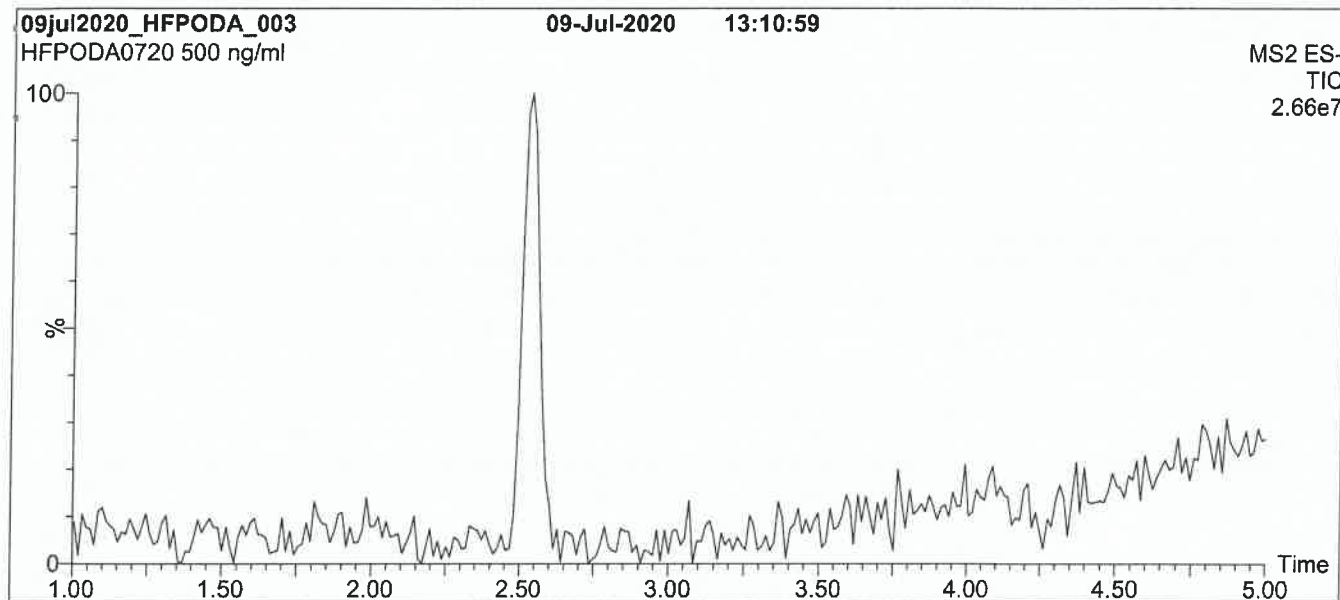
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: HFPO-DA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Waters Xevo TQ-S micro MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 50% (80:20 MeOH:ACN) / 50% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 8 min and hold for
 2 min before returning to initial conditions in 0.75 min.
 Time: 12 min

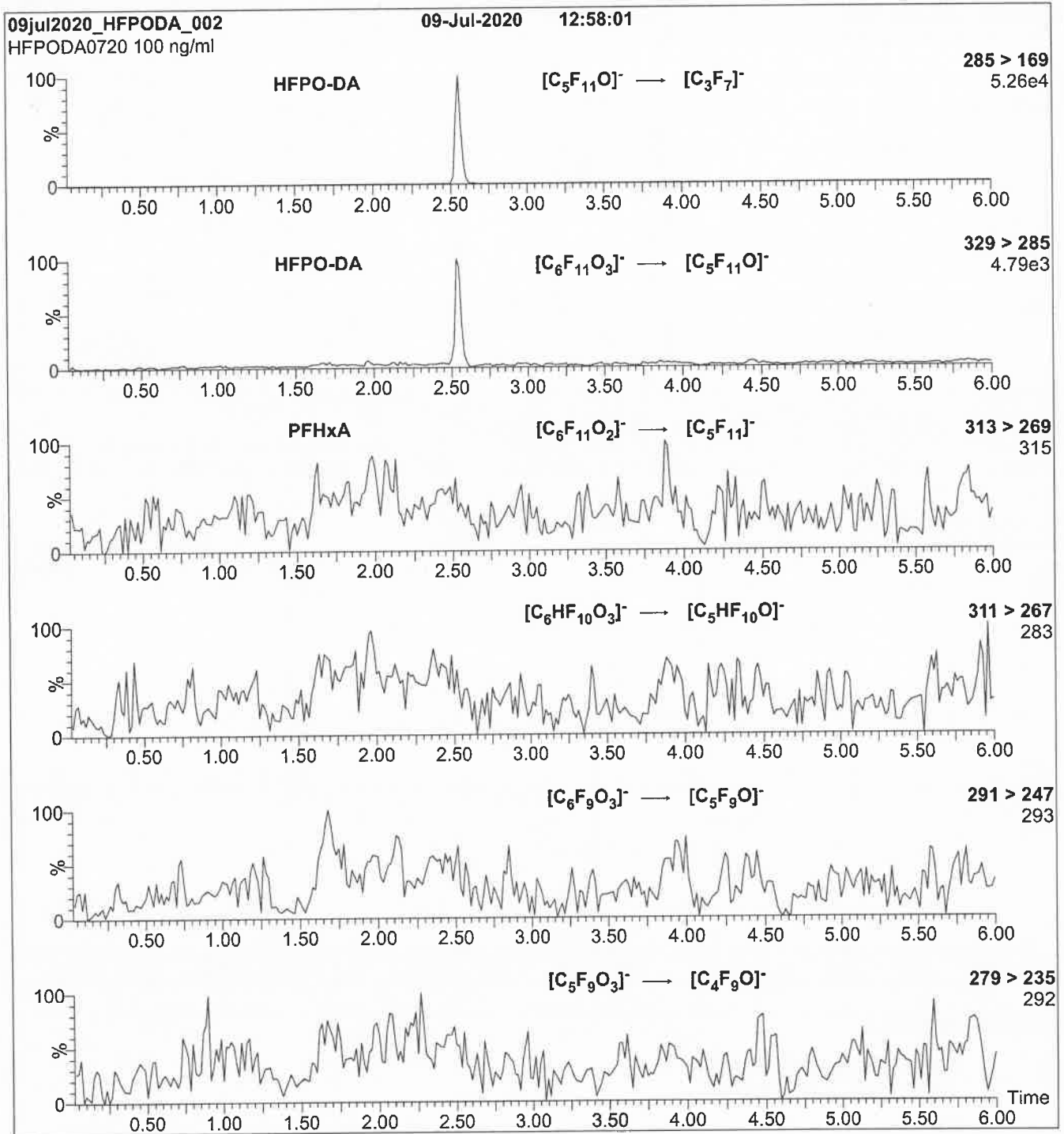
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 3.00
 Cone Voltage (V) = 15.00
 Desolvation Temperature ($^{\circ}$ C) = 300
 Desolvation Gas Flow (l/hr) = 1000

Figure 2: HFPO-DA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: On-column (HFPO-DA)
Mobile phase: Same as Figure 1
Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.29e-3
Collision Energy (eV) = 8

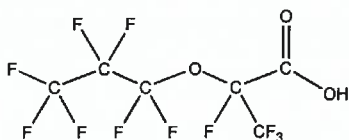
Reagent

LCHEPO-DA_00017



PRODUCT CODE: HFPO-DA **LOT NUMBER:** HFPODA1120
COMPOUND: 2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid

STRUCTURE: **CAS #:** 13252-13-6



MOLECULAR FORMULA: C₆HF₁₁O₃ **MOLECULAR WEIGHT:** 330.05
CONCENTRATION: 50.0 ± 2.5 µg/mL **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 11/13/2020
EXPIRY DATE: (mm/dd/yyyy) 11/13/2023
RECOMMENDED STORAGE: Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Product is commercially known as GenX.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
B.G. Chittim, General Manager

Date: 11/19/2020
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

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SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

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$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

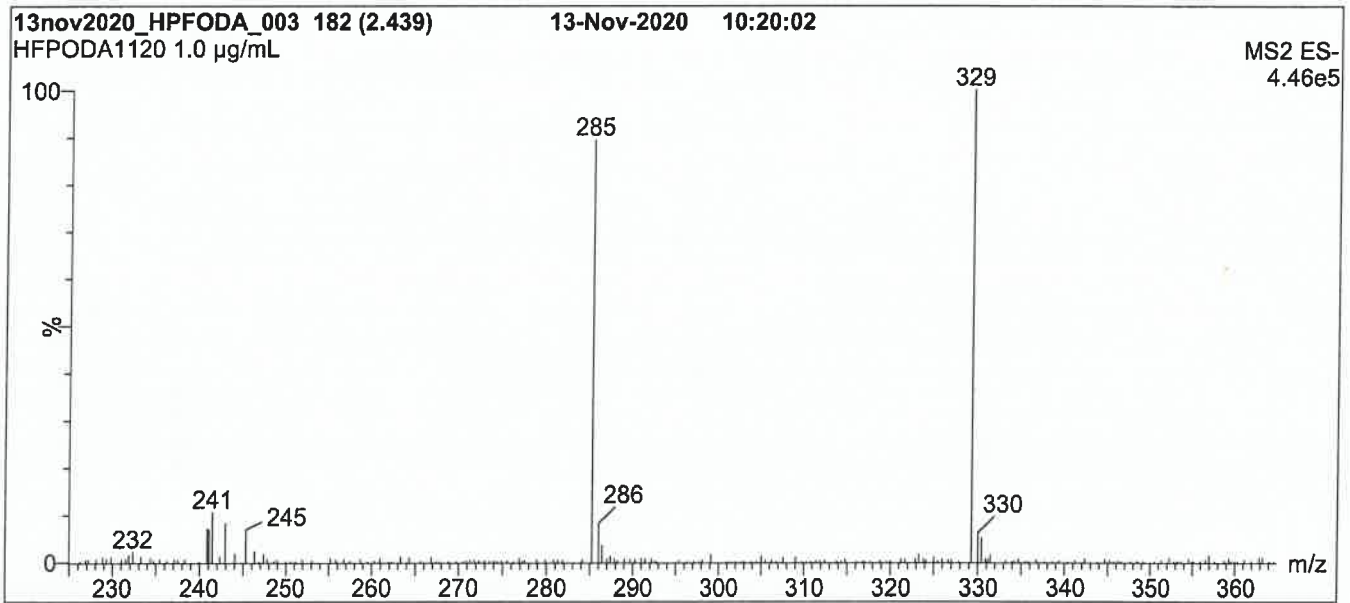
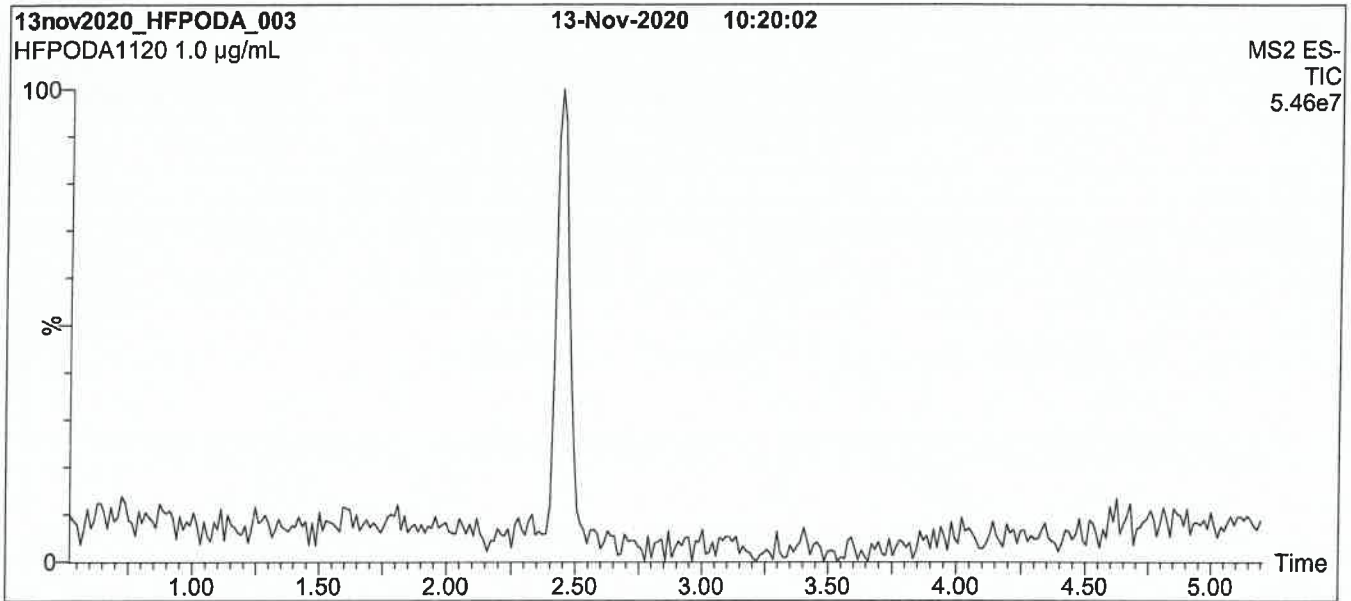
QUALITY MANAGEMENT:

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For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: HFPO-DA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% H₂O / 50% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

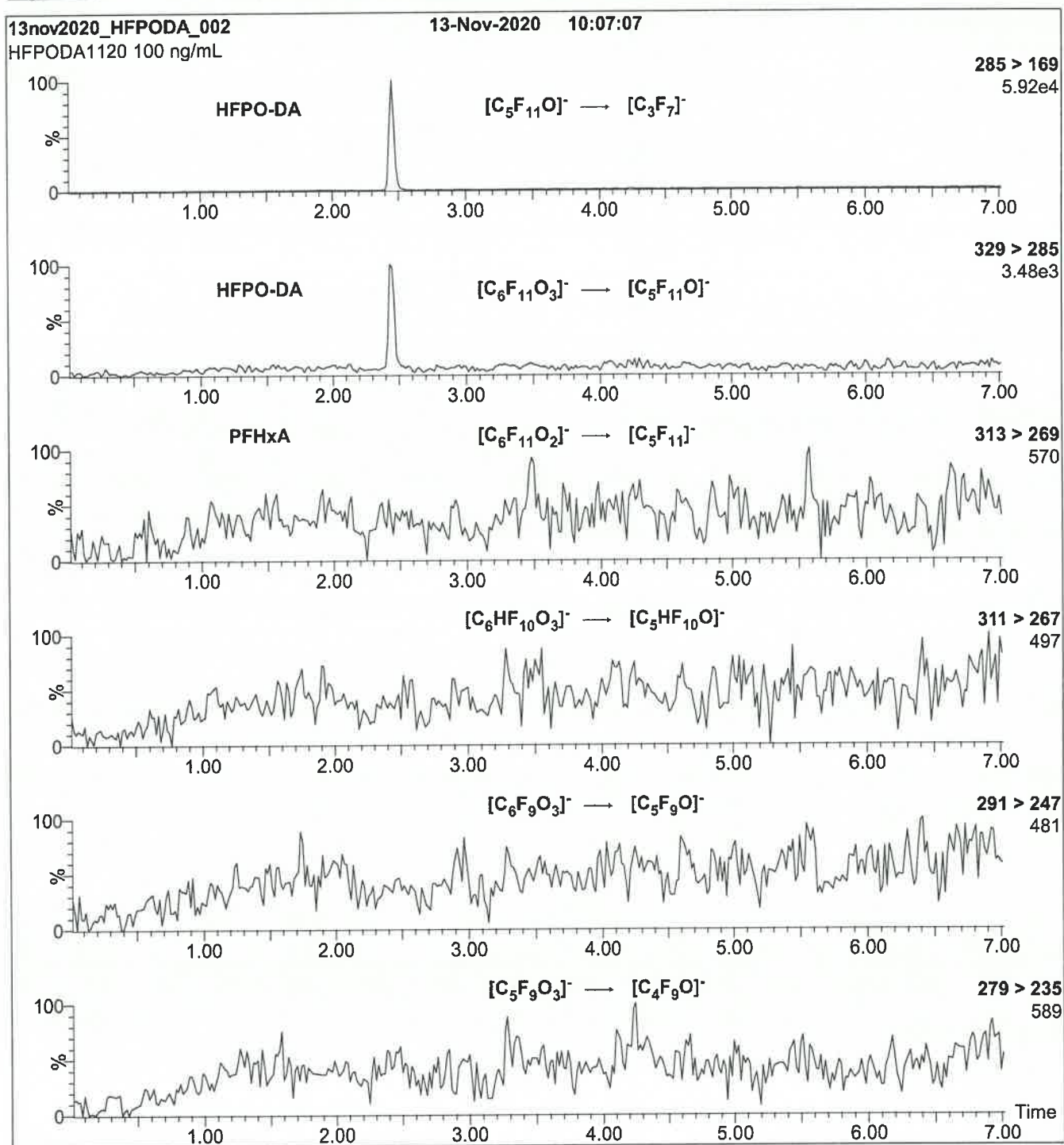
Flow: 300 µL/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 15.00
Desolvation Temperature (°C) = 300
Desolvation Gas Flow (L/hr) = 1000

Figure 2: HFPO-DA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: On-column (HFPO-DA)
 Mobile phase: Same as Figure 1
 Flow: 300 μ L/min

MS Parameters:

Collision Gas (mbar) = 3.29e-3
 Collision Energy (eV) = 8

Reagent

LCM3HFPO-DA_00027

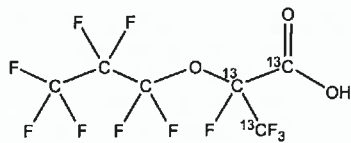


WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M3HFPO-DA **LOT NUMBER:** M3HFPODA1020
COMPOUND: 2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-¹³C₃-propanoic acid

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: ¹³C₃¹²C₃HF₁₁O₃ **MOLECULAR WEIGHT:** 333.03
CONCENTRATION: 50.0 ± 2.5 µg/mL **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
LAST TESTED: (mm/dd/yyyy) 10/21/2020 (¹³C₃)
EXPIRY DATE: (mm/dd/yyyy) 10/21/2023
RECOMMENDED STORAGE: Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Product is commercially known as GenX.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
B.G. Chittim, General Manager

Date: 10/23/2020
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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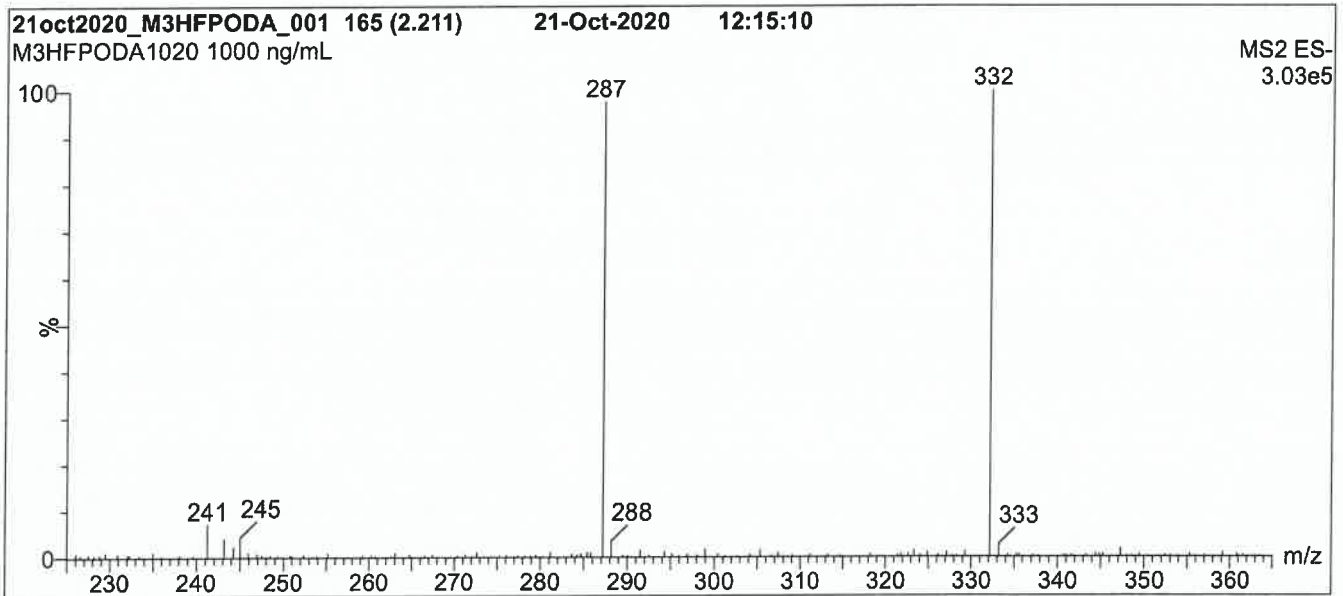
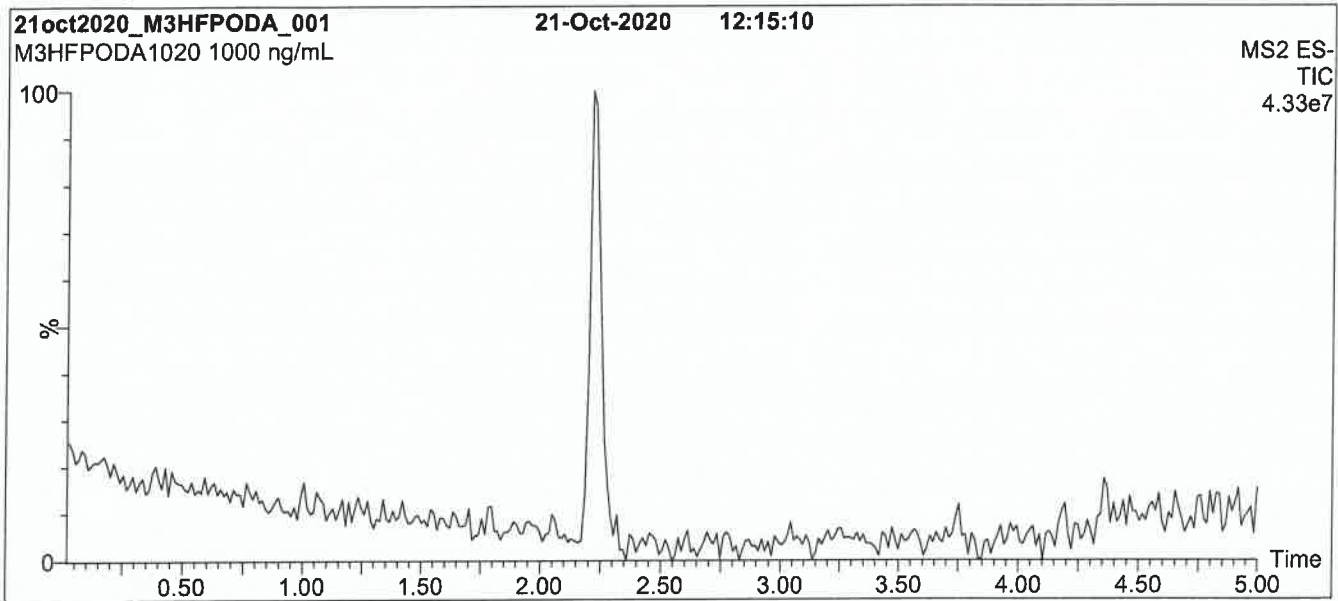
QUALITY MANAGEMENT:

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Figure 1: M3HFPO-DA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% H₂O / 50% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

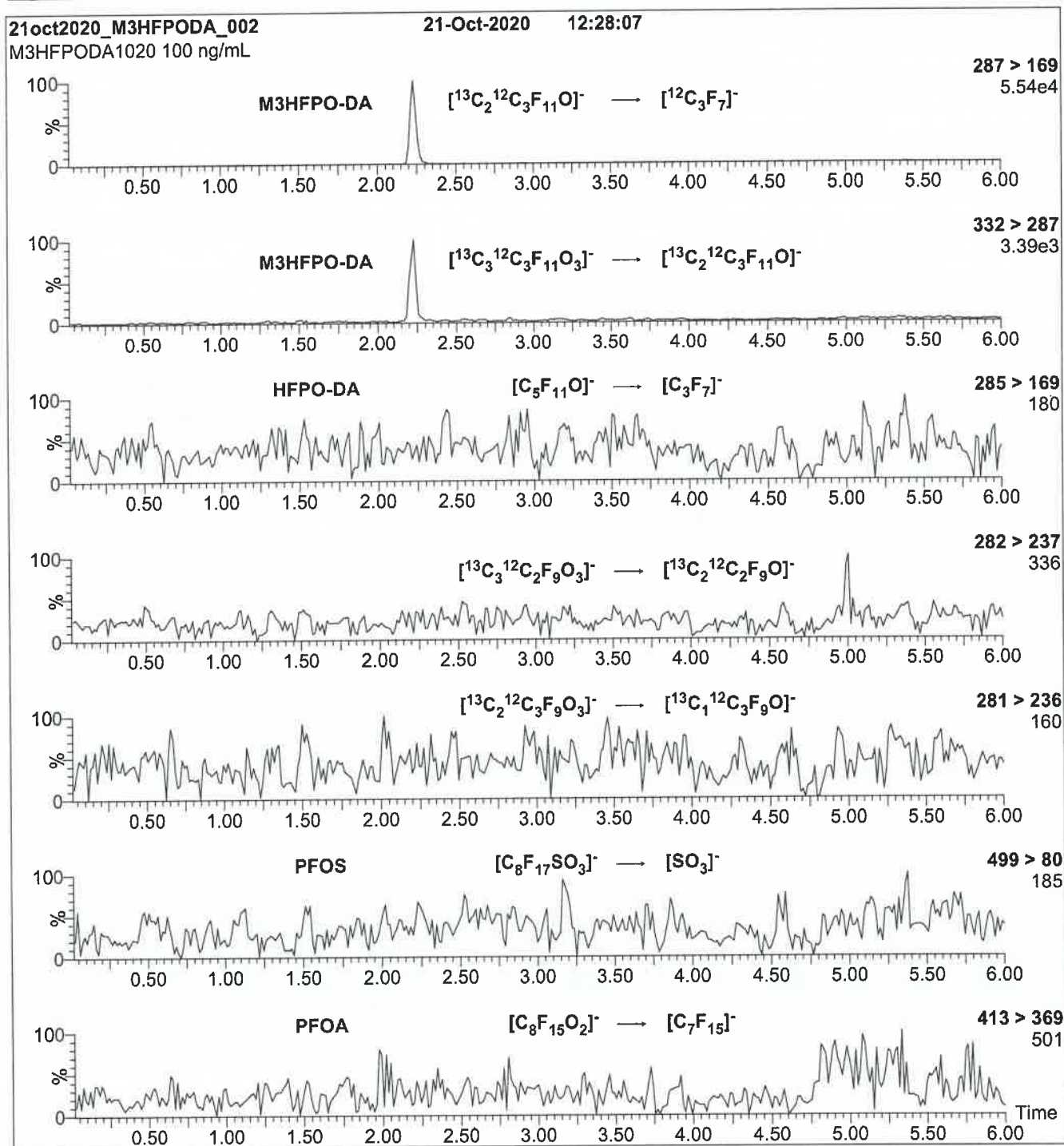
Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 15.00
Desolvation Temperature ($^{\circ}$ C) = 300
Desolvation Gas Flow (L/hr) = 1000

Figure 2: M3HFPO-DA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: On-column (M3HFPO-DA)

Mobile phase: Same as Figure 1

Flow: 300 $\mu\text{L}/\text{min}$

MS Parameters:

Collision Gas (mbar) = 3.41e-3

Collision Energy (eV) = 8

Reagent

LCM4PFHPA_00035

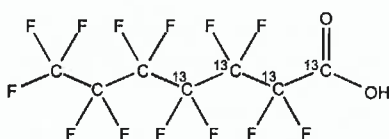


PRODUCT CODE: M4PFHpA
COMPOUND: Perfluoro-n-[1,2,3,4-¹³C₄]heptanoic acid

LOT NUMBER: M4PFHpA0920

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₄¹²C₃HF₁₃O₂
CONCENTRATION: 50.0 ± 2.5 µg/mL

MOLECULAR WEIGHT: 368.03
SOLVENT(S): Methanol
Water (<1%)
ISOTOPIC PURITY: ≥99% ¹³C
(1,2,3,4-¹³C₄)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 09/29/2020
EXPIRY DATE: (mm/dd/yyyy) 09/29/2025
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.03% of perfluoro-n-heptanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
B.G. Chittim, General Manager

Date: 10/22/2020
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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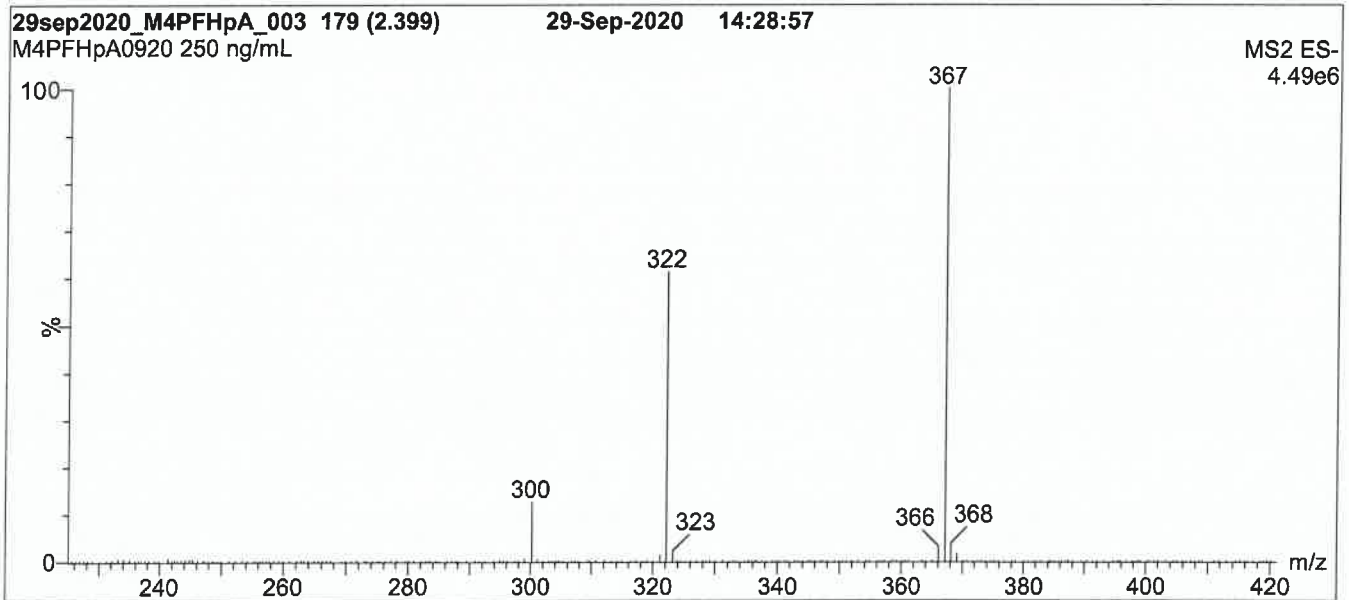
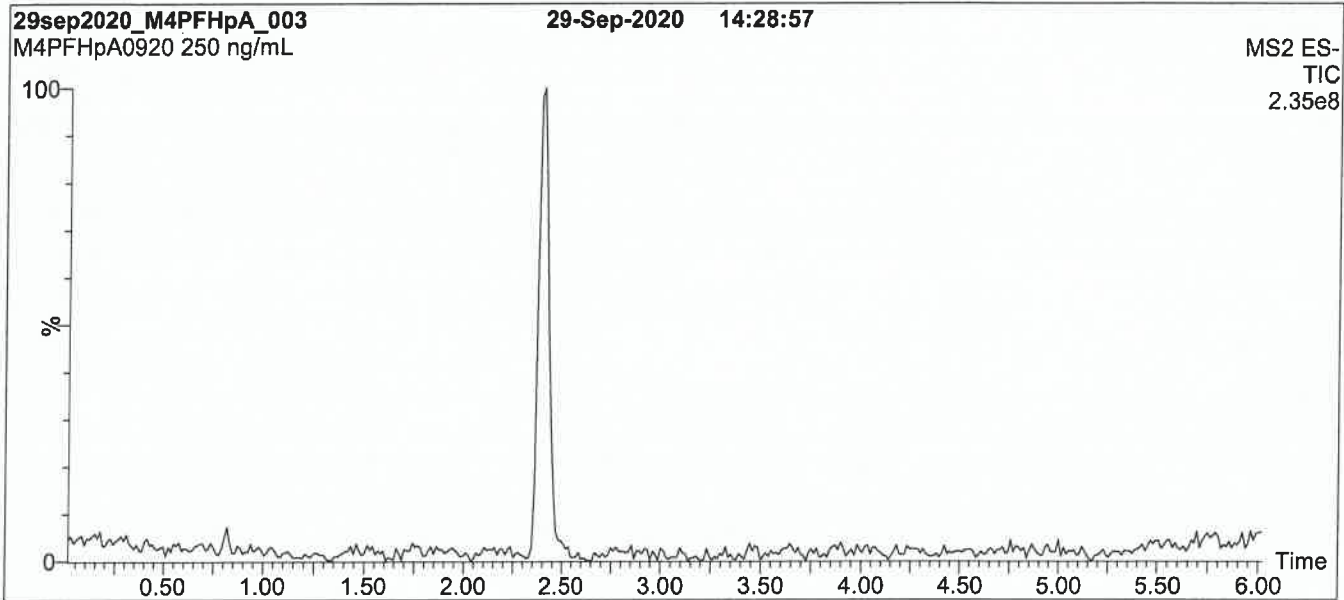
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: M4PFHpA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 45% H₂O / 55% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

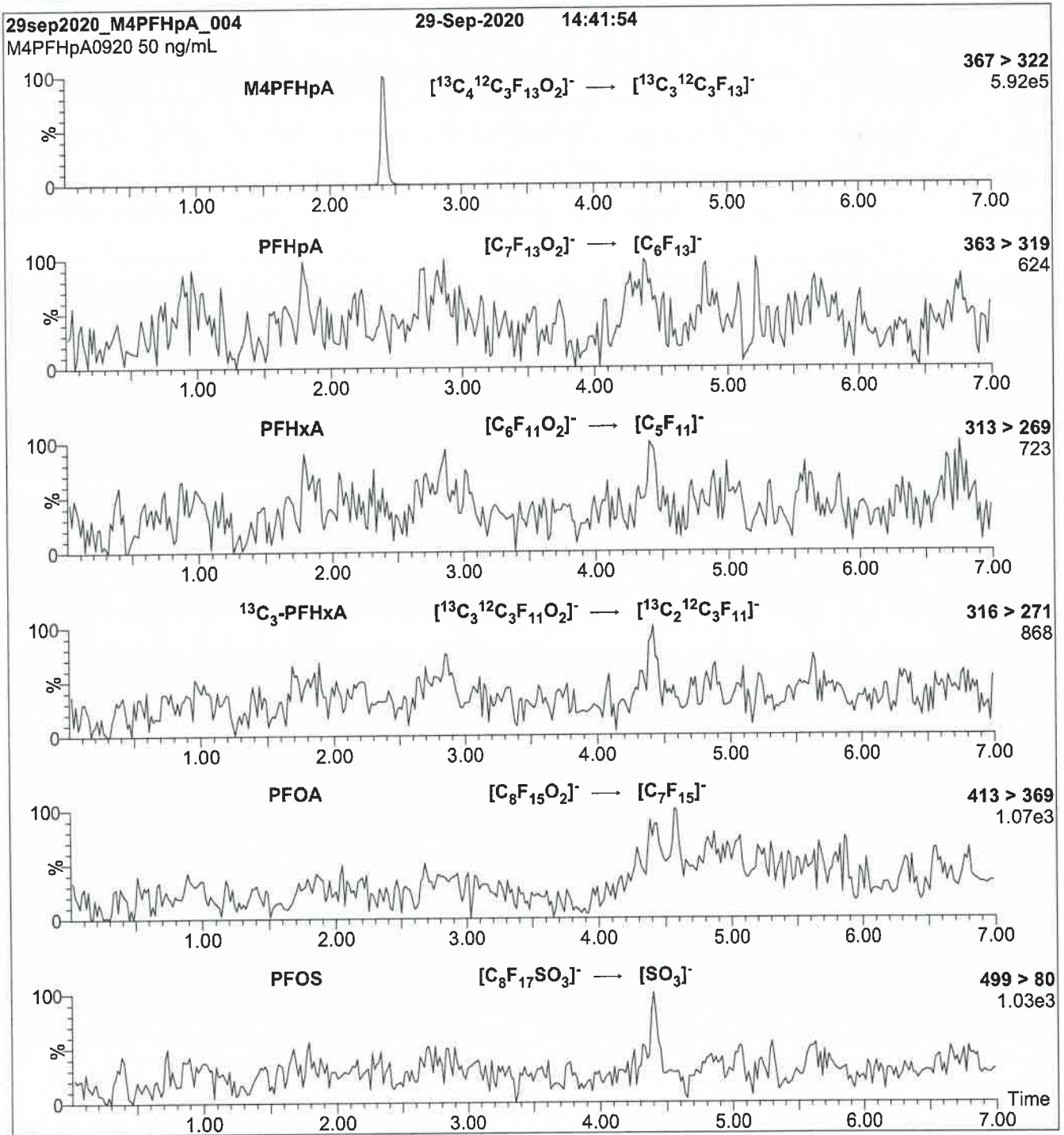
Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 10.00
Desolvation Temperature ($^{\circ}$ C) = 500
Desolvation Gas Flow (L/hr) = 1000

Figure 2: M4PFHpA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: On-column (M4PFHpA)

Mobile phase: Same as Figure 1

Flow: 300 $\mu\text{L}/\text{min}$

MS Parameters:

Collision Gas (mbar) = 3.27e-3

Collision Energy (eV) = 8

Reagent

LCPFHpA_00020



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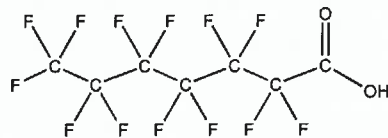
CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: PFHpA
COMPOUND: Perfluoro-n-heptanoic acid

LOT NUMBER: PFHpA0620

STRUCTURE:

CAS #: 375-85-9



MOLECULAR FORMULA: C₇HF₁₃O₂
CONCENTRATION: 50.0 ± 2.5 µg/ml

MOLECULAR WEIGHT: 364.06
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 07/09/2020
EXPIRY DATE: (mm/dd/yyyy) 07/09/2025
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
B.G. Chittim, General Manager

Date: 07/22/2020
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{j=1}^n u(y, x_j)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

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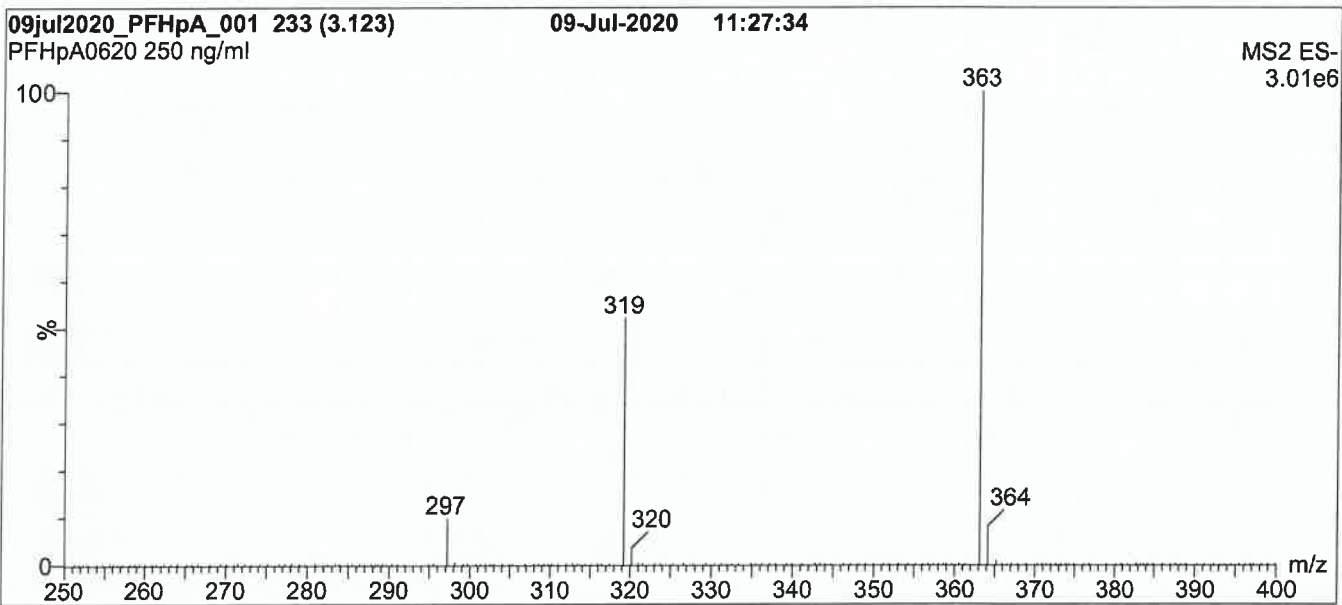
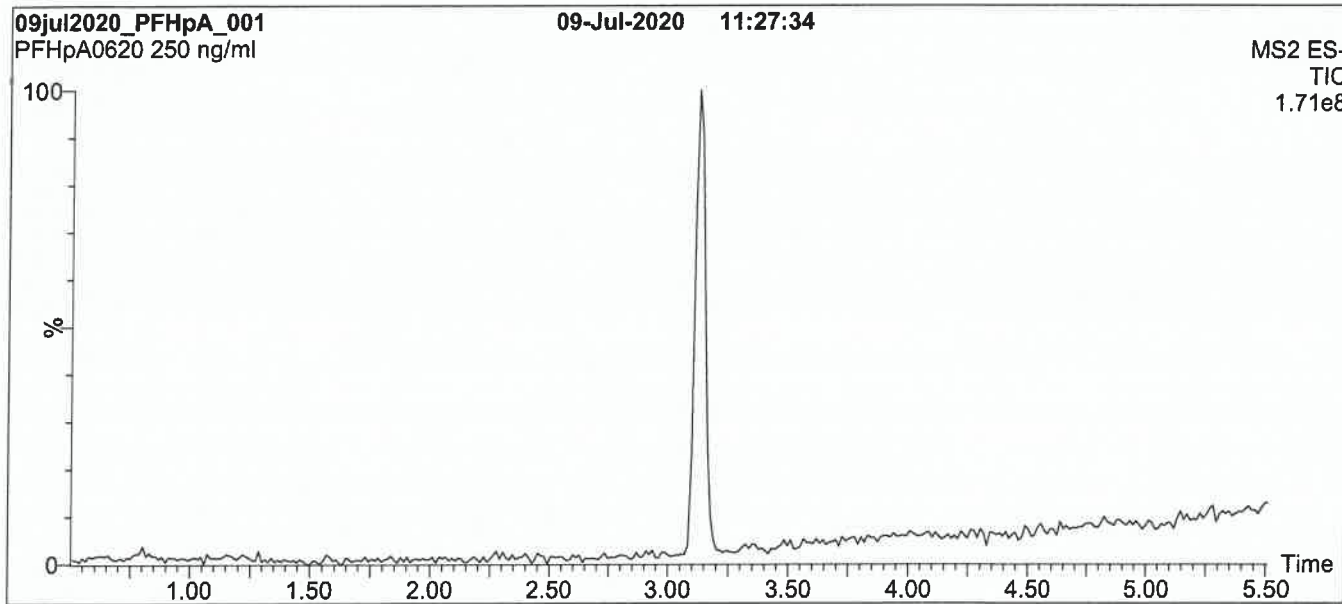
QUALITY MANAGEMENT:

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Figure 1: PFHpA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Waters Xevo TQ-S micro MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μm, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 50% (80:20 MeOH:ACN) / 50% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 8 min and hold for
 2 min before returning to initial conditions in 0.75 min.
 Time: 12 min

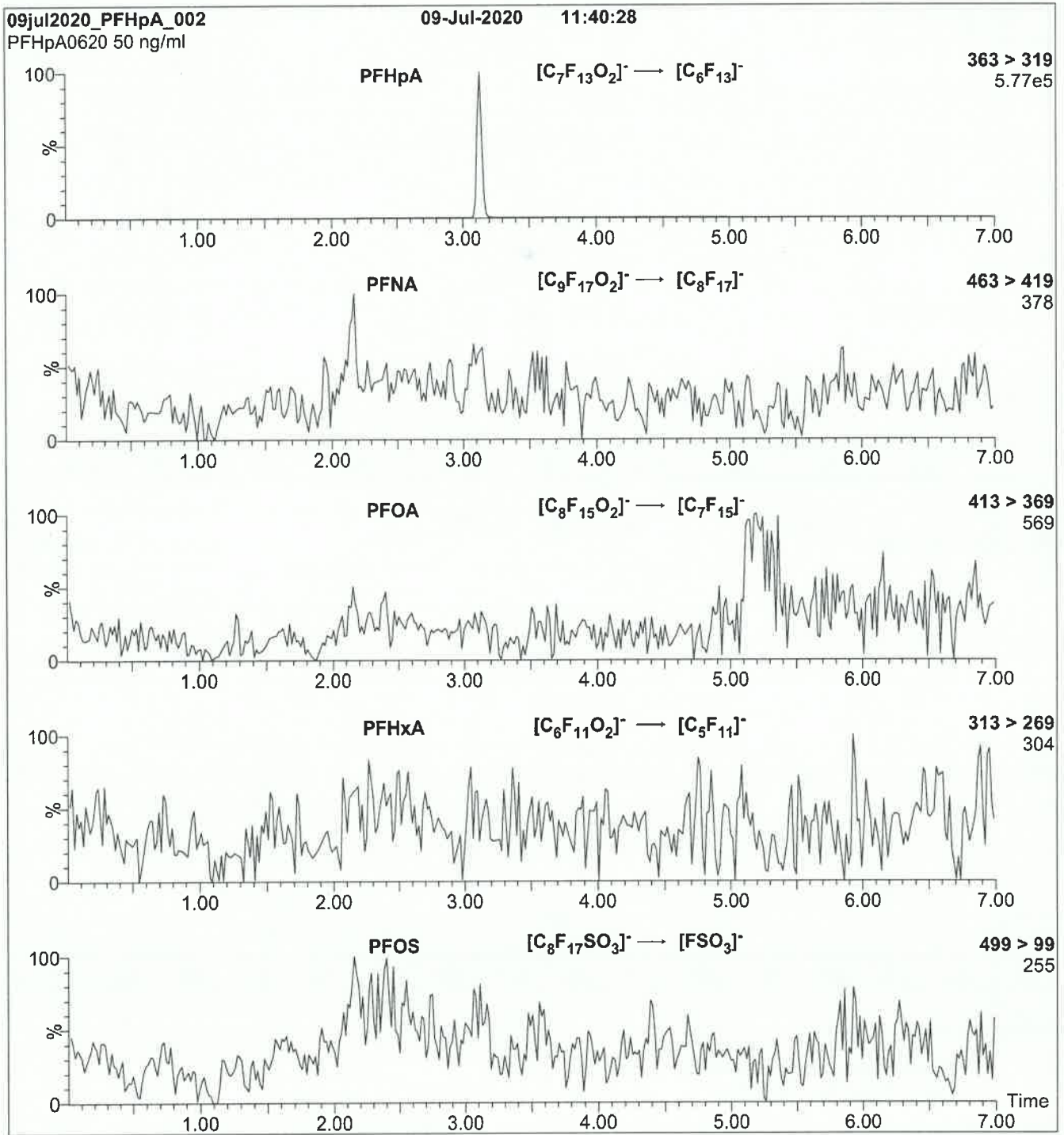
Flow: 300 μl/min

MS Parameters

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 2.00
 Cone Voltage (V) = 10.00
 Desolvation Temperature (°C) = 500
 Desolvation Gas Flow (l/hr) = 1000

Figure 2: PFHpA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: On-column (PFHpA)
 Mobile phase: Same as Figure 1
 Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.29e-3
 Collision Energy (eV) = 8

Reagent

LCPFHpA_00024

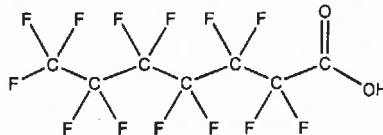


WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: PFHpA **LOT NUMBER:** PFHpA0620
COMPOUND: Perfluoro-n-heptanoic acid

STRUCTURE: **CAS #:** 375-85-9



MOLECULAR FORMULA: $C_7HF_{13}O_2$ **MOLECULAR WEIGHT:** 364.06
CONCENTRATION: $50.0 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):** Methanol
Water (<1%)
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 07/09/2020
EXPIRY DATE: (mm/dd/yyyy) 07/09/2025
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
B.G. Chittim, General Manager **Date:** 07/22/2020
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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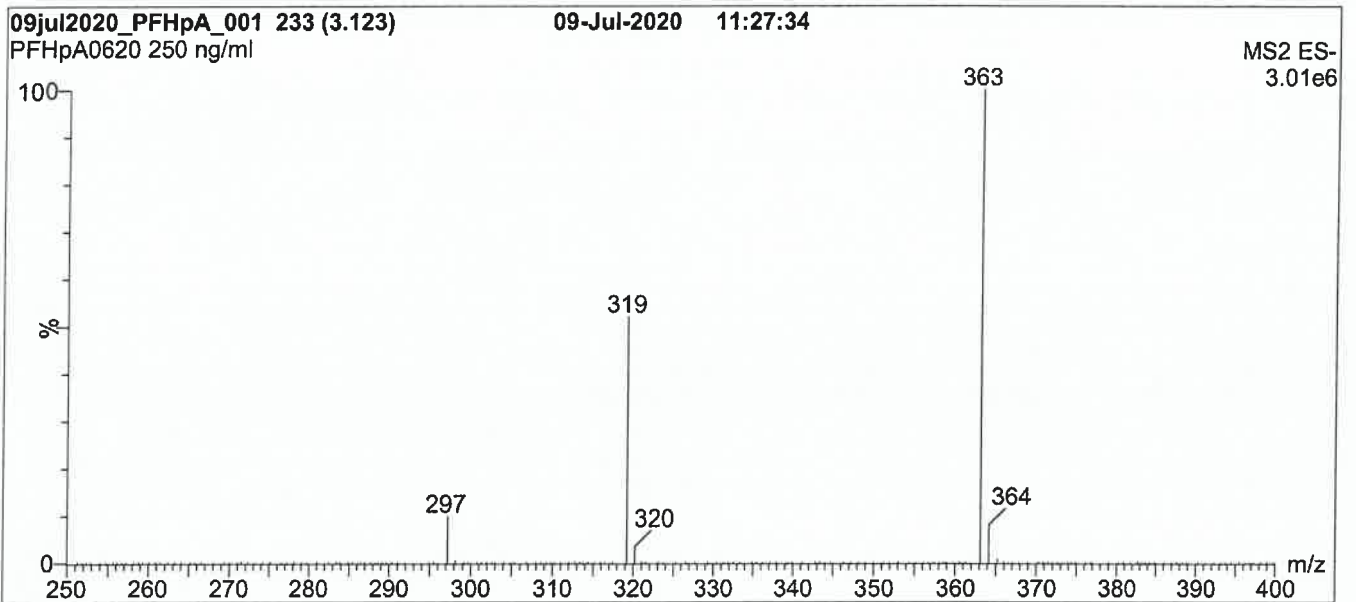
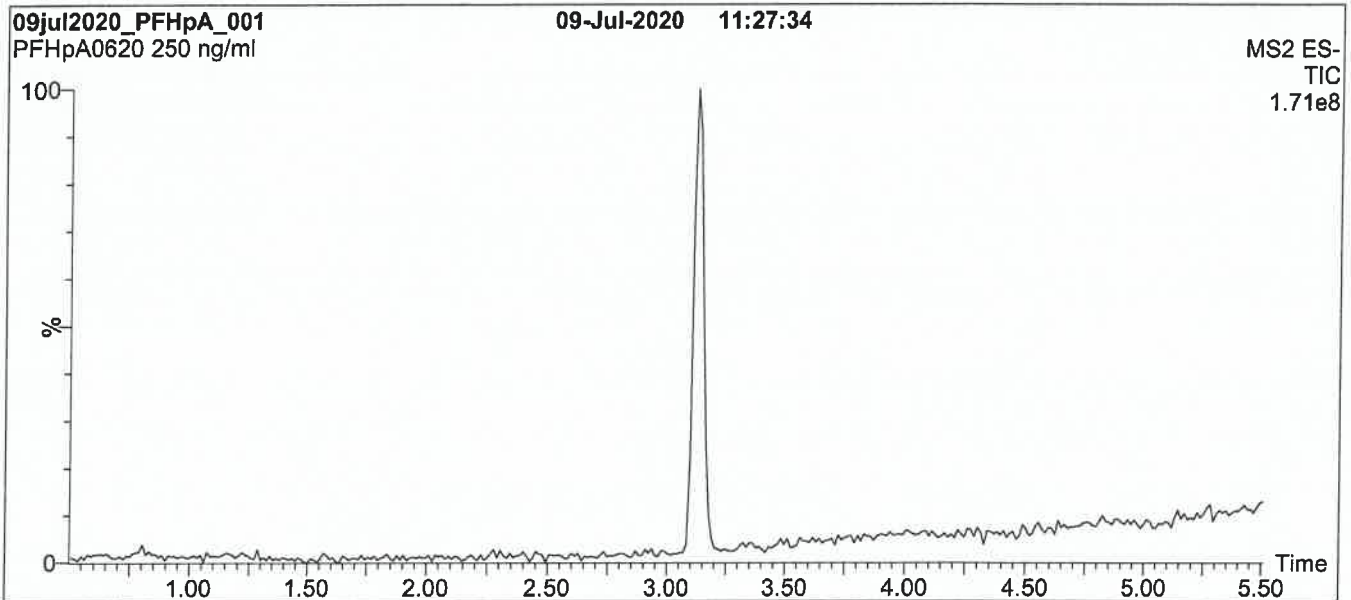
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Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Waters Xevo TQ-S micro MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μm, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 50% (80:20 MeOH:ACN) / 50% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 8 min and hold for
 2 min before returning to initial conditions in 0.75 min.
 Time: 12 min

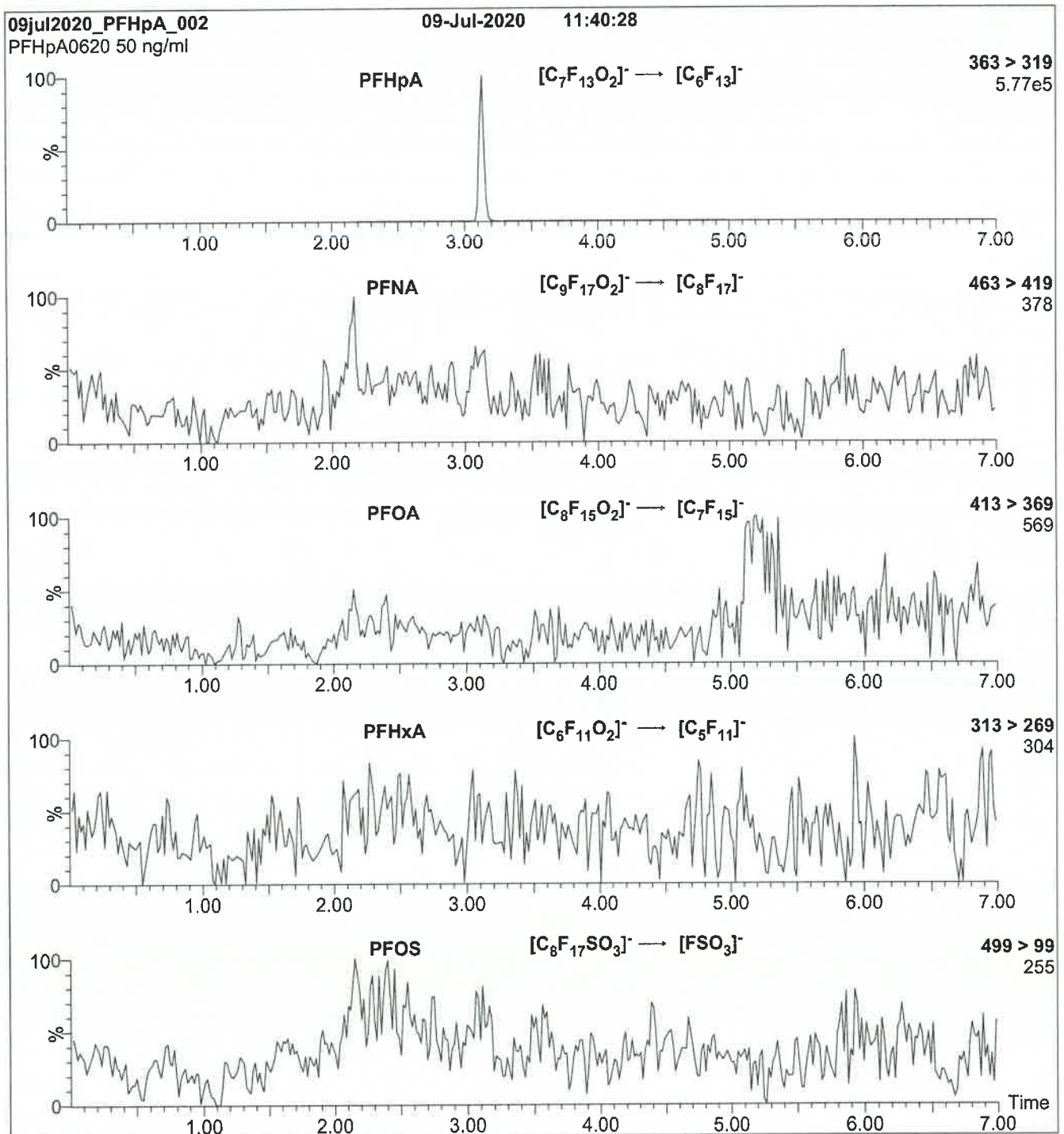
Flow: 300 μl/min

MS Parameters

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 2.00
 Cone Voltage (V) = 10.00
 Desolvation Temperature (°C) = 500
 Desolvation Gas Flow (l/hr) = 1000

Figure 2: PFHpA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: On-column (PFHpA)
 Mobile phase: Same as Figure 1
 Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.29e-3
 Collision Energy (eV) = 8

PFAS_CHEM_TB3P

Fluoroproducts Analytical Method -
Table 3+

FORM II
LCMS SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	HFPODA #
SEEP-C-Effluent-24-022721	320-70652-1	105
SEEP-C-Influent-24-022721	320-70652-2	109
Seep-C-EQBLK-ISCO-022721	320-70652-3	102
SEEP-C-FBLK-022721	320-70652-4	106
	MB 320-467237/1-A	96
	LCS 320-467237/2-A	81
	LCSD 320-467237/3-A	78

HFPODA = 13C3 HFPO-DA

QC LIMITS
25-150

Column to be used to flag recovery values

FORM II Chemours (TB3+)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 2021.03.12_A12_TB3_C_008.d
 Lab ID: LCS 320-467237/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
13C3 HFPO-DA	0.500	0.403	81	25-150	
EVE Acid	0.200	0.179	90	70-130	
HFPO-DA	0.200	0.212	106	70-130	
Hydro-EVE Acid	0.200	0.150	75	70-130	
Hydrolyzed PSDA	0.200	0.186	93	50-150	
Hydro-PS Acid	0.200	0.177	88	70-130	
NVHOS	0.200	0.183	91	70-130	
PEPA	0.200	0.176	88	70-130	
PES	0.200	0.191	95	70-130	
PFECA B	0.200	0.186	93	70-130	
PFECA G	0.200	0.163	82	70-130	
PFMOAA	0.200	0.227	113	70-130	
PFO2HxA	0.200	0.208	104	70-130	
PFO3OA	0.200	0.210	105	70-130	
PFO4DA	0.200	0.136	68	50-150	
PFO5DA	0.200	0.156	78	50-150	
PMPA	0.200	0.202	101	70-130	
PS Acid	0.200	0.178	89	70-130	
R-EVE	0.200	0.207	104	50-150	
R-PSDA	0.200	0.170	85	50-150	
R-PSDCA	0.200	0.139	70	70-130	

Column to be used to flag recovery and RPD values

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 2021.03.12_A12_TB3_C_009.d

Lab ID: LCSD 320-467237/3-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
13C3 HFPO-DA	0.500	0.389	78			25-150	
EVE Acid	0.200	0.161	81	11	25	70-130	
HFPO-DA	0.200	0.228	114	7	25	70-130	
Hydro-EVE Acid	0.200	0.148	74	1	25	70-130	
Hydrolyzed PSDA	0.200	0.204	102	9	25	50-150	
Hydro-PS Acid	0.200	0.168	84	5	25	70-130	
NVHOS	0.200	0.172	86	6	25	70-130	
PEPA	0.200	0.158	79	11	25	70-130	
PES	0.200	0.171	86	11	25	70-130	
PFECA B	0.200	0.178	89	4	25	70-130	
PFECA G	0.200	0.146	73	11	25	70-130	
PFMOAA	0.200	0.212	106	7	25	70-130	
PFO2HxA	0.200	0.190	95	9	25	70-130	
PFO3OA	0.200	0.178	89	17	25	70-130	
PFO4DA	0.200	0.122	61	10	25	50-150	
PFO5DA	0.200	0.128	64	19	25	50-150	
PMPA	0.200	0.186	93	8	25	70-130	
PS Acid	0.200	0.166	83	7	25	70-130	
R-EVE	0.200	0.220	110	6	25	50-150	
R-PSDA	0.200	0.188	94	10	25	50-150	
R-PSDCA	0.200	0.143	71	3	25	70-130	

Column to be used to flag recovery and RPD values

FORM III Chemours (TB3+)

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1
 SDG No.: _____
 Lab File ID: 2021.03.09_TB3_A12_AB_031.d Lab Sample ID: MB 320-467237/1-A
 Matrix: Water Date Extracted: 03/03/2021 20:42
 Instrument ID: A12 Date Analyzed: 03/10/2021 00:12
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
SEEP-C-Effluent-24-022721	320-70652-1	2021.03.09_TB3_A12_AB_050.d	03/10/2021 05:48
SEEP-C-Influent-24-022721	320-70652-2	2021.03.09_TB3_A12_AB_051.d	03/10/2021 06:05
Seep-C-EQBLK-ISCO-022721	320-70652-3	2021.03.09_TB3_A12_AB_052.d	03/10/2021 06:23
SEEP-C-FBLK-022721	320-70652-4	2021.03.09_TB3_A12_AB_053.d	03/10/2021 06:40
	LCS 320-467237/2-A	2021.03.12_A12_TB3_C_008.d	03/13/2021 07:41
	LCSD 320-467237/3-A	2021.03.12_A12_TB3_C_009.d	03/13/2021 07:59

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1
 SDG No.: _____
 Client Sample ID: SEEP-C-Effluent-24-022721 Lab Sample ID: 320-70652-1
 Matrix: Water Lab File ID: 2021.03.09_TB3_A12_AB_050.d
 Analysis Method: Chemours (TB3+) Date Collected: 02/27/2021 16:00
 Extraction Method: PFAS Prep Date Extracted: 03/03/2021 20:42
 Sample wt/vol: 0.025 (mL) Date Analyzed: 03/10/2021 05:48
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 468770 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	<0.017		0.017	
13252-13-6	HFPO-DA	<0.081		0.081	
773804-62-9	Hydro-EVE Acid	<0.014		0.014	
2416366-19-1	Hydrolyzed PSDA	<0.038		0.038	
749836-20-2	Hydro-PS Acid	<0.0061		0.0061	
1132933-86-8	NVHOS	<0.015		0.015	
267239-61-2	PEPA	<0.020		0.020	
113507-82-7	PES	<0.0067		0.0067	
151772-58-6	PFECA B	<0.027		0.027	
801212-59-9	PFECA G	<0.048		0.048	
674-13-5	PFMOAA	0.28		0.080	
39492-88-1	PFO2HxA	0.083		0.027	
39492-89-2	PFO3OA	<0.039		0.039	
39492-90-5	PFO4DA	<0.059		0.059	
39492-91-6	PFO5DA	<0.078		0.078	
13140-29-9	PMPA	0.66		0.62	
29311-67-9	PS Acid	<0.020		0.020	
2416366-22-6	R-EVE	<0.072		0.072	
2416366-18-0	R-PSDA	<0.071		0.071	
2416366-21-5	R-PSDCA	<0.017		0.017	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	105		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_050.d
 Lims ID: 320-70652-A-1-A
 Client ID: SEEP-C-Effluent-24-022721
 Sample Type: Client
 Inject. Date: 10-Mar-2021 05:48:00 ALS Bottle#: 50 Worklist Smp#: 22
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: 320-70652-a-1-a
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Method: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 10-Mar-2021 12:14:49 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1671

First Level Reviewer: kwong Date: 10-Mar-2021 12:14:49
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.124	4.031	0.093		15919	0.001418		2.7		M
23 PMPA										M
229.00 > 185.00	7.111	6.686	0.425		56593	0.003290		24.8		M
6 PFO2HxA										M
245.00 > 85.00	7.829	7.677	0.152		5194	0.000413		49.8		M
D 10 13C3 HFPO-DA										M
287.00 > 169.00	9.243	9.133	0.110		1656225	0.2619		105	31909	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_050.d

Injection Date: 10-Mar-2021 05:48:00

Instrument ID: A12

Lims ID: 320-70652-A-1-A

Lab Sample ID: 320-70652-1

Client ID: SEEP-C-Effluent-24-022721

Operator ID: Sac_inst_A12

ALS Bottle#: 50

Worklist Smp#: 22

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

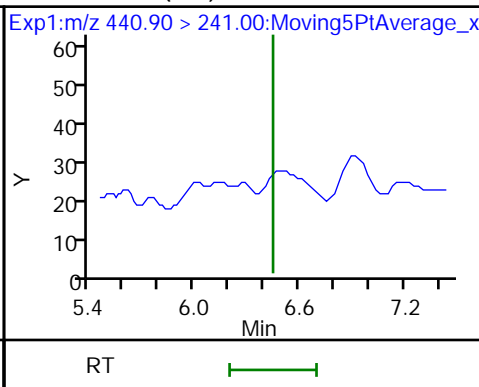
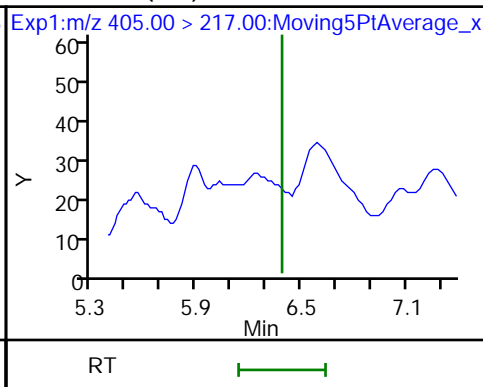
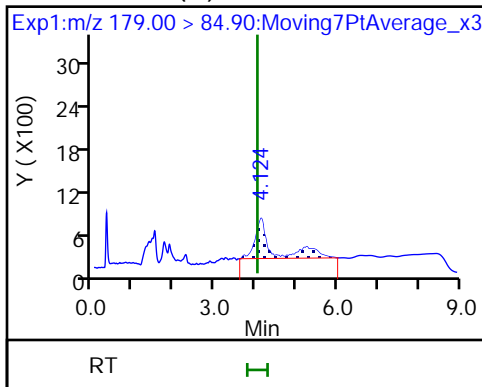
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

1 PFMOAA (M)

2 R-EVE (ND)

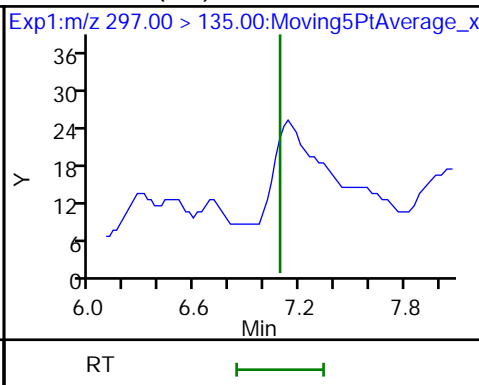
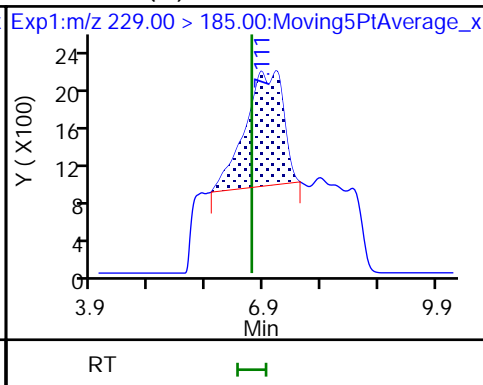
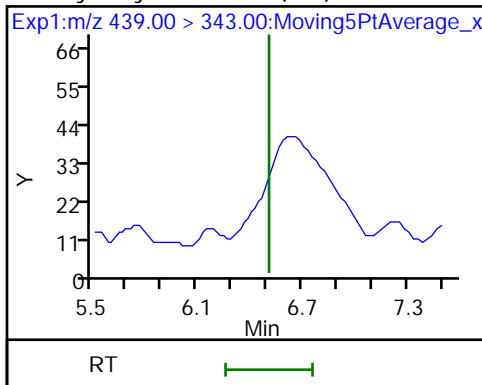
3 R-PSDA (ND)



4 Hydrolyzed PSDA (ND)

23 PMPA (M)

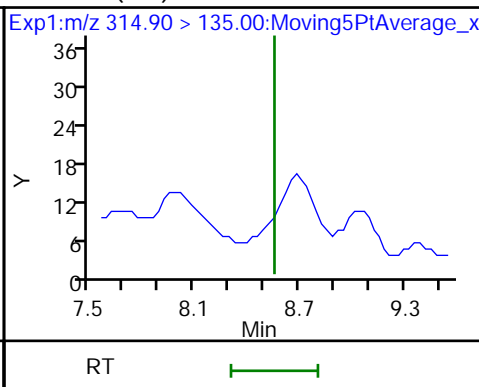
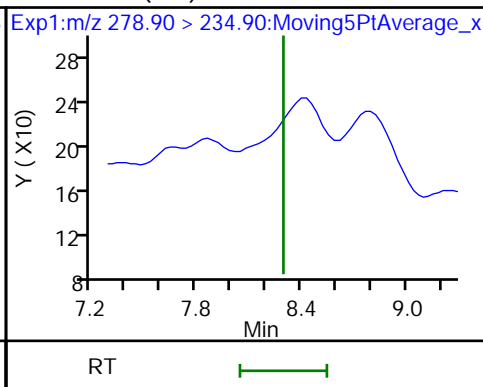
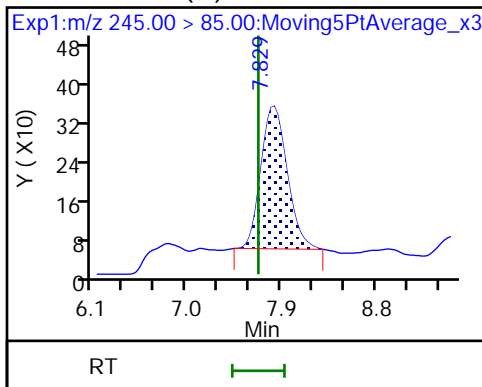
5 NVHOS (ND)



6 PFO2HxA (M)

22 PEPA (ND)

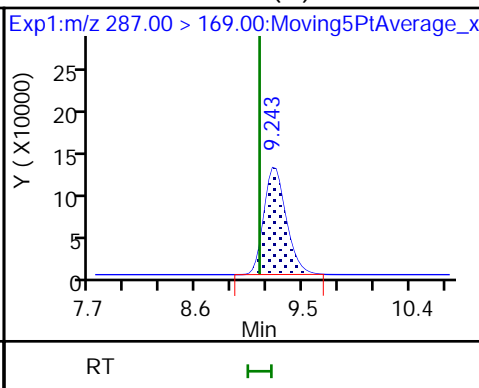
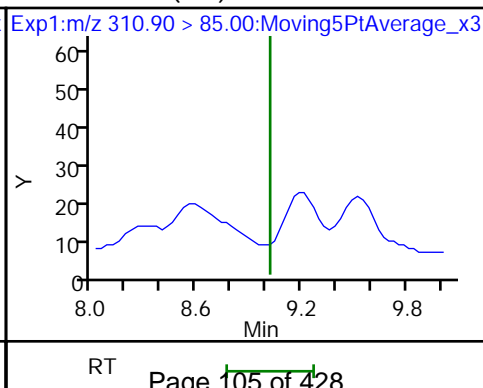
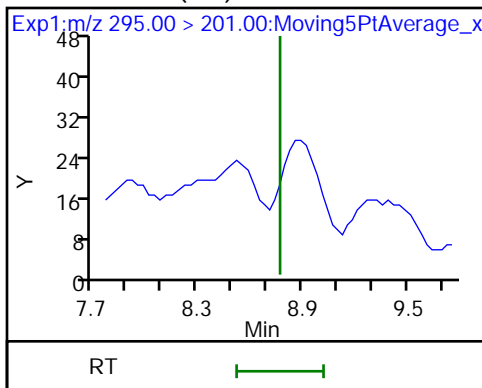
7 PES (ND)



8 PFECA B (ND)

9 PFO3OA (ND)

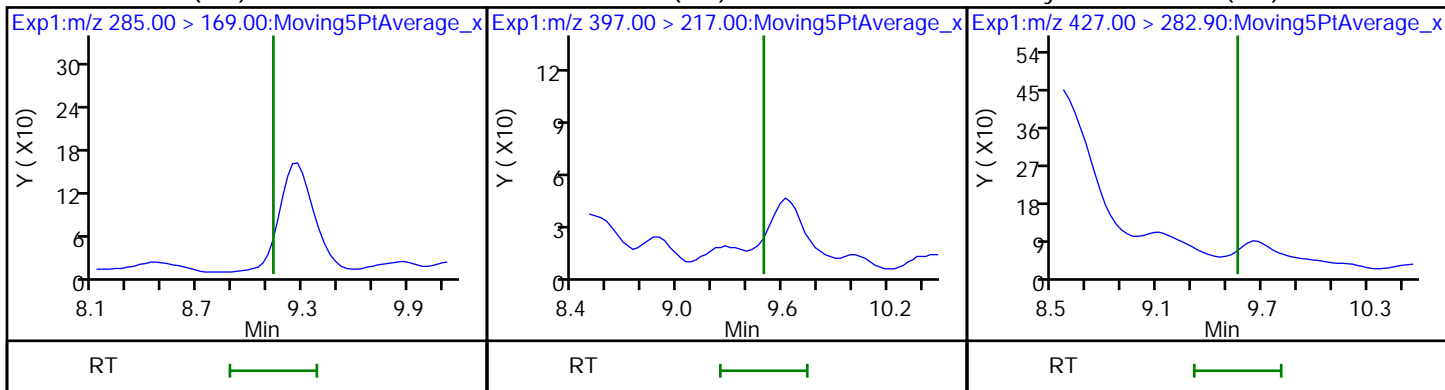
D 10 13C3 HFPO-DA (M)



11 HPFO-DA (ND)

12 R-PSDCA (ND)

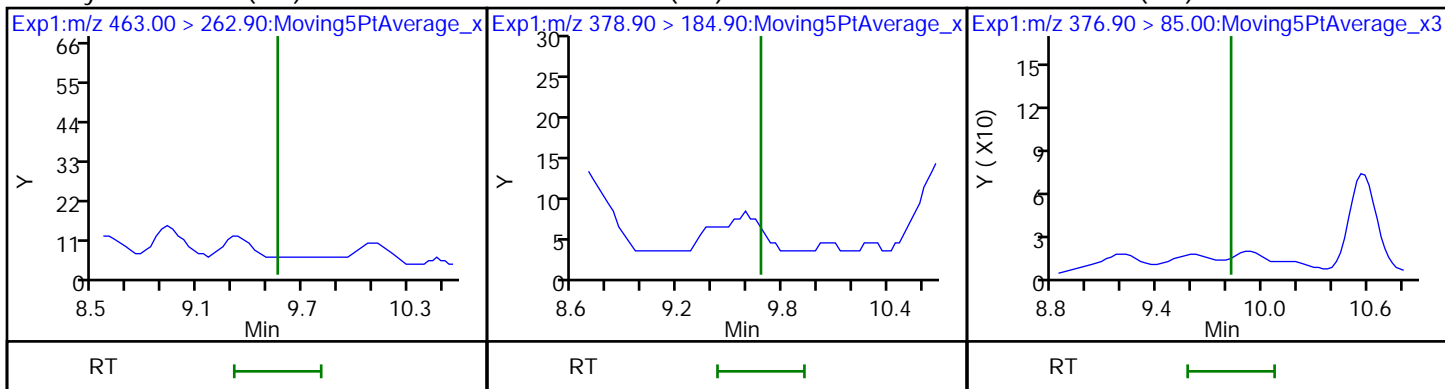
13 Hydro-EVE Acid (ND)



15 Hydro-PS Acid (ND)

17 PFECA G (ND)

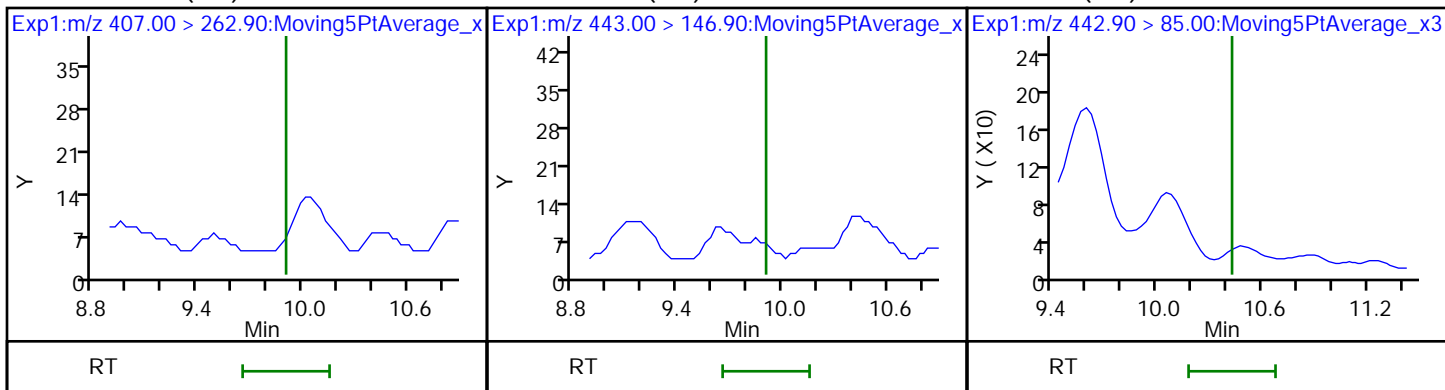
18 PFO4DA (ND)



20 EVE Acid (ND)

19 PS Acid (ND)

21 TAF (ND)



Eurofins TestAmerica, Sacramento

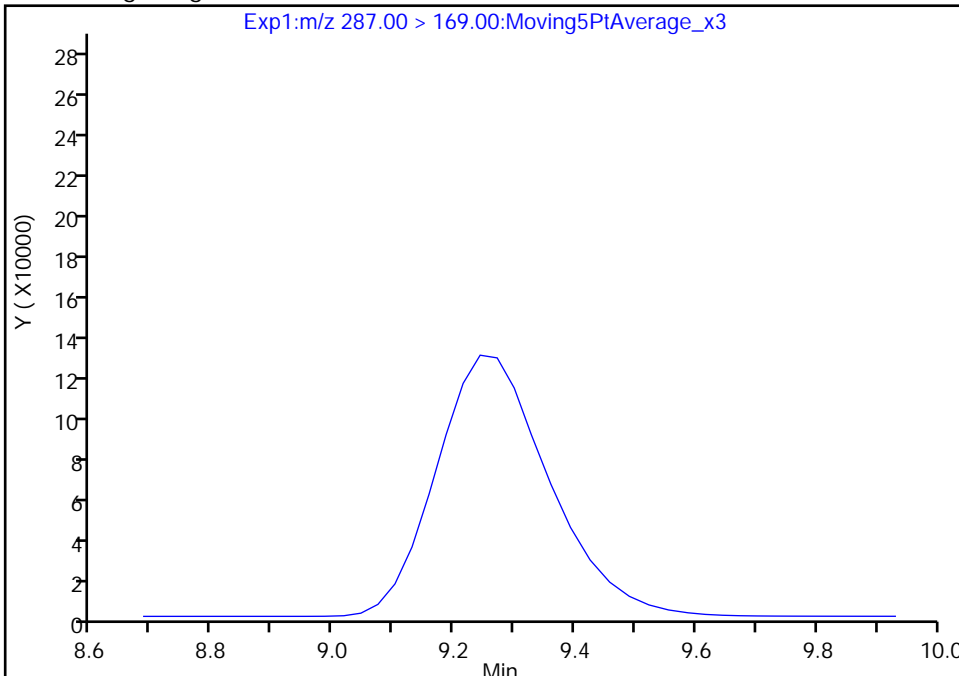
Data File:	\\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_050.d		
Injection Date:	10-Mar-2021 05:48:00	Instrument ID:	A12
Lims ID:	320-70652-A-1-A	Lab Sample ID:	320-70652-1
Client ID:	SEEP-C-Effluent-24-022721		
Operator ID:	Sac_inst_A12	ALS Bottle#:	50
Injection Vol:	500.0 ul	Dil. Factor:	1.0000
Method:	PFAS_Chem_TB3+	Limit Group:	LC PFAS_TB3P - ICAL
Column:	Gemini C18 3um 3 x 100mm (3.00 mm ID)	Detector:	EXP1
		Worklist Smp#:	22

D 10 13C3 HFPO-DA, CAS: STL02255

Signal: 1

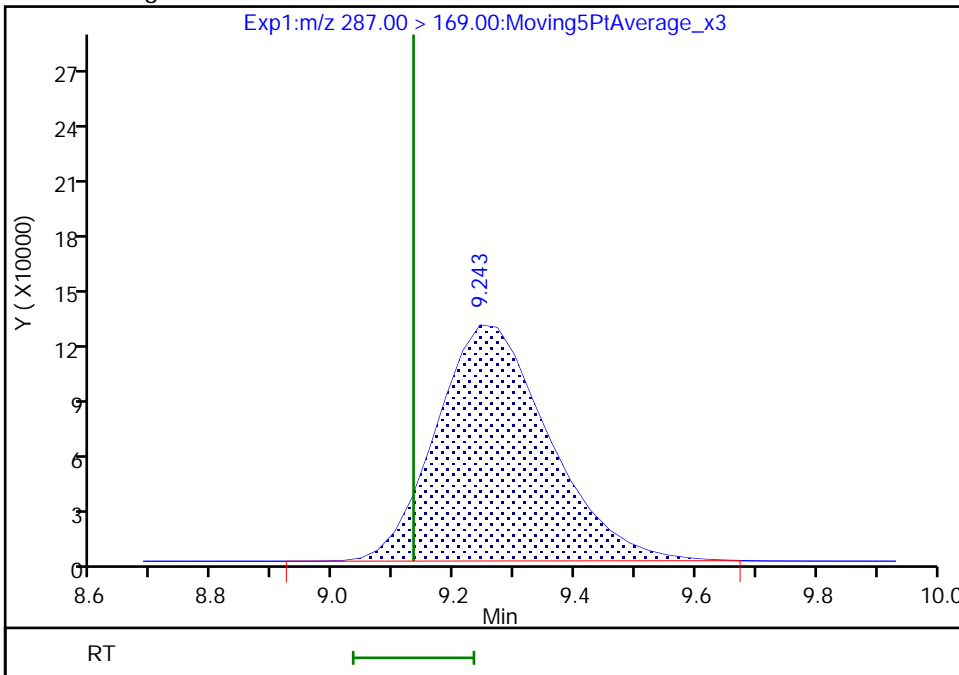
Not Detected
Expected RT: 9.13

Processing Integration Results



Manual Integration Results

RT: 9.24
 Area: 1656225
 Amount: 0.261863
 Amount Units: ng/ml



Reviewer: kwongg, 10-Mar-2021 12:14:11
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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Eurofins TestAmerica, Sacramento

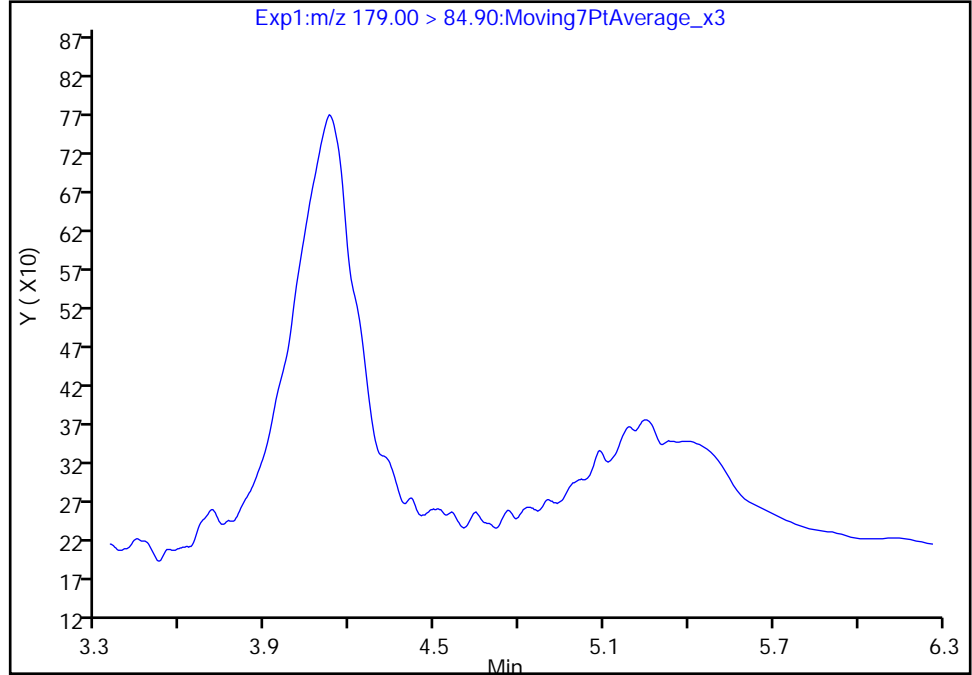
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Injection Date: 10-Mar-2021 05:48:00 Instrument ID: A12
Lims ID: 320-70652-A-1-A Lab Sample ID: 320-70652-1
Client ID: SEEP-C-Effluent-24-022721
Operator ID: Sac_inst_A12 ALS Bottle#: 50 Worklist Smp#: 22
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

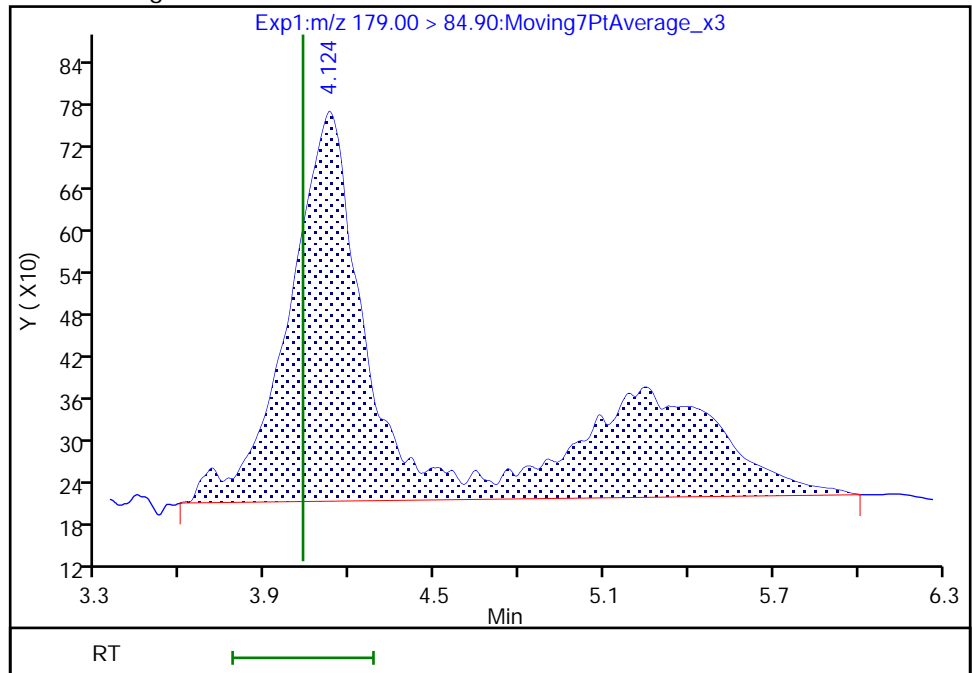
Signal: 1

Not Detected
Expected RT: 4.03

Processing Integration Results



Manual Integration Results



RT: 4.12
Area: 15919
Amount: 0.001418
Amount Units: ng/ml

Reviewer: kwongg, 10-Mar-2021 12:14:18
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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Eurofins TestAmerica, Sacramento

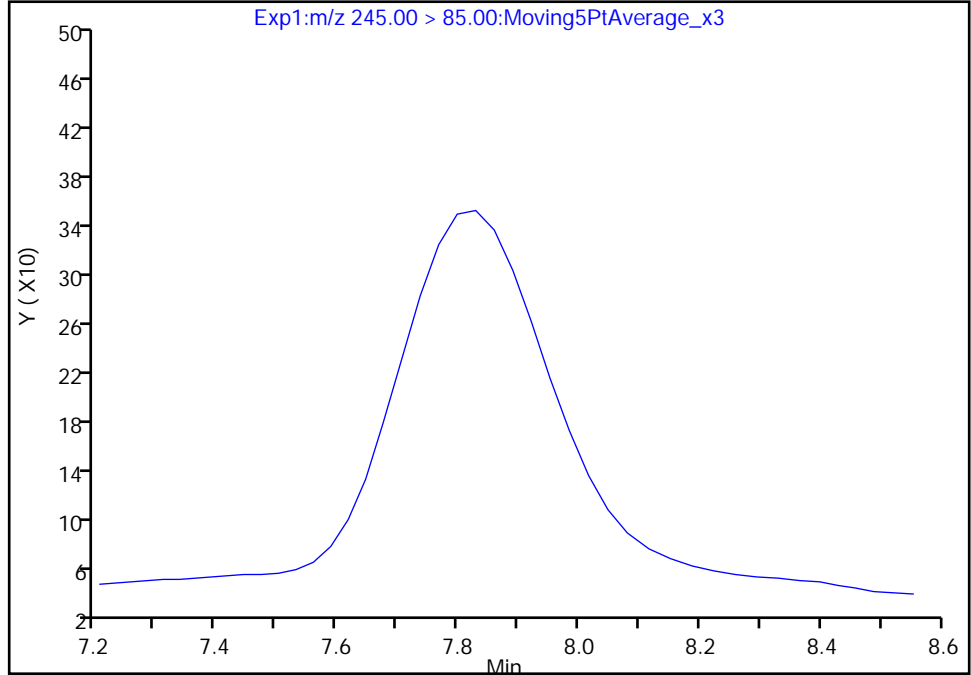
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Injection Date: 10-Mar-2021 05:48:00 Instrument ID: A12
Lims ID: 320-70652-A-1-A Lab Sample ID: 320-70652-1
Client ID: SEEP-C-Effluent-24-022721
Operator ID: Sac_inst_A12 ALS Bottle#: 50 Worklist Smp#: 22
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

6 PFO2HxA, CAS: 39492-88-1

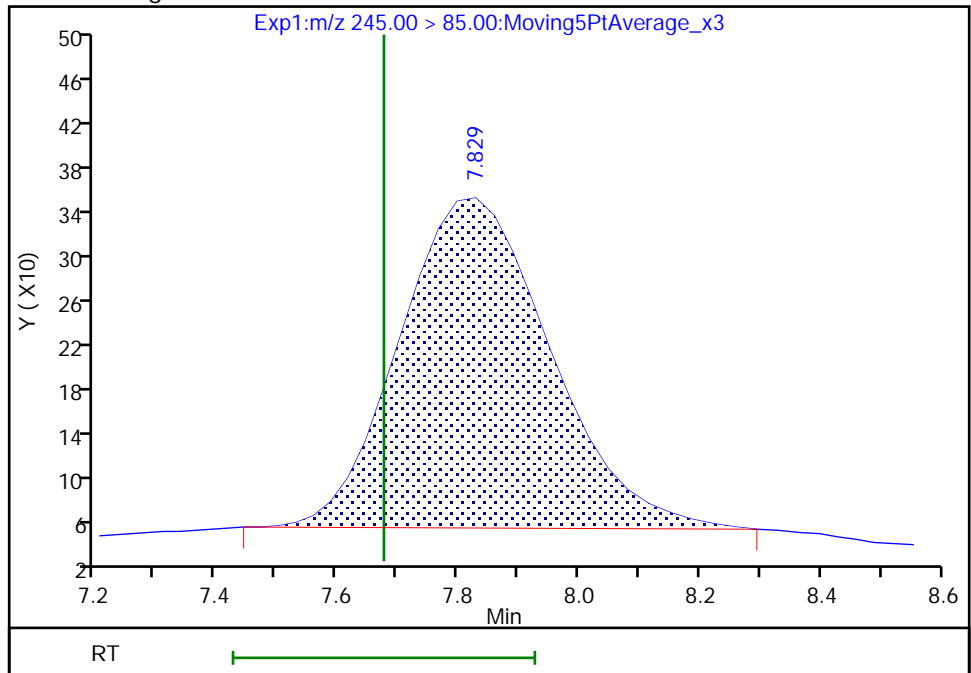
Signal: 1

Not Detected
Expected RT: 7.68

Processing Integration Results



Manual Integration Results



RT: 7.83
Area: 5194
Amount: 0.000413
Amount Units: ng/ml

Reviewer: kwongg, 10-Mar-2021 12:14:31
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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Eurofins TestAmerica, Sacramento

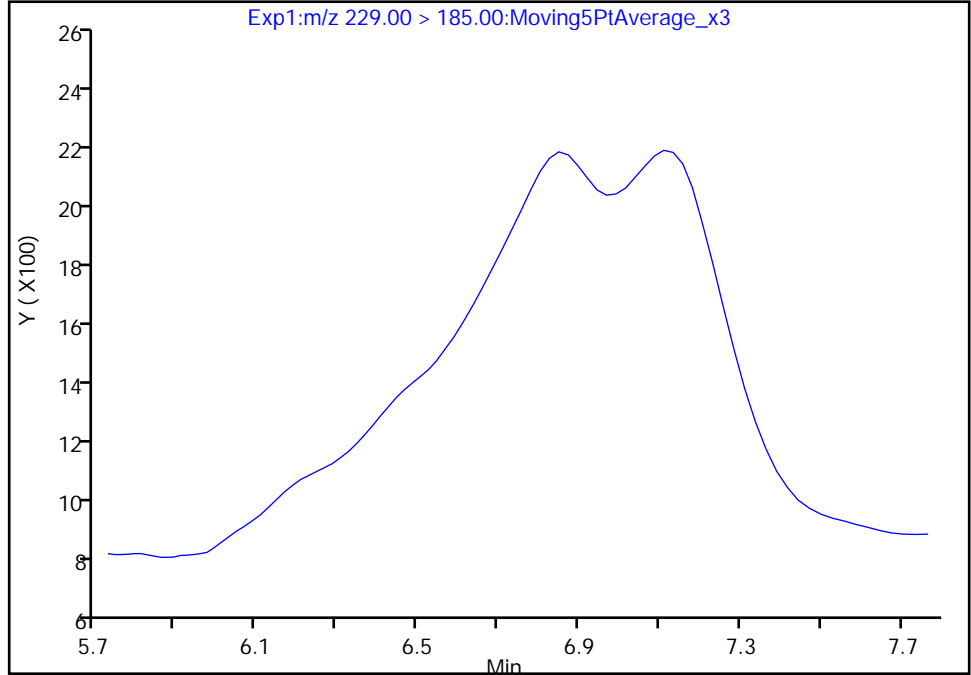
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Injection Date: 10-Mar-2021 05:48:00 Instrument ID: A12
Lims ID: 320-70652-A-1-A Lab Sample ID: 320-70652-1
Client ID: SEEP-C-Effluent-24-022721
Operator ID: Sac_inst_A12 ALS Bottle#: 50 Worklist Smp#: 22
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

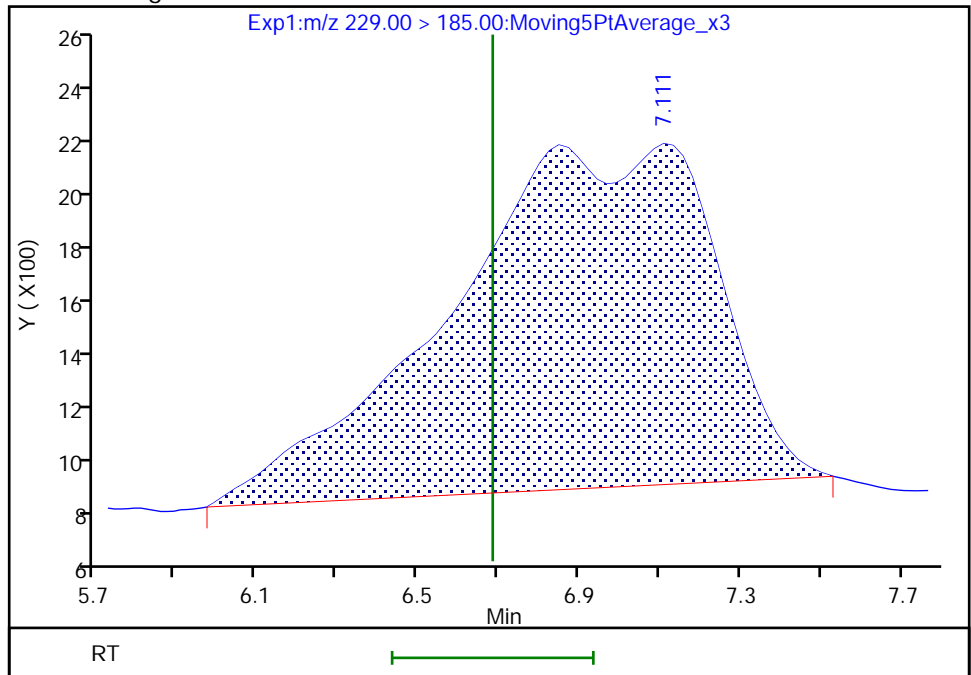
Not Detected
Expected RT: 6.69

Processing Integration Results



Manual Integration Results

RT: 7.11
Area: 56593
Amount: 0.003290
Amount Units: ng/ml



Reviewer: kwongg, 10-Mar-2021 12:14:24
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1
 SDG No.: _____
 Client Sample ID: SEEP-C-Influent-24-022721 Lab Sample ID: 320-70652-2
 Matrix: Water Lab File ID: 2021.03.09_TB3_A12_AB_051.d
 Analysis Method: Chemours (TB3+) Date Collected: 02/27/2021 16:00
 Extraction Method: PFAS Prep Date Extracted: 03/03/2021 20:42
 Sample wt/vol: 0.025 (mL) Date Analyzed: 03/10/2021 06:05
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 468770 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	0.065		0.017	
13252-13-6	HFPO-DA	5.6		0.081	
773804-62-9	Hydro-EVE Acid	0.38		0.014	
2416366-19-1	Hydrolyzed PSDA	0.63		0.038	
749836-20-2	Hydro-PS Acid	0.15		0.0061	
1132933-86-8	NVHOS	0.26		0.015	
267239-61-2	PEPA	1.2		0.020	
113507-82-7	PES	<0.0067		0.0067	
151772-58-6	PFECA B	<0.027		0.027	
801212-59-9	PFECA G	<0.048		0.048	
674-13-5	PFMOAA	23		0.080	
39492-88-1	PFO2HxA	8.4		0.027	
39492-89-2	PFO3OA	3.0		0.039	
39492-90-5	PFO4DA	0.82		0.059	
39492-91-6	PFO5DA	<0.078		0.078	
13140-29-9	PMPA	3.8		0.62	
29311-67-9	PS Acid	<0.020		0.020	
2416366-22-6	R-EVE	0.37		0.072	
2416366-18-0	R-PSDA	0.38		0.071	
2416366-21-5	R-PSDCA	<0.017		0.017	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	109		25-150

Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_051.d
 Lims ID: 320-70652-A-2-A
 Client ID: SEEP-C-Influent-24-022721
 Sample Type: Client
 Inject. Date: 10-Mar-2021 06:05:38 ALS Bottle#: 51 Worklist Smp#: 23
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: 320-70652-a-2-a
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Method: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 10-Mar-2021 12:15:28 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1671

First Level Reviewer: kwongg Date: 10-Mar-2021 12:15:28
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.119	4.031	0.088		1276071	0.1137		119		M
2 R-EVE										
405.00 > 217.00	6.510	6.388	0.122		10832	0.001831		176		
3 R-PSDA										M
440.90 > 241.00	6.550	6.448	0.102		5141	0.001918		77.8		M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.617	6.508	0.109		31617	0.003131		533		
23 PMPA										
229.00 > 185.00	6.830	6.686	0.144		324253	0.0189		239		
5 NVHOS										
297.00 > 135.00	7.209	7.088	0.121		6938	0.001309		127		
6 PFO2HxA										
245.00 > 85.00	7.802	7.677	0.125		527708	0.0419		5173		
22 PEPA										
278.90 > 234.90	8.401	8.296	0.105		31069	0.006034		137		
9 PFO3OA										
310.90 > 85.00	9.133	9.020	0.113		51656	0.0152		1367		
D 10 13C3 HFPO-DA										M
287.00 > 169.00	9.246	9.133	0.113		1717428	0.2715		109	33661	M
11 HPFO-DA										
285.00 > 169.00	9.246	9.133	0.113	1.000	197132	0.0278		5130		
13 Hydro-EVE Acid										
427.00 > 282.90	9.673	9.558	0.115		123157	0.001888		964		
15 Hydro-PS Acid										
463.00 > 262.90	9.673	9.558	0.115		17751	0.000753		401		
18 PFO4DA										
376.90 > 85.00	9.931	9.820	0.111		21186	0.004078		423		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
20 EVE Acid	407.00 > 262.90	10.017	9.906	0.111	12421	0.000323			338	

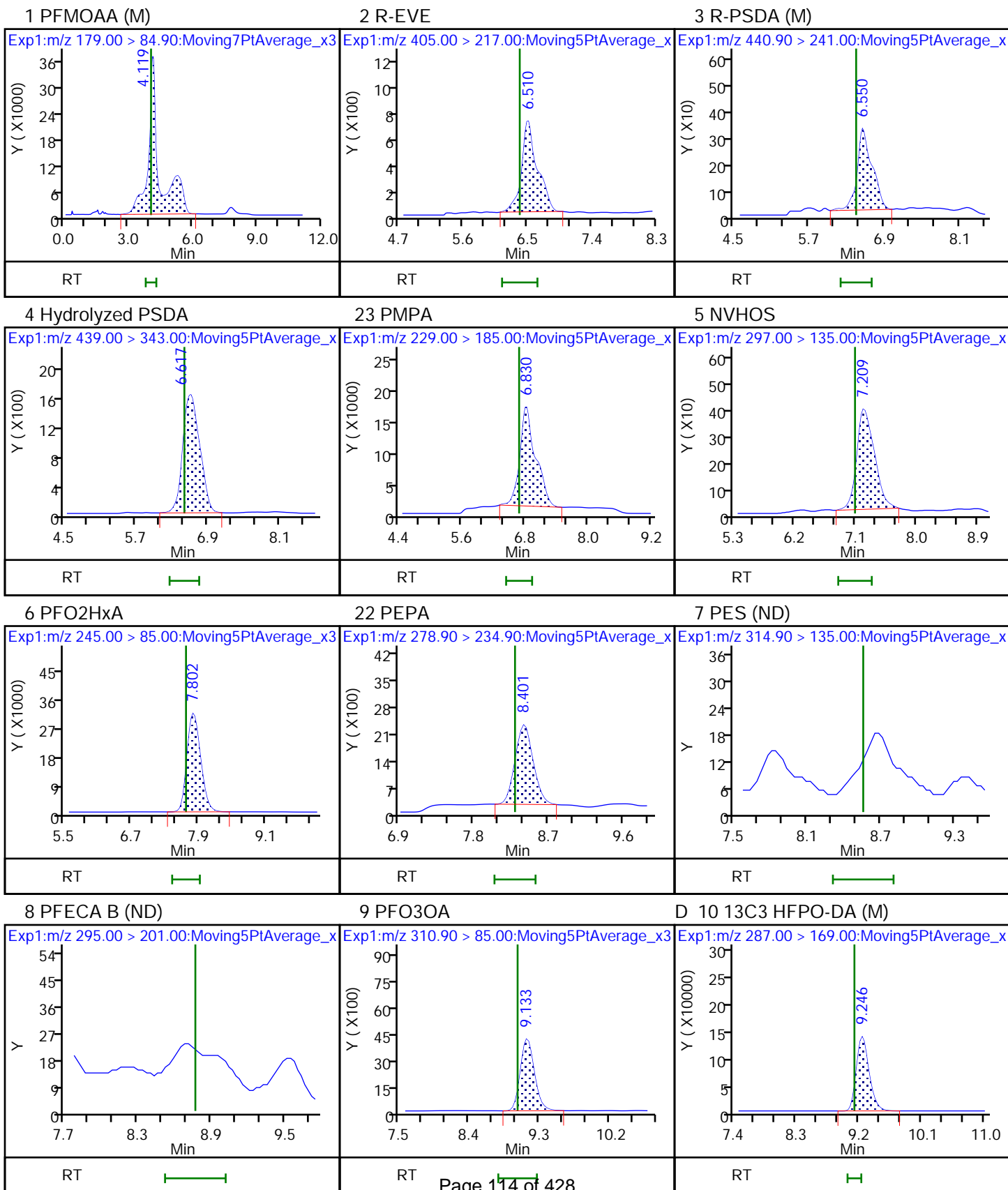
QC Flag Legend

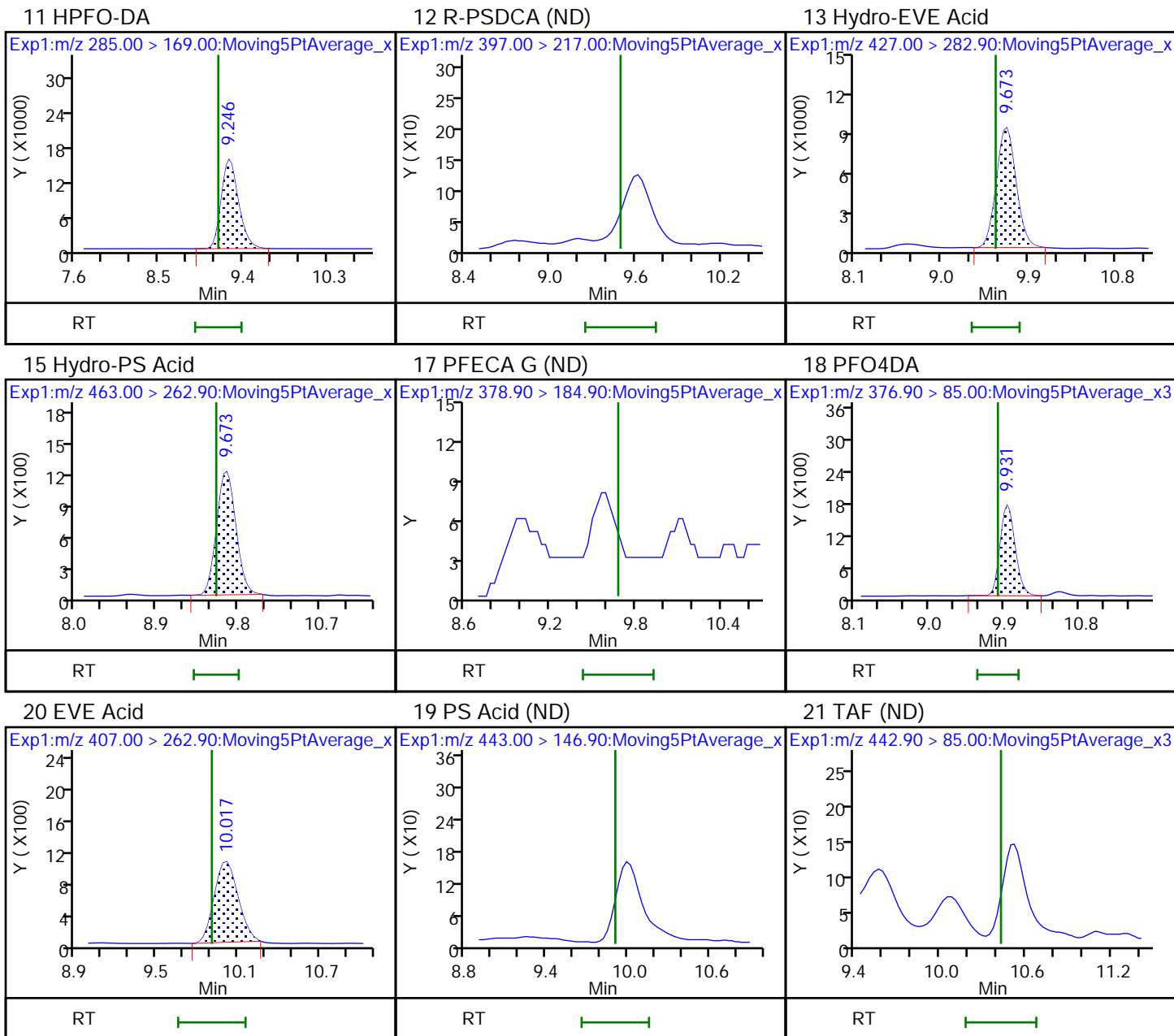
Processing Flags

Review Flags

M - Manually Integrated

Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_051.d
Injection Date: 10-Mar-2021 06:05:38 Instrument ID: A12
Lims ID: 320-70652-A-2-A Lab Sample ID: 320-70652-2
Client ID: SEEP-C-Influent-24-022721
Operator ID: Sac_inst_A12 ALS Bottle#: 51 Worklist Smp#: 23
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

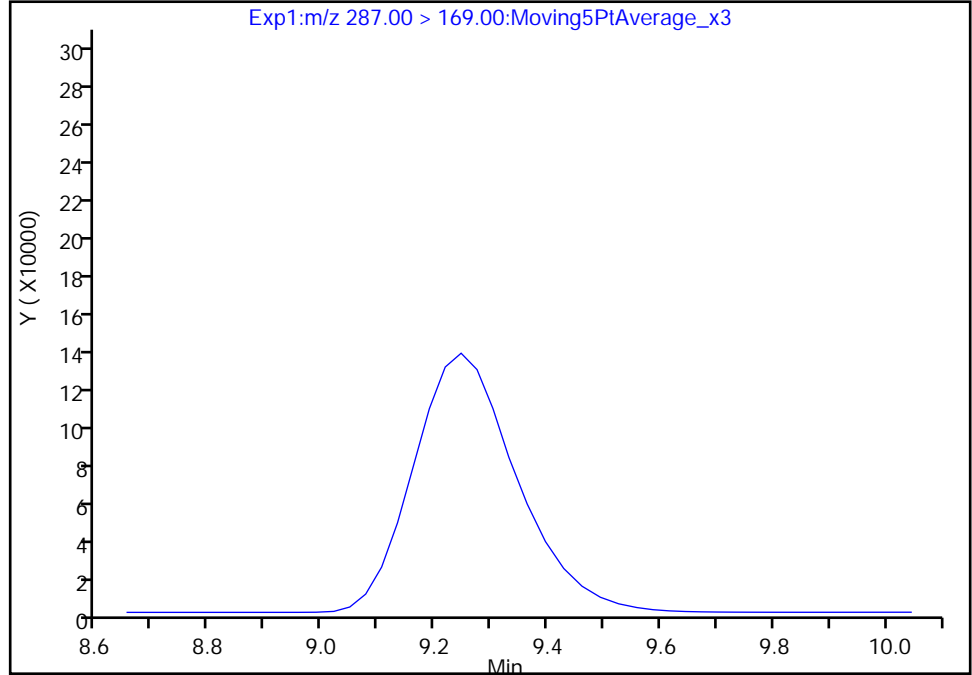
Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_051.d
Injection Date: 10-Mar-2021 06:05:38 Instrument ID: A12
Lims ID: 320-70652-A-2-A Lab Sample ID: 320-70652-2
Client ID: SEEP-C-Influent-24-022721
Operator ID: Sac_inst_A12 ALS Bottle#: 51 Worklist Smp#: 23
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

D 10 13C3 HFPO-DA, CAS: STL02255

Signal: 1

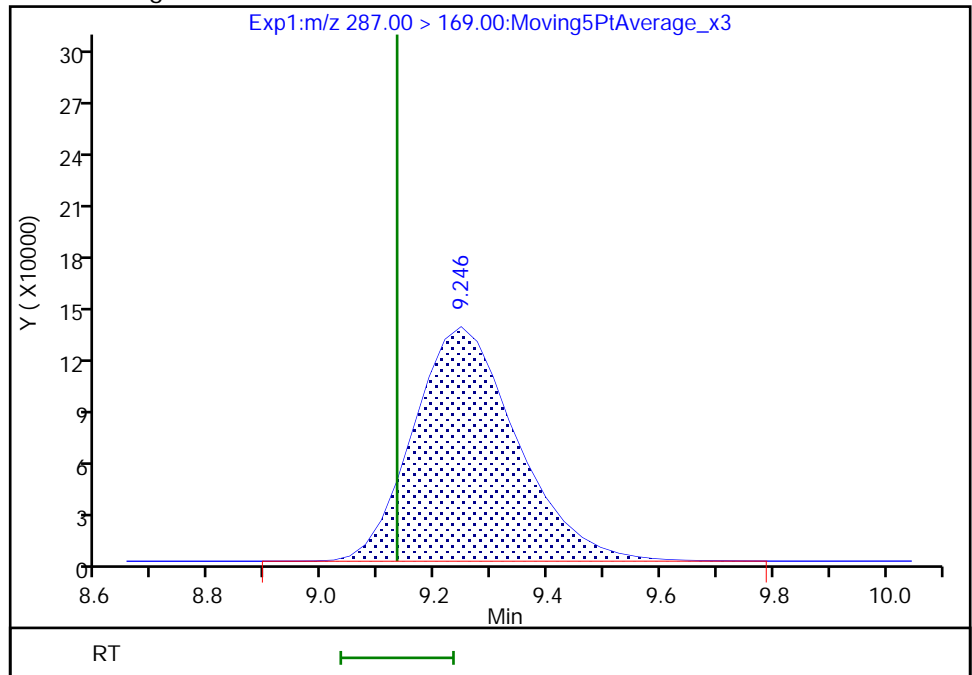
Not Detected
Expected RT: 9.13

Processing Integration Results



Manual Integration Results

RT: 9.25
Area: 1717428
Amount: 0.271540
Amount Units: ng/ml



Reviewer: kwongg, 10-Mar-2021 12:14:55
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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Eurofins TestAmerica, Sacramento

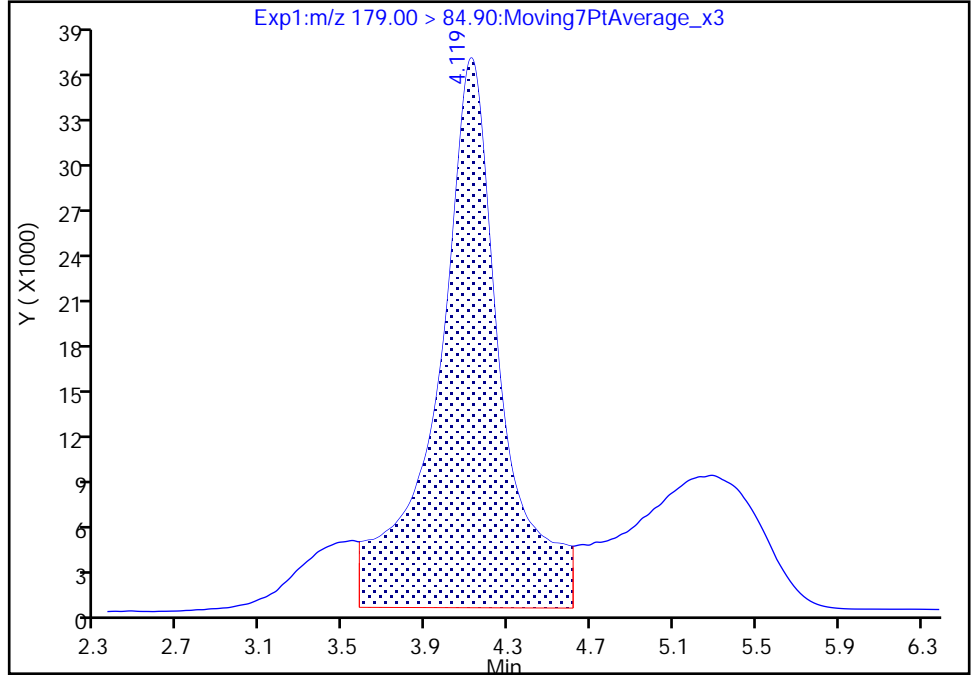
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Injection Date: 10-Mar-2021 06:05:38 Instrument ID: A12
Lims ID: 320-70652-A-2-A Lab Sample ID: 320-70652-2
Client ID: SEEP-C-Influent-24-022721
Operator ID: Sac_inst_A12 ALS Bottle#: 51 Worklist Smp#: 23
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

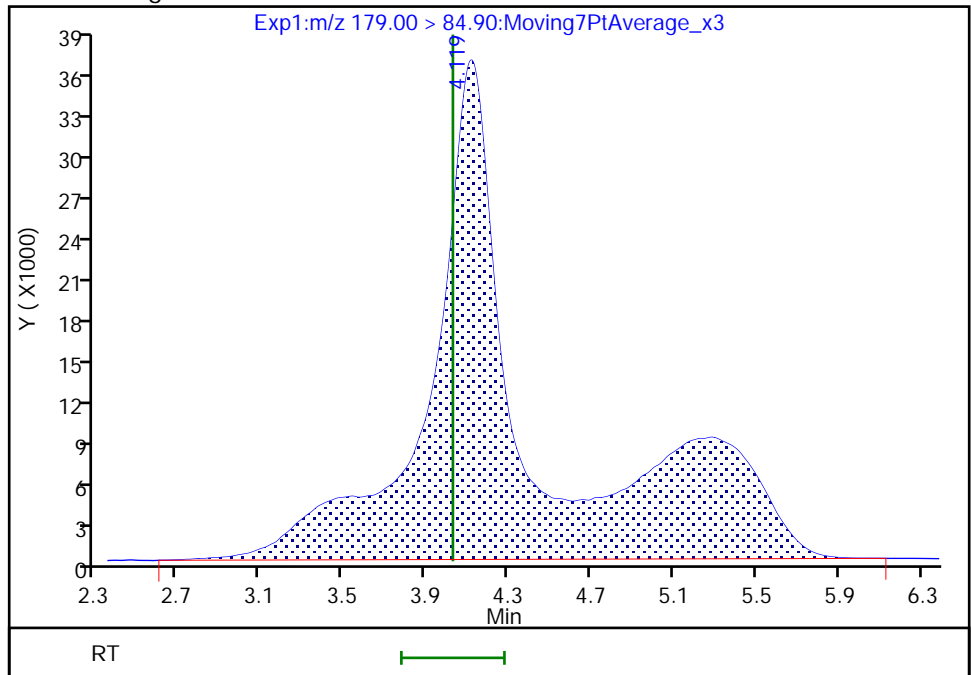
RT: 4.12
Area: 770393
Amount: 0.068625
Amount Units: ng/ml

Processing Integration Results



RT: 4.12
Area: 1276071
Amount: 0.113670
Amount Units: ng/ml

Manual Integration Results



Reviewer: kwongg, 10-Mar-2021 12:15:02
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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Eurofins TestAmerica, Sacramento

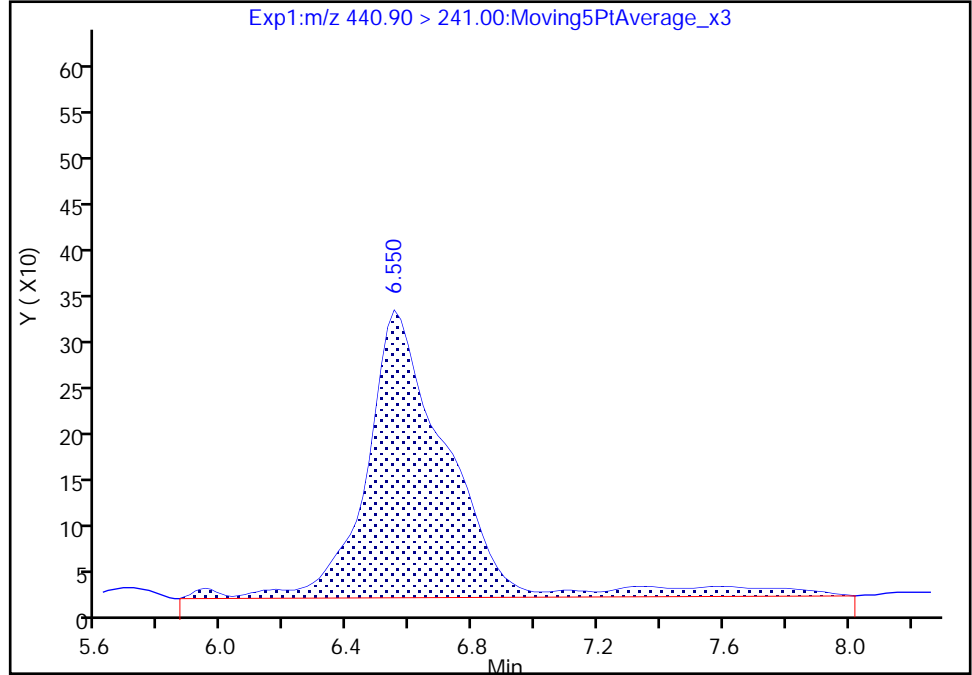
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Injection Date: 10-Mar-2021 06:05:38 Instrument ID: A12
Lims ID: 320-70652-A-2-A Lab Sample ID: 320-70652-2
Client ID: SEEP-C-Influent-24-022721
Operator ID: Sac_inst_A12 ALS Bottle#: 51 Worklist Smp#: 23
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

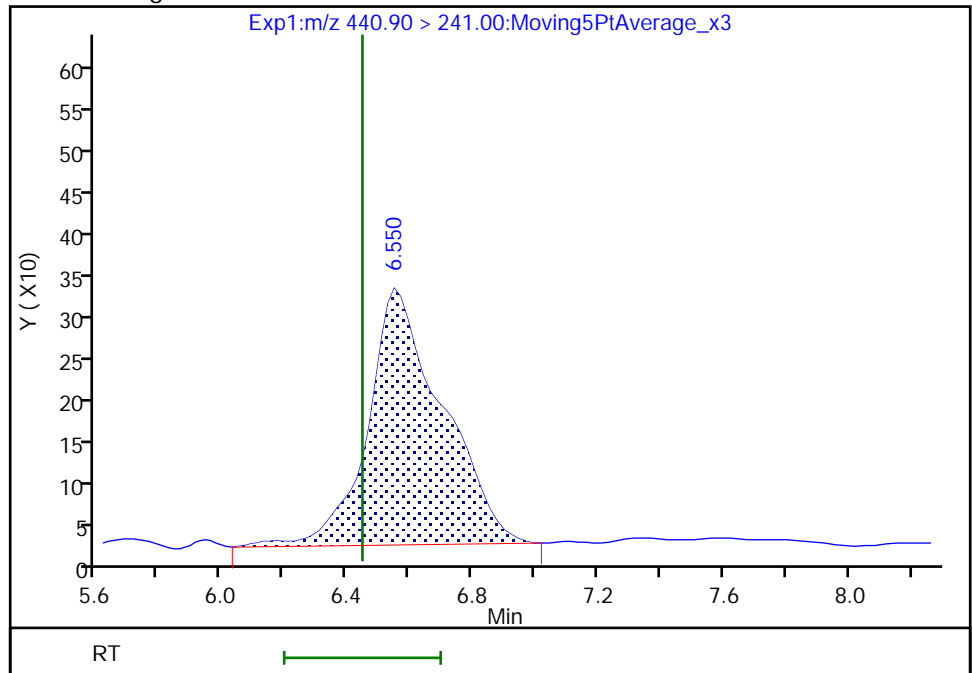
RT: 6.55
Area: 5865
Amount: 0.002189
Amount Units: ng/ml

Processing Integration Results



RT: 6.55
Area: 5141
Amount: 0.001918
Amount Units: ng/ml

Manual Integration Results



Reviewer: kwongg, 10-Mar-2021 12:15:11
Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1
 SDG No.: _____
 Client Sample ID: Seep-C-EQBLK-ISCO-022721 Lab Sample ID: 320-70652-3
 Matrix: Water Lab File ID: 2021.03.09_TB3_A12_AB_052.d
 Analysis Method: Chemours (TB3+) Date Collected: 02/27/2021 16:45
 Extraction Method: PFAS Prep Date Extracted: 03/03/2021 20:42
 Sample wt/vol: 2.50 (mL) Date Analyzed: 03/10/2021 06:23
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 468770 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	<0.0020		0.0020	
13252-13-6	HFPO-DA	<0.0020		0.0020	
773804-62-9	Hydro-EVE Acid	<0.0020		0.0020	
2416366-19-1	Hydrolyzed PSDA	<0.0020		0.0020	
749836-20-2	Hydro-PS Acid	<0.0020		0.0020	
1132933-86-8	NVHOS	<0.0020		0.0020	
267239-61-2	PEPA	<0.020		0.020	
113507-82-7	PES	<0.0020		0.0020	
151772-58-6	PFECA B	<0.0020		0.0020	
801212-59-9	PFECA G	<0.0020		0.0020	
674-13-5	PFMOAA	<0.0020		0.0020	
39492-88-1	PFO2HxA	<0.0020		0.0020	
39492-89-2	PFO3OA	<0.0020		0.0020	
39492-90-5	PFO4DA	<0.0020		0.0020	
39492-91-6	PFO5DA	<0.0020		0.0020	
13140-29-9	PMPA	<0.010		0.010	
29311-67-9	PS Acid	<0.0020		0.0020	
2416366-22-6	R-EVE	<0.0020		0.0020	
2416366-18-0	R-PSDA	<0.0020		0.0020	
2416366-21-5	R-PSDCA	<0.0020		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	102		25-150

Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_052.d
 Lims ID: 320-70652-A-3-A
 Client ID: Seep-C-EQBLK-ISCO-022721
 Sample Type: Client
 Inject. Date: 10-Mar-2021 06:23:12 ALS Bottle#: 52 Worklist Smp#: 24
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: 320-70652-a-3-a
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Method: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 10-Mar-2021 12:32:29 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1671

First Level Reviewer: kwongg Date: 10-Mar-2021 12:32:29
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
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D 10 13C3 HFPO-DA										M
287.00 > 169.00	9.243	9.133	0.110		1615995	0.2555		102	41174	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_052.d

Injection Date: 10-Mar-2021 06:23:12

Instrument ID: A12

Lims ID: 320-70652-A-3-A

Lab Sample ID: 320-70652-3

Client ID: Seep-C-EQBLK-ISCO-022721

Operator ID: Sac_inst_A12

ALS Bottle#: 52

Worklist Smp#: 24

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

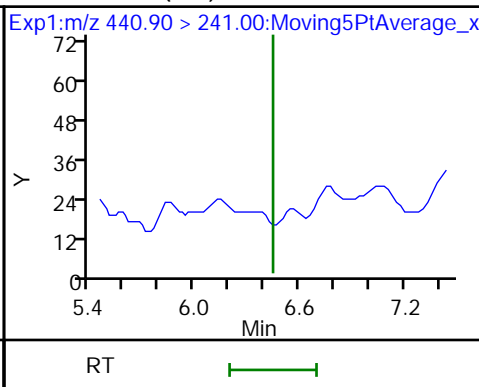
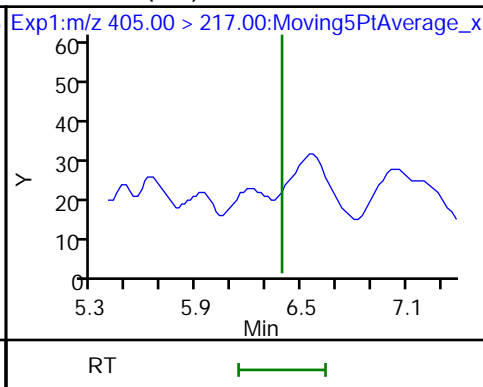
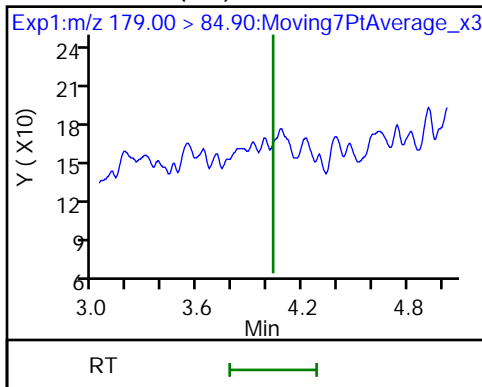
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

1 PFMOAA (ND)

2 R-EVE (ND)

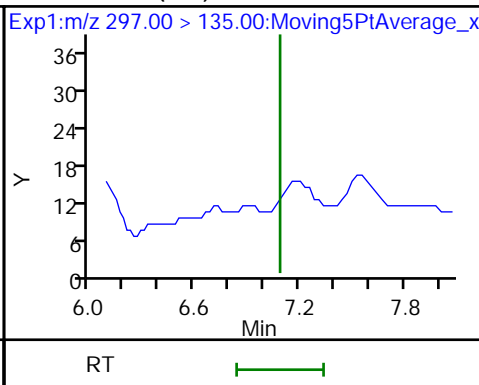
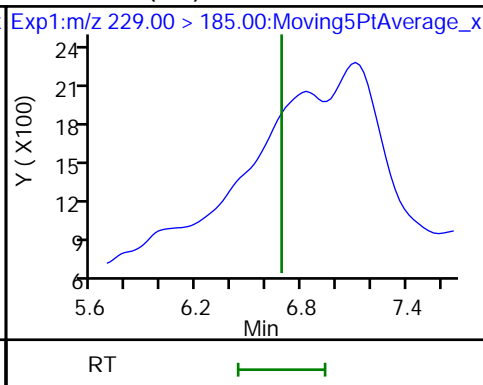
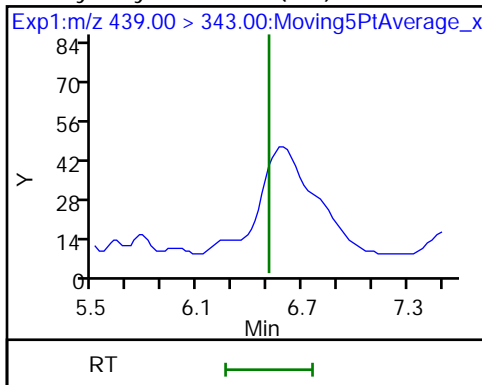
3 R-PSDA (ND)



4 Hydrolyzed PSDA (ND)

23 PMPA (ND)

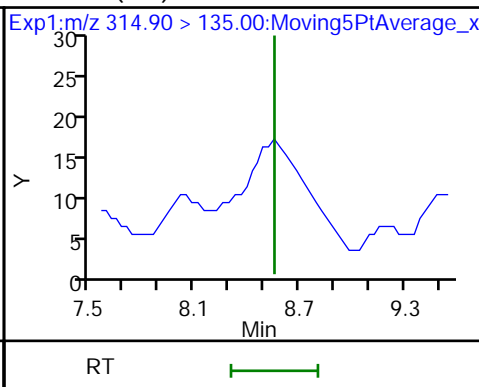
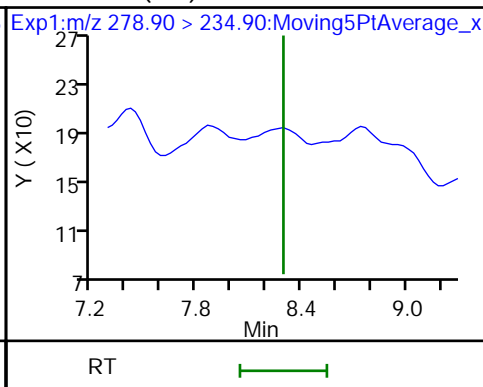
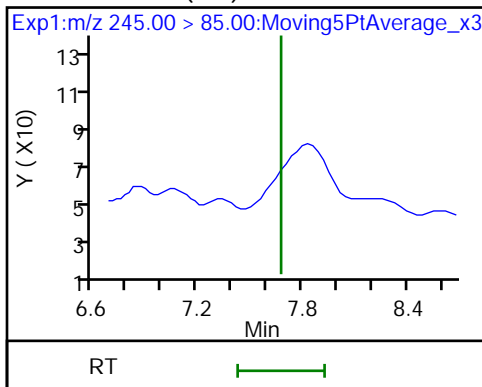
5 NVHOS (ND)



6 PFO2HxA (ND)

22 PEPA (ND)

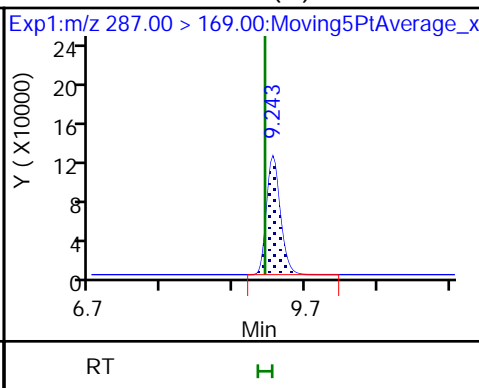
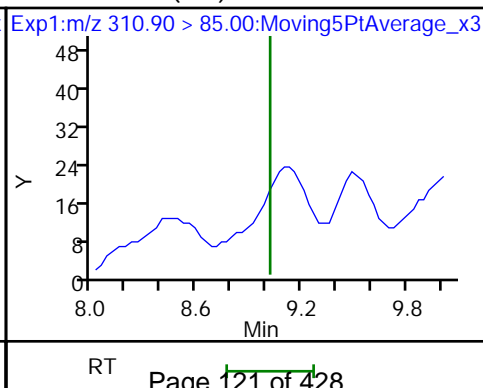
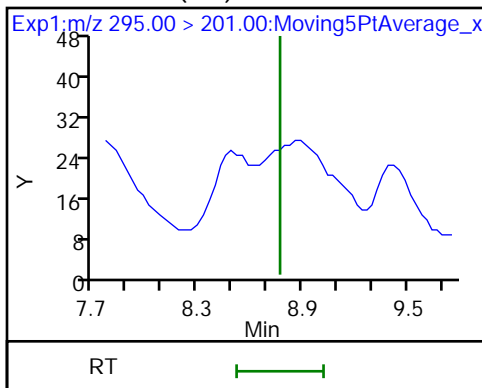
7 PES (ND)

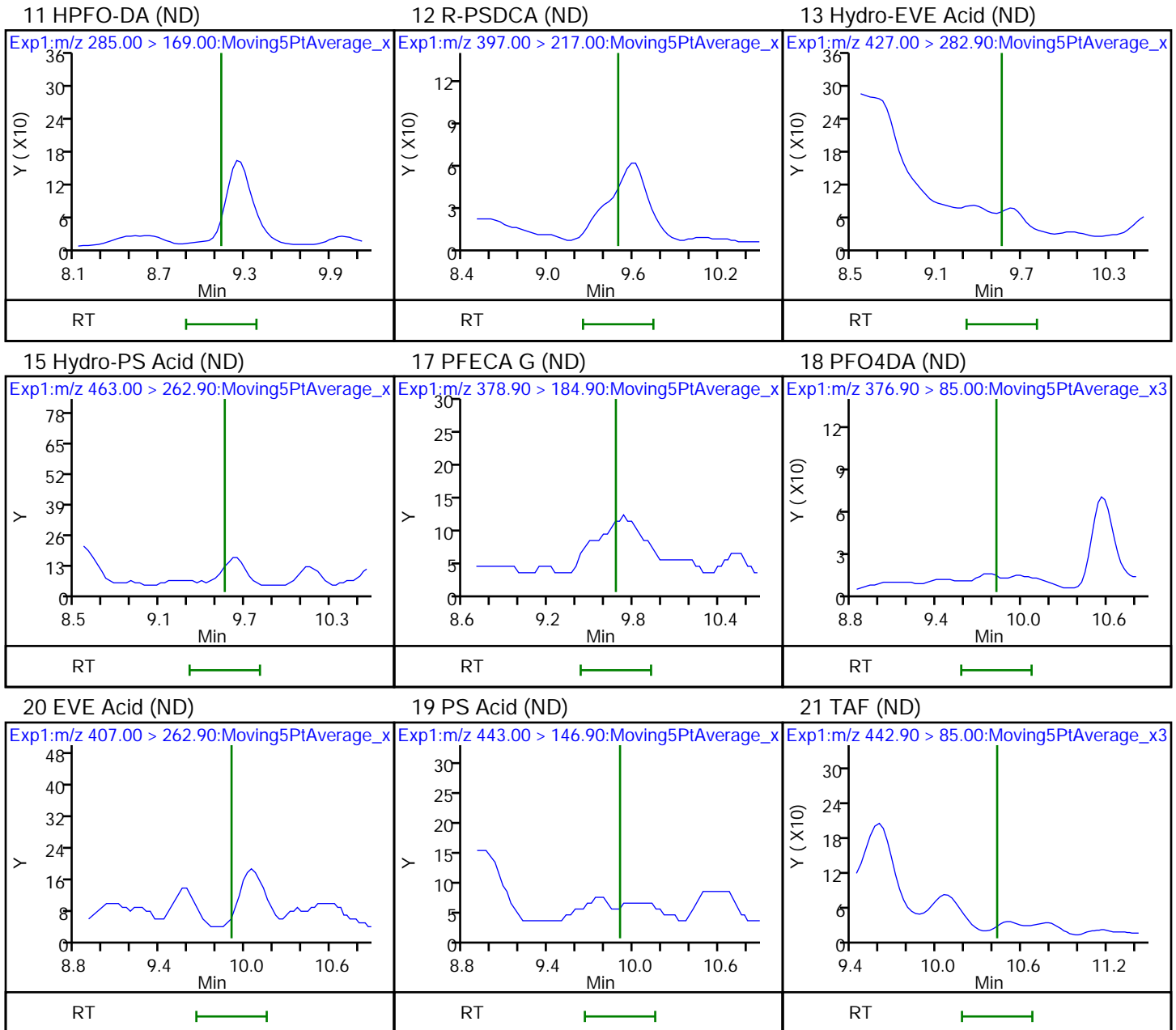


8 PFECA B (ND)

9 PFO3OA (ND)

D 10 13C3 HFPO-DA (M)





Eurofins TestAmerica, Sacramento

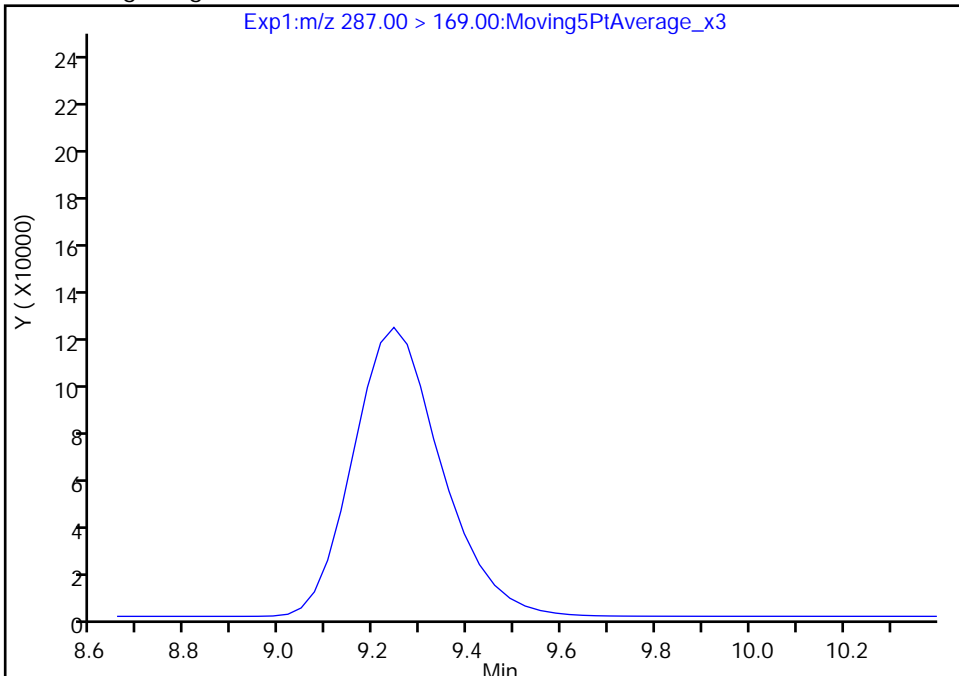
Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_052.d
Injection Date: 10-Mar-2021 06:23:12 Instrument ID: A12
Lims ID: 320-70652-A-3-A Lab Sample ID: 320-70652-3
Client ID: Seep-C-EQBLK-ISCO-022721
Operator ID: Sac_inst_A12 ALS Bottle#: 52 Worklist Smp#: 24
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector: EXP1

D 10 13C3 HFPO-DA, CAS: STL02255

Signal: 1

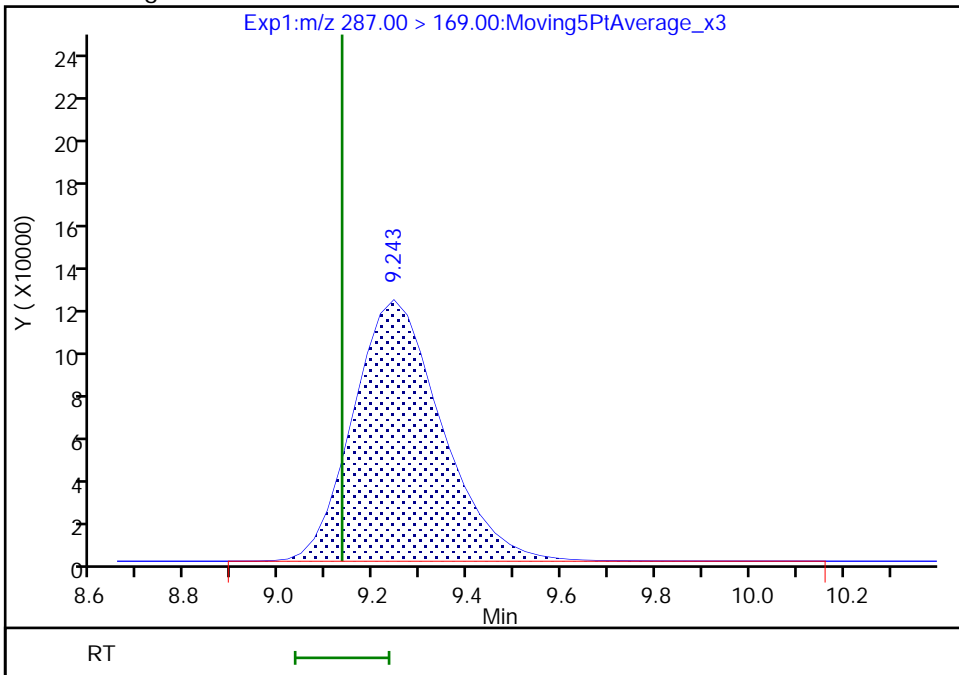
Not Detected
Expected RT: 9.13

Processing Integration Results



Manual Integration Results

RT: 9.24
Area: 1615995
Amount: 0.255502
Amount Units: ng/ml



Reviewer: kwongg, 10-Mar-2021 12:32:08
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1
 SDG No.: _____
 Client Sample ID: SEEP-C-FBLK-022721 Lab Sample ID: 320-70652-4
 Matrix: Water Lab File ID: 2021.03.09_TB3_A12_AB_053.d
 Analysis Method: Chemours (TB3+) Date Collected: 02/27/2021 16:50
 Extraction Method: PFAS Prep Date Extracted: 03/03/2021 20:42
 Sample wt/vol: 2.50 (mL) Date Analyzed: 03/10/2021 06:40
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 468770 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	<0.0020		0.0020	
13252-13-6	HFPO-DA	<0.0020		0.0020	
773804-62-9	Hydro-EVE Acid	<0.0020		0.0020	
2416366-19-1	Hydrolyzed PSDA	<0.0020		0.0020	
749836-20-2	Hydro-PS Acid	<0.0020		0.0020	
1132933-86-8	NVHOS	<0.0020		0.0020	
267239-61-2	PEPA	<0.020		0.020	
113507-82-7	PES	<0.0020		0.0020	
151772-58-6	PFECA B	<0.0020		0.0020	
801212-59-9	PFECA G	<0.0020		0.0020	
674-13-5	PFMOAA	<0.0020		0.0020	
39492-88-1	PFO2HxA	<0.0020		0.0020	
39492-89-2	PFO3OA	<0.0020		0.0020	
39492-90-5	PFO4DA	<0.0020		0.0020	
39492-91-6	PFO5DA	<0.0020		0.0020	
13140-29-9	PMPA	<0.010		0.010	
29311-67-9	PS Acid	<0.0020		0.0020	
2416366-22-6	R-EVE	<0.0020		0.0020	
2416366-18-0	R-PSDA	<0.0020		0.0020	
2416366-21-5	R-PSDCA	<0.0020		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	106		25-150

Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_053.d
 Lims ID: 320-70652-A-4-A
 Client ID: SEEP-C-FBLK-022721
 Sample Type: Client
 Inject. Date: 10-Mar-2021 06:40:47 ALS Bottle#: 53 Worklist Smp#: 25
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: 320-70652-a-4-a
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Method: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 10-Mar-2021 12:32:50 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1671

First Level Reviewer: kwongg Date: 10-Mar-2021 12:32:50
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
23 PMPA										M
229.00 > 185.00	7.087	6.686	0.401		56566	0.003288			27.2	M
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.215	9.133	0.082		1675956	0.2650		106	32333	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_053.d

Injection Date: 10-Mar-2021 06:40:47

Instrument ID: A12

Lims ID: 320-70652-A-4-A

Lab Sample ID: 320-70652-4

Client ID: SEEP-C-FBLK-022721

Operator ID: Sac_inst_A12

ALS Bottle#: 53

Worklist Smp#: 25

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

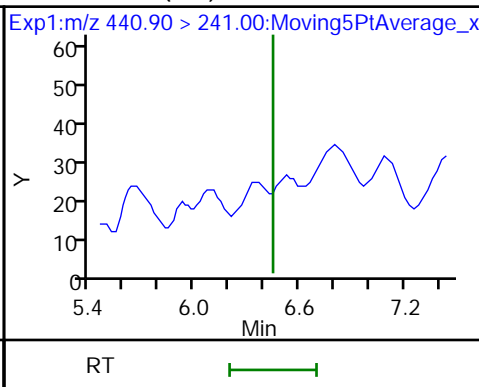
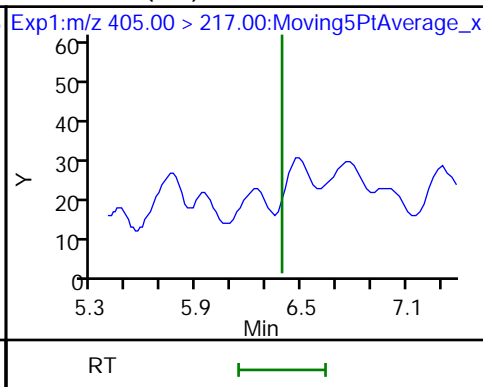
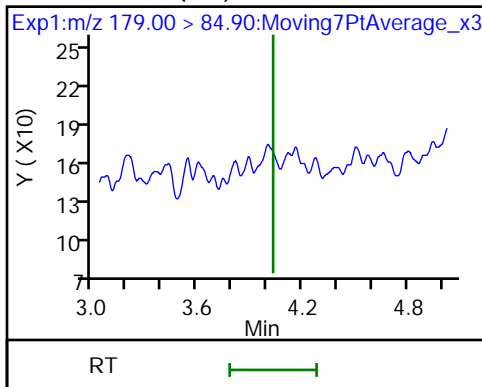
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

1 PFMOAA (ND)

2 R-EVE (ND)

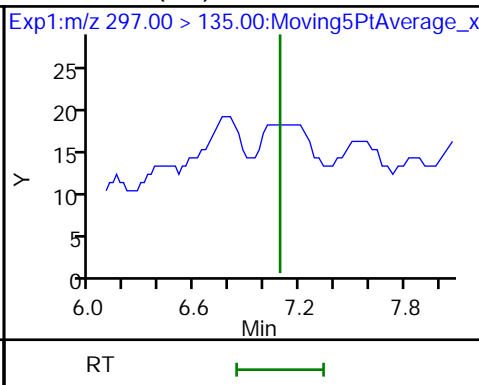
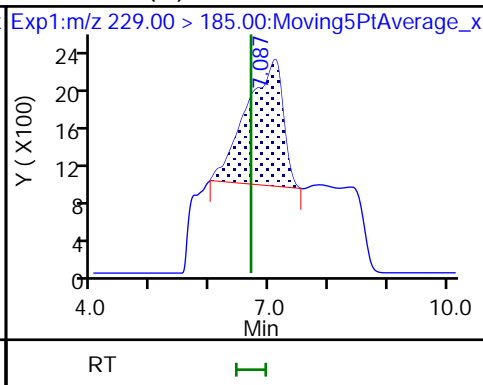
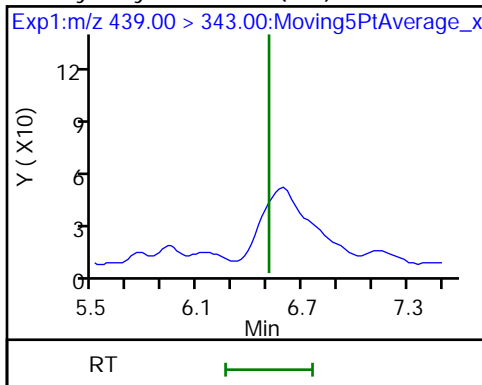
3 R-PSDA (ND)



4 Hydrolyzed PSDA (ND)

23 PMPA (M)

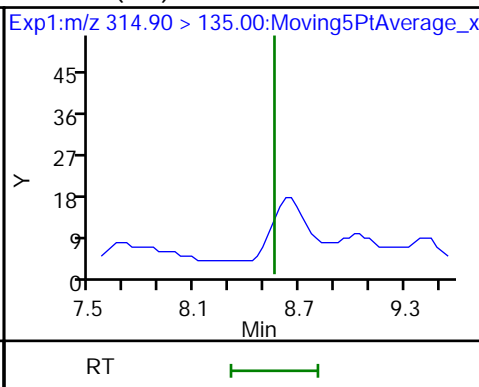
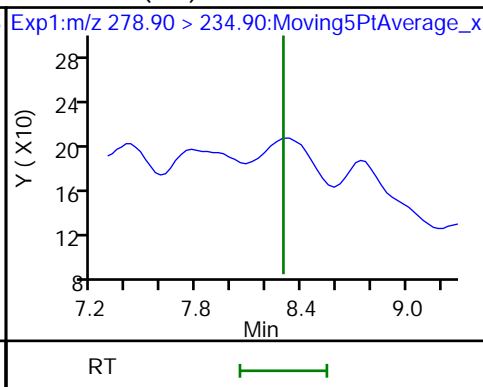
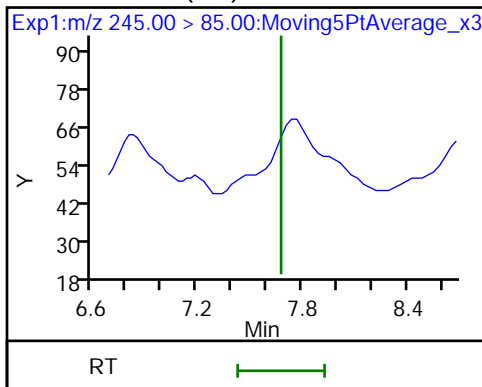
5 NVHOS (ND)



6 PFO2HxA (ND)

22 PEPA (ND)

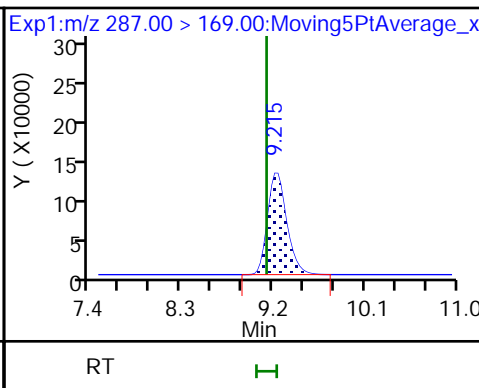
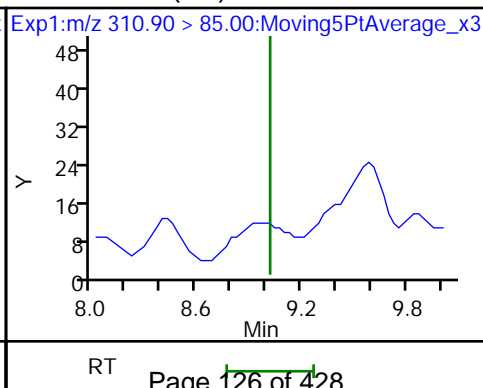
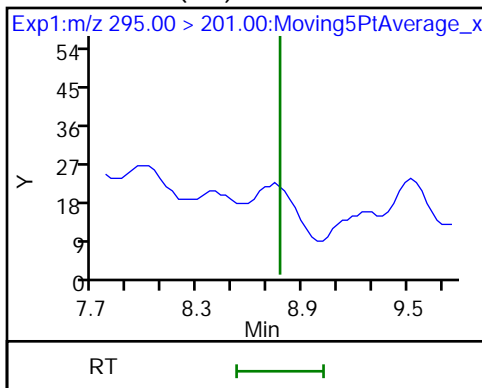
7 PES (ND)



8 PFECA B (ND)

9 PFO3OA (ND)

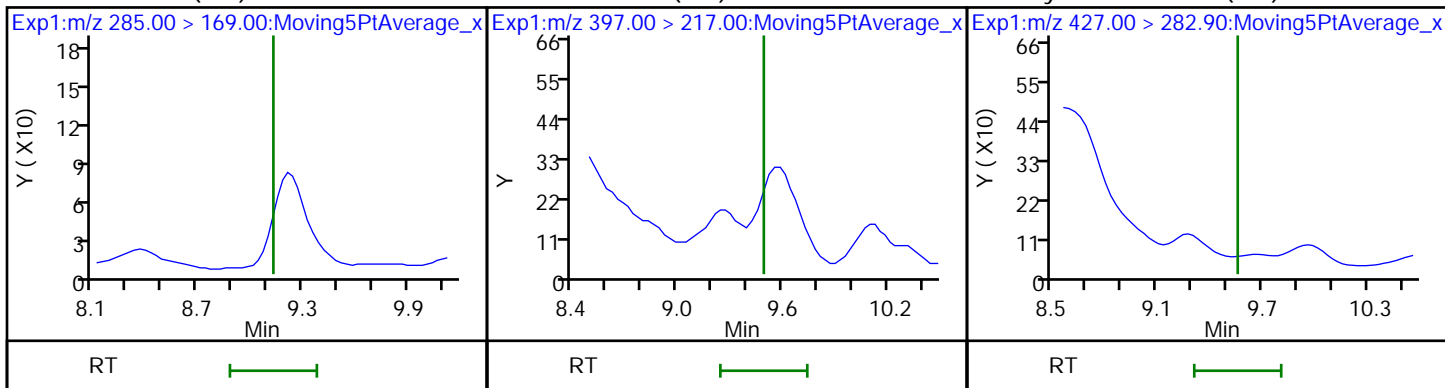
D 10 13C3 HFPO-DA



11 HPFO-DA (ND)

12 R-PSDCA (ND)

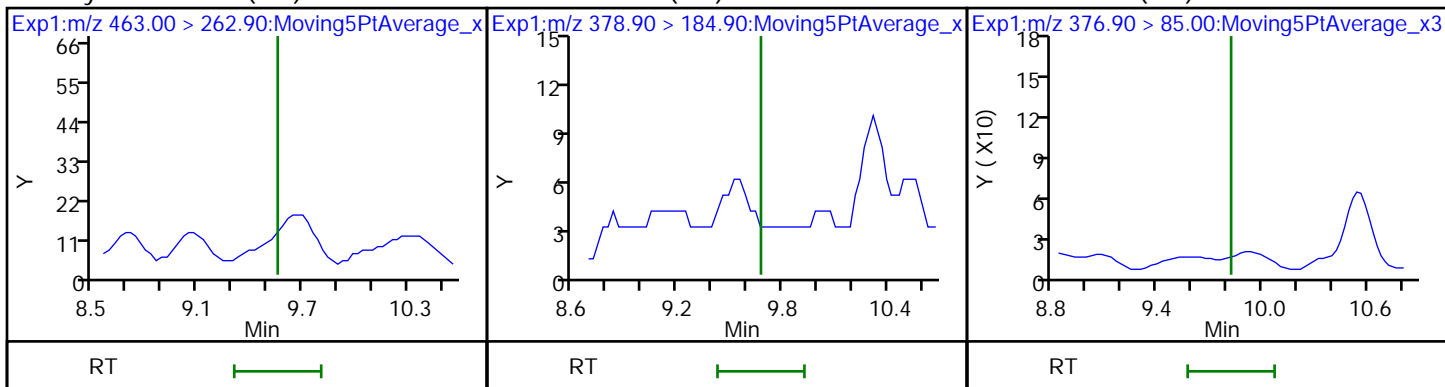
13 Hydro-EVE Acid (ND)



15 Hydro-PS Acid (ND)

17 PFECA G (ND)

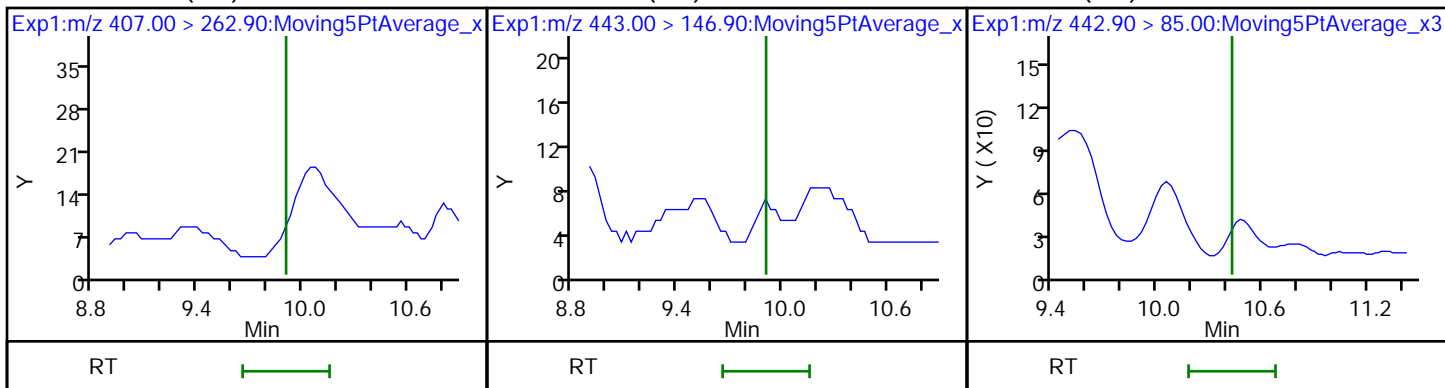
18 PFO4DA (ND)



20 EVE Acid (ND)

19 PS Acid (ND)

21 TAF (ND)



Eurofins TestAmerica, Sacramento

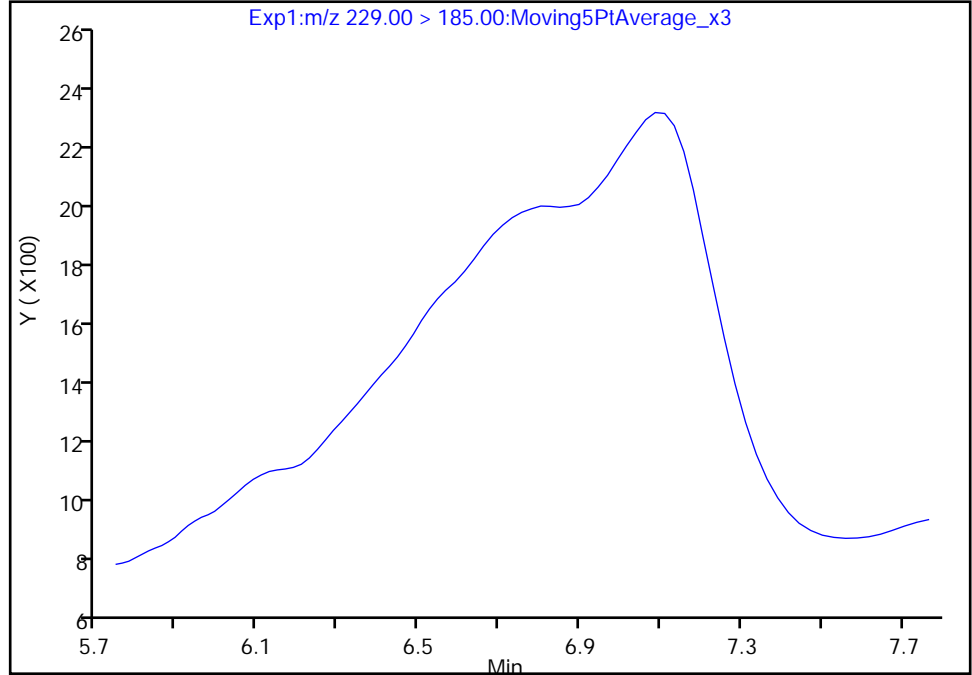
Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_053.d
Injection Date: 10-Mar-2021 06:40:47 Instrument ID: A12
Lims ID: 320-70652-A-4-A Lab Sample ID: 320-70652-4
Client ID: SEEP-C-FBLK-022721
Operator ID: Sac_inst_A12 ALS Bottle#: 53 Worklist Smp#: 25
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

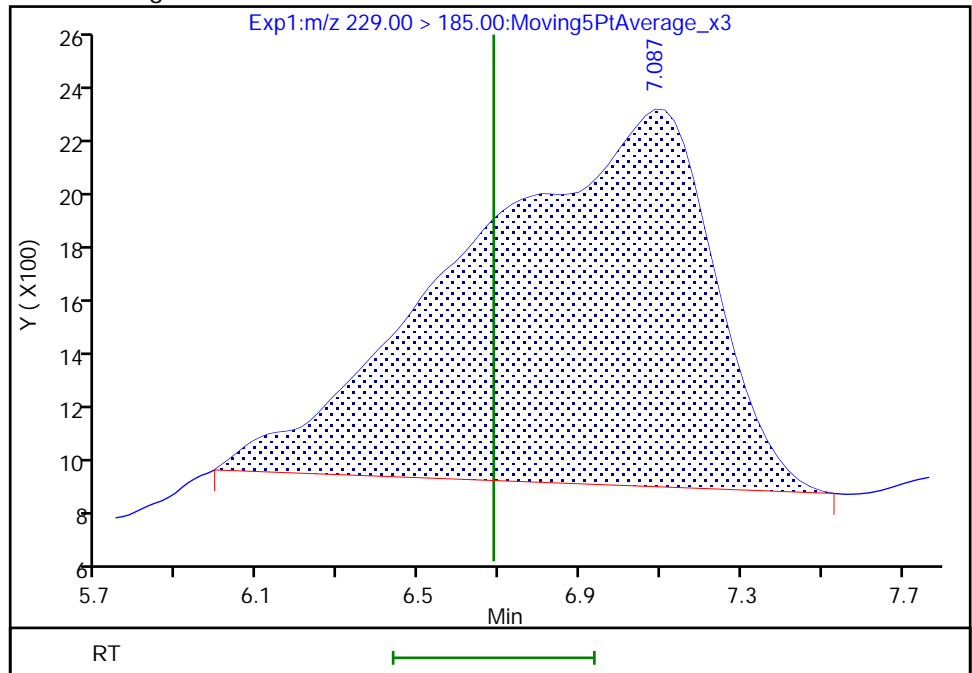
Not Detected
Expected RT: 6.69

Processing Integration Results



Manual Integration Results

RT: 7.09
Area: 56566
Amount: 0.003288
Amount Units: ng/ml



Reviewer: kwongg, 10-Mar-2021 12:32:42
Audit Action: Manually Integrated

Audit Reason: Assign Peak
Page 128 of 428

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1 Analy Batch No.: 468521

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/08/2021 14:45 Calibration End Date: 03/08/2021 18:35 Calibration ID: 54490

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-468521/2	2021.03.08_A12_TB3_ICAL_003.d
Level 2	IC 320-468521/3	2021.03.08_A12_TB3_ICAL_004.d
Level 3	IC 320-468521/4	2021.03.08_A12_TB3_ICAL_005.d
Level 4	IC 320-468521/5	2021.03.08_A12_TB3_ICAL_006.d
Level 5	IC 320-468521/6	2021.03.08_A12_TB3_ICAL_007.d
Level 6	IC 320-468521/8	2021.03.08_A12_TB3_ICAL_009.d
Level 7	IC 320-468521/10	2021.03.08_A12_TB3_ICAL_011.d
Level 8	IC 320-468521/12	2021.03.08_A12_TB3_ICAL_013.d
Level 9	IC 320-468521/14	2021.03.08_A12_TB3_ICAL_015.d
Level 10	IC 320-468521/15	2021.03.08_A12_TB3_ICAL_016.d

ANALYTE	LVL										RT WINDOW	AVG RT
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10		
PFMOAA	4.337	4.352	4.404	4.079	4.327	4.346	4.258	3.741	4.275	4.154	4.087 - 4.587	4.227
R-EVE	6.591	6.590	6.566	6.528	6.546	6.549	6.488	6.394	6.450	6.426	6.341 - 6.841	6.513
R-PSDA	6.639	6.637	6.613	6.568	6.613	6.616	6.548	6.434	+++++	+++++	6.389 - 6.889	6.584
Hydrolyzed PSDA	6.710	6.684	6.684	6.639	6.661	6.663	6.615	6.514	6.569	6.546	6.460 - 6.960	6.629
PMPA	+++++	+++++	6.874	6.829	6.850	6.853	6.805	6.692	6.759	6.731	6.626 - 7.126	6.799
NVHOS	7.260	7.258	7.232	7.208	7.232	7.235	7.184	7.095	7.138	7.110	7.010 - 7.510	7.195
PFO2HxA	7.862	7.860	7.798	7.800	7.829	7.832	7.770	7.716	7.710	7.706	7.612 - 8.112	7.788
PEPA	8.431	8.430	8.399	8.398	8.399	8.400	8.370	8.341	8.300	8.294	8.181 - 8.681	8.376
PES	8.715	8.685	8.653	8.649	8.653	8.683	8.620	8.601	8.590	8.554	8.465 - 8.965	8.640
PFECA B	8.925	8.922	8.890	8.891	8.890	8.892	8.860	8.838	8.800	8.797	8.675 - 9.175	8.871
PFO3OA	9.190	9.158	9.130	9.130	9.130	9.160	9.104	9.085	9.049	9.045	8.940 - 9.440	9.118
HFPO-DA	9.302	9.271	9.243	9.243	9.243	9.273	9.217	9.198	9.161	9.158	9.052 - 9.552	9.231
R-PSDCA	9.644	9.645	9.616	9.617	9.616	9.618	9.557	9.567	9.526	9.522	9.394 - 9.894	9.593
Hydro-EVE Acid	9.701	9.673	9.645	9.645	9.645	9.647	9.618	9.595	9.587	9.555	9.451 - 9.951	9.631
Perfluoroheptanoic acid	9.701	9.702	9.673	9.674	9.673	9.676	9.618	9.595	9.587	9.587	9.451 - 9.951	9.649
Hydro-PS Acid	9.730	9.702	9.673	9.674	9.673	9.676	9.647	9.624	9.587	9.587	9.480 - 9.980	9.657
PFECA G	9.816	9.817	9.788	9.789	9.788	9.790	9.733	9.739	9.702	9.702	9.566 - 10.066	9.766
PFO4DA	9.988	9.960	9.932	9.932	9.932	9.934	9.905	9.882	9.845	9.845	9.738 - 10.238	9.916
PS Acid	10.046	10.046	9.989	10.018	10.018	10.020	9.962	9.940	9.931	9.903	9.796 - 10.296	9.987
EVE Acid	10.046	10.046	10.018	10.018	10.018	10.020	9.991	9.968	9.931	9.931	9.796 - 10.296	9.999
PFO5DA	10.565	10.566	10.519	10.543	10.519	10.545	10.497	10.479	10.447	10.448	10.315 - 10.815	10.513
13C3 HFPO-DA	9.274	9.271	9.243	9.243	9.243	9.245	9.217	9.170	9.161	9.158	9.174 - 9.374	9.223
13C4 PFHpA	9.701	9.702	9.645	9.674	9.673	9.676	9.618	9.595	9.587	+++++	9.601 - 9.801	9.652

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1 Analy Batch No.: 468521

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/08/2021 14:45 Calibration End Date: 03/08/2021 18:35 Calibration ID: 54490

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-468521/2	2021.03.08_A12_TB3_ICAL_003.d
Level 2	IC 320-468521/3	2021.03.08_A12_TB3_ICAL_004.d
Level 3	IC 320-468521/4	2021.03.08_A12_TB3_ICAL_005.d
Level 4	IC 320-468521/5	2021.03.08_A12_TB3_ICAL_006.d
Level 5	IC 320-468521/6	2021.03.08_A12_TB3_ICAL_007.d
Level 6	IC 320-468521/8	2021.03.08_A12_TB3_ICAL_009.d
Level 7	IC 320-468521/10	2021.03.08_A12_TB3_ICAL_011.d
Level 8	IC 320-468521/12	2021.03.08_A12_TB3_ICAL_013.d
Level 9	IC 320-468521/14	2021.03.08_A12_TB3_ICAL_015.d
Level 10	IC 320-468521/15	2021.03.08_A12_TB3_ICAL_016.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6 LVL 10	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
PFMOAA	10977000 11388040 11882752	11051600 10542660 11624085	11232400 10898690	11069800 11593656	Ave		11226068. 3			3.6			50.0			
R-EVE	5648000 6139280 6207032	5406400 5705680 6171861	5870400 6034680	6164100 5796600	Ave		5914403.3 0			4.6			50.0			
R-PSDA	2852000 2780640 ++++	2651200 2472040 ++++	2557600 2777430	2670400 2677812	Ave		2679890.2 5			4.6			50.0			
Hydrolyzed PSDA	9895000 10548120 10645598	8912400 9621300 10409341	10160600 10197580	10480500 10113540	Ave		10098397. 9			5.1			50.0			
PMPA	++++ 17340680 16990664	++++ 15851500 16784939	18858000 16149670	18879900 16755584	Ave		17201367. 1			6.6			50.0			
NVHOS	4514000 5519000 5844064	4672000 5026800 5786419	5251200 5290750	5528600 5561852	Ave		5299468.5 0			8.4			50.0			
PFO2HxA	12773000 12765280 12954844	12322400 11906420 12432784	12782400 12236470	12924200 12777088	Ave		12587488. 6			2.7			50.0			
PEPA	4872000 5184320 5138034	5000800 5204880 5002510	5219800 5187480	5484200 5193400	Ave		5148742.4 0			3.2			50.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1 Analy Batch No.: 468521

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/08/2021 14:45 Calibration End Date: 03/08/2021 18:35 Calibration ID: 54490

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4		B	M1	M2								
	LVL 5 LVL 9	LVL 6 LVL 10	LVL 7	LVL 8												
PES	17446000 17738120 19725350	18060800 16173180 19262846	17827800 16285770	16958700 18058812	Ave		17753737. 8			6.4		50.0				
PFECA B	7866000 8820080 8940190	8207600 8140760 8168324	9348600 8501920	8910500 9091172	Ave		8599514.6 0			5.7		50.0				
PFO3OA	3726000 3623960 3354952	2890400 3190180 3163918	3397800 3558670	3629500 3377928	Ave		3391330.8 0			7.6		50.0				
R-PSDCA	50115000 55600280 47163262	53543600 47924600 38566604	56673800 48528810	56490900 51390708	Ave		50599756. 4			10.9		50.0				
Hydro-EVE Acid	61494000 70125240 65524696	63030400 62477060 57587964	69525200 63831810	69928600 68663084	Ave		65218805. 4			6.5		50.0				
Hydro-PS Acid	25655000 24362200 23806506	22026000 21865180 22874579	23773400 22679390	24420100 24396092	Ave		23585844. 7			5.1		50.0				
PFECA G	4934000 4869080 4341460	4831600 4051820 3634590	4580600 4408130	4862000 4658772	Ave		4517205.2 0			9.3		50.0				
PFO4DA	4614000 5905960 5262186	5202000 4994160 4348756	5740600 5027110	5691100 5159744	Ave		5194561.6 0			9.5		50.0				
PS Acid	9476000 11108120 10772376	10023200 9859820 9666123	10860600 10391410	10980200 10712232	Ave		10385008. 1			5.7		50.0				
EVE Acid	36320000 40992000 37046162	37495600 37824480 31234468	39932400 39826920	42553900 41087204	Ave		38431313. 4			8.4		50.0				
PFO5DA	4324000 4656840 4288722	4621600 4092460 4073951	4155800 4361270	4825200 4446472	Ave		4384631.5 0			5.8		50.0				
13C3 HFPO-DA	6510424 6475376 5856296	6315340 6802420 5880048	6568976 6088812	6635564 6114528	Ave		6324778.4 0			5.2		50.0				

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
 LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1 Analy Batch No.: 468521

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/08/2021 14:45 Calibration End Date: 03/08/2021 18:35 Calibration ID: 54490

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6 LVL 10	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
13C4 PFHpA	28726200 28336652 21718104	28656100 25923104 +++++	29298696 26616572	29084552 25818096	Ave		27130897. 3			9.0		50.0				

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
 LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
 CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1 Analy Batch No.: 468521

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/08/2021 14:45 Calibration End Date: 03/08/2021 18:35 Calibration ID: 54490

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10												
HFPO-DA	1.0711 0.9120	1.0449 1.0591	0.9531 1.0748	1.0556 1.0769	1.0050 1.0543	AveI D	1.030 7				5.5		35.0				
Perfluoroheptanoic acid	1.4176 0.9723	1.1759 0.9763	1.0487 1.0668	1.0363 1.1254	1.0491	AveI D	1.098 3				11.7		35.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1 Analy Batch No.: 468521

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/08/2021 14:45 Calibration End Date: 03/08/2021 18:35 Calibration ID: 54490

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-468521/2	2021.03.08_A12_TB3_ICAL_003.d
Level 2	IC 320-468521/3	2021.03.08_A12_TB3_ICAL_004.d
Level 3	IC 320-468521/4	2021.03.08_A12_TB3_ICAL_005.d
Level 4	IC 320-468521/5	2021.03.08_A12_TB3_ICAL_006.d
Level 5	IC 320-468521/6	2021.03.08_A12_TB3_ICAL_007.d
Level 6	IC 320-468521/8	2021.03.08_A12_TB3_ICAL_009.d
Level 7	IC 320-468521/10	2021.03.08_A12_TB3_ICAL_011.d
Level 8	IC 320-468521/12	2021.03.08_A12_TB3_ICAL_013.d
Level 9	IC 320-468521/14	2021.03.08_A12_TB3_ICAL_015.d
Level 10	IC 320-468521/15	2021.03.08_A12_TB3_ICAL_016.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
		LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
PFMOAA	Ave	10977	27629	56162	110698	284701	0.00100	0.00250	0.00500	0.0100	0.0250
		527133	1089869	2898414	5941376	11624085	0.0500	0.100	0.250	0.500	1.00
R-EVE	Ave	5648	13516	29352	61641	153482	0.00100	0.00250	0.00500	0.0100	0.0250
		285284	603468	1449150	3103516	6171861	0.0500	0.100	0.250	0.500	1.00
R-PSDA	Ave	2852	6628	12788	26704	69516	0.00100	0.00250	0.00500	0.0100	0.0250
		123602	277743	669453	+++++	+++++	0.0500	0.100	0.250	+++++	+++++
Hydrolyzed PSDA	Ave	9895	22281	50803	104805	263703	0.00100	0.00250	0.00500	0.0100	0.0250
		481065	1019758	2528385	5322799	10409341	0.0500	0.100	0.250	0.500	1.00
PMPA	Ave	+++++	+++++	94290	188799	433517	+++++	+++++	0.00500	0.0100	0.0250
		792575	1614967	4188896	8495332	16784939	0.0500	0.100	0.250	0.500	1.00
NVHOS	Ave	4514	11680	26256	55286	137975	0.00100	0.00250	0.00500	0.0100	0.0250
		251340	529075	1390463	2922032	5786419	0.0500	0.100	0.250	0.500	1.00
PFO2HxA	Ave	12773	30806	63912	129242	319132	0.00100	0.00250	0.00500	0.0100	0.0250
		595321	1223647	3194272	6477422	12432784	0.0500	0.100	0.250	0.500	1.00
PEPA	Ave	4872	12502	26099	54842	129608	0.00100	0.00250	0.00500	0.0100	0.0250
		260244	518748	1298350	2569017	5002510	0.0500	0.100	0.250	0.500	1.00
PES	Ave	17446	45152	89139	169587	443453	0.00100	0.00250	0.00500	0.0100	0.0250
		808659	1628577	4514703	9862675	19262846	0.0500	0.100	0.250	0.500	1.00
PFECA B	Ave	7866	20519	46743	89105	220502	0.00100	0.00250	0.00500	0.0100	0.0250
		407038	850192	2272793	4470095	8168324	0.0500	0.100	0.250	0.500	1.00
PFO3OA	Ave	3726	7226	16989	36295	90599	0.00100	0.00250	0.00500	0.0100	0.0250
		159509	355867	844482	1677476	3163918	0.0500	0.100	0.250	0.500	1.00
R-PSDCA	Ave	50115	133859	283369	564909	1390007	0.00100	0.00250	0.00500	0.0100	0.0250
		2396230	4852881	12847677	23581631	38566604	0.0500	0.100	0.250	0.500	1.00

FORM VI
 LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1 Analy Batch No.: 468521

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/08/2021 14:45 Calibration End Date: 03/08/2021 18:35 Calibration ID: 54490

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Hydro-EVE Acid	Ave	61494	157576	347626	699286	1753131	0.00100	0.00250	0.00500	0.0100	0.0250
		3123853	6383181	17165771	32762348	57587964	0.0500	0.100	0.250	0.500	1.00
Hydro-PS Acid	Ave	25655	55065	118867	244201	609055	0.00100	0.00250	0.00500	0.0100	0.0250
		1093259	2267939	6099023	11903253	22874579	0.0500	0.100	0.250	0.500	1.00
PFECA G	Ave	4934	12079	22903	48620	121727	0.00100	0.00250	0.00500	0.0100	0.0250
		202591	440813	1164693	2170730	3634590	0.0500	0.100	0.250	0.500	1.00
PFO4DA	Ave	4614	13005	28703	56911	147649	0.00100	0.00250	0.00500	0.0100	0.0250
		249708	502711	1289936	2631093	4348756	0.0500	0.100	0.250	0.500	1.00
PS Acid	Ave	9476	25058	54303	109802	277703	0.00100	0.00250	0.00500	0.0100	0.0250
		492991	1039141	2678058	5386188	9666123	0.0500	0.100	0.250	0.500	1.00
EVE Acid	Ave	36320	93739	199662	425539	1024800	0.00100	0.00250	0.00500	0.0100	0.0250
		1891224	3982692	10271801	18523081	31234468	0.0500	0.100	0.250	0.500	1.00
PFO5DA	Ave	4324	11554	20779	48252	116421	0.00100	0.00250	0.00500	0.0100	0.0250
		204623	436127	1111618	2144361	4073951	0.0500	0.100	0.250	0.500	1.00
13C3 HFPO-DA	Ave	1627606	1578835	1642244	1658891	1618844	0.250	0.250	0.250	0.250	0.250
		1700605	1522203	1528632	1464074	1470012	0.250	0.250	0.250	0.250	0.250
13C4 PFHpA	Ave	7181550	7164025	7324674	7271138	7084163	0.250	0.250	0.250	0.250	0.250
		6480776	6654143	6454524	5429526	+++++	0.250	0.250	0.250	0.250	+++++

Curve Type Legend

Ave = Average

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1 Analy Batch No.: 468521

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/08/2021 14:45 Calibration End Date: 03/08/2021 18:35 Calibration ID: 54490

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-468521/2	2021.03.08_A12_TB3_ICAL_003.d
Level 2	IC 320-468521/3	2021.03.08_A12_TB3_ICAL_004.d
Level 3	IC 320-468521/4	2021.03.08_A12_TB3_ICAL_005.d
Level 4	IC 320-468521/5	2021.03.08_A12_TB3_ICAL_006.d
Level 5	IC 320-468521/6	2021.03.08_A12_TB3_ICAL_007.d
Level 6	IC 320-468521/8	2021.03.08_A12_TB3_ICAL_009.d
Level 7	IC 320-468521/10	2021.03.08_A12_TB3_ICAL_011.d
Level 8	IC 320-468521/12	2021.03.08_A12_TB3_ICAL_013.d
Level 9	IC 320-468521/14	2021.03.08_A12_TB3_ICAL_015.d
Level 10	IC 320-468521/15	2021.03.08_A12_TB3_ICAL_016.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
HFPO-DA		AveI D	6973	16497	31304	70048	162686	0.00100	0.00250	0.00500	0.0100	0.0250
			310204	644858	1642908	3153200	6199253	0.0500	0.100	0.250	0.500	1.00
Perfluoroheptanoic acid		AveI D	40722	84245	153628	301416	743214	0.00100	0.00250	0.00500	0.0100	0.0250
			1260231	2598671	6885904	12220864	19409091	0.0500	0.100	0.250	0.500	1.00

Curve Type Legend

AveID = Average isotope dilution

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_003.d
 Lims ID: IC STD 1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 08-Mar-2021 14:45:57 ALS Bottle#: 3 Worklist Smp#: 2
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 1 (60)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 09-Mar-2021 07:05:10 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1636

First Level Reviewer: fariasa Date: 09-Mar-2021 06:50:04

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.337	4.337	0.0		10977	0.000978		97.8	1.7	M
2 R-EVE										
405.00 > 217.00	6.591	6.591	0.0		5648	0.000955		95.5	77.8	
3 R-PSDA										M
440.90 > 241.00	6.639	6.639	0.0		2852	0.001064		106	40.4	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.710	6.710	0.0		9895	0.000980		98.0	157	
23 PMPA										M
229.00 > 185.00	6.876	6.876	0.0		33403	0.001942		194	16.6	M
5 NVHOS										M
297.00 > 135.00	7.260	7.260	0.0		4514	0.000852		85.2	69.3	M
6 PFO2HxA										
245.00 > 85.00	7.862	7.862	0.0		12773	0.001015		101	134	
22 PEPA										M
278.90 > 234.90	8.431	8.431	0.0		4872	0.000946		94.6	14.3	M
7 PES										
314.90 > 135.00	8.715	8.715	0.0		17446	0.000983		98.3	441	
8 PFECA B										
295.00 > 201.00	8.925	8.925	0.0		7866	0.000915		91.5	151	
9 PFO3OA										
310.90 > 85.00	9.190	9.190	0.0		3726	0.001099		110	77.3	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.274	9.274	0.0		1627606	0.2573		103	31588	
11 HPFO-DA										M
285.00 > 169.00	9.302	9.302	0.0	1.003	6973	0.001039		104	184	M

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.644	9.644	0.0		50115	0.000990		99.0	1363	
13 Hydro-EVE Acid										
427.00 > 282.90	9.701	9.701	0.0		61494	0.000943		94.3	401	
D 14 13C4 PFHpA										
367.00 > 322.00	9.701	9.701	0.0		7181550	0.2647		106	96782	
16 Perfluoroheptanoic acid										M
363.00 > 319.00	9.701	9.701	0.0	1.000	40722	0.001291	Target=0.00	129	237	
363.00 > 169.00	9.701	9.701	0.0	1.000	12018		3.39(0.00-0.00)	129	253	M
15 Hydro-PS Acid										
463.00 > 262.90	9.730	9.730	0.0		25655	0.001088		109	573	
17 PFECA G										
378.90 > 184.90	9.816	9.816	0.0		4934	0.001092		109	135	
18 PFO4DA										
376.90 > 85.00	9.988	9.988	0.0		4614	0.000888		88.8	124	
20 EVE Acid										
407.00 > 262.90	10.046	10.046	0.0		36320	0.000945		94.5	990	
19 PS Acid										
443.00 > 146.90	10.046	10.046	0.0		9476	0.000912		91.2	261	
21 TAF										
442.90 > 85.00	10.565	10.565	0.0		4324	0.000986		98.6	34.1	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD1_00060

Amount Added: 1.00

Units: mL

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_003.d

Injection Date: 08-Mar-2021 14:45:57

Instrument ID: A12

Lims ID: IC STD 1

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 3

Worklist Smp#: 2

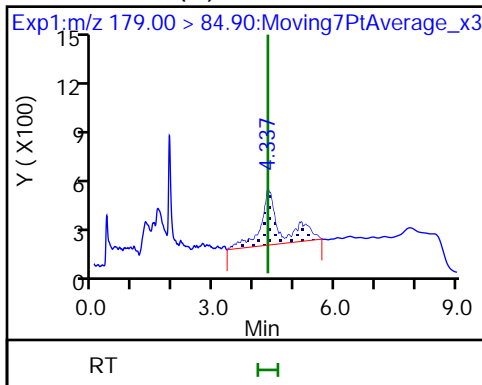
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

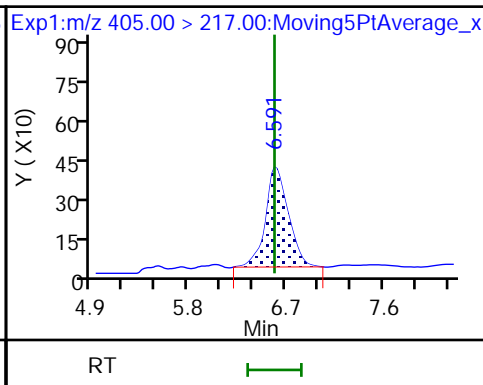
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

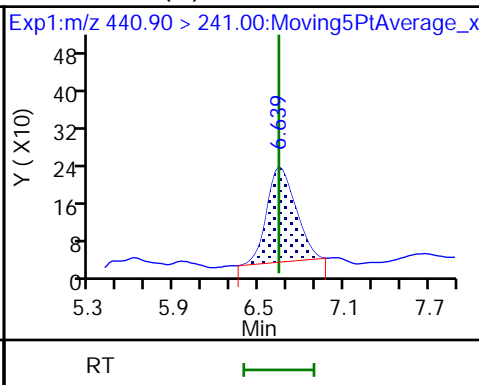
1 PFMOAA (M)



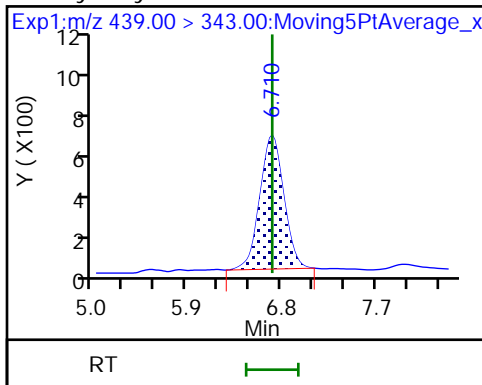
2 R-EVE



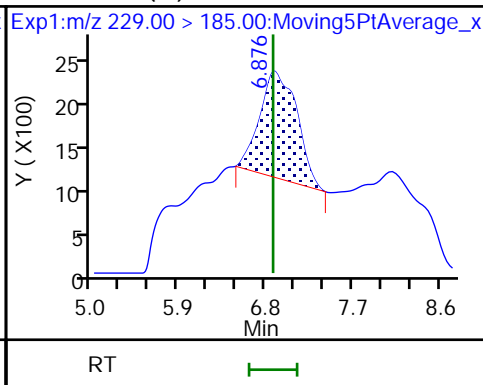
3 R-PSDA (M)



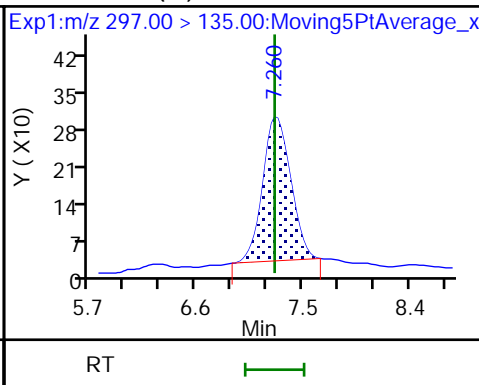
4 Hydrolyzed PSDA



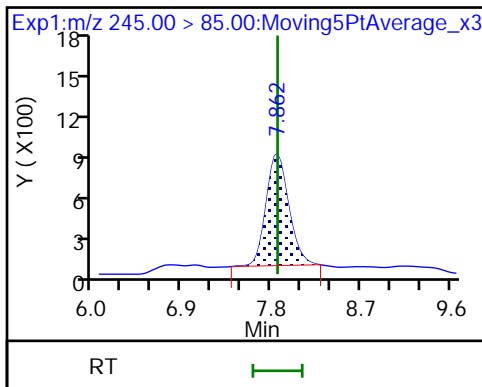
23 PMPA (M)



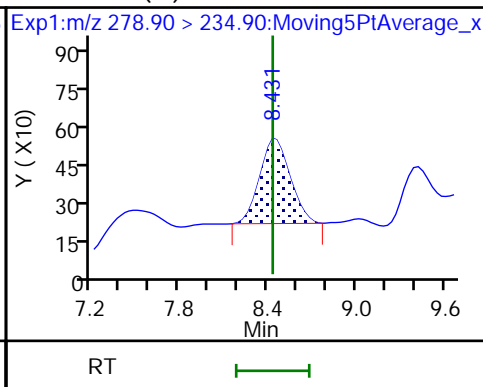
5 NVHOS (M)



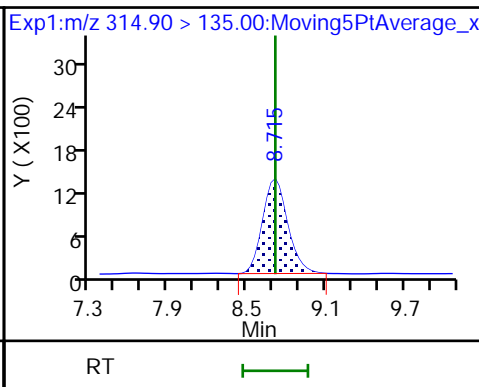
6 PFO2HxA



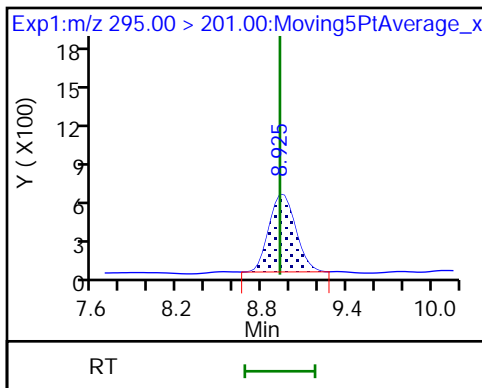
22 PEPA (M)



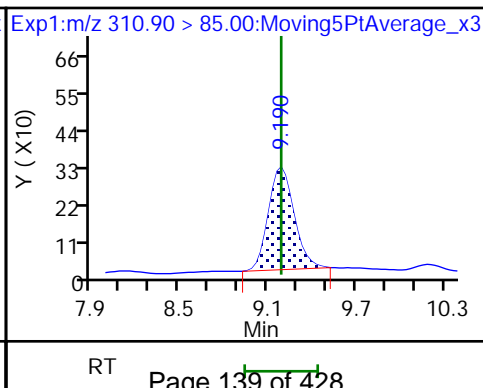
7 PES



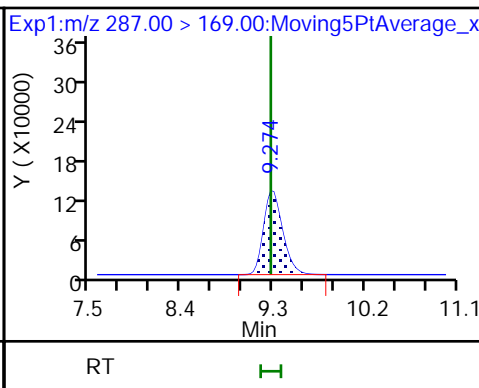
8 PFECA B

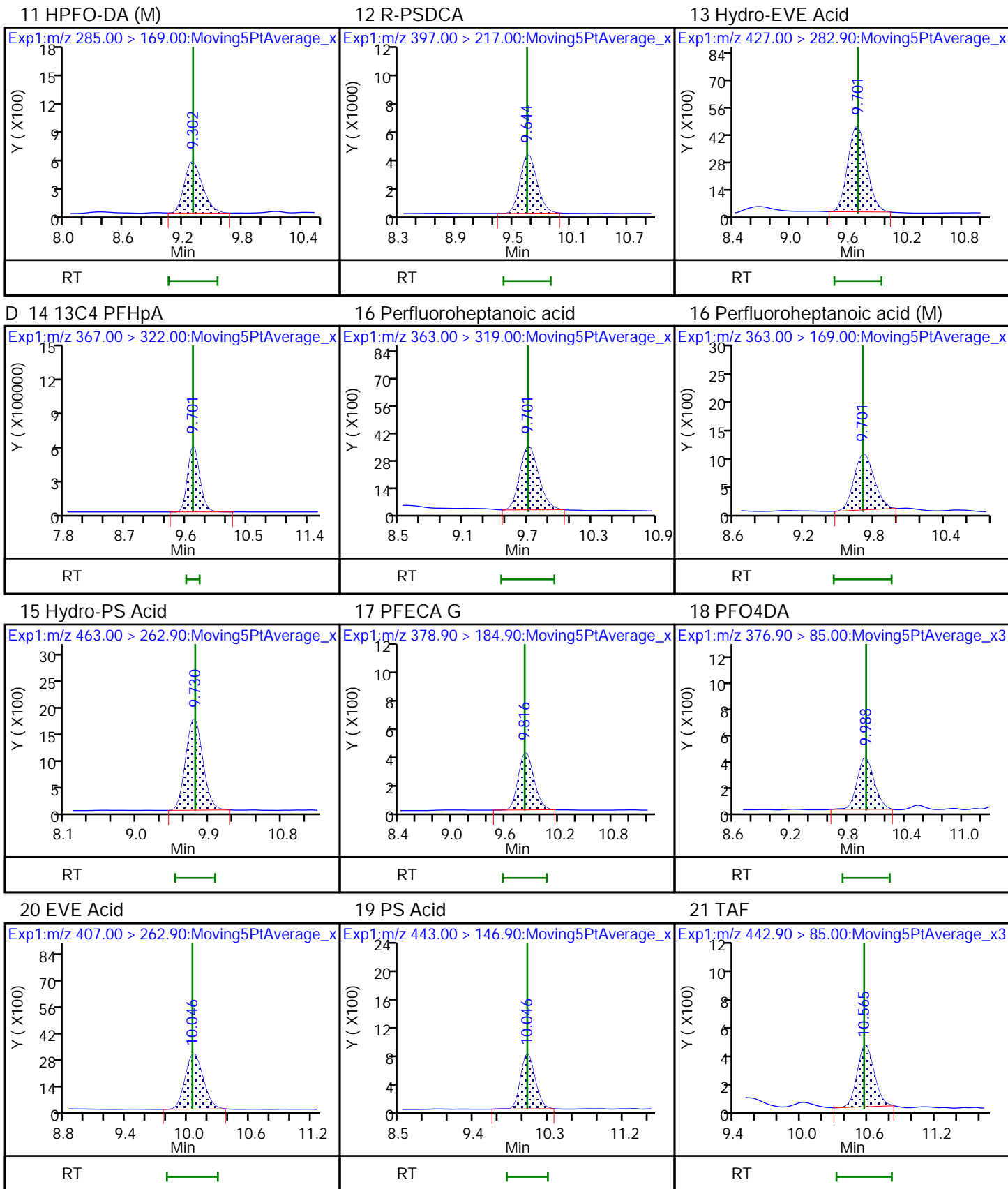


9 PFO3OA



D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

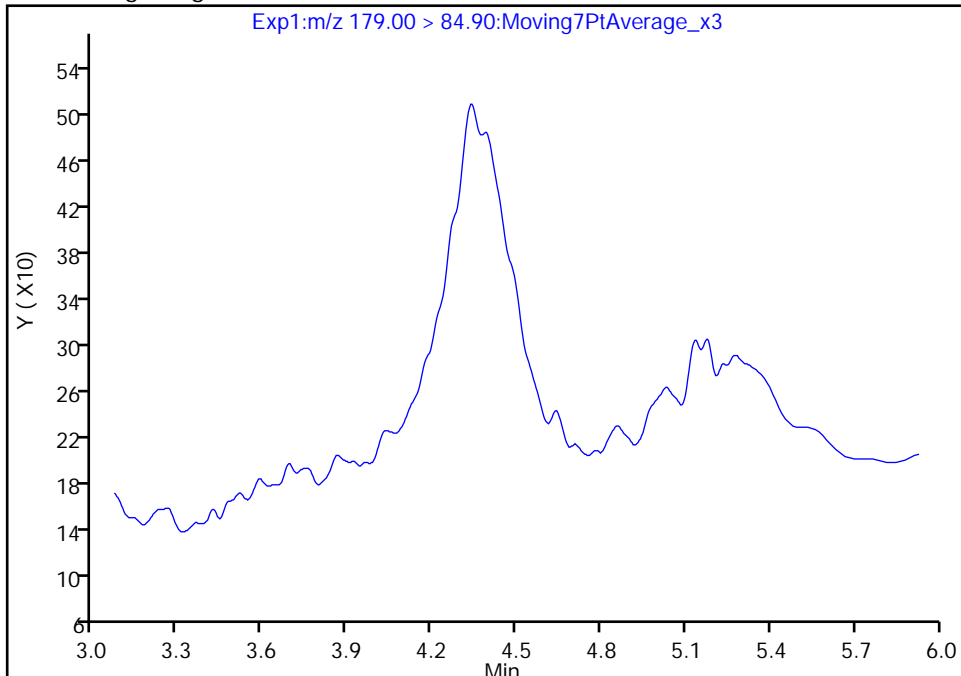
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_003.d
Injection Date: 08-Mar-2021 14:45:57 Instrument ID: A12
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

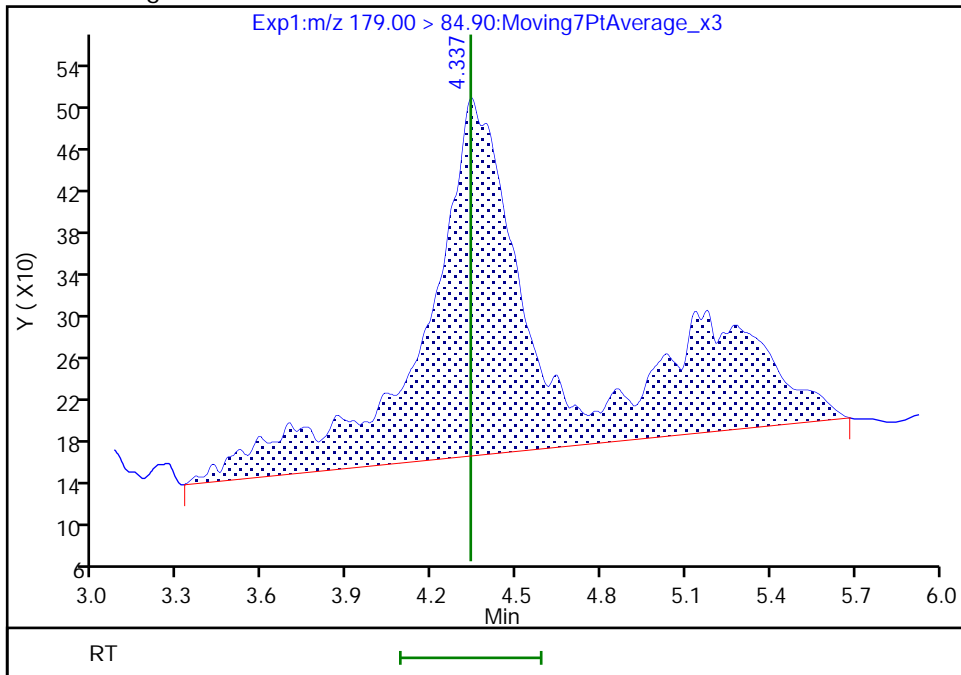
Not Detected
Expected RT: 4.34

Processing Integration Results



Manual Integration Results

RT: 4.34
Area: 10977
Amount: 0.000978
Amount Units: ng/ml



Reviewer: fariasa, 09-Mar-2021 06:32:45
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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Eurofins TestAmerica, Sacramento

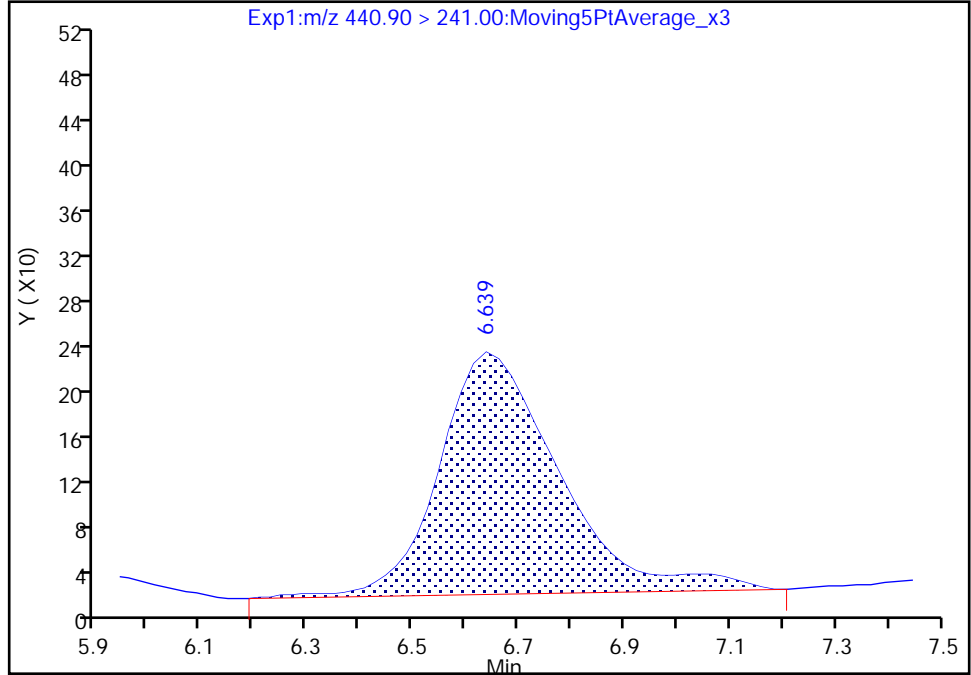
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_003.d
 Injection Date: 08-Mar-2021 14:45:57 Instrument ID: A12
 Lims ID: IC STD 1
 Client ID:
 Operator ID: Sac_inst_A12 ALS Bottle#: 3 Worklist Smp#: 2
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
 Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

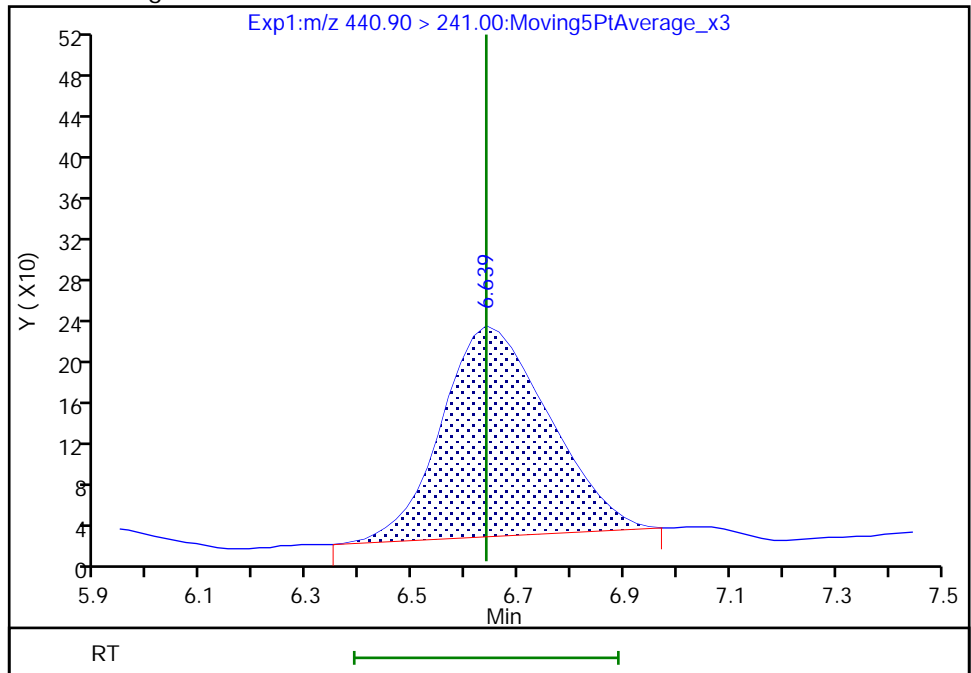
RT: 6.64
 Area: 3313
 Amount: 0.001174
 Amount Units: ng/ml

Processing Integration Results



RT: 6.64
 Area: 2852
 Amount: 0.001064
 Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 09-Mar-2021 06:33:11
 Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

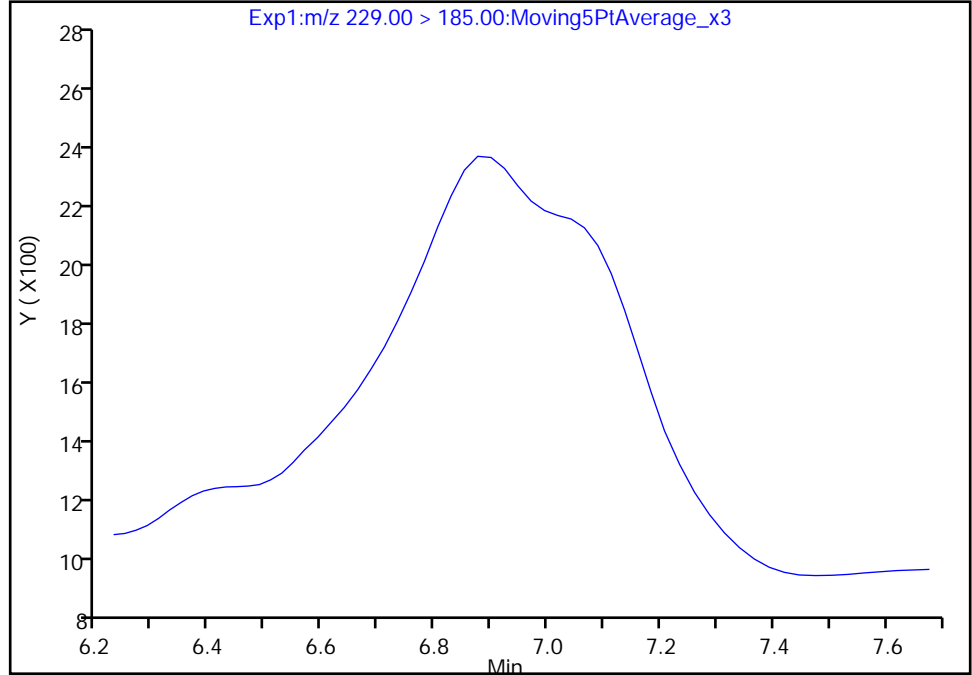
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_003.d
Injection Date: 08-Mar-2021 14:45:57 Instrument ID: A12
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

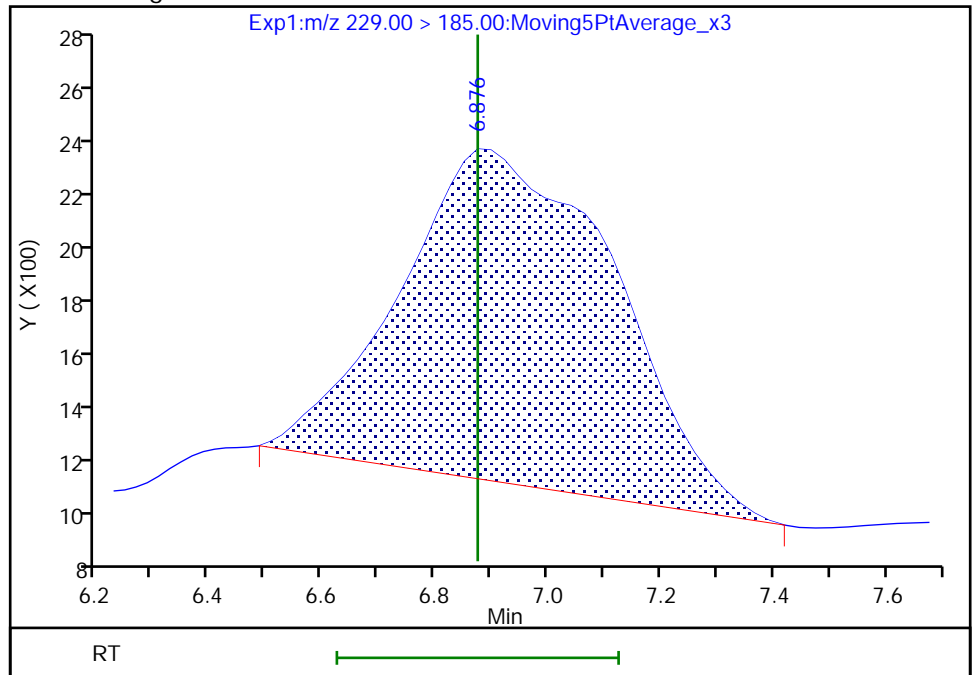
Not Detected
Expected RT: 6.88

Processing Integration Results



Manual Integration Results

RT: 6.88
Area: 33403
Amount: 0.001942
Amount Units: ng/ml



Reviewer: fariasa, 09-Mar-2021 06:32:57
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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Euofins TestAmerica, Sacramento

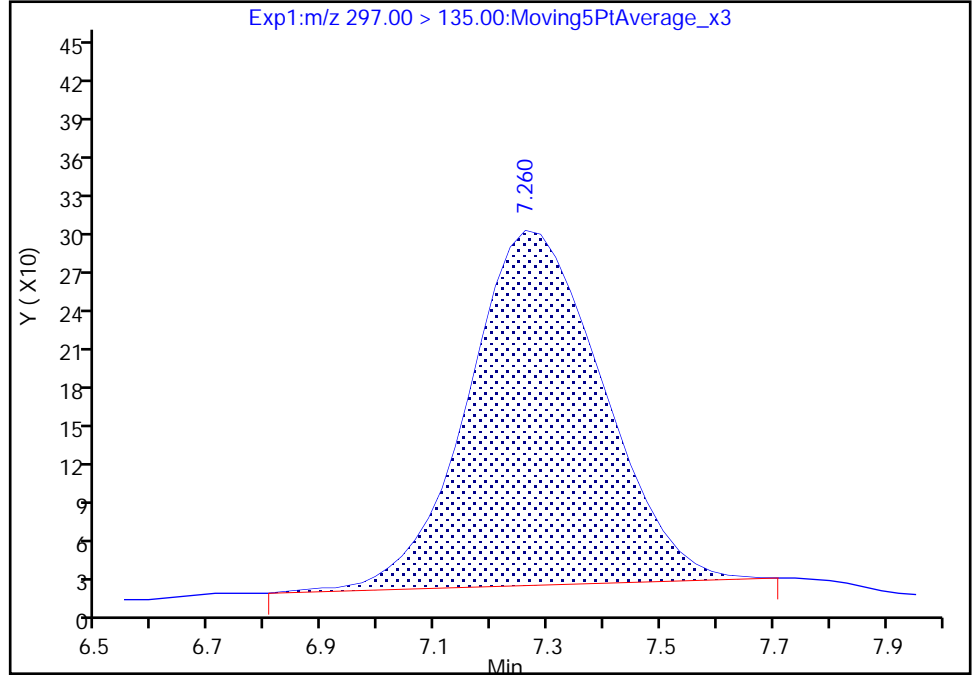
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_003.d
Injection Date: 08-Mar-2021 14:45:57 Instrument ID: A12
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

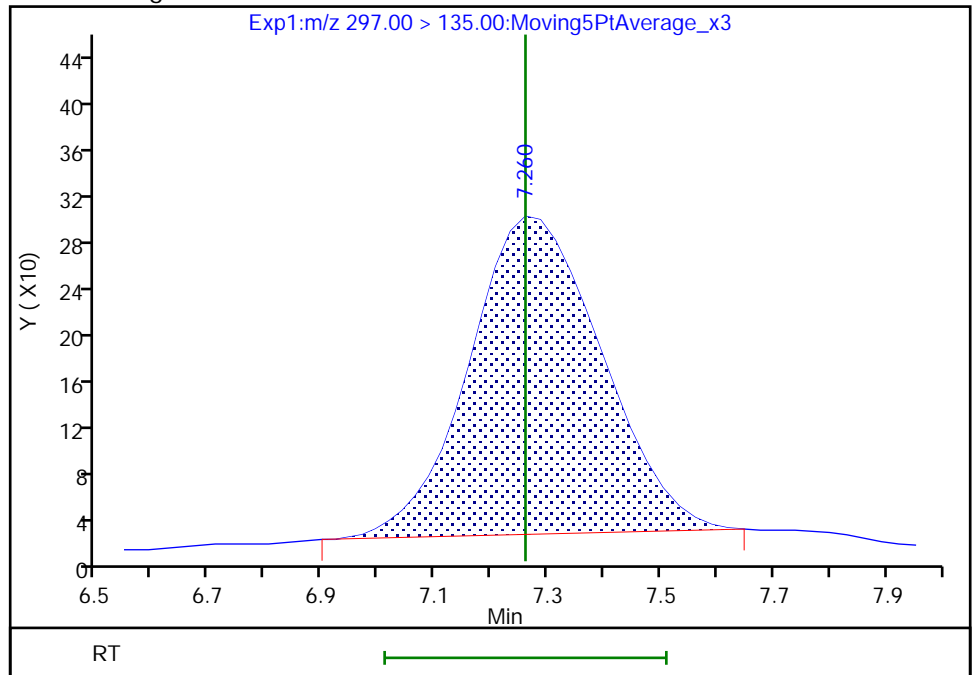
RT: 7.26
Area: 4626
Amount: 0.000869
Amount Units: ng/ml

Processing Integration Results



RT: 7.26
Area: 4514
Amount: 0.000852
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 09-Mar-2021 06:33:20
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

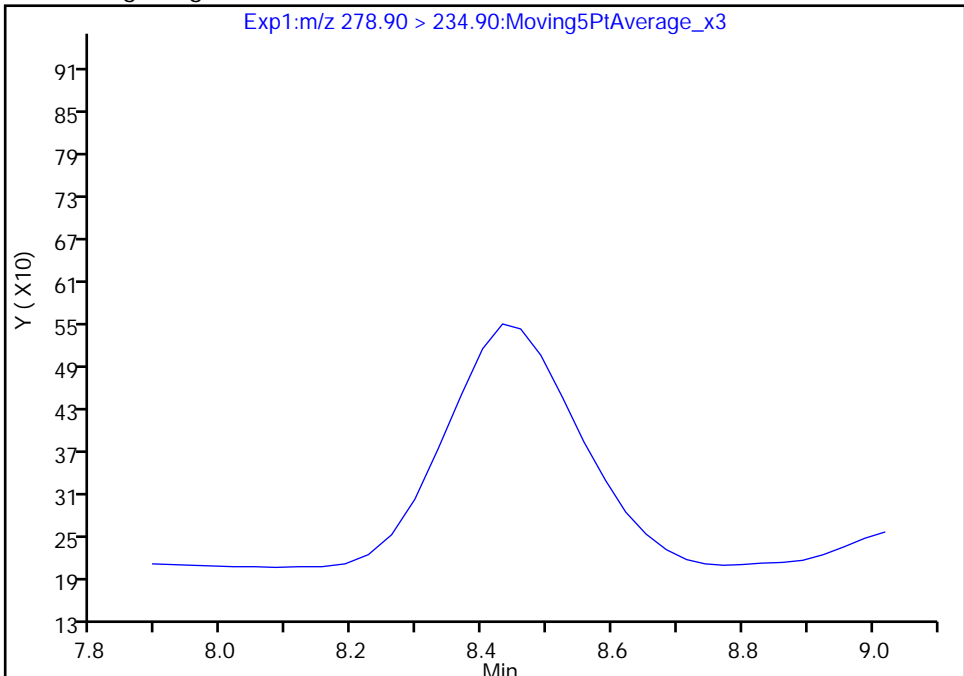
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_003.d
Injection Date: 08-Mar-2021 14:45:57 Instrument ID: A12
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

22 PEPA, CAS: 267239-61-2

Signal: 1

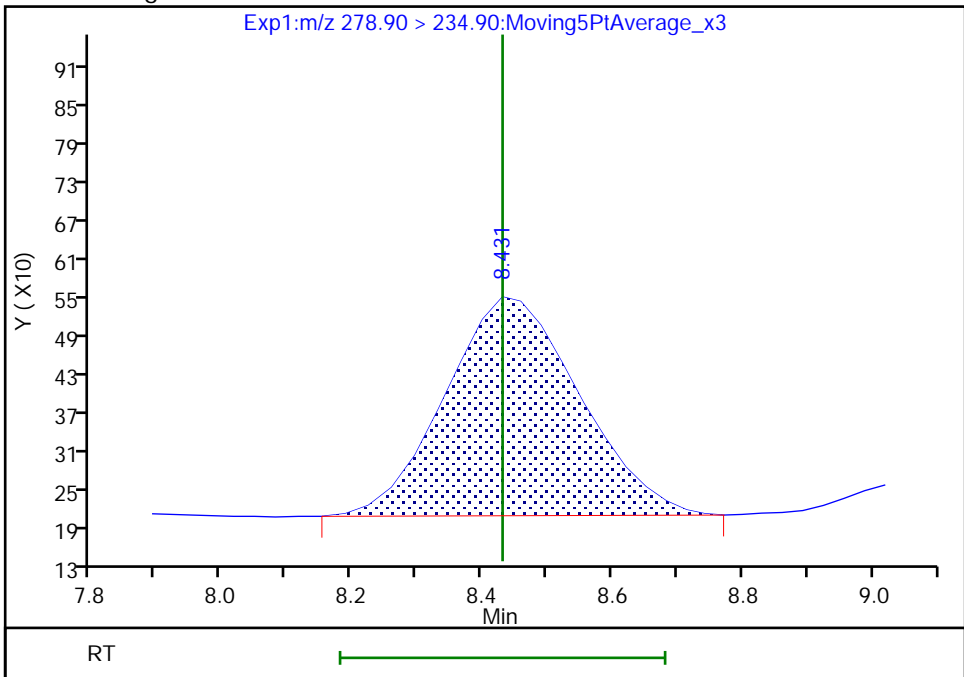
Not Detected
Expected RT: 8.43

Processing Integration Results



Manual Integration Results

RT: 8.43
Area: 4872
Amount: 0.000946
Amount Units: ng/ml



Reviewer: fariasa, 09-Mar-2021 06:33:02
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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Eurofins TestAmerica, Sacramento

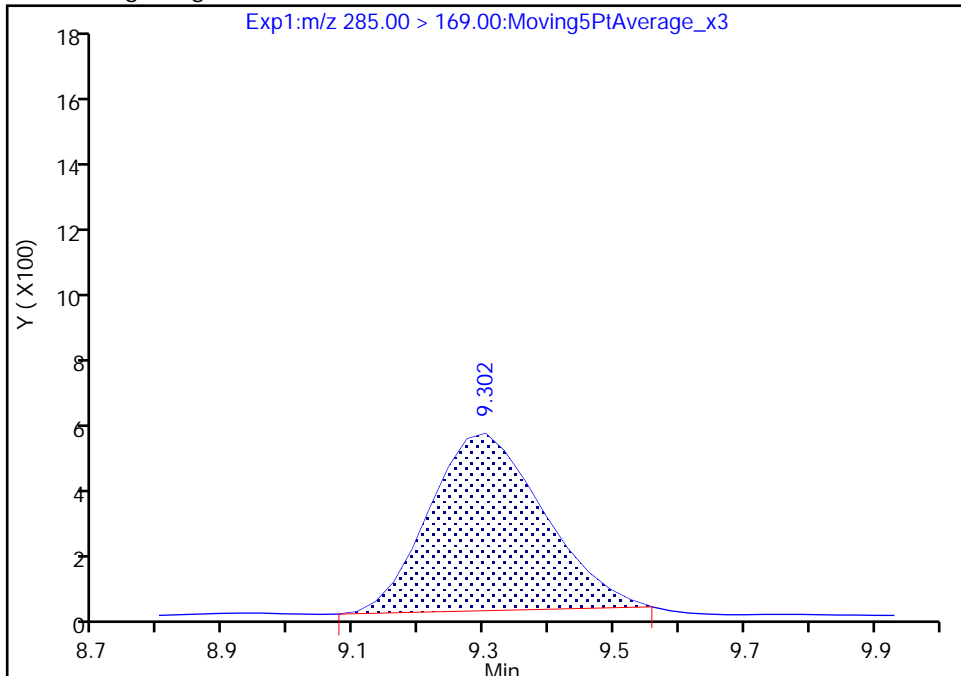
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_003.d
Injection Date: 08-Mar-2021 14:45:57 Instrument ID: A12
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

11 HPFO-DA, CAS: 13252-13-6

Signal: 1

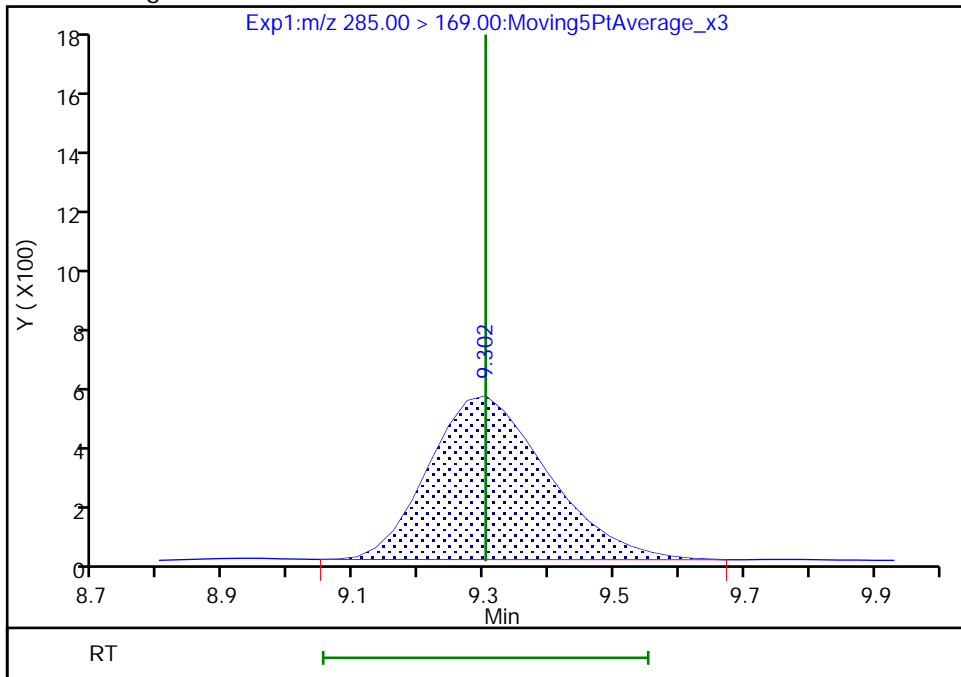
RT: 9.30
Area: 6560
Amount: 0.001002
Amount Units: ng/ml

Processing Integration Results



RT: 9.30
Area: 6973
Amount: 0.001039
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Sacramento

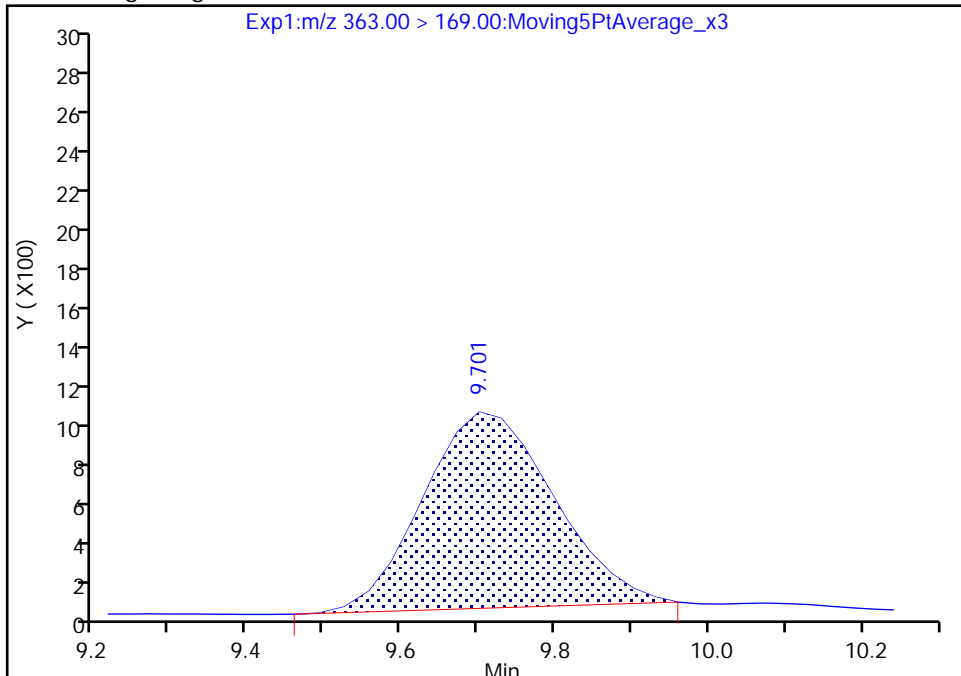
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_003.d
Injection Date: 08-Mar-2021 14:45:57 Instrument ID: A12
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector: EXP1

16 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

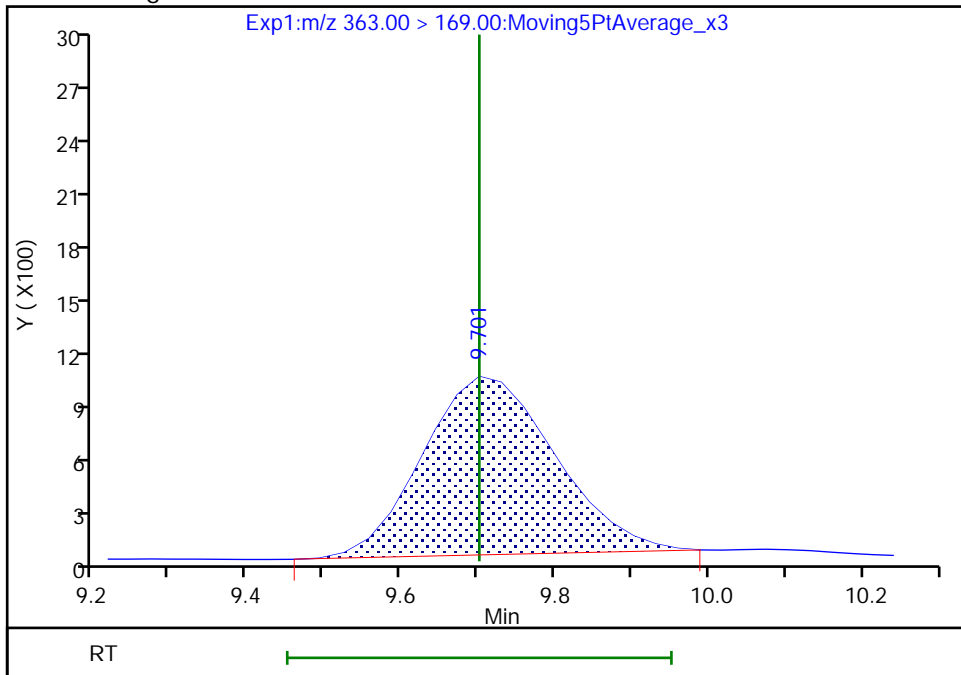
RT: 9.70
Area: 11846
Amount: 0.001293
Amount Units: ng/ml

Processing Integration Results



RT: 9.70
Area: 12018
Amount: 0.001291
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 09-Mar-2021 06:33:40
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_004.d
 Lims ID: IC STD 2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 08-Mar-2021 15:03:32 ALS Bottle#: 4 Worklist Smp#: 3
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 2 (48)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 09-Mar-2021 07:05:11 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1636

First Level Reviewer: fariasa Date: 09-Mar-2021 06:34:46

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.352	4.337	0.015		27629	0.002461		98.4	3.4	M
2 R-EVE										
405.00 > 217.00	6.590	6.591	-0.001		13516	0.002285		91.4	182	
3 R-PSDA										M
440.90 > 241.00	6.637	6.639	-0.002		6628	0.002473		98.9	86.4	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.684	6.710	-0.026		22281	0.002206		88.3	354	
23 PMPA										M
229.00 > 185.00	6.897	6.876	0.021		58246	0.003386		135	37.1	M
5 NVHOS										M
297.00 > 135.00	7.258	7.260	-0.002		11680	0.002204		88.2	241	M
6 PFO2HxA										
245.00 > 85.00	7.860	7.862	-0.002		30806	0.002447		97.9	324	
22 PEPA										
278.90 > 234.90	8.430	8.431	-0.001		12502	0.002428		97.1	49.0	
7 PES										
314.90 > 135.00	8.685	8.715	-0.031		45152	0.002543		102	1124	
8 PFECA B										
295.00 > 201.00	8.922	8.925	-0.003		20519	0.002386		95.4	386	
9 PFO3OA										
310.90 > 85.00	9.158	9.190	-0.032		7226	0.002131		85.2	144	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.271	9.274	-0.003		1578835	0.2496		99.9	41105	
11 HPFO-DA										
285.00 > 169.00	9.271	9.302	-0.031	1.000	16497	0.002534		101	442	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.645	9.644	0.001		133859	0.002645		106	3554	
13 Hydro-EVE Acid										
427.00 > 282.90	9.673	9.701	-0.028		157576	0.002416		96.6	992	
D 14 13C4 PFHpA										
367.00 > 322.00	9.702	9.701	0.001		7164025	0.2641		106	94838	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.702	9.701	0.001	1.000	84245	0.002677	Target=0.00	107	564	
363.00 > 169.00	9.702	9.701	0.001	1.000	21889		3.85(0.00-0.00)	107	448	
15 Hydro-PS Acid										
463.00 > 262.90	9.702	9.730	-0.028		55065	0.002335		93.4	1227	
17 PFECA G										
378.90 > 184.90	9.817	9.816	0.001		12079	0.002674		107	330	
18 PFO4DA										
376.90 > 85.00	9.960	9.988	-0.028		13005	0.002504		100	350	
20 EVE Acid										
407.00 > 262.90	10.046	10.046	0.0		93739	0.002439		97.6	2543	
19 PS Acid										
443.00 > 146.90	10.046	10.046	0.0		25058	0.002413		96.5	682	
21 TAF										
442.90 > 85.00	10.566	10.565	0.001		11554	0.002635		105	91.5	

QC Flag Legend

Processing Flags

Review Flags

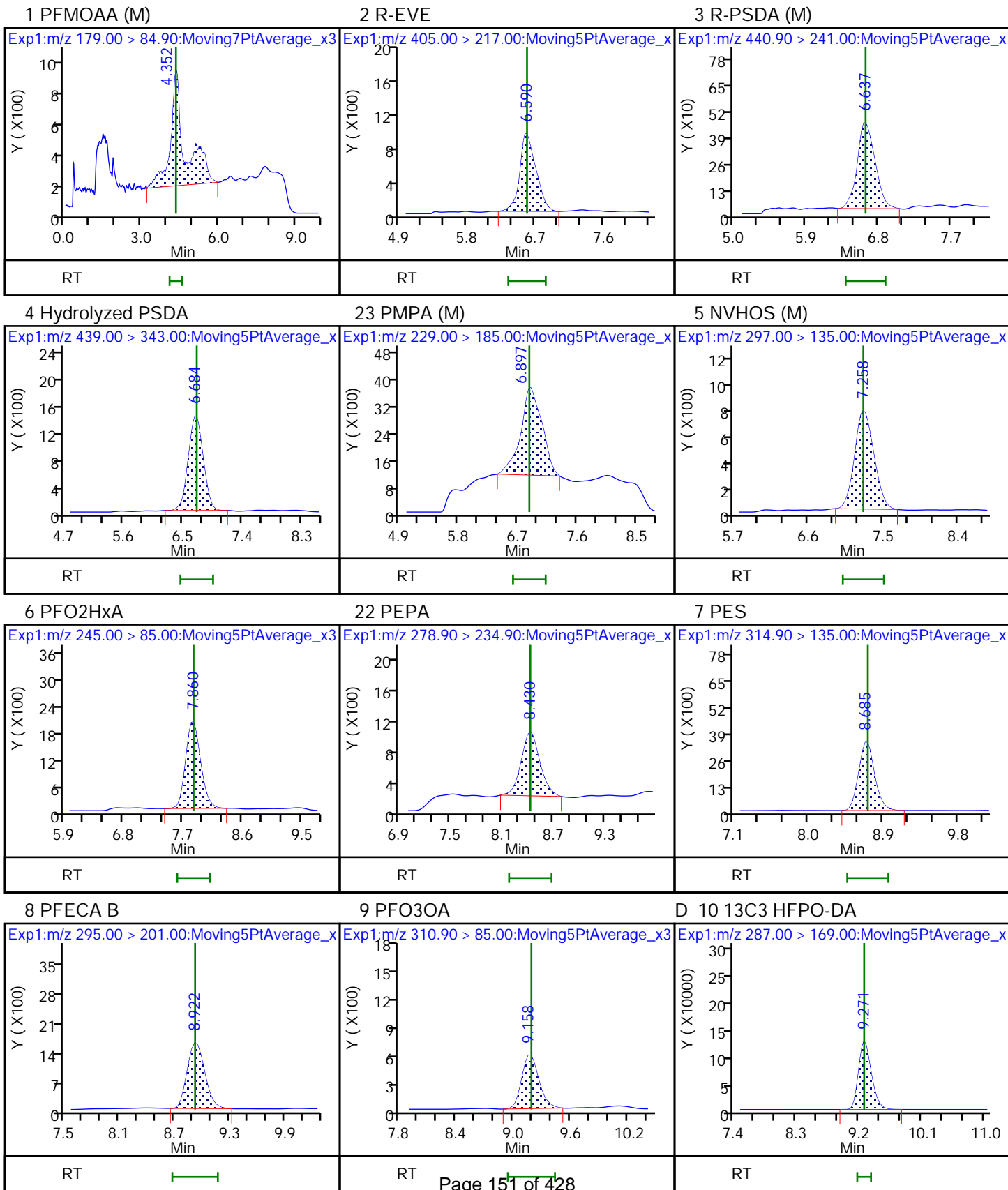
M - Manually Integrated

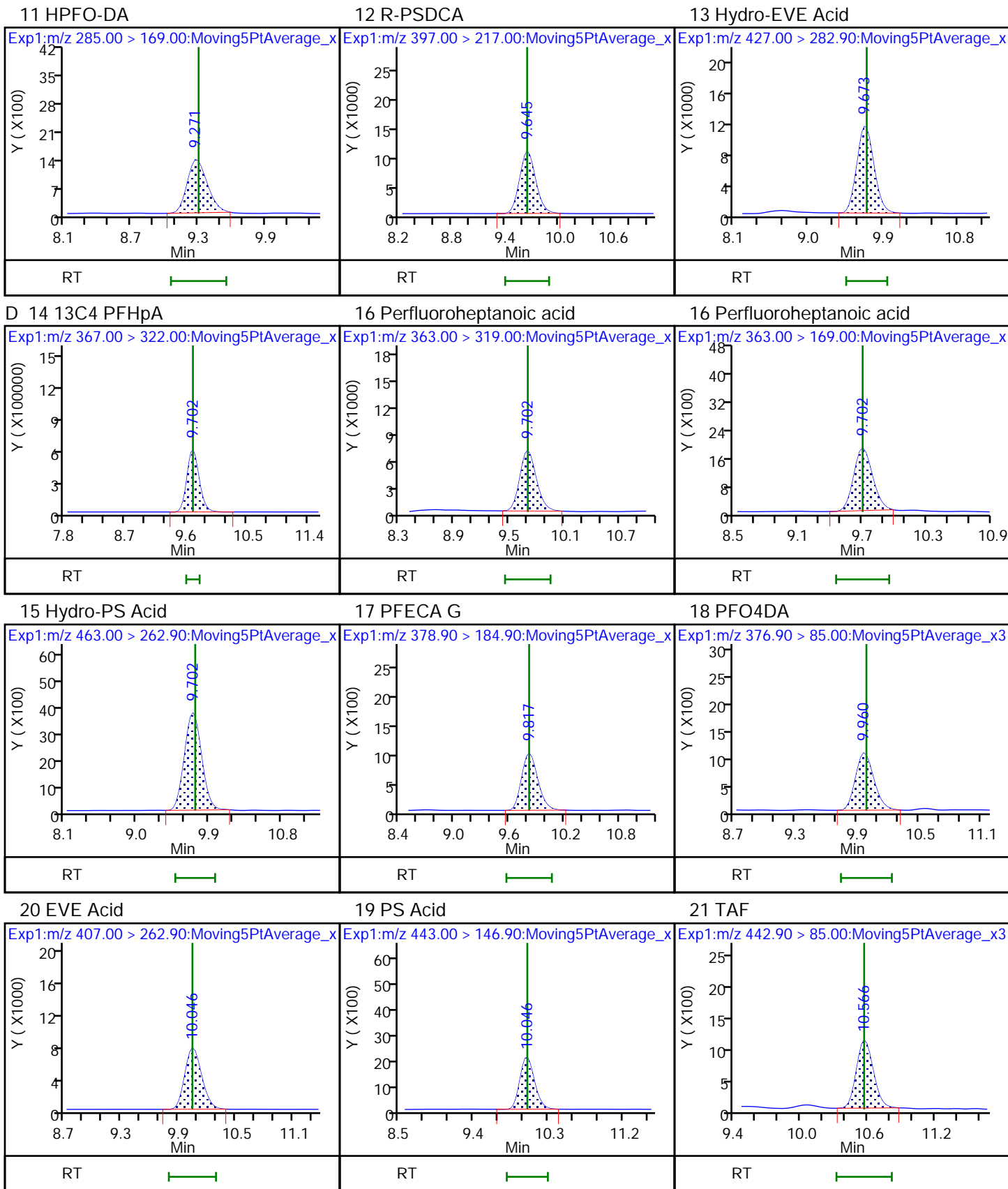
Reagents:

LCTB3_LLSTD2_00048

Amount Added: 1.00

Units: mL





Eurofins TestAmerica, Sacramento

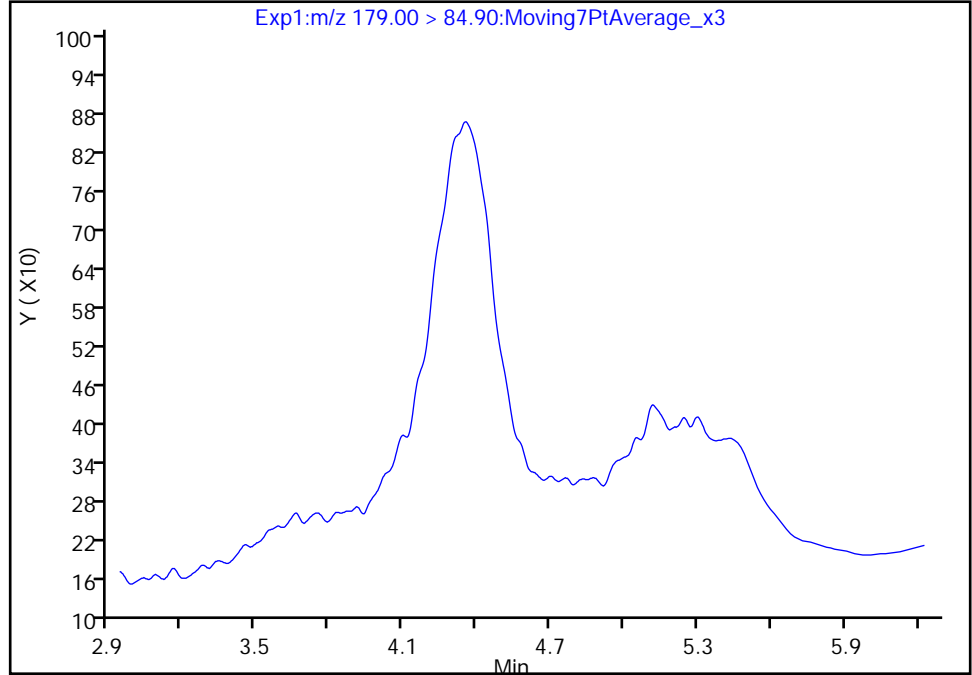
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_004.d
Injection Date: 08-Mar-2021 15:03:32 Instrument ID: A12
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 4 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

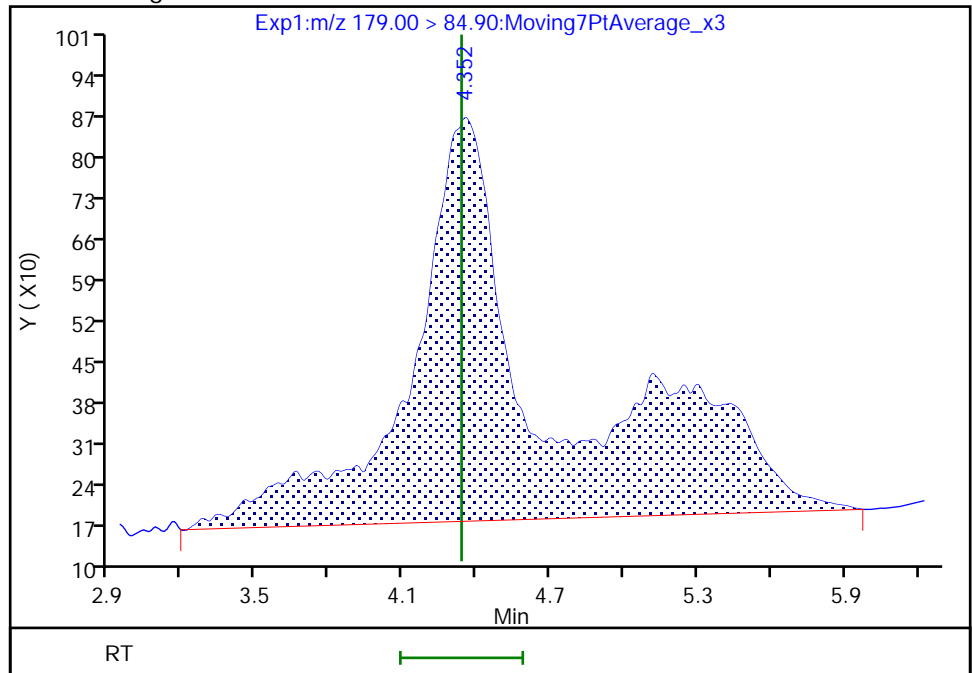
Not Detected
Expected RT: 4.34

Processing Integration Results



Manual Integration Results

RT: 4.35
Area: 27629
Amount: 0.002461
Amount Units: ng/ml



Reviewer: fariasa, 09-Mar-2021 06:34:06
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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Eurofins TestAmerica, Sacramento

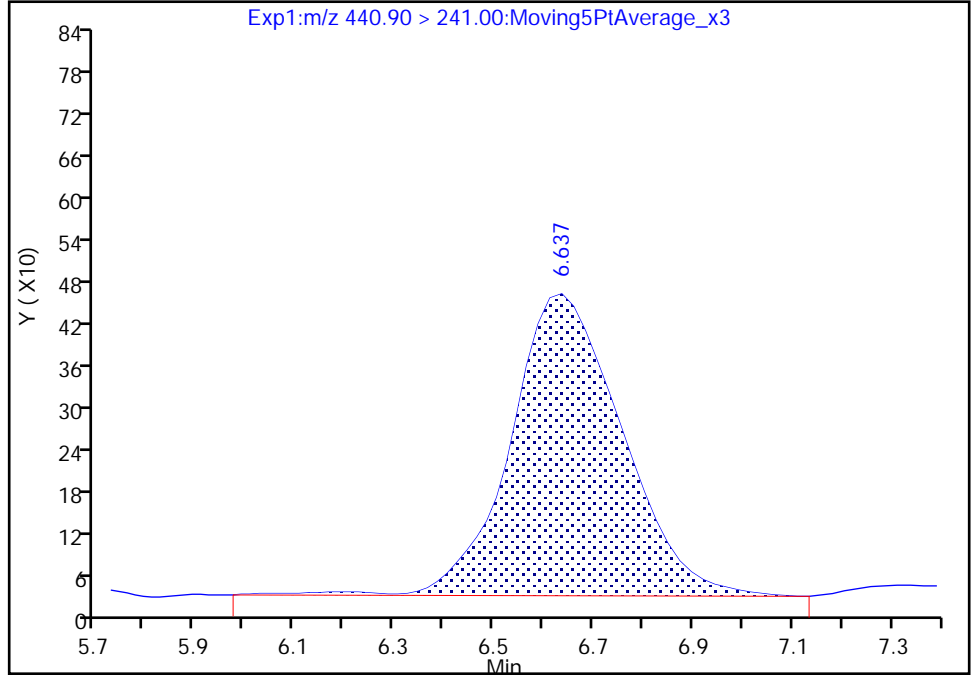
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_004.d
Injection Date: 08-Mar-2021 15:03:32 Instrument ID: A12
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 4 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

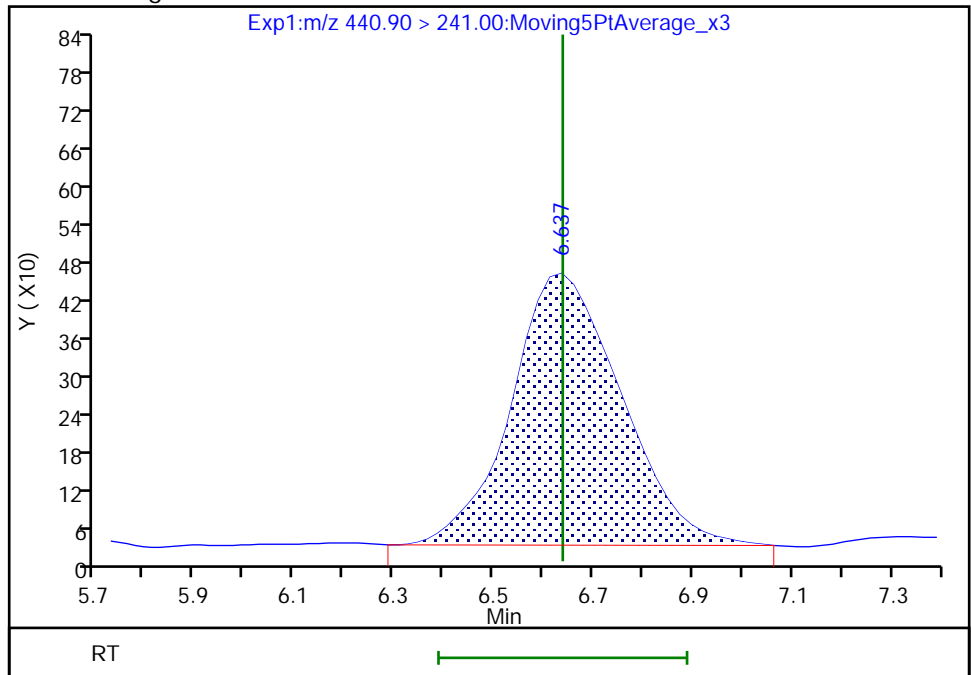
RT: 6.64
Area: 6762
Amount: 0.002435
Amount Units: ng/ml

Processing Integration Results



RT: 6.64
Area: 6628
Amount: 0.002473
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Sacramento

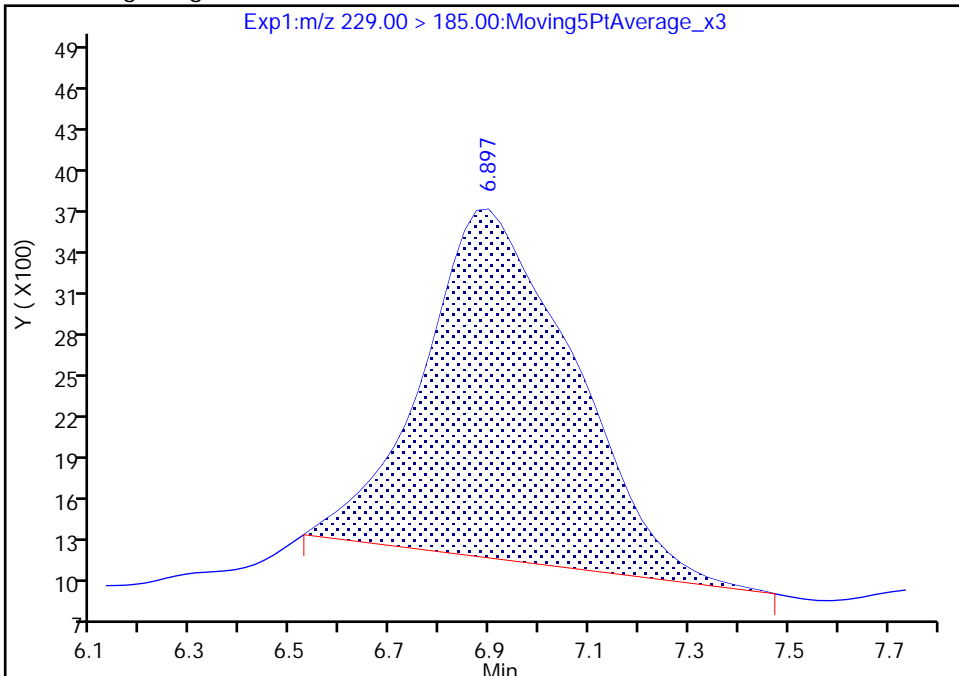
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_004.d
Injection Date: 08-Mar-2021 15:03:32 Instrument ID: A12
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 4 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

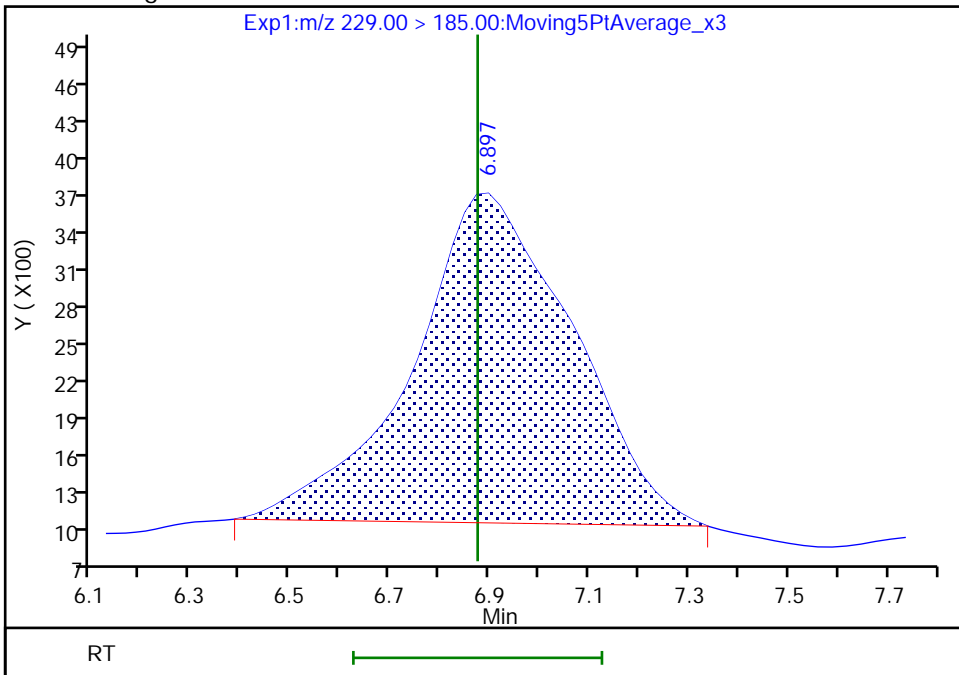
RT: 6.90
Area: 52637
Amount: 0.002741
Amount Units: ng/ml

Processing Integration Results



RT: 6.90
Area: 58246
Amount: 0.003386
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 09-Mar-2021 06:34:20
Audit Action: Manually Integrated

Audit Reason: Baseline
Page 156 of 428

Eurofins TestAmerica, Sacramento

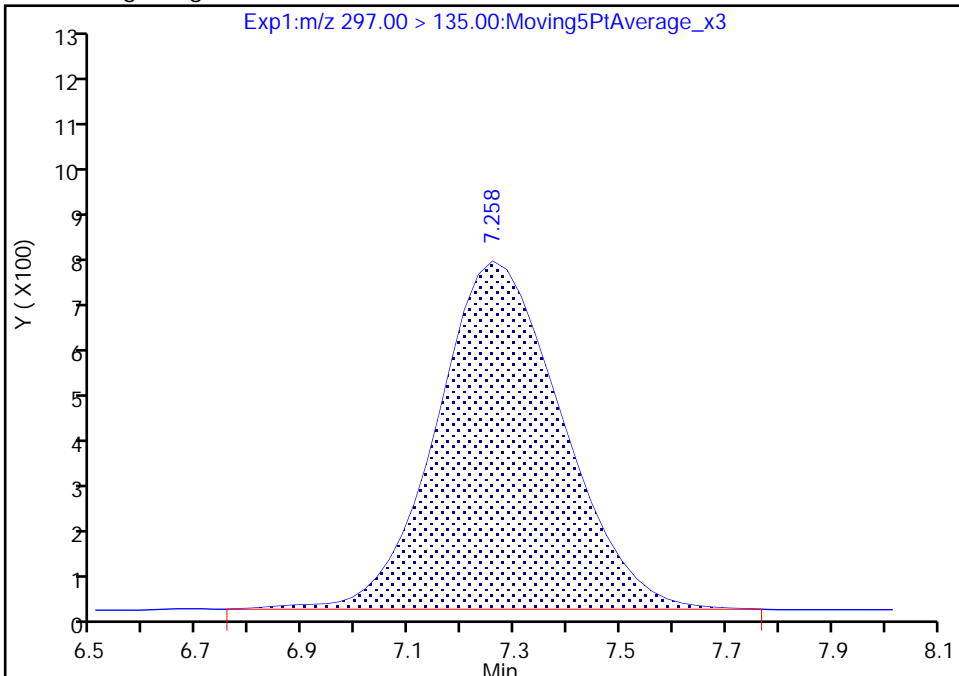
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 Injection Date: 08-Mar-2021 15:03:32 Instrument ID: A12
 Lims ID: IC STD 2
 Client ID:
 Operator ID: Sac_inst_A12 ALS Bottle#: 4 Worklist Smp#: 3
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
 Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

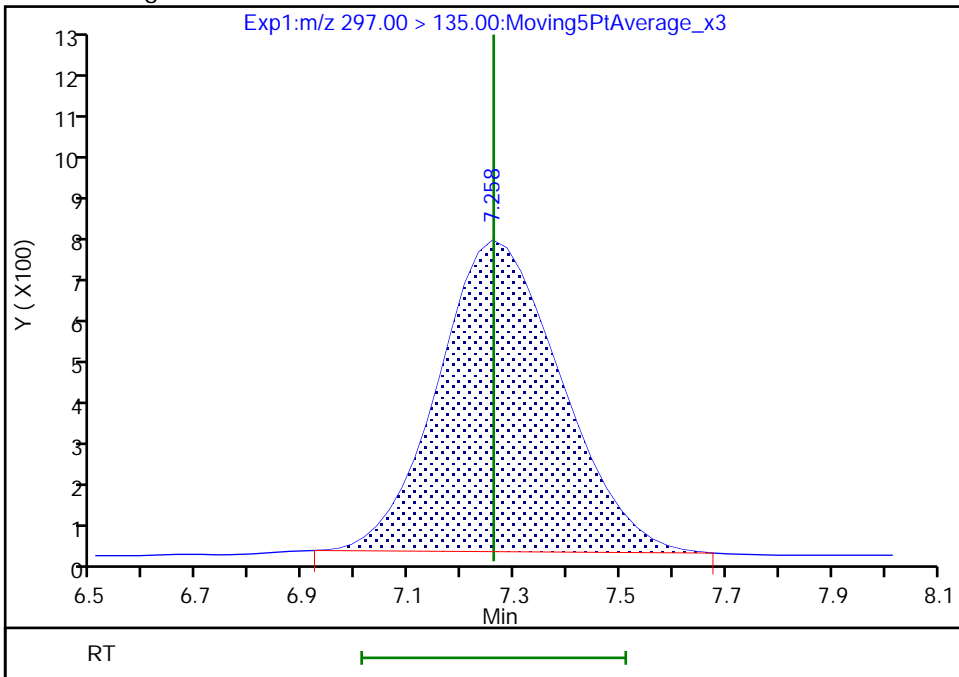
RT: 7.26
 Area: 12055
 Amount: 0.002268
 Amount Units: ng/ml

Processing Integration Results



RT: 7.26
 Area: 11680
 Amount: 0.002204
 Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 09-Mar-2021 06:34:27
 Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_005.d
 Lims ID: IC STD 3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 08-Mar-2021 15:21:14 ALS Bottle#: 5 Worklist Smp#: 4
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 3 (48)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 09-Mar-2021 07:05:12 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1636

First Level Reviewer: kwongg Date: 08-Mar-2021 16:16:38

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.404	4.337	0.067		56162	0.005003		100	12.3	M
2 R-EVE										
405.00 > 217.00	6.566	6.591	-0.025		29352	0.004963		99.3	386	
3 R-PSDA										M
440.90 > 241.00	6.613	6.639	-0.026		12788	0.004772		95.4	176	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.684	6.710	-0.026		50803	0.005031		101	791	
23 PMPA										
229.00 > 185.00	6.874	6.876	-0.002		94290	0.005482		110	73.6	
5 NVHOS										
297.00 > 135.00	7.232	7.260	-0.028		26256	0.004954		99.1	564	
6 PFO2HxA										
245.00 > 85.00	7.798	7.862	-0.064		63912	0.005077		102	695	
22 PEPA										
278.90 > 234.90	8.399	8.431	-0.032		26099	0.005069		101	104	
7 PES										
314.90 > 135.00	8.653	8.715	-0.062		89139	0.005021		100	2212	
8 PFECA B										
295.00 > 201.00	8.890	8.925	-0.035		46743	0.005436		109	877	
9 PFO3OA										
310.90 > 85.00	9.130	9.190	-0.060		16989	0.005010		100	460	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.243	9.274	-0.031		1642244	0.2597		104	32811	
11 HPFO-DA										
285.00 > 169.00	9.243	9.302	-0.059	1.000	31304	0.004624		92.5	837	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.616	9.644	-0.028		283369	0.005600		112	7374	
13 Hydro-EVE Acid										
427.00 > 282.90	9.645	9.701	-0.056		347626	0.005330		107	2194	
D 14 13C4 PFHpA										
367.00 > 322.00	9.645	9.701	-0.056		7324674	0.2700		108	95593	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.673	9.701	-0.028	1.003	153628	0.004774	Target=0.00	95.5	805	
363.00 > 169.00	9.673	9.701	-0.028	1.003	44032		3.49(0.00-0.00)	95.5	872	
15 Hydro-PS Acid										
463.00 > 262.90	9.673	9.730	-0.057		118867	0.005040		101	2622	
17 PFECA G										
378.90 > 184.90	9.788	9.816	-0.028		22903	0.005070		101	621	
18 PFO4DA										
376.90 > 85.00	9.932	9.988	-0.056		28703	0.005526		111	585	
20 EVE Acid										
407.00 > 262.90	10.018	10.046	-0.028		199662	0.005195		104	5413	
19 PS Acid										
443.00 > 146.90	9.989	10.046	-0.057		54303	0.005229		105	1450	
21 TAF										
442.90 > 85.00	10.519	10.565	-0.046		20779	0.004739		94.8	164	

QC Flag Legend

Processing Flags

Review Flags

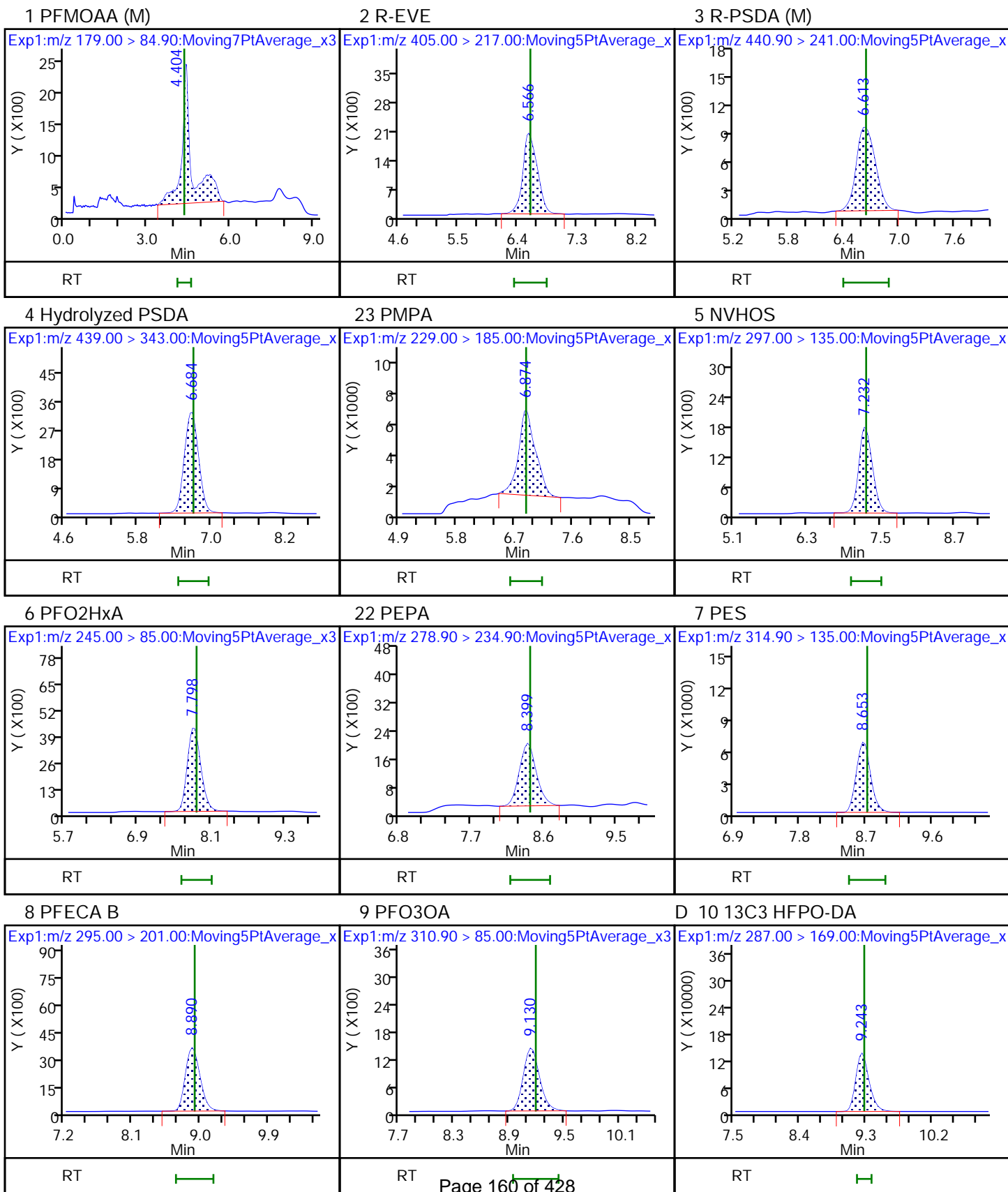
M - Manually Integrated

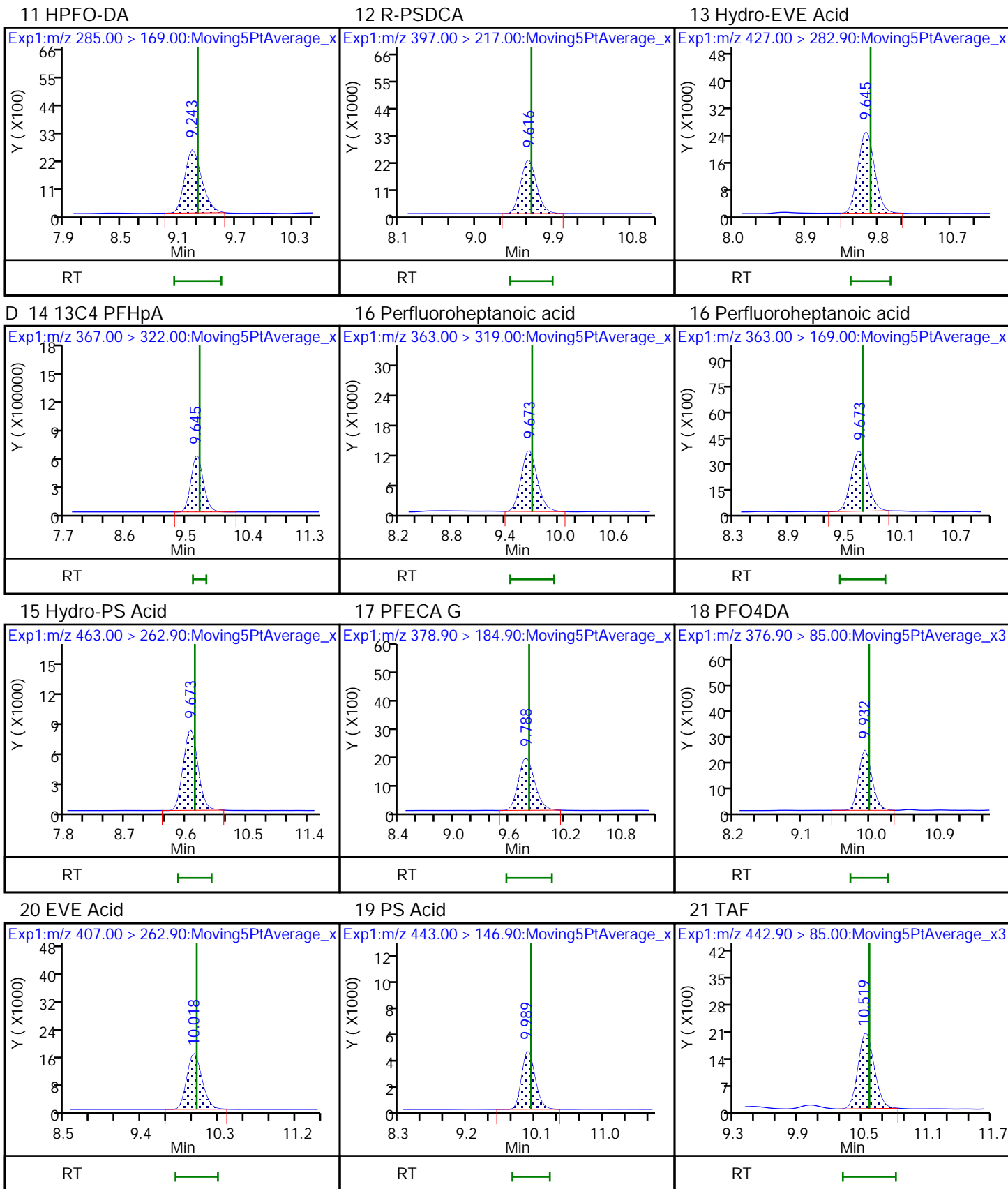
Reagents:

LCTB3_LLSTD3_00048

Amount Added: 1.00

Units: mL





Eurofins TestAmerica, Sacramento

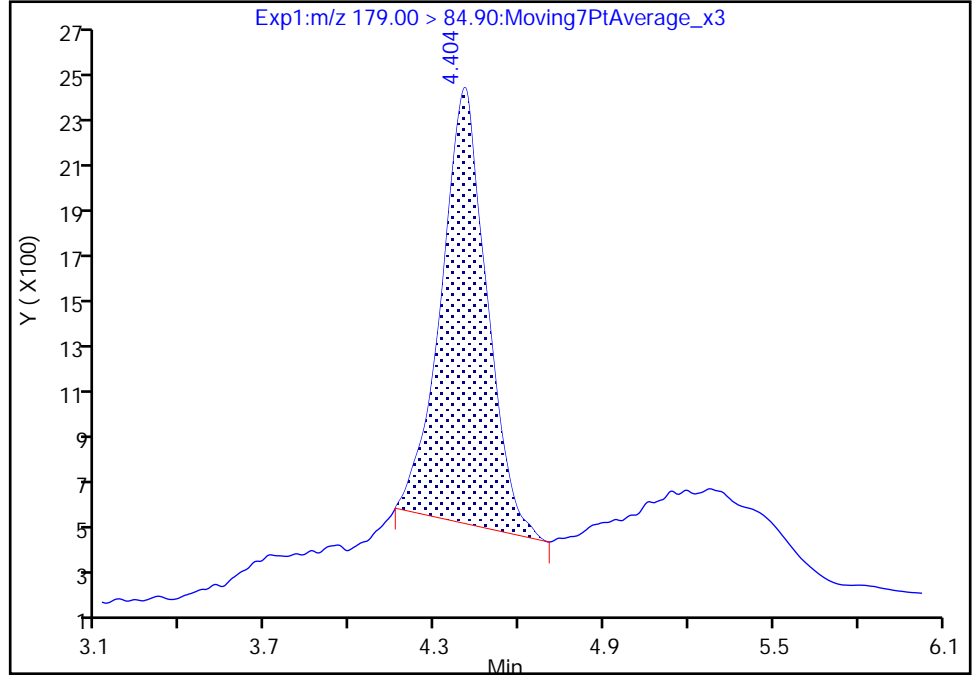
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_005.d
Injection Date: 08-Mar-2021 15:21:14 Instrument ID: A12
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 5 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

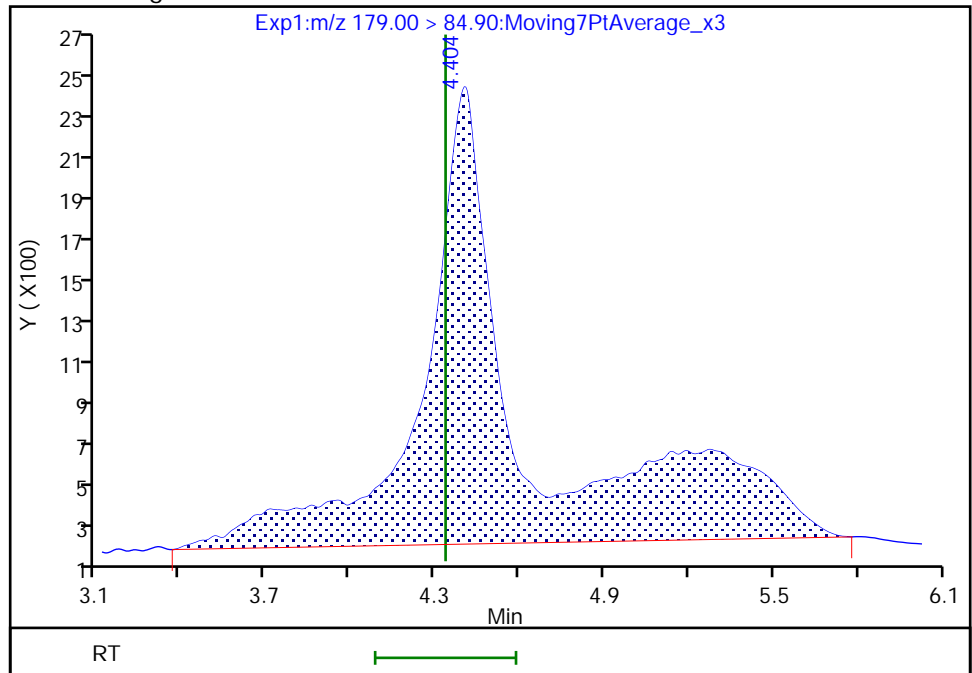
RT: 4.40
Area: 21177
Amount: 0.002694
Amount Units: ng/ml

Processing Integration Results



RT: 4.40
Area: 56162
Amount: 0.005003
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 09-Mar-2021 06:34:56
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento

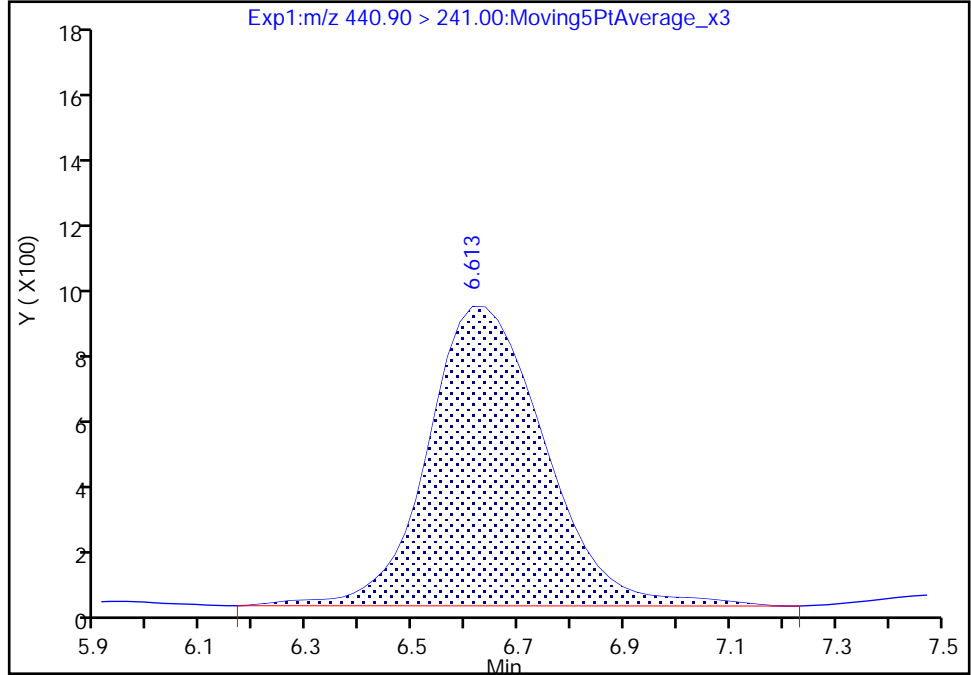
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_005.d
Injection Date: 08-Mar-2021 15:21:14 Instrument ID: A12
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 5 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

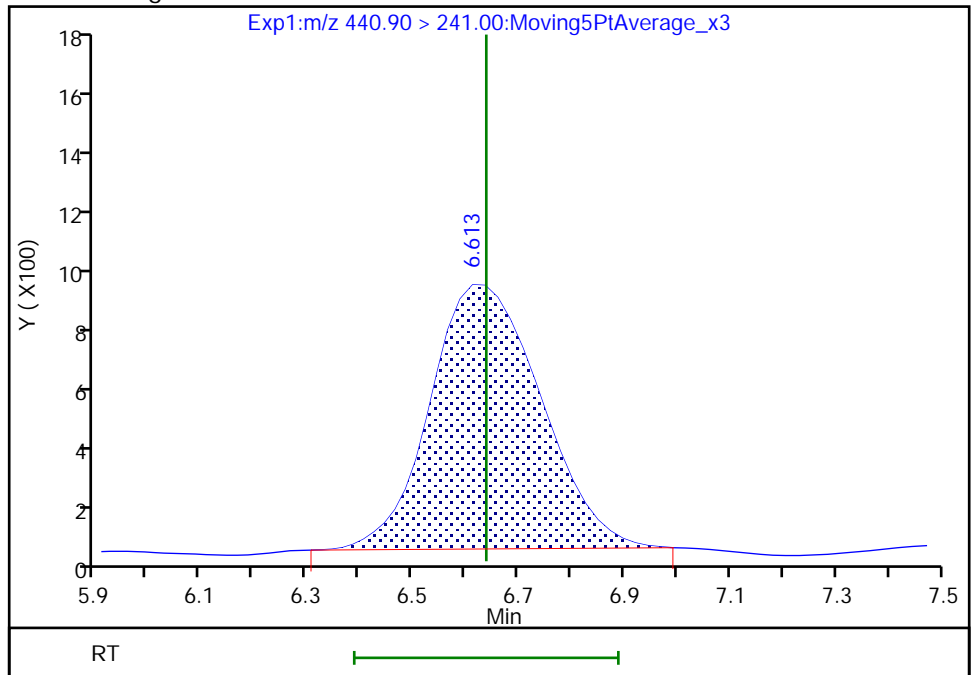
RT: 6.61
Area: 13917
Amount: 0.005022
Amount Units: ng/ml

Processing Integration Results



RT: 6.61
Area: 12788
Amount: 0.004772
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 09-Mar-2021 06:35:09
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfms\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_006.d
 Lims ID: IC STD 4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 08-Mar-2021 15:38:50 ALS Bottle#: 6 Worklist Smp#: 5
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 4 (47)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfms\Sacramento\ChromData\A12\20210308-114652.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 09-Mar-2021 07:05:13 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfms\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1636

First Level Reviewer: kwongg Date: 08-Mar-2021 17:04:04

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.079	4.337	-0.258		110698	0.009861		98.6	9.5	M
2 R-EVE										
405.00 > 217.00	6.528	6.591	-0.063		61641	0.0104		104	967	
3 R-PSDA										M
440.90 > 241.00	6.568	6.639	-0.071		26704	0.0100		99.6	325	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.639	6.710	-0.071		104805	0.0104		104	1466	
23 PMPA										
229.00 > 185.00	6.829	6.876	-0.047		188799	0.0110		110	124	
5 NVHOS										
297.00 > 135.00	7.208	7.260	-0.052		55286	0.0104		104	968	
6 PFO2HxA										
245.00 > 85.00	7.800	7.862	-0.062		129242	0.0103		103	1289	
22 PEPA										
278.90 > 234.90	8.398	8.431	-0.033		54842	0.0107		107	218	
7 PES										
314.90 > 135.00	8.649	8.715	-0.066		169587	0.009552		95.5	4113	
8 PFECA B										
295.00 > 201.00	8.891	8.925	-0.034		89105	0.0104		104	1666	
9 PFO3OA										
310.90 > 85.00	9.130	9.190	-0.060		36295	0.0107		107	729	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.243	9.274	-0.031		1658891	0.2623		105	43982	
11 HPFO-DA										
285.00 > 169.00	9.243	9.302	-0.059	1.000	70048	0.0102		102	1852	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.617	9.644	-0.027		564909	0.0112		112	14805	
13 Hydro-EVE Acid										
427.00 > 282.90	9.645	9.701	-0.056		699286	0.0107		107	4038	
D 14 13C4 PFHpA										
367.00 > 322.00	9.674	9.701	-0.027		7271138	0.2680		107	95835	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.674	9.701	-0.027	1.000	301416	0.009436	Target=0.00	94.4	1409	
363.00 > 169.00	9.674	9.701	-0.027	1.000	84739		3.56(0.00-0.00)	94.4	1355	
15 Hydro-PS Acid										
463.00 > 262.90	9.674	9.730	-0.056		244201	0.0104		104	5410	
17 PFECA G										
378.90 > 184.90	9.789	9.816	-0.027		48620	0.0108		108	1311	
18 PFO4DA										
376.90 > 85.00	9.932	9.988	-0.056		56911	0.0110		110	1157	
20 EVE Acid										
407.00 > 262.90	10.018	10.046	-0.028		425539	0.0111		111	8722	
19 PS Acid										
443.00 > 146.90	10.018	10.046	-0.028		109802	0.0106		106	2994	
21 TAF										
442.90 > 85.00	10.543	10.565	-0.022		48252	0.0110		110	383	

QC Flag Legend

Processing Flags

Review Flags

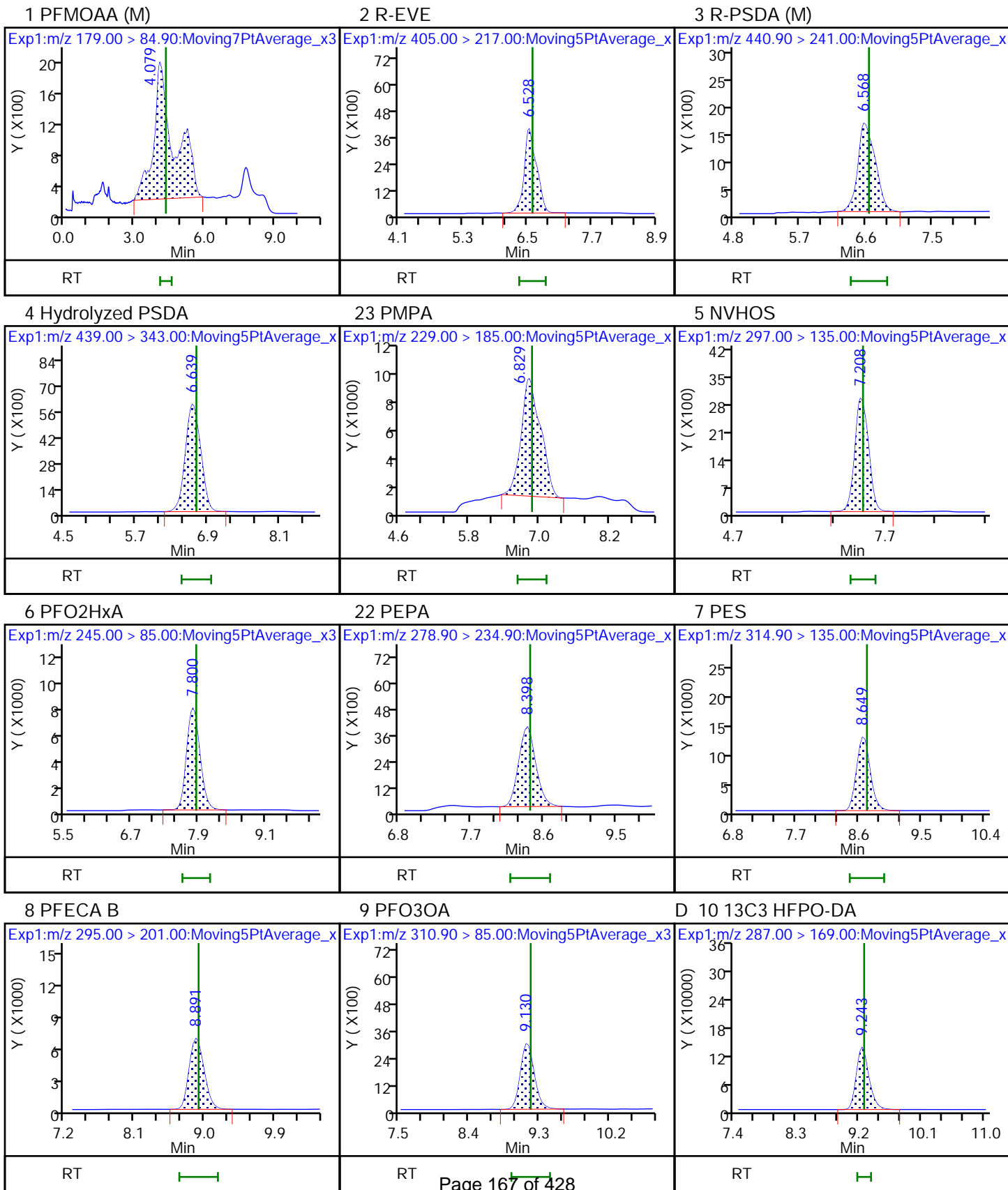
M - Manually Integrated

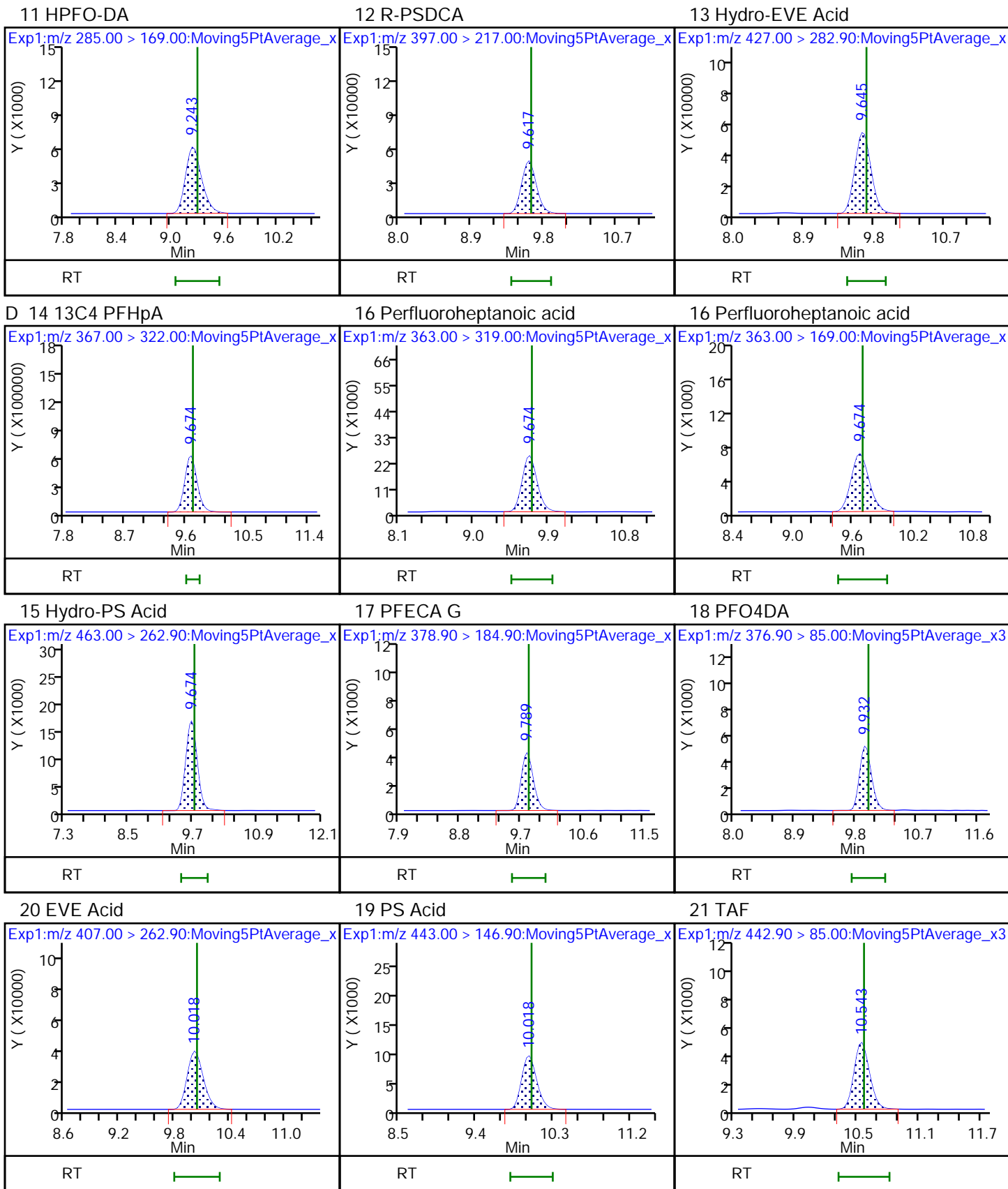
Reagents:

LCTB3_LLSTD4_00047

Amount Added: 1.00

Units: mL





Eurofins TestAmerica, Sacramento

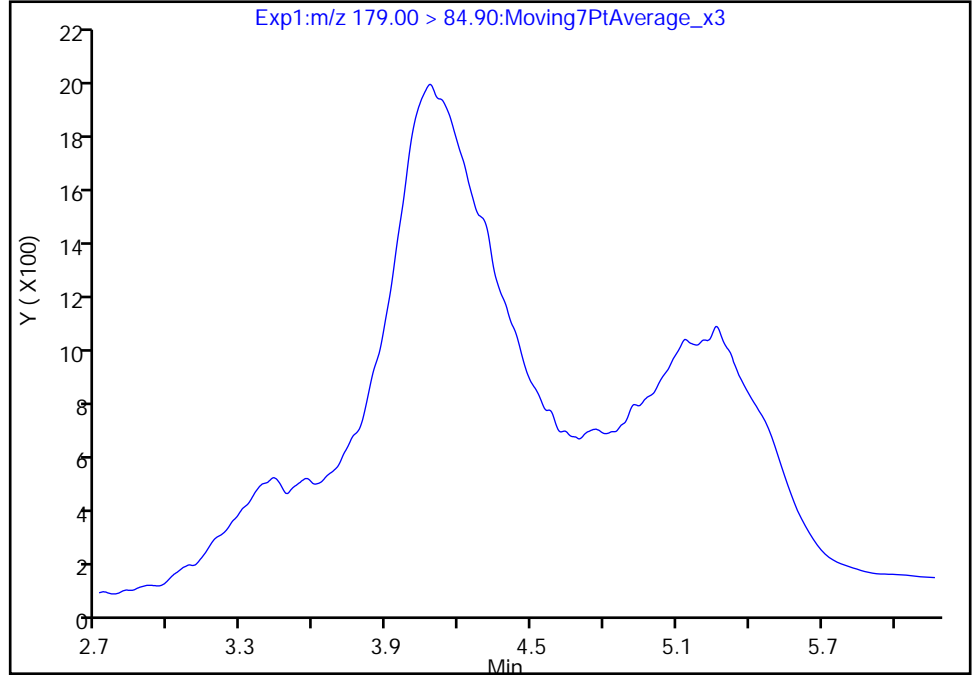
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_006.d
Injection Date: 08-Mar-2021 15:38:50 Instrument ID: A12
Lims ID: IC STD 4
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 6 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

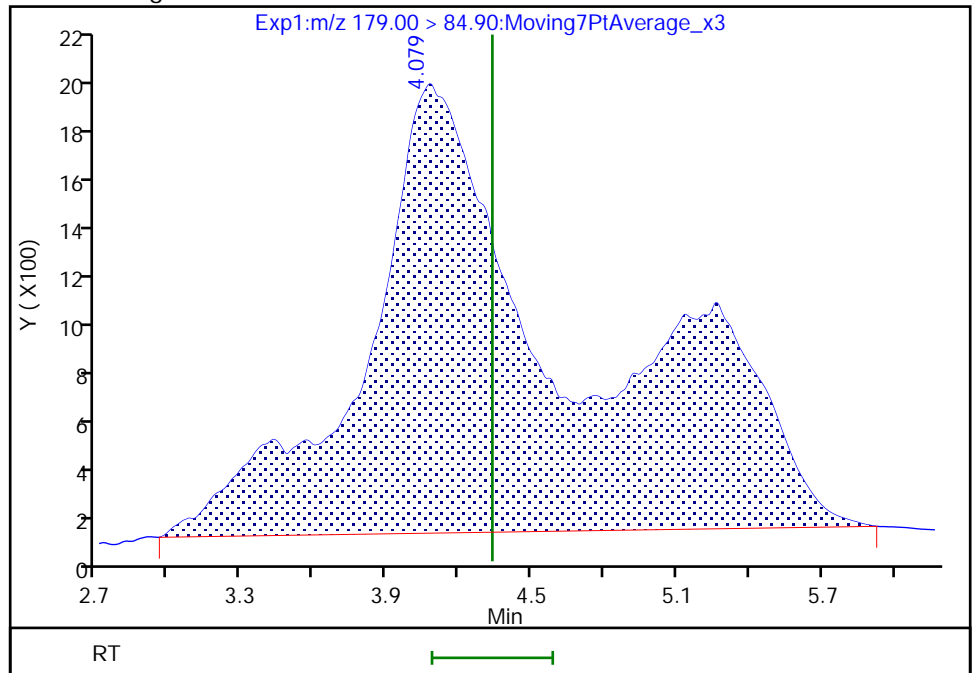
Not Detected
Expected RT: 4.34

Processing Integration Results



RT: 4.08
Area: 110698
Amount: 0.009861
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 09-Mar-2021 06:35:37
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

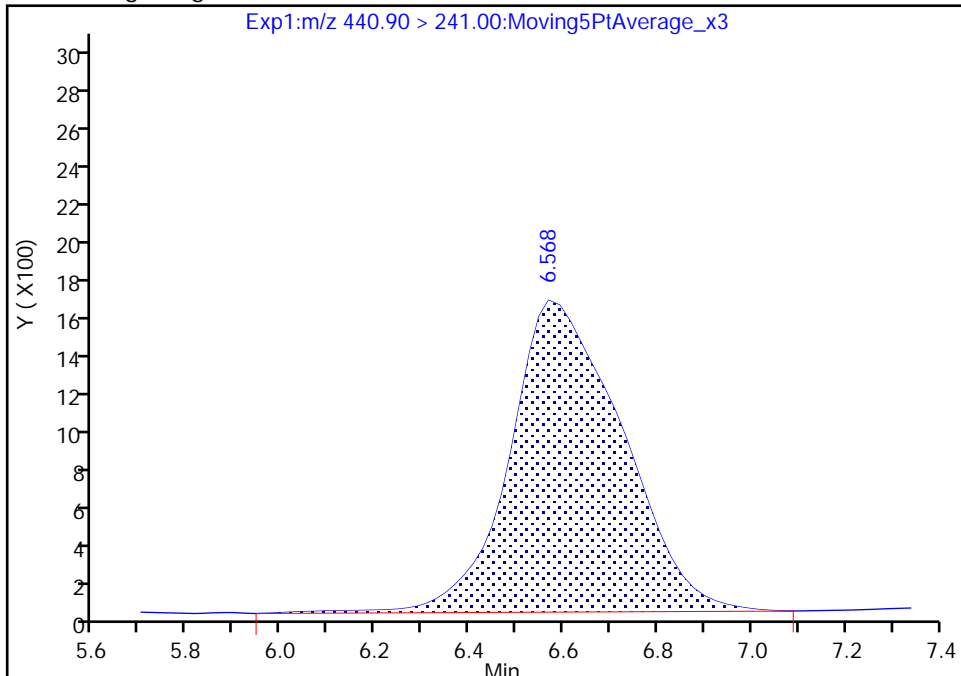
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_006.d
Injection Date: 08-Mar-2021 15:38:50 Instrument ID: A12
Lims ID: IC STD 4
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 6 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

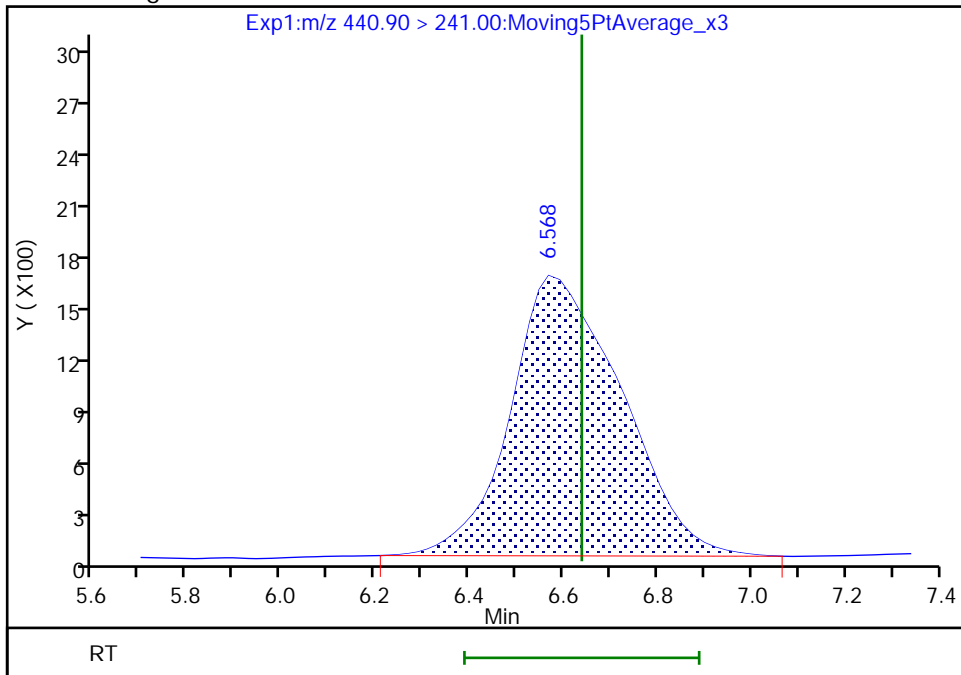
RT: 6.57
Area: 27264
Amount: 0.009918
Amount Units: ng/ml

Processing Integration Results



RT: 6.57
Area: 26704
Amount: 0.009965
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 09-Mar-2021 06:35:49
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_007.d
 Lims ID: IC STD 5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 08-Mar-2021 15:56:37 ALS Bottle#: 7 Worklist Smp#: 6
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 5 (57)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 09-Mar-2021 07:05:14 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1636

First Level Reviewer: fariasa Date: 09-Mar-2021 04:14:39

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.327	4.337	-0.010		284701	0.0254		101	32.6	M
2 R-EVE										
405.00 > 217.00	6.546	6.591	-0.045		153482	0.0260		104	2087	
3 R-PSDA										
440.90 > 241.00	6.613	6.639	-0.026		69516	0.0259		104	1143	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.661	6.710	-0.050		263703	0.0261		104	4056	
23 PMPA										
229.00 > 185.00	6.850	6.876	-0.026		433517	0.0252		101	329	
5 NVHOS										
297.00 > 135.00	7.232	7.260	-0.028		137975	0.0260		104	2775	
6 PFO2HxA										
245.00 > 85.00	7.829	7.862	-0.033		319132	0.0254		101	3330	
22 PEPA										
278.90 > 234.90	8.399	8.431	-0.032		129608	0.0252		101	342	
7 PES										
314.90 > 135.00	8.653	8.715	-0.062		443453	0.0250		99.9	10873	
8 PFECA B										
295.00 > 201.00	8.890	8.925	-0.035		220502	0.0256		103	4111	
9 PFO3OA										
310.90 > 85.00	9.130	9.190	-0.060		90599	0.0267		107	2427	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.243	9.274	-0.031		1618844	0.2560		102	31992	
11 HPFO-DA										
285.00 > 169.00	9.243	9.302	-0.059	1.000	162686	0.0244		97.5	4274	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.616	9.644	-0.028		1390007	0.0275		110	26976	
13 Hydro-EVE Acid										
427.00 > 282.90	9.645	9.701	-0.056		1753131	0.0269		108	10953	
D 14 13C4 PFHpA										
367.00 > 322.00	9.673	9.701	-0.028		7084163	0.2611		104	110475	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.673	9.701	-0.028	1.000	743214	0.0239	Target=0.00	95.5	2776	
363.00 > 169.00	9.673	9.701	-0.028	1.000	203029		3.66(0.00-0.00)	95.5	3971	
15 Hydro-PS Acid										
463.00 > 262.90	9.673	9.730	-0.057		609055	0.0258		103	13393	
17 PFECA G										
378.90 > 184.90	9.788	9.816	-0.028		121727	0.0269		108	3264	
18 PFO4DA										
376.90 > 85.00	9.932	9.988	-0.056		147649	0.0284		114	2979	
20 EVE Acid										
407.00 > 262.90	10.018	10.046	-0.028		1024800	0.0267		107	20685	
19 PS Acid										
443.00 > 146.90	10.018	10.046	-0.028		277703	0.0267		107	7425	
21 TAF										
442.90 > 85.00	10.519	10.565	-0.046		116421	0.0266		106	781	

QC Flag Legend

Processing Flags

Review Flags

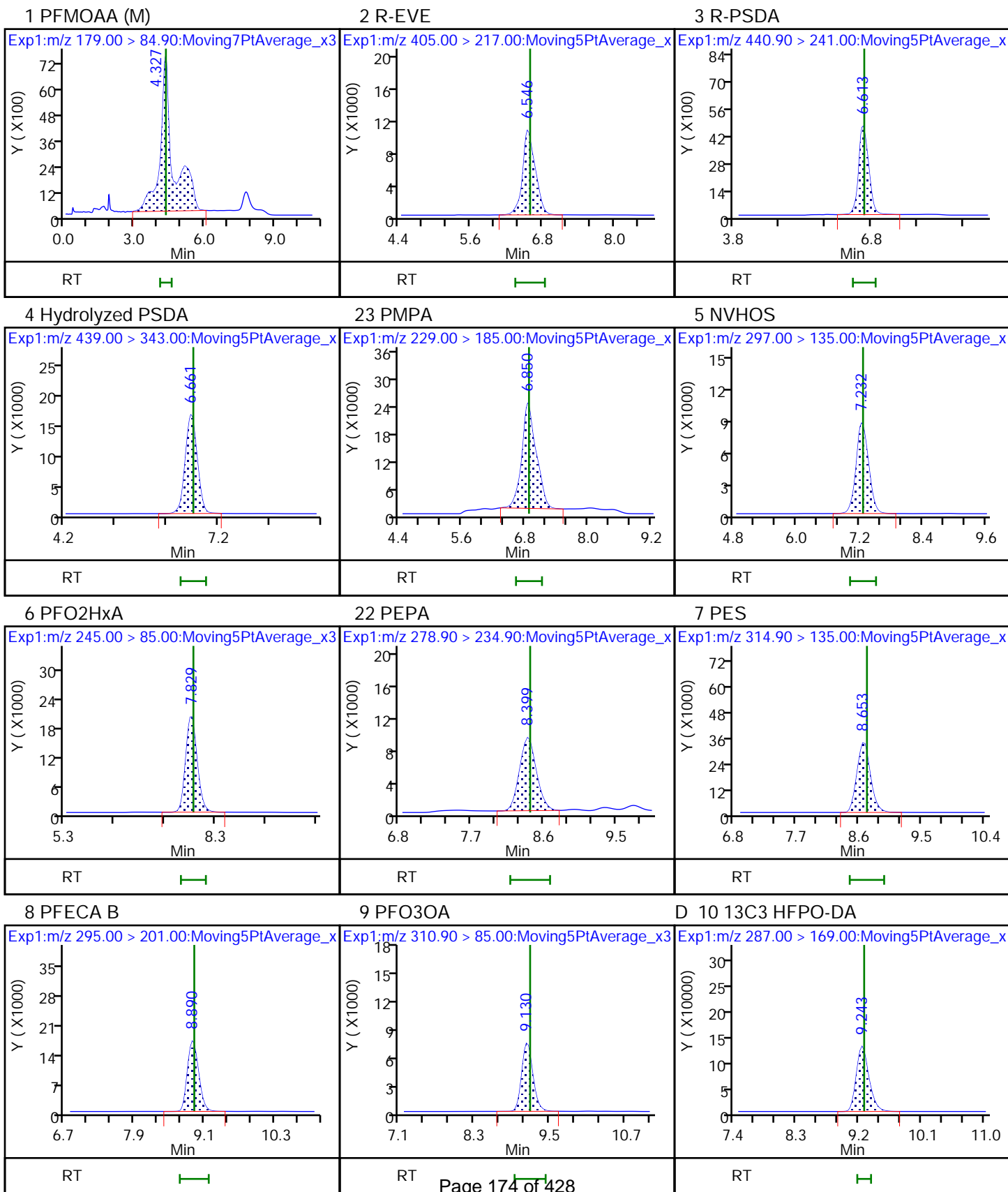
M - Manually Integrated

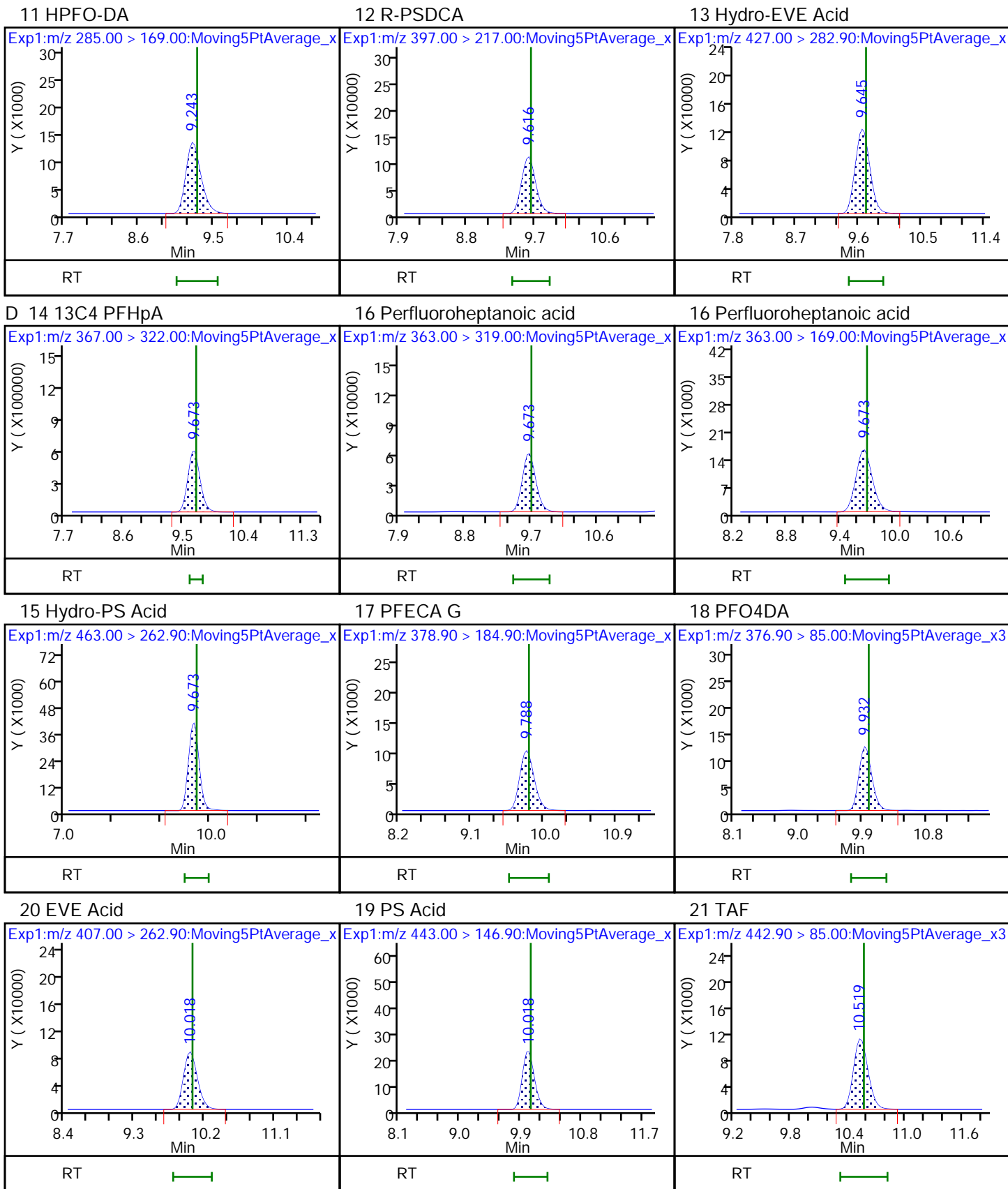
Reagents:

LCTB3_LLSTD5_00057

Amount Added: 1.00

Units: mL





Eurofins TestAmerica, Sacramento

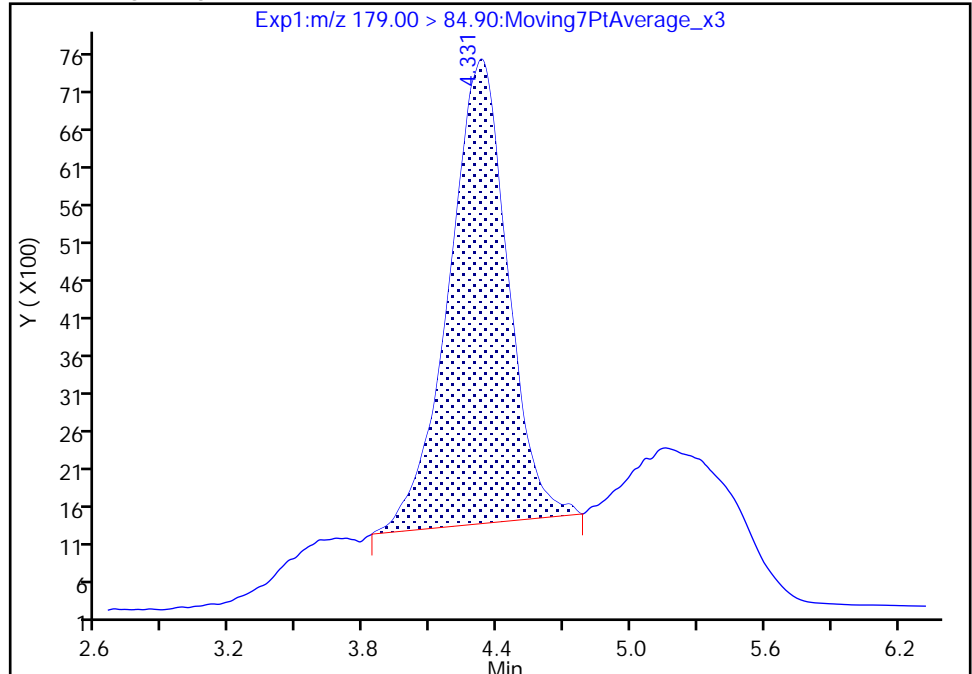
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_007.d
Injection Date: 08-Mar-2021 15:56:37 Instrument ID: A12
Lims ID: IC STD 5
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 7 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

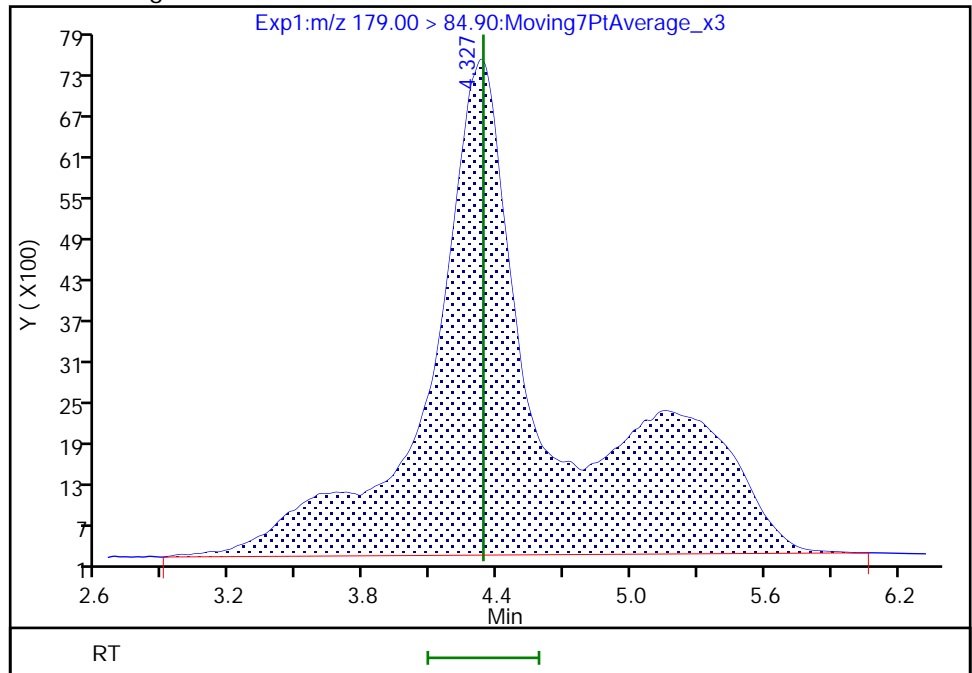
RT: 4.33
Area: 113239
Amount: 0.021664
Amount Units: ng/ml

Processing Integration Results



RT: 4.33
Area: 284701
Amount: 0.025361
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 09-Mar-2021 04:09:30
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_009.d
 Lims ID: IC STD 6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 08-Mar-2021 16:32:00 ALS Bottle#: 9 Worklist Smp#: 8
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 6 (90)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 09-Mar-2021 07:05:15 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1636

First Level Reviewer: fariasa Date: 09-Mar-2021 06:36:25

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.346	4.337	0.009		527133	0.0470		93.9	94.9	M
2 R-EVE										
405.00 > 217.00	6.549	6.591	-0.042		285284	0.0482		96.5	3850	
3 R-PSDA										
440.90 > 241.00	6.616	6.639	-0.023		123602	0.0461		92.2	1621	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.663	6.710	-0.047		481065	0.0476		95.3	7579	
23 PMPA										
229.00 > 185.00	6.853	6.876	-0.023		792575	0.0461		92.2	757	
5 NVHOS										
297.00 > 135.00	7.235	7.260	-0.025		251340	0.0474		94.9	5450	
6 PFO2HxA										
245.00 > 85.00	7.832	7.862	-0.030		595321	0.0473		94.6	6490	
22 PEPA										
278.90 > 234.90	8.400	8.431	-0.031		260244	0.0505		101	1134	
7 PES										
314.90 > 135.00	8.683	8.715	-0.033		808659	0.0455		91.1	20346	
8 PFECA B										
295.00 > 201.00	8.892	8.925	-0.033		407038	0.0473		94.7	7590	
9 PFO3OA										
310.90 > 85.00	9.160	9.190	-0.030		159509	0.0470		94.1	3222	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.245	9.274	-0.029		1700605	0.2689		108	44908	
11 HPFO-DA										
285.00 > 169.00	9.273	9.302	-0.029	1.003	310204	0.0442		88.5	8154	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.618	9.644	-0.026		2396230	0.0474		94.7	37901	
13 Hydro-EVE Acid										
427.00 > 282.90	9.647	9.701	-0.054		3123853	0.0479		95.8	16679	
D 14 13C4 PFHpA										
367.00 > 322.00	9.676	9.701	-0.025		6480776	0.2389		95.5	86457	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.676	9.701	-0.025	1.000	1260231	0.0443	Target=0.00	88.5	5636	
363.00 > 169.00	9.676	9.701	-0.025	1.000	366169		3.44(0.00-0.00)	88.5	7405	
15 Hydro-PS Acid										
463.00 > 262.90	9.676	9.730	-0.054		1093259	0.0464		92.7	24155	
17 PFECA G										
378.90 > 184.90	9.790	9.816	-0.026		202591	0.0448		89.7	5503	
18 PFO4DA										
376.90 > 85.00	9.934	9.988	-0.054		249708	0.0481		96.1	5110	
20 EVE Acid										
407.00 > 262.90	10.020	10.046	-0.026		1891224	0.0492		98.4	31033	
19 PS Acid										
443.00 > 146.90	10.020	10.046	-0.026		492991	0.0475		94.9	13505	
21 TAF										
442.90 > 85.00	10.545	10.565	-0.020		204623	0.0467		93.3	1157	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD6_00090

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_009.d

Injection Date: 08-Mar-2021 16:32:00

Instrument ID: A12

Lims ID: IC STD 6

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 9

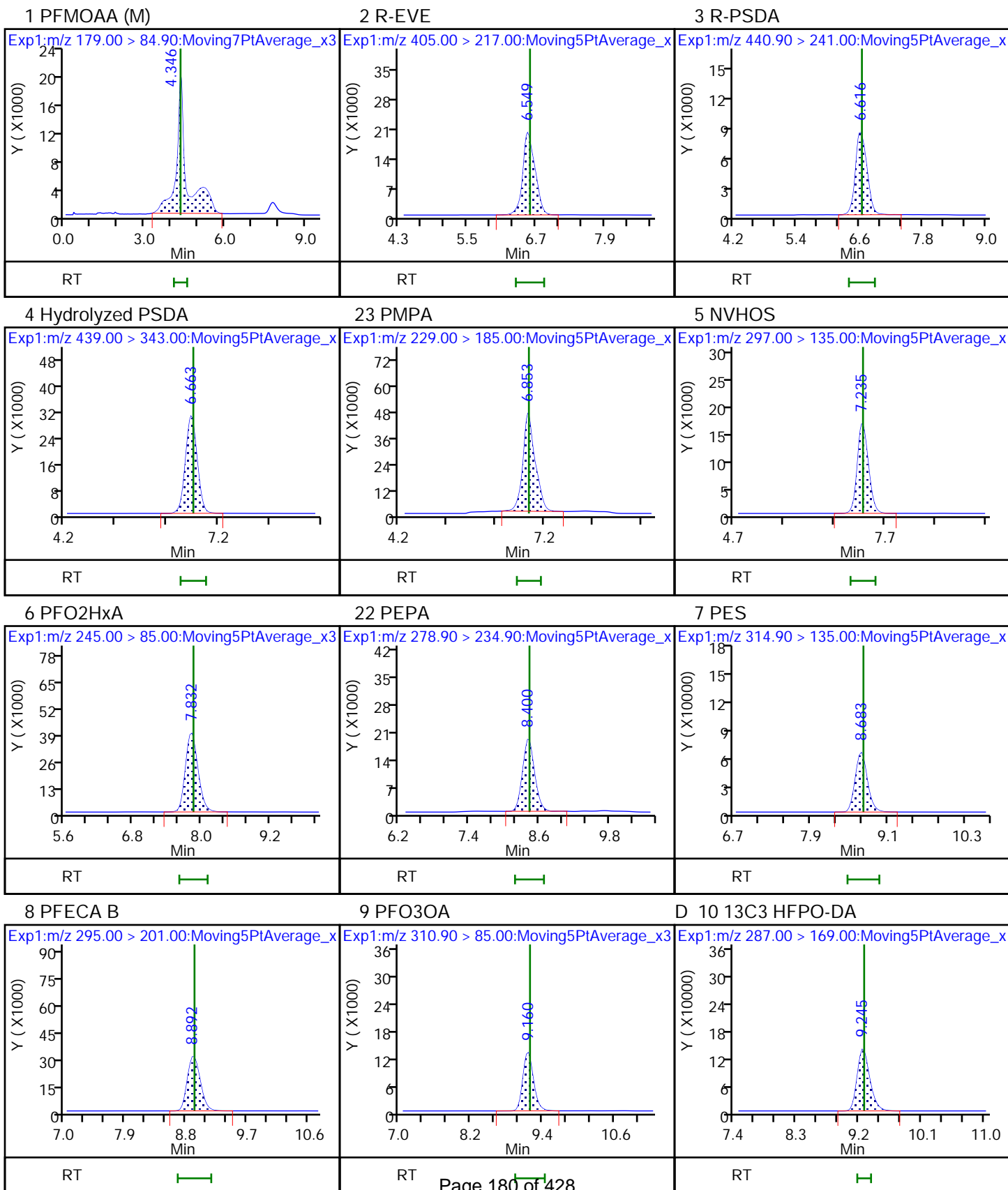
Worklist Smp#: 8

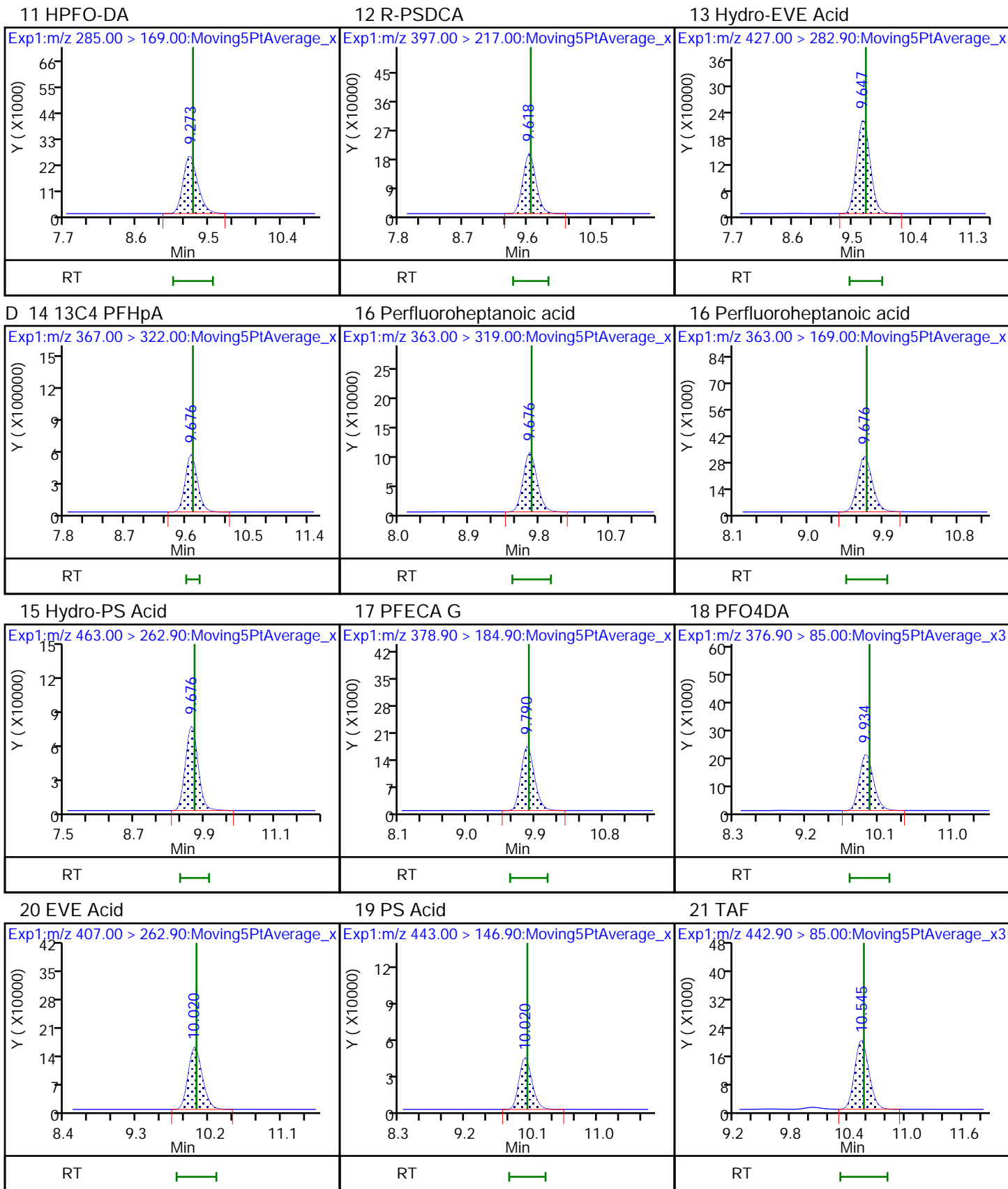
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

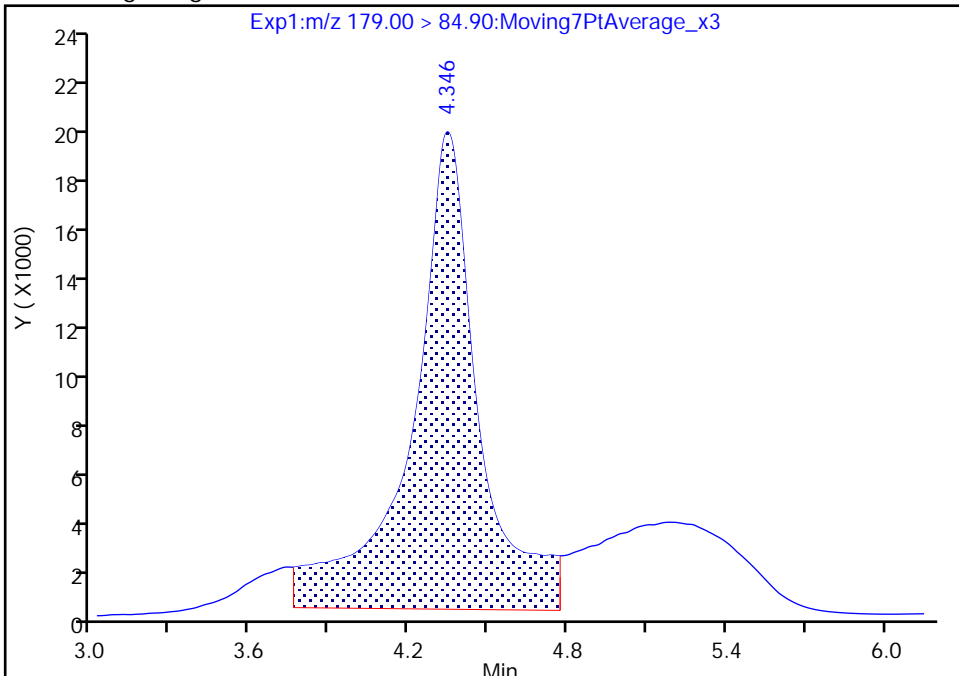
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_009.d
Injection Date: 08-Mar-2021 16:32:00 Instrument ID: A12
Lims ID: IC STD 6
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 9 Worklist Smp#: 8
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

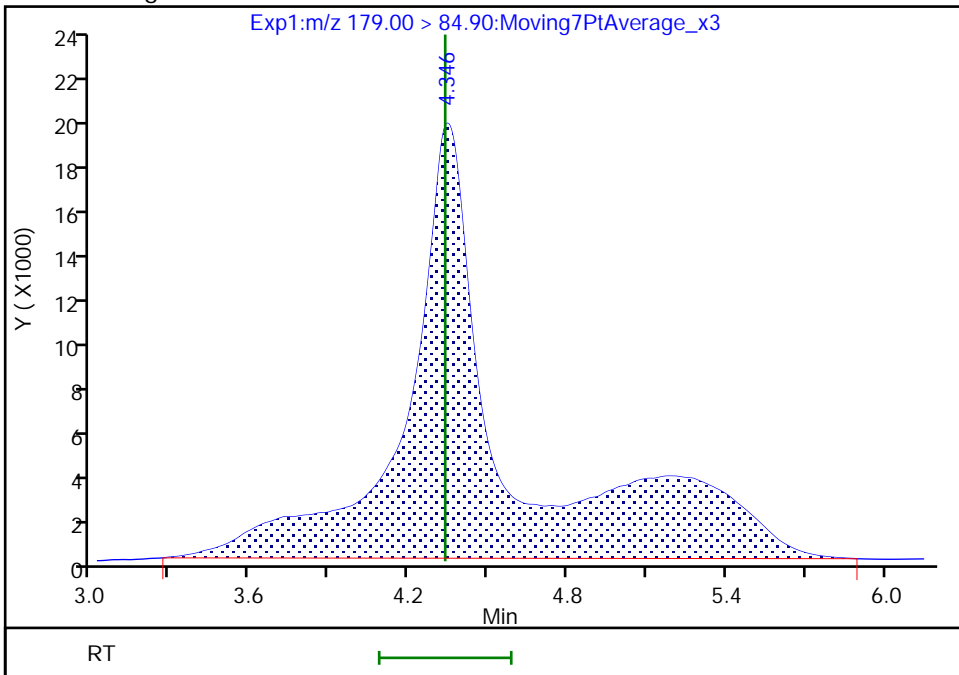
RT: 4.35
Area: 344430
Amount: 0.037700
Amount Units: ng/ml

Processing Integration Results



RT: 4.35
Area: 527133
Amount: 0.046956
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 09-Mar-2021 06:36:11
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_011.d
 Lims ID: IC STD 7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 08-Mar-2021 17:07:09 ALS Bottle#: 11 Worklist Smp#: 10
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 7 (443)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 09-Mar-2021 07:05:16 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1636

First Level Reviewer: fariasa Date: 09-Mar-2021 06:36:47

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.258	4.337	-0.079		1089869	0.0971		97.1	113	M
2 R-EVE										
405.00 > 217.00	6.488	6.591	-0.103		603468	0.1020		102	10416	
3 R-PSDA										
440.90 > 241.00	6.548	6.639	-0.091		277743	0.1036		104	4805	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.615	6.710	-0.095		1019758	0.1010		101	15869	
23 PMPA										
229.00 > 185.00	6.805	6.876	-0.071		1614967	0.0939		93.9	1465	
5 NVHOS										
297.00 > 135.00	7.184	7.260	-0.076		529075	0.0998		99.8	11071	
6 PFO2HxA										
245.00 > 85.00	7.770	7.862	-0.092		1223647	0.0972		97.2	11213	
22 PEPA										
278.90 > 234.90	8.370	8.431	-0.061		518748	0.1008		101	1589	
7 PES										
314.90 > 135.00	8.620	8.715	-0.095		1628577	0.0917		91.7	40091	
8 PFECA B										
295.00 > 201.00	8.860	8.925	-0.065		850192	0.0989		98.9	15958	
9 PFO3OA										
310.90 > 85.00	9.104	9.190	-0.086		355867	0.1049		105	7134	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.217	9.274	-0.058		1522203	0.2407		96.3	30182	
11 HPFO-DA										
285.00 > 169.00	9.217	9.302	-0.086	1.000	644858	0.1028		103	17251	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.557	9.644	-0.087		4852881	0.0959		95.9	61226	
13 Hydro-EVE Acid										
427.00 > 282.90	9.618	9.701	-0.083		6383181	0.0979		97.9	31346	
D 14 13C4 PFHpA										
367.00 > 322.00	9.618	9.701	-0.083		6654143	0.2453		98.1	86491	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.618	9.701	-0.083	1.000	2598671	0.0889	Target=0.00	88.9	7772	
363.00 > 169.00	9.618	9.701	-0.083	1.000	753012		3.45(0.00-0.00)	88.9	14680	
15 Hydro-PS Acid										
463.00 > 262.90	9.647	9.730	-0.083		2267939	0.0962		96.2	37224	
17 PFECA G										
378.90 > 184.90	9.733	9.816	-0.083		440813	0.0976		97.6	11773	
18 PFO4DA										
376.90 > 85.00	9.905	9.988	-0.083		502711	0.0968		96.8	8143	
20 EVE Acid										
407.00 > 262.90	9.991	10.046	-0.055		3982692	0.1036		104	53392	
19 PS Acid										
443.00 > 146.90	9.962	10.046	-0.084		1039141	0.1001		100	21304	
21 TAF										
442.90 > 85.00	10.497	10.565	-0.068		436127	0.0995		99.5	1957	

QC Flag Legend

Processing Flags

Review Flags

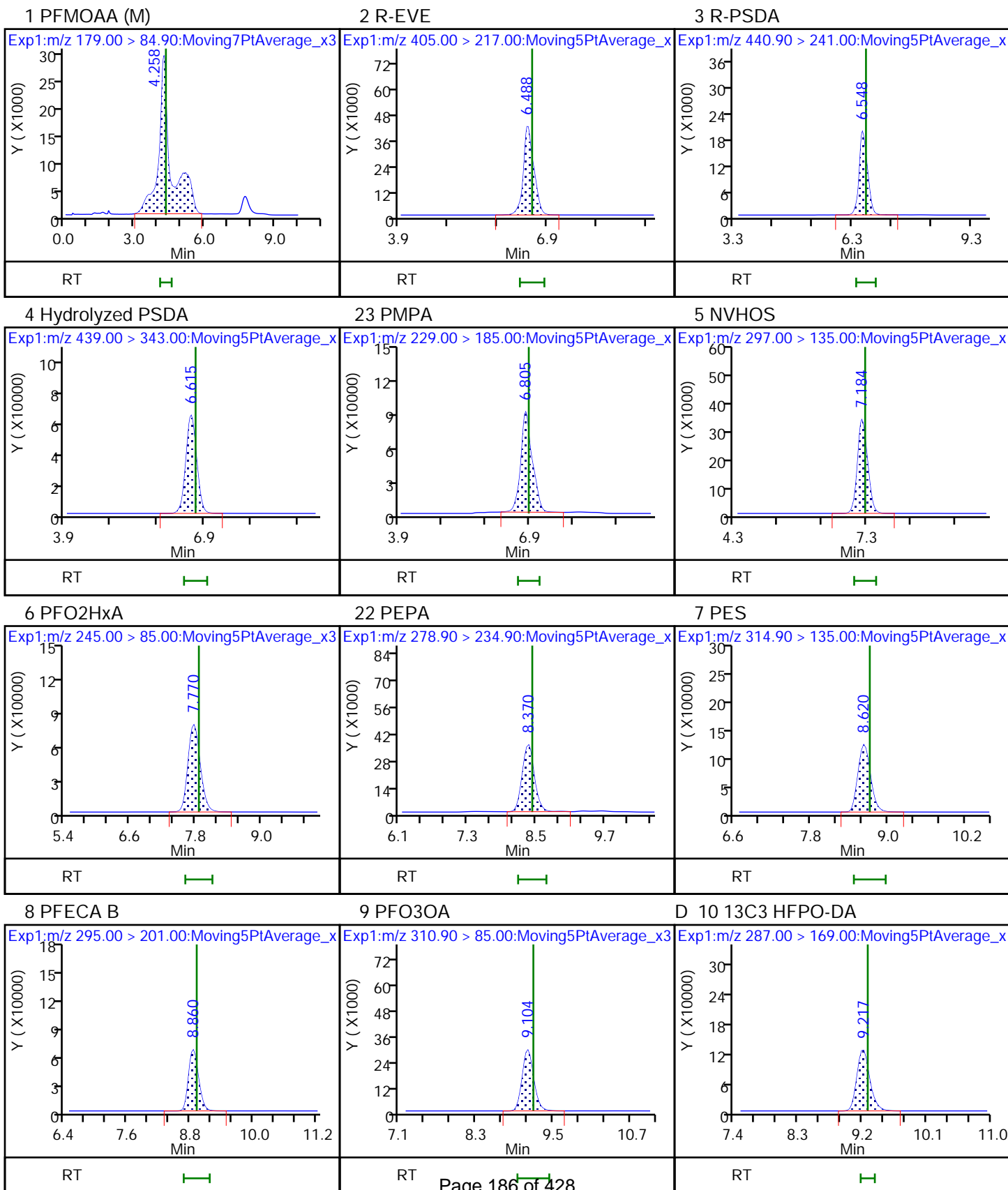
M - Manually Integrated

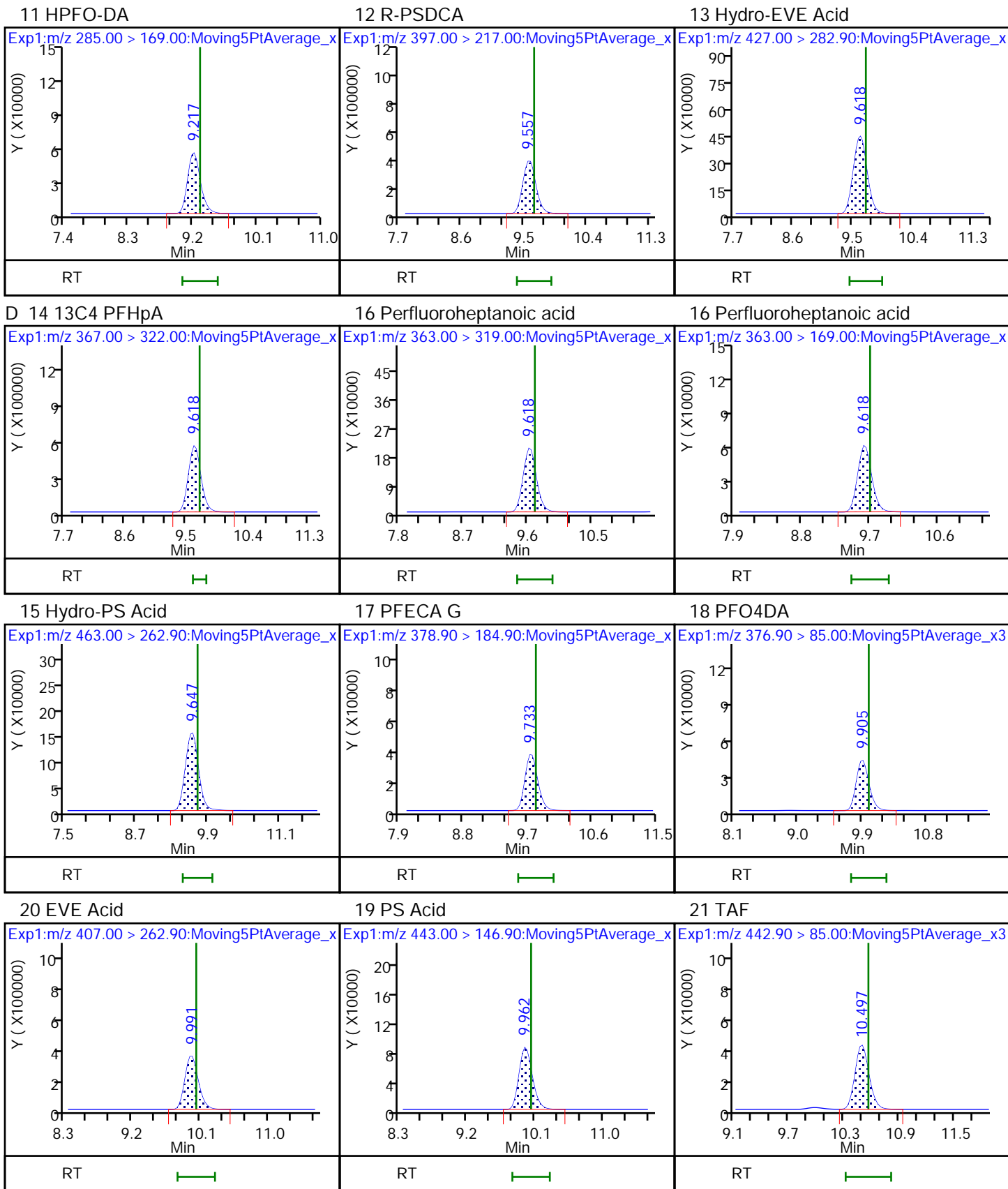
Reagents:

LCTB3_LLSTD7_00443

Amount Added: 1.00

Units: mL





Eurofins TestAmerica, Sacramento

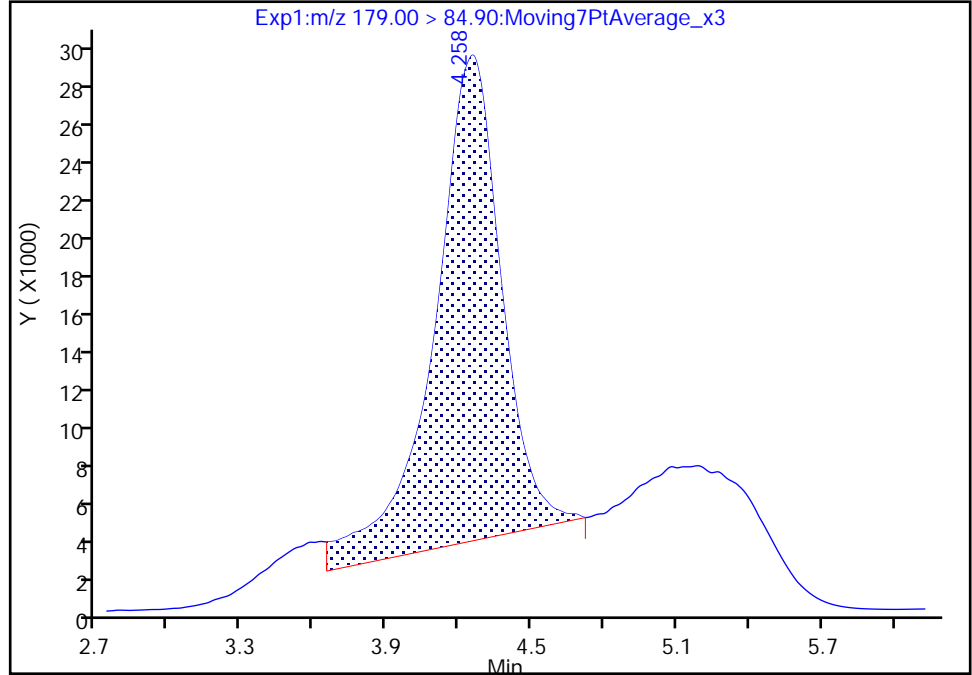
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_011.d
Injection Date: 08-Mar-2021 17:07:09 Instrument ID: A12
Lims ID: IC STD 7
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 11 Worklist Smp#: 10
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

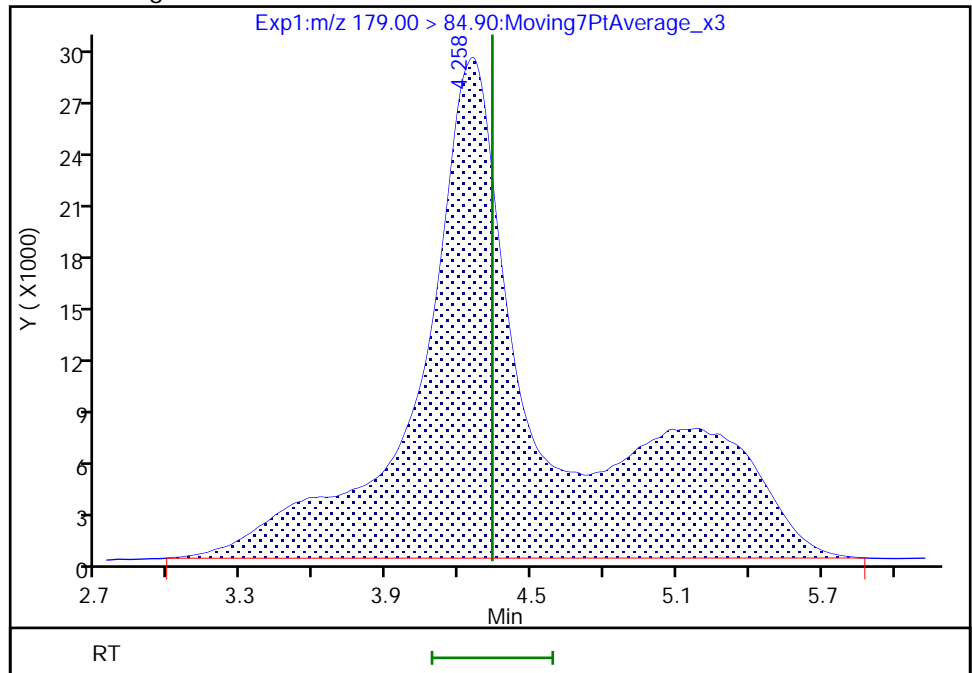
RT: 4.26
Area: 495492
Amount: 0.051652
Amount Units: ng/ml

Processing Integration Results



RT: 4.26
Area: 1089869
Amount: 0.097084
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 09-Mar-2021 06:36:35
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfms\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_013.d
 Lims ID: IC STD 8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 08-Mar-2021 17:42:24 ALS Bottle#: 13 Worklist Smp#: 12
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 8 (46)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfms\Sacramento\ChromData\A12\20210308-114652.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 09-Mar-2021 07:05:17 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfms\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1636

First Level Reviewer: fariasa Date: 09-Mar-2021 06:37:14

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.741	4.337	-0.596		2898414	0.2582		103	111	M
2 R-EVE										
405.00 > 217.00	6.394	6.591	-0.197		1449150	0.2450		98.0	11790	
3 R-PSDA										
440.90 > 241.00	6.434	6.639	-0.205		669453	0.2498		99.9	11143	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.514	6.710	-0.196		2528385	0.2504		100	28360	
23 PMPA										
229.00 > 185.00	6.692	6.876	-0.184		4188896	0.2435		97.4	3159	
5 NVHOS										
297.00 > 135.00	7.095	7.260	-0.165		1390463	0.2624		105	15194	
6 PFO2HxA										
245.00 > 85.00	7.716	7.862	-0.146		3194272	0.2538		102	24748	
22 PEPA										
278.90 > 234.90	8.341	8.431	-0.090		1298350	0.2522		101	4061	
7 PES										
314.90 > 135.00	8.601	8.715	-0.114		4514703	0.2543		102	64640	
8 PFECA B										
295.00 > 201.00	8.838	8.925	-0.087		2272793	0.2643		106	33542	
9 PFO3OA										
310.90 > 85.00	9.085	9.190	-0.105		844482	0.2490		99.6	16491	
D 10 13C3 HFPO-DA										M
287.00 > 169.00	9.170	9.274	-0.104		1528632	0.2417		96.7	30139	M
11 HPFO-DA										
285.00 > 169.00	9.198	9.302	-0.104	1.003	1642908	0.2607		104	32494	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.567	9.644	-0.077		12847677	0.2539		102	108058	
13 Hydro-EVE Acid										
427.00 > 282.90	9.595	9.701	-0.106		17165771	0.2632		105	69220	
D 14 13C4 PFHpA										M
367.00 > 322.00	9.595	9.701	-0.106		6454524	0.2379		95.2	62342	M
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.595	9.701	-0.106	1.000	6885904	0.2428	Target=0.00	97.1	16116	
363.00 > 169.00	9.595	9.701	-0.106	1.000	1943855		3.54(0.00-0.00)	97.1	29917	
15 Hydro-PS Acid										
463.00 > 262.90	9.624	9.730	-0.106		6099023	0.2586		103	80039	
17 PFECA G										
378.90 > 184.90	9.739	9.816	-0.077		1164693	0.2578		103	31017	
18 PFO4DA										
376.90 > 85.00	9.882	9.988	-0.106		1289936	0.2483		99.3	20948	
20 EVE Acid										
407.00 > 262.90	9.968	10.046	-0.078		10271801	0.2673		107	82621	
19 PS Acid										
443.00 > 146.90	9.940	10.046	-0.106		2678058	0.2579		103	43224	
21 TAF										
442.90 > 85.00	10.479	10.565	-0.086		1111618	0.2535		101	2929	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD8_00046

Amount Added: 1.00

Units: mL

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_013.d

Injection Date: 08-Mar-2021 17:42:24

Instrument ID: A12

Lims ID: IC STD 8

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 13

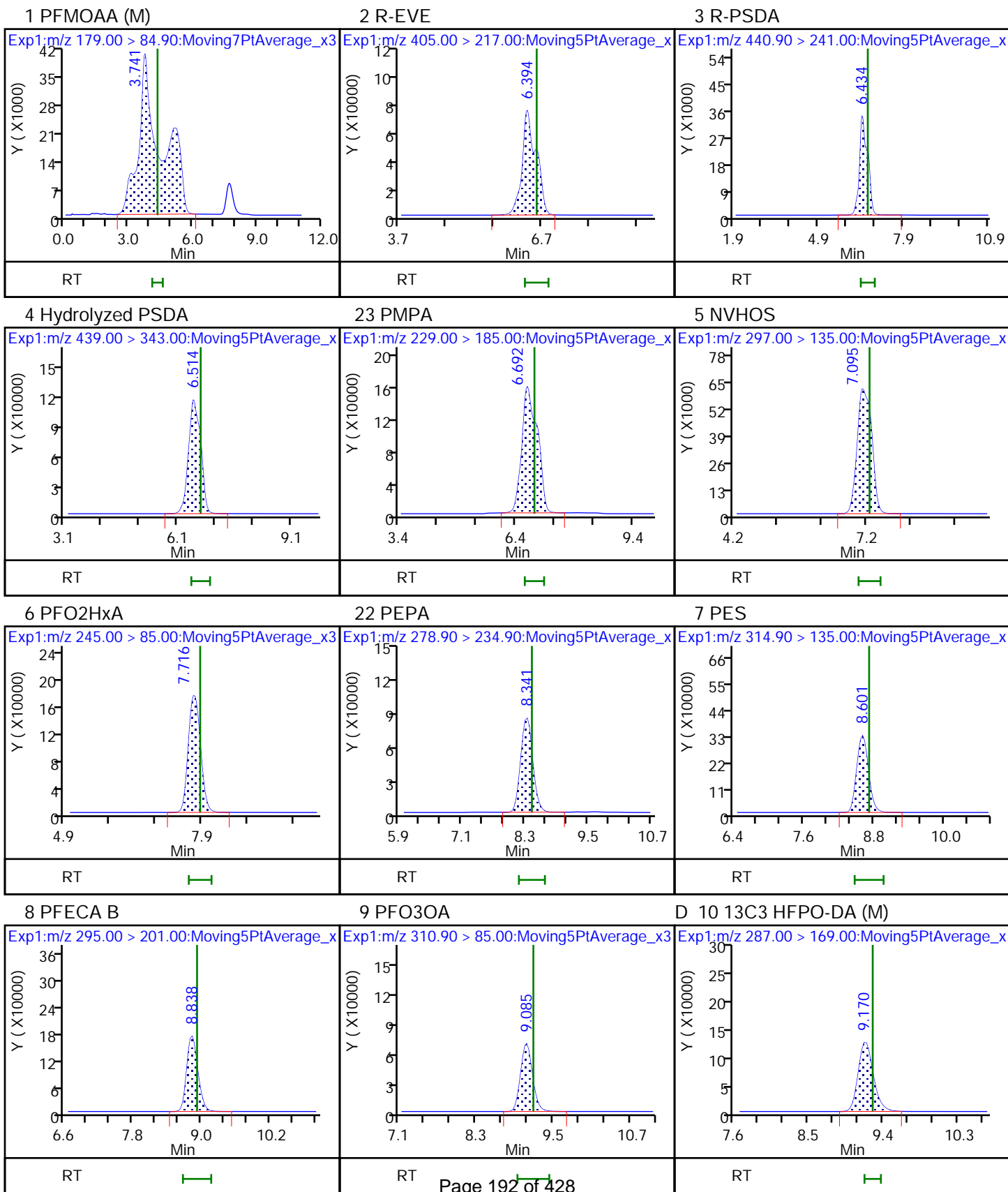
Worklist Smp#: 12

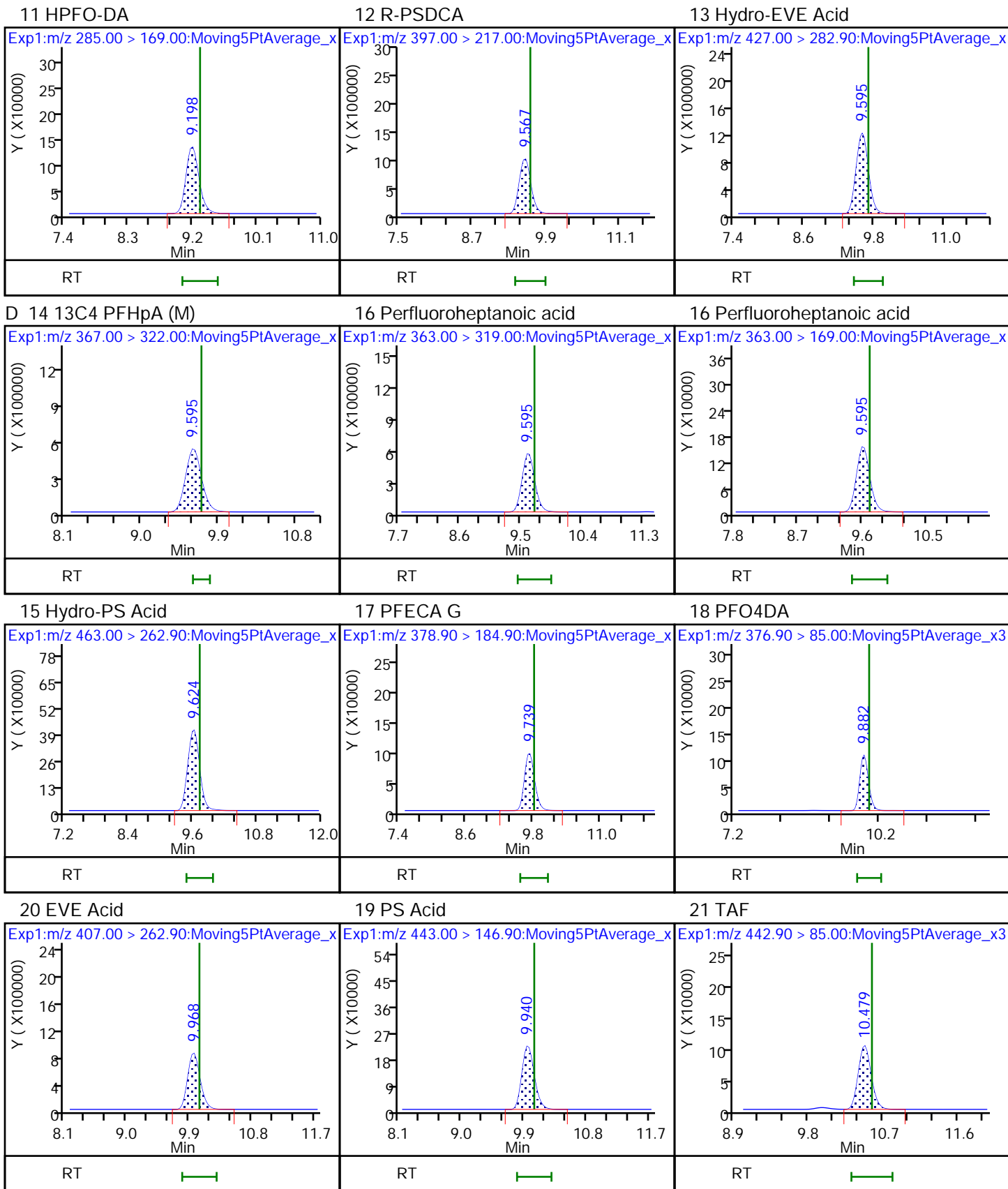
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

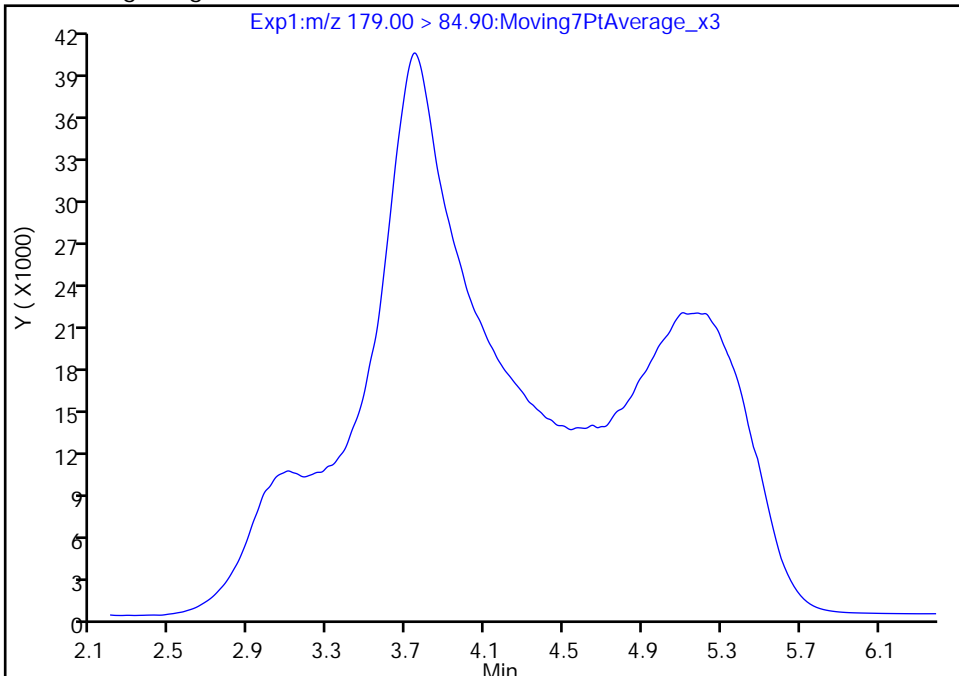
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_013.d
Injection Date: 08-Mar-2021 17:42:24 Instrument ID: A12
Lims ID: IC STD 8
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 13 Worklist Smp#: 12
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

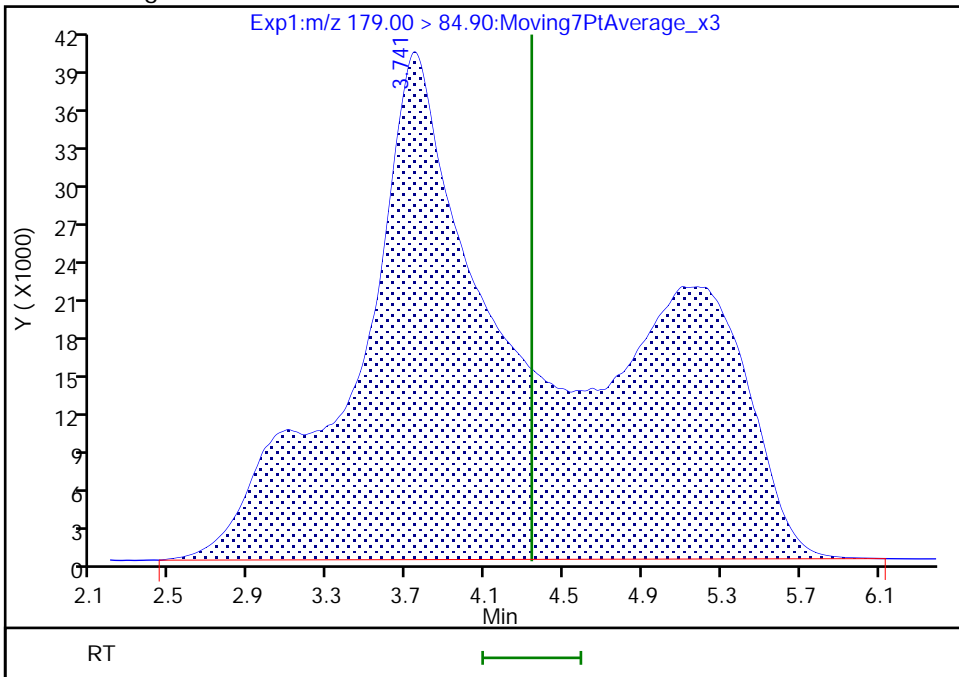
Not Detected
Expected RT: 4.34

Processing Integration Results



RT: 3.74
Area: 2898414
Amount: 0.258186
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 09-Mar-2021 06:37:03
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

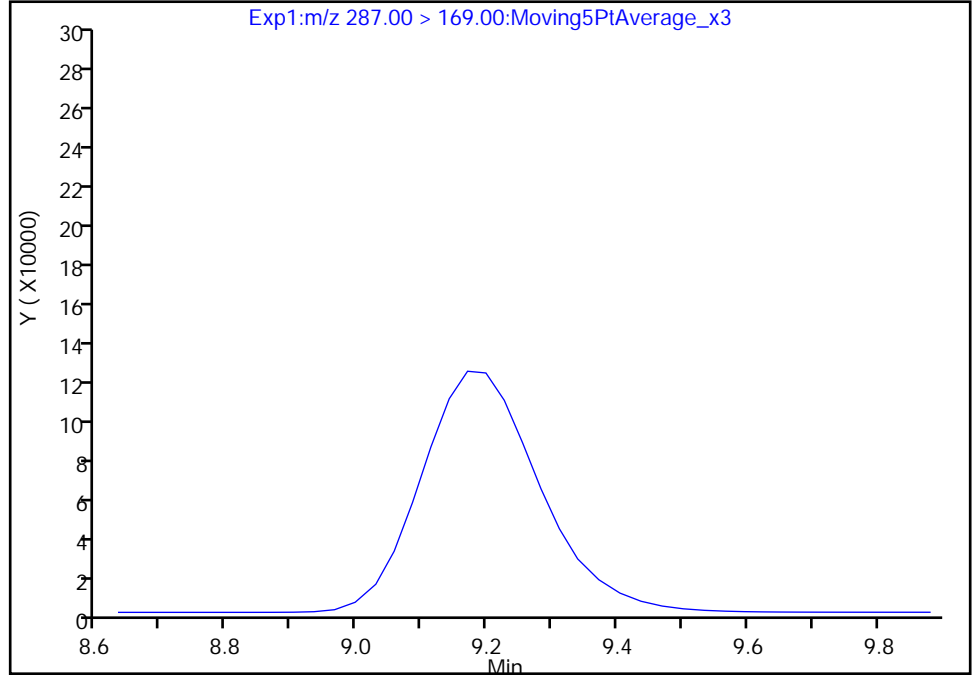
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_013.d
Injection Date: 08-Mar-2021 17:42:24 Instrument ID: A12
Lims ID: IC STD 8
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 13 Worklist Smp#: 12
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

D 10 13C3 HFPO-DA, CAS: STL02255

Signal: 1

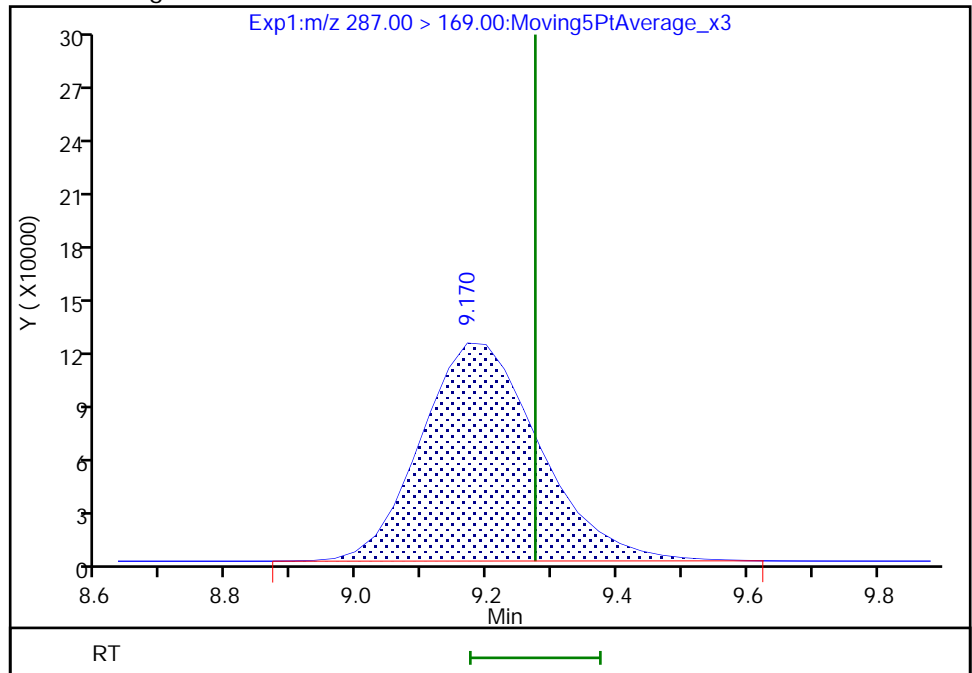
Not Detected
Expected RT: 9.27

Processing Integration Results



Manual Integration Results

RT: 9.17
Area: 1528632
Amount: 0.241689
Amount Units: ng/ml



Reviewer: fariasa, 09-Mar-2021 06:36:59
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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Eurofins TestAmerica, Sacramento

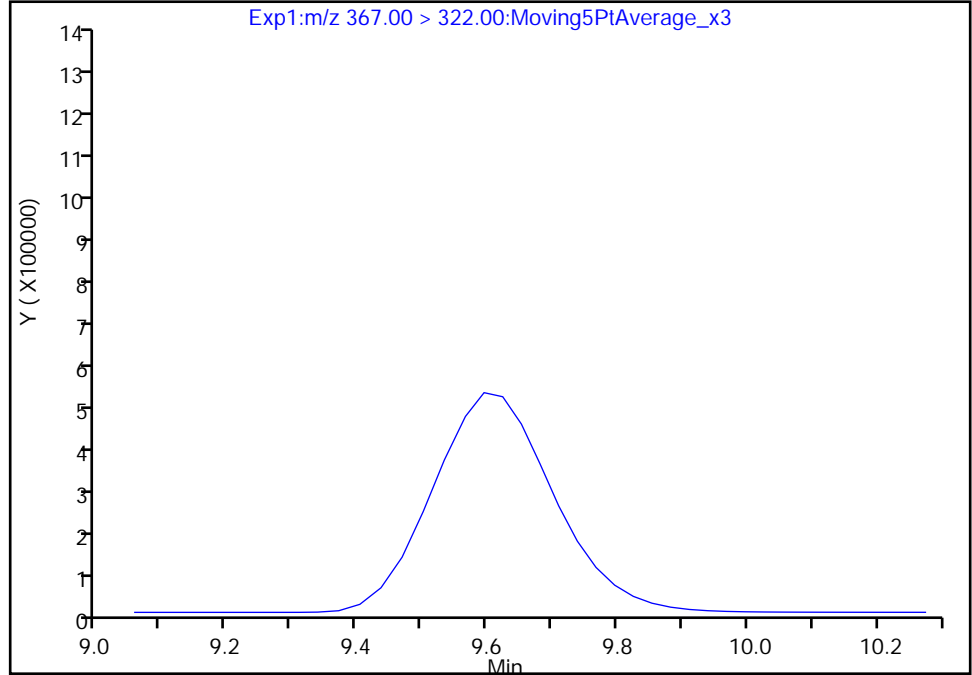
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Injection Date: 08-Mar-2021 17:42:24 Instrument ID: A12
Lims ID: IC STD 8
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 13 Worklist Smp#: 12
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

D 14 13C4 PFHpA, CAS: STL01892

Signal: 1

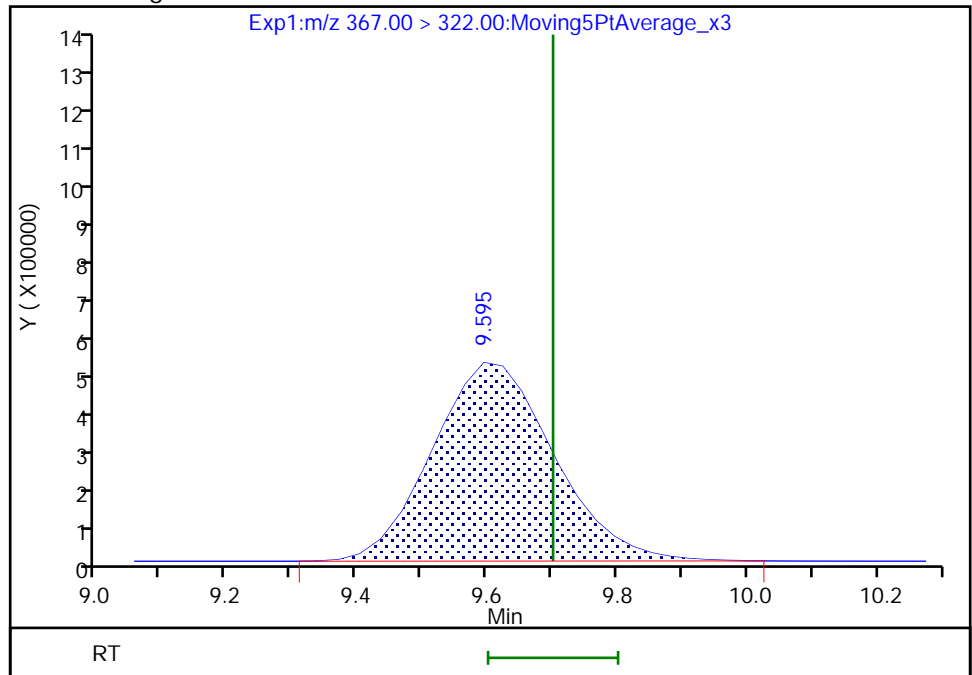
Not Detected
Expected RT: 9.70

Processing Integration Results



Manual Integration Results

RT: 9.60
Area: 6454524
Amount: 0.237903
Amount Units: ng/ml



Reviewer: fariasa, 09-Mar-2021 06:36:55
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_015.d
 Lims ID: IC STD 9
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 08-Mar-2021 18:17:46 ALS Bottle#: 15 Worklist Smp#: 14
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 9 (44)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 09-Mar-2021 07:05:18 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1636

First Level Reviewer: fariasa Date: 09-Mar-2021 07:05:02

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.275	4.337	-0.062		5941376	0.5292		106	480	M
2 R-EVE										
405.00 > 217.00	6.450	6.591	-0.141		3103516	0.5247		105	43352	
3 R-PSDA										
440.90 > 241.00	6.510	6.639	-0.129		1469973	0.5485		110	35287	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.569	6.710	-0.141		5322799	0.5271		105	67508	
23 PMPA										
229.00 > 185.00	6.759	6.876	-0.117		8495332	0.4939		98.8	10359	
5 NVHOS										
297.00 > 135.00	7.138	7.260	-0.122		2922032	0.5514		110	49328	
6 PFO2HxA										
245.00 > 85.00	7.710	7.862	-0.152		6477422	0.5146		103	61053	
22 PEPA										
278.90 > 234.90	8.300	8.431	-0.131		2569017	0.4990		99.8	10734	
7 PES										
314.90 > 135.00	8.590	8.715	-0.125		9862675	0.5555		111	146103	
8 PFECA B										
295.00 > 201.00	8.800	8.925	-0.125		4470095	0.5198		104	67717	
9 PFO3OA										
310.90 > 85.00	9.049	9.190	-0.142		1677476	0.4946		98.9	33220	
D 10 13C3 HFPO-DA										M
287.00 > 169.00	9.161	9.274	-0.113		1464074	0.2315		92.6	39756	M
11 HPFO-DA										
285.00 > 169.00	9.161	9.302	-0.141	1.000	3153200	0.5224		104	51172	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.526	9.644	-0.118		23581631	0.4660		93.2	120347	
13 Hydro-EVE Acid										
427.00 > 282.90	9.587	9.701	-0.114		32762348	0.5023		100	100986	
D 14 13C4 PFHpA										M
367.00 > 322.00	9.587	9.701	-0.114		5429526	0.2001		80.0	70383	M
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.587	9.701	-0.114	1.000	12220864	0.5123	Target=0.00	102	36819	
363.00 > 169.00	9.587	9.701	-0.114	1.000	3356614		3.64(0.00-0.00)	102	43627	
15 Hydro-PS Acid										
463.00 > 262.90	9.587	9.730	-0.143		11903253	0.5047		101	111762	
17 PFECA G										
378.90 > 184.90	9.702	9.816	-0.114		2170730	0.4805		96.1	58992	
18 PFO4DA										
376.90 > 85.00	9.845	9.988	-0.143		2631093	0.5065		101	23897	
20 EVE Acid										
407.00 > 262.90	9.931	10.046	-0.115		18523081	0.4820		96.4	94236	
19 PS Acid										
443.00 > 146.90	9.931	10.046	-0.115		5386188	0.5187		104	63242	
21 TAF										
442.90 > 85.00	10.447	10.565	-0.118		2144361	0.4891		97.8	3504	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD9_00044

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_015.d

Injection Date: 08-Mar-2021 18:17:46

Instrument ID: A12

Lims ID: IC STD 9

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 15

Worklist Smp#: 14

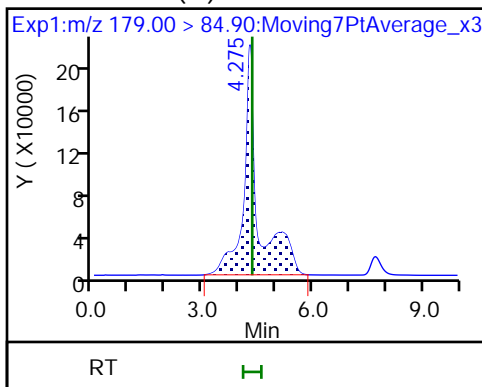
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

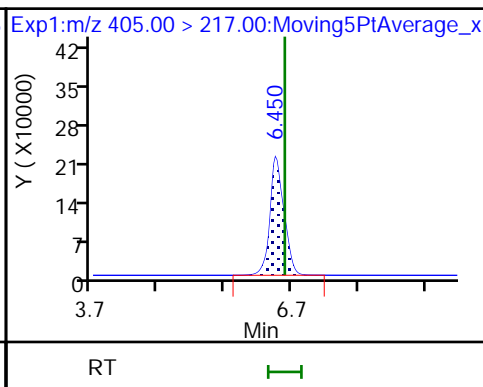
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

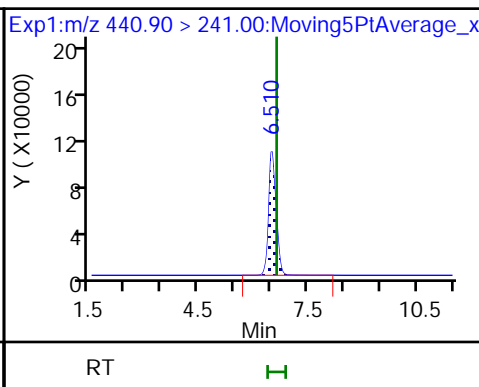
1 PFMOAA (M)



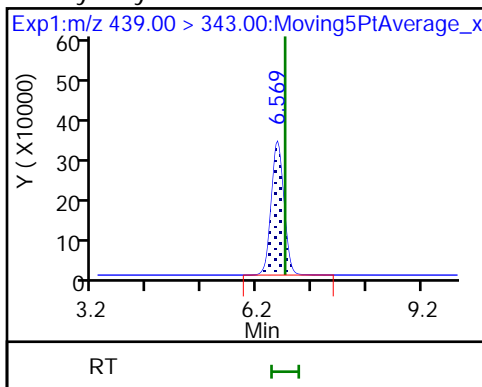
2 R-EVE



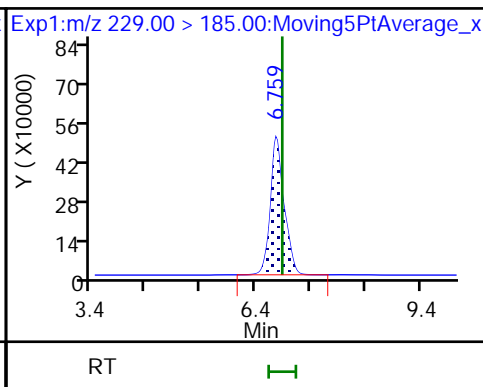
3 R-PSDA



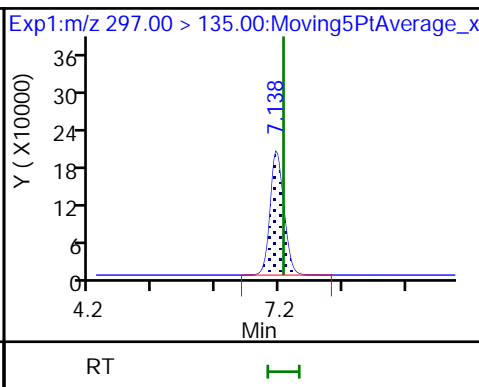
4 Hydrolyzed PSDA



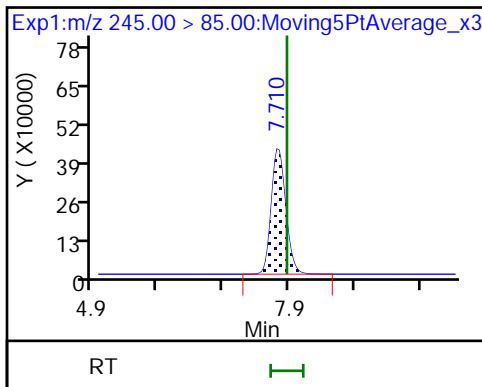
23 PMPA



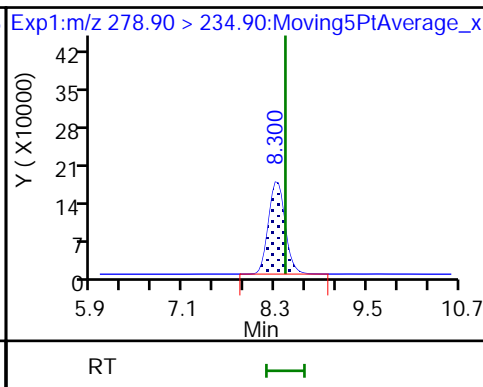
5 NVHOS



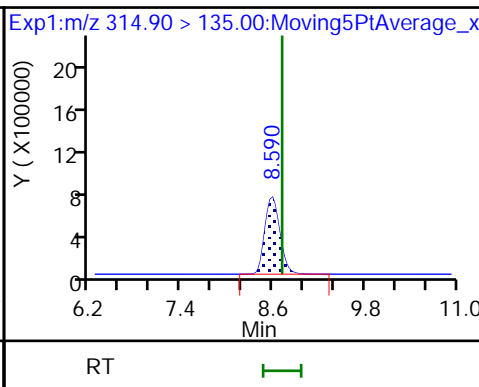
6 PFO2HxA



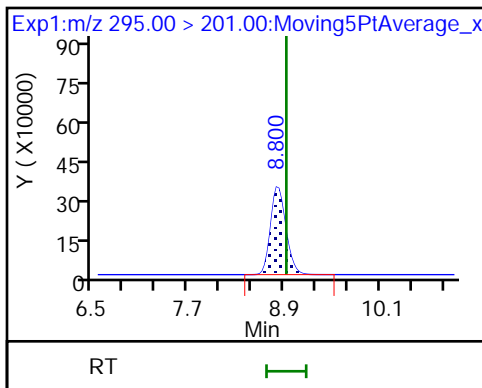
22 PEPA



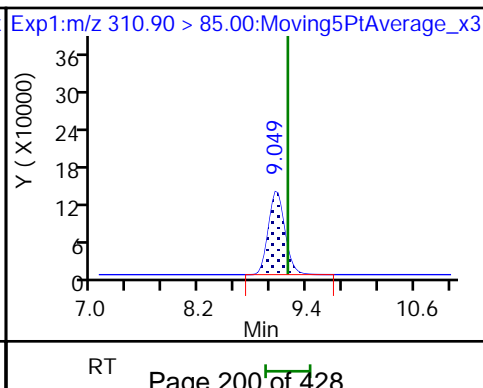
7 PES



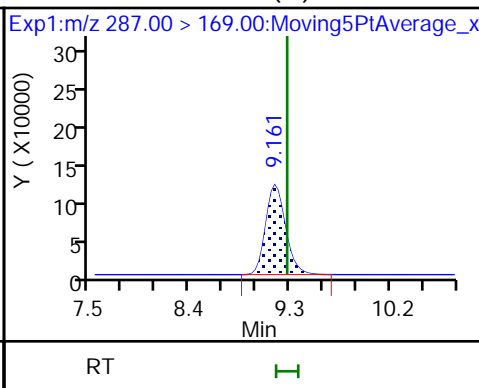
8 PFECA B

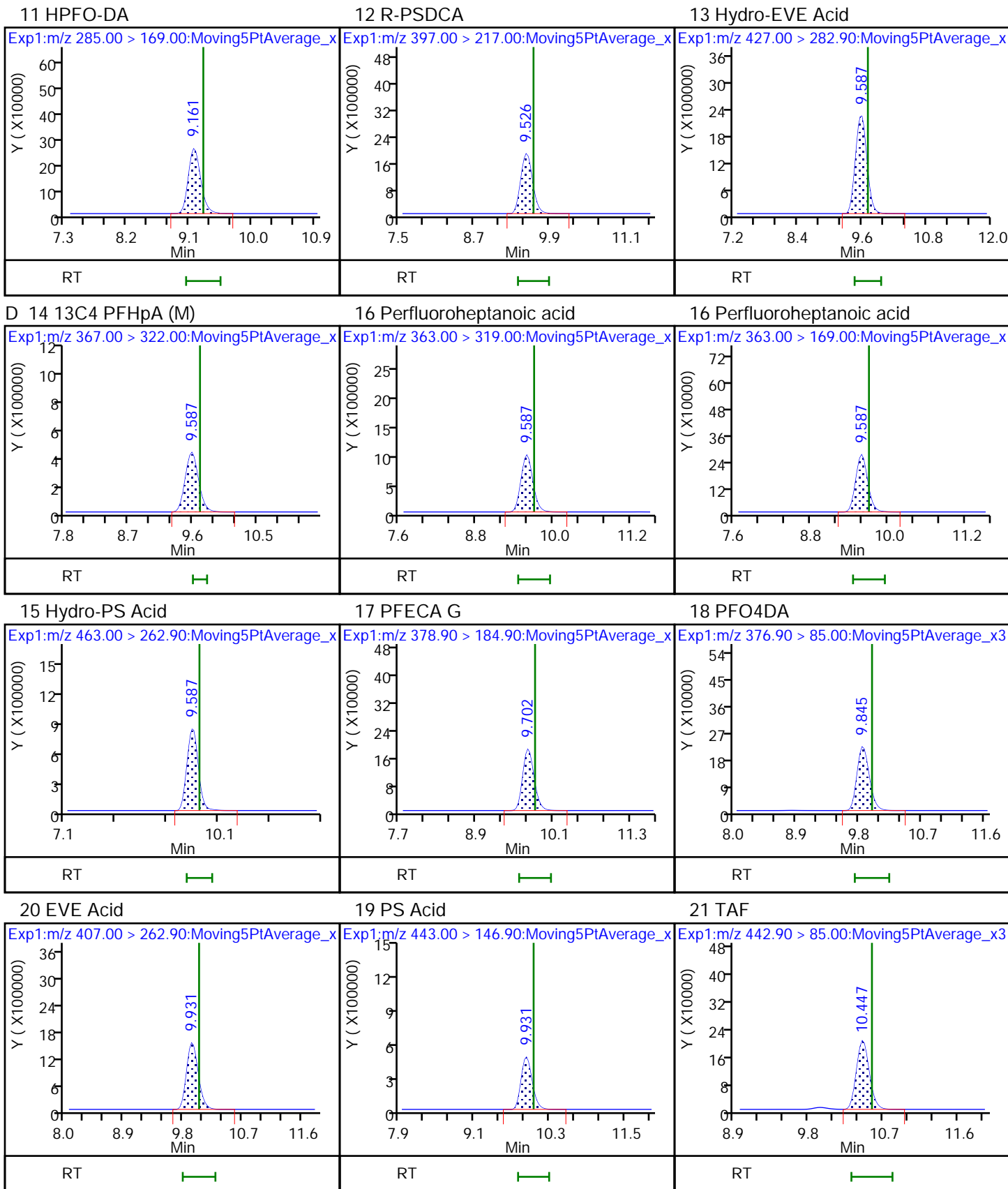


9 PFO3OA



D 10 13C3 HFPO-DA (M)





Eurofins TestAmerica, Sacramento

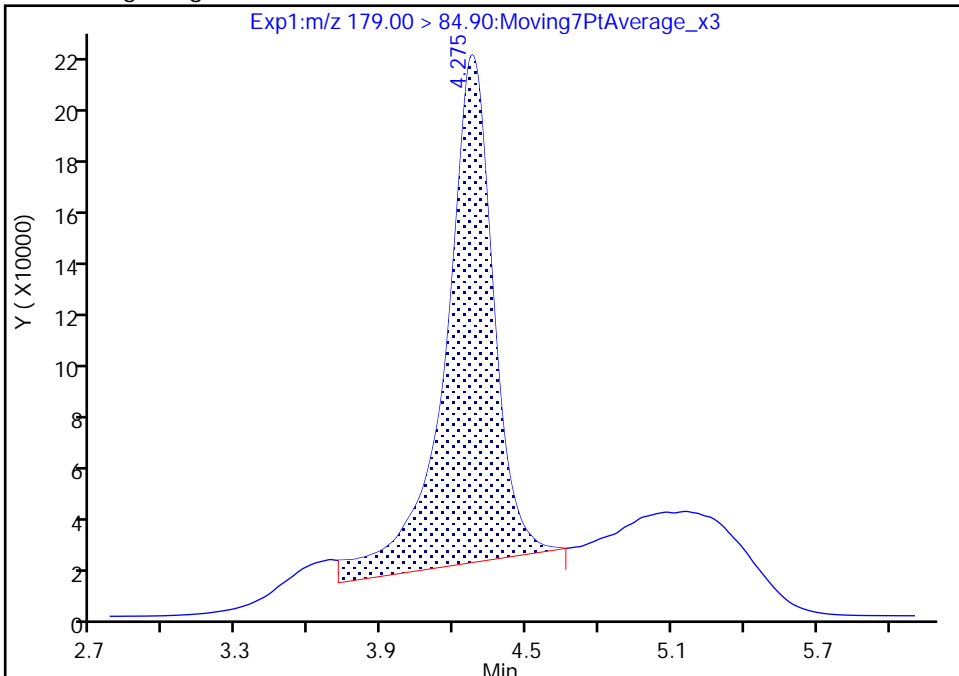
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Injection Date: 08-Mar-2021 18:17:46 Instrument ID: A12
Lims ID: IC STD 9
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 15 Worklist Smp#: 14
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

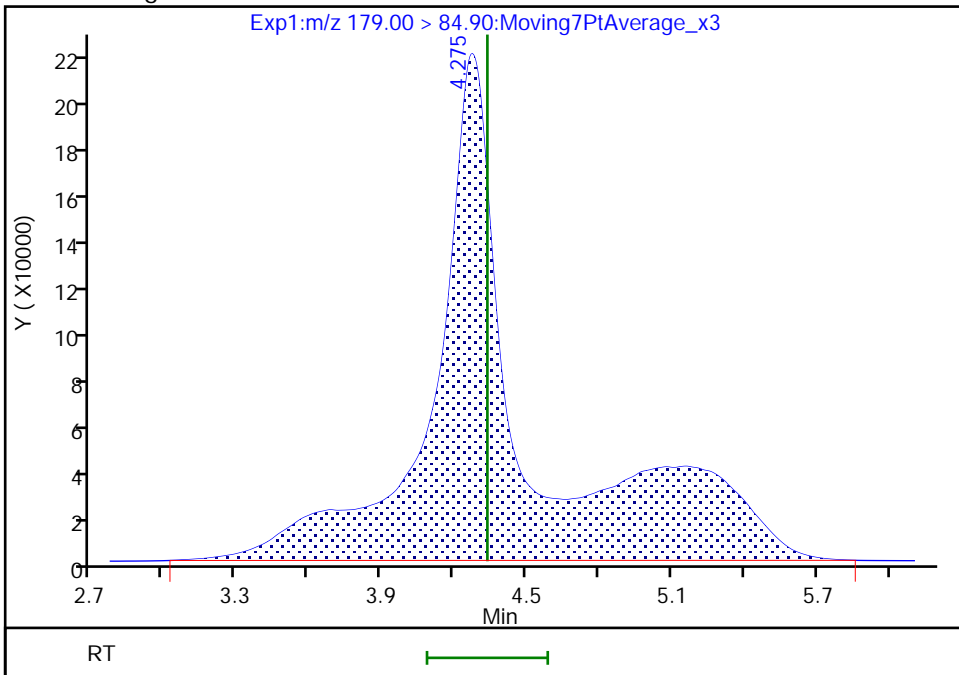
RT: 4.27
Area: 2763367
Amount: 0.263790
Amount Units: ng/ml

Processing Integration Results



RT: 4.27
Area: 5941376
Amount: 0.529248
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 09-Mar-2021 06:37:35
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 203 of 428

Eurofins TestAmerica, Sacramento

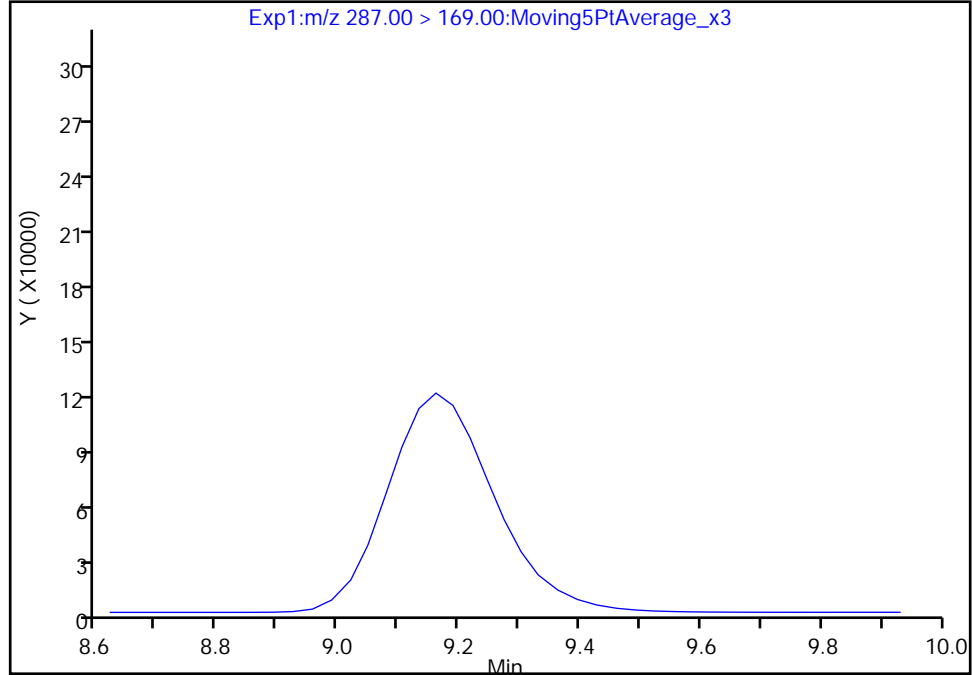
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Injection Date: 08-Mar-2021 18:17:46 Instrument ID: A12
Lims ID: IC STD 9
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 15 Worklist Smp#: 14
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

D 10 13C3 HFPO-DA, CAS: STL02255

Signal: 1

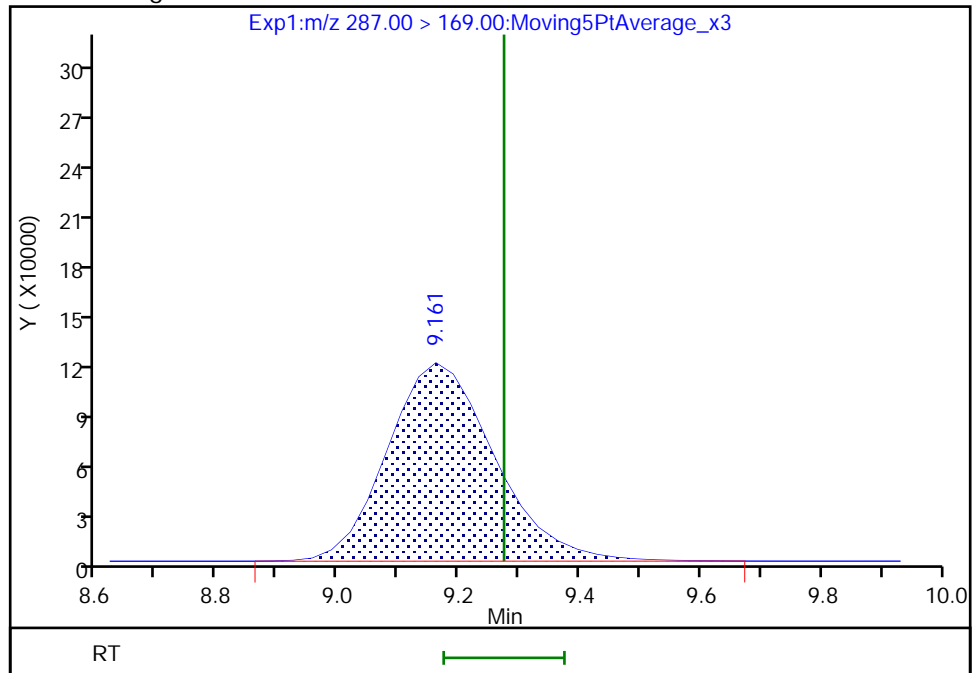
Not Detected
Expected RT: 9.27

Processing Integration Results



Manual Integration Results

RT: 9.16
Area: 1464074
Amount: 0.231482
Amount Units: ng/ml



Reviewer: fariasa, 09-Mar-2021 06:37:22
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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Eurofins TestAmerica, Sacramento

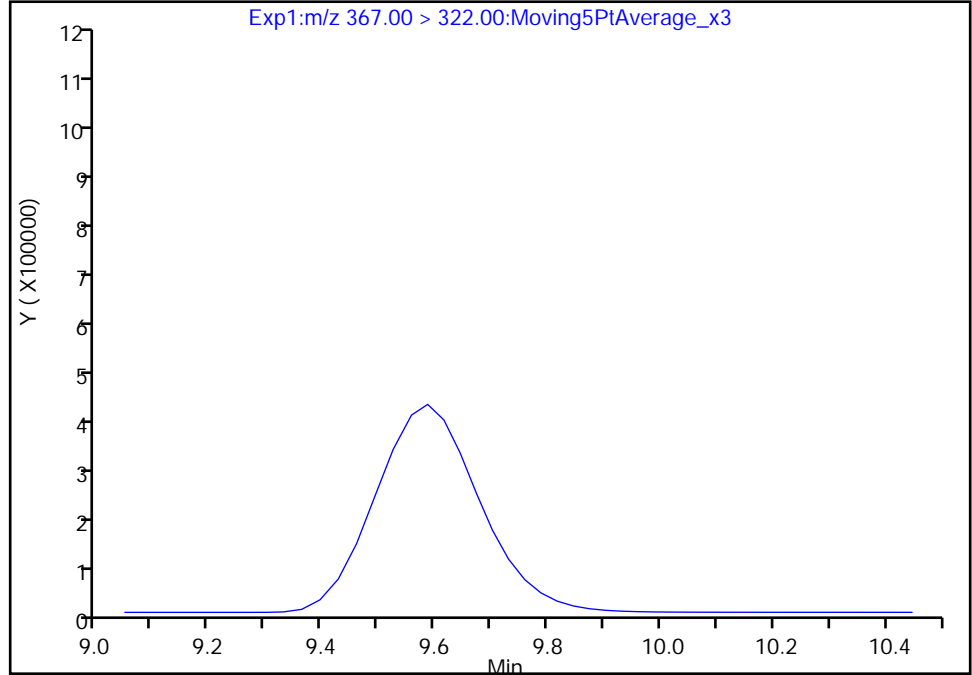
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Injection Date: 08-Mar-2021 18:17:46 Instrument ID: A12
Lims ID: IC STD 9
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 15 Worklist Smp#: 14
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

D 14 13C4 PFHpA, CAS: STL01892

Signal: 1

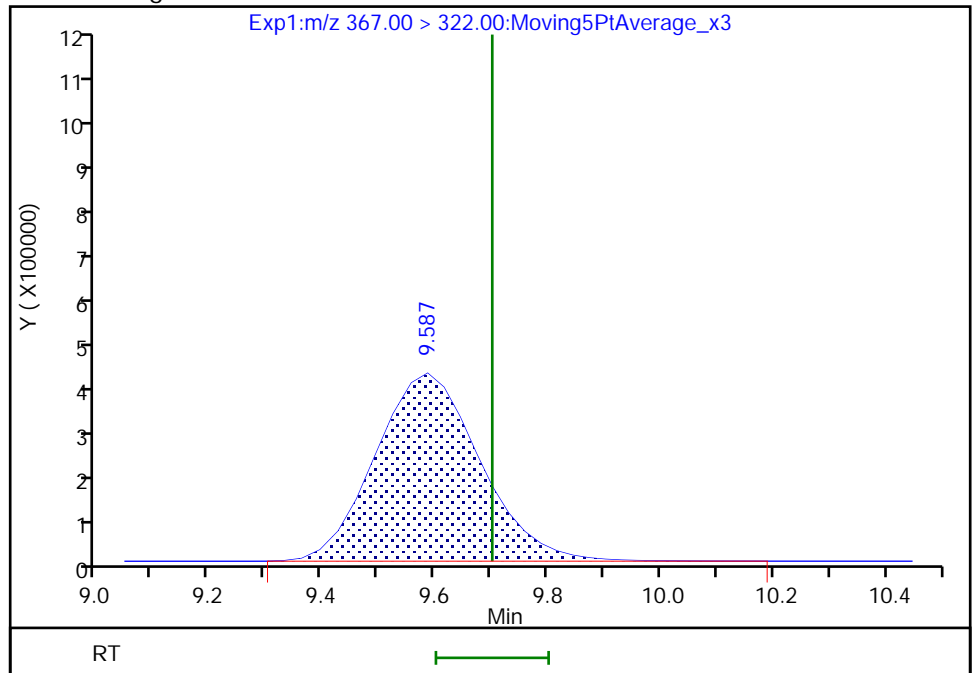
Not Detected
Expected RT: 9.70

Processing Integration Results



Manual Integration Results

RT: 9.59
Area: 5429526
Amount: 0.200123
Amount Units: ng/ml



Reviewer: fariasa, 09-Mar-2021 06:37:27
Audit Action: Manually Integrated

Audit Reason: Assign Peak
Page 205 of 428

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfms\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
 Lims ID: IC STD 10
 Client ID:
 Sample Type: IC Calib Level: 10
 Inject. Date: 08-Mar-2021 18:35:31 ALS Bottle#: 16 Worklist Smp#: 15
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 10 (43)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfms\Sacramento\ChromData\A12\20210308-114652.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 09-Mar-2021 07:05:19 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfms\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1636

First Level Reviewer: fariasa Date: 09-Mar-2021 06:38:11

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.154	4.337	-0.183		11624085	1.04		104	321	M
2 R-EVE										
405.00 > 217.00	6.426	6.591	-0.165		6171861	1.04		104	84164	
3 R-PSDA										
440.90 > 241.00	6.486	6.639	-0.153		3053744	1.14		114	52969	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.546	6.710	-0.164		10409341	1.03		103	124709	
23 PMPA										
229.00 > 185.00	6.731	6.876	-0.145		16784939	0.9758		97.6	29693	
5 NVHOS										
297.00 > 135.00	7.110	7.260	-0.150		5786419	1.09		109	83831	
6 PFO2HxA										
245.00 > 85.00	7.706	7.862	-0.156		12432784	0.9877		98.8	95995	
22 PEPA										
278.90 > 234.90	8.294	8.431	-0.137		5002510	0.9716		97.2	17149	
7 PES										
314.90 > 135.00	8.554	8.715	-0.161		19262846	1.09		109	280276	
8 PFECA B										
295.00 > 201.00	8.797	8.925	-0.128		8168324	0.9499		95.0	124176	
9 PFO3OA										
310.90 > 85.00	9.045	9.190	-0.145		3163918	0.9329		93.3	62480	
D 10 13C3 HFPO-DA										M
287.00 > 169.00	9.158	9.274	-0.116		1470012	0.2324		93.0	29780	M
11 HPFO-DA										
285.00 > 169.00	9.158	9.302	-0.144	1.000	6199253	1.02		102	83847	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.522	9.644	-0.122		38566604	0.7622		76.2	161334	
13 Hydro-EVE Acid										
427.00 > 282.90	9.555	9.701	-0.146		57587964	0.8830		88.3	161890	
D 14 13C4 PFHpA										M
367.00 > 322.00	9.587	9.701	-0.114		4352755	0.1604		64.2	46854	M
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.587	9.701	-0.114	1.000	19409091	1.01	Target=0.00	101	38733	
363.00 > 169.00	9.587	9.701	-0.114	1.000	5745134		3.38(0.00-0.00)	101	54278	
15 Hydro-PS Acid										
463.00 > 262.90	9.587	9.730	-0.143		22874579	0.9698		97.0	187925	
17 PFECA G										
378.90 > 184.90	9.702	9.816	-0.114		3634590	0.8046		80.5	73257	
18 PFO4DA										
376.90 > 85.00	9.845	9.988	-0.143		4348756	0.8372		83.7	27507	
20 EVE Acid										
407.00 > 262.90	9.931	10.046	-0.115		31234468	0.8127		81.3	110199	
19 PS Acid										
443.00 > 146.90	9.903	10.046	-0.143		9666123	0.9308		93.1	78298	
21 TAF										
442.90 > 85.00	10.448	10.565	-0.117		4073951	0.9291		92.9	4560	

QC Flag Legend

Processing Flags

Review Flags

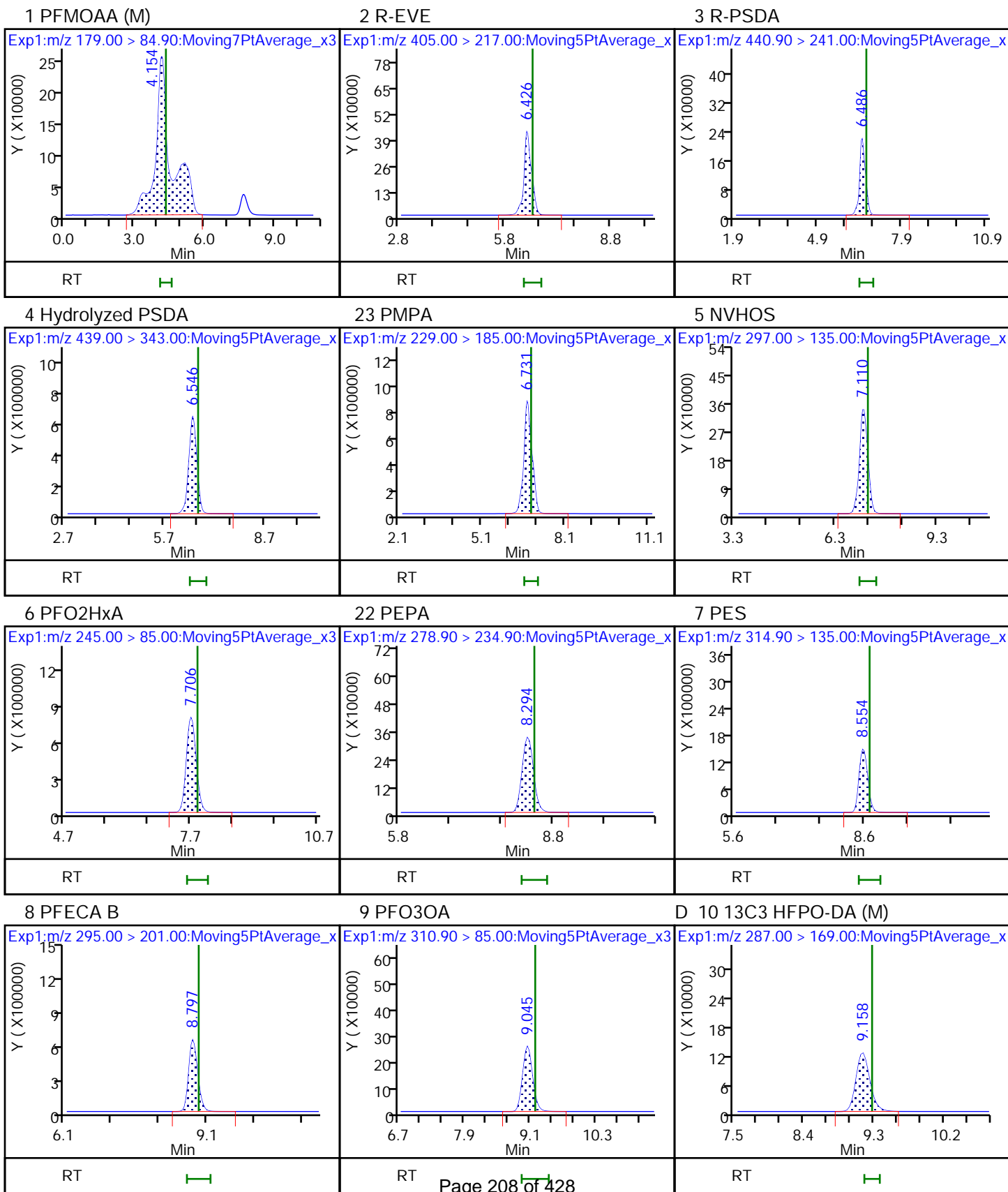
M - Manually Integrated

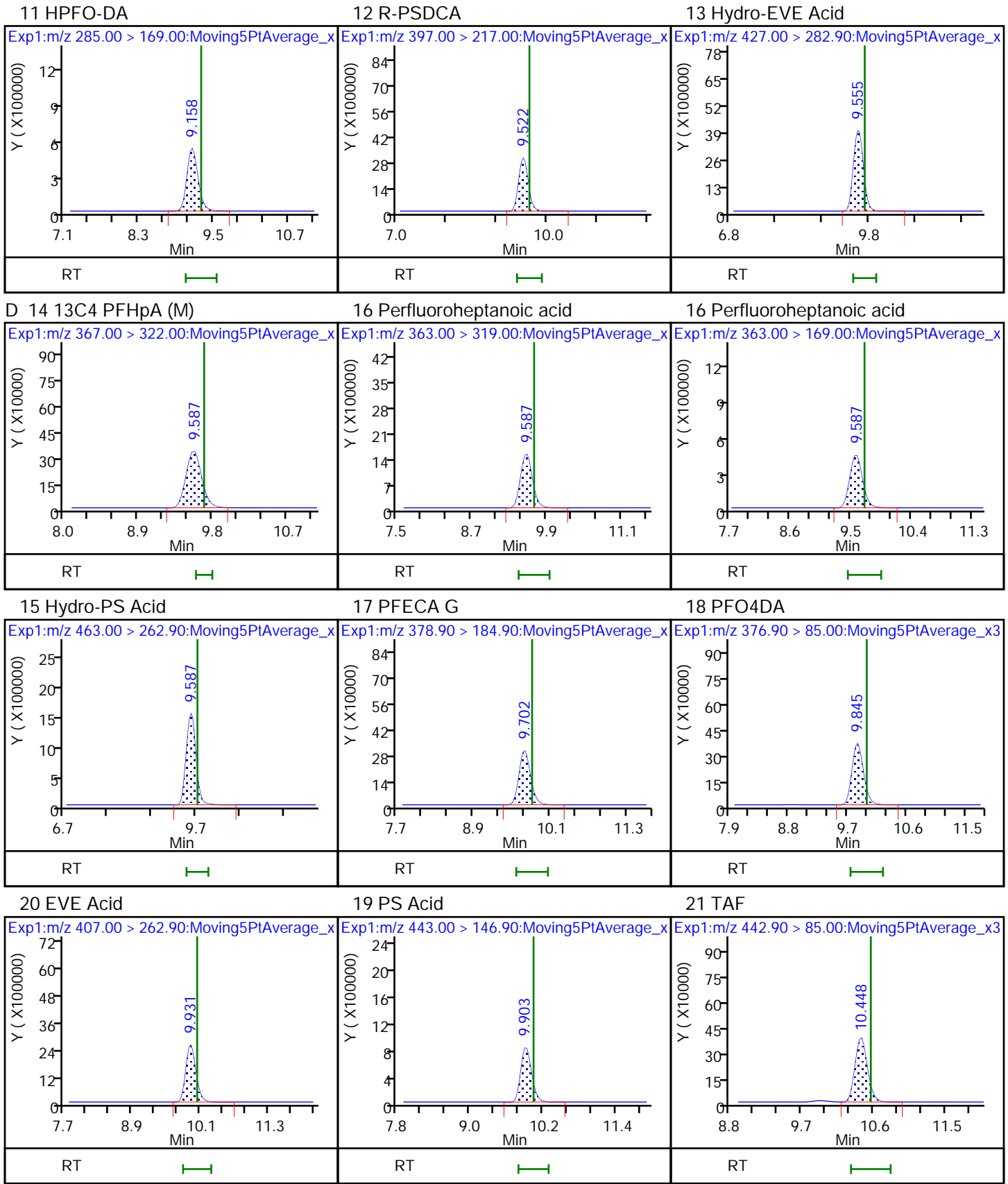
Reagents:

LCTB3_LLSTD10_00043

Amount Added: 1.00

Units: mL





Eurofins TestAmerica, Sacramento

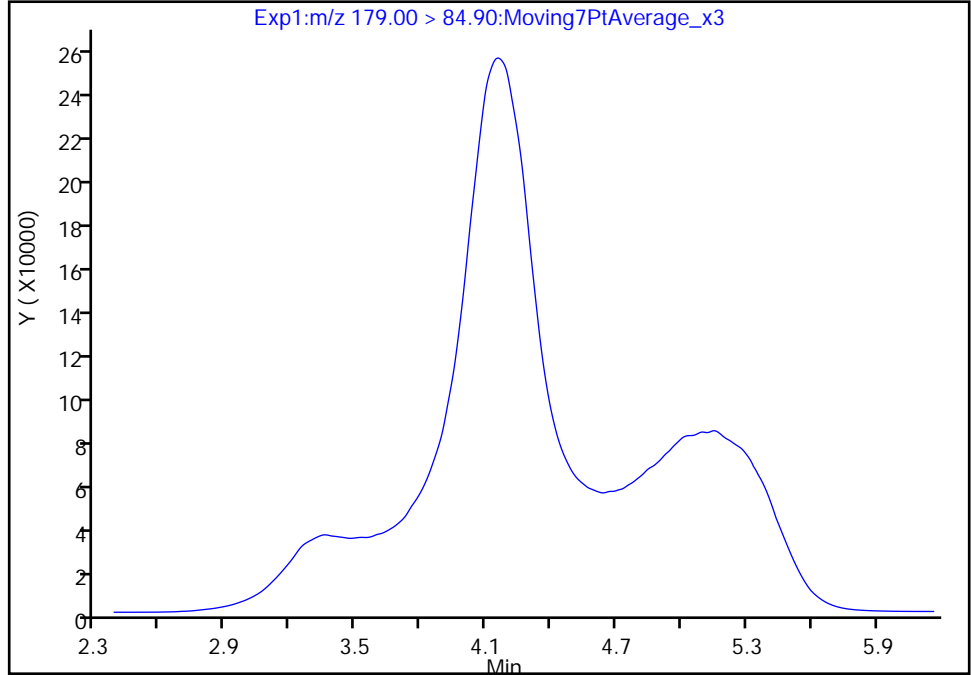
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
Injection Date: 08-Mar-2021 18:35:31 Instrument ID: A12
Lims ID: IC STD 10
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 16 Worklist Smp#: 15
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

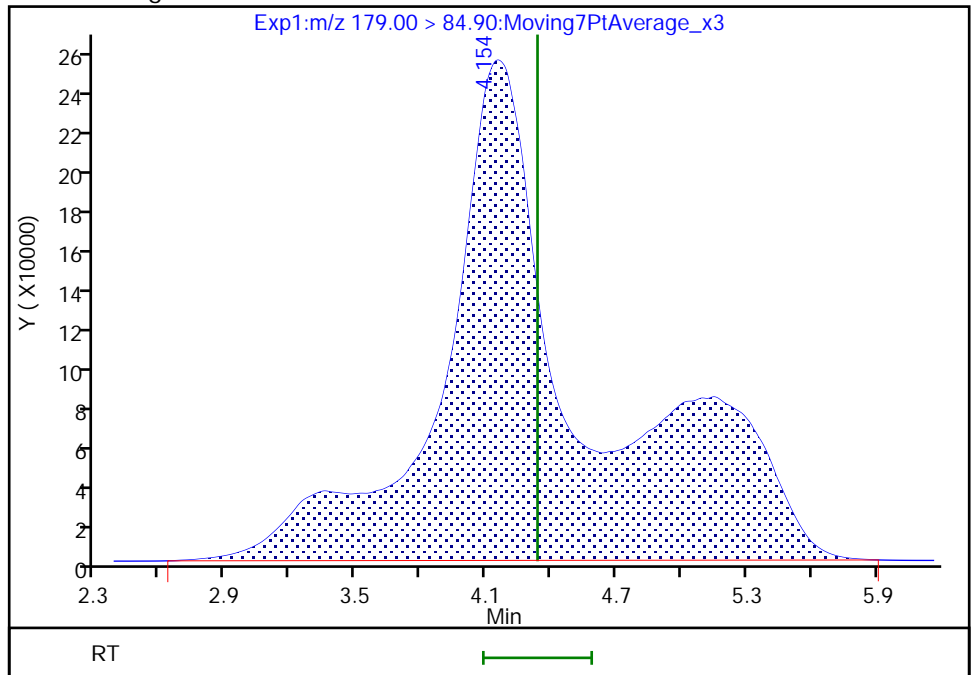
Not Detected
Expected RT: 4.34

Processing Integration Results



Manual Integration Results

RT: 4.15
Area: 11624085
Amount: 1.035455
Amount Units: ng/ml



Reviewer: fariasa, 09-Mar-2021 06:38:01
Audit Action: Manually Integrated

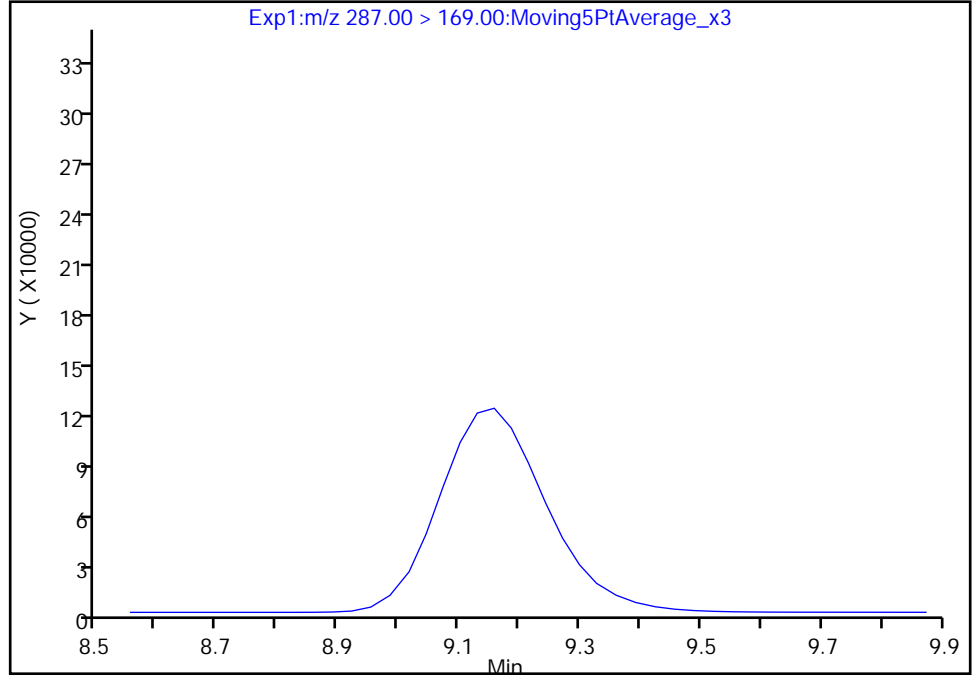
Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
Injection Date: 08-Mar-2021 18:35:31 Instrument ID: A12
Lims ID: IC STD 10
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 16 Worklist Smp#: 15
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

D 10 13C3 HFPO-DA, CAS: STL02255
Signal: 1

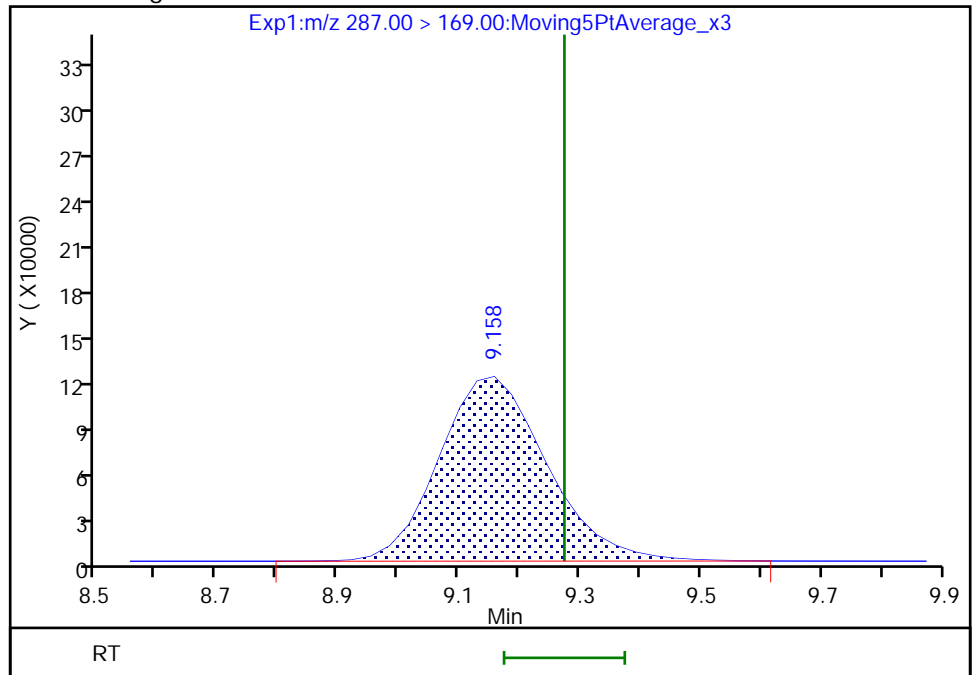
Not Detected
Expected RT: 9.27

Processing Integration Results



RT: 9.16
Area: 1470012
Amount: 0.232421
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 09-Mar-2021 06:37:54
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

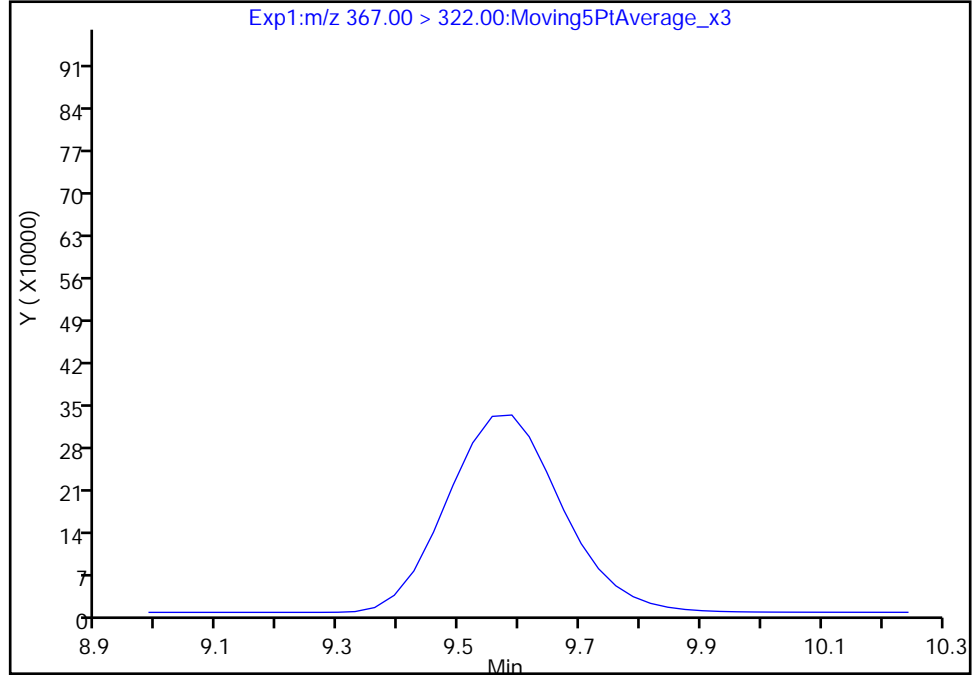
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
Injection Date: 08-Mar-2021 18:35:31 Instrument ID: A12
Lims ID: IC STD 10
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 16 Worklist Smp#: 15
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

D 14 13C4 PFHpA, CAS: STL01892

Signal: 1

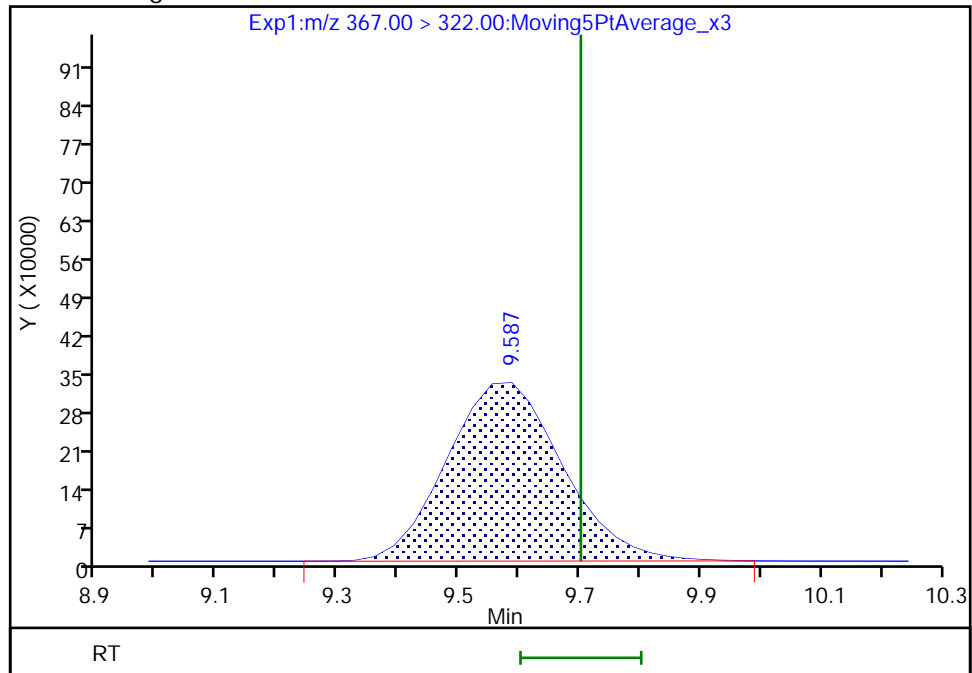
Not Detected
Expected RT: 9.70

Processing Integration Results



Manual Integration Results

RT: 9.59
Area: 4352755
Amount: 0.160435
Amount Units: ng/ml



Reviewer: fariasa, 09-Mar-2021 06:37:57
Audit Action: Manually Integrated

Audit Reason: Assign Peak
Page 213 of 428

Calibration

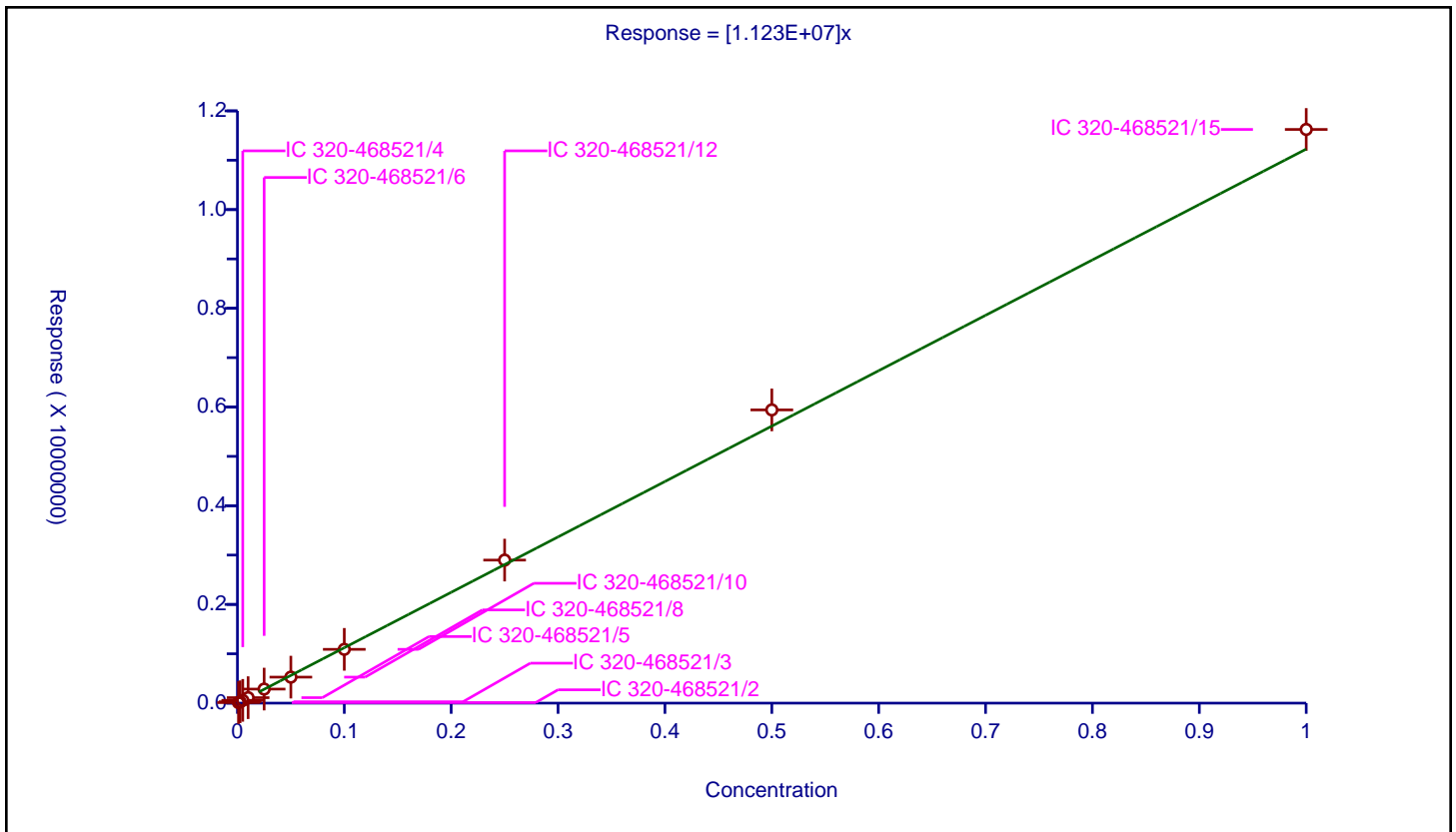
/ PFMOAA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.123E+07

Error Coefficients	
Standard Error:	175000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	10977.0			10977000.0	Y
2	IC 320-468521/3	0.0025	27629.0			11051600.0	Y
3	IC 320-468521/4	0.005	56162.0			11232400.0	Y
4	IC 320-468521/5	0.01	110698.0			11069800.0	Y
5	IC 320-468521/6	0.025	284701.0			11388040.0	Y
6	IC 320-468521/8	0.05	527133.0			10542660.0	Y
7	IC 320-468521/10	0.1	1089869.0			10898690.0	Y
8	IC 320-468521/12	0.25	2898414.0			11593656.0	Y
9	IC 320-468521/14	0.5	5941376.0			11882752.0	Y
10	IC 320-468521/15	1.0	11624085.0			11624085.0	Y



Calibration

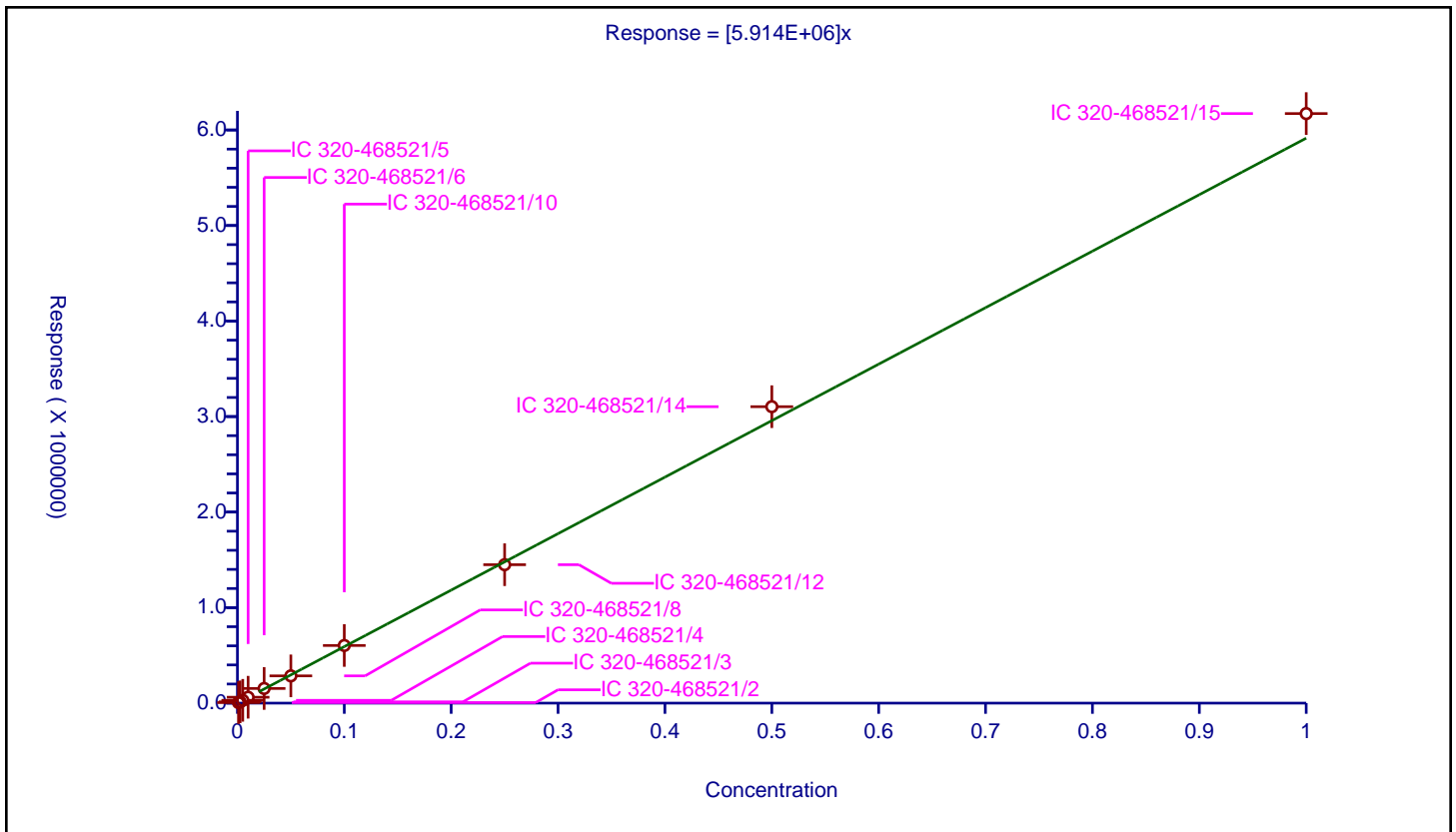
/ R-EVE

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.914E+06

Error Coefficients	
Standard Error:	99400
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	5648.0			5648000.0	Y
2	IC 320-468521/3	0.0025	13516.0			5406400.0	Y
3	IC 320-468521/4	0.005	29352.0			5870400.0	Y
4	IC 320-468521/5	0.01	61641.0			6164100.0	Y
5	IC 320-468521/6	0.025	153482.0			6139280.0	Y
6	IC 320-468521/8	0.05	285284.0			5705680.0	Y
7	IC 320-468521/10	0.1	603468.0			6034680.0	Y
8	IC 320-468521/12	0.25	1449150.0			5796600.0	Y
9	IC 320-468521/14	0.5	3103516.0			6207032.0	Y
10	IC 320-468521/15	1.0	6171861.0			6171861.0	Y



Calibration

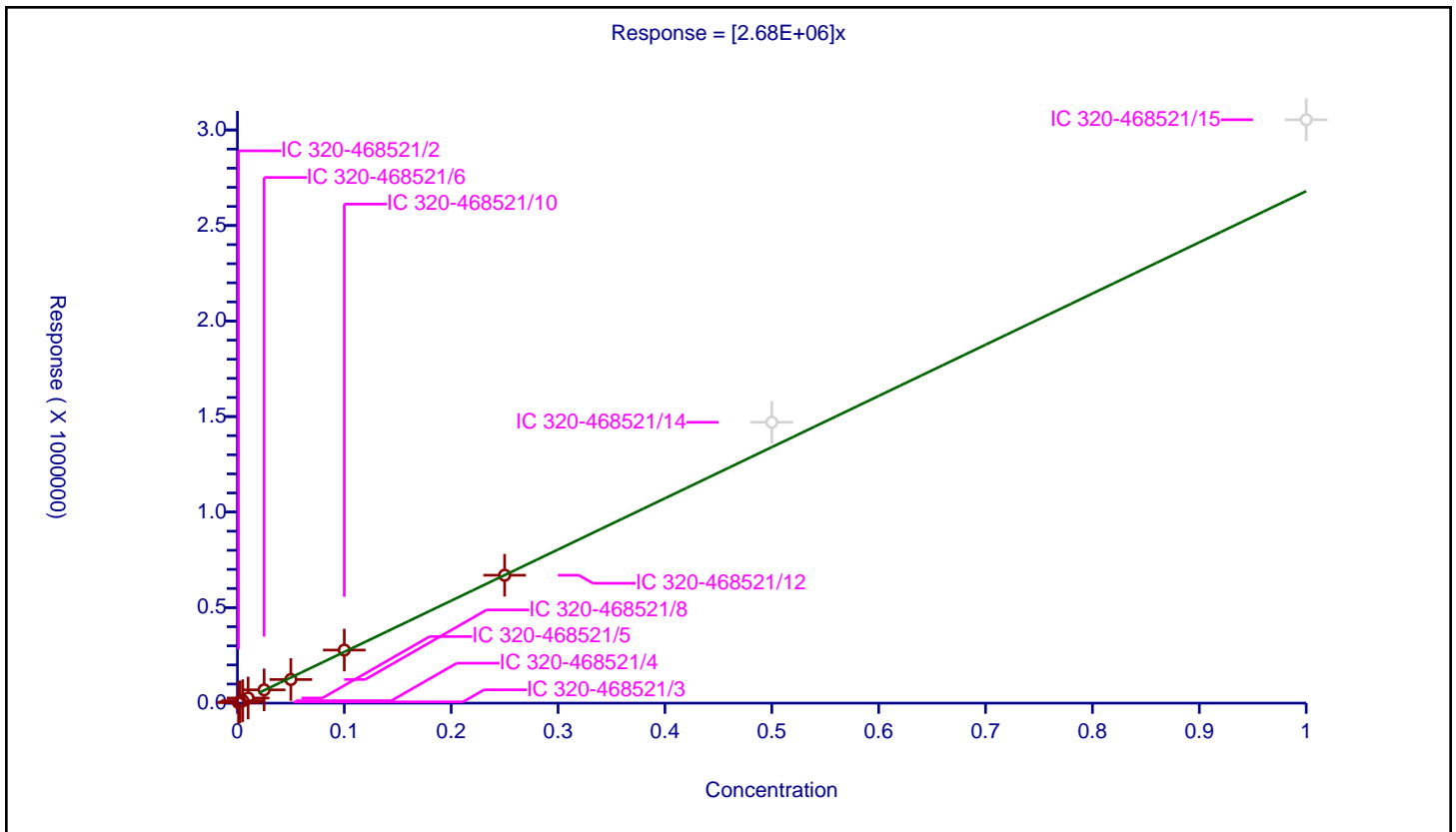
/ R-PSDA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.68E+06

Error Coefficients	
Standard Error:	5480
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	2852.0			2852000.0	Y
2	IC 320-468521/3	0.0025	6628.0			2651200.0	Y
3	IC 320-468521/4	0.005	12788.0			2557600.0	Y
4	IC 320-468521/5	0.01	26704.0			2670400.0	Y
5	IC 320-468521/6	0.025	69516.0			2780640.0	Y
6	IC 320-468521/8	0.05	123602.0			2472040.0	Y
7	IC 320-468521/10	0.1	277743.0			2777430.0	Y
8	IC 320-468521/12	0.25	669453.0			2677812.0	Y
9	IC 320-468521/14	0.5	1469973.0			2939946.0	N
10	IC 320-468521/15	1.0	3053744.0			3053744.0	N



Calibration

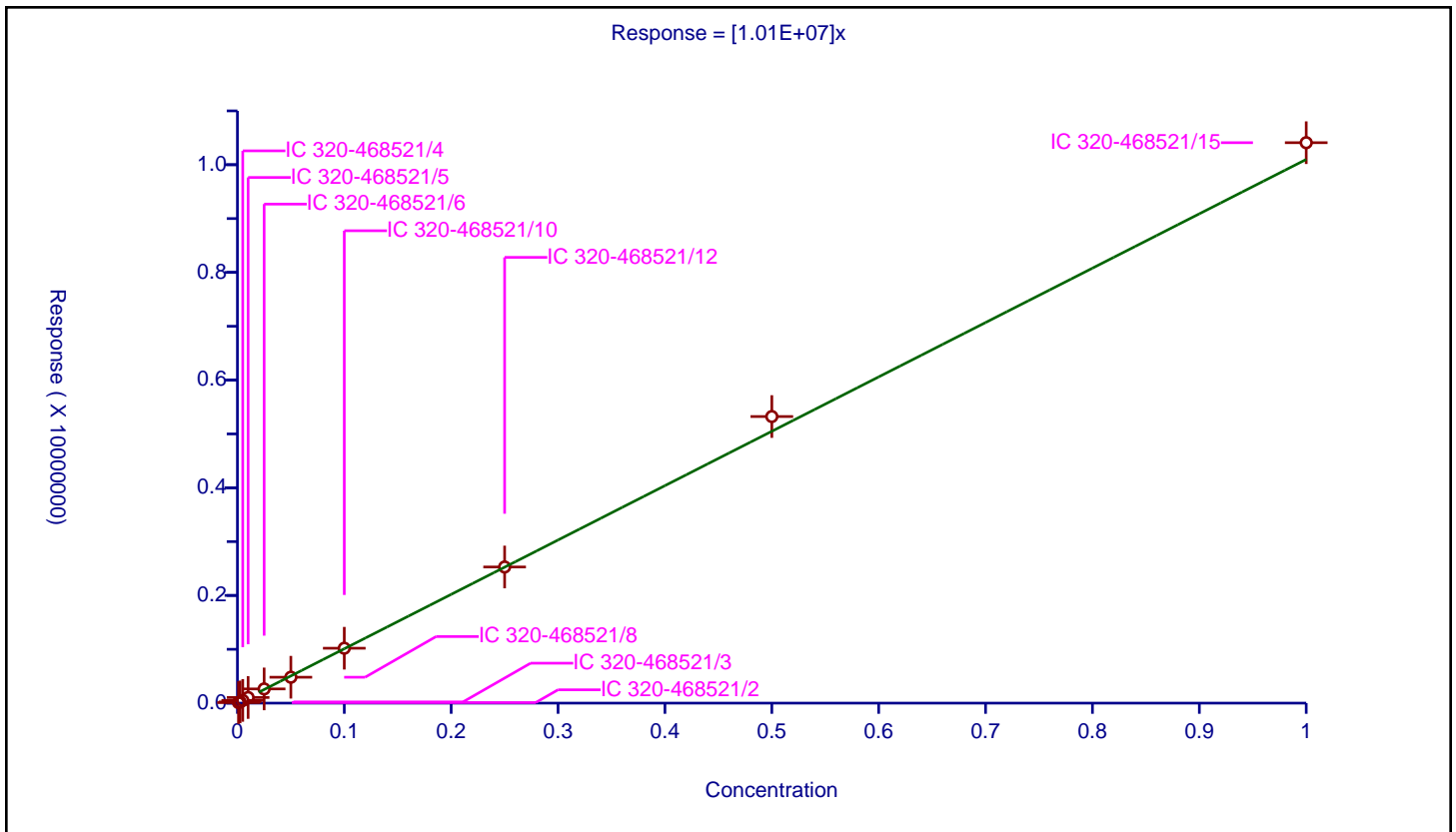
/ Hydrolyzed PSDA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.01E+07

Error Coefficients	
Standard Error:	138000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	9895.0			9895000.0	Y
2	IC 320-468521/3	0.0025	22281.0			8912400.0	Y
3	IC 320-468521/4	0.005	50803.0			10160600.0	Y
4	IC 320-468521/5	0.01	104805.0			10480500.0	Y
5	IC 320-468521/6	0.025	263703.0			10548120.0	Y
6	IC 320-468521/8	0.05	481065.0			9621300.0	Y
7	IC 320-468521/10	0.1	1019758.0			10197580.0	Y
8	IC 320-468521/12	0.25	2528385.0			10113540.0	Y
9	IC 320-468521/14	0.5	5322799.0			10645598.0	Y
10	IC 320-468521/15	1.0	10409341.0			10409341.0	Y



Calibration

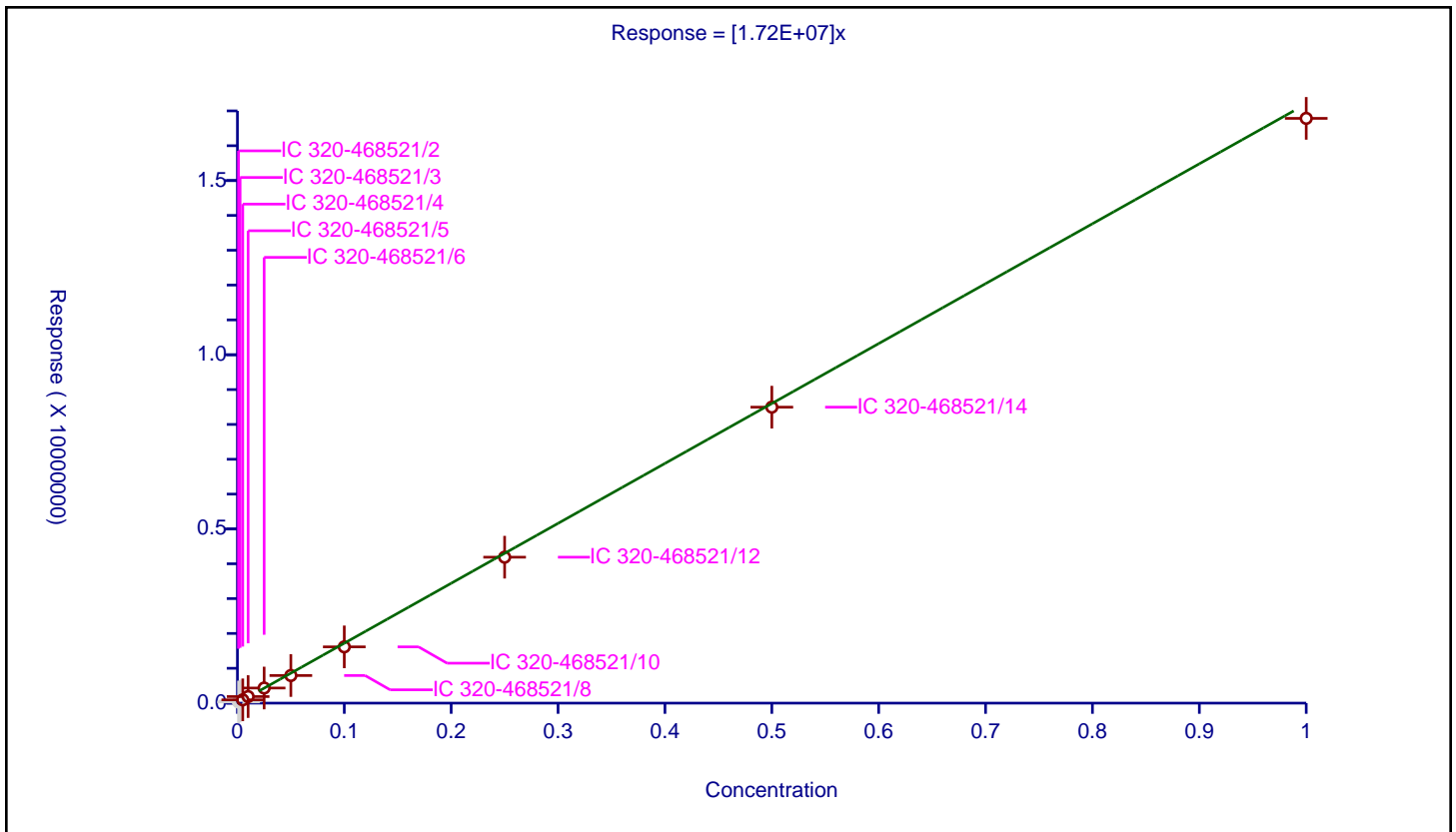
/ PMPA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.72E+07

Error Coefficients	
Standard Error:	174000
Relative Standard Error:	6.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	33403.0			33403000.0	N
2	IC 320-468521/3	0.0025	58246.0			23298400.0	N
3	IC 320-468521/4	0.005	94290.0			18858000.0	Y
4	IC 320-468521/5	0.01	188799.0			18879900.0	Y
5	IC 320-468521/6	0.025	433517.0			17340680.0	Y
6	IC 320-468521/8	0.05	792575.0			15851500.0	Y
7	IC 320-468521/10	0.1	1614967.0			16149670.0	Y
8	IC 320-468521/12	0.25	4188896.0			16755584.0	Y
9	IC 320-468521/14	0.5	8495332.0			16990664.0	Y
10	IC 320-468521/15	1.0	16784939.0			16784939.0	Y



Calibration

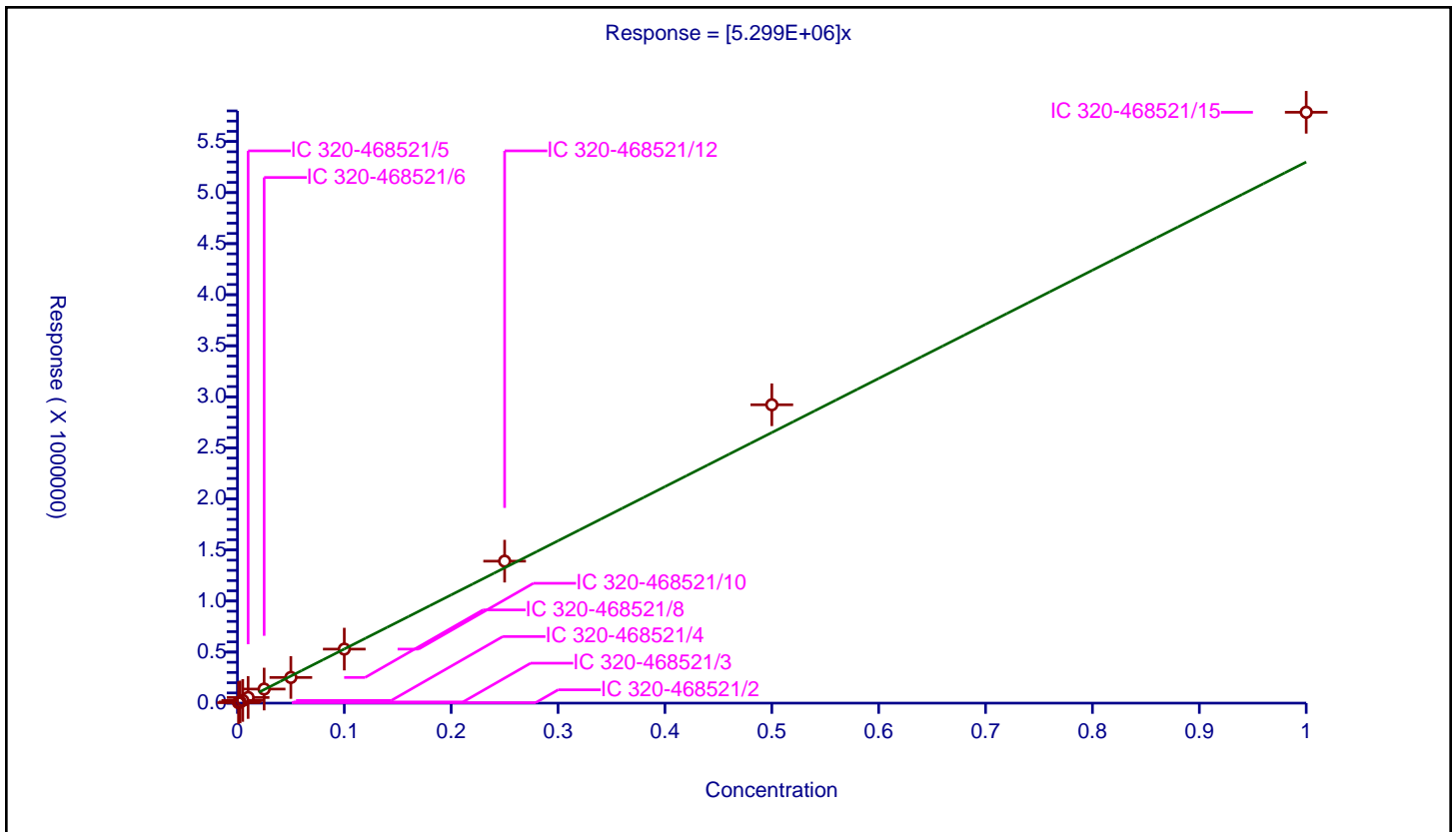
/ NVHOS

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.299E+06

Error Coefficients	
Standard Error:	187000
Relative Standard Error:	8.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	4514.0			4514000.0	Y
2	IC 320-468521/3	0.0025	11680.0			4672000.0	Y
3	IC 320-468521/4	0.005	26256.0			5251200.0	Y
4	IC 320-468521/5	0.01	55286.0			5528600.0	Y
5	IC 320-468521/6	0.025	137975.0			5519000.0	Y
6	IC 320-468521/8	0.05	251340.0			5026800.0	Y
7	IC 320-468521/10	0.1	529075.0			5290750.0	Y
8	IC 320-468521/12	0.25	1390463.0			5561852.0	Y
9	IC 320-468521/14	0.5	2922032.0			5844064.0	Y
10	IC 320-468521/15	1.0	5786419.0			5786419.0	Y



Calibration

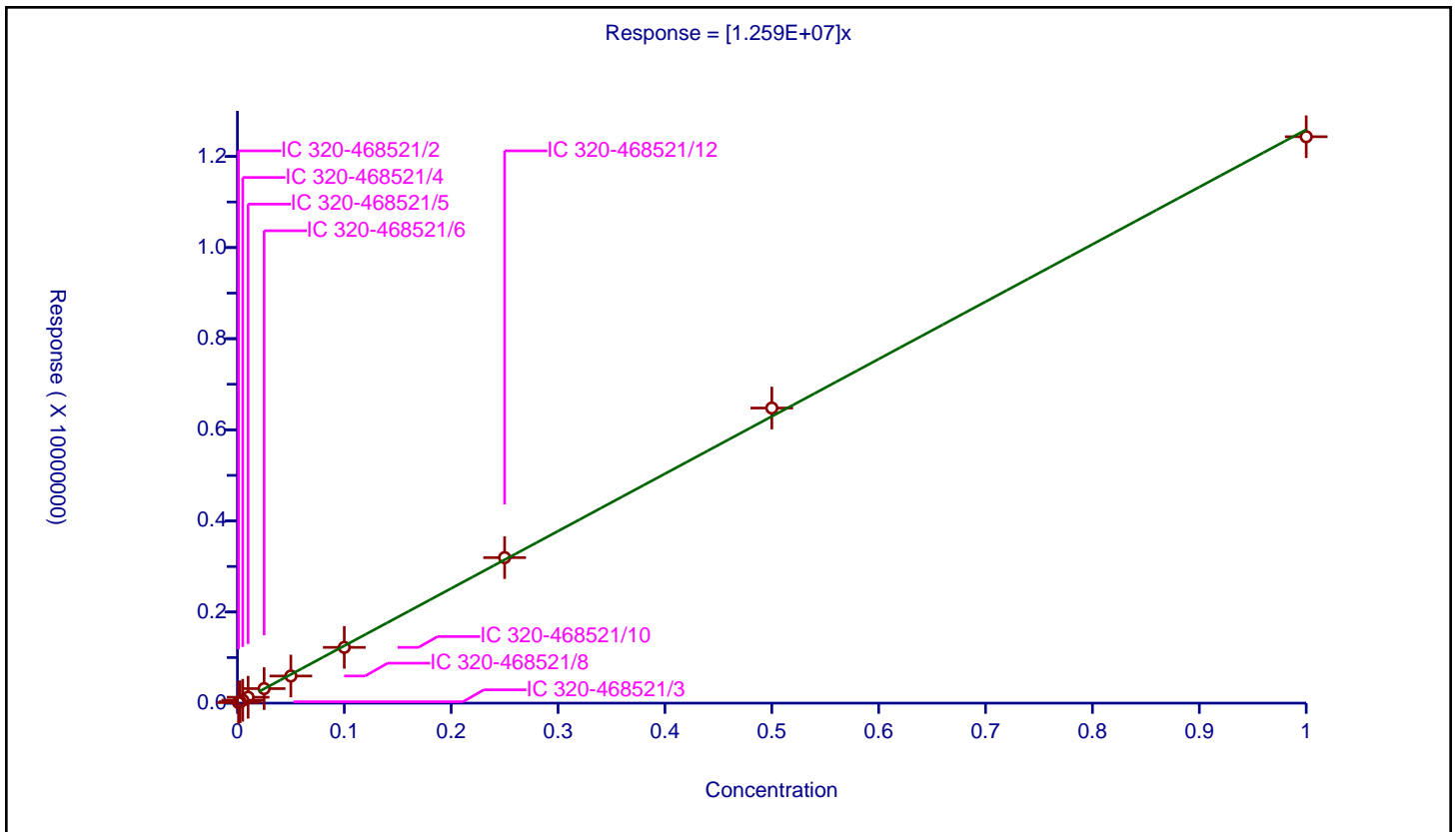
/ PFO2HxA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.259E+07

Error Coefficients	
Standard Error:	83200
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	12773.0			12773000.0	Y
2	IC 320-468521/3	0.0025	30806.0			12322400.0	Y
3	IC 320-468521/4	0.005	63912.0			12782400.0	Y
4	IC 320-468521/5	0.01	129242.0			12924200.0	Y
5	IC 320-468521/6	0.025	319132.0			12765280.0	Y
6	IC 320-468521/8	0.05	595321.0			11906420.0	Y
7	IC 320-468521/10	0.1	1223647.0			12236470.0	Y
8	IC 320-468521/12	0.25	3194272.0			12777088.0	Y
9	IC 320-468521/14	0.5	6477422.0			12954844.0	Y
10	IC 320-468521/15	1.0	12432784.0			12432784.0	Y



Calibration

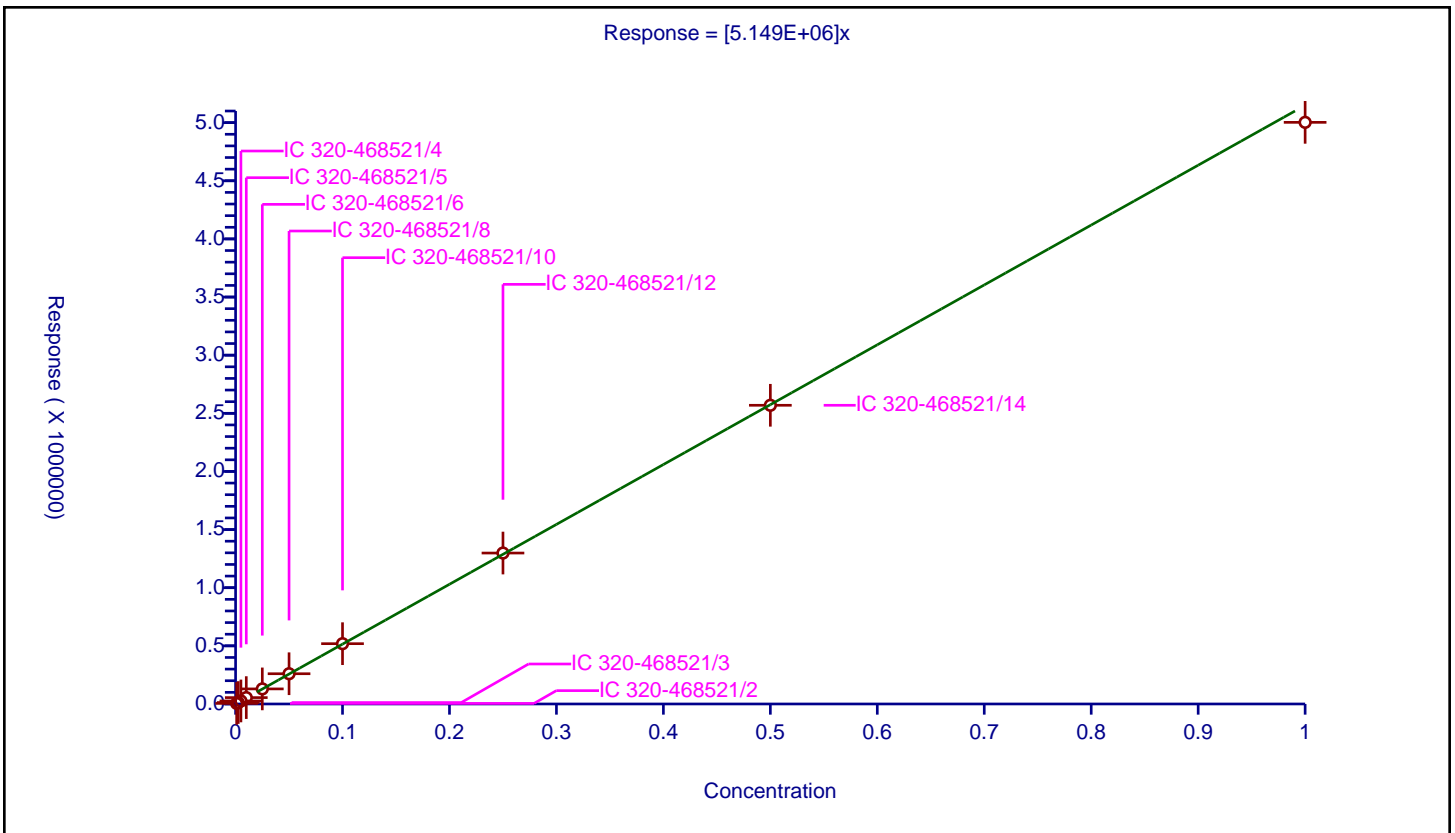
/ PEPA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.149E+06

Error Coefficients	
Standard Error:	49000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	4872.0			4872000.0	Y
2	IC 320-468521/3	0.0025	12502.0			5000800.0	Y
3	IC 320-468521/4	0.005	26099.0			5219800.0	Y
4	IC 320-468521/5	0.01	54842.0			5484200.0	Y
5	IC 320-468521/6	0.025	129608.0			5184320.0	Y
6	IC 320-468521/8	0.05	260244.0			5204880.0	Y
7	IC 320-468521/10	0.1	518748.0			5187480.0	Y
8	IC 320-468521/12	0.25	1298350.0			5193400.0	Y
9	IC 320-468521/14	0.5	2569017.0			5138034.0	Y
10	IC 320-468521/15	1.0	5002510.0			5002510.0	Y



Calibration

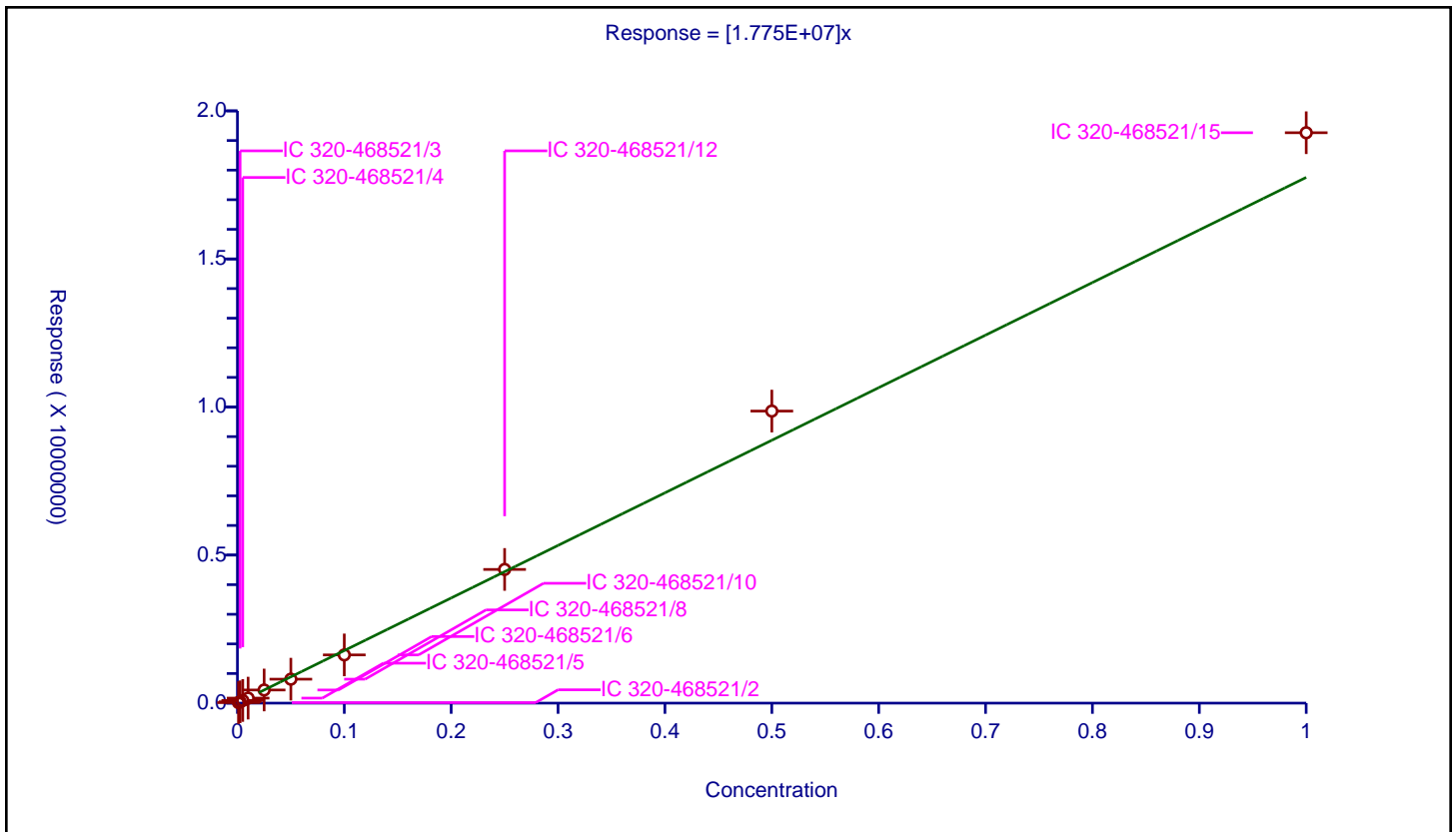
/ PES

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.775E+07

Error Coefficients	
Standard Error:	604000
Relative Standard Error:	6.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	17446.0			17446000.0	Y
2	IC 320-468521/3	0.0025	45152.0			18060800.0	Y
3	IC 320-468521/4	0.005	89139.0			17827800.0	Y
4	IC 320-468521/5	0.01	169587.0			16958700.0	Y
5	IC 320-468521/6	0.025	443453.0			17738120.0	Y
6	IC 320-468521/8	0.05	808659.0			16173180.0	Y
7	IC 320-468521/10	0.1	1628577.0			16285770.0	Y
8	IC 320-468521/12	0.25	4514703.0			18058812.0	Y
9	IC 320-468521/14	0.5	9862675.0			19725350.0	Y
10	IC 320-468521/15	1.0	19262846.0			19262846.0	Y



Calibration

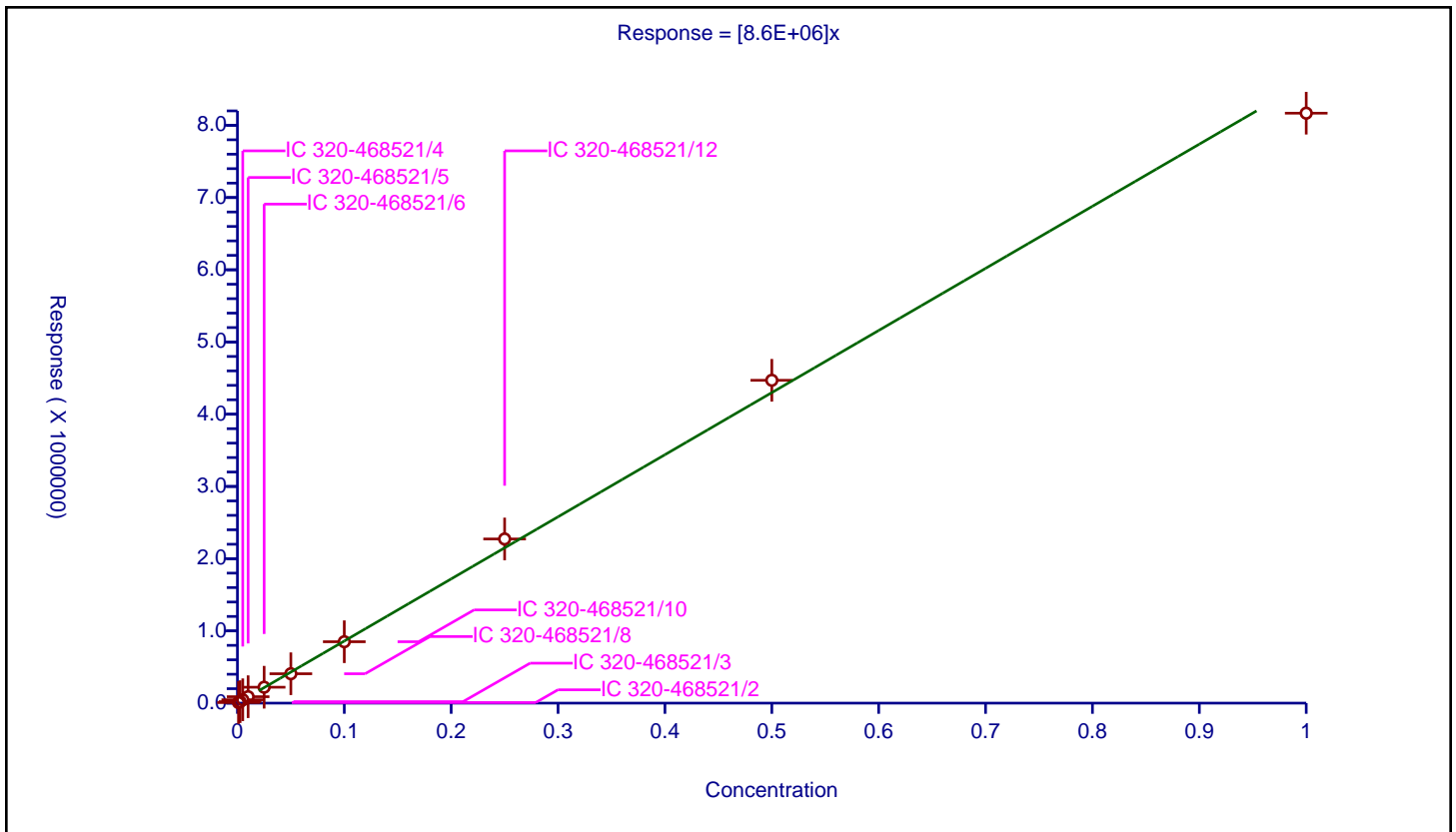
/ PFECA B

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	8.6E+06

Error Coefficients	
Standard Error:	160000
Relative Standard Error:	5.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	7866.0			7866000.0	Y
2	IC 320-468521/3	0.0025	20519.0			8207600.0	Y
3	IC 320-468521/4	0.005	46743.0			9348600.0	Y
4	IC 320-468521/5	0.01	89105.0			8910500.0	Y
5	IC 320-468521/6	0.025	220502.0			8820080.0	Y
6	IC 320-468521/8	0.05	407038.0			8140760.0	Y
7	IC 320-468521/10	0.1	850192.0			8501920.0	Y
8	IC 320-468521/12	0.25	2272793.0			9091172.0	Y
9	IC 320-468521/14	0.5	4470095.0			8940190.0	Y
10	IC 320-468521/15	1.0	8168324.0			8168324.0	Y



Calibration

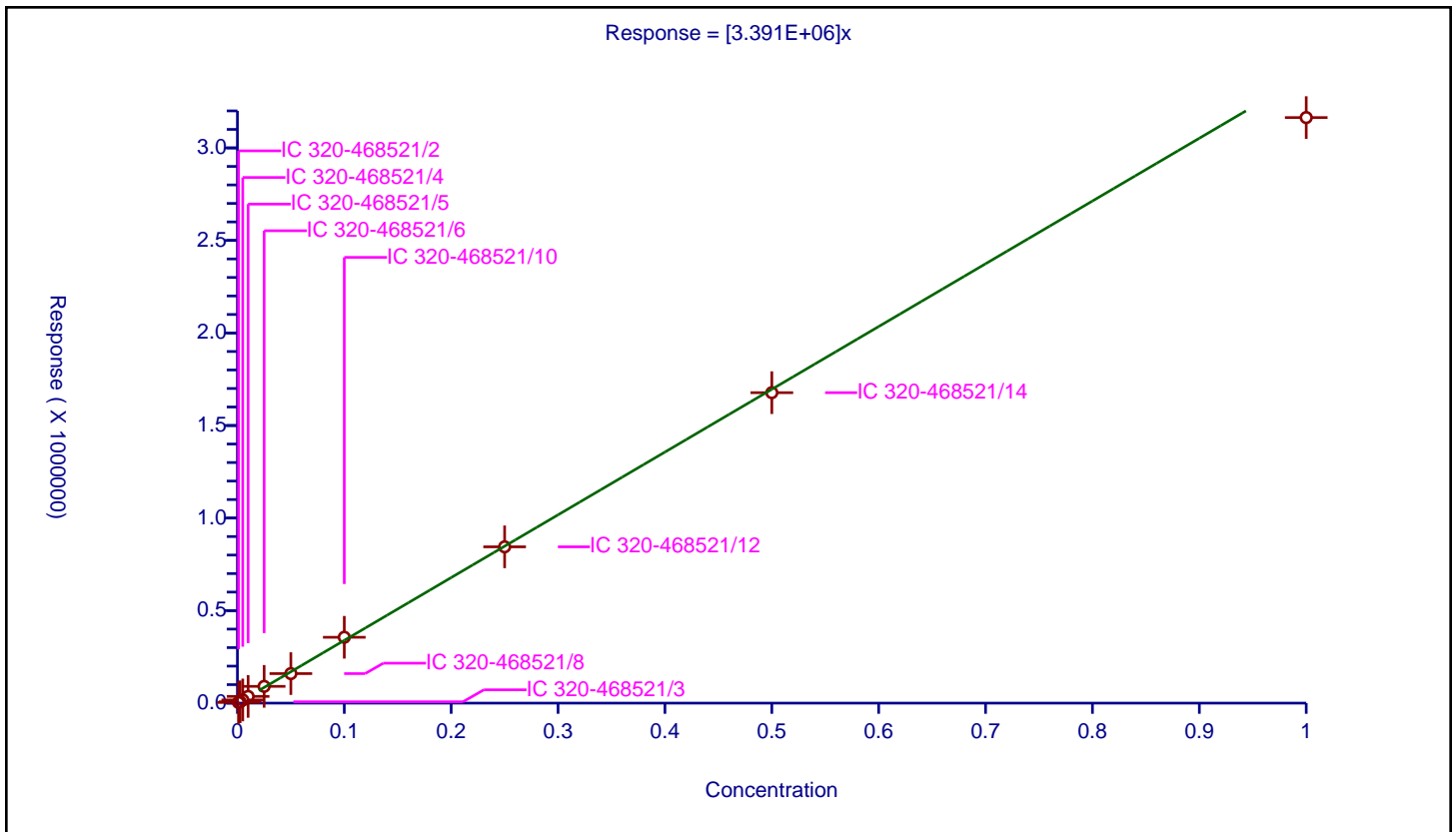
/ PFO3OA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.391E+06

Error Coefficients	
Standard Error:	76400
Relative Standard Error:	7.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	3726.0			3726000.0	Y
2	IC 320-468521/3	0.0025	7226.0			2890400.0	Y
3	IC 320-468521/4	0.005	16989.0			3397800.0	Y
4	IC 320-468521/5	0.01	36295.0			3629500.0	Y
5	IC 320-468521/6	0.025	90599.0			3623960.0	Y
6	IC 320-468521/8	0.05	159509.0			3190180.0	Y
7	IC 320-468521/10	0.1	355867.0			3558670.0	Y
8	IC 320-468521/12	0.25	844482.0			3377928.0	Y
9	IC 320-468521/14	0.5	1677476.0			3354952.0	Y
10	IC 320-468521/15	1.0	3163918.0			3163918.0	Y



Calibration

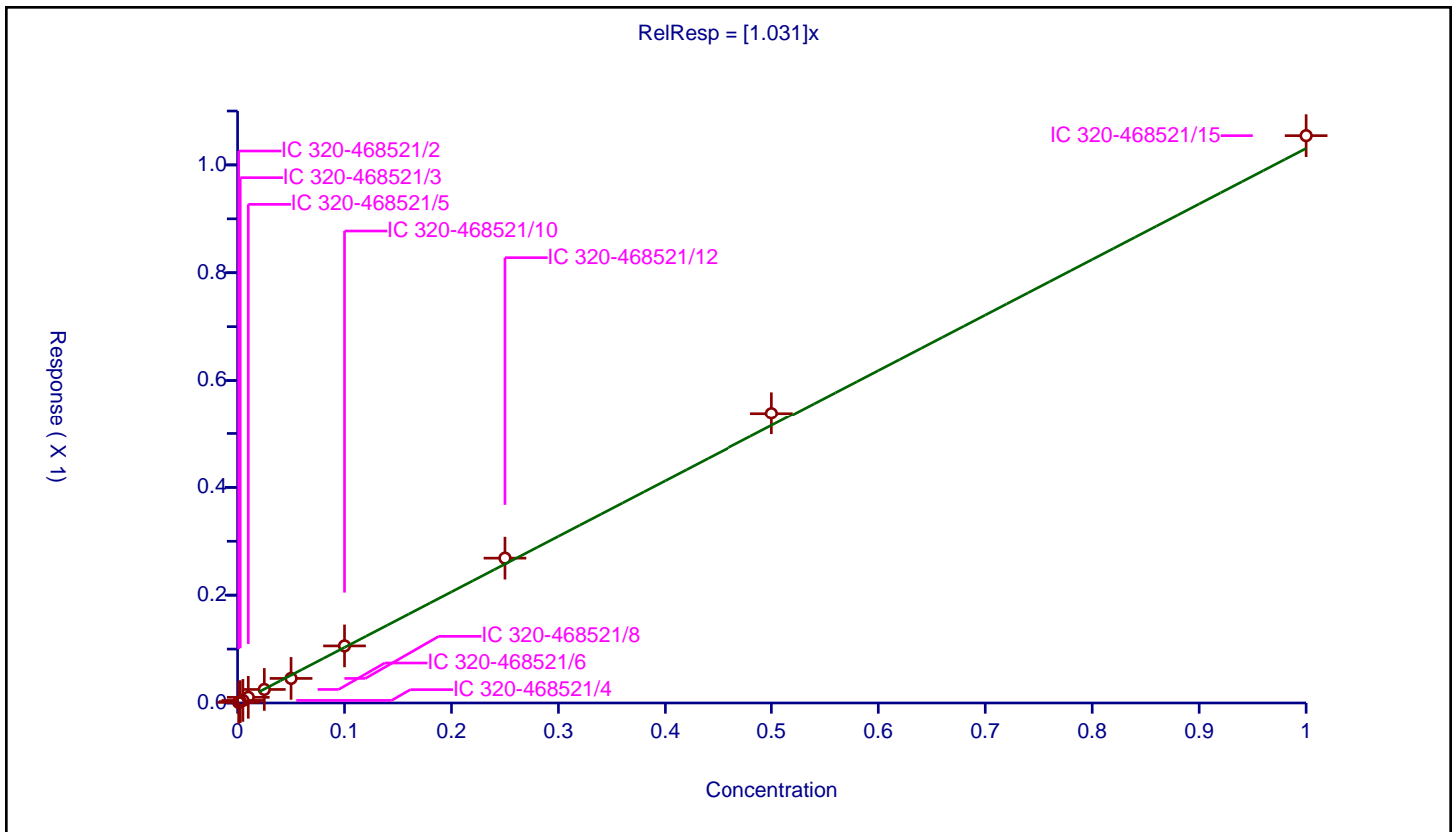
/ Perfluoro(2-propoxypropanoic) acid

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: IsoDil
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.031

