FINAL

SUMMARY REPORT

PER- AND POLYFLUOROALKYL SUBSTANCES SAMPLING

for

GROUNDWATER REMEDIAL ACTION AT OPERABLE UNIT 3
INSTALLATION RESTORATION PROGRAM SITE 1
FORMER MARINE CORPS AIR STATION TUSTIN
TUSTIN, CALIFORNIA

October 2017

Prepared for

United States Department of the Navy
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EXECUTIVE SUMMARY

This report summarizes the results from groundwater sampling and analysis for per- and polyfluoroalkyl substances (PFAS) at Operable Unit (OU)-3 at Former Marine Corps Air Station (MCAS) Tustin. The objective of the work was to simply determine the presence or absence of PFAS in groundwater in representative wells screened in the first water-bearing zone. Multimedia Environmental Compliance Group (MMEC Group), which comprises joint venture members Amec Foster Wheeler Environment & Infrastructure, Inc., and KMEA, prepared this report for work conducted under United States Department of the Navy, Naval Facilities Engineering Command Southwest Contract Number N62473-12-D-2012, Contract Task Order Number 0087, Modification 03. Field activities followed the *Final Sampling and Analysis Plan for PFAS Sampling for Groundwater Remedial Action at OU-3, Installation Restoration Program Site 1* (MMEC Group, 2017).

Three groundwater monitoring wells were selected for sampling: I001BC43S (upgradient), I001BC50S (downgradient), and I001MW52S (downgradient). The wells were redeveloped and sampled in July 2017 for the analysis of PFAS, including perfluorooctanoic acid (PFOA), perfluorooctane sulfonate (PFOS), and perfluorobutanesulfonic acid (PFBS), via United States Environmental Protection Agency (U.S. EPA) Method 537 Modified.

PFOA, PFOS, and PFBS were detected at concentrations above method detection limits in samples from the three groundwater monitoring wells. PFOA concentrations ranged from an estimated 0.397 to 743 micrograms per liter (µg/L), exceeding the U.S. EPA Lifetime Health Advisory (LHA) of 0.07 µg/L. PFOS concentrations ranged from 0.0263 to an estimated 26.9 µg/L, exceeding the U.S. EPA LHA at the two downgradient monitoring wells (I001BC50S and I001MW52S). Detected PFBS concentrations ranged from an estimated 0.0624 to 66.7 µg/L, all less than the U.S. EPA tap water Regional Screening Level of 400 µg/L.

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ACRONYMS AND ABBREVIATIONS

µg/L	microgram(s) per liter
AFFF	aqueous film-forming foam
BEI	Bechtel Environmental, Inc
BNI	Bechtel National, Inc.
btoc	below top of casing
CAS	Chemical Abstracts Service
DoD	United States Department of Defense
DON	United States Department of the Navy
ECS	Enviro Compliance Solutions, Inc.
HDPE	high-density polyethylene
IDW	investigation-derived waste
J	estimated
LCS	laboratory control sample
LDC	Laboratory Data Consultants, Inc.
LHA	Lifetime Health Advisory
MCAS	Marine Corps Air Station
MMEC Group	Multimedia Environmental Compliance Group
MS	matrix spike
MSD	matrix spike duplicate
msl	mean sea level
OU	operable unit
PFAS	per- and polyfluoroalkyl substances
PFBS	perfluorobutanesulfonic acid
PFOA	perfluorooctanoic acid
PFOS	perfluorooctane sulfonate
RSL	Regional Screening Level
SAP	Sampling and Analysis Plan
U	non-detect
U.S. EPA	United States Environmental Protection Agency
WBZ	water-bearing zone

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1 INTRODUCTION

This report summarizes the results from groundwater sampling and analysis for per- and polyfluoroalkyl substances (PFAS) at Operable Unit (OU)-3 at Former Marine Corps Air Station (MCAS) Tustin. Multimedia Environmental Compliance Group (MMEC Group), which comprises joint venture members Amec Foster Wheeler Environment & Infrastructure, Inc., and KMEA, prepared this report for work conducted under United States Department of the Navy (DON), Naval Facilities Engineering Command Southwest Contract Number N62473-12-D-2012, Contract Task Order Number 0087, Modification 03. Field activities followed the *Final Sampling and Analysis Plan for PFAS Sampling for Groundwater Remedial Action at OU-3, Installation Restoration Program Site 1* (Final SAP; MMEC Group, 2017).

1.1 PFAS OVERVIEW

PFAS are a class of synthetic organofluorine compounds that possess a chemical structure that gives them unique properties, including thermal stability and the ability to repel both water and oil. For decades, they have been used in hundreds of industrial applications and consumer products such as carpeting, apparel, upholstery, food paper wrappings, firefighting foams, and metal plating (United States Environmental Protection Agency [U.S. EPA], 2016). Initial production of PFAS compounds began in the late 1940s (DON, 2016). PFAS are also found in aqueous film-forming foam (AFFF), which was widely used at firefighting training areas and in fire suppression systems in hangars and other buildings, and the compounds can also be released accidentally through storage, transport, and day-to-day handling. In addition to hangar buildings and firefighting training areas, PFAS may be found at ordnance burn areas, plating shops, landfills, and sludge disposal areas.

The U.S. EPA Office of Water issued drinking water Lifetime Health Advisories (LHAs) for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) of 0.07 microgram per liter (µg/L) for each constituent; however, when these two chemicals co-occur in a drinking water source, a conservative and health-protective approach is recommended that compares the sum of the concentrations (PFOS + PFOA) with the LHA (0.07 µg/L) (U.S. EPA, 2016). LHAs are non-enforceable concentrations of drinking water contaminants at or below which adverse health effects are not anticipated to occur over specific exposure durations (e.g., 1 day, 10 days, and a lifetime). They serve as informal technical guidance to help federal, state, and local officials and managers of public or community water systems protect public health when spills or other contamination occurs. U.S. EPA (2016) provides information on the environmental properties, health effects, analytical methodology, and treatment technologies for removing drinking water contaminants.

U.S. EPA (2017) has also derived Regional Screening Level (RSLs) for perfluorobutanesulfonic acid (PFBS). PFBS concentrations detected in groundwater were compared with the tap water RSL of 400 µg/L (U.S. EPA, 2017), which has been updated since the Final SAP was prepared (MMEC Group, 2017). Therefore, the most recent RSL is used for comparison in this report.

Table 1 presents the screening values for comparisons of analytical results for PFOS, PFOA, and PFBS. U.S. EPA and the State of California have not issued LHAs or promulgated standards for any other PFAS to date.

1.2 PROJECT OBJECTIVE

The objective of the PFAS groundwater sampling was to determine the presence or absence of PFAS at OU-3 at Former MCAS Tustin, and, if detected, compare the concentrations with the project screening criteria in Table 1.

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2 SITE HISTORY AND BACKGROUND

2.1 FACILITY HISTORY

Former MCAS Tustin is located in southern California in central Orange County, approximately 40 miles south of downtown Los Angeles and more than 100 miles north of the California-Mexico border (Figure 1). Former MCAS Tustin covers approximately 1,595 acres. The facility was first commissioned in 1942 as a DON lighter-than-air vehicle base to support observation blimps and personnel conducting anti-submarine patrols off the coast of southern California during World War II. It operated in that capacity until 1949, when all activities ceased and the facility was decommissioned. In 1951, the facility was reactivated for helicopter operations to support the Korean conflict. Between 1951 and 1996, MCAS Tustin was a major center for United States Marine Corps helicopter aviation on the Pacific coast and a sub-element of the Commander Marine Corps Air Bases, Western Area, at MCAS El Toro. In 1996, MCAS Tustin helicopter operations were transferred to MCAS El Toro. As part of the U.S. government's base realignment and closure program, both facilities closed in July 1999, and helicopter operations were transferred to MCAS Miramar (Enviro Compliance Solutions, Inc. [ECS], 2015).

While MCAS Tustin was active, more than 200 structures and various facilities supported its mission. These facilities included two timber-frame blimp hangars, a 3,000-foot runway, aircraft parking aprons, and numerous aircraft maintenance shops. All but 674 acres formerly leased for commercial farming and maintenance activities were developed.

2.1.1 Operable Unit 3

OU-3 is located within Former MCAS Tustin. During the past 20 years, the area east of the site has changed from agricultural use to compact residential and industrial/manufacturing use, while the area west of the site has recently changed from agricultural use to no use. The Jamboree Road extension traverses OU-3 from the southwest and northeast, covering most of the site. The site is situated along the northwestern bank of Peters Canyon Channel and is bounded to the east by Peters Canyon Channel, the northeast by Edinger Avenue, the south by Moffett Drive, and the west by former agricultural land. OU-3 consists of former unlined, shallow landfill trenches (Moffett Trenches) and pits (Crash Crew Burn Pits) constructed to burn flammable liquids for firefighter training exercises (Figure 2). The landfill trenches, which reportedly contain approximately 5,000 cubic yards of material, were used from the late 1940s or early 1950s until about 1971. The trenches are suspected of containing a mixture of MCAS Tustin-generated municipal solid waste and industrial waste, the latter reportedly including paints, oils, solvents, and transformers (ECS, 2015).

2.1.1.1 Topography

The land surface at Former MCAS Tustin is relatively flat, with a mean surface elevation of approximately 54 feet above mean sea level (msl). The ground surface slopes gradually, approximately 20 feet per mile, from a maximum elevation of approximately 75 feet above msl at the northern portion of the facility to approximately 40 to 45 feet above msl at the southern portion.

2.1.1.2 Site Geology

The upper 25 feet of native soils at OU-3 consists predominantly of fine-grained material (primarily silts and clays of various plasticity). Pockets of coarser-grained material (silty sands and sand) were encountered close to Peters Canyon Channel in the northern and central parts of OU-3; these pockets terminate to the west and south. Presently, much of the more coarse-

grained material (silty sand or sand) encountered within the upper 20 feet is artificial fill and landfill material. Most of the sandy pockets are above the current water table.

2.1.1.3 Site Hydrogeology

The water table beneath the site was located at approximately 10 to 15 feet below ground surface before construction of the Jamboree Road extension. Up to 20 feet of soil was added as fill to support road construction at the site. The shallow aquifer system beneath the site consists of an uppermost, unconfined water-bearing zone (WBZ) and three underlying semiconfined WBZs, referred to as the first and second WBZs, respectively. The first WBZ extends from the water table to approximately 20 to 25 feet below the original ground surface and is separated from the second WBZ by a locally continuous clay aquitard. The second WBZ occurs from approximately 30 to 60 feet below the original ground surface. The boundaries between the WBZs vary from location to location, reflecting the heterogeneity of the sediments within each depth range. A Regional Aquifer is present approximately 90 to 95 feet below the original ground surface (ECS, 2015).

Flow in the first WBZ is controlled by a localized groundwater mound created by a containment wall that was installed in 1986 to prevent discharge of contaminated groundwater associated with the former burn pits and landfill trenches into Peters Canyon Channel. Groundwater in the first WBZ flows first toward the mound, then flows laterally around the mound to the northeast and southwest, and then discharges into the upstream and downstream portions of Peters Canyon Channel. However, the migration rate is slow, with travel times estimated to be more than 60 years (the estimated travel times for migration routes around the wall are 63 years around the southern end and 75 years around the northern end [Bechtel Environmental, Inc (BEI), 2003]). Some of the groundwater in the first WBZ is also interpreted to seep vertically into the second WBZ. Until recently, irrigation return flow from the agricultural field (former usage) located west of Jamboree Road was the primary source of recharge to both the first and second WBZs. Currently, infiltration from precipitation is the primary surface recharge source. The Jamboree Road extension and the high-density polyethylene (HDPE) liner installed at the base of the backfill prevent vertical recharge of groundwater through the landfill in these areas.

Former MCAS Tustin lies within the Irvine Groundwater Management Zone in central Orange County (California Regional Water Quality Control Board, Santa Ana Region, 2004). In the vicinity of Former MCAS Tustin, the Regional Aquifer is present below a depth of approximately 90 feet below ground surface (Bechtel National, Inc. [BNI], 1997). The Regional Aquifer lies beneath the third WBZ at approximately 90 to 95 feet below ground surface and generally flows southwesterly toward the Pacific Ocean. Groundwater within the Regional Aquifer and within the Irvine Groundwater Management Zone is currently used as a primary source of municipal drinking water and irrigation water. The data evaluated in the Remedial Investigation (BNI, 1996) indicated no evidence of direct hydraulic connection between the shallow WBZs and Regional Aquifer beneath OU-3.

2.1.1.4 Site History

According to boring logs and trench logs, landfill materials consist of concrete, gravel, wood, glass, cobbles, metal, asphalt, and minor trash. The Crash Crew Burn Pits were used to burn flammable liquids for firefighting training exercises from about 1971 until 1983. Flammable liquids burned in the Crash Crew Burn Pits consisted primarily of jet propellant grade 5, as well as oils, solvents, lacquers, primers, and various chemicals. An estimated 250,000 to 350,000 gallons of liquid wastes were used for firefighting training at the burn pits (Brown and Caldwell Consulting Engineers, 1985). The area covered by the landfill trenches and burn pits was estimated from aerial photographs and historical information to be approximately 600 by 250 feet (Figure 2) (DON, 2001). The historical use of OU-3 as a firefighting training area indicates

the potential for release of compounds known to contain PFAS, notably AFFF (MMEC Group, 2016; Barber, 2016; Fire Fighting Foam Coalition, 2004).

In 1983, petroleum was observed to be seeping into Peters Canyon Channel adjacent to OU-3. The petroleum was attributed to seepage from the burn pits. Response actions were implemented to mitigate the petroleum impacts. The principal response actions included excavation and offsite disposal of contaminated soil in 1983. A steel-reinforced concrete containment wall was constructed along the western bank of the channel in 1986 to prevent seepage of contaminated groundwater into the channel. A French drain groundwater interceptor system and two associated sumps were installed in 1987, and periodic groundwater extraction was performed until approximately 1992. In addition, landfill gas monitoring probes and groundwater monitoring wells were installed in 2000.

Between 1997 and 1999, extensive road construction occurred at OU-3. Prior to construction, an HDPE liner was installed over the landfill to prevent surface water from infiltrating through the landfill and contaminating groundwater underlying the site. Up to 20 vertical feet of earth fill was placed on top of the liner over most of OU-3 to support the construction of the overlying Jamboree Road extension. Retaining walls, associated embankment slopes, and southbound/northbound off-ramps were constructed at OU-3 as part of the road project. Road improvements also included a surface-water runoff collection system that collects and directs surface water to Peters Canyon Channel, rather than allowing it to infiltrate the subsurface (MMEC Group, 2016).

In 2004, OU-3 was transferred to the City of Tustin. The current designated land use is traffic circulation, and the majority of the site is occupied by Jamboree Road. The City of Tustin's Specific Plan/Reuse Plan indicated future development of currently vacant land adjoining OU-3 to the west as medium- to high-density residential use (City of Tustin, 2012).

The primary threats at OU-3, including contaminated soil from the burn pits and nonaqueous phase liquid petroleum products, were addressed by previous response actions at the site, as described above. The selected remedy for OU-3 uses existing remedy components to contain contaminated groundwater and restrict access to contaminated media (DON, 2001). The major components of the selected remedy include:

- Institutional controls to prevent future onsite activities that could result in exposures to buried waste, contaminated subsurface soil, or contaminated groundwater
- Land use controls requiring landowner(s) or user(s) to obtain DON and regulatory agency approval prior to undertaking activities that would impact components of the containment system
- Continued containment of contaminated groundwater through inspection and maintenance of the steel-reinforced concrete containment wall and channel bed, surface cover, and vegetation
- Groundwater and surface water monitoring to track containment migration (if any) and document any changes in groundwater quality
- Landfill gas monitoring to detect potential landfill gas migration from the site
- Maintenance of the integrity and accessibility of the French drain system and associated sumps, monitoring wells, and security features
- Comprehensive Environmental Response, Compensation, and Liability Act five-year reviews

The selected remedy was designed to stabilize or decrease chemical of concern concentrations and prevent migration of chemicals of concern and other chemicals beyond OU-3 boundaries at concentrations exceeding remediation goals. To evaluate the effectiveness of the selected remedy, specific monitoring, inspection, and reporting programs were adopted at OU-3 (BEI, 2003; ECS, 2015).

As noted in the 2016 Five-Year Review for Former MCAS Tustin (MMEC Group, 2016), PFAS have been identified as an emerging contaminant. The historical use of OU-3 as a firefighting training area indicates the potential for release of compounds known to contain PFAS.

2.2 SAMPLING RATIONALE

After evaluating historical groundwater flow directions and the existing monitoring well network relative to the historical Crash Crew Burn Pits in the Final SAP (MMEC Group, 2017), the DON selected 3 of the 11 existing monitoring wells at OU-3 (I001BC43S, I001BC50S, and I001MW52S) for PFAS sampling (Figure 2). Well selection focused on those completed within the first WBZ since any potential historical PFAS release would be expected to potentially impact this WBZ first. Monitoring well I001BC43S was selected to evaluate the potential presence of PFAS in groundwater upgradient of the former Crash Crew Burn Pits. Monitoring wells I001MW50S and I001MW52S were selected to determine the potential presence of PFAS in groundwater near and downgradient of the historical disposal trenches and former Crash Crew Burn Pits. State plane coordinates of the three wells are provided in Table 2. Analytical results were compared with the U.S. EPA (2016) LHAs for PFOA and PFOS and the U.S. EPA (2017) tap water RSL for PFBS.

3 FIELDWORK

MMEC Group redeveloped the three selected monitoring wells on July 20, 2017, and sampled the wells on July 24, 2017, in accordance with the Final SAP (MMEC Group, 2017). Sections 3.1 through 3.4 summarize the fieldwork activities performed as part of the assessment.

3.1 WELL REDEVELOPMENT

The three monitoring wells (I001BC43S, I001BC50S, and I001MW52S) were redeveloped in preparation for sampling. The purpose was to minimize the potential for cross-contamination from PFAS remaining in the casing/annular pore space from previous monitoring efforts using polytetrafluoroethylene bladder pumps, Teflon®-lined tubing, and other sources (MMEC Group, 2017). No dedicated equipment is installed in these wells. An MMEC Group subcontractor surged the wells with a stainless-steel bailer and purged them with a Monsoon Pump to dislodge particles smeared within the well and particles clogging the screen. During redevelopment, water quality parameters were monitored. Field forms showing water quality parameters and volumes purged during well redevelopment are in Attachment 1. Target purge amounts of three saturated well volumes were calculated and established during fieldwork by using well depth and depth to water measurements. Two of the three wells ran dry during redevelopment and the target purge amounts were not met, as discussed in Section 3.4. A well redevelopment summary is included in Table 3.

3.2 GROUNDWATER SAMPLING METHODOLOGY

Groundwater sampling was conducted by MMEC Group field personnel in accordance with the procedures in the Final SAP (MMEC Group, 2017). The depth to water was measured from the top of casing in each of the monitoring wells prior to the start of purging; values ranged from 13.45 feet below top of casing (btoc) in I001BC43S to 21.24 feet btoc in I001MW52S. These data are presented in Table 4.

Monitoring wells were purged using low-flow purging method for monitoring well I001MW52S, and purging and sampling for low-yielding groundwater monitoring wells for monitoring wells I001BC43S and I001BC50S. A non-dedicated bladder pump with HDPE tubing was used to purge and sample the wells. In general, the pump intake was at the approximate center of the water column. The depth of the screened interval for each well is summarized in Table 4. Water quality parameters, including pH, conductivity, temperature, oxidation-reduction potential, dissolved oxygen, and turbidity, were measured at 3- to 5-minute intervals during purging. Monitoring well I001MW52S was purged until water quality parameters were stable based on the criteria in the Final SAP (MMEC Group, 2017) and then sampled. Monitoring wells I001BC43S and I001BC50S were purged until well one casing volume was removed, and then were sampled in accordance with the Final SAP (MMEC Group, 2017). *In situ* measured water quality parameters are shown in Table 5. Field forms showing the water quality measurements and volume of water purged during the groundwater sampling event are included in Attachment 2.

According to the guidelines and protocols in the Final SAP (MMEC Group, 2017), all groundwater samples collected were analyzed for PFOS, PFOA, and PFBS using U.S. EPA Method 537 Modified by Vista Analytical Laboratory in El Dorado Hills, California. In addition to PFOS, PFOA, and PFBS, samples were also analyzed for the following 11 additional PFAS compounds listed in U.S. EPA Method 537 Modified:

- N-ethyl perfluorooctanesulfonamidoacetic acid
- N-methyl perfluorooctanesulfonamidoacetic acid
- Perfluorodecanoic acid
- Perfluorododecanoic acid
- Perfluorohelptanoic acid
- Perfluorohexanesulfonic acid
- Perfluorohexanoic acid
- Perfluorononanoic acid
- Perfluorotetradecanoic acid
- Perfluorotridecanoic acid
- Perfluoroundecanoic acid

The complete analytical laboratory report is provided in Attachment 3.

PFOA, PFOS, and PFBS results are summarized in Table 6 and shown on Figure 2.

3.3 INVESTIGATION-DERIVED WASTE DISPOSAL

Investigation-derived waste (IDW) generated as part of the assessment consisted of groundwater sampling purge water, equipment decontamination water, disposable personal protective equipment, and other miscellaneous refuse. Used personal protective equipment and other miscellaneous refuse were placed in plastic bags and placed in an offsite sanitary trash container for disposal at a sanitary landfill. Liquid IDW was containerized in a United States Department of Transportation–approved 55-gallon steel drum. Samples were collected of the IDW generated during the field activities and submitted to BC Laboratories in Bakersfield, California, for analysis of volatile organic compounds, oil and grease, California Title 22 metals, and total petroleum hydrocarbons to characterize the waste for disposal.

Based on laboratory analysis, the IDW was characterized as hazardous due to elevated concentrations of selenium. Belshire Environmental Services, Inc., was subcontracted to dispose of the hazardous waste at a Crosby & Overton facility in Long Beach, California. A copy of the waste disposal manifest is included in Attachment 4. The laboratory report summarizing the analytical results for IDW is included in Attachment 5.

3.4 DEVIATIONS FROM THE PROJECT SAP

As specified in the Final SAP (MMEC Group, 2017), a goal of at least three saturated well volumes were to be purged to remove stagnant water and potential residual contamination from prior sampling events. During redevelopment monitoring wells I001BC43S and I001BC50S were found to be low yielding wells and did not meet the minimum target purge amount specified in the Final SAP. These two wells were purged until dry. A MMEC Group senior professional geologist was consulted and it was determined that removal of three saturated well volumes was not feasible and that further attempts at redevelopment were impractical at these wells. However, no dedicated equipment had been installed in these wells, and as a result of removing all of the groundwater present in the two wells, it was confirmed that the groundwater collected during sampling originated from the surrounding WBZ and was not stagnant water that remained in the well. The data are therefore considered representative of the surrounding WBZ, and usable. Comparisons of actual purge amounts with the target purge amounts are in Table 3.

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4 LABORATORY RESULTS AND DATA VALIDATION

Groundwater samples were analyzed for PFOA, PFOS, PFBS, and 11 additional PFAS compounds by U.S. EPA Method 537 Modified. Appendix A summarizes the analytical results, and Attachment 3 provides the laboratory analytical report.

4.1 RESULTS

PFOA, PFOS, and PFBS were detected in groundwater samples from the three monitoring wells. PFOA concentrations ranged from 0.397J (estimated) µg/L (well I001BC43S) to 743 J µg/L (well I001MW52S). PFOS concentrations ranged from 0.0263 µg/L (well I001BC43S) to 26.9 J µg/L (well I001MW52S). PFBS concentrations ranged from 0.0624 J µg/L (well I001BC43S) to 66.7 J µg/L (well I001MW52S). PFOA detections exceeded the U.S. EPA LHA of 0.07 µg/L. PFOS detections in samples from the two downgradient wells (I001BC50S and I001MW52S) exceeded the U.S. EPA LHA of 0.07 µg/L. PFBS detections were less than the U.S. EPA tap water RSL of 400 µg/L. PFOA, PFOS, and PFBS results are compared against applicable screening levels in Table 6.

4.2 QUALITY ASSURANCE AND QUALITY CONTROL

Groundwater samples were shipped overnight to Vista Analytical Laboratory via FedEx and were initially analyzed within the method-specified analytical holding times. Several samples were reextracted because of high PFAS concentrations and were analyzed outside of the holding time. Vista Analytical Laboratory is certified by the State Water Resources Control Board and United States Department of Defense (DoD) Environmental Laboratory Accreditation Program.

A field duplicate sample was collected from downgradient monitoring well I001MW52S and analyzed for PFAS by U.S. EPA Method 537 Modified to assess the laboratory's precision in accordance with the analytical method specifications.

Method blanks, ongoing precision and recovery samples, surrogate spikes, laboratory control samples (LCSs), and LCS duplicates were analyzed to assess method accuracy and precision in accordance with the analytical method specifications. A matrix spike (MS) and matrix spike duplicate (MSD) were collected from downgradient monitoring well I001MW52S and provided to the laboratory to assess matrix interference.

A source blank was collected for each source of laboratory-certified PFAS-free decontamination water. An equipment rinse blank was collected upon completion of groundwater sampling to assess the effectiveness of the decontamination procedure. The source and equipment blanks were analyzed for PFAS by U.S. EPA Method 537 Modified.

4.3 DATA VALIDATION GUIDELINES

Data validation was performed by Laboratory Data Consultants, Inc. (LDC), referencing the Final SAP (MMEC Group 2017), the DoD (2013) *Quality Systems Manual for Environmental Laboratories Version 5.0*, and the U.S. EPA (2014) *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*.

4.4 DATA VALIDATION PROCESS

During validation, LDC evaluated the following parameters against validation guidelines: sample receipt/technical holding times, instrument performance check, initial and continuing calibrations, blank detections, surrogate spike recoveries, MSD/MSD recoveries and precision,

LCS recoveries, laboratory duplicate precision, field duplicate precision, internal standard recoveries, target compound identification and quantification (Stage 4 data validation only), analytical system performance (Stage 4 data validation only), and, to the extent possible, compliance with good laboratory practices.

LDC applied the following qualifiers to the data during validation:

J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however, the reported concentration is estimated because of nonconformances discovered during data validation.

R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected are not usable.

U (Non-detect): The compound or analyte was analyzed for and positively identified by the laboratory; however, the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).

UJ (Non-detect estimated): The compound or analyte was reported as not detected by the laboratory; however, the reported quantitation/detection limit is estimated due to nonconformances discovered during data validation.

4.5 DATA VALIDATION FINDINGS

During validation, data were qualified and flagged on the basis of the data evaluation process described above. Quality control criteria were met and were considered acceptable. Sampling results found to be estimated (J) can be used for the purpose of determining the presence or absence of PFAS. Complete validation findings are included in the validation report in Attachment 6.

5 SUMMARY AND CONCLUSIONS

The objective of the groundwater sampling was to determine the presence or absence of PFAS at OU-3 at Former MCAS Tustin and, if detected, determine whether the detected concentrations exceed the project screening criteria identified in Table 1. PFOA and PFOS were present in groundwater at OU-3 at concentrations greater than the LHA of 0.07 µg/L (Table 7). Although PFBS was detected in groundwater, concentrations were less than the tap water RSL of 400 µg/L (Table 7).

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6 REFERENCES

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TABLES

Table 1 PFAS Screening Criteria for Groundwater
Table 2 Monitoring Well Locations
Table 3 Well Redevelopment Summary, July 2017
Table 4 Monitoring Well Construction and Water Levels, July 2017
Table 5 *In Situ* Water Quality Parameters, July 2017
Table 6 PFOA, PFOS, and PFBS Laboratory Analysis Results Summary, July 2017
Table 7 PFOA/PFOS/PFBS in Groundwater at OU-3 at Former MCAS Tustin

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Table 1
PFAS Screening Criteria for Groundwater

Analyte[1]	CAS No.	Screening Criterion (µg/L)
Perfluorooctanoic Acid (PFOA)	335-67-1	0.07[2]
Perfluorobutanesulfonic Acid (PFBS)	375-73-5	400[3]
Perfluorooctane sulfonate (PFOS)	1763-23-1	0.07[2]
PFOA + PFOS	See above	0.07[2]

Notes:
1. Only PFAS compounds with currently defined federal or state screening criteria are shown. These established criteria provide guidance only, and no federal promulgated criteria currently exist. Screening criteria were developed based on the references provided in Notes 2 and 3.
2. *Fact Sheet: PFOA and PFOS Drinking Water Health Advisories* (U.S. EPA, 2016)
3. Regional Screening Levels. June. https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-june-2017 (U.S. EPA, 2017)

µg/L = micrograms per liter; CAS = Chemical Abstracts Service; U.S. EPA = United States Environmental Protection Agency

Table 2
Monitoring Well Locations

Location	Well Identification	Northing (feet)[1]	Easting (feet)[1]
OU-3	I001BC43S	2,203,149.6	6,087,683.8
	I001BC50S	2,202,707.6	6,087,870.7
	I001MW52S	2,202,484.1	6,087,609.5

Note:
1. Well locations are referenced to the North American Datum of 1983 in State Plane Coordinates.

Table 3
Well Redevelopment Summary, July 2017

Location	Well Identification	Target Purge Amount (gallons)[1]	Actual Purge Amount (gallons)	Water Quality Parameters Stabilized?
OU-3	I001BC43S	13.07	2	No
	I001BC50S	9.24	2	No
	I001MW52S	13.80	14	Yes

Note:
1. Calculated using the sum of casing volume and filter pack pore volume (BNI, 2004)

Table 4
Monitoring Well Construction and Water Levels, July 2017

Location	Well Identification	Well Diameter (inches)	Total Well Depth (feet btoc)[1]	Well Screen (feet msl)[2]	Depth to Water (feet btoc)[1]
OU-3	I001BC43S	2	18.28	33.45 to 45.95	13.45
	I001BC50S	2	21.37	35.15 to 50.15	18.78
	I001MW52S	2	26.37	36.05 to 46.05	21.24

Notes:
1. Measured during groundwater sampling event on July 24, 2017.
2. All elevations are referenced to North American Vertical Datum of 1988.
btoc = below top of casing; msl= above mean sea level

Table 5
***In Situ* Water Quality Parameters, July 2017**

			Temperature	pH	Specific Conductivity	Turbidity	Dissolved Oxygen	ORP
Location	Well Identification	Date	degrees Celsius	standard units	mS/cm	NTU	mg/L	mV
OU-3	I001BC42S	7/24/2017	20.14	7.99	30.7	13.7	6.91	162
	I001BC50S	7/24/2017	21.09	7.53	21.9	25.6	0.00	-44
	I001MW52S	7/24/2017	24.40	7.76	79.1	38.4	0.13	90

Notes:
Water quality parameters measured during groundwater sampling event in July 24, 2017.
mg/L = milligrams per liter; mS/cm = milliSiemens per centimeter; mV = millivolts; NTU = nephelometric turbidity units; ORP = oxidation-reduction potential

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Table 6
PFOA, PFOS, and PFBS Laboratory Analysis Results Summary, July 2017

			PFOA	PFOS	PFBS
		U.S. EPA Lifetime Health Advisory[1]	0.07	0.07	
		U.S. EPA Tap Water Regional Screening Level[2]	–	–	400
		LOQ	0.004	0.004	0.004
		Detection Limit	0.000651	0.000807	0.000179
Location	Sample Identification	Sample Date	µg/L	µg/L	µg/L
OU-3					
I001BC43S	I001BC43S-170724	7/24/2017	**0.397 J**	**0.0263**	**0.0624 J**
I001BC50S	I001BC50S-170724	7/24/2017	**6.84 J**	**1.16**	**1.07 J**
I001MW52S	I001MW52S-170724	7/24/2017	**743 J**	**26.9 J**	**66.7 J**
I001MW52S	I001MW52X-170724[3]	7/24/2017	**637 J**	**18.1 J**	**61.7 J**

Notes:
1. PFOA and PFOS screening levels are based on the U.S. EPA Lifetime Health Advisory for public drinking water (U.S. EPA, 2016). The screening value of 0.07 µg/L is also applicable for the sum of PFOA and PFOS when they are both present.
2. PFBS screening level is based on June 2017 U.S. EPA tap water Regional Screening Level (U.S. EPA, 2017).
3. Sample I001MW52X-170724 is the field duplicate of sample I001MW52S-170724.

Results have been validated
BOLD = detection

Result exceeds U.S. EPA screening level

µg/L = microgram(s) per liter; J = estimated concentration; LOQ = limit of quantitation; PFOA = perfluorooctanoic acid; PFOS = perfluorooctane sulfonate; PFBS = perfluorobutanesulfonic acid

Table 7
PFOA/PFOS/PFBS in Groundwater at OU-3 at Former MCAS Tustin

Compound	Exceeds Screening Criterion?[1,2]
PFOA	Yes
PFBS	No
PFOS	Yes
PFOA + PFOS	Yes

Notes:
1. *Fact Sheet: PFOA and PFOS Drinking Water Health Advisories* (U.S. EPA, 2016)
2. Regional Screening Levels. June. https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-june-2017 (U.S. EPA, 2017)

PFBS = perfluorobutanesulfonic acid; PFOA = perfluorooctanoic acid; PFOS = perfluorooctane sulfonate; U.S. EPA = United States Environmental Protection Agency

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FIGURES

Figure 1 Site Location Map
Figure 2 PFOA, PFOS, and PFBS in Groundwater – OU-3

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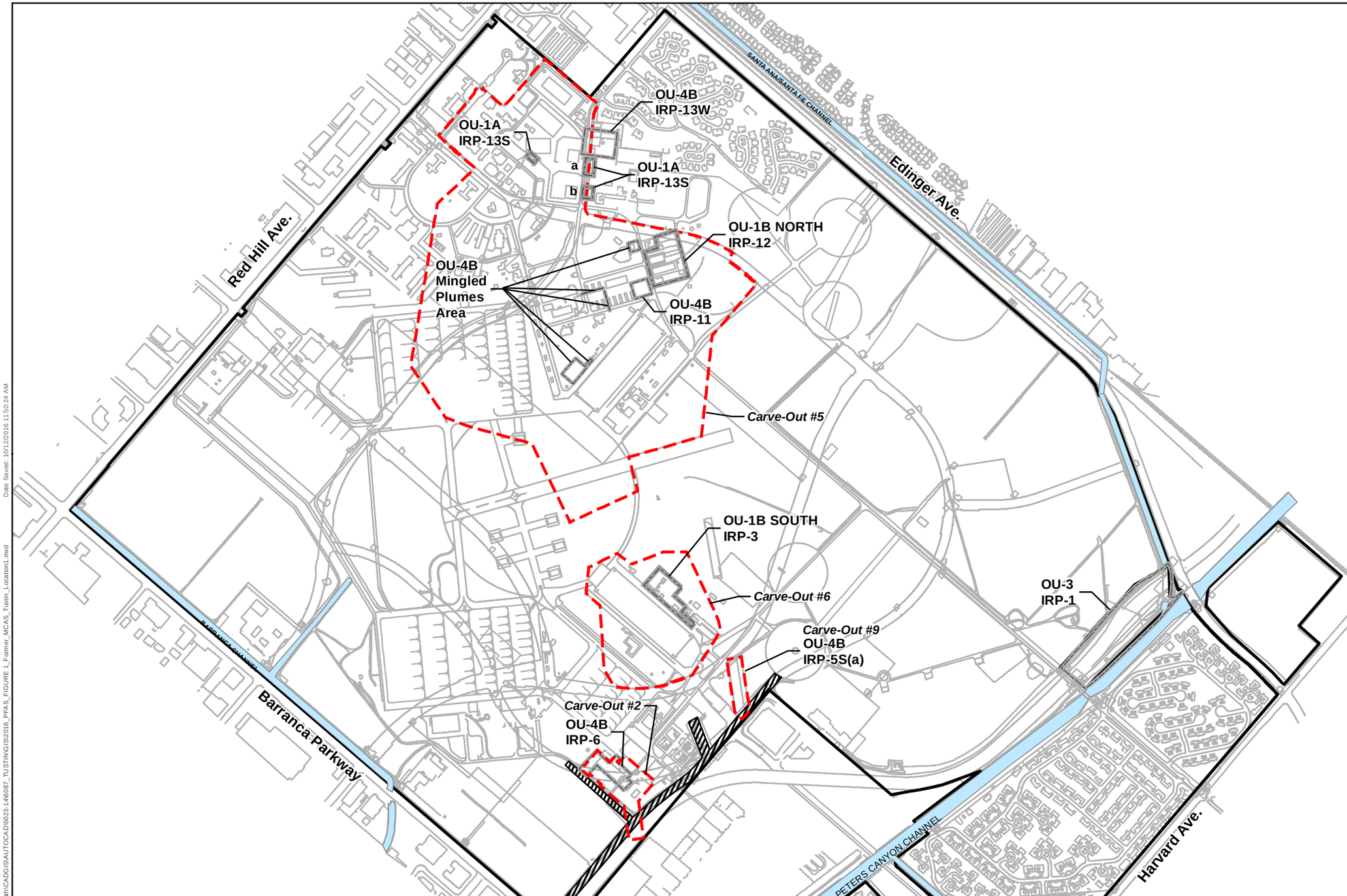

LEGEND

- Former MCAS Tustin Boundary
- Carve-Out Area Boundary
- Surface Channel
- Box Culvert Channel
- IRP Sites

Notes:
a = Temporary storage area (ST-72)
b = Miscellaneous Wash Area (MWA-18)

Abbreviations:
IRP - Installation Restoration Program
MCAS - Marine Corps Air Station
OU - Operable Unit

PROJECT:	5023-14-6087
DATE:	September 2017
DRAWN BY:	CAB / SB
CHECKED BY:	SX

N

0 1,000 2,000
Approximate Scale in Feet

MMEC GROUP

Former Marine Corps Air Station Tustin, California

Site Location Map
Groundwater PFAS Sampling at Operable Unit 3

FIGURE
1

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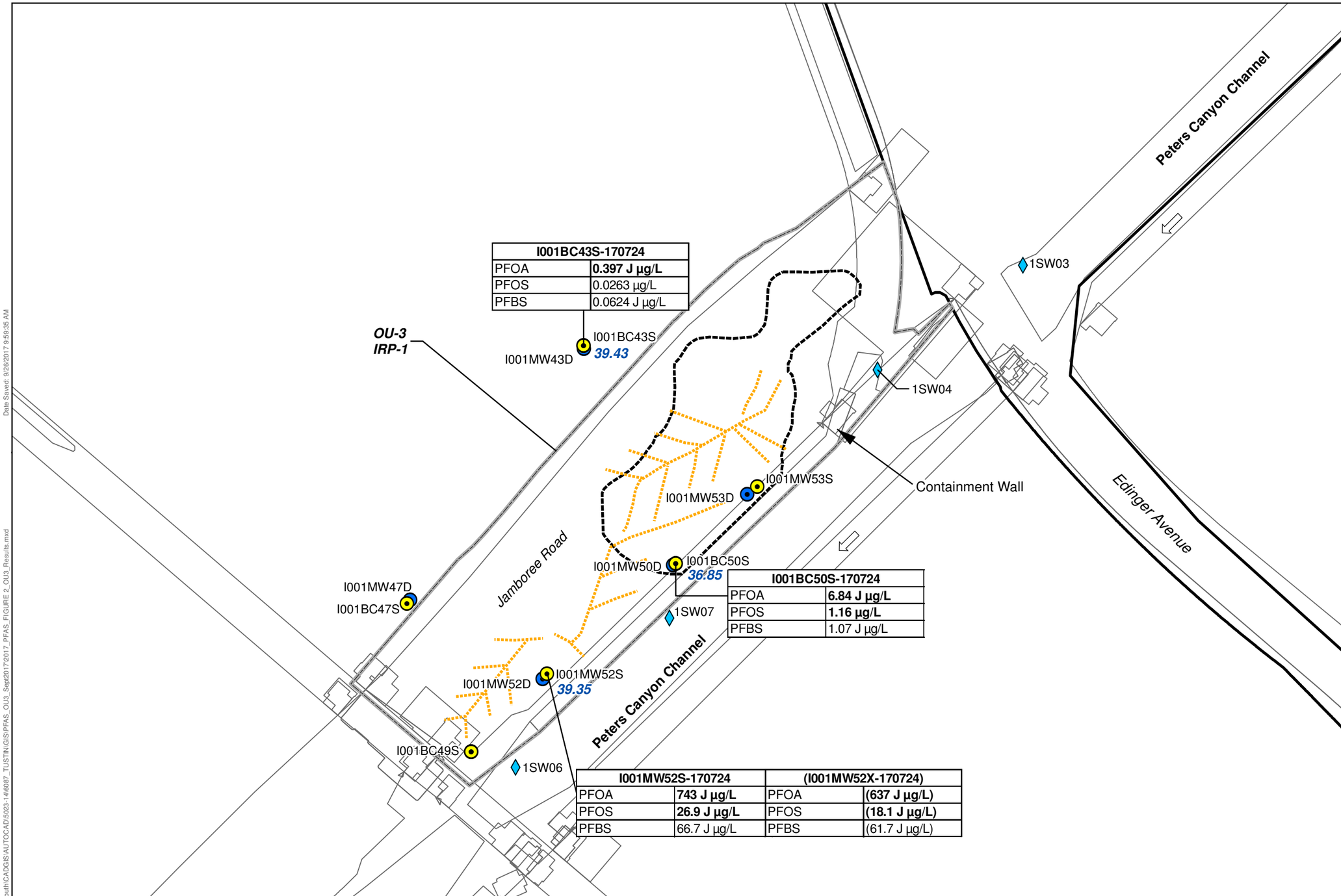


I001BC43S-170724	
PFOA	**0.397 J µg/L**
PFOS	0.0263 µg/L
PFBS	0.0624 J µg/L

I001BC50S-170724	
PFOA	**6.84 J µg/L**
PFOS	**1.16 µg/L**
PFBS	1.07 J µg/L

I001MW52S-170724		(I001MW52X-170724)	
PFOA	**743 J µg/L**	PFOA	**(637 J µg/L)**
PFOS	**26.9 J µg/L**	PFOS	**(18.1 J µg/L)**
PFBS	66.7 J µg/L	PFBS	(61.7 J µg/L)

LEGEND

- Surface Monitoring Point
- Monitoring Well (First WBZ)
- Monitoring Well (Second WBZ)
- Area Associated with Historical Disposal Trenches or Crash Crew Burn Pits (DON, 2001)
- IRP Site Boundary
- French Drain (DON, 2001)
- Former MCAS Tustin Boundary
- Surface Channel Flow
- *39.43* Water Surface Elevation in Feet AMSL, July 2017

U.S. EPA Screening Criteria

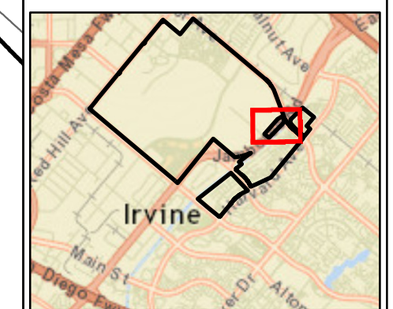
	PFOA	PFOS	PFBS
U.S. EPA Lifetime Health Advisory	0.07 µg/L	0.07 µg/L	
U.S. EPA Tap Water Regional Screening Level			400 µg/L

Groundwater samples collected on July 24, 2017
BOLD - Detection above screening criteria
J - Estimated Value
Field Duplicate in Parentheses

Abbreviations:
µg/L - Micrograms per Liter
AMSL - Above Mean Sea Level
DON - Department of the Navy
IRP - Installation Restoration Program
MCAS - Marine Corps Air Station
OU - Operable Unit
PFBS - Perfluorobutanesulfonic Acid
PFOA - Perfluorooctanoic Acid
PFOS - Perfluorooctane Sulfonate
U.S. EPA - United States Environmental Protection Agency
WBZ - Water-Bearing Zone

Well ID Suffix
S – First WBZ
D- Second WBZ
X - Field Duplicate

Source:
Source for French Drain and Area Associated with Historical Disposal Trenches or Crash Brew Burn Pits:
United States Department of the Navy (DON). 2001. Final Record of Decision/Remedial Action Plan, Operable Unit-3, Moffett Trenches and Crash Crew Burn Pits Site, Marine Corps Air Station, Tustin, California. December.



PROJECT:	5023-14-6087
DATE:	September 2017
DRAWN BY:	KOB
CHECKED BY:	KK

N

0 200 400
Approximate Scale in Feet

MMEC GROUP

Former Marine Corps Air Station Tustin
Tustin, California

PFOA, PFOS, and PFBS in Groundwater - OU-3

Groundwater PFAS Sampling at Operable Unit 3

FIGURE
2

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APPENDIX

Appendix A PFAS Laboratory Analysis, July 2017

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Appendix A
PFAS Laboratory Analysis, July 2017

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Appendix A. PFAS Laboratory Analysis, July 2017

		I001BC43S-170724	I001BC50S-170724	I001MW52S-170724	I001MW52X-170724
Analyte[1]	CAS Number	µg/L	µg/L	µg/L	µg/L
PFOA	335-67-1	0.397 J	6.84 J	743 J	637 J
PFOS	1763-23-1	0.0263	1.16	26.9 J	18.1 J
PFBS	375-73-5	0.0624 J	1.07 J	66.7 J	61.7 J
PFDA	335-76-2	0.00517 U	0.00517 U	0.0137	0.018
PFDoA	307-55-1	0.00517 U	0.00517	0.00525 U	0.00534 U
PFHpA	375-85-9	0.0408	0.519	42.6 J	37.5 J
PFHxS	355-46-4	0.505	8.05	468 J	357 J
PFHxA	307-24-4	0.208	3.70	286 J	278 J
PFNA	375-95-1	0.00517 U	0.0227	0.695	0.698
PFTA	376-06-7	0.00517 U	0.00517 U	0.00525 U	0.00534 U
PFTrDA	72629-94-8	0.00517 U	0.00517 U	0.00525 U	0.00534 U
PFUnA	2058-94-8	0.00517 U	0.00517 U	0.00525 U	0.00534 U
NEtFOSAA	2991-50-6	0.00517 U	0.00517 U	0.00525 U	0.00534 U
NMeFOSAA	2355-31-9	0.00517 U	0.00517 U	0.00525 U	0.00534 U

Notes:
1. 14 per- and polyfluoroalkyl substance (PFAS) analytes detectable using U.S. EPA Method 537 Modified
Results have been validated.
µg/L = micrograms per liter; CAS = Chemical Abstracts Service; J = estimated; PFOA = perfluorooctanoic acid; PFOS = perfluorooctanesulfonate; PFBS = perfluorobutanesulfonic acid; PFDA = perfluorodecanoic acid; PFDoA = perfluorododecanoic acid; PFHpA = perfluoroheptanoic acid; PFHxS = perfluorohexanesulfonic acid; PFHxA = perfluorohexanoic acid; PFNA = perfluorononanoic acid; PFTA = perfluorotetradecanoic acid; PFTrDA = perfluorotridecanoic acid; PFUnA = perfluoroundecanoic acid; NEtFOSAA = N-ethyl perfluorooctanesulfonamidoacetic acid; NMeFOSAA = N-methyl perfluorooctanesulfonamidoacetic acid; U = non-detect

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ATTACHMENTS

Attachment 1 Well Redevelopment Field Forms
Attachment 2 Groundwater Sampling Field Forms
Attachment 3 Laboratory Analytical Report (included on CD)
Attachment 4 Investigation-Derived Waste Manifest
Attachment 5 Investigation-Derived Waste Laboratory Analytical Report (included on CD)
Attachment 6 Data Validation Report (included on CD)

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Attachment 1
Well Redevelopment Field Forms

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Multi-Media Environmental Compliance Group

WELL DEVELOPMENT FORM

Job Number: T087 - MOD3

Project: 5023-14-6087

Personnel: KK, BL

Development Method: Surge and Pump

Total Depth: 18.30 bTOC

Well No. 2001BCX3S

Date: 7/20/2017.

Time	Depth to water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp (°C)	Electrical Conductivity (mS/cm)	D.O. (mg/L)	Redox (Mv)	Recovery Rate (Inches/min)	Recovery Rate (gpm)	Comments
8:45	13.23		0.0	7.64	23.46	12.4	2.57				
8:50	14.90		0.0	7.63	23.61	12.4	1.33				Top of pump, turned off pump for recharge
9:13 ~~8:55~~	15.1		982	7.61	24.28	12.0	1.36				Top of pump
9:46	dry										
11:46	15.9		0.0	7.71	23.50	12.3	10.49				Pump on bottom Top of pump: 16.1 ft.
11:48	~~16.1~~ DRY	~2 gal	238	7.85	23.50	0.028	5.70				

Total Gallons Removed: 2

Recovery Notes:

8:52	14.75
8:56	14.70
9:06	14:65
9:21	14:60
9:38	14:55

Depth to water before pump: 13.42 ~~13.42~~ ~~14.32~~

Reviewed By:

Amount needed to be collected: (0.173+0.72)(18.30−13.42) × 3
= 4.88 × 3
= 13.07 gal.

Reviewed by: K.O.

Multi-Media Environmental Compliance Group

WELL DEVELOPMENT FORM

Job Number: TO 87 - MOD3

Project: 5023-14-6087

Personnel: KK, BL

Development Method: Surge & pump

Total Depth: 21.65 bTOC

Well No. I00180508

Date: 7/20/2017.

Time	Depth to water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp (°C)	Electrical Conductivity (mS/cm)	D.O. (mg/L)	Redox (Mv)	Recovery Rate (Inches/min)	Recovery Rate (gpm)	Comments
16:06	19.35		119	7.31	24.32	7.78	0.00	-140			→ Top of pump
16:09	19.35		110	7.34	24.39	7.34	0.00	-172			Top of pump
16:12	DRY										
16:47	DRY.										

Total Gallons Removed: 2

Depth to water before Pump: 18.20 ft bTOC

Amount needed to be collected: (0.173 + 0.72) (21.65 - 18.20) × 3

= ~~3.05 × 3~~ 3.08 × 3

= ~~9.24 gal.~~ 9.24 gal.

Reviewed By:

Reviewed by: K.O.

Multi-Media Environmental Compliance Group

WELL DEVELOPMENT FORM

Job Number: TO 87 - MOD3

Project: 5023 14-6087

Personnel: KK, BL

Development Method: Surge & pump

Total Depth: 26.4 BTOC

Well No. 1001MW528

Date: 7/20/2017

Time	Depth to water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp (°C)	Electrical Conductivity (mS/cm)	D.O. (mg/L)	Redox (Mv)	Recovery Rate (Inches/min)	Recovery Rate (gpm)	Comments
12:52	21.20		1000	7.39	28.63	31.1	0.40				Top of pump
12:57	21.82		0.0	7.34	27.43	31.5	0.00				Top of pump.
13:02	21.82		0.0	7.34	27.78	31.5	0.00				" "
13:07	21.82		0.0	7.38	27.28	31.5	0.00				" "
13:12	21.82		0.0	7.43	28.49	31.5	0.00				" "
13:44	21.82		1000	7.47	27.25	32.3	0.00				" "
13:47	21.82		417	7.42	26.44	32.6	0.00				" "
13:50	21.82		488	7.45	26.65	32.6	0.00	20			" "
13:53	21.82		0.0	7.44	27.48	32.5	0.00	2			" "
13:56	21.82		0.0	7.45	28.81	32.4	0.00				" "
14:00	21.82		0.0	7.44	28.93	32.5	0.00	-42			" "
14:03	21.82		0.0	7.45	29.15	32.5	0.00	-41			" "

Total Gallons Removed: _____

$(0.173 + 0.72)(26.4 - 21.25) \times 3$

$= 4.59895 \times 3$

$= 13.79685$

Amount needed to be collected $= 13.80$ gal

Depth to water before pump: 21.25

Reviewed By: _____

Reviewed by: K.O.

Multi-Media Environmental Compliance Group

WELL DEVELOPMENT FORM

Job Number: ~~WO~~ T087-Mod3

Project: 5023-14-6087

Personnel: KK, BL

Development Method: Surge & pump

Total Depth: 26.4 bTOC

Well No. I001MW52S

Date: 7/20/2017

Time	Depth to water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp (°C)	Electrical Conductivity (mS/cm)	D.O. (mg/L)	Redox (Mv)	Recovery Rate (Inches/min)	Recovery Rate (gpm)	Comments
14:06	21.82		0.0	7.42	29.67	32.6	0.00	-35			Top of pump
14:09	21.82		0.0	7.41	29.64	32.6	0.00	-28			= "
14:12	21.82		0.0	7.47	29.62	32.6	0.00	-26			= "
14:15	21.82		0.0	7.45	29.32	32.6	0.00	-20			= "
14:19	21.82		0.0	7.44	29.64	32.6	0.00	-27			= "
14:22	21.82		0.0	7.42	29.79	32.6	0.00	-31			= "
14:25	21.82		0.0	7.44	29.72	32.6	0.00	-28			= "
14:28	21.82		0.0	7.39	29.64	32.7	0.00	-4			= "
14:33	21.82		78	7.41	29.32	32.7	0.00	11			= "
14:37	21.82		149	7.41	29.53	32.7	0.00	22			= "
14:40	21.82		113	7.41	29.39	32.7	0.00	25			= "
14:43	21.82		75.6	7.41	29.64	32.7	0.00	29			= "

Total Gallons Removed: _____

Reviewed By: _____

Reviewed by: K.O.

Multi-Media Environmental Compliance Group

WELL DEVELOPMENT FORM

Job Number: T087-MOP3

Project: 5023-14-6087

Personnel: KK, BL

Development Method: Surge & pump

Total Depth: 26.4 btoc

Well No. I001MW52S

Date: 7/20/2017

Time	Depth to water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp (°C)	Electrical Conductivity (mS/cm)	D.O. (mg/L)	Redox (Mv)	Recovery Rate (Inches/min)	Recovery Rate (gpm)	Comments
14:50	21.82		203	7.42	29.22	32.6	0.00 ~~22~~	32			Top of pump
15:00	21.82		98.6	7.45	29.67	32.6	0.00	33			" "
15:04	21.82		99.8	7.45	30.51	32.7	0.00	34			" "
15:11	21.82		103	7.43	28.57	32.7	0.00	37			" "
15:15	21.82		141	7.43	29.00	32.7	0.00	37			" "
15:19	21.82		102	7.47	28.89	32.7	0.00	35			" "
15:23	21.82		47.3	7.47	28.77	32.7	0.00	37			" "
15:24	21.82		45.9	7.45	28.76	32.6	0.00	38			" "
15:26	21.82		40.1	7.44	28.47	32.6	0.00	39			" "

Total Gallons Removed: 13-14

Total removed: 13-14 gals.

Reviewed By:

Reviewed by: K.O.

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Attachment 2
Groundwater Sampling Field Forms

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FIELD NOTES

Project Name: MCAS Tustin
Project Number: 50231460087.124

Weather	Bright Sun	Clear	Overcast	Rain	Snow
Temp (F)	Under 32	32-50	51-70	71-85	Over 85
Wind	Still	Mod.	High		
Humidity	Dry	Mod.	High		

Date:	Time:	Notes: 07:45. Tailgate safety mtg.! PFAS checklist
7/24/17	8:11	Auto Calibration: 4.04 pH, 4.53 mS/cm,
		0.0 NTU, 10.03 mg/L DO.
	8:20	Set up at well I001BC43S. Began purging at 8:35. Very
		low yield well. Drawdown 1.45' @ 100 mL/min. Sample collected
		at 9:15.
	9:30	Moved to well I001BC50S - setup. Began purging at 10:14.
		Very low yield well. Drawdown 1.90' @ 100mL/min. Paused
		pumping to allow well to recharge - no evidence of any
		recharge. Sample collected at 10:50.
	10:30	Source Blank collected @ 10:30
	11:15	Moved to well I001MW52S - setup. Well missing cap.
		Began purging at 11:40 at 200mL/min. Drawdown ~~@ 1.4'~~ 0.14,
		switched to 100mL/min to prevent additional drawdown.
		Water elevation stabilized. Well sampled at 12:25. Duplicate
		sample I001MW52X-170724 collected at 12:30. MS/MSD
		also collected from well.
	12:40	Moved to IDW area to collect characterization sample.
		IDW sample collected at 14:00. Sample composited from
		all 3 drums. Purge water and decon water added to
		the drum from 7/24/17 sampling event - label
		reused to indicate added IDW.
	14:30	Site clean up! Preparing samples for shipping
	14:45	Left site to return equipment from Pine! Drop coolers
		off at FedEx.

MMEC GROUP	MMEC Group GROUNDWATER SAMPLING FIELD FORM	Job #: N62473-12-D-2012 TO 0087 Date: 7/24/17 Page 1 of 1

Field Personnel: KK KM **Monitoring Well ID:** I001BC43S

Start Time: 8:35 **Weather Conditions:** clear **Approx. Air Temp (F):** 80

INITIAL WELL DATA & WELL PURGING INFORMATION

Water Temperature (degree C)	Water pH	Specific Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Water Level (feet btoc)	Time (0:00 - 23:59)	Volume Purged (milliliters)
						13.33	8:35	
21.23	7.65	31.0	183	6.03	198	13.59	8:40	200
20.46	7.97	31.4	105	~~6.06~~ 6.20	165	13.68	8:43	500
20.32	8.01	31.3	81.5	6.42	161	13.75	8:46	800
20.25	8.03	31.2	61.7	6.52	159.	13.87	8:49	1100
20.20	8.02	31.1	46.9	6.58	160	14.04	8:52	1400
20.13	8.03	30.9	32.6	6.86	160	14.19	8:55	1700
20.09	8.02	30.8	21.8	7.07	160	14.27	8:58	2000
20.06	8.01	30.7	15.7	7.00	161	14.40	9:01	2300
20.07	8.00	30.7	14.2	7.10	161	14.55	9:04	2600
20.08	7.99	30.7	14.6	6.93	162	14.64	9:07	2900
20.14	7.99	30.7	13.7	6.91	162	14.78	9:10	3200
							9:15-Sampled-	

Stabilization:	3 consecutive readings within:							
±3%	±0.1	±3%	±10% (if >5)	±10% (if >0.5)	±10 mV	-	-	-

Results of Field Ferrous Iron Kit (mg/L): NA **Total Purged:** 3200mL

Measurements: 0.5 inch tubing: 0.020 gallons/linear foot 2" well casing: 0.17 gal/linear foot 4" well casing: 0.65 gal/linear foot

Purge Pumping Rate (approx. mL/min): 100 ml/min.

Approx. Pump/Intake Depth: middle of screened intervall or slightly above

Well Yield: High / Moderate / Low Decontamination Method: Alconox wash, double rinse - distilled water

WELL CONDITION

Casing Size and Type: 2" PVC

Casing Condition:	OK / NA / Needs Repairs/Repaired	Lock Condition:	OK / NA / Needs Repairs/Repaired
Cap Condition:	OK / NA / Needs Repairs/Repaired	Monument Condition:	OK / NA / Needs Repairs/Repaired

NOTES:

SAMPLING INFORMATION / DATA

QA/QC Sample (circle one): Duplicate MS/MSD NONE

Sampling Method (circle one): Dedicated Bladder Pump Reusable Bladder Pump

Analytical Parameters	Minimum Sample Vol.	Preservative	Bottle size	Number of bottles	Sample ID	Time Sampled
PFOA, PFOS, PFBS +	125ml	none	125ml	2	I001BC43S-170724	9:15
11 compounds						

Method of Transportation of samples: FedEx

All samples were immediately placed into a cooler and packed with ice YES / NO

Field Observations/Notes of Sampling Event:
Total depth: 18.28ft Depth to water: 13.45ft. Drawdown exceed .33ft
Soft bottom.

Signature of Field Personnel: [illegible]

MMEC GROUP	MMEC Group GROUNDWATER SAMPLING FIELD FORM	Job #: N62473-12-D-2012 TO 0087 Date: 7/24/17 Page 1 of 1 I001BC50S

Field Personnel: KK KM **Monitoring Well ID:** ~~I001BC01~~

Start Time: 10:14 **Weather Conditions:** Clear **Approx. Air Temp (F):** 80

INITIAL WELL DATA & WELL PURGING INFORMATION

Water Temperature (degree C)	Water pH	Specific Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Water Level (feet btoc)	Time (0:00 - 23:59)	Volume Purged (milliliters)
						18.60	10:14	
22.22	7.63	24.9	332	1.26	-7	19.17	10:20	500
21.85	7.57	23.5	207	0.49	-16	19.30	10:23	875
21.54	7.45	20.7	60.9	0.00	-9	19.50	10:26	1250
21.35	7.46	20.0	28.6	0.00	-10	19.68	10:29	1625
21.22	7.45	20.3	23.4	0.00	-17	19.85	10:32	2000
21.15	7.52	21.0	26.9	0.00	-32	20.05	10:35	2375
21.09	7.53	21.9	25.6	0.00	-44	—	10:38	2750
							10:50 - Sampled	—
Stabilization:	3 consecutive readings within:							
±3%	±0.1	±3%	±10% (if >5)	±10% (if >0.5)	±10 mV	-	-	-

Results of Field Ferrous Iron Kit (mg/L): NA **Total Purged:** 2750 mL

Measurements: 0.5 inch tubing: 0.020 gallons/linear foot 2" well casing: 0.17 gal/linear foot 4" well casing: 0.65 gal/linear foot

Purge Pumping Rate (approx. mL/min): 125 mL/min

Approx. Pump/Intake Depth: middle of screened intervall or slightly above

Well Yield: High / Moderate / (Low) Decontamination Method: Alconox wash, double rinse - distilled water

WELL CONDITION

Casing Size and Type:

Casing Condition: (OK) / NA / Needs Repairs/Repaired Lock Condition: OK / (NA) / Needs Repairs/Repaired

Cap Condition: (OK) / NA / Needs Repairs/Repaired Monument Condition: OK / (NA) / Needs Repairs/Repaired

NOTES:

SAMPLING INFORMATION / DATA

QA/QC Sample (circle one): (Duplicate) MS/MSD (NONE) Well too dry for dup.

Sampling Method (circle one): Dedicated Bladder Pump (Reusable Bladder Pump)

Analytical Parameters	Minimum Sample Vol.	Preservative	Bottle size	Number of bottles	Sample ID	Time Sampled
PFOA, PFOS, PFBS+	125ml	none	125ml	2	I001BC50S-170724	10:50
11 compounds						

Method of Transportation of samples: FedEx

All samples were immediately placed into a cooler and packed with ice (YES) / NO

Field Observations/Notes of Sampling Event:

Depth to water: 18.78 ft. Total depth: 21.37 ft. Drawdown exceeded 0.33 ft.

Signature of Field Personnel: [signature] Scott Bottom.

MMEC GROUP	MMEC Group GROUNDWATER SAMPLING FIELD FORM	Job #: N62473-12-D-2012 TO 0087 Date: 7/24/17 Page 1 of 1

Field Personnel: KK KM **Monitoring Well ID:** 3001MW52S

Start Time: 11:40 **Weather Conditions:** Overcast **Approx. Air Temp (F):** 80

INITIAL WELL DATA & WELL PURGING INFORMATION

Water Temperature (degree C)	Water pH	Specific Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Water Level (feet btoc)	Time (0:00 - 23:59)	Volume Purged (milliliters)
						21.21	11:40	
24.50	7.61	57.1	611	2.26	18	21.38	11:43	400
23.20	7.75	77.4	538	0.49	24	21.45	11:46	1000
23.44	7.74	77.4	513	0.22	59	21.40	11:49	1600
23.65	7.72	77.7	491	0.20	67	21.35	11:52	1900 ← to 100 mL/min
← PURGED	FLOW	CELL				→	11:56	
24.07	7.70	79.5	46.7	0.43	108	21.34	12:03	2500
24.15	7.71	79.6	41.6	0.28	106	21.34	12:06	3100
24.23	7.74	79.3	42.0	0.24	103	21.33	12:09	3700
24.29	7.75	79.2	38.0	0.19	99	21.33	12:12	4300
24.36	7.76	79.1	37.0	0.15	94	21.32	12:15	4900
24.40	7.76	79.1	38.4	0.13	90	21.32	12:18	5500
							12:25 - Sampled	
Stabilization:	3 consecutive readings within:							
±3%	±0.1	±3%	±10% (if >5)	±10% (if >0.5)	±10 mV	-	-	-

Results of Field Ferrous Iron Kit (mg/L): NA **Total Purged:** 5500 mL

Measurements: 0.5 inch tubing: 0.020 gallons/linear foot 2" well casing: 0.17 gal/linear foot 4" well casing: 0.65 gal/linear foot

Purge Pumping Rate (approx. mL/min): 200 mL/min. → 100 mL/min

Approx. Pump/Intake Depth: middle of screened intervall or slightly above

Well Yield: High / Moderate / Low Decontamination Method: Alconox wash, double rinse - distilled water

WELL CONDITION

Casing Size and Type: 2" PVC

Casing Condition: OK / NA / Needs Repairs/Repaired Lock Condition: OK / NA / Needs Repairs/Repaired

Cap Condition: OK / NA / Needs Repairs/Repaired Monument Condition: OK / NA / Needs Repairs/Repaired

NOTES: Cap missing

SAMPLING INFORMATION / DATA

QA/QC Sample (circle one): Duplicate MS/MSD NONE

Sampling Method (circle one): Dedicated Bladder Pump Reusable Bladder Pump

Analytical Parameters	Minimum Sample Vol.	Preservative	Bottle size	Number of bottles	Sample ID	Time Sampled
PFOA, PFOS, PFBS +	125ml	none	125ml	~~2~~ 6	F001MW52S-170724	12:25 MS/MSD
11 compounds	125 mL	none	125mL	2	F001MW52X-170724	12:30 DUP.

Method of Transportation of samples: FedEx

All samples were immediately placed into a cooler and packed with ice YES / NO

Field Observations/Notes of Sampling Event:

Depth (Total): 26.37 Depth to water: 21.21, Soft bottom

Signature of Field Personnel: KM

Attachment 3
Laboratory Analytical Report
(Included on CD)

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August 18, 2017

Vista Work Order No. 1700925

Mr. Kurt Myers
AMEC Foster Wheeler
9210 Sky Park Court Suite 200
San Diego, CA 92123

Dear Mr. Myers,

Enclosed are the amended results for the sample set received at Vista Analytical Laboratory on July 25, 2017. This sample set was analyzed on a rush turn-around time, under your Project Name 'Tustin / 5023146087.124'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com.

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Martha Maier
Laboratory Director

Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAP for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista.

Vista Analytical Laboratory 1104 Windfield Way El Dorado Hills, CA 95762 ph: 916-673-1520 fx: 916-673-0106 www.vista-analytical.com

Vista Work Order No. 1700925
Case Narrative

Sample Condition on Receipt:

Six aqueous samples were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology. This report was amended to include the results for samples "I001MW52S-170724" and "I001MW52X-170724", which were re-extracted using smaller aliquot. In addition, the other samples were re-extracted for PFOA due to possible cross-contamination from the high level samples in the original set.

Analytical Notes:

Modified EPA Method 537

Samples "I001BC43S-170724" and "I001BC50S-170724" contained particulate and were centrifuged prior to extraction.

The samples were extracted and analyzed for a selected list of 14 PFAS using Modified EPA Method 537.

Holding Times

The samples were initially extracted and analyzed within the method hold times. The re-extractions (batches B7H0073 and B7H0074) were performed outside of the method hold time.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. PFOA was detected at 4.35 ng/L in the Method Blank above 1/2 the LOQ. No other analytes were detected in the Method Blanks above 1/2 the LOQ. The OPR recoveries were within the method acceptance criteria.

The results for PFOA in samples "I001BC43S-170724", "SB01-170724", "I001BC50S-170724" and "EB01-170724" are reported from prep batch B7H0074. The results for PFNA, PFDA, MeFOSAA, PFUnA, EtFOSAA, PFDoA, PFTrDA and PFTeDA in samples "I001MW52S-170724" and "I001MW52X-170724"were taken from prep batch H7G0121. The remaining analytes were taken from the low-volume re-extractions (prep batch B7H0073).

Samples "I001MW52S-170724" and "I001MW52X-170724" were re-extracted using lower extraction volumes and higher concentrations of internal standard spike solution.

The labeled standard recoveries outside the acceptance criteria are listed in the table below.

As requested, an MS/MSD was performed on sample "I001MW52S-170724". The spike amount added to the MS/MSD was inappropriate for the concentrations detected in the sample.

QC Anomalies

LabNumber	SampleName	Analysis	Analyte	Flag	%Rec
1700925-01	I001BC43S-170724	Modified EPA Method 537	13C3-PFBS	H	170
1700925-03	I001BC50S-170724	Modified EPA Method 537	13C3-PFBS	H	164

H = Recovery was outside laboratory acceptance criteria.

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Sample Inventory Report

Vista Sample ID	Client Sample ID		Sampled	Received	Components/Containers
1700925-01	I001BC43S-170724		24-Jul-17 09:15	25-Jul-17 08:40	HDPE Bottle, 125 mL
					HDPE Bottle, 125 mL
1700925-02	SB01-170724		24-Jul-17 10:30	25-Jul-17 08:40	HDPE Bottle, 125 mL
					HDPE Bottle, 125 mL
1700925-03	I001BC50S-170724		24-Jul-17 10:50	25-Jul-17 08:40	HDPE Bottle, 125 mL
					HDPE Bottle, 125 mL
1700925-04	I001MW52S-170724	MS/MSD	24-Jul-17 12:25	25-Jul-17 08:40	HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
1700925-05	I001MW52X-170724		24-Jul-17 12:30	25-Jul-17 08:40	HDPE Bottle, 125 mL
					HDPE Bottle, 125 mL
1700925-06	EB01-170724		24-Jul-17 13:08	25-Jul-17 08:40	HDPE Bottle, 125 mL
					HDPE Bottle, 125 mL

ANALYTICAL RESULTS

Sample ID: Method Blank

Modified EPA Method 537

Matrix: Aqueous
Sample Size: 0.125 L

QC Batch: B7G0121
Date Extracted: 31-Jul-2017 12:30

Lab Sample: B7G0121-BLK1
Date Analyzed: 02-Aug-17 11:22 Column: BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers
PFBS	ND	1.79	5.00	8.00	
PFHxA	ND	2.18	5.00	8.00	
PFHpA	ND	0.591	5.00	8.00	
PFHxS	ND	0.947	5.00	8.00	
PFOA	4.35	0.651	5.00	8.00	J
PFOS	ND	0.807	5.00	8.00	
PFNA	ND	0.810	5.00	8.00	
PFDA	ND	1.49	5.00	8.00	
MeFOSAA	ND	1.65	5.00	8.00	
PFUnA	ND	1.05	5.00	8.00	
EtFOSAA	ND	1.37	5.00	8.00	
PFDoA	ND	0.792	5.00	8.00	
PFTrDA	ND	0.494	5.00	8.00	
PFTeDA	ND	0.755	5.00	8.00	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C3-PFBS	132	50 - 150	
IS	13C2-PFHxA	99.0	50 - 150	
IS	13C4-PFHpA	78.3	50 - 150	
IS	18O2-PFHxS	104	50 - 150	
IS	13C2-PFOA	91.5	50 - 150	
IS	13C8-PFOS	105	50 - 150	
IS	13C5-PFNA	86.5	50 - 150	
IS	13C2-PFDA	84.3	50 - 150	
IS	d3-MeFOSAA	81.7	50 - 150	
IS	13C2-PFUnA	76.0	50 - 150	
IS	d5-EtFOSAA	87.9	50 - 150	
IS	13C2-PFDoA	89.7	50 - 150	
IS	13C2-PFTeDA	82.6	50 - 150	

DL - Detection limit
RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit
Results reported to DL.
When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: OPR

Modified EPA Method 537

Matrix:	Aqueous	QC Batch:	B7G0121	Lab Sample:	B7G0121-BS1
Sample Size:	0.125 L	Date Extracted:	31-Jul-2017 12:30	Date Analyzed:	02-Aug-17 11:01 Column: BEH C18

Analyte	Amt Found (ng/L)	Spike Amt	%R	Limits		Labeled Standard	%R	LCL-UCL
PFBS	73.8	80.0	92.3	70 - 130	IS	13C3-PFBS	133	50 - 150
PFHxA	78.0	80.0	97.5	70 - 130	IS	13C2-PFHxA	103	50 - 150
PFHpA	72.5	80.0	90.6	70 - 130	IS	13C4-PFHpA	76.8	50 - 150
PFHxS	78.2	80.0	97.7	70 - 130	IS	18O2-PFHxS	109	50 - 150
PFOA	90.2	80.0	113	70 - 130	IS	13C2-PFOA	101	50 - 150
PFOS	77.1	80.0	96.4	70 - 130	IS	13C8-PFOS	108	50 - 150
PFNA	80.9	80.0	101	70 - 130	IS	13C5-PFNA	93.0	50 - 150
PFDA	80.2	80.0	100	70 - 130	IS	13C2-PFDA	81.0	50 - 150
MeFOSAA	75.0	80.0	93.8	70 - 130	IS	d3-MeFOSAA	77.0	50 - 150
PFUnA	80.8	80.0	101	70 - 130	IS	13C2-PFUnA	81.9	50 - 150
EtFOSAA	79.2	80.0	99.0	70 - 130	IS	d5-EtFOSAA	73.5	50 - 150
PFDoA	68.3	80.0	85.4	70 - 130	IS	13C2-PFDoA	85.6	50 - 150
PFTrDA	73.0	80.0	91.3	60 - 130	IS	13C2-PFTeDA	78.6	50 - 150
PFTeDA	77.6	80.0	97.0	70 - 130				

LCL-UCL - Lower control limit - upper control limit

Sample ID: Method Blank

Modified EPA Method 537

Matrix:	Aqueous	QC Batch:	B7H0073	Lab Sample:	B7H0073-BLK1
Sample Size:	0.125 L	Date Extracted:	10-Aug-2017 8:47	Date Analyzed:	11-Aug-17 04:23 Column: BEH C18
					11-Aug-17 19:29 Column: BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.79	5.00	8.00		IS	13C3-PFBS	101	50 - 150	
PFHxA	ND	2.18	5.00	8.00		IS	13C2-PFHxA	88.9	50 - 150	
PFHpA	ND	0.591	5.00	8.00		IS	13C4-PFHpA	70.0	50 - 150	
PFHxS	1.82	0.947	5.00	8.00	J	IS	18O2-PFHxS	90.8	50 - 150	
PFOA	ND	0.651	5.00	8.00		IS	13C2-PFOA	91.0	50 - 150	
PFOS	0.896	0.807	5.00	8.00	J	IS	13C8-PFOS	102	50 - 150	

DL - Detection limit

RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.

Only the linear isomer is reported for all other analytes.

Sample ID: OPR

Modified EPA Method 537

Matrix:	Aqueous	QC Batch:	B7H0073	Lab Sample:	B7H0073-BS1
Sample Size:	0.125 L	Date Extracted:	10-Aug-2017 8:47	Date Analyzed:	11-Aug-17 03:51 Column: BEH C18
					11-Aug-17 18:57 Column: BEH C18

Analyte	Amt Found (ng/L)	Spike Amt	%R	Limits		Labeled Standard	%R	LCL-UCL
PFBS	166	160	103	70 - 130	IS	13C3-PFBS	119	50 - 150
PFHxA	175	160	109	70 - 130	IS	13C2-PFHxA	91.2	50 - 150
PFHpA	170	160	106	70 - 130	IS	13C4-PFHpA	70.8	50 - 150
PFHxS	147	160	92.1	70 - 130	IS	18O2-PFHxS	95.8	50 - 150
PFOA	172	160	107	70 - 130	IS	13C2-PFOA	89.6	50 - 150
PFOS	159	160	99.5	70 - 130	IS	13C8-PFOS	92.9	50 - 150

LCL-UCL - Lower control limit - upper control limit

Sample ID: Method Blank

Modified EPA Method 537

Matrix:	Aqueous	QC Batch:	B7H0074	Lab Sample:	B7H0074-BLK1
Sample Size:	0.125 L	Date Extracted:	10-Aug-2017 8:51	Date Analyzed:	11-Aug-17 19:40 Column: BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers
PFOA	ND	0.651	5.00	8.00	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C2-PFOA	95.8	50 - 150	

DL - Detection limit

RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.

Only the linear isomer is reported for all other analytes.

Sample ID: OPR

Modified EPA Method 537

Matrix:	Aqueous	QC Batch:	B7H0074	Lab Sample:	B7H0074-BS1
Sample Size:	0.125 L	Date Extracted:	10-Aug-2017 8:51	Date Analyzed:	11-Aug-17 19:08 Column: BEH C18

Analyte	Amt Found (ng/L)	Spike Amt	%R	Limits		Labeled Standard	%R	LCL-UCL
PFOA	79.2	80.0	99.0	70 - 130	IS	13C2-PFOA	108	50 - 150

LCL-UCL - Lower control limit - upper control limit

Sample ID: I001BC43S-170724

Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Tustin / 5023146087.124
Date Collected: 24-Jul-2017 9:15
Location:

Sample Data

Matrix: Water
Sample Size: 0.121 L

Laboratory Data

Lab Sample: 1700925-01 Date Received: 25-Jul-2017 8:40
QC Batch: B7G0121 Date Extracted: 31-Jul-2017 12:30
Date Analyzed: 04-Aug-17 07:01 Column: BEH C18
11-Aug-17 22:42 Column: BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers
PFBS	62.4	1.85	5.17	8.26	
PFHxA	208	2.25	5.17	8.26	
PFHpA	40.8	0.610	5.17	8.26	
PFHxS	505	0.977	5.17	8.26	
PFOA	397	0.669	5.12	8.22	
PFOS	26.3	0.833	5.17	8.26	
PFNA	ND	0.836	5.17	8.26	
PFDA	ND	1.54	5.17	8.26	
MeFOSAA	ND	1.70	5.17	8.26	
PFUnA	ND	1.08	5.17	8.26	
EtFOSAA	ND	1.41	5.17	8.26	
PFDoA	ND	0.817	5.17	8.26	
PFTrDA	ND	0.510	5.17	8.26	
PFTeDA	ND	0.779	5.17	8.26	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C3-PFBS	170	50 - 150	H
IS	13C2-PFHxA	103	50 - 150	
IS	13C4-PFHpA	83.3	50 - 150	
IS	18O2-PFHxS	112	50 - 150	
IS	13C2-PFOA	76.0	50 - 150	
IS	13C8-PFOS	106	50 - 150	
IS	13C5-PFNA	89.3	50 - 150	
IS	13C2-PFDA	78.5	50 - 150	
IS	d3-MeFOSAA	85.0	50 - 150	
IS	13C2-PFUnA	91.4	50 - 150	
IS	d5-EtFOSAA	85.3	50 - 150	
IS	13C2-PFDoA	99.0	50 - 150	
IS	13C2-PFTeDA	93.6	50 - 150	

DL - Detection limit
RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit
Results reported to DL.
When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: SB01-170724 — Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Tustin / 5023146087.124
Date Collected: 24-Jul-2017 10:30
Location:

Sample Data

Matrix: Water
Sample Size: 0.122 L

Laboratory Data

Lab Sample: 1700925-02 — Date Received: 25-Jul-2017 8:40
QC Batch: B7G0121 — Date Extracted: 31-Jul-2017 12:30
Date Analyzed: 02-Aug-17 13:32 Column: BEH C18
11-Aug-17 22:52 Column: BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers
PFBS	ND	1.84	5.12	8.21	
PFHxA	ND	2.24	5.12	8.21	
PFHpA	ND	0.607	5.12	8.21	
PFHxS	2.13	0.972	5.12	8.21	J
PFOA	ND	0.722	5.53	8.87	
PFOS	ND	0.828	5.12	8.21	
PFNA	ND	0.831	5.12	8.21	
PFDA	ND	1.53	5.12	8.21	
MeFOSAA	ND	1.69	5.12	8.21	
PFUnA	ND	1.08	5.12	8.21	
EtFOSAA	ND	1.41	5.12	8.21	
PFDoA	ND	0.813	5.12	8.21	
PFTrDA	ND	0.507	5.12	8.21	
PFTeDA	ND	0.775	5.12	8.21	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C3-PFBS	150	50 - 150	
IS	13C2-PFHxA	107	50 - 150	
IS	13C4-PFHpA	81.2	50 - 150	
IS	18O2-PFHxS	108	50 - 150	
IS	13C2-PFOA	98.0	50 - 150	
IS	13C8-PFOS	107	50 - 150	
IS	13C5-PFNA	87.0	50 - 150	
IS	13C2-PFDA	76.4	50 - 150	
IS	d3-MeFOSAA	74.5	50 - 150	
IS	13C2-PFUnA	79.2	50 - 150	
IS	d5-EtFOSAA	67.9	50 - 150	
IS	13C2-PFDoA	89.6	50 - 150	
IS	13C2-PFTeDA	86.6	50 - 150	

DL - Detection limit
RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit
Results reported to DL.
When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: I001BC50S-170724

Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Tustin / 5023146087.124
Date Collected: 24-Jul-2017 10:50
Location:

Sample Data

Matrix: Water
Sample Size: 0.121 L

Laboratory Data

Lab Sample: 1700925-03 Date Received: 25-Jul-2017 8:40
QC Batch: B7G0121 Date Extracted: 31-Jul-2017 12:30
Date Analyzed: 03-Aug-17 18:32 Column: BEH C18
12-Aug-17 21:37 Column: BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers
PFBS	1070	1.84	5.17	8.24	
PFHxA	3700	33.7	77.5	124	D
PFHpA	519	0.609	5.17	8.24	
PFHxS	8050	14.6	77.5	124	D
PFOA	6840	14.8	114	182	D
PFOS	1160	0.831	5.17	8.24	
PFNA	22.7	0.834	5.17	8.24	
PFDA	ND	1.53	5.17	8.24	
MeFOSAA	ND	1.70	5.17	8.24	
PFUnA	ND	1.08	5.17	8.24	
EtFOSAA	ND	1.41	5.17	8.24	
PFDoA	ND	0.816	5.17	8.24	
PFTrDA	ND	0.509	5.17	8.24	
PFTeDA	ND	0.778	5.17	8.24	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C3-PFBS	164	50 - 150	H
IS	13C2-PFHxA	102	50 - 150	D
IS	13C4-PFHpA	77.1	50 - 150	
IS	18O2-PFHxS	117	50 - 150	D
IS	13C2-PFOA	95.8	50 - 150	D
IS	13C8-PFOS	100	50 - 150	
IS	13C5-PFNA	82.9	50 - 150	
IS	13C2-PFDA	84.1	50 - 150	
IS	d3-MeFOSAA	88.4	50 - 150	
IS	13C2-PFUnA	85.0	50 - 150	
IS	d5-EtFOSAA	92.4	50 - 150	
IS	13C2-PFDoA	91.0	50 - 150	
IS	13C2-PFTeDA	92.9	50 - 150	

DL - Detection limit
RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit
Results reported to DL.
When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: I001MW52S-170724

Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Tustin / 5023146087.124
Date Collected: 24-Jul-2017 12:25
Location:

Sample Data

Matrix: Water
Sample Size: 0.00122 L

Laboratory Data

Lab Sample: 1700925-04 Date Received: 25-Jul-2017 8:40
QC Batch: B7H0073 Date Extracted: 10-Aug-2017 8:47
Date Analyzed: 02-Aug-17 13:53 Column: BEH C18
12-Aug-17 01:43 Column: BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers
PFBS	66700	183	512	820	
PFHxA	286000	4470	10200	16400	D
PFHpA	42600	60.6	512	820	
PFHxS	468000	1940	10200	16400	B, D
PFOA	743000	1330	10200	16400	D
PFOS	26900	82.7	512	820	B
PFNA	695	0.849	5.25	8.39	
PFDA	13.7	1.56	5.25	8.39	
MeFOSAA	ND	1.73	5.25	8.39	
PFUnA	ND	1.10	5.25	8.39	
EtFOSAA	ND	1.44	5.25	8.39	
PFDoA	ND	0.831	5.25	8.39	
PFTrDA	ND	0.518	5.25	8.39	
PFTeDA	ND	0.792	5.25	8.39	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C3-PFBS	125	50 - 150	
IS	13C2-PFHxA	94.0	50 - 150	D
IS	13C4-PFHpA	75.9	50 - 150	
IS	18O2-PFHxS	102	50 - 150	D
IS	13C2-PFOA	89.9	50 - 150	D
IS	13C8-PFOS	92.7	50 - 150	
IS	13C5-PFNA	95.2	50 - 150	
IS	13C2-PFDA	103	50 - 150	
IS	d3-MeFOSAA	92.2	50 - 150	
IS	13C2-PFUnA	88.6	50 - 150	
IS	d5-EtFOSAA	94.8	50 - 150	
IS	13C2-PFDoA	91.3	50 - 150	
IS	13C2-PFTeDA	80.3	50 - 150	

DL - Detection limit
RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit
Results reported to DL.
When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Matrix Spike Results

Modified EPA Method 537

Source Client ID: I001MW52S-170724
Source LabNumber: 1700925-04
Matrix: Aqueous
Sample Size: 0.116/0.119 L

QC Batch: B7G0121
Date Extracted: 31-Jul-2017 12:30

Lab Sample: B7G0121-MS2/B7G0121-MSD2
Date Analyzed: 02-Aug-17 11:54 Column: BEH C18
02-Aug-17 12:05 Column: BEH C18

Analyte	Spike-MS (ng/L)	MS %R	MS Qual.	Spike-MSD (ng/L)	MSD %R	RPD	MSD Qual.	%R Limit	%RPD Limit
PFNA	86.6	**134**	H	84.3	**149**	10.6	H	70 - 130	25
PFDA	86.6	107		84.3	116	8.07		70 - 130	25
MeFOSAA	86.6	107		84.3	105	1.89		70 - 130	25
PFUnA	86.6	113		84.3	95.2	17.1		70 - 130	25
EtFOSAA	86.6	99.1		84.3	94.9	4.33		70 - 130	25
PFDoA	86.6	101		84.3	103	1.96		70 - 130	25
PFTrDA	86.6	109		84.3	109	0		60 - 130	25
PFTeDA	86.6	96.1		84.3	99.0	2.97		70 - 130	25

	Labeled Standard	MS %R	MS Qualifiers	MSD %R	MS Qual.
IS	13C5-PFNA	91.0		88.5	
IS	13C2-PFDA	77.6		85.7	
IS	d3-MeFOSAA	95.2		92.0	
IS	13C2-PFUnA	86.7		97.0	
IS	d5-EtFOSAA	100		94.0	
IS	13C2-PFDoA	94.1		86.3	
IS	13C2-PFTeDA	104		94.2	

When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Matrix Spike Results

Modified EPA Method 537

Source Client ID: I001MW52S-170724
Source LabNumber: 1700925-04
Matrix: Aqueous
Sample Size: 0.000500/0.00139 L

QC Batch: B7H0073
Date Extracted: 10-Aug-2017 8:47

Lab Sample: B7H0073-MS1/B7H0073-MSD1
Date Analyzed: 12-Aug-17 01:00 Column: BEH C18
12-Aug-17 01:22 Column: BEH C18

Analyte	Spike-MS (ng/L)	MS %R	MS Qual.	Spike-MSD (ng/L)	MSD %R	RPD	MSD Qual.	%R Limit	%RPD Limit
PFBS	40000	**418**	H	14400	89.6	**129**	H	70 - 130	25
PFHxA	40000	**1220**	D, H	14400	**58.5**	**182**	D, H	70 - 130	25
PFHpA	40000	**285**	H	14400	97.1	**98.4**	H	70 - 130	25
PFHxS	40000	**2460**	B, D, H	14400	**-635**	**339**	B, D, H	70 - 130	25
PFOA	40000	**3400**	D, H	14400	**-411**	**255**	D, H	70 - 130	25
PFOS	40000	**199**	B, H	14400	74.0	**91.6**	B, H	70 - 130	25

	Labeled Standard	MS %R	MS Qualifiers	MSD %R	MS Qual.
IS	13C3-PFBS	116		121	
IS	13C2-PFHxA	96.7	D	86.0	D
IS	13C4-PFHpA	77.4		70.3	
IS	18O2-PFHxS	85.0	D	95.1	D
IS	13C2-PFOA	86.0	D	89.1	D
IS	13C8-PFOS	95.3		101	

When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: I001MW52X-170724

Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Tustin / 5023146087.124
Date Collected: 24-Jul-2017 12:30
Location:

Sample Data

Matrix: Water
Sample Size: 0.00133 L

Laboratory Data

Lab Sample: 1700925-05 Date Received: 25-Jul-2017 8:40
QC Batch: B7H0073 Date Extracted: 10-Aug-2017 8:47
Date Analyzed: 02-Aug-17 14:36 Column: BEH C18
12-Aug-17 02:05 Column: BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers
PFBS	61700	168	470	752	
PFHxA	278000	4100	9400	15000	D
PFHpA	37500	55.5	470	752	
PFHxS	357000	1780	9400	15000	B, D
PFOA	637000	1220	9400	15000	D
PFOS	18100	75.8	470	752	B
PFNA	698	0.862	5.34	8.52	
PFDA	18.0	1.59	5.34	8.52	
MeFOSAA	ND	1.76	5.34	8.52	
PFUnA	ND	1.12	5.34	8.52	
EtFOSAA	ND	1.46	5.34	8.52	
PFDoA	ND	0.843	5.34	8.52	
PFTrDA	ND	0.526	5.34	8.52	
PFTeDA	ND	0.804	5.34	8.52	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C3-PFBS	123	50 - 150	
IS	13C2-PFHxA	89.2	50 - 150	D
IS	13C4-PFHpA	77.7	50 - 150	
IS	18O2-PFHxS	104	50 - 150	D
IS	13C2-PFOA	88.1	50 - 150	D
IS	13C8-PFOS	97.4	50 - 150	
IS	13C5-PFNA	90.0	50 - 150	
IS	13C2-PFDA	79.0	50 - 150	
IS	d3-MeFOSAA	85.0	50 - 150	
IS	13C2-PFUnA	87.9	50 - 150	
IS	d5-EtFOSAA	89.9	50 - 150	
IS	13C2-PFDoA	84.4	50 - 150	
IS	13C2-PFTeDA	86.7	50 - 150	

DL - Detection limit
RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit
Results reported to DL.
When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: EB01-170724 — Modified EPA Method 537

Client Data

Name:	AMEC Foster Wheeler
Project:	Tustin / 5023146087.124
Date Collected:	24-Jul-2017 13:08
Location:	

Sample Data

Matrix:	Water
Sample Size:	0.119 L

Laboratory Data

Lab Sample:	1700925-06	Date Received:	25-Jul-2017 8:40
QC Batch:	B7G0121	Date Extracted:	31-Jul-2017 12:30
Date Analyzed:	03-Aug-17 16:45 Column: BEH C18		
	11-Aug-17 23:46 Column: BEH C18		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers
PFBS	ND	1.89	5.25	8.44	
PFHxA	ND	2.30	5.25	8.44	
PFHpA	ND	0.623	5.25	8.44	
PFHxS	ND	0.999	5.25	8.44	
PFOA	ND	0.580	4.46	7.13	
PFOS	ND	0.851	5.25	8.44	
PFNA	ND	0.854	5.25	8.44	
PFDA	ND	1.57	5.25	8.44	
MeFOSAA	ND	1.74	5.25	8.44	
PFUnA	ND	1.11	5.25	8.44	
EtFOSAA	ND	1.45	5.25	8.44	
PFDoA	ND	0.835	5.25	8.44	
PFTrDA	ND	0.521	5.25	8.44	
PFTeDA	ND	0.796	5.25	8.44	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C3-PFBS	138	50 - 150	
IS	13C2-PFHxA	105	50 - 150	
IS	13C4-PFHpA	72.3	50 - 150	
IS	18O2-PFHxS	107	50 - 150	
IS	13C2-PFOA	95.2	50 - 150	
IS	13C8-PFOS	98.5	50 - 150	
IS	13C5-PFNA	85.1	50 - 150	
IS	13C2-PFDA	86.5	50 - 150	
IS	d3-MeFOSAA	74.8	50 - 150	
IS	13C2-PFUnA	80.0	50 - 150	
IS	d5-EtFOSAA	80.7	50 - 150	
IS	13C2-PFDoA	75.7	50 - 150	
IS	13C2-PFTeDA	84.0	50 - 150	

DL - Detection limit

RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.

Only the linear isomer is reported for all other analytes.

DATA QUALIFIERS & ABBREVIATIONS

B	**This compound was also detected in the method blank.**
D	**Dilution**
E	**The associated compound concentration exceeded the calibration range of the instrument.**
H	**Recovery and/or RPD was outside laboratory acceptance limits.**
I	**Chemical Interference**
J	**The amount detected is below the Reporting Limit/LOQ.**
M	**Estimated Maximum Possible Concentration. (CA Region 2 projects only)**
*****	**See Cover Letter**
Conc.	**Concentration**
NA	**Not applicable**
ND	**Not Detected**
TEQ	**Toxic Equivalency**

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

CERTIFICATIONS

Accrediting Authority	Certificate Number
Arkansas Department of Environmental Quality	17-015-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777-18
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2016026
Minnesota Department of Health	1175673
New Hampshire Environmental Accreditation Program	207716
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-008
Pennsylvania Department of Environmental Protection	013
Texas Commission on Environmental Quality	T104704189-17-8
Virginia Department of General Services	8621
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

Current certificates and lists of licensed parameters are located in the Quality Assurance office and are available upon request.

NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	**Method**
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA 23

MATRIX: Biological Tissue	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Drinking Water	
Description of Test	**Method**
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD) GC/HRMS	EPA 1613
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537

MATRIX: Non-Potable Water	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Dioxin by GC/HRMS	EPA 613
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Solids	
Description of Test	**Method**
Tetra-Octa Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope	EPA 1613B

Dilution GC/HRMS	
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

Vista Analytical

1104 Windfield Way
El Dorado Hills, CA 95762
TEL: 916-673-1520

CHAIN OF CUSTODY RECORD

DATE: 07/24/17

Vista PM: Karen Volpendesta 1700925

PAGE: 1 OF 1

LABORATORY CLIENT: AMEC Foster Wheeler E & I, Inc.
ADDRESS: 9210 Sky Park Court
CITY: San Diego, CA 92123
TEL: 503.639.3400
E-Mail: medora.hackler@amecfw.com
E-MAIL: marie.bevier@amecfw.com

CLIENT PROJECT NAME / NUMBER: Tustin / 50231460087.124 0.3°C
PROJECT CONTACT: Medora Hackler/Marie Bevier
SAMPLER(S): (SIGNATURE)
P.O. NO.:
CONTRACT NO.: N62473-12-D-2012
LAB USE ONLY

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
*Full 14 compound min for 537 Mod.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	QC Level	~~PFOA, PFOS, and PFBS~~ (U.S. EPA 537 Mod.) PFAS*																		
	I001BC43S-170724	072417	0915	W	2	IV	X																		
	SB01-170724	072417	1030	W	2	III	X																		
	I001BC50S-170724	072417	1050	W	2	III	X																		
	I001MW52S-170724	072417	1225	W	6	III	X															MS	MSD		
	I001MW52X-170724	072417	1230	W	2	III	X																		
	EB01-170724	072417	1308	W	2	III	X																		

Relinquished by: (Signature)	Received by: (Signature) / Carrier Tracking Number	Date:	Time:
072417 @ 14:30	FedEx		
Relinquished by: (Signature) FedEx 07/25/17 0840	Received by: (Signature)	Date: 07/25/17	Time: 0852
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Vista Analytical Laboratory

Sample Log-in Checklist

Vista Work Order #: 1700925 TAT 14

Samples Arrival:	Date/Time 07/25/17 0840	Initials: JBLB	Location: WR-2 Shelf/Rack: NA
Logged In:	Date/Time 07/25/17 1045	Initials: JBLB	Location: WR-2 Shelf/Rack: F5

Delivered By:	FedEx	UPS	On Trac	GSO	DHL	Hand Delivered	Other
Preservation:	Ice		Blue Ice		Dry Ice		None

Temp °C: 0.7 (uncorrected)	Time: 0851	Thermometer ID: IR-2
Temp °C: 0.3 (corrected)	Probe used: Yes☐ No☑	

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill Trk # 8081 9079 5301	✓		
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Chain of Custody / Sample Documentation Present?	✓		
COC Anomaly/Sample Acceptance Form completed?		✓	✓
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓

Preservation Documented:	$Na_2S_2O_3$	Trizma	None	Yes	No	NA
Shipping Container	Vista	Client	Retain	Return	Dispose	

Comments:

EXTRACTION INFORMATION

Process Sheet

Workorder: 1700925

Prep Expiration: 2017-Aug-07

Client: AMEC Foster Wheeler

Workorder Due: 08-Aug-17 00:00

TAT: 14

Method: **537M PFAS DOD (LOQ as mRL)**

Matrix: **Aqueous**

Prep Batch: B7G0121

Prep Data Entered: 8/2/17 ZH

Date and Initials

Version: 537 (14 Analyte)

Initial Sequence: _____

LabSampleID		Recon	ClientSampleID	Date Received	Location	Comments
1700925-01	A	☑	I001BC43S-170724	25-Jul-17 08:40	WR-2 F-5	
1700925-02	A	☑	SB01-170724	25-Jul-17 08:40	WR-2 F-5	
1700925-03	A	☑	I001BC50S-170724	25-Jul-17 08:40	WR-2 F-5	
1700925-04	ABC	☑	I001MW52S-170724	25-Jul-17 08:40	WR-2 F-5	**MS/MSD**
1700925-05	A	☑	I001MW52X-170724	25-Jul-17 08:40	WR-2 F-5	
1700925-06	A	☑	EB01-170724	25-Jul-17 08:40	WR-2 F-5	

Vista PM: Martha Maier

Vial Box ID: Tequila Mocking Bird

Sample Reconciled By: HB 7/31/17 / /

Page 1 of 1

Batch: B7G0121 Matrix: Aqueous

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
1700922-01	0.10565 ✓	NA	NA	1000	31-Jul-17 12:30	HAC			Surface Water	537M PFAS DOD (LOQ as
1700922-02	0.11025 ✓			1000	31-Jul-17 12:30	HAC			Surface Water	537M PFAS DOD (LOQ as
1700922-02	0.11025 ✓			1000	31-Jul-17 12:30	HAC			Surface Water	537M PFAS
1700922-03	0.11852 ✓			1000	31-Jul-17 12:30	HAC			Surface Water	537M PFAS DOD (LOQ as
1700922-04	0.11017 ✓			1000	31-Jul-17 12:30	HAC			De-ionized Water	537M PFAS DOD (LOQ as
1700922-05	0.11893 ✓			1000	31-Jul-17 12:30	HAC			De-ionized Water	537M PFAS DOD (LOQ as
1700922-06	0.11676 ✓			1000	31-Jul-17 12:30	HAC			De-ionized Water	537M PFAS DOD (LOQ as
1700925-01	0.12112 ✓			1000	31-Jul-17 12:30	HAC			Water	537M PFAS DOD (LOQ as
1700925-02	0.12178 ✓			1000	31-Jul-17 12:30	HAC			Water	537M PFAS DOD (LOQ as
1700925-03	0.12135 ✓			1000	31-Jul-17 12:30	HAC			Water	537M PFAS DOD (LOQ as
1700925-04	0.1192 ✓			1000	31-Jul-17 12:30	HAC			Water	537M PFAS
1700925-04	0.1192 ✓			1000	31-Jul-17 12:30	HAC			Water	537M PFAS DOD (LOQ as
1700925-05	0.1174 ✓			1000	31-Jul-17 12:30	HAC			Water	537M PFAS DOD (LOQ as
1700925-06	0.1185 ✓			1000	31-Jul-17 12:30	HAC			Water	537M PFAS DOD (LOQ as
1700929-01	0.11834 ✓			1000	31-Jul-17 12:30	HAC			QC Water	537M PFAS DOD (LOQ as
1700929-02	0.1157 ✓			1000	31-Jul-17 12:30	HAC			QC Water	537M PFAS DOD (LOQ as
1700938-01	0.11844 ✓			1000	31-Jul-17 12:30	HAC			Groundwater	537M PFAS DOD (LOQ as
1700938-02	0.12014 ✓			1000	31-Jul-17 12:30	HAC			Water	537M PFAS DOD (LOQ as
1700938-03	0.11247 ✓			1000	31-Jul-17 12:30	HAC			Groundwater	537M PFAS DOD (LOQ as
B7G0121-BLK1	0.125			1000	31-Jul-17 12:30	HAC				QC
B7G0121-BS1	0.125			1000	31-Jul-17 12:30	HAC	17D2705	10 ✓		QC
B7G0121-MS1	0.11301 ✓			1000	31-Jul-17 12:30	HAC	17D2705	10 ✓		QC
B7G0121-MS2	0.11554 ✓			1000	31-Jul-17 12:30	HAC	17D2705	10 ✓		QC
B7G0121-MSD1	0.11225 ✓			1000	31-Jul-17 12:30	HAC	17D2705	10 ✓		QC
B7G0121-MSD2	0.11866 ✓			1000	31-Jul-17 12:30	HAC	17D2705	10 ✓		QC

7/2 8/2/17

Printed: 8/2/2017 8:17:06AM

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 537M PFAS

Method: 537M PFAS DOD (LOO as mRL)

B7G0121

Chemist: G. Mendiola

Prep Date/Time: ~~26~~ 31-Jul-17 ~~07:48~~ 12:30
OM 7/31/17 OM 7/31/17

Prepared using: LCMS - SPE Extraction-LCMS

C	VISTA Sample ID	pH Before	pH After	Chlorine (Cl)	Drops HCl Added	Bottle + Sample (g)	Bottle Only (g)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	SPE (C7H0003)	RS CHEM/WIT DATE
☐	B7G0121-BLK1	5	2	0	2	NA	NA	(0.125)	OM KBF 7/31/17	TK 7/31/17	OM TK 7/31/17
☐	B7G0121-BS1	5	2	0	2	↓	↓	↓			
☐	B7G0121-MS1 1700922-02 (A)(B)(C)(D)	6	2	0	2	139.85	26.84	0.11301			
☐	B7G0121-MS2 1700925-04 (A)(D)	6	2	0	9	143.28	27.74	0.11554			
☐	B7G0121-MSD1 1700922-02 (A)(B)(C)(D)	6	2	0	6	139.21	26.96	0.11225			
☐	B7G0121-MSD2 1700925-04 (A)(D)	6	2	0	6	146.37	27.71	0.11866			
☐	1700922-01 (A)(B)(C)(D)	7	2	0	6	132.56	26.91	0.10565			
☐	1700922-02 (A)(B)(C)(D)	6	2	0	6	137.13	~~26.88~~ 26.88	0.11025			
☐	1700922-03 (A)(B)(D)	5	2	0	3	145.47	26.95	0.11852			
☐	1700922-04	5	2	0	2	136.92	26.75	0.11017			
☐	1700922-05	5	2	0	2	145.80	26.87	0.11893			
☐	1700922-06	5	2	0	2	143.50	26.74	0.116776			
☐	1700925-01 (A)	6	2	0	2	149.23	28.11	0.12112			
☐	1700925-02	5	2	0	2	149.37	27.59	0.12178			
☐	1700925-03 (A)	6	2	0	2	148.95	27.60	0.12135			

(A) sample was centrifuged to remove particulate. HB 7/31/17 (B) centrifuge solids extracted & placed in secondary container HB 7/31/17

IS Name (VS)	NS Name (V1)	RS Name (V1)		
17G1307, 10mL	17D2705, 10mL	17F3038, 10 mL	SPE Chem: Strata XAW 33µm 200mg 6mL Ele SOLV: 0.5% NH4OH in MeOH/MeOH Final Volume(s) 1mL	Check Out: Chemist/Date: HB 7/31/17 Check In: Chemist/Date: empty Balance ID: HRMS-8 pH Adjusted: Chemist/Date: HB 7/31/17

Comments: Assume 1 g = 1 mL (C) samples were centrifuged twice. HB 7/31/17 (D) sample was foamy after HCl added. HB 7/31/17

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 537M PFAS

Method: 537M PFAS DOD (LOO as mRL)

B7G0121

Chemist: G. Mendoza

Prep Date/Time: ~~26~~ 31-Jul-17 ~~07:48~~ 12:30
em 7/31/17 em 7/31/17

Prepared using: LCMS - SPE Extraction-LCMS

C	VISTA Sample ID	pH Before	pH After	Chlorine (Cl)	Drops HCl Added	Bottle + Sample (g)	Bottle Only (g)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	SPE C710003	RS CHEM/WIT DATE
☐	1700925-04 (A)(D)	6	2	0	4	146.62	27.42	0.11920	em KBF 7/31/17	JC 7/31/17	em JC 7/31/17
☐	1700925-05 (A)(D)	7	2	0	2	144.83	27.43	0.11740			
☐	1700925-06	5	2	0	2	145.92	27.42	0.11950			
☐	1700929-01	5	2	0	2	145.38	27.04	0.11834			
☐	1700929-02	5	2	0	2	142.98	26.78	0.11570			
☐	1700938-01 (A)	5	2	0	2	145.74	27.30	0.11644			
☐	1700938-02	5	2	0	5	147.18	27.04	0.12014			
☐	1700938-03	6	2	0	5	139.49	27.02	0.11247			

(A) sample was centrifuged to remove particulate. HB 7/31/17 (D) sample was foamy after HCl added HB 7/31/17

IS Name	NS Name	RS Name		
(V5) 17G1307, 10mL	(V1) 17D2705, 10mL	(V1) 17F3038, 10mL	SPE Chem: Strata X-AW 33µm 200mg 6mL JC 8:1:1 H2O:ACN:MeOH Ele SOLV: ~~0.5%~~ NH4OH in MeOH/MeOH Final Volume(s) 1mL	Check Out: Chemist/Date: HB 7/31/17 Check In: Chemist/Date: empty Balance ID: HRMS-8 pH Adjusted: Chemist/Date: HB 7/31/17

Comments: Assume 1 g = 1 mL

RX

Process Sheet

Workorder: 1700925

Prep Expiration: 2017-Aug-07

Client: AMEC Foster Wheeler

Workorder Due: 08-Aug-17 00:00

TAT: 14

Method: **537M PFAS DOD (LOQ as mRL)**

Matrix: **Aqueous**

Prep Batch: B7H0074

Prep Data Entered: 8/11/17 AR

Date and Initials

Version: 537 (14 Analyte)

Initial Sequence: _____

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1700925-01	☑	I001BC43S-170724	25-Jul-17 08:40	WR-2 F-5	
1700925-02	☑	SB01-170724	25-Jul-17 08:40	WR-2 F-5	
1700925-03	☑	I001BC50S-170724	25-Jul-17 08:40	WR-2 F-5	
~~1700925-04~~	☐	~~I001MW52S-170724~~	~~25-Jul-17 08:40~~	~~WR-2 F-5~~	~~MS/MSD~~
~~1700925-05~~	☐	~~I001MW52X-170724~~	~~25-Jul-17 08:40~~	~~WR-2 F-5~~	
1700925-06	☑	EB01-170724	25-Jul-17 08:40	WR-2 F-5	

Vista PM: Martha Maier

Vial Box ID: Reotillary

Sample Reconciled By: BP 8/10/17

Page 1 of 1

Batch: B7H0074

Matrix: Aqueous

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
1700922-01RE1	0.0806	NA	NA	1000	10-Aug-17 08:51	BAP			Surface Water	537M PFAS DOD (LOQ as
1700922-02RE1	0.10828			1000	10-Aug-17 08:51	BAP			Surface Water	537M PFAS DOD (LOQ as
1700922-03RE1	0.1039			1000	10-Aug-17 08:51	BAP			Surface Water	537M PFAS DOD (LOQ as
1700922-04RE1	0.11621			1000	10-Aug-17 08:51	BAP			De-ionized Water	537M PFAS DOD (LOQ as
1700922-05RE1	0.12208			1000	10-Aug-17 08:51	BAP			De-ionized Water	537M PFAS DOD (LOQ as
1700922-06RE1	0.1202			1000	10-Aug-17 08:51	BAP			De-ionized Water	537M PFAS DOD (LOQ as
1700925-01RE1	0.12168			1000	10-Aug-17 08:51	BAP			Water	537M PFAS DOD (LOQ as
1700925-02RE1	0.11277			1000	10-Aug-17 08:51	BAP			Water	537M PFAS DOD (LOQ as
1700925-03RE1	0.11014			1000	10-Aug-17 08:51	BAP			Water	537M PFAS DOD (LOQ as
1700925-06RE1	0.1402			1000	31-Jul-17 12:30	BAP			Water	537M PFAS DOD (LOQ as
1700929-01RE1	0.12069			1000	10-Aug-17 08:51	BAP			QC Water	537M PFAS DOD (LOQ as
1700929-02RE1	0.11668			1000	10-Aug-17 08:51	BAP			QC Water	537M PFAS DOD (LOQ as
1700938-01RE1	0.11287			1000	10-Aug-17 08:51	BAP			Groundwater	537M PFAS DOD (LOQ as
1700938-02RE1	0.11825			1000	10-Aug-17 08:51	BAP			Water	537M PFAS DOD (LOQ as
1700938-03RE1	0.11598			1000	10-Aug-17 08:51	BAP			Groundwater	537M PFAS DOD (LOQ as
B7H0074-BLK1	0.125			1000	10-Aug-17 08:51	BAP				QC
B7H0074-BS1	0.125			1000	10-Aug-17 08:51	BAP	17G2428	10		QC
B7H0074-MS1	0.11333			1000	10-Aug-17 08:51	BAP	17G2428	10		QC
B7H0074-MSD1	0.10895			1000	10-Aug-17 08:51	BAP	17G2428	10		QC

JH 8/11/17

Printed: 8/11/2017 11:11:49AM

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 537M PFAS DOD (LOO as mRL)

B7H0074

Chemist: BP

Prep Date/Time: 10-Aug-17 08:51

Prepared using: LCMS - SPE Extraction-LCMS

C	VISTA Sample ID	pH Before	pH After	Chlorine (Cl)	Drops HCl Added	Bottle + Sample (g)	Bottle Only (g)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	SPE (NA)	RS CHEM/WIT DATE
☐	B7H0074-BLK1	5	2	0	2	NA	NA	(0.125)	BP 8.10.17	BP 8.10.17	BP BP 8/10/17
☐	B7H0074-BS1	5	2	0	2	↓	↓	↓			
☐	B7H0074-MS1 (A) 1700922-02RE1	5	2	0	2	~~135.89~~ 140.27	26.94	0.11333			
☐	B7H0074-MSD1 (A) 1700922-02RE1	5	2	0	2	135.89	26.94	0.10895			
☐	1700922-01RE1 (A)	5	2	0	2	107.41	26.81	0.08060			
☐	1700922-02RE1 (A)	5	2	0	2	135.17	26.89	0.10828			
☐	1700922-03RE1 (A)	5	2	0	2	130.91	27.01	0.10390			
☐	1700922-04RE1	5	2	0	2	142.93	26.72	0.11621			
☐	1700922-05RE1	5	2	0	2	149.05	26.97	0.12208			
☐	1700922-06RE1	5	2	0	2	146.92	26.72	0.12020			
☐	1700925-01RE1	6	2	0	2	149.86	28.18	0.12168			
☐	1700925-02RE1	5	2	0	2	140.45	27.68	0.11277			
☐	1700925-03RE1 (A)	6	2	0	2	137.76	27.62	0.11014			
☐	1700929-01RE1	6	2	0	2	147.61	26.92	0.12069			
☐	1700929-02RE1	5	2	0	2	143.47	26.79	0.11668			
☐	1700938-01RE1 (A)	6	2	0	2	140.00	27.13	0.11287			

IS Name	NS Name	RS Name
17G1307, 10uL (V2)	17G2428, 10uL (V3)	17H0108, 10uL (V2)

SPE Chem: Strata X-AW 33um 200mg/6mL

Ele SOLV: 0.5% NH4OH in MeOH/MeOH

Final Volume(s) 1mL

Check Out: Chemist/Date: BP 8.10.17

Check In: Chemist/Date: Empty

Balance ID: HRMS 8

pH Adjusted: Chemist/Date: HB 8/10/17

Comments: Assume 1 g = 1 mL (A) Samples were centrifuged to remove particulate BP 8.10.17

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 537M PFAS DOD (LOO as mRL)

B7H0074

Chemist: BP

Prep Date/Time: 10-Aug-17 08:51

Prepared using: LCMS - SPE Extraction-LCMS

C	VISTA Sample ID	pH Before	pH After	Chlorine (Cl)	Drops HCl Added	Bottle + Sample (g)	Bottle Only (g)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	SPE (NA)	RS CHEM/WIT DATE
☐	~~B7H0074-BLK1~~										
☐	B7H0074-BS1										
☐	B7H0074-MS1 1700922-02RE1										
☐	B7H0074-MSD1 1700922-02RE1										
☐	1700922-01RE1										
☐	1700922-02RE1										
☐	1700922-03RE1										
☐	1700922-04RE1										
☐	1700922-05RE1										
☐	1700922-06RE1										
☐	1700925-01RE1										
☐	1700925-02RE1										
☑	~~1700925-03RE1~~										
☐	1700925-06RE1 (A)	5	2	0	2	167.62	27.42	0.14020	BP 8-10-17	BP 8-10-17	BP 8-10-17
☐	~~1700929-01RE1~~										
☐	~~1700929-02RE1~~										

BP 8.10.17

BP 8-10-17

IS Name	NS Name	RS Name
1761307, 10L (V2)	1762428, 10L (V3)	1740608, 10L (V2)

SPE Chem: Strata X-AW 33µm 200mg/6cc

Ele SOLV: 0.5% NH4OH in MeOH/MeOH

Final Volume(s) 1mL

Check Out: Chemist/Date: BP 8-10-17

Check In: Chemist/Date: Empty

Balance ID: HRMS-8

pH Adjusted: Chemist/Date: BP 8-10-17

Comments: Assume 1 g = 1 mL

(A) Sample was spiked before being weighed, ~ 1mL of MeOH added BP 8-10-17

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 537M PFAS DOD (LOO as mRL)

B7H0074

Chemist: BP

Prep Date/Time: 10-Aug-17 08:51

Prepared using: LCMS - SPE Extraction-LCMS

C	VISTA Sample ID	pH Before	pH After	Chlorine (Cl)	Drops HCl Added	Bottle + Sample (g)	Bottle Only (g)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	NA SPE	RS CHEM/WIT DATE
☐	1700938-01RE1										
☐	1700938-02RE1										
☐	1700938-03RE1										

IS Name	NS Name	RS Name

SPE Chem: Strata X-AW 33um 200mg/6cL

Ele SOLV: 0.5% NH4OH in MeOH/MeOH

Final Volume(s) 1mL

Check Out: Chemist/Date: BP 8-10-17

Check In: Chemist/Date: NA

Balance ID: HRMS-8

pH Adjusted: Chemist/Date: FP 8-10-17

Comments: Assume 1 g = 1 mL

RX2

Process Sheet

Workorder: 1700925

Prep Expiration: 2017-Aug-07

Client: AMEC Foster Wheeler

Workorder Due: 08-Aug-17 00:00

TAT: 14

Method: **537M PFAS DOD (LOQ as mRL)**

Matrix: **Aqueous**

Prep Batch: B7H0073

Prep Data Entered: 8/10/17 KBF

Date and Initials

Version: 537 (14 Analyte)

Initial Sequence:

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
~~1700925-01~~	☐	~~I001BC43S-170724~~	~~25-Jul-17 08:40~~	~~WR-2 F-5~~	
1700925-02	☐	~~SB01-170724~~	25-Jul-17 08:40	WR-2 F-5	
~~1700925-03~~	☐	~~I001BC50S-170724~~	~~25-Jul-17 08:40~~	~~WR-2 F-5~~	
1700925-04	☑	I001MW52S-170724	25-Jul-17 08:40	WR-2 F-5	**MS/MSD**
1700925-05	☑	I001MW52X-170724	25-Jul-17 08:40	WR-2 F-5	
~~1700925-06~~	☐	~~EB01-170724~~	~~25-Jul-17 08:40~~	~~WR-2 F-5~~	

1mL, 2X Spike

Vista PM: Martha Maier

Vial Box ID: Turrible

Sample Reconciled By: BP 8/10/17

Page 1 of 1

Batch: B7H0073

Matrix: Aqueous

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
1700925-04RE2	0.00122 ✓	NA	NA	1000	10-Aug-17 08:47	BAP	NA	NA	Water	537M PFAS DOD (LOQ as
1700925-05RE2	0.00133 ✓			1000	10-Aug-17 08:47	BAP			Water	537M PFAS DOD (LOQ as
B7H0073-BLK1	0.125 ✓			1000	10-Aug-17 08:47	BAP			NA	QC
B7H0073-BS1	0.125 ✓			1000	10-Aug-17 08:47	BAP	17G2428 ✓	20 ✓		QC
B7H0073-MS1	0.0005 ✓			1000	10-Aug-17 08:47	BAP	17G2428 ✓	20 ✓		QC
B7H0073-MSD1	0.00139 ✓			1000	10-Aug-17 08:47	BAP	17G2428 ✓	20 ✓		QC

KBF 8/10/17

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 537M PFAS DOD (LOO as mRL)

B7H0073

Chemist: BP

Prep Date/Time: 10-Aug-17 08:47

Prepared using: LCMS - SPE Extraction-LCMS

C	VISTA Sample ID	pH Before	pH After	Chlorine (Cl)	Drops HCl Added	Bottle + Sample (g)	Bottle Only (g)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	SPE (NA)	RS CHEM/WIT DATE
☐	B7H0073-BLK1	5	2	0	2	NA	NA	(0.125)	BP HBF 8/10/17	BP 8.10.17	BP HC 8.10.17
☐	B7H0073-BS1	5	2	0	2	↓	↓	↓			
☐	B7H0073-MS1 1700925-04RE2 (A)	7	2	0	2	26.97	26.47	0.00050			
☐	B7H0073-MSD1 1700925-04RE2	7	2	0	2	27.91	26.52	0.00139			
☐	1700925-04RE2	7	2	0	2	27.77	26.55	0.00122			
☐	1700925-05RE2	7	2	0	2	27.79	26.46	0.00133			

(A) ~1mL of sample was diluted to 125 mL with HPLC grade H2O HB 8/10/17

IS Name X2 — 176130 7, 20 L (2)

NS Name X2 — 176242 8, 20 L (VS)

RS Name Y2 — 17H008, 20 L (V3)

SPE Chem: Strata X-AW 33 L 200mg/6mL

Ele SOLV: 0.5% NH4OH in MeOH/MeOH

Final Volume(s) 1mL

Check Out: Chemist/Date: HB 8/10/17

Check In: Chemist/Date: HB 8/10/17 HB 8/10/17

Balance ID: HRMJ-8

pH Adjusted: Chemist/Date: HB 8/10/17

Comments: Assume 1 g = 1 mL

SAMPLE DATA – MODIFIED EPA METHOD 537

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-6.qld

Last Altered: Tuesday, August 08, 2017 13:50:17 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 13:59:07 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_6, Date: 02-Aug-2017, Time: 11:22:55, ID: B7G0121-BLK1 Method Blank 0.125, Description: Method Blank

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7		4.82e3	0.125		2.96				
2	4	PFHxA	313.2 > 268.9		1.42e4	0.125		3.19				
3	5	PFHpA	363 > 318.9		3.47e4	0.125		3.45				
4	6	PFHxS	398.9 > 79.6	3.33e1	3.60e3	0.125		3.56	3.49	0.115	0.400	
5	8	PFOA	413 > 368.7	2.31e3	4.35e4	0.125		3.65	3.62	0.664	4.35	
6	10	PFNA	462.9 > 418.8		3.66e4	0.125		3.83				
7	12	PFOS	499 > 79.9	2.03e1	8.84e3	0.125		3.89	3.86	0.0287		
8	13	PFDA	513 > 468.8		3.49e4	0.125		4.01				
9	15	N-MeFOSAA	570.1 > 419		7.90e3	0.125		4.03				
10	16	N-EtFOSAA	584.2 > 419		8.35e3	0.125		4.10				
11	17	PFUnA	562.9 > 518.9		3.43e4	0.125		4.17				
12	19	PFDoA	612.9 > 318.8		4.10e3	0.125		4.34				

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-6.qld

Last Altered: Tuesday, August 08, 2017 13:50:17 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 13:59:18 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_6, Date: 02-Aug-2017, Time: 11:22:55, ID: B7G0121-BLK1 Method Blank 0.125, Description: Method Blank

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21	PFTrDA	662.9 > 618.9		4.10e3	0.125		4.50				
2	22	PFTeDA	712.9 > 668.8		2.55e4	0.125		4.68				
3	30	13C3-PFBS	302 > 98.8	4.82e3	4.28e4	0.125	0.034	2.96	2.90	0.563	132	132.1
4	31	13C2-PFHxA	315 > 269.8	1.42e4	4.28e4	0.125	0.334	3.19	3.15	1.65	39.6	99.0
5	32	13C4-PFHpA	367.2 > 321.8	3.47e4	4.28e4	0.125	0.414	3.45	3.42	4.05	78.3	78.3
6	33	18O2-PFHxS	403 > 102.6	3.60e3	7.28e3	0.125	0.475	3.56	3.49	6.18	104	104.1
7	35	13C2-PFOA	414.9 > 369.7	4.35e4	3.66e4	0.125	1.298	3.65	3.63	14.9	91.5	91.5
8	36	13C5-PFNA	468.2 > 422.9	3.66e4	3.86e4	0.125	1.094	3.83	3.80	11.8	86.5	86.5
9	38	13C8-PFOS	507 > 79.9	8.84e3	7.29e3	0.125	1.153	3.89	3.85	15.2	105	105.1
10	39	13C2-PFDA	515.1 > 469.9	3.49e4	3.91e4	0.125	1.059	4.01	3.97	11.2	84.3	84.3

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-6.qld

Last Altered: Tuesday, August 08, 2017 13:50:17 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 13:59:37 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_6, Date: 02-Aug-2017, Time: 11:22:55, ID: B7G0121-BLK1 Method Blank 0.125, Description: Method Blank

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	7.90e3	3.85e4	0.125	0.019	4.03	4.01	2.56	1060	81.7
2	42	d5-N-EtFOSAA	589.3 > 419	8.35e3	3.85e4	0.125	0.019	4.12	4.07	2.71	1140	87.9
3	43	13C2-PFUnA	565 > 519.8	3.43e4	3.85e4	0.125	1.172	4.17	4.14	11.1	76.0	76.0
4	44	13C2-PFDoA	615 > 569.7	4.10e3	3.85e4	0.125	0.118	4.34	4.30	1.33	89.7	89.7
5	46	13C2-PFTeDA	714.8 > 669.6	2.55e4	3.85e4	0.125	0.801	4.68	4.65	8.28	82.6	82.6
6	52	13C5-PFHxA	318 > 272.9	4.28e4	4.28e4	0.125	1.000	3.19	3.15	5.00	40.0	100.0
7	53	13C3-PFHxS	401.9 > 79.9	7.28e3	7.28e3	0.125	1.000	3.56	3.49	12.5	100	100.0
8	54	13C8-PFOA	421.3 > 376	3.66e4	3.66e4	0.125	1.000	3.65	3.63	12.5	100	100.0
9	55	13C9-PFNA	472.2 > 426.9	3.86e4	3.86e4	0.125	1.000	3.83	3.80	12.5	100	100.0
10	56	13C4-PFOS	503 > 79.9	7.29e3	7.29e3	0.125	1.000	3.89	3.86	12.5	100	100.0
11	57	13C6-PFDA	519.1 > 473.7	3.91e4	3.91e4	0.125	1.000	4.01	3.98	12.5	100	100.0
12	58	13C7-PFUnA	570.1 > 524.8	3.85e4	3.85e4	0.125	1.000	4.17	4.13	12.5	100	100.0
13	59	Total PFBS	299 > 79.7	0.00e0	4.82e3	0.125		2.96		0.000		
14	60	Total PFHxS	398.9 > 79.6	3.33e1	3.60e3	0.125		3.52		0.115	0.400	
15	61	Total PFOA	413 > 368.7	2.31e3	4.35e4	0.125		3.65		0.664	4.35	
16	62	Total PFOS	499 > 79.9	2.03e1	8.84e3	0.125		3.89		0.000		
17	63	Total N-Me-FOSAA	570.1 > 419	0.00e0	7.90e3	0.125		4.03		0.000		
18	64	Total N-EtFOSAA	584.2 > 419	0.00e0	8.35e3	0.125		4.17		0.000		

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-6.qld

Last Altered: Tuesday, August 08, 2017 13:50:17 Pacific Daylight Time
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Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_6, Date: 02-Aug-2017, Time: 11:22:55, ID: B7G0121-BLK1 Method Blank 0.125, Description: Method Blank

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.49	33.259	3601.977	0.115	bb	0.4

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7	3.62	2312.602	43512.035	0.664	bb	4.3

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.86	20.276	8835.542	0.029	dbl	

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15	N-MeFOSAA	570.1 > 419			7903.898		MM-I	

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16	N-EtFOSAA	584.2 > 419			8345.363		MM-	

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-6.qld

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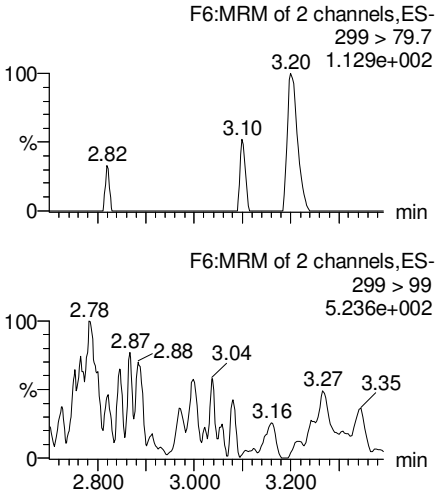
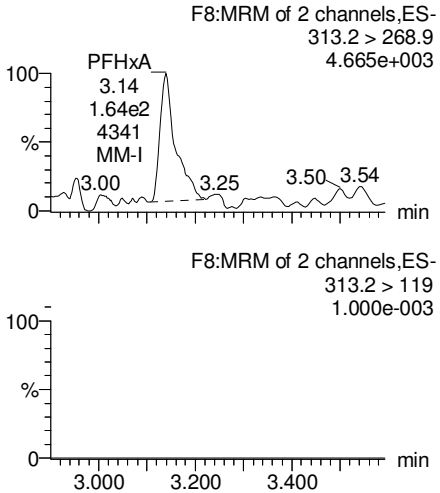
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_6, Date: 02-Aug-2017, Time: 11:22:55, ID: B7G0121-BLK1 Method Blank 0.125, Description: Method Blank

Total PFBS



PFHxA



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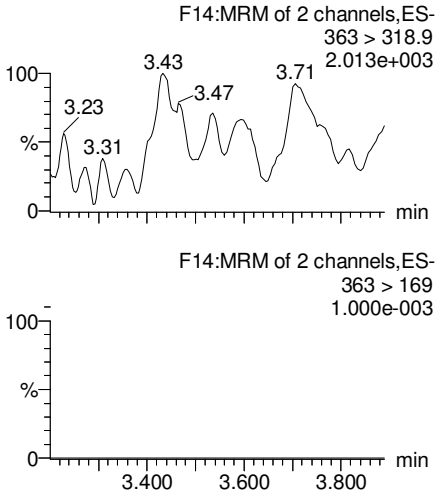

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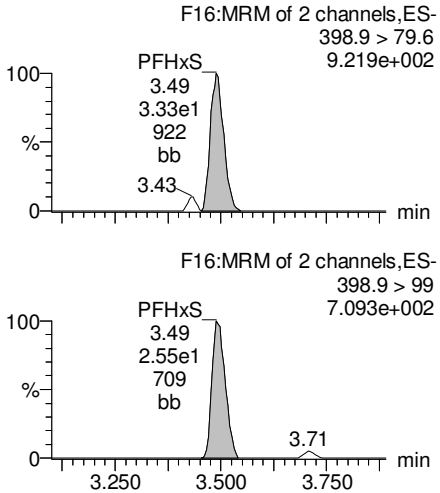

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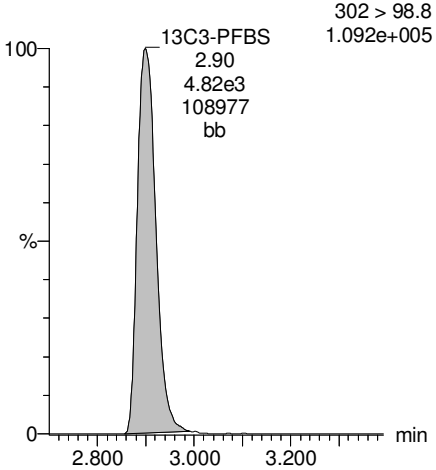

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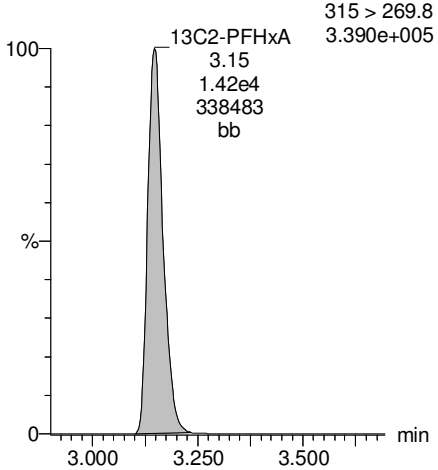

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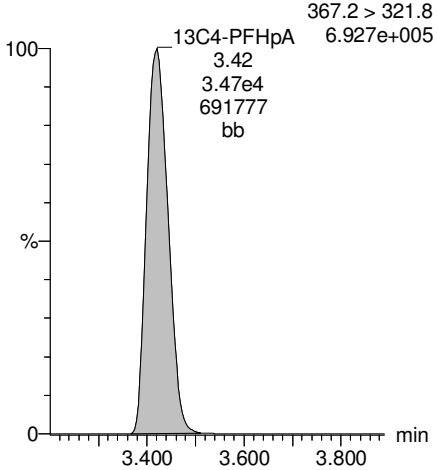

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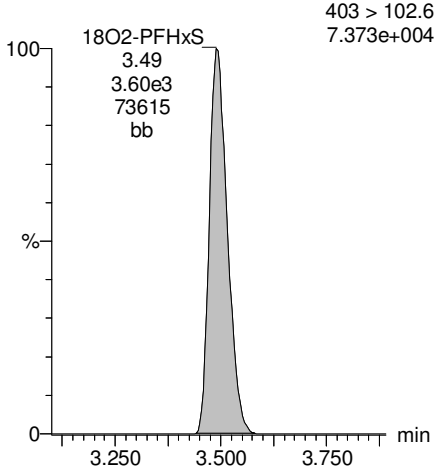

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Vista Analytical Laboratory

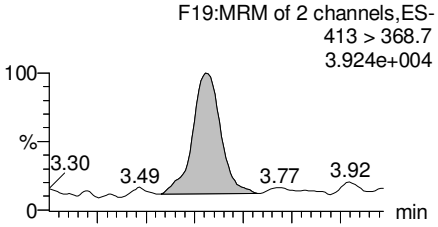
Dataset: U:\Q4.PRO\results\170802M1\170802M1-6.qld

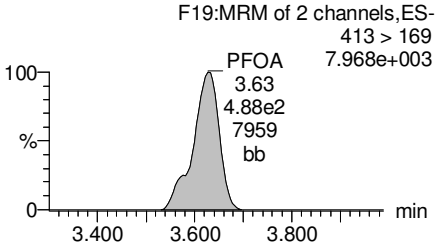
Last Altered: Tuesday, August 08, 2017 13:50:17 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 13:59:37 Pacific Daylight Time

Reviewed: CT 08/09/2017

Name: 170802M1_6, Date: 02-Aug-2017, Time: 11:22:55, ID: B7G0121-BLK1 Method Blank 0.125, Description: Method Blank

Total PFOA





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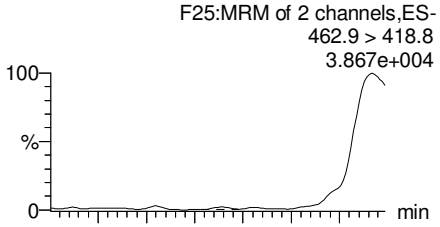
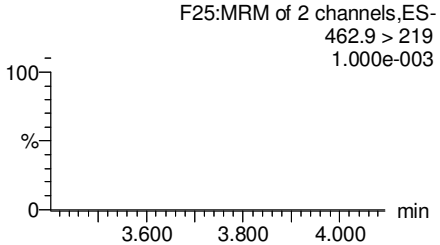
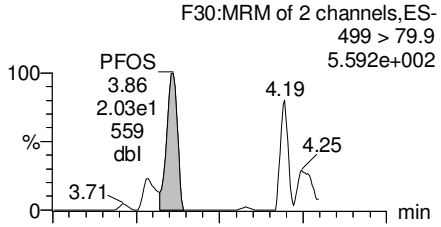
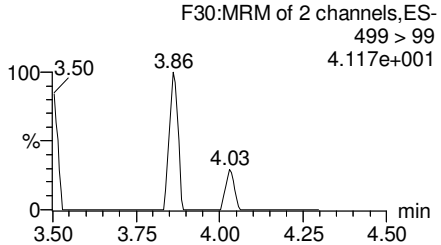




Total PFOS





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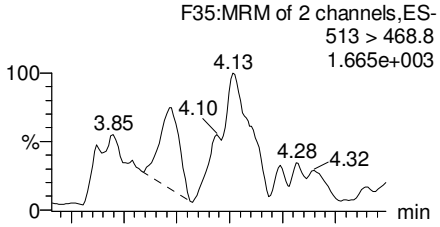

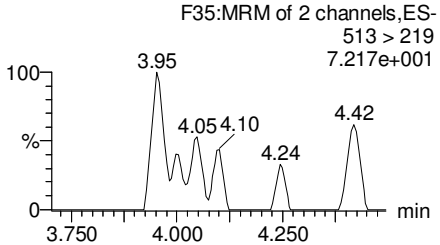

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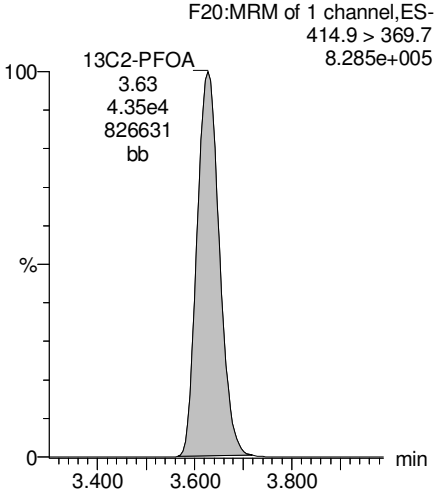

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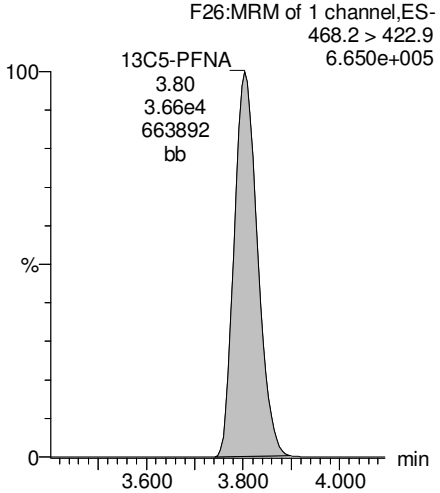

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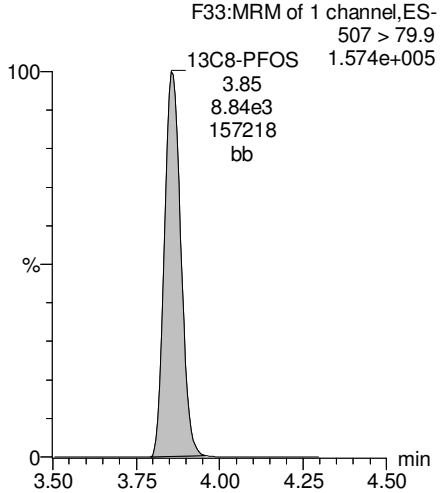

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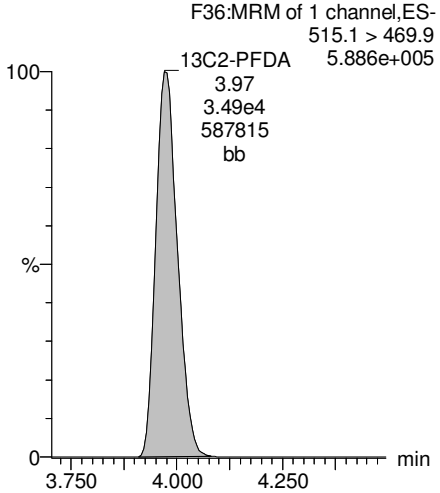

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-6.qld

Last Altered: Tuesday, August 08, 2017 13:50:17 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 13:59:37 Pacific Daylight Time

Reviewed: CT 08/09/2017

Name: 170802M1_6, Date: 02-Aug-2017, Time: 11:22:55, ID: B7G0121-BLK1 Method Blank 0.125, Description: Method Blank

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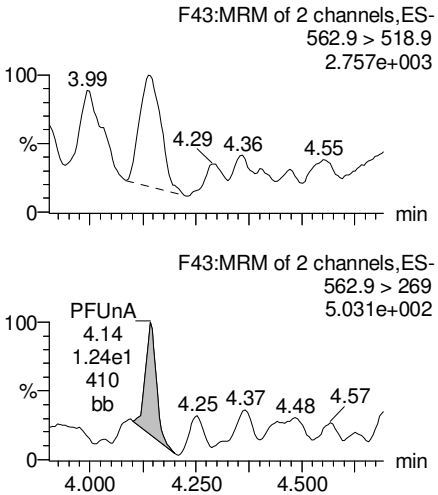

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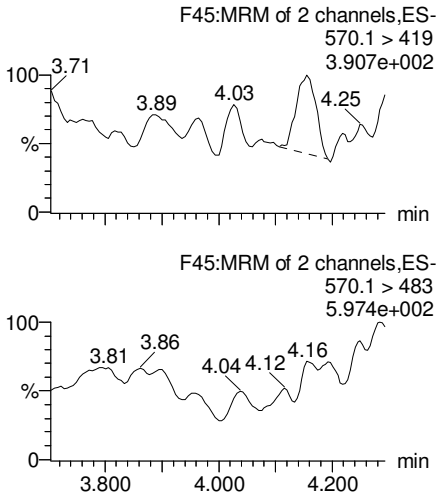

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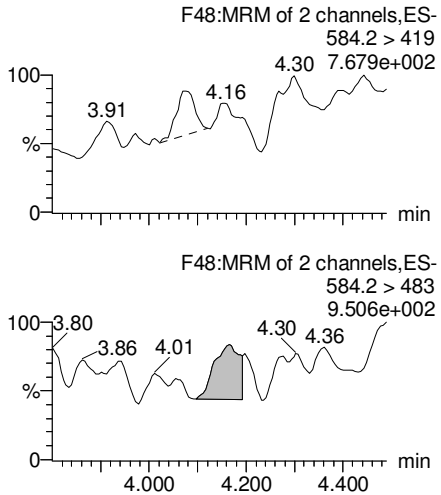

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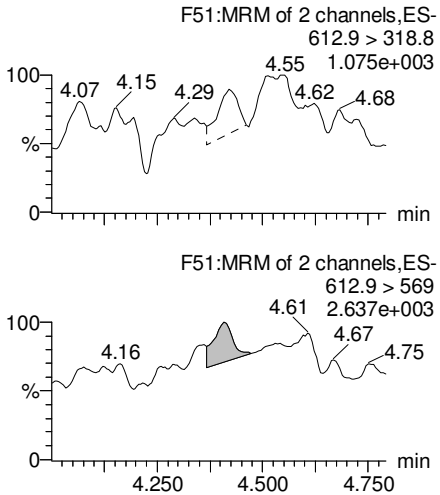

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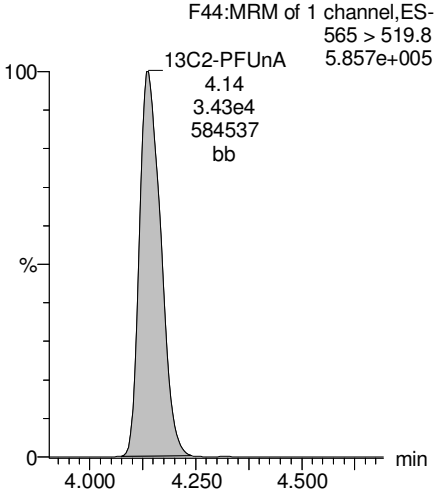

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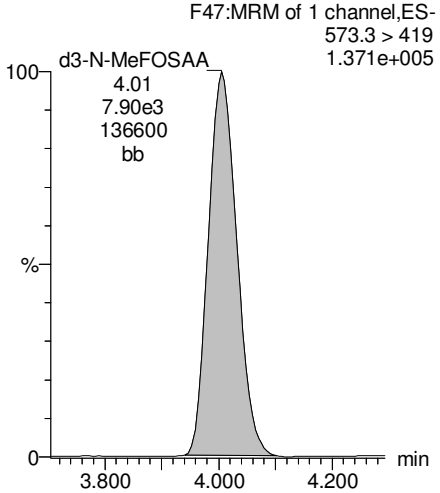

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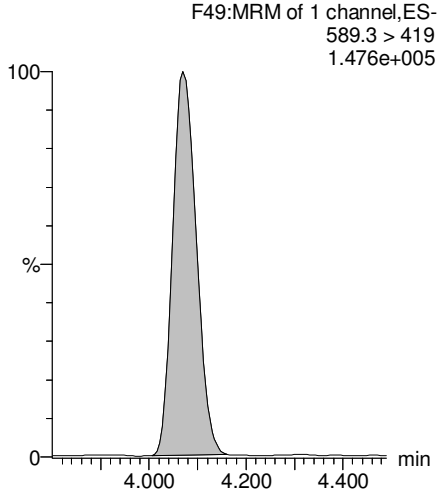

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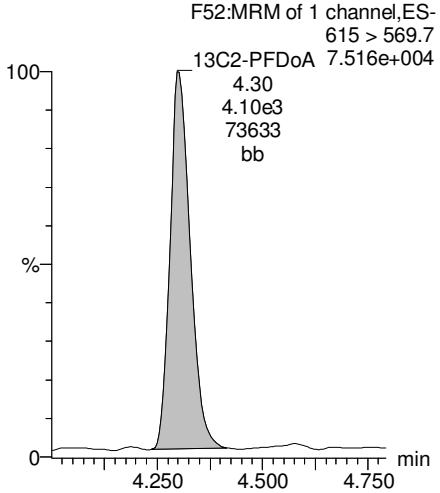

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-6.qld

Last Altered: Tuesday, August 08, 2017 13:50:17 Pacific Daylight Time
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Reviewed: CT 08/09/2017

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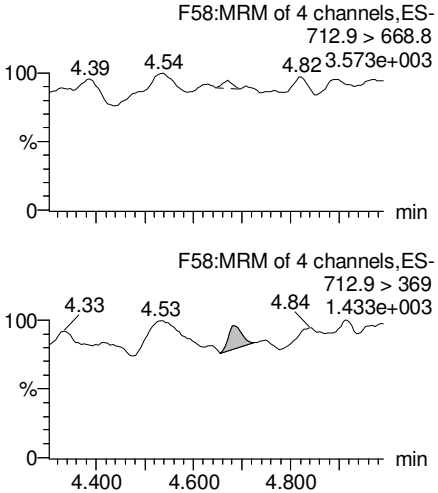

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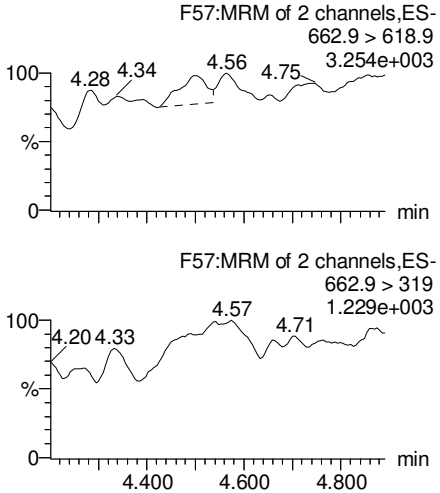

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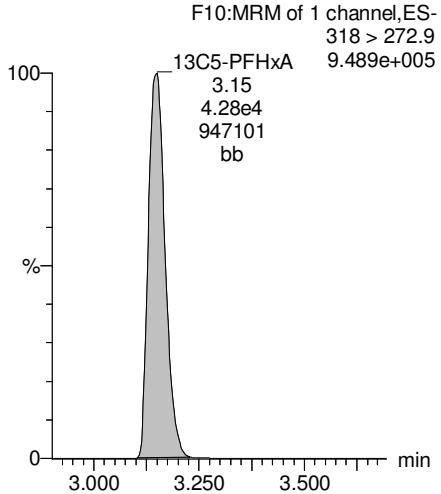

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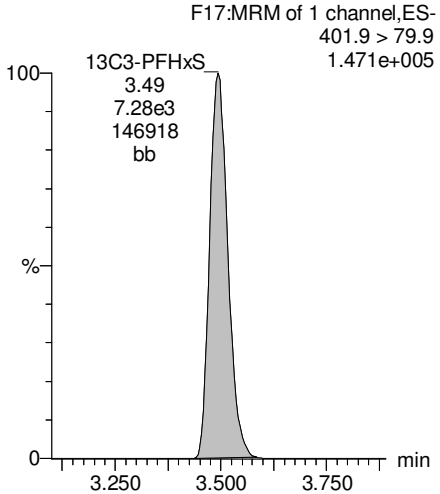

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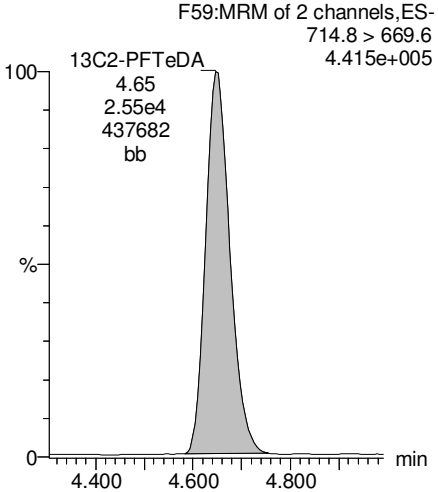
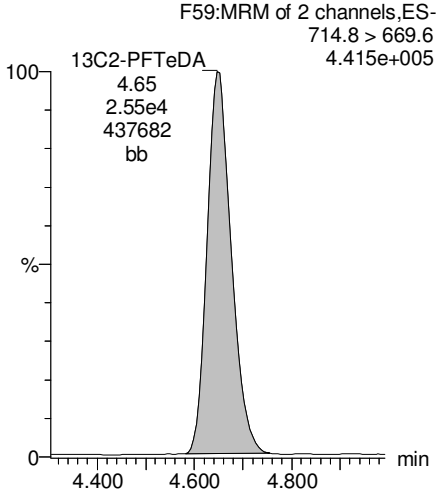
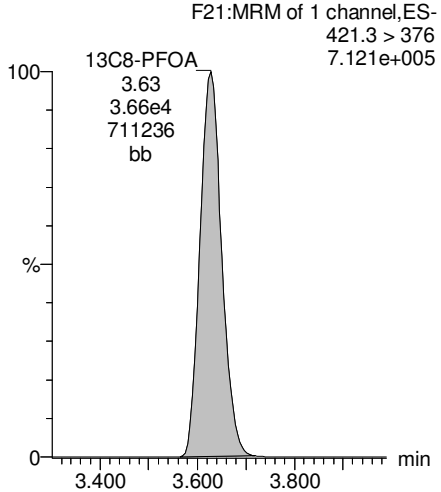


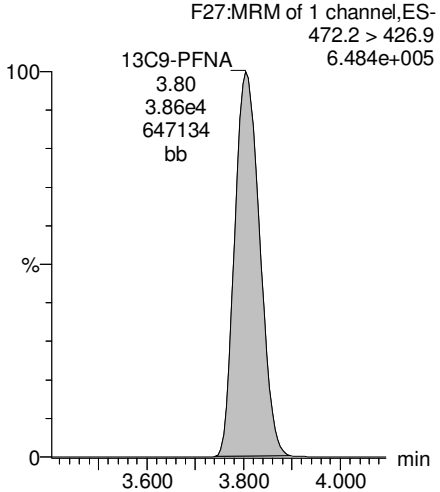
13C2-PFTeDA



13C8-PFOA



13C9-PFNA



GM 8/8/17

Vista Analytical Laboratory

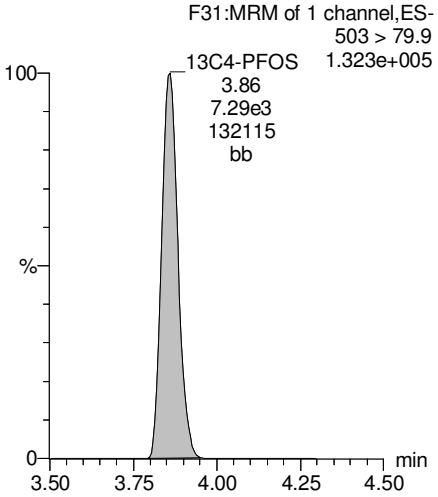
Dataset: U:\Q4.PRO\results\170802M1\170802M1-6.qld

Last Altered: Tuesday, August 08, 2017 13:50:17 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 13:59:37 Pacific Daylight Time

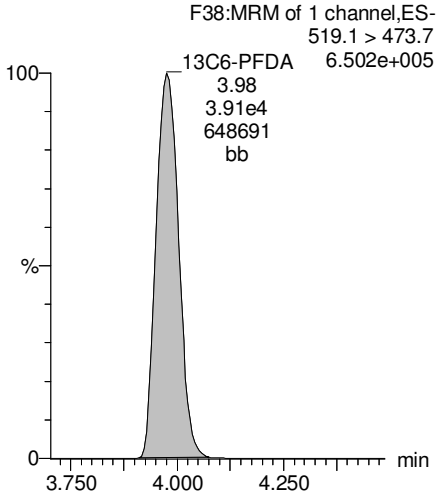
Reviewed: CT 08/09/2017

Name: 170802M1_6, Date: 02-Aug-2017, Time: 11:22:55, ID: B7G0121-BLK1 Method Blank 0.125, Description: Method Blank

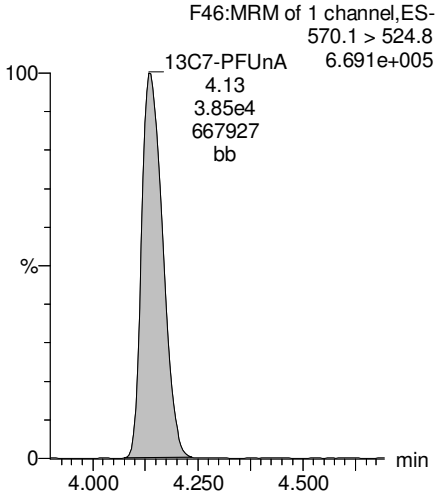
13C4-PFOS



13C6-PFDA



13C7-PFUnA



GM 8/8/17

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-4.qld

Last Altered: Tuesday, August 08, 2017 11:58:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 12:15:05 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_4, Date: 02-Aug-2017, Time: 11:01:30, ID: B7G0121-BS1 OPR 0.125, Description: OPR

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7	6.30e3	4.51e3	0.125		2.96	2.90	17.5	73.8	92.3
2	4	PFHxA	313.2 > 268.9	3.75e4	1.37e4	0.125		3.19	3.15	13.7	78.0	97.5
3	5	PFHpA	363 > 318.9	2.76e4	3.16e4	0.125		3.45	3.42	10.9	72.5	90.6
4	6	PFHxS	398.9 > 79.6	4.41e3	3.35e3	0.125		3.56	3.49	16.5	78.2	97.7
5	8	PFOA	413 > 368.7	3.50e4	4.01e4	0.125		3.65	3.63	10.9	90.2	112.8
6	10	PFNA	462.9 > 418.8	3.00e4	3.39e4	0.125		3.83	3.81	11.1	80.9	101.2
7	12	PFOS	499 > 79.9	6.31e3	8.00e3	0.125		3.89	3.86	9.87	77.1	96.4
8	13	PFDA	513 > 468.8	3.07e4	3.15e4	0.125		4.01	3.97	12.2	80.2	100.3
9	15	N-MeFOSAA	570.1 > 419	7.00e3	6.80e3	0.125		4.03	4.01	167	75.0	93.8
10	16	N-EtFOSAA	584.2 > 419	5.97e3	6.36e3	0.125		4.10	4.08	153	79.2	99.0
11	17	PFUnA	562.9 > 518.9	2.09e4	3.38e4	0.125		4.17	4.14	7.74	80.8	101.0
12	19	PFDoA	612.9 > 318.8	2.29e3	3.56e3	0.125		4.34	4.30	8.04	68.3	85.4

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-4.qld

Last Altered: Tuesday, August 08, 2017 11:58:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 12:15:19 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_4, Date: 02-Aug-2017, Time: 11:01:30, ID: B7G0121-BS1 OPR 0.125, Description: OPR

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21	PFTrDA	662.9 > 618.9	2.73e4	3.56e3	0.125		4.50	4.47	95.9	73.0	91.3
2	22	PFTeDA	712.9 > 668.8	1.86e4	2.21e4	0.125		4.68	4.65	10.5	77.6	97.0
3	30	13C3-PFBS	302 > 98.8	4.51e3	3.98e4	0.125	0.034	2.96	2.90	0.568	133	133.1
4	31	13C2-PFHxA	315 > 269.8	1.37e4	3.98e4	0.125	0.334	3.19	3.15	1.72	41.2	103.1
5	32	13C4-PFHpA	367.2 > 321.8	3.16e4	3.98e4	0.125	0.414	3.45	3.42	3.98	76.8	76.8
6	33	18O2-PFHxS	403 > 102.6	3.35e3	6.48e3	0.125	0.475	3.56	3.49	6.46	109	108.7
7	35	13C2-PFOA	414.9 > 369.7	4.01e4	3.07e4	0.125	1.298	3.65	3.63	16.3	101	100.7
8	36	13C5-PFNA	468.2 > 422.9	3.39e4	3.34e4	0.125	1.094	3.83	3.80	12.7	93.0	93.0
9	38	13C8-PFOS	507 > 79.9	8.00e3	6.42e3	0.125	1.153	3.89	3.86	15.6	108	108.0
10	39	13C2-PFDA	515.1 > 469.9	3.15e4	3.68e4	0.125	1.059	4.01	3.97	10.7	81.0	81.0

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-4.qld

Last Altered: Tuesday, August 08, 2017 11:58:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 12:16:21 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_4, Date: 02-Aug-2017, Time: 11:01:30, ID: B7G0121-BS1 OPR 0.125, Description: OPR

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	6.80e3	3.52e4	0.125	0.019	4.03	4.01	2.42	1000	77.0
2	42	d5-N-EtFOSAA	589.3 > 419	6.36e3	3.52e4	0.125	0.019	4.12	4.07	2.26	956	73.5
3	43	13C2-PFUnA	565 > 519.8	3.38e4	3.52e4	0.125	1.172	4.17	4.14	12.0	81.9	81.9
4	44	13C2-PFDoA	615 > 569.7	3.56e3	3.52e4	0.125	0.118	4.34	4.30	1.27	85.6	85.6
5	46	13C2-PFTeDA	714.8 > 669.6	2.21e4	3.52e4	0.125	0.801	4.68	4.65	7.87	78.6	78.6
6	52	13C5-PFHxA	318 > 272.9	3.98e4	3.98e4	0.125	1.000	3.19	3.15	5.00	40.0	100.0
7	53	13C3-PFHxS	401.9 > 79.9	6.48e3	6.48e3	0.125	1.000	3.56	3.50	12.5	100	100.0
8	54	13C8-PFOA	421.3 > 376	3.07e4	3.07e4	0.125	1.000	3.65	3.63	12.5	100	100.0
9	55	13C9-PFNA	472.2 > 426.9	3.34e4	3.34e4	0.125	1.000	3.83	3.81	12.5	100	100.0
10	56	13C4-PFOS	503 > 79.9	6.42e3	6.42e3	0.125	1.000	3.89	3.86	12.5	100	100.0
11	57	13C6-PFDA	519.1 > 473.7	3.68e4	3.68e4	0.125	1.000	4.01	3.98	12.5	100	100.0
12	58	13C7-PFUnA	570.1 > 524.8	3.52e4	3.52e4	0.125	1.000	4.17	4.14	12.5	100	100.0
13	59	Total PFBS	299 > 79.7	6.30e3	4.51e3	0.125		2.96		17.5	73.8	
14	60	Total PFHxS	398.9 > 79.6	4.41e3	3.35e3	0.125		3.52		16.5	78.2	
15	61	Total PFOA	413 > 368.7	3.50e4	4.01e4	0.125		3.65		10.9	90.2	
16	62	Total PFOS	499 > 79.9	6.31e3	8.00e3	0.125		3.89		9.87	77.1	
17	63	Total N-Me-FOSAA	570.1 > 419	7.00e3	6.80e3	0.125		4.03		167	75.0	
18	64	Total N-EtFOSAA	584.2 > 419	5.97e3	6.36e3	0.125		4.17		153	79.2	

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Dataset: U:\Q4.PRO\results\170802M1\170802M1-4.qld

Last Altered: Tuesday, August 08, 2017 11:58:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 12:16:21 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_4, Date: 02-Aug-2017, Time: 11:01:30, ID: B7G0121-BS1 OPR 0.125, Description: OPR

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3	PFBS	299 > 79.7	2.90	6303.591	4514.603	17.453	bb	73.8

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.49	4406.093	3348.089	16.450	MM	78.2

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7	3.63	35023.984	40144.082	10.906	bb	90.2

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.86	6313.102	7997.878	9.867	bb	77.1

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15	N-MeFOSAA	570.1 > 419	4.01	7002.594	6801.601	167.302	bb	75.0

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16	N-EtFOSAA	584.2 > 419	4.08	5971.370	6361.796	152.527	bb	79.2

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-4.qld

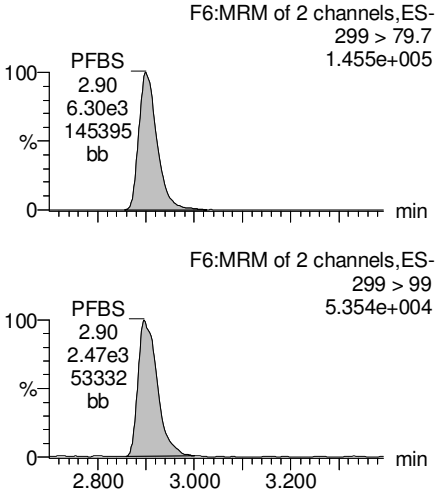
Last Altered: Tuesday, August 08, 2017 11:58:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 12:16:21 Pacific Daylight Time

Reviewed: CT 08/09/2017

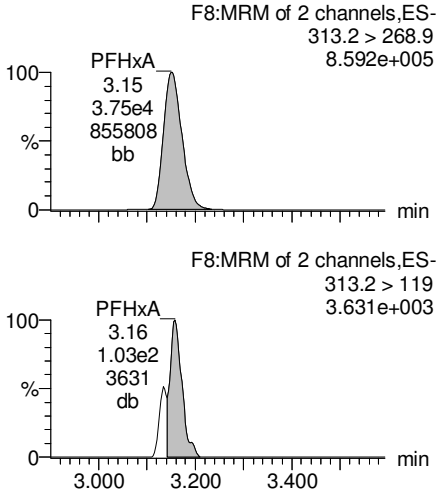
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_4, Date: 02-Aug-2017, Time: 11:01:30, ID: B7G0121-BS1 OPR 0.125, Description: OPR

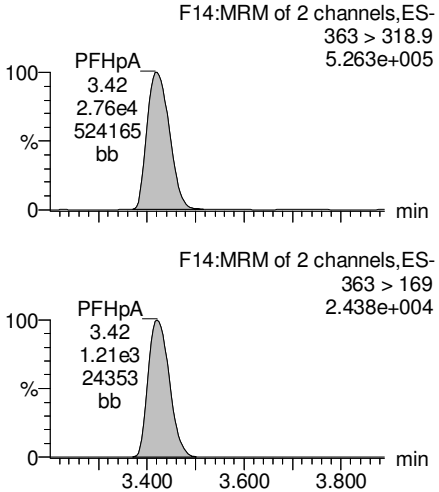
Total PFBS



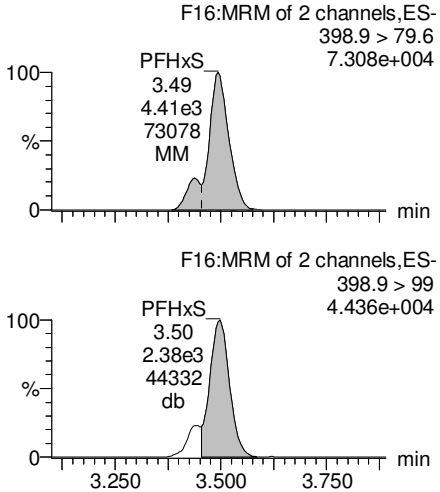
PFHxA



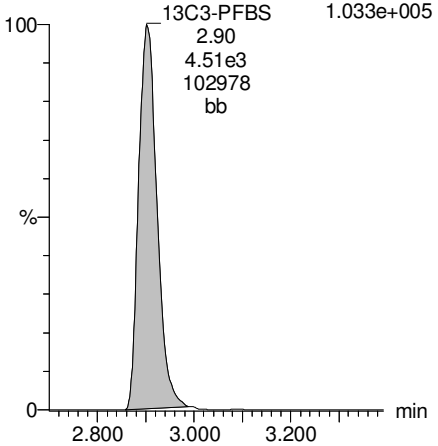
PFHpA



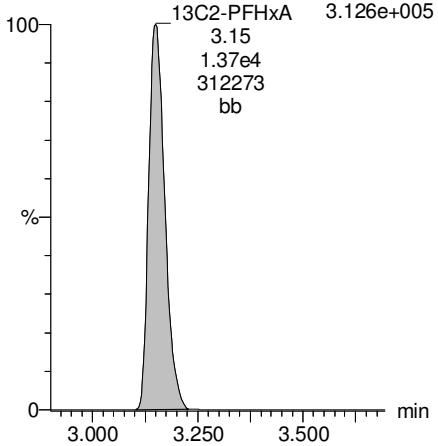
Total PFHxS



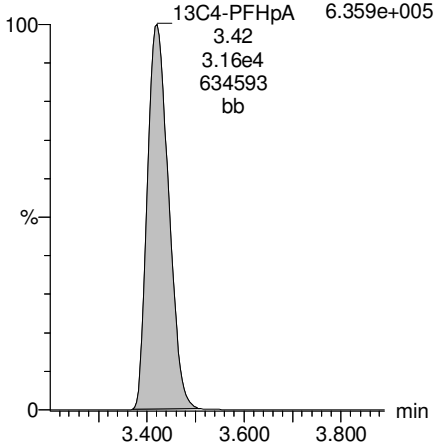
13C3-PFBS



13C2-PFHxA



13C4-PFHpA



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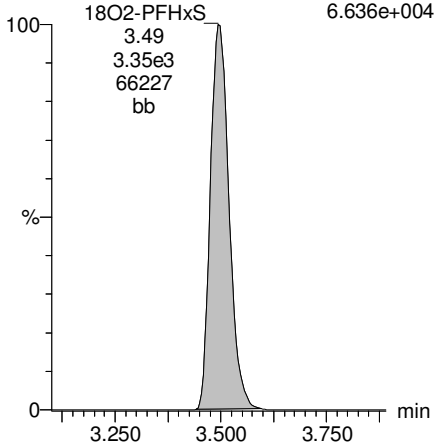

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Vista Analytical Laboratory

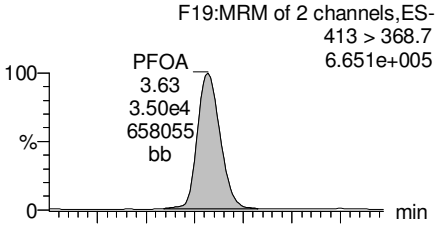
Dataset: U:\Q4.PRO\results\170802M1\170802M1-4.qld

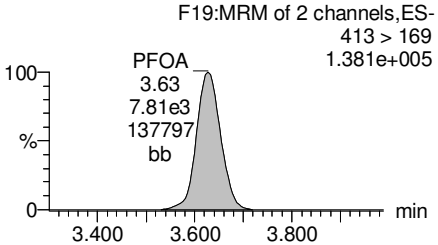
Last Altered: Tuesday, August 08, 2017 11:58:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 12:16:21 Pacific Daylight Time

Reviewed: CT 08/09/2017

Name: 170802M1_4, Date: 02-Aug-2017, Time: 11:01:30, ID: B7G0121-BS1 OPR 0.125, Description: OPR

Total PFOA





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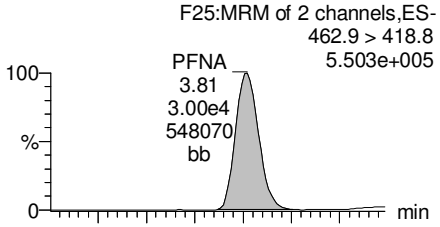
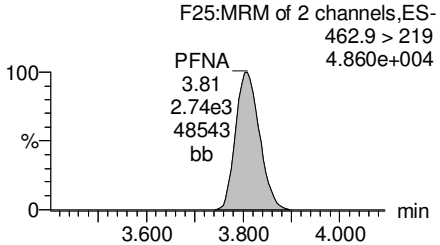
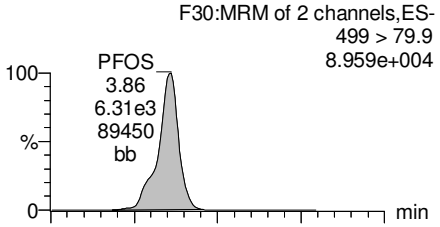
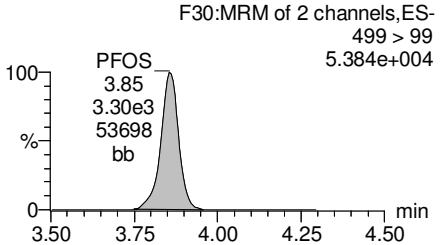




Total PFOS





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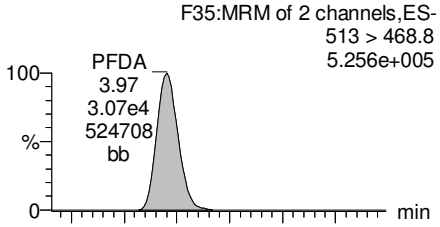
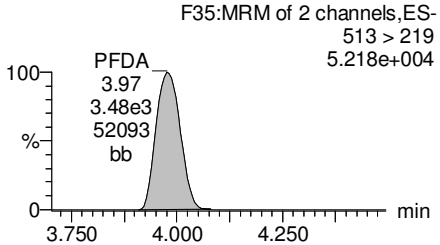
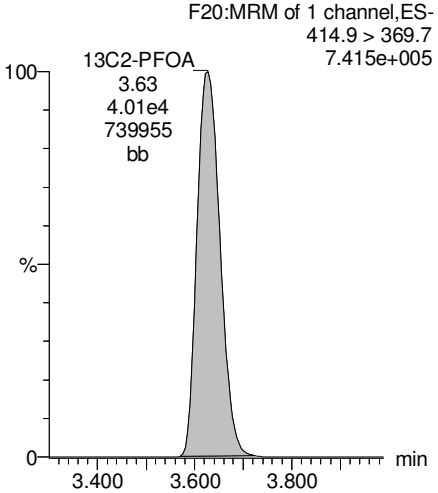




13C2-PFOA



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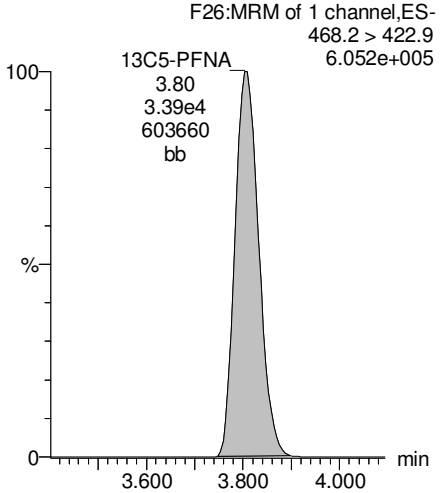
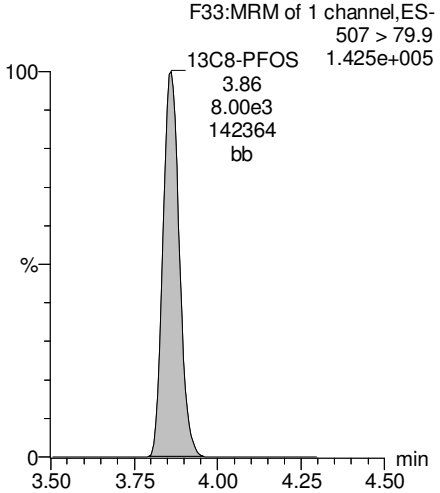


13C8-PFOS



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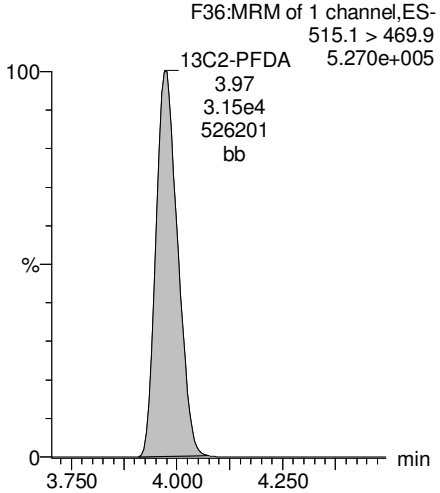

GM 8/8/17

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-4.qld

Last Altered: Tuesday, August 08, 2017 11:58:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 12:16:21 Pacific Daylight Time

Reviewed: CT 08/09/2017

Name: 170802M1_4, Date: 02-Aug-2017, Time: 11:01:30, ID: B7G0121-BS1 OPR 0.125, Description: OPR

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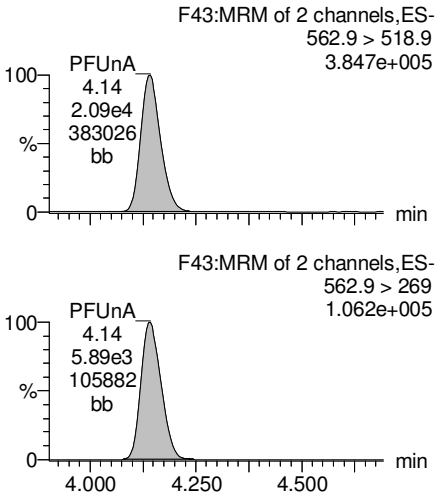
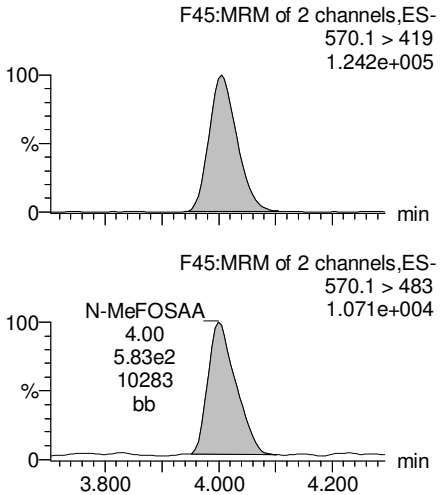


N-MeFOSAA



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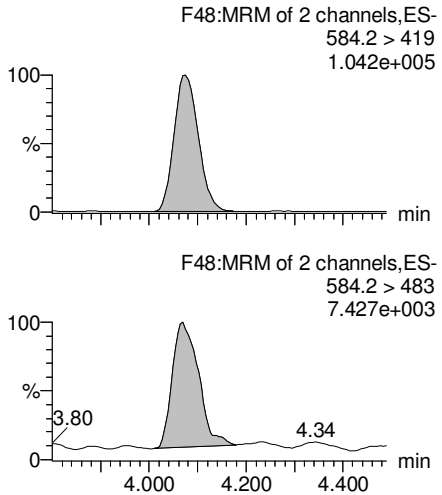
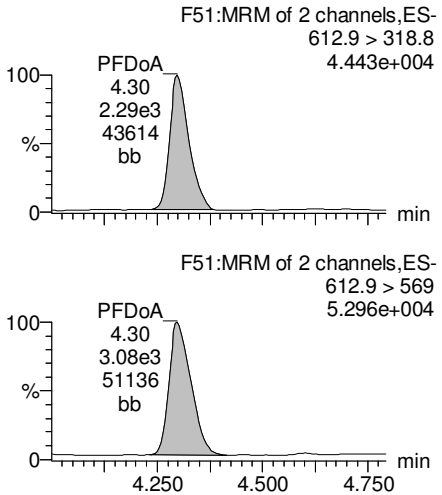
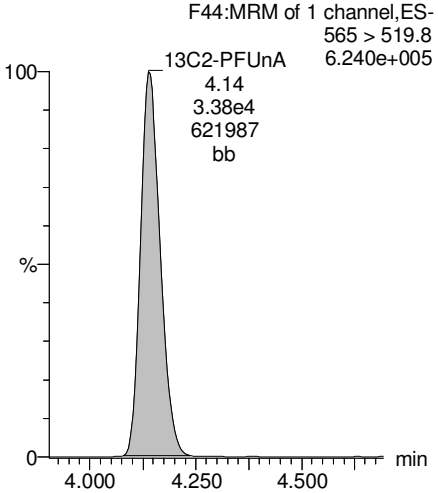


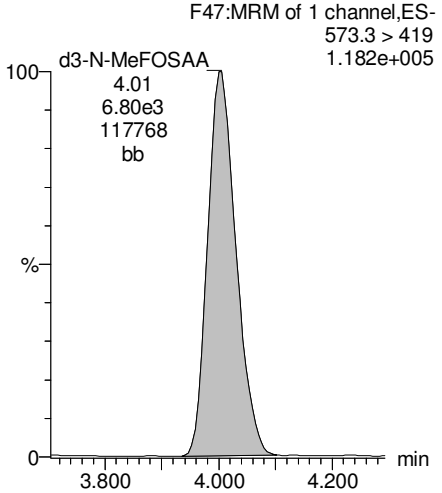
PFDoA



13C2-PFUnA



d3-N-MeFOSAA



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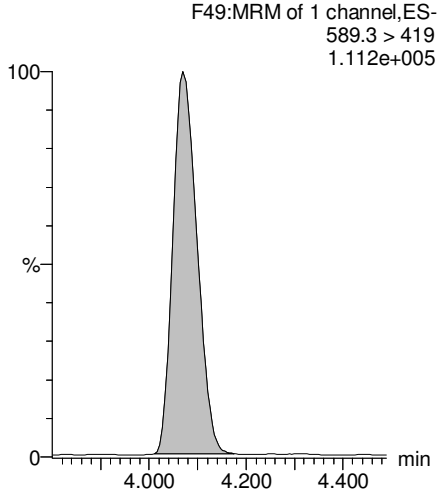

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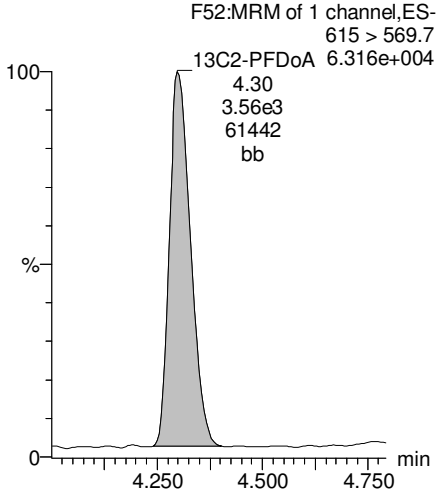

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Vista Analytical Laboratory

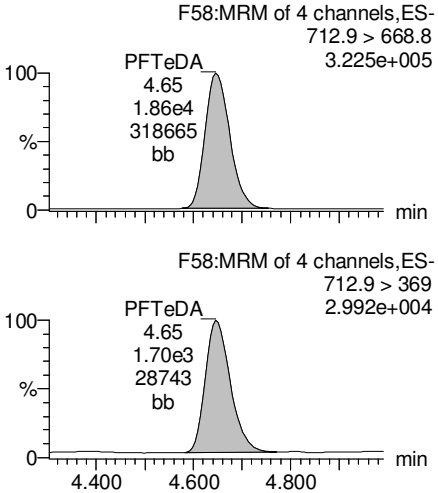
Dataset: U:\Q4.PRO\results\170802M1\170802M1-4.qld

Last Altered: Tuesday, August 08, 2017 11:58:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 12:16:21 Pacific Daylight Time

Reviewed: CT 08/09/2017

Name: 170802M1_4, Date: 02-Aug-2017, Time: 11:01:30, ID: B7G0121-BS1 OPR 0.125, Description: OPR

PFTeDA



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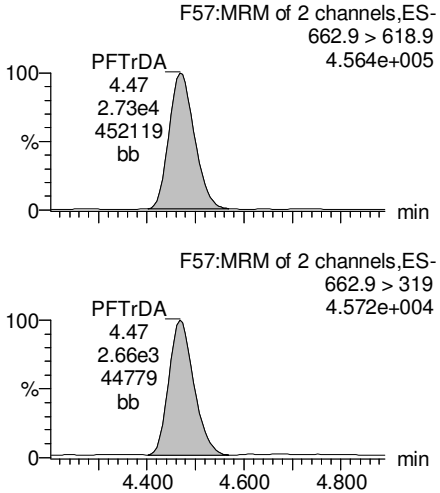
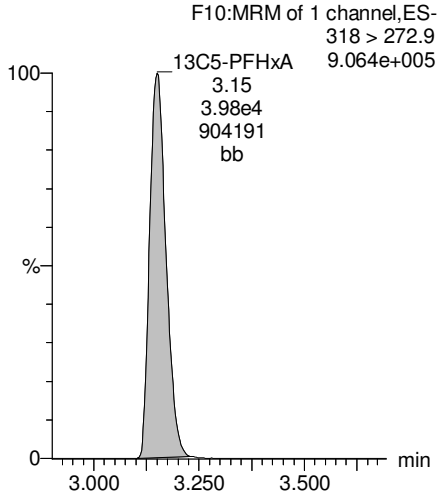
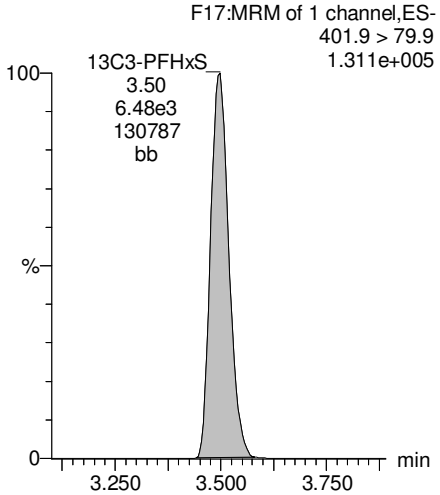


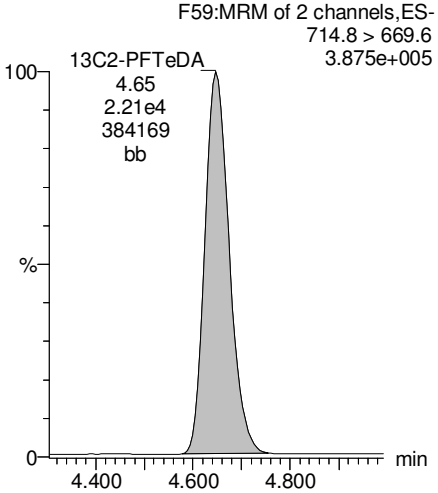
13C5-PFHxA



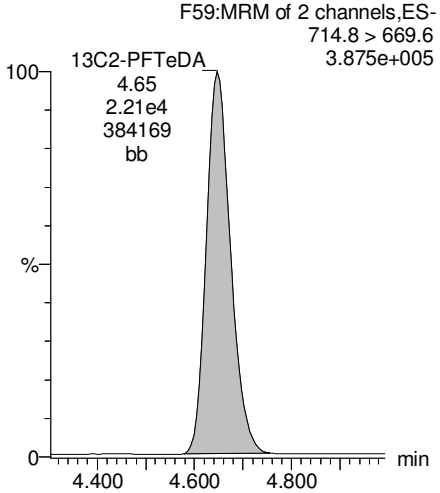
13C3-PFHxS



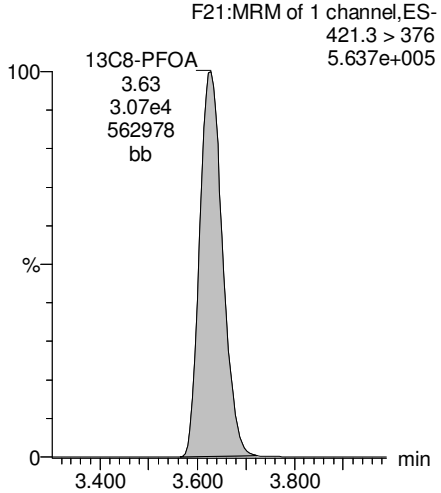
13C2-PFTeDA



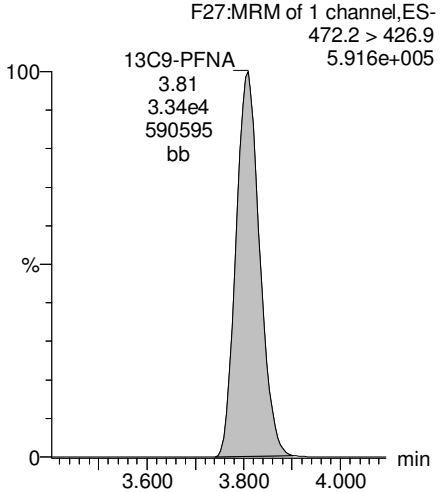
13C2-PFTeDA



13C8-PFOA



13C9-PFNA



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Vista Analytical Laboratory

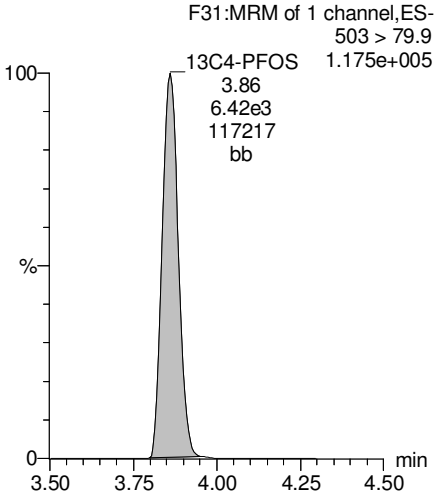
Dataset: U:\Q4.PRO\results\170802M1\170802M1-4.qld

Last Altered: Tuesday, August 08, 2017 11:58:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 12:16:21 Pacific Daylight Time

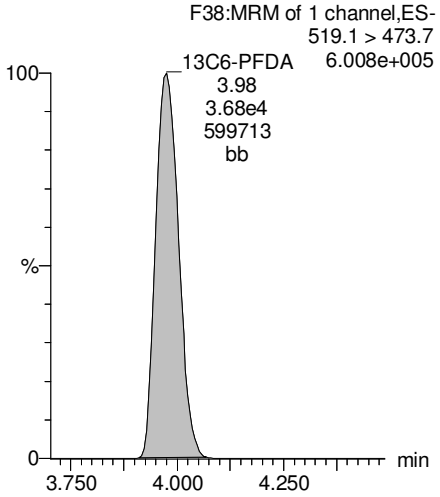
Reviewed: CT 08/09/2017

Name: 170802M1_4, Date: 02-Aug-2017, Time: 11:01:30, ID: B7G0121-BS1 OPR 0.125, Description: OPR

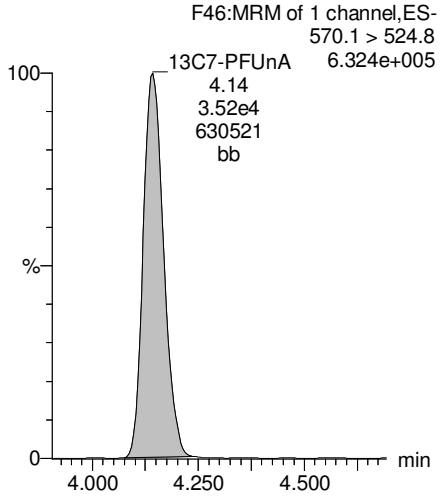
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-85.qld

Last Altered: Tuesday, August 08, 2017 14:50:26 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:51:06 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_85, Date: 04-Aug-2017, Time: 07:01:39, ID: 1700925-01 I001BC43S-170724 0.12112, Description: I001BC43S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	3	PFBS	299 > 79.7	4.63e3	4.05e3	0.121		2.96	2.94	14.3	62.4		
2	4	PFHxA	313.2 > 268.9	6.77e4	9.63e3	0.121		3.19	3.19	35.1	208		
3	5	PFHpA	363 > 318.9	1.15e4	2.41e4	0.121		3.45	3.45	5.98	40.8		
4	6	PFHxS	398.9 > 79.6	2.49e4	3.03e3	0.121		3.56	3.53	103	505		
5	8	PFOA	413 > 368.7	8.60e4	3.21e4	0.121		3.65	3.66	33.5	288		See RX
6	10	PFNA	462.9 > 418.8	3.13e2	2.78e4	0.121		3.83	3.84	0.140	0.508		
7	12	PFOS	499 > 79.9	1.79e3	6.81e3	0.121		3.89	3.83	3.28	26.3		
8	13	PFDA	513 > 468.8		2.57e4	0.121		4.01					
9	15	N-MeFOSAA	570.1 > 419		5.86e3	0.121		4.03					
10	16	N-EtFOSAA	584.2 > 419		5.76e3	0.121		4.10					
11	17	PFUnA	562.9 > 518.9		2.94e4	0.121		4.17					
12	19	PFDoA	612.9 > 318.8		3.22e3	0.121		4.34					

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-85.qld

Last Altered: Tuesday, August 08, 2017 14:50:26 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:51:21 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_85, Date: 04-Aug-2017, Time: 07:01:39, ID: 1700925-01 I001BC43S-170724 0.12112, Description: I001BC43S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	21	PFTrDA	662.9 > 618.9		3.22e3	0.121		4.50					
2	22	PFTeDA	712.9 > 668.8		2.06e4	0.121		4.68					
3	30	13C3-PFBS	302 > 98.8	4.05e3	2.80e4	0.121	0.034	2.96	2.94	0.724	175	169.7	H
4	31	13C2-PFHxA	315 > 269.8	9.63e3	2.80e4	0.121	0.334	3.19	3.18	1.72	42.6	103.1	
5	32	13C4-PFHpA	367.2 > 321.8	2.41e4	2.80e4	0.121	0.414	3.45	3.45	4.31	86.0	83.3	
6	33	18O2-PFHxS	403 > 102.6	3.03e3	5.70e3	0.121	0.475	3.56	3.52	6.64	115	111.7	
7	35	13C2-PFOA	414.9 > 369.7	3.21e4	2.51e4	0.121	1.298	3.65	3.66	16.0	102	98.6	
8	36	13C5-PFNA	468.2 > 422.9	2.78e4	2.85e4	0.121	1.094	3.83	3.84	12.2	92.2	89.3	
9	38	13C8-PFOS	507 > 79.9	6.81e3	5.58e3	0.121	1.153	3.89	3.89	15.3	109	105.8	
10	39	13C2-PFDA	515.1 > 469.9	2.57e4	3.09e4	0.121	1.059	4.01	4.01	10.4	81.0	78.5	

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-85.qld

Last Altered: Tuesday, August 08, 2017 14:50:26 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:51:40 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_85, Date: 04-Aug-2017, Time: 07:01:39, ID: 1700925-01 I001BC43S-170724 0.12112, Description: I001BC43S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	5.86e3	2.74e4	0.121	0.019	4.03	4.04	2.67	1140	85.0
2	42	d5-N-EtFOSAA	589.3 > 419	5.76e3	2.74e4	0.121	0.019	4.12	4.10	2.62	1140	85.3
3	43	13C2-PFUnA	565 > 519.8	2.94e4	2.74e4	0.121	1.172	4.17	4.18	13.4	94.3	91.4
4	44	13C2-PFDoA	615 > 569.7	3.22e3	2.74e4	0.121	0.118	4.34	4.34	1.47	102	99.0
5	46	13C2-PFTeDA	714.8 > 669.6	2.06e4	2.74e4	0.121	0.801	4.68	4.69	9.38	96.6	93.6
6	52	13C5-PFHxA	318 > 272.9	2.80e4	2.80e4	0.121	1.000	3.19	3.19	5.00	41.3	100.0
7	53	13C3-PFHxS	401.9 > 79.9	5.70e3	5.70e3	0.121	1.000	3.56	3.52	12.5	103	100.0
8	54	13C8-PFOA	421.3 > 376	2.51e4	2.51e4	0.121	1.000	3.65	3.66	12.5	103	100.0
9	55	13C9-PFNA	472.2 > 426.9	2.85e4	2.85e4	0.121	1.000	3.83	3.84	12.5	103	100.0
10	56	13C4-PFOS	503 > 79.9	5.58e3	5.58e3	0.121	1.000	3.89	3.89	12.5	103	100.0
11	57	13C6-PFDA	519.1 > 473.7	3.09e4	3.09e4	0.121	1.000	4.01	4.00	12.5	103	100.0
12	58	13C7-PFUnA	570.1 > 524.8	2.74e4	2.74e4	0.121	1.000	4.17	4.17	12.5	103	100.0
13	59	Total PFBS	299 > 79.7	4.63e3	4.05e3	0.121		2.96		14.3	62.4	
14	60	Total PFHxS	398.9 > 79.6	2.49e4	3.03e3	0.121		3.52		103	505	
15	61	Total PFOA	413 > 368.7	1.07e5	3.21e4	0.121		3.65		41.6	357	
16	62	Total PFOS	499 > 79.9	1.79e3	6.81e3	0.121		3.89		3.28	26.3	
17	63	Total N-Me-FOSAA	570.1 > 419	0.00e0	5.86e3	0.121		4.03		0.000		
18	64	Total N-EtFOSAA	584.2 > 419	0.00e0	5.76e3	0.121		4.17		0.000		

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-85.qld

Last Altered: Tuesday, August 08, 2017 14:50:26 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:51:40 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_85, Date: 04-Aug-2017, Time: 07:01:39, ID: 1700925-01 I001BC43S-170724 0.12112, Description: I001BC43S-170724

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3	PFBS	299 > 79.7	2.94	4632.484	4047.298	14.307	bb	62.4

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.53	24888.740	3028.456	102.729	MM	504.5

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7	3.66	85984.281	32106.764	33.476	db	288.5
2	61	Total PFOA	413 > 368.7	3.60	20778.715	32106.764	8.090	bd	68.8

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.83	1788.355	6806.425	3.284	bb	26.3

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15	N-MeFOSAA	570.1 > 419			5856.771		MM-I	

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16	N-EtFOSAA	584.2 > 419			5763.533		MM-	

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-85.qld

Last Altered: Tuesday, August 08, 2017 14:50:26 Pacific Daylight Time
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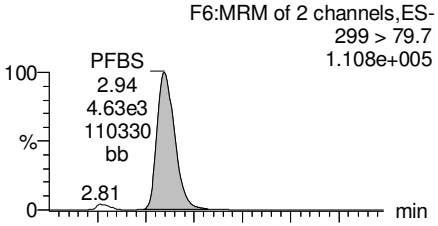
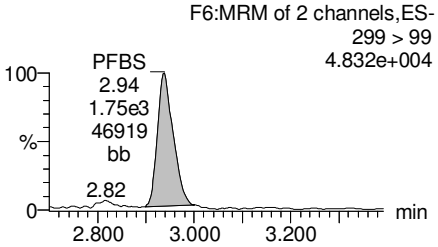
Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_85, Date: 04-Aug-2017, Time: 07:01:39, ID: 1700925-01 I001BC43S-170724 0.12112, Description: I001BC43S-170724

Total PFBS





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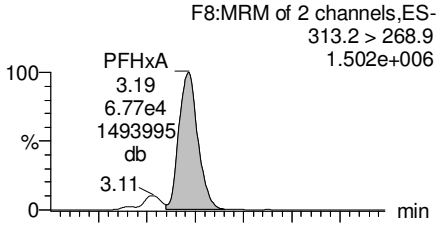

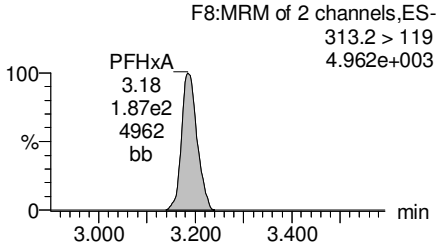

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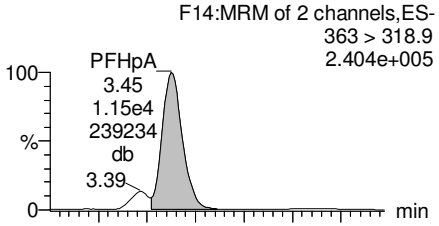
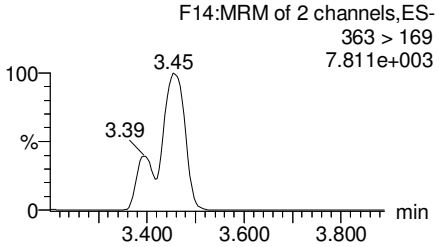
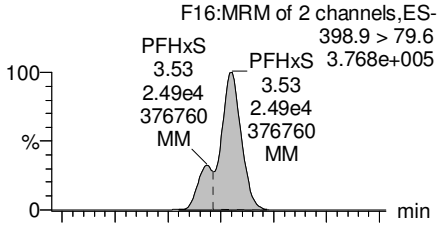
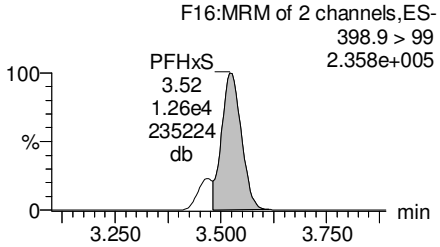


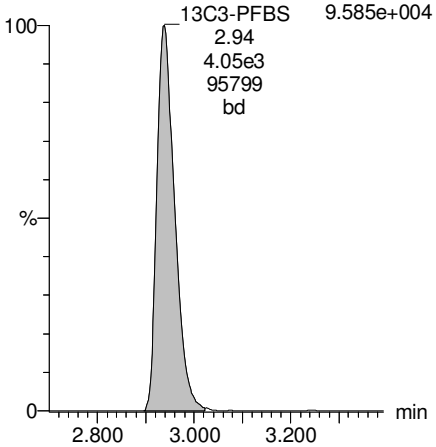


Total PFHxS

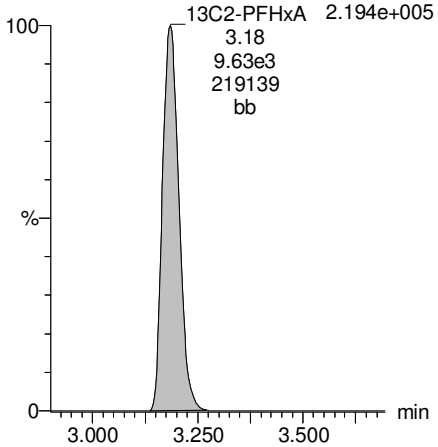




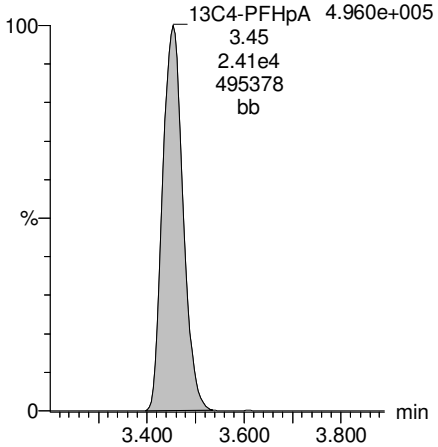
13C3-PFBS



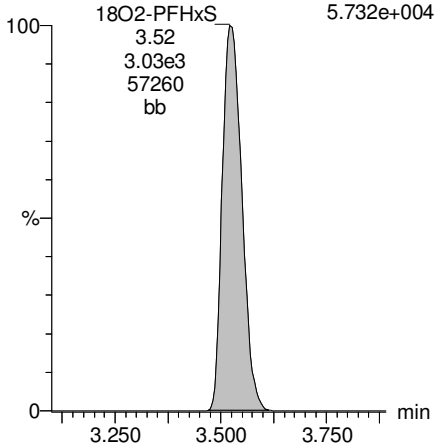
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



GM 8/8/17.

Vista Analytical Laboratory

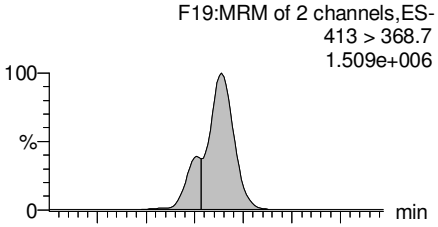
Dataset: U:\Q4.PRO\results\170803M2\170803M2-85.qld

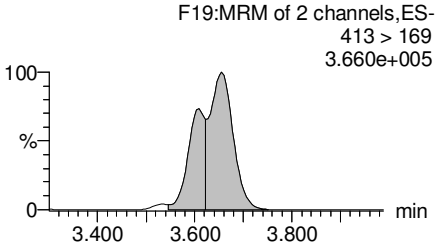
Last Altered: Tuesday, August 08, 2017 14:50:26 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:51:40 Pacific Daylight Time

Reviewed: CT 08/09/2017

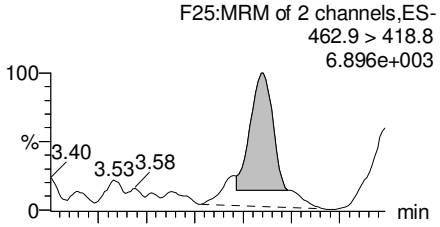
Name: 170803M2_85, Date: 04-Aug-2017, Time: 07:01:39, ID: 1700925-01 I001BC43S-170724 0.12112, Description: I001BC43S-170724

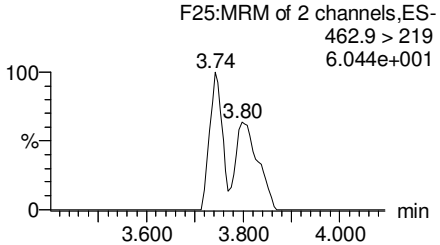
Total PFOA



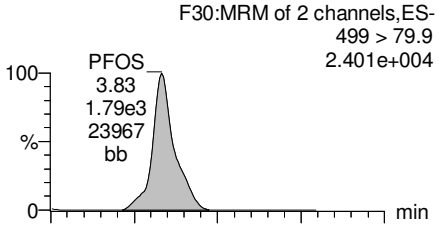


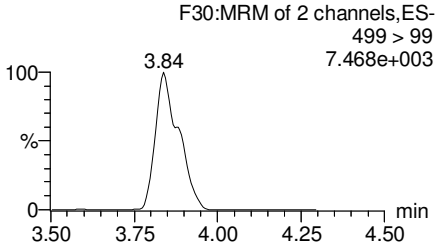
PFNA



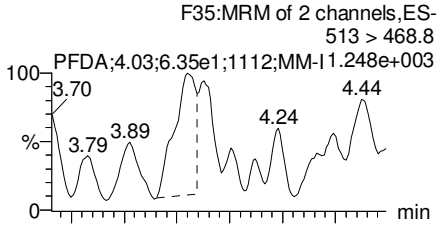


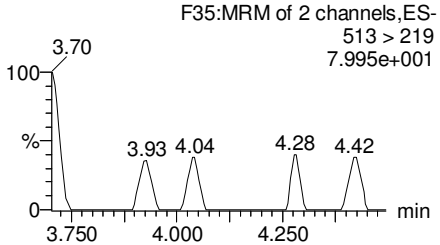
Total PFOS



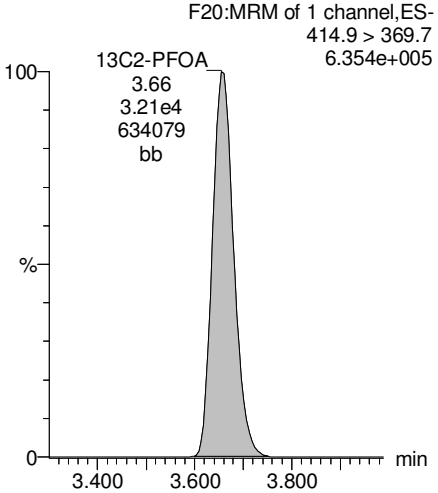


PFDA

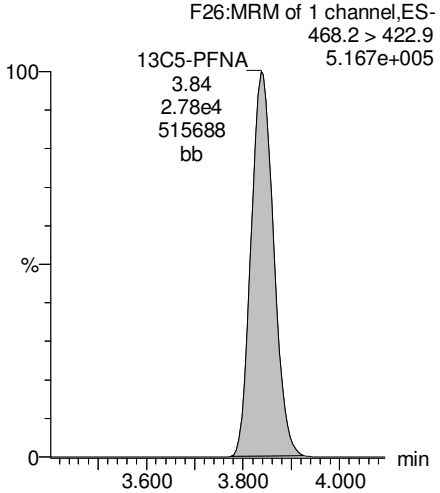




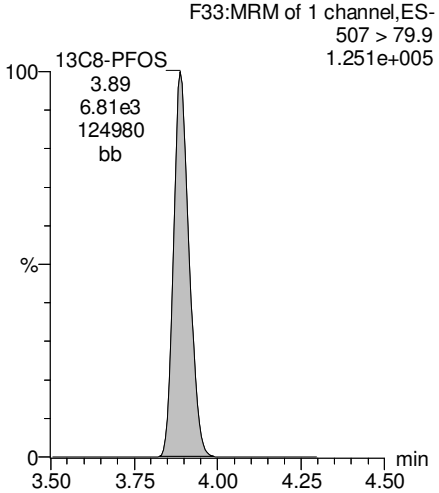
13C2-PFOA



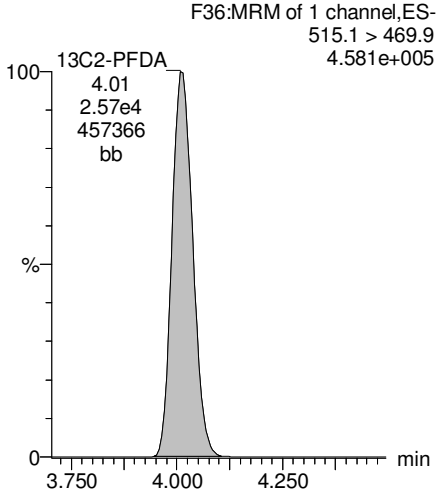
13C5-PFNA



13C8-PFOS



13C2-PFDA



GM 8/8/17.

Vista Analytical Laboratory

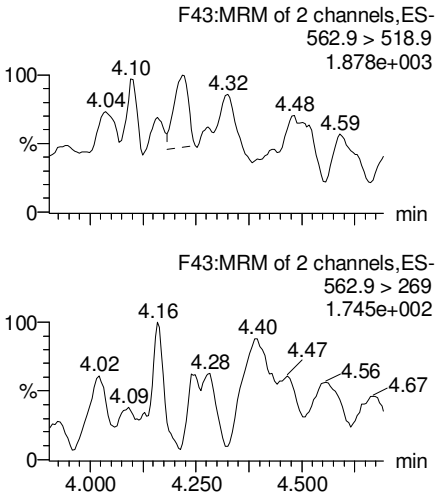
Dataset: U:\Q4.PRO\results\170803M2\170803M2-85.qld

Last Altered: Tuesday, August 08, 2017 14:50:26 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:51:40 Pacific Daylight Time

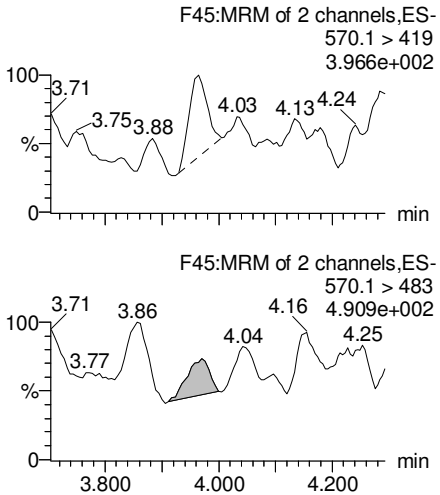
Reviewed: CT 08/09/2017

Name: 170803M2_85, Date: 04-Aug-2017, Time: 07:01:39, ID: 1700925-01 I001BC43S-170724 0.12112, Description: I001BC43S-170724

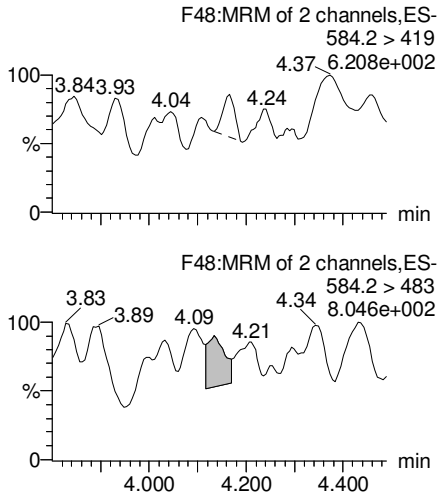
PFUnA



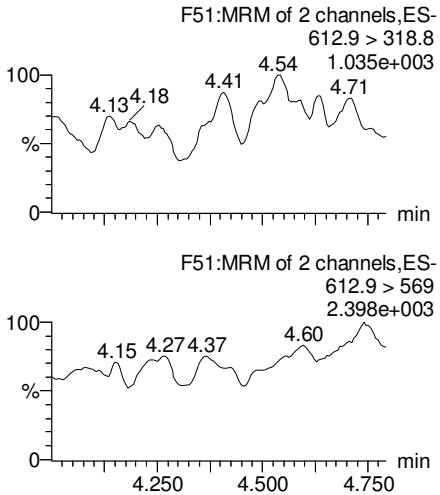
N-MeFOSAA



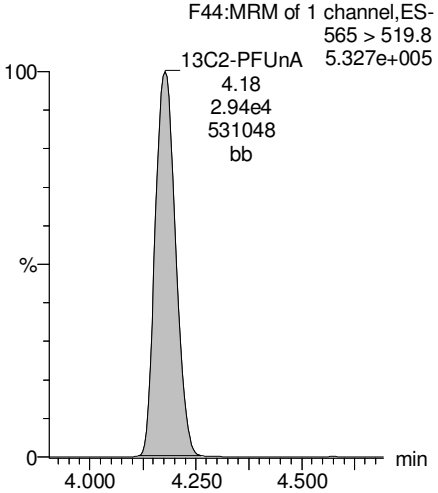
N-EtFOSAA



PFDoA



13C2-PFUnA



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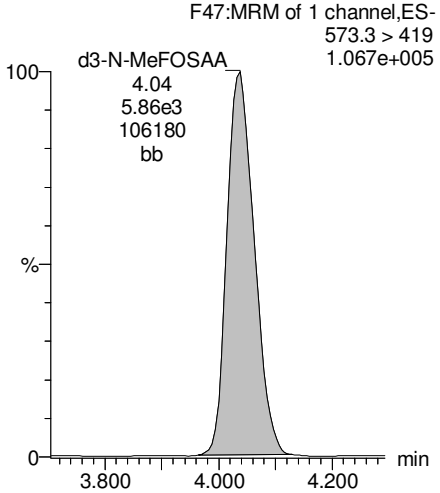
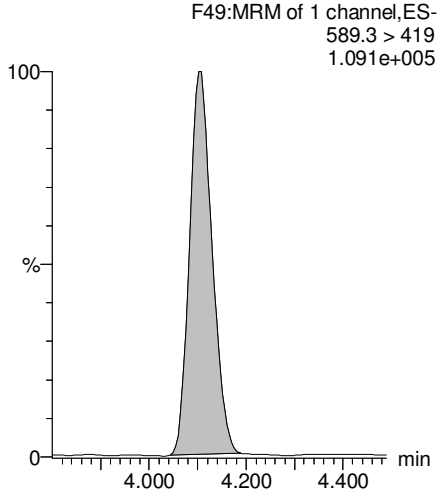
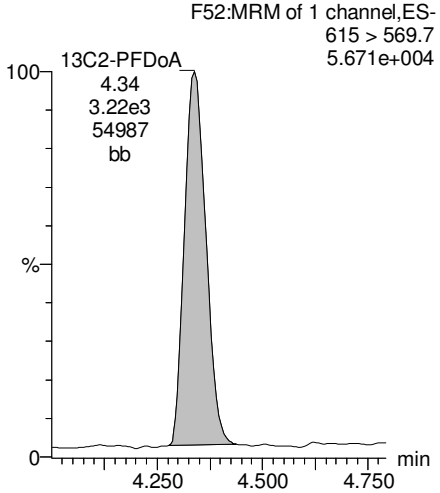


d5-N-EtFOSAA



13C2-PFDoA



GM 8/8/17.

Vista Analytical Laboratory

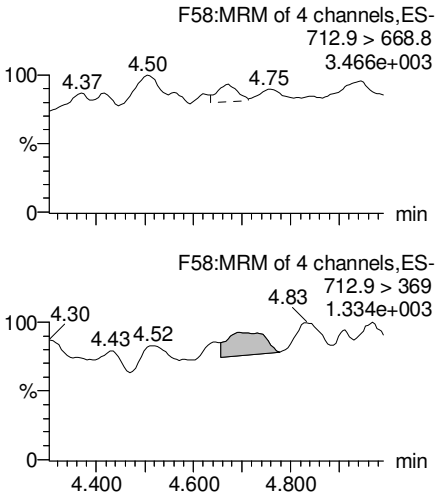
Dataset: U:\Q4.PRO\results\170803M2\170803M2-85.qld

Last Altered: Tuesday, August 08, 2017 14:50:26 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:51:40 Pacific Daylight Time

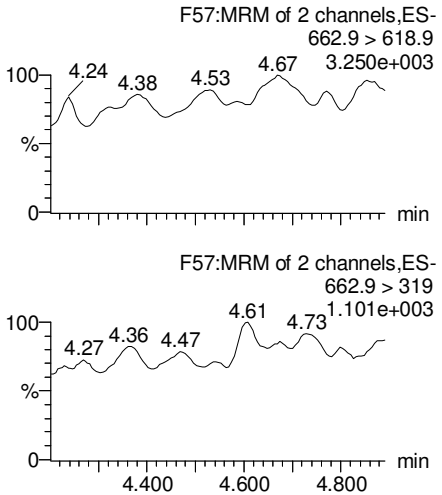
Reviewed: CT 08/09/2017

Name: 170803M2_85, Date: 04-Aug-2017, Time: 07:01:39, ID: 1700925-01 I001BC43S-170724 0.12112, Description: I001BC43S-170724

PFTeDA



PFTrDA



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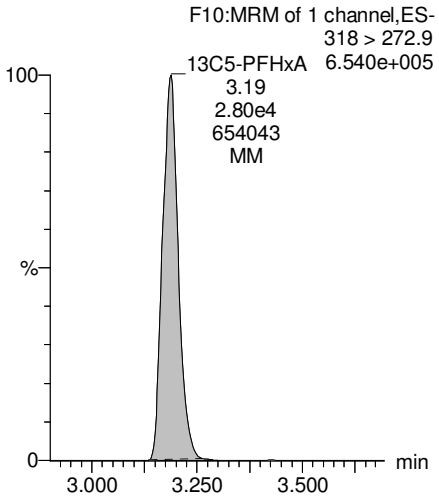
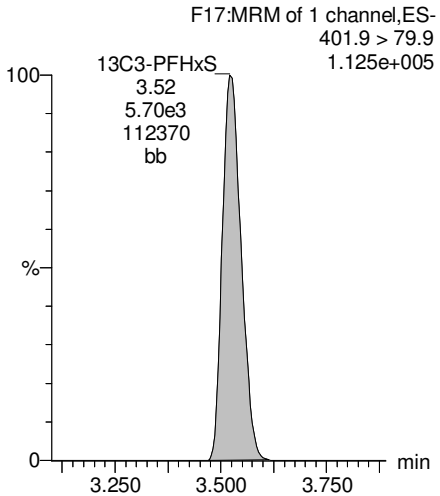


13C3-PFHxS



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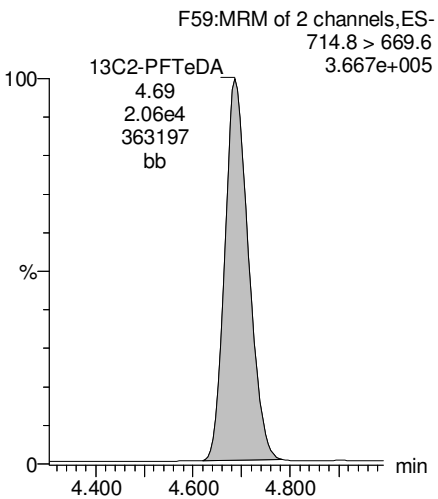

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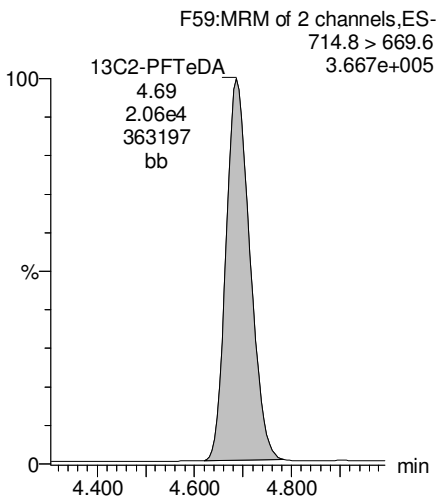
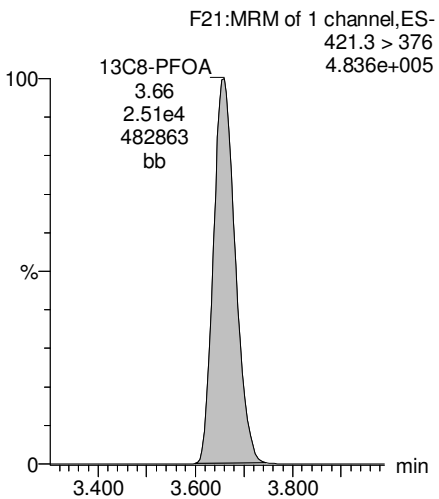
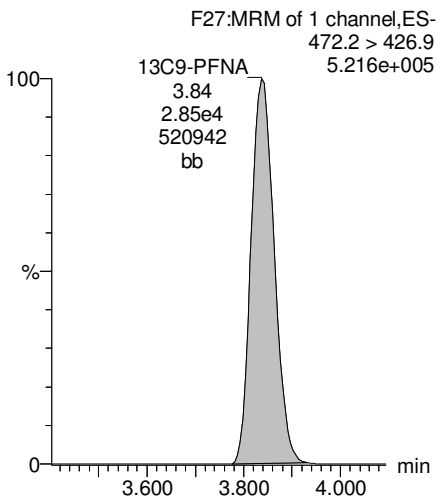


13C8-PFOA



13C9-PFNA



GM 8/8/17.

Vista Analytical Laboratory

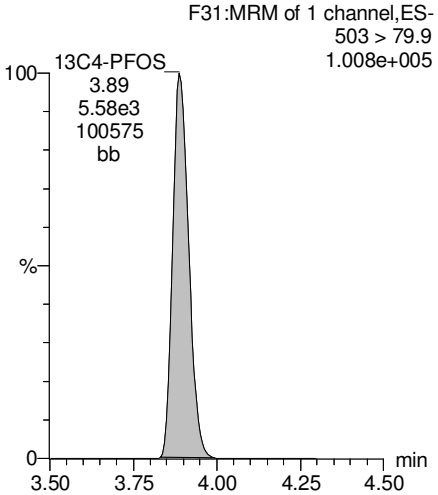
Dataset: U:\Q4.PRO\results\170803M2\170803M2-85.qld

Last Altered: Tuesday, August 08, 2017 14:50:26 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:51:40 Pacific Daylight Time

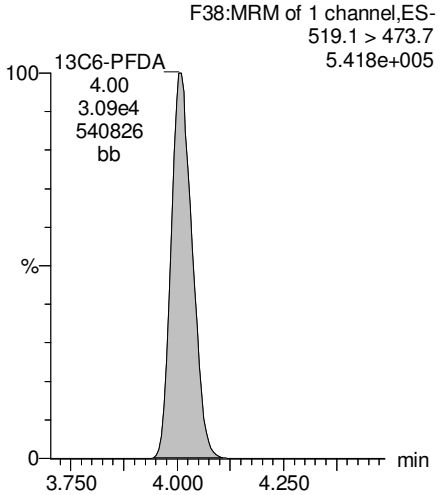
Reviewed: CT 08/09/2017

Name: 170803M2_85, Date: 04-Aug-2017, Time: 07:01:39, ID: 1700925-01 I001BC43S-170724 0.12112, Description: I001BC43S-170724

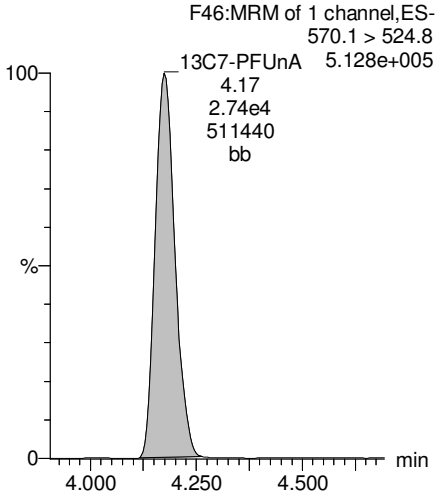
13C4-PFOS



13C6-PFDA



13C7-PFUnA



GM 8/8/17.

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-18.qld

Last Altered: Tuesday, August 08, 2017 14:44:53 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:45:20 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_18, Date: 02-Aug-2017, Time: 13:32:42, ID: 1700925-02 SB01-170724 0.12178, Description: SB01-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	3	PFBS	299 > 79.7		4.66e3	0.122		2.96					
2	4	PFHxA	313.2 > 268.9		1.30e4	0.122		3.19					
3	5	PFHpA	363 > 318.9		3.07e4	0.122		3.45					
4	6	PFHxS	398.9 > 79.6	1.25e2	3.34e3	0.122		3.56	3.50	0.468	2.13		
5	8	PFOA	413 > 368.7	4.00e3	4.17e4	0.122		3.65	3.63	1.20	9.07		See RX
6	10	PFNA	462.9 > 418.8		3.37e4	0.122		3.83					
7	12	PFOS	499 > 79.9	1.01e1	8.62e3	0.122		3.89	3.86	0.0147			
8	13	PFDA	513 > 468.8		3.40e4	0.122		4.01					
9	15	N-MeFOSAA	570.1 > 419		6.80e3	0.122		4.03					
10	16	N-EtFOSAA	584.2 > 419		6.08e3	0.122		4.10					
11	17	PFUnA	562.9 > 518.9		3.37e4	0.122		4.17					
12	19	PFDoA	612.9 > 318.8		3.86e3	0.122		4.34					

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-18.qld

Last Altered: Tuesday, August 08, 2017 14:44:53 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:45:32 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_18, Date: 02-Aug-2017, Time: 13:32:42, ID: 1700925-02 SB01-170724 0.12178, Description: SB01-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21	PFTrDA	662.9 > 618.9		3.86e3	0.122		4.50				
2	22	PFTeDA	712.9 > 668.8		2.52e4	0.122		4.68				
3	30	13C3-PFBS	302 > 98.8	4.66e3	3.65e4	0.122	0.034	2.96	2.92	0.639	154	149.9
4	31	13C2-PFHxA	315 > 269.8	1.30e4	3.65e4	0.122	0.334	3.19	3.16	1.79	44.0	107.1
5	32	13C4-PFHpA	367.2 > 321.8	3.07e4	3.65e4	0.122	0.414	3.45	3.43	4.21	83.4	81.2
6	33	18O2-PFHxS	403 > 102.6	3.34e3	6.52e3	0.122	0.475	3.56	3.50	6.40	111	107.7
7	35	13C2-PFOA	414.9 > 369.7	4.17e4	3.17e4	0.122	1.298	3.65	3.63	16.4	104	101.2
8	36	13C5-PFNA	468.2 > 422.9	3.37e4	3.55e4	0.122	1.094	3.83	3.81	11.9	89.3	87.0
9	38	13C8-PFOS	507 > 79.9	8.62e3	7.02e3	0.122	1.153	3.89	3.87	15.3	109	106.5
10	39	13C2-PFDA	515.1 > 469.9	3.40e4	4.20e4	0.122	1.059	4.01	3.99	10.1	78.4	76.4

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-18.qld

Last Altered: Tuesday, August 08, 2017 14:44:53 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:45:52 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_18, Date: 02-Aug-2017, Time: 13:32:42, ID: 1700925-02 SB01-170724 0.12178, Description: SB01-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	6.80e3	3.64e4	0.122	0.019	4.03	4.01	2.34	994	74.5
2	42	d5-N-EtFOSAA	589.3 > 419	6.08e3	3.64e4	0.122	0.019	4.12	4.08	2.09	906	67.9
3	43	13C2-PFUnA	565 > 519.8	3.37e4	3.64e4	0.122	1.172	4.17	4.16	11.6	81.3	79.2
4	44	13C2-PFDoA	615 > 569.7	3.86e3	3.64e4	0.122	0.118	4.34	4.31	1.33	92.0	89.6
5	46	13C2-PFTeDA	714.8 > 669.6	2.52e4	3.64e4	0.122	0.801	4.68	4.66	8.67	88.9	86.6
6	52	13C5-PFHxA	318 > 272.9	3.65e4	3.65e4	0.122	1.000	3.19	3.16	5.00	41.1	100.0
7	53	13C3-PFHxS	401.9 > 79.9	6.52e3	6.52e3	0.122	1.000	3.56	3.50	12.5	103	100.0
8	54	13C8-PFOA	421.3 > 376	3.17e4	3.17e4	0.122	1.000	3.65	3.64	12.5	103	100.0
9	55	13C9-PFNA	472.2 > 426.9	3.55e4	3.55e4	0.122	1.000	3.83	3.81	12.5	103	100.0
10	56	13C4-PFOS	503 > 79.9	7.02e3	7.02e3	0.122	1.000	3.89	3.87	12.5	103	100.0
11	57	13C6-PFDA	519.1 > 473.7	4.20e4	4.20e4	0.122	1.000	4.01	3.98	12.5	103	100.0
12	58	13C7-PFUnA	570.1 > 524.8	3.64e4	3.64e4	0.122	1.000	4.17	4.15	12.5	103	100.0
13	59	Total PFBS	299 > 79.7	0.00e0	4.66e3	0.122		2.96		0.000		
14	60	Total PFHxS	398.9 > 79.6	1.25e2	3.34e3	0.122		3.52		0.468	2.13	
15	61	Total PFOA	413 > 368.7	4.37e3	4.17e4	0.122		3.65		1.20	9.07	
16	62	Total PFOS	499 > 79.9	1.01e1	8.62e3	0.122		3.89		0.000		
17	63	Total N-Me-FOSAA	570.1 > 419	0.00e0	6.80e3	0.122		4.03		0.000		
18	64	Total N-EtFOSAA	584.2 > 419	0.00e0	6.08e3	0.122		4.17		0.000		

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Quantify Totals Report MassLynx MassLynx V4.1 SCN945 SCN960
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-18.qld

Last Altered: Tuesday, August 08, 2017 14:44:53 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:45:52 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_18, Date: 02-Aug-2017, Time: 13:32:42, ID: 1700925-02 SB01-170724 0.12178, Description: SB01-170724

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.50	125.041	3339.236	0.468	bb	2.1

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7	3.63	4000.579	41684.938	1.200	MM	9.1
2	61	Total PFOA	413 > 368.7	3.59	370.872	41684.938	0.111	MMI	

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.86	10.127	8619.976	0.015	dbl	

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15	N-MeFOSAA	570.1 > 419			6800.695		MM-I	

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16	N-EtFOSAA	584.2 > 419			6076.837		MM-	

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-18.qld

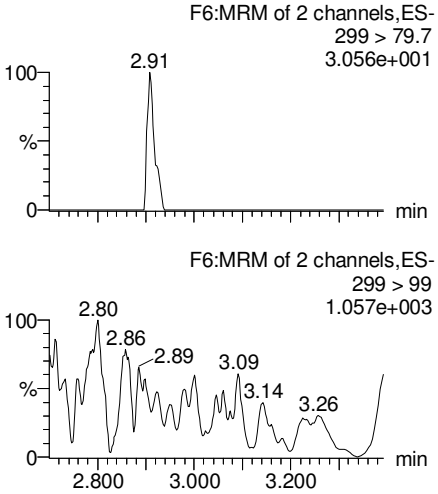
Last Altered: Tuesday, August 08, 2017 14:44:53 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:45:52 Pacific Daylight Time

Reviewed: CT 08/09/2017

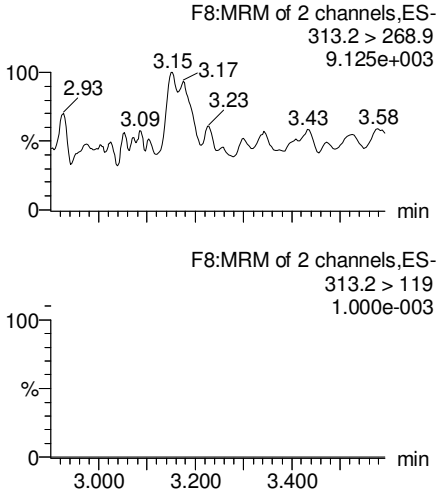
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_18, Date: 02-Aug-2017, Time: 13:32:42, ID: 1700925-02 SB01-170724 0.12178, Description: SB01-170724

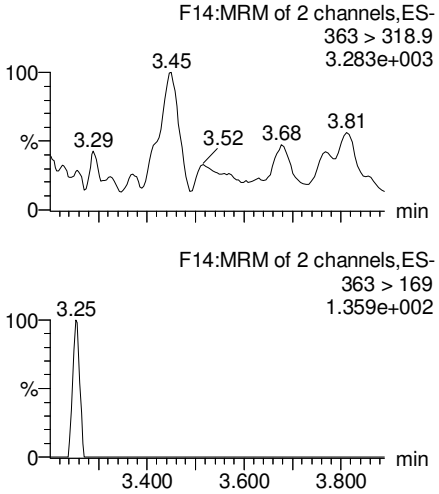
Total PFBS



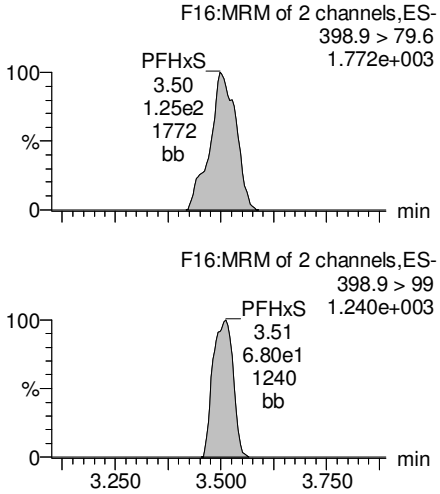
PFHxA



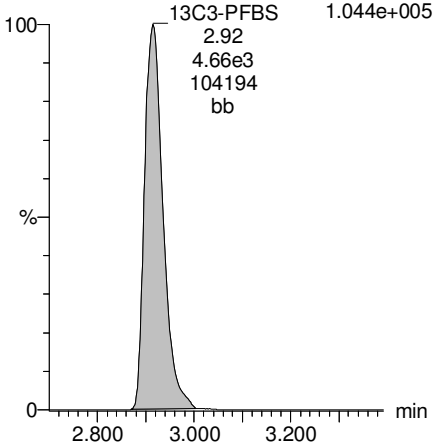
PFHpA



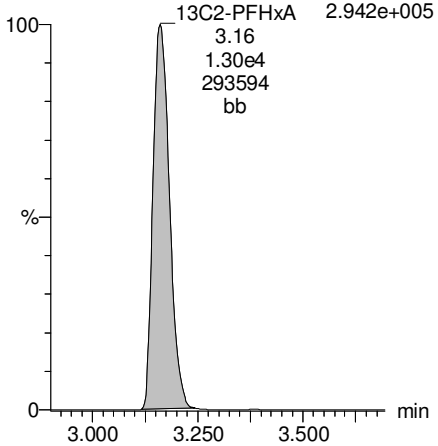
Total PFHxS



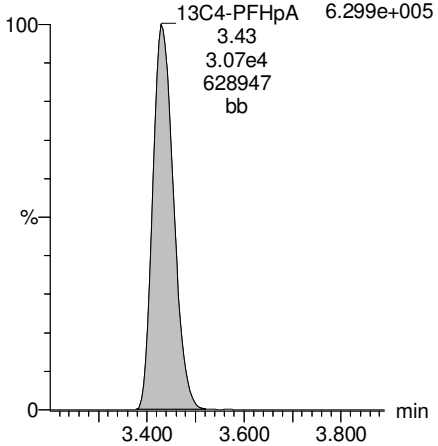
13C3-PFBS



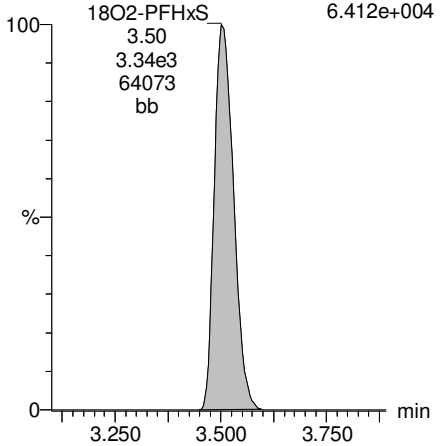
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



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Vista Analytical Laboratory

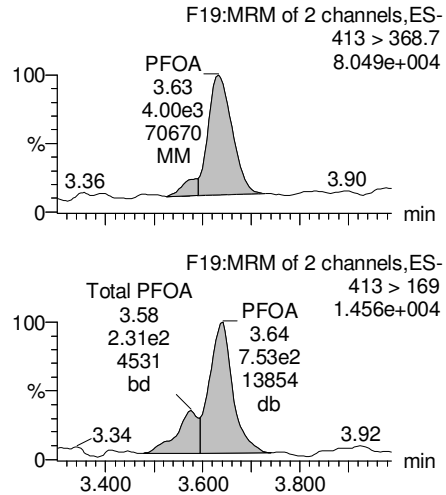
Dataset: U:\Q4.PRO\results\170802M1\170802M1-18.qld

Last Altered: Tuesday, August 08, 2017 14:44:53 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:45:52 Pacific Daylight Time

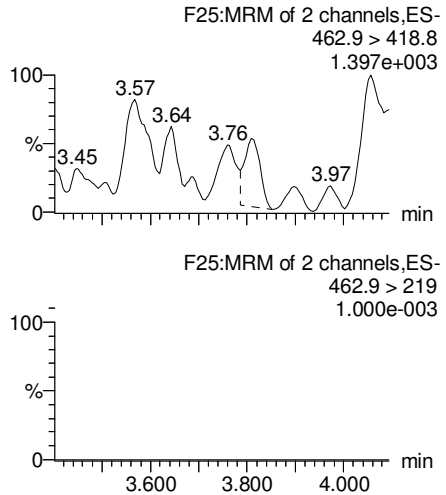
Reviewed: CT 08/09/2017

Name: 170802M1_18, Date: 02-Aug-2017, Time: 13:32:42, ID: 1700925-02 SB01-170724 0.12178, Description: SB01-170724

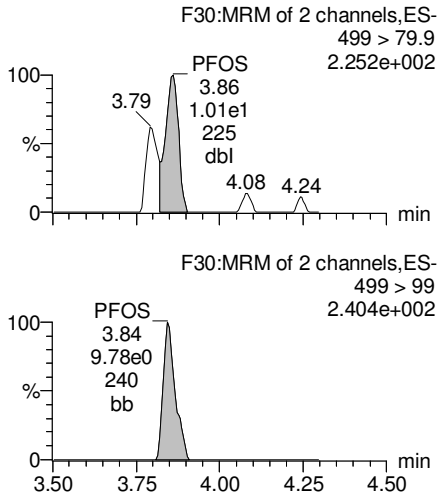
Total PFOA



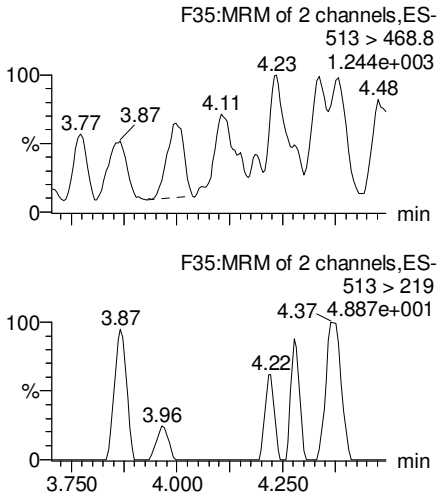
PFNA



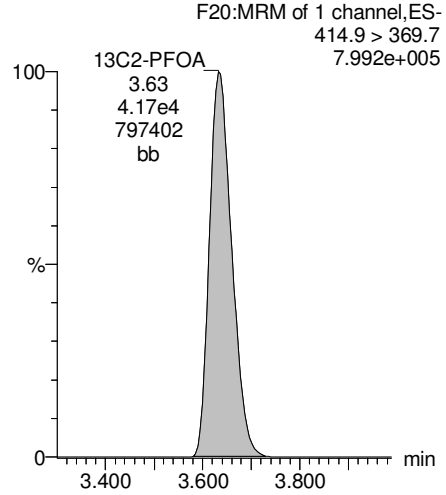
Total PFOS



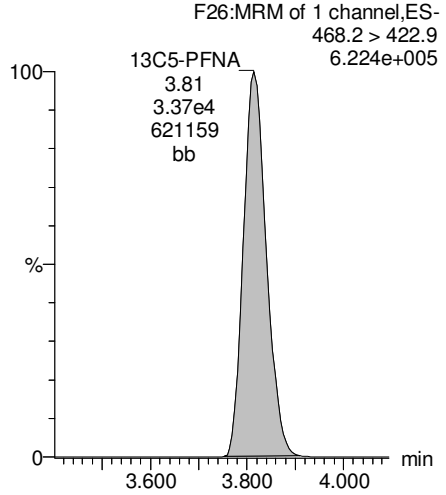
PFDA



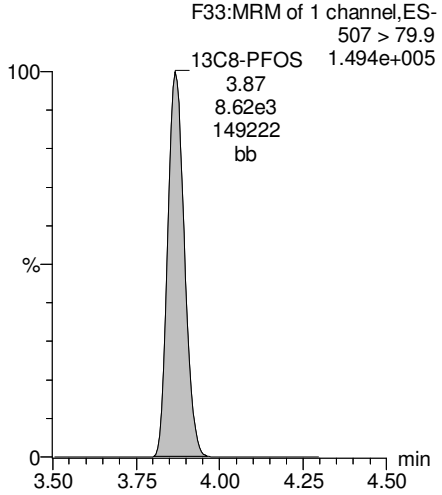
13C2-PFOA



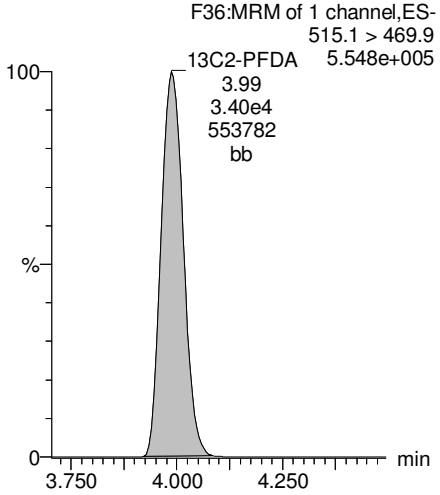
13C5-PFNA



13C8-PFOS



13C2-PFDA



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Vista Analytical Laboratory

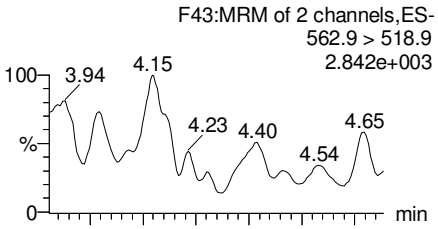
Dataset: U:\Q4.PRO\results\170802M1\170802M1-18.qld

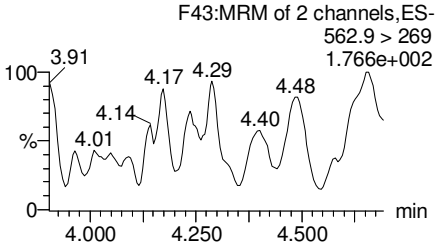
Last Altered: Tuesday, August 08, 2017 14:44:53 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:45:52 Pacific Daylight Time

Reviewed: CT 08/09/2017

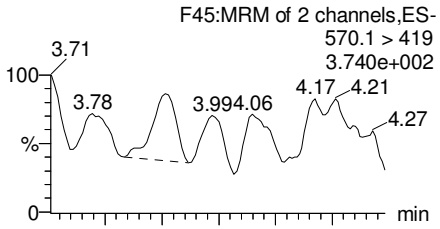
Name: 170802M1_18, Date: 02-Aug-2017, Time: 13:32:42, ID: 1700925-02 SB01-170724 0.12178, Description: SB01-170724

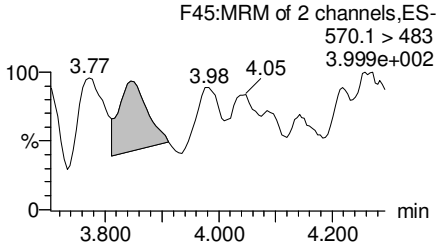
PFUnA



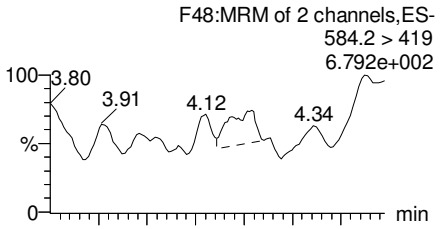


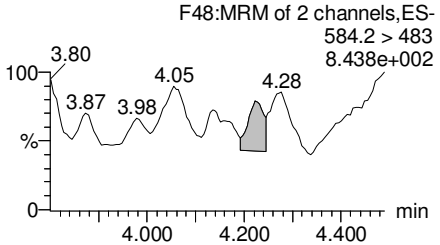
N-MeFOSAA



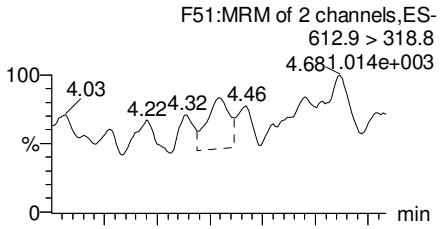


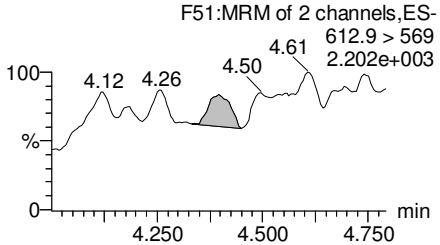
N-EtFOSAA



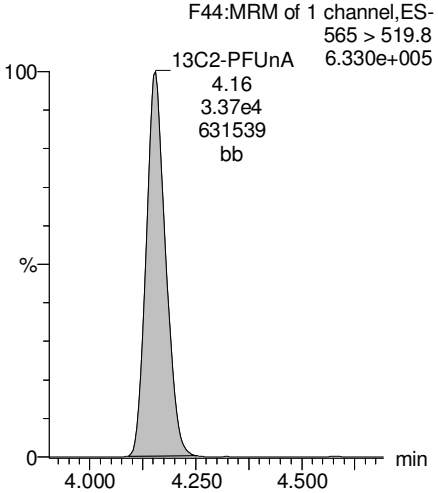


PFDoA

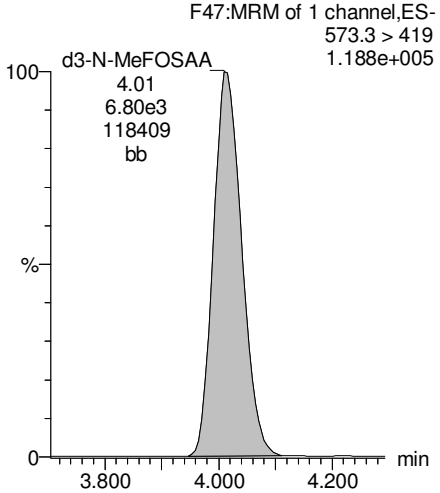




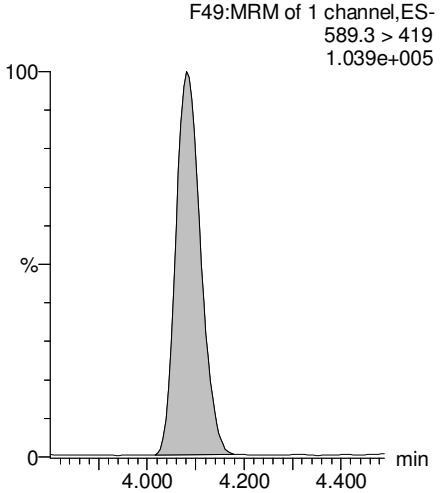
13C2-PFUnA



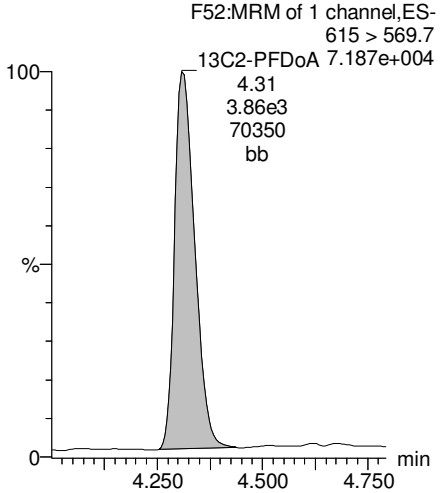
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFDoA



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Vista Analytical Laboratory

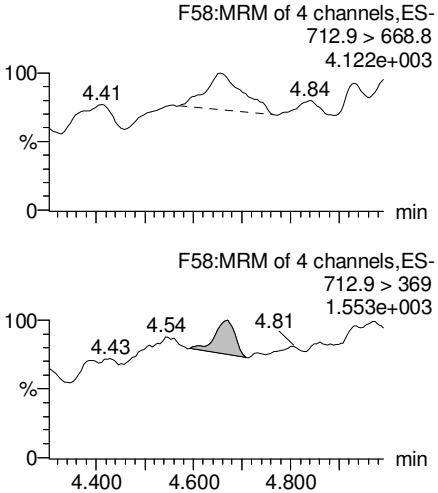
Dataset: U:\Q4.PRO\results\170802M1\170802M1-18.qld

Last Altered: Tuesday, August 08, 2017 14:44:53 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:45:52 Pacific Daylight Time

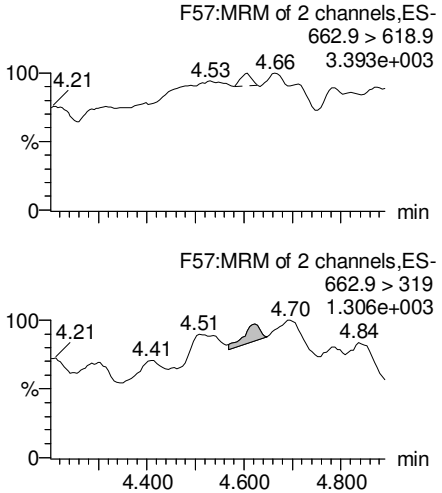
Reviewed: CT 08/09/2017

Name: 170802M1_18, Date: 02-Aug-2017, Time: 13:32:42, ID: 1700925-02 SB01-170724 0.12178, Description: SB01-170724

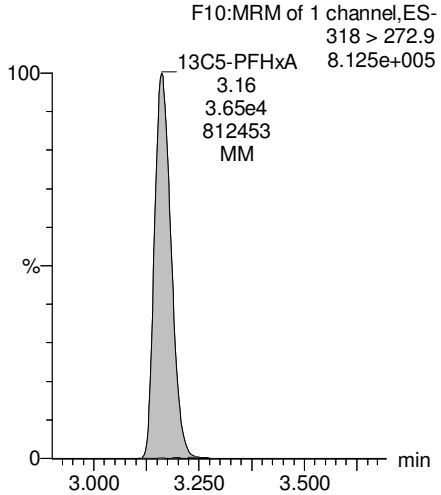
PFTeDA



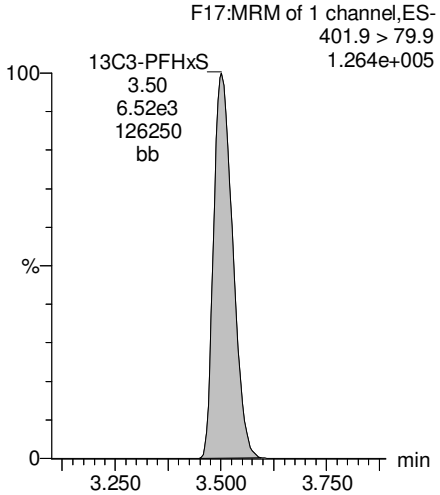
PFTrDA



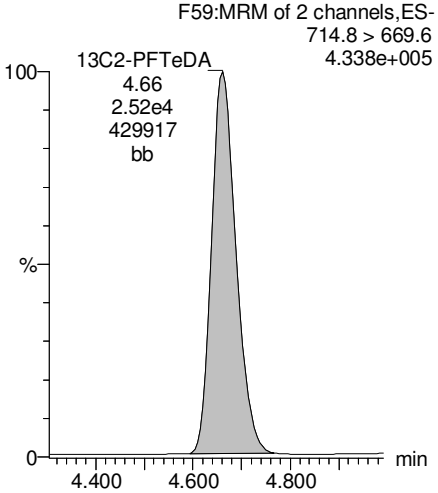
13C5-PFHxA



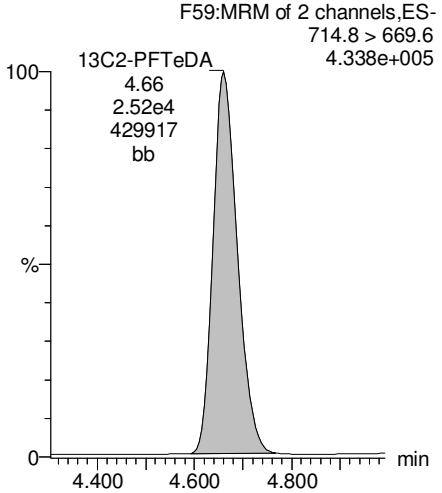
13C3-PFHxS



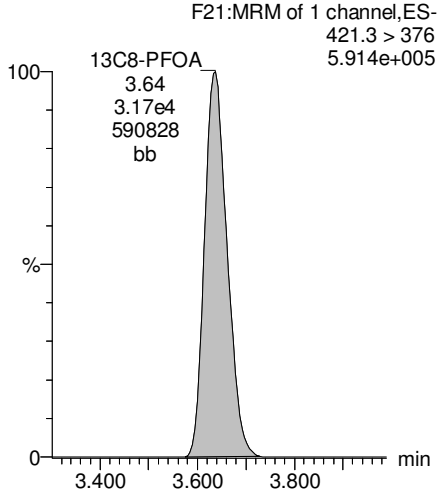
13C2-PFTeDA



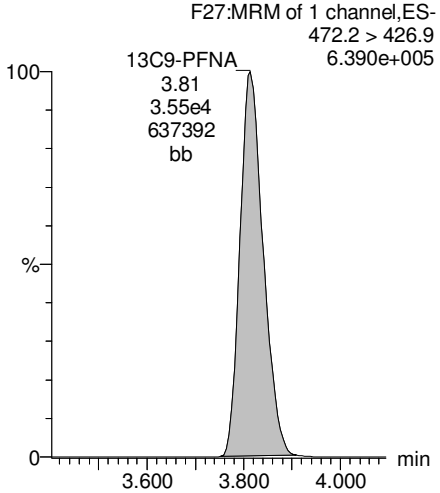
13C2-PFTeDA



13C8-PFOA



13C9-PFNA



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Vista Analytical Laboratory

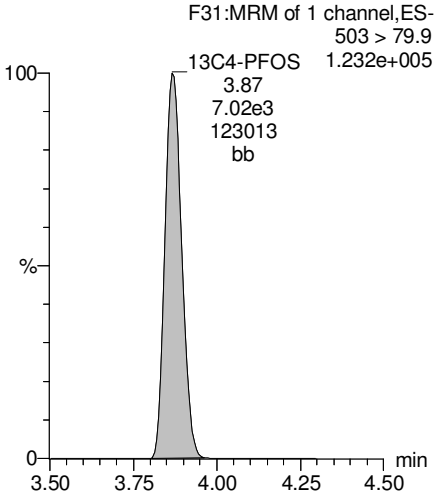
Dataset: U:\Q4.PRO\results\170802M1\170802M1-18.qld

Last Altered: Tuesday, August 08, 2017 14:44:53 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:45:52 Pacific Daylight Time

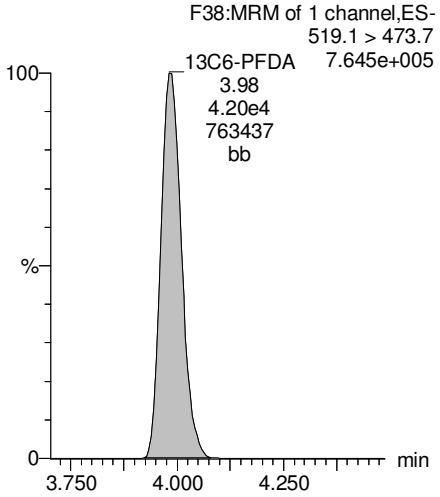
Reviewed: CT 08/09/2017

Name: 170802M1_18, Date: 02-Aug-2017, Time: 13:32:42, ID: 1700925-02 SB01-170724 0.12178, Description: SB01-170724

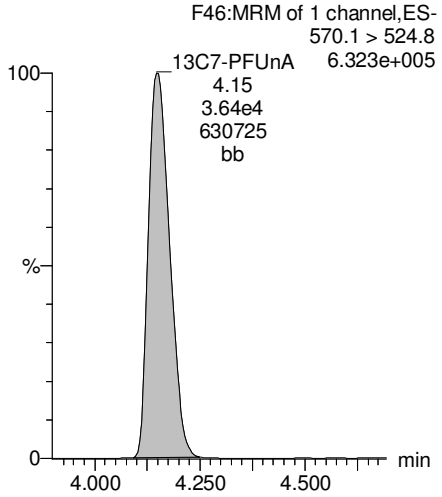
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-87.qld

Last Altered: Tuesday, August 08, 2017 14:55:20 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:55:50 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

*See dilution

Name: 170803M2_87, Date: 04-Aug-2017, Time: 07:22:56, ID: 1700925-03 I001BC50S-170724 0.12135, Description: I001BC50S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	3	PFBS	299 > 79.7	7.16e4	3.77e3	0.121		2.96	2.94	238	1040		
2	4	PFHxA	313.2 > 268.9	9.50e5	9.56e3	0.121		3.19	3.18	497	2950	E*	
3	5	PFHpA	363 > 318.9	1.30e5	2.15e4	0.121		3.45	3.45	75.4	519		
4	6	PFHxS	398.9 > 79.6	3.51e5	2.11e3	0.121		3.56	3.53	2080	10200	E*	
5	8	PFOA	413 > 368.7	1.90e6	2.96e4	0.121		3.65	3.66	802	6930	E*	See RX
6	10	PFNA	462.9 > 418.8	7.01e3	2.86e4	0.121		3.83	3.84	3.07	22.7		
7	12	PFOS	499 > 79.9	8.38e4	7.02e3	0.121		3.89	3.83	149	1160		
8	13	PFDA	513 > 468.8		2.49e4	0.121		4.01					
9	15	N-MeFOSAA	570.1 > 419		6.57e3	0.121		4.03					
10	16	N-EtFOSAA	584.2 > 419		6.73e3	0.121		4.10					
11	17	PFUnA	562.9 > 518.9		2.95e4	0.121		4.17					
12	19	PFDoA	612.9 > 318.8		3.19e3	0.121		4.34					

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-87.qld

Last Altered: Tuesday, August 08, 2017 14:55:20 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:56:02 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_87, Date: 04-Aug-2017, Time: 07:22:56, ID: 1700925-03 I001BC50S-170724 0.12135, Description: I001BC50S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21	PFTrDA	662.9 > 618.9		3.19e3	0.121		4.50				
2	22	PFTeDA	712.9 > 668.8		2.20e4	0.121		4.68				
3	30	13C3-PFBS	302 > 98.8	3.77e3	2.69e4	0.121	0.034	2.96	2.94	0.699	169	163.9
4	31	13C2-PFHxA	315 > 269.8	9.56e3	2.69e4	0.121	0.334	3.19	3.18	1.77	43.8	106.2
5	32	13C4-PFHpA	367.2 > 321.8	2.15e4	2.69e4	0.121	0.414	3.45	3.45	3.99	79.4	77.1
6	33	18O2-PFHxS	403 > 102.6	2.11e3	4.24e3	0.121	0.475	3.56	3.53	6.22	108	104.7
7	35	13C2-PFOA	414.9 > 369.7	2.96e4	2.30e4	0.121	1.298	3.65	3.66	16.1	102	99.3
8	36	13C5-PFNA	468.2 > 422.9	2.86e4	3.15e4	0.121	1.094	3.83	3.84	11.3	85.4	82.9
9	38	13C8-PFOS	507 > 79.9	7.02e3	6.06e3	0.121	1.153	3.89	3.89	14.5	103	100.4
10	39	13C2-PFDA	515.1 > 469.9	2.49e4	2.80e4	0.121	1.059	4.01	4.01	11.1	86.7	84.1

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-87.qld

Last Altered: Tuesday, August 08, 2017 14:55:20 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:56:20 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_87, Date: 04-Aug-2017, Time: 07:22:56, ID: 1700925-03 I001BC50S-170724 0.12135, Description: I001BC50S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	6.57e3	2.96e4	0.121	0.019	4.03	4.04	2.77	1180	88.4
2	42	d5-N-EtFOSAA	589.3 > 419	6.73e3	2.96e4	0.121	0.019	4.12	4.11	2.84	1240	92.4
3	43	13C2-PFUnA	565 > 519.8	2.95e4	2.96e4	0.121	1.172	4.17	4.18	12.5	87.6	85.0
4	44	13C2-PFDoA	615 > 569.7	3.19e3	2.96e4	0.121	0.118	4.34	4.34	1.35	93.8	91.0
5	46	13C2-PFTeDA	714.8 > 669.6	2.20e4	2.96e4	0.121	0.801	4.68	4.69	9.31	95.7	92.9
6	52	13C5-PFHxA	318 > 272.9	2.69e4	2.69e4	0.121	1.000	3.19	3.18	5.00	41.2	100.0
7	53	13C3-PFHxS	401.9 > 79.9	4.24e3	4.24e3	0.121	1.000	3.56	3.53	12.5	103	100.0
8	54	13C8-PFOA	421.3 > 376	2.30e4	2.30e4	0.121	1.000	3.65	3.66	12.5	103	100.0
9	55	13C9-PFNA	472.2 > 426.9	3.15e4	3.15e4	0.121	1.000	3.83	3.84	12.5	103	100.0
10	56	13C4-PFOS	503 > 79.9	6.06e3	6.06e3	0.121	1.000	3.89	3.89	12.5	103	100.0
11	57	13C6-PFDA	519.1 > 473.7	2.80e4	2.80e4	0.121	1.000	4.01	4.01	12.5	103	100.0
12	58	13C7-PFUnA	570.1 > 524.8	2.96e4	2.96e4	0.121	1.000	4.17	4.17	12.5	103	100.0
13	59	Total PFBS	299 > 79.7	7.37e4	3.77e3	0.121		2.96		245	1070	
14	60	Total PFHxS	398.9 > 79.6	3.51e5	2.11e3	0.121		3.52		2080	10200	
15	61	Total PFOA	413 > 368.7	2.10e6	2.96e4	0.121		3.65		886	7650	
16	62	Total PFOS	499 > 79.9	8.38e4	7.02e3	0.121		3.89		149	1160	
17	63	Total N-Me-FOSAA	570.1 > 419	0.00e0	6.57e3	0.121		4.03		0.000		
18	64	Total N-EtFOSAA	584.2 > 419	0.00e0	6.73e3	0.121		4.17		0.000		

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Quantify Totals Report MassLynx MassLynx V4.1 SCN945 SCN960
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-87.qld

Last Altered: Tuesday, August 08, 2017 14:55:20 Pacific Daylight Time
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Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_87, Date: 04-Aug-2017, Time: 07:22:56, ID: 1700925-03 I001BC50S-170724 0.12135, Description: I001BC50S-170724

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3	PFBS	299 > 79.7	2.94	71623.961	3767.316	237.649	bb	1039.1
2	59	Total PFBS	299 > 79.7	2.81	2078.597	3767.316	6.897	bb	29.9

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.53	350990.656	2109.526	2079.796	MM	10197.9

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7	3.66	1899089.750	29607.084	801.789	MM	6925.1
2	61	Total PFOA	413 > 368.7	3.61	199895.531	29607.084	84.395	MM	727.8

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.83	83762.992	7016.996	149.214	MM	1160.5

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16	N-EtFOSAA	584.2 > 419			6729.192		MM-	

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-87.qld

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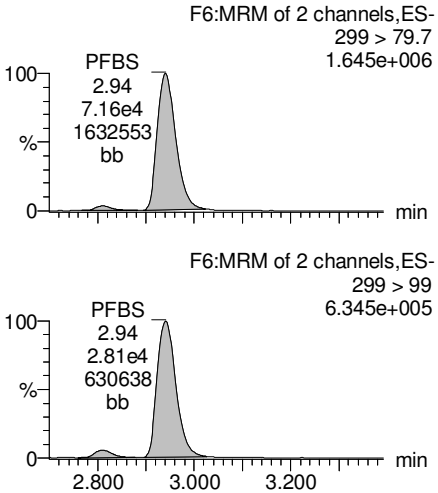
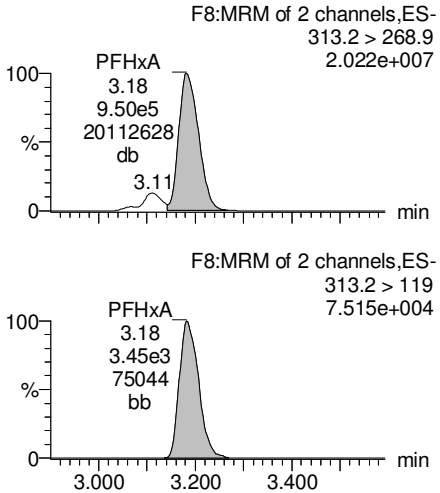
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_87, Date: 04-Aug-2017, Time: 07:22:56, ID: 1700925-03 I001BC50S-170724 0.12135, Description: I001BC50S-170724

Total PFBS



PFHxA



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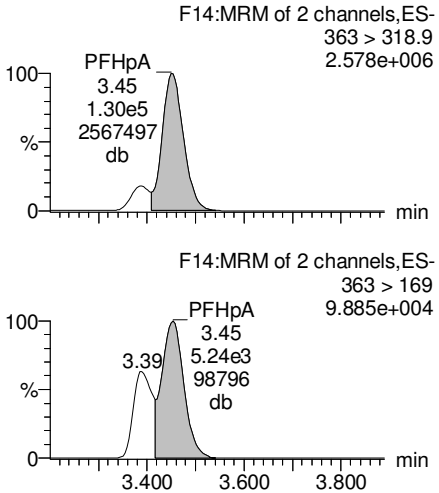
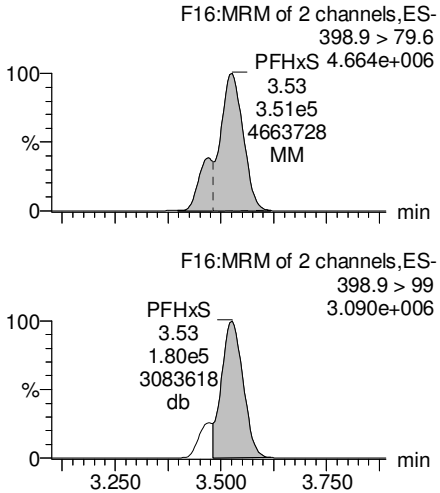


Total PFHxS



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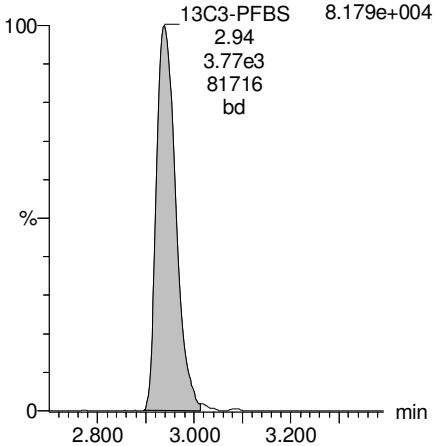

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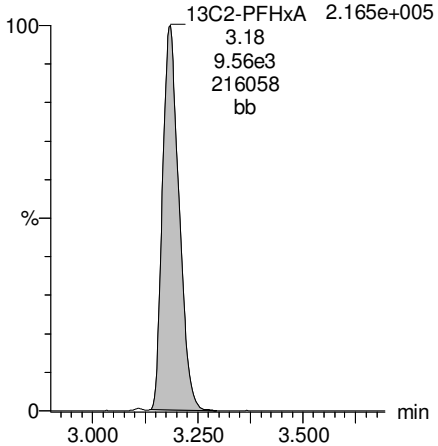

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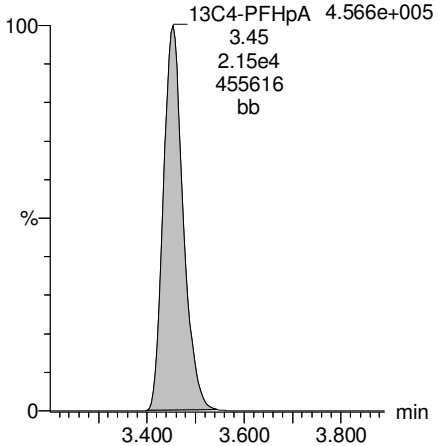

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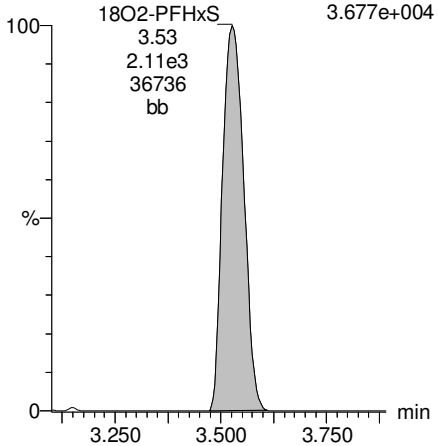

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-87.qld

Last Altered: Tuesday, August 08, 2017 14:55:20 Pacific Daylight Time
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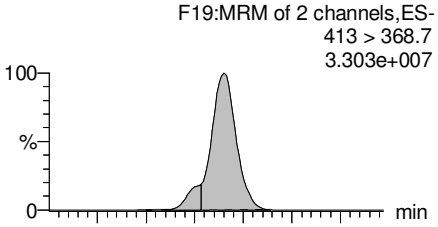
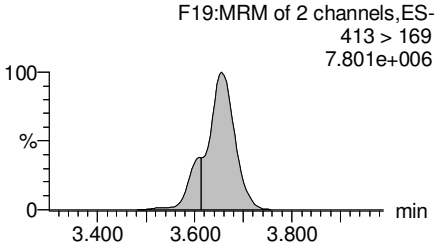
Reviewed: CT 08/09/2017

Name: 170803M2_87, Date: 04-Aug-2017, Time: 07:22:56, ID: 1700925-03 I001BC50S-170724 0.12135, Description: I001BC50S-170724

Total PFOA





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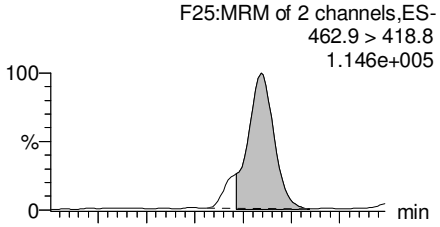
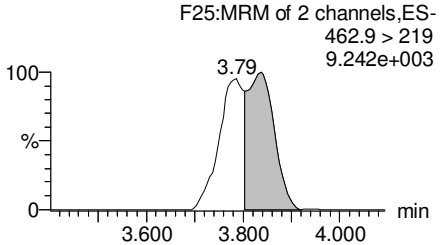
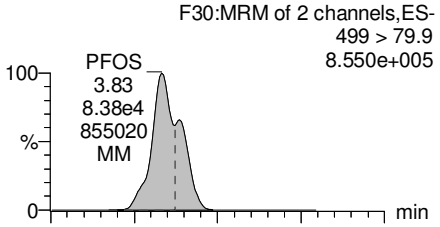
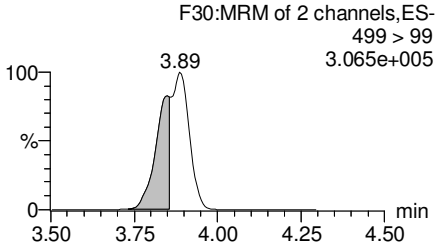




Total PFOS





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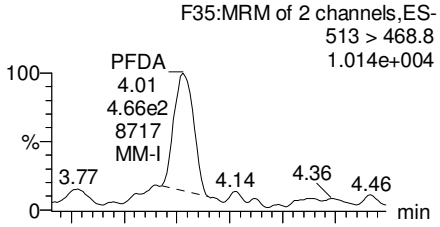
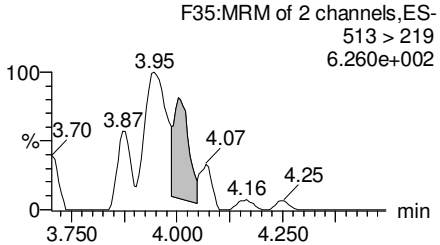
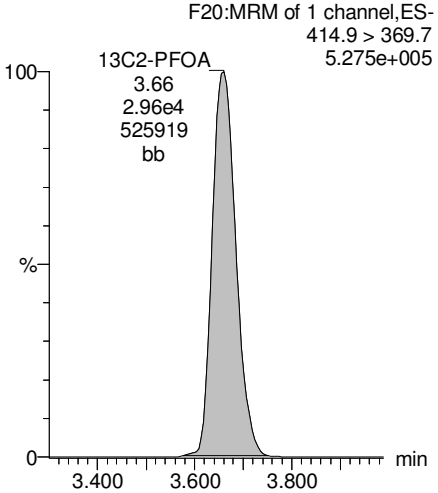




13C2-PFOA



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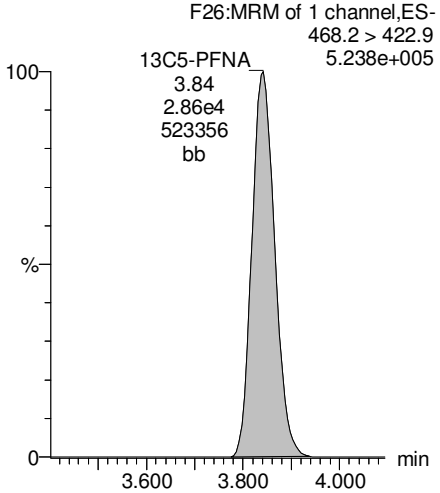

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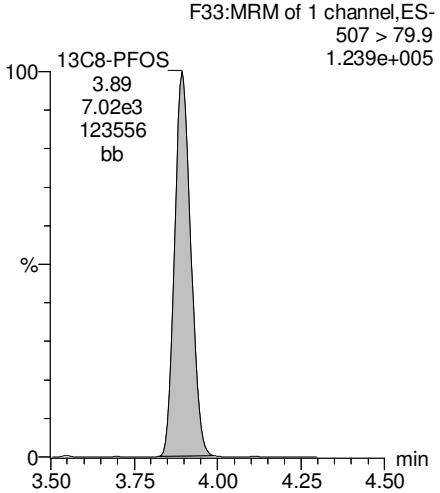

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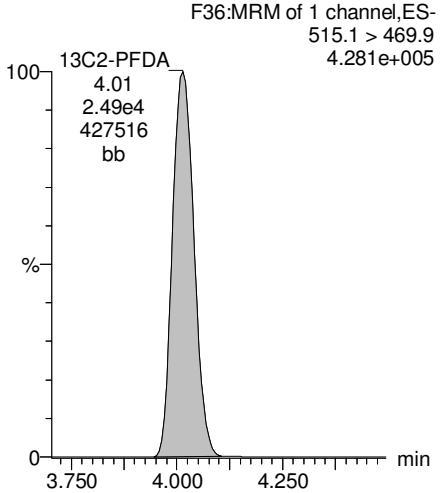

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-87.qld

Last Altered: Tuesday, August 08, 2017 14:55:20 Pacific Daylight Time
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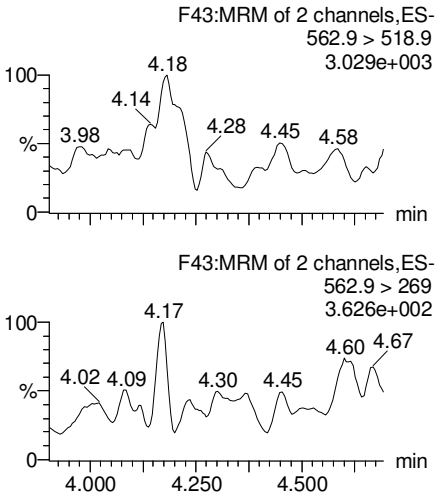
Reviewed: CT 08/09/2017

Name: 170803M2_87, Date: 04-Aug-2017, Time: 07:22:56, ID: 1700925-03 I001BC50S-170724 0.12135, Description: I001BC50S-170724

PFUnA



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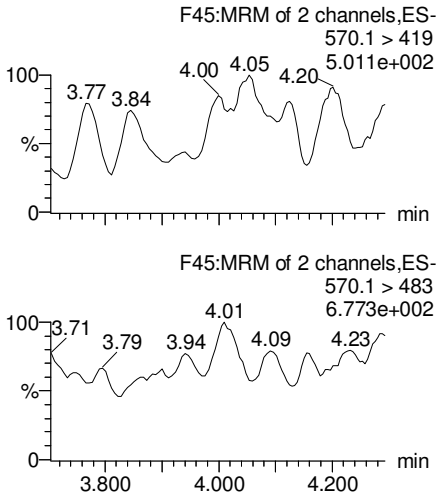
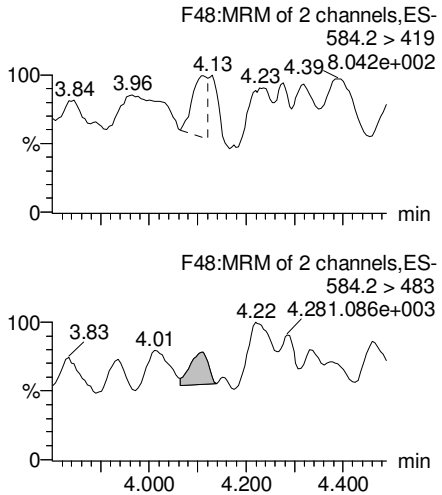
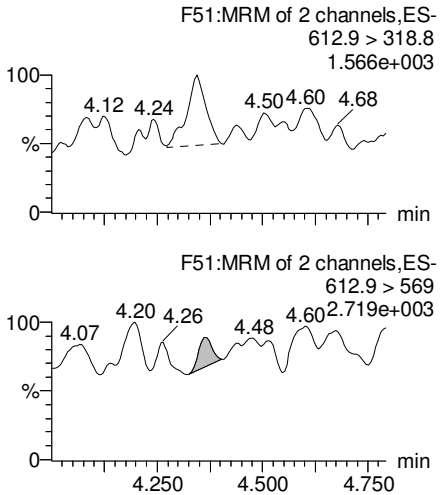


N-EtFOSAA



PFDoA



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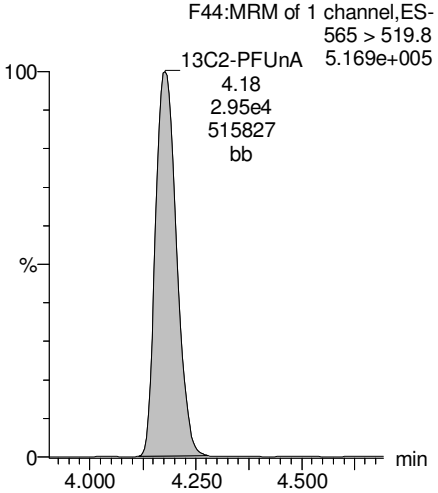
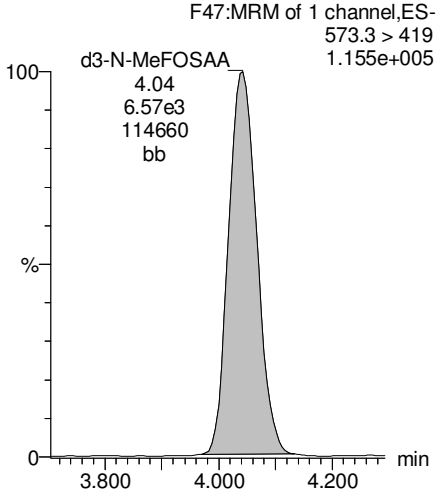


d3-N-MeFOSAA



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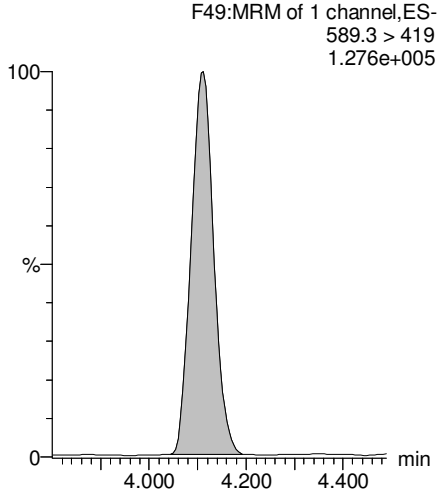

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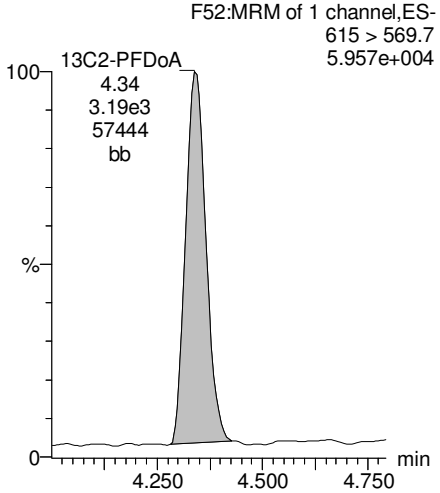

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-87.qld

Last Altered: Tuesday, August 08, 2017 14:55:20 Pacific Daylight Time
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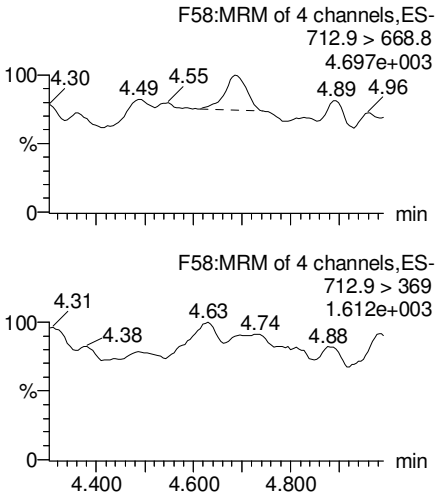
Reviewed: CT 08/09/2017

Name: 170803M2_87, Date: 04-Aug-2017, Time: 07:22:56, ID: 1700925-03 I001BC50S-170724 0.12135, Description: I001BC50S-170724

PFTeDA



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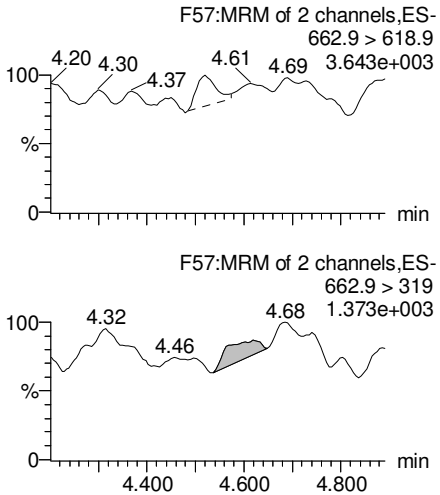

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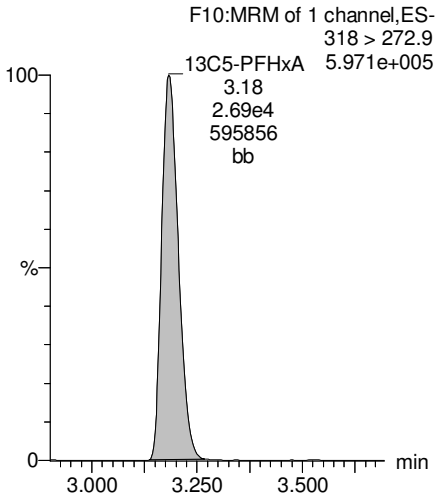

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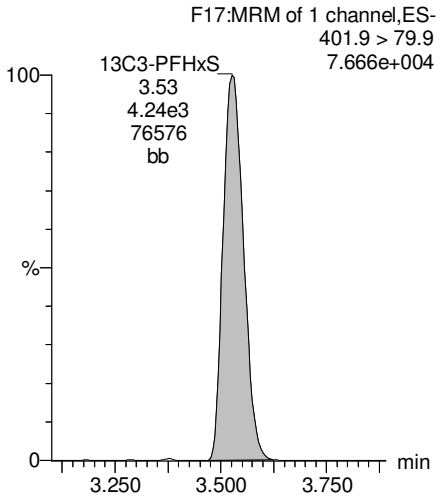

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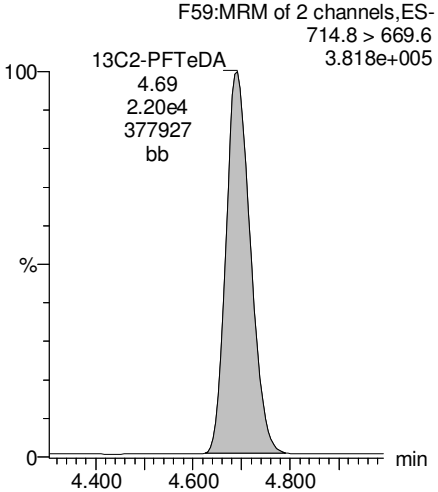

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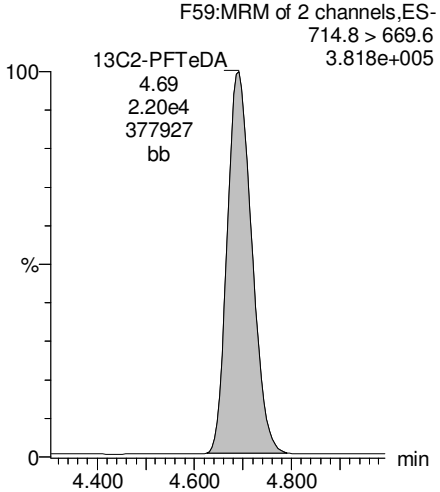

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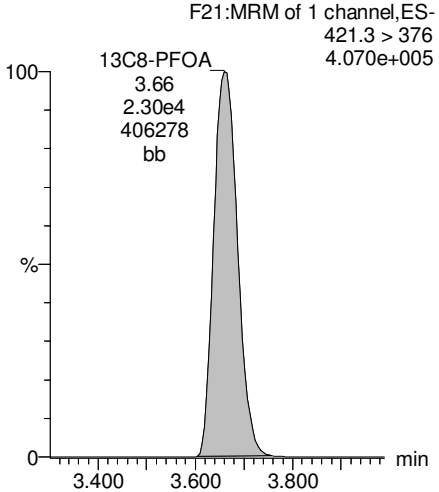

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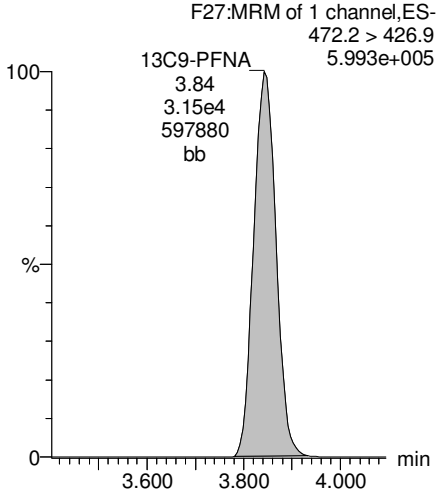

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Vista Analytical Laboratory

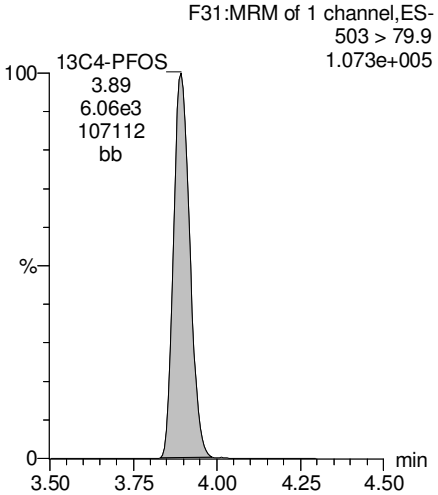
Dataset: U:\Q4.PRO\results\170803M2\170803M2-87.qld

Last Altered: Tuesday, August 08, 2017 14:55:20 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:56:20 Pacific Daylight Time

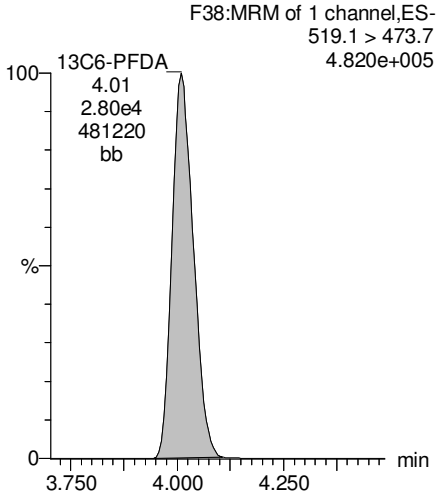
Reviewed: CT 08/09/2017

Name: 170803M2_87, Date: 04-Aug-2017, Time: 07:22:56, ID: 1700925-03 I001BC50S-170724 0.12135, Description: I001BC50S-170724

13C4-PFOS



13C6-PFDA



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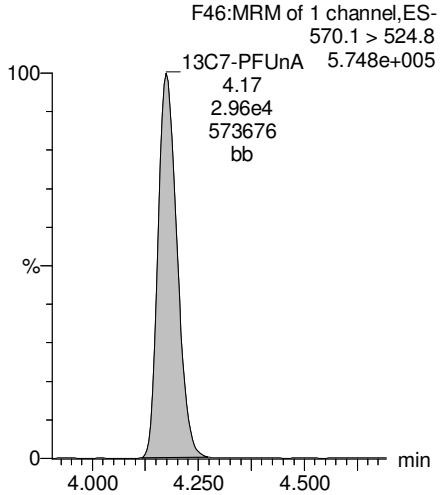

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-15.qld

Last Altered: Tuesday, August 08, 2017 15:08:03 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:09:57 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_15, Date: 03-Aug-2017, Time: 18:32:17, ID: 1700925-03@15X I001BC50S-170724 0.12135, Description: I001BC50S-170724

	#	Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	4	PFHxA	313.2 > 268.9	5.37e4	4.31e2		0.1214	3.19	3.16	623	3700	
2	6	PFHxS	398.9 > 79.6	2.90e4	2.20e2		0.1214	3.56	3.50	1640	8050	
3	8	PFOA	413 > 368.7	1.52e5	2.28e3		0.1214	3.65	3.63	830	7170	
4	31	13C2-PFHxA	315 > 269.8	4.31e2	1.27e3	0.334	0.1214	3.19	3.15	1.70	42.0	102.0
5	33	18O2-PFHxS	403 > 102.6	2.20e2	3.95e2	0.475	0.1214	3.56	3.50	6.97	121	117.3
6	35	13C2-PFOA	414.9 > 369.7	2.28e3	1.57e3	1.298	0.1214	3.65	3.63	18.2	116	112.2
7	52	13C5-PFHxA	318 > 272.9	1.27e3	1.27e3	1.000	0.1214	3.19	3.16	5.00	41.2	100.0
8	53	13C3-PFHxS	401.9 > 79.9	3.95e2	3.95e2	1.000	0.1214	3.56	3.51	12.5	103	100.0
9	54	13C8-PFOA	421.3 > 376	1.57e3	1.57e3	1.000	0.1214	3.65	3.63	12.5	103	100.0

See RX

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-15.qld

Last Altered: Tuesday, August 08, 2017 15:08:03 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:10:02 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_15, Date: 03-Aug-2017, Time: 18:32:17, ID: 1700925-03@15X I001BC50S-170724 0.12135, Description: I001BC50S-170724

	#	Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	60	Total PFHxS	398.9 > 79.6	2.90e4	2.20e2		0.1214	3.52		1640	8050	
2	61	Total PFOA	413 > 368.7	1.64e5	2.28e3		0.1214	3.65		898	7750	

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-15.qld

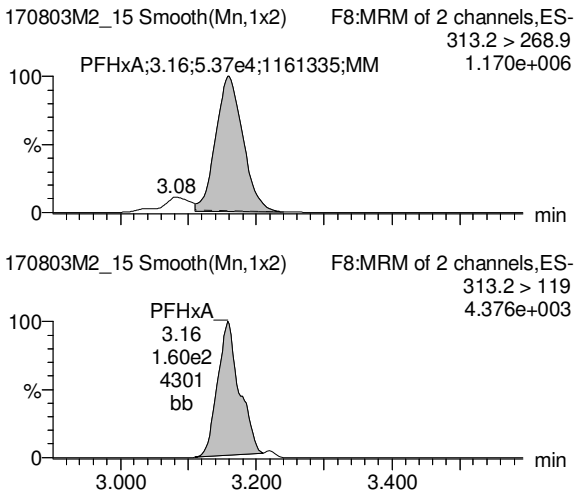
Last Altered: Tuesday, August 08, 2017 15:08:03 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:09:57 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_15, Date: 03-Aug-2017, Time: 18:32:17, ID: 1700925-03@15X I001BC50S-170724 0.12135, Description: I001BC50S-170724

PFHxA



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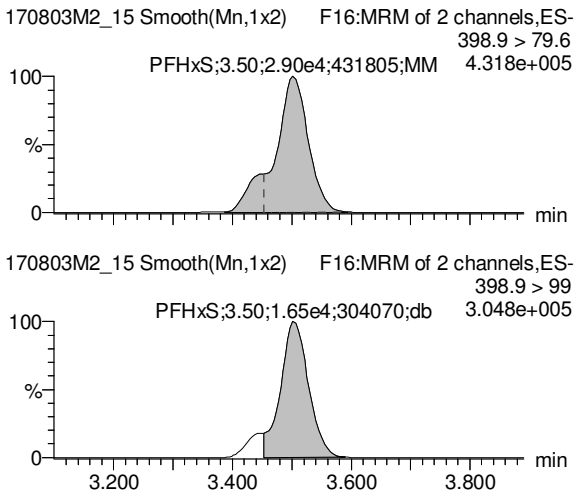

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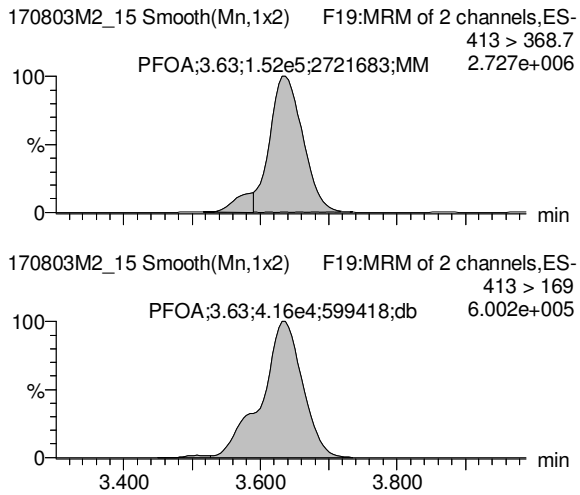

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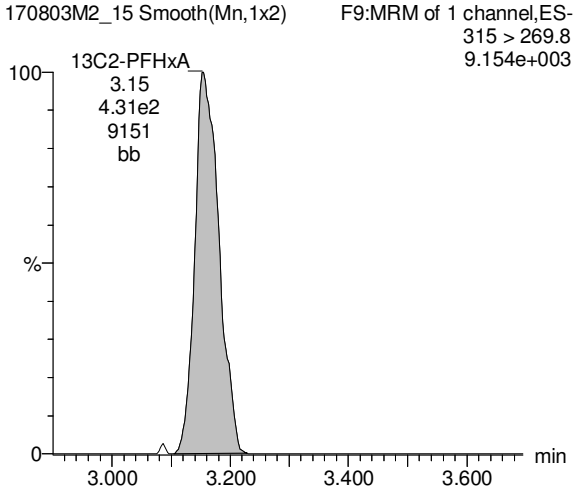

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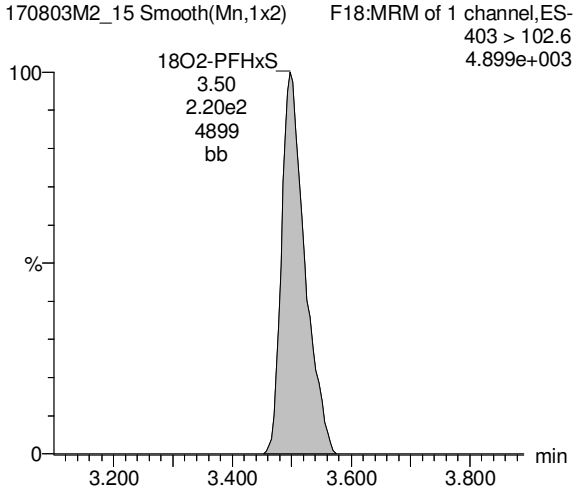

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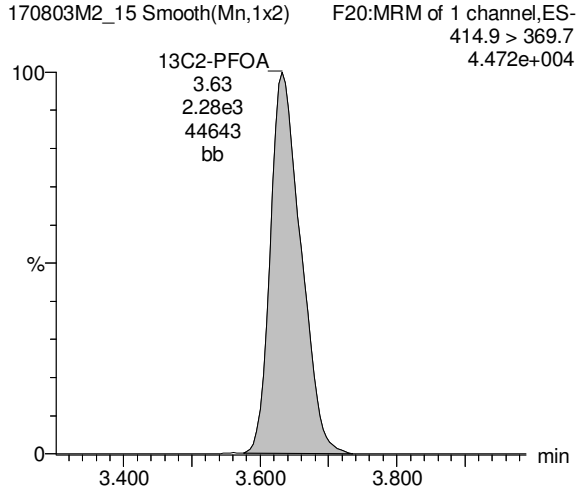

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Vista Analytical Laboratory

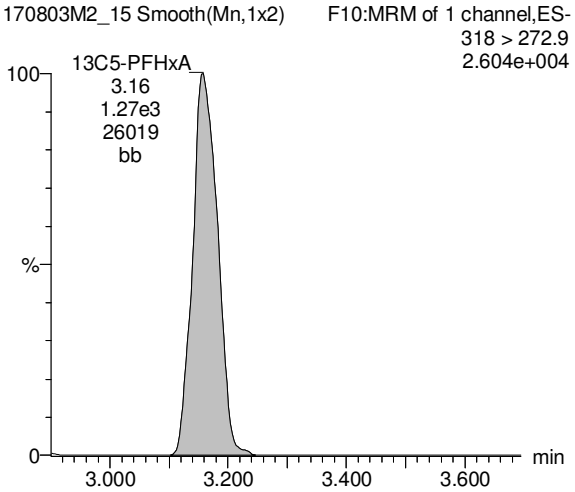
Dataset: U:\Q4.PRO\results\170803M2\170803M2-15.qld

Last Altered: Tuesday, August 08, 2017 15:08:03 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:09:57 Pacific Daylight Time

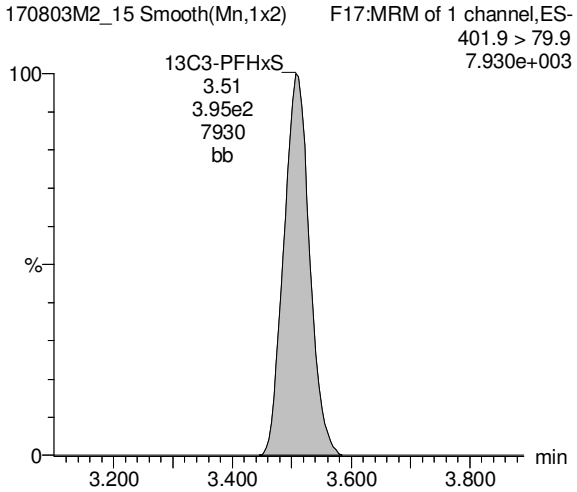
Reviewed: CT 08/09/2017

Name: 170803M2_15, Date: 03-Aug-2017, Time: 18:32:17, ID: 1700925-03@15X I001BC50S-170724 0.12135, Description: I001BC50S-170724

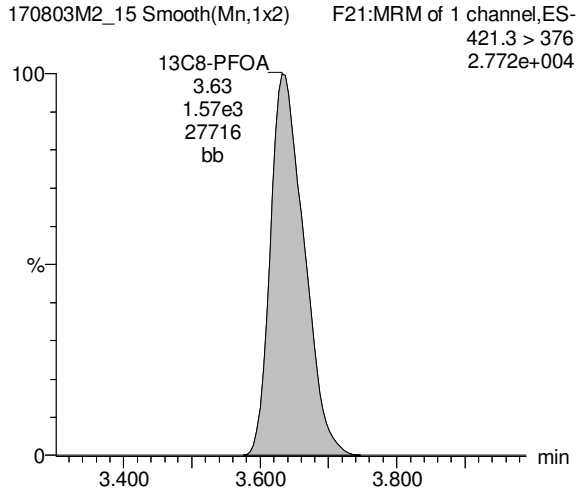
13C5-PFHxA



13C3-PFHxS



13C8-PFOA



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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-20.qld

Last Altered: Tuesday, August 08, 2017 15:16:50 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:17:54 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

*RX'd at smaller volume

Name: 170802M1_20, Date: 02-Aug-2017, Time: 13:53:59, ID: 1700925-04 I001MW52S-170724 0.1192, Description: I001MW52S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7	1.19e6	1.28e3	0.119		2.96	2.91	11700	52000 E*	
2	4	PFHxA	313.2 > 268.9	1.57e7	8.38e3	0.119		3.19	3.16	9350	56500 E*	
3	5	PFHpA	363 > 318.9	3.57e6	9.71e3	0.119		3.45	3.43	4600	32300 E*	
4	6	PFHxS	398.9 > 79.6	2.30e6	1.15e3	0.119		3.56	3.50	24900	124000 E*	
5	8	PFOA	413 > 368.7	2.32e7	2.75e4	0.119		3.65	3.64	10500	92600 E*	
6	10	PFNA	462.9 > 418.8	2.05e5	2.85e4	0.119		3.83	3.76	90.0	695	
7	12	PFOS	499 > 79.9	9.48e5	4.90e3	0.119		3.89	3.81	2420	13400 E*	
8	13	PFDA	513 > 468.8	5.72e3	3.39e4	0.119		4.01	3.99	2.11	13.7	
9	15	N-MeFOSAA	570.1 > 419		7.51e3	0.119		4.03				
10	16	N-EtFOSAA	584.2 > 419		7.56e3	0.119		4.10				
11	17	PFUnA	562.9 > 518.9		3.36e4	0.119		4.17				
12	19	PFDoA	612.9 > 318.8		3.50e3	0.119		4.34				

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-20.qld

Last Altered: Tuesday, August 08, 2017 15:16:50 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:18:07 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

*RX'd at smaller volume

Name: 170802M1_20, Date: 02-Aug-2017, Time: 13:53:59, ID: 1700925-04 I001MW52S-170724 0.1192, Description: I001MW52S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	21	PFTrDA	662.9 > 618.9		3.50e3	0.119		4.50					
2	22	PFTeDA	712.9 > 668.8		2.09e4	0.119		4.68					
3	30	13C3-PFBS	302 > 98.8	1.28e3	5.17e3	0.119	0.034	2.96	2.92	1.24	304	289.8	H*
4	31	13C2-PFHxA	315 > 269.8	8.38e3	5.17e3	0.119	0.334	3.19	3.15	8.10	203	485.0	H*
5	32	13C4-PFHpA	367.2 > 321.8	9.71e3	5.17e3	0.119	0.414	3.45	3.43	9.39	190	181.3	H*
6	33	18O2-PFHxS	403 > 102.6	1.15e3	8.73e2	0.119	0.475	3.56	3.51	16.5	291	277.9	H*
7	35	13C2-PFOA	414.9 > 369.7	2.75e4	3.28e3	0.119	1.298	3.65	3.63	105	677	645.5	H*
8	36	13C5-PFNA	468.2 > 422.9	2.85e4	2.73e4	0.119	1.094	3.83	3.81	13.0	99.9	95.2	
9	38	13C8-PFOS	507 > 79.9	4.90e3	3.87e3	0.119	1.153	3.89	3.87	15.8	115	109.8	
10	39	13C2-PFDA	515.1 > 469.9	3.39e4	3.12e4	0.119	1.059	4.01	3.99	13.6	108	102.8	

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-20.qld

Last Altered: Tuesday, August 08, 2017 15:16:50 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:19:04 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_20, Date: 02-Aug-2017, Time: 13:53:59, ID: 1700925-04 I001MW52S-170724 0.1192, Description: I001MW52S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	7.51e3	3.24e4	0.119	0.019	4.03	4.01	2.90	1260	92.2
2	42	d5-N-EtFOSAA	589.3 > 419	7.56e3	3.24e4	0.119	0.019	4.12	4.08	2.92	1290	94.8
3	43	13C2-PFUnA	565 > 519.8	3.36e4	3.24e4	0.119	1.172	4.17	4.15	13.0	92.9	88.6
4	44	13C2-PFDoA	615 > 569.7	3.50e3	3.24e4	0.119	0.118	4.34	4.31	1.35	95.7	91.3
5	46	13C2-PFTeDA	714.8 > 669.6	2.09e4	3.24e4	0.119	0.801	4.68	4.66	8.05	84.2	80.3
6	52	13C5-PFHxA	318 > 272.9	5.17e3	5.17e3	0.119	1.000	3.19	3.15	5.00	41.9	100.0
7	53	13C3-PFHxS	401.9 > 79.9	8.73e2	8.73e2	0.119	1.000	3.56	3.52	12.5	105	100.0
8	54	13C8-PFOA	421.3 > 376	3.28e3	3.28e3	0.119	1.000	3.65	3.64	12.5	105	100.0
9	55	13C9-PFNA	472.2 > 426.9	2.73e4	2.73e4	0.119	1.000	3.83	3.81	12.5	105	100.0
10	56	13C4-PFOS	503 > 79.9	3.87e3	3.87e3	0.119	1.000	3.89	3.87	12.5	105	100.0
11	57	13C6-PFDA	519.1 > 473.7	3.12e4	3.12e4	0.119	1.000	4.01	3.99	12.5	105	100.0
12	58	13C7-PFUnA	570.1 > 524.8	3.24e4	3.24e4	0.119	1.000	4.17	4.16	12.5	105	100.0
13	59	Total PFBS	299 > 79.7	1.26e6	1.28e3	0.119		2.96		12300	54700	
14	60	Total PFHxS	398.9 > 79.6	2.30e6	1.15e3	0.119		3.52		24900	124000	
15	61	Total PFOA	413 > 368.7	2.32e7	2.75e4	0.119		3.65		10500	92600	
16	62	Total PFOS	499 > 79.9	9.48e5	4.90e3	0.119		3.89		2420	13400	
17	63	Total N-Me-FOSAA	570.1 > 419	0.00e0	7.51e3	0.119		4.03		0.000		
18	64	Total N-EtFOSAA	584.2 > 419	0.00e0	7.56e3	0.119		4.17		0.000		

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-20.qld

Last Altered: Tuesday, August 08, 2017 15:16:50 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:19:04 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_20, Date: 02-Aug-2017, Time: 13:53:59, ID: 1700925-04 I001MW52S-170724 0.1192, Description: I001MW52S-170724

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3	PFBS	299 > 79.7	2.91	1193386.750	1278.480	11668.023	bb	51954.0
2	59	Total PFBS	299 > 79.7	2.78	62522.574	1278.480	611.298	bb	2721.6

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.50	2295868.250	1153.016	24889.813	db	124245.6

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7	3.64	23157926.0...	27501.379	10525.802	bb	92567.3

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.81	947925.063	4897.076	2419.620	MM	13393.9

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15	N-MeFOSAA	570.1 > 419			7506.681		MM-I	

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-20.qld

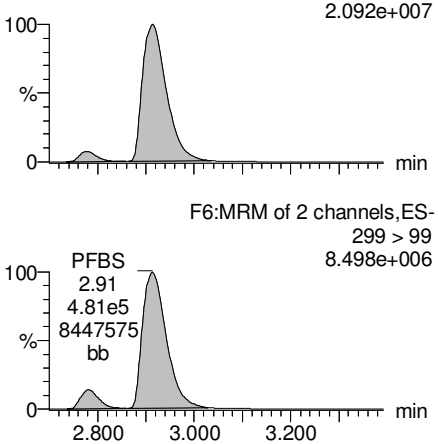
Last Altered: Tuesday, August 08, 2017 15:16:50 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:19:04 Pacific Daylight Time

Reviewed: CT 08/09/2017

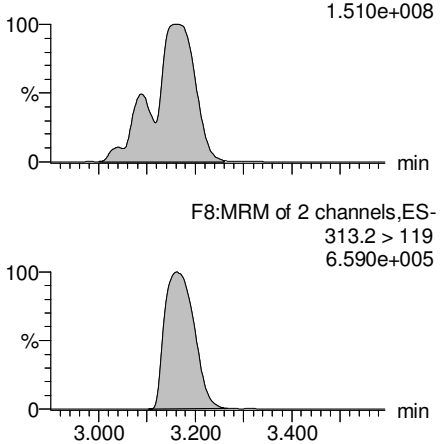
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_20, Date: 02-Aug-2017, Time: 13:53:59, ID: 1700925-04 I001MW52S-170724 0.1192, Description: I001MW52S-170724

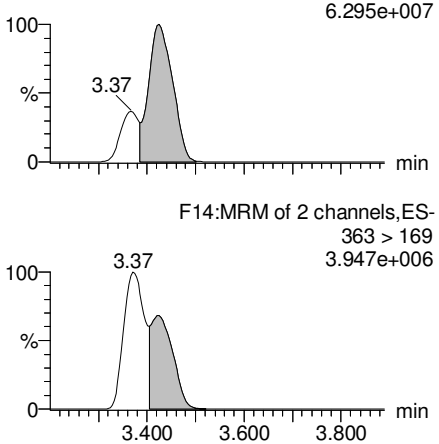
Total PFBS



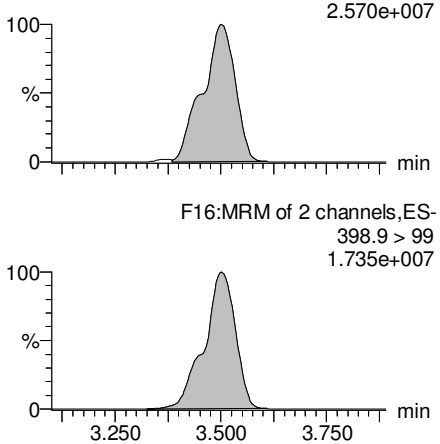
PFHxA



PFHpA



Total PFHxS



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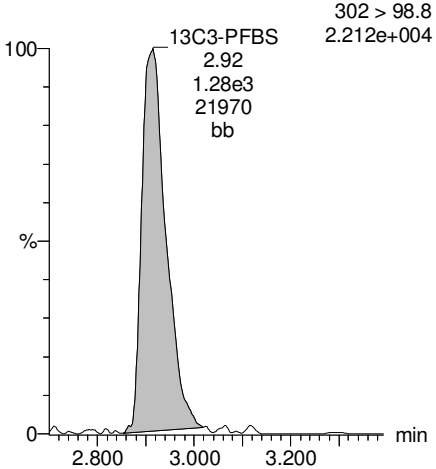
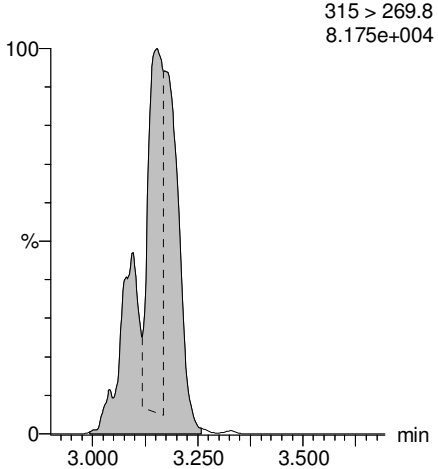
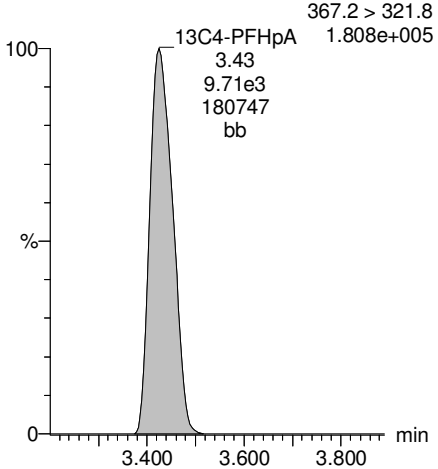


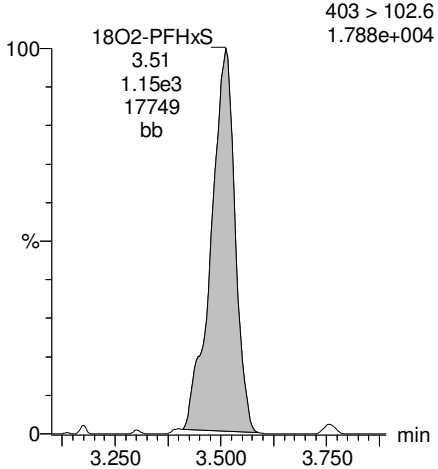
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



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Vista Analytical Laboratory

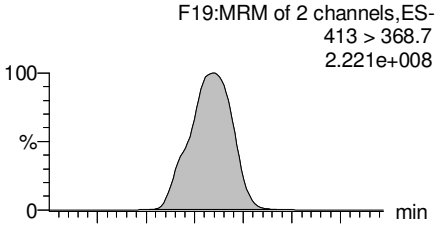
Dataset: U:\Q4.PRO\results\170802M1\170802M1-20.qld

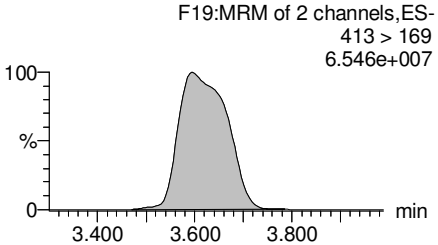
Last Altered: Tuesday, August 08, 2017 15:16:50 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:19:04 Pacific Daylight Time

Reviewed: CT 08/09/2017

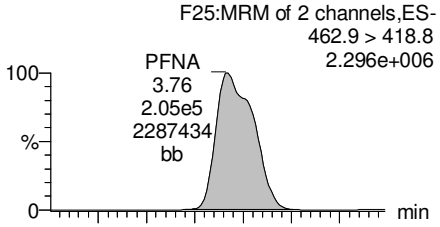
Name: 170802M1_20, Date: 02-Aug-2017, Time: 13:53:59, ID: 1700925-04 I001MW52S-170724 0.1192, Description: I001MW52S-170724

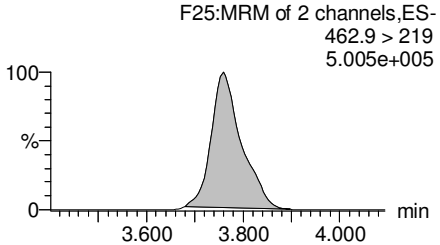
Total PFOA



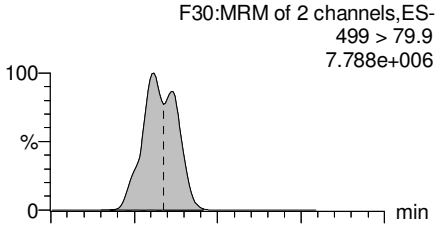


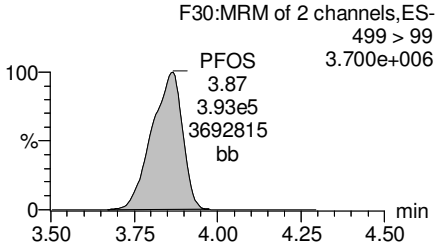
PFNA



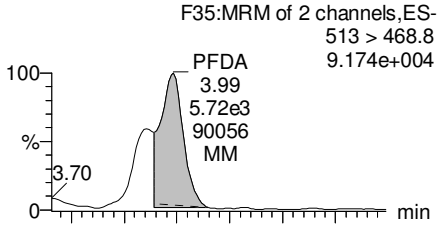


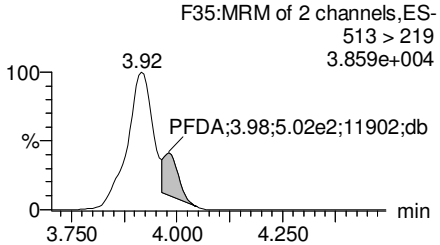
Total PFOS



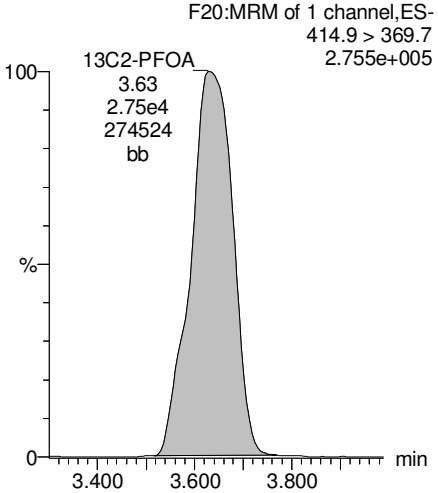


PFDA

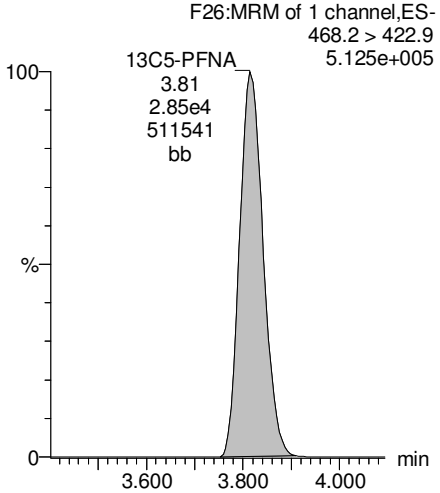




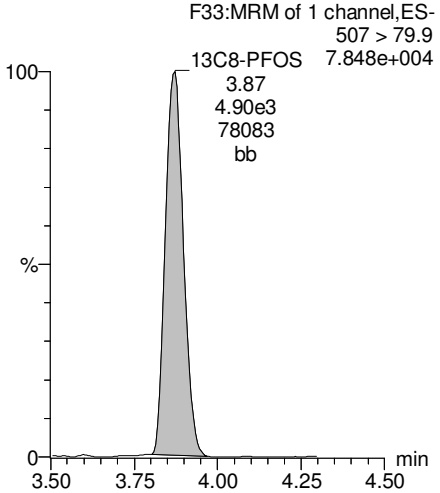
13C2-PFOA



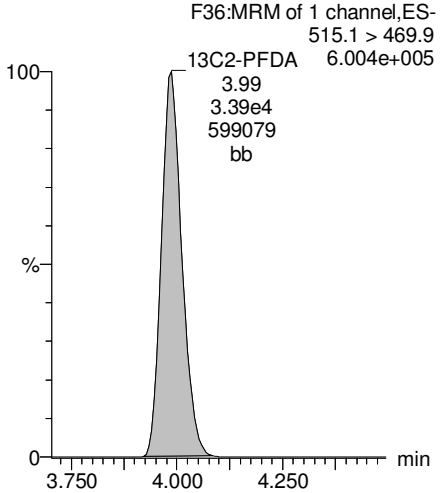
13C5-PFNA



13C8-PFOS



13C2-PFDA



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Vista Analytical Laboratory

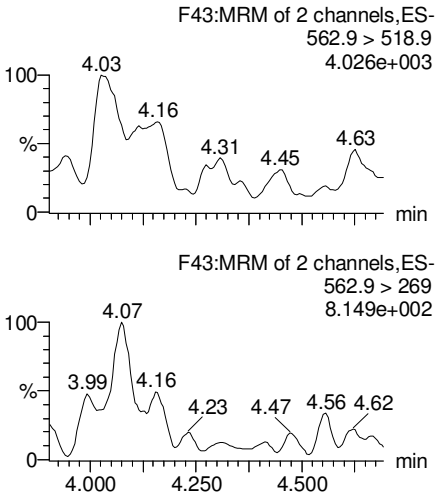
Dataset: U:\Q4.PRO\results\170802M1\170802M1-20.qld

Last Altered: Tuesday, August 08, 2017 15:16:50 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:19:04 Pacific Daylight Time

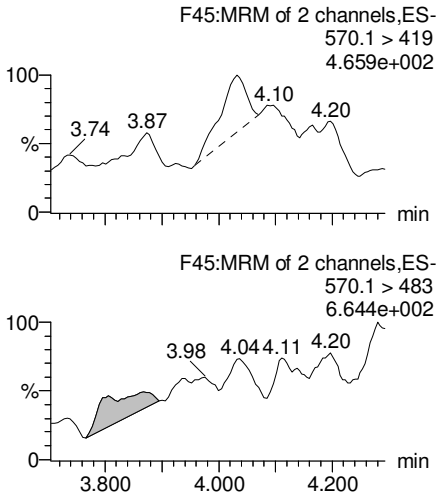
Reviewed: CT 08/09/2017

Name: 170802M1_20, Date: 02-Aug-2017, Time: 13:53:59, ID: 1700925-04 I001MW52S-170724 0.1192, Description: I001MW52S-170724

PFUnA



N-MeFOSAA



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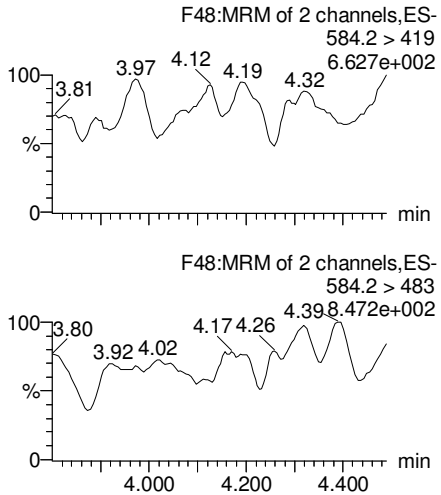
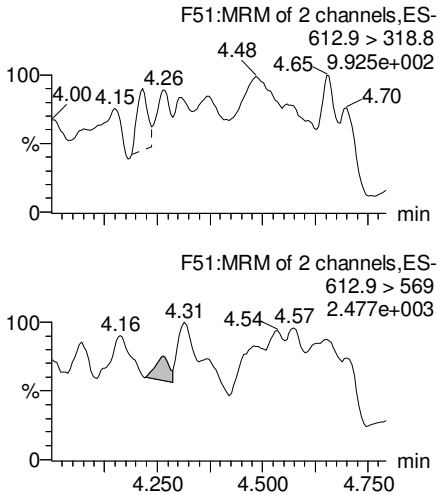
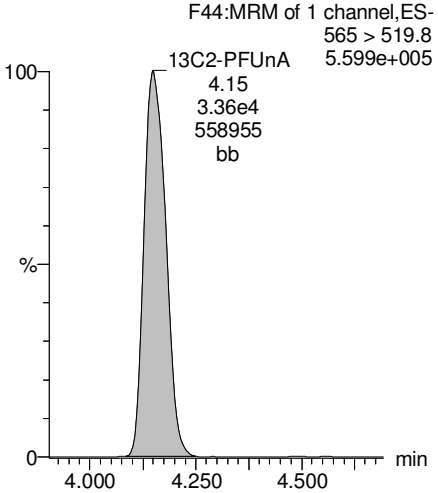


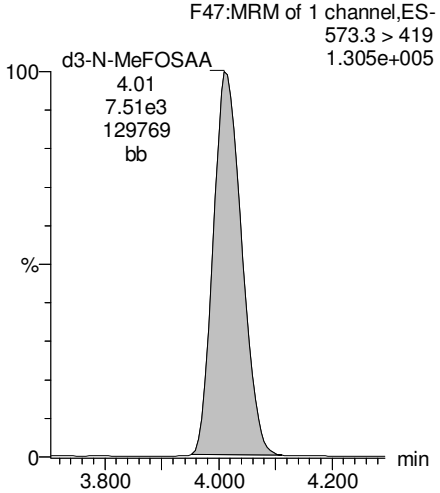
PFDoA



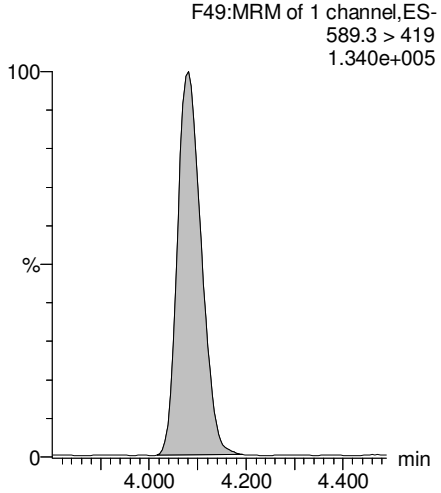
13C2-PFUnA



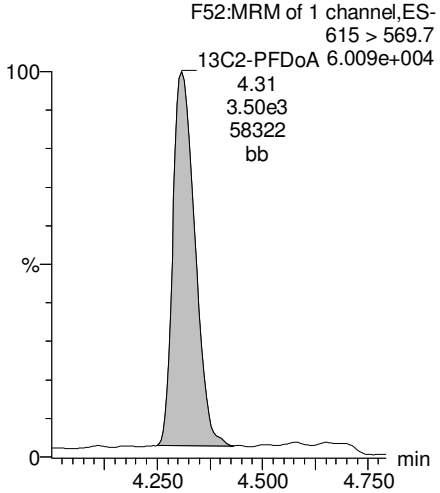
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFDoA



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Vista Analytical Laboratory

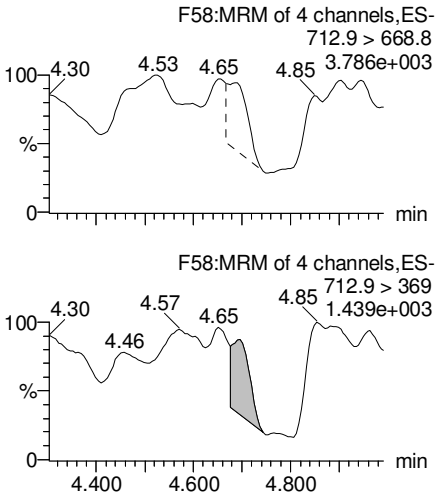
Dataset: U:\Q4.PRO\results\170802M1\170802M1-20.qld

Last Altered: Tuesday, August 08, 2017 15:16:50 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:19:04 Pacific Daylight Time

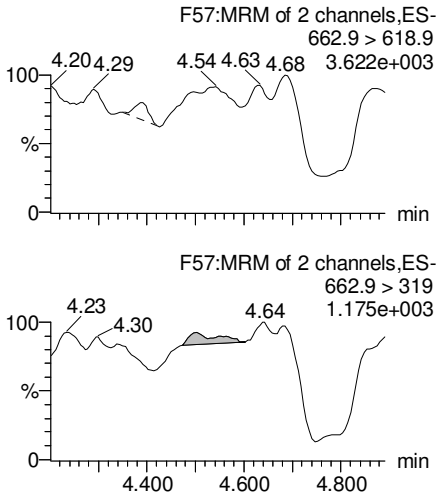
Reviewed: CT 08/09/2017

Name: 170802M1_20, Date: 02-Aug-2017, Time: 13:53:59, ID: 1700925-04 I001MW52S-170724 0.1192, Description: I001MW52S-170724

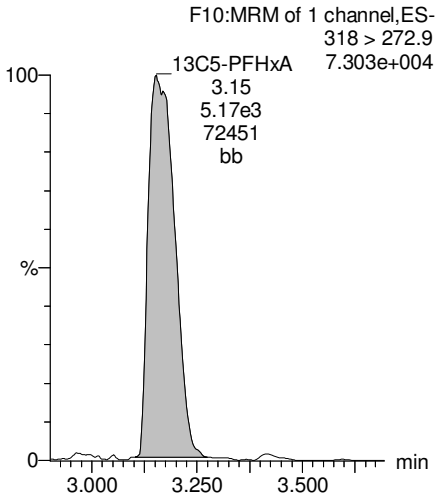
PFTeDA



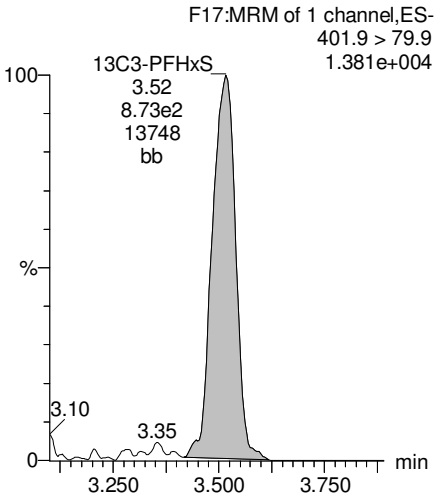
PFTrDA



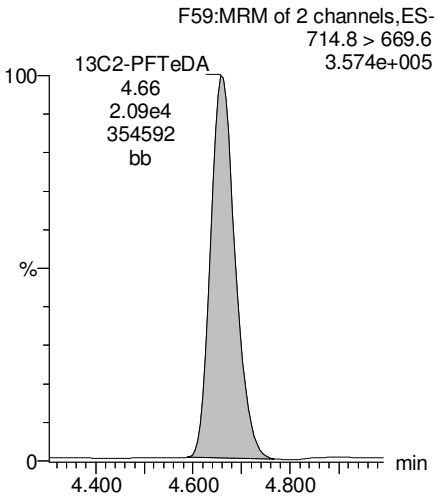
13C5-PFHxA



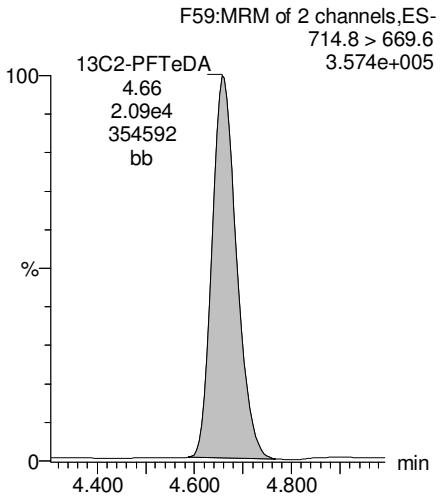
13C3-PFHxS



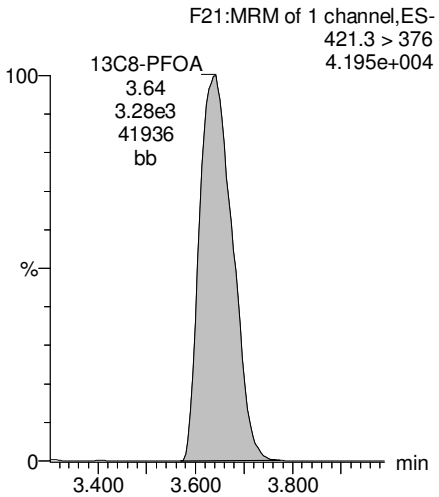
13C2-PFTeDA



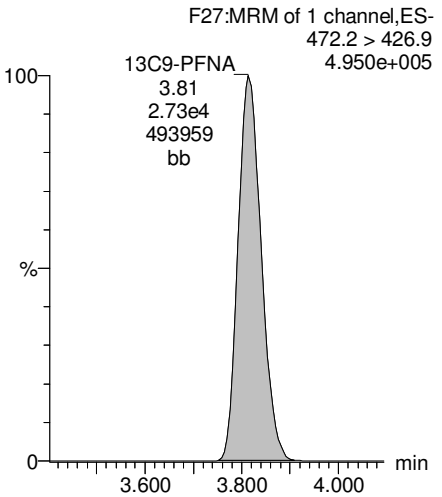
13C2-PFTeDA



13C8-PFOA



13C9-PFNA



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Vista Analytical Laboratory

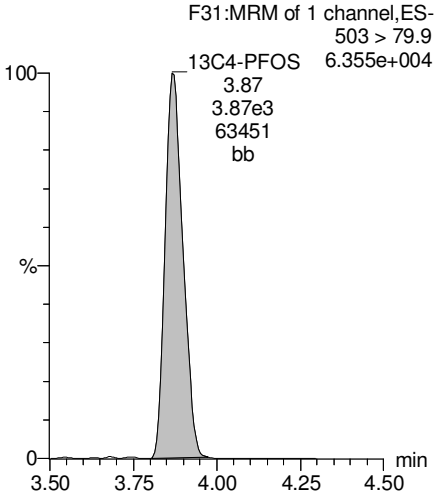
Dataset: U:\Q4.PRO\results\170802M1\170802M1-20.qld

Last Altered: Tuesday, August 08, 2017 15:16:50 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:19:04 Pacific Daylight Time

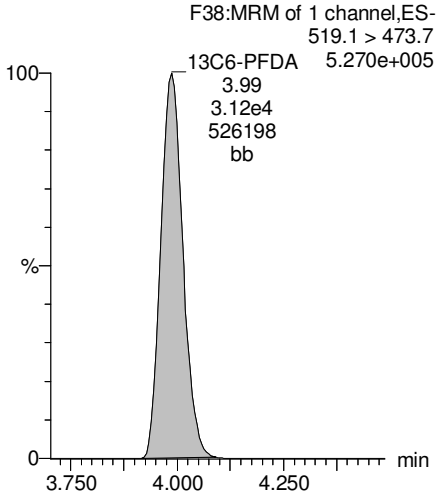
Reviewed: CT 08/09/2017

Name: 170802M1_20, Date: 02-Aug-2017, Time: 13:53:59, ID: 1700925-04 I001MW52S-170724 0.1192, Description: I001MW52S-170724

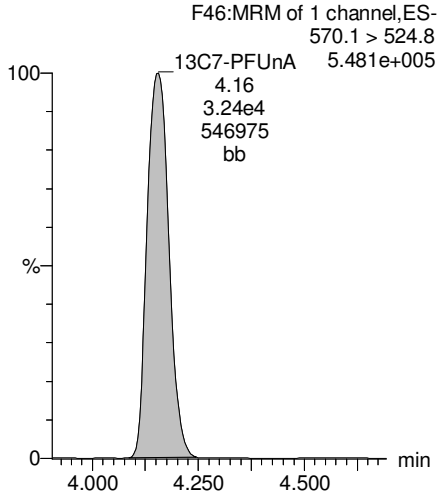
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-9.qld

Last Altered: Tuesday, August 08, 2017 14:15:16 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:19:40 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

*RX'd at smaller volume

Name: 170802M1_9, Date: 02-Aug-2017, Time: 11:54:58, ID: B7G0121-MS2 Matrix Spike 0.11554, Description: Matrix Spike

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7	1.27e6	1.35e3	0.116		2.96	2.90	11700	53900	E*
2	4	PFHxA	313.2 > 268.9	1.24e7	9.18e3	0.116		3.19	3.14	6740	42000	E*
3	5	PFHpA	363 > 318.9	3.95e6	1.10e4	0.116		3.45	3.42	4500	32600	E*
4	6	PFHxS	398.9 > 79.6	2.40e6	1.24e3	0.116		3.56	3.49	24100	124000	E*
5	8	PFOA	413 > 368.7	2.48e7	2.85e4	0.116		3.65	3.64	10900	98600	E*
6	10	PFNA	462.9 > 418.8	2.67e5	3.28e4	0.116		3.83	3.77	102	811	
7	12	PFOS	499 > 79.9	1.03e6	5.60e3	0.116		3.89	3.80	2300	13300	E*
8	13	PFDA	513 > 468.8	4.18e4	3.52e4	0.116		4.01	3.98	14.9	106	
9	15	N-MeFOSAA	570.1 > 419	1.01e4	8.61e3	0.116		4.03	4.01	191	92.5	
10	16	N-EtFOSAA	584.2 > 419	8.37e3	8.90e3	0.116		4.10	4.08	153	85.8	
11	17	PFUnA	562.9 > 518.9	2.53e4	3.66e4	0.116		4.17	4.14	8.65	97.8	
12	19	PFDoA	612.9 > 318.8	3.05e3	4.02e3	0.116		4.34	4.31	9.48	87.2	

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-9.qld

Last Altered: Tuesday, August 08, 2017 14:15:16 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:19:53 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

*RX'd at smaller volume

Name: 170802M1_9, Date: 02-Aug-2017, Time: 11:54:58, ID: B7G0121-MS2 Matrix Spike 0.11554, Description: Matrix Spike

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	21	PFTrDA	662.9 > 618.9	3.67e4	4.02e3	0.116		4.50	4.48	114	94.3		
2	22	PFTeDA	712.9 > 668.8	2.49e4	2.99e4	0.116		4.68	4.66	10.4	83.2		
3	30	13C3-PFBS	302 > 98.8	1.35e3	5.48e3	0.116	0.034	2.96	2.90	1.24	314	289.9	H*
4	31	13C2-PFHxA	315 > 269.8	9.18e3	5.48e3	0.116	0.334	3.19	3.14	8.38	217	501.5	H*
5	32	13C4-PFHpA	367.2 > 321.8	1.10e4	5.48e3	0.116	0.414	3.45	3.42	10.0	210	193.7	H*
6	33	18O2-PFHxS	403 > 102.6	1.24e3	9.85e2	0.116	0.475	3.56	3.49	15.8	287	265.3	H*
7	35	13C2-PFOA	414.9 > 369.7	2.85e4	3.65e3	0.116	1.298	3.65	3.63	97.8	652	602.4	H*
8	36	13C5-PFNA	468.2 > 422.9	3.28e4	3.29e4	0.116	1.094	3.83	3.81	12.4	98.4	91.0	
9	38	13C8-PFOS	507 > 79.9	5.60e3	4.86e3	0.116	1.153	3.89	3.86	14.4	108	99.8	
10	39	13C2-PFDA	515.1 > 469.9	3.52e4	4.28e4	0.116	1.059	4.01	3.98	10.3	83.9	77.6	

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-9.qld

Last Altered: Tuesday, August 08, 2017 14:15:16 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:20:13 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_9, Date: 02-Aug-2017, Time: 11:54:58, ID: B7G0121-MS2 Matrix Spike 0.11554, Description: Matrix Spike

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	8.61e3	3.60e4	0.116	0.019	4.03	4.01	2.99	1340	95.2
2	42	d5-N-EtFOSAA	589.3 > 419	8.90e3	3.60e4	0.116	0.019	4.12	4.08	3.09	1410	100.4
3	43	13C2-PFUnA	565 > 519.8	3.66e4	3.60e4	0.116	1.172	4.17	4.15	12.7	93.8	86.7
4	44	13C2-PFDoA	615 > 569.7	4.02e3	3.60e4	0.116	0.118	4.34	4.31	1.39	102	94.1
5	46	13C2-PFTeDA	714.8 > 669.6	2.99e4	3.60e4	0.116	0.801	4.68	4.65	10.4	112	103.5
6	52	13C5-PFHxA	318 > 272.9	5.48e3	5.48e3	0.116	1.000	3.19	3.14	5.00	43.3	100.0
7	53	13C3-PFHxS	401.9 > 79.9	9.85e2	9.85e2	0.116	1.000	3.56	3.49	12.5	108	100.0
8	54	13C8-PFOA	421.3 > 376	3.65e3	3.65e3	0.116	1.000	3.65	3.63	12.5	108	100.0
9	55	13C9-PFNA	472.2 > 426.9	3.29e4	3.29e4	0.116	1.000	3.83	3.81	12.5	108	100.0
10	56	13C4-PFOS	503 > 79.9	4.86e3	4.86e3	0.116	1.000	3.89	3.87	12.5	108	100.0
11	57	13C6-PFDA	519.1 > 473.7	4.28e4	4.28e4	0.116	1.000	4.01	3.98	12.5	108	100.0
12	58	13C7-PFUnA	570.1 > 524.8	3.60e4	3.60e4	0.116	1.000	4.17	4.15	12.5	108	100.0
13	59	Total PFBS	299 > 79.7	1.34e6	1.35e3	0.116		2.96		12300	56700	
14	60	Total PFHxS	398.9 > 79.6	2.40e6	1.24e3	0.116		3.52		24100	124000	
15	61	Total PFOA	413 > 368.7	2.48e7	2.85e4	0.116		3.65		10900	98600	
16	62	Total PFOS	499 > 79.9	1.03e6	5.60e3	0.116		3.89		2300	13300	
17	63	Total N-Me-FOSAA	570.1 > 419	1.01e4	8.61e3	0.116		4.03		191	92.5	
18	64	Total N-EtFOSAA	584.2 > 419	8.37e3	8.90e3	0.116		4.17		153	85.8	

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Quantify Totals Report MassLynx MassLynx V4.1 SCN945 SCN960
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-9.qld

Last Altered: Tuesday, August 08, 2017 14:15:16 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:20:13 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_9, Date: 02-Aug-2017, Time: 11:54:58, ID: B7G0121-MS2 Matrix Spike 0.11554, Description: Matrix Spike

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3	PFBS	299 > 79.7	2.90	1272427.125	1354.598	11741.741	bb	53938.4
2	59	Total PFBS	299 > 79.7	2.77	65764.367	1354.598	606.862	bb	2787.5

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.49	2396038.250	1241.665	24121.223	MM	124223.2

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7	3.64	24793822.0...	28528.205	10863.732	bb	98565.6

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.80	1029465.688	5600.508	2297.706	MM	13289.8

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15	N-MeFOSAA	570.1 > 419	4.01	10103.709	8612.734	190.631	bb	92.5

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16	N-EtFOSAA	584.2 > 419	4.08	8366.221	8899.321	152.766	bb	85.8

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-9.qld

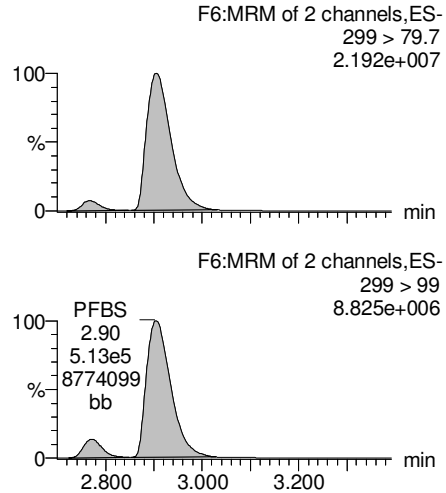
Last Altered: Tuesday, August 08, 2017 14:15:16 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:20:13 Pacific Daylight Time

Reviewed: CT 08/09/2017

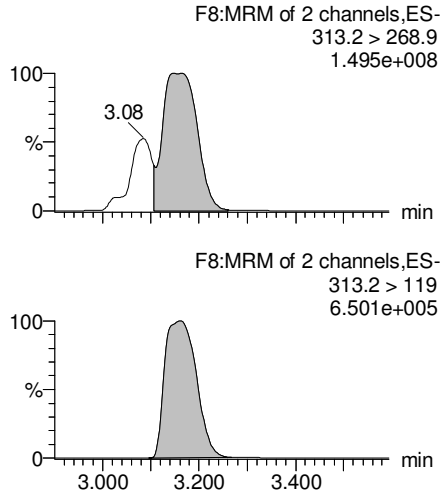
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_9, Date: 02-Aug-2017, Time: 11:54:58, ID: B7G0121-MS2 Matrix Spike 0.11554, Description: Matrix Spike

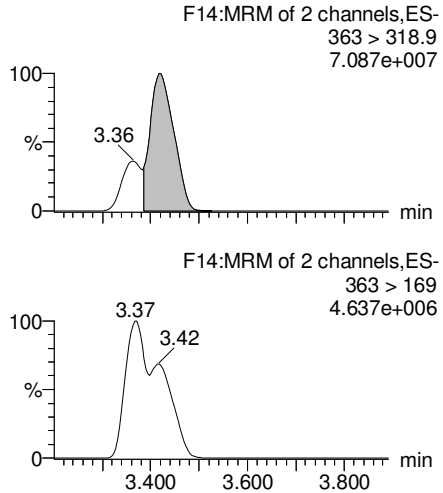
Total PFBS



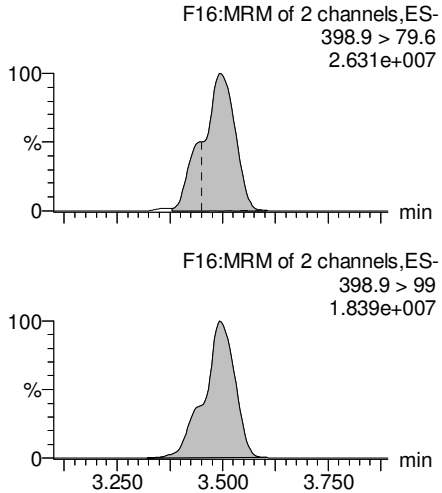
PFHxA



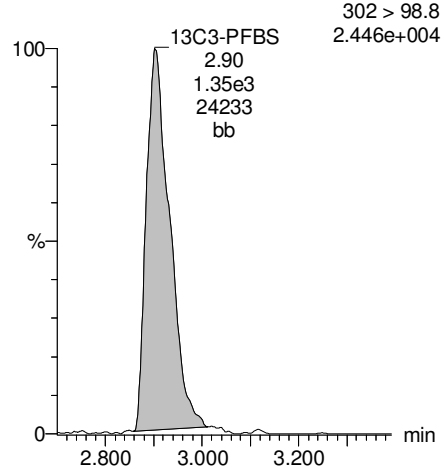
PFHpA



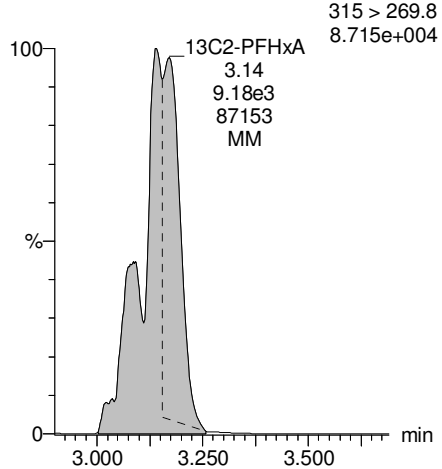
Total PFHxS



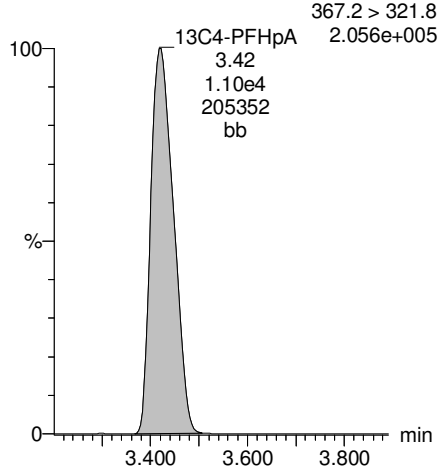
13C3-PFBS



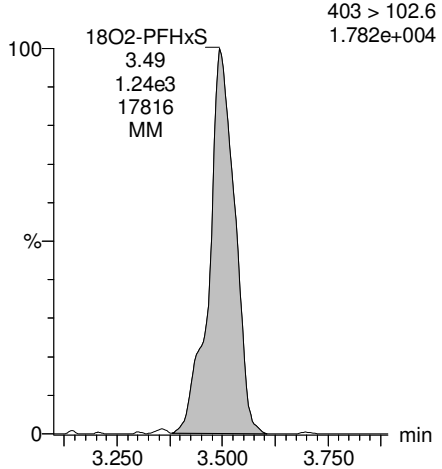
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



GM 8/8/17

Vista Analytical Laboratory

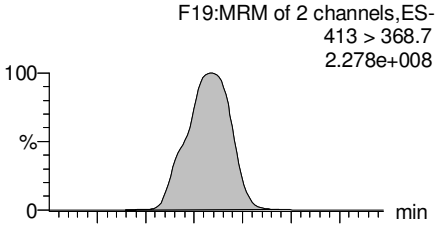
Dataset: U:\Q4.PRO\results\170802M1\170802M1-9.qld

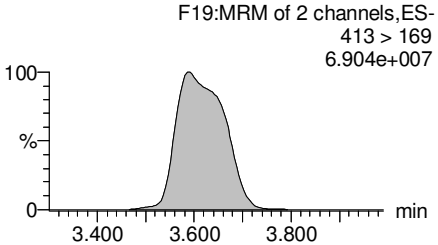
Last Altered: Tuesday, August 08, 2017 14:15:16 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:20:13 Pacific Daylight Time

Reviewed: CT 08/09/2017

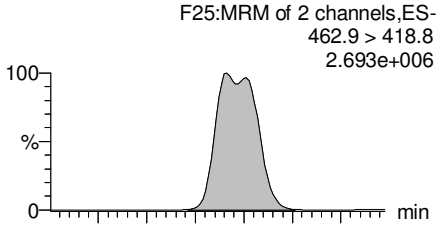
Name: 170802M1_9, Date: 02-Aug-2017, Time: 11:54:58, ID: B7G0121-MS2 Matrix Spike 0.11554, Description: Matrix Spike

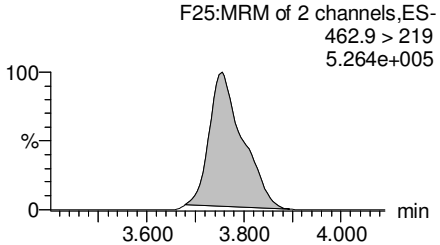
Total PFOA



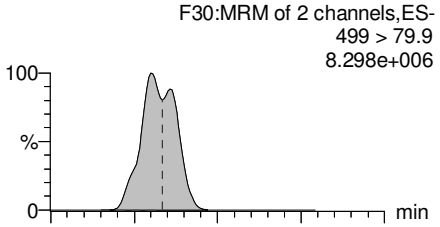


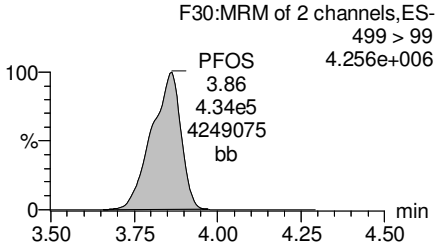
PFNA



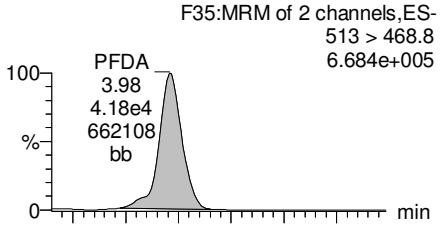


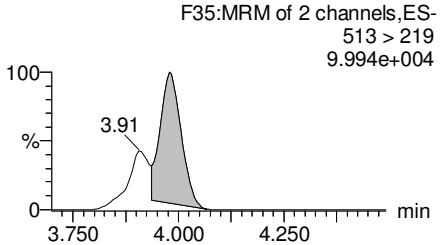
Total PFOS



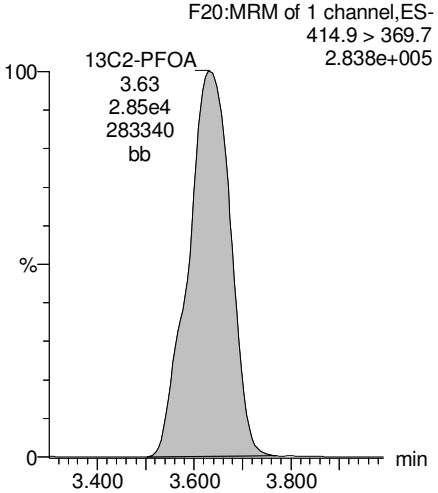


PFDA

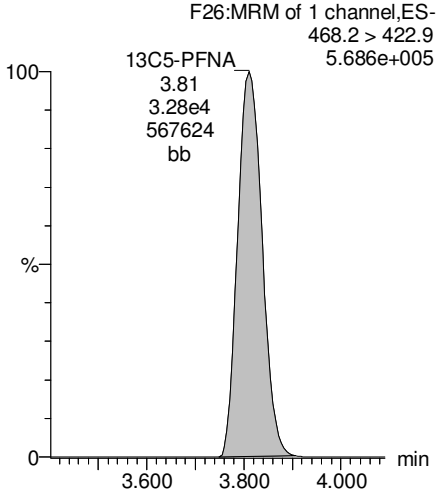




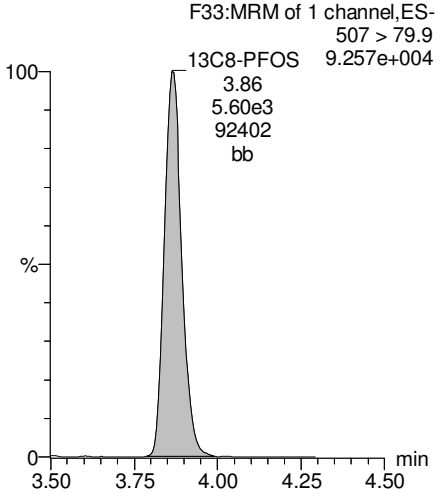
13C2-PFOA



13C5-PFNA



13C8-PFOS



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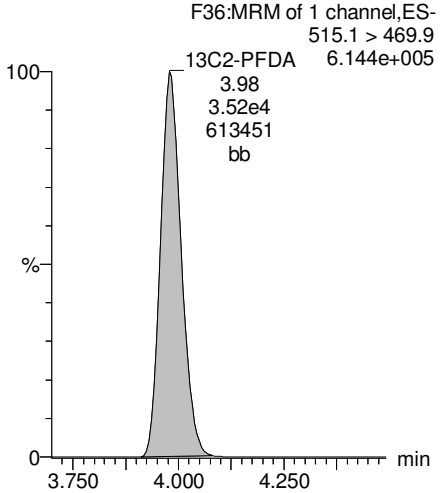


GM 8/8/17

Vista Analytical Laboratory

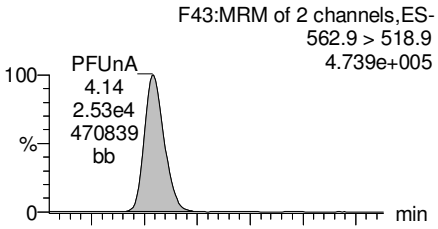
Dataset: U:\Q4.PRO\results\170802M1\170802M1-9.qld

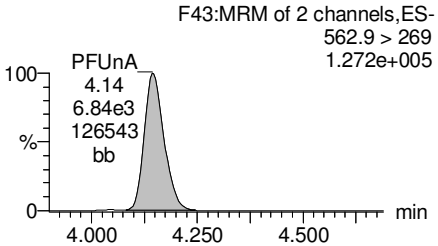
Last Altered: Tuesday, August 08, 2017 14:15:16 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:20:13 Pacific Daylight Time

Reviewed: CT 08/09/2017

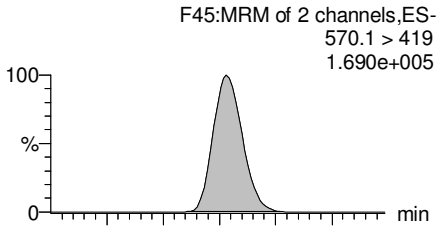
Name: 170802M1_9, Date: 02-Aug-2017, Time: 11:54:58, ID: B7G0121-MS2 Matrix Spike 0.11554, Description: Matrix Spike

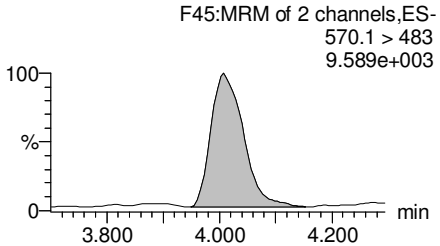
PFUnA



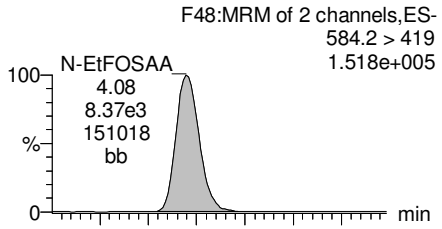


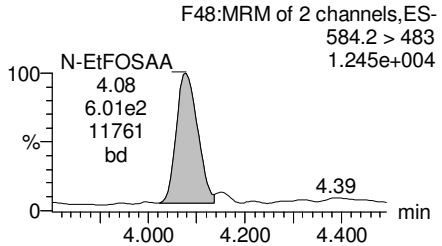
N-MeFOSAA



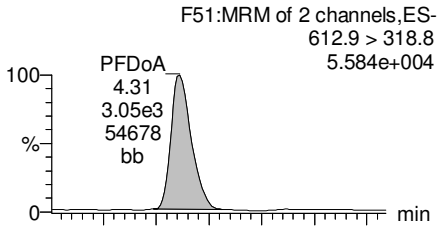


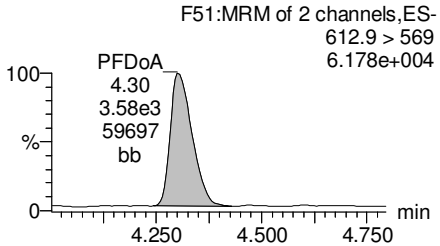
N-EtFOSAA



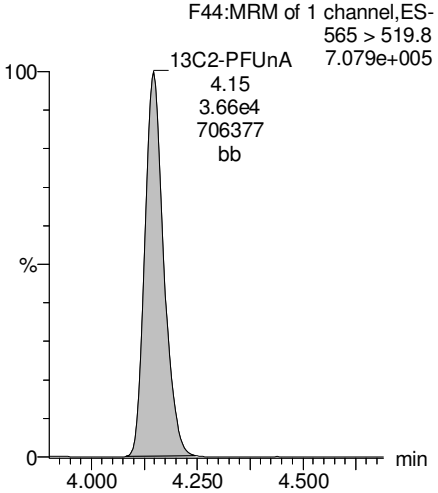


PFDoA

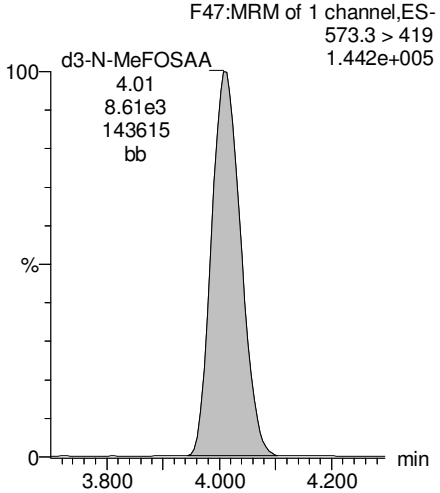




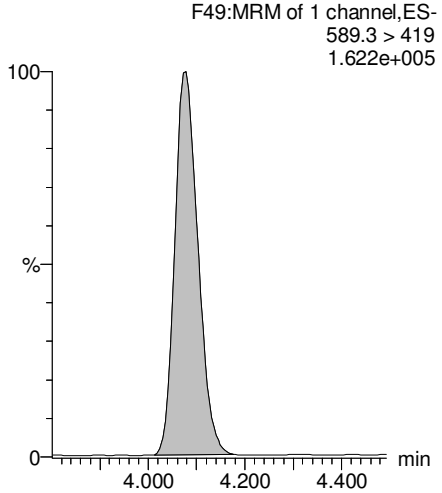
13C2-PFUnA



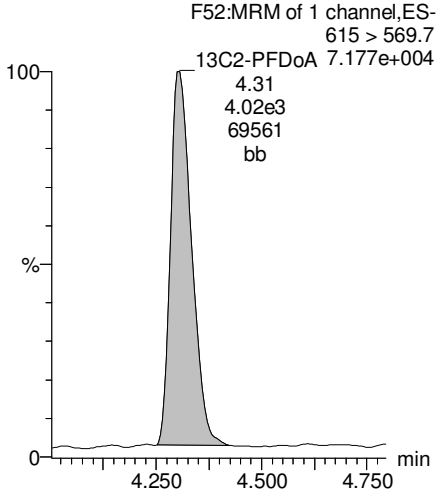
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFDoA



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Vista Analytical Laboratory

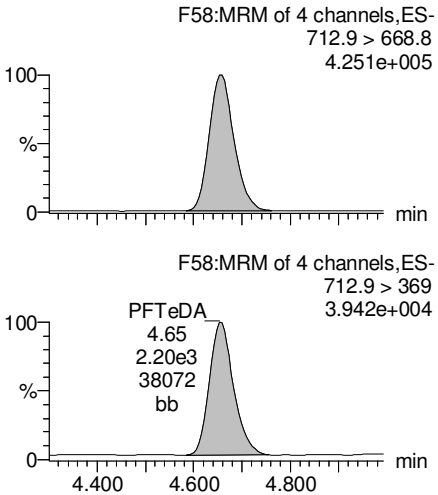
Dataset: U:\Q4.PRO\results\170802M1\170802M1-9.qld

Last Altered: Tuesday, August 08, 2017 14:15:16 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:20:13 Pacific Daylight Time

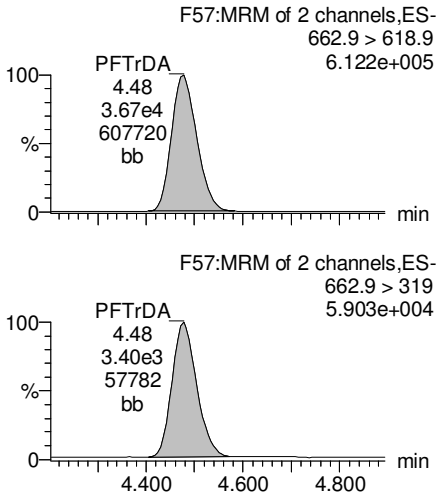
Reviewed: CT 08/09/2017

Name: 170802M1_9, Date: 02-Aug-2017, Time: 11:54:58, ID: B7G0121-MS2 Matrix Spike 0.11554, Description: Matrix Spike

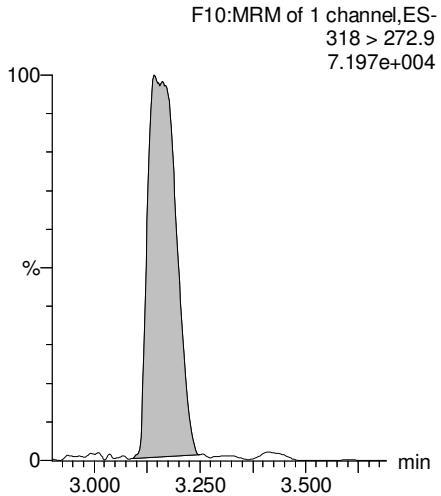
PFTeDA



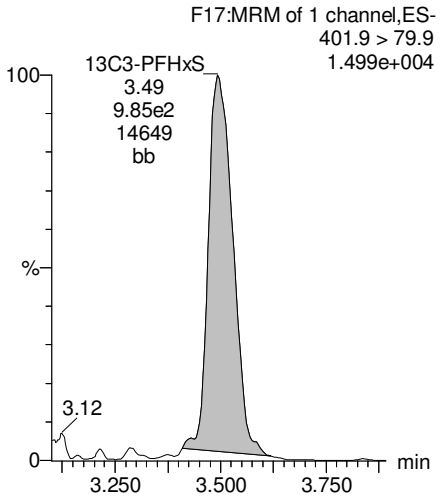
PFTrDA



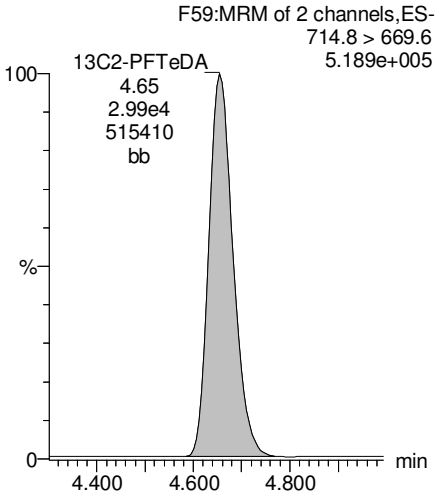
13C5-PFHxA



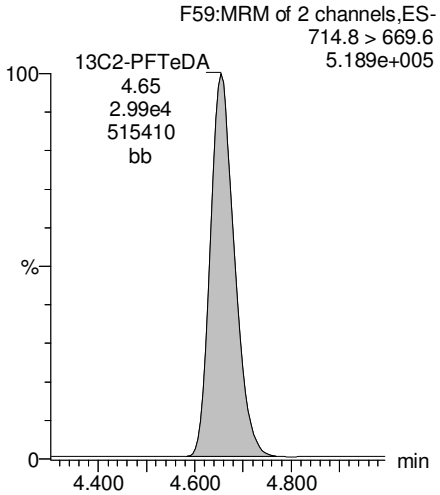
13C3-PFHxS



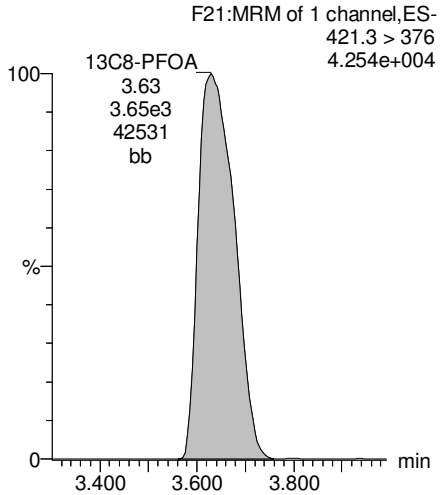
13C2-PFTeDA



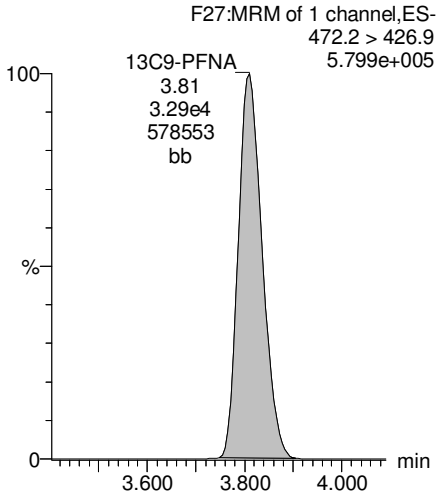
13C2-PFTeDA



13C8-PFOA



13C9-PFNA



GM 8/8/17

Vista Analytical Laboratory

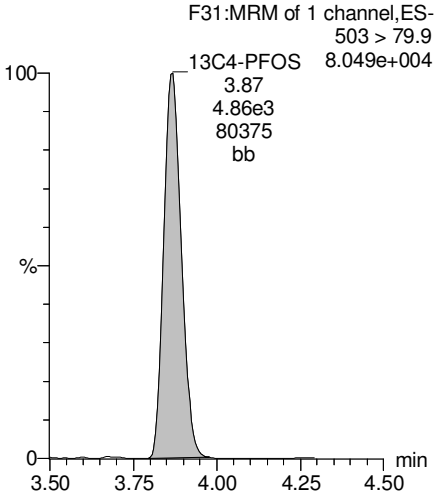
Dataset: U:\Q4.PRO\results\170802M1\170802M1-9.qld

Last Altered: Tuesday, August 08, 2017 14:15:16 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:20:13 Pacific Daylight Time

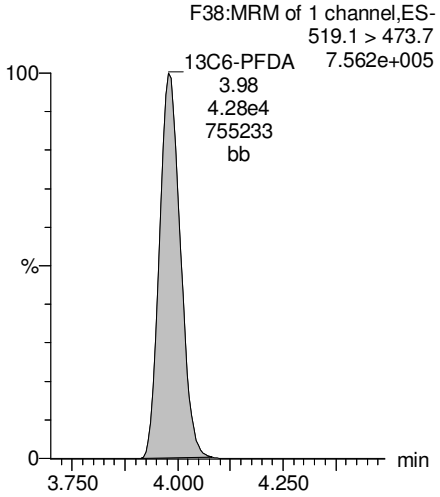
Reviewed: CT 08/09/2017

Name: 170802M1_9, Date: 02-Aug-2017, Time: 11:54:58, ID: B7G0121-MS2 Matrix Spike 0.11554, Description: Matrix Spike

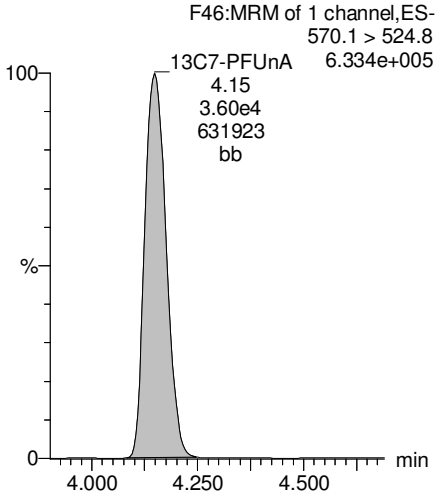
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-10.qld

Last Altered: Tuesday, August 08, 2017 14:32:40 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:37:12 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25 *RX'd at smaller volume
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_10, Date: 02-Aug-2017, Time: 12:05:47, ID: B7G0121-MSD2 Matrix Spike Dup 0.11866, Description: Matrix Spike Dup

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7	1.22e6	1.28e3	0.119		2.96	2.90	12000	53600	E*
2	4	PFHxA	313.2 > 268.9	1.65e7	8.72e3	0.119		3.19	3.15	9450	57400	E*
3	5	PFHpA	363 > 318.9	3.97e6	1.09e4	0.119		3.45	3.42	4570	32200	E*
4	6	PFHxS	398.9 > 79.6	2.36e6	1.12e3	0.119		3.56	3.49	26200	131000	E*
5	8	PFOA	413 > 368.7	2.46e7	2.83e4	0.119		3.65	3.63	10900	95900	E*
6	10	PFNA	462.9 > 418.8	2.57e5	3.04e4	0.119		3.83	3.76	106	821	
7	12	PFOS	499 > 79.9	9.92e5	5.21e3	0.119		3.89	3.80	2380	13300	E*
8	13	PFDA	513 > 468.8	4.62e4	3.62e4	0.119		4.01	3.98	16.0	111	
9	15	N-MeFOSAA	570.1 > 419	1.01e4	8.76e3	0.119		4.03	4.01	188	88.7	
10	16	N-EtFOSAA	584.2 > 419	7.90e3	8.77e3	0.119		4.10	4.08	146	80.0	
11	17	PFUnA	562.9 > 518.9	2.51e4	4.31e4	0.119		4.17	4.14	7.30	80.2	
12	19	PFDoA	612.9 > 318.8	2.99e3	3.88e3	0.119		4.34	4.30	9.65	86.4	

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-10.qld

Last Altered: Tuesday, August 08, 2017 14:32:40 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:37:26 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

*RX'd at smaller volume

Name: 170802M1_10, Date: 02-Aug-2017, Time: 12:05:47, ID: B7G0121-MSD2 Matrix Spike Dup 0.11866, Description: Matrix Spike Dup

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	21	PFTrDA	662.9 > 618.9	3.54e4	3.88e3	0.119		4.50	4.47	114	91.9		
2	22	PFTeDA	712.9 > 668.8	2.45e4	2.86e4	0.119		4.68	4.66	10.7	83.5		
3	30	13C3-PFBS	302 > 98.8	1.28e3	5.50e3	0.119	0.034	2.96	2.90	1.16	287	272.0	H*
4	31	13C2-PFHxA	315 > 269.8	8.72e3	5.50e3	0.119	0.334	3.19	3.15	7.92	200	474.4	H*
5	32	13C4-PFHpA	367.2 > 321.8	1.09e4	5.50e3	0.119	0.414	3.45	3.42	9.86	201	190.5	H*
6	33	18O2-PFHxS	403 > 102.6	1.12e3	9.68e2	0.119	0.475	3.56	3.50	14.5	258	244.6	H*
7	35	13C2-PFOA	414.9 > 369.7	2.83e4	3.23e3	0.119	1.298	3.65	3.63	110	713	676.6	H*
8	36	13C5-PFNA	468.2 > 422.9	3.04e4	3.14e4	0.119	1.094	3.83	3.81	12.1	93.2	88.5	
9	38	13C8-PFOS	507 > 79.9	5.21e3	4.14e3	0.119	1.153	3.89	3.86	15.7	115	109.1	
10	39	13C2-PFDA	515.1 > 469.9	3.62e4	3.99e4	0.119	1.059	4.01	3.98	11.3	90.3	85.7	

GM 8/8/17

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-10.qld

Last Altered: Tuesday, August 08, 2017 14:32:40 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:38:13 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_10, Date: 02-Aug-2017, Time: 12:05:47, ID: B7G0121-MSD2 Matrix Spike Dup 0.11866, Description: Matrix Spike Dup

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	8.76e3	3.79e4	0.119	0.019	4.03	4.01	2.89	1260	92.0
2	42	d5-N-EtFOSAA	589.3 > 419	8.77e3	3.79e4	0.119	0.019	4.12	4.08	2.89	1290	94.0
3	43	13C2-PFUnA	565 > 519.8	4.31e4	3.79e4	0.119	1.172	4.17	4.14	14.2	102	97.0
4	44	13C2-PFDoA	615 > 569.7	3.88e3	3.79e4	0.119	0.118	4.34	4.30	1.28	90.9	86.3
5	46	13C2-PFTeDA	714.8 > 669.6	2.86e4	3.79e4	0.119	0.801	4.68	4.65	9.43	99.2	94.2
6	52	13C5-PFHxA	318 > 272.9	5.50e3	5.50e3	0.119	1.000	3.19	3.13	5.00	42.1	100.0
7	53	13C3-PFHxS	401.9 > 79.9	9.68e2	9.68e2	0.119	1.000	3.56	3.50	12.5	105	100.0
8	54	13C8-PFOA	421.3 > 376	3.23e3	3.23e3	0.119	1.000	3.65	3.63	12.5	105	100.0
9	55	13C9-PFNA	472.2 > 426.9	3.14e4	3.14e4	0.119	1.000	3.83	3.81	12.5	105	100.0
10	56	13C4-PFOS	503 > 79.9	4.14e3	4.14e3	0.119	1.000	3.89	3.87	12.5	105	100.0
11	57	13C6-PFDA	519.1 > 473.7	3.99e4	3.99e4	0.119	1.000	4.01	3.98	12.5	105	100.0
12	58	13C7-PFUnA	570.1 > 524.8	3.79e4	3.79e4	0.119	1.000	4.17	4.15	12.5	105	100.0
13	59	Total PFBS	299 > 79.7	1.29e6	1.28e3	0.119		2.96		12600	56500	
14	60	Total PFHxS	398.9 > 79.6	2.36e6	1.12e3	0.119		3.52		26200	131000	
15	61	Total PFOA	413 > 368.7	2.46e7	2.83e4	0.119		3.65		10900	95900	
16	62	Total PFOS	499 > 79.9	9.92e5	5.21e3	0.119		3.89		2380	13300	
17	63	Total N-Me-FOSAA	570.1 > 419	1.01e4	8.76e3	0.119		4.03		188	88.7	
18	64	Total N-EtFOSAA	584.2 > 419	7.90e3	8.77e3	0.119		4.17		146	80.0	

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Quantify Totals Report MassLynx MassLynx V4.1 SCN945 SCN960
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-10.qld

Last Altered: Tuesday, August 08, 2017 14:32:40 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:38:13 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_10, Date: 02-Aug-2017, Time: 12:05:47, ID: B7G0121-MSD2 Matrix Spike Dup 0.11866, Description: Matrix Spike Dup

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3	PFBS	299 > 79.7	2.90	1224952.375	1276.849	11991.946	bb	53639.4
2	59	Total PFBS	299 > 79.7	2.78	64765.625	1276.849	634.038	bb	2835.7

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.49	2359341.250	1124.979	26215.392	MM	131458.2

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7	3.63	24614920.0...	28348.518	10853.707	bb	95885.4

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.80	992177.188	5207.053	2381.811	MM	13296.4

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15	N-MeFOSAA	570.1 > 419	4.01	10122.671	8761.171	187.753	bb	88.7

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16	N-EtFOSAA	584.2 > 419	4.08	7897.924	8774.098	146.273	bb	80.0

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-10.qld

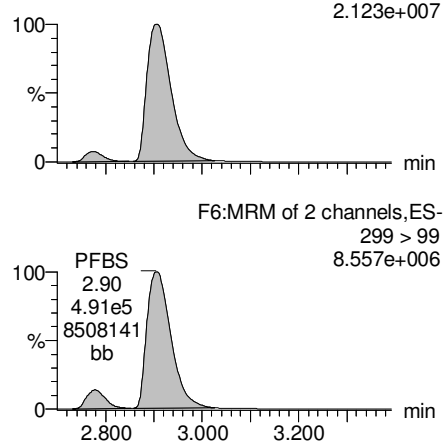
Last Altered: Tuesday, August 08, 2017 14:32:40 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:38:13 Pacific Daylight Time

Reviewed: CT 08/09/2017

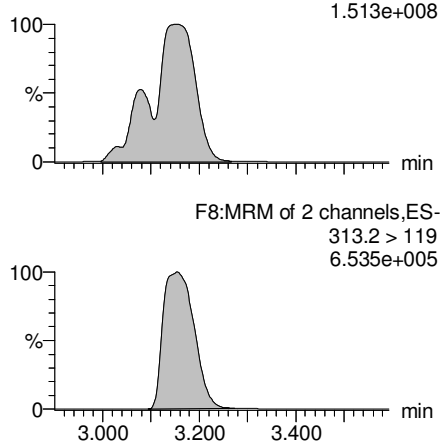
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_10, Date: 02-Aug-2017, Time: 12:05:47, ID: B7G0121-MSD2 Matrix Spike Dup 0.11866, Description: Matrix Spike Dup

Total PFBS



PFHxA



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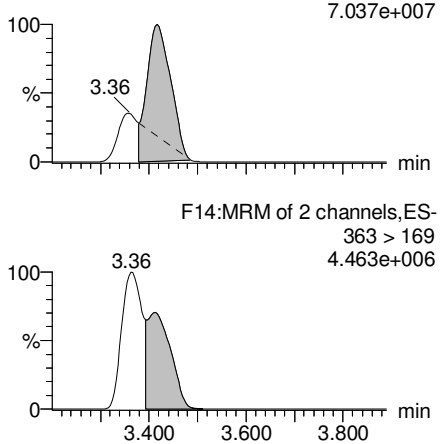
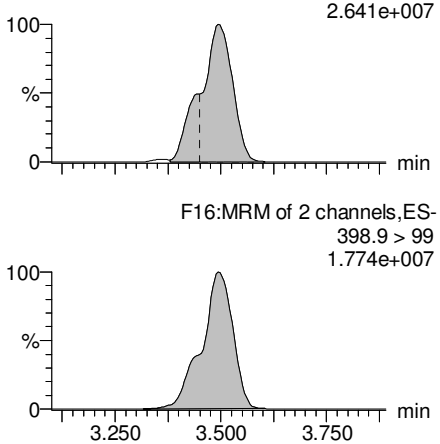
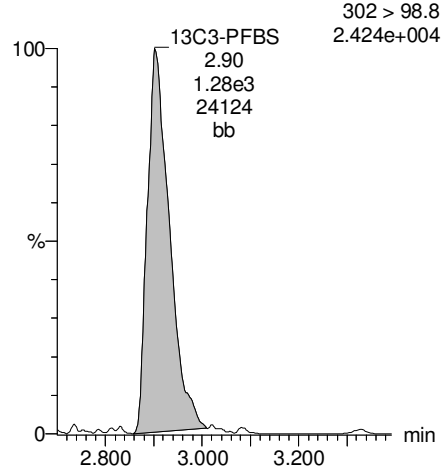


Total PFHxS



13C3-PFBS



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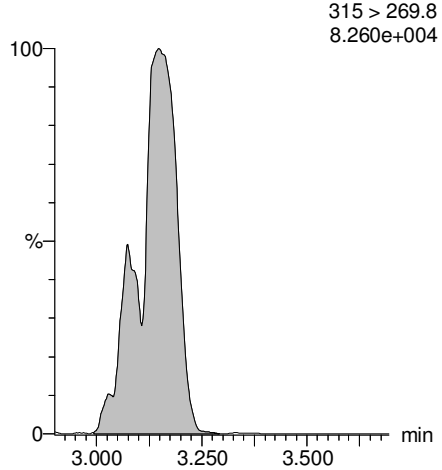

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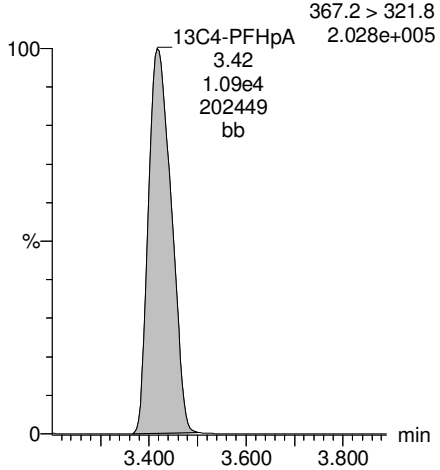

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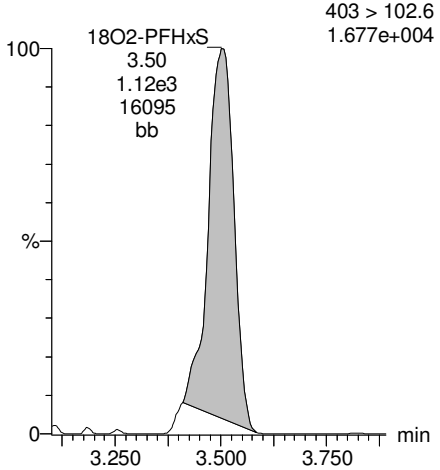

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Vista Analytical Laboratory

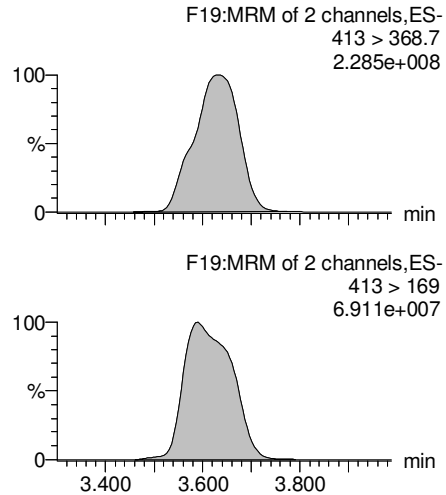
Dataset: U:\Q4.PRO\results\170802M1\170802M1-10.qld

Last Altered: Tuesday, August 08, 2017 14:32:40 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:38:13 Pacific Daylight Time

Reviewed: CT 08/09/2017

Name: 170802M1_10, Date: 02-Aug-2017, Time: 12:05:47, ID: B7G0121-MSD2 Matrix Spike Dup 0.11866, Description: Matrix Spike Dup

Total PFOA



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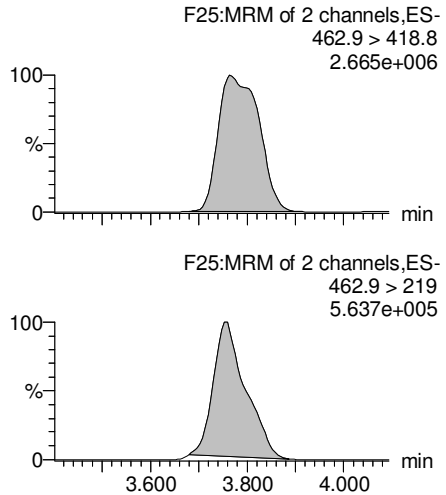
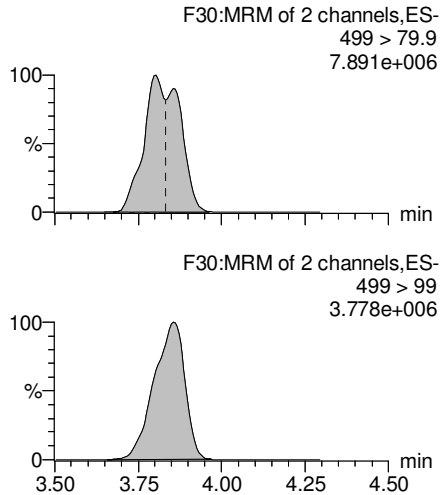


Total PFOS



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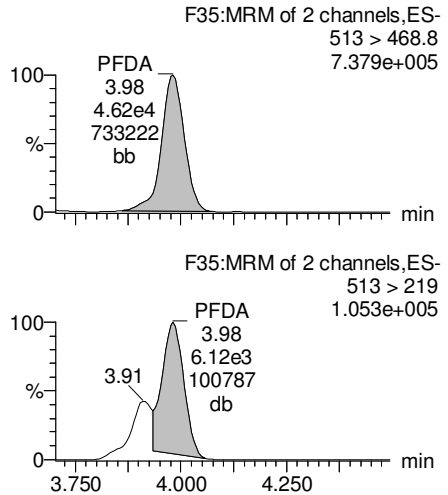

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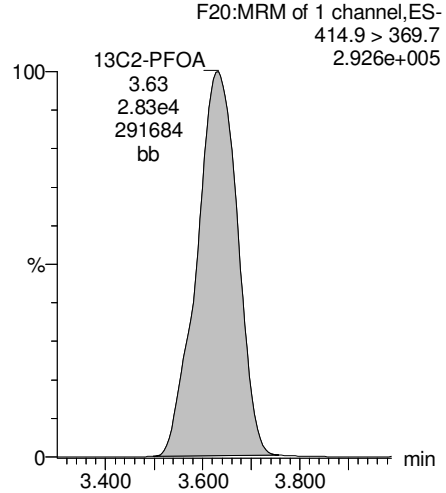

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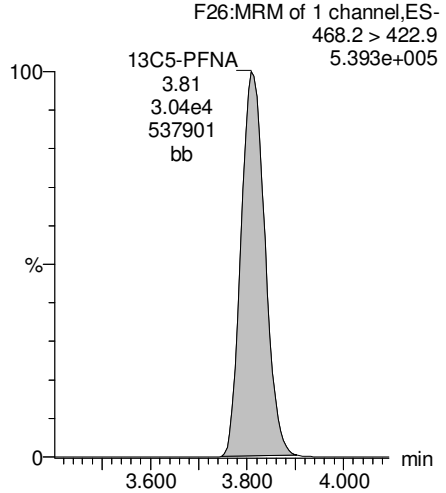
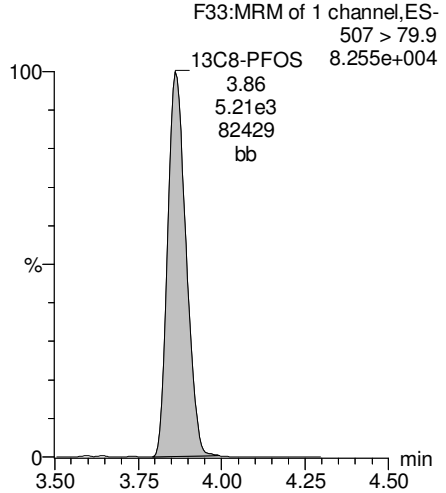
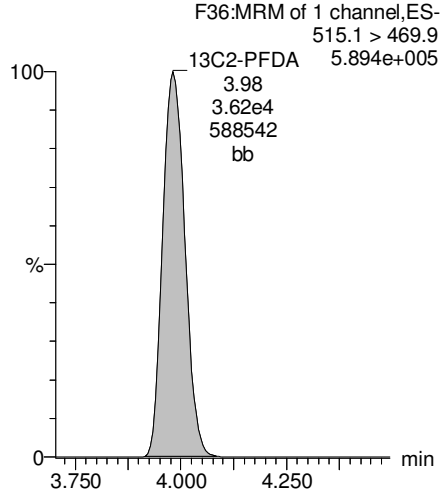


13C8-PFOS



13C2-PFDA



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Vista Analytical Laboratory

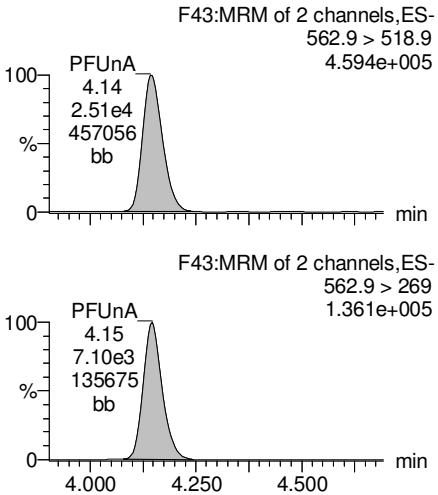
Dataset: U:\Q4.PRO\results\170802M1\170802M1-10.qld

Last Altered: Tuesday, August 08, 2017 14:32:40 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:38:13 Pacific Daylight Time

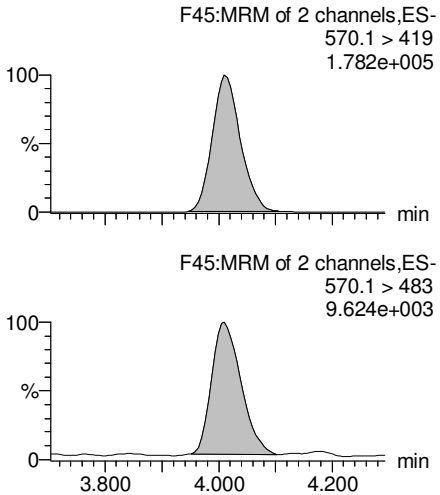
Reviewed: CT 08/09/2017

Name: 170802M1_10, Date: 02-Aug-2017, Time: 12:05:47, ID: B7G0121-MSD2 Matrix Spike Dup 0.11866, Description: Matrix Spike Dup

PFUnA



N-MeFOSAA



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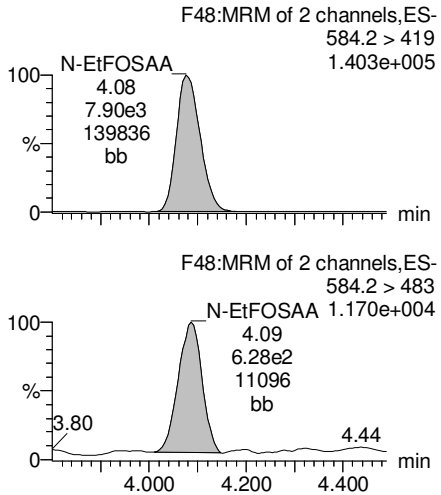
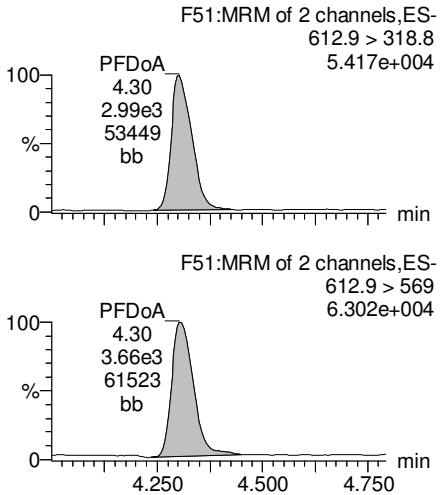


PFDoA



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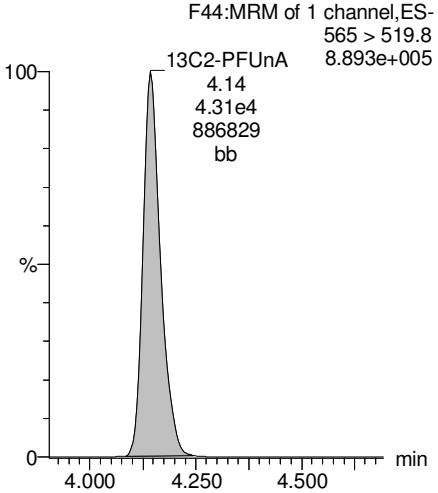

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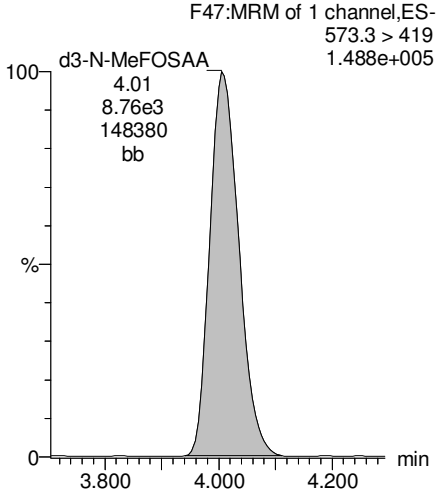

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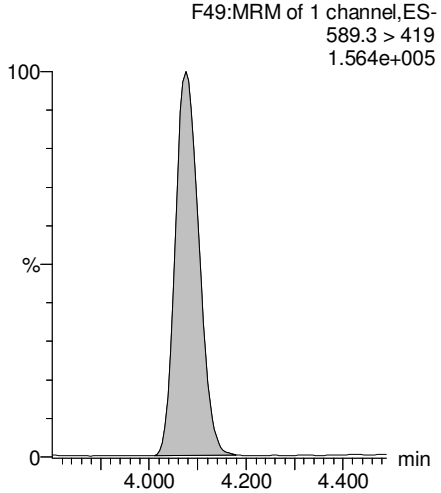

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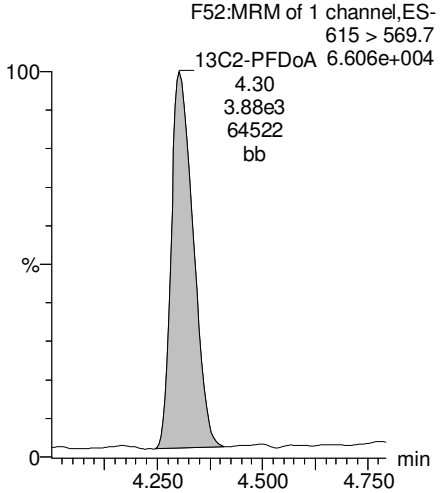


GM 8/8/17

Vista Analytical Laboratory

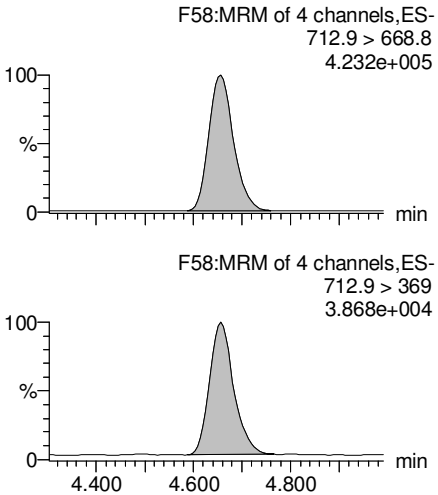
Dataset: U:\Q4.PRO\results\170802M1\170802M1-10.qld

Last Altered: Tuesday, August 08, 2017 14:32:40 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:38:13 Pacific Daylight Time

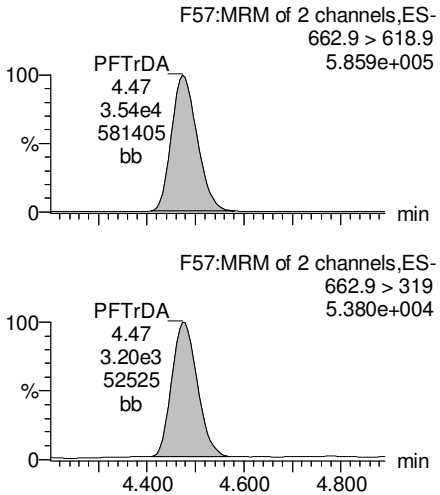
Reviewed: CT 08/09/2017

Name: 170802M1_10, Date: 02-Aug-2017, Time: 12:05:47, ID: B7G0121-MSD2 Matrix Spike Dup 0.11866, Description: Matrix Spike Dup

PFTeDA



PFTrDA



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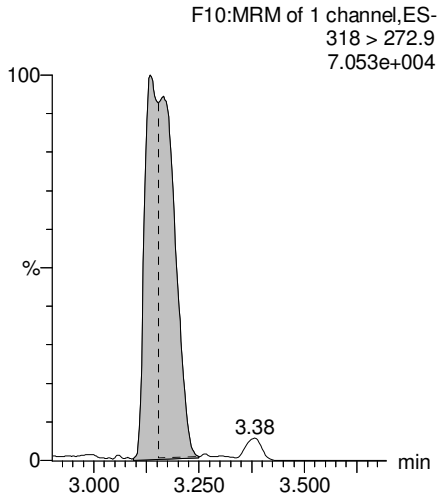

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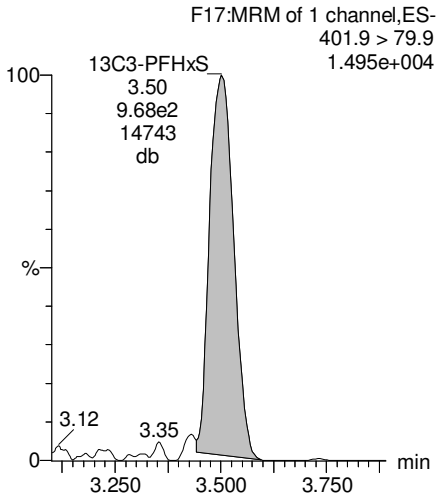

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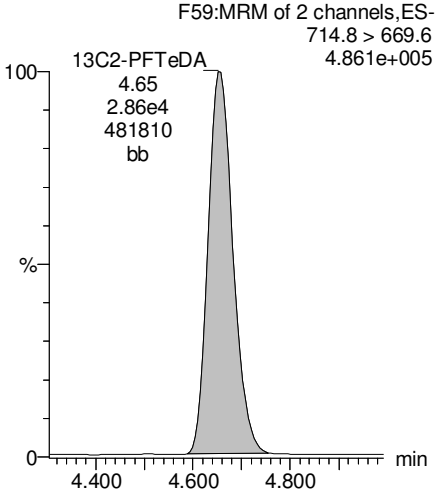

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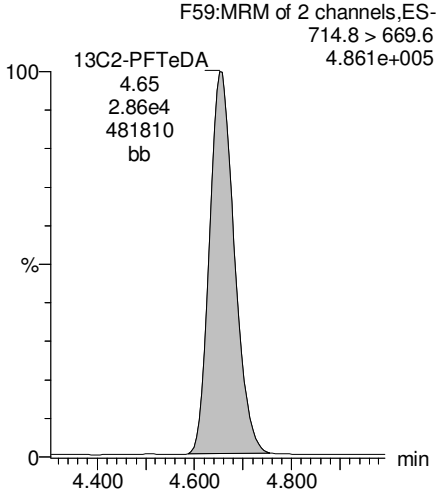
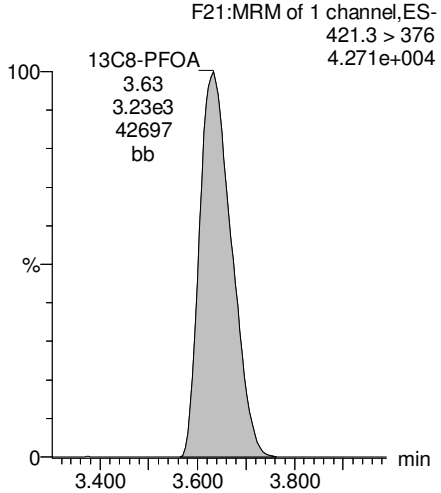


13C8-PFOA



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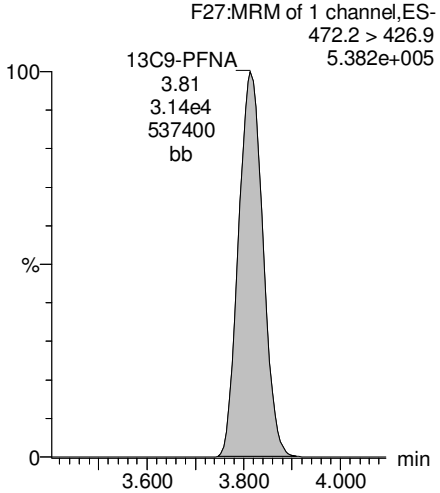

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Vista Analytical Laboratory

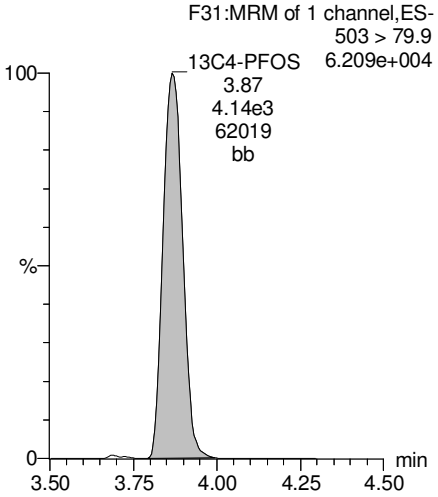
Dataset: U:\Q4.PRO\results\170802M1\170802M1-10.qld

Last Altered: Tuesday, August 08, 2017 14:32:40 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 14:38:13 Pacific Daylight Time

Reviewed: CT 08/09/2017

Name: 170802M1_10, Date: 02-Aug-2017, Time: 12:05:47, ID: B7G0121-MSD2 Matrix Spike Dup 0.11866, Description: Matrix Spike Dup

13C4-PFOS



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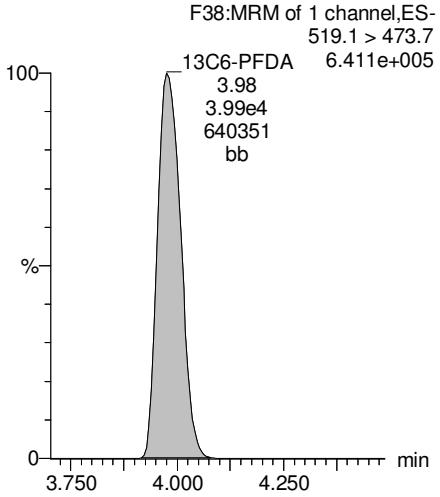

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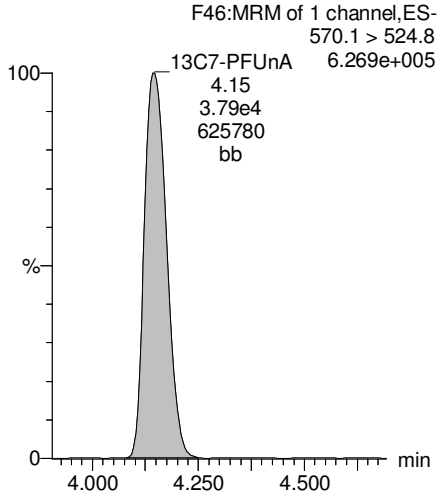

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-24.qld

Last Altered: Tuesday, August 08, 2017 15:22:24 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:22:47 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

*RX'd at smaller volume

Name: 170802M1_24, Date: 02-Aug-2017, Time: 14:36:40, ID: 1700925-05 I001MW52X-170724 0.1174, Description: I001MW52X-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7	1.17e6	1.20e3	0.117		2.96	2.91	12200	55200	E*
2	4	PFHxA	313.2 > 268.9	1.56e7	8.54e3	0.117		3.19	3.16	9110	55900	E*
3	5	PFHpA	363 > 318.9	3.54e6	9.95e3	0.117		3.45	3.43	4440	31700	E*
4	6	PFHxS	398.9 > 79.6	2.27e6	1.05e3	0.117		3.56	3.50	26900	136000	E*
5	8	PFOA	413 > 368.7	2.35e7	2.70e4	0.117		3.65	3.64	10900	97200	E*
6	10	PFNA	462.9 > 418.8	1.96e5	2.75e4	0.117		3.83	3.77	89.0	698	
7	12	PFOS	499 > 79.9	9.21e5	4.74e3	0.117		3.89	3.81	2430	13600	E*
8	13	PFDA	513 > 468.8	6.24e3	2.89e4	0.117		4.01	3.99	2.70	18.0	
9	15	N-MeFOSAA	570.1 > 419		7.34e3	0.117		4.03				
10	16	N-EtFOSAA	584.2 > 419		7.61e3	0.117		4.10				
11	17	PFUnA	562.9 > 518.9		3.54e4	0.117		4.17				
12	19	PFDoA	612.9 > 318.8		3.44e3	0.117		4.34				

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-24.qld

Last Altered: Tuesday, August 08, 2017 15:22:24 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:22:59 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

*RX'd at smaller volume

Name: 170802M1_24, Date: 02-Aug-2017, Time: 14:36:40, ID: 1700925-05 I001MW52X-170724 0.1174, Description: I001MW52X-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	21	PFTrDA	662.9 > 618.9		3.44e3	0.117		4.50					
2	22	PFTeDA	712.9 > 668.8		2.39e4	0.117		4.68					
3	30	13C3-PFBS	302 > 98.8	1.20e3	5.22e3	0.117	0.034	2.96	2.92	1.15	287	269.7	H*
4	31	13C2-PFHxA	315 > 269.8	8.54e3	5.22e3	0.117	0.334	3.19	3.17	8.18	209	490.1	H*
5	32	13C4-PFHpA	367.2 > 321.8	9.95e3	5.22e3	0.117	0.414	3.45	3.43	9.54	196	184.2	H*
6	33	18O2-PFHxS	403 > 102.6	1.05e3	9.81e2	0.117	0.475	3.56	3.50	13.4	241	226.3	H*
7	35	13C2-PFOA	414.9 > 369.7	2.70e4	3.46e3	0.117	1.298	3.65	3.64	97.7	641	602.0	H*
8	36	13C5-PFNA	468.2 > 422.9	2.75e4	2.79e4	0.117	1.094	3.83	3.81	12.3	95.8	90.0	
9	38	13C8-PFOS	507 > 79.9	4.74e3	3.79e3	0.117	1.153	3.89	3.87	15.7	116	108.6	
10	39	13C2-PFDA	515.1 > 469.9	2.89e4	3.46e4	0.117	1.059	4.01	3.99	10.5	84.1	79.0	

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-24.qld

Last Altered: Tuesday, August 08, 2017 15:22:24 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:23:32 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_24, Date: 02-Aug-2017, Time: 14:36:40, ID: 1700925-05 I001MW52X-170724 0.1174, Description: I001MW52X-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	7.34e3	3.44e4	0.117	0.019	4.03	4.02	2.67	1180	85.0
2	42	d5-N-EtFOSAA	589.3 > 419	7.61e3	3.44e4	0.117	0.019	4.12	4.08	2.77	1240	89.9
3	43	13C2-PFUnA	565 > 519.8	3.54e4	3.44e4	0.117	1.172	4.17	4.16	12.9	93.6	87.9
4	44	13C2-PFDoA	615 > 569.7	3.44e3	3.44e4	0.117	0.118	4.34	4.31	1.25	89.9	84.4
5	46	13C2-PFTeDA	714.8 > 669.6	2.39e4	3.44e4	0.117	0.801	4.68	4.66	8.69	92.3	86.7
6	52	13C5-PFHxA	318 > 272.9	5.22e3	5.22e3	0.117	1.000	3.19	3.16	5.00	42.6	100.0
7	53	13C3-PFHxS	401.9 > 79.9	9.81e2	9.81e2	0.117	1.000	3.56	3.50	12.5	106	100.0
8	54	13C8-PFOA	421.3 > 376	3.46e3	3.46e3	0.117	1.000	3.65	3.64	12.5	106	100.0
9	55	13C9-PFNA	472.2 > 426.9	2.79e4	2.79e4	0.117	1.000	3.83	3.81	12.5	106	100.0
10	56	13C4-PFOS	503 > 79.9	3.79e3	3.79e3	0.117	1.000	3.89	3.87	12.5	106	100.0
11	57	13C6-PFDA	519.1 > 473.7	3.46e4	3.46e4	0.117	1.000	4.01	3.99	12.5	106	100.0
12	58	13C7-PFUnA	570.1 > 524.8	3.44e4	3.44e4	0.117	1.000	4.17	4.16	12.5	106	100.0
13	59	Total PFBS	299 > 79.7	1.23e6	1.20e3	0.117		2.96		12800	58000	
14	60	Total PFHxS	398.9 > 79.6	2.27e6	1.05e3	0.117		3.52		26900	136000	
15	61	Total PFOA	413 > 368.7	2.35e7	2.70e4	0.117		3.65		10900	97200	
16	62	Total PFOS	499 > 79.9	9.21e5	4.74e3	0.117		3.89		2430	13600	
17	63	Total N-Me-FOSAA	570.1 > 419	0.00e0	7.34e3	0.117		4.03		0.000		
18	64	Total N-EtFOSAA	584.2 > 419	0.00e0	7.61e3	0.117		4.17		0.000		

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Dataset: U:\Q4.PRO\results\170802M1\170802M1-24.qld

Last Altered: Tuesday, August 08, 2017 15:22:24 Pacific Daylight Time
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Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_24, Date: 02-Aug-2017, Time: 14:36:40, ID: 1700925-05 I001MW52X-170724 0.1174, Description: I001MW52X-170724

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3	PFBS	299 > 79.7	2.91	1172499.625	1200.021	12213.324	bb	55215.9
2	59	Total PFBS	299 > 79.7	2.78	59556.586	1200.021	620.370	bb	2804.4

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.50	2269082.000	1054.853	26888.604	MM	136281.2

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7	3.64	23544288.0...	27045.490	10881.800	bb	97165.3

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.81	921318.375	4744.904	2427.126	MM	13631.0

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15	N-MeFOSAA	570.1 > 419			7344.650		MM-I	

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16	N-EtFOSAA	584.2 > 419			7610.202		MM-	

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-24.qld

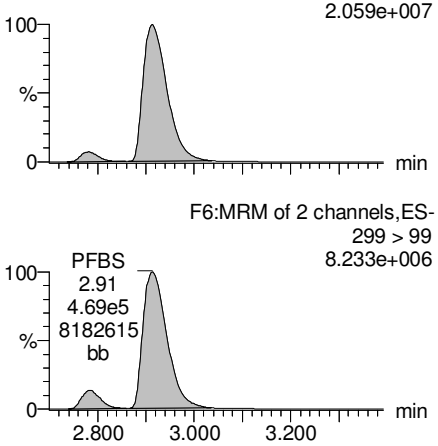
Last Altered: Tuesday, August 08, 2017 15:22:24 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:23:32 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_24, Date: 02-Aug-2017, Time: 14:36:40, ID: 1700925-05 I001MW52X-170724 0.1174, Description: I001MW52X-170724

Total PFBS



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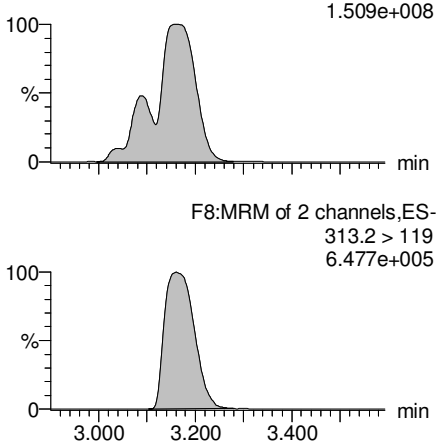

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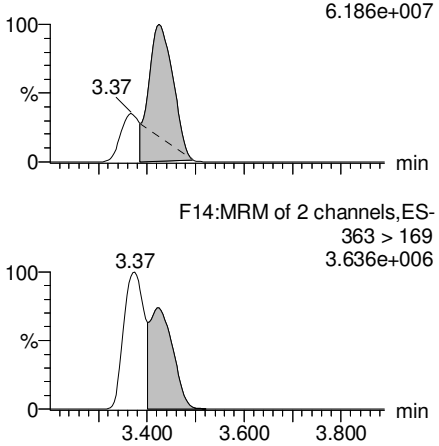
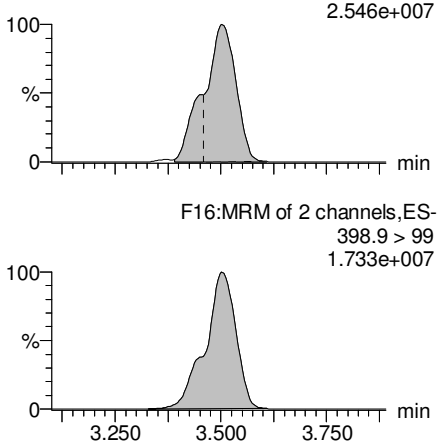


Total PFHxS



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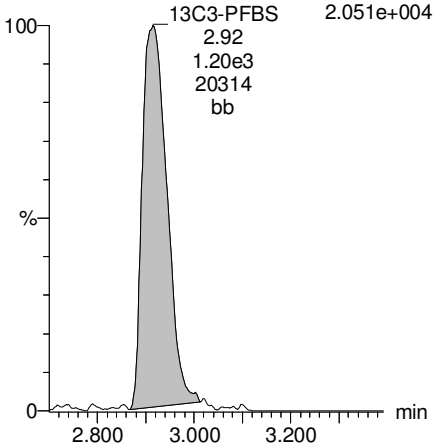

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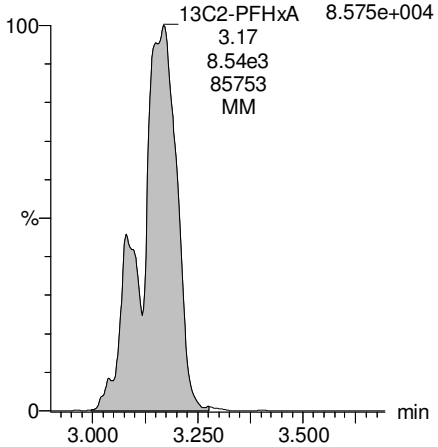

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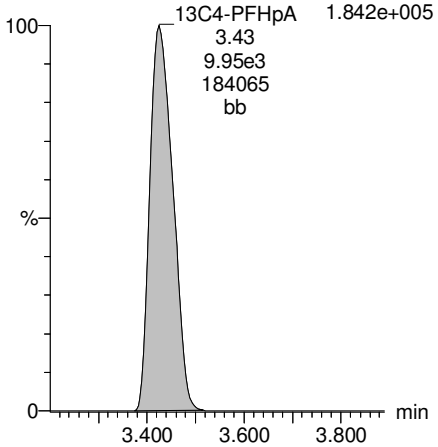

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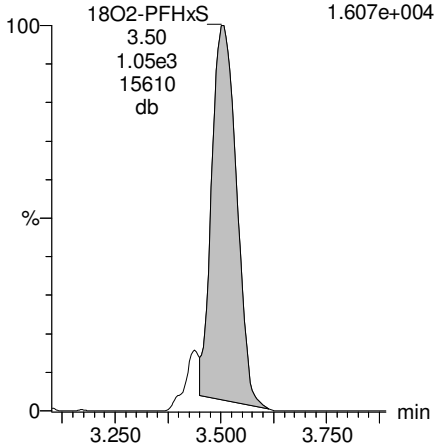

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Vista Analytical Laboratory

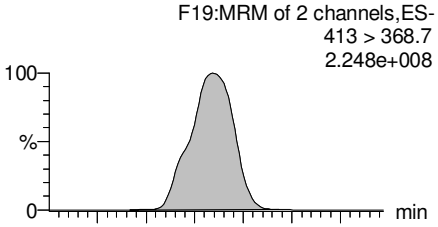
Dataset: U:\Q4.PRO\results\170802M1\170802M1-24.qld

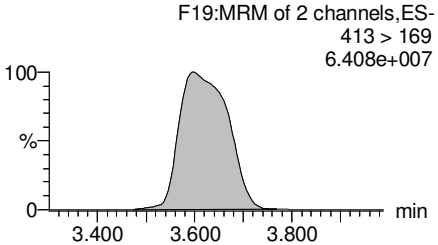
Last Altered: Tuesday, August 08, 2017 15:22:24 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:23:32 Pacific Daylight Time

Reviewed: CT 08/09/2017

Name: 170802M1_24, Date: 02-Aug-2017, Time: 14:36:40, ID: 1700925-05 I001MW52X-170724 0.1174, Description: I001MW52X-170724

Total PFOA





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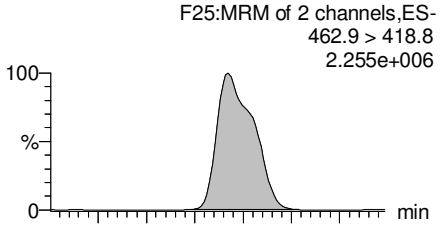
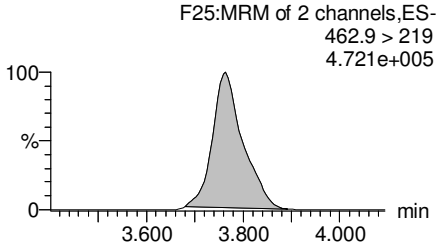
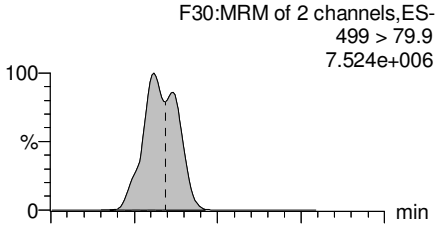
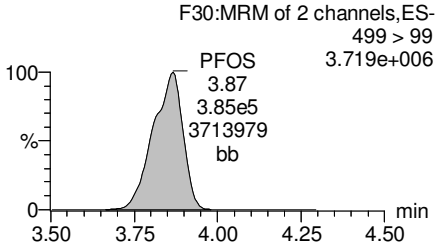




Total PFOS





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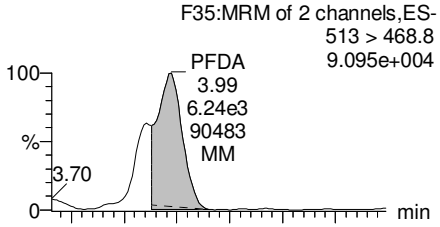
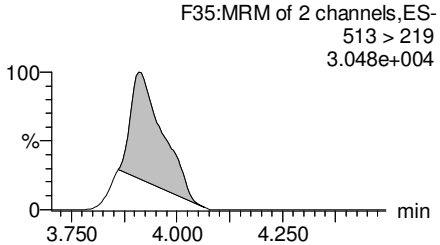
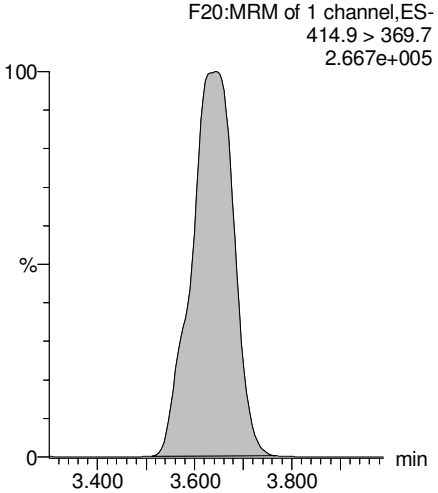




13C2-PFOA



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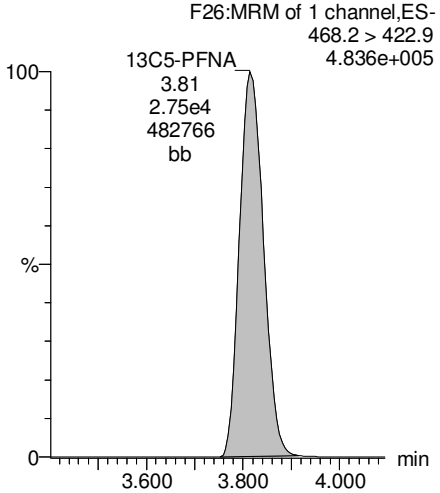

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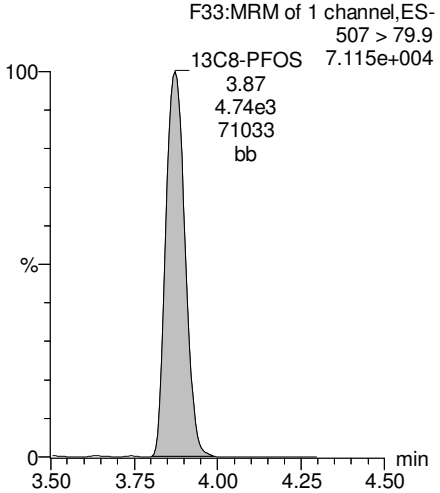

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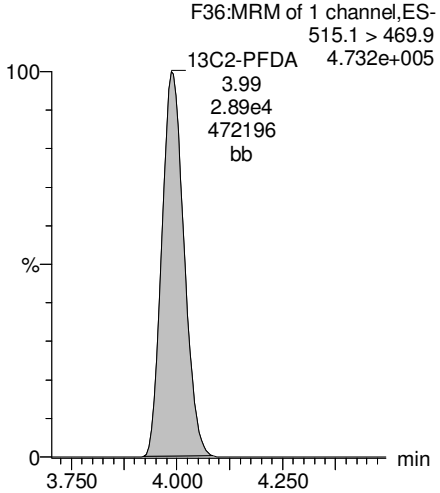

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Vista Analytical Laboratory

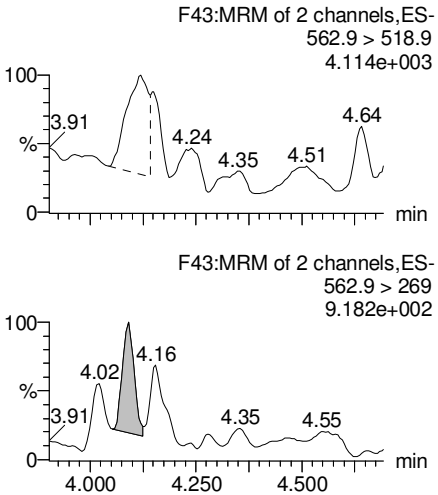
Dataset: U:\Q4.PRO\results\170802M1\170802M1-24.qld

Last Altered: Tuesday, August 08, 2017 15:22:24 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:23:32 Pacific Daylight Time

Reviewed: CT 08/09/2017

Name: 170802M1_24, Date: 02-Aug-2017, Time: 14:36:40, ID: 1700925-05 I001MW52X-170724 0.1174, Description: I001MW52X-170724

PFUnA



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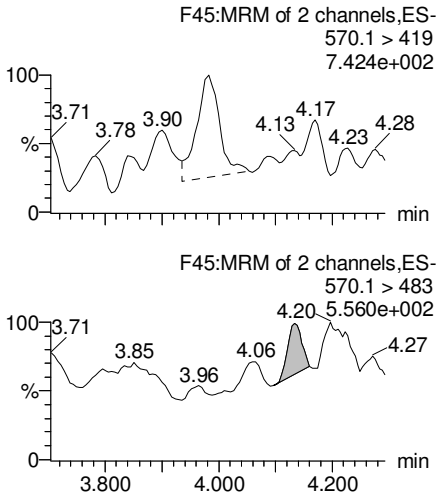

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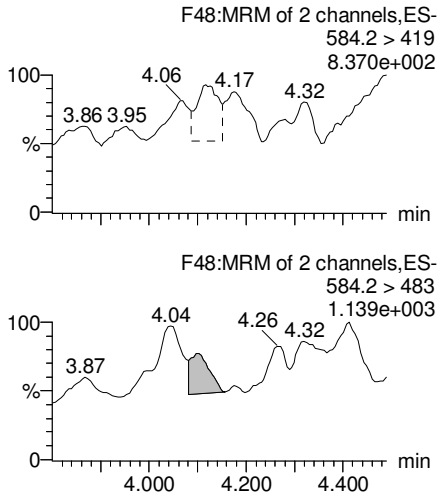
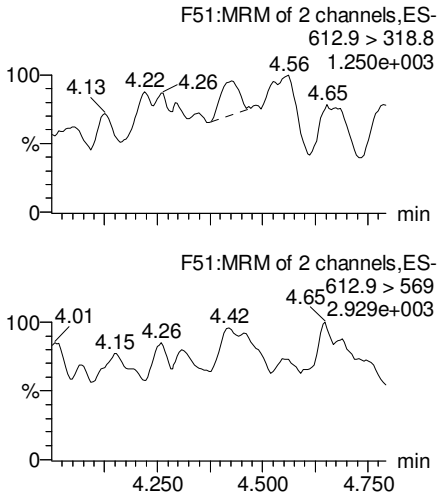


PFDoA



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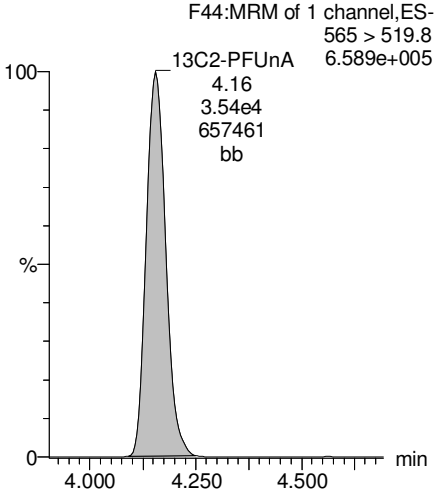

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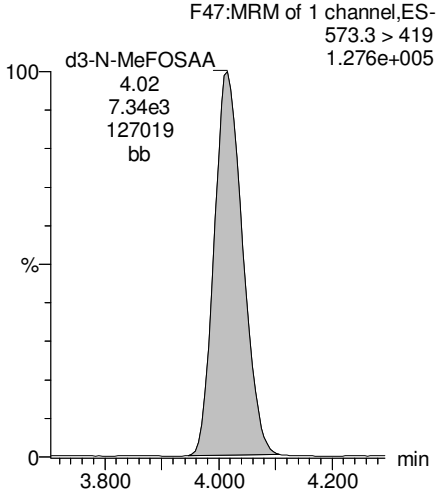
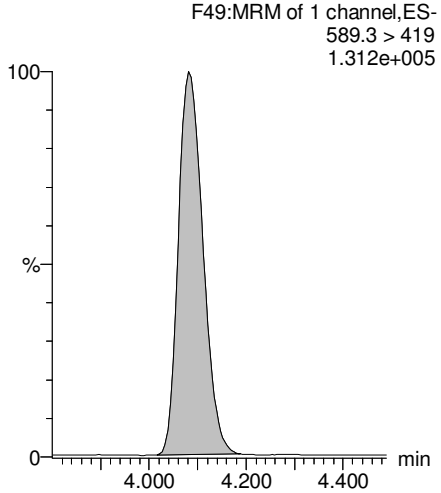


d5-N-EtFOSAA



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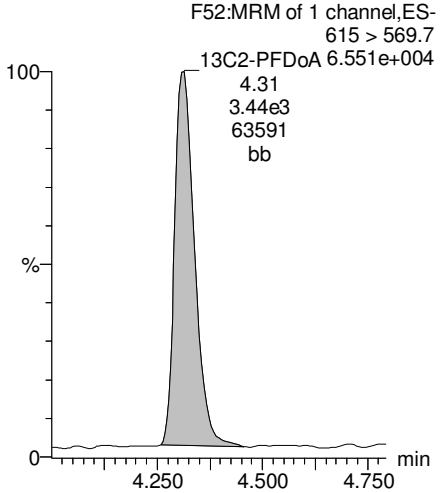

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-24.qld

Last Altered: Tuesday, August 08, 2017 15:22:24 Pacific Daylight Time
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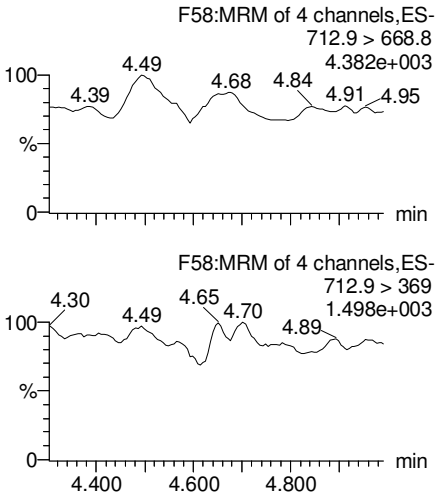
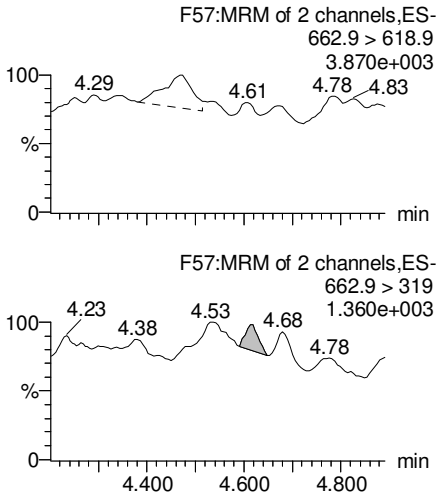
Reviewed: CT 08/09/2017

Name: 170802M1_24, Date: 02-Aug-2017, Time: 14:36:40, ID: 1700925-05 I001MW52X-170724 0.1174, Description: I001MW52X-170724

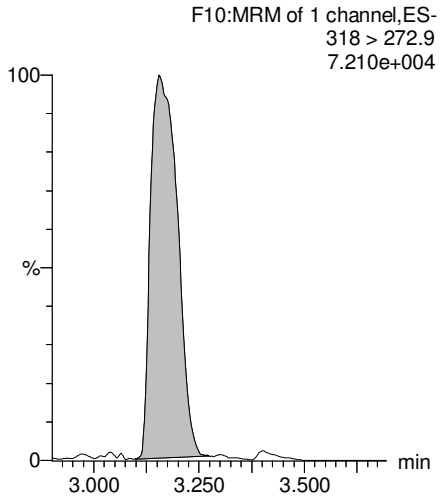
PFTeDA



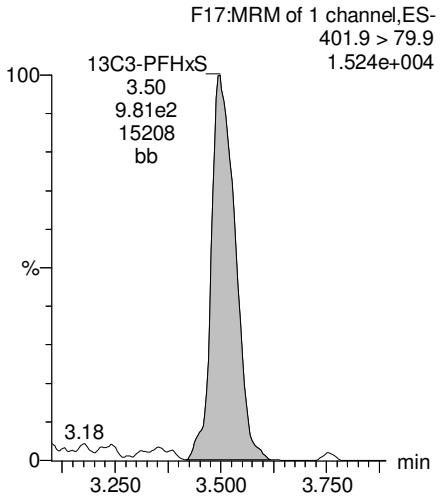
PFTrDA



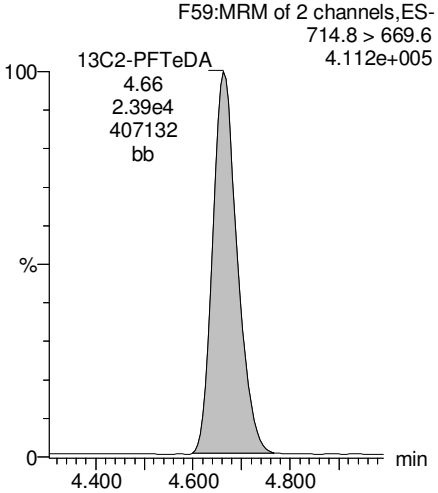
13C5-PFHxA



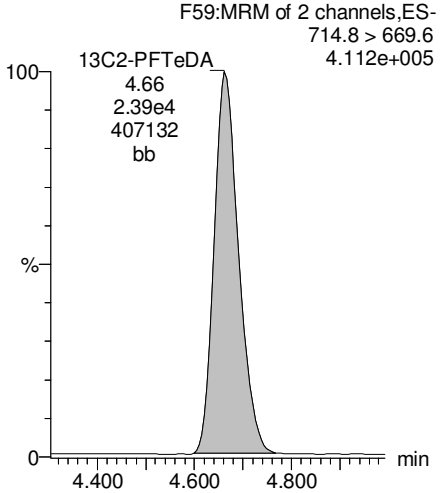
13C3-PFHxS



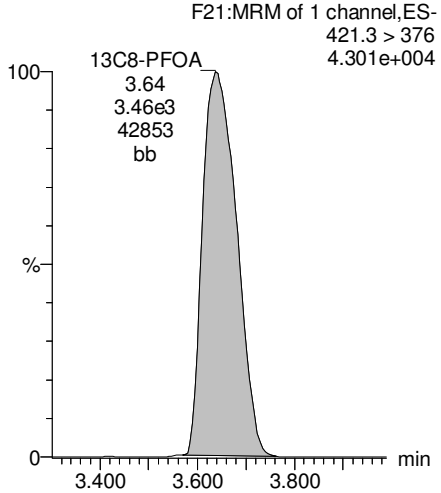
13C2-PFTeDA



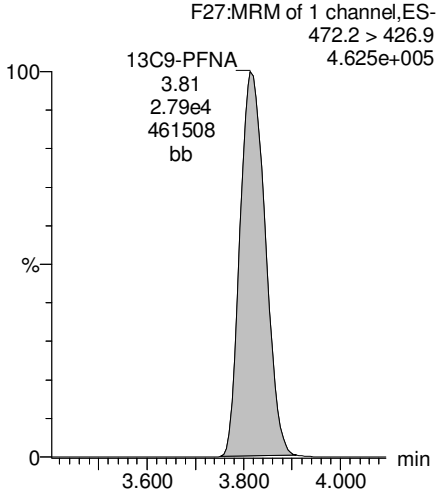
13C2-PFTeDA



13C8-PFOA



13C9-PFNA



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Vista Analytical Laboratory

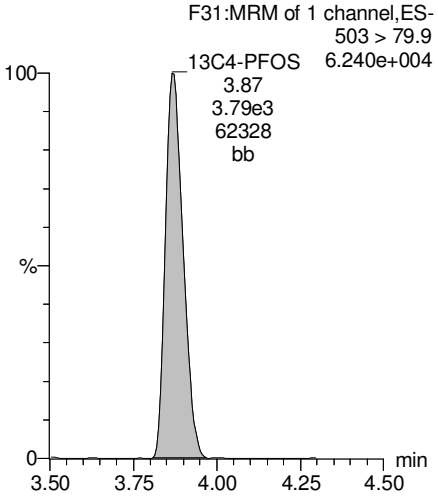
Dataset: U:\Q4.PRO\results\170802M1\170802M1-24.qld

Last Altered: Tuesday, August 08, 2017 15:22:24 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:23:32 Pacific Daylight Time

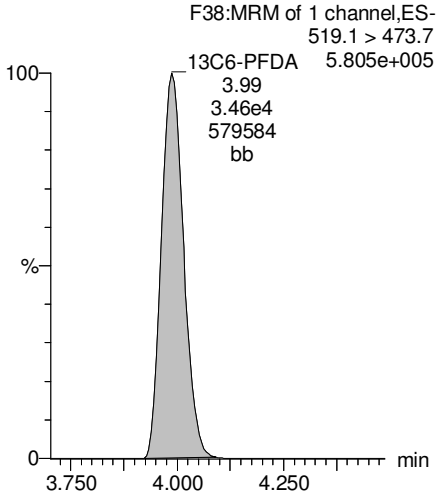
Reviewed: CT 08/09/2017

Name: 170802M1_24, Date: 02-Aug-2017, Time: 14:36:40, ID: 1700925-05 I001MW52X-170724 0.1174, Description: I001MW52X-170724

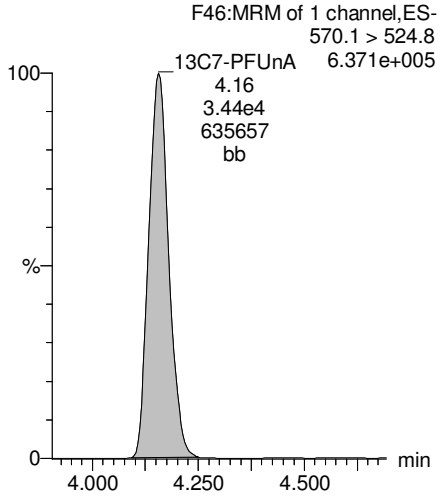
13C4-PFOS



13C6-PFDA



13C7-PFUnA



GM 8/8/17

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-5.qld

Last Altered: Tuesday, August 08, 2017 14:59:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:00:33 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_5, Date: 03-Aug-2017, Time: 16:45:12, ID: 1700925-06 EB01-170724 0.1185, Description: EB01-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	3	PFBS	299 > 79.7		4.65e3	0.118		2.96					
2	4	PFHxA	313.2 > 268.9		1.38e4	0.118		3.19					
3	5	PFHpA	363 > 318.9		2.95e4	0.118		3.45					
4	6	PFHxS	398.9 > 79.6	1.93e1	3.42e3	0.118		3.56	3.50	0.0706	0.197		
5	8	PFOA	413 > 368.7	3.20e3	3.85e4	0.118		3.65	3.63	1.04	7.90		See RX
6	10	PFNA	462.9 > 418.8		3.40e4	0.118		3.83					
7	12	PFOS	499 > 79.9	2.10e0	8.21e3	0.118		3.89	3.82	0.00320			
8	13	PFDA	513 > 468.8		3.25e4	0.118		4.01					
9	15	N-MeFOSAA	570.1 > 419		6.64e3	0.118		4.03					
10	16	N-EtFOSAA	584.2 > 419		7.03e3	0.118		4.10					
11	17	PFUnA	562.9 > 518.9		3.32e4	0.118		4.17					
12	19	PFDoA	612.9 > 318.8		3.17e3	0.118		4.34					

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-5.qld

Last Altered: Tuesday, August 08, 2017 14:59:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:00:45 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_5, Date: 03-Aug-2017, Time: 16:45:12, ID: 1700925-06 EB01-170724 0.1185, Description: EB01-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21	PFTrDA	662.9 > 618.9		3.17e3	0.118		4.50				
2	22	PFTeDA	712.9 > 668.8		2.38e4	0.118		4.68				
3	30	13C3-PFBS	302 > 98.8	4.65e3	3.94e4	0.118	0.034	2.96	2.90	0.590	146	138.4
4	31	13C2-PFHxA	315 > 269.8	1.38e4	3.94e4	0.118	0.334	3.19	3.16	1.75	44.3	105.1
5	32	13C4-PFHpA	367.2 > 321.8	2.95e4	3.94e4	0.118	0.414	3.45	3.43	3.74	76.2	72.3
6	33	18O2-PFHxS	403 > 102.6	3.42e3	6.73e3	0.118	0.475	3.56	3.50	6.34	113	106.8
7	35	13C2-PFOA	414.9 > 369.7	3.85e4	3.35e4	0.118	1.298	3.65	3.63	14.4	93.4	88.6
8	36	13C5-PFNA	468.2 > 422.9	3.40e4	3.65e4	0.118	1.094	3.83	3.81	11.6	89.8	85.1
9	38	13C8-PFOS	507 > 79.9	8.21e3	7.23e3	0.118	1.153	3.89	3.86	14.2	104	98.5
10	39	13C2-PFDA	515.1 > 469.9	3.25e4	3.55e4	0.118	1.059	4.01	3.98	11.4	91.2	86.5

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-5.qld

Last Altered: Tuesday, August 08, 2017 14:59:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:01:04 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_5, Date: 03-Aug-2017, Time: 16:45:12, ID: 1700925-06 EB01-170724 0.1185, Description: EB01-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	6.64e3	3.53e4	0.118	0.019	4.03	4.01	2.35	1030	74.8
2	42	d5-N-EtFOSAA	589.3 > 419	7.03e3	3.53e4	0.118	0.019	4.12	4.08	2.48	1110	80.7
3	43	13C2-PFUnA	565 > 519.8	3.32e4	3.53e4	0.118	1.172	4.17	4.15	11.7	84.4	80.0
4	44	13C2-PFDoA	615 > 569.7	3.17e3	3.53e4	0.118	0.118	4.34	4.30	1.12	79.9	75.7
5	46	13C2-PFTeDA	714.8 > 669.6	2.38e4	3.53e4	0.118	0.801	4.68	4.65	8.41	88.6	84.0
6	52	13C5-PFHxA	318 > 272.9	3.94e4	3.94e4	0.118	1.000	3.19	3.15	5.00	42.2	100.0
7	53	13C3-PFHxS	401.9 > 79.9	6.73e3	6.73e3	0.118	1.000	3.56	3.50	12.5	105	100.0
8	54	13C8-PFOA	421.3 > 376	3.35e4	3.35e4	0.118	1.000	3.65	3.63	12.5	105	100.0
9	55	13C9-PFNA	472.2 > 426.9	3.65e4	3.65e4	0.118	1.000	3.83	3.81	12.5	105	100.0
10	56	13C4-PFOS	503 > 79.9	7.23e3	7.23e3	0.118	1.000	3.89	3.87	12.5	105	100.0
11	57	13C6-PFDA	519.1 > 473.7	3.55e4	3.55e4	0.118	1.000	4.01	3.98	12.5	105	100.0
12	58	13C7-PFUnA	570.1 > 524.8	3.53e4	3.53e4	0.118	1.000	4.17	4.14	12.5	105	100.0
13	59	Total PFBS	299 > 79.7	0.00e0	4.65e3	0.118		2.96		0.000		
14	60	Total PFHxS	398.9 > 79.6	1.93e1	3.42e3	0.118		3.52		0.0706	0.197	
15	61	Total PFOA	413 > 368.7	3.43e3	3.85e4	0.118		3.65		1.04	7.90	
16	62	Total PFOS	499 > 79.9	2.10e0	8.21e3	0.118		3.89		0.000		
17	63	Total N-Me-FOSAA	570.1 > 419	0.00e0	6.64e3	0.118		4.03		0.000		
18	64	Total N-EtFOSAA	584.2 > 419	0.00e0	7.03e3	0.118		4.17		0.000		

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Dataset: U:\Q4.PRO\results\170803M2\170803M2-5.qld

Last Altered: Tuesday, August 08, 2017 14:59:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:01:04 Pacific Daylight Time

Reviewed: CT 08/09/2017

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_5, Date: 03-Aug-2017, Time: 16:45:12, ID: 1700925-06 EB01-170724 0.1185, Description: EB01-170724

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.50	19.293	3417.478	0.071	bb	0.2

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7	3.63	3200.328	38503.742	1.039	MM	7.9
2	61	Total PFOA	413 > 368.7	3.59	231.652	38503.742	0.075	MMI	

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.82	2.102	8211.967	0.003	MMI	

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16	N-EtFOSAA	584.2 > 419			7025.314		MM-	

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-5.qld

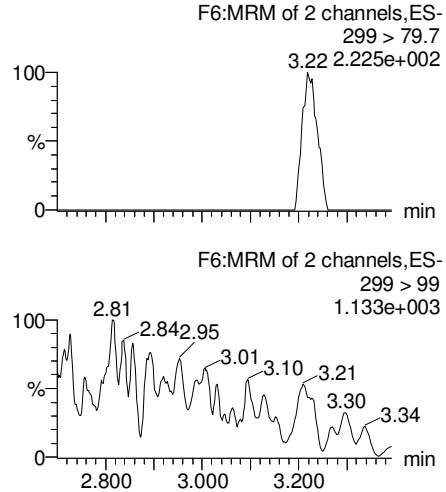
Last Altered: Tuesday, August 08, 2017 14:59:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:01:04 Pacific Daylight Time

Reviewed: CT 08/09/2017

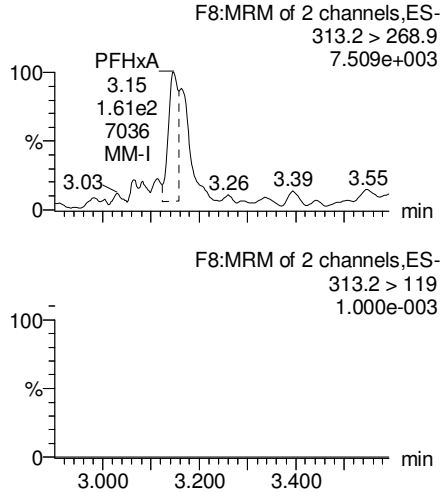
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 07 Aug 2017 17:59:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_5, Date: 03-Aug-2017, Time: 16:45:12, ID: 1700925-06 EB01-170724 0.1185, Description: EB01-170724

Total PFBS



PFHxA



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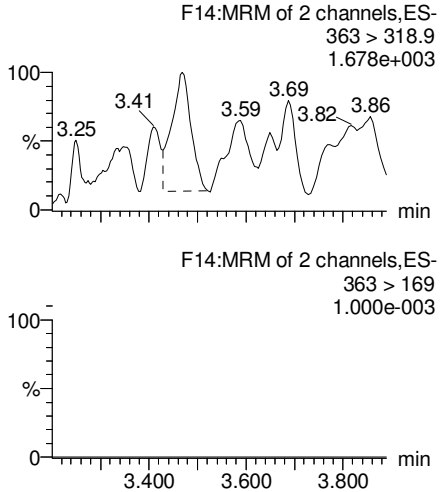
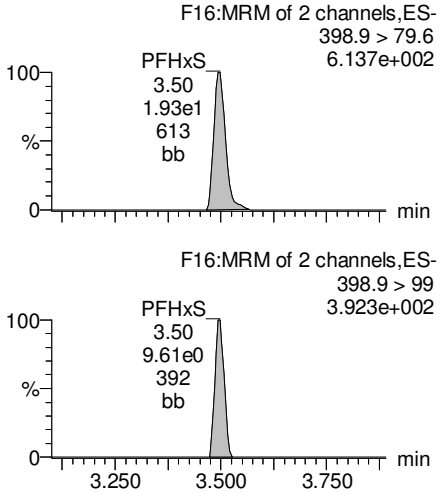
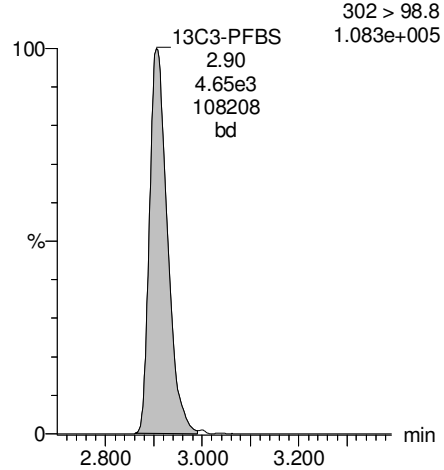


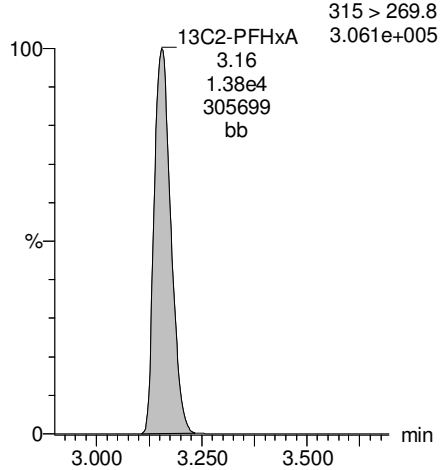
Total PFHxS



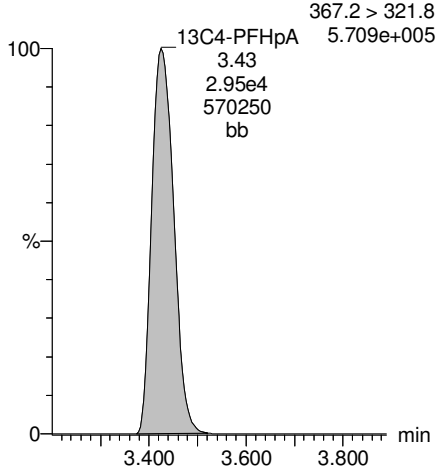
13C3-PFBS



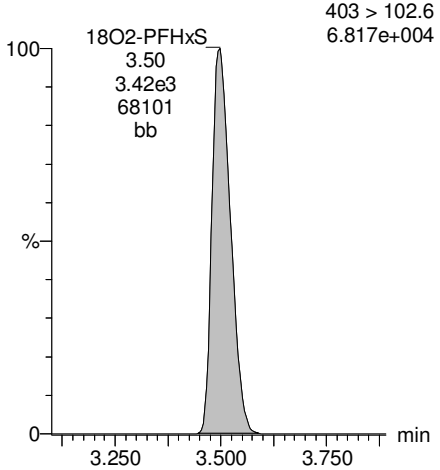
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



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Vista Analytical Laboratory

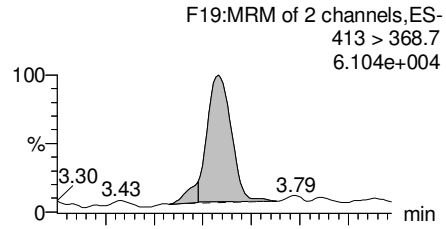
Dataset: U:\Q4.PRO\results\170803M2\170803M2-5.qld

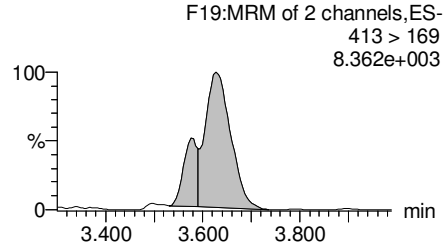
Last Altered: Tuesday, August 08, 2017 14:59:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:01:04 Pacific Daylight Time

Reviewed: CT 08/09/2017

Name: 170803M2_5, Date: 03-Aug-2017, Time: 16:45:12, ID: 1700925-06 EB01-170724 0.1185, Description: EB01-170724

Total PFOA





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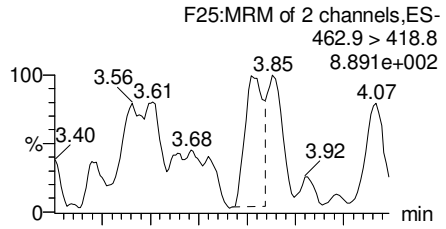
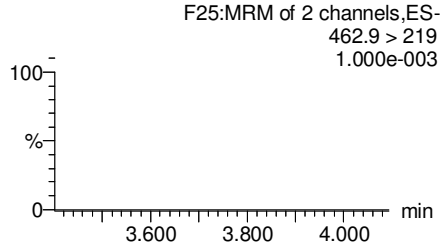
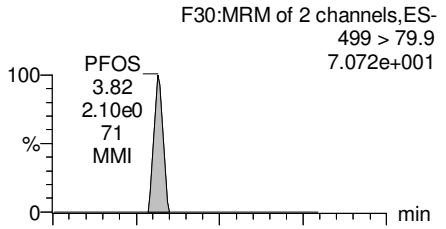
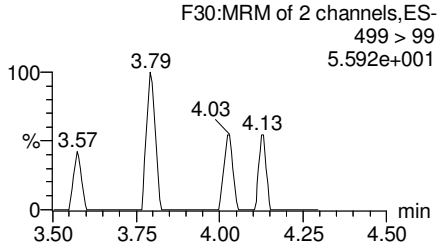


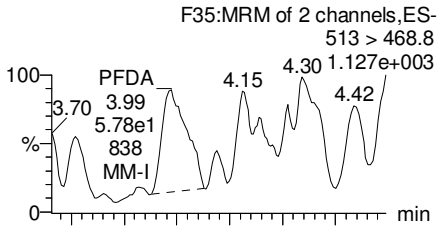


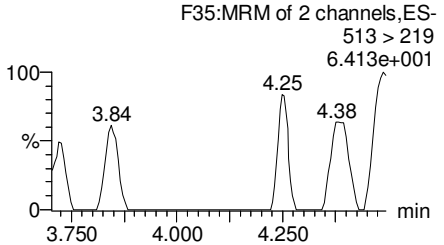
Total PFOS



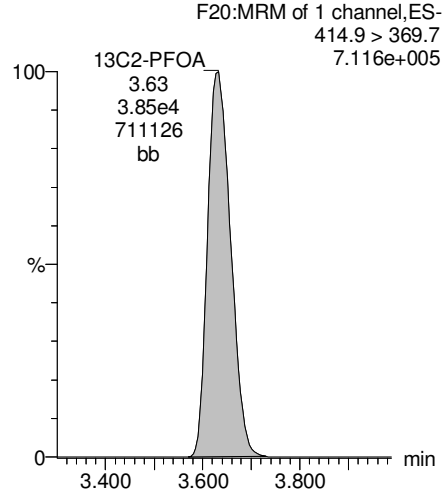


PFDA

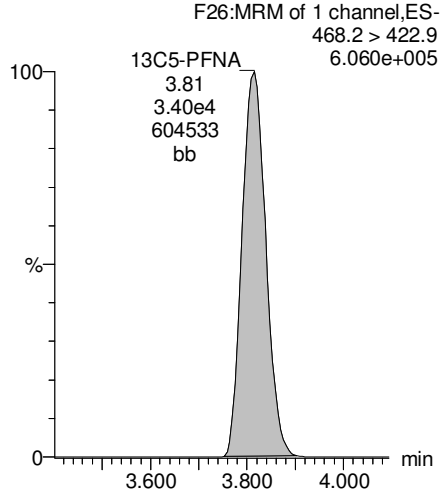




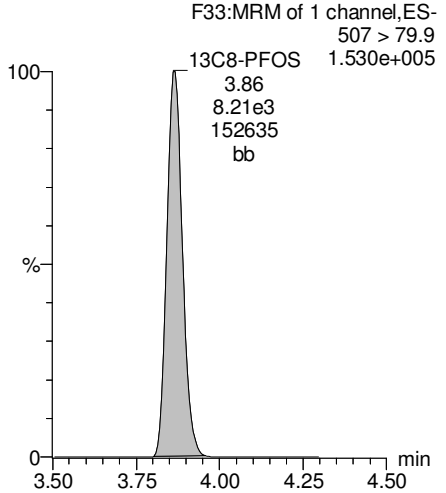
13C2-PFOA



13C5-PFNA



13C8-PFOS



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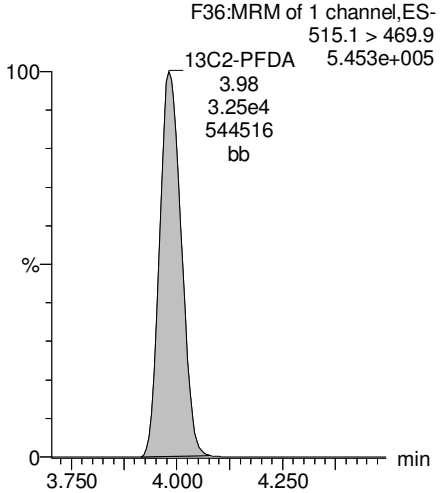

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Vista Analytical Laboratory

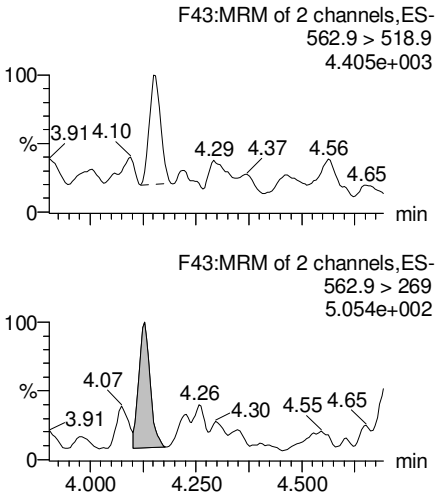
Dataset: U:\Q4.PRO\results\170803M2\170803M2-5.qld

Last Altered: Tuesday, August 08, 2017 14:59:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:01:04 Pacific Daylight Time

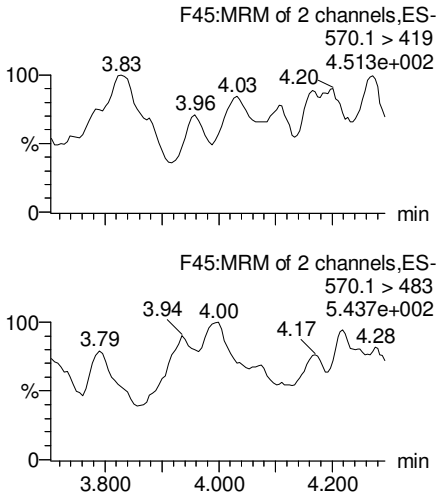
Reviewed: CT 08/09/2017

Name: 170803M2_5, Date: 03-Aug-2017, Time: 16:45:12, ID: 1700925-06 EB01-170724 0.1185, Description: EB01-170724

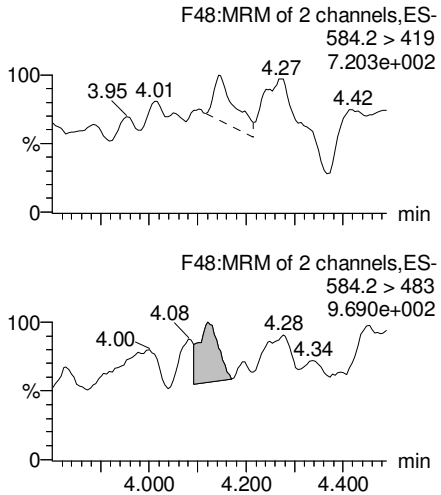
PFUnA



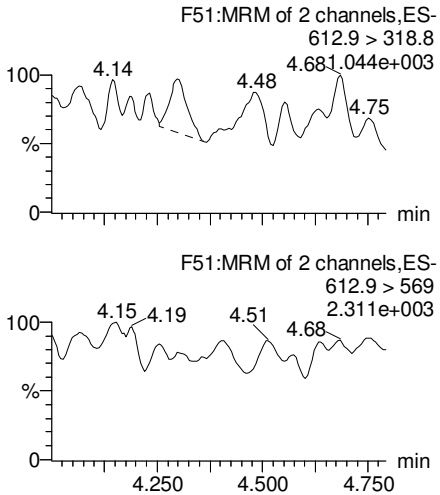
N-MeFOSAA



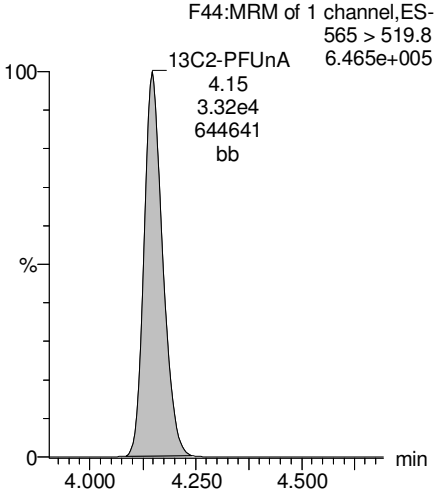
N-EtFOSAA



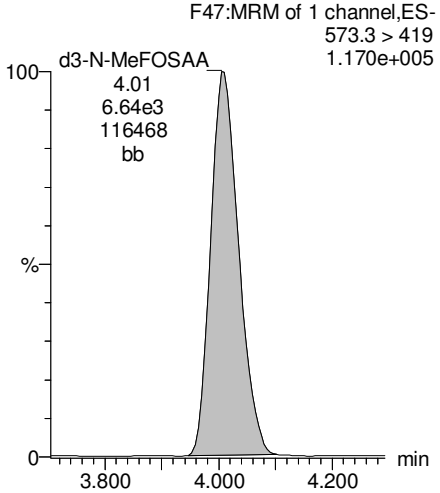
PFDoA



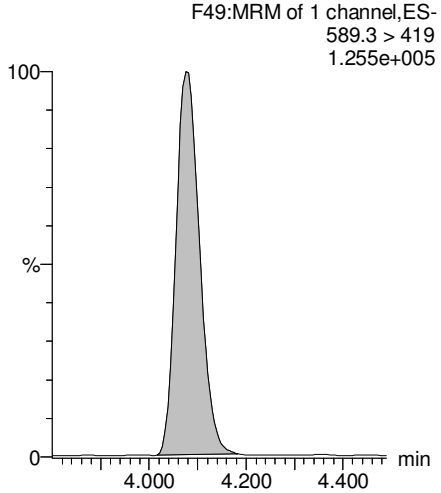
13C2-PFUnA



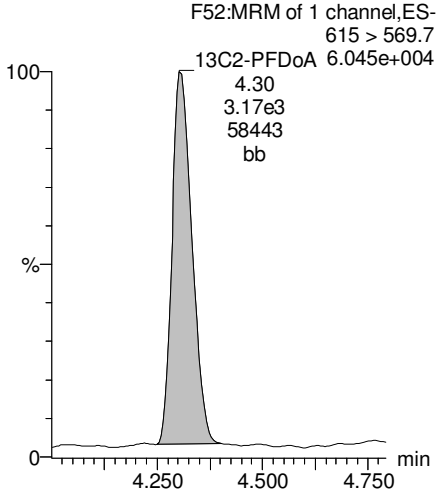
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFDoA



GM 8/8/17

Vista Analytical Laboratory

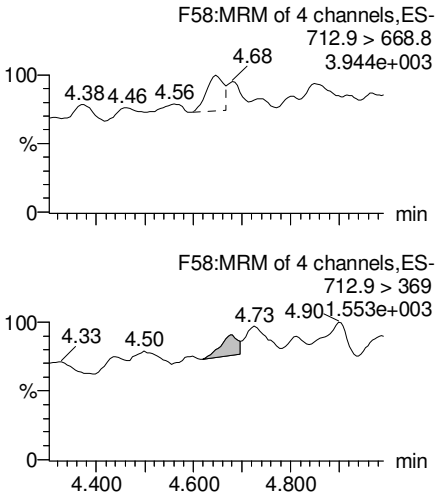
Dataset: U:\Q4.PRO\results\170803M2\170803M2-5.qld

Last Altered: Tuesday, August 08, 2017 14:59:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:01:04 Pacific Daylight Time

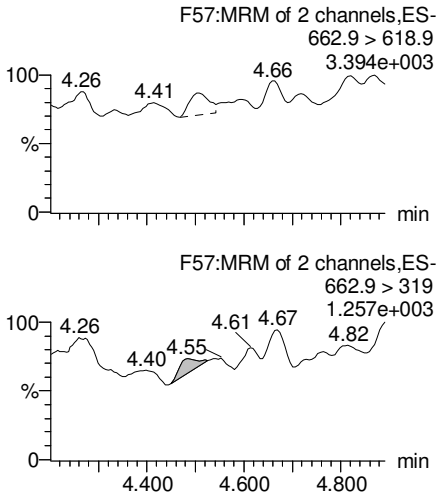
Reviewed: CT 08/09/2017

Name: 170803M2_5, Date: 03-Aug-2017, Time: 16:45:12, ID: 1700925-06 EB01-170724 0.1185, Description: EB01-170724

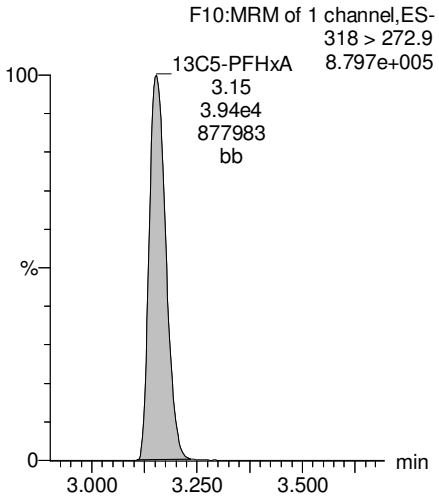
PFTeDA



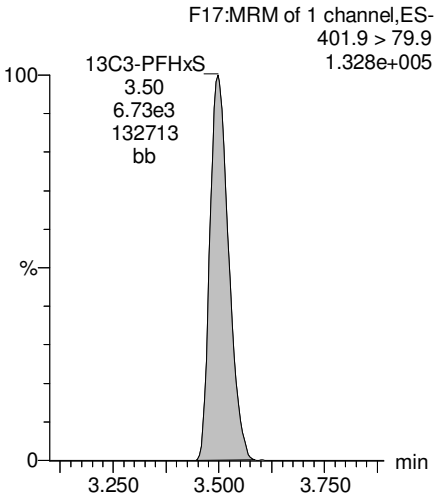
PFTrDA



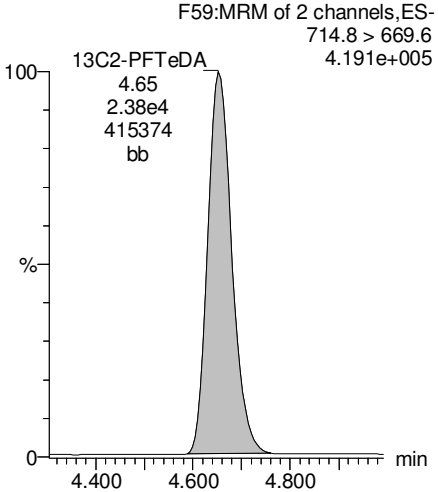
13C5-PFHxA



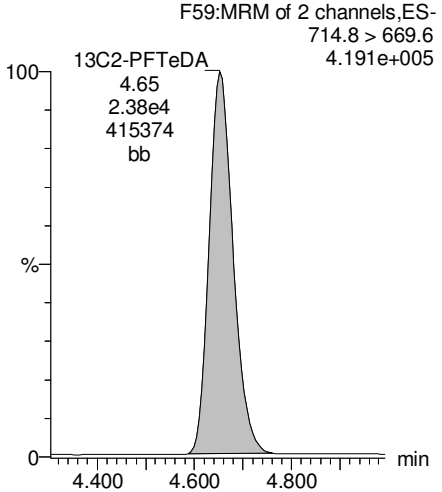
13C3-PFHxS



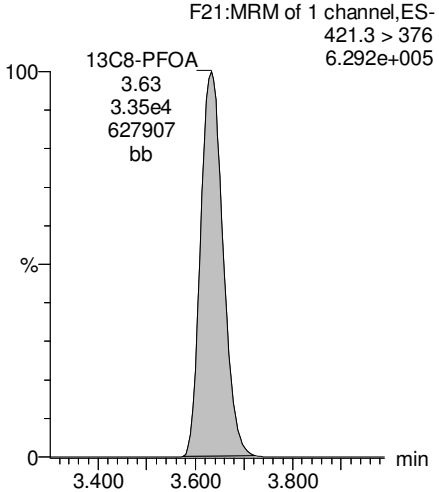
13C2-PFTeDA



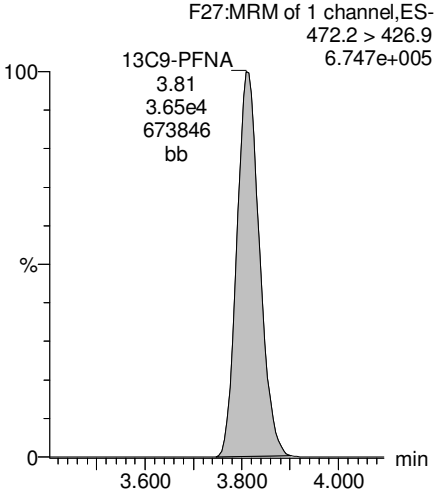
13C2-PFTeDA



13C8-PFOA



13C9-PFNA



GM 8/8/17

Vista Analytical Laboratory

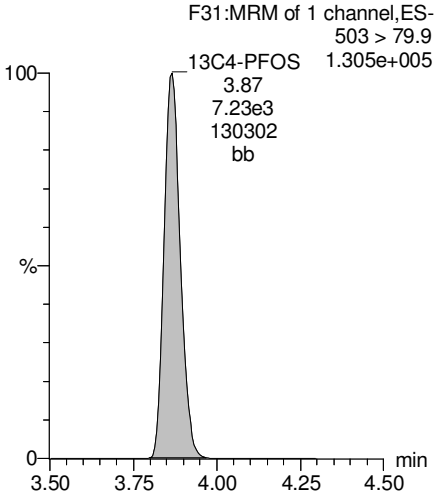
Dataset: U:\Q4.PRO\results\170803M2\170803M2-5.qld

Last Altered: Tuesday, August 08, 2017 14:59:47 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:01:04 Pacific Daylight Time

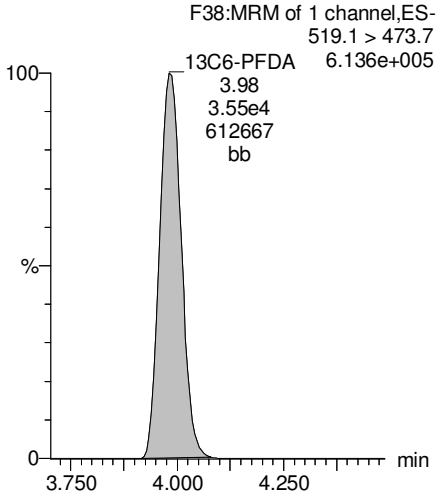
Reviewed: CT 08/09/2017

Name: 170803M2_5, Date: 03-Aug-2017, Time: 16:45:12, ID: 1700925-06 EB01-170724 0.1185, Description: EB01-170724

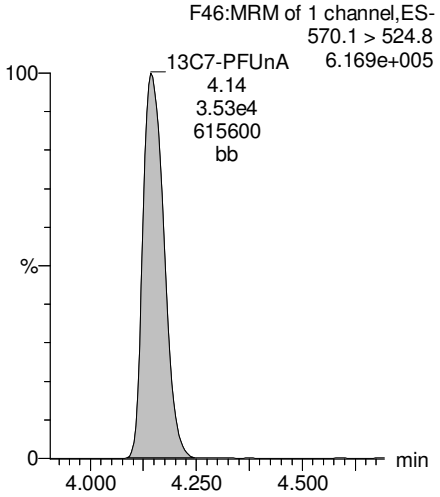
13C4-PFOS



13C6-PFDA



13C7-PFUnA



GM 8/8/17

Vista Analytical Laboratory

Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170810M2\170810M2-46.qld

Last Altered: Tuesday, August 15, 2017 09:50:01 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 09:50:13 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 14 Aug 2017 15:12:43
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_46, Date: 11-Aug-2017, Time: 04:23:54, ID: B7H0073-BLK1 Method Blank 0.125, Description: Method Blank

	#	Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	5	PFHpA	363 > 318.9		8.38e4		0.1250	3.51				
2	32	13C4-PFHpA	367.2 > 321.8	8.38e4	1.25e5	0.384	0.1250	3.51	3.53	6.72	140	70.0
3	52	13C5-PFHxA	318 > 272.9	1.25e5	1.25e5	1.000	0.1250	3.26	3.29	10.0	80.0	100.0

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Vista Analytical Laboratory

Rev'd: MM 8/17/17

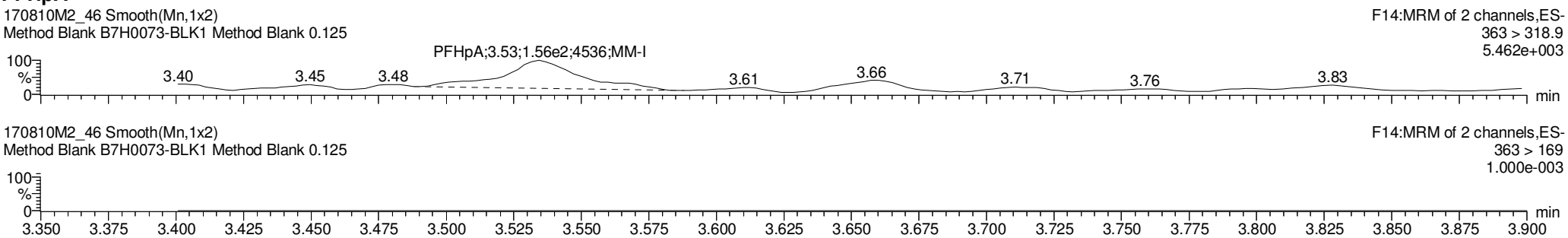
Dataset: U:\Q4.PRO\results\170810M2\170810M2-46.qld

Last Altered: Tuesday, August 15, 2017 09:50:01 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 09:50:13 Pacific Daylight Time

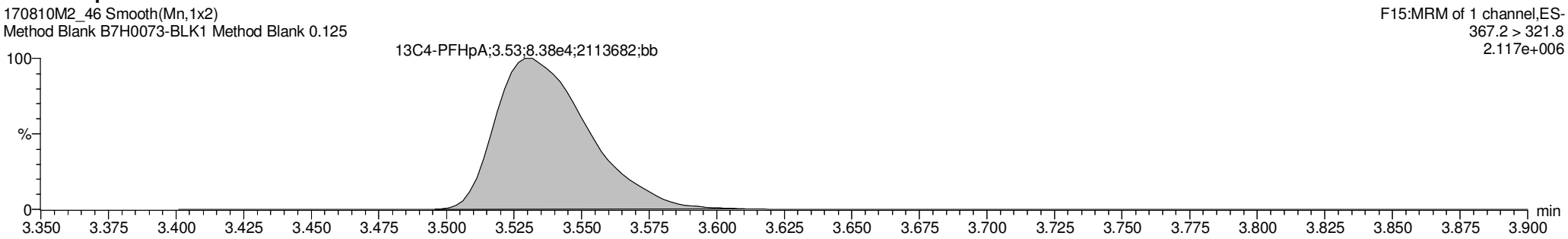
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 14 Aug 2017 15:12:43
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_46, Date: 11-Aug-2017, Time: 04:23:54, ID: B7H0073-BLK1 Method Blank 0.125, Description: Method Blank

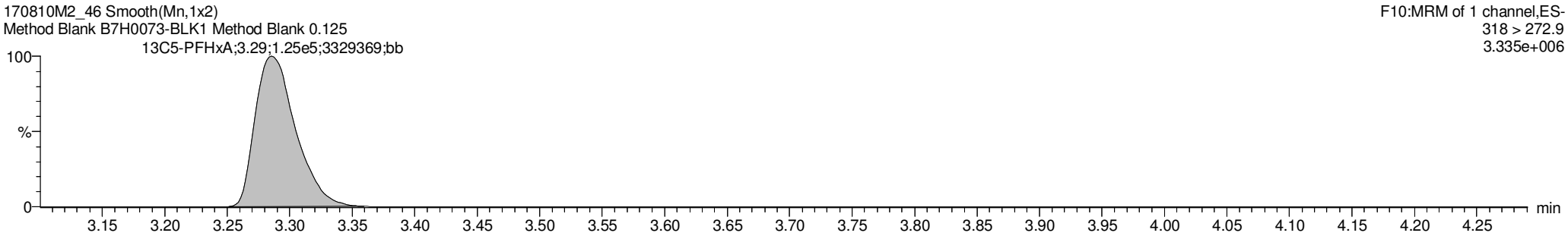
PFHpA



13C4-PFHpA



13C5-PFHxA



GM 8/15/17

Vista Analytical Laboratory

Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-7.qld

Last Altered: Saturday, August 12, 2017 11:40:50 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:41:07 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_7, Date: 11-Aug-2017, Time: 19:29:43, ID: B7H0073-BLK1 Method Blank 0.125, Description: Method Blank

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7		1.07e4	0.1250		3.06				
2	4	PFHxA	313.2 > 268.9		3.48e4	0.1250		3.26				
3	5	PFHpA -NOT USED	363 > 318.9		8.01e4	0.1250		3.51				
4	6	PFHxS	398.9 > 79.6	7.87e1	7.01e3	0.1250		3.58	3.57	0.281	1.82	
5	8	PFOA	413 > 368.7	5.98e2	1.11e5	0.1250		3.71	3.67	0.135		
6	10	PFNA	462.9 > 418.8		9.26e4	0.1250		3.90				
7	12	PFOS	499 > 79.9	5.68e1	1.78e4	0.1250		3.96	3.85	0.0800	0.896	
8	13	PFDA	513 > 468.8		9.16e4	0.1250		4.08				
9	15	N-MeFOSAA	570.1 > 419		1.81e4	0.1250		4.11				
10	16	N-EtFOSAA	584.2 > 419		1.87e4	0.1250		4.18				
11	17	PFUnA	562.9 > 518.9	2.12e2	9.08e4	0.1250		4.25	4.20	0.0584		
12	19	PFDoA	612.9 > 318.8		1.07e4	0.1250		4.42				

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Vista Analytical Laboratory

Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-7.qld

Last Altered: Saturday, August 12, 2017 11:40:50 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:41:24 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_7, Date: 11-Aug-2017, Time: 19:29:43, ID: B7H0073-BLK1 Method Blank 0.125, Description: Method Blank

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21	PFTrDA	662.9 > 618.9		1.07e4	0.1250		4.59				
2	22	PFTeDA	712.9 > 668.8		5.54e4	0.1250		4.78				
3	30	13C3-PFBS	302 > 98.8	1.07e4	1.29e5	0.1250	0.033	3.06	3.01	0.826	201	100.5
4	31	13C2-PFHxA	315 > 269.8	3.48e4	1.29e5	0.1250	0.304	3.26	3.22	2.70	71.1	88.9
5	32	13C4-PFHpA	367.2 > 321.8	8.01e4	1.29e5	0.1250	0.384	3.51	3.47	6.21	129	64.7
6	33	18O2-PFHxS	403 > 102.6	7.01e3	1.85e4	0.1250	0.417	3.58	3.55	9.47	182	90.8
7	35	13C2-PFOA	414.9 > 369.7	1.11e5	1.07e5	0.1250	1.132	3.71	3.67	25.8	182	91.0
8	36	13C5-PFNA	468.2 > 422.9	9.26e4	1.06e5	0.1250	0.946	3.90	3.86	21.9	185	92.7
9	38	13C8-PFOS	507 > 79.9	1.78e4	1.67e4	0.1250	1.040	3.96	3.92	26.6	205	102.3
10	39	13C2-PFDA	515.1 > 469.9	9.16e4	1.23e5	0.1250	0.971	4.08	4.04	18.7	154	77.0

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Vista Analytical Laboratory

Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-7.qld

Last Altered: Saturday, August 12, 2017 11:40:50 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:41:33 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_7, Date: 11-Aug-2017, Time: 19:29:43, ID: B7H0073-BLK1 Method Blank 0.125, Description: Method Blank

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	1.81e4	1.05e5	0.1250	0.018	4.11	4.07	4.33	1950	74.9
2	42	d5-N-EtFOSAA	589.3 > 419	1.87e4	1.05e5	0.1250	0.018	4.18	4.13	4.46	1960	75.3
3	43	13C2-PFUnA	565 > 519.8	9.08e4	1.05e5	0.1250	1.085	4.25	4.20	21.7	160	79.9
4	44	13C2-PFDoA	615 > 569.7	1.07e4	1.05e5	0.1250	0.123	4.42	4.37	2.56	166	83.2
5	46	13C2-PFTeDA	714.8 > 669.6	5.54e4	1.05e5	0.1250	0.798	4.78	4.73	13.2	133	66.3
6	52	13C5-PFHxA	318 > 272.9	1.29e5	1.29e5	0.1250	1.000	3.26	3.22	10.0	80.0	100.0
7	53	13C3-PFHxS	401.9 > 79.9	1.85e4	1.85e4	0.1250	1.000	3.58	3.54	25.0	200	100.0
8	54	13C8-PFOA	421.3 > 376	1.07e5	1.07e5	0.1250	1.000	3.71	3.67	25.0	200	100.0
9	55	13C9-PFNA	472.2 > 426.9	1.06e5	1.06e5	0.1250	1.000	3.90	3.86	25.0	200	100.0
10	56	13C4-PFOS	503 > 79.9	1.67e4	1.67e4	0.1250	1.000	3.96	3.92	25.0	200	100.0
11	57	13C6-PFDA	519.1 > 473.7	1.23e5	1.23e5	0.1250	1.000	4.08	4.04	25.0	200	100.0
12	58	13C7-PFUnA	570.1 > 524.8	1.05e5	1.05e5	0.1250	1.000	4.25	4.20	25.0	200	100.0
13	59	Total PFBS	299 > 79.7	0.00e0	1.07e4	0.1250		3.06		0.000		
14	60	Total PFHxS	398.9 > 79.6	7.87e1	7.01e3	0.1250		3.58		0.281	1.82	
15	61	Total PFOA	413 > 368.7	5.98e2	1.11e5	0.1250		3.71		0.000		
16	62	Total PFOS	499 > 79.9	5.68e1	1.78e4	0.1250		3.96		0.0800	0.896	
17	63	Total N-Me-FOSAA	570.1 > 419	0.00e0	1.81e4	0.1250		4.11		0.000		
18	64	Total N-EtFOSAA	584.2 > 419	0.00e0	1.87e4	0.1250		4.18		0.000		

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Dataset: U:\Q4.PRO\results\170811M2\170811M2-7.qld

Last Altered: Saturday, August 12, 2017 11:40:50 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:41:33 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_7, Date: 11-Aug-2017, Time: 19:29:43, ID: B7H0073-BLK1 Method Blank 0.125, Description: Method Blank

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.57	78.691	7006.333	0.281	MM	1.8

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7	3.67	597.526	110710.813	0.135	bbl	

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.85	56.814	17755.775	0.080	MM	0.9

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

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Vista Analytical Laboratory

Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-7.qld

Last Altered: Saturday, August 12, 2017 11:40:50 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:41:33 Pacific Daylight Time

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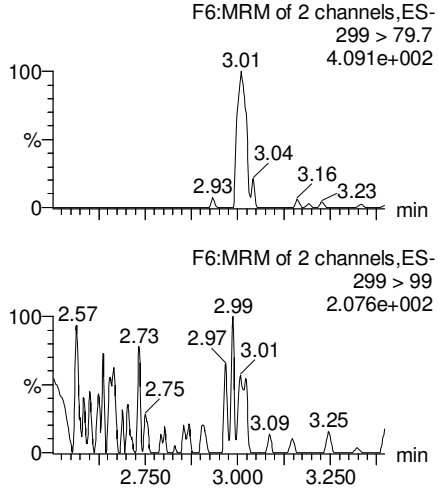
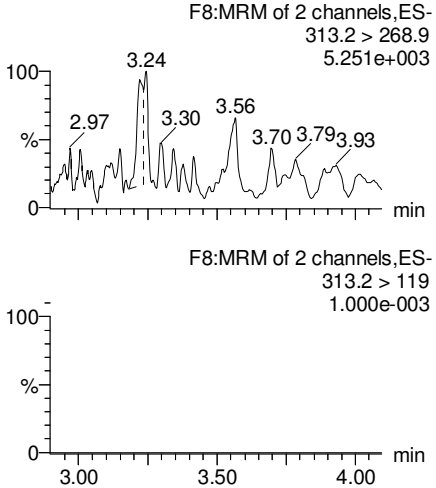
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_7, Date: 11-Aug-2017, Time: 19:29:43, ID: B7H0073-BLK1 Method Blank 0.125, Description: Method Blank

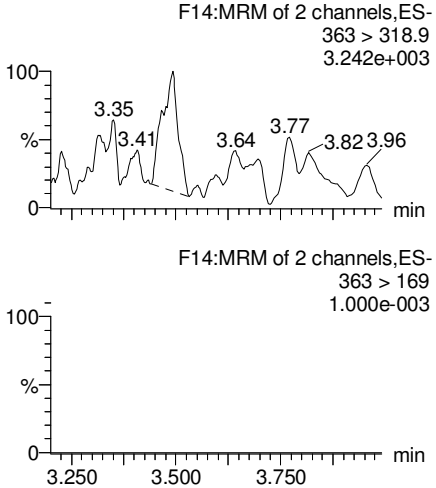
Total PFBS



PFHxA



PFHpA



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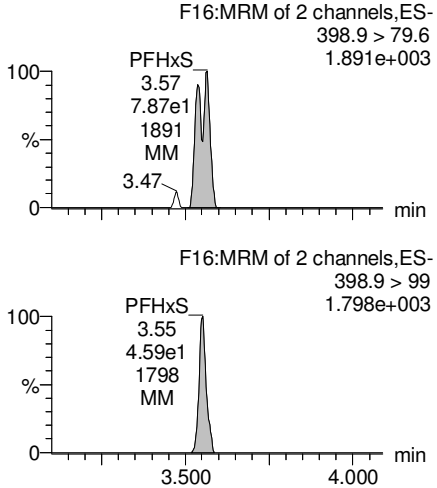
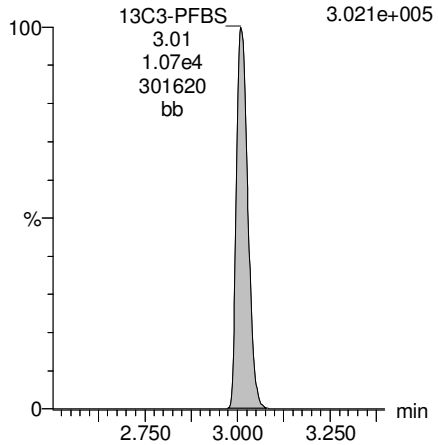
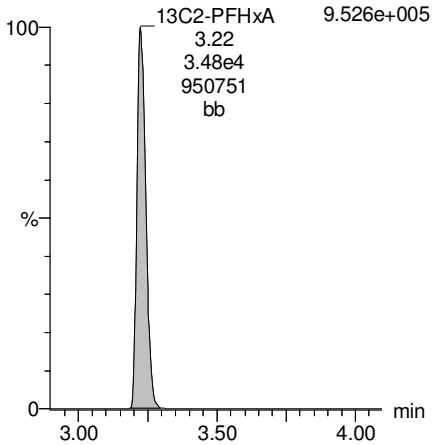


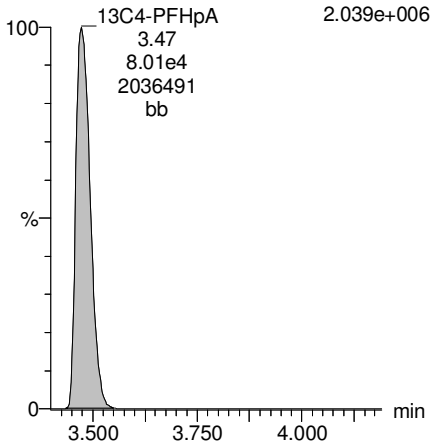
13C3-PFBS



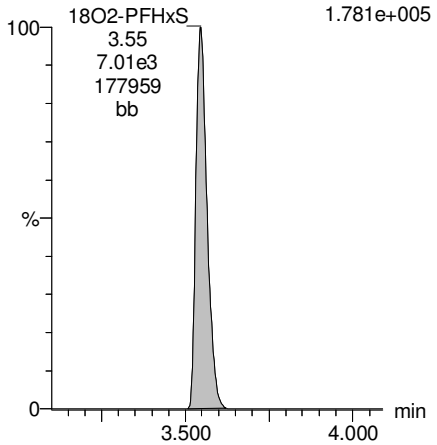
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



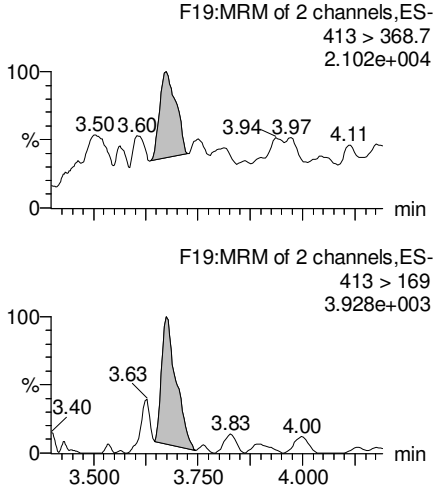
AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-7.qld

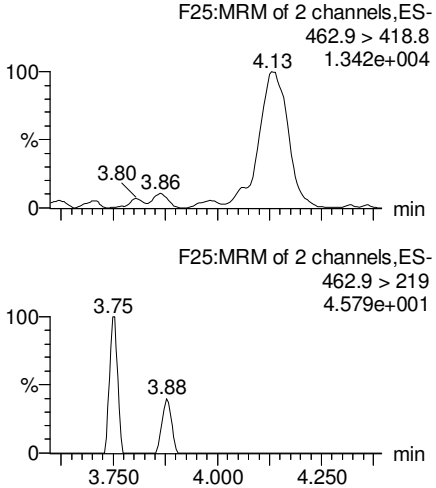
Last Altered: Saturday, August 12, 2017 11:40:50 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:41:33 Pacific Daylight Time

Name: 170811M2_7, Date: 11-Aug-2017, Time: 19:29:43, ID: B7H0073-BLK1 Method Blank 0.125, Description: Method Blank