Error Coefficients	
Standard Error:	2390000
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 320-468521/2	0.001	0.001071	0.25	1627606.0	1.071052	Y
2	IC 320-468521/3	0.0025	0.002612	0.25	1578835.0	1.044884	Y
3	IC 320-468521/4	0.005	0.004765	0.25	1642244.0	0.953086	Y
4	IC 320-468521/5	0.01	0.010556	0.25	1658891.0	1.055645	Y
5	IC 320-468521/6	0.025	0.025124	0.25	1618844.0	1.004952	Y
6	IC 320-468521/8	0.05	0.045602	0.25	1700605.0	0.91204	Y
7	IC 320-468521/10	0.1	0.105909	0.25	1522203.0	1.059087	Y
8	IC 320-468521/12	0.25	0.268689	0.25	1528632.0	1.074757	Y
9	IC 320-468521/14	0.5	0.538429	0.25	1464074.0	1.076858	Y
10	IC 320-468521/15	1.0	1.054286	0.25	1470012.0	1.054286	Y



Calibration

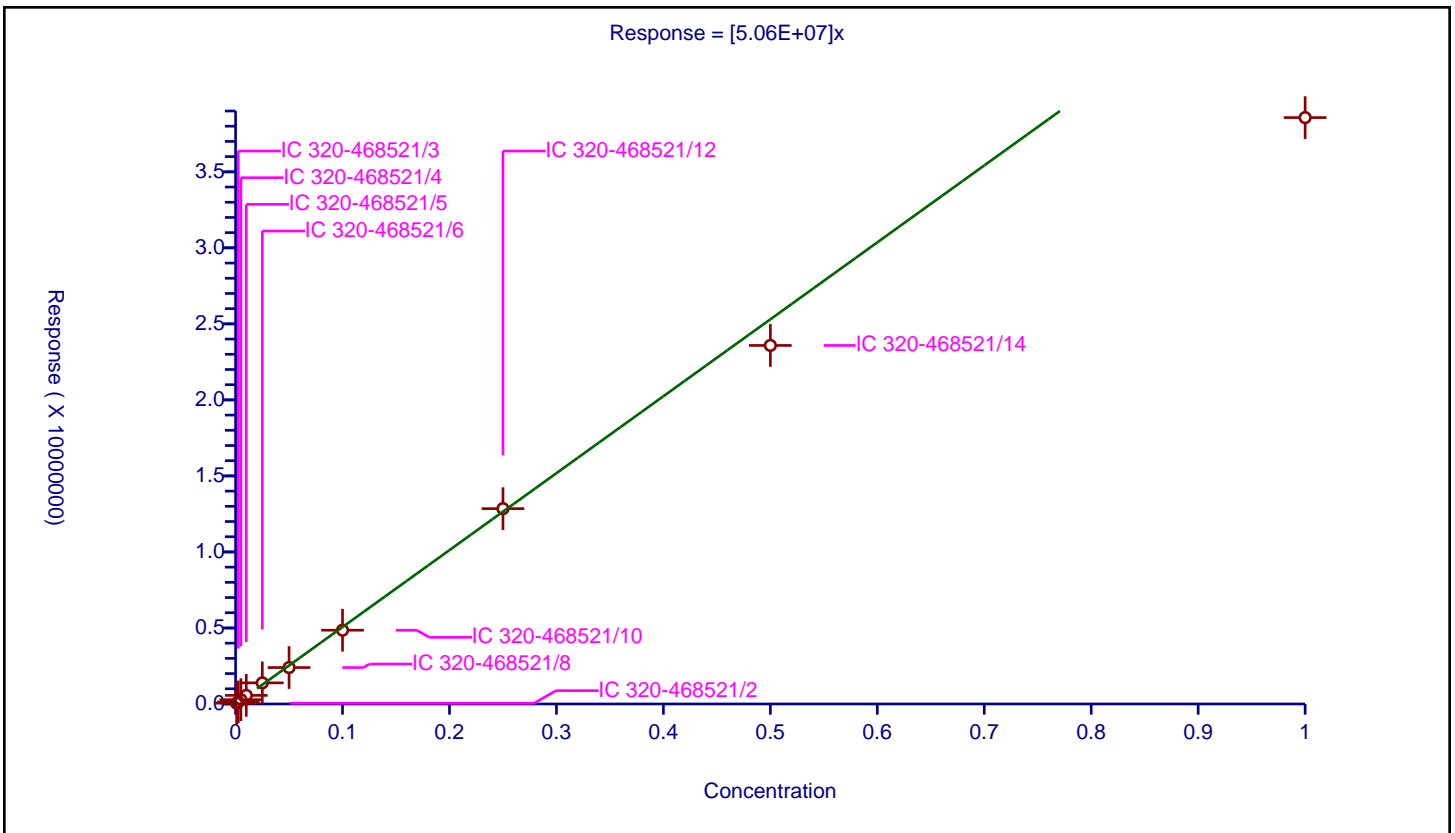
/ R-PSDCA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.06E+07

Error Coefficients	
Standard Error:	4050000
Relative Standard Error:	10.9
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	50115.0			50115000.0	Y
2	IC 320-468521/3	0.0025	133859.0			53543600.0	Y
3	IC 320-468521/4	0.005	283369.0			56673800.0	Y
4	IC 320-468521/5	0.01	564909.0			56490900.0	Y
5	IC 320-468521/6	0.025	1390007.0			55600280.0	Y
6	IC 320-468521/8	0.05	2396230.0			47924600.0	Y
7	IC 320-468521/10	0.1	4852881.0			48528810.0	Y
8	IC 320-468521/12	0.25	12847677.0			51390708.0	Y
9	IC 320-468521/14	0.5	23581631.0			47163262.0	Y
10	IC 320-468521/15	1.0	38566604.0			38566604.0	Y



Calibration

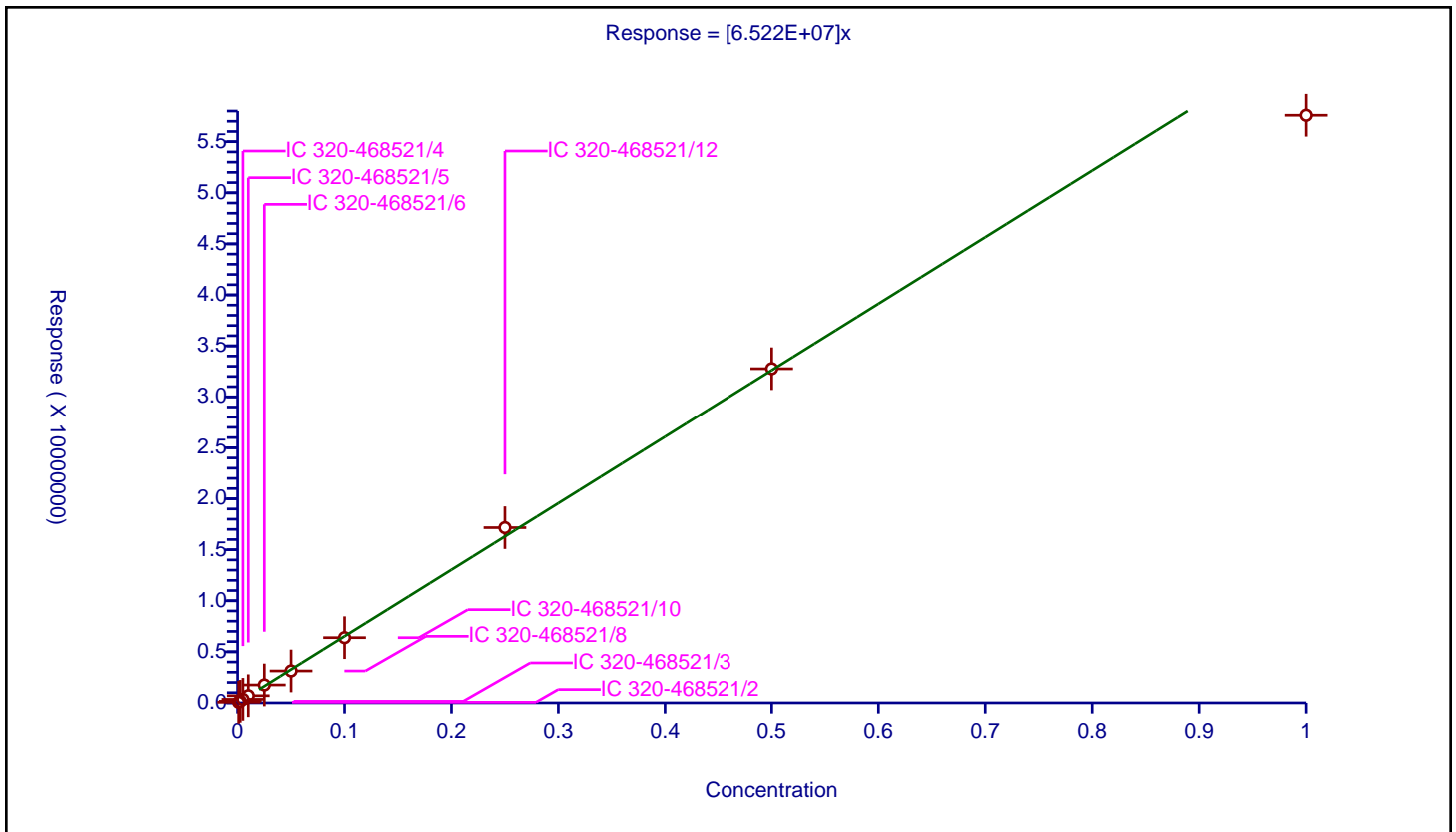
/ Hydro-EVE Acid

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	6.522E+07

Error Coefficients	
Standard Error:	2560000
Relative Standard Error:	6.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	61494.0			61494000.0	Y
2	IC 320-468521/3	0.0025	157576.0			63030400.0	Y
3	IC 320-468521/4	0.005	347626.0			69525200.0	Y
4	IC 320-468521/5	0.01	699286.0			69928600.0	Y
5	IC 320-468521/6	0.025	1753131.0			70125240.0	Y
6	IC 320-468521/8	0.05	3123853.0			62477060.0	Y
7	IC 320-468521/10	0.1	6383181.0			63831810.0	Y
8	IC 320-468521/12	0.25	17165771.0			68663084.0	Y
9	IC 320-468521/14	0.5	32762348.0			65524696.0	Y
10	IC 320-468521/15	1.0	57587964.0			57587964.0	Y



Calibration

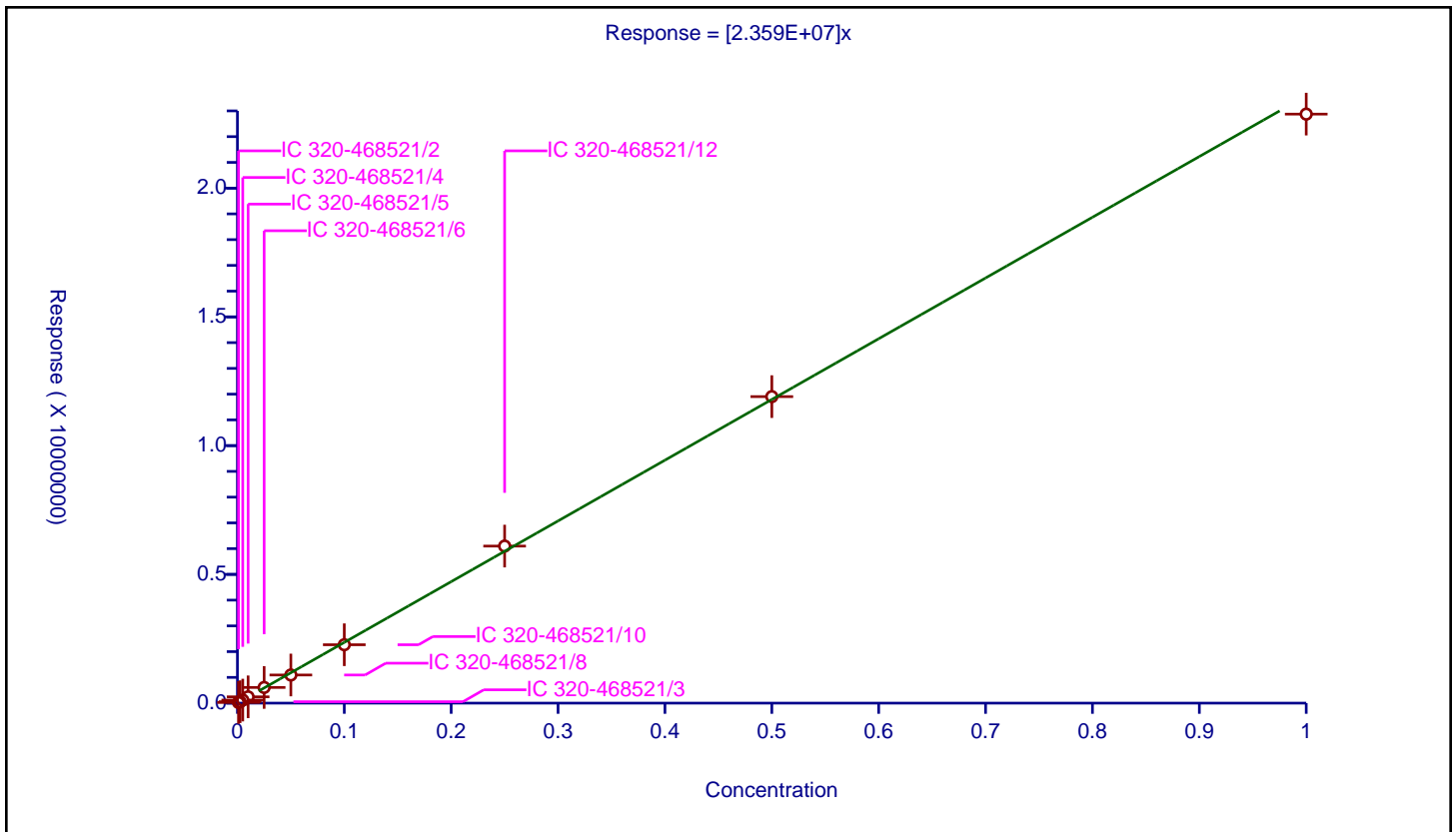
/ Hydro-PS Acid

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.359E+07

Error Coefficients	
Standard Error:	253000
Relative Standard Error:	5.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	25655.0			25655000.0	Y
2	IC 320-468521/3	0.0025	55065.0			22026000.0	Y
3	IC 320-468521/4	0.005	118867.0			23773400.0	Y
4	IC 320-468521/5	0.01	244201.0			24420100.0	Y
5	IC 320-468521/6	0.025	609055.0			24362200.0	Y
6	IC 320-468521/8	0.05	1093259.0			21865180.0	Y
7	IC 320-468521/10	0.1	2267939.0			22679390.0	Y
8	IC 320-468521/12	0.25	6099023.0			24396092.0	Y
9	IC 320-468521/14	0.5	11903253.0			23806506.0	Y
10	IC 320-468521/15	1.0	22874579.0			22874579.0	Y



Calibration

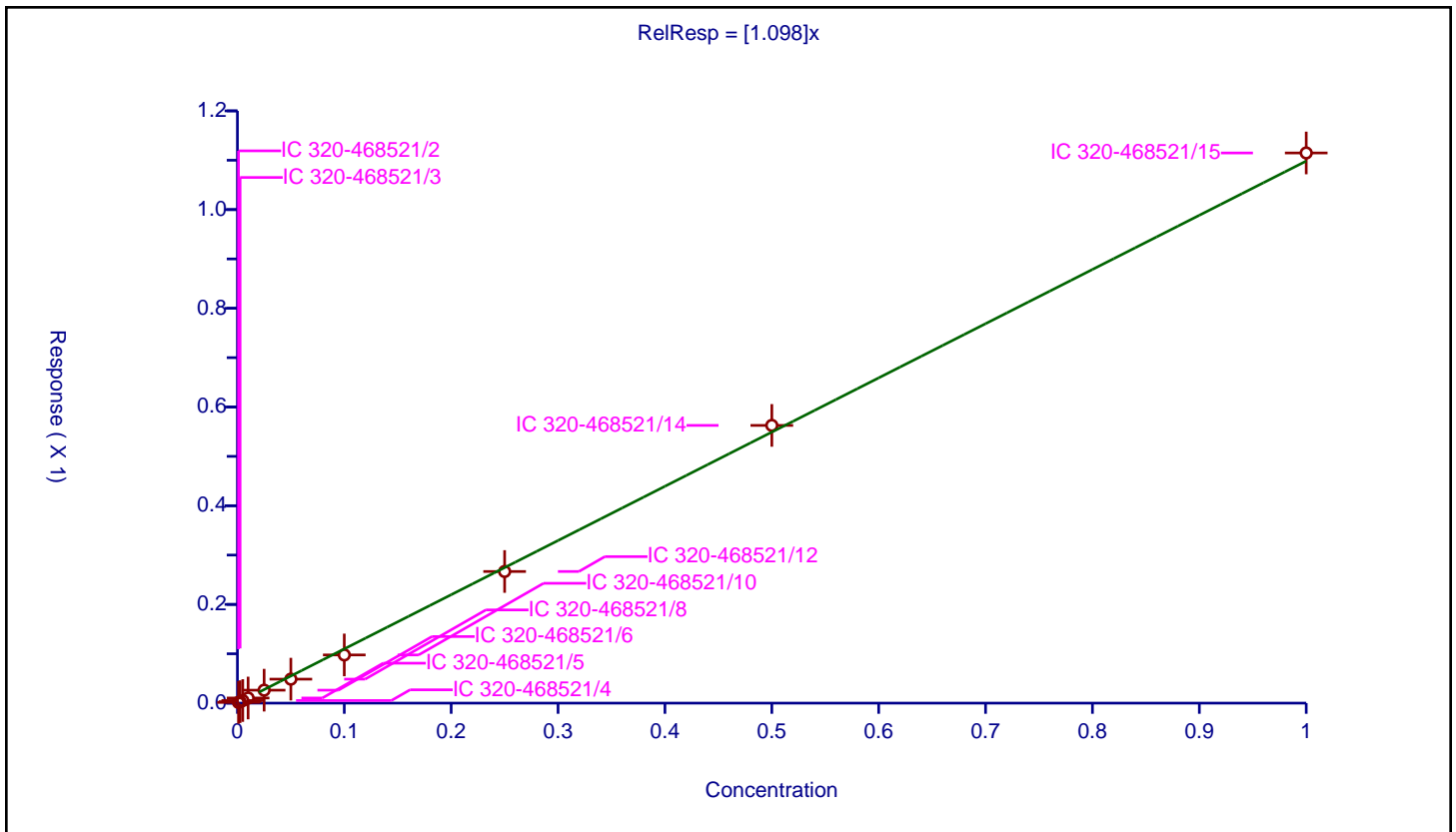
/ Perfluoroheptanoic acid

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: IsoDil
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.098

Error Coefficients	
Standard Error:	8040000
Relative Standard Error:	11.7
Correlation Coefficient:	0.982
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 320-468521/2	0.001	0.001418	0.25	7181550.0	1.417591	Y
2	IC 320-468521/3	0.0025	0.00294	0.25	7164025.0	1.175945	Y
3	IC 320-468521/4	0.005	0.005244	0.25	7324674.0	1.048702	Y
4	IC 320-468521/5	0.01	0.010363	0.25	7271138.0	1.036344	Y
5	IC 320-468521/6	0.025	0.026228	0.25	7084163.0	1.04912	Y
6	IC 320-468521/8	0.05	0.048614	0.25	6480776.0	0.972284	Y
7	IC 320-468521/10	0.1	0.097634	0.25	6654143.0	0.976336	Y
8	IC 320-468521/12	0.25	0.266708	0.25	6454524.0	1.066834	Y
9	IC 320-468521/14	0.5	0.562704	0.25	5429526.0	1.125408	Y
10	IC 320-468521/15	1.0	1.114759	0.25	4352755.0	1.114759	Y



Calibration

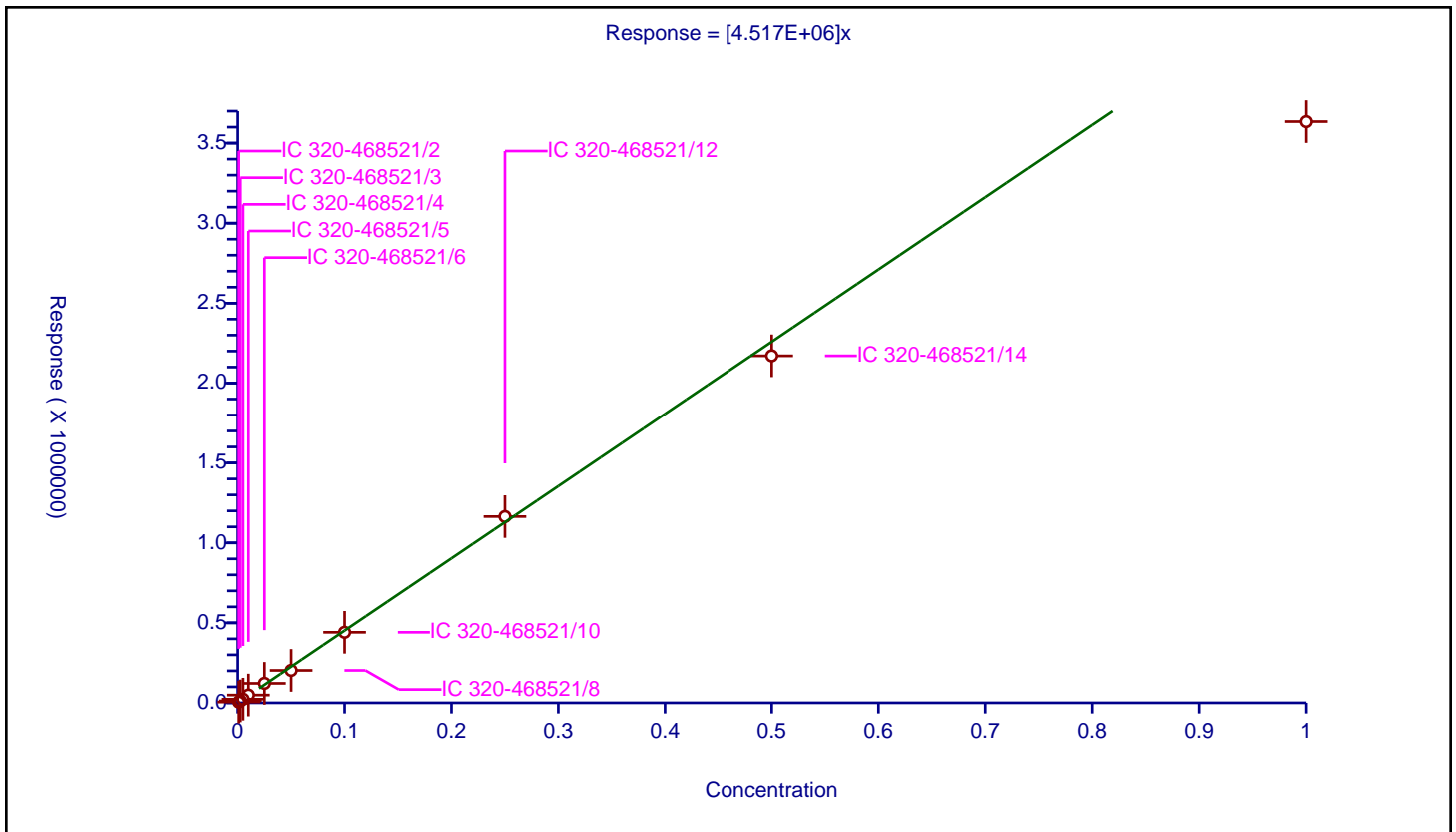
/ PFECA G

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.517E+06

Error Coefficients	
Standard Error:	296000
Relative Standard Error:	9.3
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	4934.0			4934000.0	Y
2	IC 320-468521/3	0.0025	12079.0			4831600.0	Y
3	IC 320-468521/4	0.005	22903.0			4580600.0	Y
4	IC 320-468521/5	0.01	48620.0			4862000.0	Y
5	IC 320-468521/6	0.025	121727.0			4869080.0	Y
6	IC 320-468521/8	0.05	202591.0			4051820.0	Y
7	IC 320-468521/10	0.1	440813.0			4408130.0	Y
8	IC 320-468521/12	0.25	1164693.0			4658772.0	Y
9	IC 320-468521/14	0.5	2170730.0			4341460.0	Y
10	IC 320-468521/15	1.0	3634590.0			3634590.0	Y



Calibration

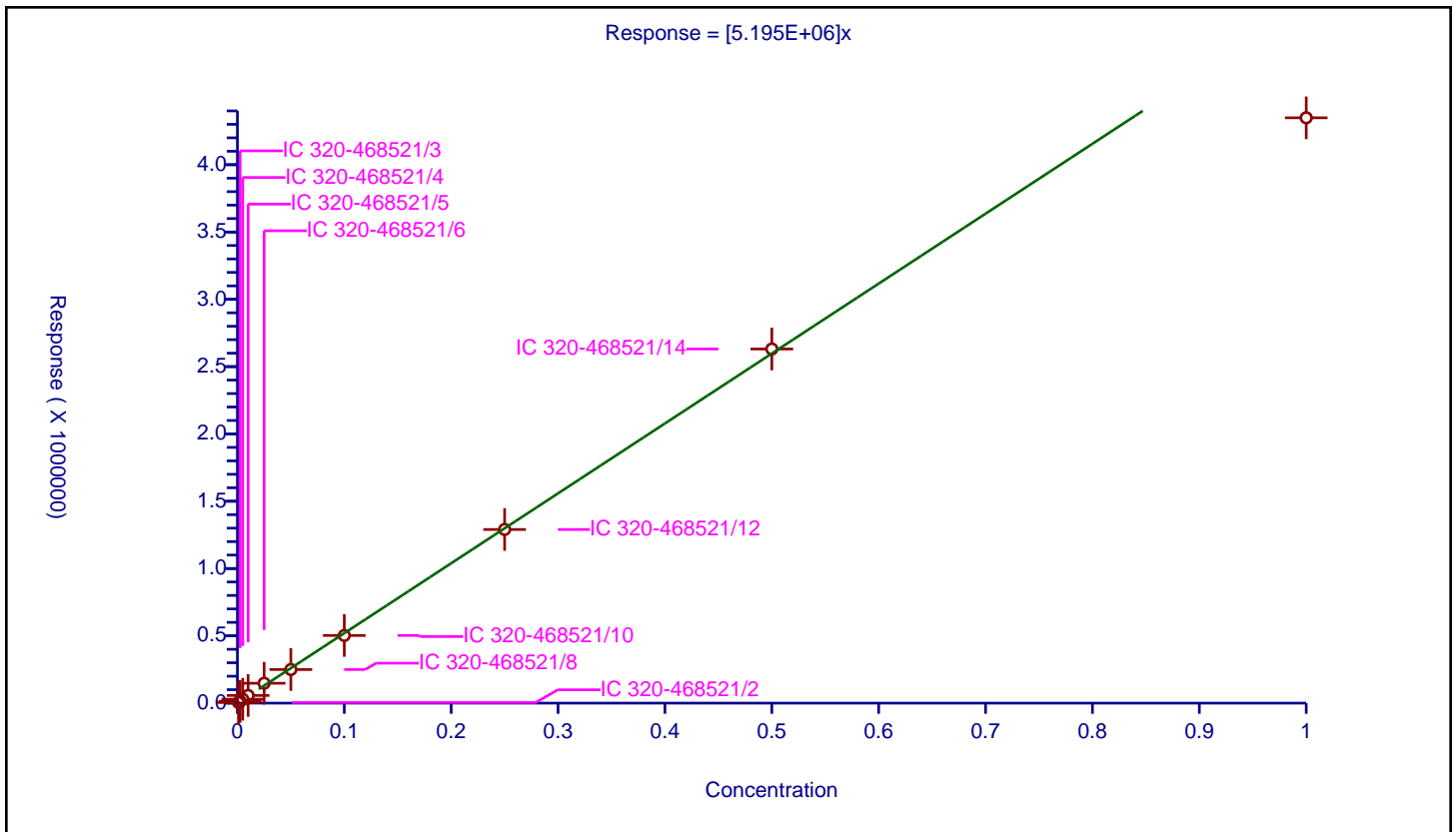
/ PFO4DA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.195E+06

Error Coefficients	
Standard Error:	282000
Relative Standard Error:	9.5
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	4614.0			4614000.0	Y
2	IC 320-468521/3	0.0025	13005.0			5202000.0	Y
3	IC 320-468521/4	0.005	28703.0			5740600.0	Y
4	IC 320-468521/5	0.01	56911.0			5691100.0	Y
5	IC 320-468521/6	0.025	147649.0			5905960.0	Y
6	IC 320-468521/8	0.05	249708.0			4994160.0	Y
7	IC 320-468521/10	0.1	502711.0			5027110.0	Y
8	IC 320-468521/12	0.25	1289936.0			5159744.0	Y
9	IC 320-468521/14	0.5	2631093.0			5262186.0	Y
10	IC 320-468521/15	1.0	4348756.0			4348756.0	Y



Calibration

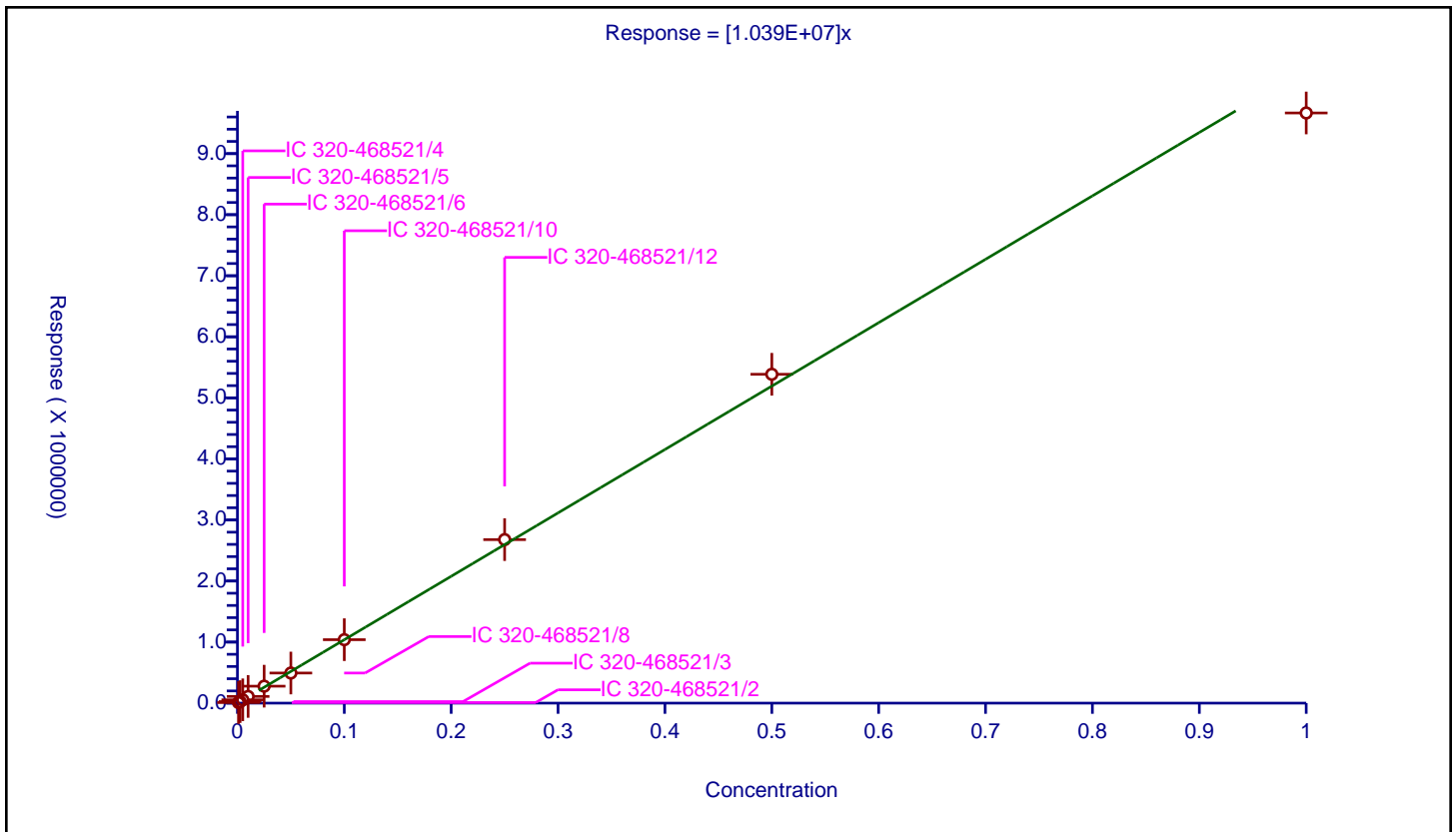
/ PS Acid

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.039E+07

Error Coefficients	
Standard Error:	250000
Relative Standard Error:	5.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	9476.0			9476000.0	Y
2	IC 320-468521/3	0.0025	25058.0			10023200.0	Y
3	IC 320-468521/4	0.005	54303.0			10860600.0	Y
4	IC 320-468521/5	0.01	109802.0			10980200.0	Y
5	IC 320-468521/6	0.025	277703.0			11108120.0	Y
6	IC 320-468521/8	0.05	492991.0			9859820.0	Y
7	IC 320-468521/10	0.1	1039141.0			10391410.0	Y
8	IC 320-468521/12	0.25	2678058.0			10712232.0	Y
9	IC 320-468521/14	0.5	5386188.0			10772376.0	Y
10	IC 320-468521/15	1.0	9666123.0			9666123.0	Y



Calibration

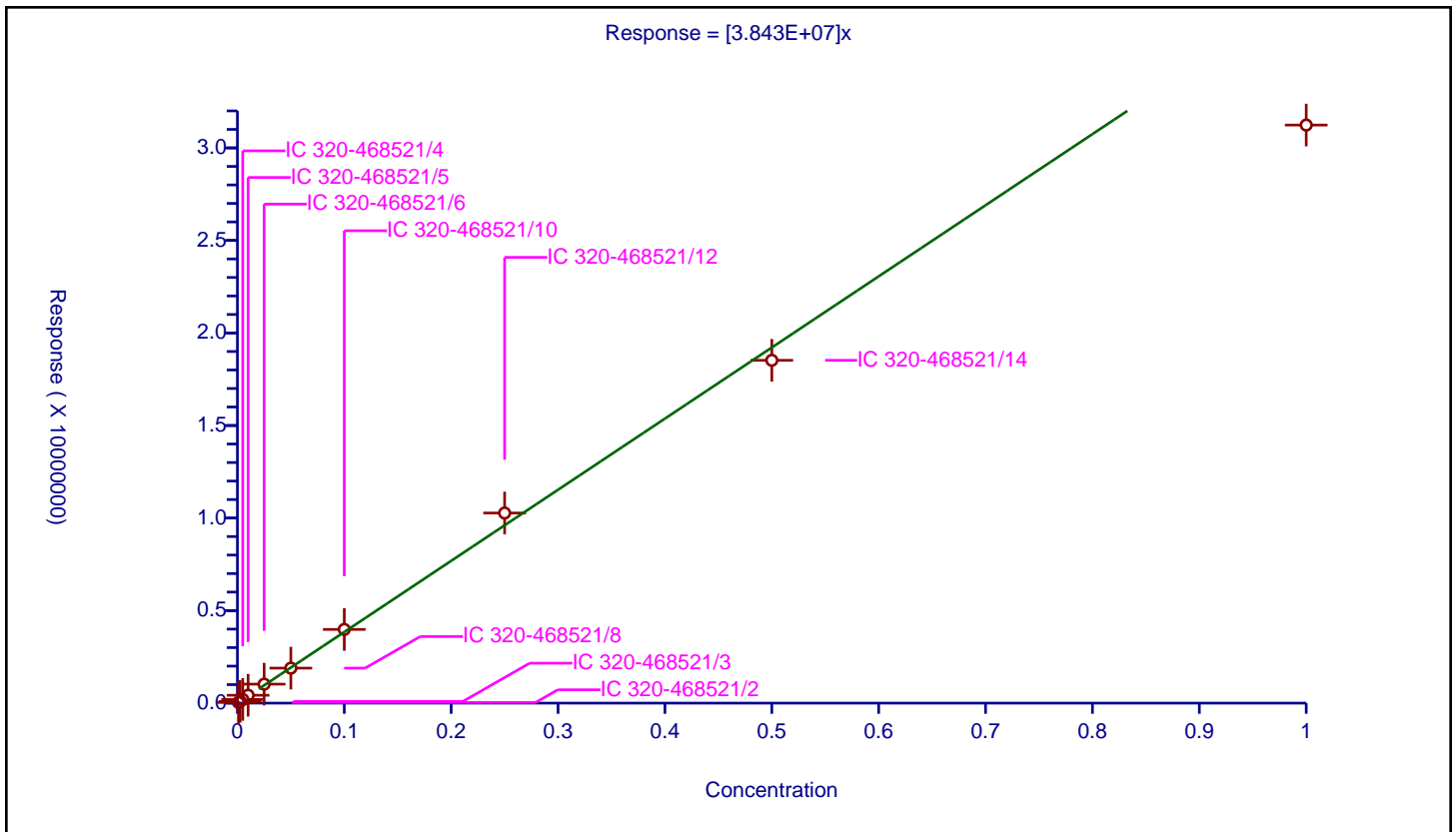
/ EVE Acid

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ESTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.843E+07

Error Coefficients	
Standard Error:	2420000
Relative Standard Error:	8.4
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	36320.0			36320000.0	Y
2	IC 320-468521/3	0.0025	93739.0			37495600.0	Y
3	IC 320-468521/4	0.005	199662.0			39932400.0	Y
4	IC 320-468521/5	0.01	425539.0			42553900.0	Y
5	IC 320-468521/6	0.025	1024800.0			40992000.0	Y
6	IC 320-468521/8	0.05	1891224.0			37824480.0	Y
7	IC 320-468521/10	0.1	3982692.0			39826920.0	Y
8	IC 320-468521/12	0.25	10271801.0			41087204.0	Y
9	IC 320-468521/14	0.5	18523081.0			37046162.0	Y
10	IC 320-468521/15	1.0	31234468.0			31234468.0	Y



Calibration

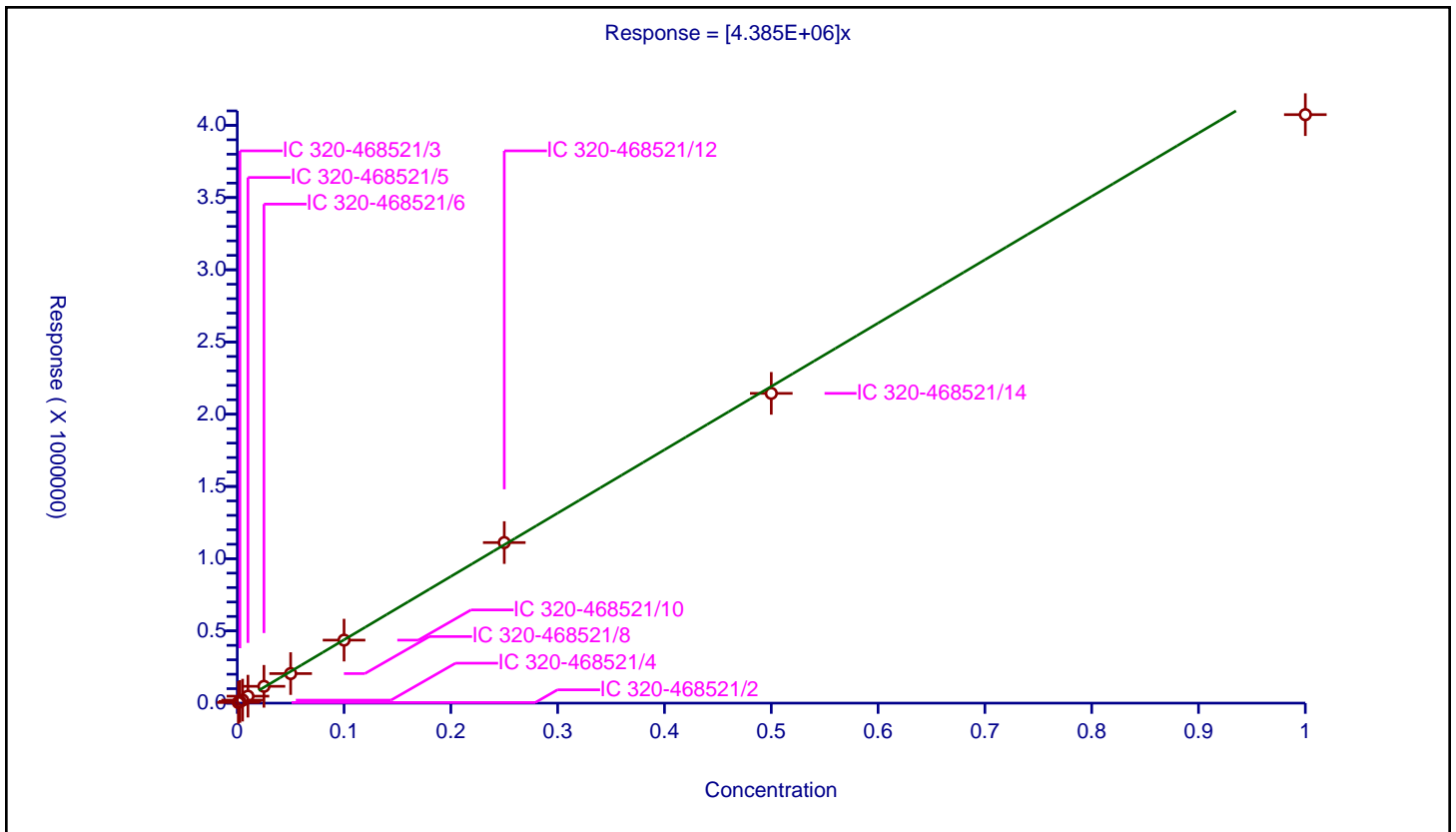
/ TAF

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.385E+06

Error Coefficients	
Standard Error:	105000
Relative Standard Error:	5.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-468521/2	0.001	4324.0			4324000.0	Y
2	IC 320-468521/3	0.0025	11554.0			4621600.0	Y
3	IC 320-468521/4	0.005	20779.0			4155800.0	Y
4	IC 320-468521/5	0.01	48252.0			4825200.0	Y
5	IC 320-468521/6	0.025	116421.0			4656840.0	Y
6	IC 320-468521/8	0.05	204623.0			4092460.0	Y
7	IC 320-468521/10	0.1	436127.0			4361270.0	Y
8	IC 320-468521/12	0.25	1111618.0			4446472.0	Y
9	IC 320-468521/14	0.5	2144361.0			4288722.0	Y
10	IC 320-468521/15	1.0	4073951.0			4073951.0	Y



FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1 Analy Batch No.: 469371

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2021 12:14 Calibration End Date: 03/11/2021 16:03 Calibration ID: 54512

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-469371/3	2021.03.11_A12_TB3_ICAL_A_006.d
Level 2	IC 320-469371/4	2021.03.11_A12_TB3_ICAL_A_007.d
Level 3	IC 320-469371/5	2021.03.11_A12_TB3_ICAL_A_008.d
Level 4	IC 320-469371/6	2021.03.11_A12_TB3_ICAL_A_009.d
Level 5	IC 320-469371/7	2021.03.11_A12_TB3_ICAL_A_010.d
Level 6	IC 320-469371/9	2021.03.11_A12_TB3_ICAL_A_012.d
Level 7	IC 320-469371/11	2021.03.11_A12_TB3_ICAL_A_014.d
Level 8	IC 320-469371/13	2021.03.11_A12_TB3_ICAL_A_016.d
Level 9	IC 320-469371/15	2021.03.11_A12_TB3_ICAL_A_018.d
Level 10	IC 320-469371/16	2021.03.11_A12_TB3_ICAL_A_019.d

ANALYTE											RT WINDOW	AVG RT
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10		
PFMOAA	4.235	4.076	4.296	3.642	4.098	3.961	3.922	4.305	4.288	3.776	3.985 - 4.485	4.060
R-EVE	6.390	6.390	6.410	6.287	6.367	6.367	6.387	6.427	+++++	+++++	6.140 - 6.640	6.378
R-PSDA	6.450	6.430	6.450	6.347	6.427	6.407	6.446	6.466	6.446	6.407	6.200 - 6.700	6.428
Hydrolyzed PSDA	6.529	6.530	6.530	6.446	6.506	6.506	6.526	6.546	+++++	+++++	6.279 - 6.779	6.515
PMPA	6.782	6.759	6.807	6.684	6.755	6.732	6.755	6.803	6.779	6.732	6.532 - 7.032	6.759
NVHOS	7.138	7.138	7.162	7.087	7.111	7.111	7.134	7.185	7.158	7.134	6.888 - 7.388	7.136
PFO2HxA	7.709	7.710	7.741	7.706	7.706	7.706	7.737	7.740	7.737	7.737	7.459 - 7.959	7.723
PEPA	8.299	8.300	8.336	8.295	8.295	8.295	8.330	8.335	8.295	8.295	8.049 - 8.549	8.308
PES	8.556	8.557	8.557	8.555	8.555	8.555	8.588	8.589	8.555	8.588	8.306 - 8.806	8.566
PFECA B	8.800	8.800	8.800	8.797	8.797	8.797	8.797	8.830	8.797	8.798	8.550 - 9.050	8.801
PFO3OA	9.048	9.049	9.049	9.045	9.045	9.017	9.045	9.048	9.045	9.047	8.798 - 9.298	9.044
Perfluoro(2-propoxypropanoic) acid	9.133	9.133	9.133	9.130	9.130	9.130	9.158	9.161	9.130	9.160	8.883 - 9.383	9.140
R-PSDCA	9.493	9.493	9.493	9.490	9.490	9.490	9.522	9.525	9.490	9.491	9.243 - 9.743	9.498
Hydro-EVE Acid	9.525	9.526	9.526	9.522	9.523	9.523	9.555	9.558	9.523	9.556	9.275 - 9.775	9.534
Perfluoroheptanoic acid	9.558	9.558	9.558	9.555	9.555	9.523	9.555	9.558	9.555	9.556	9.308 - 9.808	9.553
Hydro-PS Acid	9.558	9.558	9.558	9.555	9.555	9.555	9.587	9.590	9.555	9.556	9.308 - 9.808	9.563
PFECA G	9.676	9.673	9.673	9.673	9.674	9.645	9.673	9.676	9.674	+++++	9.426 - 9.926	9.671
PFO4DA	9.820	9.816	9.817	9.817	9.817	9.788	9.817	+++++	+++++	+++++	9.570 - 10.070	9.813
PS Acid	9.877	9.874	9.874	9.874	9.874	9.874	9.903	9.906	9.874	9.876	9.627 - 10.127	9.881
EVE Acid	9.877	9.903	9.903	9.874	9.903	9.874	9.903	9.906	9.874	+++++	9.627 - 10.127	9.891
PFO5DA	10.374	10.396	10.396	10.373	10.374	10.374	10.399	10.399	10.374	10.401	10.124 - 10.624	10.386
13C3 HFPO-DA	9.133	9.133	9.133	9.130	9.130	9.130	9.158	9.161	9.130	9.131	9.033 - 9.233	9.137
13C4 PFHpA	9.558	9.558	9.558	9.555	9.555	9.523	9.555	9.558	9.555	9.556	9.458 - 9.658	9.553

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1 Analy Batch No.: 469371

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2021 12:14 Calibration End Date: 03/11/2021 16:03 Calibration ID: 54512

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-469371/3	2021.03.11_A12_TB3_ICAL_A_006.d
Level 2	IC 320-469371/4	2021.03.11_A12_TB3_ICAL_A_007.d
Level 3	IC 320-469371/5	2021.03.11_A12_TB3_ICAL_A_008.d
Level 4	IC 320-469371/6	2021.03.11_A12_TB3_ICAL_A_009.d
Level 5	IC 320-469371/7	2021.03.11_A12_TB3_ICAL_A_010.d
Level 6	IC 320-469371/9	2021.03.11_A12_TB3_ICAL_A_012.d
Level 7	IC 320-469371/11	2021.03.11_A12_TB3_ICAL_A_014.d
Level 8	IC 320-469371/13	2021.03.11_A12_TB3_ICAL_A_016.d
Level 9	IC 320-469371/15	2021.03.11_A12_TB3_ICAL_A_018.d
Level 10	IC 320-469371/16	2021.03.11_A12_TB3_ICAL_A_019.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6 LVL 10	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
PFMOAA	9219000 9600560 11459606	8769200 10885900 11493204	10142000 10976110	9327000 11539048	Ave		10341162. 8			10.2			50.0			
R-EVE	6451000 6091560 ++++	6171600 7098560 ++++	6465600 7175440	6036600 7545904	Ave		6629533.0 0			8.6			50.0			
R-PSDA	3111000 2755080 3710836	3264000 3290720 3735435	3050200 3436460	2839600 3660252	Ave		3285358.3 0			10.7			50.0			
Hydrolyzed PSDA	13566000 11836360 ++++	12403600 13254040 ++++	12041800 13620030	11512000 14177504	Ave		12801416. 8			7.6			50.0			
PMPA	50687000 18600920 20157096	32537200 20048780 20226211	22915200 19893880	20721400 20986864	Lin2	31230.792 3	19127743. 3			7.8			0.9930			0.9900
NVHOS	7401000 6613880 8179056	6512800 7357300 8052787	6944800 7429110	6319900 8255608	Ave		7306624.1 0			9.6			50.0			
PFO2HxA	14170000 14318000 16313946	14232800 16522800 16248356	14835000 16281540	14107100 17230360	Ave		15425990. 2			7.8			50.0			
PEPA	5713000 5922440 7392076	6088800 7150360 7292414	5930400 7366140	6108700 7676872	Ave		6664120.2 0			11.5			50.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1 Analy Batch No.: 469371

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2021 12:14 Calibration End Date: 03/11/2021 16:03 Calibration ID: 54512

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6 LVL 10	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
PES	20899000 19757200 29010936	21491200 24249160 30218151	21065600 25035170	20122400 30153900	Ave		24200271. 7			17.4		50.0				
PFECA B	11628000 10378160 11351310	11212000 12085900 10862667	10817400 11743610	10784700 12377672	Ave		11324141. 9			5.6		50.0				
PFO3OA	4113000 4255280 5421386	4130400 5413900 5196365	4617400 5296310	4114000 6043804	Ave		4860184.5 0			14.4		50.0				
R-PSDCA	56403000 51392680 51157016	50906000 65763160 40333918	54352800 58818520	52923600 59065472	Ave		54111616. 6			12.4		50.0				
Hydro-EVE Acid	78607000 73942560 72981448	77886800 84467780 63520565	72662800 80584720	70780700 85417544	Ave		76085191. 7			8.8		50.0				
Hydro-PS Acid	29651000 28537320 32806950	31168400 33222320 30747606	31050200 33461710	28281400 34649448	Ave		31357635. 4			6.9		50.0				
PFECA G	6090000 5766640 4932578	6141600 6888240 +++++	5694400 6073480	5773400 5878284	Ave		5915402.4 4			8.7		50.0				
PFO4DA	5763000 5874760 +++++	6758800 8398840 +++++	5960000 7006000	6098500 +++++	Ave		6551414.2 9			14.3		50.0				
PS Acid	13693000 12908600 13361256	13799200 14845220 11215856	12965200 14726540	12301700 14517544	Ave		13433411. 6			8.5		50.0				
EVE Acid	54073000 48736080 41852806	50982000 58779140 +++++	52270000 53273760	49814900 49567792	Ave		51038830. 9			9.0		50.0				
PFO5DA	5041000 5288880 6252184	6024400 6460700 5021736	5031400 6712190	5058900 6661456	Ave		5755284.6 0			12.7		50.0				
13C3 HFPO-DA	8179668 7572736 7825980	8202736 7870920 7437968	7801340 7520892	7886928 7519792	Ave		7781896.0 0			3.5		50.0				

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
 LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1 Analy Batch No.: 469371

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2021 12:14 Calibration End Date: 03/11/2021 16:03 Calibration ID: 54512

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6 LVL 10	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
13C4 PFHpA	29580276 25520232 21106560	28029080 26765012 17385916	27670176 22383804	24218476 22061336	Ave		24472086. 8			15.4			50.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
 LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
 CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1 Analy Batch No.: 469371

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2021 12:14 Calibration End Date: 03/11/2021 16:03 Calibration ID: 54512

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10												
Perfluoro(2-propoxypropanoic) acid	1.1153 1.1358	1.0069 1.2214	0.9901 1.2638	1.0058 1.1082	1.0728 1.1146	AveI D		1.103 5			8.2		35.0				
Perfluoroheptanoic acid	1.6630 1.2203	1.3066 1.2833	1.3399 1.2944	1.1304 1.1187	1.1175 1.1216	L2ID	0.000 5	1.176 5			7.0			0.9950			0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
 LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1 Analy Batch No.: 469371

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2021 12:14 Calibration End Date: 03/11/2021 16:03 Calibration ID: 54512

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-469371/3	2021.03.11_A12_TB3_ICAL_A_006.d
Level 2	IC 320-469371/4	2021.03.11_A12_TB3_ICAL_A_007.d
Level 3	IC 320-469371/5	2021.03.11_A12_TB3_ICAL_A_008.d
Level 4	IC 320-469371/6	2021.03.11_A12_TB3_ICAL_A_009.d
Level 5	IC 320-469371/7	2021.03.11_A12_TB3_ICAL_A_010.d
Level 6	IC 320-469371/9	2021.03.11_A12_TB3_ICAL_A_012.d
Level 7	IC 320-469371/11	2021.03.11_A12_TB3_ICAL_A_014.d
Level 8	IC 320-469371/13	2021.03.11_A12_TB3_ICAL_A_016.d
Level 9	IC 320-469371/15	2021.03.11_A12_TB3_ICAL_A_018.d
Level 10	IC 320-469371/16	2021.03.11_A12_TB3_ICAL_A_019.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
		LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
PFMOAA	Ave	9219	21923	50710	93270	240014	0.00100	0.00250	0.00500	0.0100	0.0250
		544295	1097611	2884762	5729803	11493204	0.0500	0.100	0.250	0.500	1.00
R-EVE	Ave	6451	15429	32328	60366	152289	0.00100	0.00250	0.00500	0.0100	0.0250
		354928	717544	1886476	+++++	+++++	0.0500	0.100	0.250	+++++	+++++
R-PSDA	Ave	3111	8160	15251	28396	68877	0.00100	0.00250	0.00500	0.0100	0.0250
		164536	343646	915063	1855418	3735435	0.0500	0.100	0.250	0.500	1.00
Hydrolyzed PSDA	Ave	13566	31009	60209	115120	295909	0.00100	0.00250	0.00500	0.0100	0.0250
		662702	1362003	3544376	+++++	+++++	0.0500	0.100	0.250	+++++	+++++
PMPA	Lin2	50687	81343	114576	207214	465023	0.00100	0.00250	0.00500	0.0100	0.0250
		1002439	1989388	5246716	10078548	20226211	0.0500	0.100	0.250	0.500	1.00
NVHOS	Ave	7401	16282	34724	63199	165347	0.00100	0.00250	0.00500	0.0100	0.0250
		367865	742911	2063902	4089528	8052787	0.0500	0.100	0.250	0.500	1.00
PFO2HxA	Ave	14170	35582	74175	141071	357950	0.00100	0.00250	0.00500	0.0100	0.0250
		826140	1628154	4307590	8156973	16248356	0.0500	0.100	0.250	0.500	1.00
PEPA	Ave	5713	15222	29652	61087	148061	0.00100	0.00250	0.00500	0.0100	0.0250
		357518	736614	1919218	3696038	7292414	0.0500	0.100	0.250	0.500	1.00
PES	Ave	20899	53728	105328	201224	493930	0.00100	0.00250	0.00500	0.0100	0.0250
		1212458	2503517	7538475	14505468	30218151	0.0500	0.100	0.250	0.500	1.00
PFECA B	Ave	11628	28030	54087	107847	259454	0.00100	0.00250	0.00500	0.0100	0.0250
		604295	1174361	3094418	5675655	10862667	0.0500	0.100	0.250	0.500	1.00
PFO3OA	Ave	4113	10326	23087	41140	106382	0.00100	0.00250	0.00500	0.0100	0.0250
		270695	529631	1510951	2710693	5196365	0.0500	0.100	0.250	0.500	1.00
R-PSDCA	Ave	56403	127265	271764	529236	1284817	0.00100	0.00250	0.00500	0.0100	0.0250
		3288158	5881852	14766368	25578508	40333918	0.0500	0.100	0.250	0.500	1.00

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1 Analy Batch No.: 469371

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2021 12:14 Calibration End Date: 03/11/2021 16:03 Calibration ID: 54512

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Hydro-EVE Acid	Ave	78607	194717	363314	707807	1848564	0.00100	0.00250	0.00500	0.0100	0.0250
		4223389	8058472	21354386	36490724	63520565	0.0500	0.100	0.250	0.500	1.00
Hydro-PS Acid	Ave	29651	77921	155251	282814	713433	0.00100	0.00250	0.00500	0.0100	0.0250
		1661116	3346171	8662362	16403475	30747606	0.0500	0.100	0.250	0.500	1.00
PFECA G	Ave	6090	15354	28472	57734	144166	0.00100	0.00250	0.00500	0.0100	0.0250
		344412	607348	1469571	2466289	+++++	0.0500	0.100	0.250	0.500	+++++
PFO4DA	Ave	5763	16897	29800	60985	146869	0.00100	0.00250	0.00500	0.0100	0.0250
		419942	700600	+++++	+++++	+++++	0.0500	0.100	+++++	+++++	+++++
PS Acid	Ave	13693	34498	64826	123017	322715	0.00100	0.00250	0.00500	0.0100	0.0250
		742261	1472654	3629386	6680628	11215856	0.0500	0.100	0.250	0.500	1.00
EVE Acid	Ave	54073	127455	261350	498149	1218402	0.00100	0.00250	0.00500	0.0100	0.0250
		2938957	5327376	12391948	20926403	+++++	0.0500	0.100	0.250	0.500	+++++
PFO5DA	Ave	5041	15061	25157	50589	132222	0.00100	0.00250	0.00500	0.0100	0.0250
		323035	671219	1665364	3126092	5021736	0.0500	0.100	0.250	0.500	1.00
13C3 HFPO-DA	Ave	2044917	2050684	1950335	1971732	1893184	0.250	0.250	0.250	0.250	0.250
		1967730	1880223	1879948	1956495	1859492	0.250	0.250	0.250	0.250	0.250
13C4 PFHpA	Ave	7395069	7007270	6917544	6054619	6380058	0.250	0.250	0.250	0.250	0.250
		6691253	5595951	5515334	5276640	4346479	0.250	0.250	0.250	0.250	0.250

Curve Type Legend

Ave = Average
Lin2 = Linear 1/conc^2

FORM VI
 LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
 RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1 Analy Batch No.: 469371

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2021 12:14 Calibration End Date: 03/11/2021 16:03 Calibration ID: 54512

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-469371/3	2021.03.11_A12_TB3_ICAL_A_006.d
Level 2	IC 320-469371/4	2021.03.11_A12_TB3_ICAL_A_007.d
Level 3	IC 320-469371/5	2021.03.11_A12_TB3_ICAL_A_008.d
Level 4	IC 320-469371/6	2021.03.11_A12_TB3_ICAL_A_009.d
Level 5	IC 320-469371/7	2021.03.11_A12_TB3_ICAL_A_010.d
Level 6	IC 320-469371/9	2021.03.11_A12_TB3_ICAL_A_012.d
Level 7	IC 320-469371/11	2021.03.11_A12_TB3_ICAL_A_014.d
Level 8	IC 320-469371/13	2021.03.11_A12_TB3_ICAL_A_016.d
Level 9	IC 320-469371/15	2021.03.11_A12_TB3_ICAL_A_018.d
Level 10	IC 320-469371/16	2021.03.11_A12_TB3_ICAL_A_019.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
Perfluoro(2-propoxypropanoic) acid		AveID	9123	20648	38622	79329	203095	0.00100	0.00250	0.00500	0.0100	0.0250
			446970	918574	2375785	4336556	8290063	0.0500	0.100	0.250	0.500	1.00
Perfluoroheptanoic acid		L2ID	49193	91555	185376	273774	712955	0.00100	0.00250	0.00500	0.0100	0.0250
			1633022	2872511	7138839	11805867	19500901	0.0500	0.100	0.250	0.500	1.00

Curve Type Legend

AveID = Average isotope dilution
L2ID = Linear 1/conc^2 IsoDil

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_006.d
 Lims ID: IC STD 1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 11-Mar-2021 12:14:59 ALS Bottle#: 6 Worklist Smp#: 3
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 1 (61)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 12-Mar-2021 11:42:50 Calib Date: 11-Mar-2021 16:03:54
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_019.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1669

First Level Reviewer: yuj Date: 12-Mar-2021 11:41:54

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.235	4.235	0.0		9219	0.000891		89.1	1.4	M
2 R-EVE										M
405.00 > 217.00	6.390	6.390	0.0		6451	0.000973		97.3	85.2	M
3 R-PSDA										M
440.90 > 241.00	6.450	6.450	0.0		3111	0.000947		94.7	29.7	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.529	6.529	0.0		13566	0.001060		106	220	
23 PMPA										M
229.00 > 185.00	6.782	6.782	0.0		50687	0.001017		102	60.9	M
5 NVHOS										
297.00 > 135.00	7.138	7.138	0.0		7401	0.001013		101	159	
6 PFO2HxA										
245.00 > 85.00	7.709	7.709	0.0		14170	0.000919		91.9	157	
22 PEPA										
278.90 > 234.90	8.299	8.299	0.0		5713	0.000857		85.7	39.7	
7 PES										
314.90 > 135.00	8.556	8.556	0.0		20899	0.000864		86.4	530	
8 PFECA B										
295.00 > 201.00	8.800	8.800	0.0		11628	0.001027		103	310	
9 PFO3OA										
310.90 > 85.00	9.048	9.048	0.0		4113	0.000846		84.6	112	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.133	9.133	0.0		2044917	0.2628		105	35229	
11 HPFO-DA										
285.00 > 169.00	9.133	9.133	0.0	1.000	9123	0.001011		101	116	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.493	9.493	0.0		56403	0.001042		104	1480	
13 Hydro-EVE Acid										
427.00 > 282.90	9.525	9.525	0.0		78607	0.001033		103	1113	
D 14 13C4 PFHpA										
367.00 > 322.00	9.558	9.558	0.0		7395069	0.3022		121	96884	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.558	9.558	0.0	1.000	49193	0.001016	Target=0.00	102	491	
363.00 > 169.00	9.558	9.558	0.0	1.000	15709		3.13(0.00-0.00)	102	106	
15 Hydro-PS Acid										
463.00 > 262.90	9.558	9.558	0.0		29651	0.000946		94.6	674	
17 PFECA G										
378.90 > 184.90	9.676	9.676	0.0		6090	0.001030		103	171	
18 PFO4DA										
376.90 > 85.00	9.820	9.820	0.0		5763	0.000880		88.0	166	
20 EVE Acid										
407.00 > 262.90	9.877	9.877	0.0		54073	0.001059		106	1542	
19 PS Acid										
443.00 > 146.90	9.877	9.877	0.0		13693	0.001019		102	394	
21 TAF										
442.90 > 85.00	10.374	10.374	0.0		5041	0.000876		87.6	55.4	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD1_00060

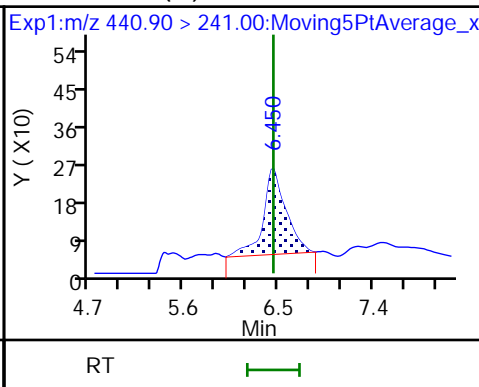
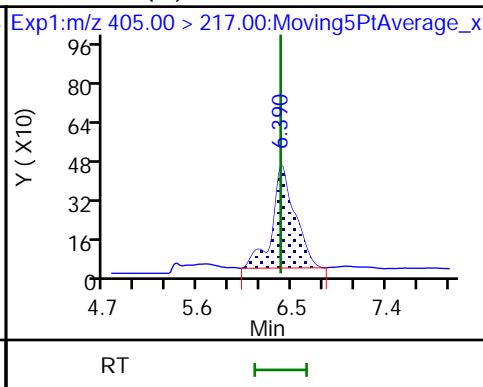
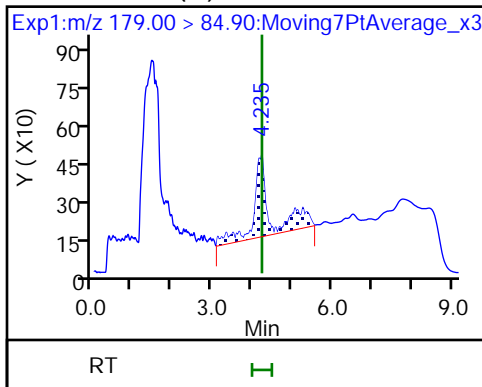
Amount Added: 1.00

Units: mL

1 PFMOAA (M)

2 R-EVE (M)

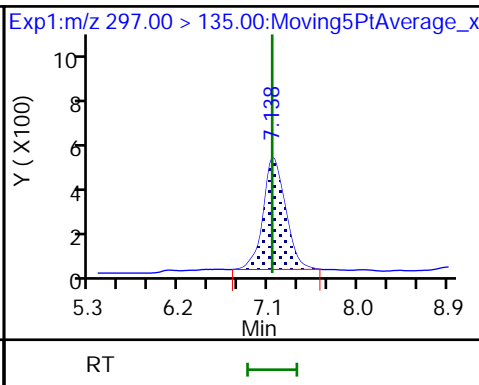
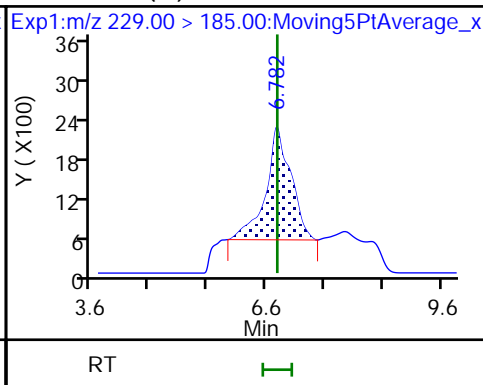
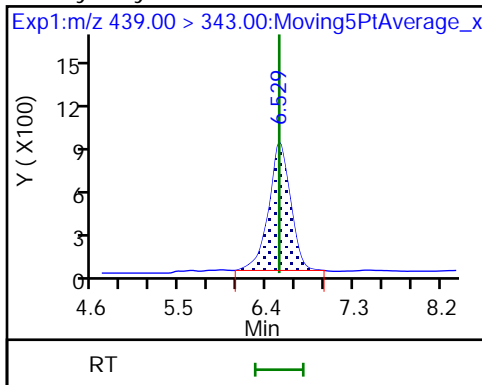
3 R-PSDA (M)



4 Hydrolyzed PSDA

23 PMPA (M)

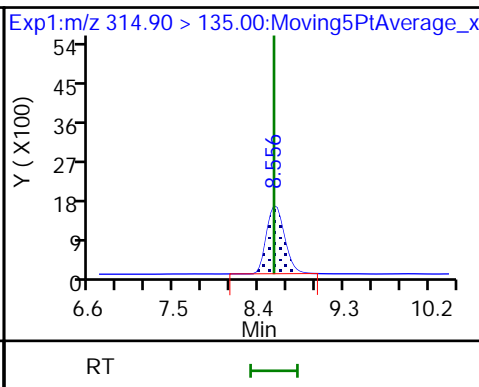
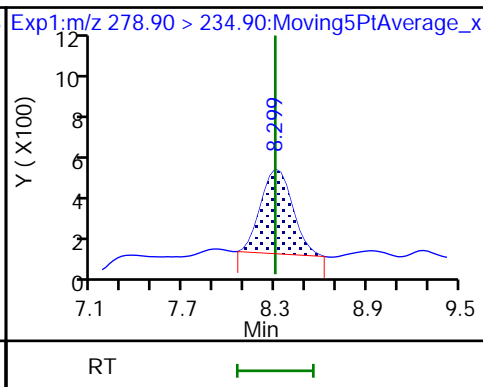
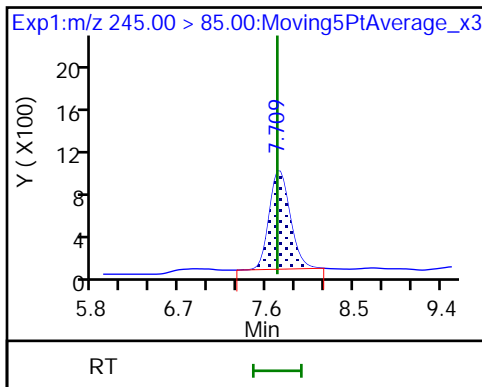
5 NVHOS



6 PFO2HxA

22 PEPA

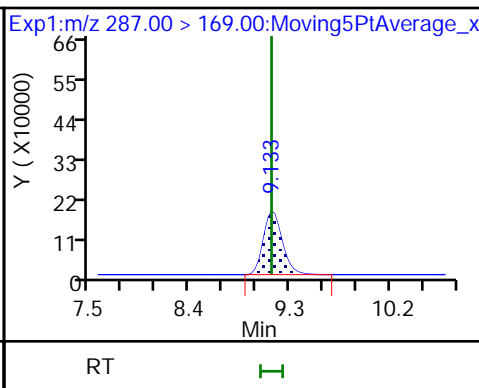
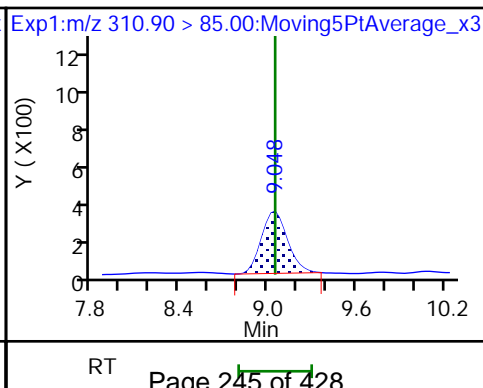
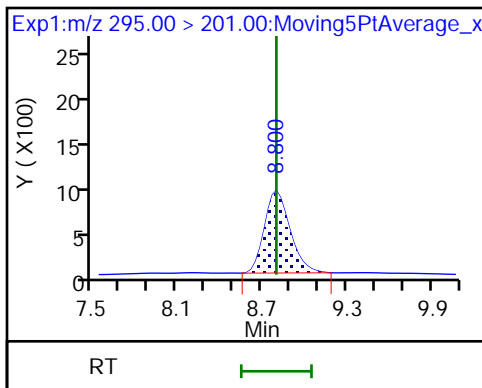
7 PES

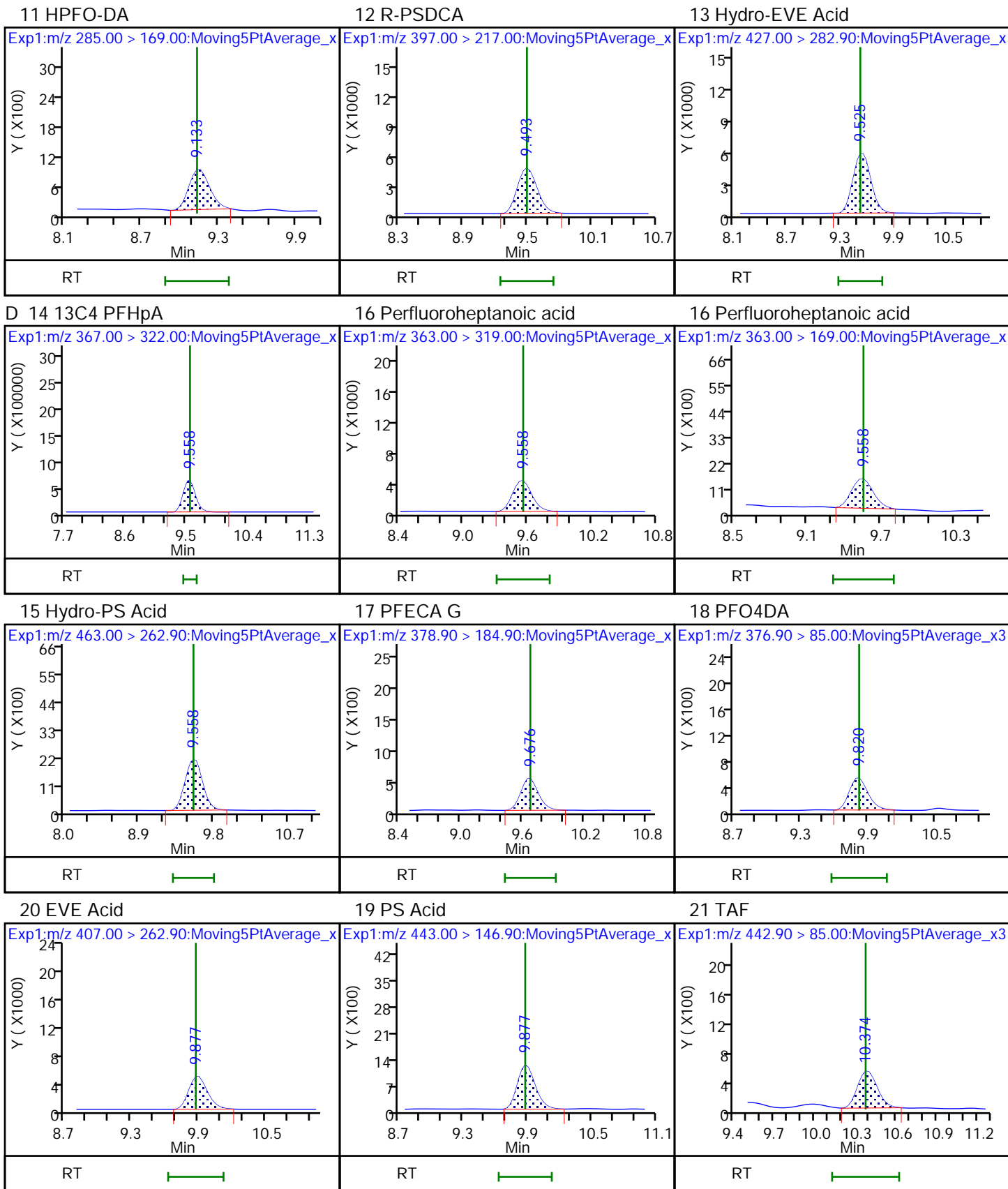


8 PFECA B

9 PFO3OA

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

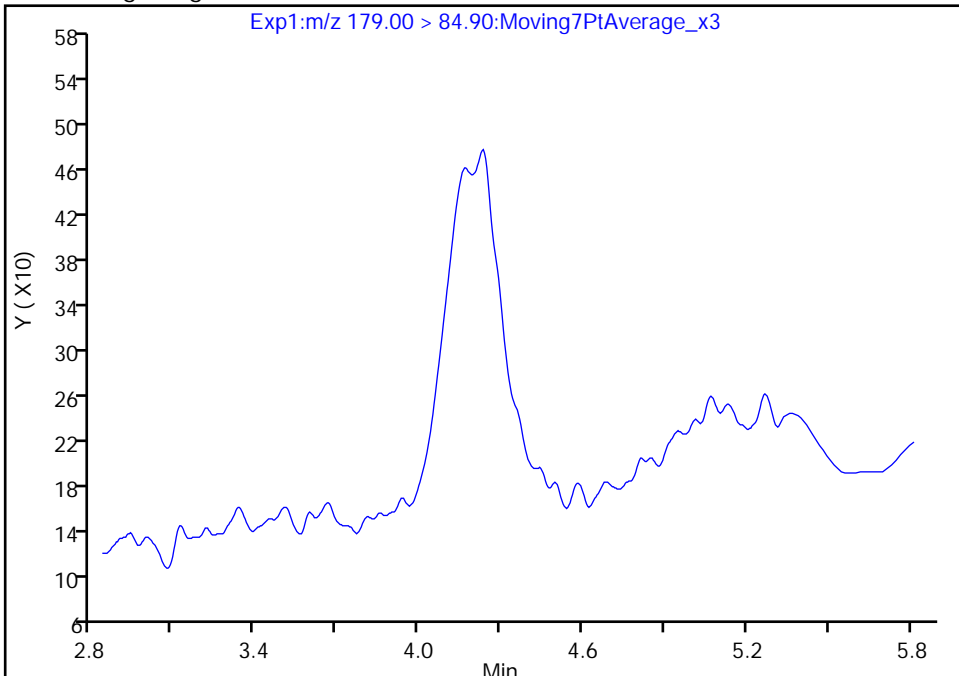
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Injection Date: 11-Mar-2021 12:14:59 Instrument ID: A12
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 6 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

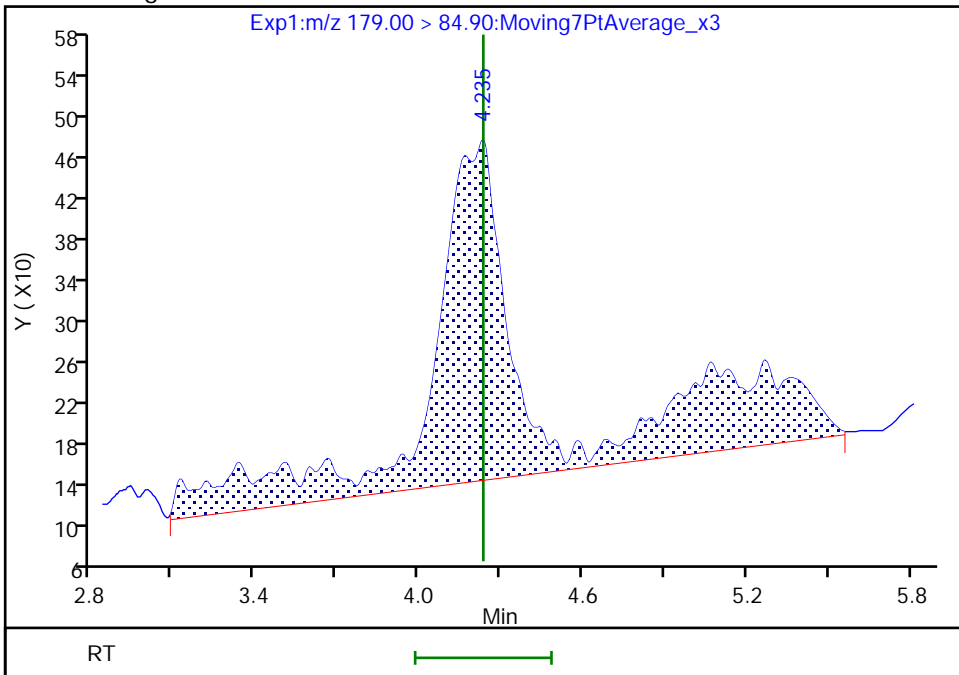
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 9219
Amount: 0.000891
Amount Units: ng/ml



Reviewer: yuj, 12-Mar-2021 11:30:50
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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Eurofins TestAmerica, Sacramento

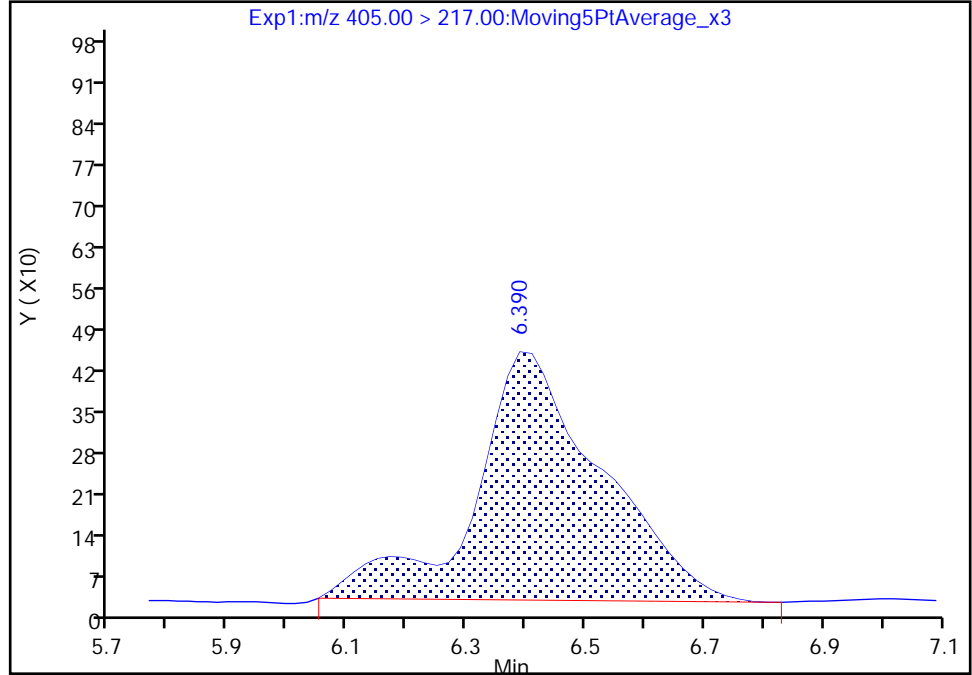
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Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 6 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

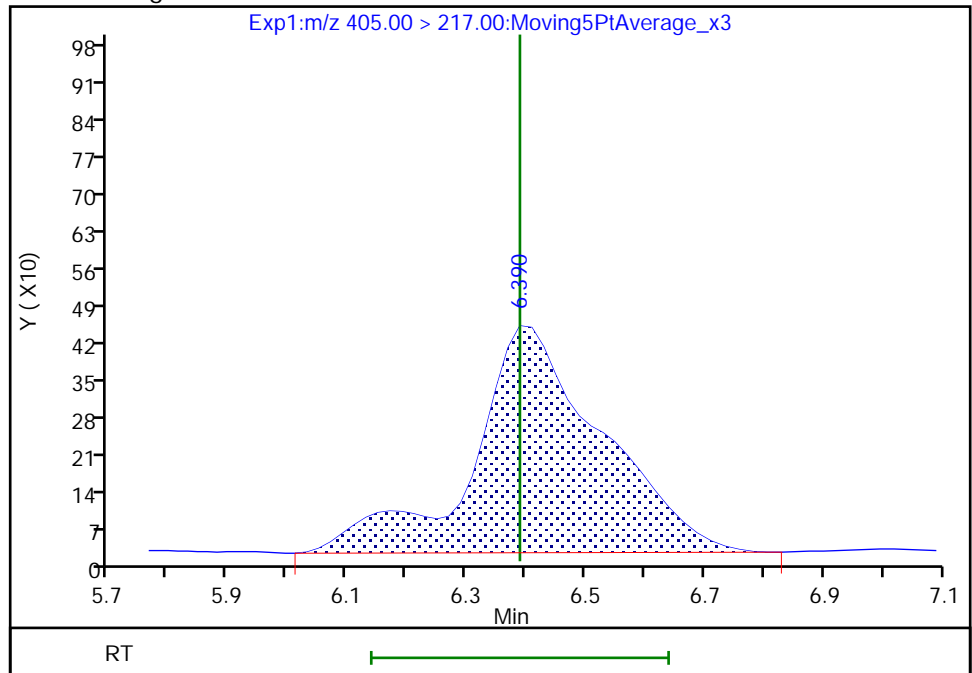
RT: 6.39
Area: 6235
Amount: 0.000944
Amount Units: ng/ml

Processing Integration Results



RT: 6.39
Area: 6451
Amount: 0.000973
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 12-Mar-2021 11:31:09
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

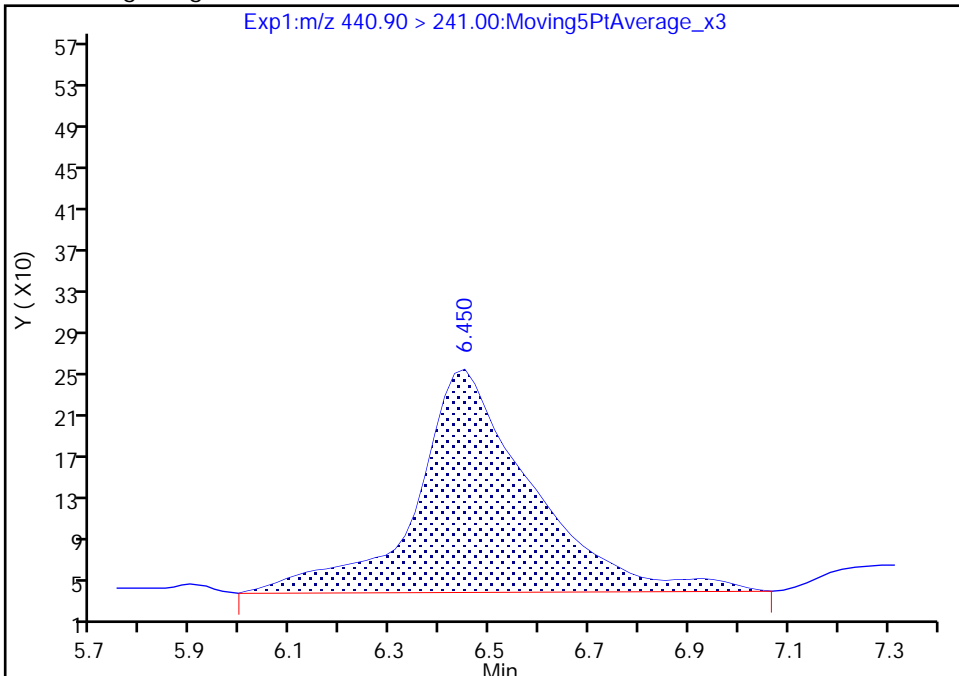
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Injection Date: 11-Mar-2021 12:14:59 Instrument ID: A12
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 6 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

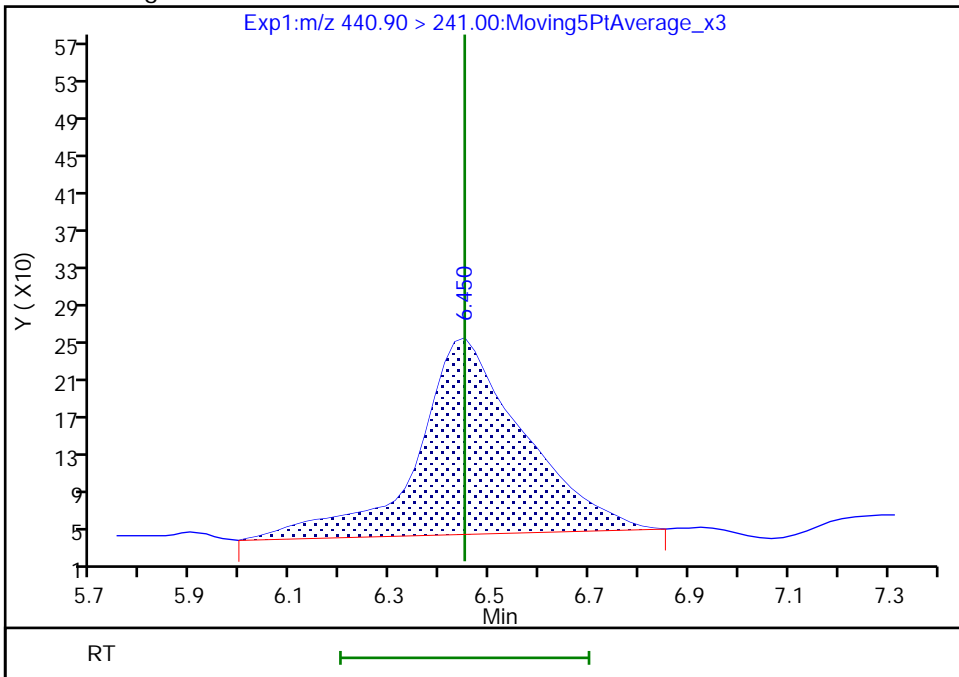
RT: 6.45
Area: 3479
Amount: 0.001047
Amount Units: ng/ml

Processing Integration Results



RT: 6.45
Area: 3111
Amount: 0.000947
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 12-Mar-2021 11:31:14
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

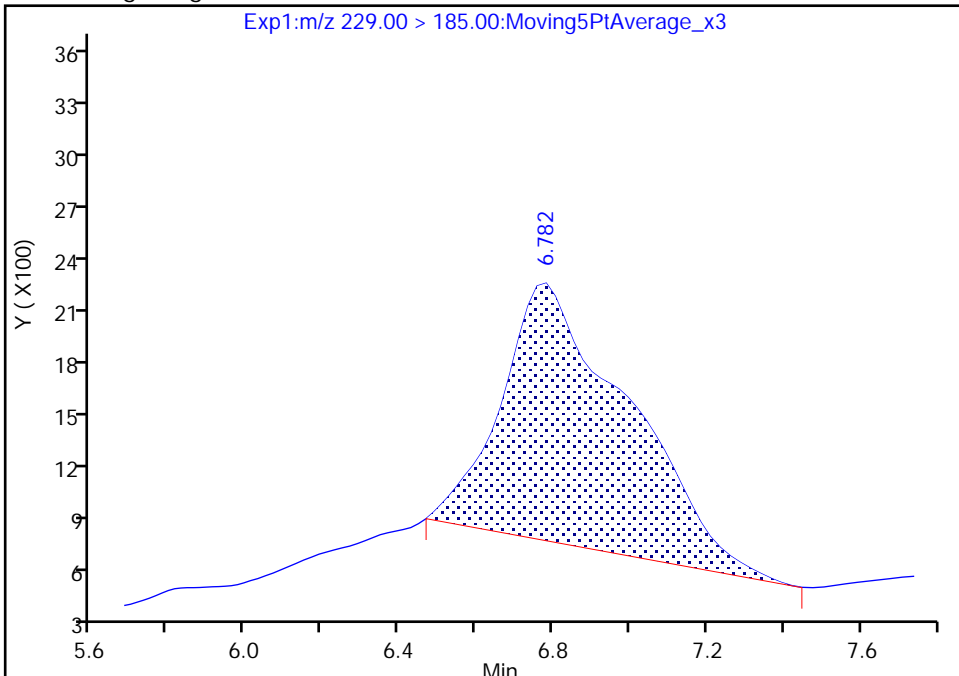
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 Injection Date: 11-Mar-2021 12:14:59 Instrument ID: A12
 Lims ID: IC STD 1
 Client ID:
 Operator ID: Sac_inst_A12 ALS Bottle#: 6 Worklist Smp#: 3
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
 Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

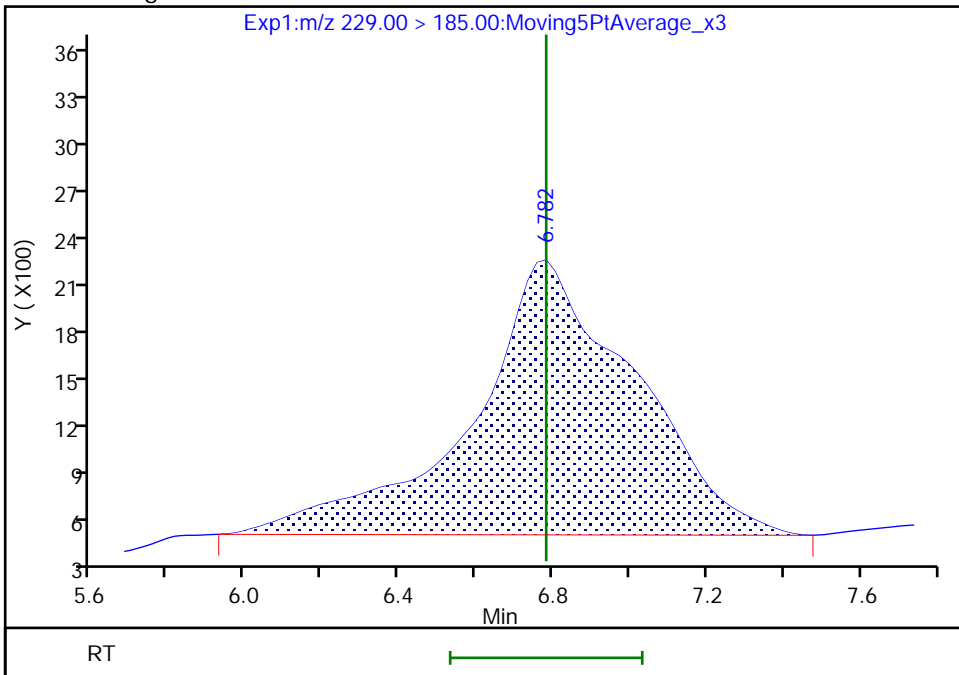
RT: 6.78
 Area: 33692
 Amount: 0.000894
 Amount Units: ng/ml

Processing Integration Results



RT: 6.78
 Area: 50687
 Amount: 0.001017
 Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 12-Mar-2021 11:31:20
 Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_007.d
 Lims ID: IC STD 2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 11-Mar-2021 12:32:45 ALS Bottle#: 7 Worklist Smp#: 4
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 2 (49)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 12-Mar-2021 11:42:51 Calib Date: 11-Mar-2021 16:03:54
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_019.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1669

First Level Reviewer: kwongg Date: 11-Mar-2021 17:08:00

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.076	4.235	-0.159		21923	0.002120		84.8	2.5	M
2 R-EVE										
405.00 > 217.00	6.390	6.390	0.0		15429	0.002327		93.1	212	
3 R-PSDA										M
440.90 > 241.00	6.430	6.450	-0.020		8160	0.002484		99.3	79.3	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.530	6.529	0.001		31009	0.002422		96.9	629	
23 PMPA										M
229.00 > 185.00	6.759	6.782	-0.023		81343	0.002620		105	108	M
5 NVHOS										M
297.00 > 135.00	7.138	7.138	0.0		16282	0.002228		89.1	332	M
6 PFO2HxA										
245.00 > 85.00	7.710	7.709	0.001		35582	0.002307		92.3	466	
22 PEPA										
278.90 > 234.90	8.300	8.299	0.001		15222	0.002284		91.4	117	
7 PES										
314.90 > 135.00	8.557	8.556	0.001		53728	0.002220		88.8	1362	
8 PFECA B										
295.00 > 201.00	8.800	8.800	0.0		28030	0.002475		99.0	745	
9 PFO3OA										
310.90 > 85.00	9.049	9.048	0.001		10326	0.002125		85.0	281	
11 HPFO-DA										
285.00 > 169.00	9.133	9.133	0.0	1.000	20648	0.002281		91.2	256	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.133	9.133	0.0		2050684	0.2635		105	35304	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.493	9.493	0.0		127265	0.002352		94.1	3353	
13 Hydro-EVE Acid										
427.00 > 282.90	9.526	9.525	0.001		194717	0.002559		102	2306	
D 14 13C4 PFHpA										
367.00 > 322.00	9.558	9.558	0.0		7007270	0.2863		115	93198	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.558	9.558	0.0	1.000	91555	0.002379	Target=0.00	95.2	1054	
363.00 > 169.00	9.558	9.558	0.0	1.000	28054		3.26(0.00-0.00)	95.2	205	
15 Hydro-PS Acid										
463.00 > 262.90	9.558	9.558	0.0		77921	0.002485		99.4	1786	
17 PFECA G										
378.90 > 184.90	9.673	9.676	-0.003		15354	0.002596		104	440	
18 PFO4DA										
376.90 > 85.00	9.816	9.820	-0.004		16897	0.002579		103	486	
20 EVE Acid										
407.00 > 262.90	9.903	9.877	0.025		127455	0.002497		99.9	3621	
19 PS Acid										
443.00 > 146.90	9.874	9.877	-0.003		34498	0.002568		103	993	
21 TAF										
442.90 > 85.00	10.396	10.374	0.022		15061	0.002617		105	162	

QC Flag Legend

Processing Flags

Review Flags

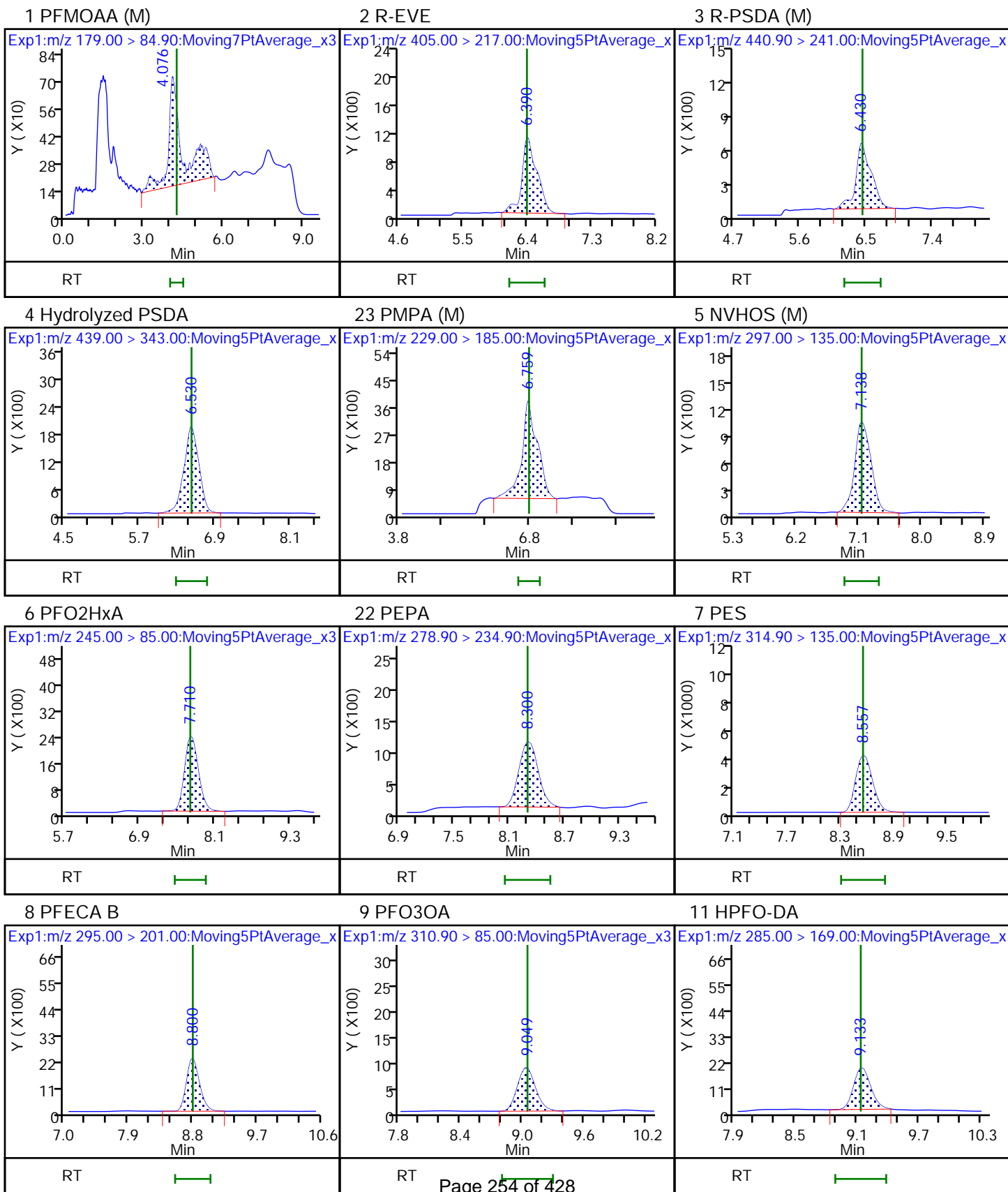
M - Manually Integrated

Reagents:

LCTB3_LLSTD2_00048

Amount Added: 1.00

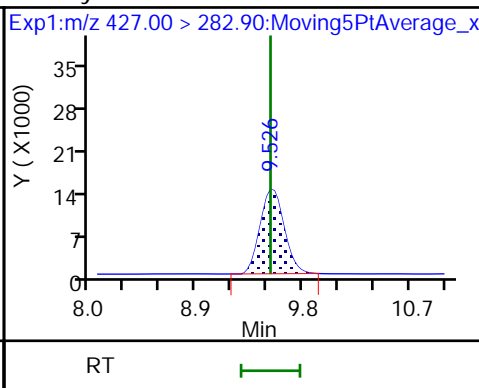
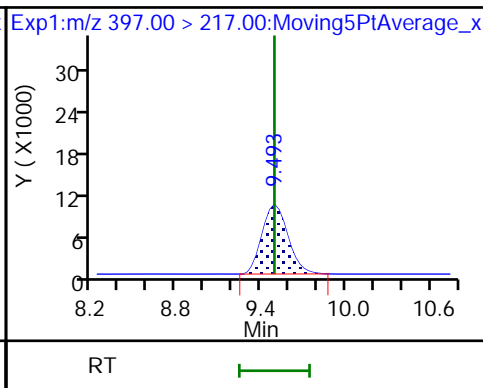
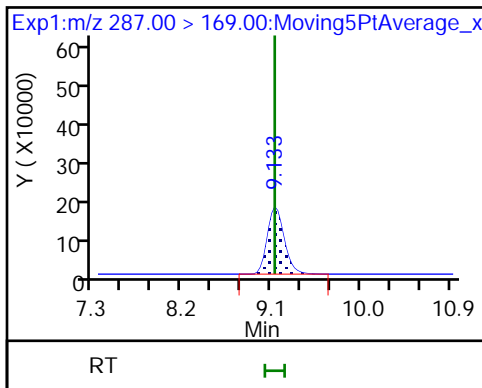
Units: mL



D 10 13C3 HFPO-DA

12 R-PSDCA

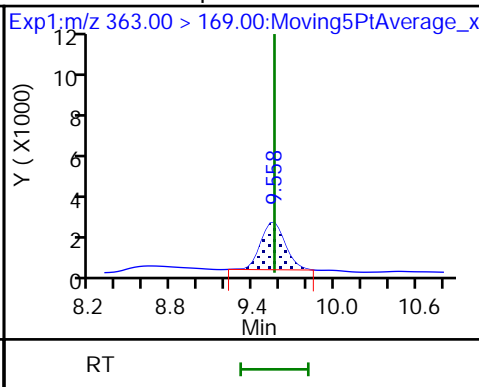
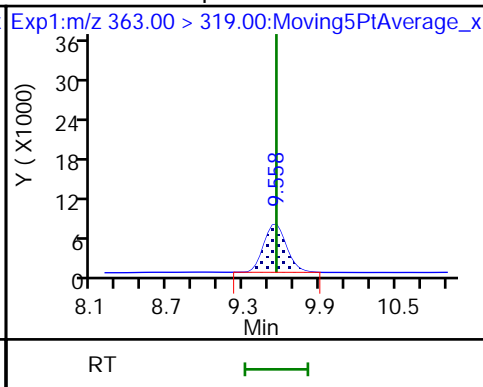
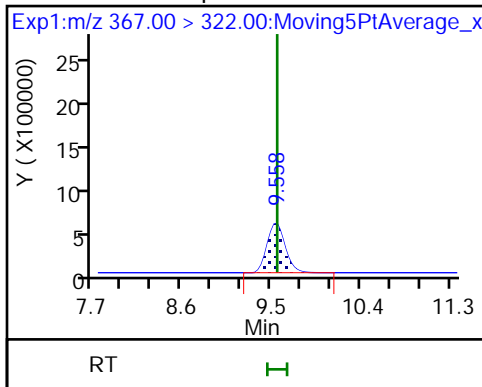
13 Hydro-EVE Acid



D 14 13C4 PFHpA

16 Perfluoroheptanoic acid

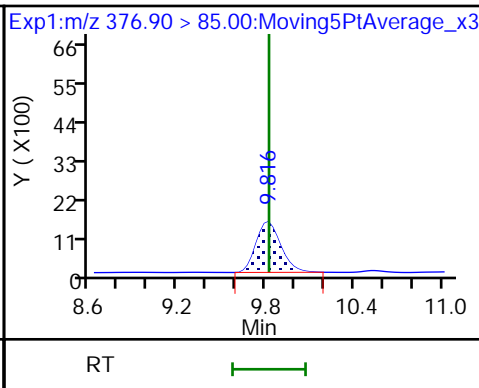
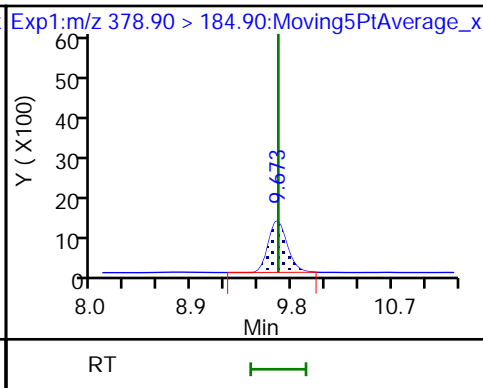
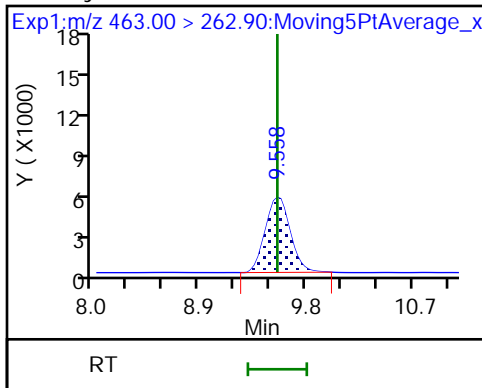
16 Perfluoroheptanoic acid



15 Hydro-PS Acid

17 PFECA G

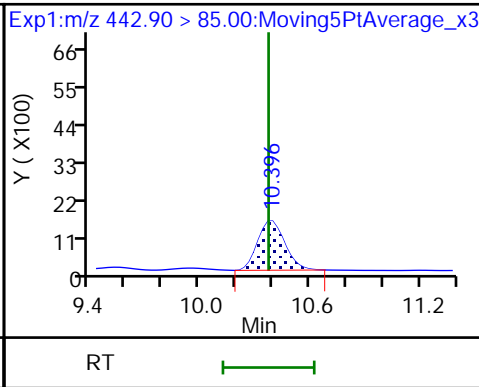
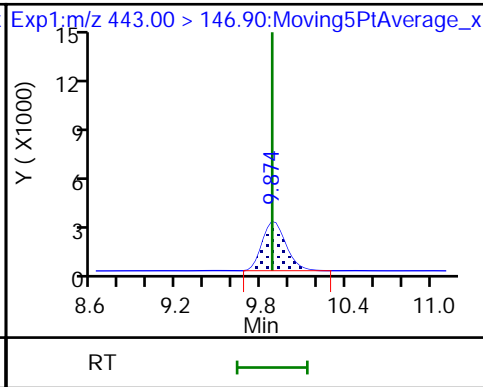
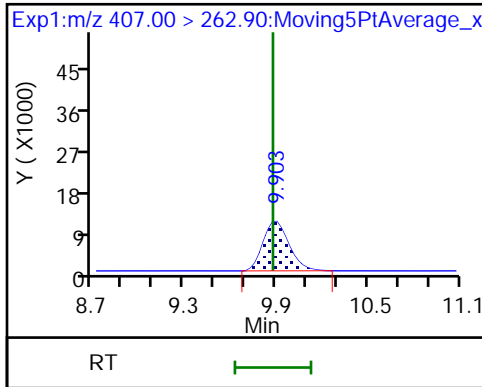
18 PFO4DA



20 EVE Acid

19 PS Acid

21 TAF



Eurofins TestAmerica, Sacramento

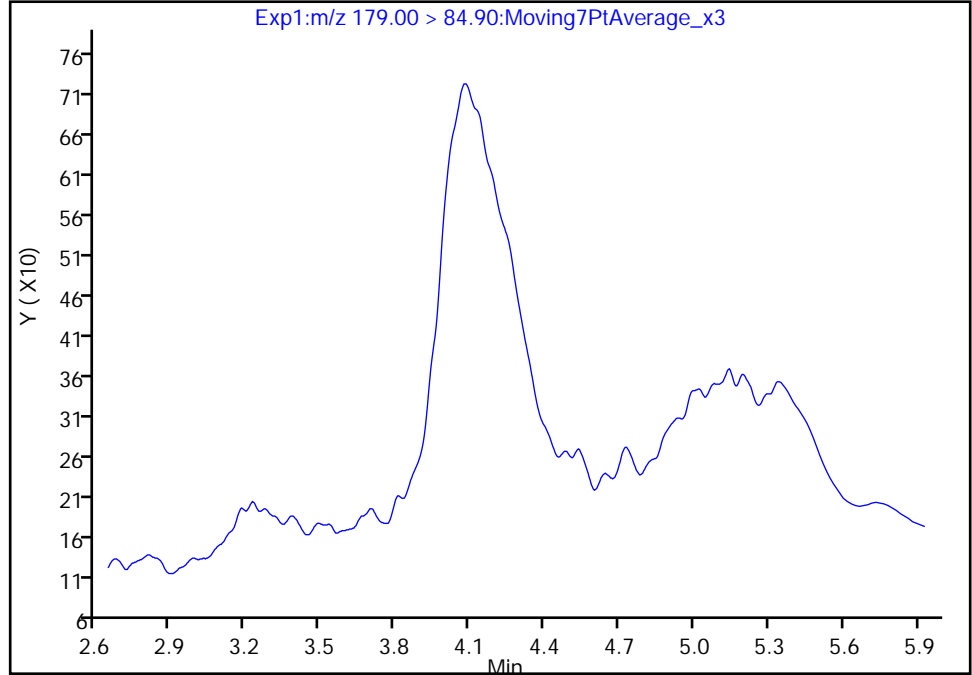
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Injection Date: 11-Mar-2021 12:32:45 Instrument ID: A12
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 7 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

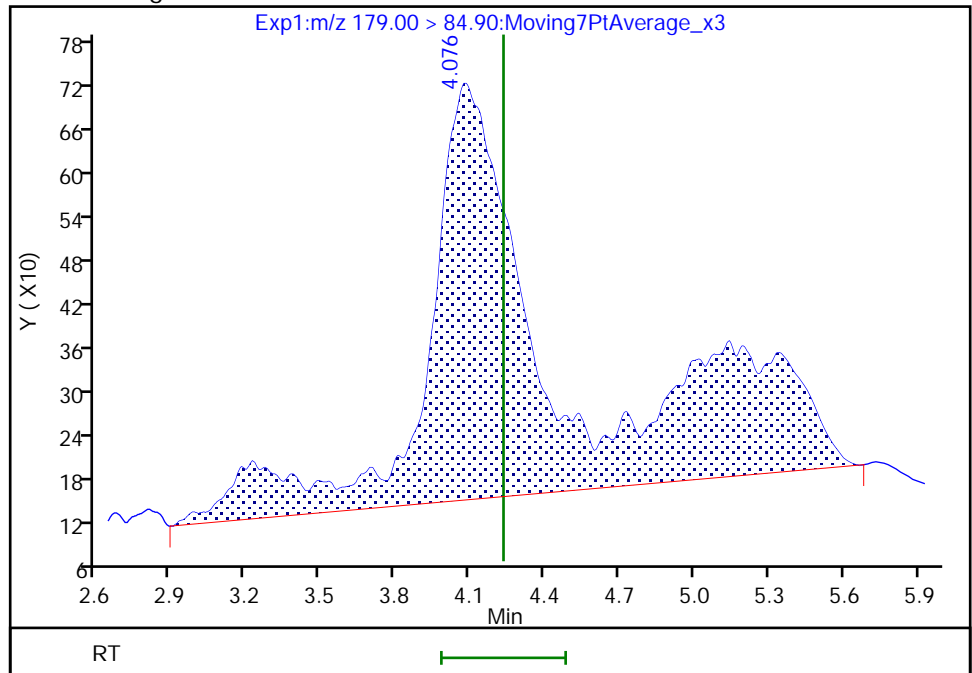
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 4.08
Area: 21923
Amount: 0.002120
Amount Units: ng/ml



Reviewer: yuj, 11-Mar-2021 15:44:42
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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Eurofins TestAmerica, Sacramento

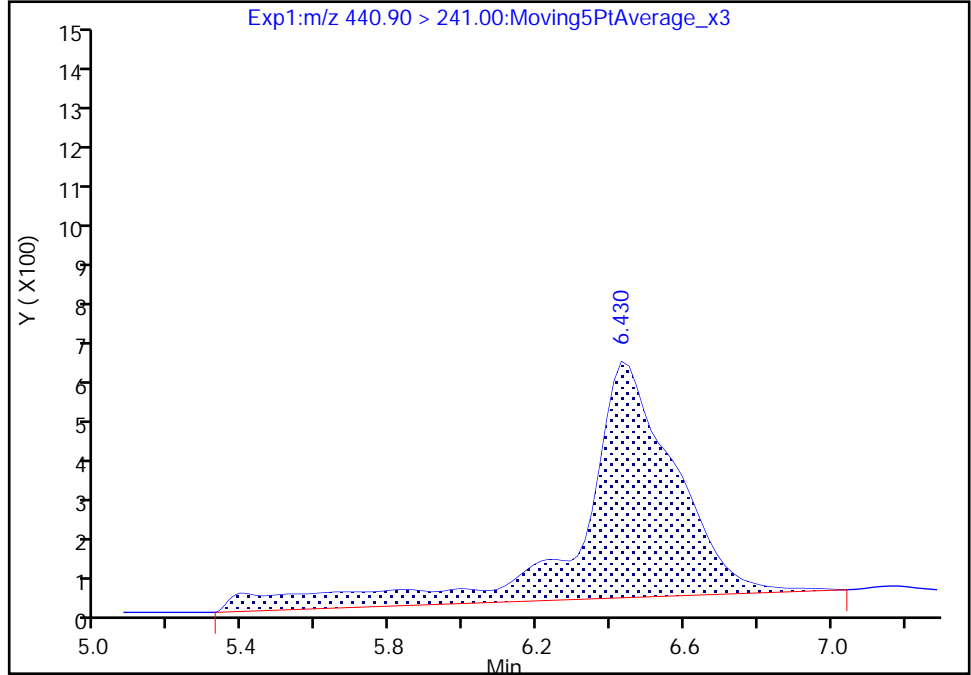
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Injection Date: 11-Mar-2021 12:32:45 Instrument ID: A12
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 7 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

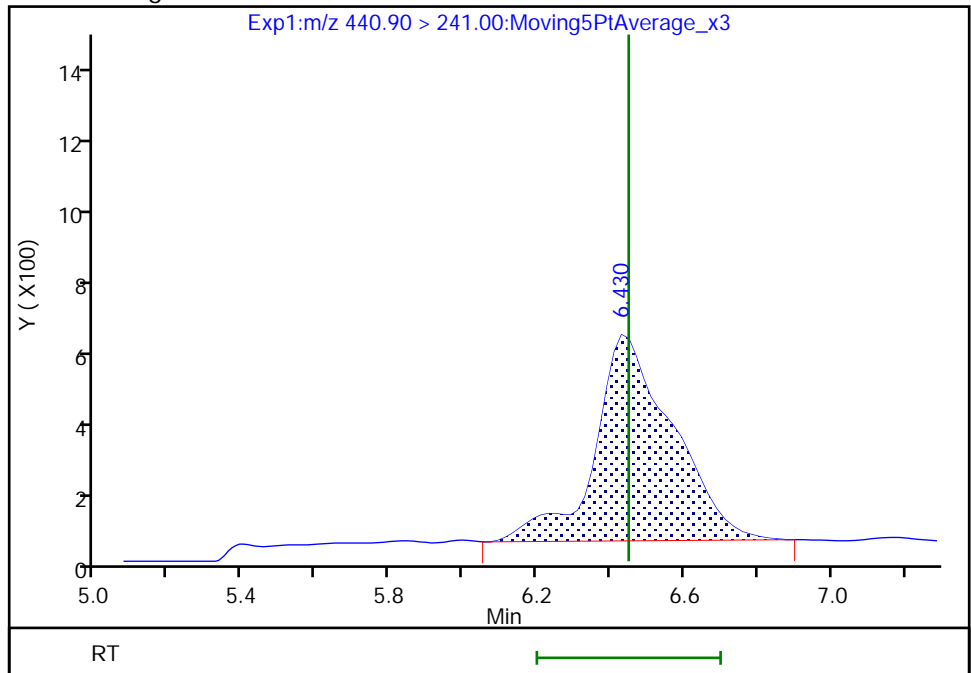
RT: 6.43
Area: 10637
Amount: 0.002888
Amount Units: ng/ml

Processing Integration Results



RT: 6.43
Area: 8160
Amount: 0.002484
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 11-Mar-2021 15:40:12
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

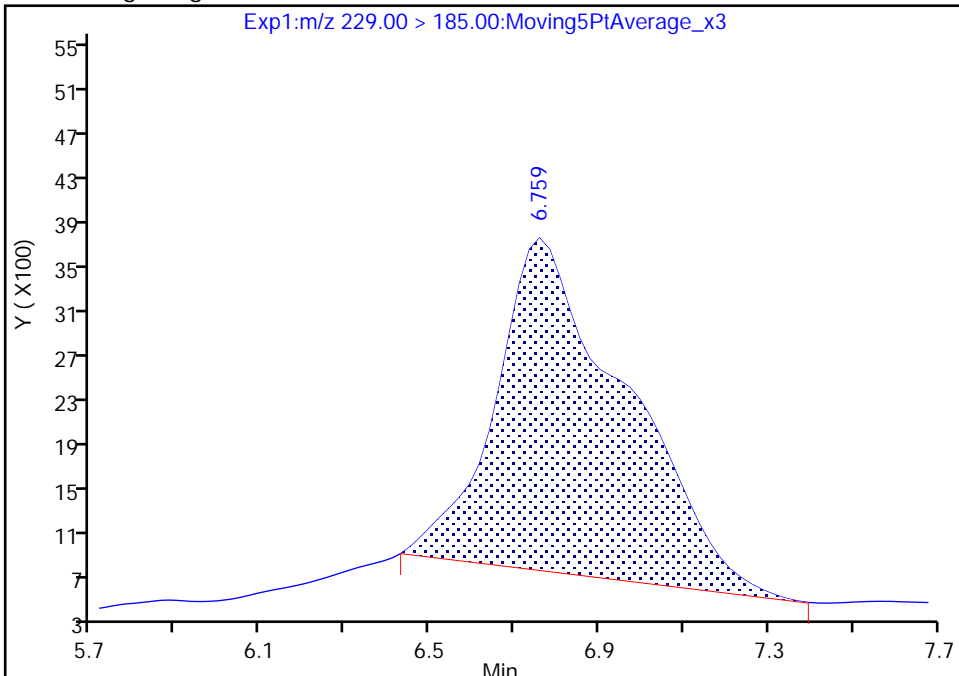
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Injection Date: 11-Mar-2021 12:32:45 Instrument ID: A12
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 7 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

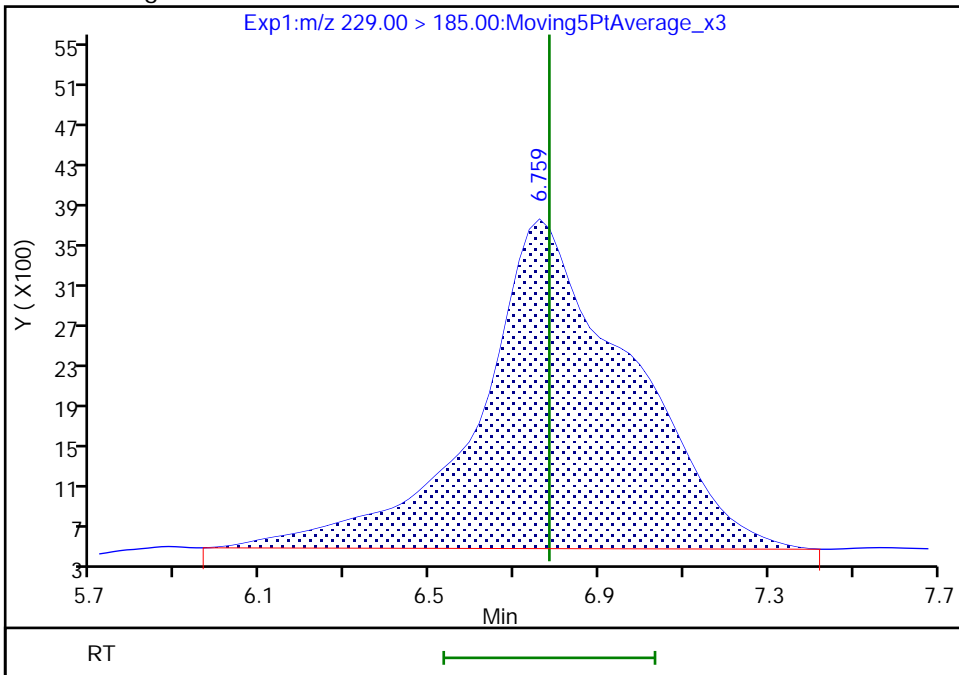
RT: 6.76
Area: 63962
Amount: 0.001677
Amount Units: ng/ml

Processing Integration Results



RT: 6.76
Area: 81343
Amount: 0.002620
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 11-Mar-2021 15:40:19
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

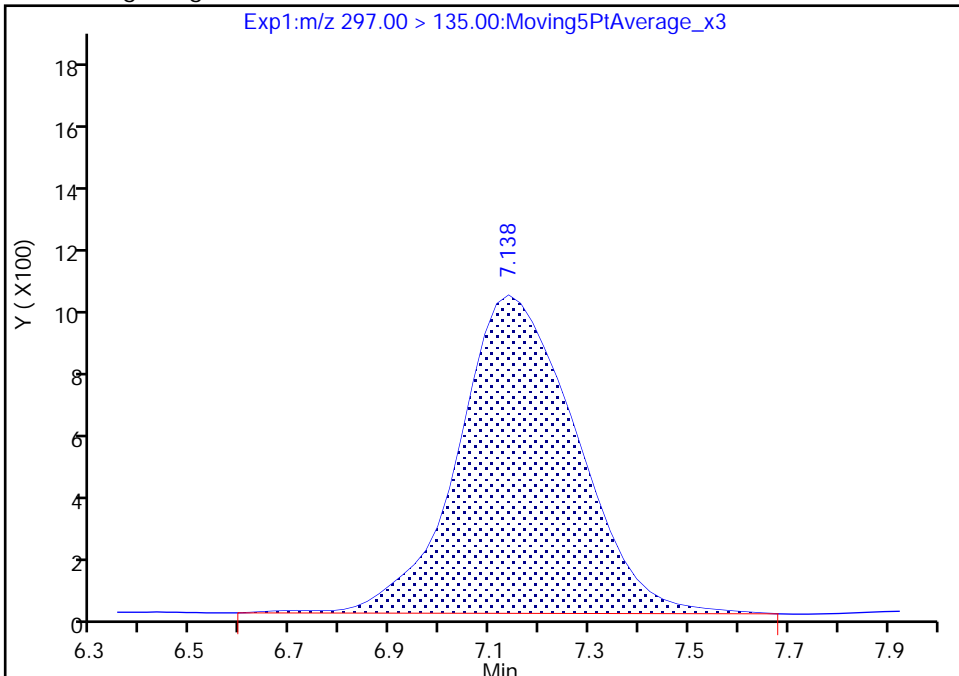
Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_007.d
Injection Date: 11-Mar-2021 12:32:45 Instrument ID: A12
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 7 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

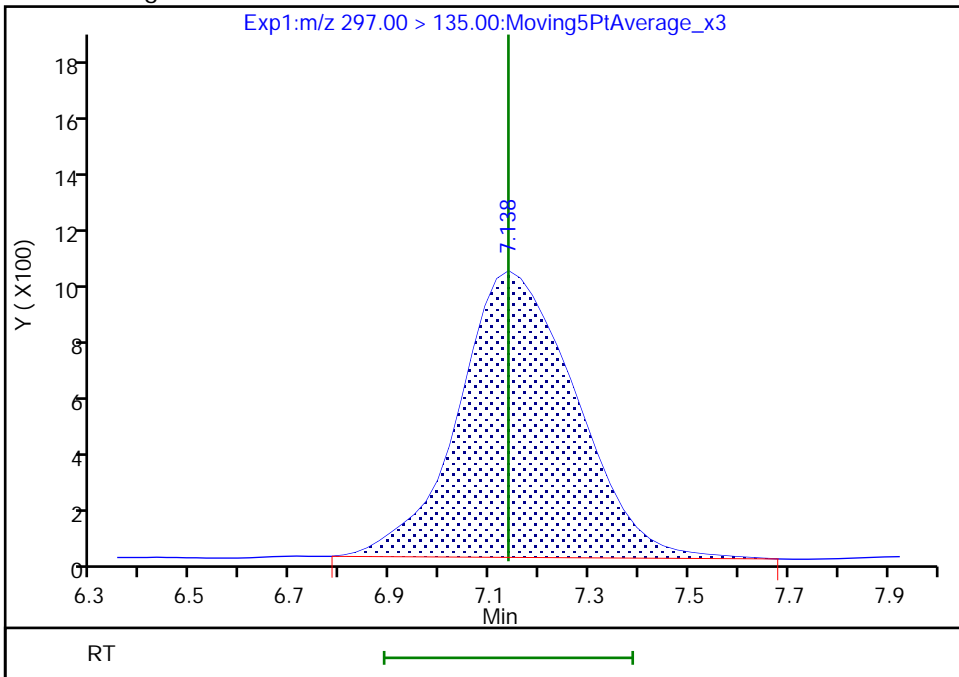
RT: 7.14
Area: 16513
Amount: 0.002358
Amount Units: ng/ml

Processing Integration Results



RT: 7.14
Area: 16282
Amount: 0.002228
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 11-Mar-2021 15:40:28
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfms\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_008.d
 Lims ID: IC STD 3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 11-Mar-2021 12:50:20 ALS Bottle#: 8 Worklist Smp#: 5
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 3 (49)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfms\Sacramento\ChromData\A12\20210311-114838.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 12-Mar-2021 11:42:52 Calib Date: 11-Mar-2021 16:03:54
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfms\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_019.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1669

First Level Reviewer: yuj Date: 11-Mar-2021 15:41:23

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.296	4.235	0.061		50710	0.004904		98.1	13.6	M
2 R-EVE										
405.00 > 217.00	6.410	6.390	0.020		32328	0.004876		97.5	461	
3 R-PSDA										M
440.90 > 241.00	6.450	6.450	0.0		15251	0.004642		92.8	167	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.530	6.529	0.001		60209	0.004703		94.1	1288	
23 PMPA										M
229.00 > 185.00	6.807	6.782	0.025		114576	0.004357		87.1	175	M
5 NVHOS										
297.00 > 135.00	7.162	7.138	0.024		34724	0.004752		95.0	852	
6 PFO2HxA										
245.00 > 85.00	7.741	7.709	0.032		74175	0.004808		96.2	904	
22 PEPA										
278.90 > 234.90	8.336	8.299	0.037		29652	0.004449		89.0	233	
7 PES										
314.90 > 135.00	8.557	8.556	0.001		105328	0.004352		87.0	2691	
8 PFECA B										
295.00 > 201.00	8.800	8.800	0.0		54087	0.004776		95.5	1101	
9 PFO3OA										
310.90 > 85.00	9.049	9.048	0.001		23087	0.004750		95.0	648	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.133	9.133	0.0		1950335	0.2506		100	28026	
11 HPFO-DA										
285.00 > 169.00	9.133	9.133	0.0	1.000	38622	0.004487		89.7	550	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.493	9.493	0.0		271764	0.005022		100	7184	
13 Hydro-EVE Acid										
427.00 > 282.90	9.526	9.525	0.001		363314	0.004775		95.5	4271	
D 14 13C4 PFHpA										
367.00 > 322.00	9.558	9.558	0.0		6917544	0.2827		113	79425	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.558	9.558	0.0	1.000	185376	0.005297	Target=0.00	106	2139	
363.00 > 169.00	9.558	9.558	0.0	1.000	47787		3.88(0.00-0.00)	106	355	
15 Hydro-PS Acid										
463.00 > 262.90	9.558	9.558	0.0		155251	0.004951		99.0	3555	
17 PFECA G										
378.90 > 184.90	9.673	9.676	-0.003		28472	0.004813		96.3	813	
18 PFO4DA										
376.90 > 85.00	9.817	9.820	-0.003		29800	0.004549		91.0	856	
20 EVE Acid										
407.00 > 262.90	9.903	9.877	0.026		261350	0.005121		102	7450	
19 PS Acid										
443.00 > 146.90	9.874	9.877	-0.003		64826	0.004826		96.5	1857	
21 TAF										
442.90 > 85.00	10.396	10.374	0.022		25157	0.004371		87.4	269	

QC Flag Legend

Processing Flags

Review Flags

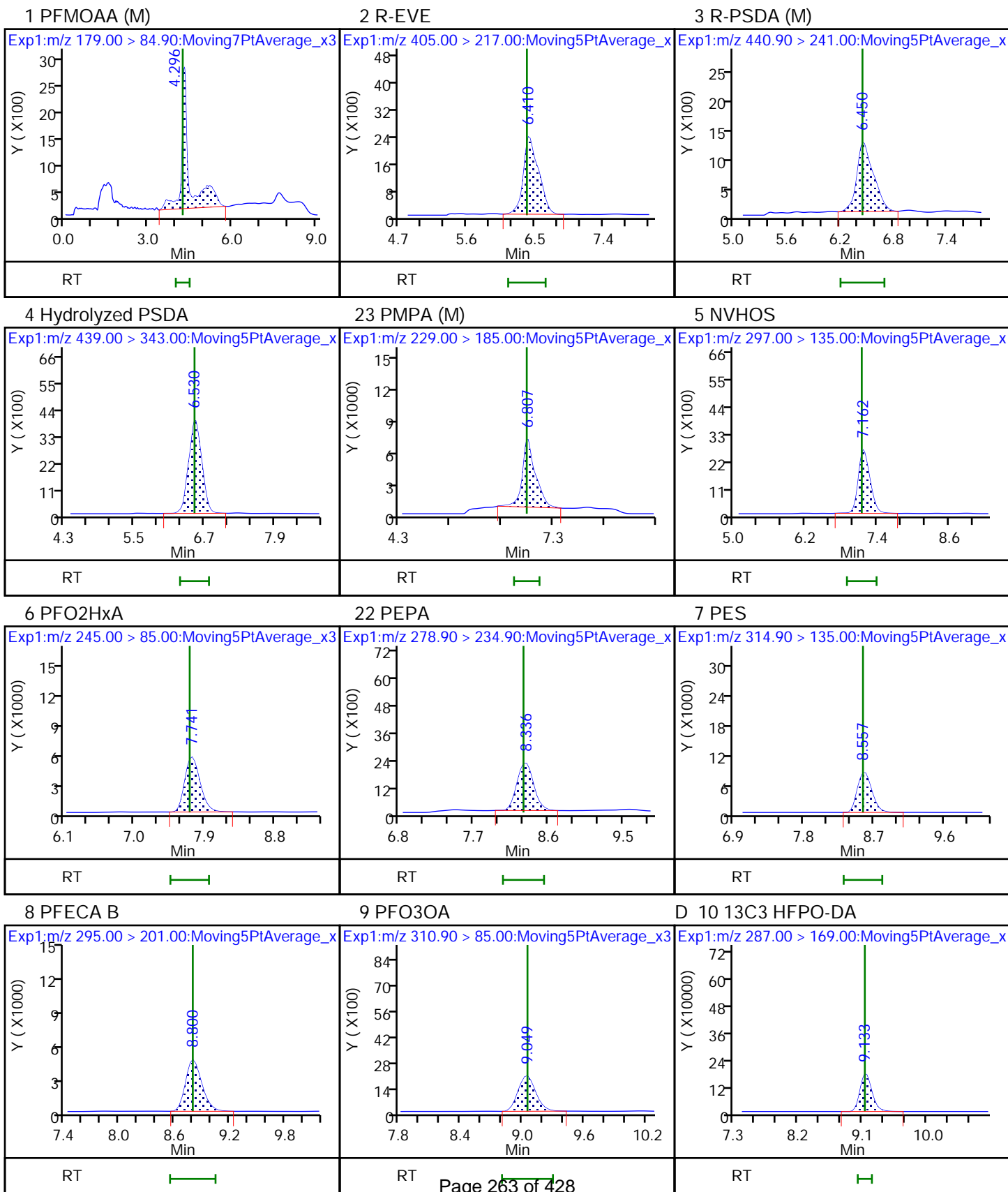
M - Manually Integrated

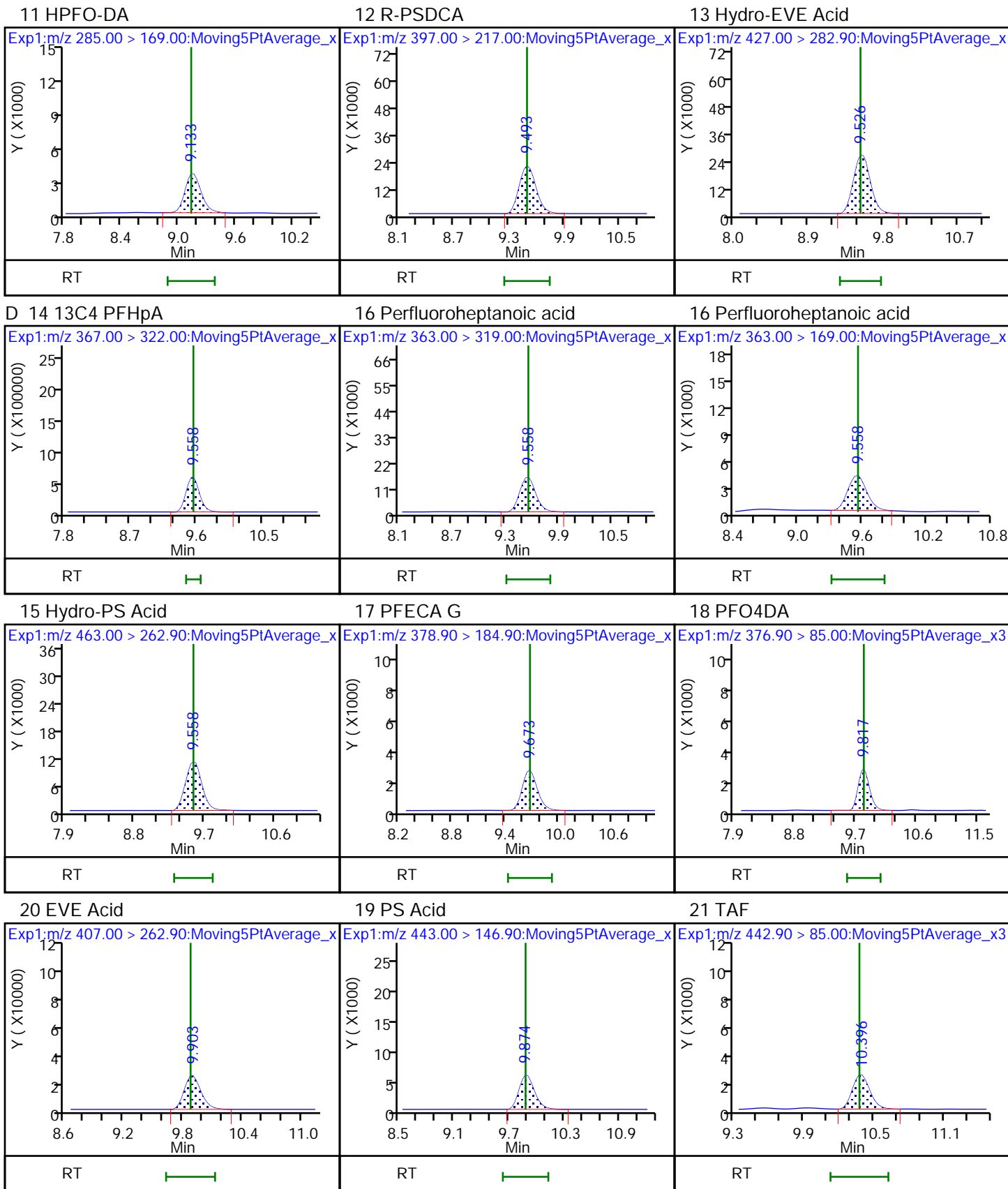
Reagents:

LCTB3_LLSTD3_00048

Amount Added: 1.00

Units: mL





Eurofins TestAmerica, Sacramento

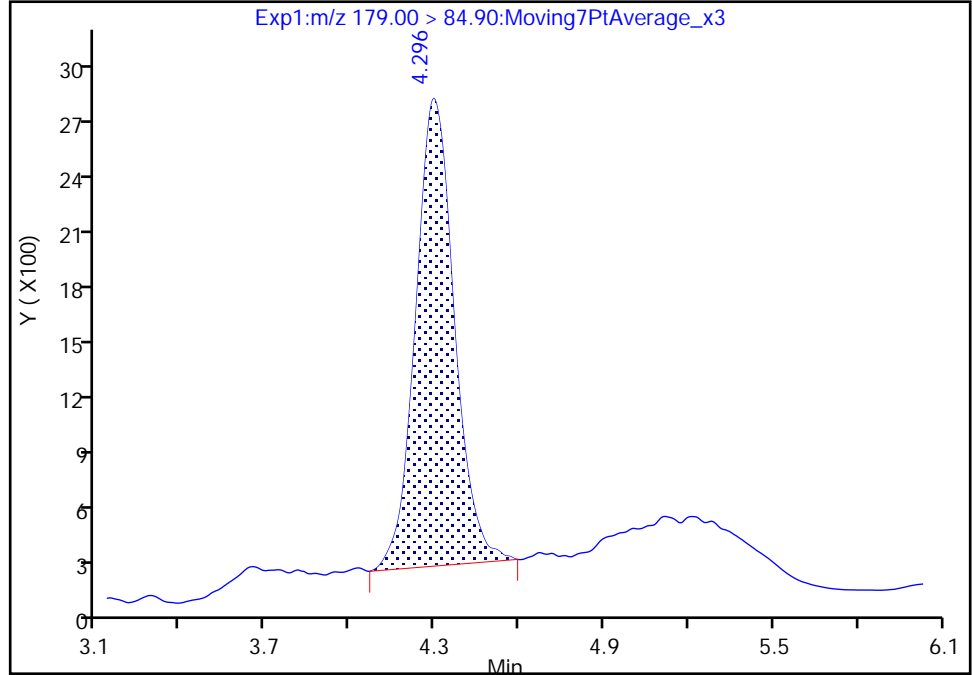
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Injection Date: 11-Mar-2021 12:50:20 Instrument ID: A12
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 8 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

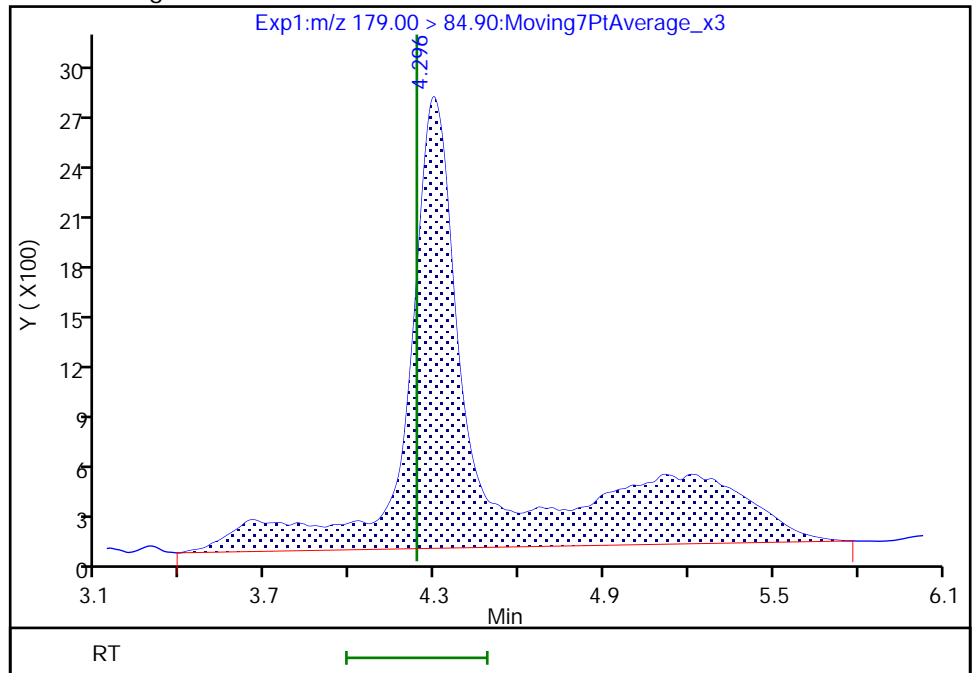
RT: 4.30
Area: 23543
Amount: 0.003632
Amount Units: ng/ml

Processing Integration Results



RT: 4.30
Area: 50710
Amount: 0.004904
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 11-Mar-2021 15:41:15
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento

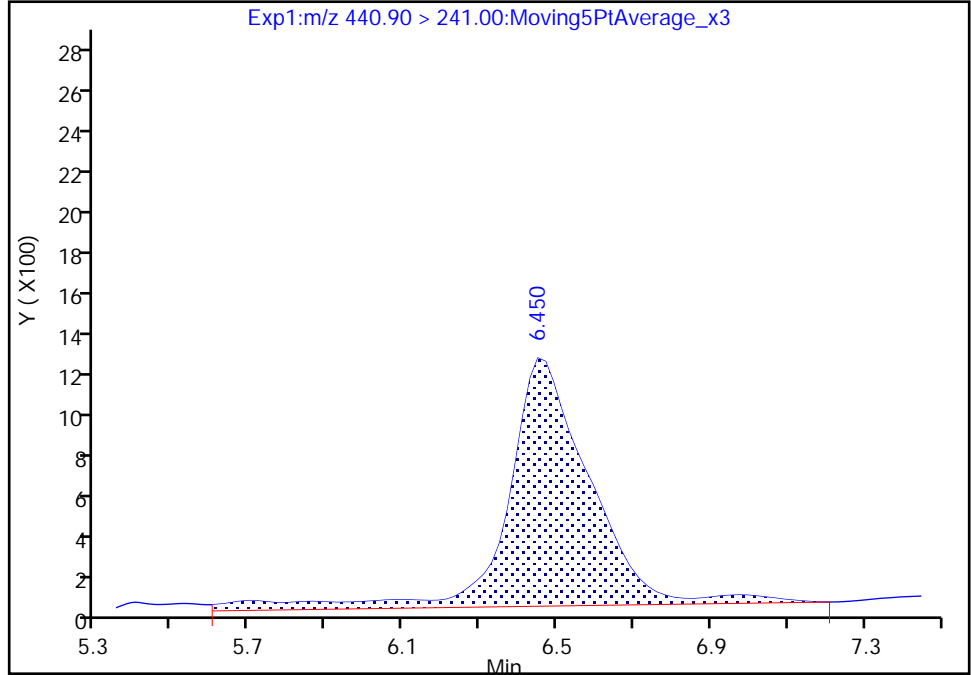
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Injection Date: 11-Mar-2021 12:50:20 Instrument ID: A12
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 8 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

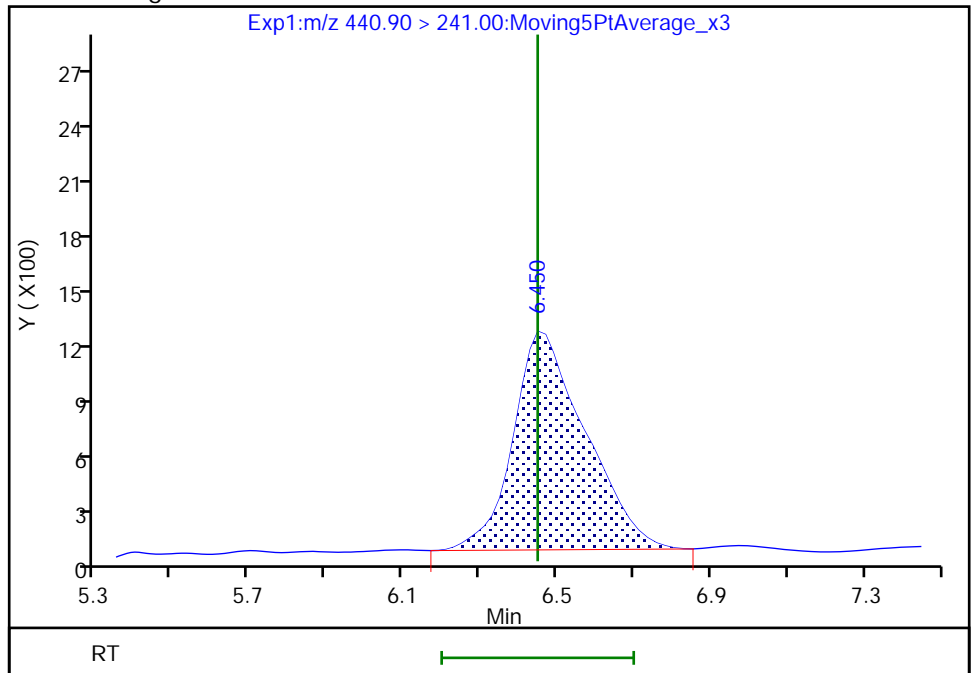
RT: 6.45
Area: 18265
Amount: 0.005691
Amount Units: ng/ml

Processing Integration Results



RT: 6.45
Area: 15251
Amount: 0.004642
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 11-Mar-2021 15:42:13
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

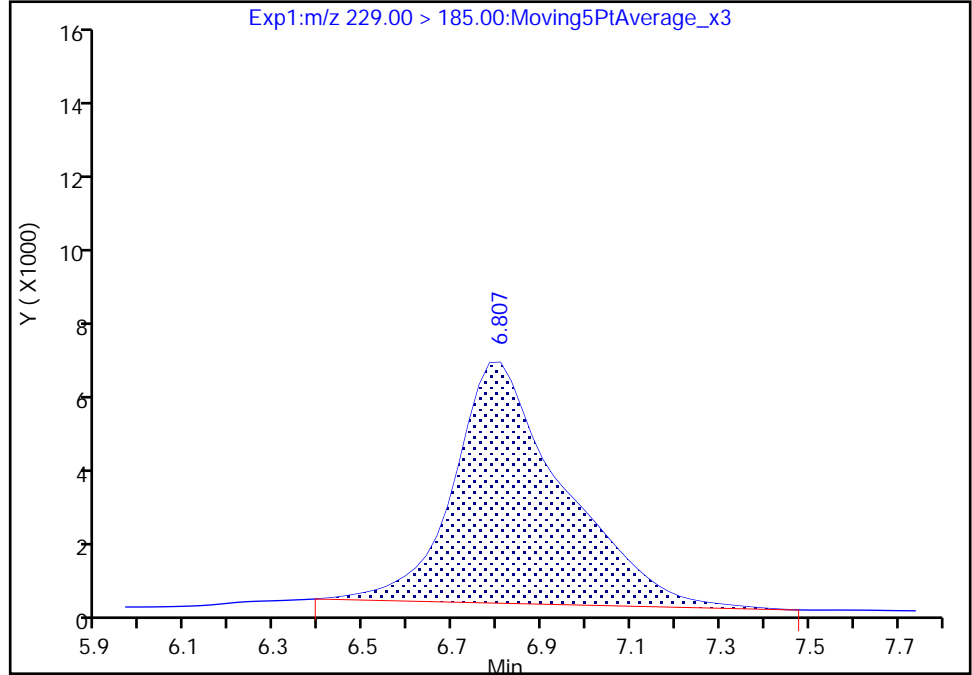
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Injection Date: 11-Mar-2021 12:50:20 Instrument ID: A12
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 8 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

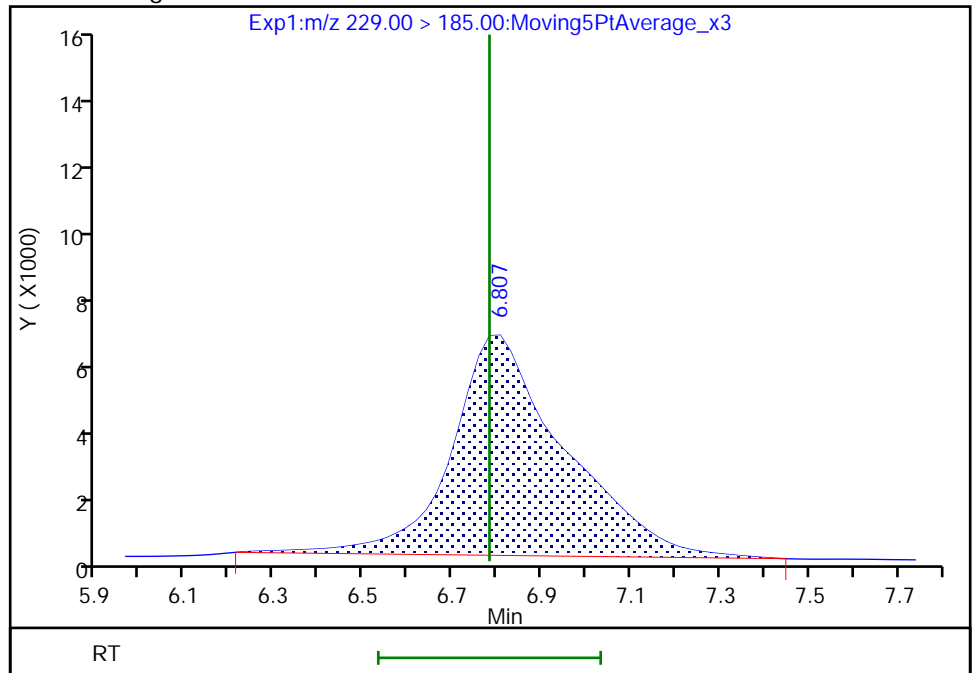
RT: 6.81
Area: 110262
Amount: 0.003509
Amount Units: ng/ml

Processing Integration Results



RT: 6.81
Area: 114576
Amount: 0.004357
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 11-Mar-2021 15:46:28
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_009.d
 Lims ID: IC STD 4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 11-Mar-2021 13:07:56 ALS Bottle#: 9 Worklist Smp#: 6
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 4 (48)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 12-Mar-2021 11:42:54 Calib Date: 11-Mar-2021 16:03:54
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_019.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1669

First Level Reviewer: yuj Date: 11-Mar-2021 15:43:14

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.642	4.235	-0.593		93270	0.009019		90.2	7.1	M
2 R-EVE										M
405.00 > 217.00	6.287	6.390	-0.103		60366	0.009106		91.1	570	M
3 R-PSDA										M
440.90 > 241.00	6.347	6.450	-0.103		28396	0.008643		86.4	206	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.446	6.529	-0.083		115120	0.008993		89.9	1700	
23 PMPA										M
229.00 > 185.00	6.684	6.782	-0.098		207214	0.009200		92.0	231	M
5 NVHOS										M
297.00 > 135.00	7.087	7.138	-0.051		63199	0.008650		86.5	947	M
6 PFO2HxA										
245.00 > 85.00	7.706	7.709	-0.003		141071	0.009145		91.5	1361	
22 PEPA										
278.90 > 234.90	8.295	8.299	-0.004		61087	0.009167		91.7	401	
7 PES										
314.90 > 135.00	8.555	8.556	-0.001		201224	0.008315		83.1	4988	
8 PFECA B										
295.00 > 201.00	8.797	8.800	-0.003		107847	0.009524		95.2	2839	
9 PFO3OA										
310.90 > 85.00	9.045	9.048	-0.003		41140	0.008465		84.6	1114	
11 HPFO-DA										
285.00 > 169.00	9.130	9.133	-0.003	1.000	79329	0.009115		91.2	1125	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.130	9.133	-0.003		1971732	0.2534		101	33681	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.490	9.493	-0.003		529236	0.009780		97.8	13790	
13 Hydro-EVE Acid										
427.00 > 282.90	9.522	9.525	-0.003		707807	0.009303		93.0	8243	
D 14 13C4 PFHpA										
367.00 > 322.00	9.555	9.558	-0.003		6054619	0.2474		99.0	79032	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.555	9.558	-0.003	1.000	273774	0.009211	Target=0.00	92.1	2698	
363.00 > 169.00	9.555	9.558	-0.003	1.000	81298		3.37(0.00-0.00)	92.1	584	
15 Hydro-PS Acid										
463.00 > 262.90	9.555	9.558	-0.003		282814	0.009019		90.2	6344	
17 PFECA G										
378.90 > 184.90	9.673	9.676	-0.003		57734	0.009760		97.6	1621	
18 PFO4DA										
376.90 > 85.00	9.817	9.820	-0.003		60985	0.009309		93.1	1736	
20 EVE Acid										
407.00 > 262.90	9.874	9.877	-0.003		498149	0.009760		97.6	10561	
19 PS Acid										
443.00 > 146.90	9.874	9.877	-0.003		123017	0.009158		91.6	3530	
21 TAF										
442.90 > 85.00	10.373	10.374	-0.001		50589	0.008790		87.9	496	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD4_00047

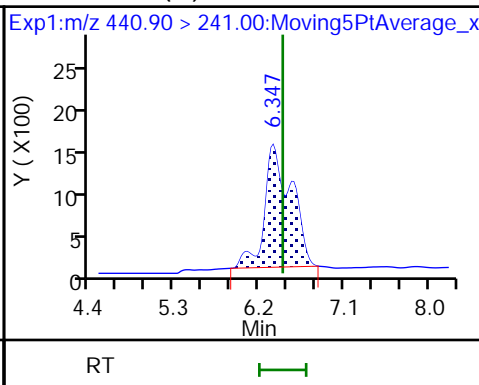
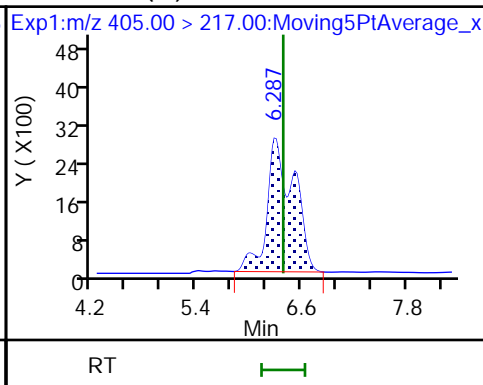
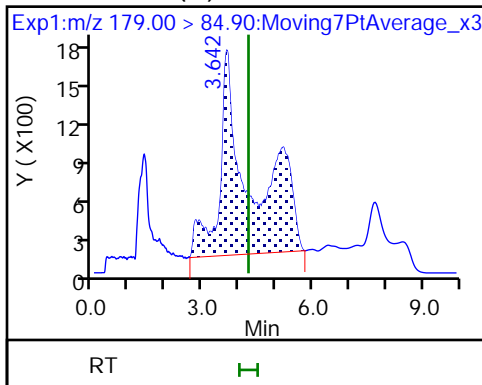
Amount Added: 1.00

Units: mL

1 PFMOAA (M)

2 R-EVE (M)

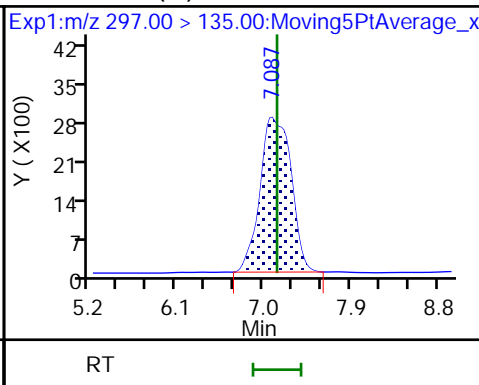
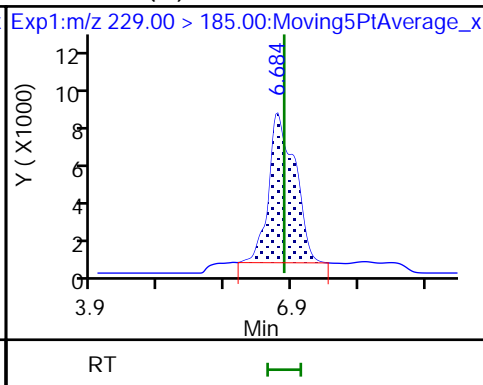
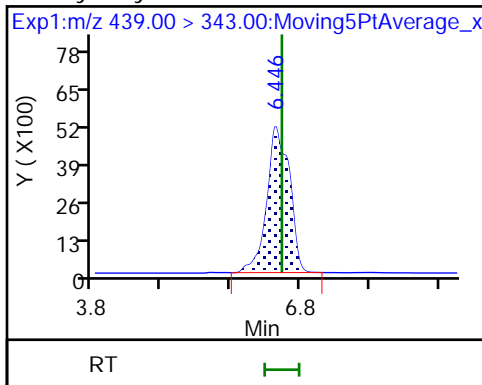
3 R-PSDA (M)



4 Hydrolyzed PSDA

23 PMPA (M)

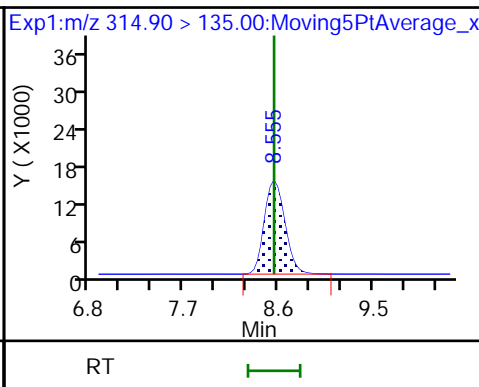
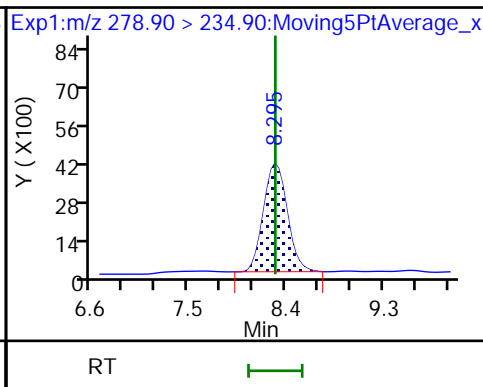
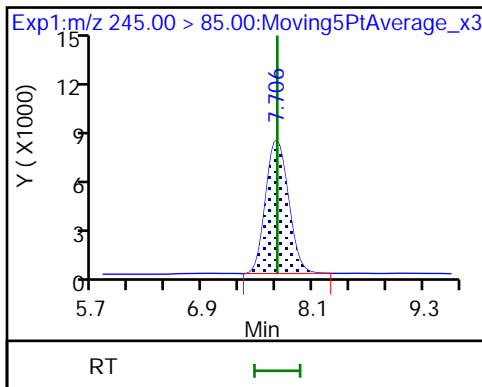
5 NVHOS (M)



6 PFO2HxA

22 PEPA

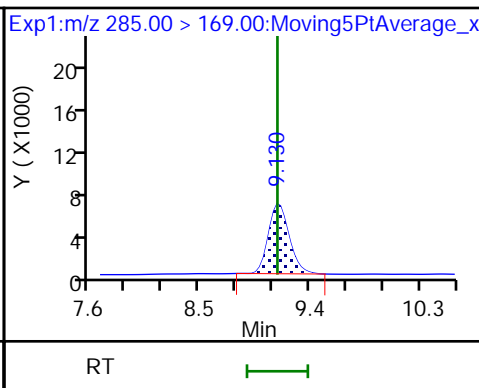
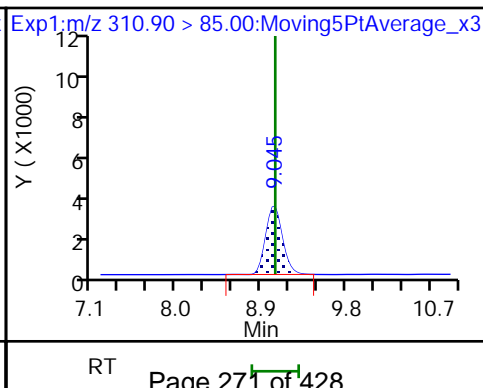
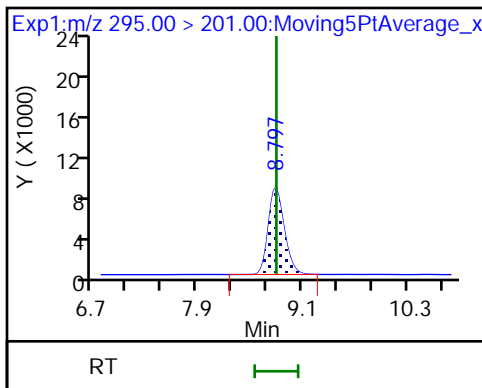
7 PES



8 PFECA B

9 PFO3OA

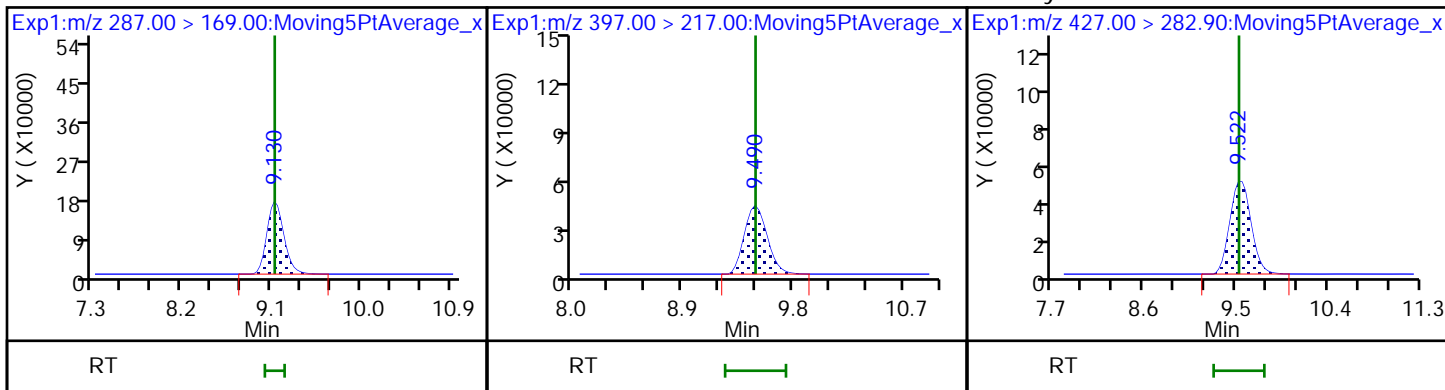
11 HPFO-DA



D 10 13C3 HFPO-DA

12 R-PSDCA

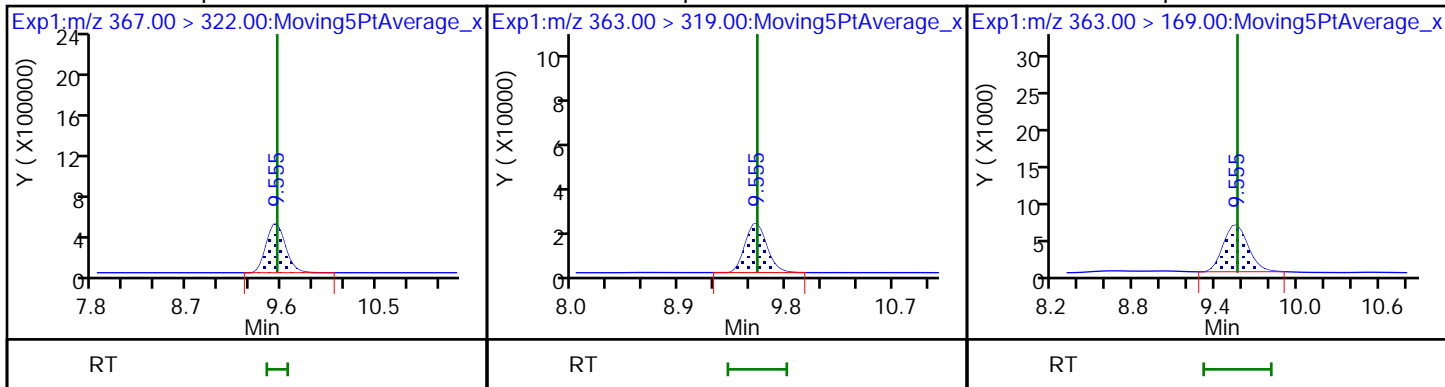
13 Hydro-EVE Acid



D 14 13C4 PFHpA

16 Perfluoroheptanoic acid

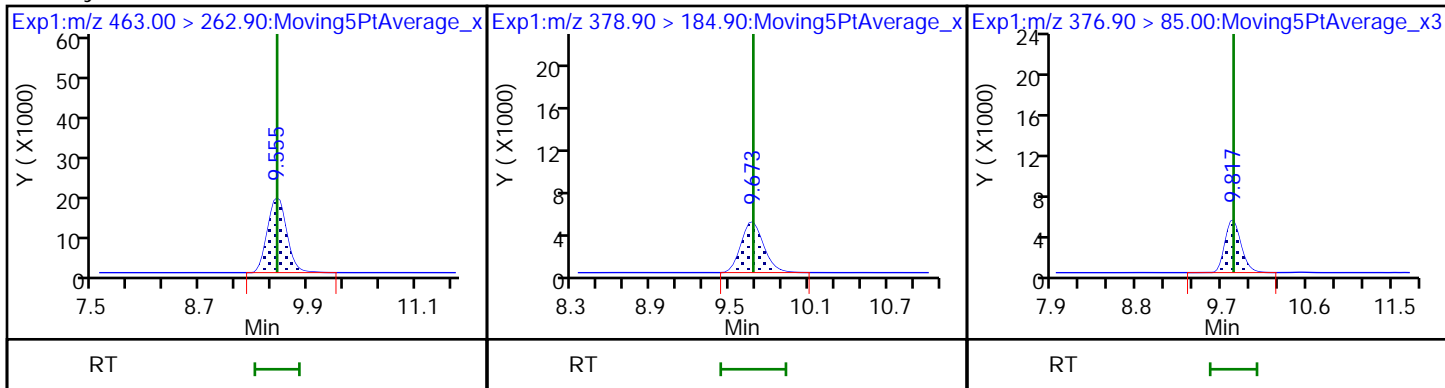
16 Perfluoroheptanoic acid



15 Hydro-PS Acid

17 PFECA G

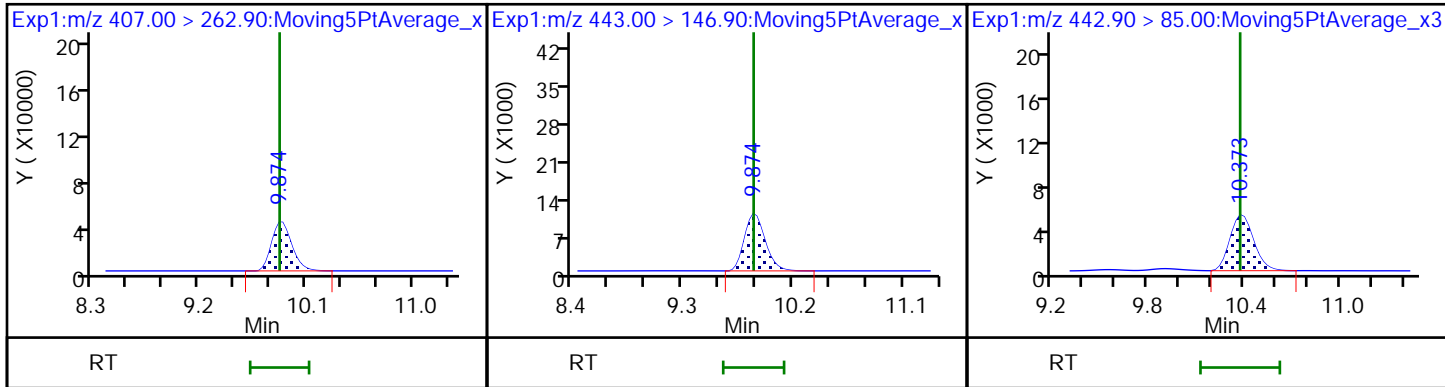
18 PFO4DA



20 EVE Acid

19 PS Acid

21 TAF



Eurofins TestAmerica, Sacramento

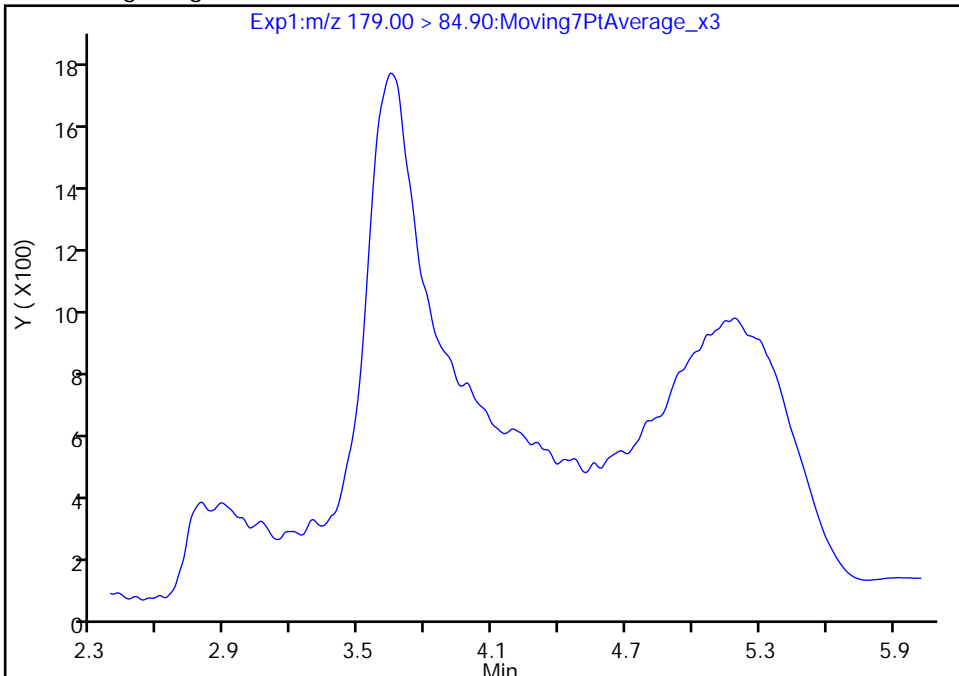
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Injection Date: 11-Mar-2021 13:07:56 Instrument ID: A12
Lims ID: IC STD 4
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 9 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

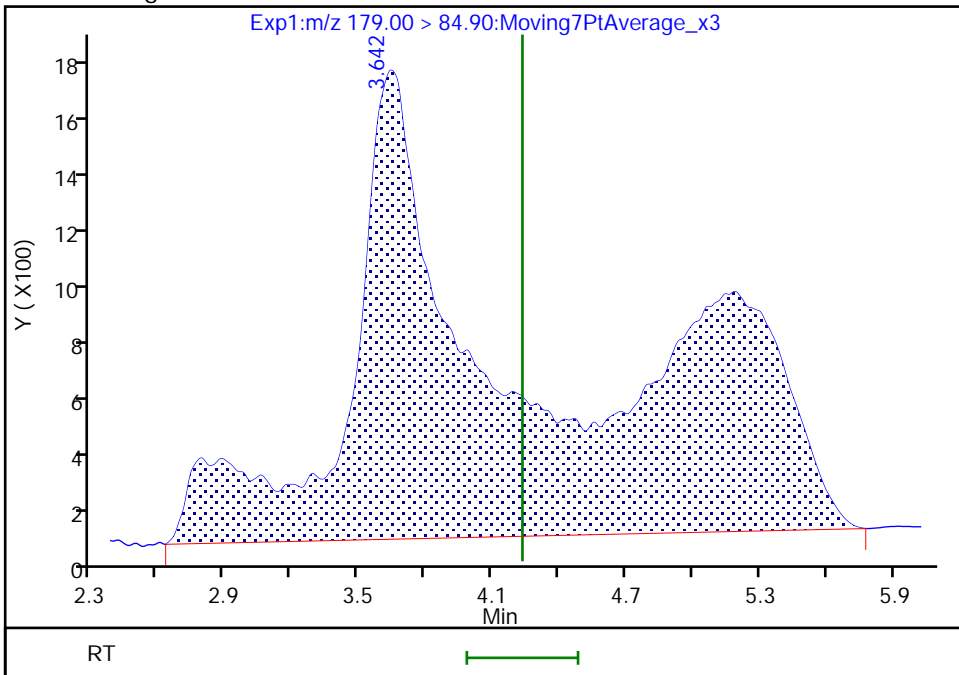
Not Detected
Expected RT: 4.24

Processing Integration Results



RT: 3.64
Area: 93270
Amount: 0.009019
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 11-Mar-2021 15:42:35
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

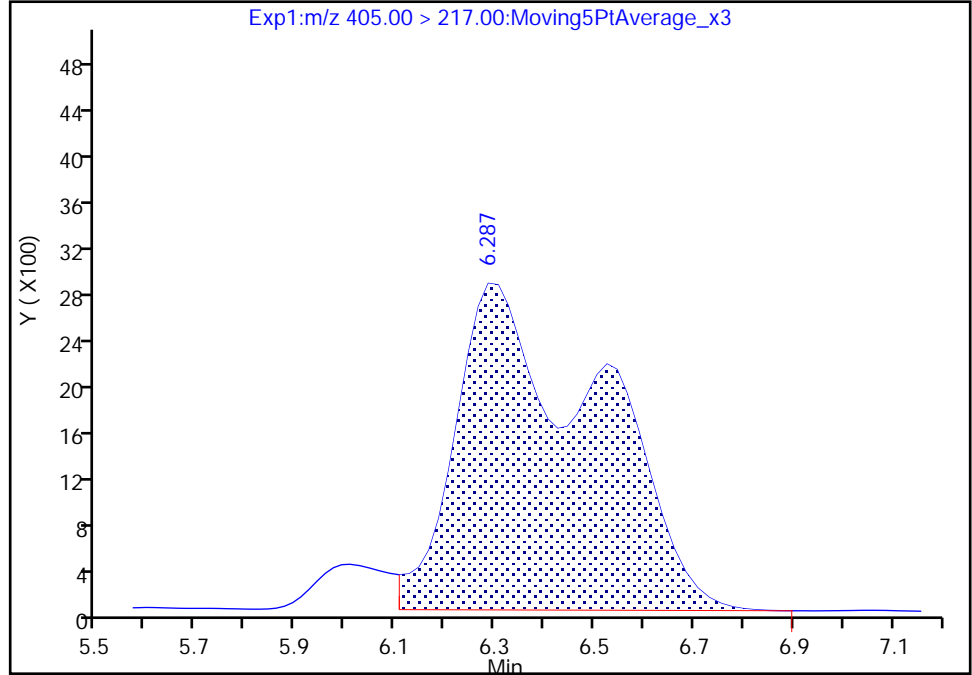
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Injection Date: 11-Mar-2021 13:07:56 Instrument ID: A12
Lims ID: IC STD 4
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 9 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

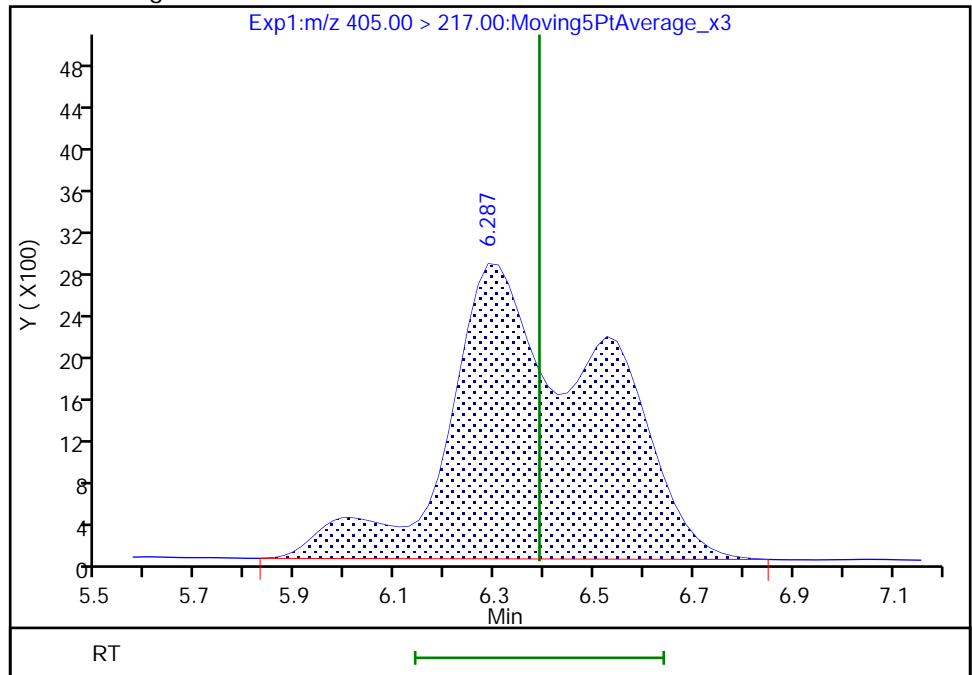
RT: 6.29
Area: 56499
Amount: 0.009136
Amount Units: ng/ml

Processing Integration Results



RT: 6.29
Area: 60366
Amount: 0.009106
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Sacramento

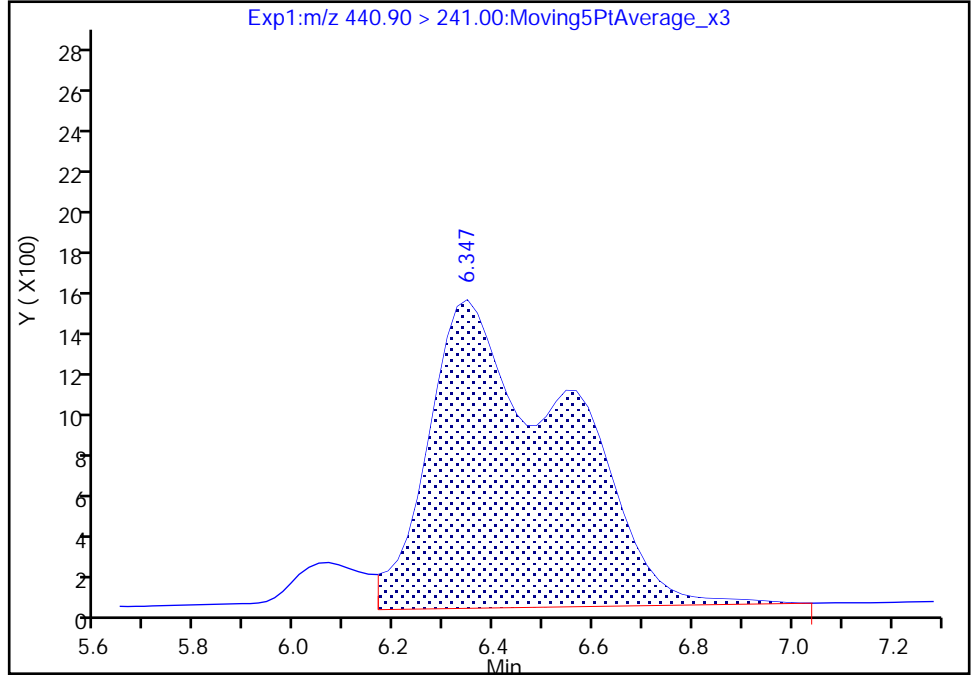
Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_009.d
Injection Date: 11-Mar-2021 13:07:56 Instrument ID: A12
Lims ID: IC STD 4
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 9 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

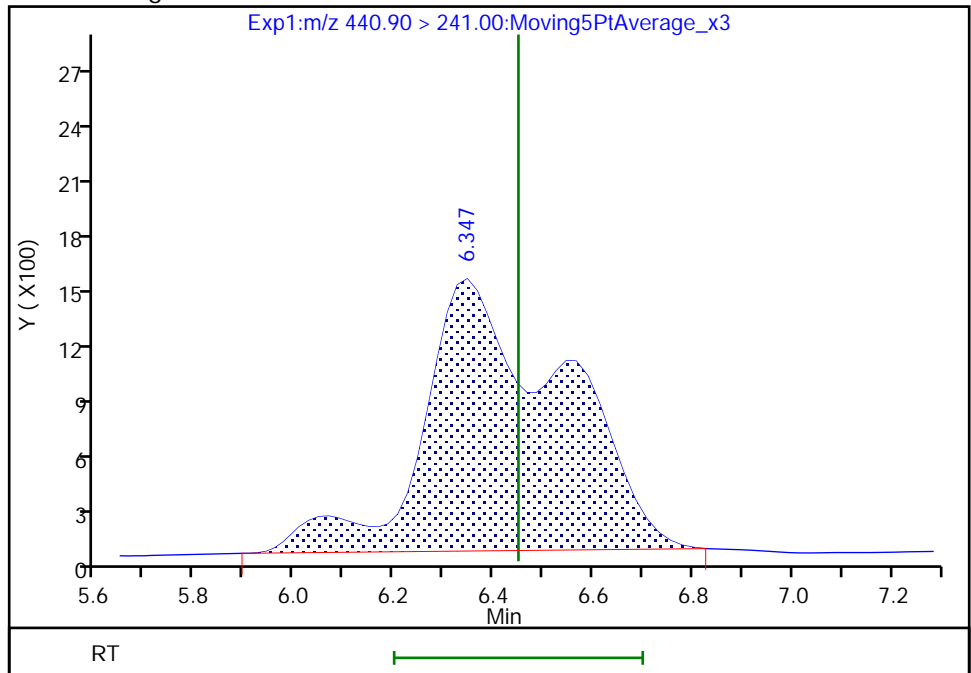
RT: 6.35
Area: 28091
Amount: 0.009184
Amount Units: ng/ml

Processing Integration Results



RT: 6.35
Area: 28396
Amount: 0.008643
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Sacramento

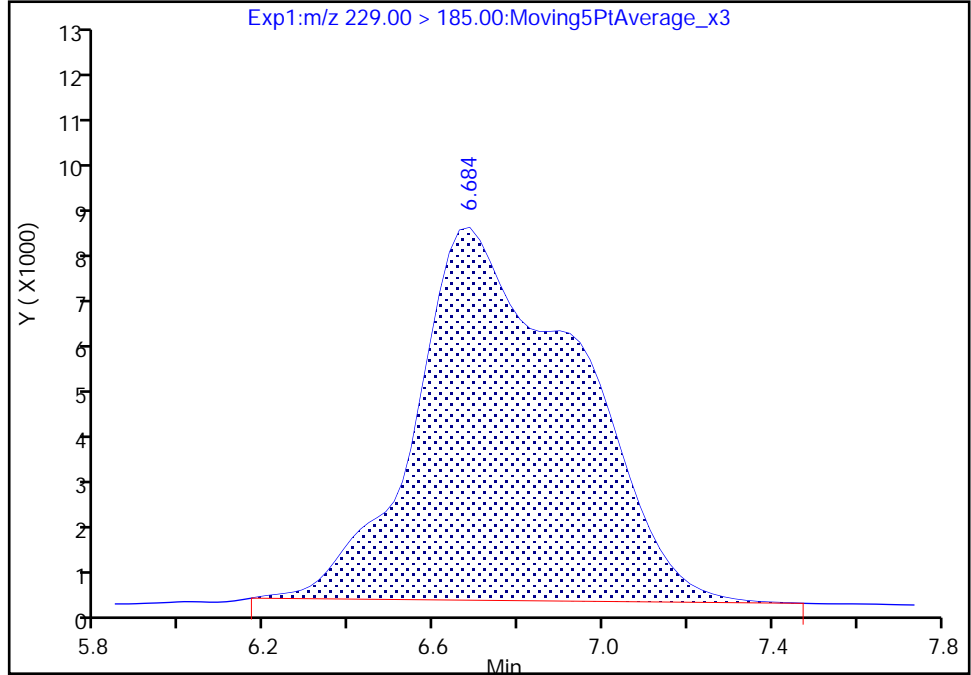
Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_009.d
Injection Date: 11-Mar-2021 13:07:56 Instrument ID: A12
Lims ID: IC STD 4
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 9 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

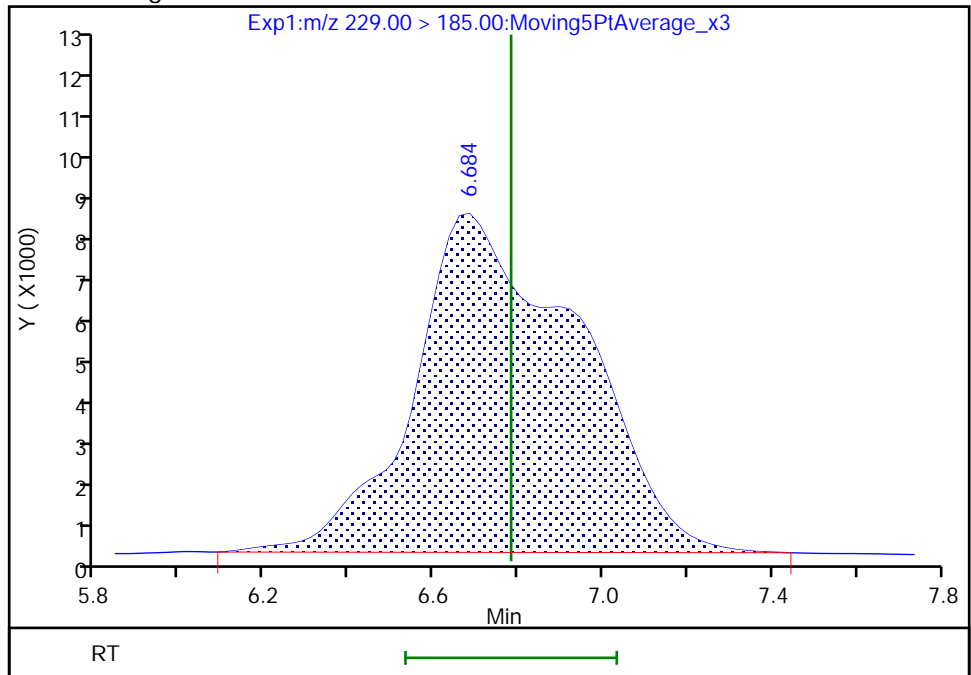
RT: 6.68
Area: 204062
Amount: 0.006450
Amount Units: ng/ml

Processing Integration Results



RT: 6.68
Area: 207214
Amount: 0.009200
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 11-Mar-2021 15:46:51
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

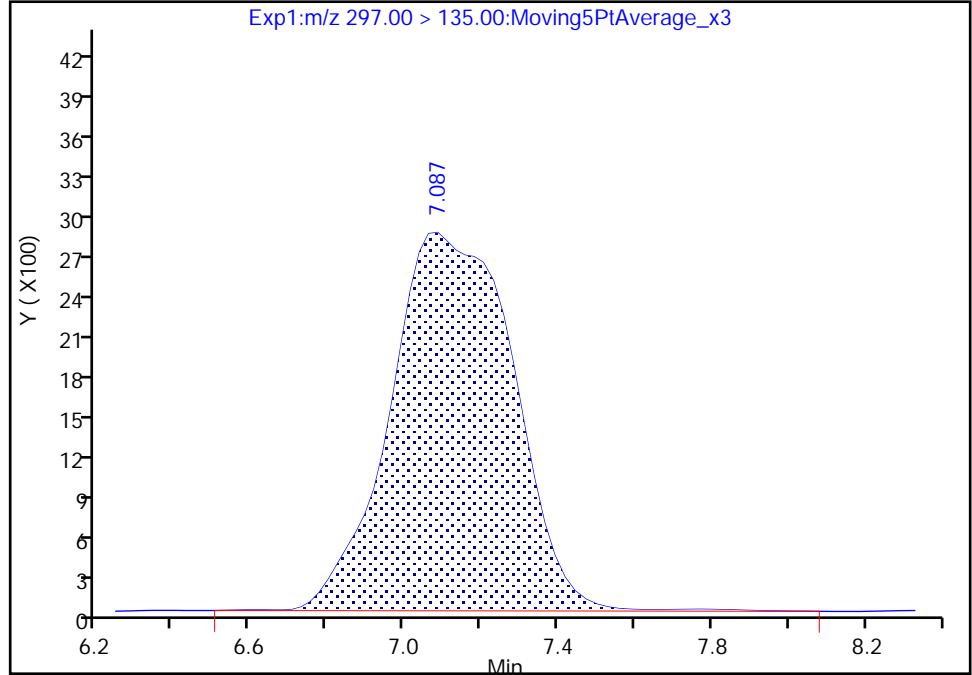
Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_009.d
Injection Date: 11-Mar-2021 13:07:56 Instrument ID: A12
Lims ID: IC STD 4
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 9 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

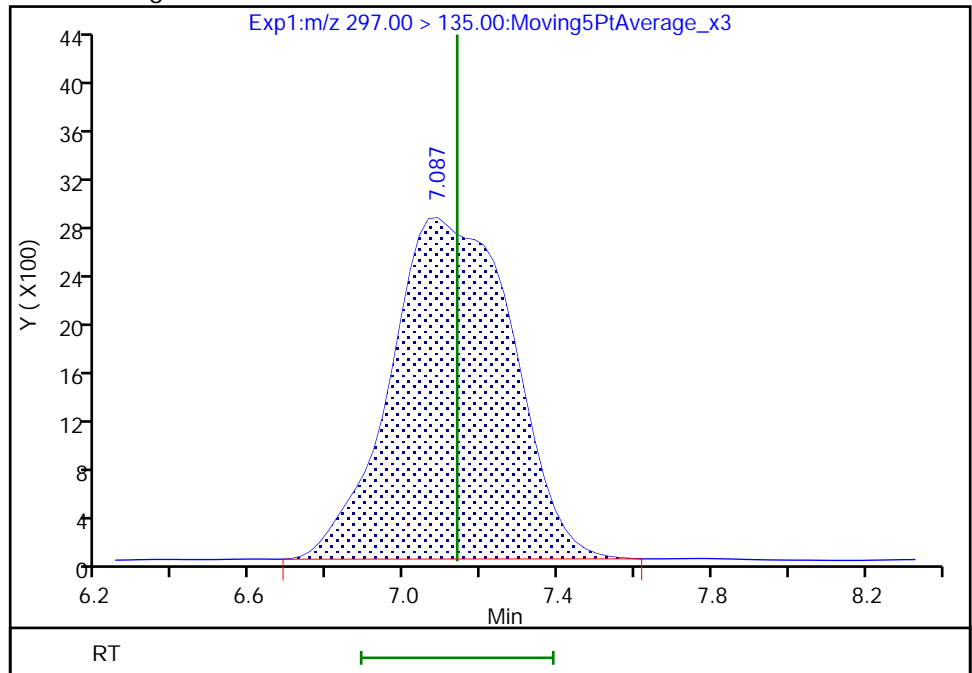
RT: 7.09
Area: 63831
Amount: 0.009373
Amount Units: ng/ml

Processing Integration Results



RT: 7.09
Area: 63199
Amount: 0.008650
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 11-Mar-2021 15:42:59
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_010.d
 Lims ID: IC STD 5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 11-Mar-2021 13:25:47 ALS Bottle#: 10 Worklist Smp#: 7
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 5 (58)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 12-Mar-2021 11:42:55 Calib Date: 11-Mar-2021 16:03:54
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_019.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1669

First Level Reviewer: yuj Date: 11-Mar-2021 15:49:17

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.098	4.235	-0.137		240014	0.0232		92.8	28.4	M
2 R-EVE										
405.00 > 217.00	6.367	6.390	-0.023		152289	0.0230		91.9	2094	
3 R-PSDA										M
440.90 > 241.00	6.427	6.450	-0.024		68877	0.0210		83.9	691	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.506	6.529	-0.023		295909	0.0231		92.5	4512	
23 PMPA										
229.00 > 185.00	6.755	6.782	-0.027		465023	0.0227		90.7	695	
5 NVHOS										
297.00 > 135.00	7.111	7.138	-0.027		165347	0.0226		90.5	3484	
6 PFO2HxA										
245.00 > 85.00	7.706	7.709	-0.003		357950	0.0232		92.8	3993	
22 PEPA										
278.90 > 234.90	8.295	8.299	-0.004		148061	0.0222		88.9	1125	
7 PES										
314.90 > 135.00	8.555	8.556	-0.001		493930	0.0204		81.6	12474	
8 PFECA B										
295.00 > 201.00	8.797	8.800	-0.003		259454	0.0229		91.6	6984	
9 PFO3OA										
310.90 > 85.00	9.045	9.048	-0.003		106382	0.0219		87.6	2919	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.130	9.133	-0.003		1893184	0.2433		97.3	32361	
11 HPFO-DA										
285.00 > 169.00	9.130	9.133	-0.003	1.000	203095	0.0243		97.2	2869	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.490	9.493	-0.003		1284817	0.0237		95.0	25097	
13 Hydro-EVE Acid										
427.00 > 282.90	9.523	9.525	-0.002		1848564	0.0243		97.2	21612	
D 14 13C4 PFHpA										
367.00 > 322.00	9.555	9.558	-0.003		6380058	0.2607		104	83981	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.555	9.558	-0.003	1.000	712955	0.0233	Target=0.00	93.4	8086	
363.00 > 169.00	9.555	9.558	-0.003	1.000	208506		3.42(0.00-0.00)	93.4	1507	
15 Hydro-PS Acid										
463.00 > 262.90	9.555	9.558	-0.003		713433	0.0228		91.0	15996	
17 PFECA G										
378.90 > 184.90	9.674	9.676	-0.002		144166	0.0244		97.5	4066	
18 PFO4DA										
376.90 > 85.00	9.817	9.820	-0.003		146869	0.0224		89.7	3159	
20 EVE Acid										
407.00 > 262.90	9.903	9.877	0.026		1218402	0.0239		95.5	25991	
19 PS Acid										
443.00 > 146.90	9.874	9.877	-0.003		322715	0.0240		96.1	9245	
21 TAF										
442.90 > 85.00	10.374	10.374	0.0		132222	0.0230		91.9	1078	

QC Flag Legend

Processing Flags

Review Flags

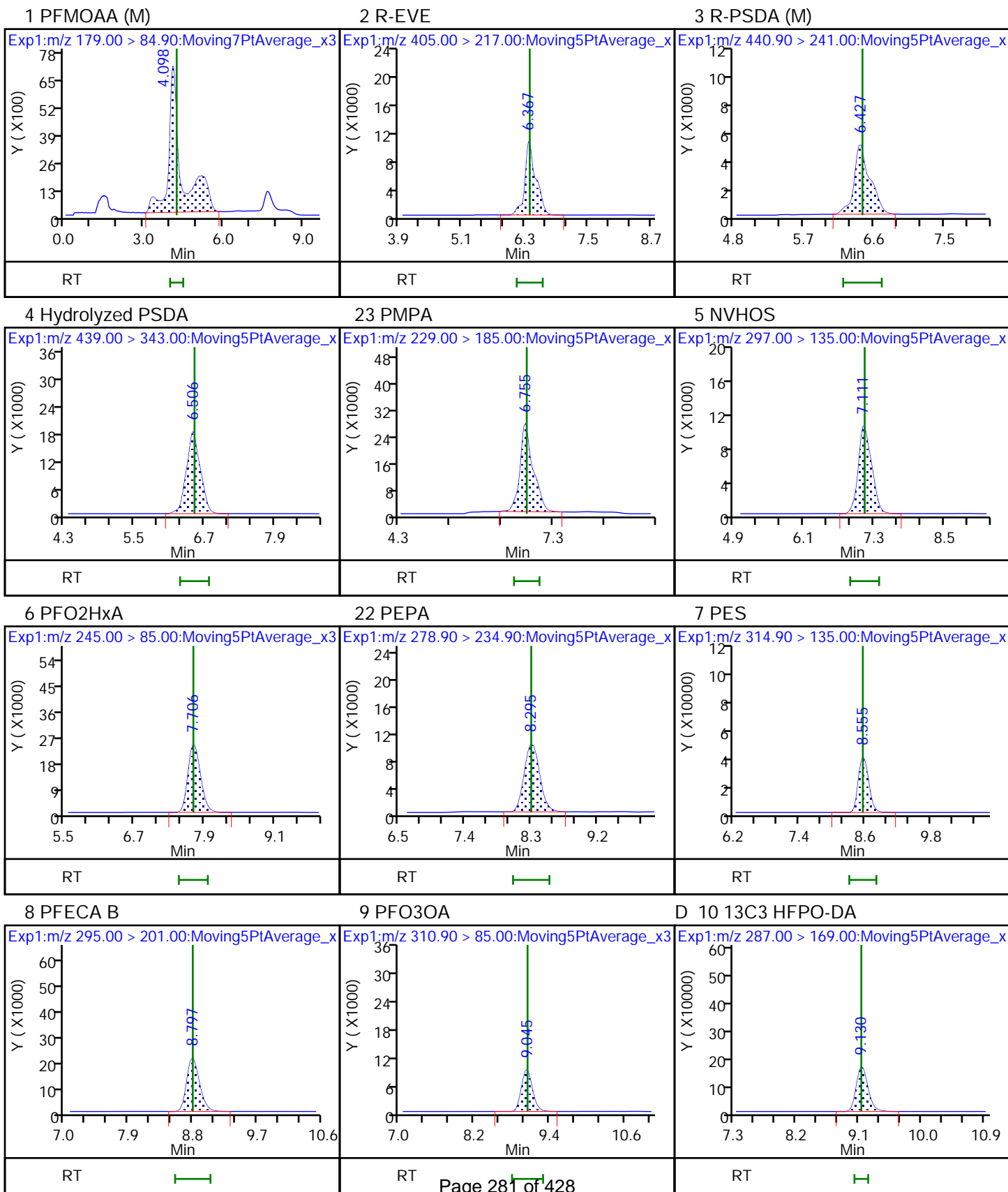
M - Manually Integrated

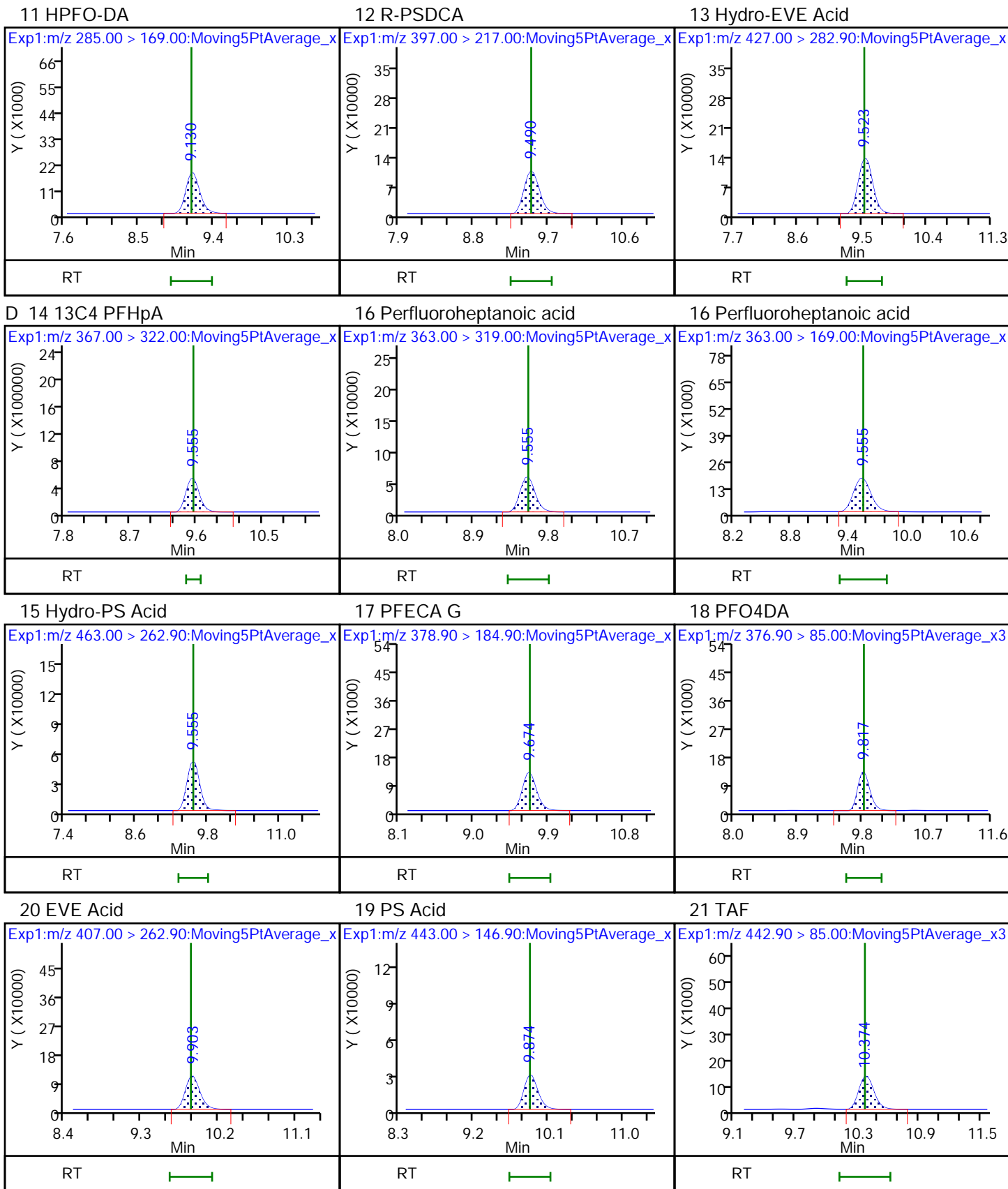
Reagents:

LCTB3_LLSTD5_00057

Amount Added: 1.00

Units: mL





Eurofins TestAmerica, Sacramento

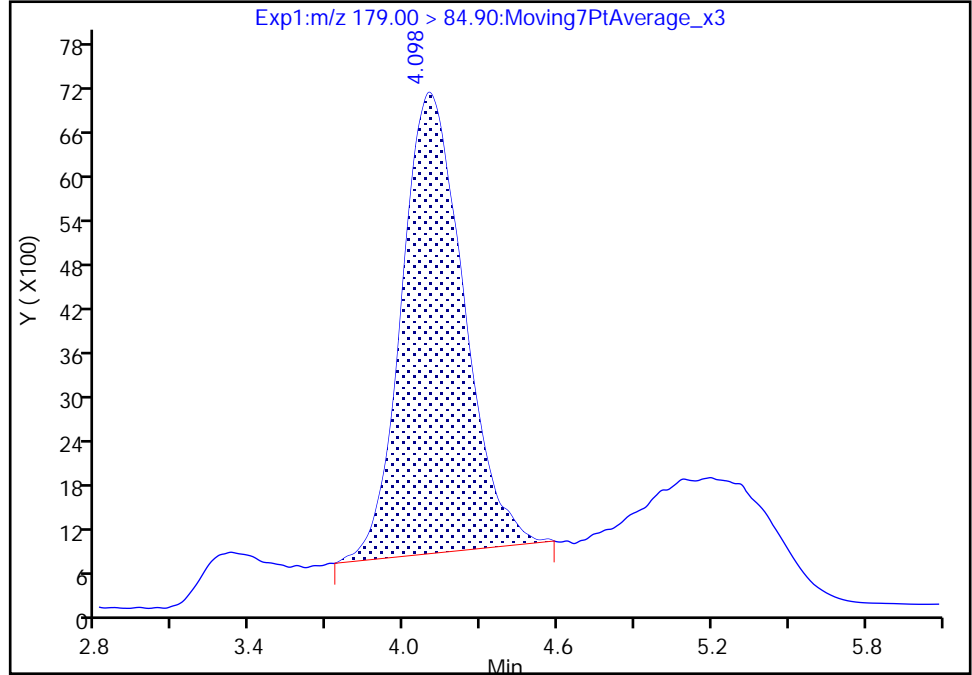
Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_010.d
Injection Date: 11-Mar-2021 13:25:47 Instrument ID: A12
Lims ID: IC STD 5
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 10 Worklist Smp#: 7
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

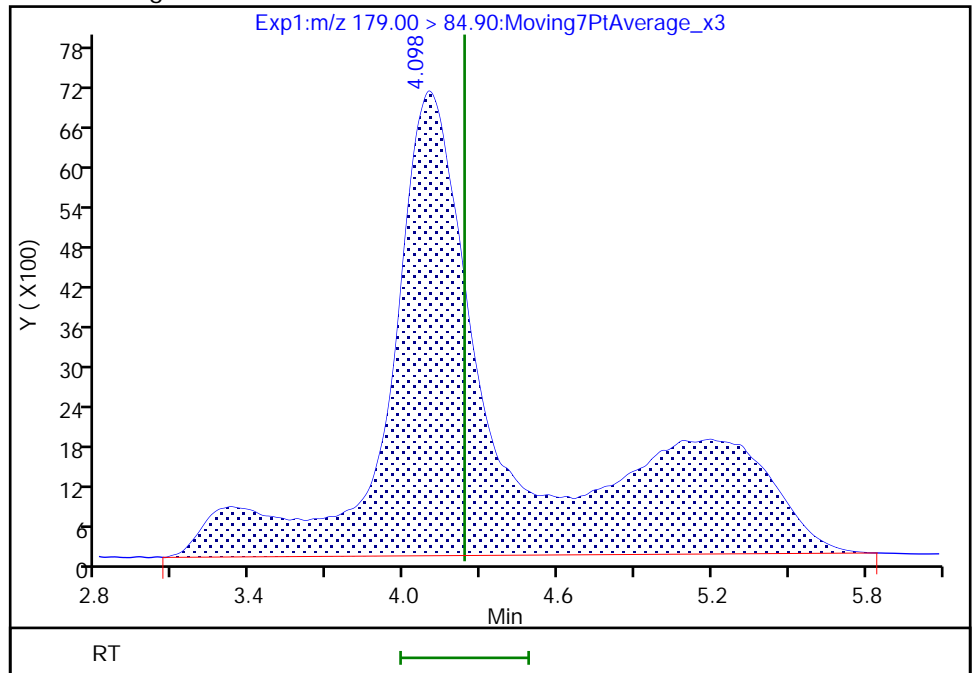
RT: 4.10
Area: 105644
Amount: 0.012773
Amount Units: ng/ml

Processing Integration Results



RT: 4.10
Area: 240014
Amount: 0.023210
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 11-Mar-2021 15:48:54
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento

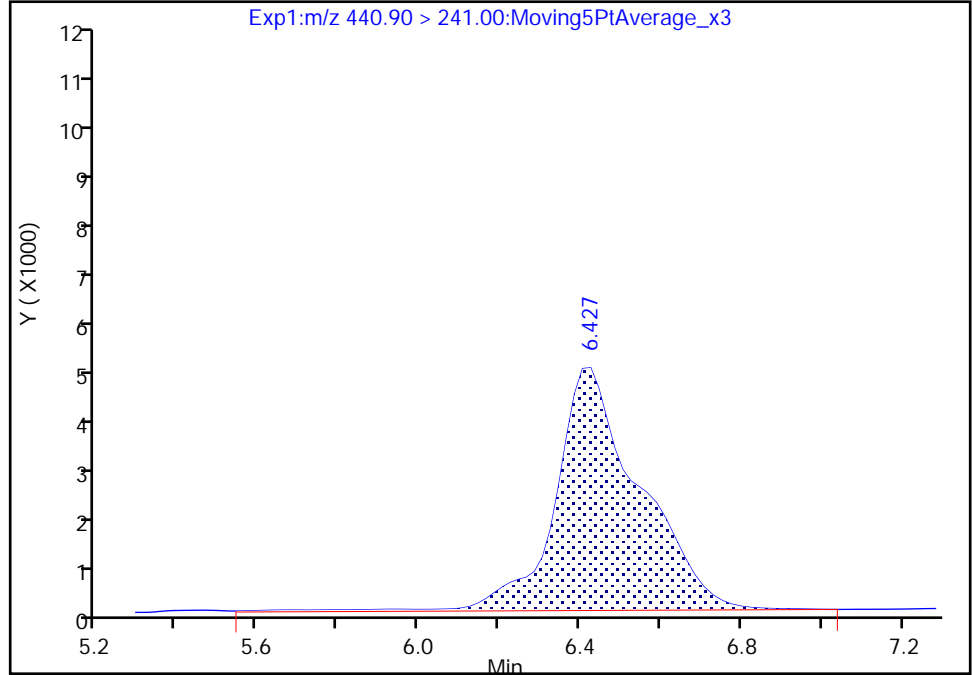
Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_010.d
Injection Date: 11-Mar-2021 13:25:47 Instrument ID: A12
Lims ID: IC STD 5
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 10 Worklist Smp#: 7
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

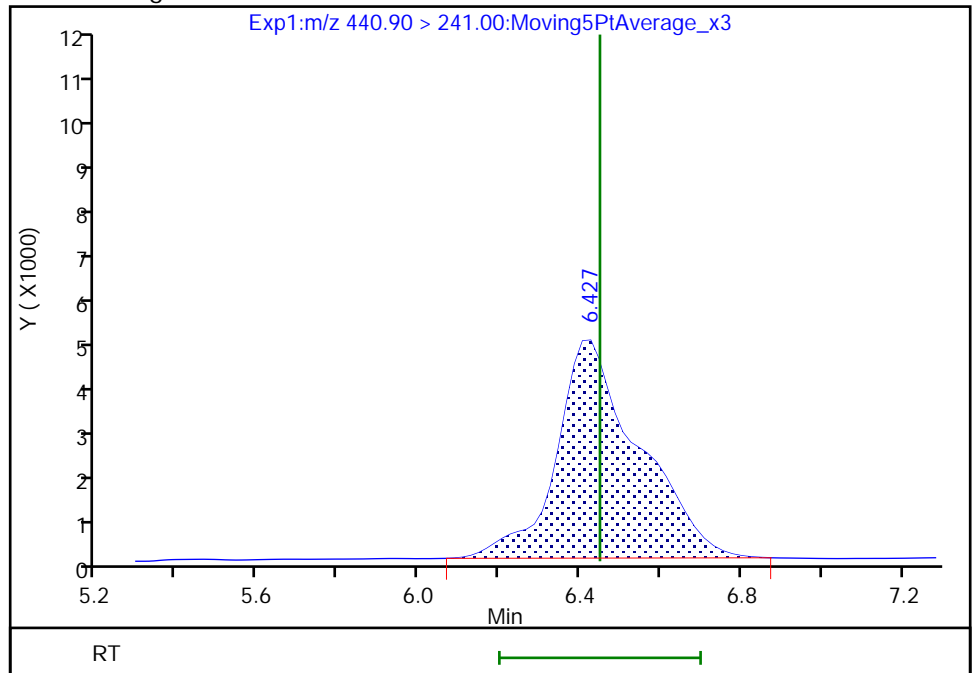
RT: 6.43
Area: 71522
Amount: 0.023643
Amount Units: ng/ml

Processing Integration Results



RT: 6.43
Area: 68877
Amount: 0.020965
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 11-Mar-2021 15:49:02
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_012.d
 Lims ID: IC STD 6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 11-Mar-2021 14:00:57 ALS Bottle#: 12 Worklist Smp#: 9
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 6 (92)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 12-Mar-2021 11:42:57 Calib Date: 11-Mar-2021 16:03:54
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_019.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1669

First Level Reviewer: yuj Date: 11-Mar-2021 16:25:10

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.961	4.235	-0.274		544295	0.0526		105	40.3	M
2 R-EVE										
405.00 > 217.00	6.367	6.390	-0.023		354928	0.0535		107	4597	
3 R-PSDA										M
440.90 > 241.00	6.407	6.450	-0.043		164536	0.0501		100	1399	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.506	6.529	-0.023		662702	0.0518		104	9601	
23 PMPA										
229.00 > 185.00	6.732	6.782	-0.050		1002439	0.0508		102	1334	
5 NVHOS										
297.00 > 135.00	7.111	7.138	-0.027		367865	0.0503		101	6999	
6 PFO2HxA										
245.00 > 85.00	7.706	7.709	-0.003		826140	0.0536		107	10594	
22 PEPA										
278.90 > 234.90	8.295	8.299	-0.004		357518	0.0536		107	2199	
7 PES										
314.90 > 135.00	8.555	8.556	-0.001		1212458	0.0501		100	30515	
8 PFECA B										
295.00 > 201.00	8.797	8.800	-0.003		604295	0.0534		107	15959	
9 PFO3OA										
310.90 > 85.00	9.017	9.048	-0.031		270695	0.0557		111	7338	
11 HPFO-DA										
285.00 > 169.00	9.130	9.133	-0.003	1.000	446970	0.0515		103	6380	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.130	9.133	-0.003		1967730	0.2529		101	33815	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.490	9.493	-0.003		3288158	0.0608		122	64078	
13 Hydro-EVE Acid										
427.00 > 282.90	9.523	9.525	-0.002		4223389	0.0555		111	36881	
D 14 13C4 PFHpA										
367.00 > 322.00	9.523	9.558	-0.035		6691253	0.2734		109	87584	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.523	9.558	-0.035	1.000	1633022	0.0515	Target=0.00	103	18290	
363.00 > 169.00	9.523	9.558	-0.035	1.000	464068		3.52(0.00-0.00)	103	3641	
15 Hydro-PS Acid										
463.00 > 262.90	9.555	9.558	-0.003		1661116	0.0530		106	37181	
17 PFECA G										
378.90 > 184.90	9.645	9.676	-0.031		344412	0.0582		116	9582	
18 PFO4DA										
376.90 > 85.00	9.788	9.820	-0.032		419942	0.0641		128	8943	
20 EVE Acid										
407.00 > 262.90	9.874	9.877	-0.003		2938957	0.0576		115	50327	
19 PS Acid										
443.00 > 146.90	9.874	9.877	-0.003		742261	0.0553		111	16018	
21 TAF										
442.90 > 85.00	10.374	10.374	0.0		323035	0.0561		112	2112	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD6_00090

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_012.d

Injection Date: 11-Mar-2021 14:00:57

Instrument ID: A12

Lims ID: IC STD 6

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 12

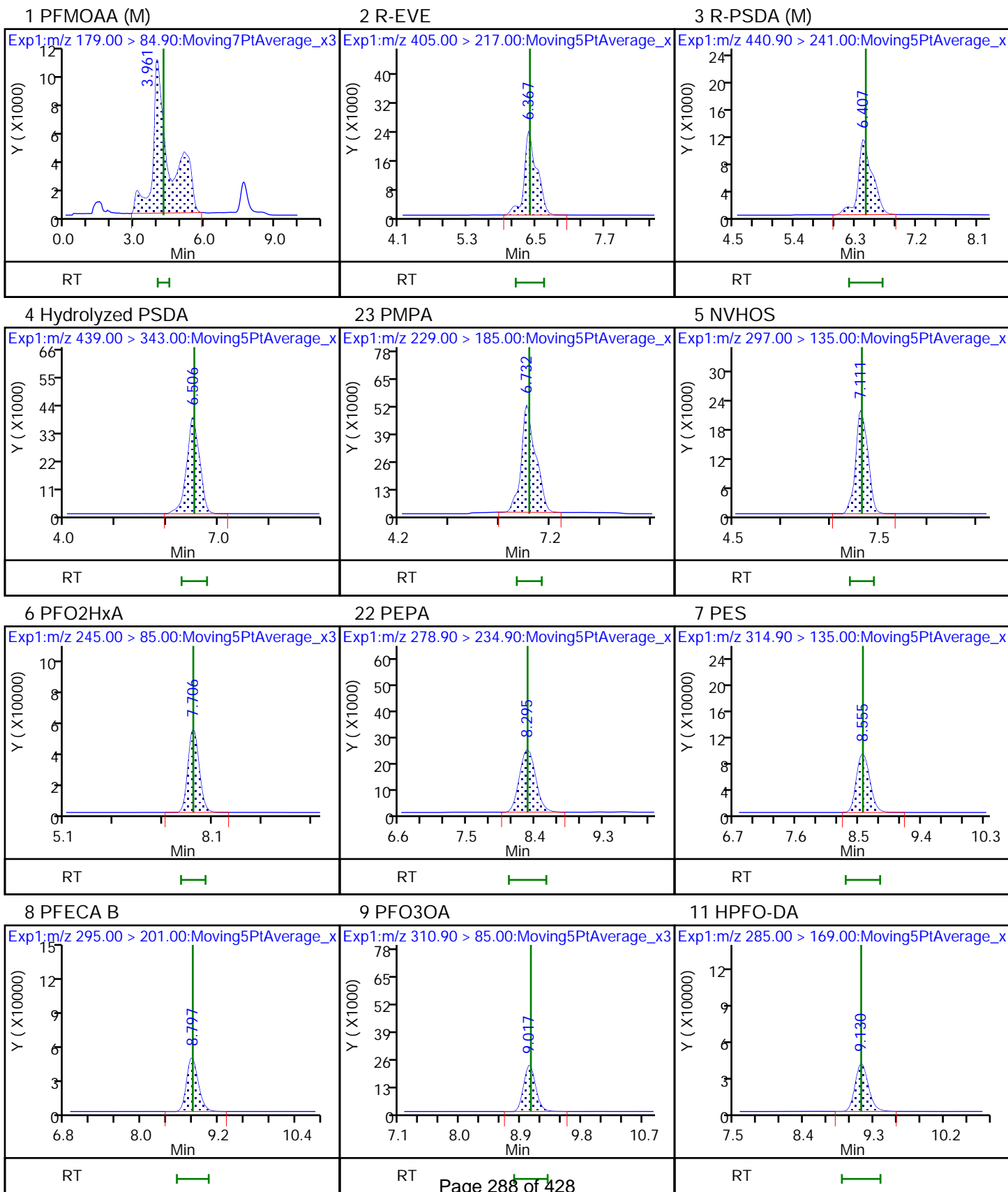
Worklist Smp#: 9

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

Method: PFAS_Chem_TB3+

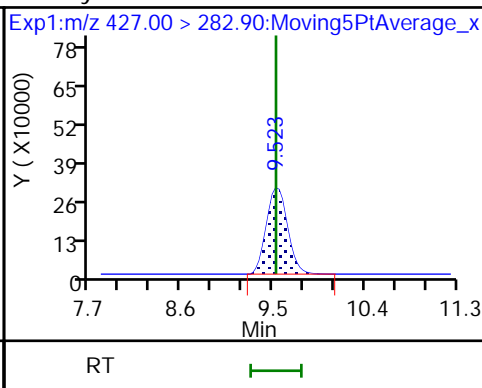
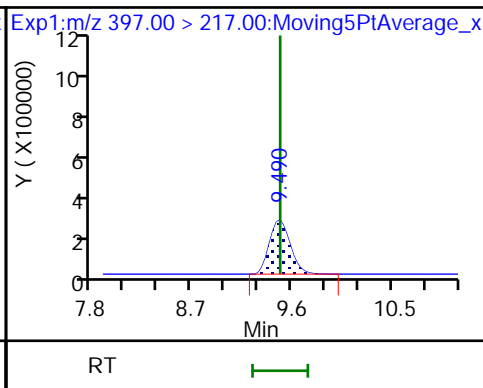
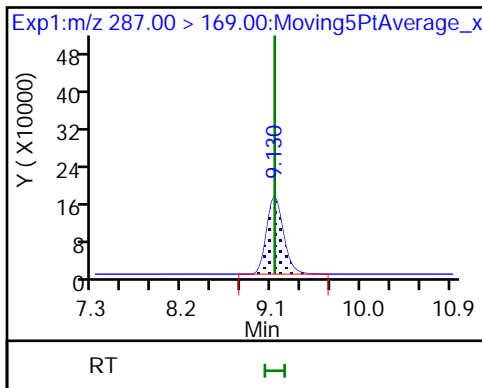
Limit Group: LC PFAS_TB3P - ICAL



D 10 13C3 HFPO-DA

12 R-PSDCA

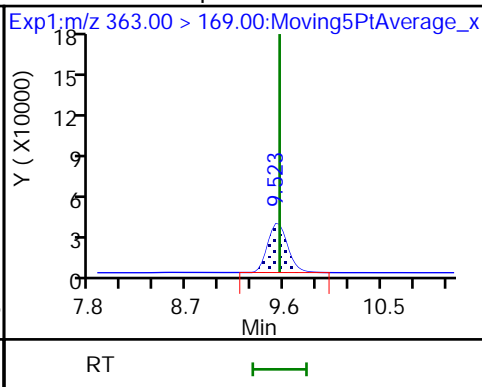
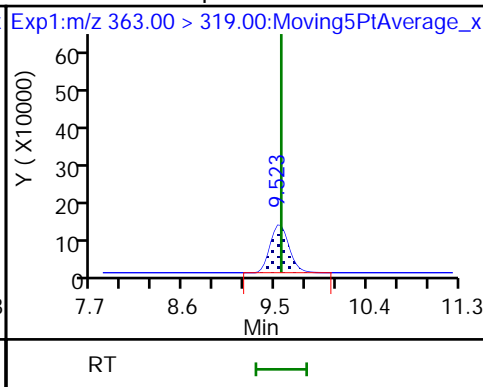
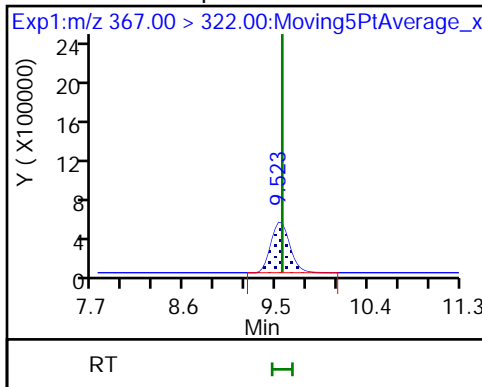
13 Hydro-EVE Acid



D 14 13C4 PFHpA

16 Perfluoroheptanoic acid

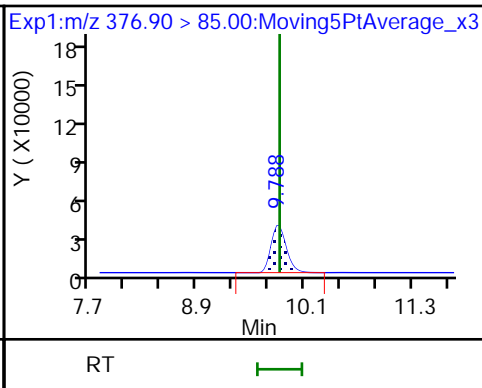
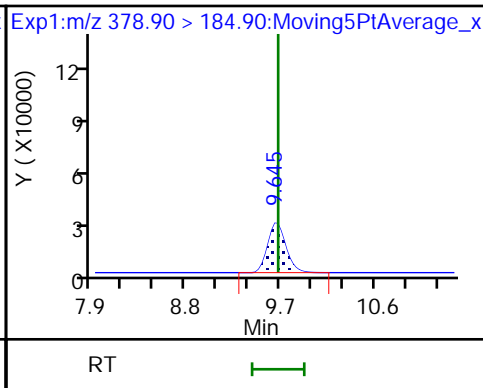
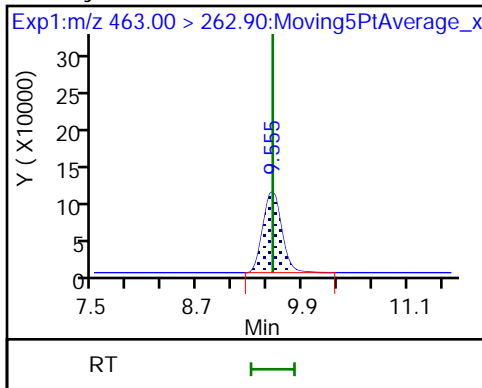
16 Perfluoroheptanoic acid



15 Hydro-PS Acid

17 PFECA G

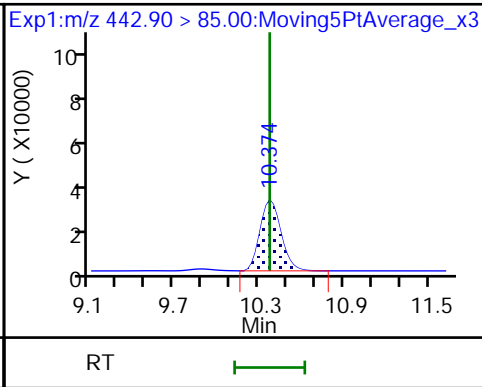
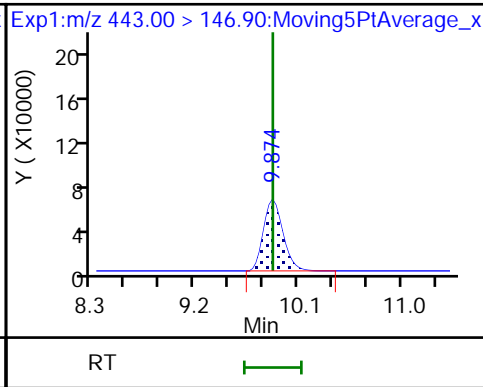
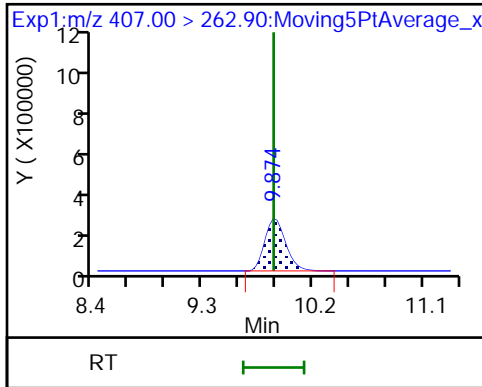
18 PFO4DA



20 EVE Acid

19 PS Acid

21 TAF



Eurofins TestAmerica, Sacramento

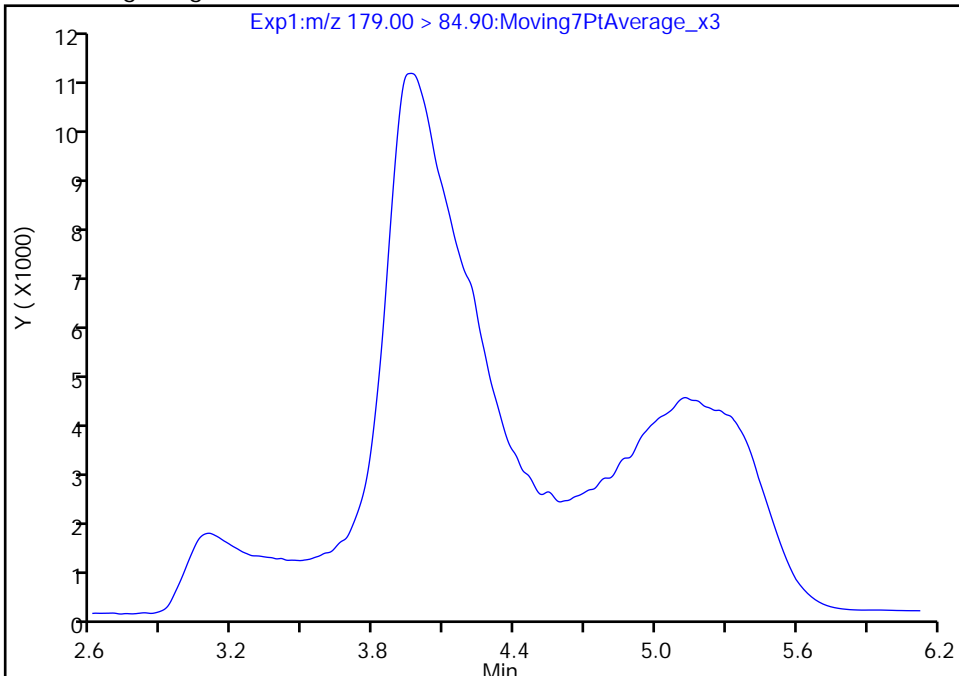
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Injection Date: 11-Mar-2021 14:00:57 Instrument ID: A12
Lims ID: IC STD 6
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 12 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

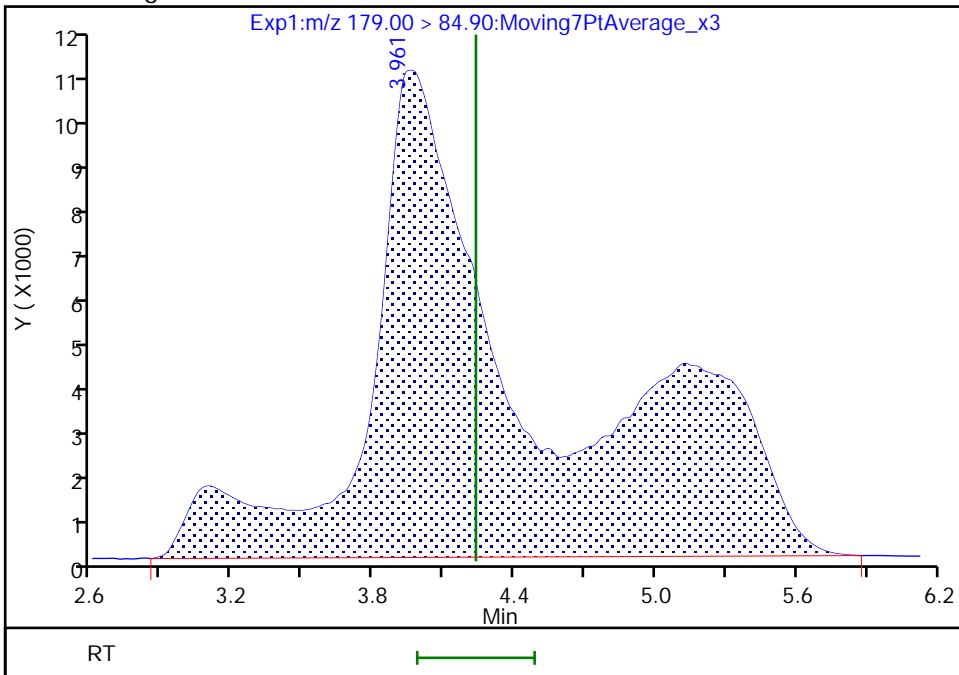
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 3.96
Area: 544295
Amount: 0.052634
Amount Units: ng/ml



Reviewer: yuj, 11-Mar-2021 16:23:52
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

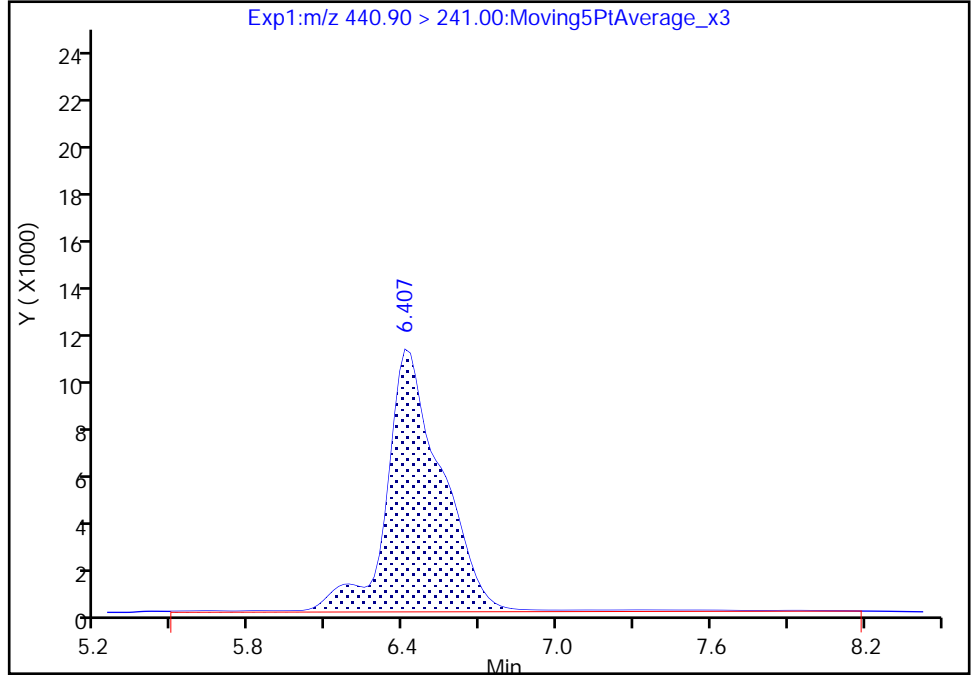
Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_012.d
Injection Date: 11-Mar-2021 14:00:57 Instrument ID: A12
Lims ID: IC STD 6
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 12 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

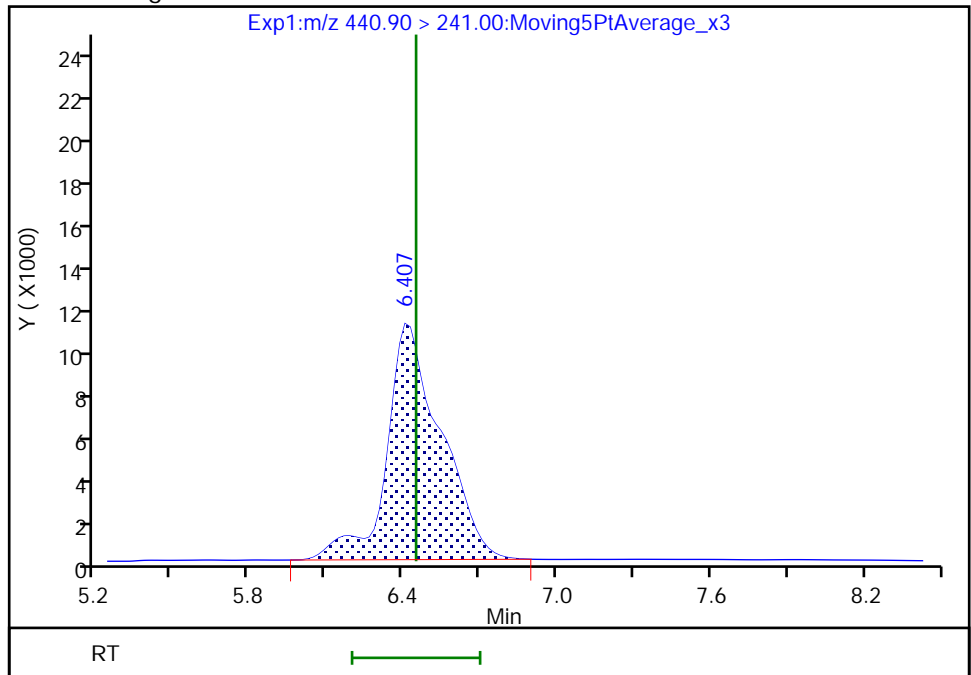
RT: 6.41
Area: 171736
Amount: 0.055835
Amount Units: ng/ml

Processing Integration Results



RT: 6.41
Area: 164536
Amount: 0.050082
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 11-Mar-2021 16:24:04
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_014.d
 Lims ID: IC STD 7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 11-Mar-2021 14:36:04 ALS Bottle#: 14 Worklist Smp#: 11
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 7 (444)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 12-Mar-2021 11:42:58 Calib Date: 11-Mar-2021 16:03:54
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_019.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1669

First Level Reviewer: yuj Date: 11-Mar-2021 16:57:07

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.922	4.235	-0.313		1097611	0.1061		106	65.6	M
2 R-EVE										M
405.00 > 217.00	6.387	6.390	-0.003		717544	0.1082		108	7525	M
3 R-PSDA										
440.90 > 241.00	6.446	6.450	-0.004		343646	0.1046		105	4193	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.526	6.529	-0.003		1362003	0.1064		106	19477	
23 PMPA										
229.00 > 185.00	6.755	6.782	-0.027		1989388	0.1024		102	2811	
5 NVHOS										
297.00 > 135.00	7.134	7.138	-0.004		742911	0.1017		102	10406	
6 PFO2HxA										
245.00 > 85.00	7.737	7.709	0.028		1628154	0.1055		106	17183	
22 PEPA										
278.90 > 234.90	8.330	8.299	0.031		736614	0.1105		111	5595	
7 PES										
314.90 > 135.00	8.588	8.556	0.032		2503517	0.1034		103	47345	
8 PFECA B										
295.00 > 201.00	8.797	8.800	-0.003		1174361	0.1037		104	23098	
9 PFO3OA										
310.90 > 85.00	9.045	9.048	-0.003		529631	0.1090		109	14631	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.158	9.133	0.025		1880223	0.2416		96.6	32221	
11 HPFO-DA										
285.00 > 169.00	9.158	9.133	0.025	1.000	918574	0.1107		111	13166	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.522	9.493	0.029		5881852	0.1087		109	75944	
13 Hydro-EVE Acid										
427.00 > 282.90	9.555	9.525	0.030		8058472	0.1059		106	56295	
D 14 13C4 PFHpA										
367.00 > 322.00	9.555	9.558	-0.003		5595951	0.2287		91.5	74405	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.555	9.558	-0.003	1.000	2872511	0.1087	Target=0.00	109	28666	
363.00 > 169.00	9.555	9.558	-0.003	1.000	799410		3.59(0.00-0.00)	109	6381	
15 Hydro-PS Acid										
463.00 > 262.90	9.587	9.558	0.029		3346171	0.1067		107	56871	
17 PFECA G										
378.90 > 184.90	9.673	9.676	-0.003		607348	0.1027		103	17204	
18 PFO4DA										
376.90 > 85.00	9.817	9.820	-0.003		700600	0.1069		107	15078	
20 EVE Acid										
407.00 > 262.90	9.903	9.877	0.026		5327376	0.1044		104	65421	
19 PS Acid										
443.00 > 146.90	9.903	9.877	0.026		1472654	0.1096		110	31708	
21 TAF										
442.90 > 85.00	10.399	10.374	0.025		671219	0.1166		117	2892	