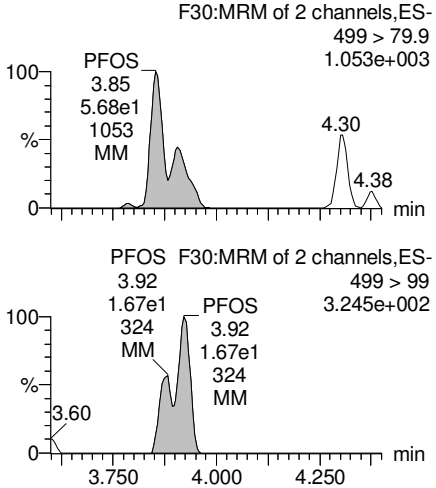
Total PFOA



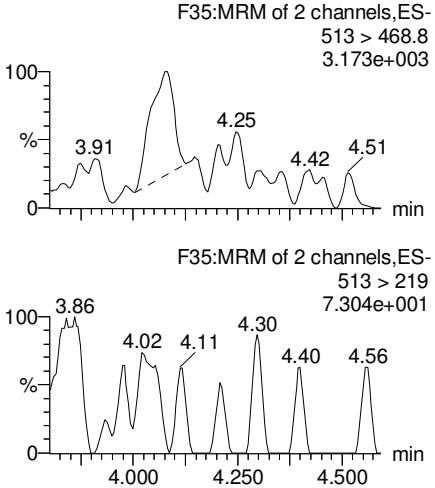
PFNA



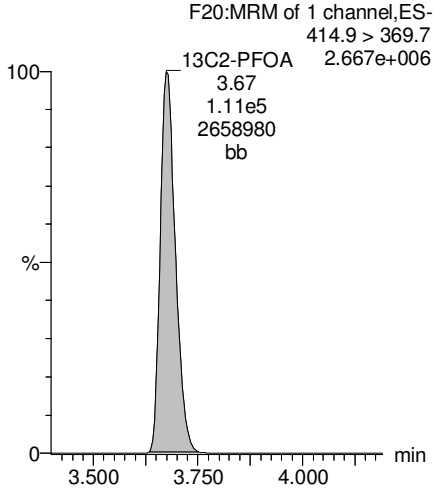
Total PFOS



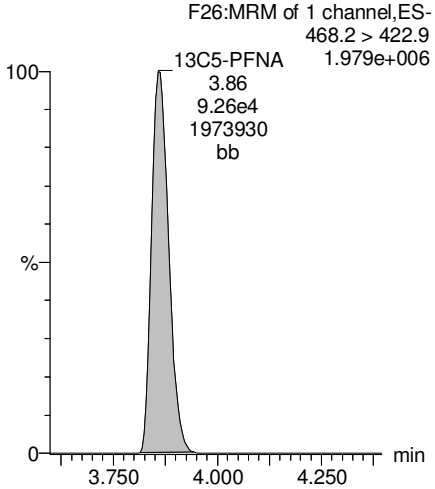
PFDA



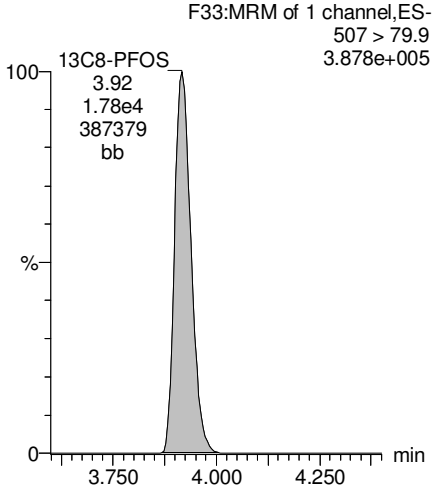
13C2-PFOA



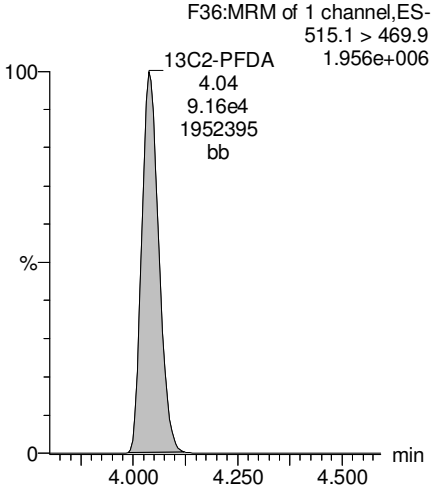
13C5-PFNA



13C8-PFOS



13C2-PFDA



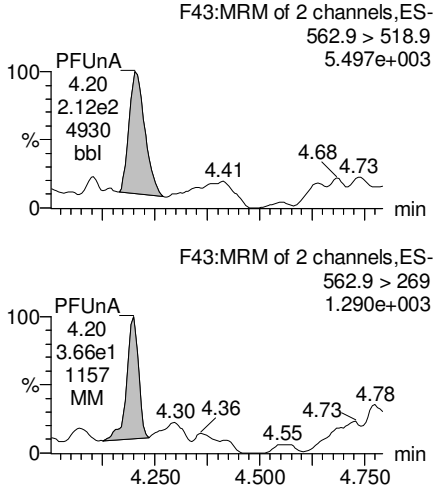
AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-7.qld

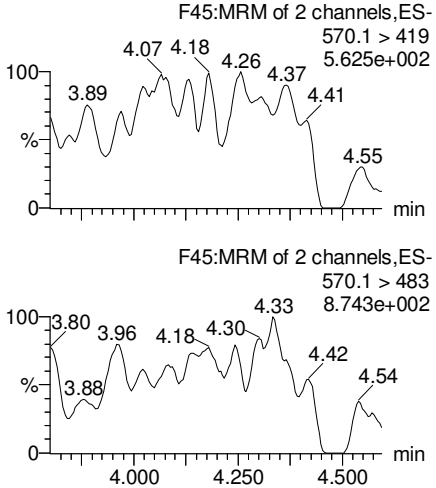
Last Altered: Saturday, August 12, 2017 11:40:50 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:41:33 Pacific Daylight Time

Name: 170811M2_7, Date: 11-Aug-2017, Time: 19:29:43, ID: B7H0073-BLK1 Method Blank 0.125, Description: Method Blank

PFUnA



N-MeFOSAA



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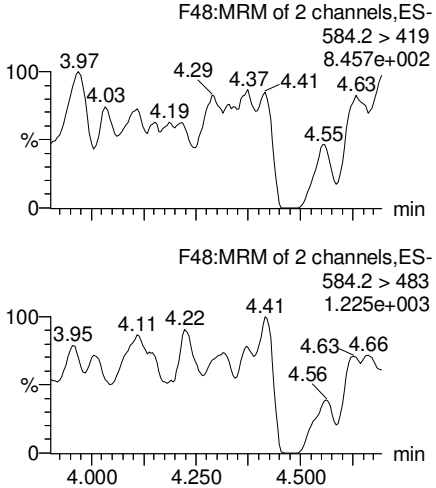
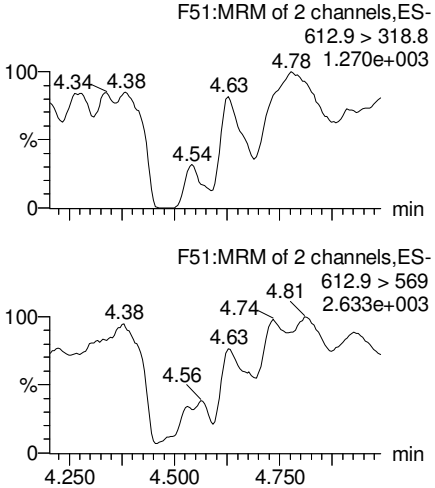
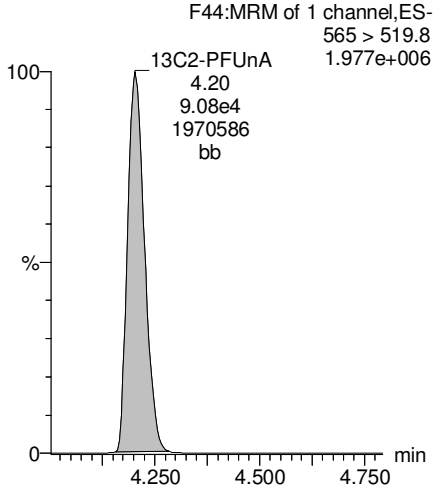


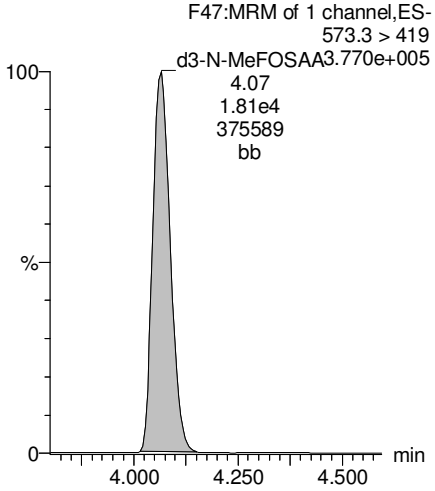
PFDoA



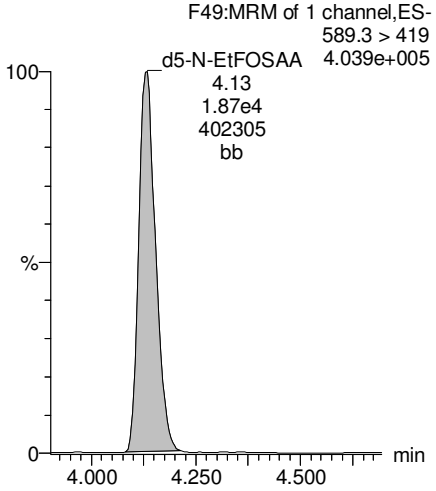
13C2-PFUnA



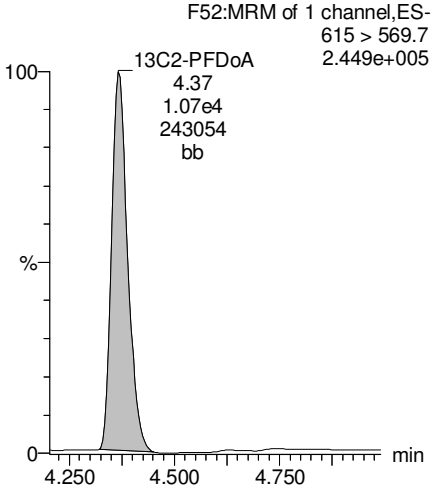
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFDoA



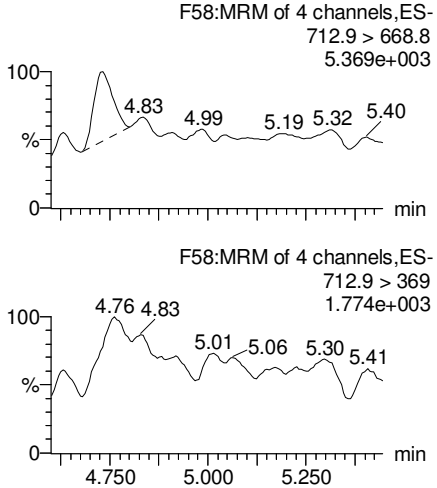
AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-7.qld

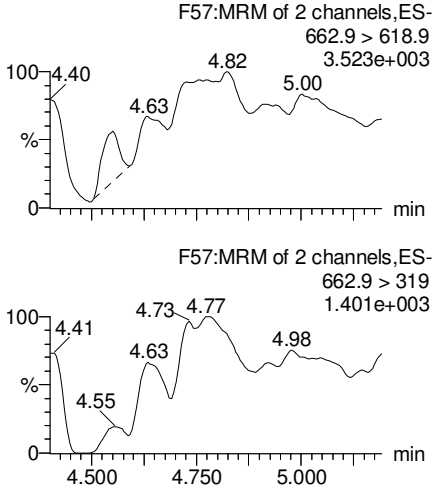
Last Altered: Saturday, August 12, 2017 11:40:50 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:41:33 Pacific Daylight Time

Name: 170811M2_7, Date: 11-Aug-2017, Time: 19:29:43, ID: B7H0073-BLK1 Method Blank 0.125, Description: Method Blank

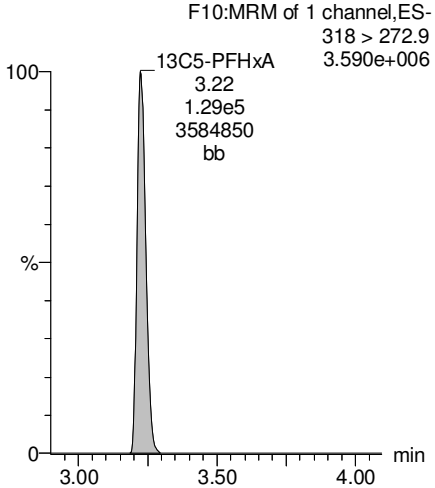
PFTeDA



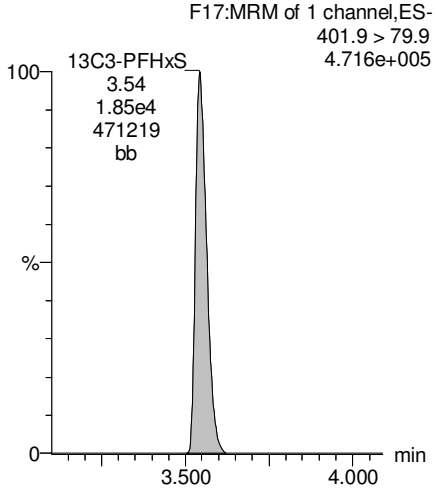
PFTrDA



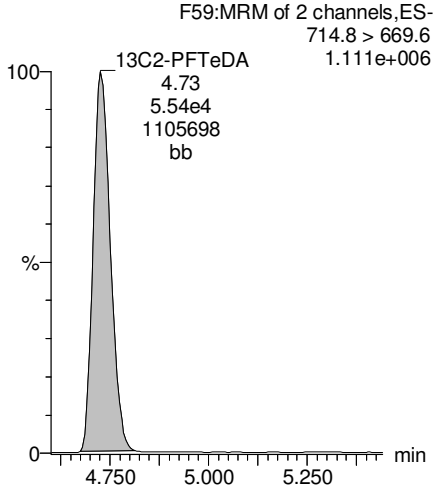
13C5-PFHxA



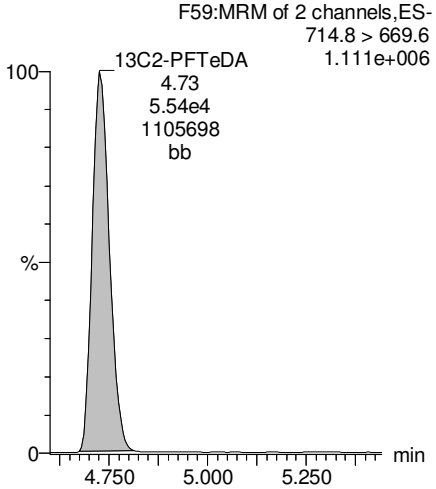
13C3-PFHxS



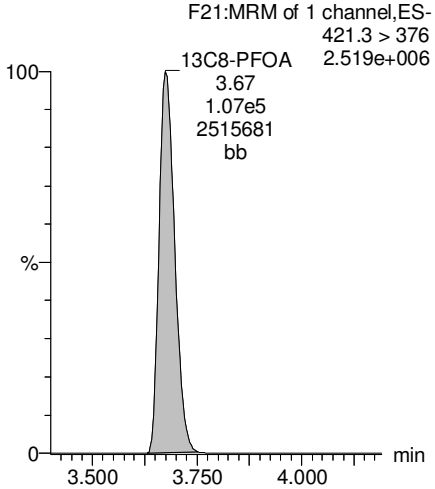
13C2-PFTeDA



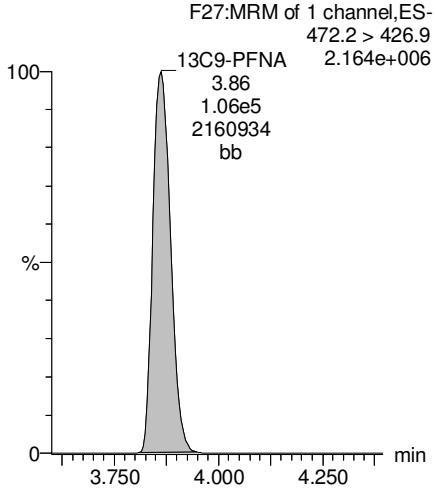
13C2-PFTeDA



13C8-PFOA



13C9-PFNA



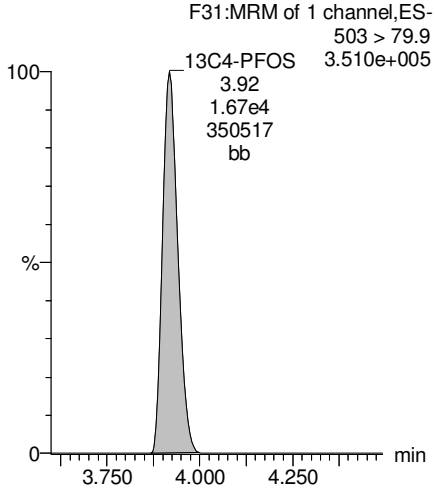
AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-7.qld

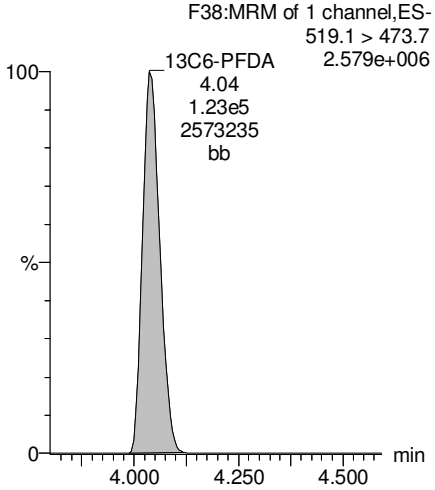
Last Altered: Saturday, August 12, 2017 11:40:50 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:41:33 Pacific Daylight Time

Name: 170811M2_7, Date: 11-Aug-2017, Time: 19:29:43, ID: B7H0073-BLK1 Method Blank 0.125, Description: Method Blank

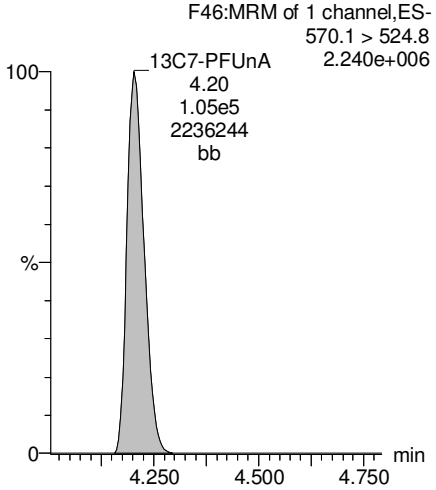
13C4-PFOS



13C6-PFDA



13C7-PFUnA



AP 8/12/2017

Vista Analytical Laboratory

Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170810M2\170810M2-43.qld

Last Altered: Tuesday, August 15, 2017 09:47:27 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 09:48:51 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 14 Aug 2017 15:12:43
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_43, Date: 11-Aug-2017, Time: 03:51:59, ID: B7H0073-BS1 OPR 0.125, Description: OPR

	#	Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	5	PFHpA	363 > 318.9	8.25e4	8.39e4		0.1250	3.51	3.53	24.6	170	106.4
2	32	13C4-PFHpA	367.2 > 321.8	8.39e4	1.24e5	0.384	0.1250	3.51	3.53	6.79	142	70.8
3	52	13C5-PFHxA	318 > 272.9	1.24e5	1.24e5	1.000	0.1250	3.26	3.29	10.0	80.0	100.0

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Vista Analytical Laboratory

Rev'd: MM 8/17/17

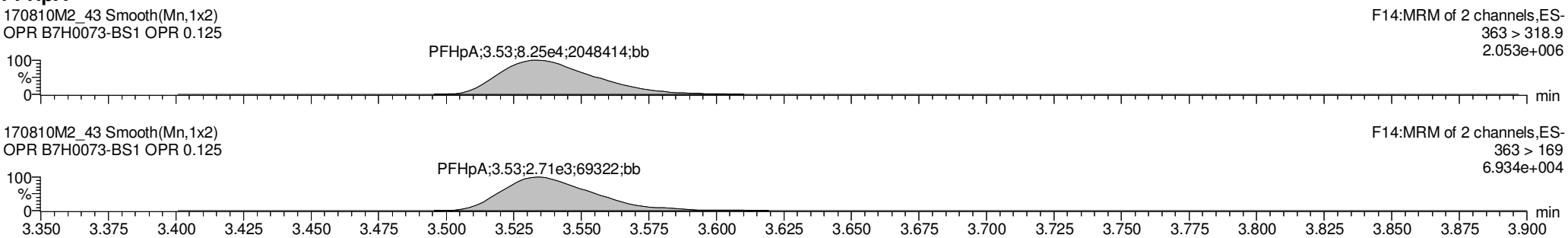
Dataset: U:\Q4.PRO\results\170810M2\170810M2-43.qld

Last Altered: Tuesday, August 15, 2017 09:47:27 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 09:48:51 Pacific Daylight Time

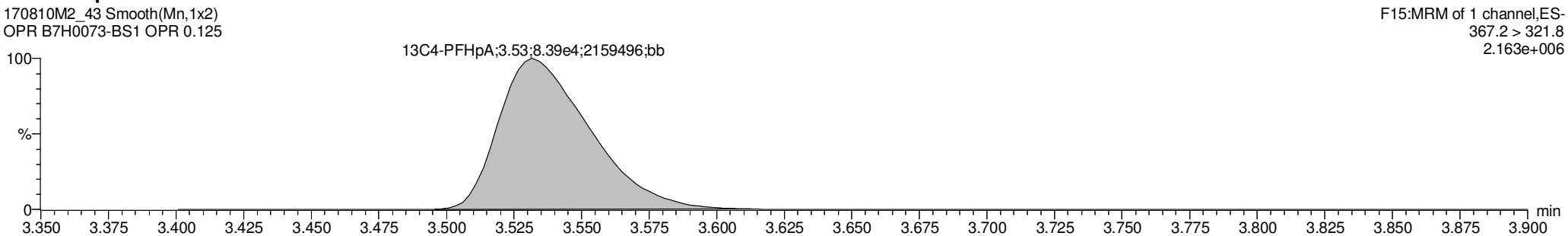
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 14 Aug 2017 15:12:43
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_43, Date: 11-Aug-2017, Time: 03:51:59, ID: B7H0073-BS1 OPR 0.125, Description: OPR

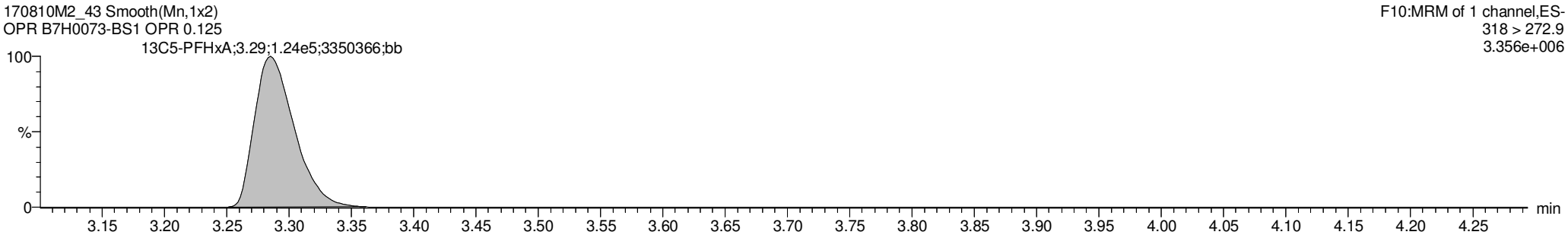
PFHpA



13C4-PFHpA



13C5-PFHxA



GM 8/15/17

Vista Analytical Laboratory

Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-4.qld

Last Altered: Saturday, August 12, 2017 11:27:57 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:28:39 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_4, Date: 11-Aug-2017, Time: 18:57:15, ID: B7H0073-BS1 OPR 0.125, Description: OPR

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7	1.72e4	1.20e4	0.1250		3.06	3.02	35.6	166	103.5
2	4	PFHxA	313.2 > 268.9	9.60e4	3.41e4	0.1250		3.26	3.24	28.2	175	109.1
3	5	~~PFHpA~~ NOT USED	~~363 > 318.9~~	~~7.80e4~~	~~7.94e4~~	~~0.1250~~		~~3.51~~	~~3.48~~	~~24.6~~	~~170~~	~~106.4~~
4	6	PFHxS	398.9 > 79.6	1.05e4	8.06e3	0.1250		3.58	3.55	32.4	147	92.1
5	8	PFOA	413 > 368.7	8.87e4	1.05e5	0.1250		3.71	3.69	21.2	172	107.3
6	10	PFNA	462.9 > 418.8	8.73e4	9.54e4	0.1250		3.90	3.87	22.9	183	114.1
7	12	PFOS	499 > 79.9	1.66e4	1.96e4	0.1250		3.96	3.93	21.1	159	99.5
8	13	PFDA	513 > 468.8	9.36e4	9.87e4	0.1250		4.08	4.04	23.7	167	104.3
9	15	N-MeFOSAA	570.1 > 419	2.45e4	1.95e4	0.1250		4.11	4.08	409	170	106.2
10	16	N-EtFOSAA	584.2 > 419	2.01e4	2.09e4	0.1250		4.18	4.14	313	160	100.2
11	17	PFUnA	562.9 > 518.9	7.07e4	1.12e5	0.1250		4.25	4.21	15.7	155	97.2
12	19	PFDoA	612.9 > 318.8	7.47e3	1.12e4	0.1250		4.42	4.38	16.6	160	99.9

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Vista Analytical Laboratory

Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-4.qld

Last Altered: Saturday, August 12, 2017 11:27:57 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:28:55 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_4, Date: 11-Aug-2017, Time: 18:57:15, ID: B7H0073-BS1 OPR 0.125, Description: OPR

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21	PFTrDA	662.9 > 618.9	1.02e5	1.12e4	0.1250		4.59	4.55	228	181	113.1
2	22	PFTeDA	712.9 > 668.8	7.35e4	8.37e4	0.1250		4.78	4.73	21.9	155	96.8
3	30	13C3-PFBS	302 > 98.8	1.20e4	1.23e5	0.1250	0.033	3.06	3.03	0.979	238	119.1
4	31	13C2-PFHxA	315 > 269.8	3.41e4	1.23e5	0.1250	0.304	3.26	3.24	2.77	73.0	91.2
5	32	13C4-PFHpA	367.2 > 321.8	7.94e4	1.23e5	0.1250	0.384	3.51	3.48	6.45	134	67.2
6	33	18O2-PFHxS	403 > 102.6	8.06e3	2.02e4	0.1250	0.417	3.58	3.55	9.99	192	95.8
7	35	13C2-PFOA	414.9 > 369.7	1.05e5	1.03e5	0.1250	1.132	3.71	3.68	25.4	179	89.6
8	36	13C5-PFNA	468.2 > 422.9	9.54e4	1.15e5	0.1250	0.946	3.90	3.87	20.7	175	87.3
9	38	13C8-PFOS	507 > 79.9	1.96e4	2.03e4	0.1250	1.040	3.96	3.93	24.1	186	92.9
10	39	13C2-PFDA	515.1 > 469.9	9.87e4	1.28e5	0.1250	0.971	4.08	4.04	19.3	159	79.4

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Vista Analytical Laboratory

Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-4.qld

Last Altered: Saturday, August 12, 2017 11:27:57 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:29:08 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_4, Date: 11-Aug-2017, Time: 18:57:15, ID: B7H0073-BS1 OPR 0.125, Description: OPR

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	1.95e4	1.20e5	0.1250	0.018	4.11	4.07	4.04	1820	69.9
2	42	d5-N-EtFOSAA	589.3 > 419	2.09e4	1.20e5	0.1250	0.018	4.18	4.14	4.34	1900	73.2
3	43	13C2-PFUnA	565 > 519.8	1.12e5	1.20e5	0.1250	1.085	4.25	4.21	23.3	172	86.0
4	44	13C2-PFDoA	615 > 569.7	1.12e4	1.20e5	0.1250	0.123	4.42	4.38	2.33	151	75.7
5	46	13C2-PFTeDA	714.8 > 669.6	8.37e4	1.20e5	0.1250	0.798	4.78	4.73	17.4	174	87.1
6	52	13C5-PFHxA	318 > 272.9	1.23e5	1.23e5	0.1250	1.000	3.26	3.24	10.0	80.0	100.0
7	53	13C3-PFHxS	401.9 > 79.9	2.02e4	2.02e4	0.1250	1.000	3.58	3.55	25.0	200	100.0
8	54	13C8-PFOA	421.3 > 376	1.03e5	1.03e5	0.1250	1.000	3.71	3.68	25.0	200	100.0
9	55	13C9-PFNA	472.2 > 426.9	1.15e5	1.15e5	0.1250	1.000	3.90	3.87	25.0	200	100.0
10	56	13C4-PFOS	503 > 79.9	2.03e4	2.03e4	0.1250	1.000	3.96	3.93	25.0	200	100.0
11	57	13C6-PFDA	519.1 > 473.7	1.28e5	1.28e5	0.1250	1.000	4.08	4.04	25.0	200	100.0
12	58	13C7-PFUnA	570.1 > 524.8	1.20e5	1.20e5	0.1250	1.000	4.25	4.21	25.0	200	100.0
13	59	Total PFBS	299 > 79.7	1.72e4	1.20e4	0.1250		3.06		35.6	166	
14	60	Total PFHxS	398.9 > 79.6	1.05e4	8.06e3	0.1250		3.58		32.4	147	
15	61	Total PFOA	413 > 368.7	8.87e4	1.05e5	0.1250		3.71		21.2	172	
16	62	Total PFOS	499 > 79.9	1.66e4	1.96e4	0.1250		3.96		21.1	159	
17	63	Total N-Me-FOSAA	570.1 > 419	2.45e4	1.95e4	0.1250		4.11		409	170	
18	64	Total N-EtFOSAA	584.2 > 419	2.01e4	2.09e4	0.1250		4.18		313	160	

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Vista Analytical Laboratory

Rev'd: MM 8/13/17

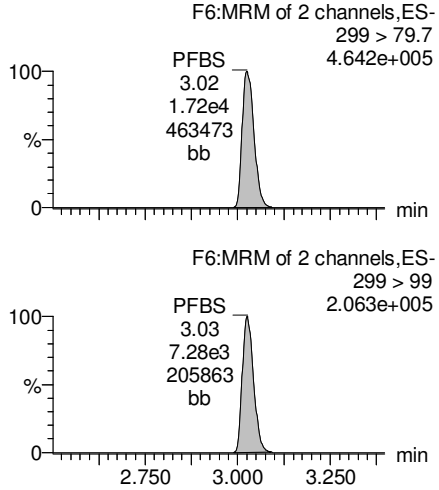
Dataset: U:\Q4.PRO\results\170811M2\170811M2-4.qld

Last Altered: Saturday, August 12, 2017 11:27:57 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:29:08 Pacific Daylight Time

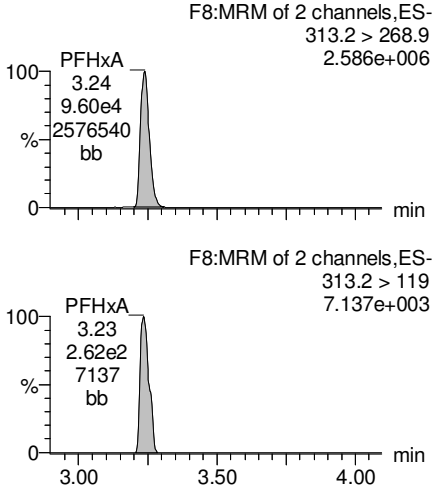
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_4, Date: 11-Aug-2017, Time: 18:57:15, ID: B7H0073-BS1 OPR 0.125, Description: OPR

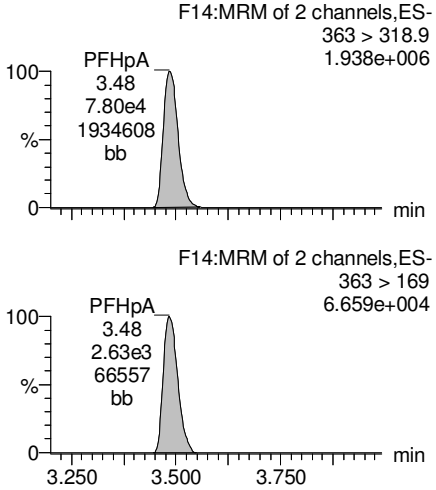
Total PFBS



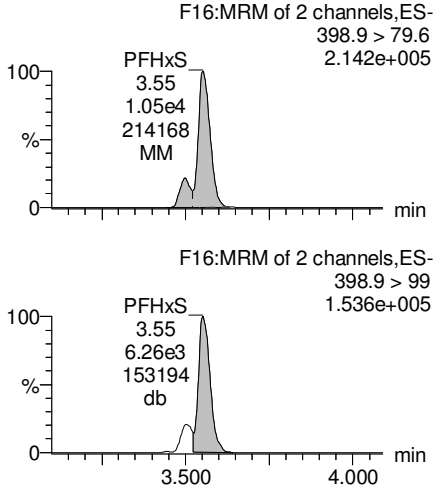
PFHxA



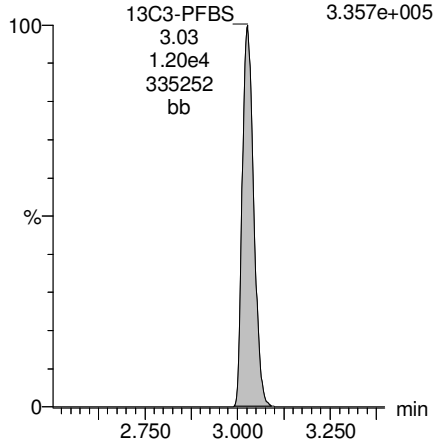
PFHpA



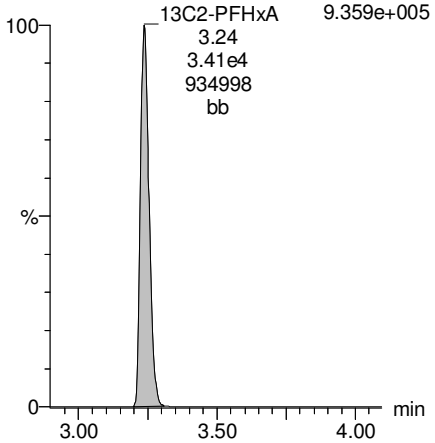
Total PFHxS



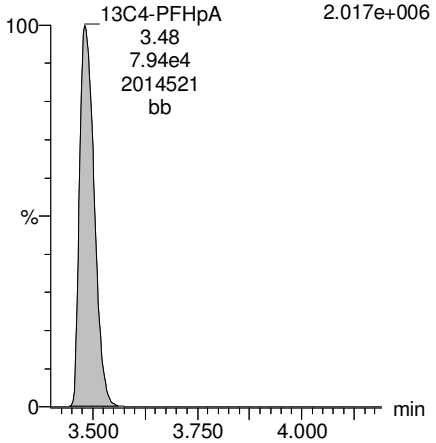
13C3-PFBS



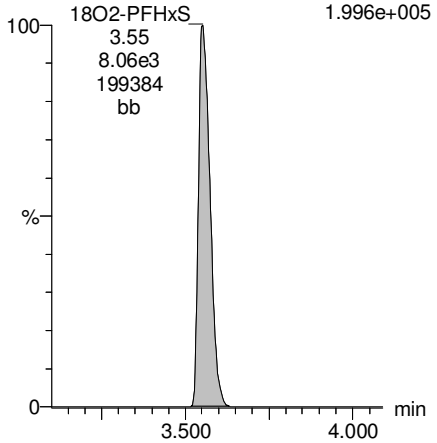
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



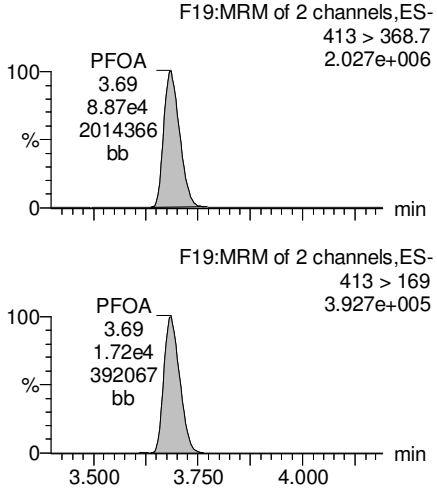
AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-4.qld

Last Altered: Saturday, August 12, 2017 11:27:57 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:29:08 Pacific Daylight Time

Name: 170811M2_4, Date: 11-Aug-2017, Time: 18:57:15, ID: B7H0073-BS1 OPR 0.125, Description: OPR

Total PFOA



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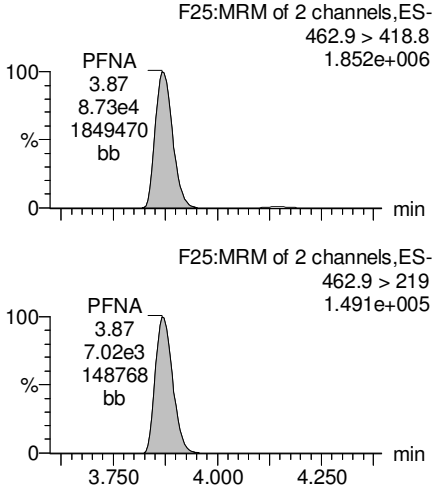
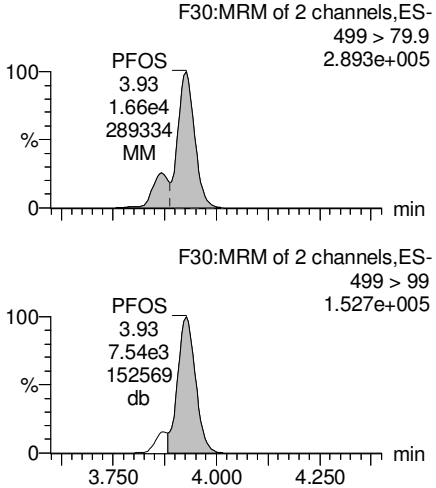
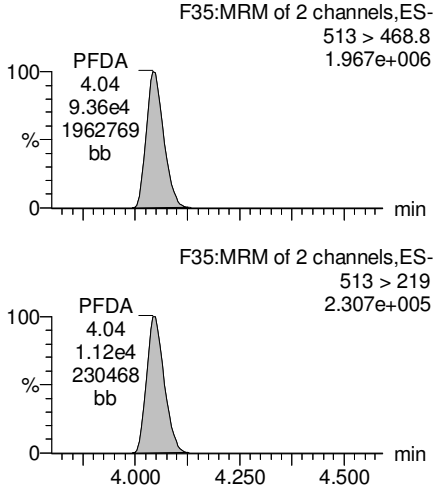


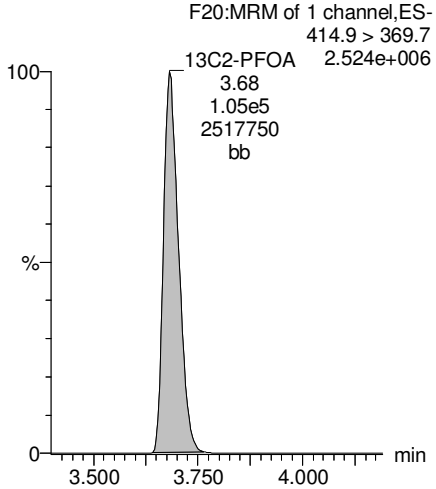
Total PFOS



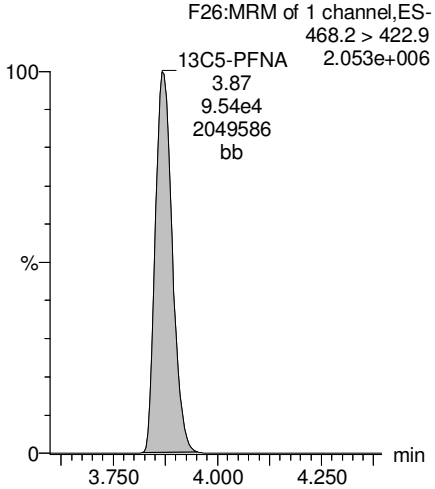
PFDA



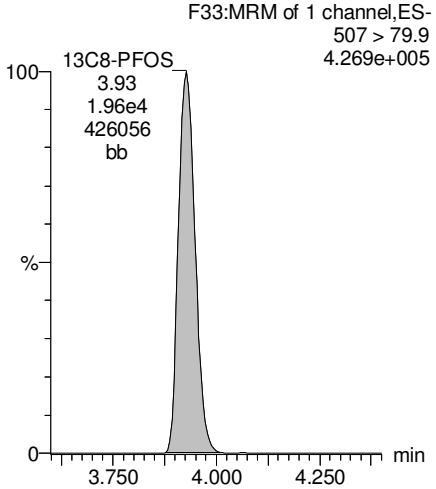
13C2-PFOA



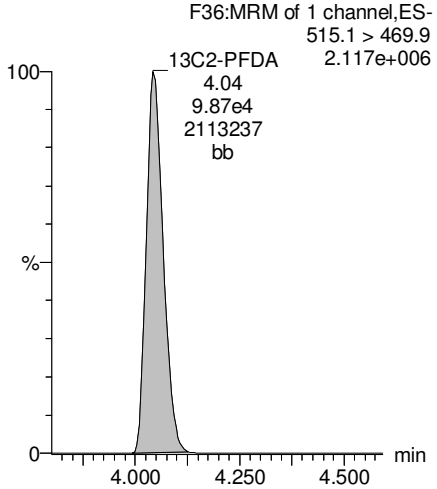
13C5-PFNA



13C8-PFOS



13C2-PFDA



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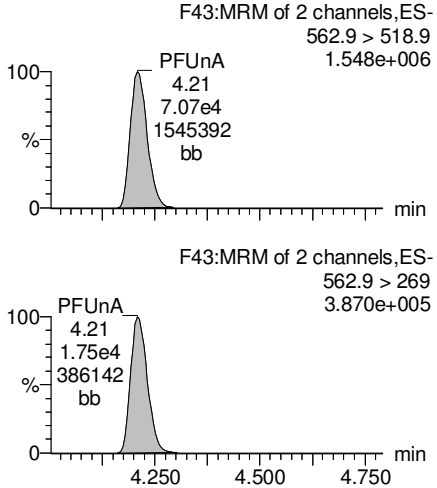
Dataset: U:\Q4.PRO\results\170811M2\170811M2-4.qld

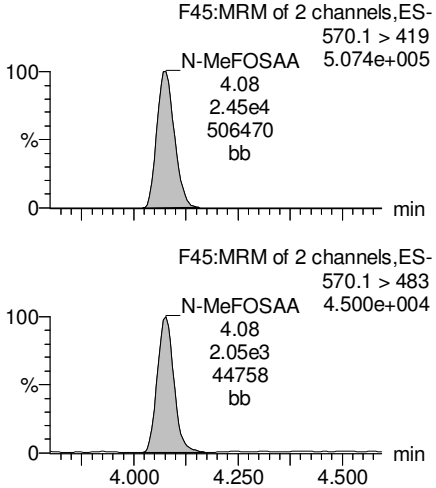
Last Altered: Saturday, August 12, 2017 11:27:57 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:29:08 Pacific Daylight Time

Name: 170811M2_4, Date: 11-Aug-2017, Time: 18:57:15, ID: B7H0073-BS1 OPR 0.125, Description: OPR

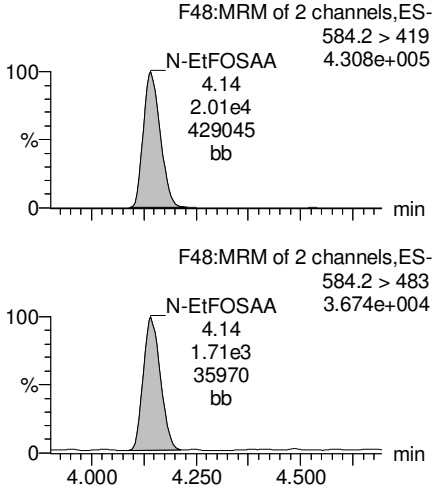
PFUnA



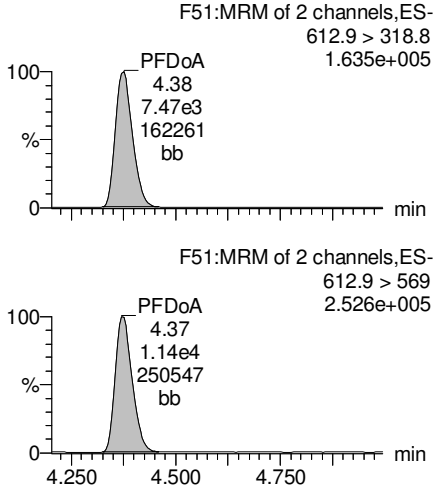
N-MeFOSAA



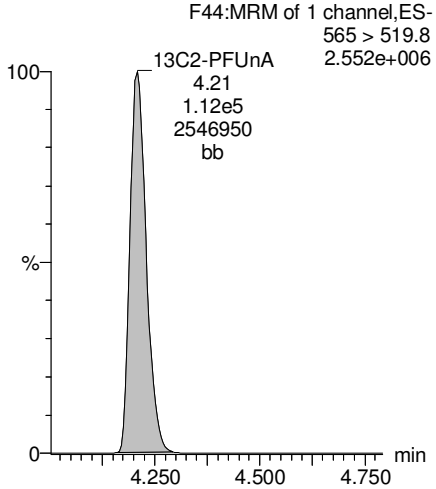
N-EtFOSAA



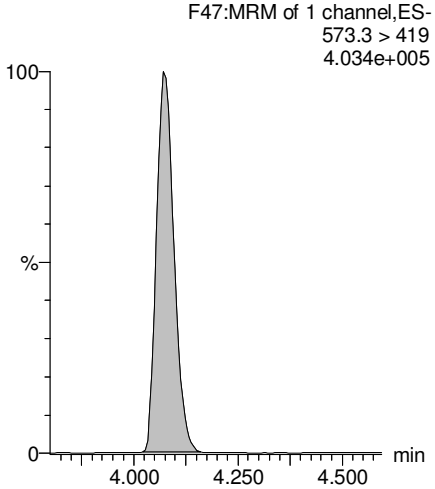
PFDoA



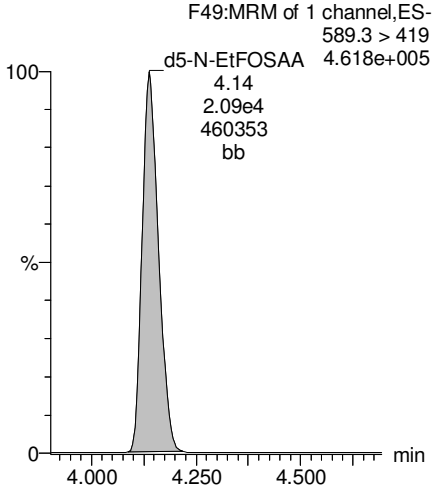
13C2-PFUnA



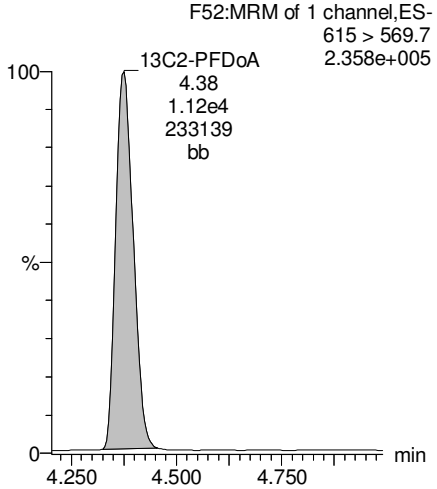
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFDoA



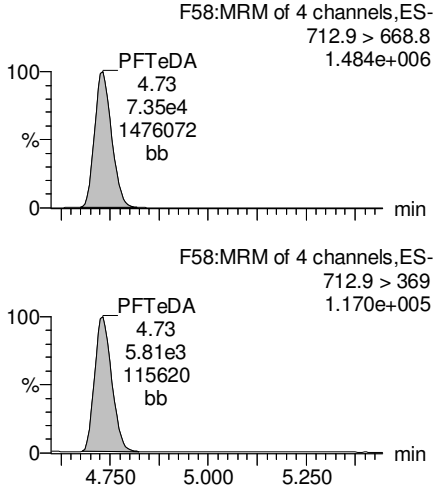
AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-4.qld

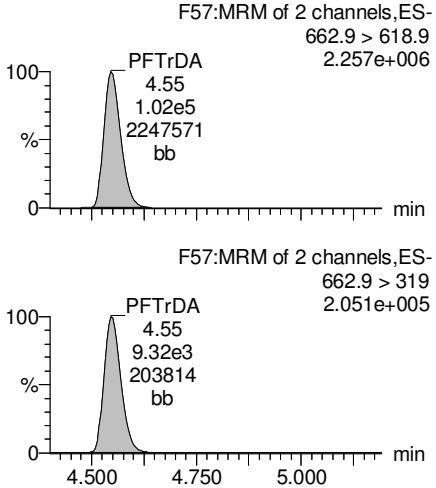
Last Altered: Saturday, August 12, 2017 11:27:57 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:29:08 Pacific Daylight Time

Name: 170811M2_4, Date: 11-Aug-2017, Time: 18:57:15, ID: B7H0073-BS1 OPR 0.125, Description: OPR

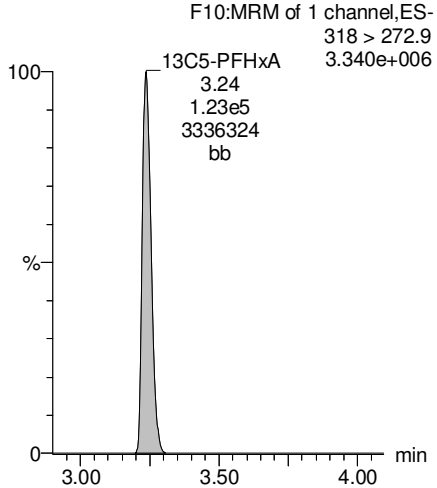
PFTeDA



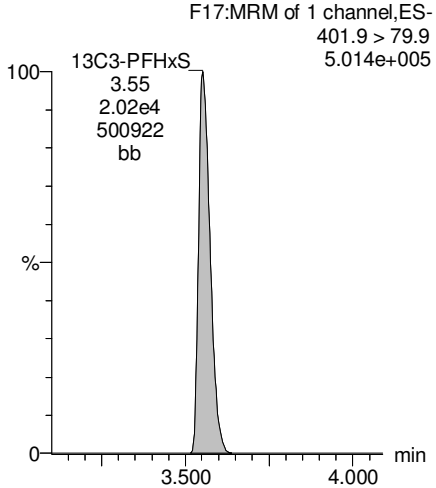
PFTrDA



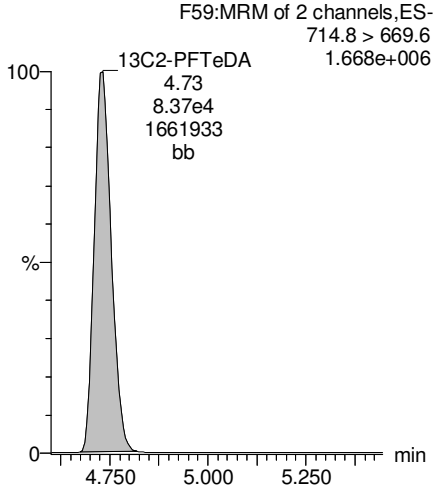
13C5-PFHxA



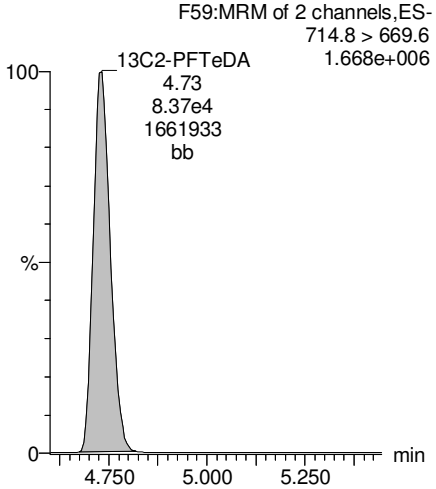
13C3-PFHxS



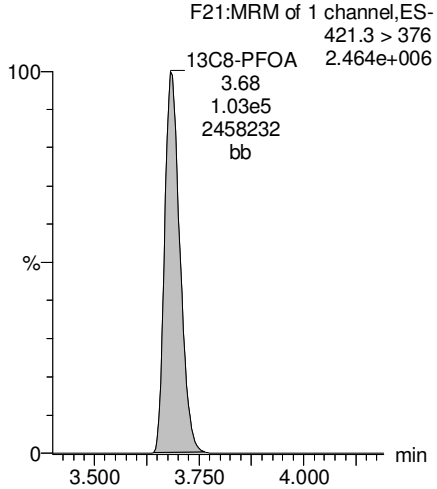
13C2-PFTeDA



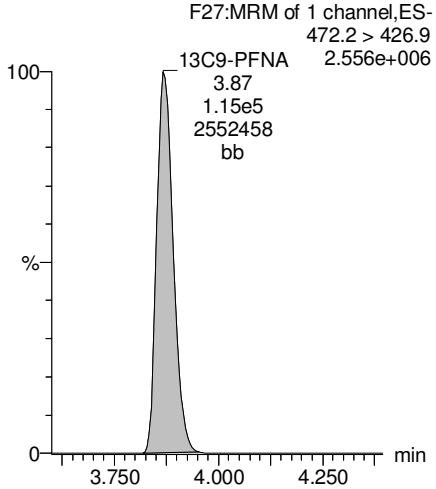
13C2-PFTeDA



13C8-PFOA



13C9-PFNA



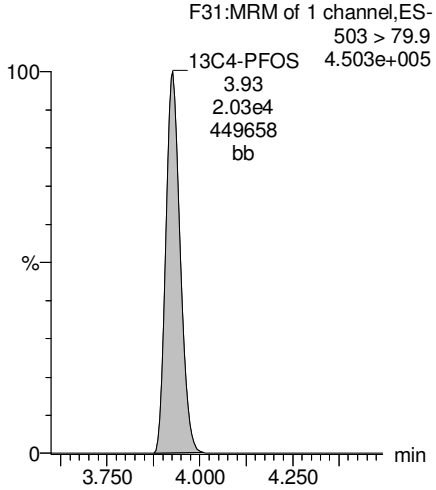
AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-4.qld

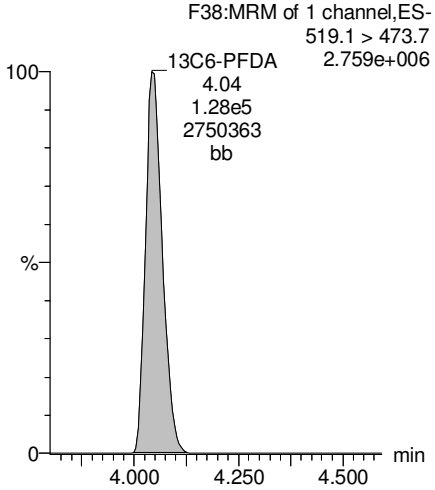
Last Altered: Saturday, August 12, 2017 11:27:57 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:29:08 Pacific Daylight Time

Name: 170811M2_4, Date: 11-Aug-2017, Time: 18:57:15, ID: B7H0073-BS1 OPR 0.125, Description: OPR

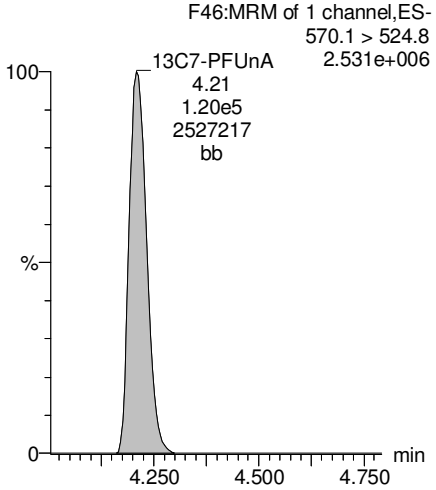
13C4-PFOS



13C6-PFDA



13C7-PFUnA



AP 8/12/2017

Vista Analytical Laboratory

Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170810M2\170810M2-71.qld

Last Altered: Tuesday, August 15, 2017 09:54:51 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 09:56:38 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 14 Aug 2017 15:12:43
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_71, Date: 11-Aug-2017, Time: 08:51:34, ID: 1700925-04RE2 I001MW52S-170724 0.00122, Description: I001MW52S-170724

	#	Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	5	PFHpA	363 > 318.9	1.81e5	7.62e4		0.0012	3.51	3.52	59.3	42600	
2	32	13C4-PFHpA	367.2 > 321.8	7.62e4	1.04e5	0.384	0.0012	3.51	3.52	7.29	15600	75.9
3	52	13C5-PFHxA	318 > 272.9	1.04e5	1.04e5	1.000	0.0012	3.26	3.27	10.0	8200	100.0

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Vista Analytical Laboratory

Rev'd: MM 8/17/17

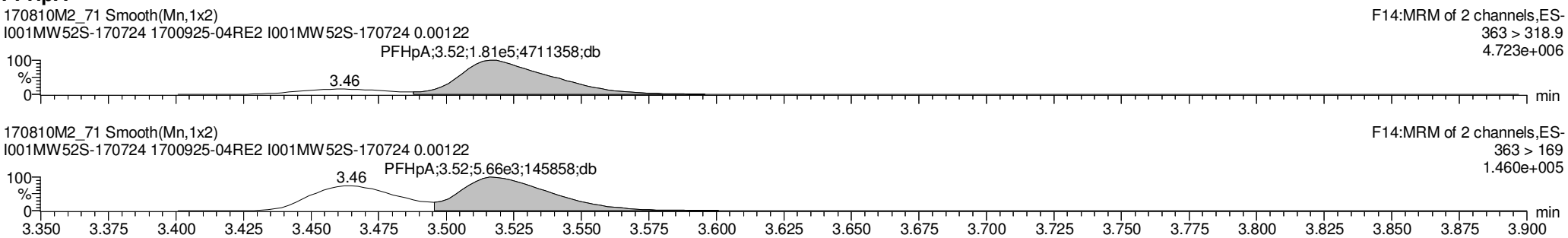
Dataset: U:\Q4.PRO\results\170810M2\170810M2-71.qld

Last Altered: Tuesday, August 15, 2017 09:54:51 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 09:56:38 Pacific Daylight Time

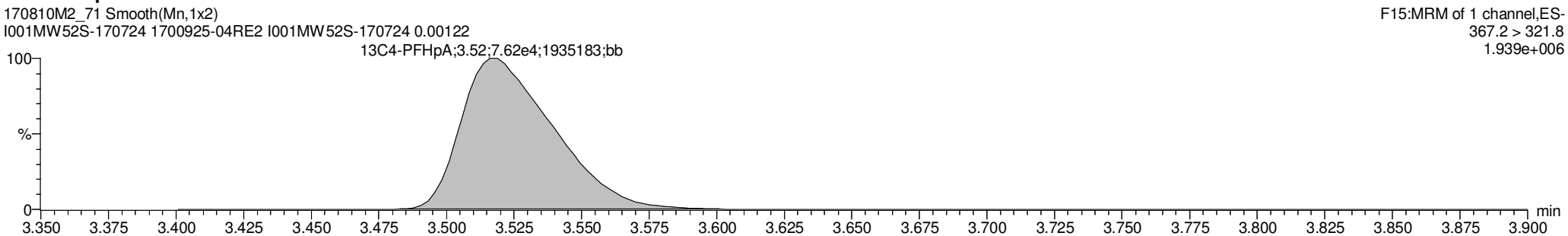
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 14 Aug 2017 15:12:43
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_71, Date: 11-Aug-2017, Time: 08:51:34, ID: 1700925-04RE2 I001MW52S-170724 0.00122, Description: I001MW52S-170724

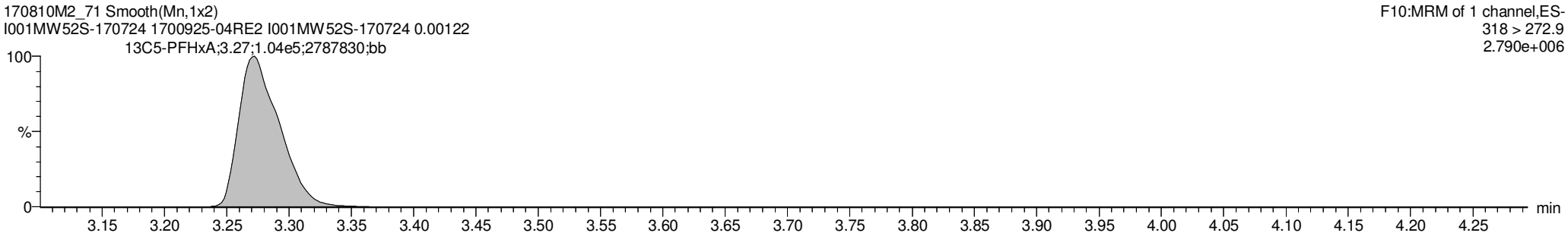
PFHpA



13C4-PFHpA



13C5-PFHxA



GM 8/15/17

Vista Analytical Laboratory

Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-15.qld

Last Altered: Saturday, August 12, 2017 12:37:49 Pacific Daylight Time
Printed: Saturday, August 12, 2017 12:39:25 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_15, Date: 11-Aug-2017, Time: 20:55:23, ID: 1700925-04RE2 I001MW52S-170724 0.00122, Description: I001MW52S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7	5.65e4	1.01e4	0.0012		3.06	3.01	140	66700	
2	4	PFHxA	313.2 > 268.9	1.18e6	2.76e4	0.0012		3.26	3.23	426	276000 E	
3	5	~~PFHpA~~ NOT USED	~~363 > 318.9~~	~~1.74e5~~	~~6.91e4~~	~~0.0012~~		~~3.51~~	~~3.48~~	~~63.0~~	~~45300~~	
4	6	PFHxS	398.9 > 79.6	1.64e5	5.41e3	0.0012		3.58	3.55	760	424000 E	
5	8	PFOA	413 > 368.7	2.48e6	7.53e4	0.0012		3.71	3.68	824	689000 E	
6	10	PFNA	462.9 > 418.8	2.02e3	9.63e4	0.0012		3.90	3.87	0.526	10.2	
7	12	PFOS	499 > 79.9	2.44e4	1.75e4	0.0012		3.96	3.86	34.8	26900	
8	13	PFDA	513 > 468.8		8.34e4	0.0012		4.08				
9	15	N-MeFOSAA	570.1 > 419		1.68e4	0.0012		4.11				
10	16	N-EtFOSAA	584.2 > 419		1.73e4	0.0012		4.18				
11	17	PFUnA	562.9 > 518.9		8.17e4	0.0012		4.25				
12	19	PFDoA	612.9 > 318.8		9.77e3	0.0012		4.42				

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Dataset: U:\Q4.PRO\results\170811M2\170811M2-15.qld

Last Altered: Saturday, August 12, 2017 12:37:49 Pacific Daylight Time
Printed: Saturday, August 12, 2017 12:39:37 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_15, Date: 11-Aug-2017, Time: 20:55:23, ID: 1700925-04RE2 I001MW52S-170724 0.00122, Description: I001MW52S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21	PFTrDA	662.9 > 618.9		9.77e3	0.0012		4.59				
2	22	PFTeDA	712.9 > 668.8		5.98e4	0.0012		4.78				
3	30	13C3-PFBS	302 > 98.8	1.01e4	9.83e4	0.0012	0.033	3.06	3.01	1.03	25700	125.3
4	31	13C2-PFHxA	315 > 269.8	2.76e4	9.83e4	0.0012	0.304	3.26	3.23	2.81	7590	92.5
5	32	13C4-PFHpA	367.2 > 321.8	6.91e4	9.83e4	0.0012	0.384	3.51	3.48	7.03	15000	73.2
6	33	18O2-PFHxS	403 > 102.6	5.41e3	1.38e4	0.0012	0.417	3.58	3.55	9.77	19200	93.7
7	35	13C2-PFOA	414.9 > 369.7	7.53e4	7.18e4	0.0012	1.132	3.71	3.68	26.2	19000	92.6
8	36	13C5-PFNA	468.2 > 422.9	9.63e4	1.18e5	0.0012	0.946	3.90	3.87	20.3	17600	86.0
9	38	13C8-PFOS	507 > 79.9	1.75e4	1.82e4	0.0012	1.040	3.96	3.92	24.1	19000	92.7
10	39	13C2-PFDA	515.1 > 469.9	8.34e4	1.03e5	0.0012	0.971	4.08	4.05	20.2	17100	83.4

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Dataset: U:\Q4.PRO\results\170811M2\170811M2-15.qld

Last Altered: Saturday, August 12, 2017 12:37:49 Pacific Daylight Time
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Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
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Name: 170811M2_15, Date: 11-Aug-2017, Time: 20:55:23, ID: 1700925-04RE2 I001MW52S-170724 0.00122, Description: I001MW52S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	1.68e4	1.06e5	0.0012	0.018	4.11	4.07	3.96	182000	68.5
2	42	d5-N-EtFOSAA	589.3 > 419	1.73e4	1.06e5	0.0012	0.018	4.18	4.14	4.09	184000	69.0
3	43	13C2-PFUnA	565 > 519.8	8.17e4	1.06e5	0.0012	1.085	4.25	4.21	19.3	14600	71.2
4	44	13C2-PFDoA	615 > 569.7	9.77e3	1.06e5	0.0012	0.123	4.42	4.38	2.31	15400	75.0
5	46	13C2-PFTeDA	714.8 > 669.6	5.98e4	1.06e5	0.0012	0.798	4.78	4.74	14.1	14500	70.9
6	52	13C5-PFHxA	318 > 272.9	9.83e4	9.83e4	0.0012	1.000	3.26	3.23	10.0	8200	100.0
7	53	13C3-PFHxS	401.9 > 79.9	1.38e4	1.38e4	0.0012	1.000	3.58	3.55	25.0	20500	100.0
8	54	13C8-PFOA	421.3 > 376	7.18e4	7.18e4	0.0012	1.000	3.71	3.68	25.0	20500	100.0
9	55	13C9-PFNA	472.2 > 426.9	1.18e5	1.18e5	0.0012	1.000	3.90	3.87	25.0	20500	100.0
10	56	13C4-PFOS	503 > 79.9	1.82e4	1.82e4	0.0012	1.000	3.96	3.93	25.0	20500	100.0
11	57	13C6-PFDA	519.1 > 473.7	1.03e5	1.03e5	0.0012	1.000	4.08	4.05	25.0	20500	100.0
12	58	13C7-PFUnA	570.1 > 524.8	1.06e5	1.06e5	0.0012	1.000	4.25	4.21	25.0	20500	100.0
13	59	Total PFBS	299 > 79.7	5.65e4	1.01e4	0.0012		3.06		140	66700	
14	60	Total PFHxS	398.9 > 79.6	1.64e5	5.41e3	0.0012		3.58		760	424000 E	
15	61	Total PFOA	413 > 368.7	2.86e6	7.53e4	0.0012		3.71		949	793000 E	
16	62	Total PFOS	499 > 79.9	2.44e4	1.75e4	0.0012		3.96		34.8	26900	
17	63	Total N-Me-FOSAA	570.1 > 419	0.00e0	1.68e4	0.0012		4.11		0.000		
18	64	Total N-EtFOSAA	584.2 > 419	0.00e0	1.73e4	0.0012		4.18		0.000		

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Dataset: U:\Q4.PRO\results\170811M2\170811M2-15.qld

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Name: 170811M2_15, Date: 11-Aug-2017, Time: 20:55:23, ID: 1700925-04RE2 I001MW52S-170724 0.00122, Description: I001MW52S-170724

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3	PFBS	299 > 79.7	3.01	56513.477	10121.709	139.585	MM	66712.8

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.55	164491.797	5408.655	760.317	MM	423696.8

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7	3.68	2483572.500	75313.328	824.413	db	689120.3
2	61	Total PFOA	413 > 368.7	3.63	368507.844	75313.328	122.325	dd	102142.5
3	61	Total PFOA	413 > 368.7	3.56	5820.351	75313.328	1.932	bd	1488.6

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.86	24411.867	17538.533	34.797	MM	26914.8

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

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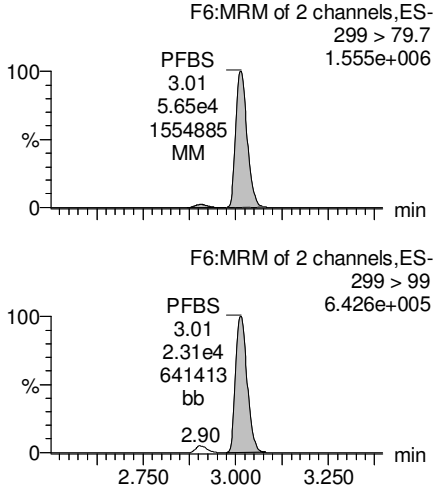
Name: 170811M2_15, Date: 11-Aug-2017, Time: 20:55:23, ID: 1700925-04RE2 I001MW52S-170724 0.00122, Description: I001MW52S-170724

Total PFBS



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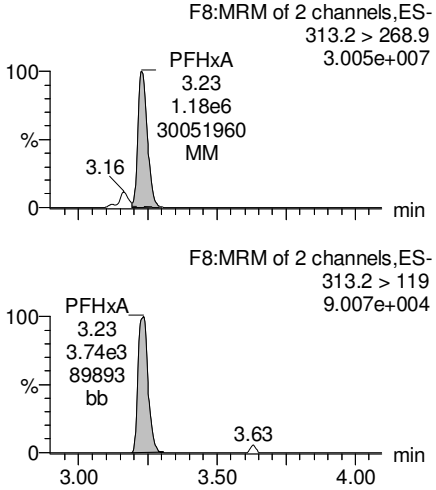

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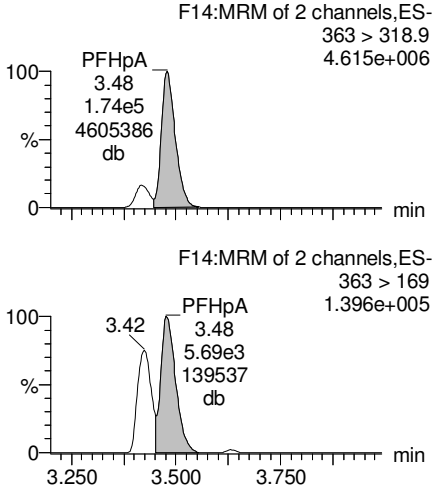

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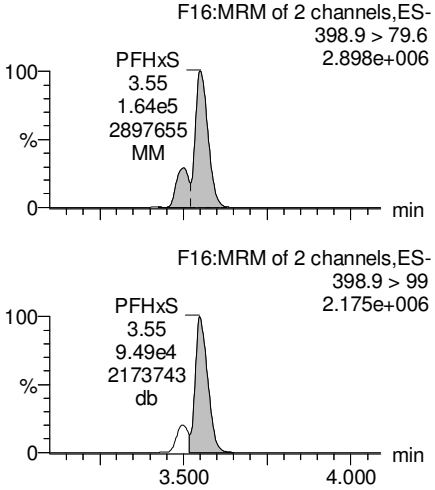

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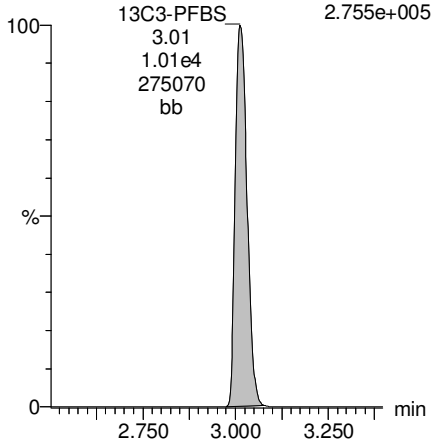

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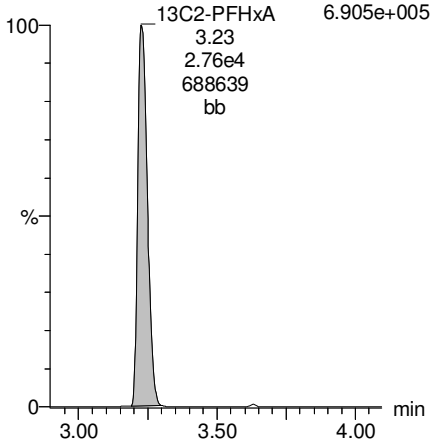

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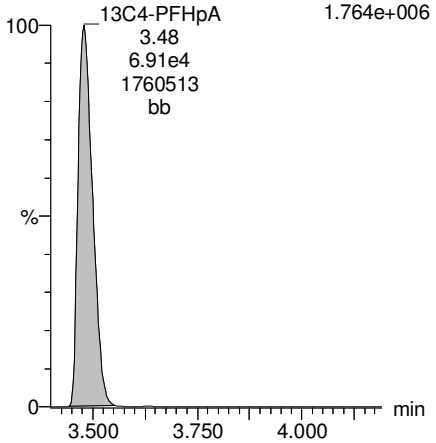

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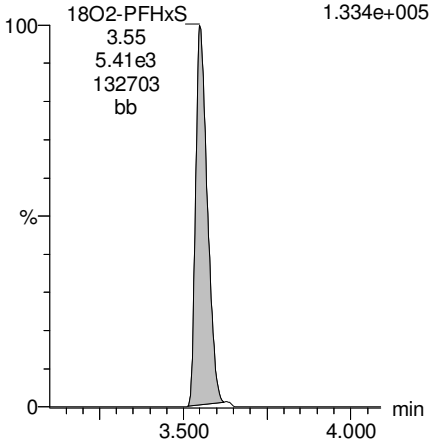

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Dataset: U:\Q4.PRO\results\170811M2\170811M2-15.qld

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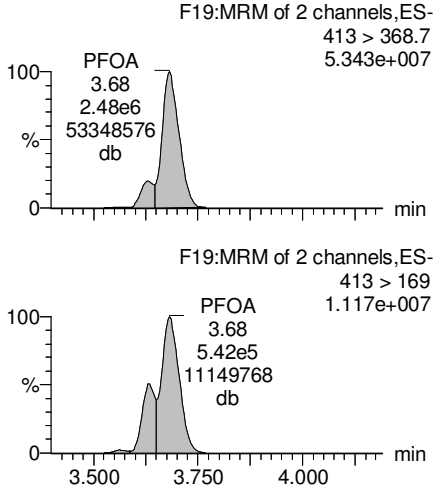
Printed: Saturday, August 12, 2017 12:39:47 Pacific Daylight Time

Name: 170811M2_15, Date: 11-Aug-2017, Time: 20:55:23, ID: 1700925-04RE2 I001MW52S-170724 0.00122, Description: I001MW52S-170724

Total PFOA



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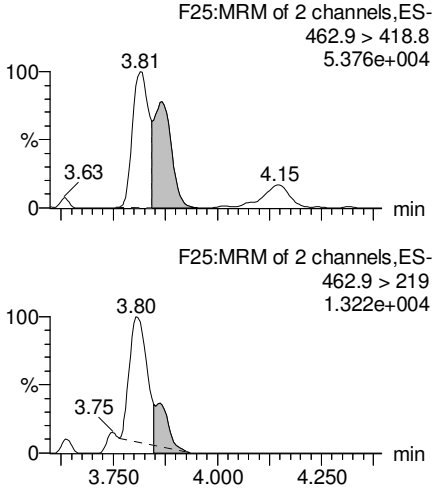

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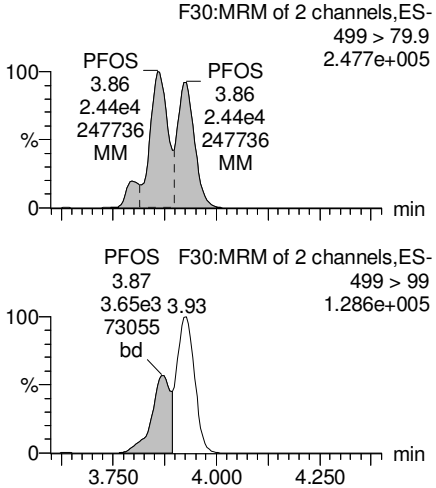

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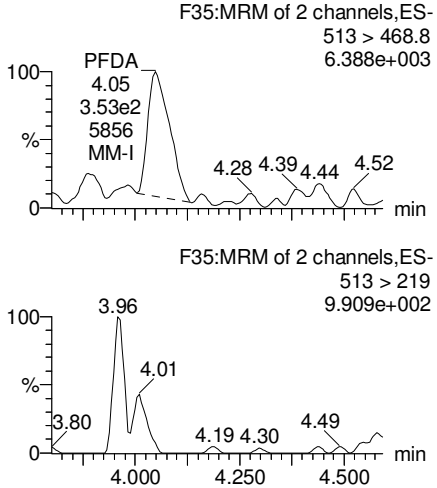

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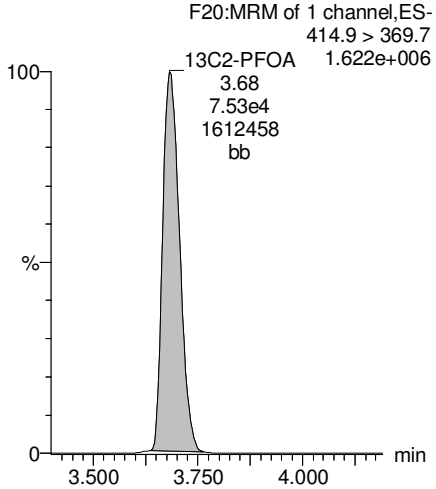

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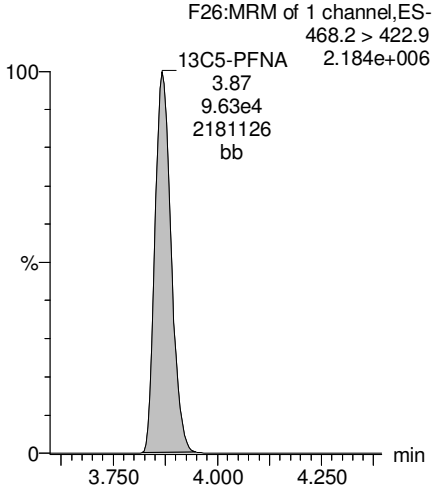

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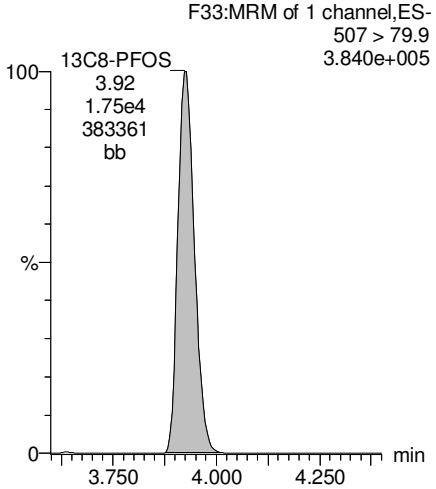

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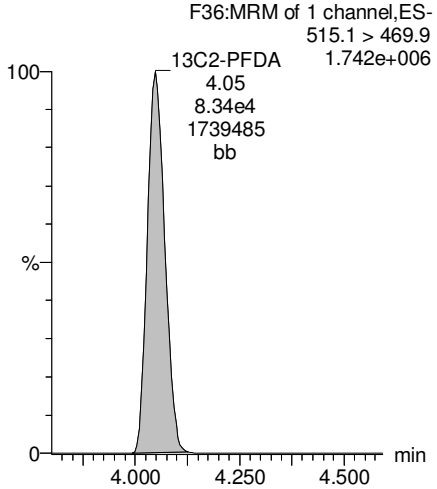

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Dataset: U:\Q4.PRO\results\170811M2\170811M2-15.qld

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Printed: Saturday, August 12, 2017 12:39:47 Pacific Daylight Time

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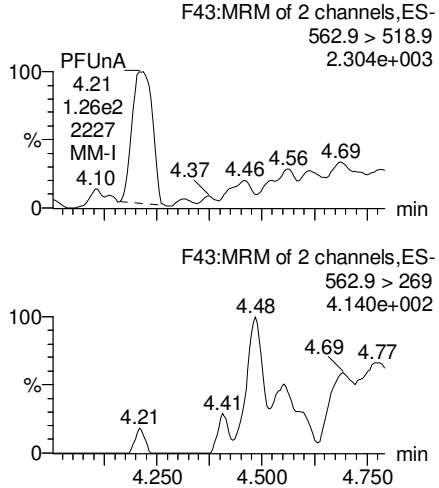
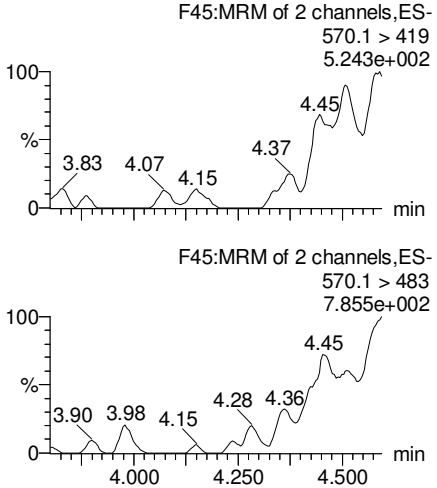
PFUnA



N-MeFOSAA



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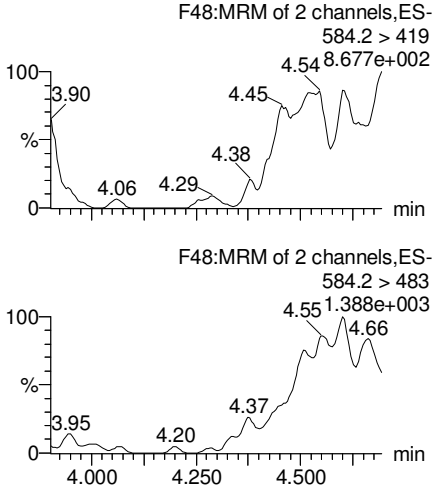

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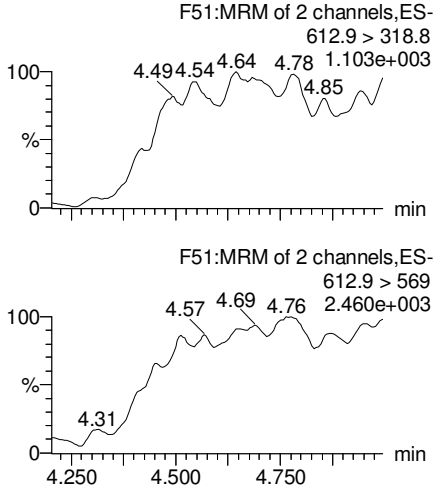

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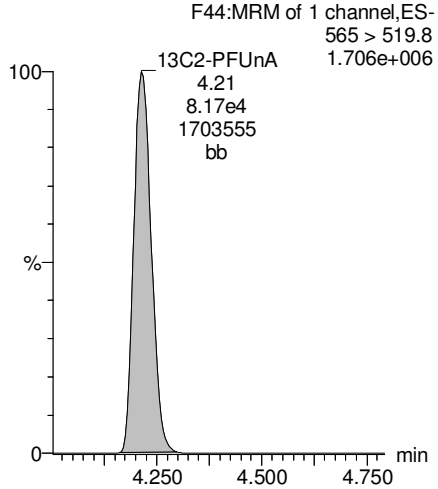

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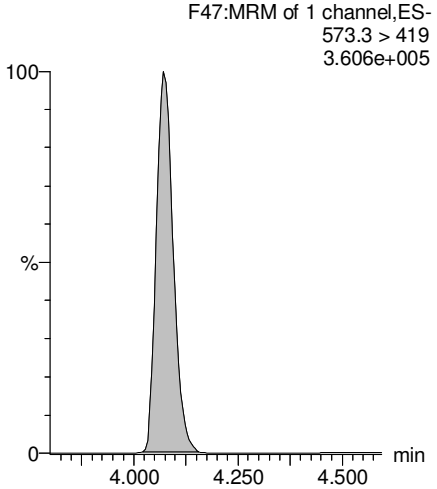

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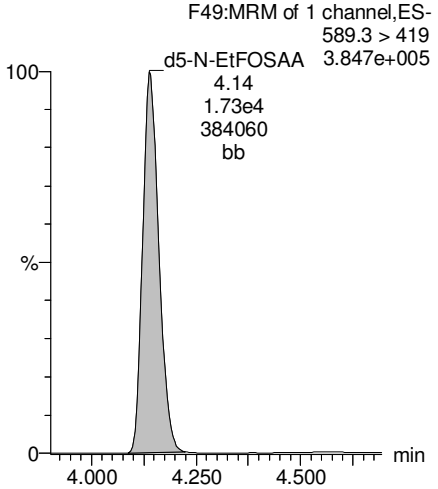

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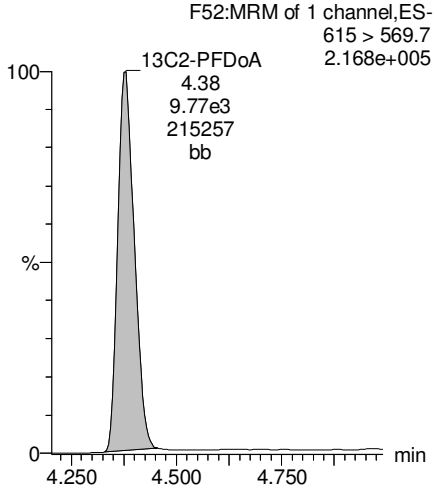

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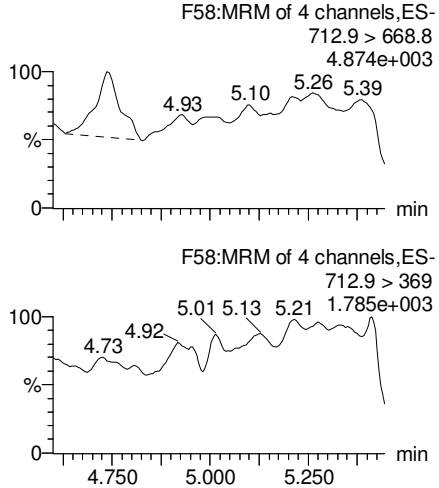
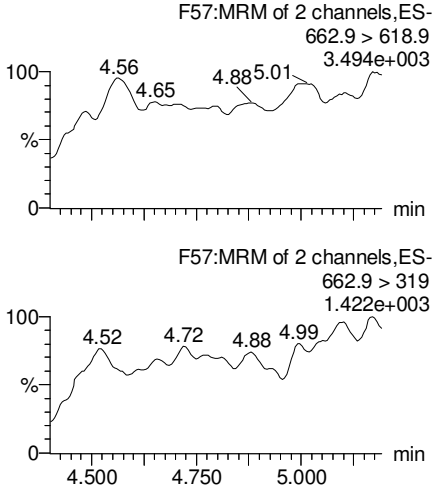


PFTrDA



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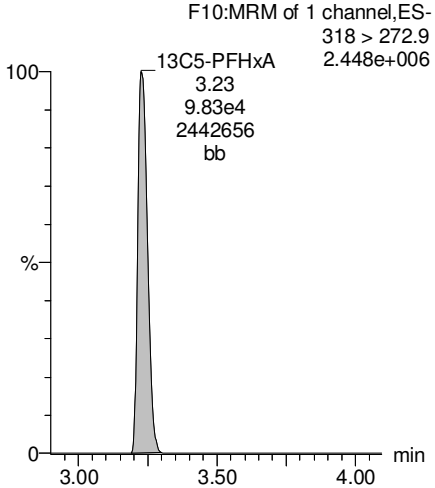

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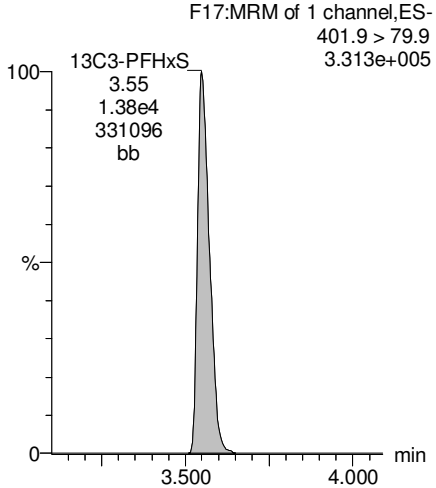

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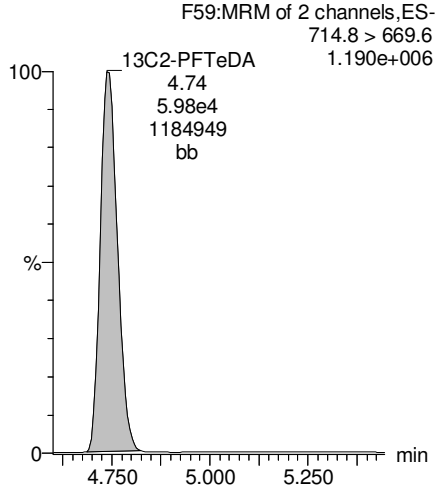

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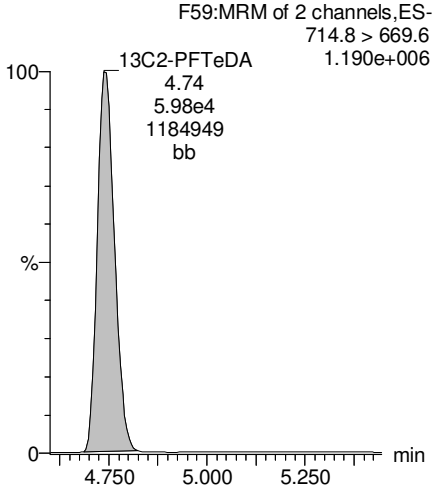
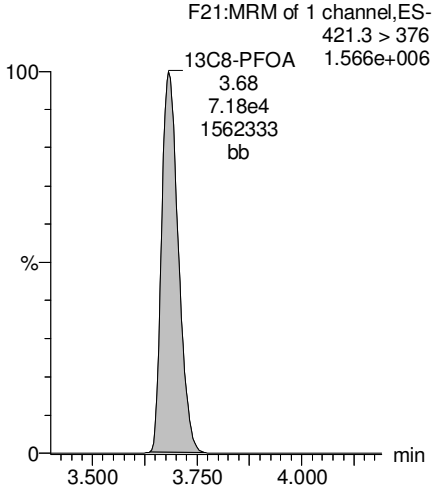


13C8-PFOA



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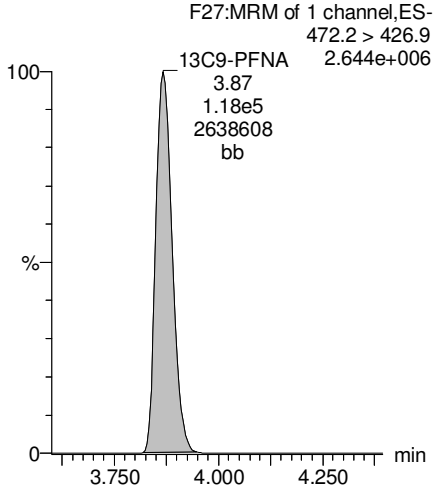

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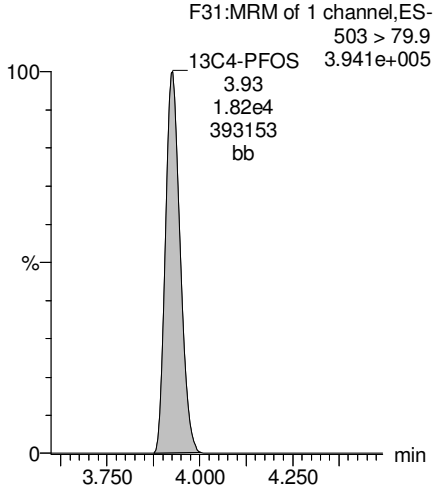
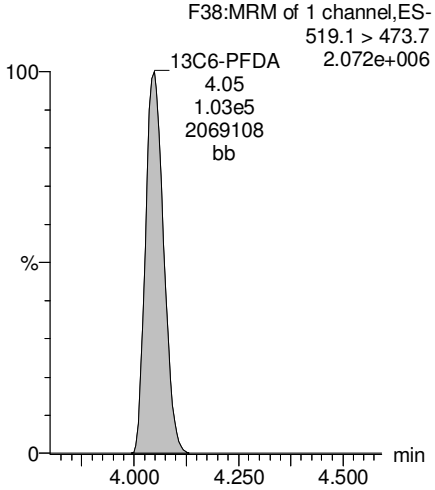
Printed: Saturday, August 12, 2017 12:39:47 Pacific Daylight Time

Name: 170811M2_15, Date: 11-Aug-2017, Time: 20:55:23, ID: 1700925-04RE2 I001MW52S-170724 0.00122, Description: I001MW52S-170724

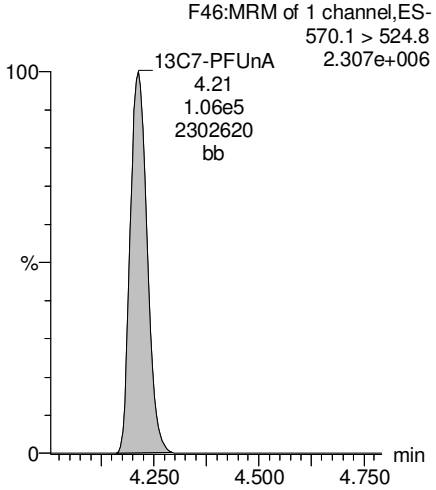
13C4-PFOS



13C6-PFDA



13C7-PFUnA



AP 8/12/2017

Vista Analytical Laboratory

Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-42.qld

Last Altered: Wednesday, August 16, 2017 09:41:26 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 09:50:35 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_42, Date: 12-Aug-2017, Time: 01:43:36, ID: 1700925-04RE2@20X I001MW52S-170724 0.00122, Description: I001MW52S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	4	PFHxA	313.2 > 268.9	5.95e4	1.35e3	0.0012		3.26	3.22	441	286000	
2	6	PFHxS	398.9 > 79.6	1.35e4	4.11e2	0.0012		3.58	3.54	822	468000	
3	8	PFOA	413 > 368.7	2.02e5	6.41e3	0.0012		3.71	3.68	789	659000	
4	31	13C2-PFHxA	315 > 269.8	1.35e3	4.73e3	0.0012	0.304	3.26	3.22	2.85	7700	94.0
5	33	18O2-PFHxS	403 > 102.6	4.11e2	9.70e2	0.0012	0.417	3.58	3.54	10.6	20800	101.6
6	35	13C2-PFOA	414.9 > 369.7	6.41e3	6.30e3	0.0012	1.132	3.71	3.67	25.4	18400	89.9
7	52	13C5-PFHxA	318 > 272.9	4.73e3	4.73e3	0.0012	1.000	3.26	3.22	10.0	8200	100.0
8	53	13C3-PFHxS	401.9 > 79.9	9.70e2	9.70e2	0.0012	1.000	3.58	3.54	25.0	20500	100.0
9	54	13C8-PFOA	421.3 > 376	6.30e3	6.30e3	0.0012	1.000	3.71	3.67	25.0	20500	100.0

AP 8/16/2017

Vista Analytical Laboratory

Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-42.qld

Last Altered: Wednesday, August 16, 2017 09:41:26 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 09:50:46 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_42, Date: 12-Aug-2017, Time: 01:43:36, ID: 1700925-04RE2@20X I001MW52S-170724 0.00122, Description: I001MW52S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	60	Total PFHxS	398.9 > 79.6	1.35e4	4.11e2	0.0012		3.58		822	468000	
2	61	Total PFOA	413 > 368.7	2.28e5	6.41e3	0.0012		3.71		889	743000	

AP 8/16/2017

Vista Analytical Laboratory

Rev'd: MM 8/17/17

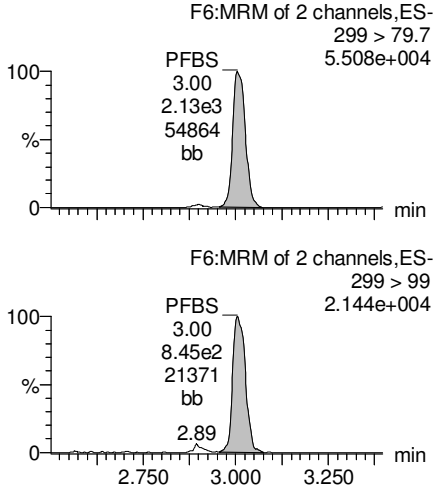
Dataset: U:\Q4.PRO\results\170811M2\170811M2-42.qld

Last Altered: Wednesday, August 16, 2017 09:41:26 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 09:50:46 Pacific Daylight Time

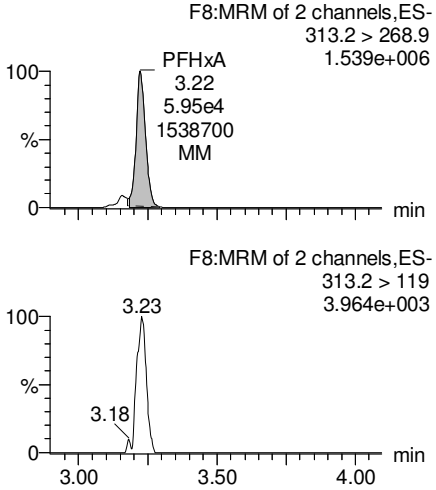
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_42, Date: 12-Aug-2017, Time: 01:43:36, ID: 1700925-04RE2@20X I001MW52S-170724 0.00122, Description: I001MW52S-170724

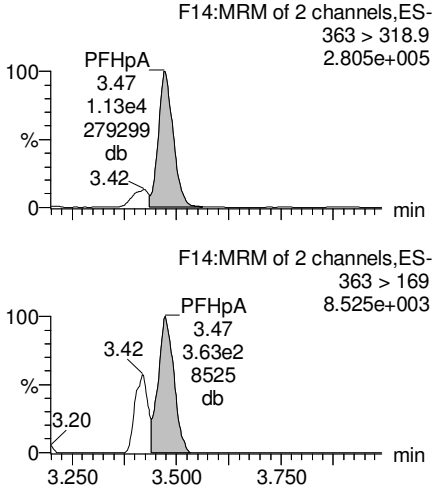
Total PFBS



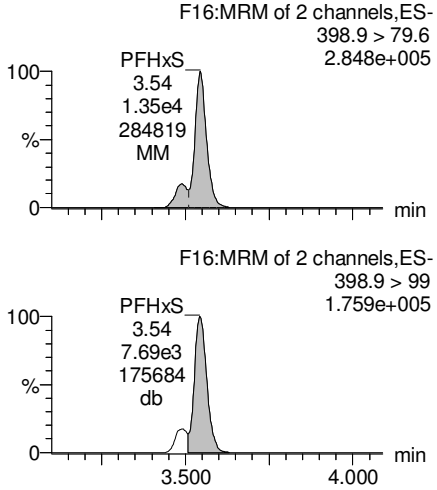
PFHxA



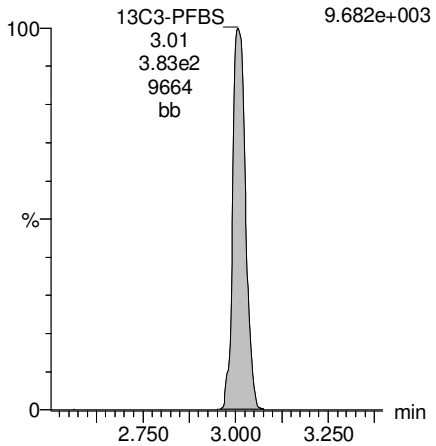
PFHpA



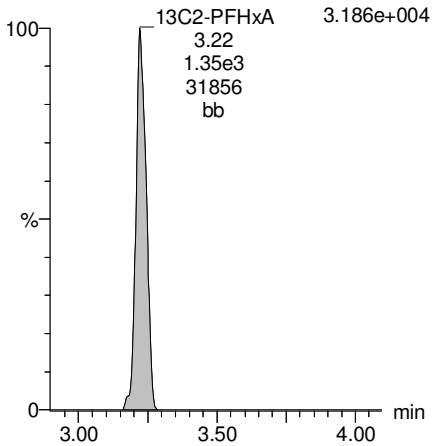
Total PFHxS



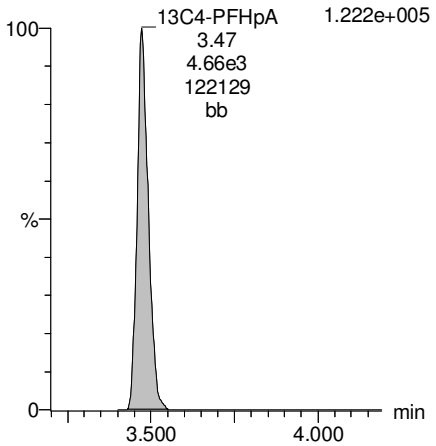
13C3-PFBS



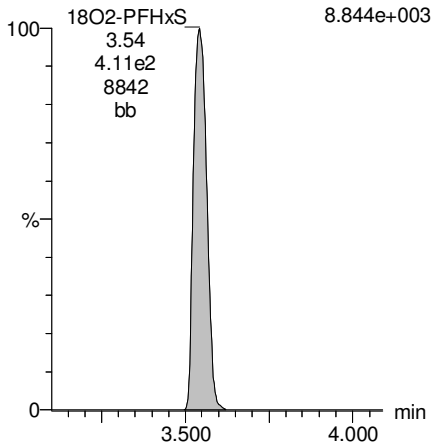
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



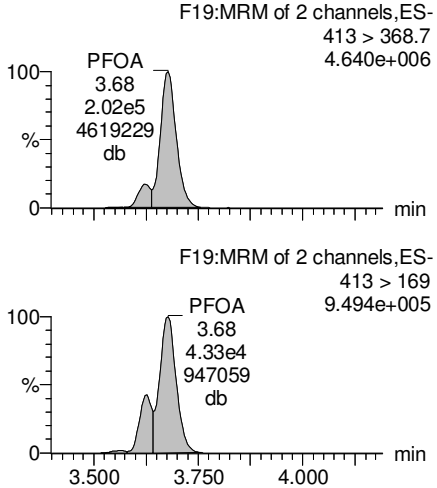
AP 8/16/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-42.qld

Last Altered: Wednesday, August 16, 2017 09:41:26 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 09:50:46 Pacific Daylight Time

Name: 170811M2_42, Date: 12-Aug-2017, Time: 01:43:36, ID: 1700925-04RE2@20X I001MW52S-170724 0.00122, Description: I001MW52S-170724

Total PFOA



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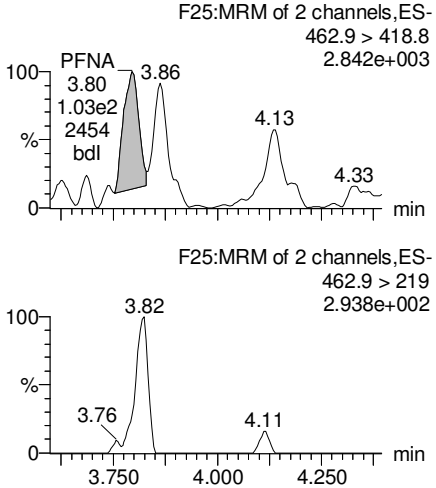
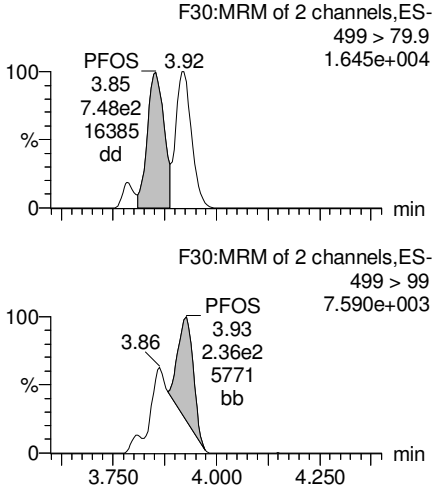
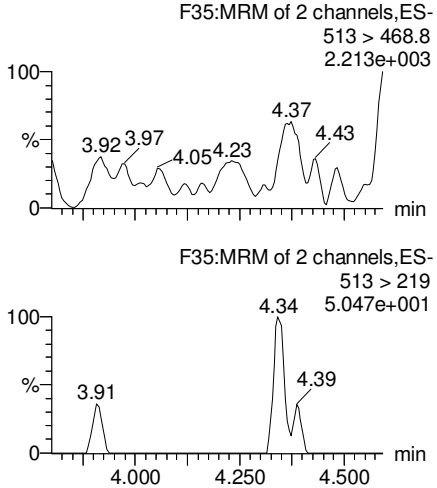


Total PFOS



PFDA



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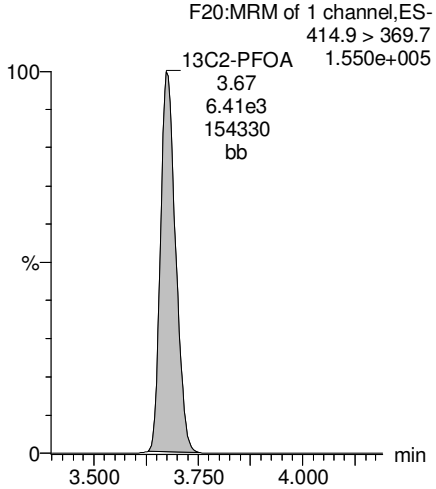
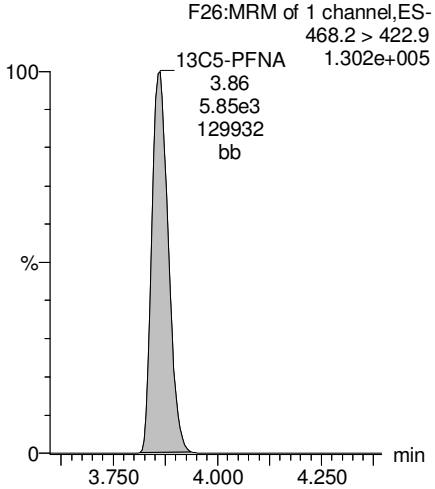
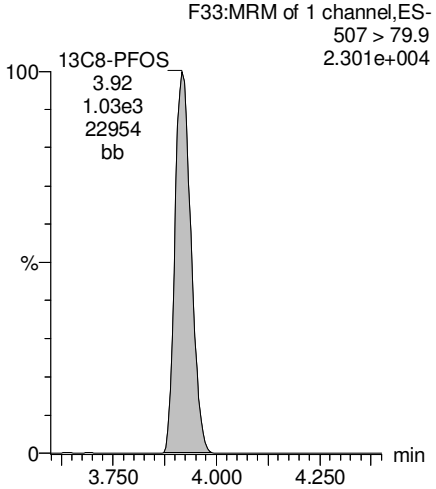


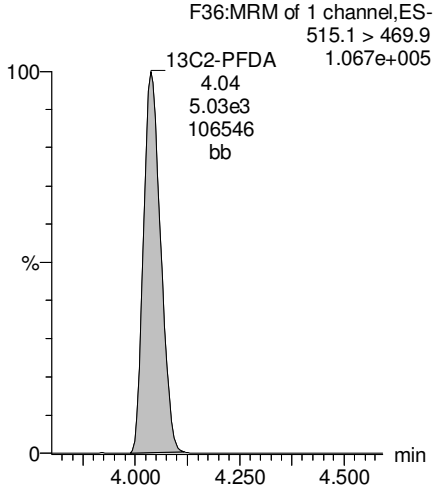
13C5-PFNA



13C8-PFOS



13C2-PFDA



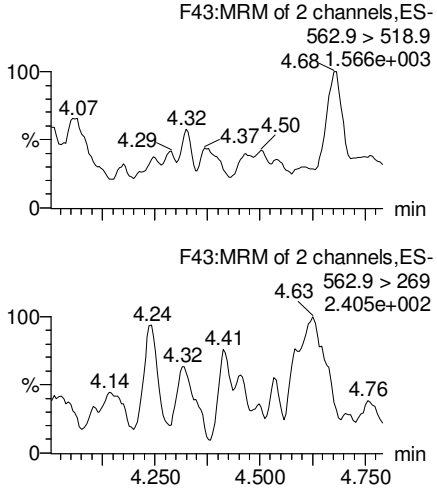
AP 8/16/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-42.qld

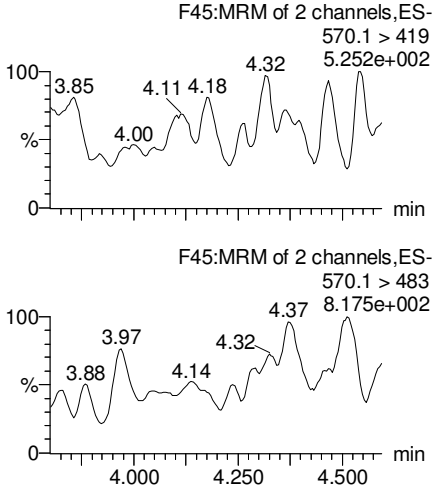
Last Altered: Wednesday, August 16, 2017 09:41:26 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 09:50:46 Pacific Daylight Time

Name: 170811M2_42, Date: 12-Aug-2017, Time: 01:43:36, ID: 1700925-04RE2@20X I001MW52S-170724 0.00122, Description: I001MW52S-170724

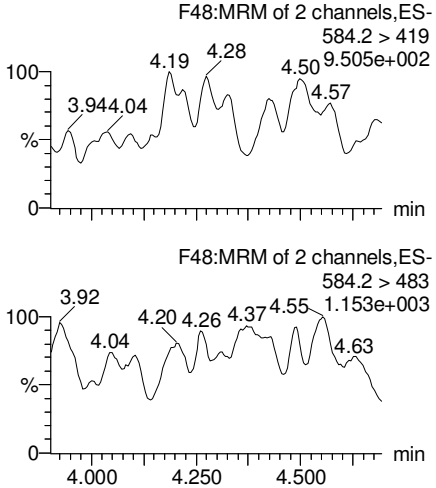
PFUnA



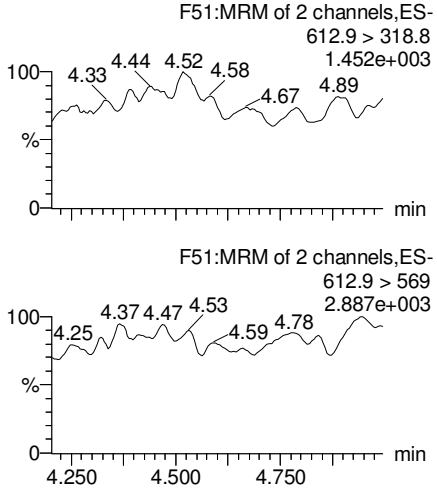
N-MeFOSAA



N-EtFOSAA



PFDoA



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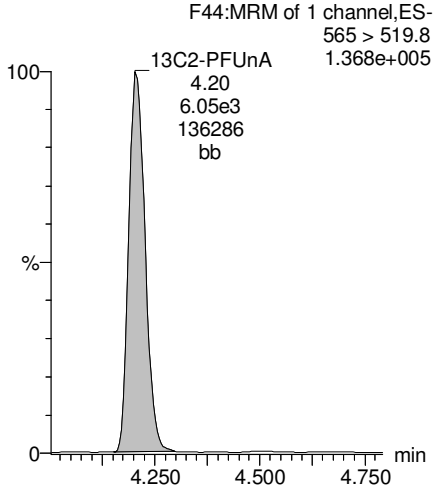
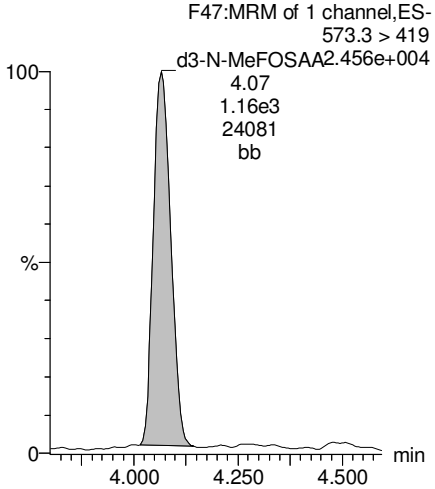
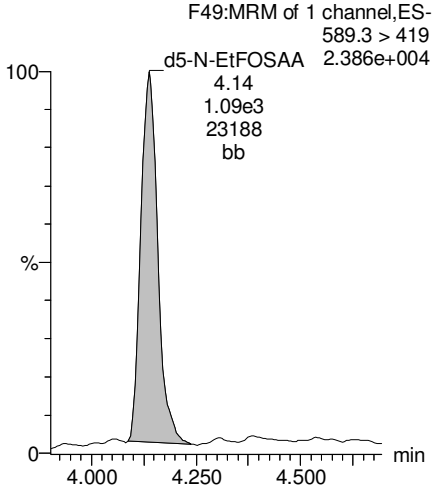


d3-N-MeFOSAA



d5-N-EtFOSAA



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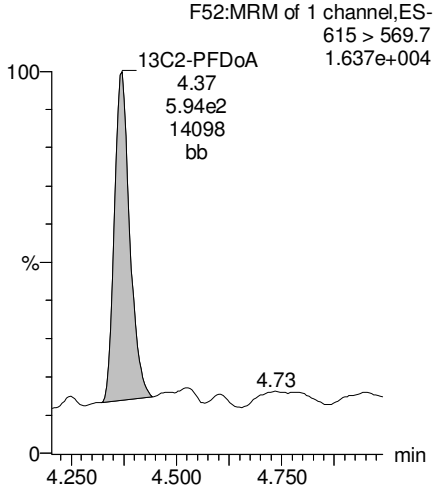


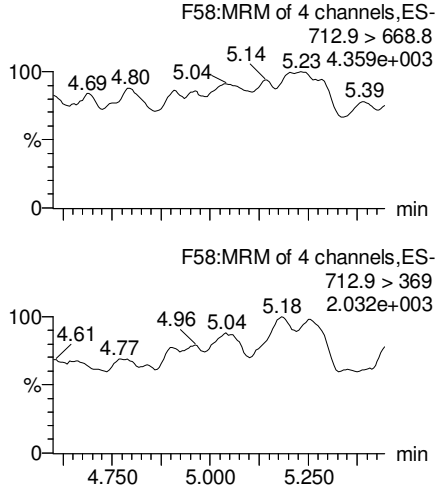
AP 8/16/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-42.qld

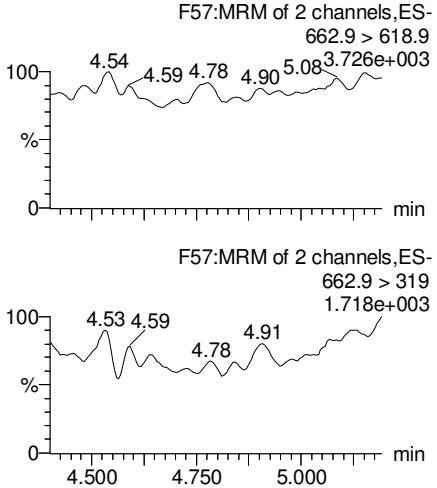
Last Altered: Wednesday, August 16, 2017 09:41:26 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 09:50:46 Pacific Daylight Time

Name: 170811M2_42, Date: 12-Aug-2017, Time: 01:43:36, ID: 1700925-04RE2@20X I001MW52S-170724 0.00122, Description: I001MW52S-170724

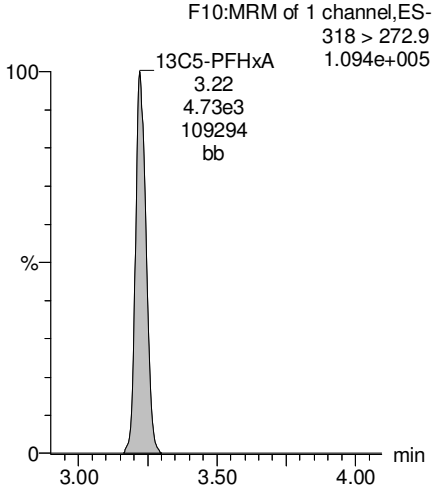
PFTeDA



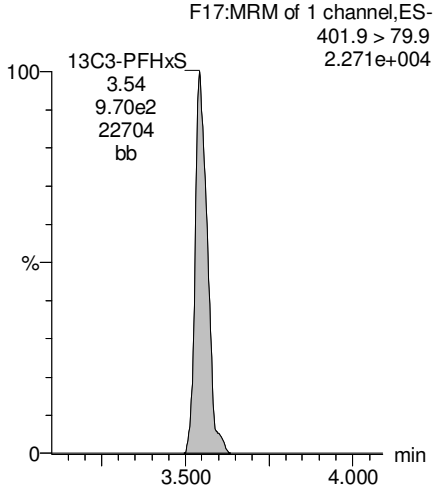
PFTrDA



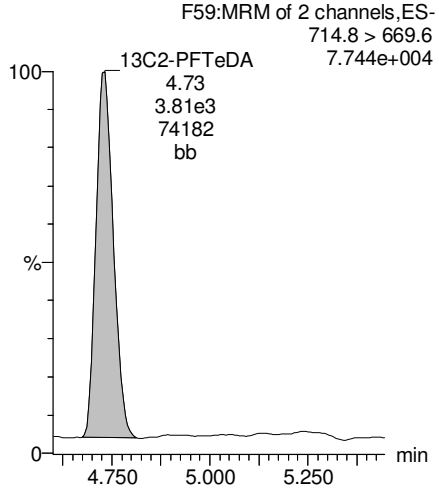
13C5-PFHxA



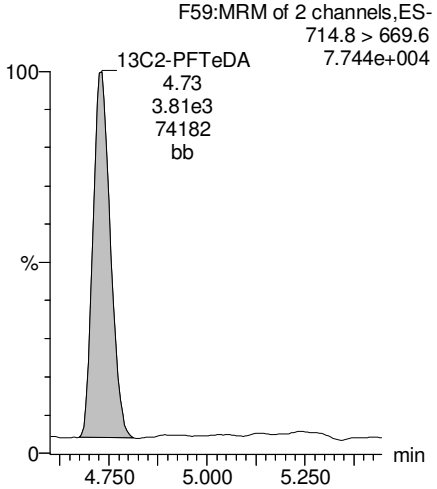
13C3-PFHxS



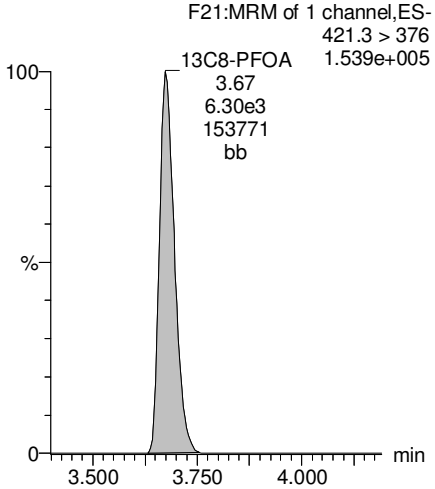
13C2-PFTeDA



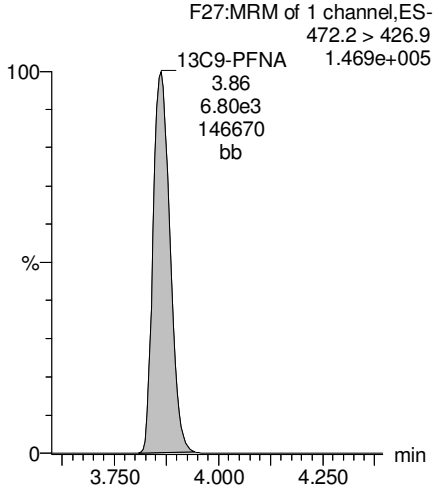
13C2-PFTeDA



13C8-PFOA



13C9-PFNA



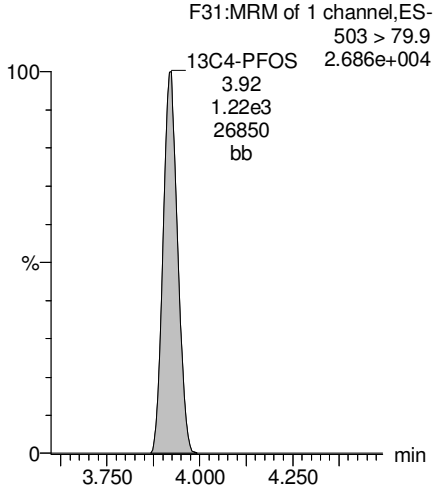
AP 8/16/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-42.qld

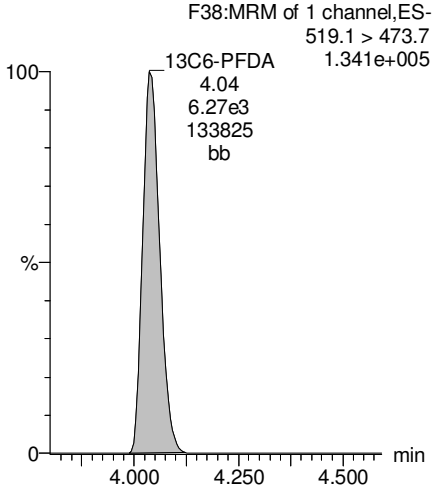
Last Altered: Wednesday, August 16, 2017 09:41:26 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 09:50:46 Pacific Daylight Time

Name: 170811M2_42, Date: 12-Aug-2017, Time: 01:43:36, ID: 1700925-04RE2@20X I001MW52S-170724 0.00122, Description: I001MW52S-170724

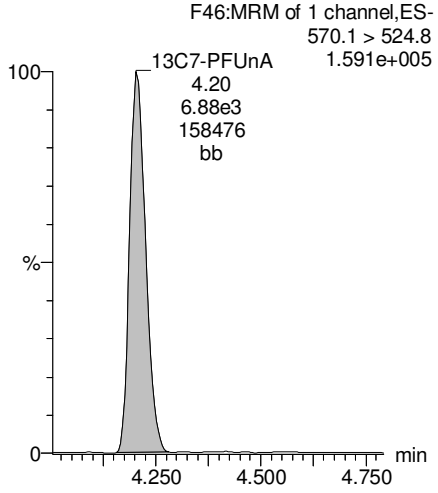
13C4-PFOS



13C6-PFDA



13C7-PFUnA



AP 8/16/2017

Vista Analytical Laboratory

Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170810M2\170810M2-48.qld

Last Altered: Tuesday, August 15, 2017 09:50:51 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 09:51:18 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 14 Aug 2017 15:12:43
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_48, Date: 11-Aug-2017, Time: 04:45:10, ID: B7H0073-MS1 Matrix Spike 0.0005, Description: Matrix Spike

	#	Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	5	PFHpA	363 > 318.9	2.64e5	7.40e4		0.0005	3.51	3.53	89.1	157000	
2	32	13C4-PFHpA	367.2 > 321.8	7.40e4	9.96e4	0.384	0.0005	3.51	3.53	7.43	38700	77.4
3	52	13C5-PFHxA	318 > 272.9	9.96e4	9.96e4	1.000	0.0005	3.26	3.28	10.0	20000	100.0

GM 8/15/17

Vista Analytical Laboratory

Rev'd: MM 8/17/17

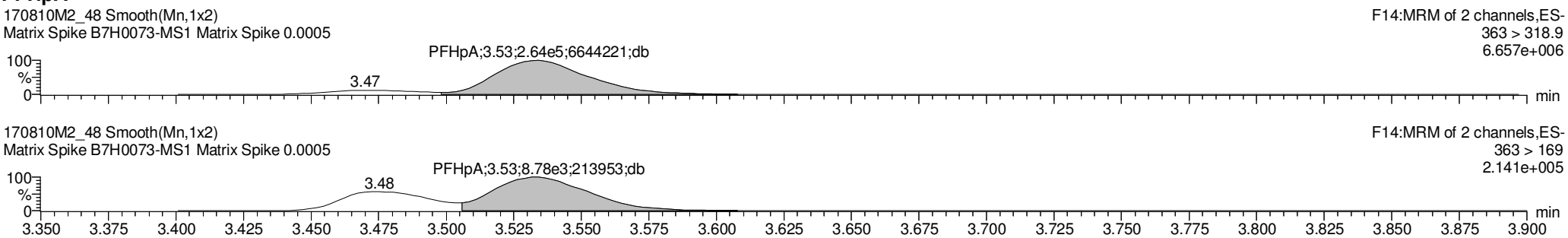
Dataset: U:\Q4.PRO\results\170810M2\170810M2-48.qld

Last Altered: Tuesday, August 15, 2017 09:50:51 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 09:51:18 Pacific Daylight Time

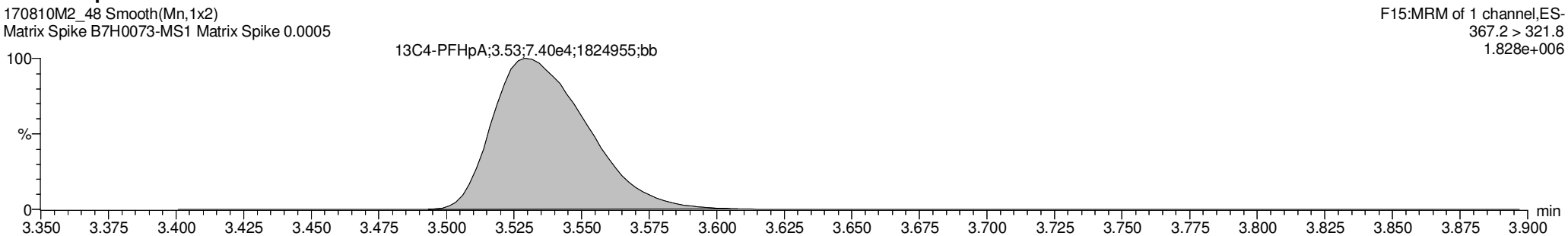
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 14 Aug 2017 15:12:43
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_48, Date: 11-Aug-2017, Time: 04:45:10, ID: B7H0073-MS1 Matrix Spike 0.0005, Description: Matrix Spike

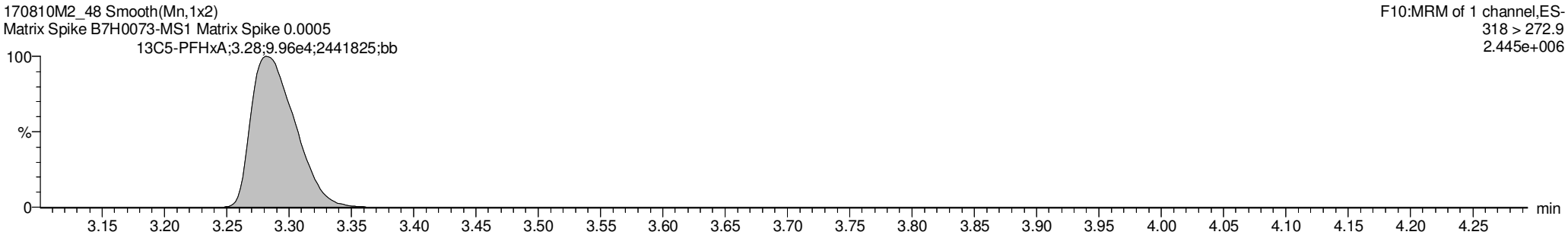
PFHpA



13C4-PFHpA



13C5-PFHxA



GM 8/15/17

Vista Analytical Laboratory

Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-9.qld

Last Altered: Saturday, August 12, 2017 11:49:15 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:49:35 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_9, Date: 11-Aug-2017, Time: 19:51:08, ID: B7H0073-MS1 Matrix Spike 0.0005, Description: Matrix Spike

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7	7.89e4	9.84e3	0.0005		3.06	3.01	201	234000	
2	4	PFHxA	313.2 > 268.9	1.48e6	2.97e4	0.0005		3.26	3.23	498	788000 E	
3	5	~~PFHpA~~ - NOT USED	~~363 > 318.9~~	~~2.79e5~~	~~7.48e4~~	~~0.0005~~		~~3.51~~	~~3.48~~	~~93.3~~	~~164000~~	
4	6	PFHxS	398.9 > 79.6	1.90e5	5.29e3	0.0005		3.58	3.55	900	1290000 E	
5	8	PFOA	413 > 368.7	2.82e6	7.87e4	0.0005		3.71	3.69	895	1830000 E	
6	10	PFNA	462.9 > 418.8	8.49e4	9.41e4	0.0005		3.90	3.87	22.6	45000	
7	12	PFOS	499 > 79.9	3.93e4	1.75e4	0.0005		3.96	3.93	56.3	107000	
8	13	PFDA	513 > 468.8	7.89e4	8.89e4	0.0005		4.08	4.05	22.2	39000	
9	15	N-MeFOSAA	570.1 > 419	2.18e4	1.76e4	0.0005		4.11	4.08	402	41700	
10	16	N-EtFOSAA	584.2 > 419	1.92e4	2.03e4	0.0005		4.18	4.14	307	39400	
11	17	PFUnA	562.9 > 518.9	5.95e4	8.17e4	0.0005		4.25	4.21	18.2	45100	
12	19	PFDoA	612.9 > 318.8	6.46e3	1.17e4	0.0005		4.42	4.38	13.8	33100	

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Vista Analytical Laboratory

Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-9.qld

Last Altered: Saturday, August 12, 2017 11:49:15 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:51:28 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_9, Date: 11-Aug-2017, Time: 19:51:08, ID: B7H0073-MS1 Matrix Spike 0.0005, Description: Matrix Spike

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21	PFTrDA	662.9 > 618.9	8.96e4	1.17e4	0.0005		4.59	4.55	191	38000	
2	22	PFTeDA	712.9 > 668.8	6.52e4	7.53e4	0.0005		4.78	4.74	21.6	38200	
3	30	13C3-PFBS	302 > 98.8	9.84e3	1.03e5	0.0005	0.033	3.06	3.01	0.955	58100	116.1
4	31	13C2-PFHxA	315 > 269.8	2.97e4	1.03e5	0.0005	0.304	3.26	3.23	2.88	19000	94.9
5	32	13C4-PFHpA	367.2 > 321.8	7.48e4	1.03e5	0.0005	0.384	3.51	3.48	7.26	37800	75.6
6	33	18O2-PFHxS	403 > 102.6	5.29e3	1.37e4	0.0005	0.417	3.58	3.55	9.66	46300	92.6
7	35	13C2-PFOA	414.9 > 369.7	7.87e4	7.44e4	0.0005	1.132	3.71	3.68	26.5	46800	93.5
8	36	13C5-PFNA	468.2 > 422.9	9.41e4	1.15e5	0.0005	0.946	3.90	3.87	20.5	43300	86.6
9	38	13C8-PFOS	507 > 79.9	1.75e4	1.76e4	0.0005	1.040	3.96	3.93	24.8	47600	95.3
10	39	13C2-PFDA	515.1 > 469.9	8.89e4	1.08e5	0.0005	0.971	4.08	4.05	20.6	42400	84.8

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Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-9.qld

Last Altered: Saturday, August 12, 2017 11:49:15 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:51:45 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_9, Date: 11-Aug-2017, Time: 19:51:08, ID: B7H0073-MS1 Matrix Spike 0.0005, Description: Matrix Spike

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	1.76e4	1.01e5	0.0005	0.018	4.11	4.08	4.35	490000	75.3
2	42	d5-N-EtFOSAA	589.3 > 419	2.03e4	1.01e5	0.0005	0.018	4.18	4.14	5.03	552000	84.9
3	43	13C2-PFUnA	565 > 519.8	8.17e4	1.01e5	0.0005	1.085	4.25	4.21	20.2	37200	74.4
4	44	13C2-PFDoA	615 > 569.7	1.17e4	1.01e5	0.0005	0.123	4.42	4.38	2.89	47000	94.0
5	46	13C2-PFTeDA	714.8 > 669.6	7.53e4	1.01e5	0.0005	0.798	4.78	4.74	18.6	46600	93.3
6	52	13C5-PFHxA	318 > 272.9	1.03e5	1.03e5	0.0005	1.000	3.26	3.23	10.0	20000	100.0
7	53	13C3-PFHxS	401.9 > 79.9	1.37e4	1.37e4	0.0005	1.000	3.58	3.55	25.0	50000	100.0
8	54	13C8-PFOA	421.3 > 376	7.44e4	7.44e4	0.0005	1.000	3.71	3.68	25.0	50000	100.0
9	55	13C9-PFNA	472.2 > 426.9	1.15e5	1.15e5	0.0005	1.000	3.90	3.87	25.0	50000	100.0
10	56	13C4-PFOS	503 > 79.9	1.76e4	1.76e4	0.0005	1.000	3.96	3.93	25.0	50000	100.0
11	57	13C6-PFDA	519.1 > 473.7	1.08e5	1.08e5	0.0005	1.000	4.08	4.05	25.0	50000	100.0
12	58	13C7-PFUnA	570.1 > 524.8	1.01e5	1.01e5	0.0005	1.000	4.25	4.21	25.0	50000	100.0
13	59	Total PFBS	299 > 79.7	7.89e4	9.84e3	0.0005		3.06		201	234000	
14	60	Total PFHxS	398.9 > 79.6	1.90e5	5.29e3	0.0005		3.58		900	1290000 E	
15	61	Total PFOA	413 > 368.7	3.28e6	7.87e4	0.0005		3.71		1040	2130000 E	
16	62	Total PFOS	499 > 79.9	3.93e4	1.75e4	0.0005		3.96		56.3	107000	
17	63	Total N-Me-FOSAA	570.1 > 419	2.18e4	1.76e4	0.0005		4.11		402	41700	
18	64	Total N-EtFOSAA	584.2 > 419	1.92e4	2.03e4	0.0005		4.18		307	39400	

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Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-9.qld

Last Altered: Saturday, August 12, 2017 11:49:15 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:51:45 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_9, Date: 11-Aug-2017, Time: 19:51:08, ID: B7H0073-MS1 Matrix Spike 0.0005, Description: Matrix Spike

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3	PFBS	299 > 79.7	3.01	78914.023	9837.748	200.539	MM	233953.7

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.55	190499.484	5294.360	899.540	MM	1289633.3

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7	3.69	2820001.500	78742.313	895.326	db	1826111.7
2	61	Total PFOA	413 > 368.7	3.63	462913.656	78742.313	146.971	dd	299504.7

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.93	39307.656	17457.672	56.290	MM	106708.5

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15	N-MeFOSAA	570.1 > 419	4.08	21787.041	17614.232	401.992	bb	41741.2

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16	N-EtFOSAA	584.2 > 419	4.14	19210.402	20336.453	307.004	bb	39372.5

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Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-9.qld

Last Altered: Saturday, August 12, 2017 11:49:15 Pacific Daylight Time
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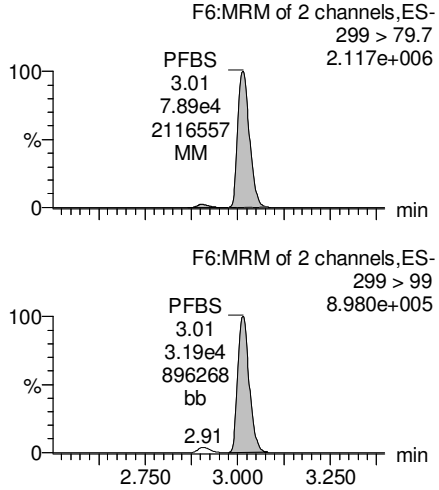
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_9, Date: 11-Aug-2017, Time: 19:51:08, ID: B7H0073-MS1 Matrix Spike 0.0005, Description: Matrix Spike

Total PFBS



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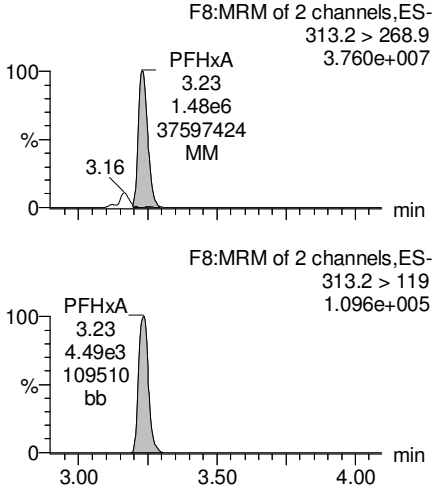

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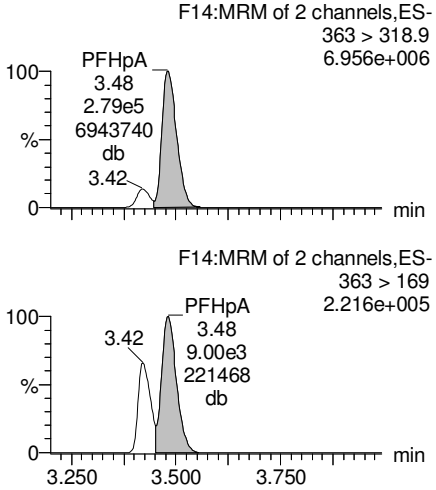
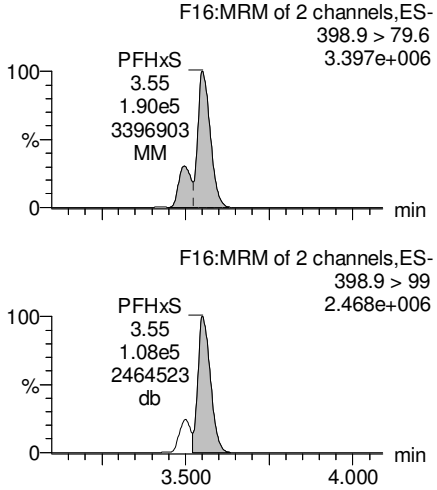


Total PFHxS



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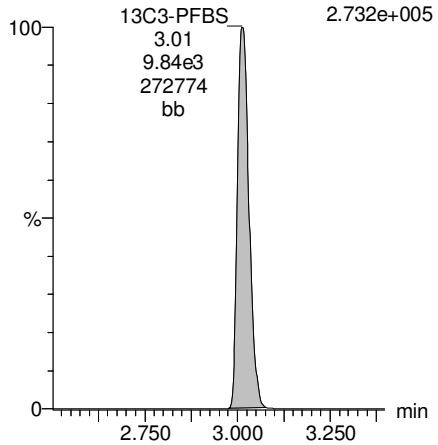

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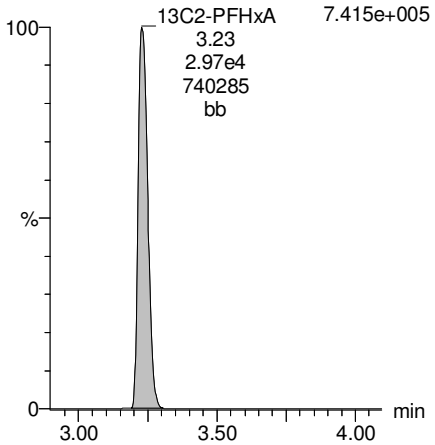

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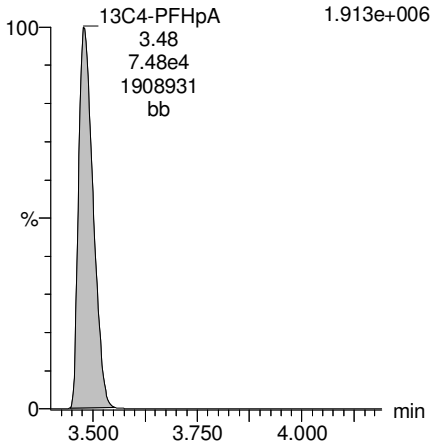

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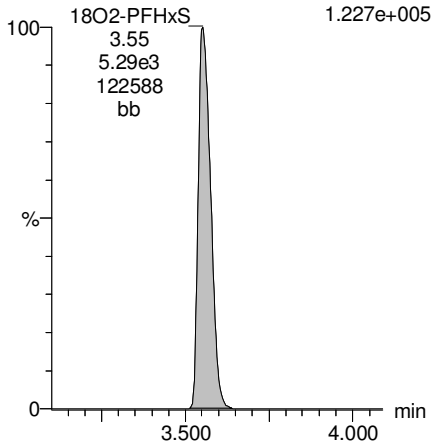

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Dataset: U:\Q4.PRO\results\170811M2\170811M2-9.qld

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Printed: Saturday, August 12, 2017 11:51:45 Pacific Daylight Time

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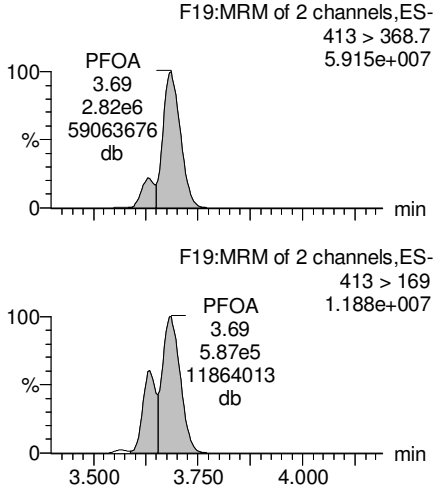
Total PFOA



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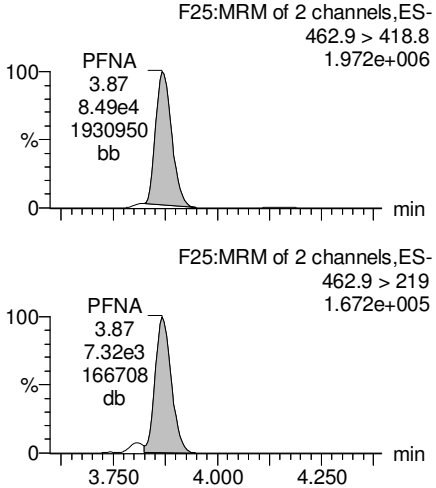
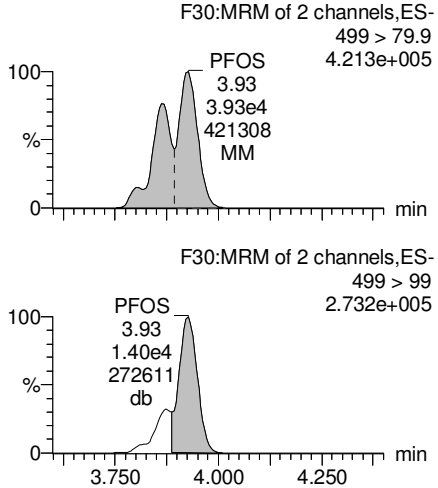


Total PFOS



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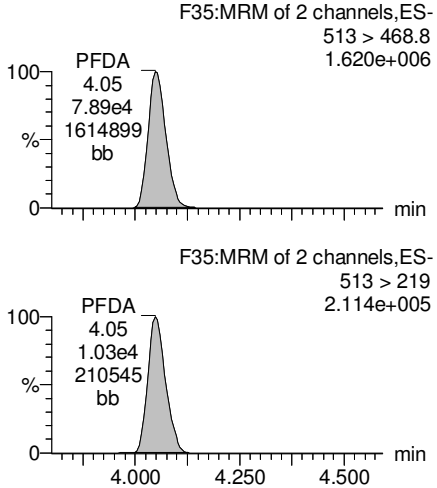

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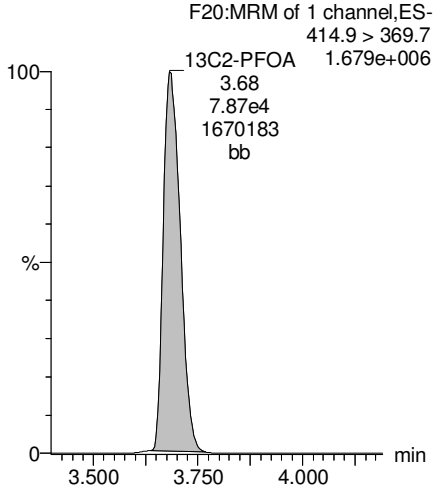

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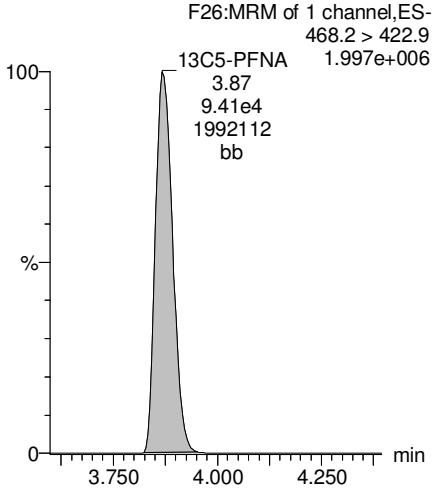

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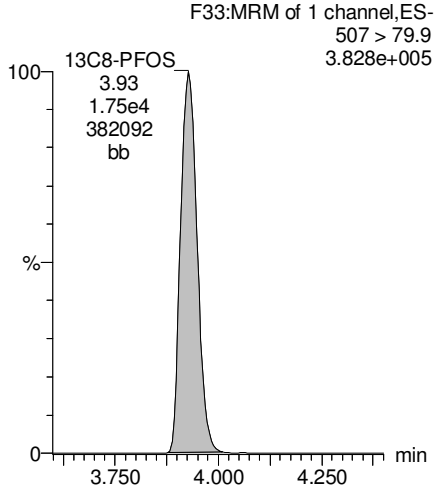

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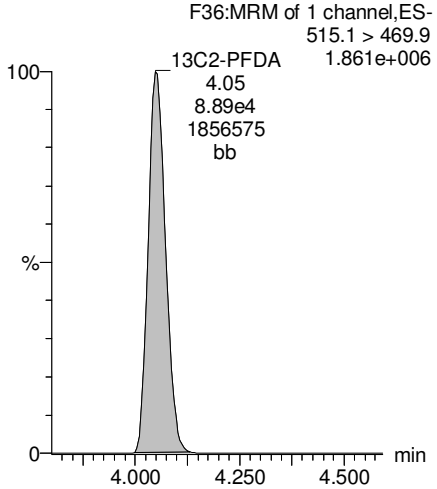

AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-9.qld

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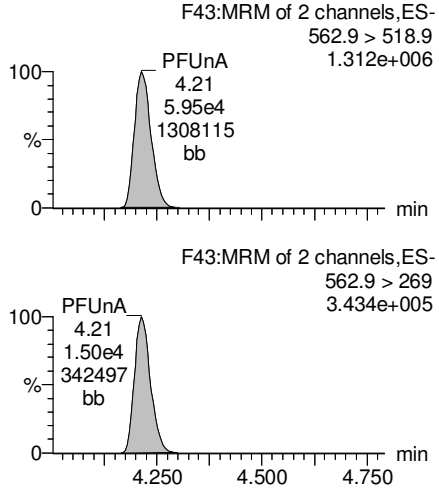

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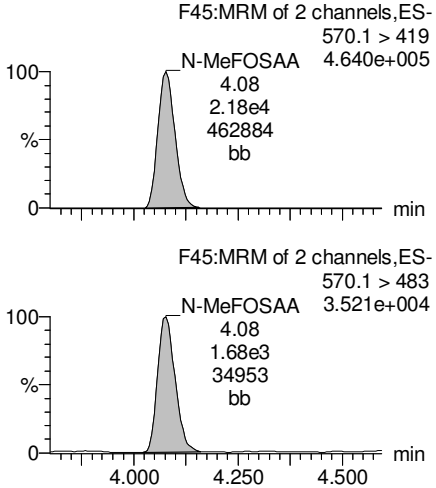

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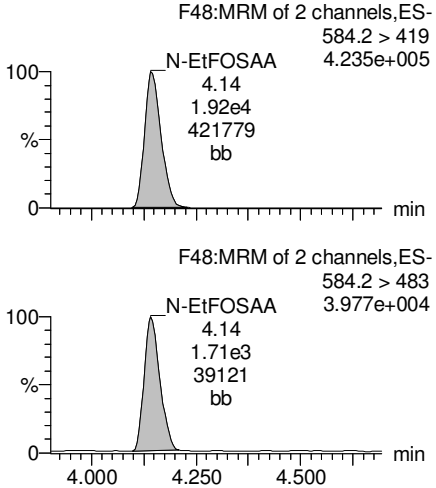

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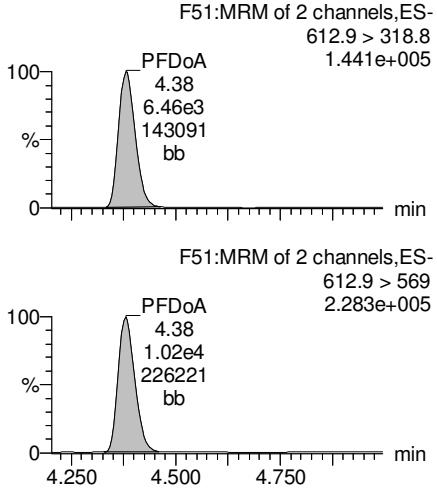

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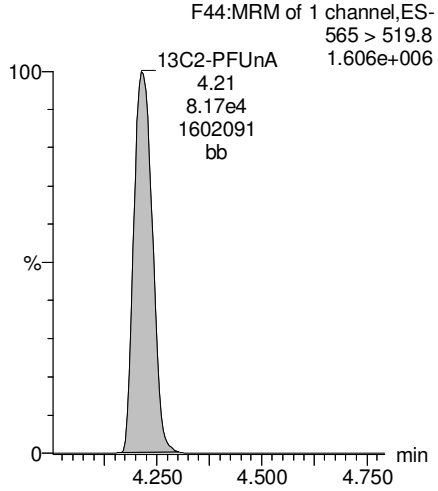

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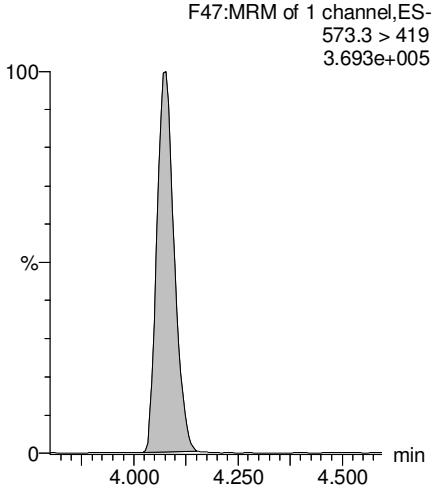

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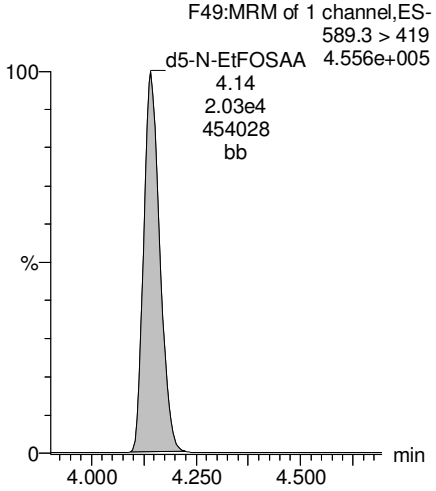

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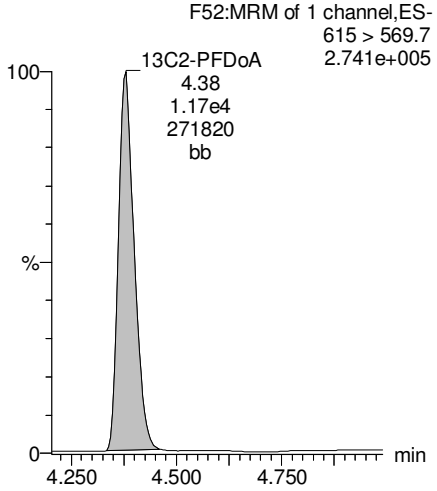

AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-9.qld

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Printed: Saturday, August 12, 2017 11:51:45 Pacific Daylight Time

Name: 170811M2_9, Date: 11-Aug-2017, Time: 19:51:08, ID: B7H0073-MS1 Matrix Spike 0.0005, Description: Matrix Spike

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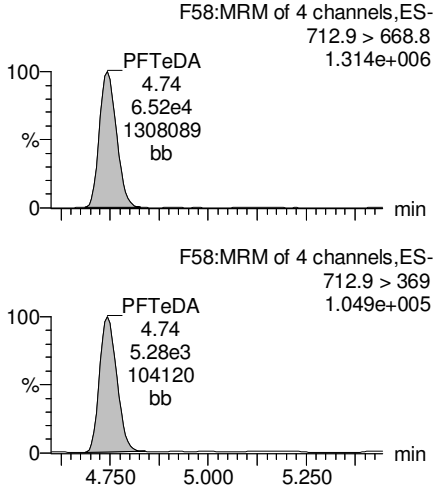
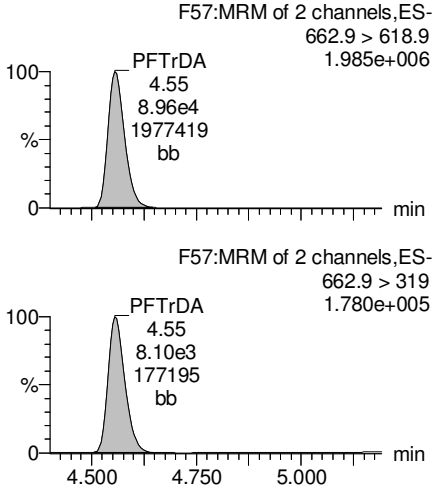
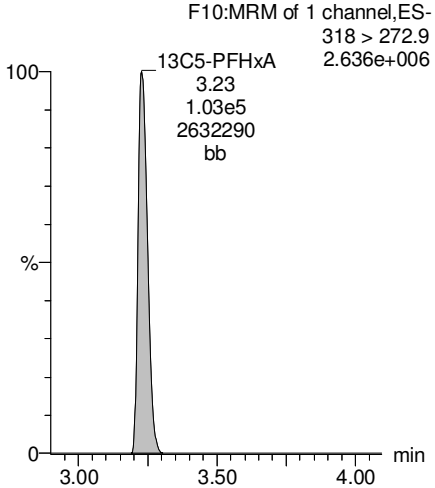


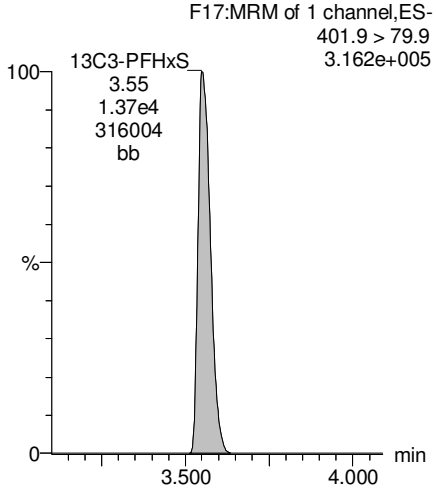
PFTrDA



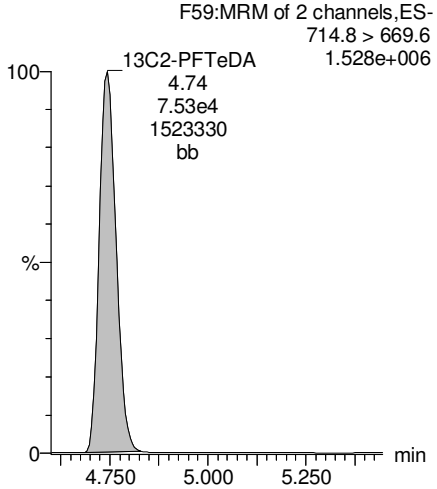
13C5-PFHxA



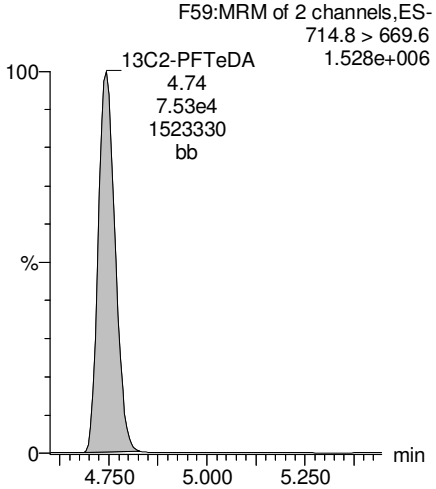
13C3-PFHxS



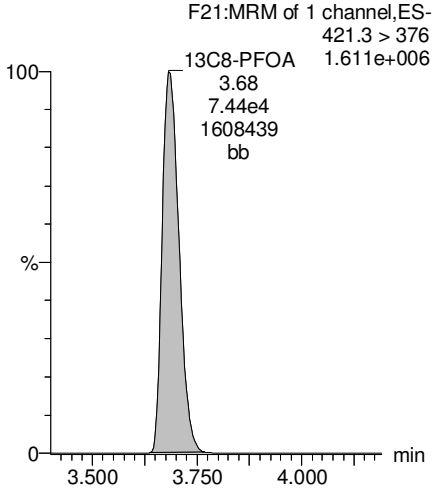
13C2-PFTeDA



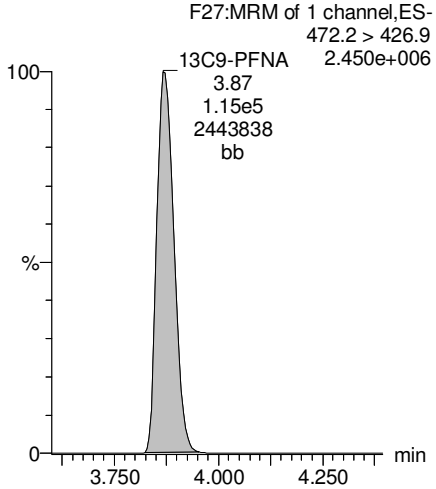
13C2-PFTeDA



13C8-PFOA



13C9-PFNA



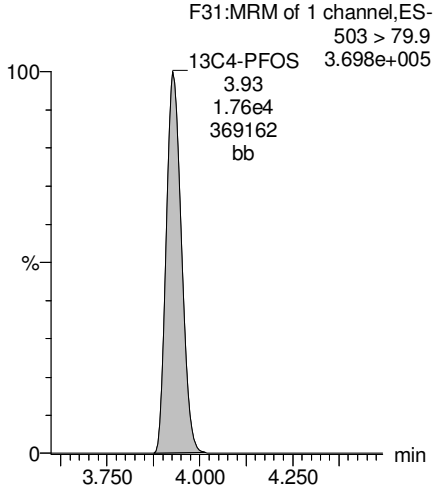
AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-9.qld

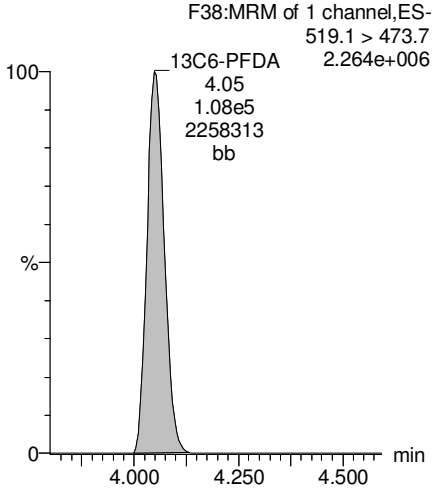
Last Altered: Saturday, August 12, 2017 11:49:15 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:51:45 Pacific Daylight Time

Name: 170811M2_9, Date: 11-Aug-2017, Time: 19:51:08, ID: B7H0073-MS1 Matrix Spike 0.0005, Description: Matrix Spike

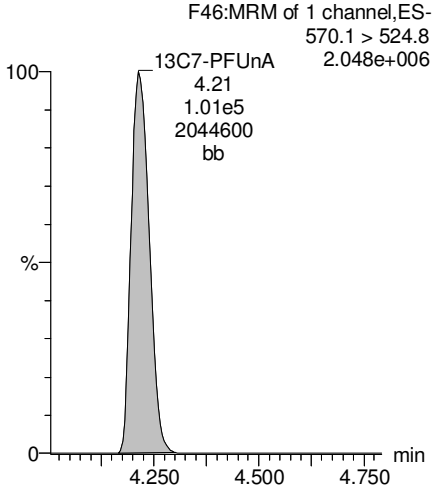
13C4-PFOS



13C6-PFDA



13C7-PFUnA



AP 8/12/2017

Vista Analytical Laboratory

Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-38.qld

Last Altered: Saturday, August 12, 2017 13:03:11 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 10:00:42 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_38, Date: 12-Aug-2017, Time: 01:00:54, ID: B7H0073-MS1@20X Matrix Spike 0.0005, Description: Matrix Spike

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	4	PFHxA	313.2 > 268.9	6.54e4	1.34e3	0.0005		3.26	3.22	488	772000	
2	6	PFHxS	398.9 > 79.6	1.47e4	3.77e2	0.0005		3.58	3.54	978	1450000	
3	8	PFOA	413 > 368.7	2.17e5	5.90e3	0.0005		3.71	3.68	921	1880000	
4	31	13C2-PFHxA	315 > 269.8	1.34e3	4.56e3	0.0005	0.304	3.26	3.22	2.94	19300	96.7
5	33	18O2-PFHxS	403 > 102.6	3.77e2	1.06e3	0.0005	0.417	3.58	3.55	8.87	42500	85.0
6	35	13C2-PFOA	414.9 > 369.7	5.90e3	6.06e3	0.0005	1.132	3.71	3.68	24.3	43000	86.0
7	52	13C5-PFHxA	318 > 272.9	4.56e3	4.56e3	0.0005	1.000	3.26	3.22	10.0	20000	100.0
8	53	13C3-PFHxS	401.9 > 79.9	1.06e3	1.06e3	0.0005	1.000	3.58	3.55	25.0	50000	100.0
9	54	13C8-PFOA	421.3 > 376	6.06e3	6.06e3	0.0005	1.000	3.71	3.68	25.0	50000	100.0

AP 8/16/2017

Vista Analytical Laboratory

Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-38.qld

Last Altered: Saturday, August 12, 2017 13:03:11 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 10:01:21 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_38, Date: 12-Aug-2017, Time: 01:00:54, ID: B7H0073-MS1@20X Matrix Spike 0.0005, Description: Matrix Spike

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	60	Total PFHxS	398.9 > 79.6	1.47e4	3.77e2	0.0005		3.58		978	1450000	
2	61	Total PFOA	413 > 368.7	2.43e5	5.90e3	0.0005		3.71		1030	2100000	

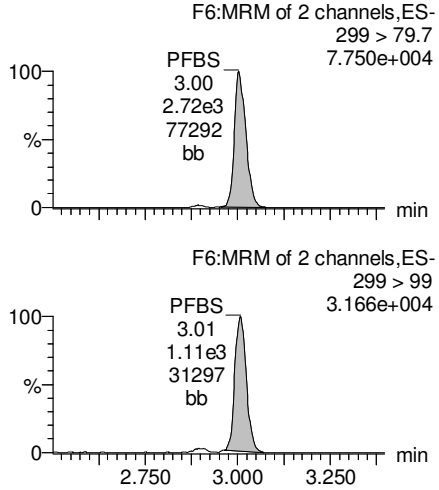
Dataset: U:\Q4.PRO\results\170811M2\170811M2-38.qld

Last Altered: Saturday, August 12, 2017 13:03:11 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 10:01:21 Pacific Daylight Time

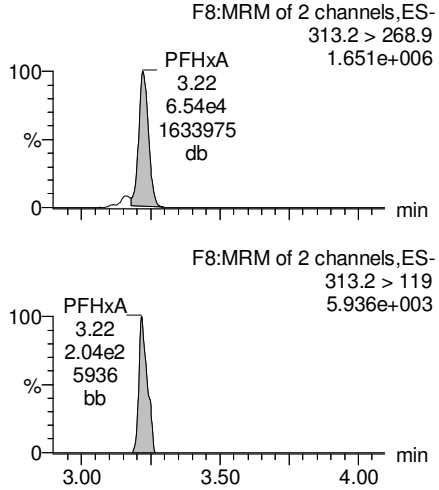
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_38, Date: 12-Aug-2017, Time: 01:00:54, ID: B7H0073-MS1@20X Matrix Spike 0.0005, Description: Matrix Spike

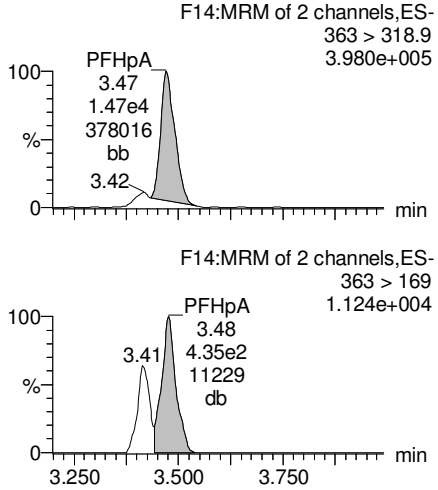
Total PFBS



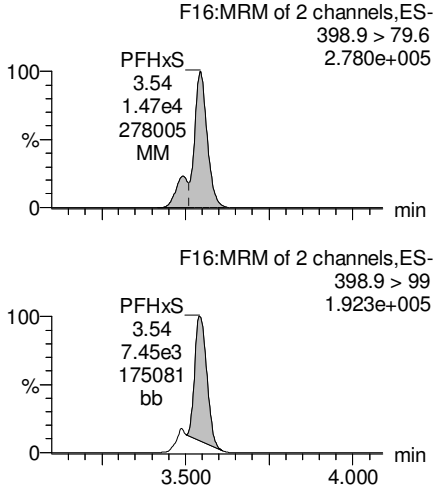
PFHxA



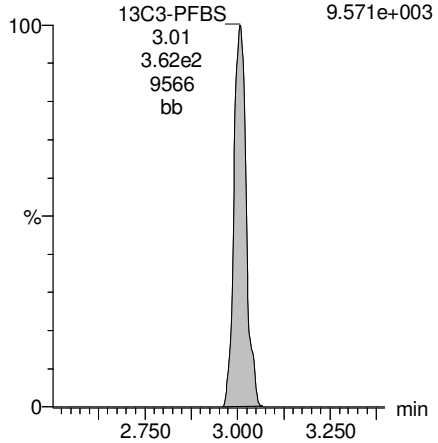
PFHpA



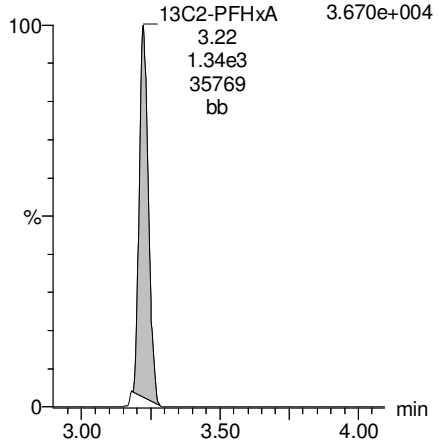
Total PFHxS



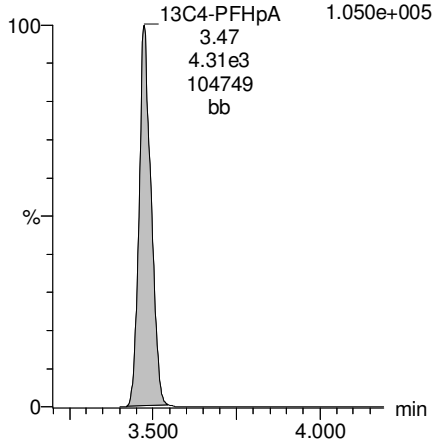
13C3-PFBS



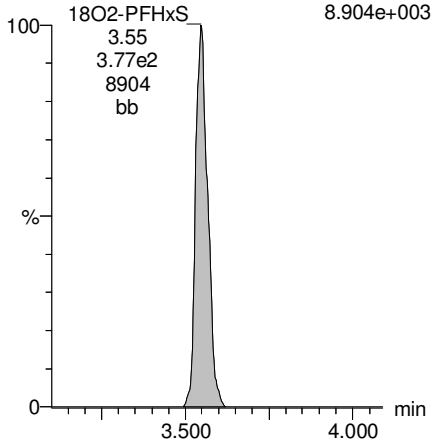
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS

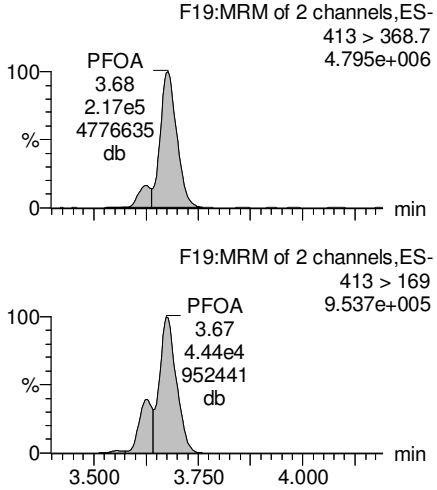


Dataset: U:\Q4.PRO\results\170811M2\170811M2-38.qld

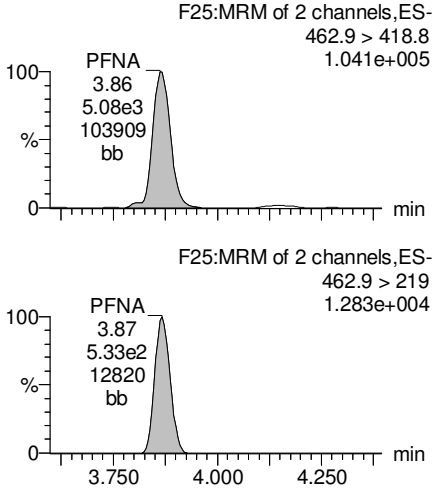
Last Altered: Saturday, August 12, 2017 13:03:11 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 10:01:21 Pacific Daylight Time

Name: 170811M2_38, Date: 12-Aug-2017, Time: 01:00:54, ID: B7H0073-MS1@20X Matrix Spike 0.0005, Description: Matrix Spike

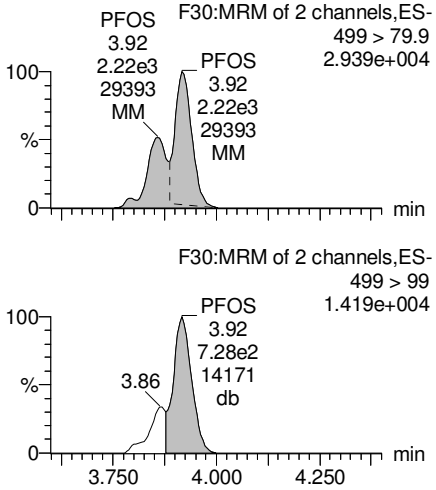
Total PFOA



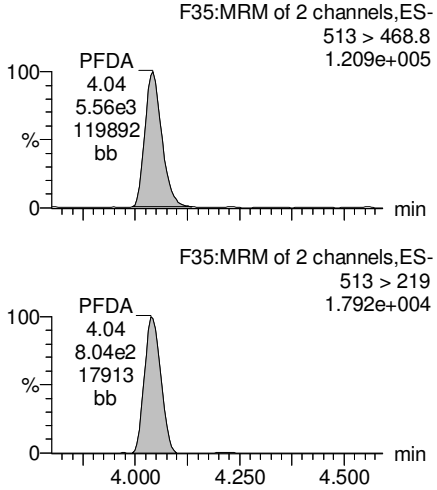
PFNA



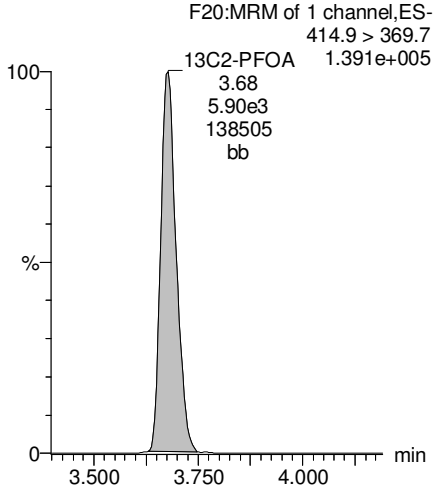
Total PFOS



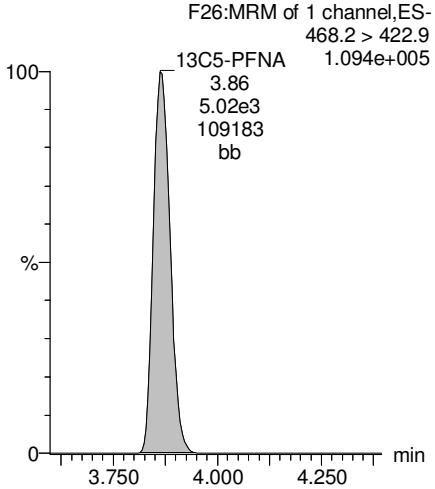
PFDA



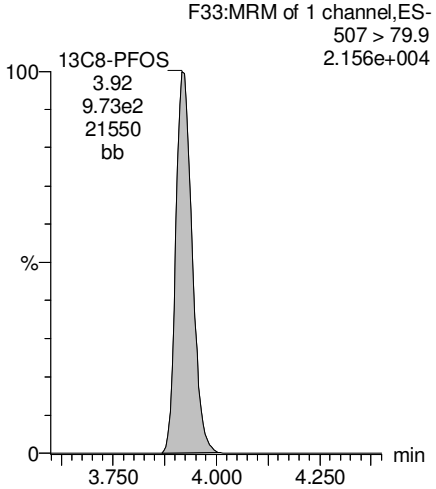
13C2-PFOA



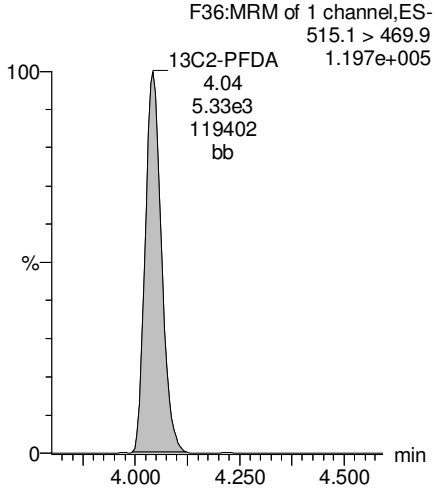
13C5-PFNA



13C8-PFOS



13C2-PFDA

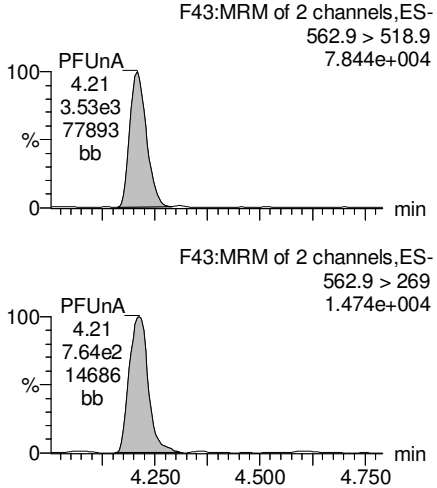


Dataset: U:\Q4.PRO\results\170811M2\170811M2-38.qld

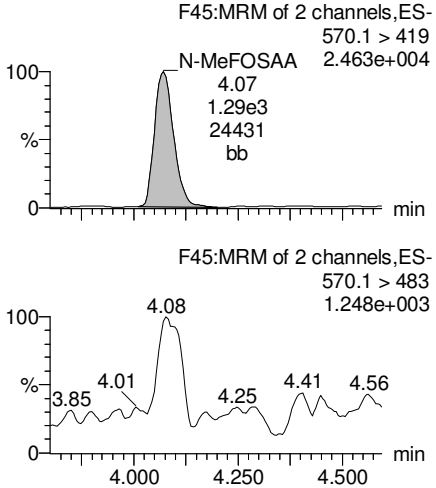
Last Altered: Saturday, August 12, 2017 13:03:11 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 10:01:21 Pacific Daylight Time

Name: 170811M2_38, Date: 12-Aug-2017, Time: 01:00:54, ID: B7H0073-MS1@20X Matrix Spike 0.0005, Description: Matrix Spike

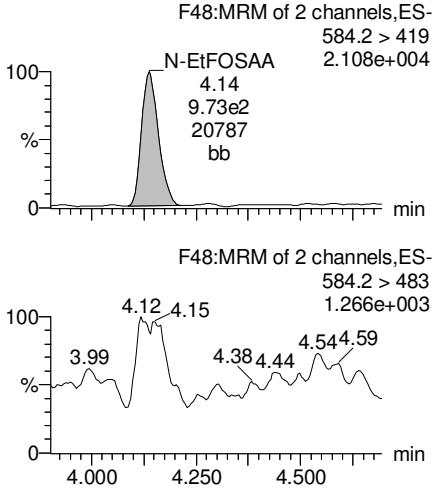
PFUnA



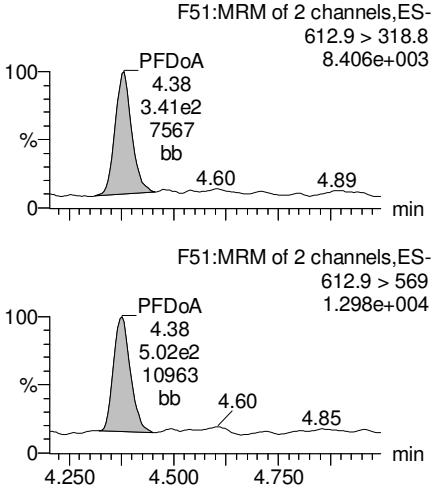
N-MeFOSAA



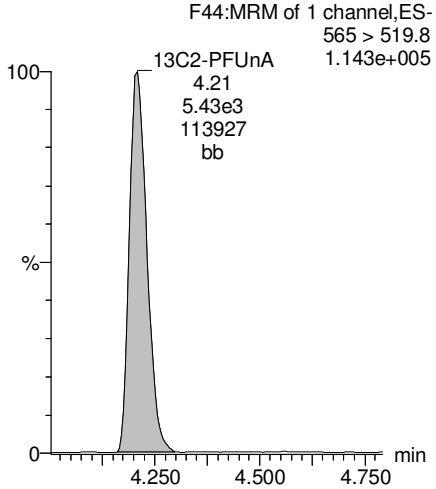
N-EtFOSAA



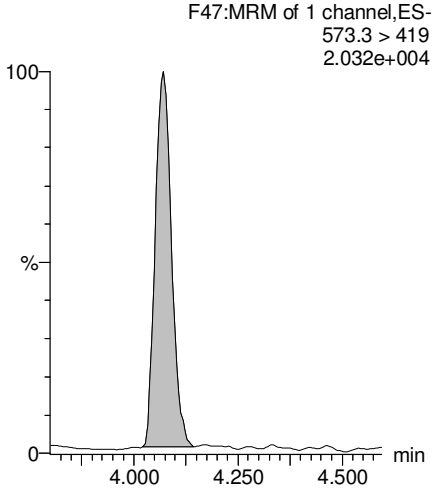
PFDoA



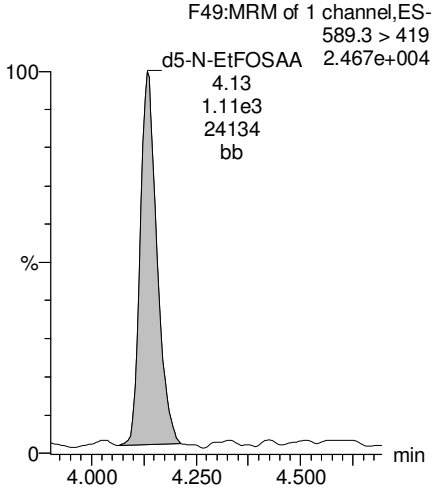
13C2-PFUnA



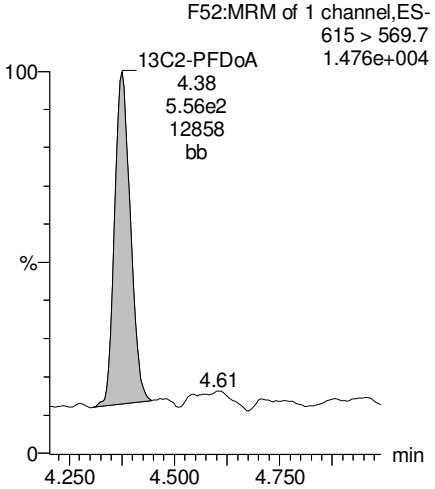
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFDoA

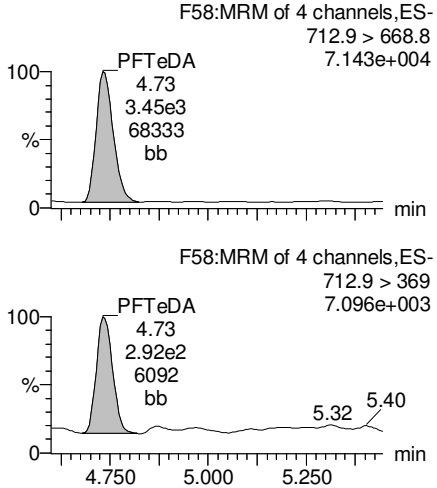


Dataset: U:\Q4.PRO\results\170811M2\170811M2-38.qld

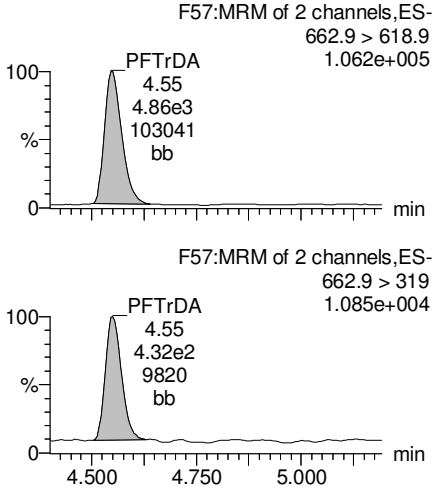
Last Altered: Saturday, August 12, 2017 13:03:11 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 10:01:21 Pacific Daylight Time

Name: 170811M2_38, Date: 12-Aug-2017, Time: 01:00:54, ID: B7H0073-MS1@20X Matrix Spike 0.0005, Description: Matrix Spike

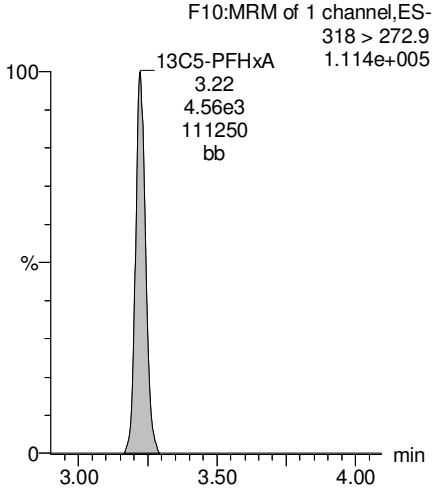
PFTeDA



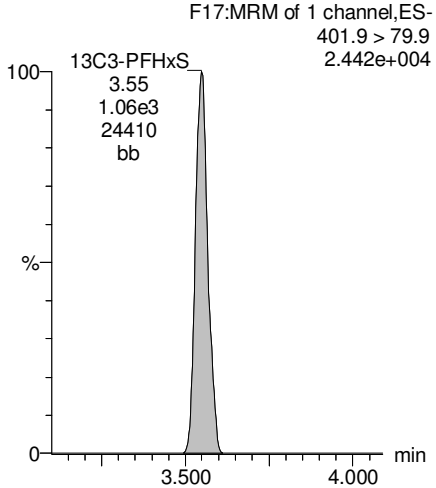
PFTrDA



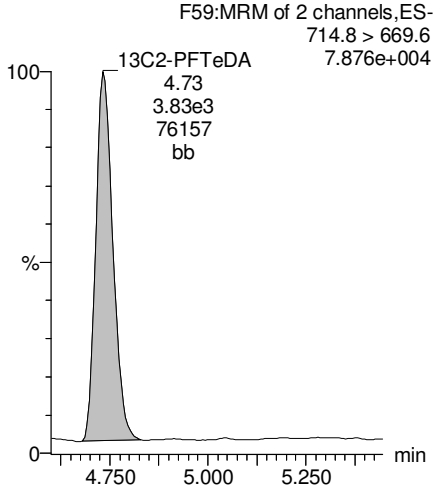
13C5-PFHxA



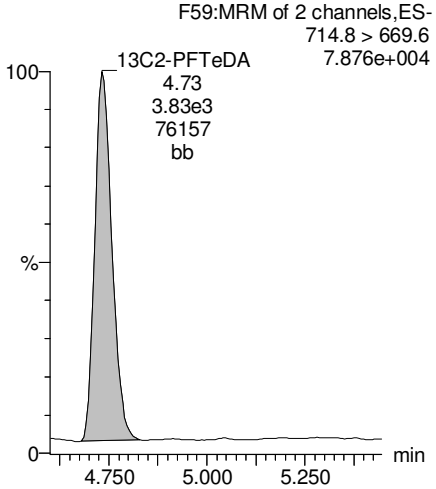
13C3-PFHxS



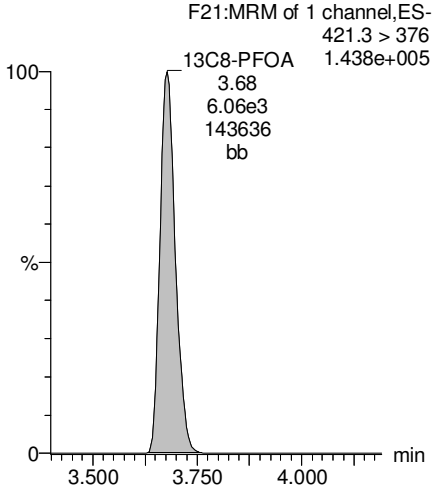
13C2-PFTeDA



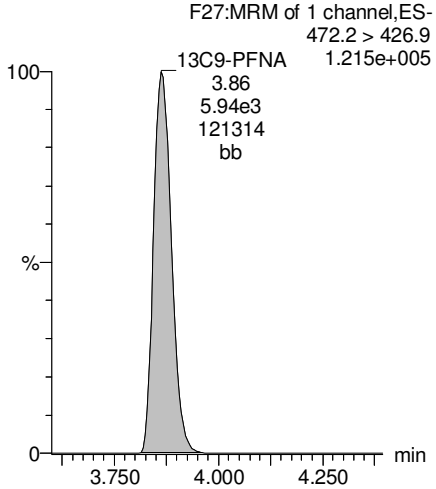
13C2-PFTeDA



13C8-PFOA



13C9-PFNA

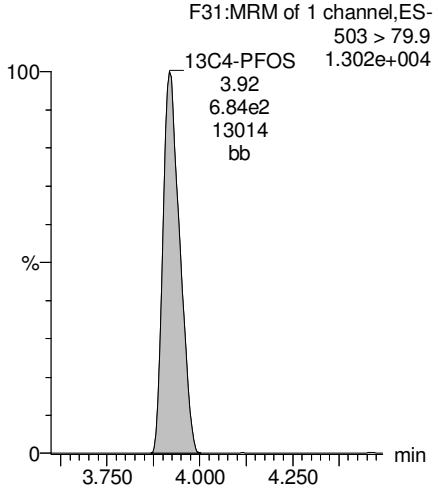


Dataset: U:\Q4.PRO\results\170811M2\170811M2-38.qld

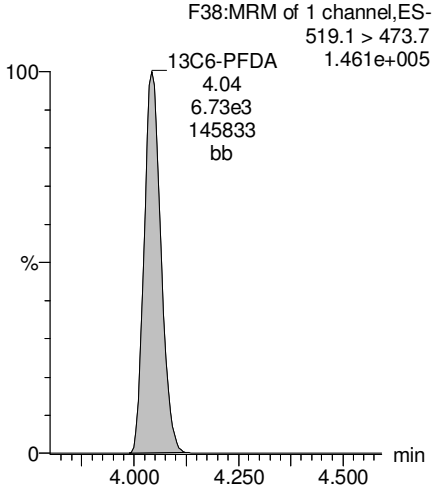
Last Altered: Saturday, August 12, 2017 13:03:11 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 10:01:21 Pacific Daylight Time

Name: 170811M2_38, Date: 12-Aug-2017, Time: 01:00:54, ID: B7H0073-MS1@20X Matrix Spike 0.0005, Description: Matrix Spike

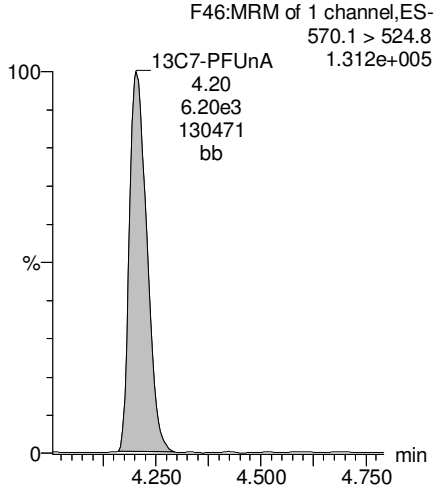
13C4-PFOS



13C6-PFDA



13C7-PFUnA



Vista Analytical Laboratory

Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170810M2\170810M2-50.qld

Last Altered: Tuesday, August 15, 2017 09:53:00 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 09:53:22 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 14 Aug 2017 15:12:43
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_50, Date: 11-Aug-2017, Time: 05:06:46, ID: B7H0073-MSD1 Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

	#	Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	5	PFHpA	363 > 318.9	2.54e5	7.09e4		0.0014	3.51	3.53	89.5	56600	
2	32	13C4-PFHpA	367.2 > 321.8	7.09e4	1.05e5	0.384	0.0014	3.51	3.53	6.75	12600	70.3
3	52	13C5-PFHxA	318 > 272.9	1.05e5	1.05e5	1.000	0.0014	3.26	3.28	10.0	7190	100.0

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Vista Analytical Laboratory

Rev'd: MM 8/17/17

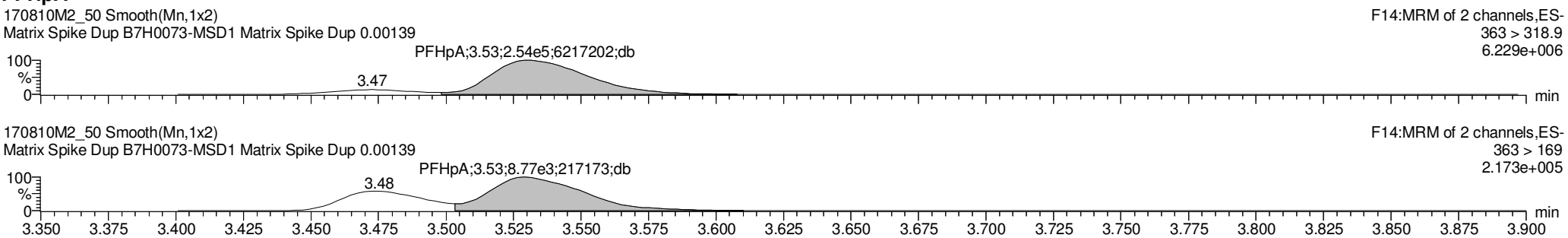
Dataset: U:\Q4.PRO\results\170810M2\170810M2-50.qld

Last Altered: Tuesday, August 15, 2017 09:53:00 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 09:53:22 Pacific Daylight Time

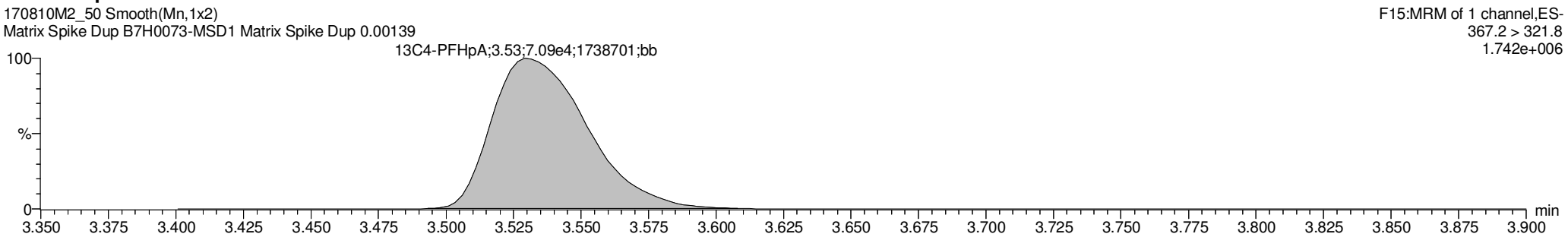
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 14 Aug 2017 15:12:43
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_50, Date: 11-Aug-2017, Time: 05:06:46, ID: B7H0073-MSD1 Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

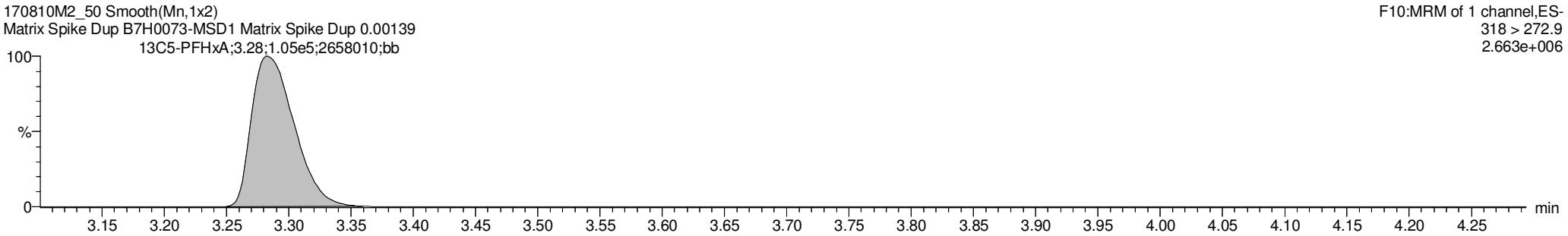
PFHpA



13C4-PFHpA



13C5-PFHxA



GM 8/15/17

Vista Analytical Laboratory

Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-11.qld

Last Altered: Saturday, August 12, 2017 11:57:36 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:58:03 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_11, Date: 11-Aug-2017, Time: 20:12:41, ID: B7H0073-MSD1 Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7	7.45e4	9.82e3	0.0014		3.06	3.01	190	79600	
2	4	PFHxA	313.2 > 268.9	1.33e6	2.87e4	0.0014		3.26	3.23	464	264000	
3	5	~~PFHpA~~ NOT USED	~~363 > 318.9~~	~~2.64e5~~	~~7.52e4~~	~~0.0014~~		~~3.51~~	~~3.48~~	~~87.6~~	~~55400~~	
4	6	PFHxS	398.9 > 79.6	1.82e5	5.29e3	0.0014		3.58	3.55	860	437000	E
5	8	PFOA	413 > 368.7	2.70e6	8.08e4	0.0014		3.71	3.68	835	613000	E
6	10	PFNA	462.9 > 418.8	8.39e4	9.19e4	0.0014		3.90	3.87	22.8	16400	
7	12	PFOS	499 > 79.9	3.89e4	1.77e4	0.0014		3.96	3.92	55.1	37600	
8	13	PFDA	513 > 468.8	8.36e4	8.71e4	0.0014		4.08	4.05	24.0	15200	
9	15	N-MeFOSAA	570.1 > 419	2.13e4	1.83e4	0.0014		4.11	4.08	379	14200	
10	16	N-EtFOSAA	584.2 > 419	1.81e4	1.86e4	0.0014		4.18	4.14	317	14600	
11	17	PFUnA	562.9 > 518.9	6.13e4	8.87e4	0.0014		4.25	4.21	17.3	15400	
12	19	PFDoA	612.9 > 318.8	6.56e3	1.00e4	0.0014		4.42	4.38	16.4	14100	

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Vista Analytical Laboratory

Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-11.qld

Last Altered: Saturday, August 12, 2017 11:57:36 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:58:20 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_11, Date: 11-Aug-2017, Time: 20:12:41, ID: B7H0073-MSD1 Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21	PFTrDA	662.9 > 618.9	8.43e4	1.00e4	0.0014		4.59	4.55	211	15000	
2	22	PFTeDA	712.9 > 668.8	5.40e4	6.17e4	0.0014		4.78	4.74	21.8	13900	
3	30	13C3-PFBS	302 > 98.8	9.82e3	9.88e4	0.0014	0.033	3.06	3.01	0.994	21700	120.9
4	31	13C2-PFHxA	315 > 269.8	2.87e4	9.88e4	0.0014	0.304	3.26	3.23	2.90	6870	95.6
5	32	13C4-PFHpA	367.2 > 321.8	7.52e4	9.88e4	0.0014	0.384	3.51	3.48	7.61	14300	79.3
6	33	18O2-PFHxS	403 > 102.6	5.29e3	1.35e4	0.0014	0.417	3.58	3.55	9.80	16900	94.0
7	35	13C2-PFOA	414.9 > 369.7	8.08e4	7.34e4	0.0014	1.132	3.71	3.68	27.5	17500	97.3
8	36	13C5-PFNA	468.2 > 422.9	9.19e4	1.11e5	0.0014	0.946	3.90	3.87	20.8	15800	87.9
9	38	13C8-PFOS	507 > 79.9	1.77e4	1.68e4	0.0014	1.040	3.96	3.92	26.3	18200	101.2
10	39	13C2-PFDA	515.1 > 469.9	8.71e4	1.05e5	0.0014	0.971	4.08	4.05	20.7	15400	85.5

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Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-11.qld

Last Altered: Saturday, August 12, 2017 11:57:36 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:58:38 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_11, Date: 11-Aug-2017, Time: 20:12:41, ID: B7H0073-MSD1 Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.		%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	1.83e4	1.06e5	0.0014	0.018	4.11	4.07	4.29	174000		74.3
2	42	d5-N-EtFOSAA	589.3 > 419	1.86e4	1.06e5	0.0014	0.018	4.18	4.14	4.38	173000		73.9
3	43	13C2-PFUnA	565 > 519.8	8.87e4	1.06e5	0.0014	1.085	4.25	4.21	20.9	13800		77.0
4	44	13C2-PFDoA	615 > 569.7	1.00e4	1.06e5	0.0014	0.123	4.42	4.38	2.36	13800		76.5
5	46	13C2-PFTeDA	714.8 > 669.6	6.17e4	1.06e5	0.0014	0.798	4.78	4.74	14.5	13100		72.8
6	52	13C5-PFHxA	318 > 272.9	9.88e4	9.88e4	0.0014	1.000	3.26	3.23	10.0	7190		100.0
7	53	13C3-PFHxS	401.9 > 79.9	1.35e4	1.35e4	0.0014	1.000	3.58	3.55	25.0	18000		100.0
8	54	13C8-PFOA	421.3 > 376	7.34e4	7.34e4	0.0014	1.000	3.71	3.68	25.0	18000		100.0
9	55	13C9-PFNA	472.2 > 426.9	1.11e5	1.11e5	0.0014	1.000	3.90	3.87	25.0	18000		100.0
10	56	13C4-PFOS	503 > 79.9	1.68e4	1.68e4	0.0014	1.000	3.96	3.92	25.0	18000		100.0
11	57	13C6-PFDA	519.1 > 473.7	1.05e5	1.05e5	0.0014	1.000	4.08	4.05	25.0	18000		100.0
12	58	13C7-PFUnA	570.1 > 524.8	1.06e5	1.06e5	0.0014	1.000	4.25	4.21	25.0	18000		100.0
13	59	Total PFBS	299 > 79.7	7.45e4	9.82e3	0.0014		3.06		190	79600		
14	60	Total PFHxS	398.9 > 79.6	1.82e5	5.29e3	0.0014		3.58		860	437000	E	
15	61	Total PFOA	413 > 368.7	3.13e6	8.08e4	0.0014		3.71		967	709000	E	
16	62	Total PFOS	499 > 79.9	3.89e4	1.77e4	0.0014		3.96		55.1	37600		
17	63	Total N-Me-FOSAA	570.1 > 419	2.13e4	1.83e4	0.0014		4.11		379	14200		
18	64	Total N-EtFOSAA	584.2 > 419	1.81e4	1.86e4	0.0014		4.18		317	14600		

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Dataset: U:\Q4.PRO\results\170811M2\170811M2-11.qld

Last Altered: Saturday, August 12, 2017 11:57:36 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:58:38 Pacific Daylight Time

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Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_11, Date: 11-Aug-2017, Time: 20:12:41, ID: B7H0073-MSD1 Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3	PFBS	299 > 79.7	3.01	74527.313	9820.726	189.719	MM	79611.6

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.55	181908.922	5285.372	860.436	MM	436715.5

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7	3.68	2699419.500	80825.477	834.953	MM	612573.4
2	61	Total PFOA	413 > 368.7	3.63	420058.156	80825.477	129.928	MM	95229.0
3	61	Total PFOA	413 > 368.7	3.56	6227.751	80825.477	1.926	MM	1302.4

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.92	38931.863	17657.676	55.120	MM	37577.3

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15	N-MeFOSAA	570.1 > 419	4.08	21306.809	18253.891	379.355	bb	14163.7

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16	N-EtFOSAA	584.2 > 419	4.14	18145.246	18620.133	316.711	bb	14613.6

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Vista Analytical Laboratory

Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-11.qld

Last Altered: Saturday, August 12, 2017 11:57:36 Pacific Daylight Time
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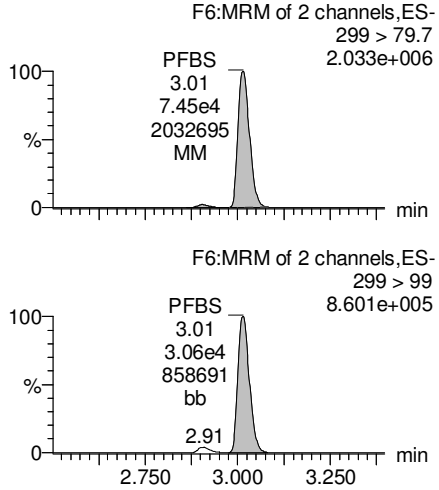
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_11, Date: 11-Aug-2017, Time: 20:12:41, ID: B7H0073-MSD1 Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

Total PFBS



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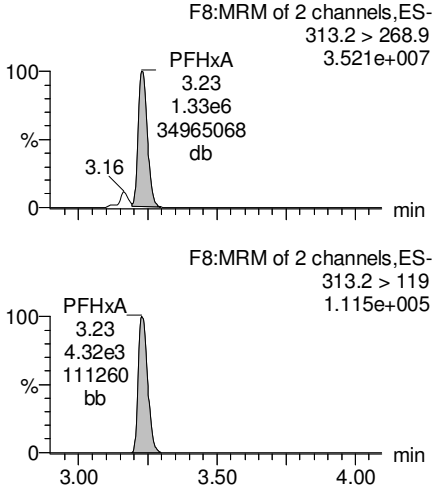

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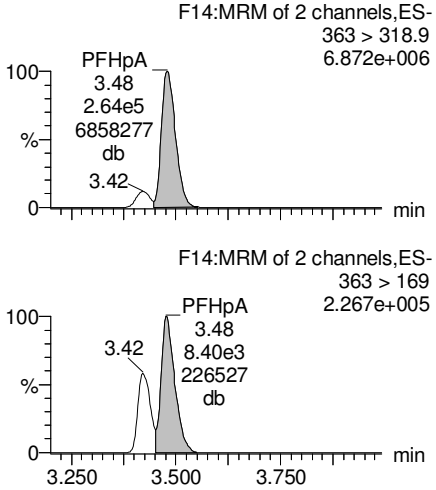
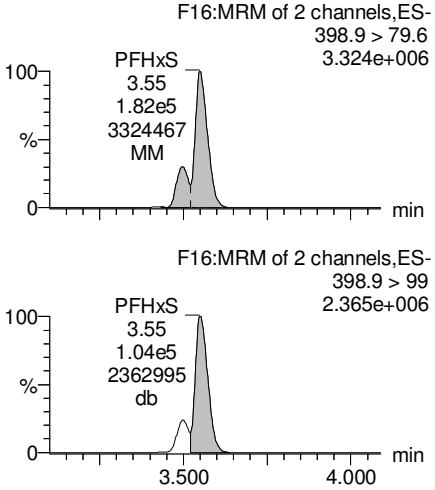
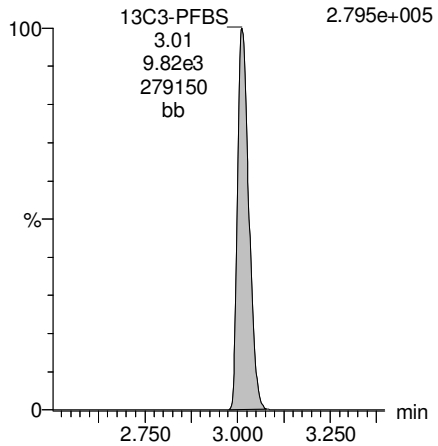


Total PFHxS



13C3-PFBS



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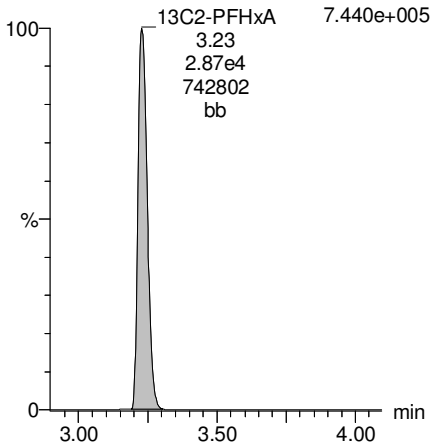
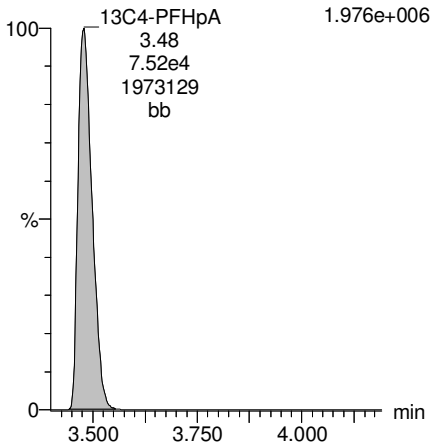


13C4-PFHpA



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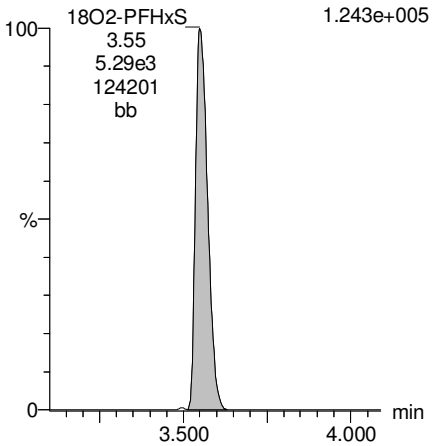

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Vista Analytical Laboratory

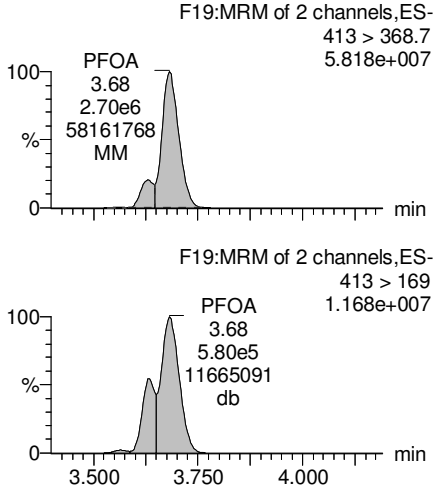
Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-11.qld

Last Altered: Saturday, August 12, 2017 11:57:36 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:58:38 Pacific Daylight Time

Name: 170811M2_11, Date: 11-Aug-2017, Time: 20:12:41, ID: B7H0073-MSD1 Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

Total PFOA



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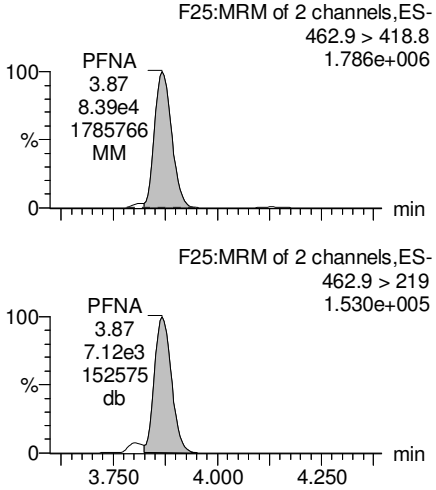
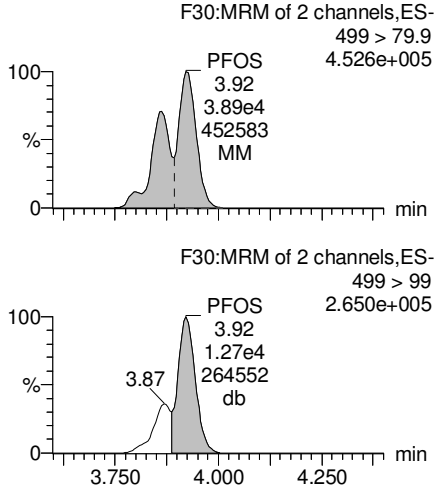


Total PFOS



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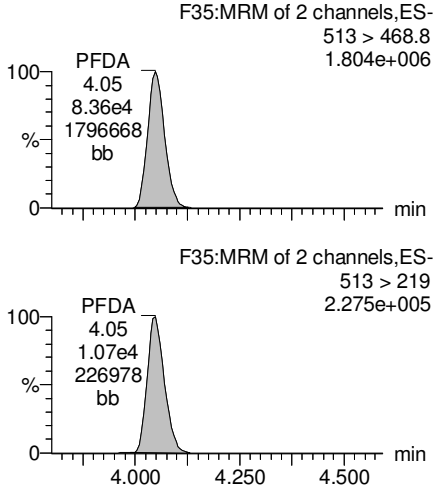

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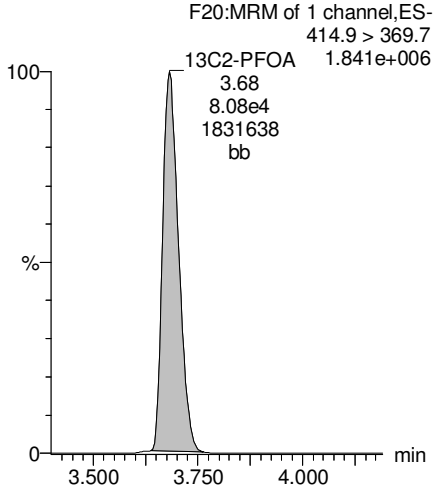

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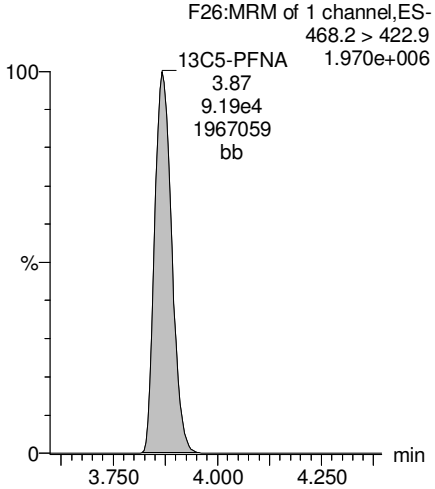

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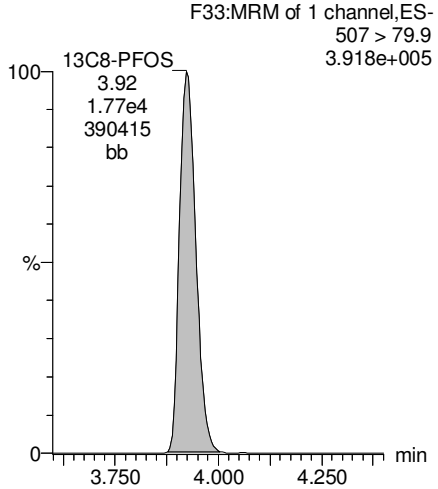
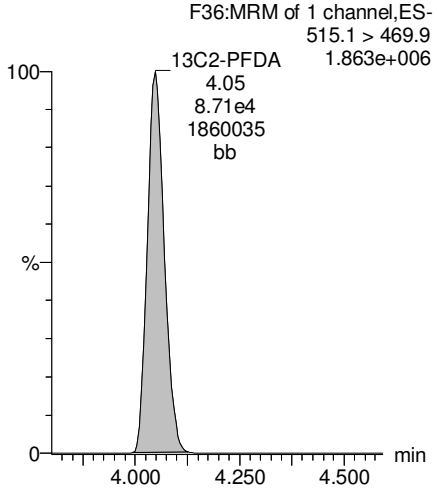


13C2-PFDA



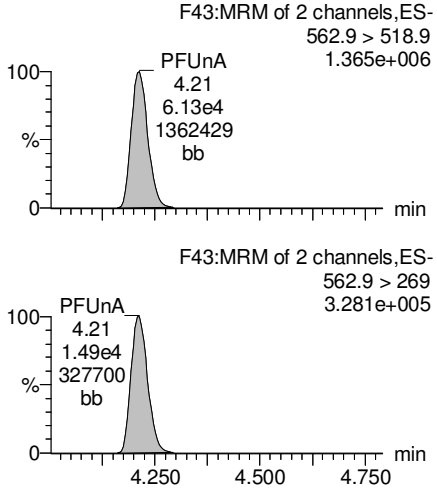
AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-11.qld

Last Altered: Saturday, August 12, 2017 11:57:36 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:58:38 Pacific Daylight Time

Name: 170811M2_11, Date: 11-Aug-2017, Time: 20:12:41, ID: B7H0073-MSD1 Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

PFUnA



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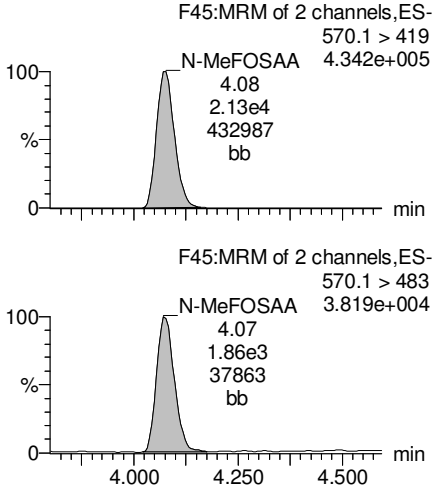

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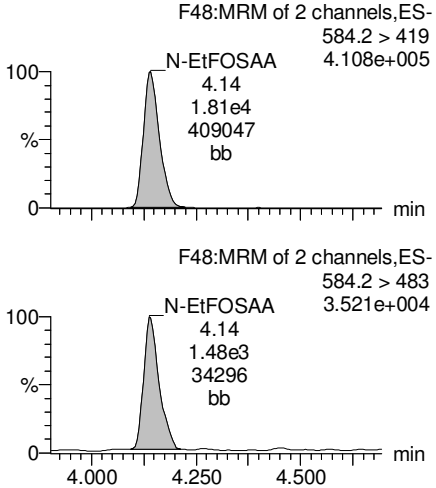
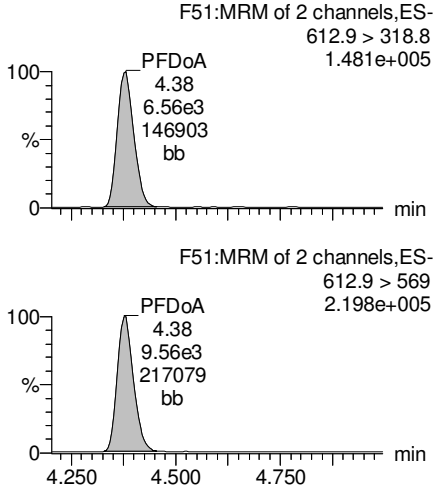
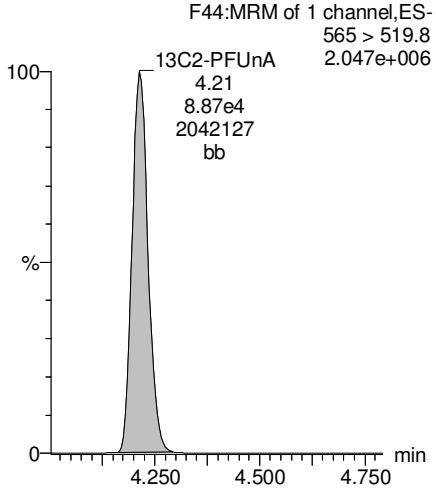


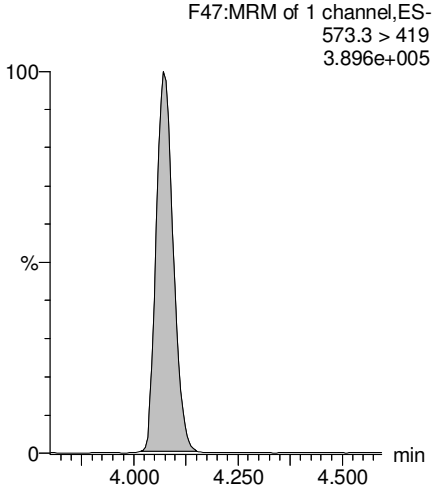
PFDoA



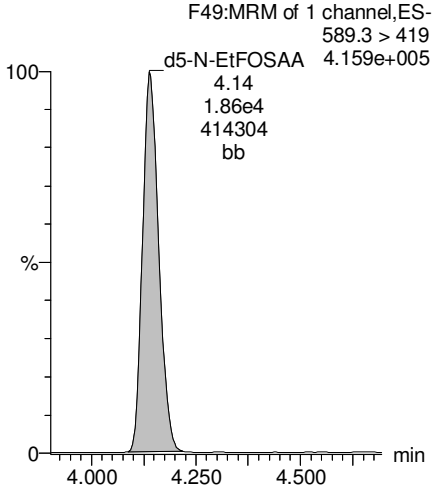
13C2-PFUnA



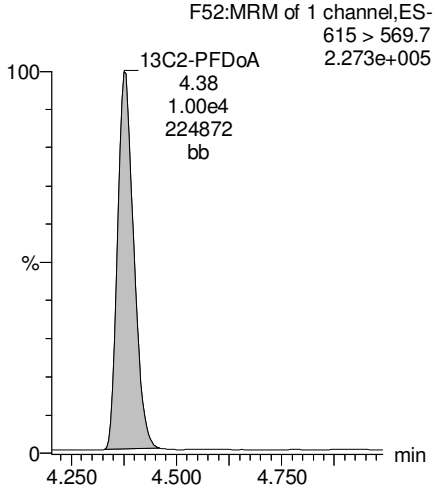
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFDoA



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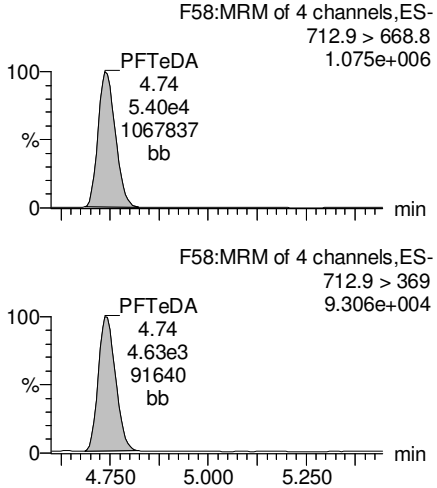
Dataset: U:\Q4.PRO\results\170811M2\170811M2-11.qld

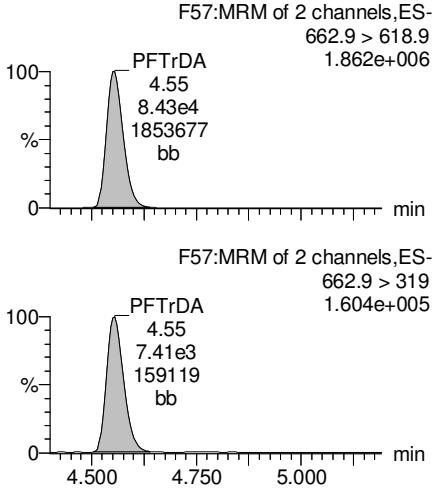
Last Altered: Saturday, August 12, 2017 11:57:36 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:58:38 Pacific Daylight Time

Name: 170811M2_11, Date: 11-Aug-2017, Time: 20:12:41, ID: B7H0073-MSD1 Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

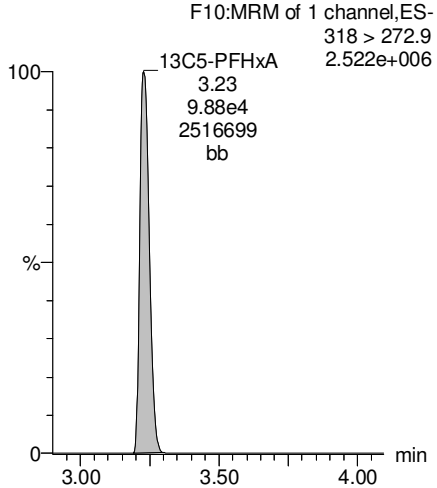
PFTeDA



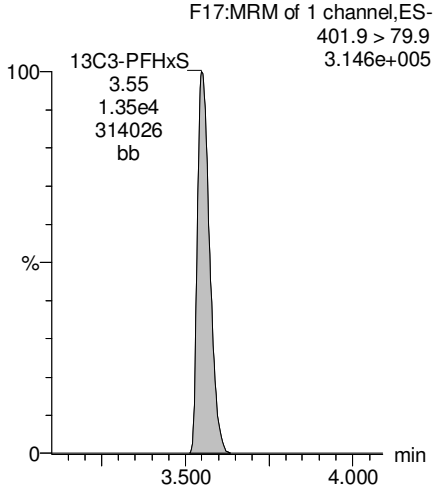
PFTrDA



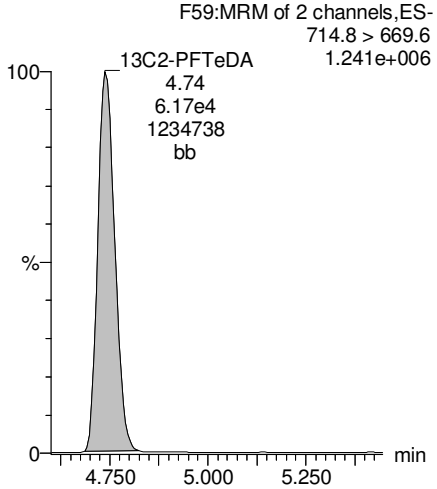
13C5-PFHxA



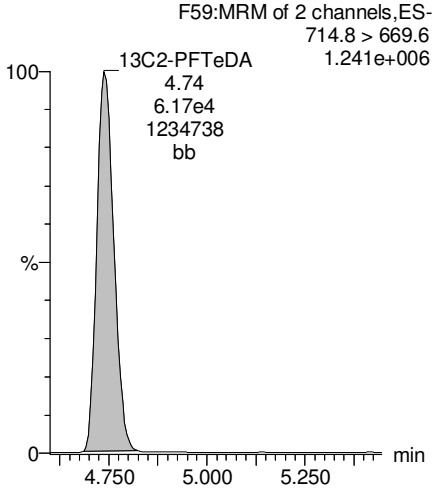
13C3-PFHxS



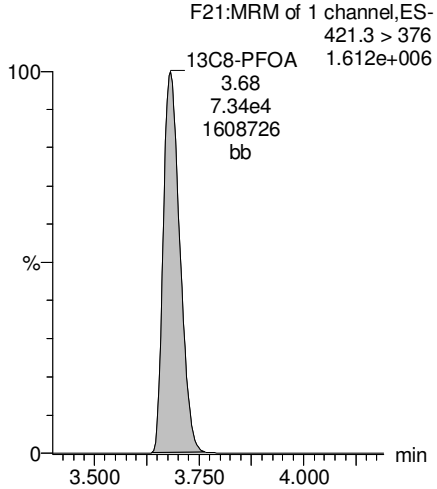
13C2-PFTeDA



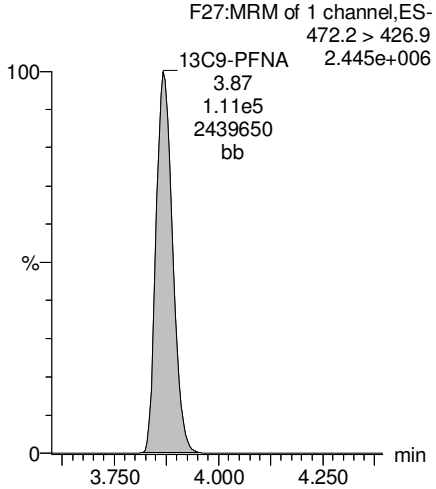
13C2-PFTeDA



13C8-PFOA



13C9-PFNA



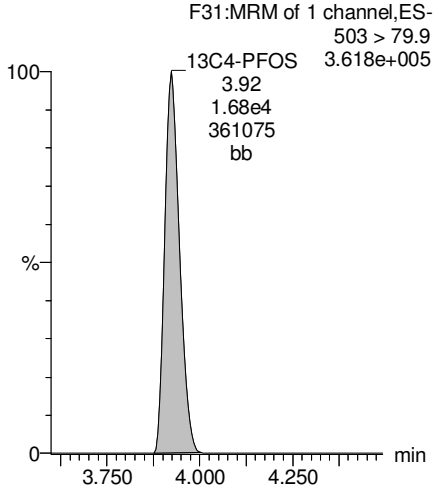
AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-11.qld

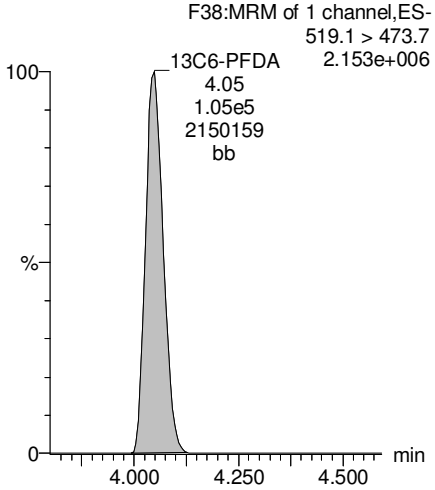
Last Altered: Saturday, August 12, 2017 11:57:36 Pacific Daylight Time
Printed: Saturday, August 12, 2017 11:58:38 Pacific Daylight Time

Name: 170811M2_11, Date: 11-Aug-2017, Time: 20:12:41, ID: B7H0073-MSD1 Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

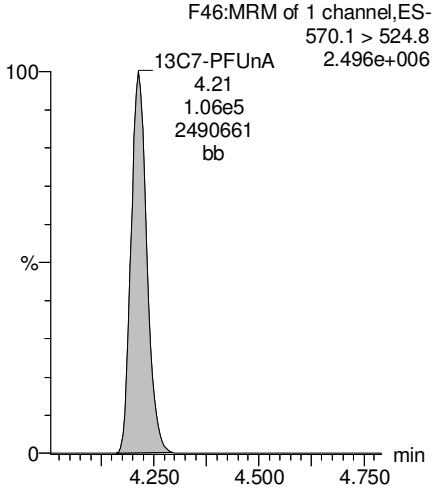
13C4-PFOS



13C6-PFDA



13C7-PFUnA



AP 8/12/2017

Vista Analytical Laboratory

Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-40.qld

Last Altered: Saturday, August 12, 2017 13:09:38 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 10:05:52 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_40, Date: 12-Aug-2017, Time: 01:22:19, ID: B7H0073-MSD1@20X Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	4	PFHxA	313.2 > 268.9	6.21e4	1.20e3	0.0014		3.26	3.22	517	294000	
2	6	PFHxS	398.9 > 79.6	1.39e4	4.53e2	0.0014		3.58	3.54	768	377000	
3	8	PFOA	413 > 368.7	1.91e5	5.76e3	0.0014		3.71	3.67	827	607000	
4	31	13C2-PFHxA	315 > 269.8	1.20e3	4.60e3	0.0014	0.304	3.26	3.22	2.61	6190	86.0
5	33	18O2-PFHxS	403 > 102.6	4.53e2	1.14e3	0.0014	0.417	3.58	3.54	9.92	17100	95.1
6	35	13C2-PFOA	414.9 > 369.7	5.76e3	5.71e3	0.0014	1.132	3.71	3.67	25.2	16000	89.1
7	52	13C5-PFHxA	318 > 272.9	4.60e3	4.60e3	0.0014	1.000	3.26	3.22	10.0	7190	100.0
8	53	13C3-PFHxS	401.9 > 79.9	1.14e3	1.14e3	0.0014	1.000	3.58	3.54	25.0	18000	100.0
9	54	13C8-PFOA	421.3 > 376	5.71e3	5.71e3	0.0014	1.000	3.71	3.67	25.0	18000	100.0

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Vista Analytical Laboratory

Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-40.qld

Last Altered: Saturday, August 12, 2017 13:09:38 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 10:06:48 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_40, Date: 12-Aug-2017, Time: 01:22:19, ID: B7H0073-MSD1@20X Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	60	Total PFHxS	398.9 > 79.6	1.39e4	4.53e2	0.0014		3.58		768	377000	
2	61	Total PFOA	413 > 368.7	2.15e5	5.76e3	0.0014		3.71		933	684000	

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Vista Analytical Laboratory

Rev'd: MM 8/17/17

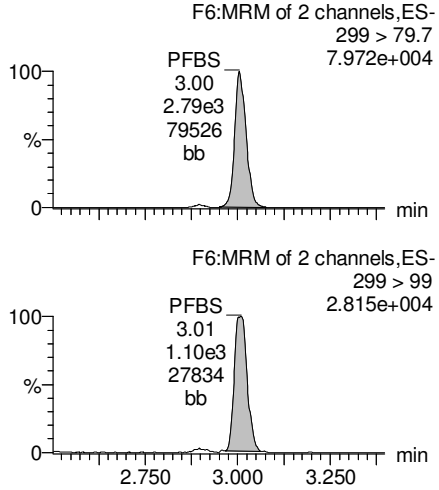
Dataset: U:\Q4.PRO\results\170811M2\170811M2-40.qld

Last Altered: Saturday, August 12, 2017 13:09:38 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 10:06:48 Pacific Daylight Time

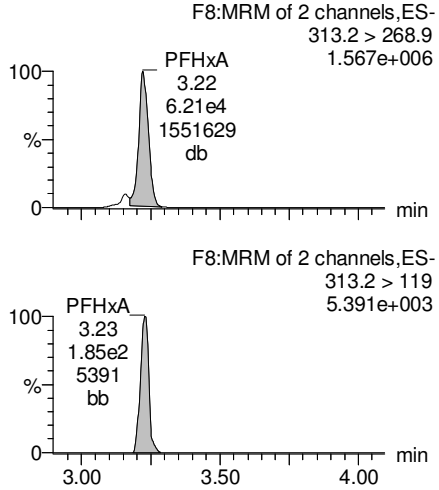
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_40, Date: 12-Aug-2017, Time: 01:22:19, ID: B7H0073-MSD1@20X Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

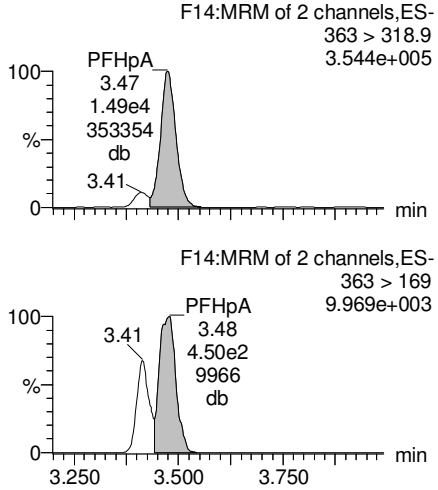
Total PFBS



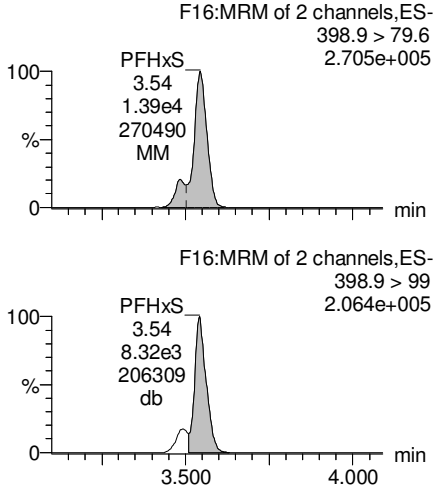
PFHxA



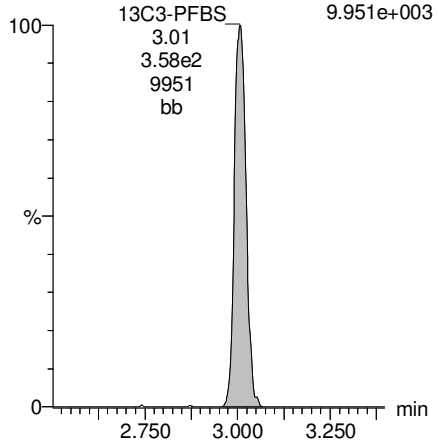
PFHpA



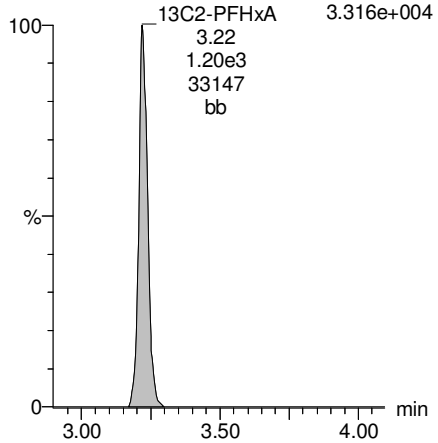
Total PFHxS



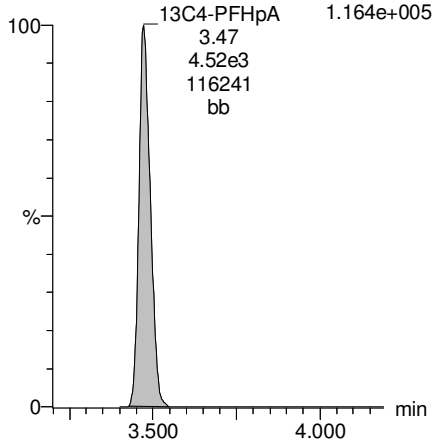
13C3-PFBS



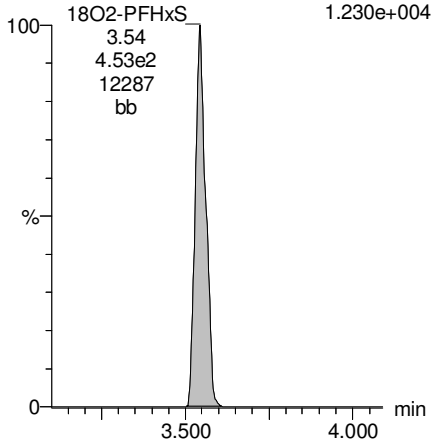
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



AP 8/16/2017

Vista Analytical Laboratory

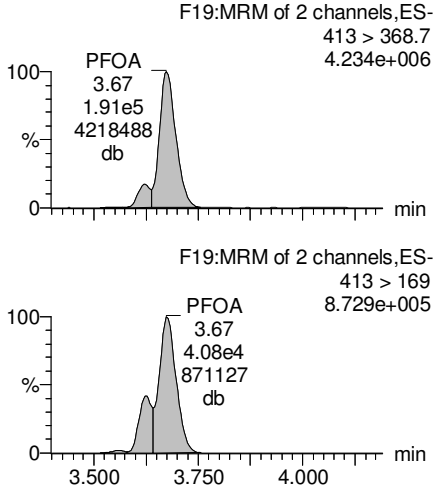
Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-40.qld

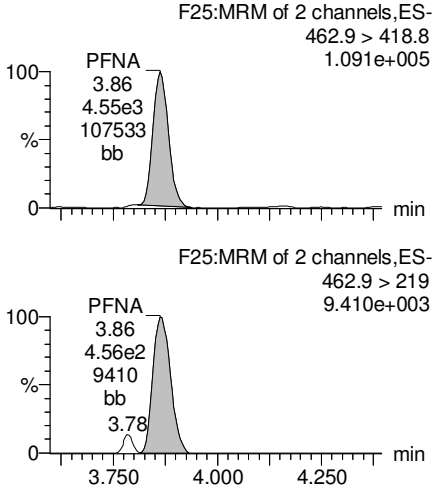
Last Altered: Saturday, August 12, 2017 13:09:38 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 10:06:48 Pacific Daylight Time

Name: 170811M2_40, Date: 12-Aug-2017, Time: 01:22:19, ID: B7H0073-MSD1@20X Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

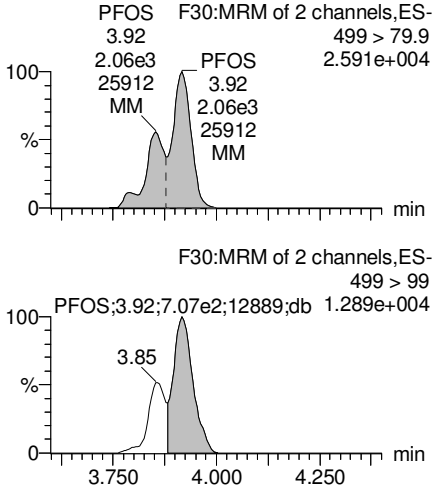
Total PFOA



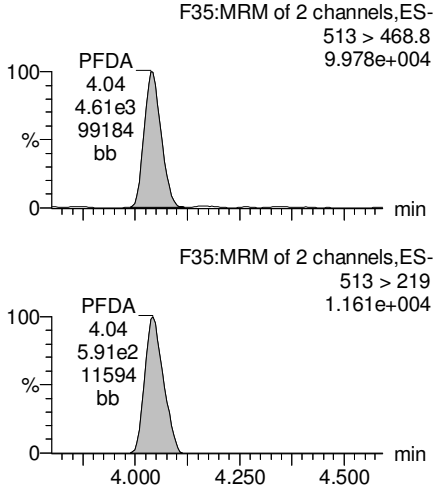
PFNA



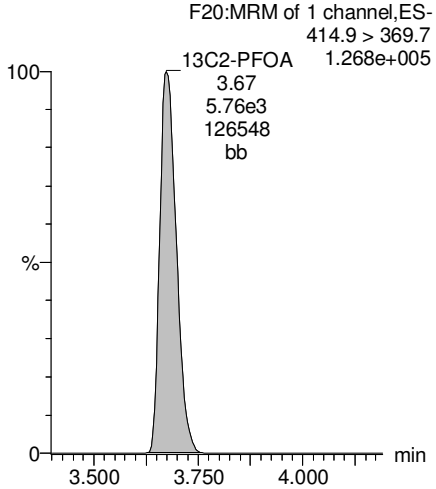
Total PFOS



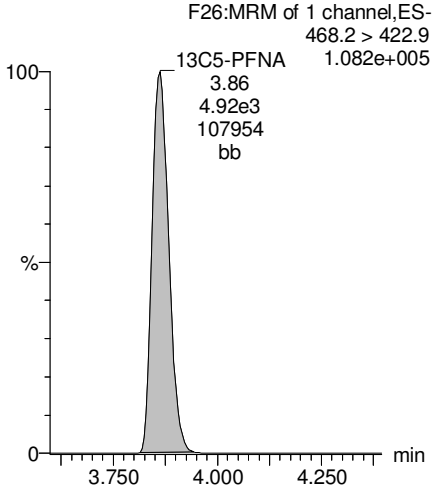
PFDA



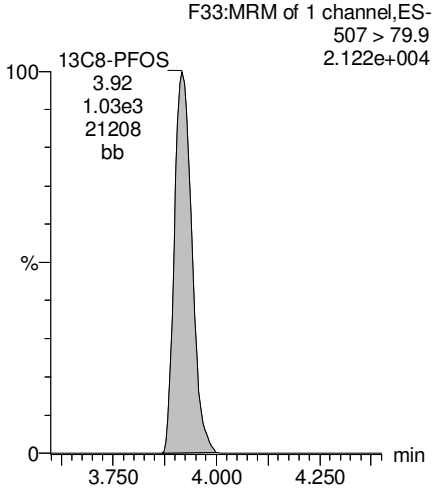
13C2-PFOA



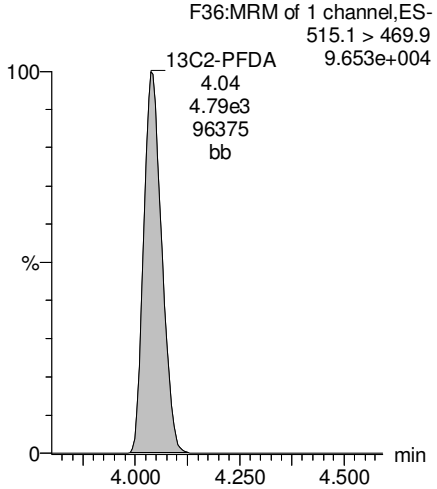
13C5-PFNA



13C8-PFOS



13C2-PFDA



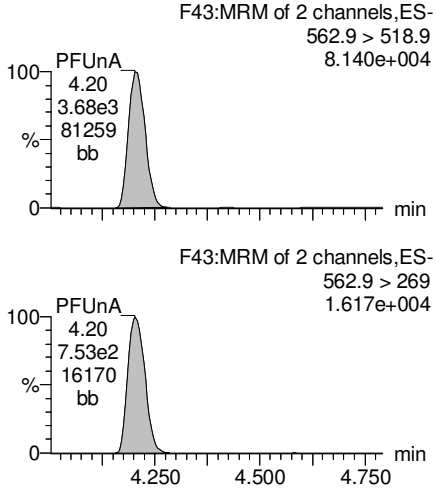
AP 8/16/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-40.qld

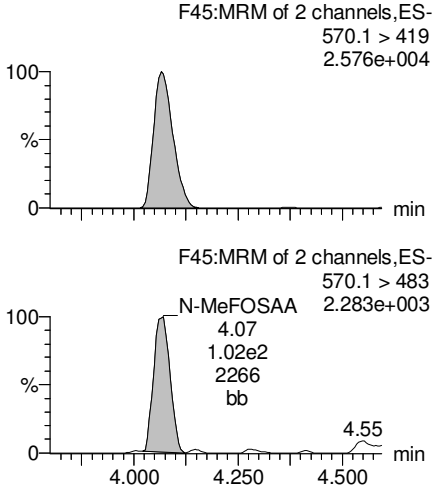
Last Altered: Saturday, August 12, 2017 13:09:38 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 10:06:48 Pacific Daylight Time

Name: 170811M2_40, Date: 12-Aug-2017, Time: 01:22:19, ID: B7H0073-MSD1@20X Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

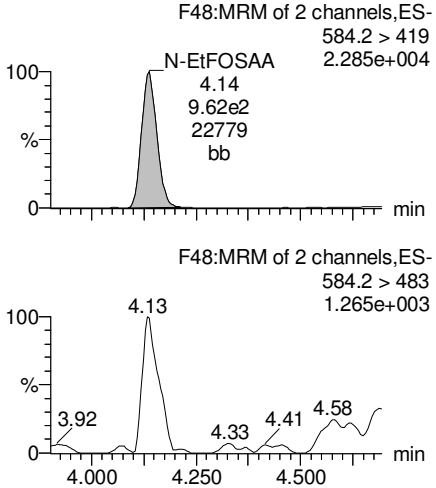
PFUnA



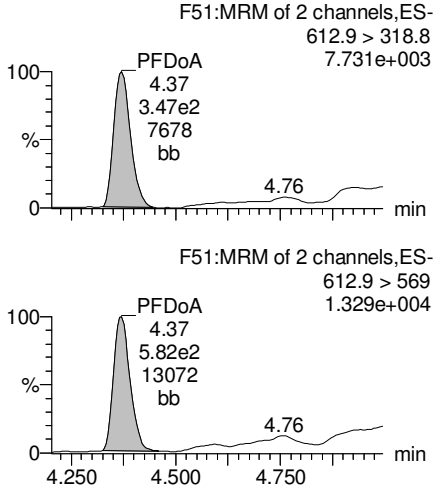
N-MeFOSAA



N-EtFOSAA



PFDoA



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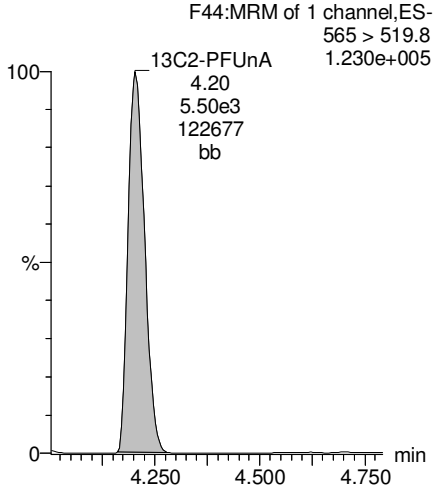
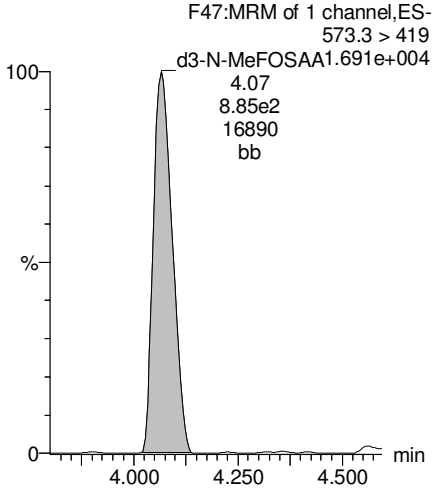
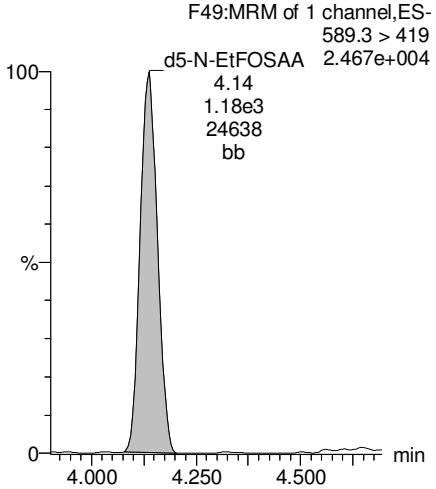


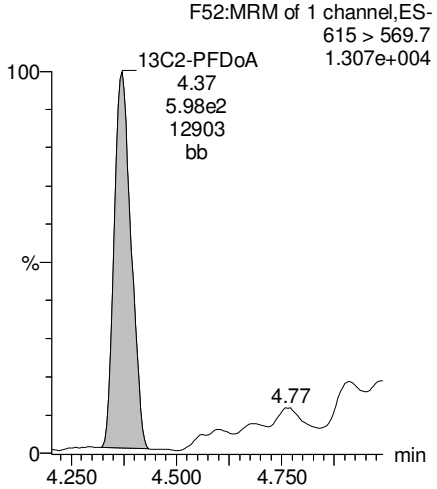
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFDoA



AP 8/16/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-40.qld

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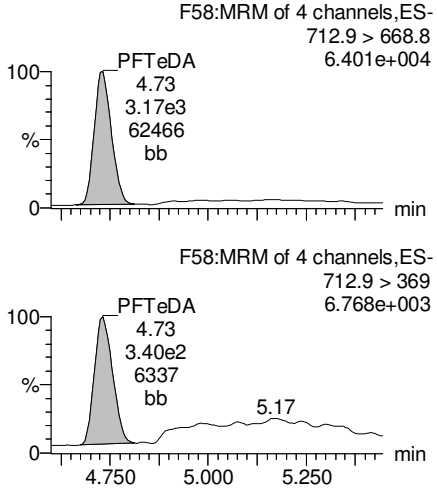
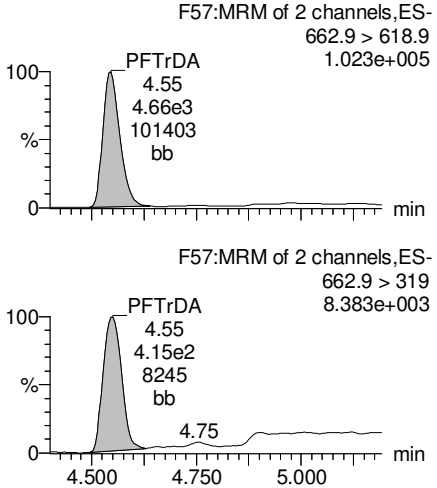
Printed: Wednesday, August 16, 2017 10:06:48 Pacific Daylight Time

Name: 170811M2_40, Date: 12-Aug-2017, Time: 01:22:19, ID: B7H0073-MSD1@20X Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

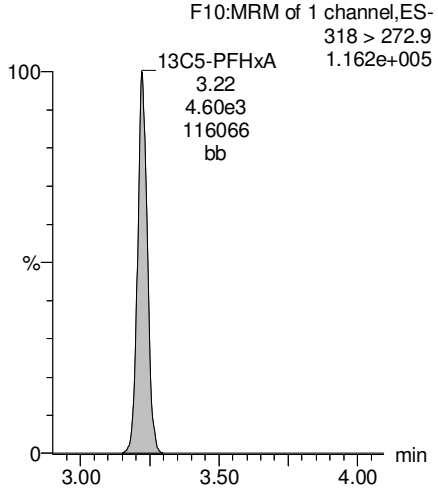
PFTeDA



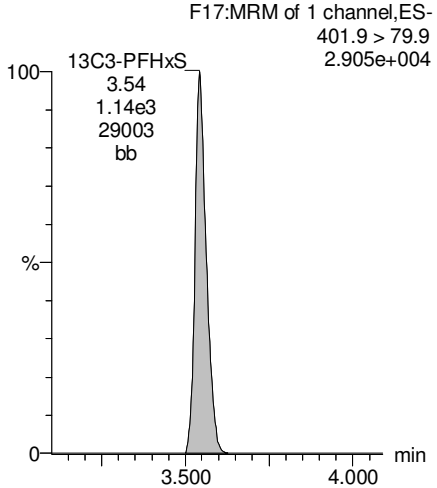
PFTrDA



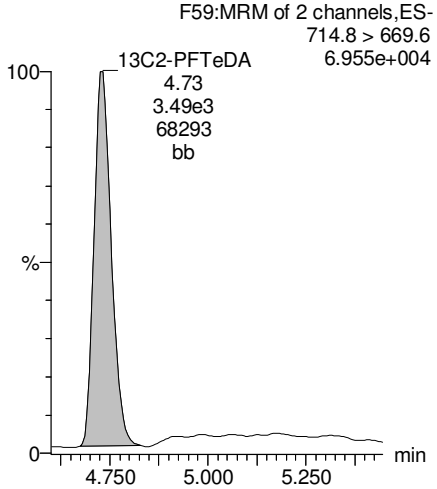
13C5-PFHxA



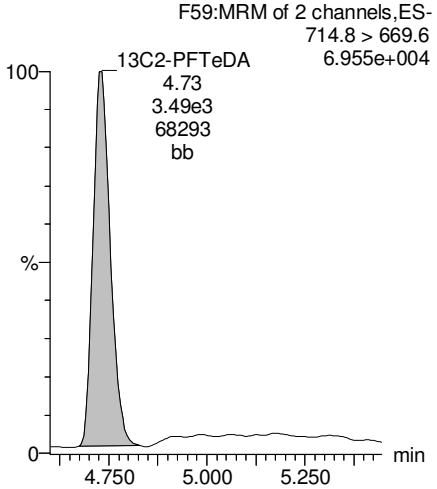
13C3-PFHxS



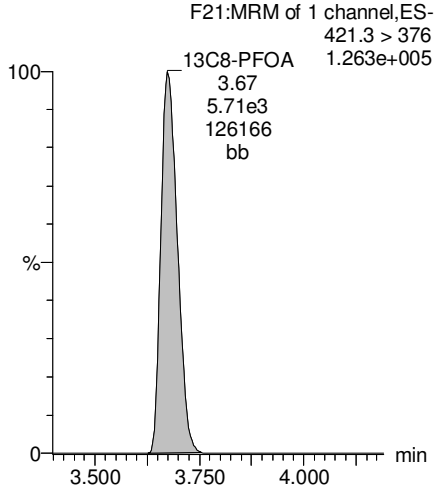
13C2-PFTeDA



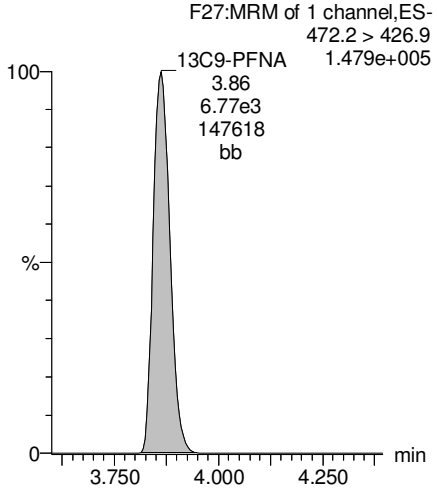
13C2-PFTeDA



13C8-PFOA



13C9-PFNA



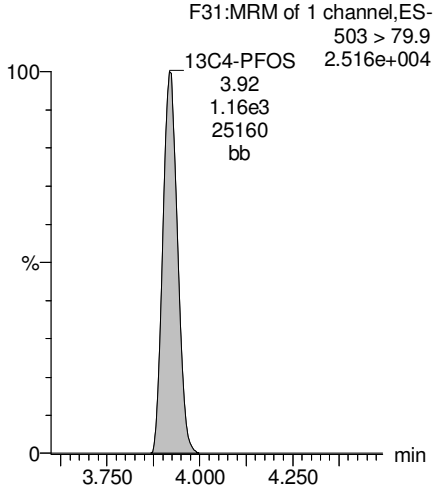
AP 8/16/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-40.qld

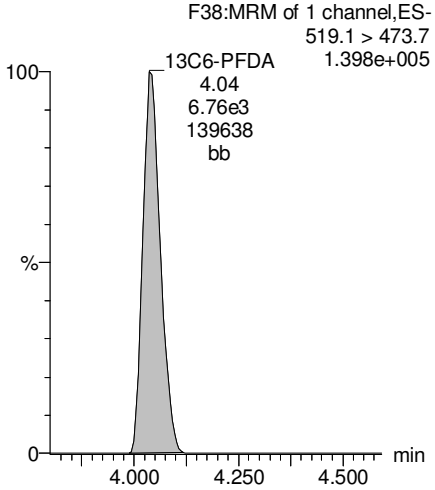
Last Altered: Saturday, August 12, 2017 13:09:38 Pacific Daylight Time
Printed: Wednesday, August 16, 2017 10:06:48 Pacific Daylight Time

Name: 170811M2_40, Date: 12-Aug-2017, Time: 01:22:19, ID: B7H0073-MSD1@20X Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

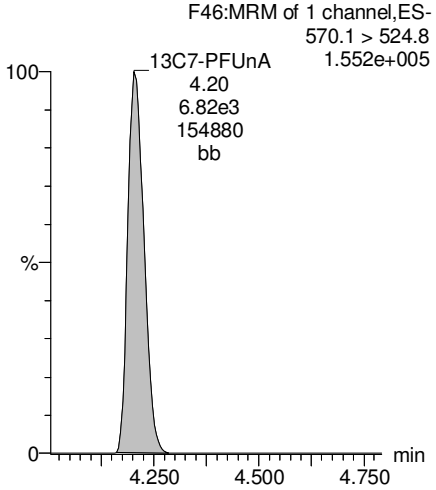
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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Vista Analytical Laboratory

Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170810M2\170810M2-73.qld

Last Altered: Tuesday, August 15, 2017 09:57:19 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 09:57:52 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 14 Aug 2017 15:12:43
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_73, Date: 11-Aug-2017, Time: 09:12:50, ID: 1700925-05RE2 I001MW52X-170724 0.00133, Description: I001MW52X-170724

	#	Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	5	PFHpA	363 > 318.9	1.93e5	8.46e4		0.0013	3.51	3.52	56.9	37500	
2	32	13C4-PFHpA	367.2 > 321.8	8.46e4	1.13e5	0.384	0.0013	3.51	3.52	7.46	14600	77.7
3	52	13C5-PFHxA	318 > 272.9	1.13e5	1.13e5	1.000	0.0013	3.26	3.27	10.0	7520	100.0

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Vista Analytical Laboratory

Rev'd: MM 8/17/17

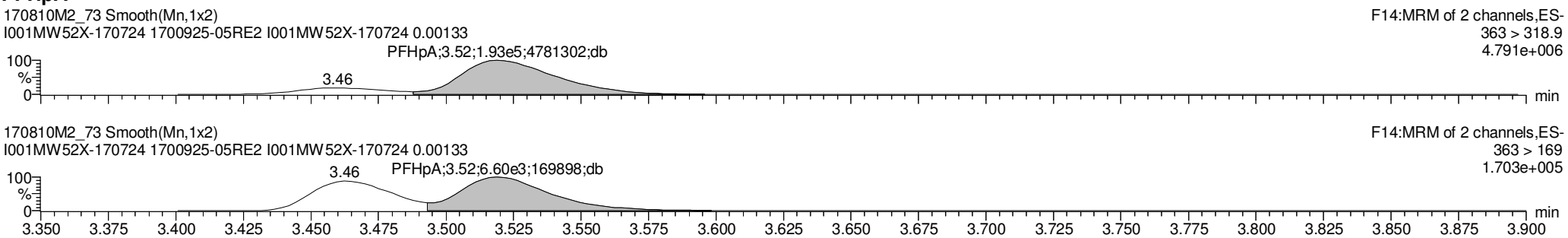
Dataset: U:\Q4.PRO\results\170810M2\170810M2-73.qld

Last Altered: Tuesday, August 15, 2017 09:57:19 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 09:57:52 Pacific Daylight Time

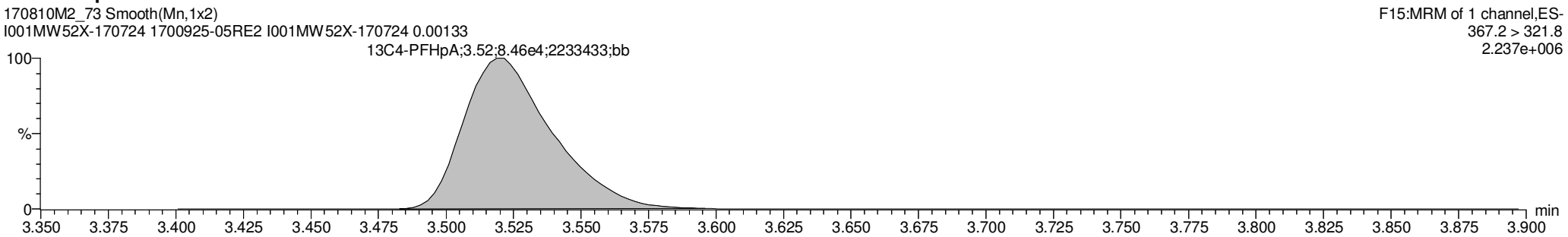
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 14 Aug 2017 15:12:43
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_73, Date: 11-Aug-2017, Time: 09:12:50, ID: 1700925-05RE2 I001MW52X-170724 0.00133, Description: I001MW52X-170724

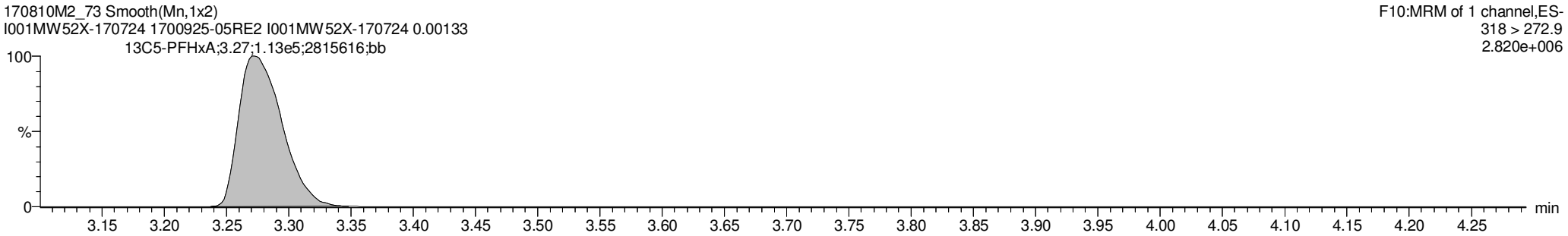
PFHpA



13C4-PFHpA



13C5-PFHxA



GM 8/15/17

Vista Analytical Laboratory

Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-17.qld

Last Altered: Saturday, August 12, 2017 12:51:58 Pacific Daylight Time
Printed: Saturday, August 12, 2017 12:52:19 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_17, Date: 11-Aug-2017, Time: 21:16:40, ID: 1700925-05RE2 I001MW52X-170724 0.00133, Description: I001MW52X-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7	6.35e4	1.13e4	0.0013		3.06	3.01	141	61700	
2	4	PFHxA	313.2 > 268.9	1.34e6	3.17e4	0.0013		3.26	3.23	425	253000 E	
3	5	~~PFHpA~~ NOT USED	~~363 > 318.9~~	~~1.98e5~~	~~8.11e4~~	~~0.0013~~		~~3.51~~	~~3.48~~	~~60.9~~	~~40200~~	
4	6	PFHxS	398.9 > 79.6	1.72e5	5.96e3	0.0013		3.58	3.55	720	363000 E	
5	8	PFOA	413 > 368.7	2.67e6	8.77e4	0.0013		3.71	3.68	761	584000 E	
6	10	PFNA	462.9 > 418.8	1.83e3	1.03e5	0.0013		3.90	3.87	0.447		
7	12	PFOS	499 > 79.9	2.07e4	2.03e4	0.0013		3.96	3.86	25.5	18100	
8	13	PFDA	513 > 468.8		9.72e4	0.0013		4.08				
9	15	N-MeFOSAA	570.1 > 419		1.95e4	0.0013		4.11				
10	16	N-EtFOSAA	584.2 > 419		1.85e4	0.0013		4.18				
11	17	PFUnA	562.9 > 518.9	2.60e2	1.17e5	0.0013		4.25	4.22	0.0552		
12	19	PFDoA	612.9 > 318.8		1.18e4	0.0013		4.42				

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Vista Analytical Laboratory

Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-17.qld

Last Altered: Saturday, August 12, 2017 12:51:58 Pacific Daylight Time
Printed: Saturday, August 12, 2017 12:52:30 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_17, Date: 11-Aug-2017, Time: 21:16:40, ID: 1700925-05RE2 I001MW52X-170724 0.00133, Description: I001MW52X-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21	PFTrDA	662.9 > 618.9		1.18e4	0.0013		4.59				
2	22	PFTeDA	712.9 > 668.8		7.49e4	0.0013		4.78				
3	30	13C3-PFBS	302 > 98.8	1.13e4	1.12e5	0.0013	0.033	3.06	3.01	1.01	23000	122.5
4	31	13C2-PFHxA	315 > 269.8	3.17e4	1.12e5	0.0013	0.304	3.26	3.23	2.83	7000	93.1
5	32	13C4-PFHpA	367.2 > 321.8	8.11e4	1.12e5	0.0013	0.384	3.51	3.48	7.24	14200	75.4
6	33	18O2-PFHxS	403 > 102.6	5.96e3	1.49e4	0.0013	0.417	3.58	3.55	10.0	18100	96.1
7	35	13C2-PFOA	414.9 > 369.7	8.77e4	8.31e4	0.0013	1.132	3.71	3.68	26.4	17500	93.2
8	36	13C5-PFNA	468.2 > 422.9	1.03e5	1.22e5	0.0013	0.946	3.90	3.87	20.9	16600	88.6
9	38	13C8-PFOS	507 > 79.9	2.03e4	2.00e4	0.0013	1.040	3.96	3.92	25.3	18300	97.4
10	39	13C2-PFDA	515.1 > 469.9	9.72e4	1.40e5	0.0013	0.971	4.08	4.04	17.4	13500	71.7

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Vista Analytical Laboratory

Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-17.qld

Last Altered: Saturday, August 12, 2017 12:51:58 Pacific Daylight Time
Printed: Saturday, August 12, 2017 12:52:45 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_17, Date: 11-Aug-2017, Time: 21:16:40, ID: 1700925-05RE2 I001MW52X-170724 0.00133, Description: I001MW52X-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	1.95e4	1.33e5	0.0013	0.018	4.11	4.07	3.66	155000	63.4
2	42	d5-N-EtFOSAA	589.3 > 419	1.85e4	1.33e5	0.0013	0.018	4.18	4.14	3.47	143000	58.6
3	43	13C2-PFUnA	565 > 519.8	1.17e5	1.33e5	0.0013	1.085	4.25	4.21	22.0	15300	81.2
4	44	13C2-PFDoA	615 > 569.7	1.18e4	1.33e5	0.0013	0.123	4.42	4.38	2.22	13500	72.0
5	46	13C2-PFTeDA	714.8 > 669.6	7.49e4	1.33e5	0.0013	0.798	4.78	4.74	14.1	13200	70.5
6	52	13C5-PFHxA	318 > 272.9	1.12e5	1.12e5	0.0013	1.000	3.26	3.23	10.0	7520	100.0
7	53	13C3-PFHxS	401.9 > 79.9	1.49e4	1.49e4	0.0013	1.000	3.58	3.55	25.0	18800	100.0
8	54	13C8-PFOA	421.3 > 376	8.31e4	8.31e4	0.0013	1.000	3.71	3.68	25.0	18800	100.0
9	55	13C9-PFNA	472.2 > 426.9	1.22e5	1.22e5	0.0013	1.000	3.90	3.87	25.0	18800	100.0
10	56	13C4-PFOS	503 > 79.9	2.00e4	2.00e4	0.0013	1.000	3.96	3.92	25.0	18800	100.0
11	57	13C6-PFDA	519.1 > 473.7	1.40e5	1.40e5	0.0013	1.000	4.08	4.04	25.0	18800	100.0
12	58	13C7-PFUnA	570.1 > 524.8	1.33e5	1.33e5	0.0013	1.000	4.25	4.21	25.0	18800	100.0
13	59	Total PFBS	299 > 79.7	6.35e4	1.13e4	0.0013		3.06		141	61700	
14	60	Total PFHxS	398.9 > 79.6	1.72e5	5.96e3	0.0013		3.58		720	363000 E	
15	61	Total PFOA	413 > 368.7	3.09e6	8.77e4	0.0013		3.71		880	675000 E	
16	62	Total PFOS	499 > 79.9	2.07e4	2.03e4	0.0013		3.96		25.5	18100	
17	63	Total N-Me-FOSAA	570.1 > 419	0.00e0	1.95e4	0.0013		4.11		0.000		
18	64	Total N-EtFOSAA	584.2 > 419	0.00e0	1.85e4	0.0013		4.18		0.000		

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Dataset: U:\Q4.PRO\results\170811M2\170811M2-17.qld

Last Altered: Saturday, August 12, 2017 12:51:58 Pacific Daylight Time
Printed: Saturday, August 12, 2017 12:52:45 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_17, Date: 11-Aug-2017, Time: 21:16:40, ID: 1700925-05RE2 I001MW52X-170724 0.00133, Description: I001MW52X-170724

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3	PFBS	299 > 79.7	3.01	63473.930	11276.536	140.721	MM	61694.0

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.55	171672.781	5961.695	719.899	MM	363000.7

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7	3.68	2669286.500	87664.141	761.225	db	583666.5
2	61	Total PFOA	413 > 368.7	3.63	411939.281	87664.141	117.477	dd	89976.5
3	61	Total PFOA	413 > 368.7	3.56	6147.015	87664.141	1.753	bd	1228.2

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.86	20703.883	20275.381	25.528	MM	18082.1

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

AP 8/12/2017

Vista Analytical Laboratory

Rev'd: MM 8/13/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-17.qld

Last Altered: Saturday, August 12, 2017 12:51:58 Pacific Daylight Time
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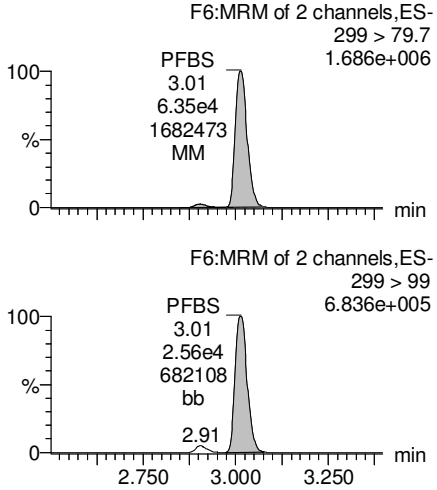
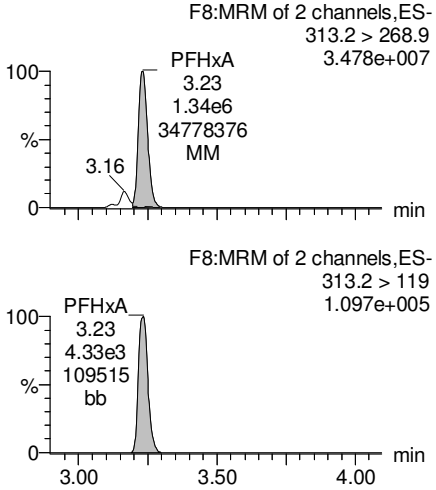
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_17, Date: 11-Aug-2017, Time: 21:16:40, ID: 1700925-05RE2 I001MW52X-170724 0.00133, Description: I001MW52X-170724

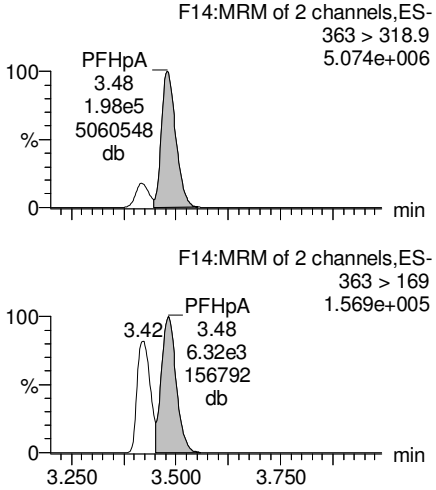
Total PFBS



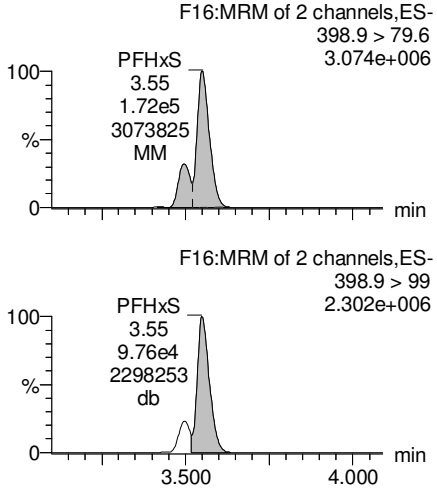
PFHxA



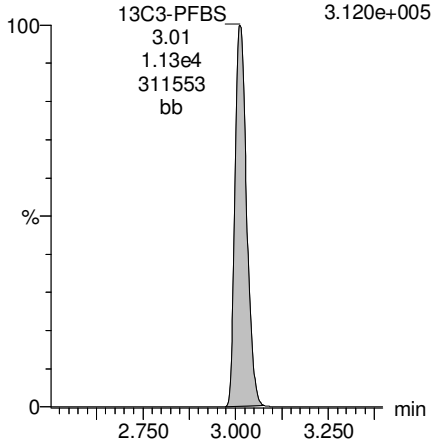
PFHpA



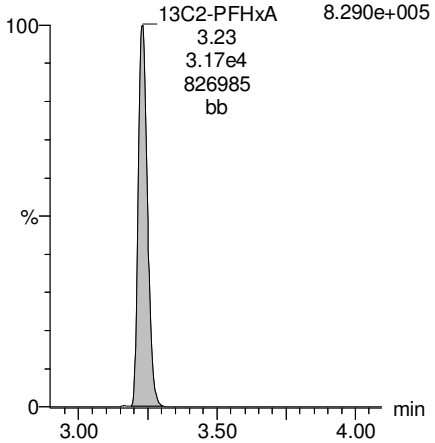
Total PFHxS



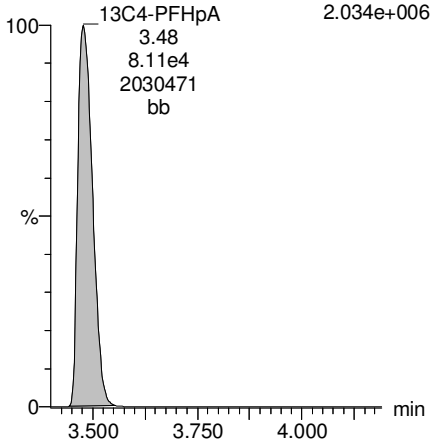
13C3-PFBS



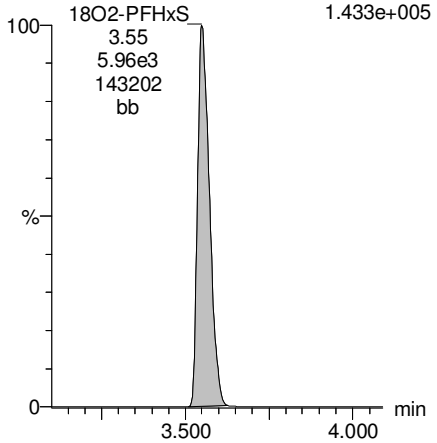
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



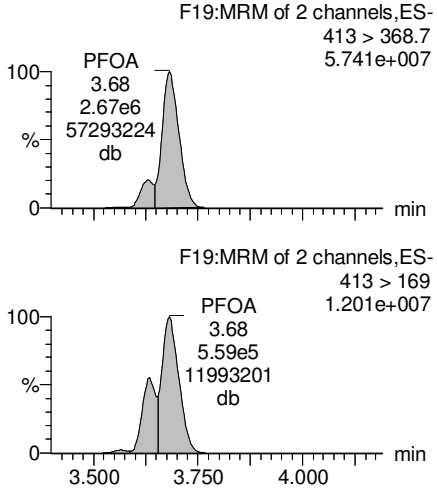
AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-17.qld

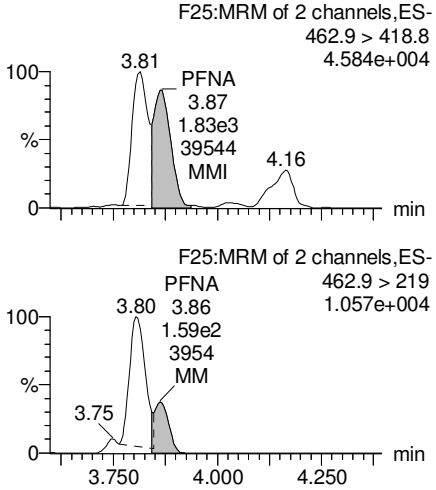
Last Altered: Saturday, August 12, 2017 12:51:58 Pacific Daylight Time
Printed: Saturday, August 12, 2017 12:52:45 Pacific Daylight Time

Name: 170811M2_17, Date: 11-Aug-2017, Time: 21:16:40, ID: 1700925-05RE2 I001MW52X-170724 0.00133, Description: I001MW52X-170724

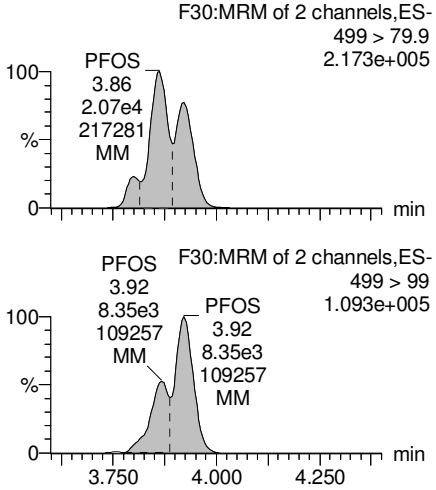
Total PFOA



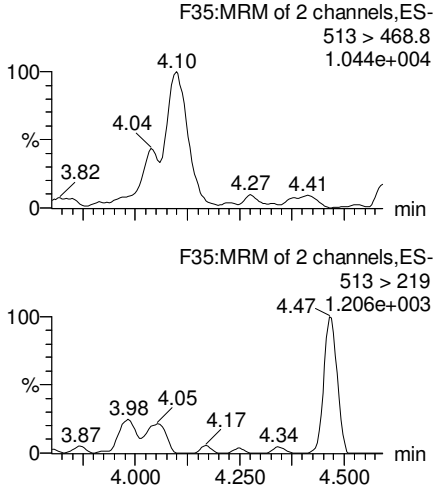
PFNA



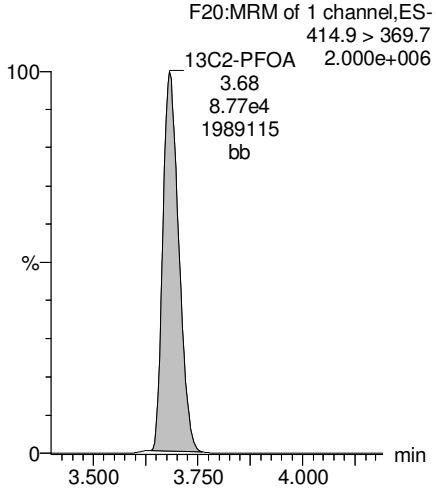
Total PFOS



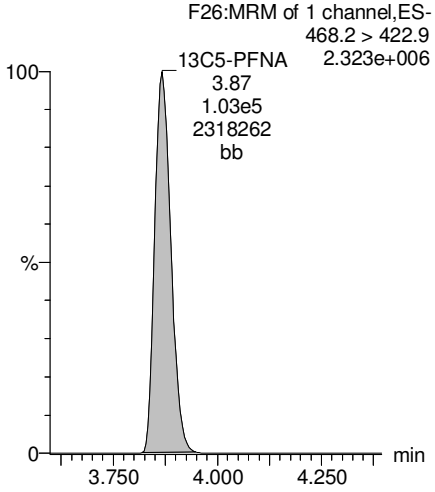
PFDA



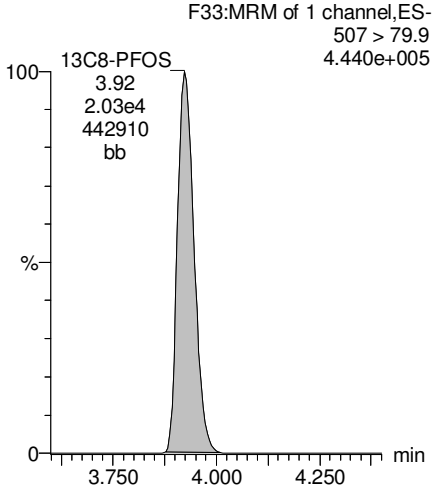
13C2-PFOA



13C5-PFNA



13C8-PFOS



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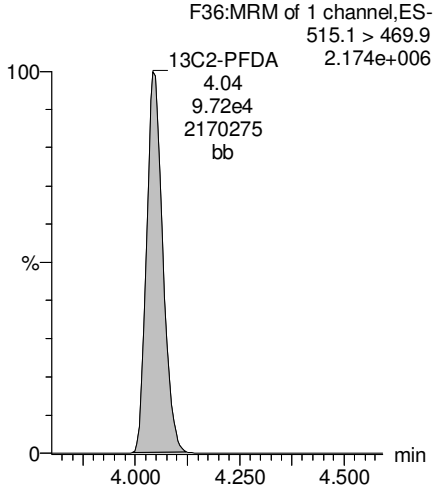

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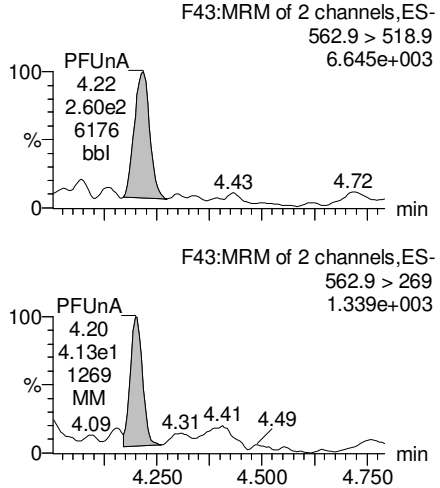
Dataset: U:\Q4.PRO\results\170811M2\170811M2-17.qld

Last Altered: Saturday, August 12, 2017 12:51:58 Pacific Daylight Time
Printed: Saturday, August 12, 2017 12:52:45 Pacific Daylight Time

Name: 170811M2_17, Date: 11-Aug-2017, Time: 21:16:40, ID: 1700925-05RE2 I001MW52X-170724 0.00133, Description: I001MW52X-170724

PFUnA



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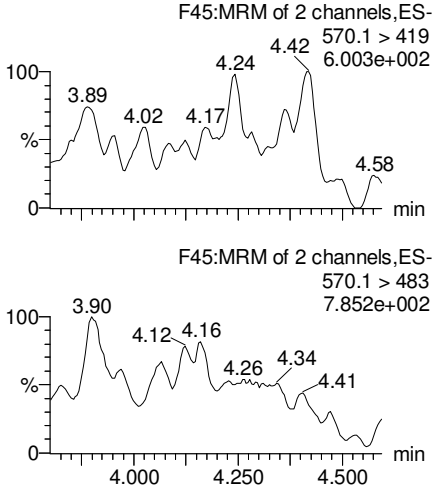

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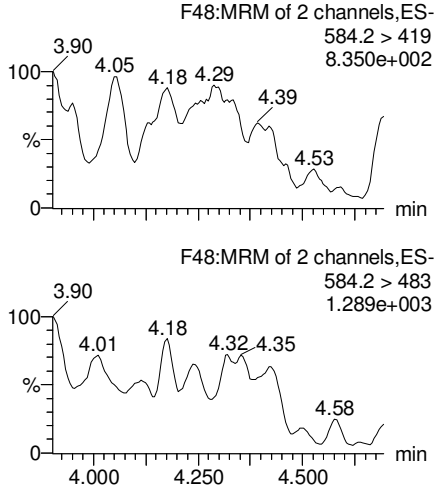

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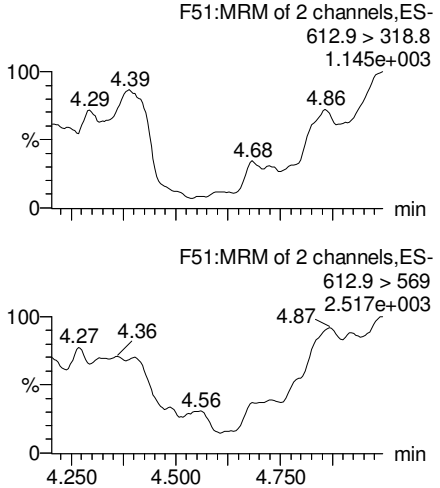

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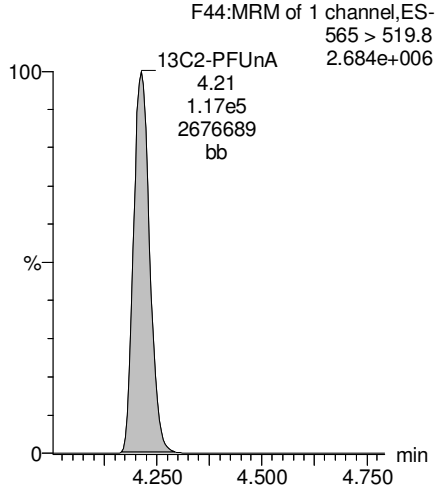

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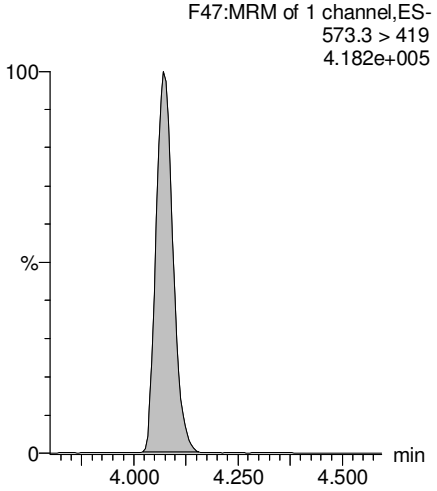

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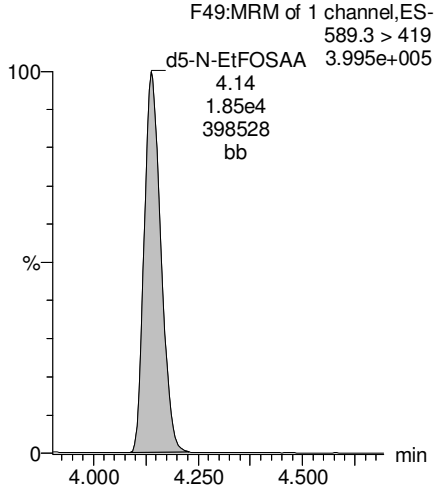

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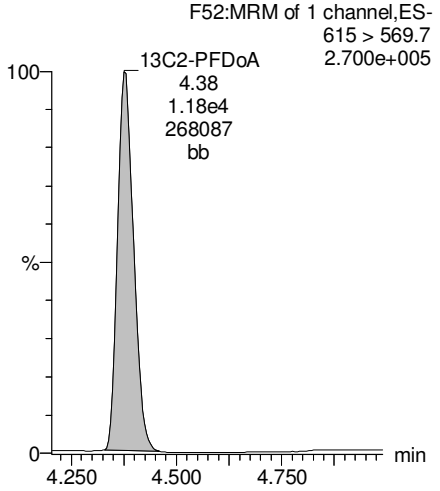

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Rev'd: MM 8/13/17

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Printed: Saturday, August 12, 2017 12:52:45 Pacific Daylight Time

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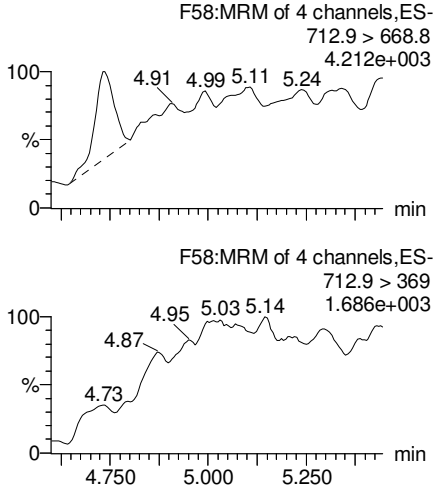

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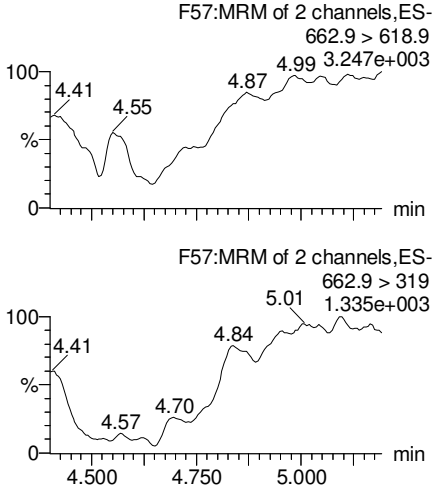

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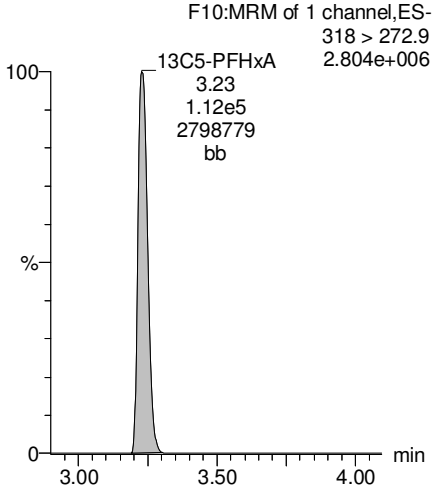

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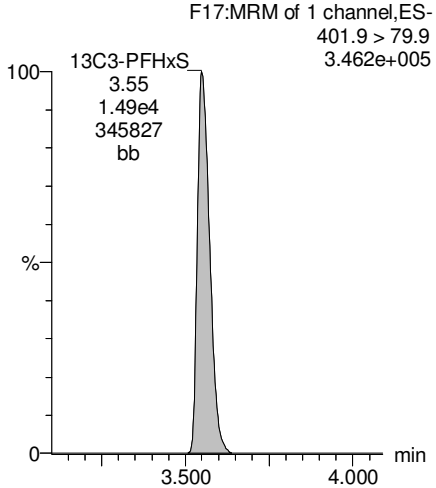

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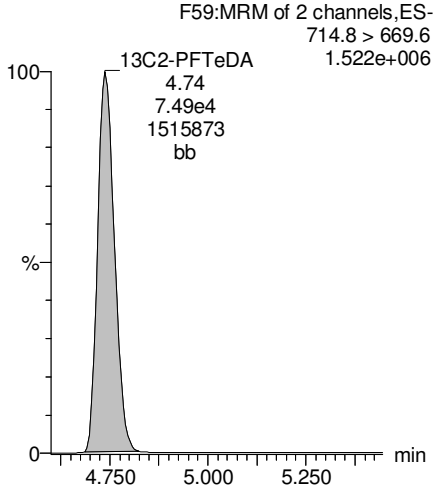

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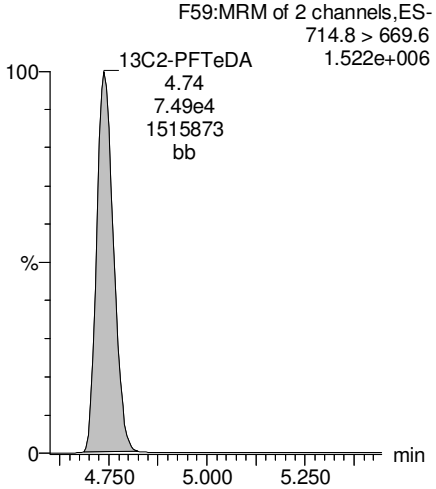
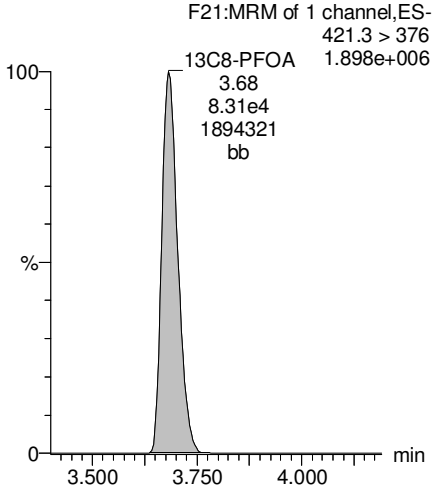


13C8-PFOA



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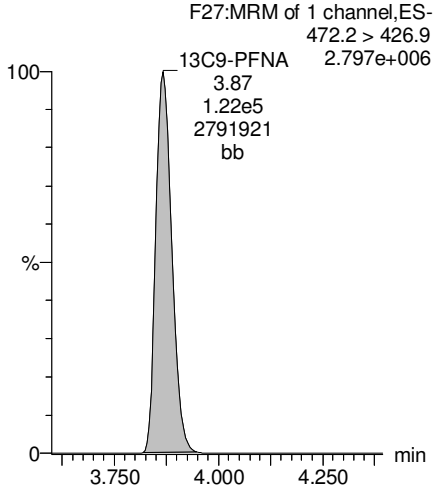

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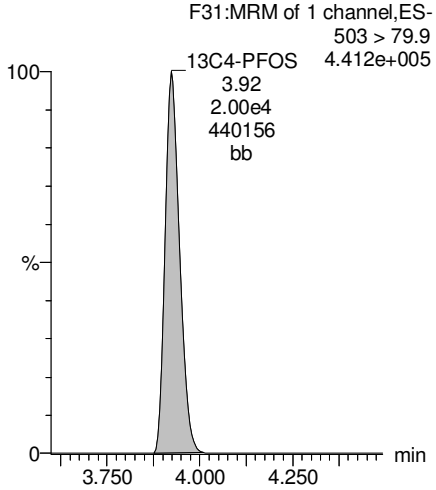
Name: 170811M2_17, Date: 11-Aug-2017, Time: 21:16:40, ID: 1700925-05RE2 I001MW52X-170724 0.00133, Description: I001MW52X-170724

13C4-PFOS



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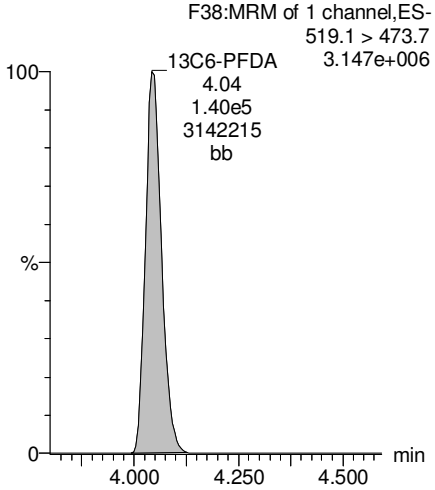
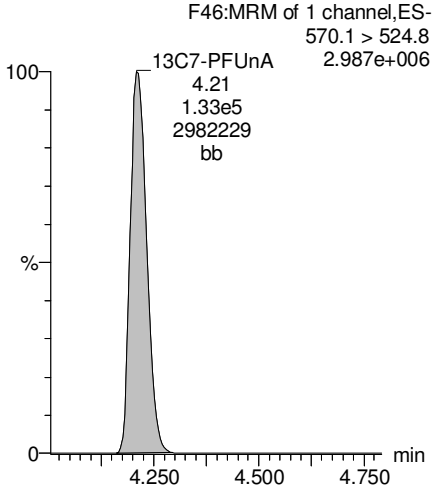


13C7-PFUnA



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Vista Analytical Laboratory

Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-44.qld

Last Altered: Saturday, August 12, 2017 13:21:58 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 14:50:35 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_44, Date: 12-Aug-2017, Time: 02:05:00, ID: 1700925-05RE2@20X I001MW52X-170724 0.00133, Description: I001MW52X-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	4	PFHxA	313.2 > 268.9	5.77e4	1.23e3	0.0013		3.26	3.22	467	278000	
2	6	PFHxS	398.9 > 79.6	1.36e4	4.79e2	0.0013		3.58	3.54	710	357000	
3	8	PFOA	413 > 368.7	1.91e5	6.52e3	0.0013		3.71	3.67	732	562000	
4	31	13C2-PFHxA	315 > 269.8	1.23e3	4.56e3	0.0013	0.304	3.26	3.22	2.71	6710	89.2
5	33	18O2-PFHxS	403 > 102.6	4.79e2	1.10e3	0.0013	0.417	3.58	3.55	10.9	19600	104.4
6	35	13C2-PFOA	414.9 > 369.7	6.52e3	6.54e3	0.0013	1.132	3.71	3.67	24.9	16600	88.1
7	52	13C5-PFHxA	318 > 272.9	4.56e3	4.56e3	0.0013	1.000	3.26	3.22	10.0	7520	100.0
8	53	13C3-PFHxS	401.9 > 79.9	1.10e3	1.10e3	0.0013	1.000	3.58	3.54	25.0	18800	100.0
9	54	13C8-PFOA	421.3 > 376	6.54e3	6.54e3	0.0013	1.000	3.71	3.68	25.0	18800	100.0

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Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-44.qld

Last Altered: Saturday, August 12, 2017 13:21:58 Pacific Daylight Time
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Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_44, Date: 12-Aug-2017, Time: 02:05:00, ID: 1700925-05RE2@20X I001MW52X-170724 0.00133, Description: I001MW52X-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	60	Total PFHxS	398.9 > 79.6	1.36e4	4.79e2	0.0013		3.58		710	357000	
2	61	Total PFOA	413 > 368.7	2.17e5	6.52e3	0.0013		3.71		831	637000	

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Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-44.qld

Last Altered: Saturday, August 12, 2017 13:21:58 Pacific Daylight Time
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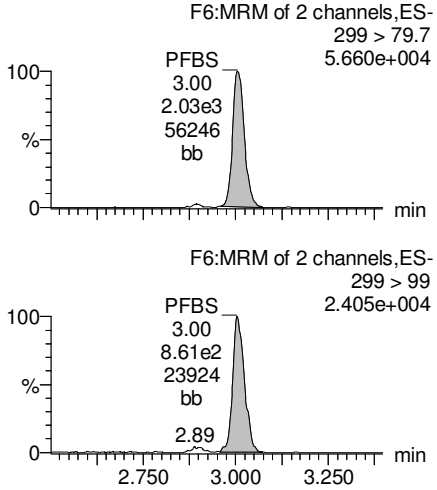
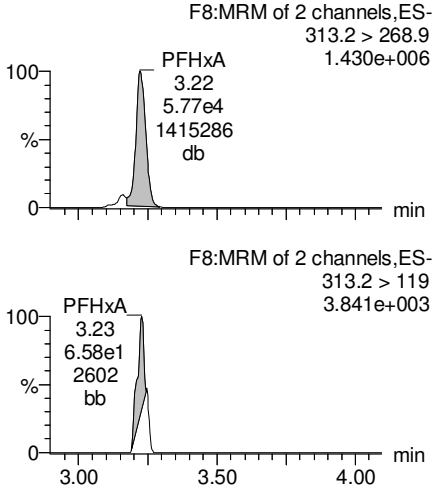
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_44, Date: 12-Aug-2017, Time: 02:05:00, ID: 1700925-05RE2@20X I001MW52X-170724 0.00133, Description: I001MW52X-170724

Total PFBS



PFHxA



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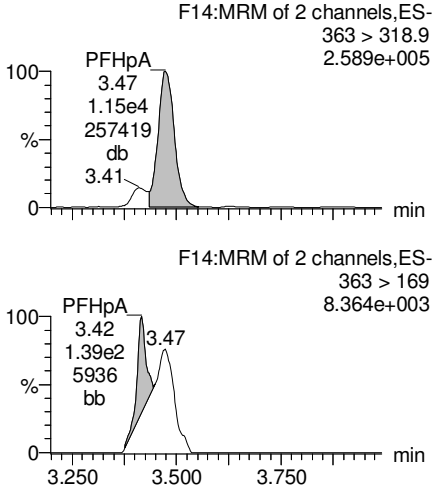

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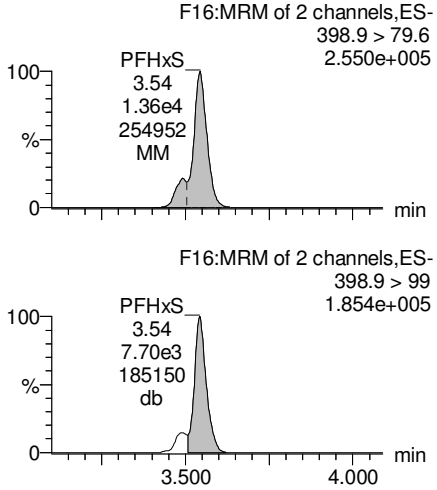

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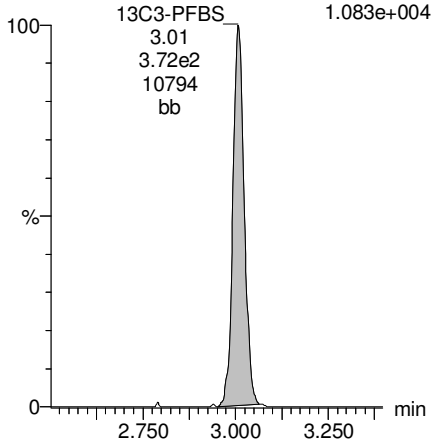

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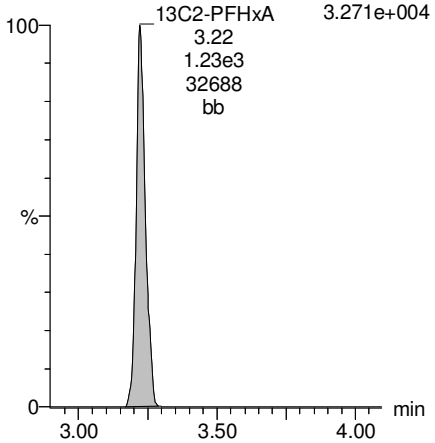

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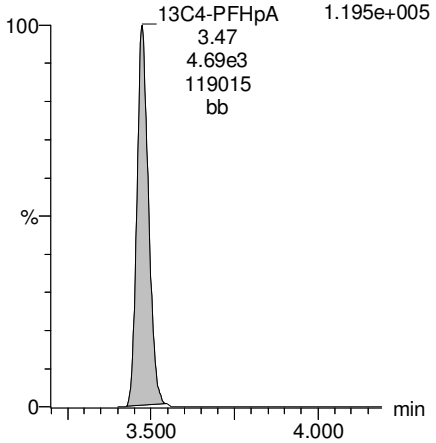

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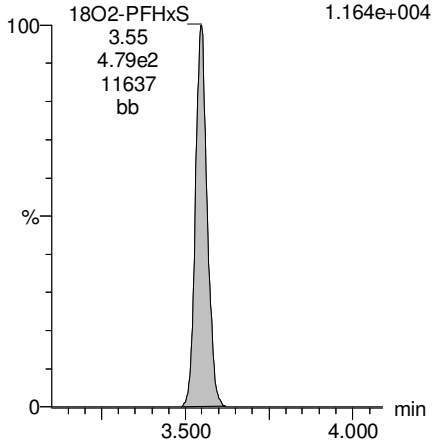

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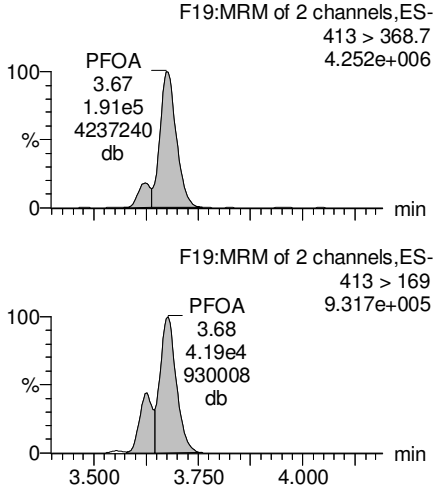
Total PFOA



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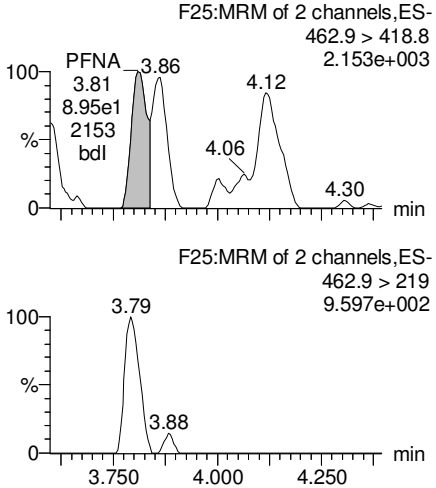
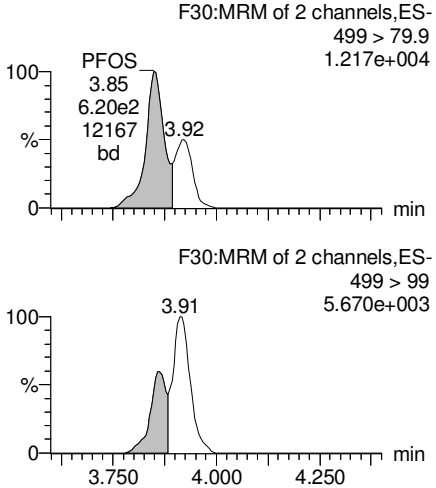


Total PFOS



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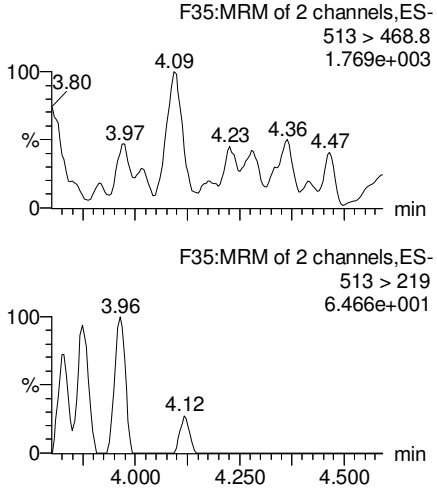

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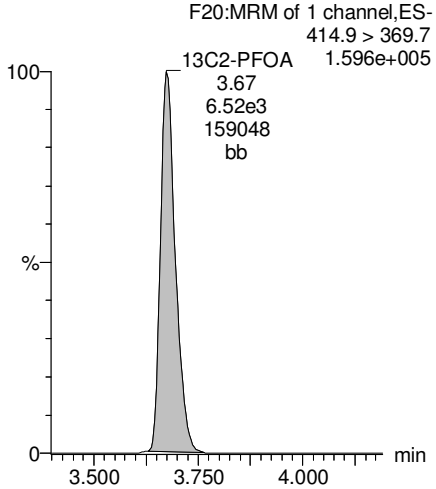

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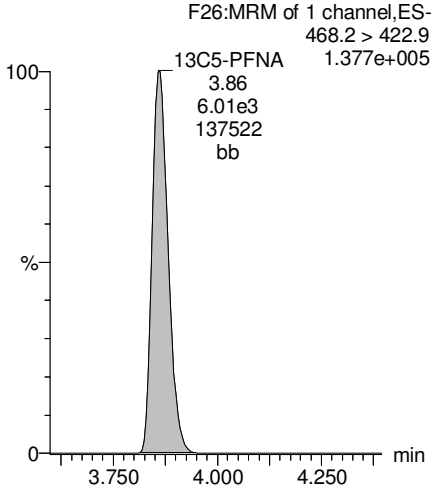
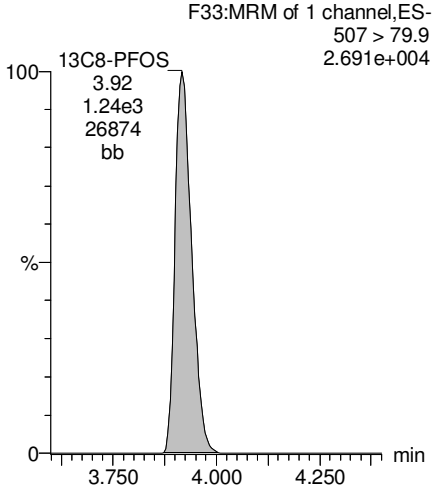


13C8-PFOS



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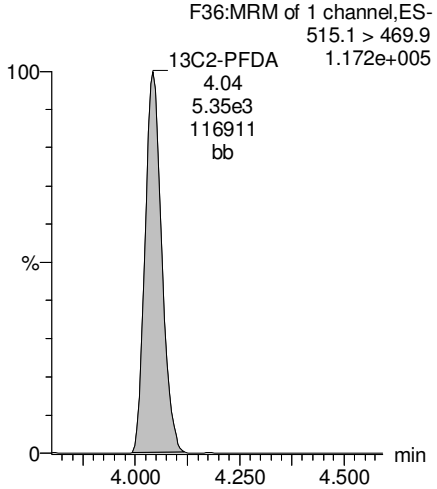

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Rev'd: MM 8/15/17

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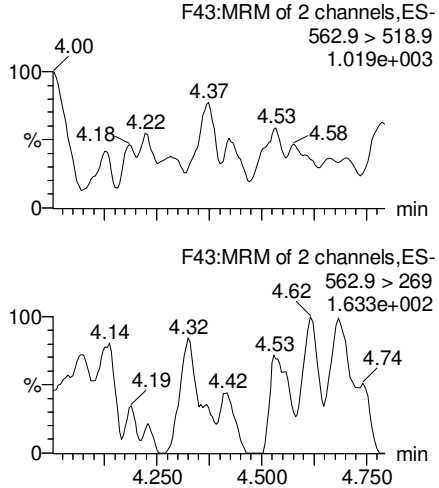

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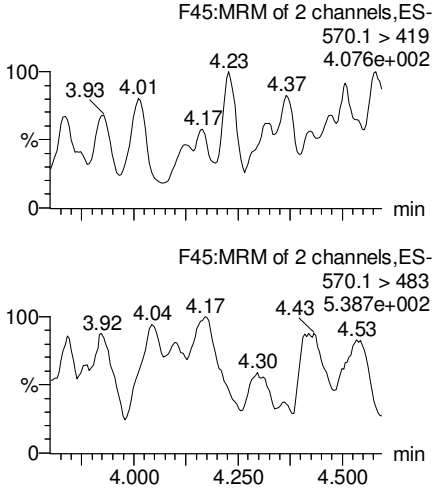

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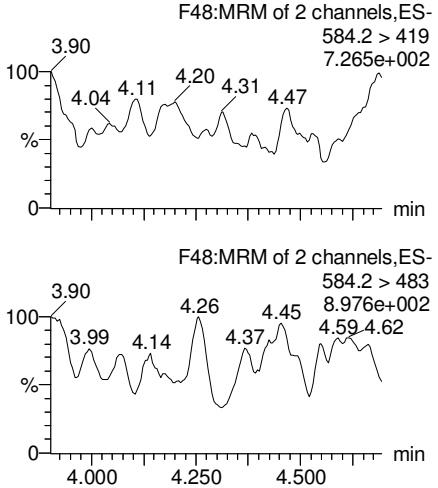

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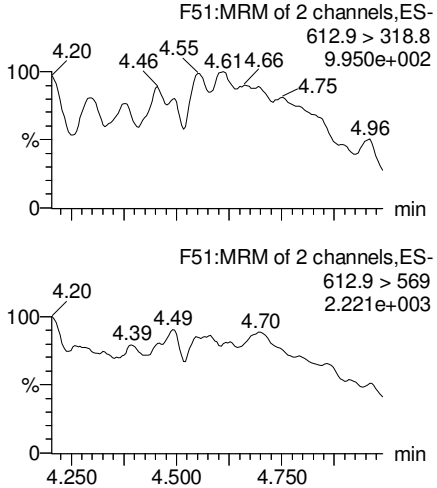
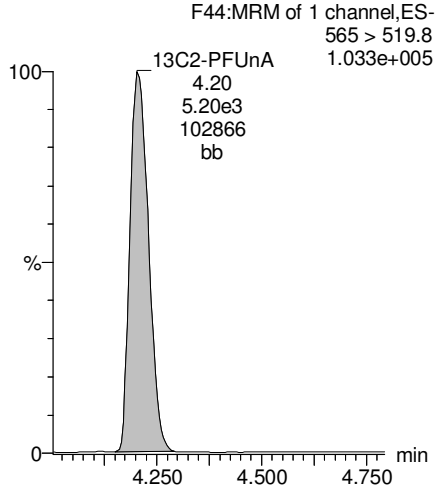


13C2-PFUnA



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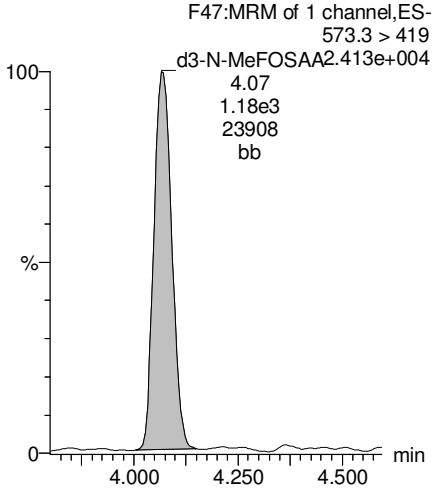

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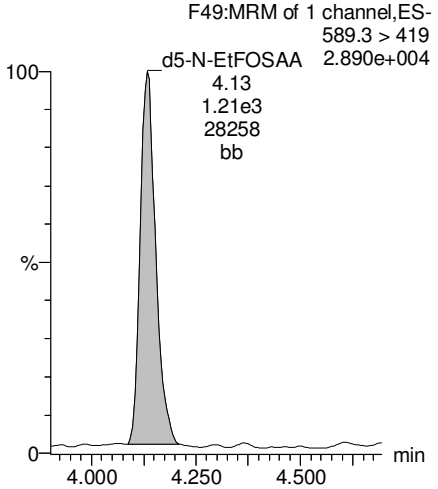

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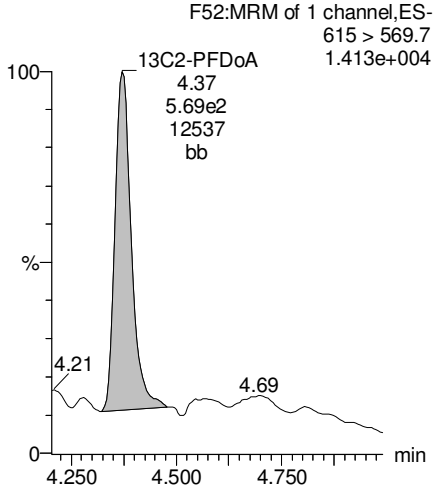

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Vista Analytical Laboratory

Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-44.qld

Last Altered: Saturday, August 12, 2017 13:21:58 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 14:50:45 Pacific Daylight Time

Name: 170811M2_44, Date: 12-Aug-2017, Time: 02:05:00, ID: 1700925-05RE2@20X I001MW52X-170724 0.00133, Description: I001MW52X-170724

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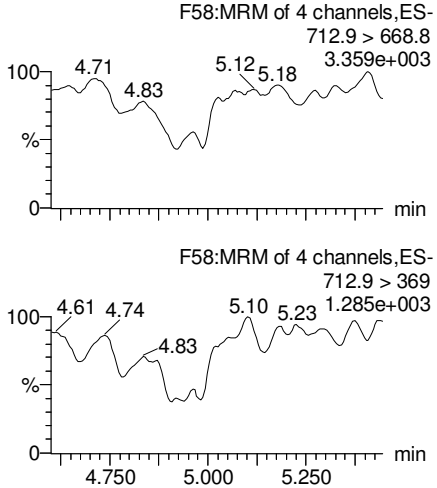
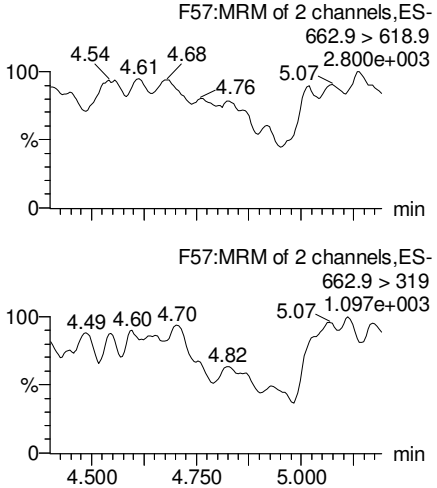
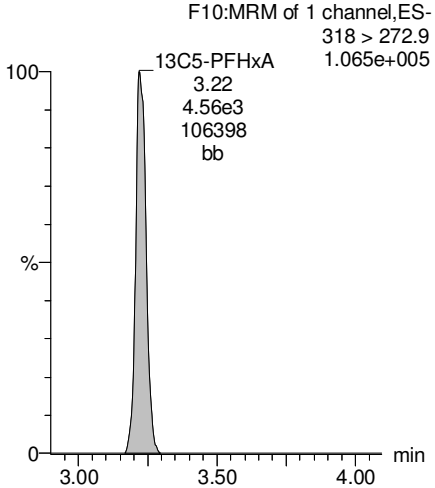


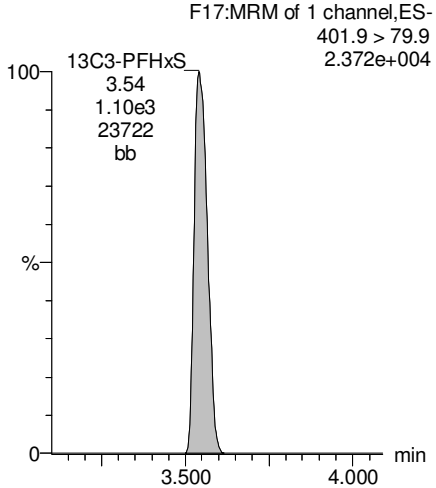
PFTrDA



13C5-PFHxA



13C3-PFHxS



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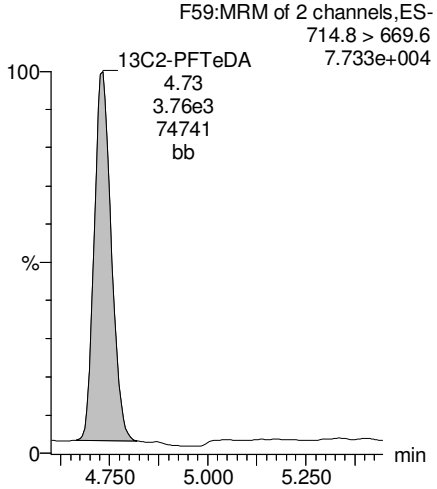

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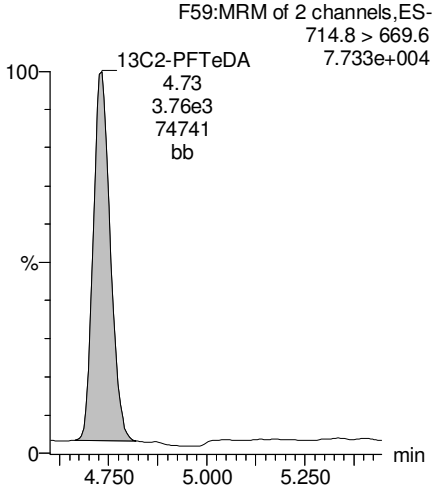
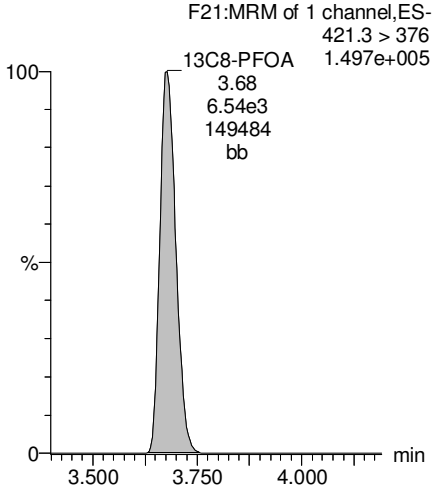
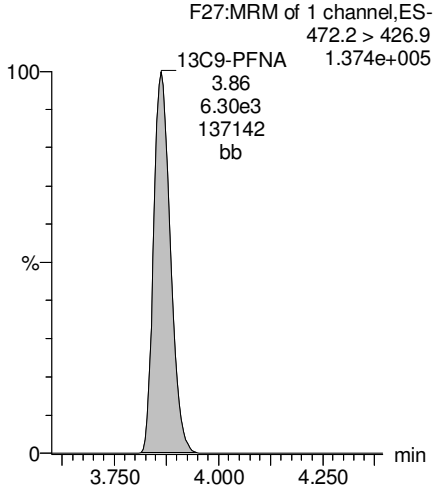


13C8-PFOA



13C9-PFNA



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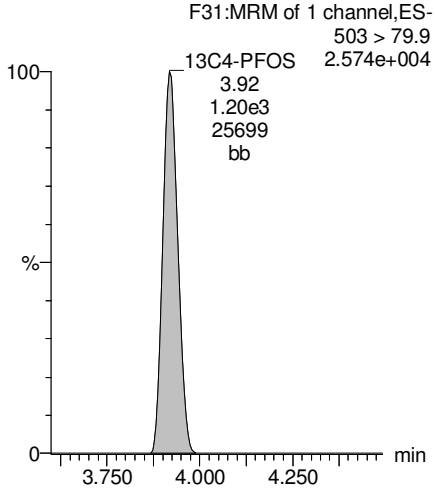
Dataset: U:\Q4.PRO\results\170811M2\170811M2-44.qld

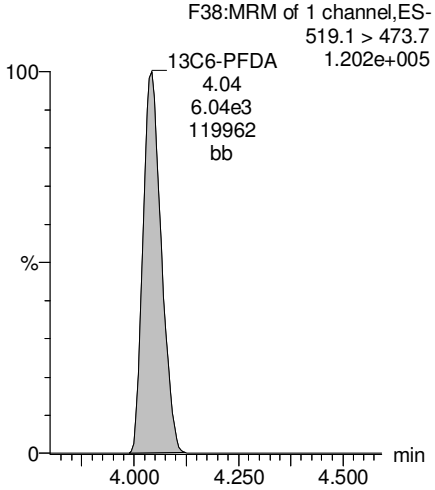
Last Altered: Saturday, August 12, 2017 13:21:58 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 14:50:45 Pacific Daylight Time

Name: 170811M2_44, Date: 12-Aug-2017, Time: 02:05:00, ID: 1700925-05RE2@20X I001MW52X-170724 0.00133, Description: I001MW52X-170724

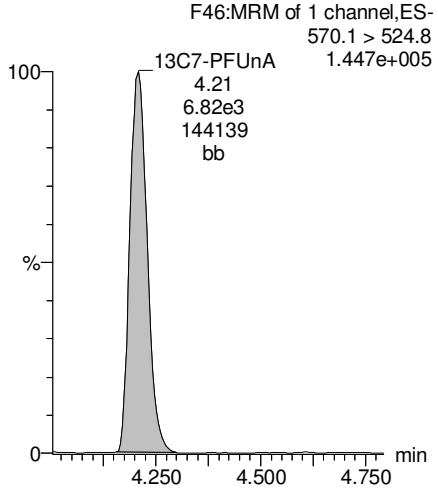
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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Vista Analytical Laboratory

Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-8.qld

Last Altered: Saturday, August 12, 2017 13:44:55 Pacific Daylight Time
Printed: Saturday, August 12, 2017 17:48:41 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_8, Date: 11-Aug-2017, Time: 19:40:22, ID: B7H0074-BLK1 Method Blank 0.125, Description: Method Blank

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7		5.86e3	0.125		3.06				
2	4	PFHxA	313.2 > 268.9		1.67e4	0.125		3.26				
3	6	PFHxS	398.9 > 79.6	9.56e0	4.07e3	0.125		3.58	3.55	0.0294	0.689	
4	8	PFOA	413 > 368.7		4.89e4	0.125		3.71				
5	10	PFNA	462.9 > 418.8		4.17e4	0.125		3.90				
6	12	PFOS	499 > 79.9	2.33e1	8.68e3	0.125		3.96	3.87	0.0336	0.548	
7	13	PFDA	513 > 468.8		3.97e4	0.125		4.08				
8	15	N-MeFOSAA	570.1 > 419		6.77e3	0.125		4.11				
9	16	N-EtFOSAA	584.2 > 419		7.73e3	0.125		4.18				
10	17	PFUnA	562.9 > 518.9		4.45e4	0.125		4.25				
11	19	PFDoA	612.9 > 318.8		4.31e3	0.125		4.42				

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Vista Analytical Laboratory

Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-8.qld

Last Altered: Saturday, August 12, 2017 13:44:55 Pacific Daylight Time
Printed: Saturday, August 12, 2017 17:48:54 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_8, Date: 11-Aug-2017, Time: 19:40:22, ID: B7H0074-BLK1 Method Blank 0.125, Description: Method Blank

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21	PFTrDA	662.9 > 618.9		4.31e3	0.125		4.59				
2	22	PFTeDA	712.9 > 668.8		2.37e4	0.125		4.78				
3	30	13C3-PFBS	302 > 98.8	5.86e3	5.25e4	0.125	0.033	3.06	3.01	0.558	136	135.7
4	31	13C2-PFHxA	315 > 269.8	1.67e4	5.25e4	0.125	0.304	3.26	3.23	1.59	41.8	104.5
5	33	18O2-PFHxS	403 > 102.6	4.07e3	8.89e3	0.125	0.417	3.58	3.55	5.72	110	109.6
6	35	13C2-PFOA	414.9 > 369.7	4.89e4	4.51e4	0.125	1.132	3.71	3.68	13.6	95.8	95.8
7	36	13C5-PFNA	468.2 > 422.9	4.17e4	5.09e4	0.125	0.946	3.90	3.87	10.2	86.5	86.5

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Vista Analytical Laboratory

Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-8.qld

Last Altered: Saturday, August 12, 2017 13:44:55 Pacific Daylight Time
Printed: Saturday, August 12, 2017 17:49:15 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_8, Date: 11-Aug-2017, Time: 19:40:22, ID: B7H0074-BLK1 Method Blank 0.125, Description: Method Blank

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	38	13C8-PFOS	507 > 79.9	8.68e3	8.29e3	0.125	1.040	3.96	3.93	13.1	101	100.7
2	39	13C2-PFDA	515.1 > 469.9	3.97e4	5.20e4	0.125	0.971	4.08	4.05	9.53	78.5	78.5
3	41	d3-N-MeFOSAA	573.3 > 419	6.77e3	6.17e4	0.125	0.018	4.11	4.08	1.37	617	47.5
4	42	d5-N-EtFOSAA	589.3 > 419	7.73e3	6.17e4	0.125	0.018	4.18	4.14	1.57	688	52.9
5	43	13C2-PFUnA	565 > 519.8	4.45e4	6.17e4	0.125	1.085	4.25	4.21	9.03	66.5	66.5
6	44	13C2-PFDoA	615 > 569.7	4.31e3	6.17e4	0.125	0.123	4.42	4.38	0.873	56.7	56.7
7	46	13C2-PFTeDA	714.8 > 669.6	2.37e4	6.17e4	0.125	0.798	4.78	4.74	4.80	48.1	48.1
8	52	13C5-PFHxA	318 > 272.9	5.25e4	5.25e4	0.125	1.000	3.26	3.23	5.00	40.0	100.0
9	53	13C3-PFHxS	401.9 > 79.9	8.89e3	8.89e3	0.125	1.000	3.58	3.55	12.5	100	100.0
10	54	13C8-PFOA	421.3 > 376	4.51e4	4.51e4	0.125	1.000	3.71	3.68	12.5	100	100.0
11	55	13C9-PFNA	472.2 > 426.9	5.09e4	5.09e4	0.125	1.000	3.90	3.87	12.5	100	100.0
12	56	13C4-PFOS	503 > 79.9	8.29e3	8.29e3	0.125	1.000	3.96	3.93	12.5	100	100.0
13	57	13C6-PFDA	519.1 > 473.7	5.20e4	5.20e4	0.125	1.000	4.08	4.05	12.5	100	100.0
14	58	13C7-PFUnA	570.1 > 524.8	6.17e4	6.17e4	0.125	1.000	4.25	4.21	12.5	100	100.0
15	59	Total PFBS	299 > 79.7	0.00e0	5.86e3	0.125		3.06		0.000		
16	60	Total PFHxS	398.9 > 79.6	9.56e0	4.07e3	0.125		3.58		0.0294	0.689	
17	61	Total PFOA	413 > 368.7	0.00e0	4.89e4	0.125		3.71		0.000		
18	62	Total PFOS	499 > 79.9	2.33e1	8.68e3	0.125		3.96		0.0336	0.548	
19	63	Total N-Me-FOSAA	570.1 > 419	0.00e0	6.77e3	0.125		4.11		0.000		
20	64	Total N-EtFOSAA	584.2 > 419	0.00e0	7.73e3	0.125		4.18		0.000		

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Vista Analytical Laboratory

Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-8.qld

Last Altered: Saturday, August 12, 2017 13:44:55 Pacific Daylight Time
Printed: Saturday, August 12, 2017 17:49:15 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_8, Date: 11-Aug-2017, Time: 19:40:22, ID: B7H0074-BLK1 Method Blank 0.125, Description: Method Blank

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.55	9.563	4065.890	0.029	MM	0.7

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7			48923.547		MM-I	

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.87	23.329	8683.348	0.034	MM	0.5

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

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Dataset: U:\Q4.PRO\results\170811M2\170811M2-8.qld

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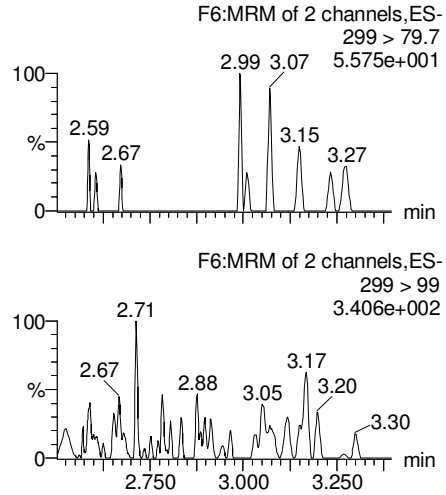
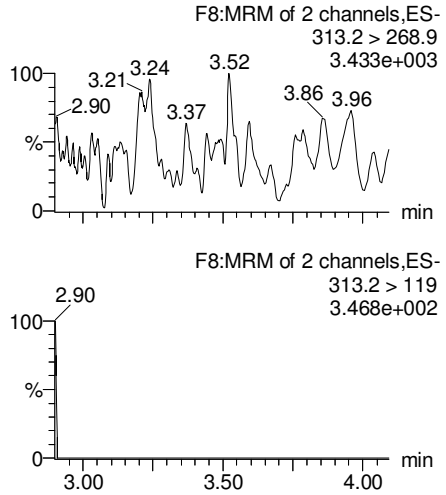
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_8, Date: 11-Aug-2017, Time: 19:40:22, ID: B7H0074-BLK1 Method Blank 0.125, Description: Method Blank

Total PFBS



PFHxA



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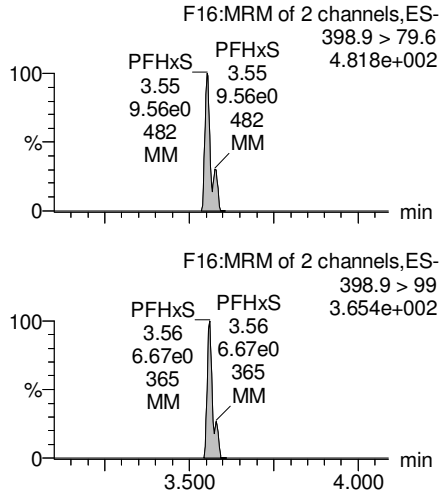

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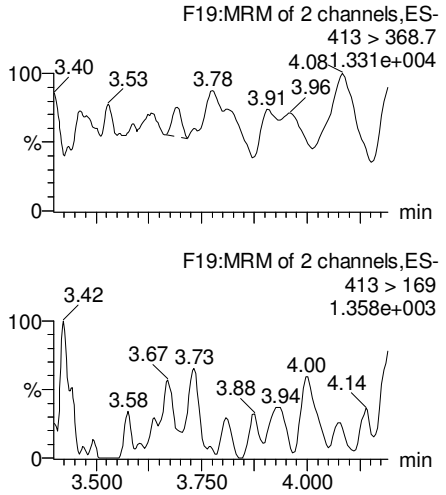
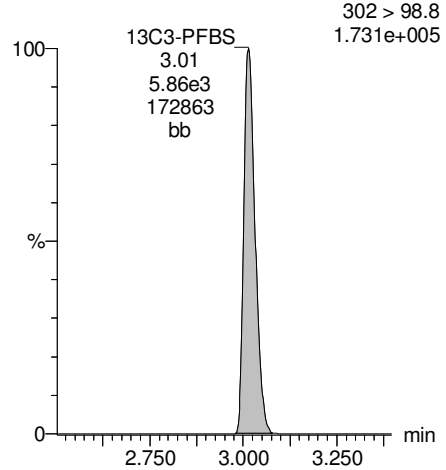


13C3-PFBS



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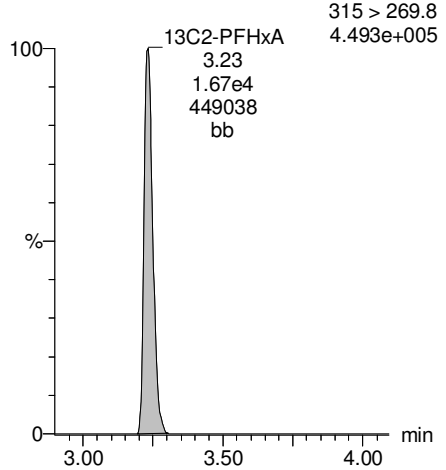
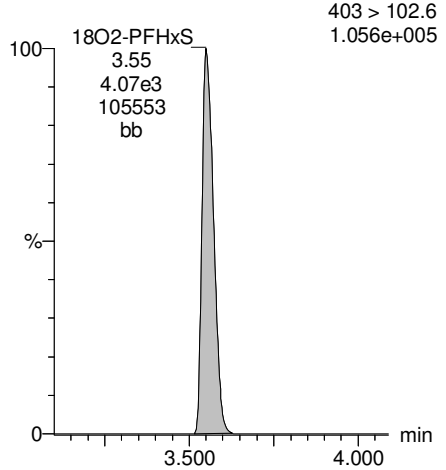


18O2-PFHxS



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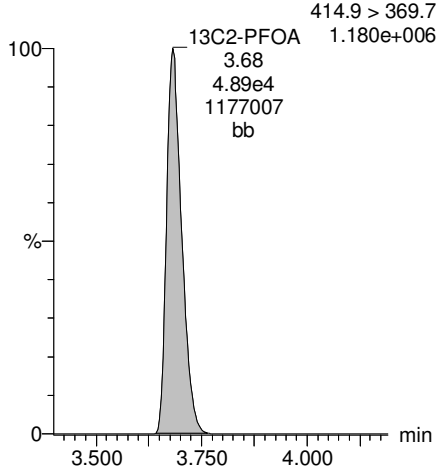

GM 8/12/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-8.qld

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Printed: Saturday, August 12, 2017 17:49:15 Pacific Daylight Time

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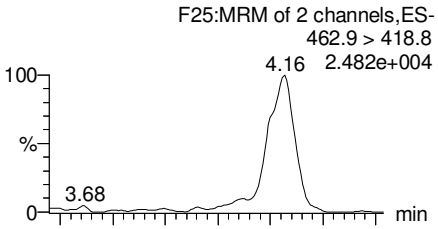
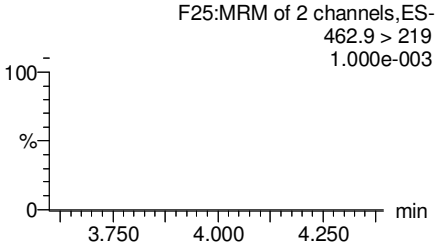
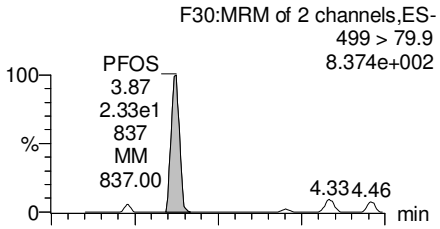
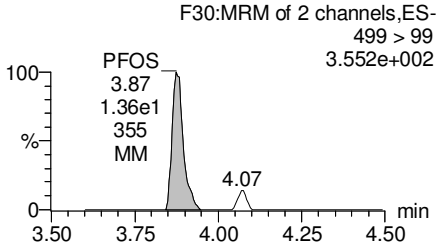




Total PFOS





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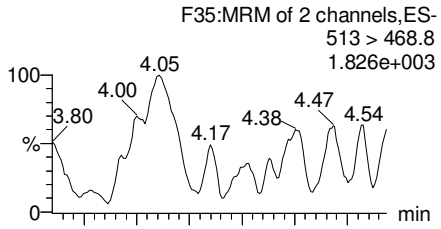
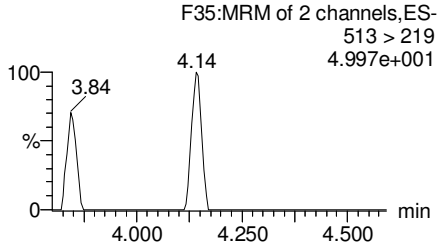
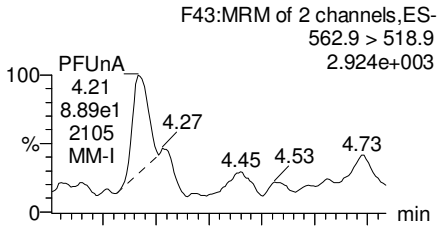
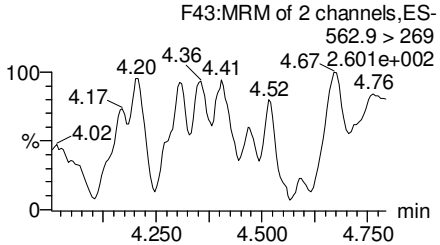


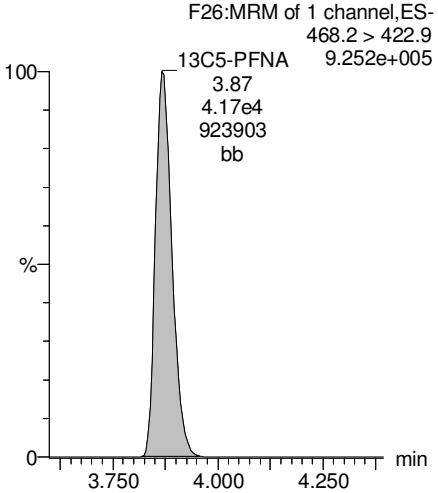


PFUnA

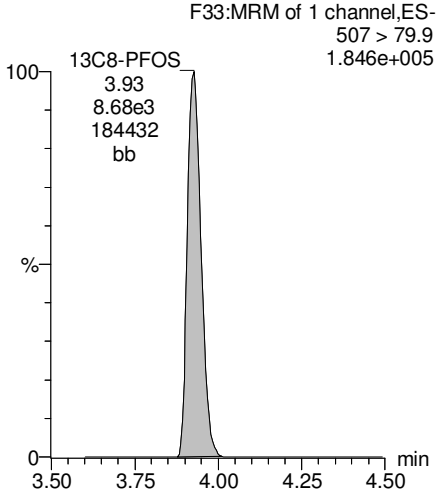




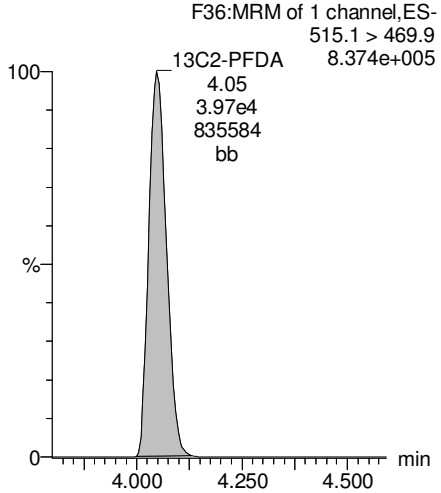
13C5-PFNA



13C8-PFOS



13C2-PFDA



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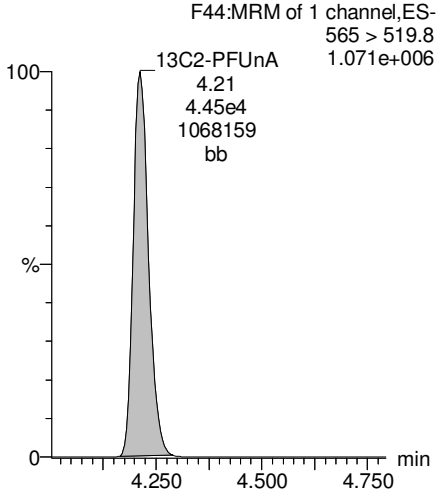


GM 8/12/17

Vista Analytical Laboratory

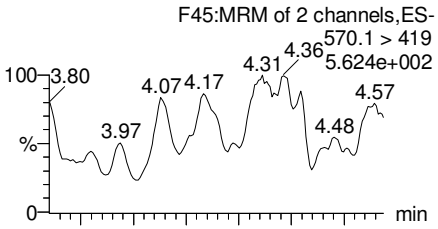
Rev'd: MM 8/15/17

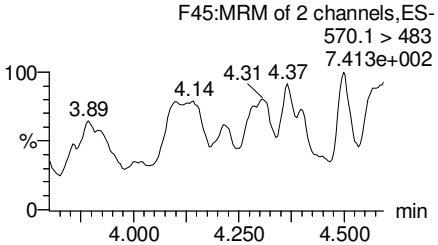
Dataset: U:\Q4.PRO\results\170811M2\170811M2-8.qld

Last Altered: Saturday, August 12, 2017 13:44:55 Pacific Daylight Time
Printed: Saturday, August 12, 2017 17:49:15 Pacific Daylight Time

Name: 170811M2_8, Date: 11-Aug-2017, Time: 19:40:22, ID: B7H0074-BLK1 Method Blank 0.125, Description: Method Blank

N-MeFOSAA





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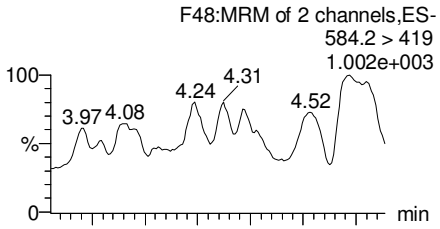
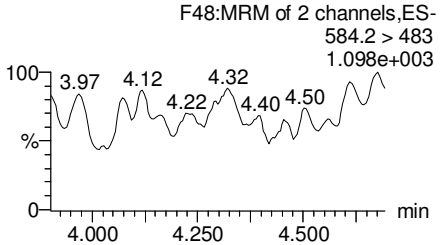
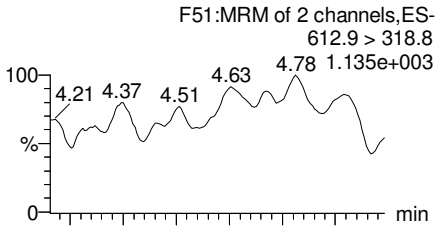
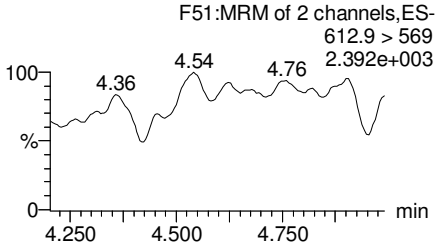


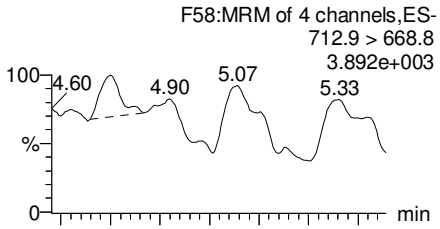


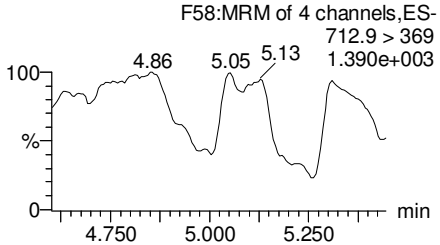
PFDoA





PFTeDA





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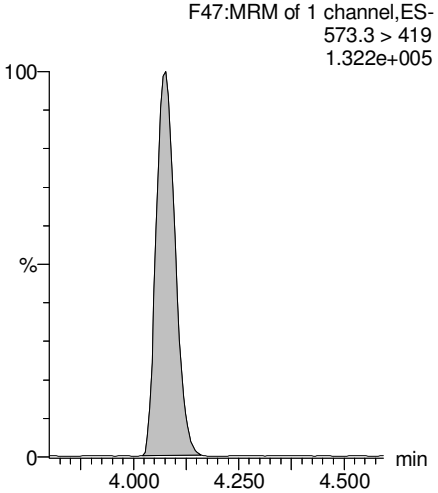
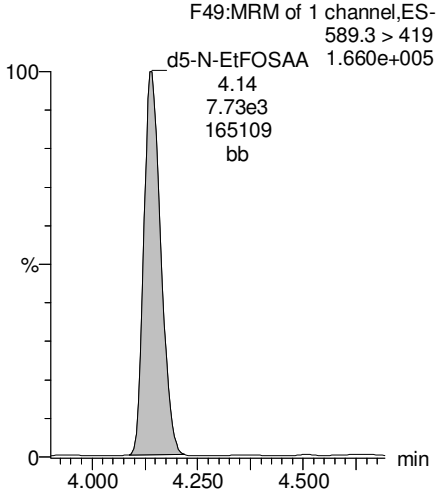
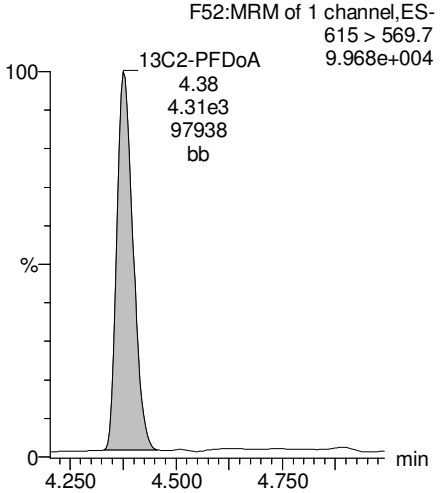


d5-N-EtFOSAA



13C2-PFDoA



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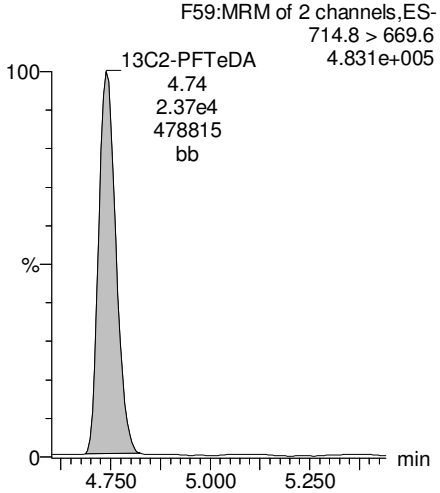

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Vista Analytical Laboratory

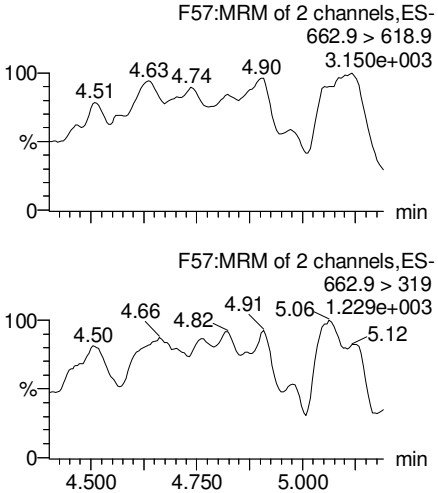
Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-8.qld

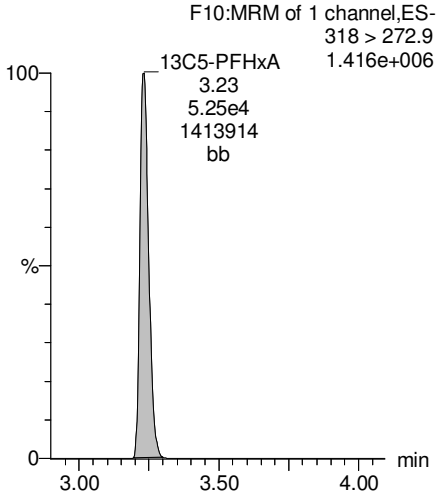
Last Altered: Saturday, August 12, 2017 13:44:55 Pacific Daylight Time
Printed: Saturday, August 12, 2017 17:49:15 Pacific Daylight Time

Name: 170811M2_8, Date: 11-Aug-2017, Time: 19:40:22, ID: B7H0074-BLK1 Method Blank 0.125, Description: Method Blank

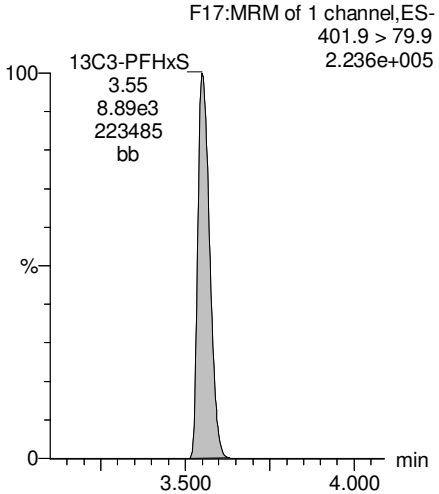
PFTrDA



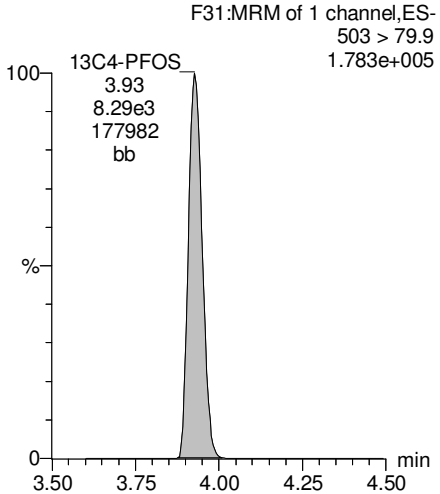
13C5-PFHxA



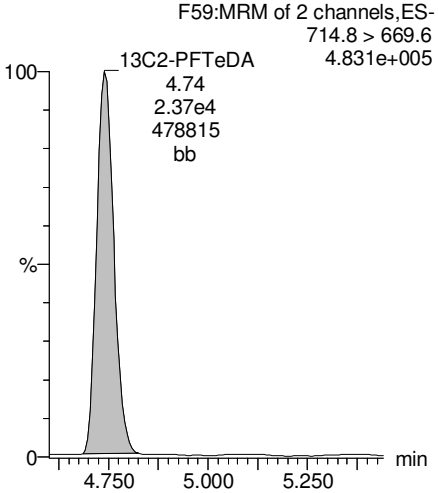
13C3-PFHxS



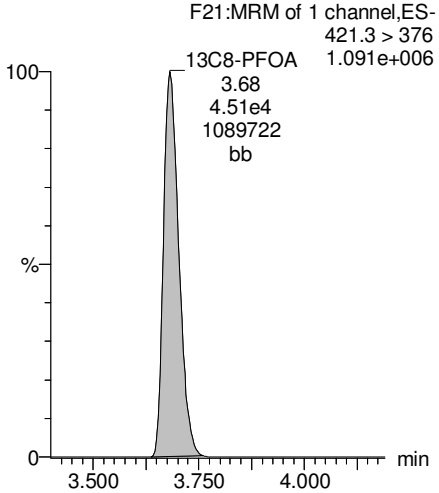
13C4-PFOS



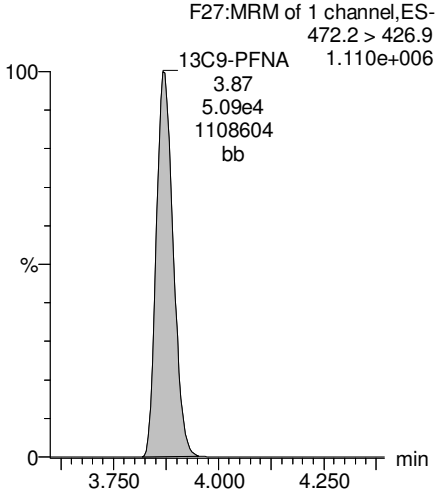
13C2-PFTeDA



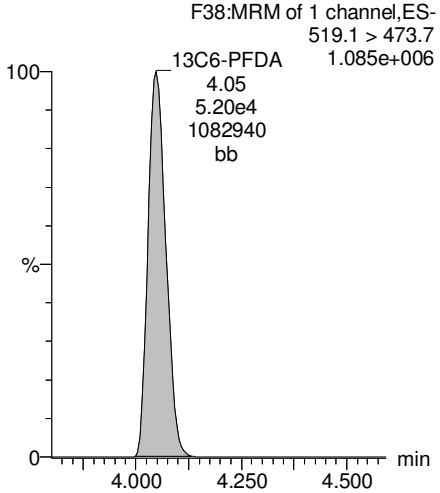
13C8-PFOA



13C9-PFNA



13C6-PFDA



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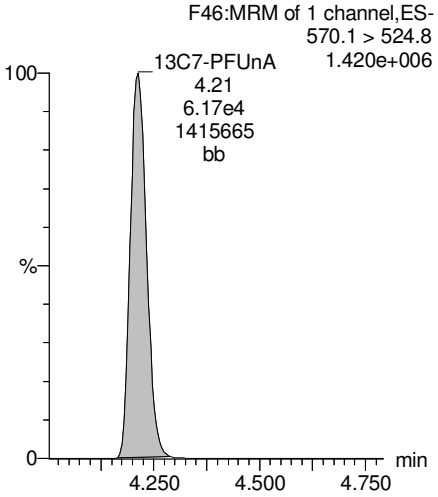
Dataset: U:\Q4.PRO\results\170811M2\170811M2-8.qld

Last Altered: Saturday, August 12, 2017 13:44:55 Pacific Daylight Time
Printed: Saturday, August 12, 2017 17:49:15 Pacific Daylight Time

Name: 170811M2_8, Date: 11-Aug-2017, Time: 19:40:22, ID: B7H0074-BLK1 Method Blank 0.125, Description: Method Blank

13C7-PFUnA



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Vista Analytical Laboratory

Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-5.qld

Last Altered: Saturday, August 12, 2017 17:45:10 Pacific Daylight Time
Printed: Saturday, August 12, 2017 17:50:41 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_5, Date: 11-Aug-2017, Time: 19:08:08, ID: B7H0074-BS1 OPR 0.125, Description: OPR

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7	8.97e3	6.12e3	0.125		3.06	3.01	18.3	84.7	105.9
2	4	PFHxA	313.2 > 268.9	4.96e4	1.75e4	0.125		3.26	3.22	14.2	85.9	107.4
3	6	PFHxS	398.9 > 79.6	5.26e3	3.50e3	0.125		3.58	3.54	18.8	85.4	106.7
4	8	PFOA	413 > 368.7	4.19e4	5.31e4	0.125		3.71	3.67	9.86	79.2	99.0
5	10	PFNA	462.9 > 418.8	4.28e4	4.74e4	0.125		3.90	3.86	11.3	87.9	109.9
6	12	PFOS	499 > 79.9	8.03e3	9.40e3	0.125		3.96	3.91	10.7	80.4	100.5
7	13	PFDA	513 > 468.8	4.00e4	4.86e4	0.125		4.08	4.04	10.3	72.0	90.0
8	15	N-MeFOSAA	570.1 > 419	1.01e4	8.76e3	0.125		4.11	4.07	187	77.4	96.8
9	16	N-EtFOSAA	584.2 > 419	8.95e3	9.00e3	0.125		4.18	4.13	162	82.6	103.3
10	17	PFUnA	562.9 > 518.9	3.16e4	5.19e4	0.125		4.25	4.20	7.60	74.4	93.0
11	19	PFDoA	612.9 > 318.8	2.92e3	4.85e3	0.125		4.42	4.36	7.53	71.8	89.8

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Vista Analytical Laboratory

Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-5.qld

Last Altered: Saturday, August 12, 2017 17:45:10 Pacific Daylight Time
Printed: Saturday, August 12, 2017 17:50:53 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_5, Date: 11-Aug-2017, Time: 19:08:08, ID: B7H0074-BS1 OPR 0.125, Description: OPR

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21	PFTrDA	662.9 > 618.9	3.43e4	4.85e3	0.125		4.59	4.53	88.4	69.6	86.9
2	22	PFTeDA	712.9 > 668.8	2.19e4	2.62e4	0.125		4.78	4.71	10.5	73.0	91.2
3	30	13C3-PFBS	302 > 98.8	6.12e3	5.55e4	0.125	0.033	3.06	3.01	0.551	134	134.2
4	31	13C2-PFHxA	315 > 269.8	1.75e4	5.55e4	0.125	0.304	3.26	3.22	1.57	41.4	103.6
5	33	18O2-PFHxS	403 > 102.6	3.50e3	9.11e3	0.125	0.417	3.58	3.54	4.81	92.2	92.2
6	35	13C2-PFOA	414.9 > 369.7	5.31e4	4.34e4	0.125	1.132	3.71	3.67	15.3	108	108.1
7	36	13C5-PFNA	468.2 > 422.9	4.74e4	5.38e4	0.125	0.946	3.90	3.86	11.0	93.1	93.1

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Vista Analytical Laboratory

Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-5.qld

Last Altered: Saturday, August 12, 2017 17:45:10 Pacific Daylight Time
Printed: Saturday, August 12, 2017 17:51:12 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_5, Date: 11-Aug-2017, Time: 19:08:08, ID: B7H0074-BS1 OPR 0.125, Description: OPR

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	38	13C8-PFOS	507 > 79.9	9.40e3	9.09e3	0.125	1.040	3.96	3.92	12.9	99.5	99.5
2	39	13C2-PFDA	515.1 > 469.9	4.86e4	5.43e4	0.125	0.971	4.08	4.03	11.2	92.1	92.1
3	41	d3-N-MeFOSAA	573.3 > 419	8.76e3	5.94e4	0.125	0.018	4.11	4.06	1.84	829	63.7
4	42	d5-N-EtFOSAA	589.3 > 419	9.00e3	5.94e4	0.125	0.018	4.18	4.13	1.89	830	63.9
5	43	13C2-PFUnA	565 > 519.8	5.19e4	5.94e4	0.125	1.085	4.25	4.20	10.9	80.6	80.6
6	44	13C2-PFDoA	615 > 569.7	4.85e3	5.94e4	0.125	0.123	4.42	4.36	1.02	66.2	66.2
7	46	13C2-PFTeDA	714.8 > 669.6	2.62e4	5.94e4	0.125	0.798	4.78	4.71	5.52	55.3	55.3
8	52	13C5-PFHxA	318 > 272.9	5.55e4	5.55e4	0.125	1.000	3.26	3.23	5.00	40.0	100.0
9	53	13C3-PFHxS	401.9 > 79.9	9.11e3	9.11e3	0.125	1.000	3.58	3.54	12.5	100	100.0
10	54	13C8-PFOA	421.3 > 376	4.34e4	4.34e4	0.125	1.000	3.71	3.67	12.5	100	100.0
11	55	13C9-PFNA	472.2 > 426.9	5.38e4	5.38e4	0.125	1.000	3.90	3.86	12.5	100	100.0
12	56	13C4-PFOS	503 > 79.9	9.09e3	9.09e3	0.125	1.000	3.96	3.91	12.5	100	100.0
13	57	13C6-PFDA	519.1 > 473.7	5.43e4	5.43e4	0.125	1.000	4.08	4.04	12.5	100	100.0
14	58	13C7-PFUnA	570.1 > 524.8	5.94e4	5.94e4	0.125	1.000	4.25	4.20	12.5	100	100.0
15	59	Total PFBS	299 > 79.7	8.97e3	6.12e3	0.125		3.06		18.3	84.7	
16	60	Total PFHxS	398.9 > 79.6	5.26e3	3.50e3	0.125		3.58		18.8	85.4	
17	61	Total PFOA	413 > 368.7	4.19e4	5.31e4	0.125		3.71		9.86	79.2	
18	62	Total PFOS	499 > 79.9	8.03e3	9.40e3	0.125		3.96		10.7	80.4	
19	63	Total N-Me-FOSAA	570.1 > 419	1.01e4	8.76e3	0.125		4.11		187	77.4	
20	64	Total N-EtFOSAA	584.2 > 419	8.95e3	9.00e3	0.125		4.18		162	82.6	

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Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-5.qld

Last Altered: Saturday, August 12, 2017 17:45:10 Pacific Daylight Time
Printed: Saturday, August 12, 2017 17:51:12 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_5, Date: 11-Aug-2017, Time: 19:08:08, ID: B7H0074-BS1 OPR 0.125, Description: OPR

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3	PFBS	299 > 79.7	3.01	8970.554	6122.794	18.314	bb	84.7

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.54	5264.029	3504.047	18.778	MM	85.4

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7	3.67	41867.449	53094.262	9.857	bb	79.2

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.91	8034.295	9399.206	10.685	MM	80.4

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15	N-MeFOSAA	570.1 > 419	4.07	10077.366	8759.603	186.946	bb	77.4

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16	N-EtFOSAA	584.2 > 419	4.13	8951.798	8995.045	161.719	bb	82.6

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Vista Analytical Laboratory

Rev'd: MM 8/17/17

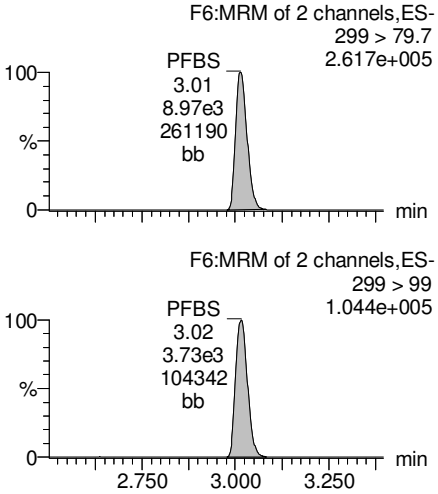
Dataset: U:\Q4.PRO\results\170811M2\170811M2-5.qld

Last Altered: Saturday, August 12, 2017 17:45:10 Pacific Daylight Time
Printed: Saturday, August 12, 2017 17:51:12 Pacific Daylight Time

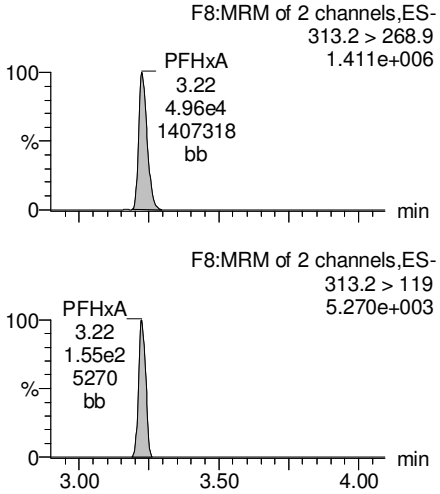
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_5, Date: 11-Aug-2017, Time: 19:08:08, ID: B7H0074-BS1 OPR 0.125, Description: OPR

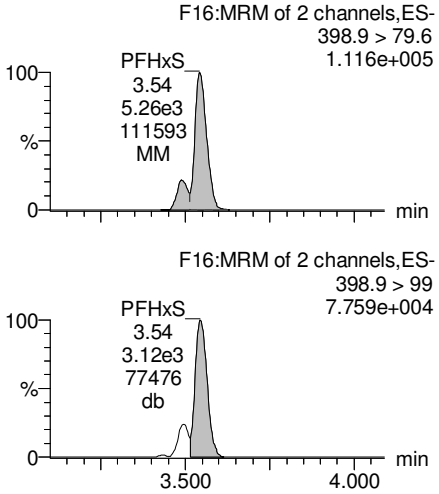
Total PFBS



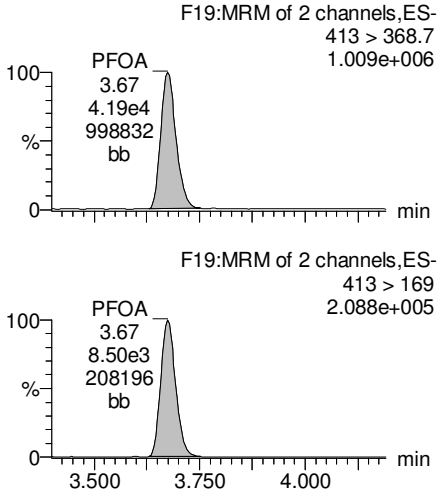
PFHxA



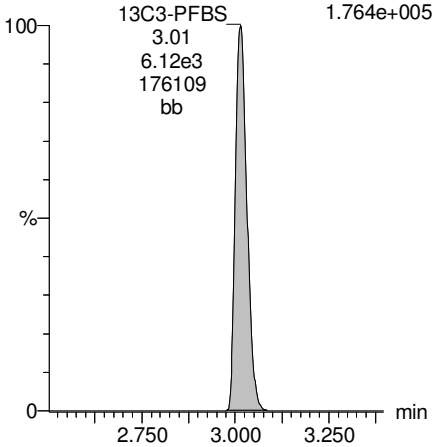
Total PFHxS



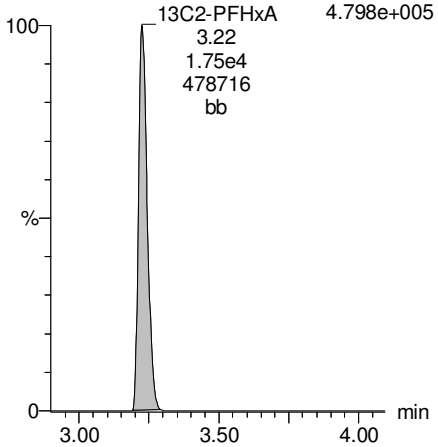
Total PFOA



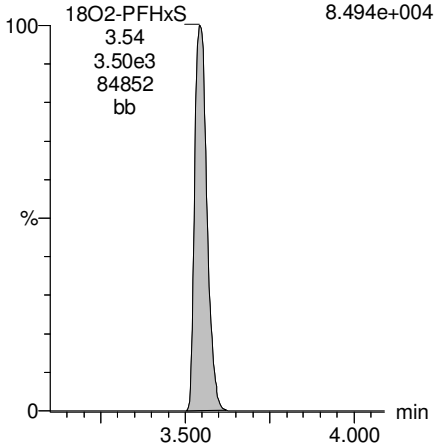
13C3-PFBS



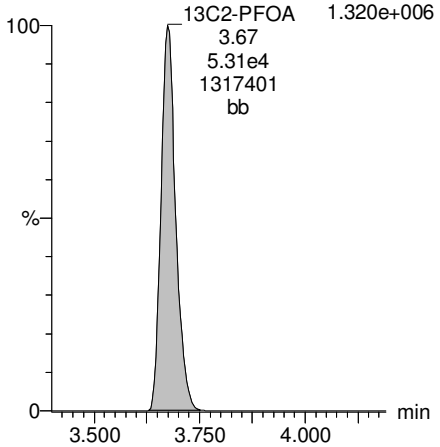
13C2-PFHxA



18O2-PFHxS



13C2-PFOA



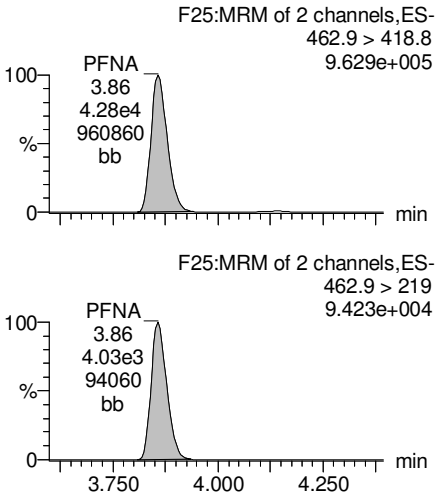
GM 8/12/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-5.qld

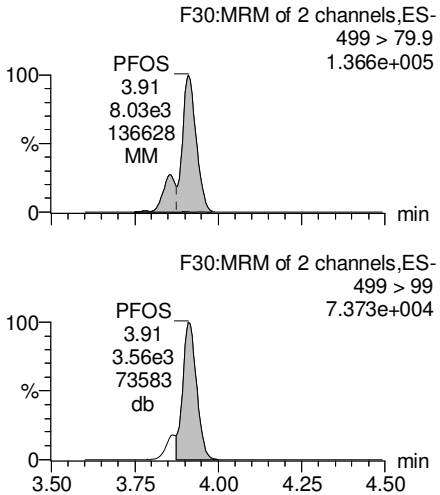
Last Altered: Saturday, August 12, 2017 17:45:10 Pacific Daylight Time
Printed: Saturday, August 12, 2017 17:51:12 Pacific Daylight Time

Name: 170811M2_5, Date: 11-Aug-2017, Time: 19:08:08, ID: B7H0074-BS1 OPR 0.125, Description: OPR

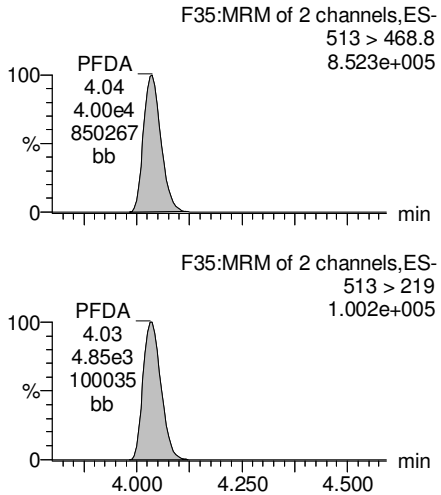
PFNA



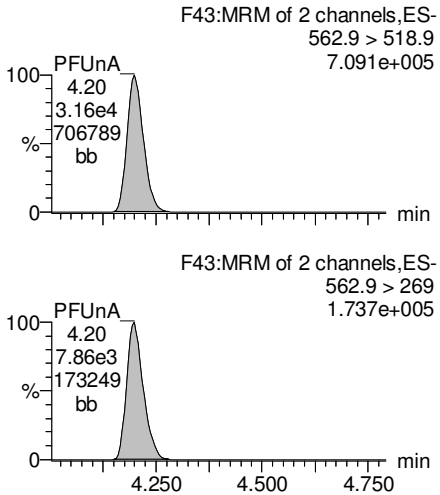
Total PFOS



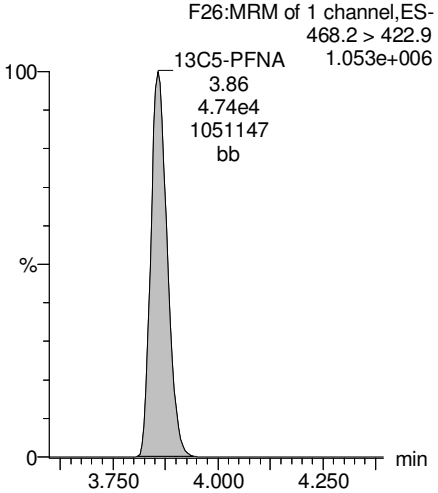
PFDA



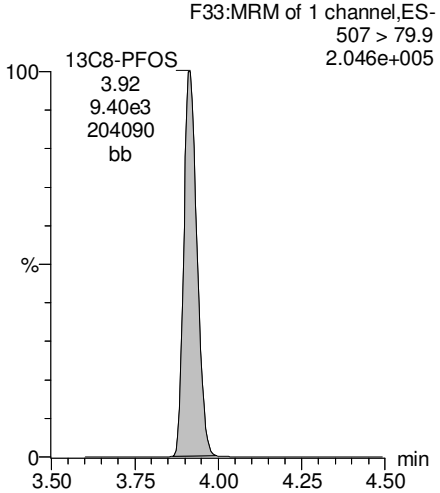
PFUnA



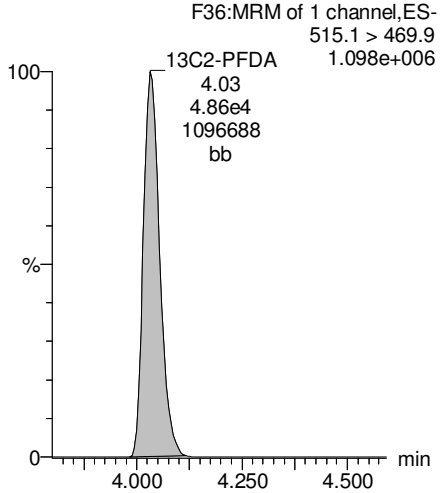
13C5-PFNA



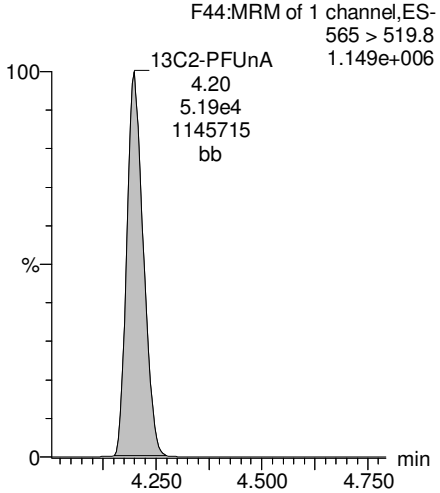
13C8-PFOS



13C2-PFDA



13C2-PFUnA



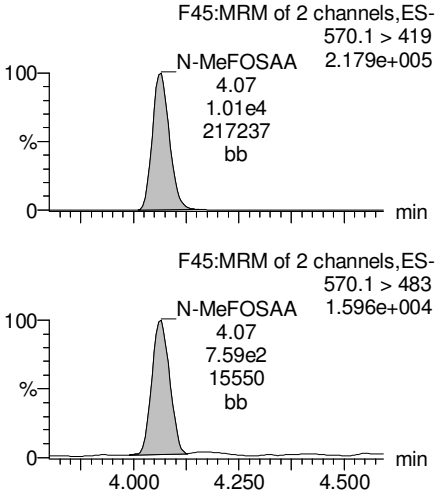
GM 8/12/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-5.qld

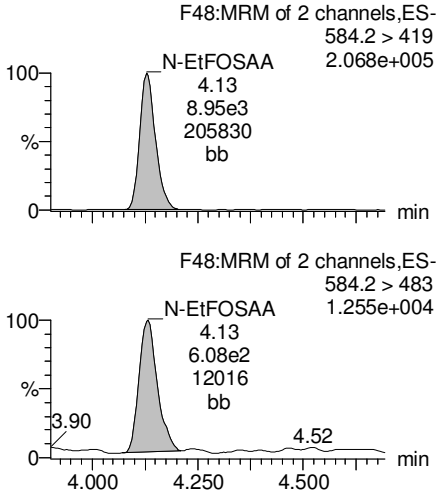
Last Altered: Saturday, August 12, 2017 17:45:10 Pacific Daylight Time
Printed: Saturday, August 12, 2017 17:51:12 Pacific Daylight Time

Name: 170811M2_5, Date: 11-Aug-2017, Time: 19:08:08, ID: B7H0074-BS1 OPR 0.125, Description: OPR

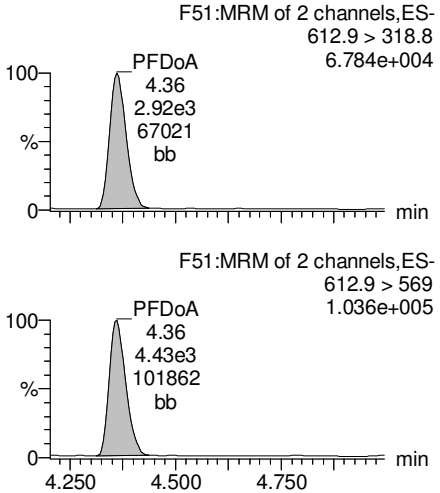
N-MeFOSAA



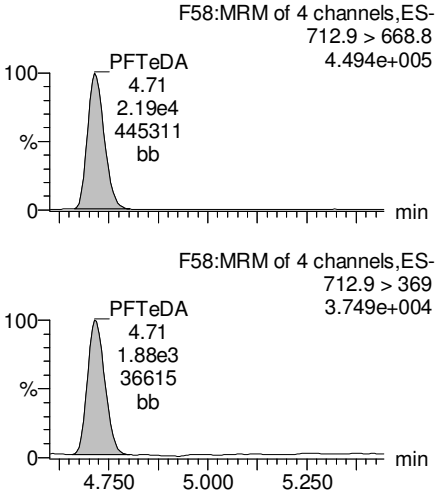
N-EtFOSAA



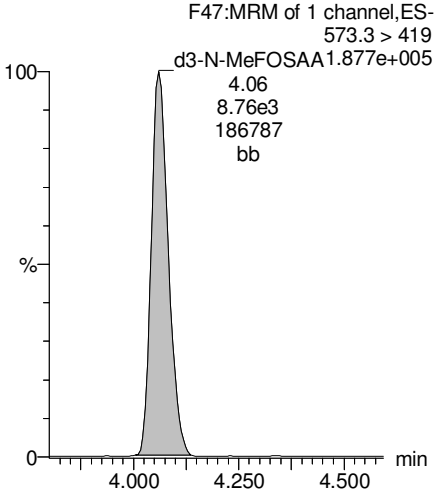
PFDoA



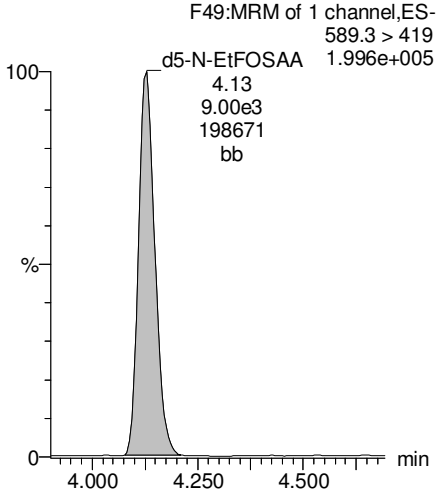
PFTeDA



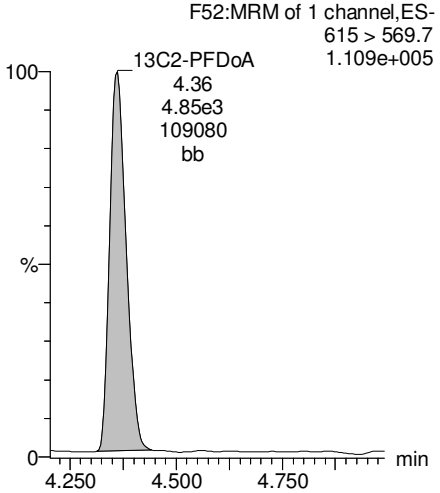
d3-N-MeFOSAA



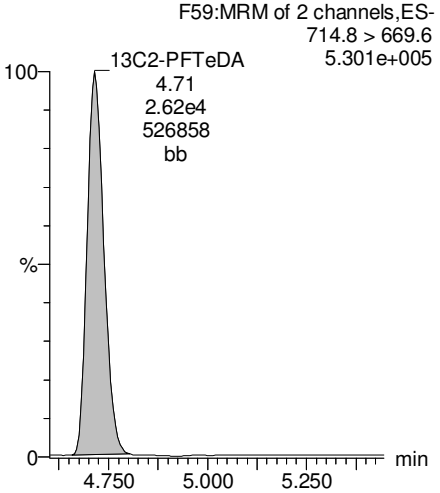
d5-N-EtFOSAA



13C2-PFDoA



13C2-PFTeDA



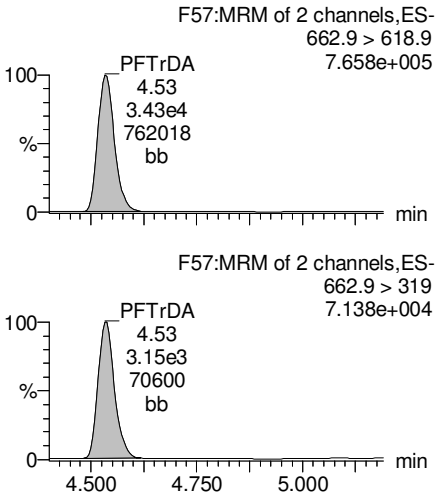
GM 8/12/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-5.qld

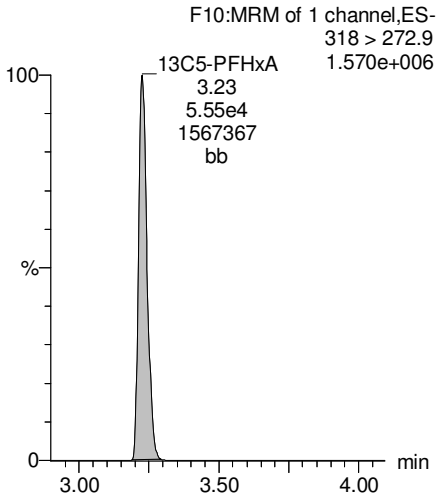
Last Altered: Saturday, August 12, 2017 17:45:10 Pacific Daylight Time
Printed: Saturday, August 12, 2017 17:51:12 Pacific Daylight Time

Name: 170811M2_5, Date: 11-Aug-2017, Time: 19:08:08, ID: B7H0074-BS1 OPR 0.125, Description: OPR

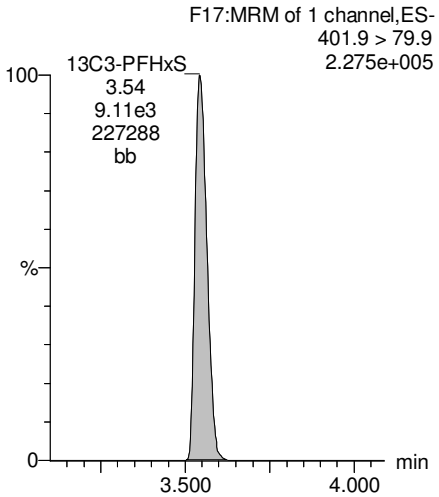
PFTrDA



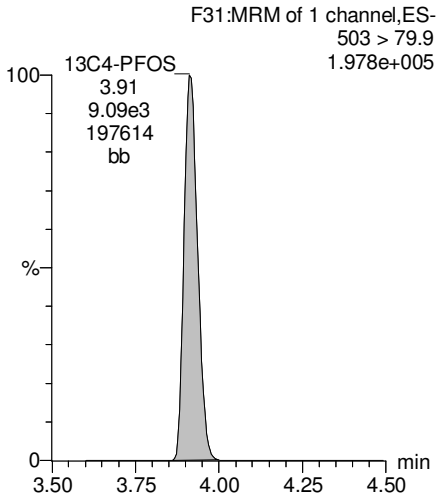
13C5-PFHxA



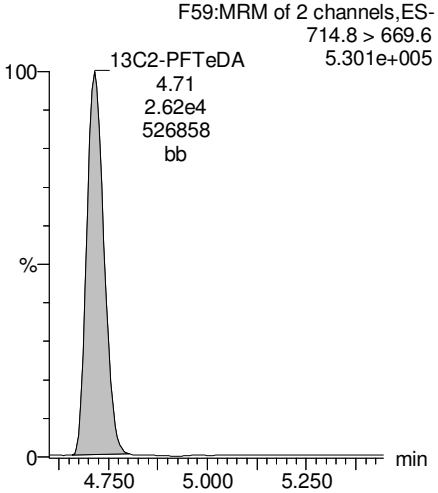
13C3-PFHxS



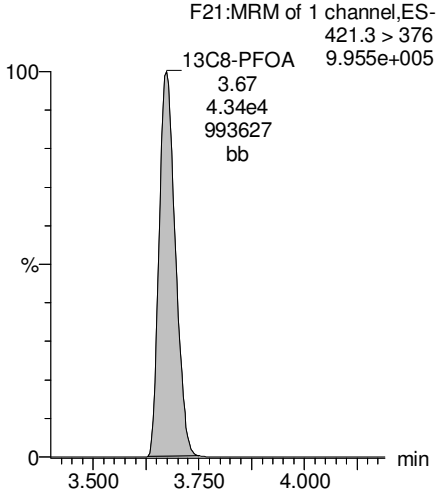
13C4-PFOS



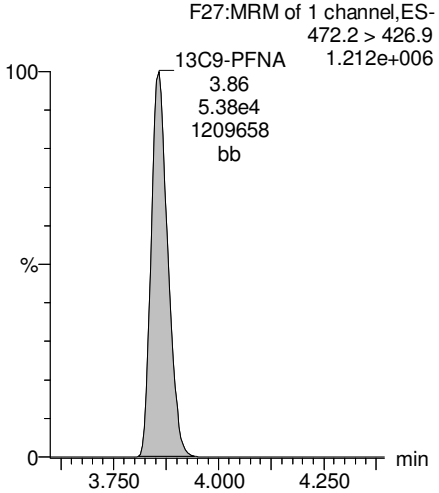
13C2-PFTeDA



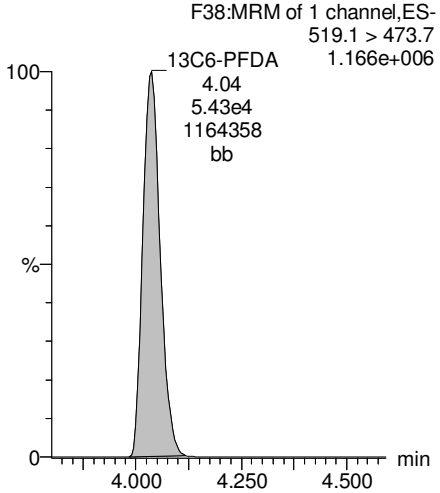
13C8-PFOA



13C9-PFNA



13C6-PFDA



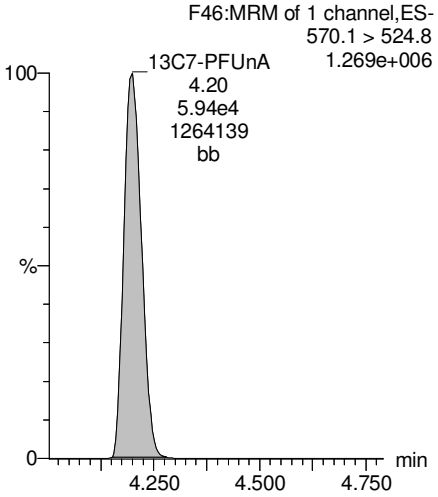
GM 8/12/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-5.qld

Last Altered: Saturday, August 12, 2017 17:45:10 Pacific Daylight Time
Printed: Saturday, August 12, 2017 17:51:12 Pacific Daylight Time

Name: 170811M2_5, Date: 11-Aug-2017, Time: 19:08:08, ID: B7H0074-BS1 OPR 0.125, Description: OPR

13C7-PFUnA



GM 8/12/17

Vista Analytical Laboratory

Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-25.qld

Last Altered: Saturday, August 12, 2017 14:08:52 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:09:23 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40 This run used only for PFOA
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_25, Date: 11-Aug-2017, Time: 22:42:11, ID: 1700925-01RE1 I001BC43S-170724 0.12112, Description: I001BC43S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7	6.33e3	4.67e3	0.1217		3.06	3.01	17.0	80.5	
2	4	PFHxA	313.2 > 268.9	1.08e5	1.33e4	0.1217		3.26	3.23	40.7	261	
3	5	~~PFHpA~~ NOT USED	~~363 > 318.9~~	~~1.85e4~~	~~3.24e4~~	~~0.1217~~		~~3.51~~	~~3.48~~	~~7.14~~	~~48.1~~	
4	6	PFHxS	398.9 > 79.6	2.86e4	2.85e3	0.1217		3.58	3.55	125	595	
5	8	PFOA	413 > 368.7	1.28e5	4.35e4	0.1217		3.71	3.68	36.9	308	
6	10	PFNA	462.9 > 418.8	7.22e2	3.88e4	0.1217		3.90	3.86	0.232		
7	12	PFOS	499 > 79.9	2.41e3	7.17e3	0.1217		3.96	3.86	4.21	32.7	
8	13	PFDA	513 > 468.8		3.39e4	0.1217		4.08				
9	15	N-MeFOSAA	570.1 > 419		7.56e3	0.1217		4.11				
10	16	N-EtFOSAA	584.2 > 419		6.90e3	0.1217		4.18				
11	17	PFUnA	562.9 > 518.9		4.33e4	0.1217		4.25				
12	19	PFDoA	612.9 > 318.8		4.35e3	0.1217		4.42				

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Vista Analytical Laboratory

Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-25.qld

Last Altered: Saturday, August 12, 2017 14:08:52 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:09:37 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_25, Date: 11-Aug-2017, Time: 22:42:11, ID: 1700925-01RE1 I001BC43S-170724 0.12112, Description: I001BC43S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21	PFTrDA	662.9 > 618.9		4.35e3	0.1217		4.59				
2	22	PFTeDA	712.9 > 668.8		2.83e4	0.1217		4.78				
3	30	13C3-PFBS	302 > 98.8	4.67e3	6.04e4	0.1217	0.033	3.06	3.01	0.386	96.6	94.0
4	31	13C2-PFHxA	315 > 269.8	1.33e4	6.04e4	0.1217	0.304	3.26	3.23	1.10	29.9	72.7
5	32	13C4-PFHpA	367.2 > 321.8	3.24e4	6.04e4	0.1217	0.384	3.51	3.48	2.69	57.5	55.9
6	33	18O2-PFHxS	403 > 102.6	2.85e3	8.60e3	0.1217	0.417	3.58	3.55	4.14	81.5	79.4
7	35	13C2-PFOA	414.9 > 369.7	4.35e4	5.05e4	0.1217	1.132	3.71	3.68	10.8	78.1	76.0
8	36	13C5-PFNA	468.2 > 422.9	3.88e4	5.04e4	0.1217	0.946	3.90	3.87	9.62	83.6	81.4
9	38	13C8-PFOS	507 > 79.9	7.17e3	8.55e3	0.1217	1.040	3.96	3.92	10.5	82.9	80.7
10	39	13C2-PFDA	515.1 > 469.9	3.39e4	4.47e4	0.1217	0.971	4.08	4.05	9.48	80.3	78.1

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Vista Analytical Laboratory

Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-25.qld

Last Altered: Saturday, August 12, 2017 14:08:52 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:09:46 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_25, Date: 11-Aug-2017, Time: 22:42:11, ID: 1700925-01RE1 I001BC43S-170724 0.12112, Description: I001BC43S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	7.56e3	5.22e4	0.1217	0.018	4.11	4.07	1.81	837	62.7
2	42	d5-N-EtFOSAA	589.3 > 419	6.90e3	5.22e4	0.1217	0.018	4.18	4.14	1.65	746	55.8
3	43	13C2-PFUnA	565 > 519.8	4.33e4	5.22e4	0.1217	1.085	4.25	4.21	10.4	78.6	76.6
4	44	13C2-PFDoA	615 > 569.7	4.35e3	5.22e4	0.1217	0.123	4.42	4.38	1.04	69.5	67.6
5	46	13C2-PFTeDA	714.8 > 669.6	2.83e4	5.22e4	0.1217	0.798	4.78	4.74	6.78	69.9	68.0
6	52	13C5-PFHxA	318 > 272.9	6.04e4	6.04e4	0.1217	1.000	3.26	3.23	5.00	41.1	100.0
7	53	13C3-PFHxS	401.9 > 79.9	8.60e3	8.60e3	0.1217	1.000	3.58	3.55	12.5	103	100.0
8	54	13C8-PFOA	421.3 > 376	5.05e4	5.05e4	0.1217	1.000	3.71	3.68	12.5	103	100.0
9	55	13C9-PFNA	472.2 > 426.9	5.04e4	5.04e4	0.1217	1.000	3.90	3.87	12.5	103	100.0
10	56	13C4-PFOS	503 > 79.9	8.55e3	8.55e3	0.1217	1.000	3.96	3.92	12.5	103	100.0
11	57	13C6-PFDA	519.1 > 473.7	4.47e4	4.47e4	0.1217	1.000	4.08	4.05	12.5	103	100.0
12	58	13C7-PFUnA	570.1 > 524.8	5.22e4	5.22e4	0.1217	1.000	4.25	4.21	12.5	103	100.0
13	59	Total PFBS	299 > 79.7	6.33e3	4.67e3	0.1217		3.06		17.0	80.5	
14	60	Total PFHxS	398.9 > 79.6	2.86e4	2.85e3	0.1217		3.58		125	595	
15	61	Total PFOA	413 > 368.7	1.66e5	4.35e4	0.1217		3.71		47.8	397	
16	62	Total PFOS	499 > 79.9	2.41e3	7.17e3	0.1217		3.96		4.21	32.7	
17	63	Total N-Me-FOSAA	570.1 > 419	0.00e0	7.56e3	0.1217		4.11		0.000		
18	64	Total N-EtFOSAA	584.2 > 419	0.00e0	6.90e3	0.1217		4.18		0.000		

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Dataset: U:\Q4.PRO\results\170811M2\170811M2-25.qld

Last Altered: Saturday, August 12, 2017 14:08:52 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:09:46 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_25, Date: 11-Aug-2017, Time: 22:42:11, ID: 1700925-01RE1 I001BC43S-170724 0.12112, Description: I001BC43S-170724

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3	PFBS	299 > 79.7	3.01	6327.660	4666.046	16.951	MM	80.5

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.55	28554.852	2846.280	125.404	MM	594.6

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	61	Total PFOA	413 > 368.7	3.56	623.999	43472.551	0.179	bd	0.2
2	8	PFOA	413 > 368.7	3.68	128237.313	43472.551	36.873	db	307.8
3	61	Total PFOA	413 > 368.7	3.63	37394.352	43472.551	10.752	dd	88.9

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.86	2413.621	7173.221	4.206	MM	32.7

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

AP 8/12/2017

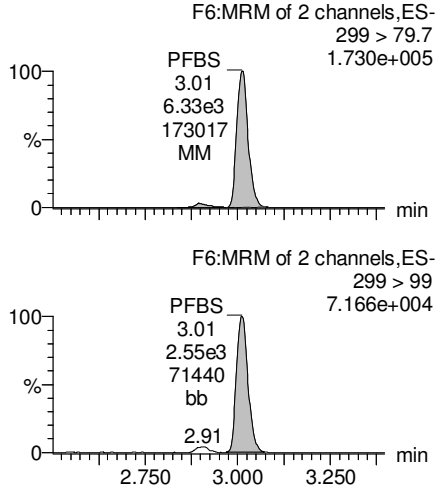
Dataset: U:\Q4.PRO\results\170811M2\170811M2-25.qld

Last Altered: Saturday, August 12, 2017 14:08:52 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:09:46 Pacific Daylight Time

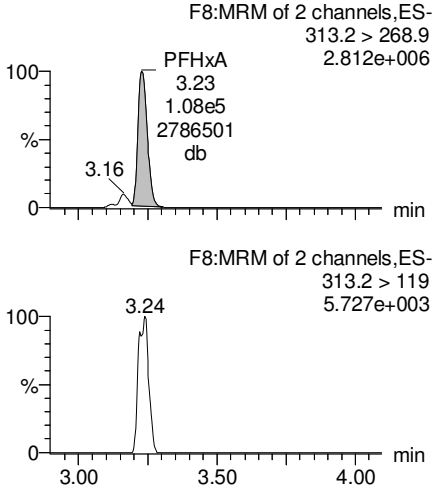
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_25, Date: 11-Aug-2017, Time: 22:42:11, ID: 1700925-01RE1 I001BC43S-170724 0.12112, Description: I001BC43S-170724

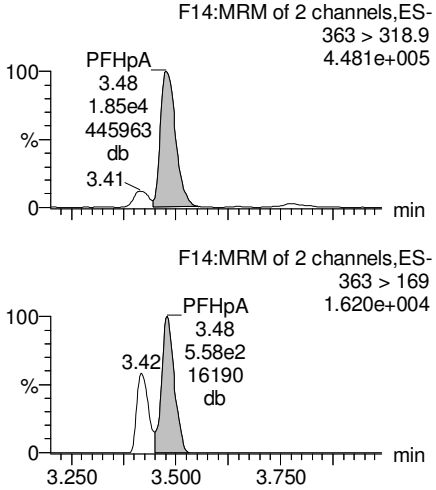
Total PFBS



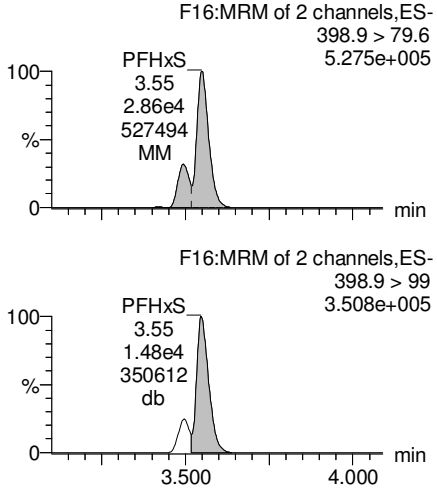
PFHxA



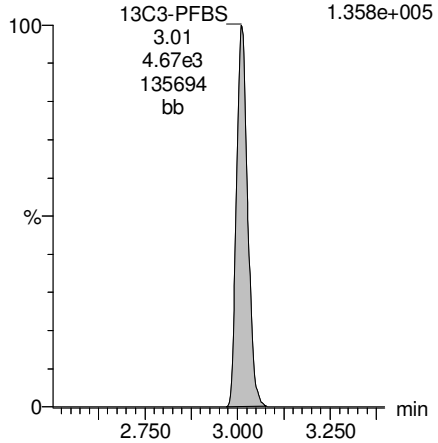
PFHpA



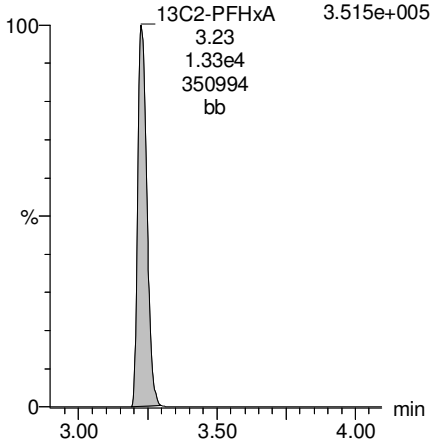
Total PFHxS



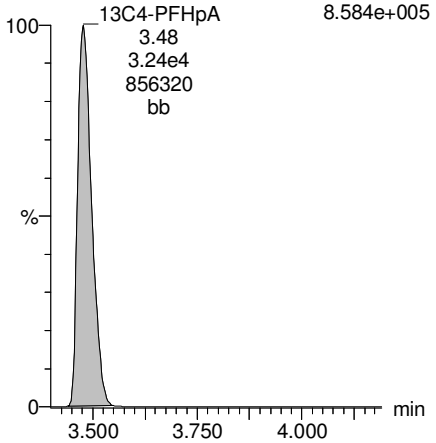
13C3-PFBS



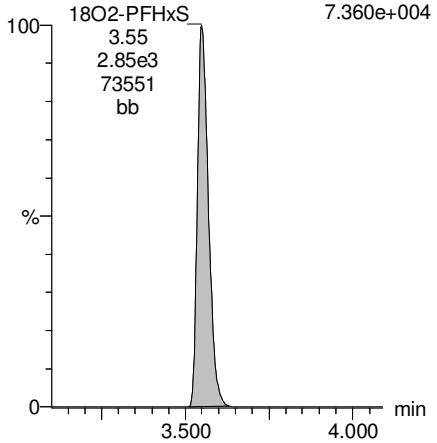
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



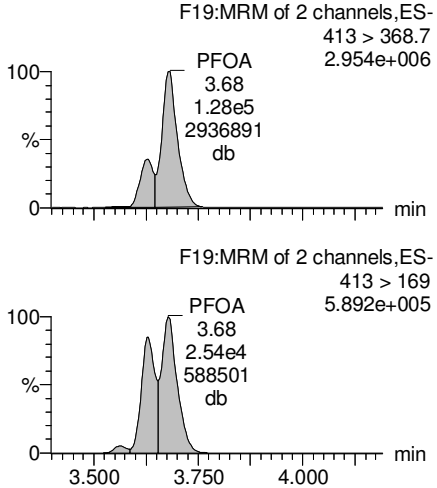
AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-25.qld

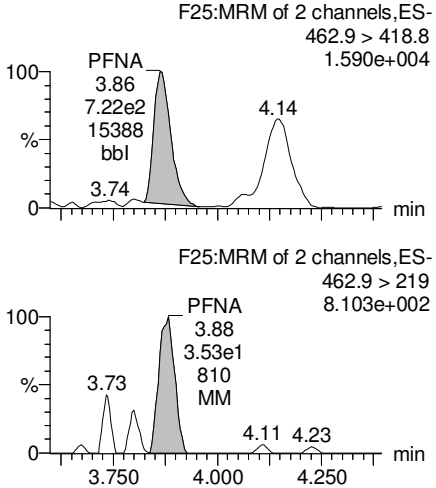
Last Altered: Saturday, August 12, 2017 14:08:52 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:09:46 Pacific Daylight Time

Name: 170811M2_25, Date: 11-Aug-2017, Time: 22:42:11, ID: 1700925-01RE1 I001BC43S-170724 0.12112, Description: I001BC43S-170724

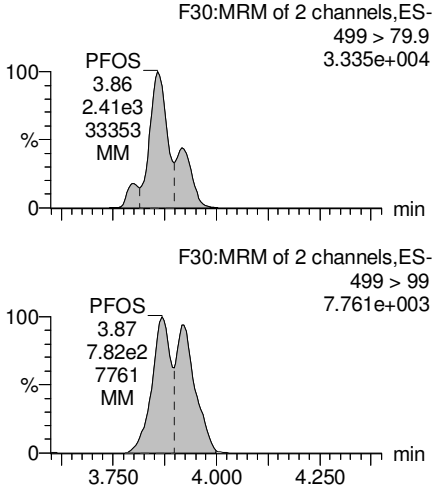
Total PFOA



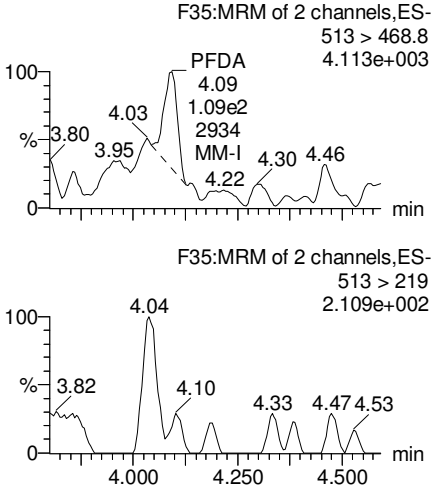
PFNA



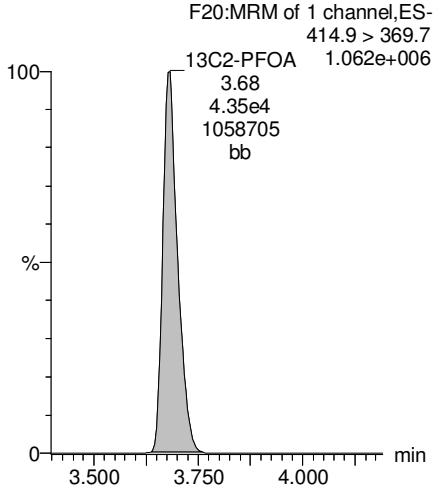
Total PFOS



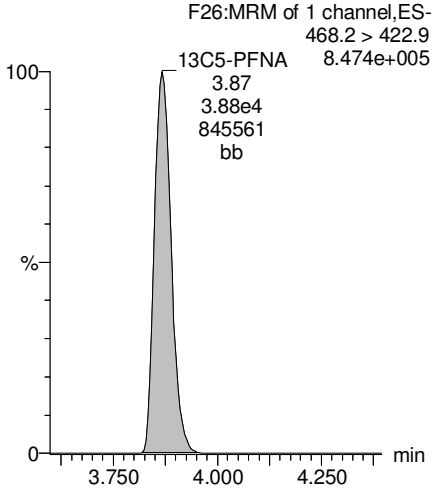
PFDA



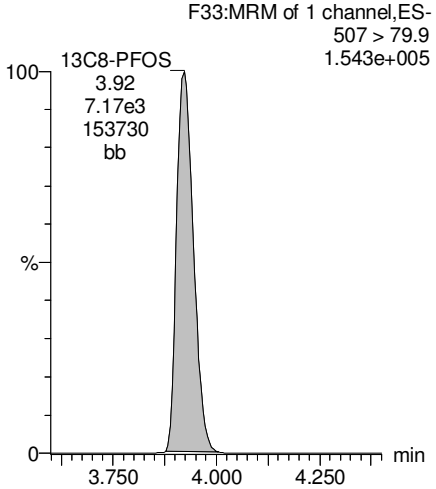
13C2-PFOA



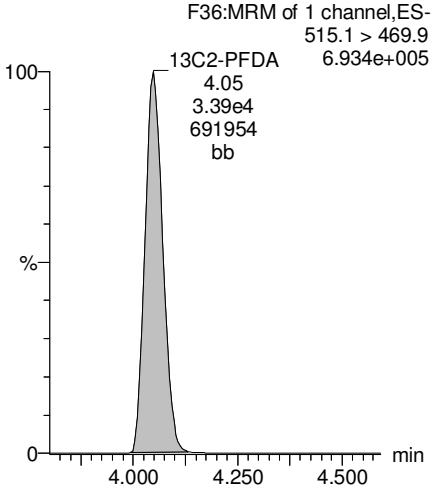
13C5-PFNA



13C8-PFOS



13C2-PFDA



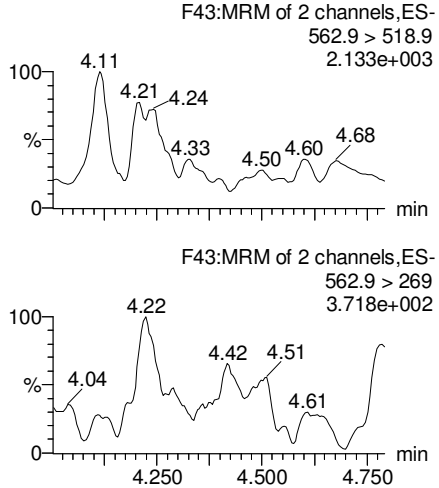
AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-25.qld

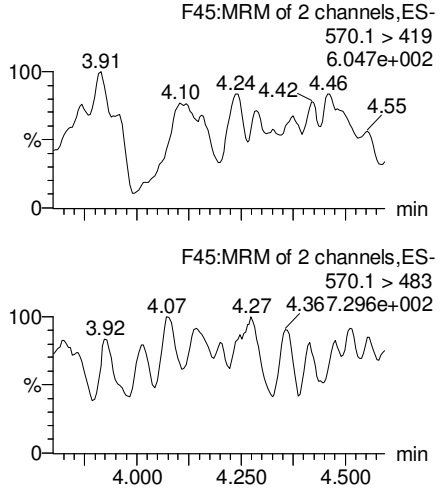
Last Altered: Saturday, August 12, 2017 14:08:52 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:09:46 Pacific Daylight Time

Name: 170811M2_25, Date: 11-Aug-2017, Time: 22:42:11, ID: 1700925-01RE1 I001BC43S-170724 0.12112, Description: I001BC43S-170724

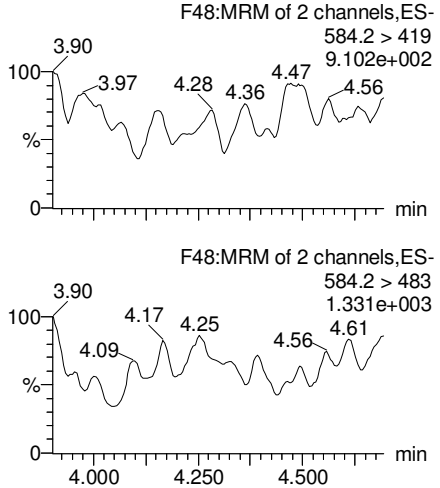
PFUnA



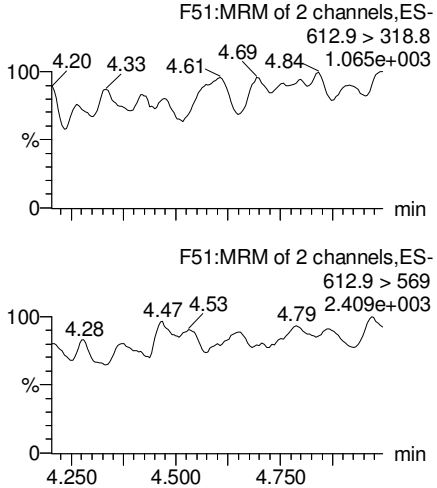
N-MeFOSAA



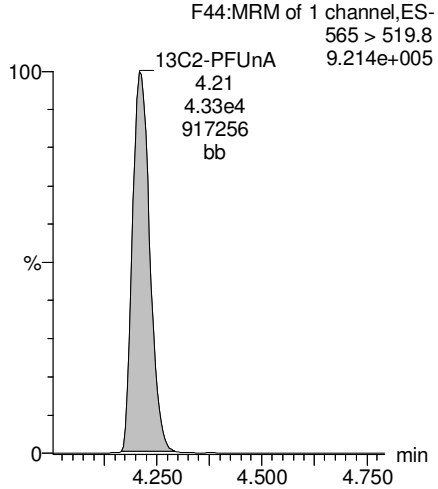
N-EtFOSAA



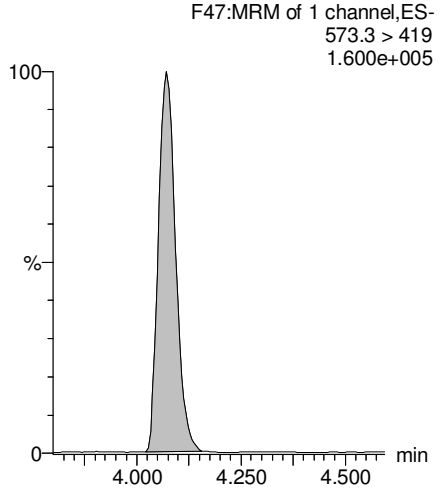
PFDoA



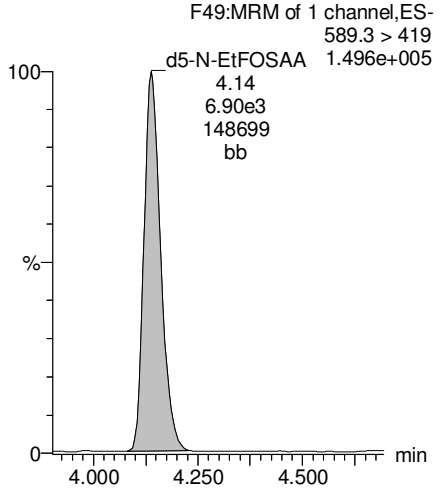
13C2-PFUnA



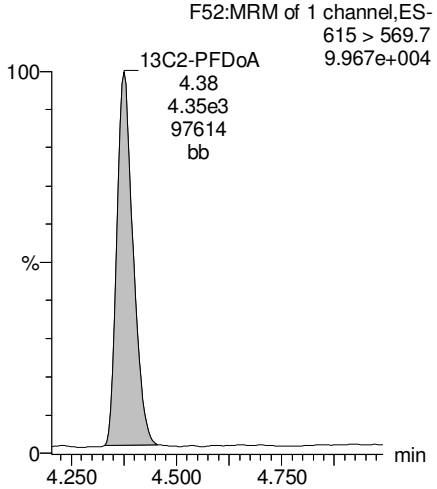
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFDoA



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Vista Analytical Laboratory

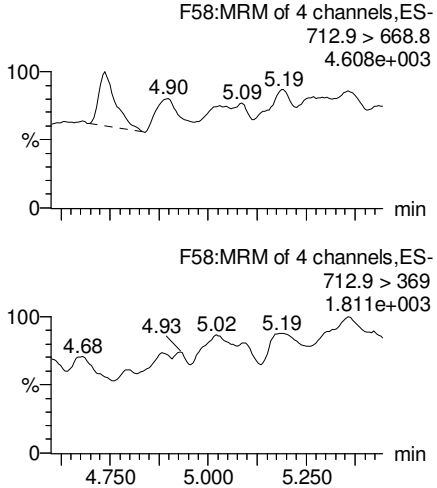
Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-25.qld

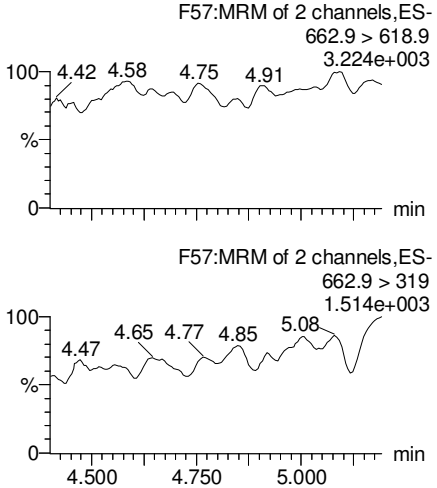
Last Altered: Saturday, August 12, 2017 14:08:52 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:09:46 Pacific Daylight Time

Name: 170811M2_25, Date: 11-Aug-2017, Time: 22:42:11, ID: 1700925-01RE1 I001BC43S-170724 0.12112, Description: I001BC43S-170724

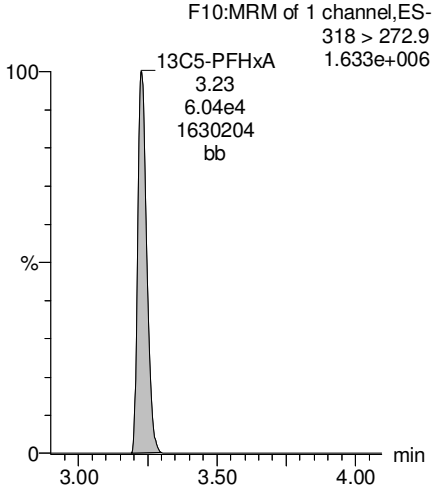
PFTeDA



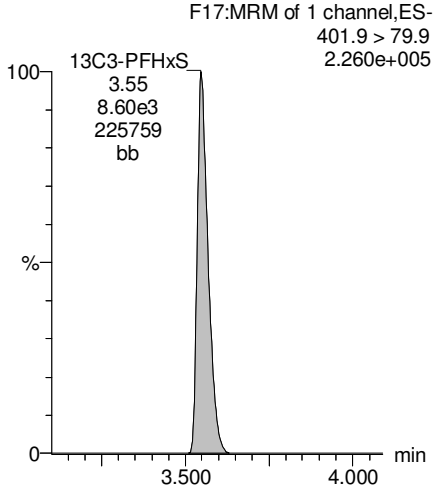
PFTrDA



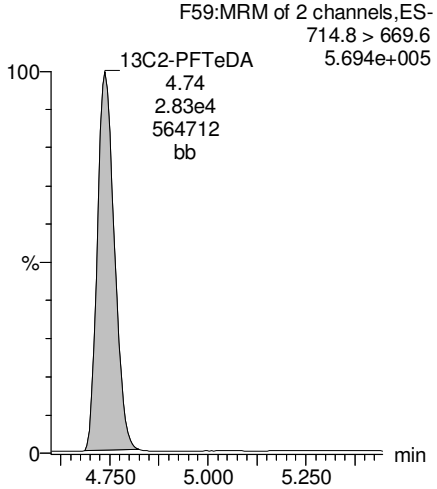
13C5-PFHxA



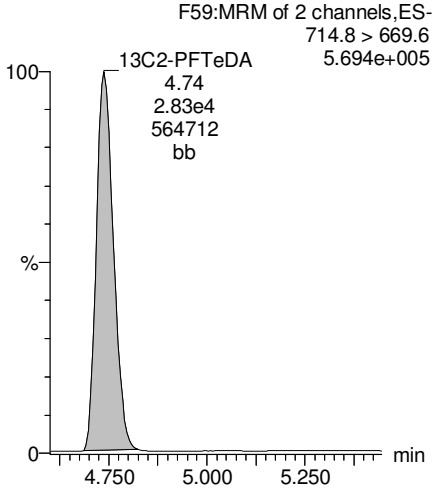
13C3-PFHxS



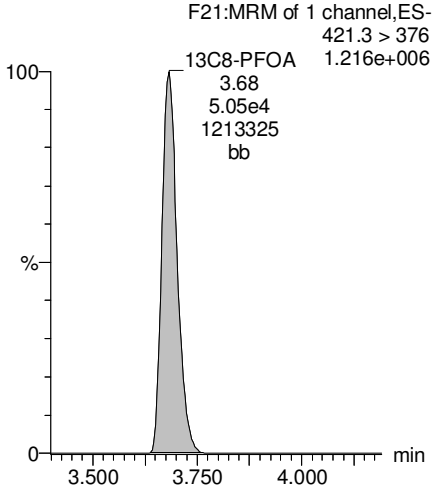
13C2-PFTeDA



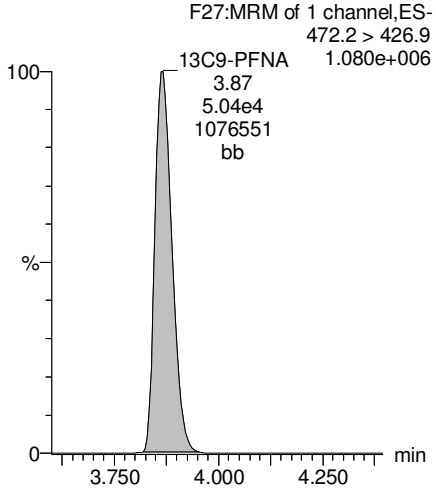
13C2-PFTeDA



13C8-PFOA



13C9-PFNA



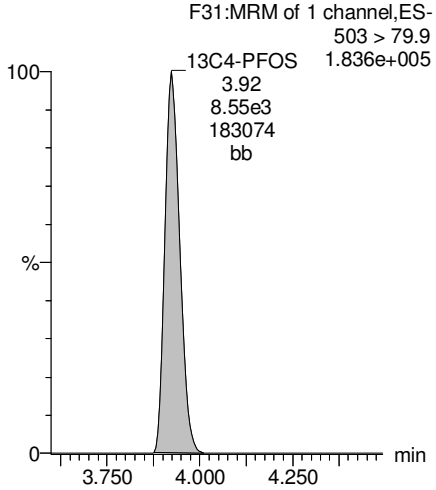
AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-25.qld

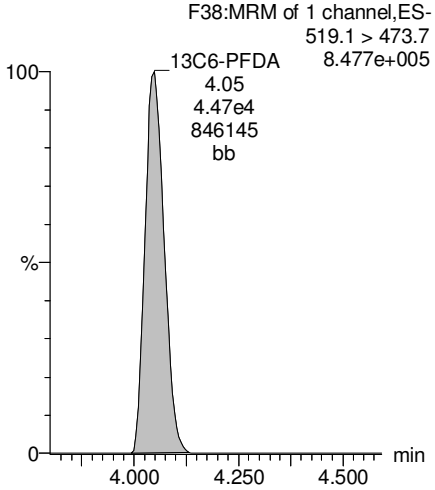
Last Altered: Saturday, August 12, 2017 14:08:52 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:09:46 Pacific Daylight Time

Name: 170811M2_25, Date: 11-Aug-2017, Time: 22:42:11, ID: 1700925-01RE1 I001BC43S-170724 0.12112, Description: I001BC43S-170724

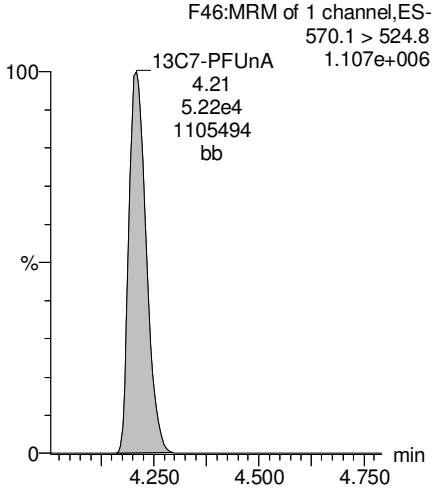
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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Vista Analytical Laboratory

Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-26.qld

Last Altered: Saturday, August 12, 2017 14:13:05 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:13:19 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

This run used only for PFOA

Name: 170811M2_26, Date: 11-Aug-2017, Time: 22:52:49, ID: 1700925-02RE1 SB01-170724 0.12178, Description: SB01-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7		5.23e3	0.1128		3.06				
2	4	PFHxA	313.2 > 268.9		1.60e4	0.1128		3.26				
3	5	~~PFHpA~~ NOT USED	~~363 > 318.9~~		~~4.07e4~~	~~0.1128~~		~~3.51~~				
4	6	PFHxS	398.9 > 79.6		3.53e3	0.1128		3.58				
5	8	PFOA	413 > 368.7		4.95e4	0.1128		3.71				
6	10	PFNA	462.9 > 418.8		4.62e4	0.1128		3.90				
7	12	PFOS	499 > 79.9		8.53e3	0.1128		3.96				
8	13	PFDA	513 > 468.8		3.72e4	0.1128		4.08				
9	15	N-MeFOSAA	570.1 > 419		7.42e3	0.1128		4.11				
10	16	N-EtFOSAA	584.2 > 419		7.23e3	0.1128		4.18				
11	17	PFUnA	562.9 > 518.9	6.20e1	3.91e4	0.1128		4.25	4.21	0.0198		
12	19	PFDoA	612.9 > 318.8		4.34e3	0.1128		4.42				

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Vista Analytical Laboratory

Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-26.qld

Last Altered: Saturday, August 12, 2017 14:13:05 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:13:33 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_26, Date: 11-Aug-2017, Time: 22:52:49, ID: 1700925-02RE1 SB01-170724 0.12178, Description: SB01-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21	PFTrDA	662.9 > 618.9		4.34e3	0.1128		4.59				
2	22	PFTeDA	712.9 > 668.8		3.00e4	0.1128		4.78				
3	30	13C3-PFBS	302 > 98.8	5.23e3	5.45e4	0.1128	0.033	3.06	3.01	0.480	129	116.7
4	31	13C2-PFHxA	315 > 269.8	1.60e4	5.45e4	0.1128	0.304	3.26	3.23	1.47	42.9	96.8
5	32	13C4-PFHpA	367.2 > 321.8	4.07e4	5.45e4	0.1128	0.384	3.51	3.48	3.74	86.3	77.8
6	33	18O2-PFHxS	403 > 102.6	3.53e3	7.95e3	0.1128	0.417	3.58	3.55	5.56	118	106.6
7	35	13C2-PFOA	414.9 > 369.7	4.95e4	4.46e4	0.1128	1.132	3.71	3.68	13.9	109	98.0
8	36	13C5-PFNA	468.2 > 422.9	4.62e4	5.17e4	0.1128	0.946	3.90	3.87	11.2	105	94.4
9	38	13C8-PFOS	507 > 79.9	8.53e3	7.95e3	0.1128	1.040	3.96	3.92	13.4	114	103.1
10	39	13C2-PFDA	515.1 > 469.9	3.72e4	4.69e4	0.1128	0.971	4.08	4.04	9.91	90.6	81.7

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Vista Analytical Laboratory

Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-26.qld

Last Altered: Saturday, August 12, 2017 14:13:05 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:13:49 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_26, Date: 11-Aug-2017, Time: 22:52:49, ID: 1700925-02RE1 SB01-170724 0.12178, Description: SB01-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	7.42e3	4.32e4	0.1128	0.018	4.11	4.07	2.15	1070	74.2
2	42	d5-N-EtFOSAA	589.3 > 419	7.23e3	4.32e4	0.1128	0.018	4.18	4.14	2.09	1020	70.6
3	43	13C2-PFUnA	565 > 519.8	3.91e4	4.32e4	0.1128	1.085	4.25	4.21	11.3	92.4	83.3
4	44	13C2-PFDoA	615 > 569.7	4.34e3	4.32e4	0.1128	0.123	4.42	4.38	1.25	90.3	81.5
5	46	13C2-PFTeDA	714.8 > 669.6	3.00e4	4.32e4	0.1128	0.798	4.78	4.73	8.69	96.5	87.1
6	52	13C5-PFHxA	318 > 272.9	5.45e4	5.45e4	0.1128	1.000	3.26	3.23	5.00	44.3	100.0
7	53	13C3-PFHxS	401.9 > 79.9	7.95e3	7.95e3	0.1128	1.000	3.58	3.55	12.5	111	100.0
8	54	13C8-PFOA	421.3 > 376	4.46e4	4.46e4	0.1128	1.000	3.71	3.68	12.5	111	100.0
9	55	13C9-PFNA	472.2 > 426.9	5.17e4	5.17e4	0.1128	1.000	3.90	3.87	12.5	111	100.0
10	56	13C4-PFOS	503 > 79.9	7.95e3	7.95e3	0.1128	1.000	3.96	3.92	12.5	111	100.0
11	57	13C6-PFDA	519.1 > 473.7	4.69e4	4.69e4	0.1128	1.000	4.08	4.04	12.5	111	100.0
12	58	13C7-PFUnA	570.1 > 524.8	4.32e4	4.32e4	0.1128	1.000	4.25	4.21	12.5	111	100.0
13	59	Total PFBS	299 > 79.7	0.00e0	5.23e3	0.1128		3.06		0.000		
14	60	Total PFHxS	398.9 > 79.6	0.00e0	3.53e3	0.1128		3.58		0.000		
15	61	Total PFOA	413 > 368.7	0.00e0	4.95e4	0.1128		3.71		0.000		
16	62	Total PFOS	499 > 79.9	0.00e0	8.53e3	0.1128		3.96		0.000		
17	63	Total N-Me-FOSAA	570.1 > 419	0.00e0	7.42e3	0.1128		4.11		0.000		
18	64	Total N-EtFOSAA	584.2 > 419	0.00e0	7.23e3	0.1128		4.18		0.000		

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Dataset: U:\Q4.PRO\results\170811M2\170811M2-26.qld

Last Altered: Saturday, August 12, 2017 14:13:05 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:13:49 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_26, Date: 11-Aug-2017, Time: 22:52:49, ID: 1700925-02RE1 SB01-170724 0.12178, Description: SB01-170724

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7			49544.023		MM-I	

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

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Vista Analytical Laboratory

Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-26.qld

Last Altered: Saturday, August 12, 2017 14:13:05 Pacific Daylight Time
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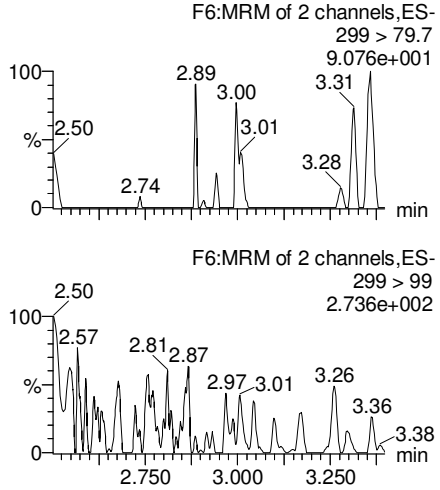
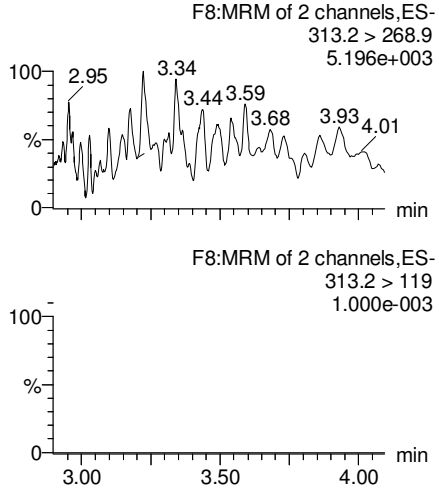
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_26, Date: 11-Aug-2017, Time: 22:52:49, ID: 1700925-02RE1 SB01-170724 0.12178, Description: SB01-170724

Total PFBS



PFHxA



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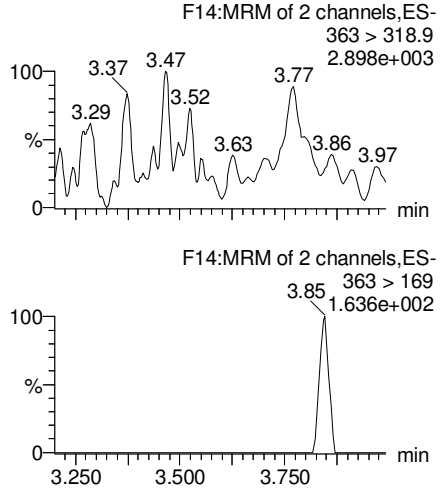
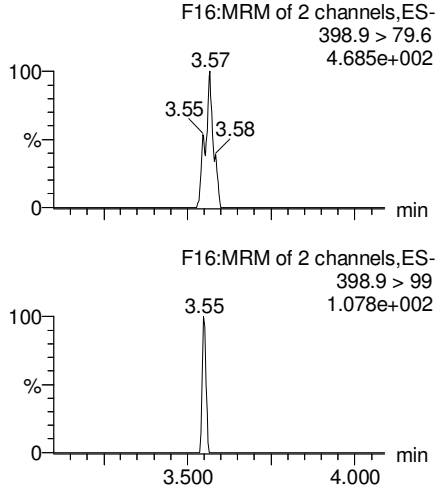
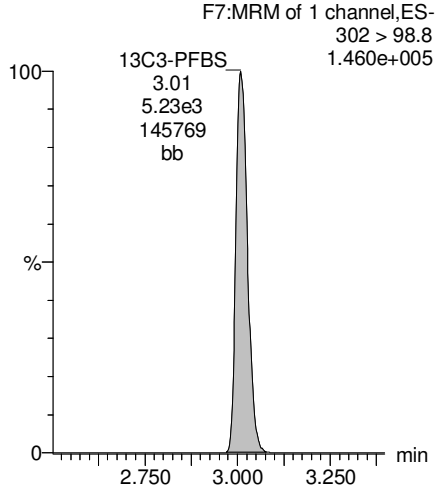


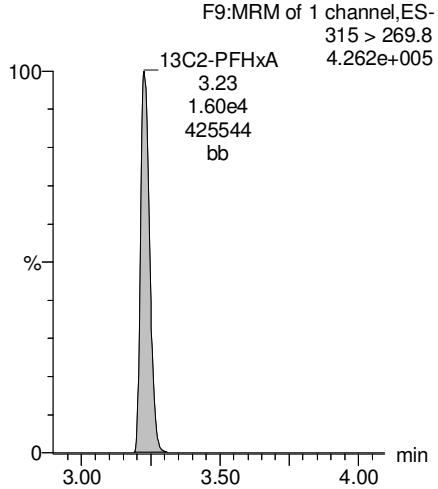
Total PFHxS



13C3-PFBS



13C2-PFHxA



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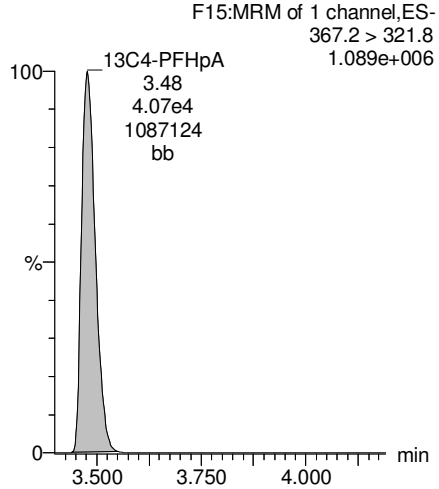
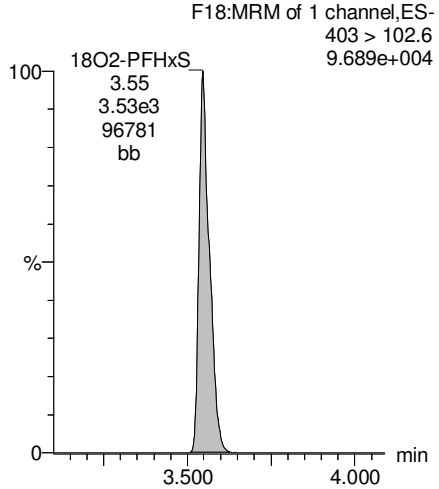


18O2-PFHxS



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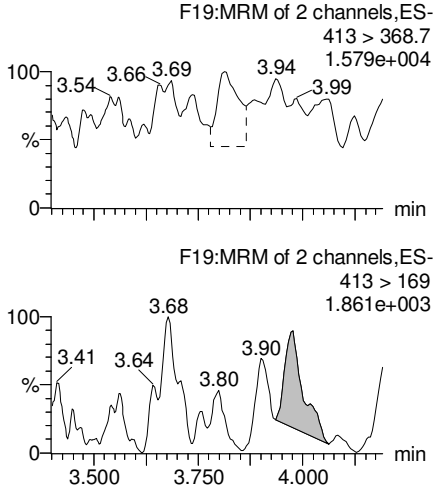
Dataset: U:\Q4.PRO\results\170811M2\170811M2-26.qld

Last Altered: Saturday, August 12, 2017 14:13:05 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:13:49 Pacific Daylight Time

Name: 170811M2_26, Date: 11-Aug-2017, Time: 22:52:49, ID: 1700925-02RE1 SB01-170724 0.12178, Description: SB01-170724

Total PFOA



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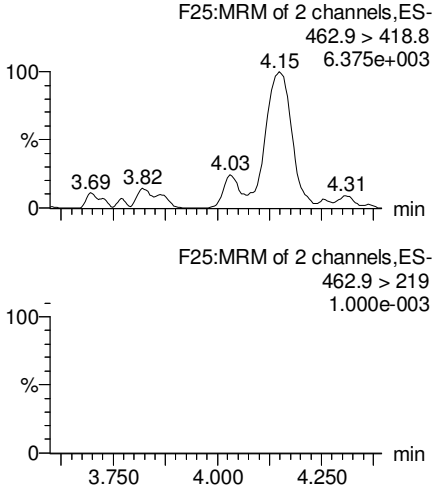
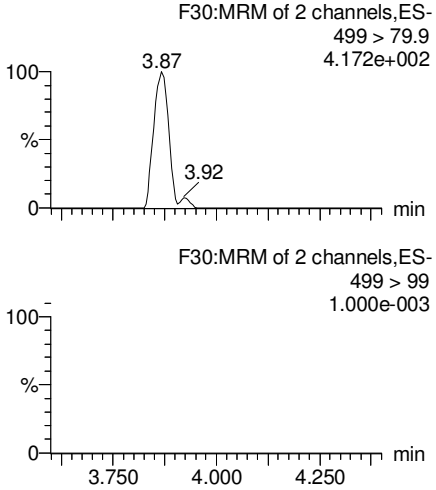


Total PFOS



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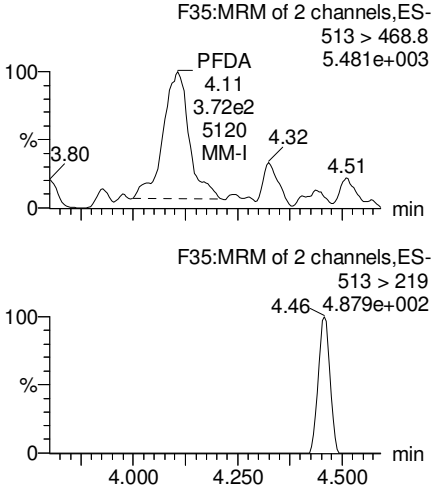

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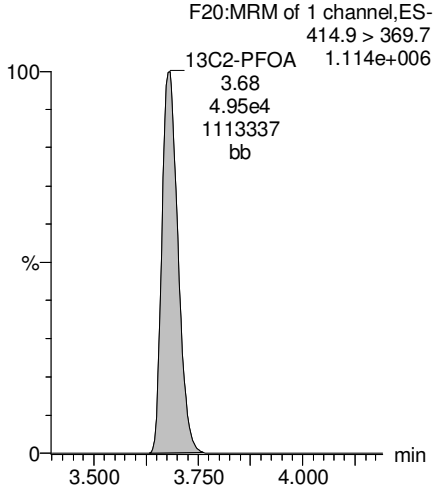

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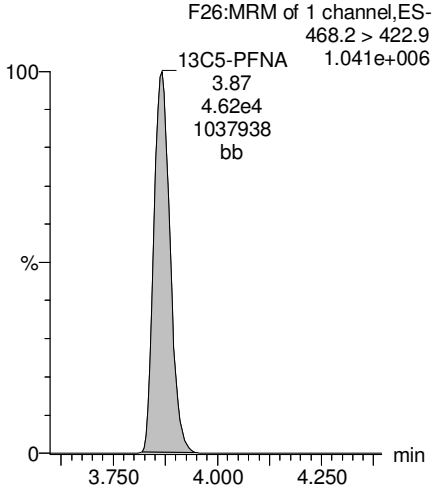
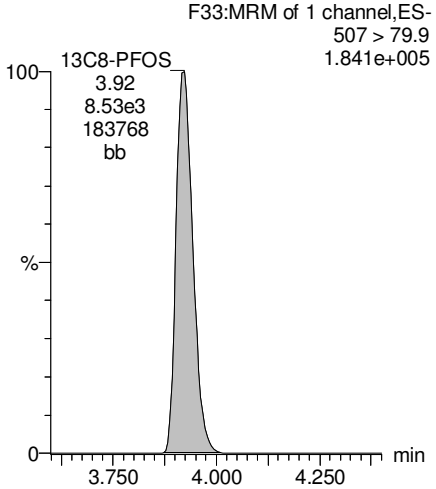


13C8-PFOS



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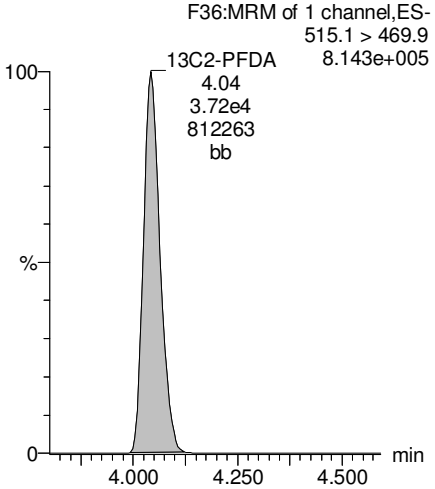

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Vista Analytical Laboratory

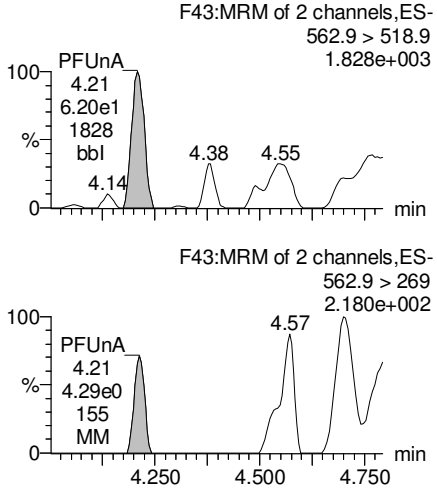
Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-26.qld

Last Altered: Saturday, August 12, 2017 14:13:05 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:13:49 Pacific Daylight Time

Name: 170811M2_26, Date: 11-Aug-2017, Time: 22:52:49, ID: 1700925-02RE1 SB01-170724 0.12178, Description: SB01-170724

PFUnA



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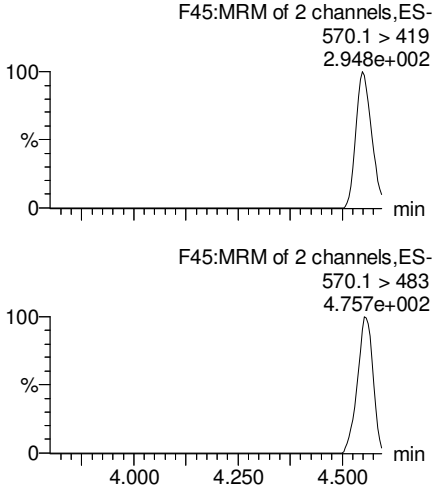

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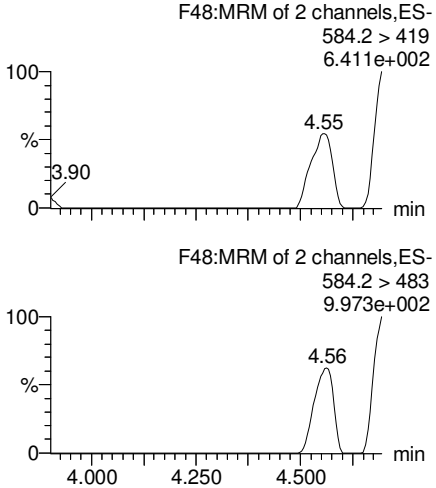
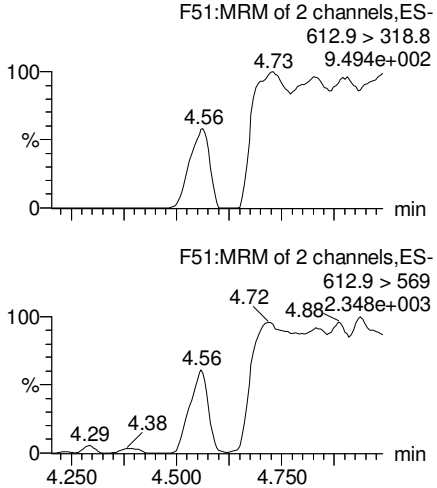


PFDoA



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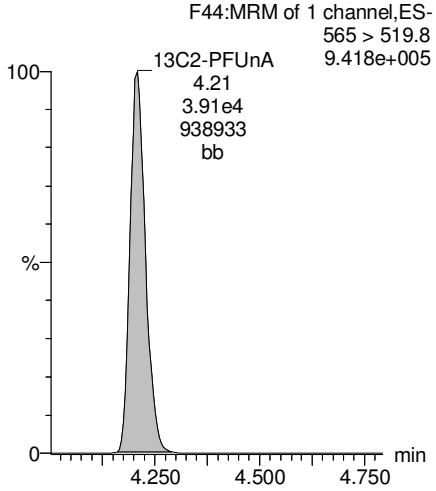
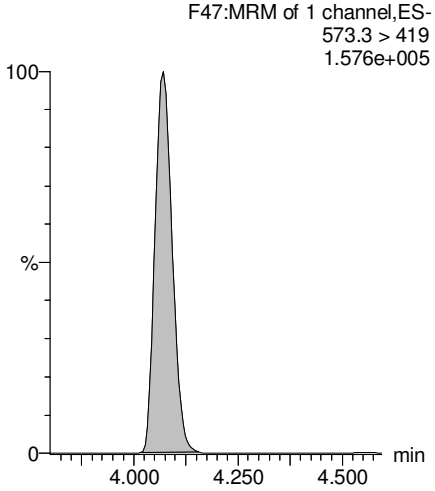
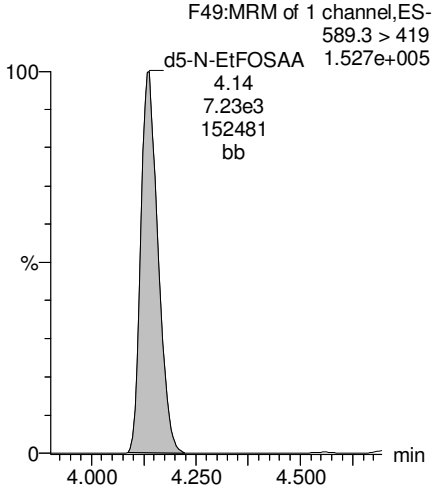


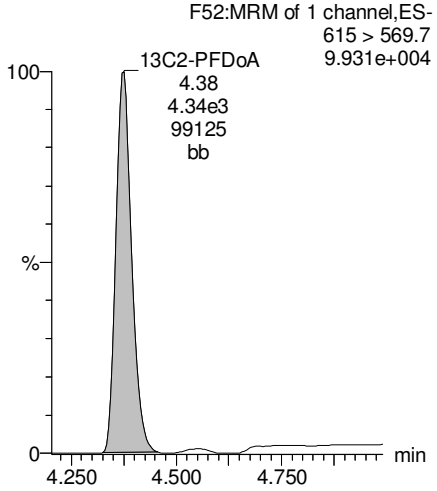
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFDoA



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Vista Analytical Laboratory

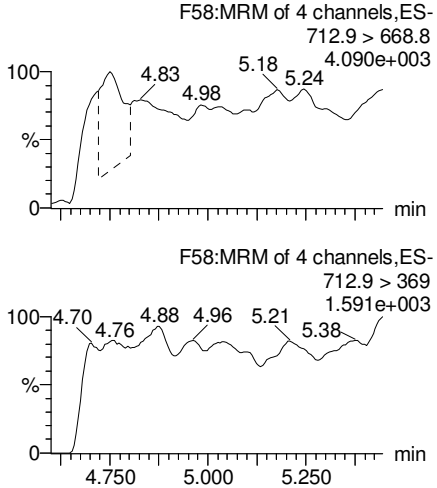
Rev'd: MM 8/15/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-26.qld

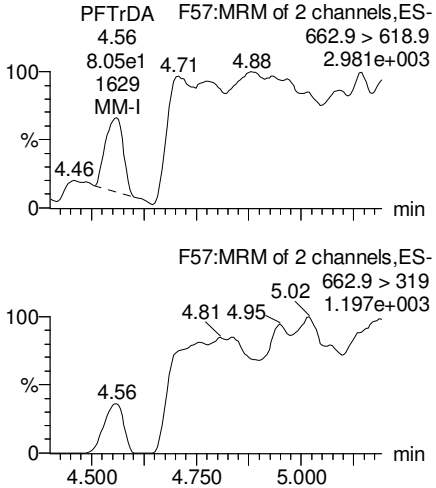
Last Altered: Saturday, August 12, 2017 14:13:05 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:13:49 Pacific Daylight Time

Name: 170811M2_26, Date: 11-Aug-2017, Time: 22:52:49, ID: 1700925-02RE1 SB01-170724 0.12178, Description: SB01-170724

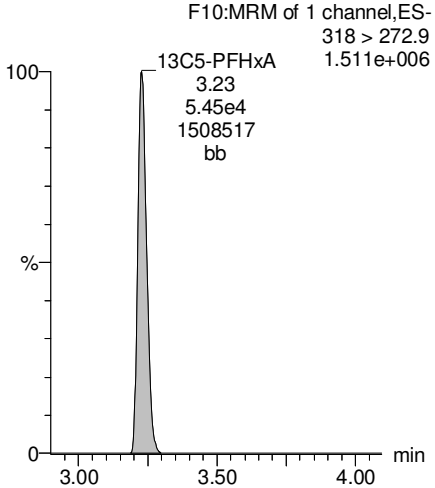
PFTeDA



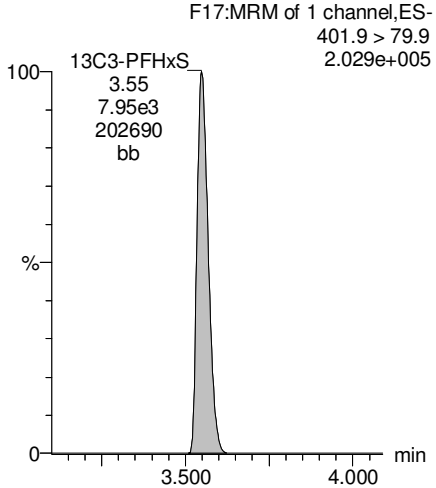
PFTrDA



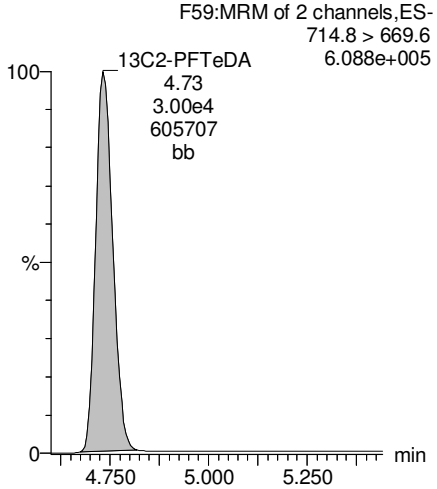
13C5-PFHxA



13C3-PFHxS



13C2-PFTeDA



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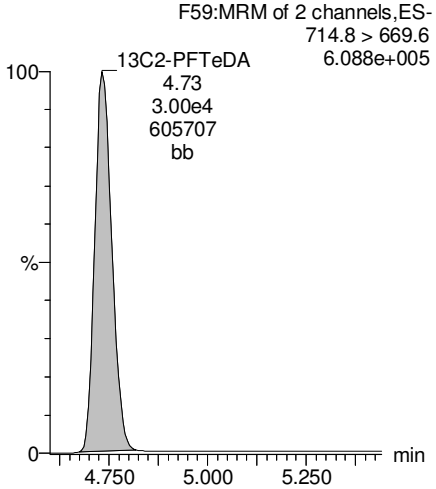
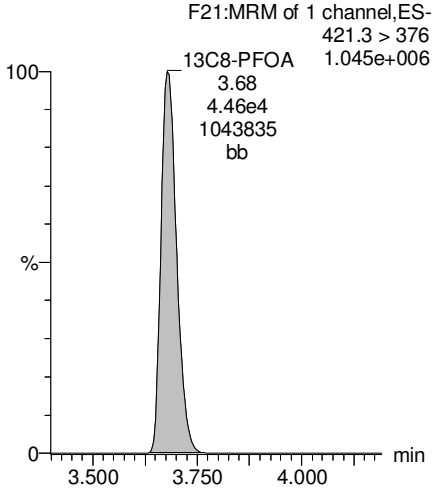


13C8-PFOA



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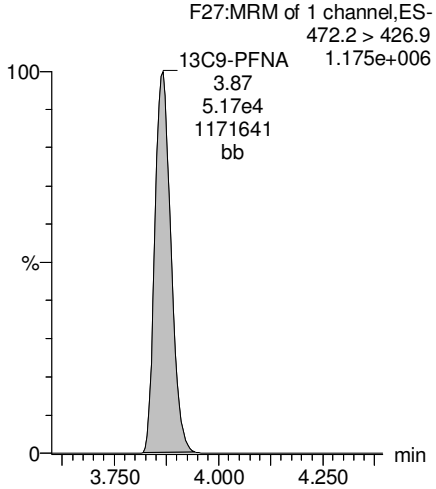

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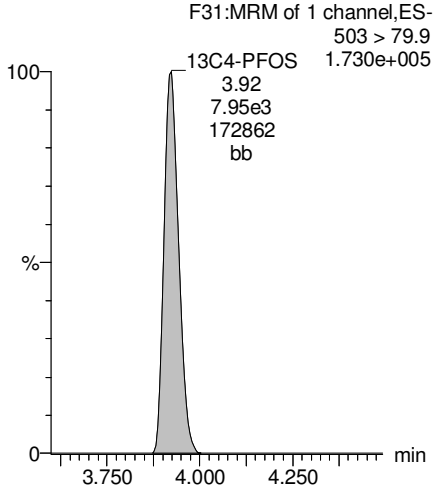
Dataset: U:\Q4.PRO\results\170811M2\170811M2-26.qld

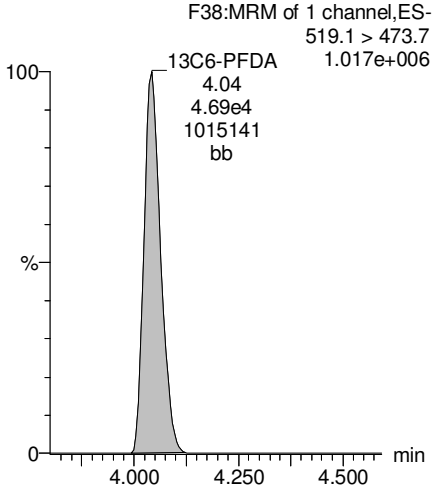
Last Altered: Saturday, August 12, 2017 14:13:05 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:13:49 Pacific Daylight Time

Name: 170811M2_26, Date: 11-Aug-2017, Time: 22:52:49, ID: 1700925-02RE1 SB01-170724 0.12178, Description: SB01-170724

13C4-PFOS



13C6-PFDA



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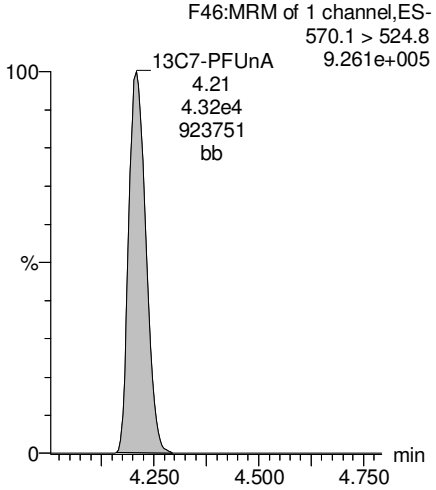

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Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170812M1\170812M1-8_PFHxS_PFOS.qld

Last Altered: Thursday, August 17, 2017 11:28:52 Pacific Daylight Time
Printed: Thursday, August 17, 2017 17:40:21 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-14-17.mdb 15 Aug 2017 11:47:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

*ug/L

Name: 170812M1_8, Date: 12-Aug-2017, Time: 21:37:27, ID: 1700925-03RE1@20X I001BC50S-170724 0.12135, Description: I001BC50S-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc. *	%Rec
1	8	PFOA	413 > 368.7	1.63e5	2.29e3	0.1101		3.71	3.65	0.890	6.84	
2	35	13C2-PFOA	414.9 > 369.7	2.29e3	2.11e3	0.1101	1.132	3.71	3.65	0.0136	0.109	95.8
3	54	13C8-PFOA	421.3 > 376	2.11e3	2.11e3	0.1101	1.000	3.71	3.64	0.0125	0.113	100.0
4	61	Total PFOA	413 > 368.7	1.79e5	2.29e3	0.1101		3.71		0.890	6.84	

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Rev'd: MM 8/17/17

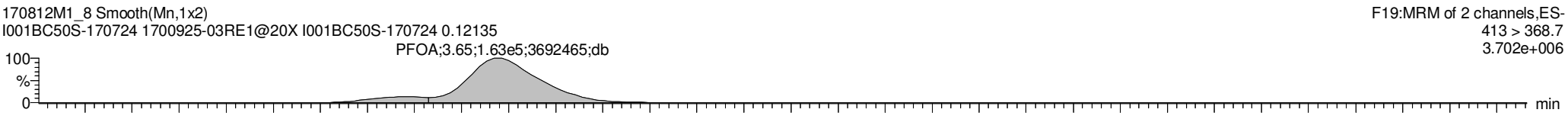
Dataset: U:\Q4.PRO\results\170812M1\170812M1-8_PFHxS_PFOS.qld

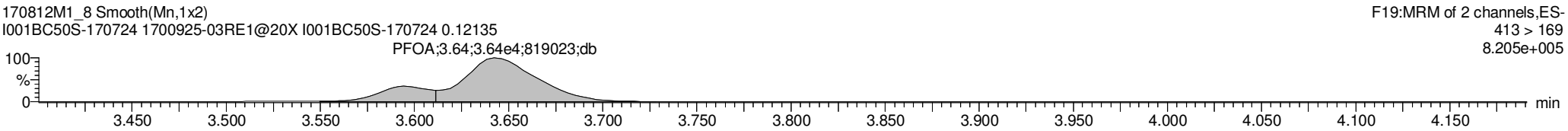
Last Altered: Thursday, August 17, 2017 11:28:52 Pacific Daylight Time
Printed: Thursday, August 17, 2017 17:40:21 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-14-17.mdb 15 Aug 2017 11:47:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170812M1_8, Date: 12-Aug-2017, Time: 21:37:27, ID: 1700925-03RE1@20X I001BC50S-170724 0.12135, Description: I001BC50S-170724

Total PFOA





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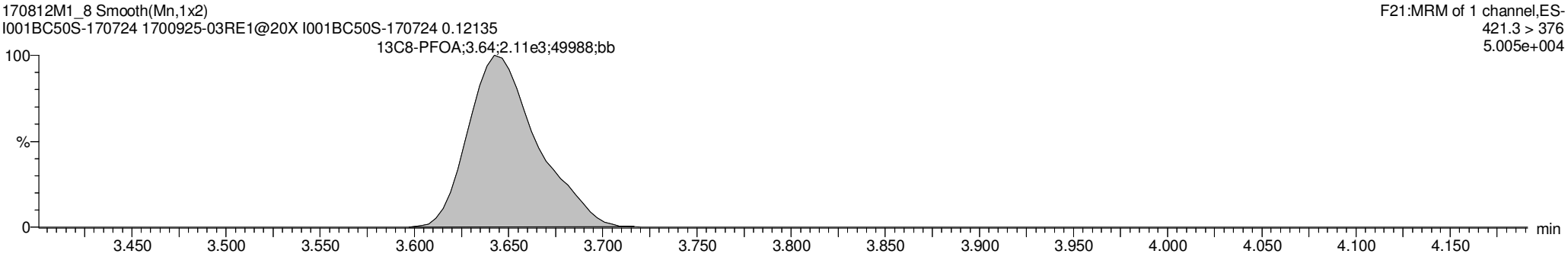
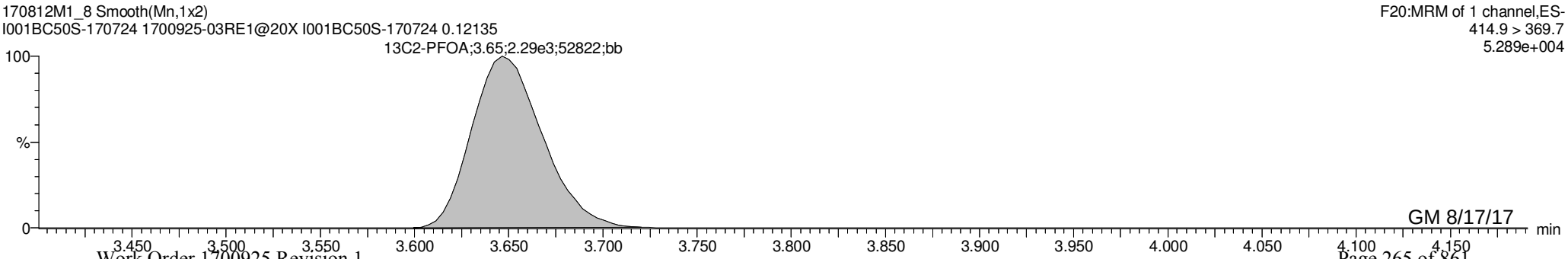


13C2-PFOA



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Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-31.qld

Last Altered: Saturday, August 12, 2017 14:25:21 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:25:37 Pacific Daylight Time

This run used only for PFOA

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_31, Date: 11-Aug-2017, Time: 23:46:09, ID: 1700925-06RE1 EB01-170724 0.1185, Description: EB01-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7		4.90e3	0.1402		3.06				
2	4	PFHxA	313.2 > 268.9		1.58e4	0.1402		3.26				
3	5	PFHpA - NOT USED	363 > 318.9		3.65e4	0.1402		3.51				
4	6	PFHxS	398.9 > 79.6		3.58e3	0.1402		3.58				
5	8	PFOA	413 > 368.7		4.77e4	0.1402		3.71				
6	10	PFNA	462.9 > 418.8		4.26e4	0.1402		3.90				
7	12	PFOS	499 > 79.9		8.43e3	0.1402		3.96				
8	13	PFDA	513 > 468.8		3.86e4	0.1402		4.08				
9	15	N-MeFOSAA	570.1 > 419		7.93e3	0.1402		4.11				
10	16	N-EtFOSAA	584.2 > 419		7.64e3	0.1402		4.18				
11	17	PFUnA	562.9 > 518.9		3.63e4	0.1402		4.25				
12	19	PFDoA	612.9 > 318.8		4.26e3	0.1402		4.42				

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Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-31.qld

Last Altered: Saturday, August 12, 2017 14:25:21 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:25:49 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_31, Date: 11-Aug-2017, Time: 23:46:09, ID: 1700925-06RE1 EB01-170724 0.1185, Description: EB01-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21	PFTrDA	662.9 > 618.9		4.26e3	0.1402		4.59				
2	22	PFTeDA	712.9 > 668.8		2.83e4	0.1402		4.78				
3	30	13C3-PFBS	302 > 98.8	4.90e3	5.25e4	0.1402	0.033	3.06	3.01	0.467	101	113.6
4	31	13C2-PFHxA	315 > 269.8	1.58e4	5.25e4	0.1402	0.304	3.26	3.23	1.50	35.3	98.9
5	32	13C4-PFHpA	367.2 > 321.8	3.65e4	5.25e4	0.1402	0.384	3.51	3.48	3.47	64.5	72.3
6	33	18O2-PFHxS	403 > 102.6	3.58e3	7.72e3	0.1402	0.417	3.58	3.55	5.80	99.3	111.3
7	35	13C2-PFOA	414.9 > 369.7	4.77e4	4.42e4	0.1402	1.132	3.71	3.68	13.5	84.9	95.2
8	36	13C5-PFNA	468.2 > 422.9	4.26e4	5.12e4	0.1402	0.946	3.90	3.87	10.4	78.5	88.1
9	38	13C8-PFOS	507 > 79.9	8.43e3	8.28e3	0.1402	1.040	3.96	3.92	12.7	87.2	97.9
10	39	13C2-PFDA	515.1 > 469.9	3.86e4	4.94e4	0.1402	0.971	4.08	4.04	9.77	71.8	80.5

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Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-31.qld

Last Altered: Saturday, August 12, 2017 14:25:21 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:25:59 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_31, Date: 11-Aug-2017, Time: 23:46:09, ID: 1700925-06RE1 EB01-170724 0.1185, Description: EB01-170724

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	41	d3-N-MeFOSAA	573.3 > 419	7.93e3	4.68e4	0.1402	0.018	4.11	4.07	2.12	849	73.3
2	42	d5-N-EtFOSAA	589.3 > 419	7.64e3	4.68e4	0.1402	0.018	4.18	4.13	2.04	798	68.9
3	43	13C2-PFUnA	565 > 519.8	3.63e4	4.68e4	0.1402	1.085	4.25	4.21	9.70	63.8	71.5
4	44	13C2-PFDoA	615 > 569.7	4.26e3	4.68e4	0.1402	0.123	4.42	4.37	1.14	65.9	73.9
5	46	13C2-PFTeDA	714.8 > 669.6	2.83e4	4.68e4	0.1402	0.798	4.78	4.73	7.55	67.5	75.7
6	52	13C5-PFHxA	318 > 272.9	5.25e4	5.25e4	0.1402	1.000	3.26	3.23	5.00	35.7	100.0
7	53	13C3-PFHxS	401.9 > 79.9	7.72e3	7.72e3	0.1402	1.000	3.58	3.54	12.5	89.2	100.0
8	54	13C8-PFOA	421.3 > 376	4.42e4	4.42e4	0.1402	1.000	3.71	3.68	12.5	89.2	100.0
9	55	13C9-PFNA	472.2 > 426.9	5.12e4	5.12e4	0.1402	1.000	3.90	3.86	12.5	89.2	100.0
10	56	13C4-PFOS	503 > 79.9	8.28e3	8.28e3	0.1402	1.000	3.96	3.92	12.5	89.2	100.0
11	57	13C6-PFDA	519.1 > 473.7	4.94e4	4.94e4	0.1402	1.000	4.08	4.04	12.5	89.2	100.0
12	58	13C7-PFUnA	570.1 > 524.8	4.68e4	4.68e4	0.1402	1.000	4.25	4.20	12.5	89.2	100.0
13	59	Total PFBS	299 > 79.7	0.00e0	4.90e3	0.1402		3.06		0.000		
14	60	Total PFHxS	398.9 > 79.6	0.00e0	3.58e3	0.1402		3.58		0.000		
15	61	Total PFOA	413 > 368.7	0.00e0	4.77e4	0.1402		3.71		0.000		
16	62	Total PFOS	499 > 79.9	0.00e0	8.43e3	0.1402		3.96		0.000		
17	63	Total N-Me-FOSAA	570.1 > 419	0.00e0	7.93e3	0.1402		4.11		0.000		
18	64	Total N-EtFOSAA	584.2 > 419	0.00e0	7.64e3	0.1402		4.18		0.000		

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Dataset: U:\Q4.PRO\results\170811M2\170811M2-31.qld

Last Altered: Saturday, August 12, 2017 14:25:21 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:25:59 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_31, Date: 11-Aug-2017, Time: 23:46:09, ID: 1700925-06RE1 EB01-170724 0.1185, Description: EB01-170724

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7			47675.281		MM-I	

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1									

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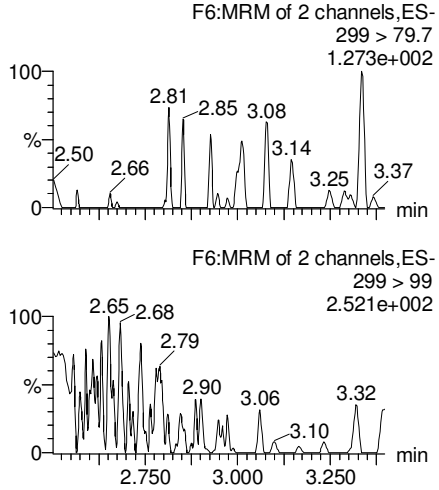
Dataset: U:\Q4.PRO\results\170811M2\170811M2-31.qld

Last Altered: Saturday, August 12, 2017 14:25:21 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:25:59 Pacific Daylight Time

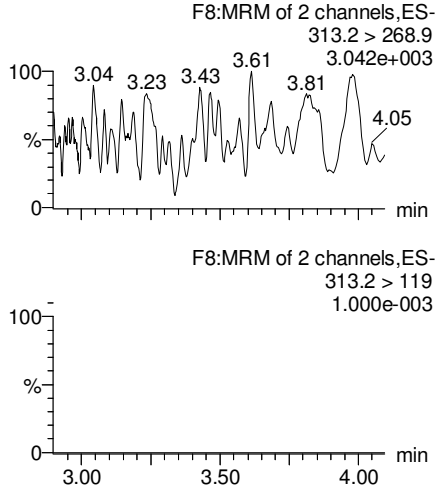
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_31, Date: 11-Aug-2017, Time: 23:46:09, ID: 1700925-06RE1 EB01-170724 0.1185, Description: EB01-170724

Total PFBS



PFHxA



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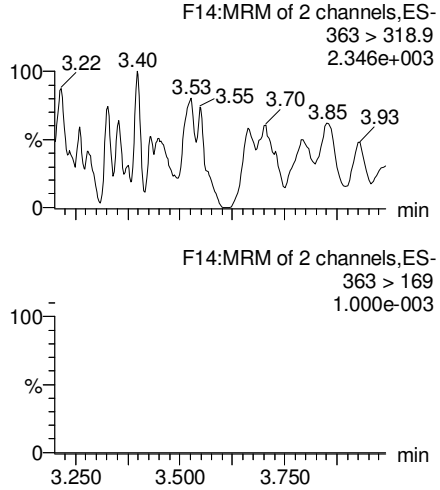
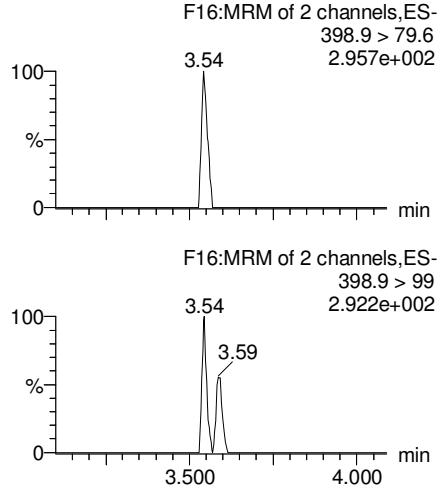
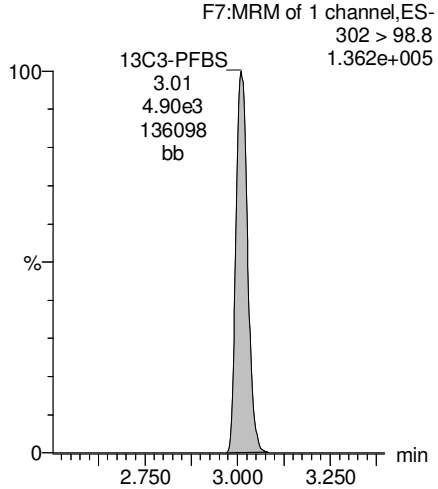


Total PFHxS



13C3-PFBS



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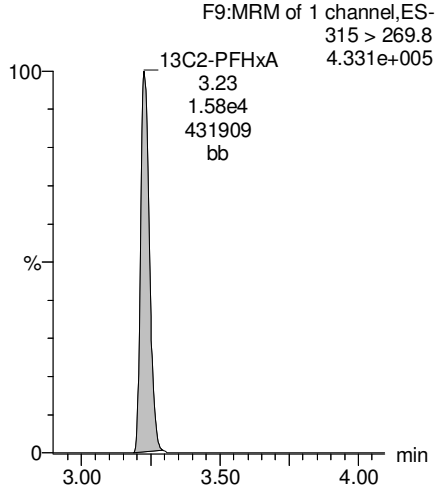

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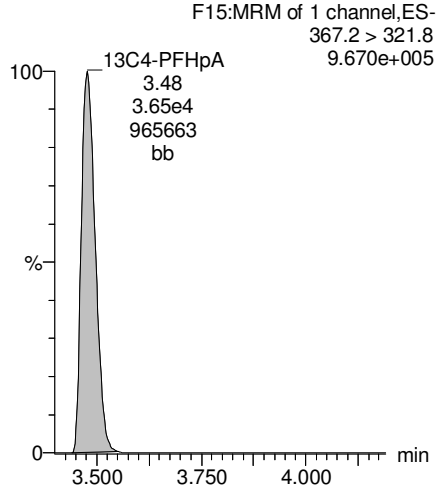

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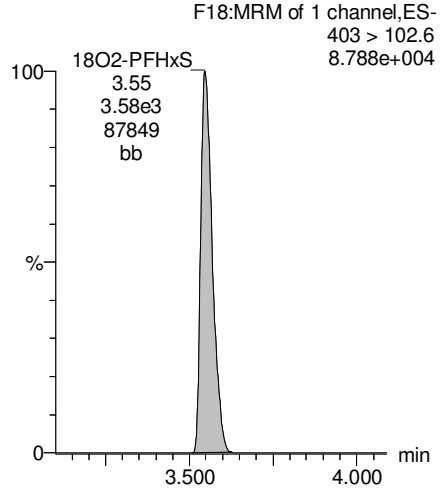

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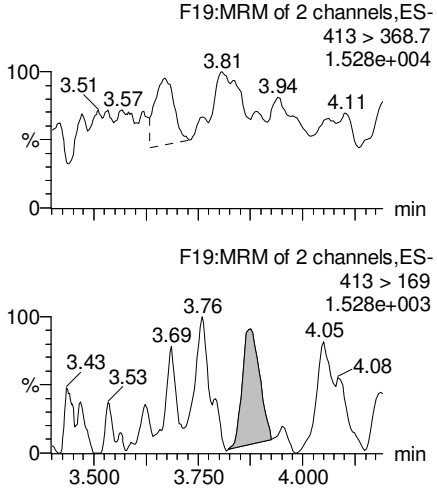
Dataset: U:\Q4.PRO\results\170811M2\170811M2-31.qld

Last Altered: Saturday, August 12, 2017 14:25:21 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:25:59 Pacific Daylight Time

Name: 170811M2_31, Date: 11-Aug-2017, Time: 23:46:09, ID: 1700925-06RE1 EB01-170724 0.1185, Description: EB01-170724

Total PFOA



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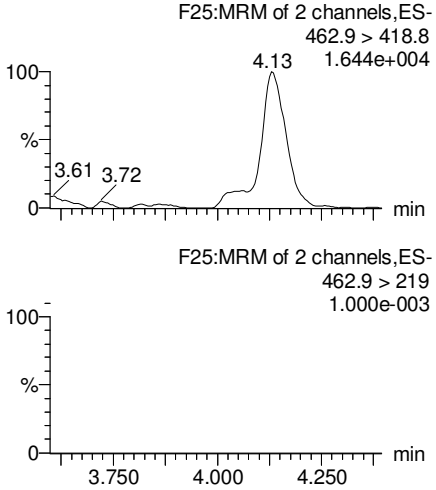
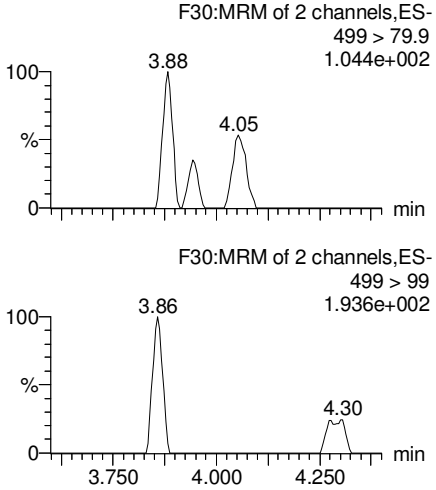
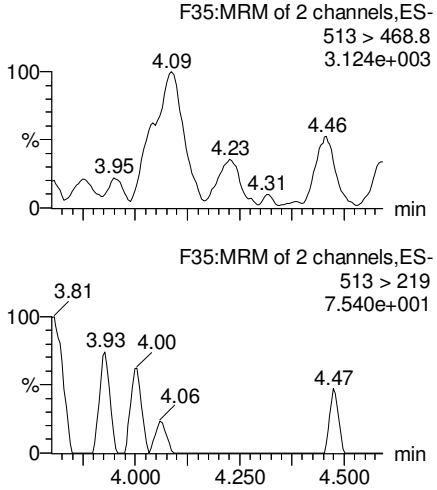


Total PFOS



PFDA



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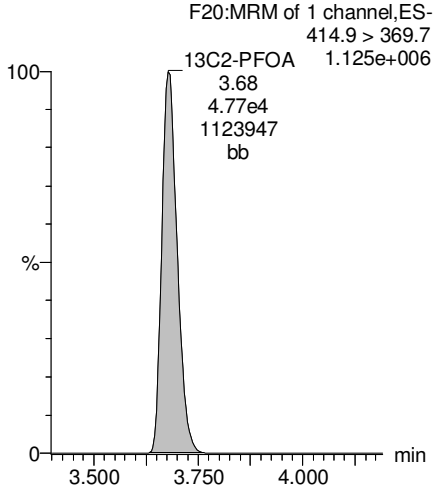

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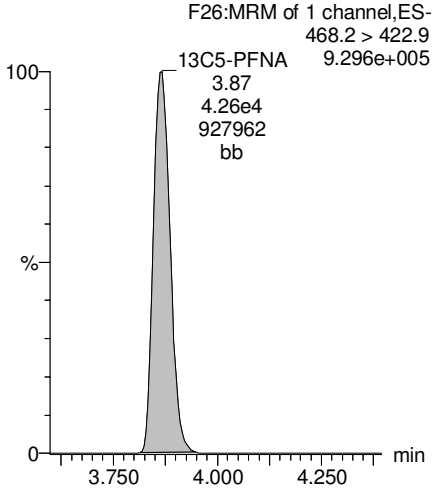

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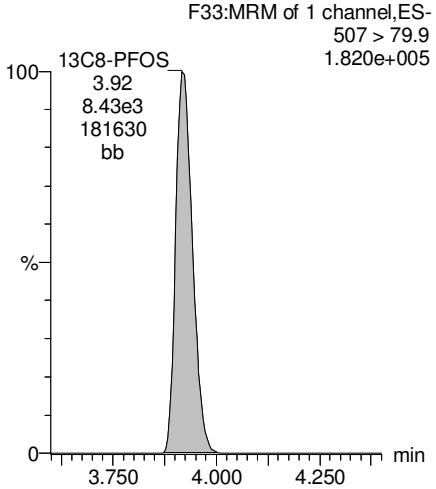

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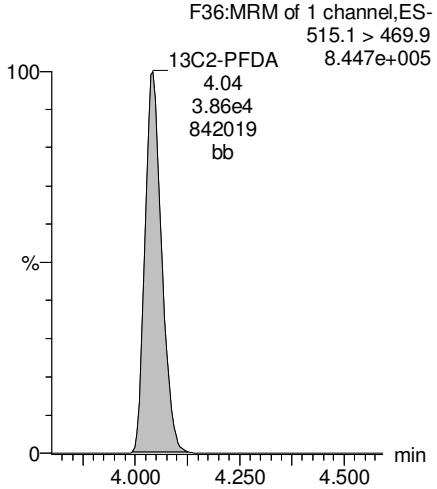


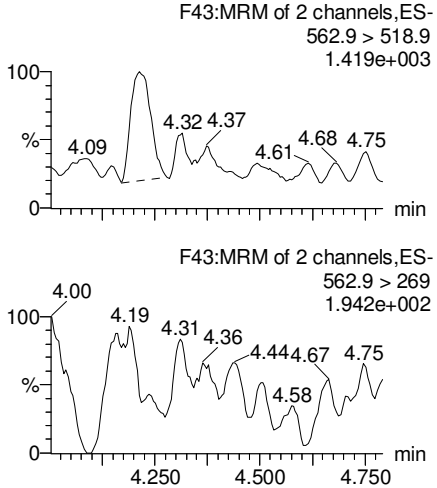
AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-31.qld

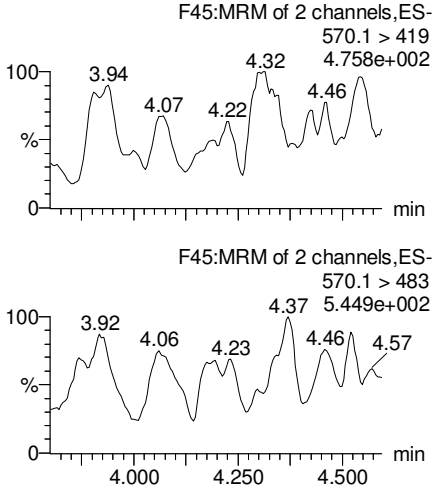
Last Altered: Saturday, August 12, 2017 14:25:21 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:25:59 Pacific Daylight Time

Name: 170811M2_31, Date: 11-Aug-2017, Time: 23:46:09, ID: 1700925-06RE1 EB01-170724 0.1185, Description: EB01-170724

PFUnA



N-MeFOSAA



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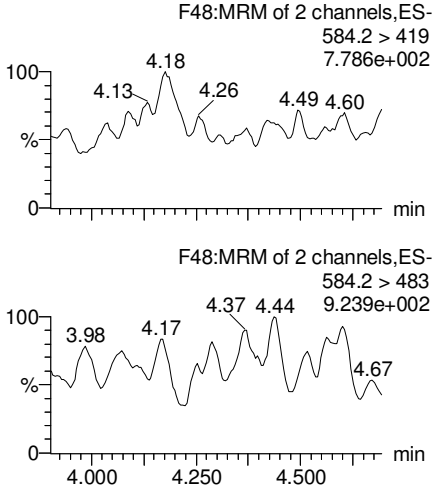
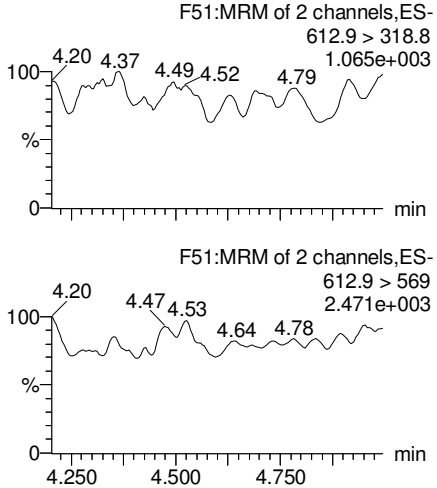


PFDoA



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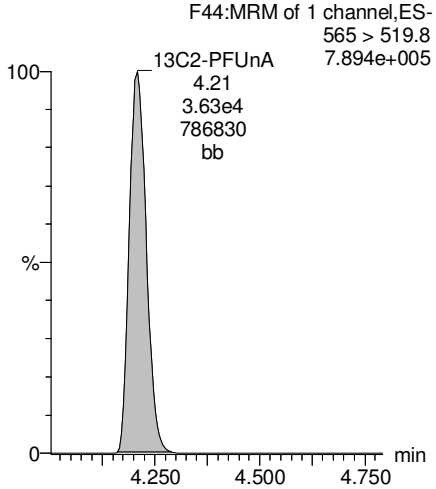

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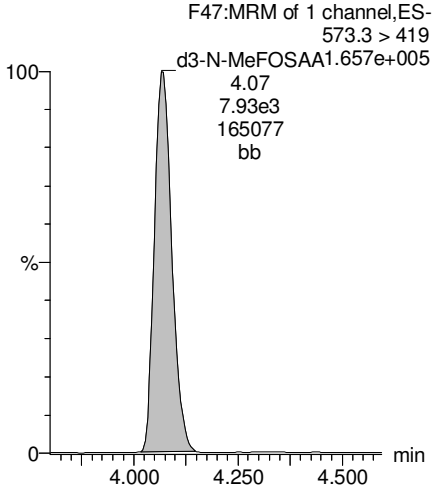

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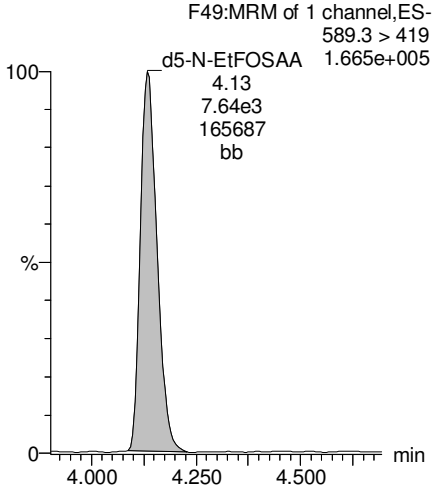

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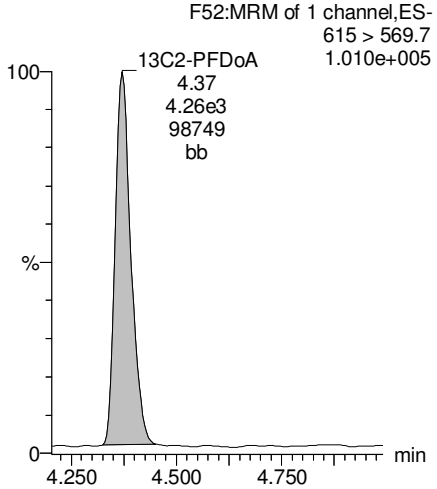

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Vista Analytical Laboratory

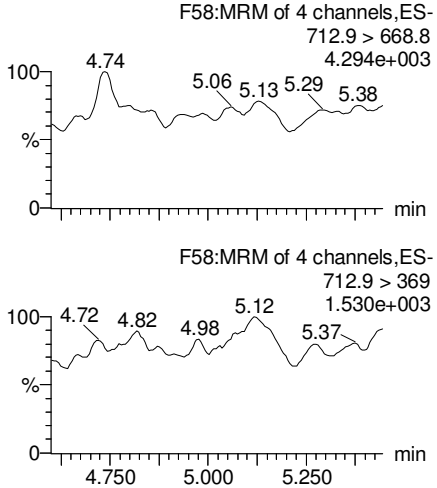
Rev'd: MM 8/17/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-31.qld

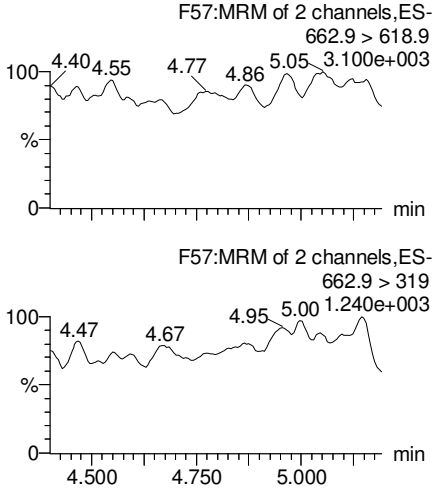
Last Altered: Saturday, August 12, 2017 14:25:21 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:25:59 Pacific Daylight Time

Name: 170811M2_31, Date: 11-Aug-2017, Time: 23:46:09, ID: 1700925-06RE1 EB01-170724 0.1185, Description: EB01-170724