QC Flag Legend

Processing Flags

Review Flags

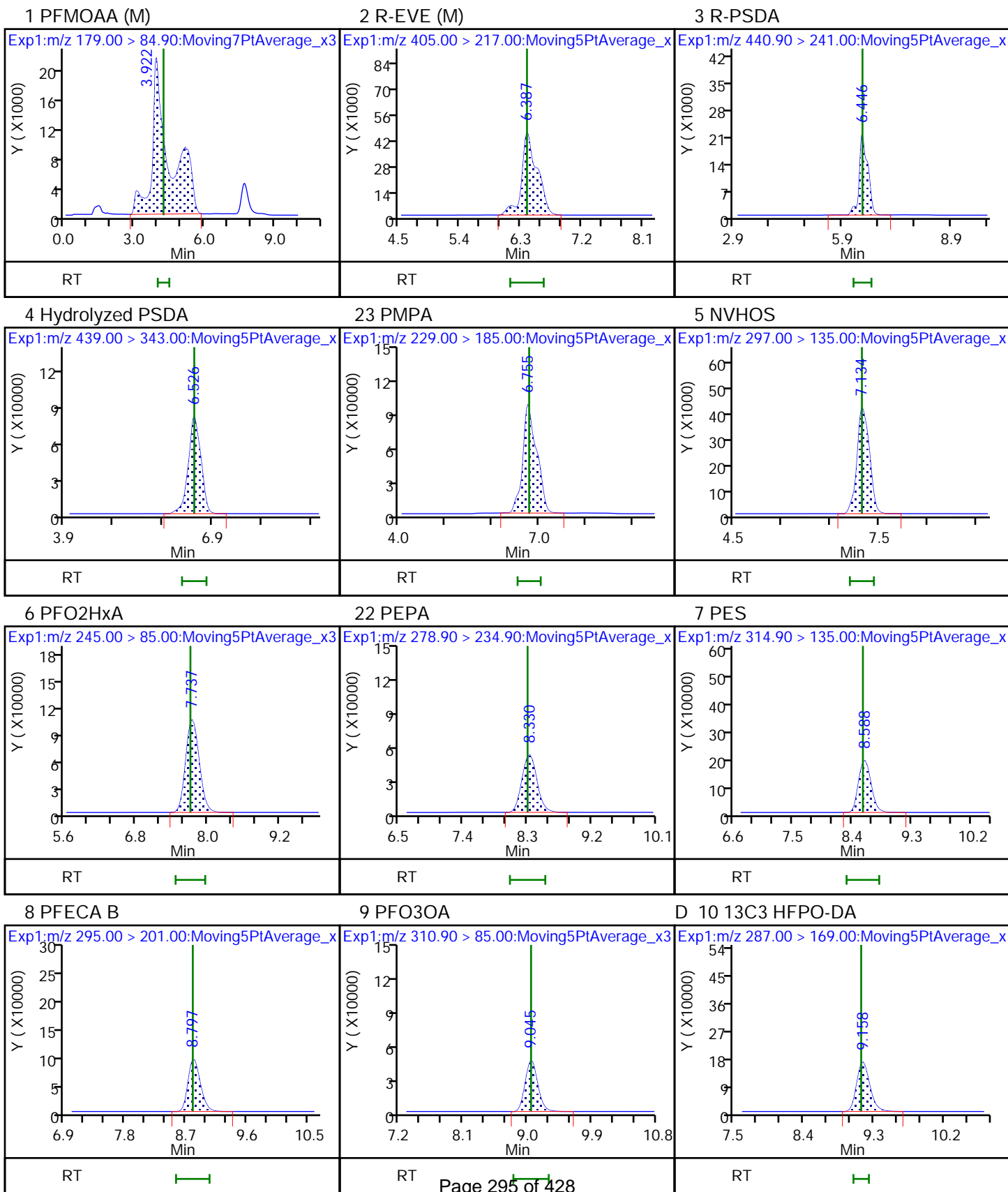
M - Manually Integrated

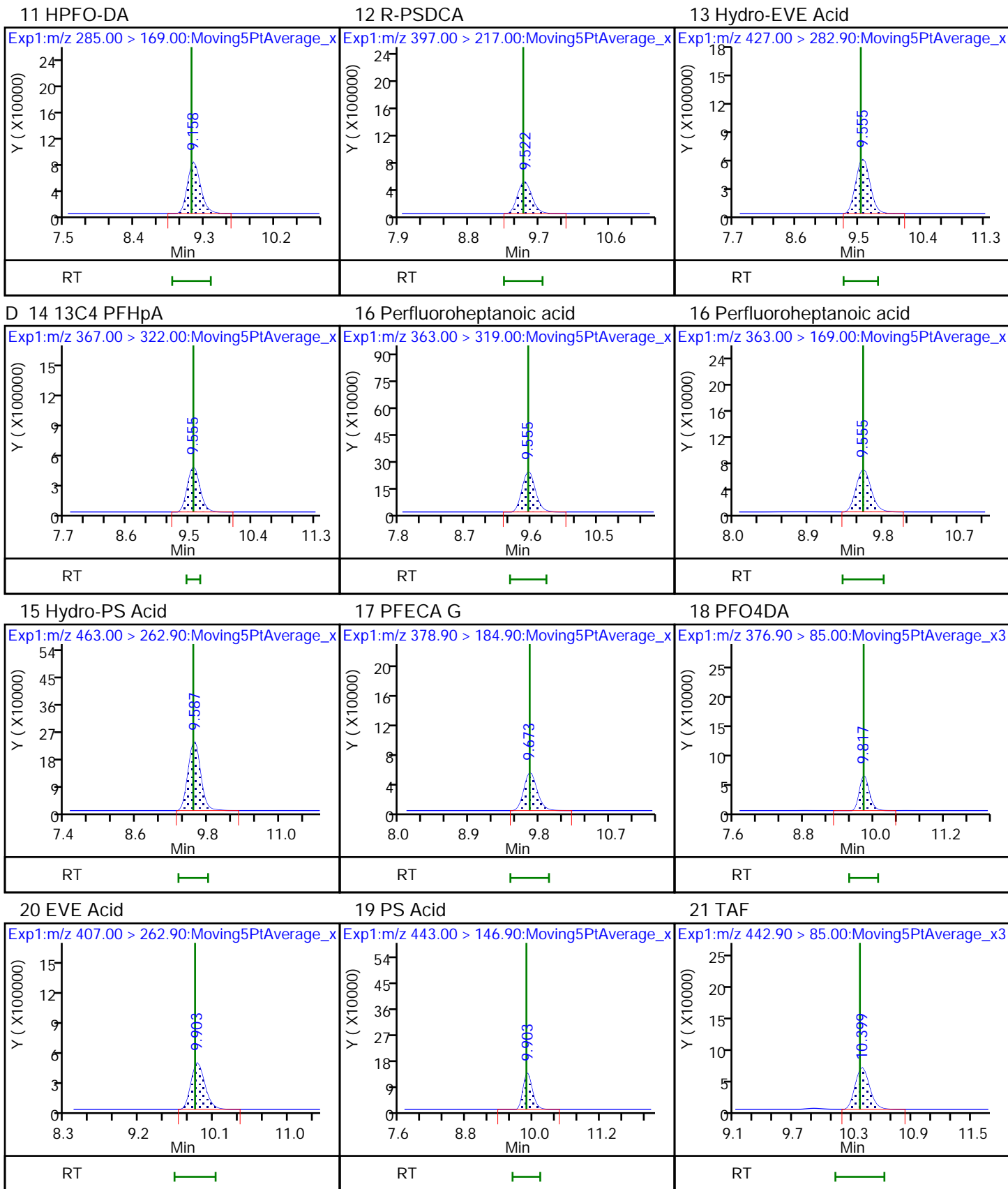
Reagents:

LCTB3_LLSTD7_00443

Amount Added: 1.00

Units: mL





Eurofins TestAmerica, Sacramento

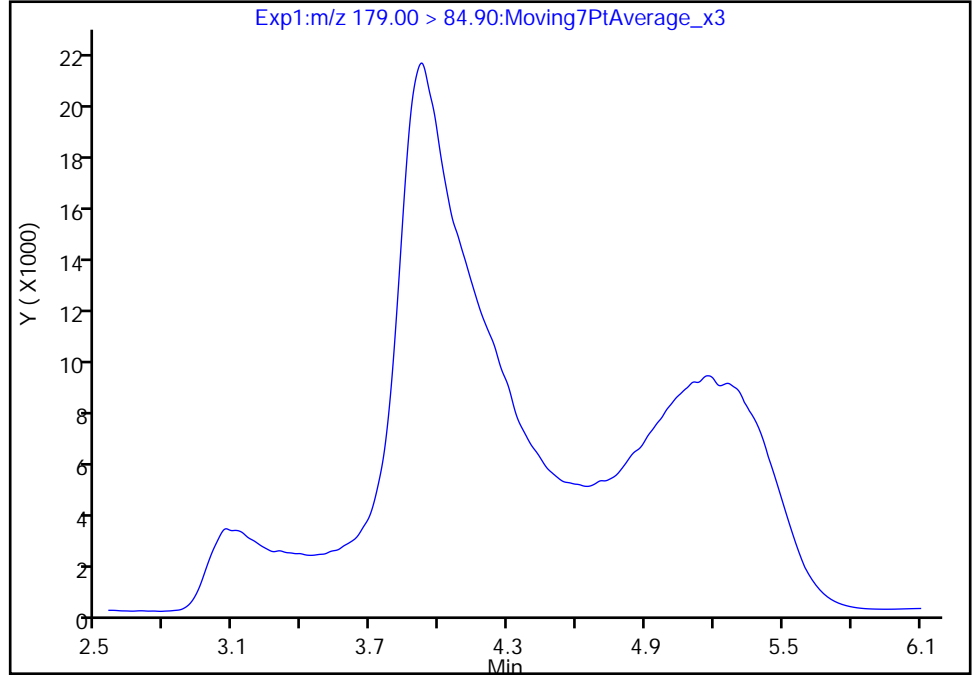
Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_014.d
Injection Date: 11-Mar-2021 14:36:04 Instrument ID: A12
Lims ID: IC STD 7
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 14 Worklist Smp#: 11
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

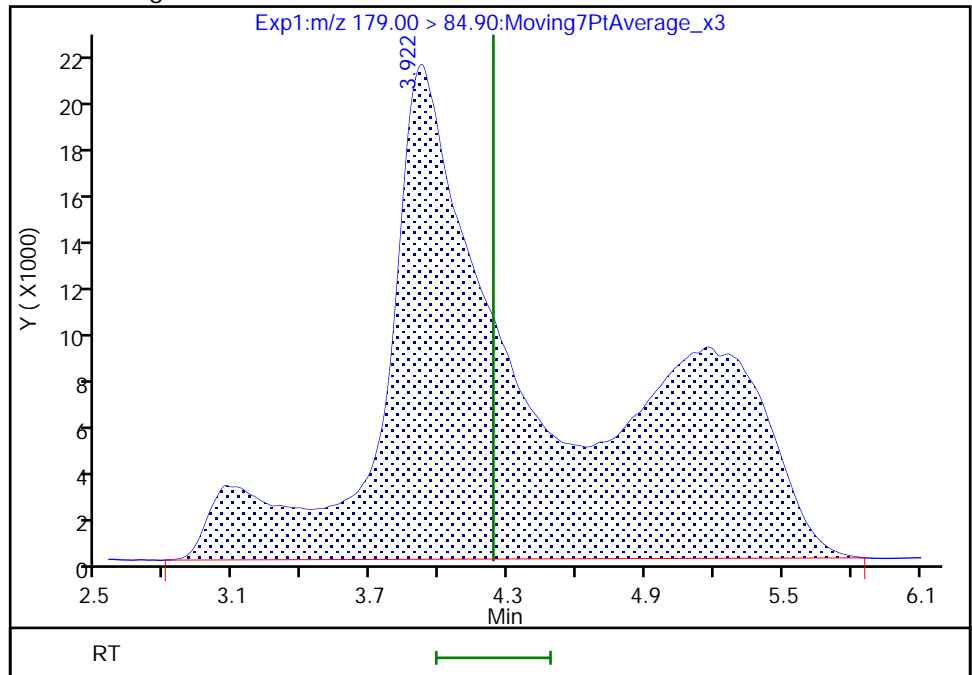
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 3.92
Area: 1097611
Amount: 0.106140
Amount Units: ng/ml



Reviewer: yuj, 11-Mar-2021 16:56:36
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

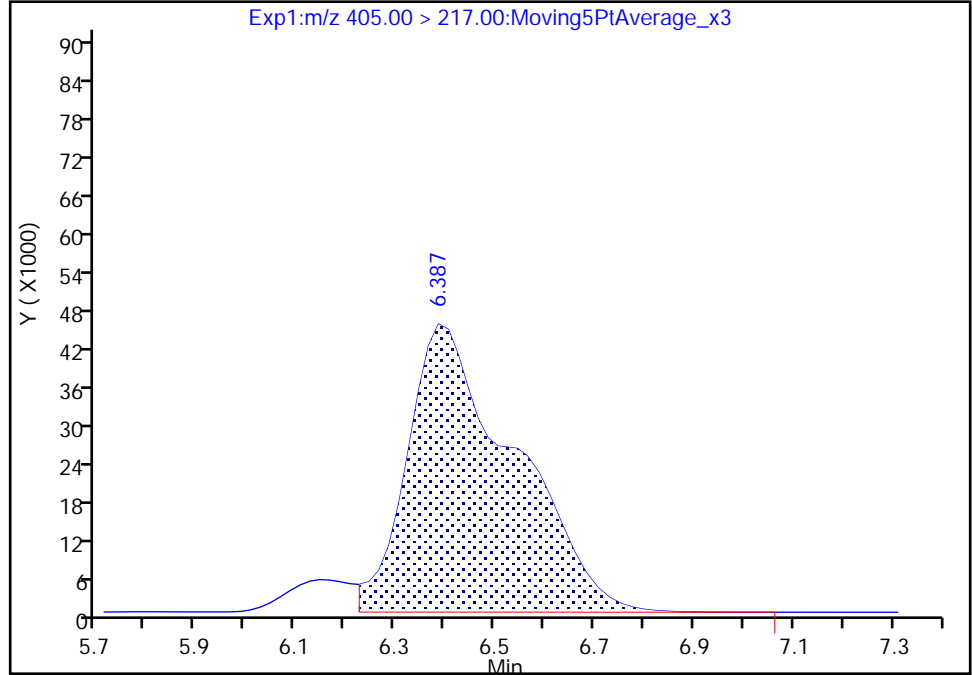
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Injection Date: 11-Mar-2021 14:36:04 Instrument ID: A12
Lims ID: IC STD 7
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 14 Worklist Smp#: 11
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

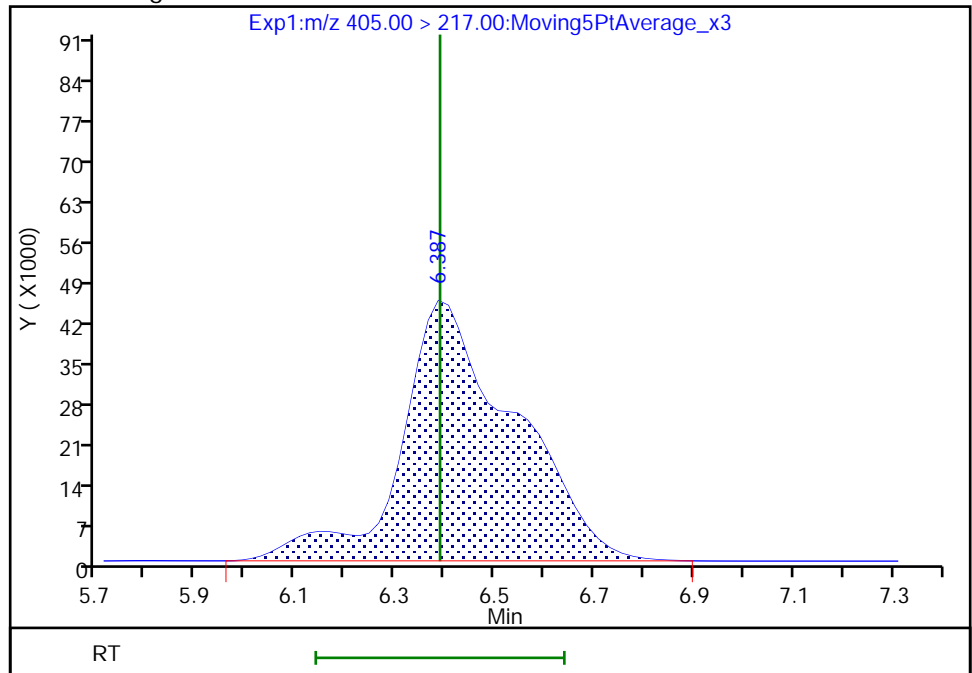
RT: 6.39
Area: 672655
Amount: 0.104544
Amount Units: ng/ml

Processing Integration Results



RT: 6.39
Area: 717544
Amount: 0.108234
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 11-Mar-2021 16:56:45
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_016.d
 Lims ID: IC STD 8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 11-Mar-2021 15:11:13 ALS Bottle#: 16 Worklist Smp#: 13
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 8 (47)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 12-Mar-2021 11:42:59 Calib Date: 11-Mar-2021 16:03:54
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_019.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1669

First Level Reviewer: yuj Date: 11-Mar-2021 17:34:25

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.305	4.235	0.070		2884762	0.2790		112	433	M
2 R-EVE										
405.00 > 217.00	6.427	6.390	0.037		1886476	0.2846		114	26844	
3 R-PSDA										
440.90 > 241.00	6.466	6.450	0.016		915063	0.2785		111	11342	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.546	6.529	0.017		3544376	0.2769		111	56581	
23 PMPA										
229.00 > 185.00	6.803	6.782	0.021		5246716	0.2727		109	8629	
5 NVHOS										
297.00 > 135.00	7.185	7.138	0.047		2063902	0.2825		113	38732	
6 PFO2HxA										
245.00 > 85.00	7.740	7.709	0.031		4307590	0.2792		112	44248	
22 PEPA										
278.90 > 234.90	8.335	8.299	0.036		1919218	0.2880		115	12581	
7 PES										
314.90 > 135.00	8.589	8.556	0.033		7538475	0.3115		125	117617	
8 PFECA B										
295.00 > 201.00	8.830	8.800	0.030		3094418	0.2733		109	61605	
9 PFO3OA										
310.90 > 85.00	9.048	9.048	0.0		1510951	0.3109		124	31655	
11 HPFO-DA										
285.00 > 169.00	9.161	9.133	0.028	1.000	2375785	0.2863		115	34272	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.161	9.133	0.028		1879948	0.2416		96.6	32566	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.525	9.493	0.032		14766368	0.2729		109	114508	
13 Hydro-EVE Acid										
427.00 > 282.90	9.558	9.525	0.033		21354386	0.2807		112	93632	
D 14 13C4 PFHpA										
367.00 > 322.00	9.558	9.558	0.0		5515334	0.2254		90.1	73497	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.558	9.558	0.0	1.000	7138839	0.2746	Target=0.00	110	51976	
363.00 > 169.00	9.558	9.558	0.0	1.000	2027207		3.52(0.00-0.00)	110	16206	
15 Hydro-PS Acid										
463.00 > 262.90	9.590	9.558	0.032		8662362	0.2762		110	98264	
17 PFECA G										
378.90 > 184.90	9.676	9.676	0.0		1469571	0.2484		99.4	41653	
18 PFO4DA										
376.90 > 85.00	9.820	9.820	0.0		1446690	0.2208		88.3	24866	
20 EVE Acid										
407.00 > 262.90	9.906	9.877	0.029		12391948	0.2428		97.1	81903	
19 PS Acid										
443.00 > 146.90	9.906	9.877	0.029		3629386	0.2702		108	62451	
21 TAF										
442.90 > 85.00	10.399	10.374	0.025		1665364	0.2894		116	3982	

QC Flag Legend

Processing Flags

Review Flags

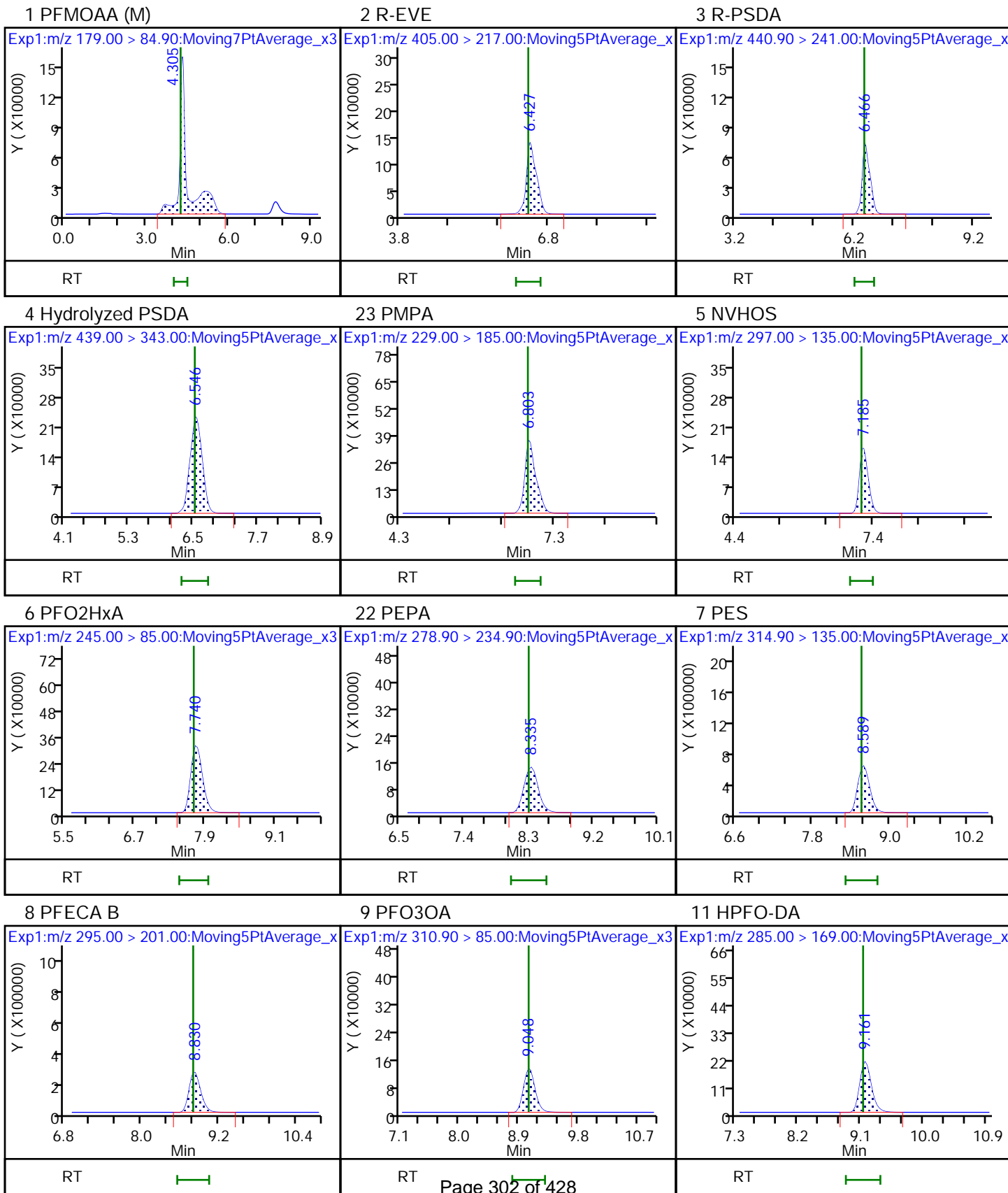
M - Manually Integrated

Reagents:

LCTB3_LLSTD8_00046

Amount Added: 1.00

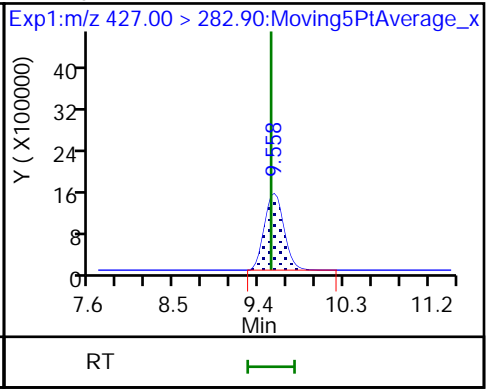
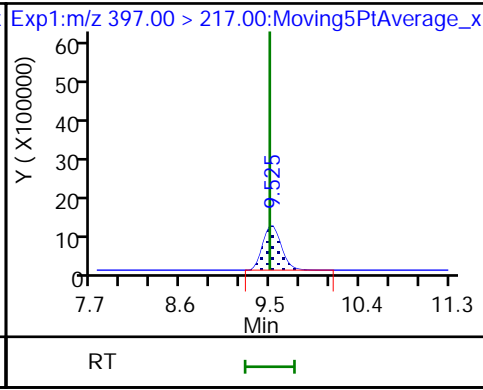
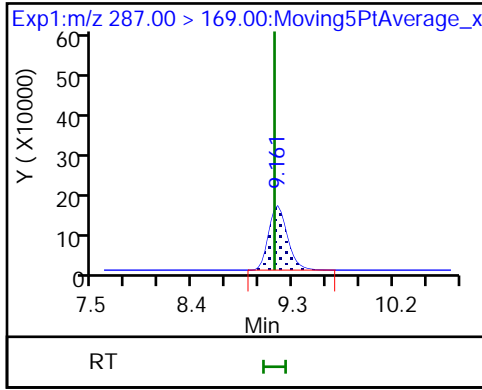
Units: mL



D 10 13C3 HFPO-DA

12 R-PSDCA

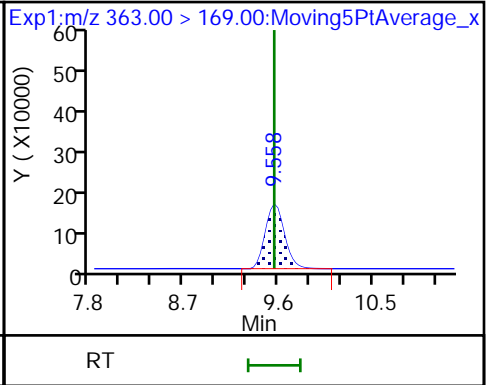
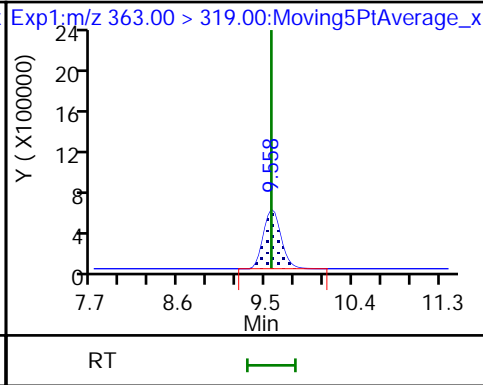
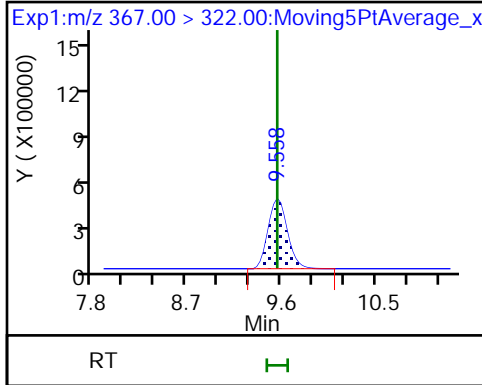
13 Hydro-EVE Acid



D 14 13C4 PFHpA

16 Perfluoroheptanoic acid

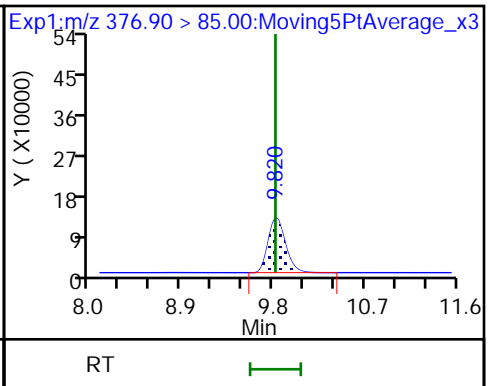
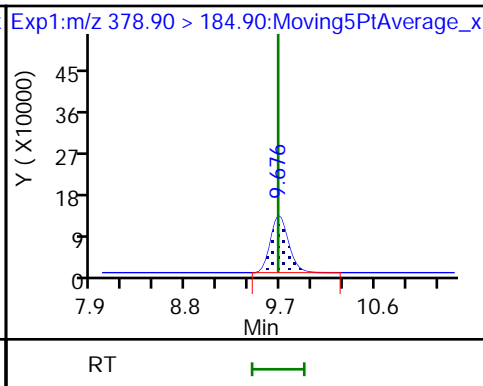
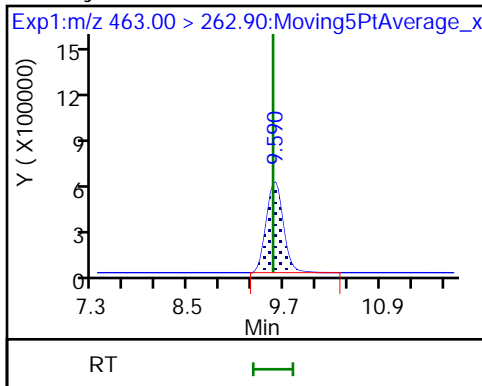
16 Perfluoroheptanoic acid



15 Hydro-PS Acid

17 PFECA G

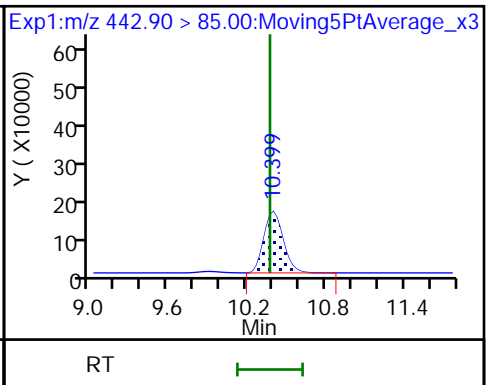
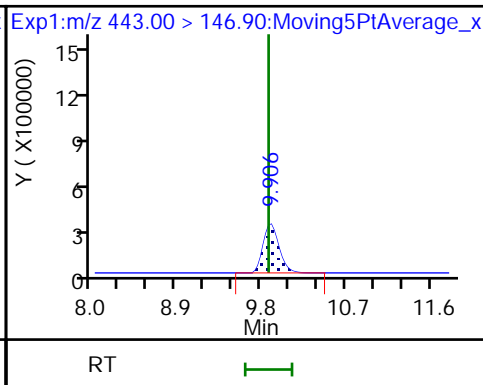
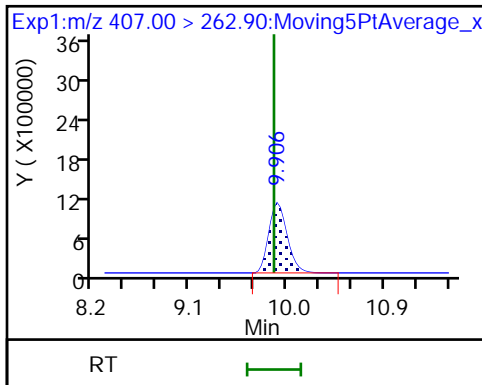
18 PFO4DA



20 EVE Acid

19 PS Acid

21 TAF



Eurofins TestAmerica, Sacramento

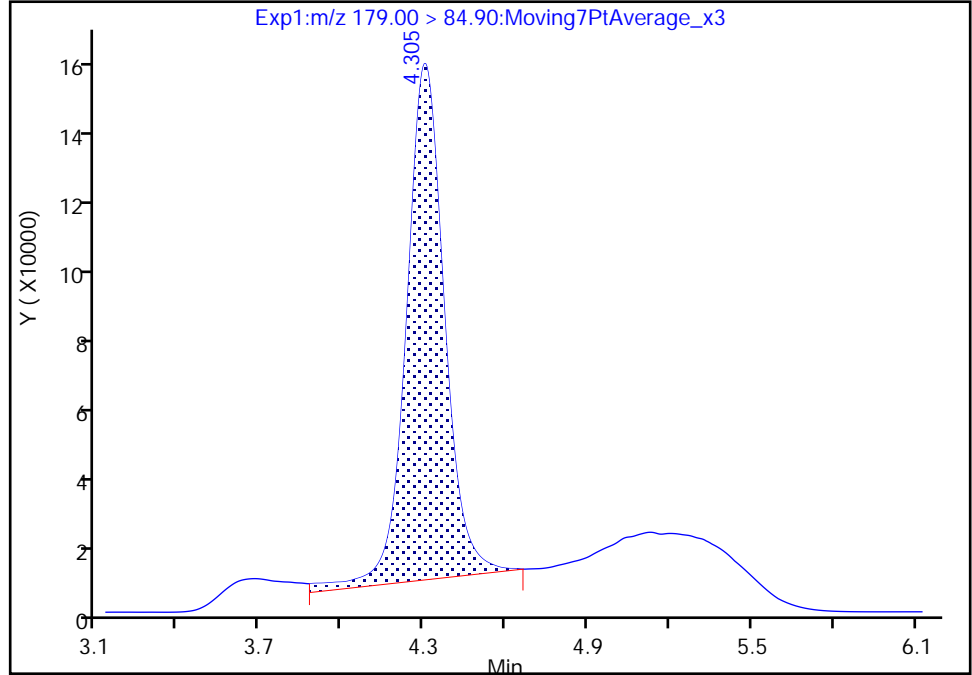
Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_016.d
Injection Date: 11-Mar-2021 15:11:13 Instrument ID: A12
Lims ID: IC STD 8
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 16 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

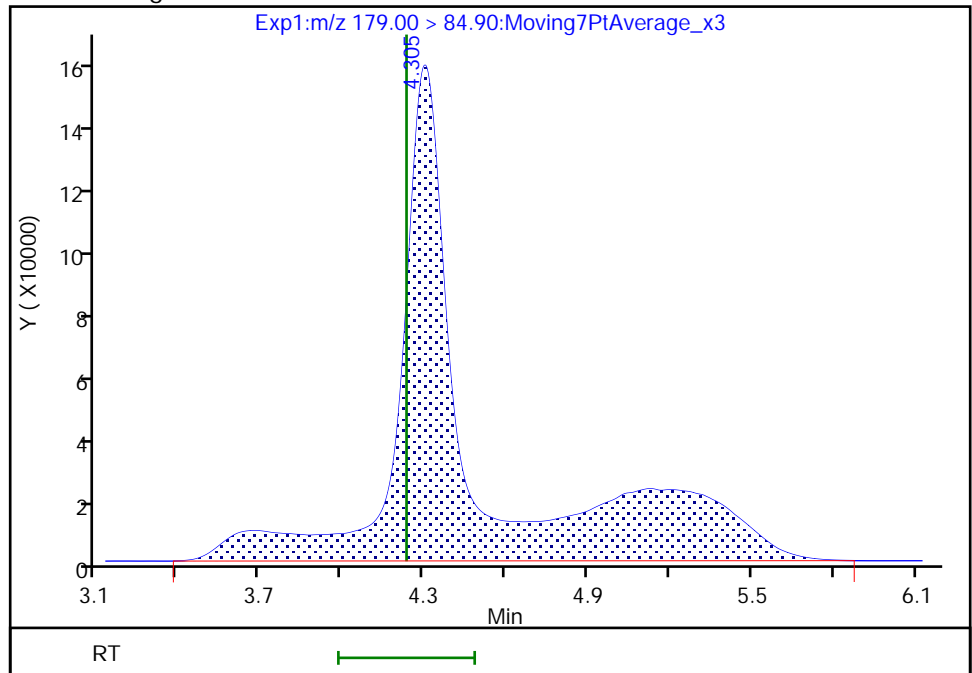
RT: 4.31
Area: 1386949
Amount: 0.149658
Amount Units: ng/ml

Processing Integration Results



RT: 4.31
Area: 2884762
Amount: 0.278959
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 11-Mar-2021 17:34:16
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_018.d
 Lims ID: IC STD 9
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 11-Mar-2021 15:46:20 ALS Bottle#: 18 Worklist Smp#: 15
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 9 (45)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 12-Mar-2021 11:43:01 Calib Date: 11-Mar-2021 16:03:54
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_019.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1669

First Level Reviewer: kwongg Date: 11-Mar-2021 16:36:30

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.288	4.235	0.053		5729803	0.5541		111	638	M
2 R-EVE										
405.00 > 217.00	6.407	6.390	0.017		3779800	0.5701		114	45555	
3 R-PSDA										
440.90 > 241.00	6.446	6.450	-0.004		1855418	0.5648		113	47552	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.526	6.529	-0.003		6951189	0.5430		109	88350	
23 PMPA										
229.00 > 185.00	6.779	6.782	-0.003		10078548	0.5253		105	17684	
5 NVHOS										
297.00 > 135.00	7.158	7.138	0.020		4089528	0.5597		112	77351	
6 PFO2HxA										
245.00 > 85.00	7.737	7.709	0.028		8156973	0.5288		106	73771	
22 PEPA										
278.90 > 234.90	8.295	8.299	-0.004		3696038	0.5546		111	25802	
7 PES										
314.90 > 135.00	8.555	8.556	-0.001		14505468	0.5994		120	223235	
8 PFECA B										
295.00 > 201.00	8.797	8.800	-0.003		5675655	0.5012		100	92910	
9 PFO3OA										
310.90 > 85.00	9.045	9.048	-0.003		2710693	0.5577		112	56196	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.130	9.133	-0.003		1956495	0.2514		101	33766	
11 HPFO-DA										
285.00 > 169.00	9.130	9.133	-0.003	1.000	4336556	0.5022		100	46270	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.490	9.493	-0.003		25578508	0.4727		94.5	133053	
13 Hydro-EVE Acid										
427.00 > 282.90	9.523	9.525	-0.002		36490724	0.4796		95.9	101936	
D 14 13C4 PFHpA										
367.00 > 322.00	9.555	9.558	-0.003		5276640	0.2156		86.2	69195	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.555	9.558	-0.003	1.000	11805867	0.4750	Target=0.00	95.0	71828	
363.00 > 169.00	9.555	9.558	-0.003	1.000	3495725		3.38(0.00-0.00)	95.0	30596	
15 Hydro-PS Acid										
463.00 > 262.90	9.555	9.558	-0.003		16403475	0.5231		105	138291	
17 PFECA G										
378.90 > 184.90	9.674	9.676	-0.002		2466289	0.4169		83.4	51801	
18 PFO4DA										
376.90 > 85.00	9.817	9.820	-0.003		2805185	0.4282		85.6	30051	
20 EVE Acid										
407.00 > 262.90	9.874	9.877	-0.003		20926403	0.4100		82.0	76930	
19 PS Acid										
443.00 > 146.90	9.874	9.877	-0.003		6680628	0.4973		99.5	71965	
21 TAF										
442.90 > 85.00	10.374	10.374	0.0		3126092	0.5432		109	5026	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD9_00044

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_018.d

Injection Date: 11-Mar-2021 15:46:20

Instrument ID: A12

Lims ID: IC STD 9

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 18

Worklist Smp#: 15

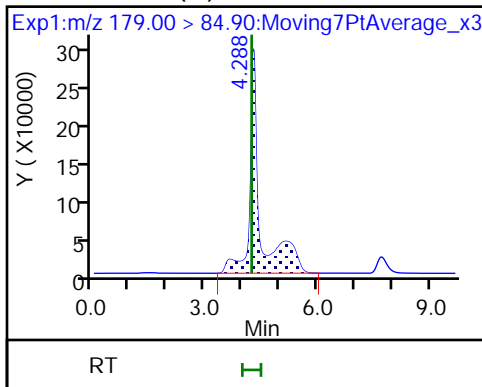
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

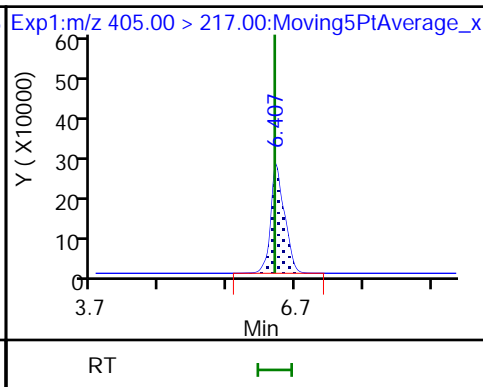
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

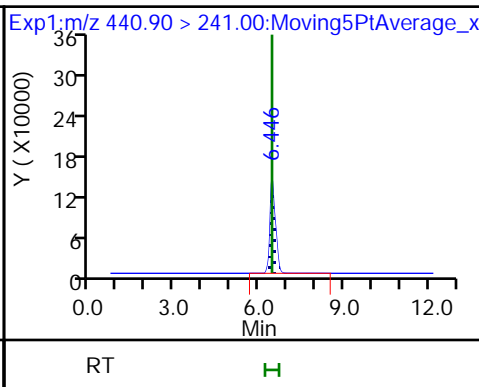
1 PFMOAA (M)



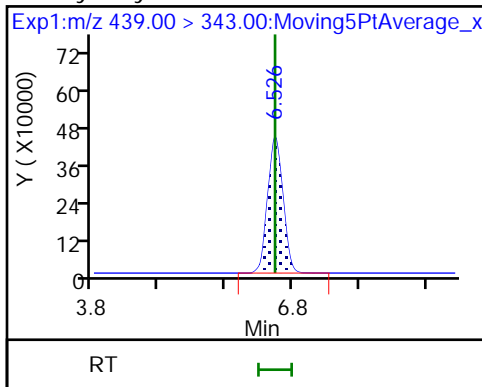
2 R-EVE



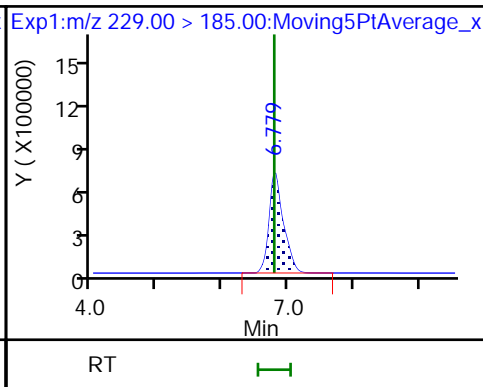
3 R-PSDA



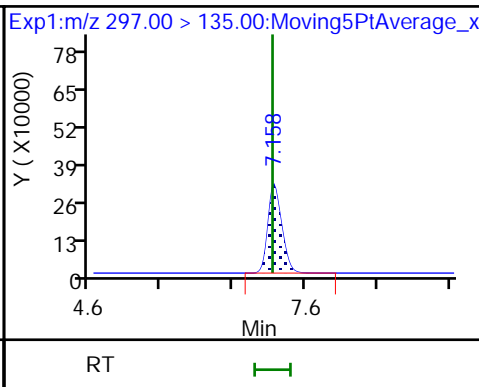
4 Hydrolyzed PSDA



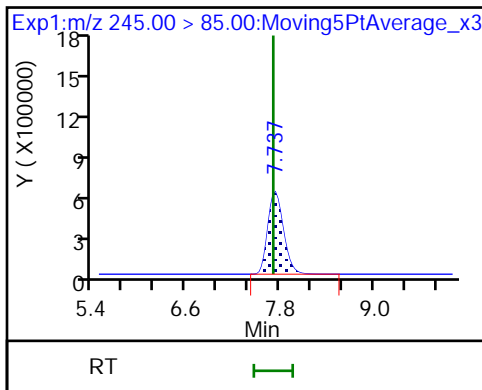
23 PMPA



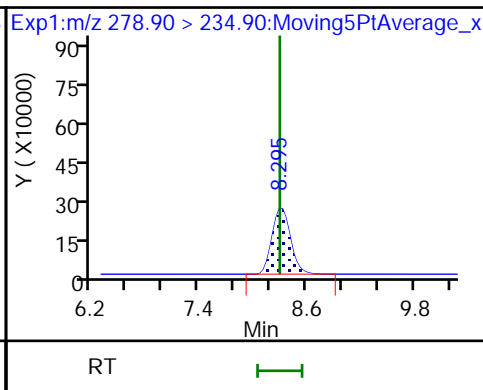
5 NVHOS



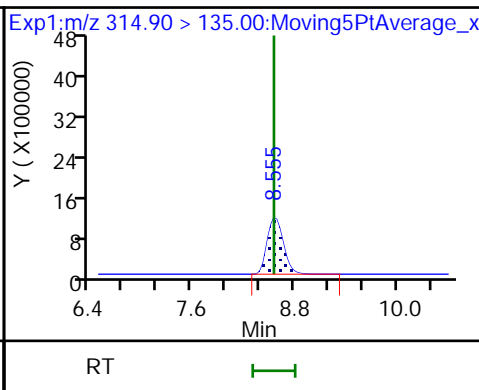
6 PFO2HxA



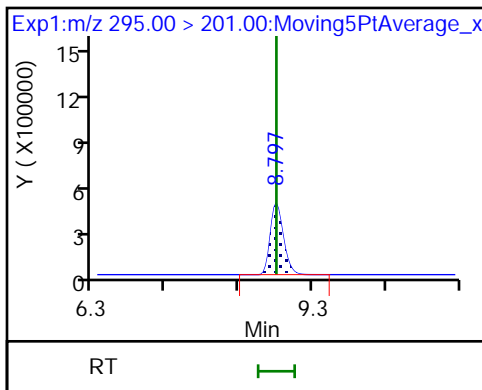
22 PEPA



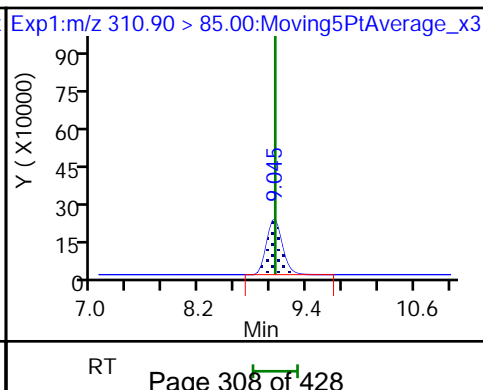
7 PES



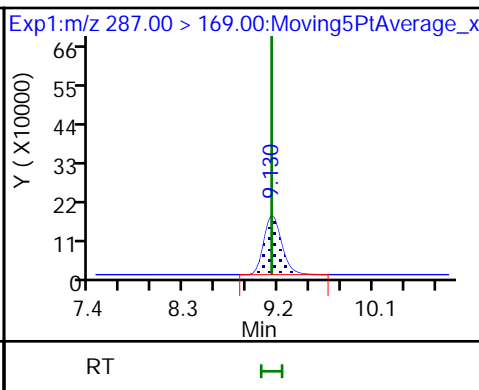
8 PFECA B

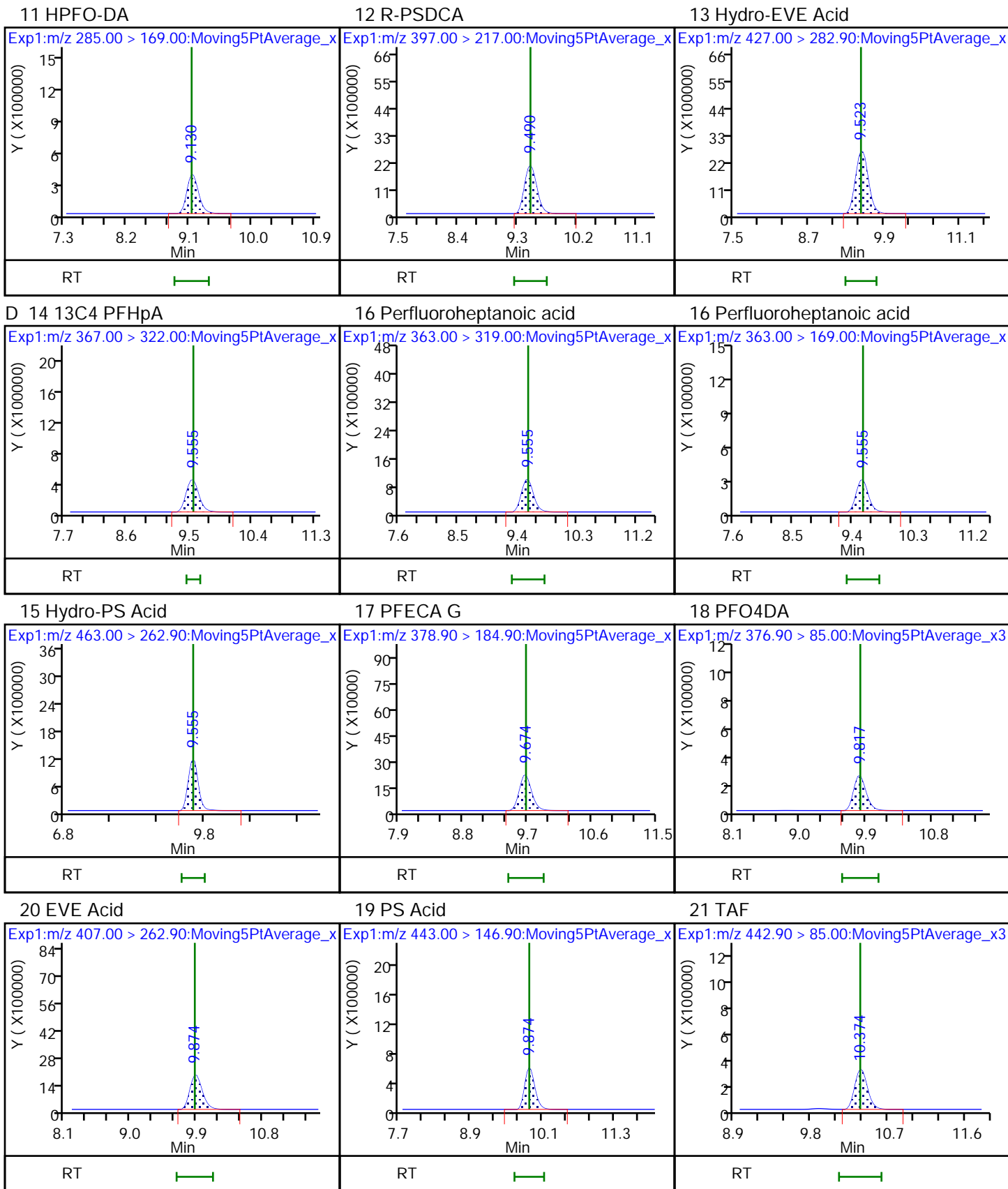


9 PFO3OA



D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

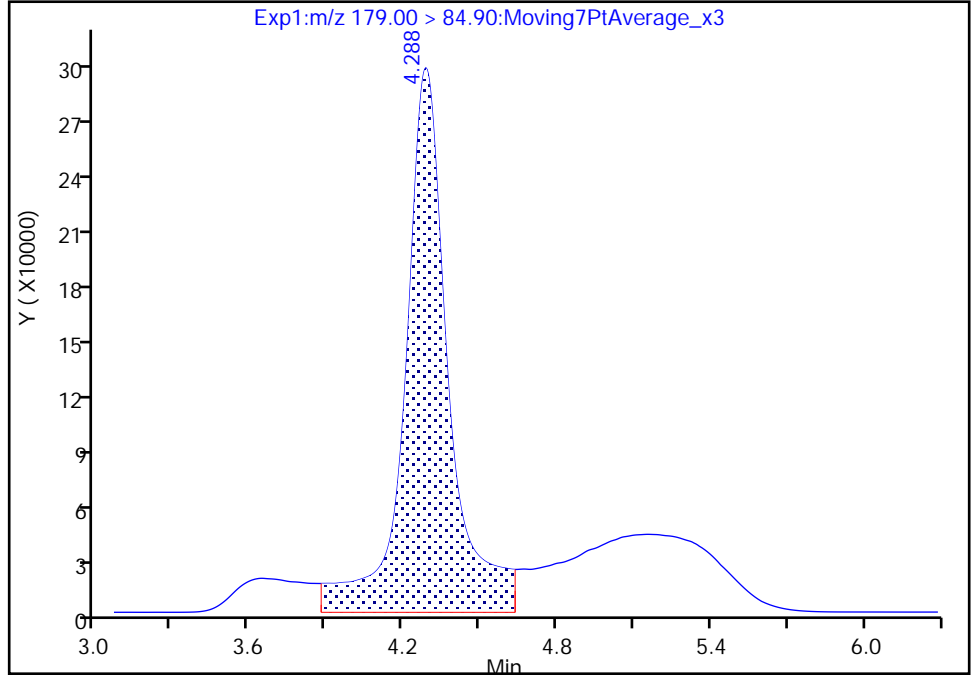
Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_018.d
Injection Date: 11-Mar-2021 15:46:20 Instrument ID: A12
Lims ID: IC STD 9
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 18 Worklist Smp#: 15
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

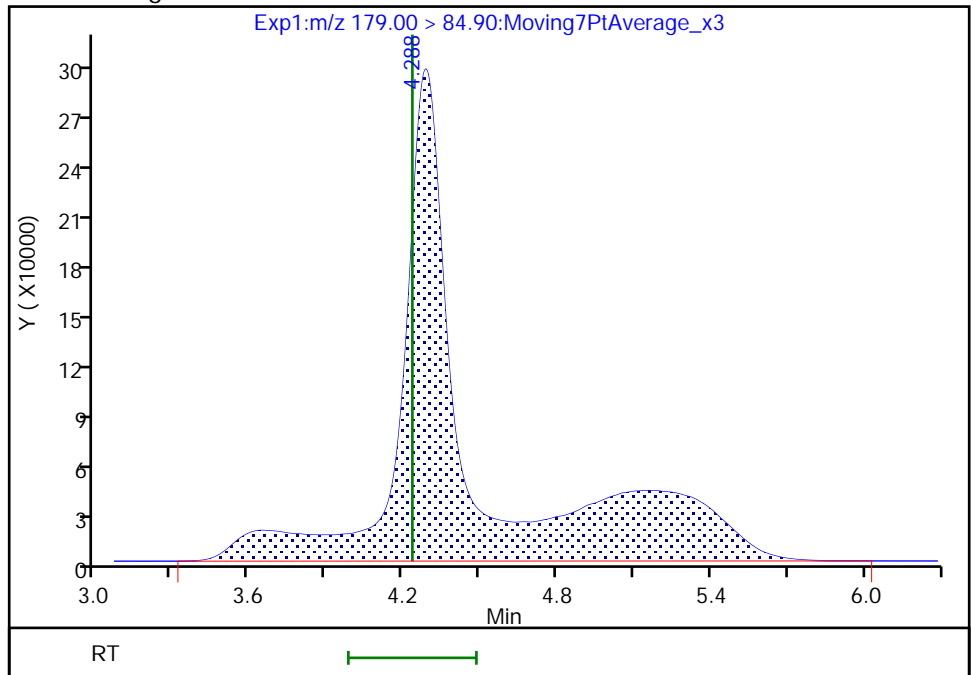
RT: 4.29
Area: 3532447
Amount: 0.364605
Amount Units: ng/ml

Processing Integration Results



RT: 4.29
Area: 5729803
Amount: 0.554077
Amount Units: ng/ml

Manual Integration Results



Reviewer: kwongg, 11-Mar-2021 16:36:20
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 311 of 428

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_019.d
 Lims ID: IC STD 10
 Client ID:
 Sample Type: IC Calib Level: 10
 Inject. Date: 11-Mar-2021 16:03:54 ALS Bottle#: 19 Worklist Smp#: 16
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 10 (44)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 12-Mar-2021 11:43:03 Calib Date: 11-Mar-2021 16:03:54
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_019.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1669

First Level Reviewer: kwongg Date: 11-Mar-2021 16:42:55

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.776	4.235	-0.459		11493204	1.11		111	226	M
2 R-EVE										
405.00 > 217.00	6.347	6.390	-0.043		7519979	1.13		113	29625	
3 R-PSDA										
440.90 > 241.00	6.407	6.450	-0.043		3735435	1.14		114	43601	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.506	6.529	-0.023		13670791	1.07		107	113056	
23 PMPA										
229.00 > 185.00	6.732	6.782	-0.050		20226211	1.06		106	38081	
5 NVHOS										
297.00 > 135.00	7.134	7.138	-0.004		8052787	1.10		110	106318	
6 PFO2HxA										
245.00 > 85.00	7.737	7.709	0.028		16248356	1.05		105	111849	
22 PEPA										
278.90 > 234.90	8.295	8.299	-0.004		7292414	1.09		109	44454	
7 PES										
314.90 > 135.00	8.588	8.556	0.032		30218151	1.25		125	452705	
8 PFECA B										
295.00 > 201.00	8.798	8.800	-0.002		10862667	0.9592		95.9	172996	
9 PFO3OA										
310.90 > 85.00	9.047	9.048	-0.001		5196365	1.07		107	86218	
11 HPFO-DA										
285.00 > 169.00	9.160	9.133	0.027	1.003	8290063	1.01		101	78300	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.131	9.133	-0.002		1859492	0.2390		95.6	31571	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.491	9.493	-0.002		40333918	0.7454		74.5	116266	
13 Hydro-EVE Acid										
427.00 > 282.90	9.556	9.525	0.031		63520565	0.8349		83.5	110728	
D 14 13C4 PFHpA										
367.00 > 322.00	9.556	9.558	-0.002		4346479	0.1776		71.0	57436	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.556	9.558	-0.002	1.000	19500901	0.9530	Target=0.00	95.3	73821	
363.00 > 169.00	9.556	9.558	-0.002	1.000	5744200		3.39(0.00-0.00)	95.3	41400	
15 Hydro-PS Acid										
463.00 > 262.90	9.556	9.558	-0.002		30747606	0.9805		98.1	129052	
17 PFECA G										
378.90 > 184.90	9.675	9.676	-0.001		3909864	0.6610		66.1	82630	
18 PFO4DA										
376.90 > 85.00	9.818	9.820	-0.002		4942284	0.7544		75.4	35492	
20 EVE Acid										
407.00 > 262.90	9.904	9.877	0.027		31241621	0.6121		61.2	68164	
19 PS Acid										
443.00 > 146.90	9.876	9.877	-0.001		11215856	0.8349		83.5	73644	
21 TAF										
442.90 > 85.00	10.401	10.374	0.027		5021736	0.8725		87.3	5007	

QC Flag Legend

Processing Flags

Review Flags

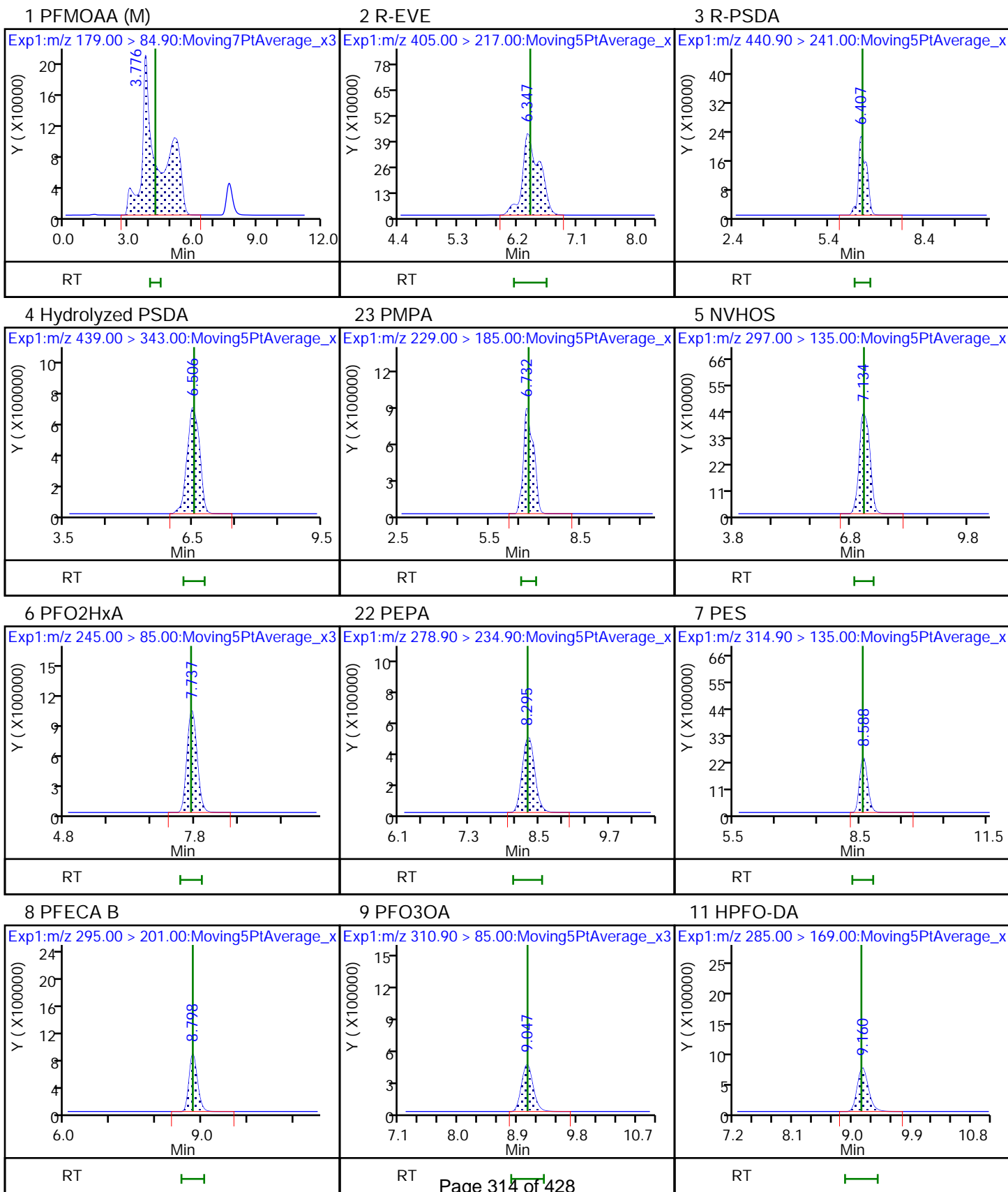
M - Manually Integrated

Reagents:

LCTB3_LLSTD10_00043

Amount Added: 1.00

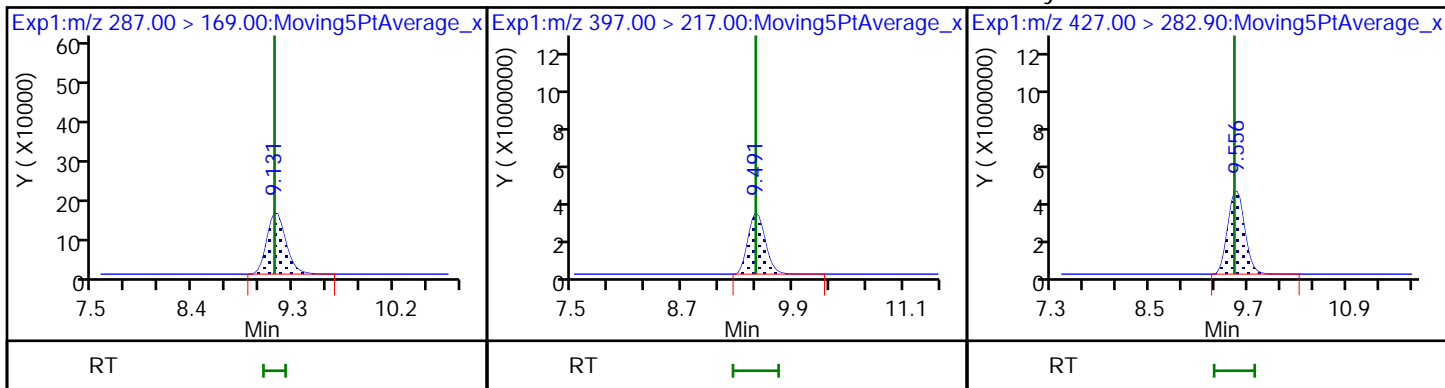
Units: mL



D 10 13C3 HFPO-DA

12 R-PSDCA

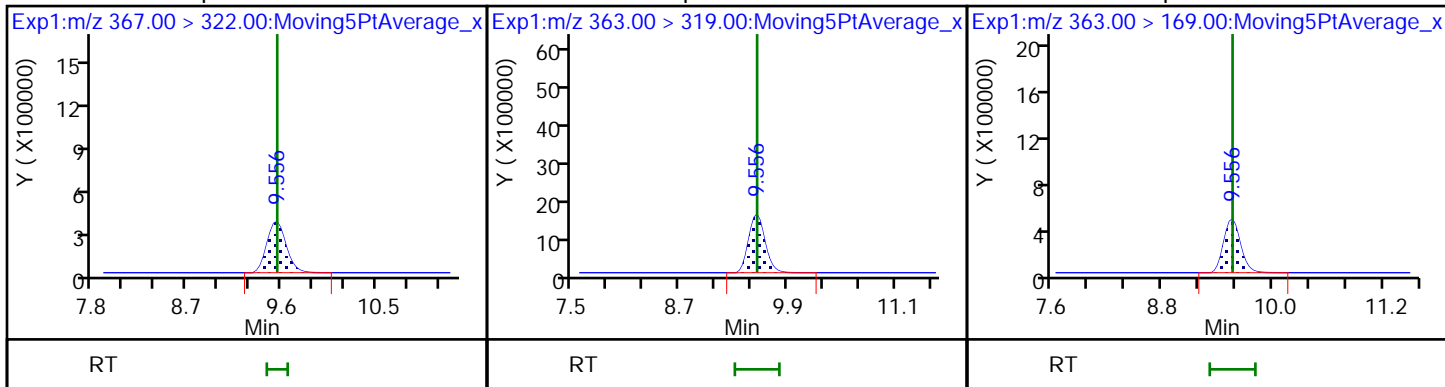
13 Hydro-EVE Acid



D 14 13C4 PFHpA

16 Perfluoroheptanoic acid

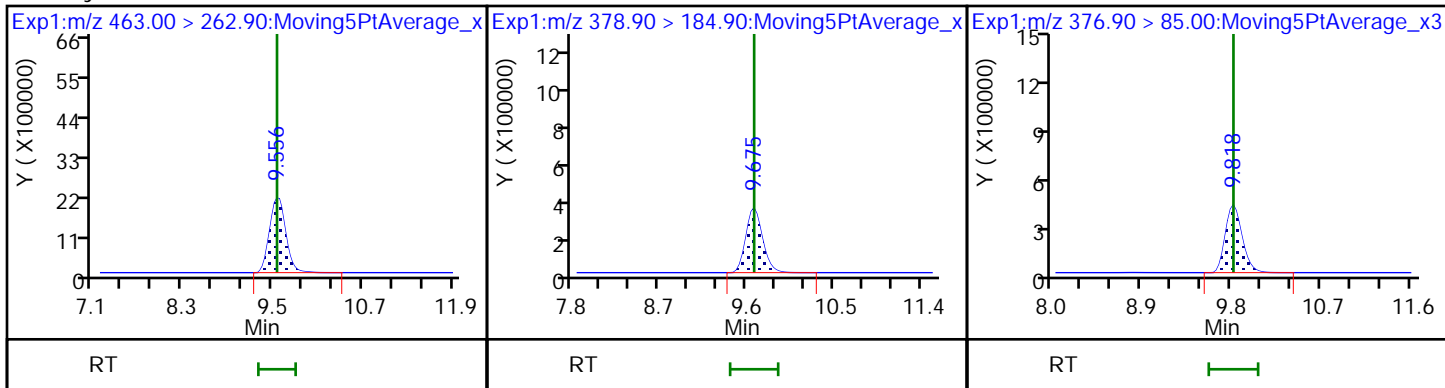
16 Perfluoroheptanoic acid



15 Hydro-PS Acid

17 PFECA G

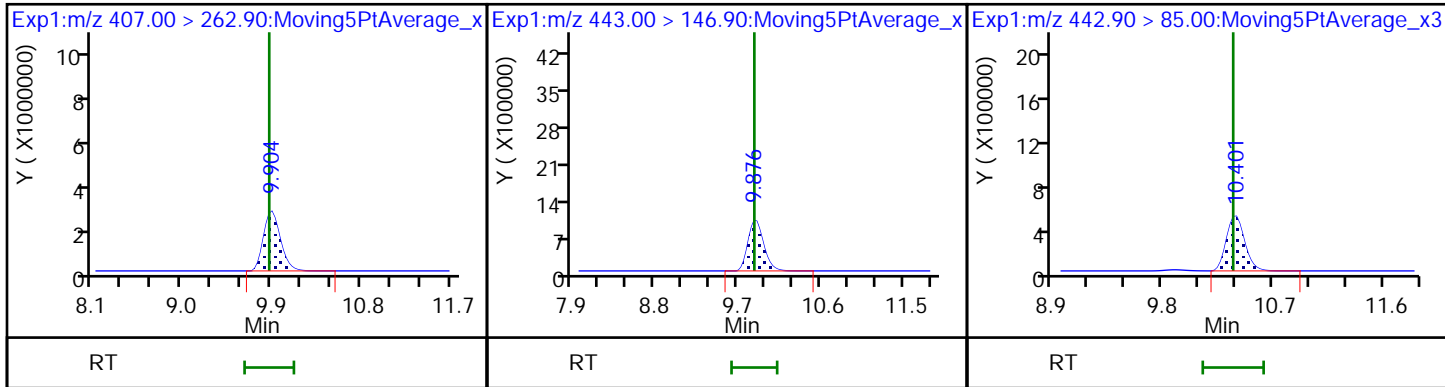
18 PFO4DA



20 EVE Acid

19 PS Acid

21 TAF



Eurofins TestAmerica, Sacramento

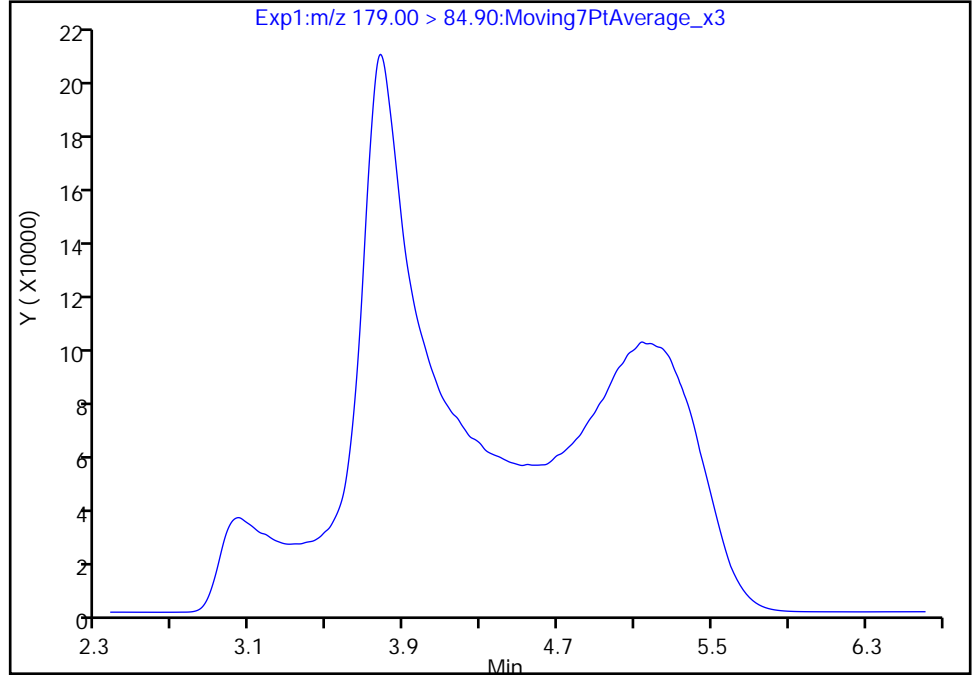
Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_019.d
Injection Date: 11-Mar-2021 16:03:54 Instrument ID: A12
Lims ID: IC STD 10
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 19 Worklist Smp#: 16
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

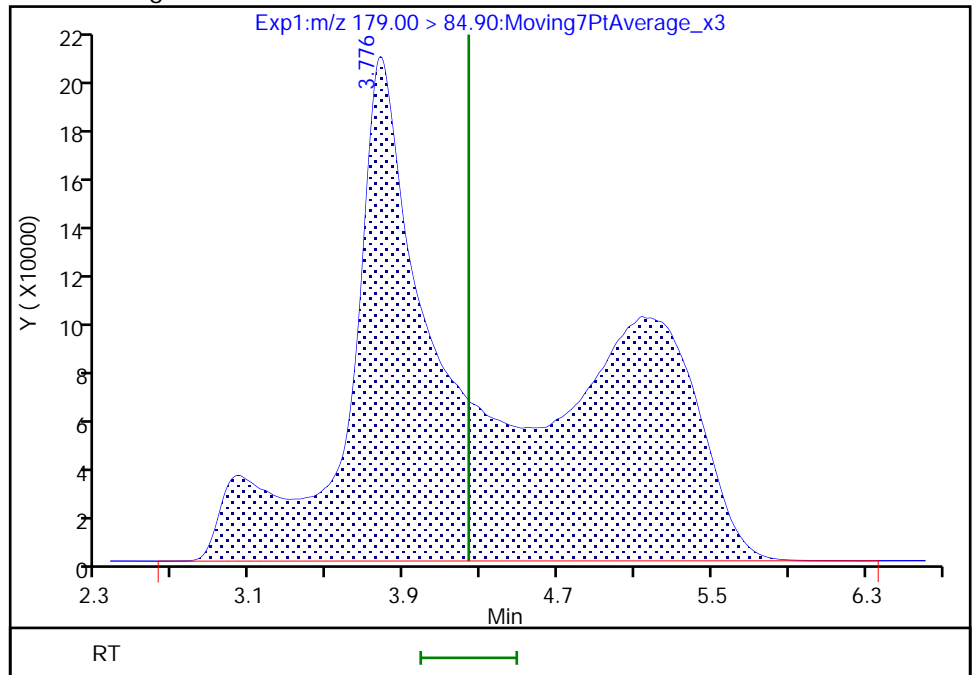
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 3.78
Area: 11493204
Amount: 1.111403
Amount Units: ng/ml



Reviewer: kwongg, 11-Mar-2021 16:42:38
Audit Action: Manually Integrated

Calibration

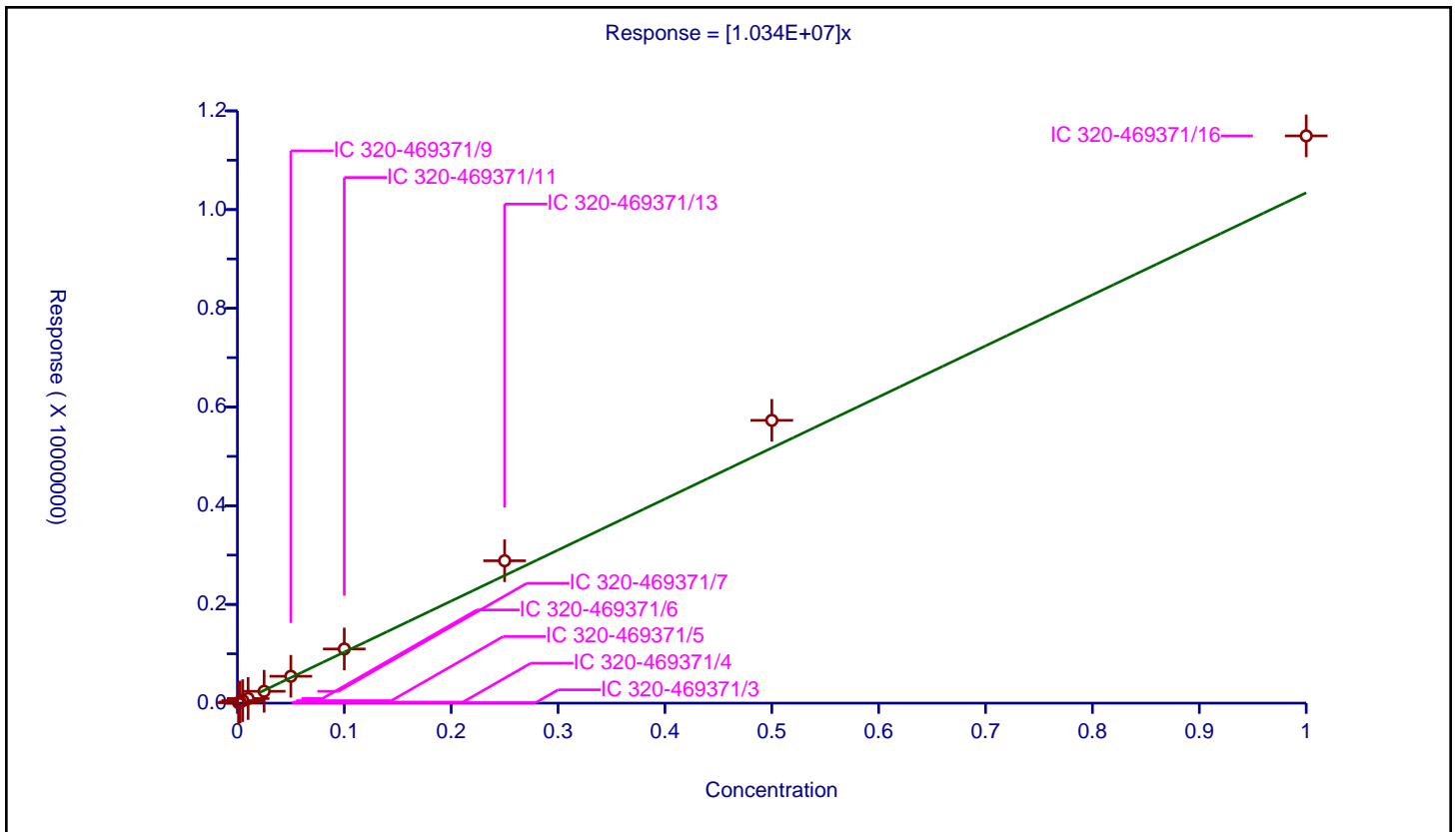
/ PFMOAA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.034E+07

Error Coefficients	
Standard Error:	439000
Relative Standard Error:	10.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	9219.0			9219000.0	Y
2	IC 320-469371/4	0.0025	21923.0			8769200.0	Y
3	IC 320-469371/5	0.005	50710.0			10142000.0	Y
4	IC 320-469371/6	0.01	93270.0			9327000.0	Y
5	IC 320-469371/7	0.025	240014.0			9600560.0	Y
6	IC 320-469371/9	0.05	544295.0			10885900.0	Y
7	IC 320-469371/11	0.1	1097611.0			10976110.0	Y
8	IC 320-469371/13	0.25	2884762.0			11539048.0	Y
9	IC 320-469371/15	0.5	5729803.0			11459606.0	Y
10	IC 320-469371/16	1.0	11493204.0			11493204.0	Y



Calibration

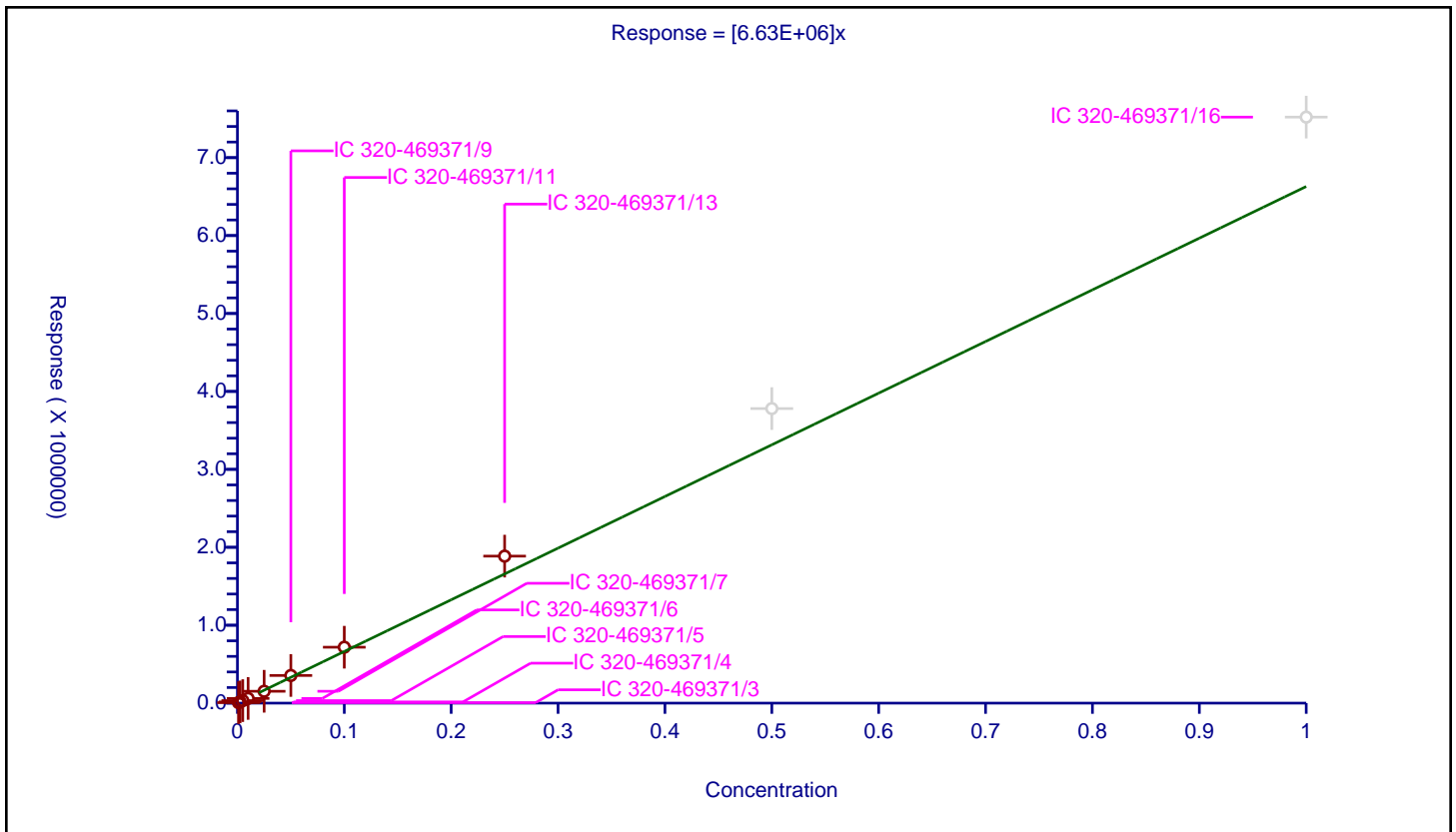
/ R-EVE

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	6.63E+06

Error Coefficients	
Standard Error:	89600
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	6451.0			6451000.0	Y
2	IC 320-469371/4	0.0025	15429.0			6171600.0	Y
3	IC 320-469371/5	0.005	32328.0			6465600.0	Y
4	IC 320-469371/6	0.01	60366.0			6036600.0	Y
5	IC 320-469371/7	0.025	152289.0			6091560.0	Y
6	IC 320-469371/9	0.05	354928.0			7098560.0	Y
7	IC 320-469371/11	0.1	717544.0			7175440.0	Y
8	IC 320-469371/13	0.25	1886476.0			7545904.0	Y
9	IC 320-469371/15	0.5	3779800.0			7559600.0	N
10	IC 320-469371/16	1.0	7519979.0			7519979.0	N



Calibration

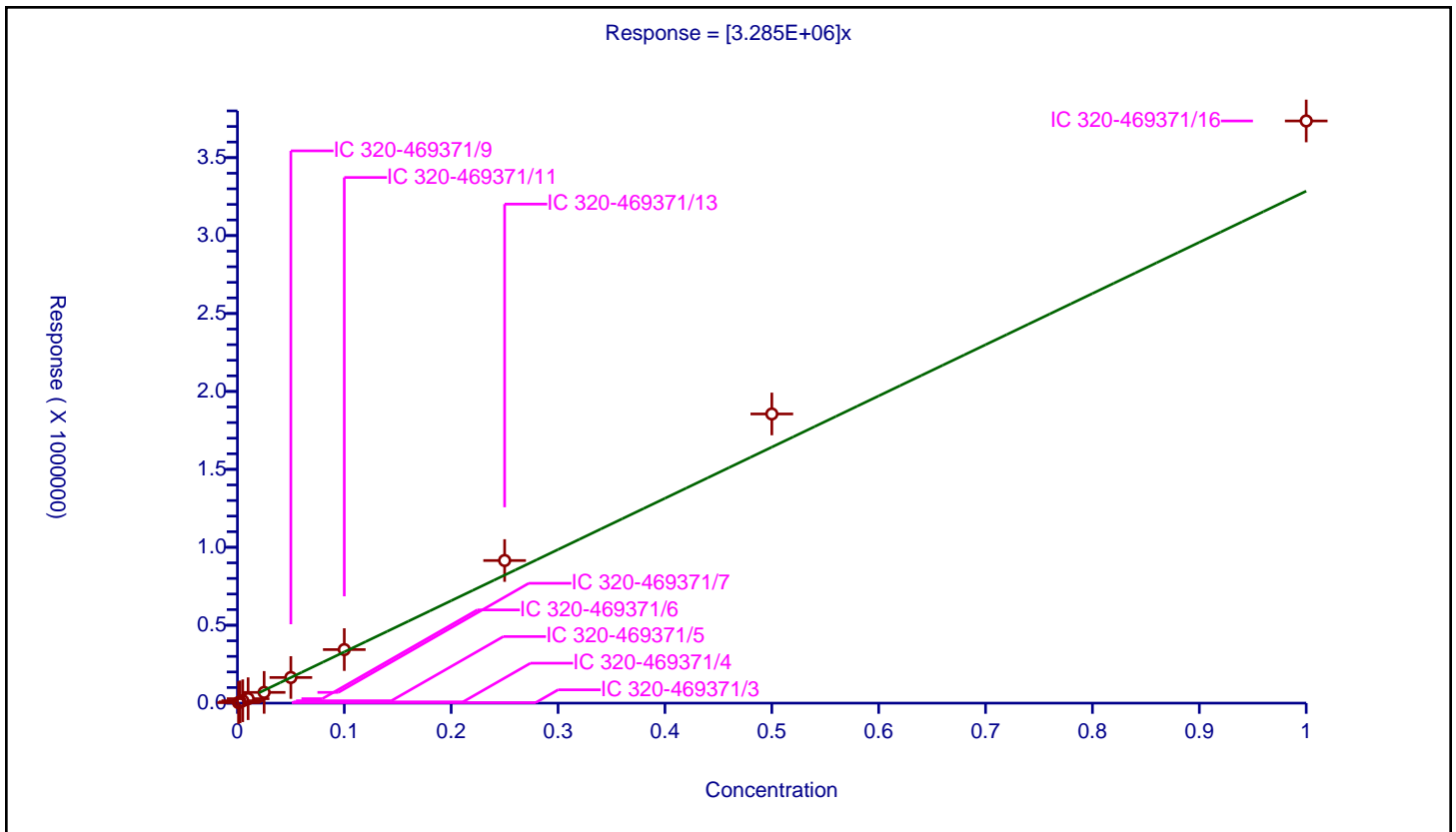
/ R-PSDA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.285E+06

Error Coefficients	
Standard Error:	169000
Relative Standard Error:	10.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	3111.0			3111000.0	Y
2	IC 320-469371/4	0.0025	8160.0			3264000.0	Y
3	IC 320-469371/5	0.005	15251.0			3050200.0	Y
4	IC 320-469371/6	0.01	28396.0			2839600.0	Y
5	IC 320-469371/7	0.025	68877.0			2755080.0	Y
6	IC 320-469371/9	0.05	164536.0			3290720.0	Y
7	IC 320-469371/11	0.1	343646.0			3436460.0	Y
8	IC 320-469371/13	0.25	915063.0			3660252.0	Y
9	IC 320-469371/15	0.5	1855418.0			3710836.0	Y
10	IC 320-469371/16	1.0	3735435.0			3735435.0	Y



Calibration

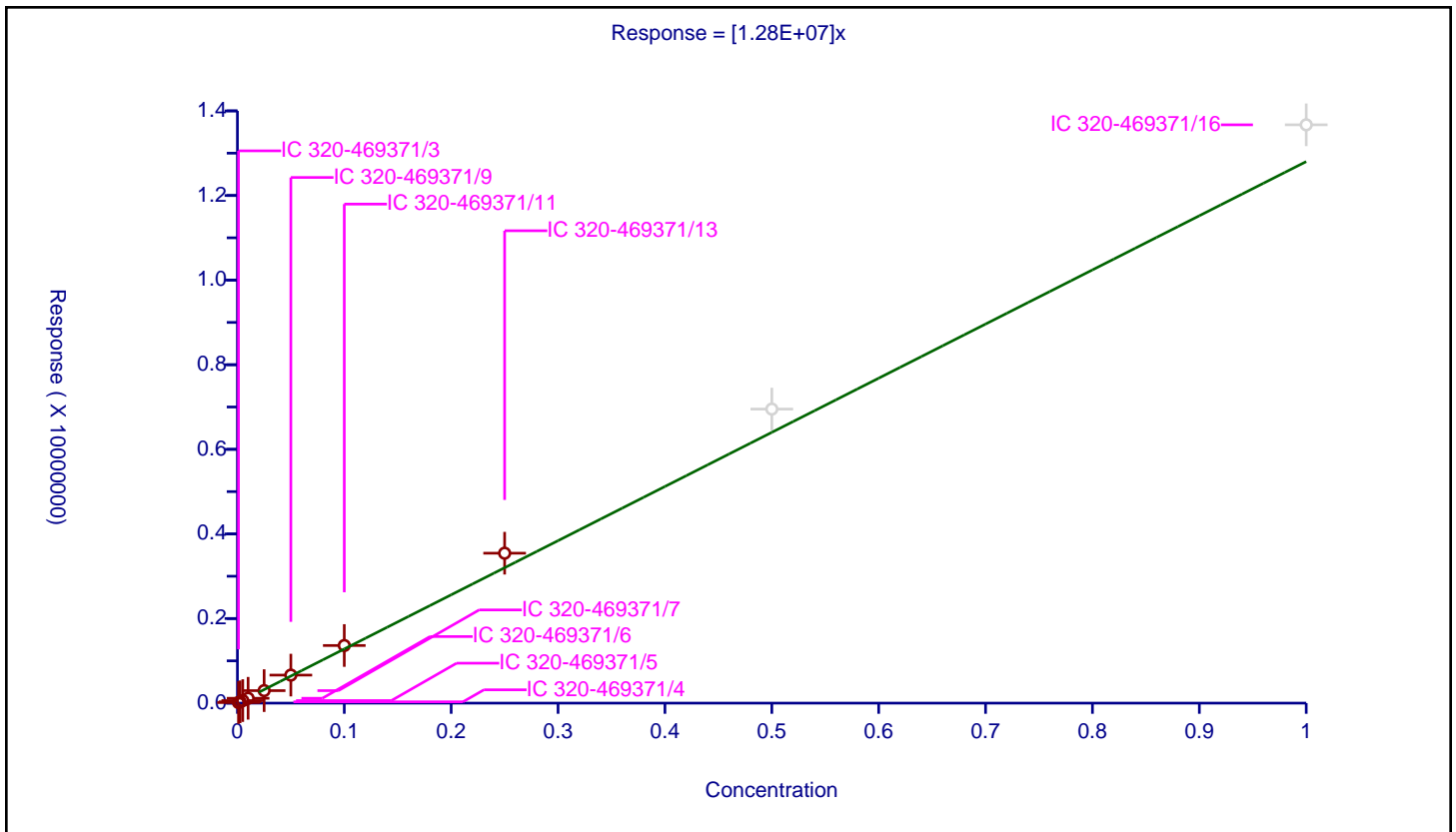
/ Hydrolyzed PSDA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.28E+07

Error Coefficients	
Standard Error:	134000
Relative Standard Error:	7.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	13566.0			13566000.0	Y
2	IC 320-469371/4	0.0025	31009.0			12403600.0	Y
3	IC 320-469371/5	0.005	60209.0			12041800.0	Y
4	IC 320-469371/6	0.01	115120.0			11512000.0	Y
5	IC 320-469371/7	0.025	295909.0			11836360.0	Y
6	IC 320-469371/9	0.05	662702.0			13254040.0	Y
7	IC 320-469371/11	0.1	1362003.0			13620030.0	Y
8	IC 320-469371/13	0.25	3544376.0			14177504.0	Y
9	IC 320-469371/15	0.5	6951189.0			13902378.0	N
10	IC 320-469371/16	1.0	13670791.0			13670791.0	N



Calibration

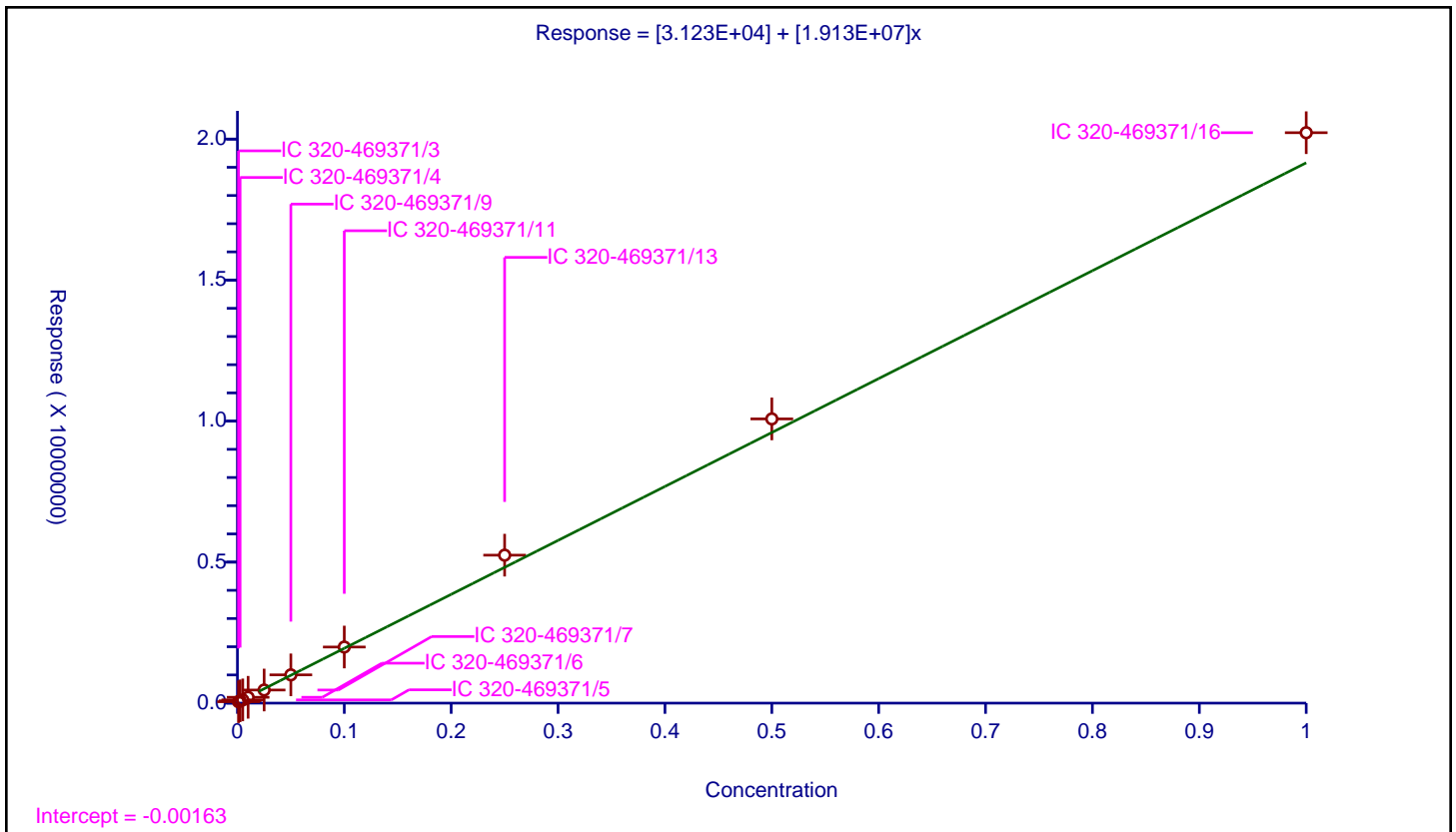
/ PMPA

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	3.123E+04
Slope:	1.913E+07

Error Coefficients	
Standard Error:	442000
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	50687.0			50687000.0	Y
2	IC 320-469371/4	0.0025	81343.0			32537200.0	Y
3	IC 320-469371/5	0.005	114576.0			22915200.0	Y
4	IC 320-469371/6	0.01	207214.0			20721400.0	Y
5	IC 320-469371/7	0.025	465023.0			18600920.0	Y
6	IC 320-469371/9	0.05	1002439.0			20048780.0	Y
7	IC 320-469371/11	0.1	1989388.0			19893880.0	Y
8	IC 320-469371/13	0.25	5246716.0			20986864.0	Y
9	IC 320-469371/15	0.5	10078548.0			20157096.0	Y
10	IC 320-469371/16	1.0	20226211.0			20226211.0	Y



Calibration

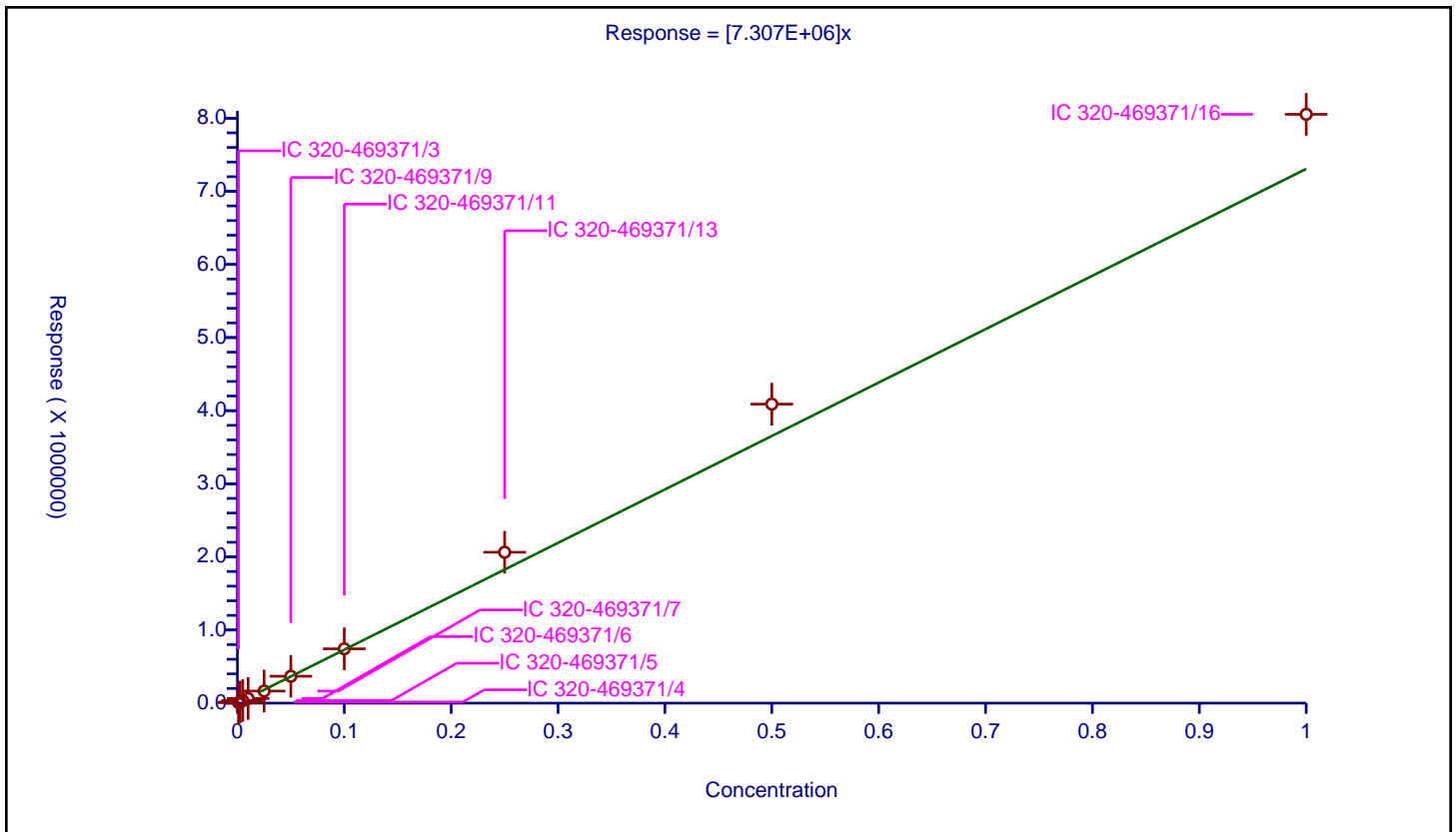
/ NVHOS

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	7.307E+06

Error Coefficients	
Standard Error:	299000
Relative Standard Error:	9.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	7401.0			7401000.0	Y
2	IC 320-469371/4	0.0025	16282.0			6512800.0	Y
3	IC 320-469371/5	0.005	34724.0			6944800.0	Y
4	IC 320-469371/6	0.01	63199.0			6319900.0	Y
5	IC 320-469371/7	0.025	165347.0			6613880.0	Y
6	IC 320-469371/9	0.05	367865.0			7357300.0	Y
7	IC 320-469371/11	0.1	742911.0			7429110.0	Y
8	IC 320-469371/13	0.25	2063902.0			8255608.0	Y
9	IC 320-469371/15	0.5	4089528.0			8179056.0	Y
10	IC 320-469371/16	1.0	8052787.0			8052787.0	Y



Calibration

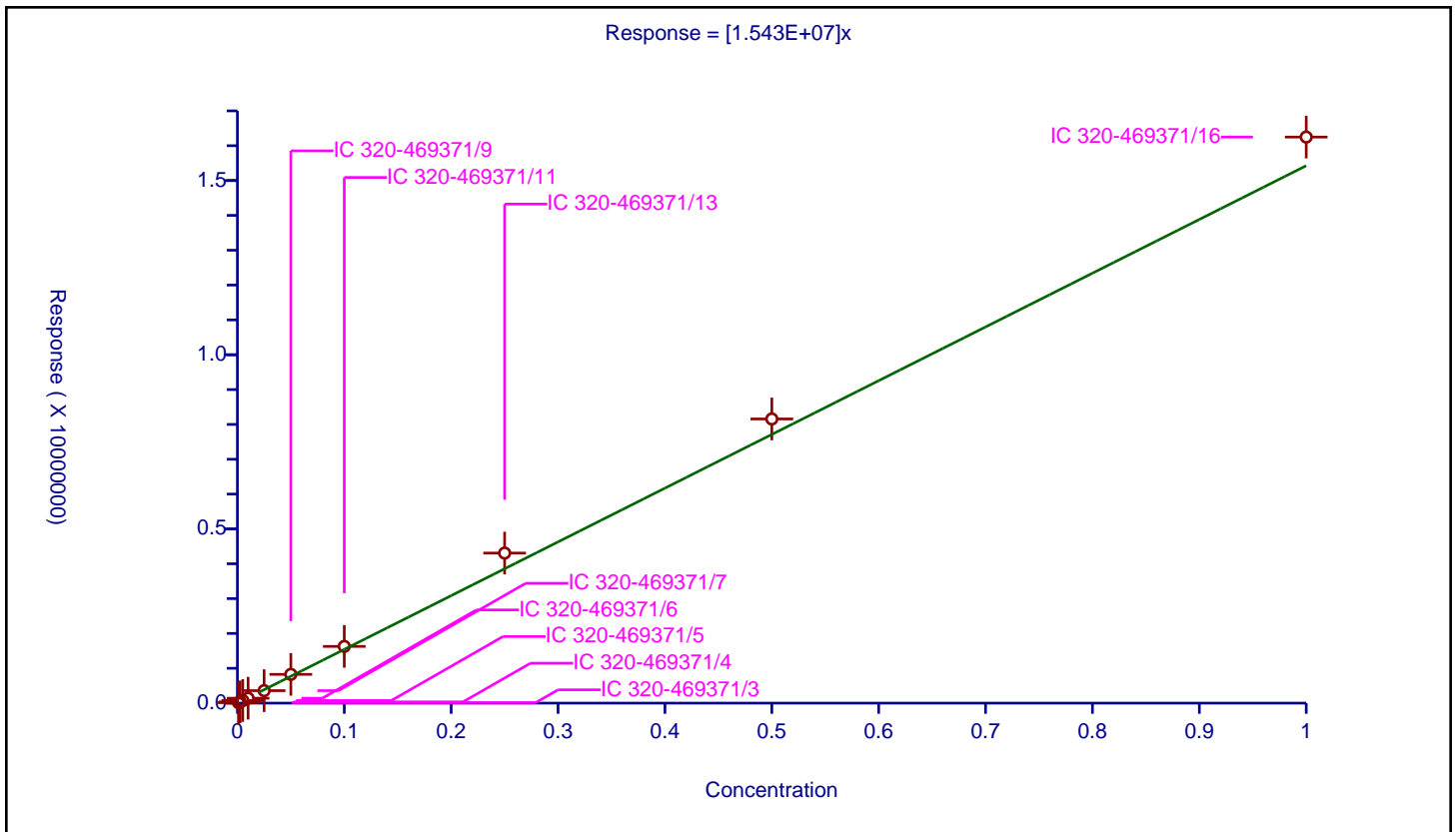
/ PFO2HxA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.543E+07

Error Coefficients	
Standard Error:	348000
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	14170.0			14170000.0	Y
2	IC 320-469371/4	0.0025	35582.0			14232800.0	Y
3	IC 320-469371/5	0.005	74175.0			14835000.0	Y
4	IC 320-469371/6	0.01	141071.0			14107100.0	Y
5	IC 320-469371/7	0.025	357950.0			14318000.0	Y
6	IC 320-469371/9	0.05	826140.0			16522800.0	Y
7	IC 320-469371/11	0.1	1628154.0			16281540.0	Y
8	IC 320-469371/13	0.25	4307590.0			17230360.0	Y
9	IC 320-469371/15	0.5	8156973.0			16313946.0	Y
10	IC 320-469371/16	1.0	16248356.0			16248356.0	Y



Calibration

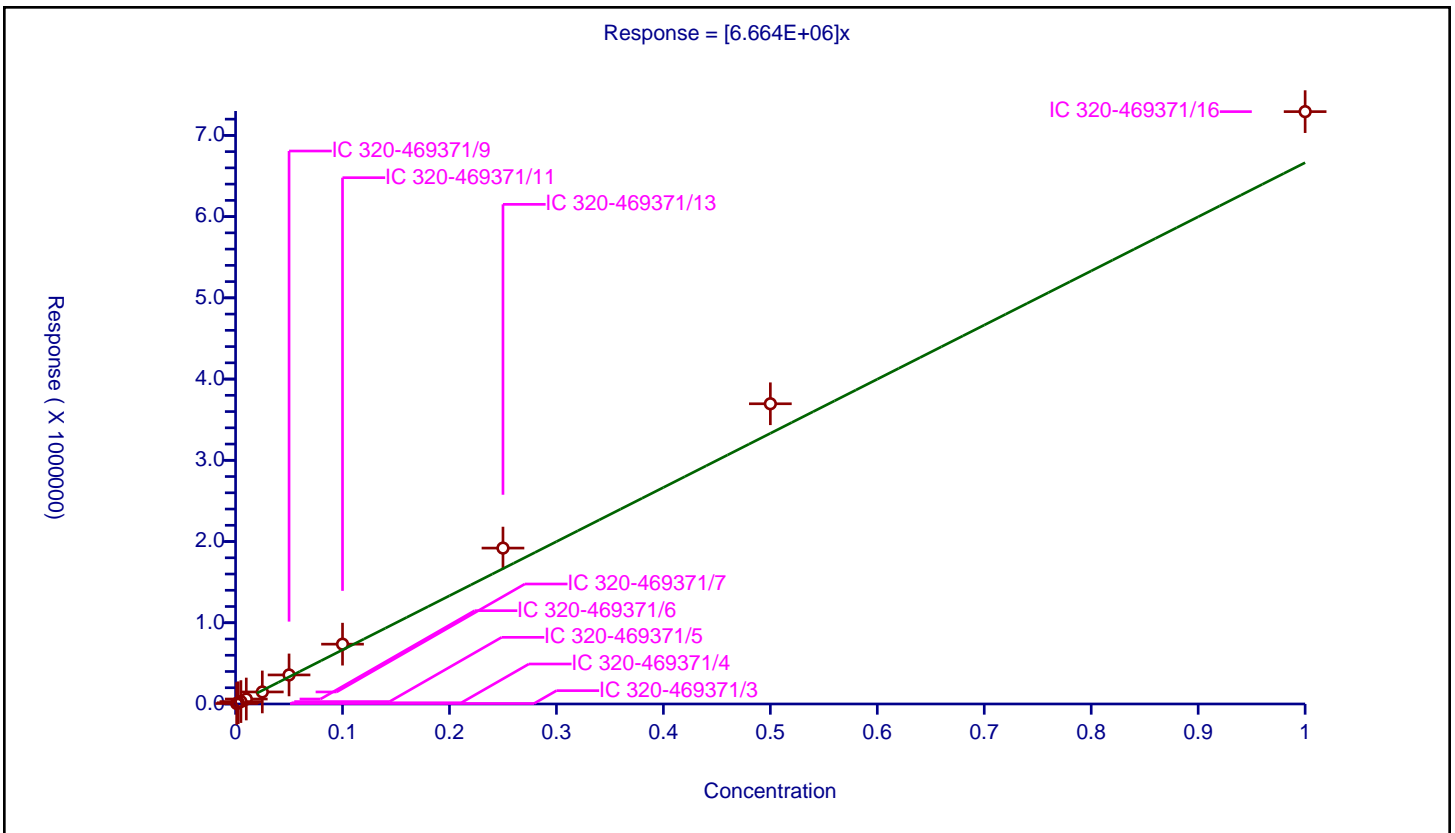
/ PEPA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	6.664E+06

Error Coefficients	
Standard Error:	258000
Relative Standard Error:	11.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	5713.0			5713000.0	Y
2	IC 320-469371/4	0.0025	15222.0			6088800.0	Y
3	IC 320-469371/5	0.005	29652.0			5930400.0	Y
4	IC 320-469371/6	0.01	61087.0			6108700.0	Y
5	IC 320-469371/7	0.025	148061.0			5922440.0	Y
6	IC 320-469371/9	0.05	357518.0			7150360.0	Y
7	IC 320-469371/11	0.1	736614.0			7366140.0	Y
8	IC 320-469371/13	0.25	1919218.0			7676872.0	Y
9	IC 320-469371/15	0.5	3696038.0			7392076.0	Y
10	IC 320-469371/16	1.0	7292414.0			7292414.0	Y



Calibration

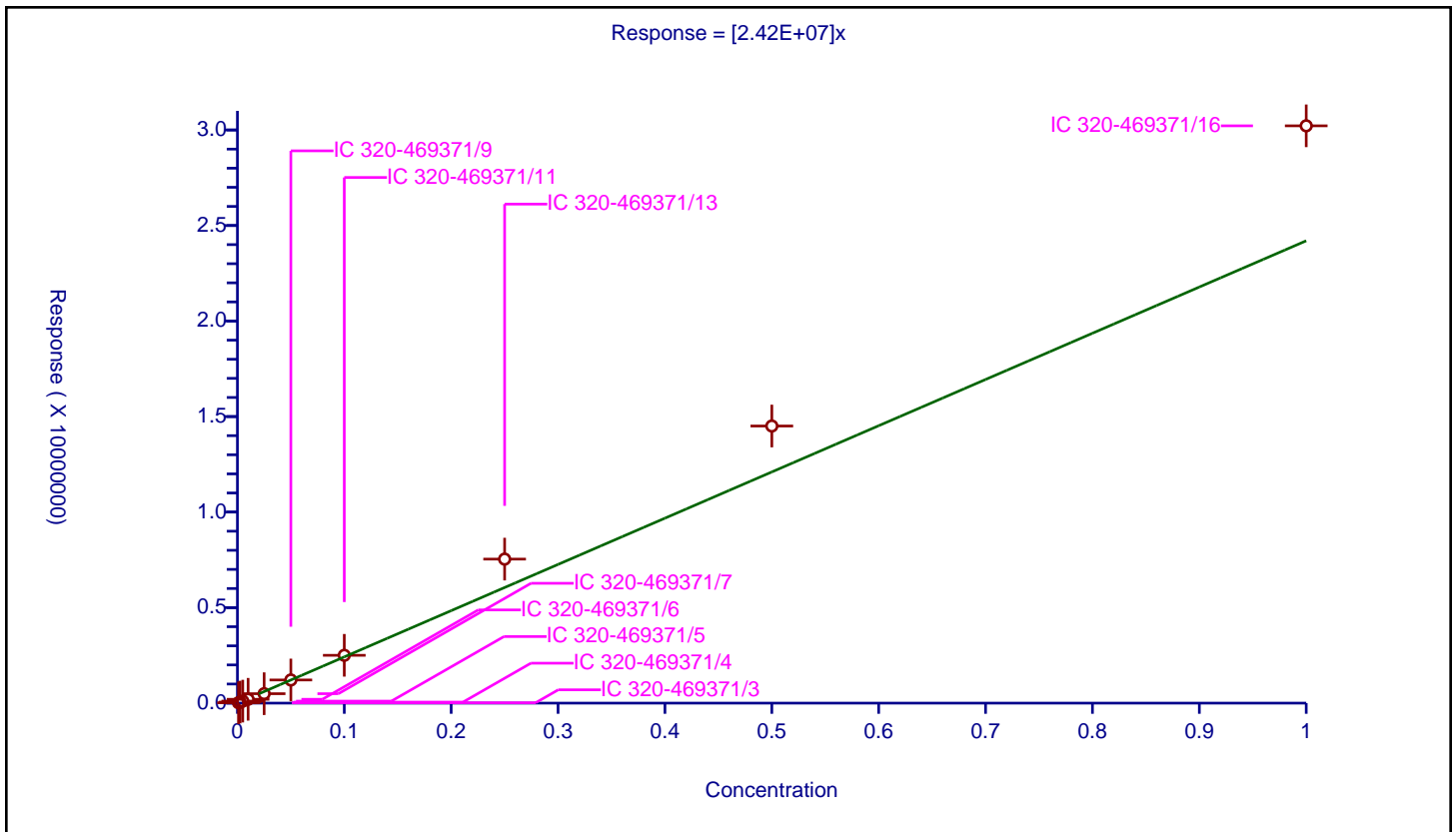
/ PES

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.42E+07

Error Coefficients	
Standard Error:	2220000
Relative Standard Error:	17.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.967

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	20899.0			20899000.0	Y
2	IC 320-469371/4	0.0025	53728.0			21491200.0	Y
3	IC 320-469371/5	0.005	105328.0			21065600.0	Y
4	IC 320-469371/6	0.01	201224.0			20122400.0	Y
5	IC 320-469371/7	0.025	493930.0			19757200.0	Y
6	IC 320-469371/9	0.05	1212458.0			24249160.0	Y
7	IC 320-469371/11	0.1	2503517.0			25035170.0	Y
8	IC 320-469371/13	0.25	7538475.0			30153900.0	Y
9	IC 320-469371/15	0.5	14505468.0			29010936.0	Y
10	IC 320-469371/16	1.0	30218151.0			30218151.0	Y



Calibration

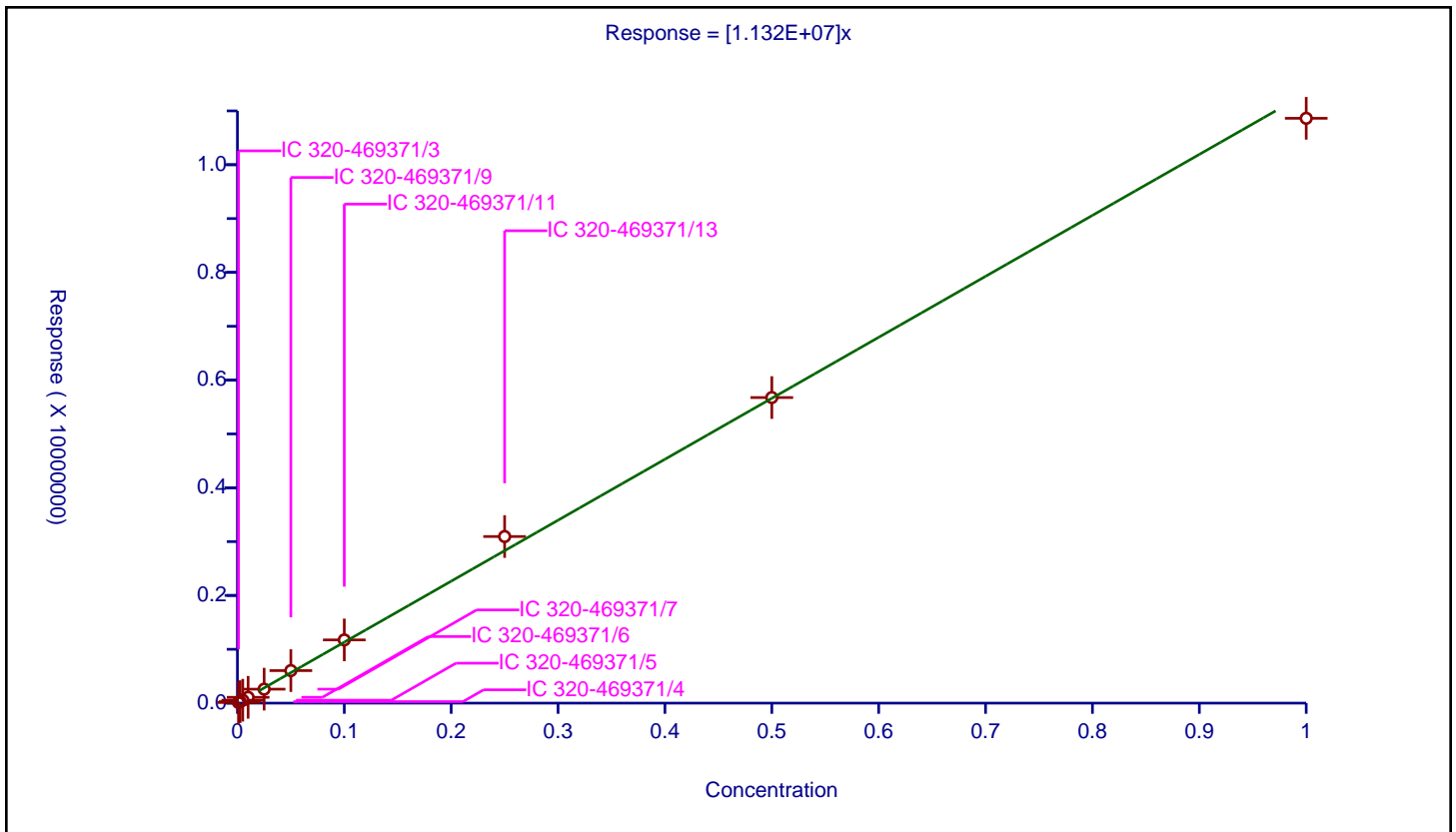
/ PFECA B

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ESTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.132E+07

Error Coefficients	
Standard Error:	178000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	11628.0			11628000.0	Y
2	IC 320-469371/4	0.0025	28030.0			11212000.0	Y
3	IC 320-469371/5	0.005	54087.0			10817400.0	Y
4	IC 320-469371/6	0.01	107847.0			10784700.0	Y
5	IC 320-469371/7	0.025	259454.0			10378160.0	Y
6	IC 320-469371/9	0.05	604295.0			12085900.0	Y
7	IC 320-469371/11	0.1	1174361.0			11743610.0	Y
8	IC 320-469371/13	0.25	3094418.0			12377672.0	Y
9	IC 320-469371/15	0.5	5675655.0			11351310.0	Y
10	IC 320-469371/16	1.0	10862667.0			10862667.0	Y



Calibration

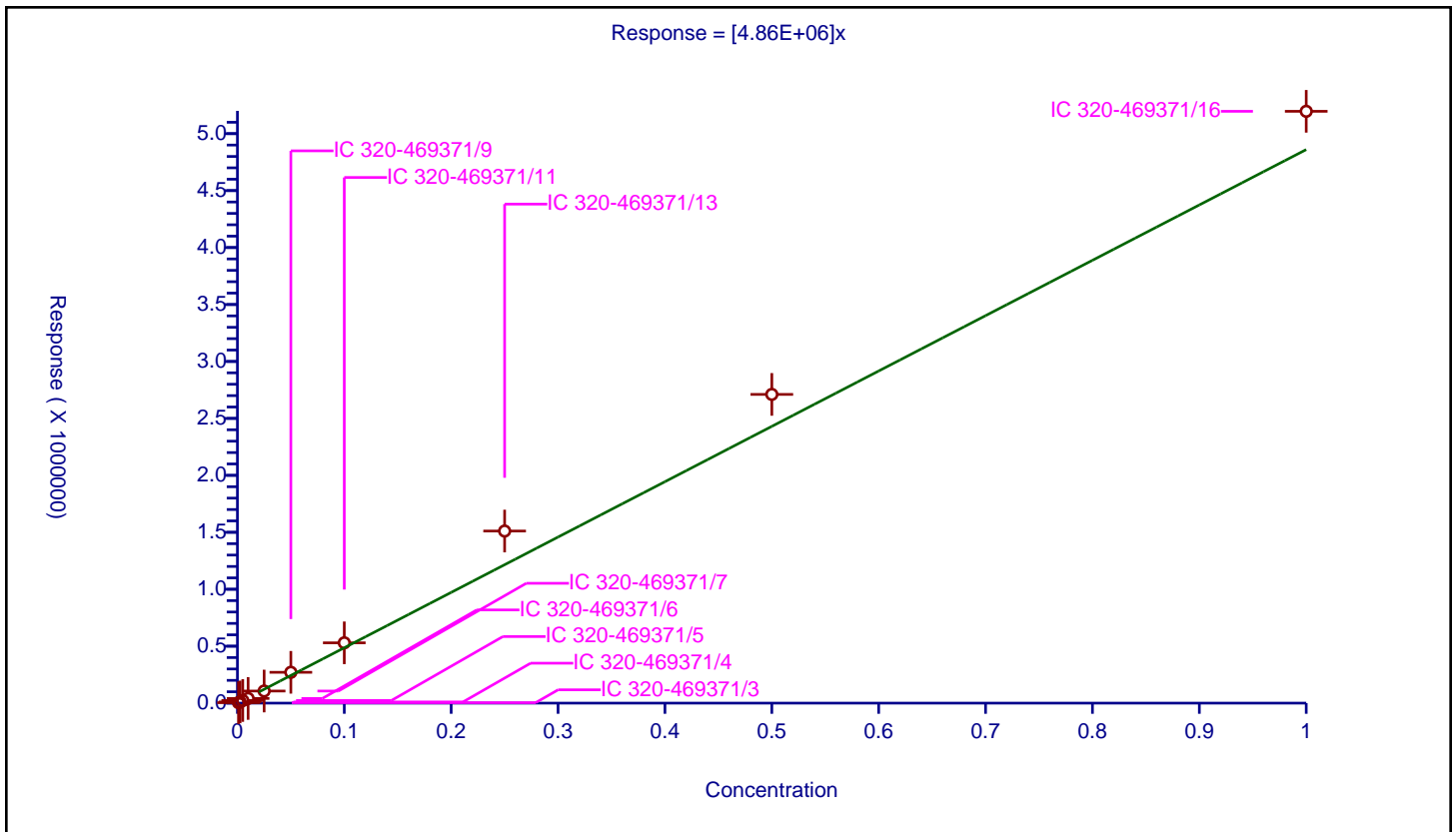
/ PFO3OA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.86E+06

Error Coefficients	
Standard Error:	177000
Relative Standard Error:	14.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	4113.0			4113000.0	Y
2	IC 320-469371/4	0.0025	10326.0			4130400.0	Y
3	IC 320-469371/5	0.005	23087.0			4617400.0	Y
4	IC 320-469371/6	0.01	41140.0			4114000.0	Y
5	IC 320-469371/7	0.025	106382.0			4255280.0	Y
6	IC 320-469371/9	0.05	270695.0			5413900.0	Y
7	IC 320-469371/11	0.1	529631.0			5296310.0	Y
8	IC 320-469371/13	0.25	1510951.0			6043804.0	Y
9	IC 320-469371/15	0.5	2710693.0			5421386.0	Y
10	IC 320-469371/16	1.0	5196365.0			5196365.0	Y



Calibration

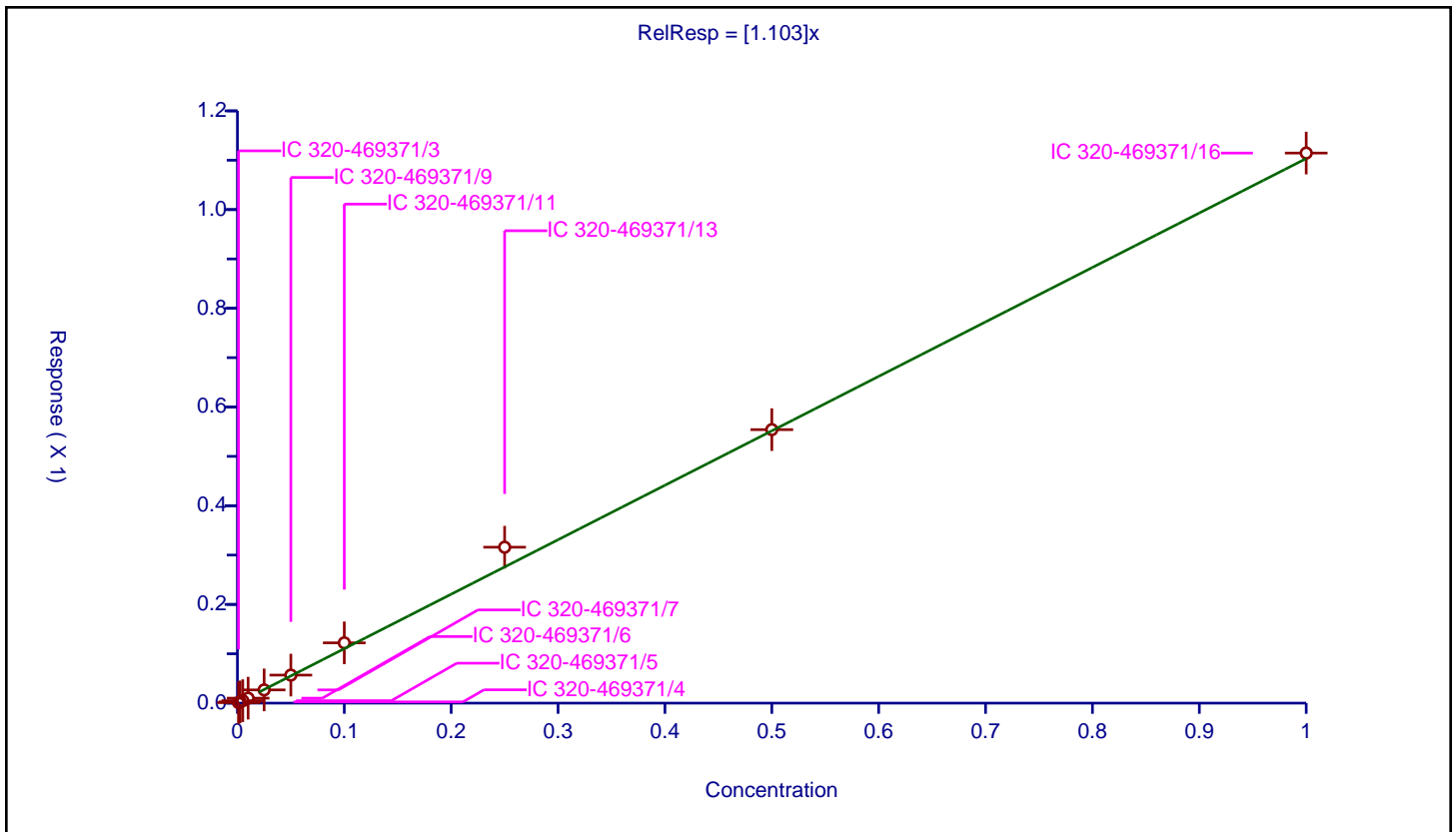
/ Perfluoro(2-propoxypropanoic) acid

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: IsoDil
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.103

Error Coefficients	
Standard Error:	3240000
Relative Standard Error:	8.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 320-469371/3	0.001	0.001115	0.25	2044917.0	1.115326	Y
2	IC 320-469371/4	0.0025	0.002517	0.25	2050684.0	1.006884	Y
3	IC 320-469371/5	0.005	0.004951	0.25	1950335.0	0.990138	Y
4	IC 320-469371/6	0.01	0.010058	0.25	1971732.0	1.005829	Y
5	IC 320-469371/7	0.025	0.026819	0.25	1893184.0	1.072769	Y
6	IC 320-469371/9	0.05	0.056788	0.25	1967730.0	1.13575	Y
7	IC 320-469371/11	0.1	0.122136	0.25	1880223.0	1.221363	Y
8	IC 320-469371/13	0.25	0.315938	0.25	1879948.0	1.26375	Y
9	IC 320-469371/15	0.5	0.554123	0.25	1956495.0	1.108246	Y
10	IC 320-469371/16	1.0	1.11456	0.25	1859492.0	1.11456	Y



Calibration

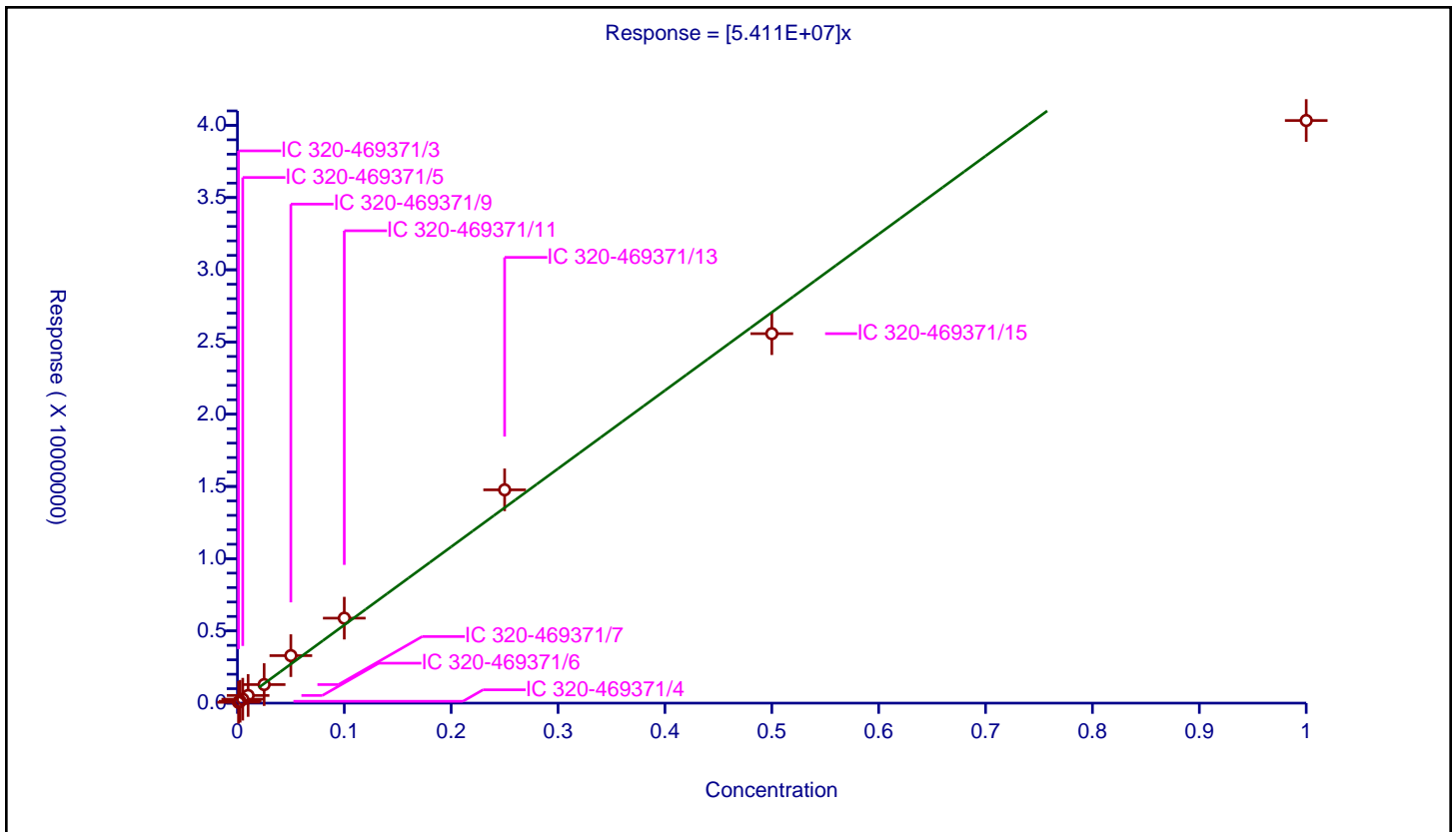
/ R-PSDCA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.411E+07

Error Coefficients	
Standard Error:	4640000
Relative Standard Error:	12.4
Correlation Coefficient:	0.979
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	56403.0			56403000.0	Y
2	IC 320-469371/4	0.0025	127265.0			50906000.0	Y
3	IC 320-469371/5	0.005	271764.0			54352800.0	Y
4	IC 320-469371/6	0.01	529236.0			52923600.0	Y
5	IC 320-469371/7	0.025	1284817.0			51392680.0	Y
6	IC 320-469371/9	0.05	3288158.0			65763160.0	Y
7	IC 320-469371/11	0.1	5881852.0			58818520.0	Y
8	IC 320-469371/13	0.25	14766368.0			59065472.0	Y
9	IC 320-469371/15	0.5	25578508.0			51157016.0	Y
10	IC 320-469371/16	1.0	40333918.0			40333918.0	Y



Calibration

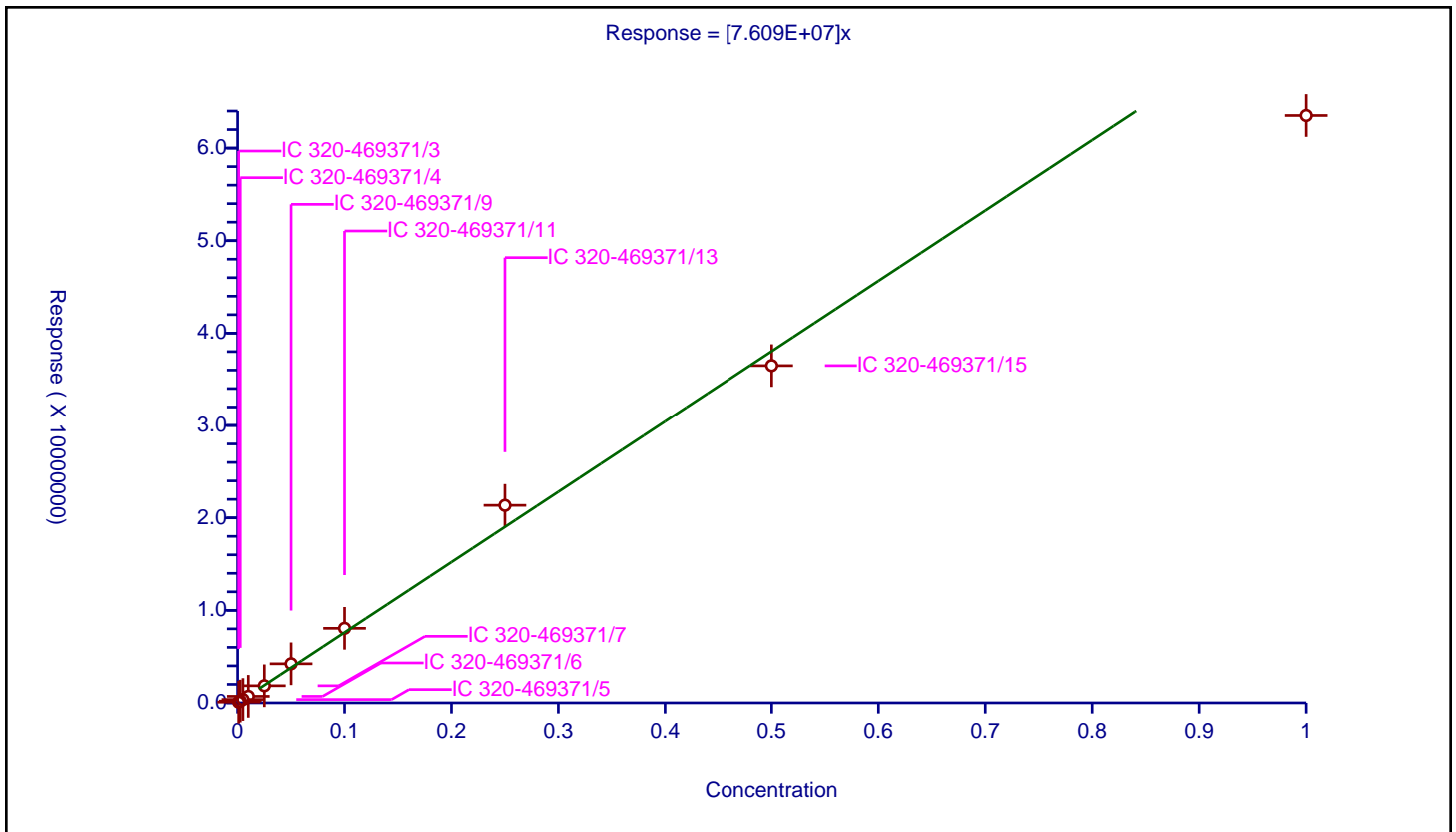
/ Hydro-EVE Acid

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	7.609E+07

Error Coefficients	
Standard Error:	4300000
Relative Standard Error:	8.8
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	78607.0			78607000.0	Y
2	IC 320-469371/4	0.0025	194717.0			77886800.0	Y
3	IC 320-469371/5	0.005	363314.0			72662800.0	Y
4	IC 320-469371/6	0.01	707807.0			70780700.0	Y
5	IC 320-469371/7	0.025	1848564.0			73942560.0	Y
6	IC 320-469371/9	0.05	4223389.0			84467780.0	Y
7	IC 320-469371/11	0.1	8058472.0			80584720.0	Y
8	IC 320-469371/13	0.25	21354386.0			85417544.0	Y
9	IC 320-469371/15	0.5	36490724.0			72981448.0	Y
10	IC 320-469371/16	1.0	63520565.0			63520565.0	Y



Calibration

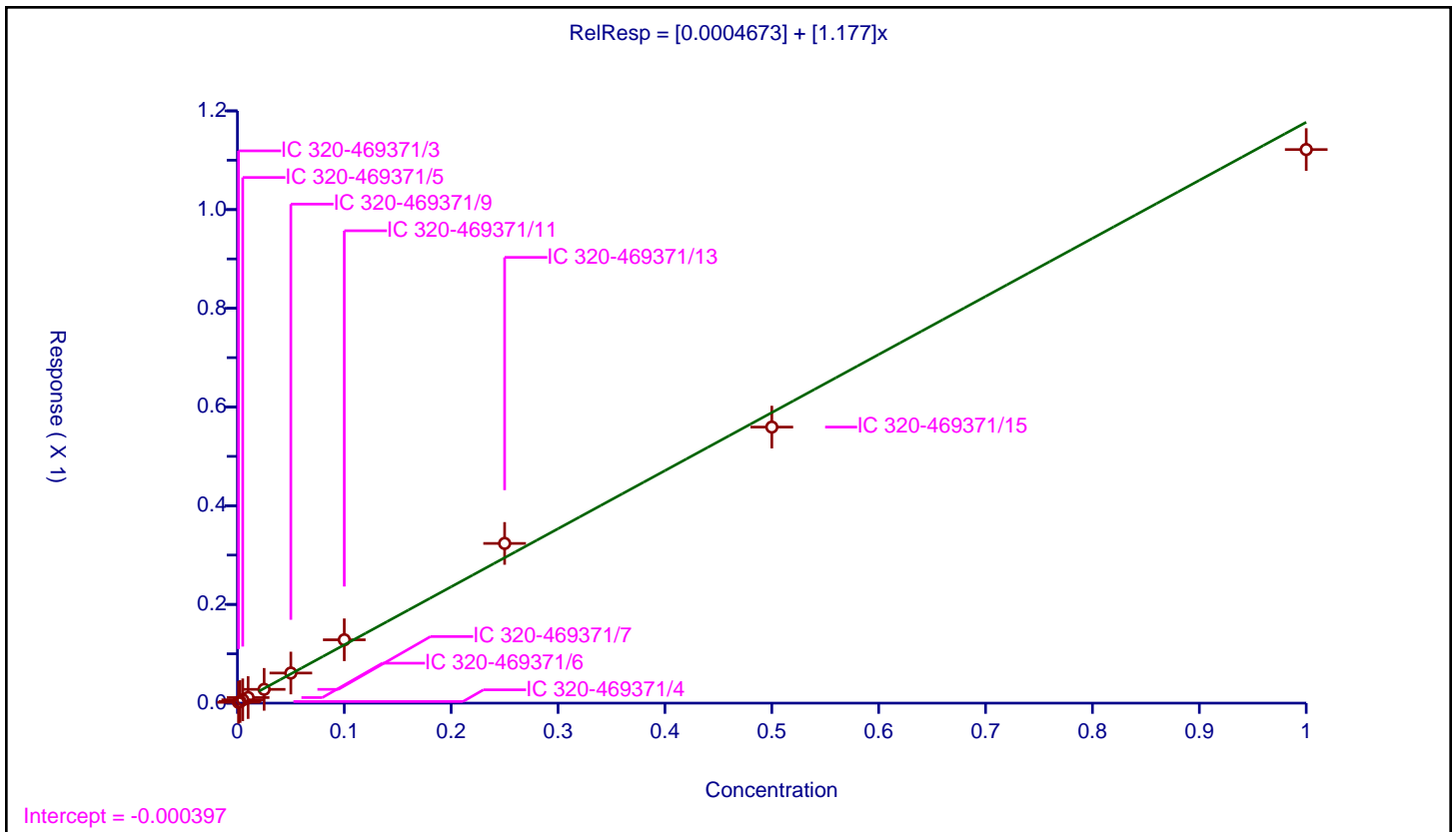
/ Perfluoroheptanoic acid

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: IsoDil
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0.0004673
Slope:	1.177

Error Coefficients	
Standard Error:	8530000
Relative Standard Error:	7.0
Correlation Coefficient:	0.983
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 320-469371/3	0.001	0.001663	0.25	7395069.0	1.663034	Y
2	IC 320-469371/4	0.0025	0.003266	0.25	7007270.0	1.306572	Y
3	IC 320-469371/5	0.005	0.006699	0.25	6917544.0	1.339898	Y
4	IC 320-469371/6	0.01	0.011304	0.25	6054619.0	1.130434	Y
5	IC 320-469371/7	0.025	0.027937	0.25	6380058.0	1.117474	Y
6	IC 320-469371/9	0.05	0.061013	0.25	6691253.0	1.220266	Y
7	IC 320-469371/11	0.1	0.12833	0.25	5595951.0	1.283299	Y
8	IC 320-469371/13	0.25	0.323591	0.25	5515334.0	1.294362	Y
9	IC 320-469371/15	0.5	0.559346	0.25	5276640.0	1.118692	Y
10	IC 320-469371/16	1.0	1.121649	0.25	4346479.0	1.121649	Y



Calibration

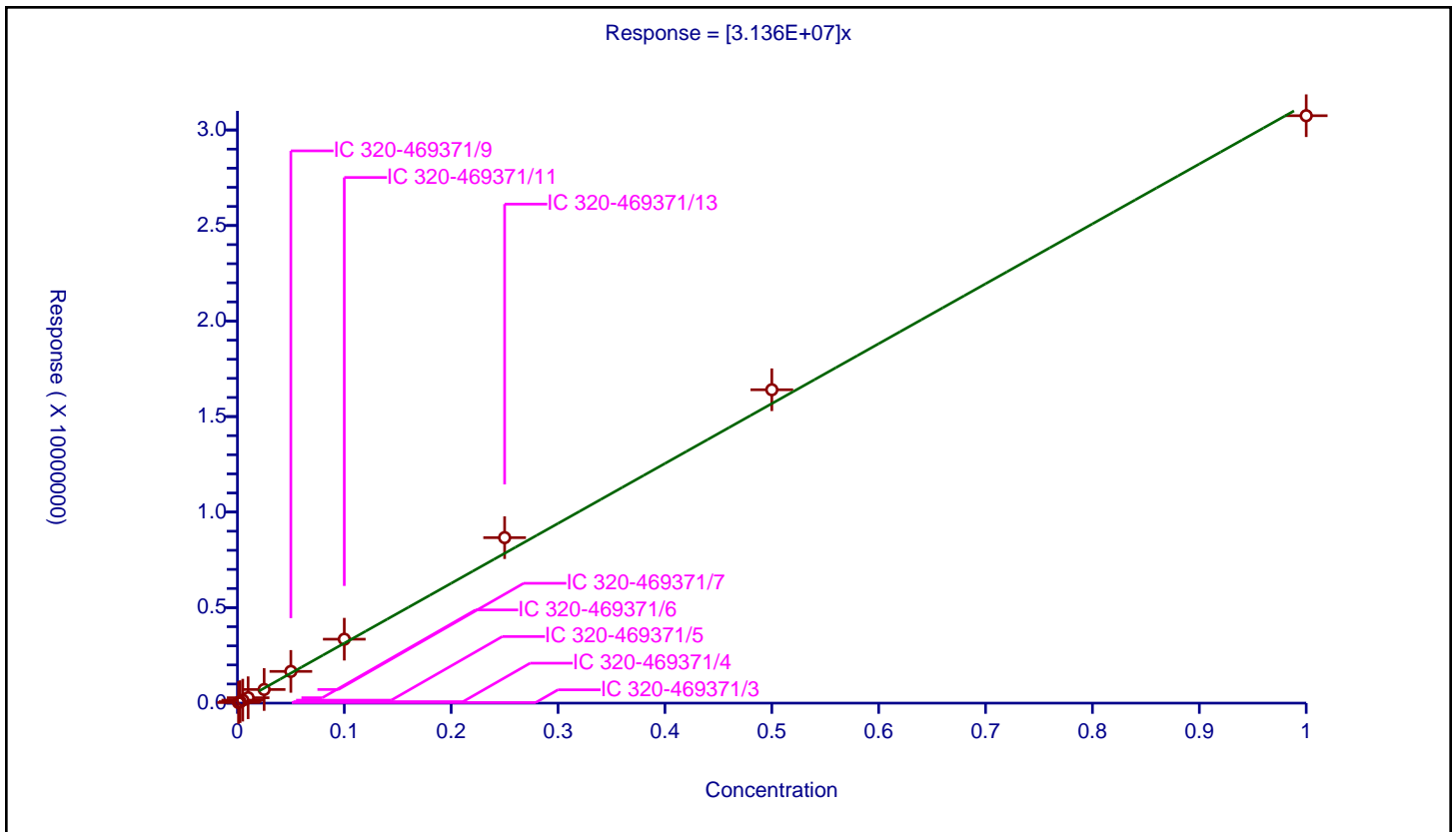
/ Hydro-PS Acid

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.136E+07

Error Coefficients	
Standard Error:	426000
Relative Standard Error:	6.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	29651.0			29651000.0	Y
2	IC 320-469371/4	0.0025	77921.0			31168400.0	Y
3	IC 320-469371/5	0.005	155251.0			31050200.0	Y
4	IC 320-469371/6	0.01	282814.0			28281400.0	Y
5	IC 320-469371/7	0.025	713433.0			28537320.0	Y
6	IC 320-469371/9	0.05	1661116.0			33222320.0	Y
7	IC 320-469371/11	0.1	3346171.0			33461710.0	Y
8	IC 320-469371/13	0.25	8662362.0			34649448.0	Y
9	IC 320-469371/15	0.5	16403475.0			32806950.0	Y
10	IC 320-469371/16	1.0	30747606.0			30747606.0	Y



Calibration

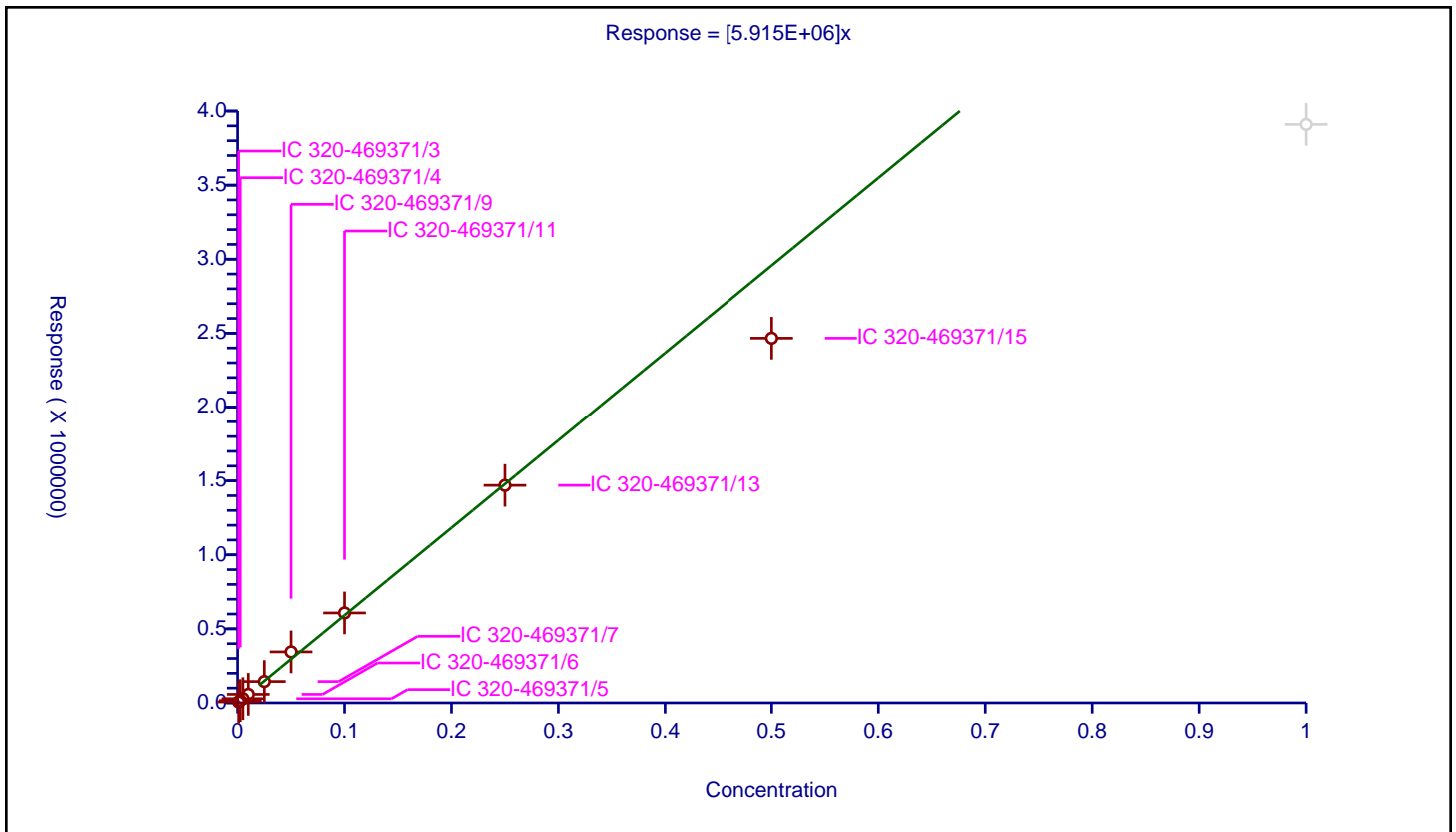
/ PFECA G

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.915E+06

Error Coefficients	
Standard Error:	175000
Relative Standard Error:	8.7
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	6090.0			6090000.0	Y
2	IC 320-469371/4	0.0025	15354.0			6141600.0	Y
3	IC 320-469371/5	0.005	28472.0			5694400.0	Y
4	IC 320-469371/6	0.01	57734.0			5773400.0	Y
5	IC 320-469371/7	0.025	144166.0			5766640.0	Y
6	IC 320-469371/9	0.05	344412.0			6888240.0	Y
7	IC 320-469371/11	0.1	607348.0			6073480.0	Y
8	IC 320-469371/13	0.25	1469571.0			5878284.0	Y
9	IC 320-469371/15	0.5	2466289.0			4932578.0	Y
10	IC 320-469371/16	1.0	3909864.0			3909864.0	N



Calibration

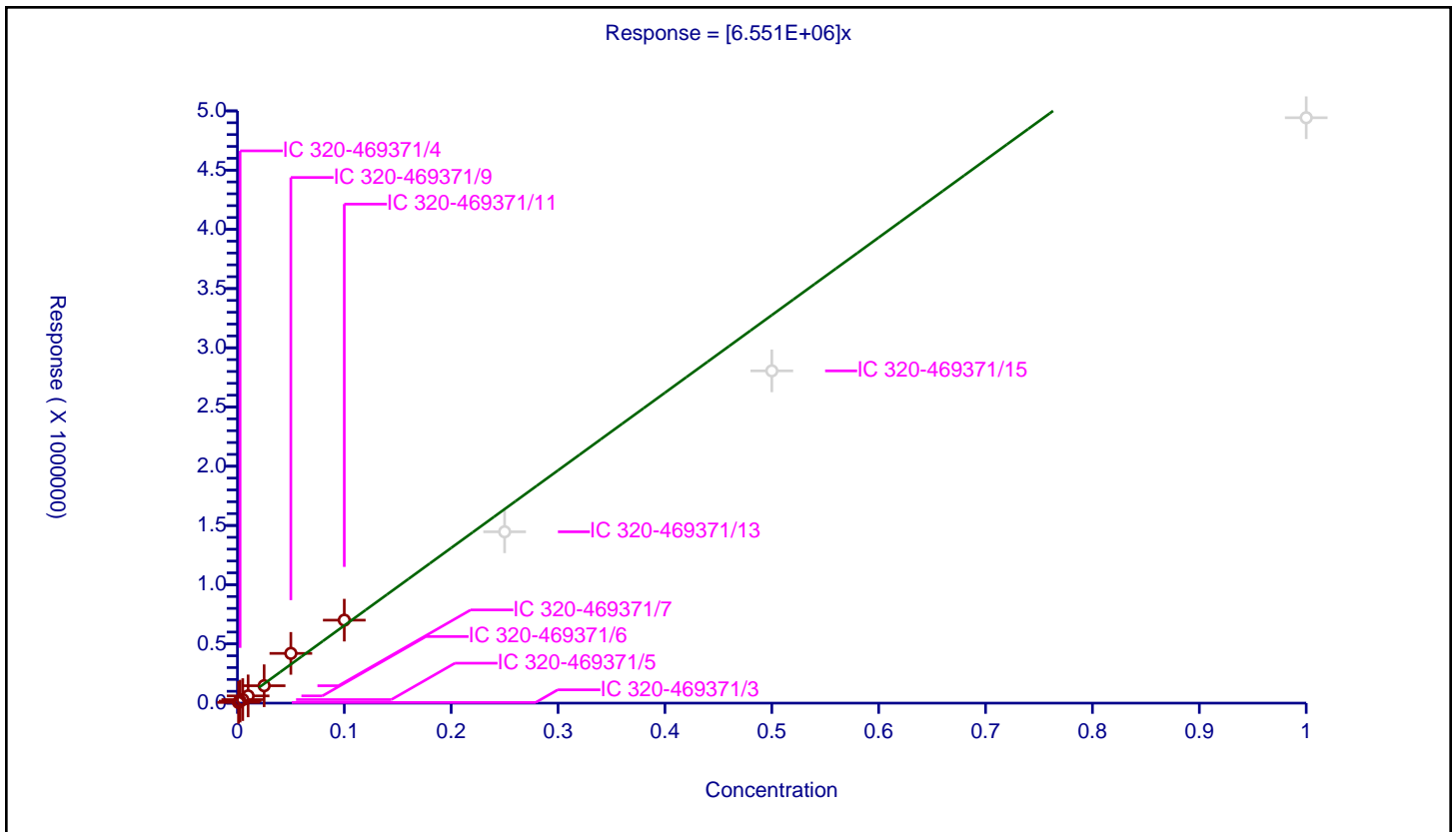
/ PFO4DA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	6.551E+06

Error Coefficients	
Standard Error:	42700
Relative Standard Error:	14.3
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	5763.0			5763000.0	Y
2	IC 320-469371/4	0.0025	16897.0			6758800.0	Y
3	IC 320-469371/5	0.005	29800.0			5960000.0	Y
4	IC 320-469371/6	0.01	60985.0			6098500.0	Y
5	IC 320-469371/7	0.025	146869.0			5874760.0	Y
6	IC 320-469371/9	0.05	419942.0			8398840.0	Y
7	IC 320-469371/11	0.1	700600.0			7006000.0	Y
8	IC 320-469371/13	0.25	1446690.0			5786760.0	N
9	IC 320-469371/15	0.5	2805185.0			5610370.0	N
10	IC 320-469371/16	1.0	4942284.0			4942284.0	N



Calibration

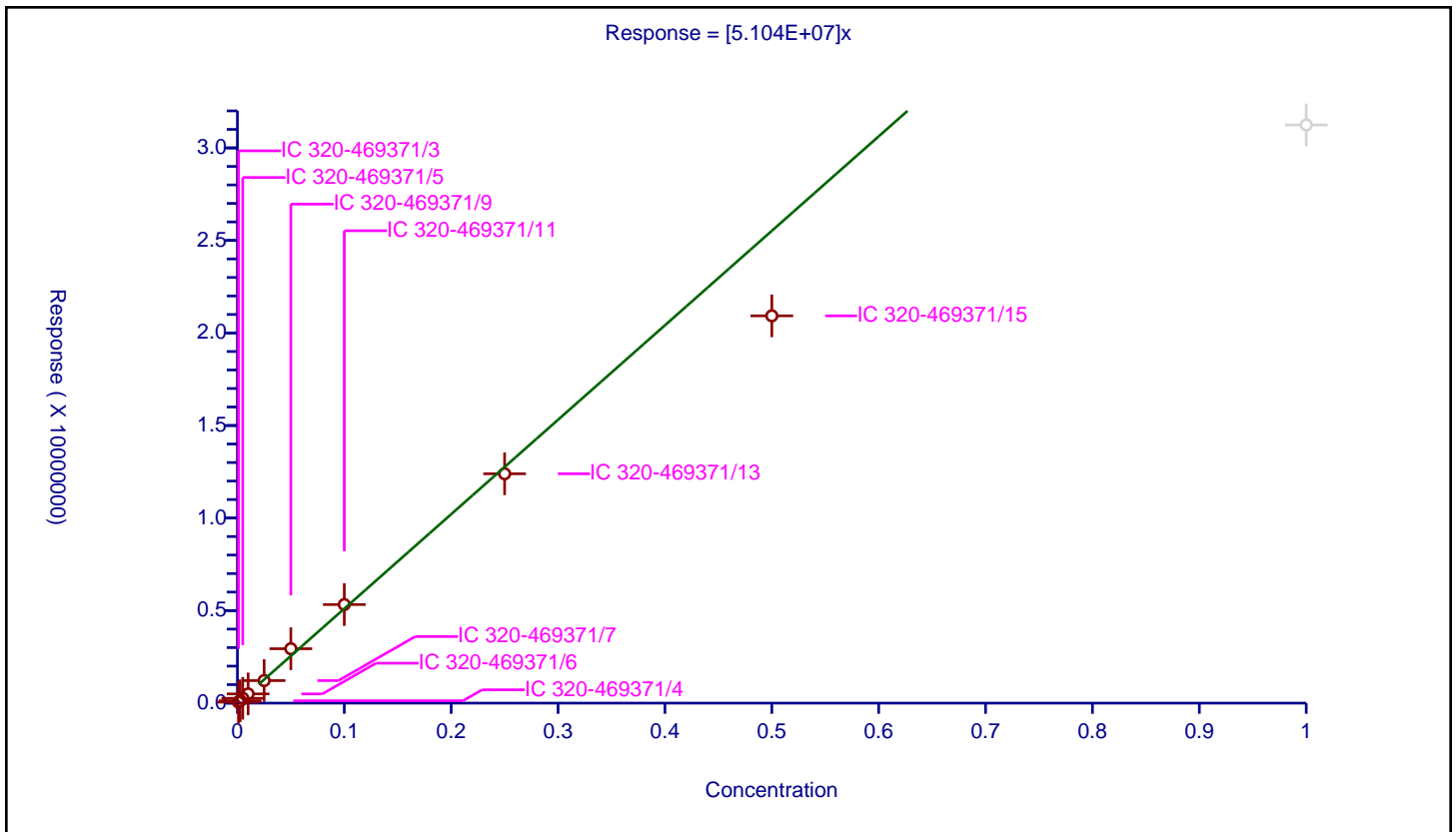
/ EVE Acid

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ESTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.104E+07

Error Coefficients	
Standard Error:	1640000
Relative Standard Error:	9.0
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	54073.0			54073000.0	Y
2	IC 320-469371/4	0.0025	127455.0			50982000.0	Y
3	IC 320-469371/5	0.005	261350.0			52270000.0	Y
4	IC 320-469371/6	0.01	498149.0			49814900.0	Y
5	IC 320-469371/7	0.025	1218402.0			48736080.0	Y
6	IC 320-469371/9	0.05	2938957.0			58779140.0	Y
7	IC 320-469371/11	0.1	5327376.0			53273760.0	Y
8	IC 320-469371/13	0.25	12391948.0			49567792.0	Y
9	IC 320-469371/15	0.5	20926403.0			41852806.0	Y
10	IC 320-469371/16	1.0	31241621.0			31241621.0	N



Calibration

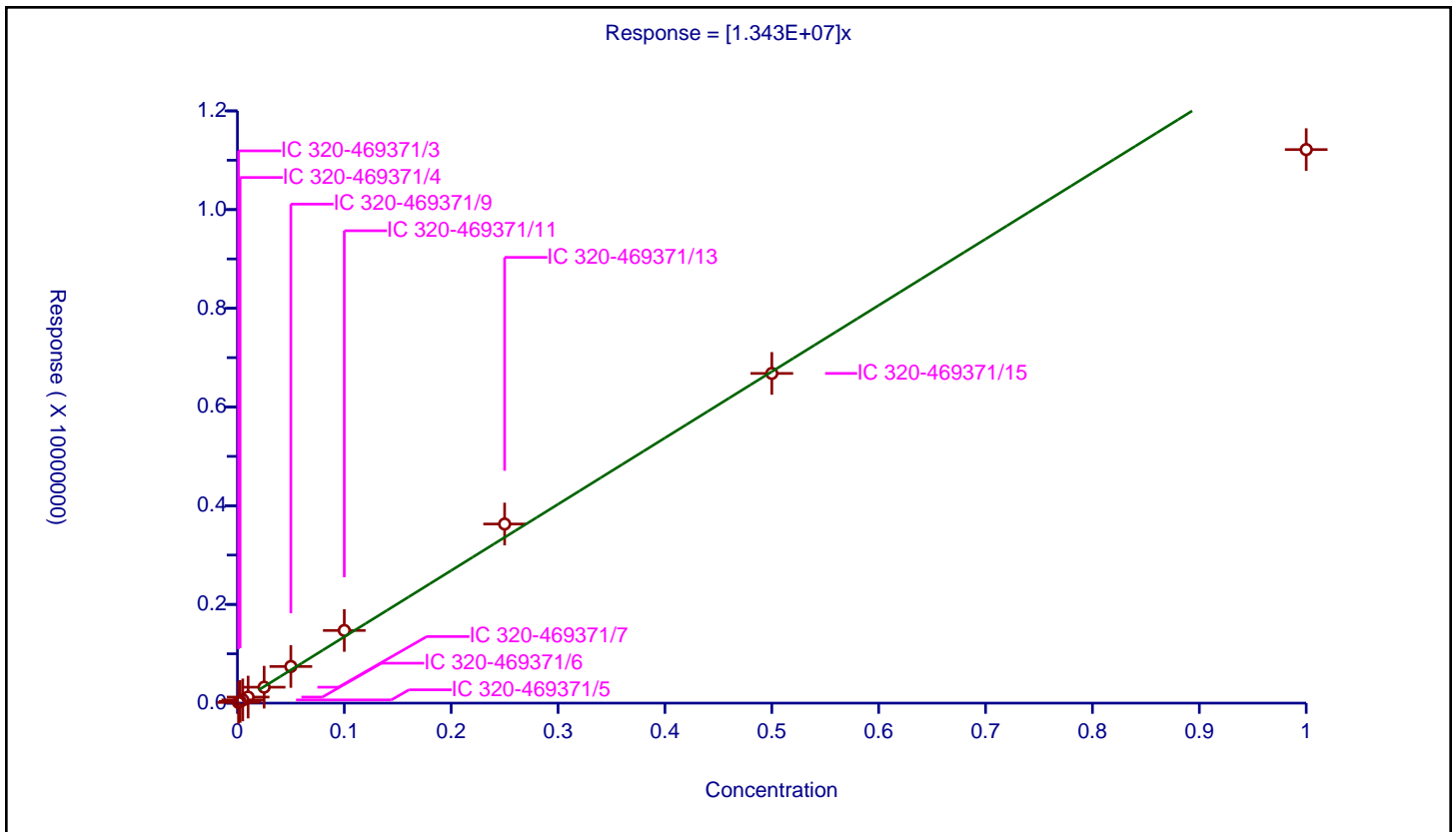
/ PS Acid

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.343E+07

Error Coefficients	
Standard Error:	746000
Relative Standard Error:	8.5
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	13693.0			13693000.0	Y
2	IC 320-469371/4	0.0025	34498.0			13799200.0	Y
3	IC 320-469371/5	0.005	64826.0			12965200.0	Y
4	IC 320-469371/6	0.01	123017.0			12301700.0	Y
5	IC 320-469371/7	0.025	322715.0			12908600.0	Y
6	IC 320-469371/9	0.05	742261.0			14845220.0	Y
7	IC 320-469371/11	0.1	1472654.0			14726540.0	Y
8	IC 320-469371/13	0.25	3629386.0			14517544.0	Y
9	IC 320-469371/15	0.5	6680628.0			13361256.0	Y
10	IC 320-469371/16	1.0	11215856.0			11215856.0	Y



Calibration

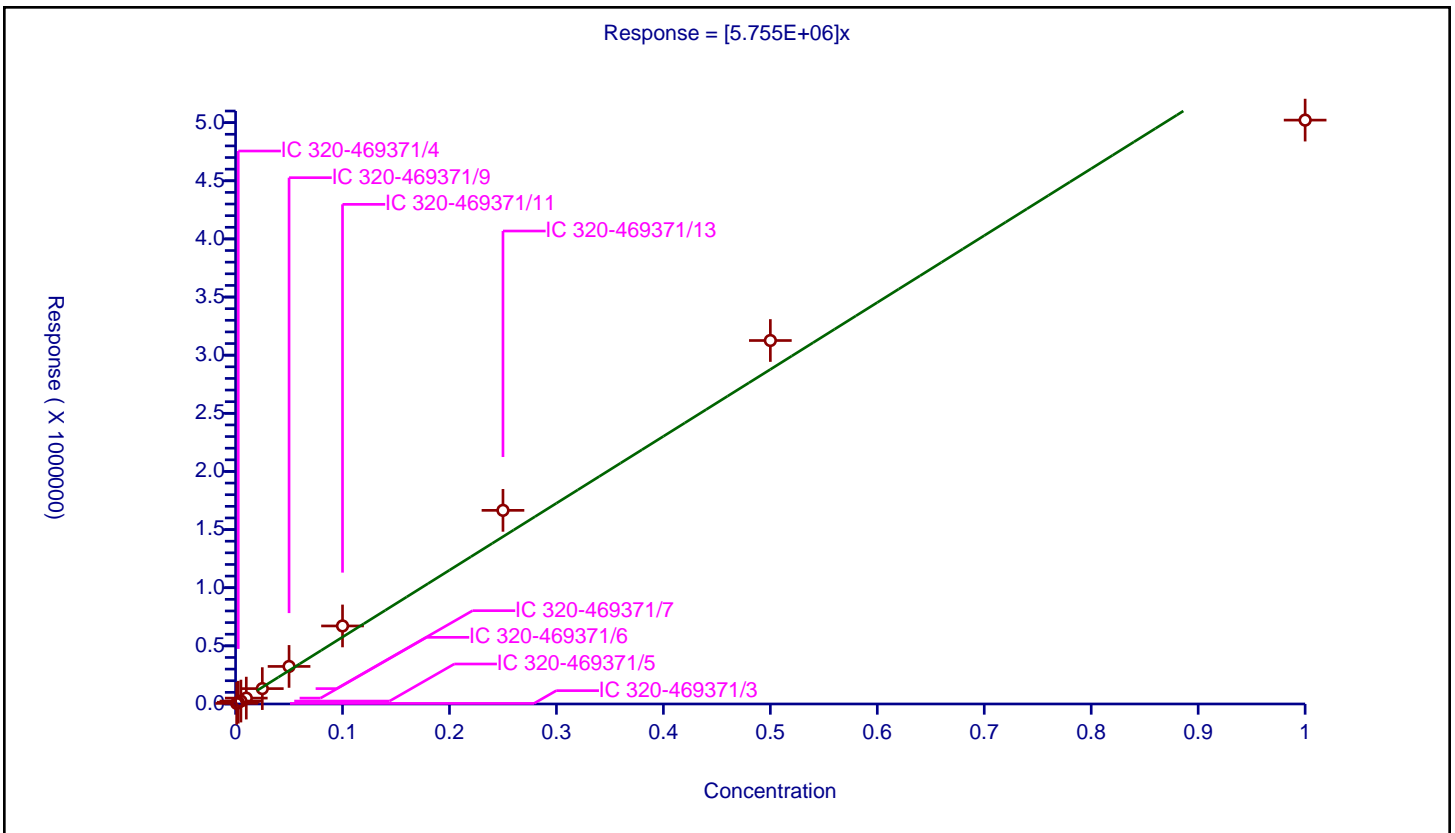
/ TAF

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.755E+06

Error Coefficients	
Standard Error:	271000
Relative Standard Error:	12.7
Correlation Coefficient:	0.985
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-469371/3	0.001	5041.0			5041000.0	Y
2	IC 320-469371/4	0.0025	15061.0			6024400.0	Y
3	IC 320-469371/5	0.005	25157.0			5031400.0	Y
4	IC 320-469371/6	0.01	50589.0			5058900.0	Y
5	IC 320-469371/7	0.025	132222.0			5288880.0	Y
6	IC 320-469371/9	0.05	323035.0			6460700.0	Y
7	IC 320-469371/11	0.1	671219.0			6712190.0	Y
8	IC 320-469371/13	0.25	1665364.0			6661456.0	Y
9	IC 320-469371/15	0.5	3126092.0			6252184.0	Y
10	IC 320-469371/16	1.0	5021736.0			5021736.0	Y



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1
 SDG No.: _____
 Lab Sample ID: ICV 320-468521/17 Calibration Date: 03/08/2021 19:10
 Instrument ID: A12 Calib Start Date: 03/08/2021 14:45
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 03/08/2021 18:35
 Lab File ID: 2021.03.08_A12_TB3_ICAL_018.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PFMOAA	Ave	11226068	11034110		98.3	100	-1.7	30.0
R-EVE	Ave	5914403	5576570		94.3	100	-5.7	50.0
R-PSDA	Ave	2679890	2335720		87.2	100	-12.8	50.0
Hydrolyzed PSDA	Ave	10098398	7936710		78.6	100	-21.4	50.0
PMPA	Ave	17201367	17032680		99.0	100	-1.0	30.0
NVHOS	Ave	5299469	4949150		93.4	100	-6.6	30.0
PFO2HxA	Ave	12587489	12114640		96.2	100	-3.8	30.0
PEPA	Ave	5148742	4552480		88.4	100	-11.6	30.0
PES	Ave	17753738	16299080		91.8	100	-8.2	30.0
PFECA B	Ave	8599515	8785350		102	100	2.2	30.0
PFO3OA	Ave	3391331	3703770		109	100	9.2	30.0
HFPO-DA	AveID	1.031	0.9645		93.6	100	-6.4	40.0
R-PSDCA	Ave	50599756	44215190		87.4	100	-12.6	30.0
Hydro-EVE Acid	Ave	65218805	64304410		98.6	100	-1.4	30.0
Perfluoroheptanoic acid	AveID	1.097	1.002		91.2	100	-8.7	40.0
Hydro-PS Acid	Ave	23585845	22315280		94.6	100	-5.4	30.0
PFECA G	Ave	4517205	3366360		74.5	100	-25.5	30.0
PFO4DA	Ave	5194562	4297310		82.7	100	-17.3	30.0
EVE Acid	Ave	38431313	38966610		101	100	1.4	30.0
PS Acid	Ave	10385008	9231780		88.9	100	-11.1	30.0
PFO5DA	Ave	4384632	5252410		120	100	19.8	50.0
13C3 HFPO-DA	Ave	6324778	6117748		242	250	-3.3	50.0
13C4 PFHpA	Ave	27130897	25224816		232	250	-7.0	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_018.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 08-Mar-2021 19:10:44 ALS Bottle#: 18 Worklist Smp#: 17
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: ICV (49)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3
 Method: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 09-Mar-2021 07:11:06 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1636

First Level Reviewer: fariasa Date: 09-Mar-2021 06:38:34

Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.240	4.337	-0.097		1103411	0.0983		163		M
2 R-EVE										
405.00 > 217.00	6.426	6.591	-0.165		557657	0.0943		9378		
3 R-PSDA										
440.90 > 241.00	6.486	6.639	-0.153		233572	0.0872		3281		
4 Hydrolyzed PSDA										
439.00 > 343.00	6.546	6.710	-0.164		793671	0.0786		12684		
23 PMPA										
229.00 > 185.00	6.732	6.876	-0.144		1703268	0.0990		1655		
5 NVHOS										
297.00 > 135.00	7.111	7.260	-0.149		494915	0.0934		10858		
6 PFO2HxA										
245.00 > 85.00	7.706	7.862	-0.156		1211464	0.0962		13463		
22 PEPA										
278.90 > 234.90	8.295	8.431	-0.136		455248	0.0884		2016		
7 PES										
314.90 > 135.00	8.555	8.715	-0.160		1629908	0.0918		39808		
8 PFECA B										
295.00 > 201.00	8.797	8.925	-0.128		878535	0.1022		16876		
9 PFO3OA										
310.90 > 85.00	9.045	9.190	-0.145		370377	0.1092		7293		
D 10 13C3 HFPO-DA										M
287.00 > 169.00	9.130	9.274	-0.144		1529437	0.2418		96.7	30792	M
11 HPFO-DA										
285.00 > 169.00	9.158	9.302	-0.144	1.003	590065	0.0936		15704		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.522	9.644	-0.122		4421519	0.0874			54892	
13 Hydro-EVE Acid										
427.00 > 282.90	9.555	9.701	-0.146		6430441	0.0986			33521	
D 14 13C4 PFHpA										M
367.00 > 322.00	9.555	9.701	-0.146		6306204	0.2324		93.0	95264	M
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.555	9.701	-0.146	1.000	2526489	0.0912	Target=0.00		10609	
363.00 > 169.00	9.555	9.701	-0.146	1.000	731099		3.46(0.00-0.00)		13896	
15 Hydro-PS Acid										
463.00 > 262.90	9.587	9.730	-0.143		2231528	0.0946			36244	
17 PFECA G										
378.90 > 184.90	9.673	9.816	-0.143		336636	0.0745			8973	
18 PFO4DA										
376.90 > 85.00	9.846	9.988	-0.142		429731	0.0827			8601	
20 EVE Acid										
407.00 > 262.90	9.903	10.046	-0.143		3896661	0.1014			52239	
19 PS Acid										
443.00 > 146.90	9.903	10.046	-0.143		923178	0.0889			18859	
21 TAF										
442.90 > 85.00	10.425	10.565	-0.140		525241	0.1198			2549	

QC Flag Legend

Processing Flags

Review Flags

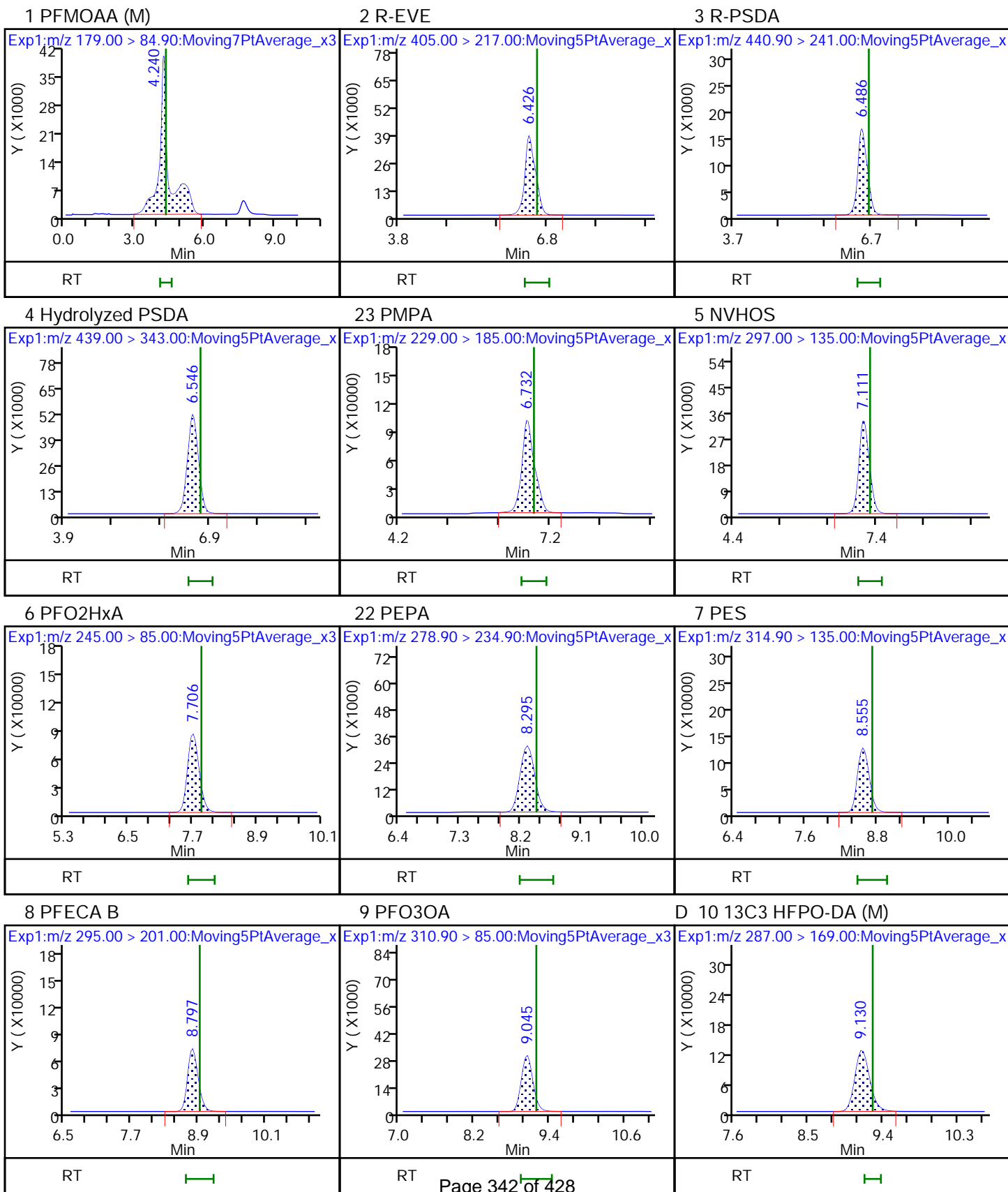
M - Manually Integrated

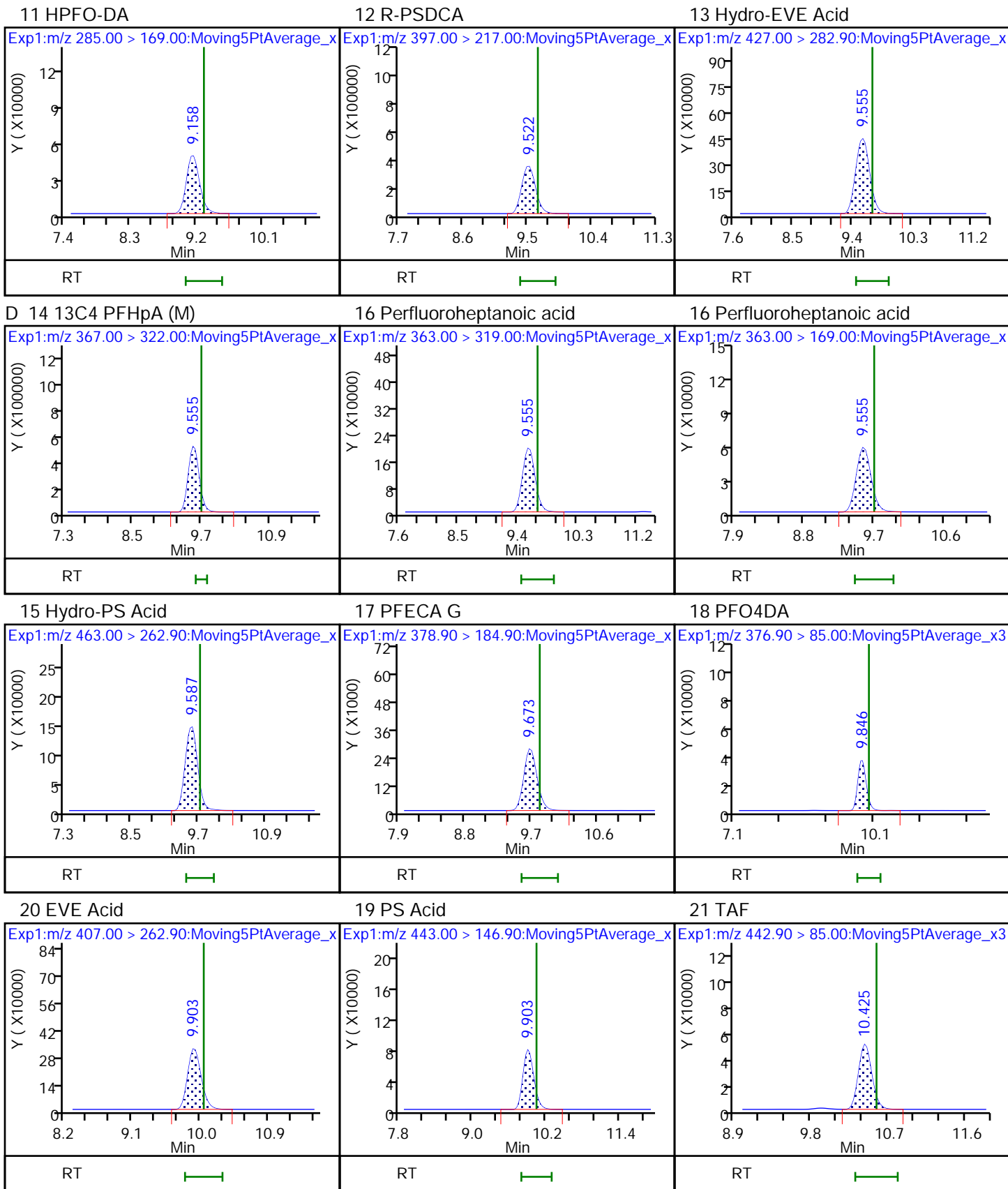
Reagents:

LCTB3_LLICV_00049

Amount Added: 1.00

Units: mL





Eurofins TestAmerica, Sacramento

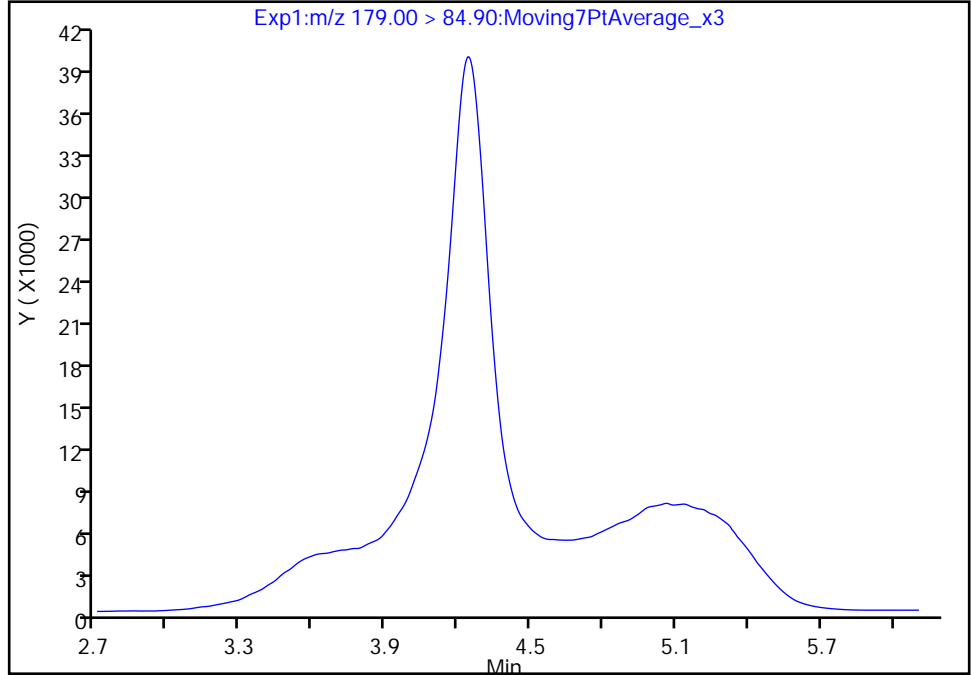
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Injection Date: 08-Mar-2021 19:10:44 Instrument ID: A12
Lims ID: ICV
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 18 Worklist Smp#: 17
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

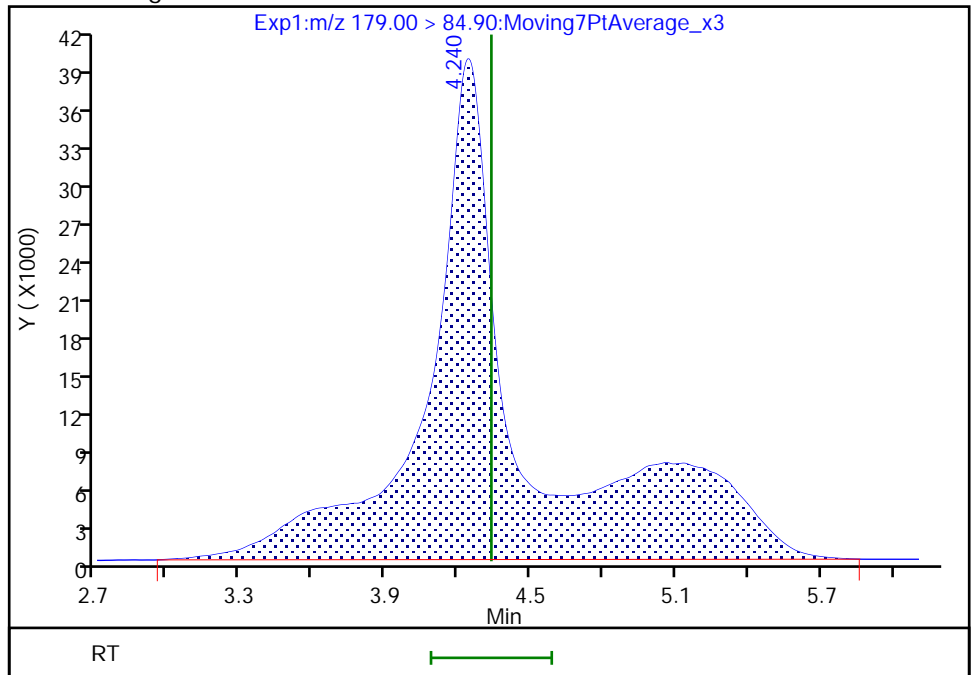
Not Detected
Expected RT: 4.34

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 1103411
Amount: 0.098290
Amount Units: ng/ml



Reviewer: fariasa, 09-Mar-2021 06:38:24
Audit Action: Manually Integrated

Audit Reason: Assign Peak
Page 345 of 428

Eurofins TestAmerica, Sacramento

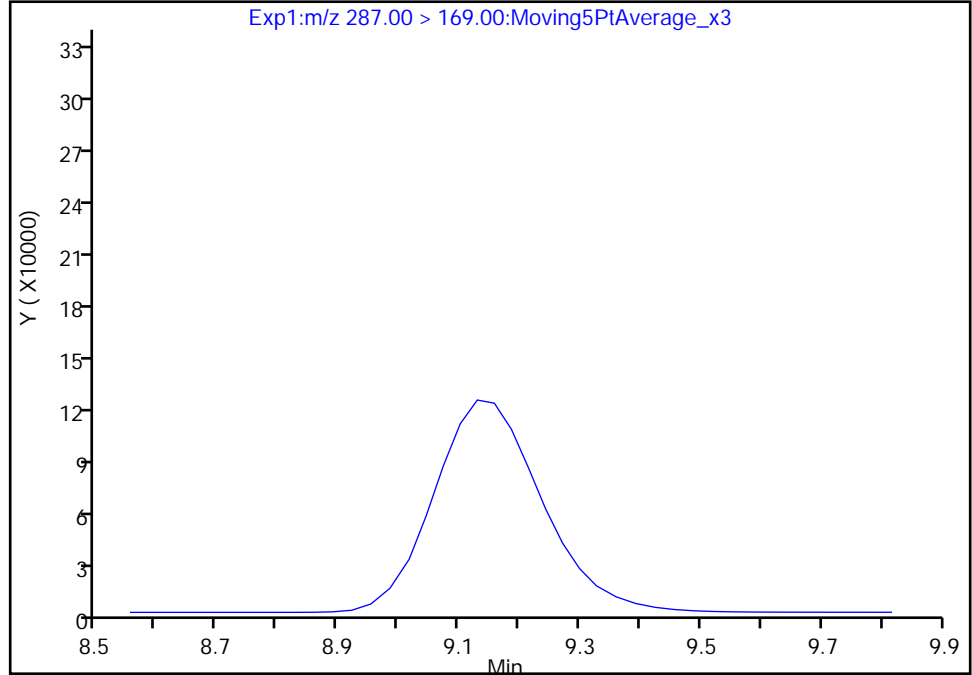
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_018.d
Injection Date: 08-Mar-2021 19:10:44 Instrument ID: A12
Lims ID: ICV
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 18 Worklist Smp#: 17
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

D 10 13C3 HFPO-DA, CAS: STL02255

Signal: 1

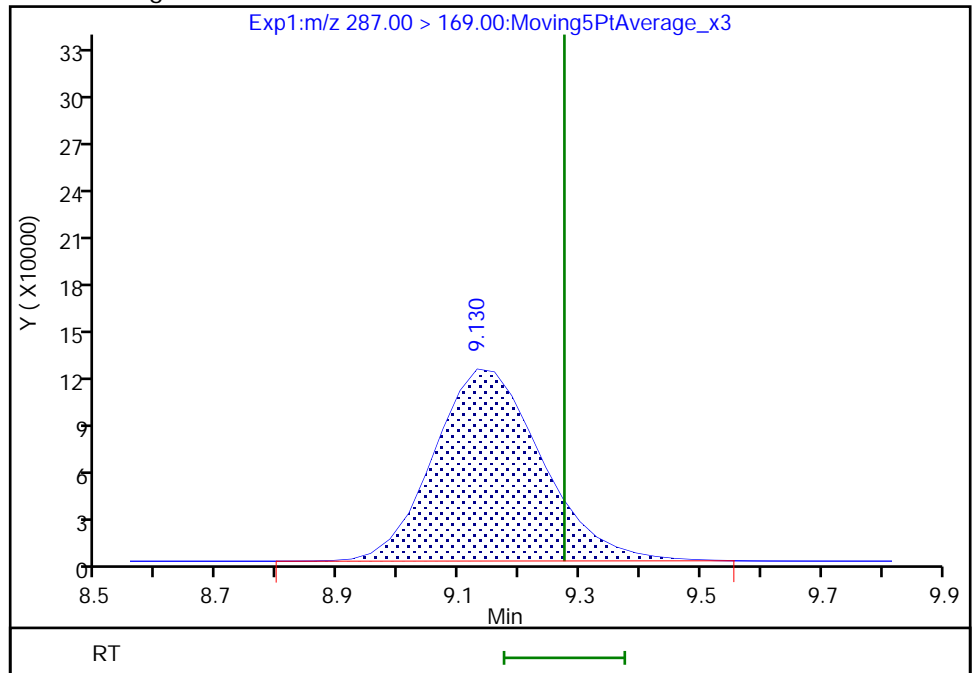
Not Detected
Expected RT: 9.27

Processing Integration Results



Manual Integration Results

RT: 9.13
Area: 1529437
Amount: 0.241817
Amount Units: ng/ml



Eurofins TestAmerica, Sacramento

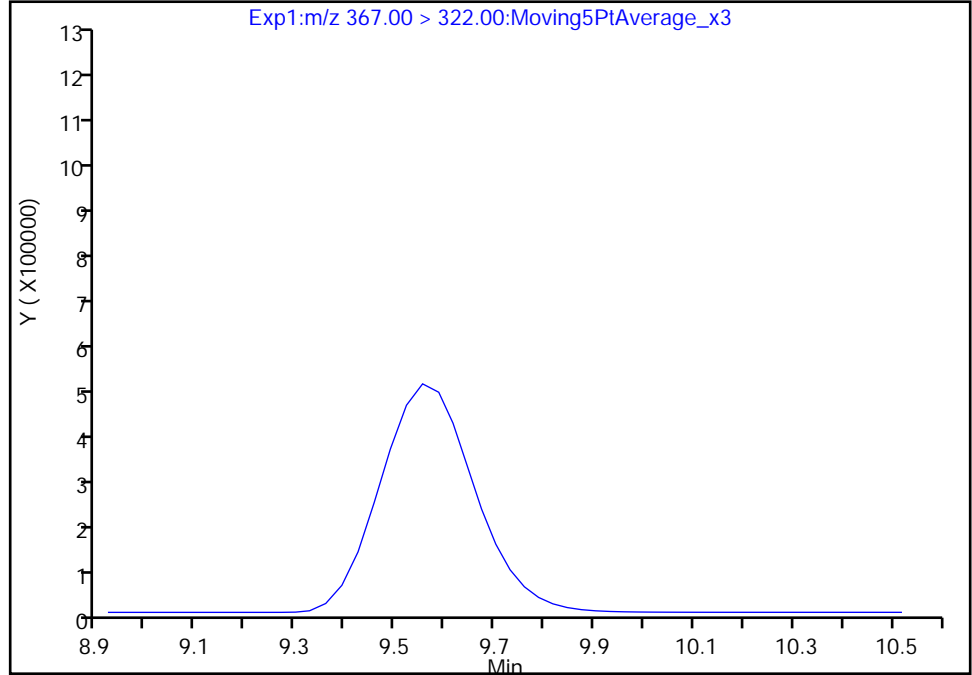
Data File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_018.d
Injection Date: 08-Mar-2021 19:10:44 Instrument ID: A12
Lims ID: ICV
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 18 Worklist Smp#: 17
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

D 14 13C4 PFHpA, CAS: STL01892

Signal: 1

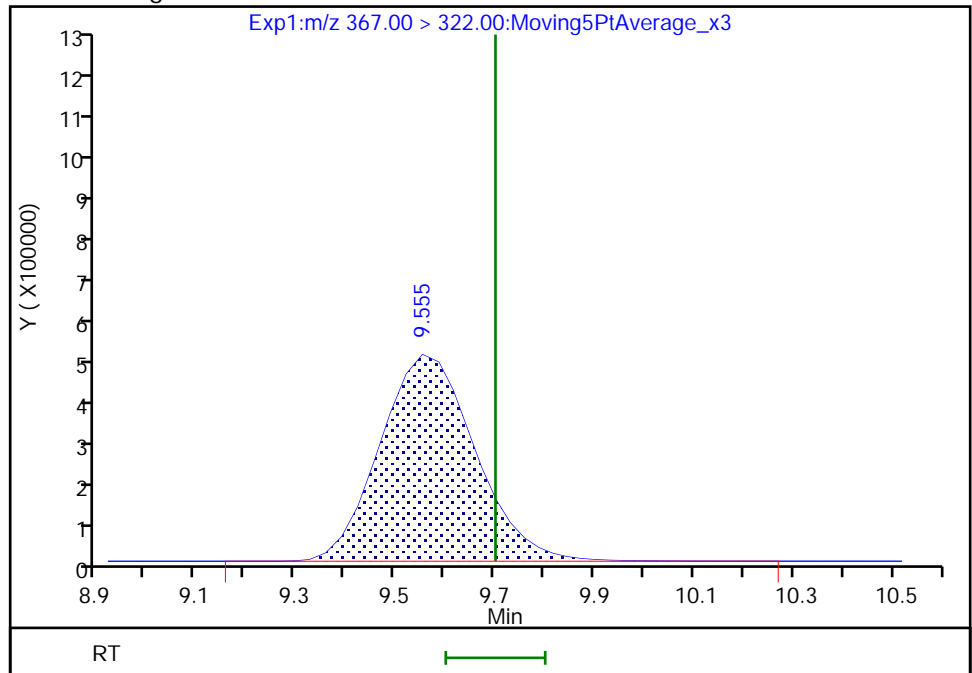
Not Detected
Expected RT: 9.70

Processing Integration Results



Manual Integration Results

RT: 9.55
Area: 6306204
Amount: 0.232436
Amount Units: ng/ml



Reviewer: fariasa, 09-Mar-2021 06:38:21
Audit Action: Manually Integrated

Audit Reason: Assign Peak
Page 347 of 428

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1
 SDG No.: _____
 Lab Sample ID: CCV 320-468770/1 Calibration Date: 03/09/2021 23:37
 Instrument ID: A12 Calib Start Date: 03/08/2021 14:45
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 03/08/2021 18:35
 Lab File ID: 2021.03.09_TB3_A12_AB_029.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PFMOAA	Ave	11226068	10879800		72.7	75.0	-3.1	30.0
R-EVE	Ave	5914403	6327840		80.2	75.0	7.0	50.0
R-PSDA	Ave	2679890	2679547		75.0	75.0	-0.0	50.0
Hydrolyzed PSDA	Ave	10098398	10034320		74.5	75.0	-0.6	50.0
PMPA	Ave	17201367	17252027		75.2	75.0	0.3	30.0
NVHOS	Ave	5299469	5653987		80.0	75.0	6.7	30.0
PFO2HxA	Ave	12587489	13197893		78.6	75.0	4.8	30.0
PEPA	Ave	5148742	4998840		72.8	75.0	-2.9	30.0
PES	Ave	17753738	16876680		71.3	75.0	-4.9	30.0
PFECA B	Ave	8599515	9422027		82.2	75.0	9.6	30.0
PFO3OA	Ave	3391331	3558867		78.7	75.0	4.9	30.0
HFPO-DA	AveID	1.031	1.038		75.5	75.0	0.7	40.0
R-PSDCA	Ave	50599756	50207453		74.4	75.0	-0.8	30.0
Hydro-EVE Acid	Ave	65218805	71025547		81.7	75.0	8.9	30.0
Hydro-PS Acid	Ave	23585845	23298773		74.1	75.0	-1.2	30.0
Perfluoroheptanoic acid	AveID	1.097	1.091		74.5	75.0	-0.5	40.0
PFECA G	Ave	4517205	5080547		84.4	75.0	12.5	30.0
PFO4DA	Ave	5194562	6214093		89.7	75.0	19.6	30.0
EVE Acid	Ave	38431313	44522467		86.9	75.0	15.8	30.0
PS Acid	Ave	10385008	11359240		82.0	75.0	9.4	30.0
PFO5DA	Ave	4384632	4378080		74.9	75.0	-0.1	50.0
13C3 HFPO-DA	Ave	6324778	6230520		246	250	-1.5	50.0
13C4 PFHpA	Ave	27130897	26132712		241	250	-3.7	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfms\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_029.d
 Lims ID: CCV L6.5
 Client ID:
 Sample Type: CCV
 Inject. Date: 09-Mar-2021 23:37:29 ALS Bottle#: 29 Worklist Smp#: 1
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L6.5 (29)
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3
 Method: \\chromfms\Sacramento\ChromData\A12\20210309-114713.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 10-Mar-2021 12:33:25 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICAL File: \\chromfms\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1671

First Level Reviewer: kwongg Date: 10-Mar-2021 12:33:25

Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.031	4.031	0.0		815985	0.0727		96.9	46.2	M
2 R-EVE										
405.00 > 217.00	6.388	6.388	0.0		474588	0.0802		107	7387	
3 R-PSDA										
440.90 > 241.00	6.448	6.448	0.0		200966	0.0750		100.0	4297	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.508	6.508	0.0		752574	0.0745		99.4	10702	
23 PMPA										
229.00 > 185.00	6.686	6.686	0.0		1293902	0.0752		100	1024	
5 NVHOS										
297.00 > 135.00	7.088	7.088	0.0		424049	0.0800		107	7390	
6 PFO2HxA										
245.00 > 85.00	7.677	7.677	0.0		989842	0.0786		105	8280	
22 PEPA										
278.90 > 234.90	8.296	8.296	0.0		374913	0.0728		97.1	1460	
7 PES										
314.90 > 135.00	8.556	8.556	0.0		1265751	0.0713		95.1	29803	
8 PFECA B										
295.00 > 201.00	8.771	8.771	0.0		706652	0.0822		110	12995	
9 PFO3OA										
310.90 > 85.00	9.020	9.020	0.0		266915	0.0787		105	5081	
D 10 13C3 HFPO-DA										a
287.00 > 169.00	9.133	9.133	0.0		1557630	0.2463		98.5	31073	a
11 HPFO-DA										
285.00 > 169.00	9.133	9.133	0.0	1.000	484899	0.0755		101	12853	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.493	9.493	0.0		3765559	0.0744		99.2	46544	
13 Hydro-EVE Acid										
427.00 > 282.90	9.558	9.558	0.0		5326916	0.0817		109	27559	
D 14 13C4 PFHpA										a
367.00 > 322.00	9.558	9.558	0.0		6533178	0.2408		96.3	70122	a
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.558	9.558	0.0	1.000	2139224	0.0745	Target=0.00	99.4	11517	
363.00 > 169.00	9.558	9.558	0.0	1.000	604899		3.54(0.00-0.00)		11371	
15 Hydro-PS Acid										
463.00 > 262.90	9.558	9.558	0.0		1747408	0.0741		98.8	28256	
17 PFECA G										
378.90 > 184.90	9.676	9.676	0.0		381041	0.0844		112	10164	
18 PFO4DA										
376.90 > 85.00	9.820	9.820	0.0		466057	0.0897		120	9427	
20 EVE Acid										
407.00 > 262.90	9.906	9.906	0.0		3339185	0.0869		116	44904	
19 PS Acid										
443.00 > 146.90	9.906	9.906	0.0		851943	0.0820		109	17278	
21 TAF										
442.90 > 85.00	10.425	10.425	0.0		328356	0.0749		99.9	1570	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

LCTB3_LLCCV_00028

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_029.d

Injection Date: 09-Mar-2021 23:37:29

Instrument ID: A12

Lims ID: CCV L6.5

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 29

Worklist Smp#: 1

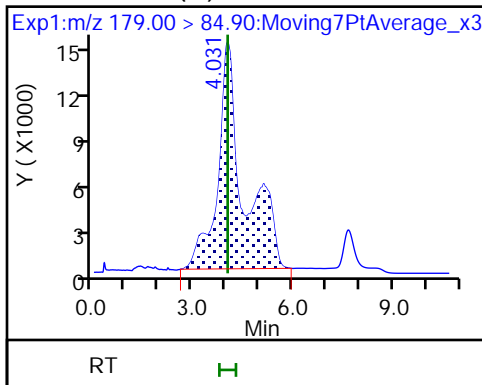
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

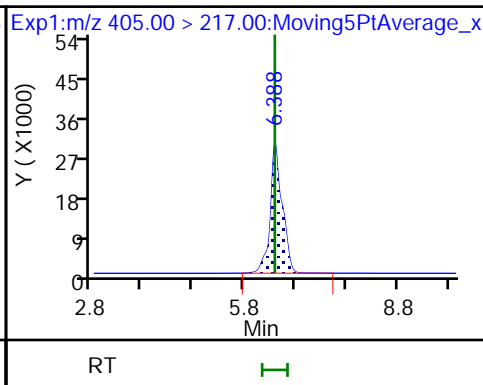
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

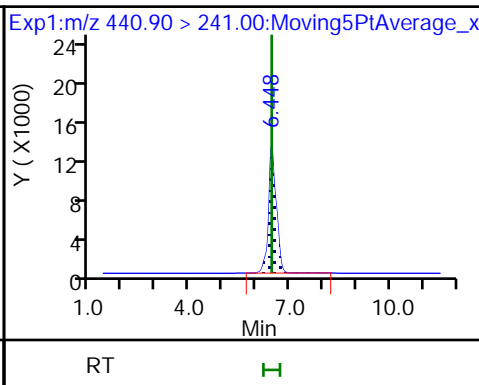
1 PFMOAA (M)



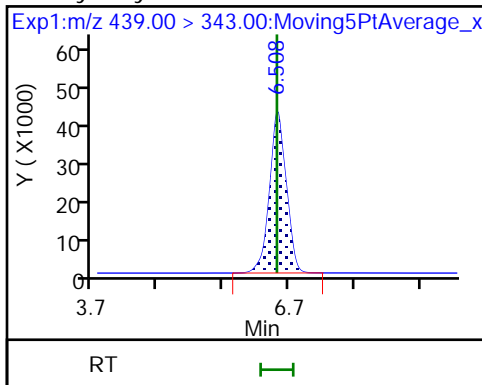
2 R-EVE



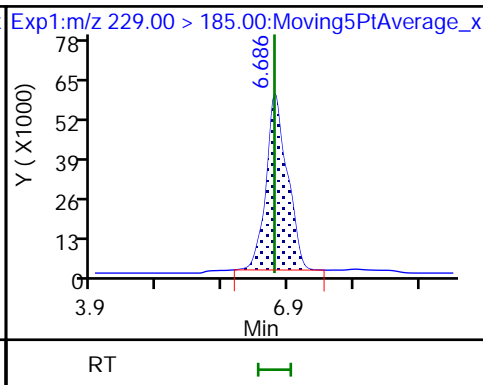
3 R-PSDA



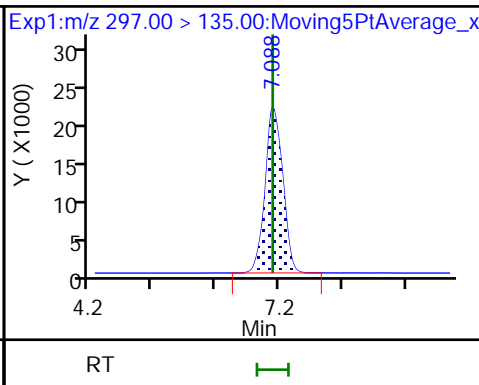
4 Hydrolyzed PSDA



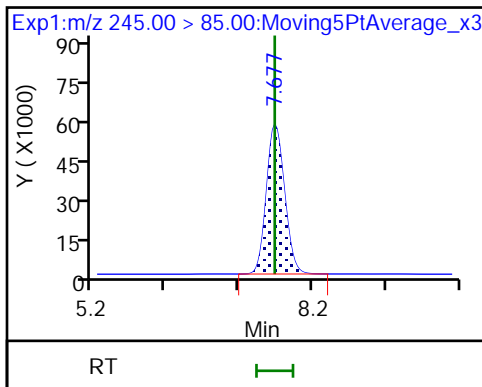
23 PMPA



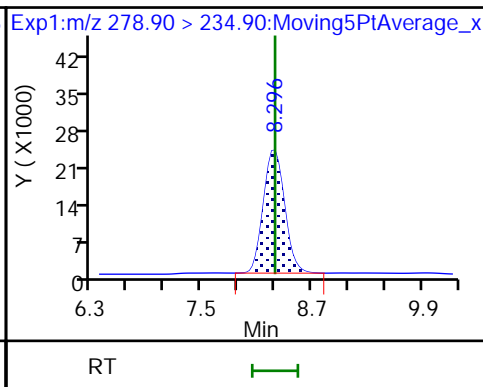
5 NVHOS



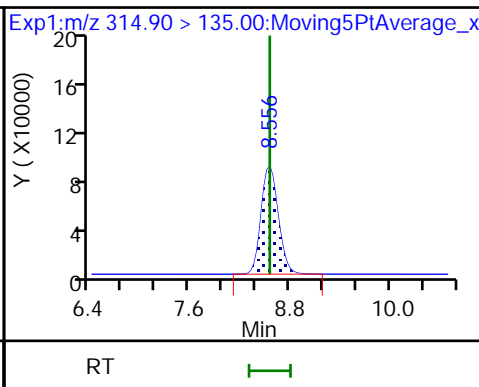
6 PFO2HxA



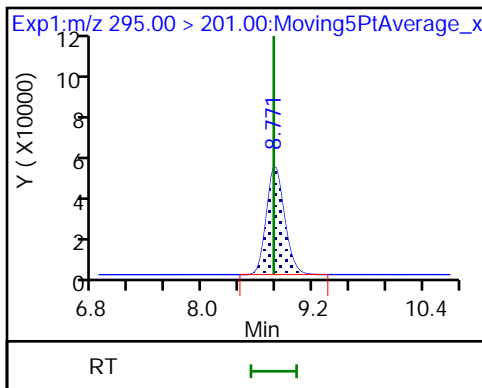
22 PEPA



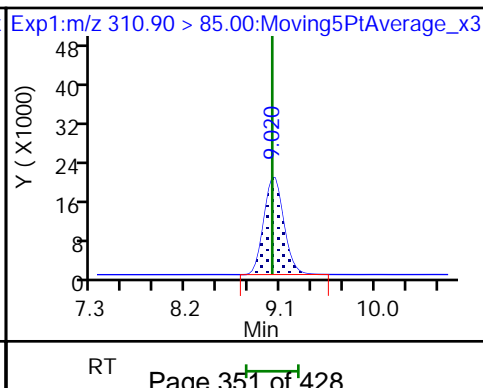
7 PES



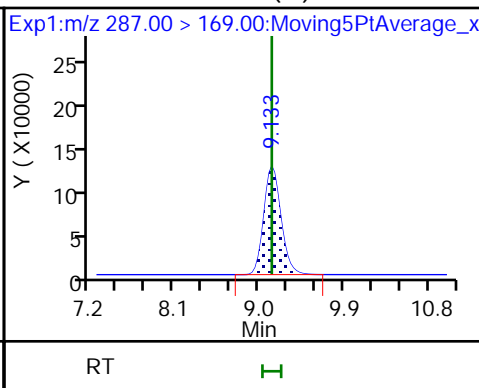
8 PFECA B

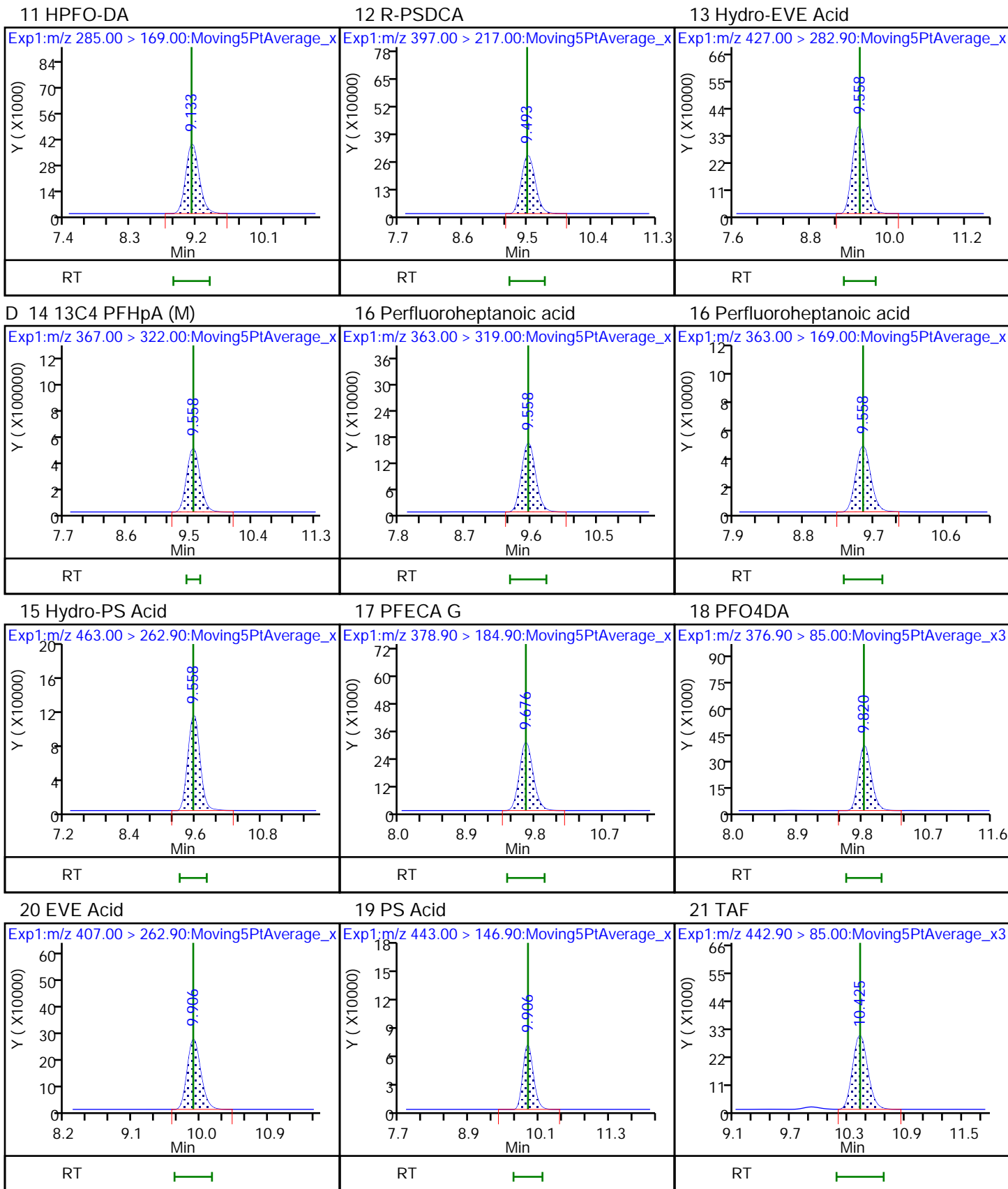


9 PFO3OA



D 10 13C3 HFPO-DA (M)





Eurofins TestAmerica, Sacramento

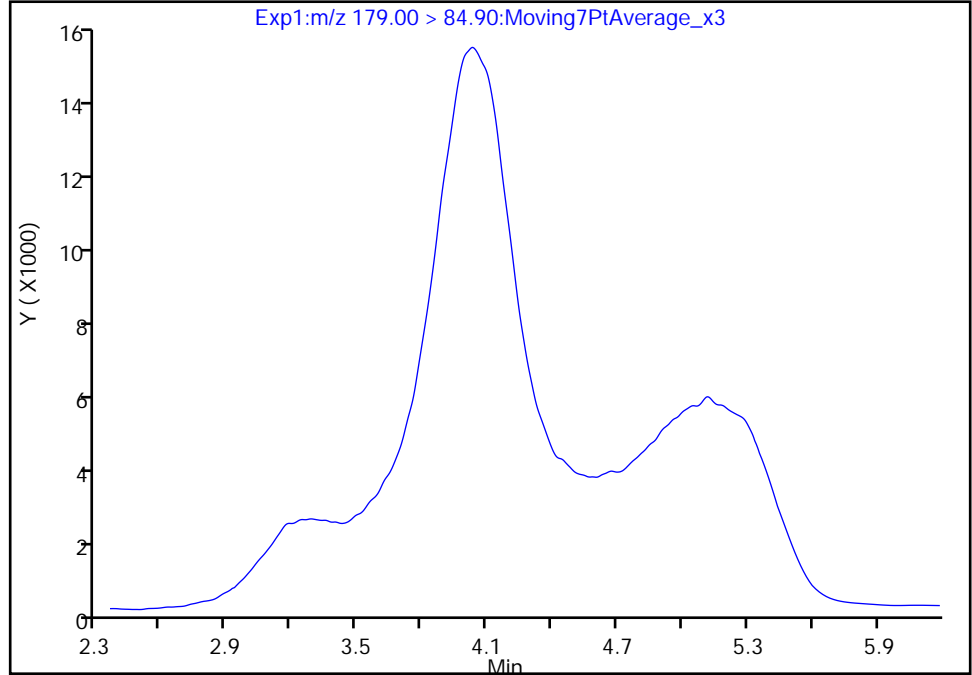
Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_029.d
Injection Date: 09-Mar-2021 23:37:29 Instrument ID: A12
Lims ID: CCV L6.5
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 29 Worklist Smp#: 1
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

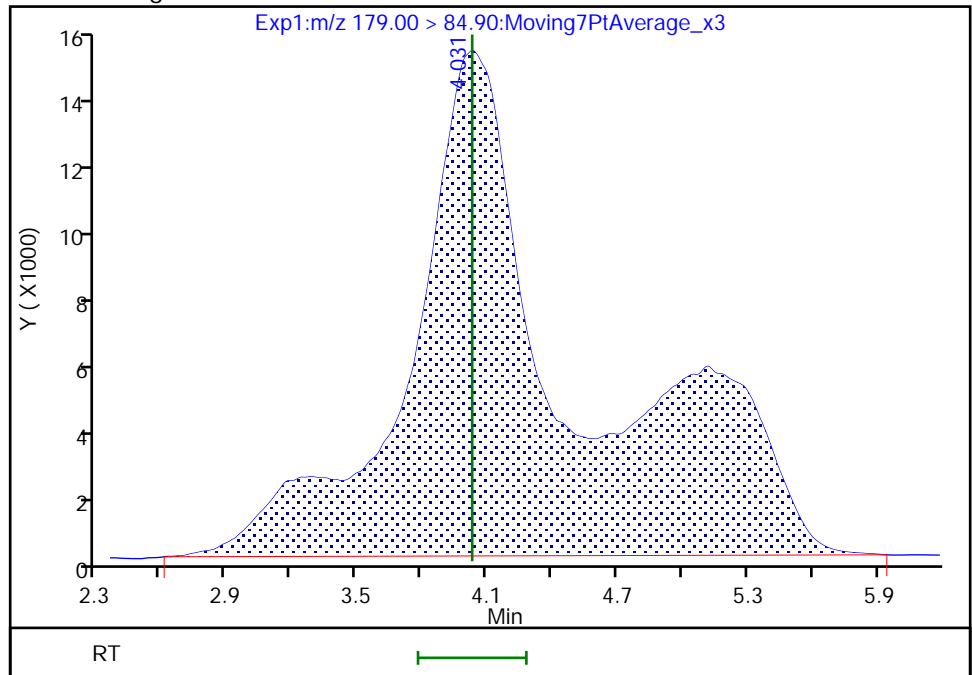
Not Detected
Expected RT: 4.03

Processing Integration Results



Manual Integration Results

RT: 4.03
Area: 815985
Amount: 0.072687
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 10-Mar-2021 15:13:04
Audit Action: Manually Integrated

Audit Reason: Baseline
Page 354 of 428

Eurofins TestAmerica, Sacramento

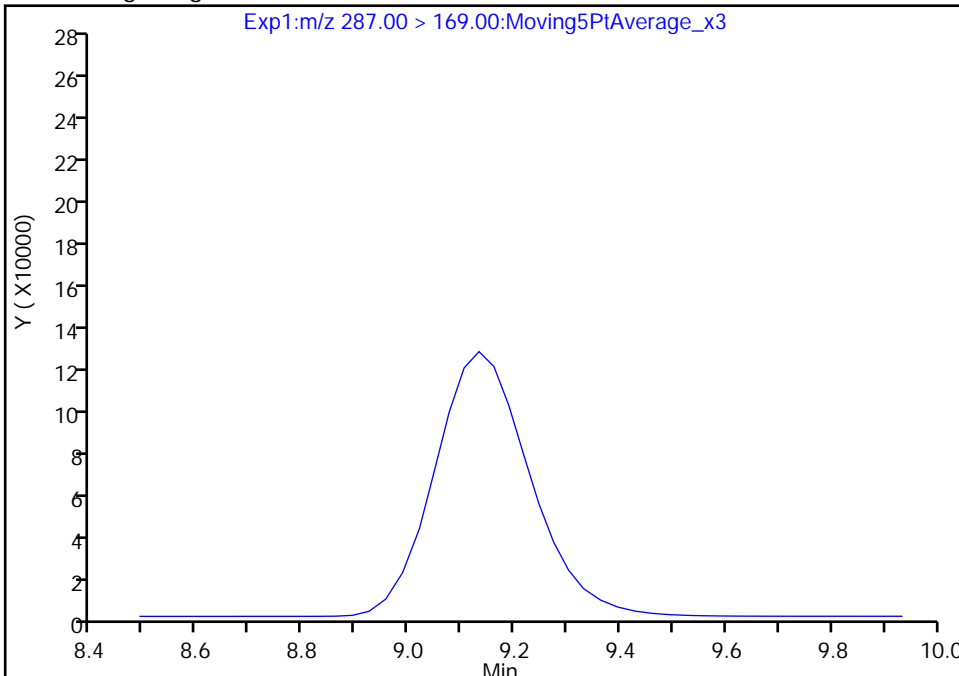
Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_029.d
Injection Date: 09-Mar-2021 23:37:29 Instrument ID: A12
Lims ID: CCV L6.5
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 29 Worklist Smp#: 1
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

D 10 13C3 HFPO-DA, CAS: STL02255

Signal: 1

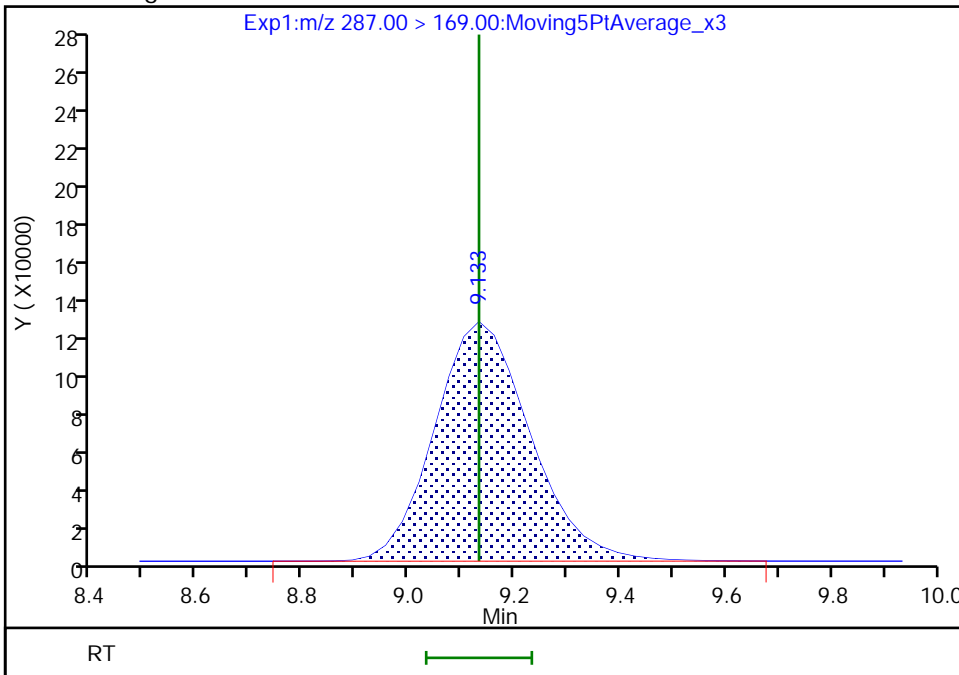
Not Detected
Expected RT: 9.13

Processing Integration Results



Manual Integration Results

RT: 9.13
Area: 1557630
Amount: 0.246274
Amount Units: ng/ml



Eurofins TestAmerica, Sacramento

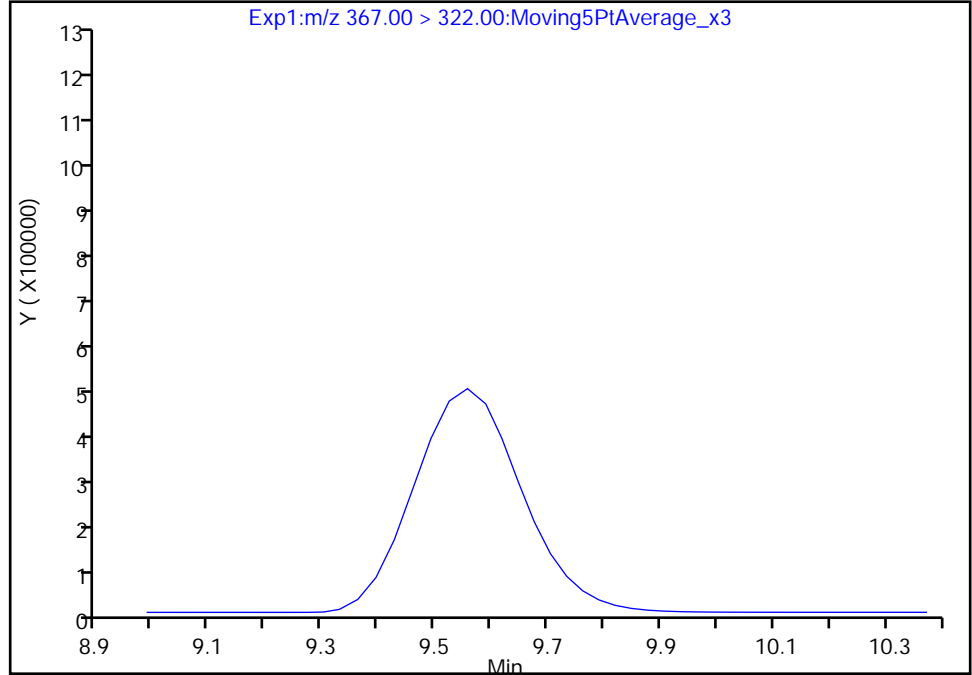
Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_029.d
Injection Date: 09-Mar-2021 23:37:29 Instrument ID: A12
Lims ID: CCV L6.5
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 29 Worklist Smp#: 1
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

D 14 13C4 PFHpA, CAS: STL01892

Signal: 1

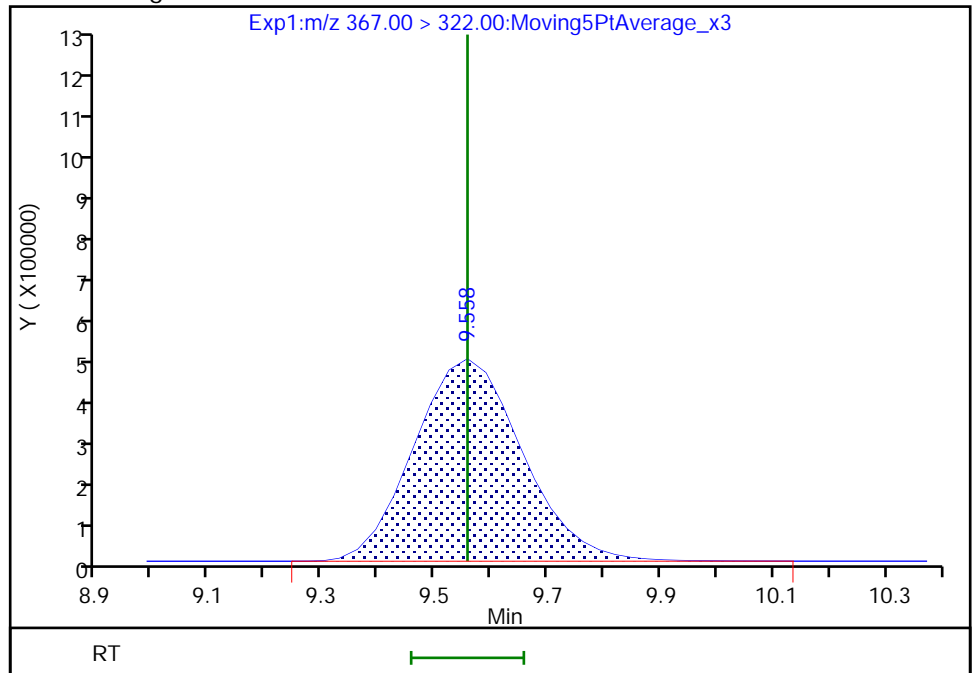
Not Detected
Expected RT: 9.56

Processing Integration Results



Manual Integration Results

RT: 9.56
Area: 6533178
Amount: 0.240802
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 10-Mar-2021 15:12:56

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1
 SDG No.: _____
 Lab Sample ID: CCV 320-468770/14 Calibration Date: 03/10/2021 03:26
 Instrument ID: A12 Calib Start Date: 03/08/2021 14:45
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 03/08/2021 18:35
 Lab File ID: 2021.03.09_TB3_A12_AB_042.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PFMOAA	Ave	11226068	9924293		66.3	75.0	-11.6	30.0
R-EVE	Ave	5914403	6243933		79.2	75.0	5.6	50.0
R-PSDA	Ave	2679890	2580680		72.2	75.0	-3.7	50.0
Hydrolyzed PSDA	Ave	10098398	9846200		73.1	75.0	-2.5	50.0
PMPA	Ave	17201367	16449960		71.7	75.0	-4.4	30.0
NVHOS	Ave	5299469	5438920		77.0	75.0	2.6	30.0
PFO2HxA	Ave	12587489	12289120		73.2	75.0	-2.4	30.0
PEPA	Ave	5148742	4916720		71.6	75.0	-4.5	30.0
PES	Ave	17753738	17184720		72.6	75.0	-3.2	30.0
PFECA B	Ave	8599515	8208627		71.6	75.0	-4.5	30.0
PFO3OA	Ave	3391331	3368427		74.5	75.0	-0.7	30.0
HFPO-DA	AveID	1.031	1.029		74.9	75.0	-0.2	40.0
R-PSDCA	Ave	50599756	51959453		77.0	75.0	2.7	30.0
Hydro-EVE Acid	Ave	65218805	66628813		76.6	75.0	2.2	30.0
Perfluoroheptanoic acid	AveID	1.097	0.9808		67.0	75.0	-10.6	40.0
Hydro-PS Acid	Ave	23585845	22782493		72.4	75.0	-3.4	30.0
PFECA G	Ave	4517205	4693027		77.9	75.0	3.9	30.0
PFO4DA	Ave	5194562	5723507		82.6	75.0	10.2	30.0
EVE Acid	Ave	38431313	42372253		82.7	75.0	10.3	30.0
PS Acid	Ave	10385008	10768067		77.8	75.0	3.7	30.0
PFO5DA	Ave	4384632	4340880		74.3	75.0	-1.0	50.0
13C3 HFPO-DA	Ave	6324778	6380864		252	250	0.9	50.0
13C4 PFHpA	Ave	27130897	28985904		267	250	6.8	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_042.d
 Lims ID: CCV L6.5
 Client ID:
 Sample Type: CCV
 Inject. Date: 10-Mar-2021 03:26:48 ALS Bottle#: 42 Worklist Smp#: 14
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L6.5 (28)
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 10-Mar-2021 11:28:18 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICAL File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1671

First Level Reviewer: kwongg Date: 10-Mar-2021 11:28:18

Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.137	4.031	0.106		744322	0.0663		88.4	45.7	M
2 R-EVE										
405.00 > 217.00	6.506	6.388	0.118		468295	0.0792		106	7131	
3 R-PSDA										
440.90 > 241.00	6.566	6.448	0.118		193551	0.0722		96.3	2959	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.637	6.508	0.129		738465	0.0731		97.5	13326	
23 PMPA										
229.00 > 185.00	6.802	6.686	0.116		1233747	0.0717		95.6	788	
5 NVHOS										
297.00 > 135.00	7.205	7.088	0.117		407919	0.0770		103	6979	
6 PFO2HxA										
245.00 > 85.00	7.798	7.677	0.121		921684	0.0732		97.6	7591	
22 PEPA										
278.90 > 234.90	8.399	8.296	0.103		368754	0.0716		95.5	799	
7 PES										
314.90 > 135.00	8.653	8.556	0.097		1288854	0.0726		96.8	23134	
8 PFECA B										
295.00 > 201.00	8.890	8.771	0.119		615647	0.0716		95.5	11278	
9 PFO3OA										
310.90 > 85.00	9.130	9.020	0.110		252632	0.0745		99.3	4980	
D 10 13C3 HFPO-DA										M
287.00 > 169.00	9.243	9.133	0.110		1595216	0.2522		101	31297	M
11 HPFO-DA										
285.00 > 169.00	9.243	9.133	0.110	1.000	492299	0.0749		99.8	9628	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.587	9.493	0.094		3896959	0.0770		103	59282	
13 Hydro-EVE Acid										
427.00 > 282.90	9.645	9.558	0.087		4997161	0.0766		102	28776	
D 14 13C4 PFHpA										
367.00 > 322.00	9.645	9.558	0.087		7246476	0.2671		107	80698	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.645	9.558	0.087	1.000	2132256	0.0670	Target=0.00	89.3	5038	
363.00 > 169.00	9.645	9.558	0.087	1.000	629041		3.39(0.00-0.00)		12261	
15 Hydro-PS Acid										
463.00 > 262.90	9.673	9.558	0.115		1708687	0.0724		96.6	28145	
17 PFECA G										
378.90 > 184.90	9.759	9.676	0.083		351977	0.0779		104	9327	
18 PFO4DA										
376.90 > 85.00	9.932	9.820	0.112		429263	0.0826		110	8624	
20 EVE Acid										
407.00 > 262.90	9.989	9.906	0.083		3177919	0.0827		110	42300	
19 PS Acid										
443.00 > 146.90	9.989	9.906	0.083		807605	0.0778		104	16387	
21 TAF										
442.90 > 85.00	10.495	10.425	0.070		325566	0.0743		99.0	1604	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLCCV_00028

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_042.d

Injection Date: 10-Mar-2021 03:26:48

Instrument ID: A12

Lims ID: CCV L6.5

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 42

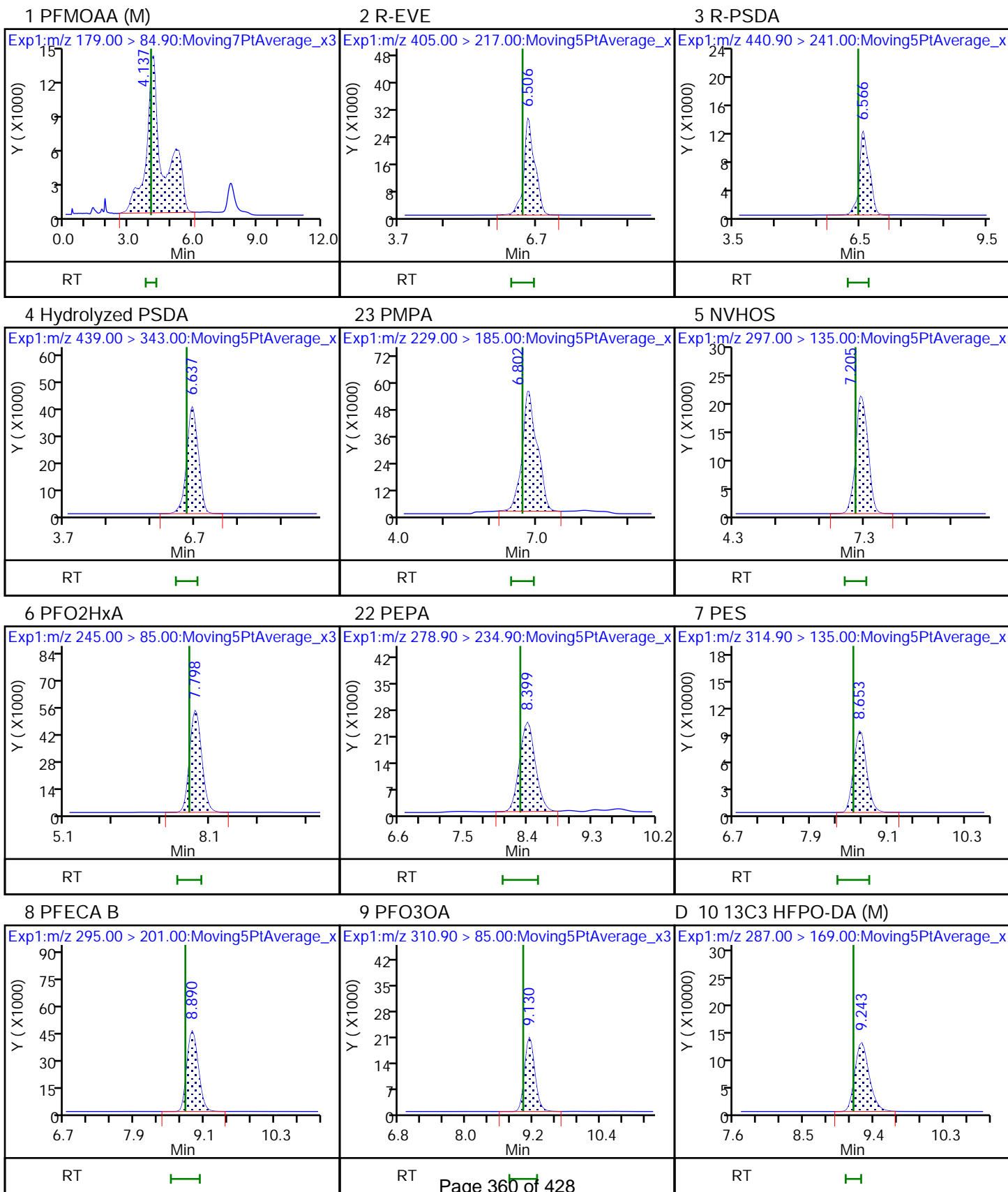
Worklist Smp#: 14

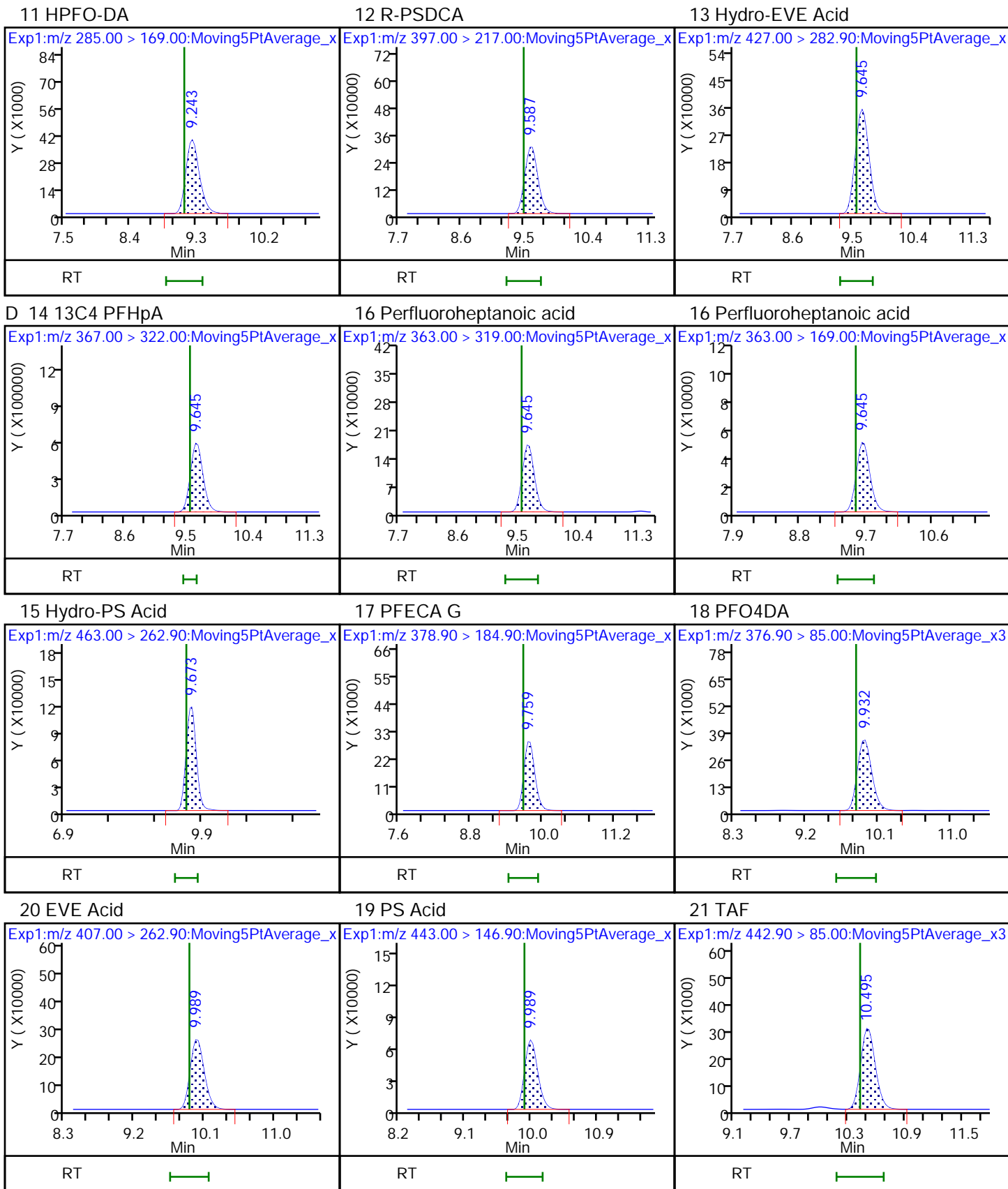
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL