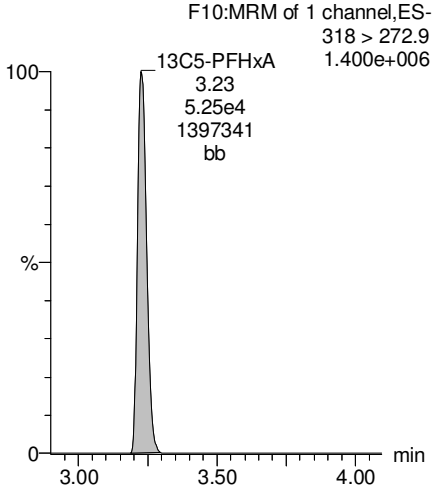
PFTeDA



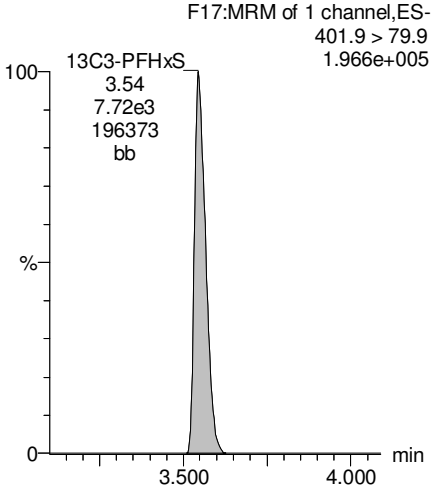
PFTrDA



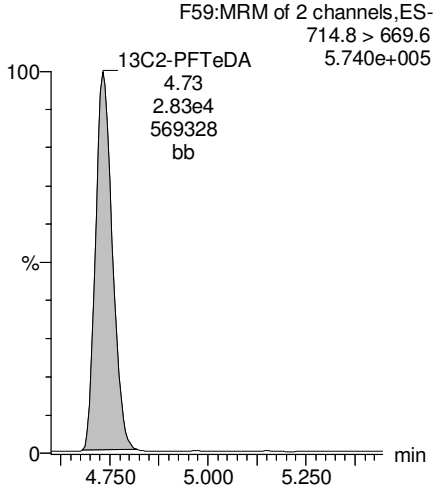
13C5-PFHxA



13C3-PFHxS



13C2-PFTeDA



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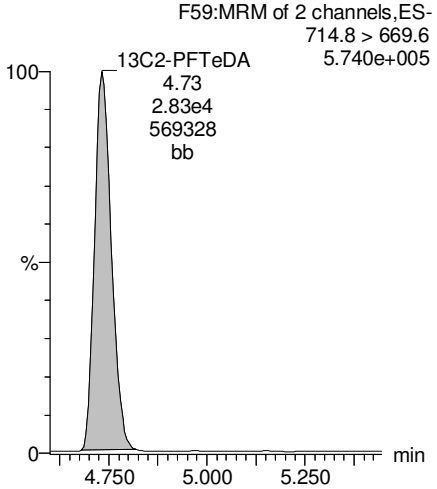
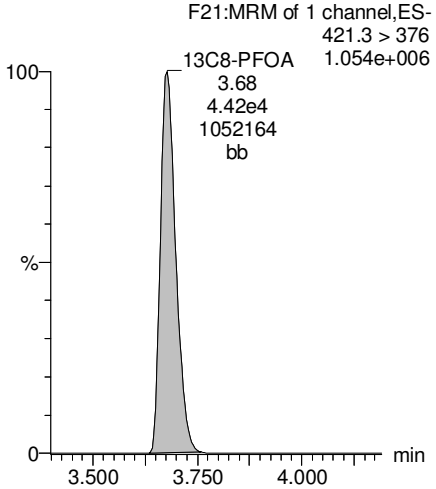
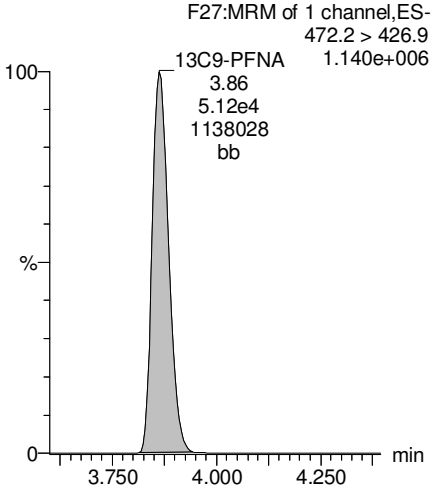


13C8-PFOA



13C9-PFNA



AP 8/12/2017

Dataset: U:\Q4.PRO\results\170811M2\170811M2-31.qld

Last Altered: Saturday, August 12, 2017 14:25:21 Pacific Daylight Time
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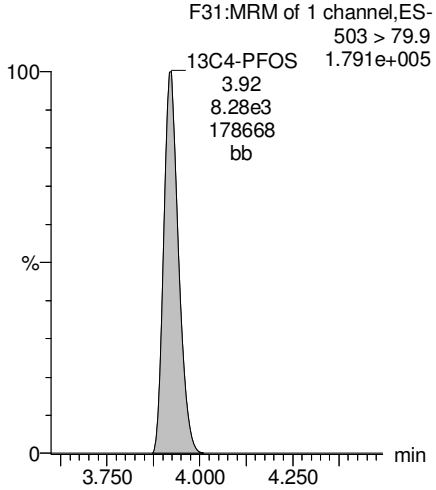
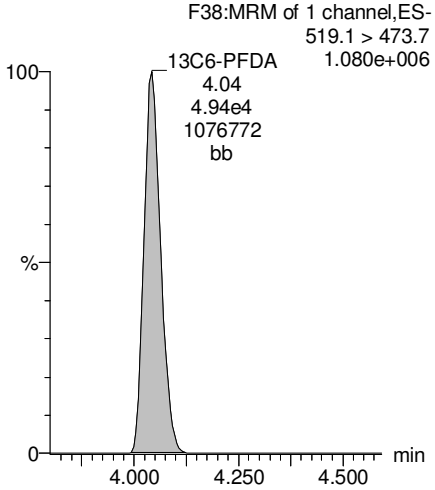
Name: 170811M2_31, Date: 11-Aug-2017, Time: 23:46:09, ID: 1700925-06RE1 EB01-170724 0.1185, Description: EB01-170724

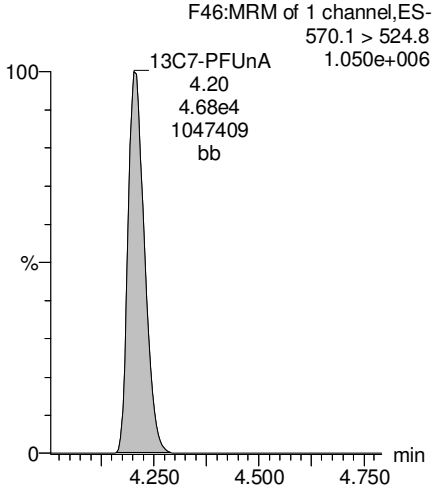
13C4-PFOS



13C6-PFDA



13C7-PFUnA



AP 8/12/2017

INJECTION INTERNAL STANDARD (IIS) AREAS,

INSTRUMENT BLANKS (IB)

AND

CONTINUTING CALIBRATION VERIFICATIONS CCV)

Dataset: U:\Q4.PRO\results\170802M1\170802M1-RS AREAS.qld

Last Altered: Thursday, August 03, 2017 10:30:32 Pacific Daylight Time
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Method: U:\Q4.PRO\MethDB\PFAS_RS=only.mdb 28 Jul 2017 09:34:01
Calibration: 03 Aug 2017 10:24:06

Name: 170802M1_2, Date: 02-Aug-2017, Time: 10:40:05, ID: ST170802M1-1 PFC CS0 17H0201, Description: PFC CS0 17H0201

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	3.90e4	100.0	NO
2	2	13C3-PFHxS	ST170...	7.48e3	100.0	NO
3	3	13C8-PFOA	ST170...	5.22e4	100.0	NO
4	4	13C9-PFNA	ST170...	5.61e4	100.0	NO
5	5	13C4-PFOS	ST170...	9.60e3	100.0	NO
6	6	13C6-PFDA	ST170...	6.22e4	100.0	NO
7	7	13C7-PFUnA	ST170...	5.40e4	100.0	NO

Name: 170802M1_3, Date: 02-Aug-2017, Time: 10:50:52, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA	4.60e-1	0.0	NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA	6.62e0	0.0	NO
7	7	13C7-PFUnA	IPA			NO

Name: 170802M1_4, Date: 02-Aug-2017, Time: 11:01:30, ID: B7G0121-BS1 OPR 0.125, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7G01...	3.98e4	101.8	NO
2	2	13C3-PFHxS	B7G01...	6.48e3	86.6	NO
3	3	13C8-PFOA	B7G01...	3.07e4	58.8	NO
4	4	13C9-PFNA	B7G01...	3.34e4	59.5	NO
5	5	13C4-PFOS	B7G01...	6.42e3	66.8	NO
6	6	13C6-PFDA	B7G01...	3.68e4	59.1	NO
7	7	13C7-PFUnA	B7G01...	3.52e4	65.0	NO

Name: 170802M1_5, Date: 02-Aug-2017, Time: 11:12:16, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	7.11e0	0.0	NO

Dataset: U:\Q4.PRO\results\170802M1\170802M1-RS AREAS.qld

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Name: 170802M1_6, Date: 02-Aug-2017, Time: 11:22:55, ID: B7G0121-BLK1 Method Blank 0.125, Description: Method Blank

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	B7G01...	4.29e4	109.8	NO
2	2 13C3-PFHxS	B7G01...	7.28e3	97.4	NO
3	3 13C8-PFOA	B7G01...	3.66e4	70.1	NO
4	4 13C9-PFNA	B7G01...	3.86e4	68.9	NO
5	5 13C4-PFOS	B7G01...	7.29e3	75.9	NO
6	6 13C6-PFDA	B7G01...	3.91e4	62.8	NO
7	7 13C7-PFUnA	B7G01...	3.85e4	71.3	NO

Name: 170802M1_7, Date: 02-Aug-2017, Time: 11:33:34, ID: B7G0121-MS1 Matrix Spike 0.11301, Description: Matrix Spike

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	B7G01...	4.72e4	120.8	NO
2	2 13C3-PFHxS	B7G01...	8.04e3	107.5	NO
3	3 13C8-PFOA	B7G01...	4.19e4	80.3	NO
4	4 13C9-PFNA	B7G01...	4.51e4	80.5	NO
5	5 13C4-PFOS	B7G01...	7.70e3	80.2	NO
6	6 13C6-PFDA	B7G01...	4.03e4	64.7	NO
7	7 13C7-PFUnA	B7G01...	4.60e4	85.2	NO

Name: 170802M1_8, Date: 02-Aug-2017, Time: 11:44:20, ID: B7G0121-MSD1 Matrix Spike Dup 0.11225, Description: Matrix Spike Dup

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	B7G01...	3.71e4	95.1	NO
2	2 13C3-PFHxS	B7G01...	6.30e3	84.3	NO
3	3 13C8-PFOA	B7G01...	3.37e4	64.6	NO
4	4 13C9-PFNA	B7G01...	3.90e4	69.5	NO
5	5 13C4-PFOS	B7G01...	6.40e3	66.6	NO
6	6 13C6-PFDA	B7G01...	3.87e4	62.2	NO
7	7 13C7-PFUnA	B7G01...	3.34e4	61.8	NO

Name: 170802M1_9, Date: 02-Aug-2017, Time: 11:54:58, ID: B7G0121-MS2 Matrix Spike 0.11554, Description: Matrix Spike

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	B7G01...	5.53e3	14.2	YES
2	2 13C3-PFHxS	B7G01...	1.03e3	13.8	YES
3	3 13C8-PFOA	B7G01...	3.65e3	7.0	YES
4	4 13C9-PFNA	B7G01...	3.29e4	58.7	NO
5	5 13C4-PFOS	B7G01...	4.86e3	50.7	NO
6	6 13C6-PFDA	B7G01...	4.28e4	68.8	NO
7	7 13C7-PFUnA	B7G01...	3.60e4	66.6	NO

Dataset: U:\Q4.PRO\results\170802M1\170802M1-RS AREAS.qld

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Name: 170802M1_10, Date: 02-Aug-2017, Time: 12:05:47, ID: B7G0121-MSD2 Matrix Spike Dup 0.11866, Description: Matrix Spike Dup

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7G01...	3.06e3	7.8	YES
2	2	13C3-PFHxS	B7G01...	9.34e2	12.5	YES
3	3	13C8-PFOA	B7G01...	3.23e3	6.2	YES
4	4	13C9-PFNA	B7G01...	3.14e4	56.0	NO
5	5	13C4-PFOS	B7G01...	4.14e3	43.1	YES
6	6	13C6-PFDA	B7G01...	3.99e4	64.1	NO
7	7	13C7-PFUnA	B7G01...	3.79e4	70.1	NO

Name: 170802M1_11, Date: 02-Aug-2017, Time: 12:17:05, ID: 1700922-01 MH-L103-20170721 0.10565, Description: MH-L103-20170721

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	4.45e4	114.0	NO
2	2	13C3-PFHxS	17009...	7.21e3	96.4	NO
3	3	13C8-PFOA	17009...	3.93e4	75.4	NO
4	4	13C9-PFNA	17009...	4.03e4	72.0	NO
5	5	13C4-PFOS	17009...	7.63e3	79.5	NO
6	6	13C6-PFDA	17009...	4.18e4	67.1	NO
7	7	13C7-PFUnA	17009...	3.90e4	72.2	NO

Name: 170802M1_12, Date: 02-Aug-2017, Time: 12:28:21, ID: 1700922-02 MH-N104-20170721 0.11025, Description: MH-N104-20170721

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	3.71e4	95.0	NO
2	2	13C3-PFHxS	17009...	6.48e3	86.7	NO
3	3	13C8-PFOA	17009...	3.04e4	58.3	NO
4	4	13C9-PFNA	17009...	3.25e4	58.0	NO
5	5	13C4-PFOS	17009...	6.16e3	64.1	NO
6	6	13C6-PFDA	17009...	3.49e4	56.2	NO
7	7	13C7-PFUnA	17009...	3.30e4	61.0	NO

Name: 170802M1_13, Date: 02-Aug-2017, Time: 12:39:13, ID: 1700922-03 Upstream-Culvert-109-20170721 0.11852, Description: Upstream-Culvert-109-20170721

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	4.12e4	105.6	NO
2	2	13C3-PFHxS	17009...	6.33e3	84.7	NO
3	3	13C8-PFOA	17009...	3.62e4	69.3	NO
4	4	13C9-PFNA	17009...	4.39e4	78.3	NO
5	5	13C4-PFOS	17009...	6.16e3	64.2	NO
6	6	13C6-PFDA	17009...	3.97e4	63.8	NO
7	7	13C7-PFUnA	17009...	4.10e4	75.9	NO

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Name: 170802M1_14, Date: 02-Aug-2017, Time: 12:49:51, ID: 1700922-04 FRB03-20170721 0.11017, Description: FRB03-20170721

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	4.18e4	107.1	NO
2	2 13C3-PFHxS	17009...	6.33e3	84.7	NO
3	3 13C8-PFOA	17009...	3.72e4	71.3	NO
4	4 13C9-PFNA	17009...	3.61e4	64.5	NO
5	5 13C4-PFOS	17009...	6.19e3	64.5	NO
6	6 13C6-PFDA	17009...	3.73e4	60.0	NO
7	7 13C7-PFUnA	17009...	3.55e4	65.7	NO

Name: 170802M1_15, Date: 02-Aug-2017, Time: 13:00:41, ID: 1700922-05 RB08-20170720 0.11893, Description: RB08-20170720

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	4.00e4	102.5	NO
2	2 13C3-PFHxS	17009...	6.34e3	84.8	NO
3	3 13C8-PFOA	17009...	3.41e4	65.3	NO
4	4 13C9-PFNA	17009...	3.92e4	69.9	NO
5	5 13C4-PFOS	17009...	6.88e3	71.6	NO
6	6 13C6-PFDA	17009...	3.53e4	56.8	NO
7	7 13C7-PFUnA	17009...	3.59e4	66.4	NO

Name: 170802M1_16, Date: 02-Aug-2017, Time: 13:11:25, ID: 1700922-06 RB09-20170721 0.11676, Description: RB09-20170721

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	3.51e4	90.0	NO
2	2 13C3-PFHxS	17009...	6.23e3	83.3	NO
3	3 13C8-PFOA	17009...	2.89e4	55.3	NO
4	4 13C9-PFNA	17009...	3.18e4	56.8	NO
5	5 13C4-PFOS	17009...	6.34e3	66.0	NO
6	6 13C6-PFDA	17009...	3.56e4	57.3	NO
7	7 13C7-PFUnA	17009...	3.48e4	64.3	NO

Name: 170802M1_17, Date: 02-Aug-2017, Time: 13:22:03, ID: 1700925-01 I001BC43S-170724 0.12112, Description: I001BC43S-170724

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	2.64e4	67.6	NO
2	2 13C3-PFHxS	17009...	5.18e3	69.2	NO
3	3 13C8-PFOA	17009...	2.46e4	47.2	YES
4	4 13C9-PFNA	17009...	2.71e4	48.4	YES
5	5 13C4-PFOS	17009...	5.51e3	57.4	NO
6	6 13C6-PFDA	17009...	2.93e4	47.0	YES
7	7 13C7-PFUnA	17009...	2.74e4	50.8	NO

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Name: 170802M1_18, Date: 02-Aug-2017, Time: 13:32:42, ID: 1700925-02 SB01-170724 0.12178, Description: SB01-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	3.62e4	92.7	NO
2	2	13C3-PFHxS	17009...	6.52e3	87.2	NO
3	3	13C8-PFOA	17009...	3.17e4	60.8	NO
4	4	13C9-PFNA	17009...	3.55e4	63.2	NO
5	5	13C4-PFOS	17009...	7.02e3	73.1	NO
6	6	13C6-PFDA	17009...	4.20e4	67.5	NO
7	7	13C7-PFUnA	17009...	3.64e4	67.3	NO

Name: 170802M1_19, Date: 02-Aug-2017, Time: 13:43:20, ID: 1700925-03 I001BC50S-170724 0.12135, Description: I001BC50S-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	2.53e4	64.9	NO
2	2	13C3-PFHxS	17009...	3.93e3	52.5	NO
3	3	13C8-PFOA	17009...	2.11e4	40.5	YES
4	4	13C9-PFNA	17009...	2.96e4	52.9	NO
5	5	13C4-PFOS	17009...	5.91e3	61.5	NO
6	6	13C6-PFDA	17009...	3.23e4	51.9	NO
7	7	13C7-PFUnA	17009...	3.35e4	62.0	NO

Name: 170802M1_20, Date: 02-Aug-2017, Time: 13:53:59, ID: 1700925-04 I001MW52S-170724 0.1192, Description: I001MW52S-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.17e3	13.2	YES
2	2	13C3-PFHxS	17009...	8.73e2	11.7	YES
3	3	13C8-PFOA	17009...	3.28e3	6.3	YES
4	4	13C9-PFNA	17009...	2.73e4	48.8	YES
5	5	13C4-PFOS	17009...	3.87e3	40.3	YES
6	6	13C6-PFDA	17009...	3.12e4	50.1	NO
7	7	13C7-PFUnA	17009...	3.24e4	60.0	NO

Name: 170802M1_21, Date: 02-Aug-2017, Time: 14:04:37, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA	6.15e0	0.0	YES
7	7	13C7-PFUnA	IPA	1.96e1	0.0	YES

Dataset: U:\Q4.PRO\results\170802M1\170802M1-RS AREAS.qld

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Name: 170802M1_22, Date: 02-Aug-2017, Time: 14:15:15, ID: ST170802M1-2 PFC CS3 17G3105, Description: PFC CS3 17G3105

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	5.07e4	129.8	NO
2	2	13C3-PFHxS	ST170...	1.12e4	149.3	NO
3	3	13C8-PFOA	ST170...	6.44e4	123.4	NO
4	4	13C9-PFNA	ST170...	6.96e4	124.1	NO
5	5	13C4-PFOS	ST170...	1.21e4	125.5	NO
6	6	13C6-PFDA	ST170...	7.42e4	119.3	NO
7	7	13C7-PFUnA	ST170...	7.06e4	130.7	NO

Name: 170802M1_23, Date: 02-Aug-2017, Time: 14:25:57, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA	5.85e0	0.0	NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.48e1	0.0	NO

Name: 170802M1_24, Date: 02-Aug-2017, Time: 14:36:40, ID: 1700925-05 I001MW52X-170724 0.1174, Description: I001MW52X-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.22e3	13.4	YES
2	2	13C3-PFHxS	17009...	9.81e2	13.1	YES
3	3	13C8-PFOA	17009...	3.46e3	6.6	YES
4	4	13C9-PFNA	17009...	2.79e4	49.8	YES
5	5	13C4-PFOS	17009...	3.79e3	39.5	YES
6	6	13C6-PFDA	17009...	3.46e4	55.6	NO
7	7	13C7-PFUnA	17009...	3.44e4	63.6	NO

Name: 170802M1_25, Date: 02-Aug-2017, Time: 14:47:19, ID: 1700925-06 EB01-170724 0.1185, Description: EB01-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	3.71e4	94.9	NO
2	2	13C3-PFHxS	17009...	6.30e3	84.2	NO
3	3	13C8-PFOA	17009...	3.24e4	62.1	NO
4	4	13C9-PFNA	17009...	3.68e4	65.7	NO
5	5	13C4-PFOS	17009...	6.62e3	68.9	NO
6	6	13C6-PFDA	17009...	3.52e4	56.5	NO
7	7	13C7-PFUnA	17009...	3.68e4	68.2	NO

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Name: 170802M1_26, Date: 02-Aug-2017, Time: 14:57:57, ID: 1700929-01 MATP01001 0.11834, Description: MATP01001

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	3.30e4	84.5	NO
2	2 13C3-PFHxS	17009...	5.95e3	79.5	NO
3	3 13C8-PFOA	17009...	2.67e4	51.2	NO
4	4 13C9-PFNA	17009...	2.56e4	45.6	YES
5	5 13C4-PFOS	17009...	6.17e3	64.3	NO
6	6 13C6-PFDA	17009...	3.07e4	49.4	YES
7	7 13C7-PFUnA	17009...	2.94e4	54.5	NO

Name: 170802M1_27, Date: 02-Aug-2017, Time: 15:08:55, ID: 1700929-02 MATP01002 0.1157, Description: MATP01002

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	3.43e4	88.0	NO
2	2 13C3-PFHxS	17009...	6.80e3	90.9	NO
3	3 13C8-PFOA	17009...	3.22e4	61.6	NO
4	4 13C9-PFNA	17009...	3.60e4	64.2	NO
5	5 13C4-PFOS	17009...	6.34e3	66.0	NO
6	6 13C6-PFDA	17009...	3.63e4	58.3	NO
7	7 13C7-PFUnA	17009...	3.20e4	59.1	NO

Name: 170802M1_28, Date: 02-Aug-2017, Time: 15:19:39, ID: 1700938-01 NORP08102 0.11844, Description: NORP08102

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	3.05e4	78.1	NO
2	2 13C3-PFHxS	17009...	5.50e3	73.6	NO
3	3 13C8-PFOA	17009...	2.75e4	52.7	NO
4	4 13C9-PFNA	17009...	2.78e4	49.6	YES
5	5 13C4-PFOS	17009...	5.26e3	54.7	NO
6	6 13C6-PFDA	17009...	2.71e4	43.5	YES
7	7 13C7-PFUnA	17009...	2.73e4	50.5	NO

Name: 170802M1_29, Date: 02-Aug-2017, Time: 15:30:18, ID: 1700938-02 NORP08103 0.12014, Description: NORP08103

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	3.41e4	87.4	NO
2	2 13C3-PFHxS	17009...	5.30e3	70.9	NO
3	3 13C8-PFOA	17009...	3.10e4	59.3	NO
4	4 13C9-PFNA	17009...	3.20e4	57.1	NO
5	5 13C4-PFOS	17009...	5.61e3	58.4	NO
6	6 13C6-PFDA	17009...	3.38e4	54.3	NO
7	7 13C7-PFUnA	17009...	2.64e4	48.8	YES

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Name: 170802M1_30, Date: 02-Aug-2017, Time: 15:40:56, ID: 1700938-03 NORP08104 0.11247, Description: NORP08104

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	4.27e4	109.3	NO
2	2 13C3-PFHxS	17009...	7.36e3	98.4	NO
3	3 13C8-PFOA	17009...	3.41e4	65.3	NO
4	4 13C9-PFNA	17009...	4.05e4	72.3	NO
5	5 13C4-PFOS	17009...	7.35e3	76.5	NO
6	6 13C6-PFDA	17009...	3.71e4	59.6	NO
7	7 13C7-PFUnA	17009...	3.32e4	61.5	NO

Name: 170802M1_31, Date: 02-Aug-2017, Time: 15:51:34, ID: 1700886-12 AT028-SD17-02-071317-0845 1.44, Description: AT028-SD17-02-071317-0845

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17008...	2.45e4	62.8	NO
2	2 13C3-PFHxS	17008...	4.53e3	60.6	NO
3	3 13C8-PFOA	17008...	2.10e4	40.3	YES
4	4 13C9-PFNA	17008...	2.08e4	37.2	YES
5	5 13C4-PFOS	17008...	3.62e3	37.7	YES
6	6 13C6-PFDA	17008...	1.60e4	25.6	YES
7	7 13C7-PFUnA	17008...	8.00e3	14.8	YES

Name: 170802M1_32, Date: 02-Aug-2017, Time: 16:02:12, ID: 1700888-03 HARRI-01-SB02-0-2 2.04, Description: HARRI-01-SB02-0-2

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17008...	5.74e4	146.9	NO
2	2 13C3-PFHxS	17008...	8.78e3	117.4	NO
3	3 13C8-PFOA	17008...	5.18e4	99.3	NO
4	4 13C9-PFNA	17008...	4.41e4	78.6	NO
5	5 13C4-PFOS	17008...	3.06e3	31.8	YES
6	6 13C6-PFDA	17008...	1.84e4	29.6	YES
7	7 13C7-PFUnA	17008...	5.79e3	10.7	YES

Name: 170802M1_33, Date: 02-Aug-2017, Time: 16:12:51, ID: 1700888-09 HARRI-02-SB01-6-8 1.47, Description: HARRI-02-SB01-6-8

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17008...	5.51e4	141.1	NO
2	2 13C3-PFHxS	17008...	9.57e3	128.0	NO
3	3 13C8-PFOA	17008...	4.08e4	78.2	NO
4	4 13C9-PFNA	17008...	3.70e4	66.1	NO
5	5 13C4-PFOS	17008...	4.21e3	43.8	YES
6	6 13C6-PFDA	17008...	1.42e4	22.8	YES
7	7 13C7-PFUnA	17008...	2.94e3	5.4	YES

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Name: 170802M1_34, Date: 02-Aug-2017, Time: 16:23:37, ID: 1700889-06 HARRI-03-SB03-0-2 1.33, Description: HARRI-03-SB03-0-2

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	6.12e4	156.8	YES
2	2	13C3-PFHxS	17008...	9.45e3	126.4	NO
3	3	13C8-PFOA	17008...	5.42e4	103.9	NO
4	4	13C9-PFNA	17008...	5.33e4	95.1	NO
5	5	13C4-PFOS	17008...	6.59e3	68.7	NO
6	6	13C6-PFDA	17008...	2.80e4	45.0	YES
7	7	13C7-PFUnA	17008...	9.43e3	17.4	YES

Name: 170802M1_35, Date: 02-Aug-2017, Time: 16:34:16, ID: B7G0086-MS1 Matrix Spike 1.35, Description: Matrix Spike

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7G00...	6.10e4	156.2	YES
2	2	13C3-PFHxS	B7G00...	9.49e3	127.0	NO
3	3	13C8-PFOA	B7G00...	5.07e4	97.1	NO
4	4	13C9-PFNA	B7G00...	4.68e4	83.5	NO
5	5	13C4-PFOS	B7G00...	6.52e3	67.9	NO
6	6	13C6-PFDA	B7G00...	2.52e4	40.4	YES
7	7	13C7-PFUnA	B7G00...	5.17e3	9.6	YES

Name: 170802M1_36, Date: 02-Aug-2017, Time: 16:44:54, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA	7.57e0	0.0	YES
7	7	13C7-PFUnA	IPA			NO

Name: 170802M1_37, Date: 02-Aug-2017, Time: 16:55:33, ID: ST170802M1-3 PFC CS3 17G3105, Description: PFC CS3 17G3105

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	5.66e4	145.0	NO
2	2	13C3-PFHxS	ST170...	1.16e4	155.7	YES
3	3	13C8-PFOA	ST170...	6.10e4	116.9	NO
4	4	13C9-PFNA	ST170...	7.31e4	130.4	NO
5	5	13C4-PFOS	ST170...	1.12e4	117.0	NO
6	6	13C6-PFDA	ST170...	5.97e4	95.9	NO
7	7	13C7-PFUnA	ST170...	6.38e4	118.1	NO

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Name: 170802M1_38, Date: 02-Aug-2017, Time: 17:06:27, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA	5.13e0	0.0	NO
7	7	13C7-PFUnA	IPA			NO

Name: 170802M1_39, Date: 02-Aug-2017, Time: 17:17:55, ID: 1700906-01 MW-50BR-20170717 0.125, Description: MW-50BR-20170717

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	2.90e4	74.4	NO
2	2	13C3-PFHxS	17009...	5.21e3	69.7	NO
3	3	13C8-PFOA	17009...	2.38e4	45.5	YES
4	4	13C9-PFNA	17009...	2.51e4	44.8	YES
5	5	13C4-PFOS	17009...	5.16e3	53.7	NO
6	6	13C6-PFDA	17009...	2.96e4	47.6	YES
7	7	13C7-PFUnA	17009...	3.06e4	56.6	NO

Name: 170802M1_40, Date: 02-Aug-2017, Time: 17:29:18, ID: 1700906-03 RB-04-20170717 0.125, Description: RB-04-20170717

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	2.03e4	52.1	NO
2	2	13C3-PFHxS	17009...	3.75e3	50.1	NO
3	3	13C8-PFOA	17009...	1.72e4	33.0	YES
4	4	13C9-PFNA	17009...	2.04e4	36.4	YES
5	5	13C4-PFOS	17009...	3.68e3	38.4	YES
6	6	13C6-PFDA	17009...	2.15e4	34.6	YES
7	7	13C7-PFUnA	17009...	1.91e4	35.3	YES

Name: 170802M1_41, Date: 02-Aug-2017, Time: 17:39:57, ID: 1700906-04 MW-12BR-20170718 0.125, Description: MW-12BR-20170718

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	2.60e4	66.7	NO
2	2	13C3-PFHxS	17009...	5.06e3	67.7	NO
3	3	13C8-PFOA	17009...	2.48e4	47.5	YES
4	4	13C9-PFNA	17009...	2.56e4	45.7	YES
5	5	13C4-PFOS	17009...	4.52e3	47.0	YES
6	6	13C6-PFDA	17009...	2.75e4	44.2	YES
7	7	13C7-PFUnA	17009...	2.65e4	49.0	YES

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Name: 170802M1_42, Date: 02-Aug-2017, Time: 17:50:35, ID: 1700906-05 MW-02BR-20170718 0.125, Description: MW-02BR-20170718

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	2.19e4	56.2	NO
2	2 13C3-PFHxS	17009...	3.83e3	51.2	NO
3	3 13C8-PFOA	17009...	1.94e4	37.1	YES
4	4 13C9-PFNA	17009...	1.81e4	32.4	YES
5	5 13C4-PFOS	17009...	4.14e3	43.1	YES
6	6 13C6-PFDA	17009...	2.14e4	34.3	YES
7	7 13C7-PFUnA	17009...	2.22e4	41.2	YES

Name: 170802M1_43, Date: 02-Aug-2017, Time: 18:01:15, ID: 1700906-06 RB-05-20170718 0.125, Description: RB-05-20170718

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	2.52e4	64.4	NO
2	2 13C3-PFHxS	17009...	4.39e3	58.7	NO
3	3 13C8-PFOA	17009...	2.23e4	42.7	YES
4	4 13C9-PFNA	17009...	2.47e4	44.0	YES
5	5 13C4-PFOS	17009...	4.36e3	45.5	YES
6	6 13C6-PFDA	17009...	2.13e4	34.2	YES
7	7 13C7-PFUnA	17009...	2.01e4	37.3	YES

Name: 170802M1_44, Date: 02-Aug-2017, Time: 18:12:00, ID: 1700907-01 AT028-FB-01-071717-0850 0.125, Description: AT028-FB-01-071717-0850

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	2.84e4	72.9	NO
2	2 13C3-PFHxS	17009...	4.93e3	65.9	NO
3	3 13C8-PFOA	17009...	2.49e4	47.6	YES
4	4 13C9-PFNA	17009...	2.74e4	48.9	YES
5	5 13C4-PFOS	17009...	5.13e3	53.5	NO
6	6 13C6-PFDA	17009...	2.43e4	39.1	YES
7	7 13C7-PFUnA	17009...	2.63e4	48.8	YES

Name: 170802M1_45, Date: 02-Aug-2017, Time: 18:22:46, ID: 1700907-02 AT028-MW17-02-071717-0950 0.125, Description: AT028-MW17-02-071717-0950

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	2.45e4	62.6	NO
2	2 13C3-PFHxS	17009...	3.87e3	51.7	NO
3	3 13C8-PFOA	17009...	2.05e4	39.3	YES
4	4 13C9-PFNA	17009...	2.46e4	44.0	YES
5	5 13C4-PFOS	17009...	4.22e3	43.9	YES
6	6 13C6-PFDA	17009...	2.17e4	34.8	YES
7	7 13C7-PFUnA	17009...	2.31e4	42.7	YES

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Name: 170802M1_46, Date: 02-Aug-2017, Time: 18:33:33, ID: 1700907-03 AT028-MW17-04-071717-1050 0.125, Description: AT028-MW17-04-071717-1050

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	2.59e4	66.4	NO
2	2 13C3-PFHxS	17009...	4.25e3	56.9	NO
3	3 13C8-PFOA	17009...	2.13e4	40.7	YES
4	4 13C9-PFNA	17009...	2.00e4	35.7	YES
5	5 13C4-PFOS	17009...	3.97e3	41.4	YES
6	6 13C6-PFDA	17009...	2.35e4	37.7	YES
7	7 13C7-PFUnA	17009...	2.23e4	41.4	YES

Name: 170802M1_47, Date: 02-Aug-2017, Time: 18:44:11, ID: B7G0105-MS1 Matrix Spike 0.125, Description: Matrix Spike

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	B7G01...	1.90e4	48.8	YES
2	2 13C3-PFHxS	B7G01...	3.30e3	44.1	YES
3	3 13C8-PFOA	B7G01...	1.59e4	30.4	YES
4	4 13C9-PFNA	B7G01...	1.73e4	30.9	YES
5	5 13C4-PFOS	B7G01...	3.12e3	32.5	YES
6	6 13C6-PFDA	B7G01...	1.90e4	30.6	YES
7	7 13C7-PFUnA	B7G01...	1.56e4	28.8	YES

Name: 170802M1_48, Date: 02-Aug-2017, Time: 18:54:50, ID: B7G0105-MSD1 Matrix Spike Dup 0.125, Description: Matrix Spike Dup

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	B7G01...	2.78e4	71.1	NO
2	2 13C3-PFHxS	B7G01...	4.36e3	58.4	NO
3	3 13C8-PFOA	B7G01...	2.35e4	45.1	YES
4	4 13C9-PFNA	B7G01...	2.56e4	45.7	YES
5	5 13C4-PFOS	B7G01...	4.48e3	46.7	YES
6	6 13C6-PFDA	B7G01...	2.69e4	43.2	YES
7	7 13C7-PFUnA	B7G01...	2.17e4	40.2	YES

Name: 170802M1_49, Date: 02-Aug-2017, Time: 19:05:28, ID: 1700907-04 AT028-MW17-06-071717-1300 0.125, Description: AT028-MW17-06-071717-1300

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	4.41e4	112.9	NO
2	2 13C3-PFHxS	17009...	5.08e3	67.9	NO
3	3 13C8-PFOA	17009...	3.96e4	75.9	NO
4	4 13C9-PFNA	17009...	4.08e4	72.8	NO
5	5 13C4-PFOS	17009...	7.54e3	78.5	NO
6	6 13C6-PFDA	17009...	3.85e4	61.9	NO
7	7 13C7-PFUnA	17009...	3.63e4	67.2	NO

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Name: 170802M1_50, Date: 02-Aug-2017, Time: 19:16:12, ID: 1700907-06 AT028-MW17-07-071717-1520 0.125, Description: AT028-MW17-07-071717-1520

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	3.62e4	92.8	NO
2	2 13C3-PFHxS	17009...	5.86e3	78.4	NO
3	3 13C8-PFOA	17009...	2.86e4	54.7	NO
4	4 13C9-PFNA	17009...	3.00e4	53.5	NO
5	5 13C4-PFOS	17009...	5.44e3	56.7	NO
6	6 13C6-PFDA	17009...	2.27e4	36.4	YES
7	7 13C7-PFUnA	17009...	2.28e4	42.2	YES

Name: 170802M1_51, Date: 02-Aug-2017, Time: 19:28:18, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA			NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA	5.69e0	0.0	YES
7	7 13C7-PFUnA	IPA	1.02e1	0.0	YES

Name: 170802M1_52, Date: 02-Aug-2017, Time: 19:39:46, ID: ST170802M1-4 PFC CS3 17G3105, Description: PFC CS3 17G3105

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	ST170...	6.25e4	160.0	YES
2	2 13C3-PFHxS	ST170...	1.24e4	166.2	YES
3	3 13C8-PFOA	ST170...	6.71e4	128.4	NO
4	4 13C9-PFNA	ST170...	7.44e4	132.8	NO
5	5 13C4-PFOS	ST170...	1.23e4	128.5	NO
6	6 13C6-PFDA	ST170...	6.54e4	105.1	NO
7	7 13C7-PFUnA	ST170...	6.93e4	128.2	NO

Name: 170802M1_53, Date: 02-Aug-2017, Time: 19:50:32, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA			NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA	6.25e0	0.0	NO
7	7 13C7-PFUnA	IPA	1.12e1	0.0	NO

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Name: 170802M1_54, Date: 02-Aug-2017, Time: 20:01:11, ID: 1700907-08 AT028-MW17-05-071817-0835 0.125, Description: AT028-MW17-05-071817-0835

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	2.44e4	62.6	NO
2	2 13C3-PFHxS	17009...	4.15e3	55.5	NO
3	3 13C8-PFOA	17009...	2.07e4	39.6	YES
4	4 13C9-PFNA	17009...	2.09e4	37.3	YES
5	5 13C4-PFOS	17009...	4.38e3	45.6	YES
6	6 13C6-PFDA	17009...	2.20e4	35.3	YES
7	7 13C7-PFUnA	17009...	2.05e4	37.9	YES

Name: 170802M1_55, Date: 02-Aug-2017, Time: 20:11:49, ID: 1700907-09 AT028-MW17-01-071817-0950 0.125, Description: AT028-MW17-01-071817-0950

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	1.78e4	45.6	YES
2	2 13C3-PFHxS	17009...	2.80e3	37.5	YES
3	3 13C8-PFOA	17009...	1.44e4	27.5	YES
4	4 13C9-PFNA	17009...	1.57e4	28.1	YES
5	5 13C4-PFOS	17009...	2.65e3	27.6	YES
6	6 13C6-PFDA	17009...	1.43e4	23.0	YES
7	7 13C7-PFUnA	17009...	1.52e4	28.2	YES

Name: 170802M1_56, Date: 02-Aug-2017, Time: 20:22:27, ID: 1700875-05@40X MW-11S-20170713 0.11994, Description: MW-11S-20170713

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17008...	2.01e3	5.2	YES
2	2 13C3-PFHxS	17008...	2.62e2	3.5	YES
3	3 13C8-PFOA	17008...	1.83e3	3.5	YES
4	4 13C9-PFNA	17008...	1.59e3	2.8	YES
5	5 13C4-PFOS	17008...	1.86e2	1.9	YES
6	6 13C6-PFDA	17008...	1.22e3	2.0	YES
7	7 13C7-PFUnA	17008...	7.04e2	1.3	YES

Name: 170802M1_57, Date: 02-Aug-2017, Time: 20:33:06, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA			NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA	6.11e0	0.0	NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA			NO
7	7 13C7-PFUnA	IPA	1.41e1	0.0	NO

Dataset: U:\Q4.PRO\results\170802M1\170802M1-RS AREAS.qld

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Name: 170802M1_58, Date: 02-Aug-2017, Time: 20:43:44, ID: B7H0006-BS1 OPR 0.005, Description: OPR

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	B7H00...	5.00e4	128.2	NO
2	2 13C3-PFHxS	B7H00...	7.13e3	95.3	NO
3	3 13C8-PFOA	B7H00...	3.63e4	69.4	NO
4	4 13C9-PFNA	B7H00...	4.56e4	81.4	NO
5	5 13C4-PFOS	B7H00...	6.51e3	67.8	NO
6	6 13C6-PFDA	B7H00...	3.67e4	59.0	NO
7	7 13C7-PFUnA	B7H00...	2.65e4	49.0	YES

Name: 170802M1_59, Date: 02-Aug-2017, Time: 20:54:23, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA			NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA	8.51e0	0.0	NO
7	7 13C7-PFUnA	IPA	1.87e1	0.0	NO

Name: 170802M1_60, Date: 02-Aug-2017, Time: 21:05:01, ID: B7H0006-BLK1 Method Blank 0.005, Description: Method Blank

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	B7H00...	5.75e4	147.3	NO
2	2 13C3-PFHxS	B7H00...	8.28e3	110.7	NO
3	3 13C8-PFOA	B7H00...	5.06e4	97.0	NO
4	4 13C9-PFNA	B7H00...	5.07e4	90.5	NO
5	5 13C4-PFOS	B7H00...	8.16e3	84.9	NO
6	6 13C6-PFDA	B7H00...	4.28e4	68.8	NO
7	7 13C7-PFUnA	B7H00...	3.36e4	62.1	NO

Name: 170802M1_61, Date: 02-Aug-2017, Time: 21:15:39, ID: 1700936-01 BULK TANK #1 0.005, Description: BULK TANK #1

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	4.34e4	111.2	NO
2	2 13C3-PFHxS	17009...	6.88e3	91.9	NO
3	3 13C8-PFOA	17009...	3.41e4	65.2	NO
4	4 13C9-PFNA	17009...	2.46e4	43.9	YES
5	5 13C4-PFOS	17009...	3.87e3	40.2	YES
6	6 13C6-PFDA	17009...	1.94e4	31.1	YES
7	7 13C7-PFUnA	17009...	1.94e4	35.9	YES

Dataset: U:\Q4.PRO\results\170802M1\170802M1-RS AREAS.qld

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Name: 170802M1_62, Date: 02-Aug-2017, Time: 21:26:18, ID: 1700936-02 BULK TANK #2 0.005, Description: BULK TANK #2

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	4.42e4	113.1	NO
2	2	13C3-PFHxS	17009...	7.14e3	95.5	NO
3	3	13C8-PFOA	17009...	2.98e4	57.1	NO
4	4	13C9-PFNA	17009...	1.98e4	35.4	YES
5	5	13C4-PFOS	17009...	2.56e3	26.7	YES
6	6	13C6-PFDA	17009...	1.19e4	19.2	YES
7	7	13C7-PFUnA	17009...	8.95e3	16.6	YES

Name: 170802M1_63, Date: 02-Aug-2017, Time: 21:36:56, ID: 1700936-03 COW SAMPLE 0.005, Description: COW SAMPLE

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.33e4	136.5	NO
2	2	13C3-PFHxS	17009...	8.09e3	108.2	NO
3	3	13C8-PFOA	17009...	3.92e4	75.2	NO
4	4	13C9-PFNA	17009...	3.77e4	67.2	NO
5	5	13C4-PFOS	17009...	5.27e3	54.9	NO
6	6	13C6-PFDA	17009...	3.14e4	50.5	NO
7	7	13C7-PFUnA	17009...	3.55e4	65.7	NO

Name: 170802M1_64, Date: 02-Aug-2017, Time: 21:47:34, ID: 1700936-04 OAKHURST Whole Pt. 0.005, Description: OAKHURST Whole Pt.

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	4.75e4	121.8	NO
2	2	13C3-PFHxS	17009...	7.46e3	99.7	NO
3	3	13C8-PFOA	17009...	4.01e4	76.9	NO
4	4	13C9-PFNA	17009...	3.77e4	67.2	NO
5	5	13C4-PFOS	17009...	5.18e3	54.0	NO
6	6	13C6-PFDA	17009...	2.49e4	40.0	YES
7	7	13C7-PFUnA	17009...	1.42e4	26.3	YES

Name: 170802M1_65, Date: 02-Aug-2017, Time: 21:58:13, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA	5.37e0	0.0	YES
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

Dataset: U:\Q4.PRO\results\170802M1\170802M1-RS AREAS.qld

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Name: 170802M1_66, Date: 02-Aug-2017, Time: 22:09:16, ID: ST170802M1-5 PFC CS3 17G3105, Description: PFC CS3 17G3105

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	6.92e4	177.2	YES
2	2	13C3-PFHxS	ST170...	1.27e4	170.1	YES
3	3	13C8-PFOA	ST170...	7.06e4	135.3	NO
4	4	13C9-PFNA	ST170...	7.64e4	136.3	NO
5	5	13C4-PFOS	ST170...	1.31e4	136.8	NO
6	6	13C6-PFDA	ST170...	6.93e4	111.4	NO
7	7	13C7-PFUnA	ST170...	7.65e4	141.6	NO

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Last Altered: Tuesday, August 15, 2017 08:53:24 Pacific Daylight Time
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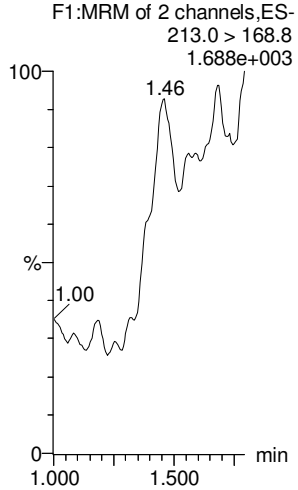
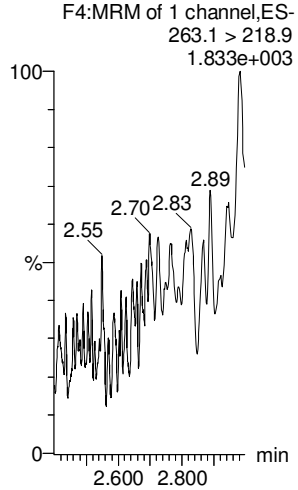
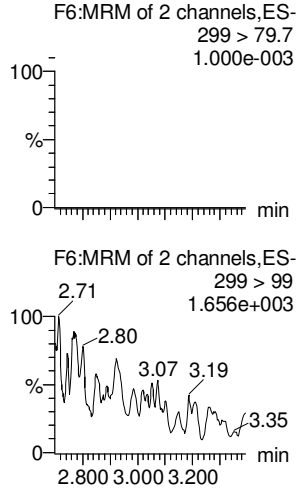


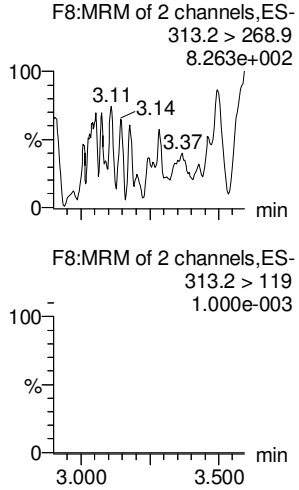
PFPeA



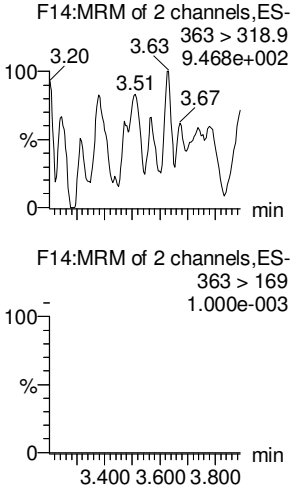
PFBS



PFHxA



PFHpA



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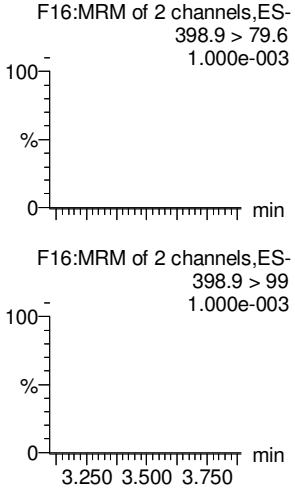

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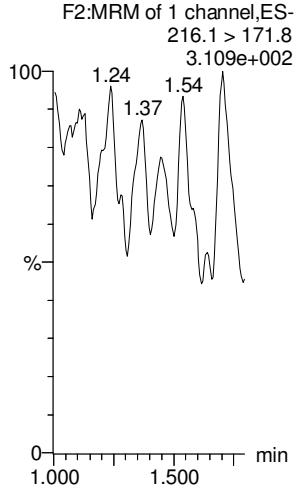

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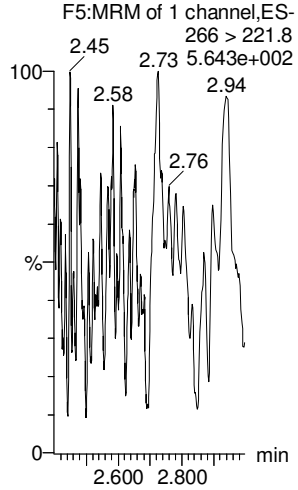

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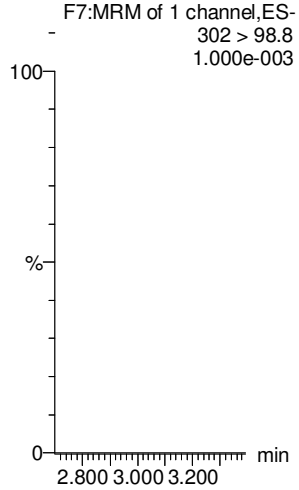

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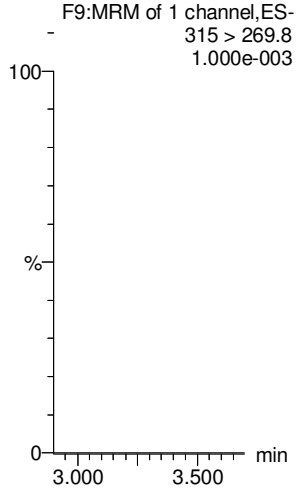

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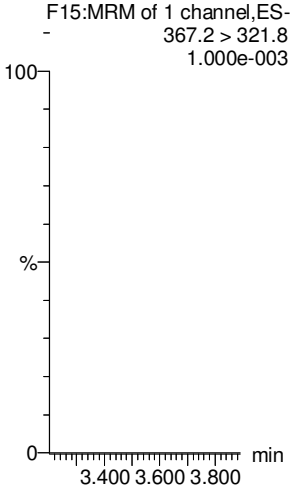

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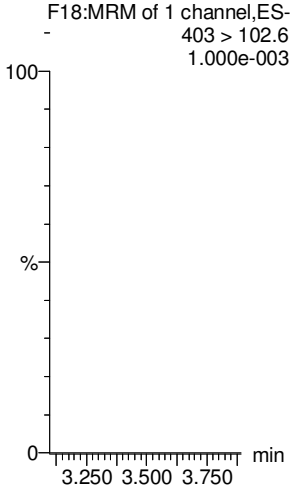

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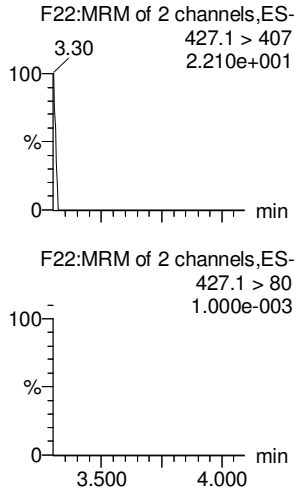
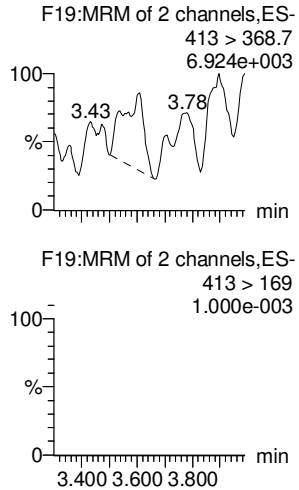
Name: 170802M1_3, Date: 02-Aug-2017, Time: 10:50:52, ID: IPA, Description: IPA

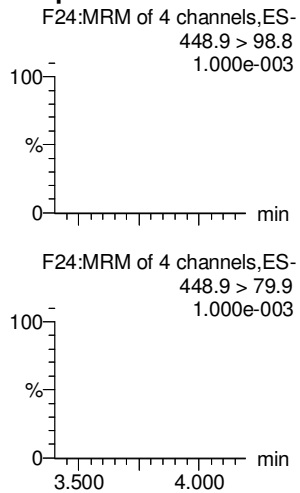
6:2 FTS



PFOA



PFHpS



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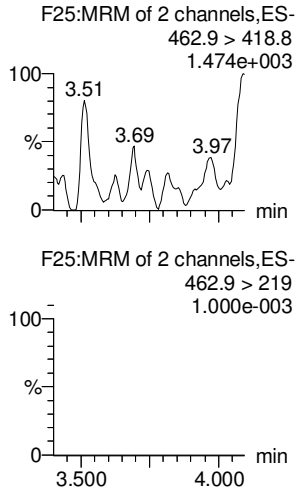
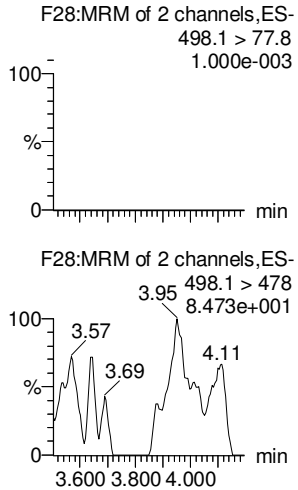
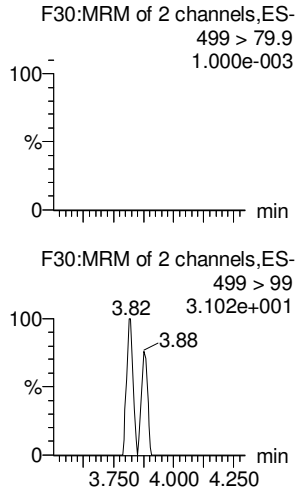


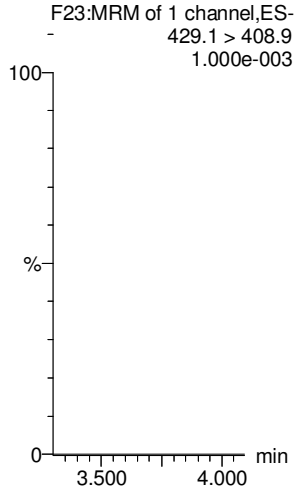
PFOSA



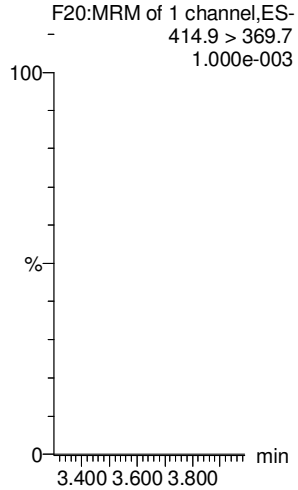
PFOS



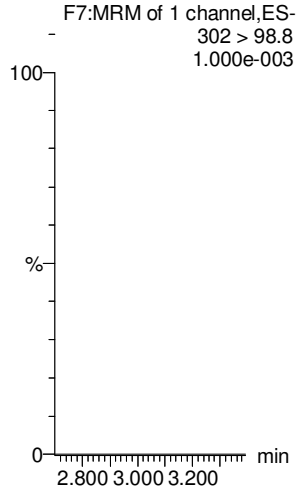
13C2-6:2 FTS



13C2-PFOA



13C3-PFBS



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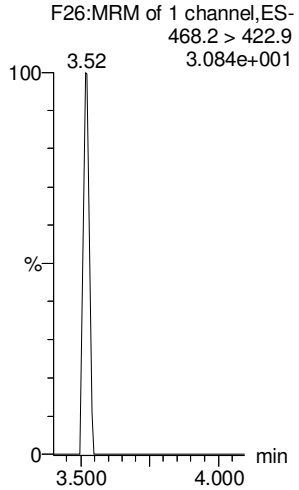
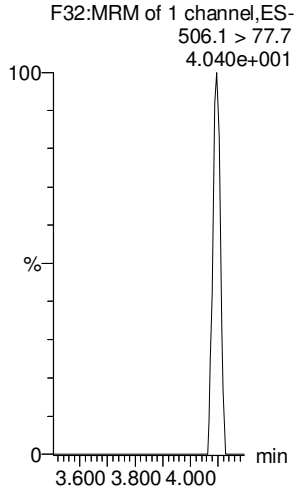
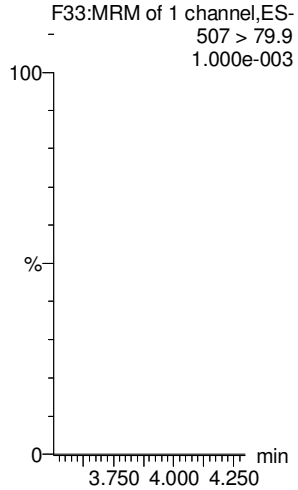


13C8-PFOSA



13C8-PFOS



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Dataset: U:\Q4.PRO\results\170802M1\170802M1-3.qld

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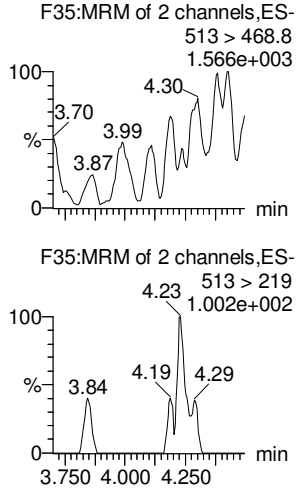
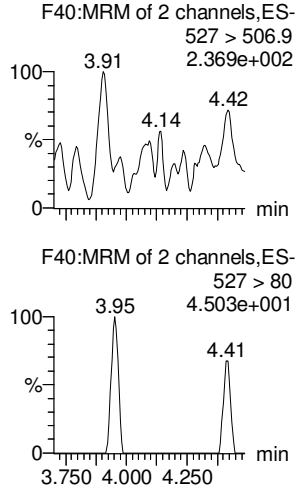


8:2 FTS



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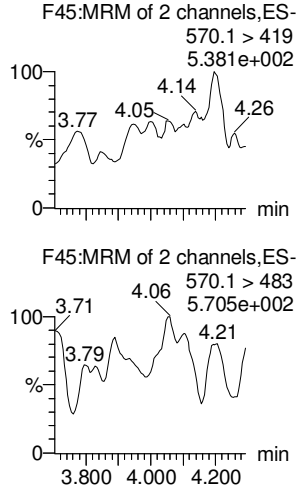
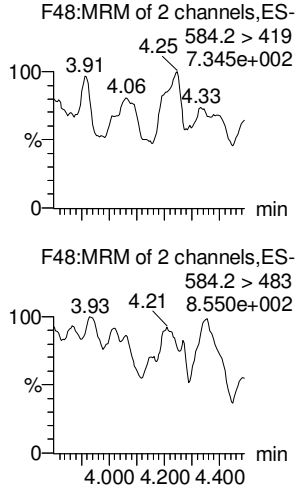
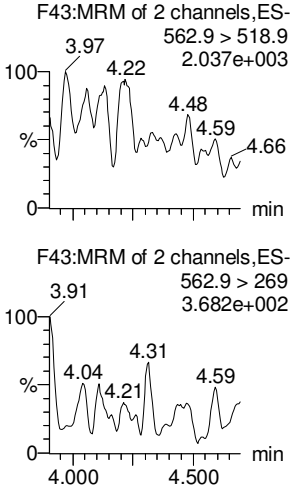


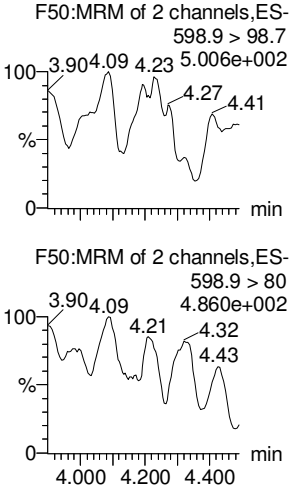
N-EtFOSAA



PFUnA



PFDS



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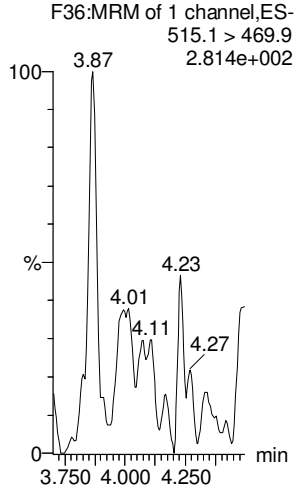
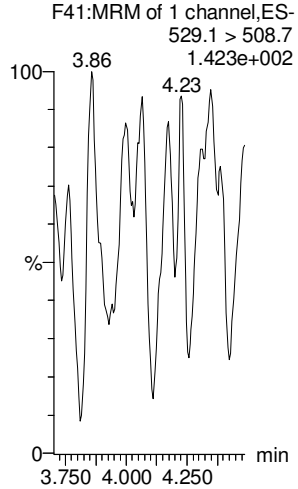


13C2-8:2 FTS



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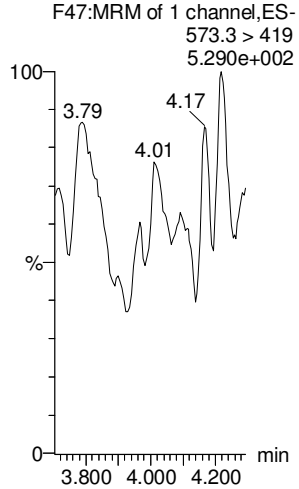

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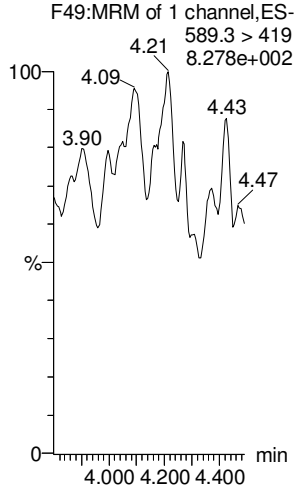

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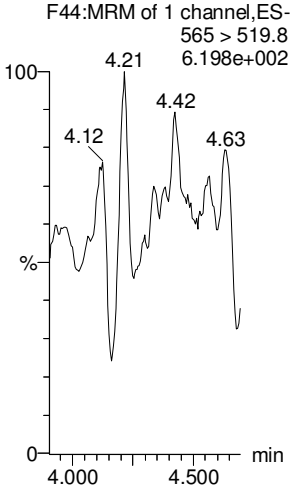
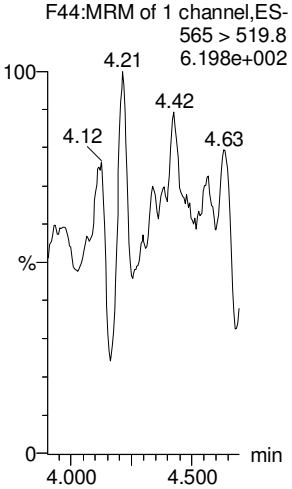


13C2-PFUnA



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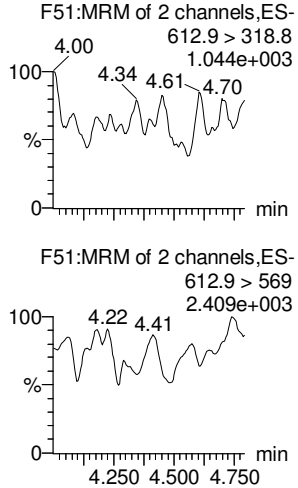
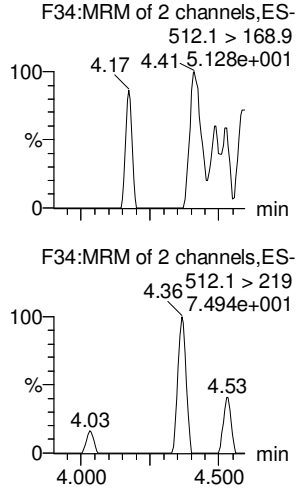
Name: 170802M1_3, Date: 02-Aug-2017, Time: 10:50:52, ID: IPA, Description: IPA

PFDoA



N-MeFOSA



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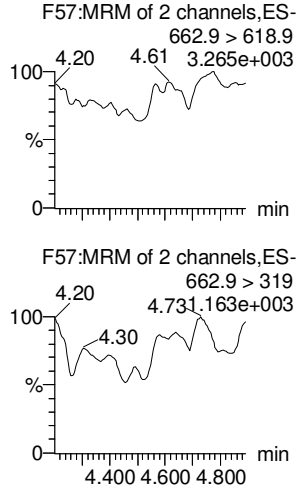
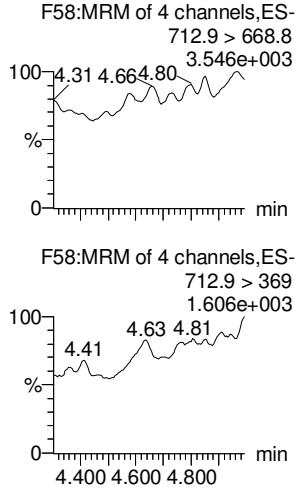


PFTeDA



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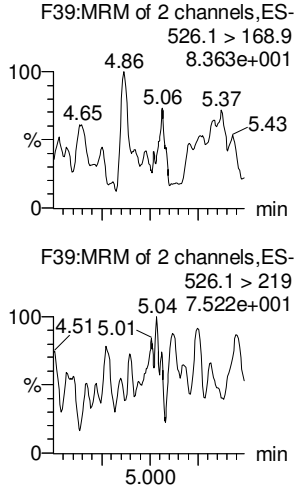
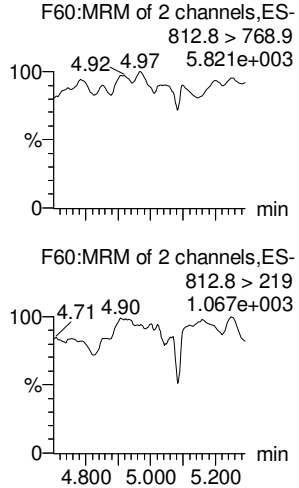
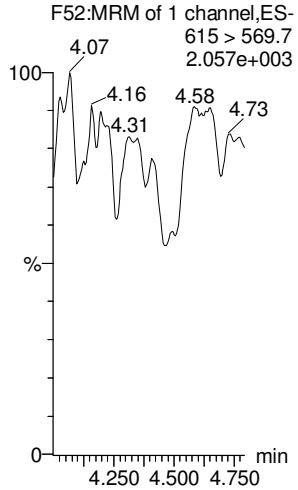


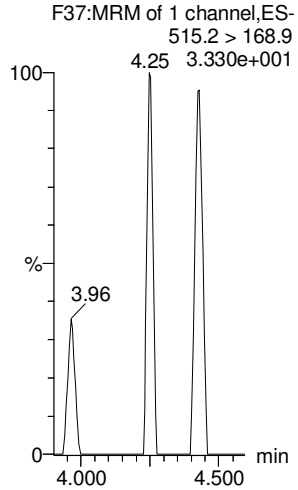
PFHxDA



13C2-PFDoA



d3-N-MeFOSA



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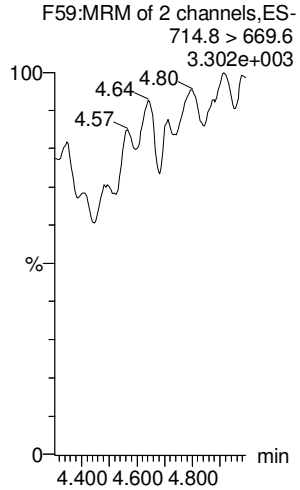

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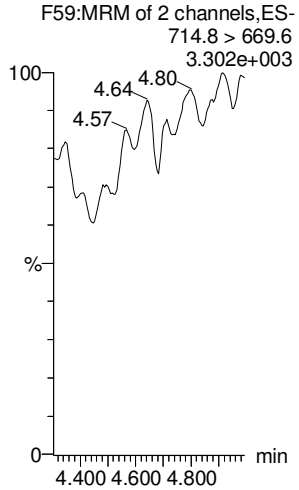

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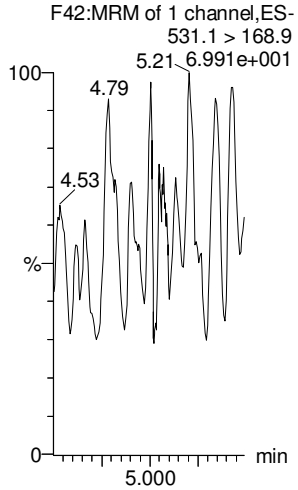

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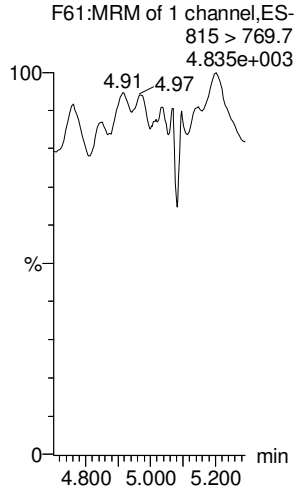

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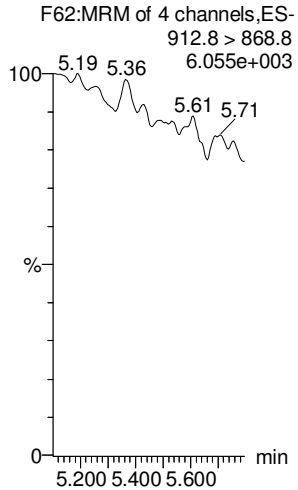
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-3.qld

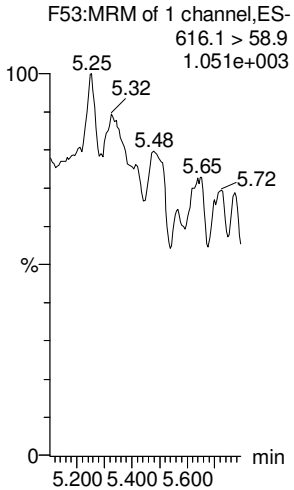
Last Altered: Tuesday, August 15, 2017 08:53:24 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 08:53:47 Pacific Daylight Time

Name: 170802M1_3, Date: 02-Aug-2017, Time: 10:50:52, ID: IPA, Description: IPA

PFODA



N-MeFOSE



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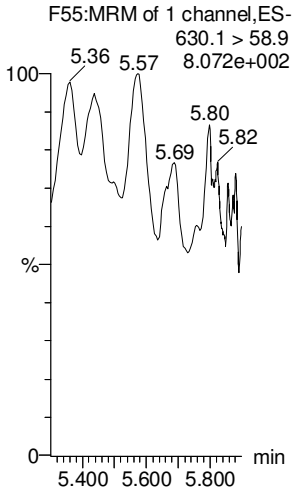
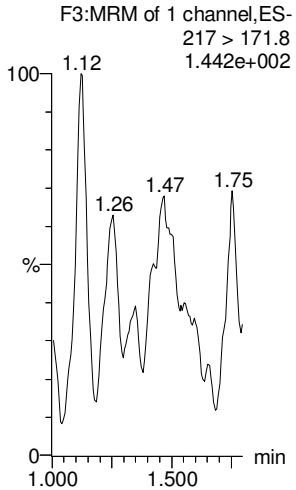
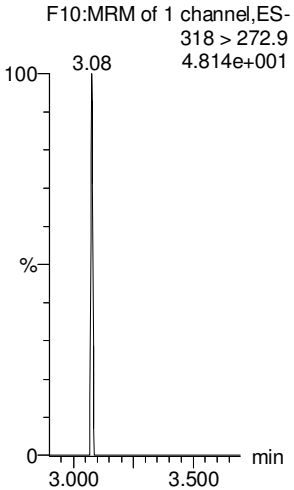


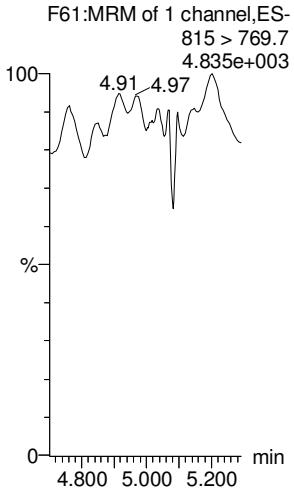
13C4-PFBA



13C5-PFHxA



13C2-PFHxDA



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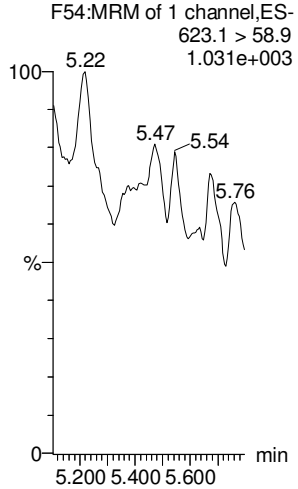

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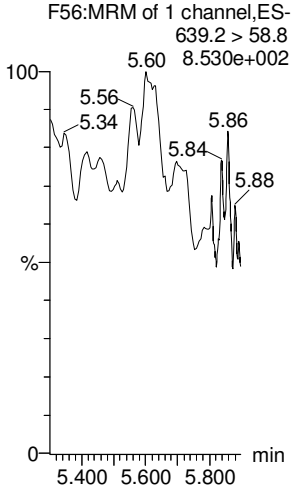

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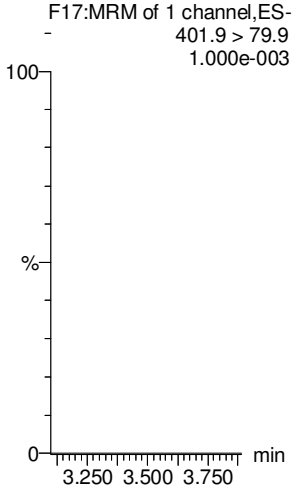

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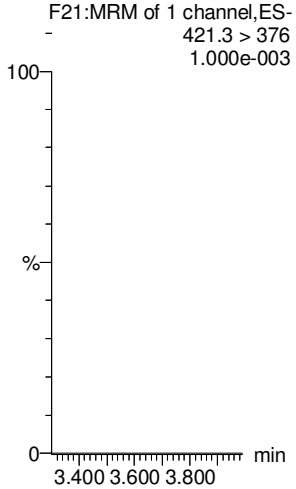

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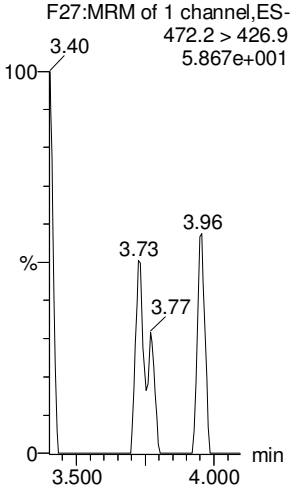

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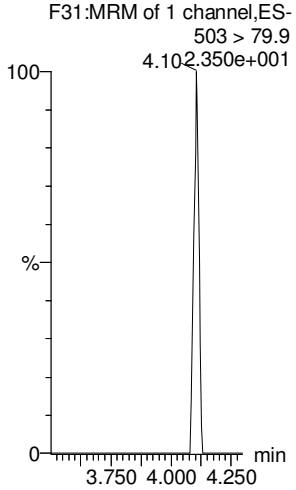
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-3.qld

Last Altered: Tuesday, August 15, 2017 08:53:24 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 08:53:47 Pacific Daylight Time

Name: 170802M1_3, Date: 02-Aug-2017, Time: 10:50:52, ID: IPA, Description: IPA

13C4-PFOS



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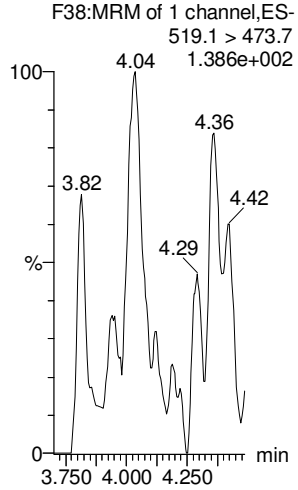

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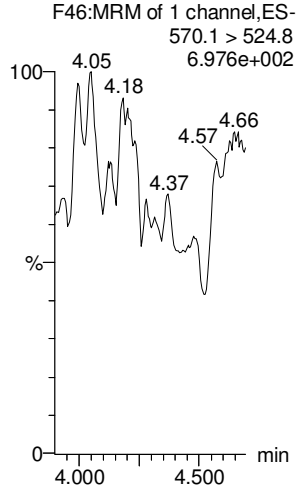

GM 8/15/17

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-2.qld

Last Altered: Thursday, August 03, 2017 14:49:37 Pacific Daylight Time
Printed: Thursday, August 03, 2017 14:57:22 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 01 Aug 2017 09:55:07
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_2, Date: 02-Aug-2017, Time: 10:40:05, ID: ST170802M1-1 PFC CS0 17H0201, Description: PFC CS0 17H0201

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	1	PFBA	213.0 > 168.8	1.36e3	1.38e4		1.41	1.36	1.24	1.08	107.9	70-130
2	2	PFPeA	263.1 > 218.9	2.05e3	2.44e4		2.77	2.65	1.05	1.07	106.7	
3	3	PFBS	299 > 79.7	5.48e2	3.45e3		2.96	2.89	1.99	1.02	102.0	
4	4	PFHxA	313.2 > 268.9	4.02e3	1.35e4		3.19	3.14	1.50	0.969	96.9	
5	5	PFHpA	363 > 318.9	4.05e3	3.93e4		3.45	3.41	1.29	1.01	101.4	
6	6	PFHxS	398.9 > 79.6	4.83e2	3.53e3		3.56	3.50	1.71	0.998	99.8	
7	7	6:2 FTS	427.1 > 407	1.07e3	1.08e4		3.64	3.60	1.24	1.11	111.3	
8	8	PFOA	413 > 368.7	6.28e3	6.55e4		3.65	3.61	1.20	1.10	110.4	
9	9	PFHpS	448.9 > 98.8	5.08e2	6.55e4		3.71	3.67	0.0970	1.04	104.2	
10	10	PFNA	462.9 > 418.8	5.72e3	6.09e4		3.83	3.80	1.17	1.01	101.3	
11	11	PFOSA	498.1 > 77.8	6.26e2	7.09e3		3.84	3.81	1.10	1.05	105.4	
12	12	PFOS	499 > 79.9	1.01e3	1.15e4		3.89	3.85	1.10	1.03	103.2	
13	13	PFDA	513 > 468.8	6.08e3	5.54e4		4.01	3.97	1.37	1.01	101.3	
14	14	8:2 FTS	527 > 506.9	1.14e3	8.50e3		4.00	3.96	1.67	1.14	114.0	
15	15	N-MeFOSAA	570.1 > 419	1.60e3	1.34e4		4.03	3.99	19.4	1.04	104.1	
16	16	N-EtFOSAA	584.2 > 419	1.14e3	1.34e4		4.10	4.06	13.8	0.915	91.5	
17	17	PFUnA	562.9 > 518.9	4.71e3	6.59e4		4.17	4.13	0.893	1.06	106.3	
18	18	PFDS	598.9 > 98.7	4.13e2	6.59e4		4.22	4.19	0.0782	1.01	100.5	
19	19	PFDoA	612.9 > 318.8	5.56e2	6.78e3		4.34	4.29	1.02	1.08	108.1	
20	20	N-MeFOSA	512.1 > 168.9	1.15e3	2.69e4		4.29	4.30	6.40	6.12	122.5	
21	21	PFTrDA	662.9 > 618.9	6.43e3	6.78e3		4.50	4.46	11.9	1.03	102.8	
22	22	PFTeDA	712.9 > 668.8	4.23e3	4.34e4		4.68	4.63	1.22	1.03	102.9	
23	23	N-EtFOSA	526.1 > 168.9	1.30e3	3.36e4		4.87	4.88	5.80	5.88	117.6	
24	24	PFHxDA	812.8 > 768.9	6.54e3	2.07e4		5.06	5.01	1.58	1.06	106.2	
25	25	PFODA	912.8 > 868.8	6.16e3	2.07e4		5.43	5.38	1.49	1.19	118.6	
26	26	N-MeFOSE	616.1 > 58.9	1.71e3	4.36e4		5.42	5.45	5.89	5.33	106.6	
27	27	N-EtFOSE	630.1 > 58.9	1.94e3	4.42e4		5.59	5.63	6.59	4.65	93.1	
28	28	13C3-PFBA	216.1 > 171.8	1.38e4	1.33e4	1.006	1.41	1.35	12.9	12.8	102.7	50-150
29	29	13C3-PFPeA	266 > 221.8	2.44e4	3.90e4	0.275	2.77	2.65	3.12	11.3	90.8	
30	30	13C3-PFBS	302 > 98.8	3.45e3	3.90e4	0.034	2.96	2.89	0.441	12.9	103.5	
31	31	13C2-PFHxA	315 > 269.8	1.35e4	3.90e4	0.334	3.19	3.14	1.72	5.16	103.1	

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Dataset: U:\Q4.PRO\results\170802M1\170802M1-2.qld

Last Altered: Thursday, August 03, 2017 14:49:37 Pacific Daylight Time
Printed: Thursday, August 03, 2017 14:57:22 Pacific Daylight Time

Name: 170802M1_2, Date: 02-Aug-2017, Time: 10:40:05, ID: ST170802M1-1 PFC CS0 17H0201, Description: PFC CS0 17H0201

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32	32	13C4-PFHpA	367.2 > 321.8	3.93e4	3.90e4	0.414	3.45	3.41	5.03	12.1	97.2
33	33	18O2-PFHxS	403 > 102.6	3.53e3	7.48e3	0.475	3.56	3.49	5.91	12.4	99.4
34	34	13C2-6:2 FTS	429.1 > 408.9	1.08e4	5.22e4	0.214	3.64	3.61	2.58	12.1	96.6
35	35	13C2-PFOA	414.9 > 369.7	6.55e4	5.22e4	1.298	3.65	3.62	15.7	12.1	96.6
36	36	13C5-PFNA	468.2 > 422.9	6.09e4	5.61e4	1.094	3.83	3.80	13.6	12.4	99.3
37	37	13C8-PFOSA	506.1 > 77.7	7.09e3	5.40e4	0.124	3.84	3.80	1.64	13.2	105.4
38	38	13C8-PFOS	507 > 79.9	1.15e4	9.58e3	1.153	3.89	3.85	14.9	13.0	103.7
39	39	13C2-PFDA	515.1 > 469.9	5.54e4	6.22e4	1.059	4.01	3.97	11.1	10.5	84.1
40	40	13C2-8:2 FTS	529.1 > 508.7	8.50e3	6.22e4	0.129	4.00	3.96	1.71	13.3	106.2
41	41	d3-N-MeFOSAA	573.3 > 419	1.34e4	5.40e4	0.019	4.03	3.99	3.10	161	98.8
42	42	d5-N-EtFOSAA	589.3 > 419	1.34e4	5.40e4	0.019	4.12	4.06	3.11	164	101.0
43	43	13C2-PFUnA	565 > 519.8	6.59e4	5.40e4	1.172	4.17	4.14	15.2	13.0	104.1
44	44	13C2-PFDoA	615 > 569.7	6.78e3	5.40e4	0.118	4.34	4.29	1.57	13.2	105.9
45	45	d3-N-MeFOSA	515.2 > 168.9	2.69e4	5.40e4	0.040	4.29	4.33	6.23	154	102.7
46	46	13C2-PFTeDA	714.8 > 669.6	4.34e4	5.40e4	0.801	4.68	4.64	10.0	12.5	100.2
47	47	d5-N-ETFOSA	531.1 > 168.9	3.36e4	5.40e4	0.055	5.01	4.92	7.78	141	94.2
48	48	13C2-PFHxDA	815 > 769.7	2.07e4	5.40e4	0.991	5.06	5.00	4.79	4.83	96.7
49	49	d7-N-MeFOSE	623.1 > 58.9	4.36e4	5.40e4	0.065	5.42	5.44	10.1	155	103.2
50	50	d9-N-EtFOSE	639.2 > 58.8	4.42e4	5.40e4	0.065	5.59	5.62	10.2	158	105.2
51	51	13C4-PFBA	217 > 171.8	1.33e4	1.33e4	1.000	1.41	1.36	12.5	12.5	100.0
52	52	13C5-PFHxA	318 > 272.9	3.90e4	3.90e4	1.000	3.19	3.14	5.00	5.00	100.0
53	53	13C3-PFHxS	401.9 > 79.9	7.48e3	7.48e3	1.000	3.56	3.49	12.5	12.5	100.0
54	54	13C8-PFOA	421.3 > 376	5.22e4	5.22e4	1.000	3.65	3.62	12.5	12.5	100.0
55	55	13C9-PFNA	472.2 > 426.9	5.61e4	5.61e4	1.000	3.83	3.80	12.5	12.5	100.0
56	56	13C4-PFOS	503 > 79.9	9.58e3	9.58e3	1.000	3.89	3.85	12.5	12.5	100.0
57	57	13C6-PFDA	519.1 > 473.7	6.22e4	6.22e4	1.000	4.01	3.97	12.5	12.5	100.0
58	58	13C7-PFUnA	570.1 > 524.8	5.40e4	5.40e4	1.000	4.17	4.13	12.5	12.5	100.0

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2	170802M1_2	---	ST170802M1-1 PFC CS0 17H0201	PFC CS0 17H0201	1.0000	1:1	Analyte
3	170802M1_3	---	IPA	IPA	1.0000	1:48	Blank
4	170802M1_4	---	B7G0121-BS1 OPR 0.125	OPR	0.1250	1:3	Analyte
5	170802M1_5	---	IPA	IPA	1.0000	1:48	Blank
6	170802M1_6	---	B7G0121-BLK1 Method Blank 0.125	Method Blank	0.1250	1:4	Analyte
7	170802M1_7	---	B7G0121-MS1 Matrix Spike 0.11301	Matrix Spike	0.1130	1:5	Analyte
8	170802M1_8	---	B7G0121-MSD1 Matrix Spike Dup 0.11225	Matrix Spike Dup	0.1123	1:6	Analyte
9	170802M1_9	---	B7G0121-MS2 Matrix Spike 0.11554	Matrix Spike	0.1155	1:7	Analyte
10	170802M1_10	---	B7G0121-MSD2 Matrix Spike Dup 0.11866	Matrix Spike Dup	0.1187	1:8	Analyte
11	170802M1_11	---	1700922-01 MH-L103-20170721 0.10565	MH-L103-20170721	0.1056	1:9	Analyte
12	170802M1_12	---	1700922-02 MH-N104-20170721 0.11025	MH-N104-20170721	0.1103	1:10	Analyte
13	170802M1_13	---	1700922-03 Upstream-Culvert-109-20170721 0.11852	Upstream-Culvert-109-20170721	0.1185	1:11	Analyte
14	170802M1_14	---	1700922-04 FRB03-20170721 0.11017	FRB03-20170721	0.1102	1:12	Analyte
15	170802M1_15	---	1700922-05 RB08-20170720 0.11893	RB08-20170720	0.1189	1:13	Analyte
16	170802M1_16	---	1700922-06 RB09-20170721 0.11676	RB09-20170721	0.1168	1:14	Analyte
17	170802M1_17	---	1700925-01 I001BC43S-170724 0.12112	I001BC43S-170724	0.1211	1:15	Analyte
18	170802M1_18	---	1700925-02 SB01-170724 0.12178	SB01-170724	0.1218	1:16	Analyte
19	170802M1_19	---	1700925-03 I001BC50S-170724 0.12135	I001BC50S-170724	0.1214	1:17	Analyte
20	170802M1_20	---	1700925-04 I001MW52S-170724 0.1192	I001MW52S-170724	0.1192	1:18	Analyte
21	170802M1_21	---	IPA	IPA	1.0000	1:48	Analyte
22	170802M1_22	---	ST170802M1-2 PFC CS3 17G3105	PFC CS3 17G3105	1.0000	1:2	Analyte
23	170802M1_23	---	IPA	IPA	1.0000	1:48	Blank
24	170802M1_24	---	1700925-05 I001MW52X-170724 0.1174	I001MW52X-170724	0.1174	1:19	Analyte
25	170802M1_25	---	1700925-06 EB01-170724 0.1185	EB01-170724	0.1185	1:20	Analyte
26	170802M1_26	---	1700929-01 MATP01001 0.11834	MATP01001	0.1183	1:21	Analyte
27	170802M1_27	---	1700929-02 MATP01002 0.1157	MATP01002	0.1157	1:22	Analyte
28	170802M1_28	---	1700938-01 NORP08102 0.11844	NORP08102	0.1184	1:23	Analyte
29	170802M1_29	---	1700938-02 NORP08103 0.12014	NORP08103	0.1201	1:24	Analyte
30	170802M1_30	---	1700938-03 NORP08104 0.11247	NORP08104	0.1125	1:25	Analyte
31	170802M1_31	---	1700886-12 AT028-SD17-02-071317-0845 1.44	AT028-SD17-02-071317-0845	0.9987	1:26	Analyte
32	170802M1_32	---	1700888-03 HARRI-01-SB02-0-2 2.04	HARRI-01-SB02-0-2	1.0167	1:27	Analyte
33	170802M1_33	---	1700888-09 HARRI-02-SB01-6-8 1.47	HARRI-02-SB01-6-8	1.0058	1:28	Analyte
34	170802M1_34	---	1700889-06 HARRI-03-SB03-0-2 1.33	HARRI-03-SB03-0-2	0.9903	1:29	Analyte
35	170802M1_35	---	B7G0086-MS1 Matrix Spike 1.35	Matrix Spike	1.3500	1:30	Analyte
36	170802M1_36	---	IPA	IPA	1.0000	1:48	Analyte
37	170802M1_37	---	ST170802M1-3 PFC CS3 17G3105	PFC CS3 17G3105	1.0000	1:2	Analyte
38	170802M1_38	---	IPA	IPA	1.0000	1:48	Blank
39	170802M1_39	---	1700906-01 MW-50BR-20170717 0.125	MW-50BR-20170717	0.1211	1:31	Analyte
40	170802M1_40	---	1700906-03 RB-04-20170717 0.125	RB-04-20170717	0.1202	1:32	Analyte

✓ QM 8/3/17 AC 8/3/17

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
41	170802M1_41	---	1700906-04 MW-12BR-20170718 0.125	MW-12BR-20170718	0.1213	1:33	Analyte
42	170802M1_42	---	1700906-05 MW-02BR-20170718 0.125	MW-02BR-20170718	0.1208	1:34	Analyte
43	170802M1_43	---	1700906-06 RB-05-20170718 0.125	RB-05-20170718	0.1215	1:35	Analyte
44	170802M1_44	---	1700907-01 AT028-FB-01-071717-0850 0.125	AT028-FB-01-071717-0850	0.1198	1:36	Analyte
45	170802M1_45	---	1700907-02 AT028-MW17-02-071717-0950 0.125	AT028-MW17-02-071717-0950	0.1199	1:37	Analyte
46	170802M1_46	---	1700907-03 AT028-MW17-04-071717-1050 0.125	AT028-MW17-04-071717-1050	0.1204	1:38	Analyte
47	170802M1_47	---	B7G0105-MS1 Matrix Spike 0.125	Matrix Spike	0.1181	1:39	Analyte
48	170802M1_48	---	B7G0105-MSD1 Matrix Spike Dup 0.125	Matrix Spike Dup	0.1216	1:40	Analyte
49	170802M1_49	---	1700907-04 AT028-MW17-06-071717-1300 0.125	AT028-MW17-06-071717-1300	0.1250	1:41	Analyte
50	170802M1_50	---	1700907-06 AT028-MW17-07-071717-1520 0.125	AT028-MW17-07-071717-1520	0.1163	1:42	Analyte
51	170802M1_51	---	IPA	IPA	1.0000	1:48	Analyte
52	170802M1_52	---	ST170802M1-4 PFC CS3 17G3105	PFC CS3 17G3105	1.0000	1:2	Analyte
53	170802M1_53	---	IPA	IPA	1.0000	1:48	Blank
54	170802M1_54	---	1700907-08 AT028-MW17-05-071817-0835 0.125	AT028-MW17-05-071817-0835	0.1196	1:43	Analyte
55	170802M1_55	---	1700907-09 AT028-MW17-01-071817-0950 0.125	AT028-MW17-01-071817-0950	0.1159	1:44	Analyte
56	170802M1_56	---	1700875-05@40X MW-11S-20170713 0.11994	MW-11S-20170713	0.1199	1:45	Analyte
57	170802M1_57	---	IPA	IPA	1.0000	1:48	Blank
58	170802M1_58	---	B7H0006-BS1 OPR 0.005	OPR	0.0050	1:46	Analyte
59	170802M1_59	---	IPA	IPA	1.0000	1:48	Blank
60	170802M1_60	---	B7H0006-BLK1 Method Blank 0.005	Method Blank	0.0050	1:47	Analyte
61	170802M1_61	---	1700936-01 BULK TANK #1 0.005	BULK TANK #1	0.0050	2:1	Analyte
62	170802M1_62	---	1700936-02 BULK TANK #2 0.005	BULK TANK #2	0.0050	2:2	Analyte
63	170802M1_63	---	1700936-03 COW SAMPLE 0.005	COW SAMPLE	0.0050	2:3	Analyte
64	170802M1_64	---	1700936-04 OAKHURST Whole Pt. 0.005	OAKHURST Whole Pt.	0.0050	2:4	Analyte
65	170802M1_65	---	IPA	IPA	1.0000	1:48	Analyte
66	170802M1_66	---	ST170802M1-5 PFC CS3 17G3105	PFC CS3 17G3105	1.0000	1:2	Analyte
67	170802M1_67	---	IPA	IPA	1.0000	1:48	Blank

LC Calibration Standards Review Checklist Q4

			ION Ratio	Concentration	C-Cals Name	Sign Date	Correct I-Cal	Manual Integrations	NA
Calibration ID:	ST170802M1-1	L M H	☑	☑	☑	☑	☑	☑	☐
Calibration ID:	-2	L M H	☐	☑	☑	☑	☑	☑	☐
Calibration ID:	-3	L M H	☐	☑	☑	☑	☑	☑	☐
Calibration ID:	-4	L M H	☐	☑	☑	☑	☑	☑	☐
Calibration ID:	-5	L M H	☐	☑	☑	☑	☑	☑	☐
Calibration ID:		L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:		L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:		L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:		L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:		L M H	☐	☐	☐	☐	☐	☐	☐

Full Mass Cal. Date: 6/21/17

Run Log Present: ☑

# of Samples per Sequence Checked: ☑

Reviewed By: [illegible] 8/3/17
Initials/Date

Comments:
Full List

Vista Analytical Laboratory

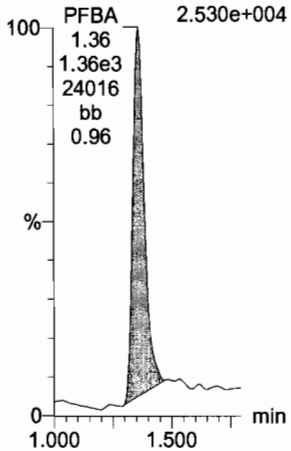
Dataset: U:\Q4.PRO\results\170802M1\170802M1-2.qld

Last Altered: Thursday, August 03, 2017 14:49:37 Pacific Daylight Time
Printed: Thursday, August 03, 2017 14:57:22 Pacific Daylight Time

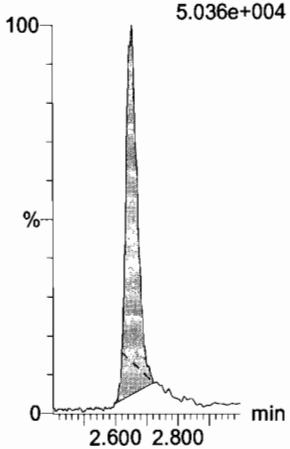
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 01 Aug 2017 09:55:07
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_2, Date: 02-Aug-2017, Time: 10:40:05, ID: ST170802M1-1 PFC CS0 17H0201, Description: PFC CS0 17H0201

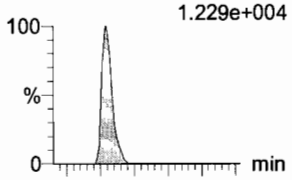
PFBA
F1:MRM of 2 channels,ES-
213.0 > 168.8
2.530e+004



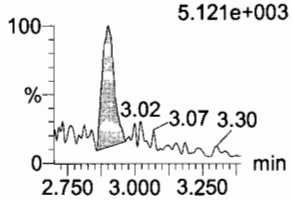
PFPeA
F4:MRM of 1 channel,ES-
263.1 > 218.9
5.036e+004



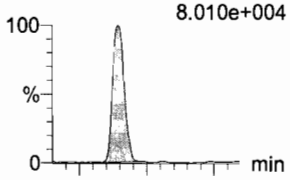
PFBS
F6:MRM of 2 channels,ES-
299 > 79.7
1.229e+004



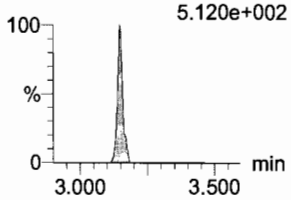
F6:MRM of 2 channels,ES-
299 > 99
5.121e+003



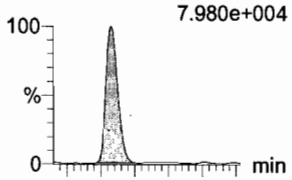
PFHxA
F8:MRM of 2 channels,ES-
313.2 > 268.9
8.010e+004



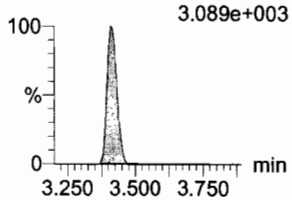
F8:MRM of 2 channels,ES-
313.2 > 119
5.120e+002



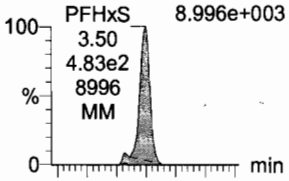
PFHpA
F14:MRM of 2 channels,ES-
363 > 318.9
7.980e+004



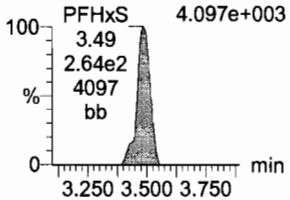
F14:MRM of 2 channels,ES-
363 > 169
3.089e+003



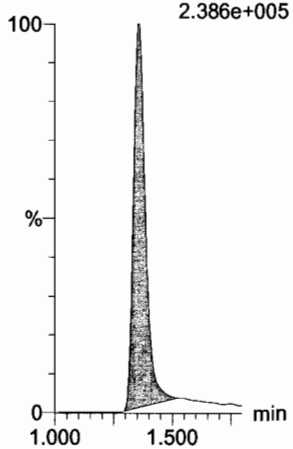
PFHxS
F16:MRM of 2 channels,ES-
398.9 > 79.6
8.996e+003



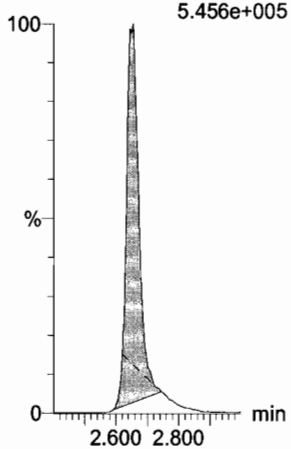
F16:MRM of 2 channels,ES-
398.9 > 99
4.097e+003



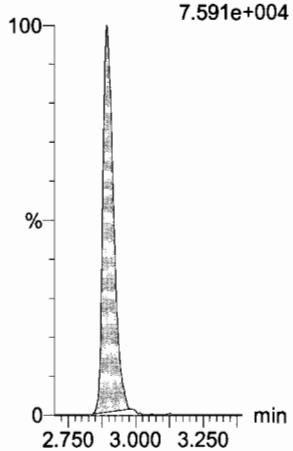
13C3-PFBA
F2:MRM of 1 channel,ES-
216.1 > 171.8
2.386e+005



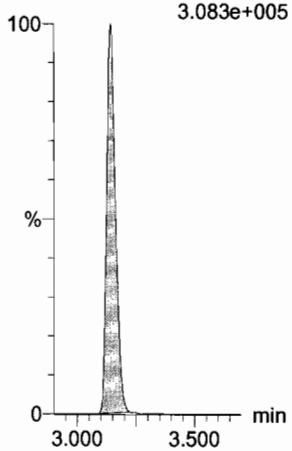
13C3-PFPeA
F5:MRM of 1 channel,ES-
266 > 221.8
5.456e+005



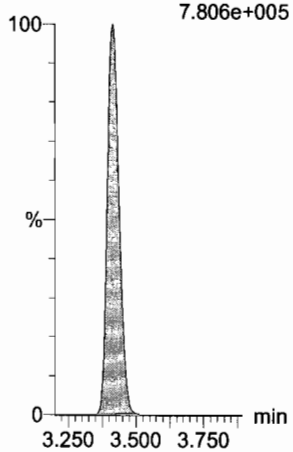
13C3-PFBS
F7:MRM of 1 channel,ES-
302 > 98.8
7.591e+004



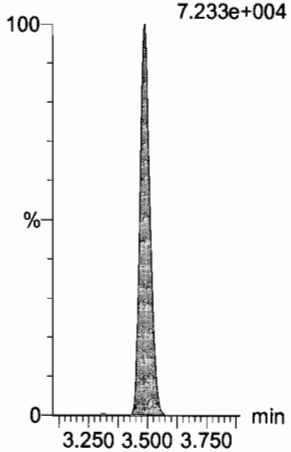
13C2-PFHxA
F9:MRM of 1 channel,ES-
315 > 269.8
3.083e+005



13C4-PFHpA
F15:MRM of 1 channel,ES-
367.2 > 321.8
7.806e+005



18O2-PFHxS
F18:MRM of 1 channel,ES-
403 > 102.6
7.233e+004



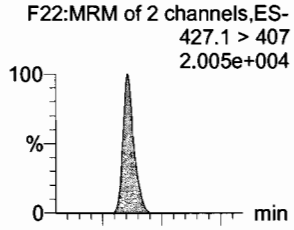
Vista Analytical Laboratory

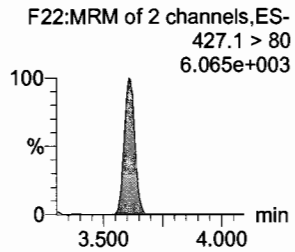
Dataset: U:\Q4.PRO\results\170802M1\170802M1-2.qld

Last Altered: Thursday, August 03, 2017 14:49:37 Pacific Daylight Time
Printed: Thursday, August 03, 2017 14:57:22 Pacific Daylight Time

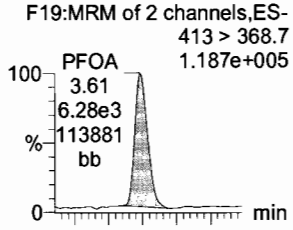
Name: 170802M1_2, Date: 02-Aug-2017, Time: 10:40:05, ID: ST170802M1-1 PFC CS0 17H0201, Description: PFC CS0 17H0201

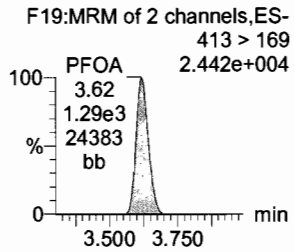
6:2 FTS



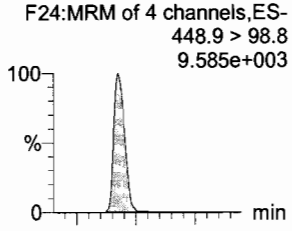


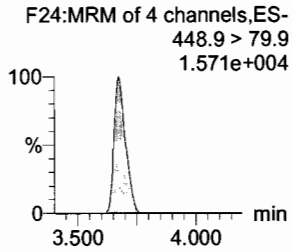
PFOA





PFHpS





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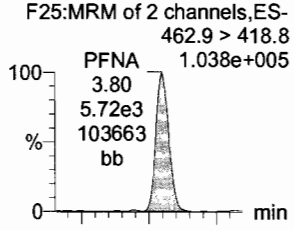
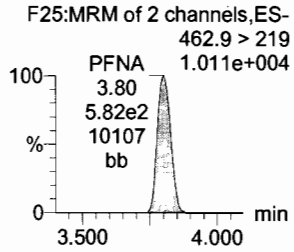
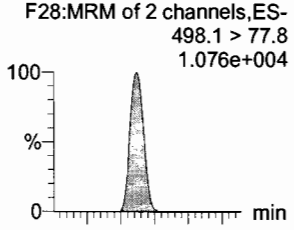
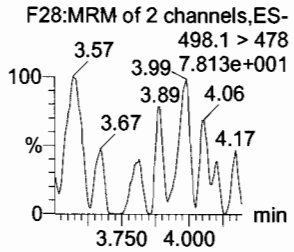


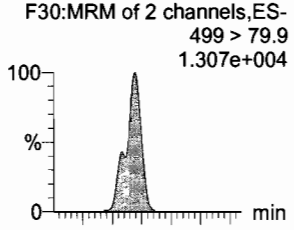


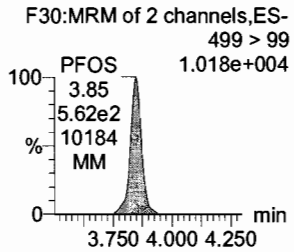
PFOSA



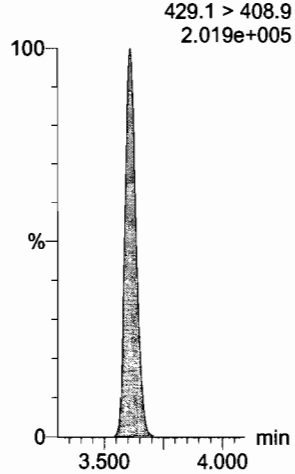


PFOS

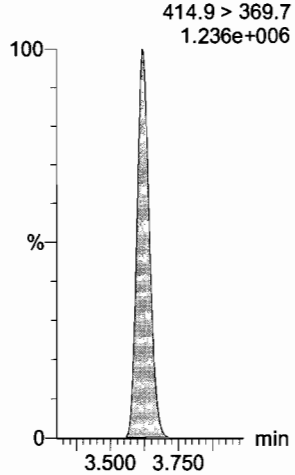




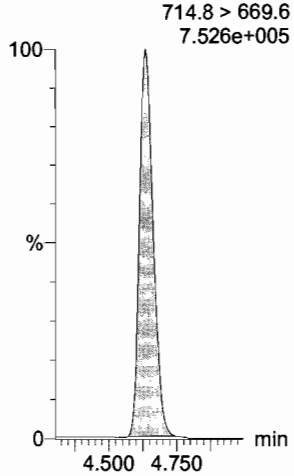
13C2-6:2 FTS



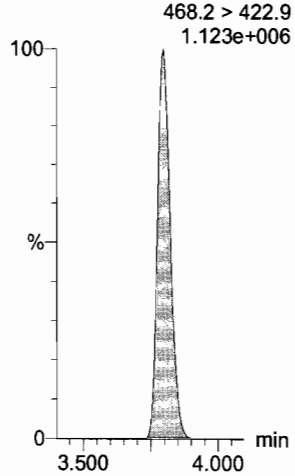
13C2-PFOA



13C2-PFTeDA



13C5-PFNA



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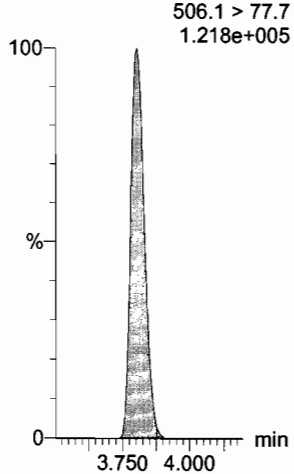
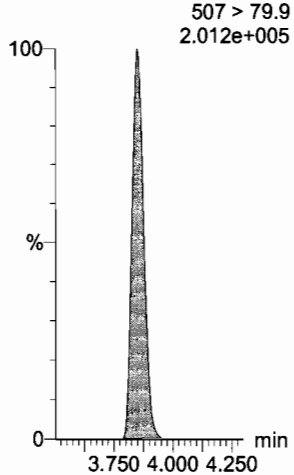


13C8-PFOS

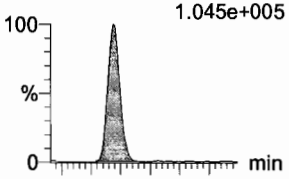


Dataset: U:\Q4.PRO\results\170802M1\170802M1-2.qld

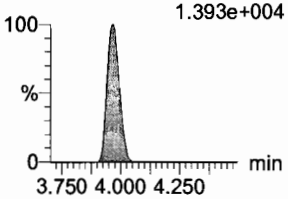
Last Altered: Thursday, August 03, 2017 14:49:37 Pacific Daylight Time
Printed: Thursday, August 03, 2017 14:57:22 Pacific Daylight Time

Name: 170802M1_2, Date: 02-Aug-2017, Time: 10:40:05, ID: ST170802M1-1 PFC CS0 17H0201, Description: PFC CS0 17H0201

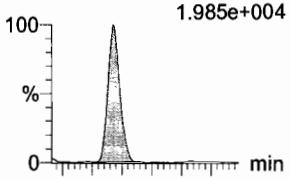
PFDA
F35:MRM of 2 channels,ES-
513 > 468.8
1.045e+005



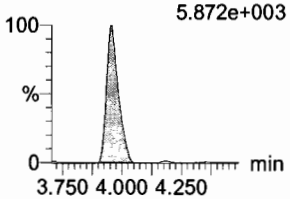
F35:MRM of 2 channels,ES-
513 > 219
1.393e+004



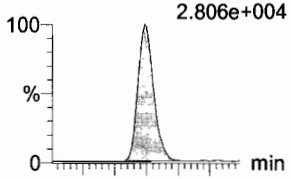
8:2 FTS
F40:MRM of 2 channels,ES-
527 > 506.9
1.985e+004



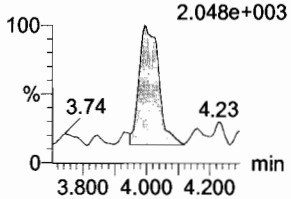
F40:MRM of 2 channels,ES-
527 > 80
5.872e+003



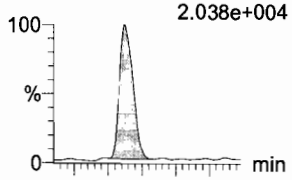
N-MeFOSAA
F45:MRM of 2 channels,ES-
570.1 > 419
2.806e+004



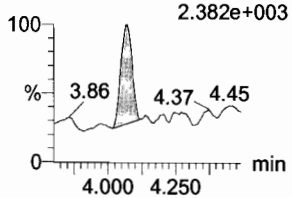
F45:MRM of 2 channels,ES-
570.1 > 483
2.048e+003



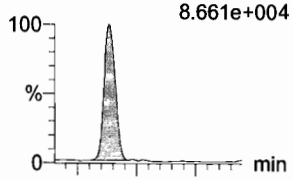
N-EtFOSAA
F48:MRM of 2 channels,ES-
584.2 > 419
2.038e+004



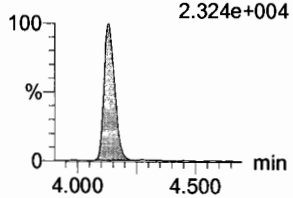
F48:MRM of 2 channels,ES-
584.2 > 483
2.382e+003



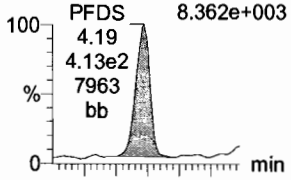
PFUnA
F43:MRM of 2 channels,ES-
562.9 > 518.9
8.661e+004



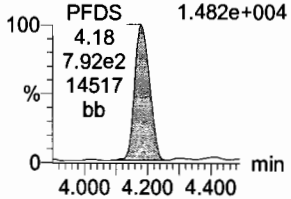
F43:MRM of 2 channels,ES-
562.9 > 269
2.324e+004



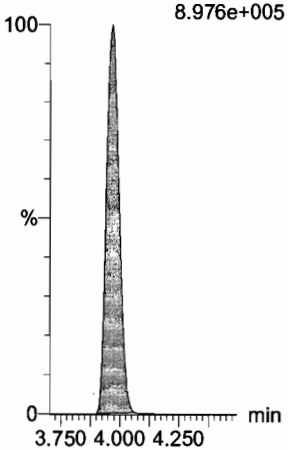
PFDS
F50:MRM of 2 channels,ES-
598.9 > 98.7
8.362e+003



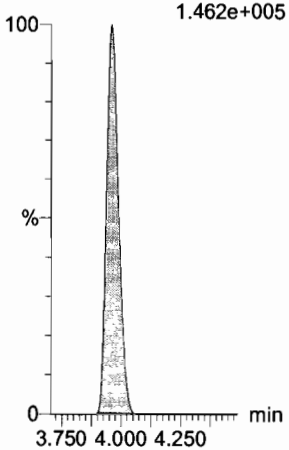
F50:MRM of 2 channels,ES-
598.9 > 80
1.482e+004



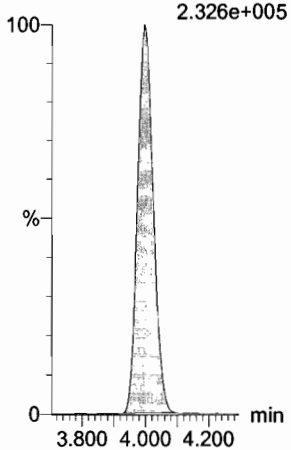
13C2-PFDA
F36:MRM of 1 channel,ES-
515.1 > 469.9
8.976e+005



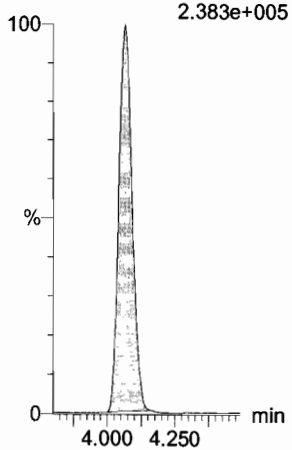
13C2-8:2 FTS
F41:MRM of 1 channel,ES-
529.1 > 508.7
1.462e+005



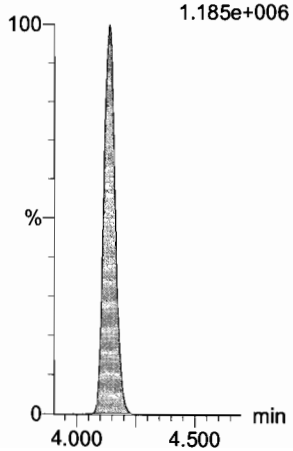
d3-N-MeFOSAA
F47:MRM of 1 channel,ES-
573.3 > 419
2.326e+005



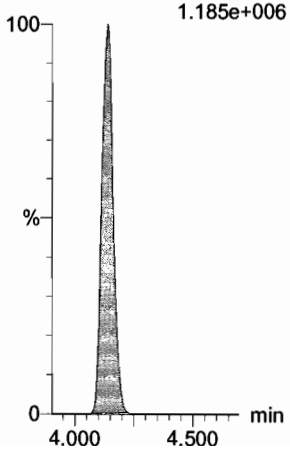
d5-N-EtFOSAA
F49:MRM of 1 channel,ES-
589.3 > 419
2.383e+005



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.185e+006



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.185e+006



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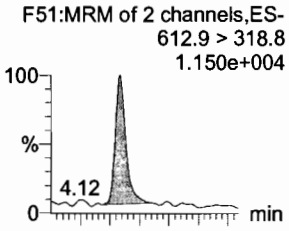
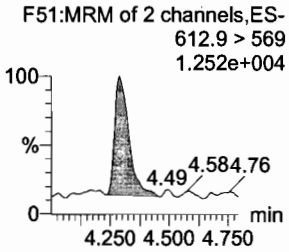
Last Altered: Thursday, August 03, 2017 14:49:37 Pacific Daylight Time
Printed: Thursday, August 03, 2017 14:57:22 Pacific Daylight Time

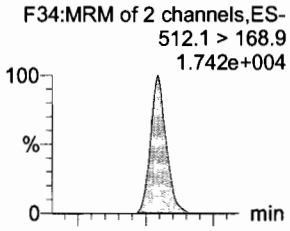
Name: 170802M1_2, Date: 02-Aug-2017, Time: 10:40:05, ID: ST170802M1-1 PFC CS0 17H0201, Description: PFC CS0 17H0201

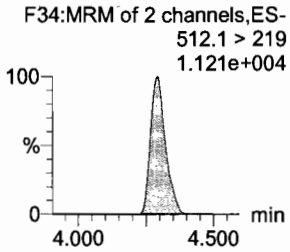
PFDoA



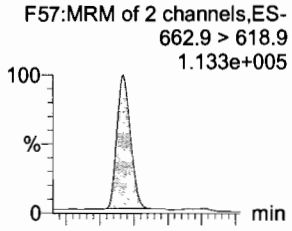


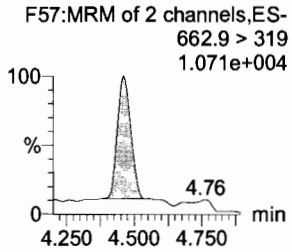
N-MeFOSA



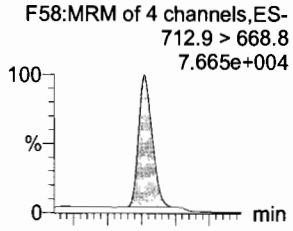


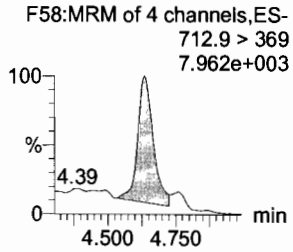
PFTrDA



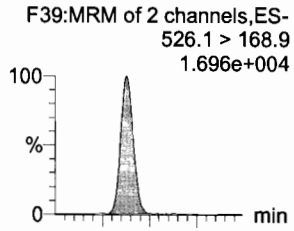


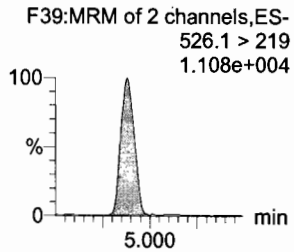
PFTeDA



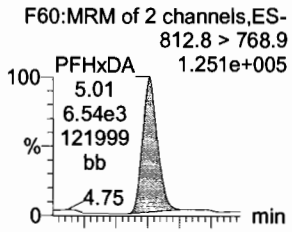


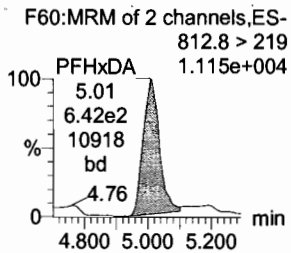
N-EtFOSA



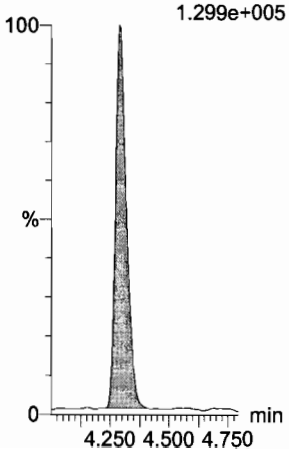


PFHxDA

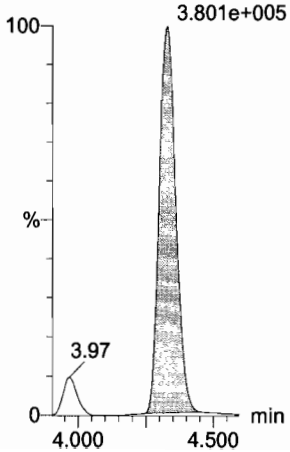




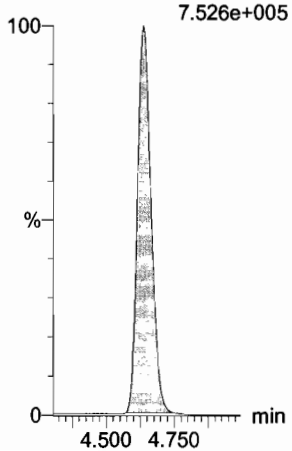
13C2-PFDoA



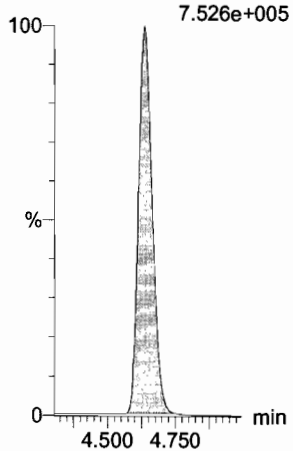
d3-N-MeFOSA



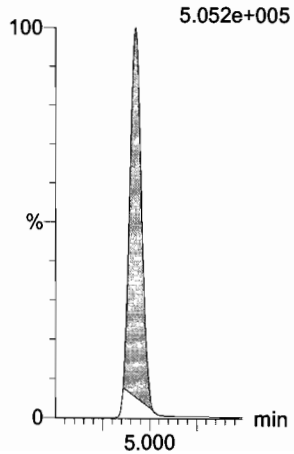
13C2-PFTeDA



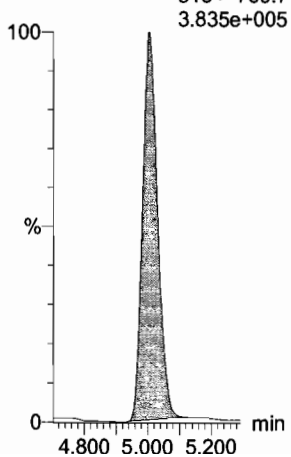
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-2.qld

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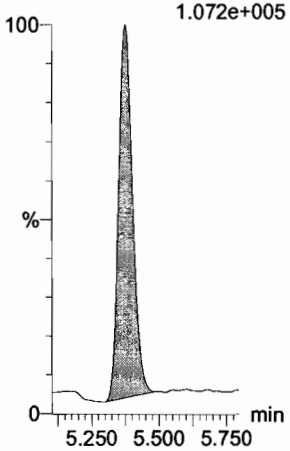
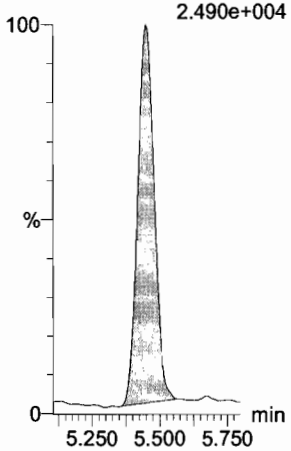
Name: 170802M1_2, Date: 02-Aug-2017, Time: 10:40:05, ID: ST170802M1-1 PFC CS0 17H0201, Description: PFC CS0 17H0201

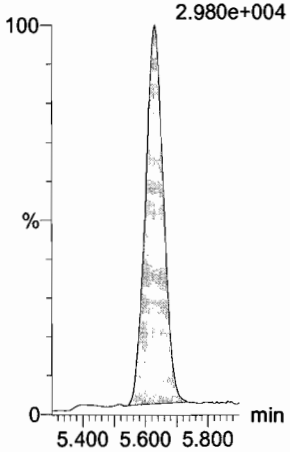
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
1.072e+005



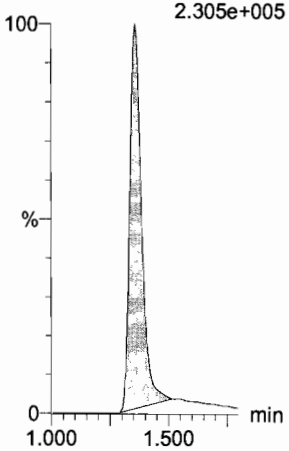
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
2.490e+004



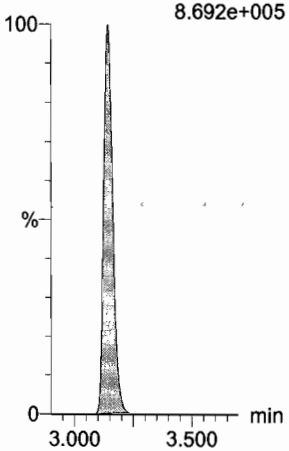
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
2.980e+004



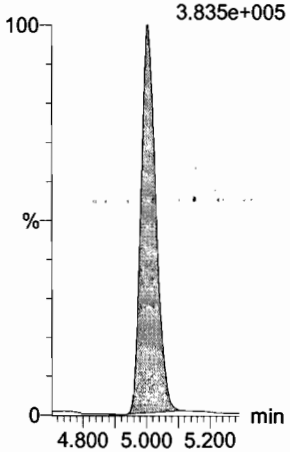
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.305e+005



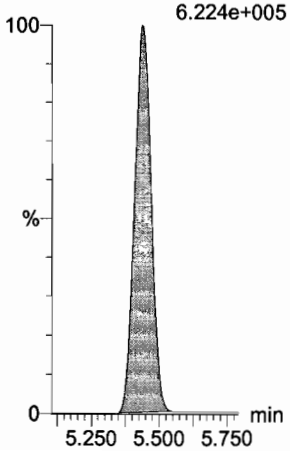
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
8.692e+005



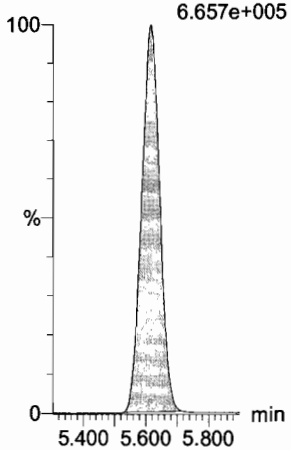
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
3.835e+005



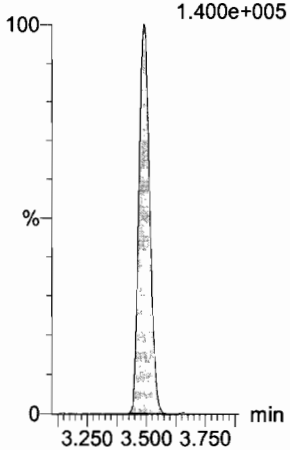
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
6.224e+005



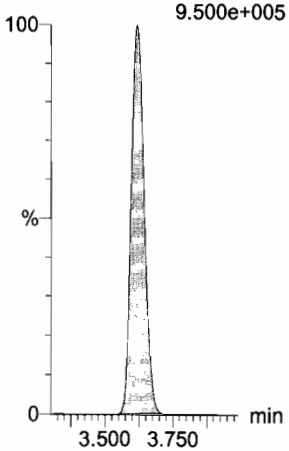
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
6.657e+005



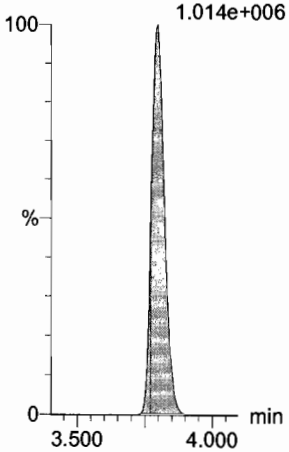
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.400e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
9.500e+005



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.014e+006



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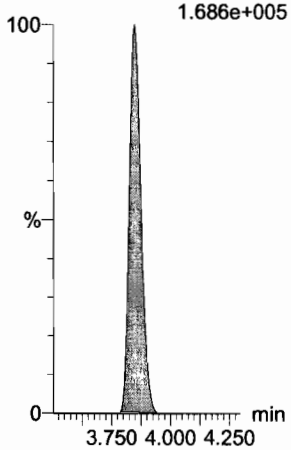
Name: 170802M1_2, Date: 02-Aug-2017, Time: 10:40:05, ID: ST170802M1-1 PFC CS0 17H0201, Description: PFC CS0 17H0201

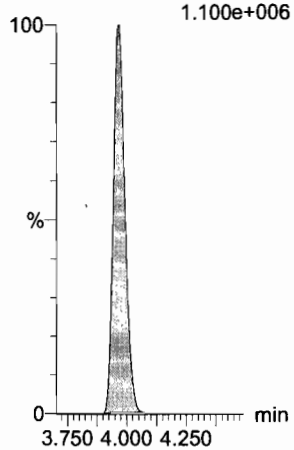
13C4-PFOS

F31:MRM of 1 channel,ES-
503 > 79.9
1.686e+005



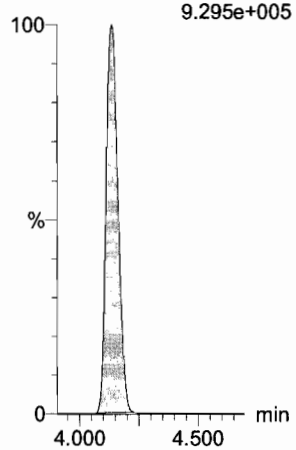
13C6-PFDA

F38:MRM of 1 channel,ES-
519.1 > 473.7
1.100e+006



13C7-PFUnA

F46:MRM of 1 channel,ES-
570.1 > 524.8
9.295e+005



Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-22.qld

Last Altered: Thursday, August 03, 2017 15:04:12 Pacific Daylight Time
Printed: Thursday, August 03, 2017 15:05:44 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 01 Aug 2017 09:55:07
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_22, Date: 02-Aug-2017, Time: 14:15:15, ID: ST170802M1-2 PFC CS3 17G3105, Description: PFC CS3 17G3105

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	1	PFBA	213.0 > 168.8	1.49e4	1.75e4		1.41	1.38	10.7	9.80	98.0	70-130
2	2	PFPeA	263.1 > 218.9	2.69e4	3.36e4		2.77	2.68	9.98	10.4	104.5	
3	3	PFBS	299 > 79.7	6.19e3	4.55e3		2.96	2.92	17.0	8.99	89.9	
4	4	PFHxA	313.2 > 268.9	4.77e4	1.65e4		3.19	3.16	14.5	10.3	103.1	
5	5	PFHpA	363 > 318.9	5.26e4	5.57e4		3.45	3.43	11.8	9.82	98.2	
6	6	PFHxS	398.9 > 79.6	7.21e3	5.29e3		3.56	3.50	17.0	10.1	101.2	
7	7	6:2 FTS	427.1 > 407	1.09e4	1.21e4		3.64	3.62	11.2	10.0	100.0	
8	8	PFOA	413 > 368.7	6.19e4	7.90e4		3.65	3.64	9.79	10.1	101.1	
9	9	PFHpS	448.9 > 98.8	6.34e3	7.90e4		3.71	3.69	1.00	11.6	115.6	
10	10	PFNA	462.9 > 418.8	6.20e4	6.98e4		3.83	3.81	11.1	10.2	101.6	
11	11	PFOSA	498.1 > 77.8	6.71e3	8.59e3		3.84	3.83	9.76	9.12	91.2	
12	12	PFOS	499 > 79.9	1.10e4	1.41e4		3.89	3.87	9.74	9.52	95.2	
13	13	PFDA	513 > 468.8	6.90e4	7.21e4		4.01	3.98	12.0	9.84	98.4	
14	14	8:2 FTS	527 > 506.9	9.16e3	7.57e3		4.00	3.98	15.1	10.8	107.7	
15	15	N-MeFOSAA	570.1 > 419	1.78e4	1.49e4		4.03	4.02	194	10.9	108.9	
16	16	N-EtFOSAA	584.2 > 419	1.42e4	1.49e4		4.10	4.09	155	10.0	100.3	
17	17	PFUnA	562.9 > 518.9	4.63e4	7.20e4		4.17	4.15	8.03	10.5	104.9	
18	18	PFDS	598.9 > 98.7	4.58e3	7.20e4		4.22	4.20	0.795	9.88	98.8	
19	19	PFDoA	612.9 > 318.8	5.44e3	7.59e3		4.34	4.31	8.97	9.53	95.3	
20	20	N-MeFOSA	512.1 > 168.9	1.11e4	3.15e4		4.29	4.32	52.9	52.3	104.7	
21	21	PFTrDA	662.9 > 618.9	6.58e4	7.59e3		4.50	4.49	108	10.3	103.4	
22	22	PFTeDA	712.9 > 668.8	4.54e4	5.23e4		4.68	4.66	10.8	10.0	100.2	
23	23	N-EtFOSA	526.1 > 168.9	1.40e4	4.35e4		4.87	4.91	48.3	52.0	104.0	
24	24	PFHxDA	812.8 > 768.9	6.59e4	2.45e4		5.06	5.03	13.4	10.5	105.1	
25	25	PFODA	912.8 > 868.8	5.61e4	2.45e4		5.43	5.41	11.4	10.0	100.3	
26	26	N-MeFOSE	616.1 > 58.9	1.84e4	5.19e4		5.42	5.47	53.3	51.5	103.0	
27	27	N-EtFOSE	630.1 > 58.9	2.09e4	5.14e4		5.59	5.64	61.0	52.0	104.0	
28	28	13C3-PFBA	216.1 > 171.8	1.75e4	1.72e4	1.006	1.41	1.38	12.7	12.7	101.3	30-150
29	29	13C3-PFPeA	266 > 221.8	3.36e4	5.07e4	0.275	2.77	2.68	3.32	12.1	96.4	
30	30	13C3-PFBS	302 > 98.8	4.55e3	5.07e4	0.034	2.96	2.92	0.449	13.2	105.2	
31	31	13C2-PFHxA	315 > 269.8	1.65e4	5.07e4	0.334	3.19	3.16	1.63	4.87	97.5	

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Dataset: U:\Q4.PRO\results\170802M1\170802M1-22.qld

Last Altered: Thursday, August 03, 2017 15:04:12 Pacific Daylight Time
Printed: Thursday, August 03, 2017 15:05:44 Pacific Daylight Time

Name: 170802M1_22, Date: 02-Aug-2017, Time: 14:15:15, ID: ST170802M1-2 PFC CS3 17G3105, Description: PFC CS3 17G3105

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	32	13C4-PFHpA	367.2 > 321.8	5.57e4	5.07e4	0.414	3.45	3.43	5.49	13.3	106.1
33	33	18O2-PFHxS	403 > 102.6	5.29e3	1.11e4	0.475	3.56	3.50	5.95	12.5	100.1
34	34	13C2-6:2 FTS	429.1 > 408.9	1.21e4	6.44e4	0.214	3.64	3.63	2.35	11.0	88.0
35	35	13C2-PFOA	414.9 > 369.7	7.90e4	6.44e4	1.298	3.65	3.64	15.3	11.8	94.5
36	36	13C5-PFNA	468.2 > 422.9	6.98e4	6.96e4	1.094	3.83	3.81	12.5	11.5	91.7
37	37	13C8-PFOSA	506.1 > 77.7	8.59e3	7.06e4	0.124	3.84	3.83	1.52	12.2	97.7
38	38	13C8-PFOS	507 > 79.9	1.41e4	1.21e4	1.153	3.89	3.87	14.6	12.6	101.2
39	39	13C2-PFDA	515.1 > 469.9	7.21e4	7.42e4	1.059	4.01	3.99	12.1	11.5	91.8
40	40	13C2-8:2 FTS	529.1 > 508.7	7.57e3	7.42e4	0.129	4.00	3.98	1.27	9.91	79.3
41	41	d3-N-MeFOSAA	573.3 > 419	1.49e4	7.06e4	0.019	4.03	4.02	2.64	136	84.0
42	42	d5-N-EtFOSAA	589.3 > 419	1.49e4	7.06e4	0.019	4.12	4.08	2.63	139	85.6
43	43	13C2-PFUnA	565 > 519.8	7.20e4	7.06e4	1.172	4.17	4.15	12.7	10.9	87.0
44	44	13C2-PFDoA	615 > 569.7	7.59e3	7.06e4	0.118	4.34	4.31	1.34	11.3	90.7
45	45	d3-N-MeFOSA	515.2 > 168.9	3.15e4	7.06e4	0.040	4.29	4.35	5.58	138	91.9
46	46	13C2-PFTeDA	714.8 > 669.6	5.23e4	7.06e4	0.801	4.68	4.66	9.26	11.6	92.5
47	47	d5-N-ETFOSA	531.1 > 168.9	4.35e4	7.06e4	0.055	5.01	4.95	7.69	140	93.1
48	48	13C2-PFHxDA	815 > 769.7	2.45e4	7.06e4	0.991	5.06	5.04	4.34	4.38	87.6
49	49	d7-N-MeFOSE	623.1 > 58.9	5.19e4	7.06e4	0.065	5.42	5.45	9.18	141	93.9
50	50	d9-N-EtFOSE	639.2 > 58.8	5.14e4	7.06e4	0.065	5.59	5.63	9.10	141	93.7
51	51	13C4-PFBA	217 > 171.8	1.72e4	1.72e4	1.000	1.41	1.38	12.5	12.5	100.0
52	52	13C5-PFHxA	318 > 272.9	5.07e4	5.07e4	1.000	3.19	3.16	5.00	5.00	100.0
53	53	13C3-PFHxS	401.9 > 79.9	1.11e4	1.11e4	1.000	3.56	3.50	12.5	12.5	100.0
54	54	13C8-PFOA	421.3 > 376	6.44e4	6.44e4	1.000	3.65	3.64	12.5	12.5	100.0
55	55	13C9-PFNA	472.2 > 426.9	6.96e4	6.96e4	1.000	3.83	3.81	12.5	12.5	100.0
56	56	13C4-PFOS	503 > 79.9	1.21e4	1.21e4	1.000	3.89	3.87	12.5	12.5	100.0
57	57	13C6-PFDA	519.1 > 473.7	7.42e4	7.42e4	1.000	4.01	3.99	12.5	12.5	100.0
58	58	13C7-PFUnA	570.1 > 524.8	7.06e4	7.06e4	1.000	4.17	4.15	12.5	12.5	100.0

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Sample List: U:\Q4.PRO\SampleDB\170802M1.SPL
Last Modified: Wednesday, August 02, 2017 14:54:09 Pacific Daylight Time
Printed: Thursday, August 03, 2017 09:42:21 Pacific Daylight Time

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
1	170802M1_1	---	IPA	IPA	1.0000	1:48	Blank
2	170802M1_2	---	ST170802M1-1 PFC CS0 17H0201	PFC CS0 17H0201	1.0000	1:1	Analyte
3	170802M1_3	---	IPA	IPA	1.0000	1:48	Blank
4	170802M1_4	---	B7G0121-BS1 OPR 0.125	OPR	0.1250	1:3	Analyte
5	170802M1_5	---	IPA	IPA	1.0000	1:48	Blank
6	170802M1_6	---	B7G0121-BLK1 Method Blank 0.125	Method Blank	0.1250	1:4	Analyte
7	170802M1_7	---	B7G0121-MS1 Matrix Spike 0.11301	Matrix Spike	0.1130	1:5	Analyte
8	170802M1_8	---	B7G0121-MSD1 Matrix Spike Dup 0.11225	Matrix Spike Dup	0.1123	1:6	Analyte
9	170802M1_9	---	B7G0121-MS2 Matrix Spike 0.11554	Matrix Spike	0.1155	1:7	Analyte
10	170802M1_10	---	B7G0121-MSD2 Matrix Spike Dup 0.11866	Matrix Spike Dup	0.1187	1:8	Analyte
11	170802M1_11	---	1700922-01 MH-L103-20170721 0.10565	MH-L103-20170721	0.1056	1:9	Analyte
12	170802M1_12	---	1700922-02 MH-N104-20170721 0.11025	MH-N104-20170721	0.1103	1:10	Analyte
13	170802M1_13	---	1700922-03 Upstream-Culvert-109-20170721 0.11852	Upstream-Culvert-109-20170721	0.1185	1:11	Analyte
14	170802M1_14	---	1700922-04 FRB03-20170721 0.11017	FRB03-20170721	0.1102	1:12	Analyte
15	170802M1_15	---	1700922-05 RB08-20170720 0.11893	RB08-20170720	0.1189	1:13	Analyte
16	170802M1_16	---	1700922-06 RB09-20170721 0.11676	RB09-20170721	0.1168	1:14	Analyte
17	170802M1_17	---	1700925-01 I001BC43S-170724 0.12112	I001BC43S-170724	0.1211	1:15	Analyte
18	170802M1_18	---	1700925-02 SB01-170724 0.12178	SB01-170724	0.1218	1:16	Analyte
19	170802M1_19	---	1700925-03 I001BC50S-170724 0.12135	I001BC50S-170724	0.1214	1:17	Analyte
20	170802M1_20	---	1700925-04 I001MW52S-170724 0.1192	I001MW52S-170724	0.1192	1:18	Analyte
21	170802M1_21	---	IPA	IPA	1.0000	1:48	Analyte
22	170802M1_22	---	ST170802M1-2 PFC CS3 17G3105	PFC CS3 17G3105	1.0000	1:2	Analyte
23	170802M1_23	---	IPA	IPA	1.0000	1:48	Blank
24	170802M1_24	---	1700925-05 I001MW52X-170724 0.1174	I001MW52X-170724	0.1174	1:19	Analyte
25	170802M1_25	---	1700925-06 EB01-170724 0.1185	EB01-170724	0.1185	1:20	Analyte
26	170802M1_26	---	1700929-01 MATP01001 0.11834	MATP01001	0.1183	1:21	Analyte
27	170802M1_27	---	1700929-02 MATP01002 0.1157	MATP01002	0.1157	1:22	Analyte
28	170802M1_28	---	1700938-01 NORP08102 0.11844	NORP08102	0.1184	1:23	Analyte
29	170802M1_29	---	1700938-02 NORP08103 0.12014	NORP08103	0.1201	1:24	Analyte
30	170802M1_30	---	1700938-03 NORP08104 0.11247	NORP08104	0.1125	1:25	Analyte
31	170802M1_31	---	1700886-12 AT028-SD17-02-071317-0845 1.44	AT028-SD17-02-071317-0845	0.9987	1:26	Analyte
32	170802M1_32	---	1700888-03 HARRI-01-SB02-0-2 2.04	HARRI-01-SB02-0-2	1.0167	1:27	Analyte
33	170802M1_33	---	1700888-09 HARRI-02-SB01-6-8 1.47	HARRI-02-SB01-6-8	1.0058	1:28	Analyte
34	170802M1_34	---	1700889-06 HARRI-03-SB03-0-2 1.33	HARRI-03-SB03-0-2	0.9903	1:29	Analyte
35	170802M1_35	---	B7G0086-MS1 Matrix Spike 1.35	Matrix Spike	1.3500	1:30	Analyte
36	170802M1_36	---	IPA	IPA	1.0000	1:48	Analyte
37	170802M1_37	---	ST170802M1-3 PFC CS3 17G3105	PFC CS3 17G3105	1.0000	1:2	Analyte
38	170802M1_38	---	IPA	IPA	1.0000	1:48	Blank
39	170802M1_39	---	1700906-01 MW-50BR-20170717 0.125	MW-50BR-20170717	0.1211	1:31	Analyte
40	170802M1_40	---	1700906-03 RB-04-20170717 0.125	RB-04-20170717	0.1202	1:32	Analyte

✓ QM 8/3/17 AC 8/3/17

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
41	170802M1_41	---	1700906-04 MW-12BR-20170718 0.125	MW-12BR-20170718	0.1213	1:33	Analyte
42	170802M1_42	---	1700906-05 MW-02BR-20170718 0.125	MW-02BR-20170718	0.1208	1:34	Analyte
43	170802M1_43	---	1700906-06 RB-05-20170718 0.125	RB-05-20170718	0.1215	1:35	Analyte
44	170802M1_44	---	1700907-01 AT028-FB-01-071717-0850 0.125	AT028-FB-01-071717-0850	0.1198	1:36	Analyte
45	170802M1_45	---	1700907-02 AT028-MW17-02-071717-0950 0.125	AT028-MW17-02-071717-0950	0.1199	1:37	Analyte
46	170802M1_46	---	1700907-03 AT028-MW17-04-071717-1050 0.125	AT028-MW17-04-071717-1050	0.1204	1:38	Analyte
47	170802M1_47	---	B7G0105-MS1 Matrix Spike 0.125	Matrix Spike	0.1181	1:39	Analyte
48	170802M1_48	---	B7G0105-MSD1 Matrix Spike Dup 0.125	Matrix Spike Dup	0.1216	1:40	Analyte
49	170802M1_49	---	1700907-04 AT028-MW17-06-071717-1300 0.125	AT028-MW17-06-071717-1300	0.1250	1:41	Analyte
50	170802M1_50	---	1700907-06 AT028-MW17-07-071717-1520 0.125	AT028-MW17-07-071717-1520	0.1163	1:42	Analyte
51	170802M1_51	---	IPA	IPA	1.0000	1:48	Analyte
52	170802M1_52	---	ST170802M1-4 PFC CS3 17G3105	PFC CS3 17G3105	1.0000	1:2	Analyte
53	170802M1_53	---	IPA	IPA	1.0000	1:48	Blank
54	170802M1_54	---	1700907-08 AT028-MW17-05-071817-0835 0.125	AT028-MW17-05-071817-0835	0.1196	1:43	Analyte
55	170802M1_55	---	1700907-09 AT028-MW17-01-071817-0950 0.125	AT028-MW17-01-071817-0950	0.1159	1:44	Analyte
56	170802M1_56	---	1700875-05@40X MW-11S-20170713 0.11994	MW-11S-20170713	0.1199	1:45	Analyte
57	170802M1_57	---	IPA	IPA	1.0000	1:48	Blank
58	170802M1_58	---	B7H0006-BS1 OPR 0.005	OPR	0.0050	1:46	Analyte
59	170802M1_59	---	IPA	IPA	1.0000	1:48	Blank
60	170802M1_60	---	B7H0006-BLK1 Method Blank 0.005	Method Blank	0.0050	1:47	Analyte
61	170802M1_61	---	1700936-01 BULK TANK #1 0.005	BULK TANK #1	0.0050	2:1	Analyte
62	170802M1_62	---	1700936-02 BULK TANK #2 0.005	BULK TANK #2	0.0050	2:2	Analyte
63	170802M1_63	---	1700936-03 COW SAMPLE 0.005	COW SAMPLE	0.0050	2:3	Analyte
64	170802M1_64	---	1700936-04 OAKHURST Whole Pt. 0.005	OAKHURST Whole Pt.	0.0050	2:4	Analyte
65	170802M1_65	---	IPA	IPA	1.0000	1:48	Analyte
66	170802M1_66	---	ST170802M1-5 PFC CS3 17G3105	PFC CS3 17G3105	1.0000	1:2	Analyte
67	170802M1_67	---	IPA	IPA	1.0000	1:48	Blank

Vista Analytical Laboratory

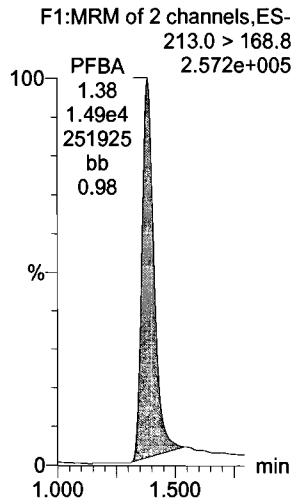
Dataset: U:\Q4.PRO\results\170802M1\170802M1-22.qld

Last Altered: Thursday, August 03, 2017 15:04:12 Pacific Daylight Time
Printed: Thursday, August 03, 2017 15:05:44 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 01 Aug 2017 09:55:07
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_22, Date: 02-Aug-2017, Time: 14:15:15, ID: ST170802M1-2 PFC CS3 17G3105, Description: PFC CS3 17G3105

PFBA



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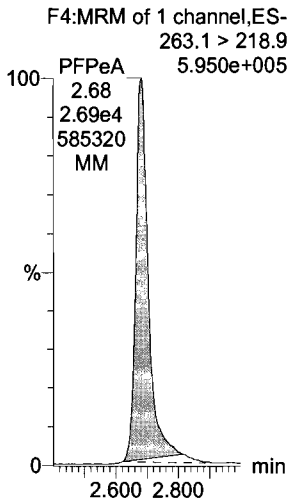

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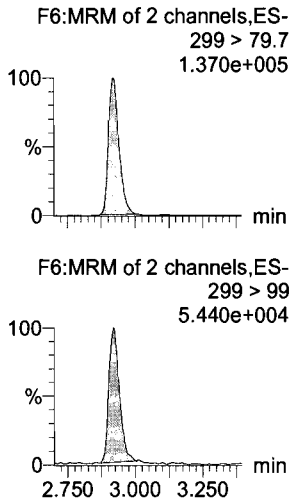

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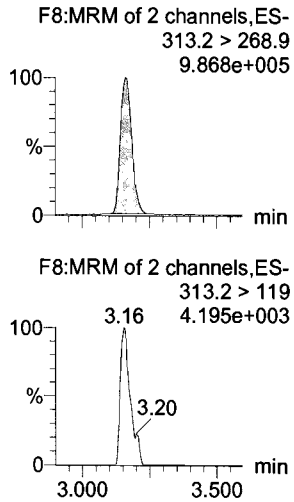

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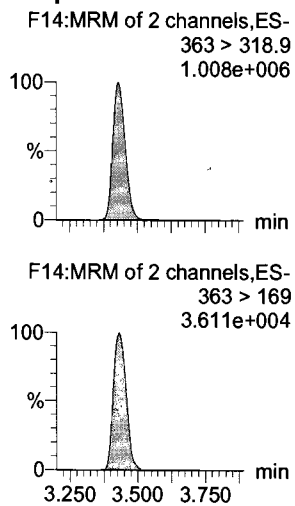
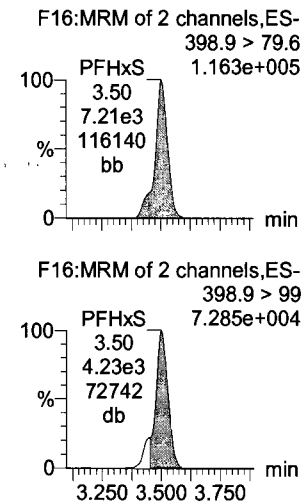
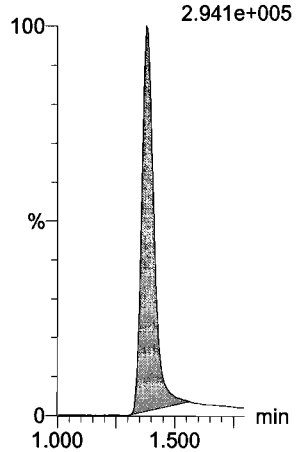


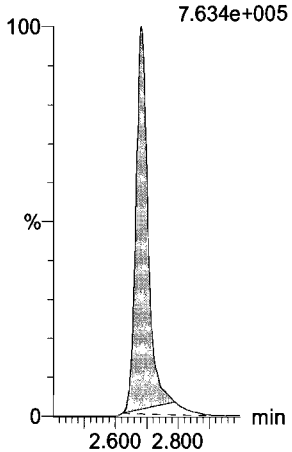
PFHxS



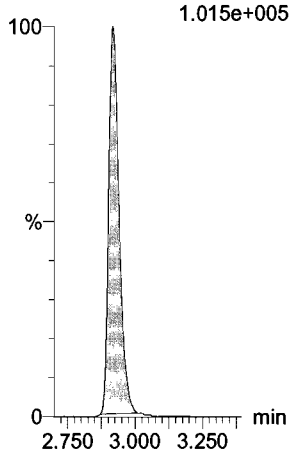
13C3-PFBA



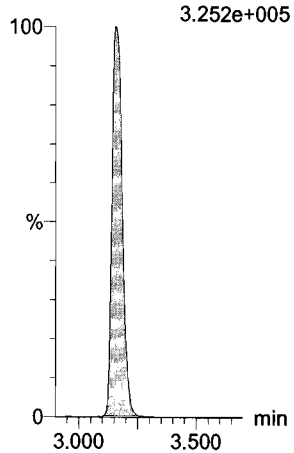
13C3-PFPeA



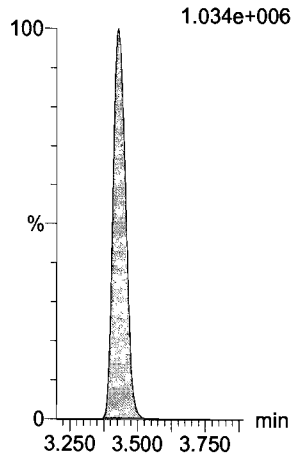
13C3-PFBS



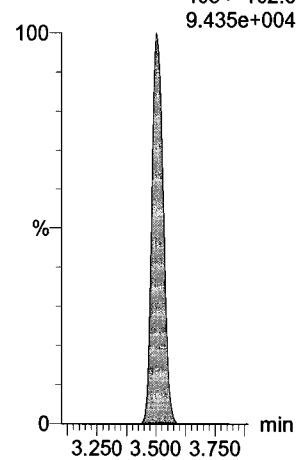
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



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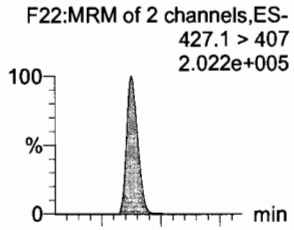
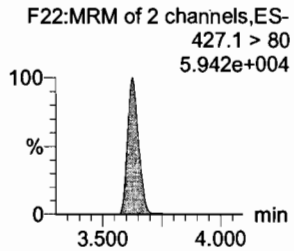
Printed: Thursday, August 03, 2017 15:05:44 Pacific Daylight Time

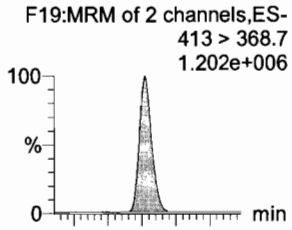
Name: 170802M1_22, Date: 02-Aug-2017, Time: 14:15:15, ID: ST170802M1-2 PFC CS3 17G3105, Description: PFC CS3 17G3105

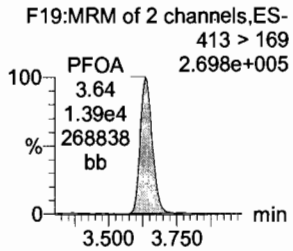
6:2 FTS



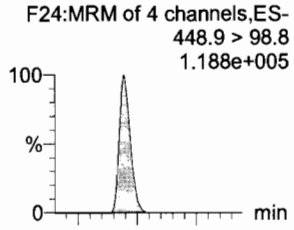


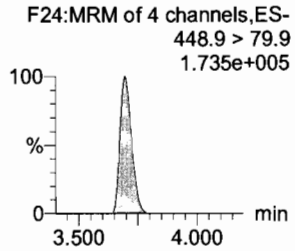
PFOA



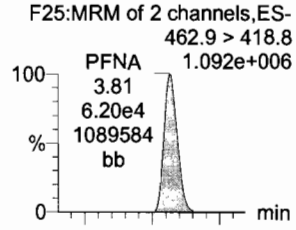


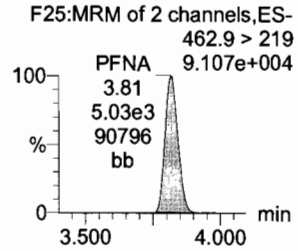
PFHpS



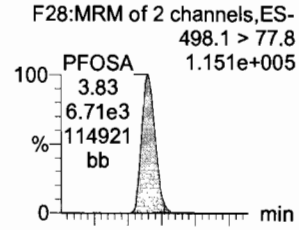


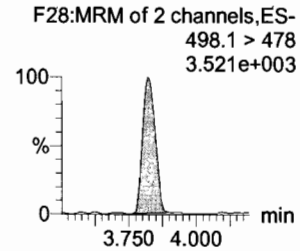
PFNA



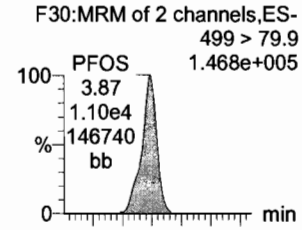


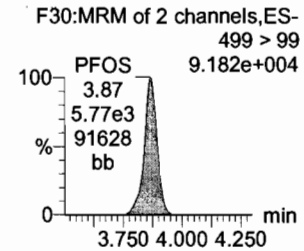
PFOSA



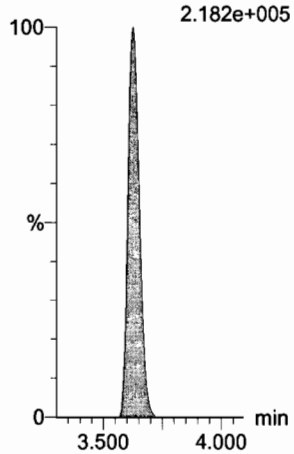


PFOS

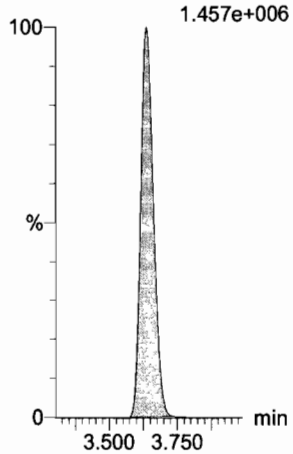




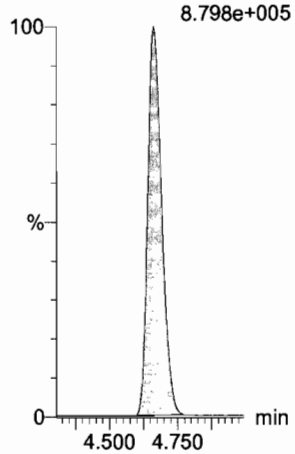
13C2-6:2 FTS



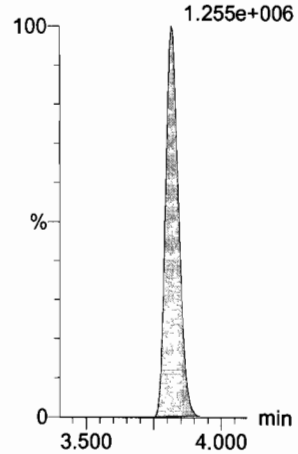
13C2-PFOA



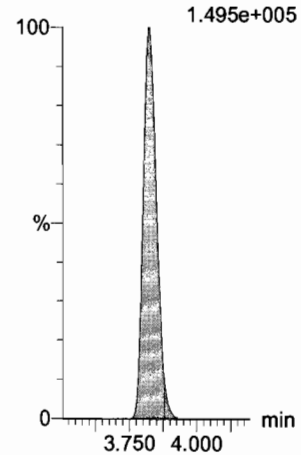
13C2-PFTeDA



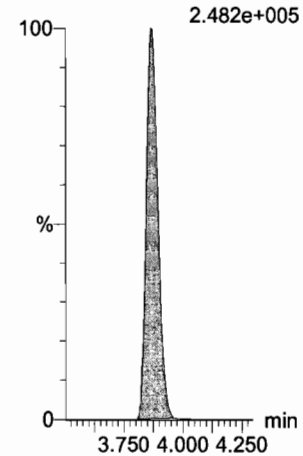
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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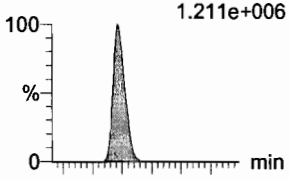
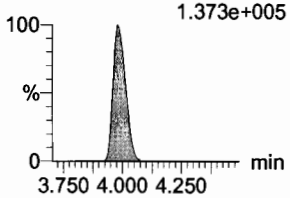
Name: 170802M1_22, Date: 02-Aug-2017, Time: 14:15:15, ID: ST170802M1-2 PFC CS3 17G3105, Description: PFC CS3 17G3105

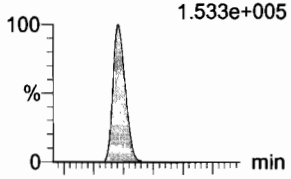
PFDA
F35:MRM of 2 channels,ES-
513 > 468.8
1.211e+006



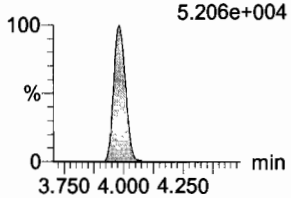
F35:MRM of 2 channels,ES-
513 > 219
1.373e+005



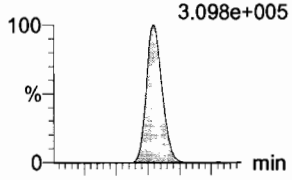
8:2 FTS
F40:MRM of 2 channels,ES-
527 > 506.9
1.533e+005



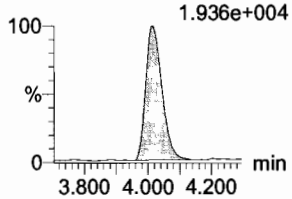
F40:MRM of 2 channels,ES-
527 > 80
5.206e+004



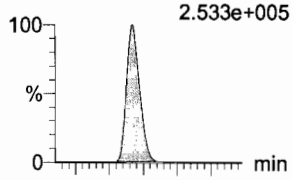
N-MeFOSAA
F45:MRM of 2 channels,ES-
570.1 > 419
3.098e+005



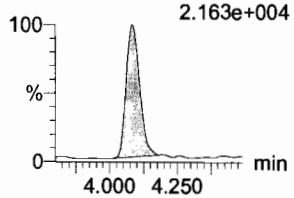
F45:MRM of 2 channels,ES-
570.1 > 483
1.936e+004



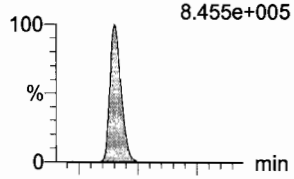
N-EtFOSAA
F48:MRM of 2 channels,ES-
584.2 > 419
2.533e+005



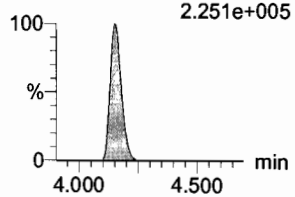
F48:MRM of 2 channels,ES-
584.2 > 483
2.163e+004



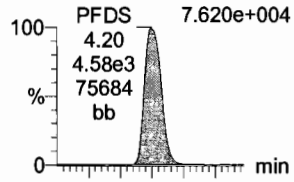
PFUnA
F43:MRM of 2 channels,ES-
562.9 > 518.9
8.455e+005



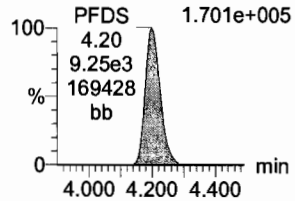
F43:MRM of 2 channels,ES-
562.9 > 269
2.251e+005



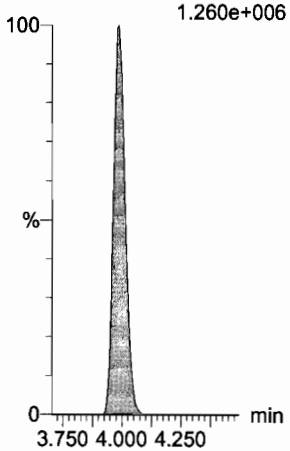
PFDS
F50:MRM of 2 channels,ES-
598.9 > 98.7
7.620e+004



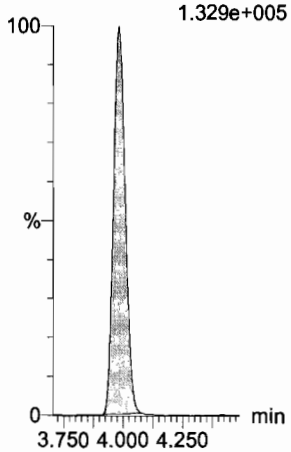
F50:MRM of 2 channels,ES-
598.9 > 80
1.701e+005



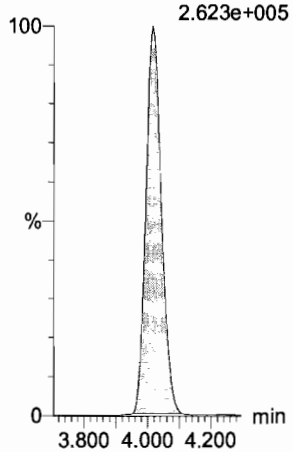
13C2-PFDA
F36:MRM of 1 channel,ES-
515.1 > 469.9
1.260e+006



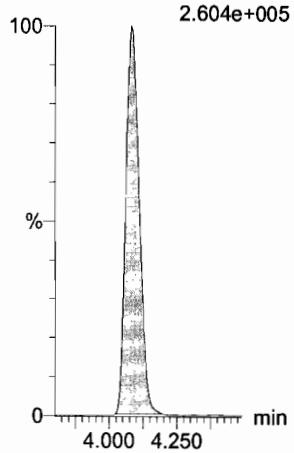
13C2-8:2 FTS
F41:MRM of 1 channel,ES-
529.1 > 508.7
1.329e+005



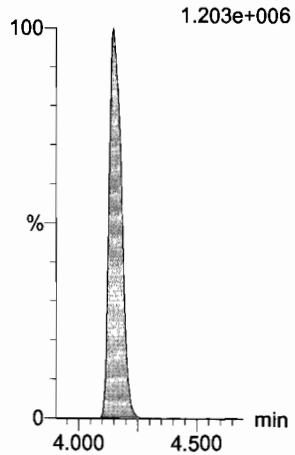
d3-N-MeFOSAA
F47:MRM of 1 channel,ES-
573.3 > 419
2.623e+005



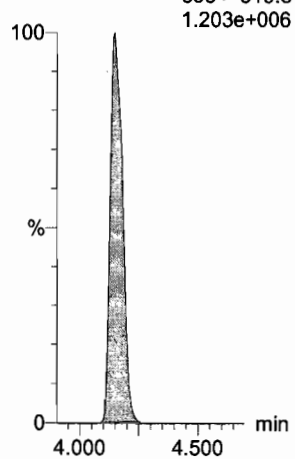
d5-N-EtFOSAA
F49:MRM of 1 channel,ES-
589.3 > 419
2.604e+005



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.203e+006



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.203e+006



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Last Altered: Thursday, August 03, 2017 15:04:12 Pacific Daylight Time
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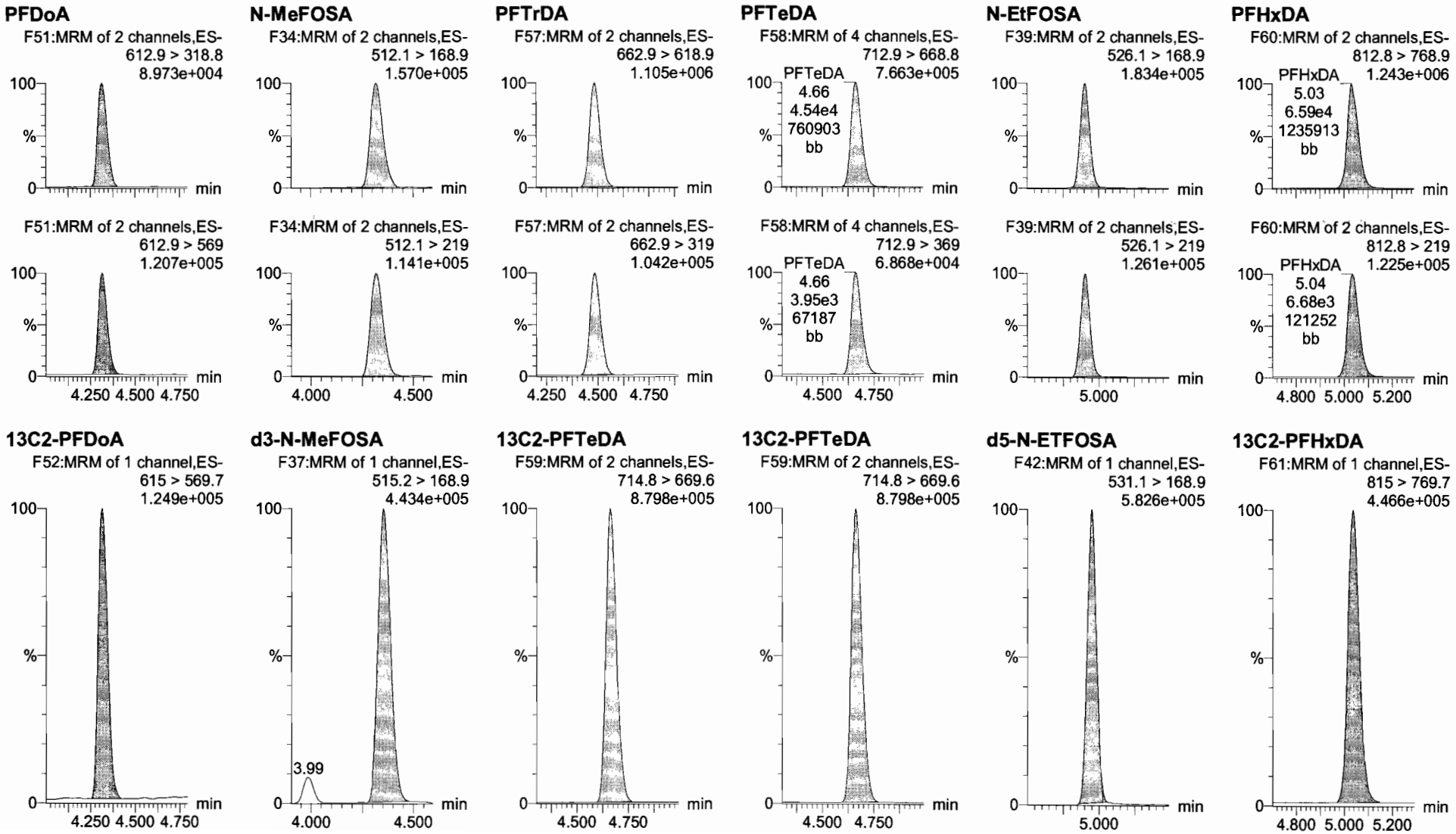
Name: 170802M1_22, Date: 02-Aug-2017, Time: 14:15:15, ID: ST170802M1-2 PFC CS3 17G3105, Description: PFC CS3 17G3105



Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-22.qld

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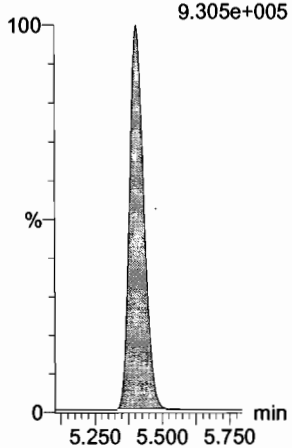
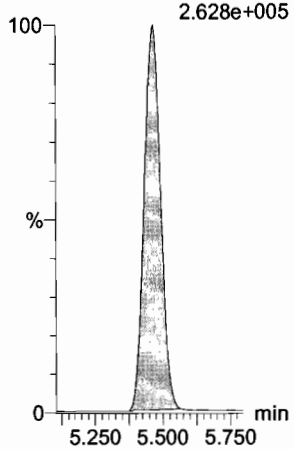
Printed: Thursday, August 03, 2017 15:05:44 Pacific Daylight Time

Name: 170802M1_22, Date: 02-Aug-2017, Time: 14:15:15, ID: ST170802M1-2 PFC CS3 17G3105, Description: PFC CS3 17G3105

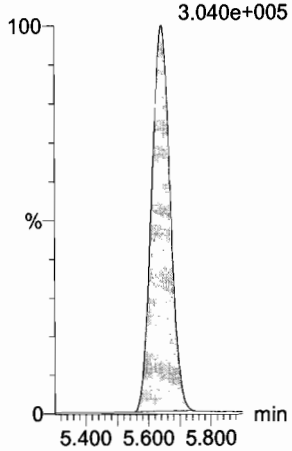
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
9.305e+005



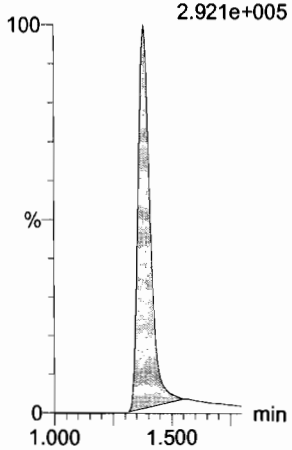
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
2.628e+005



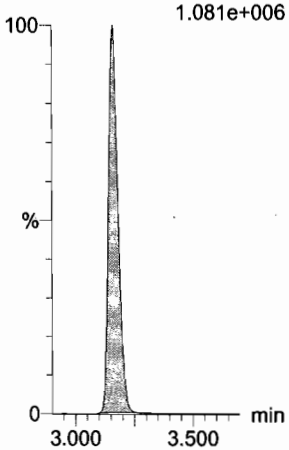
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
3.040e+005



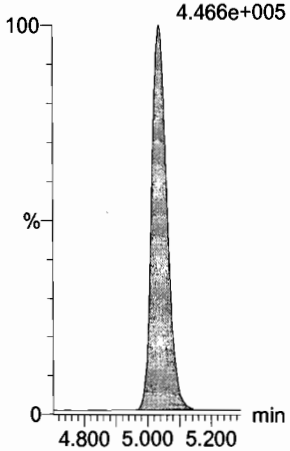
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.921e+005



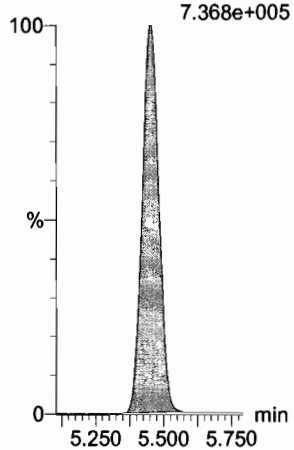
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
1.081e+006



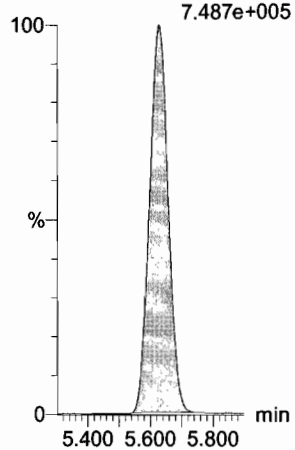
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.466e+005



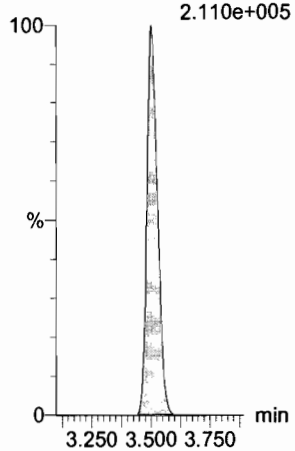
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
7.368e+005



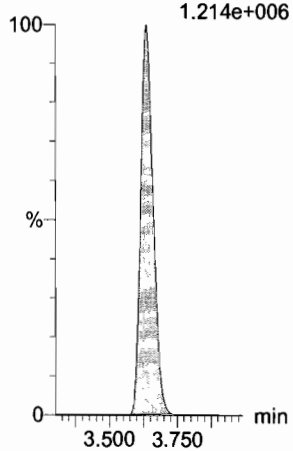
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
7.487e+005



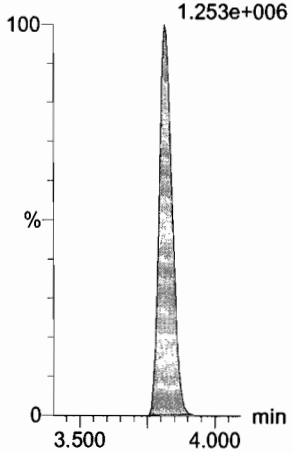
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
2.110e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.214e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.253e+006

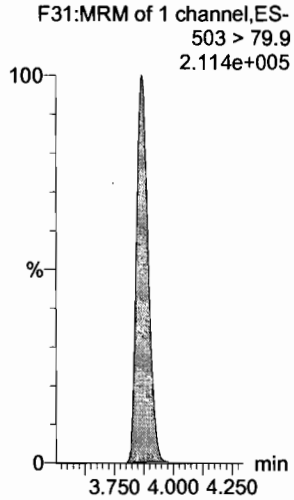


Dataset: U:\Q4.PRO\results\170802M1\170802M1-22.qld

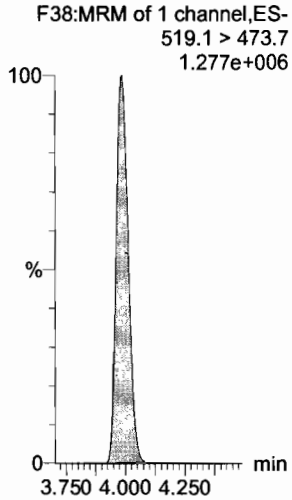
Last Altered: Thursday, August 03, 2017 15:04:12 Pacific Daylight Time
Printed: Thursday, August 03, 2017 15:05:44 Pacific Daylight Time

Name: 170802M1_22, Date: 02-Aug-2017, Time: 14:15:15, ID: ST170802M1-2 PFC CS3 17G3105, Description: PFC CS3 17G3105

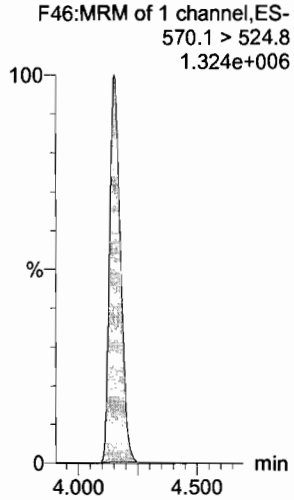
13C4-PFOS



13C6-PFDA



13C7-PFUnA



Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-37.qld

Last Altered: Thursday, August 03, 2017 15:26:20 Pacific Daylight Time
Printed: Thursday, August 03, 2017 15:26:37 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 01 Aug 2017 09:55:07
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_37, Date: 02-Aug-2017, Time: 16:55:33, ID: ST170802M1-3 PFC CS3 17G3105, Description: PFC CS3 17G3105

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1	PFBA	213.0 > 168.8	1.60e4	1.85e4		1.41	1.39	10.8	9.94	99.4
2	2	PFPeA	263.1 > 218.9	2.92e4	3.81e4		2.77	2.68	9.59	10.0	100.3
3	3	PFBS	299 > 79.7	6.66e3	4.74e3		2.96	2.92	17.6	9.29	92.9
4	4	PFHxA	313.2 > 268.9	5.31e4	1.89e4		3.19	3.16	14.1	10.0	100.2
5	5	PFHpA	363 > 318.9	5.79e4	6.35e4		3.45	3.43	11.4	9.46	94.6
6	6	PFHxS	398.9 > 79.6	7.44e3	5.83e3		3.56	3.50	16.0	9.48	94.8
7	7	6:2 FTS	427.1 > 407	1.02e4	1.24e4		3.64	3.63	10.3	9.16	91.6
8	8	PFOA	413 > 368.7	6.43e4	7.99e4		3.65	3.64	10.1	10.4	103.9
9	9	PFHpS	448.9 > 98.8	6.10e3	7.99e4		3.71	3.70	0.954	11.0	109.9
10	10	PFNA	462.9 > 418.8	5.78e4	7.12e4		3.83	3.82	10.2	9.29	92.9
11	11	PFOSA	498.1 > 77.8	7.06e3	8.56e3		3.84	3.83	10.3	9.63	96.3
12	12	PFOS	499 > 79.9	1.13e4	1.39e4		3.89	3.87	10.2	9.94	99.4
13	13	PFDA	513 > 468.8	6.80e4	7.07e4		4.01	3.99	12.0	9.89	98.9
14	14	8:2 FTS	527 > 506.9	8.77e3	6.89e3		4.00	3.98	15.9	11.4	113.6
15	15	N-MeFOSAA	570.1 > 419	1.85e4	1.65e4		4.03	4.02	183	10.3	102.6
16	16	N-EtFOSAA	584.2 > 419	1.52e4	1.60e4		4.10	4.09	154	10.0	100.2
17	17	PFUnA	562.9 > 518.9	4.98e4	7.87e4		4.17	4.16	7.90	10.3	103.2
18	18	PFDS	598.9 > 98.7	4.97e3	7.87e4		4.22	4.21	0.790	9.82	98.2
19	19	PFDoA	612.9 > 318.8	5.67e3	7.88e3		4.34	4.31	8.99	9.55	95.5
20	20	N-MeFOSA	512.1 > 168.9	1.21e4	3.16e4		4.29	4.33	57.4	56.8	113.7
21	21	PFTrDA	662.9 > 618.9	7.09e4	7.88e3		4.50	4.49	112	10.7	107.3
22	22	PFTeDA	712.9 > 668.8	4.58e4	5.13e4		4.68	4.67	11.2	10.3	103.2
23	23	N-EtFOSA	526.1 > 168.9	1.45e4	4.48e4		4.87	4.91	48.6	52.3	104.6
24	24	PFHxDA	812.8 > 768.9	6.53e4	2.44e4		5.06	5.04	13.4	10.5	104.7
25	25	PFODA	912.8 > 868.8	5.61e4	2.44e4		5.43	5.41	11.5	10.1	101.0
26	26	N-MeFOSE	616.1 > 58.9	1.89e4	5.24e4		5.42	5.47	54.1	52.3	104.6
27	27	N-EtFOSE	630.1 > 58.9	2.12e4	5.28e4		5.59	5.64	60.3	51.4	102.7
28	28	13C3-PFBA	216.1 > 171.8	1.85e4	1.84e4	1.006	1.41	1.38	12.6	12.6	100.4
29	29	13C3-PFPeA	266 > 221.8	3.81e4	5.66e4	0.275	2.77	2.68	3.36	12.2	97.7
30	30	13C3-PFBS	302 > 98.8	4.74e3	5.66e4	0.034	2.96	2.92	0.419	12.3	98.1
31	31	13C2-PFHxA	315 > 269.8	1.89e4	5.66e4	0.334	3.19	3.16	1.67	5.00	100.0

70-130

50-150

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Dataset: U:\Q4.PRO\results\170802M1\170802M1-37.qld

Last Altered: Thursday, August 03, 2017 15:26:20 Pacific Daylight Time
Printed: Thursday, August 03, 2017 15:26:37 Pacific Daylight Time

Name: 170802M1_37, Date: 02-Aug-2017, Time: 16:55:33, ID: ST170802M1-3 PFC CS3 17G3105, Description: PFC CS3 17G3105

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	32	13C4-PFHpA	367.2 > 321.8	6.35e4	5.66e4	0.414	3.45	3.43	5.61	13.5	108.4
33	33	18O2-PFHxS	403 > 102.6	5.83e3	1.16e4	0.475	3.56	3.51	6.26	13.2	105.4
34	34	13C2-6:2 FTS	429.1 > 408.9	1.24e4	6.10e4	0.214	3.64	3.63	2.54	11.9	95.0
35	35	13C2-PFOA	414.9 > 369.7	7.99e4	6.10e4	1.298	3.65	3.64	16.4	12.6	100.9
36	36	13C5-PFNA	468.2 > 422.9	7.12e4	7.29e4	1.094	3.83	3.82	12.2	11.2	89.2
37	37	13C8-PFOSA	506.1 > 77.7	8.56e3	6.38e4	0.124	3.84	3.83	1.68	13.5	107.8
38	38	13C8-PFOS	507 > 79.9	1.39e4	1.12e4	1.153	3.89	3.87	15.5	13.4	107.3
39	39	13C2-PFDA	515.1 > 469.9	7.07e4	5.97e4	1.059	4.01	3.99	14.8	14.0	111.9
40	40	13C2-8:2 FTS	529.1 > 508.7	6.89e3	5.97e4	0.129	4.00	3.99	1.44	11.2	89.7
41	41	d3-N-MeFOSAA	573.3 > 419	1.65e4	6.38e4	0.019	4.03	4.02	3.23	167	102.8
42	42	d5-N-EtFOSAA	589.3 > 419	1.60e4	6.38e4	0.019	4.12	4.09	3.13	165	101.6
43	43	13C2-PFUnA	565 > 519.8	7.87e4	6.38e4	1.172	4.17	4.15	15.4	13.2	105.3
44	44	13C2-PFDoA	615 > 569.7	7.88e3	6.38e4	0.118	4.34	4.32	1.54	13.0	104.3
45	45	d3-N-MeFOSA	515.2 > 168.9	3.16e4	6.38e4	0.040	4.29	4.37	6.20	153	102.2
46	46	13C2-PFTeDA	714.8 > 669.6	5.13e4	6.38e4	0.801	4.68	4.67	10.1	12.5	100.3
47	47	d5-N-ETFOSA	531.1 > 168.9	4.48e4	6.38e4	0.055	5.01	4.96	8.77	159	106.1
48	48	13C2-PFHxDA	815 > 769.7	2.44e4	6.38e4	0.991	5.06	5.04	4.78	4.82	96.4
49	49	d7-N-MeFOSE	623.1 > 58.9	5.24e4	6.38e4	0.065	5.42	5.46	10.3	157	105.0
50	50	d9-N-EtFOSE	639.2 > 58.8	5.28e4	6.38e4	0.065	5.59	5.63	10.3	160	106.4
51	51	13C4-PFBA	217 > 171.8	1.84e4	1.84e4	1.000	1.41	1.39	12.5	12.5	100.0
52	52	13C5-PFHxA	318 > 272.9	5.66e4	5.66e4	1.000	3.19	3.16	5.00	5.00	100.0
53	53	13C3-PFHxS	401.9 > 79.9	1.16e4	1.16e4	1.000	3.56	3.51	12.5	12.5	100.0
54	54	13C8-PFOA	421.3 > 376	6.10e4	6.10e4	1.000	3.65	3.64	12.5	12.5	100.0
55	55	13C9-PFNA	472.2 > 426.9	7.29e4	7.29e4	1.000	3.83	3.82	12.5	12.5	100.0
56	56	13C4-PFOS	503 > 79.9	1.12e4	1.12e4	1.000	3.89	3.87	12.5	12.5	100.0
57	57	13C6-PFDA	519.1 > 473.7	5.97e4	5.97e4	1.000	4.01	3.99	12.5	12.5	100.0
58	58	13C7-PFUnA	570.1 > 524.8	6.38e4	6.38e4	1.000	4.17	4.15	12.5	12.5	100.0

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	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
1	170802M1_1	—	IPA	IPA	1.0000	1:48	Blank
2	170802M1_2	—	ST170802M1-1 PFC CS0 17H0201	PFC CS0 17H0201	1.0000	1:1	Analyte
3	170802M1_3	—	IPA	IPA	1.0000	1:48	Blank
4	170802M1_4	—	B7G0121-BS1 OPR 0.125	OPR	0.1250	1:3	Analyte
5	170802M1_5	—	IPA	IPA	1.0000	1:48	Blank
6	170802M1_6	—	B7G0121-BLK1 Method Blank 0.125	Method Blank	0.1250	1:4	Analyte
7	170802M1_7	—	B7G0121-MS1 Matrix Spike 0.11301	Matrix Spike	0.1130	1:5	Analyte
8	170802M1_8	—	B7G0121-MSD1 Matrix Spike Dup 0.11225	Matrix Spike Dup	0.1123	1:6	Analyte
9	170802M1_9	—	B7G0121-MS2 Matrix Spike 0.11554	Matrix Spike	0.1155	1:7	Analyte
10	170802M1_10	—	B7G0121-MSD2 Matrix Spike Dup 0.11866	Matrix Spike Dup	0.1187	1:8	Analyte
11	170802M1_11	—	1700922-01 MH-L103-20170721 0.10565	MH-L103-20170721	0.1056	1:9	Analyte
12	170802M1_12	—	1700922-02 MH-N104-20170721 0.11025	MH-N104-20170721	0.1103	1:10	Analyte
13	170802M1_13	—	1700922-03 Upstream-Culvert-109-20170721 0.11852	Upstream-Culvert-109-20170721	0.1185	1:11	Analyte
14	170802M1_14	—	1700922-04 FRB03-20170721 0.11017	FRB03-20170721	0.1102	1:12	Analyte
15	170802M1_15	—	1700922-05 RB08-20170720 0.11893	RB08-20170720	0.1189	1:13	Analyte
16	170802M1_16	—	1700922-06 RB09-20170721 0.11676	RB09-20170721	0.1168	1:14	Analyte
17	170802M1_17	—	1700925-01 I001BC43S-170724 0.12112	I001BC43S-170724	0.1211	1:15	Analyte
18	170802M1_18	—	1700925-02 SB01-170724 0.12178	SB01-170724	0.1218	1:16	Analyte
19	170802M1_19	—	1700925-03 I001BC50S-170724 0.12135	I001BC50S-170724	0.1214	1:17	Analyte
20	170802M1_20	—	1700925-04 I001MW52S-170724 0.1192	I001MW52S-170724	0.1192	1:18	Analyte
21	170802M1_21	—	IPA	IPA	1.0000	1:48	Analyte
22	170802M1_22	—	ST170802M1-2 PFC CS3 17G3105	PFC CS3 17G3105	1.0000	1:2	Analyte
23	170802M1_23	—	IPA	IPA	1.0000	1:48	Blank
24	170802M1_24	—	1700925-05 I001MW52X-170724 0.1174	I001MW52X-170724	0.1174	1:19	Analyte
25	170802M1_25	—	1700925-06 EB01-170724 0.1185	EB01-170724	0.1185	1:20	Analyte
26	170802M1_26	—	1700929-01 MATP01001 0.11834	MATP01001	0.1183	1:21	Analyte
27	170802M1_27	—	1700929-02 MATP01002 0.1157	MATP01002	0.1157	1:22	Analyte
28	170802M1_28	—	1700938-01 NORP08102 0.11844	NORP08102	0.1184	1:23	Analyte
29	170802M1_29	—	1700938-02 NORP08103 0.12014	NORP08103	0.1201	1:24	Analyte
30	170802M1_30	—	1700938-03 NORP08104 0.11247	NORP08104	0.1125	1:25	Analyte
31	170802M1_31	—	1700886-12 AT028-SD17-02-071317-0845 1.44	AT028-SD17-02-071317-0845	0.9987	1:26	Analyte
32	170802M1_32	—	1700888-03 HARRI-01-SB02-0-2 2.04	HARRI-01-SB02-0-2	1.0167	1:27	Analyte
33	170802M1_33	—	1700888-09 HARRI-02-SB01-6-8 1.47	HARRI-02-SB01-6-8	1.0058	1:28	Analyte
34	170802M1_34	—	1700889-06 HARRI-03-SB03-0-2 1.33	HARRI-03-SB03-0-2	0.9903	1:29	Analyte
35	170802M1_35	—	B7G0086-MS1 Matrix Spike 1.35	Matrix Spike	1.3500	1:30	Analyte
36	170802M1_36	—	IPA	IPA	1.0000	1:48	Analyte
37	170802M1_37	—	ST170802M1-3 PFC CS3 17G3105	PFC CS3 17G3105	1.0000	1:2	Analyte
38	170802M1_38	—	IPA	IPA	1.0000	1:48	Blank
39	170802M1_39	—	1700906-01 MW-50BR-20170717 0.125	MW-50BR-20170717	0.1211	1:31	Analyte
40	170802M1_40	—	1700906-03 RB-04-20170717 0.125	RB-04-20170717	0.1202	1:32	Analyte

✓ QM 8/3/17 AC 8/3/17

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
41	170802M1_41	---	1700906-04 MW-12BR-20170718 0.125	MW-12BR-20170718	0.1213	1:33	Analyte
42	170802M1_42	---	1700906-05 MW-02BR-20170718 0.125	MW-02BR-20170718	0.1208	1:34	Analyte
43	170802M1_43	---	1700906-06 RB-05-20170718 0.125	RB-05-20170718	0.1215	1:35	Analyte
44	170802M1_44	---	1700907-01 AT028-FB-01-071717-0850 0.125	AT028-FB-01-071717-0850	0.1198	1:36	Analyte
45	170802M1_45	---	1700907-02 AT028-MW17-02-071717-0950 0.125	AT028-MW17-02-071717-0950	0.1199	1:37	Analyte
46	170802M1_46	---	1700907-03 AT028-MW17-04-071717-1050 0.125	AT028-MW17-04-071717-1050	0.1204	1:38	Analyte
47	170802M1_47	---	B7G0105-MS1 Matrix Spike 0.125	Matrix Spike	0.1181	1:39	Analyte
48	170802M1_48	---	B7G0105-MSD1 Matrix Spike Dup 0.125	Matrix Spike Dup	0.1216	1:40	Analyte
49	170802M1_49	---	1700907-04 AT028-MW17-06-071717-1300 0.125	AT028-MW17-06-071717-1300	0.1250	1:41	Analyte
50	170802M1_50	---	1700907-06 AT028-MW17-07-071717-1520 0.125	AT028-MW17-07-071717-1520	0.1163	1:42	Analyte
51	170802M1_51	---	IPA	IPA	1.0000	1:48	Analyte
52	170802M1_52	---	ST170802M1-4 PFC CS3 17G3105	PFC CS3 17G3105	1.0000	1:2	Analyte
53	170802M1_53	---	IPA	IPA	1.0000	1:48	Blank
54	170802M1_54	---	1700907-08 AT028-MW17-05-071817-0835 0.125	AT028-MW17-05-071817-0835	0.1196	1:43	Analyte
55	170802M1_55	---	1700907-09 AT028-MW17-01-071817-0950 0.125	AT028-MW17-01-071817-0950	0.1159	1:44	Analyte
56	170802M1_56	---	1700875-05@40X MW-11S-20170713 0.11994	MW-11S-20170713	0.1199	1:45	Analyte
57	170802M1_57	---	IPA	IPA	1.0000	1:48	Blank
58	170802M1_58	---	B7H0006-BS1 OPR 0.005	OPR	0.0050	1:46	Analyte
59	170802M1_59	---	IPA	IPA	1.0000	1:48	Blank
60	170802M1_60	---	B7H0006-BLK1 Method Blank 0.005	Method Blank	0.0050	1:47	Analyte
61	170802M1_61	---	1700936-01 BULK TANK #1 0.005	BULK TANK #1	0.0050	2:1	Analyte
62	170802M1_62	---	1700936-02 BULK TANK #2 0.005	BULK TANK #2	0.0050	2:2	Analyte
63	170802M1_63	---	1700936-03 COW SAMPLE 0.005	COW SAMPLE	0.0050	2:3	Analyte
64	170802M1_64	---	1700936-04 OAKHURST Whole Pt. 0.005	OAKHURST Whole Pt.	0.0050	2:4	Analyte
65	170802M1_65	---	IPA	IPA	1.0000	1:48	Analyte
66	170802M1_66	---	ST170802M1-5 PFC CS3 17G3105	PFC CS3 17G3105	1.0000	1:2	Analyte
67	170802M1_67	---	IPA	IPA	1.0000	1:48	Blank

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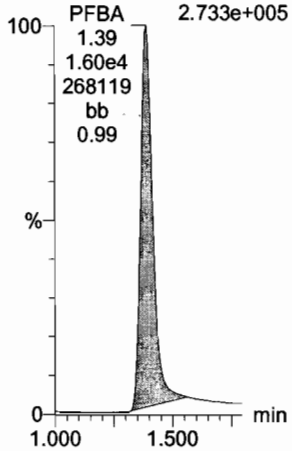
Dataset: U:\Q4.PRO\results\170802M1\170802M1-37.qld

Last Altered: Thursday, August 03, 2017 15:26:20 Pacific Daylight Time
Printed: Thursday, August 03, 2017 15:26:37 Pacific Daylight Time

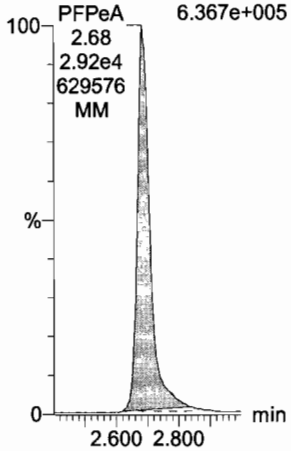
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 01 Aug 2017 09:55:07
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170802M1_37, Date: 02-Aug-2017, Time: 16:55:33, ID: ST170802M1-3 PFC CS3 17G3105, Description: PFC CS3 17G3105

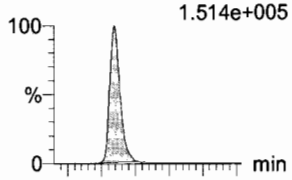
PFBA
F1:MRM of 2 channels,ES-
213.0 > 168.8
2.733e+005



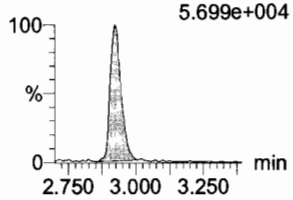
PFPeA
F4:MRM of 1 channel,ES-
263.1 > 218.9
6.367e+005



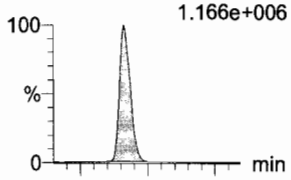
PFBS
F6:MRM of 2 channels,ES-
299 > 79.7
1.514e+005



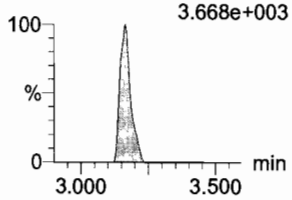
F6:MRM of 2 channels,ES-
299 > 99
5.699e+004



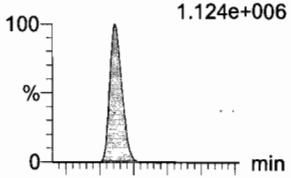
PFHxA
F8:MRM of 2 channels,ES-
313.2 > 268.9
1.166e+006



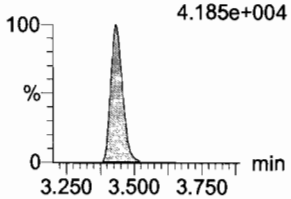
F8:MRM of 2 channels,ES-
313.2 > 119
3.668e+003



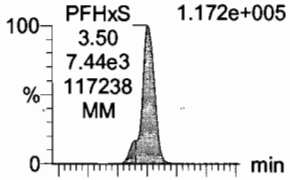
PFHpA
F14:MRM of 2 channels,ES-
363 > 318.9
1.124e+006



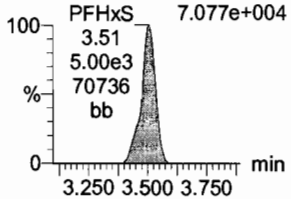
F14:MRM of 2 channels,ES-
363 > 169
4.185e+004



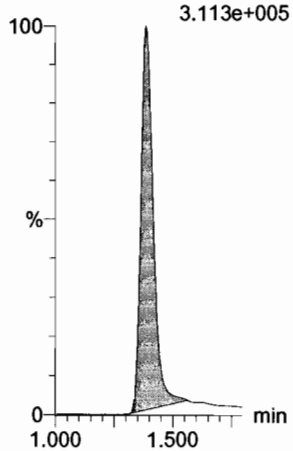
PFHxS
F16:MRM of 2 channels,ES-
398.9 > 79.6
1.172e+005



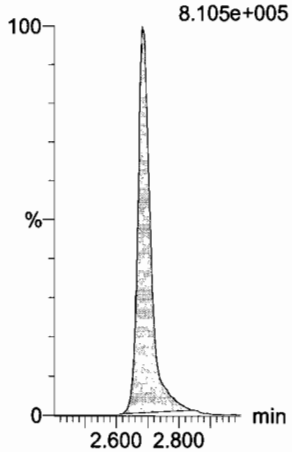
F16:MRM of 2 channels,ES-
398.9 > 99
7.077e+004



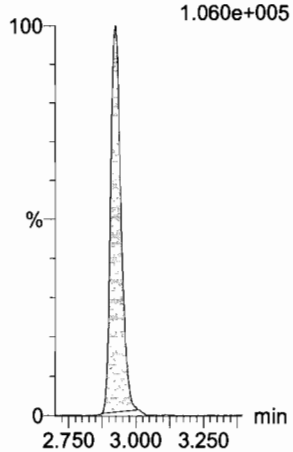
13C3-PFBA
F2:MRM of 1 channel,ES-
216.1 > 171.8
3.113e+005



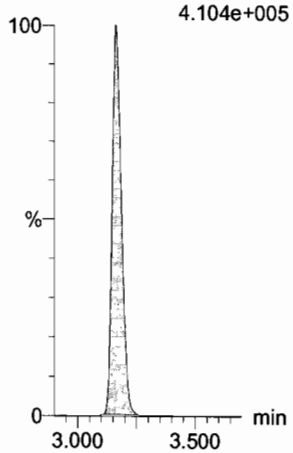
13C3-PFPeA
F5:MRM of 1 channel,ES-
266 > 221.8
8.105e+005



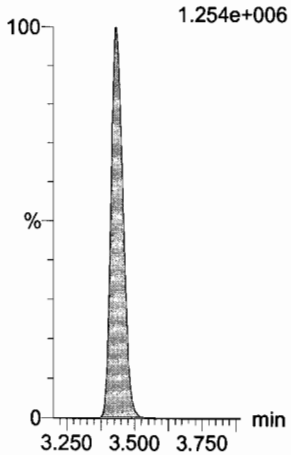
13C3-PFBS
F7:MRM of 1 channel,ES-
302 > 98.8
1.060e+005



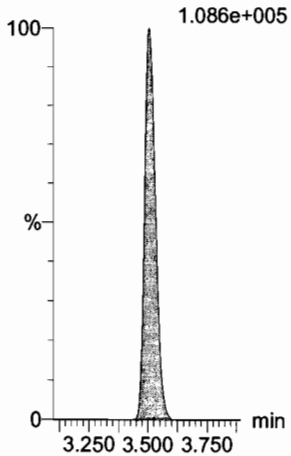
13C2-PFHxA
F9:MRM of 1 channel,ES-
315 > 269.8
4.104e+005



13C4-PFHpA
F15:MRM of 1 channel,ES-
367.2 > 321.8
1.254e+006



18O2-PFHxS
F18:MRM of 1 channel,ES-
403 > 102.6
1.086e+005



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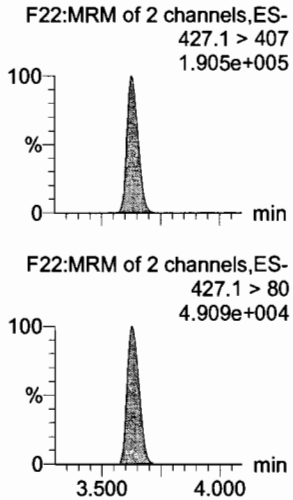
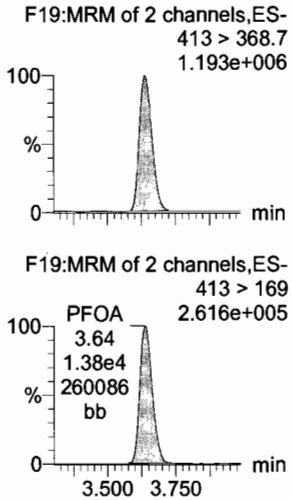
Name: 170802M1_37, Date: 02-Aug-2017, Time: 16:55:33, ID: ST170802M1-3 PFC CS3 17G3105, Description: PFC CS3 17G3105

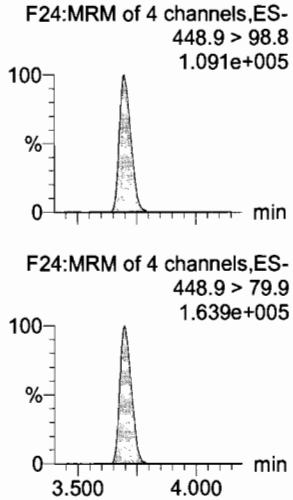
6:2 FTS



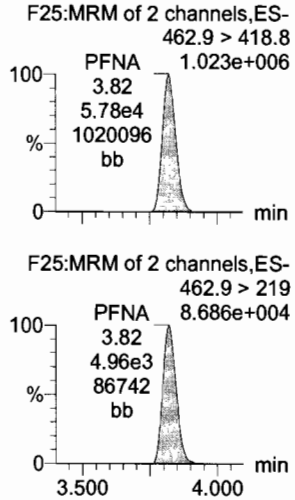
PFOA



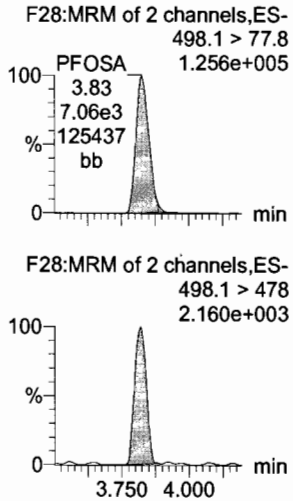
PFHpS



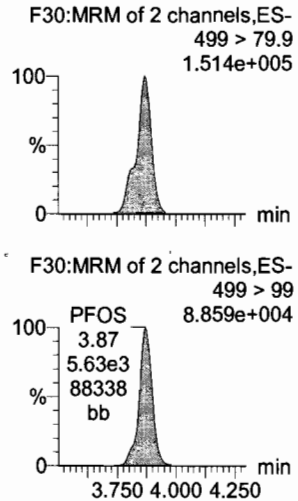
PFNA



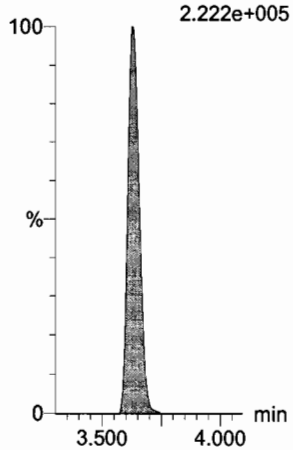
PFOSA



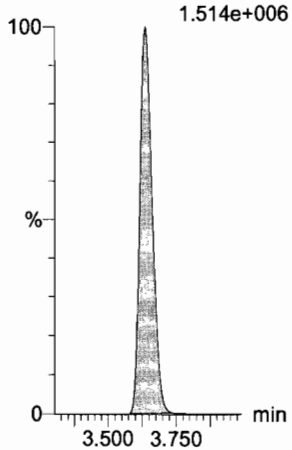
PFOS



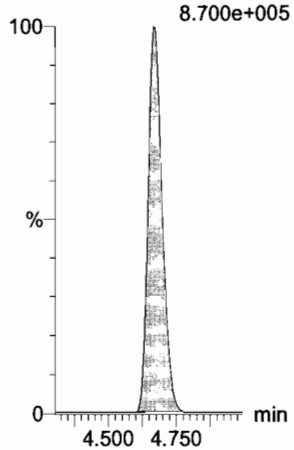
13C2-6:2 FTS



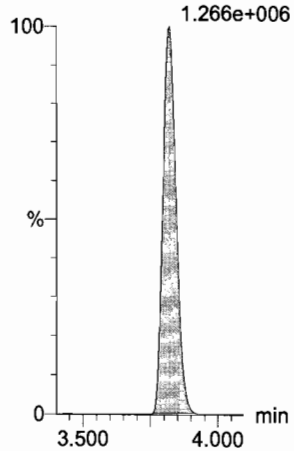
13C2-PFOA



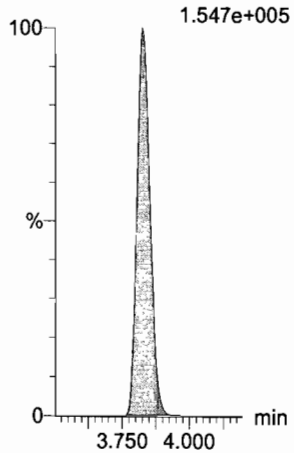
13C2-PFTeDA



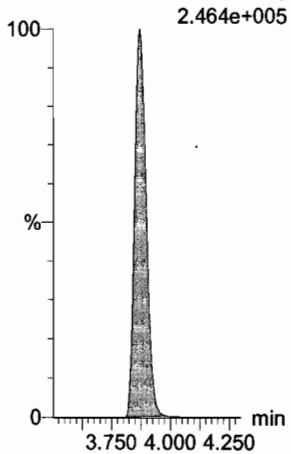
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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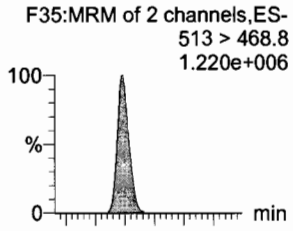
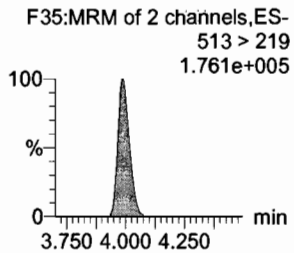
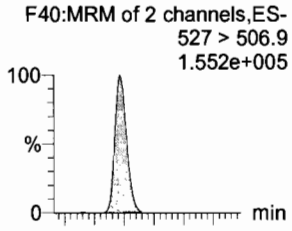
Name: 170802M1_37, Date: 02-Aug-2017, Time: 16:55:33, ID: ST170802M1-3 PFC CS3 17G3105, Description: PFC CS3 17G3105

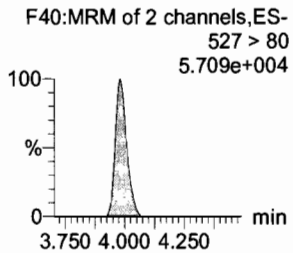
PFDA



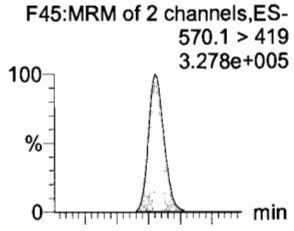


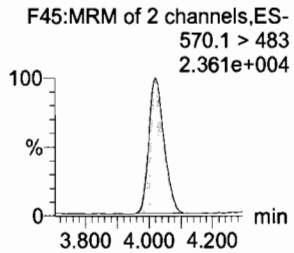
8:2 FTS



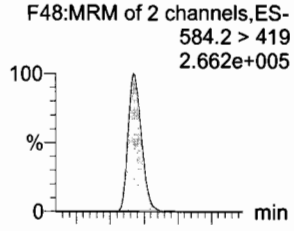


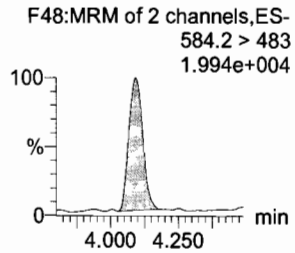
N-MeFOSAA



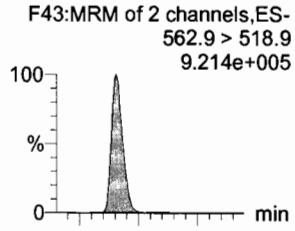


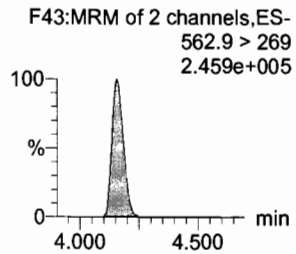
N-EtFOSAA



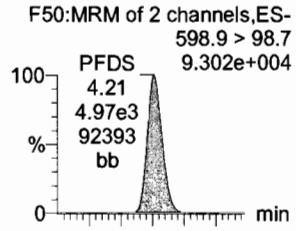


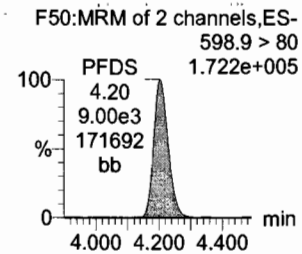
PFUnA



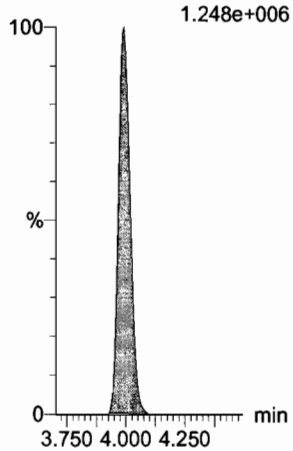


PFDS

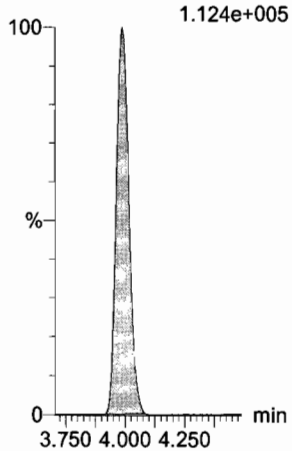




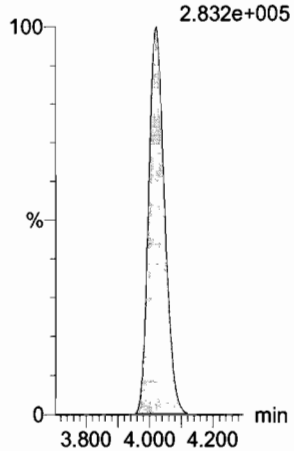
13C2-PFDA



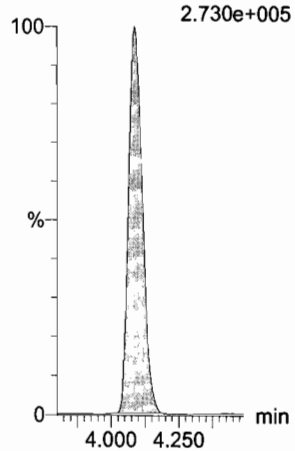
13C2-8:2 FTS



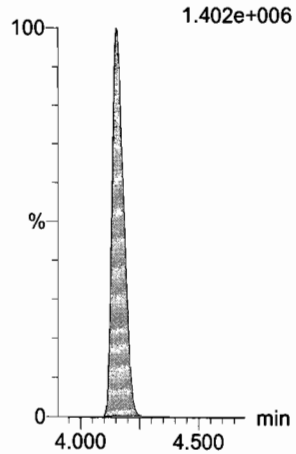
d3-N-MeFOSAA



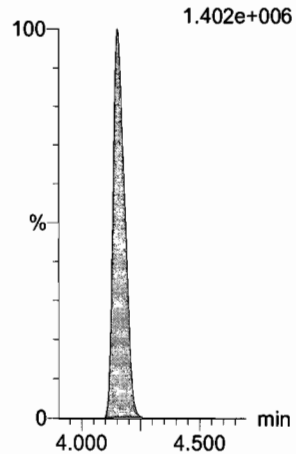
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



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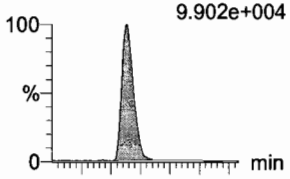
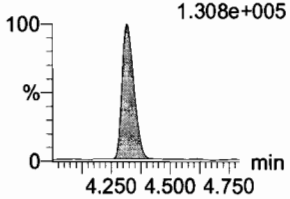
Name: 170802M1_37, Date: 02-Aug-2017, Time: 16:55:33, ID: ST170802M1-3 PFC CS3 17G3105, Description: PFC CS3 17G3105

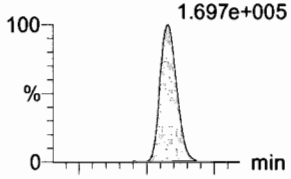
PFDoA
F51:MRM of 2 channels,ES-
612.9 > 318.8
9.902e+004



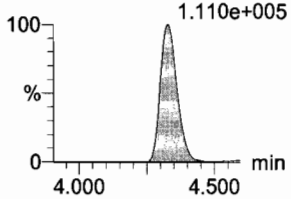
F51:MRM of 2 channels,ES-
612.9 > 569
1.308e+005



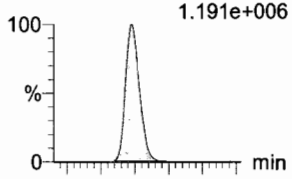
N-MeFOSA
F34:MRM of 2 channels,ES-
512.1 > 168.9
1.697e+005



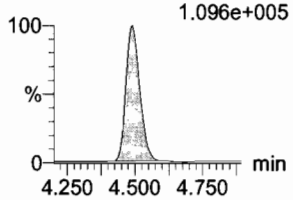
F34:MRM of 2 channels,ES-
512.1 > 219
1.110e+005



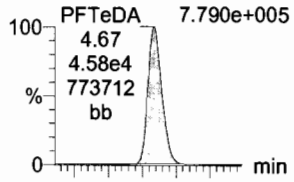
PFTrDA
F57:MRM of 2 channels,ES-
662.9 > 618.9
1.191e+006



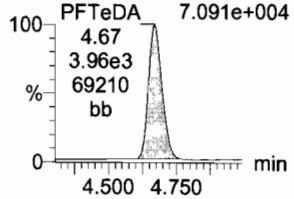
F57:MRM of 2 channels,ES-
662.9 > 319
1.096e+005



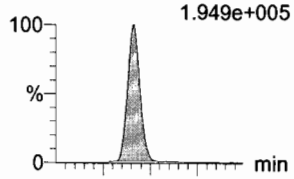
PFTeDA
F58:MRM of 4 channels,ES-
712.9 > 668.8
7.790e+005



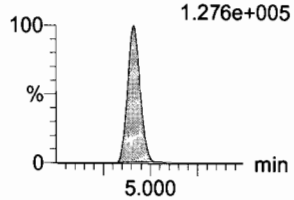
F58:MRM of 4 channels,ES-
712.9 > 369
7.091e+004



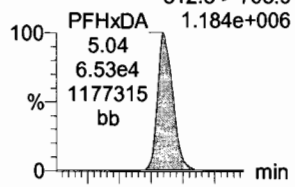
N-EtFOSA
F39:MRM of 2 channels,ES-
526.1 > 168.9
1.949e+005



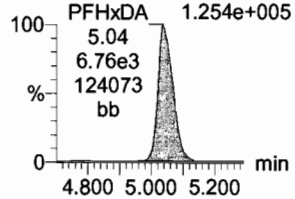
F39:MRM of 2 channels,ES-
526.1 > 219
1.276e+005



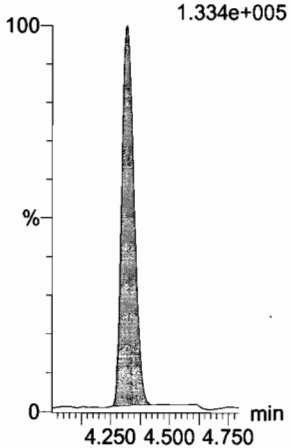
PFHxDA
F60:MRM of 2 channels,ES-
812.8 > 768.9
1.184e+006



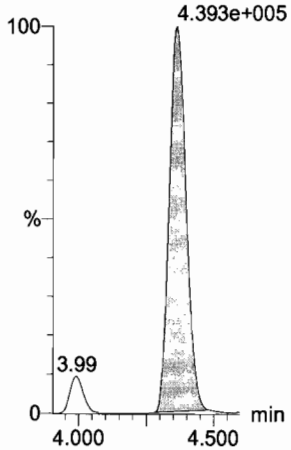
F60:MRM of 2 channels,ES-
812.8 > 219
1.254e+005



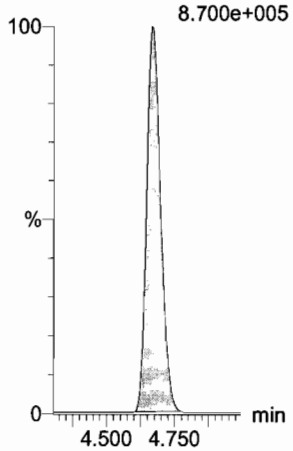
13C2-PFDoA
F52:MRM of 1 channel,ES-
615 > 569.7
1.334e+005



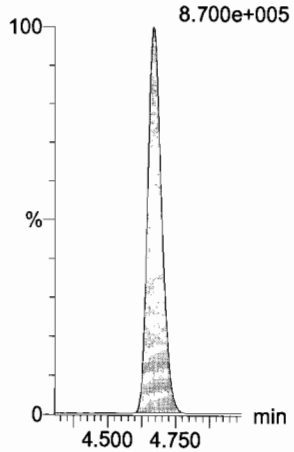
d3-N-MeFOSA
F37:MRM of 1 channel,ES-
515.2 > 168.9
4.393e+005



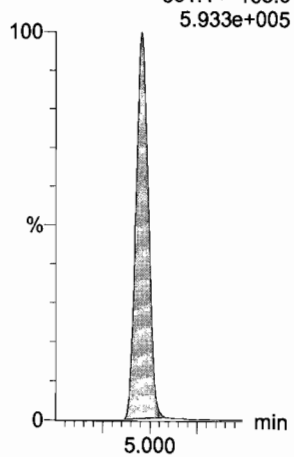
13C2-PFTeDA
F59:MRM of 2 channels,ES-
714.8 > 669.6
8.700e+005



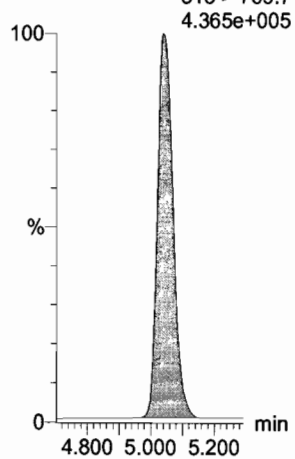
13C2-PFTeDA
F59:MRM of 2 channels,ES-
714.8 > 669.6
8.700e+005



d5-N-ETFOSA
F42:MRM of 1 channel,ES-
531.1 > 168.9
5.933e+005



13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.365e+005



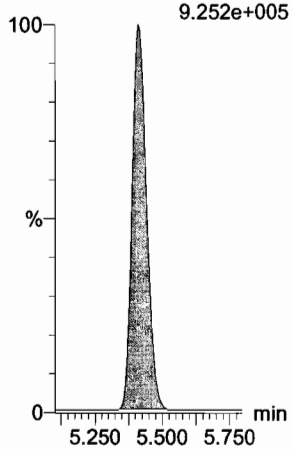
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170802M1\170802M1-37.qld

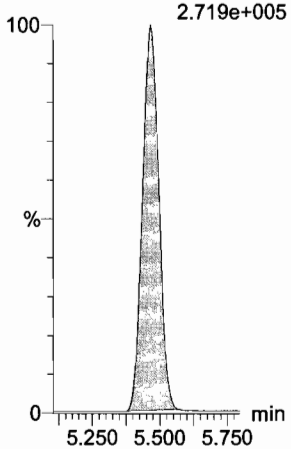
Last Altered: Thursday, August 03, 2017 15:26:20 Pacific Daylight Time
Printed: Thursday, August 03, 2017 15:26:37 Pacific Daylight Time

Name: 170802M1_37, Date: 02-Aug-2017, Time: 16:55:33, ID: ST170802M1-3 PFC CS3 17G3105, Description: PFC CS3 17G3105

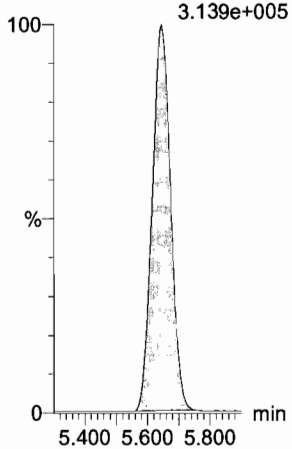
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
9.252e+005



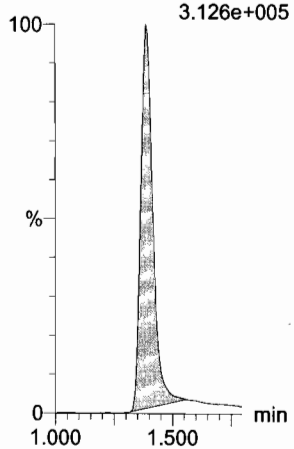
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
2.719e+005



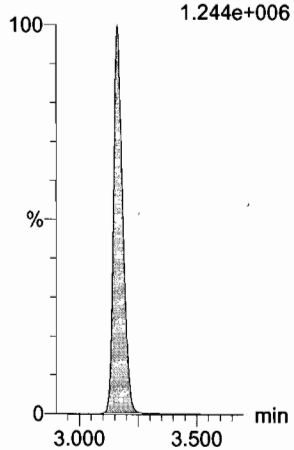
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
3.139e+005



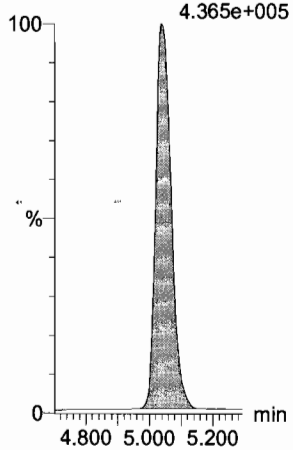
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
3.126e+005



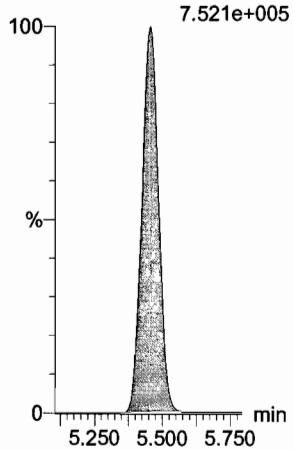
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
1.244e+006



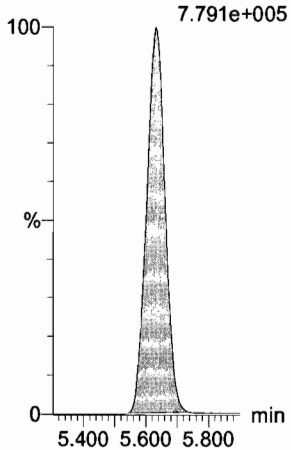
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.365e+005



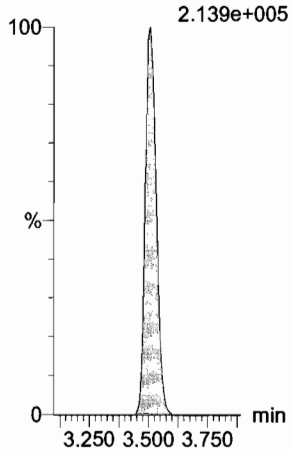
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
7.521e+005



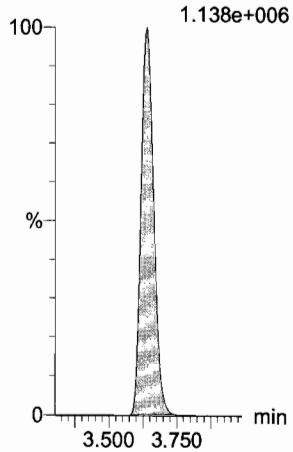
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
7.791e+005



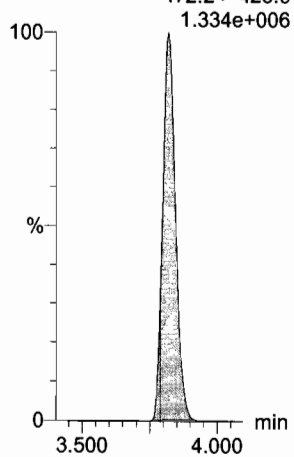
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
2.139e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.138e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.334e+006



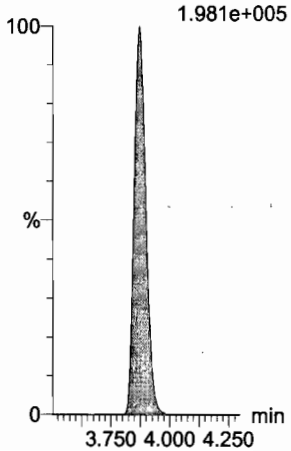
Dataset: U:\Q4.PRO\results\170802M1\170802M1-37.qld

Last Altered: Thursday, August 03, 2017 15:26:20 Pacific Daylight Time
Printed: Thursday, August 03, 2017 15:26:37 Pacific Daylight Time

Name: 170802M1_37, Date: 02-Aug-2017, Time: 16:55:33, ID: ST170802M1-3 PFC CS3 17G3105, Description: PFC CS3 17G3105

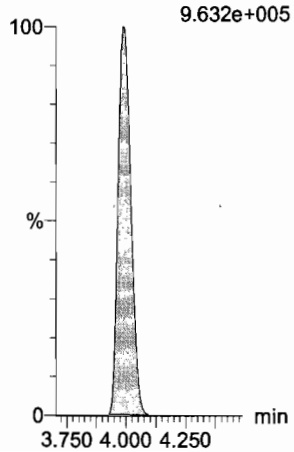
13C4-PFOS

F31:MRM of 1 channel,ES-
503 > 79.9
1.981e+005



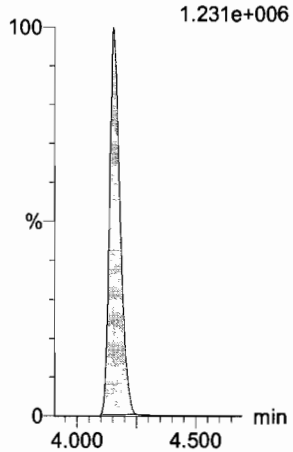
13C6-PFDA

F38:MRM of 1 channel,ES-
519.1 > 473.7
9.632e+005



13C7-PFUnA

F46:MRM of 1 channel,ES-
570.1 > 524.8
1.231e+006



Dataset: U:\Q4.PRO\results\170803M2\RS AREAS.qld

Last Altered: Friday, August 04, 2017 08:17:40 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:27:25 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_RS=only.mdb 28 Jul 2017 09:34:01
Calibration: 04 Aug 2017 08:17:40

Name: 170803M2_2, Date: 03-Aug-2017, Time: 16:12:52, ID: ST170803M2-1 PFC CS0 17H0307, Description: PFC CS0 17H0307

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	3.47e4	93.8	NO
2	2	13C3-PFHxS	ST170...	7.71e3	95.8	NO
3	3	13C8-PFOA	ST170...	4.28e4	94.8	NO
4	4	13C9-PFNA	ST170...	5.02e4	93.8	NO
5	5	13C4-PFOS	ST170...	8.92e3	93.3	NO
6	6	13C6-PFDA	ST170...	5.24e4	97.4	NO
7	7	13C7-PFUnA	ST170...	4.62e4	90.1	NO

Name: 170803M2_3, Date: 03-Aug-2017, Time: 16:23:40, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	2.20e1	0.0	NO

Name: 170803M2_4, Date: 03-Aug-2017, Time: 16:34:26, ID: 1700925-02 SB01-170724 0.12178, Description: SB01-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	3.61e4	97.6	NO
2	2	13C3-PFHxS	17009...	7.57e3	94.0	NO
3	3	13C8-PFOA	17009...	3.08e4	68.3	NO
4	4	13C9-PFNA	17009...	3.34e4	62.3	NO
5	5	13C4-PFOS	17009...	7.77e3	81.2	NO
6	6	13C6-PFDA	17009...	3.74e4	69.5	NO
7	7	13C7-PFUnA	17009...	3.62e4	70.6	NO

Name: 170803M2_5, Date: 03-Aug-2017, Time: 16:45:12, ID: 1700925-06 EB01-170724 0.1185, Description: EB01-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	3.94e4	106.3	NO
2	2	13C3-PFHxS	17009...	6.73e3	83.6	NO
3	3	13C8-PFOA	17009...	3.35e4	74.2	NO
4	4	13C9-PFNA	17009...	3.65e4	68.2	NO
5	5	13C4-PFOS	17009...	7.21e3	75.4	NO
6	6	13C6-PFDA	17009...	3.55e4	66.0	NO
7	7	13C7-PFUnA	17009...	3.53e4	69.0	NO

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Dataset: U:\Q4.PRO\results\170803M2\RS AREAS.qld

Last Altered: Friday, August 04, 2017 08:17:40 Pacific Daylight Time
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Name: 170803M2_6, Date: 03-Aug-2017, Time: 16:55:51, ID: 1700929-01 MATP01001 0.11834, Description: MATP01001

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	3.46e4	93.4	NO
2	2 13C3-PFHxS	17009...	6.53e3	81.1	NO
3	3 13C8-PFOA	17009...	2.87e4	63.6	NO
4	4 13C9-PFNA	17009...	3.15e4	58.8	NO
5	5 13C4-PFOS	17009...	5.82e3	60.9	NO
6	6 13C6-PFDA	17009...	2.77e4	51.5	NO
7	7 13C7-PFUnA	17009...	2.91e4	56.8	NO

Name: 170803M2_7, Date: 03-Aug-2017, Time: 17:06:36, ID: 1700938-01 NORP08102 0.11844, Description: NORP08102

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	3.08e4	83.3	NO
2	2 13C3-PFHxS	17009...	5.47e3	67.9	NO
3	3 13C8-PFOA	17009...	2.89e4	64.1	NO
4	4 13C9-PFNA	17009...	2.96e4	55.2	NO
5	5 13C4-PFOS	17009...	5.76e3	60.2	NO
6	6 13C6-PFDA	17009...	3.19e4	59.4	NO
7	7 13C7-PFUnA	17009...	2.91e4	56.8	NO

Name: 170803M2_8, Date: 03-Aug-2017, Time: 17:17:30, ID: 1700938-02 NORP08103 0.12014, Description: NORP08103

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	4.21e4	113.6	NO
2	2 13C3-PFHxS	17009...	7.16e3	89.0	NO
3	3 13C8-PFOA	17009...	3.61e4	80.0	NO
4	4 13C9-PFNA	17009...	4.11e4	76.9	NO
5	5 13C4-PFOS	17009...	7.00e3	73.2	NO
6	6 13C6-PFDA	17009...	4.40e4	81.8	NO
7	7 13C7-PFUnA	17009...	4.37e4	85.2	NO

Name: 170803M2_9, Date: 03-Aug-2017, Time: 17:28:17, ID: 1700936-01 BULK TANK #1 0.005, Description: BULK TANK #1

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	4.50e4	121.6	NO
2	2 13C3-PFHxS	17009...	6.76e3	84.0	NO
3	3 13C8-PFOA	17009...	2.93e4	64.9	NO
4	4 13C9-PFNA	17009...	1.66e4	30.9	YES
5	5 13C4-PFOS	17009...	1.36e3	14.2	YES
6	6 13C6-PFDA	17009...	6.37e3	11.8	YES
7	7 13C7-PFUnA	17009...	2.02e3	3.9	YES

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Dataset: U:\Q4.PRO\results\170803M2\RS AREAS.qld

Last Altered: Friday, August 04, 2017 08:17:40 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:27:25 Pacific Daylight Time

Name: 170803M2_10, Date: 03-Aug-2017, Time: 17:38:55, ID: 1700936-02 BULK TANK #2 0.005, Description: BULK TANK #2

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	4.27e4	115.4	NO
2	2	13C3-PFHxS	17009...	6.88e3	85.4	NO
3	3	13C8-PFOA	17009...	3.22e4	71.3	NO
4	4	13C9-PFNA	17009...	1.72e4	32.1	YES
5	5	13C4-PFOS	17009...	1.89e3	19.8	YES
6	6	13C6-PFDA	17009...	8.75e3	16.3	YES
7	7	13C7-PFUnA	17009...	4.37e3	8.5	YES

Name: 170803M2_11, Date: 03-Aug-2017, Time: 17:49:34, ID: 1700871-11@5X 16-GW-16_MW04-20170713 0.12043, Description: 16-GW-16_MW04-20170713

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	5.33e3	14.4	YES
2	2	13C3-PFHxS	17008...	8.91e2	11.1	YES
3	3	13C8-PFOA	17008...	4.18e3	9.3	YES
4	4	13C9-PFNA	17008...	4.25e3	7.9	YES
5	5	13C4-PFOS	17008...	7.80e2	8.2	YES
6	6	13C6-PFDA	17008...	4.54e3	8.4	YES
7	7	13C7-PFUnA	17008...	3.86e3	7.5	YES

Name: 170803M2_12, Date: 03-Aug-2017, Time: 18:00:12, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.71e1	0.0	YES

Name: 170803M2_13, Date: 03-Aug-2017, Time: 18:10:51, ID: 1700925-01@15X I001BC43S-170724 0.12112, Description: I001BC43S-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	1.46e3	3.9	YES
2	2	13C3-PFHxS	17009...	3.84e2	4.8	YES
3	3	13C8-PFOA	17009...	1.76e3	3.9	YES
4	4	13C9-PFNA	17009...	2.10e3	3.9	YES
5	5	13C4-PFOS	17009...	3.88e2	4.1	YES
6	6	13C6-PFDA	17009...	2.03e3	3.8	YES
7	7	13C7-PFUnA	17009...	1.79e3	3.5	YES

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Dataset: U:\Q4.PRO\results\170803M2\RS AREAS.qld

Last Altered: Friday, August 04, 2017 08:17:40 Pacific Daylight Time
Printed: Tuesday, August 08, 2017 15:27:25 Pacific Daylight Time

Name: 170803M2_14, Date: 03-Aug-2017, Time: 18:21:33, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	7.57e0	0.0	YES

Name: 170803M2_15, Date: 03-Aug-2017, Time: 18:32:17, ID: 1700925-03@15X I001BC50S-170724 0.12135, Description: I001BC50S-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	1.27e3	3.4	YES
2	2	13C3-PFHxS	17009...	3.95e2	4.9	YES
3	3	13C8-PFOA	17009...	1.57e3	3.5	YES
4	4	13C9-PFNA	17009...	1.96e3	3.7	YES
5	5	13C4-PFOS	17009...	3.66e2	3.8	YES
6	6	13C6-PFDA	17009...	2.06e3	3.8	YES
7	7	13C7-PFUnA	17009...	2.00e3	3.9	YES

Name: 170803M2_16, Date: 03-Aug-2017, Time: 18:42:55, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.21e1	0.0	NO

Name: 170803M2_17, Date: 03-Aug-2017, Time: 18:53:33, ID: B7G0122-BS1 OPR 0.25, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7G01...	2.91e4	78.6	NO
2	2	13C3-PFHxS	B7G01...	5.19e3	64.5	NO
3	3	13C8-PFOA	B7G01...	2.49e4	55.2	NO
4	4	13C9-PFNA	B7G01...	3.05e4	56.9	NO
5	5	13C4-PFOS	B7G01...	5.29e3	55.3	NO
6	6	13C6-PFDA	B7G01...	2.43e4	45.2	YES
7	7	13C7-PFUnA	B7G01...	2.83e4	55.2	NO

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Name: 170803M2_18, Date: 03-Aug-2017, Time: 19:04:20, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.02e1	0.0	NO

Name: 170803M2_19, Date: 03-Aug-2017, Time: 19:14:58, ID: B7G0122-BLK1 Method Blank 0.25, Description: Method Blank

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7G01...	3.25e4	87.8	NO
2	2	13C3-PFHxS	B7G01...	5.54e3	68.8	NO
3	3	13C8-PFOA	B7G01...	2.48e4	55.0	NO
4	4	13C9-PFNA	B7G01...	2.67e4	49.9	YES
5	5	13C4-PFOS	B7G01...	5.53e3	57.8	NO
6	6	13C6-PFDA	B7G01...	2.61e4	48.4	YES
7	7	13C7-PFUnA	B7G01...	2.65e4	51.7	NO

Name: 170803M2_20, Date: 03-Aug-2017, Time: 19:25:37, ID: 1700891-06RE1 VEL FOAM 0.17113, Description: VEL FOAM

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	4.68e4	126.3	NO
2	2	13C3-PFHxS	17008...	6.76e3	83.9	NO
3	3	13C8-PFOA	17008...	2.68e4	59.3	NO
4	4	13C9-PFNA	17008...	1.37e4	25.6	YES
5	5	13C4-PFOS	17008...	1.95e3	20.4	YES
6	6	13C6-PFDA	17008...	6.66e3	12.4	YES
7	7	13C7-PFUnA	17008...	4.66e3	9.1	YES

Name: 170803M2_21, Date: 03-Aug-2017, Time: 19:36:23, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA	5.37e0	0.0	NO
7	7	13C7-PFUnA	IPA	1.21e1	0.0	NO

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Name: 170803M2_22, Date: 03-Aug-2017, Time: 19:47:10, ID: ST170803M2-2 PFC CS3 17H0202, Description: PFC CS3 17H0202

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	4.03e4	108.9	NO
2	2	13C3-PFHxS	ST170...	7.76e3	96.4	NO
3	3	13C8-PFOA	ST170...	4.66e4	103.3	NO
4	4	13C9-PFNA	ST170...	5.64e4	105.4	NO
5	5	13C4-PFOS	ST170...	1.00e4	104.6	NO
6	6	13C6-PFDA	ST170...	5.77e4	107.2	NO
7	7	13C7-PFUnA	ST170...	5.96e4	116.2	NO

Name: 170803M2_23, Date: 03-Aug-2017, Time: 19:57:57, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	8.92e0	0.0	NO

Name: 170803M2_24, Date: 03-Aug-2017, Time: 20:08:35, ID: B7H0007-BS1 OPR 0.25, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	1.97e4	53.3	NO
2	2	13C3-PFHxS	B7H00...	3.24e3	40.2	YES
3	3	13C8-PFOA	B7H00...	1.74e4	38.5	YES
4	4	13C9-PFNA	B7H00...	1.93e4	36.0	YES
5	5	13C4-PFOS	B7H00...	3.26e3	34.1	YES
6	6	13C6-PFDA	B7H00...	1.78e4	33.0	YES
7	7	13C7-PFUnA	B7H00...	1.67e4	32.6	YES

Name: 170803M2_25, Date: 03-Aug-2017, Time: 20:19:13, ID: B7H0010-BS1 OPR 5, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	5.09e4	137.4	NO
2	2	13C3-PFHxS	B7H00...	8.17e3	101.5	NO
3	3	13C8-PFOA	B7H00...	4.27e4	94.7	NO
4	4	13C9-PFNA	B7H00...	4.73e4	88.4	NO
5	5	13C4-PFOS	B7H00...	8.18e3	85.6	NO
6	6	13C6-PFDA	B7H00...	4.55e4	84.6	NO
7	7	13C7-PFUnA	B7H00...	4.77e4	93.1	NO

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Name: 170803M2_26, Date: 03-Aug-2017, Time: 20:29:52, ID: B7H0011-BS1 OPR 5, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	4.81e4	129.8	NO
2	2	13C3-PFHxS	B7H00...	7.42e3	92.1	NO
3	3	13C8-PFOA	B7H00...	3.63e4	80.3	NO
4	4	13C9-PFNA	B7H00...	4.50e4	84.0	NO
5	5	13C4-PFOS	B7H00...	7.59e3	79.4	NO
6	6	13C6-PFDA	B7H00...	4.28e4	79.6	NO
7	7	13C7-PFUnA	B7H00...	4.79e4	93.4	NO

Name: 170803M2_27, Date: 03-Aug-2017, Time: 20:40:30, ID: B7H0012-BS1 OPR 0.25, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	4.72e4	127.4	NO
2	2	13C3-PFHxS	B7H00...	7.84e3	97.3	NO
3	3	13C8-PFOA	B7H00...	3.72e4	82.5	NO
4	4	13C9-PFNA	B7H00...	4.35e4	81.3	NO
5	5	13C4-PFOS	B7H00...	7.75e3	81.0	NO
6	6	13C6-PFDA	B7H00...	4.07e4	75.6	NO
7	7	13C7-PFUnA	B7H00...	4.08e4	79.7	NO

Name: 170803M2_28, Date: 03-Aug-2017, Time: 20:51:17, ID: B7H0007-BSD1 LCS Dup 0.25, Description: LCS Dup

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	2.09e4	56.6	NO
2	2	13C3-PFHxS	B7H00...	3.82e3	47.4	YES
3	3	13C8-PFOA	B7H00...	1.81e4	40.1	YES
4	4	13C9-PFNA	B7H00...	1.85e4	34.5	YES
5	5	13C4-PFOS	B7H00...	3.57e3	37.4	YES
6	6	13C6-PFDA	B7H00...	2.03e4	37.7	YES
7	7	13C7-PFUnA	B7H00...	1.96e4	38.2	YES

Name: 170803M2_29, Date: 03-Aug-2017, Time: 21:01:55, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	9.28e0	0.0	NO

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Name: 170803M2_30, Date: 03-Aug-2017, Time: 21:12:41, ID: B7H0007-BLK1 Method Blank 0.25, Description: Method Blank

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	B7H00...	1.82e4	49.2	YES
2	2 13C3-PFHxS	B7H00...	3.27e3	40.6	YES
3	3 13C8-PFOA	B7H00...	1.43e4	31.7	YES
4	4 13C9-PFNA	B7H00...	1.55e4	29.0	YES
5	5 13C4-PFOS	B7H00...	3.27e3	34.2	YES
6	6 13C6-PFDA	B7H00...	1.86e4	34.6	YES
7	7 13C7-PFUnA	B7H00...	1.58e4	30.8	YES

Name: 170803M2_31, Date: 03-Aug-2017, Time: 21:23:20, ID: B7H0010-BLK1 Method Blank 5, Description: Method Blank

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	B7H00...	4.58e4	123.7	NO
2	2 13C3-PFHxS	B7H00...	7.50e3	93.1	NO
3	3 13C8-PFOA	B7H00...	3.61e4	80.0	NO
4	4 13C9-PFNA	B7H00...	4.16e4	77.7	NO
5	5 13C4-PFOS	B7H00...	6.93e3	72.5	NO
6	6 13C6-PFDA	B7H00...	3.74e4	69.4	NO
7	7 13C7-PFUnA	B7H00...	3.90e4	76.1	NO

Name: 170803M2_32, Date: 03-Aug-2017, Time: 21:33:58, ID: B7H0011-BLK1 Method Blank 5, Description: Method Blank

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	B7H00...	4.62e4	124.8	NO
2	2 13C3-PFHxS	B7H00...	7.18e3	89.1	NO
3	3 13C8-PFOA	B7H00...	3.65e4	80.9	NO
4	4 13C9-PFNA	B7H00...	4.12e4	77.0	NO
5	5 13C4-PFOS	B7H00...	6.84e3	71.6	NO
6	6 13C6-PFDA	B7H00...	4.38e4	81.4	NO
7	7 13C7-PFUnA	B7H00...	3.89e4	75.8	NO

Name: 170803M2_33, Date: 03-Aug-2017, Time: 21:44:37, ID: B7H0012-BLK1 Method Blank 0.25, Description: Method Blank

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	B7H00...	4.79e4	129.3	NO
2	2 13C3-PFHxS	B7H00...	7.66e3	95.1	NO
3	3 13C8-PFOA	B7H00...	4.09e4	90.5	NO
4	4 13C9-PFNA	B7H00...	4.40e4	82.2	NO
5	5 13C4-PFOS	B7H00...	8.25e3	86.3	NO
6	6 13C6-PFDA	B7H00...	4.40e4	81.8	NO
7	7 13C7-PFUnA	B7H00...	4.59e4	89.6	NO

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Name: 170803M2_34, Date: 03-Aug-2017, Time: 21:55:15, ID: 1700862-01 WS 252 0.00025, Description: WS 252

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	2.41e4	65.1	NO
2	2	13C3-PFHxS	17008...	4.45e3	55.3	NO
3	3	13C8-PFOA	17008...	1.99e4	44.0	YES
4	4	13C9-PFNA	17008...	2.20e4	41.2	YES
5	5	13C4-PFOS	17008...	4.26e3	44.6	YES
6	6	13C6-PFDA	17008...	2.49e4	46.3	YES
7	7	13C7-PFUnA	17008...	2.28e4	44.4	YES

Name: 170803M2_35, Date: 03-Aug-2017, Time: 22:06:01, ID: 1700952-01 CP-IDW-072517 0.24347, Description: CP-IDW-072517

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	2.55e4	68.9	NO
2	2	13C3-PFHxS	17009...	4.33e3	53.8	NO
3	3	13C8-PFOA	17009...	2.08e4	46.2	YES
4	4	13C9-PFNA	17009...	2.62e4	48.9	YES
5	5	13C4-PFOS	17009...	4.30e3	44.9	YES
6	6	13C6-PFDA	17009...	2.53e4	47.0	YES
7	7	13C7-PFUnA	17009...	2.29e4	44.7	YES

Name: 170803M2_36, Date: 03-Aug-2017, Time: 22:16:55, ID: 1700953-01 TF4-IDW-072517-01 0.26372, Description: TF4-IDW-072517-01

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	2.78e4	75.1	NO
2	2	13C3-PFHxS	17009...	5.29e3	65.7	NO
3	3	13C8-PFOA	17009...	2.41e4	53.5	NO
4	4	13C9-PFNA	17009...	2.95e4	55.2	NO
5	5	13C4-PFOS	17009...	5.21e3	54.5	NO
6	6	13C6-PFDA	17009...	2.66e4	49.5	YES
7	7	13C7-PFUnA	17009...	2.64e4	51.6	NO

Name: 170803M2_37, Date: 03-Aug-2017, Time: 22:27:44, ID: 1700953-02 TF4-IDW-072517-02 0.26543, Description: TF4-IDW-072517-02

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	2.22e4	60.1	NO
2	2	13C3-PFHxS	17009...	3.71e3	46.1	YES
3	3	13C8-PFOA	17009...	1.82e4	40.4	YES
4	4	13C9-PFNA	17009...	2.18e4	40.8	YES
5	5	13C4-PFOS	17009...	3.78e3	39.5	YES
6	6	13C6-PFDA	17009...	2.34e4	43.5	YES
7	7	13C7-PFUnA	17009...	2.14e4	41.8	YES

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Name: 170803M2_38, Date: 03-Aug-2017, Time: 22:38:30, ID: 1700954-01 TF5-IDW-072517 0.25837, Description: TF5-IDW-072517

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	2.74e4	74.0	NO
2	2	13C3-PFHxS	17009...	4.58e3	56.8	NO
3	3	13C8-PFOA	17009...	2.11e4	46.8	YES
4	4	13C9-PFNA	17009...	2.51e4	47.0	YES
5	5	13C4-PFOS	17009...	4.06e3	42.5	YES
6	6	13C6-PFDA	17009...	2.16e4	40.1	YES
7	7	13C7-PFUnA	17009...	2.58e4	50.3	NO

Name: 170803M2_39, Date: 03-Aug-2017, Time: 22:49:08, ID: 1700818-01 QPFD-1 5, Description: QPFD-1

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	3.87e4	104.5	NO
2	2	13C3-PFHxS	17008...	6.48e3	80.5	NO
3	3	13C8-PFOA	17008...	3.56e4	78.8	NO
4	4	13C9-PFNA	17008...	3.83e4	71.7	NO
5	5	13C4-PFOS	17008...	7.19e3	75.2	NO
6	6	13C6-PFDA	17008...	4.26e4	79.2	NO
7	7	13C7-PFUnA	17008...	3.80e4	74.0	NO

Name: 170803M2_40, Date: 03-Aug-2017, Time: 22:59:55, ID: 1700818-02 QPFD-2 5, Description: QPFD-2

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	4.43e4	119.7	NO
2	2	13C3-PFHxS	17008...	7.03e3	87.3	NO
3	3	13C8-PFOA	17008...	3.56e4	79.0	NO
4	4	13C9-PFNA	17008...	4.03e4	75.4	NO
5	5	13C4-PFOS	17008...	6.64e3	69.5	NO
6	6	13C6-PFDA	17008...	4.09e4	76.1	NO
7	7	13C7-PFUnA	17008...	4.56e4	89.0	NO

Name: 170803M2_41, Date: 03-Aug-2017, Time: 23:10:33, ID: 1700818-03 QPFD-3 5, Description: QPFD-3

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	4.77e4	128.9	NO
2	2	13C3-PFHxS	17008...	7.52e3	93.4	NO
3	3	13C8-PFOA	17008...	3.96e4	87.7	NO
4	4	13C9-PFNA	17008...	4.50e4	84.2	NO
5	5	13C4-PFOS	17008...	7.36e3	77.0	NO
6	6	13C6-PFDA	17008...	4.13e4	76.9	NO
7	7	13C7-PFUnA	17008...	4.40e4	85.8	NO

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Name: 170803M2_42, Date: 03-Aug-2017, Time: 23:21:11, ID: 1700818-04 QPFD-4 5, Description: QPFD-4

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	5.10e4	137.7	NO
2	2	13C3-PFHxS	17008...	7.34e3	91.2	NO
3	3	13C8-PFOA	17008...	4.12e4	91.3	NO
4	4	13C9-PFNA	17008...	4.34e4	81.0	NO
5	5	13C4-PFOS	17008...	7.50e3	78.4	NO
6	6	13C6-PFDA	17008...	4.97e4	92.4	NO
7	7	13C7-PFUnA	17008...	4.50e4	87.8	NO

Name: 170803M2_43, Date: 03-Aug-2017, Time: 23:31:50, ID: 1700818-05 QPFD-5 5, Description: QPFD-5

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	4.77e4	128.9	NO
2	2	13C3-PFHxS	17008...	7.70e3	95.6	NO
3	3	13C8-PFOA	17008...	4.19e4	92.8	NO
4	4	13C9-PFNA	17008...	4.44e4	82.9	NO
5	5	13C4-PFOS	17008...	7.30e3	76.4	NO
6	6	13C6-PFDA	17008...	4.77e4	88.7	NO
7	7	13C7-PFUnA	17008...	4.02e4	78.5	NO

Name: 170803M2_44, Date: 03-Aug-2017, Time: 23:42:28, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	9.98e0	0.0	YES

Name: 170803M2_45, Date: 03-Aug-2017, Time: 23:53:06, ID: ST170803M2-3 PFC CS3 17H0202, Description: PFC CS3 17H0202

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	4.00e4	108.1	NO
2	2	13C3-PFHxS	ST170...	8.19e3	101.7	NO
3	3	13C8-PFOA	ST170...	5.34e4	118.4	NO
4	4	13C9-PFNA	ST170...	6.55e4	122.4	NO
5	5	13C4-PFOS	ST170...	1.06e4	110.6	NO
6	6	13C6-PFDA	ST170...	5.84e4	108.6	NO
7	7	13C7-PFUnA	ST170...	5.47e4	106.8	NO

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Name: 170803M2_46, Date: 04-Aug-2017, Time: 00:03:53, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	7.04e0	0.0	NO

Name: 170803M2_47, Date: 04-Aug-2017, Time: 00:14:34, ID: 1700818-06 QPFD-6 5, Description: QPFD-6

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	4.39e4	118.6	NO
2	2	13C3-PFHxS	17008...	7.44e3	92.3	NO
3	3	13C8-PFOA	17008...	4.05e4	89.8	NO
4	4	13C9-PFNA	17008...	3.94e4	73.6	NO
5	5	13C4-PFOS	17008...	7.25e3	75.8	NO
6	6	13C6-PFDA	17008...	4.47e4	83.0	NO
7	7	13C7-PFUnA	17008...	4.58e4	89.3	NO

Name: 170803M2_48, Date: 04-Aug-2017, Time: 00:25:19, ID: 1700818-07 QPFD-7 5, Description: QPFD-7

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	4.87e4	131.6	NO
2	2	13C3-PFHxS	17008...	7.35e3	91.2	NO
3	3	13C8-PFOA	17008...	4.02e4	89.0	NO
4	4	13C9-PFNA	17008...	4.08e4	76.2	NO
5	5	13C4-PFOS	17008...	6.85e3	71.7	NO
6	6	13C6-PFDA	17008...	4.73e4	88.0	NO
7	7	13C7-PFUnA	17008...	4.15e4	80.9	NO

Name: 170803M2_49, Date: 04-Aug-2017, Time: 00:35:57, ID: 1700818-08 QPFD-8 5, Description: QPFD-8

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	4.77e4	128.9	NO
2	2	13C3-PFHxS	17008...	7.98e3	99.1	NO
3	3	13C8-PFOA	17008...	3.98e4	88.1	NO
4	4	13C9-PFNA	17008...	4.31e4	80.6	NO
5	5	13C4-PFOS	17008...	7.87e3	82.3	NO
6	6	13C6-PFDA	17008...	5.19e4	96.5	NO
7	7	13C7-PFUnA	17008...	4.87e4	95.1	NO

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Name: 170803M2_50, Date: 04-Aug-2017, Time: 00:46:44, ID: 1700818-09 QPFD-9 5, Description: QPFD-9

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17008...	5.28e4	142.7	NO
2	2 13C3-PFHxS	17008...	8.27e3	102.8	NO
3	3 13C8-PFOA	17008...	4.45e4	98.7	NO
4	4 13C9-PFNA	17008...	4.76e4	89.0	NO
5	5 13C4-PFOS	17008...	7.18e3	75.1	NO
6	6 13C6-PFDA	17008...	4.69e4	87.2	NO
7	7 13C7-PFUnA	17008...	4.07e4	79.4	NO

Name: 170803M2_51, Date: 04-Aug-2017, Time: 00:57:39, ID: 1700818-10 QPFD-10 5, Description: QPFD-10

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17008...	4.74e4	127.9	NO
2	2 13C3-PFHxS	17008...	7.76e3	96.4	NO
3	3 13C8-PFOA	17008...	3.82e4	84.6	NO
4	4 13C9-PFNA	17008...	4.53e4	84.7	NO
5	5 13C4-PFOS	17008...	6.96e3	72.8	NO
6	6 13C6-PFDA	17008...	3.98e4	73.9	NO
7	7 13C7-PFUnA	17008...	4.30e4	83.8	NO

Name: 170803M2_52, Date: 04-Aug-2017, Time: 01:08:26, ID: 1700818-11 QPFD-11 5, Description: QPFD-11

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17008...	5.23e4	141.3	NO
2	2 13C3-PFHxS	17008...	7.89e3	98.0	NO
3	3 13C8-PFOA	17008...	4.35e4	96.4	NO
4	4 13C9-PFNA	17008...	4.99e4	93.2	NO
5	5 13C4-PFOS	17008...	8.26e3	86.4	NO
6	6 13C6-PFDA	17008...	4.99e4	92.8	NO
7	7 13C7-PFUnA	17008...	4.29e4	83.7	NO

Name: 170803M2_53, Date: 04-Aug-2017, Time: 01:19:04, ID: 1700818-12 QPFD-12 5, Description: QPFD-12

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17008...	4.82e4	130.3	NO
2	2 13C3-PFHxS	17008...	8.05e3	100.0	NO
3	3 13C8-PFOA	17008...	4.05e4	89.8	NO
4	4 13C9-PFNA	17008...	3.76e4	70.3	NO
5	5 13C4-PFOS	17008...	7.42e3	77.6	NO
6	6 13C6-PFDA	17008...	4.05e4	75.2	NO
7	7 13C7-PFUnA	17008...	4.37e4	85.3	NO

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Name: 170803M2_54, Date: 04-Aug-2017, Time: 01:29:51, ID: 1700818-13 QPFD-13 5, Description: QPFD-13

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	4.58e4	123.8	NO
2	2	13C3-PFHxS	17008...	7.65e3	95.0	NO
3	3	13C8-PFOA	17008...	3.86e4	85.5	NO
4	4	13C9-PFNA	17008...	3.50e4	65.5	NO
5	5	13C4-PFOS	17008...	7.63e3	79.8	NO
6	6	13C6-PFDA	17008...	4.06e4	75.4	NO
7	7	13C7-PFUnA	17008...	4.70e4	91.8	NO

Name: 170803M2_55, Date: 04-Aug-2017, Time: 01:40:29, ID: 1700903-01 1958 5, Description: 1958

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.13e4	138.5	NO
2	2	13C3-PFHxS	17009...	7.94e3	98.7	NO
3	3	13C8-PFOA	17009...	4.30e4	95.4	NO
4	4	13C9-PFNA	17009...	4.22e4	78.8	NO
5	5	13C4-PFOS	17009...	8.07e3	84.4	NO
6	6	13C6-PFDA	17009...	4.65e4	86.5	NO
7	7	13C7-PFUnA	17009...	5.04e4	98.3	NO

Name: 170803M2_56, Date: 04-Aug-2017, Time: 01:51:08, ID: B7H0010-DUP1 Duplicate 5, Description: Duplicate

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	4.95e4	133.8	NO
2	2	13C3-PFHxS	B7H00...	8.02e3	99.6	NO
3	3	13C8-PFOA	B7H00...	4.23e4	93.8	NO
4	4	13C9-PFNA	B7H00...	4.59e4	85.8	NO
5	5	13C4-PFOS	B7H00...	7.48e3	78.2	NO
6	6	13C6-PFDA	B7H00...	4.13e4	76.8	NO
7	7	13C7-PFUnA	B7H00...	4.54e4	88.5	NO

Name: 170803M2_57, Date: 04-Aug-2017, Time: 02:01:46, ID: 1700819-01 QPFD-14 5, Description: QPFD-14

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	4.33e4	116.8	NO
2	2	13C3-PFHxS	17008...	7.09e3	88.1	NO
3	3	13C8-PFOA	17008...	3.62e4	80.3	NO
4	4	13C9-PFNA	17008...	4.32e4	80.7	NO
5	5	13C4-PFOS	17008...	7.24e3	75.7	NO
6	6	13C6-PFDA	17008...	4.46e4	82.9	NO
7	7	13C7-PFUnA	17008...	4.31e4	84.0	NO

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Name: 170803M2_58, Date: 04-Aug-2017, Time: 02:12:27, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA			NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA	6.54e0	0.0	YES
7	7 13C7-PFUnA	IPA	2.21e1	0.0	YES

Name: 170803M2_59, Date: 04-Aug-2017, Time: 02:23:13, ID: ST170803M2-4 PFC CS0 17H0307, Description: PFC CS0 17H0307

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	ST170...	3.93e4	106.2	NO
2	2 13C3-PFHxS	ST170...	8.39e3	104.2	NO
3	3 13C8-PFOA	ST170...	4.75e4	105.2	NO
4	4 13C9-PFNA	ST170...	5.68e4	106.2	NO
5	5 13C4-PFOS	ST170...	1.02e4	106.7	NO
6	6 13C6-PFDA	ST170...	5.52e4	102.6	NO
7	7 13C7-PFUnA	ST170...	5.63e4	109.9	NO

Name: 170803M2_60, Date: 04-Aug-2017, Time: 02:33:58, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA			NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA			NO
7	7 13C7-PFUnA	IPA	9.87e0	0.0	NO

Name: 170803M2_61, Date: 04-Aug-2017, Time: 02:44:36, ID: 1700819-02 QPFD-15 5, Description: QPFD-15

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17008...	4.93e4	133.3	NO
2	2 13C3-PFHxS	17008...	8.79e3	109.2	NO
3	3 13C8-PFOA	17008...	4.55e4	100.7	NO
4	4 13C9-PFNA	17008...	5.08e4	94.9	NO
5	5 13C4-PFOS	17008...	8.37e3	87.5	NO
6	6 13C6-PFDA	17008...	5.18e4	96.3	NO
7	7 13C7-PFUnA	17008...	4.73e4	92.2	NO

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Name: 170803M2_62, Date: 04-Aug-2017, Time: 02:55:15, ID: 1700819-03 QPFD-16 5, Description: QPFD-16

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	4.60e4	124.3	NO
2	2	13C3-PFHxS	17008...	7.70e3	95.7	NO
3	3	13C8-PFOA	17008...	3.98e4	88.1	NO
4	4	13C9-PFNA	17008...	4.03e4	75.2	NO
5	5	13C4-PFOS	17008...	6.99e3	73.1	NO
6	6	13C6-PFDA	17008...	3.91e4	72.7	NO
7	7	13C7-PFUnA	17008...	4.09e4	79.8	NO

Name: 170803M2_63, Date: 04-Aug-2017, Time: 03:05:53, ID: 1700819-04 QPFD-17 5, Description: QPFD-17

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	4.87e4	131.5	NO
2	2	13C3-PFHxS	17008...	8.68e3	107.8	NO
3	3	13C8-PFOA	17008...	4.53e4	100.4	NO
4	4	13C9-PFNA	17008...	4.99e4	93.2	NO
5	5	13C4-PFOS	17008...	8.27e3	86.5	NO
6	6	13C6-PFDA	17008...	4.96e4	92.3	NO
7	7	13C7-PFUnA	17008...	5.17e4	100.9	NO

Name: 170803M2_64, Date: 04-Aug-2017, Time: 03:16:32, ID: 1700819-05 QPFD-18 5, Description: QPFD-18

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	4.68e4	126.3	NO
2	2	13C3-PFHxS	17008...	8.86e3	110.0	NO
3	3	13C8-PFOA	17008...	4.24e4	93.8	NO
4	4	13C9-PFNA	17008...	4.68e4	87.4	NO
5	5	13C4-PFOS	17008...	8.21e3	85.8	NO
6	6	13C6-PFDA	17008...	5.29e4	98.4	NO
7	7	13C7-PFUnA	17008...	4.04e4	78.9	NO

Name: 170803M2_65, Date: 04-Aug-2017, Time: 03:27:10, ID: 1700819-06 QPFD-19 5, Description: QPFD-19

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	4.71e4	127.2	NO
2	2	13C3-PFHxS	17008...	8.91e3	110.6	NO
3	3	13C8-PFOA	17008...	4.12e4	91.4	NO
4	4	13C9-PFNA	17008...	4.83e4	90.2	NO
5	5	13C4-PFOS	17008...	8.47e3	88.6	NO
6	6	13C6-PFDA	17008...	4.85e4	90.2	NO
7	7	13C7-PFUnA	17008...	4.72e4	92.0	NO

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Name: 170803M2_66, Date: 04-Aug-2017, Time: 03:37:48, ID: 1700819-07 QPFD-20 5, Description: QPFD-20

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	5.24e4	141.6	NO
2	2	13C3-PFHxS	17008...	9.38e3	116.5	NO
3	3	13C8-PFOA	17008...	4.41e4	97.6	NO
4	4	13C9-PFNA	17008...	5.53e4	103.3	NO
5	5	13C4-PFOS	17008...	8.85e3	92.5	NO
6	6	13C6-PFDA	17008...	5.42e4	100.8	NO
7	7	13C7-PFUnA	17008...	5.19e4	101.3	NO

Name: 170803M2_67, Date: 04-Aug-2017, Time: 03:48:35, ID: 1700819-08 QPFD-21 5, Description: QPFD-21

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	4.82e4	130.2	NO
2	2	13C3-PFHxS	17008...	8.26e3	102.6	NO
3	3	13C8-PFOA	17008...	4.21e4	93.3	NO
4	4	13C9-PFNA	17008...	4.68e4	87.4	NO
5	5	13C4-PFOS	17008...	7.97e3	83.3	NO
6	6	13C6-PFDA	17008...	4.31e4	80.1	NO
7	7	13C7-PFUnA	17008...	5.10e4	99.6	NO

Name: 170803M2_68, Date: 04-Aug-2017, Time: 03:59:13, ID: 1700819-09 QPFD-22 5, Description: QPFD-22

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	5.01e4	135.3	NO
2	2	13C3-PFHxS	17008...	8.67e3	107.6	NO
3	3	13C8-PFOA	17008...	4.57e4	101.2	NO
4	4	13C9-PFNA	17008...	4.61e4	86.1	NO
5	5	13C4-PFOS	17008...	7.70e3	80.5	NO
6	6	13C6-PFDA	17008...	5.33e4	99.1	NO
7	7	13C7-PFUnA	17008...	5.44e4	106.0	NO

Name: 170803M2_69, Date: 04-Aug-2017, Time: 04:10:00, ID: 1700819-10 QPFD-23 5, Description: QPFD-23

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	4.70e4	127.0	NO
2	2	13C3-PFHxS	17008...	8.05e3	99.9	NO
3	3	13C8-PFOA	17008...	3.74e4	82.9	NO
4	4	13C9-PFNA	17008...	4.76e4	88.9	NO
5	5	13C4-PFOS	17008...	7.68e3	80.3	NO
6	6	13C6-PFDA	17008...	4.35e4	80.8	NO
7	7	13C7-PFUnA	17008...	4.33e4	84.4	NO

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Name: 170803M2_70, Date: 04-Aug-2017, Time: 04:20:46, ID: 1700819-11 QPFD-24 5, Description: QPFD-24

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	4.84e4	130.8	NO
2	2	13C3-PFHxS	17008...	6.81e3	84.6	NO
3	3	13C8-PFOA	17008...	3.76e4	83.4	NO
4	4	13C9-PFNA	17008...	4.03e4	75.3	NO
5	5	13C4-PFOS	17008...	7.39e3	77.3	NO
6	6	13C6-PFDA	17008...	4.73e4	88.0	NO
7	7	13C7-PFUnA	17008...	4.40e4	85.9	NO

Name: 170803M2_71, Date: 04-Aug-2017, Time: 04:31:33, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA	5.94e0	0.0	YES
7	7	13C7-PFUnA	IPA	1.03e1	0.0	YES

Name: 170803M2_72, Date: 04-Aug-2017, Time: 04:42:11, ID: ST170803M2-5 PFC CS3 17H0202, Description: PFC CS3 17H0202

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	4.18e4	112.9	NO
2	2	13C3-PFHxS	ST170...	8.68e3	107.8	NO
3	3	13C8-PFOA	ST170...	5.66e4	125.4	NO
4	4	13C9-PFNA	ST170...	5.94e4	111.1	NO
5	5	13C4-PFOS	ST170...	1.02e4	106.7	NO
6	6	13C6-PFDA	ST170...	6.18e4	114.8	NO
7	7	13C7-PFUnA	ST170...	6.02e4	117.5	NO

Name: 170803M2_73, Date: 04-Aug-2017, Time: 04:52:57, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA	3.88e4	104.9	NO
2	2	13C3-PFHxS	IPA	6.82e3	84.7	NO
3	3	13C8-PFOA	IPA	2.86e4	63.3	NO
4	4	13C9-PFNA	IPA	3.67e4	68.5	NO
5	5	13C4-PFOS	IPA	6.80e3	71.1	NO
6	6	13C6-PFDA	IPA	3.39e4	63.1	NO
7	7	13C7-PFUnA	IPA	3.33e4	64.9	NO

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Name: 170803M2_74, Date: 04-Aug-2017, Time: 05:03:36, ID: 1700819-12 QPFD-25 5, Description: QPFD-25

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17008...	4.66e4	125.9	NO
2	2 13C3-PFHxS	17008...	8.46e3	105.1	NO
3	3 13C8-PFOA	17008...	4.07e4	90.2	NO
4	4 13C9-PFNA	17008...	4.78e4	89.3	NO
5	5 13C4-PFOS	17008...	7.68e3	80.3	NO
6	6 13C6-PFDA	17008...	4.52e4	84.0	NO
7	7 13C7-PFUnA	17008...	5.15e4	100.6	NO

Name: 170803M2_75, Date: 04-Aug-2017, Time: 05:14:14, ID: 1700819-13 QPFD-26 5, Description: QPFD-26

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17008...	4.74e4	127.9	NO
2	2 13C3-PFHxS	17008...	8.16e3	101.3	NO
3	3 13C8-PFOA	17008...	4.20e4	93.2	NO
4	4 13C9-PFNA	17008...	4.47e4	83.5	NO
5	5 13C4-PFOS	17008...	7.73e3	80.8	NO
6	6 13C6-PFDA	17008...	4.84e4	90.0	NO
7	7 13C7-PFUnA	17008...	4.48e4	87.5	NO

Name: 170803M2_76, Date: 04-Aug-2017, Time: 05:24:54, ID: 1700963-01 SW VEL L2 0.25308, Description: SW VEL L2

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	4.29e4	115.8	NO
2	2 13C3-PFHxS	17009...	7.12e3	88.5	NO
3	3 13C8-PFOA	17009...	3.54e4	78.4	NO
4	4 13C9-PFNA	17009...	3.68e4	68.8	NO
5	5 13C4-PFOS	17009...	6.68e3	69.9	NO
6	6 13C6-PFDA	17009...	3.80e4	70.7	NO
7	7 13C7-PFUnA	17009...	3.49e4	68.0	NO

Name: 170803M2_77, Date: 04-Aug-2017, Time: 05:35:42, ID: 1700963-02 SW VEL L3 0.21924, Description: SW VEL L3

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	4.99e4	134.8	NO
2	2 13C3-PFHxS	17009...	7.86e3	97.7	NO
3	3 13C8-PFOA	17009...	4.08e4	90.4	NO
4	4 13C9-PFNA	17009...	4.48e4	83.7	NO
5	5 13C4-PFOS	17009...	8.00e3	83.7	NO
6	6 13C6-PFDA	17009...	4.77e4	88.7	NO
7	7 13C7-PFUnA	17009...	3.60e4	70.3	NO

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Name: 170803M2_78, Date: 04-Aug-2017, Time: 05:46:38, ID: 1700963-03 SW VEL L4 0.25896, Description: SW VEL L4

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	4.32e4	116.7	NO
2	2	13C3-PFHxS	17009...	6.71e3	83.3	NO
3	3	13C8-PFOA	17009...	3.65e4	80.9	NO
4	4	13C9-PFNA	17009...	3.98e4	74.4	NO
5	5	13C4-PFOS	17009...	7.24e3	75.7	NO
6	6	13C6-PFDA	17009...	4.12e4	76.6	NO
7	7	13C7-PFUnA	17009...	3.37e4	65.8	NO

Name: 170803M2_79, Date: 04-Aug-2017, Time: 05:57:16, ID: 1700963-04 VEL FOAM L2 0.02349, Description: VEL FOAM L2

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	4.39e4	118.7	NO
2	2	13C3-PFHxS	17009...	7.33e3	91.1	NO
3	3	13C8-PFOA	17009...	3.70e4	81.9	NO
4	4	13C9-PFNA	17009...	3.72e4	69.5	NO
5	5	13C4-PFOS	17009...	6.49e3	67.8	NO
6	6	13C6-PFDA	17009...	4.42e4	82.2	NO
7	7	13C7-PFUnA	17009...	3.90e4	76.1	NO

Name: 170803M2_80, Date: 04-Aug-2017, Time: 06:08:00, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

Name: 170803M2_81, Date: 04-Aug-2017, Time: 06:18:49, ID: 1700963-05 VEL FOAM L3 0.09911, Description: VEL FOAM L3

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	4.53e4	122.3	NO
2	2	13C3-PFHxS	17009...	7.19e3	89.3	NO
3	3	13C8-PFOA	17009...	3.57e4	79.0	NO
4	4	13C9-PFNA	17009...	3.29e4	61.5	NO
5	5	13C4-PFOS	17009...	5.31e3	55.5	NO
6	6	13C6-PFDA	17009...	4.11e4	76.3	NO
7	7	13C7-PFUnA	17009...	4.10e4	80.0	NO

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Name: 170803M2_82, Date: 04-Aug-2017, Time: 06:29:35, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA			NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA			NO
7	7 13C7-PFUnA	IPA	2.22e1	0.0	NO

Name: 170803M2_83, Date: 04-Aug-2017, Time: 06:40:14, ID: 1700963-06 VEL FOAM L4 0.03035, Description: VEL FOAM L4

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	4.71e4	127.2	NO
2	2 13C3-PFHxS	17009...	7.55e3	93.8	NO
3	3 13C8-PFOA	17009...	4.00e4	88.7	NO
4	4 13C9-PFNA	17009...	3.62e4	67.6	NO
5	5 13C4-PFOS	17009...	4.94e3	51.7	NO
6	6 13C6-PFDA	17009...	4.14e4	77.0	NO
7	7 13C7-PFUnA	17009...	4.22e4	82.3	NO

Name: 170803M2_84, Date: 04-Aug-2017, Time: 06:50:52, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA	5.80e0	0.0	YES
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA			NO
7	7 13C7-PFUnA	IPA	1.73e1	0.0	YES

Name: 170803M2_85, Date: 04-Aug-2017, Time: 07:01:39, ID: 1700925-01 I001BC43S-170724 0.12112, Description: I001BC43S-170724

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	2.77e4	74.8	NO
2	2 13C3-PFHxS	17009...	5.70e3	70.8	NO
3	3 13C8-PFOA	17009...	2.51e4	55.5	NO
4	4 13C9-PFNA	17009...	2.85e4	53.2	NO
5	5 13C4-PFOS	17009...	5.58e3	58.3	NO
6	6 13C6-PFDA	17009...	3.09e4	57.5	NO
7	7 13C7-PFUnA	17009...	2.74e4	53.6	NO

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Name: 170803M2_86, Date: 04-Aug-2017, Time: 07:12:17, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA	5.34e0	0.0	YES
7	7	13C7-PFUnA	IPA	9.30e0	0.0	YES

Name: 170803M2_87, Date: 04-Aug-2017, Time: 07:22:56, ID: 1700925-03 I001BC50S-170724 0.12135, Description: I001BC50S-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	2.69e4	72.8	NO
2	2	13C3-PFHxS	17009...	4.23e3	52.6	NO
3	3	13C8-PFOA	17009...	2.30e4	50.9	NO
4	4	13C9-PFNA	17009...	3.15e4	58.8	NO
5	5	13C4-PFOS	17009...	6.06e3	63.4	NO
6	6	13C6-PFDA	17009...	2.80e4	52.0	NO
7	7	13C7-PFUnA	17009...	2.96e4	57.7	NO

Name: 170803M2_88, Date: 04-Aug-2017, Time: 07:33:42, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

Name: 170803M2_89, Date: 04-Aug-2017, Time: 07:44:20, ID: ST170803M2-6 PFC CS3 17H0202, Description: PFC CS3 17H0202

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	4.40e4	118.9	NO
2	2	13C3-PFHxS	ST170...	9.41e3	116.9	NO
3	3	13C8-PFOA	ST170...	5.49e4	121.7	NO
4	4	13C9-PFNA	ST170...	6.48e4	121.0	NO
5	5	13C4-PFOS	ST170...	1.19e4	124.9	NO
6	6	13C6-PFDA	ST170...	6.39e4	118.8	NO
7	7	13C7-PFUnA	ST170...	6.84e4	133.5	NO

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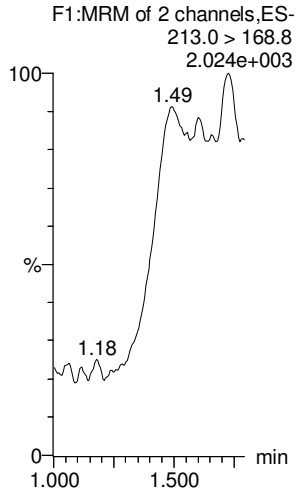
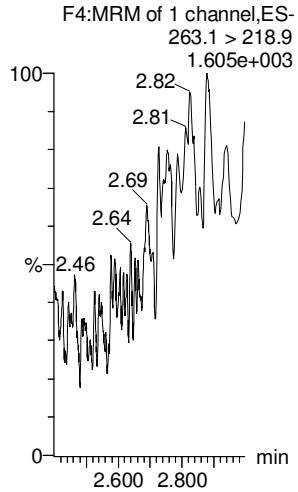
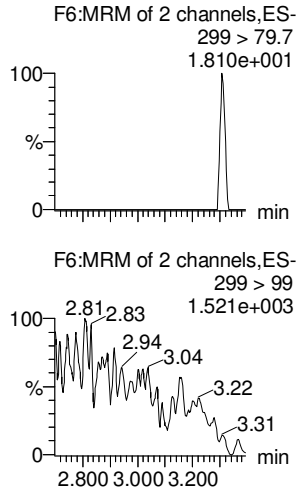


PFPeA



PFBS



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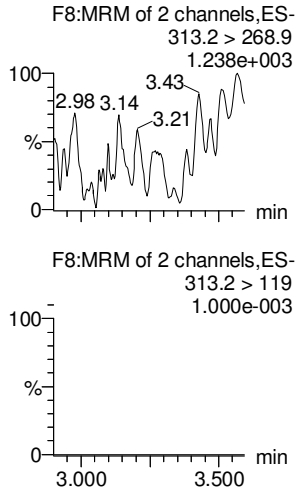

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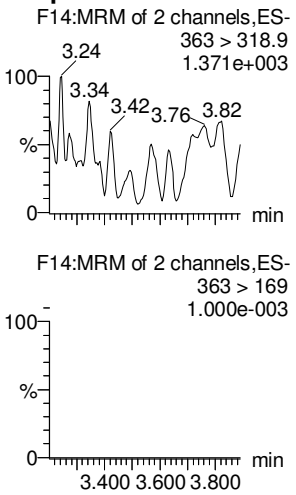

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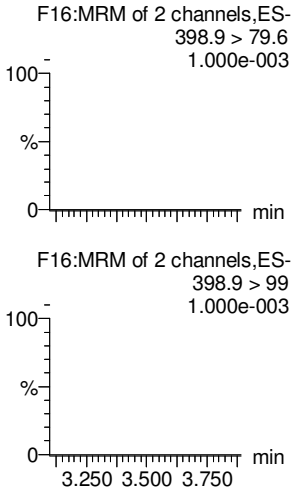

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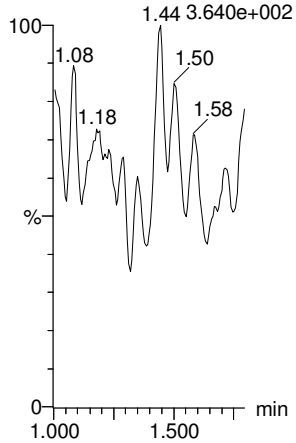

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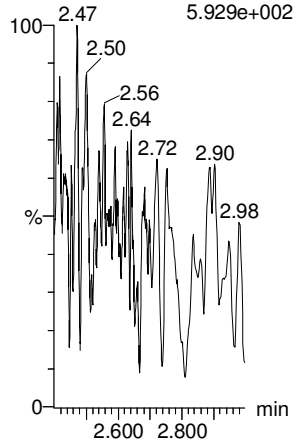

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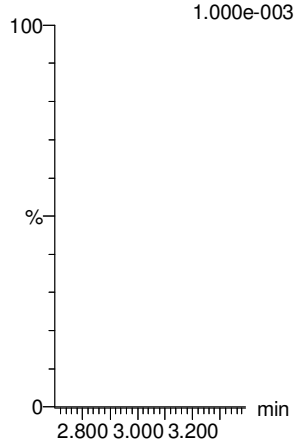

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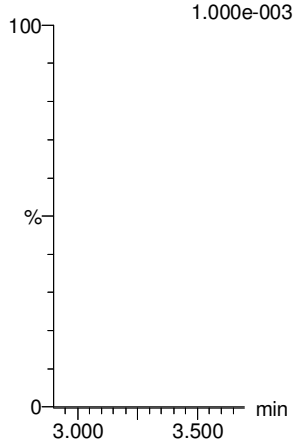

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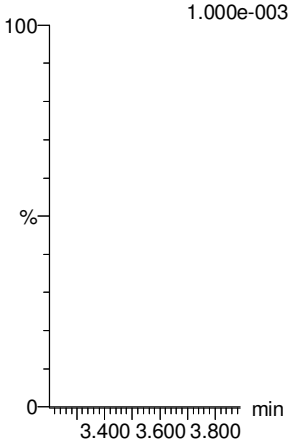

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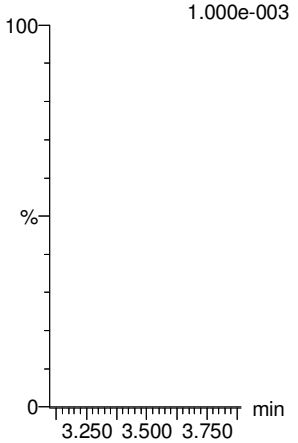

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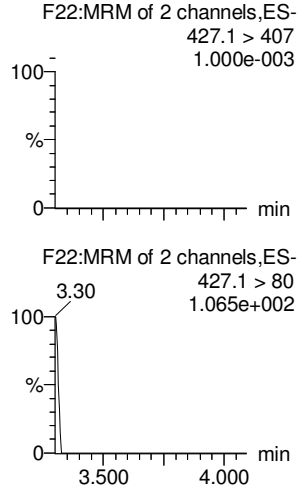
6:2 FTS



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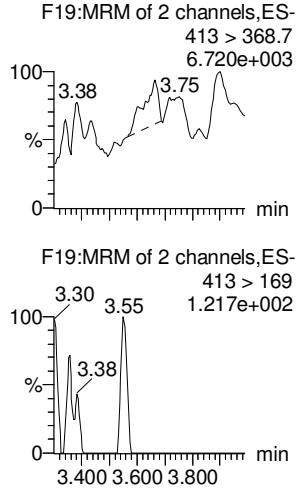

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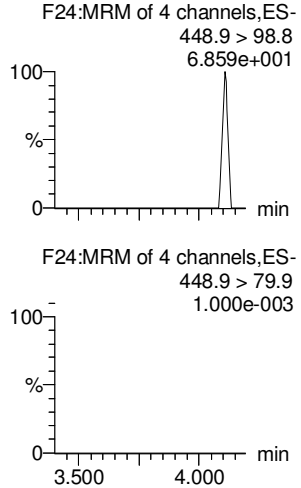

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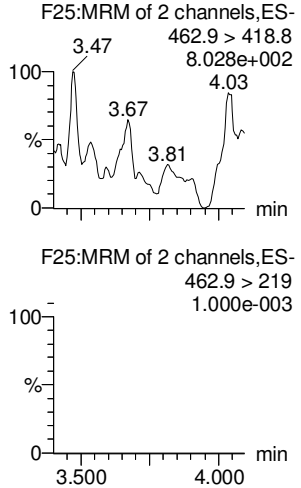

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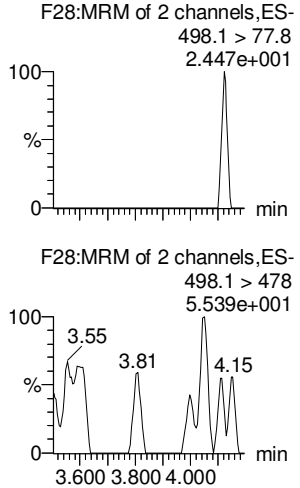

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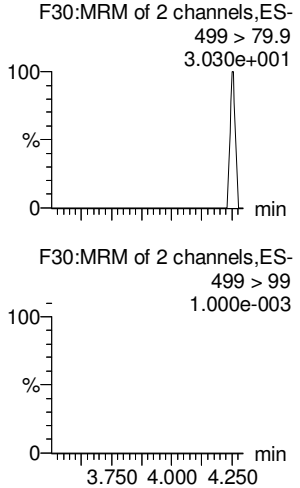

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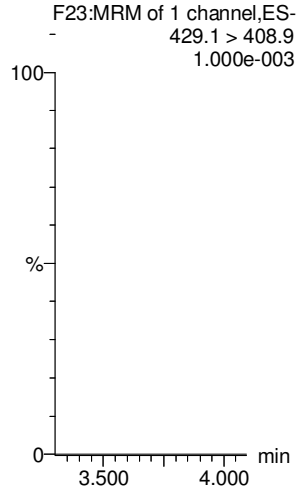

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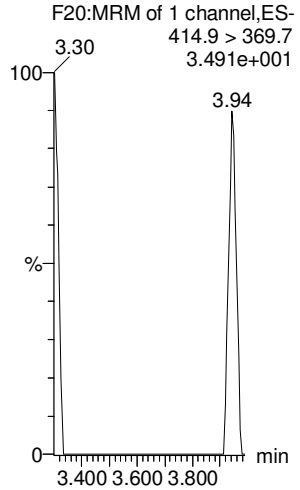
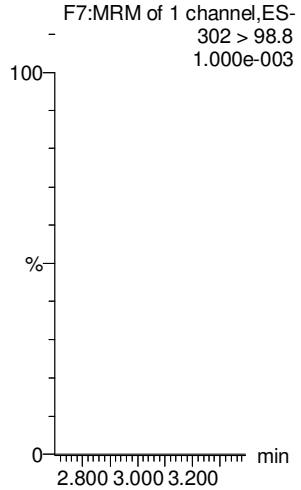


13C3-PFBS



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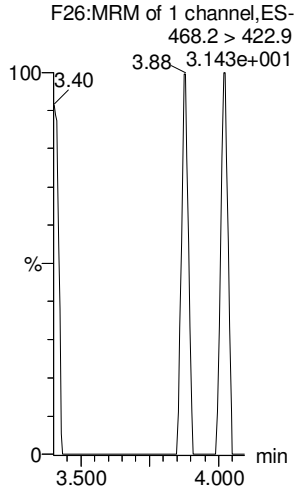

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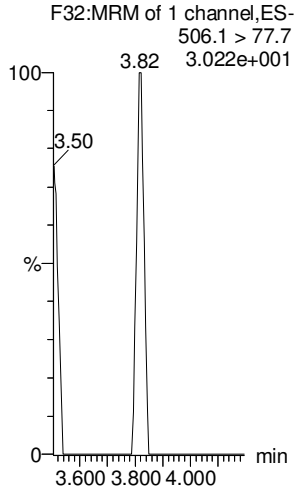

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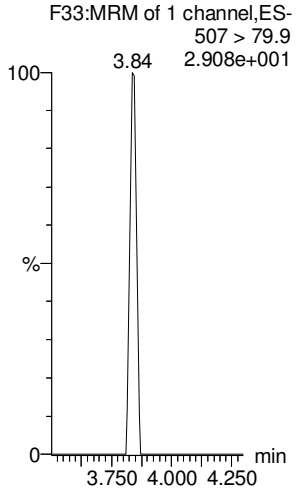

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Dataset: U:\Q4.PRO\results\170803M2\170803M2-3.qld

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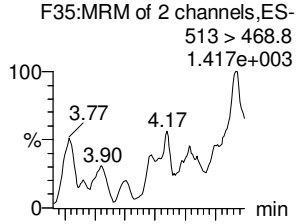

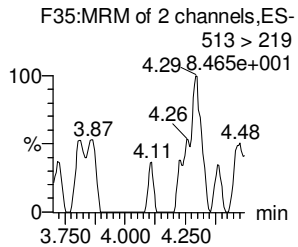

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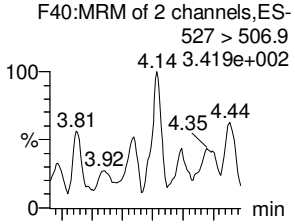
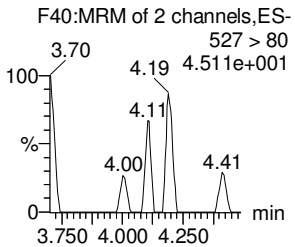
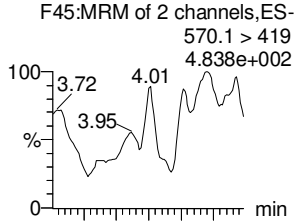
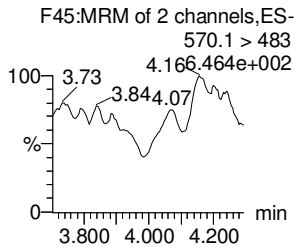




N-MeFOSAA





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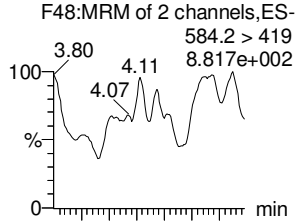
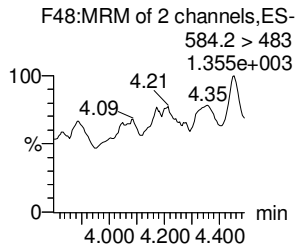
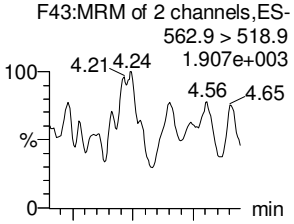
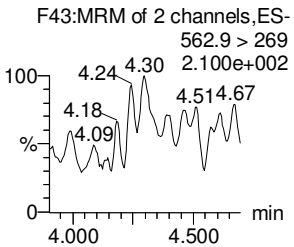


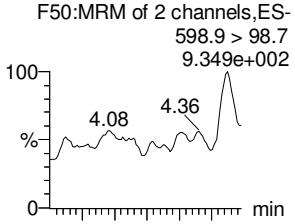


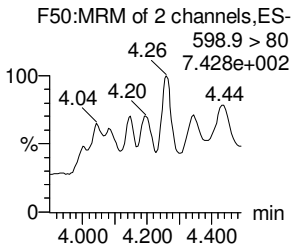
PFUnA



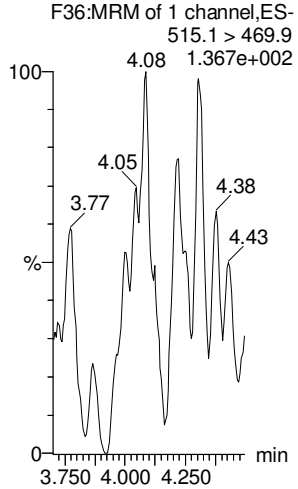


PFDS

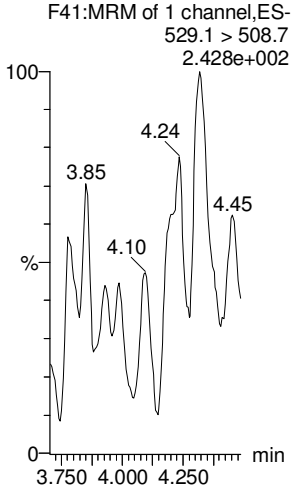




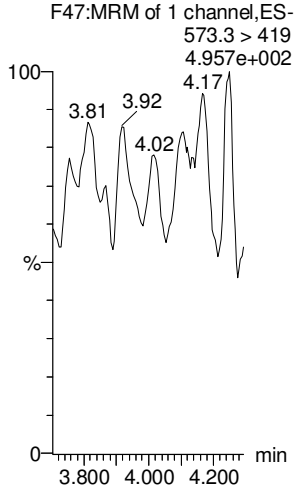
13C2-PFDA



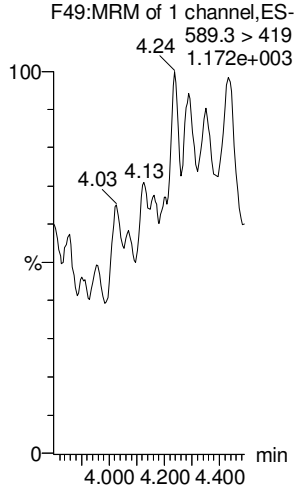
13C2-8:2 FTS



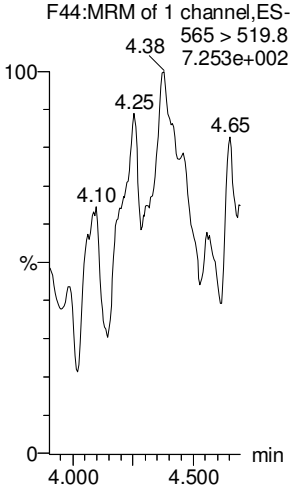
d3-N-MeFOSAA



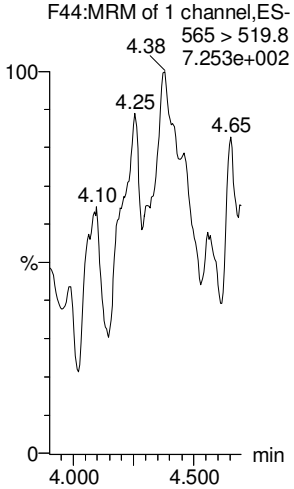
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



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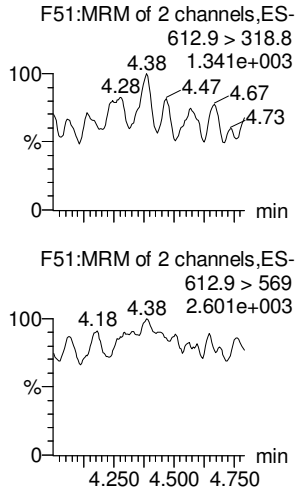
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-3.qld

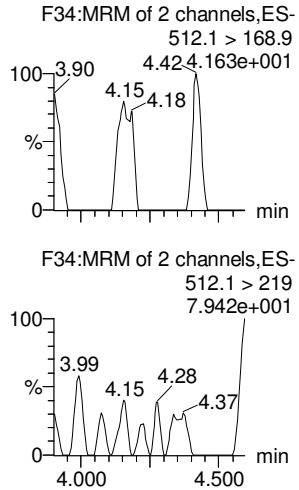
Last Altered: Tuesday, August 15, 2017 08:56:03 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 08:56:43 Pacific Daylight Time

Name: 170803M2_3, Date: 03-Aug-2017, Time: 16:23:40, ID: IPA, Description: IPA

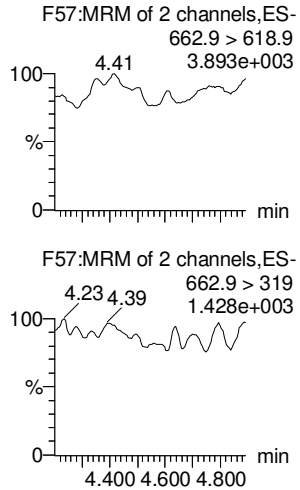
PFDoA



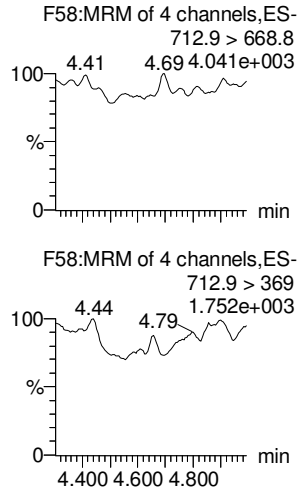
N-MeFOSA



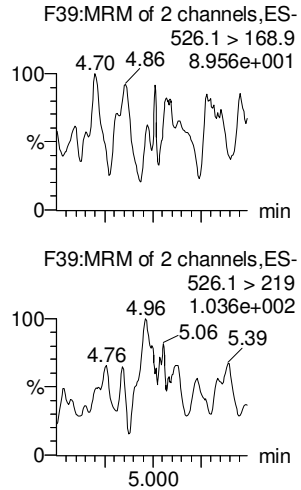
PFTrDA



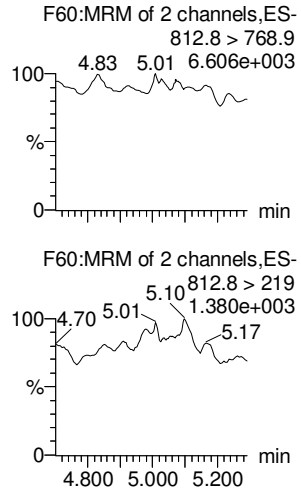
PFTeDA



N-EtFOSA



PFHxDA



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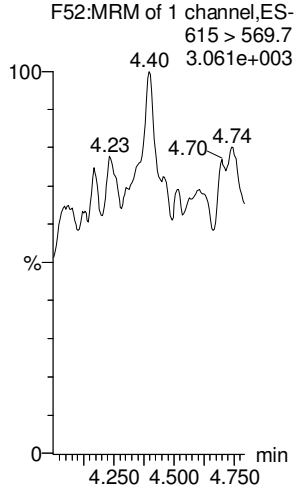
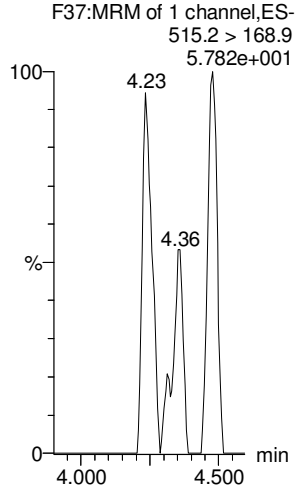


d3-N-MeFOSA



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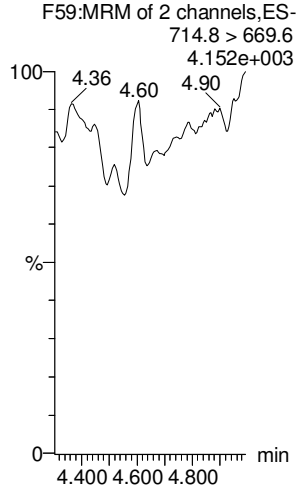

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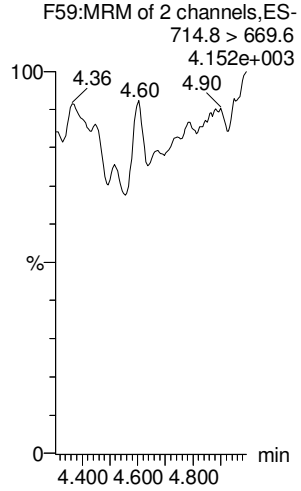
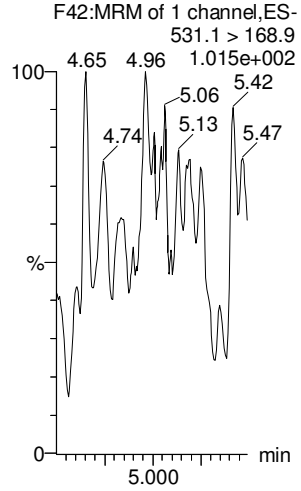


d5-N-ETFOSA



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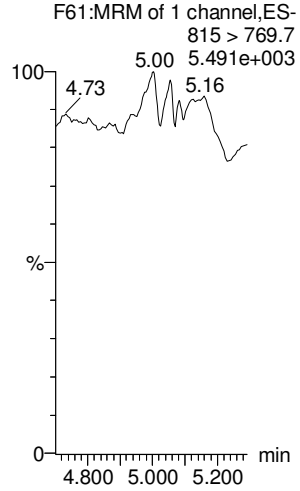

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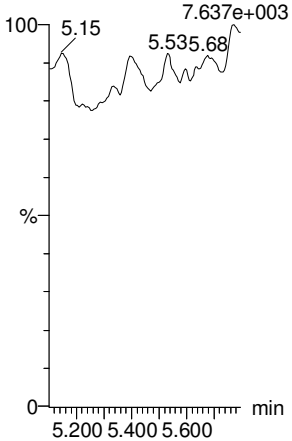
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-3.qld

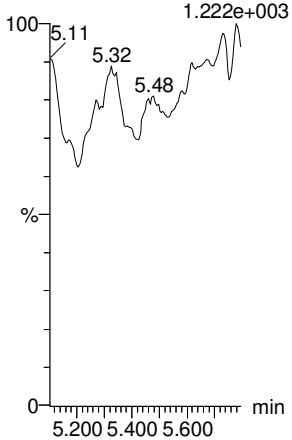
Last Altered: Tuesday, August 15, 2017 08:56:03 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 08:56:43 Pacific Daylight Time

Name: 170803M2_3, Date: 03-Aug-2017, Time: 16:23:40, ID: IPA, Description: IPA

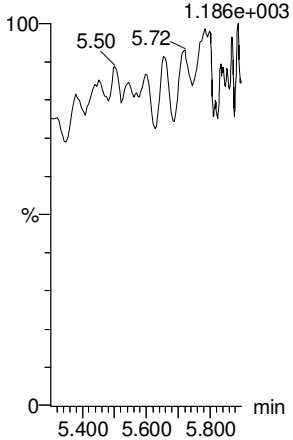
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
7.637e+003



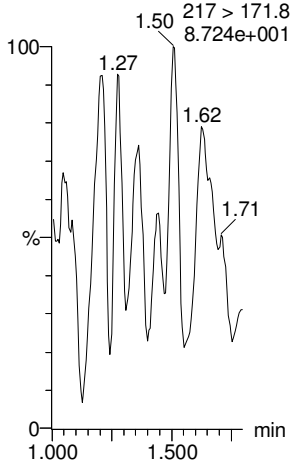
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
1.222e+003



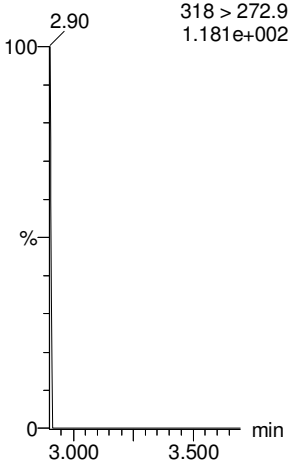
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
1.186e+003



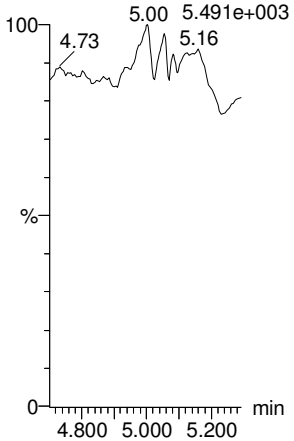
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
8.724e+001



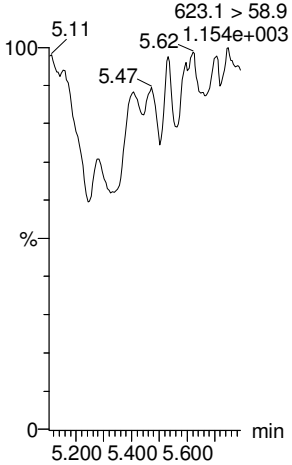
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
1.181e+002



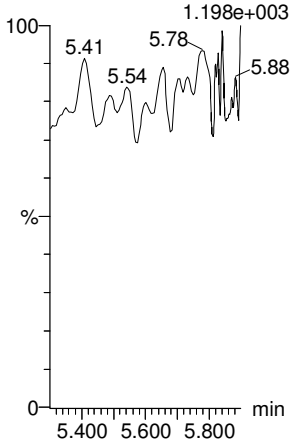
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
5.491e+003



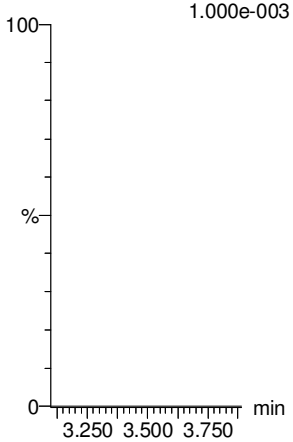
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
1.154e+003



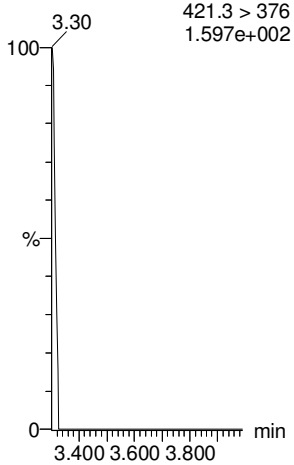
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
1.198e+003



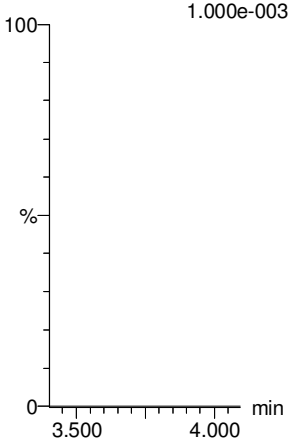
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.000e-003



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.597e+002



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.000e-003



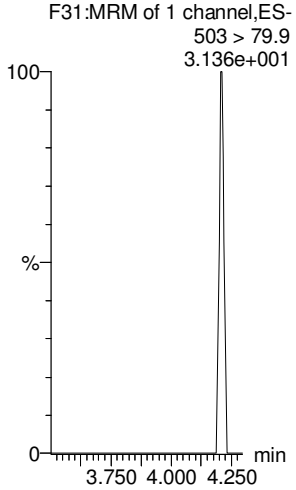
GM 8/15/17

Dataset: U:\Q4.PRO\results\170803M2\170803M2-3.qld

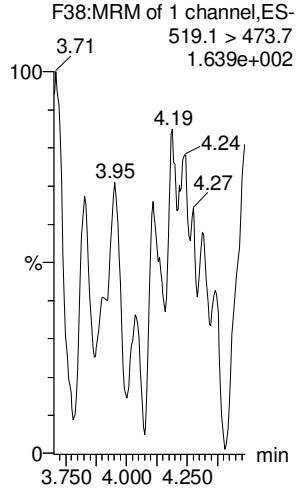
Last Altered: Tuesday, August 15, 2017 08:56:03 Pacific Daylight Time
Printed: Tuesday, August 15, 2017 08:56:43 Pacific Daylight Time

Name: 170803M2_3, Date: 03-Aug-2017, Time: 16:23:40, ID: IPA, Description: IPA

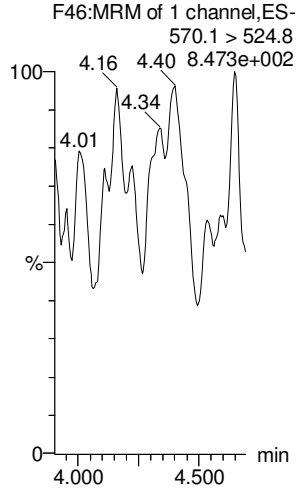
13C4-PFOS



13C6-PFDA



13C7-PFUnA



GM 8/15/17

Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-2.qld

Last Altered: Friday, August 04, 2017 08:44:22 Pacific Daylight Time
Printed: Friday, August 04, 2017 08:48:29 Pacific Daylight Time

AC 8/4/17

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-27-17.mdb 28 Jul 2017 08:06:09
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_2, Date: 03-Aug-2017, Time: 16:12:52, ID: ST170803M2-1 PFC CS0 17H0307, Description: PFC CS0 17H0307

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	1	PFBA	213.0 > 168.8	1.39e3	1.33e4		1.32	1.37	1.30	1.14	113.9	70-130
2	2	PFPeA	263.1 > 218.9	2.15e3	2.56e4		2.77	2.66	1.05	1.07	106.8	
3	3	PFBS	299 > 79.7	5.11e2	3.56e3		2.96	2.90	1.80	0.919	91.9	
4	4	PFHxA	313.2 > 268.9	4.02e3	1.24e4		3.19	3.15	1.63	1.06	106.2	
5	5	PFHpA	363 > 318.9	4.02e3	3.70e4		3.45	3.42	1.36	1.07	107.3	
6	6	PFHxS	398.9 > 79.6	5.08e2	3.81e3		3.56	3.49	1.67	0.972	97.2	
7	7	6:2 FTS	427.1 > 407	8.51e2	1.13e4		3.64	3.62	0.938	0.857	85.7	
8	8	PFOA	413 > 368.7	5.63e3	5.43e4		3.65	3.62	1.30	1.21	120.6	
9	9	PFHpS	448.9 > 98.8	4.16e2	5.43e4		3.65	3.69	0.0958	1.03	102.8	
10	10	PFNA	462.9 > 418.8	5.39e3	5.31e4		3.83	3.80	1.27	1.10	110.2	
11	11	PFOSA	498.1 > 77.8	6.06e2	6.02e3		3.84	3.81	1.26	1.20	119.8	
12	12	PFOS	499 > 79.9	1.01e3	1.16e4		3.89	3.85	1.09	1.02	102.4	
13	13	PFDA	513 > 468.8	5.47e3	5.41e4		4.01	3.97	1.26	0.924	92.4	
14	14	8:2 FTS	527 > 506.9	1.02e3	7.24e3		4.00	3.97	1.77	1.20	120.4	
15	15	N-MeFOSAA	570.1 > 419	1.53e3	1.36e4		4.03	4.01	18.3	0.977	97.7	
16	16	N-EtFOSAA	584.2 > 419	1.25e3	1.36e4		4.10	4.07	14.9	0.984	98.4	
17	17	PFUnA	562.9 > 518.9	4.39e3	6.31e4		4.17	4.14	0.870	1.03	103.2	
18	18	PFDS	598.9 > 98.7	4.11e2	6.31e4		4.22	4.18	0.0814	1.04	104.4	
19	19	PFDoA	612.9 > 318.8	5.68e2	5.99e3		4.34	4.29	1.18	1.25	125.1	
20	20	N-MeFOSA	512.1 > 168.9	8.52e2	2.33e4		4.29	4.32	5.48	5.22	104.3	
21	21	PFTrDA	662.9 > 618.9	6.54e3	5.99e3		4.50	4.47	13.6	1.20	120.0	
22	22	PFTeDA	712.9 > 668.8	4.25e3	4.32e4		4.68	4.64	1.23	1.04	104.1	
23	23	N-EtFOSA	526.1 > 168.9	1.18e3	3.29e4		4.79	4.91	5.37	5.41	108.2	
24	24	PFHxDA	812.8 > 768.9	6.56e3	2.11e4		5.06	5.01	1.55	1.04	104.0	
25	25	PFODA	912.8 > 868.8	6.16e3	2.11e4		5.43	5.38	1.46	1.16	115.8	
26	26	N-MeFOSE	616.1 > 58.9	1.57e3	3.83e4		5.42	5.45	6.13	5.56	111.3	
27	27	N-EtFOSE	630.1 > 58.9	1.65e3	3.78e4		5.59	5.63	6.56	4.62	92.4	
28	28	13C3-PFBA	216.1 > 171.8	1.33e4	1.27e4	1.006	1.32	1.37	13.1	13.0	104.2	50-150
29	29	13C3-PFPeA	266 > 221.8	2.56e4	3.47e4	0.275	2.77	2.66	3.68	13.4	107.0	
30	30	13C3-PFBS	302 > 98.8	3.56e3	3.47e4	0.034	2.96	2.90	0.512	15.0	120.0	
31	31	13C2-PFHxA	315 > 269.8	1.24e4	3.47e4	0.334	3.19	3.14	1.78	5.33	106.5	

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-2.qld

Last Altered: Friday, August 04, 2017 08:44:22 Pacific Daylight Time
Printed: Friday, August 04, 2017 08:48:29 Pacific Daylight Time

Name: 170803M2_2, Date: 03-Aug-2017, Time: 16:12:52, ID: ST170803M2-1 PFC CS0 17H0307, Description: PFC CS0 17H0307

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	32	13C4-PFHpA	367.2 > 321.8	3.70e4	3.47e4	0.414	3.45	3.42	5.32	12.8	102.7
33	33	18O2-PFHxS	403 > 102.6	3.81e3	7.71e3	0.475	3.56	3.49	6.18	13.0	104.0
34	34	13C2-6:2 FTS	429.1 > 408.9	1.13e4	4.28e4	0.214	3.64	3.61	3.31	15.5	123.9
35	35	13C2-PFOA	414.9 > 369.7	5.43e4	4.28e4	1.298	3.65	3.62	15.9	12.2	97.7
36	36	13C5-PFNA	468.2 > 422.9	5.31e4	5.02e4	1.094	3.83	3.80	13.2	12.1	96.6
37	37	13C8-PFOSA	506.1 > 77.7	6.02e3	4.62e4	0.124	3.84	3.81	1.63	13.1	104.8
38	38	13C8-PFOS	507 > 79.9	1.16e4	8.92e3	1.153	3.89	3.85	16.2	14.1	112.6
39	39	13C2-PFDA	515.1 > 469.9	5.41e4	5.24e4	1.059	4.01	3.97	12.9	12.2	97.5
40	40	13C2-8:2 FTS	529.1 > 508.7	7.24e3	5.24e4	0.129	4.00	3.97	1.73	13.4	107.4
41	41	d3-N-MeFOSAA	573.3 > 419	1.36e4	4.62e4	0.019	4.03	4.01	3.68	191	117.2
42	42	d5-N-EtFOSAA	589.3 > 419	1.36e4	4.62e4	0.019	4.12	4.07	3.69	195	119.8
43	43	13C2-PFUnA	565 > 519.8	6.31e4	4.62e4	1.172	4.17	4.14	17.1	14.6	116.6
44	44	13C2-PFDoA	615 > 569.7	5.99e3	4.62e4	0.118	4.34	4.29	1.62	13.7	109.5
45	45	d3-N-MeFOSA	515.2 > 168.9	2.33e4	4.62e4	0.040	4.29	4.36	6.30	156	103.9
46	46	13C2-PFTeDA	714.8 > 669.6	4.32e4	4.62e4	0.801	4.68	4.64	11.7	14.6	116.6
47	47	d5-N-ETFOSA	531.1 > 168.9	3.29e4	4.62e4	0.055	4.85	4.96	8.90	162	107.7
48	48	13C2-PFHxDA	815 > 769.7	2.11e4	4.62e4	0.991	5.06	5.01	5.72	5.77	115.4
49	49	d7-N-MeFOSE	623.1 > 58.9	3.83e4	4.62e4	0.065	5.42	5.44	10.4	159	106.1
50	50	d9-N-EtFOSE	639.2 > 58.8	3.78e4	4.62e4	0.065	5.59	5.62	10.2	158	105.2
51	51	13C4-PFBA	217 > 171.8	1.27e4	1.27e4	1.000	1.32	1.37	12.5	12.5	100.0
52	52	13C5-PFHxA	318 > 272.9	3.47e4	3.47e4	1.000	3.19	3.14	5.00	5.00	100.0
53	53	13C3-PFHxS	401.9 > 79.9	7.71e3	7.71e3	1.000	3.56	3.49	12.5	12.5	100.0
54	54	13C8-PFOA	421.3 > 376	4.28e4	4.28e4	1.000	3.65	3.62	12.5	12.5	100.0
55	55	13C9-PFNA	472.2 > 426.9	5.02e4	5.02e4	1.000	3.83	3.80	12.5	12.5	100.0
56	56	13C4-PFOS	503 > 79.9	8.92e3	8.92e3	1.000	3.89	3.85	12.5	12.5	100.0
57	57	13C6-PFDA	519.1 > 473.7	5.24e4	5.24e4	1.000	4.01	3.98	12.5	12.5	100.0
58	58	13C7-PFUnA	570.1 > 524.8	4.62e4	4.62e4	1.000	4.17	4.15	12.5	12.5	100.0

50-150

Quantify Totals Report MassLynx MassLynx V4.1 SCN 945
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-2.qld

Last Altered: Friday, August 04, 2017 08:44:22 Pacific Daylight Time
Printed: Friday, August 04, 2017 08:48:29 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-27-17.mdb 28 Jul 2017 08:06:09
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_2, Date: 03-Aug-2017, Time: 16:12:52, ID: ST170803M2-1 PFC CS0 17H0307, Description: PFC CS0 17H0307

Total PFBS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3 PFBS	299 > 79.7	2.90	511.319	3555.671	1.798	bb	0.919

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6 PFHxS	398.9 > 79.6	3.49	507.744	3810.517	1.666	bb	0.972

Total PFOA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8 PFOA	413 > 368.7	3.62	5630.639	54311.566	1.296	bb	1.21

Total PFOS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12 PFOS	499 > 79.9	3.85	1008.226	11580.122	1.088	bb	1.02

Total N-Me-FOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15 N-MeFOSAA	570.1 > 419	4.01	1531.593	13601.123	18.299	bb	0.977

Total N-EtFOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16 N-EtFOSAA	584.2 > 419	4.07	1248.161	13627.513	14.884	bb	0.984

Quantify Compound Summary Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory

Dataset: Untitled

Last Altered: Friday, August 04, 2017 09:33:42 Pacific Daylight Time
Printed: Friday, August 04, 2017 10:28:42 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-27-17.mdb 28 Jul 2017 08:06:09
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	170803M2_1	IPA	03-Aug-17	16:02:09
2	170803M2_2	ST170803M2-1 PFC CS0 17H0307	03-Aug-17	16:12:52
3	170803M2_3	IPA	03-Aug-17	16:23:40
4	170803M2_4	1700925-02 SB01-170724 0.12178	03-Aug-17	16:34:26
5	170803M2_5	1700925-06 EB01-170724 0.1185	03-Aug-17	16:45:12
6	170803M2_6	1700929-01 MATP01001 0.11834	03-Aug-17	16:55:51
7	170803M2_7	1700938-01 NORP08102 0.11844	03-Aug-17	17:06:36
8	170803M2_8	1700938-02 NORP08103 0.12014	03-Aug-17	17:17:30
9	170803M2_9	1700936-01 BULK TANK #1 0.005	03-Aug-17	17:28:17
10	170803M2_10	1700936-02 BULK TANK #2 0.005	03-Aug-17	17:38:55
11	170803M2_11	1700871-11@5X 16-GW-16_MW04-2017071...	03-Aug-17	17:49:34
12	170803M2_12	IPA	03-Aug-17	18:00:12
13	170803M2_13	1700925-01@15X I001BC43S-170724 0.12112	03-Aug-17	18:10:51
14	170803M2_14	IPA	03-Aug-17	18:21:33
15	170803M2_15	1700925-03@15X I001BC50S-170724 0.12135	03-Aug-17	18:32:17
16	170803M2_16	IPA	03-Aug-17	18:42:55
17	170803M2_17	B7G0122-BS1 OPR 0.25	03-Aug-17	18:53:33
18	170803M2_18	IPA	03-Aug-17	19:04:20
19	170803M2_19	B7G0122-BLK1 Method Blank 0.25	03-Aug-17	19:14:58
20	170803M2_20	1700891-06RE1 VEL FOAM 0.17113	03-Aug-17	19:25:37
21	170803M2_21	IPA	03-Aug-17	19:36:23
22	170803M2_22	ST170803M2-2 PFC CS3 17H0202	03-Aug-17	19:47:10
23	170803M2_23	IPA	03-Aug-17	19:57:57
24	170803M2_24	B7H0007-BS1 OPR 0.25	03-Aug-17	20:08:35
25	170803M2_25	B7H0010-BS1 OPR 5	03-Aug-17	20:19:13
26	170803M2_26	B7H0011-BS1 OPR 5	03-Aug-17	20:29:52
27	170803M2_27	B7H0012-BS1 OPR 0.25	03-Aug-17	20:40:30
28	170803M2_28	B7H0007-BSD1 LCS Dup 0.25	03-Aug-17	20:51:17
29	170803M2_29	IPA	03-Aug-17	21:01:55
30	170803M2_30	B7H0007-BLK1 Method Blank 0.25	03-Aug-17	21:12:41
31	170803M2_31	B7H0010-BLK1 Method Blank 5	03-Aug-17	21:23:20

Dataset: Untitled

Last Altered: Friday, August 04, 2017 09:33:42 Pacific Daylight Time
Printed: Friday, August 04, 2017 10:28:42 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	170803M2_32	B7H0011-BLK1 Method Blank 5	03-Aug-17	21:33:58
33	170803M2_33	B7H0012-BLK1 Method Blank 0.25	03-Aug-17	21:44:37
34	170803M2_34	1700862-01 WS 252 0.00025	03-Aug-17	21:55:15
35	170803M2_35	1700952-01 CP-IDW-072517 0.24347	03-Aug-17	22:06:01
36	170803M2_36	1700953-01 TF4-IDW-072517-01 0.26372	03-Aug-17	22:16:55
37	170803M2_37	1700953-02 TF4-IDW-072517-02 0.26543	03-Aug-17	22:27:44
38	170803M2_38	1700954-01 TF5-IDW-072517 0.25837	03-Aug-17	22:38:30
39	170803M2_39	1700818-01 QPFD-1 5	03-Aug-17	22:49:08
40	170803M2_40	1700818-02 QPFD-2 5	03-Aug-17	22:59:55
41	170803M2_41	1700818-03 QPFD-3 5	03-Aug-17	23:10:33
42	170803M2_42	1700818-04 QPFD-4 5	03-Aug-17	23:21:11
43	170803M2_43	1700818-05 QPFD-5 5	03-Aug-17	23:31:50
44	170803M2_44	IPA	03-Aug-17	23:42:28
45	170803M2_45	ST170803M2-3 PFC CS3 17H0202	03-Aug-17	23:53:06
46	170803M2_46	IPA	04-Aug-17	00:03:53
47	170803M2_47	1700818-06 QPFD-6 5	04-Aug-17	00:14:34
48	170803M2_48	1700818-07 QPFD-7 5	04-Aug-17	00:25:19
49	170803M2_49	1700818-08 QPFD-8 5	04-Aug-17	00:35:57
50	170803M2_50	1700818-09 QPFD-9 5	04-Aug-17	00:46:44
51	170803M2_51	1700818-10 QPFD-10 5	04-Aug-17	00:57:39
52	170803M2_52	1700818-11 QPFD-11 5	04-Aug-17	01:08:26
53	170803M2_53	1700818-12 QPFD-12 5	04-Aug-17	01:19:04
54	170803M2_54	1700818-13 QPFD-13 5	04-Aug-17	01:29:51
55	170803M2_55	1700903-01 1958 5	04-Aug-17	01:40:29
56	170803M2_56	B7H0010-DUP1 Duplicate 5	04-Aug-17	01:51:08
57	170803M2_57	1700819-01 QPFD-14 5	04-Aug-17	02:01:46
58	170803M2_58	IPA	04-Aug-17	02:12:27
59	170803M2_59	ST170803M2-4 PFC CS0 17H0307	04-Aug-17	02:23:13
60	170803M2_60	IPA	04-Aug-17	02:33:58
61	170803M2_61	1700819-02 QPFD-15 5	04-Aug-17	02:44:36
62	170803M2_62	1700819-03 QPFD-16 5	04-Aug-17	02:55:15
63	170803M2_63	1700819-04 QPFD-17 5	04-Aug-17	03:05:53
64	170803M2_64	1700819-05 QPFD-18 5	04-Aug-17	03:16:32
65	170803M2_65	1700819-06 QPFD-19 5	04-Aug-17	03:27:10

Quantify Compound Summary Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory

Dataset: Untitled

Last Altered: Friday, August 04, 2017 09:33:42 Pacific Daylight Time
Printed: Friday, August 04, 2017 10:28:42 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
66	170803M2_66	1700819-07 QPFD-20 5	04-Aug-17	03:37:48
67	170803M2_67	1700819-08 QPFD-21 5	04-Aug-17	03:48:35
68	170803M2_68	1700819-09 QPFD-22 5	04-Aug-17	03:59:13
69	170803M2_69	1700819-10 QPFD-23 5	04-Aug-17	04:10:00
70	170803M2_70	1700819-11 QPFD-24 5	04-Aug-17	04:20:46
71	170803M2_71	IPA	04-Aug-17	04:31:33
72	170803M2_72	ST170803M2-5 PFC CS3 17H0202	04-Aug-17	04:42:11
73	170803M2_73	IPA	04-Aug-17	04:52:57
74	170803M2_74	1700819-12 QPFD-25 5	04-Aug-17	05:03:36
75	170803M2_75	1700819-13 QPFD-26 5	04-Aug-17	05:14:14
76	170803M2_76	1700963-01 SW VEL L2 0.25308	04-Aug-17	05:24:54
77	170803M2_77	1700963-02 SW VEL L3 0.21924	04-Aug-17	05:35:42
78	170803M2_78	1700963-03 SW VEL L4 0.25896	04-Aug-17	05:46:38
79	170803M2_79	1700963-04 VEL FOAM L2 0.02349	04-Aug-17	05:57:16
80	170803M2_80	IPA	04-Aug-17	06:08:00
81	170803M2_81	1700963-05 VEL FOAM L3 0.09911	04-Aug-17	06:18:49
82	170803M2_82	IPA	04-Aug-17	06:29:35
83	170803M2_83	1700963-06 VEL FOAM L4 0.03035	04-Aug-17	06:40:14
84	170803M2_84	IPA	04-Aug-17	06:50:52
85	170803M2_85	1700925-01 I001BC43S-170724 0.12112	04-Aug-17	07:01:39
86	170803M2_86	IPA	04-Aug-17	07:12:17
87	170803M2_87	1700925-03 I001BC50S-170724 0.12135	04-Aug-17	07:22:56
88	170803M2_88	IPA	04-Aug-17	07:33:42
89	170803M2_89	ST170803M2-6 PFC CS3 17H0202	04-Aug-17	07:44:20
90	170803M2_90	IPA	04-Aug-17	07:55:07

LC Calibration Standards Review Checklist Q4

		ION Ratio	Concentration	C-Cals Name	Sign Date	Correct I-Cal	Manual Integrations	N/A
Calibration ID: ST170803M2-1	(L) M H	NA	✓	X	X	X	X	☐
Calibration ID: -2	L (M) H	☐	X	X	X	X	X	☐
Calibration ID: -3	L (M) H	☐	X	X	X	X	X	☐
Calibration ID: -4	(L) M H	☐	X	X	X	X	X	☐
Calibration ID: -5	L (M) H	☐	X	X	X	X	X	☐
Calibration ID: -6	L (M) H	✓	X	X	X	X	X	✓
Calibration ID:	L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:	L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:	L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:	L M H	☐	☐	☐	☐	☐	☐	☐

Full Mass Cal. Date: 6/21/17

Run Log Present: ☑

# of Samples per Sequence Checked: ☑

Reviewed By: DM 9/4/15
Initials/Date

Comments:
Full List.

Quantify Sample Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory

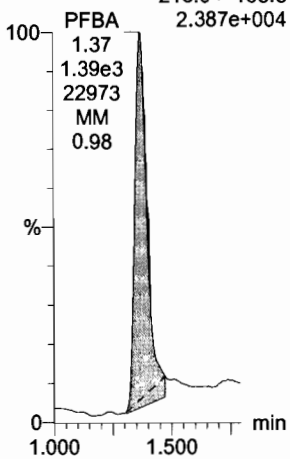
Dataset: U:\Q4.PRO\results\170803M2\170803M2-2.qld

Last Altered: Friday, August 04, 2017 08:44:22 Pacific Daylight Time
Printed: Friday, August 04, 2017 08:48:29 Pacific Daylight Time

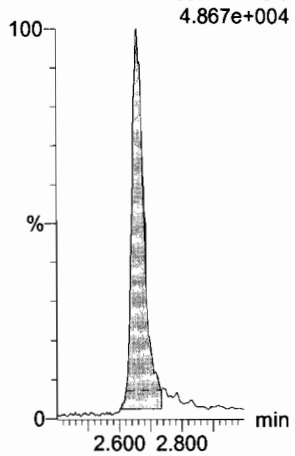
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-27-17.mdb 28 Jul 2017 08:06:09
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_2, Date: 03-Aug-2017, Time: 16:12:52, ID: ST170803M2-1 PFC CS0 17H0307, Description: PFC CS0 17H0307

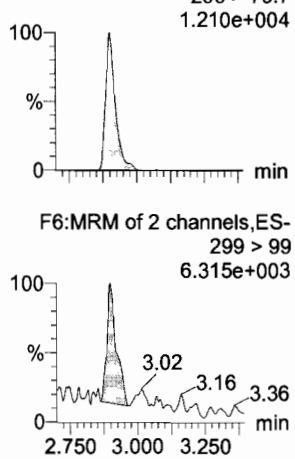
PFBA
F1:MRM of 2 channels,ES-
213.0 > 168.8
2.387e+004



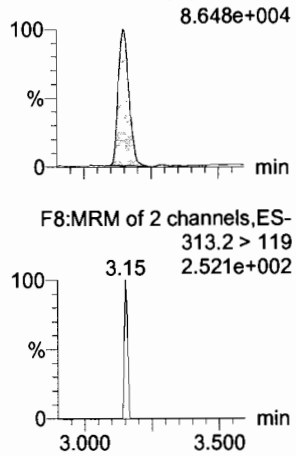
PFPeA
F4:MRM of 1 channel,ES-
263.1 > 218.9
4.867e+004



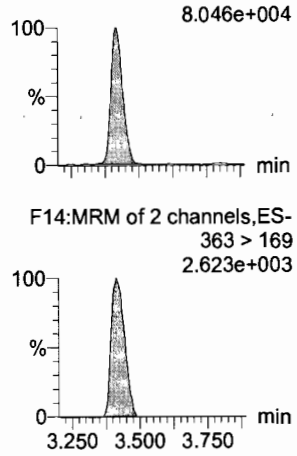
PFBS
F6:MRM of 2 channels,ES-
299 > 79.7
1.210e+004



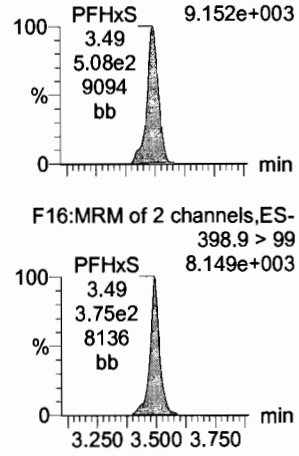
PFHxA
F8:MRM of 2 channels,ES-
313.2 > 268.9
8.648e+004



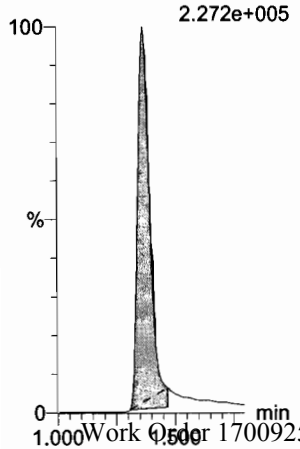
PFHpA
F14:MRM of 2 channels,ES-
363 > 318.9
8.046e+004



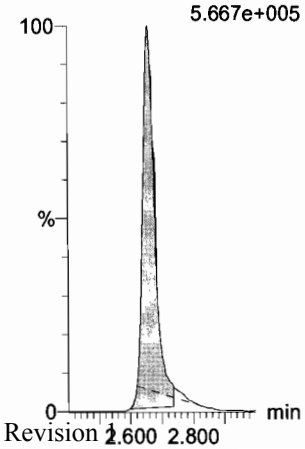
PFHxS
F16:MRM of 2 channels,ES-
398.9 > 79.6
9.152e+003



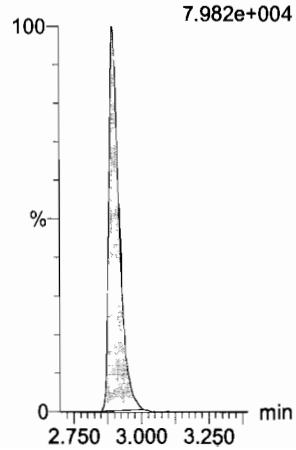
13C3-PFBA
F2:MRM of 1 channel,ES-
216.1 > 171.8
2.272e+005



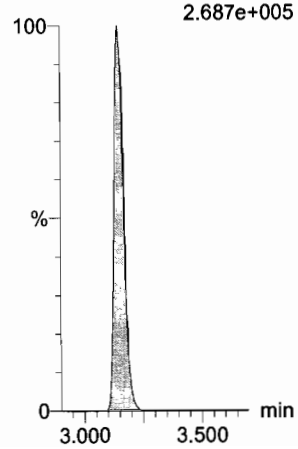
13C3-PFPeA
F5:MRM of 1 channel,ES-
266 > 221.8
5.667e+005



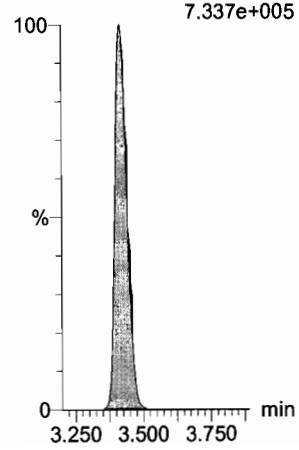
13C3-PFBS
F7:MRM of 1 channel,ES-
302 > 98.8
7.982e+004



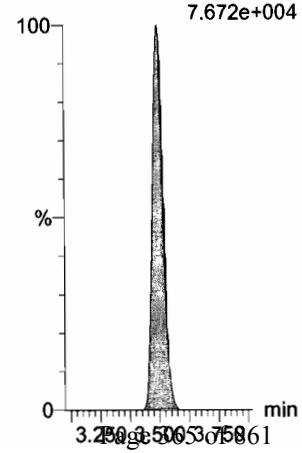
13C2-PFHxA
F9:MRM of 1 channel,ES-
315 > 269.8
2.687e+005



13C4-PFHpA
F15:MRM of 1 channel,ES-
367.2 > 321.8
7.337e+005



18O2-PFHxS
F18:MRM of 1 channel,ES-
403 > 102.6
7.672e+004



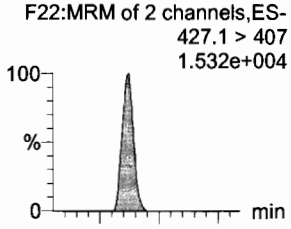
Vista Analytical Laboratory

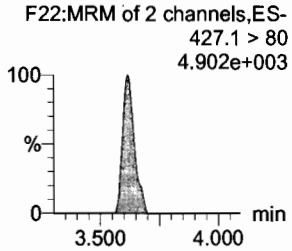
Dataset: U:\Q4.PRO\results\170803M2\170803M2-2.qld

Last Altered: Friday, August 04, 2017 08:44:22 Pacific Daylight Time
Printed: Friday, August 04, 2017 08:48:29 Pacific Daylight Time

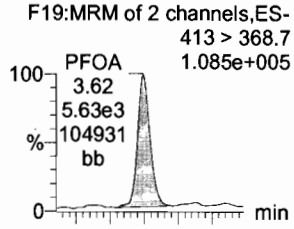
Name: 170803M2_2, Date: 03-Aug-2017, Time: 16:12:52, ID: ST170803M2-1 PFC CS0 17H0307, Description: PFC CS0 17H0307

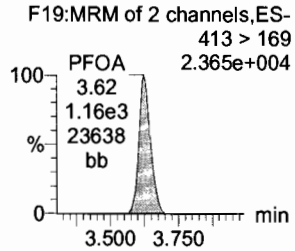
6:2 FTS



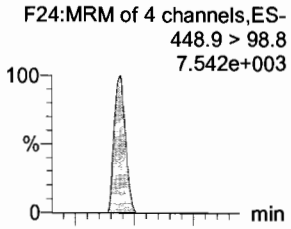


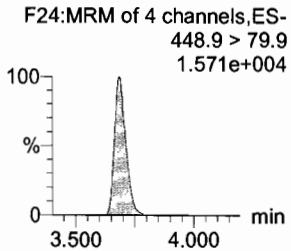
PFOA



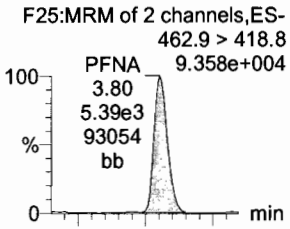


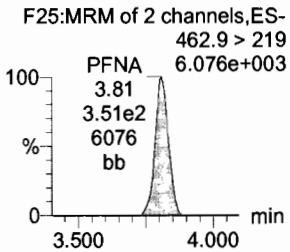
PFHpS



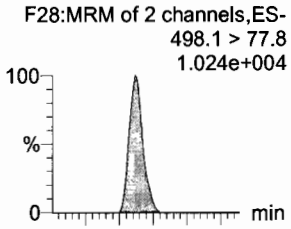


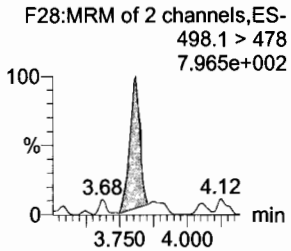
PFNA



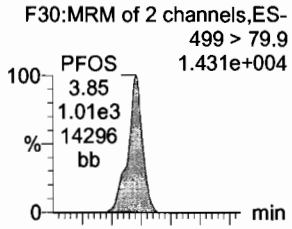


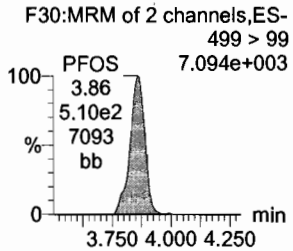
PFOSA



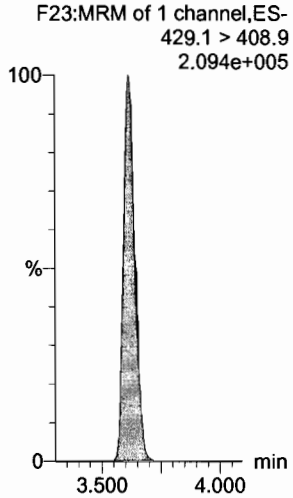


PFOS

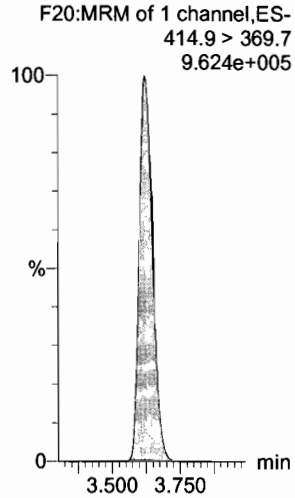




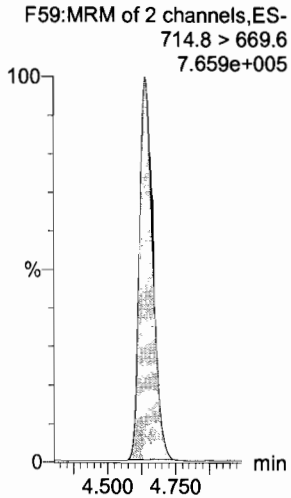
13C2-6:2 FTS



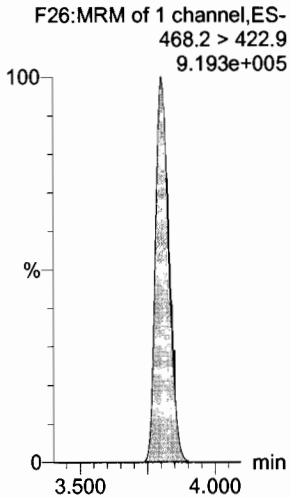
13C2-PFOA



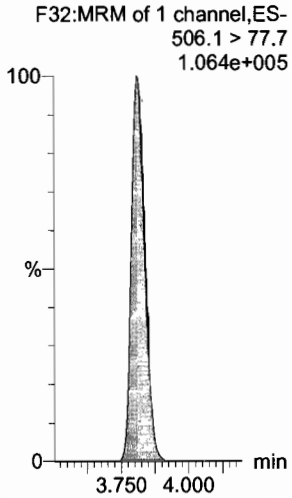
13C2-PFTeDA



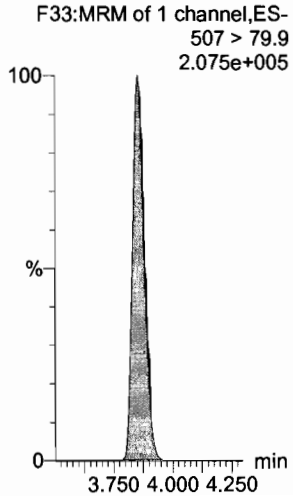
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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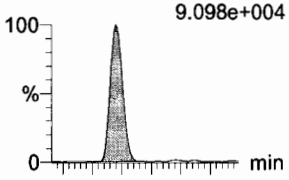
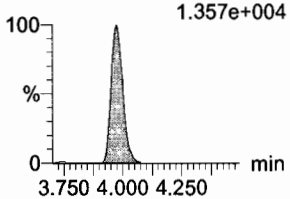
Last Altered: Friday, August 04, 2017 08:44:22 Pacific Daylight Time
Printed: Friday, August 04, 2017 08:48:29 Pacific Daylight Time

Name: 170803M2_2, Date: 03-Aug-2017, Time: 16:12:52, ID: ST170803M2-1 PFC CS0 17H0307, Description: PFC CS0 17H0307

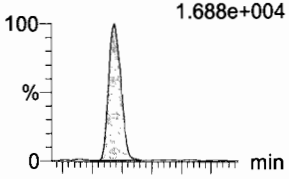
PFDA
F35:MRM of 2 channels,ES-
513 > 468.8
9.098e+004



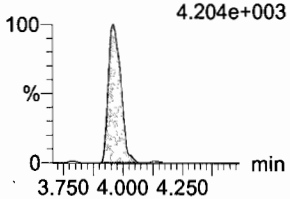
F35:MRM of 2 channels,ES-
513 > 219
1.357e+004



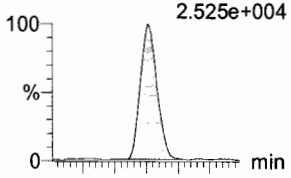
8:2 FTS
F40:MRM of 2 channels,ES-
527 > 506.9
1.688e+004



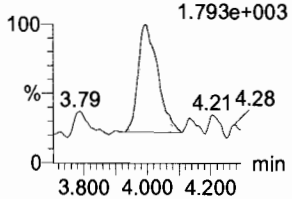
F40:MRM of 2 channels,ES-
527 > 80
4.204e+003



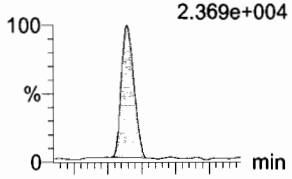
N-MeFOSAA
F45:MRM of 2 channels,ES-
570.1 > 419
2.525e+004



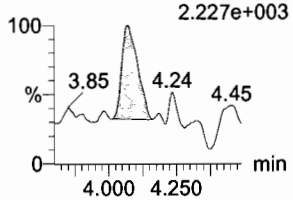
F45:MRM of 2 channels,ES-
570.1 > 483
1.793e+003



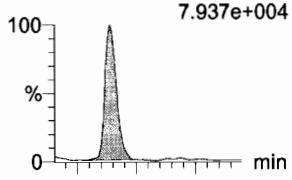
N-EtFOSAA
F48:MRM of 2 channels,ES-
584.2 > 419
2.369e+004



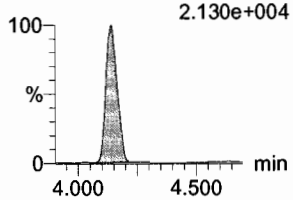
F48:MRM of 2 channels,ES-
584.2 > 483
2.227e+003



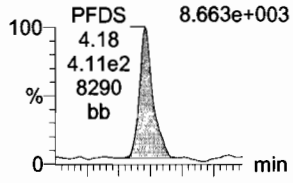
PFUnA
F43:MRM of 2 channels,ES-
562.9 > 518.9
7.937e+004



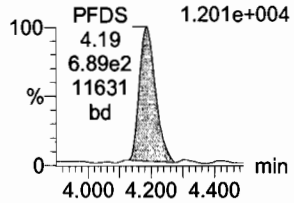
F43:MRM of 2 channels,ES-
562.9 > 269
2.130e+004



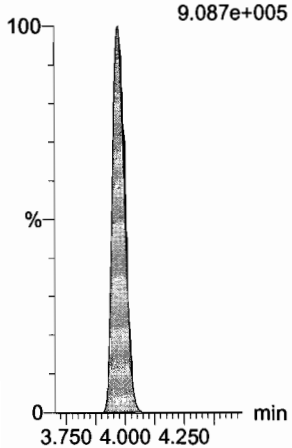
PFDS
F50:MRM of 2 channels,ES-
598.9 > 98.7
8.663e+003



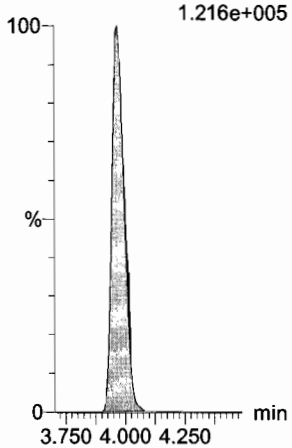
F50:MRM of 2 channels,ES-
598.9 > 80
1.201e+004



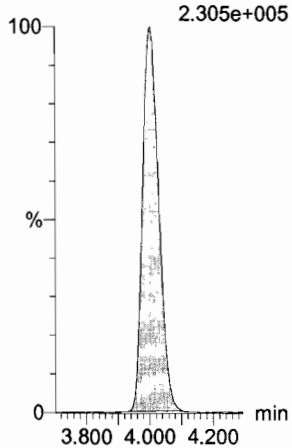
13C2-PFDA
F36:MRM of 1 channel,ES-
515.1 > 469.9
9.087e+005



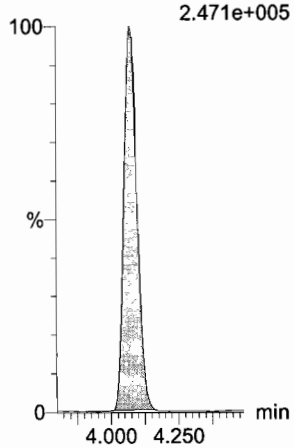
13C2-8:2 FTS
F41:MRM of 1 channel,ES-
529.1 > 508.7
1.216e+005



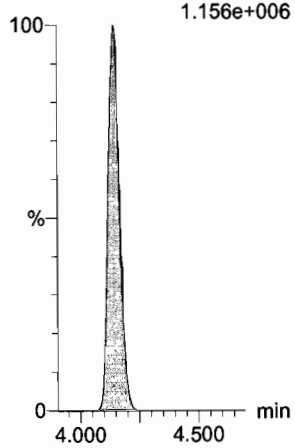
d3-N-MeFOSAA
F47:MRM of 1 channel,ES-
573.3 > 419
2.305e+005



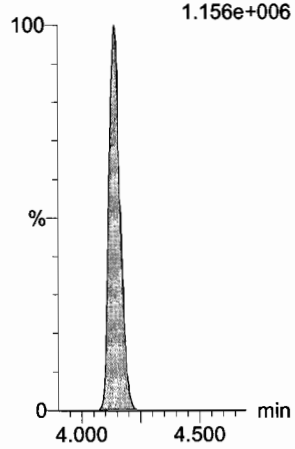
d5-N-EtFOSAA
F49:MRM of 1 channel,ES-
589.3 > 419
2.471e+005



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.156e+006



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.156e+006



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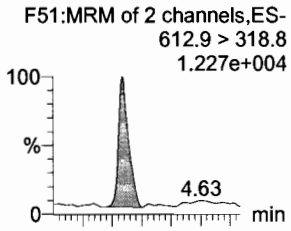
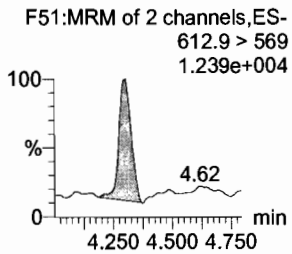
Last Altered: Friday, August 04, 2017 08:44:22 Pacific Daylight Time
Printed: Friday, August 04, 2017 08:48:29 Pacific Daylight Time

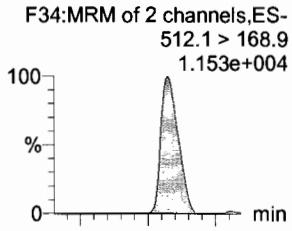
Name: 170803M2_2, Date: 03-Aug-2017, Time: 16:12:52, ID: ST170803M2-1 PFC CS0 17H0307, Description: PFC CS0 17H0307

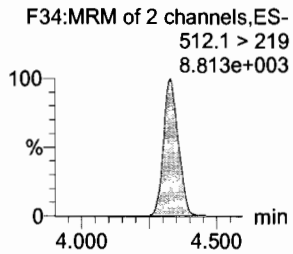
PFDoA



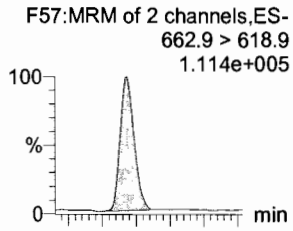


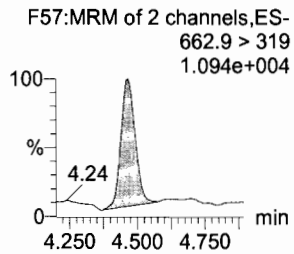
N-MeFOSA



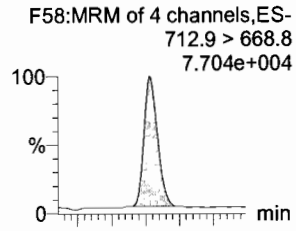


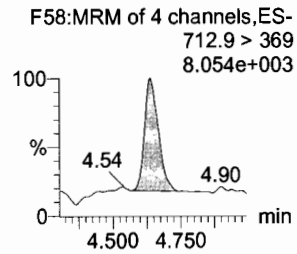
PFTrDA



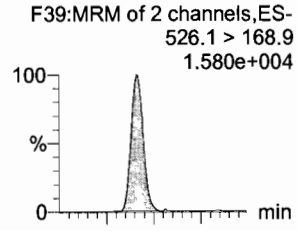


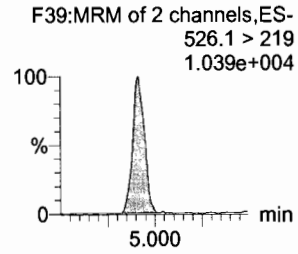
PFTeDA



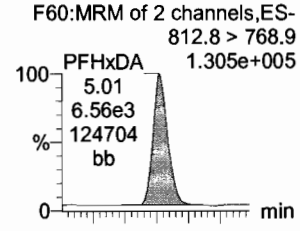


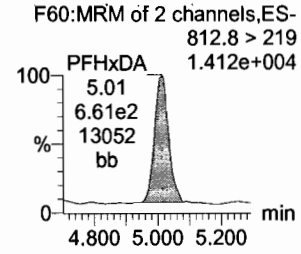
N-EtFOSA





PFHxDA





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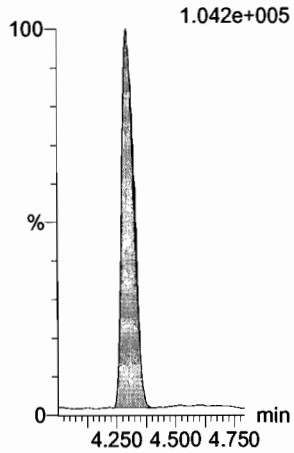
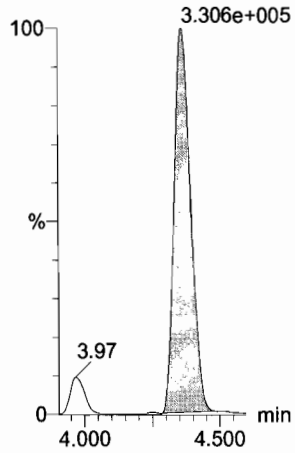


d3-N-MeFOSA



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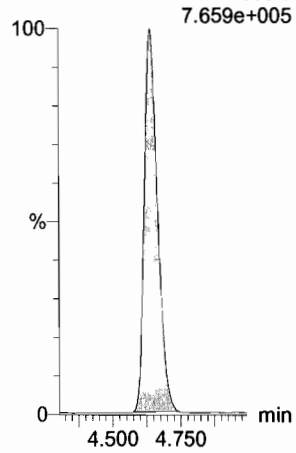
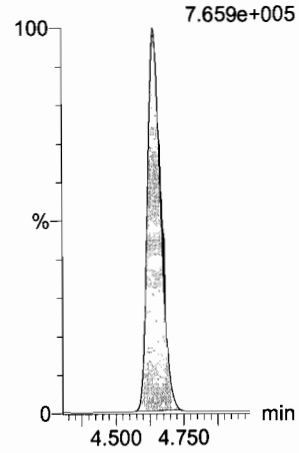
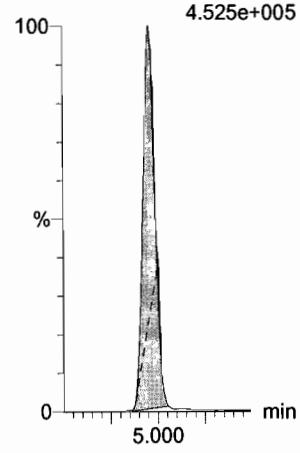


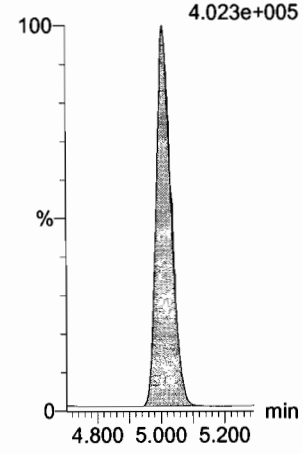
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA

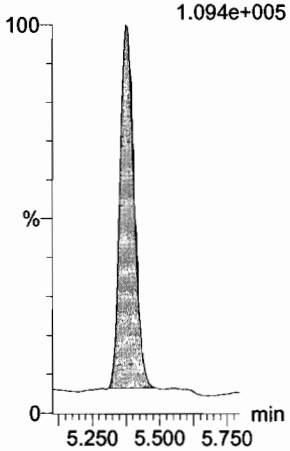


Dataset: U:\Q4.PRO\results\170803M2\170803M2-2.qld

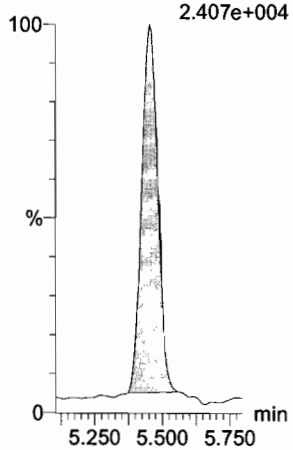
Last Altered: Friday, August 04, 2017 08:44:22 Pacific Daylight Time
Printed: Friday, August 04, 2017 08:48:29 Pacific Daylight Time

Name: 170803M2_2, Date: 03-Aug-2017, Time: 16:12:52, ID: ST170803M2-1 PFC CS0 17H0307, Description: PFC CS0 17H0307

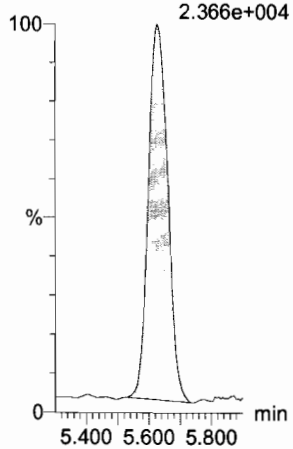
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
1.094e+005



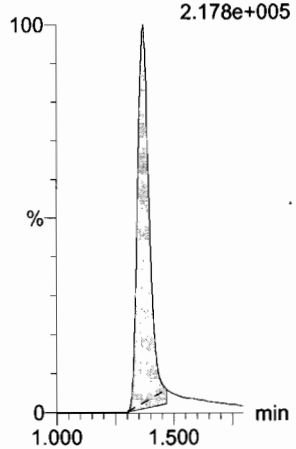
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
2.407e+004



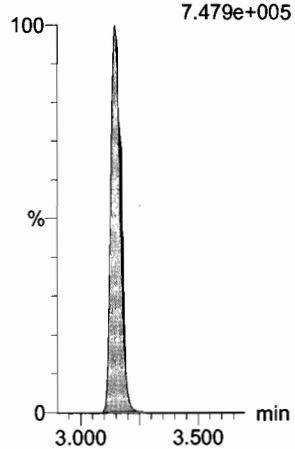
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
2.366e+004



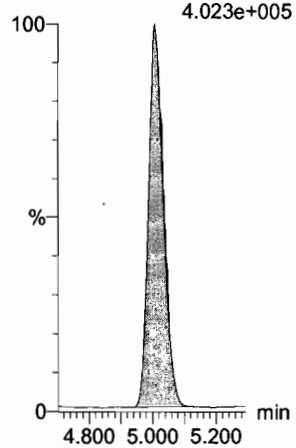
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.178e+005



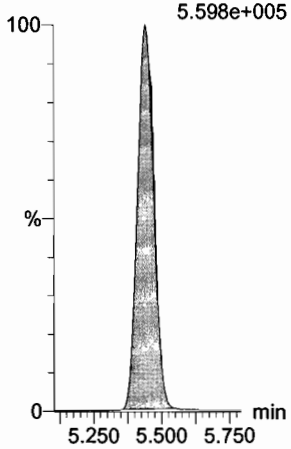
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
7.479e+005



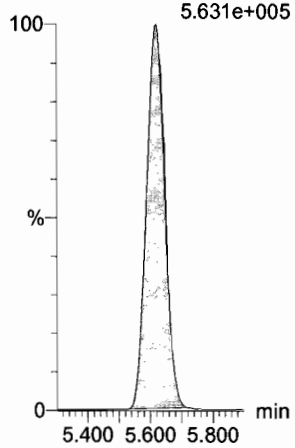
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.023e+005



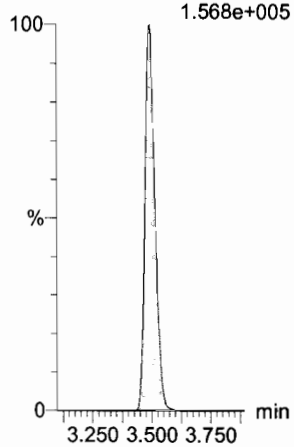
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
5.598e+005



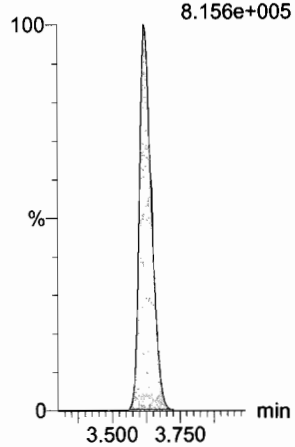
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
5.631e+005



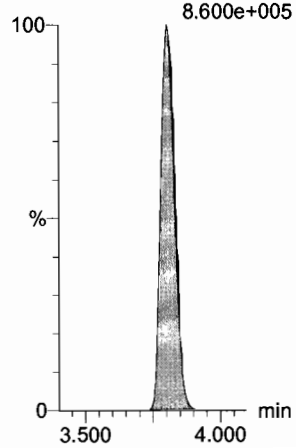
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.568e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
8.156e+005



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
8.600e+005



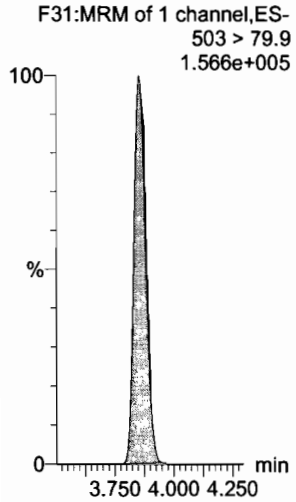
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-2.qld

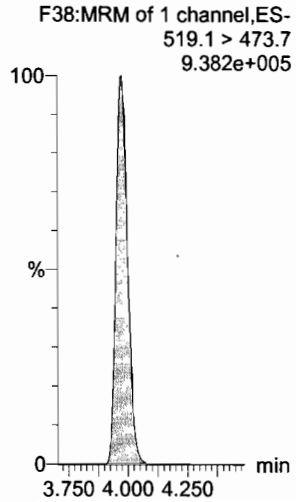
Last Altered: Friday, August 04, 2017 08:44:22 Pacific Daylight Time
Printed: Friday, August 04, 2017 08:48:29 Pacific Daylight Time

Name: 170803M2_2, Date: 03-Aug-2017, Time: 16:12:52, ID: ST170803M2-1 PFC CS0 17H0307, Description: PFC CS0 17H0307

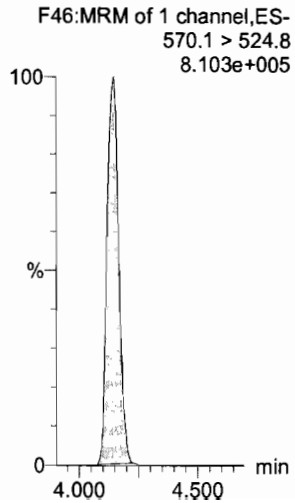
13C4-PFOS



13C6-PFDA



13C7-PFUnA



Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-22.qld

Last Altered: Friday, August 04, 2017 08:53:55 Pacific Daylight Time
Printed: Friday, August 04, 2017 08:57:24 Pacific Daylight Time

AC 8/4/17

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-27-17.mdb 28 Jul 2017 08:06:09
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_22, Date: 03-Aug-2017, Time: 19:47:10, ID: ST170803M2-2 PFC CS3 17H0202, Description: PFC CS3 17H0202

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1	PFBA	213.0 > 168.8	1.25e4	1.46e4		1.32	1.40	10.7	9.83	98.3
2	2	PFPeA	263.1 > 218.9	2.16e4	2.83e4		2.77	2.69	9.53	9.97	99.7
3	3	PFBS	299 > 79.7	5.37e3	3.54e3		2.96	2.92	19.0	10.0	100.3
4	4	PFHxA	313.2 > 268.9	3.86e4	1.39e4		3.19	3.16	13.9	9.89	98.9
5	5	PFHpA	363 > 318.9	3.70e4	3.85e4		3.45	3.43	12.0	9.98	99.8
6	6	PFHxS	398.9 > 79.6	4.93e3	3.96e3		3.56	3.51	15.6	9.24	92.4
7	7	6:2 FTS	427.1 > 407	8.90e3	1.09e4		3.64	3.63	10.2	9.01	90.1
8	8	PFOA	413 > 368.7	4.98e4	6.48e4		3.65	3.64	9.61	9.92	99.2
9	9	PFHpS	448.9 > 98.8	4.92e3	6.48e4		3.65	3.70	0.950	10.9	109.4
10	10	PFNA	462.9 > 418.8	5.06e4	5.73e4		3.83	3.82	11.0	10.1	101.1
11	11	PFOSA	498.1 > 77.8	5.22e3	6.57e3		3.84	3.83	9.94	9.28	92.8
12	12	PFOS	499 > 79.9	9.25e3	1.22e4		3.89	3.87	9.49	9.27	92.7
13	13	PFDA	513 > 468.8	6.07e4	6.05e4		4.01	3.99	12.6	10.3	103.3
14	14	8:2 FTS	527 > 506.9	7.16e3	6.37e3		4.00	3.99	14.0	9.96	99.6
15	15	N-MeFOSAA	570.1 > 419	1.53e4	1.32e4		4.03	4.02	189	10.6	105.9
16	16	N-EtFOSAA	584.2 > 419	1.18e4	1.29e4		4.10	4.09	148	9.62	96.2
17	17	PFUnA	562.9 > 518.9	3.97e4	6.77e4		4.17	4.16	7.33	9.57	95.7
18	18	PFDS	598.9 > 98.7	4.14e3	6.77e4		4.22	4.20	0.765	9.51	95.1
19	19	PFDoA	612.9 > 318.8	4.87e3	6.42e3		4.34	4.32	9.49	10.1	100.8
20	20	N-MeFOSA	512.1 > 168.9	8.72e3	2.37e4		4.29	4.36	55.2	54.7	109.4
21	21	PFTrDA	662.9 > 618.9	5.87e4	6.42e3		4.50	4.49	114	10.9	109.0
22	22	PFTeDA	712.9 > 668.8	3.91e4	4.55e4		4.68	4.67	10.7	9.92	99.2
23	23	N-EtFOSA	526.1 > 168.9	1.05e4	3.30e4		4.79	4.94	47.6	51.2	102.4
24	24	PFHxDA	812.8 > 768.9	5.79e4	2.19e4		5.06	5.04	13.2	10.3	103.2
25	25	PFODA	912.8 > 868.8	5.71e4	2.19e4		5.43	5.41	13.0	11.4	114.3
26	26	N-MeFOSE	616.1 > 58.9	1.37e4	3.88e4		5.42	5.47	52.9	51.2	102.3
27	27	N-EtFOSE	630.1 > 58.9	1.55e4	3.85e4		5.59	5.64	60.5	51.6	103.2
28	28	13C3-PFBA	216.1 > 171.8	1.46e4	1.39e4	1.006	1.32	1.40	13.1	13.0	104.1
29	29	13C3-PFPeA	266 > 221.8	2.83e4	4.03e4	0.275	2.77	2.69	3.51	12.8	102.1
30	30	13C3-PFBS	302 > 98.8	3.54e3	4.03e4	0.034	2.96	2.92	0.439	12.9	102.9
31	31	13C2-PFHxA	315 > 269.8	1.39e4	4.03e4	0.334	3.19	3.16	1.72	5.16	103.2

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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-22.qld

Last Altered: Friday, August 04, 2017 08:53:55 Pacific Daylight Time
Printed: Friday, August 04, 2017 08:57:24 Pacific Daylight Time

Name: 170803M2_22, Date: 03-Aug-2017, Time: 19:47:10, ID: ST170803M2-2 PFC CS3 17H0202, Description: PFC CS3 17H0202

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	32	13C4-PFHpA	367.2 > 321.8	3.85e4	4.03e4	0.414	3.45	3.43	4.77	11.5	92.2
33	33	18O2-PFHxS	403 > 102.6	3.96e3	7.76e3	0.475	3.56	3.51	6.38	13.4	107.3
34	34	13C2-6:2 FTS	429.1 > 408.9	1.09e4	4.66e4	0.214	3.64	3.63	2.94	13.7	109.8
35	35	13C2-PFOA	414.9 > 369.7	6.48e4	4.66e4	1.298	3.65	3.64	17.4	13.4	107.0
36	36	13C5-PFNA	468.2 > 422.9	5.73e4	5.64e4	1.094	3.83	3.82	12.7	11.6	92.9
37	37	13C8-PFOSA	506.1 > 77.7	6.57e3	5.95e4	0.124	3.84	3.83	1.38	11.1	88.8
38	38	13C8-PFOS	507 > 79.9	1.22e4	1.00e4	1.153	3.89	3.87	15.2	13.2	105.6
39	39	13C2-PFDA	515.1 > 469.9	6.05e4	5.77e4	1.059	4.01	3.99	13.1	12.4	99.0
40	40	13C2-8:2 FTS	529.1 > 508.7	6.37e3	5.77e4	0.129	4.00	3.98	1.38	10.7	85.9
41	41	d3-N-MeFOSAA	573.3 > 419	1.32e4	5.95e4	0.019	4.03	4.02	2.77	144	88.3
42	42	d5-N-EtFOSAA	589.3 > 419	1.29e4	5.95e4	0.019	4.12	4.09	2.72	144	88.4
43	43	13C2-PFUnA	565 > 519.8	6.77e4	5.95e4	1.172	4.17	4.15	14.2	12.1	97.0
44	44	13C2-PFDoA	615 > 569.7	6.42e3	5.95e4	0.118	4.34	4.32	1.35	11.4	91.1
45	45	d3-N-MeFOSA	515.2 > 168.9	2.37e4	5.95e4	0.040	4.29	4.39	4.97	123	82.0
46	46	13C2-PFTeDA	714.8 > 669.6	4.55e4	5.95e4	0.801	4.68	4.67	9.57	11.9	95.5
47	47	d5-N-ETFOSA	531.1 > 168.9	3.30e4	5.95e4	0.055	4.85	4.98	6.94	126	84.0
48	48	13C2-PFHxDA	815 > 769.7	2.19e4	5.95e4	0.991	5.06	5.04	4.61	4.65	93.0
49	49	d7-N-MeFOSE	623.1 > 58.9	3.88e4	5.95e4	0.065	5.42	5.45	8.15	125	83.4
50	50	d9-N-EtFOSE	639.2 > 58.8	3.85e4	5.95e4	0.065	5.59	5.63	8.10	125	83.3
51	51	13C4-PFBA	217 > 171.8	1.39e4	1.39e4	1.000	1.32	1.40	12.5	12.5	100.0
52	52	13C5-PFHxA	318 > 272.9	4.03e4	4.03e4	1.000	3.19	3.16	5.00	5.00	100.0
53	53	13C3-PFHxS	401.9 > 79.9	7.76e3	7.76e3	1.000	3.56	3.51	12.5	12.5	100.0
54	54	13C8-PFOA	421.3 > 376	4.66e4	4.66e4	1.000	3.65	3.64	12.5	12.5	100.0
55	55	13C9-PFNA	472.2 > 426.9	5.64e4	5.64e4	1.000	3.83	3.82	12.5	12.5	100.0
56	56	13C4-PFOS	503 > 79.9	1.00e4	1.00e4	1.000	3.89	3.87	12.5	12.5	100.0
57	57	13C6-PFDA	519.1 > 473.7	5.77e4	5.77e4	1.000	4.01	3.99	12.5	12.5	100.0
58	58	13C7-PFUnA	570.1 > 524.8	5.95e4	5.95e4	1.000	4.17	4.15	12.5	12.5	100.0

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Dataset: Untitled

Last Altered: Friday, August 04, 2017 09:33:42 Pacific Daylight Time
Printed: Friday, August 04, 2017 10:28:42 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-27-17.mdb 28 Jul 2017 08:06:09
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	170803M2_1	IPA	03-Aug-17	16:02:09
2	170803M2_2	ST170803M2-1 PFC CS0 17H0307	03-Aug-17	16:12:52
3	170803M2_3	IPA	03-Aug-17	16:23:40
4	170803M2_4	1700925-02 SB01-170724 0.12178	03-Aug-17	16:34:26
5	170803M2_5	1700925-06 EB01-170724 0.1185	03-Aug-17	16:45:12
6	170803M2_6	1700929-01 MATP01001 0.11834	03-Aug-17	16:55:51
7	170803M2_7	1700938-01 NORP08102 0.11844	03-Aug-17	17:06:36
8	170803M2_8	1700938-02 NORP08103 0.12014	03-Aug-17	17:17:30
9	170803M2_9	1700936-01 BULK TANK #1 0.005	03-Aug-17	17:28:17
10	170803M2_10	1700936-02 BULK TANK #2 0.005	03-Aug-17	17:38:55
11	170803M2_11	1700871-11@5X 16-GW-16_MW04-2017071...	03-Aug-17	17:49:34
12	170803M2_12	IPA	03-Aug-17	18:00:12
13	170803M2_13	1700925-01@15X I001BC43S-170724 0.12112	03-Aug-17	18:10:51
14	170803M2_14	IPA	03-Aug-17	18:21:33
15	170803M2_15	1700925-03@15X I001BC50S-170724 0.12135	03-Aug-17	18:32:17
16	170803M2_16	IPA	03-Aug-17	18:42:55
17	170803M2_17	B7G0122-BS1 OPR 0.25	03-Aug-17	18:53:33
18	170803M2_18	IPA	03-Aug-17	19:04:20
19	170803M2_19	B7G0122-BLK1 Method Blank 0.25	03-Aug-17	19:14:58
20	170803M2_20	1700891-06RE1 VEL FOAM 0.17113	03-Aug-17	19:25:37
21	170803M2_21	IPA	03-Aug-17	19:36:23
22	170803M2_22	ST170803M2-2 PFC CS3 17H0202	03-Aug-17	19:47:10
23	170803M2_23	IPA	03-Aug-17	19:57:57
24	170803M2_24	B7H0007-BS1 OPR 0.25	03-Aug-17	20:08:35
25	170803M2_25	B7H0010-BS1 OPR 5	03-Aug-17	20:19:13
26	170803M2_26	B7H0011-BS1 OPR 5	03-Aug-17	20:29:52
27	170803M2_27	B7H0012-BS1 OPR 0.25	03-Aug-17	20:40:30
28	170803M2_28	B7H0007-BSD1 LCS Dup 0.25	03-Aug-17	20:51:17
29	170803M2_29	IPA	03-Aug-17	21:01:55
30	170803M2_30	B7H0007-BLK1 Method Blank 0.25	03-Aug-17	21:12:41
31	170803M2_31	B7H0010-BLK1 Method Blank 5	03-Aug-17	21:23:20

Dataset: Untitled

Last Altered: Friday, August 04, 2017 09:33:42 Pacific Daylight Time
Printed: Friday, August 04, 2017 10:28:42 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	170803M2_32	B7H0011-BLK1 Method Blank 5	03-Aug-17	21:33:58
33	170803M2_33	B7H0012-BLK1 Method Blank 0.25	03-Aug-17	21:44:37
34	170803M2_34	1700862-01 WS 252 0.00025	03-Aug-17	21:55:15
35	170803M2_35	1700952-01 CP-IDW-072517 0.24347	03-Aug-17	22:06:01
36	170803M2_36	1700953-01 TF4-IDW-072517-01 0.26372	03-Aug-17	22:16:55
37	170803M2_37	1700953-02 TF4-IDW-072517-02 0.26543	03-Aug-17	22:27:44
38	170803M2_38	1700954-01 TF5-IDW-072517 0.25837	03-Aug-17	22:38:30
39	170803M2_39	1700818-01 QPFD-1 5	03-Aug-17	22:49:08
40	170803M2_40	1700818-02 QPFD-2 5	03-Aug-17	22:59:55
41	170803M2_41	1700818-03 QPFD-3 5	03-Aug-17	23:10:33
42	170803M2_42	1700818-04 QPFD-4 5	03-Aug-17	23:21:11
43	170803M2_43	1700818-05 QPFD-5 5	03-Aug-17	23:31:50
44	170803M2_44	IPA	03-Aug-17	23:42:28
45	170803M2_45	ST170803M2-3 PFC CS3 17H0202	03-Aug-17	23:53:06
46	170803M2_46	IPA	04-Aug-17	00:03:53
47	170803M2_47	1700818-06 QPFD-6 5	04-Aug-17	00:14:34
48	170803M2_48	1700818-07 QPFD-7 5	04-Aug-17	00:25:19
49	170803M2_49	1700818-08 QPFD-8 5	04-Aug-17	00:35:57
50	170803M2_50	1700818-09 QPFD-9 5	04-Aug-17	00:46:44
51	170803M2_51	1700818-10 QPFD-10 5	04-Aug-17	00:57:39
52	170803M2_52	1700818-11 QPFD-11 5	04-Aug-17	01:08:26
53	170803M2_53	1700818-12 QPFD-12 5	04-Aug-17	01:19:04
54	170803M2_54	1700818-13 QPFD-13 5	04-Aug-17	01:29:51
55	170803M2_55	1700903-01 1958 5	04-Aug-17	01:40:29
56	170803M2_56	B7H0010-DUP1 Duplicate 5	04-Aug-17	01:51:08
57	170803M2_57	1700819-01 QPFD-14 5	04-Aug-17	02:01:46
58	170803M2_58	IPA	04-Aug-17	02:12:27
59	170803M2_59	ST170803M2-4 PFC CS0 17H0307	04-Aug-17	02:23:13
60	170803M2_60	IPA	04-Aug-17	02:33:58
61	170803M2_61	1700819-02 QPFD-15 5	04-Aug-17	02:44:36
62	170803M2_62	1700819-03 QPFD-16 5	04-Aug-17	02:55:15
63	170803M2_63	1700819-04 QPFD-17 5	04-Aug-17	03:05:53
64	170803M2_64	1700819-05 QPFD-18 5	04-Aug-17	03:16:32
65	170803M2_65	1700819-06 QPFD-19 5	04-Aug-17	03:27:10

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Dataset: Untitled

Last Altered: Friday, August 04, 2017 09:33:42 Pacific Daylight Time
Printed: Friday, August 04, 2017 10:28:42 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
66	170803M2_66	1700819-07 QPFD-20 5	04-Aug-17	03:37:48
67	170803M2_67	1700819-08 QPFD-21 5	04-Aug-17	03:48:35
68	170803M2_68	1700819-09 QPFD-22 5	04-Aug-17	03:59:13
69	170803M2_69	1700819-10 QPFD-23 5	04-Aug-17	04:10:00
70	170803M2_70	1700819-11 QPFD-24 5	04-Aug-17	04:20:46
71	170803M2_71	IPA	04-Aug-17	04:31:33
72	170803M2_72	ST170803M2-5 PFC CS3 17H0202	04-Aug-17	04:42:11
73	170803M2_73	IPA	04-Aug-17	04:52:57
74	170803M2_74	1700819-12 QPFD-25 5	04-Aug-17	05:03:36
75	170803M2_75	1700819-13 QPFD-26 5	04-Aug-17	05:14:14
76	170803M2_76	1700963-01 SW VEL L2 0.25308	04-Aug-17	05:24:54
77	170803M2_77	1700963-02 SW VEL L3 0.21924	04-Aug-17	05:35:42
78	170803M2_78	1700963-03 SW VEL L4 0.25896	04-Aug-17	05:46:38
79	170803M2_79	1700963-04 VEL FOAM L2 0.02349	04-Aug-17	05:57:16
80	170803M2_80	IPA	04-Aug-17	06:08:00
81	170803M2_81	1700963-05 VEL FOAM L3 0.09911	04-Aug-17	06:18:49
82	170803M2_82	IPA	04-Aug-17	06:29:35
83	170803M2_83	1700963-06 VEL FOAM L4 0.03035	04-Aug-17	06:40:14
84	170803M2_84	IPA	04-Aug-17	06:50:52
85	170803M2_85	1700925-01 I001BC43S-170724 0.12112	04-Aug-17	07:01:39
86	170803M2_86	IPA	04-Aug-17	07:12:17
87	170803M2_87	1700925-03 I001BC50S-170724 0.12135	04-Aug-17	07:22:56
88	170803M2_88	IPA	04-Aug-17	07:33:42
89	170803M2_89	ST170803M2-6 PFC CS3 17H0202	04-Aug-17	07:44:20
90	170803M2_90	IPA	04-Aug-17	07:55:07

Quantify Sample Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory

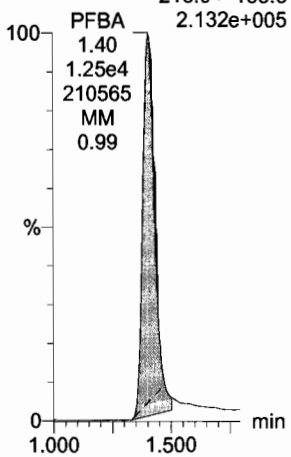
Dataset: U:\Q4.PRO\results\170803M2\170803M2-22.qld

Last Altered: Friday, August 04, 2017 08:53:55 Pacific Daylight Time
Printed: Friday, August 04, 2017 08:57:24 Pacific Daylight Time

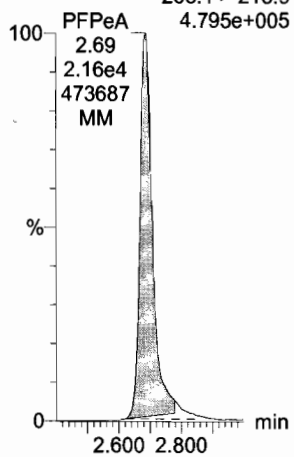
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-27-17.mdb 28 Jul 2017 08:06:09
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_22, Date: 03-Aug-2017, Time: 19:47:10, ID: ST170803M2-2 PFC CS3 17H0202, Description: PFC CS3 17H0202

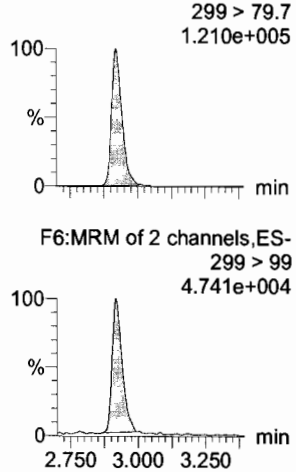
PFBA
F1:MRM of 2 channels,ES-
213.0 > 168.8
2.132e+005



PFPeA
F4:MRM of 1 channel,ES-
263.1 > 218.9
4.795e+005

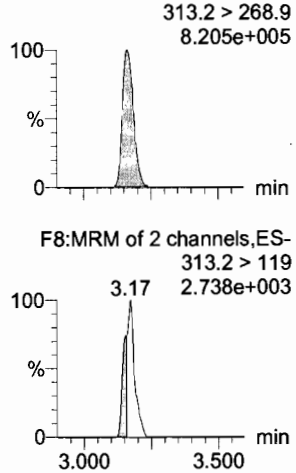


PFBS
F6:MRM of 2 channels,ES-
299 > 79.7
1.210e+005



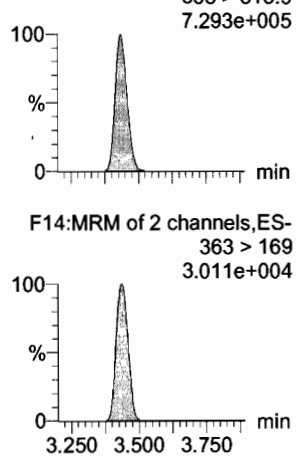
F6:MRM of 2 channels,ES-
299 > 99
4.741e+004

PFHxA
F8:MRM of 2 channels,ES-
313.2 > 268.9
8.205e+005



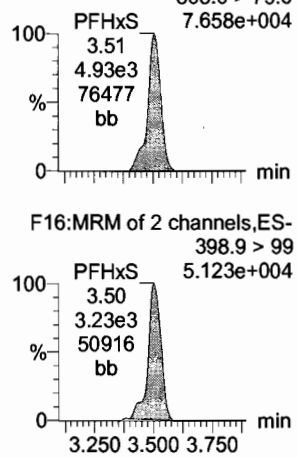
F8:MRM of 2 channels,ES-
313.2 > 119
2.738e+003

PFHpA
F14:MRM of 2 channels,ES-
363 > 318.9
7.293e+005



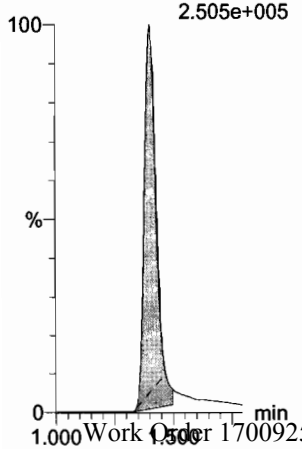
F14:MRM of 2 channels,ES-
363 > 169
3.011e+004

PFHxS
F16:MRM of 2 channels,ES-
398.9 > 79.6
7.658e+004

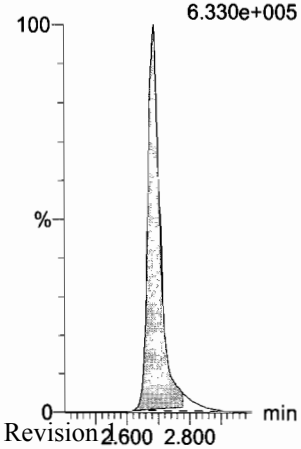


F16:MRM of 2 channels,ES-
398.9 > 99
5.123e+004

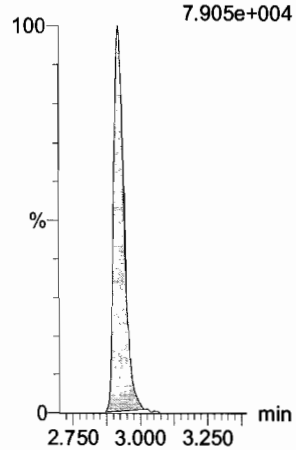
13C3-PFBA
F2:MRM of 1 channel,ES-
216.1 > 171.8
2.505e+005



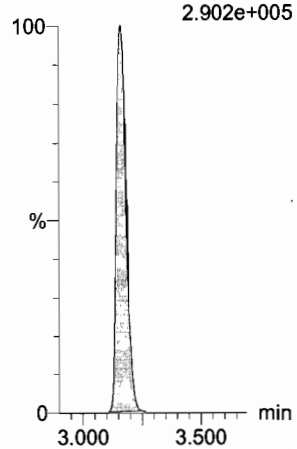
13C3-PFPeA
F5:MRM of 1 channel,ES-
266 > 221.8
6.330e+005



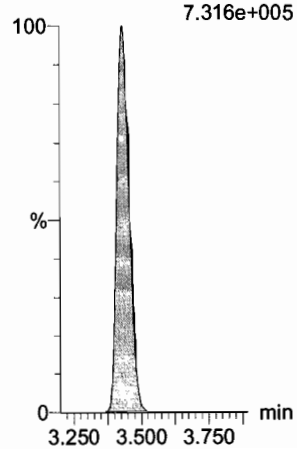
13C3-PFBS
F7:MRM of 1 channel,ES-
302 > 98.8
7.905e+004



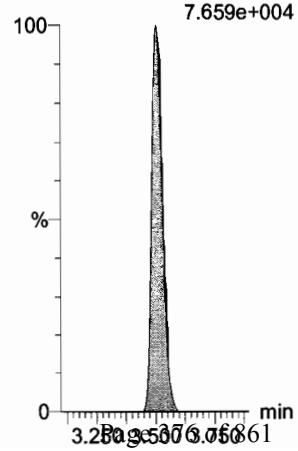
13C2-PFHxA
F9:MRM of 1 channel,ES-
315 > 269.8
2.902e+005



13C4-PFHpA
F15:MRM of 1 channel,ES-
367.2 > 321.8
7.316e+005



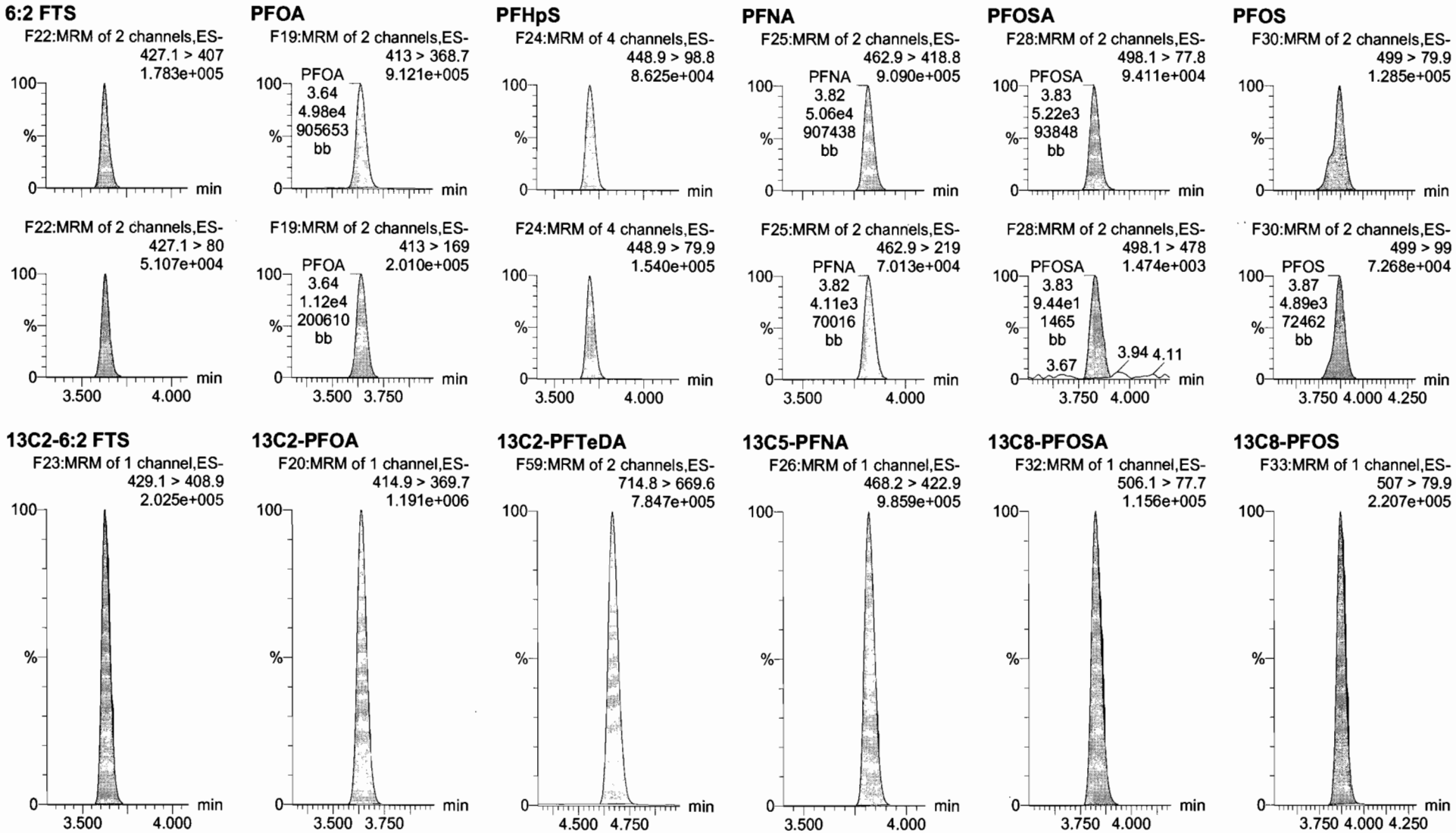
18O2-PFHxS
F18:MRM of 1 channel,ES-
403 > 102.6
7.659e+004



Dataset: U:\Q4.PRO\results\170803M2\170803M2-22.qld

Last Altered: Friday, August 04, 2017 08:53:55 Pacific Daylight Time
Printed: Friday, August 04, 2017 08:57:24 Pacific Daylight Time

Name: 170803M2_22, Date: 03-Aug-2017, Time: 19:47:10, ID: ST170803M2-2 PFC CS3 17H0202, Description: PFC CS3 17H0202



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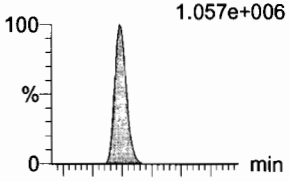
Dataset: U:\Q4.PRO\results\170803M2\170803M2-22.qld

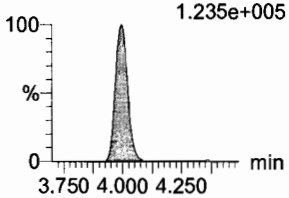
Last Altered: Friday, August 04, 2017 08:53:55 Pacific Daylight Time
Printed: Friday, August 04, 2017 08:57:24 Pacific Daylight Time

Name: 170803M2_22, Date: 03-Aug-2017, Time: 19:47:10, ID: ST170803M2-2 PFC CS3 17H0202, Description: PFC CS3 17H0202

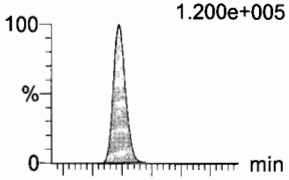
PFDA
F35:MRM of 2 channels,ES-
513 > 468.8
1.057e+006



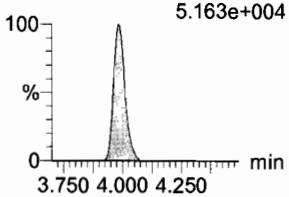
F35:MRM of 2 channels,ES-
513 > 219
1.235e+005



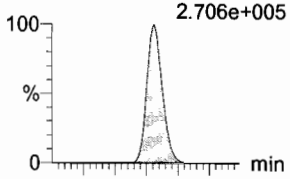
8:2 FTS
F40:MRM of 2 channels,ES-
527 > 506.9
1.200e+005



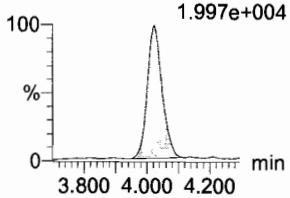
F40:MRM of 2 channels,ES-
527 > 80
5.163e+004



N-MeFOSAA
F45:MRM of 2 channels,ES-
570.1 > 419
2.706e+005

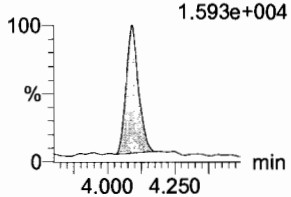


F45:MRM of 2 channels,ES-
570.1 > 483
1.997e+004

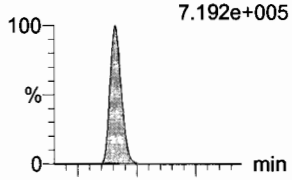


N-EtFOSAA
F48:MRM of 2 channels,ES-
584.2 > 419
2.174e+005

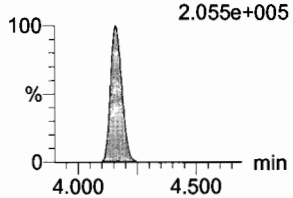
F48:MRM of 2 channels,ES-
584.2 > 483
1.593e+004



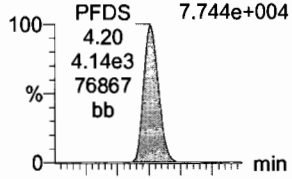
PFUnA
F43:MRM of 2 channels,ES-
562.9 > 518.9
7.192e+005



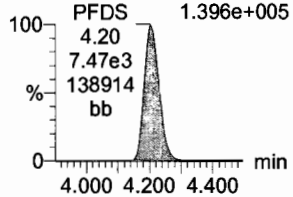
F43:MRM of 2 channels,ES-
562.9 > 269
2.055e+005



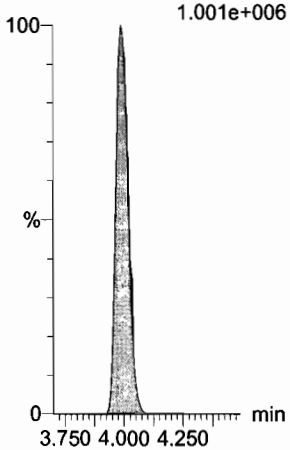
PFDS
F50:MRM of 2 channels,ES-
598.9 > 98.7
7.744e+004



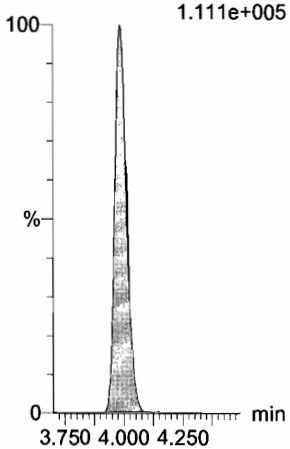
F50:MRM of 2 channels,ES-
598.9 > 80
1.396e+005



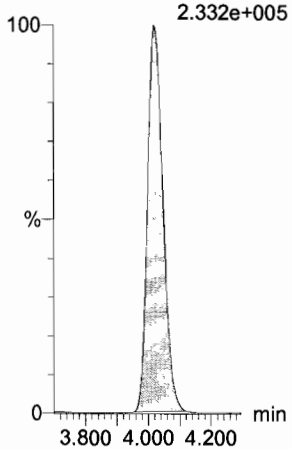
13C2-PFDA
F36:MRM of 1 channel,ES-
515.1 > 469.9
1.001e+006



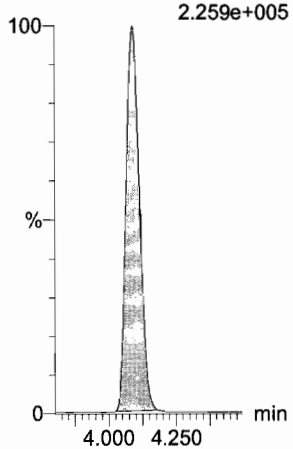
13C2-8:2 FTS
F41:MRM of 1 channel,ES-
529.1 > 508.7
1.111e+005



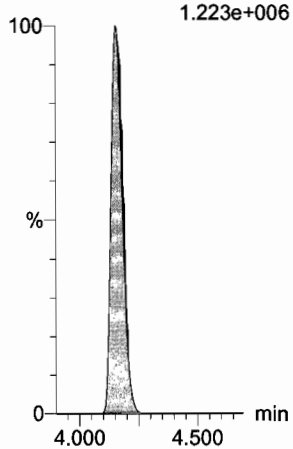
d3-N-MeFOSAA
F47:MRM of 1 channel,ES-
573.3 > 419
2.332e+005



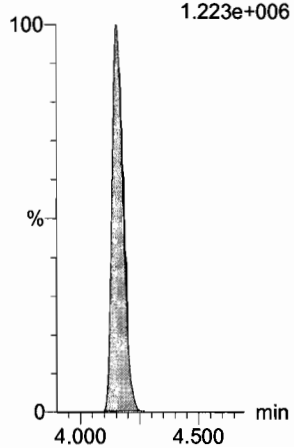
d5-N-EtFOSAA
F49:MRM of 1 channel,ES-
589.3 > 419
2.259e+005



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.223e+006



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.223e+006



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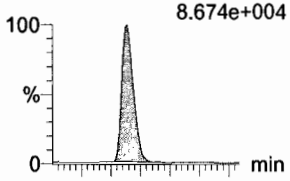
Dataset: U:\Q4.PRO\results\170803M2\170803M2-22.qld

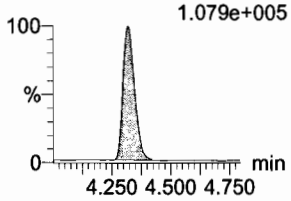
Last Altered: Friday, August 04, 2017 08:53:55 Pacific Daylight Time
Printed: Friday, August 04, 2017 08:57:24 Pacific Daylight Time

Name: 170803M2_22, Date: 03-Aug-2017, Time: 19:47:10, ID: ST170803M2-2 PFC CS3 17H0202, Description: PFC CS3 17H0202

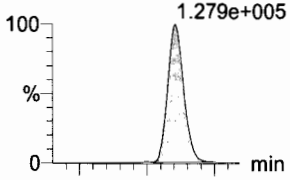
PFDoA
F51:MRM of 2 channels,ES-
612.9 > 318.8
8.674e+004



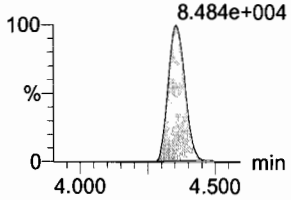
F51:MRM of 2 channels,ES-
612.9 > 569
1.079e+005



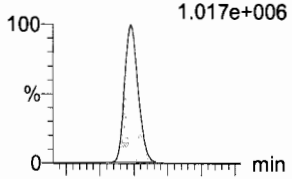
N-MeFOSA
F34:MRM of 2 channels,ES-
512.1 > 168.9
1.279e+005



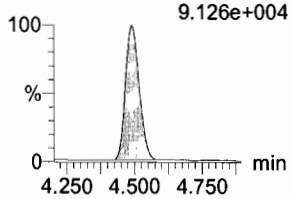
F34:MRM of 2 channels,ES-
512.1 > 219
8.484e+004



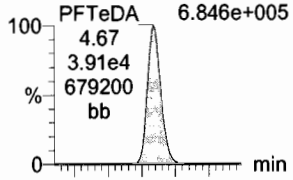
PFTrDA
F57:MRM of 2 channels,ES-
662.9 > 618.9
1.017e+006



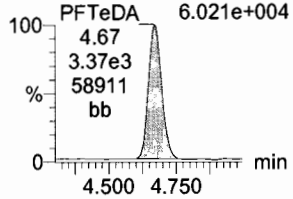
F57:MRM of 2 channels,ES-
662.9 > 319
9.126e+004



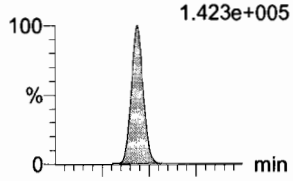
PFTeDA
F58:MRM of 4 channels,ES-
712.9 > 668.8
6.846e+005



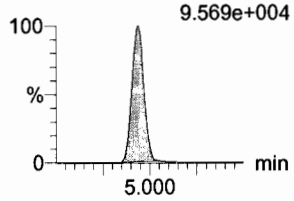
F58:MRM of 4 channels,ES-
712.9 > 369
6.021e+004



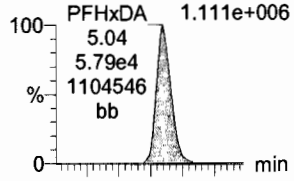
N-EtFOSA
F39:MRM of 2 channels,ES-
526.1 > 168.9
1.423e+005



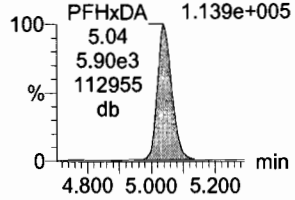
F39:MRM of 2 channels,ES-
526.1 > 219
9.569e+004



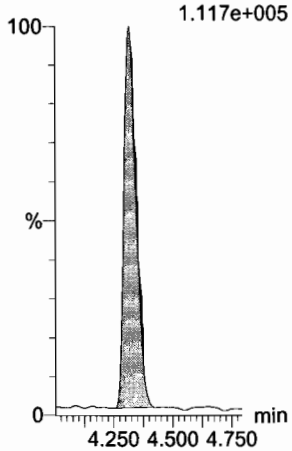
PFHxDA
F60:MRM of 2 channels,ES-
812.8 > 768.9
1.111e+006



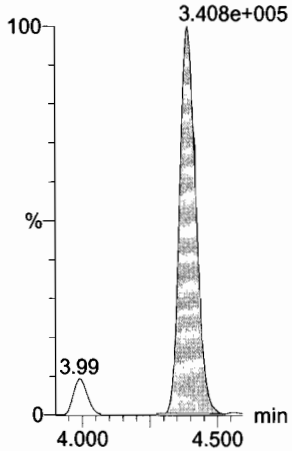
F60:MRM of 2 channels,ES-
812.8 > 219
1.139e+005



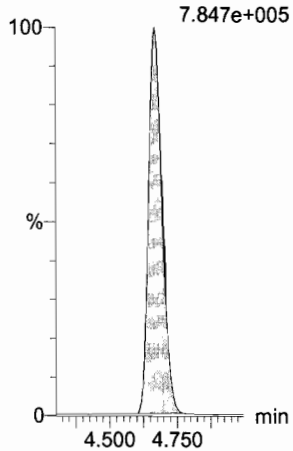
13C2-PFDoA
F52:MRM of 1 channel,ES-
615 > 569.7
1.117e+005



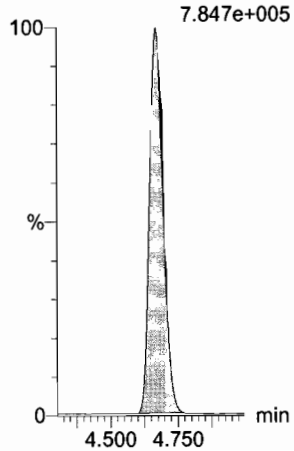
d3-N-MeFOSA
F37:MRM of 1 channel,ES-
515.2 > 168.9
3.408e+005



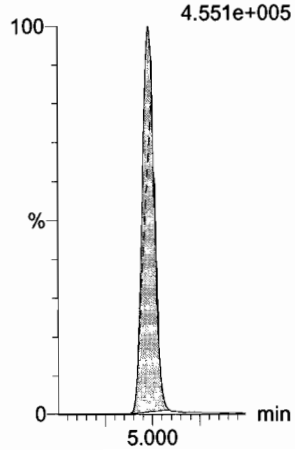
13C2-PFTeDA
F59:MRM of 2 channels,ES-
714.8 > 669.6
7.847e+005



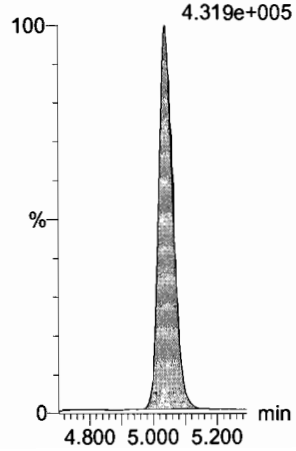
13C2-PFTeDA
F59:MRM of 2 channels,ES-
714.8 > 669.6
7.847e+005



d5-N-ETFOSA
F42:MRM of 1 channel,ES-
531.1 > 168.9
4.551e+005



13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.319e+005

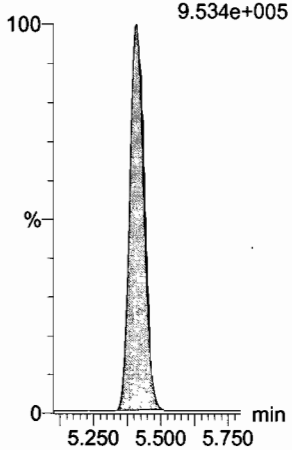


Dataset: U:\Q4.PRO\results\170803M2\170803M2-22.qld

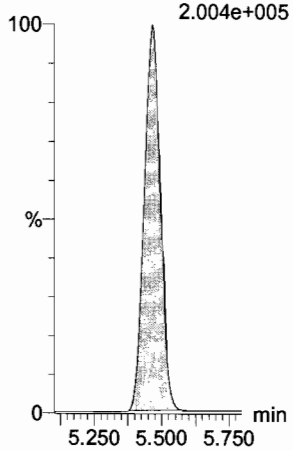
Last Altered: Friday, August 04, 2017 08:53:55 Pacific Daylight Time
Printed: Friday, August 04, 2017 08:57:24 Pacific Daylight Time

Name: 170803M2_22, Date: 03-Aug-2017, Time: 19:47:10, ID: ST170803M2-2 PFC CS3 17H0202, Description: PFC CS3 17H0202

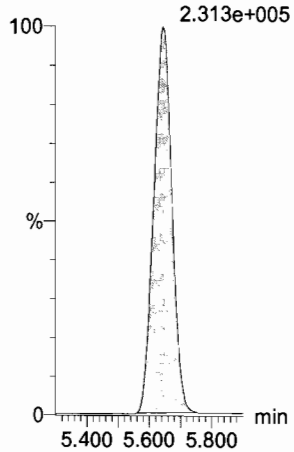
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
9.534e+005



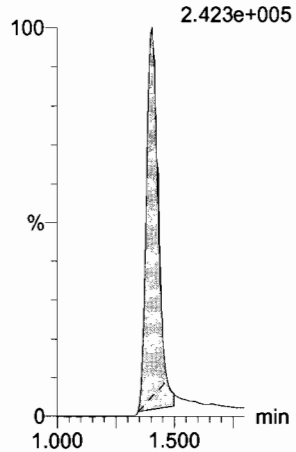
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
2.004e+005



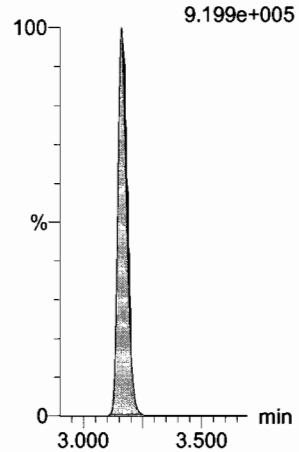
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
2.313e+005



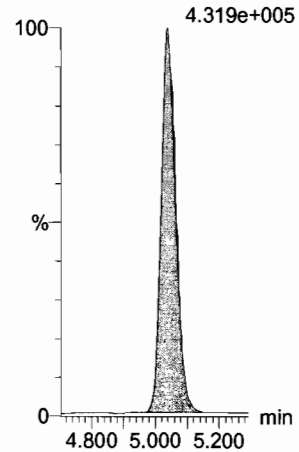
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.423e+005



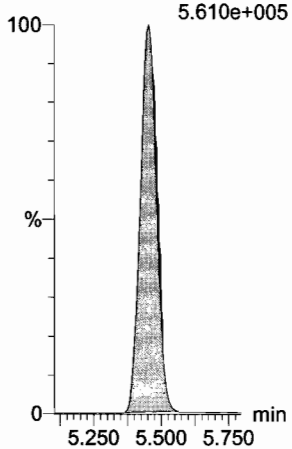
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
9.199e+005



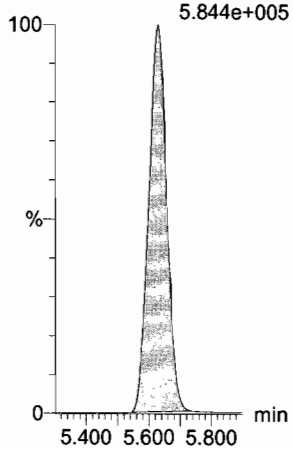
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.319e+005



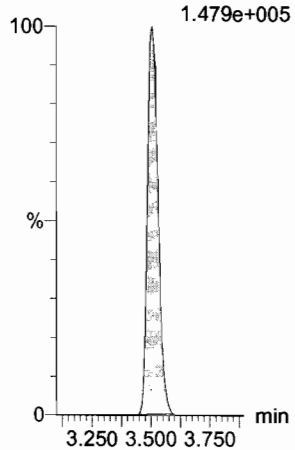
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
5.610e+005



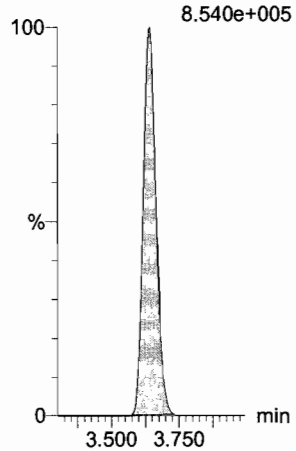
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
5.844e+005



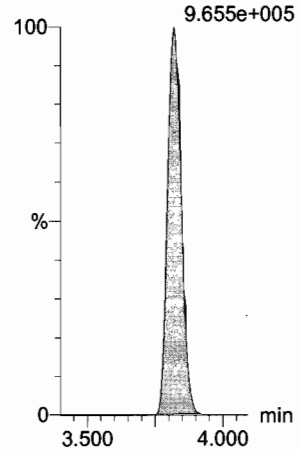
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.479e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
8.540e+005



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
9.655e+005



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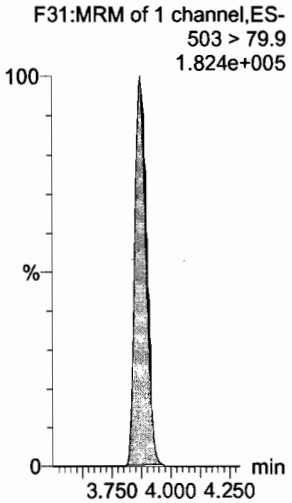
Dataset: U:\Q4.PRO\results\170803M2\170803M2-22.qld

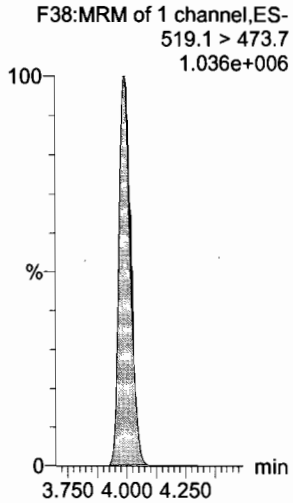
Last Altered: Friday, August 04, 2017 08:53:55 Pacific Daylight Time
Printed: Friday, August 04, 2017 08:57:24 Pacific Daylight Time

Name: 170803M2_22, Date: 03-Aug-2017, Time: 19:47:10, ID: ST170803M2-2 PFC CS3 17H0202, Description: PFC CS3 17H0202

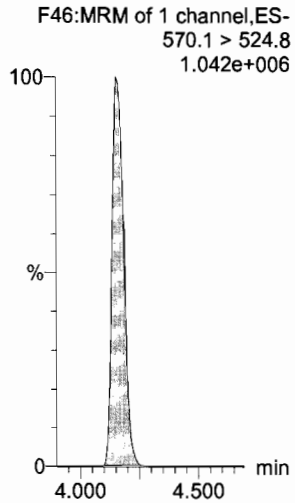
13C4-PFOS



13C6-PFDA



13C7-PFUnA



Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-59.qld

Last Altered: Friday, August 04, 2017 09:19:09 Pacific Daylight Time
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AC 8/4/17

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-27-17.mdb 28 Jul 2017 08:06:09
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_59, Date: 04-Aug-2017, Time: 02:23:13, ID: ST170803M2-4 PFC CS0 17H0307, Description: PFC CS0 17H0307

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	1	PFBA	213.0 > 168.8	1.45e3	1.38e4		1.32	1.42	1.31	1.15	115.0	70-130
2	2	PFPeA	263.1 > 218.9	2.43e3	2.89e4		2.77	2.71	1.05	1.07	106.7	
3	3	PFBS	299 > 79.7	5.75e2	3.58e3		2.96	2.93	2.01	1.03	103.0	
4	4	PFHxA	313.2 > 268.9	4.15e3	1.35e4		3.19	3.17	1.54	1.00	100.1	
5	5	PFHpA	363 > 318.9	4.25e3	4.23e4		3.45	3.45	1.26	0.988	98.8	
6	6	PFHxS	398.9 > 79.6	5.45e2	4.16e3		3.56	3.52	1.64	0.957	95.7	
7	7	6:2 FTS	427.1 > 407	8.44e2	1.02e4		3.64	3.64	1.03	0.935	93.5	
8	8	PFOA	413 > 368.7	5.71e3	6.98e4		3.65	3.65	1.02	0.920	92.0	
9	9	PFHpS	448.9 > 98.8	5.64e2	6.98e4		3.65	3.71	0.101	1.09	108.8	
10	10	PFNA	462.9 > 418.8	6.08e3	6.36e4		3.83	3.83	1.19	1.03	103.3	
11	11	PFOSA	498.1 > 77.8	7.42e2	6.85e3		3.84	3.84	1.36	1.29	128.8	
12	12	PFOS	499 > 79.9	1.02e3	1.26e4		3.89	3.89	1.02	0.953	95.3	
13	13	PFDA	513 > 468.8	6.92e3	6.00e4		4.01	4.00	1.44	1.07	107.1	
14	14	8:2 FTS	527 > 506.9	8.95e2	6.60e3		4.00	4.00	1.69	1.15	115.4	
15	15	N-MeFOSAA	570.1 > 419	1.61e3	1.35e4		4.03	4.03	19.3	1.04	103.6	
16	16	N-EtFOSAA	584.2 > 419	1.32e3	1.34e4		4.10	4.11	16.0	1.06	105.6	
17	17	PFUnA	562.9 > 518.9	4.83e3	7.29e4		4.17	4.17	0.828	0.977	97.7	
18	18	PFDS	598.9 > 98.7	4.71e2	7.29e4		4.22	4.21	0.0807	1.04	103.6	
19	19	PFDoA	612.9 > 318.8	6.20e2	6.68e3		4.34	4.33	1.16	1.23	122.6	
20	20	N-MeFOSA	512.1 > 168.9	9.24e2	2.43e4		4.29	4.38	5.70	5.44	108.7	
21	21	PFTrDA	662.9 > 618.9	6.82e3	6.68e3		4.50	4.50	12.8	1.11	111.5	
22	22	PFTeDA	712.9 > 668.8	4.91e3	4.88e4		4.68	4.69	1.26	1.07	106.7	
23	23	N-EtFOSA	526.1 > 168.9	1.18e3	3.45e4		4.79	4.96	5.11	5.13	102.6	
24	24	PFHxDA	812.8 > 768.9	7.32e3	2.33e4		5.06	5.06	1.57	1.05	105.2	
25	25	PFODA	912.8 > 868.8	6.49e3	2.33e4		5.43	5.42	1.39	1.10	109.9	
26	26	N-MeFOSE	616.1 > 58.9	1.57e3	3.98e4		5.42	5.47	5.92	5.36	107.2	
27	27	N-EtFOSE	630.1 > 58.9	1.83e3	3.91e4		5.59	5.65	7.03	5.04	100.7	
28	28	13C3-PFBA	216.1 > 171.8	1.38e4	1.36e4	1.006	1.32	1.42	12.8	12.7	101.6	50-150
29	29	13C3-PFPeA	266 > 221.8	2.89e4	3.93e4	0.275	2.77	2.70	3.68	13.4	106.8	
30	30	13C3-PFBS	302 > 98.8	3.58e3	3.93e4	0.034	2.96	2.94	0.455	13.3	106.8	
31	31	13C2-PFHxA	315 > 269.8	1.35e4	3.93e4	0.334	3.19	3.17	1.72	5.14	102.8	

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Dataset: U:\Q4.PRO\results\170803M2\170803M2-59.qld

Last Altered: Friday, August 04, 2017 09:19:09 Pacific Daylight Time
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Name: 170803M2_59, Date: 04-Aug-2017, Time: 02:23:13, ID: ST170803M2-4 PFC CS0 17H0307, Description: PFC CS0 17H0307

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	32	13C4-PFHpA	367.2 > 321.8	4.23e4	3.93e4	0.414	3.45	3.45	5.38	13.0	103.9
33	33	18O2-PFHxS	403 > 102.6	4.16e3	8.39e3	0.475	3.56	3.52	6.19	13.0	104.2
34	34	13C2-6:2 FTS	429.1 > 408.9	1.02e4	4.75e4	0.214	3.64	3.64	2.70	12.6	100.9
35	35	13C2-PFOA	414.9 > 369.7	6.98e4	4.75e4	1.298	3.65	3.65	18.4	14.2	113.3
36	36	13C5-PFNA	468.2 > 422.9	6.36e4	5.68e4	1.094	3.83	3.83	14.0	12.8	102.2
37	37	13C8-PFOSA	506.1 > 77.7	6.85e3	5.63e4	0.124	3.84	3.84	1.52	12.2	97.7
38	38	13C8-PFOS	507 > 79.9	1.26e4	1.02e4	1.153	3.89	3.89	15.4	13.4	107.0
39	39	13C2-PFDA	515.1 > 469.9	6.00e4	5.52e4	1.059	4.01	4.00	13.6	12.8	102.8
40	40	13C2-8:2 FTS	529.1 > 508.7	6.60e3	5.52e4	0.129	4.00	4.00	1.50	11.6	93.1
41	41	d3-N-MeFOSAA	573.3 > 419	1.35e4	5.63e4	0.019	4.03	4.03	3.01	156	95.8
42	42	d5-N-EtFOSAA	589.3 > 419	1.34e4	5.63e4	0.019	4.12	4.10	2.98	157	96.7
43	43	13C2-PFUnA	565 > 519.8	7.29e4	5.63e4	1.172	4.17	4.17	16.2	13.8	110.4
44	44	13C2-PFDoA	615 > 569.7	6.68e3	5.63e4	0.118	4.34	4.33	1.48	12.5	100.1
45	45	d3-N-MeFOSA	515.2 > 168.9	2.43e4	5.63e4	0.040	4.29	4.41	5.39	133	88.9
46	46	13C2-PFTeDA	714.8 > 669.6	4.88e4	5.63e4	0.801	4.68	4.68	10.8	13.5	108.1
47	47	d5-N-ETFOSA	531.1 > 168.9	3.45e4	5.63e4	0.055	4.85	5.00	7.66	139	92.8
48	48	13C2-PFHxDA	815 > 769.7	2.33e4	5.63e4	0.991	5.06	5.05	5.18	5.23	104.6
49	49	d7-N-MeFOSE	623.1 > 58.9	3.98e4	5.63e4	0.065	5.42	5.46	8.83	136	90.4
50	50	d9-N-EtFOSE	639.2 > 58.8	3.91e4	5.63e4	0.065	5.59	5.64	8.68	134	89.3
51	51	13C4-PFBA	217 > 171.8	1.36e4	1.36e4	1.000	1.32	1.42	12.5	12.5	100.0
52	52	13C5-PFHxA	318 > 272.9	3.93e4	3.93e4	1.000	3.19	3.18	5.00	5.00	100.0
53	53	13C3-PFHxS	401.9 > 79.9	8.39e3	8.39e3	1.000	3.56	3.52	12.5	12.5	100.0
54	54	13C8-PFOA	421.3 > 376	4.75e4	4.75e4	1.000	3.65	3.65	12.5	12.5	100.0
55	55	13C9-PFNA	472.2 > 426.9	5.68e4	5.68e4	1.000	3.83	3.83	12.5	12.5	100.0
56	56	13C4-PFOS	503 > 79.9	1.02e4	1.02e4	1.000	3.89	3.89	12.5	12.5	100.0
57	57	13C6-PFDA	519.1 > 473.7	5.52e4	5.52e4	1.000	4.01	4.01	12.5	12.5	100.0
58	58	13C7-PFUnA	570.1 > 524.8	5.63e4	5.63e4	1.000	4.17	4.17	12.5	12.5	100.0

50-150

Quantify Compound Summary Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory

Dataset: Untitled

Last Altered: Friday, August 04, 2017 09:33:42 Pacific Daylight Time
Printed: Friday, August 04, 2017 10:28:42 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-27-17.mdb 28 Jul 2017 08:06:09
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	170803M2_1	IPA	03-Aug-17	16:02:09
2	170803M2_2	ST170803M2-1 PFC CS0 17H0307	03-Aug-17	16:12:52
3	170803M2_3	IPA	03-Aug-17	16:23:40
4	170803M2_4	1700925-02 SB01-170724 0.12178	03-Aug-17	16:34:26
5	170803M2_5	1700925-06 EB01-170724 0.1185	03-Aug-17	16:45:12
6	170803M2_6	1700929-01 MATP01001 0.11834	03-Aug-17	16:55:51
7	170803M2_7	1700938-01 NORP08102 0.11844	03-Aug-17	17:06:36
8	170803M2_8	1700938-02 NORP08103 0.12014	03-Aug-17	17:17:30
9	170803M2_9	1700936-01 BULK TANK #1 0.005	03-Aug-17	17:28:17
10	170803M2_10	1700936-02 BULK TANK #2 0.005	03-Aug-17	17:38:55
11	170803M2_11	1700871-11@5X 16-GW-16_MW04-2017071...	03-Aug-17	17:49:34
12	170803M2_12	IPA	03-Aug-17	18:00:12
13	170803M2_13	1700925-01@15X I001BC43S-170724 0.12112	03-Aug-17	18:10:51
14	170803M2_14	IPA	03-Aug-17	18:21:33
15	170803M2_15	1700925-03@15X I001BC50S-170724 0.12135	03-Aug-17	18:32:17
16	170803M2_16	IPA	03-Aug-17	18:42:55
17	170803M2_17	B7G0122-BS1 OPR 0.25	03-Aug-17	18:53:33
18	170803M2_18	IPA	03-Aug-17	19:04:20
19	170803M2_19	B7G0122-BLK1 Method Blank 0.25	03-Aug-17	19:14:58
20	170803M2_20	1700891-06RE1 VEL FOAM 0.17113	03-Aug-17	19:25:37
21	170803M2_21	IPA	03-Aug-17	19:36:23
22	170803M2_22	ST170803M2-2 PFC CS3 17H0202	03-Aug-17	19:47:10
23	170803M2_23	IPA	03-Aug-17	19:57:57
24	170803M2_24	B7H0007-BS1 OPR 0.25	03-Aug-17	20:08:35
25	170803M2_25	B7H0010-BS1 OPR 5	03-Aug-17	20:19:13
26	170803M2_26	B7H0011-BS1 OPR 5	03-Aug-17	20:29:52
27	170803M2_27	B7H0012-BS1 OPR 0.25	03-Aug-17	20:40:30
28	170803M2_28	B7H0007-BSD1 LCS Dup 0.25	03-Aug-17	20:51:17
29	170803M2_29	IPA	03-Aug-17	21:01:55
30	170803M2_30	B7H0007-BLK1 Method Blank 0.25	03-Aug-17	21:12:41
31	170803M2_31	B7H0010-BLK1 Method Blank 5	03-Aug-17	21:23:20

Dataset: Untitled

Last Altered: Friday, August 04, 2017 09:33:42 Pacific Daylight Time
Printed: Friday, August 04, 2017 10:28:42 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	170803M2_32	B7H0011-BLK1 Method Blank 5	03-Aug-17	21:33:58
33	170803M2_33	B7H0012-BLK1 Method Blank 0.25	03-Aug-17	21:44:37
34	170803M2_34	1700862-01 WS 252 0.00025	03-Aug-17	21:55:15
35	170803M2_35	1700952-01 CP-IDW-072517 0.24347	03-Aug-17	22:06:01
36	170803M2_36	1700953-01 TF4-IDW-072517-01 0.26372	03-Aug-17	22:16:55
37	170803M2_37	1700953-02 TF4-IDW-072517-02 0.26543	03-Aug-17	22:27:44
38	170803M2_38	1700954-01 TF5-IDW-072517 0.25837	03-Aug-17	22:38:30
39	170803M2_39	1700818-01 QPFD-1 5	03-Aug-17	22:49:08
40	170803M2_40	1700818-02 QPFD-2 5	03-Aug-17	22:59:55
41	170803M2_41	1700818-03 QPFD-3 5	03-Aug-17	23:10:33
42	170803M2_42	1700818-04 QPFD-4 5	03-Aug-17	23:21:11
43	170803M2_43	1700818-05 QPFD-5 5	03-Aug-17	23:31:50
44	170803M2_44	IPA	03-Aug-17	23:42:28
45	170803M2_45	ST170803M2-3 PFC CS3 17H0202	03-Aug-17	23:53:06
46	170803M2_46	IPA	04-Aug-17	00:03:53
47	170803M2_47	1700818-06 QPFD-6 5	04-Aug-17	00:14:34
48	170803M2_48	1700818-07 QPFD-7 5	04-Aug-17	00:25:19
49	170803M2_49	1700818-08 QPFD-8 5	04-Aug-17	00:35:57
50	170803M2_50	1700818-09 QPFD-9 5	04-Aug-17	00:46:44
51	170803M2_51	1700818-10 QPFD-10 5	04-Aug-17	00:57:39
52	170803M2_52	1700818-11 QPFD-11 5	04-Aug-17	01:08:26
53	170803M2_53	1700818-12 QPFD-12 5	04-Aug-17	01:19:04
54	170803M2_54	1700818-13 QPFD-13 5	04-Aug-17	01:29:51
55	170803M2_55	1700903-01 1958 5	04-Aug-17	01:40:29
56	170803M2_56	B7H0010-DUP1 Duplicate 5	04-Aug-17	01:51:08
57	170803M2_57	1700819-01 QPFD-14 5	04-Aug-17	02:01:46
58	170803M2_58	IPA	04-Aug-17	02:12:27
59	170803M2_59	ST170803M2-4 PFC CS0 17H0307	04-Aug-17	02:23:13
60	170803M2_60	IPA	04-Aug-17	02:33:58
61	170803M2_61	1700819-02 QPFD-15 5	04-Aug-17	02:44:36
62	170803M2_62	1700819-03 QPFD-16 5	04-Aug-17	02:55:15
63	170803M2_63	1700819-04 QPFD-17 5	04-Aug-17	03:05:53
64	170803M2_64	1700819-05 QPFD-18 5	04-Aug-17	03:16:32
65	170803M2_65	1700819-06 QPFD-19 5	04-Aug-17	03:27:10

Vista Analytical Laboratory

Dataset: Untitled

Last Altered: Friday, August 04, 2017 09:33:42 Pacific Daylight Time
Printed: Friday, August 04, 2017 10:28:42 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
66	170803M2_66	1700819-07 QPFD-20 5	04-Aug-17	03:37:48
67	170803M2_67	1700819-08 QPFD-21 5	04-Aug-17	03:48:35
68	170803M2_68	1700819-09 QPFD-22 5	04-Aug-17	03:59:13
69	170803M2_69	1700819-10 QPFD-23 5	04-Aug-17	04:10:00
70	170803M2_70	1700819-11 QPFD-24 5	04-Aug-17	04:20:46
71	170803M2_71	IPA	04-Aug-17	04:31:33
72	170803M2_72	ST170803M2-5 PFC CS3 17H0202	04-Aug-17	04:42:11
73	170803M2_73	IPA	04-Aug-17	04:52:57
74	170803M2_74	1700819-12 QPFD-25 5	04-Aug-17	05:03:36
75	170803M2_75	1700819-13 QPFD-26 5	04-Aug-17	05:14:14
76	170803M2_76	1700963-01 SW VEL L2 0.25308	04-Aug-17	05:24:54
77	170803M2_77	1700963-02 SW VEL L3 0.21924	04-Aug-17	05:35:42
78	170803M2_78	1700963-03 SW VEL L4 0.25896	04-Aug-17	05:46:38
79	170803M2_79	1700963-04 VEL FOAM L2 0.02349	04-Aug-17	05:57:16
80	170803M2_80	IPA	04-Aug-17	06:08:00
81	170803M2_81	1700963-05 VEL FOAM L3 0.09911	04-Aug-17	06:18:49
82	170803M2_82	IPA	04-Aug-17	06:29:35
83	170803M2_83	1700963-06 VEL FOAM L4 0.03035	04-Aug-17	06:40:14
84	170803M2_84	IPA	04-Aug-17	06:50:52
85	170803M2_85	1700925-01 I001BC43S-170724 0.12112	04-Aug-17	07:01:39
86	170803M2_86	IPA	04-Aug-17	07:12:17
87	170803M2_87	1700925-03 I001BC50S-170724 0.12135	04-Aug-17	07:22:56
88	170803M2_88	IPA	04-Aug-17	07:33:42
89	170803M2_89	ST170803M2-6 PFC CS3 17H0202	04-Aug-17	07:44:20
90	170803M2_90	IPA	04-Aug-17	07:55:07

Quantify Sample Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory

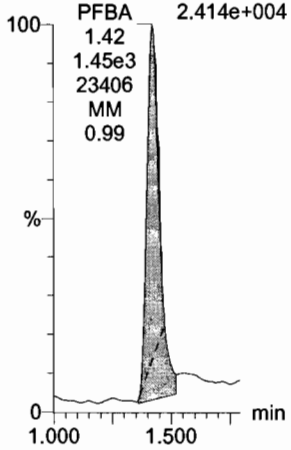
Dataset: U:\Q4.PRO\results\170803M2\170803M2-59.qld

Last Altered: Friday, August 04, 2017 09:19:09 Pacific Daylight Time
Printed: Friday, August 04, 2017 09:19:38 Pacific Daylight Time

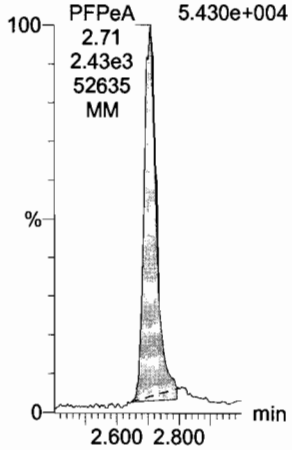
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-27-17.mdb 28 Jul 2017 08:06:09
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_59, Date: 04-Aug-2017, Time: 02:23:13, ID: ST170803M2-4 PFC CS0 17H0307, Description: PFC CS0 17H0307

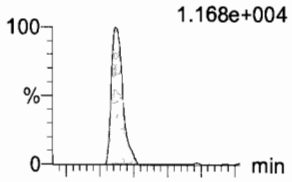
PFBA
F1:MRM of 2 channels,ES-
213.0 > 168.8
2.414e+004
PFBA
1.42
1.45e3
23406
MM
0.99



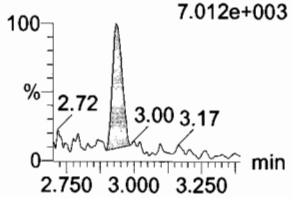
PFPeA
F4:MRM of 1 channel,ES-
263.1 > 218.9
5.430e+004
PFPeA
2.71
2.43e3
52635
MM



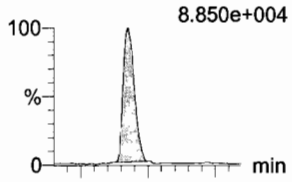
PFBS
F6:MRM of 2 channels,ES-
299 > 79.7
1.168e+004



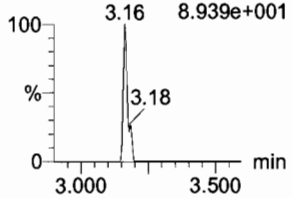
F6:MRM of 2 channels,ES-
299 > 99
7.012e+003



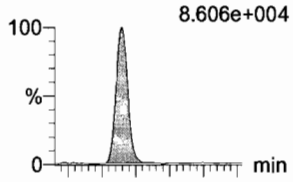
PFHxA
F8:MRM of 2 channels,ES-
313.2 > 268.9
8.850e+004



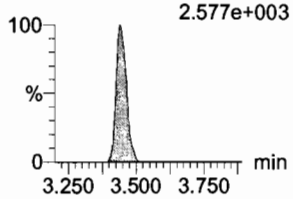
F8:MRM of 2 channels,ES-
313.2 > 119
8.939e+001



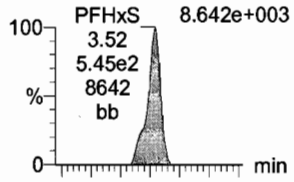
PFHpA
F14:MRM of 2 channels,ES-
363 > 318.9
8.606e+004



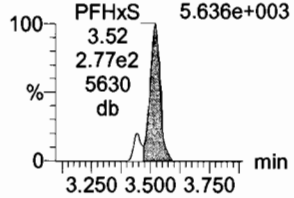
F14:MRM of 2 channels,ES-
363 > 169
2.577e+003



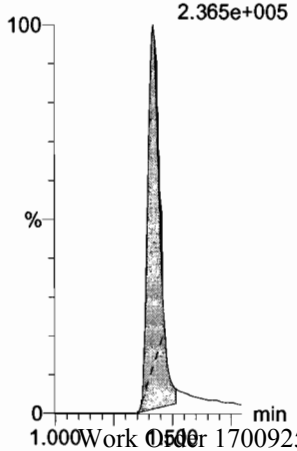
PFHxS
F16:MRM of 2 channels,ES-
398.9 > 79.6
8.642e+003
PFHxS
3.52
5.45e2
8642
bb



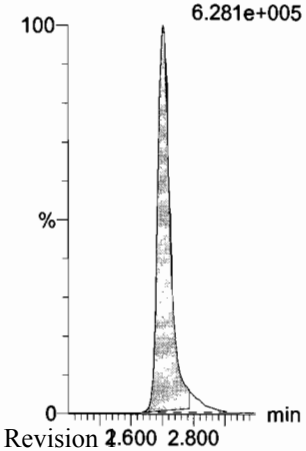
F16:MRM of 2 channels,ES-
398.9 > 99
5.636e+003
PFHxS
3.52
2.77e2
5630
db



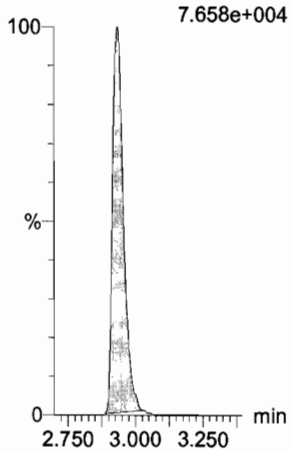
13C3-PFBA
F2:MRM of 1 channel,ES-
216.1 > 171.8
2.365e+005



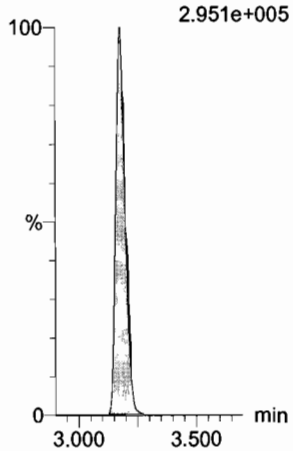
13C3-PFPeA
F5:MRM of 1 channel,ES-
266 > 221.8
6.281e+005



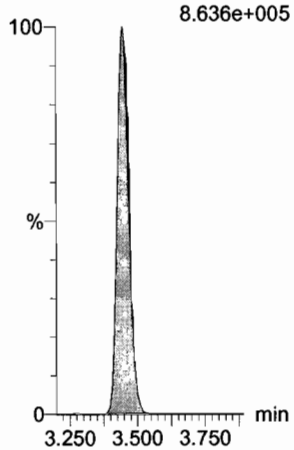
13C3-PFBS
F7:MRM of 1 channel,ES-
302 > 98.8
7.658e+004



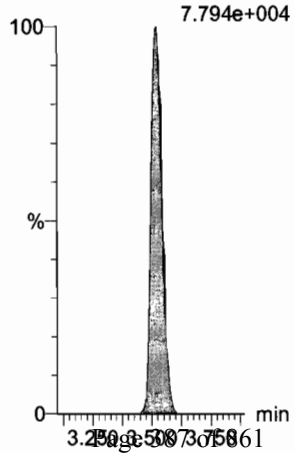
13C2-PFHxA
F9:MRM of 1 channel,ES-
315 > 269.8
2.951e+005



13C4-PFHpA
F15:MRM of 1 channel,ES-
367.2 > 321.8
8.636e+005



18O2-PFHxS
F18:MRM of 1 channel,ES-
403 > 102.6
7.794e+004

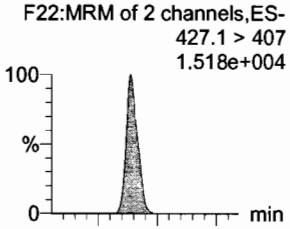


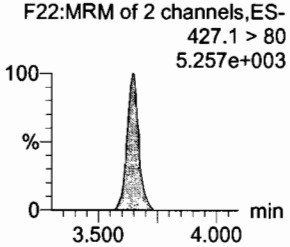
Dataset: U:\Q4.PRO\results\170803M2\170803M2-59.qld

Last Altered: Friday, August 04, 2017 09:19:09 Pacific Daylight Time
Printed: Friday, August 04, 2017 09:19:38 Pacific Daylight Time

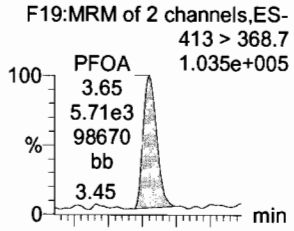
Name: 170803M2_59, Date: 04-Aug-2017, Time: 02:23:13, ID: ST170803M2-4 PFC CS0 17H0307, Description: PFC CS0 17H0307

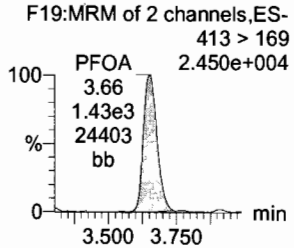
6:2 FTS



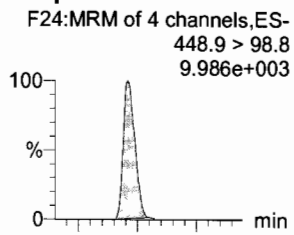


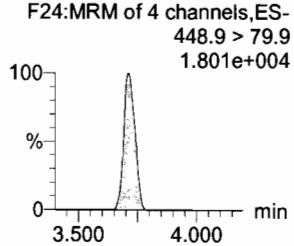
PFOA



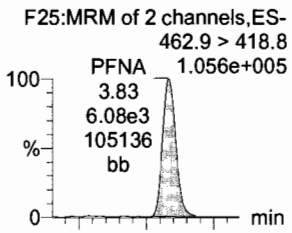


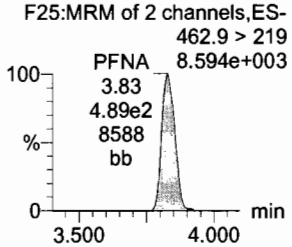
PFHpS



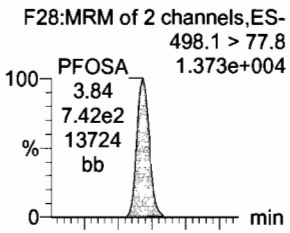


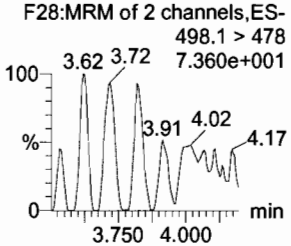
PFNA



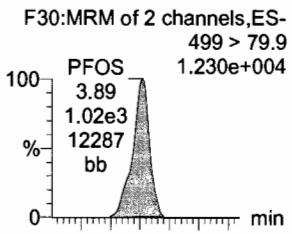


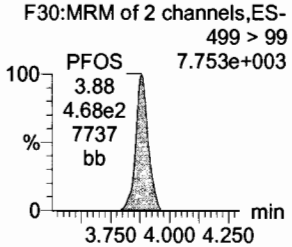
PFOSA



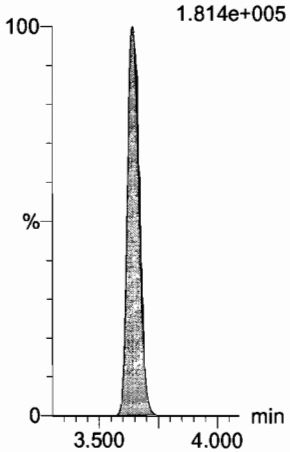


PFOS

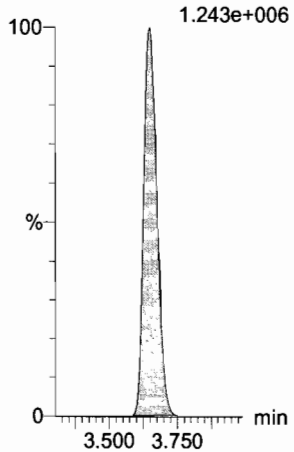




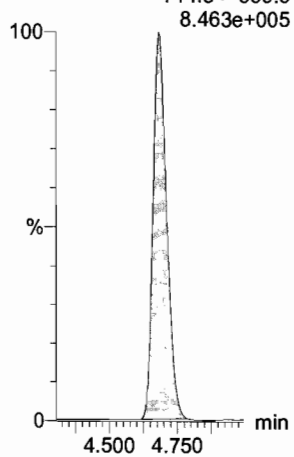
13C2-6:2 FTS



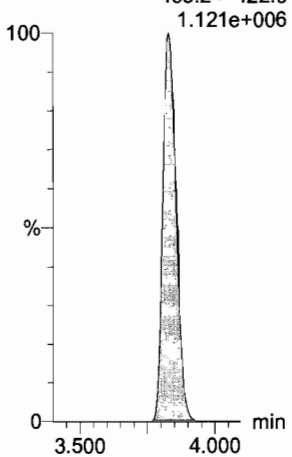
13C2-PFOA



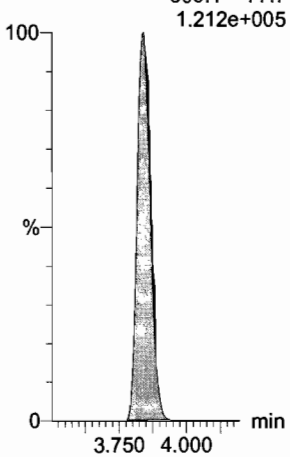
13C2-PFTeDA



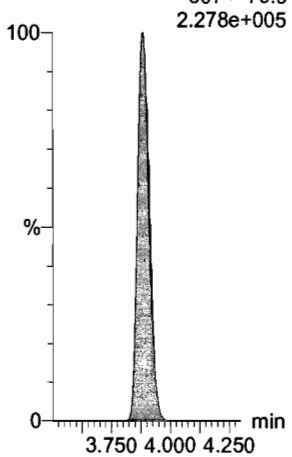
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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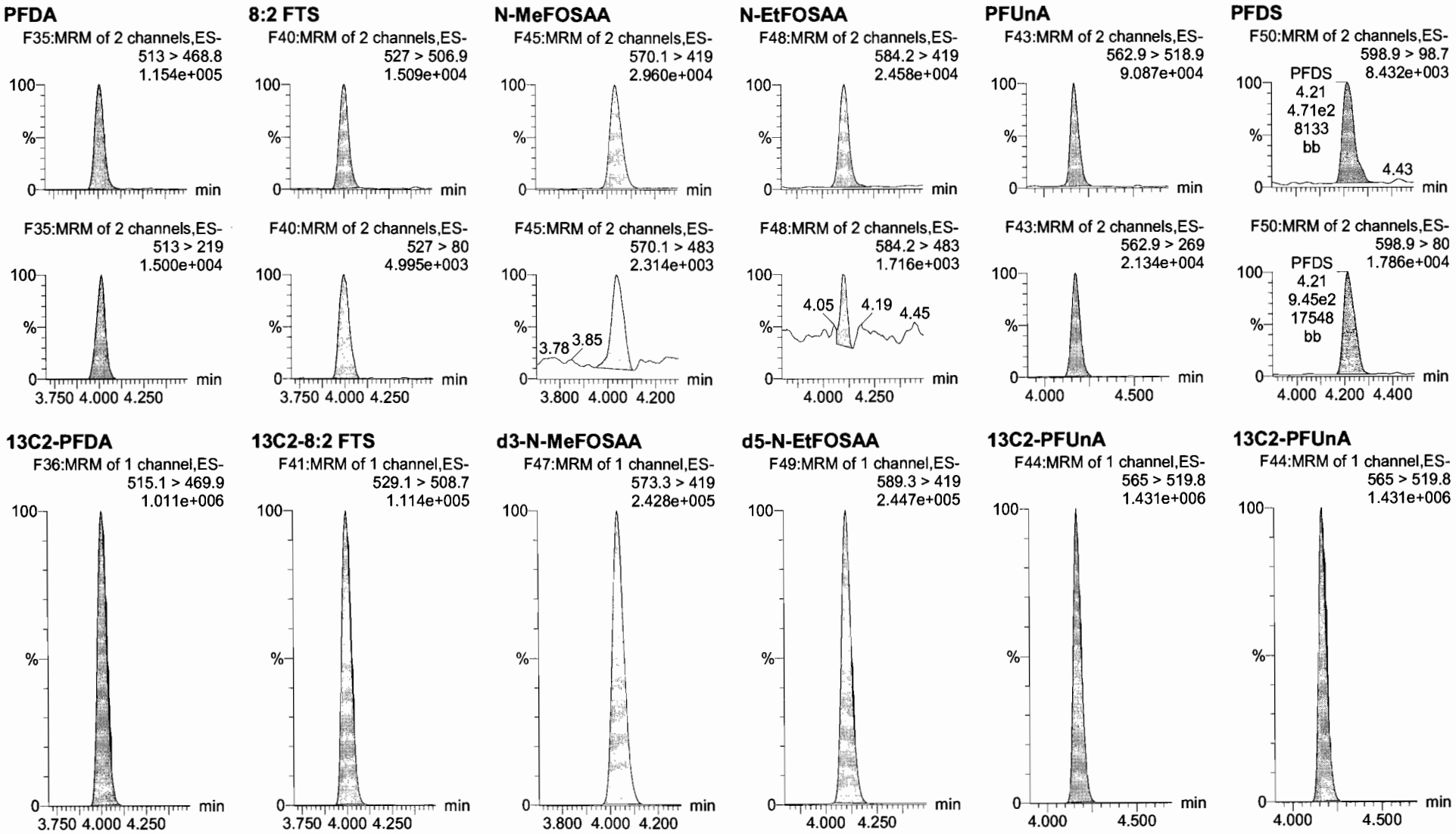
Printed: Friday, August 04, 2017 09:19:38 Pacific Daylight Time

Name: 170803M2_59, Date: 04-Aug-2017, Time: 02:23:13, ID: ST170803M2-4 PFC CS0 17H0307, Description: PFC CS0 17H0307



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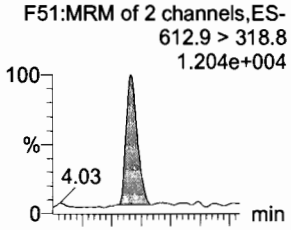
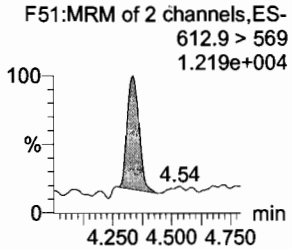
Printed: Friday, August 04, 2017 09:19:38 Pacific Daylight Time

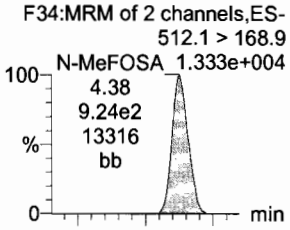
Name: 170803M2_59, Date: 04-Aug-2017, Time: 02:23:13, ID: ST170803M2-4 PFC CS0 17H0307, Description: PFC CS0 17H0307

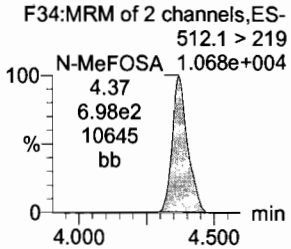
PFDoA



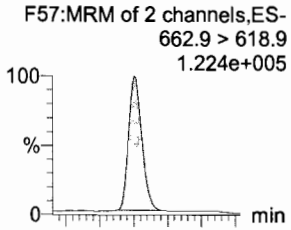


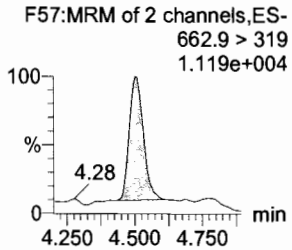
N-MeFOSA



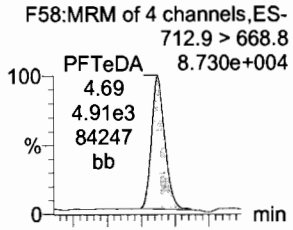


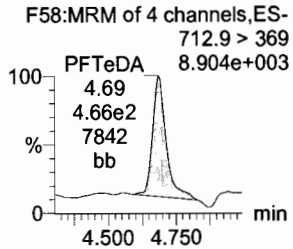
PFTrDA



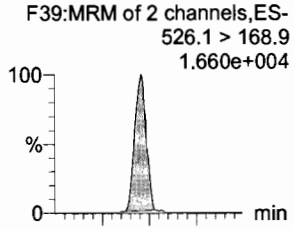


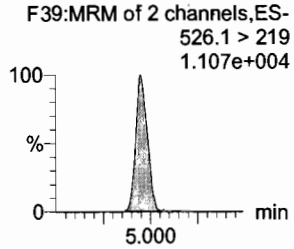
PFTeDA



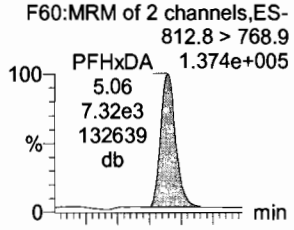


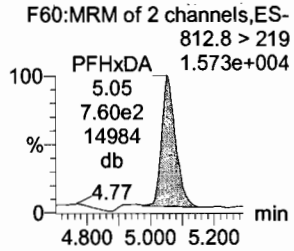
N-EtFOSA



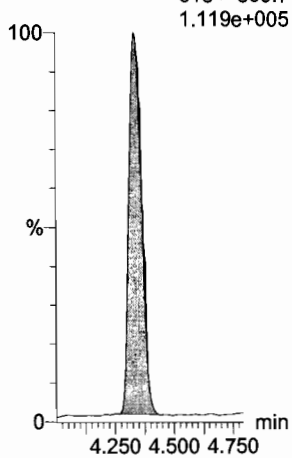


PFHxDA

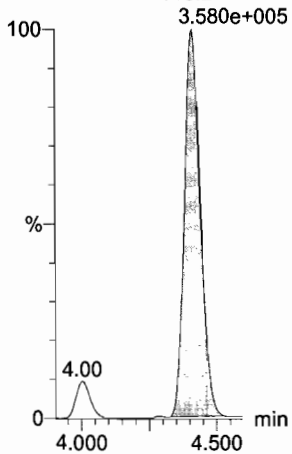




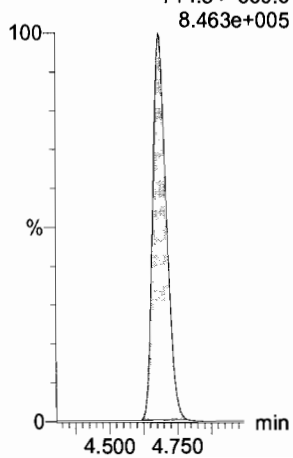
13C2-PFDoA



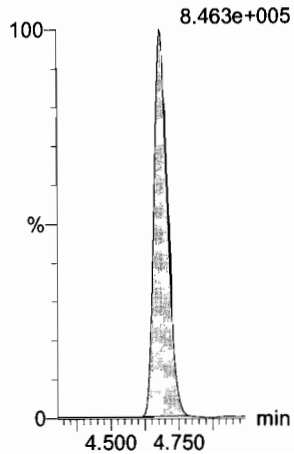
d3-N-MeFOSA



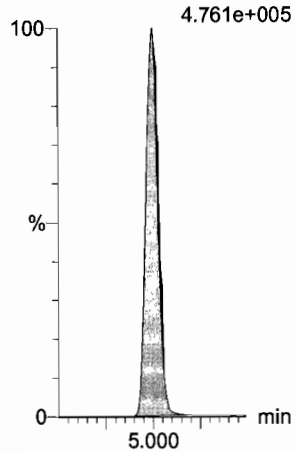
13C2-PFTeDA



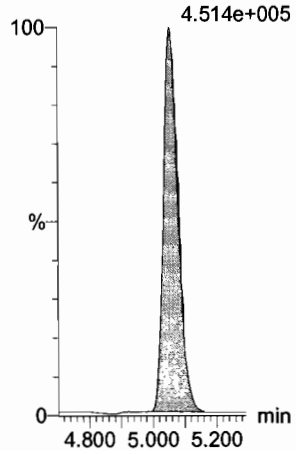
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



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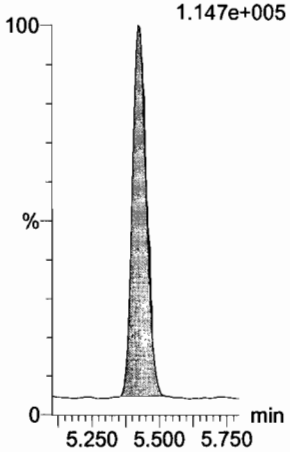
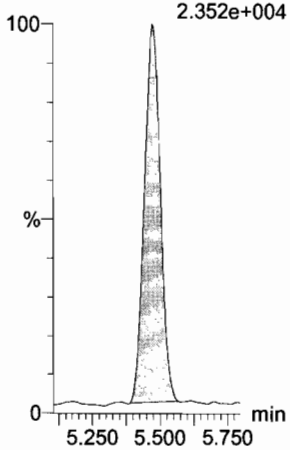
Last Altered: Friday, August 04, 2017 09:19:09 Pacific Daylight Time
Printed: Friday, August 04, 2017 09:19:38 Pacific Daylight Time

Name: 170803M2_59, Date: 04-Aug-2017, Time: 02:23:13, ID: ST170803M2-4 PFC CS0 17H0307, Description: PFC CS0 17H0307

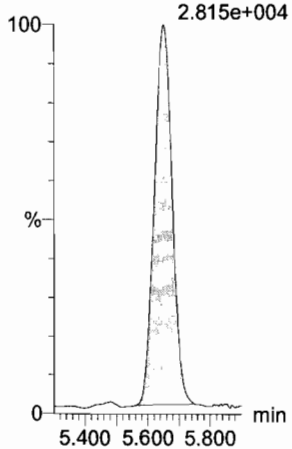
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
1.147e+005



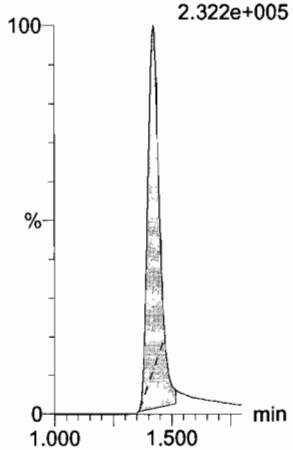
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
2.352e+004



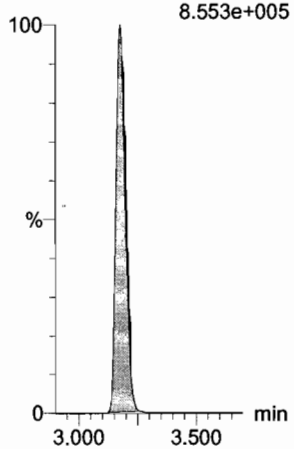
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
2.815e+004



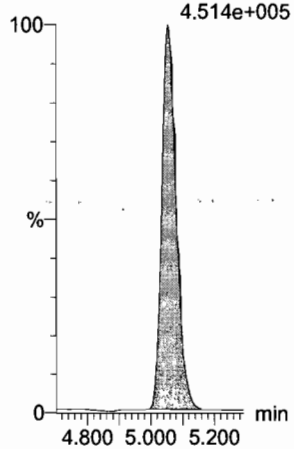
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.322e+005



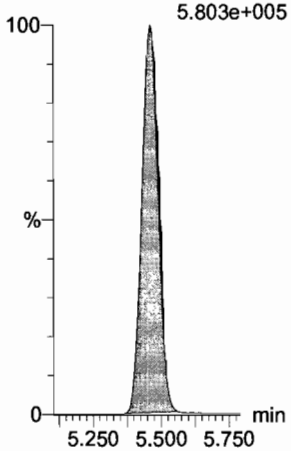
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
8.553e+005



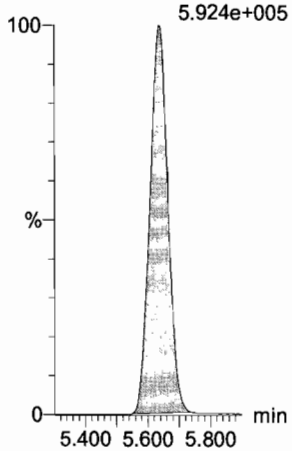
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.514e+005



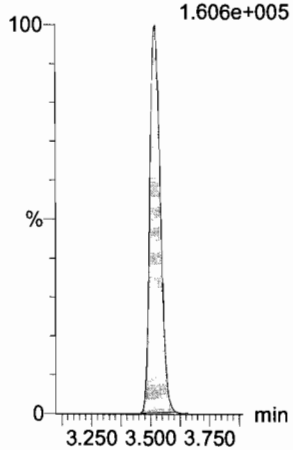
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
5.803e+005



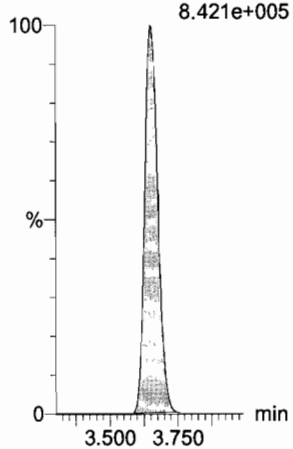
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
5.924e+005



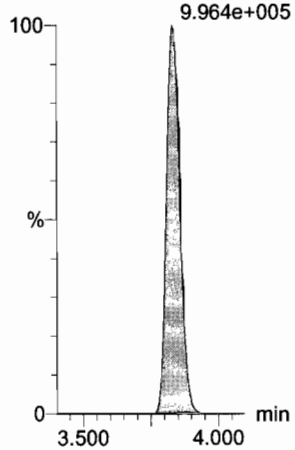
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.606e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
8.421e+005



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
9.964e+005



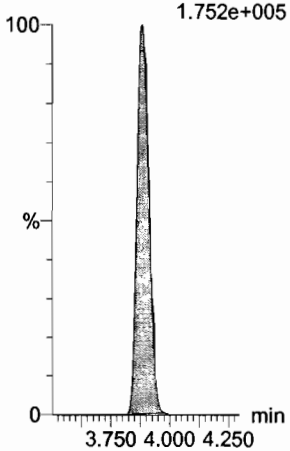
Dataset: U:\Q4.PRO\results\170803M2\170803M2-59.qld

Last Altered: Friday, August 04, 2017 09:19:09 Pacific Daylight Time
Printed: Friday, August 04, 2017 09:19:38 Pacific Daylight Time

Name: 170803M2_59, Date: 04-Aug-2017, Time: 02:23:13, ID: ST170803M2-4 PFC CS0 17H0307, Description: PFC CS0 17H0307

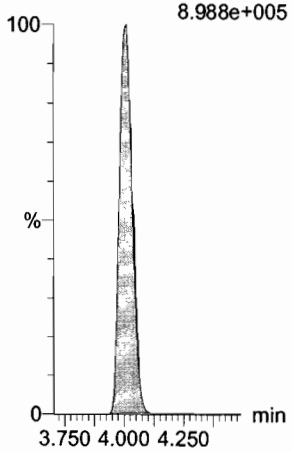
13C4-PFOS

F31:MRM of 1 channel,ES-
503 > 79.9
1.752e+005



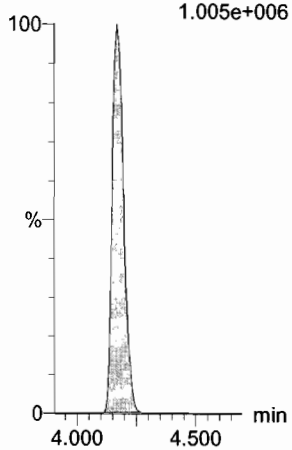
13C6-PFDA

F38:MRM of 1 channel,ES-
519.1 > 473.7
8.988e+005



13C7-PFUnA

F46:MRM of 1 channel,ES-
570.1 > 524.8
1.005e+006



Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-72.qld

Last Altered: Friday, August 04, 2017 09:21:22 Pacific Daylight Time
Printed: Friday, August 04, 2017 09:21:46 Pacific Daylight Time

AC 8/4/17

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-27-17.mdb 28 Jul 2017 08:06:09
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_72, Date: 04-Aug-2017, Time: 04:42:11, ID: ST170803M2-5 PFC CS3 17H0202, Description: PFC CS3 17H0202

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	1	PFBA	213.0 > 168.8	1.32e4	1.52e4		1.32	1.42	10.9	10.1	100.6	70-130
2	2	PFPeA	263.1 > 218.9	2.27e4	3.04e4		2.77	2.71	9.33	9.76	97.6	
3	3	PFBS	299 > 79.7	5.64e3	3.95e3		2.96	2.94	17.9	9.45	94.5	
4	4	PFHxA	313.2 > 268.9	4.04e4	1.45e4		3.19	3.18	13.9	9.91	99.1	
5	5	PFHpA	363 > 318.9	4.24e4	4.53e4		3.45	3.45	11.7	9.72	97.2	
6	6	PFHxS	398.9 > 79.6	5.57e3	4.39e3		3.56	3.52	15.9	9.43	94.3	
7	7	6:2 FTS	427.1 > 407	9.14e3	1.11e4		3.64	3.65	10.3	9.16	91.6	
8	8	PFOA	413 > 368.7	5.78e4	7.86e4		3.65	3.66	9.19	9.48	94.8	
9	9	PFHpS	448.9 > 98.8	5.55e3	7.86e4		3.65	3.71	0.882	10.2	101.6	
10	10	PFNA	462.9 > 418.8	5.32e4	6.46e4		3.83	3.84	10.3	9.41	94.1	
11	11	PFOSA	498.1 > 77.8	6.08e3	7.03e3		3.84	3.84	10.8	10.1	101.0	
12	12	PFOS	499 > 79.9	1.04e4	1.28e4		3.89	3.89	10.2	9.95	99.5	
13	13	PFDA	513 > 468.8	6.38e4	6.41e4		4.01	4.01	12.5	10.3	102.5	
14	14	8:2 FTS	527 > 506.9	7.62e3	7.75e3		4.00	4.00	12.3	8.69	86.9	
15	15	N-MeFOSAA	570.1 > 419	1.68e4	1.44e4		4.03	4.04	189	10.6	105.9	
16	16	N-EtFOSAA	584.2 > 419	1.37e4	1.39e4		4.10	4.11	160	10.4	103.7	
17	17	PFUnA	562.9 > 518.9	4.47e4	6.46e4		4.17	4.17	8.64	11.3	113.0	
18	18	PFDS	598.9 > 98.7	4.61e3	6.46e4		4.22	4.22	0.892	11.1	110.9	
19	19	PFDoA	612.9 > 318.8	5.50e3	6.95e3		4.34	4.34	9.89	10.5	105.0	
20	20	N-MeFOSA	512.1 > 168.9	9.33e3	2.60e4		4.29	4.38	53.7	53.2	106.4	
21	21	PFTrDA	662.9 > 618.9	6.46e4	6.95e3		4.50	4.51	116	11.1	110.8	
22	22	PFTeDA	712.9 > 668.8	4.41e4	5.12e4		4.68	4.69	10.8	9.95	99.5	
23	23	N-EtFOSA	526.1 > 168.9	1.10e4	3.63e4		4.79	4.96	45.6	49.1	98.2	
24	24	PFHxDA	812.8 > 768.9	6.39e4	2.46e4		5.06	5.05	13.0	10.2	101.6	
25	25	PFODA	912.8 > 868.8	6.04e4	2.46e4		5.43	5.43	12.3	10.8	107.9	
26	26	N-MeFOSE	616.1 > 58.9	1.48e4	4.10e4		5.42	5.47	54.2	52.4	104.8	
27	27	N-EtFOSE	630.1 > 58.9	1.65e4	4.06e4		5.59	5.65	60.8	51.8	103.6	
28	28	13C3-PFBA	216.1 > 171.8	1.52e4	1.48e4	1.006	1.32	1.42	12.8	12.7	101.9	50-150
29	29	13C3-PFPeA	266 > 221.8	3.04e4	4.18e4	0.275	2.77	2.70	3.63	13.2	105.6	
30	30	13C3-PFBS	302 > 98.8	3.95e3	4.18e4	0.034	2.96	2.94	0.472	13.8	110.7	
31	31	13C2-PFHxA	315 > 269.8	1.45e4	4.18e4	0.334	3.19	3.18	1.74	5.21	104.2	

Dataset: U:\Q4.PRO\results\170803M2\170803M2-72.qld

Last Altered: Friday, August 04, 2017 09:21:22 Pacific Daylight Time
Printed: Friday, August 04, 2017 09:21:46 Pacific Daylight Time

Name: 170803M2_72, Date: 04-Aug-2017, Time: 04:42:11, ID: ST170803M2-5 PFC CS3 17H0202, Description: PFC CS3 17H0202

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	32	13C4-PFHpA	367.2 > 321.8	4.53e4	4.18e4	0.414	3.45	3.45	5.42	13.1	104.7
33	33	18O2-PFHxS	403 > 102.6	4.39e3	8.68e3	0.475	3.56	3.52	6.32	13.3	106.3
34	34	13C2-6:2 FTS	429.1 > 408.9	1.11e4	5.66e4	0.214	3.64	3.64	2.44	11.4	91.4
35	35	13C2-PFOA	414.9 > 369.7	7.86e4	5.66e4	1.298	3.65	3.65	17.4	13.4	106.9
36	36	13C5-PFNA	468.2 > 422.9	6.46e4	5.94e4	1.094	3.83	3.83	13.6	12.4	99.3
37	37	13C8-PFOSA	506.1 > 77.7	7.03e3	6.02e4	0.124	3.84	3.84	1.46	11.7	93.8
38	38	13C8-PFOS	507 > 79.9	1.28e4	1.02e4	1.153	3.89	3.89	15.7	13.6	108.8
39	39	13C2-PFDA	515.1 > 469.9	6.41e4	6.18e4	1.059	4.01	4.01	13.0	12.2	98.0
40	40	13C2-8:2 FTS	529.1 > 508.7	7.75e3	6.18e4	0.129	4.00	4.00	1.57	12.2	97.5
41	41	d3-N-MeFOSAA	573.3 > 419	1.44e4	6.02e4	0.019	4.03	4.04	3.00	155	95.5
42	42	d5-N-EtFOSAA	589.3 > 419	1.39e4	6.02e4	0.019	4.12	4.10	2.89	153	93.9
43	43	13C2-PFUnA	565 > 519.8	6.46e4	6.02e4	1.172	4.17	4.17	13.4	11.4	91.5
44	44	13C2-PFDoA	615 > 569.7	6.95e3	6.02e4	0.118	4.34	4.34	1.44	12.2	97.4
45	45	d3-N-MeFOSA	515.2 > 168.9	2.60e4	6.02e4	0.040	4.29	4.42	5.40	134	89.0
46	46	13C2-PFTeDA	714.8 > 669.6	5.12e4	6.02e4	0.801	4.68	4.69	10.6	13.3	106.0
47	47	d5-N-ETFOSA	531.1 > 168.9	3.63e4	6.02e4	0.055	4.85	5.00	7.53	137	91.1
48	48	13C2-PFHxDA	815 > 769.7	2.46e4	6.02e4	0.991	5.06	5.06	5.10	5.14	102.9
49	49	d7-N-MeFOSE	623.1 > 58.9	4.10e4	6.02e4	0.065	5.42	5.46	8.51	131	87.0
50	50	d9-N-EtFOSE	639.2 > 58.8	4.06e4	6.02e4	0.065	5.59	5.64	8.43	130	86.8
51	51	13C4-PFBA	217 > 171.8	1.48e4	1.48e4	1.000	1.32	1.42	12.5	12.5	100.0
52	52	13C5-PFHxA	318 > 272.9	4.18e4	4.18e4	1.000	3.19	3.18	5.00	5.00	100.0
53	53	13C3-PFHxS	401.9 > 79.9	8.68e3	8.68e3	1.000	3.56	3.52	12.5	12.5	100.0
54	54	13C8-PFOA	421.3 > 376	5.66e4	5.66e4	1.000	3.65	3.65	12.5	12.5	100.0
55	55	13C9-PFNA	472.2 > 426.9	5.94e4	5.94e4	1.000	3.83	3.84	12.5	12.5	100.0
56	56	13C4-PFOS	503 > 79.9	1.02e4	1.02e4	1.000	3.89	3.89	12.5	12.5	100.0
57	57	13C6-PFDA	519.1 > 473.7	6.18e4	6.18e4	1.000	4.01	4.01	12.5	12.5	100.0
58	58	13C7-PFUnA	570.1 > 524.8	6.02e4	6.02e4	1.000	4.17	4.17	12.5	12.5	100.0

50-150

Quantify Totals Report MassLynx MassLynx V4.1 SCN 945
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-72.qld

Last Altered: Friday, August 04, 2017 09:21:22 Pacific Daylight Time
Printed: Friday, August 04, 2017 09:21:46 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-27-17.mdb 28 Jul 2017 08:06:09
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_72, Date: 04-Aug-2017, Time: 04:42:11, ID: ST170803M2-5 PFC CS3 17H0202, Description: PFC CS3 17H0202

Total PFBS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	59	Total PFBS	299 > 79.7	3.12	6.698	3945.888	0.021	bbl	
2	3	PFBS	299 > 79.7	2.94	5639.435	3945.888	17.865	bb	9.45

Total PFHxS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6	PFHxS	398.9 > 79.6	3.52	5574.708	4387.036	15.884	bb	9.43

Total PFOA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8	PFOA	413 > 368.7	3.66	57798.137	78590.109	9.193	bb	9.48

Total PFOS

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12	PFOS	499 > 79.9	3.89	10424.921	12800.938	10.180	bb	9.95

Total N-Me-FOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	63	Total N-Me-FOSAA	570.1 > 419	4.20	9.975	14449.723	0.112	bbl	
2	15	N-MeFOSAA	570.1 > 419	4.04	16790.883	14449.723	188.828	bb	10.6
3	63	Total N-Me-FOSAA	570.1 > 419	3.79	7.823	14449.723	0.088	bbl	

Total N-EtFOSAA

	#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16	N-EtFOSAA	584.2 > 419	4.11	13694.060	13921.812	159.842	bb	10.4

Quantify Compound Summary Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory

Dataset: Untitled

Last Altered: Friday, August 04, 2017 09:33:42 Pacific Daylight Time
Printed: Friday, August 04, 2017 10:28:42 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-27-17.mdb 28 Jul 2017 08:06:09
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	170803M2_1	IPA	03-Aug-17	16:02:09
2	170803M2_2	ST170803M2-1 PFC CS0 17H0307	03-Aug-17	16:12:52
3	170803M2_3	IPA	03-Aug-17	16:23:40
4	170803M2_4	1700925-02 SB01-170724 0.12178	03-Aug-17	16:34:26
5	170803M2_5	1700925-06 EB01-170724 0.1185	03-Aug-17	16:45:12
6	170803M2_6	1700929-01 MATP01001 0.11834	03-Aug-17	16:55:51
7	170803M2_7	1700938-01 NORP08102 0.11844	03-Aug-17	17:06:36
8	170803M2_8	1700938-02 NORP08103 0.12014	03-Aug-17	17:17:30
9	170803M2_9	1700936-01 BULK TANK #1 0.005	03-Aug-17	17:28:17
10	170803M2_10	1700936-02 BULK TANK #2 0.005	03-Aug-17	17:38:55
11	170803M2_11	1700871-11@5X 16-GW-16_MW04-2017071...	03-Aug-17	17:49:34
12	170803M2_12	IPA	03-Aug-17	18:00:12
13	170803M2_13	1700925-01@15X I001BC43S-170724 0.12112	03-Aug-17	18:10:51
14	170803M2_14	IPA	03-Aug-17	18:21:33
15	170803M2_15	1700925-03@15X I001BC50S-170724 0.12135	03-Aug-17	18:32:17
16	170803M2_16	IPA	03-Aug-17	18:42:55
17	170803M2_17	B7G0122-BS1 OPR 0.25	03-Aug-17	18:53:33
18	170803M2_18	IPA	03-Aug-17	19:04:20
19	170803M2_19	B7G0122-BLK1 Method Blank 0.25	03-Aug-17	19:14:58
20	170803M2_20	1700891-06RE1 VEL FOAM 0.17113	03-Aug-17	19:25:37
21	170803M2_21	IPA	03-Aug-17	19:36:23
22	170803M2_22	ST170803M2-2 PFC CS3 17H0202	03-Aug-17	19:47:10
23	170803M2_23	IPA	03-Aug-17	19:57:57
24	170803M2_24	B7H0007-BS1 OPR 0.25	03-Aug-17	20:08:35
25	170803M2_25	B7H0010-BS1 OPR 5	03-Aug-17	20:19:13
26	170803M2_26	B7H0011-BS1 OPR 5	03-Aug-17	20:29:52
27	170803M2_27	B7H0012-BS1 OPR 0.25	03-Aug-17	20:40:30
28	170803M2_28	B7H0007-BSD1 LCS Dup 0.25	03-Aug-17	20:51:17
29	170803M2_29	IPA	03-Aug-17	21:01:55
30	170803M2_30	B7H0007-BLK1 Method Blank 0.25	03-Aug-17	21:12:41
31	170803M2_31	B7H0010-BLK1 Method Blank 5	03-Aug-17	21:23:20

Quantify Compound Summary Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory

Dataset: Untitled

Last Altered: Friday, August 04, 2017 09:33:42 Pacific Daylight Time
Printed: Friday, August 04, 2017 10:28:42 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	170803M2_32	B7H0011-BLK1 Method Blank 5	03-Aug-17	21:33:58
33	170803M2_33	B7H0012-BLK1 Method Blank 0.25	03-Aug-17	21:44:37
34	170803M2_34	1700862-01 WS 252 0.00025	03-Aug-17	21:55:15
35	170803M2_35	1700952-01 CP-IDW-072517 0.24347	03-Aug-17	22:06:01
36	170803M2_36	1700953-01 TF4-IDW-072517-01 0.26372	03-Aug-17	22:16:55
37	170803M2_37	1700953-02 TF4-IDW-072517-02 0.26543	03-Aug-17	22:27:44
38	170803M2_38	1700954-01 TF5-IDW-072517 0.25837	03-Aug-17	22:38:30
39	170803M2_39	1700818-01 QPFD-1 5	03-Aug-17	22:49:08
40	170803M2_40	1700818-02 QPFD-2 5	03-Aug-17	22:59:55
41	170803M2_41	1700818-03 QPFD-3 5	03-Aug-17	23:10:33
42	170803M2_42	1700818-04 QPFD-4 5	03-Aug-17	23:21:11
43	170803M2_43	1700818-05 QPFD-5 5	03-Aug-17	23:31:50
44	170803M2_44	IPA	03-Aug-17	23:42:28
45	170803M2_45	ST170803M2-3 PFC CS3 17H0202	03-Aug-17	23:53:06
46	170803M2_46	IPA	04-Aug-17	00:03:53
47	170803M2_47	1700818-06 QPFD-6 5	04-Aug-17	00:14:34
48	170803M2_48	1700818-07 QPFD-7 5	04-Aug-17	00:25:19
49	170803M2_49	1700818-08 QPFD-8 5	04-Aug-17	00:35:57
50	170803M2_50	1700818-09 QPFD-9 5	04-Aug-17	00:46:44
51	170803M2_51	1700818-10 QPFD-10 5	04-Aug-17	00:57:39
52	170803M2_52	1700818-11 QPFD-11 5	04-Aug-17	01:08:26
53	170803M2_53	1700818-12 QPFD-12 5	04-Aug-17	01:19:04
54	170803M2_54	1700818-13 QPFD-13 5	04-Aug-17	01:29:51
55	170803M2_55	1700903-01 1958 5	04-Aug-17	01:40:29
56	170803M2_56	B7H0010-DUP1 Duplicate 5	04-Aug-17	01:51:08
57	170803M2_57	1700819-01 QPFD-14 5	04-Aug-17	02:01:46
58	170803M2_58	IPA	04-Aug-17	02:12:27
59	170803M2_59	ST170803M2-4 PFC CS0 17H0307	04-Aug-17	02:23:13
60	170803M2_60	IPA	04-Aug-17	02:33:58
61	170803M2_61	1700819-02 QPFD-15 5	04-Aug-17	02:44:36
62	170803M2_62	1700819-03 QPFD-16 5	04-Aug-17	02:55:15
63	170803M2_63	1700819-04 QPFD-17 5	04-Aug-17	03:05:53
64	170803M2_64	1700819-05 QPFD-18 5	04-Aug-17	03:16:32
65	170803M2_65	1700819-06 QPFD-19 5	04-Aug-17	03:27:10

Dataset: Untitled

Last Altered: Friday, August 04, 2017 09:33:42 Pacific Daylight Time
Printed: Friday, August 04, 2017 10:28:42 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
66	170803M2_66	1700819-07 QPFD-20 5	04-Aug-17	03:37:48
67	170803M2_67	1700819-08 QPFD-21 5	04-Aug-17	03:48:35
68	170803M2_68	1700819-09 QPFD-22 5	04-Aug-17	03:59:13
69	170803M2_69	1700819-10 QPFD-23 5	04-Aug-17	04:10:00
70	170803M2_70	1700819-11 QPFD-24 5	04-Aug-17	04:20:46
71	170803M2_71	IPA	04-Aug-17	04:31:33
72	170803M2_72	ST170803M2-5 PFC CS3 17H0202	04-Aug-17	04:42:11
73	170803M2_73	IPA	04-Aug-17	04:52:57
74	170803M2_74	1700819-12 QPFD-25 5	04-Aug-17	05:03:36
75	170803M2_75	1700819-13 QPFD-26 5	04-Aug-17	05:14:14
76	170803M2_76	1700963-01 SW VEL L2 0.25308	04-Aug-17	05:24:54
77	170803M2_77	1700963-02 SW VEL L3 0.21924	04-Aug-17	05:35:42
78	170803M2_78	1700963-03 SW VEL L4 0.25896	04-Aug-17	05:46:38
79	170803M2_79	1700963-04 VEL FOAM L2 0.02349	04-Aug-17	05:57:16
80	170803M2_80	IPA	04-Aug-17	06:08:00
81	170803M2_81	1700963-05 VEL FOAM L3 0.09911	04-Aug-17	06:18:49
82	170803M2_82	IPA	04-Aug-17	06:29:35
83	170803M2_83	1700963-06 VEL FOAM L4 0.03035	04-Aug-17	06:40:14
84	170803M2_84	IPA	04-Aug-17	06:50:52
85	170803M2_85	1700925-01 I001BC43S-170724 0.12112	04-Aug-17	07:01:39
86	170803M2_86	IPA	04-Aug-17	07:12:17
87	170803M2_87	1700925-03 I001BC50S-170724 0.12135	04-Aug-17	07:22:56
88	170803M2_88	IPA	04-Aug-17	07:33:42
89	170803M2_89	ST170803M2-6 PFC CS3 17H0202	04-Aug-17	07:44:20
90	170803M2_90	IPA	04-Aug-17	07:55:07

Quantify Sample Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory

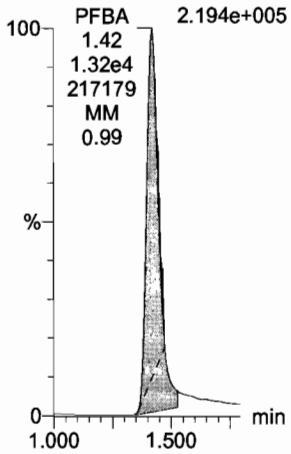
Dataset: U:\Q4.PRO\results\170803M2\170803M2-72.qld

Last Altered: Friday, August 04, 2017 09:21:22 Pacific Daylight Time
Printed: Friday, August 04, 2017 09:21:46 Pacific Daylight Time

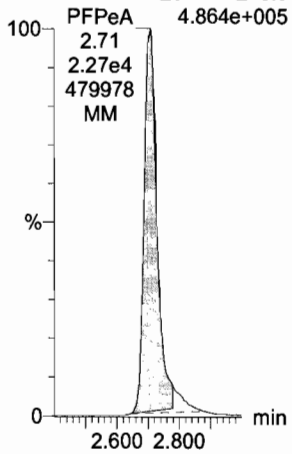
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-27-17.mdb 28 Jul 2017 08:06:09
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_72, Date: 04-Aug-2017, Time: 04:42:11, ID: ST170803M2-5 PFC CS3 17H0202, Description: PFC CS3 17H0202

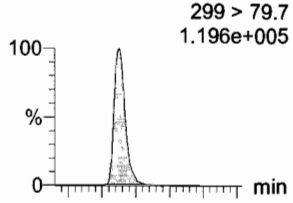
PFBA
F1:MRM of 2 channels,ES-
213.0 > 168.8
2.194e+005



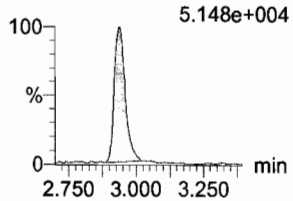
PFPeA
F4:MRM of 1 channel,ES-
263.1 > 218.9
4.864e+005