Euofins TestAmerica, Sacramento

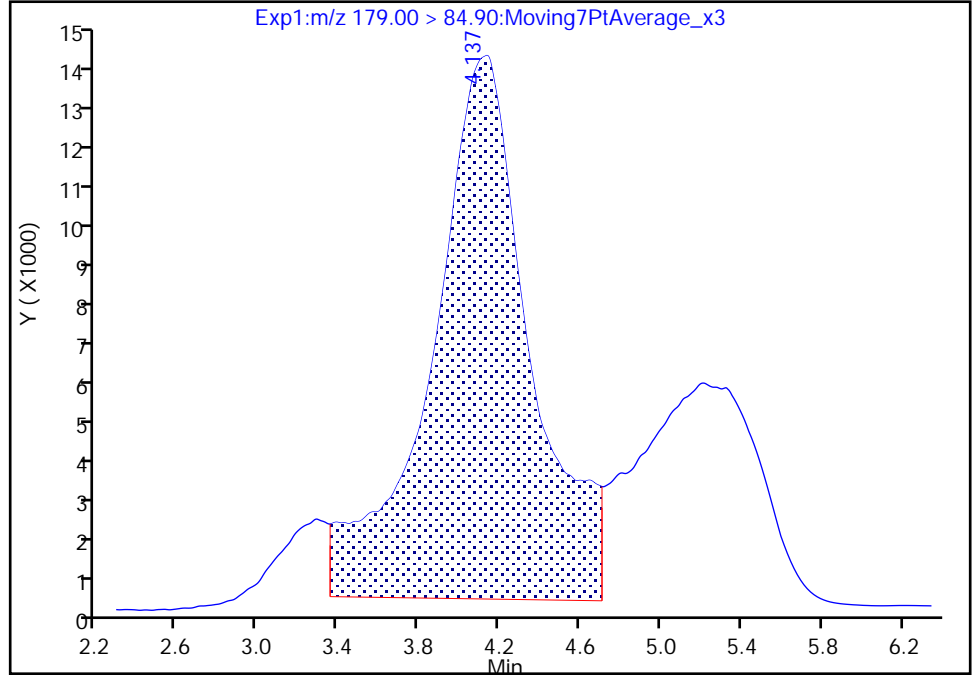
Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_042.d
 Injection Date: 10-Mar-2021 03:26:48 Instrument ID: A12
 Lims ID: CCV L6.5
 Client ID:
 Operator ID: Sac_inst_A12 ALS Bottle#: 42 Worklist Smp#: 14
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
 Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

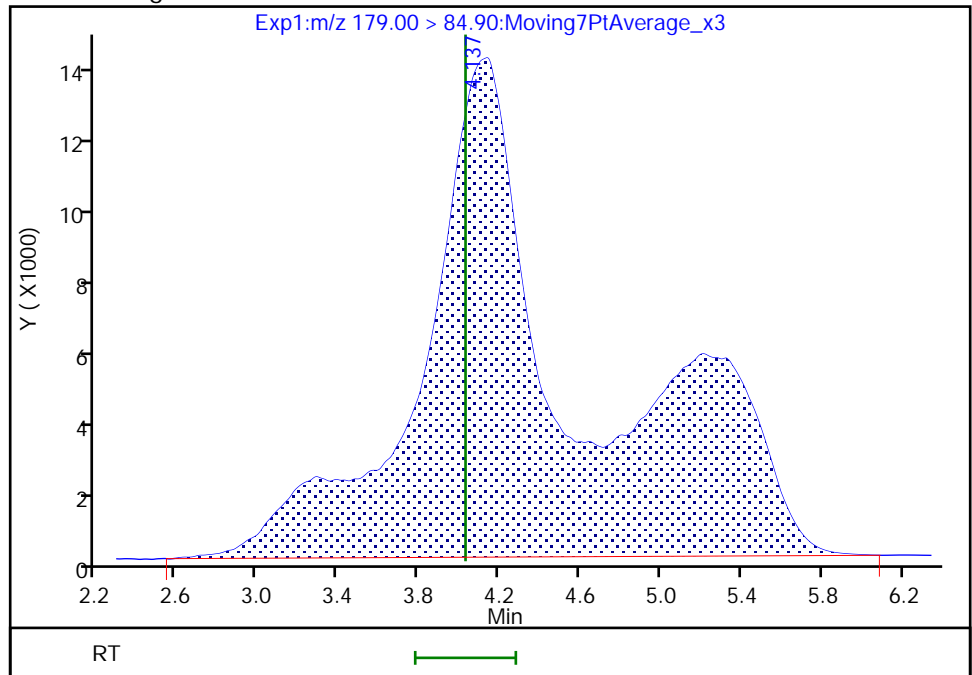
RT: 4.14
 Area: 452532
 Amount: 0.040311
 Amount Units: ng/ml

Processing Integration Results



RT: 4.14
 Area: 744322
 Amount: 0.066303
 Amount Units: ng/ml

Manual Integration Results



Reviewer: kwongg, 10-Mar-2021 11:24:35
 Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

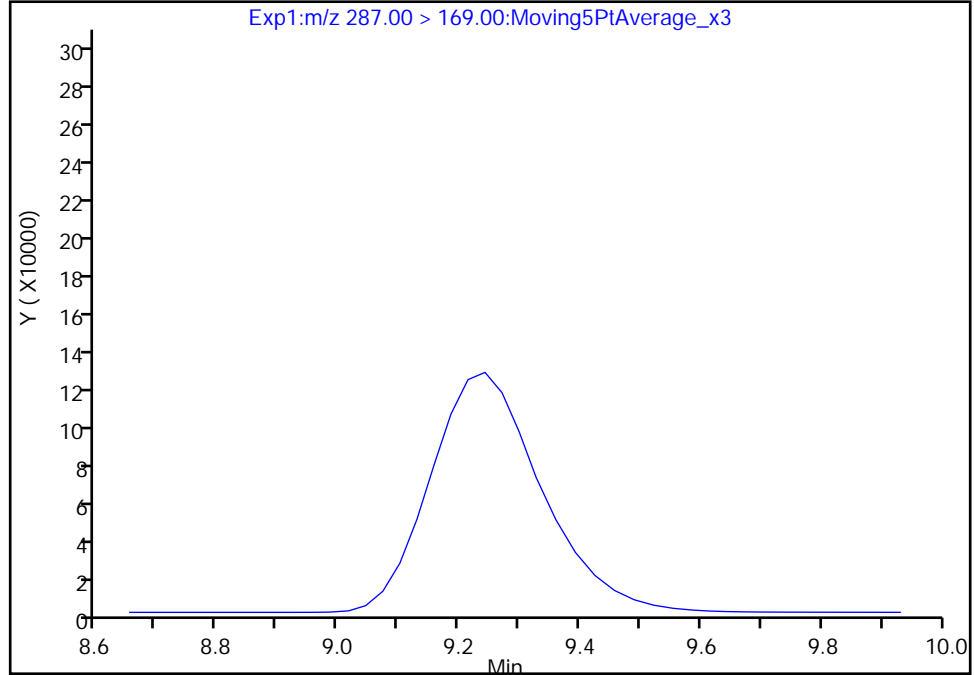
Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_042.d
Injection Date: 10-Mar-2021 03:26:48 Instrument ID: A12
Lims ID: CCV L6.5
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 42 Worklist Smp#: 14
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

D 10 13C3 HFPO-DA, CAS: STL02255

Signal: 1

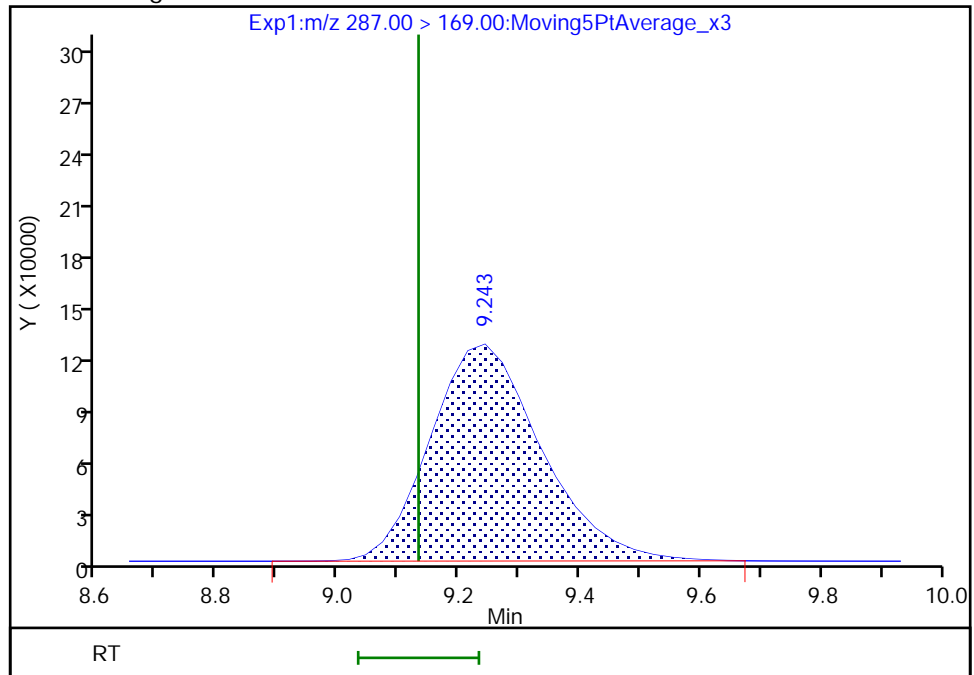
Not Detected
Expected RT: 9.13

Processing Integration Results



Manual Integration Results

RT: 9.24
Area: 1595216
Amount: 0.252217
Amount Units: ng/ml



Reviewer: kwongg, 10-Mar-2021 11:24:29
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1
 SDG No.: _____
 Lab Sample ID: CCV 320-468770/27 Calibration Date: 03/10/2021 07:16
 Instrument ID: A12 Calib Start Date: 03/08/2021 14:45
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 03/08/2021 18:35
 Lab File ID: 2021.03.09_TB3_A12_AB_055.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PFMOAA	Ave	11226068	11054653		73.9	75.0	-1.5	30.0
R-EVE	Ave	5914403	6924693		87.8	75.0	17.1	50.0
R-PSDA	Ave	2679890	2776787		77.7	75.0	3.6	50.0
Hydrolyzed PSDA	Ave	10098398	10344547		76.8	75.0	2.4	50.0
PMPA	Ave	17201367	18270427		79.7	75.0	6.2	30.0
NVHOS	Ave	5299469	5814760		82.3	75.0	9.7	30.0
PFO2HxA	Ave	12587489	13809907		82.3	75.0	9.7	30.0
PEPA	Ave	5148742	5480787		79.8	75.0	6.4	30.0
PES	Ave	17753738	18719160		79.1	75.0	5.4	30.0
PFECA B	Ave	8599515	9379200		81.8	75.0	9.1	30.0
PFO3OA	Ave	3391331	3692467		81.7	75.0	8.9	30.0
HFPO-DA	AveID	1.031	1.088		79.2	75.0	5.6	40.0
R-PSDCA	Ave	50599756	58731707		87.1	75.0	16.1	30.0
Hydro-EVE Acid	Ave	65218805	75259000		86.5	75.0	15.4	30.0
Perfluoroheptanoic acid	AveID	1.097	1.128		77.1	75.0	2.9	40.0
Hydro-PS Acid	Ave	23585845	24883733		79.1	75.0	5.5	30.0
PFECA G	Ave	4517205	5476973		90.9	75.0	21.2	30.0
PFO4DA	Ave	5194562	6380787		92.1	75.0	22.8	30.0
EVE Acid	Ave	38431313	48537387		94.7	75.0	26.3	30.0
PS Acid	Ave	10385008	11492813		83.0	75.0	10.7	30.0
PFO5DA	Ave	4384632	4594400		78.6	75.0	4.8	50.0
13C3 HFPO-DA	Ave	6324778	6427656		254	250	1.6	50.0
13C4 PFHpA	Ave	27130897	29448064		271	250	8.5	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfms\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_055.d
 Lims ID: CCV L6.5
 Client ID:
 Sample Type: CCV
 Inject. Date: 10-Mar-2021 07:16:09 ALS Bottle#: 1 Worklist Smp#: 27
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L6.5 (35)
 Misc. Info.: Plate: 1 Rack: 3
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfms\Sacramento\ChromData\A12\20210309-114713.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 10-Mar-2021 12:33:32 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICAL File: \\chromfms\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1671

First Level Reviewer: kwongg Date: 10-Mar-2021 12:33:15

Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.095	4.031	0.064		829099	0.0739		98.5	56.8	M
2 R-EVE										
405.00 > 217.00	6.527	6.388	0.139		519352	0.0878		117	10436	
3 R-PSDA										
440.90 > 241.00	6.567	6.448	0.119		208259	0.0777		104	3169	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.638	6.508	0.130		775841	0.0768		102	13942	
23 PMPA										
229.00 > 185.00	6.827	6.686	0.141		1370282	0.0797		106	1007	
5 NVHOS										
297.00 > 135.00	7.233	7.088	0.145		436107	0.0823		110	7398	
6 PFO2HxA										
245.00 > 85.00	7.799	7.677	0.122		1035743	0.0823		110	9870	
22 PEPA										
278.90 > 234.90	8.400	8.296	0.104		411059	0.0798		106	1664	
7 PES										
314.90 > 135.00	8.651	8.556	0.095		1403937	0.0791		105	24815	
8 PFECA B										
295.00 > 201.00	8.892	8.771	0.121		703440	0.0818		109	12800	
9 PFO3OA										
310.90 > 85.00	9.132	9.020	0.112		276935	0.0817		109	7182	
D 10 13C3 HFPO-DA										M
287.00 > 169.00	9.245	9.133	0.112		1606914	0.2541		102	30945	M
11 HPFO-DA										
285.00 > 169.00	9.245	9.133	0.112	1.000	524454	0.0792		106	13465	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.618	9.493	0.125		4404878	0.0871		116	55475	
13 Hydro-EVE Acid										
427.00 > 282.90	9.647	9.558	0.089		5644425	0.0865		115	32404	
D 14 13C4 PFHpA										
367.00 > 322.00	9.647	9.558	0.089		7362016	0.2714		109	70572	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.647	9.558	0.089	1.000	2492354	0.0771	Target=0.00	103	11229	
363.00 > 169.00	9.647	9.558	0.089	1.000	710097		3.51(0.00-0.00)		13603	
15 Hydro-PS Acid										
463.00 > 262.90	9.676	9.558	0.118		1866280	0.0791		106	30424	
17 PFECA G										
378.90 > 184.90	9.762	9.676	0.086		410773	0.0909		121	10717	
18 PFO4DA										
376.90 > 85.00	9.934	9.820	0.114		478559	0.0921		123	7561	
20 EVE Acid										
407.00 > 262.90	9.991	9.906	0.085		3640304	0.0947		126	40876	
19 PS Acid										
443.00 > 146.90	9.991	9.906	0.085		861961	0.0830		111	22958	
21 TAF										
442.90 > 85.00	10.521	10.425	0.096		344580	0.0786		105	1633	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLCCV_00028

Amount Added: 1.00

Units: mL

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_055.d

Injection Date: 10-Mar-2021 07:16:09

Instrument ID: A12

Lims ID: CCV L6.5

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 1

Worklist Smp#: 27

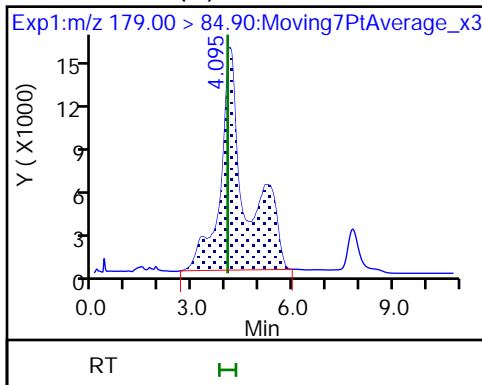
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

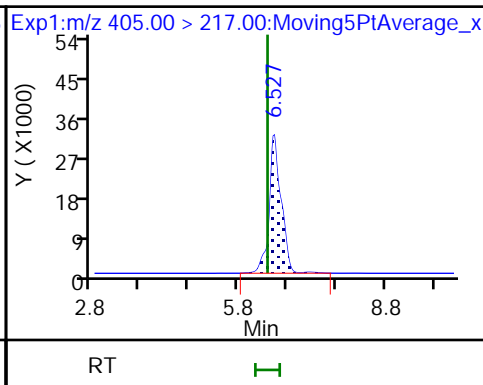
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

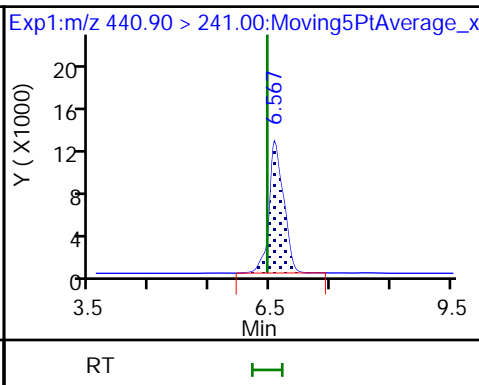
1 PFMOAA (M)



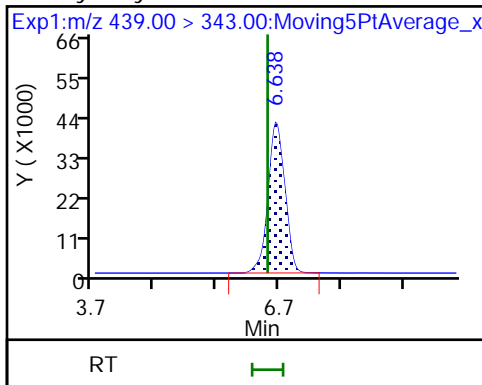
2 R-EVE



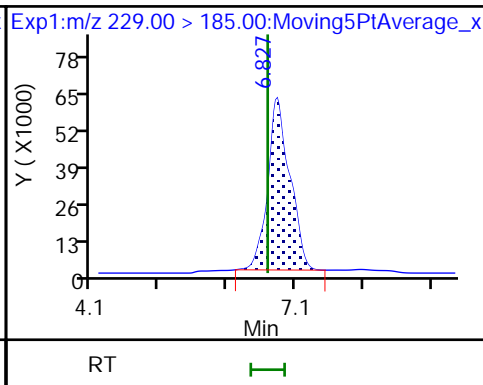
3 R-PSDA



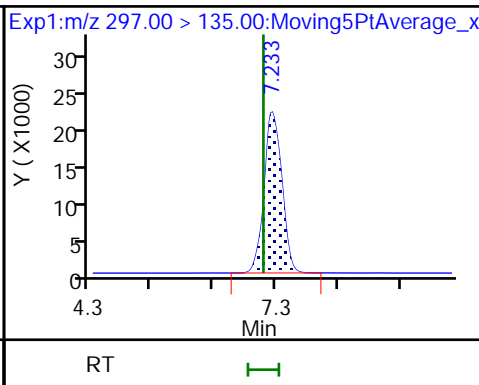
4 Hydrolyzed PSDA



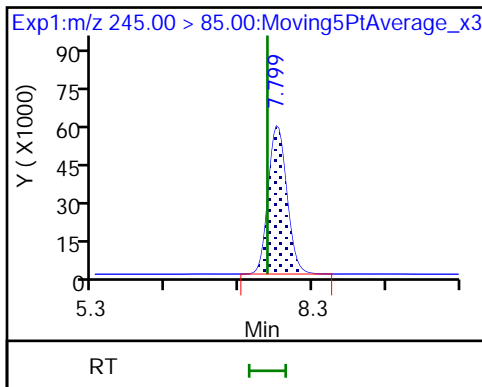
23 PMPA



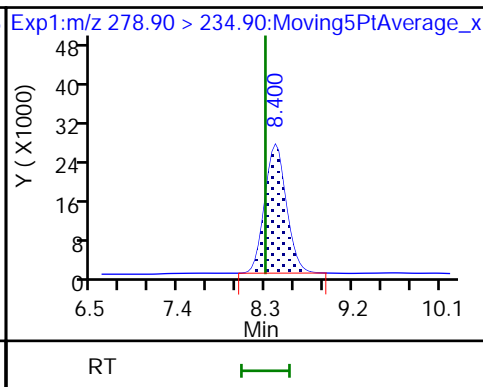
5 NVHOS



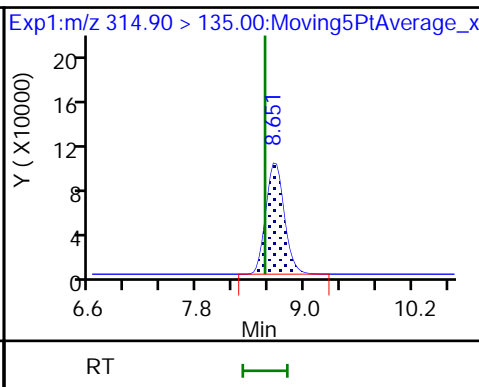
6 PFO2HxA



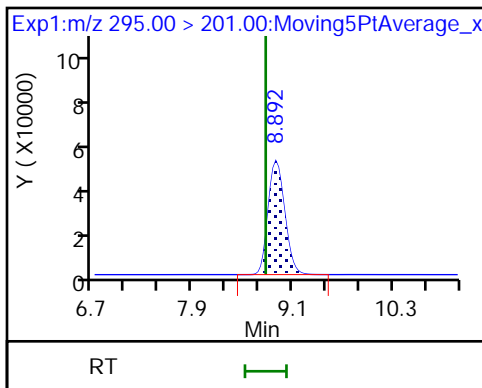
22 PEPA



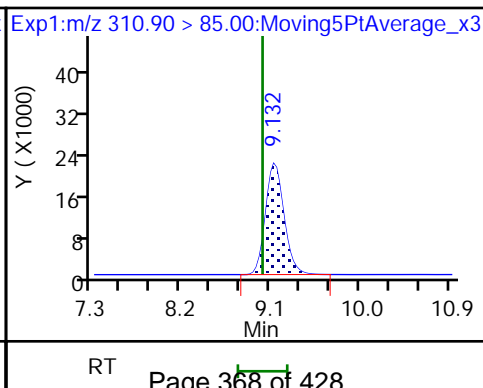
7 PES



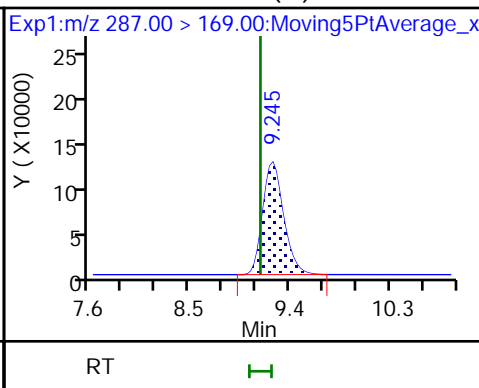
8 PFECA B

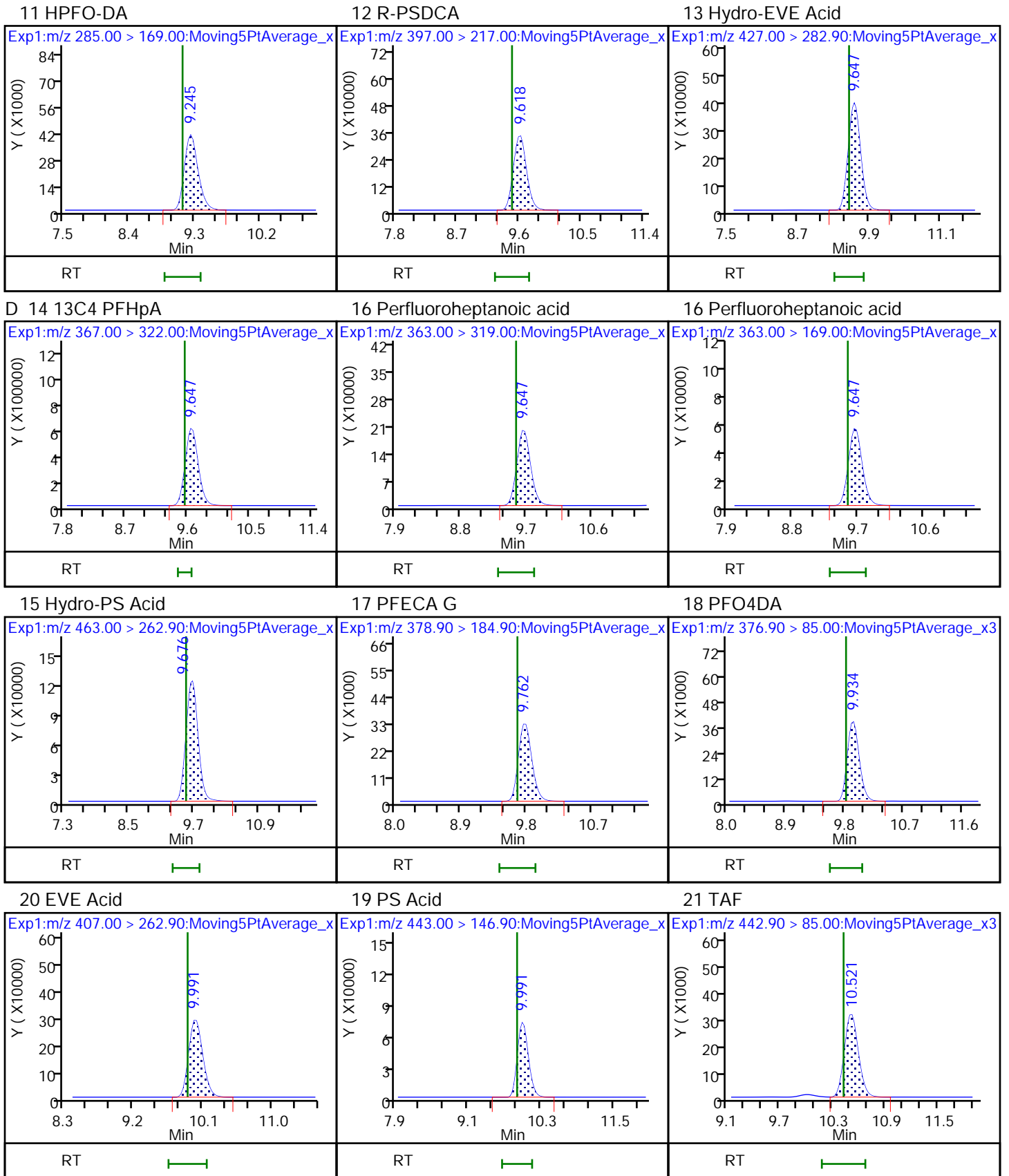


9 PFO3OA



D 10 13C3 HFPO-DA (M)





Eurofins TestAmerica, Sacramento

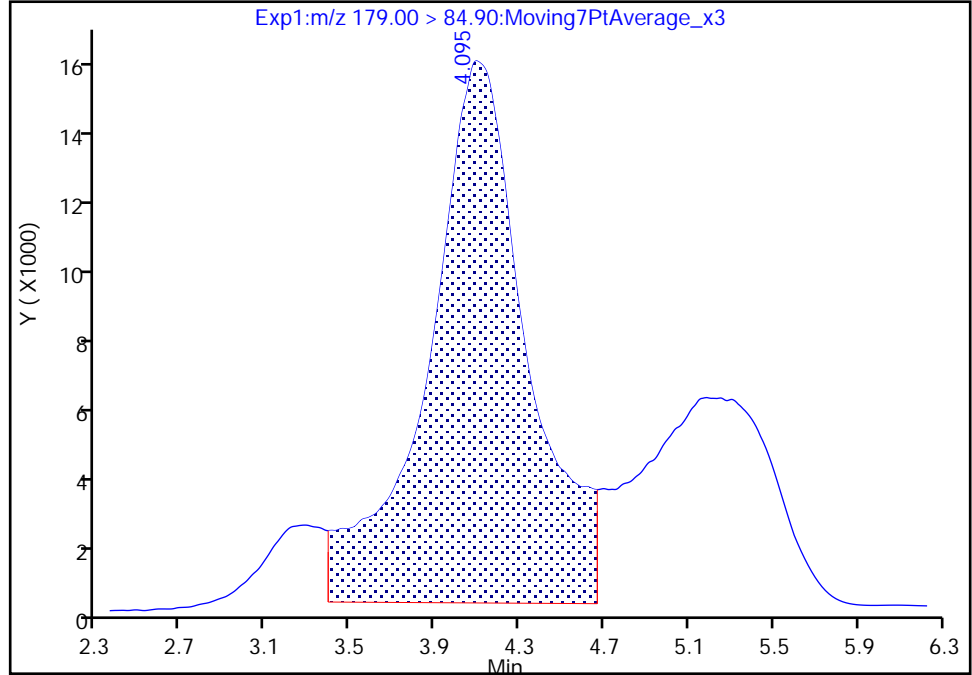
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 Injection Date: 10-Mar-2021 07:16:09 Instrument ID: A12
 Lims ID: CCV L6.5
 Client ID:
 Operator ID: Sac_inst_A12 ALS Bottle#: 1 Worklist Smp#: 27
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
 Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

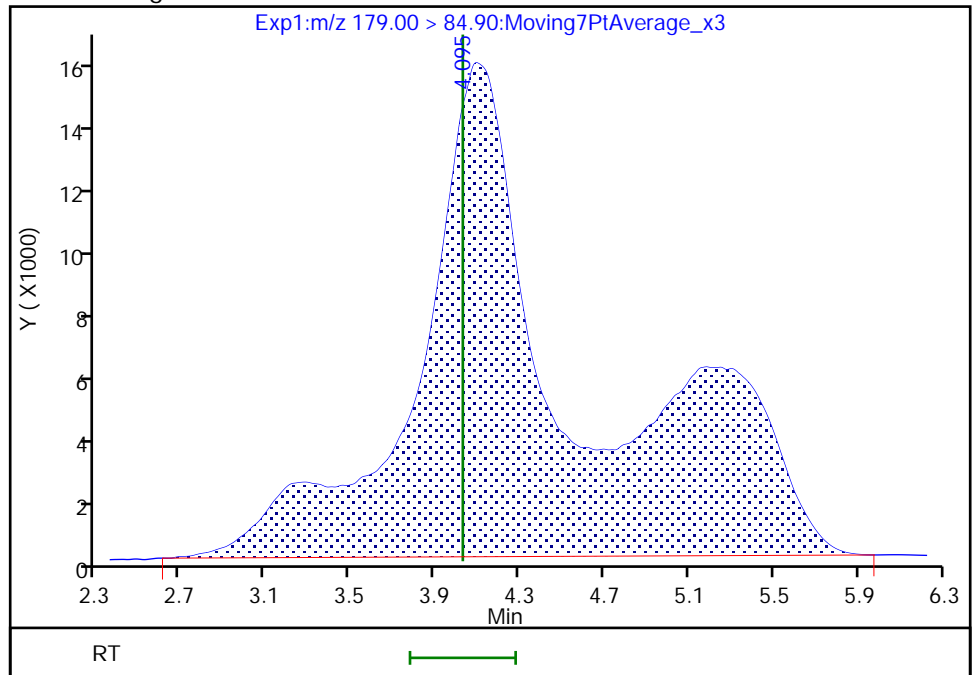
RT: 4.10
 Area: 503624
 Amount: 0.044862
 Amount Units: ng/ml

Processing Integration Results



RT: 4.10
 Area: 829099
 Amount: 0.073855
 Amount Units: ng/ml

Manual Integration Results



Reviewer: kwongg, 10-Mar-2021 12:33:06
 Audit Action: Manually Integrated

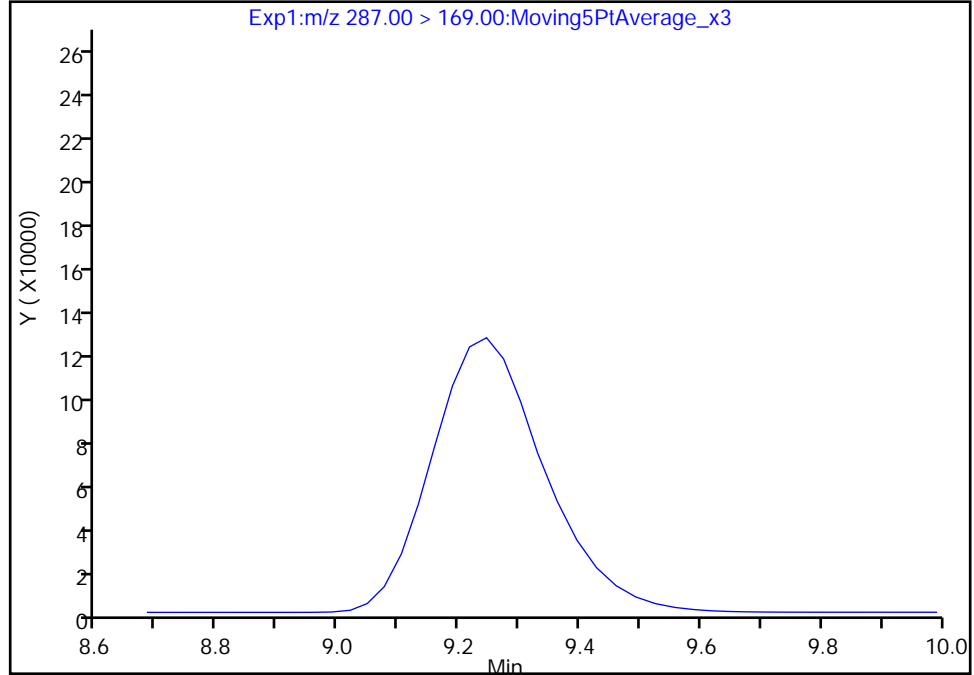
Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_055.d
Injection Date: 10-Mar-2021 07:16:09 Instrument ID: A12
Lims ID: CCV L6.5
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 1 Worklist Smp#: 27
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

D 10 13C3 HFPO-DA, CAS: STL02255
Signal: 1

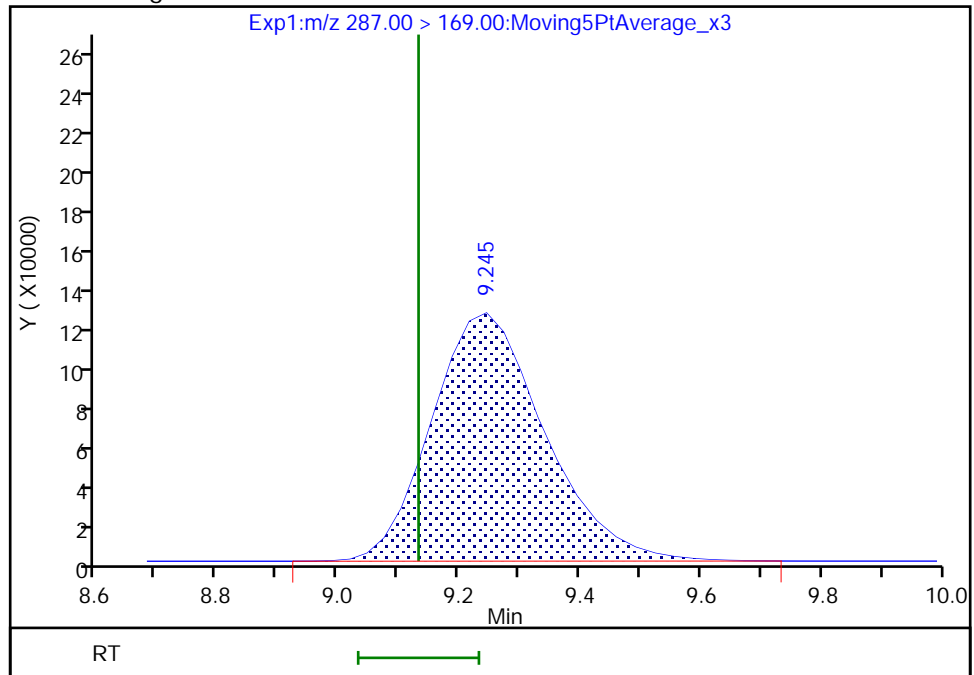
Not Detected
Expected RT: 9.13

Processing Integration Results



Manual Integration Results

RT: 9.25
Area: 1606914
Amount: 0.254066
Amount Units: ng/ml



Reviewer: kwongg, 10-Mar-2021 12:33:00
Audit Action: Manually Integrated

Audit Reason: Assign Peak
Page 372 of 428

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1
 SDG No.: _____
 Lab Sample ID: ICV 320-469371/18 Calibration Date: 03/11/2021 16:39
 Instrument ID: A12 Calib Start Date: 03/11/2021 12:14
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 03/11/2021 16:03
 Lab File ID: 2021.03.11_A12_TB3_ICAL_A_021.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PFMOAA	Ave	10341163	10560800		102	100	2.1	30.0
R-EVE	Ave	6629533	7129010		108	100	7.5	50.0
R-PSDA	Ave	3285358	3352700		102	100	2.0	50.0
Hydrolyzed PSDA	Ave	12801417	13327900		104	100	4.1	50.0
PMPA	Lin2		18941260		97.4	100	-2.6	30.0
NVHOS	Ave	7306624	7008010		95.9	100	-4.1	30.0
PFO2HxA	Ave	15425990	15400110		99.8	100	-0.2	30.0
PEPA	Ave	6664120	6687760		100	100	0.4	30.0
PES	Ave	24200272	24891950		103	100	2.9	30.0
PFECA B	Ave	11324142	11172540		98.7	100	-1.3	30.0
PFO3OA	Ave	4860185	5585860		115	100	14.9	30.0
Perfluoro(2-propoxypropanoic) acid	AveID	1.103	1.045		94.7	100	-5.3	40.0
R-PSDCA	Ave	54111617	61336760		113	100	13.4	30.0
Hydro-EVE Acid	Ave	76085192	85684410		113	100	12.6	30.0
Hydro-PS Acid	Ave	31357635	33986550		108	100	8.4	30.0
Perfluoroheptanoic acid	L2ID		1.182		100	100	0.0	40.0
PFECA G	Ave	5915402	6434280		109	100	8.8	30.0
PFO4DA	Ave	6551414	5582320		85.2	100	-14.8	30.0
PS Acid	Ave	13433412	14272300		106	100	6.2	30.0
EVE Acid	Ave	51038831	50773070		99.5	100	-0.5	30.0
PFO5DA	Ave	5755285	6448060		112	100	12.0	50.0
13C3 HFPO-DA	Ave	7781896	7755712		249	250	-0.3	50.0
13C4 PFHpA	Ave	24472087	27421460		280	250	12.1	50.0

Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_021.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 11-Mar-2021 16:39:03 ALS Bottle#: 21 Worklist Smp#: 18
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: ICV (50)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist:

Method: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 12-Mar-2021 11:44:14 Calib Date: 11-Mar-2021 16:03:54
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_019.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1669

First Level Reviewer: kwongg Date: 11-Mar-2021 17:00:43

Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.779	4.235	-0.456		1056080	0.1021		62.4		M
2 R-EVE										M
405.00 > 217.00	6.370	6.390	-0.020		712901	0.1075		6565		M
3 R-PSDA										
440.90 > 241.00	6.430	6.450	-0.020		335270	0.1020		3260		
4 Hydrolyzed PSDA										
439.00 > 343.00	6.509	6.529	-0.020		1332790	0.1041		16391		
23 PMPA										
229.00 > 185.00	6.758	6.782	-0.024		1894126	0.0974		2078		
5 NVHOS										
297.00 > 135.00	7.137	7.138	-0.001		700801	0.0959		11613		
6 PFO2HxA										
245.00 > 85.00	7.771	7.709	0.062		1540011	0.0998		15348		
22 PEPA										
278.90 > 234.90	8.335	8.299	0.036		668776	0.1004		4527		
7 PES										
314.90 > 135.00	8.621	8.556	0.064		2489195	0.1029		46485		
8 PFECA B										
295.00 > 201.00	8.829	8.800	0.029		1117254	0.0987		22011		
9 PFO3OA										
310.90 > 85.00	9.076	9.048	0.028		558586	0.1149		15568		
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.189	9.133	0.056		1938928	0.2492		99.7	32717	
11 HPFO-DA										
285.00 > 169.00	9.189	9.133	0.056	1.000	810734	0.0947			11488	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.525	9.493	0.032		6133676	0.1134			80721	
13 Hydro-EVE Acid										
427.00 > 282.90	9.590	9.525	0.065		8568441	0.1126			66986	
D 14 13C4 PFHpA										
367.00 > 322.00	9.590	9.558	0.032		6855365	0.2801		112	91810	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.590	9.558	0.032	1.000	3239910	0.1000	Target=0.00		26188	
363.00 > 169.00	9.590	9.558	0.032	1.000	822875		3.94(0.00-0.00)		9465	
15 Hydro-PS Acid										
463.00 > 262.90	9.590	9.558	0.032		3398655	0.1084			57838	
17 PFECA G										
378.90 > 184.90	9.705	9.676	0.029		643428	0.1088			18355	
18 PFO4DA										
376.90 > 85.00	9.848	9.820	0.028		558232	0.0852			12007	
20 EVE Acid										
407.00 > 262.90	9.934	9.877	0.057		5077307	0.0995			61926	
19 PS Acid										
443.00 > 146.90	9.906	9.877	0.029		1427230	0.1062			40737	
21 TAF										
442.90 > 85.00	10.425	10.374	0.051		644806	0.1120			2749	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLICV_00050

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_021.d

Injection Date: 11-Mar-2021 16:39:03

Instrument ID: A12

Lims ID: ICV

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 21

Worklist Smp#: 18

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

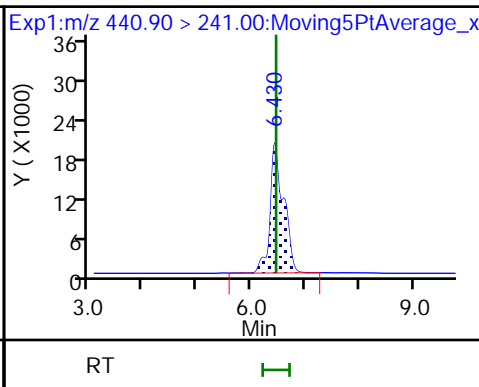
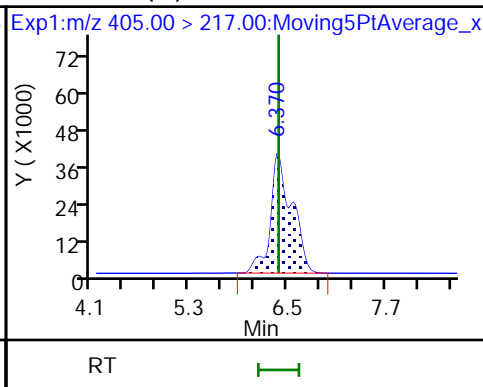
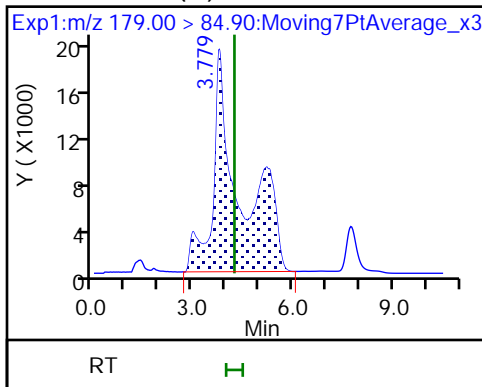
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

1 PFMOAA (M)

2 R-EVE (M)

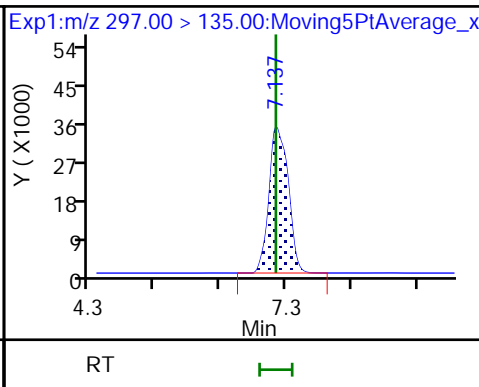
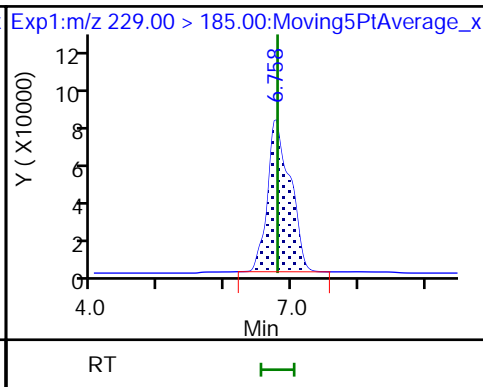
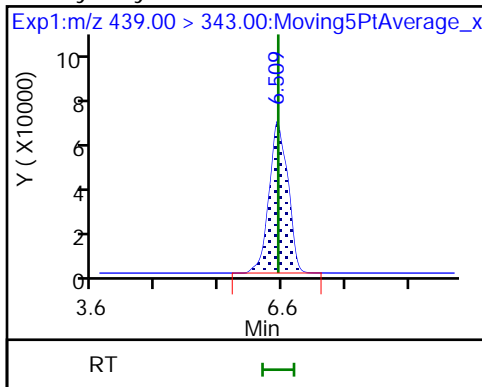
3 R-PSDA



4 Hydrolyzed PSDA

23 PMPA

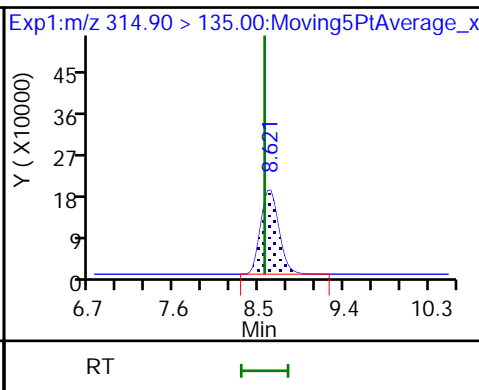
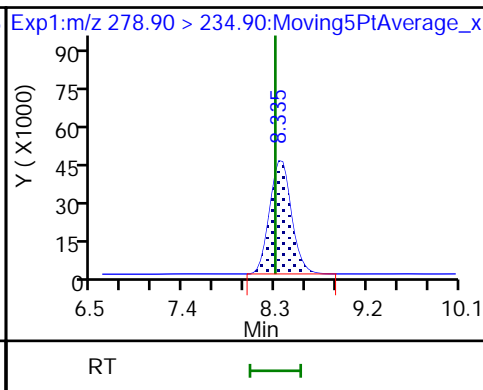
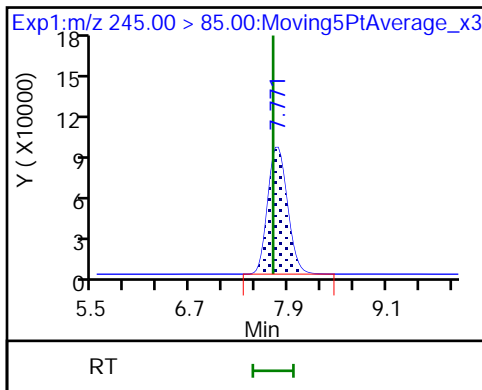
5 NVHOS



6 PFO2HxA

22 PEPA

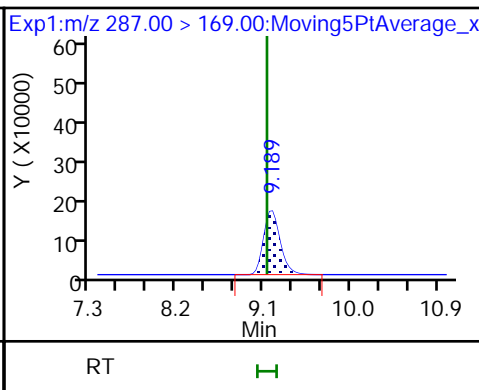
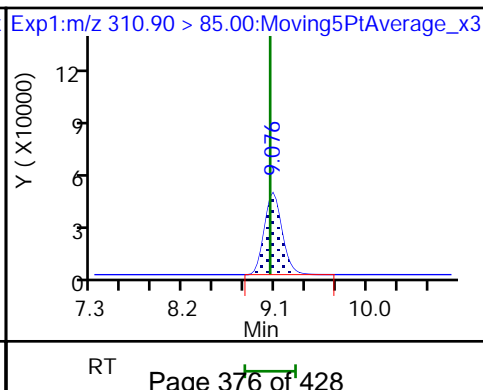
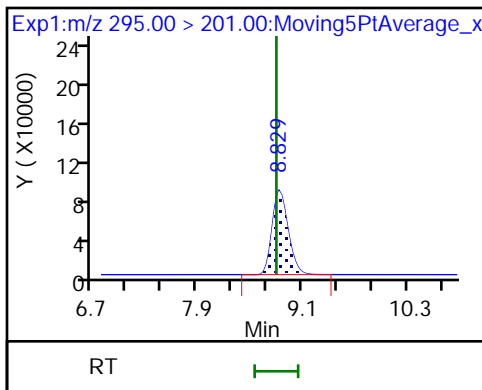
7 PES

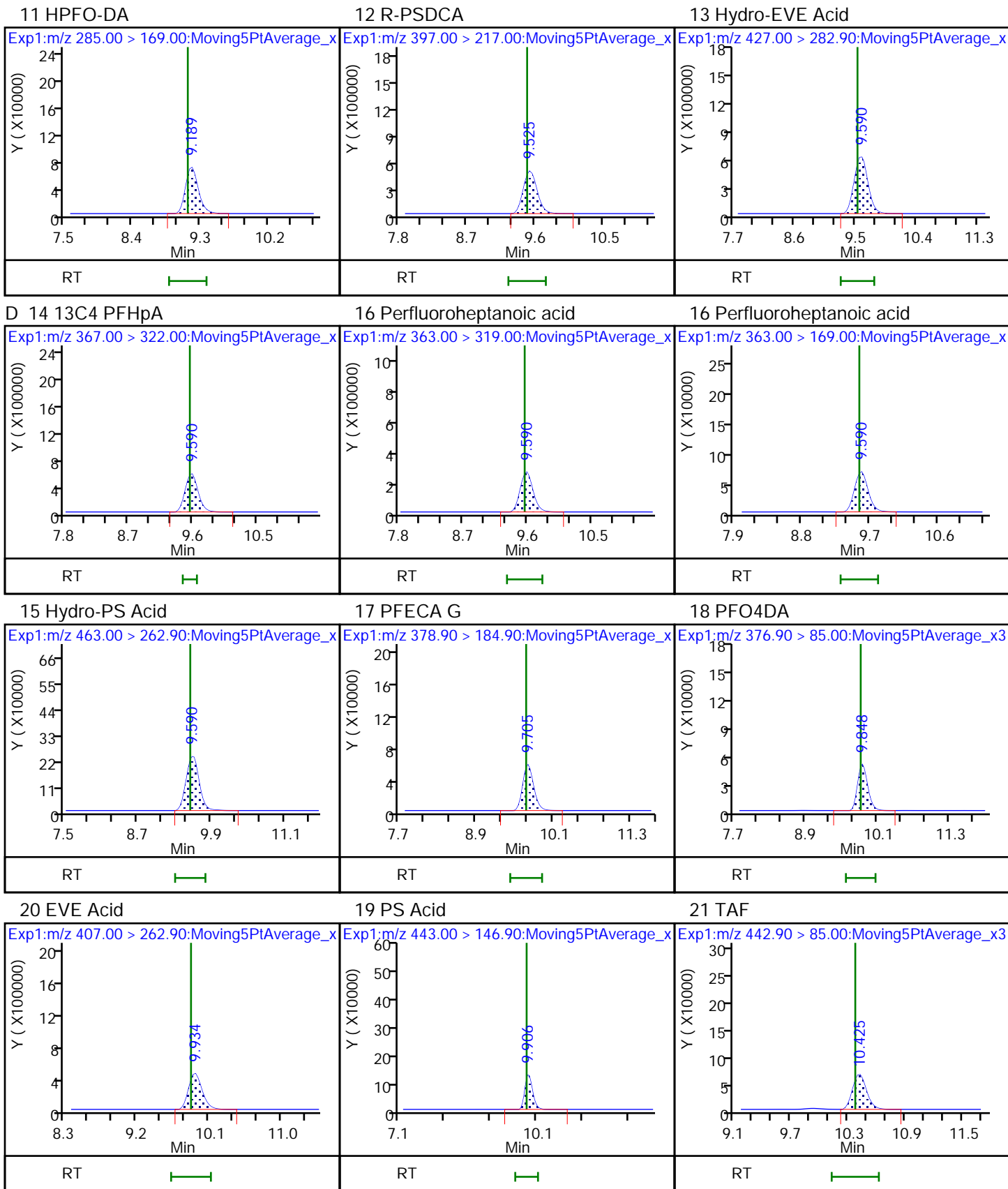


8 PFECA B

9 PFO3OA

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

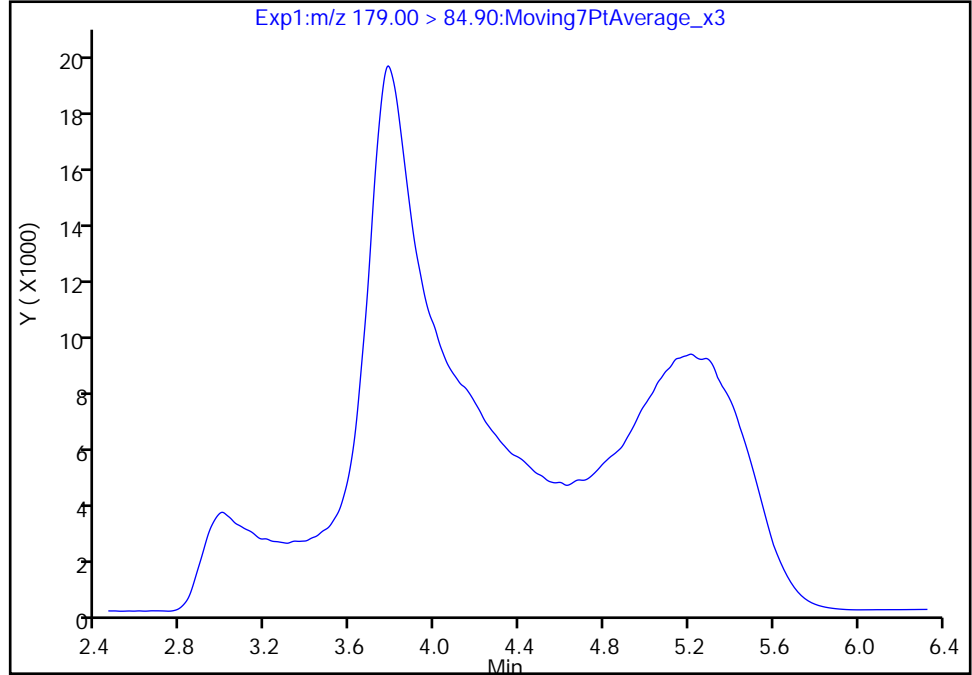
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Injection Date: 11-Mar-2021 16:39:03 Instrument ID: A12
Lims ID: ICV
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 21 Worklist Smp#: 18
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

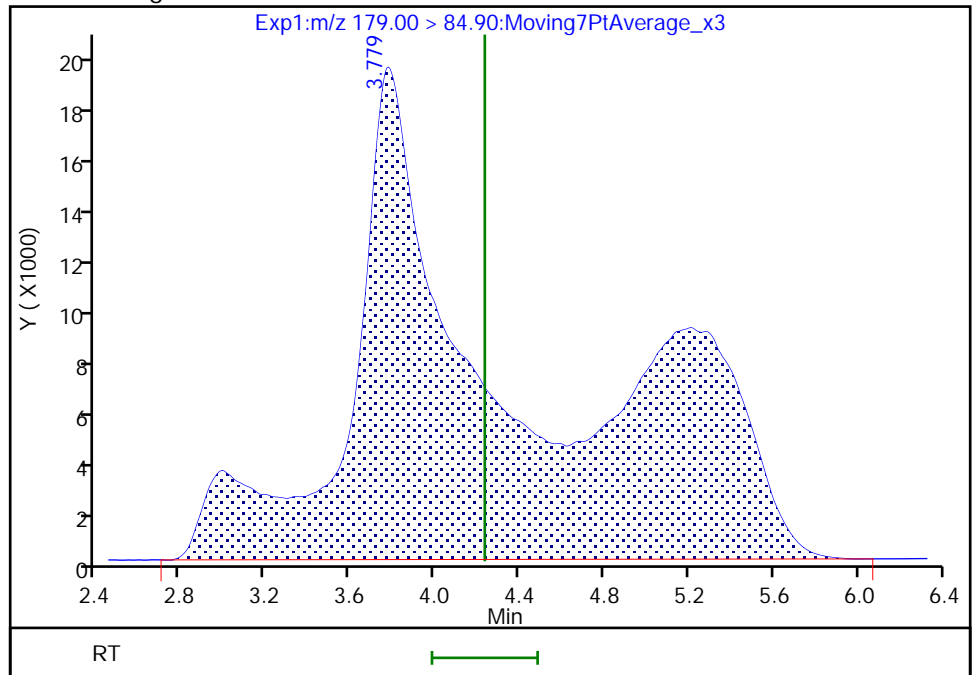
Not Detected
Expected RT: 4.24

Processing Integration Results



RT: 3.78
Area: 1056080
Amount: 0.102124
Amount Units: ng/ml

Manual Integration Results



Reviewer: kwong, 11-Mar-2021 17:00:38
Audit Action: Manually Integrated

Audit Reason: Assign Peak
Page 379 of 428

Eurofins TestAmerica, Sacramento

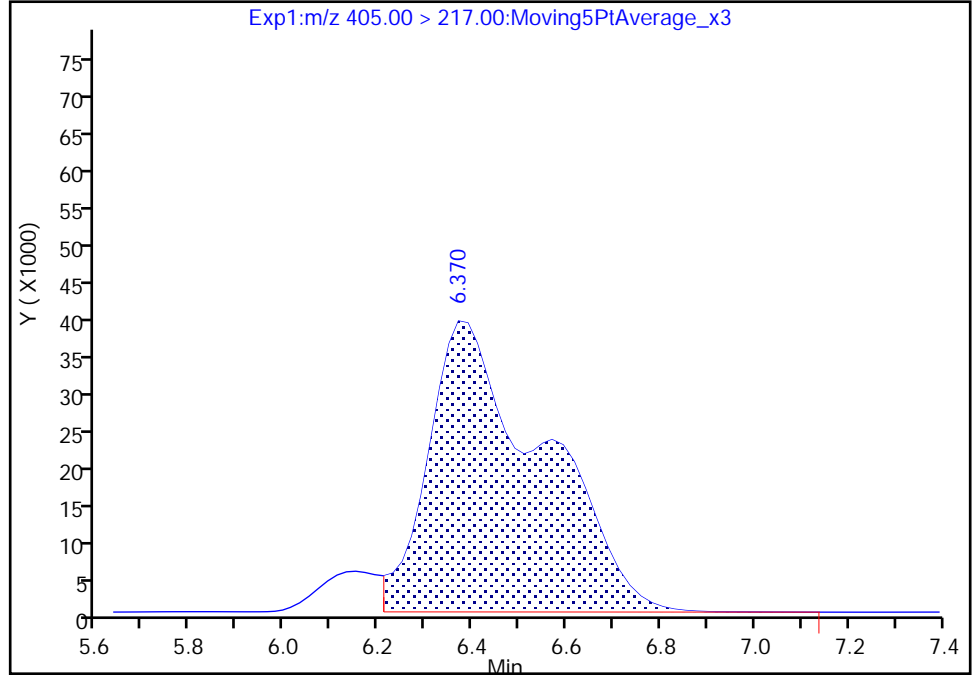
Data File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_021.d
Injection Date: 11-Mar-2021 16:39:03 Instrument ID: A12
Lims ID: ICV
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 21 Worklist Smp#: 18
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

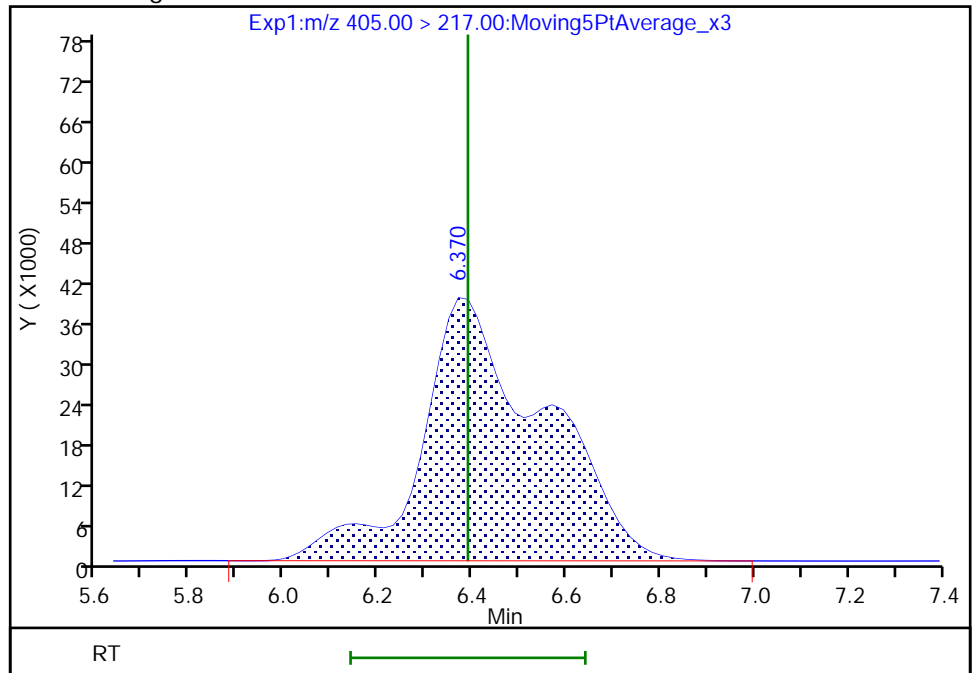
RT: 6.37
Area: 665446
Amount: 0.099991
Amount Units: ng/ml

Processing Integration Results



RT: 6.37
Area: 712901
Amount: 0.107534
Amount Units: ng/ml

Manual Integration Results



Reviewer: kwong, 11-Mar-2021 17:00:54
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 380 of 428

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1
 SDG No.: _____
 Lab Sample ID: CCV 320-469973/1 Calibration Date: 03/13/2021 05:56
 Instrument ID: A12 Calib Start Date: 03/11/2021 12:14
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 03/11/2021 16:03
 Lab File ID: 2021.03.12_A12_TB3_C_002.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PFMOAA	Ave	10341163	10232867		74.2	75.0	-1.0	30.0
R-EVE	Ave	6629533	5936960		67.2	75.0	-10.4	50.0
R-PSDA	Ave	3285358	2498987		57.0	75.0	-23.9	50.0
Hydrolyzed PSDA	Ave	12801417	9876760		57.9	75.0	-22.8	50.0
PMPA	Lin2		17445240		66.8	75.0	-11.0	30.0
NVHOS	Ave	7306624	6076133		62.4	75.0	-16.8	30.0
PFO2HxA	Ave	15425990	13461907		65.5	75.0	-12.7	30.0
PEPA	Ave	6664120	5121373		57.6	75.0	-23.2	30.0
PES	Ave	24200272	18811040		58.3	75.0	-22.3	30.0
PFECA B	Ave	11324142	9298933		61.6	75.0	-17.9	30.0
PFO3OA	Ave	4860185	3577773		55.2	75.0	-26.4	30.0
Perfluoro(2-propoxypropanoic) acid	AveID	1.103	1.101		74.8	75.0	-0.2	40.0
R-PSDCA	Ave	54111617	50386853		69.8	75.0	-6.9	30.0
Hydro-EVE Acid	Ave	76085192	71650920		70.6	75.0	-5.8	30.0
Hydro-PS Acid	Ave	31357635	26633227		63.7	75.0	-15.1	30.0
Perfluoroheptanoic acid	L2ID		1.092		69.2	75.0	-7.7	40.0
PFECA G	Ave	5915402	5710080		72.4	75.0	-3.5	30.0
PFO4DA	Ave	6551414	6031667		69.0	75.0	-7.9	30.0
EVE Acid	Ave	51038831	45117493		66.3	75.0	-11.6	30.0
PS Acid	Ave	13433412	12491840		69.7	75.0	-7.0	30.0
PFO5DA	Ave	5755285	4271347		55.7	75.0	-25.8	50.0
13C3 HFPO-DA	Ave	7781896	6239376		200	250	-19.8	50.0
13C4 PFHpA	Ave	24472087	26717220		273	250	9.2	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210313-114967.b\2021.03.12_A12_TB3_C_002.d
 Lims ID: CCV L6.5
 Client ID:
 Sample Type: CCV
 Inject. Date: 13-Mar-2021 05:56:01 ALS Bottle#: 2 Worklist Smp#: 1
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L6.5 (40)
 Misc. Info.: Plate: 1 Rack: 6
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210313-114967.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 13-Mar-2021 09:42:11 Calib Date: 11-Mar-2021 16:03:54
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_019.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1648

First Level Reviewer: yuj Date: 13-Mar-2021 09:42:11

Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.236	4.235	0.001		767465	0.0742		99.0	24.1	M
2 R-EVE										M
405.00 > 217.00	6.446	6.390	0.056		445272	0.0672		89.6	1206	M
3 R-PSDA										
440.90 > 241.00	6.486	6.450	0.036		187424	0.0570		76.1	1885	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.566	6.529	0.037		740757	0.0579		77.2	15099	
23 PMPA										
229.00 > 185.00	6.826	6.782	0.044		1308393	0.0668		89.0	1673	
5 NVHOS										
297.00 > 135.00	7.182	7.138	0.044		455710	0.0624		83.2	10052	
6 PFO2HxA										
245.00 > 85.00	7.768	7.709	0.059		1009643	0.0655		87.3	11380	
22 PEPA										
278.90 > 234.90	8.366	8.299	0.067		384103	0.0576		76.8	2229	
7 PES										
314.90 > 135.00	8.622	8.556	0.066		1410828	0.0583		77.7	26669	
8 PFECA B										
295.00 > 201.00	8.827	8.800	0.027		697420	0.0616		82.1	13890	
9 PFO3OA										
310.90 > 85.00	9.074	9.048	0.026		268333	0.0552		73.6	7536	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.186	9.133	0.053		1559844	0.2004		80.2	33280	
11 HPFO-DA										
285.00 > 169.00	9.186	9.133	0.053	1.000	515267	0.0748		99.8	8853	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.522	9.493	0.029		3779014	0.0698		93.1	59695	
13 Hydro-EVE Acid										
427.00 > 282.90	9.587	9.525	0.062		5373819	0.0706		94.2	47364	
D 14 13C4 PFHpA										
367.00 > 322.00	9.587	9.558	0.029		6679305	0.2729		109	90285	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.587	9.558	0.029	1.000	2189135	0.0692	Target=0.00	92.3	13703	
363.00 > 169.00	9.587	9.558	0.029	1.000	658999		3.32(0.00-0.00)		10718	
15 Hydro-PS Acid										
463.00 > 262.90	9.587	9.558	0.029		1997492	0.0637		84.9	33690	
17 PFECA G										
378.90 > 184.90	9.702	9.676	0.026		428256	0.0724		96.5	12231	
18 PFO4DA										
376.90 > 85.00	9.846	9.820	0.026		452375	0.0690		92.1	9756	
20 EVE Acid										
407.00 > 262.90	9.932	9.877	0.055		3383812	0.0663		88.4	48488	
19 PS Acid										
443.00 > 146.90	9.932	9.877	0.055		936888	0.0697		93.0	20057	
21 TAF										
442.90 > 85.00	10.425	10.374	0.051		320351	0.0557		74.2	1693	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLCCV_00041

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210313-114967.b\2021.03.12_A12_TB3_C_002.d

Injection Date: 13-Mar-2021 05:56:01

Instrument ID: A12

Lims ID: CCV L6.5

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 2

Worklist Smp#: 1

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

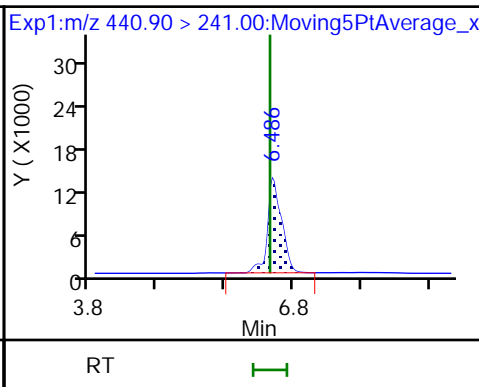
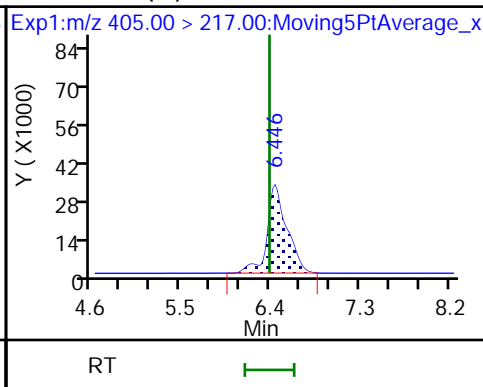
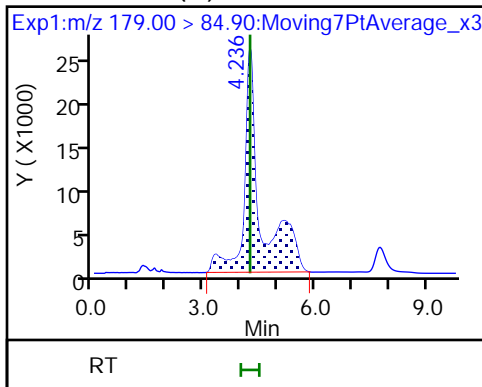
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

1 PFMOAA (M)

2 R-EVE (M)

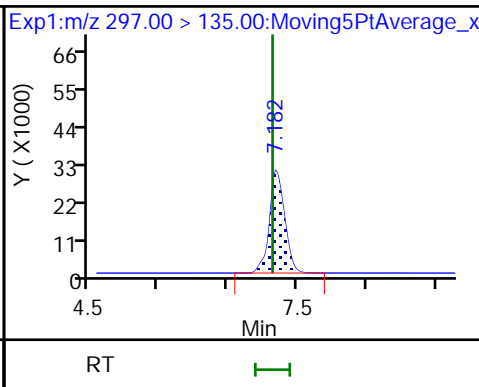
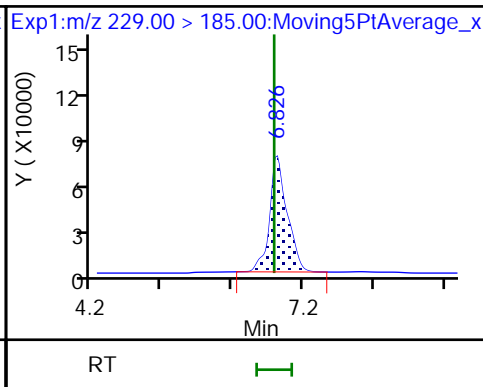
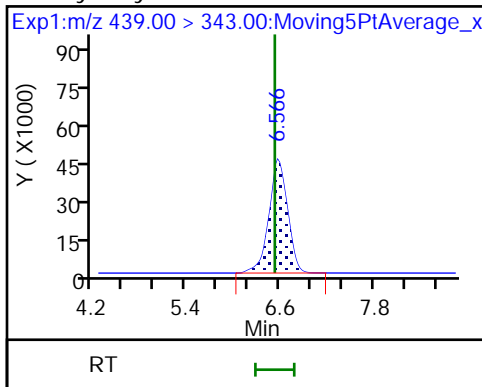
3 R-PSDA



4 Hydrolyzed PSDA

23 PMPA

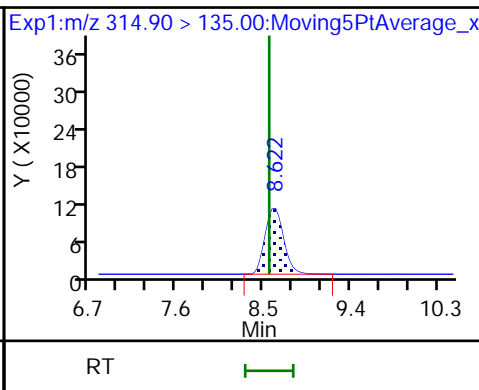
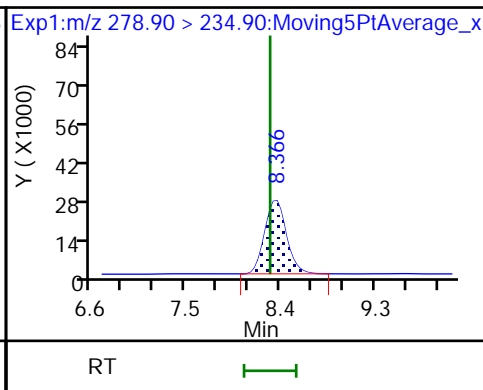
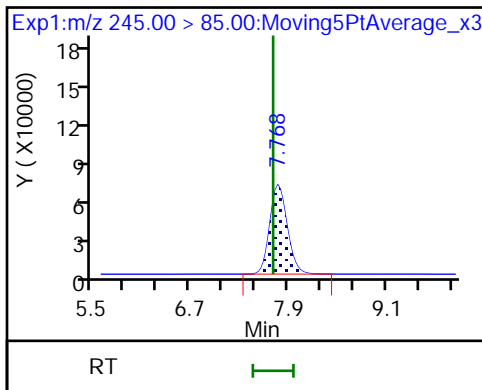
5 NVHOS



6 PFO2HxA

22 PEPA

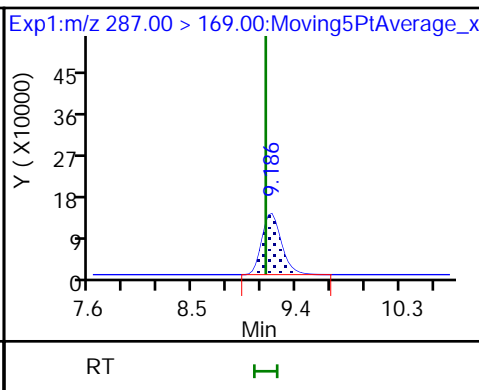
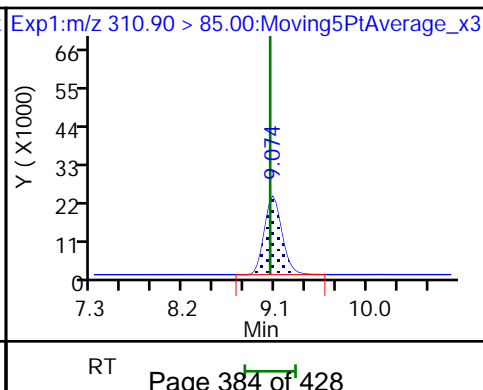
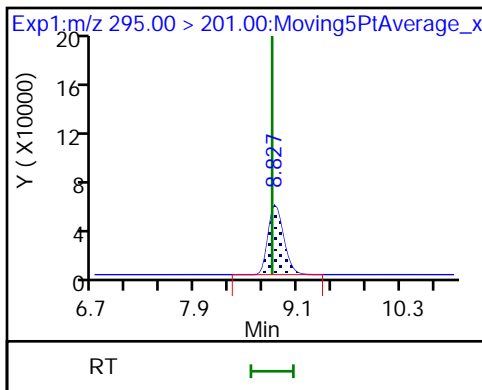
7 PES

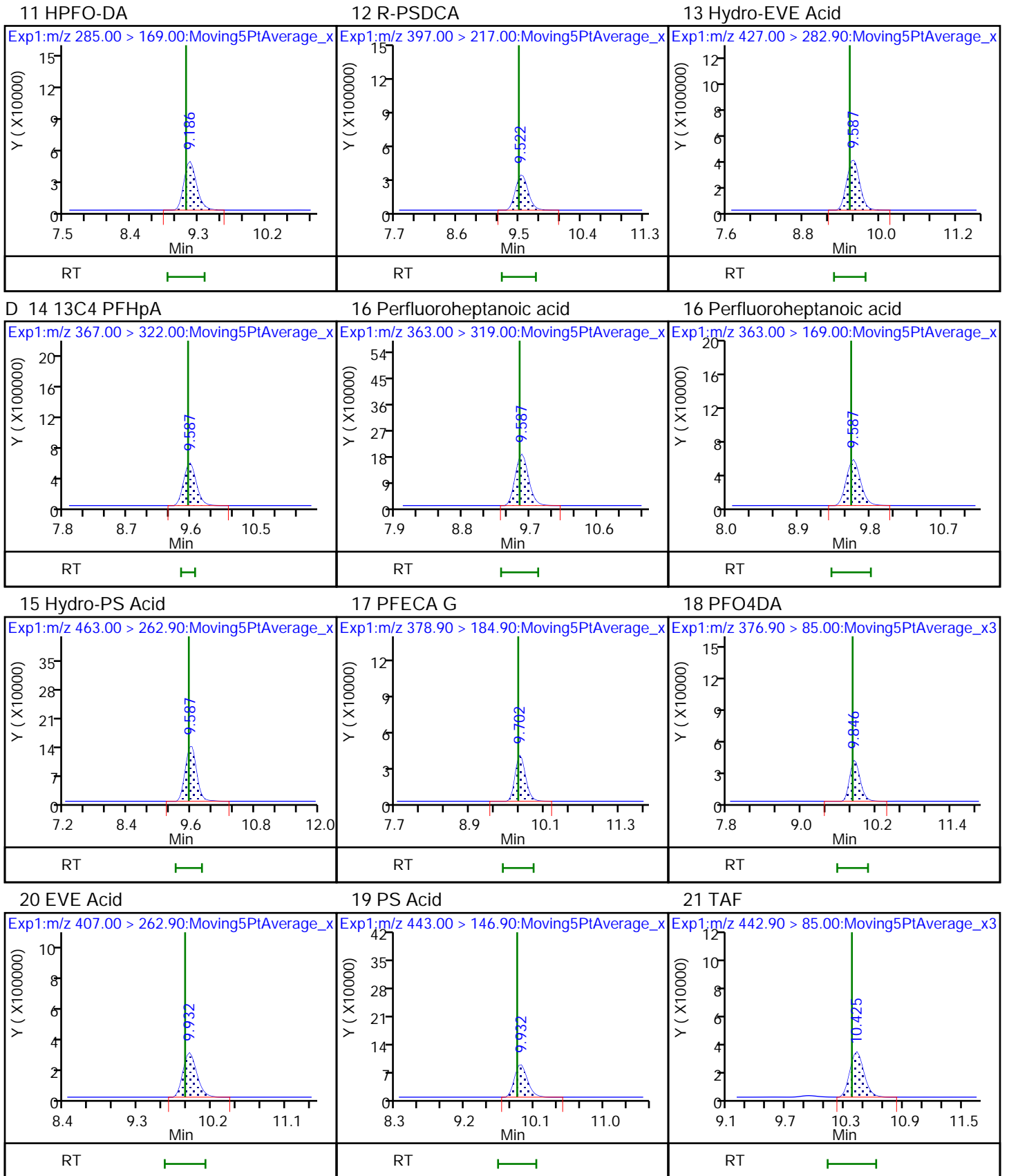


8 PFECA B

9 PFO3OA

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

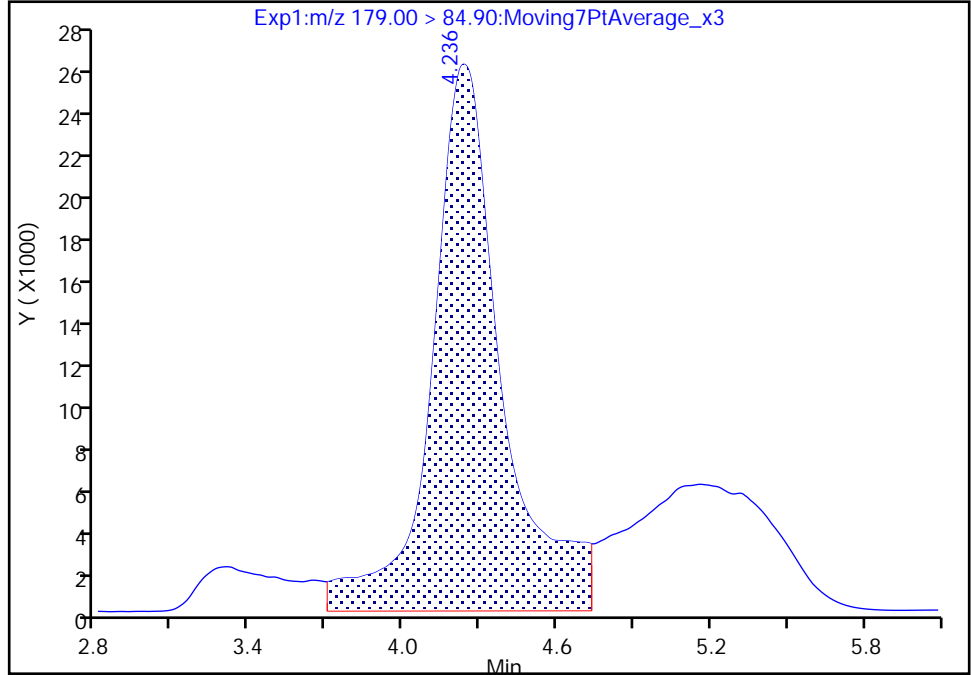
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Injection Date: 13-Mar-2021 05:56:01 Instrument ID: A12
Lims ID: CCV L6.5
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 2 Worklist Smp#: 1
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

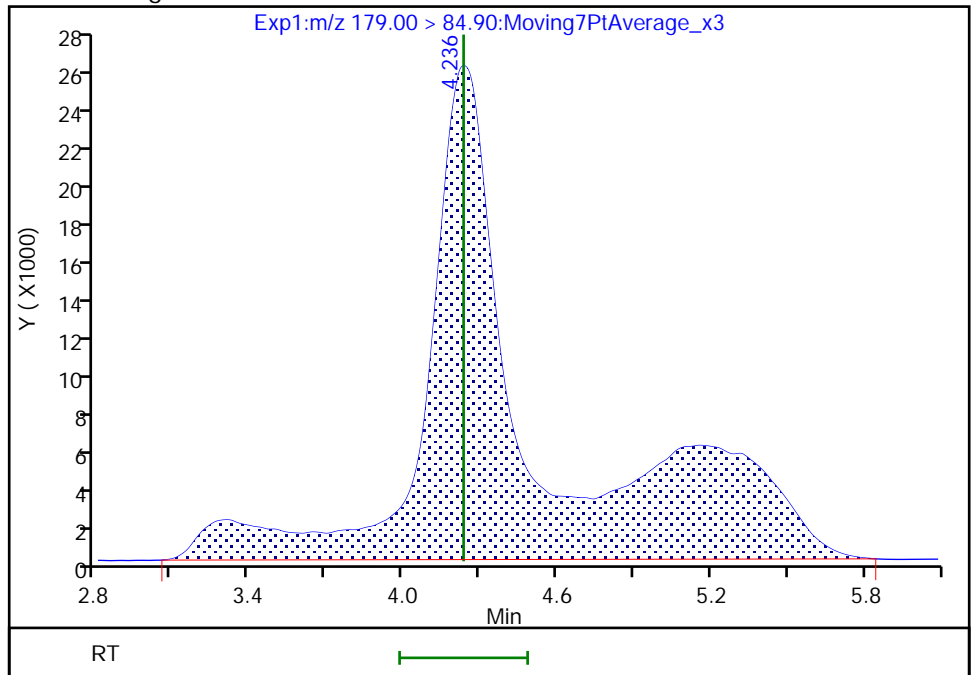
RT: 4.24
Area: 483116
Amount: 0.046718
Amount Units: ng/ml

Processing Integration Results



RT: 4.24
Area: 767465
Amount: 0.074215
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 13-Mar-2021 09:41:58
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 387 of 428

Eurofins TestAmerica, Sacramento

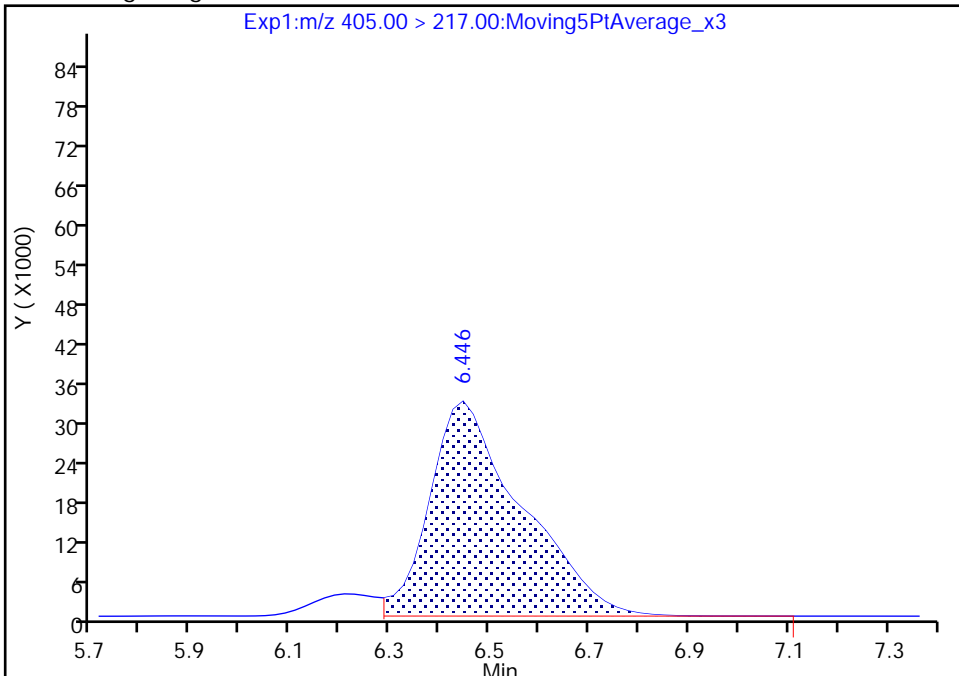
Data File: \\chromfs\Sacramento\ChromData\A12\20210313-114967.b\2021.03.12_A12_TB3_C_002.d
Injection Date: 13-Mar-2021 05:56:01 Instrument ID: A12
Lims ID: CCV L6.5
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 2 Worklist Smp#: 1
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

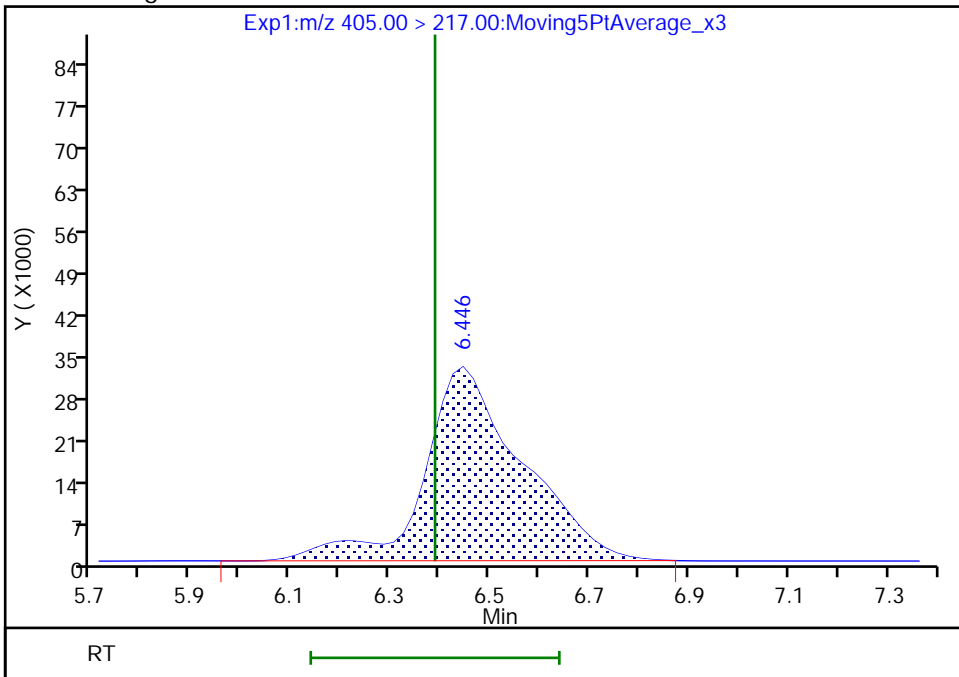
RT: 6.45
Area: 417347
Amount: 0.062953
Amount Units: ng/ml

Processing Integration Results



RT: 6.45
Area: 445272
Amount: 0.067165
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 13-Mar-2021 09:42:03
Audit Action: Manually Integrated

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1
 SDG No.: _____
 Lab Sample ID: CCV 320-469973/11 Calibration Date: 03/13/2021 08:52
 Instrument ID: A12 Calib Start Date: 03/11/2021 12:14
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 03/11/2021 16:03
 Lab File ID: 2021.03.12_A12_TB3_C_012.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PFMOAA	Ave	10341163	10487173		76.1	75.0	1.4	30.0
R-EVE	Ave	6629533	6141667		69.5	75.0	-7.4	50.0
R-PSDA	Ave	3285358	2695867		61.5	75.0	-17.9	50.0
Hydrolyzed PSDA	Ave	12801417	11042453		64.7	75.0	-13.7	50.0
PMPA	Lin2		17426653		66.7	75.0	-11.1	30.0
NVHOS	Ave	7306624	6016533		61.8	75.0	-17.7	30.0
PFO2HxA	Ave	15425990	13449360		65.4	75.0	-12.8	30.0
PEPA	Ave	6664120	4986760		56.1	75.0	-25.2	30.0
PES	Ave	24200272	18722720		58.0	75.0	-22.6	30.0
PFECA B	Ave	11324142	9187747		60.9	75.0	-18.9	30.0
PFO3OA	Ave	4860185	3438933		53.1	75.0	-29.2	30.0
Perfluoro(2-propoxypropanoic) acid	AveID	1.103	1.040		70.7	75.0	-5.7	40.0
R-PSDCA	Ave	54111617	49081320		68.0	75.0	-9.3	30.0
Hydro-EVE Acid	Ave	76085192	68795627		67.8	75.0	-9.6	30.0
Hydro-PS Acid	Ave	31357635	25487133		61.0	75.0	-18.7	30.0
Perfluoroheptanoic acid	L2ID		1.143		72.5	75.0	-3.4	40.0
PFECA G	Ave	5915402	5487013		69.6	75.0	-7.2	30.0
PFO4DA	Ave	6551414	5309480		60.8	75.0	-19.0	30.0
EVE Acid	Ave	51038831	49545347		72.8	75.0	-2.9	30.0
PS Acid	Ave	13433412	12295253		68.6	75.0	-8.5	30.0
PFO5DA	Ave	5755285	4495240		58.6	75.0	-21.9	50.0
13C3 HFPO-DA	Ave	7781896	6439692		207	250	-17.2	50.0
13C4 PFHpA	Ave	24472087	25173408		257	250	2.9	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfms\Sacramento\ChromData\A12\20210313-114967.b\2021.03.12_A12_TB3_C_012.d
 Lims ID: CCV L6.5
 Client ID:
 Sample Type: CCV
 Inject. Date: 13-Mar-2021 08:52:11 ALS Bottle#: 12 Worklist Smp#: 11
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L6.5 (40)
 Misc. Info.: Plate: 1 Rack: 6
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3
 Method: \\chromfms\Sacramento\ChromData\A12\20210313-114967.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 13-Mar-2021 11:17:28 Calib Date: 11-Mar-2021 16:03:54
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICAL File: \\chromfms\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_019.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1648

First Level Reviewer: yuj Date: 13-Mar-2021 11:17:28

Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA	179.00 > 84.90	4.133	4.235	-0.102	786538	0.0761		101	77.5	M
2 R-EVE	405.00 > 217.00	6.427	6.390	0.037	460625	0.0695		92.6	6572	
3 R-PSDA	440.90 > 241.00	6.466	6.450	0.016	202190	0.0615		82.1	2132	
4 Hydrolyzed PSDA	439.00 > 343.00	6.546	6.529	0.017	828184	0.0647		86.3	17234	
23 PMPA	229.00 > 185.00	6.779	6.782	-0.003	1306999	0.0667		88.9	1481	
5 NVHOS	297.00 > 135.00	7.158	7.138	0.020	451240	0.0618		82.3	9424	
6 PFO2HxA	245.00 > 85.00	7.737	7.709	0.028	1008702	0.0654		87.2	9436	
22 PEPA	278.90 > 234.90	8.330	8.299	0.031	374007	0.0561		74.8	1725	
7 PES	314.90 > 135.00	8.588	8.556	0.032	1404204	0.0580		77.4	35402	
8 PFECA B	295.00 > 201.00	8.827	8.800	0.027	689081	0.0609		81.1	18315	
9 PFO3OA	310.90 > 85.00	9.074	9.048	0.026	257920	0.0531		70.8	7249	
D 10 13C3 HFPO-DA	287.00 > 169.00	9.187	9.133	0.054	1609923	0.2069		82.8	34271	
11 HPFO-DA	285.00 > 169.00	9.187	9.133	0.054	502354	0.0707	1.000	94.3	10767	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.523	9.493	0.029		3681099	0.0680		90.7	58131	
13 Hydro-EVE Acid										
427.00 > 282.90	9.587	9.525	0.062		5159672	0.0678		90.4	45649	
D 14 13C4 PFHpA										
367.00 > 322.00	9.587	9.558	0.029		6293352	0.2572		103	85031	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.587	9.558	0.029	1.000	2157984	0.0725	Target=0.00	96.6	10327	
363.00 > 169.00	9.587	9.558	0.029	1.000	600098		3.60(0.00-0.00)		9733	
15 Hydro-PS Acid										
463.00 > 262.90	9.587	9.558	0.029		1911535	0.0610		81.3	43006	
17 PFECA G										
378.90 > 184.90	9.702	9.676	0.026		411526	0.0696		92.8	11761	
18 PFO4DA										
376.90 > 85.00	9.846	9.820	0.026		398211	0.0608		81.0	8585	
20 EVE Acid										
407.00 > 262.90	9.932	9.877	0.055		3715901	0.0728		97.1	63955	
19 PS Acid										
443.00 > 146.90	9.932	9.877	0.055		922144	0.0686		91.5	26308	
21 TAF										
442.90 > 85.00	10.425	10.374	0.051		337143	0.0586		78.1	1688	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLCCV_00041

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210313-114967.b\2021.03.12_A12_TB3_C_012.d

Injection Date: 13-Mar-2021 08:52:11

Instrument ID: A12

Lims ID: CCV L6.5

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 12

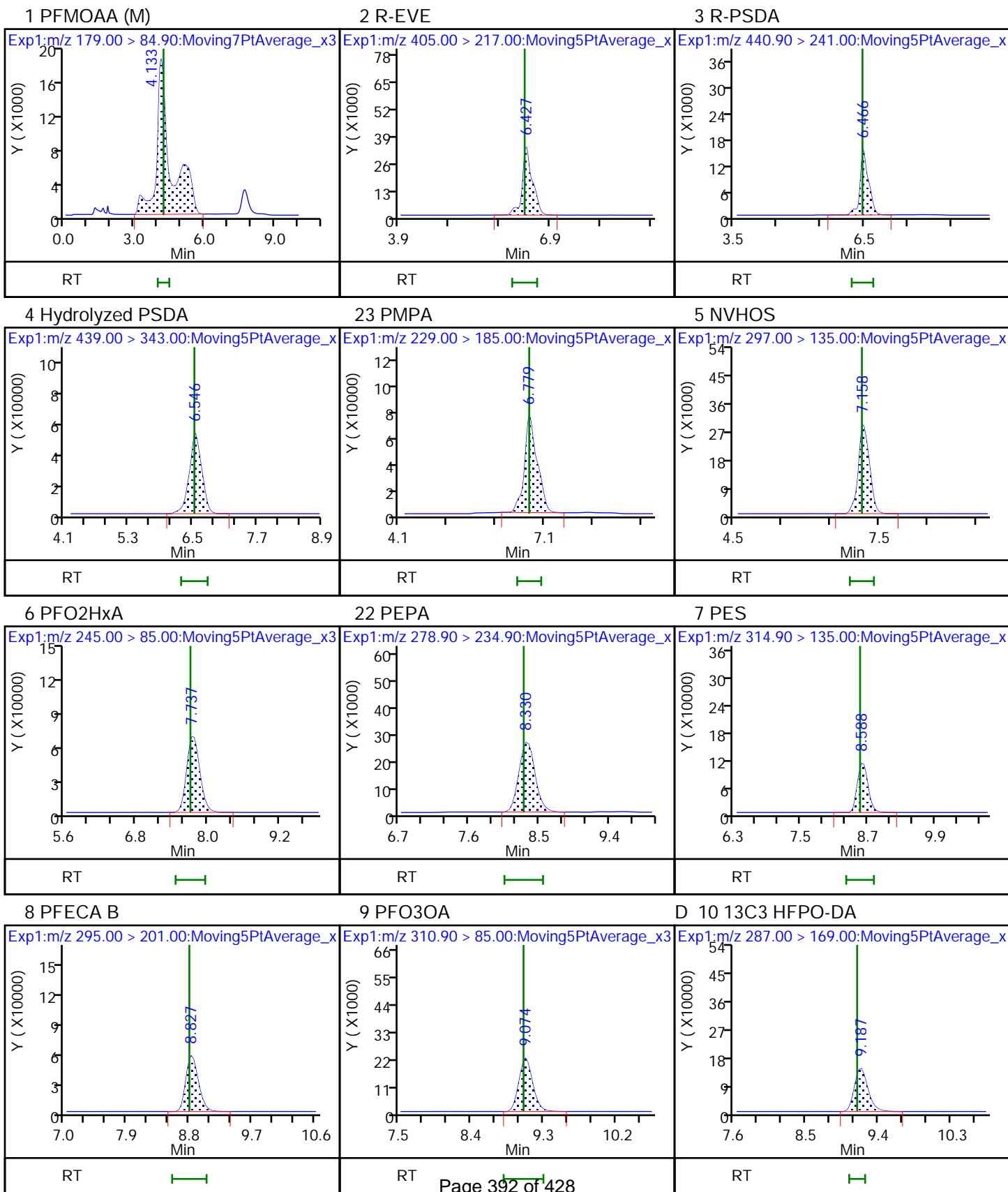
Worklist Smp#: 11

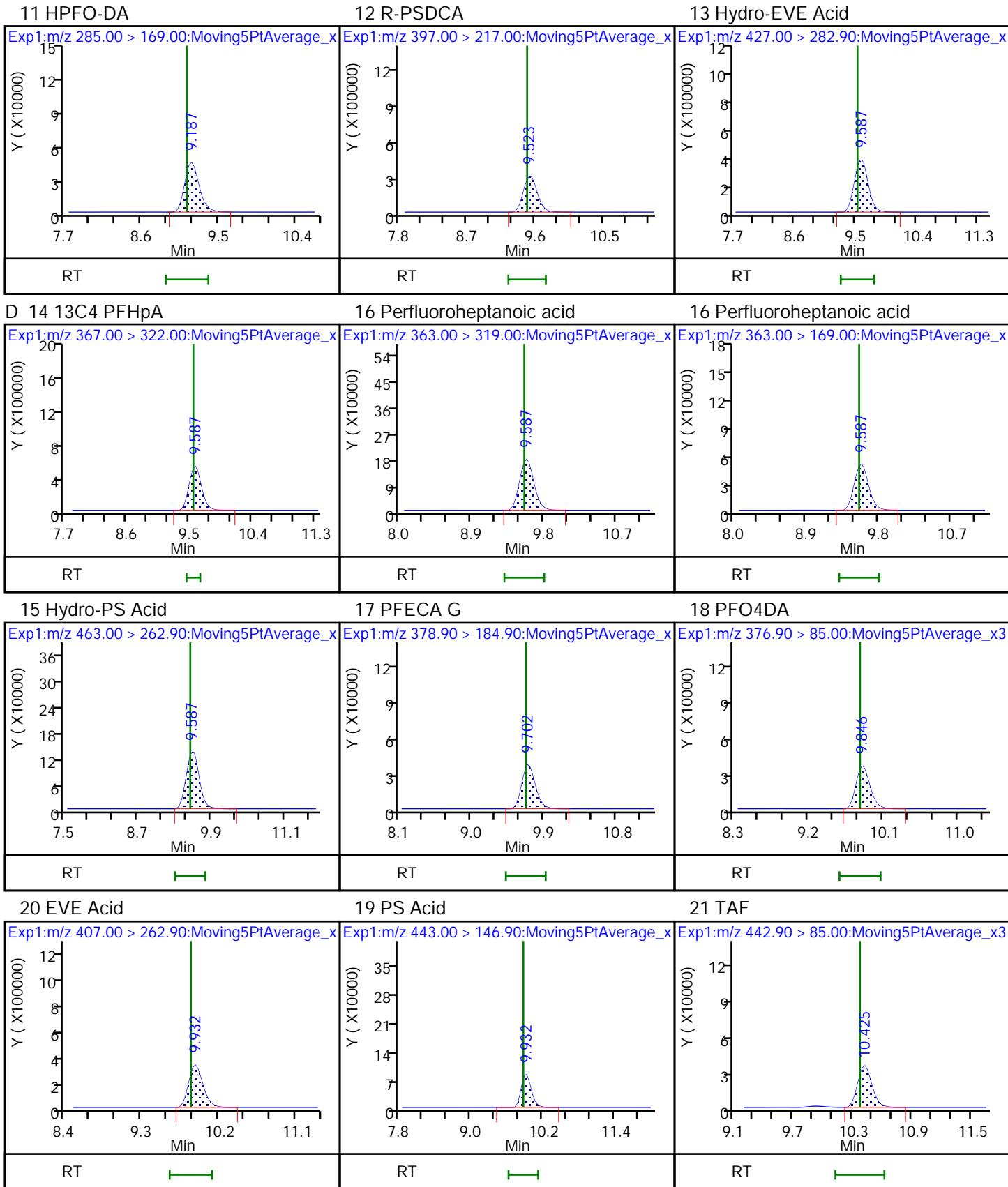
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

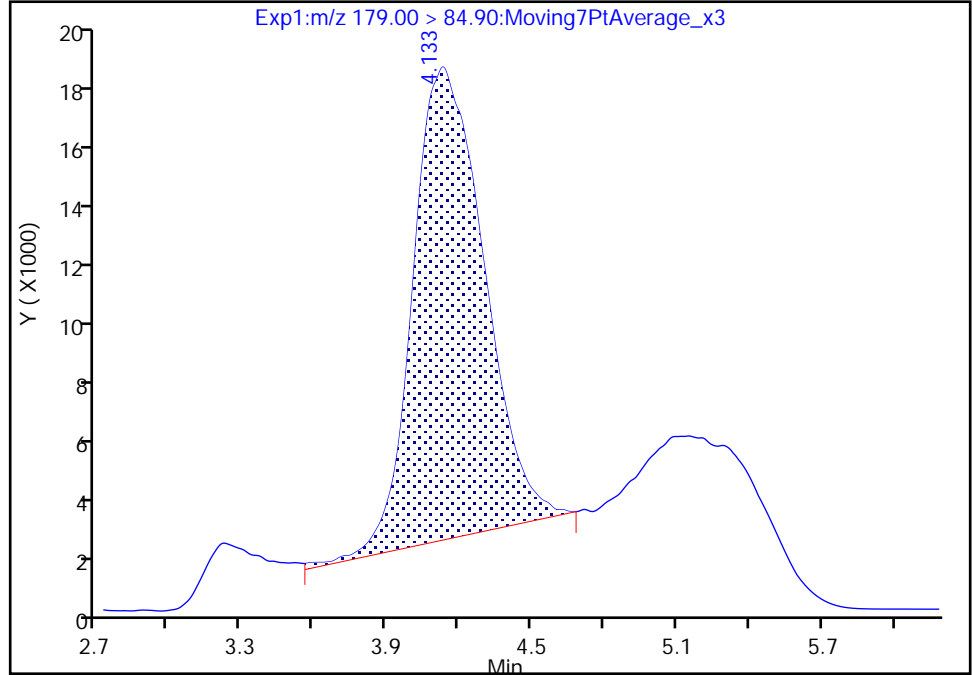
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Injection Date: 13-Mar-2021 08:52:11 Instrument ID: A12
Lims ID: CCV L6.5
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 12 Worklist Smp#: 11
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

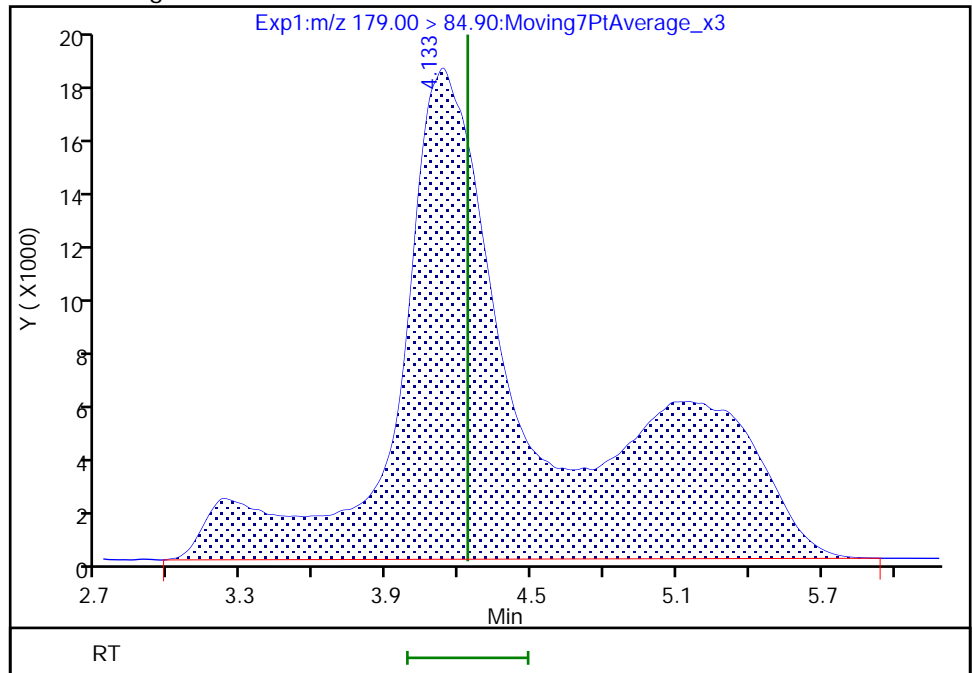
RT: 4.13
Area: 329076
Amount: 0.031822
Amount Units: ng/ml

Processing Integration Results



RT: 4.13
Area: 786538
Amount: 0.076059
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 13-Mar-2021 11:17:21
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 395 of 428

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 320-467237/1-A
 Matrix: Water Lab File ID: 2021.03.09_TB3_A12_AB_031.d
 Analysis Method: Chemours (TB3+) Date Collected: _____
 Extraction Method: PFAS Prep Date Extracted: 03/03/2021 20:42
 Sample wt/vol: 2.50 (mL) Date Analyzed: 03/10/2021 00:12
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 468770 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	<0.0020		0.0020	
13252-13-6	HFPO-DA	<0.0020		0.0020	
773804-62-9	Hydro-EVE Acid	<0.0020		0.0020	
2416366-19-1	Hydrolyzed PSDA	<0.0020		0.0020	
749836-20-2	Hydro-PS Acid	<0.0020		0.0020	
1132933-86-8	NVHOS	<0.0020		0.0020	
267239-61-2	PEPA	<0.020		0.020	
113507-82-7	PES	<0.0020		0.0020	
151772-58-6	PFECA B	<0.0020		0.0020	
801212-59-9	PFECA G	<0.0020		0.0020	
674-13-5	PFMOAA	<0.0020		0.0020	
39492-88-1	PFO2HxA	<0.0020		0.0020	
39492-89-2	PFO3OA	<0.0020		0.0020	
39492-90-5	PFO4DA	<0.0020		0.0020	
39492-91-6	PFO5DA	<0.0020		0.0020	
13140-29-9	PMPA	<0.010		0.010	
29311-67-9	PS Acid	<0.0020		0.0020	
2416366-22-6	R-EVE	<0.0020		0.0020	
2416366-18-0	R-PSDA	<0.0020		0.0020	
2416366-21-5	R-PSDCA	<0.0020		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	96		25-150

Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_031.d
 Lims ID: MB 320-467237/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 10-Mar-2021 00:12:37 ALS Bottle#: 31 Worklist Smp#: 3
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: mb 320-467237/1-a DUE 3/22 (467237)
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Method: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 10-Mar-2021 09:48:25 Calib Date: 08-Mar-2021 18:35:31
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210308-114652.b\2021.03.08_A12_TB3_ICAL_016.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1671

First Level Reviewer: kwong Date: 10-Mar-2021 09:49:30
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
23 PMPA										M
229.00 > 185.00	6.945	6.686	0.259		40642	0.002363			15.8	M
D 10 13C3 HFPO-DA										a
287.00 > 169.00	9.130	9.133	-0.003		1514347	0.2394		95.8	29616	a
D 14 13C4 PFHpA										a
367.00 > 322.00	9.555	9.558	-0.003		5729538	0.2112		84.5	71487	a
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.555	9.558	-0.003	1.000	22149	0.000880	Target=0.00		123	
363.00 > 169.00	9.555	9.558	-0.003	1.000	6192		3.58(0.00-0.00)		121	

QC Flag Legend

Processing Flags

Review Flags

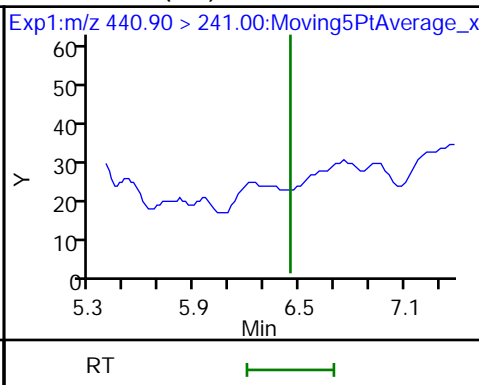
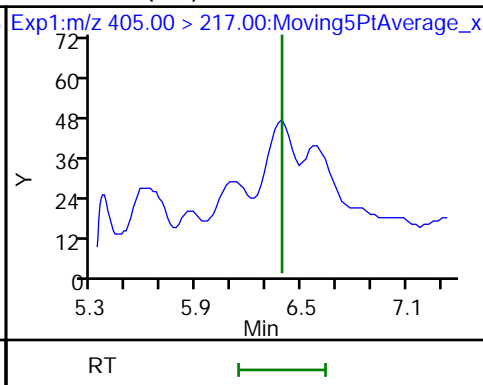
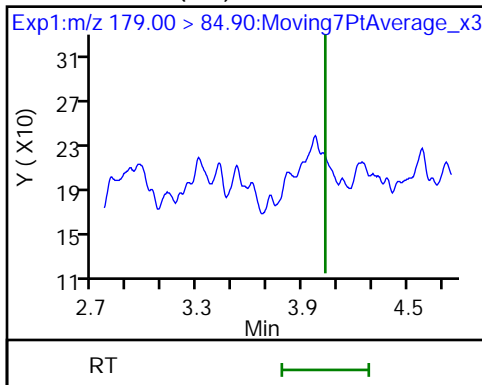
M - Manually Integrated

a - User Assigned ID

1 PFM0AA (ND)

2 R-EVE (ND)

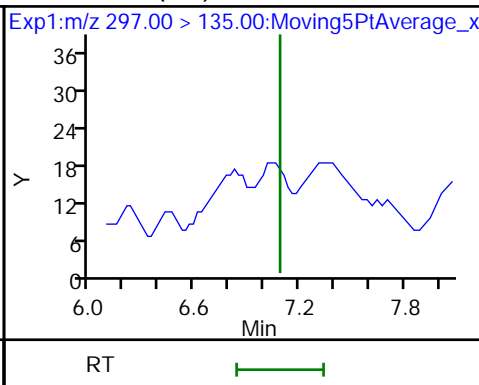
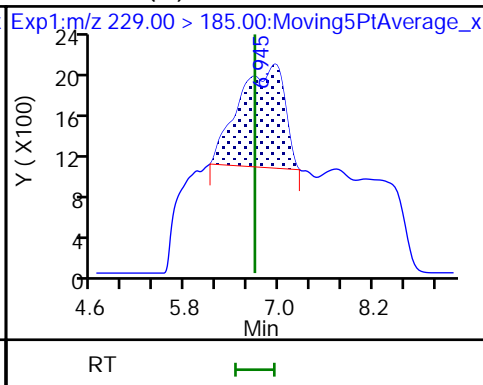
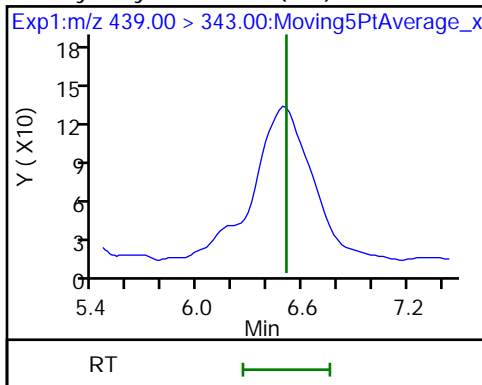
3 R-PSDA (ND)



4 Hydrolyzed PSDA (ND)

23 PMPA (M)

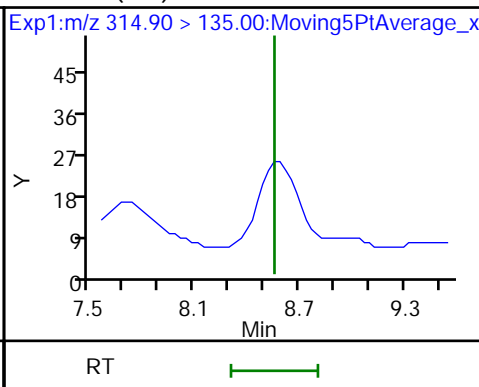
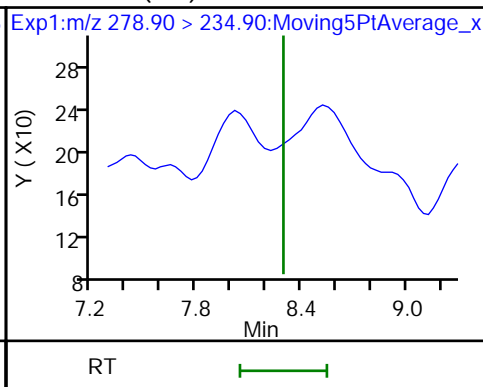
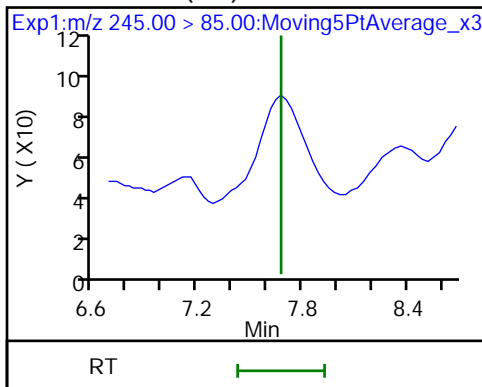
5 NVHOS (ND)



6 PFO2HxA (ND)

22 PEPA (ND)

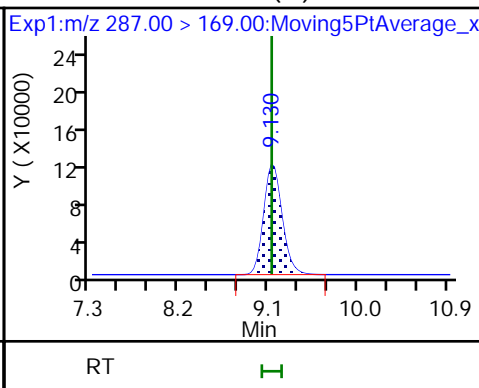
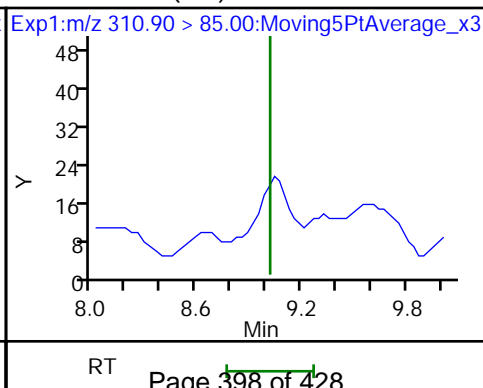
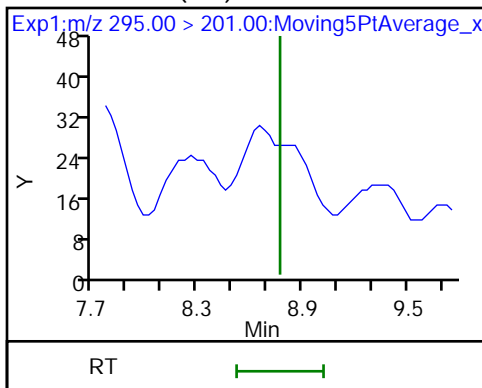
7 PES (ND)

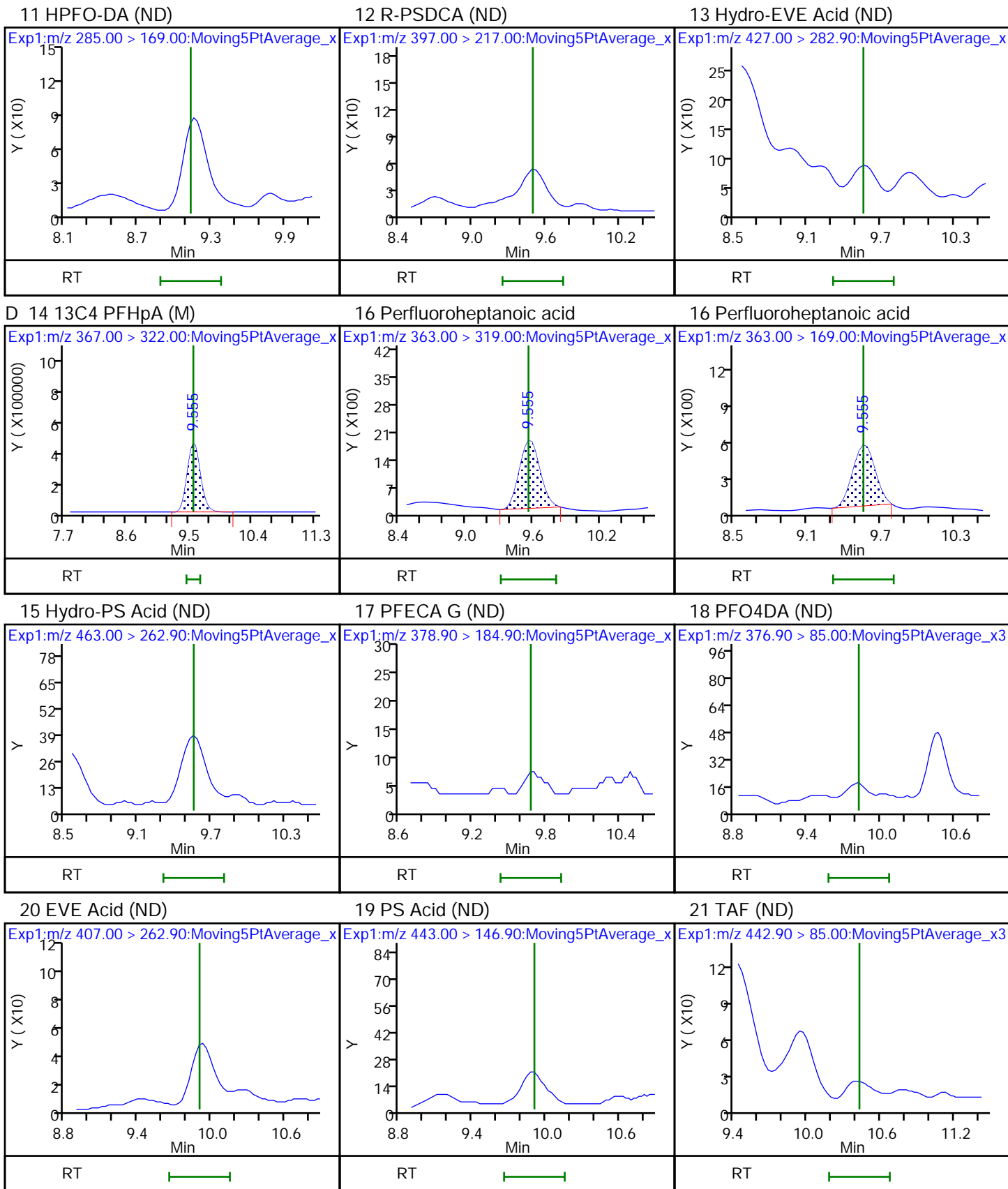


8 PFECA B (ND)

9 PFO3OA (ND)

D 10 13C3 HFPO-DA (M)





Eurofins TestAmerica, Sacramento

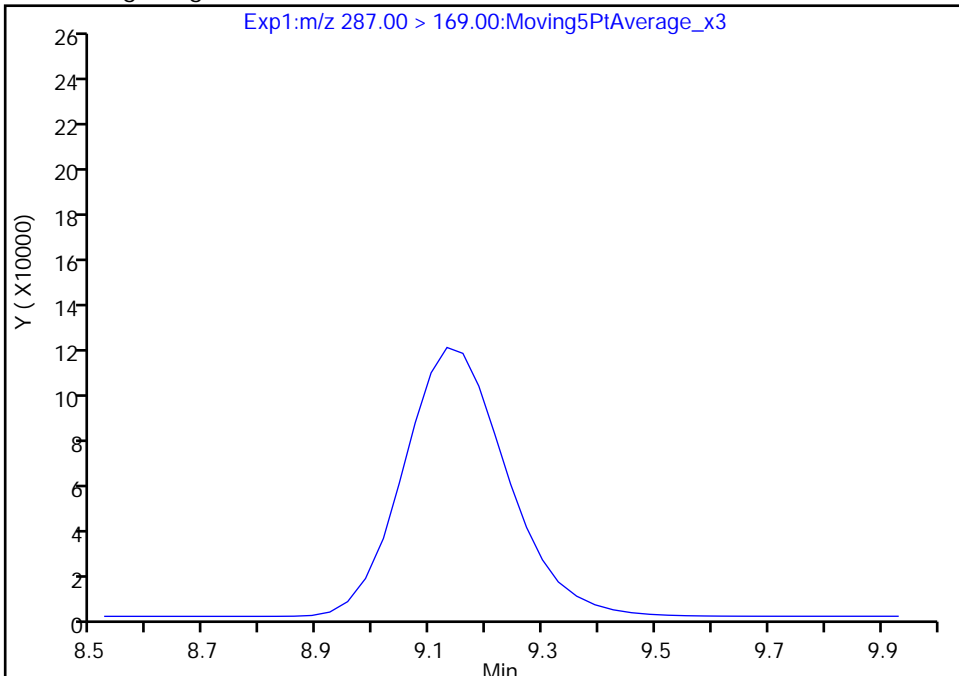
Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_031.d
Injection Date: 10-Mar-2021 00:12:37 Instrument ID: A12
Lims ID: MB 320-467237/1-A
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 31 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

D 10 13C3 HFPO-DA, CAS: STL02255

Signal: 1

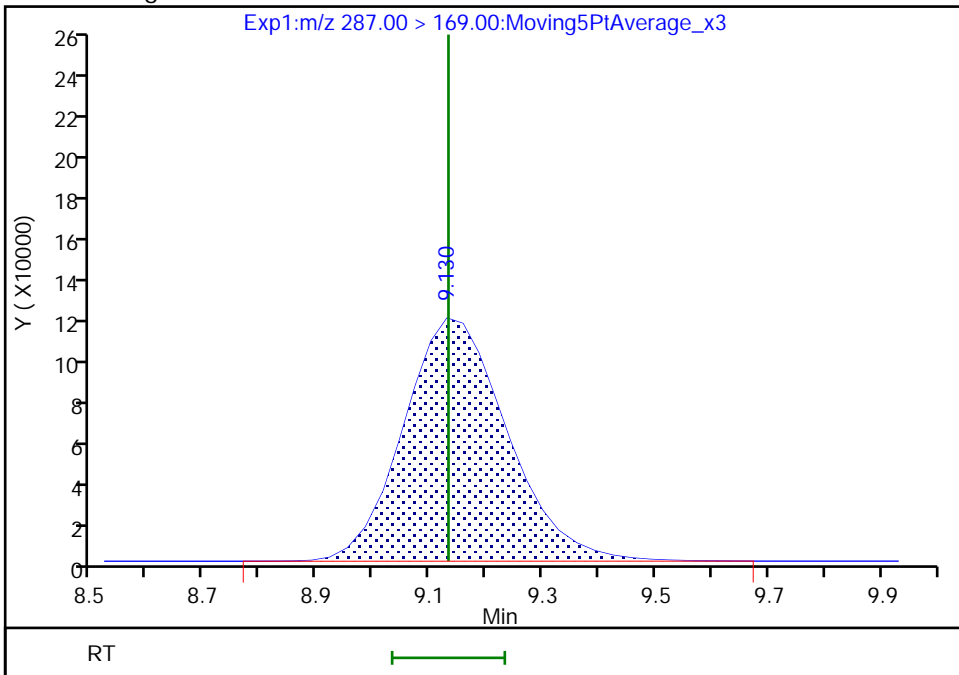
Not Detected
Expected RT: 9.13

Processing Integration Results



Manual Integration Results

RT: 9.13
Area: 1514347
Amount: 0.239431
Amount Units: ng/ml



Eurofins TestAmerica, Sacramento

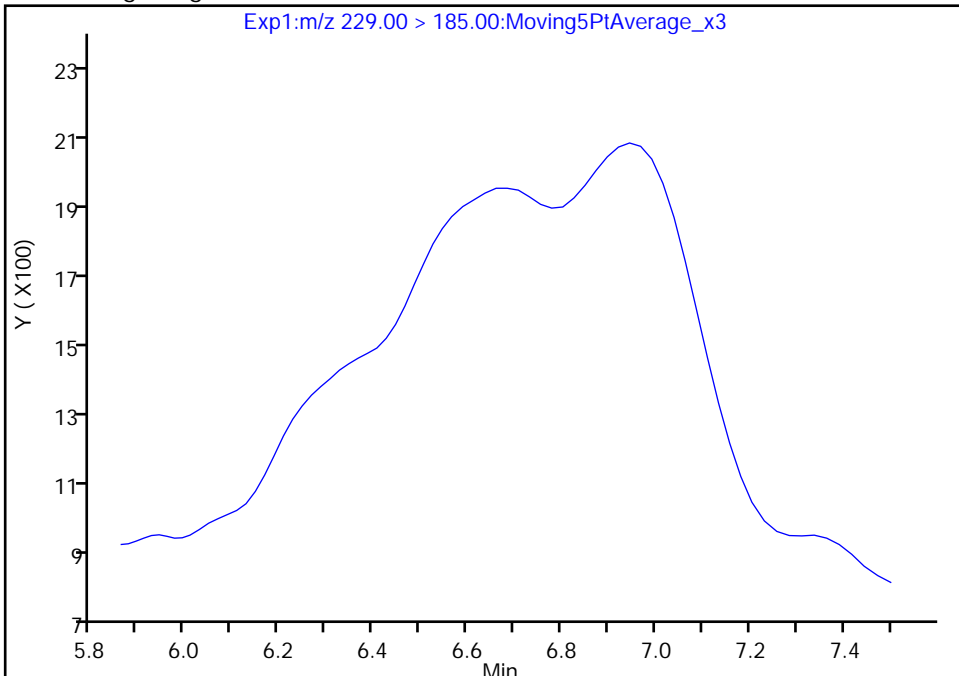
Data File: \\chromfs\Sacramento\ChromData\A12\20210309-114713.b\2021.03.09_TB3_A12_AB_031.d
Injection Date: 10-Mar-2021 00:12:37 Instrument ID: A12
Lims ID: MB 320-467237/1-A
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 31 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

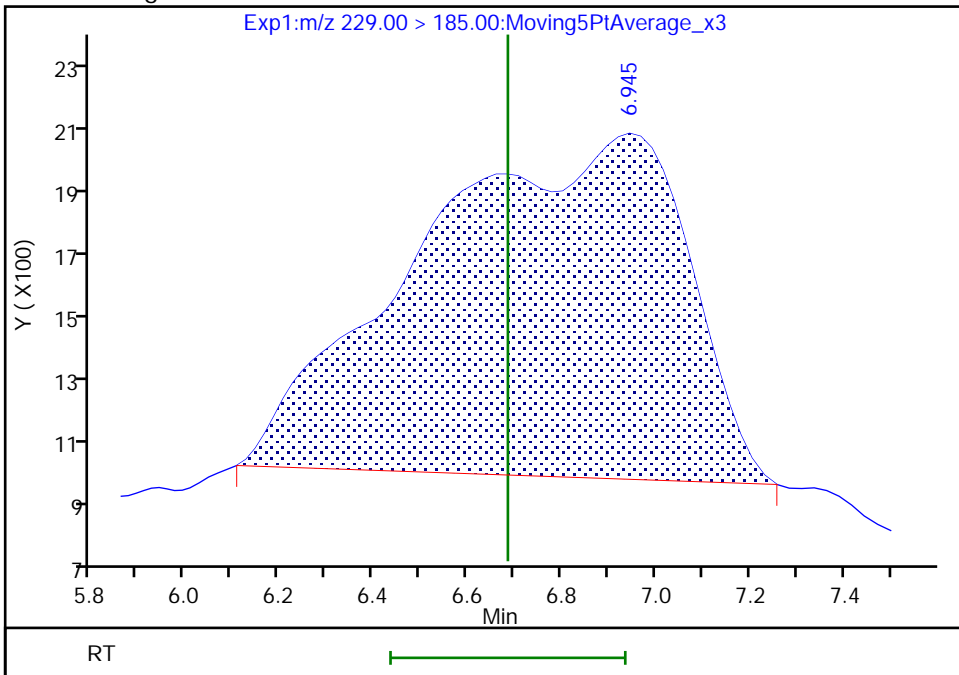
Not Detected
Expected RT: 6.69

Processing Integration Results



Manual Integration Results

RT: 6.94
Area: 40642
Amount: 0.002363
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 10-Mar-2021 15:44:14
Audit Action: Manually Integrated

Audit Reason: Baseline
Page 402 of 428

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 320-467237/2-A
 Matrix: Water Lab File ID: 2021.03.12_A12_TB3_C_008.d
 Analysis Method: Chemours (TB3+) Date Collected: _____
 Extraction Method: PFAS Prep Date Extracted: 03/03/2021 20:42
 Sample wt/vol: 2.50 (mL) Date Analyzed: 03/13/2021 07:41
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 469973 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	0.179		0.0020	
13252-13-6	HFPO-DA	0.212		0.0020	
773804-62-9	Hydro-EVE Acid	0.150		0.0020	
2416366-19-1	Hydrolyzed PSDA	0.186		0.0020	
749836-20-2	Hydro-PS Acid	0.177		0.0020	
1132933-86-8	NVHOS	0.183		0.0020	
267239-61-2	PEPA	0.176		0.020	
113507-82-7	PES	0.191		0.0020	
151772-58-6	PFECA B	0.186		0.0020	
801212-59-9	PFECA G	0.163		0.0020	
674-13-5	PFMOAA	0.227		0.0020	
39492-88-1	PFO2HxA	0.208		0.0020	
39492-89-2	PFO3OA	0.210		0.0020	
39492-90-5	PFO4DA	0.136		0.0020	
39492-91-6	PFO5DA	0.156		0.0020	
13140-29-9	PMPA	0.202		0.010	
29311-67-9	PS Acid	0.178		0.0020	
2416366-22-6	R-EVE	0.207		0.0020	
2416366-18-0	R-PSDA	0.170		0.0020	
2416366-21-5	R-PSDCA	0.139		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	81		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210313-114967.b\2021.03.12_A12_TB3_C_008.d
 Lims ID: LCS 320-467237/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 13-Mar-2021 07:41:51 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: lcs 320-467237/2-a AR
 Misc. Info.: Plate: 1 Rack: 6
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Method: \\chromfs\Sacramento\ChromData\A12\20210313-114967.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 13-Mar-2021 11:05:52 Calib Date: 11-Mar-2021 16:03:54
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_019.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1648

First Level Reviewer: yuj Date: 13-Mar-2021 11:05:52
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.888	4.235	-0.347		1172189	0.1134		113	55.2	M
2 R-EVE										M
405.00 > 217.00	6.367	6.390	-0.023		686310	0.1035		104	7394	M
3 R-PSDA										M
440.90 > 241.00	6.407	6.450	-0.043		279012	0.0849		84.9	2299	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.486	6.529	-0.043		1192875	0.0932		93.2	20989	
23 PMPA										
229.00 > 185.00	6.755	6.782	-0.027		1961123	0.1009		101	2194	
5 NVHOS										
297.00 > 135.00	7.111	7.138	-0.027		667098	0.0913		91.3	11646	
6 PFO2HxA										
245.00 > 85.00	7.737	7.709	0.028		1606619	0.1042		104	15802	
22 PEPA										
278.90 > 234.90	8.330	8.299	0.031		587124	0.0881		88.1	3526	
7 PES										
314.90 > 135.00	8.588	8.556	0.032		2307457	0.0953		95.3	56968	
8 PFECA B										
295.00 > 201.00	8.828	8.800	0.028		1051286	0.0928		92.8	27051	
9 PFO3OA										
310.90 > 85.00	9.047	9.048	-0.001		509792	0.1049		105	13816	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.160	9.133	0.027		1568955	0.2016		80.6	33275	
11 HPFO-DA										
285.00 > 169.00	9.160	9.133	0.027	1.000	733648	0.1059		106	15402	
12 R-PSDCA										
397.00 > 217.00	9.524	9.493	0.031		276462	0.0696		69.6	49255	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Hydro-EVE Acid										
427.00 > 282.90	9.589	9.525	0.064		5717109	0.0751		75.1	50158	
D 14 13C4 PFHpA										
367.00 > 322.00	9.589	9.558	0.031		4136831	0.1690		67.6	66038	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.589	9.558	0.031	1.000	2322549	0.1189	Target=0.00	119	15549	
363.00 > 169.00	9.589	9.558	0.031	1.000	611772		3.80(0.00-0.00)		9781	
15 Hydro-PS Acid										
463.00 > 262.90	9.589	9.558	0.031		2768421	0.0883		88.3	47088	
17 PFECA G										
378.90 > 184.90	9.703	9.676	0.027		482440	0.0816		81.6	13709	
18 PFO4DA										
376.90 > 85.00	9.847	9.820	0.027		443963	0.0678		67.8	9523	
20 EVE Acid										
407.00 > 262.90	9.933	9.877	0.056		4579327	0.0897		89.7	65097	
19 PS Acid										
443.00 > 146.90	9.904	9.877	0.027		1195265	0.0890		89.0	25669	
21 TAF										
442.90 > 85.00	10.426	10.374	0.052		447728	0.0778		77.8	1939	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Data File: \\chromfs\Sacramento\ChromData\A12\20210313-114967.b\2021.03.12_A12_TB3_C_008.d

Injection Date: 13-Mar-2021 07:41:51

Instrument ID: A12

Lims ID: LCS 320-467237/2-A

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 8

Worklist Smp#: 8

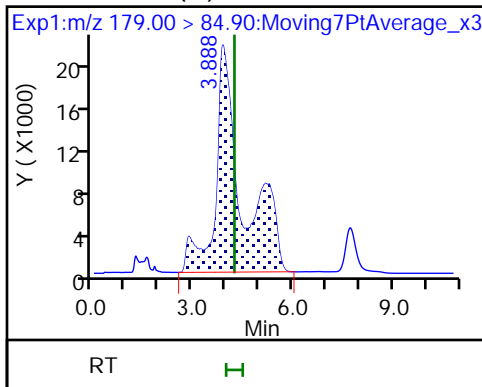
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

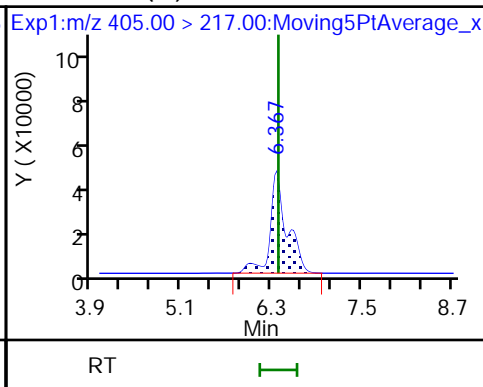
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

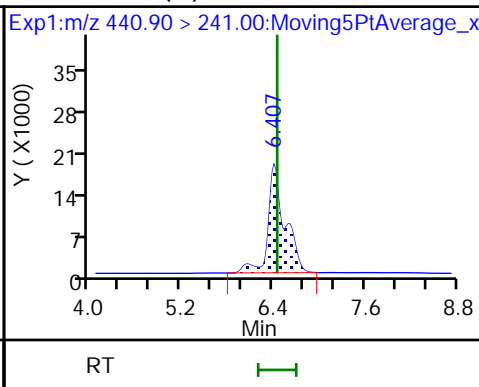
1 PFMOAA (M)



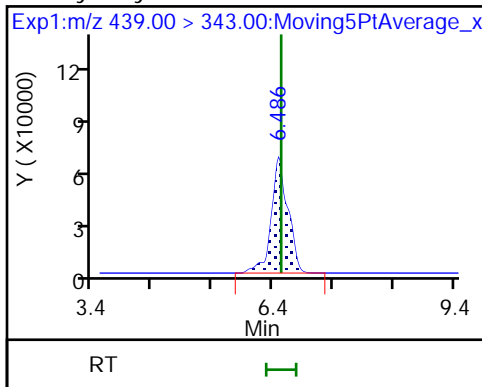
2 R-EVE (M)



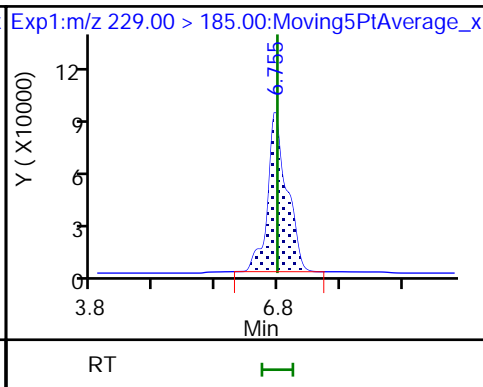
3 R-PSDA (M)



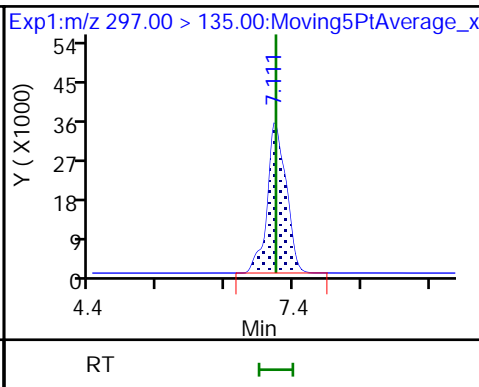
4 Hydrolyzed PSDA



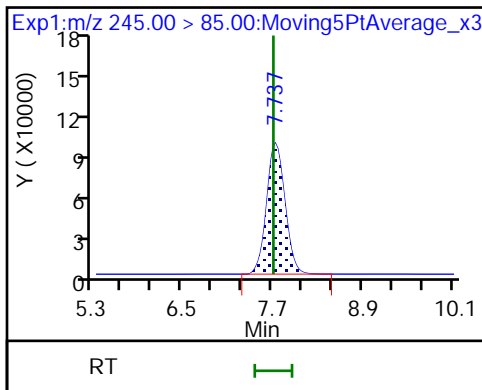
23 PMPA



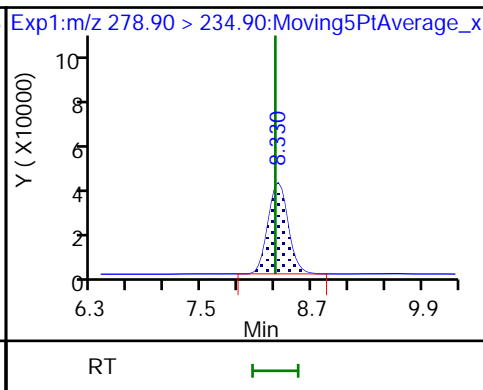
5 NVHOS



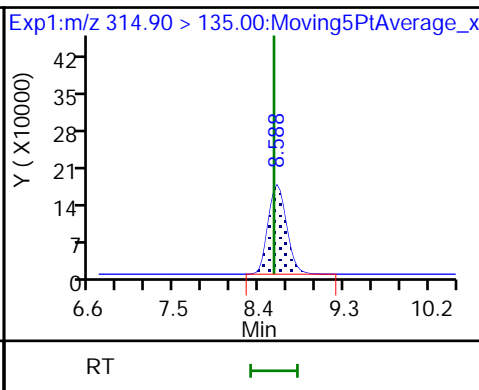
6 PFO2HxA



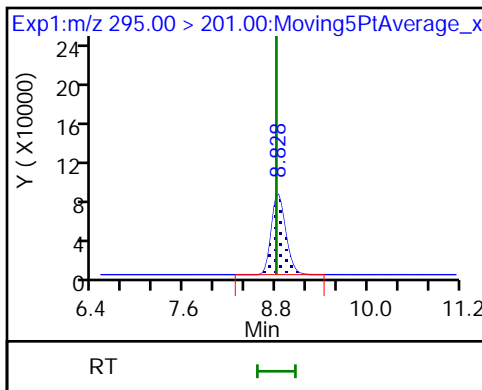
22 PEPA



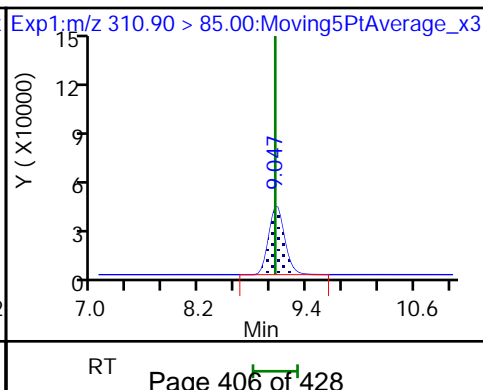
7 PES



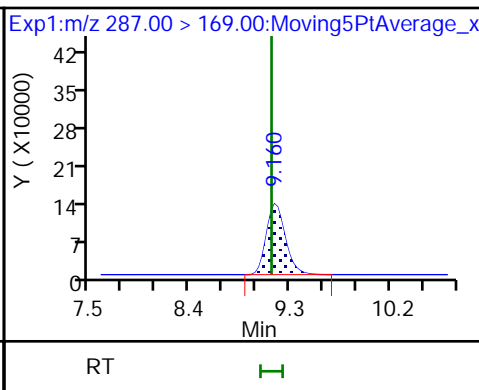
8 PFECA B

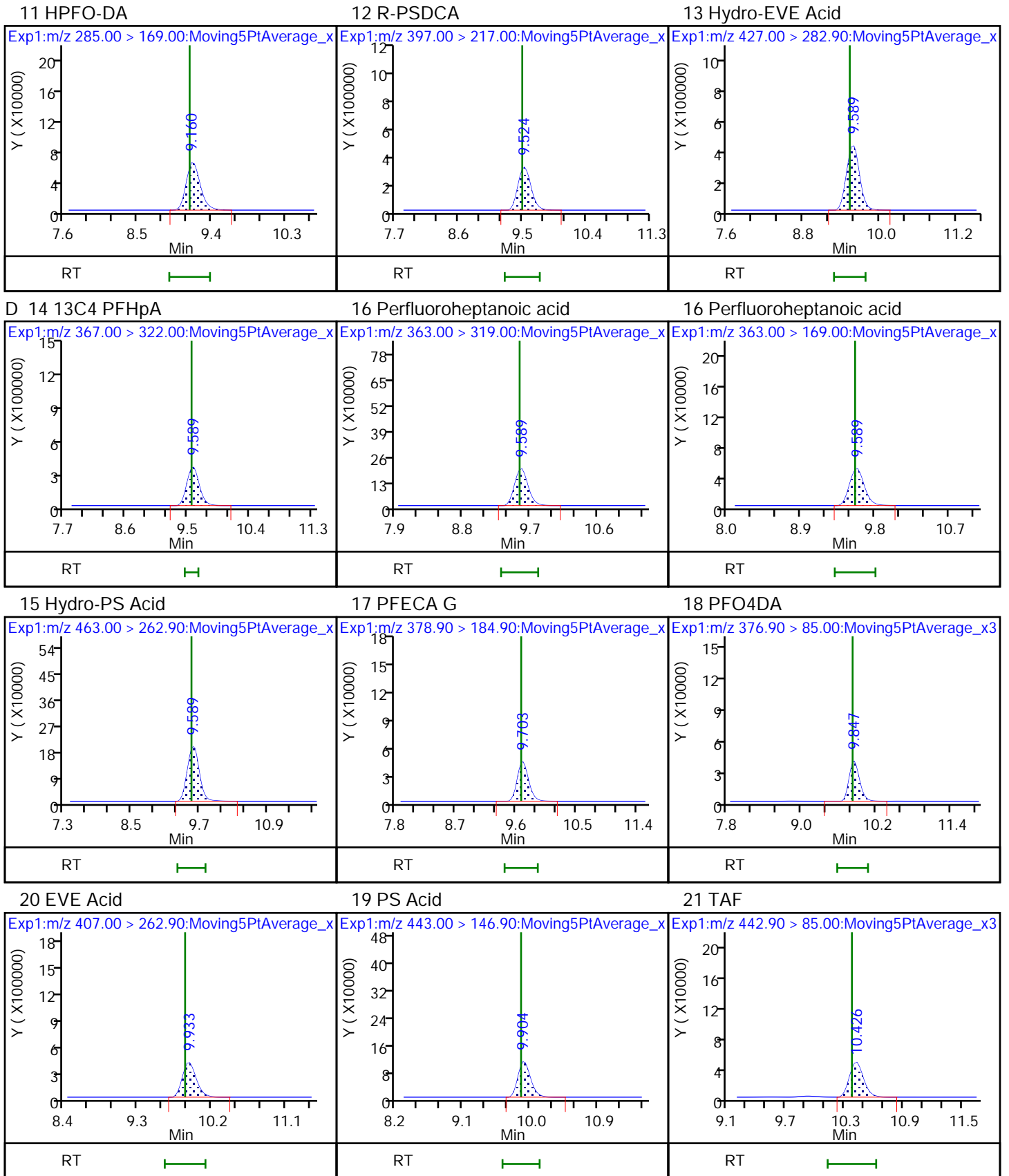


9 PFO3OA



D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

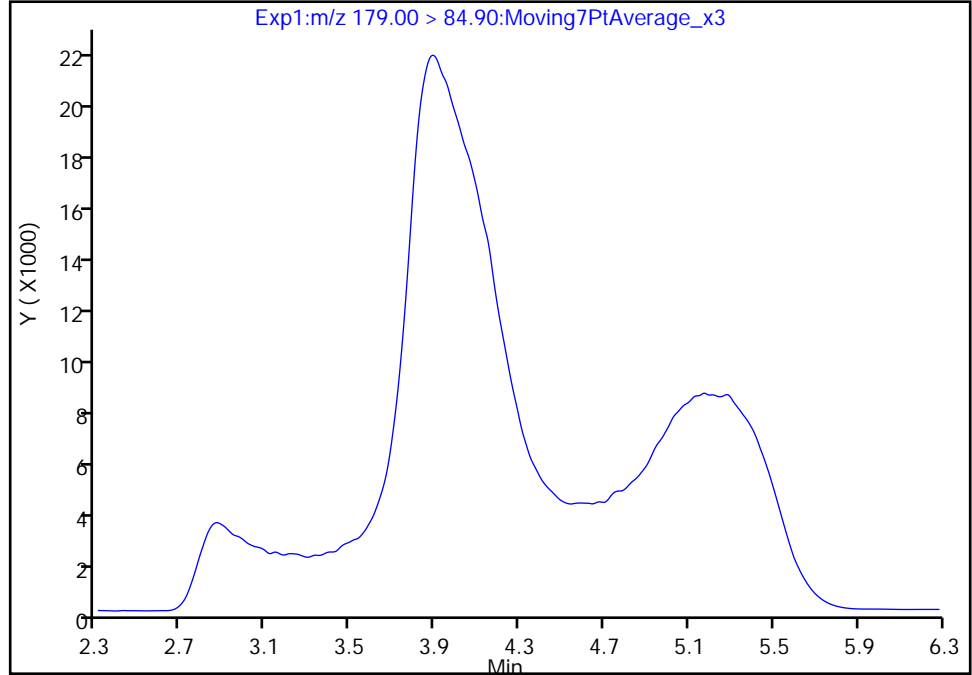
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Injection Date: 13-Mar-2021 07:41:51 Instrument ID: A12
Lims ID: LCS 320-467237/2-A
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

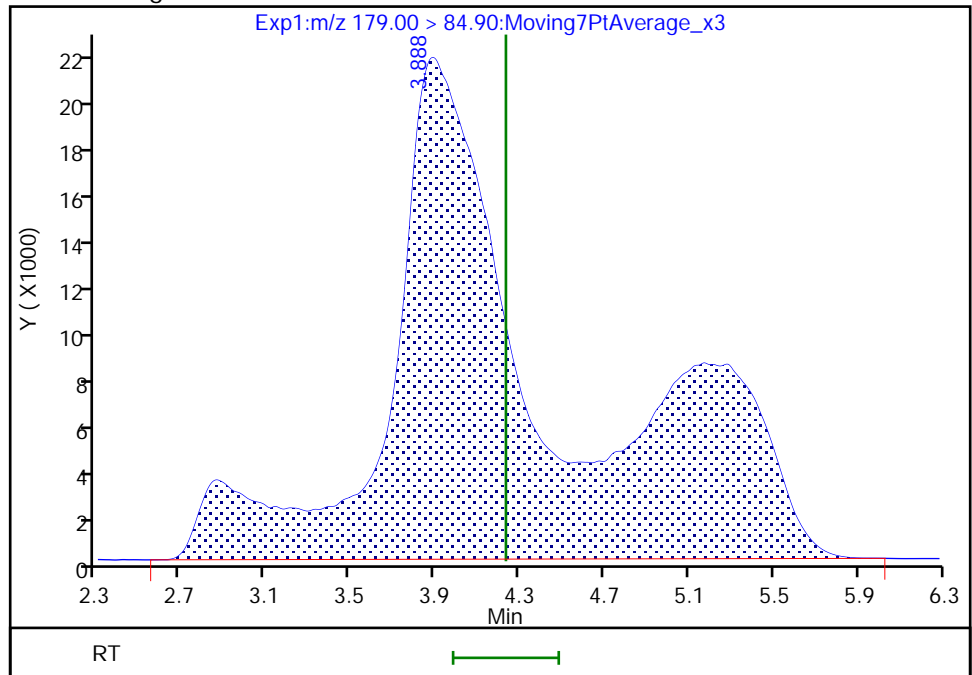
Not Detected
Expected RT: 4.24

Processing Integration Results



Manual Integration Results

RT: 3.89
Area: 1172189
Amount: 0.113352
Amount Units: ng/ml



Reviewer: yuj, 13-Mar-2021 11:05:34
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

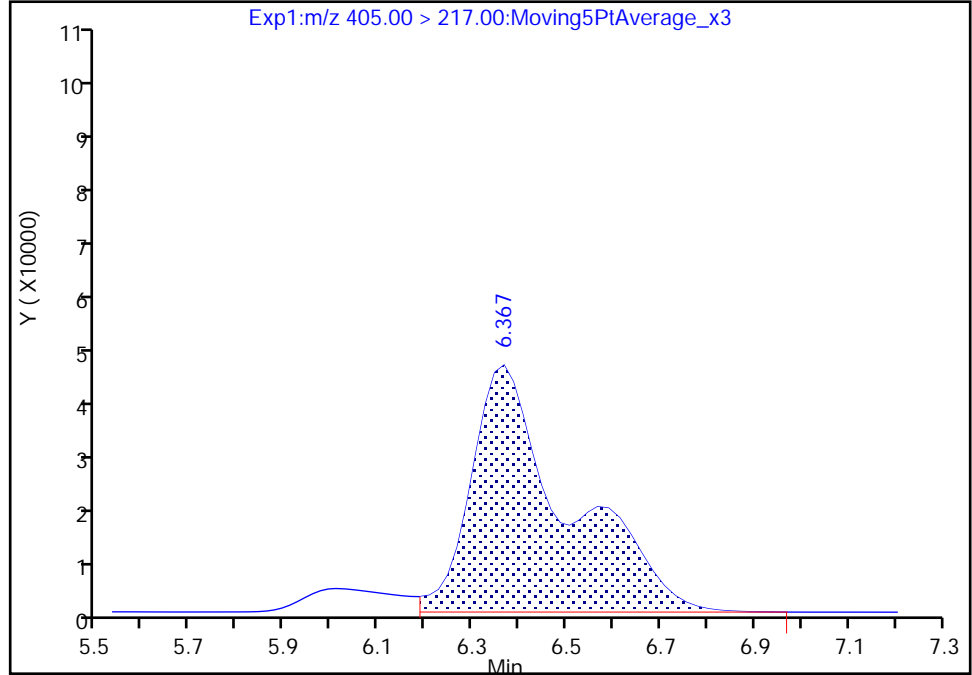
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Injection Date: 13-Mar-2021 07:41:51 Instrument ID: A12
Lims ID: LCS 320-467237/2-A
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

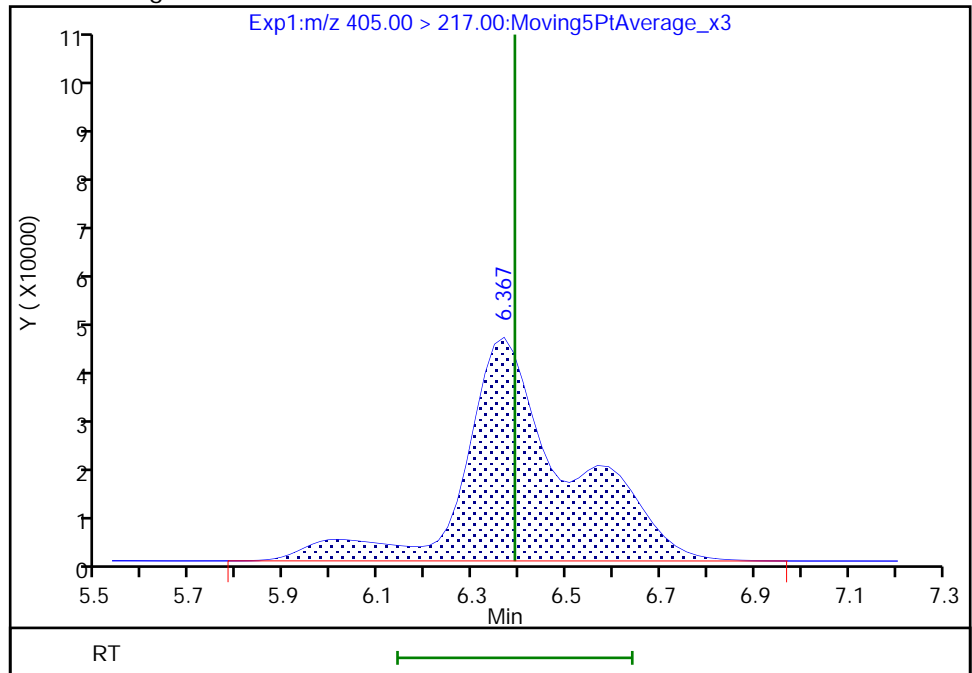
RT: 6.37
Area: 629272
Amount: 0.094920
Amount Units: ng/ml

Processing Integration Results



RT: 6.37
Area: 686310
Amount: 0.103523
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 13-Mar-2021 11:05:39
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

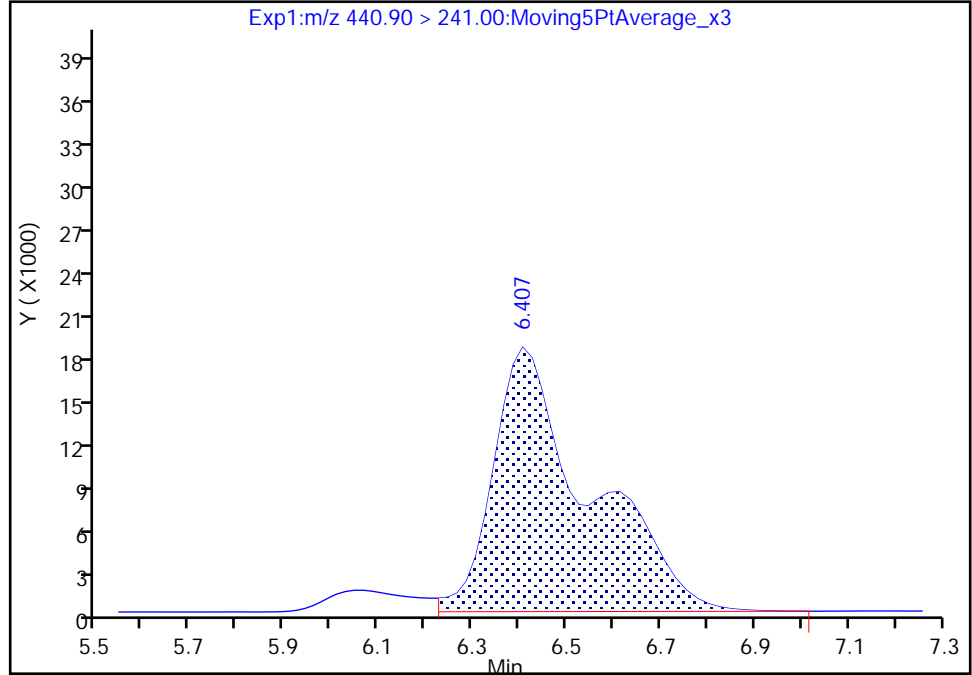
Data File: \\chromfs\Sacramento\ChromData\A12\20210313-114967.b\2021.03.12_A12_TB3_C_008.d
Injection Date: 13-Mar-2021 07:41:51 Instrument ID: A12
Lims ID: LCS 320-467237/2-A
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

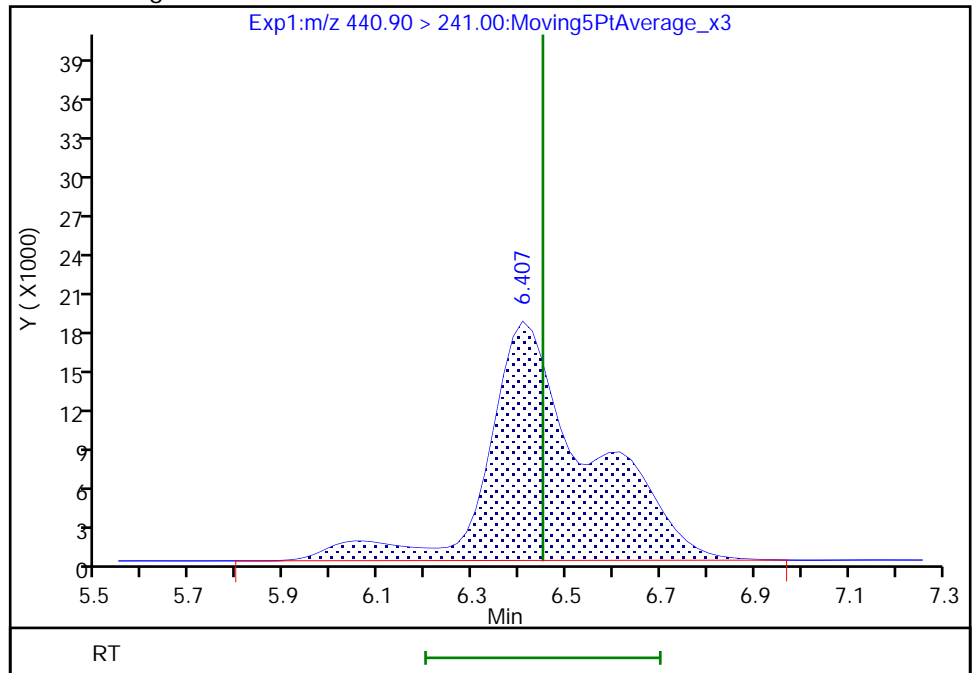
RT: 6.41
Area: 260449
Amount: 0.079276
Amount Units: ng/ml

Processing Integration Results



RT: 6.41
Area: 279012
Amount: 0.084926
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 13-Mar-2021 11:05:41
Audit Action: Manually Integrated

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 320-467237/3-A
 Matrix: Water Lab File ID: 2021.03.12_A12_TB3_C_009.d
 Analysis Method: Chemours (TB3+) Date Collected: _____
 Extraction Method: PFAS Prep Date Extracted: 03/03/2021 20:42
 Sample wt/vol: 2.50 (mL) Date Analyzed: 03/13/2021 07:59
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 469973 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	0.161		0.0020	
13252-13-6	HFPO-DA	0.228		0.0020	
773804-62-9	Hydro-EVE Acid	0.148		0.0020	
2416366-19-1	Hydrolyzed PSDA	0.204		0.0020	
749836-20-2	Hydro-PS Acid	0.168		0.0020	
1132933-86-8	NVHOS	0.172		0.0020	
267239-61-2	PEPA	0.158		0.020	
113507-82-7	PES	0.171		0.0020	
151772-58-6	PFECA B	0.178		0.0020	
801212-59-9	PFECA G	0.146		0.0020	
674-13-5	PFMOAA	0.212		0.0020	
39492-88-1	PFO2HxA	0.190		0.0020	
39492-89-2	PFO3OA	0.178		0.0020	
39492-90-5	PFO4DA	0.122		0.0020	
39492-91-6	PFO5DA	0.128		0.0020	
13140-29-9	PMPA	0.186		0.010	
29311-67-9	PS Acid	0.166		0.0020	
2416366-22-6	R-EVE	0.220		0.0020	
2416366-18-0	R-PSDA	0.188		0.0020	
2416366-21-5	R-PSDCA	0.143		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	78		25-150

Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210313-114967.b\2021.03.12_A12_TB3_C_009.d
 Lims ID: LCSD 320-467237/3-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 13-Mar-2021 07:59:25 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: lcsd 320-467237/3-a AR
 Misc. Info.: Plate: 1 Rack: 6
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Method: \\chromfs\Sacramento\ChromData\A12\20210313-114967.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 13-Mar-2021 11:06:22 Calib Date: 11-Mar-2021 16:03:54
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210311-114838.b\2021.03.11_A12_TB3_ICAL_A_019.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1648

First Level Reviewer: yuj Date: 13-Mar-2021 11:06:22
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.999	4.235	-0.236		1096409	0.1060		106	57.5	M
2 R-EVE										M
405.00 > 217.00	6.367	6.390	-0.023		728237	0.1098		110	8063	M
3 R-PSDA										M
440.90 > 241.00	6.407	6.450	-0.043		308448	0.0939		93.9	2582	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.486	6.529	-0.043		1304914	0.1019		102	23315	
23 PMPA										
229.00 > 185.00	6.755	6.782	-0.027		1814714	0.0932		93.2	2541	
5 NVHOS										
297.00 > 135.00	7.134	7.138	-0.004		626874	0.0858		85.8	11671	
6 PFO2HxA										
245.00 > 85.00	7.737	7.709	0.028		1469082	0.0952		95.2	14872	
22 PEPA										
278.90 > 234.90	8.331	8.299	0.031		526401	0.0790		79.0	3195	
7 PES										
314.90 > 135.00	8.588	8.556	0.032		2074457	0.0857		85.7	51465	
8 PFECA B										
295.00 > 201.00	8.827	8.800	0.027		1007801	0.0890		89.0	19614	
9 PFO3OA										
310.90 > 85.00	9.045	9.048	-0.003		432018	0.0889		88.9	11762	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.158	9.133	0.025		1511881	0.1943		77.7	42859	
11 HPFO-DA										
285.00 > 169.00	9.158	9.133	0.025	1.000	761014	0.1140		114	16131	
12 R-PSDCA										
397.00 > 217.00	9.523	9.493	0.030		2863380	0.0714		71.4	60463	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Hydro-EVE Acid										
427.00 > 282.90	9.588	9.525	0.063		5646252	0.0742		74.2	49565	
D 14 13C4 PFHpA										
367.00 > 322.00	9.588	9.558	0.030		4209805	0.1720		68.8	66424	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.588	9.558	0.030	1.000	2049874	0.1031	Target=0.00	103	14855	
363.00 > 169.00	9.588	9.558	0.030	1.000	563610		3.64(0.00-0.00)		11182	
15 Hydro-PS Acid										
463.00 > 262.90	9.588	9.558	0.030		2626466	0.0838		83.8	59672	
17 PFECA G										
378.90 > 184.90	9.702	9.676	0.026		431431	0.0729		72.9	12180	
18 PFO4DA										
376.90 > 85.00	9.846	9.820	0.026		400522	0.0611		61.1	8553	
20 EVE Acid										
407.00 > 262.90	9.903	9.877	0.026		4112742	0.0806		80.6	58016	
19 PS Acid										
443.00 > 146.90	9.903	9.877	0.026		1116448	0.0831		83.1	24044	
21 TAF										
442.90 > 85.00	10.399	10.374	0.025		368958	0.0641		64.1	1644	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Data File: \\chromfs\Sacramento\ChromData\A12\20210313-114967.b\2021.03.12_A12_TB3_C_009.d

Injection Date: 13-Mar-2021 07:59:25

Instrument ID: A12

Lims ID: LCSD 320-467237/3-A

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 9

Worklist Smp#: 9

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

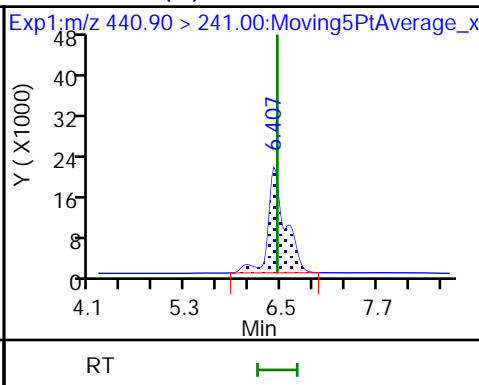
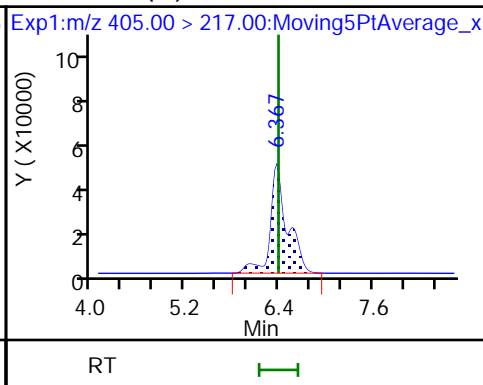
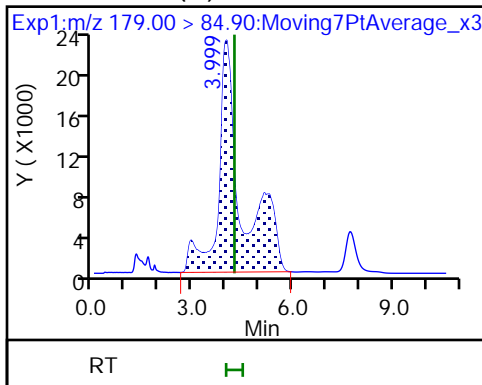
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

1 PFMOAA (M)

2 R-EVE (M)

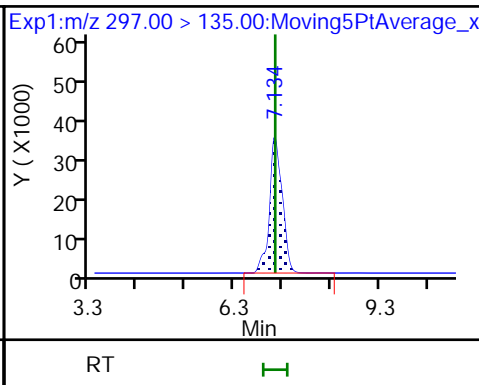
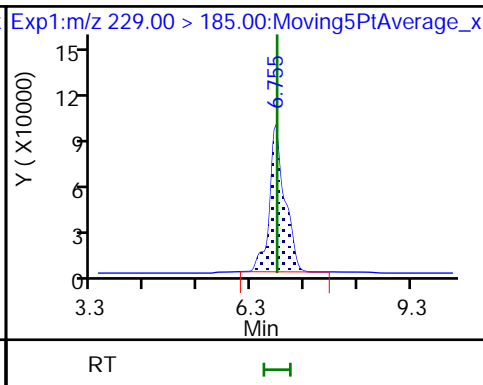
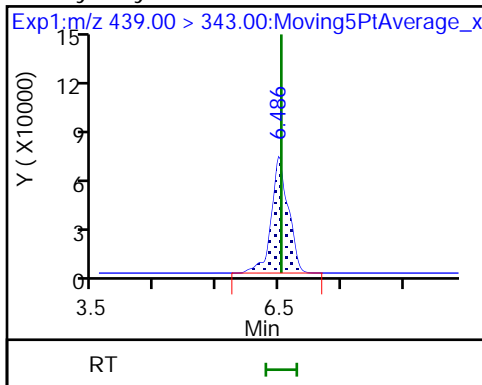
3 R-PSDA (M)



4 Hydrolyzed PSDA

23 PMPA

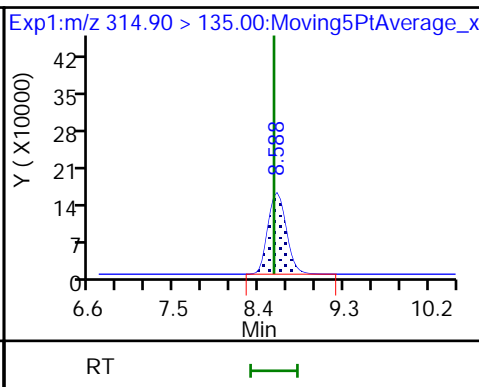
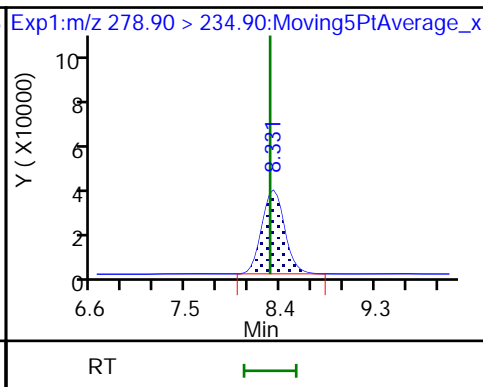
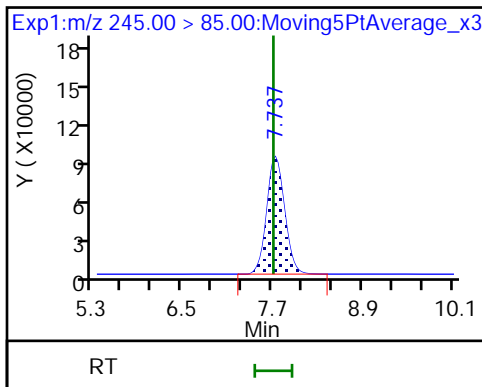
5 NVHOS



6 PFO2HxA

22 PEPA

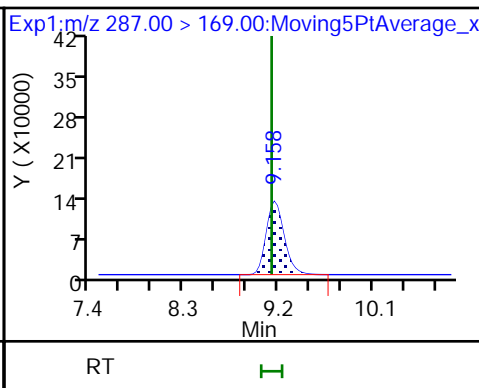
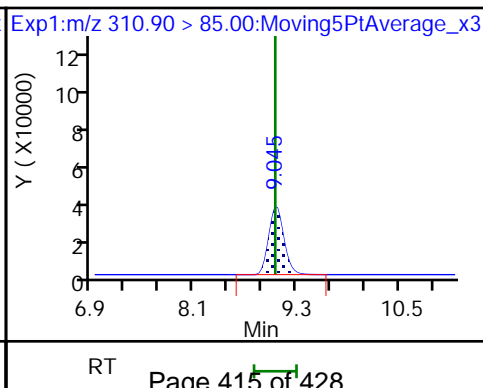
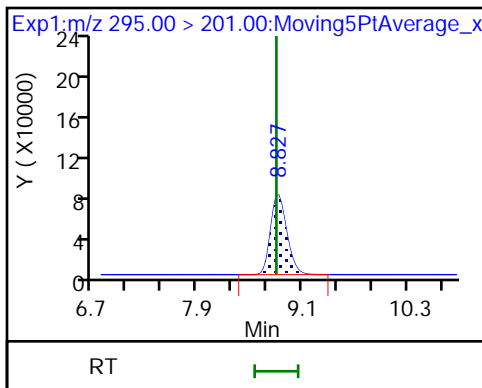
7 PES

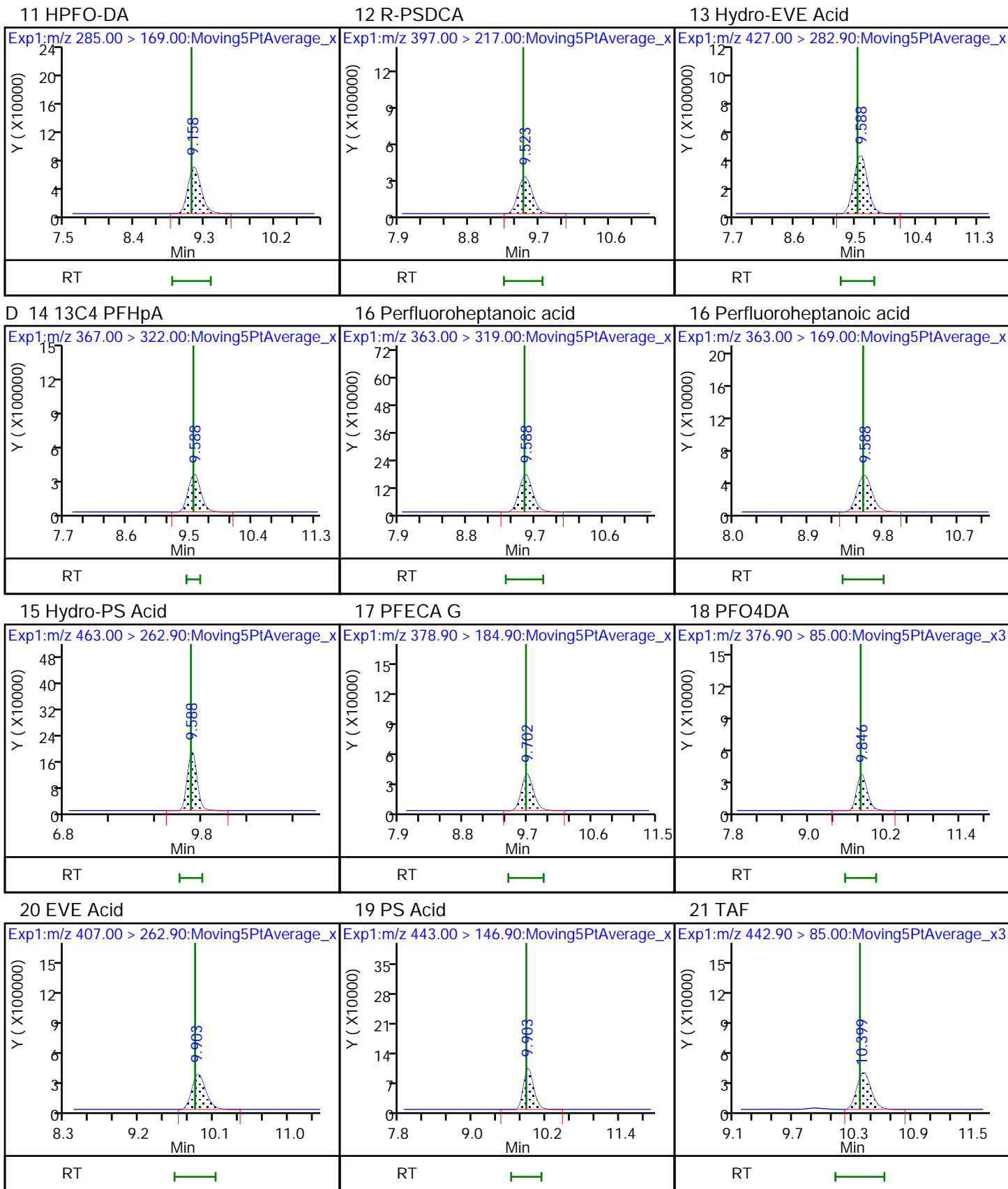


8 PFECA B

9 PFO3OA

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

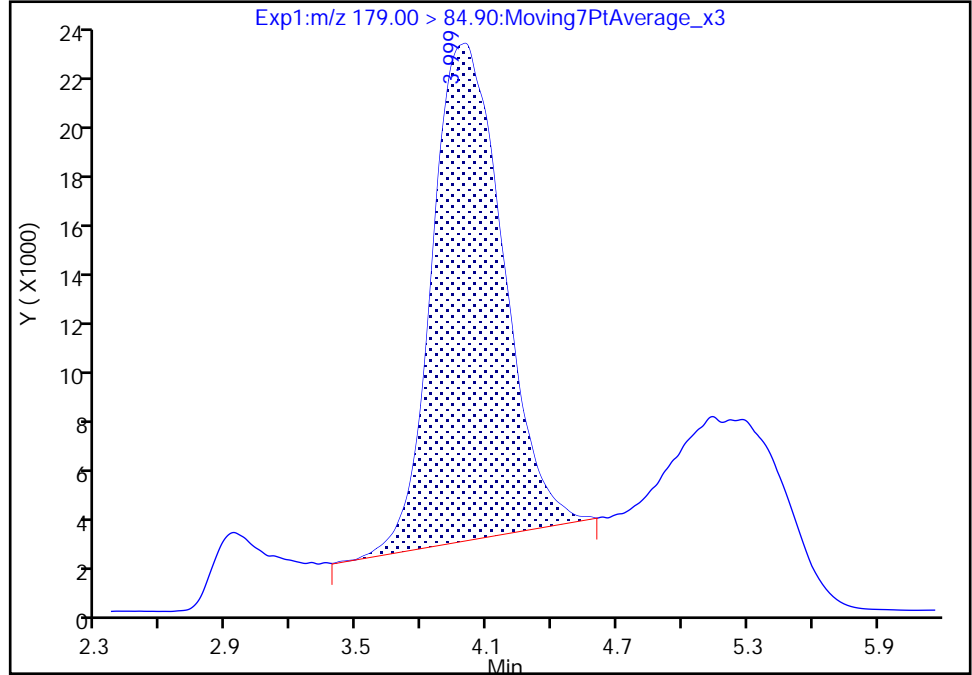
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Injection Date: 13-Mar-2021 07:59:25 Instrument ID: A12
Lims ID: LCSD 320-467237/3-A
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

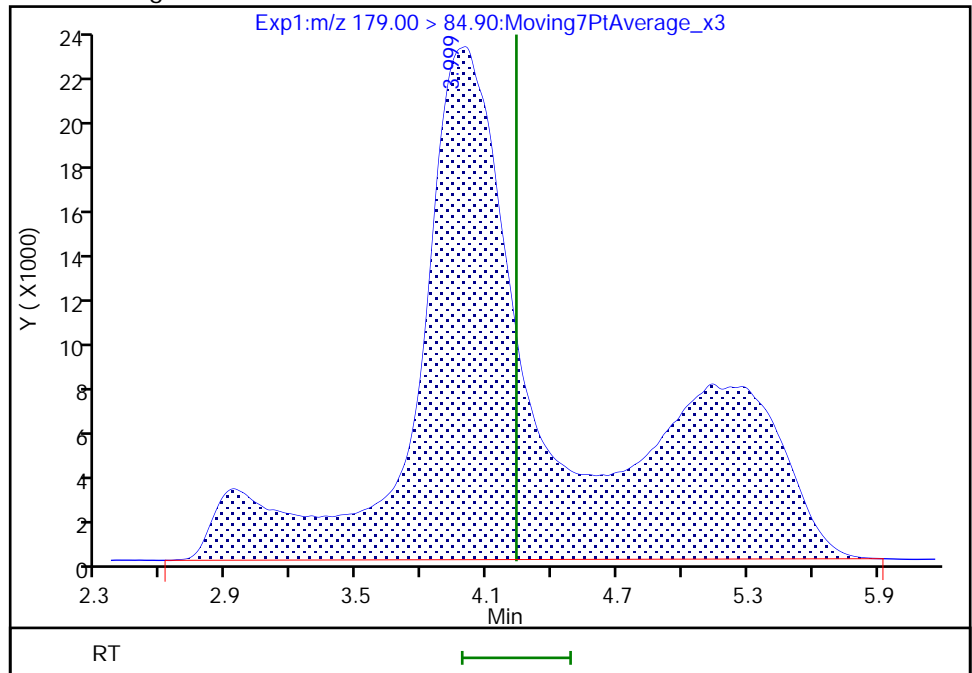
RT: 4.00
Area: 460080
Amount: 0.044490
Amount Units: ng/ml

Processing Integration Results



RT: 4.00
Area: 1096409
Amount: 0.106024
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 13-Mar-2021 11:06:01
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Sacramento

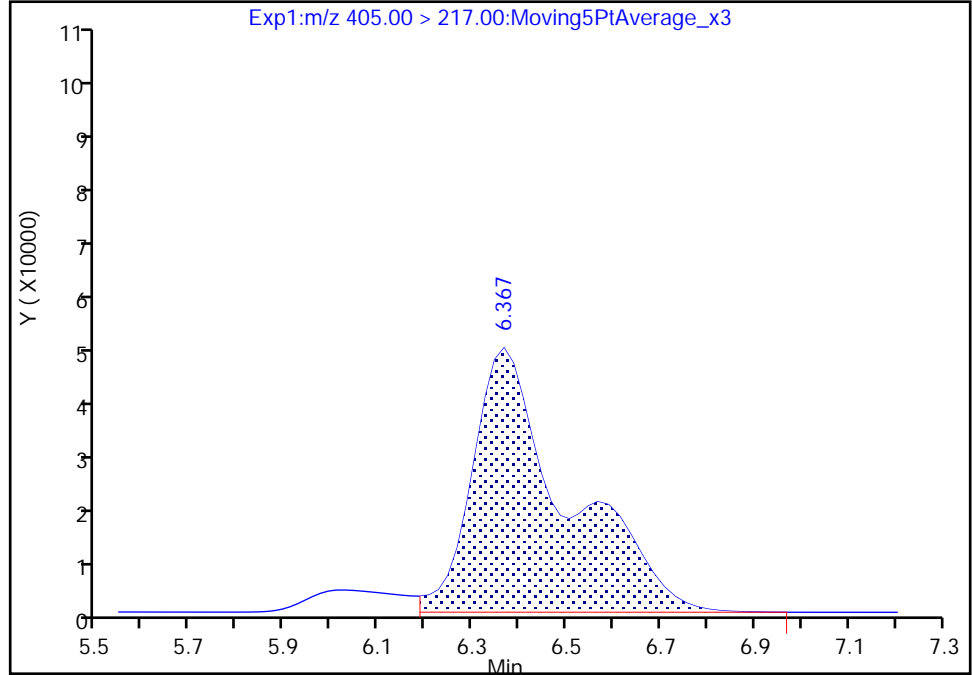
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Injection Date: 13-Mar-2021 07:59:25 Instrument ID: A12
Lims ID: LCSD 320-467237/3-A
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

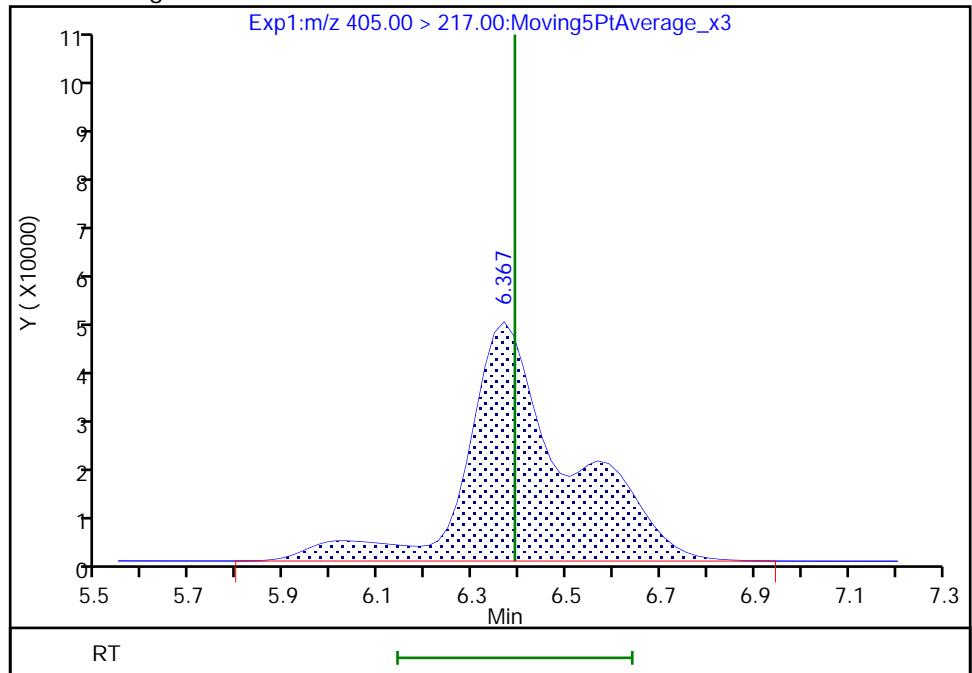
RT: 6.37
Area: 673048
Amount: 0.101523
Amount Units: ng/ml

Processing Integration Results



RT: 6.37
Area: 728237
Amount: 0.109847
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 13-Mar-2021 11:06:05
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

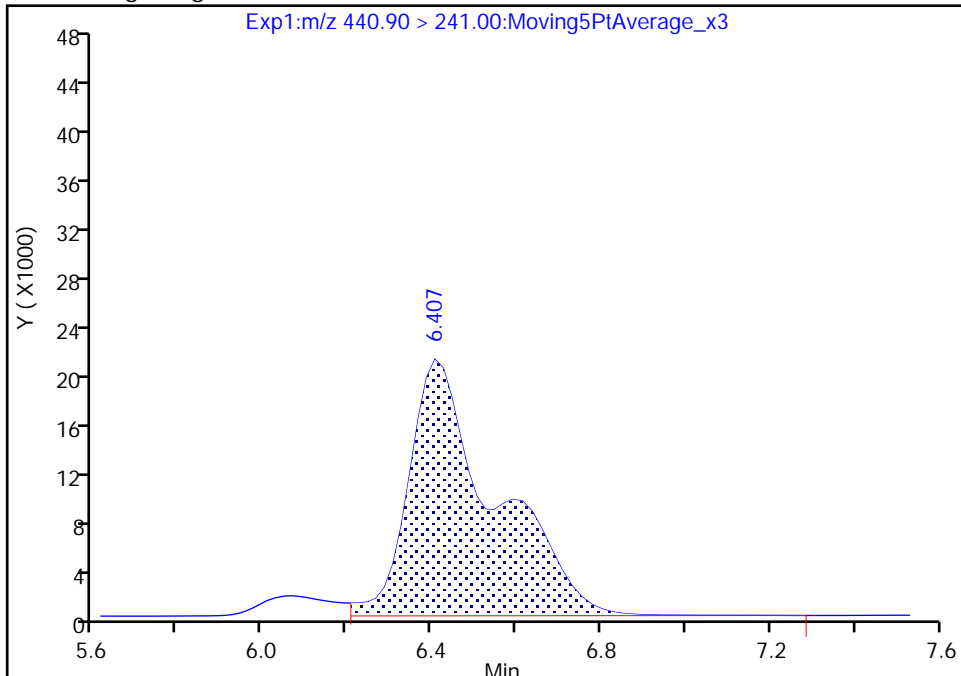
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Injection Date: 13-Mar-2021 07:59:25 Instrument ID: A12
Lims ID: LCSD 320-467237/3-A
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

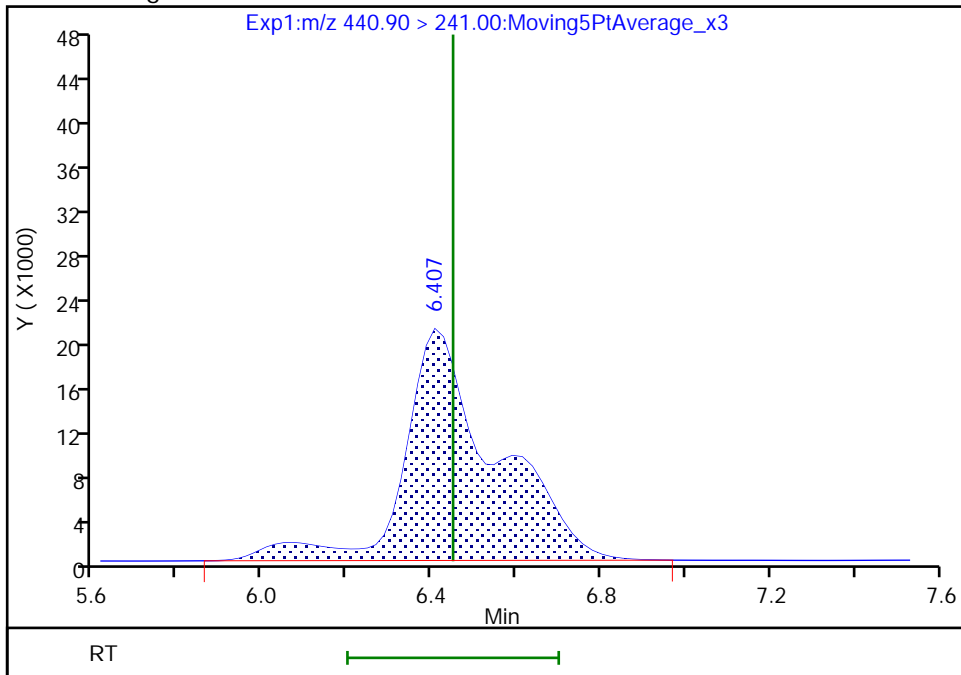
RT: 6.41
Area: 291353
Amount: 0.088682
Amount Units: ng/ml

Processing Integration Results



RT: 6.41
Area: 308448
Amount: 0.093886
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 13-Mar-2021 11:06:09
Audit Action: Manually Integrated

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Instrument ID: A12 Start Date: 03/08/2021 14:45

Analysis Batch Number: 468521 End Date: 03/08/2021 19:28

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-468521/2		03/08/2021 14:45	1	2021.03.08_A12_TB3_ICAL_003.d	GeminiC18 3x100 3(mm)
IC 320-468521/3		03/08/2021 15:03	1	2021.03.08_A12_TB3_ICAL_004.d	GeminiC18 3x100 3(mm)
IC 320-468521/4		03/08/2021 15:21	1	2021.03.08_A12_TB3_ICAL_005.d	GeminiC18 3x100 3(mm)
IC 320-468521/5		03/08/2021 15:38	1	2021.03.08_A12_TB3_ICAL_006.d	GeminiC18 3x100 3(mm)
IC 320-468521/6		03/08/2021 15:56	1	2021.03.08_A12_TB3_ICAL_007.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/08/2021 16:14	1		GeminiC18 3x100 3(mm)
IC 320-468521/8		03/08/2021 16:32	1	2021.03.08_A12_TB3_ICAL_009.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/08/2021 16:49	1		GeminiC18 3x100 3(mm)
IC 320-468521/10		03/08/2021 17:07	1	2021.03.08_A12_TB3_ICAL_011.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/08/2021 17:24	1		GeminiC18 3x100 3(mm)
IC 320-468521/12		03/08/2021 17:42	1	2021.03.08_A12_TB3_ICAL_013.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/08/2021 18:00	1		GeminiC18 3x100 3(mm)
IC 320-468521/14		03/08/2021 18:17	1	2021.03.08_A12_TB3_ICAL_015.d	GeminiC18 3x100 3(mm)
IC 320-468521/15		03/08/2021 18:35	1	2021.03.08_A12_TB3_ICAL_016.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/08/2021 18:53	1		GeminiC18 3x100 3(mm)
ICV 320-468521/17		03/08/2021 19:10	1	2021.03.08_A12_TB3_ICAL_018.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/08/2021 19:28	1		GeminiC18 3x100 3(mm)

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Instrument ID: A12 Start Date: 03/09/2021 23:37

Analysis Batch Number: 468770 End Date: 03/10/2021 07:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 320-468770/1		03/09/2021 23:37	1	2021.03.09_TB3_A12 AB 029.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/09/2021 23:55	1		GeminiC18 3x100 3(mm)
MB 320-467237/1-A		03/10/2021 00:12	1	2021.03.09_TB3_A12 AB 031.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 00:30	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 00:47	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 01:05	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 01:23	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 01:40	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 01:58	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 02:16	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 02:33	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 02:51	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 03:09	1		GeminiC18 3x100 3(mm)
CCV 320-468770/14		03/10/2021 03:26	1	2021.03.09_TB3_A12 AB 042.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 03:44	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 04:02	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 04:19	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 04:37	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 04:54	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 05:12	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 05:30	1		GeminiC18 3x100 3(mm)
320-70652-1	SEEP-C-Effluent-24-02721	03/10/2021 05:48	1	2021.03.09_TB3_A12 AB 050.d	GeminiC18 3x100 3(mm)
320-70652-2	SEEP-C-Influent-24-02721	03/10/2021 06:05	1	2021.03.09_TB3_A12 AB 051.d	GeminiC18 3x100 3(mm)
320-70652-3	Seep-C-EQBLK-ISCO-022721	03/10/2021 06:23	1	2021.03.09_TB3_A12 AB 052.d	GeminiC18 3x100 3(mm)
320-70652-4	SEEP-C-FBLK-022721	03/10/2021 06:40	1	2021.03.09_TB3_A12 AB 053.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/10/2021 06:58	1		GeminiC18 3x100 3(mm)
CCV 320-468770/27		03/10/2021 07:16	1	2021.03.09_TB3_A12 AB 055.d	GeminiC18 3x100 3(mm)

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Instrument ID: A12 Start Date: 03/11/2021 12:14

Analysis Batch Number: 469371 End Date: 03/11/2021 16:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-469371/3		03/11/2021 12:14	1	2021.03.11_A12_TB3_ICAL_A_006.d	GeminiC18 3x100 3(mm)
IC 320-469371/4		03/11/2021 12:32	1	2021.03.11_A12_TB3_ICAL_A_007.d	GeminiC18 3x100 3(mm)
IC 320-469371/5		03/11/2021 12:50	1	2021.03.11_A12_TB3_ICAL_A_008.d	GeminiC18 3x100 3(mm)
IC 320-469371/6		03/11/2021 13:07	1	2021.03.11_A12_TB3_ICAL_A_009.d	GeminiC18 3x100 3(mm)
IC 320-469371/7		03/11/2021 13:25	1	2021.03.11_A12_TB3_ICAL_A_010.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/11/2021 13:43	1		GeminiC18 3x100 3(mm)
IC 320-469371/9		03/11/2021 14:00	1	2021.03.11_A12_TB3_ICAL_A_012.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/11/2021 14:18	1		GeminiC18 3x100 3(mm)
IC 320-469371/11		03/11/2021 14:36	1	2021.03.11_A12_TB3_ICAL_A_014.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/11/2021 14:53	1		GeminiC18 3x100 3(mm)
IC 320-469371/13		03/11/2021 15:11	1	2021.03.11_A12_TB3_ICAL_A_016.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/11/2021 15:28	1		GeminiC18 3x100 3(mm)
IC 320-469371/15		03/11/2021 15:46	1	2021.03.11_A12_TB3_ICAL_A_018.d	GeminiC18 3x100 3(mm)
IC 320-469371/16		03/11/2021 16:03	1	2021.03.11_A12_TB3_ICAL_A_019.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/11/2021 16:21	1		GeminiC18 3x100 3(mm)
ICV 320-469371/18		03/11/2021 16:39	1	2021.03.11_A12_TB3_ICAL_A_021.d	GeminiC18 3x100 3(mm)

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-70652-1

SDG No.: _____

Instrument ID: A12 Start Date: 03/13/2021 05:56

Analysis Batch Number: 469973 End Date: 03/13/2021 08:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 320-469973/1		03/13/2021 05:56	1	2021.03.12_A12_ TB3 C 002.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2021 06:13	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2021 06:31	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2021 06:48	50		GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2021 07:06	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2021 07:24	5		GeminiC18 3x100 3(mm)
LCS 320-467237/2-A		03/13/2021 07:41	1	2021.03.12_A12_ TB3 C 008.d	GeminiC18 3x100 3(mm)
LCSD 320-467237/3-A		03/13/2021 07:59	1	2021.03.12_A12_ TB3 C 009.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2021 08:16	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2021 08:34	1		GeminiC18 3x100 3(mm)
CCV 320-469973/11		03/13/2021 08:52	1	2021.03.12_A12_ TB3 C 012.d	GeminiC18 3x100 3(mm)

LCMS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Sacramen Job No.: 320-70652-1

SDG No.: _____

Batch Number: 467237 Batch Start Date: 03/03/21 20:40 Batch Analyst: Xiong, Fong C

Batch Method: PFAS Prep Batch End Date: 03/03/21 23:23

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	LCMTB3_SU 00022	LCTB3_SP 00063	AnalysisComment	
MB 320-467237/1		PFAS Prep, Chemours (TB3+)		2.50 mL	5.00 mL	250 uL			
LCS 320-467237/2		PFAS Prep, Chemours (TB3+)		2.50 mL	5.00 mL	250 uL	100 uL		
LCSD 320-467237/3		PFAS Prep, Chemours (TB3+)		2.50 mL	5.00 mL	250 uL	100 uL		
320-70652-A-1	SEEP-C-Effluent-24-022721	PFAS Prep, Chemours (TB3+)	T	0.025 mL	5.00 mL	250 uL		pH = 7.	
320-70652-A-2	SEEP-C-Influent-24-022721	PFAS Prep, Chemours (TB3+)	T	0.025 mL	5.00 mL	250 uL		pH = 7.	
320-70652-A-3	Seep-C-EQBLK-ISC O-022721	PFAS Prep, Chemours (TB3+)	T	2.50 mL	5.00 mL	250 uL		pH = 7.	
320-70652-A-4	SEEP-C-FBLK-022721	PFAS Prep, Chemours (TB3+)	T	2.50 mL	5.00 mL	250 uL		pH = 7.	

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Chemours (TB3+)

Shipping and Receiving Documents

Login Sample Receipt Checklist

Client: The Chemours Company FC, LLC

Job Number: 320-70652-1

Login Number: 70652

List Source: Eurofins TestAmerica, Sacramento

List Number: 1

Creator: Oropeza, Salvador

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	1547253
Sample custody seals, if present, are intact.	N/A	
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?	False	
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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (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: 320-71576-1

Job Description: FAY-Seep Flow Through Cell Sampling 2021

For:

The Chemours Company FC, LLC
c/o AECOM
Sabre Building, Suite 300
4051 Ogletown Road
Newark, DE 19713

Attention: Michael Aucoin



Approved for release.
Michelle A. Johnston
Project Manager II
4/2/2021 9:39 AM

Michelle A Johnston, Project Manager II
880 Riverside Parkway, West Sacramento, CA, 95605
(303)736-0110
Michelle.Johnston@Eurofinset.com
04/02/2021

cc: Barbara McGraw
Kelly Rinehimer

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

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.

Eurofins TestAmerica, Sacramento

880 Riverside Parkway, West Sacramento, CA 95605

Tel (916) 373-5600 Fax (916) 372-1059 www.testamericainc.com



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Definitions/Glossary

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Glossary

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

CASE NARRATIVE
Client: The Chemours Company FC, LLC
Project: FAY-Seep Flow Through Cell Sampling 2021
Report Number: 320-71576-1

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

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

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

North Carolina Department of Environmental Quality (NCDEQ) does not offer certification for PFAS testing in Non-Potable Water and Solid matrices.

For samples requiring analysis at a dilution, the dilution factor has been multiplied by the Method Detection Limit (MDL) for each analyte and evaluated versus the project-specific reporting limit (PSRL). If the obtained value is below the PSRL, then the PSRL is preserved as the reporting limit for the diluted result, otherwise, the obtained value becomes the reporting limit. This is done in order to maintain the PSRL to meet project requirements at the request of the client and to report the lowest possible RL for each analyte.

Sample Arrival and Receipt

The samples were received on 3/23/2021 10:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.6° C and 0.7° C.

No anomalies were observed during sample receipt.

Table 3 Fluoroproducts

Samples SEEP-C-RAIN-INFLUENT-24-031721 (320-71576-1), SEEP-C-RAIN-EFFLUENT-24-031721 (320-71576-2), SEEP-C-RAIN-EQBLK-031721 (320-71576-3), SEEP-C-EFFLUENT-336-031921 (320-71576-4), SEEP-C-INFLUENT-336-031921 (320-71576-5) and SEEP-C-FBLK-336-031921 (320-71576-6) were analyzed for Table 3 Fluoroproducts in accordance with Chemours 4.3.18. The samples were prepared on 03/30/2021 and analyzed on 03/31/2021.

Results for samples SEEP-C-RAIN-INFLUENT-24-031721 (320-71576-1) and SEEP-C-INFLUENT-336-031921 (320-71576-5) were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. The surrogate recoveries were calculated from diluted samples. The reporting limits have been adjusted relative to the dilutions required.

The project required MS and Sample Duplicate could not be performed for prep batch 320-475092, due to either being from a different job/SDG or due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable LCS/LCSD analyses data.

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

Executive Summary

Client: The Chemours Company FC, LLC

Job Number: 320-71576-1

Chemours (TB3+) : Fluoroproducts Analytical Method – Table 3+

Lab Sample ID	Client Sample ID	Analyte	Individual Result (ug/L)	Final Result (ug/L)	RL
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	EVE Acid	<0.0087	<0.0087	0.0087
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	HFPO-DA	16	16	0.041
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	Hydro-EVE Acid	1.2	1.2	0.0072
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	Hydrolyzed PSDA	0.76	0.76	0.019
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	Hydro-PS Acid	0.46	0.46	0.0031
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	NVHOS	0.74	0.74	0.0073
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	PEPA	3.4	3.4	0.020
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	PES	<0.0034	<0.0034	0.0034
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	PFECA B	<0.013	<0.013	0.013
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	PFECA G	<0.024	<0.024	0.024
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	PFMOAA	80	80	0.040
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	PFO2HxA	24	24	0.013
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	PFO3OA	6.2	6.2	0.020
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	PFO4DA	2.3	2.3	0.030
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	PFO5DA	0.088	0.088	0.039
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	PMPA	8.5	8.5	0.31
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	PS Acid	<0.0098	<0.0098	0.0098
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	R-EVE	0.69	0.69	0.036
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	R-PSDA	0.60	0.60	0.035
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	R-PSDCA	0.017	0.017	0.0087
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	EVE Acid	<0.0020	<0.0020	0.0020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	HFPO-DA	0.0035	0.0035	0.0020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	Hydro-EVE Acid	<0.0020	<0.0020	0.0020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	Hydrolyzed PSDA	<0.0020	<0.0020	0.0020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	Hydro-PS Acid	<0.0020	<0.0020	0.0020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	NVHOS	<0.0020	<0.0020	0.0020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	PEPA	<0.020	<0.020	0.020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	PES	<0.0020	<0.0020	0.0020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	PFECA B	<0.0020	<0.0020	0.0020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	PFECA G	<0.0020	<0.0020	0.0020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	PFMOAA	0.054	0.054	0.0020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	PFO2HxA	0.0033	0.0033	0.0020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	PFO3OA	<0.0020	<0.0020	0.0020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	PFO4DA	<0.0020	<0.0020	0.0020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	PFO5DA	<0.0020	<0.0020	0.0020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	PMPA	0.011	0.011	0.010
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	PS Acid	<0.0020	<0.0020	0.0020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	R-EVE	<0.0020	<0.0020	0.0020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	R-PSDA	<0.0020	<0.0020	0.0020
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	R-PSDCA	<0.0020	<0.0020	0.0020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	EVE Acid	<0.0020	<0.0020	0.0020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	HFPO-DA	<0.0020	<0.0020	0.0020

(a) DU indicates a laboratory duplicate.

(b) If the sample and laboratory duplicate are both greater than or equal to 5X their RL and the relative percent difference (RPD) is less than or equal to 20, the average value is reported. If the RPD is greater than 20, the higher value is reported. If the sample or laboratory duplicate is less than 5X their RL, and the absolute difference between the sample and laboratory duplicate is less than or equal to the sample RL, the average value is reported. If the absolute difference is greater than the sample RL, the higher value is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(c) For Table 3 and Table 6 methods, if the sample and laboratory duplicate are greater than their RL, the average is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(d) Moisture Determined by ASTM D2216.

Executive Summary

Client: The Chemours Company FC, LLC

Job Number: 320-71576-1

Chemours (TB3+) : Fluoroproducts Analytical Method – Table 3+

Lab Sample ID	Client Sample ID	Analyte	Individual Result (ug/L)	Final Result (ug/L)	RL
320-71576-3	SEEP-C-RAIN-EQBLK-031721	Hydro-EVE Acid	<0.0020	<0.0020	0.0020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	Hydrolyzed PSDA	<0.0020	<0.0020	0.0020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	Hydro-PS Acid	<0.0020	<0.0020	0.0020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	NVHOS	<0.0020	<0.0020	0.0020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	PEPA	<0.020	<0.020	0.020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	PES	<0.0020	<0.0020	0.0020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	PFECA B	<0.0020	<0.0020	0.0020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	PFECA G	<0.0020	<0.0020	0.0020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	PFMOAA	<0.0020	<0.0020	0.0020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	PFO2HxA	<0.0020	<0.0020	0.0020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	PFO3OA	<0.0020	<0.0020	0.0020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	PFO4DA	<0.0020	<0.0020	0.0020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	PFO5DA	<0.0020	<0.0020	0.0020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	PMPA	<0.010	<0.010	0.010
320-71576-3	SEEP-C-RAIN-EQBLK-031721	PS Acid	<0.0020	<0.0020	0.0020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	R-EVE	<0.0020	<0.0020	0.0020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	R-PSDA	<0.0020	<0.0020	0.0020
320-71576-3	SEEP-C-RAIN-EQBLK-031721	R-PSDCA	<0.0020	<0.0020	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	EVE Acid	<0.0020	<0.0020	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	HFPO-DA	0.011	0.011	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	Hydro-EVE Acid	<0.0020	<0.0020	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	Hydrolyzed PSDA	<0.0020	<0.0020	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	Hydro-PS Acid	<0.0020	<0.0020	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	NVHOS	<0.0020	<0.0020	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	PEPA	<0.020	<0.020	0.020
320-71576-4	SEEP-C-EFFLUENT-336-031921	PES	<0.0020	<0.0020	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	PFECA B	<0.0020	<0.0020	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	PFECA G	<0.0020	<0.0020	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	PFMOAA	0.15	0.15	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	PFO2HxA	0.018	0.018	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	PFO3OA	0.0049	0.0049	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	PFO4DA	<0.0020	<0.0020	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	PFO5DA	<0.0020	<0.0020	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	PMPA	0.018	0.018	0.010
320-71576-4	SEEP-C-EFFLUENT-336-031921	PS Acid	<0.0020	<0.0020	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	R-EVE	<0.0020	<0.0020	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	R-PSDA	0.0050	0.0050	0.0020
320-71576-4	SEEP-C-EFFLUENT-336-031921	R-PSDCA	<0.0020	<0.0020	0.0020
320-71576-5	SEEP-C-INFLUENT-336-031921	EVE Acid	<0.0087	<0.0087	0.0087
320-71576-5	SEEP-C-INFLUENT-336-031921	HFPO-DA	18	18	0.041
320-71576-5	SEEP-C-INFLUENT-336-031921	Hydro-EVE Acid	1.3	1.3	0.0072
320-71576-5	SEEP-C-INFLUENT-336-031921	Hydrolyzed PSDA	0.80	0.80	0.019

(a) DU indicates a laboratory duplicate.

(b) If the sample and laboratory duplicate are both greater than or equal to 5X their RL and the relative percent difference (RPD) is less than or equal to 20, the average value is reported. If the RPD is greater than 20, the higher value is reported. If the sample or laboratory duplicate is less than 5X their RL, and the absolute difference between the sample and laboratory duplicate is less than or equal to the sample RL, the average value is reported. If the absolute difference is greater than the sample RL, the higher value is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(c) For Table 3 and Table 6 methods, if the sample and laboratory duplicate are greater than their RL, the average is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(d) Moisture Determined by ASTM D2216.

Executive Summary

Client: The Chemours Company FC, LLC

Job Number: 320-71576-1

Chemours (TB3+) : Fluoroproducts Analytical Method – Table 3+

Lab Sample ID	Client Sample ID	Analyte	Individual Result (ug/L)	Final Result (ug/L)	RL
320-71576-5	SEEP-C-INFLUENT-336-031921	Hydro-PS Acid	0.43	0.43	0.0031
320-71576-5	SEEP-C-INFLUENT-336-031921	NVHOS	0.78	0.78	0.0073
320-71576-5	SEEP-C-INFLUENT-336-031921	PEPA	3.5	3.5	0.020
320-71576-5	SEEP-C-INFLUENT-336-031921	PES	<0.0034	<0.0034	0.0034
320-71576-5	SEEP-C-INFLUENT-336-031921	PFECA B	<0.013	<0.013	0.013
320-71576-5	SEEP-C-INFLUENT-336-031921	PFECA G	<0.024	<0.024	0.024
320-71576-5	SEEP-C-INFLUENT-336-031921	PFMOAA	79	79	0.040
320-71576-5	SEEP-C-INFLUENT-336-031921	PFO2HxA	24	24	0.013
320-71576-5	SEEP-C-INFLUENT-336-031921	PFO3OA	7.1	7.1	0.020
320-71576-5	SEEP-C-INFLUENT-336-031921	PFO4DA	3.4	3.4	0.030
320-71576-5	SEEP-C-INFLUENT-336-031921	PFO5DA	0.074	0.074	0.039
320-71576-5	SEEP-C-INFLUENT-336-031921	PMPA	8.7	8.7	0.31
320-71576-5	SEEP-C-INFLUENT-336-031921	PS Acid	<0.0098	<0.0098	0.0098
320-71576-5	SEEP-C-INFLUENT-336-031921	R-EVE	0.74	0.74	0.036
320-71576-5	SEEP-C-INFLUENT-336-031921	R-PSDA	0.66	0.66	0.035
320-71576-5	SEEP-C-INFLUENT-336-031921	R-PSDCA	0.016	0.016	0.0087
320-71576-6	SEEP-C-FBLK-336-031921	EVE Acid	<0.0020	<0.0020	0.0020
320-71576-6	SEEP-C-FBLK-336-031921	HFPO-DA	<0.0020	<0.0020	0.0020
320-71576-6	SEEP-C-FBLK-336-031921	Hydro-EVE Acid	<0.0020	<0.0020	0.0020
320-71576-6	SEEP-C-FBLK-336-031921	Hydrolyzed PSDA	<0.0020	<0.0020	0.0020
320-71576-6	SEEP-C-FBLK-336-031921	Hydro-PS Acid	<0.0020	<0.0020	0.0020
320-71576-6	SEEP-C-FBLK-336-031921	NVHOS	<0.0020	<0.0020	0.0020
320-71576-6	SEEP-C-FBLK-336-031921	PEPA	<0.020	<0.020	0.020
320-71576-6	SEEP-C-FBLK-336-031921	PES	<0.0020	<0.0020	0.0020
320-71576-6	SEEP-C-FBLK-336-031921	PFECA B	<0.0020	<0.0020	0.0020
320-71576-6	SEEP-C-FBLK-336-031921	PFECA G	<0.0020	<0.0020	0.0020
320-71576-6	SEEP-C-FBLK-336-031921	PFMOAA	<0.0020	<0.0020	0.0020
320-71576-6	SEEP-C-FBLK-336-031921	PFO2HxA	<0.0020	<0.0020	0.0020
320-71576-6	SEEP-C-FBLK-336-031921	PFO3OA	<0.0020	<0.0020	0.0020
320-71576-6	SEEP-C-FBLK-336-031921	PFO4DA	<0.0020	<0.0020	0.0020
320-71576-6	SEEP-C-FBLK-336-031921	PFO5DA	<0.0020	<0.0020	0.0020
320-71576-6	SEEP-C-FBLK-336-031921	PMPA	<0.010	<0.010	0.010
320-71576-6	SEEP-C-FBLK-336-031921	PS Acid	<0.0020	<0.0020	0.0020
320-71576-6	SEEP-C-FBLK-336-031921	R-EVE	<0.0020	<0.0020	0.0020
320-71576-6	SEEP-C-FBLK-336-031921	R-PSDA	<0.0020	<0.0020	0.0020
320-71576-6	SEEP-C-FBLK-336-031921	R-PSDCA	<0.0020	<0.0020	0.0020

(a) DU indicates a laboratory duplicate.

(b) If the sample and laboratory duplicate are both greater than or equal to 5X their RL and the relative percent difference (RPD) is less than or equal to 20, the average value is reported. If the RPD is greater than 20, the higher value is reported. If the sample or laboratory duplicate is less than 5X their RL, and the absolute difference between the sample and laboratory duplicate is less than or equal to the sample RL, the average value is reported. If the absolute difference is greater than the sample RL, the higher value is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(c) For Table 3 and Table 6 methods, if the sample and laboratory duplicate are greater than their RL, the average is reported. If the sample or the duplicate is greater than or equal to their RL and the other is less than its RL, the higher higher value is reported. If the sample and duplicate are both less than their RL, the lowest RL is reported.

(d) Moisture Determined by ASTM D2216.

Detection Summary

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Client Sample ID: SEEP-C-RAIN-INFLUENT-24-031721

Lab Sample ID: 320-71576-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	16		0.041		ug/L	50		Chemours (TB3+)	Total/NA
Hydro-EVE Acid	1.2		0.0072		ug/L	50		Chemours (TB3+)	Total/NA
Hydrolyzed PSDA	0.76		0.019		ug/L	50		Chemours (TB3+)	Total/NA
Hydro-PS Acid	0.46		0.0031		ug/L	50		Chemours (TB3+)	Total/NA
NVHOS	0.74		0.0073		ug/L	50		Chemours (TB3+)	Total/NA
PEPA	3.4		0.020		ug/L	50		Chemours (TB3+)	Total/NA
PFMOAA	80		0.040		ug/L	50		Chemours (TB3+)	Total/NA
PFO2HxA	24		0.013		ug/L	50		Chemours (TB3+)	Total/NA
PFO3OA	6.2		0.020		ug/L	50		Chemours (TB3+)	Total/NA
PFO4DA	2.3		0.030		ug/L	50		Chemours (TB3+)	Total/NA
PFO5DA	0.088		0.039		ug/L	50		Chemours (TB3+)	Total/NA
PMPA	8.5		0.31		ug/L	50		Chemours (TB3+)	Total/NA
R-EVE	0.69		0.036		ug/L	50		Chemours (TB3+)	Total/NA
R-PSDA	0.60		0.035		ug/L	50		Chemours (TB3+)	Total/NA
R-PSDCA	0.017		0.0087		ug/L	50		Chemours (TB3+)	Total/NA

Client Sample ID: SEEP-C-RAIN-EFFLUENT-24-031721

Lab Sample ID: 320-71576-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.0035		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
PFMOAA	0.054		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
PFO2HxA	0.0033		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
PMPA	0.011		0.010		ug/L	1		Chemours (TB3+)	Total/NA

Client Sample ID: SEEP-C-RAIN-EQBLK-031721

Lab Sample ID: 320-71576-3

No Detections.

Client Sample ID: SEEP-C-EFFLUENT-336-031921

Lab Sample ID: 320-71576-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.011		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
PFMOAA	0.15		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
PFO2HxA	0.018		0.0020		ug/L	1		Chemours (TB3+)	Total/NA
PFO3OA	0.0049		0.0020		ug/L	1		Chemours (TB3+)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

Detection Summary

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Client Sample ID: SEEP-C-EFFLUENT-336-031921 (Continued)

Lab Sample ID: 320-71576-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PMPA	0.018		0.010		ug/L	1		Chemours (TB3+)	Total/NA
R-PSDA	0.0050		0.0020		ug/L	1		Chemours (TB3+)	Total/NA

Client Sample ID: SEEP-C-INFLUENT-336-031921

Lab Sample ID: 320-71576-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	18		0.041		ug/L	50		Chemours (TB3+)	Total/NA
Hydro-EVE Acid	1.3		0.0072		ug/L	50		Chemours (TB3+)	Total/NA
Hydrolyzed PSDA	0.80		0.019		ug/L	50		Chemours (TB3+)	Total/NA
Hydro-PS Acid	0.43		0.0031		ug/L	50		Chemours (TB3+)	Total/NA
NVHOS	0.78		0.0073		ug/L	50		Chemours (TB3+)	Total/NA
PEPA	3.5		0.020		ug/L	50		Chemours (TB3+)	Total/NA
PFMOAA	79		0.040		ug/L	50		Chemours (TB3+)	Total/NA
PFO2HxA	24		0.013		ug/L	50		Chemours (TB3+)	Total/NA
PFO3OA	7.1		0.020		ug/L	50		Chemours (TB3+)	Total/NA
PFO4DA	3.4		0.030		ug/L	50		Chemours (TB3+)	Total/NA
PFO5DA	0.074		0.039		ug/L	50		Chemours (TB3+)	Total/NA
PMPA	8.7		0.31		ug/L	50		Chemours (TB3+)	Total/NA
R-EVE	0.74		0.036		ug/L	50		Chemours (TB3+)	Total/NA
R-PSDA	0.66		0.035		ug/L	50		Chemours (TB3+)	Total/NA
R-PSDCA	0.016		0.0087		ug/L	50		Chemours (TB3+)	Total/NA

Client Sample ID: SEEP-C-FBLK-336-031921

Lab Sample ID: 320-71576-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Client Sample ID: SEEP-C-RAIN-INFLUENT-24-031721

Lab Sample ID: 320-71576-1

Date Collected: 03/17/21 11:42

Matrix: Water

Date Received: 03/23/21 10:10

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
EVE Acid	<0.0087		0.0087		ug/L		03/30/21 13:04	03/31/21 11:09	50
HFPO-DA	16		0.041		ug/L		03/30/21 13:04	03/31/21 11:09	50
Hydro-EVE Acid	1.2		0.0072		ug/L		03/30/21 13:04	03/31/21 11:09	50
Hydrolyzed PSDA	0.76		0.019		ug/L		03/30/21 13:04	03/31/21 11:09	50
Hydro-PS Acid	0.46		0.0031		ug/L		03/30/21 13:04	03/31/21 11:09	50
NVHOS	0.74		0.0073		ug/L		03/30/21 13:04	03/31/21 11:09	50
PEPA	3.4		0.020		ug/L		03/30/21 13:04	03/31/21 11:09	50
PES	<0.0034		0.0034		ug/L		03/30/21 13:04	03/31/21 11:09	50
PFECA B	<0.013		0.013		ug/L		03/30/21 13:04	03/31/21 11:09	50
PFECA G	<0.024		0.024		ug/L		03/30/21 13:04	03/31/21 11:09	50
PFMOAA	80		0.040		ug/L		03/30/21 13:04	03/31/21 11:09	50
PFO2HxA	24		0.013		ug/L		03/30/21 13:04	03/31/21 11:09	50
PFO3OA	6.2		0.020		ug/L		03/30/21 13:04	03/31/21 11:09	50
PFO4DA	2.3		0.030		ug/L		03/30/21 13:04	03/31/21 11:09	50
PFO5DA	0.088		0.039		ug/L		03/30/21 13:04	03/31/21 11:09	50
PMPA	8.5		0.31		ug/L		03/30/21 13:04	03/31/21 11:09	50
PS Acid	<0.0098		0.0098		ug/L		03/30/21 13:04	03/31/21 11:09	50
R-EVE	0.69		0.036		ug/L		03/30/21 13:04	03/31/21 11:09	50
R-PSDA	0.60		0.035		ug/L		03/30/21 13:04	03/31/21 11:09	50
R-PSDCA	0.017		0.0087		ug/L		03/30/21 13:04	03/31/21 11:09	50
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>13C3 HFPO-DA</i>	104		25 - 150				03/30/21 13:04	03/31/21 11:09	50

Client Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Client Sample ID: SEEP-C-RAIN-EFFLUENT-24-031721

Lab Sample ID: 320-71576-2

Date Collected: 03/17/21 11:42

Matrix: Water

Date Received: 03/23/21 10:10

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
EVE Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
HFPO-DA	0.0035		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
Hydro-EVE Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
Hydrolyzed PSDA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
Hydro-PS Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
NVHOS	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
PEPA	<0.020		0.020		ug/L		03/30/21 13:04	03/31/21 14:41	1
PES	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
PFECA B	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
PFECA G	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
PFMOAA	0.054		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
PFO2HxA	0.0033		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
PFO3OA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
PFO4DA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
PFO5DA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
PMPA	0.011		0.010		ug/L		03/30/21 13:04	03/31/21 14:41	1
PS Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
R-EVE	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
R-PSDA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
R-PSDCA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:41	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	85		25 - 150				03/30/21 13:04	03/31/21 14:41	1

Client Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Client Sample ID: SEEP-C-RAIN-EQBLK-031721

Lab Sample ID: 320-71576-3

Date Collected: 03/17/21 10:00

Matrix: Water

Date Received: 03/23/21 10:10

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
EVE Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
HFPO-DA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
Hydro-EVE Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
Hydrolyzed PSDA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
Hydro-PS Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
NVHOS	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
PEPA	<0.020		0.020		ug/L		03/30/21 13:04	03/31/21 14:58	1
PES	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
PFECA B	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
PFECA G	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
PFMOAA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
PFO2HxA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
PFO3OA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
PFO4DA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
PFO5DA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
PMPA	<0.010		0.010		ug/L		03/30/21 13:04	03/31/21 14:58	1
PS Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
R-EVE	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
R-PSDA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
R-PSDCA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 14:58	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	94		25 - 150				03/30/21 13:04	03/31/21 14:58	1

Client Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Client Sample ID: SEEP-C-EFFLUENT-336-031921

Lab Sample ID: 320-71576-4

Date Collected: 03/19/21 09:00

Matrix: Water

Date Received: 03/23/21 10:10

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
EVE Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
HFPO-DA	0.011		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
Hydro-EVE Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
Hydrolyzed PSDA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
Hydro-PS Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
NVHOS	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
PEPA	<0.020		0.020		ug/L		03/30/21 13:04	03/31/21 15:16	1
PES	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
PFECA B	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
PFECA G	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
PFMOAA	0.15		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
PFO2HxA	0.018		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
PFO3OA	0.0049		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
PFO4DA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
PFO5DA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
PMPA	0.018		0.010		ug/L		03/30/21 13:04	03/31/21 15:16	1
PS Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
R-EVE	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
R-PSDA	0.0050		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
R-PSDCA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:16	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>13C3 HFPO-DA</i>	84		25 - 150				03/30/21 13:04	03/31/21 15:16	1

Client Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Client Sample ID: SEEP-C-INFLUENT-336-031921

Lab Sample ID: 320-71576-5

Date Collected: 03/19/21 09:00

Matrix: Water

Date Received: 03/23/21 10:10

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
EVE Acid	<0.0087		0.0087		ug/L		03/30/21 13:04	03/31/21 11:26	50
HFPO-DA	18		0.041		ug/L		03/30/21 13:04	03/31/21 11:26	50
Hydro-EVE Acid	1.3		0.0072		ug/L		03/30/21 13:04	03/31/21 11:26	50
Hydrolyzed PSDA	0.80		0.019		ug/L		03/30/21 13:04	03/31/21 11:26	50
Hydro-PS Acid	0.43		0.0031		ug/L		03/30/21 13:04	03/31/21 11:26	50
NVHOS	0.78		0.0073		ug/L		03/30/21 13:04	03/31/21 11:26	50
PEPA	3.5		0.020		ug/L		03/30/21 13:04	03/31/21 11:26	50
PES	<0.0034		0.0034		ug/L		03/30/21 13:04	03/31/21 11:26	50
PFECA B	<0.013		0.013		ug/L		03/30/21 13:04	03/31/21 11:26	50
PFECA G	<0.024		0.024		ug/L		03/30/21 13:04	03/31/21 11:26	50
PFMOAA	79		0.040		ug/L		03/30/21 13:04	03/31/21 11:26	50
PFO2HxA	24		0.013		ug/L		03/30/21 13:04	03/31/21 11:26	50
PFO3OA	7.1		0.020		ug/L		03/30/21 13:04	03/31/21 11:26	50
PFO4DA	3.4		0.030		ug/L		03/30/21 13:04	03/31/21 11:26	50
PFO5DA	0.074		0.039		ug/L		03/30/21 13:04	03/31/21 11:26	50
PMPA	8.7		0.31		ug/L		03/30/21 13:04	03/31/21 11:26	50
PS Acid	<0.0098		0.0098		ug/L		03/30/21 13:04	03/31/21 11:26	50
R-EVE	0.74		0.036		ug/L		03/30/21 13:04	03/31/21 11:26	50
R-PSDA	0.66		0.035		ug/L		03/30/21 13:04	03/31/21 11:26	50
R-PSDCA	0.016		0.0087		ug/L		03/30/21 13:04	03/31/21 11:26	50
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>13C3 HFPO-DA</i>	99		25 - 150				03/30/21 13:04	03/31/21 11:26	50

Client Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Client Sample ID: SEEP-C-FBLK-336-031921

Lab Sample ID: 320-71576-6

Date Collected: 03/19/21 08:00

Matrix: Water

Date Received: 03/23/21 10:10

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
EVE Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
HFPO-DA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
Hydro-EVE Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
Hydrolyzed PSDA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
Hydro-PS Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
NVHOS	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
PEPA	<0.020		0.020		ug/L		03/30/21 13:04	03/31/21 15:34	1
PES	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
PFECA B	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
PFECA G	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
PFMOAA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
PFO2HxA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
PFO3OA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
PFO4DA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
PFO5DA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
PMPA	<0.010		0.010		ug/L		03/30/21 13:04	03/31/21 15:34	1
PS Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
R-EVE	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
R-PSDA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
R-PSDCA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 15:34	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	96		25 - 150				03/30/21 13:04	03/31/21 15:34	1

Default Detection Limits

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Prep: PFAS Prep

Analyte	RL	MDL	Units
EVE Acid	0.0020	0.00017	ug/L
HFPO-DA	0.0020	0.00081	ug/L
Hydro-EVE Acid	0.0020	0.00014	ug/L
Hydrolyzed PSDA	0.0020	0.00038	ug/L
Hydro-PS Acid	0.0020	0.000061	ug/L
NVHOS	0.0020	0.00015	ug/L
PEPA	0.020	0.00016	ug/L
PES	0.0020	0.000067	ug/L
PFECA B	0.0020	0.00027	ug/L
PFECA G	0.0020	0.00048	ug/L
PFMOAA	0.0020	0.00080	ug/L
PFO2HxA	0.0020	0.00027	ug/L
PFO3OA	0.0020	0.00039	ug/L
PFO4DA	0.0020	0.00059	ug/L
PFO5DA	0.0020	0.00078	ug/L
PMPA	0.010	0.0062	ug/L
PS Acid	0.0020	0.00020	ug/L
R-EVE	0.0020	0.00072	ug/L
R-PSDA	0.0020	0.00071	ug/L
R-PSDCA	0.0020	0.00017	ug/L

Isotope Dilution Summary

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	HFPODA (25-150)
320-71576-1	SEEP-C-RAIN-INFLUENT-24-03	104
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-03	85
	1721	
320-71576-3	SEEP-C-RAIN-EQBLK-031721	94
320-71576-4	SEEP-C-EFFLUENT-336-03192	84
320-71576-5	SEEP-C-INFLUENT-336-03192	99
320-71576-6	SEEP-C-FBLK-336-031921	96
LCS 320-475092/2-A	Lab Control Sample	95
LCSD 320-475092/3-A	Lab Control Sample Dup	89
MB 320-475092/1-A	Method Blank	99

Surrogate Legend

HFPODA = 13C3 HFPO-DA

QC Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+

Lab Sample ID: MB 320-475092/1-A
Matrix: Water
Analysis Batch: 475323

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475092

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
EVE Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
HFPO-DA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
Hydro-EVE Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
Hydrolyzed PSDA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
Hydro-PS Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
NVHOS	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
PEPA	<0.020		0.020		ug/L		03/30/21 13:04	03/31/21 10:51	1
PES	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
PFECA B	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
PFECA G	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
PFMOAA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
PFO2HxA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
PFO3OA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
PFO4DA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
PFO5DA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
PMPA	<0.010		0.010		ug/L		03/30/21 13:04	03/31/21 10:51	1
PS Acid	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
R-EVE	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
R-PSDA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
R-PSDCA	<0.0020		0.0020		ug/L		03/30/21 13:04	03/31/21 10:51	1
Isotope Dilution	MB	MB	Limits		Unit	D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
¹³ C3 HFPO-DA	99		25 - 150				03/30/21 13:04	03/31/21 10:51	1

Lab Sample ID: LCS 320-475092/2-A
Matrix: Water
Analysis Batch: 475323

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475092

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
HFPO-DA	0.200	0.197		ug/L		99	70 - 130	
Hydro-EVE Acid	0.200	0.178		ug/L		89	70 - 130	
Hydrolyzed PSDA	0.200	0.163		ug/L		82	50 - 150	
Hydro-PS Acid	0.200	0.164		ug/L		82	70 - 130	
NVHOS	0.200	0.175		ug/L		87	70 - 130	
PEPA	0.200	0.167		ug/L		84	70 - 130	
PES	0.200	0.167		ug/L		83	70 - 130	
PFECA B	0.200	0.195		ug/L		98	70 - 130	
PFECA G	0.200	0.148		ug/L		74	70 - 130	
PFMOAA	0.200	0.198		ug/L		99	70 - 130	
PFO2HxA	0.200	0.178		ug/L		89	70 - 130	
PFO3OA	0.200	0.187		ug/L		93	70 - 130	
PFO4DA	0.200	0.159		ug/L		79	50 - 150	
PFO5DA	0.200	0.228		ug/L		114	50 - 150	
PMPA	0.200	0.182		ug/L		91	70 - 130	
PS Acid	0.200	0.155		ug/L		78	70 - 130	
R-EVE	0.200	0.189		ug/L		94	50 - 150	
R-PSDA	0.200	0.181		ug/L		91	50 - 150	
R-PSDCA	0.200	0.166		ug/L		83	70 - 130	

Eurofins TestAmerica, Sacramento

QC Sample Results

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Method: Chemours (TB3+) - Fluoroproducts Analytical Method – Table 3+ (Continued)

<i>Isotope Dilution</i>	<i>LCS</i>	<i>LCS</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>13C3 HFPO-DA</i>	95		25 - 150

Lab Sample ID: LCSD 320-475092/3-A
Matrix: Water
Analysis Batch: 475323

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 475092

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	Limits	RPD	RPD	Limit
	Added	Result	Qualifier								
EVE Acid	0.200	0.179		ug/L		90		70 - 130	2		25
HFPO-DA	0.200	0.192		ug/L		96		70 - 130	3		25
Hydro-EVE Acid	0.200	0.165		ug/L		83		70 - 130	8		25
Hydrolyzed PSDA	0.200	0.150		ug/L		75		50 - 150	9		25
Hydro-PS Acid	0.200	0.156		ug/L		78		70 - 130	5		25
NVHOS	0.200	0.167		ug/L		84		70 - 130	4		25
PEPA	0.200	0.158		ug/L		79		70 - 130	6		25
PES	0.200	0.160		ug/L		80		70 - 130	4		25
PFECA B	0.200	0.181		ug/L		90		70 - 130	8		25
PFECA G	0.200	0.140		ug/L		70		70 - 130	6		25
PFMOAA	0.200	0.188		ug/L		94		70 - 130	5		25
PFO2HxA	0.200	0.164		ug/L		82		70 - 130	9		25
PFO3OA	0.200	0.190		ug/L		95		70 - 130	2		25
PFO4DA	0.200	0.131		ug/L		65		50 - 150	19		25
PFO5DA	0.200	0.208		ug/L		104		50 - 150	9		25
PMPA	0.200	0.172		ug/L		86		70 - 130	5		25
PS Acid	0.200	0.145		ug/L		72		70 - 130	7		25
R-EVE	0.200	0.168		ug/L		84		50 - 150	11		25
R-PSDA	0.200	0.170		ug/L		85		50 - 150	6		25
R-PSDCA	0.200	0.146		ug/L		73		70 - 130	13		25

<i>Isotope Dilution</i>	<i>LCSD</i>	<i>LCSD</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>13C3 HFPO-DA</i>	89		25 - 150

QC Association Summary

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

LCMS

Prep Batch: 475092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	Total/NA	Water	PFAS Prep	
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	Total/NA	Water	PFAS Prep	
320-71576-3	SEEP-C-RAIN-EQBLK-031721	Total/NA	Water	PFAS Prep	
320-71576-4	SEEP-C-EFFLUENT-336-031921	Total/NA	Water	PFAS Prep	
320-71576-5	SEEP-C-INFLUENT-336-031921	Total/NA	Water	PFAS Prep	
320-71576-6	SEEP-C-FBLK-336-031921	Total/NA	Water	PFAS Prep	
MB 320-475092/1-A	Method Blank	Total/NA	Water	PFAS Prep	
LCS 320-475092/2-A	Lab Control Sample	Total/NA	Water	PFAS Prep	
LCSD 320-475092/3-A	Lab Control Sample Dup	Total/NA	Water	PFAS Prep	

Analysis Batch: 475323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	Total/NA	Water	Chemours (TB3+)	475092
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	Total/NA	Water	Chemours (TB3+)	475092
320-71576-3	SEEP-C-RAIN-EQBLK-031721	Total/NA	Water	Chemours (TB3+)	475092
320-71576-4	SEEP-C-EFFLUENT-336-031921	Total/NA	Water	Chemours (TB3+)	475092
320-71576-5	SEEP-C-INFLUENT-336-031921	Total/NA	Water	Chemours (TB3+)	475092
320-71576-6	SEEP-C-FBLK-336-031921	Total/NA	Water	Chemours (TB3+)	475092
MB 320-475092/1-A	Method Blank	Total/NA	Water	Chemours (TB3+)	475092
LCS 320-475092/2-A	Lab Control Sample	Total/NA	Water	Chemours (TB3+)	475092
LCSD 320-475092/3-A	Lab Control Sample Dup	Total/NA	Water	Chemours (TB3+)	475092

Lab Chronicle

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Client Sample ID: SEEP-C-RAIN-INFLUENT-24-031721

Lab Sample ID: 320-71576-1

Date Collected: 03/17/21 11:42

Matrix: Water

Date Received: 03/23/21 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.5 mL	5.00 mL	475092	03/30/21 13:04	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		50			475323	03/31/21 11:09	D1R	TAL SAC

Client Sample ID: SEEP-C-RAIN-EFFLUENT-24-031721

Lab Sample ID: 320-71576-2

Date Collected: 03/17/21 11:42

Matrix: Water

Date Received: 03/23/21 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.5 mL	5.00 mL	475092	03/30/21 13:04	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			475323	03/31/21 14:41	D1R	TAL SAC

Client Sample ID: SEEP-C-RAIN-EQBLK-031721

Lab Sample ID: 320-71576-3

Date Collected: 03/17/21 10:00

Matrix: Water

Date Received: 03/23/21 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.5 mL	5.00 mL	475092	03/30/21 13:04	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			475323	03/31/21 14:58	D1R	TAL SAC

Client Sample ID: SEEP-C-EFFLUENT-336-031921

Lab Sample ID: 320-71576-4

Date Collected: 03/19/21 09:00

Matrix: Water

Date Received: 03/23/21 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.5 mL	5.00 mL	475092	03/30/21 13:04	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			475323	03/31/21 15:16	D1R	TAL SAC

Client Sample ID: SEEP-C-INFLUENT-336-031921

Lab Sample ID: 320-71576-5

Date Collected: 03/19/21 09:00

Matrix: Water

Date Received: 03/23/21 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.5 mL	5.00 mL	475092	03/30/21 13:04	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		50			475323	03/31/21 11:26	D1R	TAL SAC

Client Sample ID: SEEP-C-FBLK-336-031921

Lab Sample ID: 320-71576-6

Date Collected: 03/19/21 08:00

Matrix: Water

Date Received: 03/23/21 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.5 mL	5.00 mL	475092	03/30/21 13:04	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			475323	03/31/21 15:34	D1R	TAL SAC

Lab Chronicle

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Client Sample ID: Method Blank

Lab Sample ID: MB 320-475092/1-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.5 mL	5.00 mL	475092	03/30/21 13:04	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			475323	03/31/21 10:51	D1R	TAL SAC

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 320-475092/2-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.5 mL	5.00 mL	475092	03/30/21 13:04	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			475323	03/31/21 13:12	D1R	TAL SAC

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 320-475092/3-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			2.5 mL	5.00 mL	475092	03/30/21 13:04	SAD	TAL SAC
Total/NA	Analysis	Chemours (TB3+)		1			475323	03/31/21 13:30	D1R	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: The Chemours Company FC, LLC
 Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Laboratory: Eurofins TestAmerica, Sacramento

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-24
ANAB	Dept. of Defense ELAP	L2468	01-20-24
ANAB	Dept. of Energy	L2468.01	01-20-24
ANAB	ISO/IEC 17025	L2468	01-20-24
Arizona	State	AZ0708	08-11-21
Arkansas DEQ	State	88-0691	06-17-21
California	State	2897	01-31-22
Colorado	State	CA0004	08-31-21
Connecticut	State	PH-0691	06-30-21
Florida	NELAP	E87570	06-30-21
Georgia	State	4040	01-29-22
Hawaii	State	<cert No.>	01-29-22
Illinois	NELAP	200060	03-18-22
Kansas	NELAP	E-10375	10-31-21
Louisiana	NELAP	01944	06-30-21
Maine	State	CA00004	04-14-22
Michigan	State	9947	01-29-22
Nevada	State	CA000442021-2	07-31-21
New Hampshire	NELAP	2997	04-18-21
New Jersey	NELAP	CA005	06-30-21
New York	NELAP	11666	04-01-21
Ohio	State	41252	01-29-22
Oregon	NELAP	4040	01-30-23
Pennsylvania	NELAP	68-01272	03-31-21
Texas	NELAP	T104704399-19-13	06-01-21
US Fish & Wildlife	US Federal Programs	58448	07-31-21
USDA	US Federal Programs	P330-18-00239	07-31-21
Utah	NELAP	CA000442021-12	02-28-21 *
Vermont	State	VT-4040	04-16-21
Virginia	NELAP	460278	03-14-22
Washington	State	C581	05-05-21
West Virginia (DW)	State	9930C	12-31-21
Wisconsin	State	998204680	08-31-21
Wyoming	State Program	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Method	Method Description	Protocol	Laboratory
Chemours (TB3+)	Fluoroproducts Analytical Method – Table 3+	Client	TAL SAC
PFAS Prep	Preparation, Direct Inject PFAS	TAL-SAC	TAL SAC

Protocol References:

Client = Client derived Standard Operating Procedure

TAL-SAC = TestAmerica Laboratories, West Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: The Chemours Company FC, LLC
Project/Site: FAY-Seep Flow Through Cell Sampling 2021

Job ID: 320-71576-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	Water	03/17/21 11:42	03/23/21 10:10	
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	Water	03/17/21 11:42	03/23/21 10:10	
320-71576-3	SEEP-C-RAIN-EQBLK-031721	Water	03/17/21 10:00	03/23/21 10:10	
320-71576-4	SEEP-C-EFFLUENT-336-031921	Water	03/19/21 09:00	03/23/21 10:10	
320-71576-5	SEEP-C-INFLUENT-336-031921	Water	03/19/21 09:00	03/23/21 10:10	
320-71576-6	SEEP-C-FBLK-336-031921	Water	03/19/21 08:00	03/23/21 10:10	

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-71576-1

SDG No.: _____

Instrument ID: A12 Analysis Batch Number: 473456

Lab Sample ID: IC 320-473456/2 Client Sample ID: _____

Date Analyzed: 03/24/21 11:54 Lab File ID: 2021.03.24_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.60	Assign Peak	fariasa	03/25/21 03:54
R-EVE	6.23	Baseline	fariasa	03/25/21 03:55
R-PSDA	6.29	Baseline	fariasa	03/25/21 03:55
PMPA	6.59	Assign Peak	fariasa	03/25/21 03:54
NVHOS	7.14	Baseline	fariasa	03/25/21 03:55
PEPA	8.23	Assign Peak	fariasa	03/25/21 03:54

Lab Sample ID: IC 320-473456/3 Client Sample ID: _____

Date Analyzed: 03/24/21 12:12 Lab File ID: 2021.03.24_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.15	Incomplete Integration	fariasa	03/25/21 03:56
R-PSDA	6.37	Baseline	fariasa	03/25/21 03:56

Lab Sample ID: IC 320-473456/4 Client Sample ID: _____

Date Analyzed: 03/24/21 12:29 Lab File ID: 2021.03.24_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.69	Assign Peak	fariasa	03/25/21 03:57
PMPA	6.64	Baseline	fariasa	03/25/21 03:57

Lab Sample ID: IC 320-473456/5 Client Sample ID: _____

Date Analyzed: 03/24/21 12:47 Lab File ID: 2021.03.24_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.52	Assign Peak	fariasa	03/25/21 03:57
R-EVE	6.23	Incomplete Integration	fariasa	03/25/21 03:57

Chemours (TB3+)

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-71576-1

SDG No.: _____

Instrument ID: A12 Analysis Batch Number: 473456

Lab Sample ID: IC 320-473456/6 Client Sample ID: _____

Date Analyzed: 03/24/21 13:05 Lab File ID: 2021.03.24_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.05	Incomplete Integration	fariasa	03/25/21 03:58
R-EVE	6.31	Incomplete Integration	fariasa	03/25/21 03:58

Lab Sample ID: IC 320-473456/7 Client Sample ID: _____

Date Analyzed: 03/24/21 13:22 Lab File ID: 2021.03.24_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.12	Incomplete Integration	fariasa	03/25/21 03:58
R-EVE	6.31	Incomplete Integration	fariasa	03/25/21 03:58

Lab Sample ID: IC 320-473456/9 Client Sample ID: _____

Date Analyzed: 03/24/21 13:57 Lab File ID: 2021.03.24_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.22	Incomplete Integration	fariasa	03/25/21 03:59

Lab Sample ID: IC 320-473456/11 Client Sample ID: _____

Date Analyzed: 03/24/21 14:33 Lab File ID: 2021.03.24_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.05	Incomplete Integration	fariasa	03/25/21 03:59
R-EVE	6.33	Incomplete Integration	fariasa	03/25/21 03:59

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-71576-1

SDG No.: _____

Instrument ID: A12 Analysis Batch Number: 473456

Lab Sample ID: IC 320-473456/13 Client Sample ID: _____

Date Analyzed: 03/24/21 15:08 Lab File ID: 2021.03.24_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.75	Assign Peak	fariasa	03/25/21 03:59
R-EVE	6.29	Incomplete Integration	fariasa	03/25/21 03:59

Lab Sample ID: IC 320-473456/14 Client Sample ID: _____

Date Analyzed: 03/24/21 15:26 Lab File ID: 2021.03.24_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.31	Incomplete Integration	fariasa	03/25/21 04:00

Lab Sample ID: ICV 320-473456/16 Client Sample ID: _____

Date Analyzed: 03/24/21 16:01 Lab File ID: 2021.03.24_A12_TB3_ICAL_0 GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.16	Incomplete Integration	fariasa	03/25/21 04:00

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-71576-1

SDG No.: _____

Instrument ID: A12 Analysis Batch Number: 475323

Lab Sample ID: CCV 320-475323/1 Client Sample ID: _____

Date Analyzed: 03/31/21 10:16 Lab File ID: 2021.03.31_A12_TB3_A_007. GC Column: GeminiC18 3x1 ID: 3 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.21	Assign Peak	fariasa	03/31/21 11:09

Lab Sample ID: MB 320-475092/1-A Client Sample ID: _____

Date Analyzed: 03/31/21 10:51 Lab File ID: 2021.03.31_A12_TB3_A_009. GC Column: GeminiC18 3x1 ID: 3 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PMPA	6.97	Baseline	ruangyots akuld	04/01/21 10:18

Lab Sample ID: 320-71576-1 Client Sample ID: SEEP-C-RAIN-INFLUENT-24-031721

Date Analyzed: 03/31/21 11:09 Lab File ID: 2021.03.31_A12_TB3_A_010. GC Column: GeminiC18 3x1 ID: 3 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.92	Missed Peak	vanommens	03/31/21 13:28
R-PSDA	6.41	Baseline	ruangyots akuld	04/01/21 10:18

Lab Sample ID: 320-71576-5 Client Sample ID: SEEP-C-INFLUENT-336-031921

Date Analyzed: 03/31/21 11:26 Lab File ID: 2021.03.31_A12_TB3_A_011. GC Column: GeminiC18 3x1 ID: 3 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.29	Incomplete Integration	vanommens	03/31/21 13:29

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-71576-1

SDG No.: _____

Instrument ID: A12 Analysis Batch Number: 475323

Lab Sample ID: LCS 320-475092/2-A Client Sample ID: _____

Date Analyzed: 03/31/21 13:12 Lab File ID: 2021.03.31_A12_TB3_A_017. GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.12	Incomplete Integration	vanommens	03/31/21 13:41

Lab Sample ID: LCSD 320-475092/3-A Client Sample ID: _____

Date Analyzed: 03/31/21 13:30 Lab File ID: 2021.03.31_A12_TB3_A_018. GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.27	Baseline	ruangyots akuld	04/01/21 10:24

Lab Sample ID: CCV 320-475323/14 Client Sample ID: _____

Date Analyzed: 03/31/21 14:05 Lab File ID: 2021.03.31_A12_TB3_A_020. GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.13	Baseline	ruangyots akuld	04/01/21 10:17

Lab Sample ID: 320-71576-2 Client Sample ID: SEEP-C-RAIN-EFFLUENT-24-031721

Date Analyzed: 03/31/21 14:41 Lab File ID: 2021.03.31_A12_TB3_A_022. GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.92	Baseline	ruangyots akuld	04/01/21 10:24
PMPA	6.66	Baseline	ruangyots akuld	04/01/21 10:24

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-71576-1

SDG No.: _____

Instrument ID: A12 Analysis Batch Number: 475323

Lab Sample ID: 320-71576-3 Client Sample ID: SEEP-C-RAIN-EQBLK-031721

Date Analyzed: 03/31/21 14:58 Lab File ID: 2021.03.31_A12_TB3_A_023. GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PMPA	6.97	Baseline	ruangyots akuld	04/01/21 10:25

Lab Sample ID: 320-71576-4 Client Sample ID: SEEP-C-EFFLUENT-336-031921

Date Analyzed: 03/31/21 15:16 Lab File ID: 2021.03.31_A12_TB3_A_024. GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	3.92	Baseline	ruangyots akuld	04/01/21 10:25
R-PSDA	6.15	Baseline	ruangyots akuld	04/01/21 10:25
R-EVE	6.29	Baseline	ruangyots akuld	04/01/21 10:25
Hydrolyzed PSDA	6.43	Baseline	ruangyots akuld	04/01/21 10:25
NVHOS	7.04	Baseline	ruangyots akuld	04/01/21 10:26

Lab Sample ID: 320-71576-6 Client Sample ID: SEEP-C-FBLK-336-031921

Date Analyzed: 03/31/21 15:34 Lab File ID: 2021.03.31_A12_TB3_A_025. GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PMPA	6.98	Baseline	ruangyots akuld	04/01/21 10:26

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Sacram Job No.: 320-71576-1

SDG No.: _____

Instrument ID: A12 Analysis Batch Number: 475323

Lab Sample ID: CCV 320-475323/23 Client Sample ID: _____

Date Analyzed: 03/31/21 16:44 Lab File ID: 2021.03.31_A12_TB3_A_029. GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PFMOAA	4.14	Baseline	ruangyots akuld	04/01/21 10:17

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
LCMTB3_SU_00024	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
.LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C4 PFHpA	5 ug/L
..LCM3HFPO-DA_00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		LCM4PFHPA_00035	500 uL	13C3 HFPO-DA	0.5 ug/mL
..LCM4PFHPA_00035	09/29/25		Wellington Laboratories, Lot M4PFHpA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
LCTB3_LLCCV_00084	07/10/21	03/26/21	MeOH/H2O, Lot 206204	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
					LCTB3_SP_00068	150 uL	HFPO-DA	0.075 ug/L
							PS Acid	0.075 ug/L
							Hydro-PS Acid	0.075 ug/L
							R-PSDA	0.075 ug/L
							Hydrolyzed PSDA	0.075 ug/L
							R-PSDCA	0.075 ug/L
							EVE Acid	0.075 ug/L
							Hydro-EVE Acid	0.075 ug/L
							NVHOS	0.075 ug/L
							PEPA	0.075 ug/L
							PES	0.075 ug/L
							PFECA B	0.075 ug/L
							PFECA G	0.075 ug/L
							PFMOAA	0.075 ug/L
							PFO2HxA	0.075 ug/L
							PFO30A	0.075 ug/L
							PFO4DA	0.075 ug/L
							PFO5DA	0.075 ug/L
							PMPA	0.075 ug/L
							R-EVE	0.075 ug/L
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
..LCM3HFPO-DA_00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
.LCTB3_SP_00068	08/23/21	02/28/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	25 mL	HFPO-DA	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFO30A	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA_00017	200 uL	HFPO-DA	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO30A	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA_00017	11/13/23		WELLINGTON, Lot HFPODA1120				(Purchased Reagent)	HFPO-DA
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA_00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS_00001	100 uL	NVHOS	5000 ug/L
					LCPEPA_00002	100 uL	PEPA	5000 ug/L
					LCPEPES_00001	100 uL	PES	5000 ug/L
					LCPPFECA_B_00001	100 uL	PFECA B	5000 ug/L
					LCPPFECA_G_00001	100 uL	PFECA G	5000 ug/L
					LCPPFMOAA_00002	100 uL	PFMOAA	5000 ug/L
					LCPPFO2HxA_00002	100 uL	PFO2HxA	5000 ug/L
					LCPPFO30A_00002	100 uL	PFO30A	5000 ug/L
					LCPPFO4DA_00002	100 uL	PFO4DA	5000 ug/L
					LCPPFO5DoA_00001	100 uL	PFO5DA	5000 ug/L
					LCPPMPA_00002	100 uL	PMPA	5000 ug/L
					LCR-EVE_00001	100 uL	R-EVE	5000 ug/L
....LCBP1_00001	01/23/24		Chemours, Lot NA				(Purchased Reagent)	PS Acid
....LCBP2_00001	01/23/24		Chemours, Lot NA				(Purchased Reagent)	Hydro-PS Acid
....LCBP4_00001	01/23/24		Chemours, Lot NA				(Purchased Reagent)	R-PSDA

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLICV_00050	07/10/21	03/10/21	MeOH/H2O, Lot 206204	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_ICVSP_00015	200 uL	HFPO-DA	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
		PFO3OA	0.1 ug/L					
		PFO4DA	0.1 ug/L					
		PFO5DA	0.1 ug/L					
		PMPA	0.1 ug/L					
		R-EVE	0.1 ug/L					
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA 00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHPA 00035	09/29/25		Wellington Laboratories, Lot M4PFHPA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_ICVSP_00015	08/23/21	02/28/21	Methanol, Lot 204519	10 mL	LCTB3_ICVIM2_00011	1 mL	HFPO-DA	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
							R-PSDA	5 ug/L	
							Hydrolyzed PSDA	5 ug/L	
							R-PSDCA	5 ug/L	
							EVE Acid	5 ug/L	
							Hydro-EVE Acid	5 ug/L	
							NVHOS	5 ug/L	
							PEPA	5 ug/L	
							PES	5 ug/L	
							PFECA B	5 ug/L	
							PFECA G	5 ug/L	
							PFMOAA	5 ug/L	
							PFO2HxA	5 ug/L	
							PFO3OA	5 ug/L	
							PFO4DA	5 ug/L	
							PFO5DA	5 ug/L	
							PMPA	5 ug/L	
							R-EVE	5 ug/L	
...LCTB3_ICVIM2_00011	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA_00017	200 uL	HFPO-DA	50 ug/L	
					LCTB3_ICVIM_00009	2 mL	PS Acid	50 ug/L	
							Hydro-PS Acid	50 ug/L	
							R-PSDA	50 ug/L	
							Hydrolyzed PSDA	50 ug/L	
							R-PSDCA	50 ug/L	
							EVE Acid	50 ug/L	
							Hydro-EVE Acid	50 ug/L	
							NVHOS	50 ug/L	
							PEPA	50 ug/L	
							PES	50 ug/L	
							PFECA B	50 ug/L	
							PFECA G	50 ug/L	
							PFMOAA	50 ug/L	
							PFO2HxA	50 ug/L	
							PFO3OA	50 ug/L	
							PFO4DA	50 ug/L	
							PFO5DA	50 ug/L	
							PMPA	50 ug/L	
							R-EVE	50 ug/L	
...LCHFPO-DA_00017	11/13/23		WELLINGTON, Lot HFPODA1120				(Purchased Reagent)	HFPO-DA	50 ug/mL
...LCTB3_ICVIM_00009	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L	
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L	
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L	
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L	
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L	
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L	
					LCHEVEA_00001	100 uL	Hydro-EVE Acid	5000 ug/L	
					LCNVHOS_00001	100 uL	NVHOS	5000 ug/L	
					LCPEPA_00002	100 uL	PEPA	5000 ug/L	
					LCPEPES_00001	100 uL	PES	5000 ug/L	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFECA_B_00001	100 uL	PFECA_B	5000 ug/L
					LCPFECA_G_00001	100 uL	PFECA_G	5000 ug/L
					LCPFMOAA_00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA_00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA_00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA_00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA_00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA_00002	100 uL	PMPA	5000 ug/L
					LCR-EVE_00001	100 uL	R-EVE	5000 ug/L
....LCBP1_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPES_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA_B_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA_B	1000 ug/mL
....LCPFECA_G_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA_G	1000 ug/mL
....LCPFMOAA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD1_00061	07/10/21	03/10/21	MeOH/H2O, Lot 206204	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00069	100 uL	HFPO-DA	0.001 ug/L
							Perfluoroheptanoic acid	0.001 ug/L
							PS Acid	0.001 ug/L
							Hydro-PS Acid	0.001 ug/L
							R-PSDA	0.001 ug/L
							Hydrolyzed PSDA	0.001 ug/L
							R-PSDCA	0.001 ug/L
							EVE Acid	0.001 ug/L
							Hydro-EVE Acid	0.001 ug/L
							NVHOS	0.001 ug/L
							PEPA	0.001 ug/L
							PES	0.001 ug/L
							PFECA_B	0.001 ug/L
							PFECA_G	0.001 ug/L
							PFMOAA	0.001 ug/L
							PFO2HxA	0.001 ug/L
							PFO3OA	0.001 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFO4DA	0.001 ug/L
							PFO5DA	0.001 ug/L
							PMPA	0.001 ug/L
							R-EVE	0.001 ug/L
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA_00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23	WELLINGTON, Lot M3HFPODA1020			(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHPA_00035	09/29/25	Wellington Laboratories, Lot M4PFHPA0920			(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00069	08/23/21	03/01/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	0.5 mL	HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA_00017	200 uL	HFPO-DA	50 ug/L
					LCPFHPA_00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFO30A	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120			(Purchased Reagent)	HFPO-DA	50 ug/mL
...LCPFHPA 00024	07/09/25		Wellington Laboratories, Lot PFHPA0620			(Purchased Reagent)	Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA_B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA_G 00001	100 uL	PFECA G	5000 ug/L
					LCPFM0AA 00002	100 uL	PFM0AA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO30A 00002	100 uL	PFO30A	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PEPA	1000 ug/mL
....LCPEPES 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PES	1000 ug/mL
....LCPFECA_B 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA B	1000 ug/mL
....LCPFECA_G 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA G	1000 ug/mL
....LCPFM0AA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFM0AA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO2HxA	1000 ug/mL
....LCPFO30A 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO30A	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-EVE	1000 ug/mL
LCTB3_LLSTD10_00044	07/10/21	03/10/21	MeOH/H2O, Lot 206204	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHPA	0.25 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCTB3_SP_00068	2000 uL	HFPO-DA	1 ug/L
							Perfluoroheptanoic acid	1 ug/L
							PS Acid	1 ug/L
							Hydro-PS Acid	1 ug/L
							R-PSDA	1 ug/L
							Hydrolyzed PSDA	1 ug/L
							R-PSDCA	1 ug/L
							EVE Acid	1 ug/L
							Hydro-EVE Acid	1 ug/L
							NVHOS	1 ug/L
							PEPA	1 ug/L
							PES	1 ug/L
							PFECA B	1 ug/L
							PFECA G	1 ug/L
							PFMOAA	1 ug/L
							PFO2HxA	1 ug/L
PFO3OA	1 ug/L							
PFO4DA	1 ug/L							
PFO5DA	1 ug/L							
PMPA	1 ug/L							
R-EVE	1 ug/L							
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA 00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
..LCM4PFHPA_00035	09/29/25		Wellington Laboratories, Lot M4PFHpA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00068	08/23/21	02/28/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	25 mL	HFPO-DA	5 ug/L
							Perfluoroheptanoic acid	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
PFO4DA	5 ug/L							
PFO5DA	5 ug/L							
PMPA	5 ug/L							

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA 00017	200 uL	R-EVE	5 ug/L
					LCHFPO-DA 00017	200 uL	HFPO-DA	50 ug/L
					LCPFHpA 00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
		PFMOAA	50 ug/L					
		PFO2HxA	50 ug/L					
		PFO3OA	50 ug/L					
		PFO4DA	50 ug/L					
		PFO5DA	50 ug/L					
		PMPA	50 ug/L					
		R-EVE	50 ug/L					
...LCHFPO-DA 00017	11/13/23	WELLINGTON, Lot HFPODA1120			(Purchased Reagent)		HFPO-DA	50 ug/mL
...LCPFHpA 00024	07/09/25	Wellington Laboratories, Lot PFHpA0620			(Purchased Reagent)		Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMCAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
				LCBP1 00001	01/23/24	Chemours, Lot NA	
....LCBP2 00001	01/23/24	Chemours, Lot NA			(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24	Chemours, Lot NA			(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24	Chemours, Lot NA			(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24	Chemours, Lot NA			(Purchased Reagent)		R-PSDCA	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD2_00049	07/10/21	03/10/21	MeOH/H2O, Lot 206204	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00069	250 uL	HFPO-DA	0.0025 ug/L
							Perfluoroheptanoic acid	0.0025 ug/L
							PS Acid	0.0025 ug/L
							Hydro-PS Acid	0.0025 ug/L
							R-PSDA	0.0025 ug/L
							Hydrolyzed PSDA	0.0025 ug/L
							R-PSDCA	0.0025 ug/L
							EVE Acid	0.0025 ug/L
							Hydro-EVE Acid	0.0025 ug/L
							NVHOS	0.0025 ug/L
							PEPA	0.0025 ug/L
							PES	0.0025 ug/L
							PFECA B	0.0025 ug/L
							PFECA G	0.0025 ug/L
							PFMOAA	0.0025 ug/L
		PFO2HxA	0.0025 ug/L					
		PFO3OA	0.0025 ug/L					
		PFO4DA	0.0025 ug/L					
		PFO5DA	0.0025 ug/L					
		PMPA	0.0025 ug/L					
		R-EVE	0.0025 ug/L					
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA_00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHPA_00035	09/29/25		Wellington Laboratories, Lot M4PFHPA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00069	08/23/21	03/01/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	0.5 mL	HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
							R-PSDA	0.1 ug/L	
							Hydrolyzed PSDA	0.1 ug/L	
							R-PSDCA	0.1 ug/L	
							EVE Acid	0.1 ug/L	
							Hydro-EVE Acid	0.1 ug/L	
							NVHOS	0.1 ug/L	
							PEPA	0.1 ug/L	
							PES	0.1 ug/L	
							PFECA B	0.1 ug/L	
							PFECA G	0.1 ug/L	
							PFMOAA	0.1 ug/L	
							PFO2HxA	0.1 ug/L	
							PFO3OA	0.1 ug/L	
							PFO4DA	0.1 ug/L	
							PFO5DA	0.1 ug/L	
							PMPA	0.1 ug/L	
							R-EVE	0.1 ug/L	
...LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA 00017	200 uL	HFPO-DA	50 ug/L	
					LCPFHpA 00024	200 uL	Perfluoroheptanoic acid	50 ug/L	
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L	
							Hydro-PS Acid	50 ug/L	
							R-PSDA	50 ug/L	
							Hydrolyzed PSDA	50 ug/L	
							R-PSDCA	50 ug/L	
							EVE Acid	50 ug/L	
							Hydro-EVE Acid	50 ug/L	
							NVHOS	50 ug/L	
							PEPA	50 ug/L	
							PES	50 ug/L	
							PFECA B	50 ug/L	
							PFECA G	50 ug/L	
							PFMOAA	50 ug/L	
							PFO2HxA	50 ug/L	
							PFO3OA	50 ug/L	
							PFO4DA	50 ug/L	
							PFO5DA	50 ug/L	
							PMPA	50 ug/L	
							R-EVE	50 ug/L	
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120				(Purchased Reagent)	HFPO-DA	50 ug/mL
...LCPFHpA 00024	07/09/25		Wellington Laboratories, Lot PFHpA0620				(Purchased Reagent)	Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L	
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L	
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L	
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L	
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L	
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L	
					LCHEVEA_00001	100 uL	Hydro-EVE Acid	5000 ug/L	
					LCNVHOS_00001	100 uL	NVHOS	5000 ug/L	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPEPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD3_00049	07/10/21	03/10/21	MeOH/H2O, Lot 206204	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00069	500 uL	HFPO-DA	0.005 ug/L
							Perfluoroheptanoic acid	0.005 ug/L
							PS Acid	0.005 ug/L
							Hydro-PS Acid	0.005 ug/L
							R-PSDA	0.005 ug/L
							Hydrolyzed PSDA	0.005 ug/L
							R-PSDCA	0.005 ug/L
							EVE Acid	0.005 ug/L
							Hydro-EVE Acid	0.005 ug/L
							NVHOS	0.005 ug/L
							PEPA	0.005 ug/L
							PES	0.005 ug/L
							PFECA B	0.005 ug/L
							PFECA G	0.005 ug/L
							PFMOAA	0.005 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFO2HxA	0.005 ug/L
							PFO3OA	0.005 ug/L
							PFO4DA	0.005 ug/L
							PFO5DA	0.005 ug/L
							PMPA	0.005 ug/L
							R-EVE	0.005 ug/L
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA_00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23	WELLINGTON, Lot M3HFPODA1020			(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHPA_00035	09/29/25	Wellington Laboratories, Lot M4PFHPA0920			(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00069	08/23/21	03/01/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	0.5 mL	HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA_00017	200 uL	HFPO-DA	50 ug/L
					LCPFHpA_00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120			(Purchased Reagent)	HFPO-DA	50 ug/mL
...LCPFHpA 00024	07/09/25		Wellington Laboratories, Lot PFHpA0620			(Purchased Reagent)	Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMCAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PEPA	1000 ug/mL
....LCPEPES 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA G	1000 ug/mL
....LCPFMCAA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-EVE	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
LCTB3_LLSTD4_00048	07/10/21	03/10/21	MeOH/H2O, Lot 206204	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
					LCTB3_SP_00069	1000 uL	13C4 PFHpA	0.25 ug/L
							HFPO-DA	0.01 ug/L
							Perfluoroheptanoic acid	0.01 ug/L
							PS Acid	0.01 ug/L
							Hydro-PS Acid	0.01 ug/L
							R-PSDA	0.01 ug/L
							Hydrolyzed PSDA	0.01 ug/L
							R-PSDCA	0.01 ug/L
							EVE Acid	0.01 ug/L
							Hydro-EVE Acid	0.01 ug/L
							NVHOS	0.01 ug/L
							PEPA	0.01 ug/L
							PES	0.01 ug/L
							PFECA B	0.01 ug/L
							PFECA G	0.01 ug/L
							PFMOAA	0.01 ug/L
							PFO2HxA	0.01 ug/L
PFO3OA	0.01 ug/L							
PFO4DA	0.01 ug/L							
PFO5DA	0.01 ug/L							
PMPA	0.01 ug/L							
R-EVE	0.01 ug/L							
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA_00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23	WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL	
..LCM4PFHPA_00035	09/29/25	Wellington Laboratories, Lot M4PFHpA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL	
.LCTB3_SP_00069	08/23/21	03/01/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	0.5 mL	HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
							PFO4DA	0.1 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA 00017	200 uL	HFPO-DA	50 ug/L
					LCPFHpA 00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120				HFPO-DA	50 ug/mL
...LCPFHpA 00024	07/09/25		Wellington Laboratories, Lot PFHpA0620				Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA_00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS_00001	100 uL	NVHOS	5000 ug/L
					LCPEPA_00002	100 uL	PEPA	5000 ug/L
					LCPEPES_00001	100 uL	PES	5000 ug/L
					LCPFECA_B_00001	100 uL	PFECA B	5000 ug/L
					LCPFECA_G_00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA_00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA_00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA_00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA_00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA_00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA_00002	100 uL	PMPA	5000 ug/L
					LCR-EVE_00001	100 uL	R-EVE	5000 ug/L
....LCBP1_00001	01/23/24		Chemours, Lot NA				PS Acid	1000 ug/mL
....LCBP2_00001	01/23/24		Chemours, Lot NA				Hydro-PS Acid	1000 ug/mL
....LCBP4_00001	01/23/24		Chemours, Lot NA				R-PSDA	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFM0AA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFM0AA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO30A 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO30A	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD5_00058	07/10/21	03/10/21	MeOH/H2O, Lot 206204	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00069	2500 uL	HFPO-DA	0.025 ug/L
							Perfluoroheptanoic acid	0.025 ug/L
							PS Acid	0.025 ug/L
							Hydro-PS Acid	0.025 ug/L
							R-PSDA	0.025 ug/L
							Hydrolyzed PSDA	0.025 ug/L
							R-PSDCA	0.025 ug/L
							EVE Acid	0.025 ug/L
							Hydro-EVE Acid	0.025 ug/L
							NVHOS	0.025 ug/L
							PEPA	0.025 ug/L
							PES	0.025 ug/L
							PFECA B	0.025 ug/L
							PFECA G	0.025 ug/L
							PFM0AA	0.025 ug/L
							PFO2HxA	0.025 ug/L
							PFO30A	0.025 ug/L
							PFO4DA	0.025 ug/L
							PFO5DA	0.025 ug/L
							PMPA	0.025 ug/L
							R-EVE	0.025 ug/L
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA_00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA_00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHPA_00035	09/29/25		Wellington Laboratories, Lot M4PFHPA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00069	08/23/21	03/01/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	0.5 mL	HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
							PFO2HxA	0.1 ug/L
							PFO3OA	0.1 ug/L
							PFO4DA	0.1 ug/L
							PFO5DA	0.1 ug/L
							PMPA	0.1 ug/L
							R-EVE	0.1 ug/L
...LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA 00017	200 uL	HFPO-DA	50 ug/L
					LCPFHpA 00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120				HFPO-DA	50 ug/mL
...LCPFHpA 00024	07/09/25		Wellington Laboratories, Lot PFHpA0620				Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA_00001	100 uL	EVE Acid	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPEPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD6_00091	07/10/21	03/10/21	MeOH/H2O, Lot 206204	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00068	100 uL	HFPO-DA	0.05 ug/L
							Perfluoroheptanoic acid	0.05 ug/L
							PS Acid	0.05 ug/L
							Hydro-PS Acid	0.05 ug/L
							R-PSDA	0.05 ug/L
							Hydrolyzed PSDA	0.05 ug/L
							R-PSDCA	0.05 ug/L
							EVE Acid	0.05 ug/L
							Hydro-EVE Acid	0.05 ug/L
							NVHOS	0.05 ug/L
							PEPA	0.05 ug/L
							PES	0.05 ug/L
							PFECA B	0.05 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFECA G	0.05 ug/L
							PFMOAA	0.05 ug/L
							PFO2HxA	0.05 ug/L
							PFO3OA	0.05 ug/L
							PFO4DA	0.05 ug/L
							PFO5DA	0.05 ug/L
							PMPA	0.05 ug/L
							R-EVE	0.05 ug/L
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHFA 00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHFA 00035	09/29/25		Wellington Laboratories, Lot M4PFHpA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00068	08/23/21	02/28/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	25 mL	HFPO-DA	5 ug/L
							Perfluoroheptanoic acid	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA 00017	200 uL	HFPO-DA	50 ug/L
					LCPFHpA 00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120			(Purchased Reagent)	HFPO-DA	50 ug/mL
...LCPFHpa 00024	07/09/25		Wellington Laboratories, Lot PFHpA0620			(Purchased Reagent)	Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEP 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFM0AA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PEPA	1000 ug/mL
....LCPEP 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA G	1000 ug/mL
....LCPFM0AA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PMPA	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...LCR-EVE 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-EVE	1000 ug/mL
LCTB3_LLSTD7_00444	07/10/21	03/10/21	MeOH/H2O, Lot 206204	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00068	200 uL	HFPO-DA	0.1 ug/L
							Perfluoroheptanoic acid	0.1 ug/L
							PS Acid	0.1 ug/L
							Hydro-PS Acid	0.1 ug/L
							R-PSDA	0.1 ug/L
							Hydrolyzed PSDA	0.1 ug/L
							R-PSDCA	0.1 ug/L
							EVE Acid	0.1 ug/L
							Hydro-EVE Acid	0.1 ug/L
							NVHOS	0.1 ug/L
							PEPA	0.1 ug/L
							PES	0.1 ug/L
							PFECA B	0.1 ug/L
							PFECA G	0.1 ug/L
							PFMOAA	0.1 ug/L
		PFO2HxA	0.1 ug/L					
		PFO3OA	0.1 ug/L					
		PFO4DA	0.1 ug/L					
		PFO5DA	0.1 ug/L					
		PMPA	0.1 ug/L					
		R-EVE	0.1 ug/L					
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA 00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
..LCM4PFHPA 00035	09/29/25		Wellington Laboratories, Lot M4PFHpA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00068	08/23/21	02/28/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	25 mL	HFPO-DA	5 ug/L
							Perfluoroheptanoic acid	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA 00017	200 uL	HFPO-DA	50 ug/L
					LCPFHpA 00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120				(Purchased Reagent) HFPO-DA	50 ug/mL
...LCPFHpA 00024	07/09/25		Wellington Laboratories, Lot PFHpA0620				(Purchased Reagent) Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMCAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
...LCBP1 00001	01/23/24		Chemours, Lot NA				(Purchased Reagent) PS Acid	1000 ug/mL
...LCBP2 00001	01/23/24		Chemours, Lot NA				(Purchased Reagent) Hydro-PS Acid	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD8_00047	07/10/21	03/10/21	MeOH/H2O, Lot 206204	10 mL	LCMTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00068	500 uL	HFPO-DA	0.25 ug/L
							Perfluoroheptanoic acid	0.25 ug/L
							PS Acid	0.25 ug/L
							Hydro-PS Acid	0.25 ug/L
							R-PSDA	0.25 ug/L
							Hydrolyzed PSDA	0.25 ug/L
							R-PSDCA	0.25 ug/L
							EVE Acid	0.25 ug/L
							Hydro-EVE Acid	0.25 ug/L
							NVHOS	0.25 ug/L
							PEPA	0.25 ug/L
							PES	0.25 ug/L
							PFECA B	0.25 ug/L
							PFECA G	0.25 ug/L
							PFMOAA	0.25 ug/L
							PFO2HxA	0.25 ug/L
		PFO3OA	0.25 ug/L					
		PFO4DA	0.25 ug/L					
		PFO5DA	0.25 ug/L					
		PMPA	0.25 ug/L					
		R-EVE	0.25 ug/L					
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA 00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
...LCM4PFHPA 00035	09/29/25		Wellington Laboratories, Lot M4PFHPA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00068	08/23/21	02/28/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	25 mL	HFPO-DA	5 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
							Perfluoroheptanoic acid	5 ug/L	
							PS Acid	5 ug/L	
							Hydro-PS Acid	5 ug/L	
							R-PSDA	5 ug/L	
							Hydrolyzed PSDA	5 ug/L	
							R-PSDCA	5 ug/L	
							EVE Acid	5 ug/L	
							Hydro-EVE Acid	5 ug/L	
							NVHOS	5 ug/L	
							PEPA	5 ug/L	
							PES	5 ug/L	
							PFECA B	5 ug/L	
							PFECA G	5 ug/L	
							PFMOAA	5 ug/L	
							PFO2HxA	5 ug/L	
							PFO3OA	5 ug/L	
							PFO4DA	5 ug/L	
							PFO5DA	5 ug/L	
							PMPA	5 ug/L	
							R-EVE	5 ug/L	
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA 00017	200 uL	HFPO-DA	50 ug/L	
					LCPFHpA_00024	200 uL	Perfluoroheptanoic acid	50 ug/L	
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L	
							Hydro-PS Acid	50 ug/L	
							R-PSDA	50 ug/L	
							Hydrolyzed PSDA	50 ug/L	
							R-PSDCA	50 ug/L	
							EVE Acid	50 ug/L	
							Hydro-EVE Acid	50 ug/L	
							NVHOS	50 ug/L	
							PEPA	50 ug/L	
							PES	50 ug/L	
							PFECA B	50 ug/L	
							PFECA G	50 ug/L	
							PFMOAA	50 ug/L	
							PFO2HxA	50 ug/L	
							PFO3OA	50 ug/L	
							PFO4DA	50 ug/L	
							PFO5DA	50 ug/L	
							PMPA	50 ug/L	
							R-EVE	50 ug/L	
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120				(Purchased Reagent)	HFPO-DA	50 ug/mL
...LCPFHpA_00024	07/09/25		Wellington Laboratories, Lot PFHpA0620				(Purchased Reagent)	Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1_00001	100 uL	PS Acid	5000 ug/L	
					LCBP2_00001	100 uL	Hydro-PS Acid	5000 ug/L	
					LCBP4_00001	100 uL	R-PSDA	5000 ug/L	
					LCBP5_00001	100 uL	Hydrolyzed PSDA	5000 ug/L	
					LCBP6_00001	100 uL	R-PSDCA	5000 ug/L	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMOAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PEPA	1000 ug/mL
....LCPEPES 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFECA G	1000 ug/mL
....LCPFMOAA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
....LCPPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_LLSTD9_00045	07/10/21	03/10/21	MeOH/H2O, Lot 206204	10 mL	LCTB3_SU_00023	500 uL	13C3 HFPO-DA	0.25 ug/L
							13C4 PFHpA	0.25 ug/L
					LCTB3_SP_00068	1000 uL	HFPO-DA	0.5 ug/L
							Perfluoroheptanoic acid	0.5 ug/L
							PS Acid	0.5 ug/L
							Hydro-PS Acid	0.5 ug/L
							R-PSDA	0.5 ug/L
							Hydrolyzed PSDA	0.5 ug/L
							R-PSDCA	0.5 ug/L
							EVE Acid	0.5 ug/L
							Hydro-EVE Acid	0.5 ug/L
							NVHOS	0.5 ug/L
							PEPA	0.5 ug/L
							PES	0.5 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFECA B	0.5 ug/L
							PFECA G	0.5 ug/L
							PFMOAA	0.5 ug/L
							PFO2HxA	0.5 ug/L
							PFO3OA	0.5 ug/L
							PFO4DA	0.5 ug/L
							PFO5DA	0.5 ug/L
							PMPA	0.5 ug/L
							R-EVE	0.5 ug/L
.LCMTB3_SU_00023	07/10/21	01/10/21	Methanol, Lot 202389	250 mL	LCMTB3_SU_00020	2.5 mL	13C3 HFPO-DA	5 ug/L
							13C4 PFHpA	5 ug/L
..LCMTB3_SU_00020	07/10/21	01/10/21	Methanol, Lot Fisher 202389	50 mL	LCM3HFPO-DA_00027	500 uL	13C3 HFPO-DA	0.5 ug/mL
					LCM4PFHPA 00035	500 uL	13C4 PFHpA	0.5 ug/mL
...LCM3HFPO-DA 00027	10/21/23		WELLINGTON, Lot M3HFPODA1020		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
..LCM4PFHPA 00035	09/29/25		Wellington Laboratories, Lot M4PFHpA0920		(Purchased Reagent)		13C4 PFHpA	50 ug/mL
.LCTB3_SP_00068	08/23/21	02/28/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	25 mL	HFPO-DA	5 ug/L
							Perfluoroheptanoic acid	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							R-EVE	5 ug/L
..LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA 00017	200 uL	HFPO-DA	50 ug/L
					LCPFHpA 00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							R-EVE	50 ug/L
...LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120			(Purchased Reagent)	HFPO-DA	50 ug/mL
...LCPFHpA 00024	07/09/25		Wellington Laboratories, Lot PFHpA0620			(Purchased Reagent)	Perfluoroheptanoic acid	50 ug/mL
...LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMCAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
....LCBP1 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PS Acid	1000 ug/mL
....LCBP2 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-PS Acid	1000 ug/mL
....LCBP4 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDA	1000 ug/mL
....LCBP5 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydrolyzed PSDA	1000 ug/mL
....LCBP6 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDCA	1000 ug/mL
....LCEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	EVE Acid	1000 ug/mL
....LCHEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-EVE Acid	1000 ug/mL
....LCNVHOS 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	NVHOS	1000 ug/mL
....LCPEPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PEPA	1000 ug/mL
....LCPEPES 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PES	1000 ug/mL
....LCPFECA B 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA B	1000 ug/mL
....LCPFECA G 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA G	1000 ug/mL
....LCPFMCAA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFMOAA	1000 ug/mL
....LCPFO2HxA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO2HxA	1000 ug/mL
....LCPFO3OA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO3OA	1000 ug/mL
....LCPFO4DA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO4DA	1000 ug/mL
....LCPFO5DoA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO5DA	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....LCPMPA_00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
....LCR-EVE_00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL
LCTB3_SP_00071	08/23/21	03/24/21	Methanol, Lot 204519	250 mL	LCTB3_IM2_00012	25 mL	HFPO-DA	5 ug/L
							Perfluoroheptanoic acid	5 ug/L
							PS Acid	5 ug/L
							Hydro-PS Acid	5 ug/L
							R-PSDA	5 ug/L
							Hydrolyzed PSDA	5 ug/L
							R-PSDCA	5 ug/L
							DFSA	5 ug/L
							EVE Acid	5 ug/L
							Hydro-EVE Acid	5 ug/L
							MMF	5 ug/L
							MTP	5 ug/L
							NVHOS	5 ug/L
							PEPA	5 ug/L
							PES	5 ug/L
							PFECA B	5 ug/L
							PFECA G	5 ug/L
							PFMOAA	5 ug/L
							PFO2HxA	5 ug/L
							PFO3OA	5 ug/L
							PFO4DA	5 ug/L
							PFO5DA	5 ug/L
							PMPA	5 ug/L
							PPF Acid	5 ug/L
							R-EVE	5 ug/L
.LCTB3_IM2_00012	08/23/21	02/28/21	Methanol, Lot 204519	200 mL	LCHFPO-DA_00017	200 uL	HFPO-DA	50 ug/L
					LCPFHpA_00024	200 uL	Perfluoroheptanoic acid	50 ug/L
					LCTB3_IM_00022	2 mL	PS Acid	50 ug/L
							Hydro-PS Acid	50 ug/L
							R-PSDA	50 ug/L
							Hydrolyzed PSDA	50 ug/L
							R-PSDCA	50 ug/L
							DFSA	50 ug/L
							EVE Acid	50 ug/L
							Hydro-EVE Acid	50 ug/L
							MMF	50 ug/L
							MTP	50 ug/L
							NVHOS	50 ug/L
							PEPA	50 ug/L
							PES	50 ug/L
							PFECA B	50 ug/L
							PFECA G	50 ug/L
							PFMOAA	50 ug/L
							PFO2HxA	50 ug/L
							PFO3OA	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PFO4DA	50 ug/L
							PFO5DA	50 ug/L
							PMPA	50 ug/L
							PPF Acid	50 ug/L
							R-EVE	50 ug/L
..LCHFPO-DA 00017	11/13/23		WELLINGTON, Lot HFPODA1120			(Purchased Reagent)	HFPO-DA	50 ug/mL
..LCPFHpa 00024	07/09/25		Wellington Laboratories, Lot PFHpA0620			(Purchased Reagent)	Perfluoroheptanoic acid	50 ug/mL
..LCTB3_IM_00022	08/23/21	02/28/21	Methanol, Lot 204519	20 mL	LCBP1 00001	100 uL	PS Acid	5000 ug/L
					LCBP2 00001	100 uL	Hydro-PS Acid	5000 ug/L
					LCBP4 00001	100 uL	R-PSDA	5000 ug/L
					LCBP5 00001	100 uL	Hydrolyzed PSDA	5000 ug/L
					LCBP6 00001	100 uL	R-PSDCA	5000 ug/L
					LCDFSA 00001	100 uL	DFSA	5000 ug/L
					LCEVEA 00001	100 uL	EVE Acid	5000 ug/L
					LCHEVEA 00001	100 uL	Hydro-EVE Acid	5000 ug/L
					LCMMF 00001	100 uL	MMF	5000 ug/L
					LCMTP 00001	100 uL	MTP	5000 ug/L
					LCNVHOS 00001	100 uL	NVHOS	5000 ug/L
					LCPEPA 00002	100 uL	PEPA	5000 ug/L
					LCPEPES 00001	100 uL	PES	5000 ug/L
					LCPFECA B 00001	100 uL	PFECA B	5000 ug/L
					LCPFECA G 00001	100 uL	PFECA G	5000 ug/L
					LCPFMCAA 00002	100 uL	PFMOAA	5000 ug/L
					LCPFO2HxA 00002	100 uL	PFO2HxA	5000 ug/L
					LCPFO3OA 00002	100 uL	PFO3OA	5000 ug/L
					LCPFO4DA 00002	100 uL	PFO4DA	5000 ug/L
					LCPFO5DoA 00001	100 uL	PFO5DA	5000 ug/L
					LCPMPA 00002	100 uL	PMPA	5000 ug/L
					LCPPPA 00001	100 uL	PPF Acid	5000 ug/L
					LCR-EVE 00001	100 uL	R-EVE	5000 ug/L
...LCBP1 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PS Acid	1000 ug/mL
...LCBP2 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-PS Acid	1000 ug/mL
...LCBP4 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDA	1000 ug/mL
...LCBP5 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydrolyzed PSDA	1000 ug/mL
...LCBP6 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	R-PSDCA	1000 ug/mL
...LCDFSA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	DFSA	1000 ug/mL
...LCEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	EVE Acid	1000 ug/mL
...LCHEVEA 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	Hydro-EVE Acid	1000 ug/mL
...LCMMF 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	MMF	1000 ug/mL
...LCMTP 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	MTP	1000 ug/mL
...LCNVHOS 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	NVHOS	1000 ug/mL
...LCPEPA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PEPA	1000 ug/mL
...LCPEPES 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PES	1000 ug/mL
...LCPFECA B 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA B	1000 ug/mL
...LCPFECA G 00001	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFECA G	1000 ug/mL
...LCPFMCAA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFMOAA	1000 ug/mL
...LCPFO2HxA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO2HxA	1000 ug/mL
...LCPFO3OA 00002	01/23/24		Chemours, Lot NA			(Purchased Reagent)	PFO3OA	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...LCPFO4DA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO4DA	1000 ug/mL
...LCPFO5DoA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PFO5DA	1000 ug/mL
...LCPMPA 00002	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PMPA	1000 ug/mL
...LCPFFA 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		PPF Acid	1000 ug/mL
...LCR-EVE 00001	01/23/24		Chemours, Lot NA		(Purchased Reagent)		R-EVE	1000 ug/mL

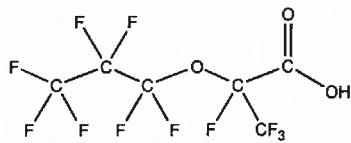
Reagent

LCHEPO-DA_00017



PRODUCT CODE: HFPO-DA **LOT NUMBER:** HFPODA1120
COMPOUND: 2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid

STRUCTURE: **CAS #:** 13252-13-6



MOLECULAR FORMULA: C₆HF₁₁O₃ **MOLECULAR WEIGHT:** 330.05
CONCENTRATION: 50.0 ± 2.5 µg/mL **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 11/13/2020
EXPIRY DATE: (mm/dd/yyyy) 11/13/2023
RECOMMENDED STORAGE: Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Product is commercially known as GenX.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
B.G. Chittim, General Manager **Date:** 11/19/2020
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

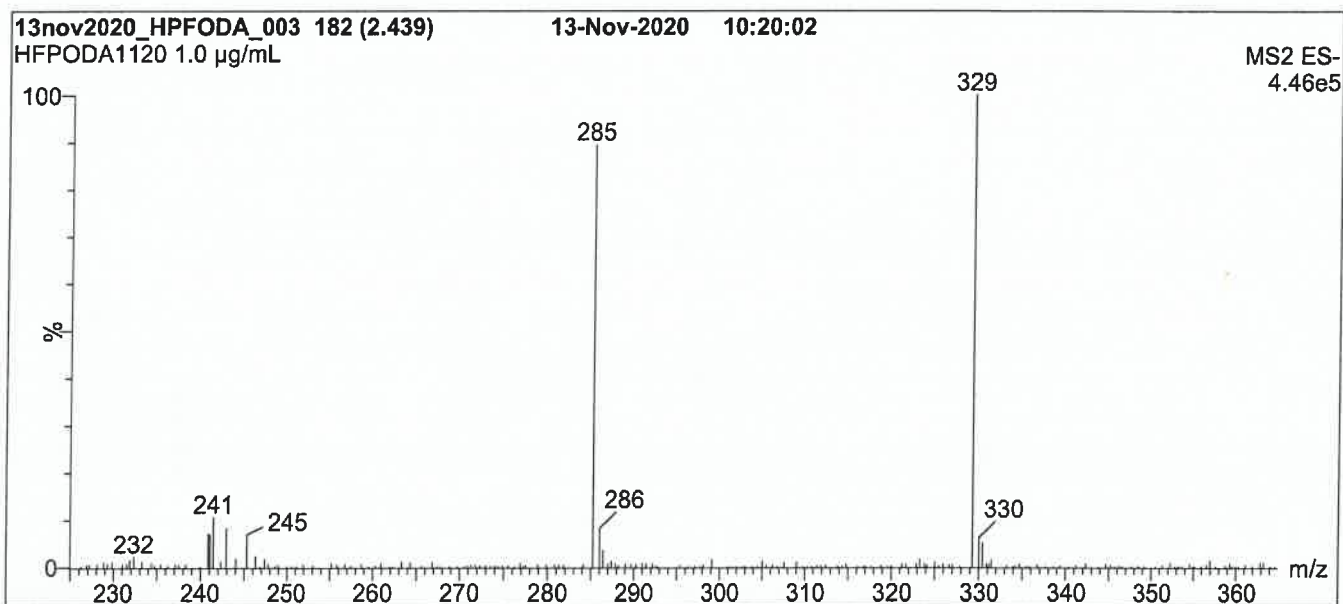
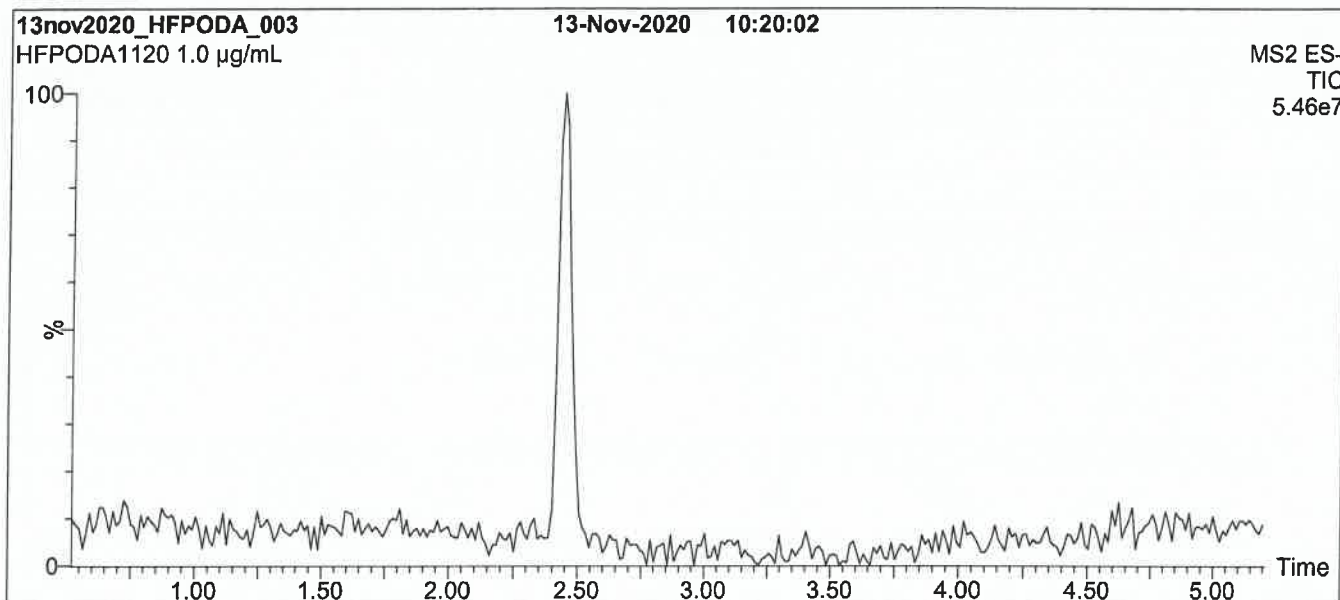
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: HFPO-DA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient

Start: 50% H₂O / 50% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

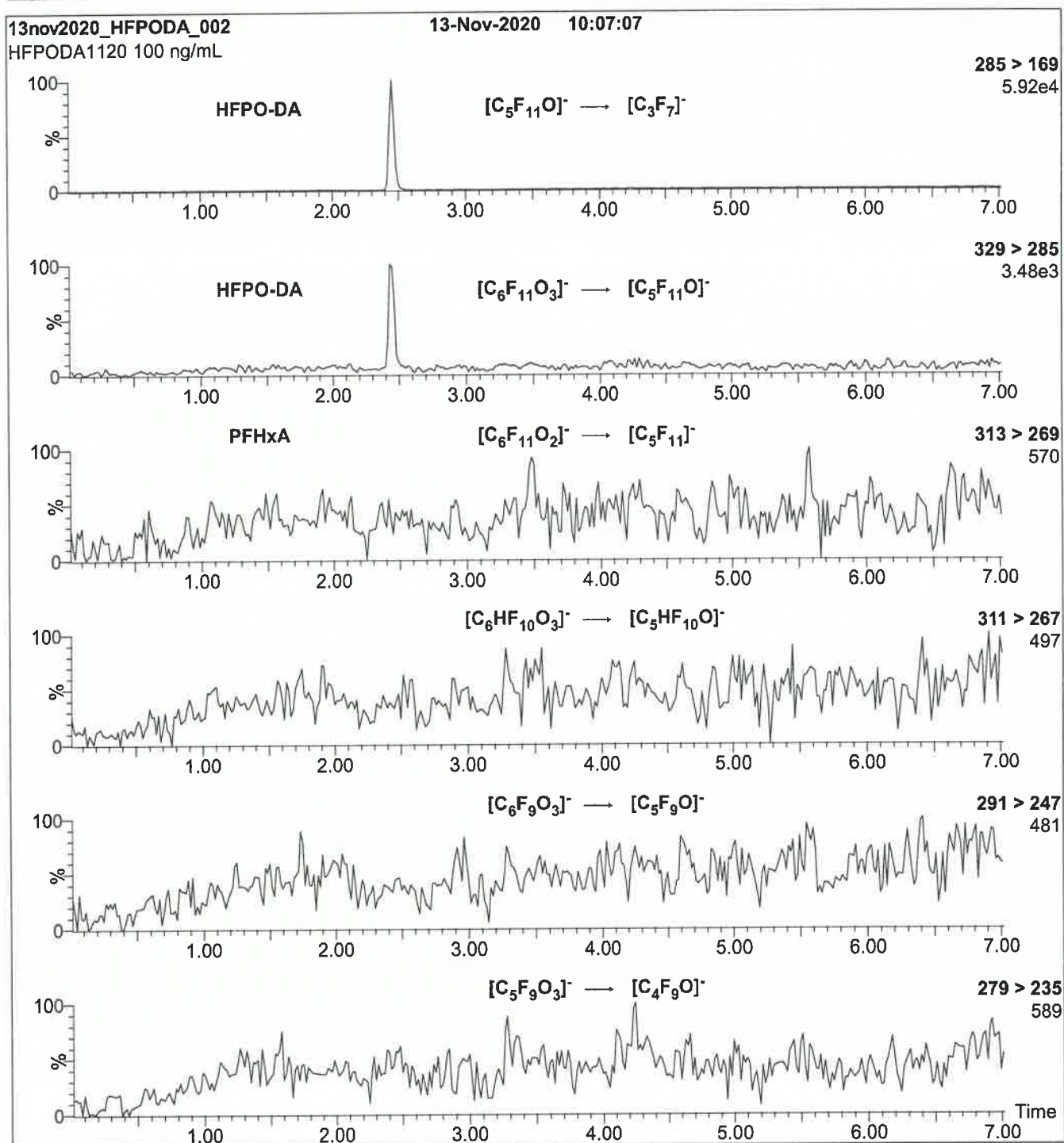
Flow: 300 µL/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 15.00
Desolvation Temperature (°C) = 300
Desolvation Gas Flow (L/hr) = 1000

Figure 2: HFPO-DA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: On-column (HFPO-DA)
 Mobile phase: Same as Figure 1
 Flow: 300 μL/min

MS Parameters:

Collision Gas (mbar) = 3.29e-3
 Collision Energy (eV) = 8

Reagent

LCM3HFPO-DA_00027

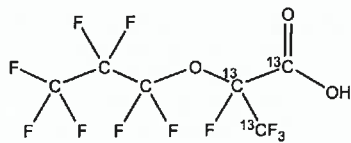


WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M3HFPO-DA **LOT NUMBER:** M3HFPODA1020
COMPOUND: 2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-¹³C₃-propanoic acid

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: ¹³C₃¹²C₃HF₁₁O₃ **MOLECULAR WEIGHT:** 333.03
CONCENTRATION: 50.0 ± 2.5 µg/mL **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
LAST TESTED: (mm/dd/yyyy) 10/21/2020 (¹³C₃)
EXPIRY DATE: (mm/dd/yyyy) 10/21/2023
RECOMMENDED STORAGE: Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Product is commercially known as GenX.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
B.G. Chittim, General Manager

Date: 10/23/2020
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

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$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

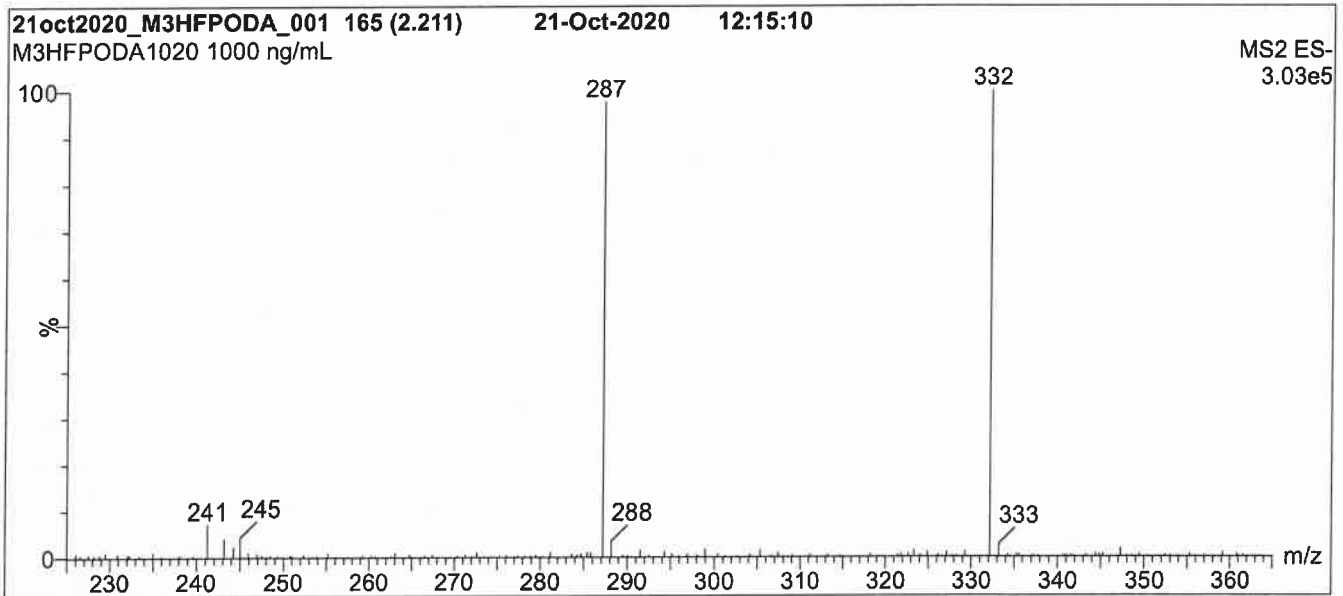
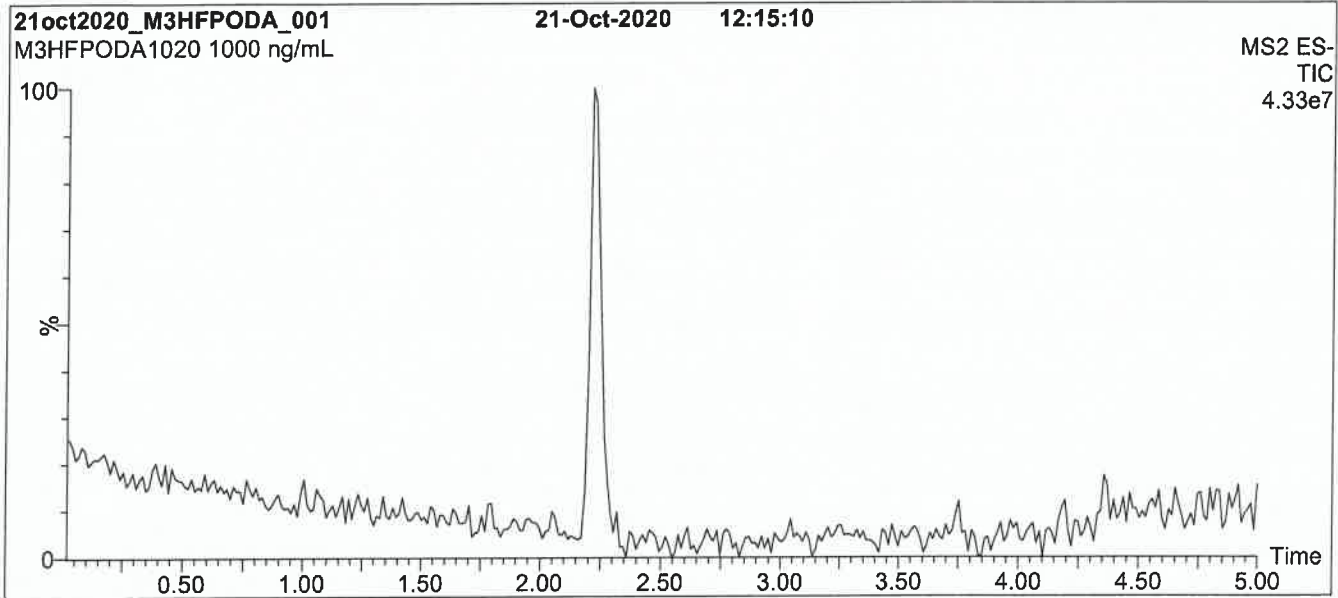
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: M3HFPO-DA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% H₂O / 50% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

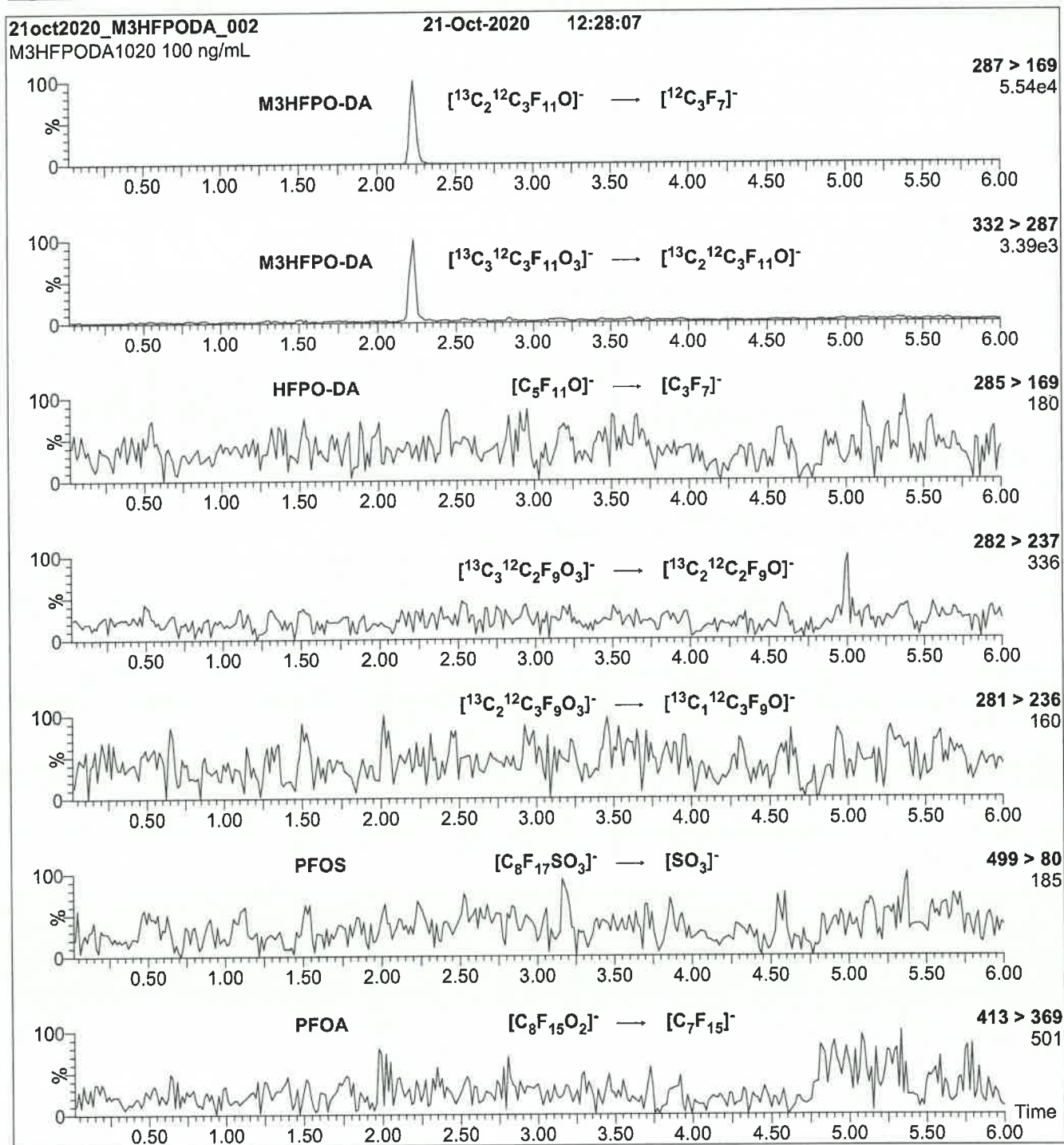
Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 15.00
Desolvation Temperature ($^{\circ}$ C) = 300
Desolvation Gas Flow (L/hr) = 1000

Figure 2: M3HFPO-DA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: On-column (M3HFPO-DA)

Mobile phase: Same as Figure 1

Flow: 300 $\mu\text{L}/\text{min}$

MS Parameters:

Collision Gas (mbar) = 3.41e-3

Collision Energy (eV) = 8

Reagent

LCM4PFHPA_00035

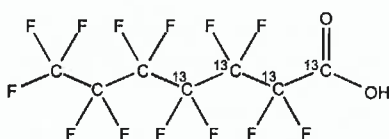


PRODUCT CODE: M4PFHpA
COMPOUND: Perfluoro-n-[1,2,3,4-¹³C₄]heptanoic acid

LOT NUMBER: M4PFHpA0920

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₄¹²C₃HF₁₃O₂
CONCENTRATION: 50.0 ± 2.5 µg/mL

MOLECULAR WEIGHT: 368.03
SOLVENT(S): Methanol
Water (<1%)
ISOTOPIC PURITY: ≥99% ¹³C
(1,2,3,4-¹³C₄)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 09/29/2020
EXPIRY DATE: (mm/dd/yyyy) 09/29/2025
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.03% of perfluoro-n-heptanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
B.G. Chittim, General Manager

Date: 10/22/2020
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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HANDLING:

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LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

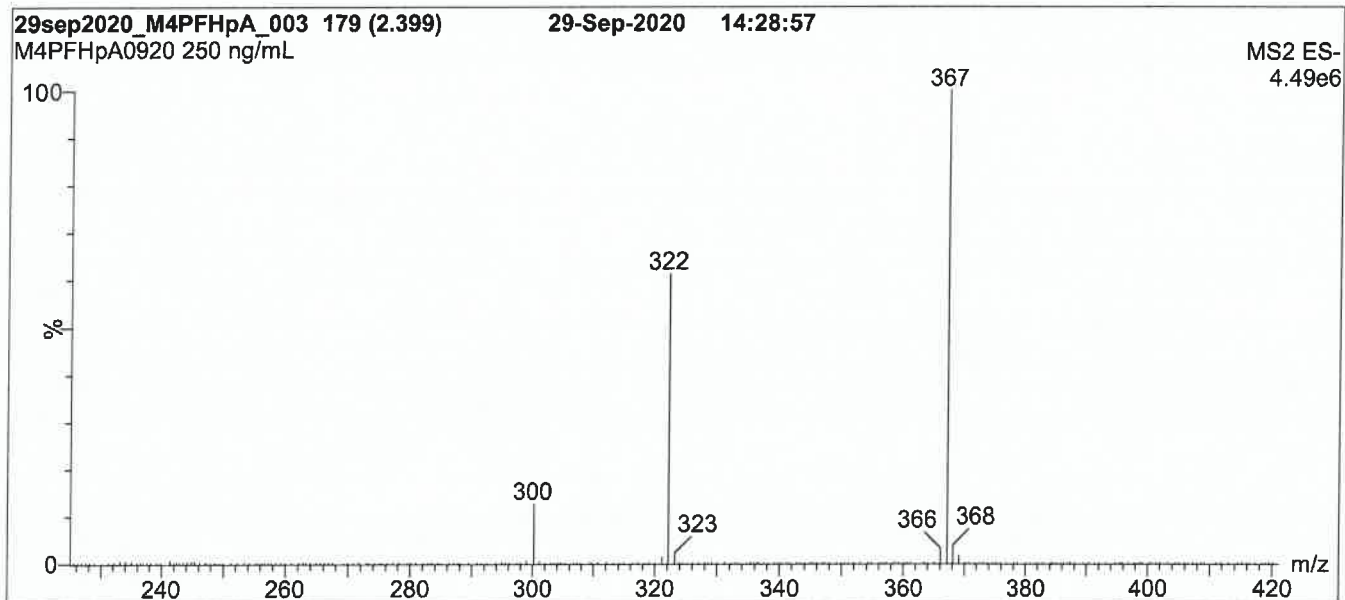
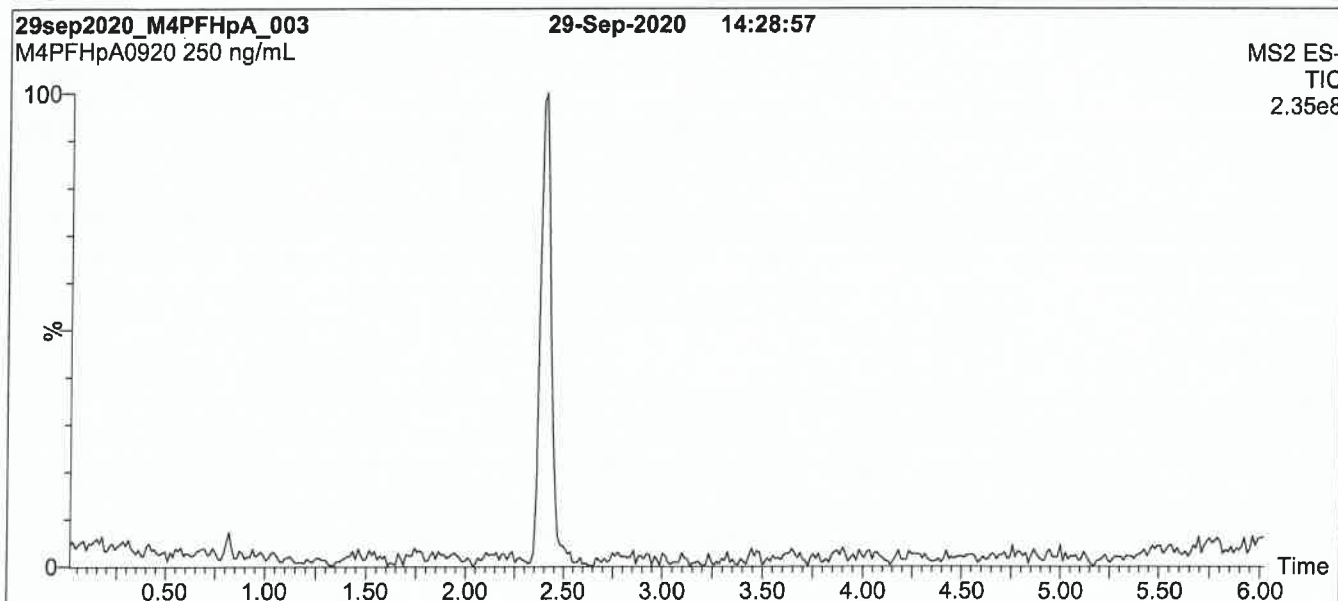
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: M4PFHpA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 45% H₂O / 55% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

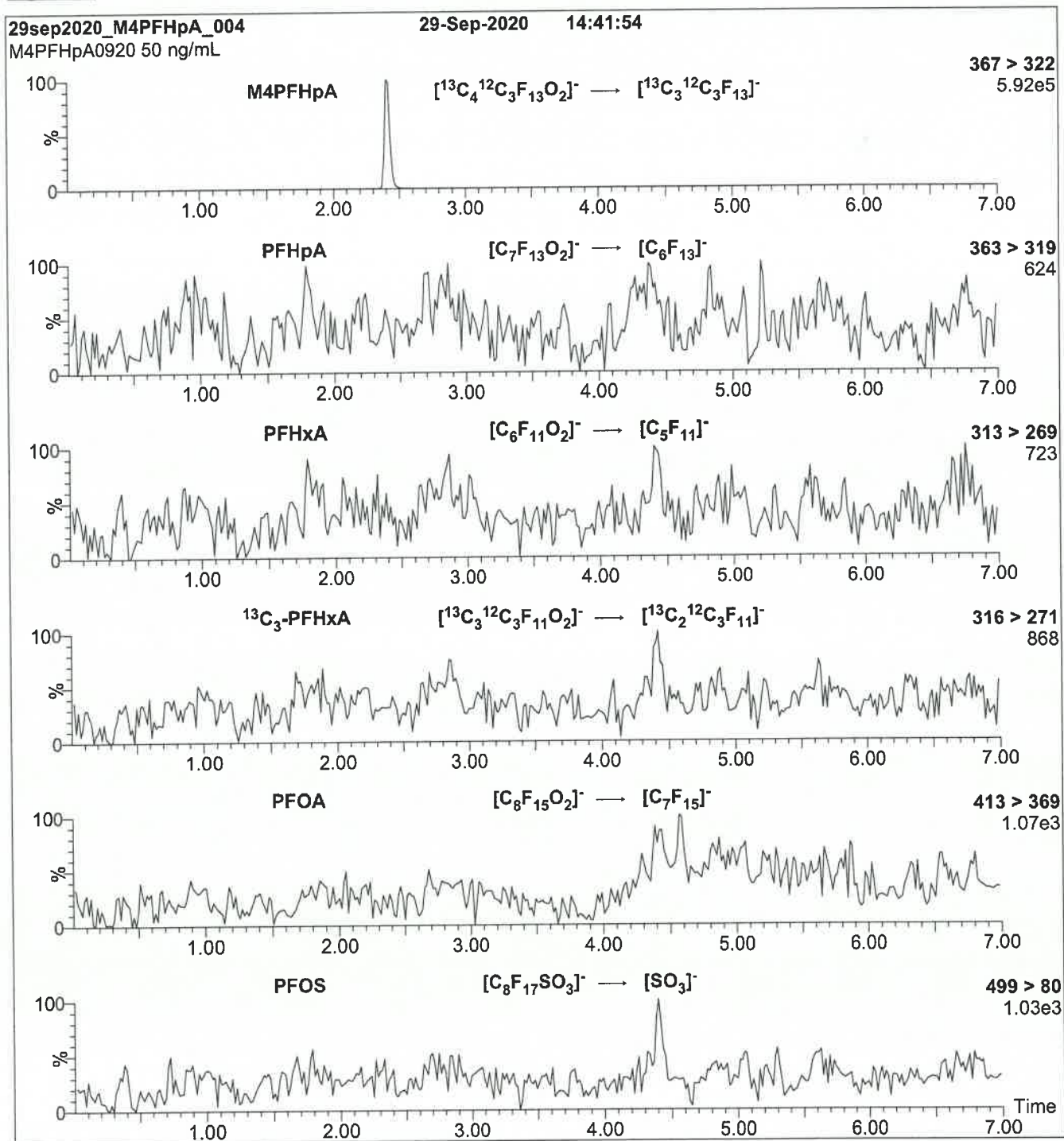
Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 10.00
Desolvation Temperature ($^{\circ}$ C) = 500
Desolvation Gas Flow (L/hr) = 1000

Figure 2: M4PFHpA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: On-column (M4PFHpA)
Mobile phase: Same as Figure 1
Flow: 300 $\mu\text{L}/\text{min}$

MS Parameters:

Collision Gas (mbar) = 3.27e-3
Collision Energy (eV) = 8

Reagent

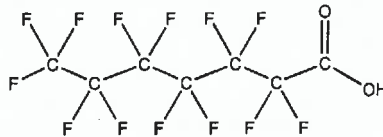
LCPFHpA_00024



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: PFHpA **LOT NUMBER:** PFHpA0620
COMPOUND: Perfluoro-n-heptanoic acid
STRUCTURE: **CAS #:** 375-85-9



MOLECULAR FORMULA: $C_7HF_{13}O_2$ **MOLECULAR WEIGHT:** 364.06
CONCENTRATION: $50.0 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):** Methanol
Water (<1%)
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 07/09/2020
EXPIRY DATE: (mm/dd/yyyy) 07/09/2025
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:  **Date:** 07/22/2020
B.G. Chittim, General Manager (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

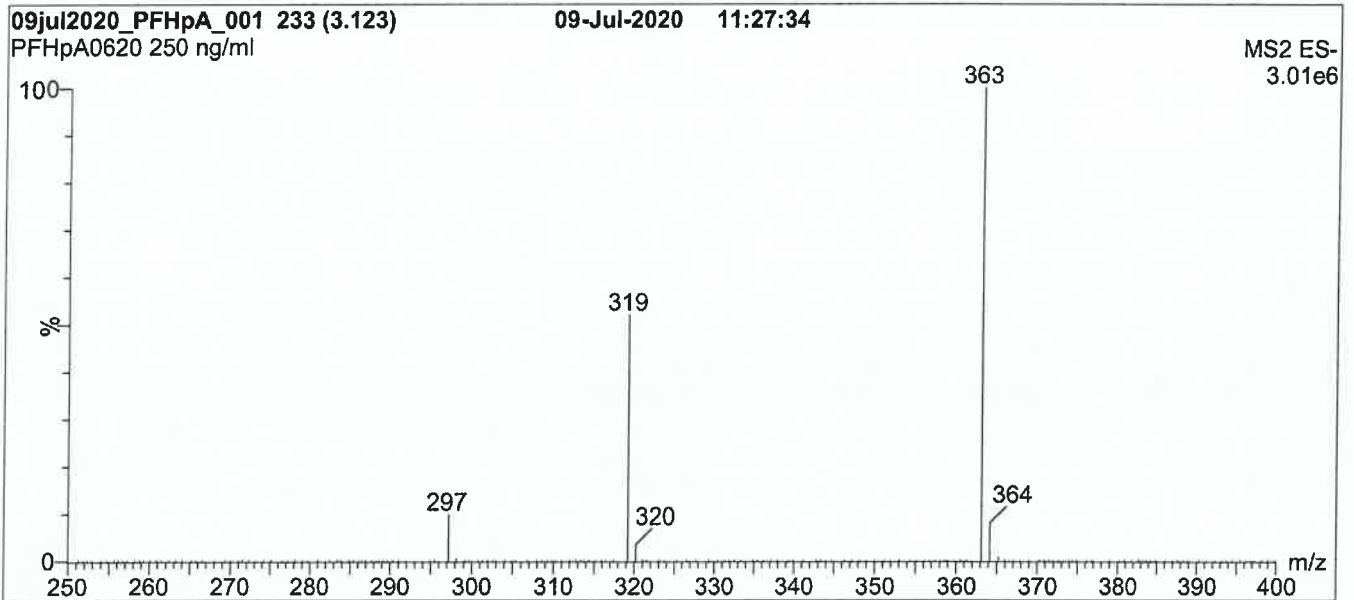
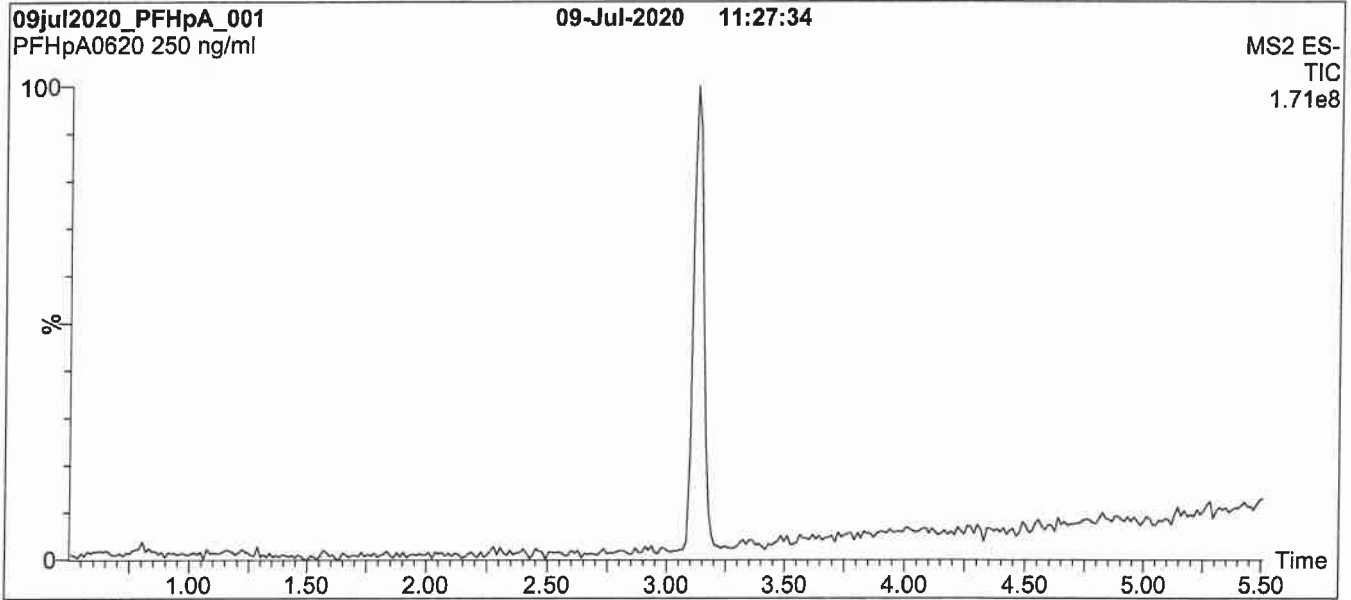
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: PFHpA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Waters Xevo TQ-S micro MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

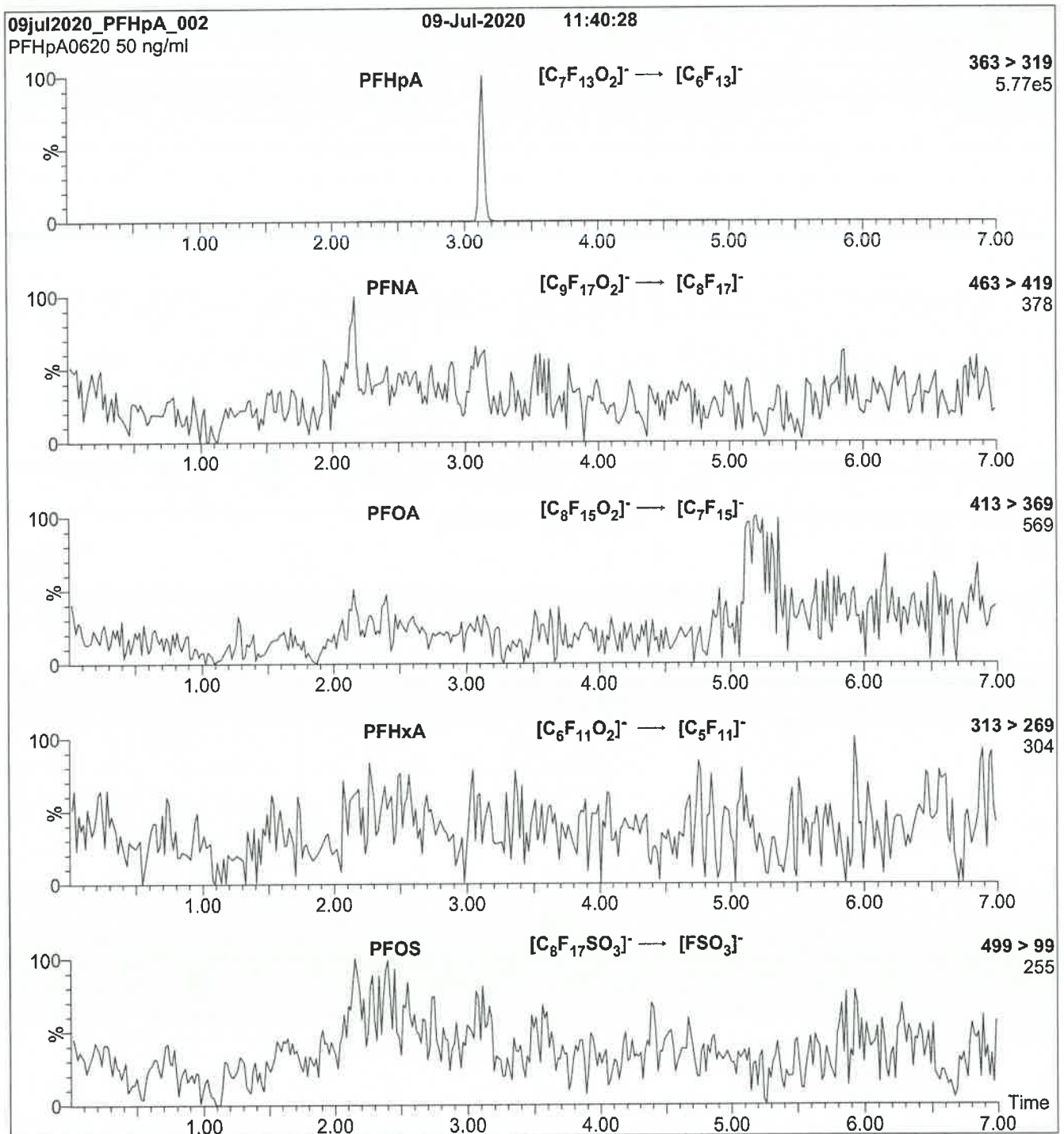
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 10.00
Desolvation Temperature ($^{\circ}$ C) = 500
Desolvation Gas Flow (l/hr) = 1000

Figure 2: PFHpA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: On-column (PFHpA)
 Mobile phase: Same as Figure 1
 Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.29e-3
 Collision Energy (eV) = 8

PFAS_CHEM_TB3P

Fluoroproducts Analytical Method -
Table 3+

FORM II
LCMS SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	HFPODA #
SEEP-C-RAIN-INFLUE NT-24-031721	320-71576-1	104
SEEP-C-RAIN-EFFLUE NT-24-031721	320-71576-2	85
SEEP-C-RAIN-EQBLK- 031721	320-71576-3	94
SEEP-C-EFFLUENT-33 6-031921	320-71576-4	84
SEEP-C-INFLUENT-33 6-031921	320-71576-5	99
SEEP-C-FBLK-336-03 1921	320-71576-6	96
	MB 320-475092/1-A	99
	LCS 320-475092/2-A	95
	LCSD 320-475092/3-A	89

HFPODA = 13C3 HFPO-DA

QC LIMITS
25-150

Column to be used to flag recovery values

FORM II Chemours (TB3+)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 2021.03.31_A12_TB3_A_017.d
 Lab ID: LCS 320-475092/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
13C3 HFPO-DA	0.500	0.476	95	25-150	
EVE Acid	0.200	0.176	88	70-130	
HFPO-DA	0.200	0.197	99	70-130	
Hydro-EVE Acid	0.200	0.178	89	70-130	
Hydrolyzed PSDA	0.200	0.163	82	50-150	
Hydro-PS Acid	0.200	0.164	82	70-130	
NVHOS	0.200	0.175	87	70-130	
PEPA	0.200	0.167	84	70-130	
PES	0.200	0.167	83	70-130	
PFECA B	0.200	0.195	98	70-130	
PFECA G	0.200	0.148	74	70-130	
PFMOAA	0.200	0.198	99	70-130	
PFO2HxA	0.200	0.178	89	70-130	
PFO3OA	0.200	0.187	93	70-130	
PFO4DA	0.200	0.159	79	50-150	
PFO5DA	0.200	0.228	114	50-150	
PMPA	0.200	0.182	91	70-130	
PS Acid	0.200	0.155	78	70-130	
R-EVE	0.200	0.189	94	50-150	
R-PSDA	0.200	0.181	91	50-150	
R-PSDCA	0.200	0.166	83	70-130	

Column to be used to flag recovery and RPD values

FORM III Chemours (TB3+)

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 2021.03.31_A12_TB3_A_018.d

Lab ID: LCSD 320-475092/3-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
13C3 HFPO-DA	0.500	0.444	89			25-150	
EVE Acid	0.200	0.179	90	2	25	70-130	
HFPO-DA	0.200	0.192	96	3	25	70-130	
Hydro-EVE Acid	0.200	0.165	83	8	25	70-130	
Hydrolyzed PSDA	0.200	0.150	75	9	25	50-150	
Hydro-PS Acid	0.200	0.156	78	5	25	70-130	
NVHOS	0.200	0.167	84	4	25	70-130	
PEPA	0.200	0.158	79	6	25	70-130	
PES	0.200	0.160	80	4	25	70-130	
PFECA B	0.200	0.181	90	8	25	70-130	
PFECA G	0.200	0.140	70	6	25	70-130	
PFMOAA	0.200	0.188	94	5	25	70-130	
PFO2HxA	0.200	0.164	82	9	25	70-130	
PFO3OA	0.200	0.190	95	2	25	70-130	
PFO4DA	0.200	0.131	65	19	25	50-150	
PFO5DA	0.200	0.208	104	9	25	50-150	
PMPA	0.200	0.172	86	5	25	70-130	
PS Acid	0.200	0.145	72	7	25	70-130	
R-EVE	0.200	0.168	84	11	25	50-150	
R-PSDA	0.200	0.170	85	6	25	50-150	
R-PSDCA	0.200	0.146	73	13	25	70-130	

Column to be used to flag recovery and RPD values

FORM III Chemours (TB3+)

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1
 SDG No.: _____
 Lab File ID: 2021.03.31_A12_TB3_A_009.d Lab Sample ID: MB 320-475092/1-A
 Matrix: Water Date Extracted: 03/30/2021 13:04
 Instrument ID: A12 Date Analyzed: 03/31/2021 10:51
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
SEEP-C-RAIN-INFLUENT-24-031721	320-71576-1	2021.03.31_A12_TB3_A_010.d	03/31/2021 11:09
SEEP-C-INFLUENT-336-031921	320-71576-5	2021.03.31_A12_TB3_A_011.d	03/31/2021 11:26
	LCS 320-475092/2-A	2021.03.31_A12_TB3_A_017.d	03/31/2021 13:12
	LCSD 320-475092/3-A	2021.03.31_A12_TB3_A_018.d	03/31/2021 13:30
SEEP-C-RAIN-EFFLUENT-24-031721	320-71576-2	2021.03.31_A12_TB3_A_022.d	03/31/2021 14:41
SEEP-C-RAIN-EQBLK-031721	320-71576-3	2021.03.31_A12_TB3_A_023.d	03/31/2021 14:58
SEEP-C-EFFLUENT-336-031921	320-71576-4	2021.03.31_A12_TB3_A_024.d	03/31/2021 15:16
SEEP-C-FBLK-336-031921	320-71576-6	2021.03.31_A12_TB3_A_025.d	03/31/2021 15:34

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Client Sample ID: SEEP-C-RAIN-INFLUENT-24-0 Lab Sample ID: 320-71576-1
31721

Matrix: Water Lab File ID: 2021.03.31_A12_TB3_A_010.d

Analysis Method: Chemours (TB3+) Date Collected: 03/17/2021 11:42

Extraction Method: PFAS Prep Date Extracted: 03/30/2021 13:04

Sample wt/vol: 2.5(mL) Date Analyzed: 03/31/2021 11:09

Con. Extract Vol.: 5.00(mL) Dilution Factor: 50

Injection Volume: 500(uL) GC Column: GeminiC18 3x100 ID: 3(mm)

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

Analysis Batch No.: 475323 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
69087-46-3	EVE Acid	<0.0087		0.0087
13252-13-6	HFPO-DA	16		0.041
773804-62-9	Hydro-EVE Acid	1.2		0.0072
2416366-19-1	Hydrolyzed PSDA	0.76		0.019
749836-20-2	Hydro-PS Acid	0.46		0.0031
1132933-86-8	NVHOS	0.74		0.0073
267239-61-2	PEPA	3.4		0.020
113507-82-7	PES	<0.0034		0.0034
151772-58-6	PFECA B	<0.013		0.013
801212-59-9	PFECA G	<0.024		0.024
674-13-5	PFMOAA	80		0.040
39492-88-1	PFO2HxA	24		0.013
39492-89-2	PFO3OA	6.2		0.020
39492-90-5	PFO4DA	2.3		0.030
39492-91-6	PFO5DA	0.088		0.039
13140-29-9	PMPA	8.5		0.31
29311-67-9	PS Acid	<0.0098		0.0098
2416366-22-6	R-EVE	0.69		0.036
2416366-18-0	R-PSDA	0.60		0.035
2416366-21-5	R-PSDCA	0.017		0.0087

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	104		25-150

Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_010.d
 Lims ID: 320-71576-A-1-B
 Client ID: SEEP-C-RAIN-INFLUENT-24-031721
 Sample Type: Client
 Inject. Date: 31-Mar-2021 11:09:17 ALS Bottle#: 10 Worklist Smp#: 4
 Injection Vol: 500.0 ul Dil. Factor: 50.0000
 Sample Info: 320-71576-A-1-B 50x
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Method: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 01-Apr-2021 10:18:54 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1678

First Level Reviewer: ruangyotsakuld Date: 01-Apr-2021 10:18:54
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.922	4.256	-0.334		8902487	0.7977			895	M
2 R-EVE										
405.00 > 217.00	6.347	6.410	-0.063		43432	0.006867			747	
3 R-PSDA										M
440.90 > 241.00	6.407	6.469	-0.062		17830	0.005967			320	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.486	6.529	-0.043		90027	0.007577			1291	
23 PMPA										
229.00 > 185.00	6.708	6.782	-0.074		1546618	0.0846			2403	
5 NVHOS										
297.00 > 135.00	7.087	7.137	-0.050		39578	0.007419			794	
6 PFO2HxA										
245.00 > 85.00	7.675	7.709	-0.034		3108539	0.2415			41680	
22 PEPA										
278.90 > 234.90	8.259	8.299	-0.040		149261	0.0339			921	
9 PFO3OA										
310.90 > 85.00	9.017	9.020	-0.003		186635	0.0616			5017	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.102	9.133	-0.031		30134	0.005203		2.1	656	
11 HPFO-DA										
285.00 > 169.00	9.102	9.133	-0.031	1.000	1079966	0.1613			23122	
12 R-PSDCA										
397.00 > 217.00	9.458	9.493	-0.035		8497	0.000175			227	
13 Hydro-EVE Acid										
427.00 > 282.90	9.523	9.525	-0.002		773207	0.0116			10853	
15 Hydro-PS Acid										
463.00 > 262.90	9.523	9.558	-0.035		112775	0.004562			2519	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
18 PFO4DA										
376.90 > 85.00	9.788	9.820	-0.032		113048	0.0227			3246	
21 TAF										
442.90 > 85.00	10.348	10.399	-0.051		3390	0.000877			47.6	

QC Flag Legend

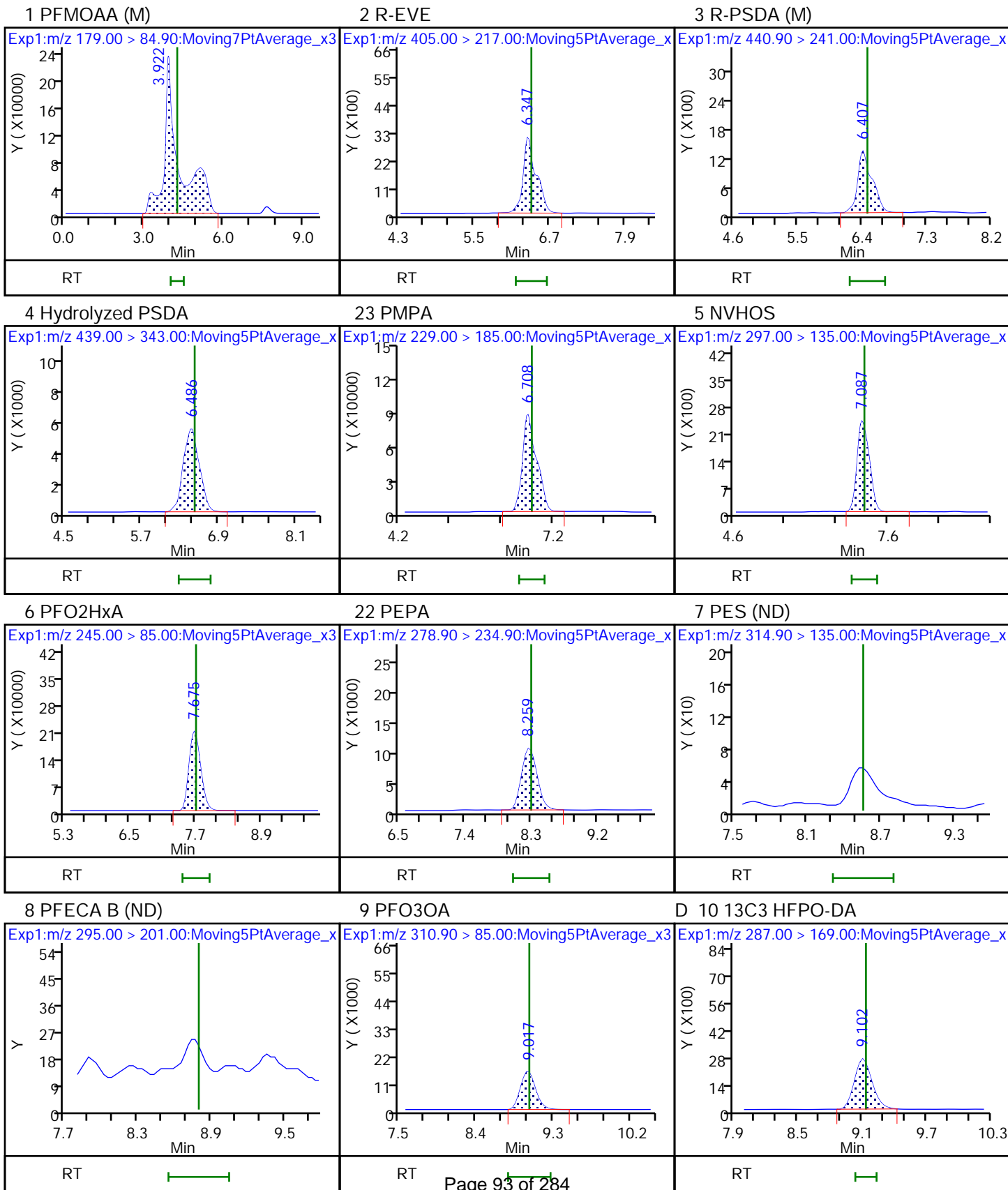
Processing Flags

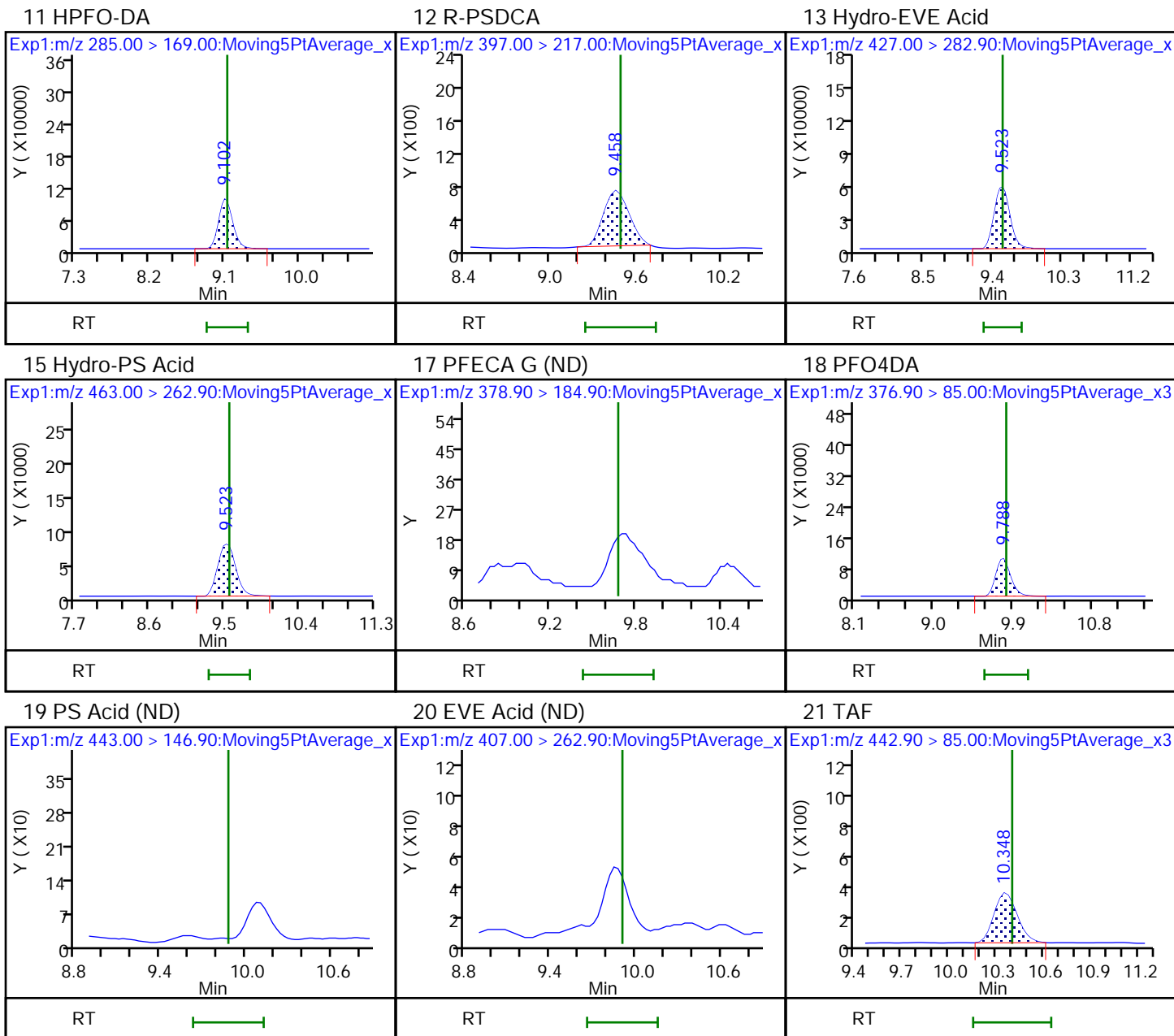
Review Flags

M - Manually Integrated

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_010.d
Injection Date: 31-Mar-2021 11:09:17 Instrument ID: A12
Lims ID: 320-71576-A-1-B Lab Sample ID: 320-71576-1
Client ID: SEEP-C-RAIN-INFLUENT-24-031721
Operator ID: Sac_inst_A12 ALS Bottle#: 10 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

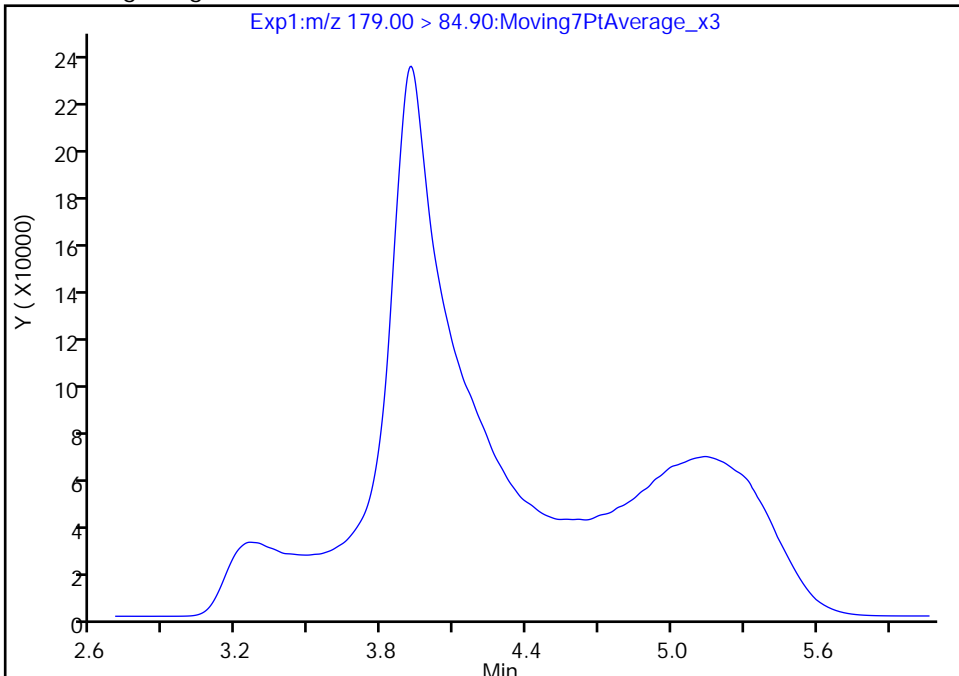
Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_010.d
Injection Date: 31-Mar-2021 11:09:17 Instrument ID: A12
Lims ID: 320-71576-A-1-B Lab Sample ID: 320-71576-1
Client ID: SEEP-C-RAIN-INFLUENT-24-031721
Operator ID: Sac_inst_A12 ALS Bottle#: 10 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

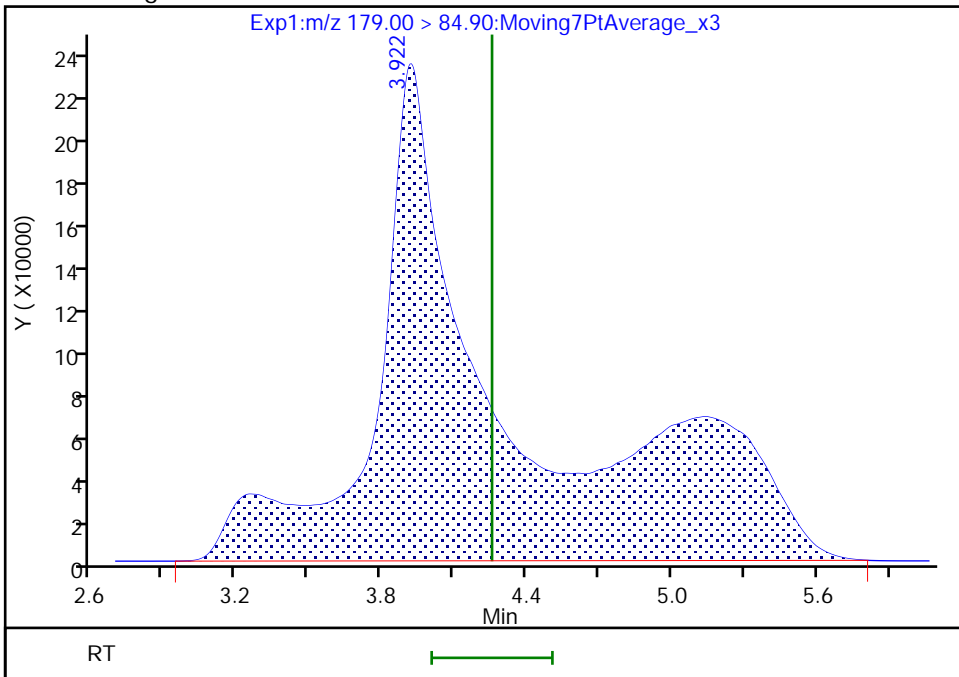
Not Detected
Expected RT: 4.26

Processing Integration Results



Manual Integration Results

RT: 3.92
Area: 8902487
Amount: 0.797666
Amount Units: ng/ml



Reviewer: vanommens, 31-Mar-2021 13:28:20
Audit Action: Manually Integrated

Audit Reason: Missed Peak

Eurofins TestAmerica, Sacramento

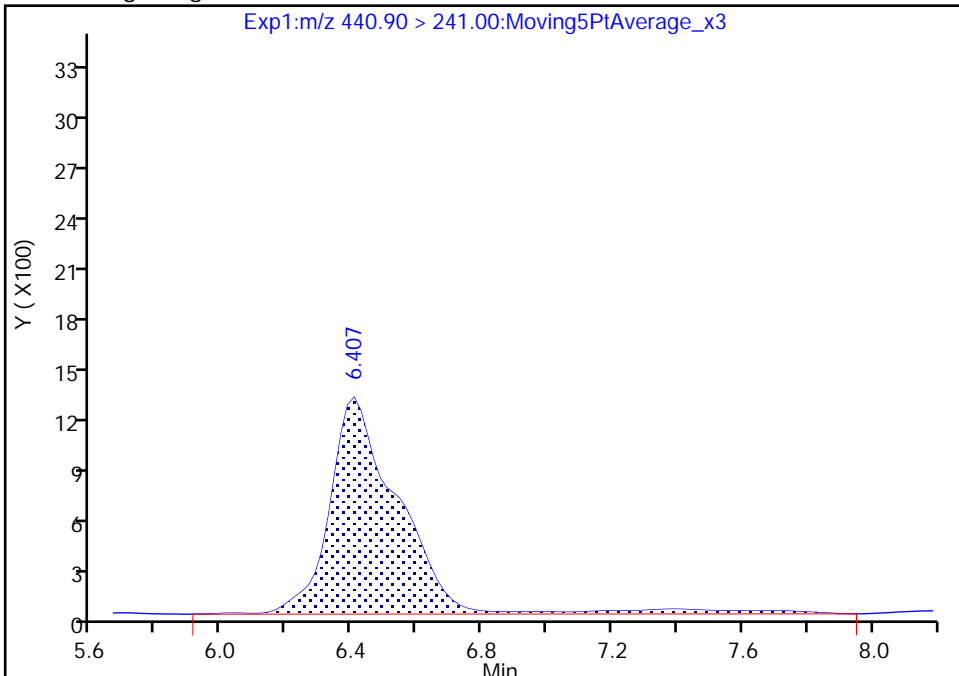
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Injection Date: 31-Mar-2021 11:09:17 Instrument ID: A12
Lims ID: 320-71576-A-1-B Lab Sample ID: 320-71576-1
Client ID: SEEP-C-RAIN-INFLUENT-24-031721
Operator ID: Sac_inst_A12 ALS Bottle#: 10 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

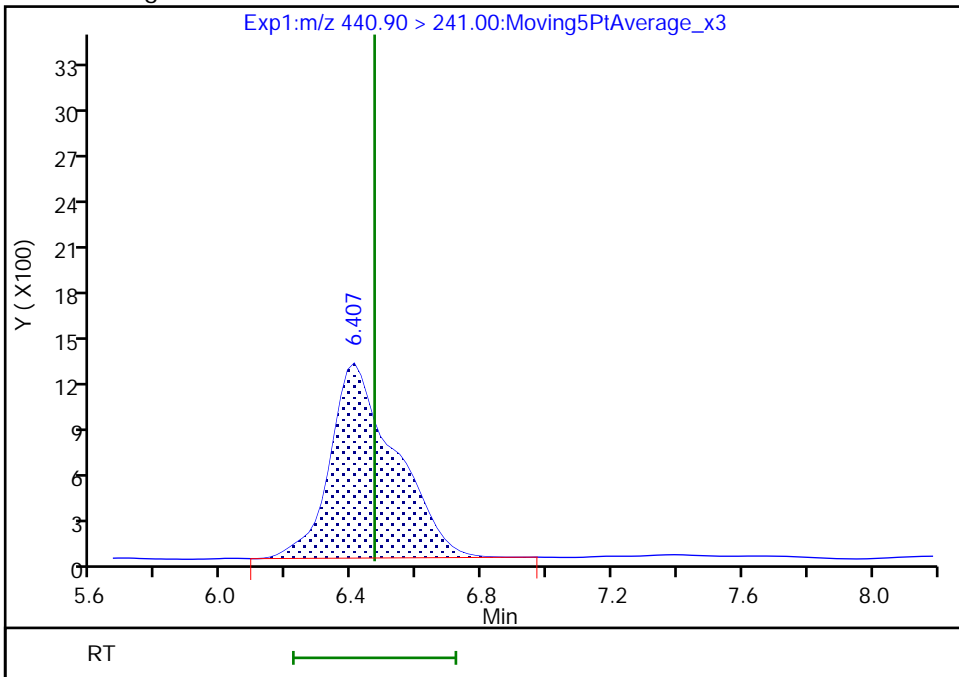
RT: 6.41
Area: 19274
Amount: 0.006451
Amount Units: ng/ml

Processing Integration Results



RT: 6.41
Area: 17830
Amount: 0.005967
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_022.d
 Lims ID: 320-71576-A-2-B
 Client ID: SEEP-C-RAIN-EFFLUENT-24-031721
 Sample Type: Client
 Inject. Date: 31-Mar-2021 14:41:15 ALS Bottle#: 22 Worklist Smp#: 16
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: 320-71576-A-2-B
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Method: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 01-Apr-2021 10:25:00 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1678

First Level Reviewer: ruangyotsakuld Date: 01-Apr-2021 10:25:00
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.922	4.256	-0.334		298831	0.0268		52.6		M
23 PMPA										M
229.00 > 185.00	6.661	6.782	-0.121		102290	0.005598		52.2		M
6 PFO2HxA										
245.00 > 85.00	7.647	7.709	-0.062		21068	0.001636		237		
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.074	9.133	-0.059		1237553	0.2137		85.5	34597	
11 HPFO-DA										
285.00 > 169.00	9.074	9.133	-0.059	1.000	9674	0.001759		280		

QC Flag Legend

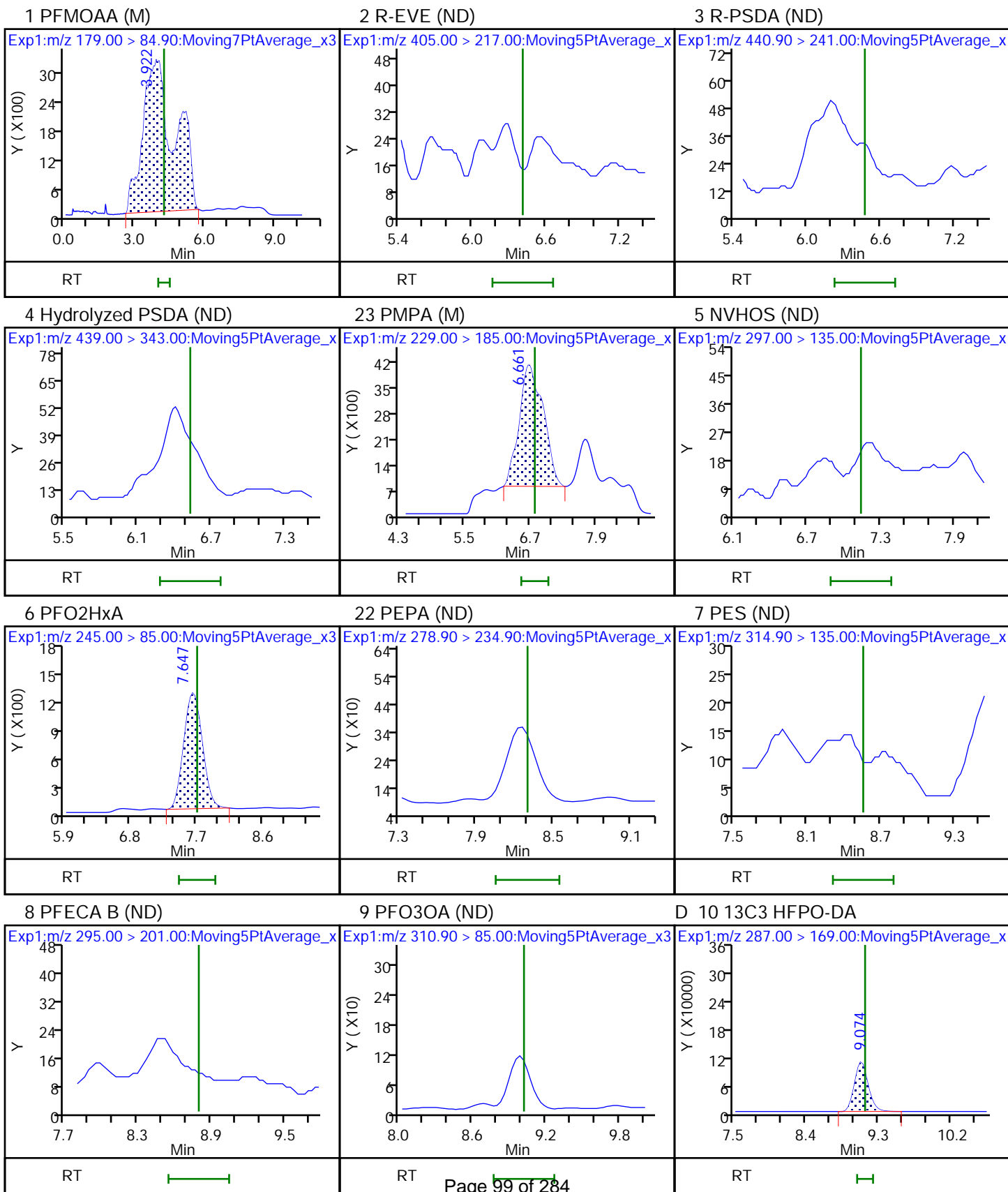
Processing Flags

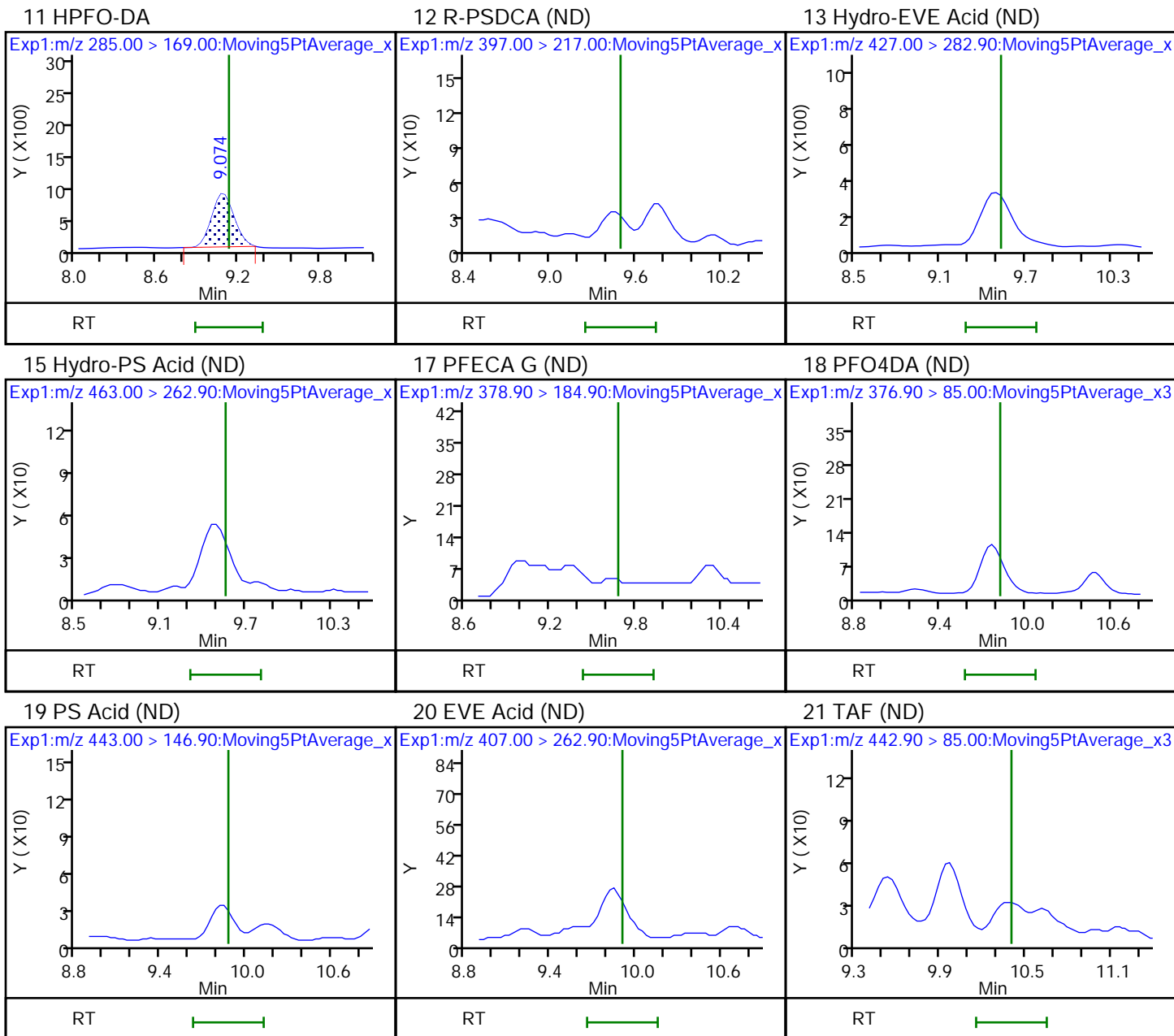
Review Flags

M - Manually Integrated

Eurofins TestAmerica, Sacramento

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_022.d
Injection Date: 31-Mar-2021 14:41:15 Instrument ID: A12
Lims ID: 320-71576-A-2-B Lab Sample ID: 320-71576-2
Client ID: SEEP-C-RAIN-EFFLUENT-24-031721
Operator ID: Sac_inst_A12 ALS Bottle#: 22 Worklist Smp#: 16
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

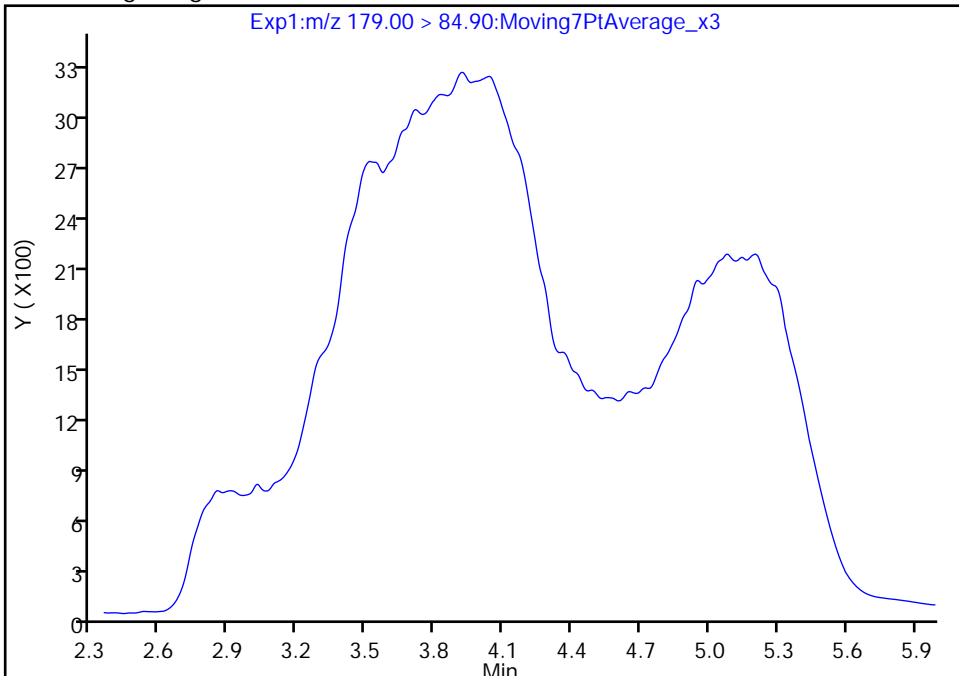
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Injection Date: 31-Mar-2021 14:41:15 Instrument ID: A12
Lims ID: 320-71576-A-2-B Lab Sample ID: 320-71576-2
Client ID: SEEP-C-RAIN-EFFLUENT-24-031721
Operator ID: Sac_inst_A12 ALS Bottle#: 22 Worklist Smp#: 16
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

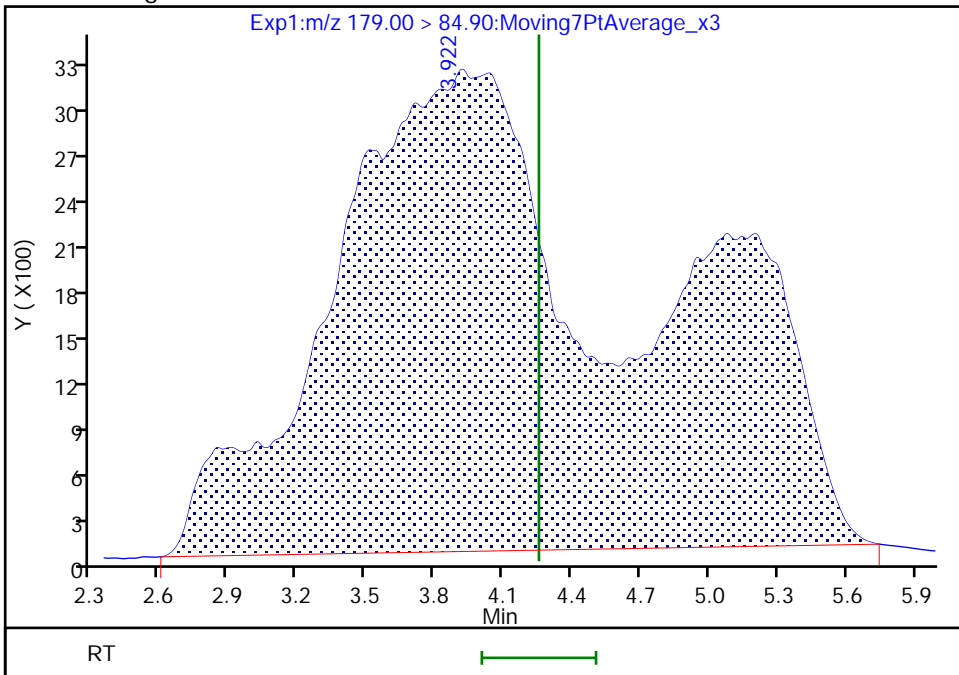
Not Detected
Expected RT: 4.26

Processing Integration Results



Manual Integration Results

RT: 3.92
Area: 298831
Amount: 0.026775
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 01-Apr-2021 10:24:42
Audit Action: Manually Integrated

Audit Reason: Baseline
Page 101 of 284

Eurofins TestAmerica, Sacramento

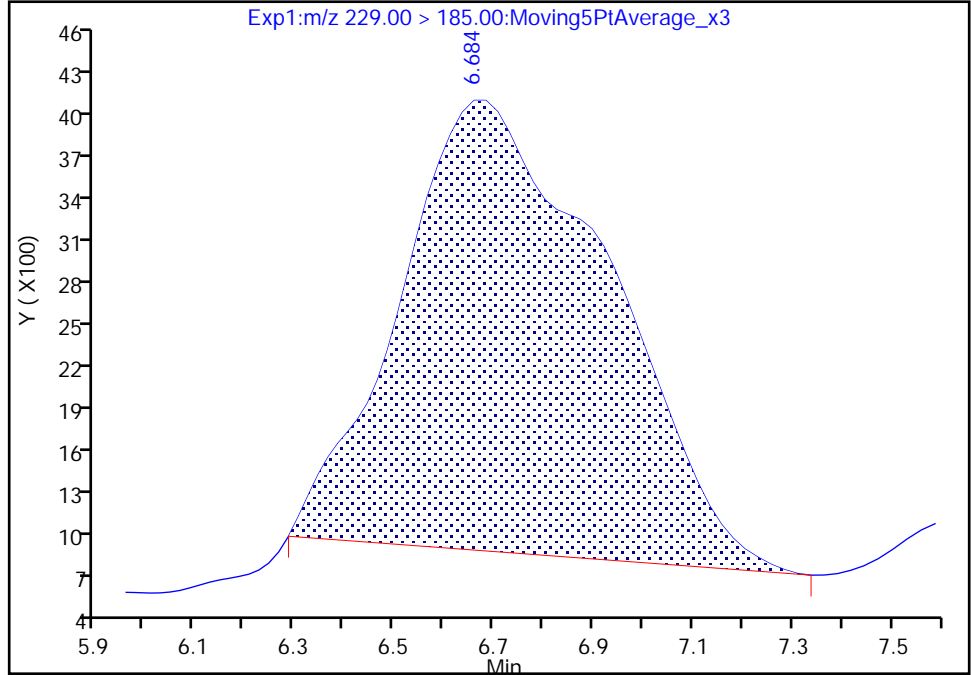
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Injection Date: 31-Mar-2021 14:41:15 Instrument ID: A12
Lims ID: 320-71576-A-2-B Lab Sample ID: 320-71576-2
Client ID: SEEP-C-RAIN-EFFLUENT-24-031721
Operator ID: Sac_inst_A12 ALS Bottle#: 22 Worklist Smp#: 16
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

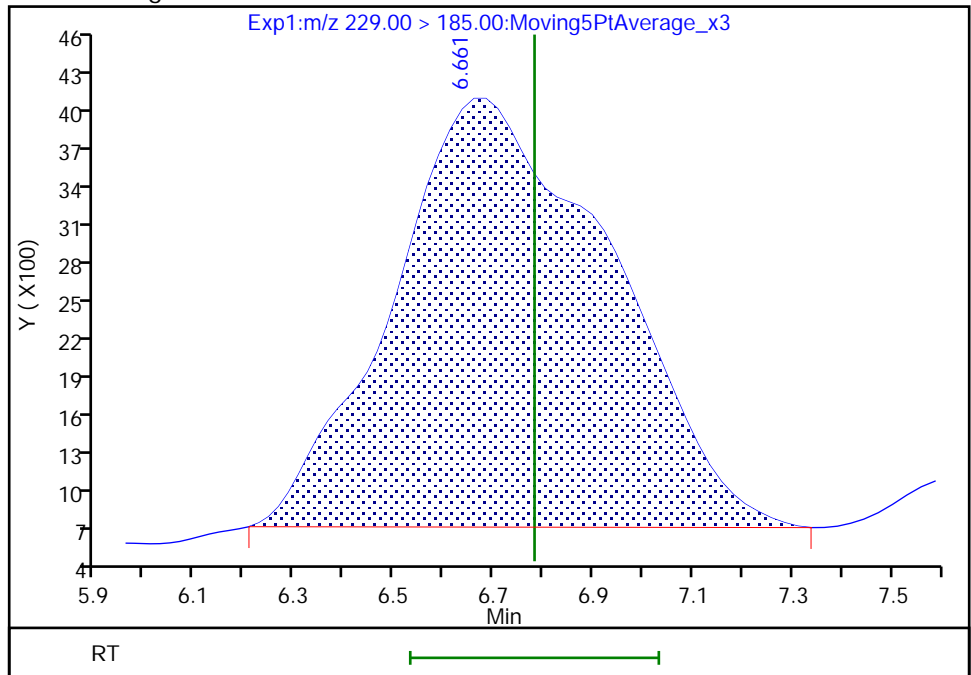
RT: 6.68
Area: 93381
Amount: 0.005111
Amount Units: ng/ml

Processing Integration Results



RT: 6.66
Area: 102290
Amount: 0.005598
Amount Units: ng/ml

Manual Integration Results



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1
 SDG No.: _____
 Client Sample ID: SEEP-C-RAIN-EQBLK-031721 Lab Sample ID: 320-71576-3
 Matrix: Water Lab File ID: 2021.03.31_A12_TB3_A_023.d
 Analysis Method: Chemours (TB3+) Date Collected: 03/17/2021 10:00
 Extraction Method: PFAS Prep Date Extracted: 03/30/2021 13:04
 Sample wt/vol: 2.5 (mL) Date Analyzed: 03/31/2021 14:58
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 475323 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	<0.0020		0.0020	
13252-13-6	HFPO-DA	<0.0020		0.0020	
773804-62-9	Hydro-EVE Acid	<0.0020		0.0020	
2416366-19-1	Hydrolyzed PSDA	<0.0020		0.0020	
749836-20-2	Hydro-PS Acid	<0.0020		0.0020	
1132933-86-8	NVHOS	<0.0020		0.0020	
267239-61-2	PEPA	<0.020		0.020	
113507-82-7	PES	<0.0020		0.0020	
151772-58-6	PFECA B	<0.0020		0.0020	
801212-59-9	PFECA G	<0.0020		0.0020	
674-13-5	PFMOAA	<0.0020		0.0020	
39492-88-1	PFO2HxA	<0.0020		0.0020	
39492-89-2	PFO3OA	<0.0020		0.0020	
39492-90-5	PFO4DA	<0.0020		0.0020	
39492-91-6	PFO5DA	<0.0020		0.0020	
13140-29-9	PMPA	<0.010		0.010	
29311-67-9	PS Acid	<0.0020		0.0020	
2416366-22-6	R-EVE	<0.0020		0.0020	
2416366-18-0	R-PSDA	<0.0020		0.0020	
2416366-21-5	R-PSDCA	<0.0020		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	94		25-150

Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_023.d
 Lims ID: 320-71576-A-3-B
 Client ID: SEEP-C-RAIN-EQBLK-031721
 Sample Type: Client
 Inject. Date: 31-Mar-2021 14:58:48 ALS Bottle#: 23 Worklist Smp#: 17
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: 320-71576-A-3-B
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Method: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 01-Apr-2021 10:25:30 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1678

First Level Reviewer: ruangyotsakuld Date: 01-Apr-2021 10:25:30
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
23 PMPA										M
229.00 > 185.00	6.969	6.782	0.187		53789	0.002944			31.8	M
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.075	9.133	-0.058		1358025	0.2345		93.8	38625	

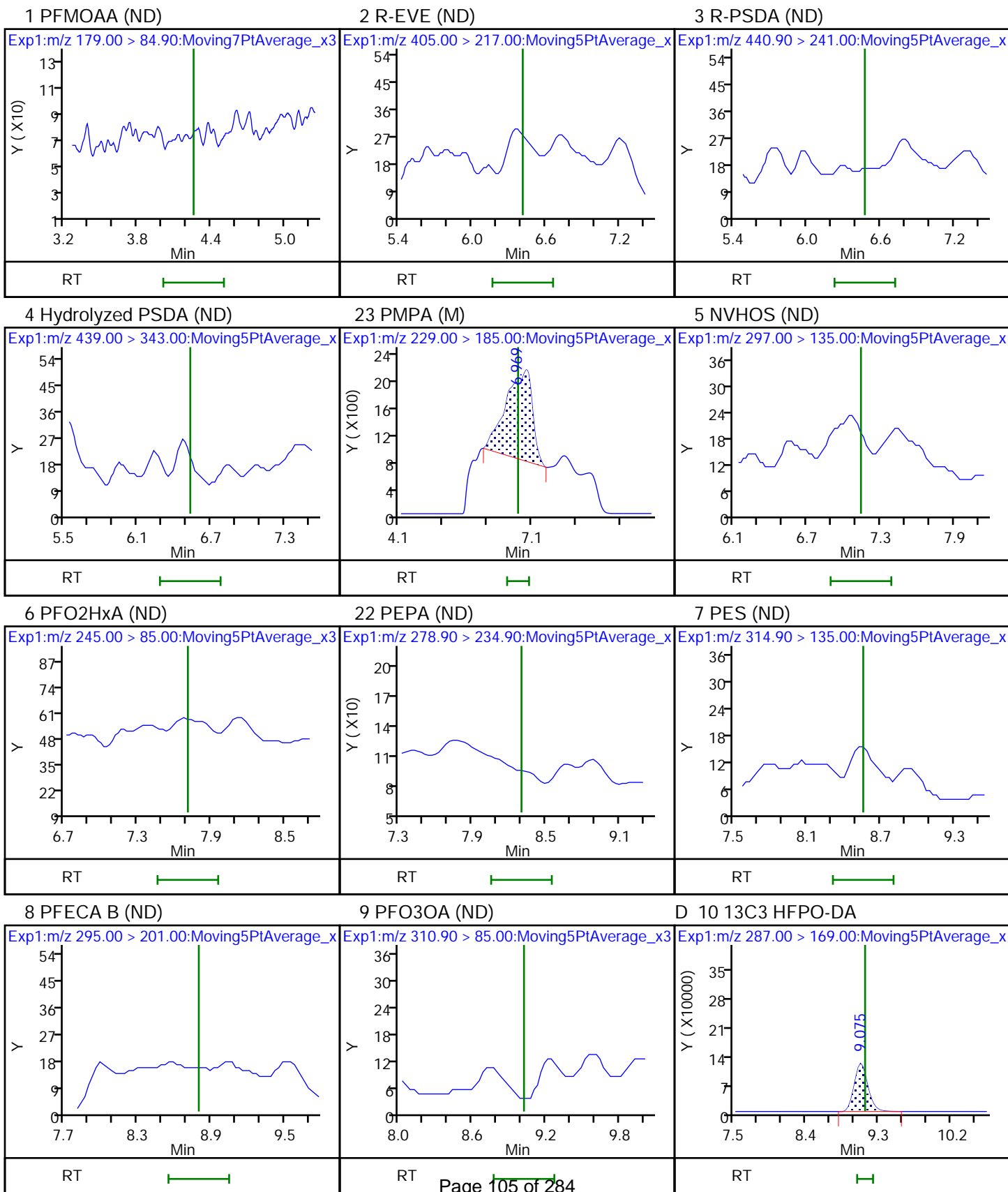
QC Flag Legend

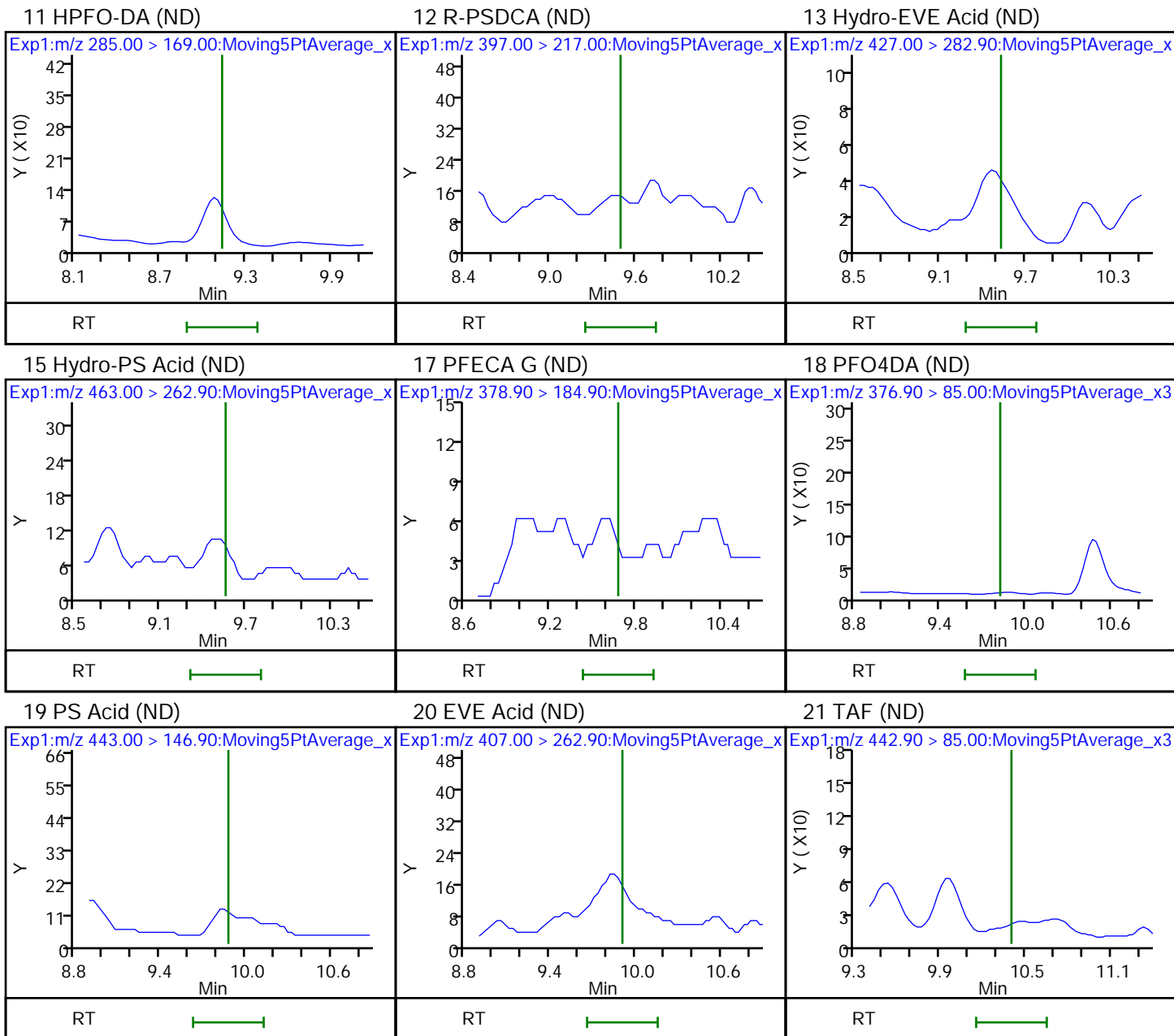
Processing Flags

Review Flags

M - Manually Integrated

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_023.d
Injection Date: 31-Mar-2021 14:58:48 Instrument ID: A12
Lims ID: 320-71576-A-3-B Lab Sample ID: 320-71576-3
Client ID: SEEP-C-RAIN-EQBLK-031721
Operator ID: Sac_inst_A12 ALS Bottle#: 23 Worklist Smp#: 17
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

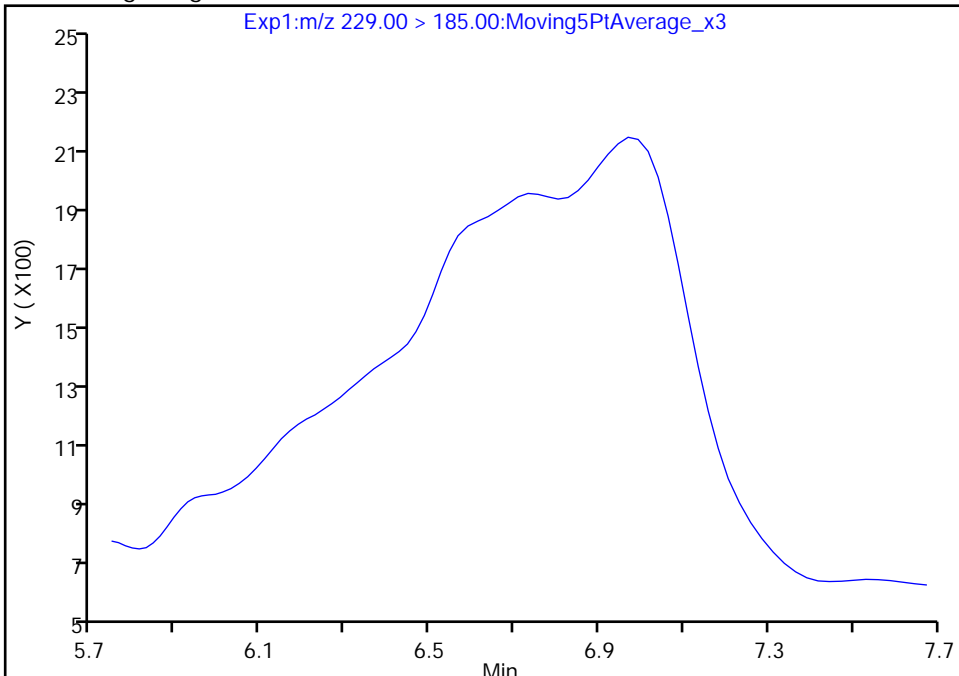
Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_023.d
Injection Date: 31-Mar-2021 14:58:48 Instrument ID: A12
Lims ID: 320-71576-A-3-B Lab Sample ID: 320-71576-3
Client ID: SEEP-C-RAIN-EQBLK-031721
Operator ID: Sac_inst_A12 ALS Bottle#: 23 Worklist Smp#: 17
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

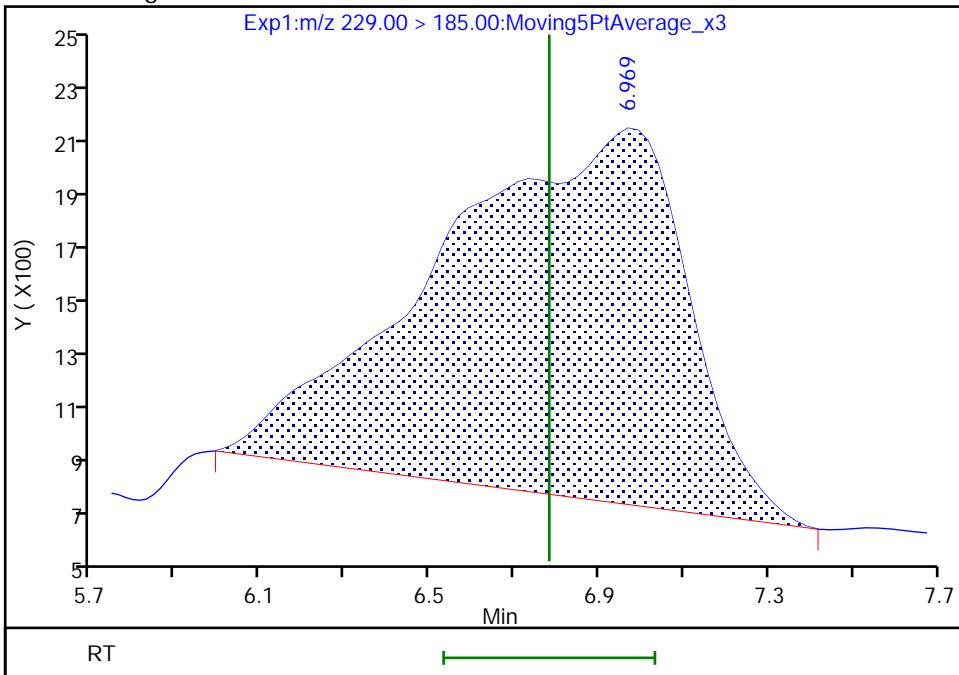
Not Detected
Expected RT: 6.78

Processing Integration Results



Manual Integration Results

RT: 6.97
Area: 53789
Amount: 0.002944
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 01-Apr-2021 10:25:16
Audit Action: Manually Integrated

Audit Reason: Baseline
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FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1
SDG No.: _____
Client Sample ID: SEEP-C-EFFLUENT-336-03192 Lab Sample ID: 320-71576-4
1
Matrix: Water Lab File ID: 2021.03.31_A12_TB3_A_024.d
Analysis Method: Chemours (TB3+) Date Collected: 03/19/2021 09:00
Extraction Method: PFAS Prep Date Extracted: 03/30/2021 13:04
Sample wt/vol: 2.5(mL) Date Analyzed: 03/31/2021 15:16
Con. Extract Vol.: 5.00(mL) Dilution Factor: 1
Injection Volume: 500(uL) GC Column: GeminiC18 3x100 ID: 3(mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 475323 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	<0.0020		0.0020	
13252-13-6	HFPO-DA	0.011		0.0020	
773804-62-9	Hydro-EVE Acid	<0.0020		0.0020	
2416366-19-1	Hydrolyzed PSDA	<0.0020		0.0020	
749836-20-2	Hydro-PS Acid	<0.0020		0.0020	
1132933-86-8	NVHOS	<0.0020		0.0020	
267239-61-2	PEPA	<0.020		0.020	
113507-82-7	PES	<0.0020		0.0020	
151772-58-6	PFECA B	<0.0020		0.0020	
801212-59-9	PFECA G	<0.0020		0.0020	
674-13-5	PFMOAA	0.15		0.0020	
39492-88-1	PFO2HxA	0.018		0.0020	
39492-89-2	PFO3OA	0.0049		0.0020	
39492-90-5	PFO4DA	<0.0020		0.0020	
39492-91-6	PFO5DA	<0.0020		0.0020	
13140-29-9	PMPA	0.018		0.010	
29311-67-9	PS Acid	<0.0020		0.0020	
2416366-22-6	R-EVE	<0.0020		0.0020	
2416366-18-0	R-PSDA	0.0050		0.0020	
2416366-21-5	R-PSDCA	<0.0020		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	84		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_024.d
 Lims ID: 320-71576-A-4-B
 Client ID: SEEP-C-EFFLUENT-336-031921
 Sample Type: Client
 Inject. Date: 31-Mar-2021 15:16:26 ALS Bottle#: 24 Worklist Smp#: 18
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: 320-71576-A-4-B
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Method: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 01-Apr-2021 10:26:13 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1678

First Level Reviewer: ruangyotsakuld Date: 01-Apr-2021 10:26:13
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.918	4.256	-0.338		861571	0.0772		162		M
2 R-EVE										M
405.00 > 217.00	6.287	6.410	-0.123		1966	0.000311		29.8		M
3 R-PSDA										M
440.90 > 241.00	6.148	6.469	-0.321		7537	0.002522		79.0		M
4 Hydrolyzed PSDA										M
439.00 > 343.00	6.426	6.529	-0.103		3749	0.000316		65.7		M
23 PMPA										
229.00 > 185.00	6.661	6.782	-0.121		163631	0.008956		57.0		
5 NVHOS										M
297.00 > 135.00	7.040	7.137	-0.097		1221	0.000229		19.7		M
6 PFO2HxA										
245.00 > 85.00	7.647	7.709	-0.062		116930	0.009083		1165		
9 PFO3OA										
310.90 > 85.00	8.985	9.020	-0.035		7432	0.002454		202		
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.074	9.133	-0.059		1220997	0.2108		84.3	34344	
11 HPFO-DA										
285.00 > 169.00	9.074	9.133	-0.059	1.000	30730	0.005665		866		
13 Hydro-EVE Acid										
427.00 > 282.90	9.490	9.525	-0.035		16815	0.000253		301		
18 PFO4DA										
376.90 > 85.00	9.760	9.820	-0.060		4546	0.000914		99.0		

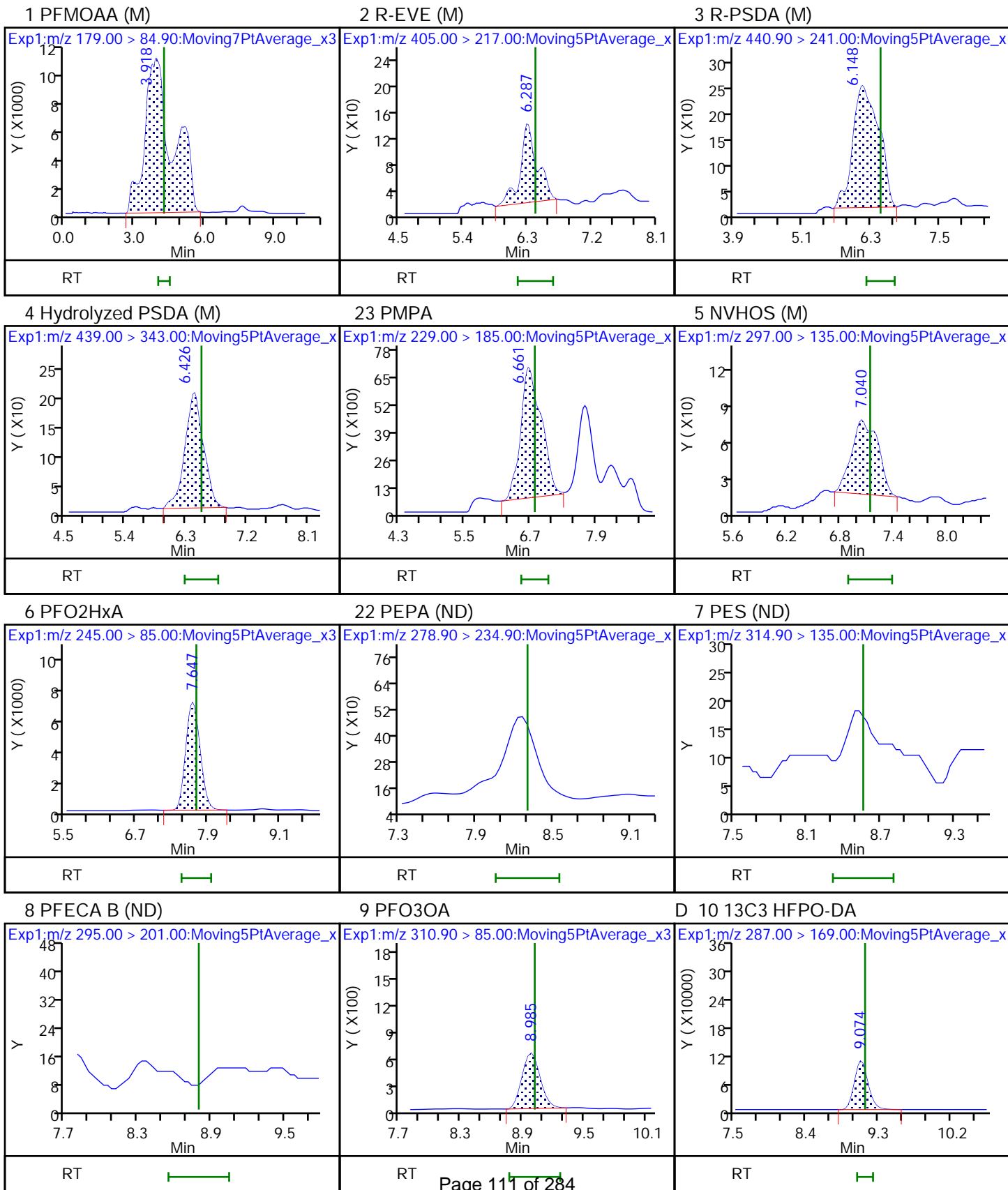
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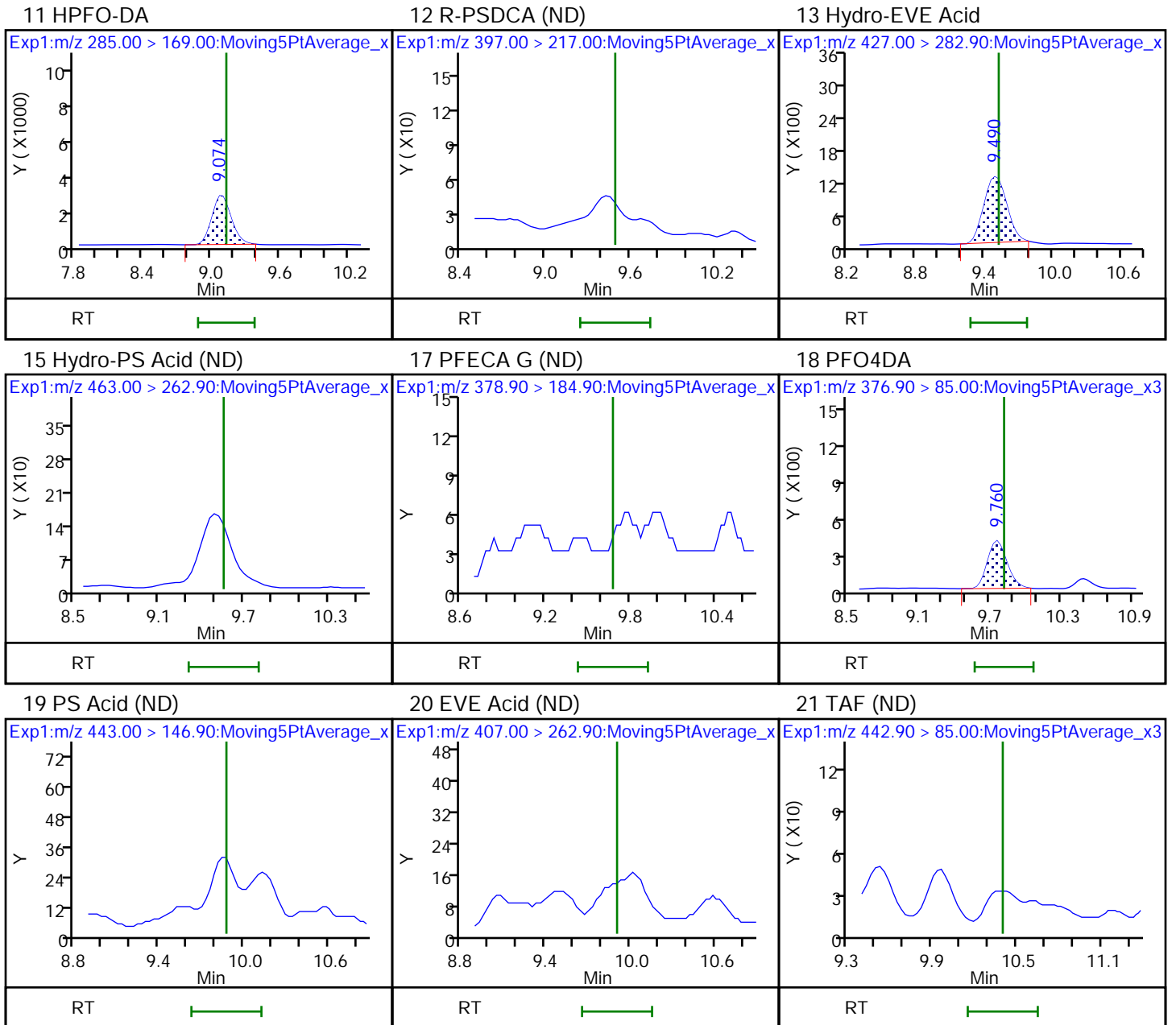
Processing Flags

Review Flags

M - Manually Integrated

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_024.d
Injection Date: 31-Mar-2021 15:16:26 Instrument ID: A12
Lims ID: 320-71576-A-4-B Lab Sample ID: 320-71576-4
Client ID: SEEP-C-EFFLUENT-336-031921
Operator ID: Sac_inst_A12 ALS Bottle#: 24 Worklist Smp#: 18
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

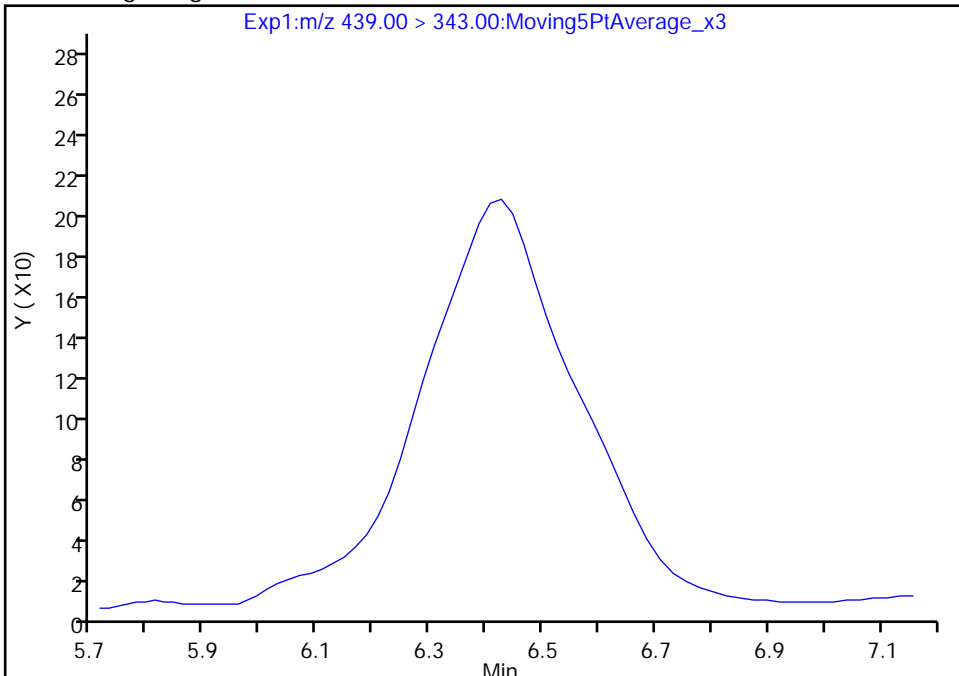
Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_024.d
Injection Date: 31-Mar-2021 15:16:26 Instrument ID: A12
Lims ID: 320-71576-A-4-B Lab Sample ID: 320-71576-4
Client ID: SEEP-C-EFFLUENT-336-031921
Operator ID: Sac_inst_A12 ALS Bottle#: 24 Worklist Smp#: 18
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

4 Hydrolyzed PSDA, CAS: 2416366-19-1

Signal: 1

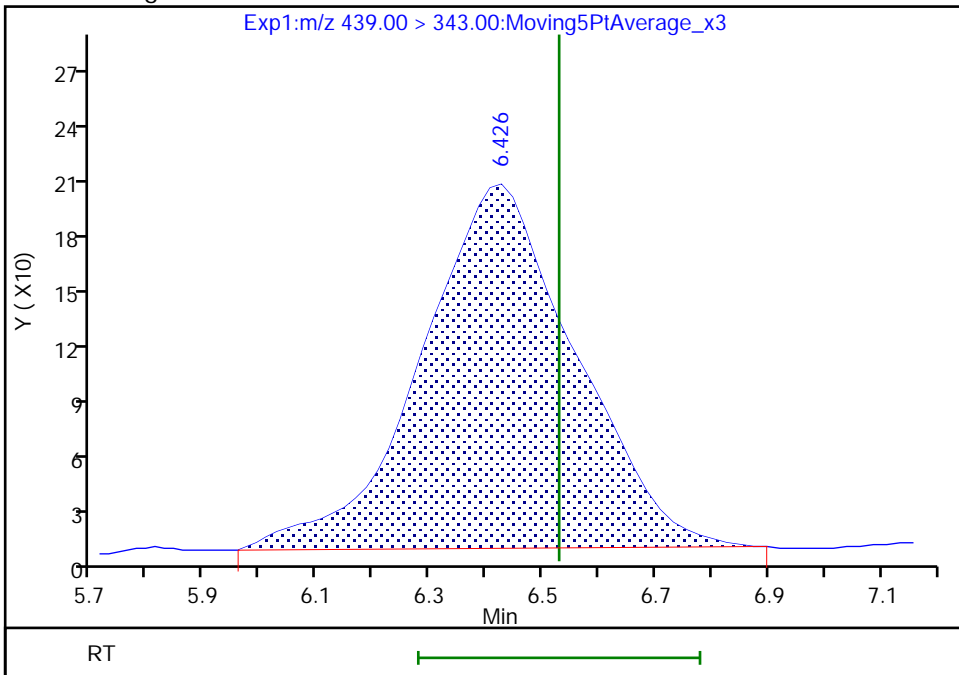
Not Detected
Expected RT: 6.53

Processing Integration Results



Manual Integration Results

RT: 6.43
Area: 3749
Amount: 0.000316
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 01-Apr-2021 10:25:53
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

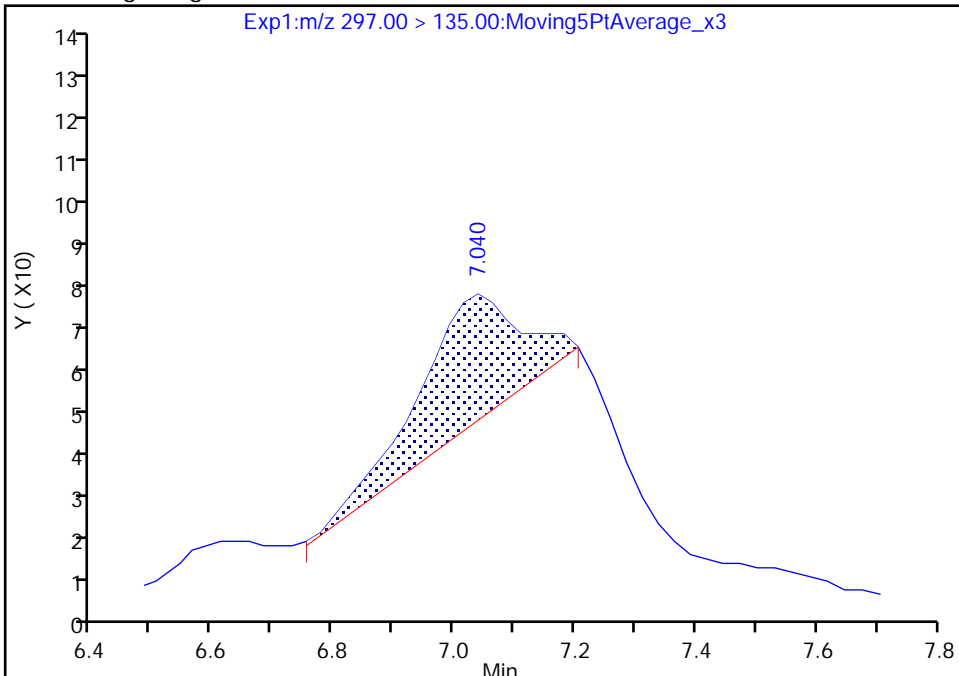
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Injection Date: 31-Mar-2021 15:16:26 Instrument ID: A12
Lims ID: 320-71576-A-4-B Lab Sample ID: 320-71576-4
Client ID: SEEP-C-EFFLUENT-336-031921
Operator ID: Sac_inst_A12 ALS Bottle#: 24 Worklist Smp#: 18
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

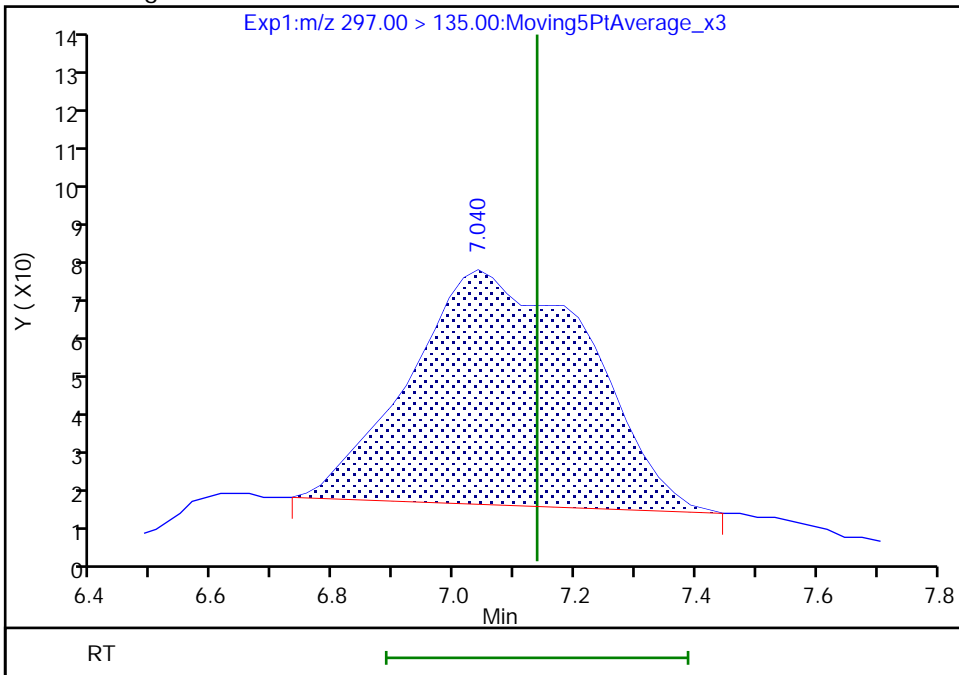
RT: 7.04
Area: 338
Amount: 0.000063
Amount Units: ng/ml

Processing Integration Results



RT: 7.04
Area: 1221
Amount: 0.000229
Amount Units: ng/ml

Manual Integration Results



Reviewer: ruangyotsakuld, 01-Apr-2021 10:26:00
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

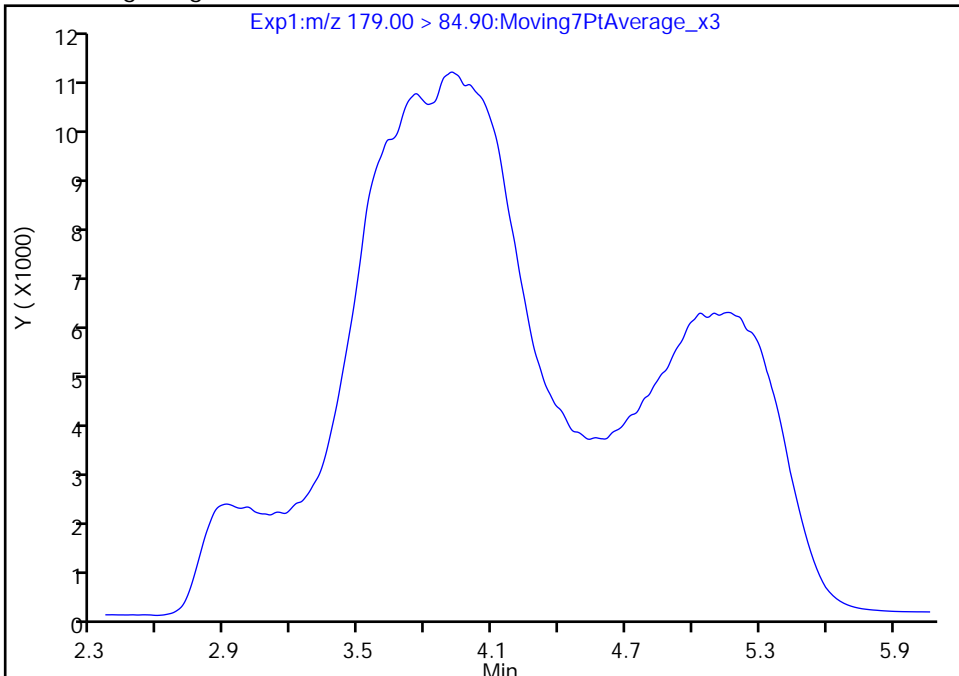
Data File:	\\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_024.d		
Injection Date:	31-Mar-2021 15:16:26	Instrument ID:	A12
Lims ID:	320-71576-A-4-B	Lab Sample ID:	320-71576-4
Client ID:	SEEP-C-EFFLUENT-336-031921		
Operator ID:	Sac_inst_A12	ALS Bottle#:	24
Injection Vol:	500.0 ul	Dil. Factor:	1.0000
Method:	PFAS_Chem_TB3+	Limit Group:	LC PFAS_TB3P - ICAL
Column:	Gemini C18 3um 3 x 100mm (3.00 mm ID)	Detector:	EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

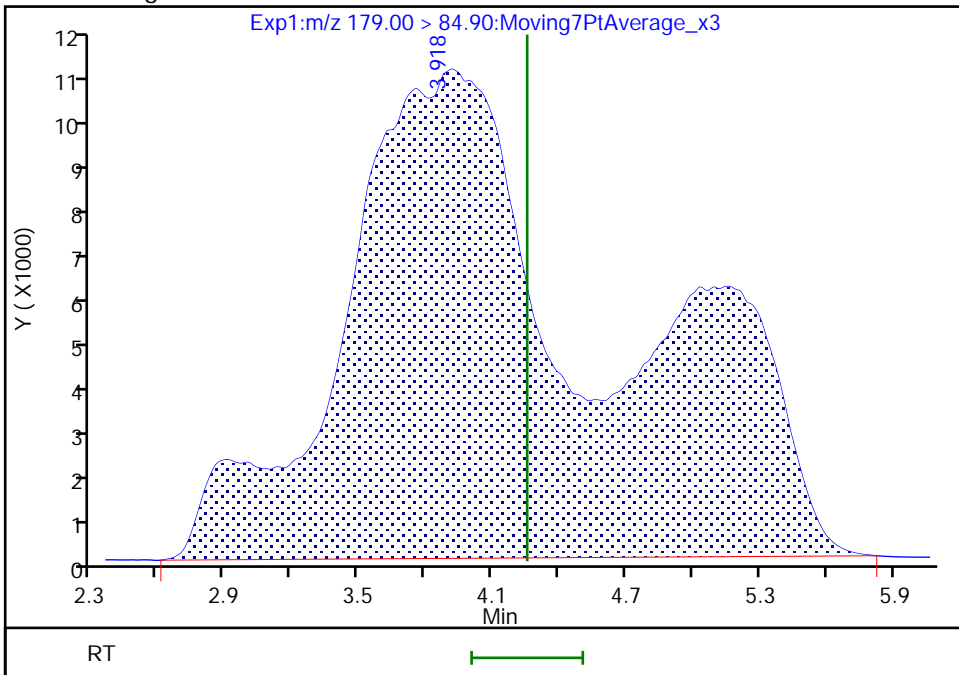
Not Detected
Expected RT: 4.26

Processing Integration Results



Manual Integration Results

RT: 3.92
 Area: 861571
 Amount: 0.077197
 Amount Units: ng/ml



Reviewer: ruangyotsakuld, 01-Apr-2021 10:25:42
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

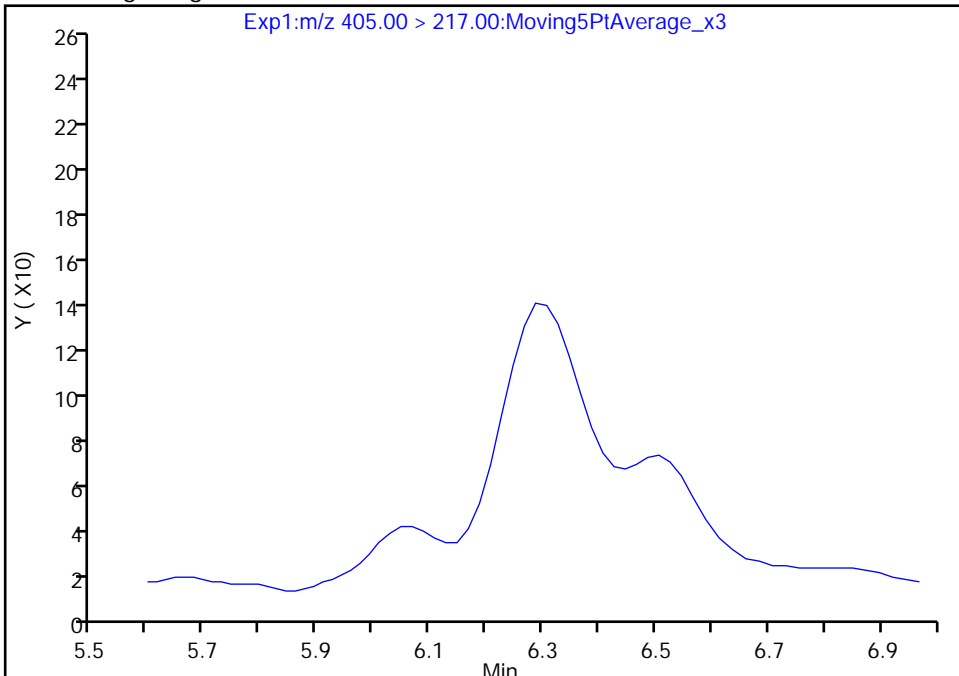
Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_024.d
Injection Date: 31-Mar-2021 15:16:26 Instrument ID: A12
Lims ID: 320-71576-A-4-B Lab Sample ID: 320-71576-4
Client ID: SEEP-C-EFFLUENT-336-031921
Operator ID: Sac_inst_A12 ALS Bottle#: 24 Worklist Smp#: 18
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

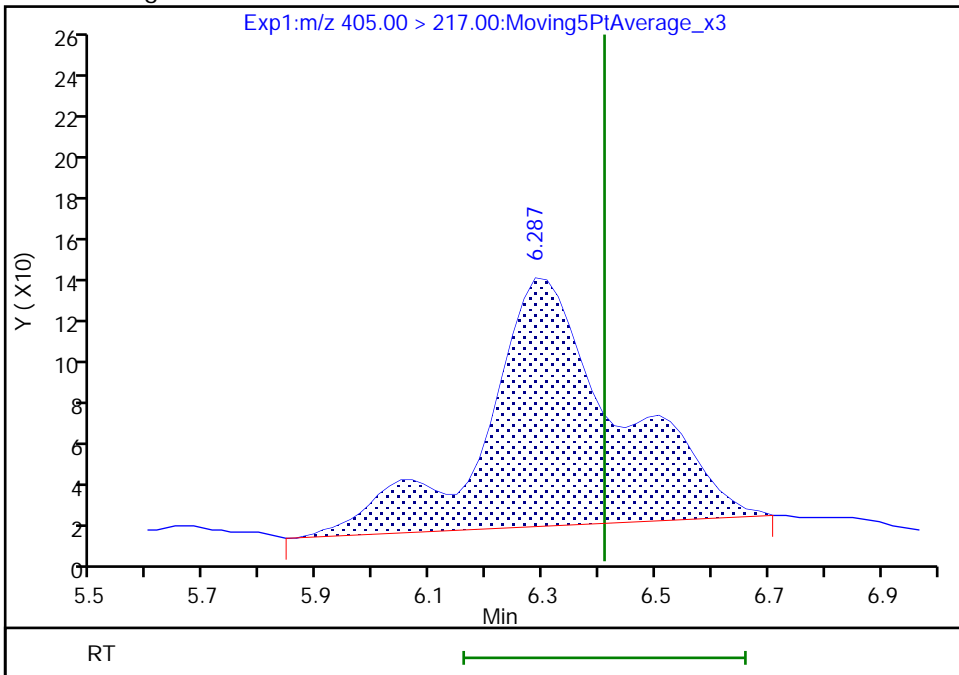
Not Detected
Expected RT: 6.41

Processing Integration Results



Manual Integration Results

RT: 6.29
Area: 1966
Amount: 0.000311
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 01-Apr-2021 10:25:45
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

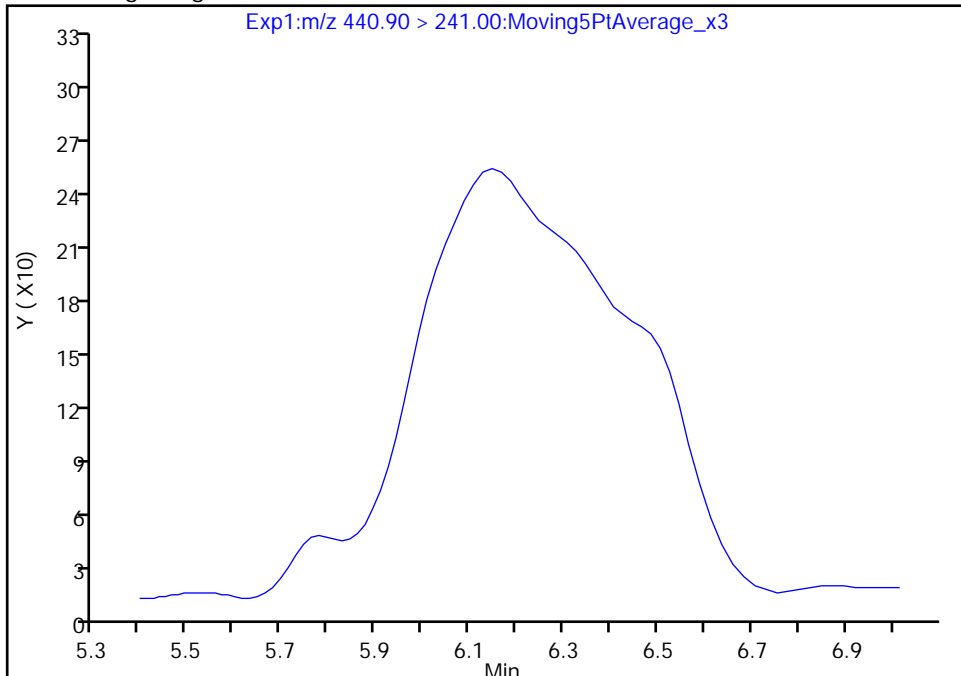
Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_024.d
Injection Date: 31-Mar-2021 15:16:26 Instrument ID: A12
Lims ID: 320-71576-A-4-B Lab Sample ID: 320-71576-4
Client ID: SEEP-C-EFFLUENT-336-031921
Operator ID: Sac_inst_A12 ALS Bottle#: 24 Worklist Smp#: 18
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

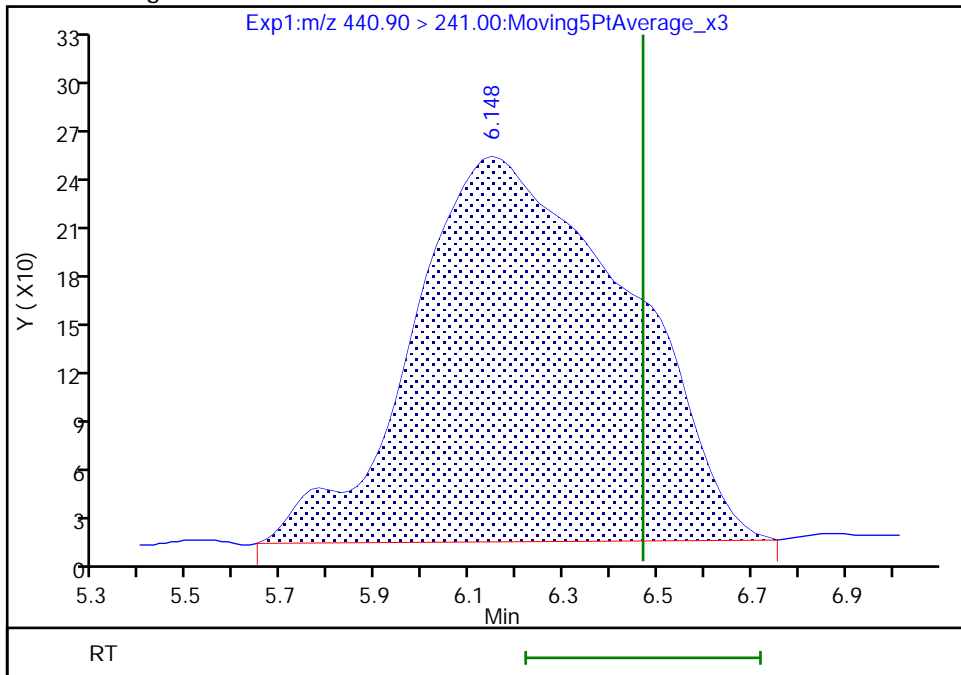
Not Detected
Expected RT: 6.47

Processing Integration Results



Manual Integration Results

RT: 6.15
Area: 7537
Amount: 0.002522
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 01-Apr-2021 10:25:49
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfms\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_011.d
 Lims ID: 320-71576-A-5-B
 Client ID: SEEP-C-INFLUENT-336-031921
 Sample Type: Client
 Inject. Date: 31-Mar-2021 11:26:51 ALS Bottle#: 11 Worklist Smp#: 5
 Injection Vol: 500.0 ul Dil. Factor: 50.0000
 Sample Info: 320-71576-A-5-B 50x
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Method: \\chromfms\Sacramento\ChromData\A12\20210331-116053.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 01-Apr-2021 10:18:54 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfms\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1678

First Level Reviewer: ruangyotsakuld Date: 01-Apr-2021 10:19:12
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.292	4.256	0.036		8812371	0.7896			2038	M
2 R-EVE										
405.00 > 217.00	6.387	6.410	-0.023		46883	0.007413			929	
3 R-PSDA										
440.90 > 241.00	6.446	6.469	-0.023		19616	0.006565			394	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.506	6.529	-0.023		95322	0.008023			1611	
23 PMPA										
229.00 > 185.00	6.755	6.782	-0.027		1596399	0.0874			3104	
5 NVHOS										
297.00 > 135.00	7.134	7.137	-0.003		41848	0.007845			1067	
6 PFO2HxA										
245.00 > 85.00	7.706	7.709	-0.003		3148407	0.2446			45883	
22 PEPA										
278.90 > 234.90	8.259	8.299	-0.040		155699	0.0353			897	
9 PFO3OA										
310.90 > 85.00	8.985	9.020	-0.035		216316	0.0714			5869	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.102	9.133	-0.031		28635	0.004944		2.0	631	
11 HPFO-DA										
285.00 > 169.00	9.102	9.133	-0.031	1.000	1117240	0.1756			19240	
12 R-PSDCA										
397.00 > 217.00	9.458	9.493	-0.035		7848	0.000162			209	
13 Hydro-EVE Acid										
427.00 > 282.90	9.522	9.525	-0.003		841034	0.0126			11807	
15 Hydro-PS Acid										
463.00 > 262.90	9.522	9.558	-0.036		105719	0.004276			2368	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
18 PFO4DA										
376.90 > 85.00	9.760	9.820	-0.060		169213	0.0340			4828	
21 TAF										
442.90 > 85.00	10.348	10.399	-0.051		2845	0.000736			40.3	

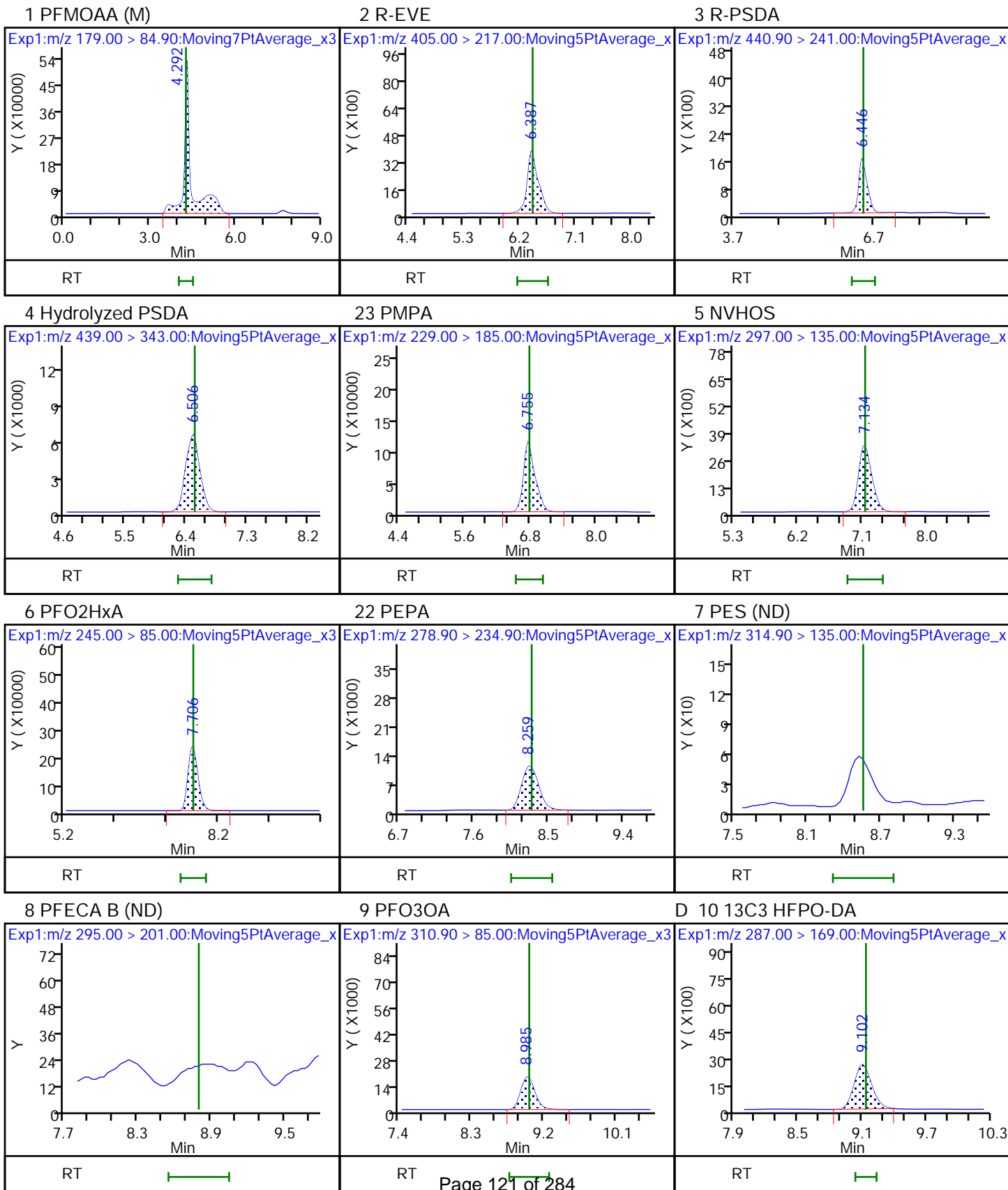
QC Flag Legend

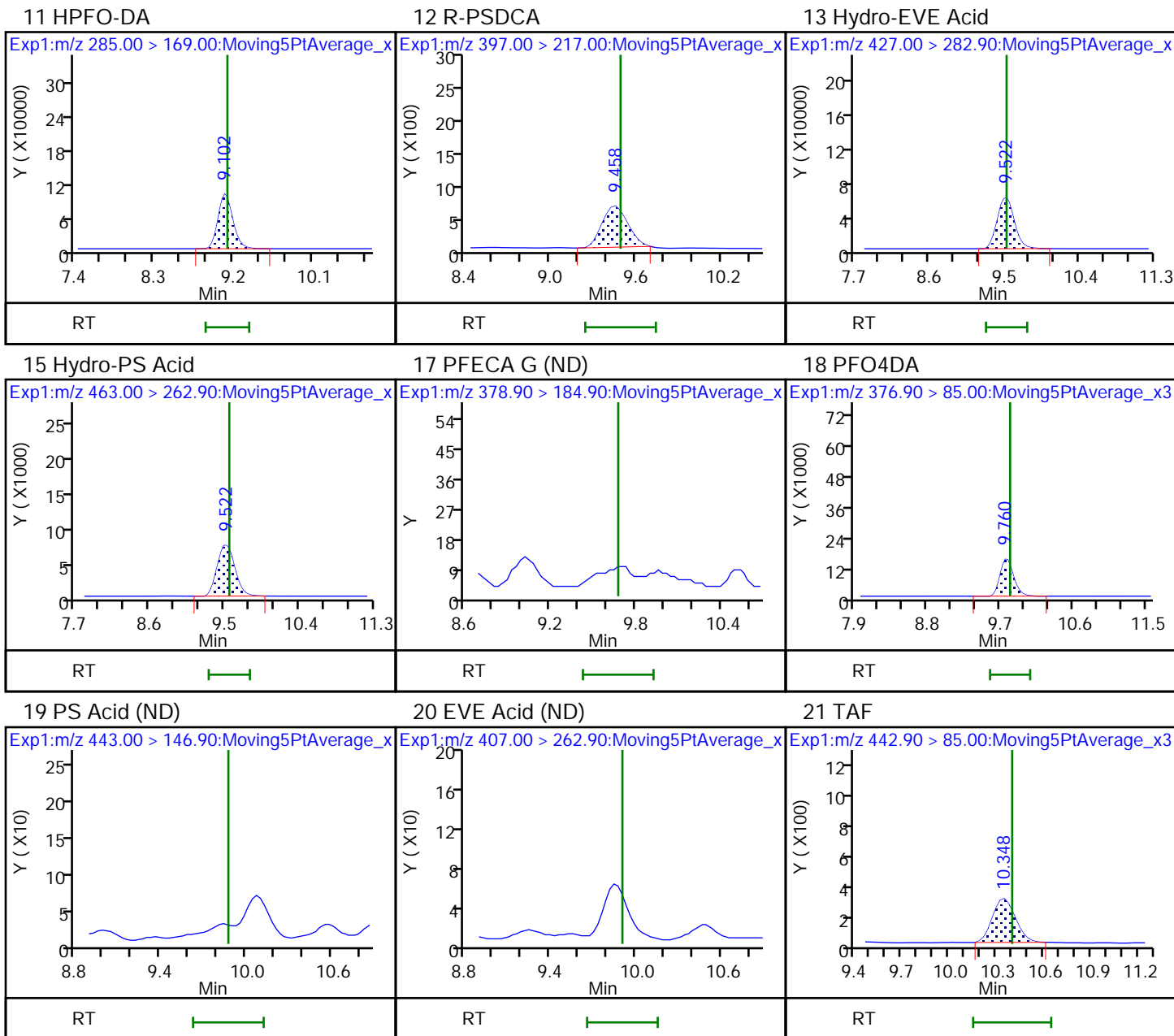
Processing Flags

Review Flags

M - Manually Integrated

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_011.d
Injection Date: 31-Mar-2021 11:26:51 Instrument ID: A12
Lims ID: 320-71576-A-5-B Lab Sample ID: 320-71576-5
Client ID: SEEP-C-INFLUENT-336-031921
Operator ID: Sac_inst_A12 ALS Bottle#: 11 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

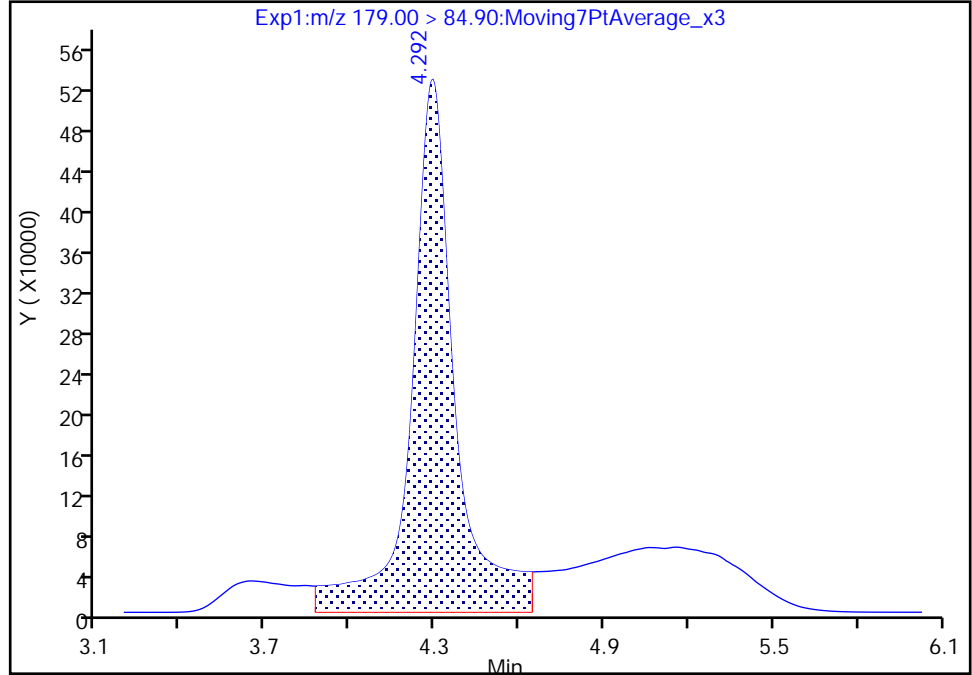
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Injection Date: 31-Mar-2021 11:26:51 Instrument ID: A12
Lims ID: 320-71576-A-5-B Lab Sample ID: 320-71576-5
Client ID: SEEP-C-INFLUENT-336-031921
Operator ID: Sac_inst_A12 ALS Bottle#: 11 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 50.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

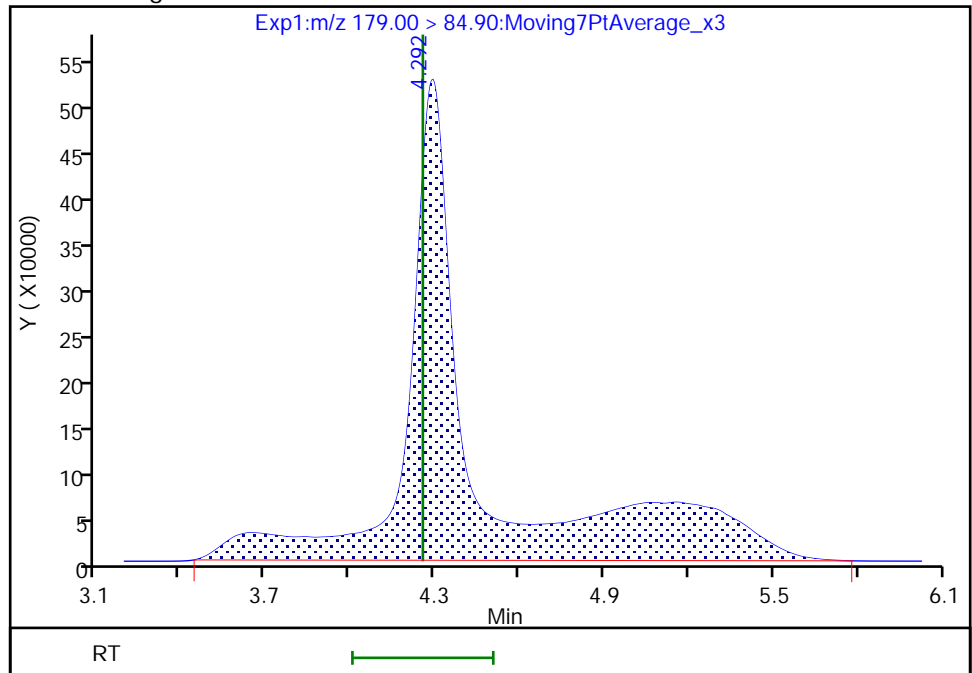
RT: 4.29
Area: 5662773
Amount: 0.507386
Amount Units: ng/ml

Processing Integration Results



RT: 4.29
Area: 8812371
Amount: 0.789591
Amount Units: ng/ml

Manual Integration Results



Reviewer: vanommens, 31-Mar-2021 13:29:09

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1
 SDG No.: _____
 Client Sample ID: SEEP-C-FBLK-336-031921 Lab Sample ID: 320-71576-6
 Matrix: Water Lab File ID: 2021.03.31_A12_TB3_A_025.d
 Analysis Method: Chemours (TB3+) Date Collected: 03/19/2021 08:00
 Extraction Method: PFAS Prep Date Extracted: 03/30/2021 13:04
 Sample wt/vol: 2.5 (mL) Date Analyzed: 03/31/2021 15:34
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 475323 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	<0.0020		0.0020	
13252-13-6	HFPO-DA	<0.0020		0.0020	
773804-62-9	Hydro-EVE Acid	<0.0020		0.0020	
2416366-19-1	Hydrolyzed PSDA	<0.0020		0.0020	
749836-20-2	Hydro-PS Acid	<0.0020		0.0020	
1132933-86-8	NVHOS	<0.0020		0.0020	
267239-61-2	PEPA	<0.020		0.020	
113507-82-7	PES	<0.0020		0.0020	
151772-58-6	PFECA B	<0.0020		0.0020	
801212-59-9	PFECA G	<0.0020		0.0020	
674-13-5	PFMOAA	<0.0020		0.0020	
39492-88-1	PFO2HxA	<0.0020		0.0020	
39492-89-2	PFO3OA	<0.0020		0.0020	
39492-90-5	PFO4DA	<0.0020		0.0020	
39492-91-6	PFO5DA	<0.0020		0.0020	
13140-29-9	PMPA	<0.010		0.010	
29311-67-9	PS Acid	<0.0020		0.0020	
2416366-22-6	R-EVE	<0.0020		0.0020	
2416366-18-0	R-PSDA	<0.0020		0.0020	
2416366-21-5	R-PSDCA	<0.0020		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	96		25-150

Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_025.d
 Lims ID: 320-71576-A-6-B
 Client ID: SEEP-C-FBLK-336-031921
 Sample Type: Client
 Inject. Date: 31-Mar-2021 15:34:18 ALS Bottle#: 25 Worklist Smp#: 19
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: 320-71576-A-6-B
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Method: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 01-Apr-2021 10:26:39 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1678

First Level Reviewer: ruangyotsakuld Date: 01-Apr-2021 10:26:39
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
23 PMPA										M
229.00 > 185.00	6.976	6.782	0.194		60954	0.003336			38.7	M
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.082	9.133	-0.051		1385930	0.2393		95.7	39852	

QC Flag Legend

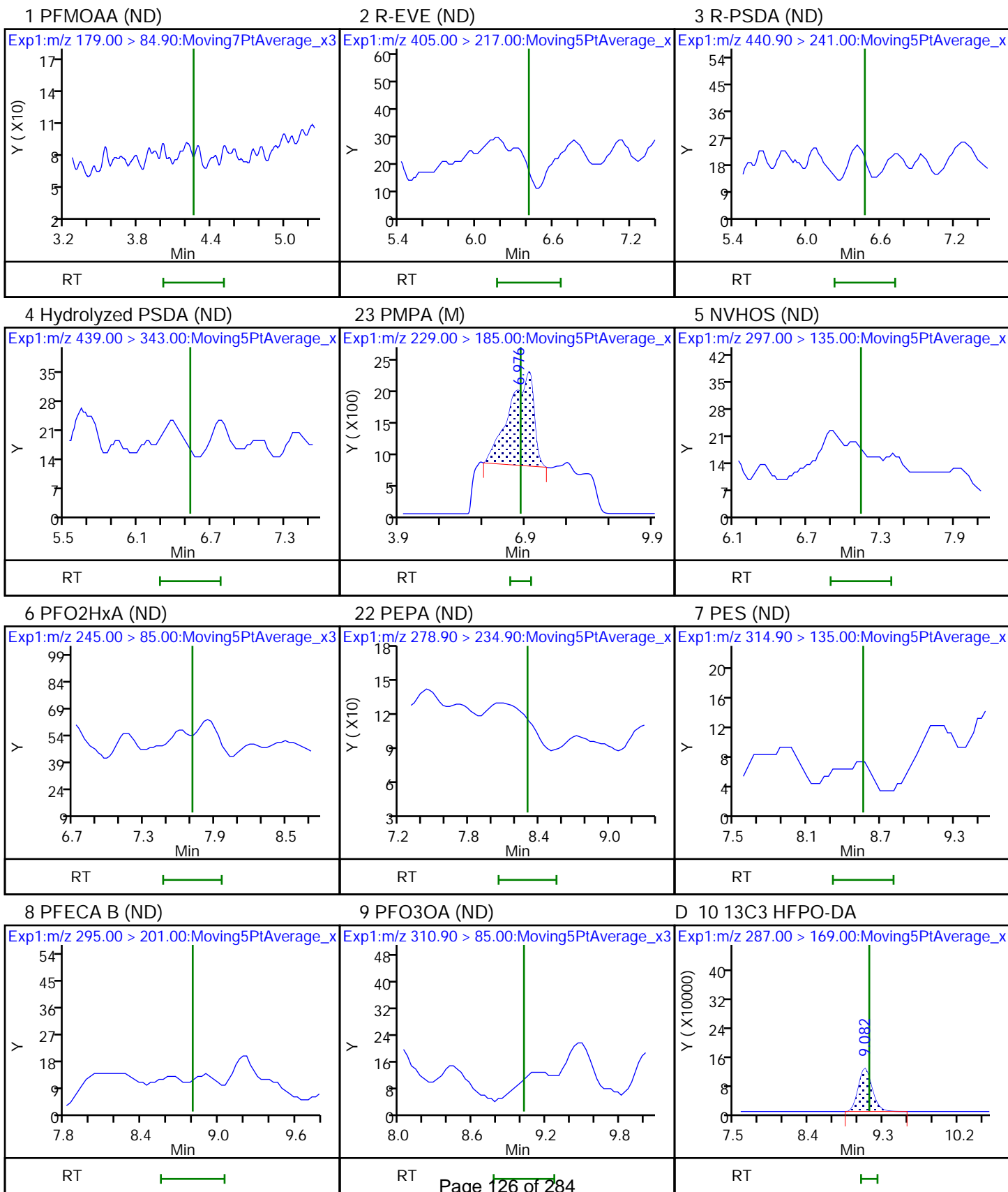
Processing Flags

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Sacramento

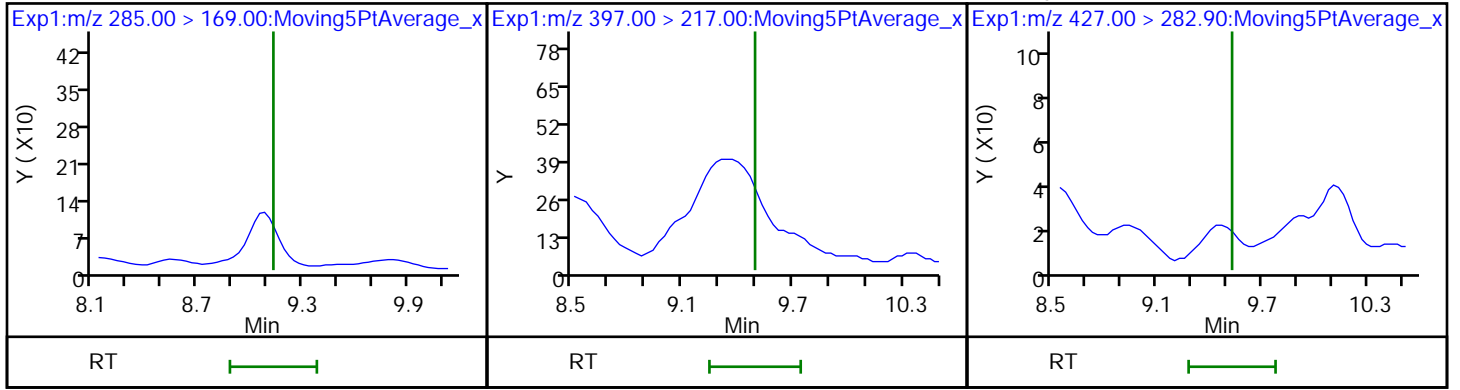
Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_025.d
Injection Date: 31-Mar-2021 15:34:18 Instrument ID: A12
Lims ID: 320-71576-A-6-B Lab Sample ID: 320-71576-6
Client ID: SEEP-C-FBLK-336-031921
Operator ID: Sac_inst_A12 ALS Bottle#: 25 Worklist Smp#: 19
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL



11 HPFO-DA (ND)

12 R-PSDCA (ND)

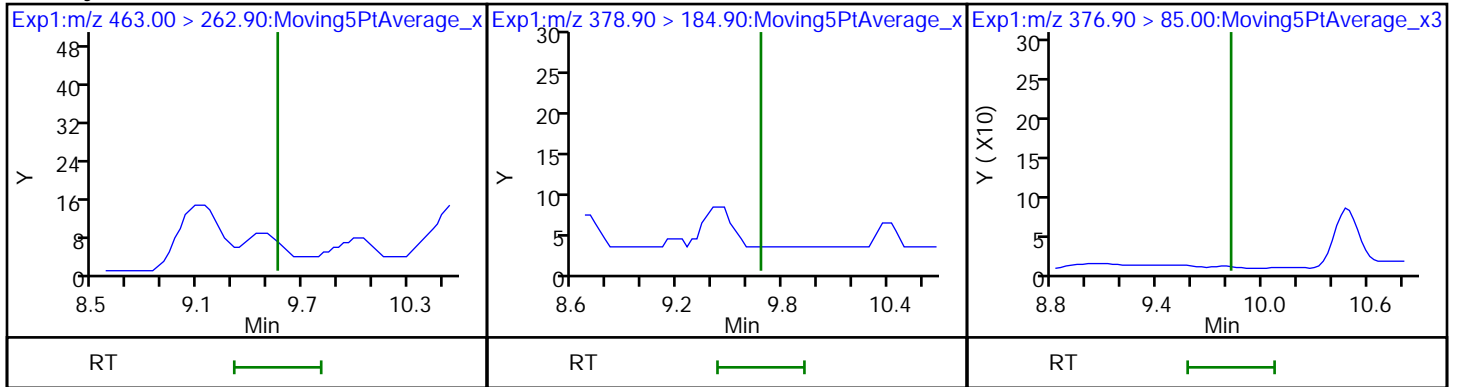
13 Hydro-EVE Acid (ND)



15 Hydro-PS Acid (ND)

17 PFECA G (ND)

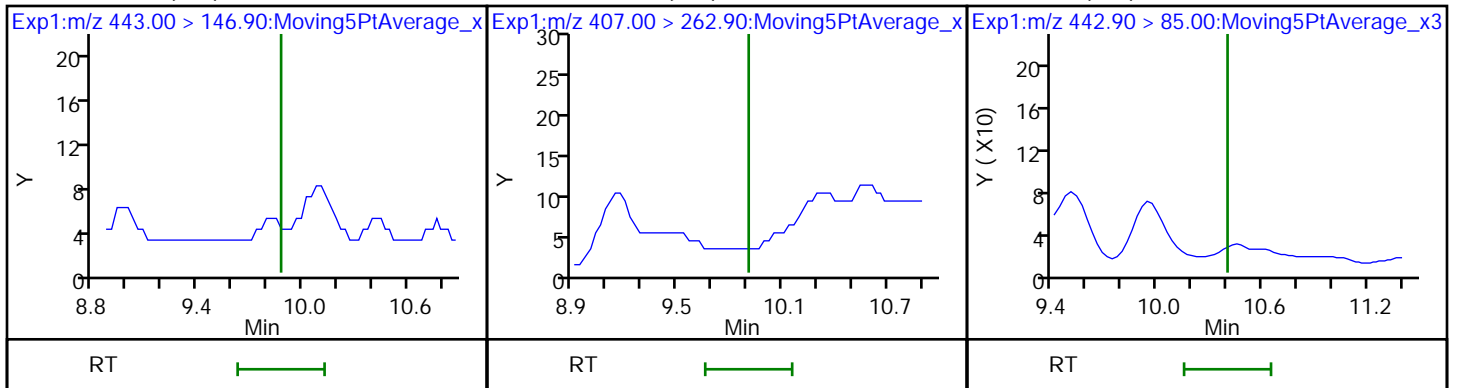
18 PFO4DA (ND)



19 PS Acid (ND)

20 EVE Acid (ND)

21 TAF (ND)



Eurofins TestAmerica, Sacramento

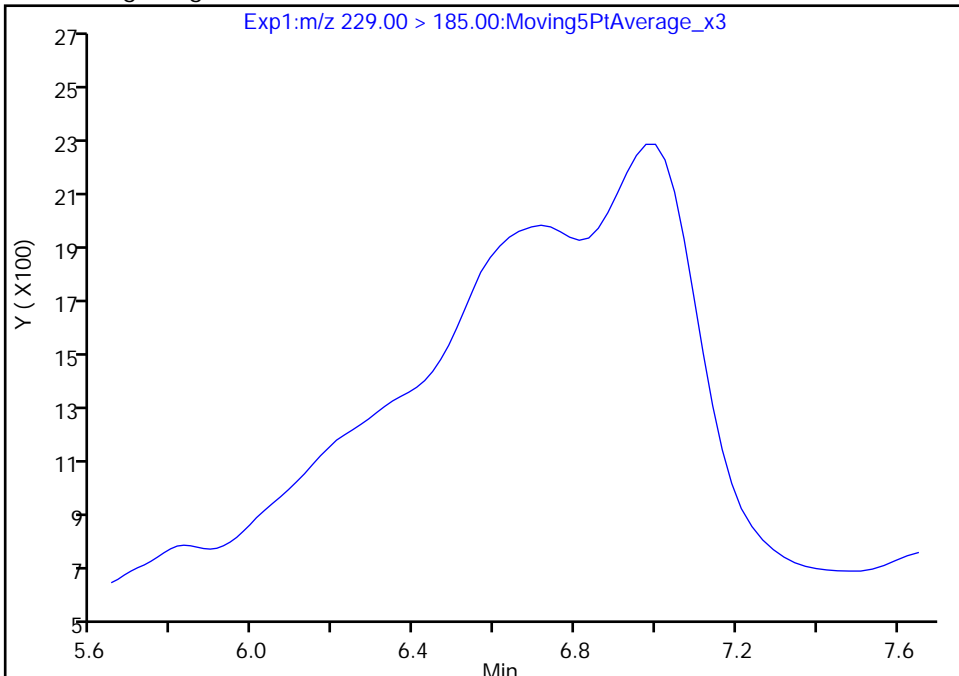
Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_025.d
Injection Date: 31-Mar-2021 15:34:18 Instrument ID: A12
Lims ID: 320-71576-A-6-B Lab Sample ID: 320-71576-6
Client ID: SEEP-C-FBLK-336-031921
Operator ID: Sac_inst_A12 ALS Bottle#: 25 Worklist Smp#: 19
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

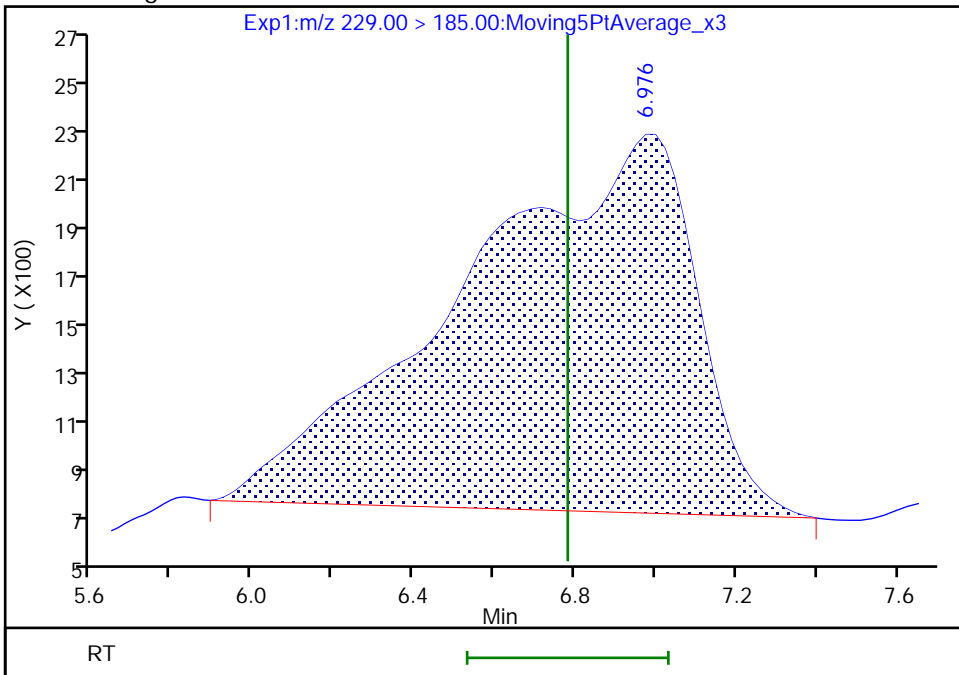
Not Detected
Expected RT: 6.78

Processing Integration Results



Manual Integration Results

RT: 6.98
Area: 60954
Amount: 0.003336
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 01-Apr-2021 10:26:29
Audit Action: Manually Integrated

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1 Analy Batch No.: 473456

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2021 11:54 Calibration End Date: 03/24/2021 15:26 Calibration ID: 54687

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-473456/2	2021.03.24_A12_TB3_ICAL_002.d
Level 2	IC 320-473456/3	2021.03.24_A12_TB3_ICAL_003.d
Level 3	IC 320-473456/4	2021.03.24_A12_TB3_ICAL_004.d
Level 4	IC 320-473456/5	2021.03.24_A12_TB3_ICAL_005.d
Level 5	IC 320-473456/6	2021.03.24_A12_TB3_ICAL_006.d
Level 6	IC 320-473456/7	2021.03.24_A12_TB3_ICAL_007.d
Level 7	IC 320-473456/9	2021.03.24_A12_TB3_ICAL_009.d
Level 8	IC 320-473456/11	2021.03.24_A12_TB3_ICAL_011.d
Level 9	IC 320-473456/13	2021.03.24_A12_TB3_ICAL_013.d
Level 10	IC 320-473456/14	2021.03.24_A12_TB3_ICAL_014.d

ANALYTE	LVL										RT WINDOW	AVG RT
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10		
PFMOAA	3.603	4.149	3.694	3.522	4.046	4.124	4.221	4.047	3.746	4.314	3.353 - 3.853	3.947
R-EVE	6.231	6.331	6.287	6.227	6.310	6.307	6.351	6.329	++++	++++	5.981 - 6.481	6.297
R-PSDA	6.291	6.370	6.327	6.287	6.350	6.367	6.391	6.369	6.328	++++	6.041 - 6.541	6.342
Hydrolyzed PSDA	6.371	6.450	6.406	6.367	6.430	6.446	6.470	6.449	++++	++++	6.121 - 6.621	6.424
PMPA	++++	6.688	6.637	6.590	6.664	6.684	6.712	6.687	6.638	6.755	6.343 - 6.843	6.673
NVHOS	7.138	7.067	7.039	7.016	7.043	7.063	7.091	7.066	7.017	7.111	6.888 - 7.388	7.065
PFO2HxA	7.622	7.650	7.647	7.647	7.621	7.618	7.651	7.620	7.619	7.676	7.372 - 7.872	7.637
PEPA	8.228	8.228	8.223	8.223	8.228	8.223	8.228	8.227	8.225	8.259	7.978 - 8.478	8.229
PES	8.460	8.490	8.488	8.488	8.490	8.457	8.491	8.489	8.490	8.522	8.210 - 8.710	8.487
PFECA B	8.715	8.715	8.711	8.712	8.714	8.712	8.715	8.714	8.714	8.740	8.465 - 8.965	8.716
PFO3OA	8.957	8.957	8.954	8.954	8.956	8.954	8.957	8.956	8.956	8.986	8.707 - 9.207	8.959
HFPO-DA	9.049	9.048	9.073	9.074	9.048	9.045	9.077	9.047	9.076	9.074	8.799 - 9.299	9.061
R-PSDCA	9.396	9.396	9.425	9.425	9.395	9.393	9.429	9.395	9.428	9.425	9.146 - 9.646	9.411
Hydro-EVE Acid	9.461	9.461	9.457	9.457	9.460	9.425	9.461	9.459	9.460	9.490	9.211 - 9.711	9.459
Perfluoroheptanoic acid	9.461	9.461	9.457	9.457	9.460	9.458	9.461	9.459	9.460	9.490	9.211 - 9.711	9.462
Hydro-PS Acid	9.461	9.493	9.490	9.490	9.460	9.458	9.493	9.459	9.460	9.490	9.211 - 9.711	9.475
PFECA G	9.587	9.587	9.587	9.587	9.590	9.587	9.587	9.589	9.590	9.616	9.337 - 9.837	9.591
PFO4DA	9.730	9.730	9.731	9.731	9.734	9.731	9.731	9.733	9.734	9.760	9.480 - 9.980	9.735
PS Acid	9.788	9.788	9.817	9.817	9.791	9.788	9.817	9.790	9.791	9.817	9.538 - 10.038	9.800
EVE Acid	9.817	9.816	9.817	9.817	9.820	9.788	9.817	9.819	9.820	++++	9.567 - 10.067	9.815
PFO5DA	10.293	10.293	10.322	10.296	10.296	10.296	10.293	10.298	10.296	10.322	10.043 - 10.543	10.301
13C3 HFPO-DA	9.049	9.048	9.073	9.074	9.048	9.045	9.049	9.047	9.048	9.074	8.949 - 9.149	9.056
13C4 PFHpA	9.461	9.461	9.457	9.457	9.460	9.458	9.461	9.459	9.460	9.490	9.361 - 9.561	9.462

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1 Analy Batch No.: 473456

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2021 11:54 Calibration End Date: 03/24/2021 15:26 Calibration ID: 54687

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-473456/2	2021.03.24_A12_TB3_ICAL_002.d
Level 2	IC 320-473456/3	2021.03.24_A12_TB3_ICAL_003.d
Level 3	IC 320-473456/4	2021.03.24_A12_TB3_ICAL_004.d
Level 4	IC 320-473456/5	2021.03.24_A12_TB3_ICAL_005.d
Level 5	IC 320-473456/6	2021.03.24_A12_TB3_ICAL_006.d
Level 6	IC 320-473456/7	2021.03.24_A12_TB3_ICAL_007.d
Level 7	IC 320-473456/9	2021.03.24_A12_TB3_ICAL_009.d
Level 8	IC 320-473456/11	2021.03.24_A12_TB3_ICAL_011.d
Level 9	IC 320-473456/13	2021.03.24_A12_TB3_ICAL_013.d
Level 10	IC 320-473456/14	2021.03.24_A12_TB3_ICAL_014.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6 LVL 10	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
PFMOAA	9101000 10179840 12253178	10089200 11939480 12846264	10267400 12345670	10282400 12302296	Ave		11160672. 8			11.7			50.0			
R-EVE	5834000 5786000 ++++	6319600 6663260 ++++	5784000 7354210	5713500 7141732	Ave		6324537.7 5			10.4			50.0			
R-PSDA	2825000 2559280 3416274	2816800 3029280 ++++	2772800 3426610	2762200 3283008	Ave		2987916.8 9			10.6			50.0			
Hydrolyzed PSDA	11773000 10552640 ++++	11316800 12382900 ++++	11132600 13686890	11053200 13149776	Ave		11880975. 8			9.3			50.0			
PMPA	++++ 15464520 17264970	21756000 17535220 18062980	20730400 17740240	18217200 17671932	Ave		18271495. 8			10.3			50.0			
NVHOS	4383000 4635560 5804430	5042800 5545280 6700222	4871400 5765540	4886100 5708996	Ave		5334332.8 0			13.0			50.0			
PFO2HxA	12396000 11444200 13611220	12161200 13249980 13631154	11968400 14425030	11754300 14097108	Ave		12873859. 2			8.2			50.0			
PEPA	4053000 3787800 4934380	4239600 4930660 4710955	3567800 4644020	4056800 5128240	Ave		4405325.5 0			12.2			50.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1 Analy Batch No.: 473456

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2021 11:54 Calibration End Date: 03/24/2021 15:26 Calibration ID: 54687

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6 LVL 10	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
PES	16494000 15224160 21048628	16312000 18382940 21894796	15108600 19038310	15812700 21127304	Ave		18044343. 8			14.5		50.0				
PFECA B	8305000 8078680 9230732	8585600 9432300 8464512	8117800 9571500	8549400 9061380	Ave		8739690.4 0			6.2		50.0				
PFO3OA	2869000 2603640 3442904	3177600 3558380 2683507	2379400 3472890	2577700 3520312	Ave		3028533.3 0			15.0		50.0				
R-PSDCA	55341000 47024200 43758990	49920400 53354920 35515927	45493400 58808400	46535500 50079976	Ave		48583271. 3			13.5		50.0				
Hydro-EVE Acid	66950000 63227200 66405256	68195600 76325000 54017645	64208000 71701020	64663500 69615784	Ave		66530900. 5			8.8		50.0				
Hydro-PS Acid	22844000 21253080 26055342	22481600 27573480 27847716	24001600 25386010	22686900 27074572	Ave		24720430. 0			9.6		50.0				
PFECA G	4934000 3852600 3784058	4848000 4876340 3028772	4087200 4829840	4009300 4200568	Ave		4245067.8 0			14.7		50.0				
PFO4DA	5048000 3848960 4651616	5498400 6343820 3967612	4935800 5833060	4862100 4720956	Ave		4971032.4 0			15.5		50.0				
PS Acid	11833000 10639240 11499488	11711200 12969120 9831575	11130600 13768690	10886500 11913036	Ave		11618244. 9			9.7		50.0				
EVE Acid	50255000 43446720 39389846	48299600 50698040 +++++	49410800 49576270	44541300 45196924	Ave		46757166. 7			8.2		50.0				
PFO5DA	3698000 3232280 4369594	3688400 4671580 3679886	3374000 4028840	3546700 4366716	Ave		3865599.6 0			12.3		50.0				
13C3 HFPO-DA	6087560 5613840 5785784	5821812 5564012 5772888	5823516 6127132	5940600 5379504	Ave		5791664.8 0			4.0		50.0				

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
 LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1 Analy Batch No.: 473456

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2021 11:54 Calibration End Date: 03/24/2021 15:26 Calibration ID: 54687

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6 LVL 10	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
13C4 PFHpA	23574404 20789024 17971148	23139800 21873336 14611512	24119368 19301512	20387128 19234876	Ave		20500210. 8			14.1		50.0				

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
 LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
 CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1 Analy Batch No.: 473456

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2021 11:54 Calibration End Date: 03/24/2021 15:26 Calibration ID: 54687

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10												
HFPO-DA	1.1211 1.2453	1.1436 1.1335	1.0013 1.2926	0.9312 1.1255	1.0289 1.0844	AveI D		1.110 7			9.7		35.0				
Perfluoroheptanoic acid	1.7429 1.2774	1.3781 1.2404	1.2087 1.2741	1.1299 1.3359	1.1007 1.2744	L2ID	0.000 5	1.209 7			7.9			0.9930			0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1 Analy Batch No.: 473456

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2021 11:54 Calibration End Date: 03/24/2021 15:26 Calibration ID: 54687

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-473456/2	2021.03.24_A12_TB3_ICAL_002.d
Level 2	IC 320-473456/3	2021.03.24_A12_TB3_ICAL_003.d
Level 3	IC 320-473456/4	2021.03.24_A12_TB3_ICAL_004.d
Level 4	IC 320-473456/5	2021.03.24_A12_TB3_ICAL_005.d
Level 5	IC 320-473456/6	2021.03.24_A12_TB3_ICAL_006.d
Level 6	IC 320-473456/7	2021.03.24_A12_TB3_ICAL_007.d
Level 7	IC 320-473456/9	2021.03.24_A12_TB3_ICAL_009.d
Level 8	IC 320-473456/11	2021.03.24_A12_TB3_ICAL_011.d
Level 9	IC 320-473456/13	2021.03.24_A12_TB3_ICAL_013.d
Level 10	IC 320-473456/14	2021.03.24_A12_TB3_ICAL_014.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
		LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
PFMOAA	Ave	9101	25223	51337	102824	254496	0.00100	0.00250	0.00500	0.0100	0.0250
		596974	1234567	3075574	6126589	12846264	0.0500	0.100	0.250	0.500	1.00
R-EVE	Ave	5834	15799	28920	57135	144650	0.00100	0.00250	0.00500	0.0100	0.0250
		333163	735421	1785433	++++	++++	0.0500	0.100	0.250	++++	++++
R-PSDA	Ave	2825	7042	13864	27622	63982	0.00100	0.00250	0.00500	0.0100	0.0250
		151464	342661	820752	1708137	++++	0.0500	0.100	0.250	0.500	++++
Hydrolyzed PSDA	Ave	11773	28292	55663	110532	263816	0.00100	0.00250	0.00500	0.0100	0.0250
		619145	1368689	3287444	++++	++++	0.0500	0.100	0.250	++++	++++
PMPA	Ave	++++	54390	103652	182172	386613	++++	0.00250	0.00500	0.0100	0.0250
		876761	1774024	4417983	8632485	18062980	0.0500	0.100	0.250	0.500	1.00
NVHOS	Ave	4383	12607	24357	48861	115889	0.00100	0.00250	0.00500	0.0100	0.0250
		277264	576554	1427249	2902215	6700222	0.0500	0.100	0.250	0.500	1.00
PFO2HxA	Ave	12396	30403	59842	117543	286105	0.00100	0.00250	0.00500	0.0100	0.0250
		662499	1442503	3524277	6805610	13631154	0.0500	0.100	0.250	0.500	1.00
PEPA	Ave	4053	10599	17839	40568	94695	0.00100	0.00250	0.00500	0.0100	0.0250
		246533	464402	1282060	2467190	4710955	0.0500	0.100	0.250	0.500	1.00
PES	Ave	16494	40780	75543	158127	380604	0.00100	0.00250	0.00500	0.0100	0.0250
		919147	1903831	5281826	10524314	21894796	0.0500	0.100	0.250	0.500	1.00
PFECA B	Ave	8305	21464	40589	85494	201967	0.00100	0.00250	0.00500	0.0100	0.0250
		471615	957150	2265345	4615366	8464512	0.0500	0.100	0.250	0.500	1.00
PFO3OA	Ave	2869	7944	11897	25777	65091	0.00100	0.00250	0.00500	0.0100	0.0250
		177919	347289	880078	1721452	2683507	0.0500	0.100	0.250	0.500	1.00
R-PSDCA	Ave	55341	124801	227467	465355	1175605	0.00100	0.00250	0.00500	0.0100	0.0250
		2667746	5880840	12519994	21879495	35515927	0.0500	0.100	0.250	0.500	1.00

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1 Analy Batch No.: 473456

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2021 11:54 Calibration End Date: 03/24/2021 15:26 Calibration ID: 54687

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Hydro-EVE Acid	Ave	66950	170489	321040	646635	1580680	0.00100	0.00250	0.00500	0.0100	0.0250
		3816250	7170102	17403946	33202628	54017645	0.0500	0.100	0.250	0.500	1.00
Hydro-PS Acid	Ave	22844	56204	120008	226869	531327	0.00100	0.00250	0.00500	0.0100	0.0250
		1378674	2538601	6768643	13027671	27847716	0.0500	0.100	0.250	0.500	1.00
PFECA G	Ave	4934	12120	20436	40093	96315	0.00100	0.00250	0.00500	0.0100	0.0250
		243817	482984	1050142	1892029	3028772	0.0500	0.100	0.250	0.500	1.00
PFO4DA	Ave	5048	13746	24679	48621	96224	0.00100	0.00250	0.00500	0.0100	0.0250
		317191	583306	1180239	2325808	3967612	0.0500	0.100	0.250	0.500	1.00
PS Acid	Ave	11833	29278	55653	108865	265981	0.00100	0.00250	0.00500	0.0100	0.0250
		648456	1376869	2978259	5749744	9831575	0.0500	0.100	0.250	0.500	1.00
EVE Acid	Ave	50255	120749	247054	445413	1086168	0.00100	0.00250	0.00500	0.0100	0.0250
		2534902	4957627	11299231	19694923	++++	0.0500	0.100	0.250	0.500	++++
PFO5DA	Ave	3698	9221	16870	35467	80807	0.00100	0.00250	0.00500	0.0100	0.0250
		233579	402884	1091679	2184797	3679886	0.0500	0.100	0.250	0.500	1.00
13C3 HFPO-DA	Ave	1521890	1455453	1455879	1485150	1403460	0.250	0.250	0.250	0.250	0.250
		1391003	1531783	1344876	1446446	1443222	0.250	0.250	0.250	0.250	0.250
13C4 PFHpA	Ave	5893601	5784950	6029842	5096782	5197256	0.250	0.250	0.250	0.250	0.250
		5468334	4825378	4808719	4492787	3652878	0.250	0.250	0.250	0.250	0.250

Curve Type Legend

Ave = Average

FORM VI
 LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
 RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1 Analy Batch No.: 473456

SDG No.: _____

Instrument ID: A12 GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2021 11:54 Calibration End Date: 03/24/2021 15:26 Calibration ID: 54687

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-473456/2	2021.03.24_A12_TB3_ICAL_002.d
Level 2	IC 320-473456/3	2021.03.24_A12_TB3_ICAL_003.d
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Level 5	IC 320-473456/6	2021.03.24_A12_TB3_ICAL_006.d
Level 6	IC 320-473456/7	2021.03.24_A12_TB3_ICAL_007.d
Level 7	IC 320-473456/9	2021.03.24_A12_TB3_ICAL_009.d
Level 8	IC 320-473456/11	2021.03.24_A12_TB3_ICAL_011.d
Level 9	IC 320-473456/13	2021.03.24_A12_TB3_ICAL_013.d
Level 10	IC 320-473456/14	2021.03.24_A12_TB3_ICAL_014.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
HFPO-DA		AveI D	6825	16645	29154	55320	144400	0.00100	0.00250	0.00500	0.0100	0.0250
			346444	694490	1738383	3255902	6260253	0.0500	0.100	0.250	0.500	1.00
Perfluoroheptanoic acid		L2ID	41088	79721	145770	230359	572087	0.00100	0.00250	0.00500	0.0100	0.0250
			1397019	2394204	6126840	12003786	18621438	0.0500	0.100	0.250	0.500	1.00

Curve Type Legend

AveID = Average isotope dilution
 L2ID = Linear 1/conc^2 IsoDil

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_002.d
 Lims ID: IC STD 1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 24-Mar-2021 11:54:43 ALS Bottle#: 2 Worklist Smp#: 2
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 1 (49)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Mar-2021 04:06:19 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1601

First Level Reviewer: fariasa Date: 25-Mar-2021 03:55:27

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.603	3.603	0.0		9101	0.000815		81.5	1.3	M
2 R-EVE										M
405.00 > 217.00	6.231	6.231	0.0		5834	0.000922		92.2	101	M
3 R-PSDA										M
440.90 > 241.00	6.291	6.291	0.0		2825	0.000945		94.5	45.7	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.371	6.371	0.0		11773	0.000991		99.1	117	
23 PMPA										M
229.00 > 185.00	6.593	6.593	0.0		39948	0.002186		219	34.2	M
5 NVHOS										M
297.00 > 135.00	7.138	7.138	0.0		4383	0.000822		82.2	64.3	M
6 PFO2HxA										
245.00 > 85.00	7.622	7.622	0.0		12396	0.000963		96.3	150	
22 PEPA										M
278.90 > 234.90	8.228	8.228	0.0		4053	0.000920		92.0	27.0	M
7 PES										
314.90 > 135.00	8.460	8.460	0.0		16494	0.000914		91.4	408	
8 PFECA B										
295.00 > 201.00	8.715	8.715	0.0		8305	0.000950		95.0	215	
9 PFO3OA										
310.90 > 85.00	8.957	8.957	0.0		2869	0.000947		94.7	79.3	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.049	9.049	0.0		1521890	0.2628		105	42411	
11 HPFO-DA										
285.00 > 169.00	9.049	9.049	0.0	1.000	6825	0.001009		101	201	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.396	9.396	0.0		55341	0.001139		114	1454	
13 Hydro-EVE Acid										
427.00 > 282.90	9.461	9.461	0.0		66950	0.001006		101	1166	
D 14 13C4 PFHpA										
367.00 > 322.00	9.461	9.461	0.0		5893601	0.2875		115	92385	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.461	9.461	0.0	1.000	41088	0.001038	Target=0.00	104	297	
363.00 > 169.00	9.461	9.461	0.0	1.000	13225		3.11(0.00-0.00)	104	267	
15 Hydro-PS Acid										
463.00 > 262.90	9.461	9.461	0.0		22844	0.000924		92.4	514	
17 PFECA G										
378.90 > 184.90	9.587	9.587	0.0		4934	0.001162		116	137	
18 PFO4DA										
376.90 > 85.00	9.730	9.730	0.0		5048	0.001015		102	143	
19 PS Acid										
443.00 > 146.90	9.788	9.788	0.0		11833	0.001018		102	341	
20 EVE Acid										
407.00 > 262.90	9.817	9.817	0.0		50255	0.001075		107	1451	
21 TAF										
442.90 > 85.00	10.293	10.293	0.0		3698	0.000957		95.7	37.4	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD1_00061