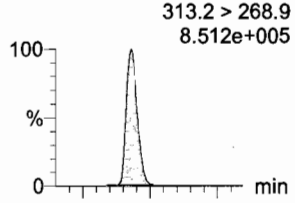
PFBS
F6:MRM of 2 channels,ES-
299 > 79.7
1.196e+005



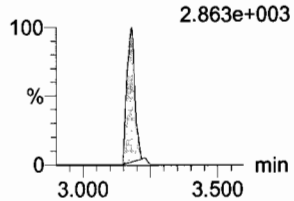
F6:MRM of 2 channels,ES-
299 > 99
5.148e+004



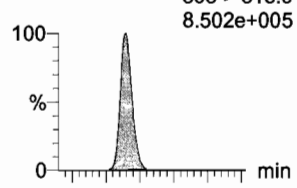
PFHxA
F8:MRM of 2 channels,ES-
313.2 > 268.9
8.512e+005



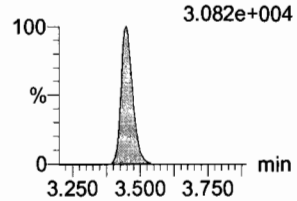
F8:MRM of 2 channels,ES-
313.2 > 119
2.863e+003



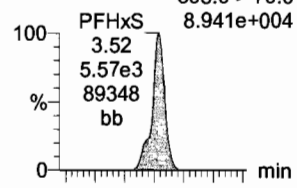
PFHpA
F14:MRM of 2 channels,ES-
363 > 318.9
8.502e+005



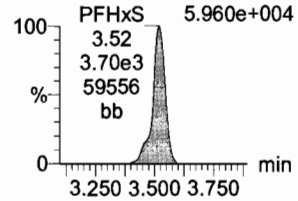
F14:MRM of 2 channels,ES-
363 > 169
3.082e+004



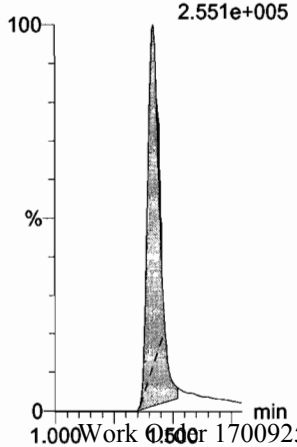
PFHxS
F16:MRM of 2 channels,ES-
398.9 > 79.6
8.941e+004



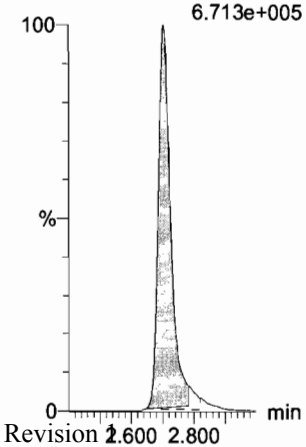
F16:MRM of 2 channels,ES-
398.9 > 99
5.960e+004



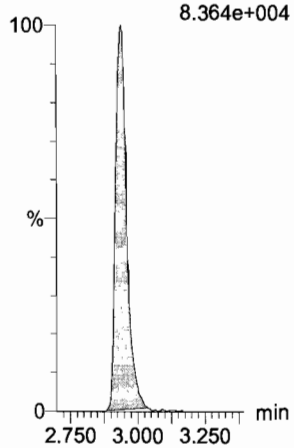
13C3-PFBA
F2:MRM of 1 channel,ES-
216.1 > 171.8
2.551e+005



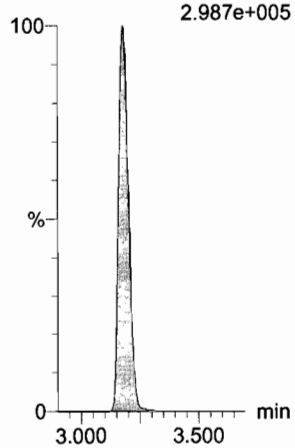
13C3-PFPeA
F5:MRM of 1 channel,ES-
266 > 221.8
6.713e+005



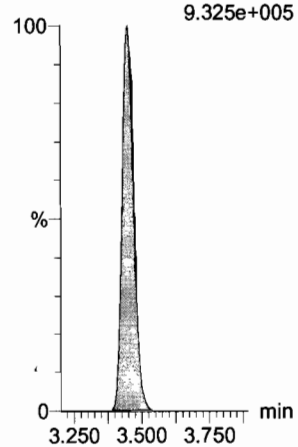
13C3-PFBS
F7:MRM of 1 channel,ES-
302 > 98.8
8.364e+004



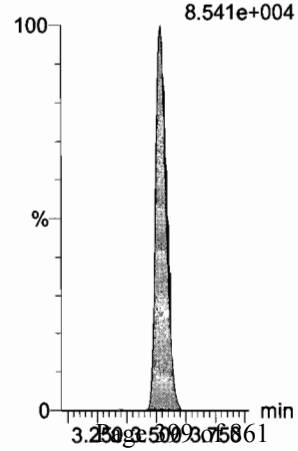
13C2-PFHxA
F9:MRM of 1 channel,ES-
315 > 269.8
2.987e+005



13C4-PFHpA
F15:MRM of 1 channel,ES-
367.2 > 321.8
9.325e+005



18O2-PFHxS
F18:MRM of 1 channel,ES-
403 > 102.6
8.541e+004



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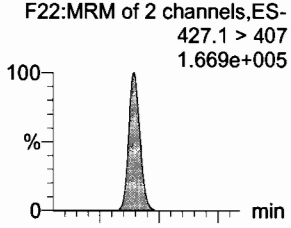
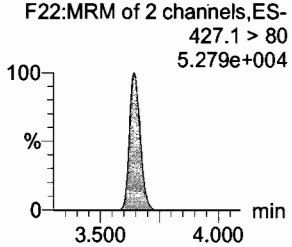
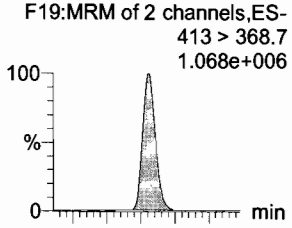
Name: 170803M2_72, Date: 04-Aug-2017, Time: 04:42:11, ID: ST170803M2-5 PFC CS3 17H0202, Description: PFC CS3 17H0202

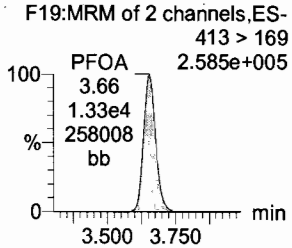
6:2 FTS



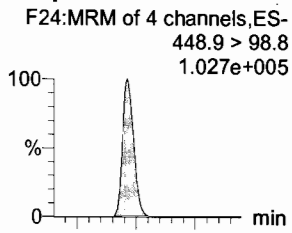


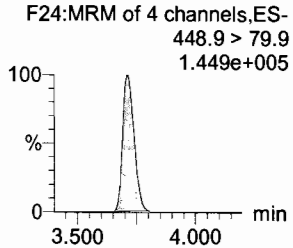
PFOA



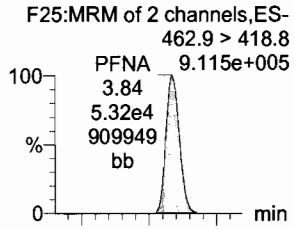


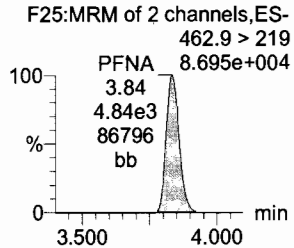
PFHpS



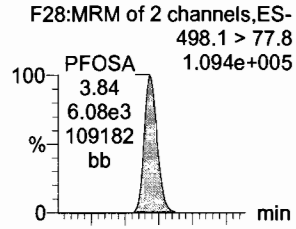


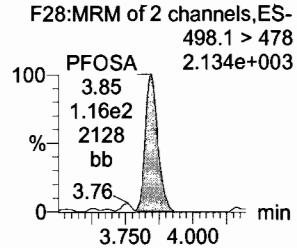
PFNA



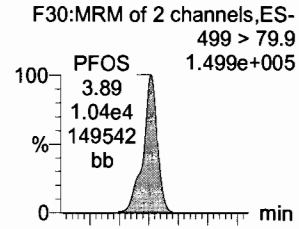


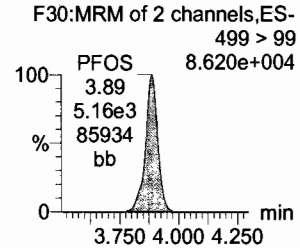
PFOSA



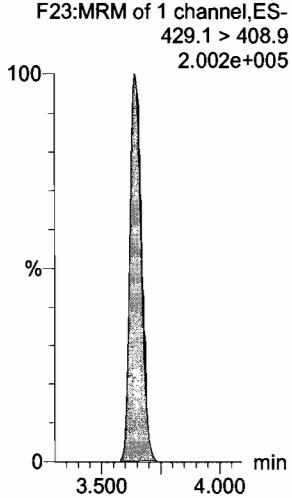


PFOS

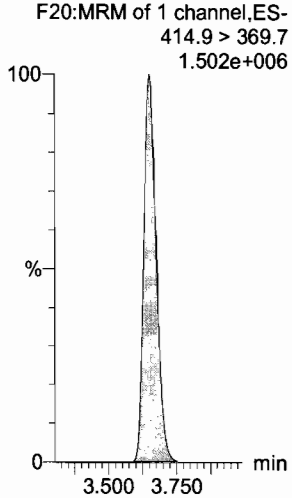




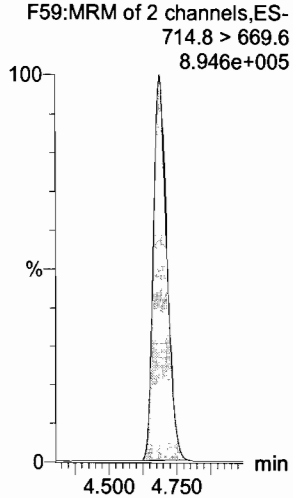
13C2-6:2 FTS



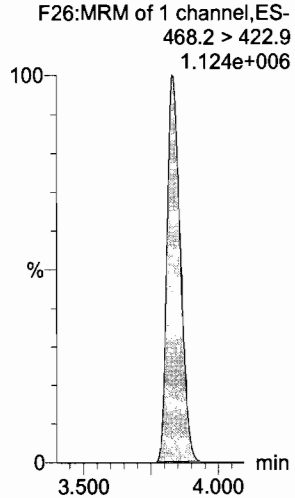
13C2-PFOA



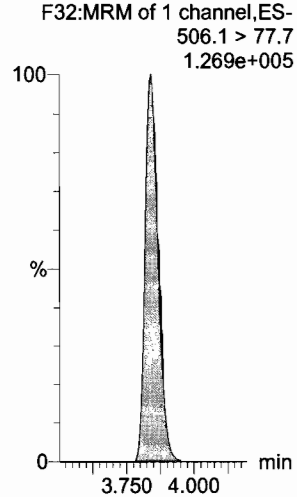
13C2-PFTeDA



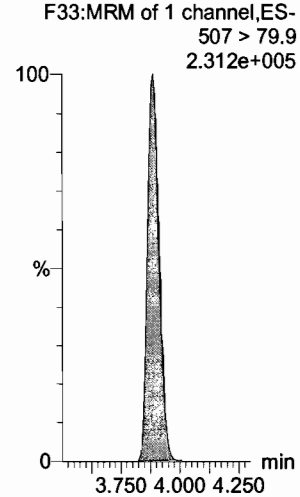
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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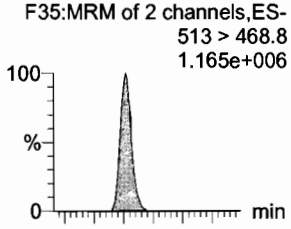
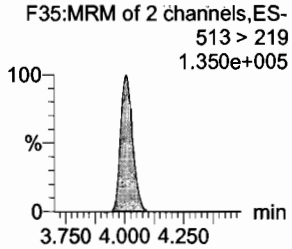
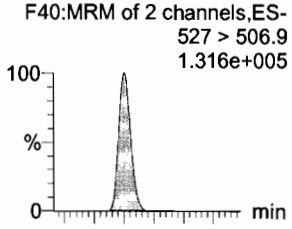
Name: 170803M2_72, Date: 04-Aug-2017, Time: 04:42:11, ID: ST170803M2-5 PFC CS3 17H0202, Description: PFC CS3 17H0202

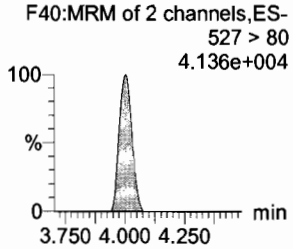
PFDA



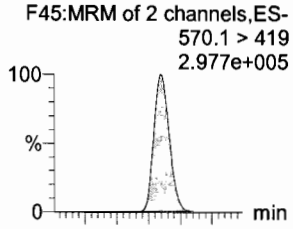


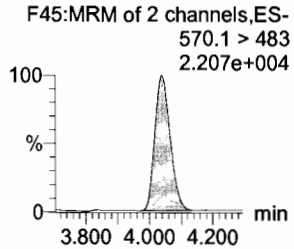
8:2 FTS



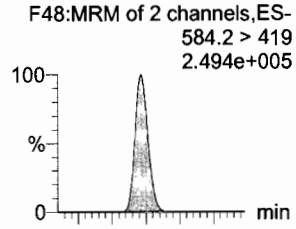


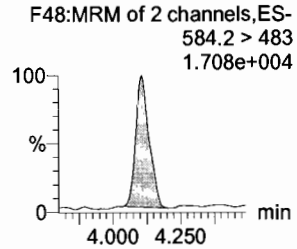
N-MeFOSAA



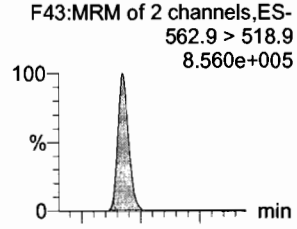


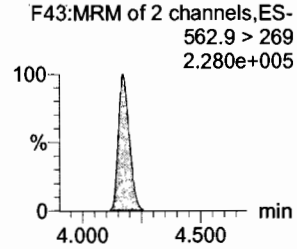
N-EtFOSAA



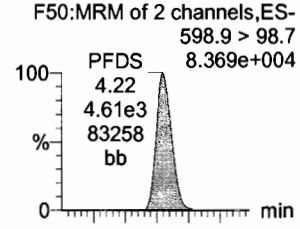


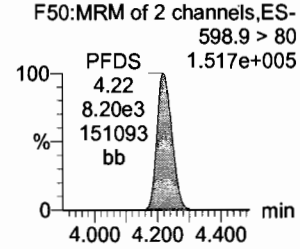
PFUnA



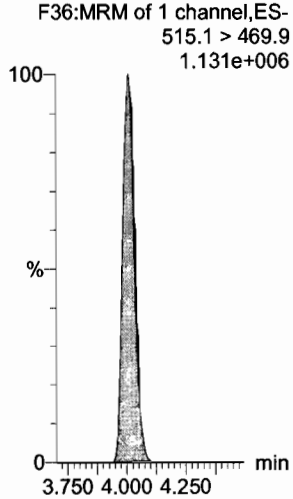


PFDS

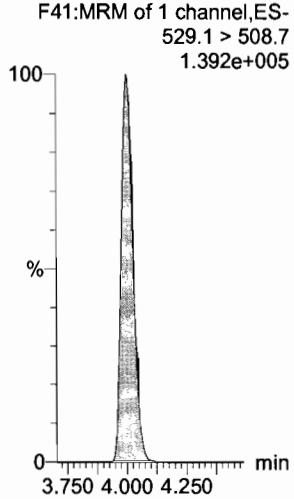




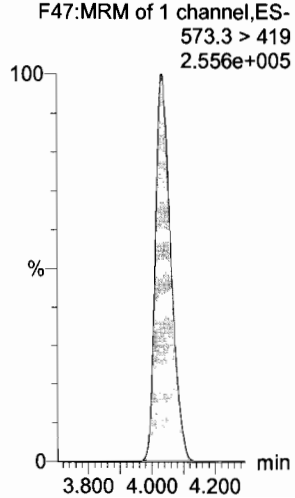
13C2-PFDA



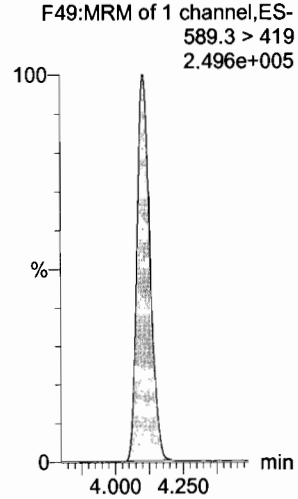
13C2-8:2 FTS



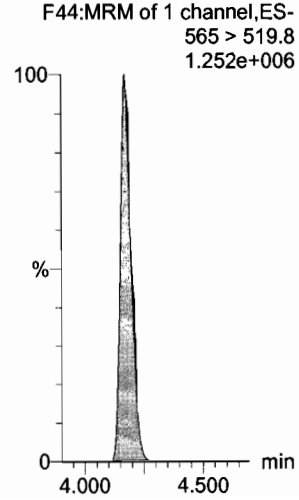
d3-N-MeFOSAA



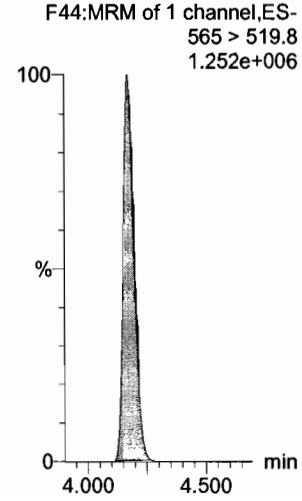
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



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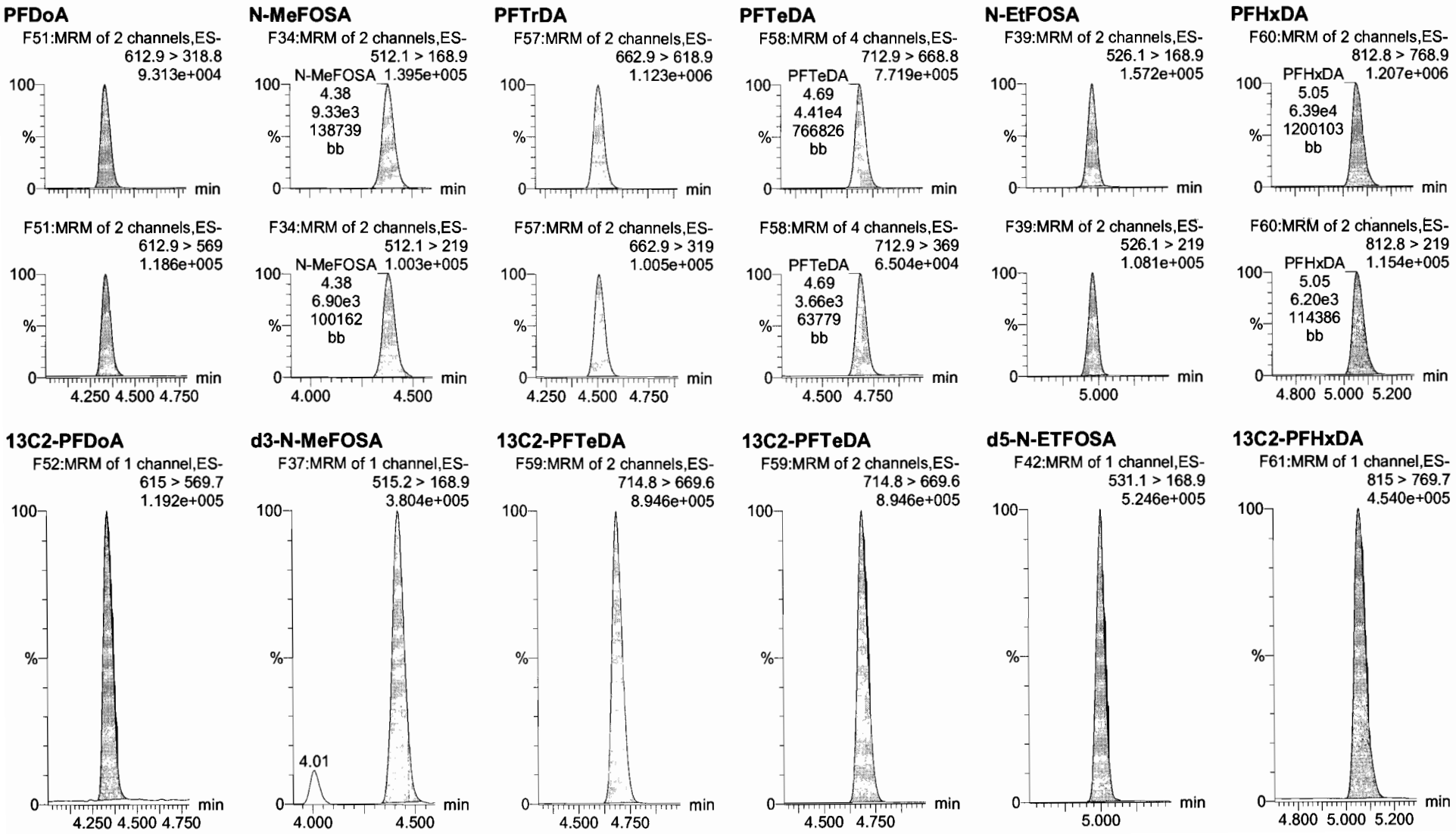

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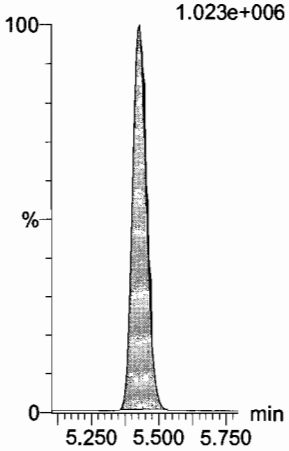
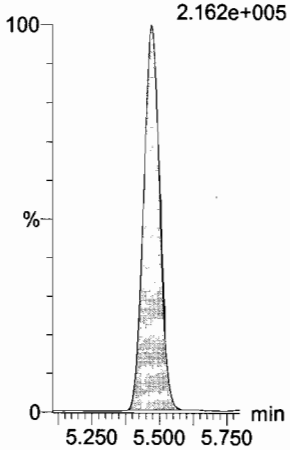
Name: 170803M2_72, Date: 04-Aug-2017, Time: 04:42:11, ID: ST170803M2-5 PFC CS3 17H0202, Description: PFC CS3 17H0202

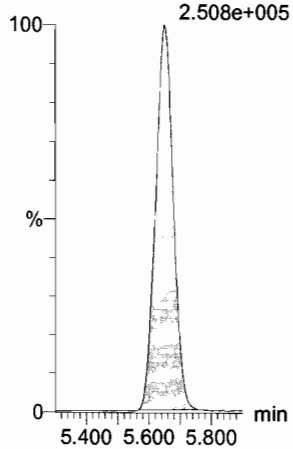
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
1.023e+006



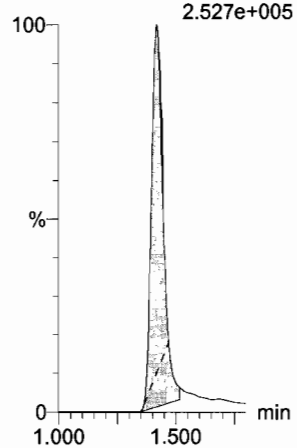
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
2.162e+005



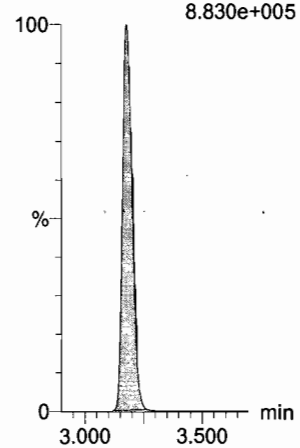
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
2.508e+005



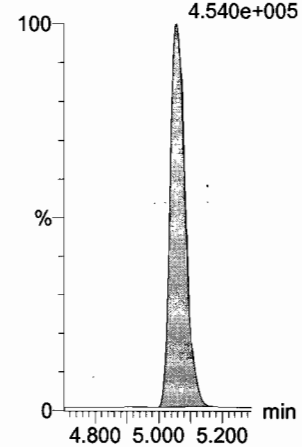
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.527e+005



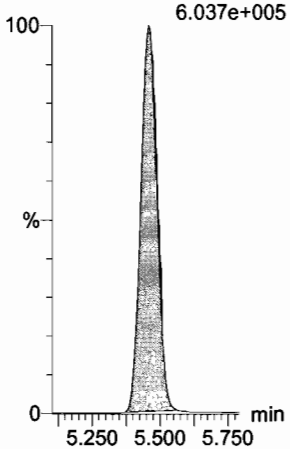
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
8.830e+005



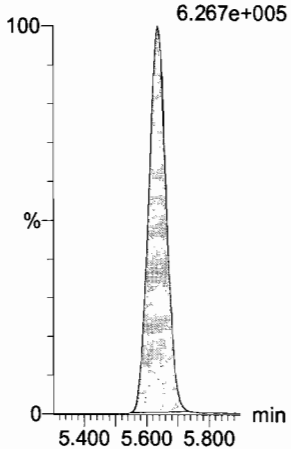
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.540e+005



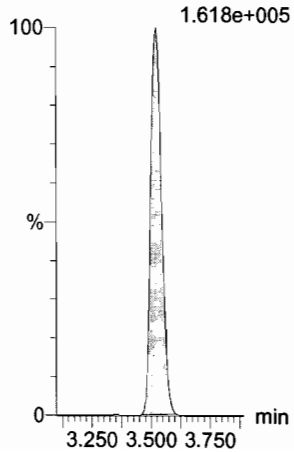
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
6.037e+005



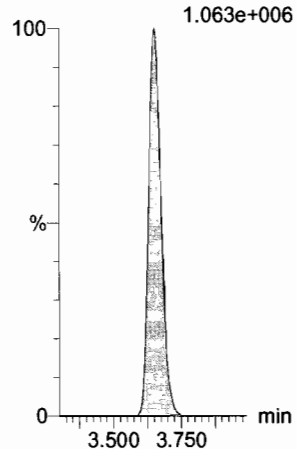
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
6.267e+005



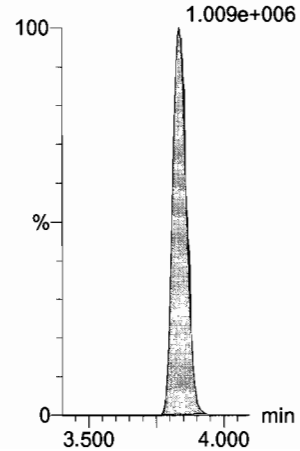
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.618e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.063e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.009e+006



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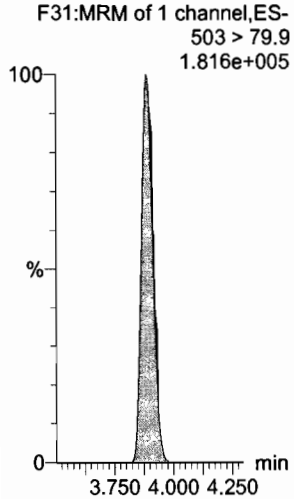
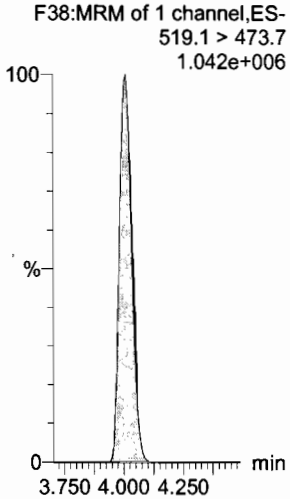
Last Altered: Friday, August 04, 2017 09:21:22 Pacific Daylight Time
Printed: Friday, August 04, 2017 09:21:46 Pacific Daylight Time

Name: 170803M2_72, Date: 04-Aug-2017, Time: 04:42:11, ID: ST170803M2-5 PFC CS3 17H0202, Description: PFC CS3 17H0202

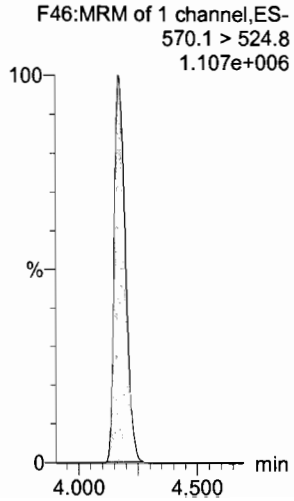
13C4-PFOS



13C6-PFDA



13C7-PFUnA



Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-89.qld

Last Altered: Friday, August 04, 2017 09:23:26 Pacific Daylight Time
Printed: Friday, August 04, 2017 09:23:52 Pacific Daylight Time

AC 8/4/17

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-27-17.mdb 28 Jul 2017 08:06:09
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_89, Date: 04-Aug-2017, Time: 07:44:20, ID: ST170803M2-6 PFC CS3 17H0202, Description: PFC CS3 17H0202

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1	PFBA	213.0 > 168.8	1.37e4	1.58e4		1.32	1.42	10.8	9.94	99.4
2	2	PFPeA	263.1 > 218.9	2.34e4	3.13e4		2.77	2.71	9.36	9.80	98.0
3	3	PFBS	299 > 79.7	5.68e3	3.82e3		2.96	2.94	18.6	9.82	98.2
4	4	PFHxA	313.2 > 268.9	4.37e4	1.46e4		3.19	3.18	15.0	10.7	106.7
5	5	PFHpA	363 > 318.9	4.06e4	4.69e4		3.45	3.45	10.8	8.97	89.7
6	6	PFHxS	398.9 > 79.6	5.76e3	4.37e3		3.56	3.52	16.5	9.78	97.8
7	7	6:2 FTS	427.1 > 407	9.79e3	1.17e4		3.64	3.65	10.4	9.25	92.5
8	8	PFOA	413 > 368.7	5.60e4	7.07e4		3.65	3.66	9.89	10.2	102.2
9	9	PFHpS	448.9 > 98.8	5.86e3	7.07e4		3.65	3.71	1.04	11.9	119.4
10	10	PFNA	462.9 > 418.8	6.16e4	6.82e4		3.83	3.84	11.3	10.3	103.3
11	11	PFOSA	498.1 > 77.8	5.76e3	7.27e3		3.84	3.85	9.90	9.25	92.5
12	12	PFOS	499 > 79.9	1.13e4	1.32e4		3.89	3.89	10.7	10.5	104.6
13	13	PFDA	513 > 468.8	6.69e4	6.42e4		4.01	4.01	13.0	10.7	107.3
14	14	8:2 FTS	527 > 506.9	7.89e3	7.22e3		4.00	4.00	13.7	9.69	96.9
15	15	N-MeFOSAA	570.1 > 419	1.79e4	1.41e4		4.03	4.04	206	11.5	115.4
16	16	N-EtFOSAA	584.2 > 419	1.37e4	1.48e4		4.10	4.11	150	9.75	97.5
17	17	PFUnA	562.9 > 518.9	4.71e4	7.61e4		4.17	4.17	7.73	10.1	100.9
18	18	PFDS	598.9 > 98.7	4.61e3	7.61e4		4.22	4.22	0.756	9.40	94.0
19	19	PFDoA	612.9 > 318.8	5.63e3	8.01e3		4.34	4.34	8.78	9.33	93.3
20	20	N-MeFOSA	512.1 > 168.9	9.53e3	2.64e4		4.29	4.39	54.1	53.6	107.1
21	21	PFTrDA	662.9 > 618.9	6.71e4	8.01e3		4.50	4.51	105	9.97	99.7
22	22	PFTeDA	712.9 > 668.8	4.59e4	5.33e4		4.68	4.69	10.8	9.94	99.4
23	23	N-EtFOSA	526.1 > 168.9	1.17e4	3.64e4		4.79	4.97	48.0	51.7	103.4
24	24	PFHxDA	812.8 > 768.9	6.42e4	2.44e4		5.06	5.06	13.1	10.3	102.7
25	25	PFODA	912.8 > 868.8	6.22e4	2.44e4		5.43	5.43	12.7	11.2	111.7
26	26	N-MeFOSE	616.1 > 58.9	1.47e4	4.14e4		5.42	5.48	53.3	51.6	103.1
27	27	N-EtFOSE	630.1 > 58.9	1.66e4	4.09e4		5.59	5.65	60.8	51.8	103.6
28	28	13C3-PFBA	216.1 > 171.8	1.58e4	1.53e4	1.006	1.32	1.43	12.9	12.9	102.9
29	29	13C3-PFPeA	266 > 221.8	3.13e4	4.40e4	0.275	2.77	2.71	3.55	12.9	103.3
30	30	13C3-PFBS	302 > 98.8	3.82e3	4.40e4	0.034	2.96	2.94	0.435	12.7	101.9
31	31	13C2-PFHxA	315 > 269.8	1.46e4	4.40e4	0.334	3.19	3.18	1.66	4.97	99.4

70-130

50-150

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170803M2\170803M2-89.qld

Last Altered: Friday, August 04, 2017 09:23:26 Pacific Daylight Time
Printed: Friday, August 04, 2017 09:23:52 Pacific Daylight Time

Name: 170803M2_89, Date: 04-Aug-2017, Time: 07:44:20, ID: ST170803M2-6 PFC CS3 17H0202, Description: PFC CS3 17H0202

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	32	13C4-PFHpA	367.2 > 321.8	4.69e4	4.40e4	0.414	3.45	3.45	5.33	12.9	103.0
33	33	18O2-PFHxS	403 > 102.6	4.37e3	9.41e3	0.475	3.56	3.52	5.80	12.2	97.7
34	34	13C2-6:2 FTS	429.1 > 408.9	1.17e4	5.49e4	0.214	3.64	3.65	2.67	12.5	99.9
35	35	13C2-PFOA	414.9 > 369.7	7.07e4	5.49e4	1.298	3.65	3.66	16.1	12.4	99.2
36	36	13C5-PFNA	468.2 > 422.9	6.82e4	6.48e4	1.094	3.83	3.84	13.2	12.0	96.3
37	37	13C8-PFOSA	506.1 > 77.7	7.27e3	6.84e4	0.124	3.84	3.85	1.33	10.7	85.4
38	38	13C8-PFOS	507 > 79.9	1.32e4	1.19e4	1.153	3.89	3.89	13.8	12.0	96.0
39	39	13C2-PFDA	515.1 > 469.9	6.42e4	6.39e4	1.059	4.01	4.01	12.5	11.8	94.8
40	40	13C2-8:2 FTS	529.1 > 508.7	7.22e3	6.39e4	0.129	4.00	4.00	1.41	11.0	87.8
41	41	d3-N-MeFOSAA	573.3 > 419	1.41e4	6.84e4	0.019	4.03	4.04	2.58	133	82.1
42	42	d5-N-EtFOSAA	589.3 > 419	1.48e4	6.84e4	0.019	4.12	4.11	2.71	143	88.0
43	43	13C2-PFUnA	565 > 519.8	7.61e4	6.84e4	1.172	4.17	4.18	13.9	11.9	95.0
44	44	13C2-PFDoA	615 > 569.7	8.01e3	6.84e4	0.118	4.34	4.34	1.46	12.4	98.8
45	45	d3-N-MeFOSA	515.2 > 168.9	2.64e4	6.84e4	0.040	4.29	4.42	4.83	119	79.6
46	46	13C2-PFTeDA	714.8 > 669.6	5.33e4	6.84e4	0.801	4.68	4.69	9.74	12.2	97.2
47	47	d5-N-ETFOSA	531.1 > 168.9	3.64e4	6.84e4	0.055	4.85	5.01	6.65	121	80.6
48	48	13C2-PFHxDA	815 > 769.7	2.44e4	6.84e4	0.991	5.06	5.06	4.46	4.50	90.1
49	49	d7-N-MeFOSE	623.1 > 58.9	4.14e4	6.84e4	0.065	5.42	5.47	7.57	116	77.5
50	50	d9-N-EtFOSE	639.2 > 58.8	4.09e4	6.84e4	0.065	5.59	5.64	7.48	115	77.0
51	51	13C4-PFBA	217 > 171.8	1.53e4	1.53e4	1.000	1.32	1.42	12.5	12.5	100.0
52	52	13C5-PFHxA	318 > 272.9	4.40e4	4.40e4	1.000	3.19	3.18	5.00	5.00	100.0
53	53	13C3-PFHxS	401.9 > 79.9	9.41e3	9.41e3	1.000	3.56	3.52	12.5	12.5	100.0
54	54	13C8-PFOA	421.3 > 376	5.49e4	5.49e4	1.000	3.65	3.66	12.5	12.5	100.0
55	55	13C9-PFNA	472.2 > 426.9	6.48e4	6.48e4	1.000	3.83	3.84	12.5	12.5	100.0
56	56	13C4-PFOS	503 > 79.9	1.19e4	1.19e4	1.000	3.89	3.89	12.5	12.5	100.0
57	57	13C6-PFDA	519.1 > 473.7	6.39e4	6.39e4	1.000	4.01	4.01	12.5	12.5	100.0
58	58	13C7-PFUnA	570.1 > 524.8	6.84e4	6.84e4	1.000	4.17	4.17	12.5	12.5	100.0

50-150

Vista Analytical Laboratory

Dataset: Untitled

Last Altered: Friday, August 04, 2017 09:33:42 Pacific Daylight Time
Printed: Friday, August 04, 2017 10:28:42 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-27-17.mdb 28 Jul 2017 08:06:09
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Compound name: PFBA

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1	170803M2_1	IPA	03-Aug-17	16:02:09
2	170803M2_2	ST170803M2-1 PFC CS0 17H0307	03-Aug-17	16:12:52
3	170803M2_3	IPA	03-Aug-17	16:23:40
4	170803M2_4	1700925-02 SB01-170724 0.12178	03-Aug-17	16:34:26
5	170803M2_5	1700925-06 EB01-170724 0.1185	03-Aug-17	16:45:12
6	170803M2_6	1700929-01 MATP01001 0.11834	03-Aug-17	16:55:51
7	170803M2_7	1700938-01 NORP08102 0.11844	03-Aug-17	17:06:36
8	170803M2_8	1700938-02 NORP08103 0.12014	03-Aug-17	17:17:30
9	170803M2_9	1700936-01 BULK TANK #1 0.005	03-Aug-17	17:28:17
10	170803M2_10	1700936-02 BULK TANK #2 0.005	03-Aug-17	17:38:55
11	170803M2_11	1700871-11@5X 16-GW-16_MW04-2017071...	03-Aug-17	17:49:34
12	170803M2_12	IPA	03-Aug-17	18:00:12
13	170803M2_13	1700925-01@15X I001BC43S-170724 0.12112	03-Aug-17	18:10:51
14	170803M2_14	IPA	03-Aug-17	18:21:33
15	170803M2_15	1700925-03@15X I001BC50S-170724 0.12135	03-Aug-17	18:32:17
16	170803M2_16	IPA	03-Aug-17	18:42:55
17	170803M2_17	B7G0122-BS1 OPR 0.25	03-Aug-17	18:53:33
18	170803M2_18	IPA	03-Aug-17	19:04:20
19	170803M2_19	B7G0122-BLK1 Method Blank 0.25	03-Aug-17	19:14:58
20	170803M2_20	1700891-06RE1 VEL FOAM 0.17113	03-Aug-17	19:25:37
21	170803M2_21	IPA	03-Aug-17	19:36:23
22	170803M2_22	ST170803M2-2 PFC CS3 17H0202	03-Aug-17	19:47:10
23	170803M2_23	IPA	03-Aug-17	19:57:57
24	170803M2_24	B7H0007-BS1 OPR 0.25	03-Aug-17	20:08:35
25	170803M2_25	B7H0010-BS1 OPR 5	03-Aug-17	20:19:13
26	170803M2_26	B7H0011-BS1 OPR 5	03-Aug-17	20:29:52
27	170803M2_27	B7H0012-BS1 OPR 0.25	03-Aug-17	20:40:30
28	170803M2_28	B7H0007-BSD1 LCS Dup 0.25	03-Aug-17	20:51:17
29	170803M2_29	IPA	03-Aug-17	21:01:55
30	170803M2_30	B7H0007-BLK1 Method Blank 0.25	03-Aug-17	21:12:41
31	170803M2_31	B7H0010-BLK1 Method Blank 5	03-Aug-17	21:23:20

Vista Analytical Laboratory

Dataset: Untitled

Last Altered: Friday, August 04, 2017 09:33:42 Pacific Daylight Time
Printed: Friday, August 04, 2017 10:28:42 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	170803M2_32	B7H0011-BLK1 Method Blank 5	03-Aug-17	21:33:58
33	170803M2_33	B7H0012-BLK1 Method Blank 0.25	03-Aug-17	21:44:37
34	170803M2_34	1700862-01 WS 252 0.00025	03-Aug-17	21:55:15
35	170803M2_35	1700952-01 CP-IDW-072517 0.24347	03-Aug-17	22:06:01
36	170803M2_36	1700953-01 TF4-IDW-072517-01 0.26372	03-Aug-17	22:16:55
37	170803M2_37	1700953-02 TF4-IDW-072517-02 0.26543	03-Aug-17	22:27:44
38	170803M2_38	1700954-01 TF5-IDW-072517 0.25837	03-Aug-17	22:38:30
39	170803M2_39	1700818-01 QPFD-1 5	03-Aug-17	22:49:08
40	170803M2_40	1700818-02 QPFD-2 5	03-Aug-17	22:59:55
41	170803M2_41	1700818-03 QPFD-3 5	03-Aug-17	23:10:33
42	170803M2_42	1700818-04 QPFD-4 5	03-Aug-17	23:21:11
43	170803M2_43	1700818-05 QPFD-5 5	03-Aug-17	23:31:50
44	170803M2_44	IPA	03-Aug-17	23:42:28
45	170803M2_45	ST170803M2-3 PFC CS3 17H0202	03-Aug-17	23:53:06
46	170803M2_46	IPA	04-Aug-17	00:03:53
47	170803M2_47	1700818-06 QPFD-6 5	04-Aug-17	00:14:34
48	170803M2_48	1700818-07 QPFD-7 5	04-Aug-17	00:25:19
49	170803M2_49	1700818-08 QPFD-8 5	04-Aug-17	00:35:57
50	170803M2_50	1700818-09 QPFD-9 5	04-Aug-17	00:46:44
51	170803M2_51	1700818-10 QPFD-10 5	04-Aug-17	00:57:39
52	170803M2_52	1700818-11 QPFD-11 5	04-Aug-17	01:08:26
53	170803M2_53	1700818-12 QPFD-12 5	04-Aug-17	01:19:04
54	170803M2_54	1700818-13 QPFD-13 5	04-Aug-17	01:29:51
55	170803M2_55	1700903-01 1958 5	04-Aug-17	01:40:29
56	170803M2_56	B7H0010-DUP1 Duplicate 5	04-Aug-17	01:51:08
57	170803M2_57	1700819-01 QPFD-14 5	04-Aug-17	02:01:46
58	170803M2_58	IPA	04-Aug-17	02:12:27
59	170803M2_59	ST170803M2-4 PFC CS0 17H0307	04-Aug-17	02:23:13
60	170803M2_60	IPA	04-Aug-17	02:33:58
61	170803M2_61	1700819-02 QPFD-15 5	04-Aug-17	02:44:36
62	170803M2_62	1700819-03 QPFD-16 5	04-Aug-17	02:55:15
63	170803M2_63	1700819-04 QPFD-17 5	04-Aug-17	03:05:53
64	170803M2_64	1700819-05 QPFD-18 5	04-Aug-17	03:16:32
65	170803M2_65	1700819-06 QPFD-19 5	04-Aug-17	03:27:10

Vista Analytical Laboratory

Dataset: Untitled

Last Altered: Friday, August 04, 2017 09:33:42 Pacific Daylight Time
Printed: Friday, August 04, 2017 10:28:42 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
66	170803M2_66	1700819-07 QPFD-20 5	04-Aug-17	03:37:48
67	170803M2_67	1700819-08 QPFD-21 5	04-Aug-17	03:48:35
68	170803M2_68	1700819-09 QPFD-22 5	04-Aug-17	03:59:13
69	170803M2_69	1700819-10 QPFD-23 5	04-Aug-17	04:10:00
70	170803M2_70	1700819-11 QPFD-24 5	04-Aug-17	04:20:46
71	170803M2_71	IPA	04-Aug-17	04:31:33
72	170803M2_72	ST170803M2-5 PFC CS3 17H0202	04-Aug-17	04:42:11
73	170803M2_73	IPA	04-Aug-17	04:52:57
74	170803M2_74	1700819-12 QPFD-25 5	04-Aug-17	05:03:36
75	170803M2_75	1700819-13 QPFD-26 5	04-Aug-17	05:14:14
76	170803M2_76	1700963-01 SW VEL L2 0.25308	04-Aug-17	05:24:54
77	170803M2_77	1700963-02 SW VEL L3 0.21924	04-Aug-17	05:35:42
78	170803M2_78	1700963-03 SW VEL L4 0.25896	04-Aug-17	05:46:38
79	170803M2_79	1700963-04 VEL FOAM L2 0.02349	04-Aug-17	05:57:16
80	170803M2_80	IPA	04-Aug-17	06:08:00
81	170803M2_81	1700963-05 VEL FOAM L3 0.09911	04-Aug-17	06:18:49
82	170803M2_82	IPA	04-Aug-17	06:29:35
83	170803M2_83	1700963-06 VEL FOAM L4 0.03035	04-Aug-17	06:40:14
84	170803M2_84	IPA	04-Aug-17	06:50:52
85	170803M2_85	1700925-01 I001BC43S-170724 0.12112	04-Aug-17	07:01:39
86	170803M2_86	IPA	04-Aug-17	07:12:17
87	170803M2_87	1700925-03 I001BC50S-170724 0.12135	04-Aug-17	07:22:56
88	170803M2_88	IPA	04-Aug-17	07:33:42
89	170803M2_89	ST170803M2-6 PFC CS3 17H0202	04-Aug-17	07:44:20
90	170803M2_90	IPA	04-Aug-17	07:55:07

Quantify Sample Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory

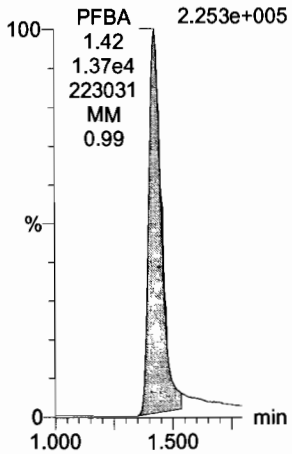
Dataset: U:\Q4.PRO\results\170803M2\170803M2-89.qld

Last Altered: Friday, August 04, 2017 09:23:26 Pacific Daylight Time
Printed: Friday, August 04, 2017 09:23:52 Pacific Daylight Time

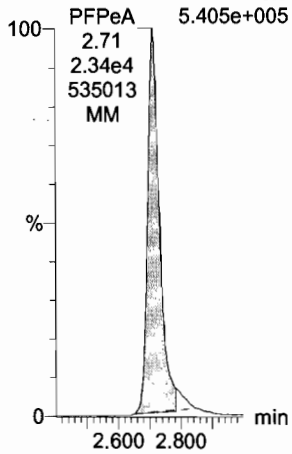
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-27-17.mdb 28 Jul 2017 08:06:09
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170803M2_89, Date: 04-Aug-2017, Time: 07:44:20, ID: ST170803M2-6 PFC CS3 17H0202, Description: PFC CS3 17H0202

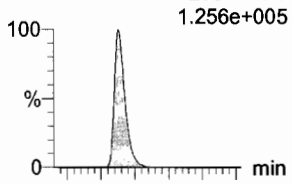
PFBA
F1:MRM of 2 channels,ES-
213.0 > 168.8
2.253e+005



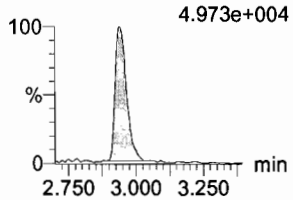
PFPeA
F4:MRM of 1 channel,ES-
263.1 > 218.9
5.405e+005



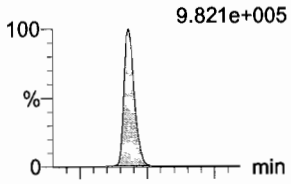
PFBS
F6:MRM of 2 channels,ES-
299 > 79.7
1.256e+005



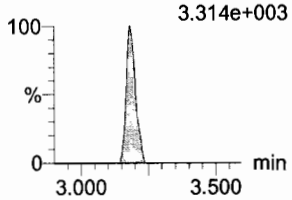
F6:MRM of 2 channels,ES-
299 > 99
4.973e+004



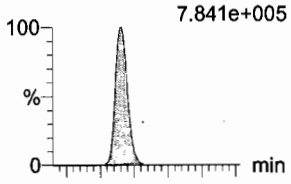
PFHxA
F8:MRM of 2 channels,ES-
313.2 > 268.9
9.821e+005



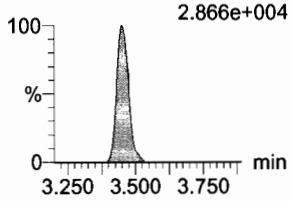
F8:MRM of 2 channels,ES-
313.2 > 119
3.314e+003



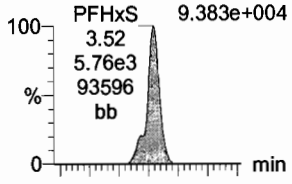
PFHpA
F14:MRM of 2 channels,ES-
363 > 318.9
7.841e+005



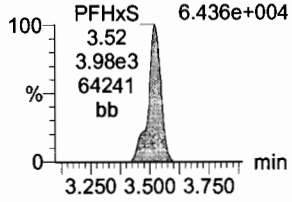
F14:MRM of 2 channels,ES-
363 > 169
2.866e+004



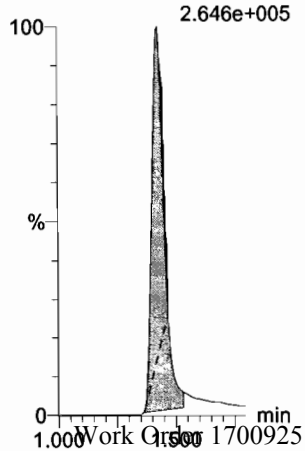
PFHxS
F16:MRM of 2 channels,ES-
398.9 > 79.6
9.383e+004



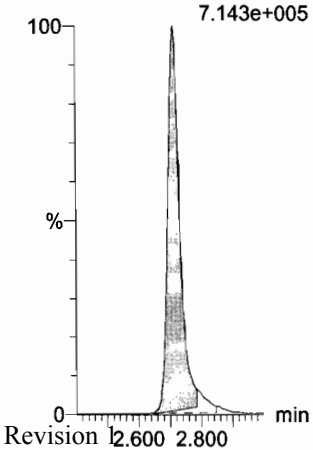
F16:MRM of 2 channels,ES-
398.9 > 99
6.436e+004



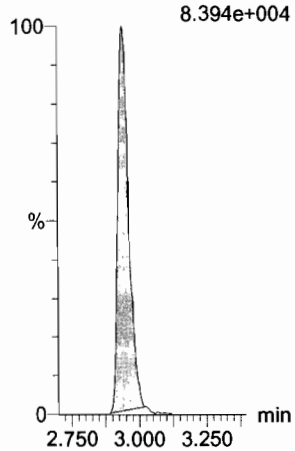
13C3-PFBA
F2:MRM of 1 channel,ES-
216.1 > 171.8
2.646e+005



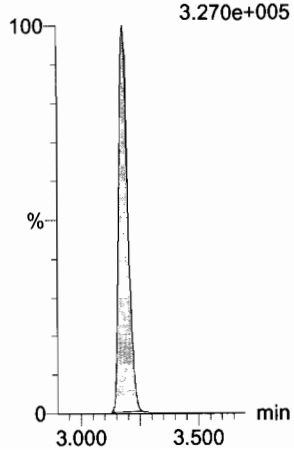
13C3-PFPeA
F5:MRM of 1 channel,ES-
266 > 221.8
7.143e+005



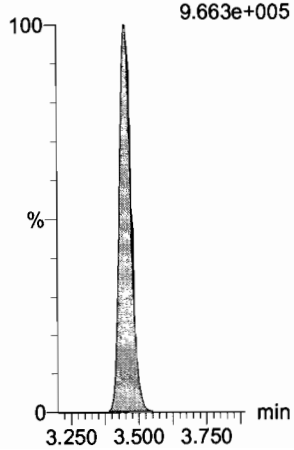
13C3-PFBS
F7:MRM of 1 channel,ES-
302 > 98.8
8.394e+004



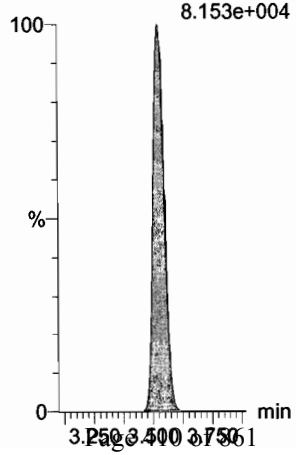
13C2-PFHxA
F9:MRM of 1 channel,ES-
315 > 269.8
3.270e+005



13C4-PFHpA
F15:MRM of 1 channel,ES-
367.2 > 321.8
9.663e+005



18O2-PFHxS
F18:MRM of 1 channel,ES-
403 > 102.6
8.153e+004



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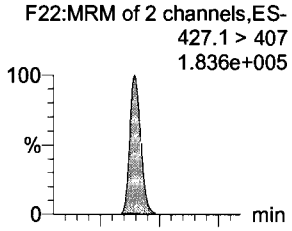
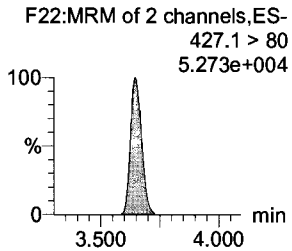
Last Altered: Friday, August 04, 2017 09:23:26 Pacific Daylight Time
Printed: Friday, August 04, 2017 09:23:52 Pacific Daylight Time

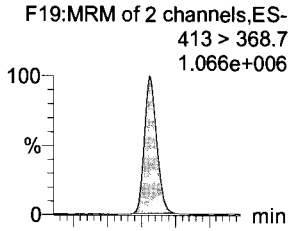
Name: 170803M2_89, Date: 04-Aug-2017, Time: 07:44:20, ID: ST170803M2-6 PFC CS3 17H0202, Description: PFC CS3 17H0202

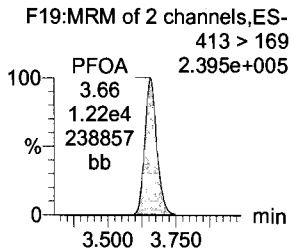
6:2 FTS



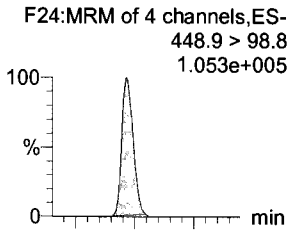


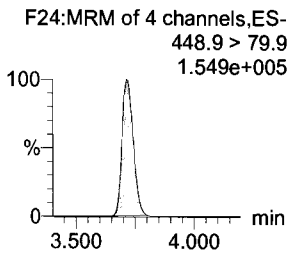
PFOA



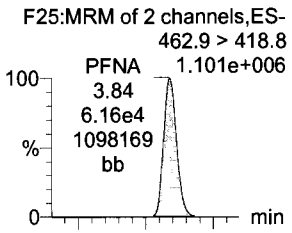


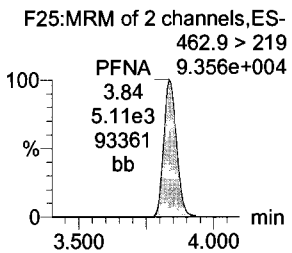
PFHpS



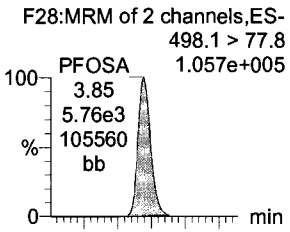


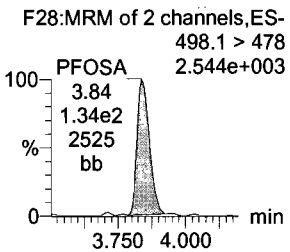
PFNA



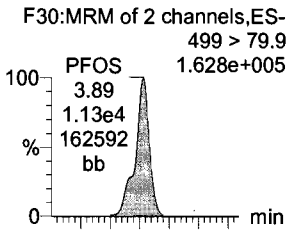


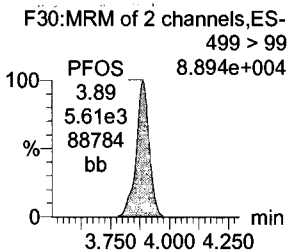
PFOSA



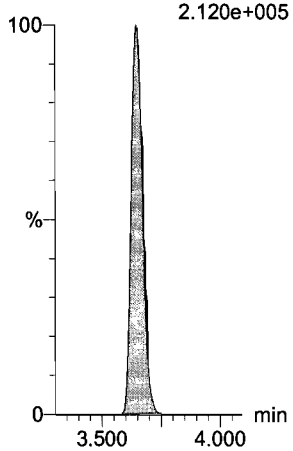


PFOS

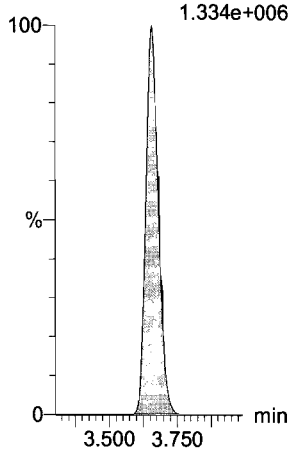




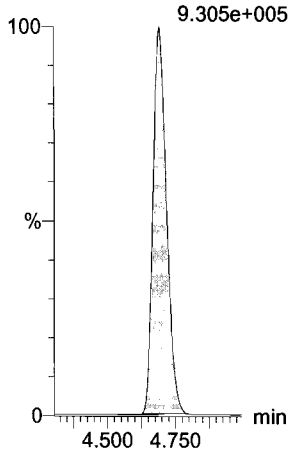
13C2-6:2 FTS



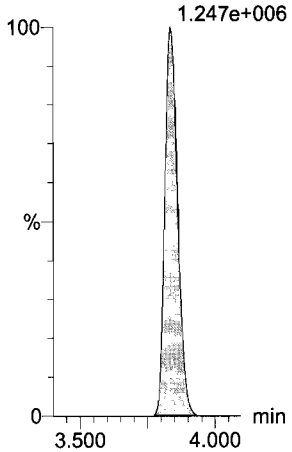
13C2-PFOA



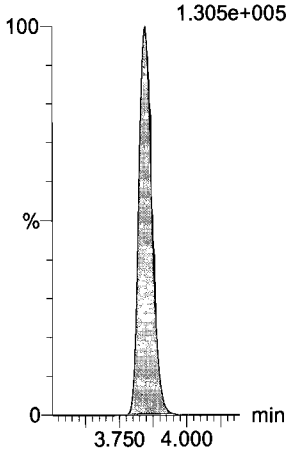
13C2-PFTeDA



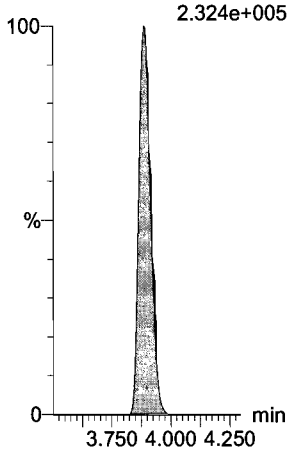
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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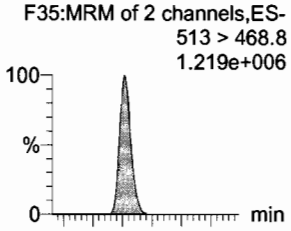
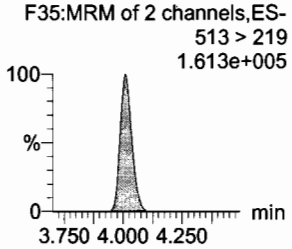
Printed: Friday, August 04, 2017 09:23:52 Pacific Daylight Time

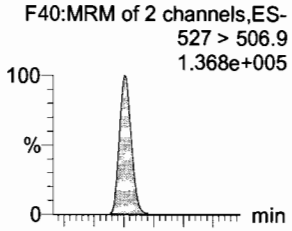
Name: 170803M2_89, Date: 04-Aug-2017, Time: 07:44:20, ID: ST170803M2-6 PFC CS3 17H0202, Description: PFC CS3 17H0202

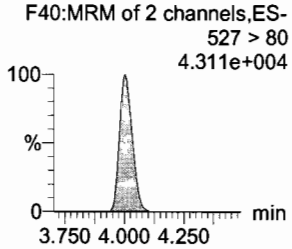
PFDA



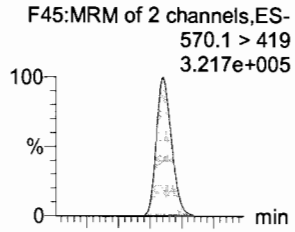


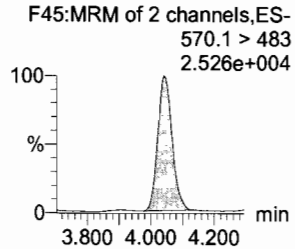
8:2 FTS



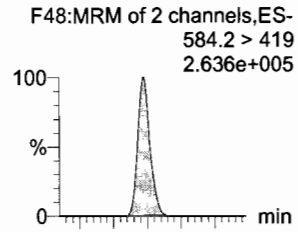


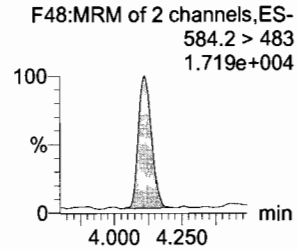
N-MeFOSAA



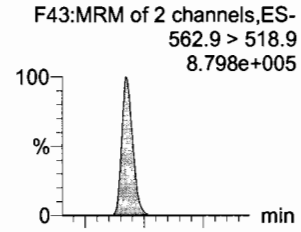


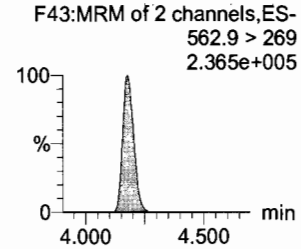
N-EtFOSAA



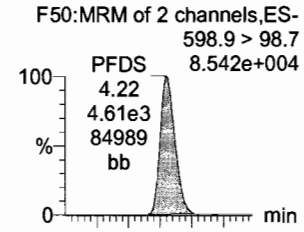


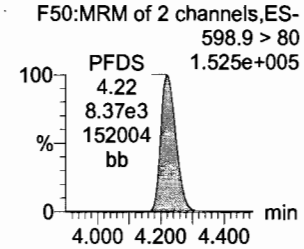
PFUnA



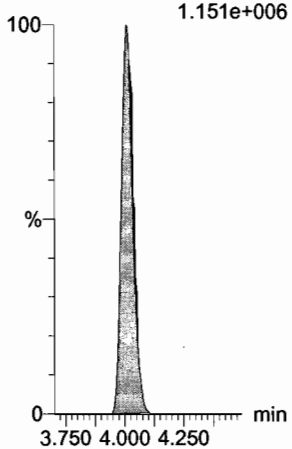


PFDS

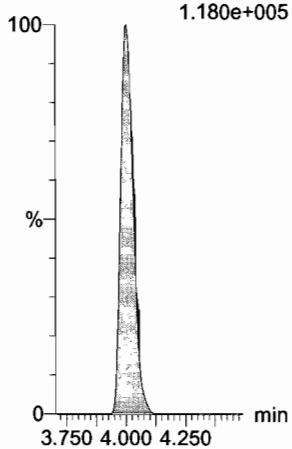




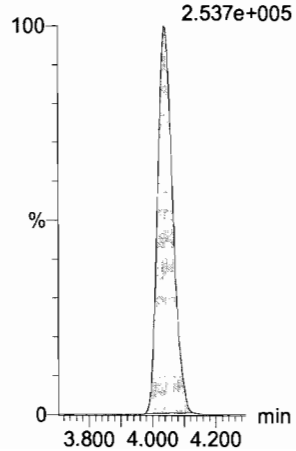
13C2-PFDA



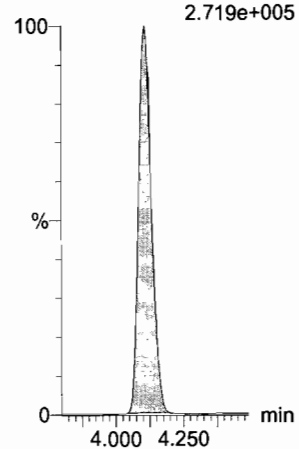
13C2-8:2 FTS



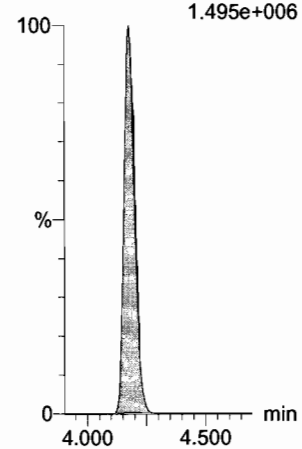
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFUnA



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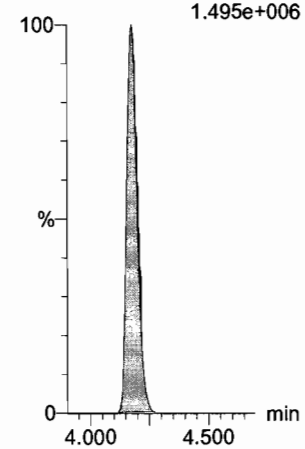

Vista Analytical Laboratory

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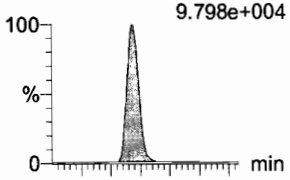
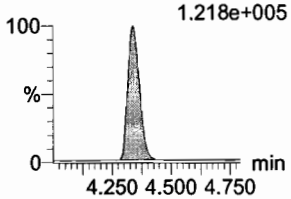
Printed: Friday, August 04, 2017 09:23:52 Pacific Daylight Time

Name: 170803M2_89, Date: 04-Aug-2017, Time: 07:44:20, ID: ST170803M2-6 PFC CS3 17H0202, Description: PFC CS3 17H0202

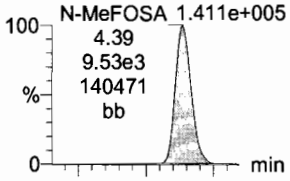
PFDoA
F51:MRM of 2 channels,ES-
612.9 > 318.8
9.798e+004



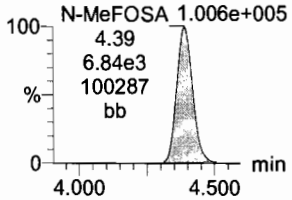
F51:MRM of 2 channels,ES-
612.9 > 569
1.218e+005



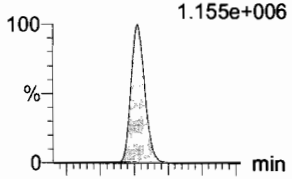
N-MeFOSA
F34:MRM of 2 channels,ES-
512.1 > 168.9
N-MeFOSA 1.411e+005



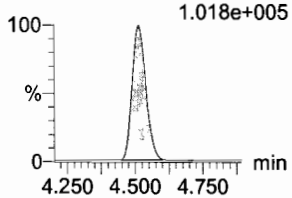
F34:MRM of 2 channels,ES-
512.1 > 219
N-MeFOSA 1.006e+005



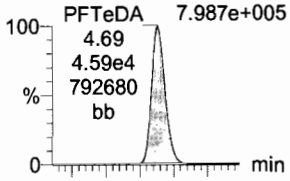
PFTrDA
F57:MRM of 2 channels,ES-
662.9 > 618.9
1.155e+006



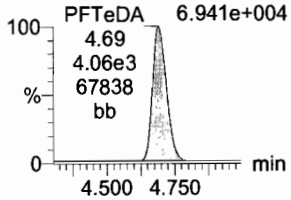
F57:MRM of 2 channels,ES-
662.9 > 319
1.018e+005



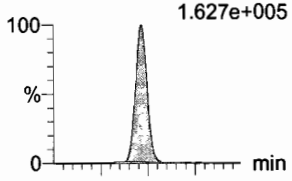
PFTeDA
F58:MRM of 4 channels,ES-
712.9 > 668.8
PFTeDA 7.987e+005



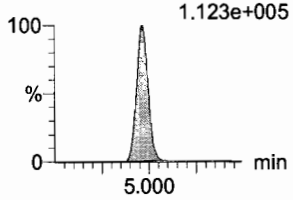
F58:MRM of 4 channels,ES-
712.9 > 369
PFTeDA 6.941e+004



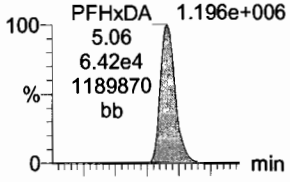
N-EtFOSA
F39:MRM of 2 channels,ES-
526.1 > 168.9
1.627e+005



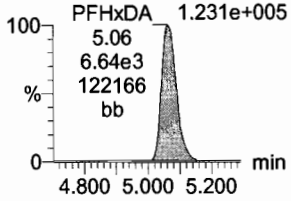
F39:MRM of 2 channels,ES-
526.1 > 219
1.123e+005



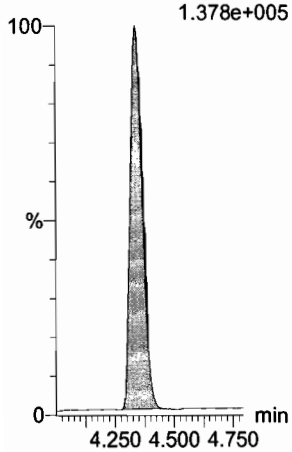
PFHxDA
F60:MRM of 2 channels,ES-
812.8 > 768.9
PFHxDA 1.196e+006



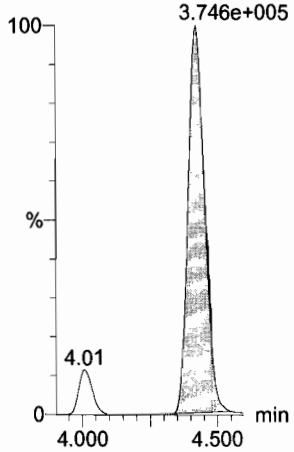
F60:MRM of 2 channels,ES-
812.8 > 219
PFHxDA 1.231e+005



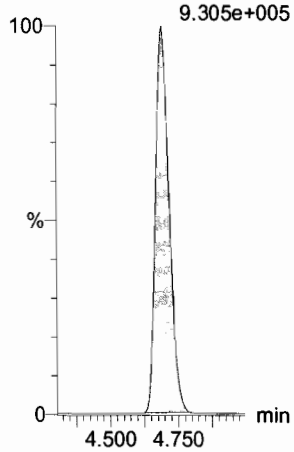
13C2-PFDoA
F52:MRM of 1 channel,ES-
615 > 569.7
1.378e+005



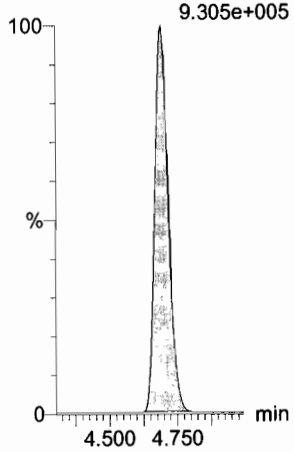
d3-N-MeFOSA
F37:MRM of 1 channel,ES-
515.2 > 168.9
3.746e+005



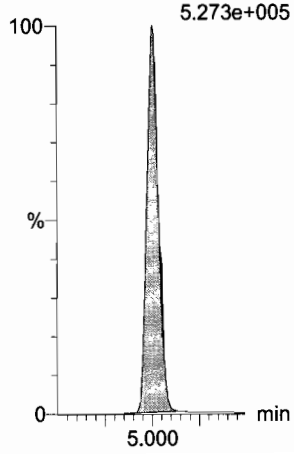
13C2-PFTeDA
F59:MRM of 2 channels,ES-
714.8 > 669.6
9.305e+005



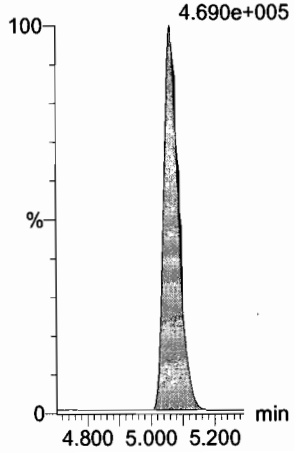
13C2-PFTeDA
F59:MRM of 2 channels,ES-
714.8 > 669.6
9.305e+005



d5-N-ETFOSA
F42:MRM of 1 channel,ES-
531.1 > 168.9
5.273e+005



13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.690e+005

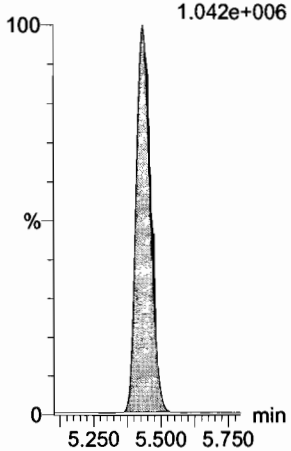


Dataset: U:\Q4.PRO\results\170803M2\170803M2-89.qld

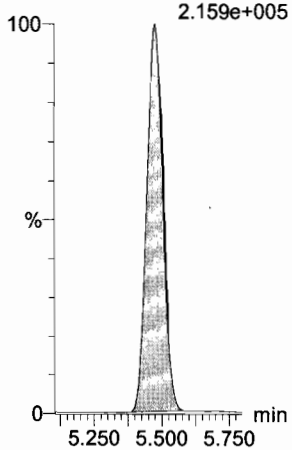
Last Altered: Friday, August 04, 2017 09:23:26 Pacific Daylight Time
Printed: Friday, August 04, 2017 09:23:52 Pacific Daylight Time

Name: 170803M2_89, Date: 04-Aug-2017, Time: 07:44:20, ID: ST170803M2-6 PFC CS3 17H0202, Description: PFC CS3 17H0202

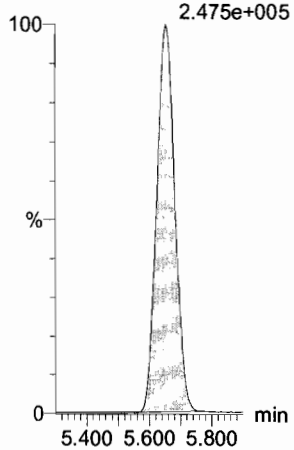
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
1.042e+006



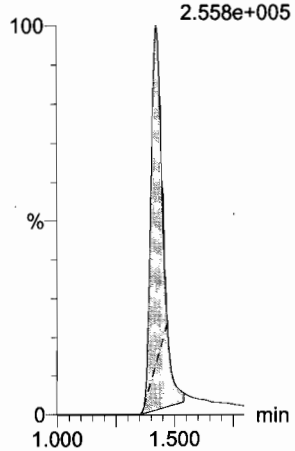
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
2.159e+005



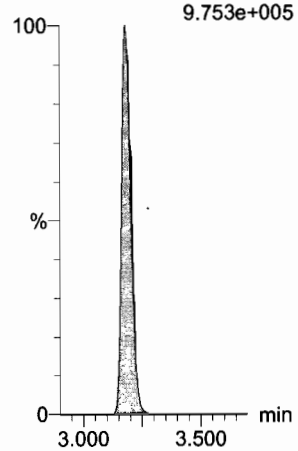
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
2.475e+005



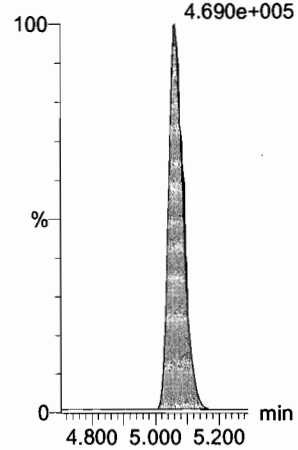
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.558e+005



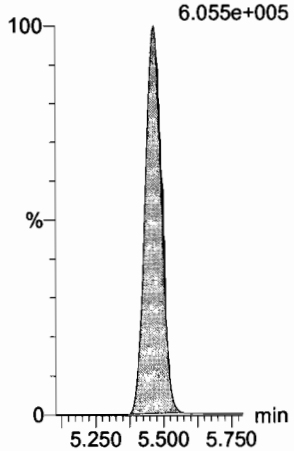
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
9.753e+005



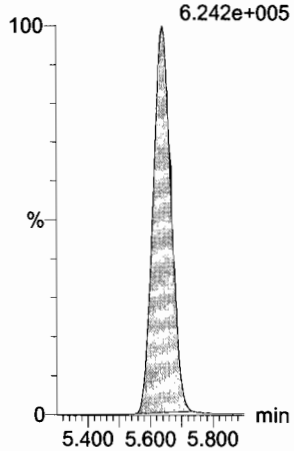
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.690e+005



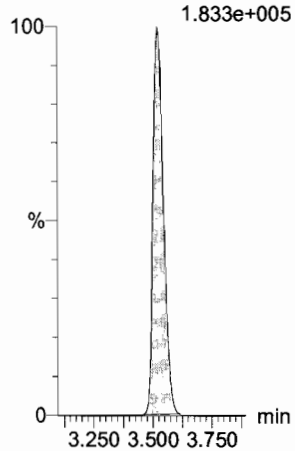
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
6.055e+005



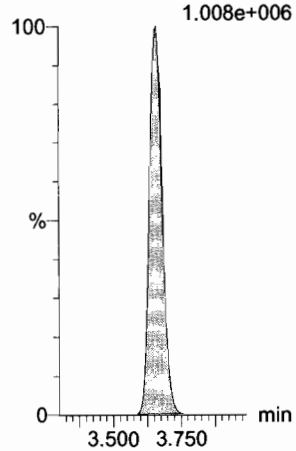
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
6.242e+005



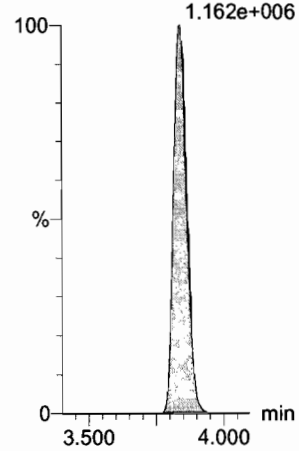
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.833e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.008e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.162e+006



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Dataset: U:\Q4.PRO\results\170803M2\170803M2-89.qld

Last Altered: Friday, August 04, 2017 09:23:26 Pacific Daylight Time
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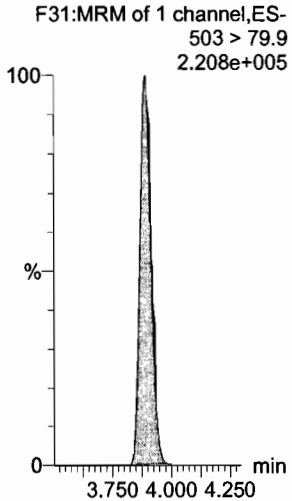
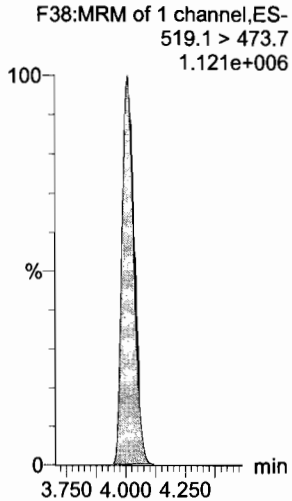
Name: 170803M2_89, Date: 04-Aug-2017, Time: 07:44:20, ID: ST170803M2-6 PFC CS3 17H0202, Description: PFC CS3 17H0202

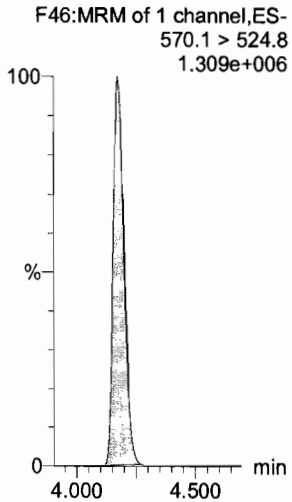
13C4-PFOS



13C6-PFDA



13C7-PFUnA



Dataset: U:\Q4.PRO\results\170810M2\RS_AREAS.qld

Last Altered: Friday, August 11, 2017 15:02:10 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:02:59 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_RS=only.mdb 11 Aug 2017 12:16:30
Calibration: 11 Aug 2017 15:02:10

Name: 170810M2_2, Date: 10-Aug-2017, Time: 20:32:31, ID: ST170810M2-1 PFC CS-2 17H1015, Description: PFC CS-2 17H1015

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	ST170...	3.82e4	91.3	NO
2	2 13C3-PFHxS	ST170...	7.28e3	84.6	NO
3	3 13C8-PFOA	ST170...	5.46e4	94.4	NO
4	4 13C9-PFNA	ST170...	6.28e4	98.6	NO
5	5 13C4-PFOS	ST170...	1.00e4	96.4	NO
6	6 13C6-PFDA	ST170...	6.21e4	106.9	NO
7	7 13C7-PFUnA	ST170...	5.65e4	96.8	NO

Name: 170810M2_3, Date: 10-Aug-2017, Time: 20:43:21, ID: ST170810M2-2 PFC CS-1 17H1003, Description: PFC CS-1 17H1003

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	ST170...	4.01e4	95.8	NO
2	2 13C3-PFHxS	ST170...	8.10e3	94.0	NO
3	3 13C8-PFOA	ST170...	5.90e4	102.0	NO
4	4 13C9-PFNA	ST170...	6.90e4	108.3	NO
5	5 13C4-PFOS	ST170...	1.15e4	110.7	NO
6	6 13C6-PFDA	ST170...	5.69e4	97.8	NO
7	7 13C7-PFUnA	ST170...	5.41e4	92.6	NO

Name: 170810M2_4, Date: 10-Aug-2017, Time: 20:54:09, ID: ST170810M2-3 PFC CS0 17H1004, Description: PFC CS0 17H1004

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	ST170...	4.16e4	99.5	NO
2	2 13C3-PFHxS	ST170...	8.55e3	99.3	NO
3	3 13C8-PFOA	ST170...	6.04e4	104.5	NO
4	4 13C9-PFNA	ST170...	6.40e4	100.5	NO
5	5 13C4-PFOS	ST170...	1.04e4	100.5	NO
6	6 13C6-PFDA	ST170...	6.35e4	109.3	NO
7	7 13C7-PFUnA	ST170...	5.89e4	100.8	NO

Name: 170810M2_5, Date: 10-Aug-2017, Time: 21:05:02, ID: ST170810M2-4 PFC CS1 17H1016, Description: PFC CS1 17H1016

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	ST170...	3.98e4	95.1	NO
2	2 13C3-PFHxS	ST170...	9.12e3	105.9	NO
3	3 13C8-PFOA	ST170...	6.12e4	105.8	NO
4	4 13C9-PFNA	ST170...	6.38e4	100.2	NO
5	5 13C4-PFOS	ST170...	1.06e4	102.1	NO
6	6 13C6-PFDA	ST170...	5.69e4	98.0	NO
7	7 13C7-PFUnA	ST170...	5.49e4	94.0	NO

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Name: 170810M2_6, Date: 10-Aug-2017, Time: 21:15:44, ID: ST170810M2-5 PFC CS2 17H1017, Description: PFC CS2 17H1017

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	4.17e4	99.7	NO
2	2	13C3-PFHxS	ST170...	8.81e3	102.3	NO
3	3	13C8-PFOA	ST170...	5.70e4	98.5	NO
4	4	13C9-PFNA	ST170...	5.97e4	93.7	NO
5	5	13C4-PFOS	ST170...	1.09e4	105.1	NO
6	6	13C6-PFDA	ST170...	5.88e4	101.2	NO
7	7	13C7-PFUnA	ST170...	6.64e4	113.7	NO

Name: 170810M2_7, Date: 10-Aug-2017, Time: 21:26:22, ID: ST170810M2-6 PFC CS3 17H1005, Description: PFC CS3 17H1005

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	4.17e4	99.8	NO
2	2	13C3-PFHxS	ST170...	8.88e3	103.1	NO
3	3	13C8-PFOA	ST170...	5.38e4	93.1	NO
4	4	13C9-PFNA	ST170...	6.77e4	106.3	NO
5	5	13C4-PFOS	ST170...	9.90e3	95.3	NO
6	6	13C6-PFDA	ST170...	5.78e4	99.5	NO
7	7	13C7-PFUnA	ST170...	5.01e4	85.9	NO

Name: 170810M2_8, Date: 10-Aug-2017, Time: 21:37:09, ID: ST170810M2-7 PFC CS4 17H1018, Description: PFC CS4 17H1018

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	3.91e4	93.5	NO
2	2	13C3-PFHxS	ST170...	8.46e3	98.3	NO
3	3	13C8-PFOA	ST170...	5.28e4	91.4	NO
4	4	13C9-PFNA	ST170...	6.16e4	96.7	NO
5	5	13C4-PFOS	ST170...	1.00e4	96.3	NO
6	6	13C6-PFDA	ST170...	5.34e4	91.9	NO
7	7	13C7-PFUnA	ST170...	5.57e4	95.4	NO

Name: 170810M2_9, Date: 10-Aug-2017, Time: 21:47:47, ID: ST170810M2-8 PFC CS5 17H1019, Description: PFC CS5 17H1019

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	4.61e4	110.3	NO
2	2	13C3-PFHxS	ST170...	9.36e3	108.7	NO
3	3	13C8-PFOA	ST170...	6.37e4	110.1	NO
4	4	13C9-PFNA	ST170...	6.71e4	105.4	NO
5	5	13C4-PFOS	ST170...	1.12e4	108.1	NO
6	6	13C6-PFDA	ST170...	6.28e4	107.9	NO
7	7	13C7-PFUnA	ST170...	6.52e4	111.6	NO

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Dataset: U:\Q4.PRO\results\170810M2\RS_AREAS.qld

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Name: 170810M2_10, Date: 10-Aug-2017, Time: 21:58:34, ID: ST170810M2-9 PFC CS6 17H1013, Description: PFC CS6 17H1013

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	4.56e4	109.1	NO
2	2	13C3-PFHxS	ST170...	9.07e3	105.3	NO
3	3	13C8-PFOA	ST170...	6.19e4	107.0	NO
4	4	13C9-PFNA	ST170...	6.54e4	102.7	NO
5	5	13C4-PFOS	ST170...	1.07e4	102.9	NO
6	6	13C6-PFDA	ST170...	6.21e4	106.7	NO
7	7	13C7-PFUnA	ST170...	6.19e4	105.9	NO

Name: 170810M2_11, Date: 10-Aug-2017, Time: 22:09:12, ID: ST170810M2-10 PFC CS7 17H1012, Description: PFC CS7 17H1012

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	4.43e4	105.9	NO
2	2	13C3-PFHxS	ST170...	8.49e3	98.6	NO
3	3	13C8-PFOA	ST170...	5.39e4	93.2	NO
4	4	13C9-PFNA	ST170...	5.57e4	87.5	NO
5	5	13C4-PFOS	ST170...	8.58e3	82.6	NO
6	6	13C6-PFDA	ST170...	4.70e4	80.9	NO
7	7	13C7-PFUnA	ST170...	6.02e4	103.1	NO

Name: 170810M2_12, Date: 10-Aug-2017, Time: 22:19:51, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.12e1	0.0	NO

Name: 170810M2_13, Date: 10-Aug-2017, Time: 22:30:29, ID: ICV170810M2-1 PFC ICV 17H1020, Description: PFC ICV 17H1020

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ICV17...	4.18e4	100.0	NO
2	2	13C3-PFHxS	ICV17...	8.56e3	99.4	NO
3	3	13C8-PFOA	ICV17...	6.07e4	104.9	NO
4	4	13C9-PFNA	ICV17...	6.37e4	100.1	NO
5	5	13C4-PFOS	ICV17...	1.05e4	101.0	NO
6	6	13C6-PFDA	ICV17...	5.81e4	99.9	NO
7	7	13C7-PFUnA	ICV17...	6.42e4	110.0	NO

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Dataset: U:\Q4.PRO\results\170810M2\RS_AREAS.qld

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Name: 170810M2_14, Date: 10-Aug-2017, Time: 22:41:07, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	5.94e0	0.0	NO

Name: 170810M2_15, Date: 10-Aug-2017, Time: 22:51:45, ID: 1700946-05RE1 MATP05077 1.06, Description: MATP05077

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.54e4	156.3	YES
2	2	13C3-PFHxS	17009...	1.03e4	119.7	NO
3	3	13C8-PFOA	17009...	5.65e4	97.7	NO
4	4	13C9-PFNA	17009...	5.78e4	90.7	NO
5	5	13C4-PFOS	17009...	8.08e3	77.8	NO
6	6	13C6-PFDA	17009...	5.11e4	87.9	NO
7	7	13C7-PFUnA	17009...	5.38e4	92.1	NO

Name: 170810M2_16, Date: 10-Aug-2017, Time: 23:02:24, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.01e1	0.0	NO

Name: 170810M2_17, Date: 10-Aug-2017, Time: 23:13:02, ID: 1700946-05RE1@5X MATP05077 1.06, Description: MATP05077

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	1.32e4	31.6	YES
2	2	13C3-PFHxS	17009...	2.11e3	24.5	YES
3	3	13C8-PFOA	17009...	1.25e4	21.7	YES
4	4	13C9-PFNA	17009...	1.24e4	19.4	YES
5	5	13C4-PFOS	17009...	2.16e3	20.8	YES
6	6	13C6-PFDA	17009...	1.08e4	18.6	YES
7	7	13C7-PFUnA	17009...	1.20e4	20.5	YES

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Name: 170810M2_18, Date: 10-Aug-2017, Time: 23:23:41, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

Name: 170810M2_19, Date: 10-Aug-2017, Time: 23:34:27, ID: B7H0026-BS1 OPR 1, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	5.55e4	132.6	NO
2	2	13C3-PFHxS	B7H00...	9.09e3	105.6	NO
3	3	13C8-PFOA	B7H00...	4.84e4	83.8	NO
4	4	13C9-PFNA	B7H00...	5.41e4	84.9	NO
5	5	13C4-PFOS	B7H00...	9.74e3	93.8	NO
6	6	13C6-PFDA	B7H00...	4.71e4	80.9	NO
7	7	13C7-PFUnA	B7H00...	4.97e4	85.2	NO

Name: 170810M2_20, Date: 10-Aug-2017, Time: 23:45:14, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

Name: 170810M2_21, Date: 10-Aug-2017, Time: 23:55:52, ID: B7H0026-BLK1 Method Blank 1, Description: Method Blank

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	5.50e4	131.5	NO
2	2	13C3-PFHxS	B7H00...	9.20e3	106.8	NO
3	3	13C8-PFOA	B7H00...	4.49e4	77.7	NO
4	4	13C9-PFNA	B7H00...	5.03e4	79.0	NO
5	5	13C4-PFOS	B7H00...	8.60e3	82.8	NO
6	6	13C6-PFDA	B7H00...	4.64e4	79.9	NO
7	7	13C7-PFUnA	B7H00...	4.22e4	72.4	NO

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Name: 170810M2_22, Date: 11-Aug-2017, Time: 00:06:30, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.12e1	0.0	NO

Name: 170810M2_23, Date: 11-Aug-2017, Time: 00:17:19, ID: 1700946-01 MATP05073 1, Description: MATP05073

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	4.60e4	110.0	NO
2	2	13C3-PFHxS	17009...	7.64e3	88.8	NO
3	3	13C8-PFOA	17009...	3.85e4	66.5	NO
4	4	13C9-PFNA	17009...	4.03e4	63.3	NO
5	5	13C4-PFOS	17009...	7.73e3	74.4	NO
6	6	13C6-PFDA	17009...	3.78e4	65.1	NO
7	7	13C7-PFUnA	17009...	4.03e4	68.9	NO

Name: 170810M2_24, Date: 11-Aug-2017, Time: 00:28:28, ID: 1700946-02 MATP05074 1, Description: MATP05074

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.34e4	151.6	YES
2	2	13C3-PFHxS	17009...	1.13e4	131.6	NO
3	3	13C8-PFOA	17009...	5.88e4	101.7	NO
4	4	13C9-PFNA	17009...	5.65e4	88.7	NO
5	5	13C4-PFOS	17009...	1.06e4	102.5	NO
6	6	13C6-PFDA	17009...	5.69e4	97.8	NO
7	7	13C7-PFUnA	17009...	5.64e4	96.6	NO

Name: 170810M2_25, Date: 11-Aug-2017, Time: 00:39:18, ID: 1700946-03 MATP05075 1, Description: MATP05075

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.40e4	153.0	YES
2	2	13C3-PFHxS	17009...	1.00e4	116.5	NO
3	3	13C8-PFOA	17009...	5.34e4	92.3	NO
4	4	13C9-PFNA	17009...	5.85e4	91.9	NO
5	5	13C4-PFOS	17009...	1.10e4	106.3	NO
6	6	13C6-PFDA	17009...	4.93e4	84.8	NO
7	7	13C7-PFUnA	17009...	5.66e4	96.9	NO

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Name: 170810M2_26, Date: 11-Aug-2017, Time: 00:50:09, ID: 1700946-05 MATP05077 1, Description: MATP05077

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	7.33e4	175.3	YES
2	2	13C3-PFHxS	17009...	1.13e4	131.6	NO
3	3	13C8-PFOA	17009...	5.79e4	100.1	NO
4	4	13C9-PFNA	17009...	6.67e4	104.7	NO
5	5	13C4-PFOS	17009...	7.77e3	74.8	NO
6	6	13C6-PFDA	17009...	5.53e4	95.2	NO
7	7	13C7-PFUnA	17009...	6.22e4	106.5	NO

Name: 170810M2_27, Date: 11-Aug-2017, Time: 01:00:48, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

Name: 170810M2_28, Date: 11-Aug-2017, Time: 01:11:26, ID: 1700946-04 MATP05076 1, Description: MATP05076

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.97e4	166.7	YES
2	2	13C3-PFHxS	17009...	1.10e4	128.0	NO
3	3	13C8-PFOA	17009...	5.69e4	98.4	NO
4	4	13C9-PFNA	17009...	5.82e4	91.4	NO
5	5	13C4-PFOS	17009...	8.28e3	79.7	NO
6	6	13C6-PFDA	17009...	5.06e4	87.1	NO
7	7	13C7-PFUnA	17009...	5.38e4	92.1	NO

Name: 170810M2_29, Date: 11-Aug-2017, Time: 01:22:05, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	5.91e0	0.0	NO

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Name: 170810M2_30, Date: 11-Aug-2017, Time: 01:32:51, ID: 1700946-05@10X MATP05077 1, Description: MATP05077

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	1.08e4	25.9	YES
2	2	13C3-PFHxS	17009...	1.61e3	18.7	YES
3	3	13C8-PFOA	17009...	8.51e3	14.7	YES
4	4	13C9-PFNA	17009...	9.45e3	14.8	YES
5	5	13C4-PFOS	17009...	1.27e3	12.3	YES
6	6	13C6-PFDA	17009...	8.38e3	14.4	YES
7	7	13C7-PFUnA	17009...	1.00e4	17.1	YES

Name: 170810M2_31, Date: 11-Aug-2017, Time: 01:43:30, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	8.33e0	0.0	NO

Name: 170810M2_32, Date: 11-Aug-2017, Time: 01:54:08, ID: 1700946-04@10X MATP05076 1, Description: MATP05076

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	1.02e4	24.5	YES
2	2	13C3-PFHxS	17009...	1.60e3	18.5	YES
3	3	13C8-PFOA	17009...	9.06e3	15.7	YES
4	4	13C9-PFNA	17009...	1.00e4	15.8	YES
5	5	13C4-PFOS	17009...	1.51e3	14.5	YES
6	6	13C6-PFDA	17009...	9.18e3	15.8	YES
7	7	13C7-PFUnA	17009...	8.84e3	15.1	YES

Name: 170810M2_33, Date: 11-Aug-2017, Time: 02:04:46, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.04e1	0.0	NO

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Name: 170810M2_34, Date: 11-Aug-2017, Time: 02:15:32, ID: B7H0037-BS1 OPR 0.125, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	7.43e4	177.5	YES
2	2	13C3-PFHxS	B7H00...	1.20e4	139.9	NO
3	3	13C8-PFOA	B7H00...	6.30e4	109.0	NO
4	4	13C9-PFNA	B7H00...	6.92e4	108.7	NO
5	5	13C4-PFOS	B7H00...	1.16e4	111.9	NO
6	6	13C6-PFDA	B7H00...	5.54e4	95.3	NO
7	7	13C7-PFUnA	B7H00...	5.77e4	98.8	NO

Name: 170810M2_35, Date: 11-Aug-2017, Time: 02:26:21, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

Name: 170810M2_36, Date: 11-Aug-2017, Time: 02:37:14, ID: 1701010-02@10X VEL-FOAM-080317 0.125, Description: VEL-FOAM-080317

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17010...	7.02e3	16.8	YES
2	2	13C3-PFHxS	17010...	9.53e2	11.1	YES
3	3	13C8-PFOA	17010...	5.48e3	9.5	YES
4	4	13C9-PFNA	17010...	5.71e3	9.0	YES
5	5	13C4-PFOS	17010...	1.00e3	9.7	YES
6	6	13C6-PFDA	17010...	5.35e3	9.2	YES
7	7	13C7-PFUnA	17010...	4.09e3	7.0	YES

Name: 170810M2_37, Date: 11-Aug-2017, Time: 02:47:52, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA	1.04e1	0.0	NO
7	7	13C7-PFUnA	IPA	5.57e0	0.0	NO

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Name: 170810M2_38, Date: 11-Aug-2017, Time: 02:58:38, ID: ST170810M2-11 PFC CS3 17H1005, Description: PFC CS3 17H1005

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	4.55e4	108.8	NO
2	2	13C3-PFHxS	ST170...	1.01e4	117.8	NO
3	3	13C8-PFOA	ST170...	6.17e4	106.8	NO
4	4	13C9-PFNA	ST170...	6.48e4	101.7	NO
5	5	13C4-PFOS	ST170...	1.05e4	100.8	NO
6	6	13C6-PFDA	ST170...	6.64e4	114.2	NO
7	7	13C7-PFUnA	ST170...	5.95e4	102.0	NO

Name: 170810M2_39, Date: 11-Aug-2017, Time: 03:09:17, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

Name: 170810M2_40, Date: 11-Aug-2017, Time: 03:19:55, ID: 1701010-02 VEL-FOAM-080317 0.125, Description: VEL-FOAM-080317

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17010...	5.79e4	138.3	NO
2	2	13C3-PFHxS	17010...	9.42e3	109.4	NO
3	3	13C8-PFOA	17010...	5.00e4	86.5	NO
4	4	13C9-PFNA	17010...	4.80e4	75.3	NO
5	5	13C4-PFOS	17010...	7.18e3	69.1	NO
6	6	13C6-PFDA	17010...	4.43e4	76.1	NO
7	7	13C7-PFUnA	17010...	4.95e4	84.7	NO

Name: 170810M2_41, Date: 11-Aug-2017, Time: 03:30:34, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

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Name: 170810M2_42, Date: 11-Aug-2017, Time: 03:41:12, ID: B7H0060-BS1 OPR 2.5, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	5.55e4	132.6	NO
2	2	13C3-PFHxS	B7H00...	8.73e3	101.3	NO
3	3	13C8-PFOA	B7H00...	4.95e4	85.5	NO
4	4	13C9-PFNA	B7H00...	5.17e4	81.1	NO
5	5	13C4-PFOS	B7H00...	8.62e3	83.0	NO
6	6	13C6-PFDA	B7H00...	4.49e4	77.3	NO
7	7	13C7-PFUnA	B7H00...	4.45e4	76.2	NO

Name: 170810M2_43, Date: 11-Aug-2017, Time: 03:51:59, ID: B7H0073-BS1 OPR 0.125, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	1.24e5	147.8	NO
2	2	13C3-PFHxS	B7H00...	2.09e4	121.5	NO
3	3	13C8-PFOA	B7H00...	1.13e5	97.9	NO
4	4	13C9-PFNA	B7H00...	1.14e5	89.1	NO
5	5	13C4-PFOS	B7H00...	2.10e4	101.1	NO
6	6	13C6-PFDA	B7H00...	1.02e5	87.9	NO
7	7	13C7-PFUnA	B7H00...	1.05e5	90.0	NO

Name: 170810M2_44, Date: 11-Aug-2017, Time: 04:02:37, ID: B7H0074-BS1 OPR 0.125, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	5.55e4	132.6	NO
2	2	13C3-PFHxS	B7H00...	9.30e3	108.0	NO
3	3	13C8-PFOA	B7H00...	5.41e4	93.6	NO
4	4	13C9-PFNA	B7H00...	5.19e4	81.4	NO
5	5	13C4-PFOS	B7H00...	9.90e3	95.4	NO
6	6	13C6-PFDA	B7H00...	5.09e4	87.6	NO
7	7	13C7-PFUnA	B7H00...	5.23e4	89.6	NO

Name: 170810M2_45, Date: 11-Aug-2017, Time: 04:13:15, ID: B7H0060-BLK1 Method Blank 2.5, Description: Method Blank

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	5.79e4	138.3	NO
2	2	13C3-PFHxS	B7H00...	8.88e3	103.2	NO
3	3	13C8-PFOA	B7H00...	4.75e4	82.2	NO
4	4	13C9-PFNA	B7H00...	5.02e4	78.9	NO
5	5	13C4-PFOS	B7H00...	8.75e3	84.3	NO
6	6	13C6-PFDA	B7H00...	4.49e4	77.2	NO
7	7	13C7-PFUnA	B7H00...	5.03e4	86.2	NO

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Name: 170810M2_46, Date: 11-Aug-2017, Time: 04:23:54, ID: B7H0073-BLK1 Method Blank 0.125, Description: Method Blank

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	1.25e5	149.2	NO
2	2	13C3-PFHxS	B7H00...	1.88e4	109.2	NO
3	3	13C8-PFOA	B7H00...	1.10e5	95.2	NO
4	4	13C9-PFNA	B7H00...	1.13e5	88.4	NO
5	5	13C4-PFOS	B7H00...	1.86e4	89.8	NO
6	6	13C6-PFDA	B7H00...	1.08e5	92.9	NO
7	7	13C7-PFUnA	B7H00...	1.02e5	87.5	NO

Name: 170810M2_47, Date: 11-Aug-2017, Time: 04:34:32, ID: B7H0074-BLK1 Method Blank 0.125, Description: Method Blank

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	5.11e4	122.1	NO
2	2	13C3-PFHxS	B7H00...	8.83e3	102.6	NO
3	3	13C8-PFOA	B7H00...	4.53e4	78.3	NO
4	4	13C9-PFNA	B7H00...	5.16e4	81.0	NO
5	5	13C4-PFOS	B7H00...	9.73e3	93.7	NO
6	6	13C6-PFDA	B7H00...	4.48e4	77.1	NO
7	7	13C7-PFUnA	B7H00...	4.35e4	74.4	NO

Name: 170810M2_48, Date: 11-Aug-2017, Time: 04:45:10, ID: B7H0073-MS1 Matrix Spike 0.0005, Description: Matrix Spike

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	9.96e4	119.1	NO
2	2	13C3-PFHxS	B7H00...	1.48e4	85.7	NO
3	3	13C8-PFOA	B7H00...	7.76e4	67.1	NO
4	4	13C9-PFNA	B7H00...	1.14e5	89.7	NO
5	5	13C4-PFOS	B7H00...	1.78e4	85.6	NO
6	6	13C6-PFDA	B7H00...	1.00e5	86.0	NO
7	7	13C7-PFUnA	B7H00...	1.06e5	90.5	NO

Name: 170810M2_49, Date: 11-Aug-2017, Time: 04:55:57, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	7.38e0	0.0	NO

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Name: 170810M2_50, Date: 11-Aug-2017, Time: 05:06:46, ID: B7H0073-MSD1 Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	1.05e5	125.4	NO
2	2	13C3-PFHxS	B7H00...	1.52e4	88.1	NO
3	3	13C8-PFOA	B7H00...	7.61e4	65.8	NO
4	4	13C9-PFNA	B7H00...	1.11e5	87.4	NO
5	5	13C4-PFOS	B7H00...	1.83e4	87.9	NO
6	6	13C6-PFDA	B7H00...	1.02e5	87.5	NO
7	7	13C7-PFUnA	B7H00...	1.02e5	87.6	NO

Name: 170810M2_51, Date: 11-Aug-2017, Time: 05:17:35, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.28e1	0.0	NO

Name: 170810M2_52, Date: 11-Aug-2017, Time: 05:28:20, ID: B7H0074-MS1 Matrix Spike 0.125, Description: Matrix Spike

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	5.37e4	128.4	NO
2	2	13C3-PFHxS	B7H00...	8.94e3	103.8	NO
3	3	13C8-PFOA	B7H00...	4.60e4	79.6	NO
4	4	13C9-PFNA	B7H00...	5.57e4	87.4	NO
5	5	13C4-PFOS	B7H00...	9.14e3	88.0	NO
6	6	13C6-PFDA	B7H00...	4.15e4	71.4	NO
7	7	13C7-PFUnA	B7H00...	4.43e4	75.9	NO

Name: 170810M2_53, Date: 11-Aug-2017, Time: 05:39:08, ID: B7H0074-MSD1 Matrix Spike Dup 0.125, Description: Matrix Spike Dup

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	5.51e4	131.8	NO
2	2	13C3-PFHxS	B7H00...	9.24e3	107.3	NO
3	3	13C8-PFOA	B7H00...	4.99e4	86.4	NO
4	4	13C9-PFNA	B7H00...	5.01e4	78.6	NO
5	5	13C4-PFOS	B7H00...	8.72e3	84.0	NO
6	6	13C6-PFDA	B7H00...	4.03e4	69.3	NO
7	7	13C7-PFUnA	B7H00...	5.17e4	88.5	NO

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Name: 170810M2_54, Date: 11-Aug-2017, Time: 05:49:54, ID: 1700819-01RE1 QPFD-14 2.5, Description: QPFD-14

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	5.83e4	139.4	NO
2	2	13C3-PFHxS	17008...	9.69e3	112.5	NO
3	3	13C8-PFOA	17008...	4.89e4	84.5	NO
4	4	13C9-PFNA	17008...	5.55e4	87.1	NO
5	5	13C4-PFOS	17008...	8.34e3	80.3	NO
6	6	13C6-PFDA	17008...	4.49e4	77.2	NO
7	7	13C7-PFUnA	17008...	4.57e4	78.3	NO

Name: 170810M2_55, Date: 11-Aug-2017, Time: 06:00:33, ID: 1700819-02RE1 QPFD-15 2.5, Description: QPFD-15

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	5.11e4	122.1	NO
2	2	13C3-PFHxS	17008...	7.90e3	91.7	NO
3	3	13C8-PFOA	17008...	4.08e4	70.6	NO
4	4	13C9-PFNA	17008...	4.91e4	77.0	NO
5	5	13C4-PFOS	17008...	7.02e3	67.6	NO
6	6	13C6-PFDA	17008...	3.90e4	67.2	NO
7	7	13C7-PFUnA	17008...	3.98e4	68.2	NO

Name: 170810M2_56, Date: 11-Aug-2017, Time: 06:11:19, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA	8.48e0	0.0	NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.39e1	0.0	NO

Name: 170810M2_57, Date: 11-Aug-2017, Time: 06:21:58, ID: 1700819-03RE1 QPFD-16 2.5, Description: QPFD-16

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	4.99e4	119.2	NO
2	2	13C3-PFHxS	17008...	8.17e3	94.9	NO
3	3	13C8-PFOA	17008...	4.27e4	73.9	NO
4	4	13C9-PFNA	17008...	4.28e4	67.3	NO
5	5	13C4-PFOS	17008...	7.37e3	71.0	NO
6	6	13C6-PFDA	17008...	4.15e4	71.4	NO
7	7	13C7-PFUnA	17008...	4.44e4	76.1	NO

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Name: 170810M2_58, Date: 11-Aug-2017, Time: 06:32:36, ID: 1700819-04RE1 QPFD-17 2, Description: QPFD-17

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	5.06e4	120.9	NO
2	2	13C3-PFHxS	17008...	8.61e3	100.0	NO
3	3	13C8-PFOA	17008...	4.31e4	74.6	NO
4	4	13C9-PFNA	17008...	4.66e4	73.1	NO
5	5	13C4-PFOS	17008...	7.95e3	76.5	NO
6	6	13C6-PFDA	17008...	3.97e4	68.3	NO
7	7	13C7-PFUnA	17008...	4.11e4	70.4	NO

Name: 170810M2_59, Date: 11-Aug-2017, Time: 06:43:14, ID: 1700819-05RE1 QPFD-18 2.5, Description: QPFD-18

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	5.47e4	130.8	NO
2	2	13C3-PFHxS	17008...	8.92e3	103.6	NO
3	3	13C8-PFOA	17008...	5.10e4	88.2	NO
4	4	13C9-PFNA	17008...	4.87e4	76.5	NO
5	5	13C4-PFOS	17008...	8.53e3	82.1	NO
6	6	13C6-PFDA	17008...	4.38e4	75.3	NO
7	7	13C7-PFUnA	17008...	4.72e4	80.9	NO

Name: 170810M2_60, Date: 11-Aug-2017, Time: 06:53:52, ID: 1700819-06RE1 QPFD-19 2.5, Description: QPFD-19

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	5.21e4	124.5	NO
2	2	13C3-PFHxS	17008...	8.23e3	95.6	NO
3	3	13C8-PFOA	17008...	4.11e4	71.0	NO
4	4	13C9-PFNA	17008...	5.03e4	79.0	NO
5	5	13C4-PFOS	17008...	7.78e3	74.9	NO
6	6	13C6-PFDA	17008...	4.30e4	74.0	NO
7	7	13C7-PFUnA	17008...	4.61e4	78.9	NO

Name: 170810M2_61, Date: 11-Aug-2017, Time: 07:04:31, ID: 1700819-07RE1 QPFD-20 2.5, Description: QPFD-20

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	5.30e4	126.7	NO
2	2	13C3-PFHxS	17008...	8.79e3	102.1	NO
3	3	13C8-PFOA	17008...	4.64e4	80.3	NO
4	4	13C9-PFNA	17008...	4.58e4	72.0	NO
5	5	13C4-PFOS	17008...	8.39e3	80.8	NO
6	6	13C6-PFDA	17008...	4.24e4	72.9	NO
7	7	13C7-PFUnA	17008...	5.10e4	87.3	NO

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Name: 170810M2_62, Date: 11-Aug-2017, Time: 07:15:09, ID: 1700819-08RE1 QPFD-21 2.5, Description: QPFD-21

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	5.63e4	134.7	NO
2	2	13C3-PFHxS	17008...	8.49e3	98.6	NO
3	3	13C8-PFOA	17008...	4.70e4	81.3	NO
4	4	13C9-PFNA	17008...	4.70e4	73.8	NO
5	5	13C4-PFOS	17008...	9.08e3	87.4	NO
6	6	13C6-PFDA	17008...	4.53e4	77.9	NO
7	7	13C7-PFUnA	17008...	4.35e4	74.6	NO

Name: 170810M2_63, Date: 11-Aug-2017, Time: 07:25:59, ID: 1700819-09RE1 QPFD-22 2.5, Description: QPFD-22

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	6.08e4	145.4	NO
2	2	13C3-PFHxS	17008...	9.85e3	114.3	NO
3	3	13C8-PFOA	17008...	4.77e4	82.5	NO
4	4	13C9-PFNA	17008...	5.57e4	87.4	NO
5	5	13C4-PFOS	17008...	8.73e3	84.1	NO
6	6	13C6-PFDA	17008...	4.08e4	70.2	NO
7	7	13C7-PFUnA	17008...	4.84e4	82.8	NO

Name: 170810M2_64, Date: 11-Aug-2017, Time: 07:36:57, ID: 1700819-10RE1 QPFD-23 2.5, Description: QPFD-23

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	5.22e4	124.8	NO
2	2	13C3-PFHxS	17008...	8.29e3	96.3	NO
3	3	13C8-PFOA	17008...	4.61e4	79.8	NO
4	4	13C9-PFNA	17008...	4.53e4	71.2	NO
5	5	13C4-PFOS	17008...	8.14e3	78.3	NO
6	6	13C6-PFDA	17008...	3.84e4	66.1	NO
7	7	13C7-PFUnA	17008...	4.57e4	78.3	NO

Name: 170810M2_65, Date: 11-Aug-2017, Time: 07:47:35, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	8.23e0	0.0	NO

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Name: 170810M2_66, Date: 11-Aug-2017, Time: 07:58:22, ID: ST170810M2-12 PFC CS0 17H1004, Description: PFC CS0 17H1004

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	4.48e4	107.2	NO
2	2	13C3-PFHxS	ST170...	1.01e4	116.9	NO
3	3	13C8-PFOA	ST170...	6.47e4	111.9	NO
4	4	13C9-PFNA	ST170...	6.70e4	105.3	NO
5	5	13C4-PFOS	ST170...	1.21e4	116.5	NO
6	6	13C6-PFDA	ST170...	5.93e4	102.1	NO
7	7	13C7-PFUnA	ST170...	6.19e4	106.0	NO

Name: 170810M2_67, Date: 11-Aug-2017, Time: 08:09:00, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

Name: 170810M2_68, Date: 11-Aug-2017, Time: 08:19:38, ID: 1700819-11RE1 QPFD-24 2.5, Description: QPFD-24

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	6.41e4	153.3	YES
2	2	13C3-PFHxS	17008...	9.92e3	115.1	NO
3	3	13C8-PFOA	17008...	5.38e4	92.9	NO
4	4	13C9-PFNA	17008...	5.54e4	87.0	NO
5	5	13C4-PFOS	17008...	9.57e3	92.1	NO
6	6	13C6-PFDA	17008...	4.23e4	72.7	NO
7	7	13C7-PFUnA	17008...	5.07e4	86.8	NO

Name: 170810M2_69, Date: 11-Aug-2017, Time: 08:30:17, ID: 1700819-12RE1 QPFD-25 2.5, Description: QPFD-25

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	5.60e4	134.0	NO
2	2	13C3-PFHxS	17008...	9.31e3	108.1	NO
3	3	13C8-PFOA	17008...	4.83e4	83.5	NO
4	4	13C9-PFNA	17008...	5.19e4	81.5	NO
5	5	13C4-PFOS	17008...	8.82e3	84.9	NO
6	6	13C6-PFDA	17008...	4.51e4	77.6	NO
7	7	13C7-PFUnA	17008...	4.52e4	77.5	NO

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Name: 170810M2_70, Date: 11-Aug-2017, Time: 08:40:55, ID: 1700819-13RE1 QPFD-26 2.5, Description: QPFD-26

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17008...	5.44e4	130.0	NO
2	2	13C3-PFHxS	17008...	8.64e3	100.4	NO
3	3	13C8-PFOA	17008...	4.77e4	82.5	NO
4	4	13C9-PFNA	17008...	5.34e4	83.8	NO
5	5	13C4-PFOS	17008...	8.11e3	78.1	NO
6	6	13C6-PFDA	17008...	4.43e4	76.2	NO
7	7	13C7-PFUnA	17008...	4.57e4	78.3	NO

Name: 170810M2_71, Date: 11-Aug-2017, Time: 08:51:34, ID: 1700925-04RE2 I001MW52S-170724 0.00122, Description: I001MW52S-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	1.04e5	124.9	NO
2	2	13C3-PFHxS	17009...	1.50e4	86.9	NO
3	3	13C8-PFOA	17009...	7.54e4	65.2	NO
4	4	13C9-PFNA	17009...	1.03e5	81.0	NO
5	5	13C4-PFOS	17009...	1.93e4	93.0	NO
6	6	13C6-PFDA	17009...	9.87e4	84.9	NO
7	7	13C7-PFUnA	17009...	9.41e4	80.6	NO

Name: 170810M2_72, Date: 11-Aug-2017, Time: 09:02:12, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA	6.24e0	0.0	NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.18e1	0.0	NO

Name: 170810M2_73, Date: 11-Aug-2017, Time: 09:12:50, ID: 1700925-05RE2 I001MW52X-170724 0.00133, Description: I001MW52X-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	1.13e5	135.5	NO
2	2	13C3-PFHxS	17009...	1.70e4	98.4	NO
3	3	13C8-PFOA	17009...	8.98e4	77.7	NO
4	4	13C9-PFNA	17009...	1.24e5	97.6	NO
5	5	13C4-PFOS	17009...	2.14e4	102.9	NO
6	6	13C6-PFDA	17009...	1.01e5	86.9	NO
7	7	13C7-PFUnA	17009...	1.12e5	95.9	NO

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Name: 170810M2_74, Date: 11-Aug-2017, Time: 09:25:20, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.67e1	0.0	NO

Name: 170810M2_75, Date: 11-Aug-2017, Time: 09:36:04, ID: 1700922-01RE1 MH-L103-20170721 0.10565, Description: MH-L103-20170721

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.10e4	122.0	NO
2	2	13C3-PFHxS	17009...	8.47e3	98.4	NO
3	3	13C8-PFOA	17009...	4.55e4	78.7	NO
4	4	13C9-PFNA	17009...	4.99e4	78.4	NO
5	5	13C4-PFOS	17009...	8.44e3	81.3	NO
6	6	13C6-PFDA	17009...	4.03e4	69.4	NO
7	7	13C7-PFUnA	17009...	3.83e4	65.5	NO

Name: 170810M2_76, Date: 11-Aug-2017, Time: 09:46:56, ID: 1700922-02RE1 MH-N104-20170721 0.11025, Description: MH-N104-20170721

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.20e4	124.3	NO
2	2	13C3-PFHxS	17009...	8.84e3	102.6	NO
3	3	13C8-PFOA	17009...	4.92e4	85.0	NO
4	4	13C9-PFNA	17009...	4.85e4	76.1	NO
5	5	13C4-PFOS	17009...	8.99e3	86.6	NO
6	6	13C6-PFDA	17009...	4.19e4	72.1	NO
7	7	13C7-PFUnA	17009...	4.31e4	73.8	NO

Name: 170810M2_77, Date: 11-Aug-2017, Time: 09:57:43, ID: 1700922-03RE1 Upstream-Culvert-109-20170721 0.1185, Description: Upstream-Culvert-109-20170721

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.51e4	131.7	NO
2	2	13C3-PFHxS	17009...	8.62e3	100.1	NO
3	3	13C8-PFOA	17009...	4.44e4	76.8	NO
4	4	13C9-PFNA	17009...	5.19e4	81.4	NO
5	5	13C4-PFOS	17009...	7.89e3	75.9	NO
6	6	13C6-PFDA	17009...	4.00e4	68.8	NO
7	7	13C7-PFUnA	17009...	4.87e4	83.4	NO

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Dataset: U:\Q4.PRO\results\170810M2\RS_AREAS.qld

Last Altered: Friday, August 11, 2017 15:02:10 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:02:59 Pacific Daylight Time

Name: 170810M2_78, Date: 11-Aug-2017, Time: 10:08:29, ID: 1700922-04RE1 FRB03-20170721 0.11017, Description: FRB03-20170721

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	5.39e4	128.9	NO
2	2 13C3-PFHxS	17009...	9.68e3	112.4	NO
3	3 13C8-PFOA	17009...	5.05e4	87.3	NO
4	4 13C9-PFNA	17009...	5.50e4	86.3	NO
5	5 13C4-PFOS	17009...	8.57e3	82.5	NO
6	6 13C6-PFDA	17009...	4.75e4	81.8	NO
7	7 13C7-PFUnA	17009...	4.55e4	77.9	NO

Name: 170810M2_79, Date: 11-Aug-2017, Time: 10:19:16, ID: 1700922-05RE1 RB08-20170720 0.11893, Description: RB08-20170720

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	5.24e4	125.2	NO
2	2 13C3-PFHxS	17009...	8.34e3	96.9	NO
3	3 13C8-PFOA	17009...	4.26e4	73.7	NO
4	4 13C9-PFNA	17009...	4.77e4	74.9	NO
5	5 13C4-PFOS	17009...	8.06e3	77.6	NO
6	6 13C6-PFDA	17009...	4.46e4	76.7	NO
7	7 13C7-PFUnA	17009...	4.69e4	80.4	NO

Name: 170810M2_80, Date: 11-Aug-2017, Time: 10:29:54, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA			NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA	7.53e0	0.0	NO
7	7 13C7-PFUnA	IPA			NO

Name: 170810M2_81, Date: 11-Aug-2017, Time: 10:40:32, ID: ST170810M2-13 PFC CS3 17H1005, Description: PFC CS3 17H1005

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	ST170...	4.08e4	97.6	NO
2	2 13C3-PFHxS	ST170...	8.48e3	98.5	NO
3	3 13C8-PFOA	ST170...	6.16e4	106.5	NO
4	4 13C9-PFNA	ST170...	7.20e4	113.0	NO
5	5 13C4-PFOS	ST170...	1.07e4	103.0	NO
6	6 13C6-PFDA	ST170...	7.00e4	120.4	NO
7	7 13C7-PFUnA	ST170...	5.48e4	93.9	NO

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Dataset: U:\Q4.PRO\results\170810M2\RS_AREAS.qld

Last Altered: Friday, August 11, 2017 15:02:10 Pacific Daylight Time
Printed: Saturday, August 12, 2017 14:02:59 Pacific Daylight Time

Name: 170810M2_82, Date: 11-Aug-2017, Time: 10:51:11, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

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Dataset: U:\Q4.PRO\results\170810M1\170810M2-12.qld

Last Altered: Friday, August 11, 2017 10:12:48 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:13:44 Pacific Daylight Time

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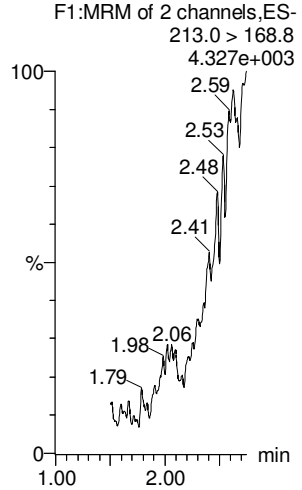
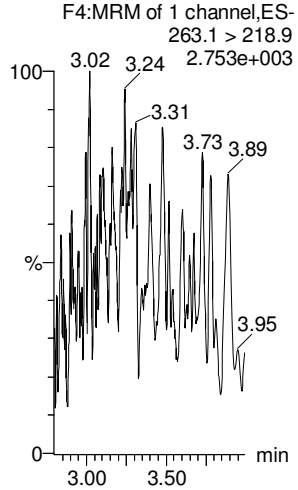
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_12, Date: 10-Aug-2017, Time: 22:19:51, ID: IPA, Description: IPA

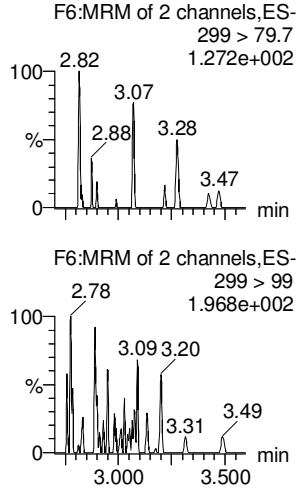
PFBA



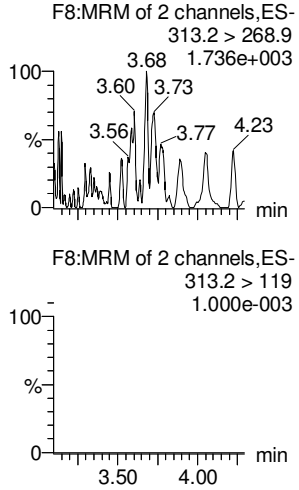
PFPeA



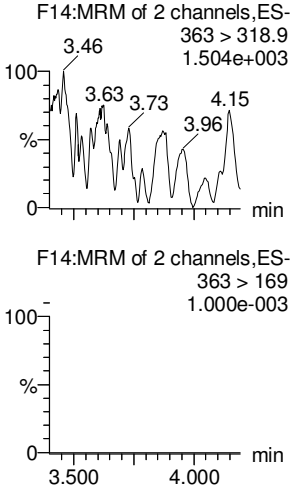
PFBS



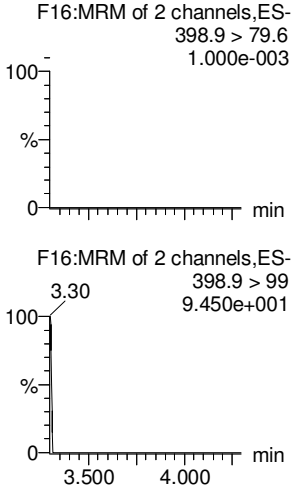
PFHxA



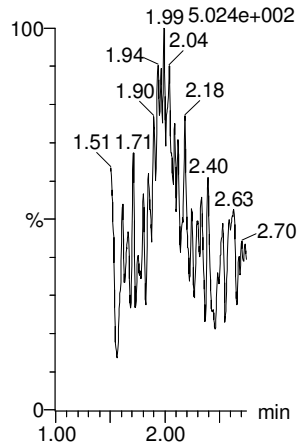
PFHpA



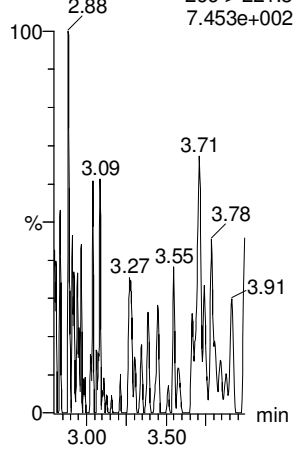
PFHxS



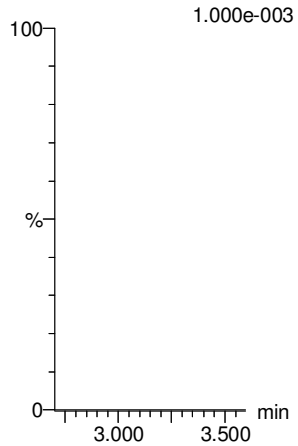
13C3-PFBA



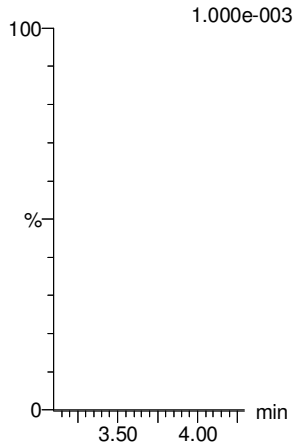
13C3-PFPeA



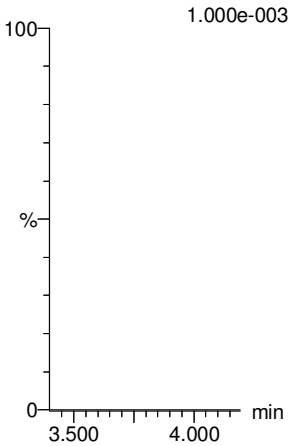
13C3-PFBS



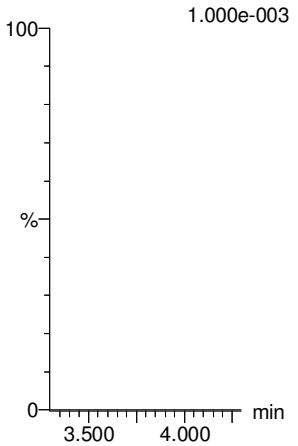
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



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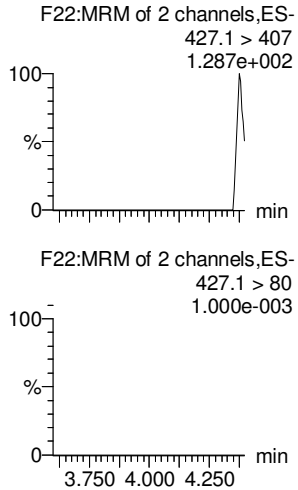
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170810M1\170810M2-12.qld

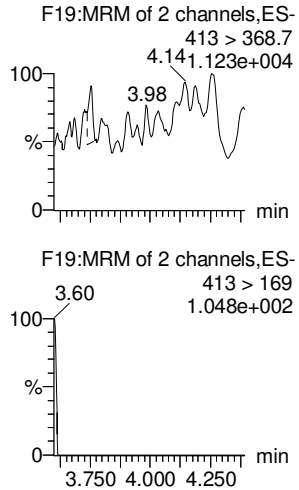
Last Altered: Friday, August 11, 2017 10:12:48 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:13:44 Pacific Daylight Time

Name: 170810M2_12, Date: 10-Aug-2017, Time: 22:19:51, ID: IPA, Description: IPA

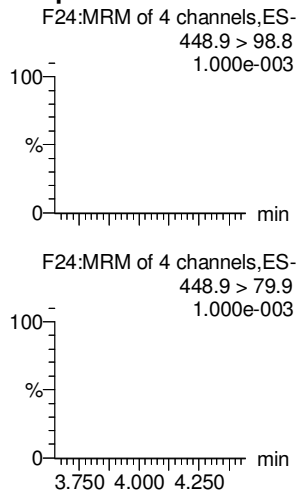
6:2 FTS



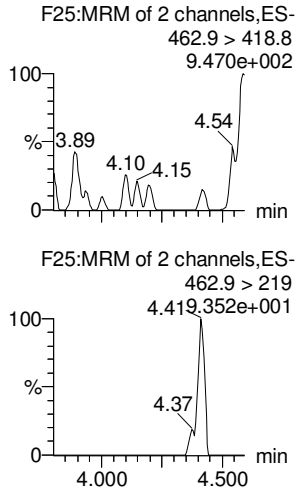
PFOA



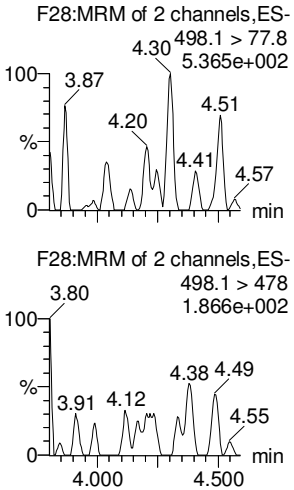
PFHpS



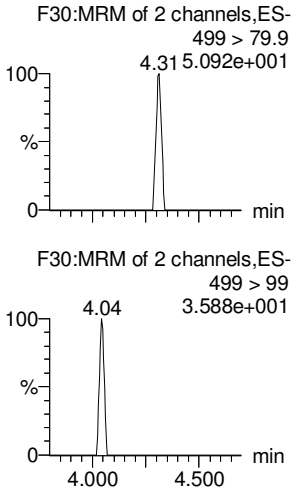
PFNA



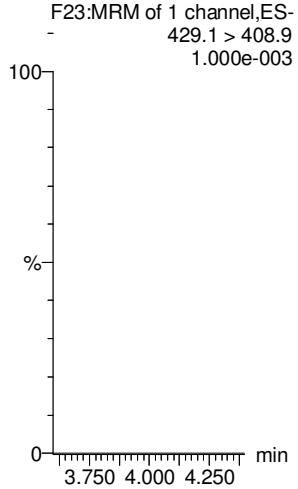
PFOSA



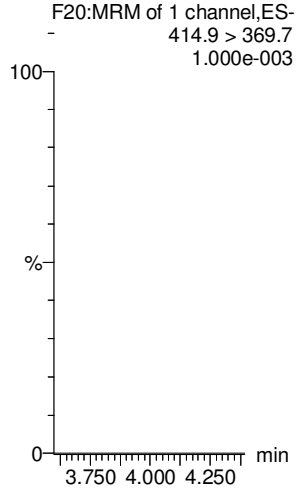
PFOS



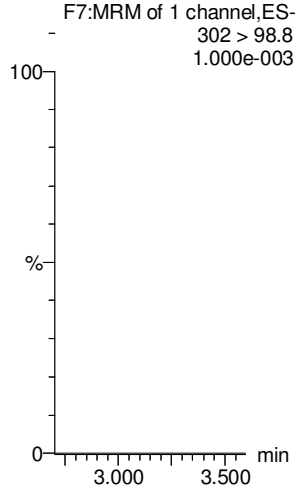
13C2-6:2 FTS



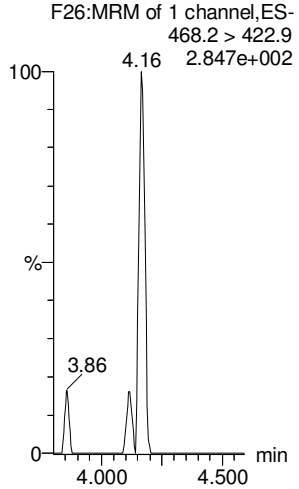
13C2-PFOA



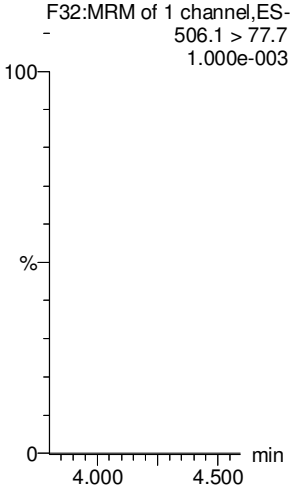
13C3-PFBS



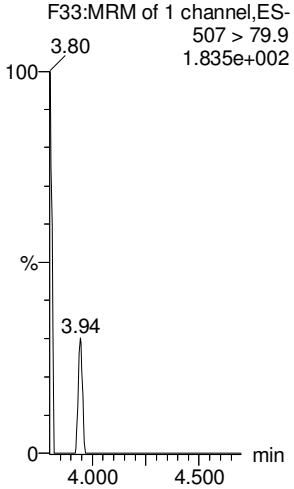
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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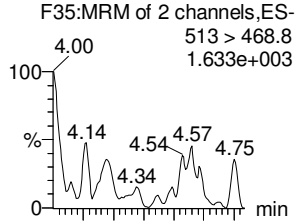
Vista Analytical Laboratory

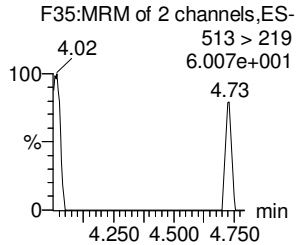
Dataset: U:\Q4.PRO\results\170810M1\170810M2-12.qld

Last Altered: Friday, August 11, 2017 10:12:48 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:13:44 Pacific Daylight Time

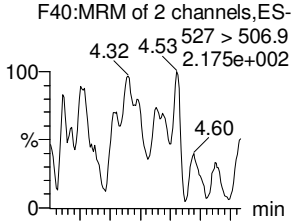
Name: 170810M2_12, Date: 10-Aug-2017, Time: 22:19:51, ID: IPA, Description: IPA

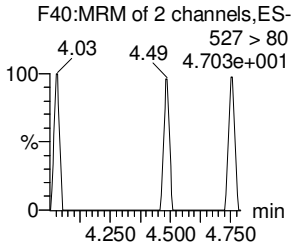
PFDA



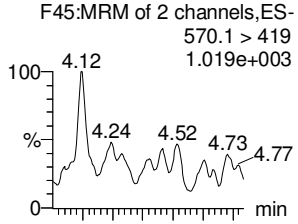


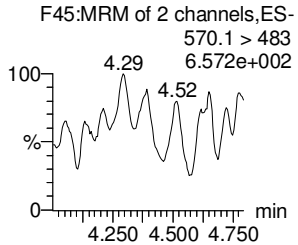
8:2 FTS



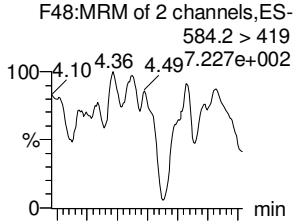


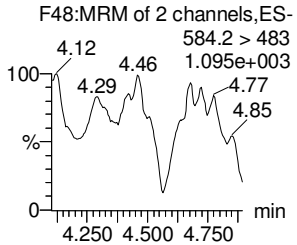
N-MeFOSAA



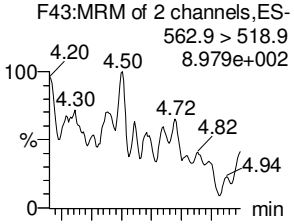


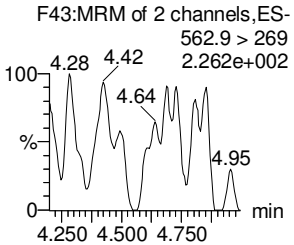
N-EtFOSAA



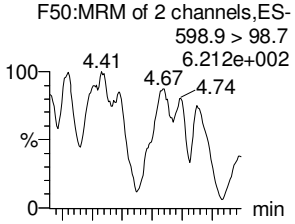


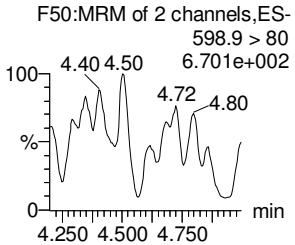
PFUnA



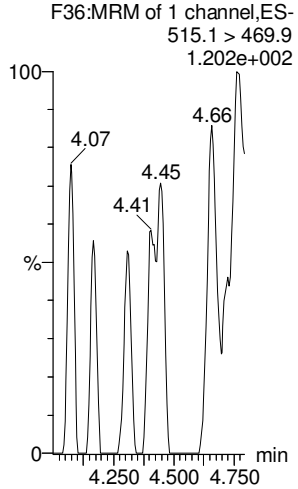


PFDS

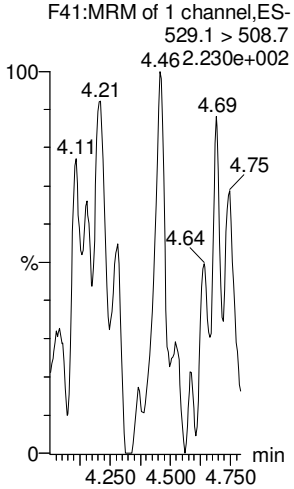




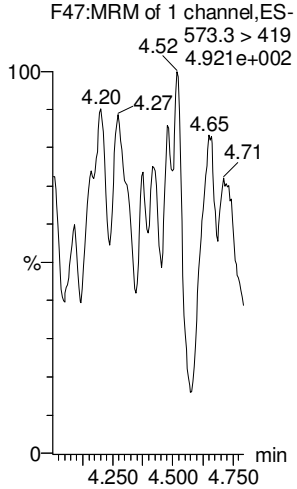
13C2-PFDA



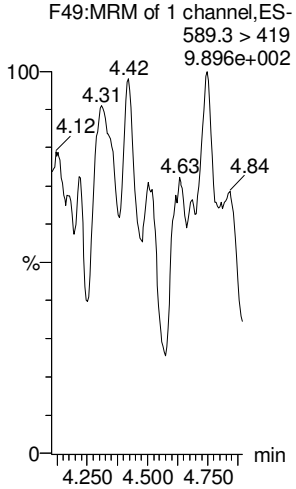
13C2-8:2 FTS



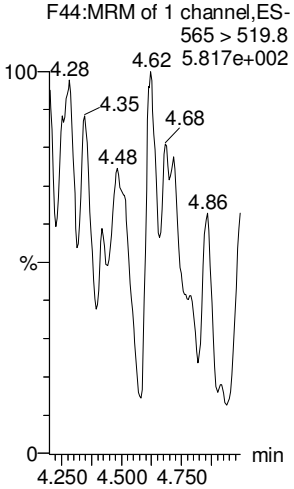
d3-N-MeFOSAA



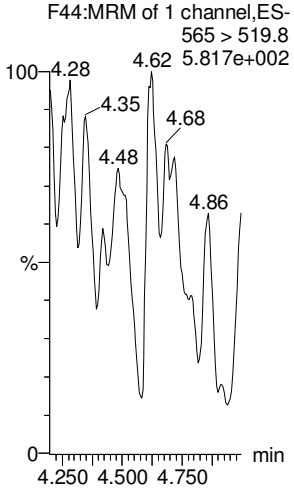
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



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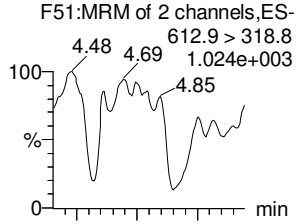
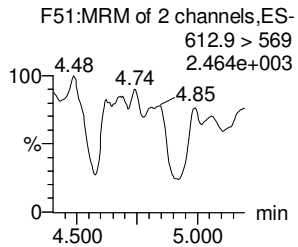
Dataset: U:\Q4.PRO\results\170810M1\170810M2-12.qld

Last Altered: Friday, August 11, 2017 10:12:48 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:13:44 Pacific Daylight Time

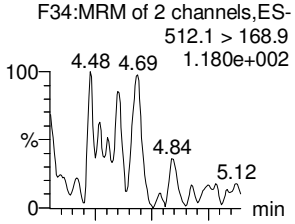
Name: 170810M2_12, Date: 10-Aug-2017, Time: 22:19:51, ID: IPA, Description: IPA

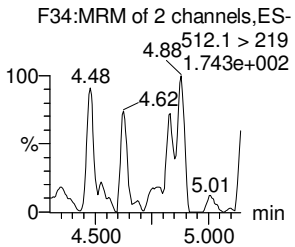
PFDoA



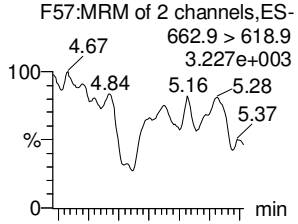


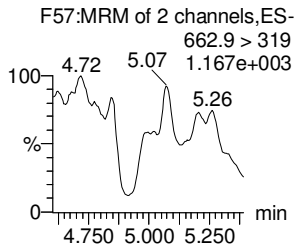
N-MeFOSA



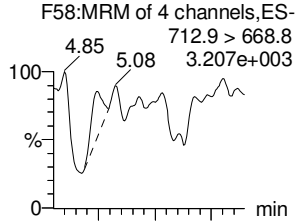


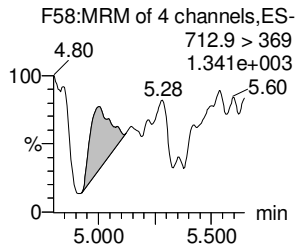
PFTrDA



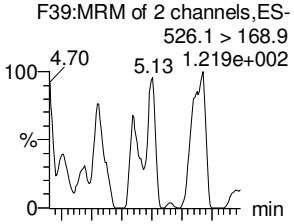


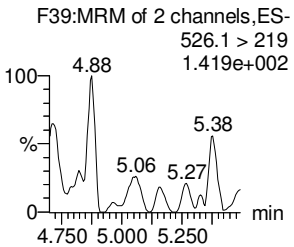
PFTeDA



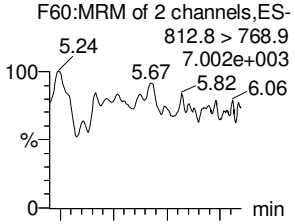


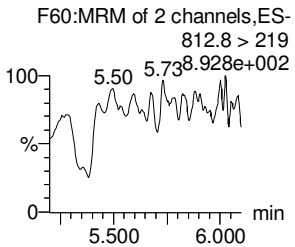
N-EtFOSA



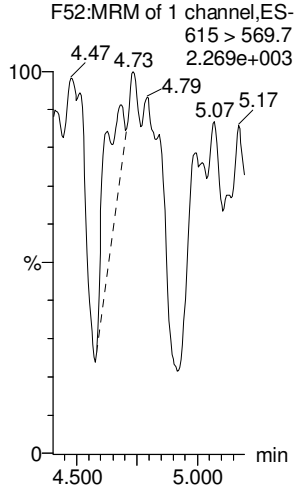


PFHxDA

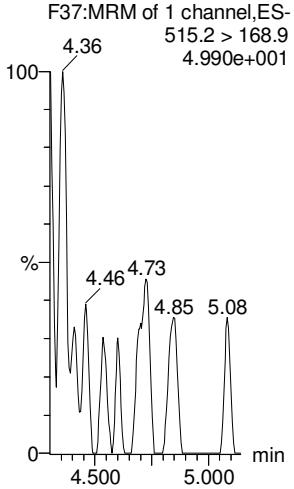




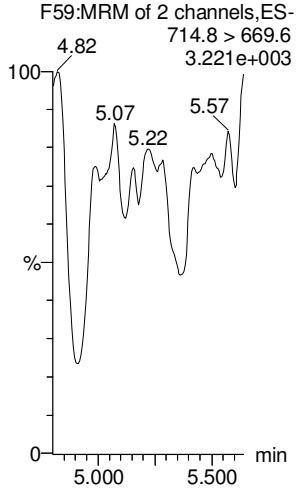
13C2-PFDoA



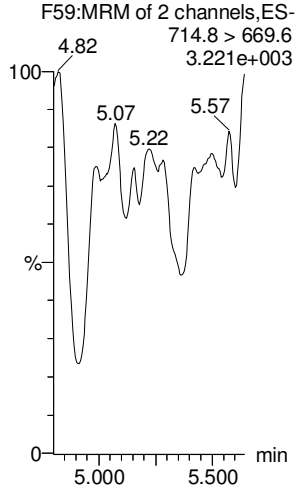
d3-N-MeFOSA



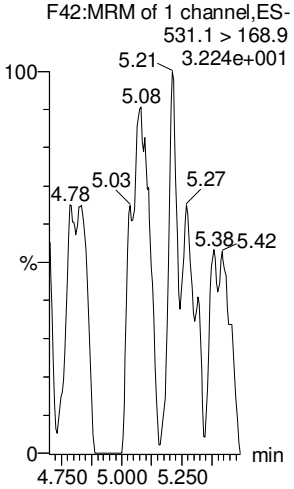
13C2-PFTeDA



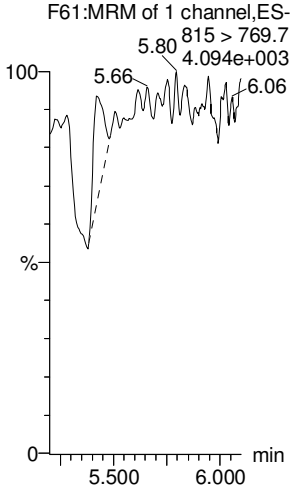
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



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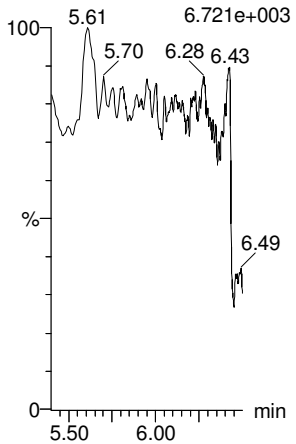
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170810M1\170810M2-12.qld

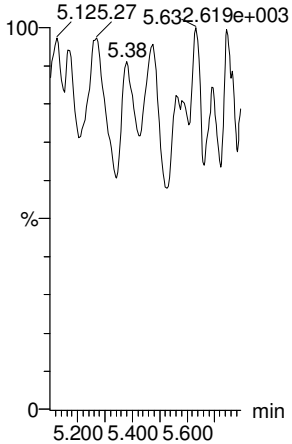
Last Altered: Friday, August 11, 2017 10:12:48 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:13:44 Pacific Daylight Time

Name: 170810M2_12, Date: 10-Aug-2017, Time: 22:19:51, ID: IPA, Description: IPA

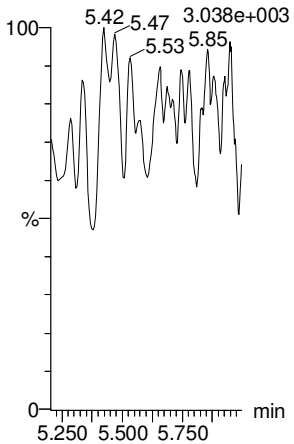
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
6.721e+003



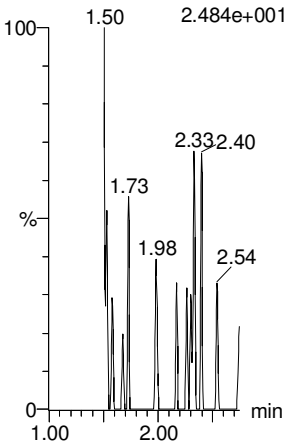
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
3.619e+003



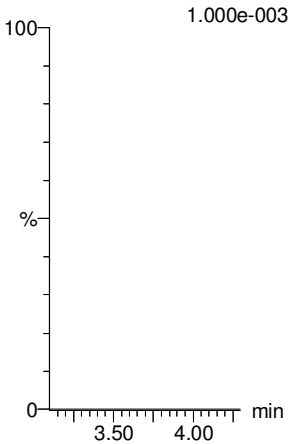
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
3.038e+003



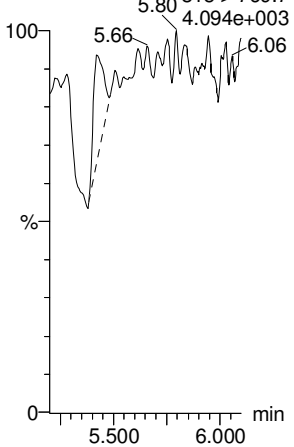
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.484e+001



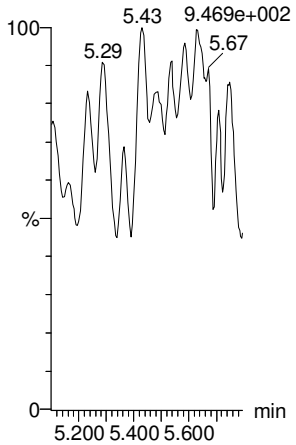
13C5-PFHxA
F10:MRM of 1 channel,ES-
-
318 > 272.9
1.000e-003



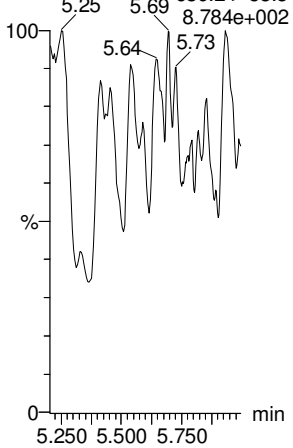
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.094e+003



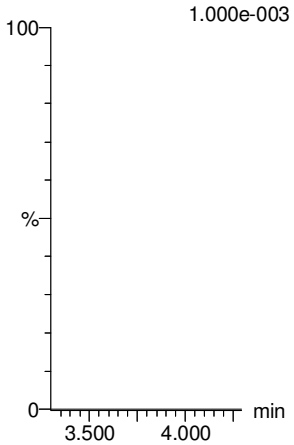
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
9.469e+002



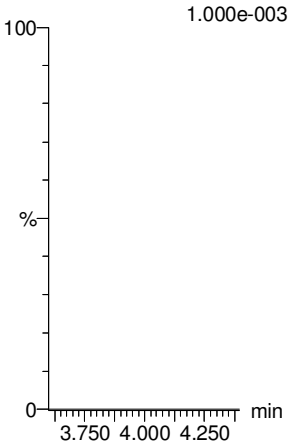
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
8.784e+002



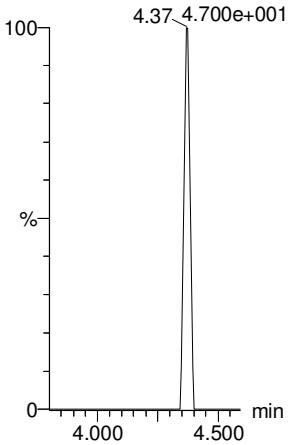
13C3-PFHxS
F17:MRM of 1 channel,ES-
-
401.9 > 79.9
1.000e-003



13C8-PFOA
F21:MRM of 1 channel,ES-
-
421.3 > 376
1.000e-003



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
4.700e+001



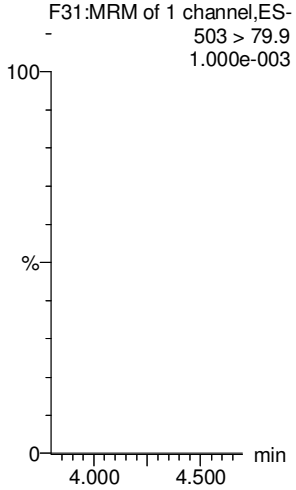
GM 8/11/17

Dataset: U:\Q4.PRO\results\170810M1\170810M2-12.qld

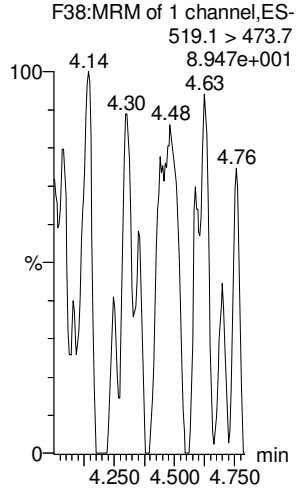
Last Altered: Friday, August 11, 2017 10:12:48 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:13:44 Pacific Daylight Time

Name: 170810M2_12, Date: 10-Aug-2017, Time: 22:19:51, ID: IPA, Description: IPA

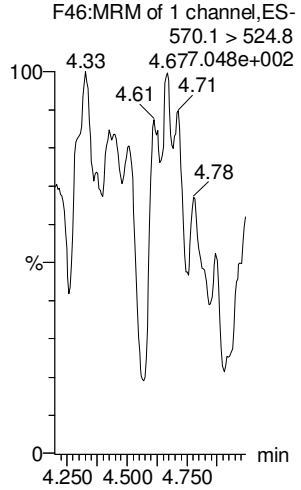
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170810M1\170810M2-38.qld

Last Altered: Friday, August 11, 2017 10:41:26 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:41:48 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 08:55:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_38, Date: 11-Aug-2017, Time: 02:58:38, ID: ST170810M2-11 PFC CS3 17H1005, Description: PFC CS3 17H1005

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1	PFBA	213.0 > 168.8	1.58e4	1.83e4		1.90	1.86	10.8	9.86	98.6
2	2	PFPeA	263.1 > 218.9	2.55e4	3.11e4		3.00	2.91	10.3	10.7	107.4
3	3	PFBS	299 > 79.7	5.65e3	3.84e3		3.16	3.08	18.4	10.6	106.4
4	4	PFHxA	313.2 > 268.9	3.93e4	1.33e4		3.35	3.29	14.8	11.2	112.0
5	5	PFHpA	363 > 318.9	4.24e4	4.41e4		3.61	3.53	12.0	10.2	101.7
6	6	PFHxS	398.9 > 79.6	5.42e3	4.39e3		3.65	3.60	15.4	8.77	87.7
7	7	6:2 FTS	427.1 > 407	9.55e3	1.12e4		3.80	3.72	10.7	11.4	114.5
8	8	PFOA	413 > 368.7	5.32e4	6.59e4		3.82	3.74	10.1	10.1	101.3
9	9	PFHpS	448.9 > 98.8	5.12e3	6.59e4		3.80	3.79	0.970	12.2	122.4
10	10	PFNA	462.9 > 418.8	5.41e4	6.19e4		4.02	3.93	10.9	10.6	106.4
11	11	PFOSA	498.1 > 77.8	7.13e3	8.71e3		4.05	3.93	10.2	9.72	97.2
12	12	PFOS	499 > 79.9	9.67e3	1.20e4		4.07	3.98	10.1	9.48	94.8
13	13	PFDA	513 > 468.8	5.87e4	7.07e4		4.21	4.10	10.4	9.07	90.7
14	14	8:2 FTS	527 > 506.9	9.54e3	8.18e3		4.20	4.10	14.6	10.6	105.6
15	15	N-MeFOSAA	570.1 > 419	1.80e4	1.55e4		4.23	4.13	189	9.76	97.6
16	16	N-EtFOSAA	584.2 > 419	1.54e4	1.61e4		4.30	4.20	155	9.90	99.0
17	17	PFUnA	562.9 > 518.9	4.51e4	6.86e4		4.38	4.27	8.21	10.1	100.6
18	18	PFDS	598.9 > 98.7	4.75e3	6.86e4		4.40	4.32	0.864	10.5	104.8
19	19	PFDoA	612.9 > 318.8	4.43e3	7.25e3		4.58	4.44	7.63	9.10	91.0
20	20	N-MeFOSA	512.1 > 168.9	1.19e4	3.33e4		4.56	4.47	53.7	60.2	120.4
21	21	PFTrDA	662.9 > 618.9		7.25e3		4.78				
22	22	PFTeDA	712.9 > 668.8				4.97				
23	23	N-EtFOSA	526.1 > 168.9	1.36e4	4.22e4		5.03	4.92	48.4	54.6	109.1
24	24	PFHxDA	812.8 > 768.9				5.37				
25	25	PFODA	912.8 > 868.8	5.75e4			5.60	5.56			
26	26	N-MeFOSE	616.1 > 58.9	1.52e4	4.50e4		5.30	5.25	50.7	54.5	108.9
27	27	N-EtFOSE	630.1 > 58.9	1.73e4	4.60e4		5.40	5.42	56.5	53.1	106.2
28	28	13C3-PFBA	216.1 > 171.8	1.83e4	1.97e4	0.906	1.90	1.86	11.6	12.8	102.2
29	29	13C3-PFPeA	266 > 221.8	3.11e4	4.55e4	0.284	2.99	2.91	3.41	12.0	96.2
30	30	13C3-PFBS	302 > 98.8	3.84e3	4.55e4	0.033	3.15	3.08	0.421	12.8	102.6
31	31	13C2-PFHxA	315 > 269.8	1.33e4	4.55e4	0.304	3.35	3.29	1.46	4.81	96.2

70-130

50-150

(A) Compounds out of the window.

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Dataset: U:\Q4.PRO\results\170810M1\170810M2-38.qld

Last Altered: Friday, August 11, 2017 10:41:26 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:41:48 Pacific Daylight Time

Name: 170810M2_38, Date: 11-Aug-2017, Time: 02:58:38, ID: ST170810M2-11 PFC CS3 17H1005, Description: PFC CS3 17H1005

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	32	13C4-PFHpA	367.2 > 321.8	4.41e4	4.55e4	0.384	3.61	3.53	4.84	12.6	100.9
33	33	18O2-PFHxS	403 > 102.6	4.39e3	1.01e4	0.417	3.68	3.60	5.41	13.0	103.8
34	34	13C2-6:2 FTS	429.1 > 408.9	1.12e4	6.19e4	0.202	3.80	3.72	2.26	11.2	89.7
35	35	13C2-PFOA	414.9 > 369.7	6.59e4	6.19e4	1.132	3.82	3.74	13.3	11.8	94.1
36	36	13C5-PFNA	468.2 > 422.9	6.19e4	6.48e4	0.946	4.02	3.93	11.9	12.6	101.0
37	37	13C8-PFOSA	506.1 > 77.7	8.71e3	5.97e4	0.119	4.08	3.93	1.82	15.3	122.2
38	38	13C8-PFOS	507 > 79.9	1.20e4	1.05e4	1.040	4.07	3.98	14.3	13.8	110.2
39	39	13C2-PFDA	515.1 > 469.9	7.07e4	6.61e4	0.971	4.21	4.10	13.4	13.8	110.3
40	40	13C2-8:2 FTS	529.1 > 508.7	8.18e3	6.61e4	0.140	4.20	4.10	1.55	11.0	88.3
41	41	d3-N-MeFOSAA	573.3 > 419	1.55e4	5.97e4	0.018	4.23	4.13	3.25	183	112.5
42	42	d5-N-EtFOSAA	589.3 > 419	1.61e4	5.97e4	0.018	4.30	4.20	3.38	185	114.1
43	43	13C2-PFUnA	565 > 519.8	6.86e4	5.97e4	1.085	4.38	4.27	14.4	13.2	106.0
44	44	13C2-PFDoA	615 > 569.7	7.25e3	5.97e4	0.123	4.58	4.44	1.52	12.3	98.7
45	45	d3-N-MeFOSA	515.2 > 168.9	3.33e4	5.97e4	0.043	4.56	4.50	6.98	161	107.6
46	46	13C2-PFTeDA	714.8 > 669.6		5.97e4	0.798	4.97			(A)	
47	47	d5-N-ETFOSA	531.1 > 168.9	4.22e4	5.97e4	0.056	5.03	4.95	8.84	159	105.8
48	48	13C2-PFHxDA	815 > 769.7		5.97e4	0.926	5.37			(A)	
49	49	d7-N-MeFOSE	623.1 > 58.9	4.50e4	5.97e4	0.059	5.30	5.24	9.43	159	105.8
50	50	d9-N-EtFOSE	639.2 > 58.8	4.60e4	5.97e4	0.059	5.40	5.41	9.63	162	108.0
51	51	13C4-PFBA	217 > 171.8	1.97e4	1.97e4	1.000	1.90	1.86	12.5	12.5	100.0
52	52	13C5-PFHxA	318 > 272.9	4.55e4	4.55e4	1.000	3.35	3.29	5.00	5.00	100.0
53	53	13C3-PFHxS	401.9 > 79.9	1.01e4	1.01e4	1.000	3.68	3.61	12.5	12.5	100.0
54	54	13C8-PFOA	421.3 > 376	6.19e4	6.19e4	1.000	3.82	3.73	12.5	12.5	100.0
55	55	13C9-PFNA	472.2 > 426.9	6.48e4	6.48e4	1.000	4.02	3.93	12.5	12.5	100.0
56	56	13C4-PFOS	503 > 79.9	1.05e4	1.05e4	1.000	4.07	3.99	12.5	12.5	100.0
57	57	13C6-PFDA	519.1 > 473.7	6.61e4	6.61e4	1.000	4.21	4.10	12.5	12.5	100.0
58	58	13C7-PFUnA	570.1 > 524.8	5.97e4	5.97e4	1.000	4.38	4.27	12.5	12.5	100.0

(A) Compound out of the window. dm 8/11/17

Sample List Report **MassLynx MassLynx V4.1 SCN945 SCN960**

Sample List: U:\Q4.PRO\SampleDB\170810M2.SPL
Last Modified: Thursday, August 10, 2017 20:07:32 Pacific Daylight Time
Printed: Thursday, August 10, 2017 20:46:13 Pacific Daylight Time

Page Position (1, 1)

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
1	170810M2_1	---	IPA	IPA	1.0000	1:48	Blank
2	170810M2_2	---	ST170810M2-1 PFC CS-2 17H1015	PFC CS-2 17H1015	1.0000	1:1	Standard
3	170810M2_3	---	ST170810M2-2 PFC CS-1 17H1003	PFC CS-1 17H1003	1.0000	1:2	Standard
4	170810M2_4	---	ST170810M2-3 PFC CS0 17H1004	PFC CS0 17H1004	1.0000	1:3	Standard
5	170810M2_5	---	ST170810M2-4 PFC CS1 17H1016	PFC CS1 17H1016	1.0000	1:4	Standard
6	170810M2_6	---	ST170810M2-5 PFC CS2 17H1017	PFC CS2 17H1017	1.0000	1:5	Standard
7	170810M2_7	---	ST170810M2-6 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Standard
8	170810M2_8	---	ST170810M2-7 PFC CS4 17H1018	PFC CS4 17H1018	1.0000	1:7	Standard
9	170810M2_9	---	ST170810M2-8 PFC CS5 17H1019	PFC CS5 17H1019	1.0000	1:8	Standard
10	170810M2_10	---	ST170810M2-9 PFC CS6 17H1013	PFC CS6 17H1013	1.0000	1:9	Standard
11	170810M2_11	---	ST170810M2-10 PFC CS7 17H1012	PFC CS7 17H1012	1.0000	1:10	Analyte
12	170810M2_12	---	IPA	IPA	1.0000	1:48	Blank
13	170810M2_13	---	SS170810M2-1 PFC SSS 17H1020	PFC SSS 17H1020	1.0000	1:11	Analyte
14	170810M2_14	---	IPA	IPA	1.0000	1:48	Blank
15	170810M2_15	O	1700946-05RE1 MATP05077 1.06	MATP05077	1.0233	1:12	Analyte
16	170810M2_16	---	IPA	IPA	1.0000	1:48	Blank
17	170810M2_17	O	1700946-05RE1@5X MATP05077 1.06	MATP05077	1.0233	1:13	Analyte
18	170810M2_18	---	IPA	IPA	1.0000	1:48	Blank
19	170810M2_19	X	B7H0026-BS1 OPR 1	OPR	1.0000	1:14	Analyte
20	170810M2_20	---	IPA	IPA	1.0000	1:48	Blank
21	170810M2_21	X	B7H0026-BLK1 Method Blank 1	Method Blank	1.0000	1:15	Analyte
22	170810M2_22	---	IPA	IPA	1.0000	1:48	Blank
23	170810M2_23	X	1700946-01 MATP05073 1	MATP05073	1.0000	1:16	Analyte
24	170810M2_24	X	1700946-02 MATP05074 1	MATP05074	1.0000	1:17	Analyte
25	170810M2_25	X	1700946-03 MATP05075 1	MATP05075	1.0000	1:18	Analyte
26	170810M2_26	---	1700946-05 MATP05077 1	MATP05077	1.0000	1:19	Analyte
27	170810M2_27	---	IPA	IPA	1.0000	1:48	Blank
28	170810M2_28	X	1700946-04 MATP05076 1	MATP05076	1.0000	1:20	Analyte
29	170810M2_29	---	IPA	IPA	1.0000	1:48	Blank
30	170810M2_30	---	1700946-05@10X MATP05077 1	MATP05077	1.0000	1:22	Analyte
31	170810M2_31	---	IPA	IPA	1.0000	1:48	Blank
32	170810M2_32	X	1700946-04@10X MATP05076 1	MATP05076	1.0000	1:23	Analyte
33	170810M2_33	---	IPA	IPA	1.0000	1:48	Blank
34	170810M2_34	---	B7H0037-BS1 OPR 0.125	OPR	0.2500	1:24	Analyte
35	170810M2_35	---	IPA	IPA	1.0000	1:48	Blank
36	170810M2_36	X	1701010-02@10X VEL-FOAM-080317 0.125	VEL-FOAM-080317	0.0065	1:25	Analyte
37	170810M2_37	---	IPA	IPA	1.0000	1:48	Blank
38	170810M2_38	---	ST170810M2-11 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Standard
39	170810M2_39	---	IPA	IPA	1.0000	1:48	Blank
40	170810M2_40	X	1701010-02 VEL-FOAM-080317 0.125	VEL-FOAM-080317	0.1250	1:26	Analyte

(A) Column was changed, new curve run due to slight shifts in RT. OM 8/11/17 OM 8/10/17

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
41	170810M2_41	---	IPA	IPA	1.0000	1:48	Blank
42	170810M2_42	---	B7H0060-BS1 OPR 2.5	OPR	2.5000	1:27	Analyte
43	170810M2_43	---	B7H0073-BS1 OPR 0.125	OPR	0.1250	1:28	Analyte
44	170810M2_44	---	B7H0074-BS1 OPR 0.125	OPR	0.1250	1:29	Analyte
45	170810M2_45	---	B7H0060-BLK1 Method Blank 2.5	Method Blank	2.5000	1:30	Analyte
46	170810M2_46	---	B7H0073-BLK1 Method Blank 0.125	Method Blank	0.1250	1:31	Analyte
47	170810M2_47	---	B7H0074-BLK1 Method Blank 0.125	Method Blank	0.1250	1:32	Analyte
48	170810M2_48	---	B7H0073-MS1 Matrix Spike 0.0005	Matrix Spike	0.0005	1:33	Analyte
49	170810M2_49	---	IPA	IPA	1.0000	1:48	Blank
50	170810M2_50	---	B7H0073-MSD1 Matrix Spike Dup 0.00139	Matrix Spike Dup	0.0014	1:34	Analyte
51	170810M2_51	---	IPA	IPA	1.0000	1:48	Blank
52	170810M2_52	---	B7H0074-MS1 Matrix Spike 0.125	Matrix Spike	0.1250	1:35	Analyte
53	170810M2_53	---	B7H0074-MSD1 Matrix Spike Dup 0.125	Matrix Spike Dup	0.1250	1:36	Analyte
54	170810M2_54	---	1700819-01RE1 QPFD-14 2.5	QPFD-14	2.5000	1:37	Analyte
55	170810M2_55	---	1700819-02RE1 QPFD-15 2.5	QPFD-15	2.5000	1:38	Analyte
56	170810M2_56	---	IPA	IPA	1.0000	1:48	Blank
57	170810M2_57	---	1700819-03RE1 QPFD-16 2.5	QPFD-16	2.5000	1:39	Analyte
58	170810M2_58	---	1700819-04RE1 QPFD-17 2	QPFD-17	2.0000	1:40	Analyte
59	170810M2_59	---	1700819-05RE1 QPFD-18 2.5	QPFD-18	2.5000	1:41	Analyte
60	170810M2_60	---	1700819-06RE1 QPFD-19 2.5	QPFD-19	2.5000	1:42	Analyte
61	170810M2_61	---	1700819-07RE1 QPFD-20 2.5	QPFD-20	2.5000	1:43	Analyte
62	170810M2_62	---	1700819-08RE1 QPFD-21 2.5	QPFD-21	2.5000	1:44	Analyte
63	170810M2_63	---	1700819-09RE1 QPFD-22 2.5	QPFD-22	2.5000	1:45	Analyte
64	170810M2_64	---	1700819-10RE1 QPFD-23 2.5	QPFD-23	2.5000	1:46	Analyte
65	170810M2_65	---	IPA	IPA	1.0000	1:48	Blank
66	170810M2_66	---	ST170810M2-12 PFC CS0 17H1004	PFC CS0 17H1004	1.0000	1:3	Standard
67	170810M2_67	---	IPA	IPA	1.0000	1:48	Blank
68	170810M2_68	---	1700819-11RE1 QPFD-24 2.5	QPFD-24	2.5000	1:47	Analyte
69	170810M2_69	---	1700819-12RE1 QPFD-25 2.5	QPFD-25	2.5000	2:1	Analyte
70	170810M2_70	---	1700819-13RE1 QPFD-26 2.5	QPFD-26	2.5000	2:2	Analyte
71	170810M2_71	---	1700925-04RE2 I001MW52S-170724 0.00122	I001MW52S-170724	0.0012	2:3	Analyte
72	170810M2_72	---	IPA	IPA	1.0000	1:48	Blank
73	170810M2_73	---	1700925-05RE2 I001MW52X-170724 0.00133	I001MW52X-170724	0.0013	2:4	Analyte
74	170810M2_74	---	IPA	IPA	1.0000	1:48	Blank
75	170810M2_75	---	1700922-01RE1 MH-L103-20170721 0.10565	MH-L103-20170721	0.1056	2:5	Analyte
76	170810M2_76	---	1700922-02RE1 MH-N104-20170721 0.11025	MH-N104-20170721	0.1103	2:6	Analyte
77	170810M2_77	---	1700922-03RE1 Upstream-Culvert-109-20170721 0.1185	Upstream-Culvert-109-20170721	0.1185	2:7	Analyte
78	170810M2_78	---	1700922-04RE1 FRB03-20170721 0.11017	FRB03-20170721	0.1102	2:8	Analyte
79	170810M2_79	---	1700922-05RE1 RB08-20170720 0.11893	RB08-20170720	0.1189	2:9	Analyte
80	170810M2_80	---	IPA	IPA	1.0000	1:48	Blank

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
81	170810M2_81	X	ST170810M2-13 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Analyte
82	170810M2_82	---	IPA	IPA	1.0000	1:48	Blank
83	170810M2_83	---	1700922-06RE1 RB09-20170721 0.11676	RB09-20170721	0.1168	2:10	Analyte
84	170810M2_84	---	1700925-01RE1 I001BC43S-170724 0.12112	I001BC43S-170724	0.1211	2:11	Analyte
85	170810M2_85	---	1700925-02RE1 SB01-170724 0.12178	SB01-170724	0.1218	2:12	Analyte
86	170810M2_86	---	1700925-03RE1 I001BC50S-170724 0.12135	I001BC50S-170724	0.1214	2:13	Analyte
87	170810M2_87	---	1700925-06RE1 EB01-170724 0.1185	EB01-170724	0.1185	2:14	Analyte
88	170810M2_88	---	1700929-01RE1 MATP01001 0.11834	MATP01001	0.1183	2:15	Analyte
89	170810M2_89	---	1700929-02RE1 MATP01002 0.1157	MATP01002	0.1157	2:16	Analyte
90	170810M2_90	---	1700938-01RE1 NORP08102 0.11844	NORP08102	0.1184	2:17	Analyte
91	170810M2_91	---	1700938-02RE1 NORP08103 0.12014	NORP08103	0.1201	2:18	Analyte
92	170810M2_92	---	1700938-03RE1 NORP08104 0.11247	NORP08104	0.1125	2:19	Analyte
93	170810M2_93	---	IPA	IPA	1.0000	1:48	Blank
94	170810M2_94	---	ST170810M2-14 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Standard
95	170810M2_95	---	IPA	IPA	1.0000	1:48	Blank
96	170810M2_96	---	1700819-02RE1 QPFD-15 2.5	QPFD-15	2.5000	1:21	Analyte
97	170810M2_97	---	IPA	IPA	1.0000	1:48	Blank
98	170810M2_98	---	B7H0073-MS1@20X Matrix Spike 0.0005	Matrix Spike	0.0005	2:20	Analyte
99	170810M2_99	---	IPA	IPA	1.0000	1:48	Blank
100	170810M2_100	---	B7H0073-MSD1@20X Matrix Spike Dup 0.00139	Matrix Spike Dup	0.0014	2:21	Analyte
101	170810M2_101	---	IPA	IPA	1.0000	1:48	Blank
102	170810M2_102	---	1700925-04RE2 I001MW52S-170724 0.00122	I001MW52S-170724	0.0012	2:22	Analyte
103	170810M2_103	---	IPA	IPA	1.0000	1:48	Blank
104	170810M2_104	---	1700925-05RE2 I001MW52X-170724 0.00133	I001MW52X-170724	0.0013	2:23	Analyte
105	170810M2_105	---	IPA	IPA	1.0000	1:48	Blank
106	170810M2_106	X	ST170810M2-15 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Analyte
107	170810M2_107	---	IPA	IPA	1.0000	1:48	Blank

(A) am 8/11/17 (B) am 8/11/17

(B) PFDoA, PFTrDA, PFTeDA, PFODA, & PFHxDA shifted out of window, samples not injected. am 8/11/17

LC Calibration Standards Review Checklist Q4

			ION Ratio	Concentration	C-Cals Name	Sign Date	Correct I-Cal	Manual Integrations	NA
Calibration ID:	ST170810M2-11	L (M) H	NA	☑ (A)	☑	☑	☑	☑	☐
Calibration ID:	-12	(L) M H	☐	☑ (B)(C)	☑	☑	☑	☑	☐
Calibration ID:	-13	L (M) H	☑	☑	☑	☑	☑	☑	☑
Calibration ID:		L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:		L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:		L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:		L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:		L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:		L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:		L M H	☐	☐	☐	☐	☐	☐	☐

Full Mass Cal. Date: 6/21/17

Run Log Present: ☑

# of Samples per Sequence Checked: ☑

Reviewed By: [illegible] 8/11/17
Initials/Date

Comments:
(A) PFTrDA, PFTeDA, PFHxDA, PFODA out of the window, not used.
(B) PFDoA out of the window, not used
(C) PFHpS out of limit criteria, NOT used

Vista Analytical Laboratory

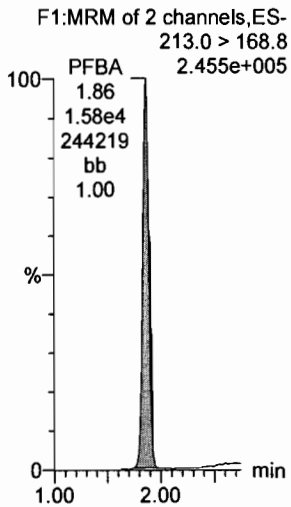
Dataset: U:\Q4.PRO\results\170810M1\170810M2-38.qld

Last Altered: Friday, August 11, 2017 10:41:26 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:41:48 Pacific Daylight Time

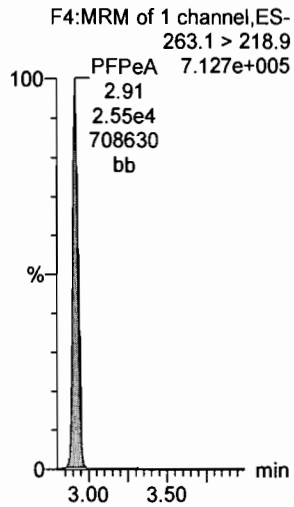
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 08:55:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_38, Date: 11-Aug-2017, Time: 02:58:38, ID: ST170810M2-11 PFC CS3 17H1005, Description: PFC CS3 17H1005

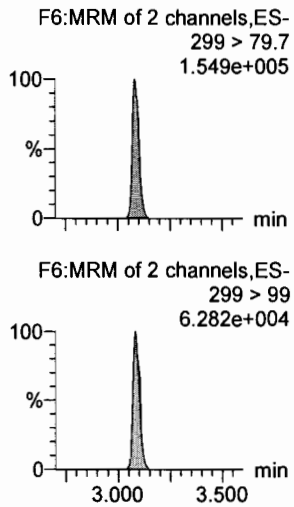
PFBA



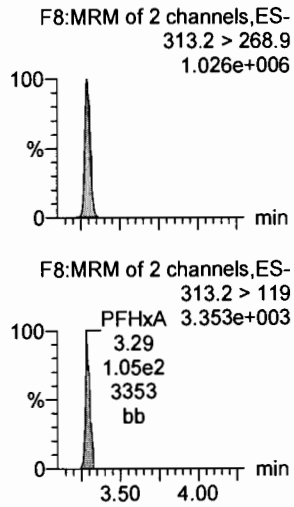
PFPeA



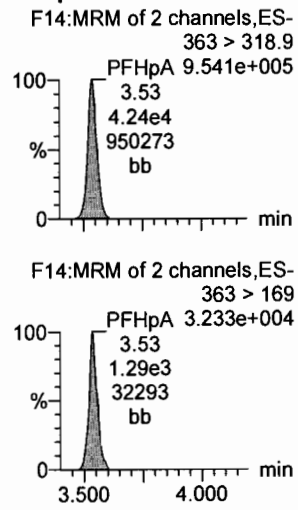
PFBS



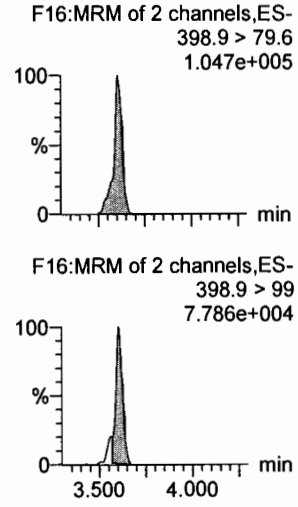
PFHxA



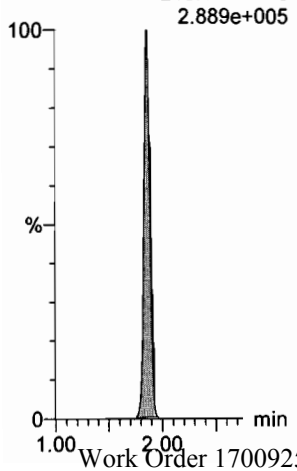
PFHpA



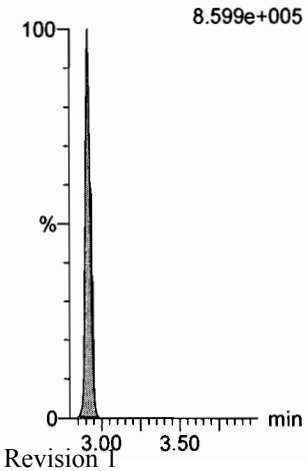
PFHxS



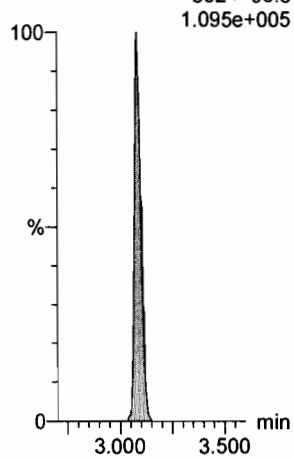
13C3-PFBA



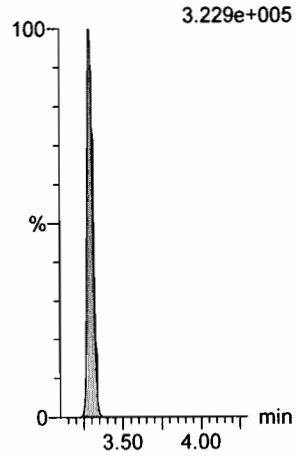
13C3-PFPeA



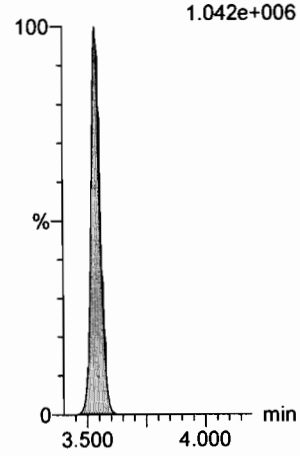
13C3-PFBS



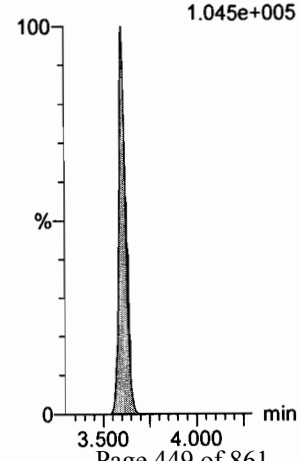
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



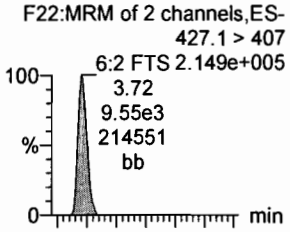
Vista Analytical Laboratory

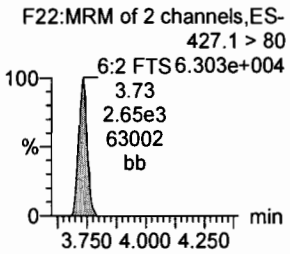
Dataset: U:\Q4.PRO\results\170810M1\170810M2-38.qld

Last Altered: Friday, August 11, 2017 10:41:26 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:41:48 Pacific Daylight Time

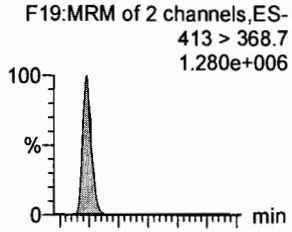
Name: 170810M2_38, Date: 11-Aug-2017, Time: 02:58:38, ID: ST170810M2-11 PFC CS3 17H1005, Description: PFC CS3 17H1005

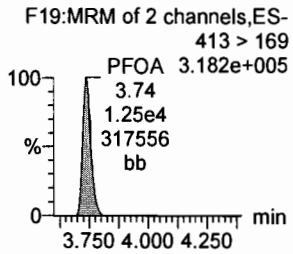
6:2 FTS



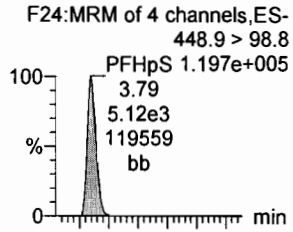


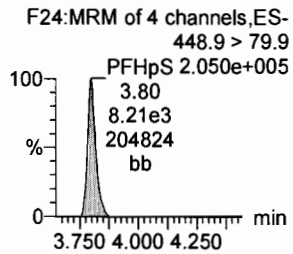
PFOA



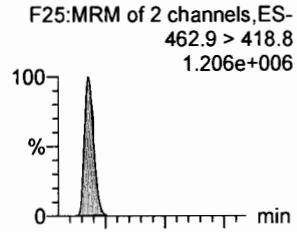


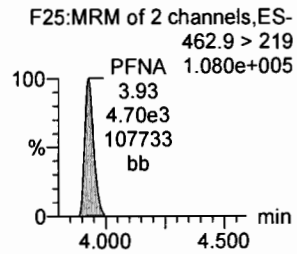
PFHpS



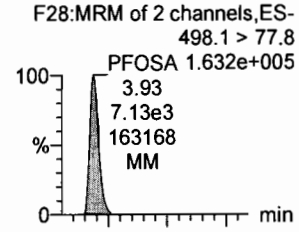


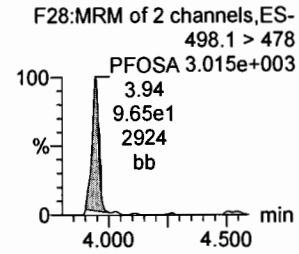
PFNA



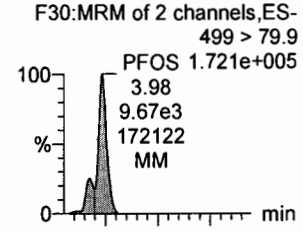


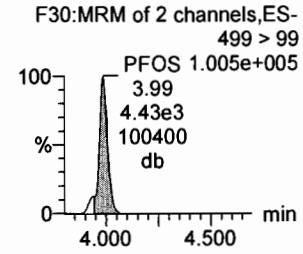
PFOSA



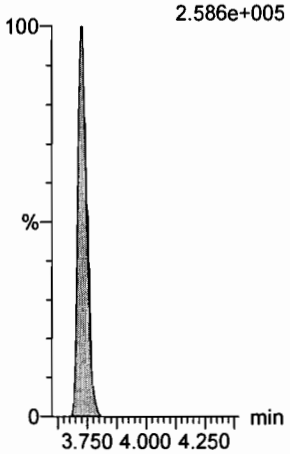


PFOS

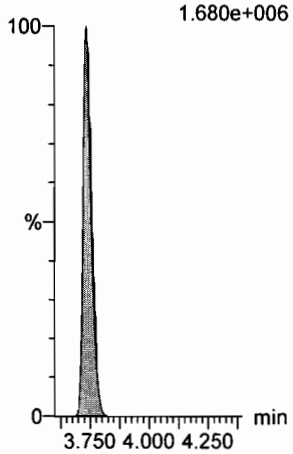




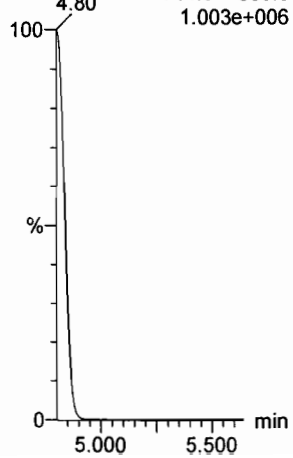
13C2-6:2 FTS



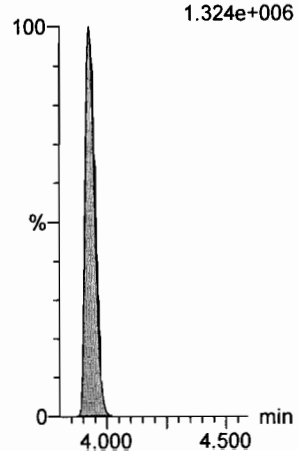
13C2-PFOA



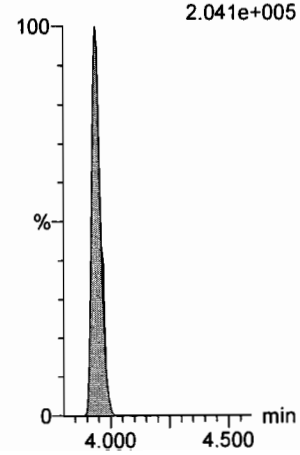
13C2-PFTeDA



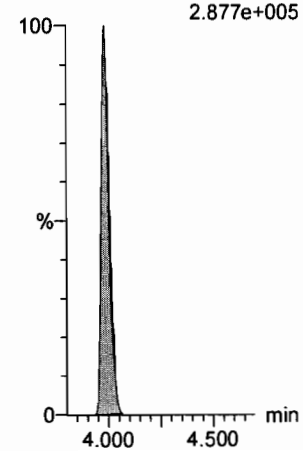
13C5-PFNA



13C8-PFOSA



13C8-PFOS



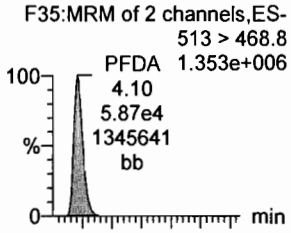
Vista Analytical Laboratory

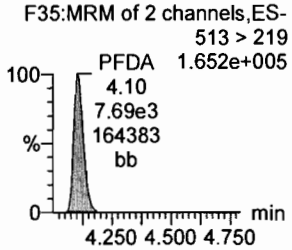
Dataset: U:\Q4.PRO\results\170810M1\170810M2-38.qld

Last Altered: Friday, August 11, 2017 10:41:26 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:41:48 Pacific Daylight Time

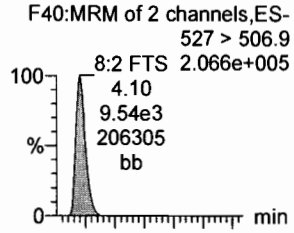
Name: 170810M2_38, Date: 11-Aug-2017, Time: 02:58:38, ID: ST170810M2-11 PFC CS3 17H1005, Description: PFC CS3 17H1005

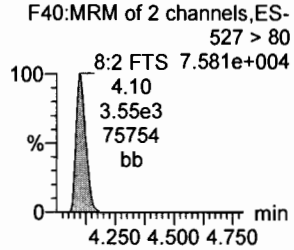
PFDA



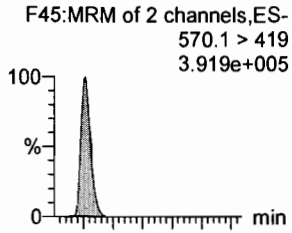


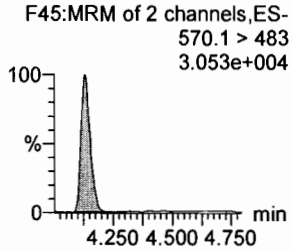
8:2 FTS





N-MeFOSAA





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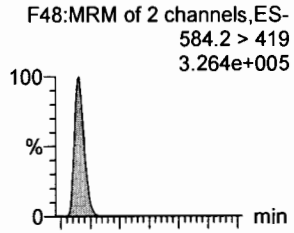
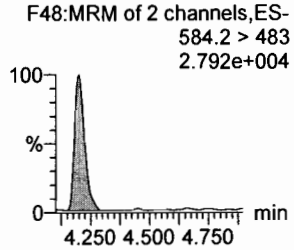
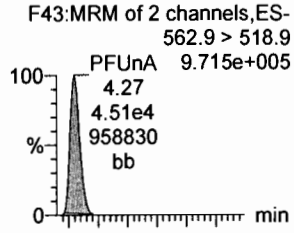
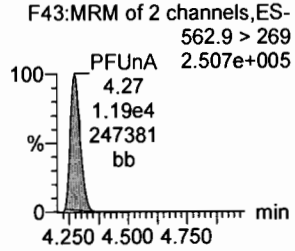


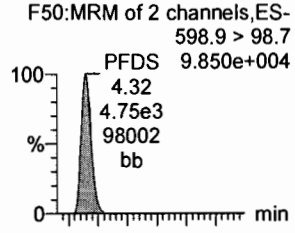


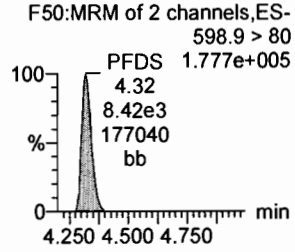
PFUnA



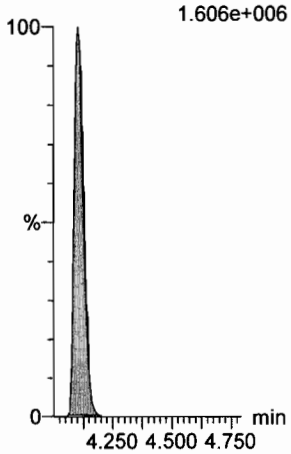


PFDS

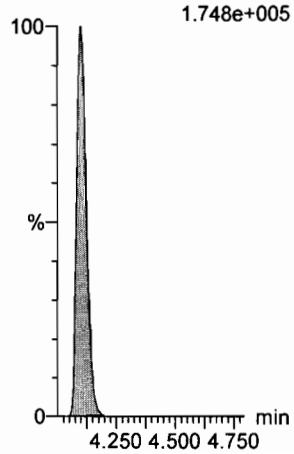




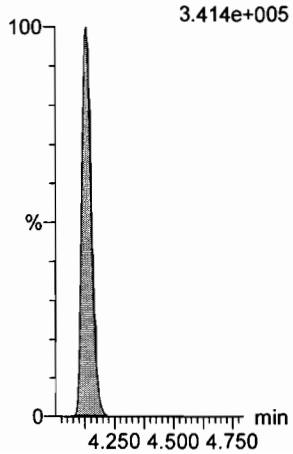
13C2-PFDA



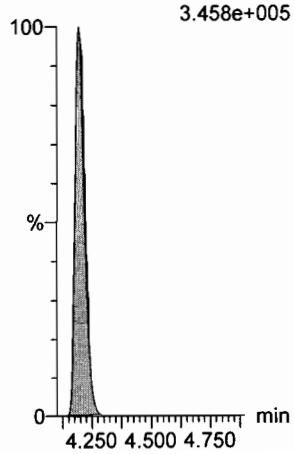
13C2-8:2 FTS



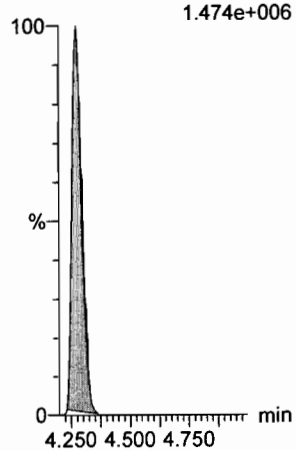
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFUnA



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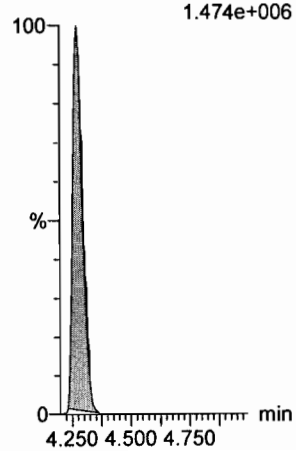

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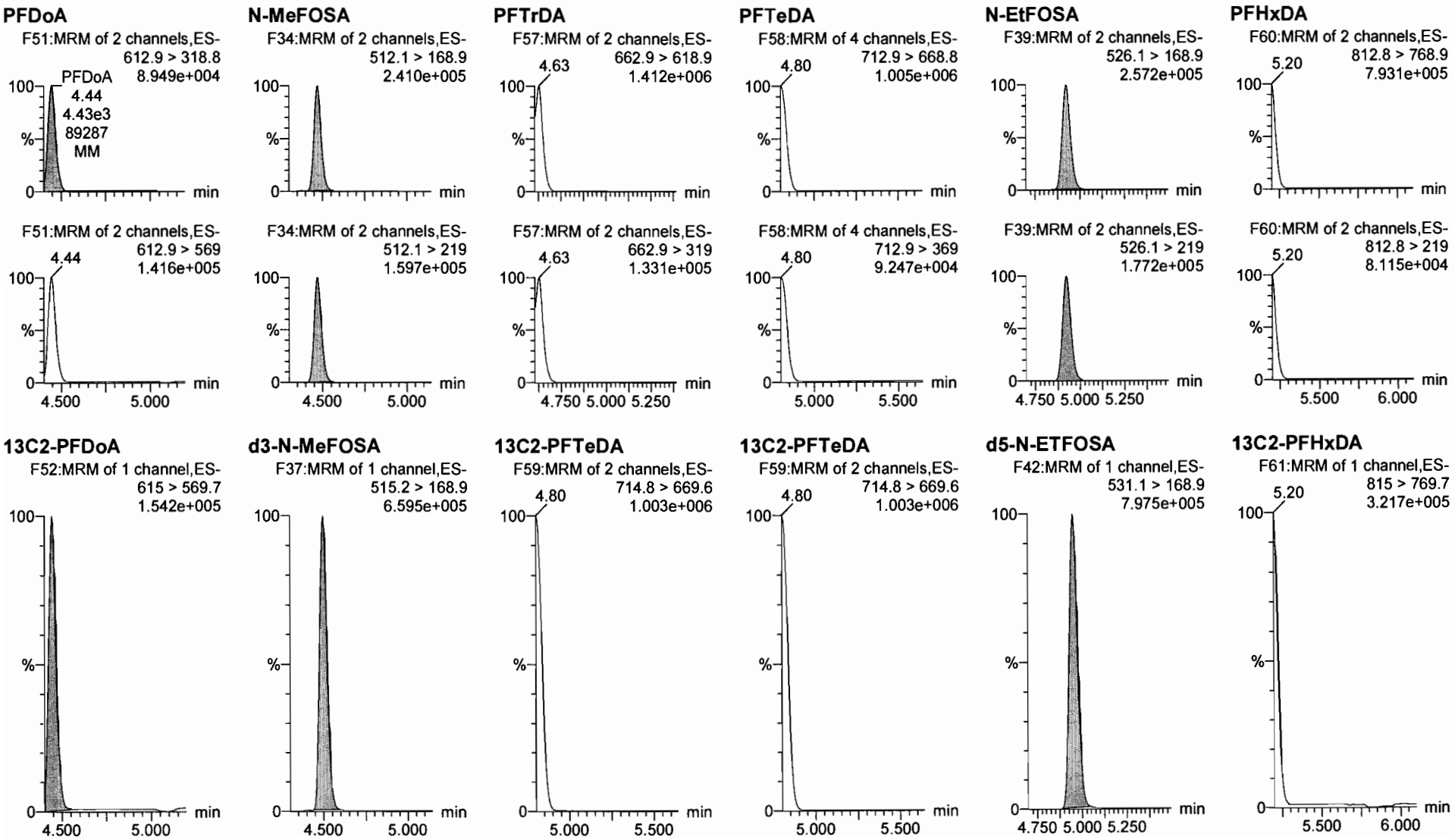
Last Altered: Friday, August 11, 2017 10:41:26 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:41:48 Pacific Daylight Time

Name: 170810M2_38, Date: 11-Aug-2017, Time: 02:58:38, ID: ST170810M2-11 PFC CS3 17H1005, Description: PFC CS3 17H1005



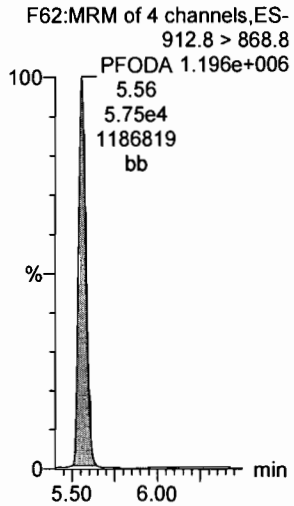
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170810M1\170810M2-38.qld

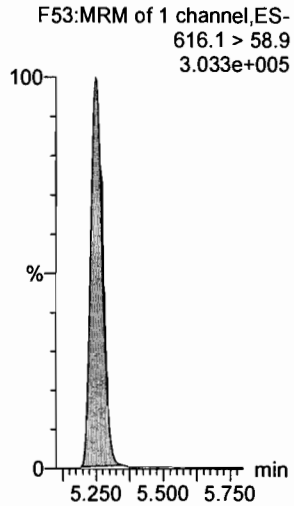
Last Altered: Friday, August 11, 2017 10:41:26 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:41:48 Pacific Daylight Time

Name: 170810M2_38, Date: 11-Aug-2017, Time: 02:58:38, ID: ST170810M2-11 PFC CS3 17H1005, Description: PFC CS3 17H1005

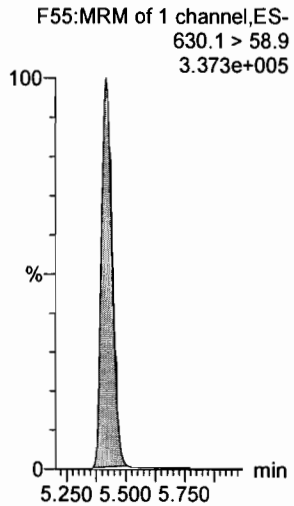
PFODA



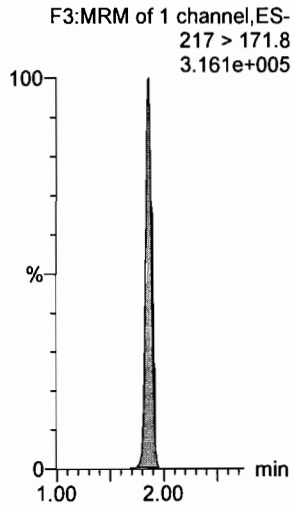
N-MeFOSE



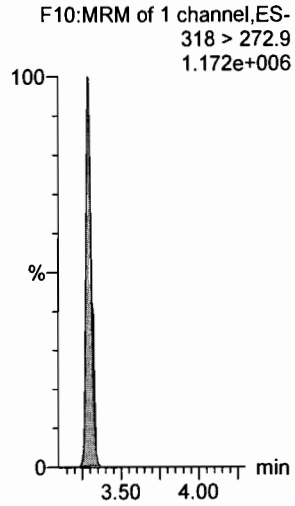
N-EtFOSE



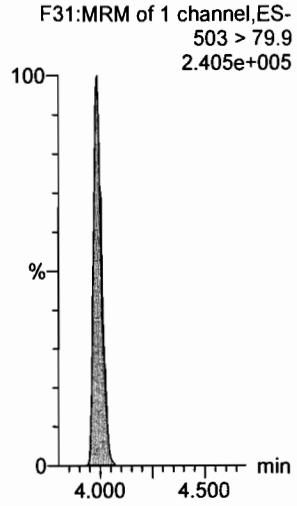
13C4-PFBA



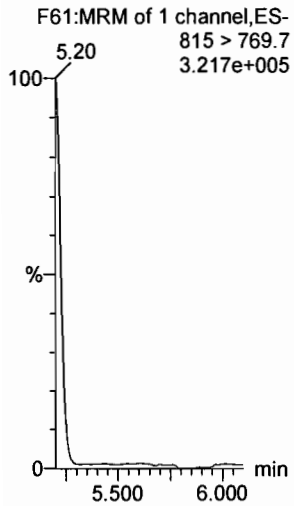
13C5-PFHxA



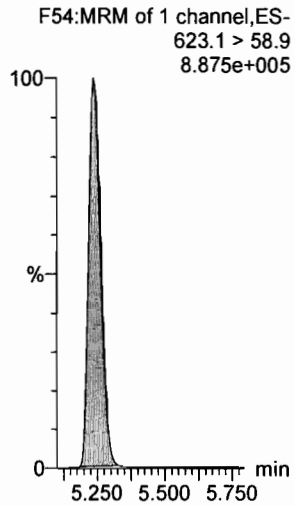
13C4-PFOS



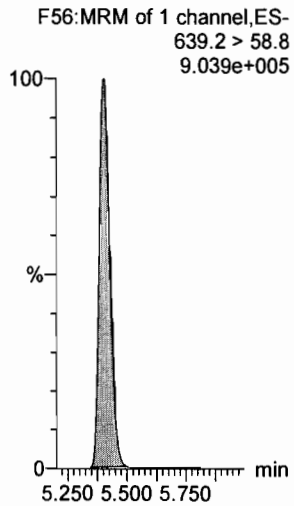
13C2-PFHxDA



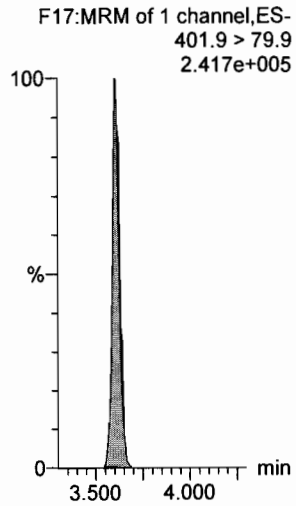
d7-N-MeFOSE



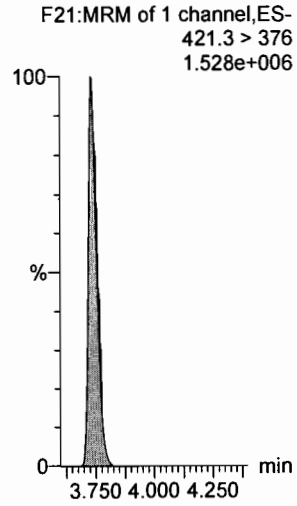
d9-N-EtFOSE



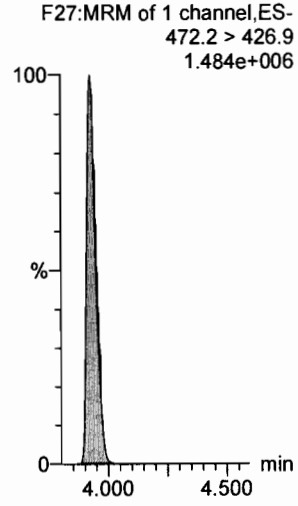
13C3-PFHxS



13C8-PFOA



13C9-PFNA



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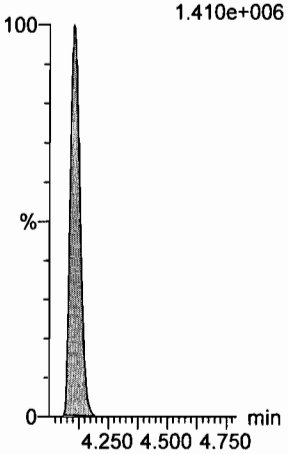
Last Altered: Friday, August 11, 2017 10:41:26 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:41:48 Pacific Daylight Time

Name: 170810M2_38, Date: 11-Aug-2017, Time: 02:58:38, ID: ST170810M2-11 PFC CS3 17H1005, Description: PFC CS3 17H1005

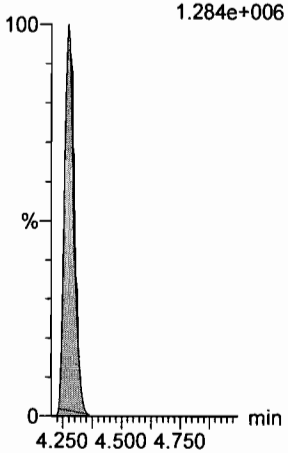
13C6-PFDA

F38:MRM of 1 channel,ES-
519.1 > 473.7
1.410e+006



13C7-PFUnA

F46:MRM of 1 channel,ES-
570.1 > 524.8
1.284e+006



Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170810M1\170810M2-66.qld

Last Altered: Friday, August 11, 2017 11:02:22 Pacific Daylight Time
Printed: Friday, August 11, 2017 11:02:28 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 08:55:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_66, Date: 11-Aug-2017, Time: 07:58:22, ID: ST170810M2-12 PFC CS0 17H1004, Description: PFC CS0 17H1004

	#	Name	Trace	Area	IS Resp	RRF	Wt./Vol	RT	Conc.	%Rec
1	1	PFBA	213.0 > 168.8	1776.016	18793.566		1.000	1.81	1.03	102.68
2	2	PFPeA	263.1 > 218.9	2795.468	32013.537		1.000	2.89	1.03	103.24
3	3	PFBS	299 > 79.7	592.350	3941.215		1.000	3.06	0.99	99.15
4	4	PFHxA	313.2 > 268.9	4441.684	14210.620		1.000	3.27	0.73	73.24
5	5	PFHpA	363 > 318.9	4637.225	44087.039		1.000	3.52	0.70	70.28
6	6	PFHxS	398.9 > 79.6	598.365	4634.031		1.000	3.59	0.98	97.78
7	7	6:2 FTS	427.1 > 407	1072.612	12399.818		1.000	3.71	1.09	108.71
8	8	PFOA	413 > 368.7	6686.349	67472.906		1.000	3.71	1.11	110.90
9	9	PFHpS	448.9 > 98.8	623.994	67472.906		1.000	3.78	1.37 (A)	137.10
10	10	PFNA	462.9 > 418.8	6229.885	64782.910		1.000	3.91	0.70	70.28
11	11	PFOSA	498.1 > 77.8	928.813	9987.791		1.000	3.91	1.08	107.73
12	12	PFOS	499 > 79.9	1188.099	12336.172		1.000	3.96	1.16	116.34
13	13	PFDA	513 > 468.8	6285.810	68545.438		1.000	4.08	0.91	91.14
14	14	8:2 FTS	527 > 506.9	830.162	7709.168		1.000	4.08	0.95	95.12
15	15	N-MeFOSAA	570.1 > 419	1924.048	16895.355		1.000	4.11	0.98	97.59
16	16	N-EtFOSAA	584.2 > 419	1712.526	17854.604		1.000	4.18	0.96	95.56
17	17	PFUnA	562.9 > 518.9	5674.684	69056.773		1.000	4.25	1.16	115.84
18	18	PFDS	598.9 > 98.7	578.555	69056.773		1.000	4.30	1.14	113.99
19	19	PFDoA	612.9 > 318.8				1.000		(B)	
20	20	N-MeFOSA	512.1 > 168.9	1275.474	35058.004		1.000	4.45	5.32	106.48
21	21	PFTrDA	662.9 > 618.9				1.000		(B)	
22	22	PFTeDA	712.9 > 668.8				1.000			
23	23	N-EtFOSA	526.1 > 168.9	1439.101	44443.469		1.000	4.91	5.01	100.17
24	24	PFHxDA	812.8 > 768.9				1.000		(B)	
25	25	PFODA	912.8 > 868.8	6202.971			1.000	5.52		
26	26	N-MeFOSE	616.1 > 58.9	1675.298	47787.676		1.000	5.25	4.75	95.06
27	27	N-EtFOSE	630.1 > 58.9	2054.963	48177.332		1.000	5.41	3.79	75.81
28	28	13C3-PFBA	216.1 > 171.8	18793.566	19654.857	0.906	1.000	1.81	13.19	105.56
29	29	13C3-PFPeA	266 > 221.8	32013.537	44833.902	0.284	1.000	2.89	12.58	100.61
30	30	13C3-PFBS	302 > 98.8	3941.215	44833.902	0.033	1.000	3.06	13.37	106.95
31	31	13C2-PFHxA	315 > 269.8	14210.620	44833.902	0.304	1.000	3.27	5.22	104.39

70-130

(A) out of limit criteria, not used.
(B) out of the window, not used.