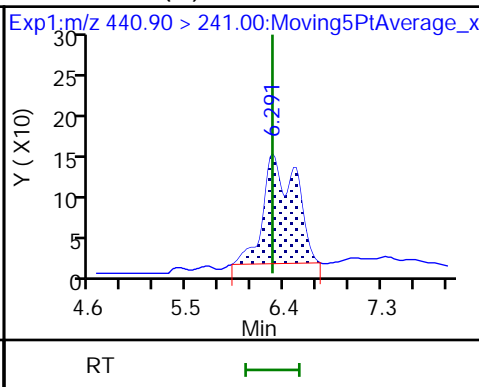
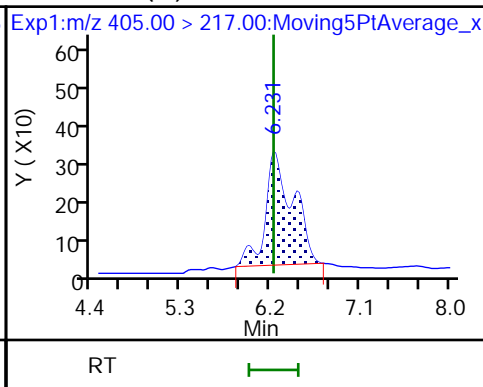
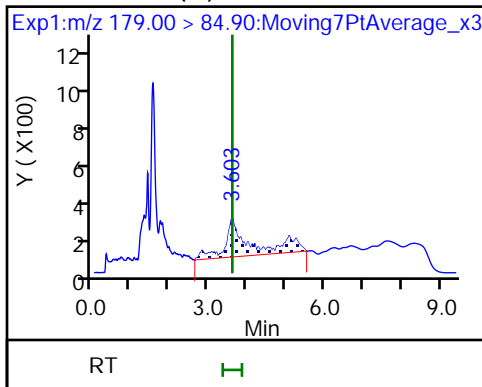
Amount Added: 1.00

Units: mL

1 PFMOAA (M)

2 R-EVE (M)

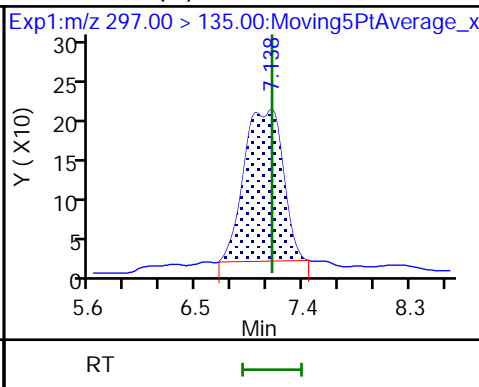
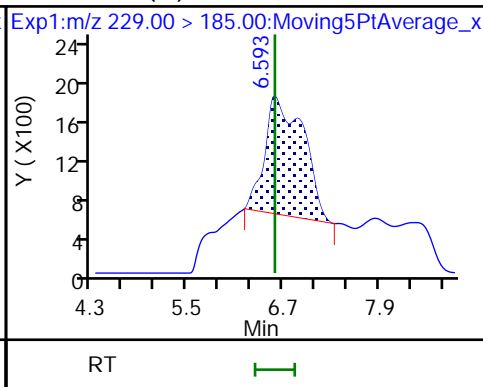
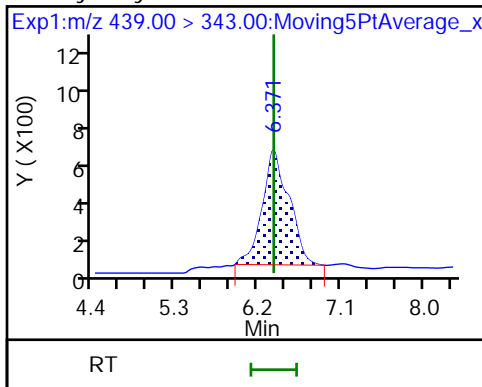
3 R-PSDA (M)



4 Hydrolyzed PSDA

23 PMPA (M)

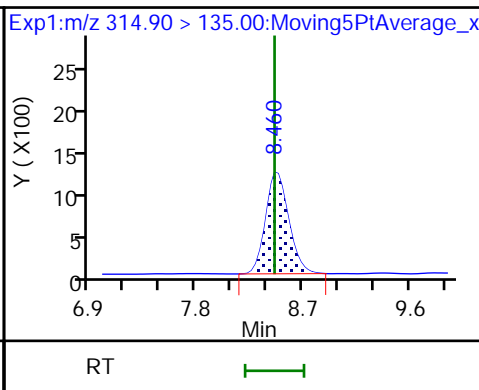
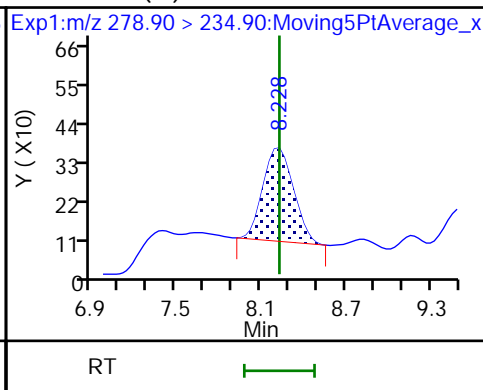
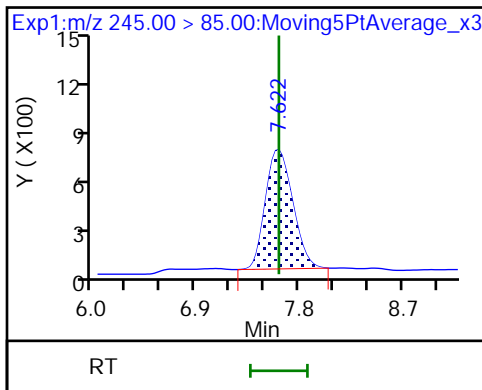
5 NVHOS (M)



6 PFO2HxA

22 PEPA (M)

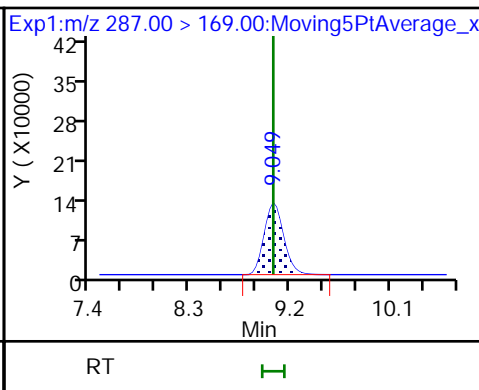
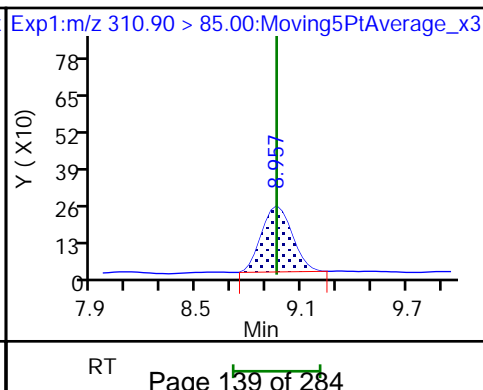
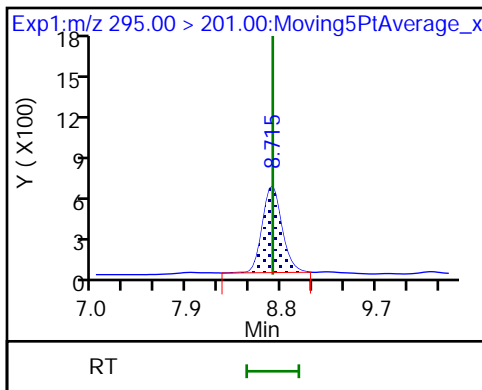
7 PES

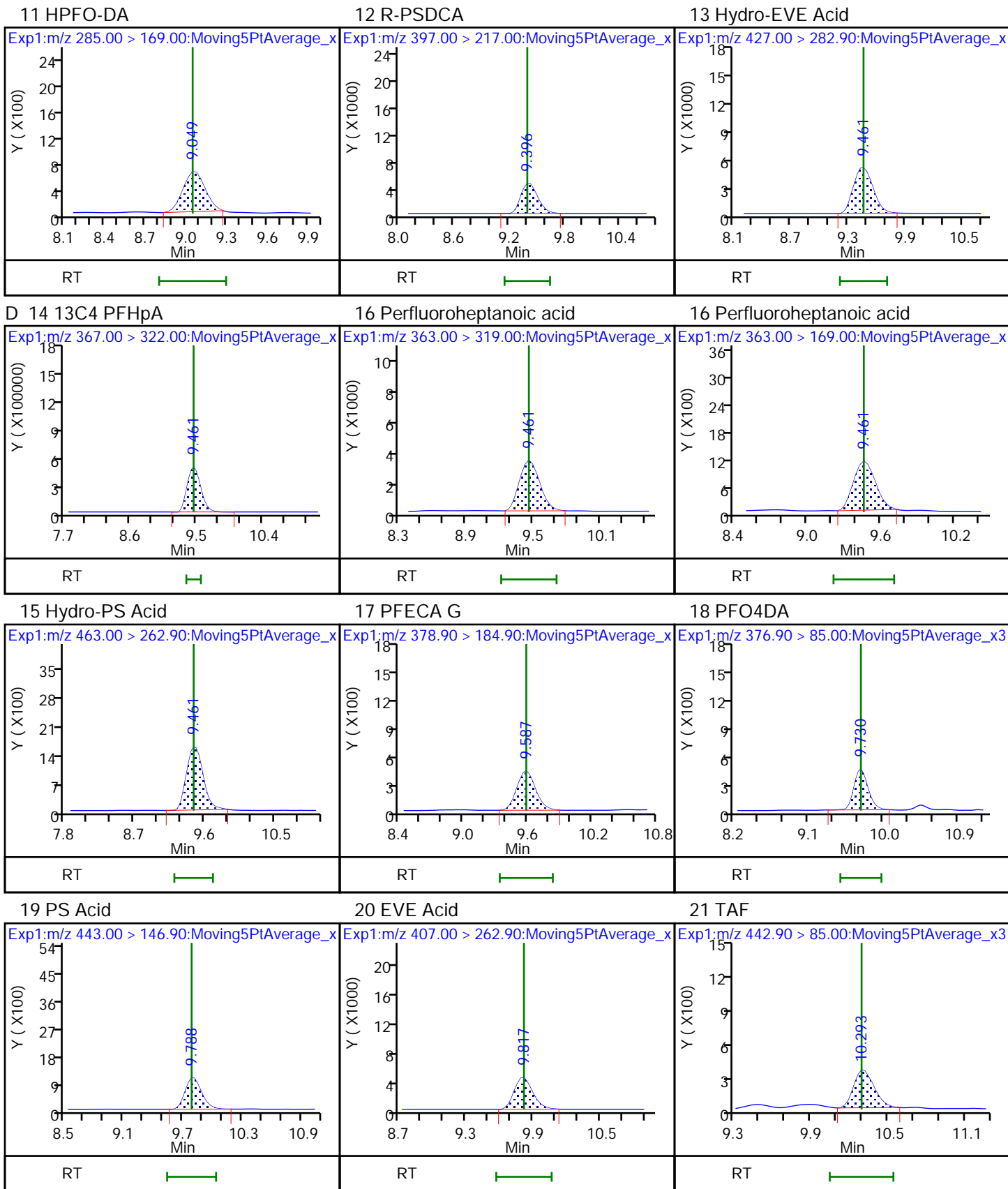


8 PFECA B

9 PFO3OA

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

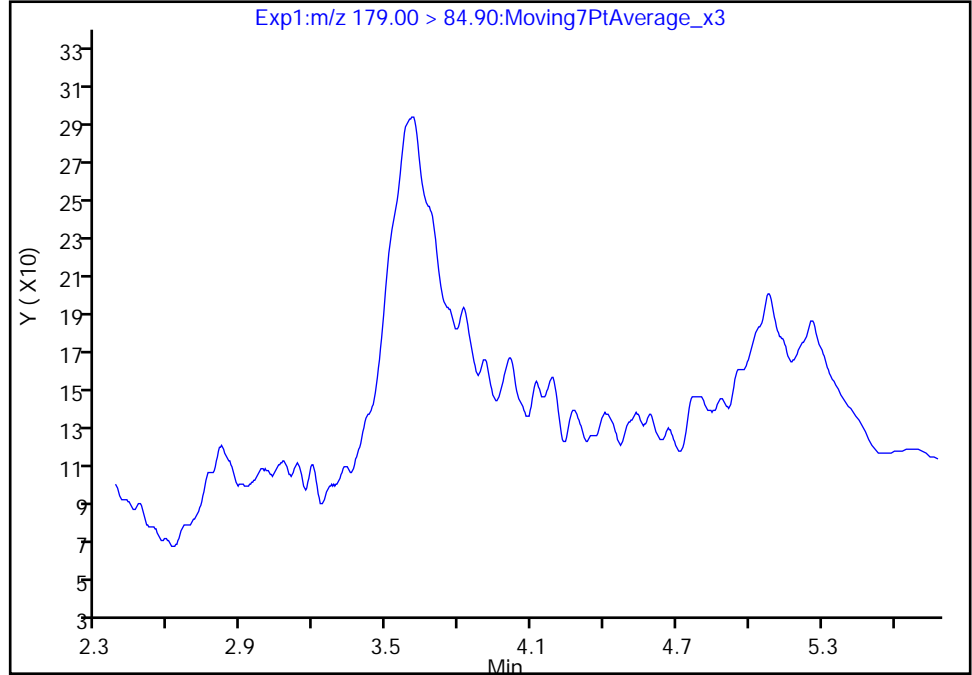
Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_002.d
Injection Date: 24-Mar-2021 11:54:43 Instrument ID: A12
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

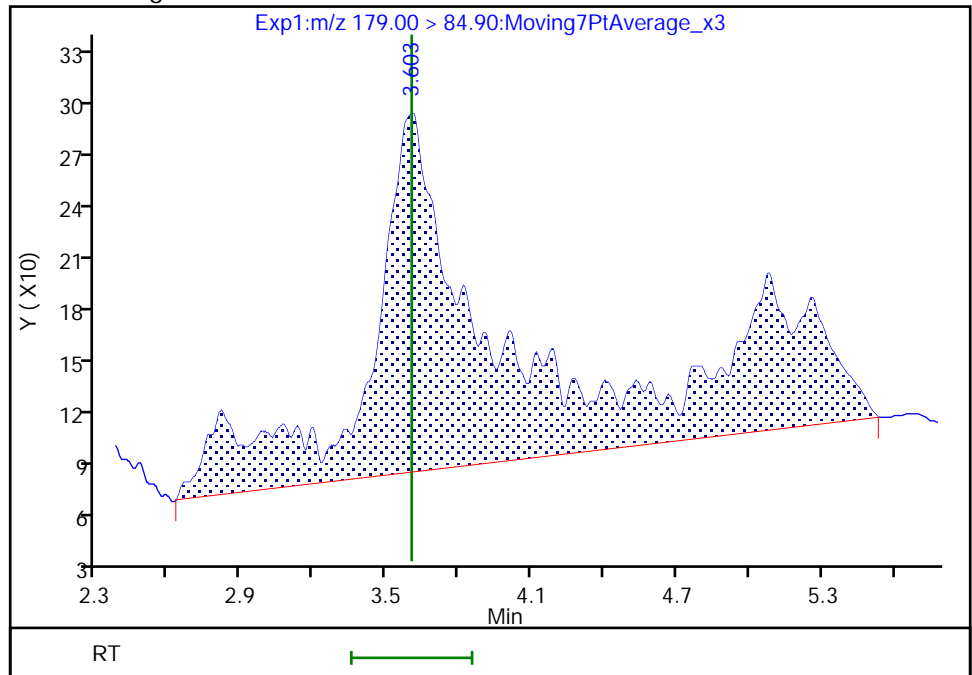
Not Detected
Expected RT: 3.60

Processing Integration Results



Manual Integration Results

RT: 3.60
Area: 9101
Amount: 0.000815
Amount Units: ng/ml



Reviewer: fariasa, 25-Mar-2021 03:54:42
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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Eurofins TestAmerica, Sacramento

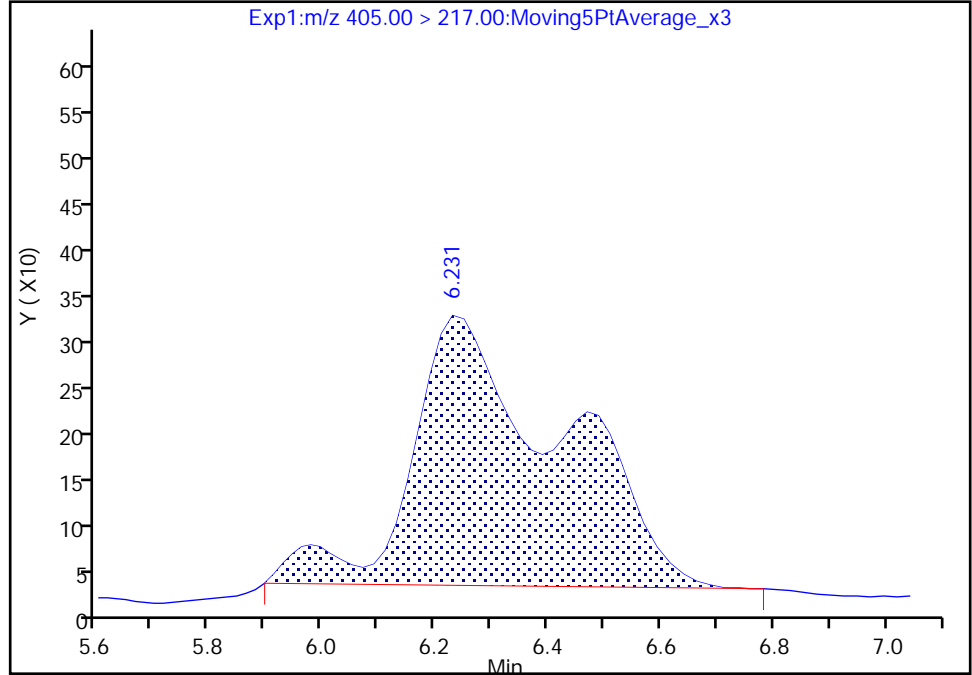
Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_002.d
Injection Date: 24-Mar-2021 11:54:43 Instrument ID: A12
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

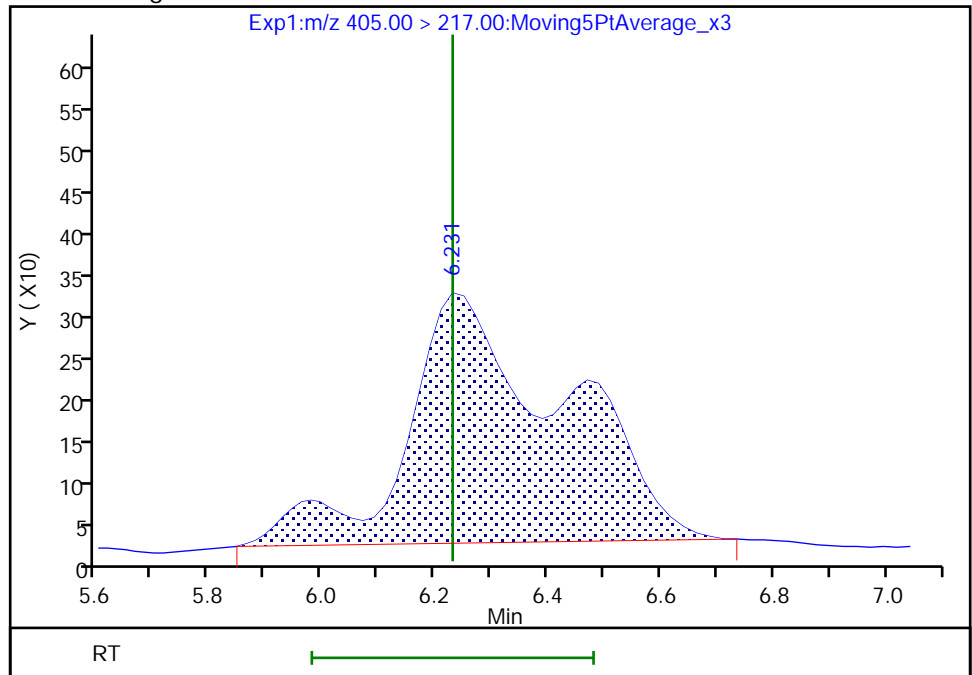
RT: 6.23
Area: 5496
Amount: 0.000870
Amount Units: ng/ml

Processing Integration Results



RT: 6.23
Area: 5834
Amount: 0.000922
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 25-Mar-2021 03:55:05
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

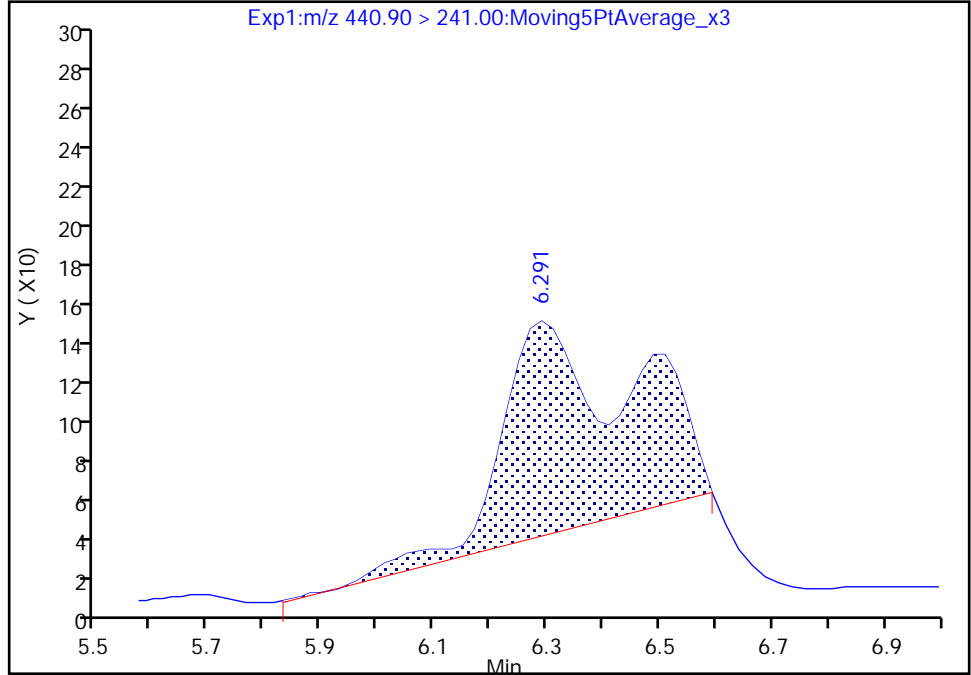
Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_002.d
Injection Date: 24-Mar-2021 11:54:43 Instrument ID: A12
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

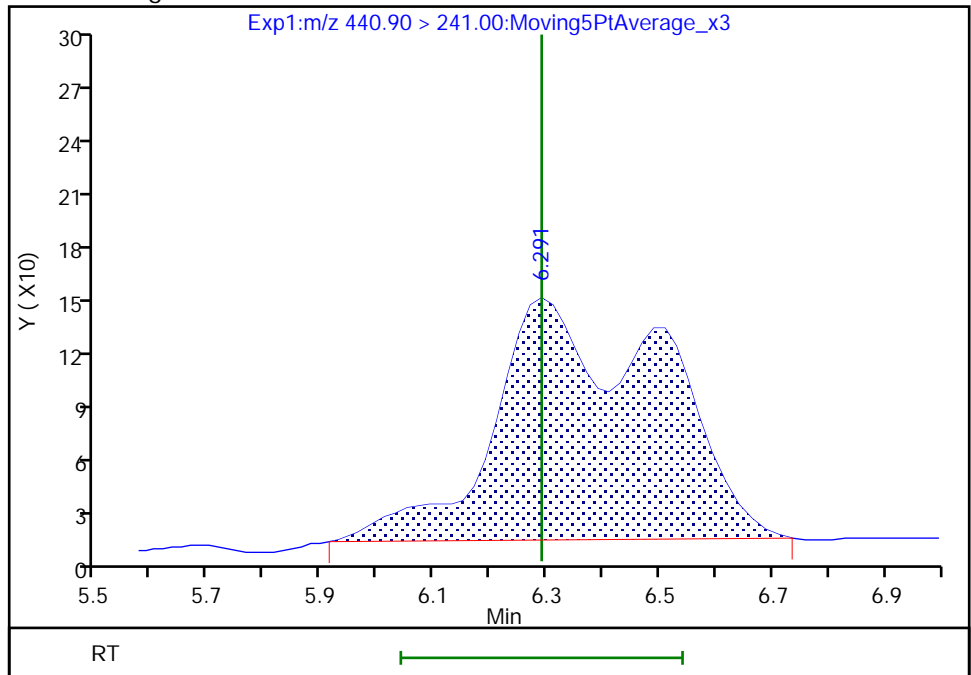
RT: 6.29
Area: 1708
Amount: 0.000569
Amount Units: ng/ml

Processing Integration Results



RT: 6.29
Area: 2825
Amount: 0.000945
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Sacramento

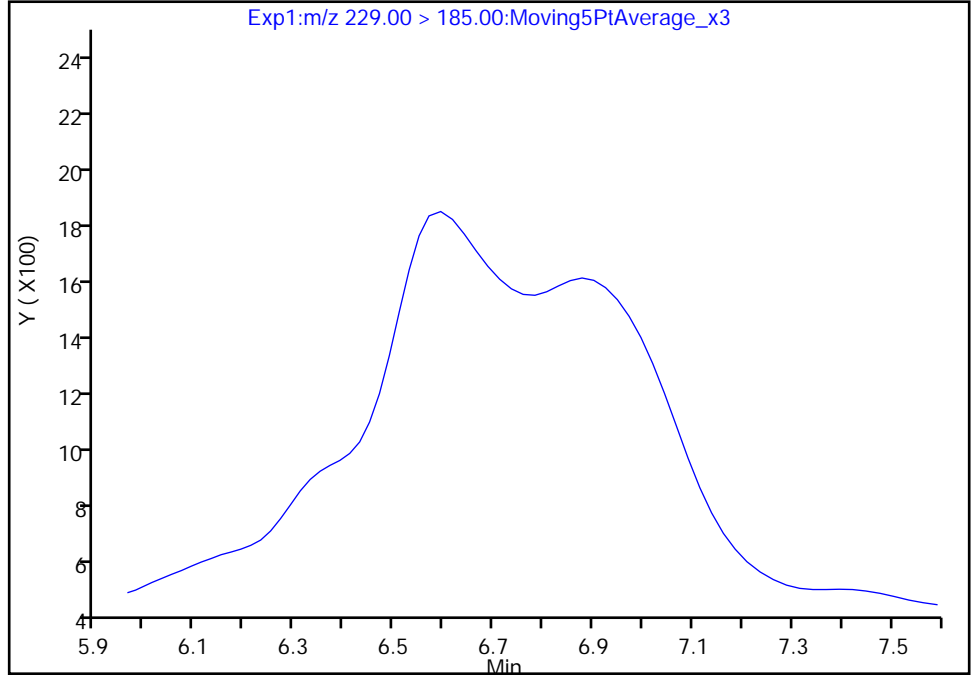
Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_002.d
Injection Date: 24-Mar-2021 11:54:43 Instrument ID: A12
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

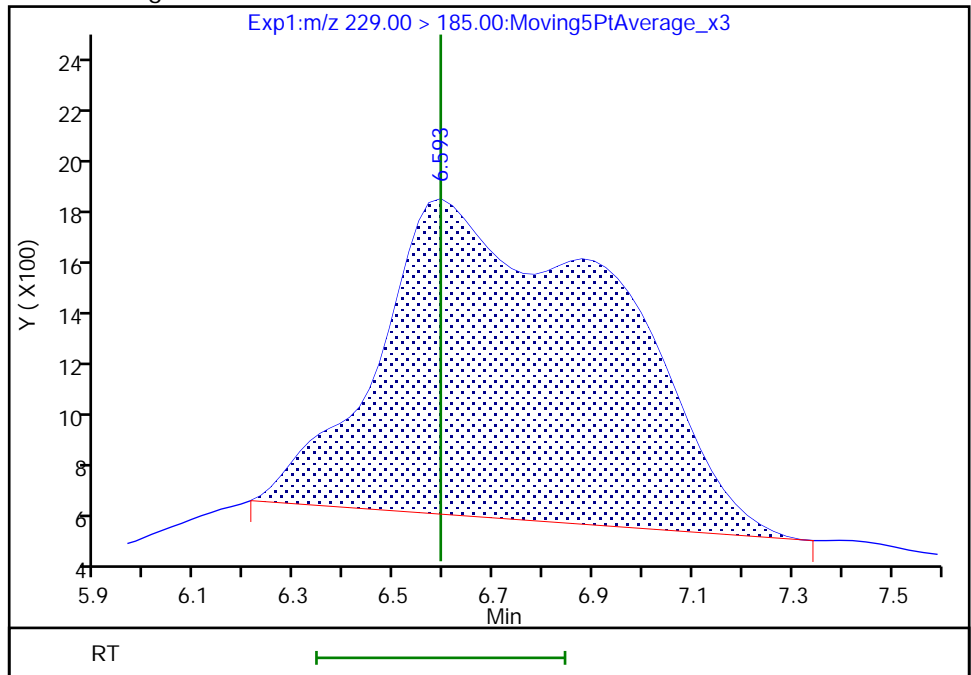
Not Detected
Expected RT: 6.59

Processing Integration Results



Manual Integration Results

RT: 6.59
Area: 39948
Amount: 0.002186
Amount Units: ng/ml



Reviewer: fariasa, 25-Mar-2021 03:54:52
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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Eurofins TestAmerica, Sacramento

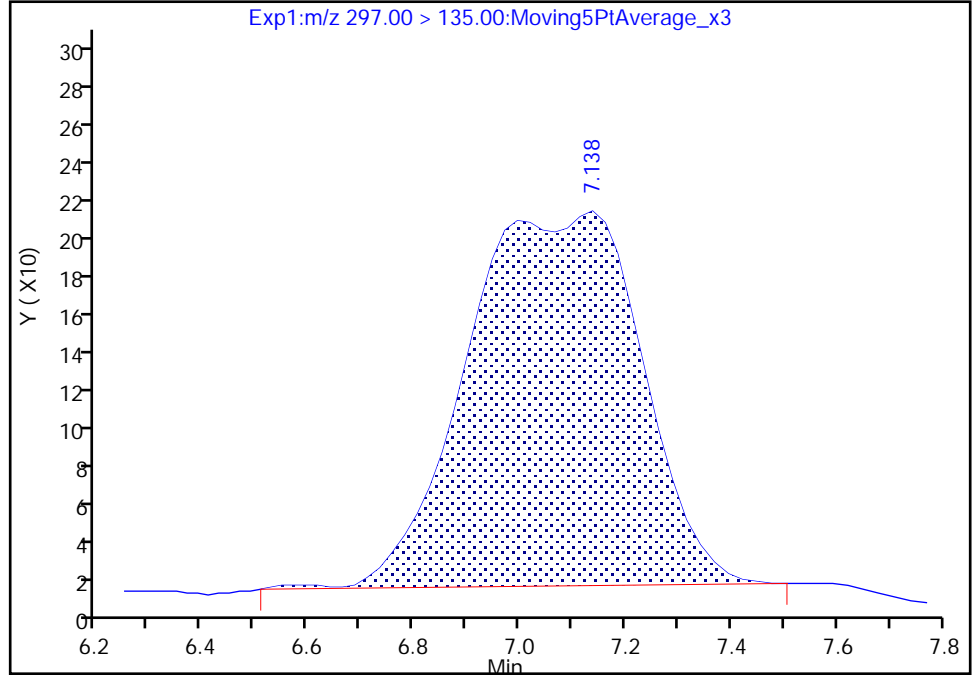
Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_002.d
Injection Date: 24-Mar-2021 11:54:43 Instrument ID: A12
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

5 NVHOS, CAS: 1132933-86-8

Signal: 1

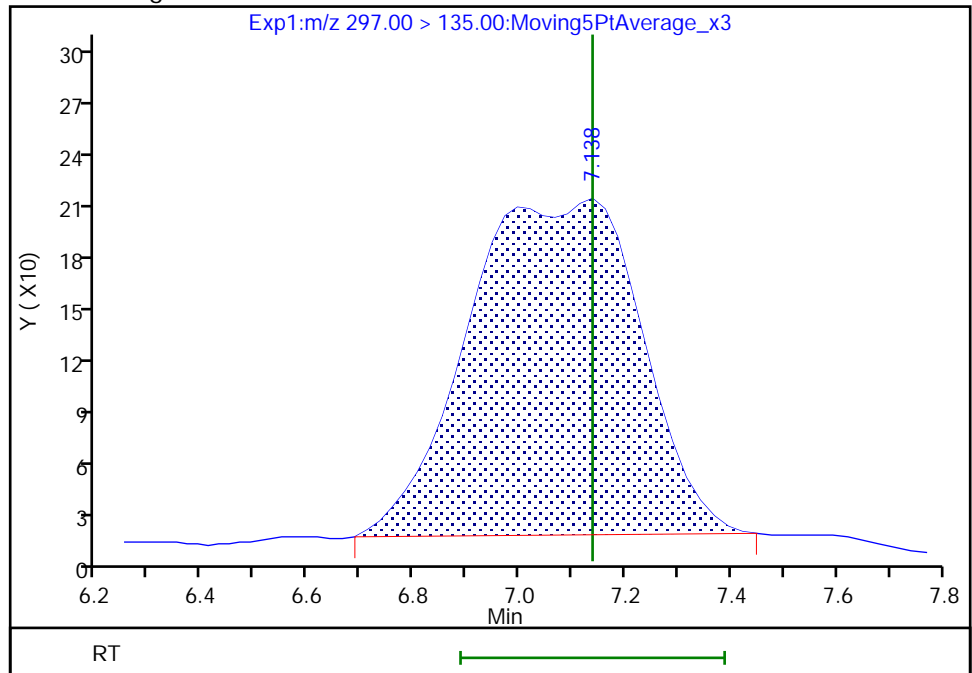
RT: 7.14
Area: 4458
Amount: 0.000835
Amount Units: ng/ml

Processing Integration Results



RT: 7.14
Area: 4383
Amount: 0.000822
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 25-Mar-2021 03:55:18
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento

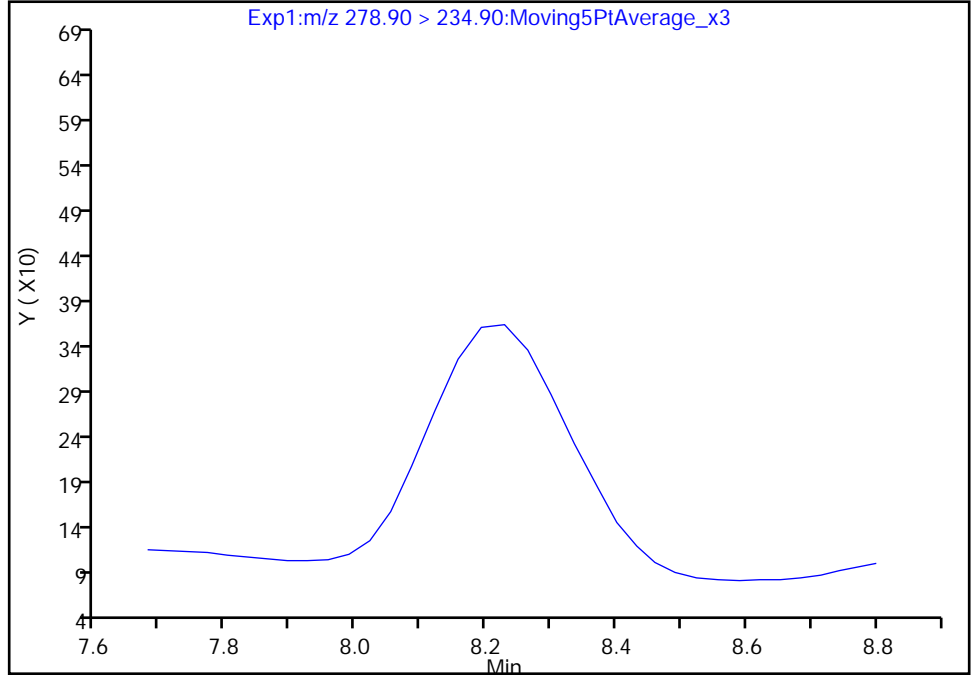
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Injection Date: 24-Mar-2021 11:54:43 Instrument ID: A12
Lims ID: IC STD 1
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

22 PEPA, CAS: 267239-61-2

Signal: 1

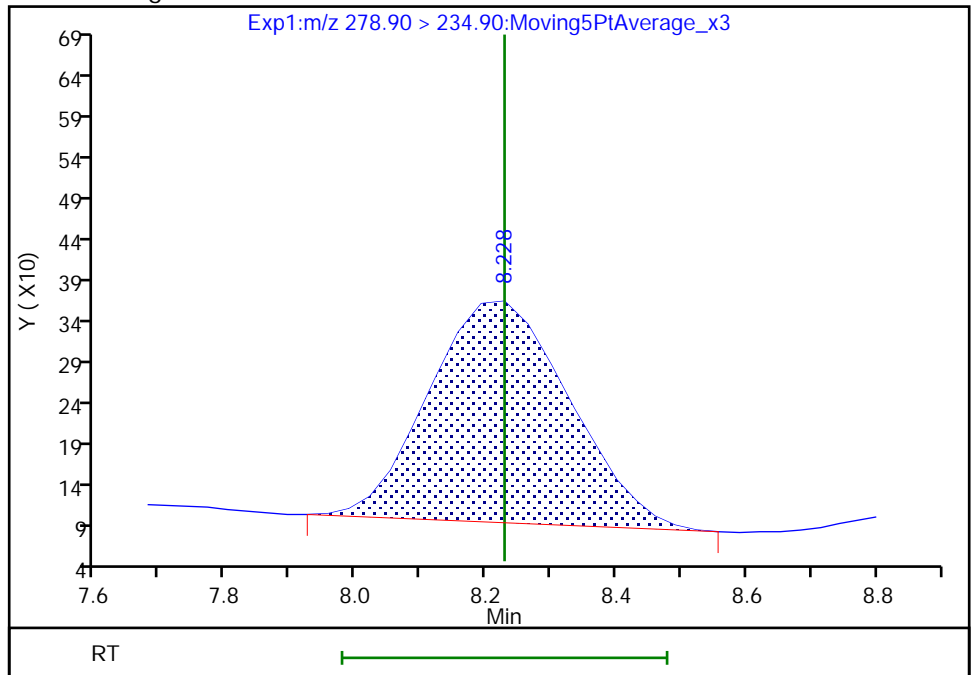
Not Detected
Expected RT: 8.23

Processing Integration Results



Manual Integration Results

RT: 8.23
Area: 4053
Amount: 0.000920
Amount Units: ng/ml



Reviewer: fariasa, 25-Mar-2021 03:54:57
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_003.d
 Lims ID: IC STD 2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 24-Mar-2021 12:12:21 ALS Bottle#: 3 Worklist Smp#: 3
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 2 (49)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Mar-2021 04:06:20 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1601

First Level Reviewer: fariasa Date: 25-Mar-2021 03:56:56

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.149	3.603	0.546		25223	0.002260		90.4	7.9	M
2 R-EVE										
405.00 > 217.00	6.331	6.231	0.100		15799	0.002498		99.9	402	
3 R-PSDA										M
440.90 > 241.00	6.370	6.291	0.079		7042	0.002357		94.3	185	M
4 Hydrolyzed PSDA										
439.00 > 343.00	6.450	6.371	0.079		28292	0.002381		95.3	374	
23 PMPA										
229.00 > 185.00	6.688	6.593	0.095		54390	0.002977		119	69.9	
5 NVHOS										
297.00 > 135.00	7.067	7.138	-0.071		12607	0.002363		94.5	295	
6 PFO2HxA										
245.00 > 85.00	7.650	7.622	0.028		30403	0.002362		94.5	421	
22 PEPA										
278.90 > 234.90	8.228	8.228	0.0		10599	0.002406		96.2	73.9	
7 PES										
314.90 > 135.00	8.490	8.460	0.030		40780	0.002260		90.4	1043	
8 PFECA B										
295.00 > 201.00	8.715	8.715	0.0		21464	0.002456		98.2	578	
9 PFO3OA										
310.90 > 85.00	8.957	8.957	0.0		7944	0.002623		105	214	
11 HPFO-DA										
285.00 > 169.00	9.048	9.049	-0.001	1.000	16645	0.002574		103	474	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.048	9.049	-0.001		1455453	0.2513		101	30542	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.396	9.396	0.0		124801	0.002569		103	3262	
13 Hydro-EVE Acid										
427.00 > 282.90	9.461	9.461	0.0		170489	0.002563		103	2944	
D 14 13C4 PFHpA										
367.00 > 322.00	9.461	9.461	0.0		5784950	0.2822		113	75634	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.461	9.461	0.0	1.000	79721	0.002445	Target=0.00	97.8	789	
363.00 > 169.00	9.461	9.461	0.0	1.000	20916		3.81(0.00-0.00)	97.8	420	
15 Hydro-PS Acid										
463.00 > 262.90	9.493	9.461	0.032		56204	0.002274		90.9	1244	
17 PFECA G										
378.90 > 184.90	9.587	9.587	0.0		12120	0.002855		114	337	
18 PFO4DA										
376.90 > 85.00	9.730	9.730	0.0		13746	0.002765		111	399	
19 PS Acid										
443.00 > 146.90	9.788	9.788	0.0		29278	0.002520		101	841	
20 EVE Acid										
407.00 > 262.90	9.816	9.817	-0.001		120749	0.002582		103	3470	
21 TAF										
442.90 > 85.00	10.293	10.293	0.0		9221	0.002385		95.4	98.6	

QC Flag Legend

Processing Flags

Review Flags

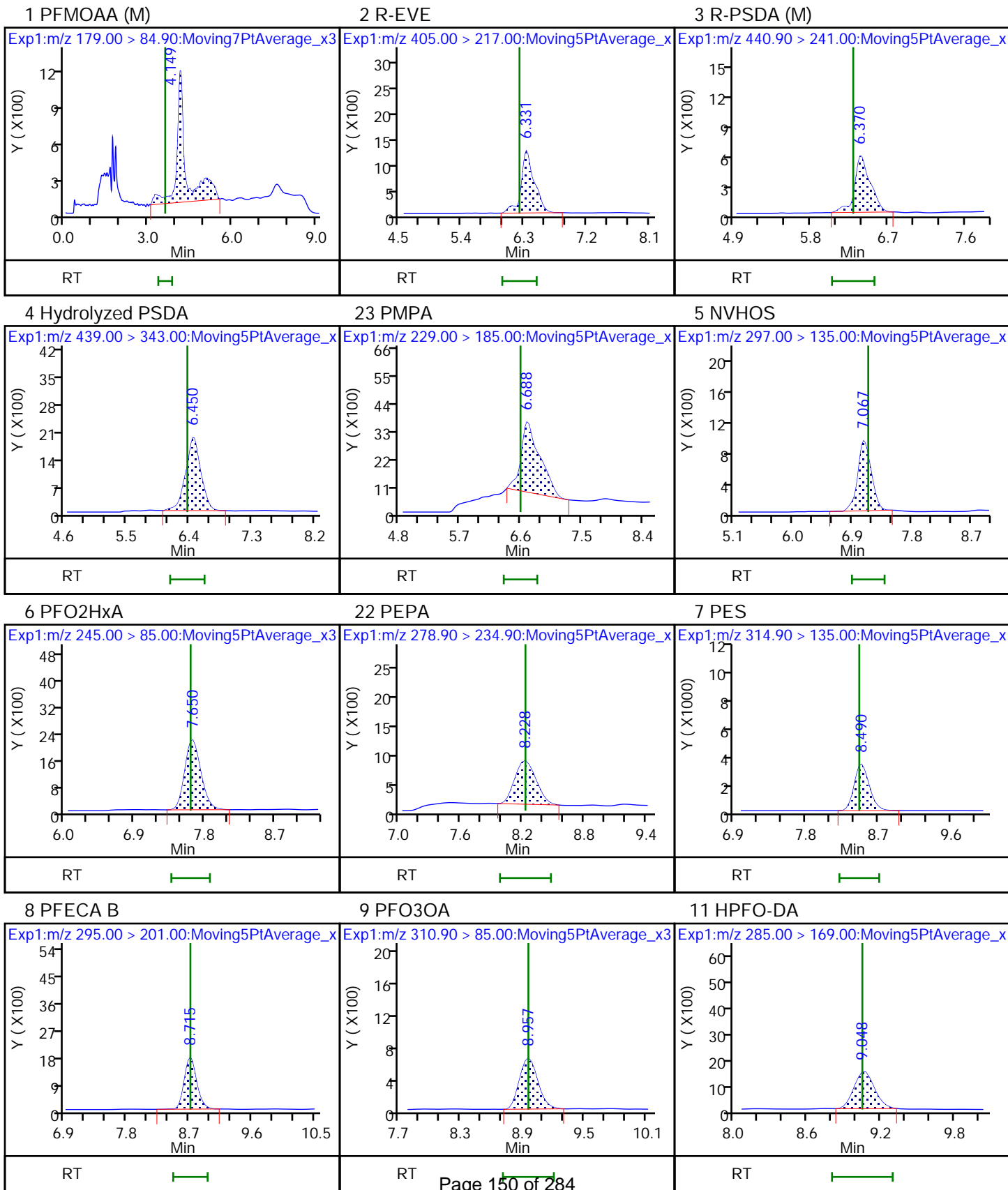
M - Manually Integrated

Reagents:

LCTB3_LLSTD2_00049

Amount Added: 1.00

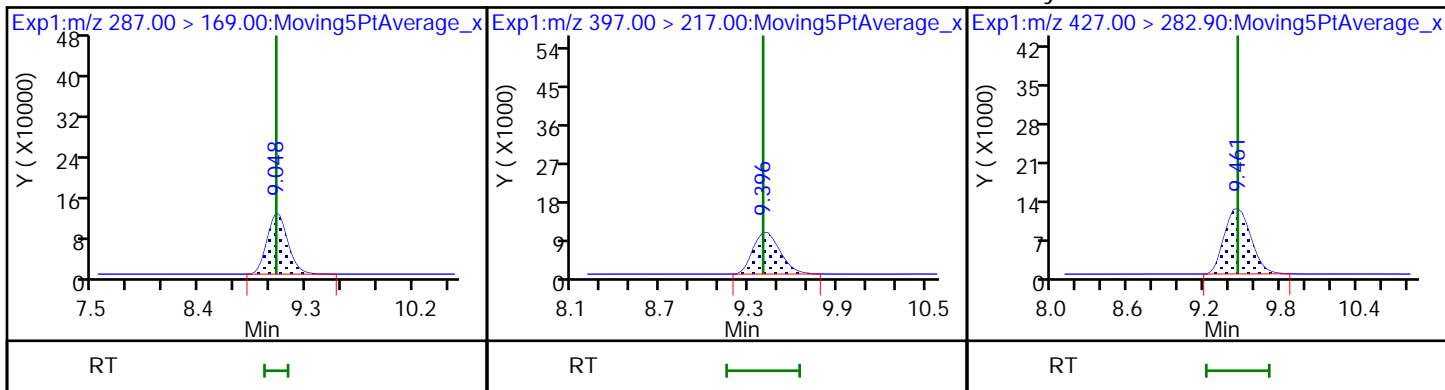
Units: mL



D 10 13C3 HFPO-DA

12 R-PSDCA

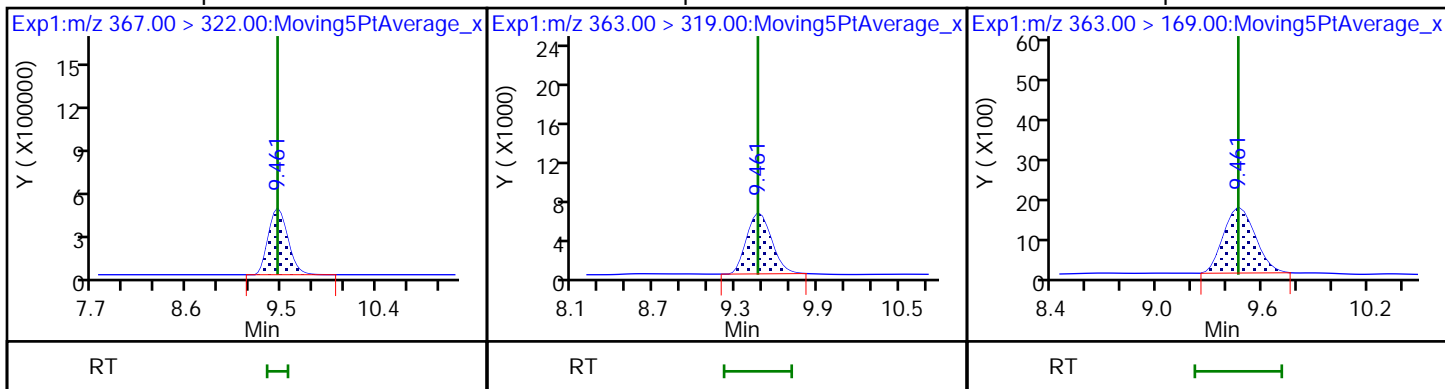
13 Hydro-EVE Acid



D 14 13C4 PFHpA

16 Perfluoroheptanoic acid

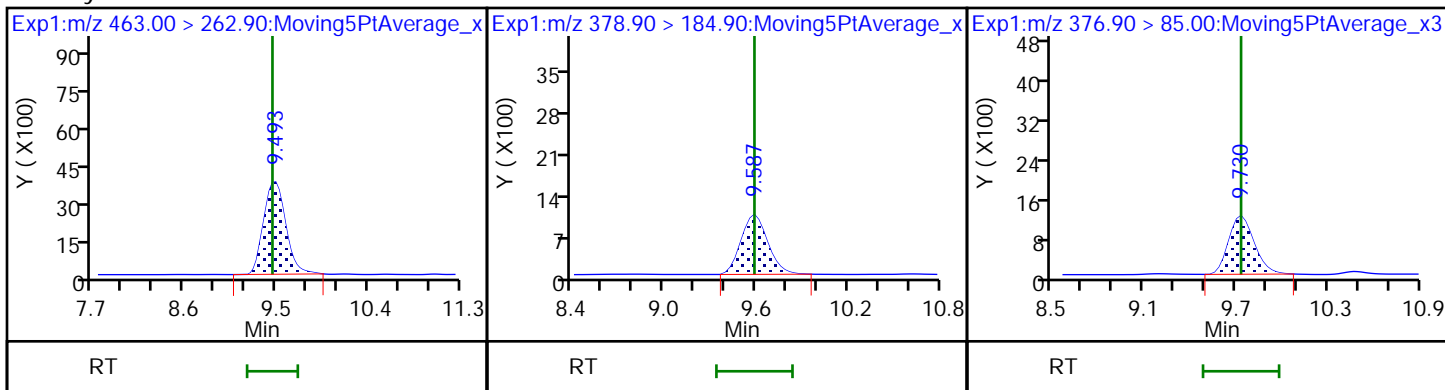
16 Perfluoroheptanoic acid



15 Hydro-PS Acid

17 PFECA G

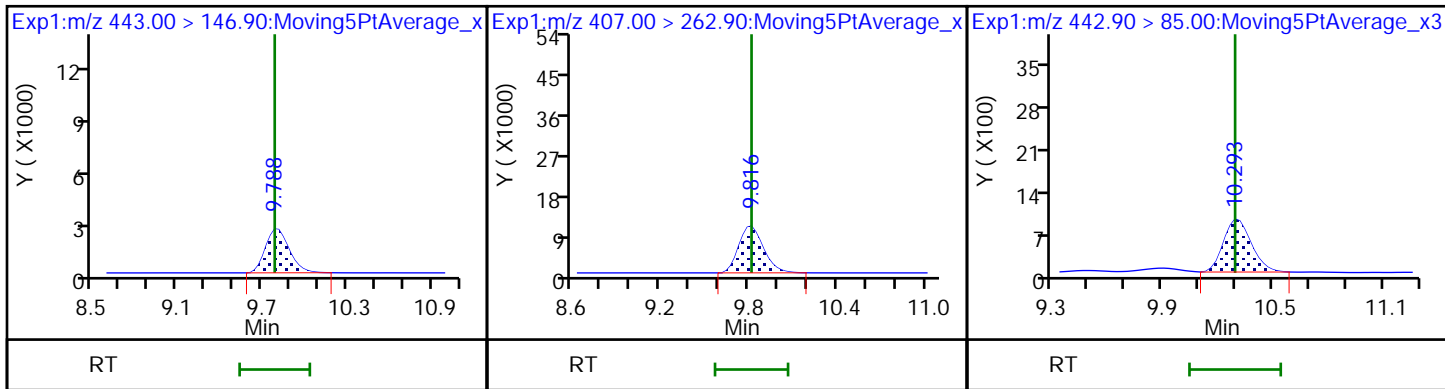
18 PFO4DA



19 PS Acid

20 EVE Acid

21 TAF



Eurofins TestAmerica, Sacramento

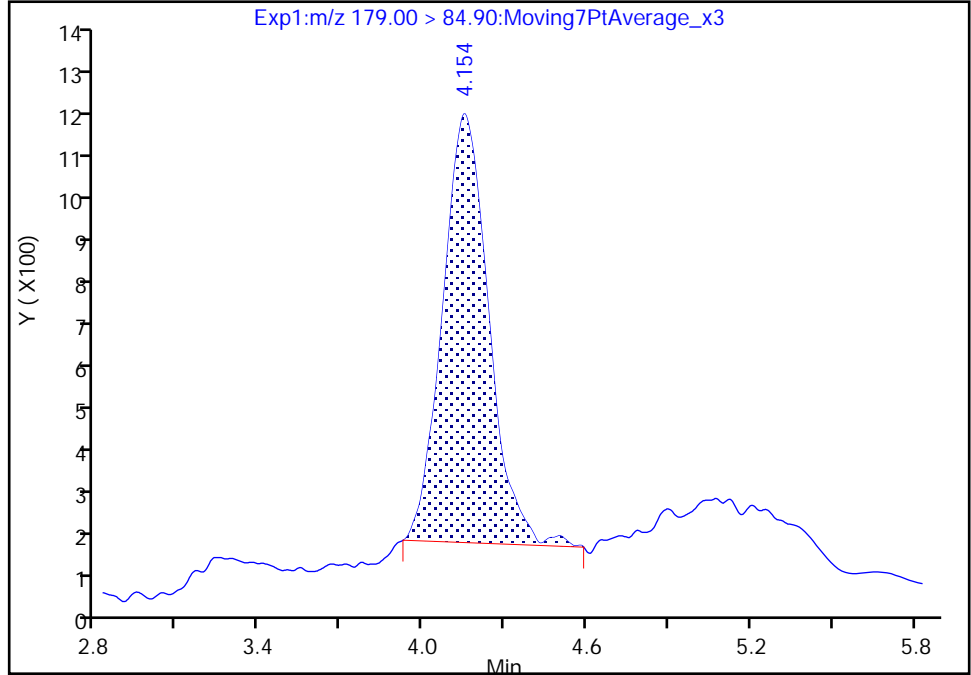
Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_003.d
Injection Date: 24-Mar-2021 12:12:21 Instrument ID: A12
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

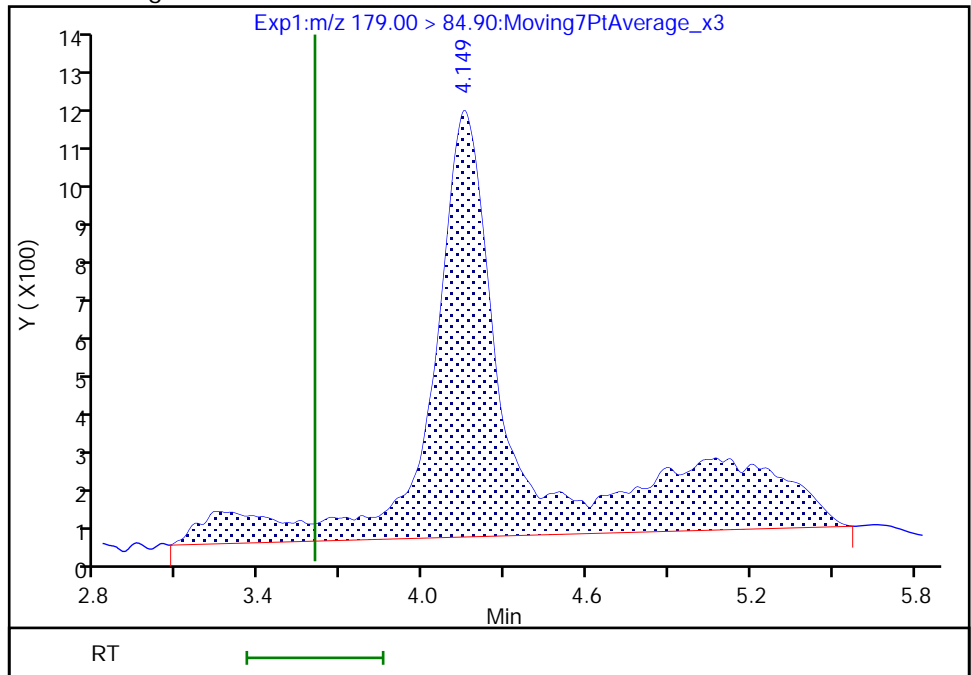
RT: 4.15
Area: 11587
Amount: 0.001768
Amount Units: ng/ml

Processing Integration Results



RT: 4.15
Area: 25223
Amount: 0.002260
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 25-Mar-2021 03:56:29
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento

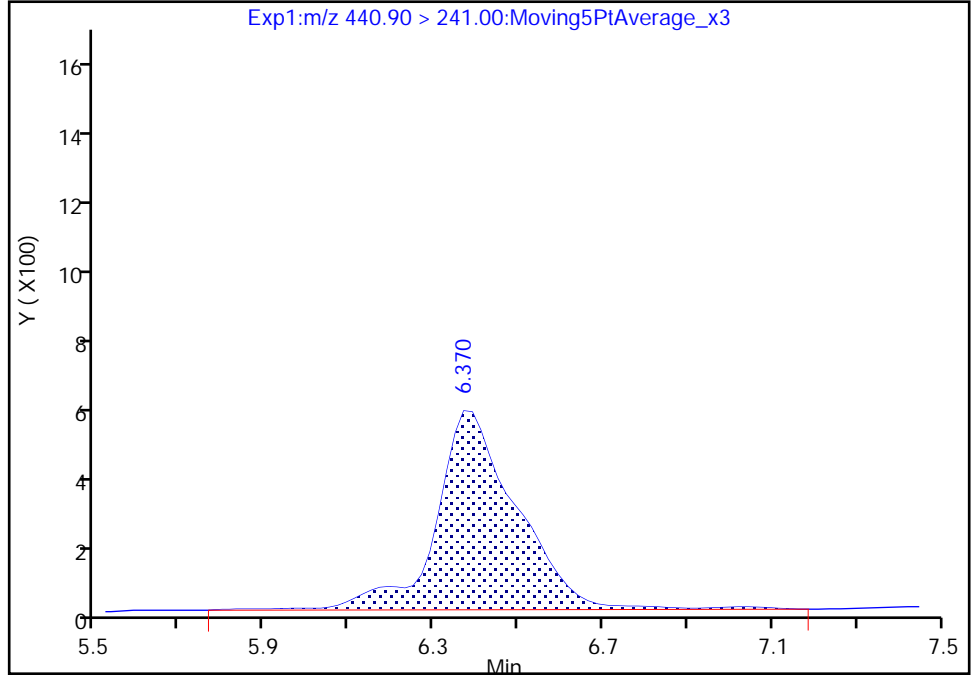
Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_003.d
Injection Date: 24-Mar-2021 12:12:21 Instrument ID: A12
Lims ID: IC STD 2
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

3 R-PSDA, CAS: 2416366-18-0

Signal: 1

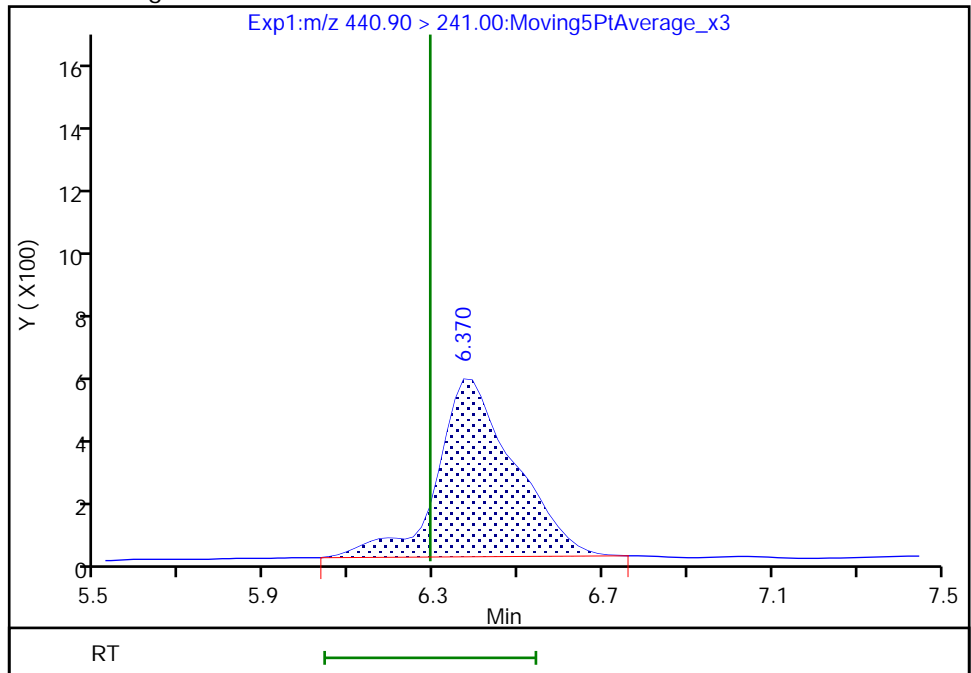
RT: 6.37
Area: 7496
Amount: 0.002408
Amount Units: ng/ml

Processing Integration Results



RT: 6.37
Area: 7042
Amount: 0.002357
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 25-Mar-2021 03:56:52
Audit Action: Manually Integrated

Audit Reason: Baseline
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Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_004.d
 Lims ID: IC STD 3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 24-Mar-2021 12:29:59 ALS Bottle#: 4 Worklist Smp#: 4
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 3 (49)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Mar-2021 04:06:21 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1601

First Level Reviewer: fariasa Date: 25-Mar-2021 03:57:30

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.694	3.603	0.091		51337	0.004600		92.0	6.5	M
2 R-EVE										
405.00 > 217.00	6.287	6.231	0.056		28920	0.004573		91.5	430	
3 R-PSDA										
440.90 > 241.00	6.327	6.291	0.036		13864	0.004640		92.8	281	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.406	6.371	0.035		55663	0.004685		93.7	591	
23 PMPA										M
229.00 > 185.00	6.637	6.593	0.044		103652	0.005673		113	120	M
5 NVHOS										
297.00 > 135.00	7.039	7.138	-0.099		24357	0.004566		91.3	411	
6 PFO2HxA										
245.00 > 85.00	7.647	7.622	0.024		59842	0.004648		93.0	728	
22 PEPA										
278.90 > 234.90	8.223	8.228	-0.005		17839	0.004049		81.0	121	
7 PES										
314.90 > 135.00	8.488	8.460	0.028		75543	0.004187		83.7	1878	
8 PFECA B										
295.00 > 201.00	8.711	8.715	-0.004		40589	0.004644		92.9	1075	
9 PFO3OA										
310.90 > 85.00	8.954	8.957	-0.003		11897	0.003928		78.6	317	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.073	9.049	0.024		1455879	0.2514		101	40500	
11 HPFO-DA										
285.00 > 169.00	9.073	9.049	0.024	1.000	29154	0.004507		90.1	623	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.425	9.396	0.029		227467	0.004682		93.6	5934	
13 Hydro-EVE Acid										
427.00 > 282.90	9.457	9.461	-0.004		321040	0.004825		96.5	4488	
D 14 13C4 PFHpA										
367.00 > 322.00	9.457	9.461	-0.004		6029842	0.2941		118	93093	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.457	9.461	-0.004	1.000	145770	0.004593	Target=0.00	91.9	1408	
363.00 > 169.00	9.457	9.461	-0.004	1.000	39863		3.66(0.00-0.00)	91.9	777	
15 Hydro-PS Acid										
463.00 > 262.90	9.490	9.461	0.029		120008	0.004855		97.1	2646	
17 PFECA G										
378.90 > 184.90	9.587	9.587	0.0		20436	0.004814		96.3	556	
18 PFO4DA										
376.90 > 85.00	9.731	9.730	0.001		24679	0.004965		99.3	707	
19 PS Acid										
443.00 > 146.90	9.817	9.788	0.029		55653	0.004790		95.8	1603	
20 EVE Acid										
407.00 > 262.90	9.817	9.817	0.0		247054	0.005284		106	7106	
21 TAF										
442.90 > 85.00	10.322	10.293	0.029		16870	0.004364		87.3	179	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD3_00049

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_004.d

Injection Date: 24-Mar-2021 12:29:59

Instrument ID: A12

Lims ID: IC STD 3

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 4

Worklist Smp#: 4

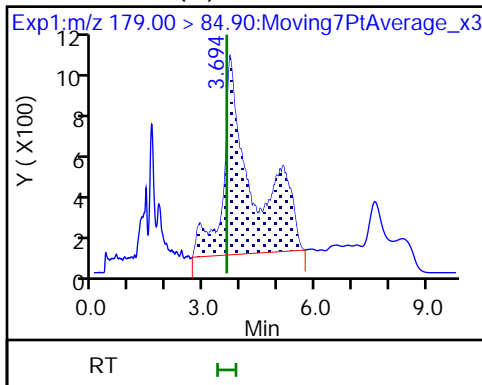
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

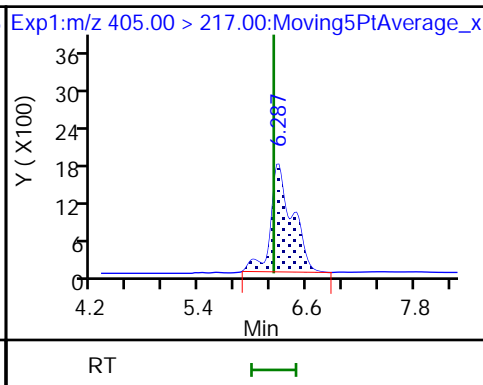
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

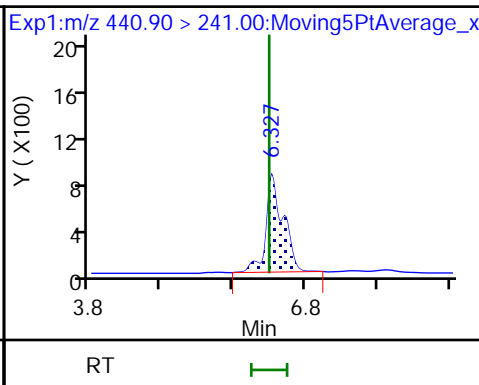
1 PFMOAA (M)



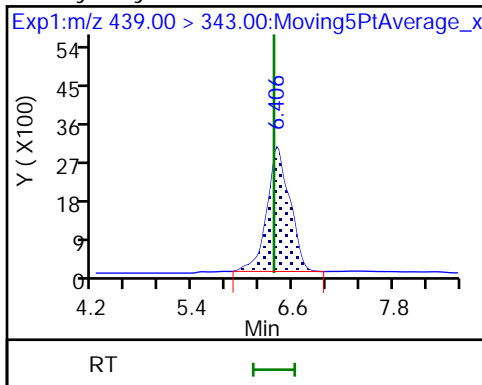
2 R-EVE



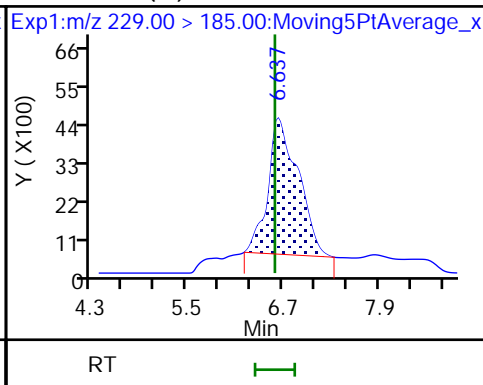
3 R-PSDA



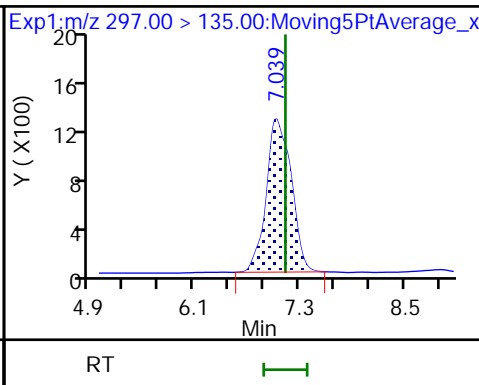
4 Hydrolyzed PSDA



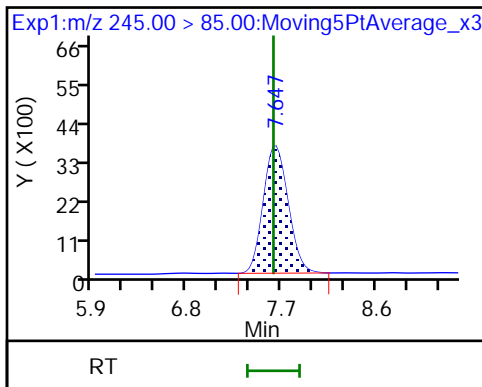
23 PMPA (M)



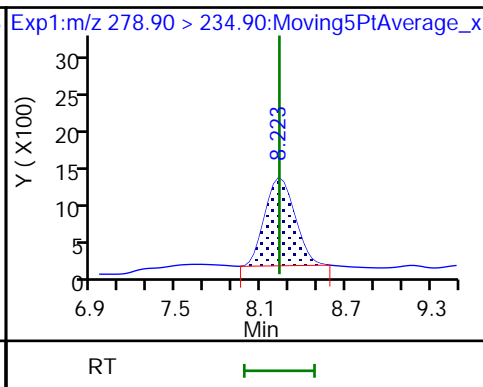
5 NVHOS



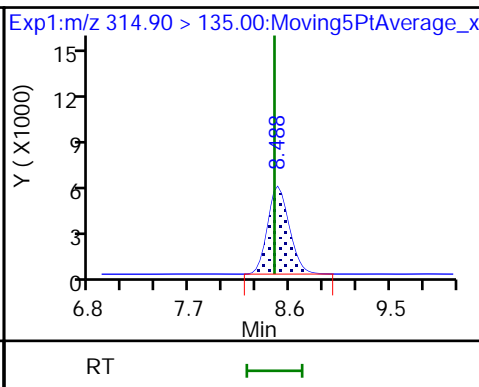
6 PFO2HxA



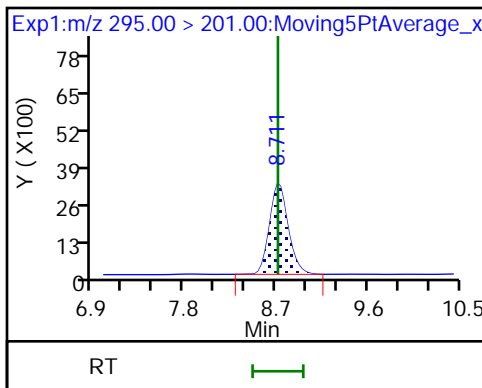
22 PEPA



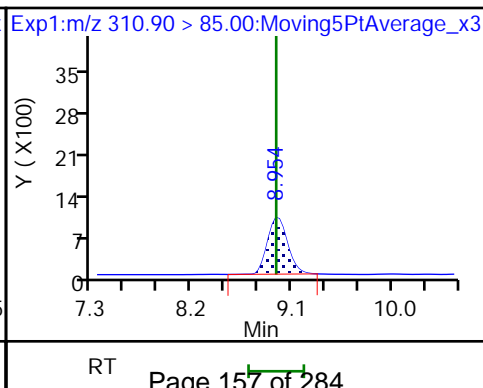
7 PES



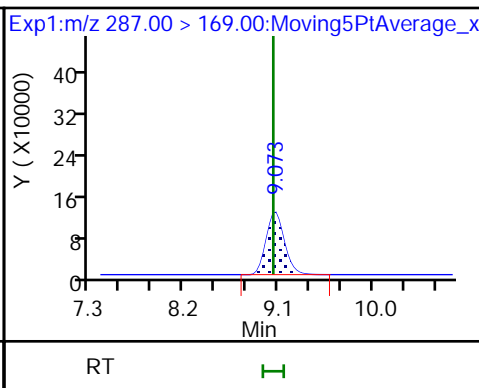
8 PFECA B

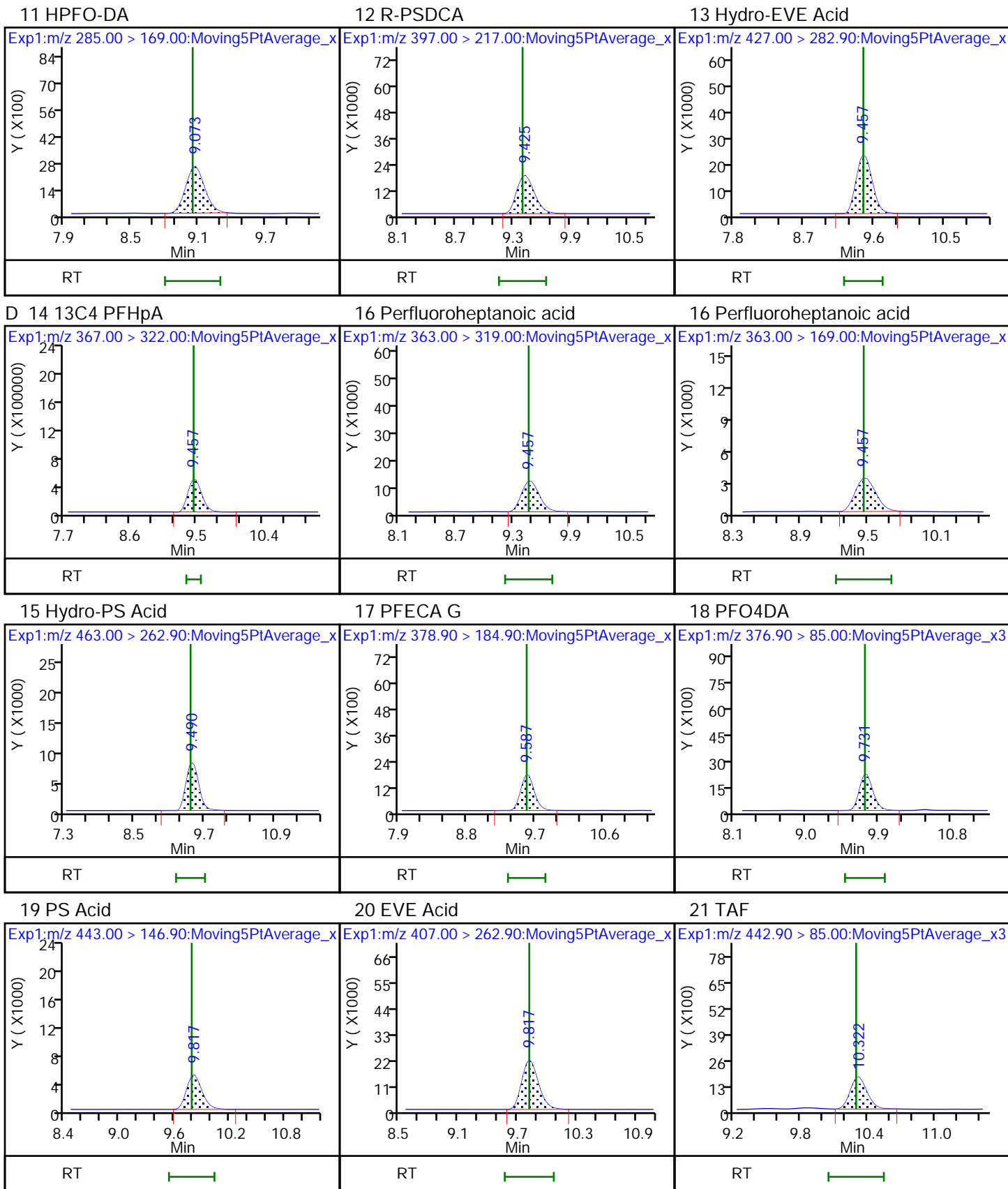


9 PFO3OA



D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

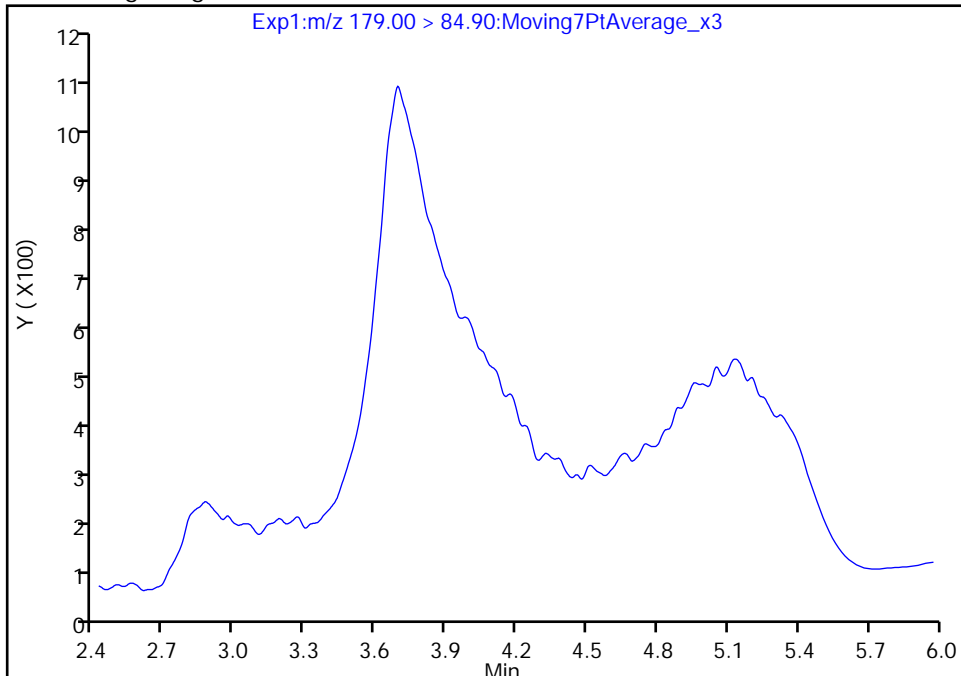
Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_004.d
Injection Date: 24-Mar-2021 12:29:59 Instrument ID: A12
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

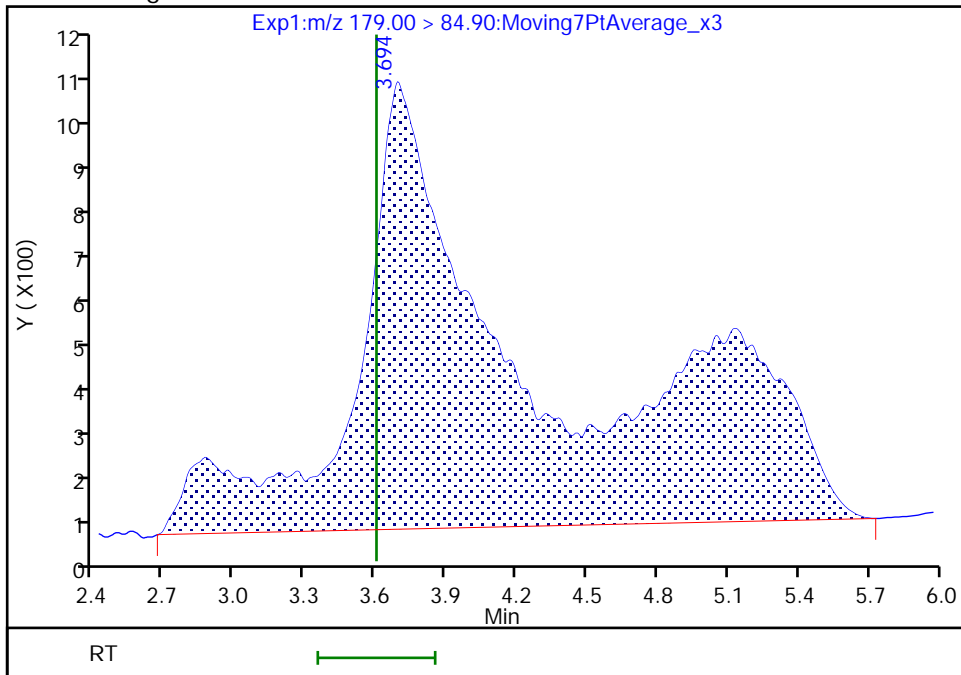
Not Detected
Expected RT: 3.60

Processing Integration Results



Manual Integration Results

RT: 3.69
Area: 51337
Amount: 0.004600
Amount Units: ng/ml



Reviewer: fariasa, 25-Mar-2021 03:57:07
Audit Action: Manually Integrated

Audit Reason: Assign Peak
Page 160 of 284

Eurofins TestAmerica, Sacramento

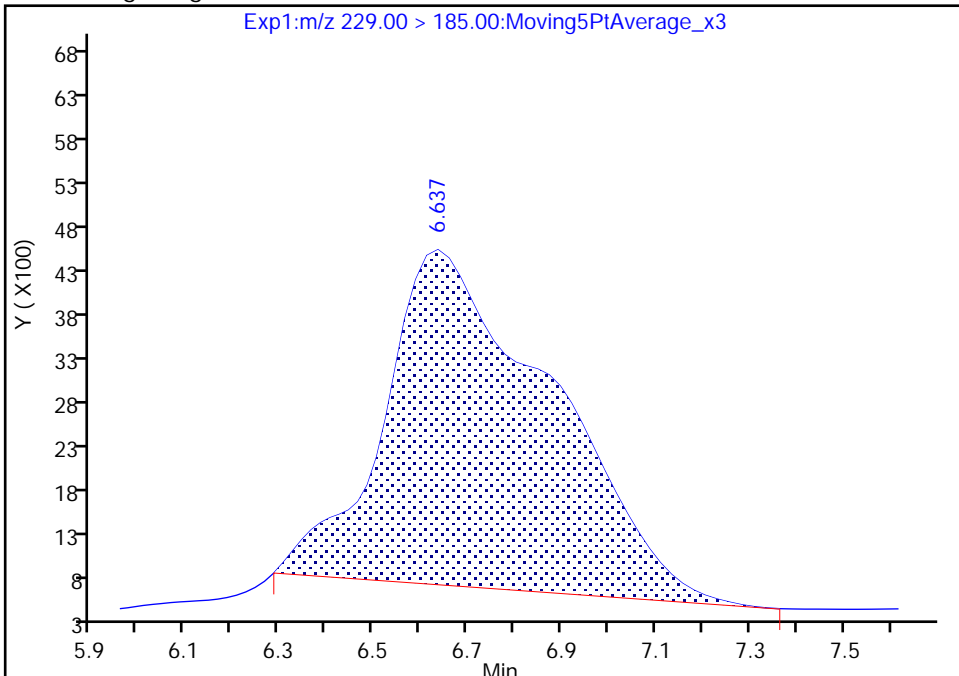
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Injection Date: 24-Mar-2021 12:29:59 Instrument ID: A12
Lims ID: IC STD 3
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

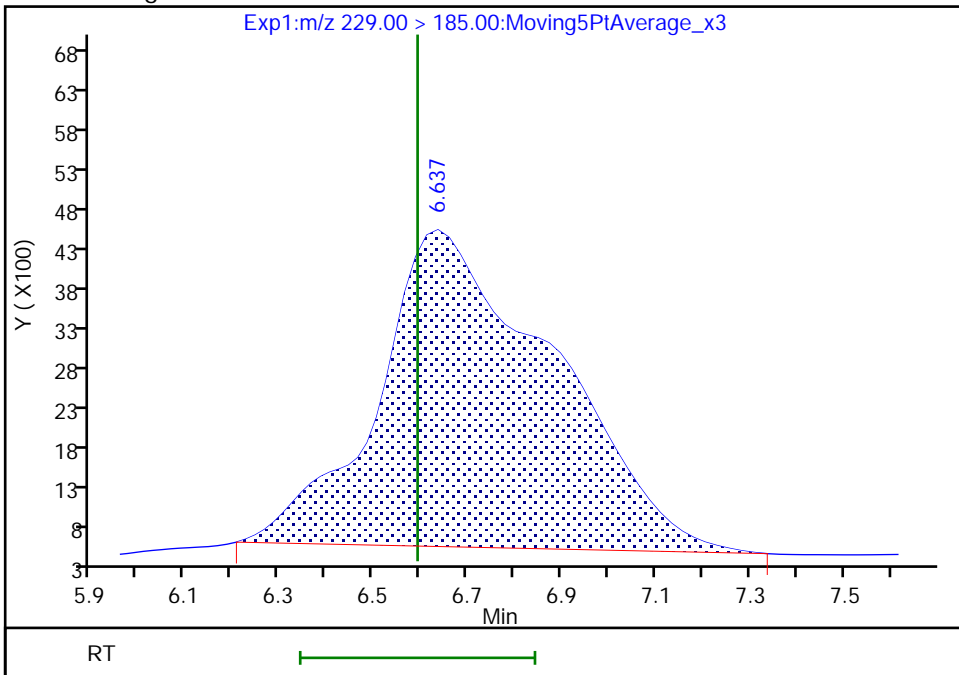
RT: 6.64
Area: 95006
Amount: 0.004688
Amount Units: ng/ml

Processing Integration Results



RT: 6.64
Area: 103652
Amount: 0.005673
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 25-Mar-2021 03:57:19
Audit Action: Manually Integrated

Audit Reason: Baseline
Page 161 of 284

Eurofins TestAmerica, Sacramento
 Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_005.d
 Lims ID: IC STD 4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 24-Mar-2021 12:47:34 ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 4 (48)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Mar-2021 04:06:22 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1601

First Level Reviewer: fariasa Date: 25-Mar-2021 03:58:00

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.522	3.603	-0.081		102824	0.009213		92.1	9.6	M
2 R-EVE										M
405.00 > 217.00	6.227	6.231	-0.004		57135	0.009034		90.3	692	M
3 R-PSDA										
440.90 > 241.00	6.287	6.291	-0.004		27622	0.009245		92.4	451	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.367	6.371	-0.004		110532	0.009303		93.0	1266	
23 PMPA										
229.00 > 185.00	6.590	6.593	-0.003		182172	0.0100		99.7	208	
5 NVHOS										
297.00 > 135.00	7.016	7.138	-0.122		48861	0.009160		91.6	744	
6 PFO2HxA										
245.00 > 85.00	7.647	7.622	0.025		117543	0.009130		91.3	1342	
22 PEPA										
278.90 > 234.90	8.223	8.228	-0.005		40568	0.009209		92.1	292	
7 PES										
314.90 > 135.00	8.488	8.460	0.028		158127	0.008763		87.6	3875	
8 PFECA B										
295.00 > 201.00	8.712	8.715	-0.003		85494	0.009782		97.8	2256	
9 PFO3OA										
310.90 > 85.00	8.954	8.957	-0.003		25777	0.008511		85.1	691	
11 HPFO-DA										
285.00 > 169.00	9.074	9.049	0.025	1.000	55320	0.008384		83.8	1550	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.074	9.049	0.025		1485150	0.2564		103	30853	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.425	9.396	0.029		465355	0.009579		95.8	12113	
13 Hydro-EVE Acid										
427.00 > 282.90	9.457	9.461	-0.004		646635	0.009719		97.2	9030	
D 14 13C4 PFHpA										
367.00 > 322.00	9.457	9.461	-0.004		5096782	0.2486		99.4	65589	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.457	9.461	-0.004	1.000	230359	0.008938	Target=0.00	89.4	1780	
363.00 > 169.00	9.457	9.461	-0.004	1.000	64474		3.57(0.00-0.00)	89.4	1000	
15 Hydro-PS Acid										
463.00 > 262.90	9.490	9.461	0.029		226869	0.009177		91.8	4989	
17 PFECA G										
378.90 > 184.90	9.587	9.587	0.0		40093	0.009445		94.4	1087	
18 PFO4DA										
376.90 > 85.00	9.731	9.730	0.001		48621	0.009781		97.8	1394	
19 PS Acid										
443.00 > 146.90	9.817	9.788	0.029		108865	0.009370		93.7	3127	
20 EVE Acid										
407.00 > 262.90	9.817	9.817	0.0		445413	0.009526		95.3	12800	
21 TAF										
442.90 > 85.00	10.296	10.293	0.003		35467	0.009175		91.8	336	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD4_00048

Amount Added: 1.00

Units: mL

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Injection Date: 24-Mar-2021 12:47:34

Instrument ID: A12

Lims ID: IC STD 4

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 5

Worklist Smp#: 5

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

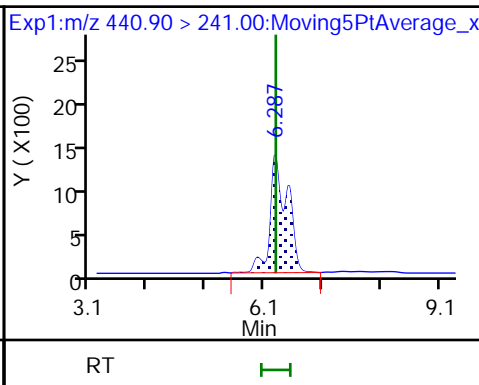
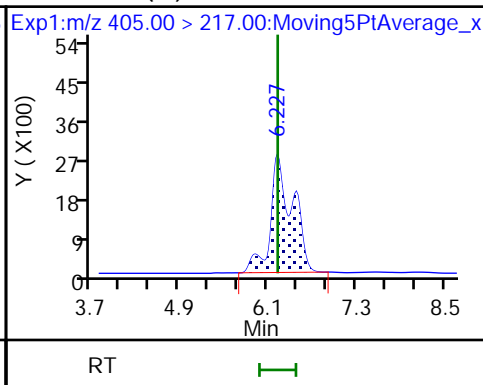
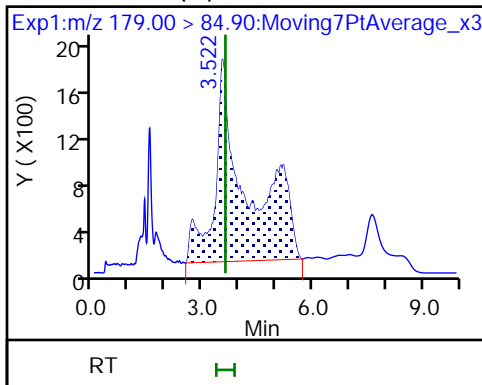
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

1 PFMOAA (M)

2 R-EVE (M)

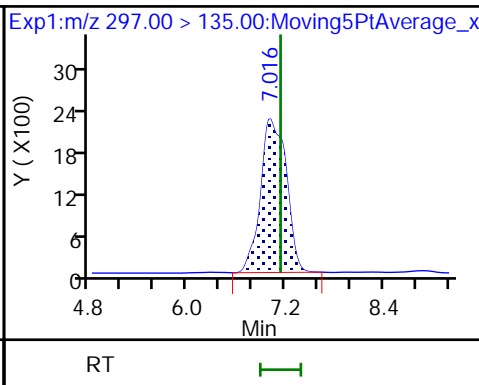
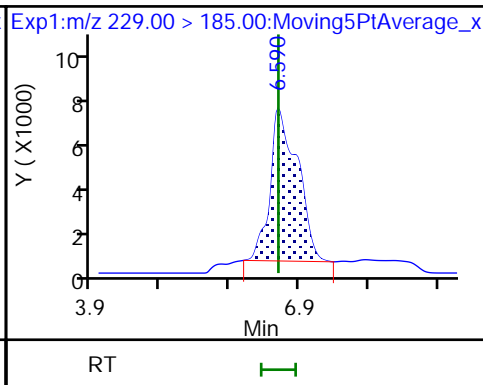
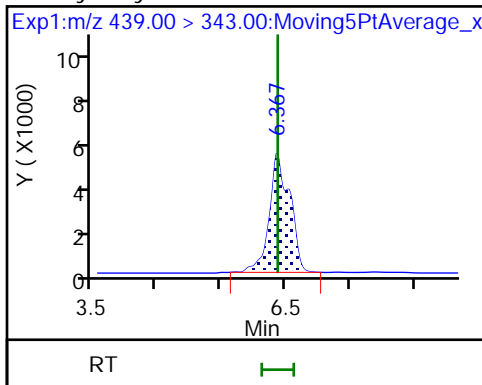
3 R-PSDA



4 Hydrolyzed PSDA

23 PMPA

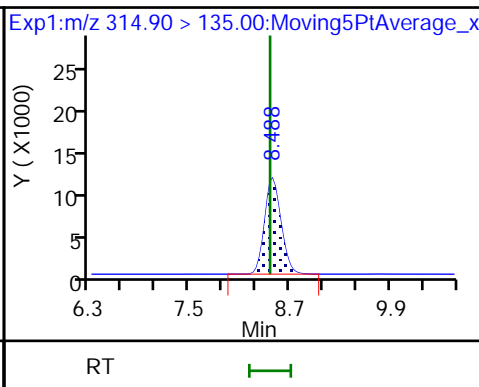
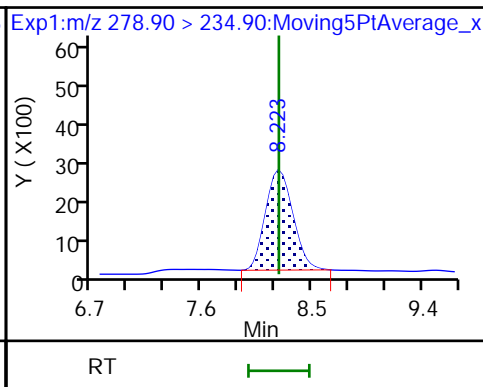
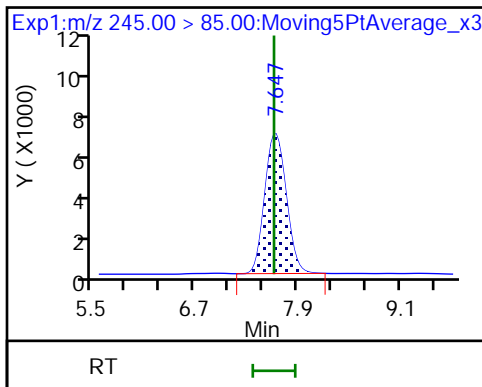
5 NVHOS



6 PFO2HxA

22 PEPA

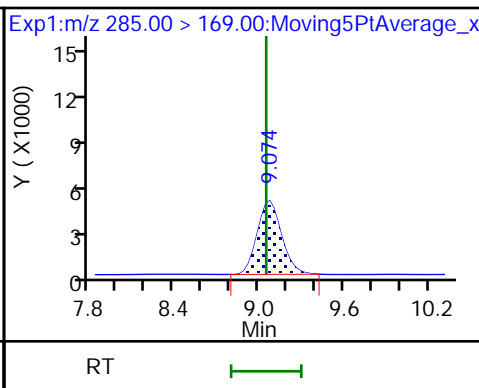
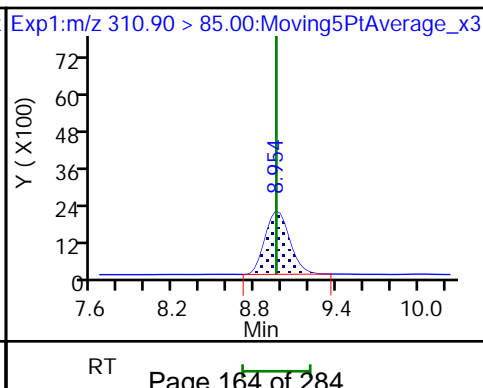
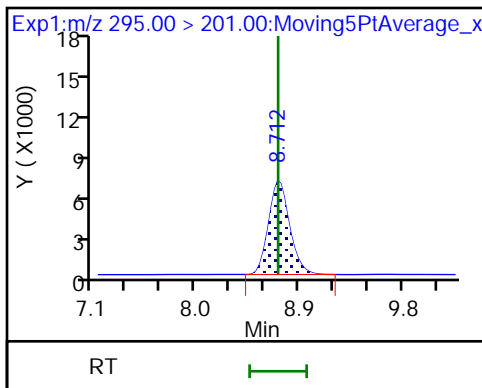
7 PES



8 PFECA B

9 PFO3OA

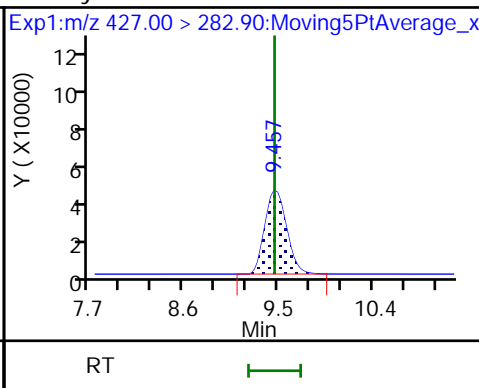
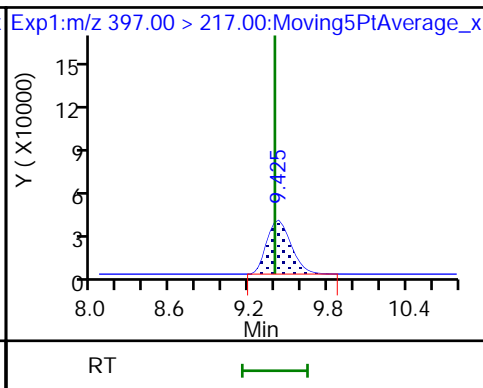
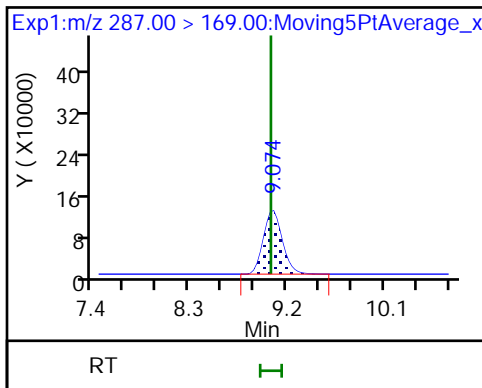
11 HPFO-DA



D 10 13C3 HFPO-DA

12 R-PSDCA

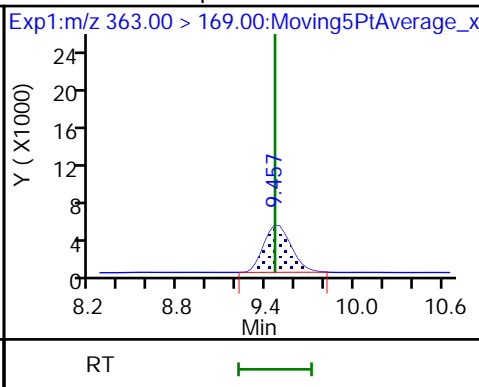
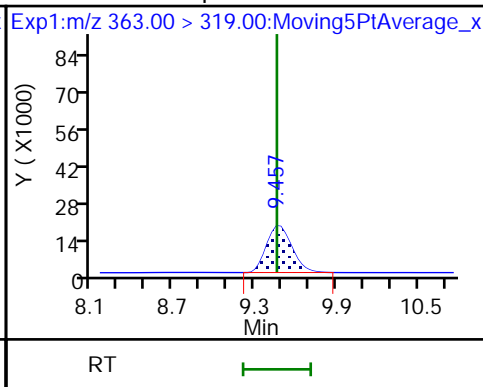
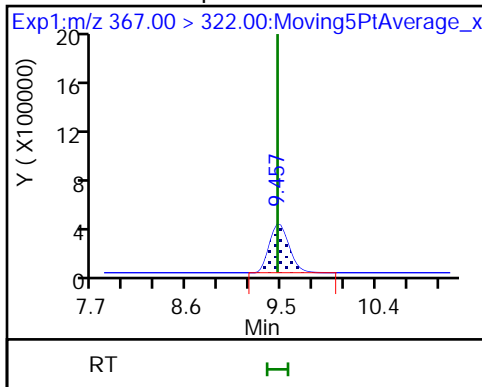
13 Hydro-EVE Acid



D 14 13C4 PFHpA

16 Perfluoroheptanoic acid

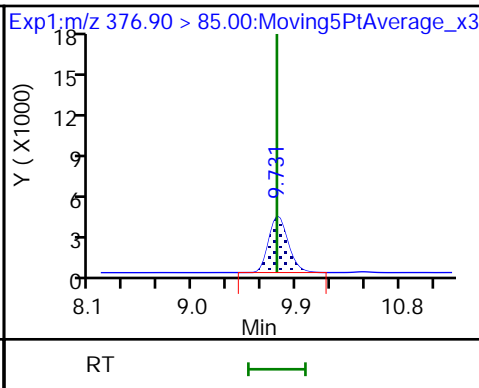
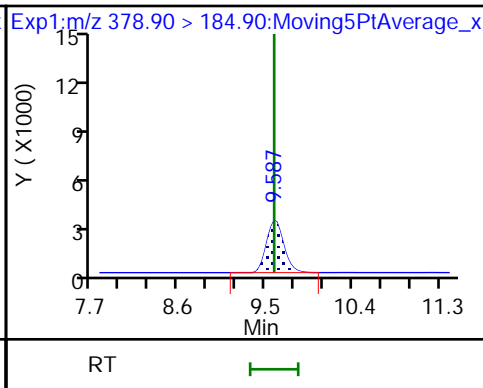
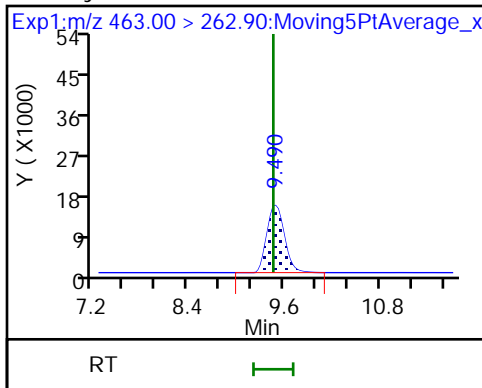
16 Perfluoroheptanoic acid



15 Hydro-PS Acid

17 PFECA G

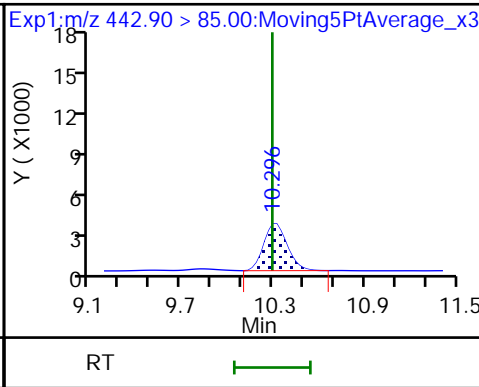
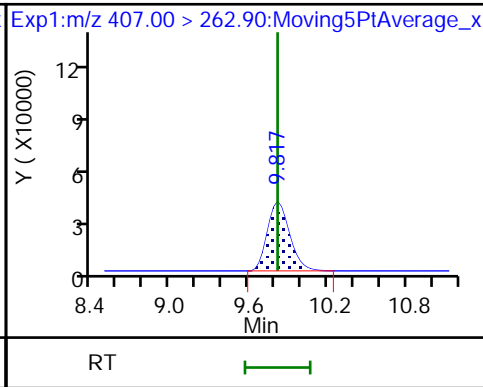
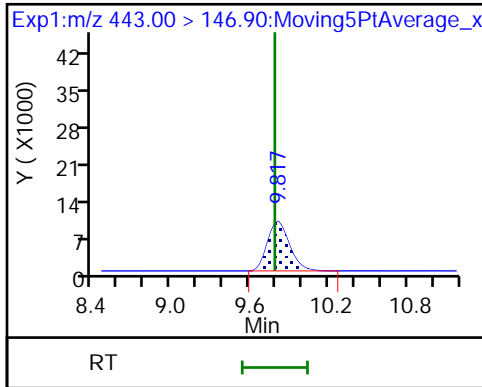
18 PFO4DA



19 PS Acid

20 EVE Acid

21 TAF



Eurofins TestAmerica, Sacramento

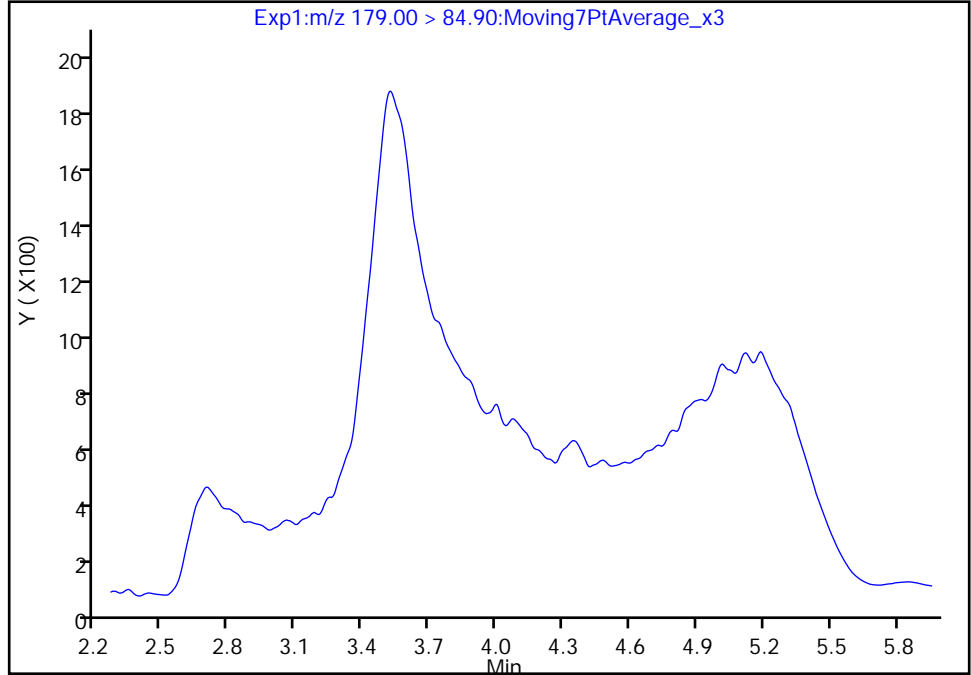
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Injection Date: 24-Mar-2021 12:47:34 Instrument ID: A12
Lims ID: IC STD 4
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

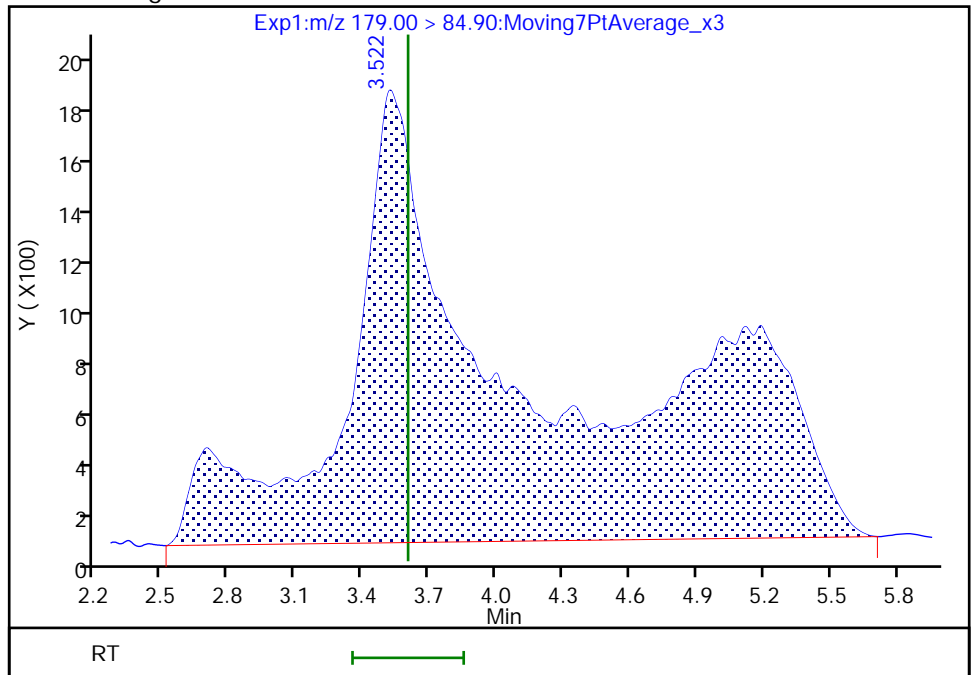
Not Detected
Expected RT: 3.60

Processing Integration Results



Manual Integration Results

RT: 3.52
Area: 102824
Amount: 0.009213
Amount Units: ng/ml



Reviewer: fariasa, 25-Mar-2021 03:57:41
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

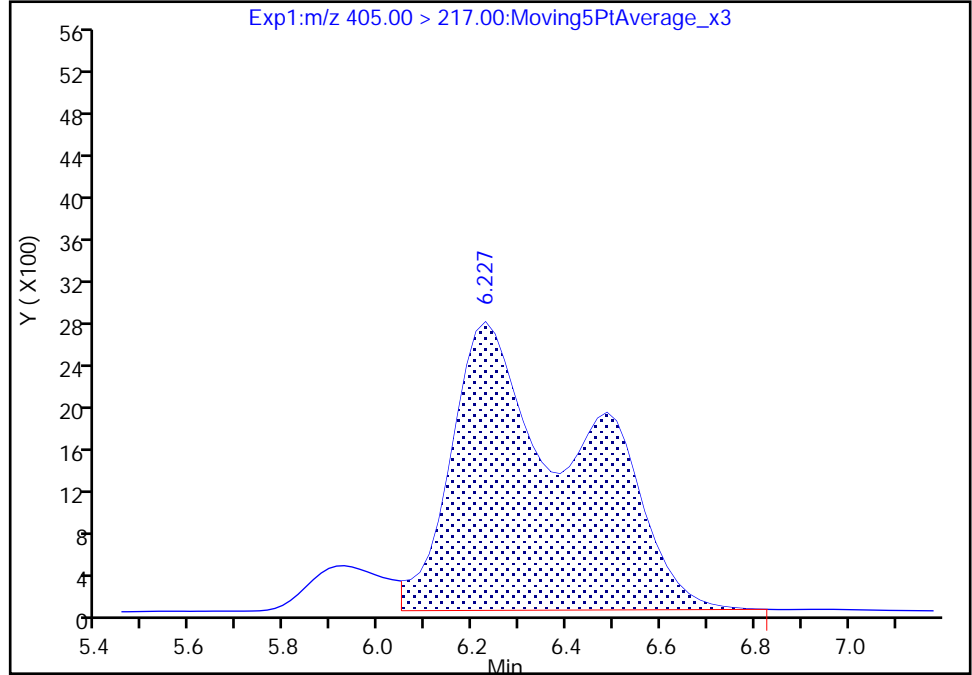
Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_005.d
Injection Date: 24-Mar-2021 12:47:34 Instrument ID: A12
Lims ID: IC STD 4
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

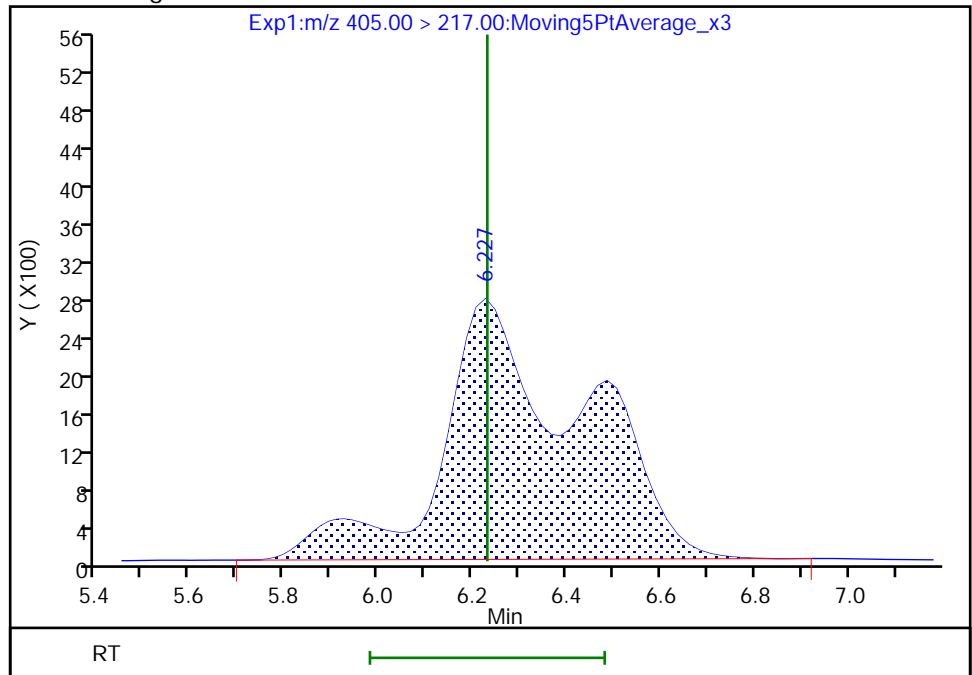
RT: 6.23
Area: 52272
Amount: 0.008235
Amount Units: ng/ml

Processing Integration Results



RT: 6.23
Area: 57135
Amount: 0.009034
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 25-Mar-2021 03:57:48
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_006.d
 Lims ID: IC STD 5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 24-Mar-2021 13:05:10 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 5 (58)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Mar-2021 04:06:22 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1601

First Level Reviewer: fariasa Date: 25-Mar-2021 03:58:27

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.046	3.603	0.443		254496	0.0228		91.2	45.9	M
2 R-EVE										M
405.00 > 217.00	6.310	6.231	0.079		144650	0.0229		91.5	2550	M
3 R-PSDA										
440.90 > 241.00	6.350	6.291	0.059		63982	0.0214		85.7	1501	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.430	6.371	0.059		263816	0.0222		88.8	4009	
23 PMPA										
229.00 > 185.00	6.664	6.593	0.071		386613	0.0212		84.6	715	
5 NVHOS										
297.00 > 135.00	7.043	7.138	-0.095		115889	0.0217		86.9	2450	
6 PFO2HxA										
245.00 > 85.00	7.621	7.622	-0.001		286105	0.0222		88.9	4819	
22 PEPA										
278.90 > 234.90	8.228	8.228	0.0		94695	0.0215		86.0	709	
7 PES										
314.90 > 135.00	8.490	8.460	0.030		380604	0.0211		84.4	9571	
8 PFECA B										
295.00 > 201.00	8.714	8.715	-0.001		201967	0.0231		92.4	5382	
9 PFO3OA										
310.90 > 85.00	8.956	8.957	-0.001		65091	0.0215		86.0	1739	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.048	9.049	-0.001		1403460	0.2423		96.9	29387	
11 HPFO-DA										
285.00 > 169.00	9.048	9.049	-0.001	1.000	144400	0.0232		92.6	4012	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.395	9.396	-0.001		1175605	0.0242		96.8	30486	
13 Hydro-EVE Acid										
427.00 > 282.90	9.460	9.461	-0.001		1580680	0.0238		95.0	21706	
D 14 13C4 PFHpA										
367.00 > 322.00	9.460	9.461	-0.001		5197256	0.2535		101	80826	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.460	9.461	-0.001	1.000	572087	0.0223	Target=0.00	89.4	4455	
363.00 > 169.00	9.460	9.461	-0.001	1.000	170050		3.36(0.00-0.00)	89.4	3319	
15 Hydro-PS Acid										
463.00 > 262.90	9.460	9.461	-0.001		531327	0.0215		86.0	11749	
17 PFECA G										
378.90 > 184.90	9.590	9.587	0.003		96315	0.0227		90.8	2611	
18 PFO4DA										
376.90 > 85.00	9.734	9.730	0.004		96224	0.0194		77.4	2758	
19 PS Acid										
443.00 > 146.90	9.791	9.788	0.003		265981	0.0229		91.6	7652	
20 EVE Acid										
407.00 > 262.90	9.820	9.817	0.003		1086168	0.0232		92.9	23121	
21 TAF										
442.90 > 85.00	10.296	10.293	0.003		80807	0.0209		83.6	705	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD5_00058

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_006.d

Injection Date: 24-Mar-2021 13:05:10

Instrument ID: A12

Lims ID: IC STD 5

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 6

Worklist Smp#: 6

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

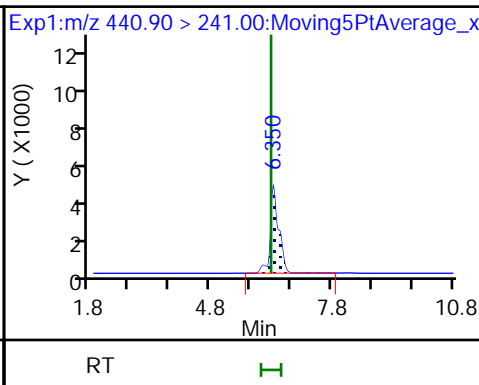
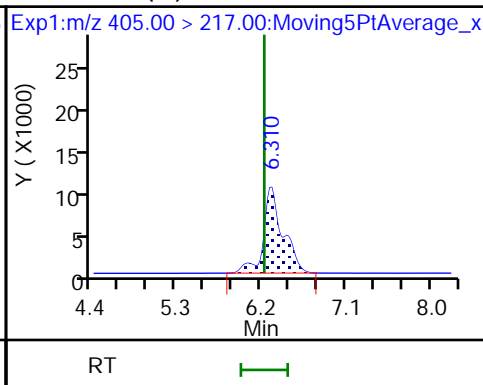
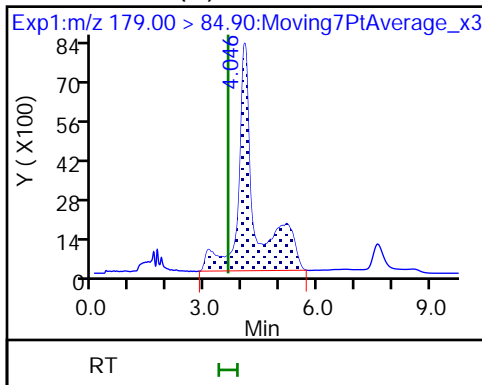
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

1 PFMOAA (M)

2 R-EVE (M)

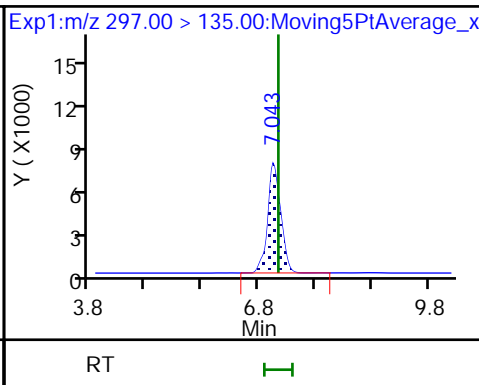
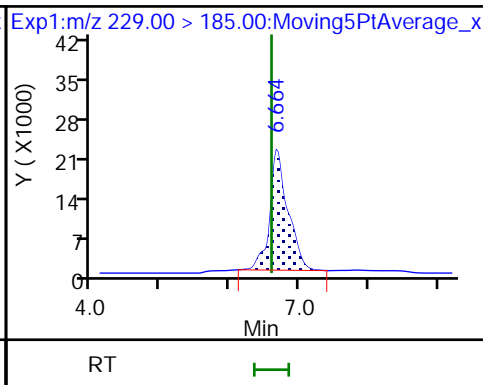
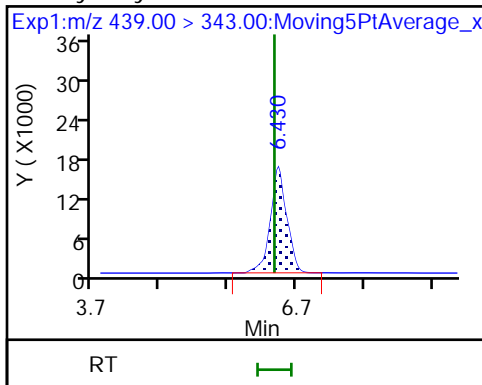
3 R-PSDA



4 Hydrolyzed PSDA

23 PMPA

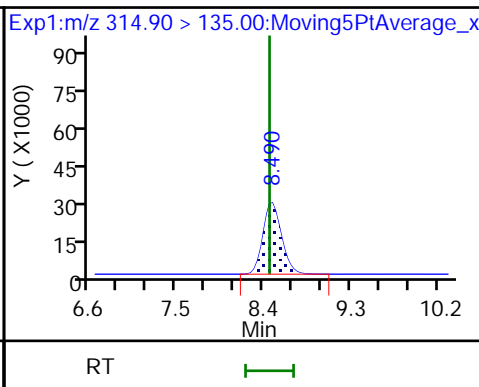
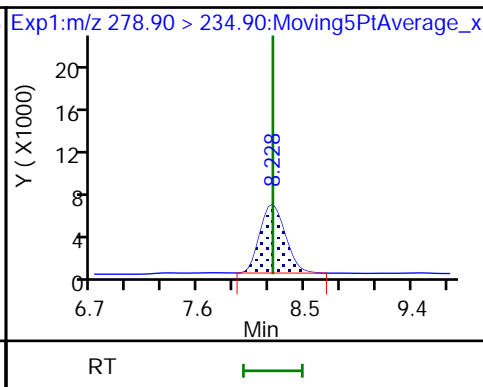
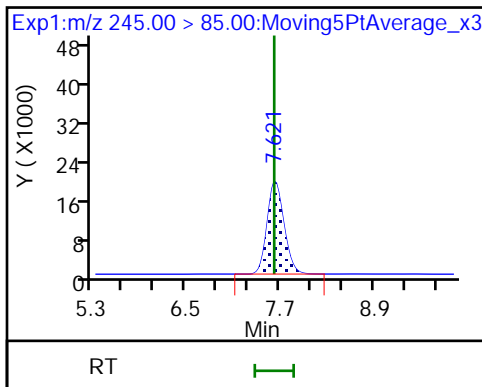
5 NVHOS



6 PFO2HxA

22 PEPA

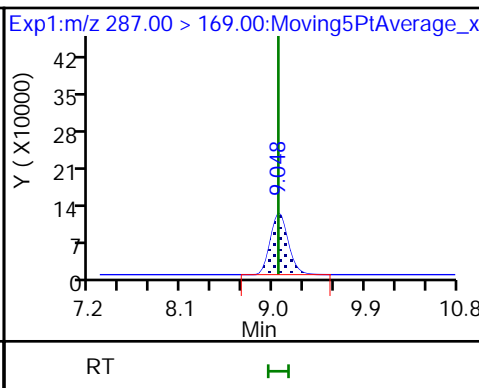
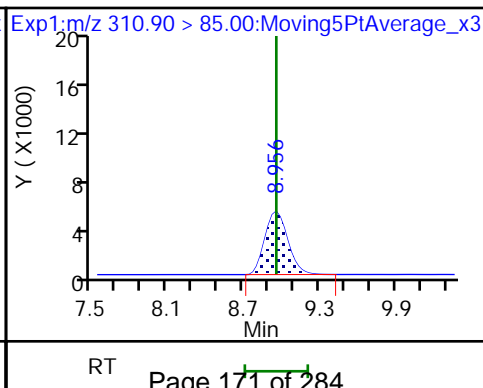
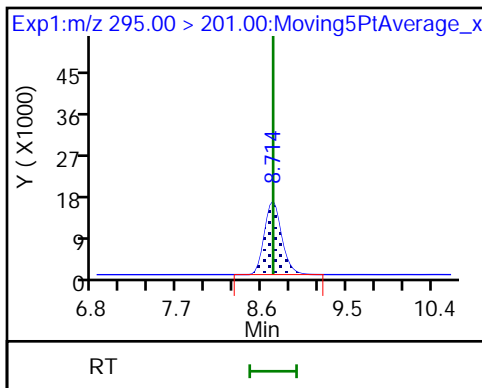
7 PES

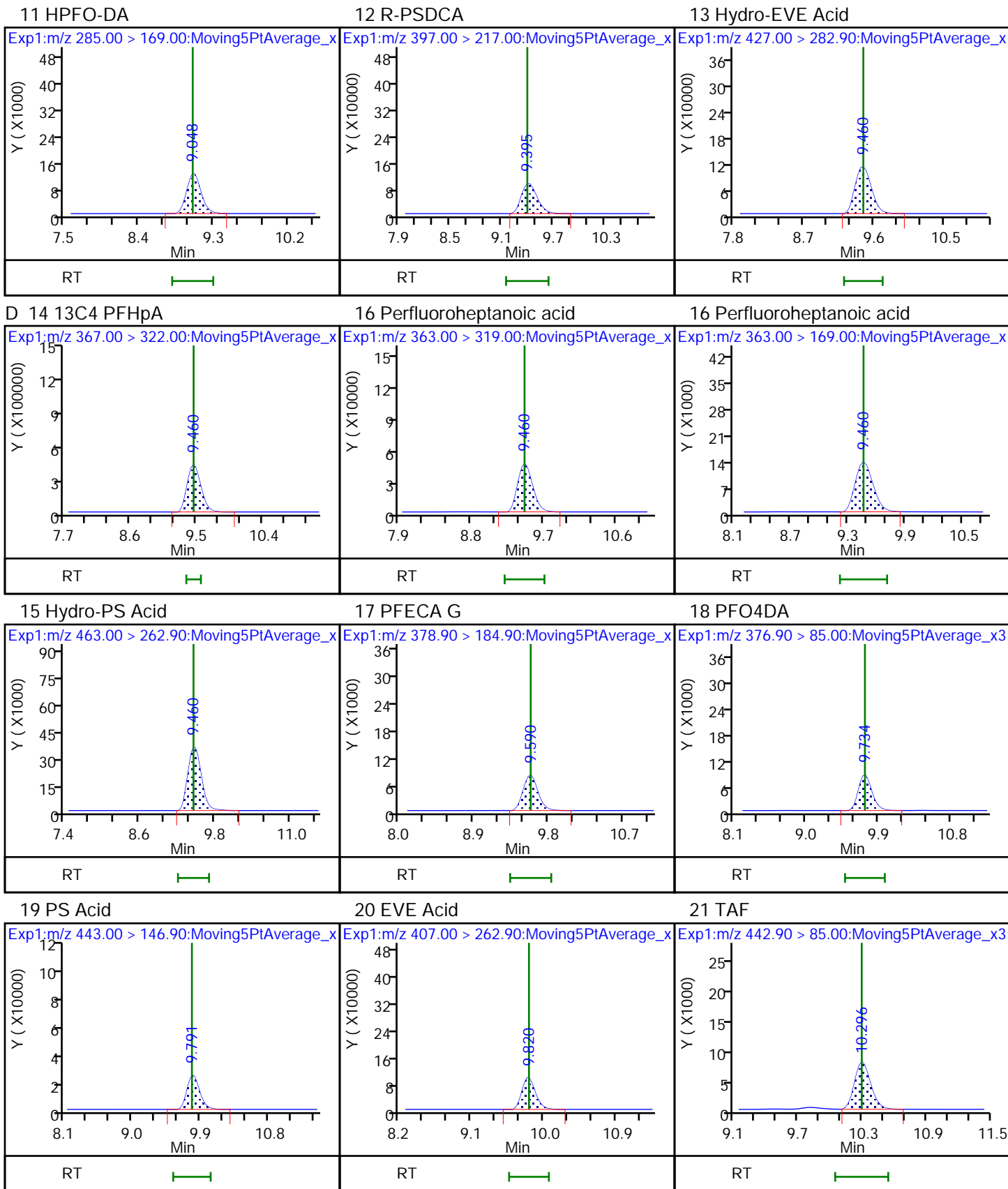


8 PFECA B

9 PFO3OA

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

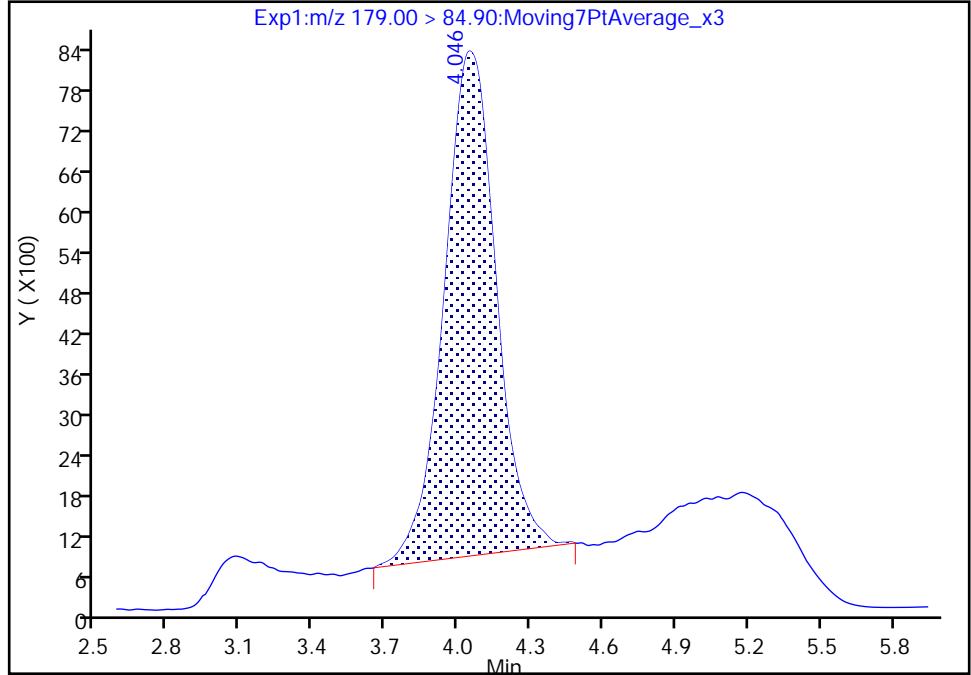
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Injection Date: 24-Mar-2021 13:05:10 Instrument ID: A12
Lims ID: IC STD 5
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

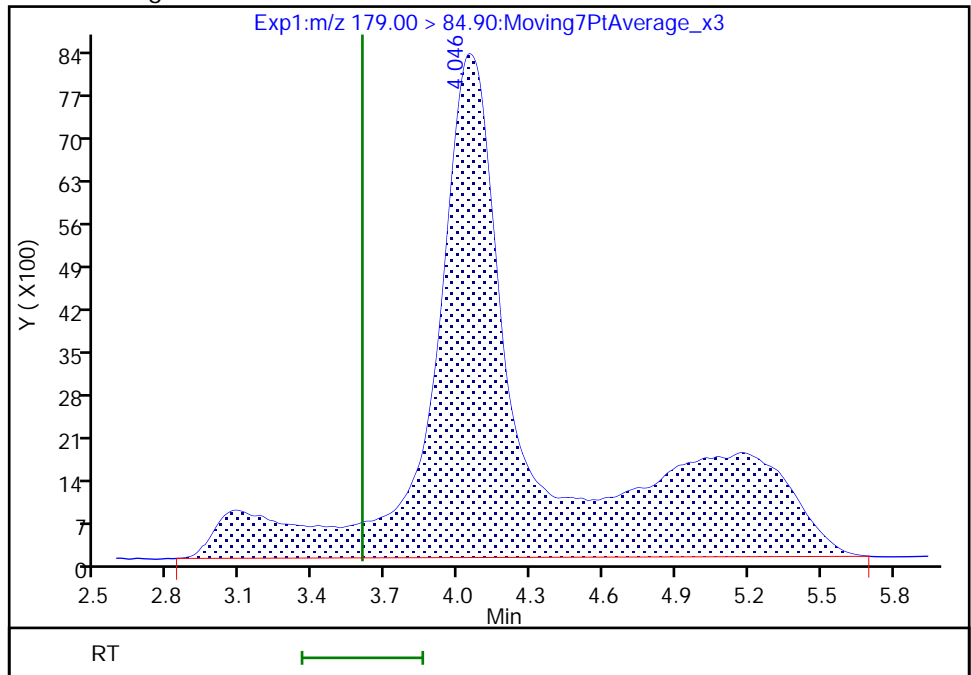
RT: 4.05
Area: 112115
Amount: 0.014036
Amount Units: ng/ml

Processing Integration Results



RT: 4.05
Area: 254496
Amount: 0.022803
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 25-Mar-2021 03:58:09
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

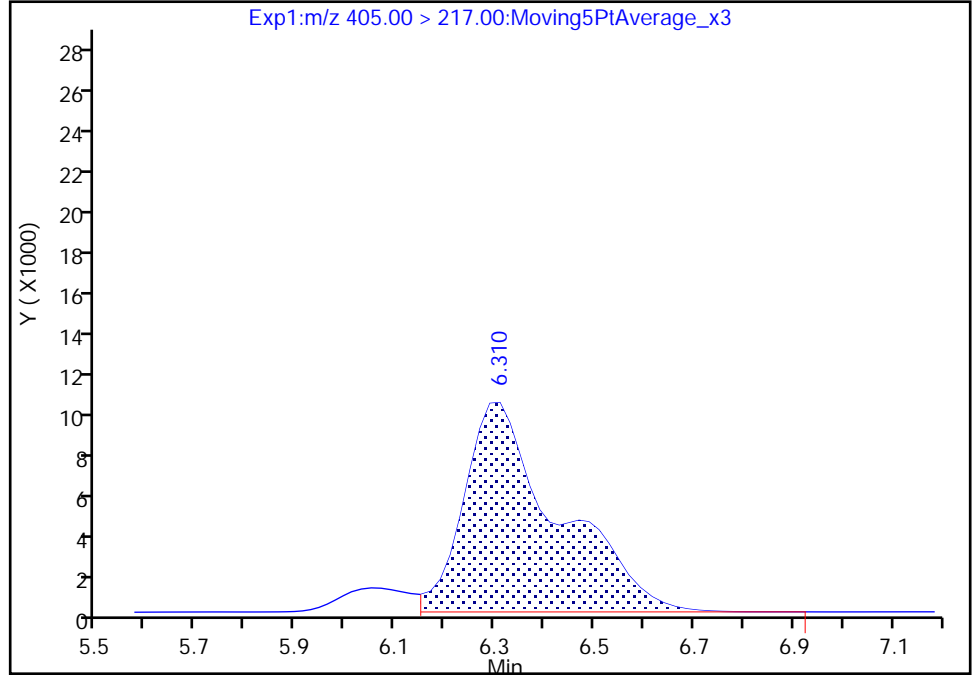
Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_006.d
Injection Date: 24-Mar-2021 13:05:10 Instrument ID: A12
Lims ID: IC STD 5
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

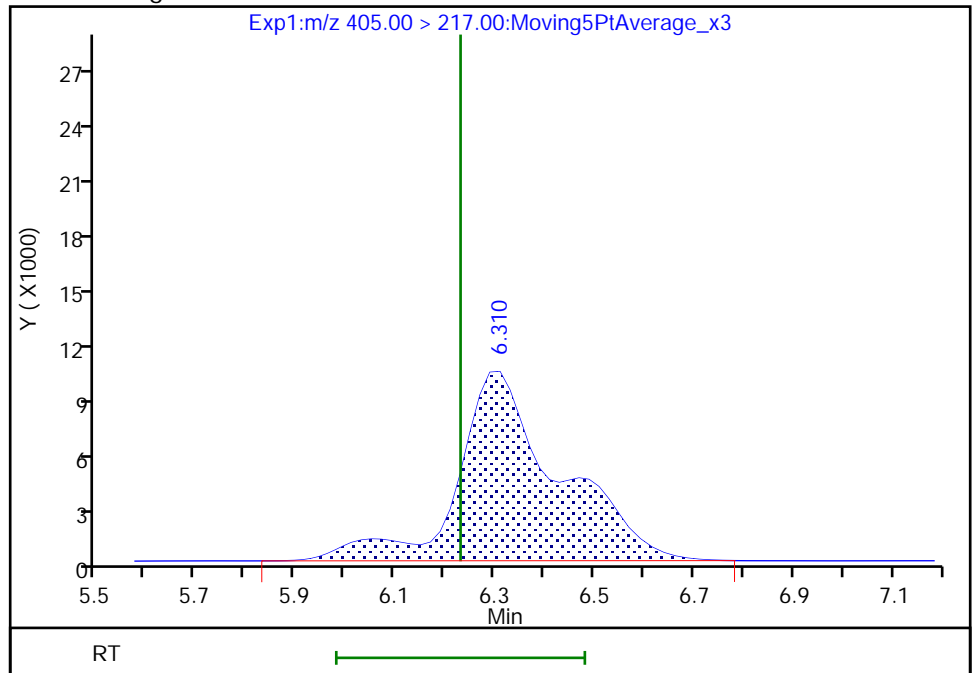
RT: 6.31
Area: 133605
Amount: 0.020888
Amount Units: ng/ml

Processing Integration Results



RT: 6.31
Area: 144650
Amount: 0.022871
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 25-Mar-2021 03:58:15
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_007.d
 Lims ID: IC STD 6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 24-Mar-2021 13:22:43 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 6 (92)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Mar-2021 04:06:23 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1601

First Level Reviewer: fariasa Date: 25-Mar-2021 03:58:55

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.124	3.603	0.521		596974	0.0535		107	140	M
2 R-EVE										M
405.00 > 217.00	6.307	6.231	0.076		333163	0.0527		105	6184	M
3 R-PSDA										
440.90 > 241.00	6.367	6.291	0.076		151464	0.0507		101	3769	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.446	6.371	0.075		619145	0.0521		104	10025	
23 PMPA										
229.00 > 185.00	6.684	6.593	0.091		876761	0.0480		96.0	1647	
5 NVHOS										
297.00 > 135.00	7.063	7.138	-0.075		277264	0.0520		104	6183	
6 PFO2HxA										
245.00 > 85.00	7.618	7.622	-0.004		662499	0.0515		103	11528	
22 PEPA										
278.90 > 234.90	8.223	8.228	-0.005		246533	0.0560		112	1867	
7 PES										
314.90 > 135.00	8.457	8.460	-0.003		919147	0.0509		102	22916	
8 PFECA B										
295.00 > 201.00	8.712	8.715	-0.003		471615	0.0540		108	12668	
9 PFO3OA										
310.90 > 85.00	8.954	8.957	-0.003		177919	0.0587		117	4743	
11 HPFO-DA										
285.00 > 169.00	9.045	9.049	-0.004	1.000	346444	0.0561		112	9720	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.045	9.049	-0.004		1391003	0.2402		96.1	29197	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.393	9.396	-0.003		2667746	0.0549		110	52224	
13 Hydro-EVE Acid										
427.00 > 282.90	9.425	9.461	-0.036		3816250	0.0574		115	53021	
D 14 13C4 PFHpA										
367.00 > 322.00	9.458	9.461	-0.003		5468334	0.2667		107	85073	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.458	9.461	-0.003	1.000	1397019	0.0524	Target=0.00	105	12091	
363.00 > 169.00	9.458	9.461	-0.003	1.000	393663		3.55(0.00-0.00)	105	7655	
15 Hydro-PS Acid										
463.00 > 262.90	9.458	9.461	-0.003		1378674	0.0558		112	30299	
17 PFECA G										
378.90 > 184.90	9.587	9.587	0.0		243817	0.0574		115	6584	
18 PFO4DA										
376.90 > 85.00	9.731	9.730	0.001		317191	0.0638		128	6815	
19 PS Acid										
443.00 > 146.90	9.788	9.788	0.0		648456	0.0558		112	18690	
20 EVE Acid										
407.00 > 262.90	9.788	9.817	-0.029		2534902	0.0542		108	54212	
21 TAF										
442.90 > 85.00	10.296	10.293	0.003		233579	0.0604		121	1483	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD6_00091

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_007.d

Injection Date: 24-Mar-2021 13:22:43

Instrument ID: A12

Lims ID: IC STD 6

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 7

Worklist Smp#: 7

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

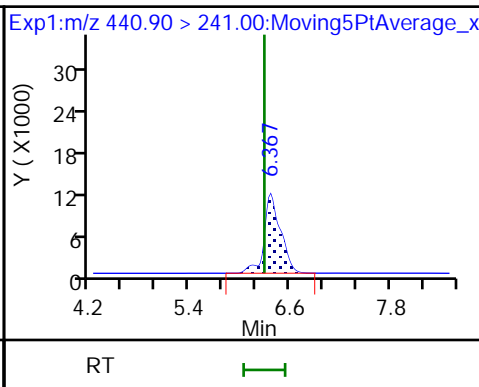
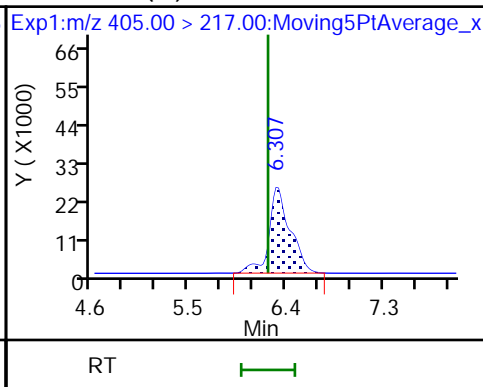
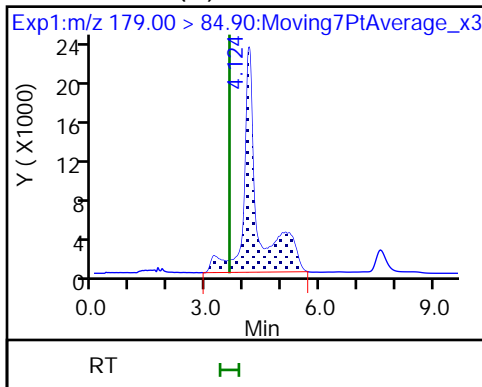
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

1 PFMOAA (M)

2 R-EVE (M)

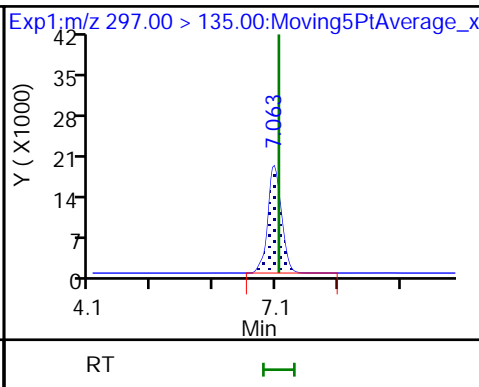
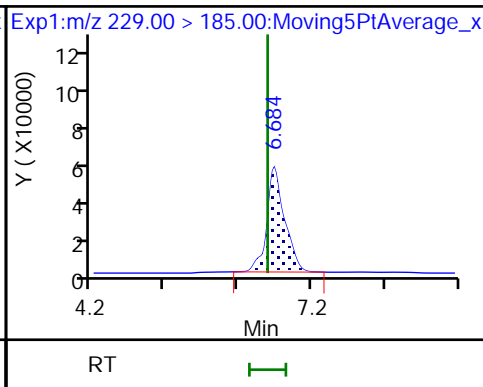
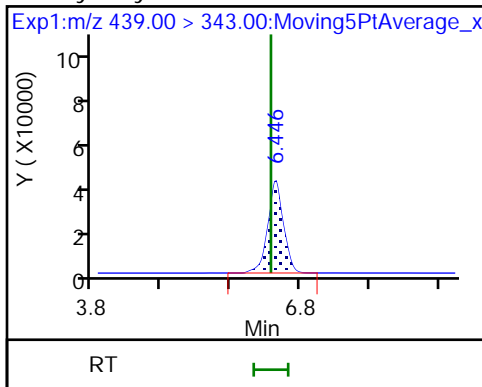
3 R-PSDA



4 Hydrolyzed PSDA

23 PMPA

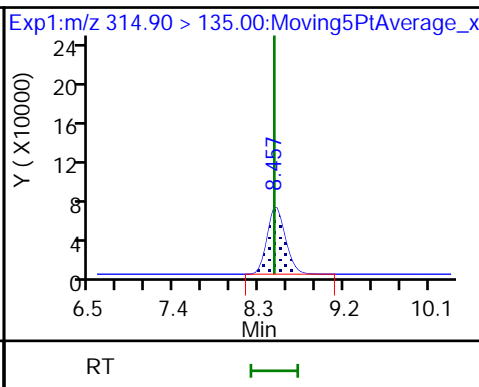
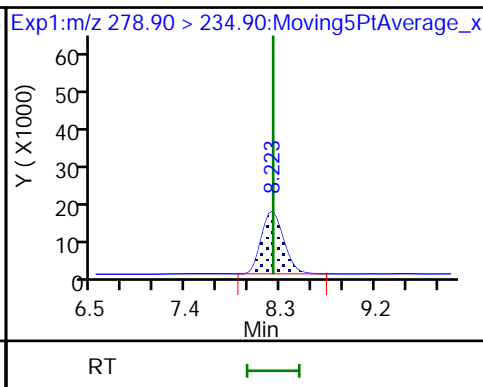
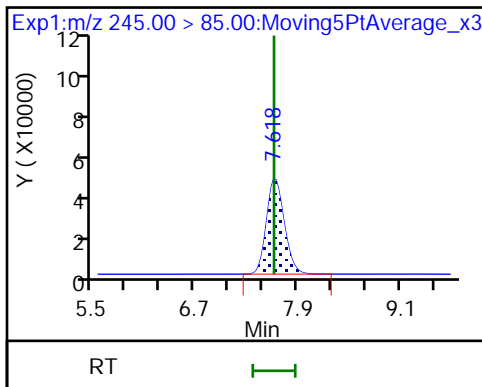
5 NVHOS



6 PFO2HxA

22 PEPA

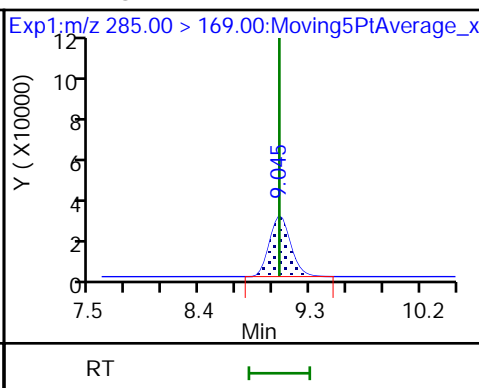
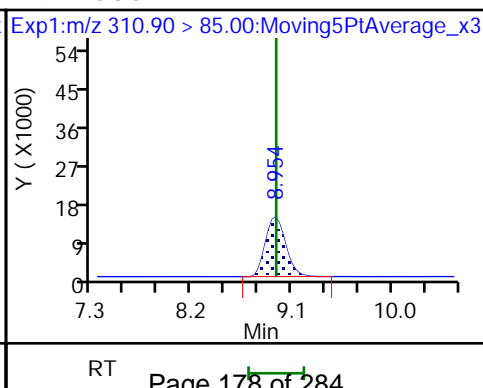
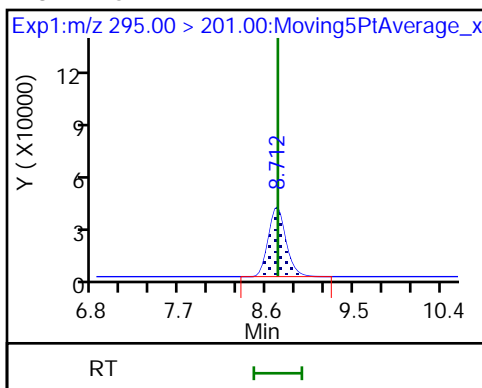
7 PES



8 PFECA B

9 PFO3OA

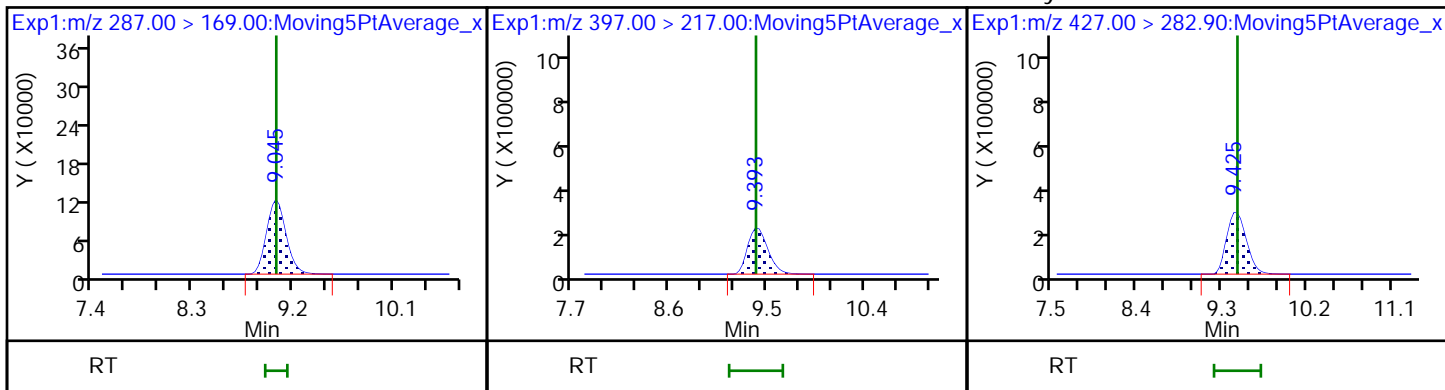
11 HPFO-DA



D 10 13C3 HFPO-DA

12 R-PSDCA

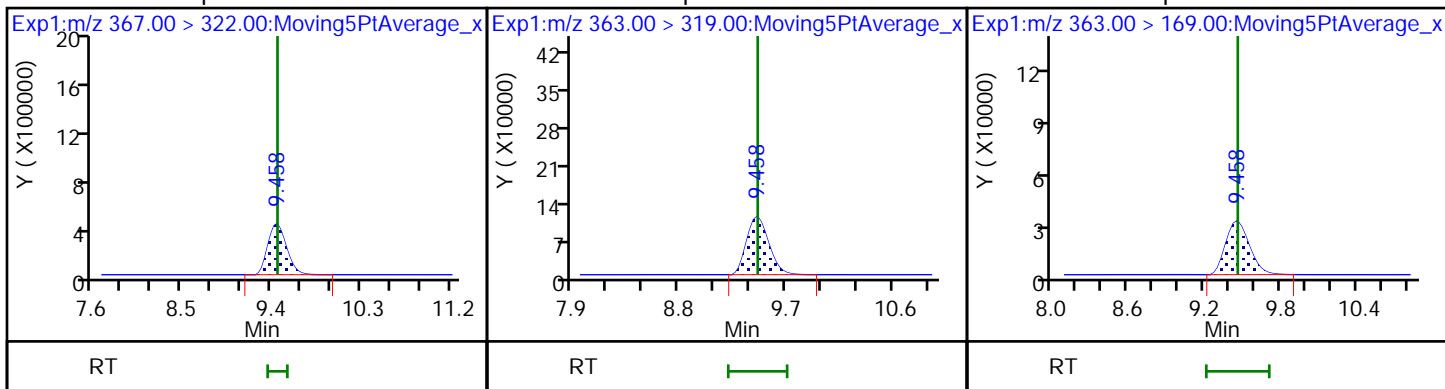
13 Hydro-EVE Acid



D 14 13C4 PFHpA

16 Perfluoroheptanoic acid

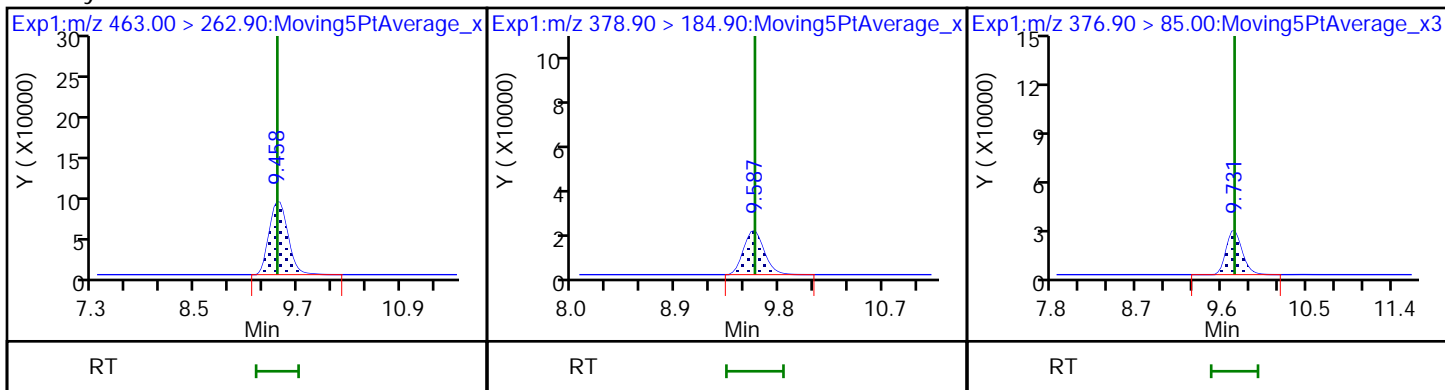
16 Perfluoroheptanoic acid



15 Hydro-PS Acid

17 PFECA G

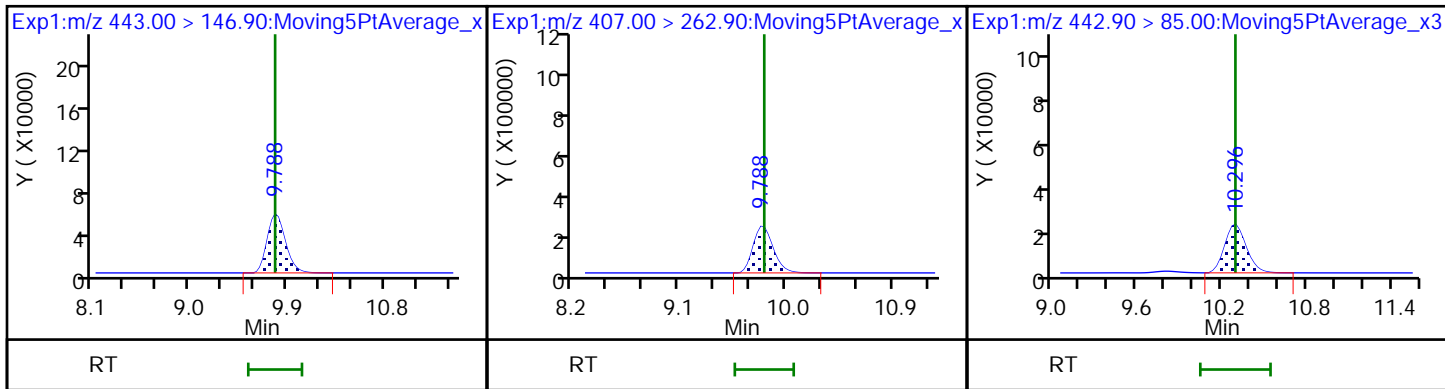
18 PFO4DA



19 PS Acid

20 EVE Acid

21 TAF



Eurofins TestAmerica, Sacramento

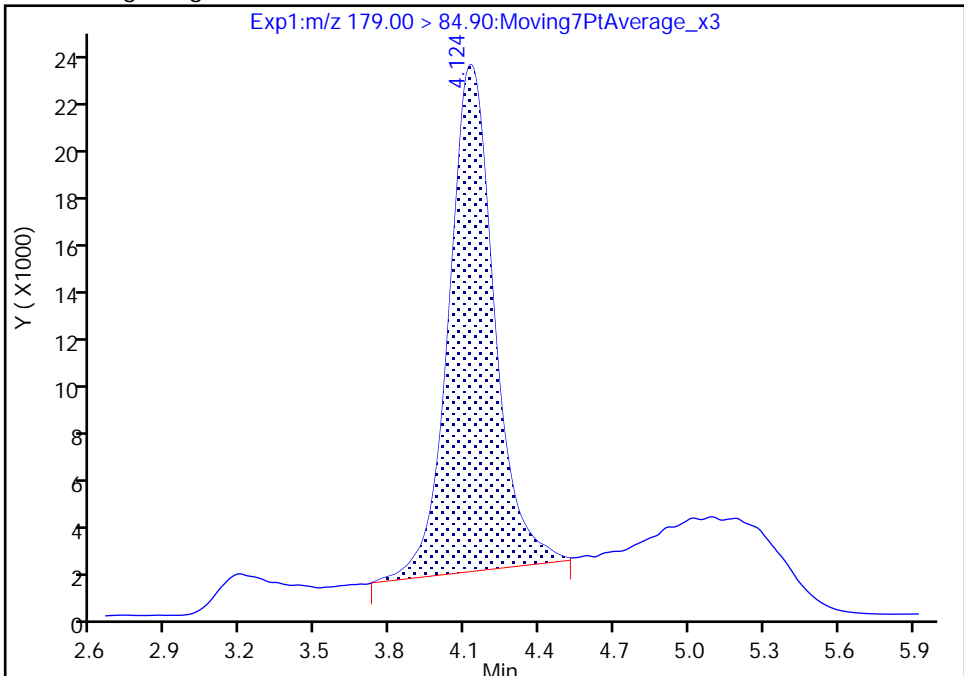
Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_007.d
Injection Date: 24-Mar-2021 13:22:43 Instrument ID: A12
Lims ID: IC STD 6
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

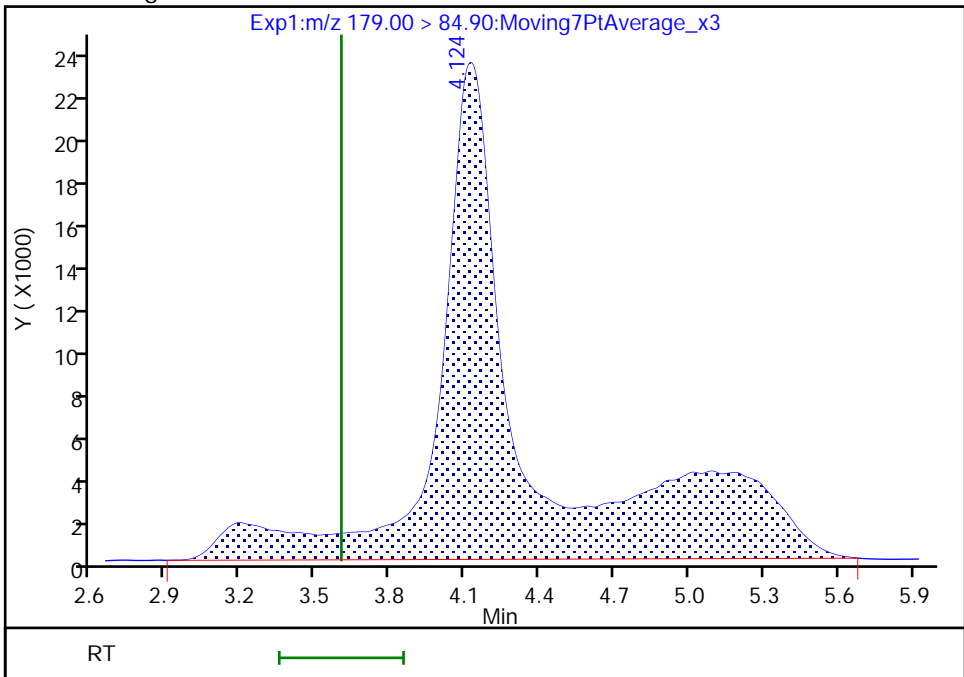
RT: 4.12
Area: 273968
Amount: 0.031781
Amount Units: ng/ml

Processing Integration Results



RT: 4.12
Area: 596974
Amount: 0.053489
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 25-Mar-2021 03:58:42
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento

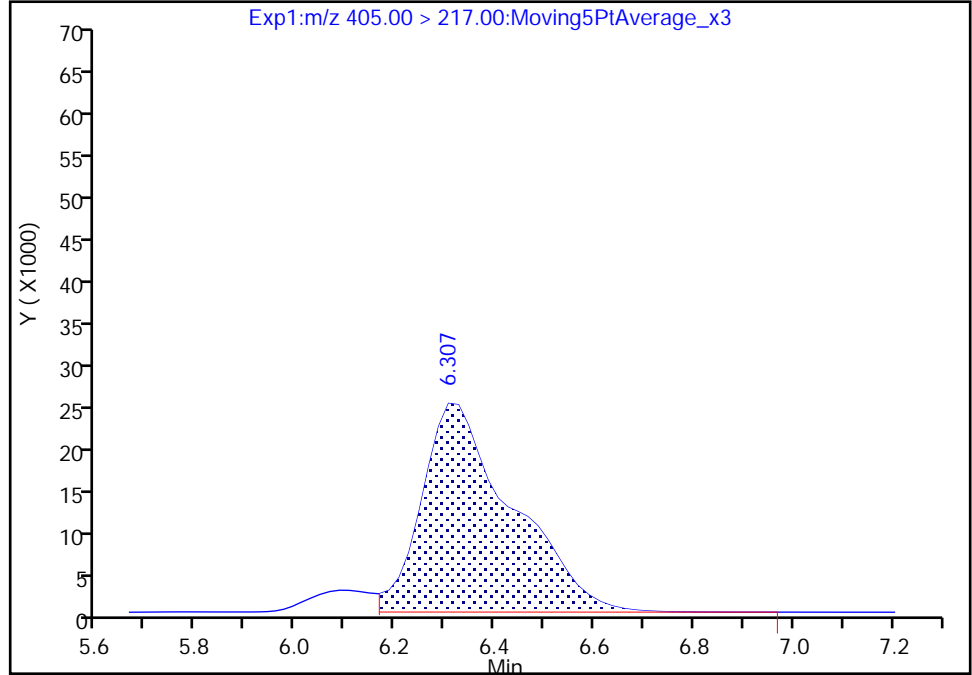
Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_007.d
Injection Date: 24-Mar-2021 13:22:43 Instrument ID: A12
Lims ID: IC STD 6
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

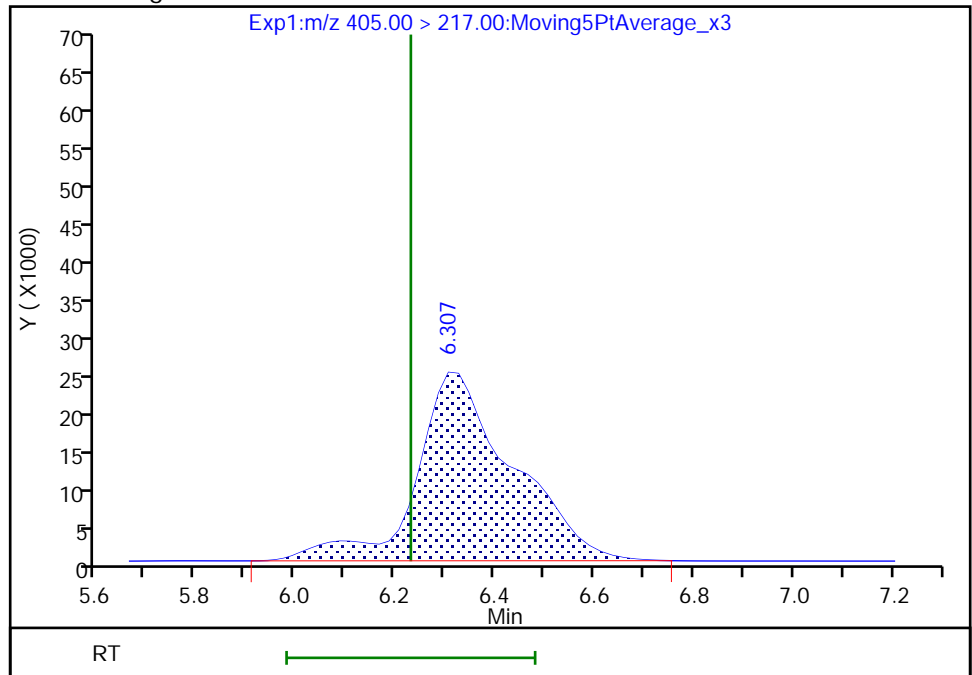
RT: 6.31
Area: 311663
Amount: 0.048392
Amount Units: ng/ml

Processing Integration Results



RT: 6.31
Area: 333163
Amount: 0.052678
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 25-Mar-2021 03:58:46
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 182 of 284

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfms\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_009.d
 Lims ID: IC STD 7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 24-Mar-2021 13:57:53 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 7 (444)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfms\Sacramento\ChromData\A12\20210324-115666.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Mar-2021 04:06:24 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfms\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1601

First Level Reviewer: fariasa Date: 25-Mar-2021 03:59:13

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.221	3.603	0.618		1234567	0.1106		111	316	M
2 R-EVE										
405.00 > 217.00	6.351	6.231	0.120		735421	0.1163		116	14243	
3 R-PSDA										
440.90 > 241.00	6.391	6.291	0.100		342661	0.1147		115	8849	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.470	6.371	0.099		1368689	0.1152		115	18588	
23 PMPA										
229.00 > 185.00	6.712	6.593	0.119		1774024	0.0971		97.1	3304	
5 NVHOS										
297.00 > 135.00	7.091	7.138	-0.047		576554	0.1081		108	14487	
6 PFO2HxA										
245.00 > 85.00	7.651	7.622	0.028		1442503	0.1120		112	21516	
22 PEPA										
278.90 > 234.90	8.228	8.228	0.0		464402	0.1054		105	3578	
7 PES										
314.90 > 135.00	8.491	8.460	0.031		1903831	0.1055		106	49621	
8 PFECA B										
295.00 > 201.00	8.715	8.715	0.0		957150	0.1095		110	25859	
9 PFO3OA										
310.90 > 85.00	8.957	8.957	0.0		347289	0.1147		115	9370	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.049	9.049	0.0		1531783	0.2645		106	42819	
11 HPFO-DA										
285.00 > 169.00	9.077	9.049	0.028	1.003	694490	0.1020		102	19500	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.429	9.396	0.032		5880840	0.1210		121	92046	
13 Hydro-EVE Acid										
427.00 > 282.90	9.461	9.461	0.0		7170102	0.1078		108	71127	
D 14 13C4 PFHpA										
367.00 > 322.00	9.461	9.461	0.0		4825378	0.2354		94.2	75646	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.461	9.461	0.0	1.000	2394204	0.1021	Target=0.00	102	20862	
363.00 > 169.00	9.461	9.461	0.0	1.000	670063		3.57(0.00-0.00)	102	10513	
15 Hydro-PS Acid										
463.00 > 262.90	9.493	9.461	0.032		2538601	0.1027		103	42631	
17 PFECA G										
378.90 > 184.90	9.587	9.587	0.0		482984	0.1138		114	13372	
18 PFO4DA										
376.90 > 85.00	9.731	9.730	0.001		583306	0.1173		117	16811	
19 PS Acid										
443.00 > 146.90	9.817	9.788	0.029		1376869	0.1185		119	29482	
20 EVE Acid										
407.00 > 262.90	9.817	9.817	0.0		4957627	0.1060		106	71105	
21 TAF										
442.90 > 85.00	10.293	10.293	0.0		402884	0.1042		104	1834	

QC Flag Legend

Processing Flags

Review Flags

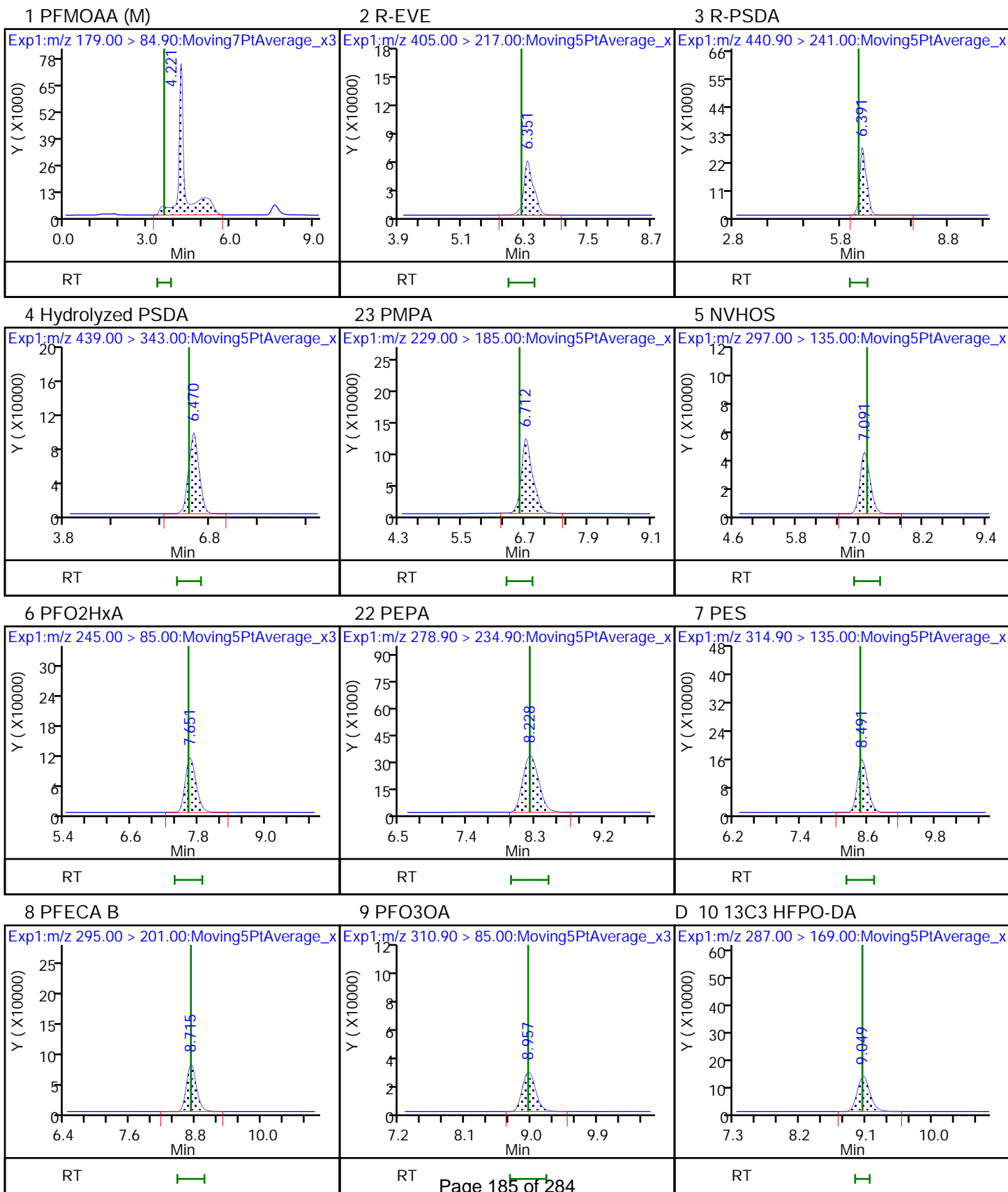
M - Manually Integrated

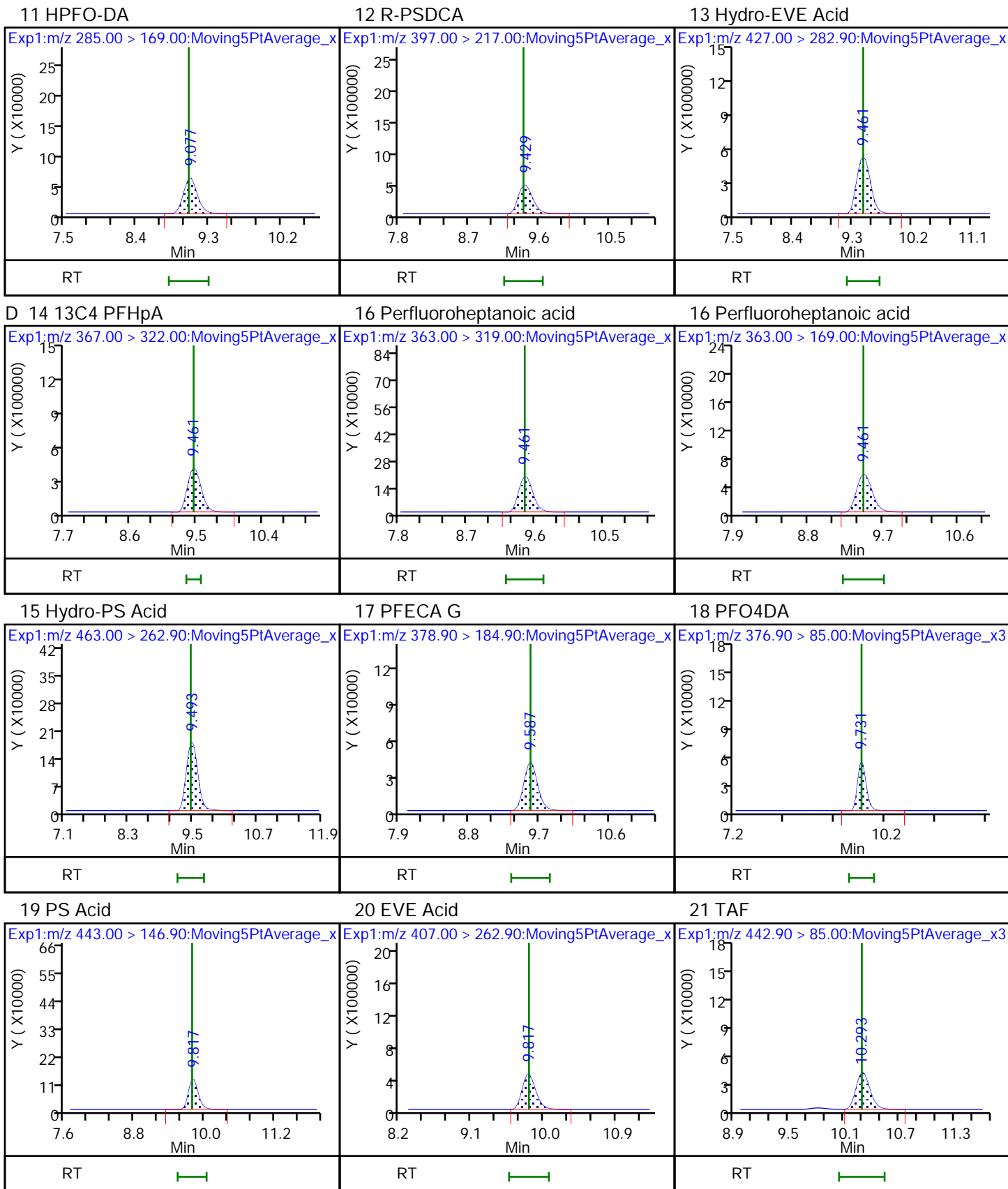
Reagents:

LCTB3_LLSTD7_00444

Amount Added: 1.00

Units: mL





Eurofins TestAmerica, Sacramento

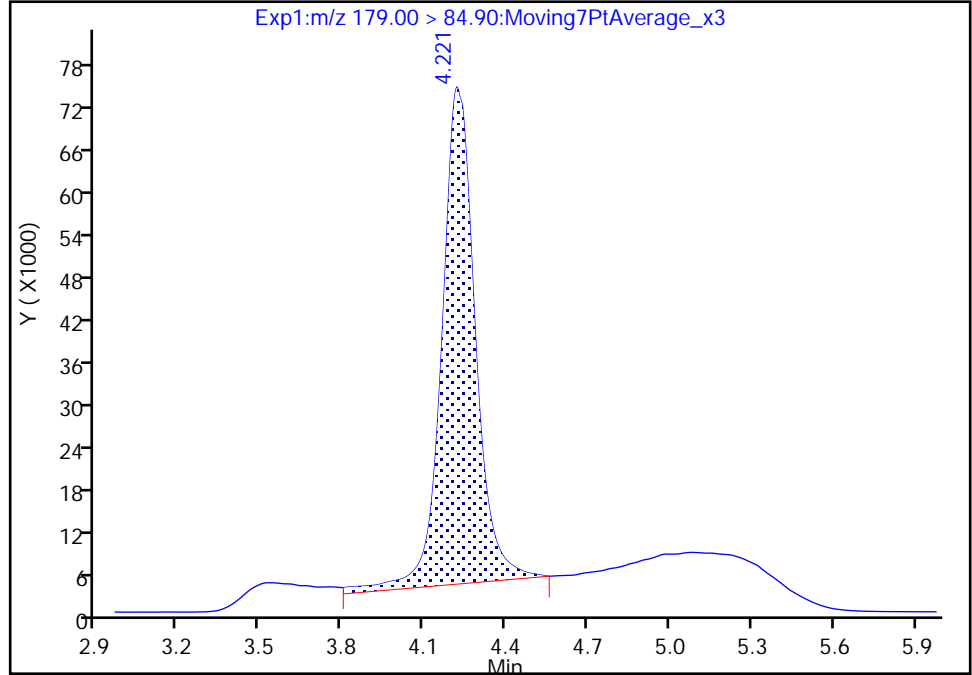
Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_009.d
Injection Date: 24-Mar-2021 13:57:53 Instrument ID: A12
Lims ID: IC STD 7
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

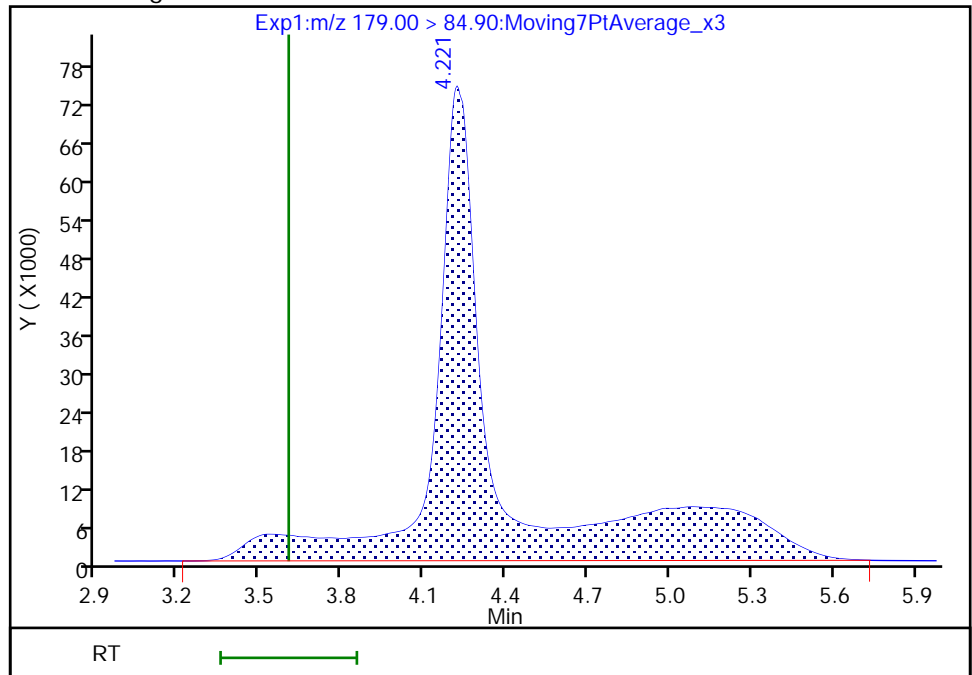
RT: 4.22
Area: 603779
Amount: 0.064656
Amount Units: ng/ml

Processing Integration Results



RT: 4.22
Area: 1234567
Amount: 0.110618
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 25-Mar-2021 03:59:03
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfms\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_011.d
 Lims ID: IC STD 8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 24-Mar-2021 14:33:05 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 8 (47)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfms\Sacramento\ChromData\A12\20210324-115666.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Mar-2021 04:06:25 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfms\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1601

First Level Reviewer: fariasa Date: 25-Mar-2021 03:59:36

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.047	3.603	0.444		3075574	0.2756		110	213	M
2 R-EVE										M
405.00 > 217.00	6.329	6.231	0.098		1785433	0.2823		113	21540	M
3 R-PSDA										
440.90 > 241.00	6.369	6.291	0.078		820752	0.2747		110	20464	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.449	6.371	0.078		3287444	0.2767		111	42048	
23 PMPA										
229.00 > 185.00	6.687	6.593	0.094		4417983	0.2418		96.7	7738	
5 NVHOS										
297.00 > 135.00	7.066	7.138	-0.072		1427249	0.2676		107	30021	
6 PFO2HxA										
245.00 > 85.00	7.620	7.622	-0.002		3524277	0.2738		110	47551	
22 PEPA										
278.90 > 234.90	8.227	8.228	-0.001		1282060	0.2910		116	7882	
7 PES										
314.90 > 135.00	8.489	8.460	0.029		5281826	0.2927		117	100550	
8 PFECA B										
295.00 > 201.00	8.714	8.715	-0.001		2265345	0.2592		104	45246	
9 PFO3OA										
310.90 > 85.00	8.956	8.957	-0.001		880078	0.2906		116	23540	
11 HPFO-DA										
285.00 > 169.00	9.047	9.049	-0.002	1.000	1738383	0.2909		116	36276	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.047	9.049	-0.002		1344876	0.2322		92.9	37588	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.395	9.396	-0.002		12519994	0.2577		103	121827	
13 Hydro-EVE Acid										
427.00 > 282.90	9.459	9.461	-0.002		17403946	0.2616		105	108609	
D 14 13C4 PFHpA										
367.00 > 322.00	9.459	9.461	-0.002		4808719	0.2346		93.8	74776	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.459	9.461	-0.002	1.000	6126840	0.2629	Target=0.00	105	39731	
363.00 > 169.00	9.459	9.461	-0.002	1.000	1696778		3.61(0.00-0.00)	105	32966	
15 Hydro-PS Acid										
463.00 > 262.90	9.459	9.461	-0.002		6768643	0.2738		110	89724	
17 PFECA G										
378.90 > 184.90	9.589	9.587	0.002		1050142	0.2474		99.0	28403	
18 PFO4DA										
376.90 > 85.00	9.733	9.730	0.003		1180239	0.2374		95.0	25303	
19 PS Acid										
443.00 > 146.90	9.790	9.788	0.002		2978259	0.2563		103	64196	
20 EVE Acid										
407.00 > 262.90	9.819	9.817	0.002		11299231	0.2417		96.7	95963	
21 TAF										
442.90 > 85.00	10.298	10.293	0.005		1091679	0.2824		113	2967	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD8_00047

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_011.d

Injection Date: 24-Mar-2021 14:33:05

Instrument ID: A12

Lims ID: IC STD 8

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 11

Worklist Smp#: 11

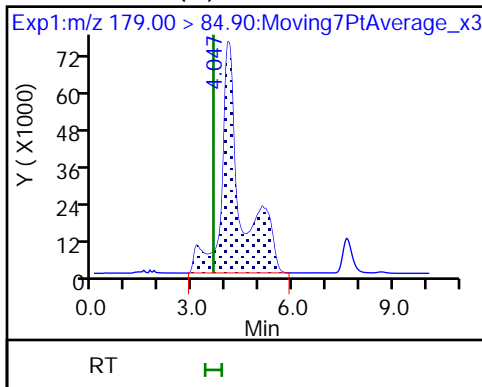
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

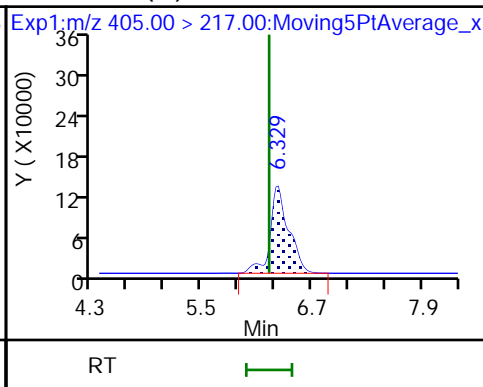
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

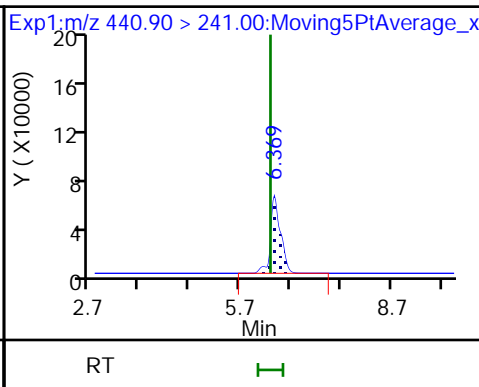
1 PFMOAA (M)



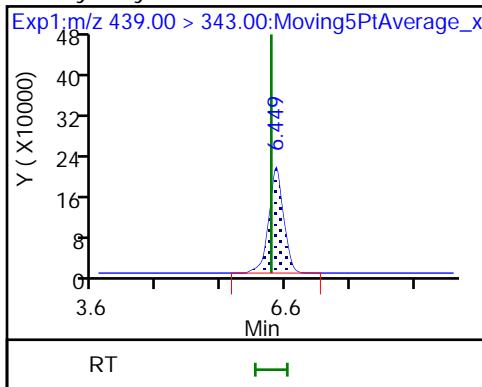
2 R-EVE (M)



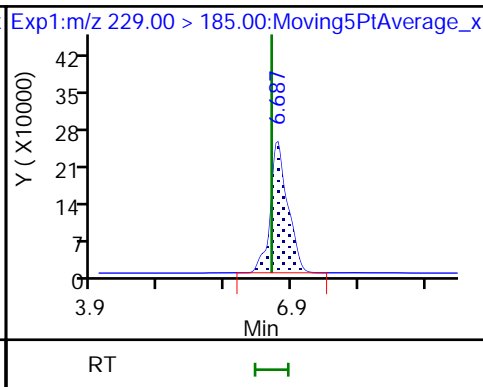
3 R-PSDA



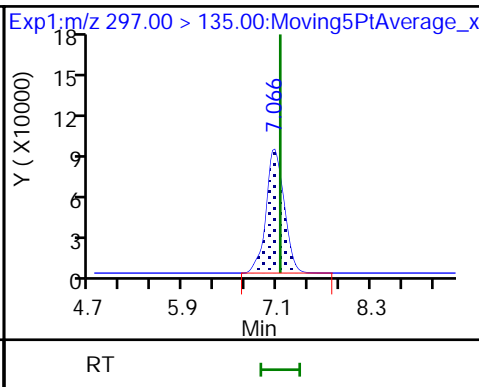
4 Hydrolyzed PSDA



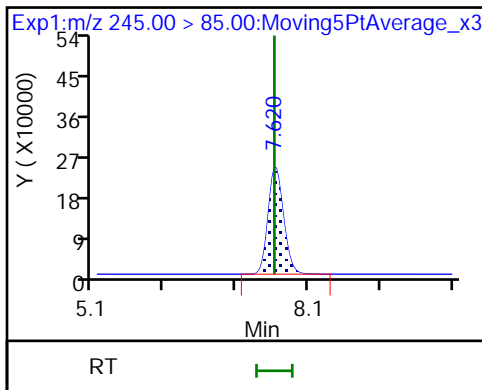
23 PMPA



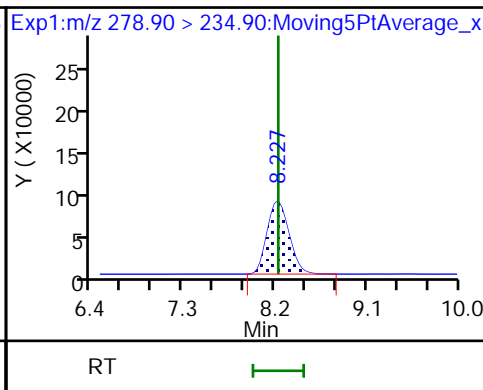
5 NVHOS



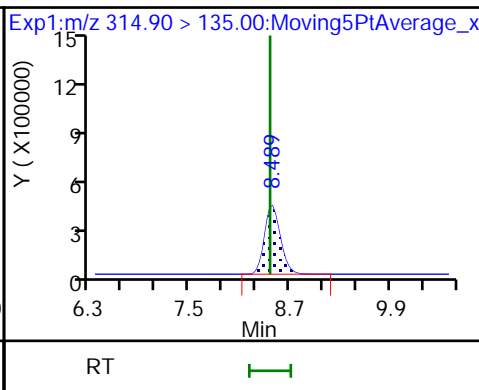
6 PFO2HxA



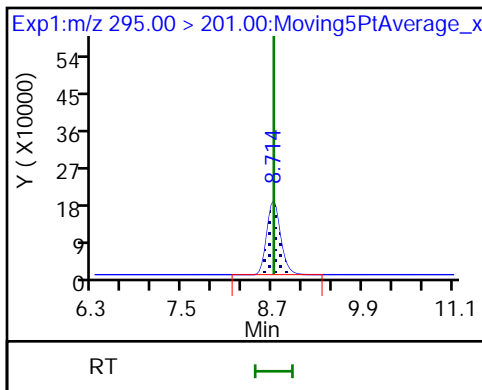
22 PEPA



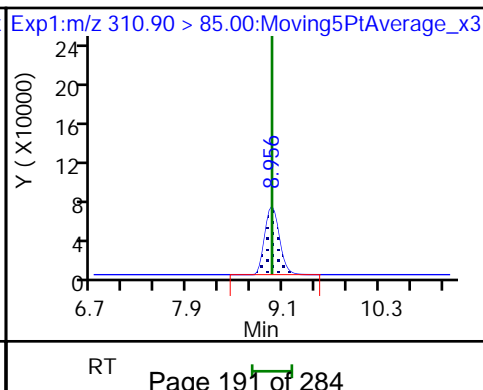
7 PES



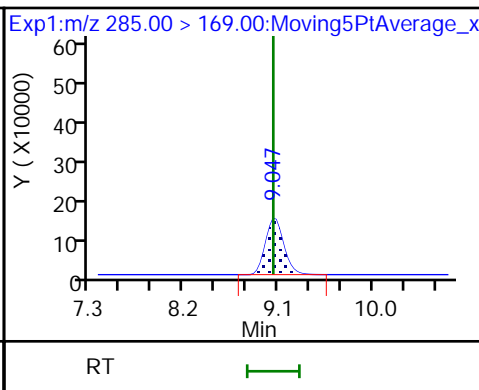
8 PFECA B



9 PFO3OA



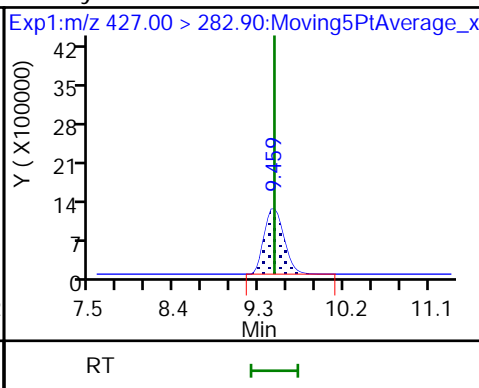
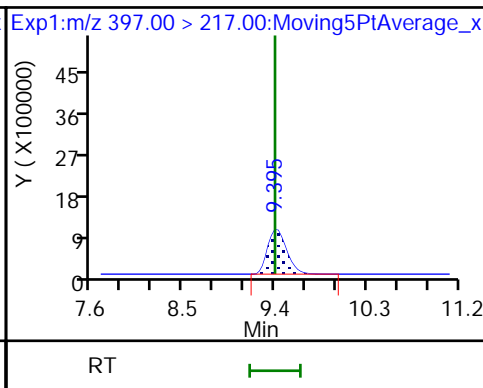
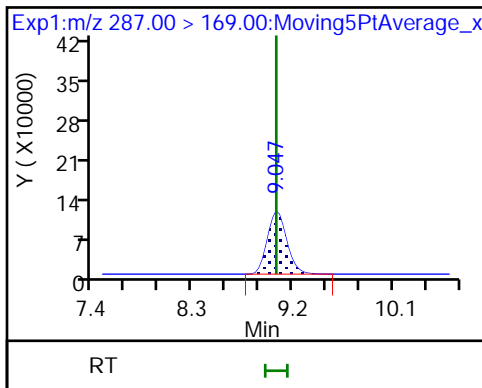
11 HPFO-DA



D 10 13C3 HFPO-DA

12 R-PSDCA

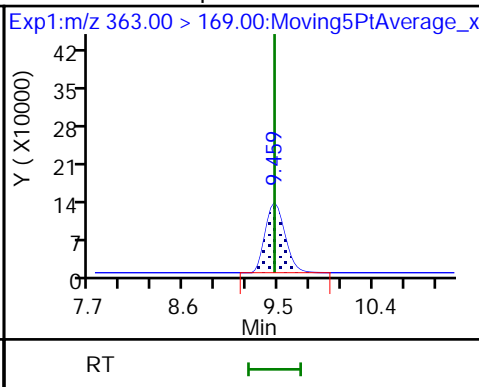
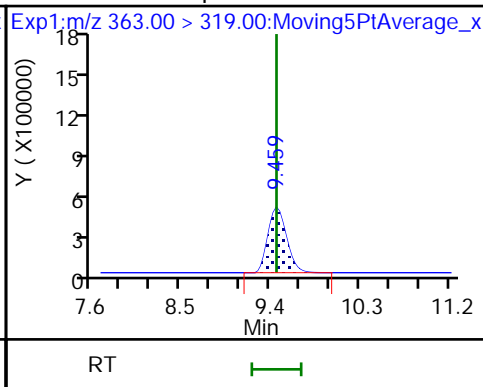
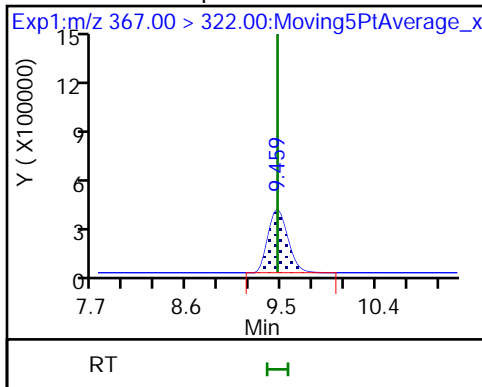
13 Hydro-EVE Acid



D 14 13C4 PFHpA

16 Perfluoroheptanoic acid

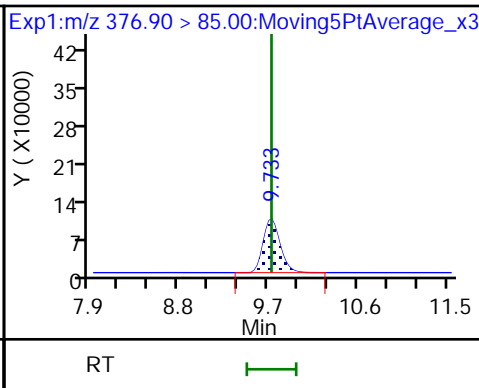
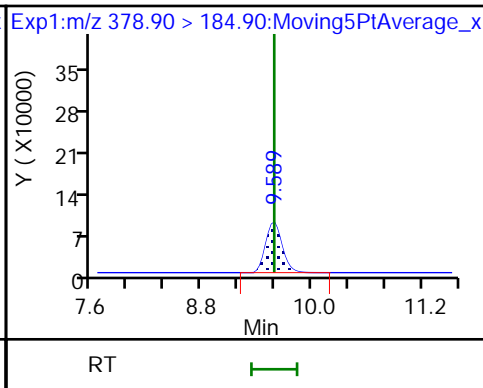
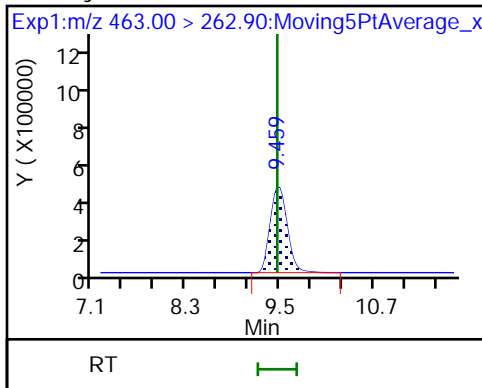
16 Perfluoroheptanoic acid



15 Hydro-PS Acid

17 PFECA G

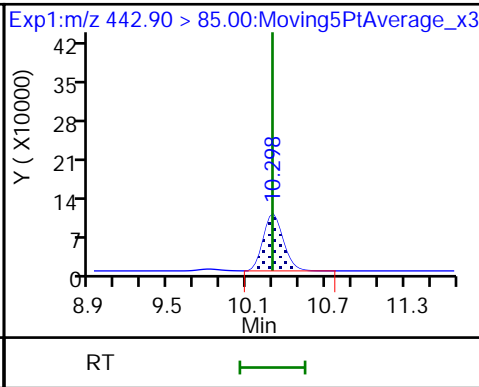
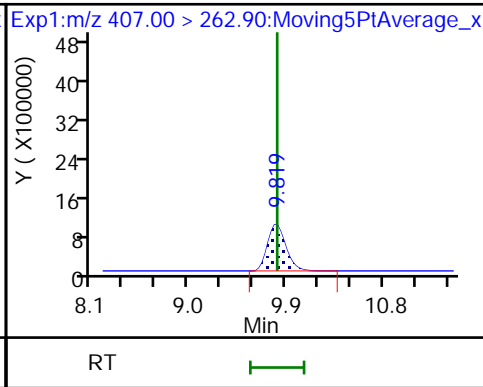
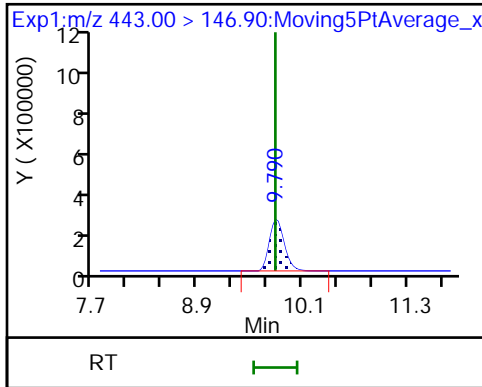
18 PFO4DA



19 PS Acid

20 EVE Acid

21 TAF



Eurofins TestAmerica, Sacramento

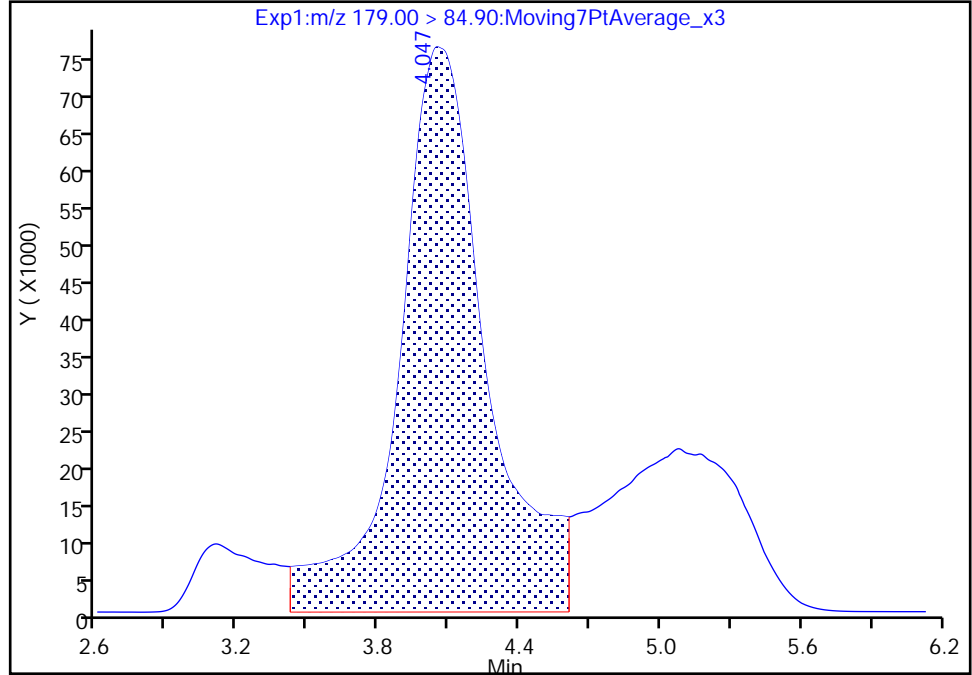
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Injection Date: 24-Mar-2021 14:33:05 Instrument ID: A12
Lims ID: IC STD 8
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

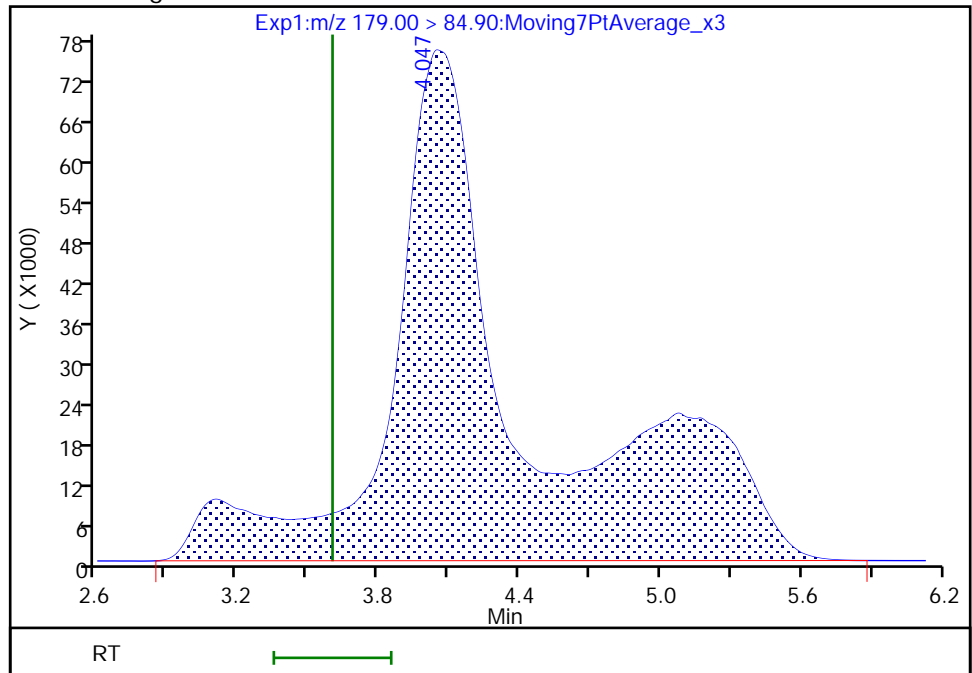
RT: 4.05
Area: 1980066
Amount: 0.197235
Amount Units: ng/ml

Processing Integration Results



RT: 4.05
Area: 3075574
Amount: 0.275572
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 25-Mar-2021 03:59:21
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 194 of 284

Eurofins TestAmerica, Sacramento

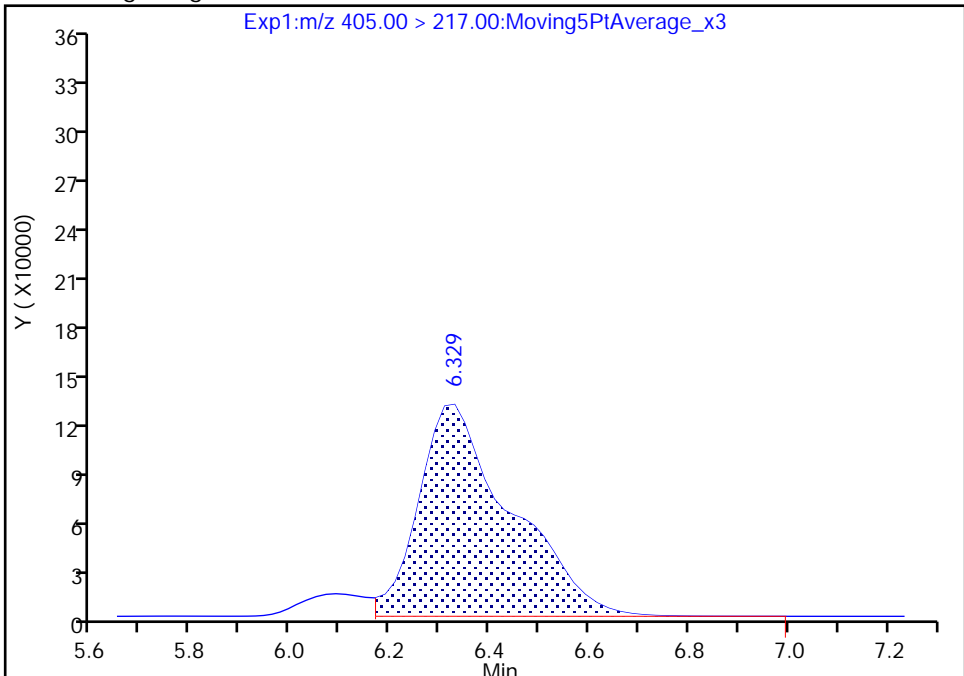
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Injection Date: 24-Mar-2021 14:33:05 Instrument ID: A12
Lims ID: IC STD 8
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

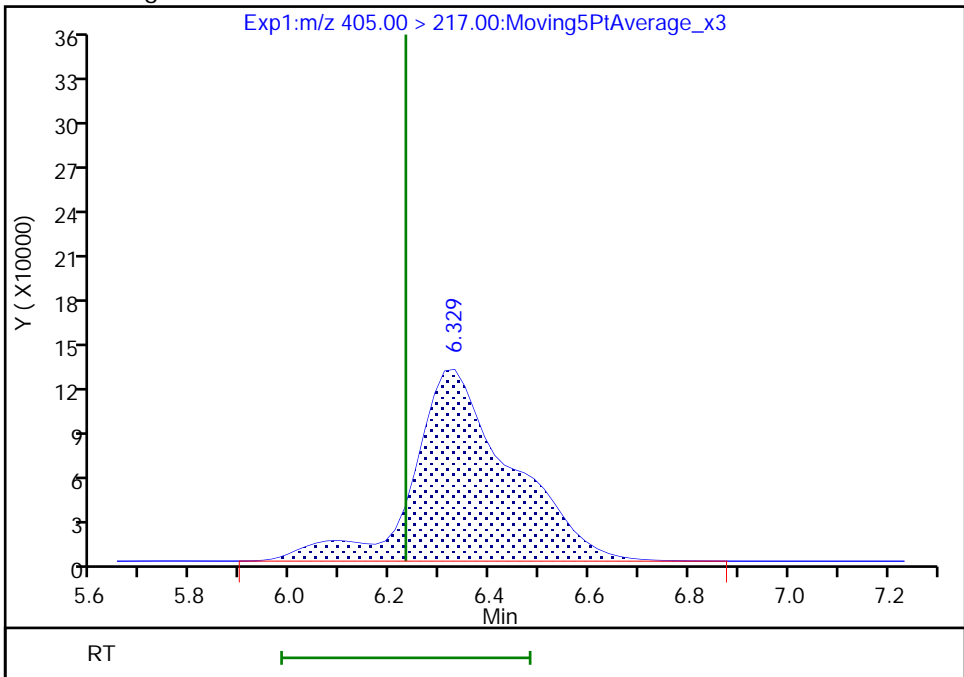
RT: 6.33
Area: 1659810
Amount: 0.256008
Amount Units: ng/ml

Processing Integration Results



RT: 6.33
Area: 1785433
Amount: 0.282303
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 25-Mar-2021 03:59:26
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_013.d
 Lims ID: IC STD 9
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 24-Mar-2021 15:08:20 ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 9 (45)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Mar-2021 04:06:26 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d

Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1601

First Level Reviewer: fariasa Date: 25-Mar-2021 04:00:00

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	3.746	3.603	0.143		6126589	0.5489		110	197	M
2 R-EVE										M
405.00 > 217.00	6.289	6.231	0.058		3544124	0.5604		112	32025	M
3 R-PSDA										
440.90 > 241.00	6.328	6.291	0.037		1708137	0.5717		114	37207	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.408	6.371	0.037		6530765	0.5497		110	72678	
23 PMPA										
229.00 > 185.00	6.638	6.593	0.045		8632485	0.4725		94.5	14079	
5 NVHOS										
297.00 > 135.00	7.017	7.138	-0.121		2902215	0.5441		109	50390	
6 PFO2HxA										
245.00 > 85.00	7.619	7.622	-0.003		6805610	0.5286		106	70406	
22 PEPA										
278.90 > 234.90	8.225	8.228	-0.003		2467190	0.5600		112	16264	
7 PES										
314.90 > 135.00	8.490	8.460	0.030		10524314	0.5832		117	196472	
8 PFECA B										
295.00 > 201.00	8.714	8.715	-0.001		4615366	0.5281		106	91565	
9 PFO3OA										
310.90 > 85.00	8.956	8.957	-0.001		1721452	0.5684		114	45948	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.048	9.049	-0.001		1446446	0.2497		99.9	40108	
11 HPFO-DA										
285.00 > 169.00	9.076	9.049	0.027	1.003	3255902	0.5066		101	67258	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.428	9.396	0.032		21879495	0.4504		90.1	141389	
13 Hydro-EVE Acid										
427.00 > 282.90	9.460	9.461	-0.001		33202628	0.4991		99.8	142894	
D 14 13C4 PFHpA										
367.00 > 322.00	9.460	9.461	-0.001		4492787	0.2192		87.7	69800	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.460	9.461	-0.001	1.000	12003786	0.5517	Target=0.00	110	77717	
363.00 > 169.00	9.460	9.461	-0.001	1.000	3131314		3.83(0.00-0.00)	110	48561	
15 Hydro-PS Acid										
463.00 > 262.90	9.460	9.461	-0.001		13027671	0.5270		105	123022	
17 PFECA G										
378.90 > 184.90	9.590	9.587	0.003		1892029	0.4457		89.1	51360	
18 PFO4DA										
376.90 > 85.00	9.734	9.730	0.004		2325808	0.4679		93.6	40147	
19 PS Acid										
443.00 > 146.90	9.791	9.788	0.003		5749744	0.4949		99.0	82005	
20 EVE Acid										
407.00 > 262.90	9.820	9.817	0.003		19694923	0.4212		84.2	105626	
21 TAF										
442.90 > 85.00	10.296	10.293	0.003		2184797	0.5652		113	3934	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD9_00045

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_013.d

Injection Date: 24-Mar-2021 15:08:20

Instrument ID: A12

Lims ID: IC STD 9

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 13

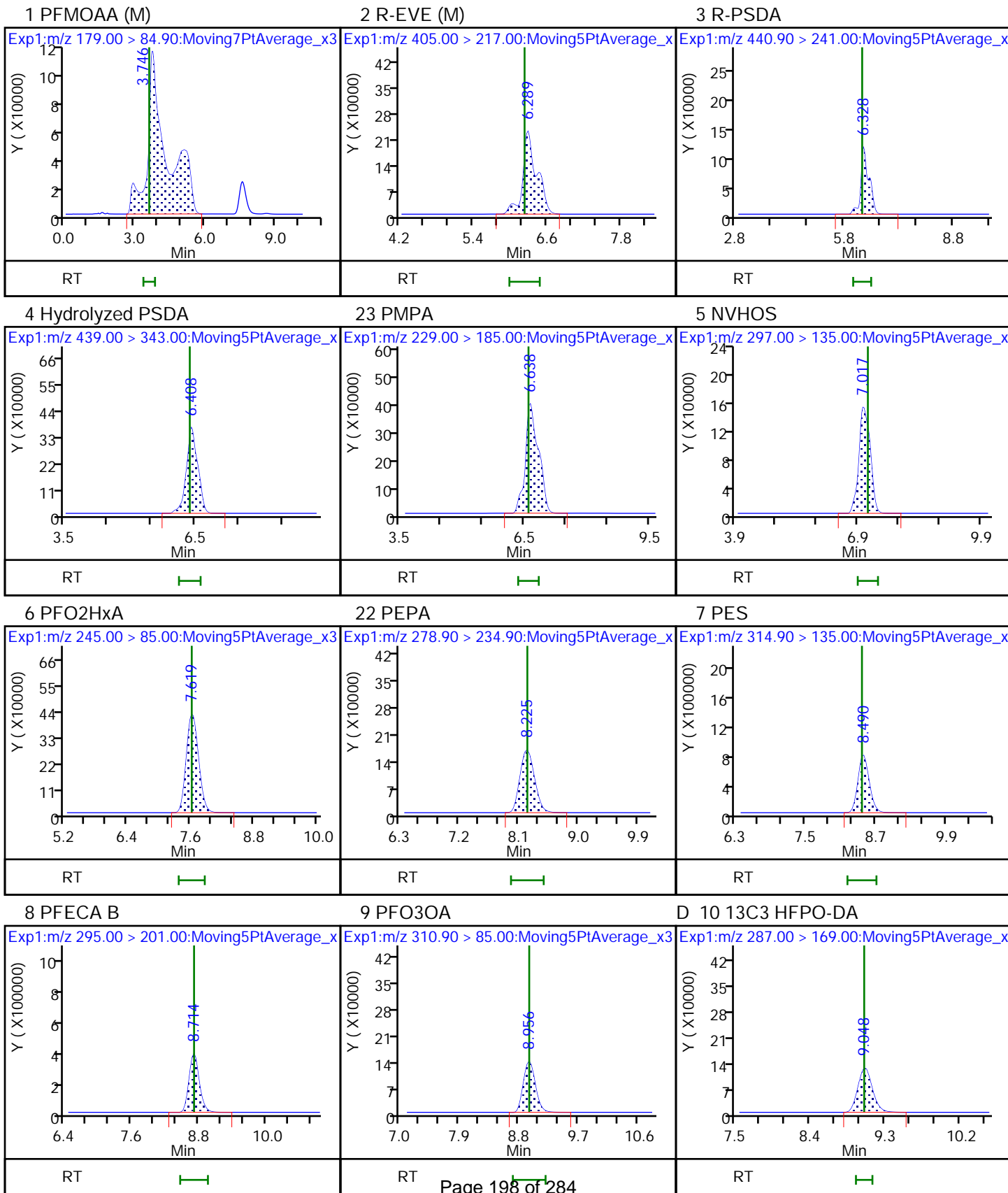
Worklist Smp#: 13

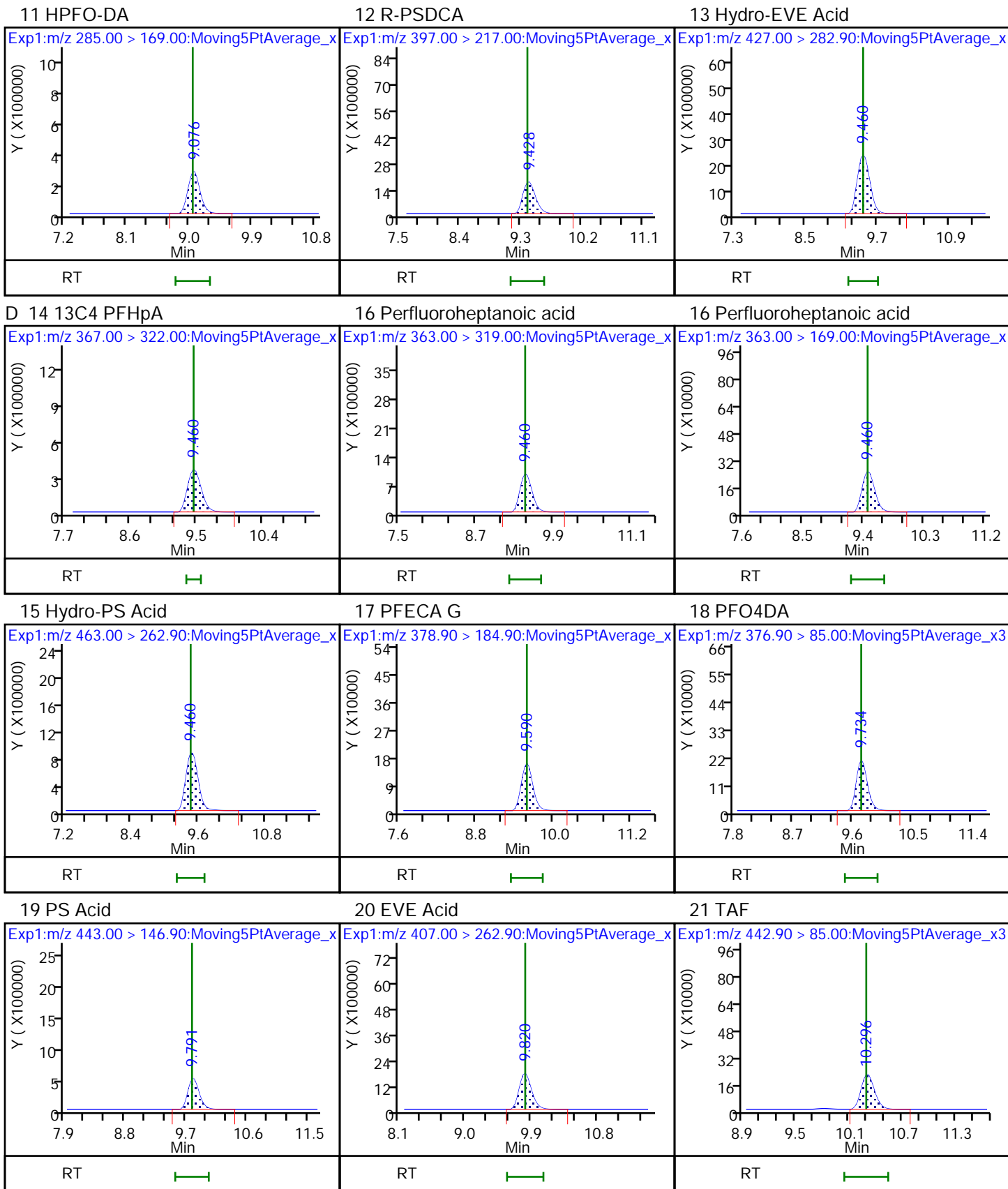
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

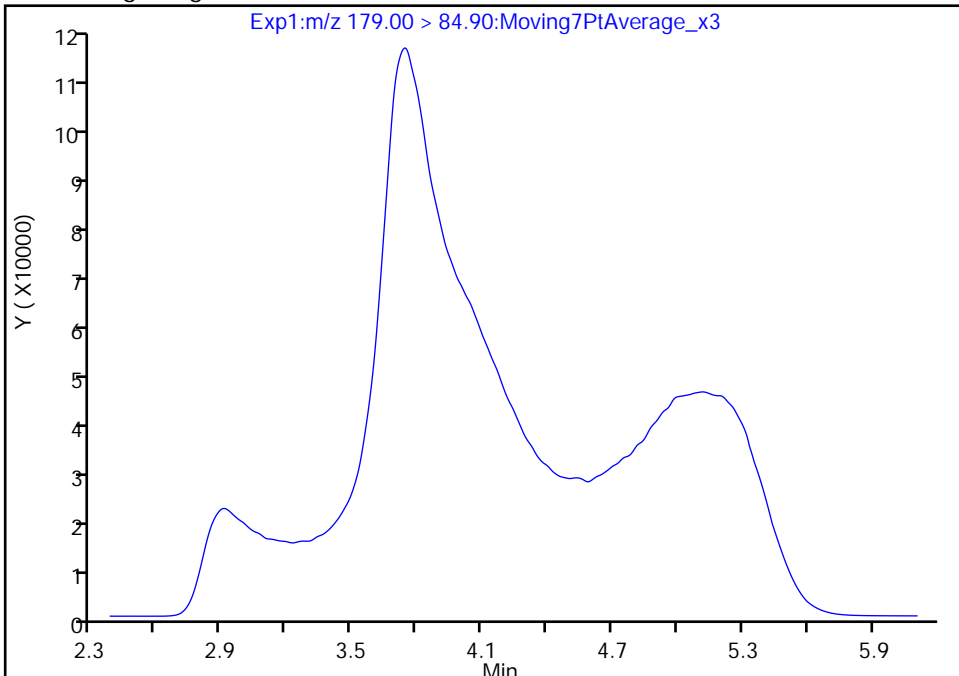
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Injection Date: 24-Mar-2021 15:08:20 Instrument ID: A12
Lims ID: IC STD 9
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

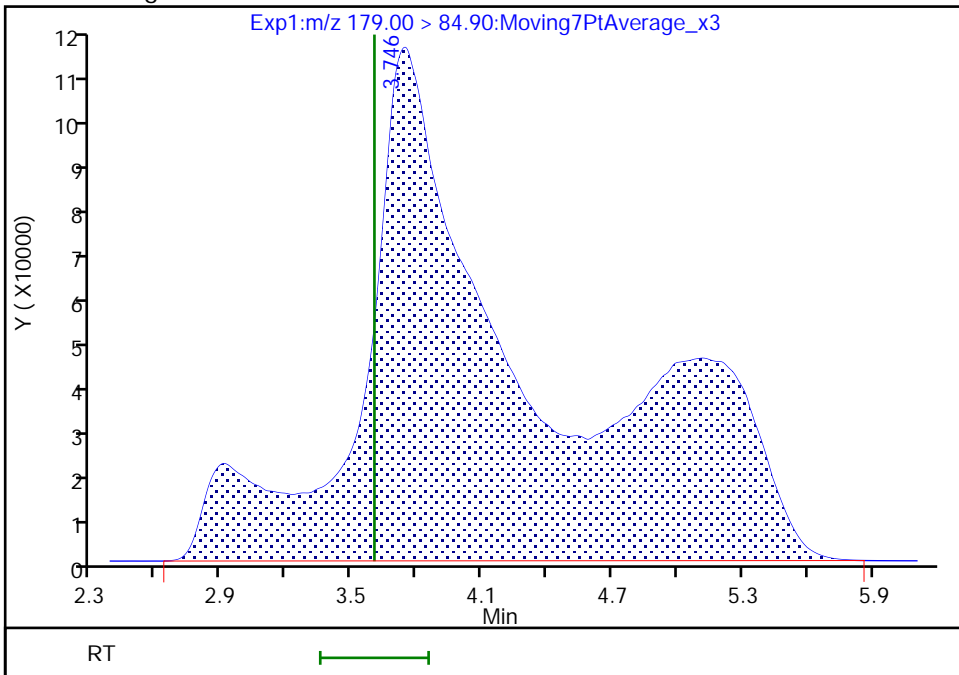
Not Detected
Expected RT: 3.60

Processing Integration Results



RT: 3.75
Area: 6126589
Amount: 0.548944
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 25-Mar-2021 03:59:45
Audit Action: Manually Integrated

Eurofins TestAmerica, Sacramento

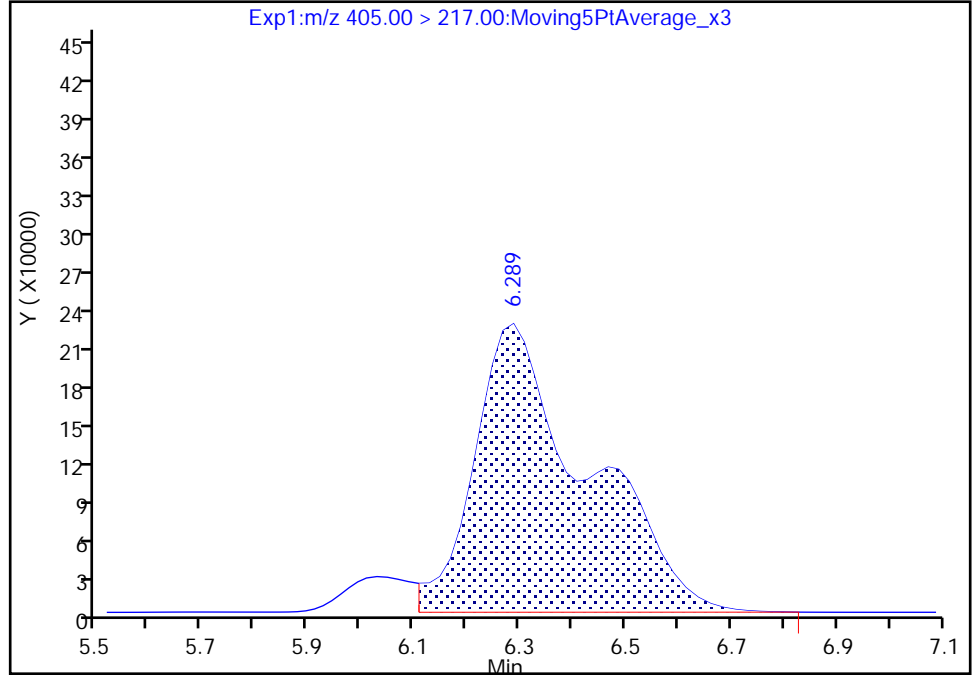
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Injection Date: 24-Mar-2021 15:08:20 Instrument ID: A12
Lims ID: IC STD 9
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

2 R-EVE, CAS: 2416366-22-6

Signal: 1

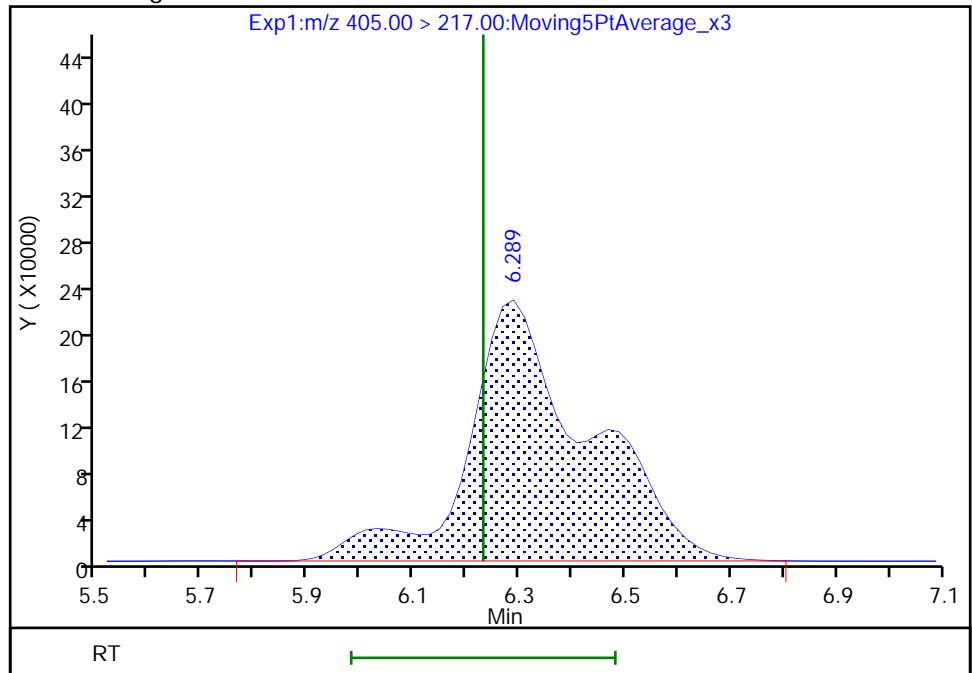
RT: 6.29
Area: 3310845
Amount: 0.506734
Amount Units: ng/ml

Processing Integration Results



RT: 6.29
Area: 3544124
Amount: 0.560377
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 25-Mar-2021 03:59:51
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 202 of 284

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Lims ID: IC STD 10
 Client ID:
 Sample Type: IC Calib Level: 10
 Inject. Date: 24-Mar-2021 15:26:08 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 10 (44)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3

Method: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Mar-2021 04:06:27 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1601

First Level Reviewer: fariasa Date: 25-Mar-2021 04:00:27

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.314	3.603	0.711		12846264	1.15		115	1156	M
2 R-EVE										
405.00 > 217.00	6.387	6.231	0.156		8118894	1.28		128	170019	
3 R-PSDA										
440.90 > 241.00	6.447	6.291	0.156		4056592	1.36		136	89304	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.506	6.371	0.135		13835653	1.16		116	165299	
23 PMPA										
229.00 > 185.00	6.755	6.593	0.162		18062980	0.9886		98.9	39603	
5 NVHOS										
297.00 > 135.00	7.111	7.138	-0.027		6700222	1.26		126	135128	
6 PFO2HxA										
245.00 > 85.00	7.676	7.622	0.054		13631154	1.06		106	146722	
22 PEPA										
278.90 > 234.90	8.259	8.228	0.031		4710955	1.07		107	33072	
7 PES										
314.90 > 135.00	8.522	8.460	0.062		21894796	1.21		121	340745	
8 PFECA B										
295.00 > 201.00	8.740	8.715	0.025		8464512	0.9685		96.9	140695	
9 PFO3OA										
310.90 > 85.00	8.986	8.957	0.029		2683507	0.8861		88.6	54812	
11 HPFO-DA										
285.00 > 169.00	9.074	9.049	0.025	1.000	6260253	0.9763		97.6	106123	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.074	9.049	0.025		1443222	0.2492		99.7	41155	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.425	9.396	0.029		35515927	0.7310		73.1	131307	
13 Hydro-EVE Acid										
427.00 > 282.90	9.490	9.461	0.029		54017645	0.8119		81.2	129505	
D 14 13C4 PFHpA										
367.00 > 322.00	9.490	9.461	0.029		3652878	0.1782		71.3	56964	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.490	9.461	0.029	1.000	18621438	1.05	Target=0.00	105	76513	
363.00 > 169.00	9.490	9.461	0.029	1.000	5213170		3.57(0.00-0.00)	105	67700	
15 Hydro-PS Acid										
463.00 > 262.90	9.490	9.461	0.029		27847716	1.13		113	168356	
17 PFECA G										
378.90 > 184.90	9.616	9.587	0.029		3028772	0.7135		71.3	62318	
18 PFO4DA										
376.90 > 85.00	9.760	9.730	0.030		3967612	0.7981		79.8	34068	
19 PS Acid										
443.00 > 146.90	9.817	9.788	0.029		9831575	0.8462		84.6	94343	
20 EVE Acid										
407.00 > 262.90	9.817	9.817	0.0		29449097	0.6298		63.0	86205	
21 TAF										
442.90 > 85.00	10.322	10.293	0.029		3679886	0.9520		95.2	4639	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLSTD10_00044

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d

Injection Date: 24-Mar-2021 15:26:08

Instrument ID: A12

Lims ID: IC STD 10

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 14

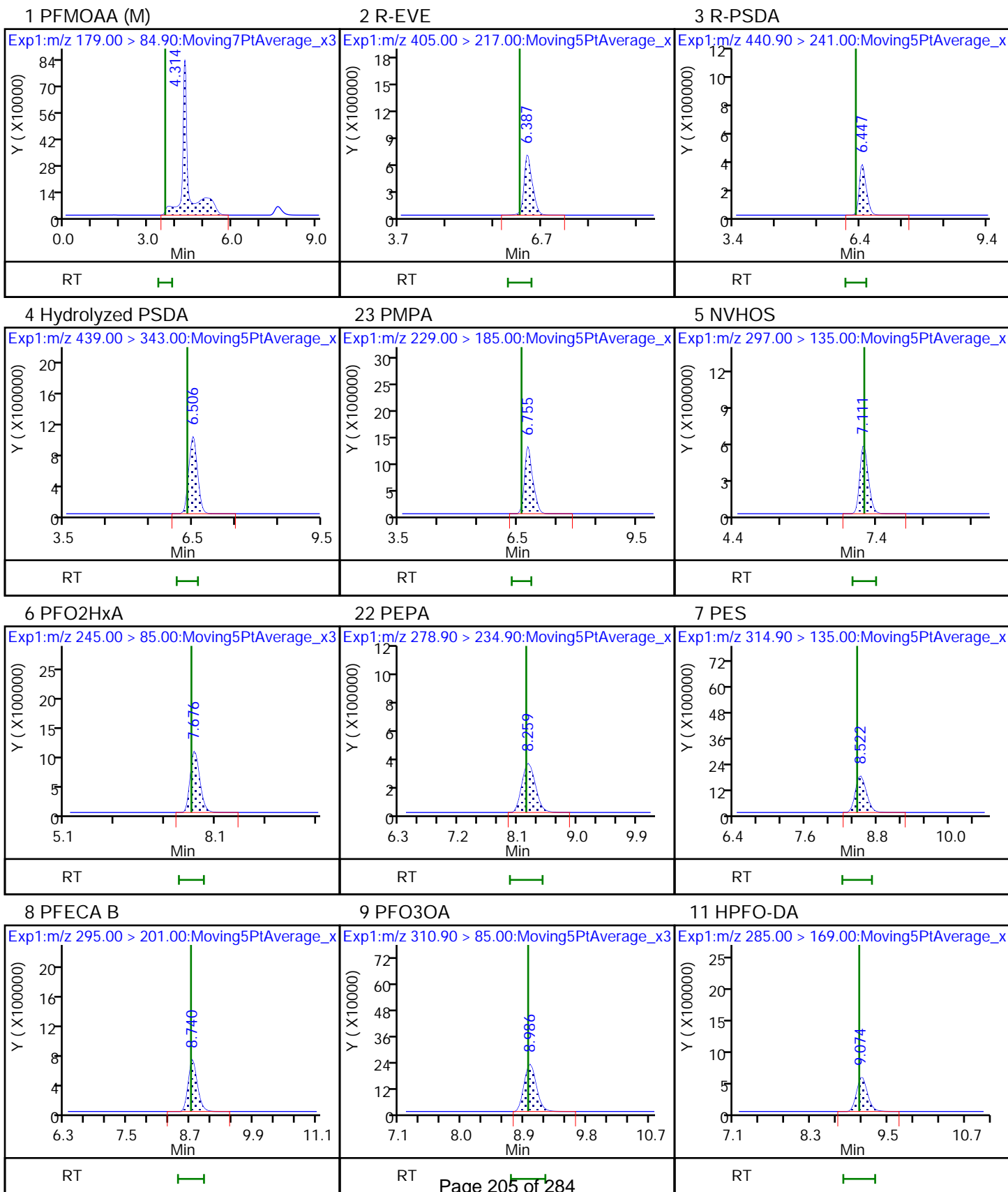
Worklist Smp#: 14

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

Method: PFAS_Chem_TB3+

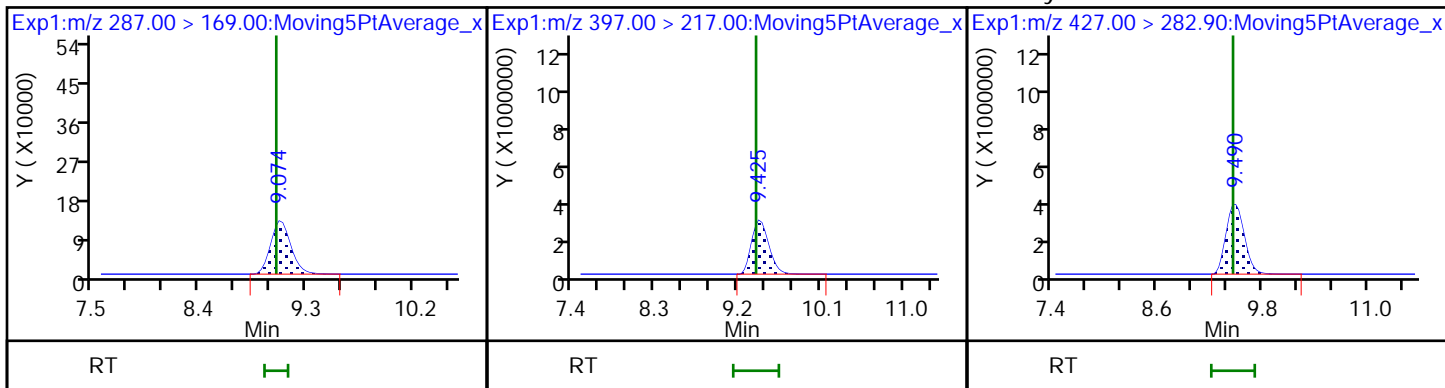
Limit Group: LC PFAS_TB3P - ICAL



D 10 13C3 HFPO-DA

12 R-PSDCA

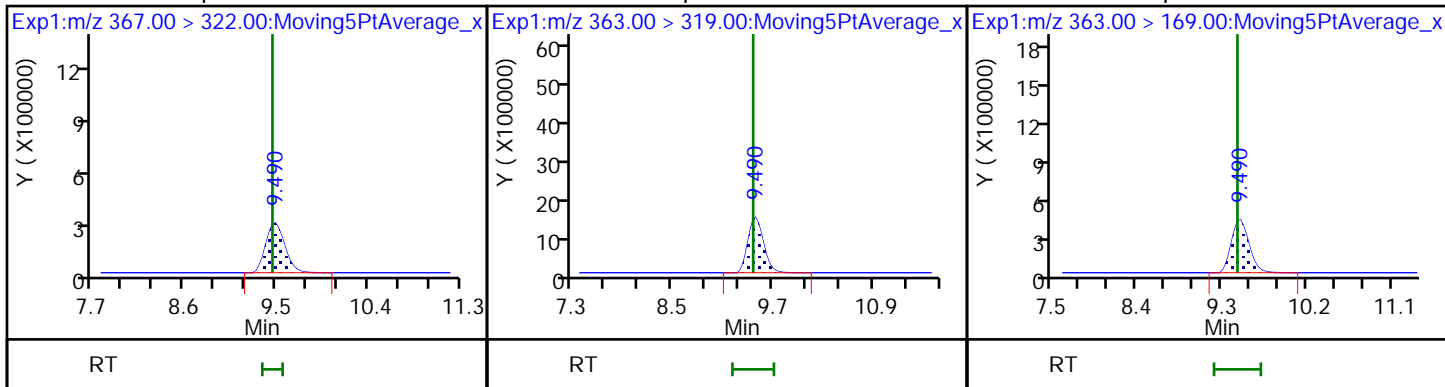
13 Hydro-EVE Acid



D 14 13C4 PFHpA

16 Perfluoroheptanoic acid

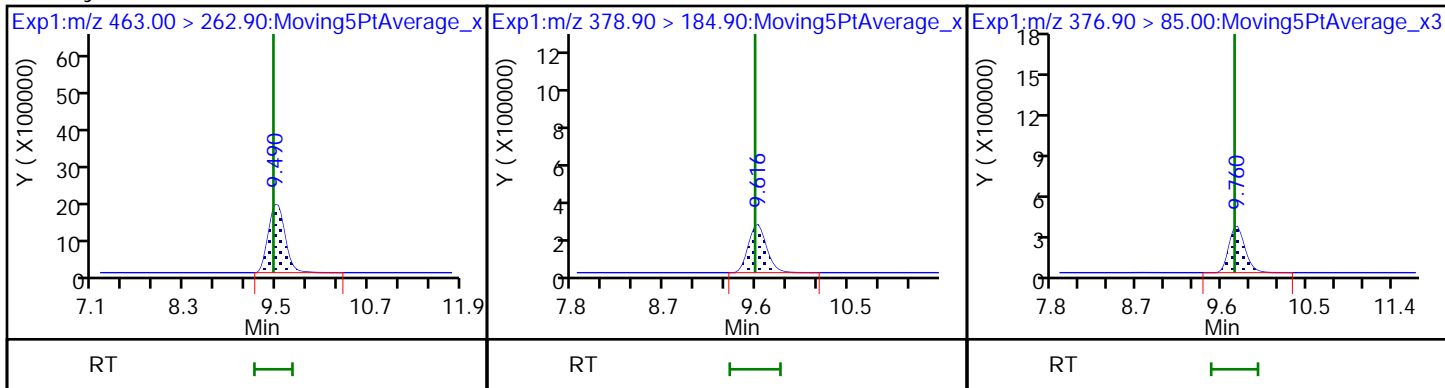
16 Perfluoroheptanoic acid



15 Hydro-PS Acid

17 PFECA G

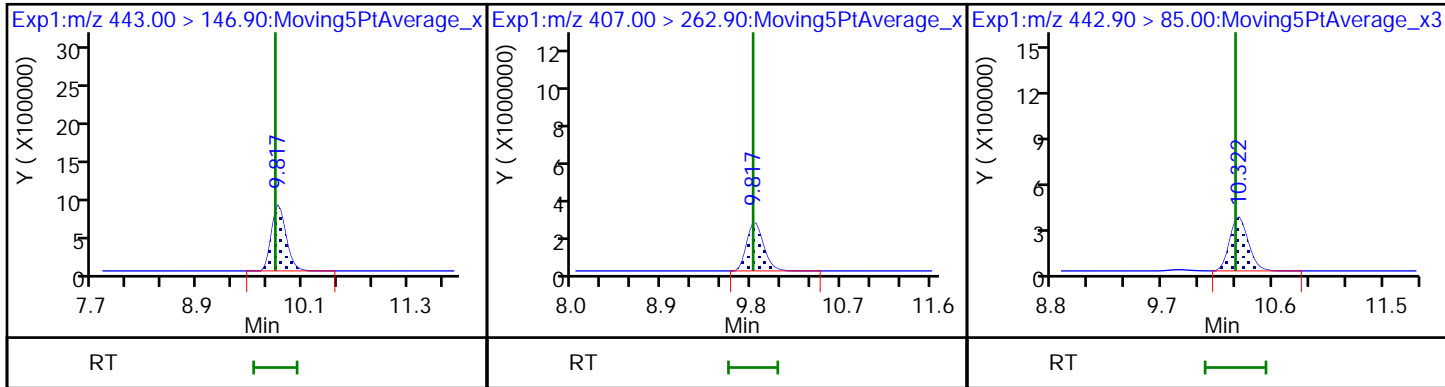
18 PFO4DA



19 PS Acid

20 EVE Acid

21 TAF



Eurofins TestAmerica, Sacramento

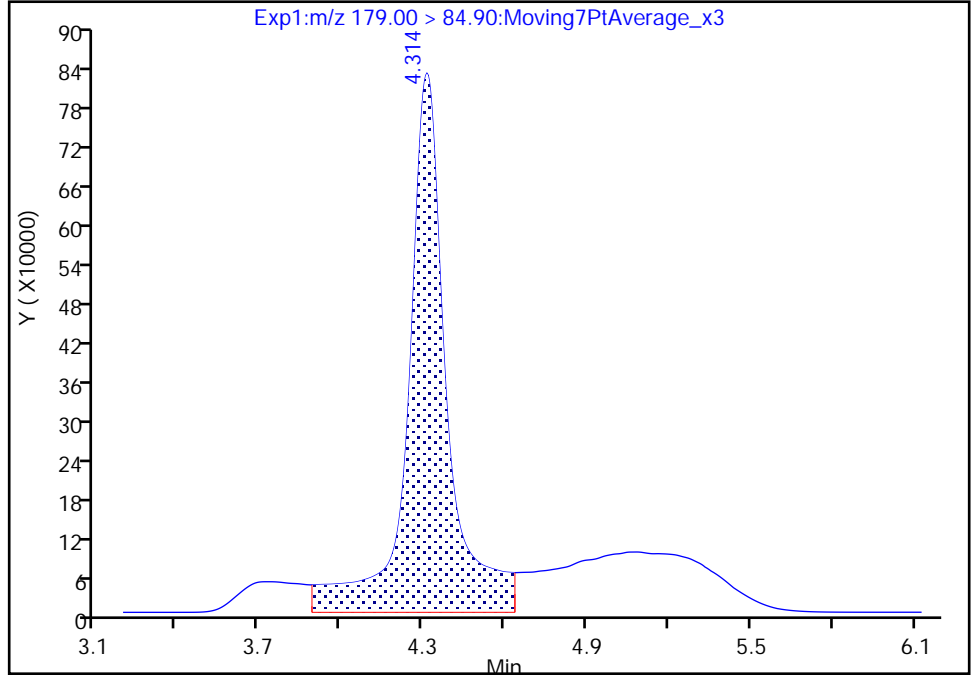
Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
Injection Date: 24-Mar-2021 15:26:08 Instrument ID: A12
Lims ID: IC STD 10
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

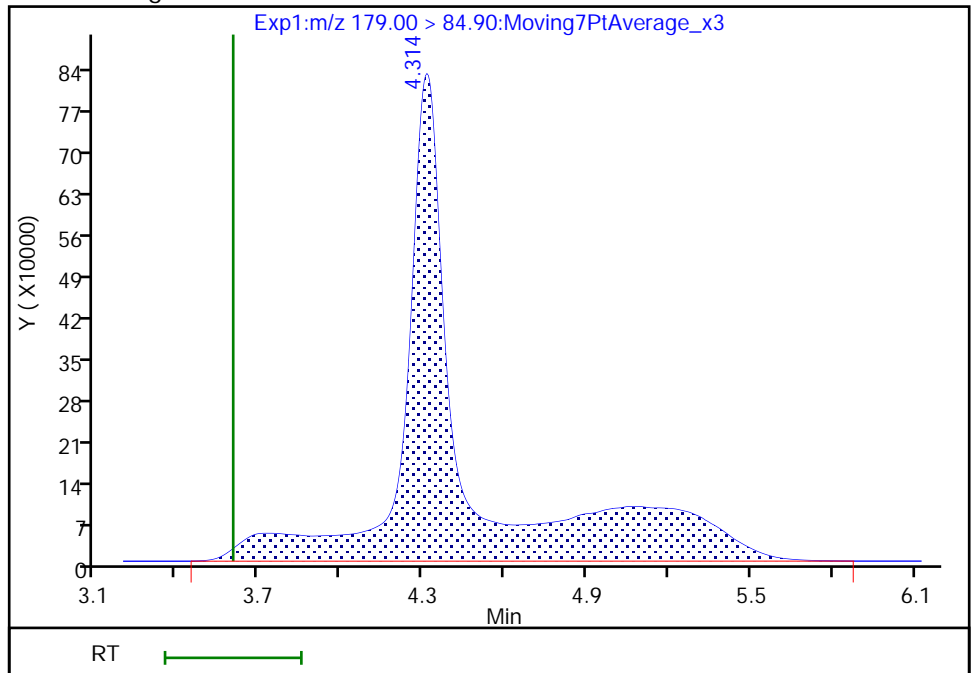
RT: 4.31
Area: 8227051
Amount: 0.768973
Amount Units: ng/ml

Processing Integration Results



RT: 4.31
Area: 12846264
Amount: 1.151030
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 25-Mar-2021 04:00:17
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Calibration

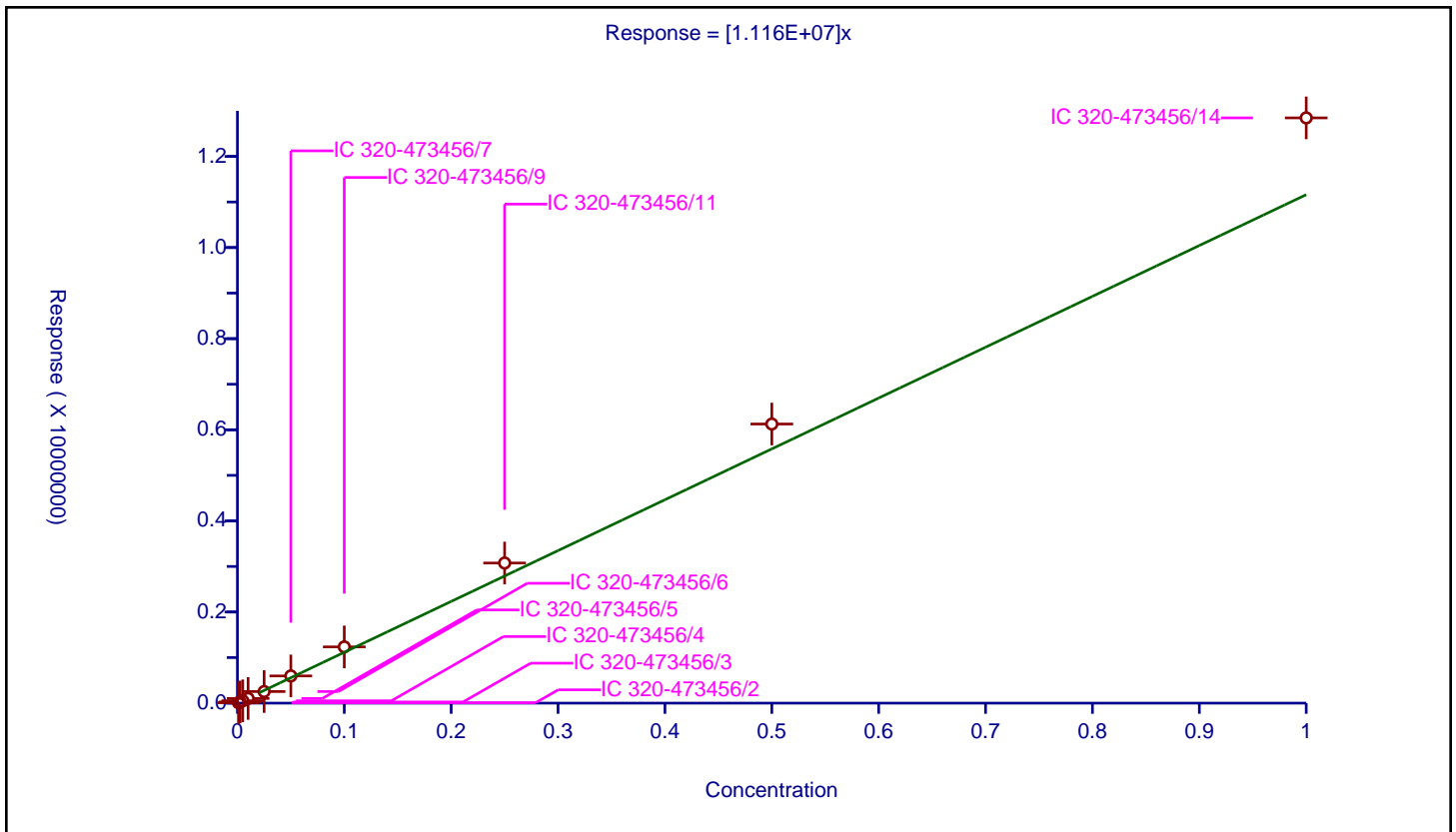
/ PFMOAA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.116E+07

Error Coefficients	
Standard Error:	600000
Relative Standard Error:	11.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	9101.0			9101000.0	Y
2	IC 320-473456/3	0.0025	25223.0			10089200.0	Y
3	IC 320-473456/4	0.005	51337.0			10267400.0	Y
4	IC 320-473456/5	0.01	102824.0			10282400.0	Y
5	IC 320-473456/6	0.025	254496.0			10179840.0	Y
6	IC 320-473456/7	0.05	596974.0			11939480.0	Y
7	IC 320-473456/9	0.1	1234567.0			12345670.0	Y
8	IC 320-473456/11	0.25	3075574.0			12302296.0	Y
9	IC 320-473456/13	0.5	6126589.0			12253178.0	Y
10	IC 320-473456/14	1.0	12846264.0			12846264.0	Y



Calibration

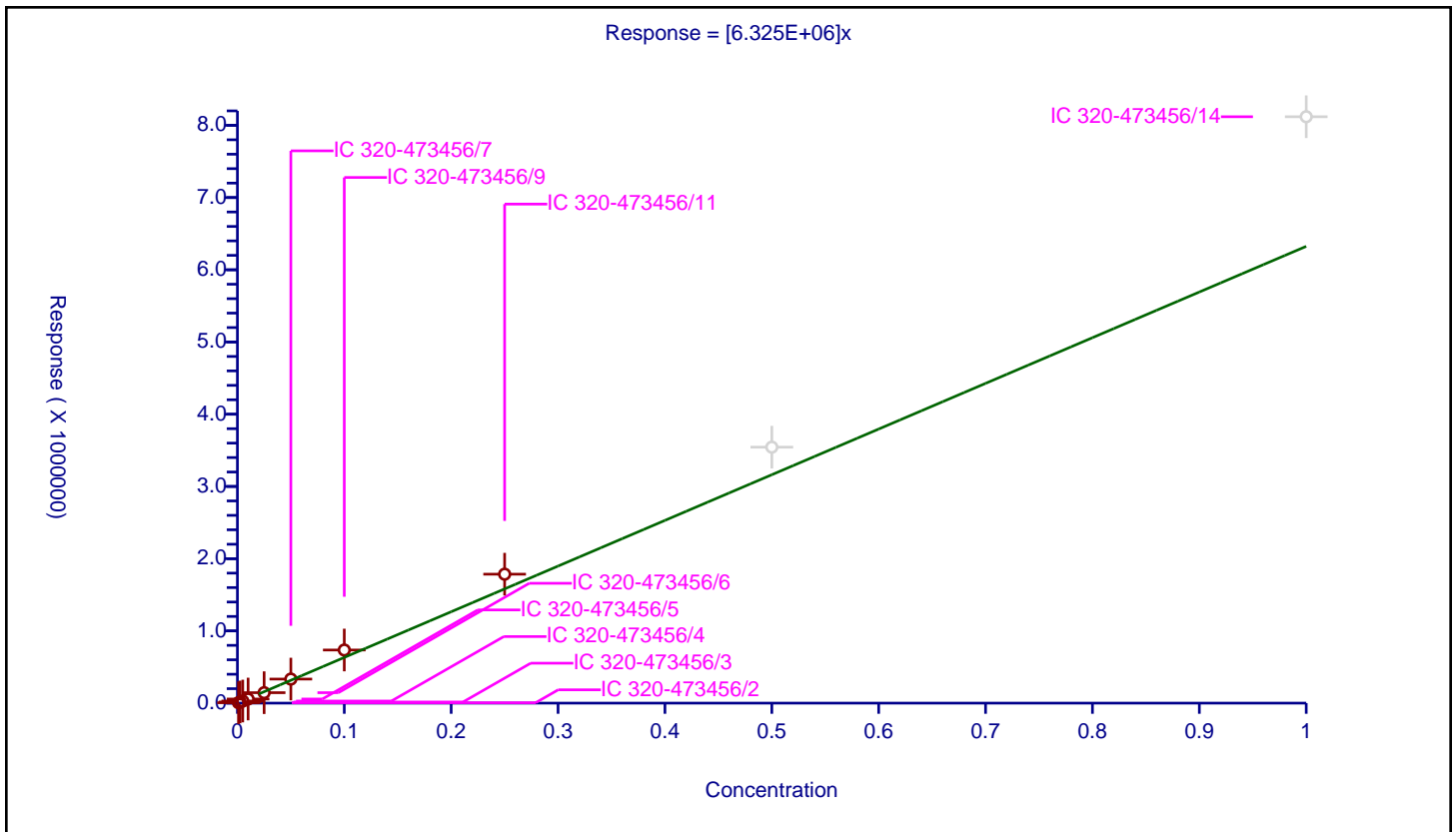
/ R-EVE

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	6.325E+06

Error Coefficients	
Standard Error:	86900
Relative Standard Error:	10.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	5834.0			5834000.0	Y
2	IC 320-473456/3	0.0025	15799.0			6319600.0	Y
3	IC 320-473456/4	0.005	28920.0			5784000.0	Y
4	IC 320-473456/5	0.01	57135.0			5713500.0	Y
5	IC 320-473456/6	0.025	144650.0			5786000.0	Y
6	IC 320-473456/7	0.05	333163.0			6663260.0	Y
7	IC 320-473456/9	0.1	735421.0			7354210.0	Y
8	IC 320-473456/11	0.25	1785433.0			7141732.0	Y
9	IC 320-473456/13	0.5	3544124.0			7088248.0	N
10	IC 320-473456/14	1.0	8118894.0			8118894.0	N



Calibration

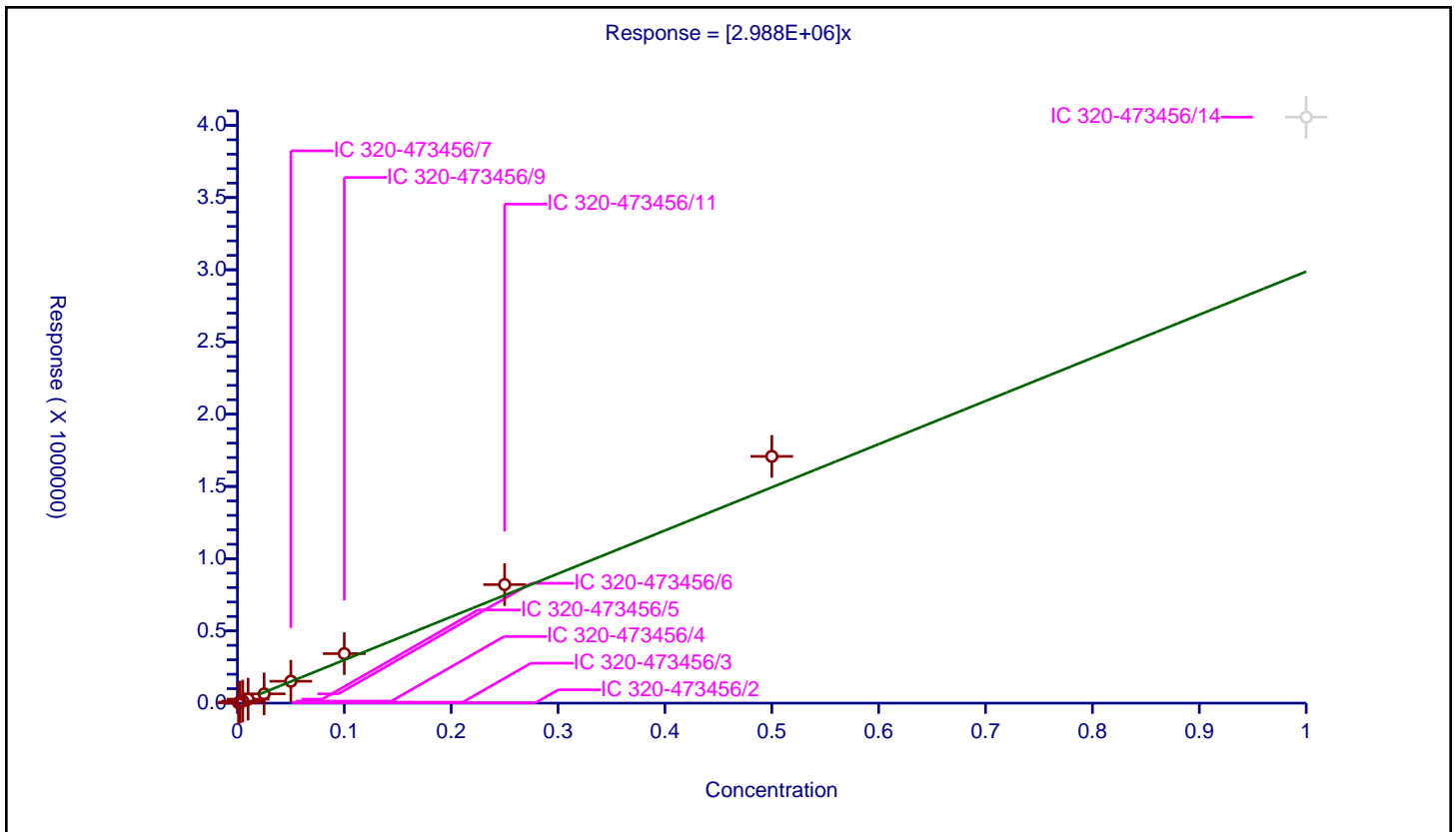
/ R-PSDA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.988E+06

Error Coefficients	
Standard Error:	81700
Relative Standard Error:	10.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	2825.0			2825000.0	Y
2	IC 320-473456/3	0.0025	7042.0			2816800.0	Y
3	IC 320-473456/4	0.005	13864.0			2772800.0	Y
4	IC 320-473456/5	0.01	27622.0			2762200.0	Y
5	IC 320-473456/6	0.025	63982.0			2559280.0	Y
6	IC 320-473456/7	0.05	151464.0			3029280.0	Y
7	IC 320-473456/9	0.1	342661.0			3426610.0	Y
8	IC 320-473456/11	0.25	820752.0			3283008.0	Y
9	IC 320-473456/13	0.5	1708137.0			3416274.0	Y
10	IC 320-473456/14	1.0	4056592.0			4056592.0	N



Calibration

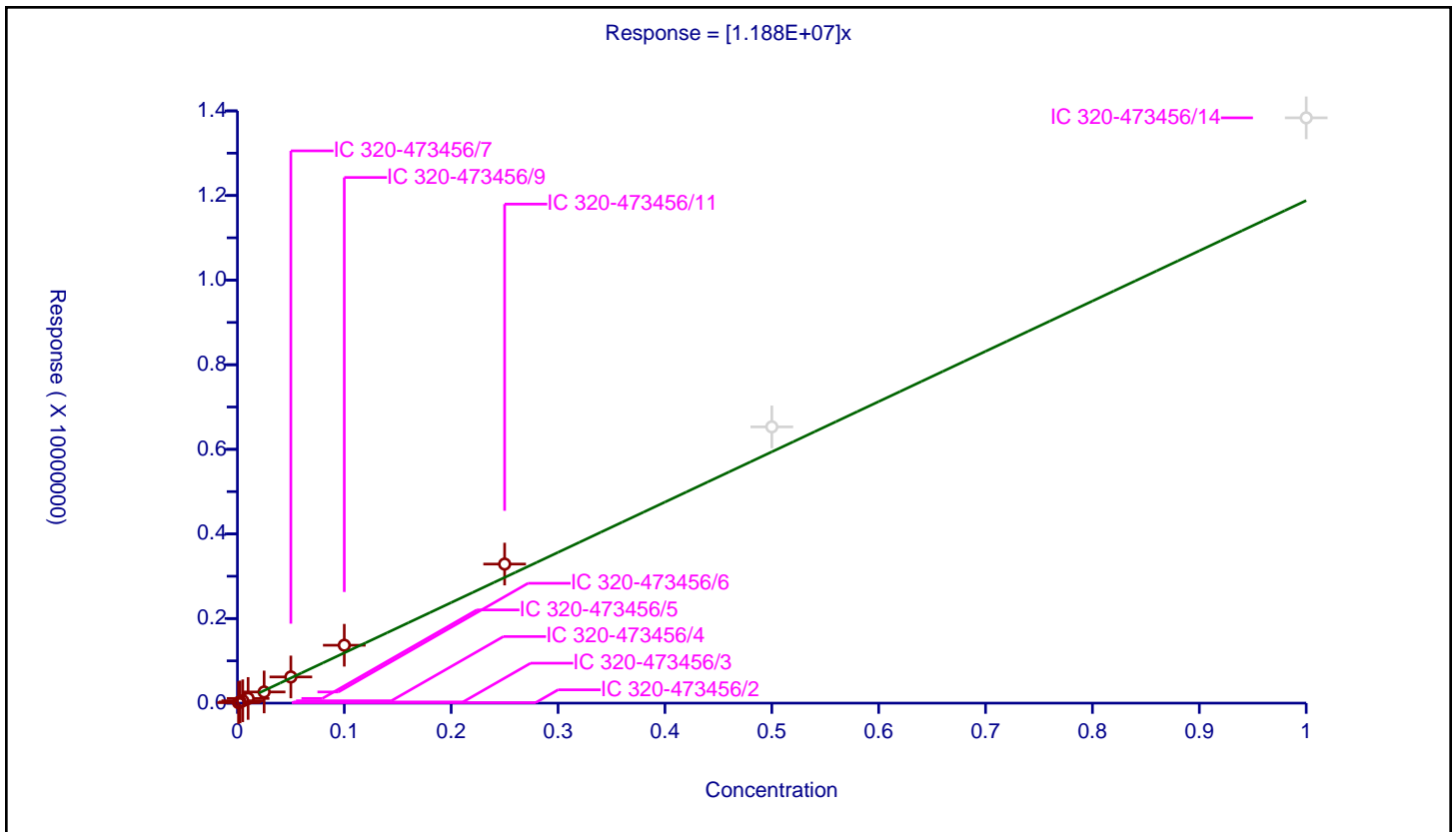
/ Hydrolyzed PSDA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.188E+07

Error Coefficients	
Standard Error:	139000
Relative Standard Error:	9.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	11773.0			11773000.0	Y
2	IC 320-473456/3	0.0025	28292.0			11316800.0	Y
3	IC 320-473456/4	0.005	55663.0			11132600.0	Y
4	IC 320-473456/5	0.01	110532.0			11053200.0	Y
5	IC 320-473456/6	0.025	263816.0			10552640.0	Y
6	IC 320-473456/7	0.05	619145.0			12382900.0	Y
7	IC 320-473456/9	0.1	1368689.0			13686890.0	Y
8	IC 320-473456/11	0.25	3287444.0			13149776.0	Y
9	IC 320-473456/13	0.5	6530765.0			13061530.0	N
10	IC 320-473456/14	1.0	13835653.0			13835653.0	N



Calibration

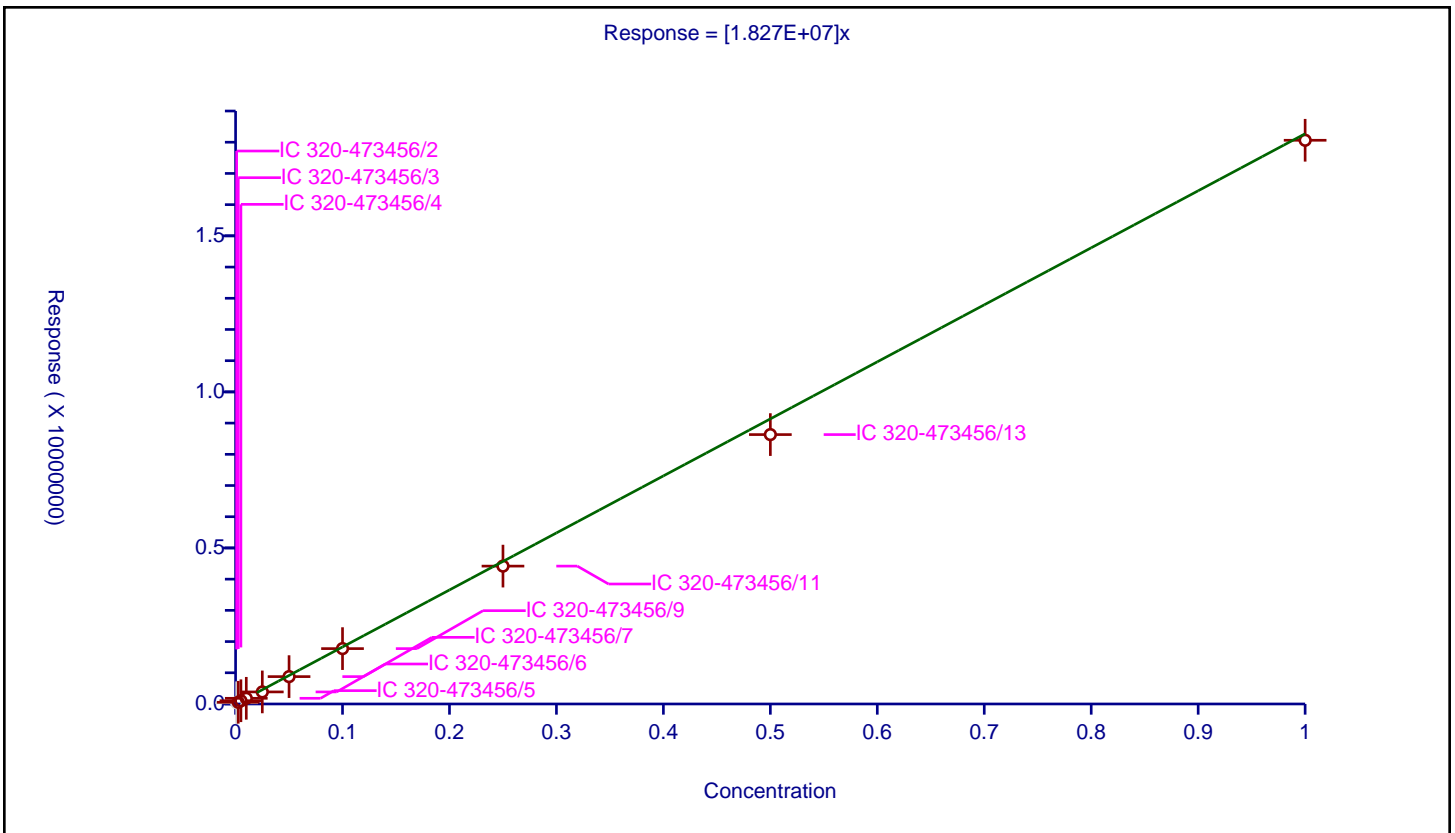
/ PMPA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.827E+07

Error Coefficients	
Standard Error:	203000
Relative Standard Error:	10.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	39948.0			39948000.0	N
2	IC 320-473456/3	0.0025	54390.0			21756000.0	Y
3	IC 320-473456/4	0.005	103652.0			20730400.0	Y
4	IC 320-473456/5	0.01	182172.0			18217200.0	Y
5	IC 320-473456/6	0.025	386613.0			15464520.0	Y
6	IC 320-473456/7	0.05	876761.0			17535220.0	Y
7	IC 320-473456/9	0.1	1774024.0			17740240.0	Y
8	IC 320-473456/11	0.25	4417983.0			17671932.0	Y
9	IC 320-473456/13	0.5	8632485.0			17264970.0	Y
10	IC 320-473456/14	1.0	18062980.0			18062980.0	Y



Calibration

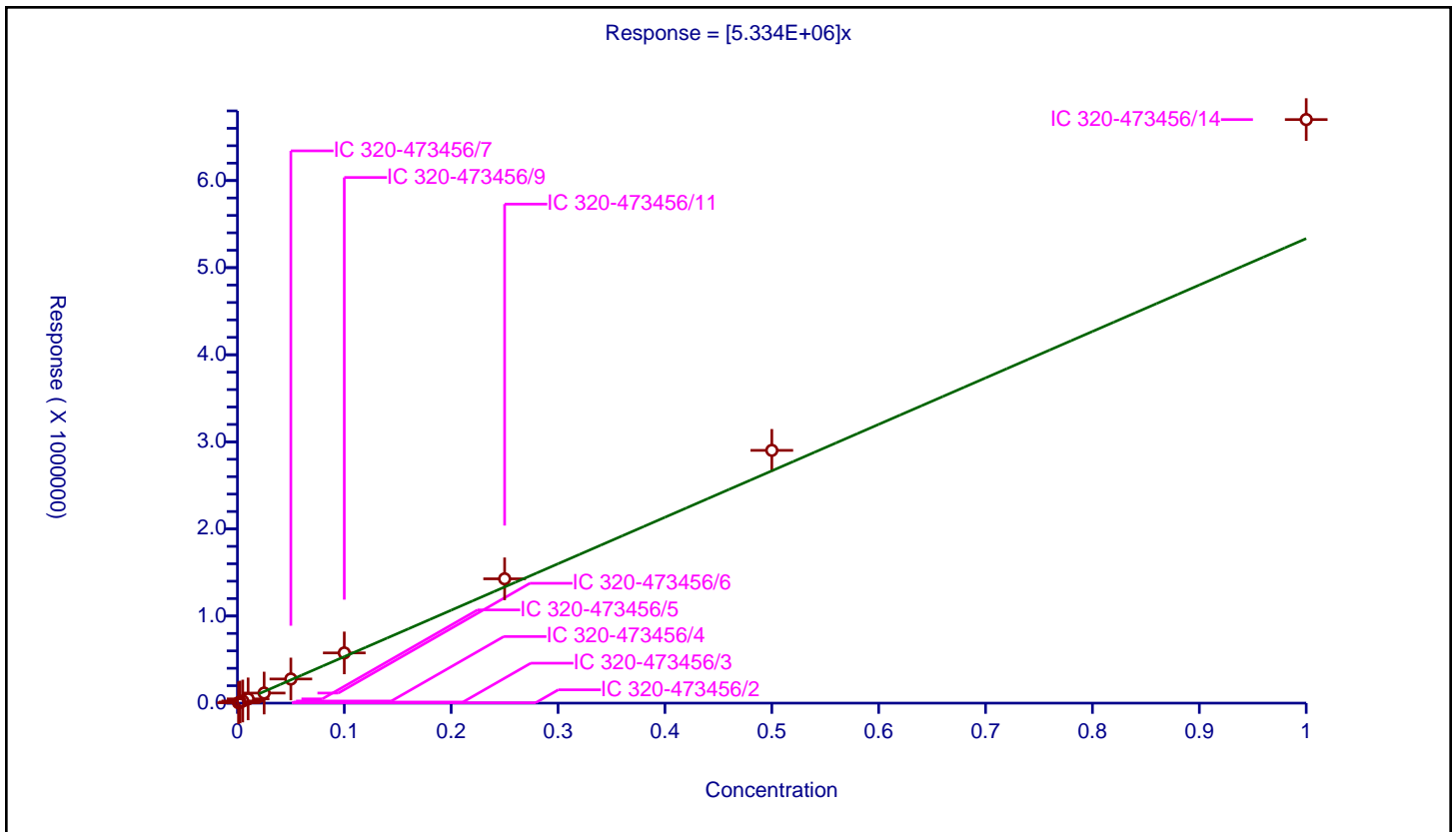
/ NVHOS

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.334E+06

Error Coefficients	
Standard Error:	463000
Relative Standard Error:	13.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	4383.0			4383000.0	Y
2	IC 320-473456/3	0.0025	12607.0			5042800.0	Y
3	IC 320-473456/4	0.005	24357.0			4871400.0	Y
4	IC 320-473456/5	0.01	48861.0			4886100.0	Y
5	IC 320-473456/6	0.025	115889.0			4635560.0	Y
6	IC 320-473456/7	0.05	277264.0			5545280.0	Y
7	IC 320-473456/9	0.1	576554.0			5765540.0	Y
8	IC 320-473456/11	0.25	1427249.0			5708996.0	Y
9	IC 320-473456/13	0.5	2902215.0			5804430.0	Y
10	IC 320-473456/14	1.0	6700222.0			6700222.0	Y



Calibration

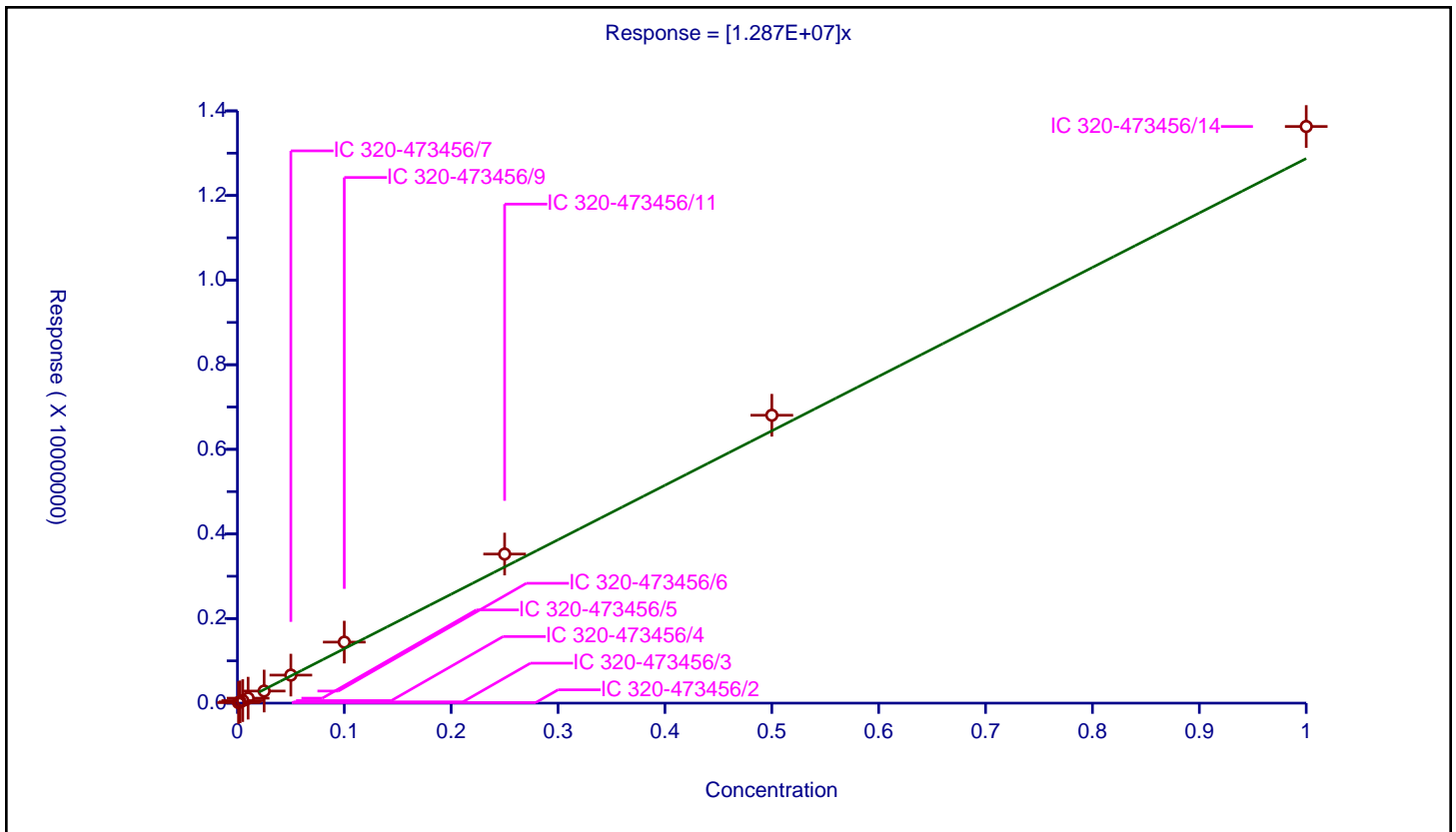
/ PFO2HxA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.287E+07

Error Coefficients	
Standard Error:	303000
Relative Standard Error:	8.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	12396.0			12396000.0	Y
2	IC 320-473456/3	0.0025	30403.0			12161200.0	Y
3	IC 320-473456/4	0.005	59842.0			11968400.0	Y
4	IC 320-473456/5	0.01	117543.0			11754300.0	Y
5	IC 320-473456/6	0.025	286105.0			11444200.0	Y
6	IC 320-473456/7	0.05	662499.0			13249980.0	Y
7	IC 320-473456/9	0.1	1442503.0			14425030.0	Y
8	IC 320-473456/11	0.25	3524277.0			14097108.0	Y
9	IC 320-473456/13	0.5	6805610.0			13611220.0	Y
10	IC 320-473456/14	1.0	13631154.0			13631154.0	Y



Calibration

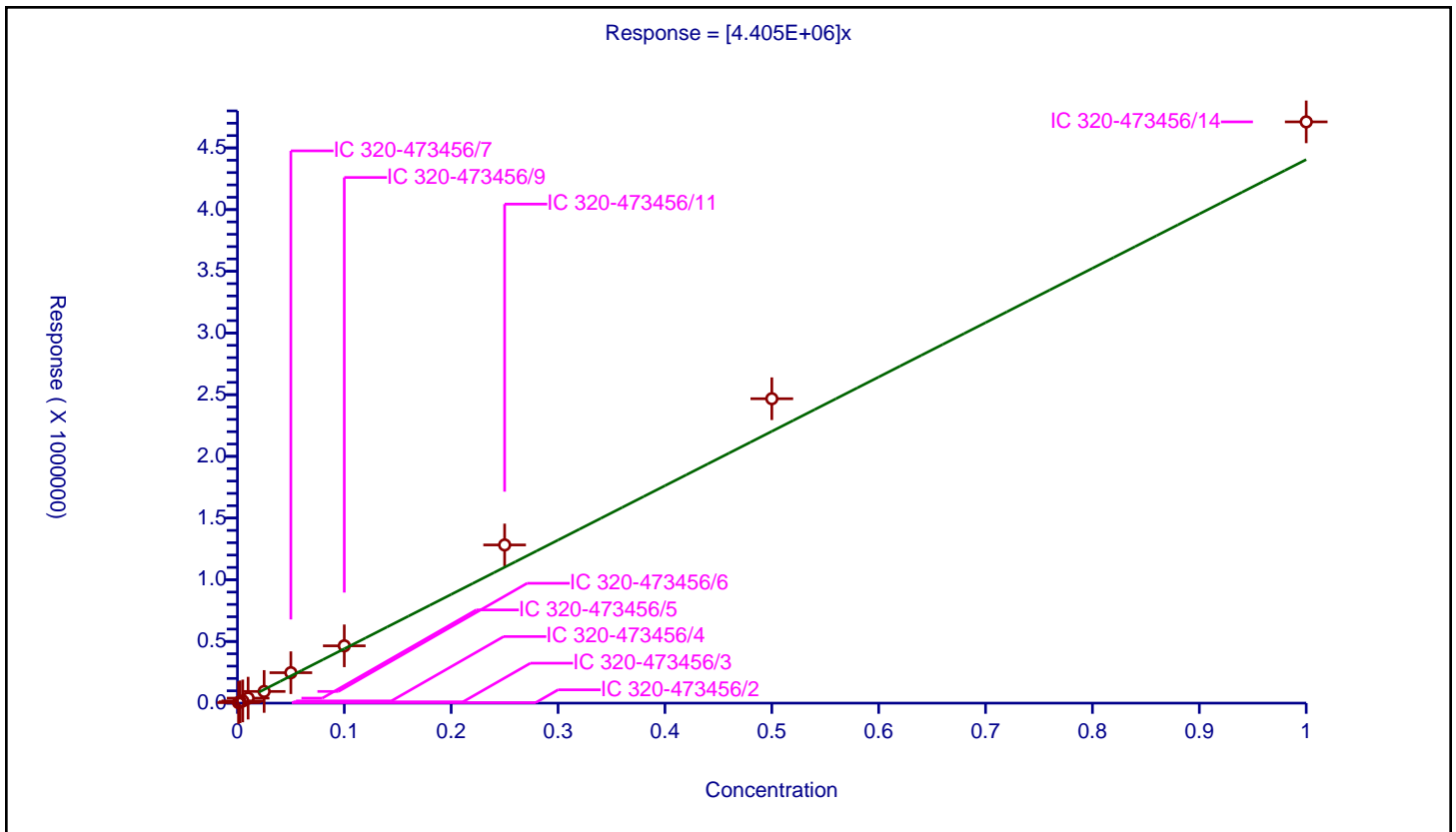
/ PEPA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.405E+06

Error Coefficients	
Standard Error:	148000
Relative Standard Error:	12.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	4053.0			4053000.0	Y
2	IC 320-473456/3	0.0025	10599.0			4239600.0	Y
3	IC 320-473456/4	0.005	17839.0			3567800.0	Y
4	IC 320-473456/5	0.01	40568.0			4056800.0	Y
5	IC 320-473456/6	0.025	94695.0			3787800.0	Y
6	IC 320-473456/7	0.05	246533.0			4930660.0	Y
7	IC 320-473456/9	0.1	464402.0			4644020.0	Y
8	IC 320-473456/11	0.25	1282060.0			5128240.0	Y
9	IC 320-473456/13	0.5	2467190.0			4934380.0	Y
10	IC 320-473456/14	1.0	4710955.0			4710955.0	Y



Calibration

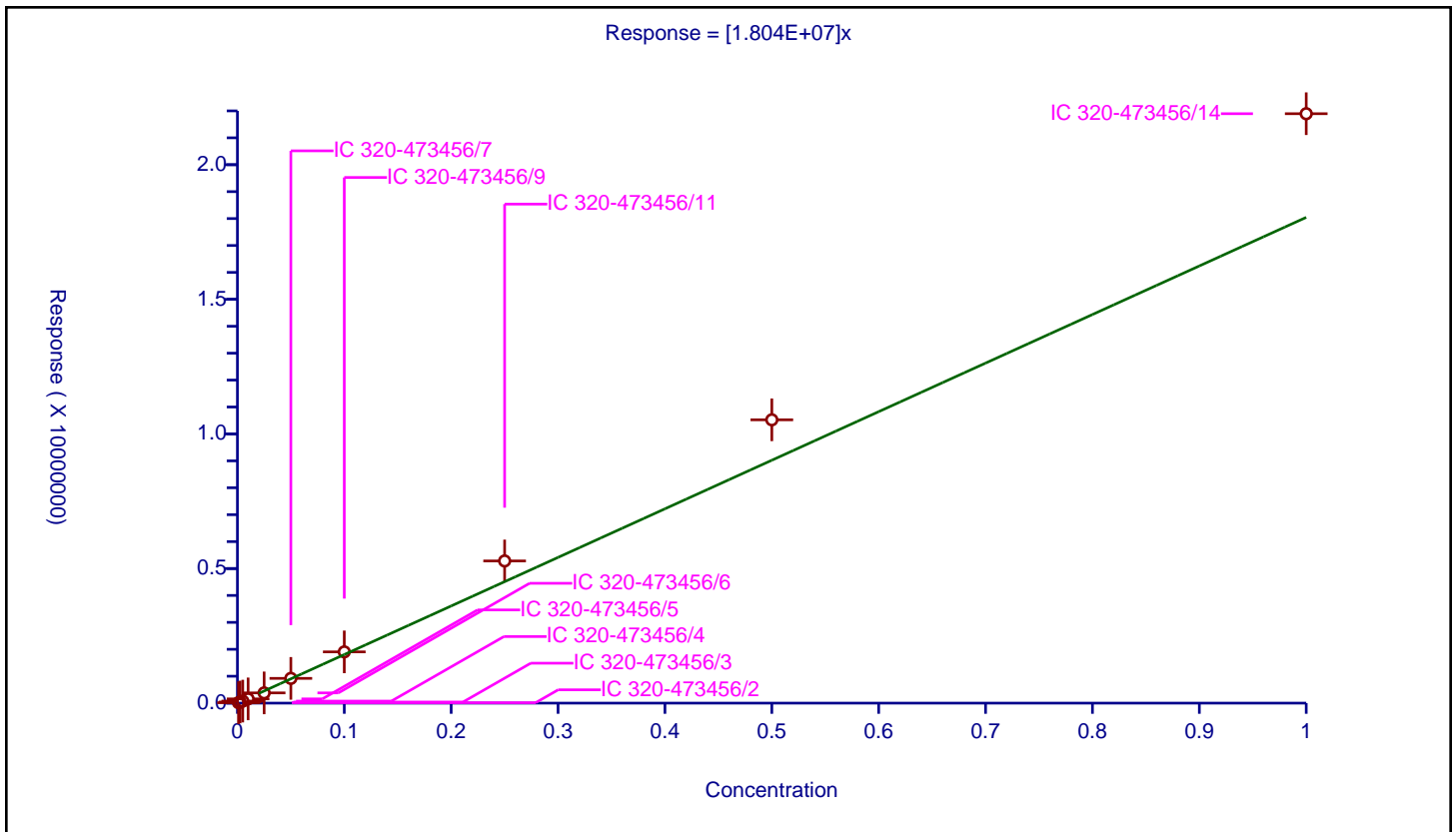
/ PES

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.804E+07

Error Coefficients	
Standard Error:	1400000
Relative Standard Error:	14.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	16494.0			16494000.0	Y
2	IC 320-473456/3	0.0025	40780.0			16312000.0	Y
3	IC 320-473456/4	0.005	75543.0			15108600.0	Y
4	IC 320-473456/5	0.01	158127.0			15812700.0	Y
5	IC 320-473456/6	0.025	380604.0			15224160.0	Y
6	IC 320-473456/7	0.05	919147.0			18382940.0	Y
7	IC 320-473456/9	0.1	1903831.0			19038310.0	Y
8	IC 320-473456/11	0.25	5281826.0			21127304.0	Y
9	IC 320-473456/13	0.5	10524314.0			21048628.0	Y
10	IC 320-473456/14	1.0	21894796.0			21894796.0	Y



Calibration

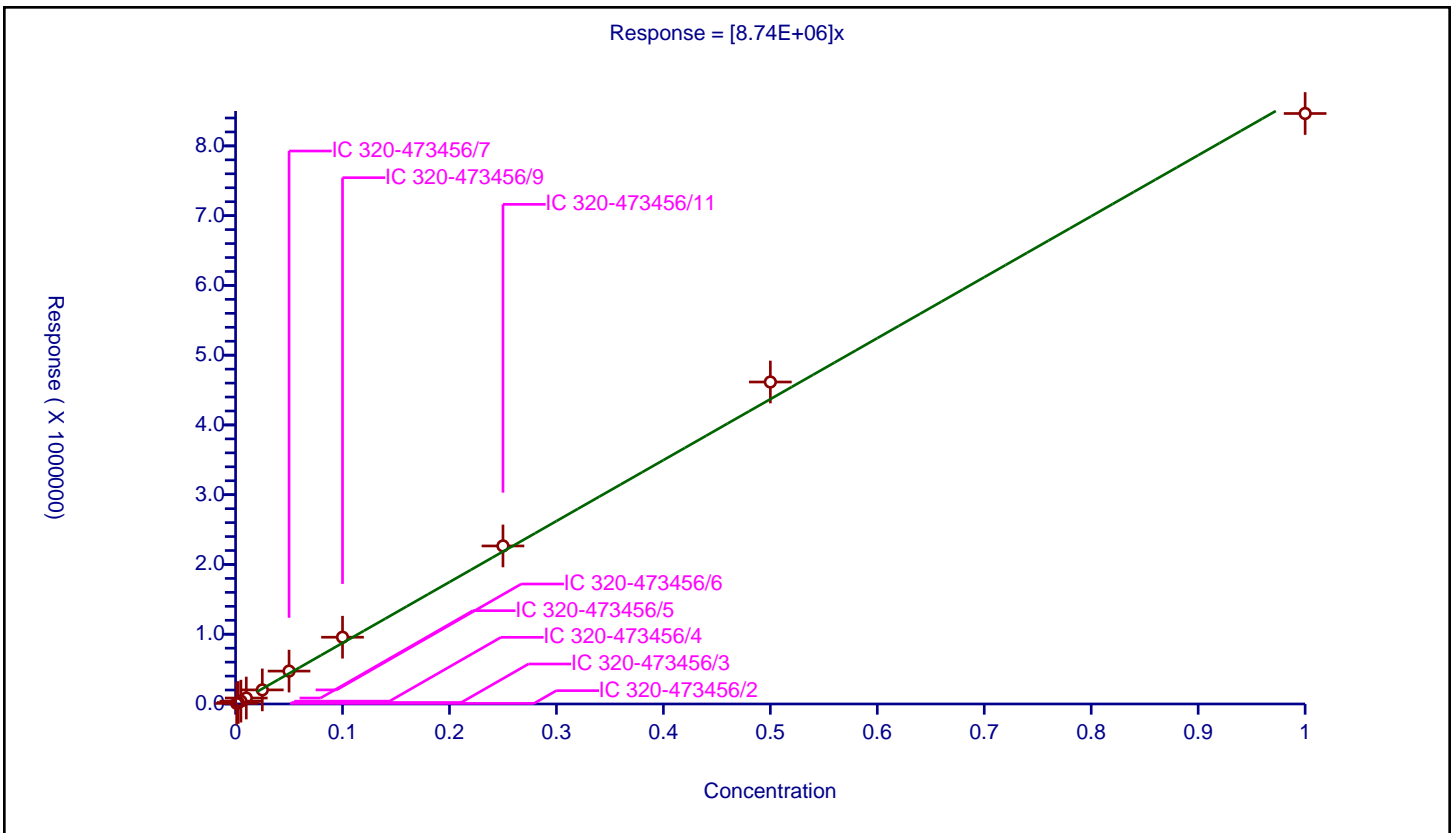
/ PFECA B

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	8.74E+06

Error Coefficients	
Standard Error:	129000
Relative Standard Error:	6.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	8305.0			8305000.0	Y
2	IC 320-473456/3	0.0025	21464.0			8585600.0	Y
3	IC 320-473456/4	0.005	40589.0			8117800.0	Y
4	IC 320-473456/5	0.01	85494.0			8549400.0	Y
5	IC 320-473456/6	0.025	201967.0			8078680.0	Y
6	IC 320-473456/7	0.05	471615.0			9432300.0	Y
7	IC 320-473456/9	0.1	957150.0			9571500.0	Y
8	IC 320-473456/11	0.25	2265345.0			9061380.0	Y
9	IC 320-473456/13	0.5	4615366.0			9230732.0	Y
10	IC 320-473456/14	1.0	8464512.0			8464512.0	Y



Calibration

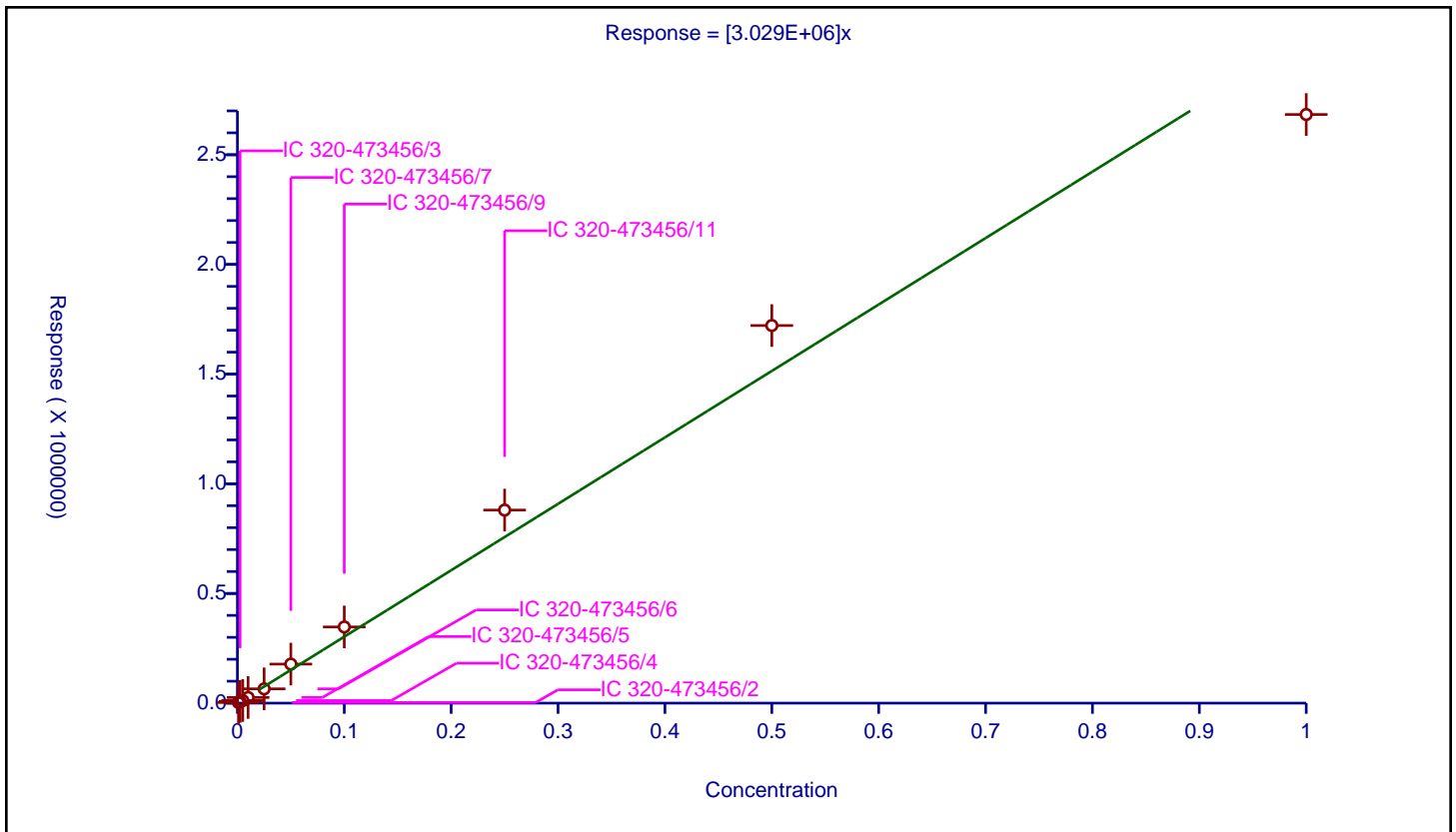
/ PFO3OA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.029E+06

Error Coefficients	
Standard Error:	141000
Relative Standard Error:	15.0
Correlation Coefficient:	0.983
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	2869.0			2869000.0	Y
2	IC 320-473456/3	0.0025	7944.0			3177600.0	Y
3	IC 320-473456/4	0.005	11897.0			2379400.0	Y
4	IC 320-473456/5	0.01	25777.0			2577700.0	Y
5	IC 320-473456/6	0.025	65091.0			2603640.0	Y
6	IC 320-473456/7	0.05	177919.0			3558380.0	Y
7	IC 320-473456/9	0.1	347289.0			3472890.0	Y
8	IC 320-473456/11	0.25	880078.0			3520312.0	Y
9	IC 320-473456/13	0.5	1721452.0			3442904.0	Y
10	IC 320-473456/14	1.0	2683507.0			2683507.0	Y



Calibration

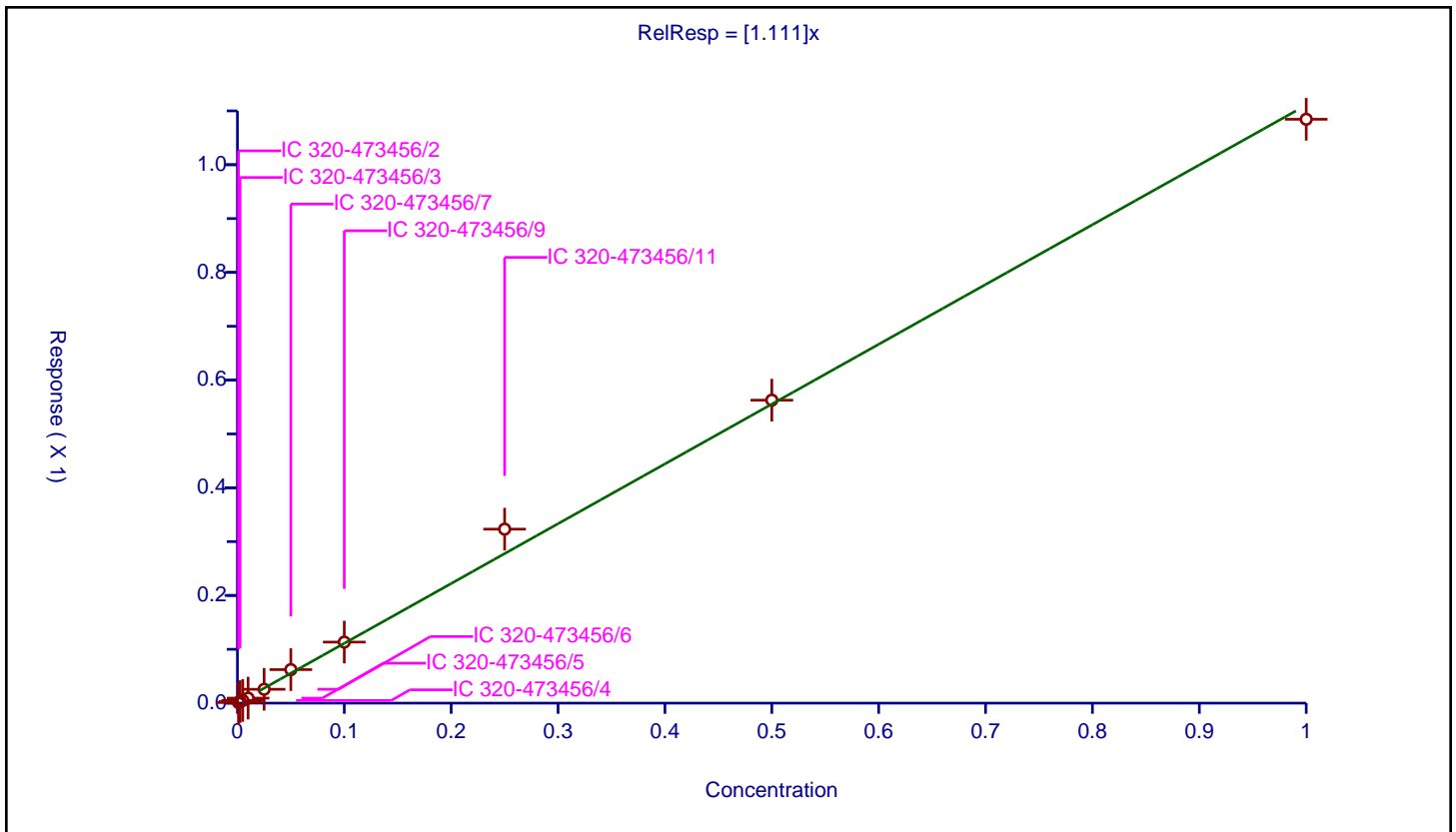
/ Perfluoro(2-propoxypropanoic) acid

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: IsoDil
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.111

Error Coefficients	
Standard Error:	2440000
Relative Standard Error:	9.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 320-473456/2	0.001	0.001121	0.25	1521890.0	1.121139	Y
2	IC 320-473456/3	0.0025	0.002859	0.25	1455453.0	1.14363	Y
3	IC 320-473456/4	0.005	0.005006	0.25	1455879.0	1.001251	Y
4	IC 320-473456/5	0.01	0.009312	0.25	1485150.0	0.931219	Y
5	IC 320-473456/6	0.025	0.025722	0.25	1403460.0	1.028886	Y
6	IC 320-473456/7	0.05	0.062265	0.25	1391003.0	1.245303	Y
7	IC 320-473456/9	0.1	0.113347	0.25	1531783.0	1.133467	Y
8	IC 320-473456/11	0.25	0.323149	0.25	1344876.0	1.292597	Y
9	IC 320-473456/13	0.5	0.562742	0.25	1446446.0	1.125483	Y
10	IC 320-473456/14	1.0	1.084423	0.25	1443222.0	1.084423	Y



Calibration

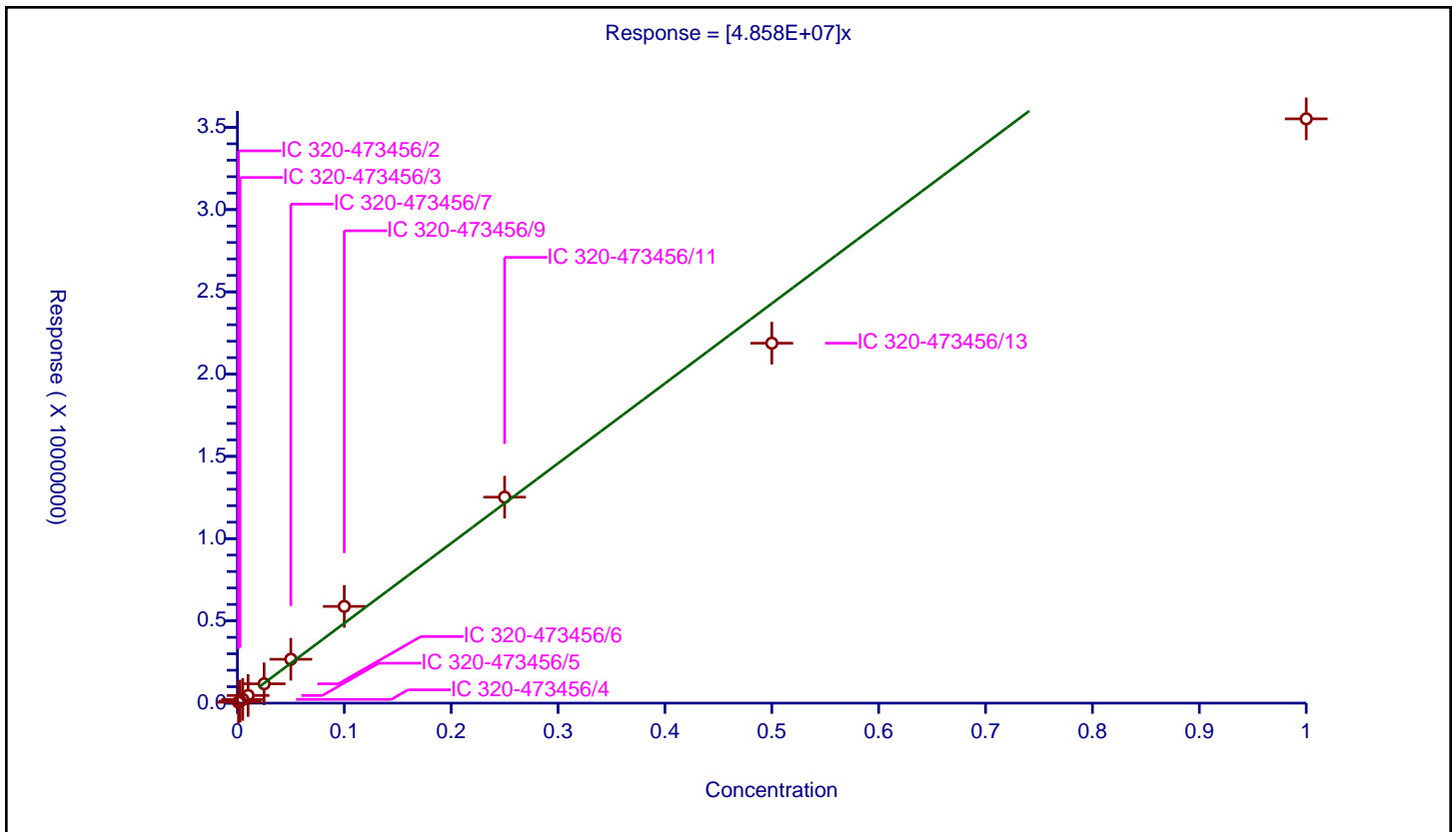
/ R-PSDCA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.858E+07

Error Coefficients	
Standard Error:	4440000
Relative Standard Error:	13.5
Correlation Coefficient:	0.983
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	55341.0			55341000.0	Y
2	IC 320-473456/3	0.0025	124801.0			49920400.0	Y
3	IC 320-473456/4	0.005	227467.0			45493400.0	Y
4	IC 320-473456/5	0.01	465355.0			46535500.0	Y
5	IC 320-473456/6	0.025	1175605.0			47024200.0	Y
6	IC 320-473456/7	0.05	2667746.0			53354920.0	Y
7	IC 320-473456/9	0.1	5880840.0			58808400.0	Y
8	IC 320-473456/11	0.25	12519994.0			50079976.0	Y
9	IC 320-473456/13	0.5	21879495.0			43758990.0	Y
10	IC 320-473456/14	1.0	35515927.0			35515927.0	Y



Calibration

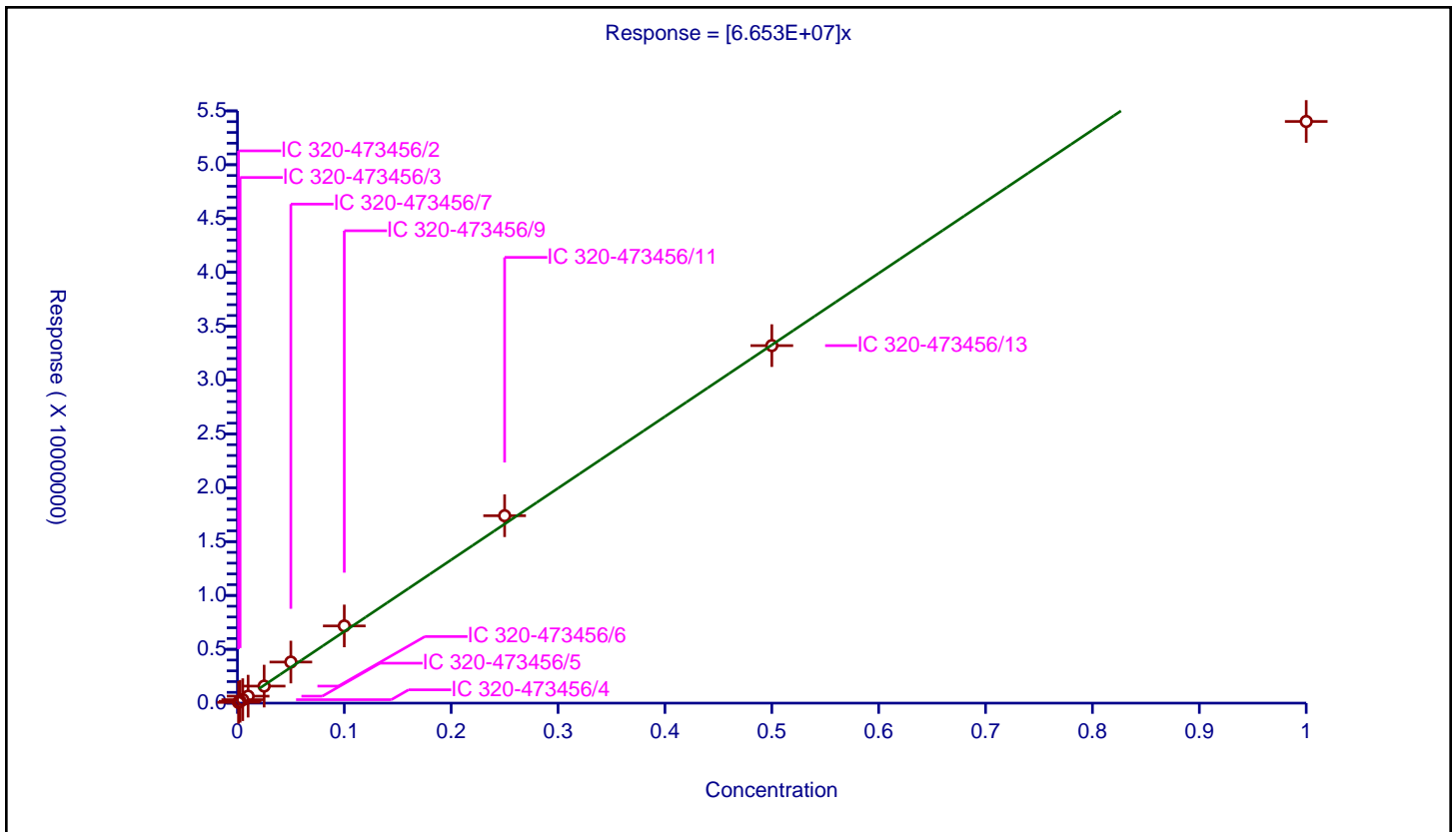
/ Hydro-EVE Acid

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	6.653E+07

Error Coefficients	
Standard Error:	4190000
Relative Standard Error:	8.8
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	66950.0			66950000.0	Y
2	IC 320-473456/3	0.0025	170489.0			68195600.0	Y
3	IC 320-473456/4	0.005	321040.0			64208000.0	Y
4	IC 320-473456/5	0.01	646635.0			64663500.0	Y
5	IC 320-473456/6	0.025	1580680.0			63227200.0	Y
6	IC 320-473456/7	0.05	3816250.0			76325000.0	Y
7	IC 320-473456/9	0.1	7170102.0			71701020.0	Y
8	IC 320-473456/11	0.25	17403946.0			69615784.0	Y
9	IC 320-473456/13	0.5	33202628.0			66405256.0	Y
10	IC 320-473456/14	1.0	54017645.0			54017645.0	Y



Calibration

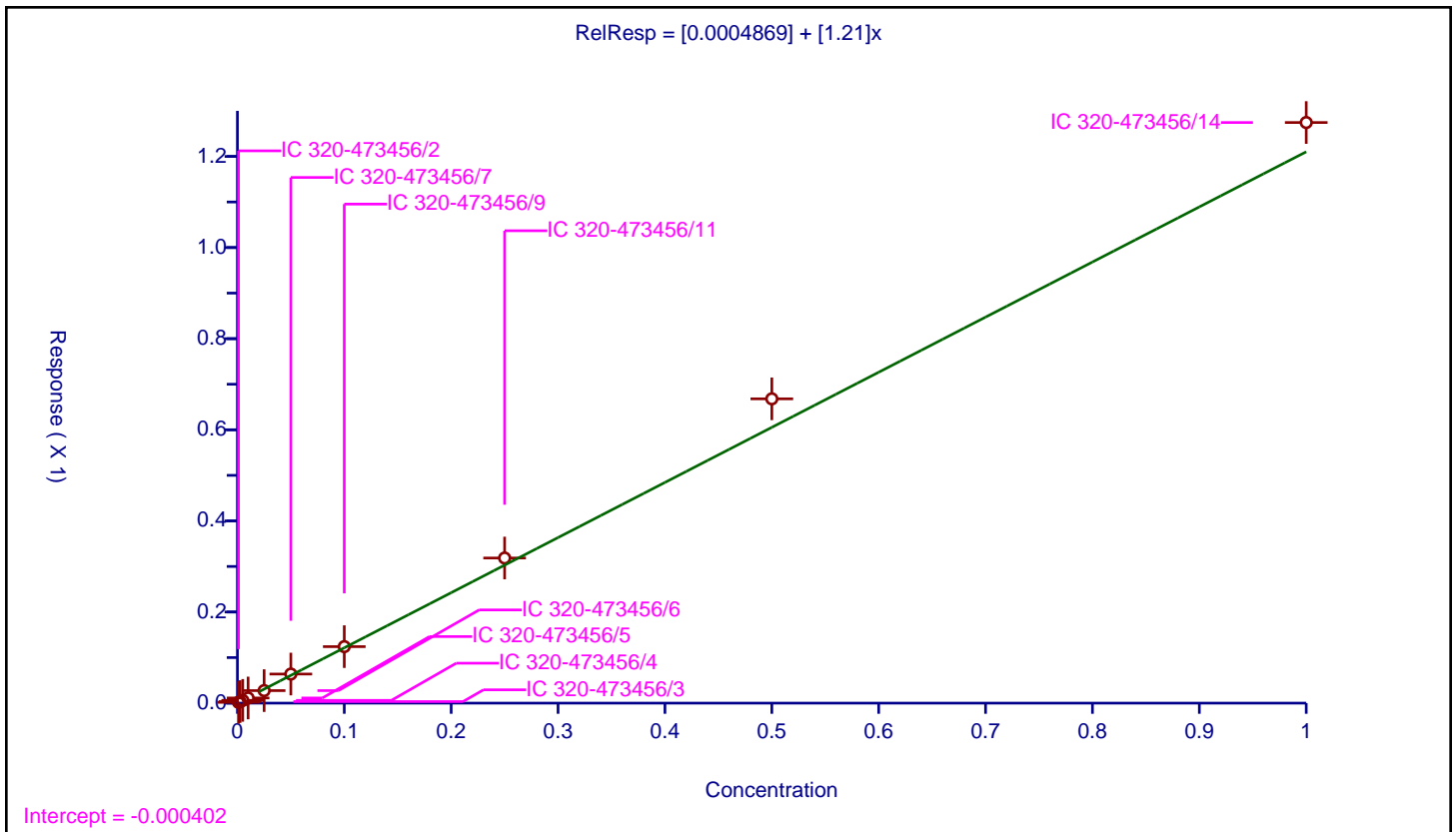
/ Perfluoroheptanoic acid

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: IsoDil
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0.0004869
Slope:	1.21

Error Coefficients	
Standard Error:	8190000
Relative Standard Error:	7.9
Correlation Coefficient:	0.982
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 320-473456/2	0.001	0.001743	0.25	5893601.0	1.742907	Y
2	IC 320-473456/3	0.0025	0.003445	0.25	5784950.0	1.378076	Y
3	IC 320-473456/4	0.005	0.006044	0.25	6029842.0	1.208738	Y
4	IC 320-473456/5	0.01	0.011299	0.25	5096782.0	1.129924	Y
5	IC 320-473456/6	0.025	0.027519	0.25	5197256.0	1.100748	Y
6	IC 320-473456/7	0.05	0.063869	0.25	5468334.0	1.277372	Y
7	IC 320-473456/9	0.1	0.124042	0.25	4825378.0	1.240423	Y
8	IC 320-473456/11	0.25	0.318528	0.25	4808719.0	1.274111	Y
9	IC 320-473456/13	0.5	0.667948	0.25	4492787.0	1.335895	Y
10	IC 320-473456/14	1.0	1.274436	0.25	3652878.0	1.274436	Y



Calibration

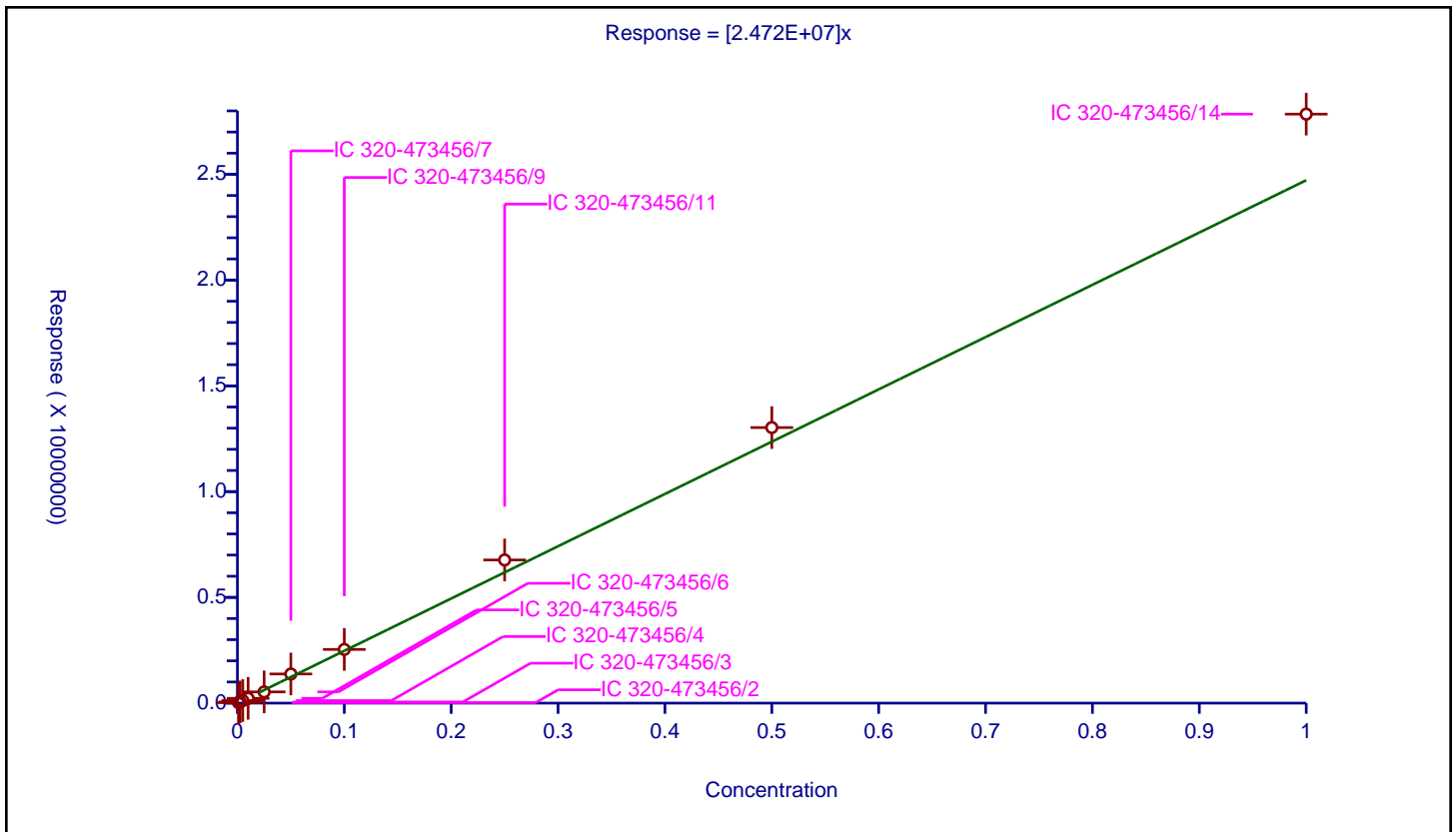
/ Hydro-PS Acid

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.472E+07

Error Coefficients	
Standard Error:	1090000
Relative Standard Error:	9.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	22844.0			22844000.0	Y
2	IC 320-473456/3	0.0025	56204.0			22481600.0	Y
3	IC 320-473456/4	0.005	120008.0			24001600.0	Y
4	IC 320-473456/5	0.01	226869.0			22686900.0	Y
5	IC 320-473456/6	0.025	531327.0			21253080.0	Y
6	IC 320-473456/7	0.05	1378674.0			27573480.0	Y
7	IC 320-473456/9	0.1	2538601.0			25386010.0	Y
8	IC 320-473456/11	0.25	6768643.0			27074572.0	Y
9	IC 320-473456/13	0.5	13027671.0			26055342.0	Y
10	IC 320-473456/14	1.0	27847716.0			27847716.0	Y



Calibration

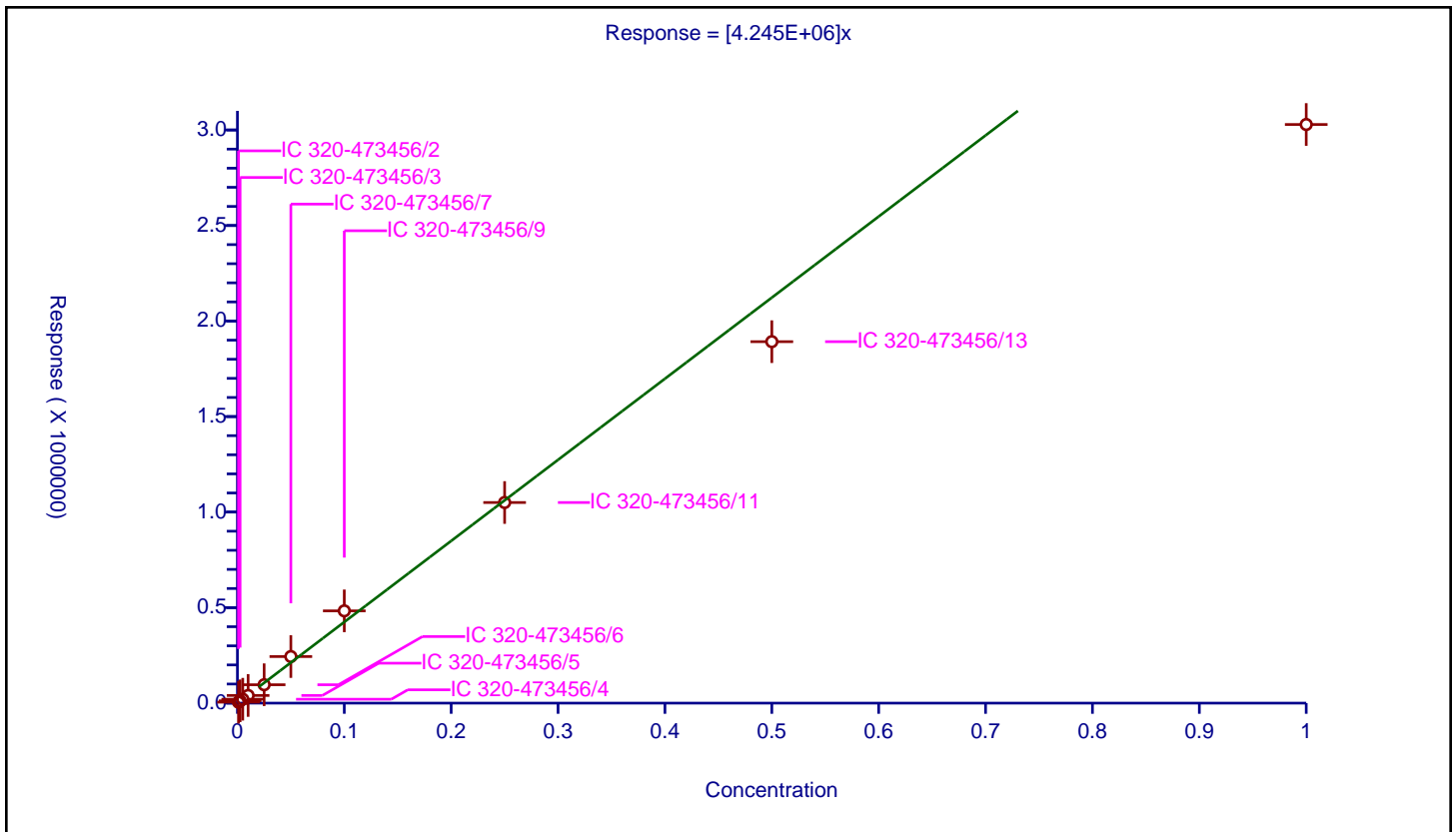
/ PFECA G

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.245E+06

Error Coefficients	
Standard Error:	413000
Relative Standard Error:	14.7
Correlation Coefficient:	0.983
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	4934.0			4934000.0	Y
2	IC 320-473456/3	0.0025	12120.0			4848000.0	Y
3	IC 320-473456/4	0.005	20436.0			4087200.0	Y
4	IC 320-473456/5	0.01	40093.0			4009300.0	Y
5	IC 320-473456/6	0.025	96315.0			3852600.0	Y
6	IC 320-473456/7	0.05	243817.0			4876340.0	Y
7	IC 320-473456/9	0.1	482984.0			4829840.0	Y
8	IC 320-473456/11	0.25	1050142.0			4200568.0	Y
9	IC 320-473456/13	0.5	1892029.0			3784058.0	Y
10	IC 320-473456/14	1.0	3028772.0			3028772.0	Y



Calibration

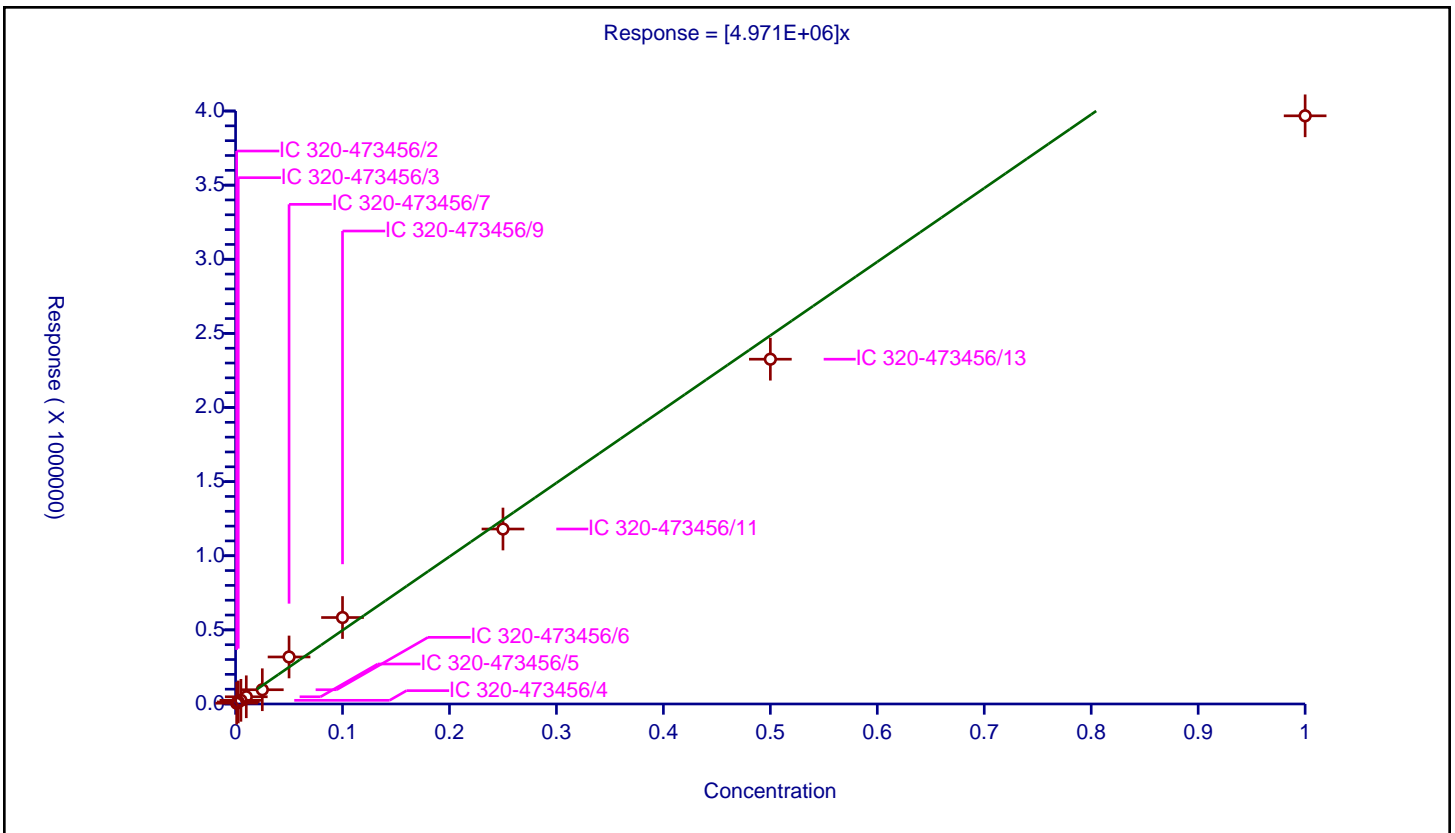
/ PFO4DA

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.971E+06

Error Coefficients	
Standard Error:	341000
Relative Standard Error:	15.5
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.971

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	5048.0			5048000.0	Y
2	IC 320-473456/3	0.0025	13746.0			5498400.0	Y
3	IC 320-473456/4	0.005	24679.0			4935800.0	Y
4	IC 320-473456/5	0.01	48621.0			4862100.0	Y
5	IC 320-473456/6	0.025	96224.0			3848960.0	Y
6	IC 320-473456/7	0.05	317191.0			6343820.0	Y
7	IC 320-473456/9	0.1	583306.0			5833060.0	Y
8	IC 320-473456/11	0.25	1180239.0			4720956.0	Y
9	IC 320-473456/13	0.5	2325808.0			4651616.0	Y
10	IC 320-473456/14	1.0	3967612.0			3967612.0	Y



Calibration

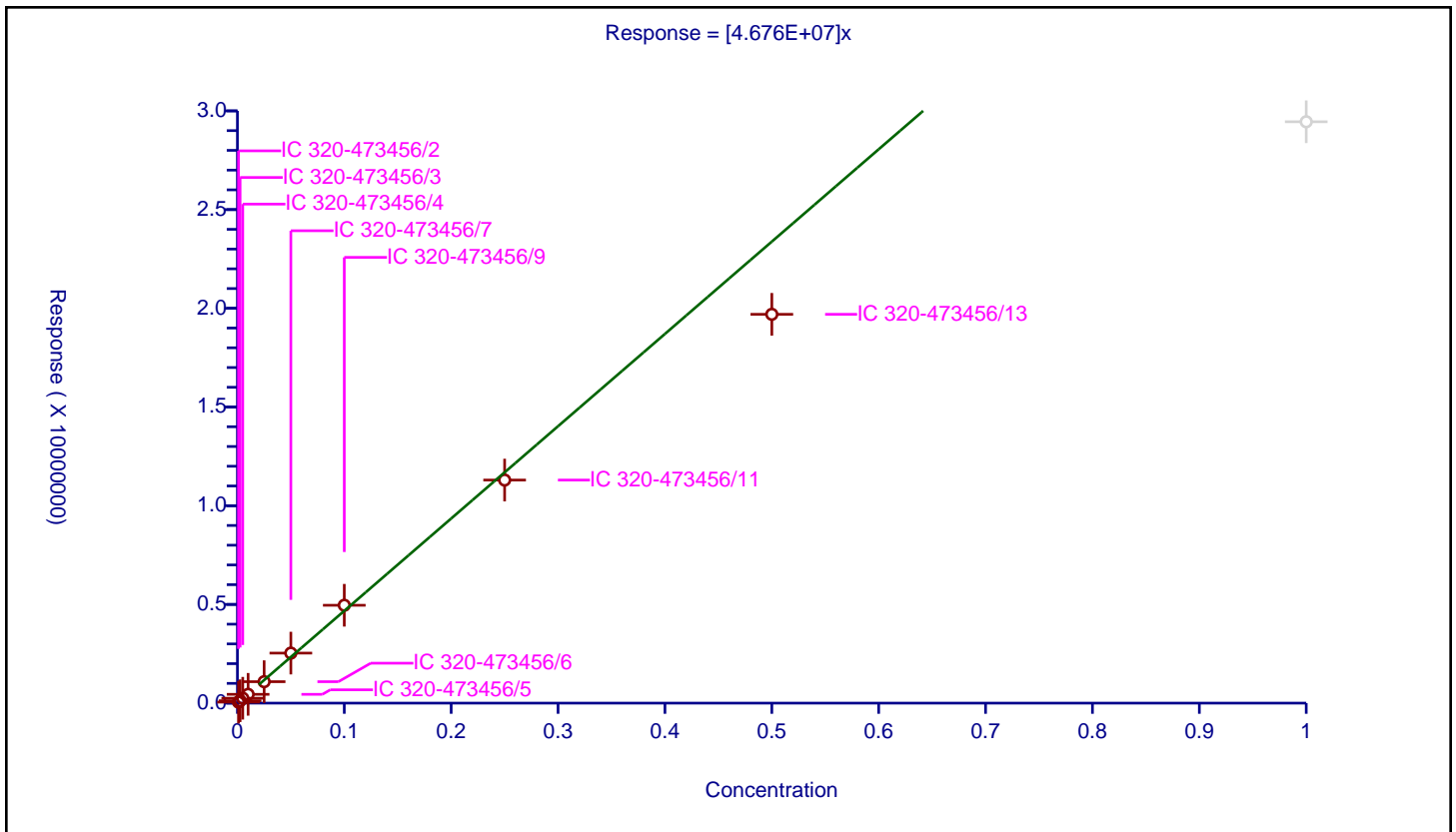
/ EVE Acid

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ESTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.676E+07

Error Coefficients	
Standard Error:	1320000
Relative Standard Error:	8.2
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	50255.0			50255000.0	Y
2	IC 320-473456/3	0.0025	120749.0			48299600.0	Y
3	IC 320-473456/4	0.005	247054.0			49410800.0	Y
4	IC 320-473456/5	0.01	445413.0			44541300.0	Y
5	IC 320-473456/6	0.025	1086168.0			43446720.0	Y
6	IC 320-473456/7	0.05	2534902.0			50698040.0	Y
7	IC 320-473456/9	0.1	4957627.0			49576270.0	Y
8	IC 320-473456/11	0.25	11299231.0			45196924.0	Y
9	IC 320-473456/13	0.5	19694923.0			39389846.0	Y
10	IC 320-473456/14	1.0	29449097.0			29449097.0	N



Calibration

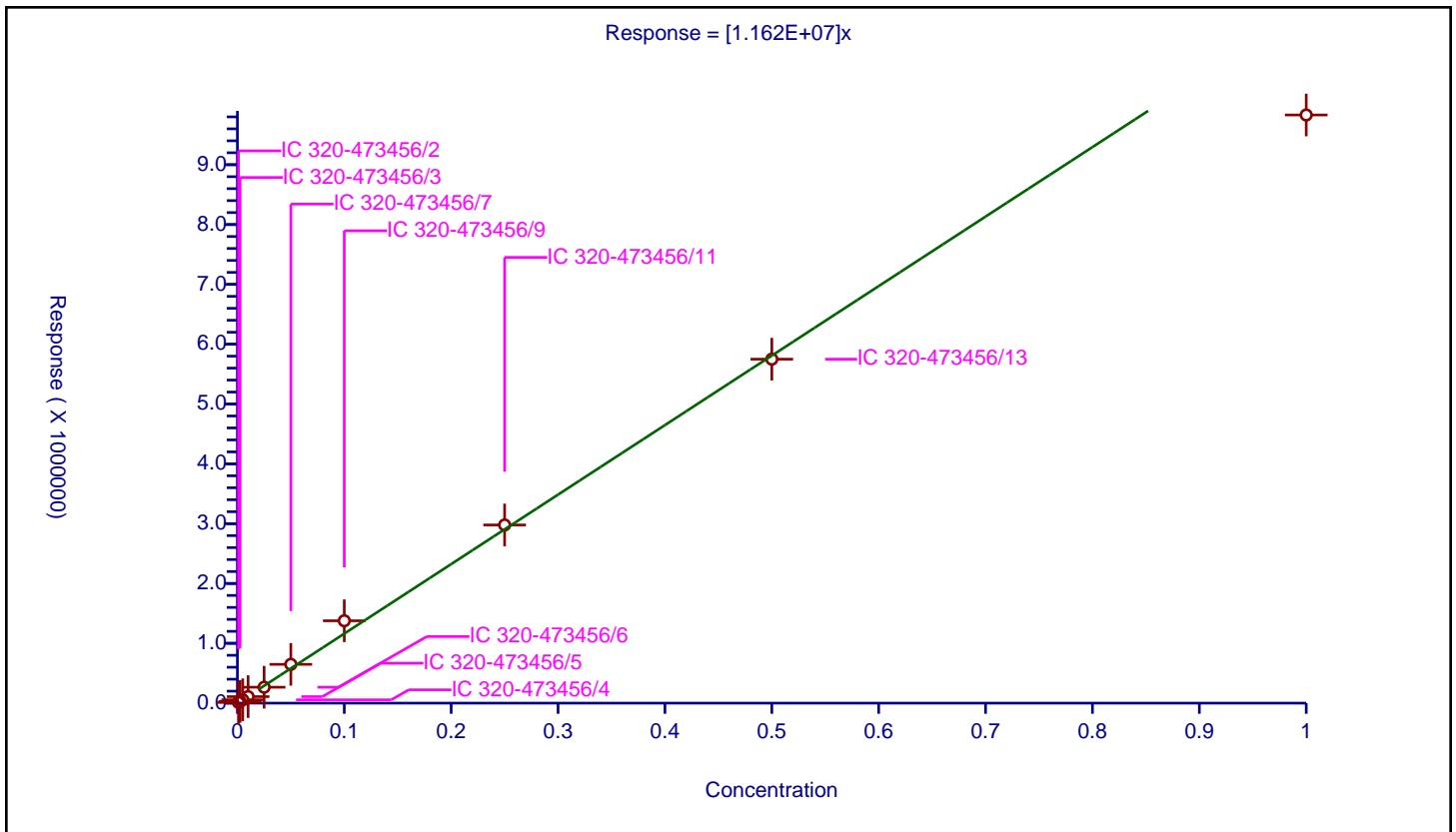
/ PS Acid

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.162E+07

Error Coefficients	
Standard Error:	601000
Relative Standard Error:	9.7
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	11833.0			11833000.0	Y
2	IC 320-473456/3	0.0025	29278.0			11711200.0	Y
3	IC 320-473456/4	0.005	55653.0			11130600.0	Y
4	IC 320-473456/5	0.01	108865.0			10886500.0	Y
5	IC 320-473456/6	0.025	265981.0			10639240.0	Y
6	IC 320-473456/7	0.05	648456.0			12969120.0	Y
7	IC 320-473456/9	0.1	1376869.0			13768690.0	Y
8	IC 320-473456/11	0.25	2978259.0			11913036.0	Y
9	IC 320-473456/13	0.5	5749744.0			11499488.0	Y
10	IC 320-473456/14	1.0	9831575.0			9831575.0	Y



Calibration

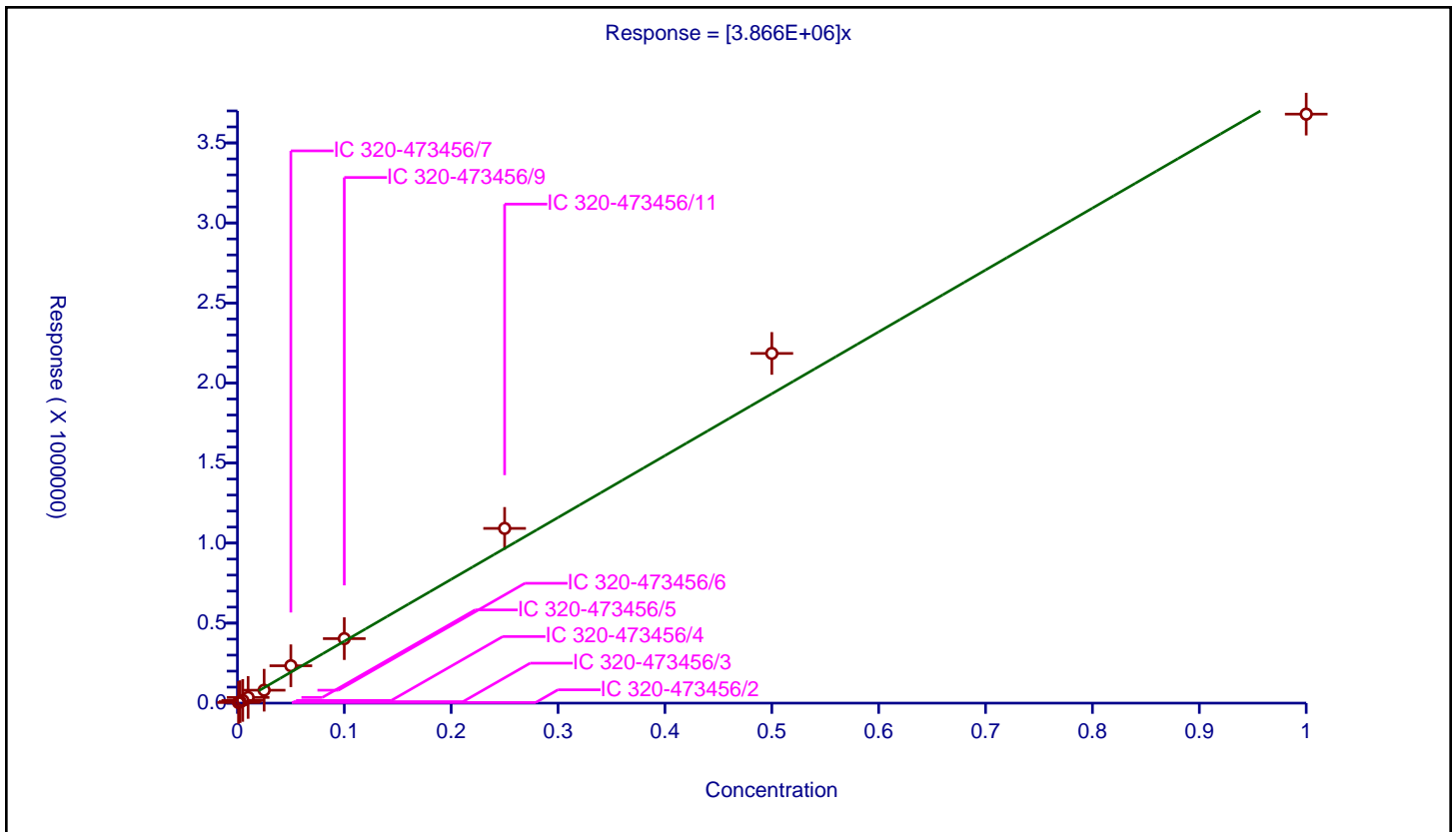
/ TAF

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.866E+06

Error Coefficients	
Standard Error:	113000
Relative Standard Error:	12.3
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 320-473456/2	0.001	3698.0			3698000.0	Y
2	IC 320-473456/3	0.0025	9221.0			3688400.0	Y
3	IC 320-473456/4	0.005	16870.0			3374000.0	Y
4	IC 320-473456/5	0.01	35467.0			3546700.0	Y
5	IC 320-473456/6	0.025	80807.0			3232280.0	Y
6	IC 320-473456/7	0.05	233579.0			4671580.0	Y
7	IC 320-473456/9	0.1	402884.0			4028840.0	Y
8	IC 320-473456/11	0.25	1091679.0			4366716.0	Y
9	IC 320-473456/13	0.5	2184797.0			4369594.0	Y
10	IC 320-473456/14	1.0	3679886.0			3679886.0	Y



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1
 SDG No.: _____
 Lab Sample ID: ICV 320-473456/16 Calibration Date: 03/24/2021 16:01
 Instrument ID: A12 Calib Start Date: 03/24/2021 11:54
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 03/24/2021 15:26
 Lab File ID: 2021.03.24_A12_TB3_ICAL_016.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PFMOAA	Ave	11160673	11480430		103	100	2.9	30.0
R-EVE	Ave	6324538	6940700		110	100	9.7	50.0
R-PSDA	Ave	2987917	2953830		98.9	100	-1.1	50.0
Hydrolyzed PSDA	Ave	11880976	11968830		101	100	0.7	50.0
PMPA	Ave	18271496	16801590		92.0	100	-8.0	30.0
NVHOS	Ave	5334333	5294560		99.3	100	-0.7	30.0
PFO2HxA	Ave	12873859	13196270		103	100	2.5	30.0
PEPA	Ave	4405326	4797460		109	100	8.9	30.0
PES	Ave	18044344	17451770		96.7	100	-3.3	30.0
PFECA B	Ave	8739690	8952410		102	100	2.4	30.0
PFO3OA	Ave	3028533	3178070		105	100	4.9	30.0
HFPO-DA	AveID	1.111	1.065		95.9	100	-4.1	40.0
R-PSDCA	Ave	48583271	52073890		107	100	7.2	30.0
Hydro-EVE Acid	Ave	66530901	69813380		105	100	4.9	30.0
Hydro-PS Acid	Ave	24720430	28732130		116	100	16.2	30.0
Perfluoroheptanoic acid	L2ID		1.103		90.8	100	-9.2	40.0
PFECA G	Ave	4245068	4765090		112	100	12.3	30.0
PFO4DA	Ave	4971032	5284000		106	100	6.3	30.0
EVE Acid	Ave	46757167	49225220		105	100	5.3	30.0
PS Acid	Ave	11618245	11428690		98.4	100	-1.6	30.0
PFO5DA	Ave	3865600	4329420		112	100	12.0	50.0
13C3 HFPO-DA	Ave	5791665	5807496		251	250	0.3	50.0
13C4 PFHpA	Ave	20500211	21737784		265	250	6.0	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_016.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 24-Mar-2021 16:01:21 ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: ICV (50)
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist:

Method: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 25-Mar-2021 04:08:46 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1601

First Level Reviewer: fariasa Date: 25-Mar-2021 04:00:54

Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.159	3.603	0.556		1148043	0.1029		187		M
2 R-EVE										
405.00 > 217.00	6.367	6.231	0.136		694070	0.1097		12943		
3 R-PSDA										
440.90 > 241.00	6.407	6.291	0.116		295383	0.0989		7392		
4 Hydrolyzed PSDA										
439.00 > 343.00	6.486	6.371	0.115		1196883	0.1007		19397		
23 PMPA										
229.00 > 185.00	6.732	6.593	0.139		1680159	0.0920		2965		
5 NVHOS										
297.00 > 135.00	7.111	7.138	-0.027		529456	0.0993		11922		
6 PFO2HxA										
245.00 > 85.00	7.676	7.622	0.054		1319627	0.1025		18319		
22 PEPA										
278.90 > 234.90	8.259	8.228	0.031		479746	0.1089		4104		
7 PES										
314.90 > 135.00	8.522	8.460	0.062		1745177	0.0967		44205		
8 PFECA B										
295.00 > 201.00	8.740	8.715	0.025		895241	0.1024		24467		
9 PFO3OA										
310.90 > 85.00	8.985	8.957	0.028		317807	0.1049		8582		
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.074	9.049	0.025		1451874	0.2507		100	30960	
11 HPFO-DA										
285.00 > 169.00	9.074	9.049	0.025	1.000	618673	0.0959		17494		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.425	9.396	0.029		5207389	0.1072			81044	
13 Hydro-EVE Acid										
427.00 > 282.90	9.458	9.461	-0.003		6981338	0.1049			70247	
D 14 13C4 PFHpA										
367.00 > 322.00	9.490	9.461	0.029		5434446	0.2651		106	84681	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.490	9.461	0.029	1.000	2397194	0.0908	Target=0.00		20797	
363.00 > 169.00	9.490	9.461	0.029	1.000	704742		3.40(0.00-0.00)		10982	
15 Hydro-PS Acid										
463.00 > 262.90	9.490	9.461	0.029		2873213	0.1162			47773	
17 PFECA G										
378.90 > 184.90	9.616	9.587	0.029		476509	0.1123			13077	
18 PFO4DA										
376.90 > 85.00	9.760	9.730	0.030		528400	0.1063			11361	
19 PS Acid										
443.00 > 146.90	9.817	9.788	0.029		1142869	0.0984			24682	
20 EVE Acid										
407.00 > 262.90	9.817	9.817	0.0		4922522	0.1053			70194	
21 TAF										
442.90 > 85.00	10.322	10.293	0.029		432942	0.1120			2194	

QC Flag Legend

Processing Flags

Review Flags

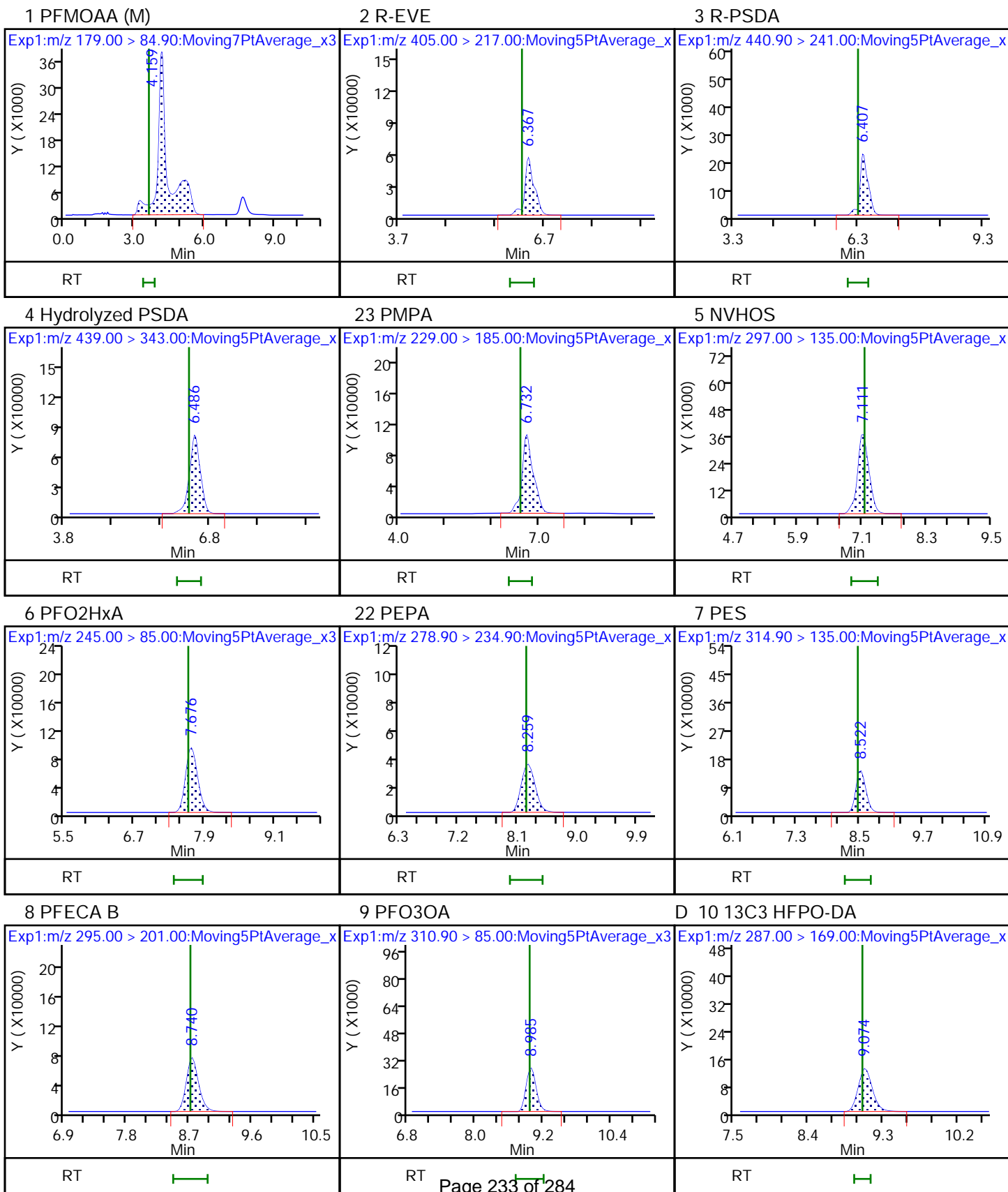
M - Manually Integrated

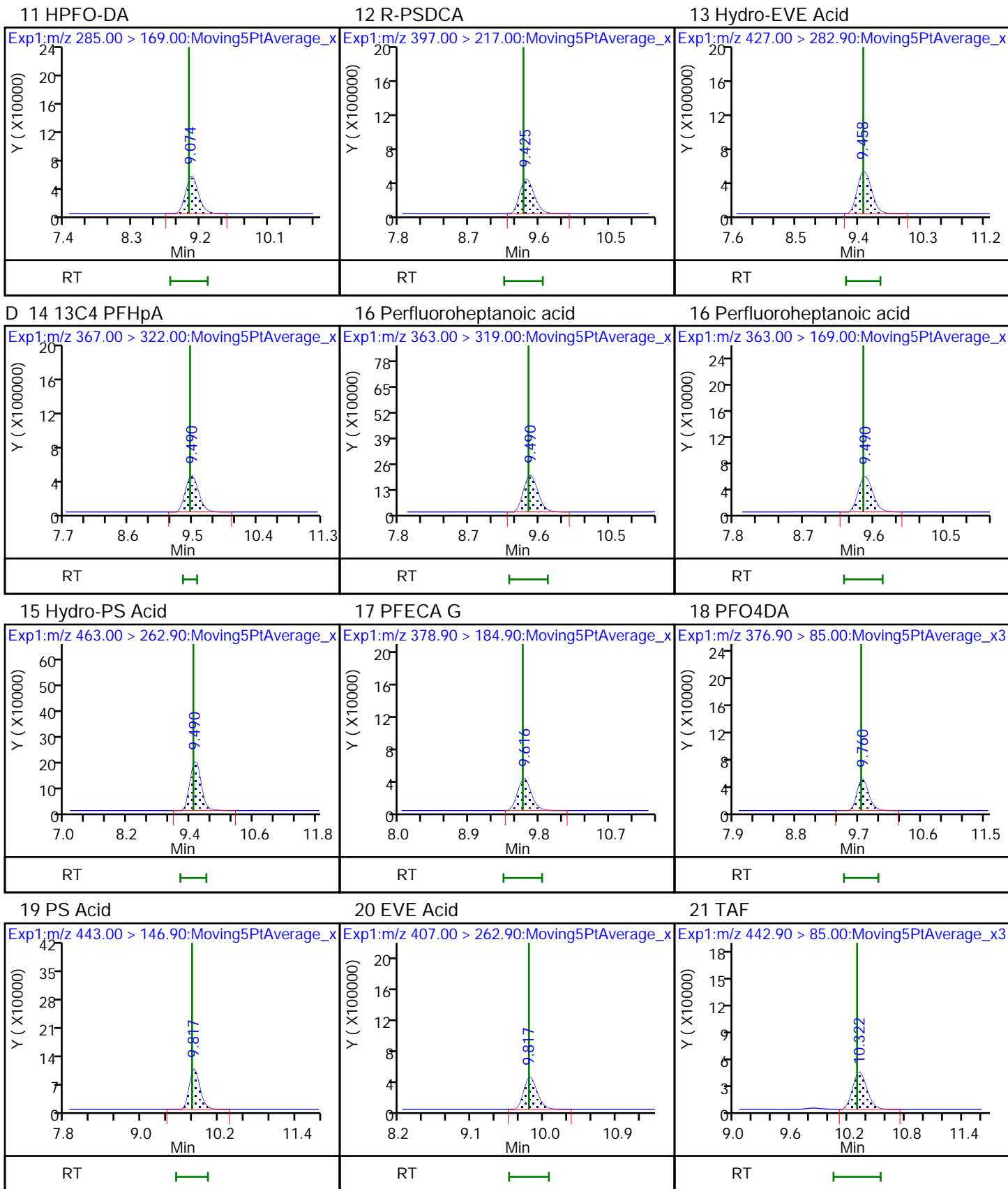
Reagents:

LCTB3_LLICV_00050

Amount Added: 1.00

Units: mL





Eurofins TestAmerica, Sacramento

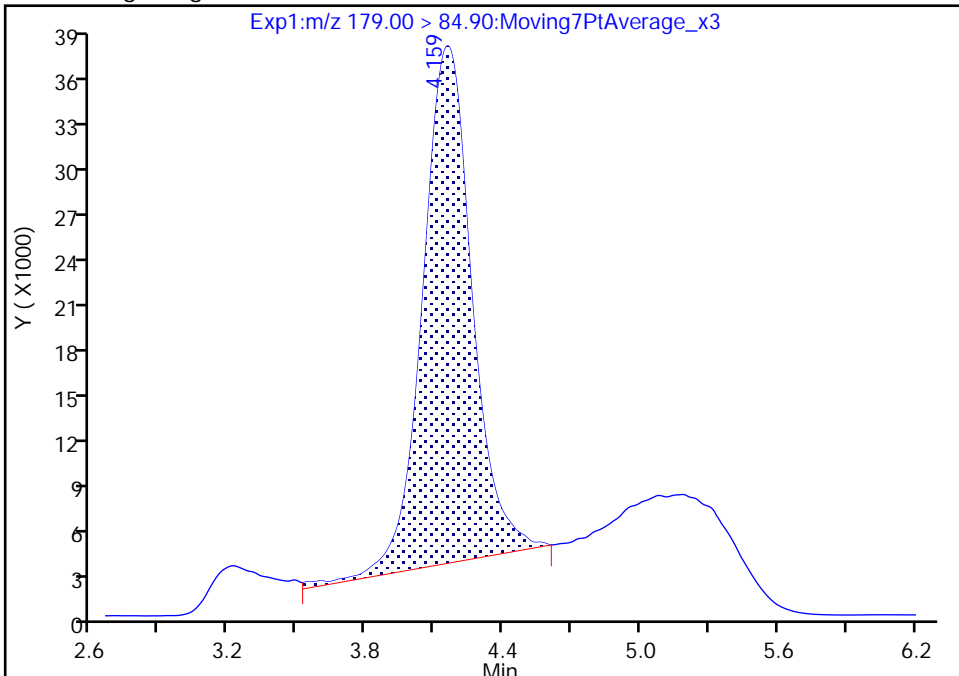
Data File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_016.d
Injection Date: 24-Mar-2021 16:01:21 Instrument ID: A12
Lims ID: ICV
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

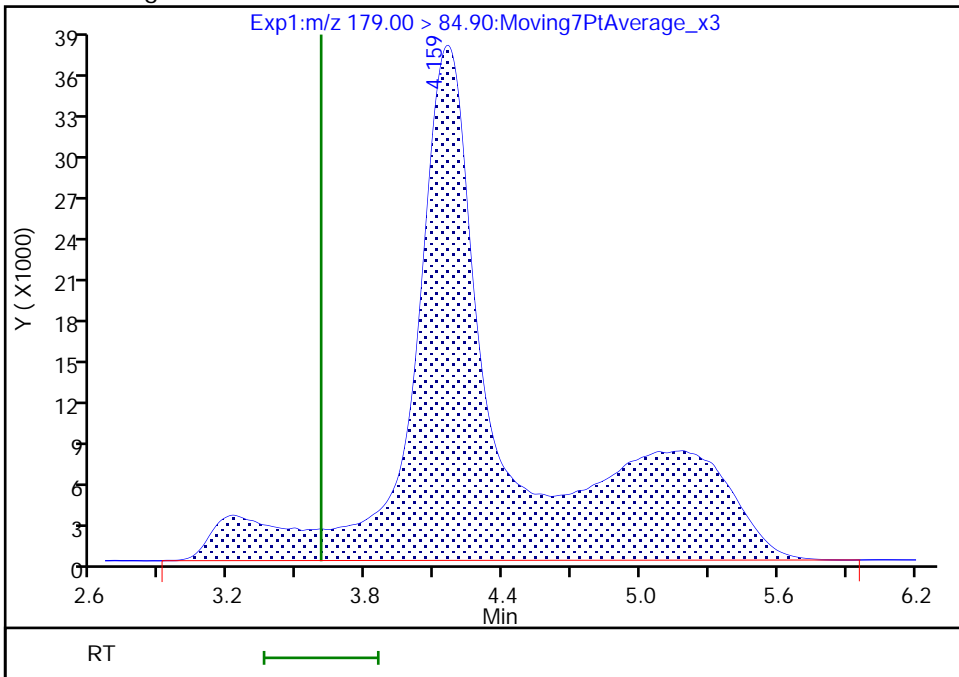
RT: 4.16
Area: 520563
Amount: 0.046643
Amount Units: ng/ml

Processing Integration Results



RT: 4.16
Area: 1148043
Amount: 0.102865
Amount Units: ng/ml

Manual Integration Results



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1
 SDG No.: _____
 Lab Sample ID: CCV 320-475323/1 Calibration Date: 03/31/2021 10:16
 Instrument ID: A12 Calib Start Date: 03/24/2021 11:54
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 03/24/2021 15:26
 Lab File ID: 2021.03.31_A12_TB3_A_007.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PFMOAA	Ave	11160673	11536827		77.5	75.0	3.4	30.0
R-EVE	Ave	6324538	5786000		68.6	75.0	-8.5	50.0
R-PSDA	Ave	2987917	2298133		57.7	75.0	-23.1	50.0
Hydrolyzed PSDA	Ave	11880976	9938347		62.7	75.0	-16.4	50.0
PMPA	Ave	18271496	16497160		67.7	75.0	-9.7	30.0
NVHOS	Ave	5334333	5262013		74.0	75.0	-1.4	30.0
PFO2HxA	Ave	12873859	12136147		70.7	75.0	-5.7	30.0
PEPA	Ave	4405326	4204840		71.6	75.0	-4.6	30.0
PES	Ave	18044344	15037600		62.5	75.0	-16.7	30.0
PFECA B	Ave	8739690	8792827		75.5	75.0	0.6	30.0
PFO3OA	Ave	3028533	2815667		69.7	75.0	-7.0	30.0
HFPO-DA	AveID	1.111	1.148		77.5	75.0	3.3	40.0
R-PSDCA	Ave	48583271	44176507		68.2	75.0	-9.1	30.0
Hydro-EVE Acid	Ave	66530901	63217853		71.3	75.0	-5.0	30.0
Hydro-PS Acid	Ave	24720430	25841693		78.4	75.0	4.5	30.0
Perfluoroheptanoic acid	L2ID		1.079		66.5	75.0	-11.4	40.0
PFECA G	Ave	4245068	4688133		82.8	75.0	10.4	30.0
PFO4DA	Ave	4971032	4923027		74.3	75.0	-1.0	30.0
PS Acid	Ave	11618245	12121627		78.2	75.0	4.3	30.0
EVE Acid	Ave	46757167	46105413		74.0	75.0	-1.4	30.0
PFO5DA	Ave	3865600	3484680		67.6	75.0	-9.9	50.0
13C3 HFPO-DA	Ave	5791665	5249776		227	250	-9.4	50.0
13C4 PFHpA	Ave	20500211	20744312		253	250	1.2	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_007.d
 Lims ID: CCV L6.5 (84)
 Client ID:
 Sample Type: CCV
 Inject. Date: 31-Mar-2021 10:16:24 ALS Bottle#: 7 Worklist Smp#: 1
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L6.5 (84)
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3
 Method: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 01-Apr-2021 10:16:44 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1678

First Level Reviewer: ruangyotsakuld

Date: 01-Apr-2021 10:16:44

Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.210	4.256	-0.046		865262	0.0775		103	249	M
2 R-EVE										
405.00 > 217.00	6.387	6.410	-0.023		433950	0.0686		91.5	8398	
3 R-PSDA										
440.90 > 241.00	6.427	6.469	-0.042		172360	0.0577		76.9	3378	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.506	6.529	-0.023		745376	0.0627		83.6	12900	
23 PMPA										
229.00 > 185.00	6.755	6.782	-0.027		1237287	0.0677		90.3	1956	
5 NVHOS										
297.00 > 135.00	7.111	7.137	-0.026		394651	0.0740		98.6	9330	
6 PFO2HxA										
245.00 > 85.00	7.706	7.709	-0.003		910211	0.0707		94.3	12725	
22 PEPA										
278.90 > 234.90	8.295	8.299	-0.004		315363	0.0716		95.4	2408	
7 PES										
314.90 > 135.00	8.522	8.556	-0.034		1127820	0.0625		83.3	28761	
8 PFECA B										
295.00 > 201.00	8.770	8.799	-0.029		659462	0.0755		101	17888	
9 PFO3OA										
310.90 > 85.00	9.018	9.020	-0.002		211175	0.0697		93.0	5782	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.103	9.133	-0.030		1312444	0.2266		90.6	37659	
11 HPFO-DA										
285.00 > 169.00	9.103	9.133	-0.030	1.000	451867	0.0775		103	9625	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.459	9.493	-0.034		3313238	0.0682		90.9	64449	
13 Hydro-EVE Acid										
427.00 > 282.90	9.491	9.525	-0.034		4741339	0.0713		95.0	55455	
D 14 13C4 PFHpA										
367.00 > 322.00	9.524	9.558	-0.034		5186078	0.2530		101	81612	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.524	9.558	-0.034	1.000	1678582	0.0665	Target=0.00	88.6	12024	
363.00 > 169.00	9.524	9.558	-0.034	1.000	481756		3.48(0.00-0.00)		9482	
15 Hydro-PS Acid										
463.00 > 262.90	9.524	9.558	-0.034		1938127	0.0784		105	43164	
17 PFECA G										
378.90 > 184.90	9.646	9.676	-0.030		351610	0.0828		110	9830	
18 PFO4DA										
376.90 > 85.00	9.789	9.820	-0.031		369227	0.0743		99.0	7972	
19 PS Acid										
443.00 > 146.90	9.847	9.877	-0.030		909122	0.0782		104	26109	
20 EVE Acid										
407.00 > 262.90	9.876	9.906	-0.030		3457906	0.0740		98.6	59362	
21 TAF										
442.90 > 85.00	10.349	10.399	-0.050		261351	0.0676		90.1	1690	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLCCV_00084

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_007.d

Injection Date: 31-Mar-2021 10:16:24

Instrument ID: A12

Lims ID: CCV L6.5 (84)

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 7

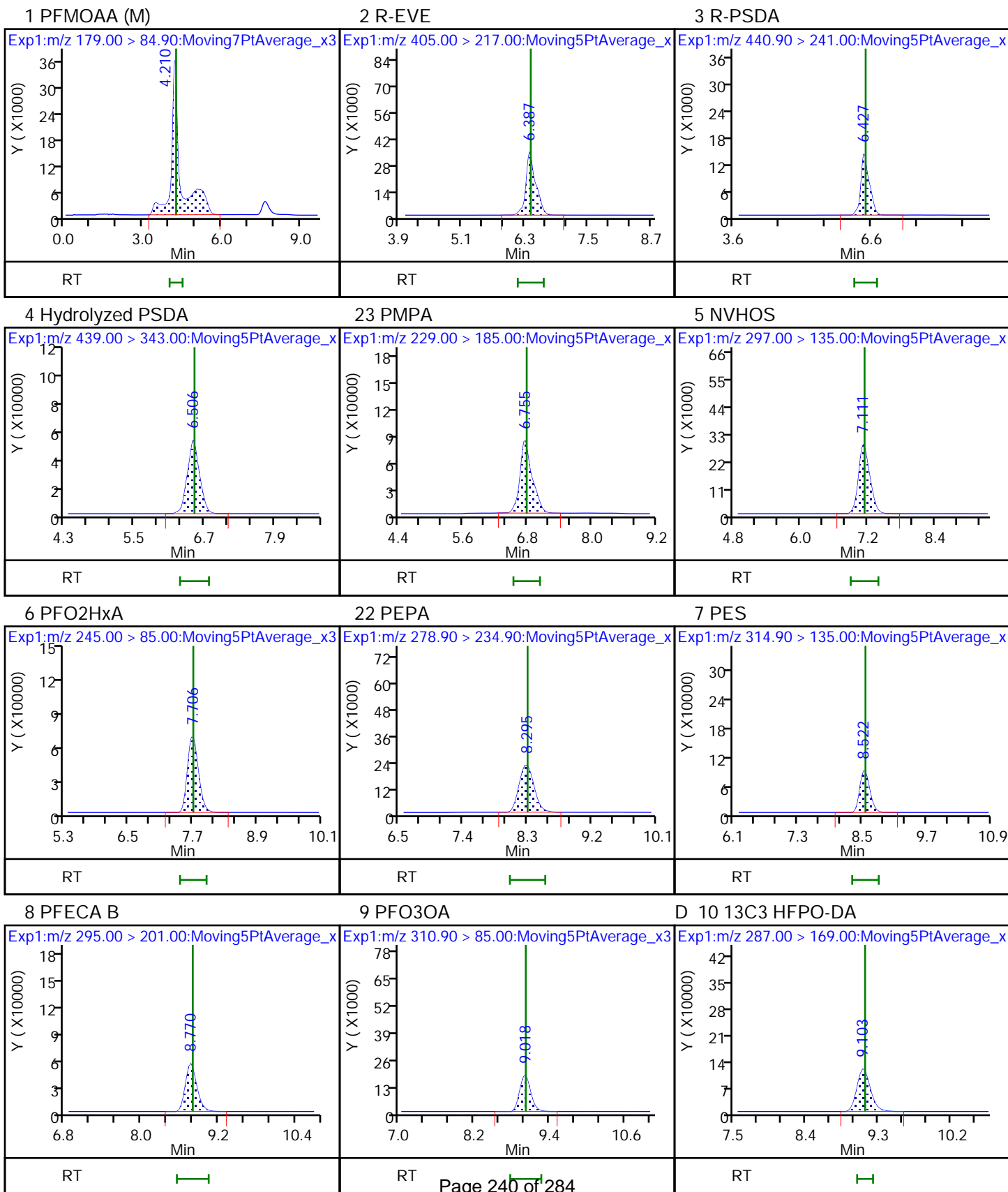
Worklist Smp#: 1

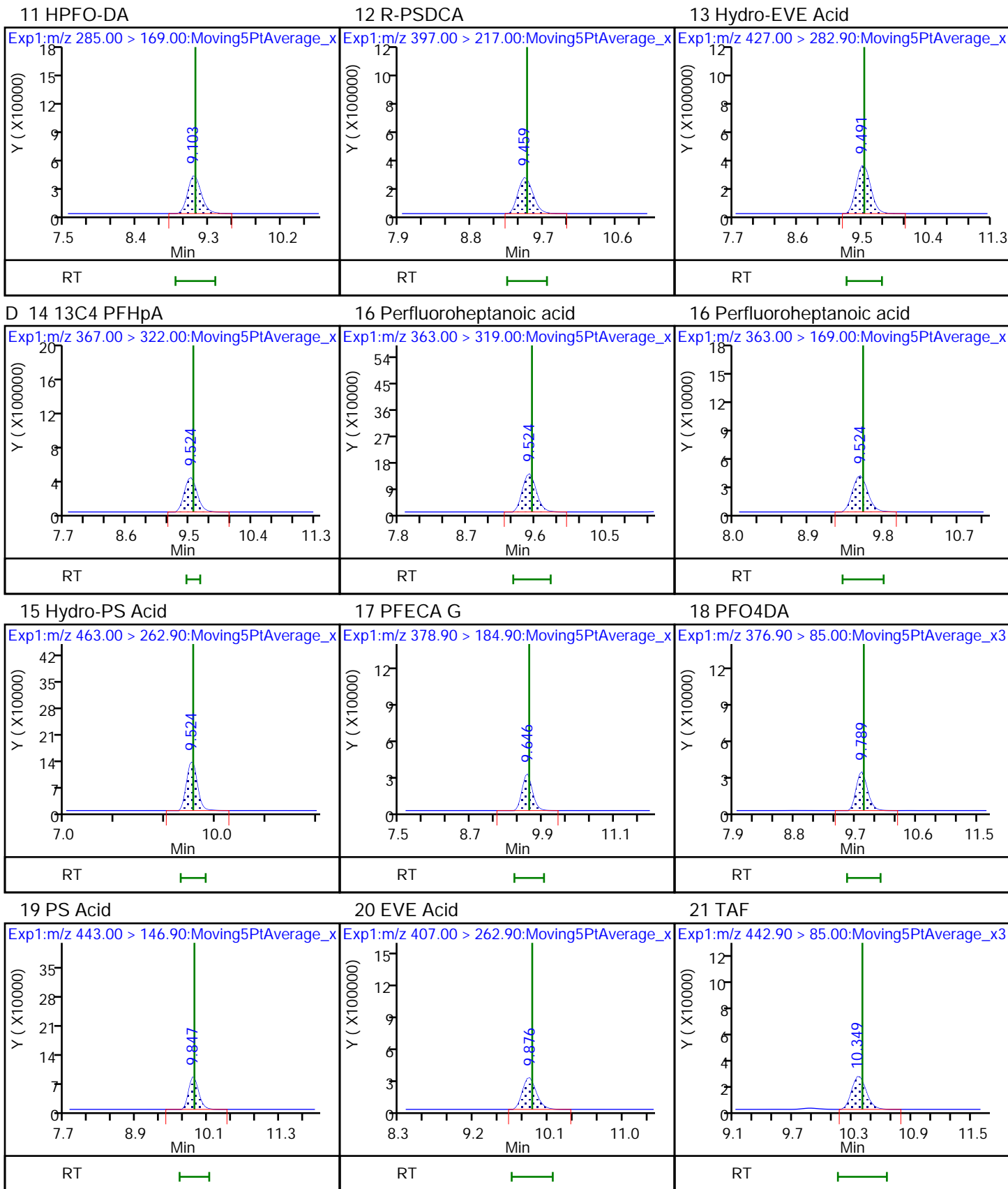
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

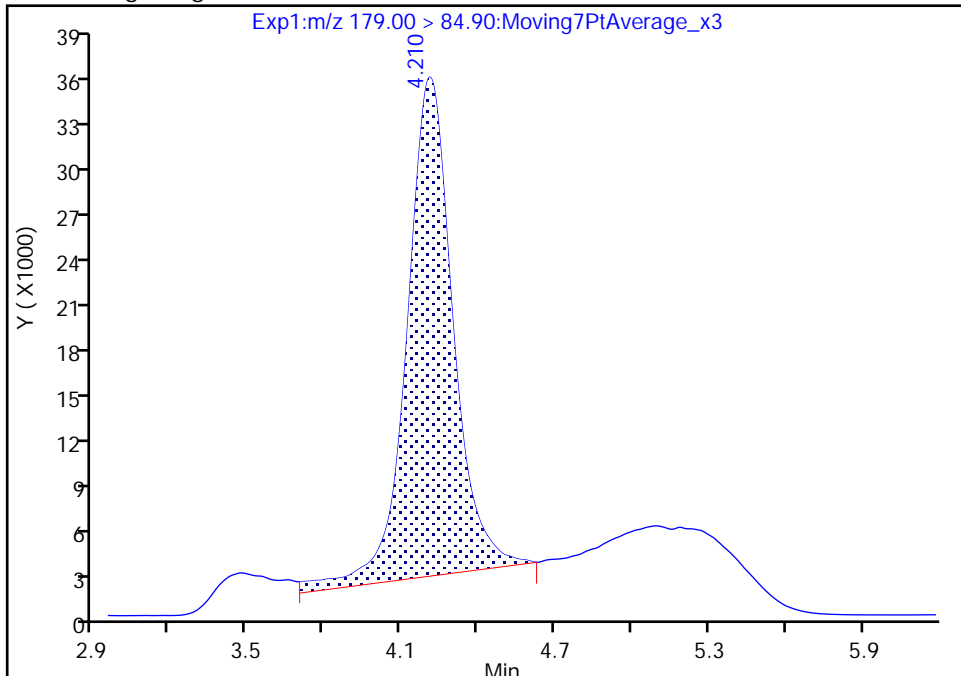
Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_007.d
Injection Date: 31-Mar-2021 10:16:24 Instrument ID: A12
Lims ID: CCV L6.5 (84)
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 7 Worklist Smp#: 1
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

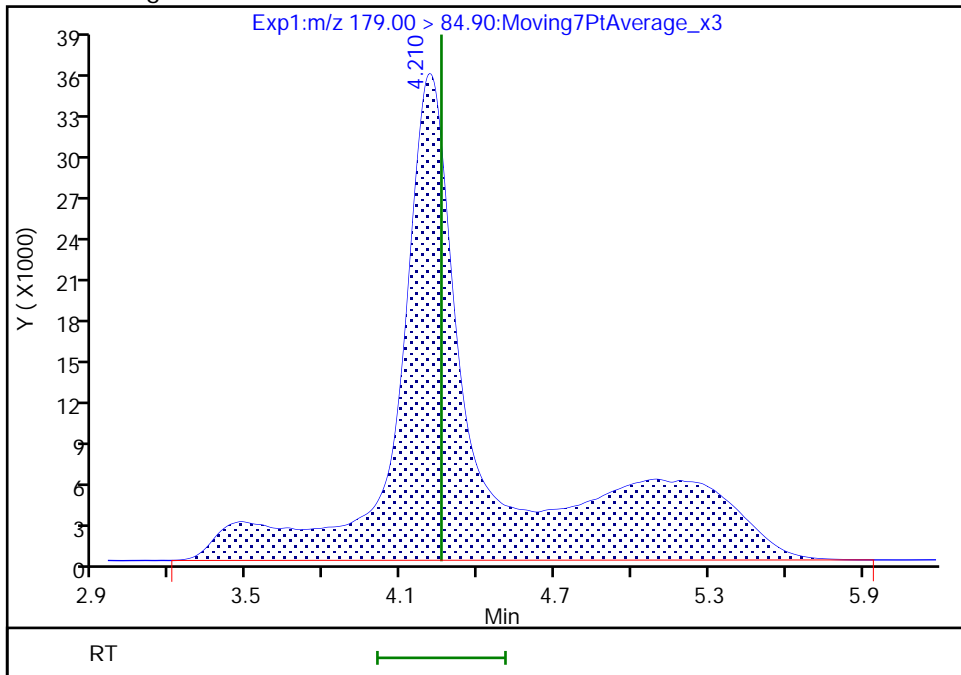
RT: 4.21
Area: 417080
Amount: 0.037371
Amount Units: ng/ml

Processing Integration Results



RT: 4.21
Area: 865262
Amount: 0.077528
Amount Units: ng/ml

Manual Integration Results



Reviewer: fariasa, 31-Mar-2021 11:09:43
Audit Action: Manually Integrated

Audit Reason: Assign Peak
Page 243 of 284

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1
 SDG No.: _____
 Lab Sample ID: CCV 320-475323/14 Calibration Date: 03/31/2021 14:05
 Instrument ID: A12 Calib Start Date: 03/24/2021 11:54
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 03/24/2021 15:26
 Lab File ID: 2021.03.31_A12_TB3_A_020.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PFMOAA	Ave	11160673	11842987		79.6	75.0	6.1	30.0
R-EVE	Ave	6324538	5844533		69.3	75.0	-7.6	50.0
R-PSDA	Ave	2987917	2487280		62.4	75.0	-16.8	50.0
Hydrolyzed PSDA	Ave	11880976	10394400		65.6	75.0	-12.5	50.0
PMPA	Ave	18271496	16708800		68.6	75.0	-8.6	30.0
NVHOS	Ave	5334333	5320067		74.8	75.0	-0.3	30.0
PFO2HxA	Ave	12873859	12186093		71.0	75.0	-5.3	30.0
PEPA	Ave	4405326	4179280		71.2	75.0	-5.1	30.0
PES	Ave	18044344	16325253		67.9	75.0	-9.5	30.0
PFECA B	Ave	8739690	9012240		77.3	75.0	3.1	30.0
PFO3OA	Ave	3028533	2985080		73.9	75.0	-1.4	30.0
HFPO-DA	AveID	1.111	1.139		76.9	75.0	2.6	40.0
R-PSDCA	Ave	48583271	52392107		80.9	75.0	7.8	30.0
Hydro-EVE Acid	Ave	66530901	70748587		79.8	75.0	6.3	30.0
Hydro-PS Acid	Ave	24720430	22862720		69.4	75.0	-7.5	30.0
Perfluoroheptanoic acid	L2ID		1.248		77.0	75.0	2.6	40.0
PFECA G	Ave	4245068	5036947		89.0	75.0	18.7	30.0
PFO4DA	Ave	4971032	5525827		83.4	75.0	11.2	30.0
PS Acid	Ave	11618245	11751267		75.9	75.0	1.1	30.0
EVE Acid	Ave	46757167	48409533		77.7	75.0	3.5	30.0
PFO5DA	Ave	3865600	3932827		76.3	75.0	1.7	50.0
13C3 HFPO-DA	Ave	5791665	5452632		235	250	-5.9	50.0
13C4 PFHpA	Ave	20500211	20930376		255	250	2.1	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_020.d
 Lims ID: CCV L6.5 (84)
 Client ID:
 Sample Type: CCV
 Inject. Date: 31-Mar-2021 14:05:54 ALS Bottle#: 20 Worklist Smp#: 14
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L6.5 (84
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3
 Method: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 01-Apr-2021 10:17:26 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1678

First Level Reviewer: ruangyotsakuld Date: 01-Apr-2021 10:17:26

Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.129	4.256	-0.127		888224	0.0796		106	195	M
2 R-EVE										
405.00 > 217.00	6.347	6.410	-0.063		438340	0.0693		92.4	8171	
3 R-PSDA										
440.90 > 241.00	6.407	6.469	-0.062		186546	0.0624		83.2	3452	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.466	6.529	-0.063		779580	0.0656		87.5	12890	
23 PMPA										
229.00 > 185.00	6.708	6.782	-0.074		1253160	0.0686		91.4	1474	
5 NVHOS										
297.00 > 135.00	7.087	7.137	-0.050		399005	0.0748		99.7	8997	
6 PFO2HxA										
245.00 > 85.00	7.676	7.709	-0.033		913957	0.0710		94.7	10516	
22 PEPA										
278.90 > 234.90	8.259	8.299	-0.040		313446	0.0712		94.9	2150	
7 PES										
314.90 > 135.00	8.522	8.556	-0.034		1224394	0.0679		90.5	31075	
8 PFECA B										
295.00 > 201.00	8.740	8.799	-0.059		675918	0.0773		103	18502	
9 PFO3OA										
310.90 > 85.00	8.985	9.020	-0.035		223881	0.0739		98.6	6087	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.074	9.133	-0.059		1363158	0.2354		94.1	28945	
11 HPFO-DA										
285.00 > 169.00	9.102	9.133	-0.031	1.003	465821	0.0769		103	7876	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.425	9.493	-0.068		3929408	0.0809		108	76063	
13 Hydro-EVE Acid										
427.00 > 282.90	9.490	9.525	-0.035		5306144	0.0798		106	60842	
D 14 13C4 PFHpA										
367.00 > 322.00	9.490	9.558	-0.068		5232594	0.2552		102	81802	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.490	9.558	-0.068	1.000	1958797	0.0770	Target=0.00	103	15329	
363.00 > 169.00	9.490	9.558	-0.068	1.000	552687		3.54(0.00-0.00)		8658	
15 Hydro-PS Acid										
463.00 > 262.90	9.490	9.558	-0.068		1714704	0.0694		92.5	37930	
17 PFECA G										
378.90 > 184.90	9.616	9.676	-0.060		377771	0.0890		119	10444	
18 PFO4DA										
376.90 > 85.00	9.760	9.820	-0.060		414437	0.0834		111	8966	
19 PS Acid										
443.00 > 146.90	9.817	9.877	-0.060		881345	0.0759		101	25179	
20 EVE Acid										
407.00 > 262.90	9.846	9.906	-0.060		3630715	0.0777		104	62466	
21 TAF										
442.90 > 85.00	10.322	10.399	-0.077		294962	0.0763		102	1675	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLCCV_00084

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_020.d

Injection Date: 31-Mar-2021 14:05:54

Instrument ID: A12

Lims ID: CCV L6.5 (84)

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 20

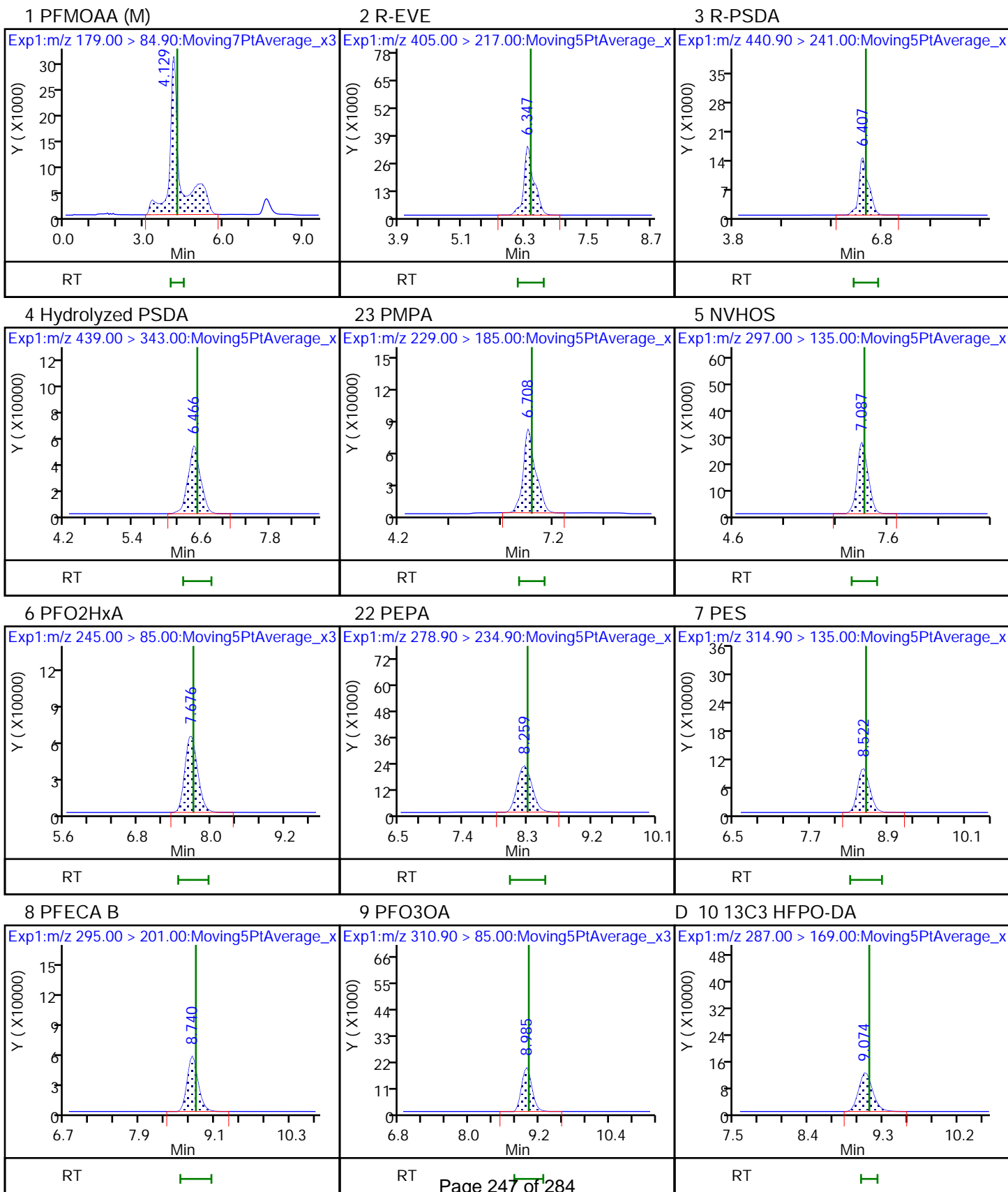
Worklist Smp#: 14

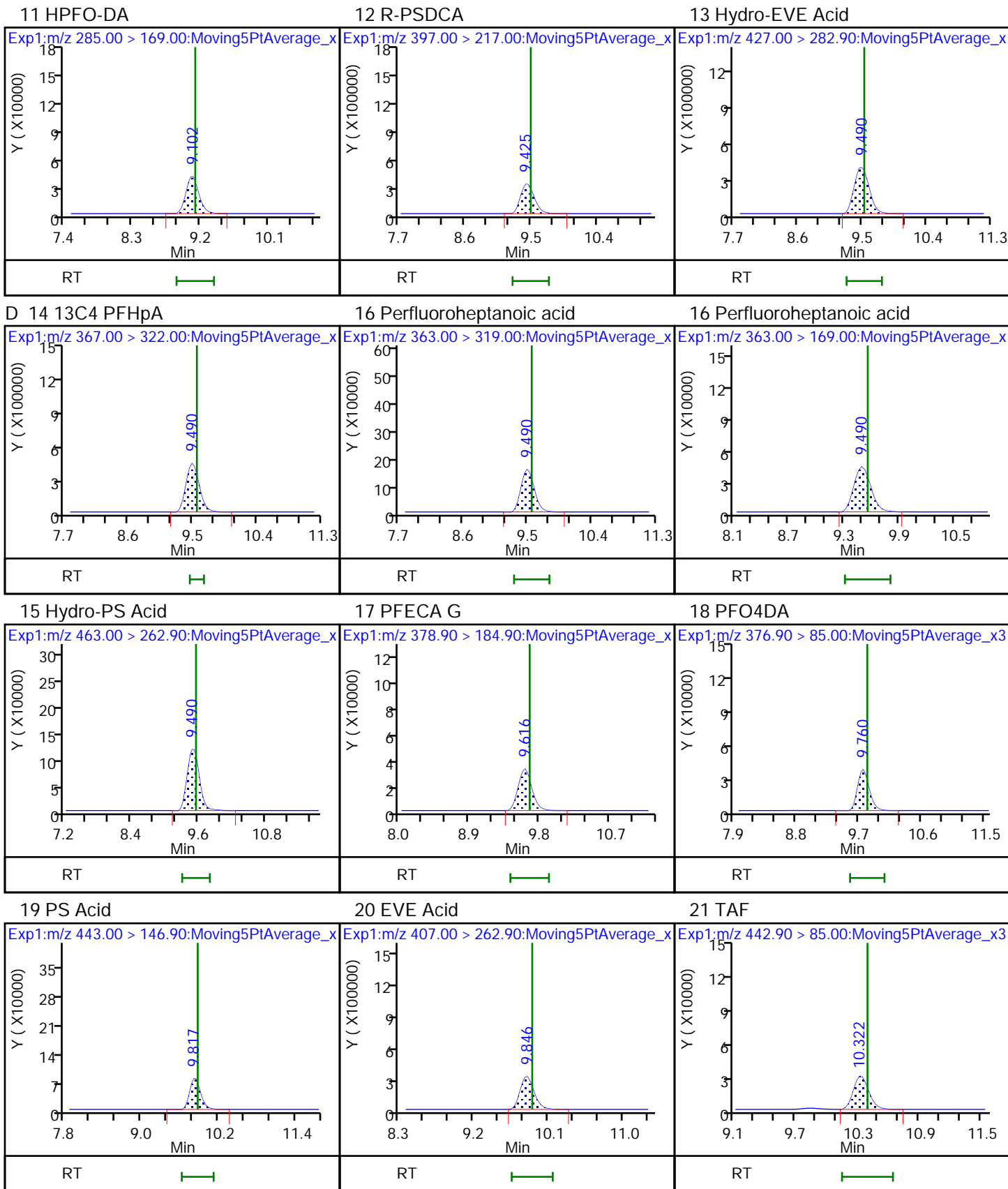
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

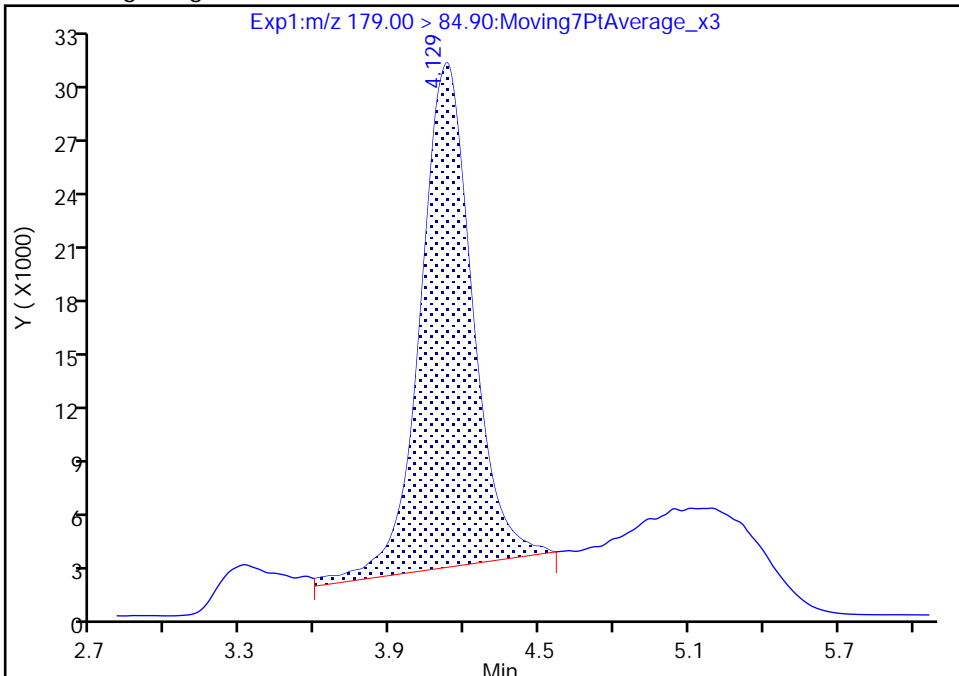
Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_020.d
Injection Date: 31-Mar-2021 14:05:54 Instrument ID: A12
Lims ID: CCV L6.5 (84)
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 20 Worklist Smp#: 14
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

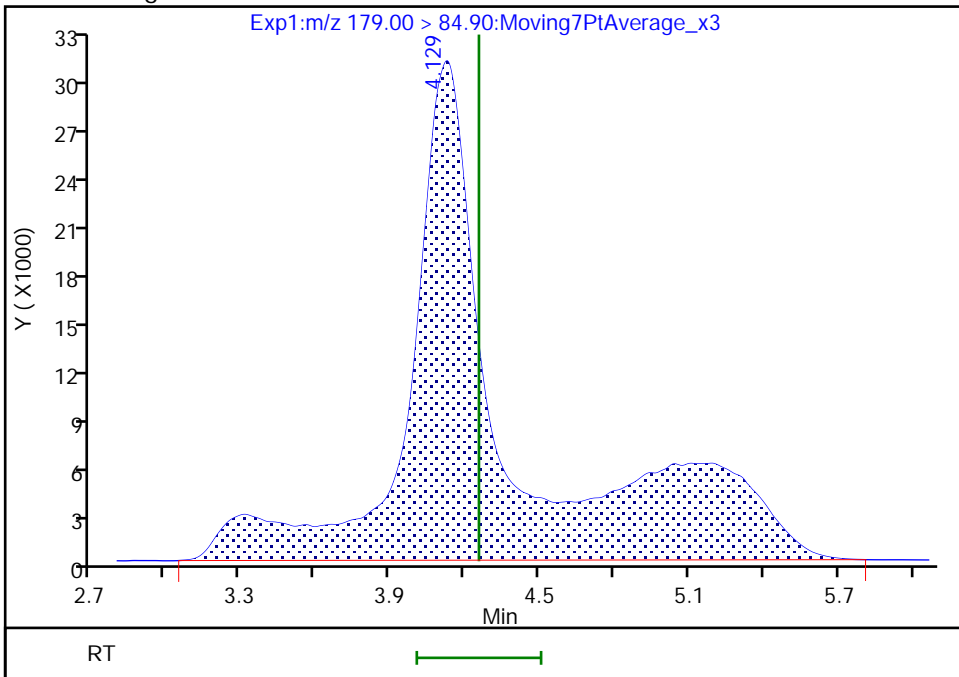
RT: 4.13
Area: 411506
Amount: 0.036871
Amount Units: ng/ml

Processing Integration Results



RT: 4.13
Area: 888224
Amount: 0.079585
Amount Units: ng/ml

Manual Integration Results



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1
 SDG No.: _____
 Lab Sample ID: CCV 320-475323/23 Calibration Date: 03/31/2021 16:44
 Instrument ID: A12 Calib Start Date: 03/24/2021 11:54
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 03/24/2021 15:26
 Lab File ID: 2021.03.31_A12_TB3_A_029.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PFMOAA	Ave	11160673	12120693		81.5	75.0	8.6	30.0
R-EVE	Ave	6324538	6185013		73.3	75.0	-2.2	50.0
R-PSDA	Ave	2987917	2519133		63.2	75.0	-15.7	50.0
Hydrolyzed PSDA	Ave	11880976	10512600		66.4	75.0	-11.5	50.0
PMPA	Ave	18271496	17573187		72.1	75.0	-3.8	30.0
NVHOS	Ave	5334333	5473733		77.0	75.0	2.6	30.0
PFO2HxA	Ave	12873859	13408133		78.1	75.0	4.2	30.0
PEPA	Ave	4405326	4340307		73.9	75.0	-1.5	30.0
PES	Ave	18044344	17302227		71.9	75.0	-4.1	30.0
PFECA B	Ave	8739690	9565413		82.1	75.0	9.4	30.0
PFO3OA	Ave	3028533	3162373		78.3	75.0	4.4	30.0
HFPO-DA	AveID	1.111	1.105		74.6	75.0	-0.5	40.0
R-PSDCA	Ave	48583271	48555307		75.0	75.0	-0.0	30.0
Hydro-EVE Acid	Ave	66530901	72435893		81.7	75.0	8.9	30.0
Hydro-PS Acid	Ave	24720430	26597640		80.7	75.0	7.6	30.0
Perfluoroheptanoic acid	L2ID		1.100		67.8	75.0	-9.6	40.0
PFECA G	Ave	4245068	5252053		92.8	75.0	23.7	30.0
PFO4DA	Ave	4971032	5194893		78.4	75.0	4.5	30.0
PS Acid	Ave	11618245	11537427		74.5	75.0	-0.7	30.0
EVE Acid	Ave	46757167	50784147		81.5	75.0	8.6	30.0
PFO5DA	Ave	3865600	3518413		68.3	75.0	-9.0	50.0
13C3 HFPO-DA	Ave	5791665	5815584		251	250	0.4	50.0
13C4 PFHpA	Ave	20500211	22794148		278	250	11.2	50.0

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_029.d
 Lims ID: CCV L6.5 (84)
 Client ID:
 Sample Type: CCV
 Inject. Date: 31-Mar-2021 16:44:42 ALS Bottle#: 29 Worklist Smp#: 23
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L6.5 (84)
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Sublist: chrom-PFAS_Chem_TB3+*sub3
 Method: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 01-Apr-2021 10:18:03 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1678

First Level Reviewer: ruangyotsakuld

Date: 01-Apr-2021 10:18:03

Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.141	4.256	-0.115		909052	0.0815		109	194	M
2 R-EVE										
405.00 > 217.00	6.347	6.410	-0.063		463876	0.0733		97.8	11491	
3 R-PSDA										
440.90 > 241.00	6.406	6.469	-0.063		188935	0.0632		84.3	3601	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.486	6.529	-0.043		788445	0.0664		88.5	17343	
23 PMPA										
229.00 > 185.00	6.708	6.782	-0.074		1317989	0.0721		96.2	1692	
5 NVHOS										
297.00 > 135.00	7.087	7.137	-0.050		410530	0.0770		103	9414	
6 PFO2HxA										
245.00 > 85.00	7.675	7.709	-0.034		1005610	0.0781		104	11673	
22 PEPA										
278.90 > 234.90	8.265	8.299	-0.034		325523	0.0739		98.5	1990	
7 PES										
314.90 > 135.00	8.525	8.556	-0.031		1297667	0.0719		95.9	32790	
8 PFECA B										
295.00 > 201.00	8.743	8.799	-0.056		717406	0.0821		109	19635	
9 PFO3OA										
310.90 > 85.00	8.988	9.020	-0.032		237178	0.0783		104	6406	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.077	9.133	-0.056		1453896	0.2510		100	30994	
11 HPFO-DA										
285.00 > 169.00	9.077	9.133	-0.056	1.000	481989	0.0746		99.5	13647	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
12 R-PSDCA										
397.00 > 217.00	9.428	9.493	-0.065		3641648	0.0750		99.9	71302	
13 Hydro-EVE Acid										
427.00 > 282.90	9.461	9.525	-0.064		5432692	0.0817		109	55026	
D 14 13C4 PFHpA										
367.00 > 322.00	9.493	9.558	-0.065		5698537	0.2780		111	89799	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.493	9.558	-0.065	1.000	1879726	0.0678	Target=0.00	90.4	10597	
363.00 > 169.00	9.493	9.558	-0.065	1.000	553619		3.40(0.00-0.00)		10903	
15 Hydro-PS Acid										
463.00 > 262.90	9.493	9.558	-0.065		1994823	0.0807		108	44703	
17 PFECA G										
378.90 > 184.90	9.615	9.676	-0.061		393904	0.0928		124	11005	
18 PFO4DA										
376.90 > 85.00	9.759	9.820	-0.061		389617	0.0784		105	8408	
19 PS Acid										
443.00 > 146.90	9.816	9.877	-0.061		865307	0.0745		99.3	24847	
20 EVE Acid										
407.00 > 262.90	9.845	9.906	-0.061		3808811	0.0815		109	65144	
21 TAF										
442.90 > 85.00	10.318	10.399	-0.081		263881	0.0683		91.0	1411	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

LCTB3_LLCCV_00084

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_029.d

Injection Date: 31-Mar-2021 16:44:42

Instrument ID: A12

Lims ID: CCV L6.5 (84)

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 29

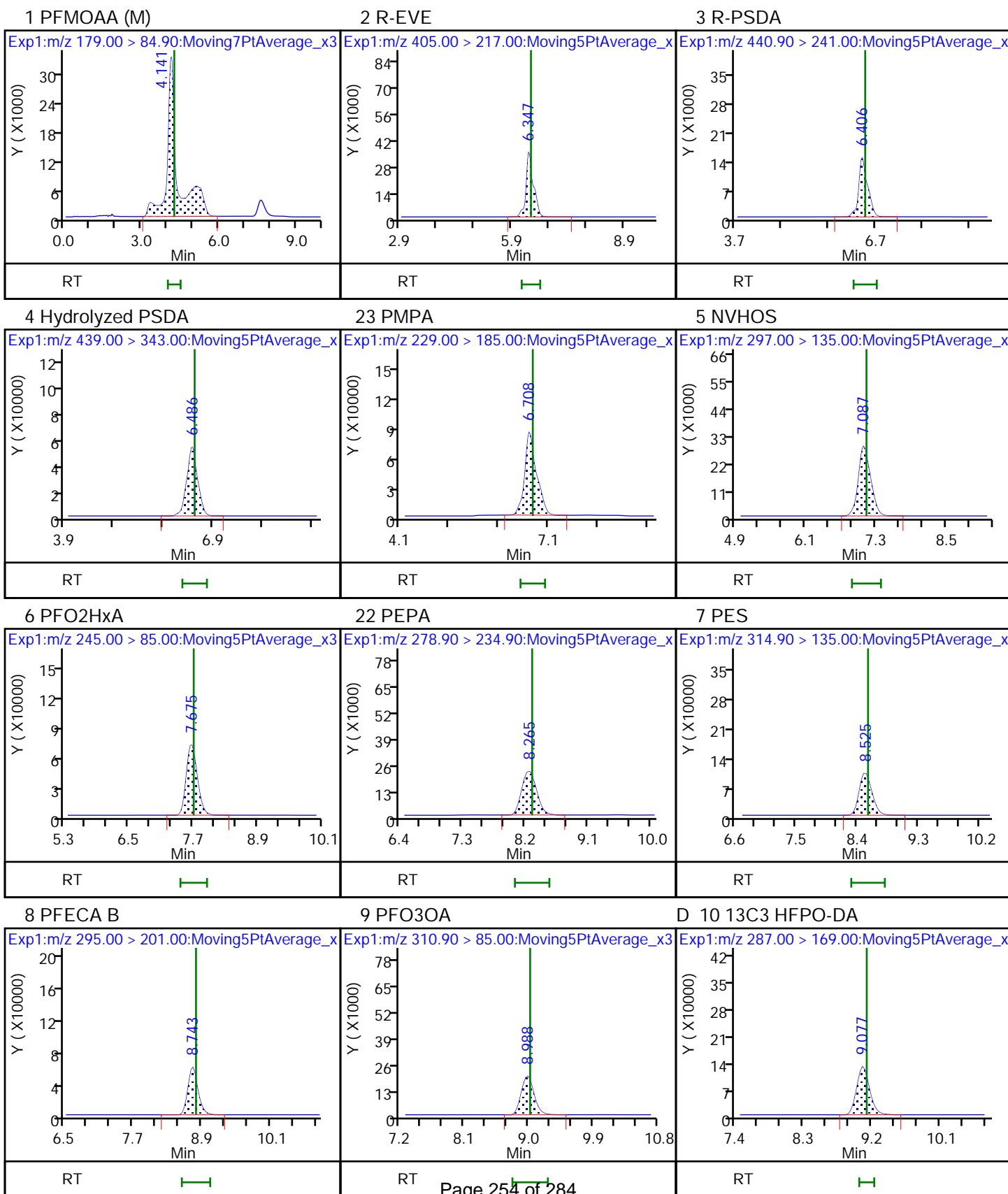
Worklist Smp#: 23

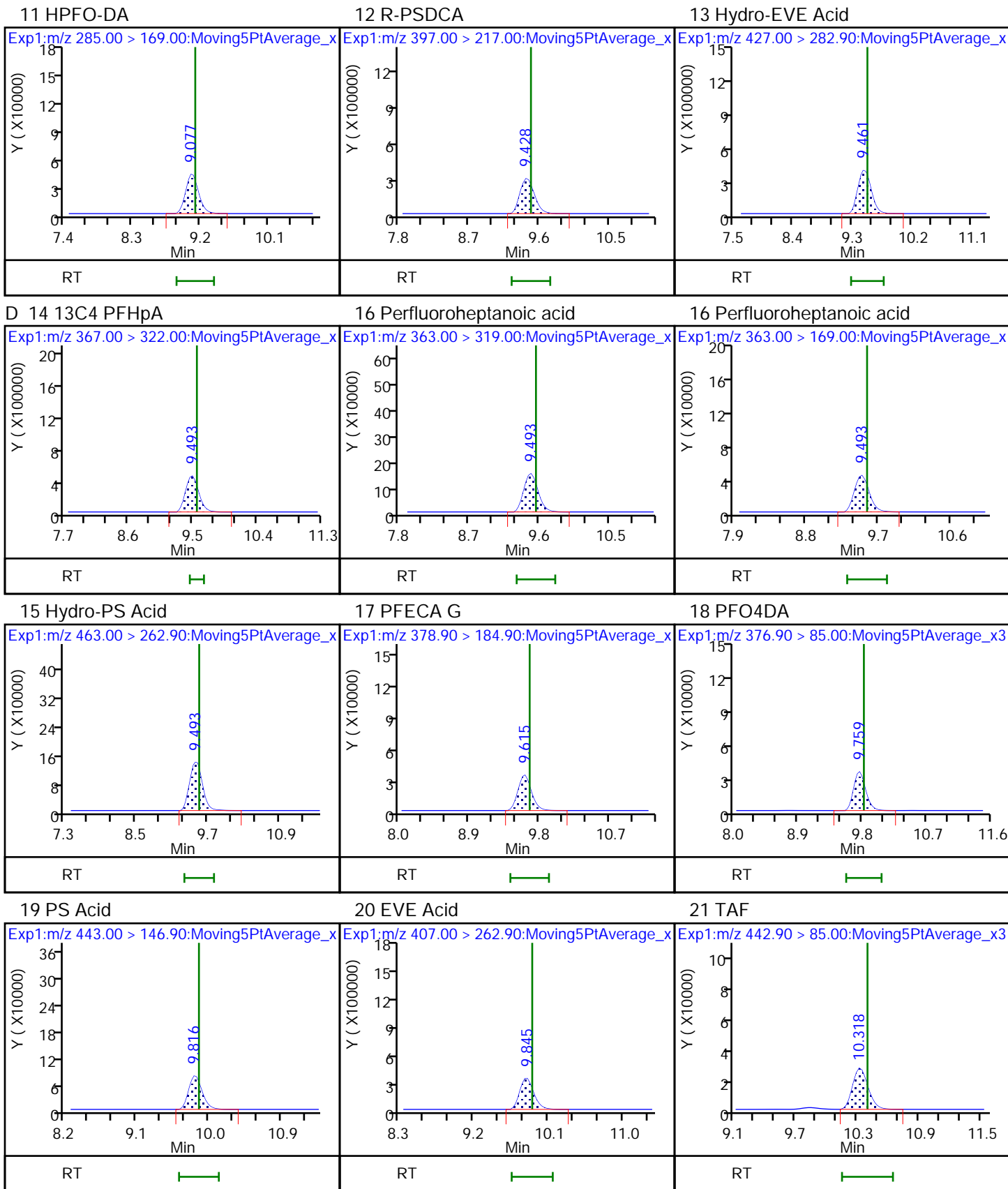
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

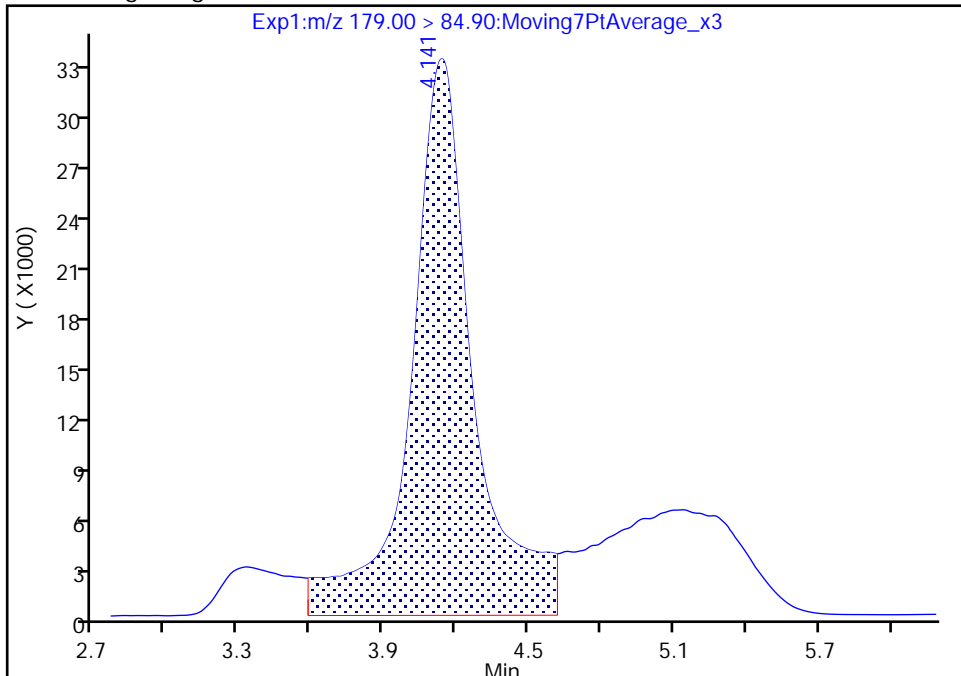
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Injection Date: 31-Mar-2021 16:44:42 Instrument ID: A12
Lims ID: CCV L6.5 (84)
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 29 Worklist Smp#: 23
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

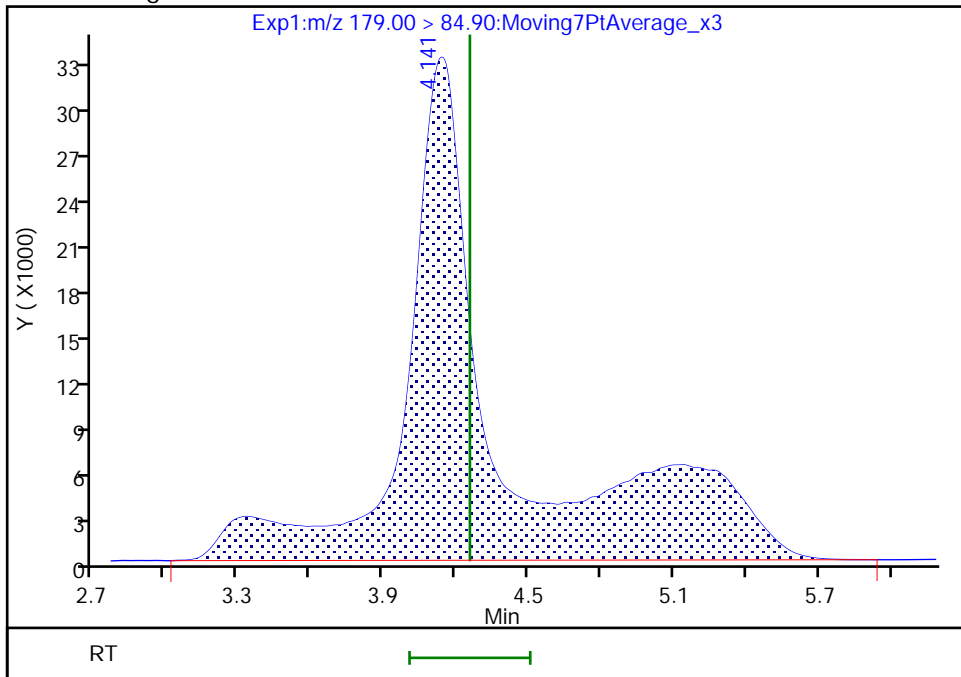
RT: 4.14
Area: 590382
Amount: 0.052898
Amount Units: ng/ml

Processing Integration Results



RT: 4.14
Area: 909052
Amount: 0.081451
Amount Units: ng/ml

Manual Integration Results



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 320-475092/1-A
 Matrix: Water Lab File ID: 2021.03.31_A12_TB3_A_009.d
 Analysis Method: Chemours (TB3+) Date Collected: _____
 Extraction Method: PFAS Prep Date Extracted: 03/30/2021 13:04
 Sample wt/vol: 2.5 (mL) Date Analyzed: 03/31/2021 10:51
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 475323 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	<0.0020		0.0020	
13252-13-6	HFPO-DA	<0.0020		0.0020	
773804-62-9	Hydro-EVE Acid	<0.0020		0.0020	
2416366-19-1	Hydrolyzed PSDA	<0.0020		0.0020	
749836-20-2	Hydro-PS Acid	<0.0020		0.0020	
1132933-86-8	NVHOS	<0.0020		0.0020	
267239-61-2	PEPA	<0.020		0.020	
113507-82-7	PES	<0.0020		0.0020	
151772-58-6	PFECA B	<0.0020		0.0020	
801212-59-9	PFECA G	<0.0020		0.0020	
674-13-5	PFMOAA	<0.0020		0.0020	
39492-88-1	PFO2HxA	<0.0020		0.0020	
39492-89-2	PFO3OA	<0.0020		0.0020	
39492-90-5	PFO4DA	<0.0020		0.0020	
39492-91-6	PFO5DA	<0.0020		0.0020	
13140-29-9	PMPA	<0.010		0.010	
29311-67-9	PS Acid	<0.0020		0.0020	
2416366-22-6	R-EVE	<0.0020		0.0020	
2416366-18-0	R-PSDA	<0.0020		0.0020	
2416366-21-5	R-PSDCA	<0.0020		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	99		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_009.d
 Lims ID: MB 320-475092/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 31-Mar-2021 10:51:42 ALS Bottle#: 9 Worklist Smp#: 3
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: mb 320-475092/1-a rx due (4/8)
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Method: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 01-Apr-2021 10:18:28 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1678

First Level Reviewer: ruangyotsakuld Date: 01-Apr-2021 10:18:28
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
23 PMPA										M
229.00 > 185.00	6.968	6.782	0.186		65100	0.003563		43.6		M
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.102	9.133	-0.031		1431172	0.2471		98.8	40852	
D 14 13C4 PFHpA										
367.00 > 322.00	9.522	9.558	-0.036		4154875	0.2027		81.1	80609	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.522	9.558	-0.036	1.000	17566	0.000471	Target=0.00		155	
363.00 > 169.00	9.490	9.558	-0.068	0.997	4758		3.69(0.00-0.00)		100	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_009.d

Injection Date: 31-Mar-2021 10:51:42

Instrument ID: A12

Lims ID: MB 320-475092/1-A

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 9

Worklist Smp#: 3

Injection Vol: 500.0 ul

Dil. Factor: 1.0000

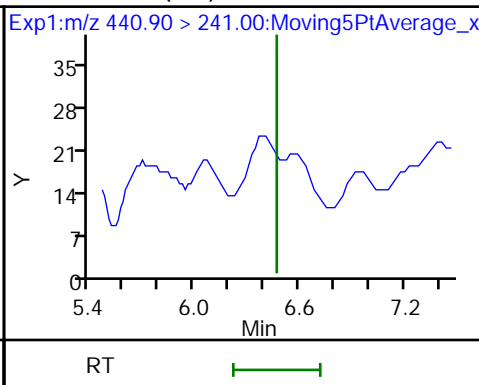
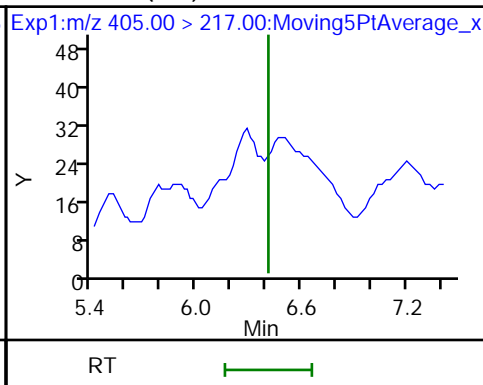
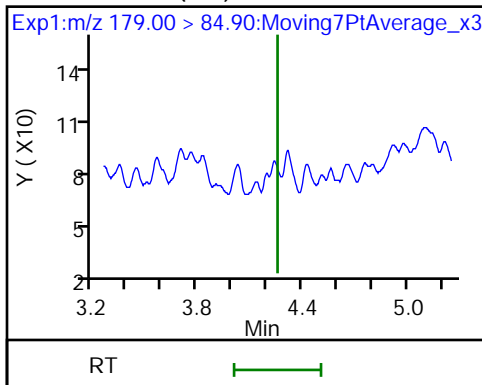
Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL

1 PFMOAA (ND)

2 R-EVE (ND)

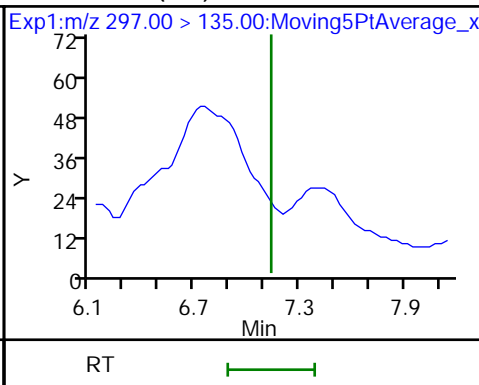
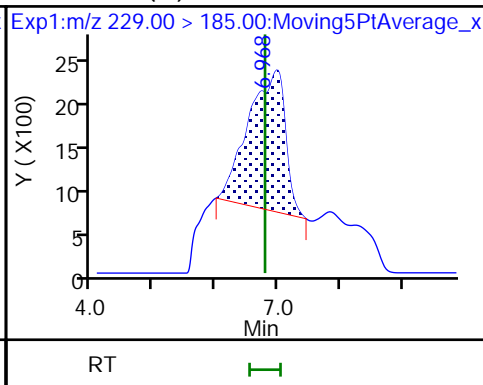
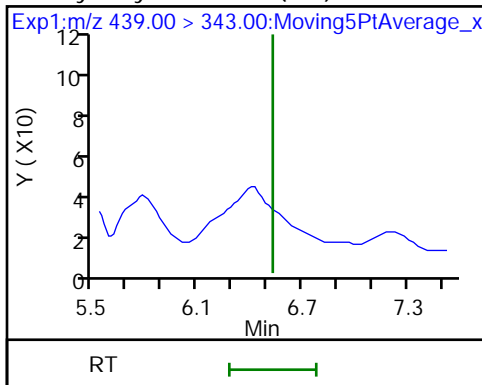
3 R-PSDA (ND)



4 Hydrolyzed PSDA (ND)

23 PMPA (M)

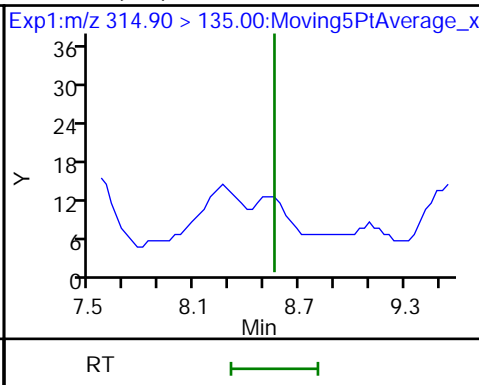
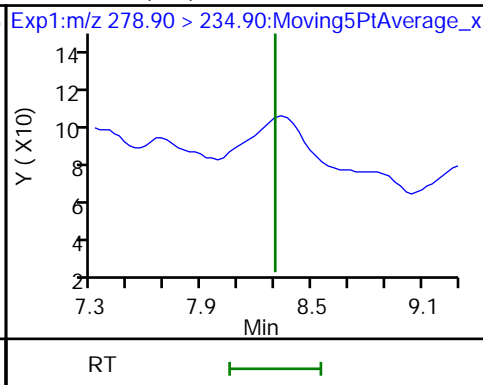
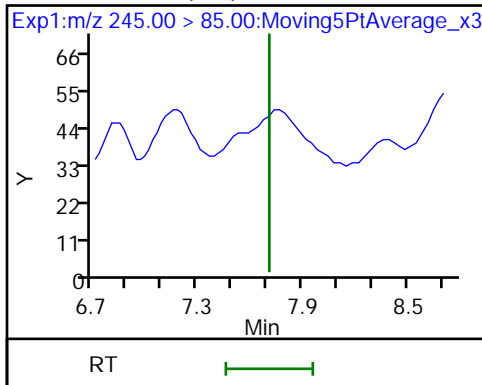
5 NVHOS (ND)



6 PFO2HxA (ND)

22 PEPA (ND)

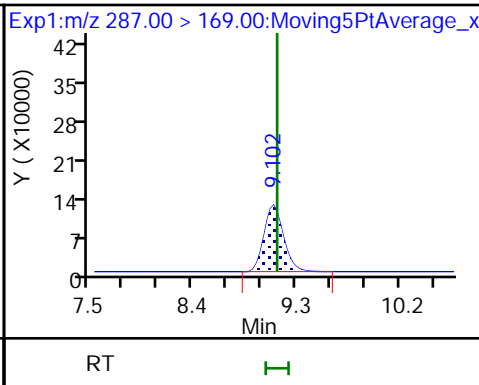
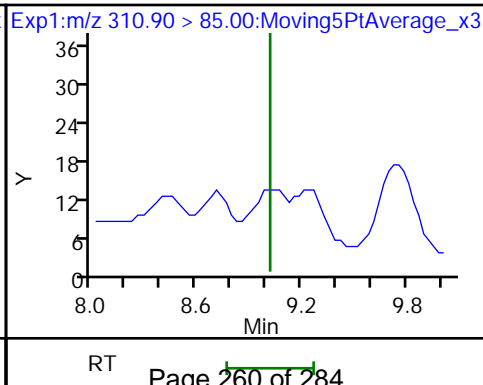
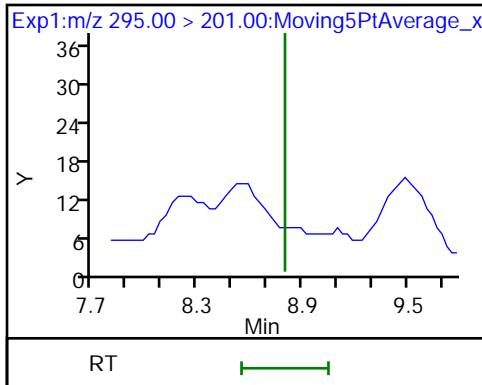
7 PES (ND)

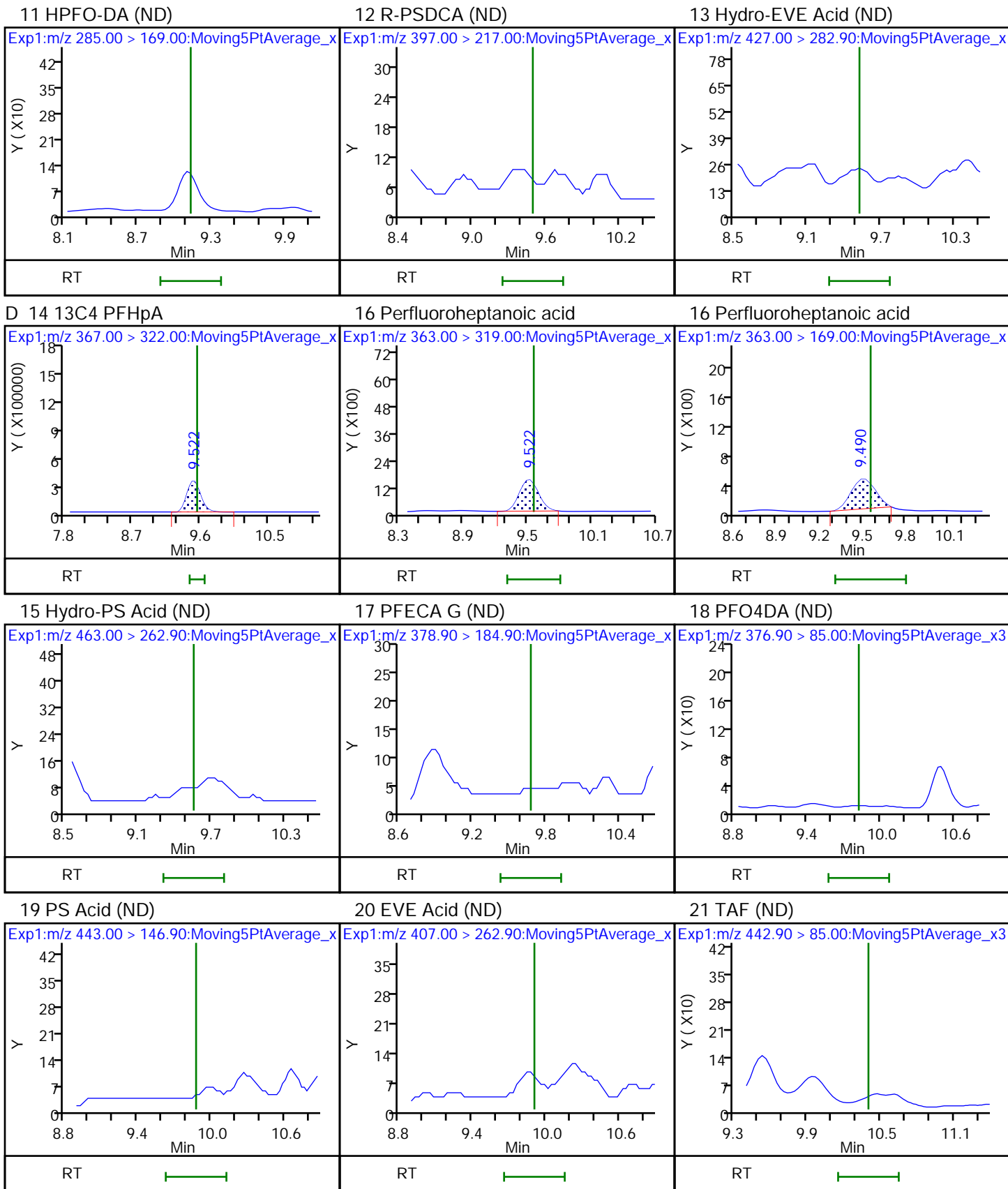


8 PFECA B (ND)

9 PFO3OA (ND)

D 10 13C3 HFPO-DA





Eurofins TestAmerica, Sacramento

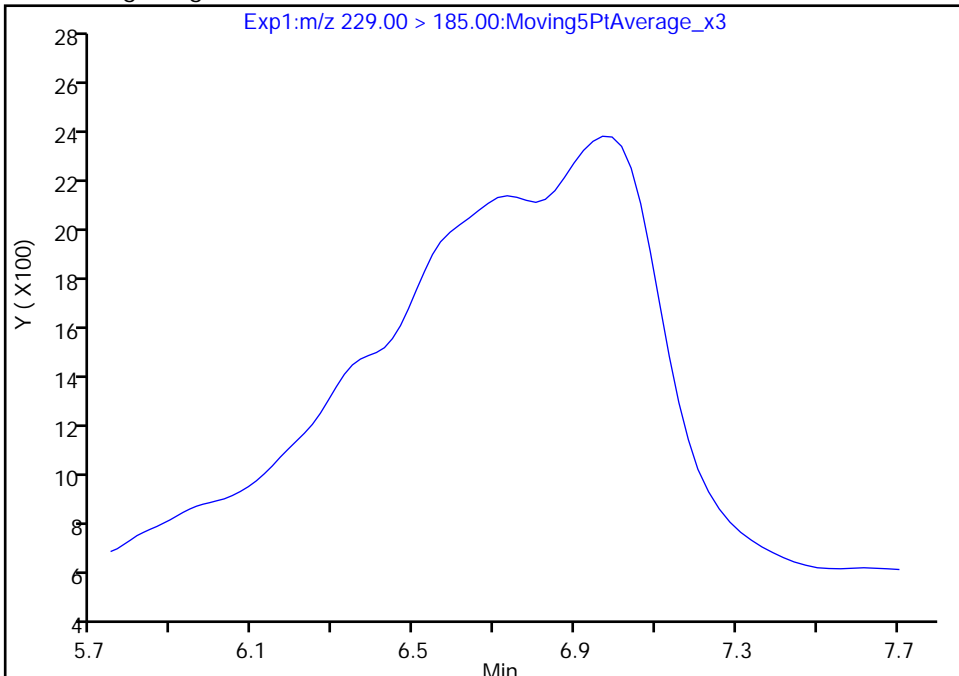
Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_009.d
Injection Date: 31-Mar-2021 10:51:42 Instrument ID: A12
Lims ID: MB 320-475092/1-A
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 9 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm ID) Detector: EXP1

23 PMPA, CAS: 13140-29-9

Signal: 1

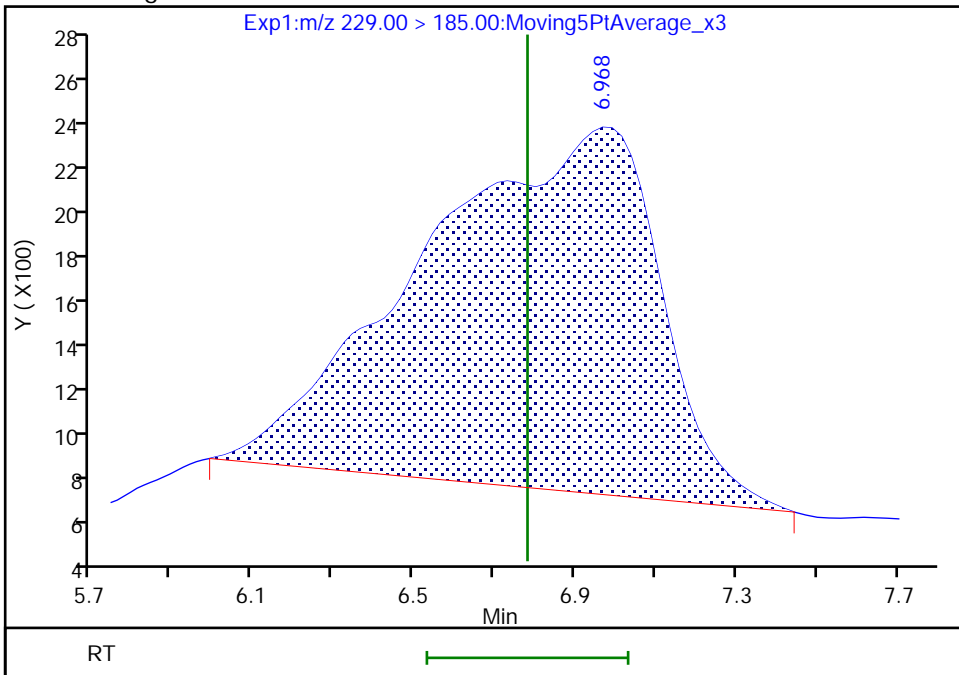
Not Detected
Expected RT: 6.78

Processing Integration Results



RT: 6.97
Area: 65100
Amount: 0.003563
Amount Units: ng/ml

Manual Integration Results



Reviewer: ruangyotsakuld, 01-Apr-2021 10:18:17
Audit Action: Manually Integrated

Audit Reason: Baseline
Page 263 of 284

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 320-475092/2-A
 Matrix: Water Lab File ID: 2021.03.31_A12_TB3_A_017.d
 Analysis Method: Chemours (TB3+) Date Collected: _____
 Extraction Method: PFAS Prep Date Extracted: 03/30/2021 13:04
 Sample wt/vol: 2.5 (mL) Date Analyzed: 03/31/2021 13:12
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 475323 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	0.176		0.0020	
13252-13-6	HFPO-DA	0.197		0.0020	
773804-62-9	Hydro-EVE Acid	0.178		0.0020	
2416366-19-1	Hydrolyzed PSDA	0.163		0.0020	
749836-20-2	Hydro-PS Acid	0.164		0.0020	
1132933-86-8	NVHOS	0.175		0.0020	
267239-61-2	PEPA	0.167		0.020	
113507-82-7	PES	0.167		0.0020	
151772-58-6	PFECA B	0.195		0.0020	
801212-59-9	PFECA G	0.148		0.0020	
674-13-5	PFMOAA	0.198		0.0020	
39492-88-1	PFO2HxA	0.178		0.0020	
39492-89-2	PFO3OA	0.187		0.0020	
39492-90-5	PFO4DA	0.159		0.0020	
39492-91-6	PFO5DA	0.228		0.0020	
13140-29-9	PMPA	0.182		0.010	
29311-67-9	PS Acid	0.155		0.0020	
2416366-22-6	R-EVE	0.189		0.0020	
2416366-18-0	R-PSDA	0.181		0.0020	
2416366-21-5	R-PSDCA	0.166		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	95		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_017.d
 Lims ID: LCS 320-475092/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 31-Mar-2021 13:12:57 ALS Bottle#: 17 Worklist Smp#: 11
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: lcs 320-475092/2-a
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Method: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 01-Apr-2021 10:23:43 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1678

First Level Reviewer: ruangyotsakuld Date: 01-Apr-2021 10:24:00
 Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.120	4.256	-0.136		1107537	0.0992		99.2	184	M
2 R-EVE										
405.00 > 217.00	6.367	6.410	-0.043		596498	0.0943		94.3	15185	
3 R-PSDA										
440.90 > 241.00	6.407	6.469	-0.062		270706	0.0906		90.6	5132	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.486	6.529	-0.043		970260	0.0817		81.7	21804	
23 PMPA										
229.00 > 185.00	6.708	6.782	-0.074		1659754	0.0908		90.8	1642	
5 NVHOS										
297.00 > 135.00	7.087	7.137	-0.050		466491	0.0875		87.5	10487	
6 PFO2HxA										
245.00 > 85.00	7.676	7.709	-0.033		1148136	0.0892		89.2	13434	
22 PEPA										
278.90 > 234.90	8.259	8.299	-0.040		368176	0.0836		83.6	2534	
7 PES										
314.90 > 135.00	8.522	8.556	-0.034		1505145	0.0834		83.4	38738	
8 PFECA B										
295.00 > 201.00	8.741	8.799	-0.058		852700	0.0976		97.6	22980	
9 PFO3OA										
310.90 > 85.00	8.987	9.020	-0.033		282695	0.0933		93.3	7705	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.103	9.133	-0.030		1378374	0.2380		95.2	29130	
11 HPFO-DA										
285.00 > 169.00	9.103	9.133	-0.030	1.000	604404	0.0987		98.7	12934	
12 R-PSDCA										
397.00 > 217.00	9.459	9.493	-0.034		4030680	0.0830		83.0	62484	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Hydro-EVE Acid										
427.00 > 282.90	9.491	9.525	-0.034		5935477	0.0892		89.2	68012	
D 14 13C4 PFHpA										
367.00 > 322.00	9.491	9.558	-0.067		4532408	0.2211		88.4	70820	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.491	9.558	-0.067	1.000	1876017	0.0851	Target=0.00	85.1	14655	
363.00 > 169.00	9.491	9.558	-0.067	1.000	563342		3.33(0.00-0.00)		8808	
15 Hydro-PS Acid										
463.00 > 262.90	9.491	9.558	-0.067		2028342	0.0821		82.1	45088	
17 PFECA G										
378.90 > 184.90	9.617	9.676	-0.059		314133	0.0740		74.0	8705	
18 PFO4DA										
376.90 > 85.00	9.761	9.820	-0.059		394480	0.0794		79.4	8526	
19 PS Acid										
443.00 > 146.90	9.847	9.877	-0.030		900559	0.0775		77.5	25823	
20 EVE Acid										
407.00 > 262.90	9.847	9.906	-0.059		4120986	0.0881		88.1	71050	
21 TAF										
442.90 > 85.00	10.323	10.399	-0.076		441434	0.1142		114	2348	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_017.d

Injection Date: 31-Mar-2021 13:12:57

Instrument ID: A12

Lims ID: LCS 320-475092/2-A

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 17

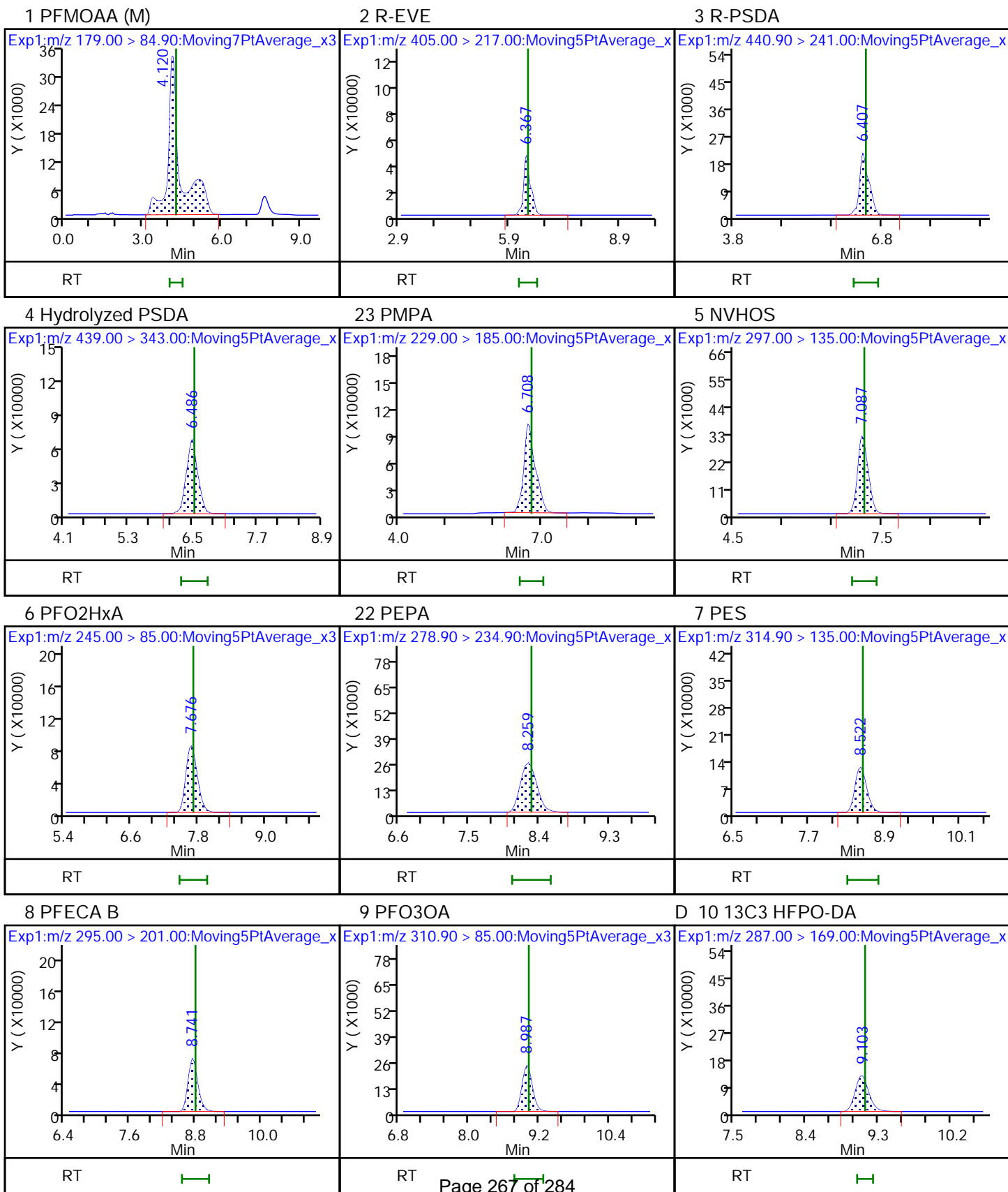
Worklist Smp#: 11

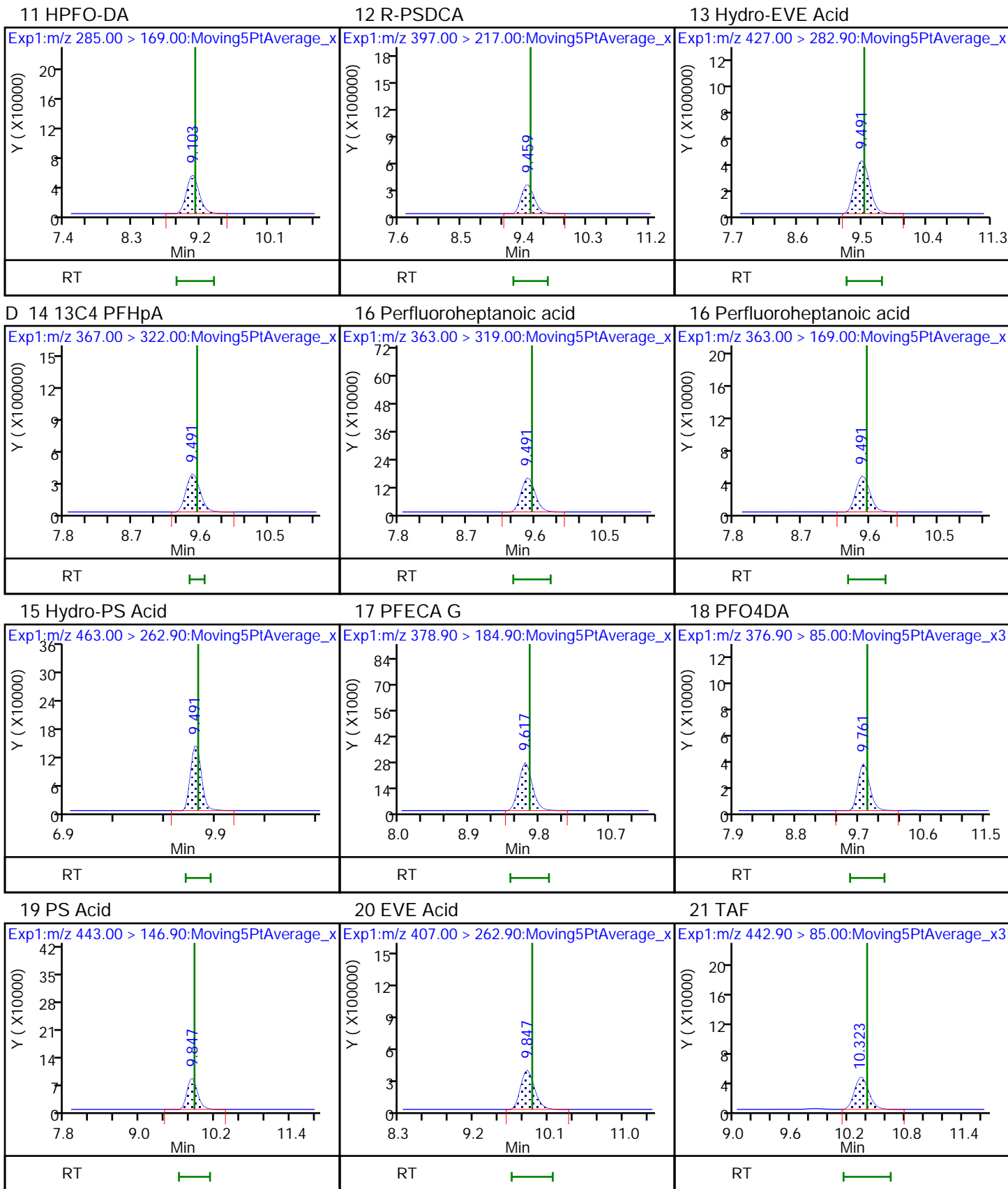
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

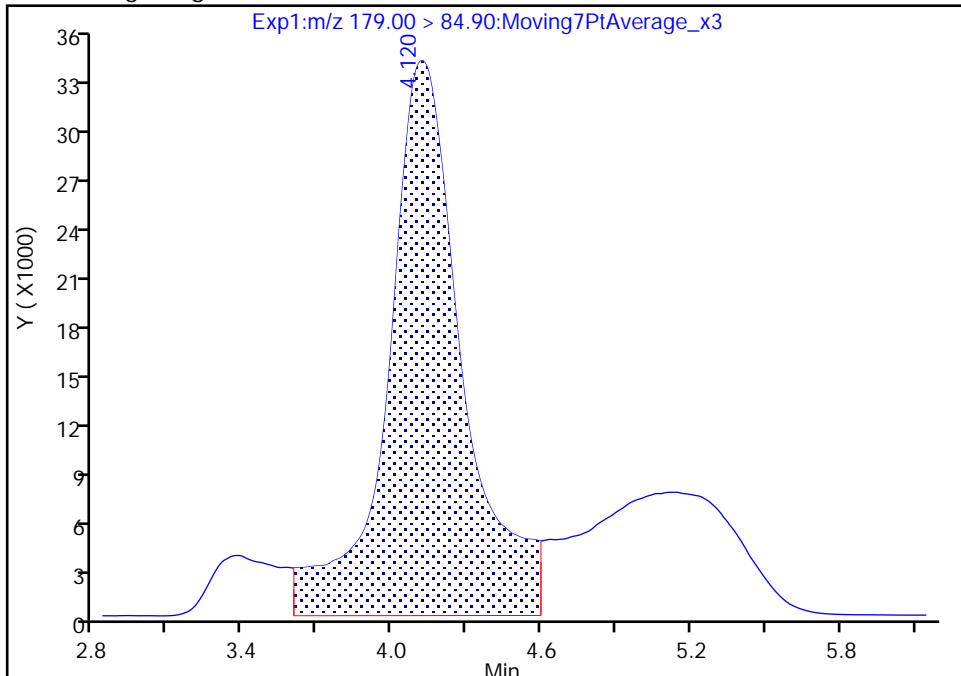
Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_017.d
Injection Date: 31-Mar-2021 13:12:57 Instrument ID: A12
Lims ID: LCS 320-475092/2-A
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 17 Worklist Smp#: 11
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

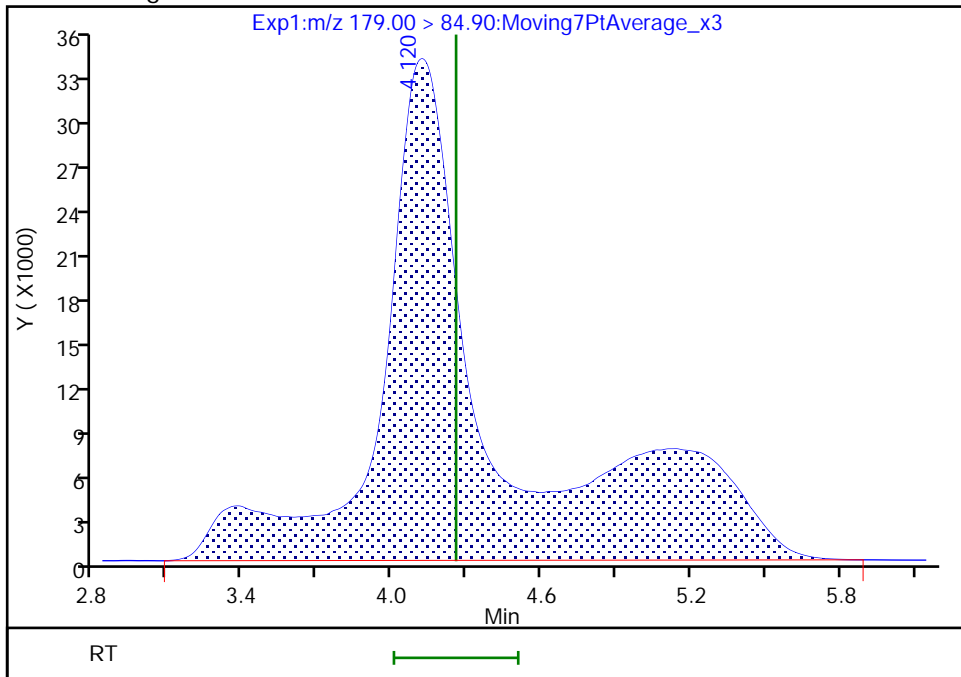
RT: 4.12
Area: 708913
Amount: 0.063519
Amount Units: ng/ml

Processing Integration Results



RT: 4.12
Area: 1107537
Amount: 0.099236
Amount Units: ng/ml

Manual Integration Results



Reviewer: vanommens, 31-Mar-2021 13:41:42
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 270 of 284

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 320-475092/3-A
 Matrix: Water Lab File ID: 2021.03.31_A12_TB3_A_018.d
 Analysis Method: Chemours (TB3+) Date Collected: _____
 Extraction Method: PFAS Prep Date Extracted: 03/30/2021 13:04
 Sample wt/vol: 2.5 (mL) Date Analyzed: 03/31/2021 13:30
 Con. Extract Vol.: 5.00 (mL) Dilution Factor: 1
 Injection Volume: 500 (uL) GC Column: GeminiC18 3x100 ID: 3 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 475323 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
69087-46-3	EVE Acid	0.179		0.0020	
13252-13-6	HFPO-DA	0.192		0.0020	
773804-62-9	Hydro-EVE Acid	0.165		0.0020	
2416366-19-1	Hydrolyzed PSDA	0.150		0.0020	
749836-20-2	Hydro-PS Acid	0.156		0.0020	
1132933-86-8	NVHOS	0.167		0.0020	
267239-61-2	PEPA	0.158		0.020	
113507-82-7	PES	0.160		0.0020	
151772-58-6	PFECA B	0.181		0.0020	
801212-59-9	PFECA G	0.140		0.0020	
674-13-5	PFMOAA	0.188		0.0020	
39492-88-1	PFO2HxA	0.164		0.0020	
39492-89-2	PFO3OA	0.190		0.0020	
39492-90-5	PFO4DA	0.131		0.0020	
39492-91-6	PFO5DA	0.208		0.0020	
13140-29-9	PMPA	0.172		0.010	
29311-67-9	PS Acid	0.145		0.0020	
2416366-22-6	R-EVE	0.168		0.0020	
2416366-18-0	R-PSDA	0.170		0.0020	
2416366-21-5	R-PSDCA	0.146		0.0020	

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	89		25-150

Eurofins TestAmerica, Sacramento
Target Compound Quantitation Report

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_018.d
 Lims ID: LCSD 320-475092/3-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 31-Mar-2021 13:30:39 ALS Bottle#: 18 Worklist Smp#: 12
 Injection Vol: 500.0 ul Dil. Factor: 1.0000
 Sample Info: lcsd 320-475092/3-a
 Misc. Info.: Plate: 1 Rack: 5
 Operator ID: Sac_inst_A12 Instrument ID: A12
 Method: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\PFAS_Chem_TB3+.m
 Limit Group: LC PFAS_TB3P - ICAL
 Last Update: 01-Apr-2021 10:24:30 Calib Date: 24-Mar-2021 15:26:08
 Integrator: Picker
 Quant Method: Isotopic Dilution/External Stnd Quant By: Initial Calibration
 Last ICal File: \\chromfs\Sacramento\ChromData\A12\20210324-115666.b\2021.03.24_A12_TB3_ICAL_014.d
 Column 1 : Gemini C18 3um 3 x 100mm (3.00 mm) Det: EXP1
 Process Host: CTX1678

First Level Reviewer: ruangyotsakuld

Date: 01-Apr-2021 10:24:30

Ratio Calibration: Initial Calibration Level: 6

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
1 PFMOAA										M
179.00 > 84.90	4.271	4.256	0.015		1050689	0.0941		94.1	396	M
2 R-EVE										
405.00 > 217.00	6.367	6.410	-0.043		532007	0.0841		84.1	10146	
3 R-PSDA										
440.90 > 241.00	6.427	6.469	-0.042		254567	0.0852		85.2	6554	
4 Hydrolyzed PSDA										
439.00 > 343.00	6.486	6.529	-0.043		890325	0.0749		74.9	14933	
23 PMPA										
229.00 > 185.00	6.732	6.782	-0.050		1573187	0.0861		86.1	1544	
5 NVHOS										
297.00 > 135.00	7.111	7.137	-0.026		446114	0.0836		83.6	11210	
6 PFO2HxA										
245.00 > 85.00	7.676	7.709	-0.033		1052673	0.0818		81.8	12871	
22 PEPA										
278.90 > 234.90	8.259	8.299	-0.040		347349	0.0788		78.8	2416	
7 PES										
314.90 > 135.00	8.522	8.556	-0.034		1443877	0.0800		80.0	37207	
8 PFECA B										
295.00 > 201.00	8.740	8.799	-0.059		790259	0.0904		90.4	21765	
9 PFO3OA										
310.90 > 85.00	8.986	9.020	-0.034		287740	0.0950		95.0	7846	
D 10 13C3 HFPO-DA										
287.00 > 169.00	9.074	9.133	-0.059		1284460	0.2218		88.7	27202	
11 HPFO-DA										
285.00 > 169.00	9.102	9.133	-0.031	1.003	547305	0.0959		95.9	9350	
12 R-PSDCA										
397.00 > 217.00	9.425	9.493	-0.068		2552668	0.0731		73.1	54949	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Hydro-EVE Acid										
427.00 > 282.90	9.458	9.525	-0.067		5504676	0.0827		82.7	62799	
D 14 13C4 PFHpA										
367.00 > 322.00	9.490	9.558	-0.068		4430258	0.2161		86.4	69253	
16 Perfluoroheptanoic acid										
363.00 > 319.00	9.490	9.558	-0.068	1.000	1796626	0.0834	Target=0.00	83.4	14061	
363.00 > 169.00	9.490	9.558	-0.068	1.000	515991		3.48(0.00-0.00)		8087	
15 Hydro-PS Acid										
463.00 > 262.90	9.523	9.558	-0.035		1924713	0.0779		77.9	42724	
17 PFECA G										
378.90 > 184.90	9.616	9.676	-0.060		297047	0.0700		70.0	8213	
18 PFO4DA										
376.90 > 85.00	9.760	9.820	-0.060		325233	0.0654		65.4	7025	
19 PS Acid										
443.00 > 146.90	9.817	9.877	-0.060		840451	0.0723		72.3	23988	
20 EVE Acid										
407.00 > 262.90	9.846	9.906	-0.060		4187865	0.0896		89.6	60121	
21 TAF										
442.90 > 85.00	10.322	10.399	-0.077		402136	0.1040		104	2153	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_018.d

Injection Date: 31-Mar-2021 13:30:39

Instrument ID: A12

Lims ID: LCSD 320-475092/3-A

Client ID:

Operator ID: Sac_inst_A12

ALS Bottle#: 18

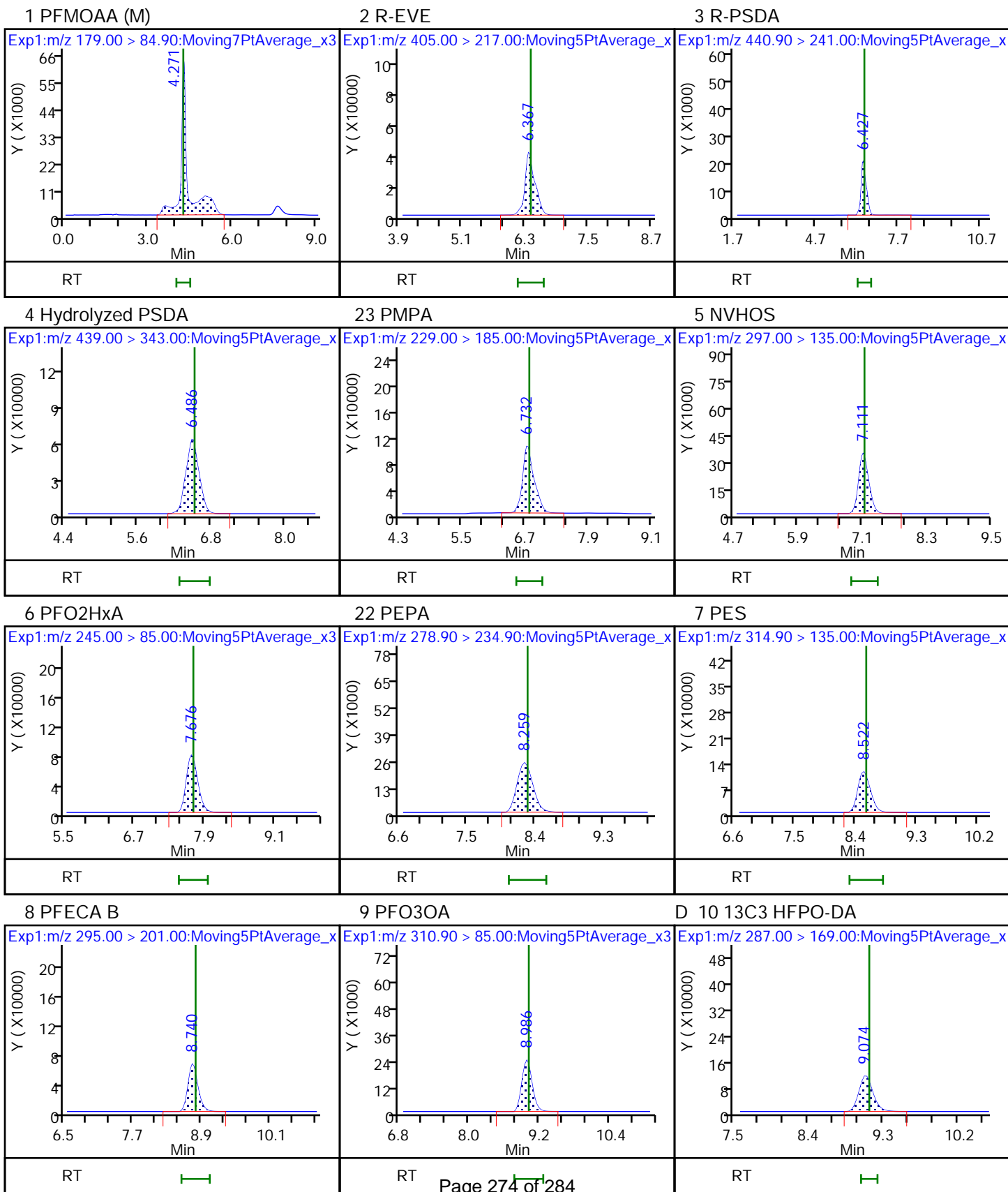
Worklist Smp#: 12

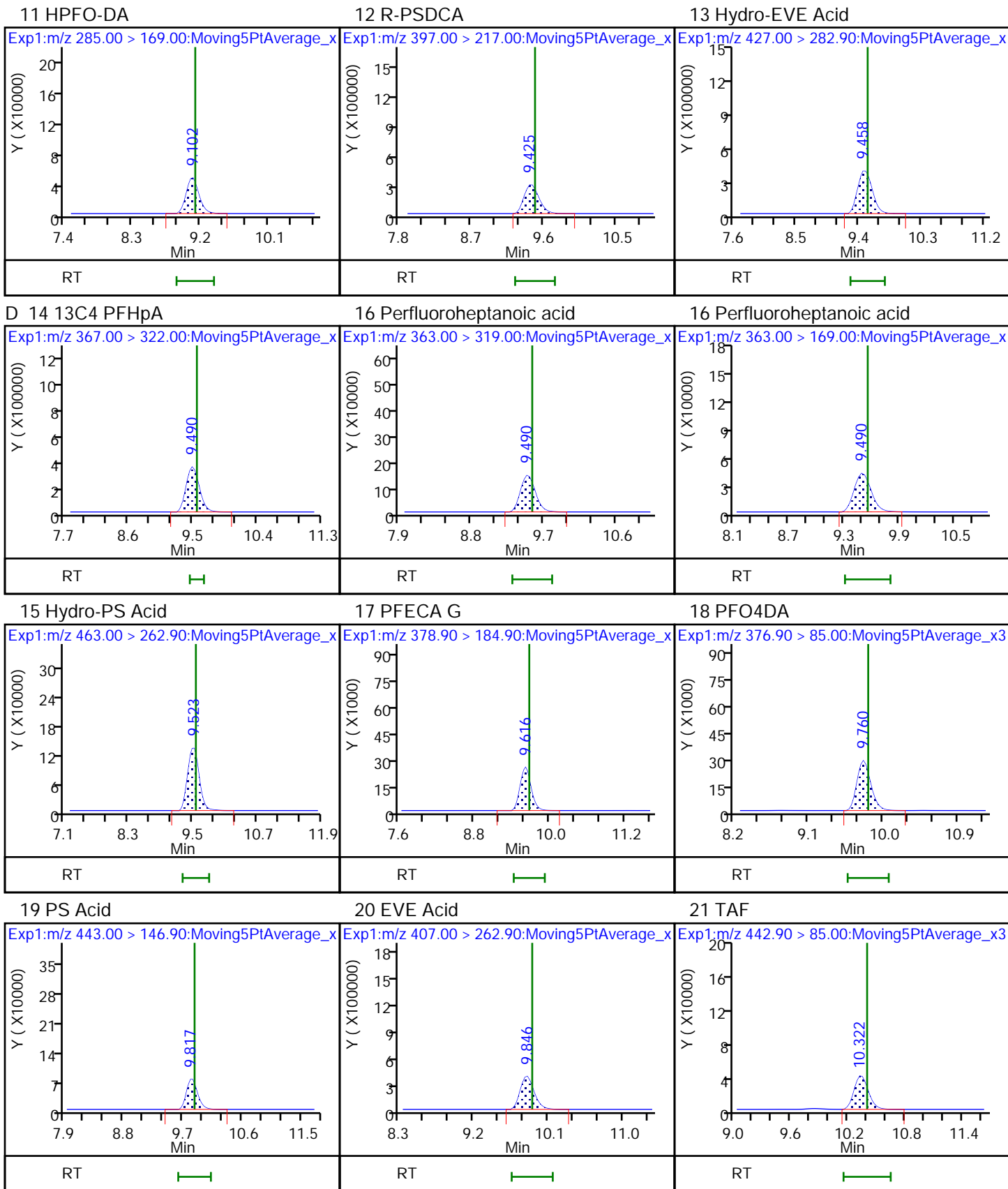
Injection Vol: 500.0 ul

Dil. Factor: 1.0000

Method: PFAS_Chem_TB3+

Limit Group: LC PFAS_TB3P - ICAL





Eurofins TestAmerica, Sacramento

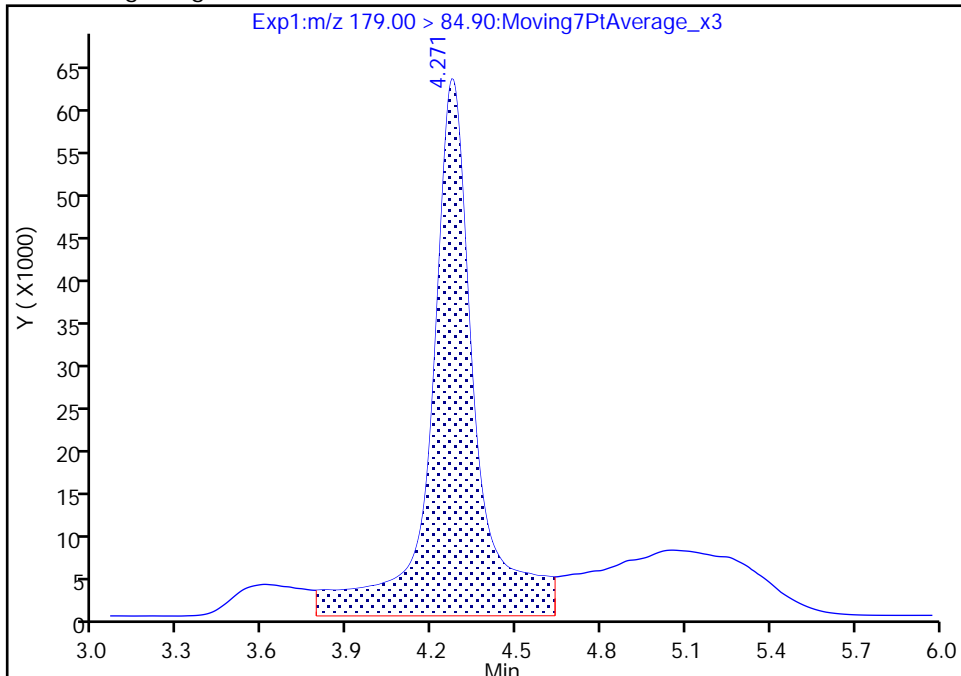
Data File: \\chromfs\Sacramento\ChromData\A12\20210331-116053.b\2021.03.31_A12_TB3_A_018.d
Injection Date: 31-Mar-2021 13:30:39 Instrument ID: A12
Lims ID: LCSD 320-475092/3-A
Client ID:
Operator ID: Sac_inst_A12 ALS Bottle#: 18 Worklist Smp#: 12
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: PFAS_Chem_TB3+ Limit Group: LC PFAS_TB3P - ICAL
Column: Gemini C18 3um 3 x 100mm (3.00 mm) Detector: EXP1

1 PFMOAA, CAS: 674-13-5

Signal: 1

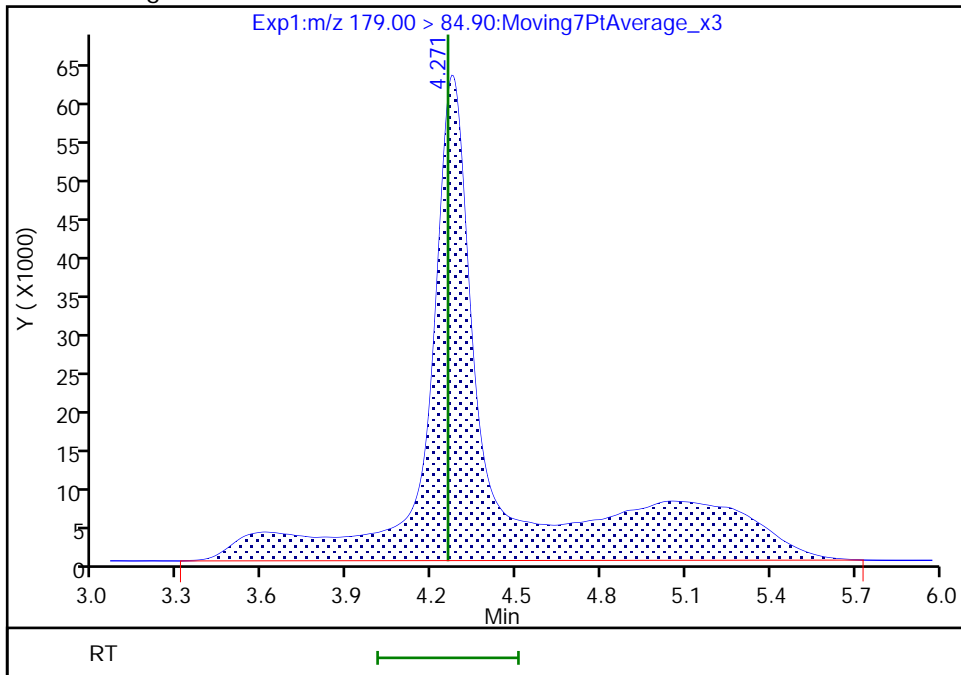
RT: 4.27
Area: 683009
Amount: 0.061198
Amount Units: ng/ml

Processing Integration Results



RT: 4.27
Area: 1050689
Amount: 0.094142
Amount Units: ng/ml

Manual Integration Results



LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Instrument ID: A12 Start Date: 03/24/2021 11:54

Analysis Batch Number: 473456 End Date: 03/24/2021 16:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-473456/2		03/24/2021 11:54	1	2021.03.24_A12_TB3_ICAL_002.d	GeminiC18 3x100 3(mm)
IC 320-473456/3		03/24/2021 12:12	1	2021.03.24_A12_TB3_ICAL_003.d	GeminiC18 3x100 3(mm)
IC 320-473456/4		03/24/2021 12:29	1	2021.03.24_A12_TB3_ICAL_004.d	GeminiC18 3x100 3(mm)
IC 320-473456/5		03/24/2021 12:47	1	2021.03.24_A12_TB3_ICAL_005.d	GeminiC18 3x100 3(mm)
IC 320-473456/6		03/24/2021 13:05	1	2021.03.24_A12_TB3_ICAL_006.d	GeminiC18 3x100 3(mm)
IC 320-473456/7		03/24/2021 13:22	1	2021.03.24_A12_TB3_ICAL_007.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/24/2021 13:40	1		GeminiC18 3x100 3(mm)
IC 320-473456/9		03/24/2021 13:57	1	2021.03.24_A12_TB3_ICAL_009.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/24/2021 14:15	1		GeminiC18 3x100 3(mm)
IC 320-473456/11		03/24/2021 14:33	1	2021.03.24_A12_TB3_ICAL_011.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/24/2021 14:50	1		GeminiC18 3x100 3(mm)
IC 320-473456/13		03/24/2021 15:08	1	2021.03.24_A12_TB3_ICAL_013.d	GeminiC18 3x100 3(mm)
IC 320-473456/14		03/24/2021 15:26	1	2021.03.24_A12_TB3_ICAL_014.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/24/2021 15:43	1		GeminiC18 3x100 3(mm)
ICV 320-473456/16		03/24/2021 16:01	1	2021.03.24_A12_TB3_ICAL_016.d	GeminiC18 3x100 3(mm)

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 320-71576-1

SDG No.: _____

Instrument ID: A12 Start Date: 03/31/2021 10:16

Analysis Batch Number: 475323 End Date: 03/31/2021 16:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 320-475323/1		03/31/2021 10:16	1	2021.03.31_A12_TB3 A 007.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/31/2021 10:34	1		GeminiC18 3x100 3(mm)
MB 320-475092/1-A		03/31/2021 10:51	1	2021.03.31_A12_TB3 A 009.d	GeminiC18 3x100 3(mm)
320-71576-1	SEEP-C-RAIN-INFLUENT-24-031721	03/31/2021 11:09	50	2021.03.31_A12_TB3 A 010.d	GeminiC18 3x100 3(mm)
320-71576-5	SEEP-C-INFLUENT-336-031921	03/31/2021 11:26	50	2021.03.31_A12_TB3 A 011.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/31/2021 11:44	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/31/2021 12:02	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/31/2021 12:19	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/31/2021 12:37	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/31/2021 12:55	1		GeminiC18 3x100 3(mm)
LCS 320-475092/2-A		03/31/2021 13:12	1	2021.03.31_A12_TB3 A 017.d	GeminiC18 3x100 3(mm)
LCSD 320-475092/3-A		03/31/2021 13:30	1	2021.03.31_A12_TB3 A 018.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/31/2021 13:48	1		GeminiC18 3x100 3(mm)
CCV 320-475323/14		03/31/2021 14:05	1	2021.03.31_A12_TB3 A 020.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/31/2021 14:23	1		GeminiC18 3x100 3(mm)
320-71576-2	SEEP-C-RAIN-EFFLUENT-24-031721	03/31/2021 14:41	1	2021.03.31_A12_TB3 A 022.d	GeminiC18 3x100 3(mm)
320-71576-3	SEEP-C-RAIN-EQBLK-031721	03/31/2021 14:58	1	2021.03.31_A12_TB3 A 023.d	GeminiC18 3x100 3(mm)
320-71576-4	SEEP-C-EFFLUENT-336-031921	03/31/2021 15:16	1	2021.03.31_A12_TB3 A 024.d	GeminiC18 3x100 3(mm)
320-71576-6	SEEP-C-FBLK-336-031921	03/31/2021 15:34	1	2021.03.31_A12_TB3 A 025.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/31/2021 15:52	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/31/2021 16:09	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/31/2021 16:27	1		GeminiC18 3x100 3(mm)
CCV 320-475323/23		03/31/2021 16:44	1	2021.03.31_A12_TB3 A 029.d	GeminiC18 3x100 3(mm)

LCMS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Sacramen Job No.: 320-71576-1

SDG No.: _____

Batch Number: 475092 Batch Start Date: 03/30/21 13:10 Batch Analyst: Duong, Stephanie A

Batch Method: PFAS Prep Batch End Date: 03/30/21 18:46

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	LCMTB3_SU 00024	LCTB3_SP 00071	AnalysisComment	
MB 320-475092/1		PFAS Prep, Chemours (TB3+)		2.5 mL	5.00 mL	250 uL		H2O/MeOH	
LCS 320-475092/2		PFAS Prep, Chemours (TB3+)		2.5 mL	5.00 mL	250 uL	100 uL		
LCSD 320-475092/3		PFAS Prep, Chemours (TB3+)		2.5 mL	5.00 mL	250 uL	100 uL		
320-71576-A-1	SEEP-C-RAIN-INFLUENT-24-031721	PFAS Prep, Chemours (TB3+)	T	2.5 mL	5.00 mL	250 uL		pH = 8	
320-71576-A-2	SEEP-C-RAIN-EFFLUENT-24-031721	PFAS Prep, Chemours (TB3+)	T	2.5 mL	5.00 mL	250 uL		pH = 8	
320-71576-A-3	SEEP-C-RAIN-EQBLK-031721	PFAS Prep, Chemours (TB3+)	T	2.5 mL	5.00 mL	250 uL		pH = 8	
320-71576-A-4	SEEP-C-EFFLUENT-336-031921	PFAS Prep, Chemours (TB3+)	T	2.5 mL	5.00 mL	250 uL		pH = 8	
320-71576-A-5	SEEP-C-INFLUENT-336-031921	PFAS Prep, Chemours (TB3+)	T	2.5 mL	5.00 mL	250 uL		pH = 8	
320-71576-A-6	SEEP-C-FBLK-336-031921	PFAS Prep, Chemours (TB3+)	T	2.5 mL	5.00 mL	250 uL		pH = 8	

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Chemours (TB3+)

Shipping and Receiving Documents

Chain of Custody Record

Sacramento, CA 95605
(916) 373-5600

Regulatory Program: DW NPDES RCRA Other:

Client Contact
Chemours
22828 NC HWY 87 W
Fayetteville, NC 28306
910-678-1213

Project Name: Seep Flow Through Cell Sampling 2021
Site: Chemours Fayetteville Works Plant
P O #

Site Contact: Christel Compton
Date: 03/22/2021
Carrier: FedEx

Lab Contact:

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT: if different from Below _____
 2 weeks
 1 week
 2 days
 1 day

Sample Identification

Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.
3/17/2021	11:42 C		W	6
3/17/2021	11:42 C		W	8
3/17/2021	10:00 G		W	8
3/19/2021	9:00 C		W	8
3/19/2021	9:00 C		W	8
3/19/2021	8:00 G		W	8

Sample Specific Notes:
Hold All Remaining Volumes as Retains

Job / SDG No.:

Sample Specific Notes:

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other



320-71576 Chain of Custody

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return to Client Disposal by Lab Archive for _____ Months

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

Custody Seal No.: 1514545
Company: PARSONS

Relinquished by: [Signature]
Date/Time: 3/22/2021

Received by: [Signature]
Date/Time: 3/22/2021

Relinquished by:
Date/Time:

Received in Laboratory by:
Date/Time:

Therm ID No.: 6.6
Corrd: 0.7
Date/Time: 3/22/2021

Login Sample Receipt Checklist

Client: The Chemours Company FC, LLC

Job Number: 320-71576-1

Login Number: 71576
List Number: 1
Creator: Oropeza, Salvador

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	1514544/1541545
Sample custody seals, if present, are intact.	N/A	
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?	False	
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.	N/A	
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	