AM 8/11/17

Dataset: U:\Q4.PRO\results\170810M1\170810M2-66.qld

Last Altered: Friday, August 11, 2017 11:02:22 Pacific Daylight Time
Printed: Friday, August 11, 2017 11:02:28 Pacific Daylight Time

Name: 170810M2_66, Date: 11-Aug-2017, Time: 07:58:22, ID: ST170810M2-12 PFC CS0 17H1004, Description: PFC CS0 17H1004

	# Name	Trace	Area	IS Resp	RRF	Wt./Vol	RT	Conc.	%Rec
32	32 13C4-PFHpA	367.2 > 321.8	44087.039	44833.902	0.384	1.000	3.52	12.80	102.41
33	33 18O2-PFHxS	403 > 102.6	4634.031	10071.075	0.417	1.000	3.59	13.79	110.31
34	34 13C2-6:2 FTS	429.1 > 408.9	12399.818	64783.871	0.202	1.000	3.70	11.86	94.88
35	35 13C2-PFOA	414.9 > 369.7	67472.906	64783.871	1.132	1.000	3.71	11.50	91.99
36	36 13C5-PFNA	468.2 > 422.9	64782.910	65390.230	0.946	1.000	3.91	13.09	104.72
37	37 13C8-PFOSA	506.1 > 77.7	9987.791	62455.215	0.119	1.000	3.92	16.74	133.91
38	38 13C8-PFOS	507 > 79.9	12336.172	12113.758	1.040	1.000	3.96	12.24	97.93
39	39 13C2-PFDA	515.1 > 469.9	68545.438	59610.031	0.971	1.000	4.09	14.81	118.45
40	40 13C2-8:2 FTS	529.1 > 508.7	7709.168	59610.031	0.140	1.000	4.08	11.52	92.19
41	41 d3-N-MeFOSAA	573.3 > 419	16895.355	62455.215	0.018	1.000	4.11	190.09	116.98
42	42 d5-N-EtFOSAA	589.3 > 419	17854.604	62455.215	0.018	1.000	4.18	196.01	120.62
43	43 13C2-PFUnA	565 > 519.8	69056.773	62455.215	1.085	1.000	4.25	12.74	101.89
44	44 13C2-PFDoA	615 > 569.7		62455.215	0.123	1.000			
45	45 d3-N-MeFOSA	515.2 > 168.9	35058.004	62455.215	0.043	1.000	4.48	162.17	108.11
46	46 13C2-PFTeDA	714.8 > 669.6		62455.215	0.798	1.000			
47	47 d5-N-ETFOSA	531.1 > 168.9	44443.469	62455.215	0.056	1.000	4.94	159.76	106.50
48	48 13C2-PFHxDA	815 > 769.7		62455.215	0.926	1.000			
49	49 d7-N-MeFOSE	623.1 > 58.9	47787.676	62455.215	0.059	1.000	5.23	160.90	107.26
50	50 d9-N-EtFOSE	639.2 > 58.8	48177.332	62455.215	0.059	1.000	5.40	162.11	108.07
51	51 13C4-PFBA	217 > 171.8	19654.857	19654.857	1.000	1.000	1.81	12.50	100.00
52	52 13C5-PFHxA	318 > 272.9	44833.902	44833.902	1.000	1.000	3.27	5.00	100.00
53	53 13C3-PFHxS	401.9 > 79.9	10071.075	10071.075	1.000	1.000	3.59	12.50	100.00
54	54 13C8-PFOA	421.3 > 376	64783.871	64783.871	1.000	1.000	3.71	12.50	100.00
55	55 13C9-PFNA	472.2 > 426.9	65390.230	65390.230	1.000	1.000	3.91	12.50	100.00
56	56 13C4-PFOS	503 > 79.9	12113.758	12113.758	1.000	1.000	3.96	12.50	100.00
57	57 13C6-PFDA	519.1 > 473.7	59610.031	59610.031	1.000	1.000	4.09	12.50	100.00
58	58 13C7-PFUnA	570.1 > 524.8	62455.215	62455.215	1.000	1.000	4.25	12.50	100.00

Sample List Report **MassLynx MassLynx V4.1 SCN945 SCN960**

Sample List: U:\Q4.PRO\SampleDB\170810M2.SPL
Last Modified: Thursday, August 10, 2017 20:07:32 Pacific Daylight Time
Printed: Thursday, August 10, 2017 20:46:13 Pacific Daylight Time

Page Position (1, 1)

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
1	170810M2_1	---	IPA	IPA	1.0000	1:48	Blank
2	170810M2_2	---	ST170810M2-1 PFC CS-2 17H1015	PFC CS-2 17H1015	1.0000	1:1	Standard
3	170810M2_3	---	ST170810M2-2 PFC CS-1 17H1003	PFC CS-1 17H1003	1.0000	1:2	Standard
4	170810M2_4	---	ST170810M2-3 PFC CS0 17H1004	PFC CS0 17H1004	1.0000	1:3	Standard
5	170810M2_5	---	ST170810M2-4 PFC CS1 17H1016	PFC CS1 17H1016	1.0000	1:4	Standard
6	170810M2_6	---	ST170810M2-5 PFC CS2 17H1017	PFC CS2 17H1017	1.0000	1:5	Standard
7	170810M2_7	---	ST170810M2-6 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Standard
8	170810M2_8	---	ST170810M2-7 PFC CS4 17H1018	PFC CS4 17H1018	1.0000	1:7	Standard
9	170810M2_9	---	ST170810M2-8 PFC CS5 17H1019	PFC CS5 17H1019	1.0000	1:8	Standard
10	170810M2_10	---	ST170810M2-9 PFC CS6 17H1013	PFC CS6 17H1013	1.0000	1:9	Standard
11	170810M2_11	---	ST170810M2-10 PFC CS7 17H1012	PFC CS7 17H1012	1.0000	1:10	Analyte
12	170810M2_12	---	IPA	IPA	1.0000	1:48	Blank
13	170810M2_13	---	SS170810M2-1 PFC SSS 17H1020	PFC SSS 17H1020	1.0000	1:11	Analyte
14	170810M2_14	---	IPA	IPA	1.0000	1:48	Blank
15	170810M2_15	O	1700946-05RE1 MATP05077 1.06	MATP05077	1.0233	1:12	Analyte
16	170810M2_16	---	IPA	IPA	1.0000	1:48	Blank
17	170810M2_17	O	1700946-05RE1@5X MATP05077 1.06	MATP05077	1.0233	1:13	Analyte
18	170810M2_18	---	IPA	IPA	1.0000	1:48	Blank
19	170810M2_19	X	B7H0026-BS1 OPR 1	OPR	1.0000	1:14	Analyte
20	170810M2_20	---	IPA	IPA	1.0000	1:48	Blank
21	170810M2_21	X	B7H0026-BLK1 Method Blank 1	Method Blank	1.0000	1:15	Analyte
22	170810M2_22	---	IPA	IPA	1.0000	1:48	Blank
23	170810M2_23	X	1700946-01 MATP05073 1	MATP05073	1.0000	1:16	Analyte
24	170810M2_24	X	1700946-02 MATP05074 1	MATP05074	1.0000	1:17	Analyte
25	170810M2_25	X	1700946-03 MATP05075 1	MATP05075	1.0000	1:18	Analyte
26	170810M2_26	---	1700946-05 MATP05077 1	MATP05077	1.0000	1:19	Analyte
27	170810M2_27	---	IPA	IPA	1.0000	1:48	Blank
28	170810M2_28	X	1700946-04 MATP05076 1	MATP05076	1.0000	1:20	Analyte
29	170810M2_29	---	IPA	IPA	1.0000	1:48	Blank
30	170810M2_30	---	1700946-05@10X MATP05077 1	MATP05077	1.0000	1:22	Analyte
31	170810M2_31	---	IPA	IPA	1.0000	1:48	Blank
32	170810M2_32	X	1700946-04@10X MATP05076 1	MATP05076	1.0000	1:23	Analyte
33	170810M2_33	---	IPA	IPA	1.0000	1:48	Blank
34	170810M2_34	---	B7H0037-BS1 OPR 0.125	OPR	0.2500	1:24	Analyte
35	170810M2_35	---	IPA	IPA	1.0000	1:48	Blank
36	170810M2_36	X	1701010-02@10X VEL-FOAM-080317 0.125	VEL-FOAM-080317	0.0065	1:25	Analyte
37	170810M2_37	---	IPA	IPA	1.0000	1:48	Blank
38	170810M2_38	---	ST170810M2-11 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Standard
39	170810M2_39	---	IPA	IPA	1.0000	1:48	Blank
40	170810M2_40	X	1701010-02 VEL-FOAM-080317 0.125	VEL-FOAM-080317	0.1250	1:26	Analyte

(A) Column was changed, new curve run due to slight shifts in RT. OM 8/11/17 OM 8/10/17

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
41	170810M2_41	---	IPA	IPA	1.0000	1:48	Blank
42	170810M2_42	---	B7H0060-BS1 OPR 2.5	OPR	2.5000	1:27	Analyte
43	170810M2_43	---	B7H0073-BS1 OPR 0.125	OPR	0.1250	1:28	Analyte
44	170810M2_44	---	B7H0074-BS1 OPR 0.125	OPR	0.1250	1:29	Analyte
45	170810M2_45	---	B7H0060-BLK1 Method Blank 2.5	Method Blank	2.5000	1:30	Analyte
46	170810M2_46	---	B7H0073-BLK1 Method Blank 0.125	Method Blank	0.1250	1:31	Analyte
47	170810M2_47	---	B7H0074-BLK1 Method Blank 0.125	Method Blank	0.1250	1:32	Analyte
48	170810M2_48	---	B7H0073-MS1 Matrix Spike 0.0005	Matrix Spike	0.0005	1:33	Analyte
49	170810M2_49	---	IPA	IPA	1.0000	1:48	Blank
50	170810M2_50	---	B7H0073-MSD1 Matrix Spike Dup 0.00139	Matrix Spike Dup	0.0014	1:34	Analyte
51	170810M2_51	---	IPA	IPA	1.0000	1:48	Blank
52	170810M2_52	---	B7H0074-MS1 Matrix Spike 0.125	Matrix Spike	0.1250	1:35	Analyte
53	170810M2_53	---	B7H0074-MSD1 Matrix Spike Dup 0.125	Matrix Spike Dup	0.1250	1:36	Analyte
54	170810M2_54	---	1700819-01RE1 QPFD-14 2.5	QPFD-14	2.5000	1:37	Analyte
55	170810M2_55	---	1700819-02RE1 QPFD-15 2.5	QPFD-15	2.5000	1:38	Analyte
56	170810M2_56	---	IPA	IPA	1.0000	1:48	Blank
57	170810M2_57	---	1700819-03RE1 QPFD-16 2.5	QPFD-16	2.5000	1:39	Analyte
58	170810M2_58	---	1700819-04RE1 QPFD-17 2	QPFD-17	2.0000	1:40	Analyte
59	170810M2_59	---	1700819-05RE1 QPFD-18 2.5	QPFD-18	2.5000	1:41	Analyte
60	170810M2_60	---	1700819-06RE1 QPFD-19 2.5	QPFD-19	2.5000	1:42	Analyte
61	170810M2_61	---	1700819-07RE1 QPFD-20 2.5	QPFD-20	2.5000	1:43	Analyte
62	170810M2_62	---	1700819-08RE1 QPFD-21 2.5	QPFD-21	2.5000	1:44	Analyte
63	170810M2_63	---	1700819-09RE1 QPFD-22 2.5	QPFD-22	2.5000	1:45	Analyte
64	170810M2_64	---	1700819-10RE1 QPFD-23 2.5	QPFD-23	2.5000	1:46	Analyte
65	170810M2_65	---	IPA	IPA	1.0000	1:48	Blank
66	170810M2_66	---	ST170810M2-12 PFC CS0 17H1004	PFC CS0 17H1004	1.0000	1:3	Standard
67	170810M2_67	---	IPA	IPA	1.0000	1:48	Blank
68	170810M2_68	---	1700819-11RE1 QPFD-24 2.5	QPFD-24	2.5000	1:47	Analyte
69	170810M2_69	---	1700819-12RE1 QPFD-25 2.5	QPFD-25	2.5000	2:1	Analyte
70	170810M2_70	---	1700819-13RE1 QPFD-26 2.5	QPFD-26	2.5000	2:2	Analyte
71	170810M2_71	---	1700925-04RE2 I001MW52S-170724 0.00122	I001MW52S-170724	0.0012	2:3	Analyte
72	170810M2_72	---	IPA	IPA	1.0000	1:48	Blank
73	170810M2_73	---	1700925-05RE2 I001MW52X-170724 0.00133	I001MW52X-170724	0.0013	2:4	Analyte
74	170810M2_74	---	IPA	IPA	1.0000	1:48	Blank
75	170810M2_75	---	1700922-01RE1 MH-L103-20170721 0.10565	MH-L103-20170721	0.1056	2:5	Analyte
76	170810M2_76	---	1700922-02RE1 MH-N104-20170721 0.11025	MH-N104-20170721	0.1103	2:6	Analyte
77	170810M2_77	---	1700922-03RE1 Upstream-Culvert-109-20170721 0.1185	Upstream-Culvert-109-20170721	0.1185	2:7	Analyte
78	170810M2_78	---	1700922-04RE1 FRB03-20170721 0.11017	FRB03-20170721	0.1102	2:8	Analyte
79	170810M2_79	---	1700922-05RE1 RB08-20170720 0.11893	RB08-20170720	0.1189	2:9	Analyte
80	170810M2_80	---	IPA	IPA	1.0000	1:48	Blank

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
		am 8/4/17	(A) (B) am 8/4/17				
81	170810M2_81	X	ST170810M2-13 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Analyte
82	170810M2_82	---	IPA	IPA	1.0000	1:48	Blank
83	170810M2_83	---	(B) 1700922-06RE1 RB09-20170721 0.11676	RB09-20170721	0.1168	2:10	Analyte
84	170810M2_84	---	1700925-01RE1 I001BC43S-170724 0.12112	I001BC43S-170724	0.1211	2:11	Analyte
85	170810M2_85	---	1700925-02RE1 SB01-170724 0.12178	SB01-170724	0.1218	2:12	Analyte
86	170810M2_86	---	1700925-03RE1 I001BC50S-170724 0.12135	I001BC50S-170724	0.1214	2:13	Analyte
87	170810M2_87	---	1700925-06RE1 EB01-170724 0.1185	EB01-170724	0.1185	2:14	Analyte
88	170810M2_88	---	1700929-01RE1 MATP01001 0.11834	MATP01001	0.1183	2:15	Analyte
89	170810M2_89	---	1700929-02RE1 MATP01002 0.1157	MATP01002	0.1157	2:16	Analyte
90	170810M2_90	---	1700938-01RE1 NORP08102 0.11844	NORP08102	0.1184	2:17	Analyte
91	170810M2_91	---	1700938-02RE1 NORP08103 0.12014	NORP08103	0.1201	2:18	Analyte
92	170810M2_92	---	1700938-03RE1 NORP08104 0.11247	NORP08104	0.1125	2:19	Analyte
93	170810M2_93	---	IPA	IPA	1.0000	1:48	Blank
94	170810M2_94	---	ST170810M2-14 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Standard
95	170810M2_95	---	IPA	IPA	1.0000	1:48	Blank
96	170810M2_96	---	1700819-02RE1 QPFD-15 2.5 (25X)	QPFD-15	2.5000	1:21	Analyte
97	170810M2_97	---	IPA	IPA	1.0000	1:48	Blank
98	170810M2_98	---	B7H0073-MS1@20X Matrix Spike 0.0005	Matrix Spike	0.0005	2:20	Analyte
99	170810M2_99	---	IPA	IPA	1.0000	1:48	Blank
100	170810M2_100	---	B7H0073-MSD1@20X Matrix Spike Dup 0.00139	Matrix Spike Dup	0.0014	2:21	Analyte
101	170810M2_101	---	IPA	IPA	1.0000	1:48	Blank
102	170810M2_102	---	1700925-04RE2 I001MW52S-170724 0.00122	I001MW52S-170724	0.0012	2:22	Analyte
103	170810M2_103	---	IPA	IPA	1.0000	1:48	Blank
104	170810M2_104	---	1700925-05RE2 I001MW52X-170724 0.00133	I001MW52X-170724	0.0013	2:23	Analyte
105	170810M2_105	---	IPA	IPA	1.0000	1:48	Blank
106	170810M2_106	X	ST170810M2-15 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Analyte
107	170810M2_107	---	IPA	IPA	1.0000	1:48	Blank

(B) PFDoA, PFTrDA, PFTeDA, PFODA, & PFHxDA shifted out of window, samples not injected. am 8/4/17

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170810M1\170810M2-66.qld

Last Altered: Friday, August 11, 2017 10:59:21 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:59:31 Pacific Daylight Time

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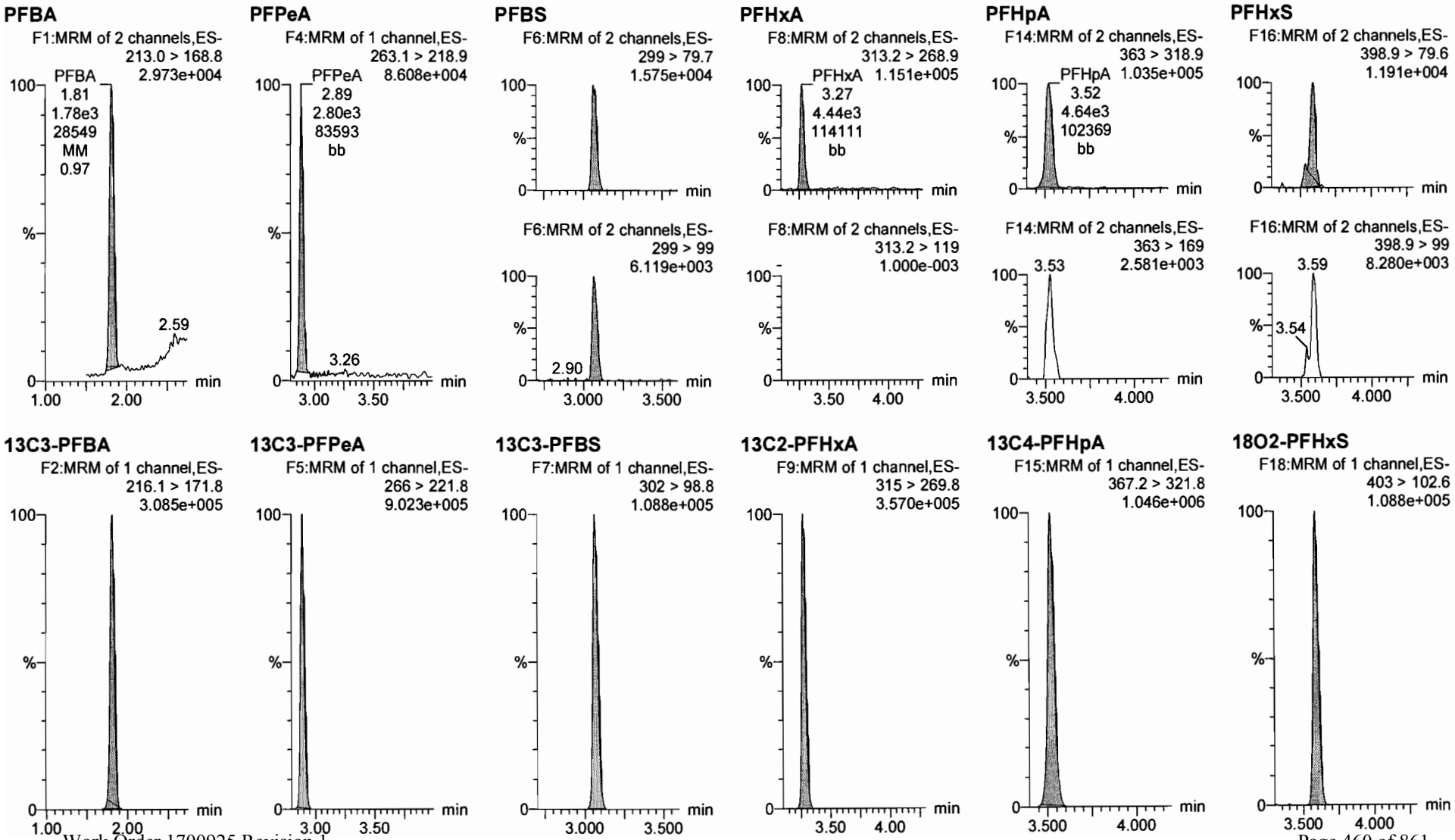
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_66, Date: 11-Aug-2017, Time: 07:58:22, ID: ST170810M2-12 PFC CS0 17H1004, Description: PFC CS0 17H1004



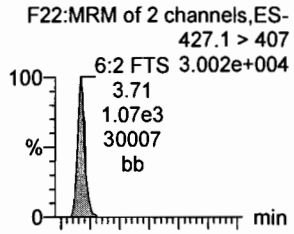
Vista Analytical Laboratory

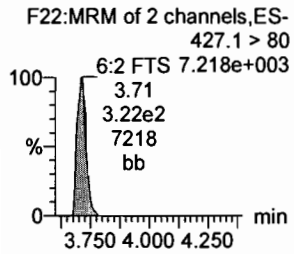
Dataset: U:\Q4.PRO\results\170810M1\170810M2-66.qld

Last Altered: Friday, August 11, 2017 10:59:21 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:59:31 Pacific Daylight Time

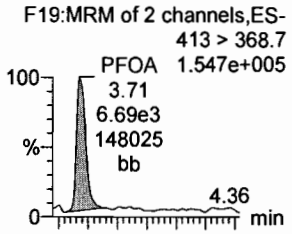
Name: 170810M2_66, Date: 11-Aug-2017, Time: 07:58:22, ID: ST170810M2-12 PFC CS0 17H1004, Description: PFC CS0 17H1004

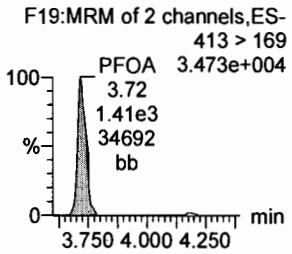
6:2 FTS



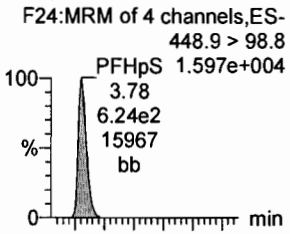


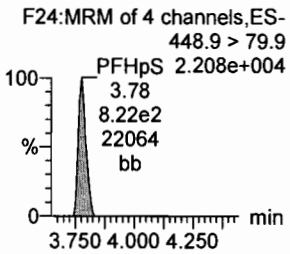
PFOA



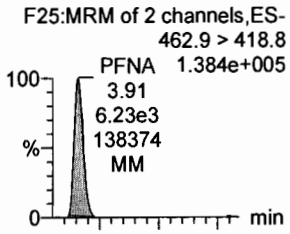


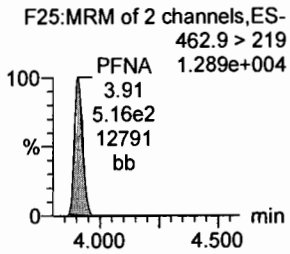
PFHpS





PFNA





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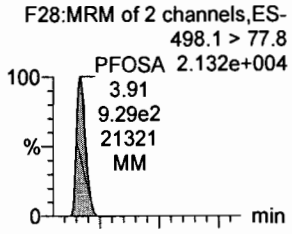
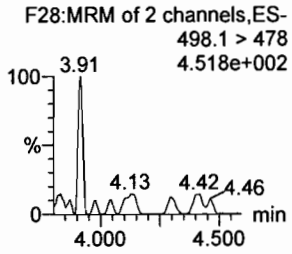
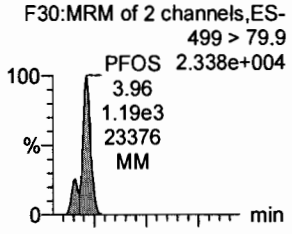
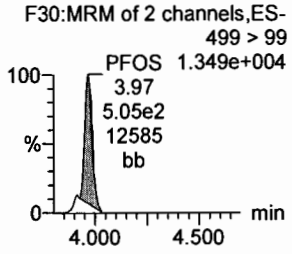


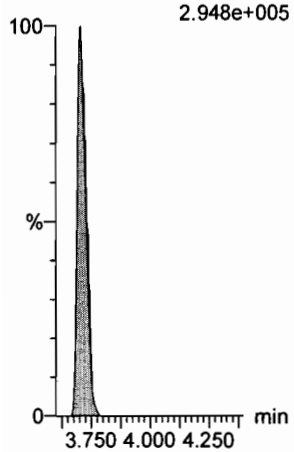


PFOS

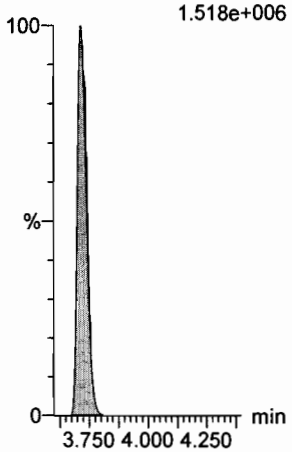




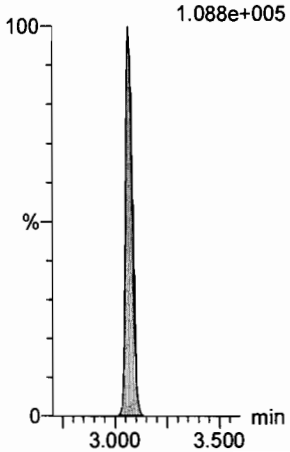
13C2-6:2 FTS



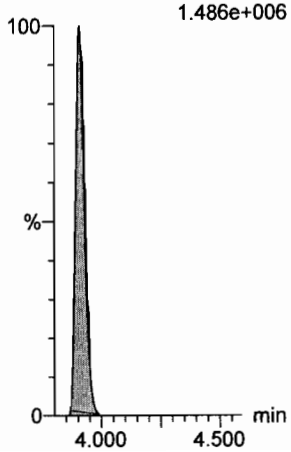
13C2-PFOA



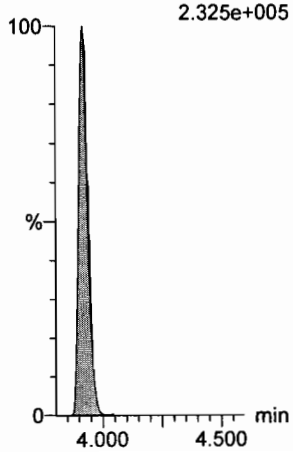
13C3-PFBS



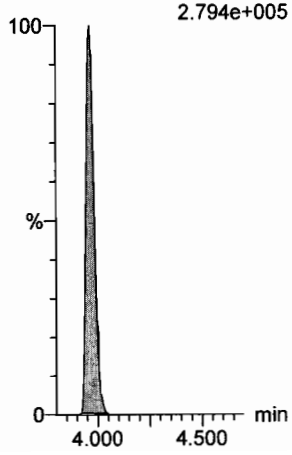
13C5-PFNA



13C8-PFOSA



13C8-PFOS



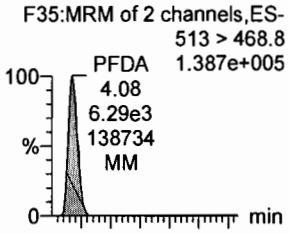
Vista Analytical Laboratory

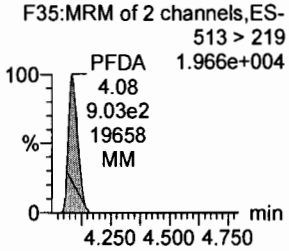
Dataset: U:\Q4.PRO\results\170810M1\170810M2-66.qld

Last Altered: Friday, August 11, 2017 10:59:21 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:59:31 Pacific Daylight Time

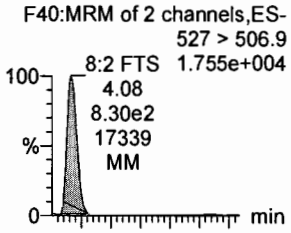
Name: 170810M2_66, Date: 11-Aug-2017, Time: 07:58:22, ID: ST170810M2-12 PFC CS0 17H1004, Description: PFC CS0 17H1004

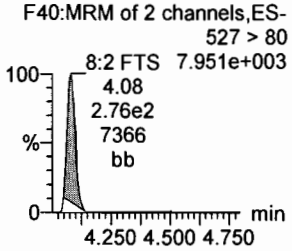
PFDA





8:2 FTS





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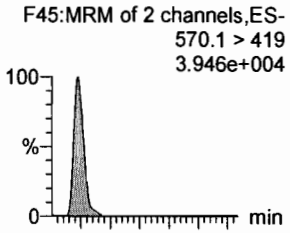

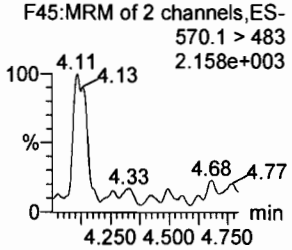

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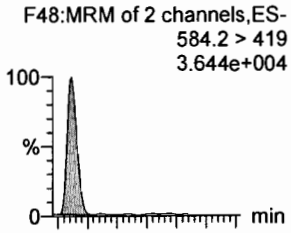
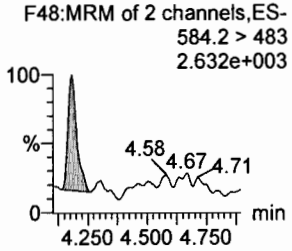
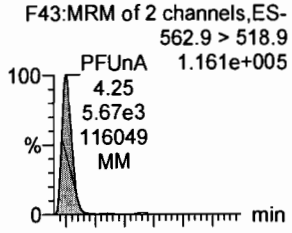
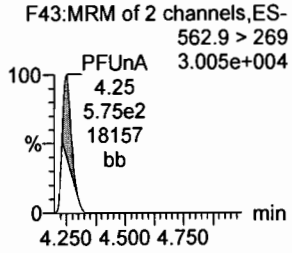




PFUnA





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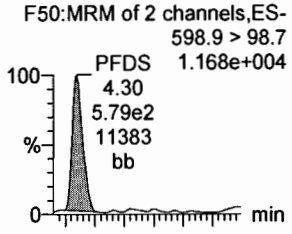
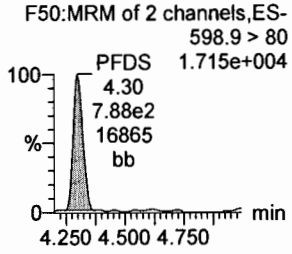
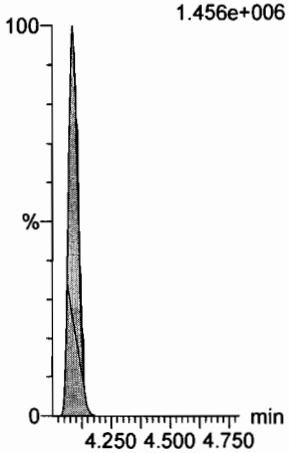
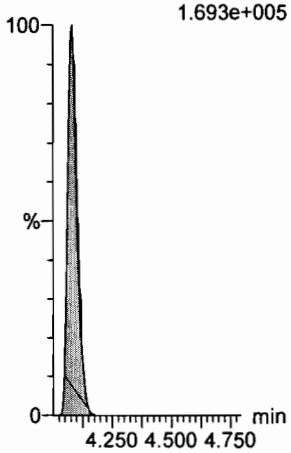




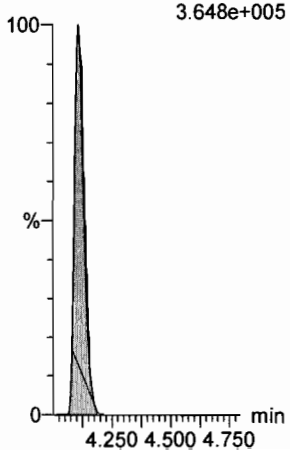
13C2-PFDA



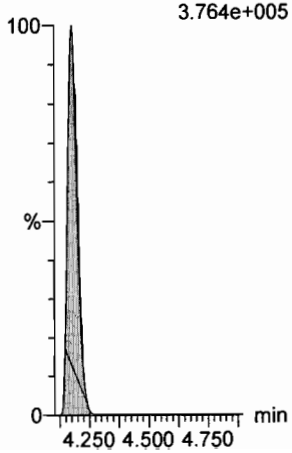
13C2-8:2 FTS



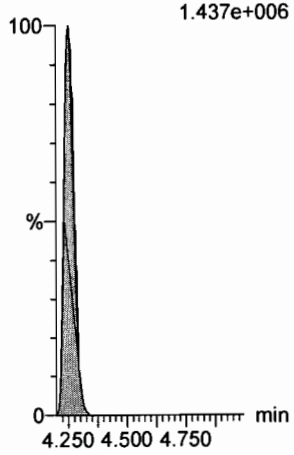
d3-N-MeFOSAA



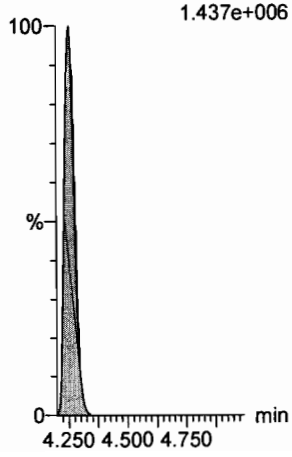
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



Vista Analytical Laboratory

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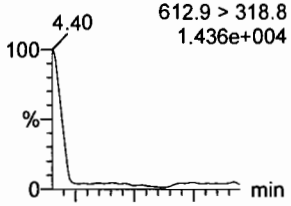
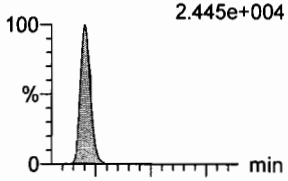
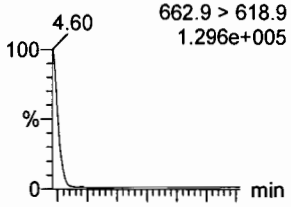
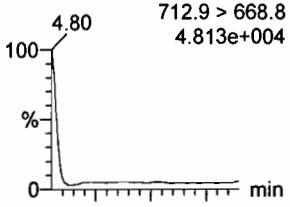
Last Altered: Friday, August 11, 2017 10:59:21 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:59:31 Pacific Daylight Time

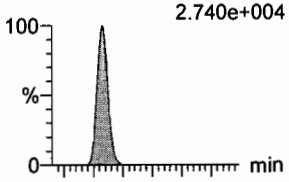
Name: 170810M2_66, Date: 11-Aug-2017, Time: 07:58:22, ID: ST170810M2-12 PFC CS0 17H1004, Description: PFC CS0 17H1004

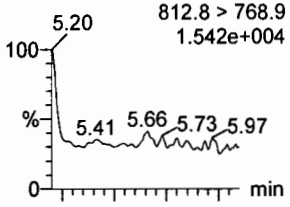
PFDoA
F51:MRM of 2 channels,ES- 612.9 > 318.8 1.436e+004


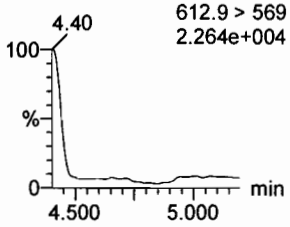
N-MeFOSA
F34:MRM of 2 channels,ES- 512.1 > 168.9 2.445e+004


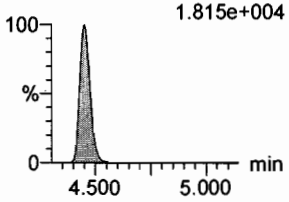
PFTrDA
F57:MRM of 2 channels,ES- 662.9 > 618.9 1.296e+005


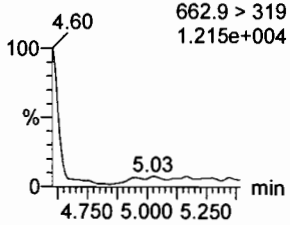
PFTeDA
F58:MRM of 4 channels,ES- 712.9 > 668.8 4.813e+004


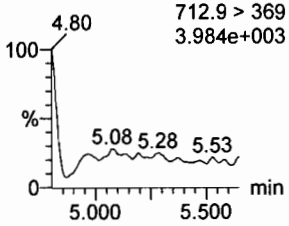
N-EtFOSA
F39:MRM of 2 channels,ES- 526.1 > 168.9 2.740e+004


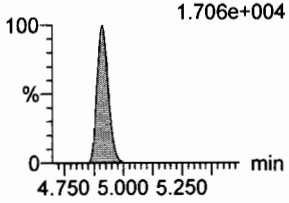
PFHxDA
F60:MRM of 2 channels,ES- 812.8 > 768.9 1.542e+004


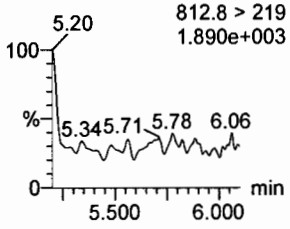
F51:MRM of 2 channels,ES- 612.9 > 569 2.264e+004


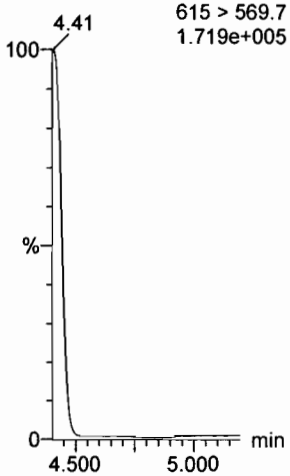
F34:MRM of 2 channels,ES- 512.1 > 219 1.815e+004


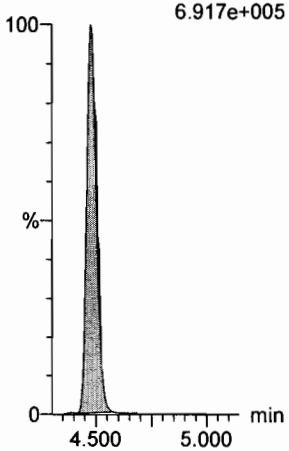
F57:MRM of 2 channels,ES- 662.9 > 319 1.215e+004


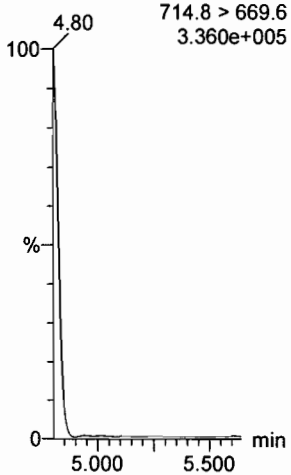
F58:MRM of 4 channels,ES- 712.9 > 369 3.984e+003


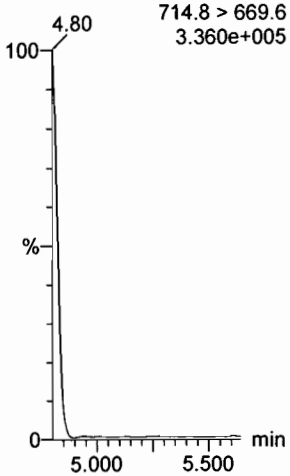
F39:MRM of 2 channels,ES- 526.1 > 219 1.706e+004


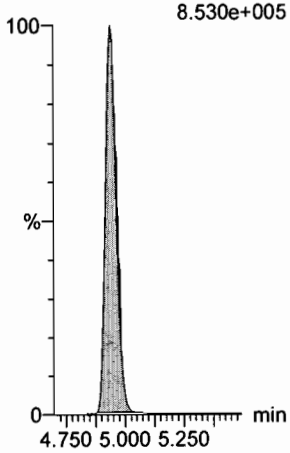
F60:MRM of 2 channels,ES- 812.8 > 219 1.890e+003


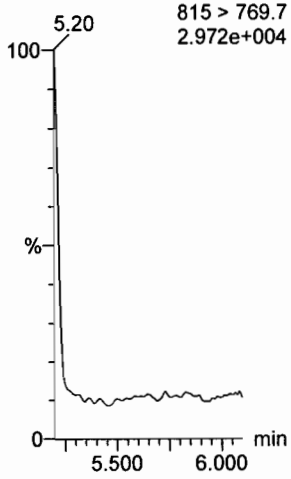
13C2-PFDoA
F52:MRM of 1 channel,ES- 615 > 569.7 1.719e+005


d3-N-MeFOSA
F37:MRM of 1 channel,ES- 515.2 > 168.9 6.917e+005


13C2-PFTeDA
F59:MRM of 2 channels,ES- 714.8 > 669.6 3.360e+005


13C2-PFTeDA
F59:MRM of 2 channels,ES- 714.8 > 669.6 3.360e+005


d5-N-ETFOSA
F42:MRM of 1 channel,ES- 531.1 > 168.9 8.530e+005


13C2-PFHxDA
F61:MRM of 1 channel,ES- 815 > 769.7 2.972e+004


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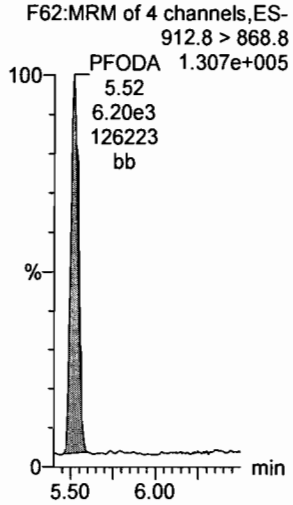
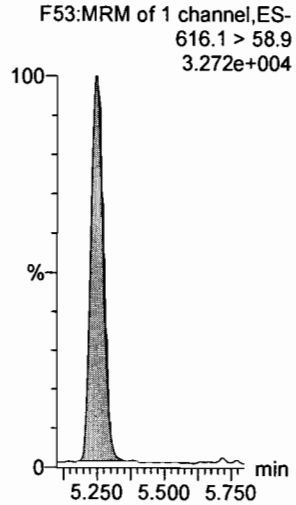
Printed: Friday, August 11, 2017 10:59:31 Pacific Daylight Time

Name: 170810M2_66, Date: 11-Aug-2017, Time: 07:58:22, ID: ST170810M2-12 PFC CS0 17H1004, Description: PFC CS0 17H1004

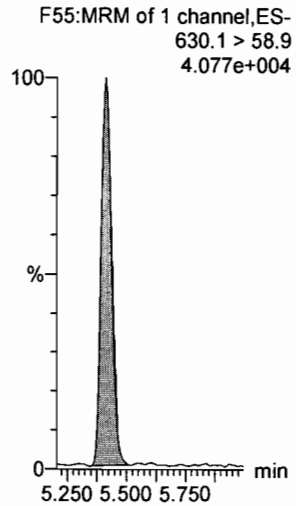
PFODA



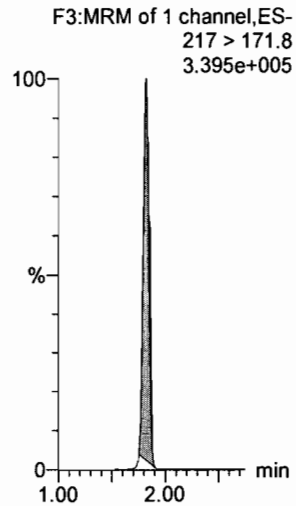
N-MeFOSE



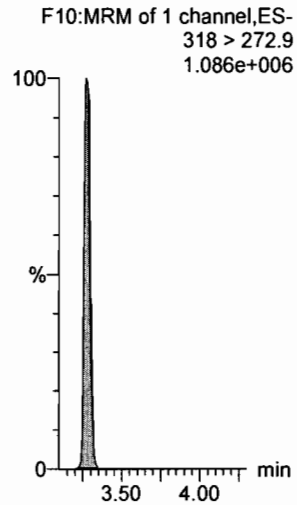
N-EtFOSE



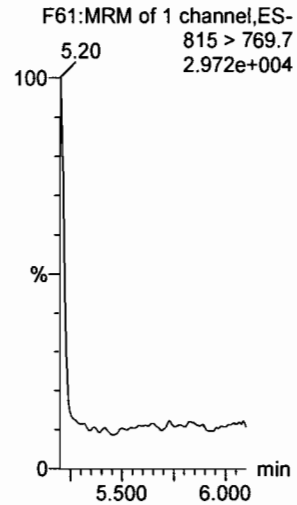
13C4-PFBA



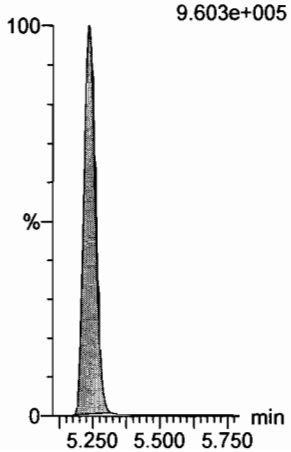
13C5-PFHxA



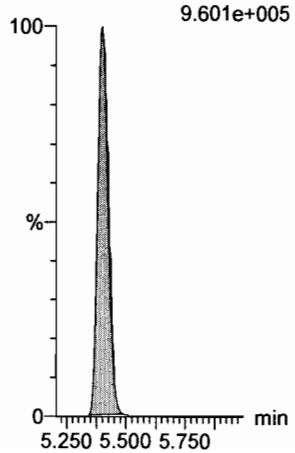
13C2-PFHxDA



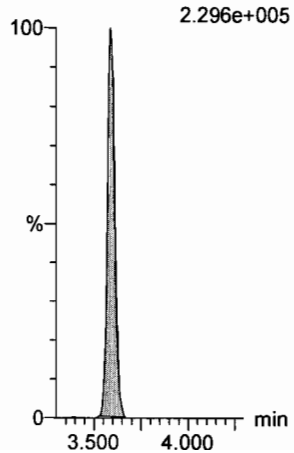
d7-N-MeFOSE



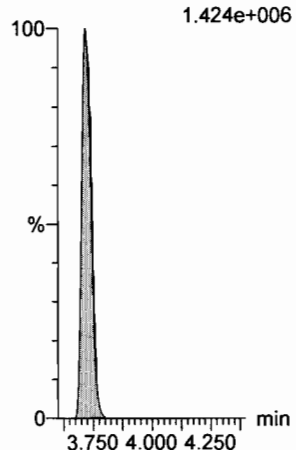
d9-N-EtFOSE



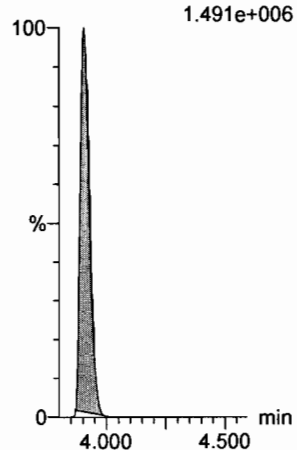
13C3-PFHxS



13C8-PFOA



13C9-PFNA

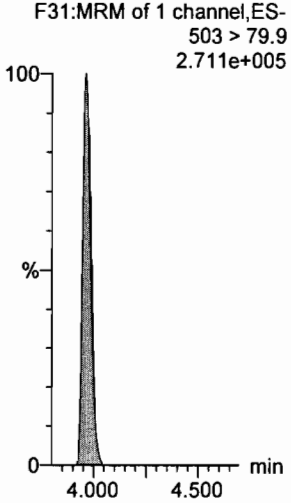


Dataset: U:\Q4.PRO\results\170810M1\170810M2-66.qld

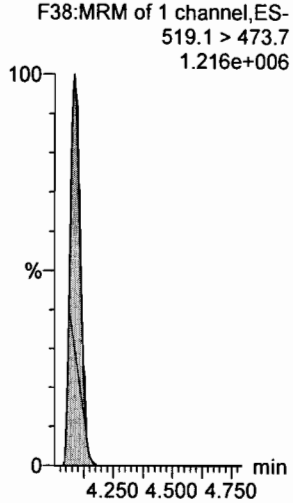
Last Altered: Friday, August 11, 2017 10:59:21 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:59:31 Pacific Daylight Time

Name: 170810M2_66, Date: 11-Aug-2017, Time: 07:58:22, ID: ST170810M2-12 PFC CS0 17H1004, Description: PFC CS0 17H1004

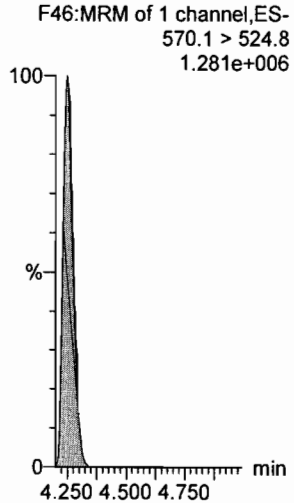
13C4-PFOS



13C6-PFDA



13C7-PFUnA



Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN945 SCN960**
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170810M1\170810M2-81.qld

Last Altered: Friday, August 11, 2017 11:47:26 Pacific Daylight Time
Printed: Friday, August 11, 2017 11:47:59 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_81, Date: 11-Aug-2017, Time: 10:40:32, ID: ST170810M2-13 PFC CS3 17H1005, Description: PFC CS3 17H1005

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1	PFBA	213.0 > 168.8	1.46e4	1.67e4		1.80	1.80	10.9	9.98	99.8
2	2	PFPeA	263.1 > 218.9	2.47e4	2.89e4		2.89	2.89	10.7	11.2	111.7
3	3	PFBS	299 > 79.7	4.80e3	3.38e3		3.06	3.06	17.7	10.2	102.4
4	4	PFHxA	313.2 > 268.9	3.61e4	1.27e4		3.26	3.26	14.2	10.8	107.7
5	5	PFHpA	363 > 318.9	4.03e4	3.94e4		3.51	3.51	12.8	10.9	108.7
6	6	PFHxS	398.9 > 79.6	4.60e3	3.58e3		3.58	3.58	16.1	9.13	91.3
7	7	6:2 FTS	427.1 > 407	8.84e3	1.13e4		3.70	3.70	9.78	10.5	104.8
8	8	PFOA	413 > 368.7	5.74e4	7.61e4		3.71	3.71	9.43	9.46	94.6
9	9	PFHpS	448.9 > 98.8	4.78e3	7.61e4		3.77	3.77	0.785	9.88	98.8
10	10	PFNA	462.9 > 418.8	5.41e4	6.14e4		3.90	3.90	11.0	10.7	107.2
11	11	PFOSA	498.1 > 77.8	6.38e3	7.49e3		3.91	3.91	10.6	10.1	101.1
12	12	PFOS	499 > 79.9	9.33e3	1.16e4		3.96	3.96	10.0	9.43	94.3
13	13	PFDA	513 > 468.8	5.59e4	6.17e4		4.08	4.08	11.3	9.92	99.2
14	14	8:2 FTS	527 > 506.9	7.87e3	7.43e3		4.08	4.08	13.2	9.55	95.5
15	15	N-MeFOSAA	570.1 > 419	1.51e4	1.31e4		4.11	4.11	188	9.71	97.1
16	16	N-EtFOSAA	584.2 > 419	1.33e4	1.34e4		4.18	4.18	160	10.2	102.4
17	17	PFUnA	562.9 > 518.9	4.51e4	6.31e4		4.25	4.25	8.93	11.0	109.6
18	18	PFDS	598.9 > 98.7	3.73e3	6.31e4		4.30	4.30	0.739	8.92	89.2
19	19	PFDoA	612.9 > 318.8	4.74e3	8.65e3		4.42	4.42	6.85	8.16	81.6
20	20	N-MeFOSA	512.1 > 168.9	1.05e4	2.93e4		4.46	4.46	53.5	60.0	120.0
21	21	PFTrDA	662.9 > 618.9	6.70e4	8.65e3		4.59	4.59	96.8	9.53	95.3
22	22	PFTeDA	712.9 > 668.8	4.78e4	5.48e4		4.78	4.78	10.9	9.54	95.4
23	23	N-EtFOSA	526.1 > 168.9	1.20e4	3.91e4		4.92	4.92	45.9	51.7	103.5
24	24	PFHxDA	812.8 > 768.9	6.83e4	2.56e4		5.16	5.16	13.3	9.19	91.9
25	25	PFODA	912.8 > 868.8	6.51e4	2.56e4		5.52	5.52	12.7	9.94	99.4
26	26	N-MeFOSE	616.1 > 58.9	1.37e4	4.18e4		5.26	5.26	49.0	52.6	105.2
27	27	N-EtFOSE	630.1 > 58.9	1.57e4	4.04e4		5.43	5.43	58.3	54.9	109.7
28	28	13C3-PFBA	216.1 > 171.8	1.67e4	1.80e4	0.906	1.80	1.80	11.6	12.8	102.2
29	29	13C3-PFPeA	266 > 221.8	2.89e4	4.08e4	0.284	2.89	2.89	3.54	12.5	99.9
30	30	13C3-PFBS	302 > 98.8	3.38e3	4.08e4	0.033	3.06	3.06	0.415	12.6	100.9
31	31	13C2-PFHxA	315 > 269.8	1.27e4	4.08e4	0.304	3.26	3.26	1.55	5.12	102.3

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OM
8/11/17

Dataset: U:\Q4.PRO\results\170810M1\170810M2-81.qld

Last Altered: Friday, August 11, 2017 11:47:26 Pacific Daylight Time
Printed: Friday, August 11, 2017 11:47:59 Pacific Daylight Time

Name: 170810M2_81, Date: 11-Aug-2017, Time: 10:40:32, ID: ST170810M2-13 PFC CS3 17H1005, Description: PFC CS3 17H1005

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	32	13C4-PFHpA	367.2 > 321.8	3.94e4	4.08e4	0.384	3.51	3.51	4.82	12.6	100.4
33	33	18O2-PFHxS	403 > 102.6	3.58e3	8.48e3	0.417	3.58	3.58	5.28	12.7	101.3
34	34	13C2-6:2 FTS	429.1 > 408.9	1.13e4	6.16e4	0.202	3.70	3.70	2.29	11.4	90.9
35	35	13C2-PFOA	414.9 > 369.7	7.61e4	6.16e4	1.132	3.71	3.71	15.4	13.6	109.0
36	36	13C5-PFNA	468.2 > 422.9	6.14e4	7.20e4	0.946	3.90	3.90	10.7	11.3	90.2
37	37	13C8-PFOSA	506.1 > 77.7	7.49e3	5.48e4	0.119	3.91	3.91	1.71	14.3	114.4
38	38	13C8-PFOS	507 > 79.9	1.16e4	1.07e4	1.040	3.96	3.96	13.6	13.1	104.6
39	39	13C2-PFDA	515.1 > 469.9	6.17e4	7.00e4	0.971	4.08	4.08	11.0	11.3	90.8
40	40	13C2-8:2 FTS	529.1 > 508.7	7.43e3	7.00e4	0.140	4.08	4.08	1.33	9.45	75.6
41	41	d3-N-MeFOSAA	573.3 > 419	1.31e4	5.48e4	0.018	4.11	4.10	2.99	168	103.5
42	42	d5-N-EtFOSAA	589.3 > 419	1.34e4	5.48e4	0.018	4.18	4.17	3.07	168	103.5
43	43	13C2-PFUnA	565 > 519.8	6.31e4	5.48e4	1.085	4.25	4.25	14.4	13.2	106.0
44	44	13C2-PFDoA	615 > 569.7	8.65e3	5.48e4	0.123	4.42	4.42	1.97	16.0	128.1
45	45	d3-N-MeFOSA	515.2 > 168.9	2.93e4	5.48e4	0.043	4.46	4.49	6.68	154	102.9
46	46	13C2-PFTeDA	714.8 > 669.6	5.48e4	5.48e4	0.798	4.78	4.78	12.5	15.7	125.2
47	47	d5-N-ETFOSA	531.1 > 168.9	3.91e4	5.48e4	0.056	5.03	4.96	8.91	160	106.7
48	48	13C2-PFHxDA	815 > 769.7	2.56e4	5.48e4	0.926	5.16	5.16	5.83	6.29	125.8
49	49	d7-N-MeFOSE	623.1 > 58.9	4.18e4	5.48e4	0.059	5.26	5.25	9.54	160	107.0
50	50	d9-N-EtFOSE	639.2 > 58.8	4.04e4	5.48e4	0.059	5.43	5.41	9.21	155	103.2
51	51	13C4-PFBA	217 > 171.8	1.80e4	1.80e4	1.000	1.80	1.80	12.5	12.5	100.0
52	52	13C5-PFHxA	318 > 272.9	4.08e4	4.08e4	1.000	3.26	3.27	5.00	5.00	100.0
53	53	13C3-PFHxS	401.9 > 79.9	8.48e3	8.48e3	1.000	3.58	3.58	12.5	12.5	100.0
54	54	13C8-PFOA	421.3 > 376	6.16e4	6.16e4	1.000	3.71	3.71	12.5	12.5	100.0
55	55	13C9-PFNA	472.2 > 426.9	7.20e4	7.20e4	1.000	3.90	3.90	12.5	12.5	100.0
56	56	13C4-PFOS	503 > 79.9	1.07e4	1.07e4	1.000	3.96	3.96	12.5	12.5	100.0
57	57	13C6-PFDA	519.1 > 473.7	7.00e4	7.00e4	1.000	4.08	4.08	12.5	12.5	100.0
58	58	13C7-PFUnA	570.1 > 524.8	5.48e4	5.48e4	1.000	4.25	4.25	12.5	12.5	100.0

50-150

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
1	170810M2_1	---	IPA	IPA	1.0000	1:48	Blank
2	170810M2_2	---	ST170810M2-1 PFC CS-2 17H1015	PFC CS-2 17H1015	1.0000	1:1	Standard
3	170810M2_3	---	ST170810M2-2 PFC CS-1 17H1003	PFC CS-1 17H1003	1.0000	1:2	Standard
4	170810M2_4	---	ST170810M2-3 PFC CS0 17H1004	PFC CS0 17H1004	1.0000	1:3	Standard
5	170810M2_5	---	ST170810M2-4 PFC CS1 17H1016	PFC CS1 17H1016	1.0000	1:4	Standard
6	170810M2_6	---	ST170810M2-5 PFC CS2 17H1017	PFC CS2 17H1017	1.0000	1:5	Standard
7	170810M2_7	---	ST170810M2-6 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Standard
8	170810M2_8	---	ST170810M2-7 PFC CS4 17H1018	PFC CS4 17H1018	1.0000	1:7	Standard
9	170810M2_9	---	ST170810M2-8 PFC CS5 17H1019	PFC CS5 17H1019	1.0000	1:8	Standard
10	170810M2_10	---	ST170810M2-9 PFC CS6 17H1013	PFC CS6 17H1013	1.0000	1:9	Standard
11	170810M2_11	---	ST170810M2-10 PFC CS7 17H1012	PFC CS7 17H1012	1.0000	1:10	Analyte
12	170810M2_12	---	IPA	IPA	1.0000	1:48	Blank
13	170810M2_13	---	SS170810M2-1 PFC SSS 17H1020	PFC SSS 17H1020	1.0000	1:11	Analyte
14	170810M2_14	---	IPA	IPA	1.0000	1:48	Blank
15	170810M2_15	O	1700946-05RE1 MATP05077 1.06	MATP05077	1.0233	1:12	Analyte
16	170810M2_16	---	IPA	IPA	1.0000	1:48	Blank
17	170810M2_17	O	1700946-05RE1@5X MATP05077 1.06	MATP05077	1.0233	1:13	Analyte
18	170810M2_18	---	IPA	IPA	1.0000	1:48	Blank
19	170810M2_19	X	B7H0026-BS1 OPR 1	OPR	1.0000	1:14	Analyte
20	170810M2_20	---	IPA	IPA	1.0000	1:48	Blank
21	170810M2_21	X	B7H0026-BLK1 Method Blank 1	Method Blank	1.0000	1:15	Analyte
22	170810M2_22	---	IPA	IPA	1.0000	1:48	Blank
23	170810M2_23	X	1700946-01 MATP05073 1	MATP05073	1.0000	1:16	Analyte
24	170810M2_24	X	1700946-02 MATP05074 1	MATP05074	1.0000	1:17	Analyte
25	170810M2_25	X	1700946-03 MATP05075 1	MATP05075	1.0000	1:18	Analyte
26	170810M2_26	---	1700946-05 MATP05077 1	MATP05077	1.0000	1:19	Analyte
27	170810M2_27	---	IPA	IPA	1.0000	1:48	Blank
28	170810M2_28	X	1700946-04 MATP05076 1	MATP05076	1.0000	1:20	Analyte
29	170810M2_29	---	IPA	IPA	1.0000	1:48	Blank
30	170810M2_30	---	1700946-05@10X MATP05077 1	MATP05077	1.0000	1:22	Analyte
31	170810M2_31	---	IPA	IPA	1.0000	1:48	Blank
32	170810M2_32	X	1700946-04@10X MATP05076 1	MATP05076	1.0000	1:23	Analyte
33	170810M2_33	---	IPA	IPA	1.0000	1:48	Blank
34	170810M2_34	---	B7H0037-BS1 OPR 0.125	OPR	0.2500	1:24	Analyte
35	170810M2_35	---	IPA	IPA	1.0000	1:48	Blank
36	170810M2_36	X	1701010-02@10X VEL-FOAM-080317 0.125	VEL-FOAM-080317	0.0065	1:25	Analyte
37	170810M2_37	---	IPA	IPA	1.0000	1:48	Blank
38	170810M2_38	---	ST170810M2-11 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Standard
39	170810M2_39	---	IPA	IPA	1.0000	1:48	Blank
40	170810M2_40	X	1701010-02 VEL-FOAM-080317 0.125	VEL-FOAM-080317	0.1250	1:26	Analyte

(A) Column was changed, new curve run due to slight shifts in RT. OM 8/11/17 OM 8/10/17

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
41	170810M2_41	---	IPA	IPA	1.0000	1:48	Blank
42	170810M2_42	---	B7H0060-BS1 OPR 2.5	OPR	2.5000	1:27	Analyte
43	170810M2_43	---	B7H0073-BS1 OPR 0.125	OPR	0.1250	1:28	Analyte
44	170810M2_44	---	B7H0074-BS1 OPR 0.125	OPR	0.1250	1:29	Analyte
45	170810M2_45	---	B7H0060-BLK1 Method Blank 2.5	Method Blank	2.5000	1:30	Analyte
46	170810M2_46	---	B7H0073-BLK1 Method Blank 0.125	Method Blank	0.1250	1:31	Analyte
47	170810M2_47	---	B7H0074-BLK1 Method Blank 0.125	Method Blank	0.1250	1:32	Analyte
48	170810M2_48	---	B7H0073-MS1 Matrix Spike 0.0005	Matrix Spike	0.0005	1:33	Analyte
49	170810M2_49	---	IPA	IPA	1.0000	1:48	Blank
50	170810M2_50	---	B7H0073-MSD1 Matrix Spike Dup 0.00139	Matrix Spike Dup	0.0014	1:34	Analyte
51	170810M2_51	---	IPA	IPA	1.0000	1:48	Blank
52	170810M2_52	---	B7H0074-MS1 Matrix Spike 0.125	Matrix Spike	0.1250	1:35	Analyte
53	170810M2_53	---	B7H0074-MSD1 Matrix Spike Dup 0.125	Matrix Spike Dup	0.1250	1:36	Analyte
54	170810M2_54	---	1700819-01RE1 QPFD-14 2.5	QPFD-14	2.5000	1:37	Analyte
55	170810M2_55	---	1700819-02RE1 QPFD-15 2.5	QPFD-15	2.5000	1:38	Analyte
56	170810M2_56	---	IPA	IPA	1.0000	1:48	Blank
57	170810M2_57	---	1700819-03RE1 QPFD-16 2.5	QPFD-16	2.5000	1:39	Analyte
58	170810M2_58	---	1700819-04RE1 QPFD-17 2	QPFD-17	2.0000	1:40	Analyte
59	170810M2_59	---	1700819-05RE1 QPFD-18 2.5	QPFD-18	2.5000	1:41	Analyte
60	170810M2_60	---	1700819-06RE1 QPFD-19 2.5	QPFD-19	2.5000	1:42	Analyte
61	170810M2_61	---	1700819-07RE1 QPFD-20 2.5	QPFD-20	2.5000	1:43	Analyte
62	170810M2_62	---	1700819-08RE1 QPFD-21 2.5	QPFD-21	2.5000	1:44	Analyte
63	170810M2_63	---	1700819-09RE1 QPFD-22 2.5	QPFD-22	2.5000	1:45	Analyte
64	170810M2_64	---	1700819-10RE1 QPFD-23 2.5	QPFD-23	2.5000	1:46	Analyte
65	170810M2_65	---	IPA	IPA	1.0000	1:48	Blank
66	170810M2_66	---	ST170810M2-12 PFC CS0 17H1004	PFC CS0 17H1004	1.0000	1:3	Standard
67	170810M2_67	---	IPA	IPA	1.0000	1:48	Blank
68	170810M2_68	---	1700819-11RE1 QPFD-24 2.5	QPFD-24	2.5000	1:47	Analyte
69	170810M2_69	---	1700819-12RE1 QPFD-25 2.5	QPFD-25	2.5000	2:1	Analyte
70	170810M2_70	---	1700819-13RE1 QPFD-26 2.5	QPFD-26	2.5000	2:2	Analyte
71	170810M2_71	---	1700925-04RE2 I001MW52S-170724 0.00122	I001MW52S-170724	0.0012	2:3	Analyte
72	170810M2_72	---	IPA	IPA	1.0000	1:48	Blank
73	170810M2_73	---	1700925-05RE2 I001MW52X-170724 0.00133	I001MW52X-170724	0.0013	2:4	Analyte
74	170810M2_74	---	IPA	IPA	1.0000	1:48	Blank
75	170810M2_75	---	1700922-01RE1 MH-L103-20170721 0.10565	MH-L103-20170721	0.1056	2:5	Analyte
76	170810M2_76	---	1700922-02RE1 MH-N104-20170721 0.11025	MH-N104-20170721	0.1103	2:6	Analyte
77	170810M2_77	---	1700922-03RE1 Upstream-Culvert-109-20170721 0.1185	Upstream-Culvert-109-20170721	0.1185	2:7	Analyte
78	170810M2_78	---	1700922-04RE1 FRB03-20170721 0.11017	FRB03-20170721	0.1102	2:8	Analyte
79	170810M2_79	---	1700922-05RE1 RB08-20170720 0.11893	RB08-20170720	0.1189	2:9	Analyte
80	170810M2_80	---	IPA	IPA	1.0000	1:48	Blank

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
81	170810M2_81	X	ST170810M2-13 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Analyte
82	170810M2_82	---	IPA	IPA	1.0000	1:48	Blank
83	170810M2_83	---	1700922-06RE1 RB09-20170721 0.11676	RB09-20170721	0.1168	2:10	Analyte
84	170810M2_84	---	1700925-01RE1 I001BC43S-170724 0.12112	I001BC43S-170724	0.1211	2:11	Analyte
85	170810M2_85	---	1700925-02RE1 SB01-170724 0.12178	SB01-170724	0.1218	2:12	Analyte
86	170810M2_86	---	1700925-03RE1 I001BC50S-170724 0.12135	I001BC50S-170724	0.1214	2:13	Analyte
87	170810M2_87	---	1700925-06RE1 EB01-170724 0.1185	EB01-170724	0.1185	2:14	Analyte
88	170810M2_88	---	1700929-01RE1 MATP01001 0.11834	MATP01001	0.1183	2:15	Analyte
89	170810M2_89	---	1700929-02RE1 MATP01002 0.1157	MATP01002	0.1157	2:16	Analyte
90	170810M2_90	---	1700938-01RE1 NORP08102 0.11844	NORP08102	0.1184	2:17	Analyte
91	170810M2_91	---	1700938-02RE1 NORP08103 0.12014	NORP08103	0.1201	2:18	Analyte
92	170810M2_92	---	1700938-03RE1 NORP08104 0.11247	NORP08104	0.1125	2:19	Analyte
93	170810M2_93	---	IPA	IPA	1.0000	1:48	Blank
94	170810M2_94	---	ST170810M2-14 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Standard
95	170810M2_95	---	IPA	IPA	1.0000	1:48	Blank
96	170810M2_96	---	1700819-02RE1 QPFD-15 2.5	QPFD-15	2.5000	1:21	Analyte
97	170810M2_97	---	IPA	IPA	1.0000	1:48	Blank
98	170810M2_98	---	B7H0073-MS1@20X Matrix Spike 0.0005	Matrix Spike	0.0005	2:20	Analyte
99	170810M2_99	---	IPA	IPA	1.0000	1:48	Blank
100	170810M2_100	---	B7H0073-MSD1@20X Matrix Spike Dup 0.00139	Matrix Spike Dup	0.0014	2:21	Analyte
101	170810M2_101	---	IPA	IPA	1.0000	1:48	Blank
102	170810M2_102	---	1700925-04RE2 I001MW52S-170724 0.00122	I001MW52S-170724	0.0012	2:22	Analyte
103	170810M2_103	---	IPA	IPA	1.0000	1:48	Blank
104	170810M2_104	---	1700925-05RE2 I001MW52X-170724 0.00133	I001MW52X-170724	0.0013	2:23	Analyte
105	170810M2_105	---	IPA	IPA	1.0000	1:48	Blank
106	170810M2_106	X	ST170810M2-15 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Analyte
107	170810M2_107	---	IPA	IPA	1.0000	1:48	Blank

(A) am 8/11/17 (B) am 8/4/17

(B) PFDoA, PFTrDA, PFTeDA, PFODA, & PFHxDA shifted out of window, samples not injected. am 8/11/17

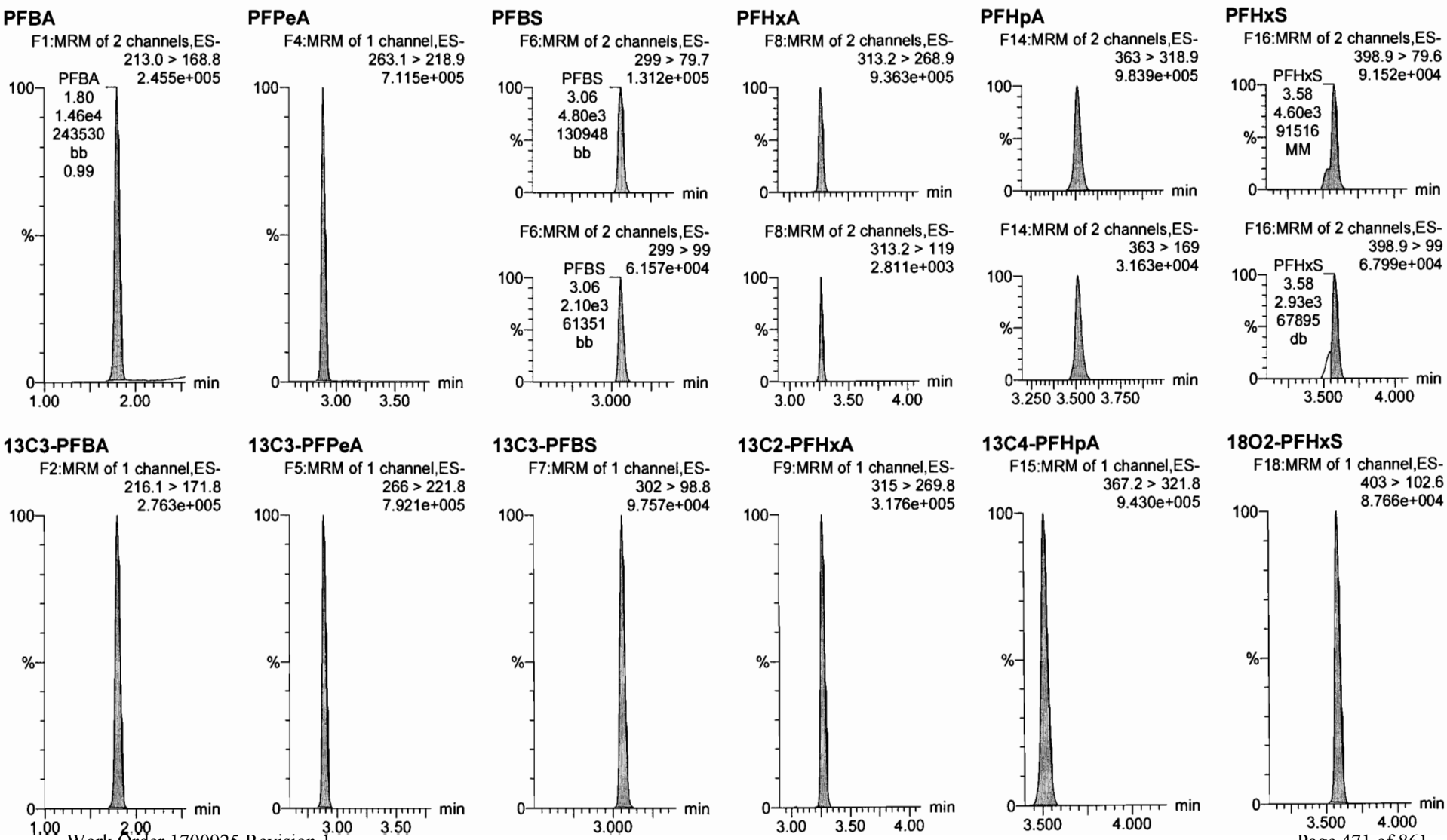
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170810M1\170810M2-81.qld

Last Altered: Friday, August 11, 2017 11:47:26 Pacific Daylight Time
Printed: Friday, August 11, 2017 11:47:59 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_81, Date: 11-Aug-2017, Time: 10:40:32, ID: ST170810M2-13 PFC CS3 17H1005, Description: PFC CS3 17H1005

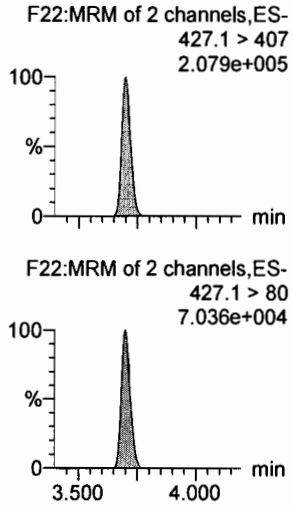


Dataset: U:\Q4.PRO\results\170810M1\170810M2-81.qld

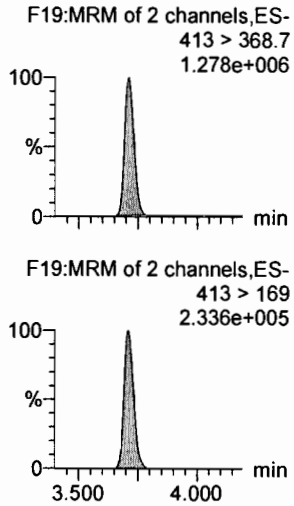
Last Altered: Friday, August 11, 2017 11:47:26 Pacific Daylight Time
Printed: Friday, August 11, 2017 11:47:59 Pacific Daylight Time

Name: 170810M2_81, Date: 11-Aug-2017, Time: 10:40:32, ID: ST170810M2-13 PFC CS3 17H1005, Description: PFC CS3 17H1005

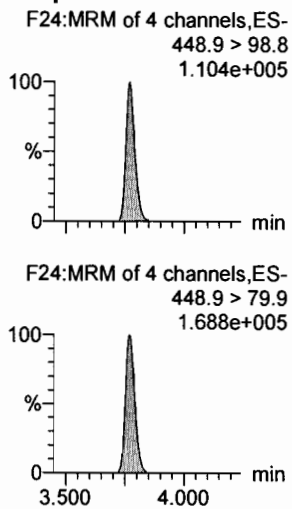
6:2 FTS



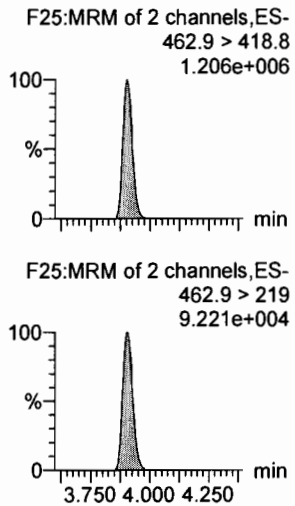
PFOA



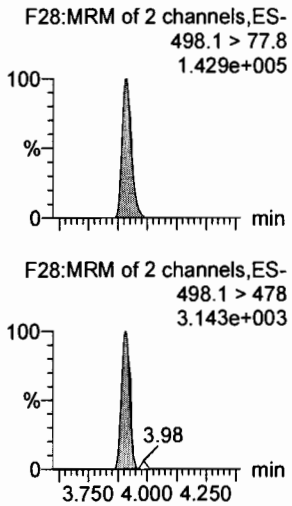
PFHpS



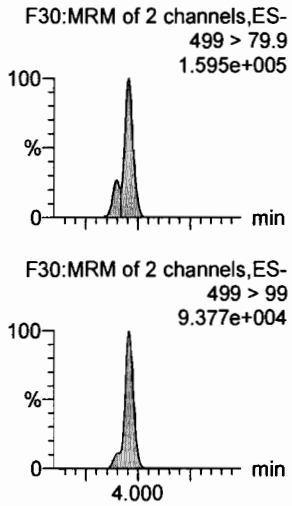
PFNA



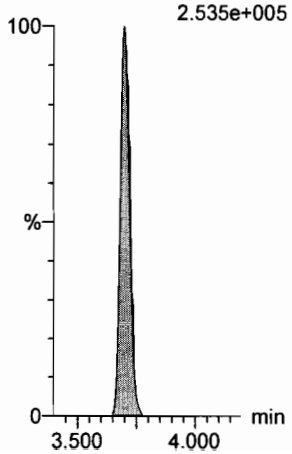
PFOSA



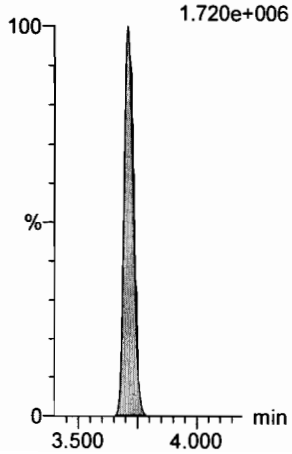
PFOS



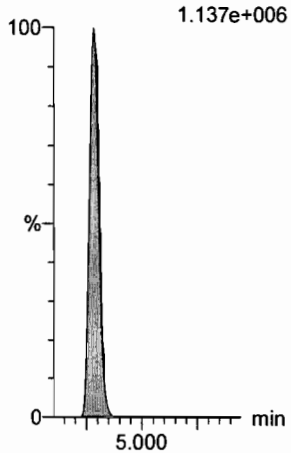
13C2-6:2 FTS



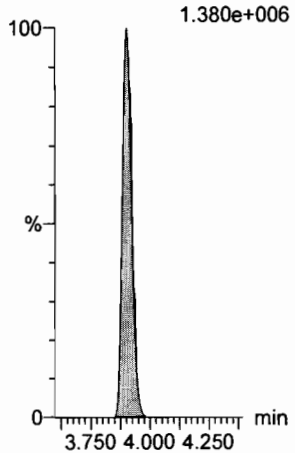
13C2-PFOA



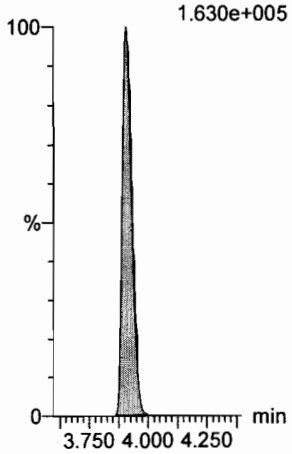
13C2-PFTeDA



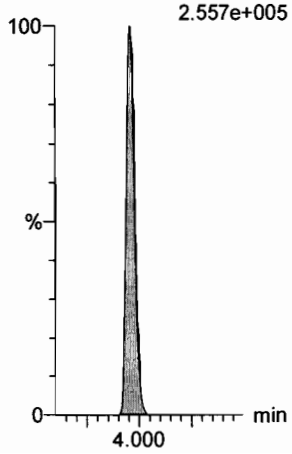
13C5-PFNA



13C8-PFOSA



13C8-PFOS



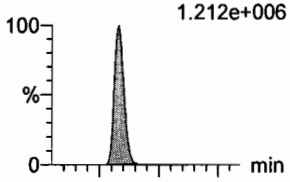
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170810M1\170810M2-81.qld

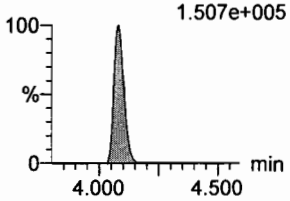
Last Altered: Friday, August 11, 2017 11:47:26 Pacific Daylight Time
Printed: Friday, August 11, 2017 11:47:59 Pacific Daylight Time

Name: 170810M2_81, Date: 11-Aug-2017, Time: 10:40:32, ID: ST170810M2-13 PFC CS3 17H1005, Description: PFC CS3 17H1005

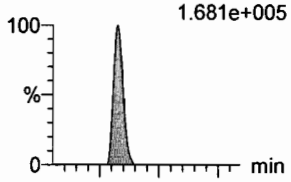
PFDA
F35:MRM of 2 channels,ES-
513 > 468.8
1.212e+006



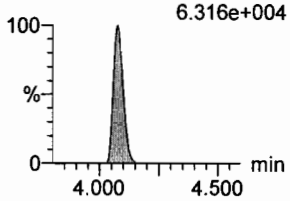
F35:MRM of 2 channels,ES-
513 > 219
1.507e+005



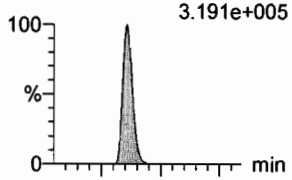
8:2 FTS
F40:MRM of 2 channels,ES-
527 > 506.9
1.681e+005



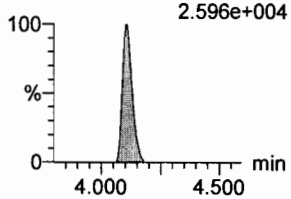
F40:MRM of 2 channels,ES-
527 > 80
6.316e+004



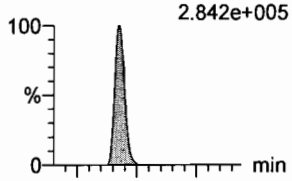
N-MeFOSAA
F45:MRM of 2 channels,ES-
570.1 > 419
3.191e+005



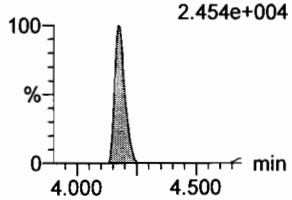
F45:MRM of 2 channels,ES-
570.1 > 483
2.596e+004



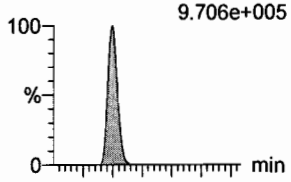
N-EtFOSAA
F48:MRM of 2 channels,ES-
584.2 > 419
2.842e+005



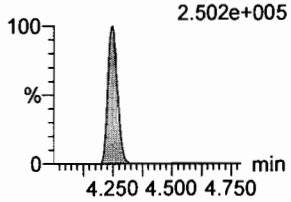
F48:MRM of 2 channels,ES-
584.2 > 483
2.454e+004



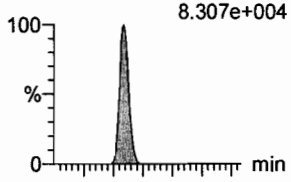
PFUnA
F43:MRM of 2 channels,ES-
562.9 > 518.9
9.706e+005



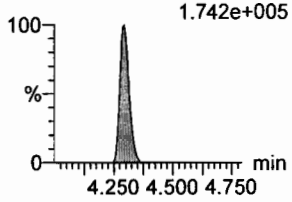
F43:MRM of 2 channels,ES-
562.9 > 269
2.502e+005



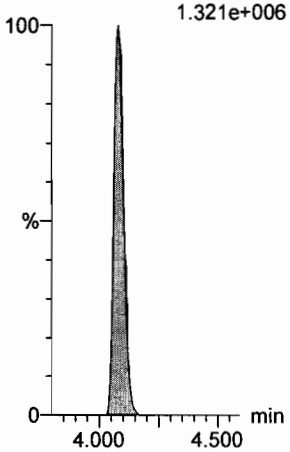
PFDS
F50:MRM of 2 channels,ES-
598.9 > 98.7
8.307e+004



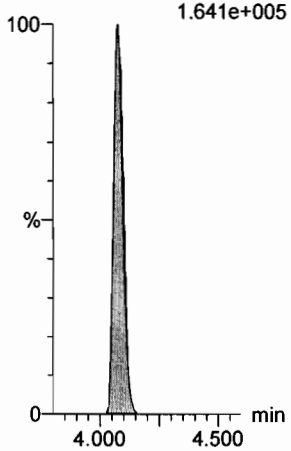
F50:MRM of 2 channels,ES-
598.9 > 80
1.742e+005



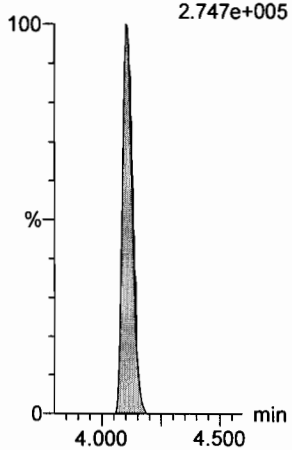
13C2-PFDA
F36:MRM of 1 channel,ES-
515.1 > 469.9
1.321e+006



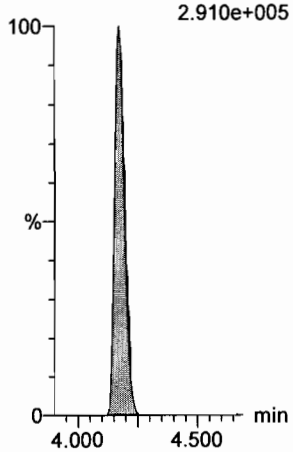
13C2-8:2 FTS
F41:MRM of 1 channel,ES-
529.1 > 508.7
1.641e+005



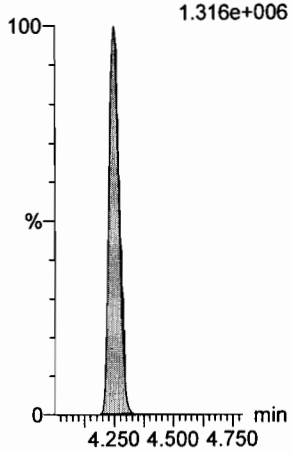
d3-N-MeFOSAA
F47:MRM of 1 channel,ES-
573.3 > 419
2.747e+005



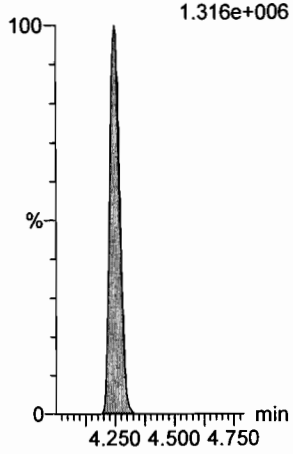
d5-N-EtFOSAA
F49:MRM of 1 channel,ES-
589.3 > 419
2.910e+005



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.316e+006



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.316e+006



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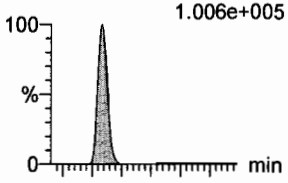
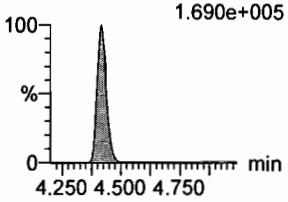
Last Altered: Friday, August 11, 2017 11:47:26 Pacific Daylight Time
Printed: Friday, August 11, 2017 11:47:59 Pacific Daylight Time

Name: 170810M2_81, Date: 11-Aug-2017, Time: 10:40:32, ID: ST170810M2-13 PFC CS3 17H1005, Description: PFC CS3 17H1005

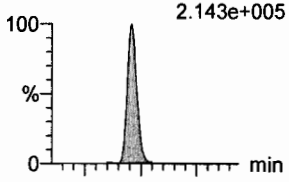
PFDoA
F51:MRM of 2 channels,ES-
612.9 > 318.8
1.006e+005



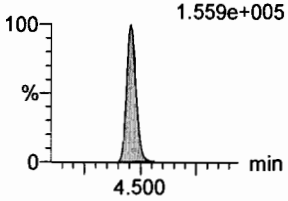
F51:MRM of 2 channels,ES-
612.9 > 569
1.690e+005



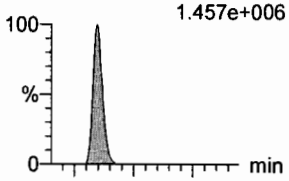
N-MeFOSA
F34:MRM of 2 channels,ES-
512.1 > 168.9
2.143e+005



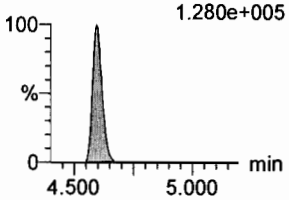
F34:MRM of 2 channels,ES-
512.1 > 219
1.559e+005



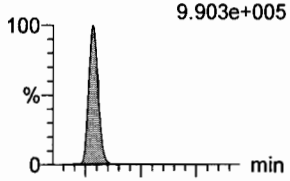
PFTrDA
F57:MRM of 2 channels,ES-
662.9 > 618.9
1.457e+006



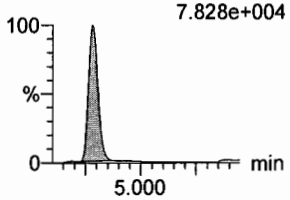
F57:MRM of 2 channels,ES-
662.9 > 319
1.280e+005



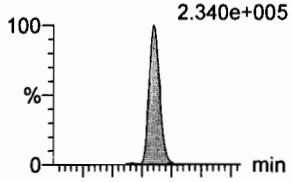
PFTeDA
F58:MRM of 4 channels,ES-
712.9 > 668.8
9.903e+005



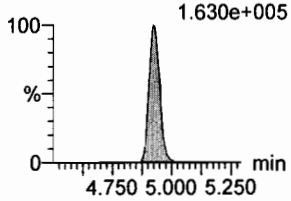
F58:MRM of 4 channels,ES-
712.9 > 369
7.828e+004



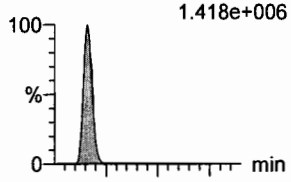
N-EtFOSA
F39:MRM of 2 channels,ES-
526.1 > 168.9
2.340e+005



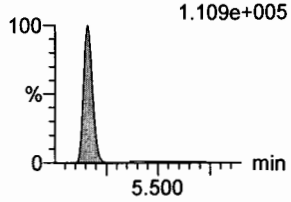
F39:MRM of 2 channels,ES-
526.1 > 219
1.630e+005



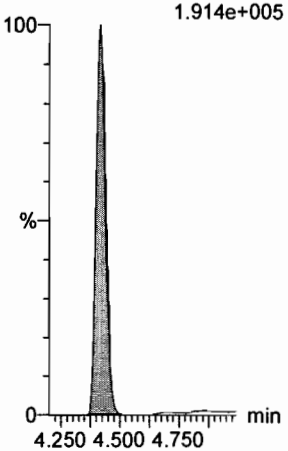
PFHxDA
F60:MRM of 2 channels,ES-
812.8 > 768.9
1.418e+006



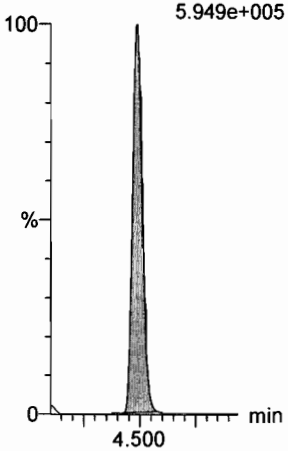
F60:MRM of 2 channels,ES-
812.8 > 219
1.109e+005



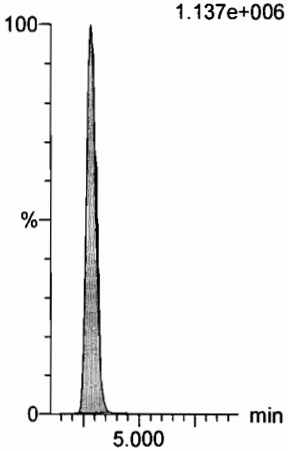
13C2-PFDoA
F52:MRM of 1 channel,ES-
615 > 569.7
1.914e+005



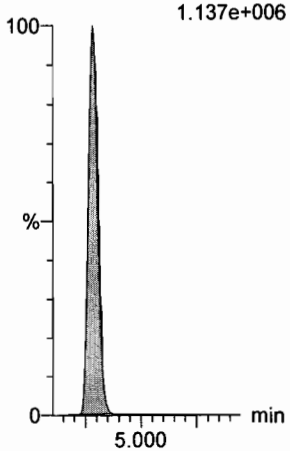
d3-N-MeFOSA
F37:MRM of 1 channel,ES-
515.2 > 168.9
5.949e+005



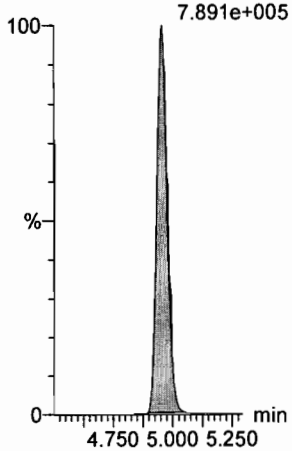
13C2-PFTeDA
F59:MRM of 2 channels,ES-
714.8 > 669.6
1.137e+006



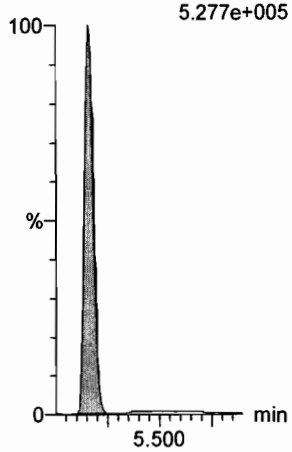
13C2-PFTeDA
F59:MRM of 2 channels,ES-
714.8 > 669.6
1.137e+006



d5-N-ETFOSA
F42:MRM of 1 channel,ES-
531.1 > 168.9
7.891e+005



13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
5.277e+005



Dataset: U:\Q4.PRO\results\170810M1\170810M2-81.qld

Last Altered: Friday, August 11, 2017 11:47:26 Pacific Daylight Time
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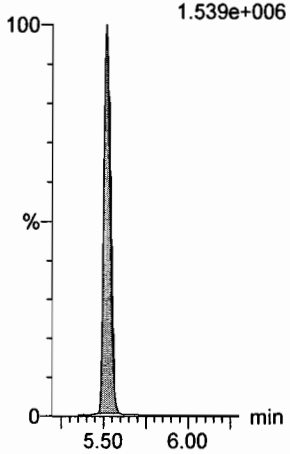
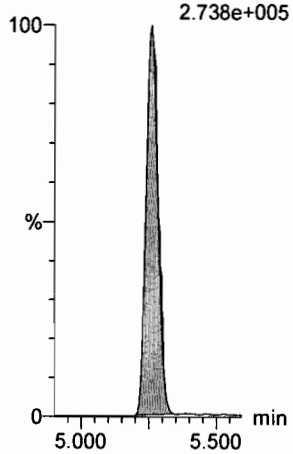
Name: 170810M2_81, Date: 11-Aug-2017, Time: 10:40:32, ID: ST170810M2-13 PFC CS3 17H1005, Description: PFC CS3 17H1005

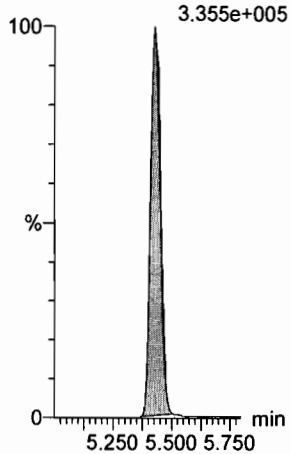
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
1.539e+006



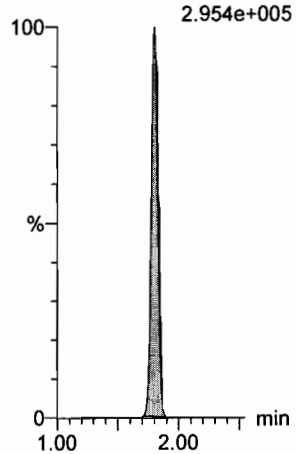
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
2.738e+005



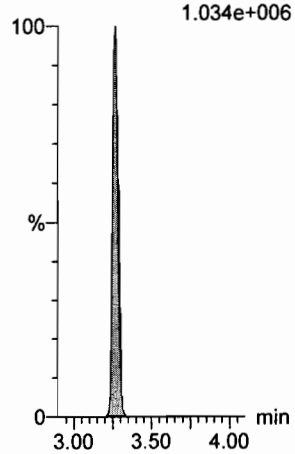
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
3.355e+005



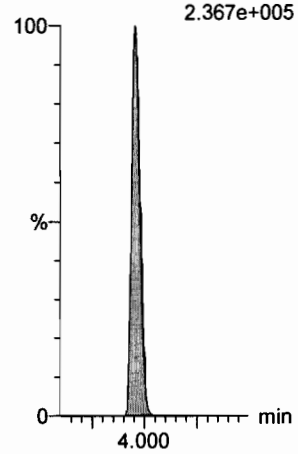
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.954e+005



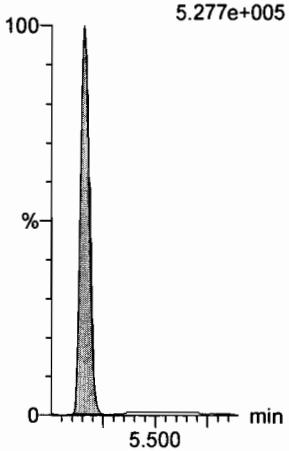
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
1.034e+006



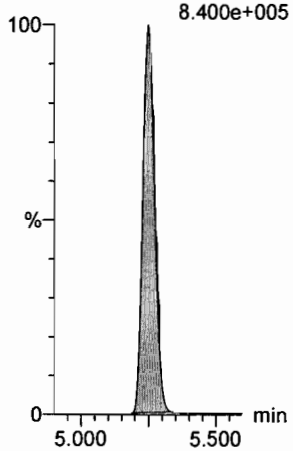
13C4-PFOS
F31:MRM of 1 channel,ES-
503 > 79.9
2.367e+005



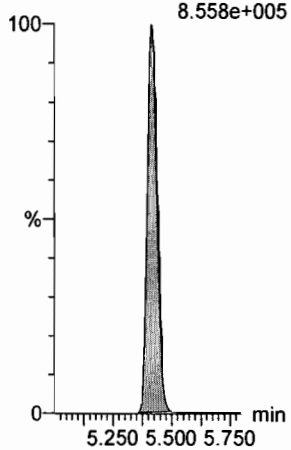
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
5.277e+005



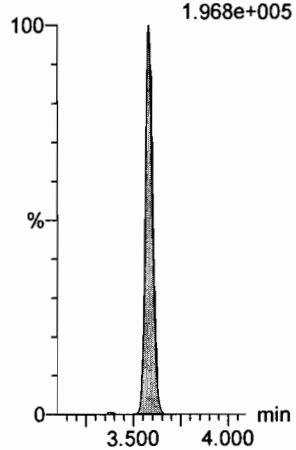
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
8.400e+005



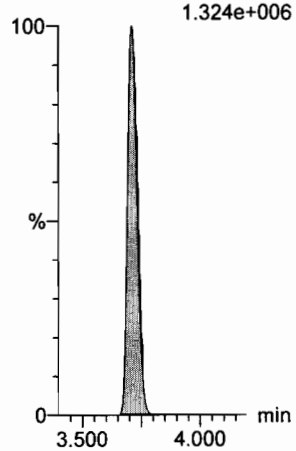
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
8.558e+005



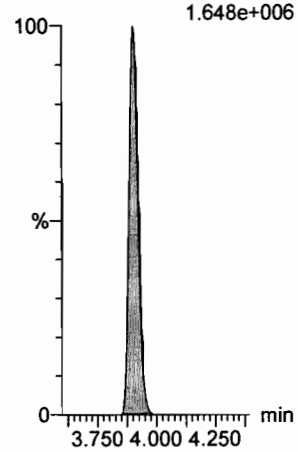
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.968e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.324e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.648e+006



Dataset: U:\Q4.PRO\results\170810M1\170810M2-81.qld

Last Altered: Friday, August 11, 2017 11:47:26 Pacific Daylight Time
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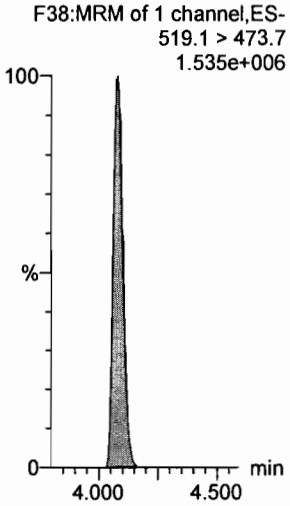
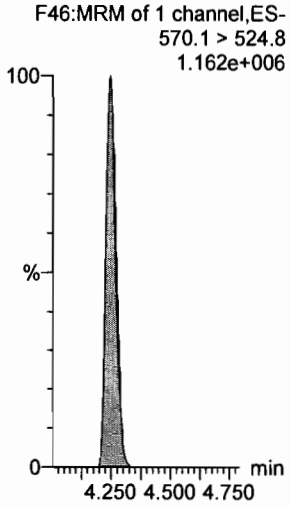
Name: 170810M2_81, Date: 11-Aug-2017, Time: 10:40:32, ID: ST170810M2-13 PFC CS3 17H1005, Description: PFC CS3 17H1005

13C6-PFDA



13C7-PFUnA



Dataset: U:\Q4.PRO\results\170811M2\RS AREAS.qld

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Method: U:\Q4.PRO\MethDB\PFAS_RS=only.mdb 11 Aug 2017 12:16:30
Calibration: 12 Aug 2017 15:36:59

Name: 170811M2_2, Date: 11-Aug-2017, Time: 18:35:42, ID: ST170811M2-1 PFC CS0 17H1106, Description: PFC CS0 17H1106

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	3.81e4	92.8	NO
2	2	13C3-PFHxS	ST170...	7.66e3	97.2	NO
3	3	13C8-PFOA	ST170...	6.00e4	97.3	NO
4	4	13C9-PFNA	ST170...	6.82e4	97.9	NO
5	5	13C4-PFOS	ST170...	1.03e4	94.2	NO
6	6	13C6-PFDA	ST170...	5.85e4	90.4	NO
7	7	13C7-PFUnA	ST170...	6.27e4	98.3	NO

Name: 170811M2_3, Date: 11-Aug-2017, Time: 18:46:29, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA	8.16e0	0.0	NO
7	7	13C7-PFUnA	IPA	9.60e0	0.0	NO

Name: 170811M2_4, Date: 11-Aug-2017, Time: 18:57:15, ID: B7H0073-BS1 OPR 0.125, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	1.23e5	149.9	NO
2	2	13C3-PFHxS	B7H00...	2.02e4	128.0	NO
3	3	13C8-PFOA	B7H00...	1.03e5	83.7	NO
4	4	13C9-PFNA	B7H00...	1.15e5	82.9	NO
5	5	13C4-PFOS	B7H00...	2.03e4	93.2	NO
6	6	13C6-PFDA	B7H00...	1.28e5	99.0	NO
7	7	13C7-PFUnA	B7H00...	1.20e5	94.5	NO

Name: 170811M2_5, Date: 11-Aug-2017, Time: 19:08:08, ID: B7H0074-BS1 OPR 0.125, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	5.55e4	135.3	NO
2	2	13C3-PFHxS	B7H00...	9.11e3	115.6	NO
3	3	13C8-PFOA	B7H00...	4.34e4	70.3	NO
4	4	13C9-PFNA	B7H00...	5.38e4	77.2	NO
5	5	13C4-PFOS	B7H00...	9.09e3	83.4	NO
6	6	13C6-PFDA	B7H00...	5.43e4	84.0	NO
7	7	13C7-PFUnA	B7H00...	5.94e4	93.2	NO

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Name: 170811M2_6, Date: 11-Aug-2017, Time: 19:18:57, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.08e1	0.0	NO

Name: 170811M2_7, Date: 11-Aug-2017, Time: 19:29:43, ID: B7H0073-BLK1 Method Blank 0.125, Description: Method Blank

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	1.21e5	147.8	NO
2	2	13C3-PFHxS	B7H00...	1.85e4	117.3	NO
3	3	13C8-PFOA	B7H00...	1.07e5	87.1	NO
4	4	13C9-PFNA	B7H00...	1.06e5	75.7	NO
5	5	13C4-PFOS	B7H00...	1.67e4	76.6	NO
6	6	13C6-PFDA	B7H00...	1.23e5	94.8	NO
7	7	13C7-PFUnA	B7H00...	1.05e5	82.1	NO

Name: 170811M2_8, Date: 11-Aug-2017, Time: 19:40:22, ID: B7H0074-BLK1 Method Blank 0.125, Description: Method Blank

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	5.25e4	128.0	NO
2	2	13C3-PFHxS	B7H00...	8.89e3	112.8	NO
3	3	13C8-PFOA	B7H00...	4.51e4	73.1	NO
4	4	13C9-PFNA	B7H00...	5.09e4	73.1	NO
5	5	13C4-PFOS	B7H00...	8.29e3	76.1	NO
6	6	13C6-PFDA	B7H00...	5.20e4	80.5	NO
7	7	13C7-PFUnA	B7H00...	6.17e4	96.7	NO

Name: 170811M2_9, Date: 11-Aug-2017, Time: 19:51:08, ID: B7H0073-MS1 Matrix Spike 0.0005, Description: Matrix Spike

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	1.03e5	125.5	NO
2	2	13C3-PFHxS	B7H00...	1.37e4	87.0	NO
3	3	13C8-PFOA	B7H00...	7.44e4	60.3	NO
4	4	13C9-PFNA	B7H00...	1.15e5	82.5	NO
5	5	13C4-PFOS	B7H00...	1.76e4	80.9	NO
6	6	13C6-PFDA	B7H00...	1.08e5	83.5	NO
7	7	13C7-PFUnA	B7H00...	1.01e5	79.3	NO

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Name: 170811M2_10, Date: 11-Aug-2017, Time: 20:01:56, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.88e1	0.0	NO

Name: 170811M2_11, Date: 11-Aug-2017, Time: 20:12:41, ID: B7H0073-MSD1 Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	9.88e4	120.4	NO
2	2	13C3-PFHxS	B7H00...	1.35e4	85.5	NO
3	3	13C8-PFOA	B7H00...	7.34e4	59.5	NO
4	4	13C9-PFNA	B7H00...	1.11e5	79.3	NO
5	5	13C4-PFOS	B7H00...	1.68e4	77.0	NO
6	6	13C6-PFDA	B7H00...	1.05e5	81.2	NO
7	7	13C7-PFUnA	B7H00...	1.06e5	83.4	NO

Name: 170811M2_12, Date: 11-Aug-2017, Time: 20:23:19, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA	6.11e0	0.0	NO
7	7	13C7-PFUnA	IPA	1.70e1	0.0	NO

Name: 170811M2_13, Date: 11-Aug-2017, Time: 20:34:06, ID: B7H0074-MS1 Matrix Spike 0.125, Description: Matrix Spike

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	B7H00...	5.67e4	138.1	NO
2	2	13C3-PFHxS	B7H00...	9.36e3	118.9	NO
3	3	13C8-PFOA	B7H00...	4.83e4	78.3	NO
4	4	13C9-PFNA	B7H00...	5.55e4	79.7	NO
5	5	13C4-PFOS	B7H00...	8.56e3	78.6	NO
6	6	13C6-PFDA	B7H00...	5.47e4	84.6	NO
7	7	13C7-PFUnA	B7H00...	4.63e4	72.7	NO

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Dataset: U:\Q4.PRO\results\170811M2\RS AREAS.qld

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Name: 170811M2_14, Date: 11-Aug-2017, Time: 20:44:44, ID: B7H0074-MSD1 Matrix Spike Dup 0.125, Description: Matrix Spike Dup

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	B7H00...	5.48e4	133.6	NO
2	2 13C3-PFHxS	B7H00...	9.28e3	117.8	NO
3	3 13C8-PFOA	B7H00...	4.51e4	73.1	NO
4	4 13C9-PFNA	B7H00...	6.02e4	86.3	NO
5	5 13C4-PFOS	B7H00...	9.54e3	87.6	NO
6	6 13C6-PFDA	B7H00...	5.62e4	86.9	NO
7	7 13C7-PFUnA	B7H00...	5.44e4	85.4	NO

Name: 170811M2_15, Date: 11-Aug-2017, Time: 20:55:23, ID: 1700925-04RE2 I001MW52S-170724 0.00122, Description: I001MW52S-170724

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	9.83e4	119.8	NO
2	2 13C3-PFHxS	17009...	1.38e4	87.8	NO
3	3 13C8-PFOA	17009...	7.18e4	58.2	NO
4	4 13C9-PFNA	17009...	1.18e5	84.9	NO
5	5 13C4-PFOS	17009...	1.82e4	83.5	NO
6	6 13C6-PFDA	17009...	1.03e5	79.7	NO
7	7 13C7-PFUnA	17009...	1.06e5	83.0	NO

Name: 170811M2_16, Date: 11-Aug-2017, Time: 21:06:01, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA			NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA			NO
7	7 13C7-PFUnA	IPA	2.02e1	0.0	NO

Name: 170811M2_17, Date: 11-Aug-2017, Time: 21:16:40, ID: 1700925-05RE2 I001MW52X-170724 0.00133, Description: I001MW52X-170724

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	1.12e5	136.5	NO
2	2 13C3-PFHxS	17009...	1.49e4	94.3	NO
3	3 13C8-PFOA	17009...	8.31e4	67.3	NO
4	4 13C9-PFNA	17009...	1.22e5	87.9	NO
5	5 13C4-PFOS	17009...	2.00e4	91.9	NO
6	6 13C6-PFDA	17009...	1.40e5	108.0	NO
7	7 13C7-PFUnA	17009...	1.33e5	104.5	NO

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Name: 170811M2_18, Date: 11-Aug-2017, Time: 21:27:18, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA			NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA	1.31e1	0.0	NO
7	7 13C7-PFUnA	IPA	1.16e1	0.0	NO

Name: 170811M2_19, Date: 11-Aug-2017, Time: 21:37:56, ID: 1700922-01RE1 MH-L103-20170721 0.10565, Description: MH-L103-20170721

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	4.83e4	117.6	NO
2	2 13C3-PFHxS	17009...	7.46e3	94.6	NO
3	3 13C8-PFOA	17009...	3.83e4	62.1	NO
4	4 13C9-PFNA	17009...	4.52e4	64.8	NO
5	5 13C4-PFOS	17009...	7.33e3	67.3	NO
6	6 13C6-PFDA	17009...	4.64e4	71.7	NO
7	7 13C7-PFUnA	17009...	3.91e4	61.3	NO

Name: 170811M2_20, Date: 11-Aug-2017, Time: 21:48:43, ID: 1700922-02RE1 MH-N104-20170721 0.11025, Description: MH-N104-20170721

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	5.16e4	125.6	NO
2	2 13C3-PFHxS	17009...	8.18e3	103.8	NO
3	3 13C8-PFOA	17009...	4.62e4	74.8	NO
4	4 13C9-PFNA	17009...	5.29e4	75.9	NO
5	5 13C4-PFOS	17009...	7.82e3	71.8	NO
6	6 13C6-PFDA	17009...	4.70e4	72.7	NO
7	7 13C7-PFUnA	17009...	4.81e4	75.4	NO

Name: 170811M2_21, Date: 11-Aug-2017, Time: 21:59:21, ID: 1700922-03RE1 Upstream-Culvert-109-20170721 0.1185, Description: Upstream-Culvert-109-20170721

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	5.18e4	126.2	NO
2	2 13C3-PFHxS	17009...	8.54e3	108.4	NO
3	3 13C8-PFOA	17009...	4.45e4	72.1	NO
4	4 13C9-PFNA	17009...	4.78e4	68.6	NO
5	5 13C4-PFOS	17009...	7.33e3	67.3	NO
6	6 13C6-PFDA	17009...	4.99e4	77.2	NO
7	7 13C7-PFUnA	17009...	5.28e4	82.8	NO

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Name: 170811M2_22, Date: 11-Aug-2017, Time: 22:10:08, ID: 1700922-04RE1 FRB03-20170721 0.11017, Description: FRB03-20170721

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	5.74e4	139.9	NO
2	2 13C3-PFHxS	17009...	8.86e3	112.4	NO
3	3 13C8-PFOA	17009...	4.65e4	75.3	NO
4	4 13C9-PFNA	17009...	5.09e4	73.1	NO
5	5 13C4-PFOS	17009...	9.05e3	83.1	NO
6	6 13C6-PFDA	17009...	5.11e4	79.0	NO
7	7 13C7-PFUnA	17009...	5.14e4	80.7	NO

Name: 170811M2_23, Date: 11-Aug-2017, Time: 22:20:54, ID: 1700922-05RE1 RB08-20170720 0.11893, Description: RB08-20170720

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	5.08e4	123.9	NO
2	2 13C3-PFHxS	17009...	8.80e3	111.7	NO
3	3 13C8-PFOA	17009...	4.04e4	65.4	NO
4	4 13C9-PFNA	17009...	5.17e4	74.3	NO
5	5 13C4-PFOS	17009...	8.18e3	75.1	NO
6	6 13C6-PFDA	17009...	4.86e4	75.2	NO
7	7 13C7-PFUnA	17009...	5.38e4	84.5	NO

Name: 170811M2_24, Date: 11-Aug-2017, Time: 22:31:33, ID: 1700922-06RE1 RB09-20170721 0.11676, Description: RB09-20170721

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	5.51e4	134.1	NO
2	2 13C3-PFHxS	17009...	8.44e3	107.1	NO
3	3 13C8-PFOA	17009...	4.41e4	71.5	NO
4	4 13C9-PFNA	17009...	5.20e4	74.6	NO
5	5 13C4-PFOS	17009...	8.46e3	77.7	NO
6	6 13C6-PFDA	17009...	5.27e4	81.5	NO
7	7 13C7-PFUnA	17009...	4.70e4	73.8	NO

Name: 170811M2_25, Date: 11-Aug-2017, Time: 22:42:11, ID: 1700925-01RE1 I001BC43S-170724 0.12112, Description: I001BC43S-170724

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	6.04e4	147.1	NO
2	2 13C3-PFHxS	17009...	8.60e3	109.1	NO
3	3 13C8-PFOA	17009...	5.05e4	81.8	NO
4	4 13C9-PFNA	17009...	5.04e4	72.3	NO
5	5 13C4-PFOS	17009...	8.55e3	78.5	NO
6	6 13C6-PFDA	17009...	4.47e4	69.1	NO
7	7 13C7-PFUnA	17009...	5.22e4	81.9	NO

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Name: 170811M2_26, Date: 11-Aug-2017, Time: 22:52:49, ID: 1700925-02RE1 SB01-170724 0.12178, Description: SB01-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.45e4	132.8	NO
2	2	13C3-PFHxS	17009...	7.95e3	100.9	NO
3	3	13C8-PFOA	17009...	4.46e4	72.3	NO
4	4	13C9-PFNA	17009...	5.17e4	74.2	NO
5	5	13C4-PFOS	17009...	7.95e3	73.0	NO
6	6	13C6-PFDA	17009...	4.69e4	72.6	NO
7	7	13C7-PFUnA	17009...	4.32e4	67.8	NO

Name: 170811M2_27, Date: 11-Aug-2017, Time: 23:03:28, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	4.35e1	0.1	NO

Name: 170811M2_28, Date: 11-Aug-2017, Time: 23:14:14, ID: ST170811M2-2 PFC CS3 17H1105, Description: PFC CS3 17H1105

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	3.97e4	96.7	NO
2	2	13C3-PFHxS	ST170...	7.67e3	97.3	NO
3	3	13C8-PFOA	ST170...	5.58e4	90.4	NO
4	4	13C9-PFNA	ST170...	6.72e4	96.4	NO
5	5	13C4-PFOS	ST170...	1.04e4	95.3	NO
6	6	13C6-PFDA	ST170...	5.79e4	89.6	NO
7	7	13C7-PFUnA	ST170...	5.86e4	91.9	NO

Name: 170811M2_29, Date: 11-Aug-2017, Time: 23:24:52, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.19e1	0.0	NO

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Name: 170811M2_30, Date: 11-Aug-2017, Time: 23:35:31, ID: 1700925-03RE1 I001BC50S-170724 0.12135, Description: I001BC50S-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	4.11e4	100.2	NO
2	2	13C3-PFHxS	17009...	4.60e3	58.4	NO
3	3	13C8-PFOA	17009...	3.23e4	52.3	NO
4	4	13C9-PFNA	17009...	4.31e4	61.9	NO
5	5	13C4-PFOS	17009...	7.24e3	66.4	NO
6	6	13C6-PFDA	17009...	3.71e4	57.4	NO
7	7	13C7-PFUnA	17009...	3.98e4	62.5	NO

Name: 170811M2_31, Date: 11-Aug-2017, Time: 23:46:09, ID: 1700925-06RE1 EB01-170724 0.1185, Description: EB01-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.25e4	127.9	NO
2	2	13C3-PFHxS	17009...	7.72e3	98.0	NO
3	3	13C8-PFOA	17009...	4.42e4	71.7	NO
4	4	13C9-PFNA	17009...	5.12e4	73.4	NO
5	5	13C4-PFOS	17009...	8.28e3	76.0	NO
6	6	13C6-PFDA	17009...	4.94e4	76.5	NO
7	7	13C7-PFUnA	17009...	4.68e4	73.4	NO

Name: 170811M2_32, Date: 11-Aug-2017, Time: 23:56:48, ID: 1700929-01RE1 MATP01001 0.11834, Description: MATP01001

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.53e4	134.8	NO
2	2	13C3-PFHxS	17009...	8.81e3	111.9	NO
3	3	13C8-PFOA	17009...	4.29e4	69.5	NO
4	4	13C9-PFNA	17009...	4.80e4	68.9	NO
5	5	13C4-PFOS	17009...	8.49e3	78.0	NO
6	6	13C6-PFDA	17009...	4.42e4	68.4	NO
7	7	13C7-PFUnA	17009...	4.63e4	72.7	NO

Name: 170811M2_33, Date: 12-Aug-2017, Time: 00:07:34, ID: 1700929-02RE1 MATP01002 0.1157, Description: MATP01002

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.62e4	137.0	NO
2	2	13C3-PFHxS	17009...	9.35e3	118.6	NO
3	3	13C8-PFOA	17009...	4.99e4	80.9	NO
4	4	13C9-PFNA	17009...	5.70e4	81.9	NO
5	5	13C4-PFOS	17009...	9.00e3	82.6	NO
6	6	13C6-PFDA	17009...	5.00e4	77.4	NO
7	7	13C7-PFUnA	17009...	5.84e4	91.7	NO

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Name: 170811M2_34, Date: 12-Aug-2017, Time: 00:18:13, ID: 1700938-01RE1 NORP08102 0.11844, Description: NORP08102

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	4.63e4	112.7	NO
2	2 13C3-PFHxS	17009...	7.40e3	93.9	NO
3	3 13C8-PFOA	17009...	3.93e4	63.6	NO
4	4 13C9-PFNA	17009...	4.84e4	69.5	NO
5	5 13C4-PFOS	17009...	7.45e3	68.4	NO
6	6 13C6-PFDA	17009...	3.85e4	59.6	NO
7	7 13C7-PFUnA	17009...	4.41e4	69.2	NO

Name: 170811M2_35, Date: 12-Aug-2017, Time: 00:28:51, ID: 1700938-02RE1 NORP08103 0.12014, Description: NORP08103

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	5.15e4	125.5	NO
2	2 13C3-PFHxS	17009...	8.26e3	104.9	NO
3	3 13C8-PFOA	17009...	4.45e4	72.0	NO
4	4 13C9-PFNA	17009...	5.12e4	73.4	NO
5	5 13C4-PFOS	17009...	8.19e3	75.2	NO
6	6 13C6-PFDA	17009...	4.53e4	70.0	NO
7	7 13C7-PFUnA	17009...	3.88e4	60.9	NO

Name: 170811M2_36, Date: 12-Aug-2017, Time: 00:39:29, ID: 1700938-03RE1 NORP08104 0.11247, Description: NORP08104

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	4.45e4	108.5	NO
2	2 13C3-PFHxS	17009...	7.13e3	90.5	NO
3	3 13C8-PFOA	17009...	3.93e4	63.6	NO
4	4 13C9-PFNA	17009...	4.37e4	62.8	NO
5	5 13C4-PFOS	17009...	6.49e3	59.6	NO
6	6 13C6-PFDA	17009...	3.75e4	58.0	NO
7	7 13C7-PFUnA	17009...	3.59e4	56.3	NO

Name: 170811M2_37, Date: 12-Aug-2017, Time: 00:50:08, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA			NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA			NO
7	7 13C7-PFUnA	IPA	9.26e0	0.0	NO

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Name: 170811M2_38, Date: 12-Aug-2017, Time: 01:00:54, ID: B7H0073-MS1@20X Matrix Spike 0.0005, Description: Matrix Spike

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	B7H00...	4.56e3	5.6	YES
2	2 13C3-PFHxS	B7H00...	1.06e3	6.7	YES
3	3 13C8-PFOA	B7H00...	6.06e3	4.9	YES
4	4 13C9-PFNA	B7H00...	5.94e3	4.3	YES
5	5 13C4-PFOS	B7H00...	6.84e2	3.1	YES
6	6 13C6-PFDA	B7H00...	6.73e3	5.2	YES
7	7 13C7-PFUnA	B7H00...	6.20e3	4.9	YES

Name: 170811M2_39, Date: 12-Aug-2017, Time: 01:11:32, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA	8.16e0	0.0	NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA	6.79e0	0.0	NO
7	7 13C7-PFUnA	IPA	1.46e1	0.0	NO

Name: 170811M2_40, Date: 12-Aug-2017, Time: 01:22:19, ID: B7H0073-MSD1@20X Matrix Spike Dup 0.00139, Description: Matrix Spike Dup

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	B7H00...	4.60e3	5.6	YES
2	2 13C3-PFHxS	B7H00...	1.14e3	7.2	YES
3	3 13C8-PFOA	B7H00...	5.71e3	4.6	YES
4	4 13C9-PFNA	B7H00...	6.77e3	4.9	YES
5	5 13C4-PFOS	B7H00...	1.16e3	5.3	YES
6	6 13C6-PFDA	B7H00...	6.76e3	5.2	YES
7	7 13C7-PFUnA	B7H00...	6.82e3	5.3	YES

Name: 170811M2_41, Date: 12-Aug-2017, Time: 01:32:57, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA			NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA			NO
7	7 13C7-PFUnA	IPA			NO

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Name: 170811M2_42, Date: 12-Aug-2017, Time: 01:43:36, ID: 1700925-04RE2@20X I001MW52S-170724 0.00122, Description: I001MW52S-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	4.73e3	5.8	YES
2	2	13C3-PFHxS	17009...	9.70e2	6.2	YES
3	3	13C8-PFOA	17009...	6.30e3	5.1	YES
4	4	13C9-PFNA	17009...	6.80e3	4.9	YES
5	5	13C4-PFOS	17009...	1.22e3	5.6	YES
6	6	13C6-PFDA	17009...	6.27e3	4.9	YES
7	7	13C7-PFUnA	17009...	6.88e3	5.4	YES

Name: 170811M2_43, Date: 12-Aug-2017, Time: 01:54:14, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.25e1	0.0	NO

Name: 170811M2_44, Date: 12-Aug-2017, Time: 02:05:00, ID: 1700925-05RE2@20X I001MW52X-170724 0.00133, Description: I001MW52X-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	4.56e3	5.6	YES
2	2	13C3-PFHxS	17009...	1.10e3	7.0	YES
3	3	13C8-PFOA	17009...	6.54e3	5.3	YES
4	4	13C9-PFNA	17009...	6.30e3	4.5	YES
5	5	13C4-PFOS	17009...	1.20e3	5.5	YES
6	6	13C6-PFDA	17009...	6.04e3	4.7	YES
7	7	13C7-PFUnA	17009...	6.82e3	5.3	YES

Name: 170811M2_45, Date: 12-Aug-2017, Time: 02:15:39, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

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Name: 170811M2_46, Date: 12-Aug-2017, Time: 02:26:17, ID: 1700958-15RE1@10X MATP05081 1.02, Description: MATP05081

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.58e3	13.6	YES
2	2	13C3-PFHxS	17009...	9.20e2	11.7	YES
3	3	13C8-PFOA	17009...	4.91e3	8.0	YES
4	4	13C9-PFNA	17009...	4.83e3	6.9	YES
5	5	13C4-PFOS	17009...	8.40e2	7.7	YES
6	6	13C6-PFDA	17009...	4.32e3	6.7	YES
7	7	13C7-PFUnA	17009...	4.76e3	7.5	YES

Name: 170811M2_47, Date: 12-Aug-2017, Time: 02:36:56, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

Name: 170811M2_48, Date: 12-Aug-2017, Time: 02:47:34, ID: ST170811M2-3 PFC CS3 17H1105, Description: PFC CS3 17H1105

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	3.91e4	95.2	NO
2	2	13C3-PFHxS	ST170...	6.98e3	88.6	NO
3	3	13C8-PFOA	ST170...	5.90e4	95.6	NO
4	4	13C9-PFNA	ST170...	6.47e4	92.9	NO
5	5	13C4-PFOS	ST170...	1.05e4	96.4	NO
6	6	13C6-PFDA	ST170...	6.56e4	101.4	NO
7	7	13C7-PFUnA	ST170...	5.83e4	91.5	NO

Name: 170811M2_49, Date: 12-Aug-2017, Time: 02:58:20, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	3.48e1	0.1	NO

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Name: 170811M2_50, Date: 12-Aug-2017, Time: 03:08:59, ID: 1701007-03 RI17-EB3-080317 0.26497, Description: RI17-EB3-080317

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17010...	7.15e4	174.2	YES
2	2	13C3-PFHxS	17010...	1.12e4	142.1	NO
3	3	13C8-PFOA	17010...	6.36e4	103.0	NO
4	4	13C9-PFNA	17010...	6.13e4	88.1	NO
5	5	13C4-PFOS	17010...	1.17e4	107.4	NO
6	6	13C6-PFDA	17010...	5.82e4	90.0	NO
7	7	13C7-PFUnA	17010...	7.63e4	119.7	NO

Name: 170811M2_51, Date: 12-Aug-2017, Time: 03:19:37, ID: 1701007-04 RI17-EB8-080317 0.26753, Description: RI17-EB8-080317

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17010...	3.94e4	96.0	NO
2	2	13C3-PFHxS	17010...	5.98e3	75.9	NO
3	3	13C8-PFOA	17010...	3.32e4	53.9	NO
4	4	13C9-PFNA	17010...	3.42e4	49.0	YES
5	5	13C4-PFOS	17010...	5.59e3	51.3	NO
6	6	13C6-PFDA	17010...	3.72e4	57.5	NO
7	7	13C7-PFUnA	17010...	3.36e4	52.7	NO

Name: 170811M2_52, Date: 12-Aug-2017, Time: 03:30:16, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

Name: 170811M2_53, Date: 12-Aug-2017, Time: 03:40:54, ID: 1700958-06RE1 MATP03050 1.22, Description: MATP03050

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.15e4	125.5	NO
2	2	13C3-PFHxS	17009...	6.07e3	77.0	NO
3	3	13C8-PFOA	17009...	4.71e4	76.3	NO
4	4	13C9-PFNA	17009...	5.10e4	73.1	NO
5	5	13C4-PFOS	17009...	8.49e3	77.9	NO
6	6	13C6-PFDA	17009...	5.18e4	80.2	NO
7	7	13C7-PFUnA	17009...	5.12e4	80.4	NO

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Name: 170811M2_54, Date: 12-Aug-2017, Time: 03:51:41, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA			NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA			NO
7	7 13C7-PFUnA	IPA	8.40e0	0.0	NO

Name: 170811M2_55, Date: 12-Aug-2017, Time: 04:02:19, ID: 1700958-09RE1 MATP04060 1.27, Description: MATP04060

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	5.12e4	124.7	NO
2	2 13C3-PFHxS	17009...	9.72e3	123.4	NO
3	3 13C8-PFOA	17009...	4.17e4	67.5	NO
4	4 13C9-PFNA	17009...	5.18e4	74.3	NO
5	5 13C4-PFOS	17009...	8.78e3	80.6	NO
6	6 13C6-PFDA	17009...	5.28e4	81.6	NO
7	7 13C7-PFUnA	17009...	5.09e4	79.9	NO

Name: 170811M2_56, Date: 12-Aug-2017, Time: 04:12:57, ID: 1700958-10RE1 MATP04061 1.27, Description: MATP04061

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	6.08e4	148.1	NO
2	2 13C3-PFHxS	17009...	1.13e4	143.0	NO
3	3 13C8-PFOA	17009...	4.99e4	80.8	NO
4	4 13C9-PFNA	17009...	6.45e4	92.6	NO
5	5 13C4-PFOS	17009...	9.32e3	85.5	NO
6	6 13C6-PFDA	17009...	6.75e4	104.3	NO
7	7 13C7-PFUnA	17009...	5.80e4	91.1	NO

Name: 170811M2_57, Date: 12-Aug-2017, Time: 04:23:41, ID: 1700958-13RE1 MATP05079 1.1, Description: MATP05079

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	5.50e4	134.0	NO
2	2 13C3-PFHxS	17009...	1.01e4	128.0	NO
3	3 13C8-PFOA	17009...	4.55e4	73.8	NO
4	4 13C9-PFNA	17009...	5.19e4	74.5	NO
5	5 13C4-PFOS	17009...	1.01e4	92.7	NO
6	6 13C6-PFDA	17009...	5.74e4	88.7	NO
7	7 13C7-PFUnA	17009...	5.74e4	90.1	NO

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Name: 170811M2_58, Date: 12-Aug-2017, Time: 04:34:36, ID: 1700958-15RE1 MATP05081 1.02, Description: MATP05081

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.72e4	139.4	NO
2	2	13C3-PFHxS	17009...	9.37e3	119.0	NO
3	3	13C8-PFOA	17009...	4.89e4	79.2	NO
4	4	13C9-PFNA	17009...	4.77e4	68.4	NO
5	5	13C4-PFOS	17009...	5.02e3	46.1	YES
6	6	13C6-PFDA	17009...	5.10e4	78.9	NO
7	7	13C7-PFUnA	17009...	5.28e4	82.8	NO

Name: 170811M2_59, Date: 12-Aug-2017, Time: 04:45:27, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	9.58e0	0.0	NO

Name: 170811M2_60, Date: 12-Aug-2017, Time: 04:56:09, ID: 1700961-02 MATP05098 1, Description: MATP05098

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.32e4	129.7	NO
2	2	13C3-PFHxS	17009...	9.88e3	125.4	NO
3	3	13C8-PFOA	17009...	4.36e4	70.6	NO
4	4	13C9-PFNA	17009...	5.66e4	81.2	NO
5	5	13C4-PFOS	17009...	8.85e3	81.2	NO
6	6	13C6-PFDA	17009...	4.43e4	68.6	NO
7	7	13C7-PFUnA	17009...	4.62e4	72.6	NO

Name: 170811M2_61, Date: 12-Aug-2017, Time: 05:07:16, ID: 1700961-03 MATP05099 1, Description: MATP05099

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.56e4	135.4	NO
2	2	13C3-PFHxS	17009...	1.03e4	130.8	NO
3	3	13C8-PFOA	17009...	4.74e4	76.8	NO
4	4	13C9-PFNA	17009...	5.46e4	78.4	NO
5	5	13C4-PFOS	17009...	8.63e3	79.2	NO
6	6	13C6-PFDA	17009...	4.93e4	76.3	NO
7	7	13C7-PFUnA	17009...	5.40e4	84.8	NO

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Name: 170811M2_62, Date: 12-Aug-2017, Time: 05:18:08, ID: 1700961-04 MATP05100 1, Description: MATP05100

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.08e4	148.1	NO
2	2	13C3-PFHxS	17009...	9.87e3	125.2	NO
3	3	13C8-PFOA	17009...	4.96e4	80.4	NO
4	4	13C9-PFNA	17009...	5.24e4	75.2	NO
5	5	13C4-PFOS	17009...	9.46e3	86.9	NO
6	6	13C6-PFDA	17009...	5.52e4	85.4	NO
7	7	13C7-PFUnA	17009...	5.81e4	91.2	NO

Name: 170811M2_63, Date: 12-Aug-2017, Time: 05:28:47, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA	5.96e0	0.0	NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	8.02e0	0.0	NO

Name: 170811M2_64, Date: 12-Aug-2017, Time: 05:39:33, ID: ST170811M2-4 PFC CS0 17H1106, Description: PFC CS0 17H1106

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	4.05e4	98.6	NO
2	2	13C3-PFHxS	ST170...	7.85e3	99.6	NO
3	3	13C8-PFOA	ST170...	6.14e4	99.4	NO
4	4	13C9-PFNA	ST170...	6.94e4	99.6	NO
5	5	13C4-PFOS	ST170...	1.14e4	104.4	NO
6	6	13C6-PFDA	ST170...	5.90e4	91.2	NO
7	7	13C7-PFUnA	ST170...	6.57e4	103.2	NO

Name: 170811M2_65, Date: 12-Aug-2017, Time: 05:50:19, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

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Name: 170811M2_66, Date: 12-Aug-2017, Time: 06:01:06, ID: 1700961-05 MATP05102 1, Description: MATP05102

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.13e4	149.5	NO
2	2	13C3-PFHxS	17009...	9.38e3	119.0	NO
3	3	13C8-PFOA	17009...	5.31e4	86.0	NO
4	4	13C9-PFNA	17009...	5.92e4	85.0	NO
5	5	13C4-PFOS	17009...	1.00e4	92.2	NO
6	6	13C6-PFDA	17009...	5.18e4	80.1	NO
7	7	13C7-PFUnA	17009...	5.28e4	82.9	NO

Name: 170811M2_67, Date: 12-Aug-2017, Time: 06:11:44, ID: 1700961-06 MATP05103 1, Description: MATP05103

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.93e4	144.5	NO
2	2	13C3-PFHxS	17009...	1.02e4	130.0	NO
3	3	13C8-PFOA	17009...	5.15e4	83.4	NO
4	4	13C9-PFNA	17009...	5.66e4	81.2	NO
5	5	13C4-PFOS	17009...	1.01e4	92.6	NO
6	6	13C6-PFDA	17009...	5.72e4	88.5	NO
7	7	13C7-PFUnA	17009...	4.92e4	77.1	NO

Name: 170811M2_68, Date: 12-Aug-2017, Time: 06:22:23, ID: 1700961-07 MATP04055 1, Description: MATP04055

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.33e4	129.8	NO
2	2	13C3-PFHxS	17009...	9.20e3	116.8	NO
3	3	13C8-PFOA	17009...	4.61e4	74.7	NO
4	4	13C9-PFNA	17009...	5.25e4	75.3	NO
5	5	13C4-PFOS	17009...	9.02e3	82.8	NO
6	6	13C6-PFDA	17009...	4.52e4	69.8	NO
7	7	13C7-PFUnA	17009...	4.85e4	76.0	NO

Name: 170811M2_69, Date: 12-Aug-2017, Time: 06:33:01, ID: 1700961-08 MATP03041 1, Description: MATP03041

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.32e4	129.6	NO
2	2	13C3-PFHxS	17009...	8.34e3	105.8	NO
3	3	13C8-PFOA	17009...	4.26e4	69.1	NO
4	4	13C9-PFNA	17009...	4.97e4	71.3	NO
5	5	13C4-PFOS	17009...	8.31e3	76.3	NO
6	6	13C6-PFDA	17009...	5.02e4	77.7	NO
7	7	13C7-PFUnA	17009...	4.62e4	72.6	NO

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Name: 170811M2_70, Date: 12-Aug-2017, Time: 06:43:40, ID: 1700961-09 MATP04063 1, Description: MATP04063

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	4.58e4	111.5	NO
2	2	13C3-PFHxS	17009...	8.13e3	103.2	NO
3	3	13C8-PFOA	17009...	4.28e4	69.4	NO
4	4	13C9-PFNA	17009...	4.79e4	68.7	NO
5	5	13C4-PFOS	17009...	7.57e3	69.5	NO
6	6	13C6-PFDA	17009...	4.96e4	76.8	NO
7	7	13C7-PFUnA	17009...	4.45e4	69.8	NO

Name: 170811M2_71, Date: 12-Aug-2017, Time: 06:54:18, ID: 1700961-11 MATP04065 1, Description: MATP04065

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.91e4	143.9	NO
2	2	13C3-PFHxS	17009...	9.51e3	120.7	NO
3	3	13C8-PFOA	17009...	4.70e4	76.1	NO
4	4	13C9-PFNA	17009...	6.40e4	91.9	NO
5	5	13C4-PFOS	17009...	9.61e3	88.2	NO
6	6	13C6-PFDA	17009...	5.30e4	82.0	NO
7	7	13C7-PFUnA	17009...	5.40e4	84.8	NO

Name: 170811M2_72, Date: 12-Aug-2017, Time: 07:04:56, ID: 1700961-12 MATP04066 1, Description: MATP04066

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.77e4	140.6	NO
2	2	13C3-PFHxS	17009...	9.98e3	126.7	NO
3	3	13C8-PFOA	17009...	4.73e4	76.6	NO
4	4	13C9-PFNA	17009...	5.99e4	86.0	NO
5	5	13C4-PFOS	17009...	1.00e4	92.0	NO
6	6	13C6-PFDA	17009...	5.92e4	91.5	NO
7	7	13C7-PFUnA	17009...	5.28e4	82.9	NO

Name: 170811M2_73, Date: 12-Aug-2017, Time: 07:15:34, ID: 1700960-03 MATP05084 0.125, Description: MATP05084

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.75e4	164.4	YES
2	2	13C3-PFHxS	17009...	1.07e4	135.3	NO
3	3	13C8-PFOA	17009...	5.93e4	96.1	NO
4	4	13C9-PFNA	17009...	5.79e4	83.1	NO
5	5	13C4-PFOS	17009...	1.02e4	94.0	NO
6	6	13C6-PFDA	17009...	5.70e4	88.1	NO
7	7	13C7-PFUnA	17009...	6.60e4	103.6	NO

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Name: 170811M2_74, Date: 12-Aug-2017, Time: 07:27:11, ID: 1700960-05 MATP05086 1, Description: MATP05086

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.43e4	156.6	YES
2	2	13C3-PFHxS	17009...	1.03e4	131.1	NO
3	3	13C8-PFOA	17009...	5.26e4	85.2	NO
4	4	13C9-PFNA	17009...	5.84e4	83.8	NO
5	5	13C4-PFOS	17009...	9.26e3	85.0	NO
6	6	13C6-PFDA	17009...	5.47e4	84.5	NO
7	7	13C7-PFUnA	17009...	5.45e4	85.6	NO

Name: 170811M2_75, Date: 12-Aug-2017, Time: 07:38:48, ID: 1700960-10 MATP05091 1, Description: MATP05091

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	7.35e4	179.0	YES
2	2	13C3-PFHxS	17009...	1.21e4	153.0	YES
3	3	13C8-PFOA	17009...	6.31e4	102.3	NO
4	4	13C9-PFNA	17009...	7.07e4	101.4	NO
5	5	13C4-PFOS	17009...	1.01e4	93.1	NO
6	6	13C6-PFDA	17009...	6.86e4	106.1	NO
7	7	13C7-PFUnA	17009...	6.20e4	97.2	NO

Name: 170811M2_76, Date: 12-Aug-2017, Time: 07:49:26, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.11e1	0.0	NO

Name: 170811M2_77, Date: 12-Aug-2017, Time: 08:00:04, ID: ST170811M2-3 PFC CS3 17H1105, Description: PFC CS3 17H1105

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	4.10e4	99.9	NO
2	2	13C3-PFHxS	ST170...	7.43e3	94.3	NO
3	3	13C8-PFOA	ST170...	6.17e4	100.0	NO
4	4	13C9-PFNA	ST170...	6.95e4	99.7	NO
5	5	13C4-PFOS	ST170...	1.09e4	100.2	NO
6	6	13C6-PFDA	ST170...	6.98e4	108.0	NO
7	7	13C7-PFUnA	ST170...	6.52e4	102.3	NO

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Name: 170811M2_78, Date: 12-Aug-2017, Time: 08:10:51, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA	6.65e0	0.0	NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

Name: 170811M2_79, Date: 12-Aug-2017, Time: 08:21:29, ID: 1700960-11 MATP05092 1, Description: MATP05092

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.97e4	169.8	YES
2	2	13C3-PFHxS	17009...	1.14e4	145.2	NO
3	3	13C8-PFOA	17009...	5.54e4	89.8	NO
4	4	13C9-PFNA	17009...	6.06e4	87.0	NO
5	5	13C4-PFOS	17009...	9.81e3	90.0	NO
6	6	13C6-PFDA	17009...	5.97e4	92.3	NO
7	7	13C7-PFUnA	17009...	6.87e4	107.8	NO

Name: 170811M2_80, Date: 12-Aug-2017, Time: 08:32:16, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA	5.67e0	0.0	NO
7	7	13C7-PFUnA	IPA			NO

Name: 170811M2_81, Date: 12-Aug-2017, Time: 08:42:54, ID: 1700960-04@5X MATP05085 1, Description: MATP05085

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	1.91e4	46.4	YES
2	2	13C3-PFHxS	17009...	2.98e3	37.8	YES
3	3	13C8-PFOA	17009...	1.56e4	25.3	YES
4	4	13C9-PFNA	17009...	1.70e4	24.4	YES
5	5	13C4-PFOS	17009...	2.50e3	23.0	YES
6	6	13C6-PFDA	17009...	1.90e4	29.3	YES
7	7	13C7-PFUnA	17009...	1.59e4	24.9	YES

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Name: 170811M2_82, Date: 12-Aug-2017, Time: 08:53:40, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

Name: 170811M2_83, Date: 12-Aug-2017, Time: 09:04:19, ID: 1700958-04 MATP03048 1, Description: MATP03048

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.50e4	134.0	NO
2	2	13C3-PFHxS	17009...	8.85e3	112.4	NO
3	3	13C8-PFOA	17009...	4.30e4	69.7	NO
4	4	13C9-PFNA	17009...	4.91e4	70.5	NO
5	5	13C4-PFOS	17009...	5.72e3	52.5	NO
6	6	13C6-PFDA	17009...	4.64e4	71.8	NO
7	7	13C7-PFUnA	17009...	5.04e4	79.1	NO

Name: 170811M2_84, Date: 12-Aug-2017, Time: 09:14:58, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	6.05e0	0.0	NO

Name: 170811M2_85, Date: 12-Aug-2017, Time: 09:25:36, ID: 1700958-04@20X MATP03048 1, Description: MATP03048

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	2.38e3	5.8	YES
2	2	13C3-PFHxS	17009...	4.07e2	5.2	YES
3	3	13C8-PFOA	17009...	2.34e3	3.8	YES
4	4	13C9-PFNA	17009...	2.91e3	4.2	YES
5	5	13C4-PFOS	17009...	4.76e2	4.4	YES
6	6	13C6-PFDA	17009...	2.43e3	3.8	YES
7	7	13C7-PFUnA	17009...	2.76e3	4.3	YES

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Name: 170811M2_86, Date: 12-Aug-2017, Time: 09:36:27, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.71e1	0.0	NO

Name: 170811M2_87, Date: 12-Aug-2017, Time: 09:47:09, ID: 1700958-05@10X MATP03049 1, Description: MATP03049

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.44e3	15.7	YES
2	2	13C3-PFHxS	17009...	9.83e2	12.5	YES
3	3	13C8-PFOA	17009...	5.13e3	8.3	YES
4	4	13C9-PFNA	17009...	6.21e3	8.9	YES
5	5	13C4-PFOS	17009...	1.04e3	9.6	YES
6	6	13C6-PFDA	17009...	5.71e3	8.8	YES
7	7	13C7-PFUnA	17009...	5.67e3	8.9	YES

Name: 170811M2_88, Date: 12-Aug-2017, Time: 09:57:55, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	7.56e0	0.0	NO

Name: 170811M2_89, Date: 12-Aug-2017, Time: 10:08:50, ID: 1700958-05 MATP03049 1, Description: MATP03049

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.39e4	131.3	NO
2	2	13C3-PFHxS	17009...	8.43e3	107.0	NO
3	3	13C8-PFOA	17009...	4.49e4	72.7	NO
4	4	13C9-PFNA	17009...	4.33e4	62.1	NO
5	5	13C4-PFOS	17009...	6.28e3	57.7	NO
6	6	13C6-PFDA	17009...	4.86e4	75.1	NO
7	7	13C7-PFUnA	17009...	4.56e4	71.6	NO

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Name: 170811M2_90, Date: 12-Aug-2017, Time: 10:19:52, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.38e1	0.0	NO

Name: 170811M2_91, Date: 12-Aug-2017, Time: 10:30:50, ID: 1700958-06 MATP03050 1, Description: MATP03050

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.14e4	149.7	NO
2	2	13C3-PFHxS	17009...	6.50e3	82.6	NO
3	3	13C8-PFOA	17009...	5.32e4	86.3	NO
4	4	13C9-PFNA	17009...	4.96e4	71.2	NO
5	5	13C4-PFOS	17009...	9.17e3	84.2	NO
6	6	13C6-PFDA	17009...	5.44e4	84.1	NO
7	7	13C7-PFUnA	17009...	5.46e4	85.6	NO

Name: 170811M2_92, Date: 12-Aug-2017, Time: 10:41:45, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	2.98e1	0.0	NO

Name: 170811M2_93, Date: 12-Aug-2017, Time: 10:52:40, ID: 1700958-06@5X MATP03050 1, Description: MATP03050

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	1.99e4	48.5	YES
2	2	13C3-PFHxS	17009...	2.52e3	32.0	YES
3	3	13C8-PFOA	17009...	1.71e4	27.7	YES
4	4	13C9-PFNA	17009...	1.70e4	24.4	YES
5	5	13C4-PFOS	17009...	2.86e3	26.2	YES
6	6	13C6-PFDA	17009...	1.86e4	28.8	YES
7	7	13C7-PFUnA	17009...	1.54e4	24.2	YES

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Name: 170811M2_94, Date: 12-Aug-2017, Time: 11:03:33, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

Name: 170811M2_95, Date: 12-Aug-2017, Time: 11:14:31, ID: 1700958-07 MATP03051 1, Description: MATP03051

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.50e4	158.4	YES
2	2	13C3-PFHxS	17009...	1.10e4	139.8	NO
3	3	13C8-PFOA	17009...	5.54e4	89.8	NO
4	4	13C9-PFNA	17009...	6.10e4	87.5	NO
5	5	13C4-PFOS	17009...	1.00e4	92.1	NO
6	6	13C6-PFDA	17009...	6.35e4	98.3	NO
7	7	13C7-PFUnA	17009...	5.33e4	83.6	NO

Name: 170811M2_96, Date: 12-Aug-2017, Time: 11:25:25, ID: 1700958-09 MATP04060 1, Description: MATP04060

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	7.06e4	172.1	YES
2	2	13C3-PFHxS	17009...	1.15e4	145.9	NO
3	3	13C8-PFOA	17009...	5.75e4	93.3	NO
4	4	13C9-PFNA	17009...	6.83e4	98.0	NO
5	5	13C4-PFOS	17009...	1.01e4	92.9	NO
6	6	13C6-PFDA	17009...	6.47e4	100.1	NO
7	7	13C7-PFUnA	17009...	6.37e4	100.0	NO

Name: 170811M2_97, Date: 12-Aug-2017, Time: 11:36:27, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA	8.35e0	0.0	NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

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Name: 170811M2_98, Date: 12-Aug-2017, Time: 11:47:23, ID: ST170811M2-6 PFC CS3 17H1105, Description: PFC CS3 17H1105

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	4.43e4	107.9	NO
2	2	13C3-PFHxS	ST170...	8.69e3	110.3	NO
3	3	13C8-PFOA	ST170...	6.68e4	108.3	NO
4	4	13C9-PFNA	ST170...	7.30e4	104.7	NO
5	5	13C4-PFOS	ST170...	1.10e4	100.8	NO
6	6	13C6-PFDA	ST170...	6.46e4	99.9	NO
7	7	13C7-PFUnA	ST170...	6.41e4	100.7	NO

Name: 170811M2_99, Date: 12-Aug-2017, Time: 11:58:20, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	8.58e0	0.0	NO

Name: 170811M2_100, Date: 12-Aug-2017, Time: 12:09:15, ID: 1700958-13 MATP05079 1, Description: MATP05079

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.56e4	159.7	YES
2	2	13C3-PFHxS	17009...	1.04e4	132.1	NO
3	3	13C8-PFOA	17009...	5.33e4	86.4	NO
4	4	13C9-PFNA	17009...	6.25e4	89.7	NO
5	5	13C4-PFOS	17009...	9.85e3	90.5	NO
6	6	13C6-PFDA	17009...	5.78e4	89.4	NO
7	7	13C7-PFUnA	17009...	5.91e4	92.8	NO

Name: 170811M2_101, Date: 12-Aug-2017, Time: 12:20:04, ID: 1700958-14 MATP05080 0.125, Description: MATP05080

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.27e4	152.8	YES
2	2	13C3-PFHxS	17009...	1.02e4	129.9	NO
3	3	13C8-PFOA	17009...	4.94e4	80.0	NO
4	4	13C9-PFNA	17009...	6.07e4	87.1	NO
5	5	13C4-PFOS	17009...	1.03e4	94.2	NO
6	6	13C6-PFDA	17009...	6.32e4	97.7	NO
7	7	13C7-PFUnA	17009...	6.68e4	104.8	NO

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Name: 170811M2_102, Date: 12-Aug-2017, Time: 12:31:04, ID: 1700958-15@10X MATP05081 1, Description: MATP05081

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.86e3	16.7	YES
2	2	13C3-PFHxS	17009...	8.28e2	10.5	YES
3	3	13C8-PFOA	17009...	5.58e3	9.0	YES
4	4	13C9-PFNA	17009...	6.45e3	9.3	YES
5	5	13C4-PFOS	17009...	1.00e3	9.2	YES
6	6	13C6-PFDA	17009...	6.29e3	9.7	YES
7	7	13C7-PFUnA	17009...	5.90e3	9.3	YES

Name: 170811M2_103, Date: 12-Aug-2017, Time: 12:41:58, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.18e1	0.0	NO

Name: 170811M2_104, Date: 12-Aug-2017, Time: 12:52:54, ID: 1700958-15 MATP05081 1, Description: MATP05081

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.81e4	141.4	NO
2	2	13C3-PFHxS	17009...	9.09e3	115.4	NO
3	3	13C8-PFOA	17009...	5.35e4	86.8	NO
4	4	13C9-PFNA	17009...	5.67e4	81.4	NO
5	5	13C4-PFOS	17009...	5.36e3	49.2	YES
6	6	13C6-PFDA	17009...	5.58e4	86.3	NO
7	7	13C7-PFUnA	17009...	5.54e4	86.9	NO

Name: 170811M2_105, Date: 12-Aug-2017, Time: 13:03:49, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	2.03e1	0.0	NO

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Name: 170811M2_106, Date: 12-Aug-2017, Time: 13:14:44, ID: 1700959-04@5X MATP10119a 0.125, Description: MATP10119a

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	1.31e4	31.9	YES
2	2	13C3-PFHxS	17009...	2.07e3	26.3	YES
3	3	13C8-PFOA	17009...	1.06e4	17.1	YES
4	4	13C9-PFNA	17009...	1.38e4	19.8	YES
5	5	13C4-PFOS	17009...	2.27e3	20.9	YES
6	6	13C6-PFDA	17009...	1.04e4	16.1	YES
7	7	13C7-PFUnA	17009...	1.14e4	17.9	YES

Name: 170811M2_107, Date: 12-Aug-2017, Time: 13:25:39, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	9.91e0	0.0	NO

Name: 170811M2_108, Date: 12-Aug-2017, Time: 13:36:33, ID: 1700959-05@10X MATPXX132a 0.125, Description: MATPXX132a

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.59e3	16.1	YES
2	2	13C3-PFHxS	17009...	1.04e3	13.2	YES
3	3	13C8-PFOA	17009...	5.92e3	9.6	YES
4	4	13C9-PFNA	17009...	6.04e3	8.7	YES
5	5	13C4-PFOS	17009...	1.01e3	9.3	YES
6	6	13C6-PFDA	17009...	6.18e3	9.6	YES
7	7	13C7-PFUnA	17009...	5.47e3	8.6	YES

Name: 170811M2_109, Date: 12-Aug-2017, Time: 13:47:27, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

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Dataset: U:\Q4.PRO\results\170811M2\RS AREAS.qld

Last Altered: Saturday, August 12, 2017 15:54:33 Pacific Daylight Time
Printed: Saturday, August 12, 2017 15:57:23 Pacific Daylight Time

Name: 170811M2_110, Date: 12-Aug-2017, Time: 13:58:21, ID: 1700959-06 MATPXX130a 0.125, Description: MATPXX130a

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.94e4	144.6	NO
2	2	13C3-PFHxS	17009...	9.81e3	124.5	NO
3	3	13C8-PFOA	17009...	5.18e4	83.9	NO
4	4	13C9-PFNA	17009...	5.47e4	78.5	NO
5	5	13C4-PFOS	17009...	9.84e3	90.3	NO
6	6	13C6-PFDA	17009...	5.01e4	77.5	NO
7	7	13C7-PFUnA	17009...	5.67e4	89.0	NO

Name: 170811M2_111, Date: 12-Aug-2017, Time: 14:09:18, ID: 1700959-07@20X MATPXX126a 0.125, Description: MATPXX126a

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	2.62e3	6.4	YES
2	2	13C3-PFHxS	17009...	4.97e2	6.3	YES
3	3	13C8-PFOA	17009...	2.74e3	4.4	YES
4	4	13C9-PFNA	17009...	3.32e3	4.8	YES
5	5	13C4-PFOS	17009...	5.41e2	5.0	YES
6	6	13C6-PFDA	17009...	3.05e3	4.7	YES
7	7	13C7-PFUnA	17009...	3.46e3	5.4	YES

Name: 170811M2_112, Date: 12-Aug-2017, Time: 14:20:12, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA	1.27e1	0.0	NO
7	7	13C7-PFUnA	IPA	3.00e1	0.0	NO

Name: 170811M2_113, Date: 12-Aug-2017, Time: 14:31:05, ID: 1700961-10 MATP04064 0.125, Description: MATP04064

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.96e4	169.7	YES
2	2	13C3-PFHxS	17009...	1.11e4	140.8	NO
3	3	13C8-PFOA	17009...	5.87e4	95.2	NO
4	4	13C9-PFNA	17009...	6.00e4	86.2	NO
5	5	13C4-PFOS	17009...	1.03e4	95.0	NO
6	6	13C6-PFDA	17009...	5.30e4	81.9	NO
7	7	13C7-PFUnA	17009...	6.04e4	94.7	NO

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Dataset: U:\Q4.PRO\results\170811M2\RS AREAS.qld

Last Altered: Saturday, August 12, 2017 15:54:33 Pacific Daylight Time
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Name: 170811M2_114, Date: 12-Aug-2017, Time: 14:42:02, ID: 1700966-03 MW-13 0.125, Description: MW-13

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	7.37e4	179.7	YES
2	2	13C3-PFHxS	17009...	1.17e4	148.8	NO
3	3	13C8-PFOA	17009...	6.40e4	103.7	NO
4	4	13C9-PFNA	17009...	7.52e4	107.9	NO
5	5	13C4-PFOS	17009...	1.22e4	111.9	NO
6	6	13C6-PFDA	17009...	7.49e4	115.9	NO
7	7	13C7-PFUnA	17009...	6.42e4	100.8	NO

Name: 170811M2_115, Date: 12-Aug-2017, Time: 14:52:59, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	9.53e0	0.0	NO

Name: 170811M2_116, Date: 12-Aug-2017, Time: 15:03:54, ID: ST170811M2-7 PFC CS3 17H1105, Description: PFC CS3 17H1105

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	4.47e4	108.9	NO
2	2	13C3-PFHxS	ST170...	8.88e3	112.7	NO
3	3	13C8-PFOA	ST170...	6.72e4	109.0	NO
4	4	13C9-PFNA	ST170...	7.57e4	108.7	NO
5	5	13C4-PFOS	ST170...	1.18e4	108.7	NO
6	6	13C6-PFDA	ST170...	7.73e4	119.6	NO
7	7	13C7-PFUnA	ST170...	7.15e4	112.1	NO

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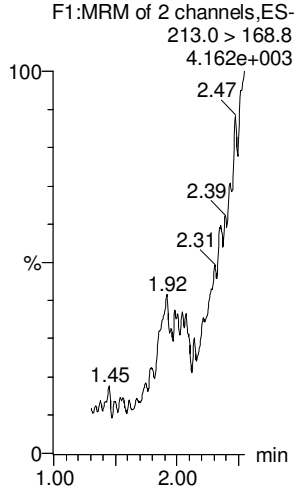
Dataset: U:\Q4.PRO\results\170811M1\170811M1-3.qld

Last Altered: Saturday, August 12, 2017 10:41:21 Pacific Daylight Time
Printed: Saturday, August 12, 2017 10:41:53 Pacific Daylight Time

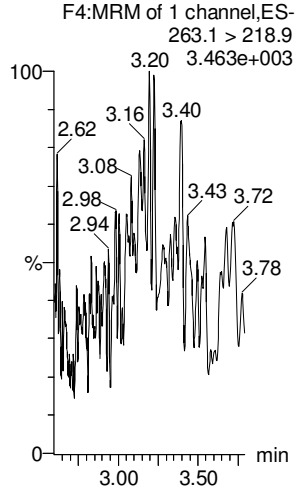
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M1_3, Date: 11-Aug-2017, Time: 11:39:40, ID: IPA, Description: IPA

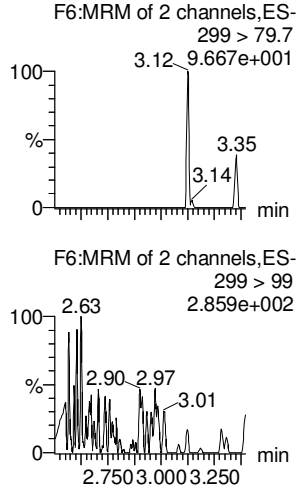
PFBA



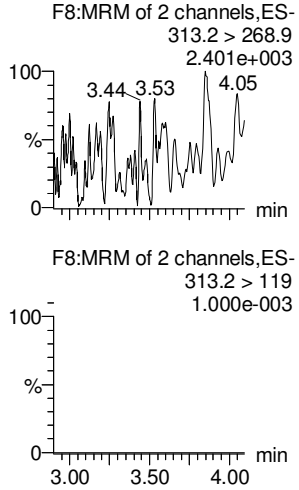
PFPeA



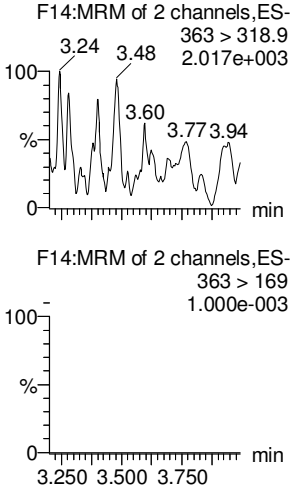
PFBS



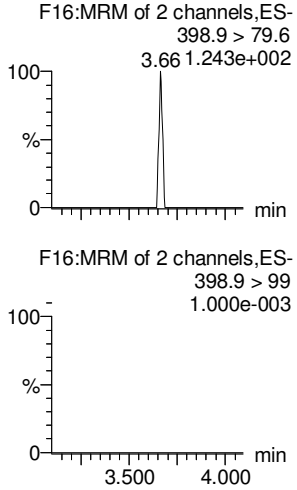
PFHxA



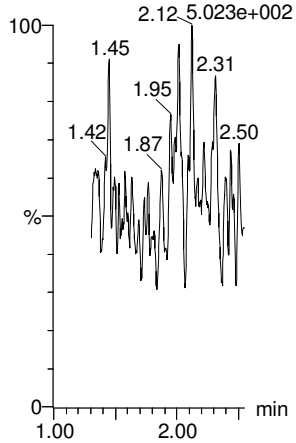
PFHpA



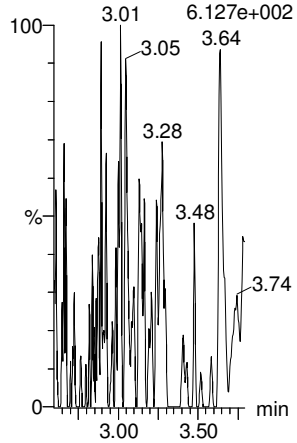
PFHxS



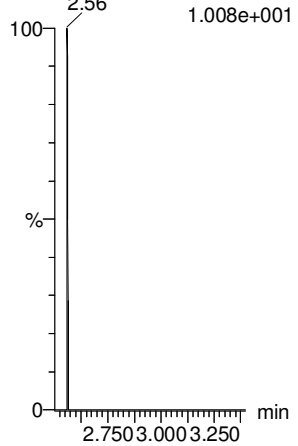
13C3-PFBA



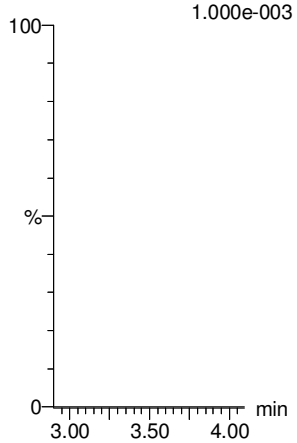
13C3-PFPeA



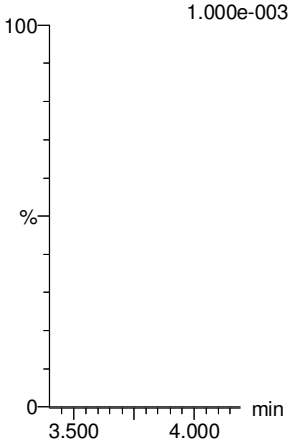
13C3-PFBS



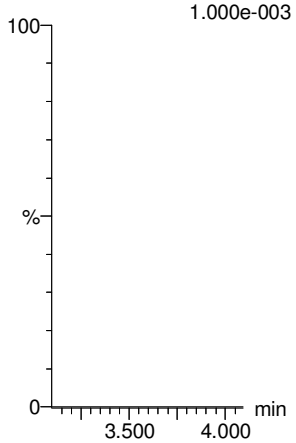
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



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Dataset: U:\Q4.PRO\results\170811M1\170811M1-3.qld

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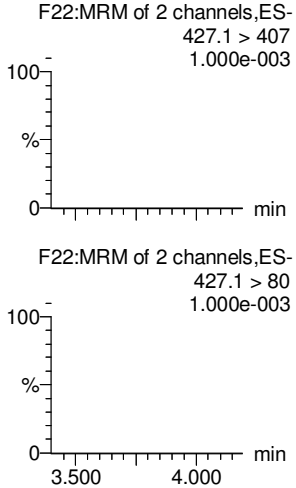
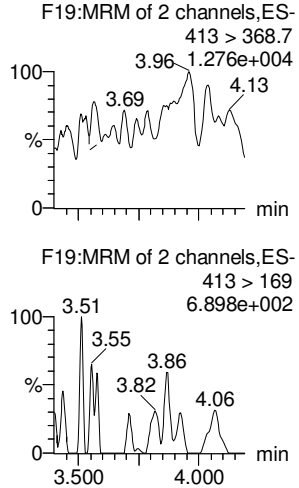
Name: 170811M1_3, Date: 11-Aug-2017, Time: 11:39:40, ID: IPA, Description: IPA

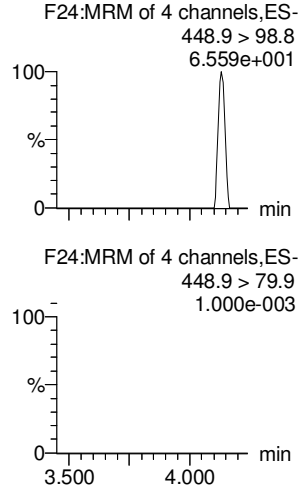
6:2 FTS



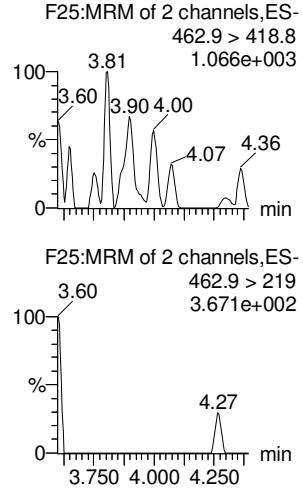
PFOA



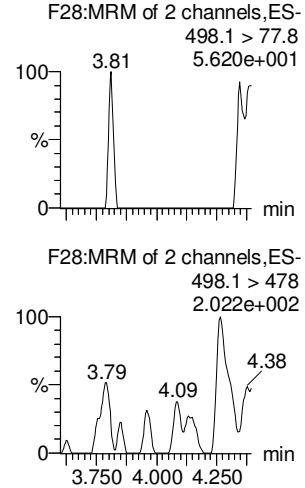
PFHpS



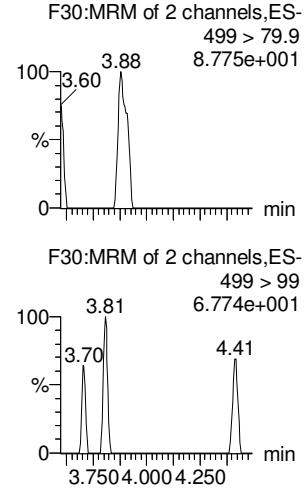
PFNA



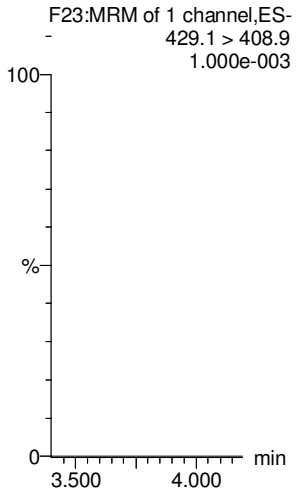
PFOSA



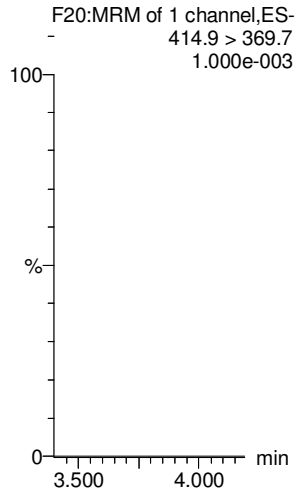
PFOS



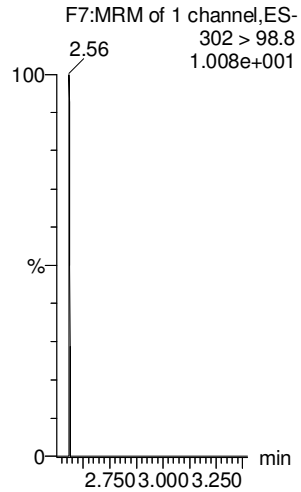
13C2-6:2 FTS



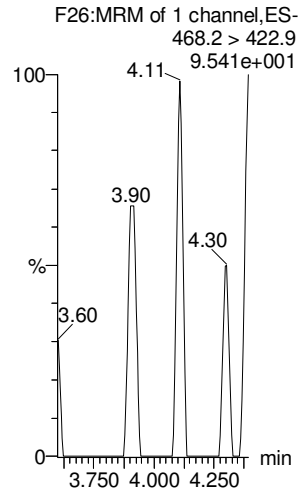
13C2-PFOA



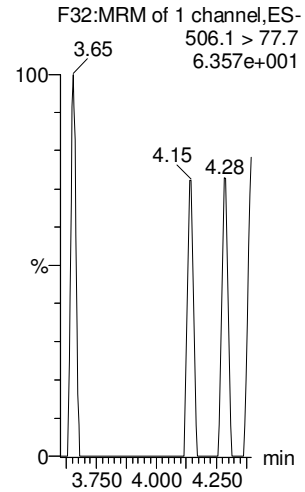
13C3-PFBS



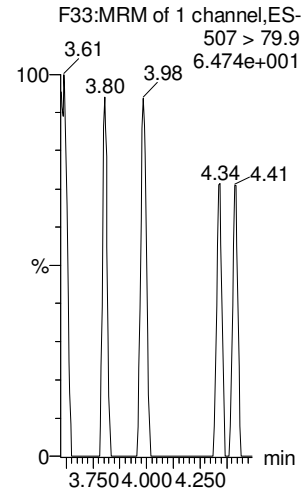
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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Dataset: U:\Q4.PRO\results\170811M1\170811M1-3.qld

Last Altered: Saturday, August 12, 2017 10:41:21 Pacific Daylight Time
Printed: Saturday, August 12, 2017 10:41:53 Pacific Daylight Time

Name: 170811M1_3, Date: 11-Aug-2017, Time: 11:39:40, ID: IPA, Description: IPA

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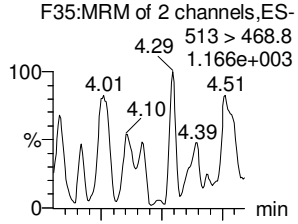
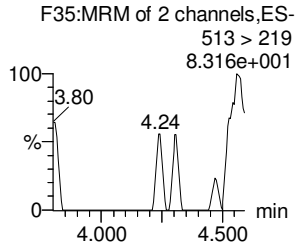
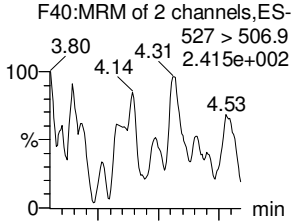
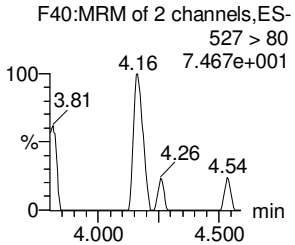


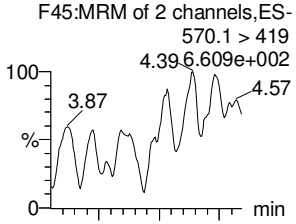


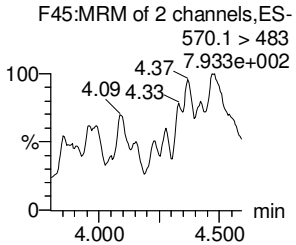
8:2 FTS



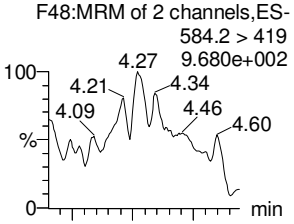


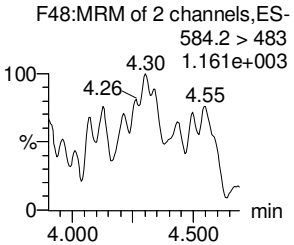
N-MeFOSAA



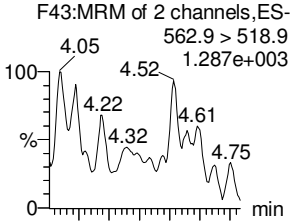


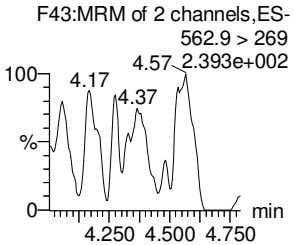
N-EtFOSAA





PFUnA





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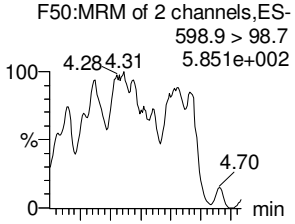
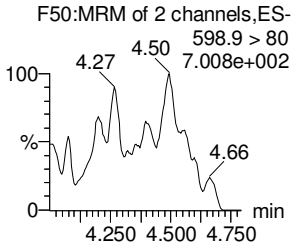
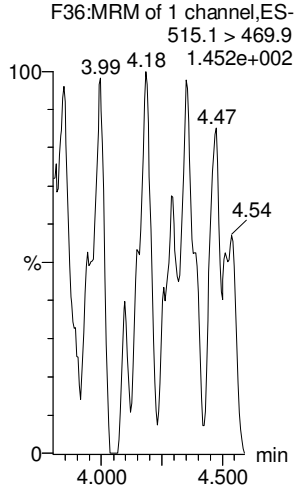
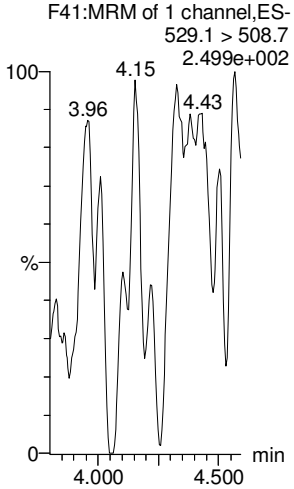




13C2-PFDA



13C2-8:2 FTS



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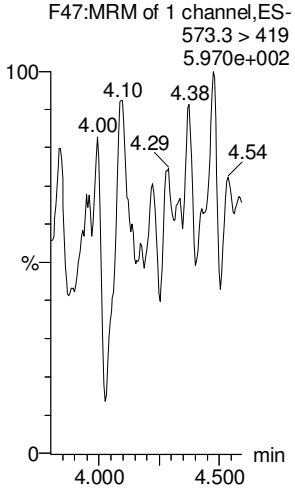

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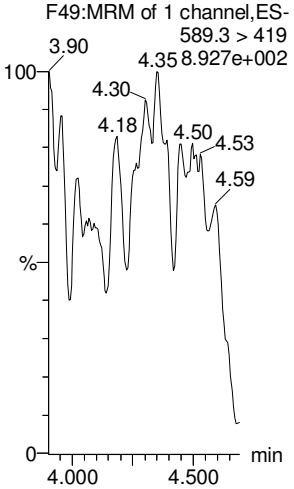
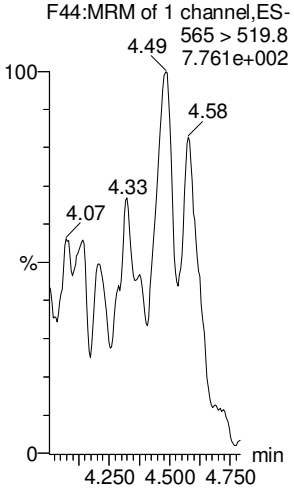


13C2-PFUnA



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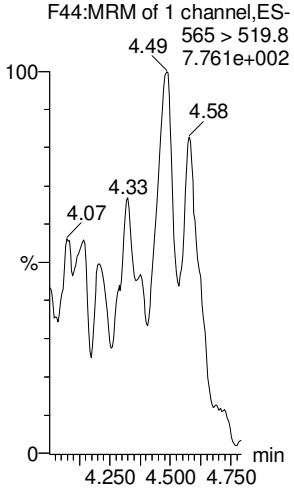

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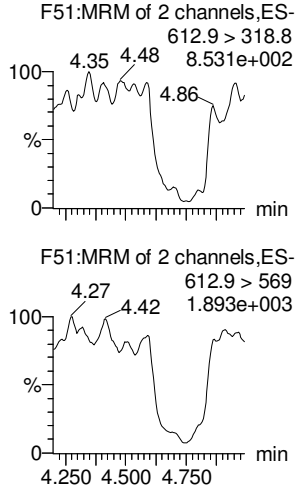
Dataset: U:\Q4.PRO\results\170811M1\170811M1-3.qld

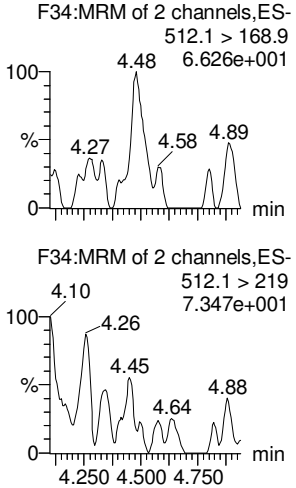
Last Altered: Saturday, August 12, 2017 10:41:21 Pacific Daylight Time
Printed: Saturday, August 12, 2017 10:41:53 Pacific Daylight Time

Name: 170811M1_3, Date: 11-Aug-2017, Time: 11:39:40, ID: IPA, Description: IPA

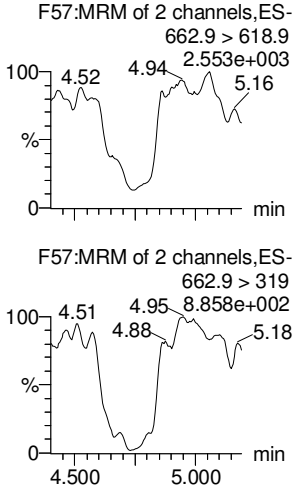
PFDoA



N-MeFOSA



PFTrDA



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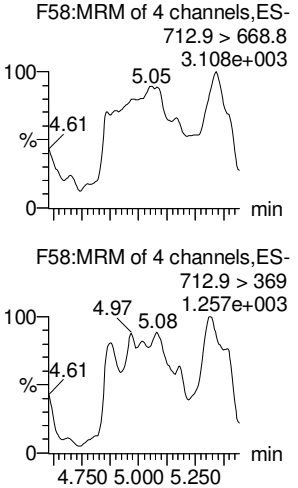
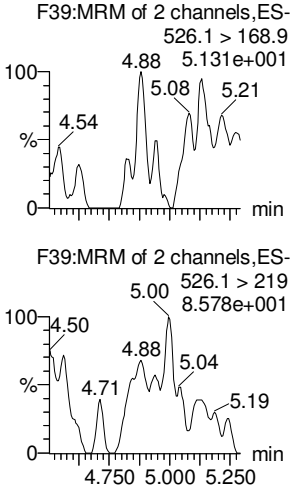
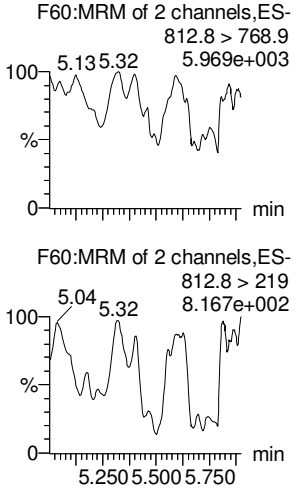


N-EtFOSA



PFHxDA



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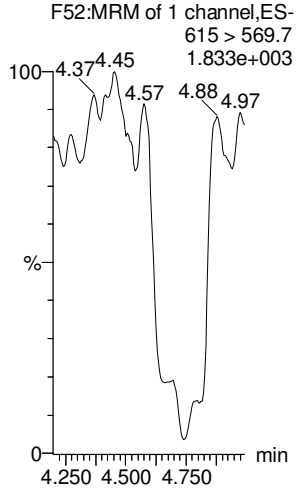
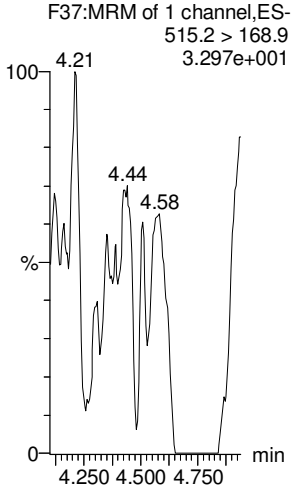


d3-N-MeFOSA



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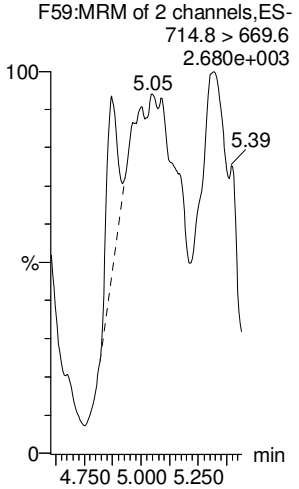

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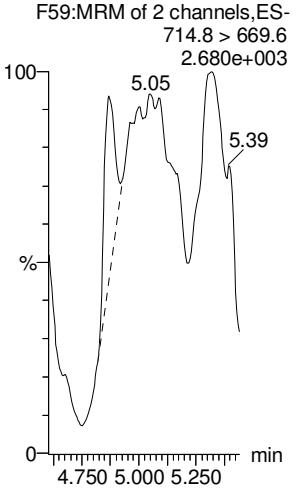

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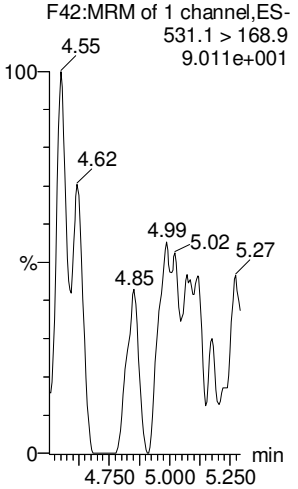

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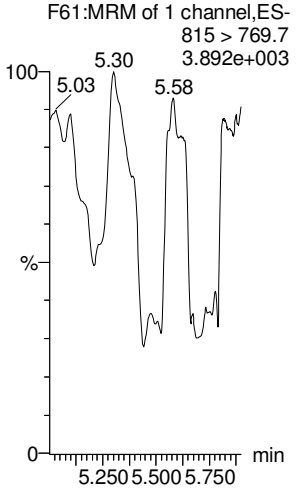

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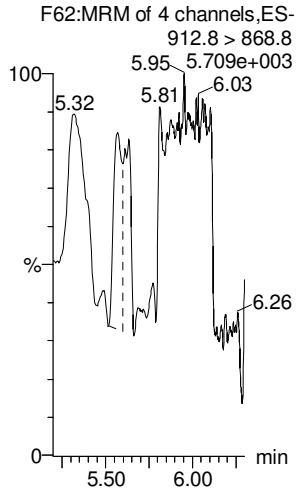
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170811M1\170811M1-3.qld

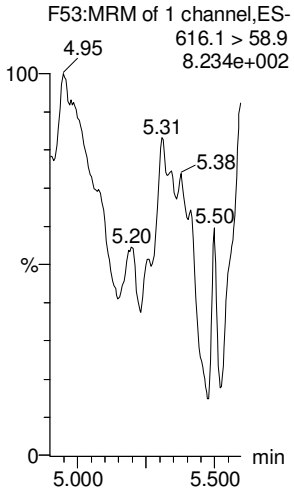
Last Altered: Saturday, August 12, 2017 10:41:21 Pacific Daylight Time
Printed: Saturday, August 12, 2017 10:41:53 Pacific Daylight Time

Name: 170811M1_3, Date: 11-Aug-2017, Time: 11:39:40, ID: IPA, Description: IPA

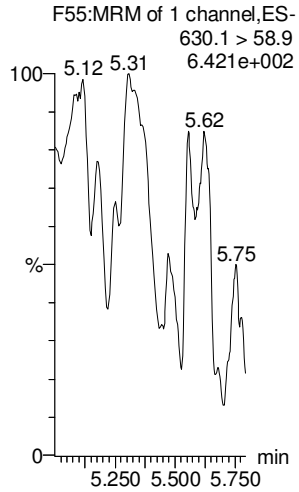
PFODA



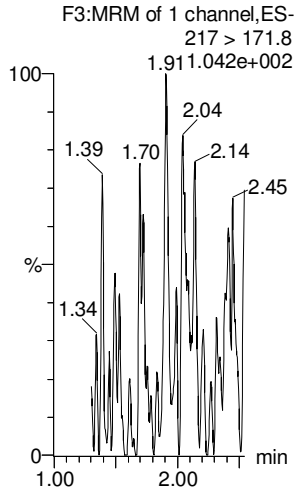
N-MeFOSE



N-EtFOSE



13C4-PFBA



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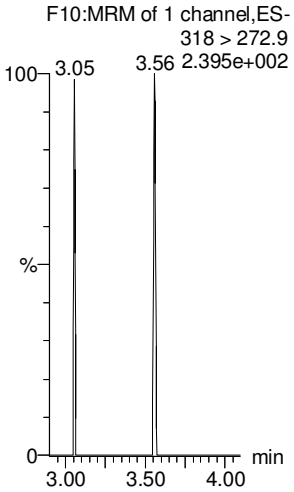
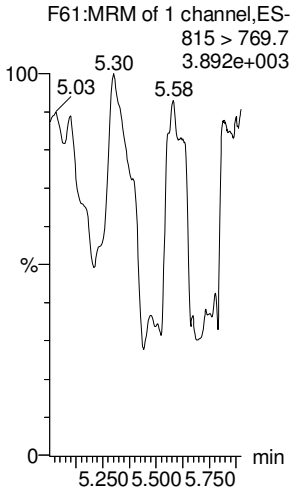
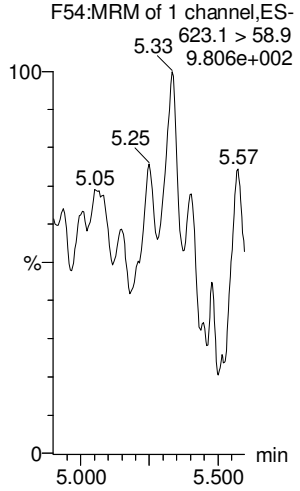


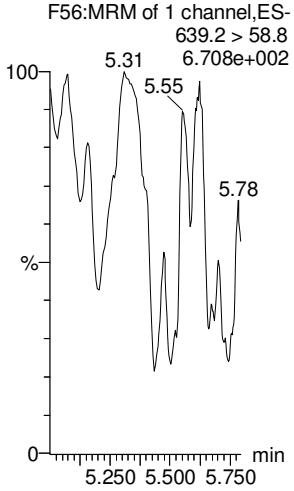
13C2-PFHxDA



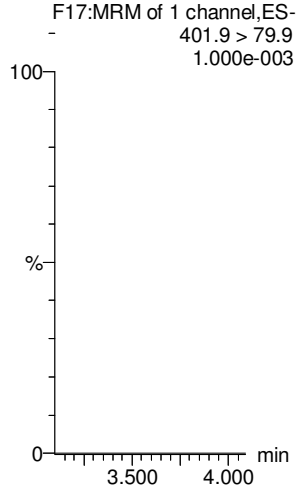
d7-N-MeFOSE



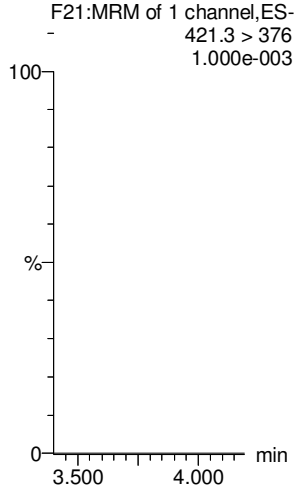
d9-N-EtFOSE



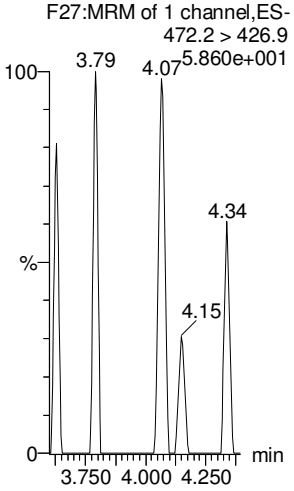
13C3-PFHxS



13C8-PFOA



13C9-PFNA



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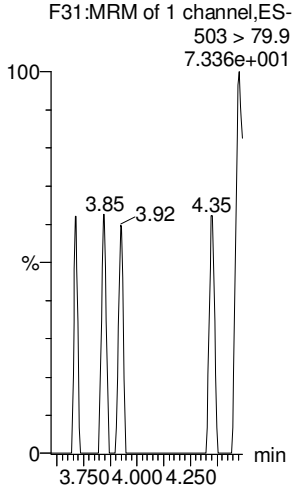
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170811M1\170811M1-3.qld

Last Altered: Saturday, August 12, 2017 10:41:21 Pacific Daylight Time
Printed: Saturday, August 12, 2017 10:41:53 Pacific Daylight Time

Name: 170811M1_3, Date: 11-Aug-2017, Time: 11:39:40, ID: IPA, Description: IPA

13C4-PFOS



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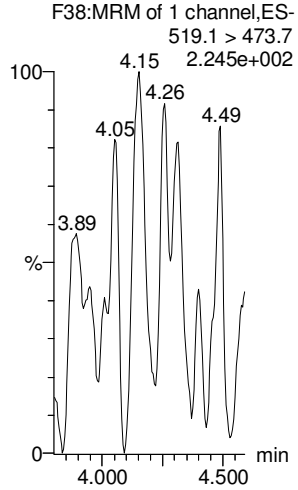
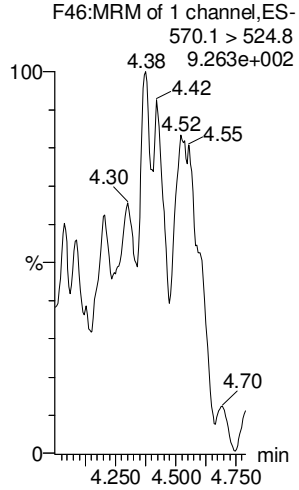


13C7-PFUnA



GM 8/12/17

Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN945 SCN960**
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170811M2\170811M2-2.qld

Last Altered: Saturday, August 12, 2017 16:41:42 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:42:14 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 12 Aug 2017 16:32:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_2, Date: 11-Aug-2017, Time: 18:35:42, ID: ST170811M2-1 PFC CS0 17H1106, Description: PFC CS0 17H1106

(A) out of limit criteria, not used.

	#	Name	Trace	Area	IS Resp	RRF	Wt./Vol	RT	Conc.	%Rec	
1	1	PFBA	213.0 > 168.8	1526.804	15896.248		1.000	1.73	1.04	104.45	70-130
2	2	PFPeA	263.1 > 218.9	2290.760	27362.303		1.000	2.85	0.98	98.47	
3	3	PFBS	299 > 79.7	482.625	3320.060		1.000	3.03	0.96	95.55	
4	4	PFHxA	313.2 > 268.9	3588.384	11502.362		1.000	3.23	0.73	73.01	
5	5	PFHpA	363 > 318.9	3516.268	35960.523		1.000	3.48	0.62	(A) 62.09	
6	6	PFHxS	398.9 > 79.6	428.208	3200.417		1.000	3.55	1.01	101.07	
7	7	6:2 FTS	427.1 > 407	991.113	11445.396		1.000	3.67	1.09	108.83	
8	8	PFOA	413 > 368.7	6056.989	65550.398		1.000	3.68	1.02	102.36	
9	9	PFHpS	448.9 > 98.8	484.435	65550.398		1.000	3.74	1.08	107.57	
10	10	PFNA	462.9 > 418.8	5996.742	61399.238		1.000	3.87	0.72	72.19	
11	11	PFOSA	498.1 > 77.8	568.032	6952.180		1.000	3.88	0.94	94.29	
12	12	PFOS	499 > 79.9	904.373	10122.739		1.000	3.92	1.08	108.19	
13	13	PFDA	513 > 468.8	5922.467	57358.012		1.000	4.04	1.04	103.91	
14	14	8:2 FTS	527 > 506.9	880.276	5777.006		1.000	4.04	1.34	(A) 134.39	
15	15	N-MeFOSAA	570.1 > 419	1627.344	13360.443		1.000	4.07	1.04	104.21	
16	16	N-EtFOSAA	584.2 > 419	1447.248	13874.303		1.000	4.14	1.04	104.29	
17	17	PFUnA	562.9 > 518.9	4680.717	64991.797		1.000	4.20	1.00	100.17	
18	18	PFDS	598.9 > 98.7	457.441	64991.797		1.000	4.25	0.94	93.53	
19	19	PFDoA	612.9 > 318.8	455.310	7639.764		1.000	4.37	0.84	83.99	
20	20	N-MeFOSA	512.1 > 168.9	946.892	27743.004		1.000	4.42	4.94	98.80	
21	21	PFTrDA	662.9 > 618.9	6957.736	7639.764		1.000	4.55	1.01	101.29	
22	22	PFTeDA	712.9 > 668.8	4867.505	50590.969		1.000	4.73	0.96	96.18	
23	23	N-EtFOSA	526.1 > 168.9	1273.096	35470.379		1.000	4.90	5.61	112.17	
24	24	PFHxDA	812.8 > 768.9	6941.739	23603.436		1.000	5.09	0.89	88.94	
25	25	PFODA	912.8 > 868.8	6606.429	23603.436		1.000	5.45	1.02	101.97	
26	26	N-MeFOSE	616.1 > 58.9	1374.597	38699.793		1.000	5.25	4.83	96.58	
27	27	N-EtFOSE	630.1 > 58.9	1522.963	37771.453		1.000	5.42	3.45	(A) 68.92	
28	28	13C3-PFBA	216.1 > 171.8	15896.248	17561.268	0.906	1.000	1.73	12.49	99.93	50-150
29	29	13C3-PFPeA	266 > 221.8	27362.303	38167.094	0.284	1.000	2.85	12.63	101.01	
30	30	13C3-PFBS	302 > 98.8	3320.060	38167.094	0.033	1.000	3.03	13.23	105.83	
31	31	13C2-PFHxA	315 > 269.8	11502.362	38167.094	0.304	1.000	3.23	4.96	99.25	

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Dataset: U:\Q4.PRO\results\170811M2\170811M2-2.qld

Last Altered: Saturday, August 12, 2017 16:41:42 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:42:14 Pacific Daylight Time

Name: 170811M2_2, Date: 11-Aug-2017, Time: 18:35:42, ID: ST170811M2-1 PFC CS0 17H1106, Description: PFC CS0 17H1106

	#	Name	Trace	Area	IS Resp	RRF	Wt./Vol	RT	Conc.	%Rec
32	32	13C4-PFHpA	367.2 > 321.8	35960.523	38167.094	0.384	1.000	3.49	12.27	98.13
33	33	18O2-PFHxS	403 > 102.6	3200.417	7658.811	0.417	1.000	3.55	12.52	100.18
34	34	13C2-6:2 FTS	429.1 > 408.9	11445.396	60030.492	0.202	1.000	3.67	11.81	94.52
35	35	13C2-PFOA	414.9 > 369.7	65550.398	60030.492	1.132	1.000	3.68	12.06	96.45
36	36	13C5-PFNA	468.2 > 422.9	61399.238	68212.227	0.946	1.000	3.87	11.89	95.14
37	37	13C8-PFOSA	506.1 > 77.7	6952.180	62654.039	0.119	1.000	3.87	11.61	92.92
38	38	13C8-PFOS	507 > 79.9	10122.739	10264.832	1.040	1.000	3.92	11.85	94.84
39	39	13C2-PFDA	515.1 > 469.9	57358.012	58465.094	0.971	1.000	4.04	12.63	101.06
40	40	13C2-8:2 FTS	529.1 > 508.7	5777.006	58465.094	0.140	1.000	4.04	8.80	70.44
41	41	d3-N-MeFOSAA	573.3 > 419	13360.443	62654.039	0.018	1.000	4.07	149.84	92.21
42	42	d5-N-EtFOSAA	589.3 > 419	13874.303	62654.039	0.018	1.000	4.14	151.83	93.43
43	43	13C2-PFUnA	565 > 519.8	64991.797	62654.039	1.085	1.000	4.21	11.95	95.59
44	44	13C2-PFDoA	615 > 569.7	7639.764	62654.039	0.123	1.000	4.37	12.38	99.03
45	45	d3-N-MeFOSA	515.2 > 168.9	27743.004	62654.039	0.043	1.000	4.45	127.93	85.28
46	46	13C2-PFTeDA	714.8 > 669.6	50590.969	62654.039	0.798	1.000	4.73	12.65	101.21
47	47	d5-N-ETFOSA	531.1 > 168.9	35470.379	62654.039	0.056	1.000	4.93	127.10	84.73
48	48	13C2-PFHxDA	815 > 769.7	23603.436	62654.039	0.926	1.000	5.09	5.08	101.66
49	49	d7-N-MeFOSE	623.1 > 58.9	38699.793	62654.039	0.059	1.000	5.24	129.88	86.59
50	50	d9-N-EtFOSE	639.2 > 58.8	37771.453	62654.039	0.059	1.000	5.40	126.69	84.46
51	51	13C4-PFBA	217 > 171.8	17561.268	17561.268	1.000	1.000	1.73	12.50	100.00
52	52	13C5-PFHxA	318 > 272.9	38167.094	38167.094	1.000	1.000	3.23	5.00	100.00
53	53	13C3-PFHxS	401.9 > 79.9	7658.811	7658.811	1.000	1.000	3.55	12.50	100.00
54	54	13C8-PFOA	421.3 > 376	60030.492	60030.492	1.000	1.000	3.68	12.50	100.00
55	55	13C9-PFNA	472.2 > 426.9	68212.227	68212.227	1.000	1.000	3.87	12.50	100.00
56	56	13C4-PFOS	503 > 79.9	10264.832	10264.832	1.000	1.000	3.92	12.50	100.00
57	57	13C6-PFDA	519.1 > 473.7	58465.094	58465.094	1.000	1.000	4.04	12.50	100.00
58	58	13C7-PFUnA	570.1 > 524.8	62654.039	62654.039	1.000	1.000	4.20	12.50	100.00

50--150

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
1	170811M2_1	---	IPA	IPA	1.0000	1:48	Blank
2	170811M2_2	X	ST170811M2-1 PFC CS0 17H1106	PFC CS0 17H1106	1.0000	1:1	Standard
3	170811M2_3	---	IPA	IPA	1.0000	1:48	Blank
4	170811M2_4	X	B7H0073-BS1 OPR 0.125	OPR	0.1250	1:3	Analyte
5	170811M2_5	X	B7H0074-BS1 OPR 0.125	OPR	0.1250	1:4	Analyte
6	170811M2_6	---	IPA	IPA	1.0000	1:48	Blank
7	170811M2_7	X	B7H0073-BLK1 Method Blank 0.125	Method Blank	0.1250	1:5	Analyte
8	170811M2_8	X	B7H0074-BLK1 Method Blank 0.125	Method Blank	0.1250	1:6	Analyte
9	170811M2_9	X	B7H0073-MS1 Matrix Spike 0.0005	Matrix Spike	0.0005	1:7	Analyte
10	170811M2_10	---	IPA	IPA	1.0000	1:48	Blank
11	170811M2_11	X	B7H0073-MSD1 Matrix Spike Dup 0.00139	Matrix Spike Dup	0.0014	1:8	Analyte
12	170811M2_12	---	IPA	IPA	1.0000	1:48	Blank
13	170811M2_13	X	B7H0074-MS1 Matrix Spike 0.125	Matrix Spike	0.1250	1:9	Analyte
14	170811M2_14	X	B7H0074-MSD1 Matrix Spike Dup 0.125	Matrix Spike Dup	0.1250	1:10	Analyte
15	170811M2_15	x	1700925-04RE2 I001MW52S-170724 0.00122	I001MW52S-170724	0.0012	1:11	Analyte
16	170811M2_16	---	IPA	IPA	1.0000	1:48	Blank
17	170811M2_17	x	1700925-05RE2 I001MW52X-170724 0.00133	I001MW52X-170724	0.0013	1:12	Analyte
18	170811M2_18	---	IPA	IPA	1.0000	1:48	Blank
19	170811M2_19	x	1700922-01RE1 MH-L103-20170721 0.10565	MH-L103-20170721	0.1056	1:14	Analyte
20	170811M2_20	x	1700922-02RE1 MH-N104-20170721 0.11025	MH-N104-20170721	0.1103	1:15	Analyte
21	170811M2_21	x	1700922-03RE1 Upstream-Culvert-109-20170721 0.1185	Upstream-Culvert-109-20170721	0.1185	1:16	Analyte
22	170811M2_22	x	1700922-04RE1 FRB03-20170721 0.11017	FRB03-20170721	0.1102	1:17	Analyte
23	170811M2_23	x	1700922-05RE1 RB08-20170720 0.11893	RB08-20170720	0.1189	1:18	Analyte
24	170811M2_24	---	1700922-06RE1 RB09-20170721 0.11676	RB09-20170721	0.1168	1:19	Analyte
25	170811M2_25	---	1700925-01RE1 I001BC43S-170724 0.12112	I001BC43S-170724	0.1211	1:20	Analyte
26	170811M2_26	---	1700925-02RE1 SB01-170724 0.12178	SB01-170724	0.1218	1:21	Analyte
27	170811M2_27	---	IPA	IPA	1.0000	1:48	Blank
28	170811M2_28	---	ST170811M2-2 PFC CS3 17H1105	PFC CS3 17H1105	1.0000	1:2	Standard
29	170811M2_29	---	IPA	IPA	1.0000	1:48	Blank
30	170811M2_30	---	1700925-03RE1 I001BC50S-170724 0.12135	I001BC50S-170724	0.1214	1:22	Analyte
31	170811M2_31	---	1700925-06RE1 EB01-170724 0.1185	EB01-170724	0.1185	1:23	Analyte
32	170811M2_32	---	1700929-01RE1 MATP01001 0.11834	MATP01001	0.1183	1:24	Analyte
33	170811M2_33	---	1700929-02RE1 MATP01002 0.1157	MATP01002	0.1157	1:25	Analyte
34	170811M2_34	---	1700938-01RE1 NORP08102 0.11844	NORP08102	0.1184	1:26	Analyte
35	170811M2_35	---	1700938-02RE1 NORP08103 0.12014	NORP08103	0.1201	1:27	Analyte
36	170811M2_36	---	1700938-03RE1 NORP08104 0.11247	NORP08104	0.1125	1:28	Analyte
37	170811M2_37	---	IPA	IPA	1.0000	1:48	Blank
38	170811M2_38	---	B7H0073-MS1@20X Matrix Spike 0.0005	Matrix Spike	0.0005	1:29	Analyte
39	170811M2_39	---	IPA	IPA	1.0000	1:48	Blank
40	170811M2_40	---	B7H0073-MSD1@20X Matrix Spike Dup 0.00139	Matrix Spike Dup	0.0014	1:30	Analyte

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
41	170811M2_41	---	IPA	IPA	1.0000	1:48	Blank
42	170811M2_42	---	1700925-04RE2@20X I001MW52S-170724 0.00122	I001MW52S-170724	0.0012	1:31	Analyte
43	170811M2_43	---	IPA	IPA	1.0000	1:48	Blank
44	170811M2_44	---	1700925-05RE2@20X I001MW52X-170724 0.00133	I001MW52X-170724	0.0013	1:32	Analyte
45	170811M2_45	---	IPA	IPA	1.0000	1:48	Blank
46	170811M2_46	---	1700958-15RE1@10X MATP05081 1.02	MATP05081	0.9982	2:26	Analyte
47	170811M2_47	---	IPA	IPA	1.0000	1:48	Blank
48	170811M2_48	---	ST170811M2-3 PFC CS3 17H1105	PFC CS3 17H1105	1.0000	1:2	Standard
49	170811M2_49	---	IPA	IPA	1.0000	1:48	Blank
50	170811M2_50	---	1701007-03 RI17-EB3-080317 0.26497	RI17-EB3-080317	0.2650	1:33	Analyte
51	170811M2_51	---	1701007-04 RI17-EB8-080317 0.26753	RI17-EB8-080317	0.2675	1:34	Analyte
52	170811M2_52	---	IPA	IPA	1.0000	1:48	Blank
53	170811M2_53	---	1700958-06RE1 MATP03050 1.22	MATP03050	1.0219	1:35	Analyte
54	170811M2_54	---	IPA	IPA	1.0000	1:48	Blank
55	170811M2_55	---	1700958-09RE1 MATP04060 1.27	MATP04060	1.0295	1:36	Analyte
56	170811M2_56	---	1700958-10RE1 MATP04061 1.27	MATP04061	1.0096	1:37	Analyte
57	170811M2_57	---	1700958-13RE1 MATP05079 1.1	MATP05079	1.0125	1:38	Analyte
58	170811M2_58	---	1700958-15RE1 MATP05081 1.02	MATP05081	0.9982	1:39	Analyte
59	170811M2_59	---	IPA	IPA	1.0000	1:48	Blank
60	170811M2_60	---	1700961-02 MATP05098 1	MATP05098	1.0000	1:40	Analyte
61	170811M2_61	---	1700961-03 MATP05099 1	MATP05099	1.0000	1:41	Analyte
62	170811M2_62	---	1700961-04 MATP05100 1	MATP05100	1.0000	1:42	Analyte
63	170811M2_63	---	IPA	IPA	1.0000	1:48	Blank
64	170811M2_64	---	ST170811M2-4 PFC CS0 17H1106	PFC CS0 17H1106	1.0000	1:1	Standard
65	170811M2_65	---	IPA	IPA	1.0000	1:48	Blank
66	170811M2_66	---	1700961-05 MATP05102 1	MATP05102	1.0000	1:43	Analyte
67	170811M2_67	---	1700961-06 MATP05103 1	MATP05103	1.0000	1:44	Analyte
68	170811M2_68	---	1700961-07 MATP04055 1	MATP04055	1.0000	1:45	Analyte
69	170811M2_69	---	1700961-08 MATP03041 1	MATP03041	1.0000	1:46	Analyte
70	170811M2_70	---	1700961-09 MATP04063 1	MATP04063	1.0000	1:47	Analyte
71	170811M2_71	---	1700961-11 MATP04065 1	MATP04065	1.0000	2:1	Analyte
72	170811M2_72	---	1700961-12 MATP04066 1	MATP04066	1.0000	2:2	Analyte
73	170811M2_73	X	1700960-03 MATP05084 0.125	MATP05084	0.1250	2:3	Analyte
74	170811M2_74	X	1700960-05 MATP05086 1	MATP05086	1.0000	2:4	Analyte
75	170811M2_75	---	1700960-10 MATP05091 1	MATP05091	1.0000	2:5	Analyte
76	170811M2_76	---	IPA	IPA	1.0000	1:48	Blank
77	170811M2_77	X	ST170811M2-~~3~~ 5 PFC CS3 17H1105	PFC CS3 17H1105	1.0000	1:2	Standard
78	170811M2_78	---	IPA	IPA	1.0000	1:48	Blank
79	170811M2_79	---	1700960-11 MATP05092 1	MATP05092	1.0000	2:6	Analyte
80	170811M2_80	---	IPA	IPA	1.0000	1:48	Blank

eln 8/12/17

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	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
81	170811M2_81	X	1700960-04@5X MATP05085 1	MATP05085	1.0000	2:7	Analyte
82	170811M2_82	---	IPA	IPA	1.0000	1:48	Blank
83	170811M2_83	X	1700958-04 MATP03048 1	MATP03048	1.0000	2:8	Analyte
84	170811M2_84	---	IPA	IPA	1.0000	1:48	Blank
85	170811M2_85	X	1700958-04@20X MATP03048 1	MATP03048	1.0000	2:9	Analyte
86	170811M2_86	---	IPA	IPA	1.0000	1:48	Blank
87	170811M2_87	X	1700958-05@10X MATP03049 1	MATP03049	1.0000	2:10	Analyte
88	170811M2_88	---	IPA	IPA	1.0000	1:48	Blank
89	170811M2_89	X	1700958-05 MATP03049 1	MATP03049	1.0000	2:11	Analyte
90	170811M2_90	---	IPA	IPA	1.0000	1:48	Blank
91	170811M2_91	X	1700958-06 MATP03050 1	MATP03050	1.0000	2:12	Analyte
92	170811M2_92	---	IPA	IPA	1.0000	1:48	Blank
93	170811M2_93	X	1700958-06@5X MATP03050 1	MATP03050	1.0000	2:13	Analyte
94	170811M2_94	---	IPA	IPA	1.0000	1:48	Blank
95	170811M2_95	X	1700958-07 MATP03051 1	MATP03051	1.0000	2:14	Analyte
96	170811M2_96	---	1700958-09 MATP04060 1	MATP04060	1.0000	2:15	Analyte
97	170811M2_97	---	IPA	IPA	1.0000	1:48	Blank
98	170811M2_98	---	ST170811M2-6 PFC CS3 17H1105	PFC CS3 17H1105	1.0000	1:2	Standard
99	170811M2_99	---	IPA	IPA	1.0000	1:48	Blank
100	170811M2_100	---	1700958-13 MATP05079 1	MATP05079	1.0000	2:16	Analyte
101	170811M2_101	X	1700958-14 MATP05080 0.125	MATP05080	0.1250	2:17	Analyte
102	170811M2_102	---	1700958-15@10X MATP05081 1	MATP05081	1.0000	2:18	Analyte
103	170811M2_103	---	IPA	IPA	1.0000	1:48	Blank
104	170811M2_104	---	1700958-15 MATP05081 1	MATP05081	1.0000	2:19	Analyte
105	170811M2_105	---	IPA	IPA	1.0000	1:48	Blank
106	170811M2_106	X	1700959-04@5X MATP10119a 0.125	MATP10119a	0.1250	2:20	Analyte
107	170811M2_107	---	IPA	IPA	1.0000	1:48	Blank
108	170811M2_108	X	1700959-05@10X MATPXX132a 0.125	MATPXX132a	0.1250	2:21	Analyte
109	170811M2_109	---	IPA	IPA	1.0000	1:48	Blank
110	170811M2_110	X	1700959-06 MATPXX130a 0.125	MATPXX130a	0.1250	2:22	Analyte
111	170811M2_111	X	1700959-07@20X MATPXX126a 0.125	MATPXX126a	0.1250	2:23	Analyte
112	170811M2_112	---	IPA	IPA	1.0000	1:48	Blank
113	170811M2_113	---	1700961-10 MATP04064 0.125	MATP04064	0.1250	2:24	Analyte
114	170811M2_114	---	1700966-03 MW-13 0.125	MW-13	0.1250	2:25	Analyte
115	170811M2_115	---	IPA	IPA	1.0000	1:48	Blank
116	170811M2_116	---	ST170811M2-7 PFC CS3 17H1105	PFC CS3 17H1105	1.0000	1:2	Standard
117	170811M2_117	---	IPA	IPA	1.0000	1:48	Blank
118	170811M2_118	---	170811_BLUE	170811_BLUE	1.0000	2:28	Blank
119	170811M2_119	---	IPA	IPA	1.0000	1:48	Blank

LC Calibration Standards Review Checklist Q4

		ION Ratio	Concentration	C-Cals Name	Sign Date	Correct I-Cal	Manual Integrations	NA
Calibration ID: ST170811M2-1	L M H	NA	☐ (A)	☐	☐	☐	☐	☐
Calibration ID: -2	L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID: -3	L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID: -4	L M H	☐	☐ (B)	☐	☐	☐	☐	☐
Calibration ID: -5	L M H	☐	☐ (C)	☐	☐	☐	☐	☐
Calibration ID: -6	L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID: -7	L M H	☑	☐	☐	☐	☐	☐	☐
Calibration ID:	L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:	L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:	L M H	☐	☐	☐	☐	☐	☐	☐

Full Mass Cal. Date: 6/21/17

Run Log Present: ☑

# of Samples per Sequence Checked: ☑

Reviewed By: KOL 8/14/17
Initials/Date

Comments:
(A) PFHpA, N-ETFOSE out of limit criteria, not used.
(B) PFHxA, PFHpA, PFNA, PFDS out of limit criteria, not used.
(C) PFHpS out of limit criteria.

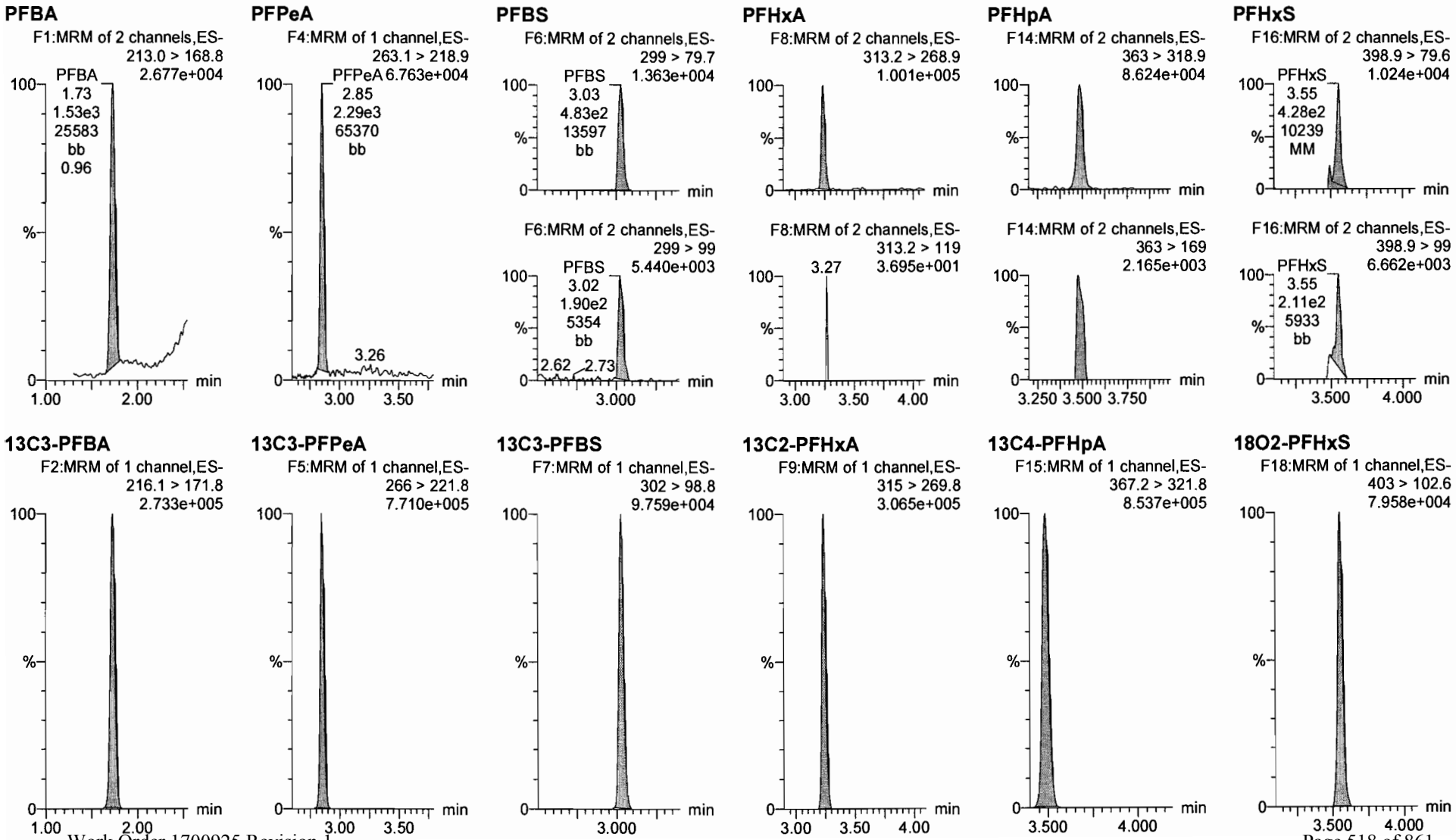
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170811M2\170811M2-2.qld

Last Altered: Saturday, August 12, 2017 16:41:42 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:43:19 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 12 Aug 2017 16:32:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_2, Date: 11-Aug-2017, Time: 18:35:42, ID: ST170811M2-1 PFC CS0 17H1106, Description: PFC CS0 17H1106



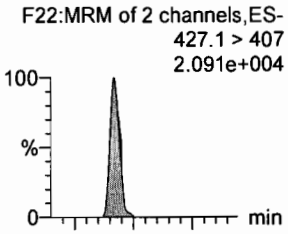
Vista Analytical Laboratory

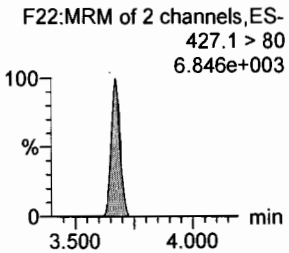
Dataset: U:\Q4.PRO\results\170811M2\170811M2-2.qld

Last Altered: Saturday, August 12, 2017 16:41:42 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:43:19 Pacific Daylight Time

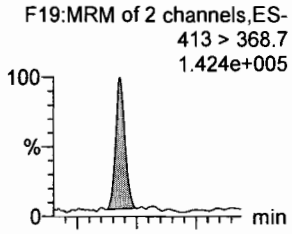
Name: 170811M2_2, Date: 11-Aug-2017, Time: 18:35:42, ID: ST170811M2-1 PFC CS0 17H1106, Description: PFC CS0 17H1106

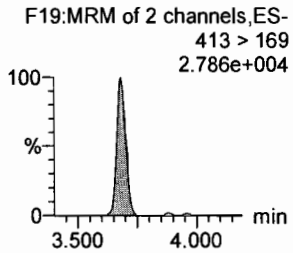
6:2 FTS



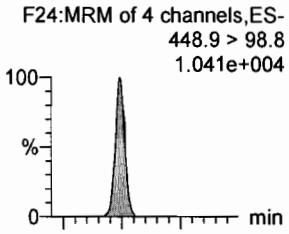


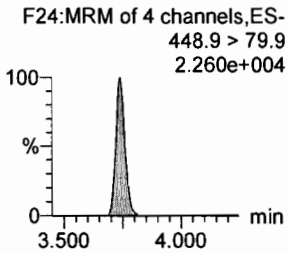
PFOA



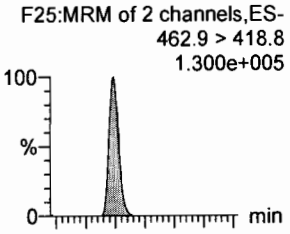


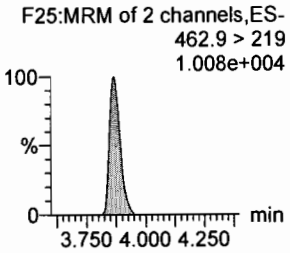
PFHpS



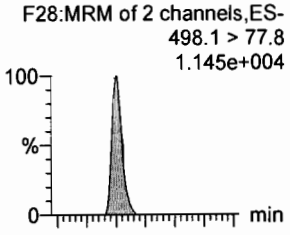


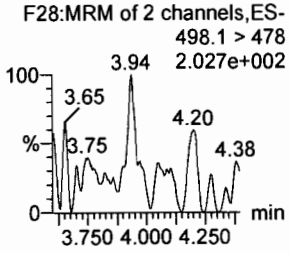
PFNA



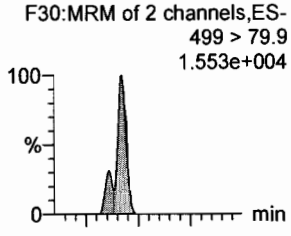


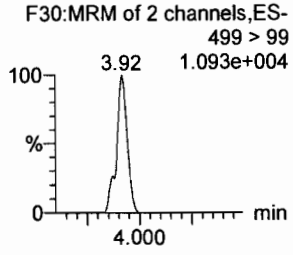
PFOSA



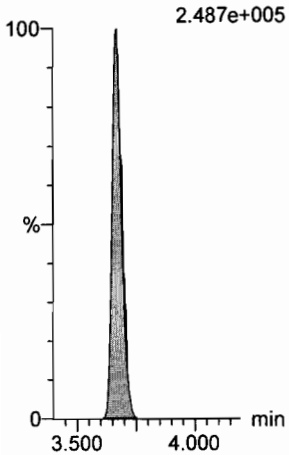


PFOS

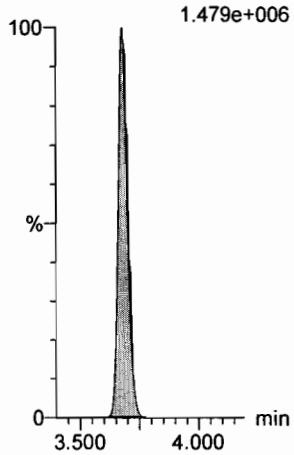




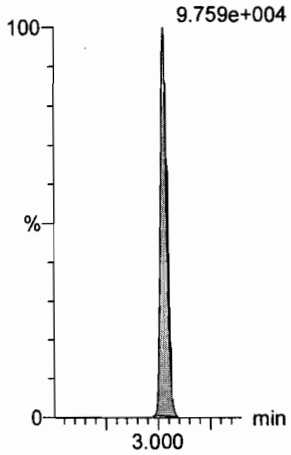
13C2-6:2 FTS



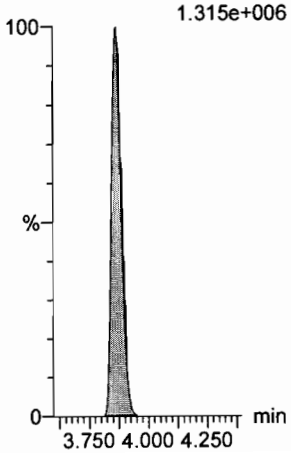
13C2-PFOA



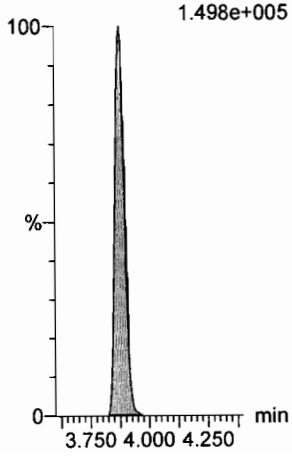
13C3-PFBS



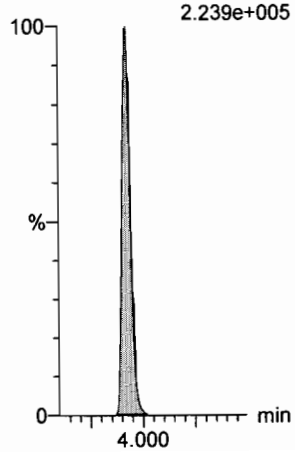
13C5-PFNA



13C8-PFOSA



13C8-PFOS

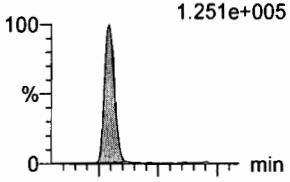


Dataset: U:\Q4.PRO\results\170811M2\170811M2-2.qld

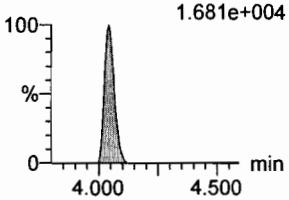
Last Altered: Saturday, August 12, 2017 16:41:42 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:43:19 Pacific Daylight Time

Name: 170811M2_2, Date: 11-Aug-2017, Time: 18:35:42, ID: ST170811M2-1 PFC CS0 17H1106, Description: PFC CS0 17H1106

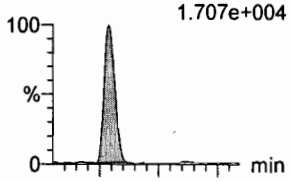
PFDA
F35:MRM of 2 channels,ES-
513 > 468.8
1.251e+005



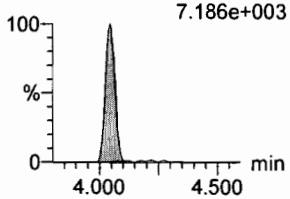
F35:MRM of 2 channels,ES-
513 > 219
1.681e+004



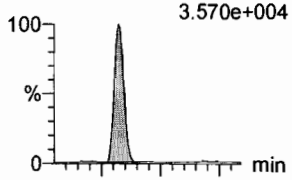
8:2 FTS
F40:MRM of 2 channels,ES-
527 > 506.9
1.707e+004



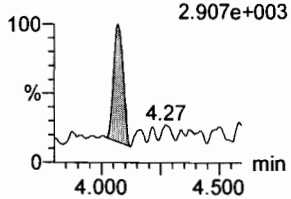
F40:MRM of 2 channels,ES-
527 > 80
7.186e+003



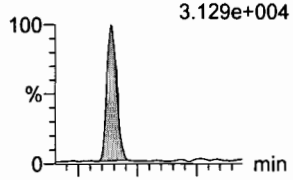
N-MeFOSAA
F45:MRM of 2 channels,ES-
570.1 > 419
3.570e+004



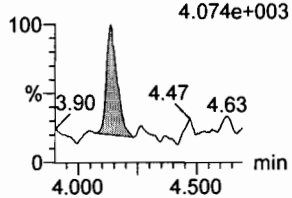
F45:MRM of 2 channels,ES-
570.1 > 483
2.907e+003



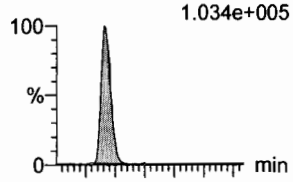
N-EtFOSAA
F48:MRM of 2 channels,ES-
584.2 > 419
3.129e+004



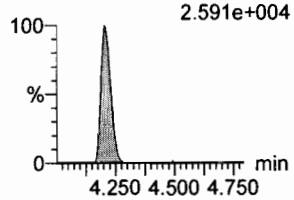
F48:MRM of 2 channels,ES-
584.2 > 483
4.074e+003



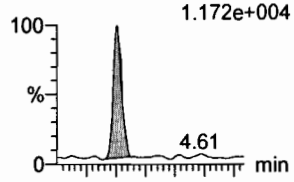
PFUnA
F43:MRM of 2 channels,ES-
562.9 > 518.9
1.034e+005



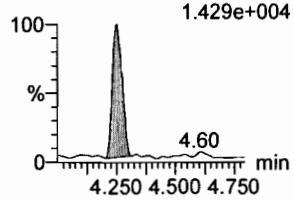
F43:MRM of 2 channels,ES-
562.9 > 269
2.591e+004



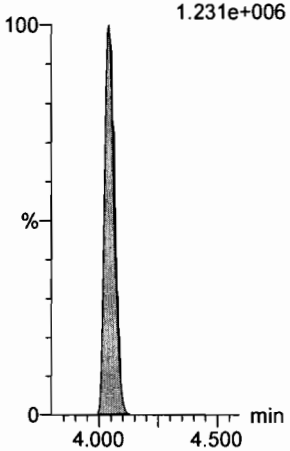
PFDS
F50:MRM of 2 channels,ES-
598.9 > 98.7
1.172e+004



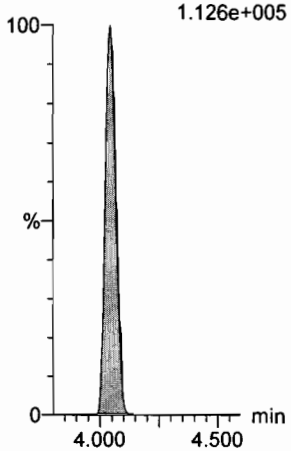
F50:MRM of 2 channels,ES-
598.9 > 80
1.429e+004



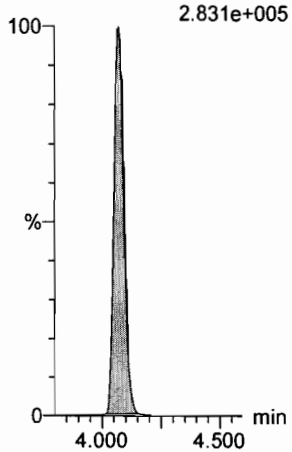
13C2-PFDA
F36:MRM of 1 channel,ES-
515.1 > 469.9
1.231e+006



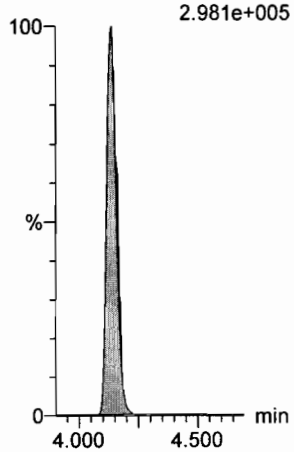
13C2-8:2 FTS
F41:MRM of 1 channel,ES-
529.1 > 508.7
1.126e+005



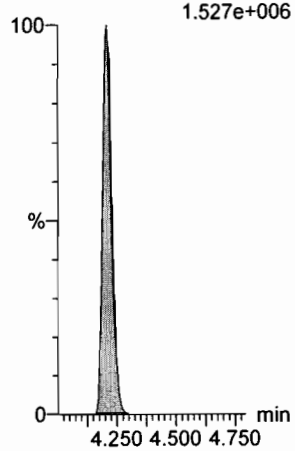
d3-N-MeFOSAA
F47:MRM of 1 channel,ES-
573.3 > 419
2.831e+005



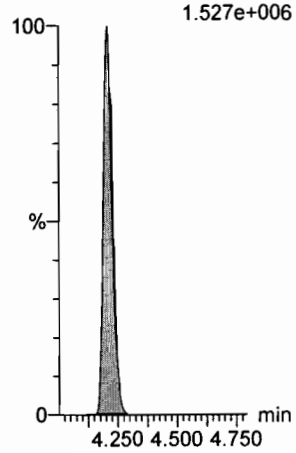
d5-N-EtFOSAA
F49:MRM of 1 channel,ES-
589.3 > 419
2.981e+005



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.527e+006



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.527e+006

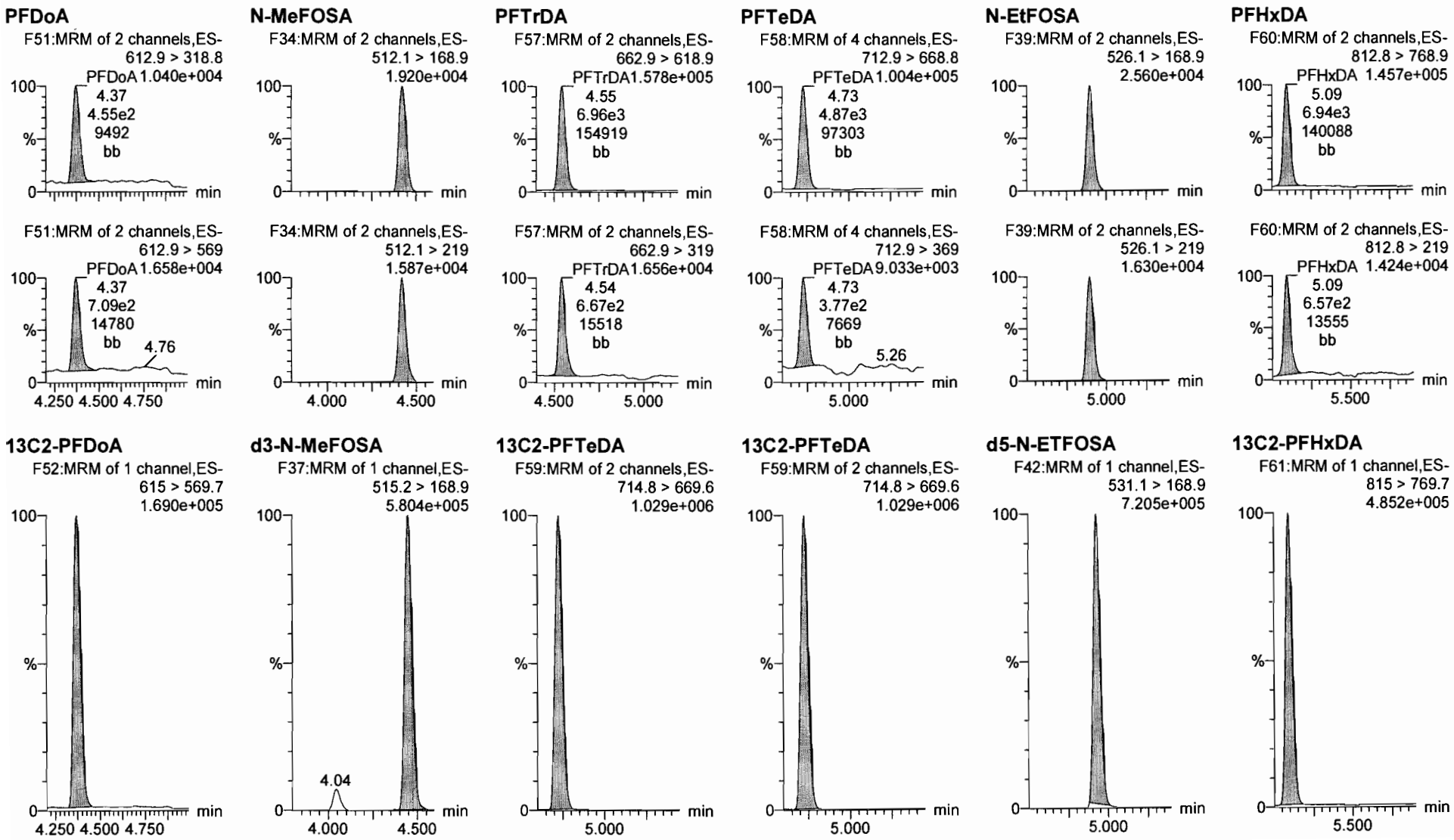


Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170811M2\170811M2-2.qld

Last Altered: Saturday, August 12, 2017 16:41:42 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:43:19 Pacific Daylight Time

Name: 170811M2_2, Date: 11-Aug-2017, Time: 18:35:42, ID: ST170811M2-1 PFC CS0 17H1106, Description: PFC CS0 17H1106

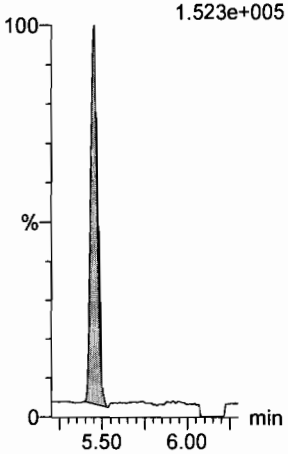


Dataset: U:\Q4.PRO\results\170811M2\170811M2-2.qld

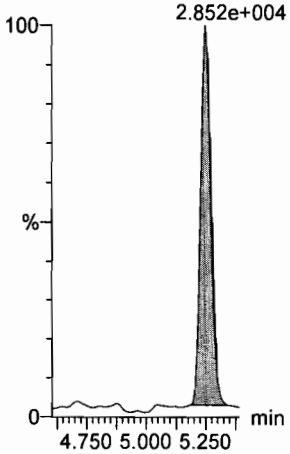
Last Altered: Saturday, August 12, 2017 16:41:42 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:43:19 Pacific Daylight Time

Name: 170811M2_2, Date: 11-Aug-2017, Time: 18:35:42, ID: ST170811M2-1 PFC CS0 17H1106, Description: PFC CS0 17H1106

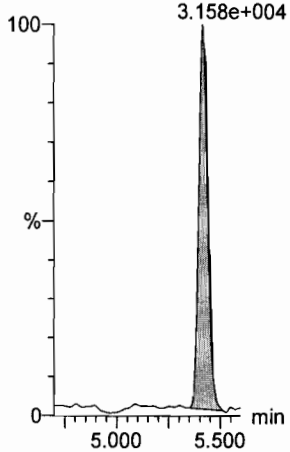
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
1.523e+005



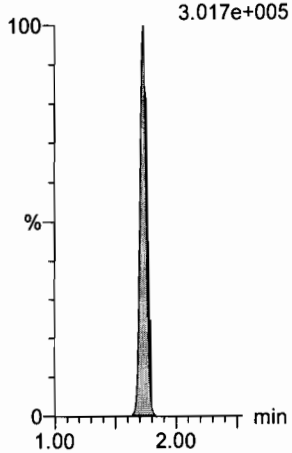
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
2.852e+004



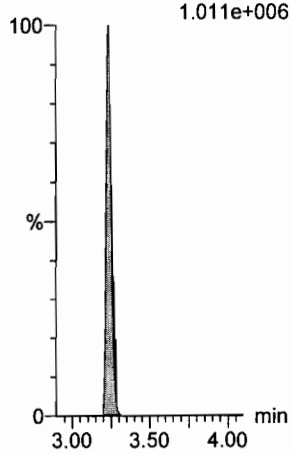
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
3.158e+004



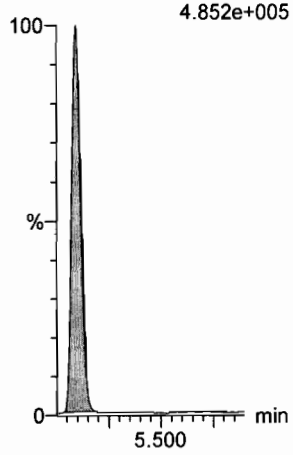
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
3.017e+005



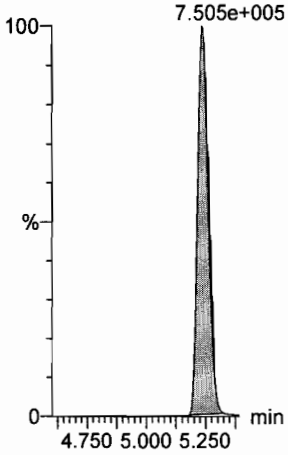
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
1.011e+006



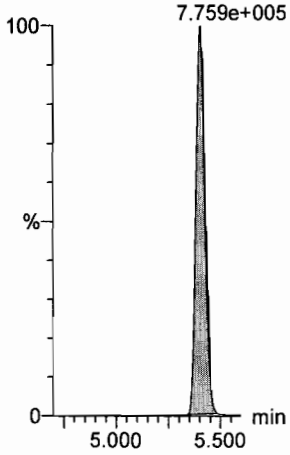
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.852e+005



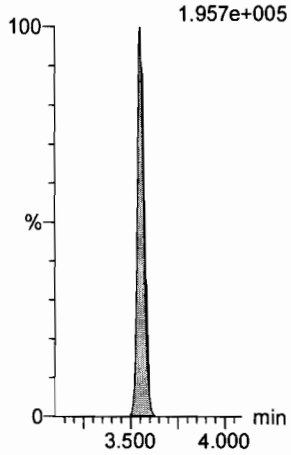
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
7.505e+005



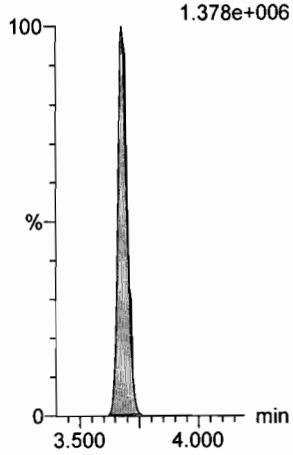
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
7.759e+005



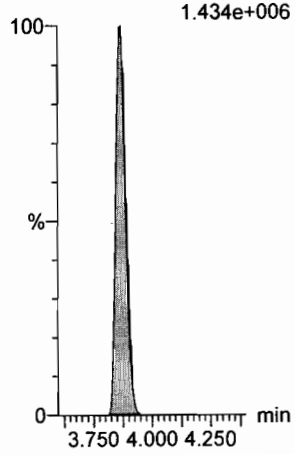
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.957e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.378e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.434e+006

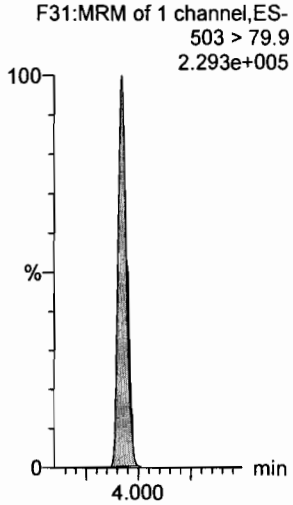


Dataset: U:\Q4.PRO\results\170811M2\170811M2-2.qld

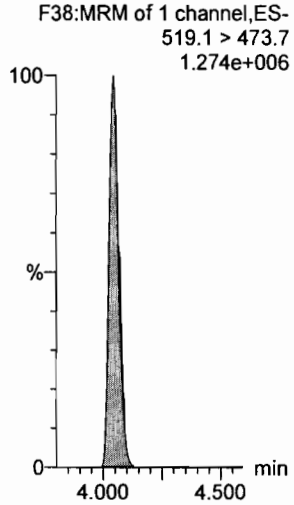
Last Altered: Saturday, August 12, 2017 16:41:42 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:43:19 Pacific Daylight Time

Name: 170811M2_2, Date: 11-Aug-2017, Time: 18:35:42, ID: ST170811M2-1 PFC CS0 17H1106, Description: PFC CS0 17H1106

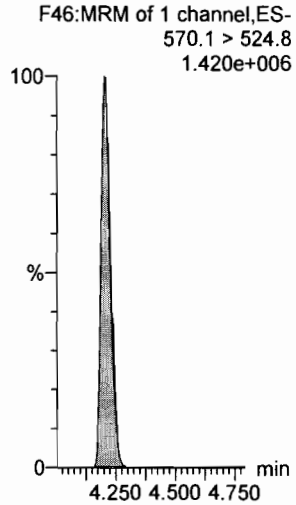
13C4-PFOS



13C6-PFDA



13C7-PFUnA



Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN945 SCN960**
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170811M2\170811M2-28.qld

Last Altered: Saturday, August 12, 2017 16:30:34 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:30:41 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_28, Date: 11-Aug-2017, Time: 23:14:14, ID: ST170811M2-2 PFC CS3 17H1105, Description: PFC CS3 17H1105

	#	Name	Trace	Area	IS Resp	RRF	Wt./Vol	RT	Conc.	%Rec
1	1	PFBA	213.0 > 168.8	13967.642	15610.922		1.000	1.68	10.20	101.96
2	2	PFPeA	263.1 > 218.9	22539.412	27810.395		1.000	2.82	10.61	106.15
3	3	PFBS	299 > 79.7	4730.332	3328.019		1.000	3.01	10.27	102.68
4	4	PFHxA	313.2 > 268.9	33955.551	12602.975		1.000	3.23	10.17	101.68
5	5	PFHpA	363 > 318.9	36299.758	36499.418		1.000	3.48	10.54	105.37
6	6	PFHxS	398.9 > 79.6	4119.456	2962.842		1.000	3.55	9.88	98.78
7	7	6:2 FTS	427.1 > 407	8251.935	10117.797		1.000	3.67	10.94	109.43
8	8	PFOA	413 > 368.7	55049.531	65332.320		1.000	3.68	10.59	105.89
9	9	PFHpS	448.9 > 98.8	4444.959	65332.320		1.000	3.74	10.72	107.17
10	10	PFNA	462.9 > 418.8	56469.422	62806.094		1.000	3.87	10.95	109.46
11	11	PFOSA	498.1 > 77.8	6850.161	7885.450		1.000	3.87	10.31	103.13
12	12	PFOS	499 > 79.9	9305.381	10281.214		1.000	3.92	10.64	106.45
13	13	PFDA	513 > 468.8	55183.238	59125.195		1.000	4.04	10.21	102.13
14	14	8:2 FTS	527 > 506.9	6759.579	5882.761		1.000	4.04	10.39	103.89
15	15	N-MeFOSAA	570.1 > 419	15085.541	13420.082		1.000	4.07	9.45	94.55
16	16	N-EtFOSAA	584.2 > 419	12415.940	13316.688		1.000	4.14	9.67	96.72
17	17	PFUnA	562.9 > 518.9	42665.273	60167.199		1.000	4.21	10.87	108.71
18	18	PFDS	598.9 > 98.7	3781.925	60167.199		1.000	4.26	9.50	95.04
19	19	PFDoA	612.9 > 318.8	4448.306	7018.458		1.000	4.38	9.45	94.52
20	20	N-MeFOSA	512.1 > 168.9	10599.475	29829.063		1.000	4.41	59.76	119.52
21	21	PFTrDA	662.9 > 618.9	61208.441	7018.458		1.000	4.55	10.76	107.55
22	22	PFTeDA	712.9 > 668.8	42053.473	47475.164		1.000	4.74	9.67	96.73
23	23	N-EtFOSA	526.1 > 168.9	11913.469	38500.605		1.000	4.90	52.35	104.70
24	24	PFHxDA	812.8 > 768.9	59576.715	20444.906		1.000	5.11	10.05	100.55
25	25	PFODA	912.8 > 868.8	57783.109	20444.906		1.000	5.47	11.04	110.39
26	26	N-MeFOSE	616.1 > 58.9	13902.591	42590.539		1.000	5.29	52.57	105.14
27	27	N-EtFOSE	630.1 > 58.9	15773.499	40149.277		1.000	5.46	55.51	111.02
28	28	13C3-PFBA	216.1 > 171.8	15610.922	17039.010	0.906	1.000	1.67	12.64	101.14
29	29	13C3-PFPeA	266 > 221.8	27810.395	39679.504	0.284	1.000	2.82	12.34	98.75
30	30	13C3-PFBS	302 > 98.8	3328.019	39679.504	0.033	1.000	3.01	12.75	102.04
31	31	13C2-PFHxA	315 > 269.8	12602.975	39679.504	0.304	1.000	3.23	5.23	104.61

70-130

50-150

DM
8/12/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-28.qld

Last Altered: Saturday, August 12, 2017 16:30:34 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:30:41 Pacific Daylight Time

Name: 170811M2_28, Date: 11-Aug-2017, Time: 23:14:14, ID: ST170811M2-2 PFC CS3 17H1105, Description: PFC CS3 17H1105

	#	Name	Trace	Area	IS Resp	RRF	Wt./Vol	RT	Conc.	%Rec
32	32	13C4-PFHpA	367.2 > 321.8	36499.418	39679.504	0.384	1.000	3.48	11.98	95.80
33	33	18O2-PFHxS	403 > 102.6	2962.842	7668.526	0.417	1.000	3.55	11.58	92.63
34	34	13C2-6:2 FTS	429.1 > 408.9	10117.797	55810.352	0.202	1.000	3.67	11.23	89.87
35	35	13C2-PFOA	414.9 > 369.7	65332.320	55810.352	1.132	1.000	3.68	12.92	103.39
36	36	13C5-PFNA	468.2 > 422.9	62806.094	67192.922	0.946	1.000	3.87	12.35	98.80
37	37	13C8-PFOSA	506.1 > 77.7	7885.450	58560.172	0.119	1.000	3.87	14.09	112.76
38	38	13C8-PFOS	507 > 79.9	10281.214	10376.990	1.040	1.000	3.92	11.91	95.28
39	39	13C2-PFDA	515.1 > 469.9	59125.195	57907.773	0.971	1.000	4.04	13.15	105.17
40	40	13C2-8:2 FTS	529.1 > 508.7	5882.761	57907.773	0.140	1.000	4.04	9.05	72.42
41	41	d3-N-MeFOSAA	573.3 > 419	13420.082	58560.172	0.018	1.000	4.07	161.04	99.10
42	42	d5-N-EtFOSAA	589.3 > 419	13316.688	58560.172	0.018	1.000	4.14	155.92	95.95
43	43	13C2-PFUnA	565 > 519.8	60167.199	58560.172	1.085	1.000	4.21	11.84	94.68
44	44	13C2-PFDoA	615 > 569.7	7018.458	58560.172	0.123	1.000	4.38	12.17	97.33
45	45	d3-N-MeFOSA	515.2 > 168.9	29829.063	58560.172	0.043	1.000	4.44	147.16	98.11
46	46	13C2-PFTeDA	714.8 > 669.6	47475.164	58560.172	0.798	1.000	4.74	12.70	101.62
47	47	d5-N-ETFOSA	531.1 > 168.9	38500.605	58560.172	0.056	1.000	4.94	147.60	98.40
48	48	13C2-PFHxDA	815 > 769.7	20444.906	58560.172	0.926	1.000	5.11	4.71	94.21
49	49	d7-N-MeFOSE	623.1 > 58.9	42590.539	58560.172	0.059	1.000	5.28	152.93	101.96
50	50	d9-N-EtFOSE	639.2 > 58.8	40149.277	58560.172	0.059	1.000	5.44	144.08	96.05
51	51	13C4-PFBA	217 > 171.8	17039.010	17039.010	1.000	1.000	1.67	12.50	100.00
52	52	13C5-PFHxA	318 > 272.9	39679.504	39679.504	1.000	1.000	3.23	5.00	100.00
53	53	13C3-PFHxS	401.9 > 79.9	7668.526	7668.526	1.000	1.000	3.55	12.50	100.00
54	54	13C8-PFOA	421.3 > 376	55810.352	55810.352	1.000	1.000	3.68	12.50	100.00
55	55	13C9-PFNA	472.2 > 426.9	67192.922	67192.922	1.000	1.000	3.86	12.50	100.00
56	56	13C4-PFOS	503 > 79.9	10376.990	10376.990	1.000	1.000	3.92	12.50	100.00
57	57	13C6-PFDA	519.1 > 473.7	57907.773	57907.773	1.000	1.000	4.04	12.50	100.00
58	58	13C7-PFUnA	570.1 > 524.8	58560.172	58560.172	1.000	1.000	4.21	12.50	100.00

50-150

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
1	170811M2_1	---	IPA	IPA	1.0000	1:48	Blank
2	170811M2_2	X	ST170811M2-1 PFC CS0 17H1106	PFC CS0 17H1106	1.0000	1:1	Standard
3	170811M2_3	---	IPA	IPA	1.0000	1:48	Blank
4	170811M2_4	X	B7H0073-BS1 OPR 0.125	OPR	0.1250	1:3	Analyte
5	170811M2_5	X	B7H0074-BS1 OPR 0.125	OPR	0.1250	1:4	Analyte
6	170811M2_6	---	IPA	IPA	1.0000	1:48	Blank
7	170811M2_7	X	B7H0073-BLK1 Method Blank 0.125	Method Blank	0.1250	1:5	Analyte
8	170811M2_8	X	B7H0074-BLK1 Method Blank 0.125	Method Blank	0.1250	1:6	Analyte
9	170811M2_9	X	B7H0073-MS1 Matrix Spike 0.0005	Matrix Spike	0.0005	1:7	Analyte
10	170811M2_10	---	IPA	IPA	1.0000	1:48	Blank
11	170811M2_11	X	B7H0073-MSD1 Matrix Spike Dup 0.00139	Matrix Spike Dup	0.0014	1:8	Analyte
12	170811M2_12	---	IPA	IPA	1.0000	1:48	Blank
13	170811M2_13	X	B7H0074-MS1 Matrix Spike 0.125	Matrix Spike	0.1250	1:9	Analyte
14	170811M2_14	X	B7H0074-MSD1 Matrix Spike Dup 0.125	Matrix Spike Dup	0.1250	1:10	Analyte
15	170811M2_15	x	1700925-04RE2 I001MW52S-170724 0.00122	I001MW52S-170724	0.0012	1:11	Analyte
16	170811M2_16	---	IPA	IPA	1.0000	1:48	Blank
17	170811M2_17	x	1700925-05RE2 I001MW52X-170724 0.00133	I001MW52X-170724	0.0013	1:12	Analyte
18	170811M2_18	---	IPA	IPA	1.0000	1:48	Blank
19	170811M2_19	x	1700922-01RE1 MH-L103-20170721 0.10565	MH-L103-20170721	0.1056	1:14	Analyte
20	170811M2_20	x	1700922-02RE1 MH-N104-20170721 0.11025	MH-N104-20170721	0.1103	1:15	Analyte
21	170811M2_21	x	1700922-03RE1 Upstream-Culvert-109-20170721 0.1185	Upstream-Culvert-109-20170721	0.1185	1:16	Analyte
22	170811M2_22	x	1700922-04RE1 FRB03-20170721 0.11017	FRB03-20170721	0.1102	1:17	Analyte
23	170811M2_23	x	1700922-05RE1 RB08-20170720 0.11893	RB08-20170720	0.1189	1:18	Analyte
24	170811M2_24	---	1700922-06RE1 RB09-20170721 0.11676	RB09-20170721	0.1168	1:19	Analyte
25	170811M2_25	---	1700925-01RE1 I001BC43S-170724 0.12112	I001BC43S-170724	0.1211	1:20	Analyte
26	170811M2_26	---	1700925-02RE1 SB01-170724 0.12178	SB01-170724	0.1218	1:21	Analyte
27	170811M2_27	---	IPA	IPA	1.0000	1:48	Blank
28	170811M2_28	---	ST170811M2-2 PFC CS3 17H1105	PFC CS3 17H1105	1.0000	1:2	Standard
29	170811M2_29	---	IPA	IPA	1.0000	1:48	Blank
30	170811M2_30	---	1700925-03RE1 I001BC50S-170724 0.12135	I001BC50S-170724	0.1214	1:22	Analyte
31	170811M2_31	---	1700925-06RE1 EB01-170724 0.1185	EB01-170724	0.1185	1:23	Analyte
32	170811M2_32	---	1700929-01RE1 MATP01001 0.11834	MATP01001	0.1183	1:24	Analyte
33	170811M2_33	---	1700929-02RE1 MATP01002 0.1157	MATP01002	0.1157	1:25	Analyte
34	170811M2_34	---	1700938-01RE1 NORP08102 0.11844	NORP08102	0.1184	1:26	Analyte
35	170811M2_35	---	1700938-02RE1 NORP08103 0.12014	NORP08103	0.1201	1:27	Analyte
36	170811M2_36	---	1700938-03RE1 NORP08104 0.11247	NORP08104	0.1125	1:28	Analyte
37	170811M2_37	---	IPA	IPA	1.0000	1:48	Blank
38	170811M2_38	---	B7H0073-MS1@20X Matrix Spike 0.0005	Matrix Spike	0.0005	1:29	Analyte
39	170811M2_39	---	IPA	IPA	1.0000	1:48	Blank
40	170811M2_40	---	B7H0073-MSD1@20X Matrix Spike Dup 0.00139	Matrix Spike Dup	0.0014	1:30	Analyte

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
41	170811M2_41	---	IPA	IPA	1.0000	1:48	Blank
42	170811M2_42	---	1700925-04RE2@20X I001MW52S-170724 0.00122	I001MW52S-170724	0.0012	1:31	Analyte
43	170811M2_43	---	IPA	IPA	1.0000	1:48	Blank
44	170811M2_44	---	1700925-05RE2@20X I001MW52X-170724 0.00133	I001MW52X-170724	0.0013	1:32	Analyte
45	170811M2_45	---	IPA	IPA	1.0000	1:48	Blank
46	170811M2_46	---	1700958-15RE1@10X MATP05081 1.02	MATP05081	0.9982	2:26	Analyte
47	170811M2_47	---	IPA	IPA	1.0000	1:48	Blank
48	170811M2_48	---	ST170811M2-3 PFC CS3 17H1105	PFC CS3 17H1105	1.0000	1:2	Standard
49	170811M2_49	---	IPA	IPA	1.0000	1:48	Blank
50	170811M2_50	---	1701007-03 RI17-EB3-080317 0.26497	RI17-EB3-080317	0.2650	1:33	Analyte
51	170811M2_51	---	1701007-04 RI17-EB8-080317 0.26753	RI17-EB8-080317	0.2675	1:34	Analyte
52	170811M2_52	---	IPA	IPA	1.0000	1:48	Blank
53	170811M2_53	---	1700958-06RE1 MATP03050 1.22	MATP03050	1.0219	1:35	Analyte
54	170811M2_54	---	IPA	IPA	1.0000	1:48	Blank
55	170811M2_55	---	1700958-09RE1 MATP04060 1.27	MATP04060	1.0295	1:36	Analyte
56	170811M2_56	---	1700958-10RE1 MATP04061 1.27	MATP04061	1.0096	1:37	Analyte
57	170811M2_57	---	1700958-13RE1 MATP05079 1.1	MATP05079	1.0125	1:38	Analyte
58	170811M2_58	---	1700958-15RE1 MATP05081 1.02	MATP05081	0.9982	1:39	Analyte
59	170811M2_59	---	IPA	IPA	1.0000	1:48	Blank
60	170811M2_60	---	1700961-02 MATP05098 1	MATP05098	1.0000	1:40	Analyte
61	170811M2_61	---	1700961-03 MATP05099 1	MATP05099	1.0000	1:41	Analyte
62	170811M2_62	---	1700961-04 MATP05100 1	MATP05100	1.0000	1:42	Analyte
63	170811M2_63	---	IPA	IPA	1.0000	1:48	Blank
64	170811M2_64	---	ST170811M2-4 PFC CS0 17H1106	PFC CS0 17H1106	1.0000	1:1	Standard
65	170811M2_65	---	IPA	IPA	1.0000	1:48	Blank
66	170811M2_66	---	1700961-05 MATP05102 1	MATP05102	1.0000	1:43	Analyte
67	170811M2_67	---	1700961-06 MATP05103 1	MATP05103	1.0000	1:44	Analyte
68	170811M2_68	---	1700961-07 MATP04055 1	MATP04055	1.0000	1:45	Analyte
69	170811M2_69	---	1700961-08 MATP03041 1	MATP03041	1.0000	1:46	Analyte
70	170811M2_70	---	1700961-09 MATP04063 1	MATP04063	1.0000	1:47	Analyte
71	170811M2_71	---	1700961-11 MATP04065 1	MATP04065	1.0000	2:1	Analyte
72	170811M2_72	---	1700961-12 MATP04066 1	MATP04066	1.0000	2:2	Analyte
73	170811M2_73	X	1700960-03 MATP05084 0.125	MATP05084	0.1250	2:3	Analyte
74	170811M2_74	X	1700960-05 MATP05086 1	MATP05086	1.0000	2:4	Analyte
75	170811M2_75	---	1700960-10 MATP05091 1	MATP05091	1.0000	2:5	Analyte
76	170811M2_76	---	IPA ~ OM 8/12/17	IPA	1.0000	1:48	Blank
77	170811M2_77	X	ST170811M2-~~3~~ PFC CS3 17H1105	PFC CS3 17H1105	1.0000	1:2	Standard
78	170811M2_78	---	IPA	IPA	1.0000	1:48	Blank
79	170811M2_79	---	1700960-11 MATP05092 1	MATP05092	1.0000	2:6	Analyte
80	170811M2_80	---	IPA	IPA	1.0000	1:48	Blank

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81	170811M2_81	X	1700960-04@5X MATP05085 1	MATP05085	1.0000	2:7	Analyte
82	170811M2_82	---	IPA	IPA	1.0000	1:48	Blank
83	170811M2_83	X	1700958-04 MATP03048 1	MATP03048	1.0000	2:8	Analyte
84	170811M2_84	---	IPA	IPA	1.0000	1:48	Blank
85	170811M2_85	X	1700958-04@20X MATP03048 1	MATP03048	1.0000	2:9	Analyte
86	170811M2_86	---	IPA	IPA	1.0000	1:48	Blank
87	170811M2_87	X	1700958-05@10X MATP03049 1	MATP03049	1.0000	2:10	Analyte
88	170811M2_88	---	IPA	IPA	1.0000	1:48	Blank
89	170811M2_89	X	1700958-05 MATP03049 1	MATP03049	1.0000	2:11	Analyte
90	170811M2_90	---	IPA	IPA	1.0000	1:48	Blank
91	170811M2_91	X	1700958-06 MATP03050 1	MATP03050	1.0000	2:12	Analyte
92	170811M2_92	---	IPA	IPA	1.0000	1:48	Blank
93	170811M2_93	X	1700958-06@5X MATP03050 1	MATP03050	1.0000	2:13	Analyte
94	170811M2_94	---	IPA	IPA	1.0000	1:48	Blank
95	170811M2_95	X	1700958-07 MATP03051 1	MATP03051	1.0000	2:14	Analyte
96	170811M2_96	---	1700958-09 MATP04060 1	MATP04060	1.0000	2:15	Analyte
97	170811M2_97	---	IPA	IPA	1.0000	1:48	Blank
98	170811M2_98	---	ST170811M2-6 PFC CS3 17H1105	PFC CS3 17H1105	1.0000	1:2	Standard
99	170811M2_99	---	IPA	IPA	1.0000	1:48	Blank
100	170811M2_100	---	1700958-13 MATP05079 1	MATP05079	1.0000	2:16	Analyte
101	170811M2_101	X	1700958-14 MATP05080 0.125	MATP05080	0.1250	2:17	Analyte
102	170811M2_102	---	1700958-15@10X MATP05081 1	MATP05081	1.0000	2:18	Analyte
103	170811M2_103	---	IPA	IPA	1.0000	1:48	Blank
104	170811M2_104	---	1700958-15 MATP05081 1	MATP05081	1.0000	2:19	Analyte
105	170811M2_105	---	IPA	IPA	1.0000	1:48	Blank
106	170811M2_106	X	1700959-04@5X MATP10119a 0.125	MATP10119a	0.1250	2:20	Analyte
107	170811M2_107	---	IPA	IPA	1.0000	1:48	Blank
108	170811M2_108	X	1700959-05@10X MATPXX132a 0.125	MATPXX132a	0.1250	2:21	Analyte
109	170811M2_109	---	IPA	IPA	1.0000	1:48	Blank
110	170811M2_110	X	1700959-06 MATPXX130a 0.125	MATPXX130a	0.1250	2:22	Analyte
111	170811M2_111	X	1700959-07@20X MATPXX126a 0.125	MATPXX126a	0.1250	2:23	Analyte
112	170811M2_112	---	IPA	IPA	1.0000	1:48	Blank
113	170811M2_113	---	1700961-10 MATP04064 0.125	MATP04064	0.1250	2:24	Analyte
114	170811M2_114	---	1700966-03 MW-13 0.125	MW-13	0.1250	2:25	Analyte
115	170811M2_115	---	IPA	IPA	1.0000	1:48	Blank
116	170811M2_116	---	ST170811M2-7 PFC CS3 17H1105	PFC CS3 17H1105	1.0000	1:2	Standard
117	170811M2_117	---	IPA	IPA	1.0000	1:48	Blank
118	170811M2_118	---	170811_BLUE	170811_BLUE	1.0000	2:28	Blank
119	170811M2_119	---	IPA	IPA	1.0000	1:48	Blank

Vista Analytical Laboratory

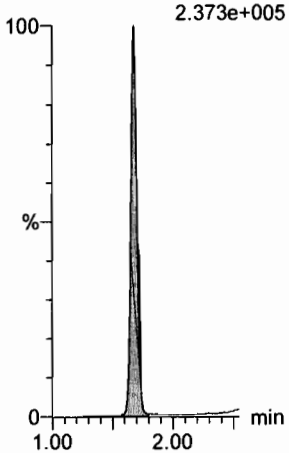
Dataset: U:\Q4.PRO\results\170811M2\170811M2-28.qld

Last Altered: Saturday, August 12, 2017 16:30:34 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:30:50 Pacific Daylight Time

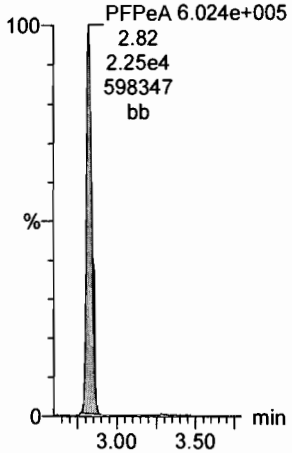
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 11:46:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_28, Date: 11-Aug-2017, Time: 23:14:14, ID: ST170811M2-2 PFC CS3 17H1105, Description: PFC CS3 17H1105

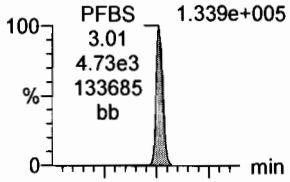
PFBA
F1:MRM of 2 channels,ES-
213.0 > 168.8
2.373e+005



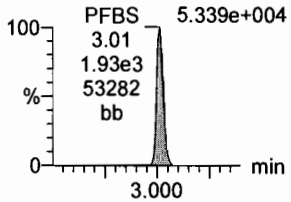
PFPeA
F4:MRM of 1 channel,ES-
263.1 > 218.9
PFPeA 6.024e+005
2.82
2.25e4
598347
bb



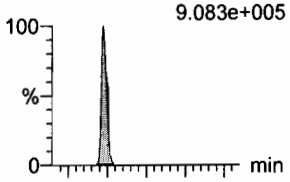
PFBS
F6:MRM of 2 channels,ES-
299 > 79.7
1.339e+005
PFBS
3.01
4.73e3
133685
bb



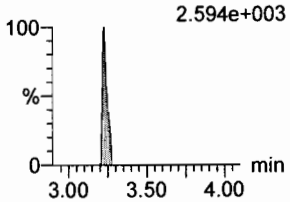
F6:MRM of 2 channels,ES-
299 > 99
5.339e+004
PFBS
3.01
1.93e3
53282
bb



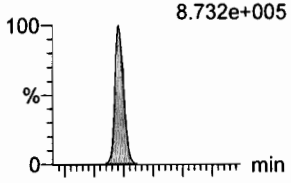
PFHxA
F8:MRM of 2 channels,ES-
313.2 > 268.9
9.083e+005



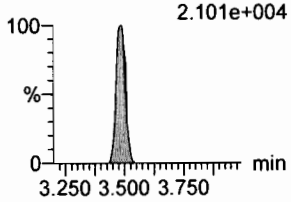
F8:MRM of 2 channels,ES-
313.2 > 119
2.594e+003



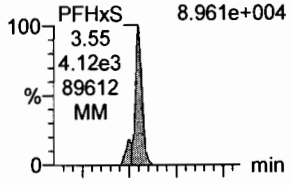
PFHpA
F14:MRM of 2 channels,ES-
363 > 318.9
8.732e+005



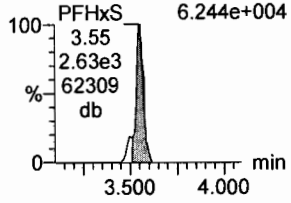
F14:MRM of 2 channels,ES-
363 > 169
2.101e+004



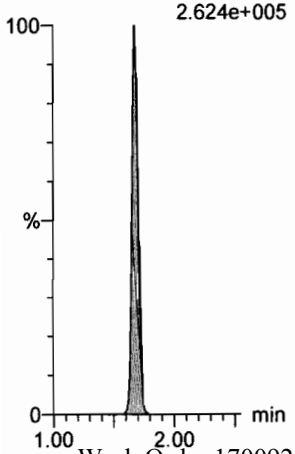
PFHxS
F16:MRM of 2 channels,ES-
398.9 > 79.6
8.961e+004
PFHxS
3.55
4.12e3
89612
MM



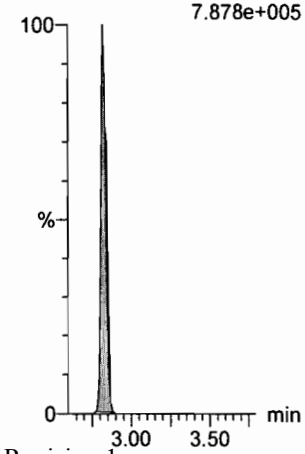
F16:MRM of 2 channels,ES-
398.9 > 99
6.244e+004
PFHxS
3.55
2.63e3
62309
db



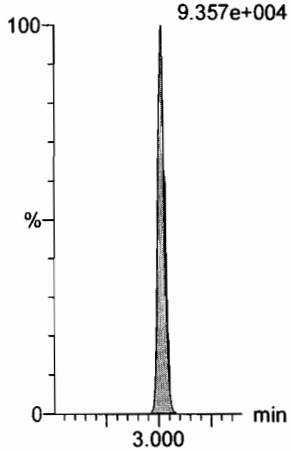
13C3-PFBA
F2:MRM of 1 channel,ES-
216.1 > 171.8
2.624e+005



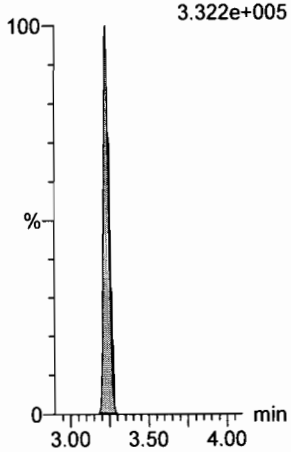
13C3-PFPeA
F5:MRM of 1 channel,ES-
266 > 221.8
7.878e+005



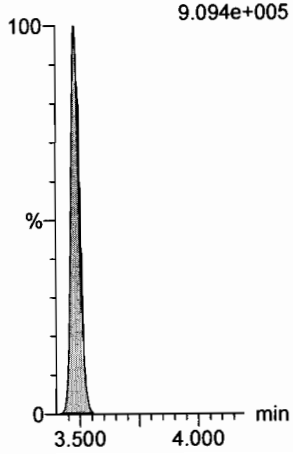
13C3-PFBS
F7:MRM of 1 channel,ES-
302 > 98.8
9.357e+004



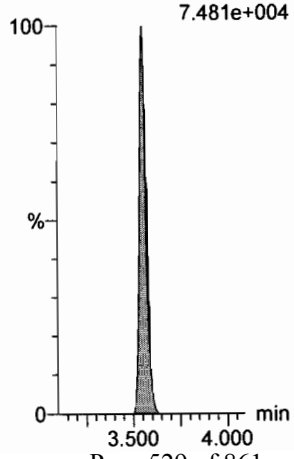
13C2-PFHxA
F9:MRM of 1 channel,ES-
315 > 269.8
3.322e+005



13C4-PFHpA
F15:MRM of 1 channel,ES-
367.2 > 321.8
9.094e+005



18O2-PFHxS
F18:MRM of 1 channel,ES-
403 > 102.6
7.481e+004

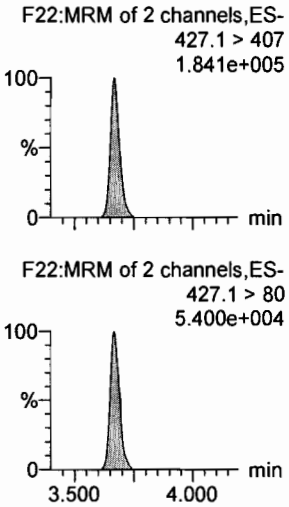


Dataset: U:\Q4.PRO\results\170811M2\170811M2-28.qld

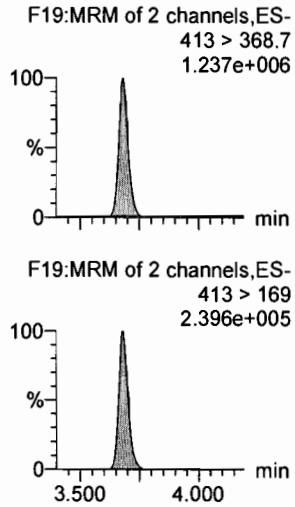
Last Altered: Saturday, August 12, 2017 16:30:34 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:30:50 Pacific Daylight Time

Name: 170811M2_28, Date: 11-Aug-2017, Time: 23:14:14, ID: ST170811M2-2 PFC CS3 17H1105, Description: PFC CS3 17H1105

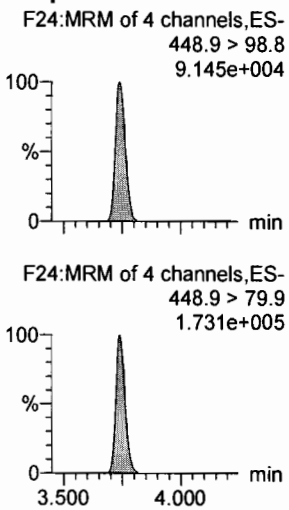
6:2 FTS



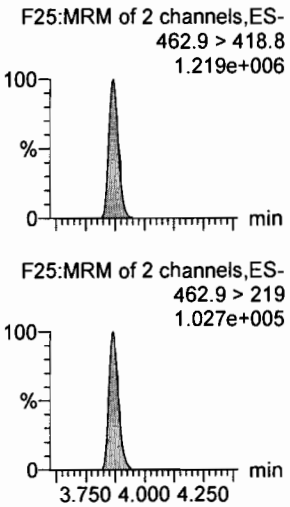
PFOA



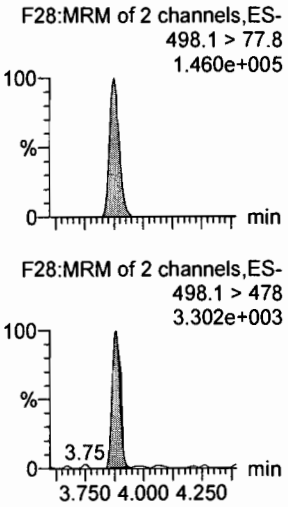
PFHpS



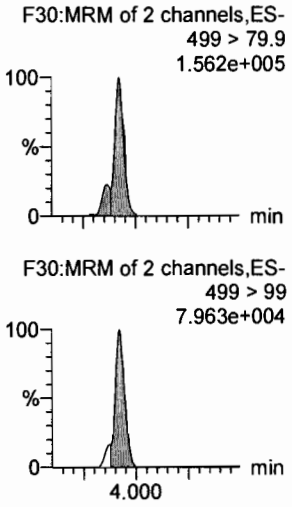
PFNA



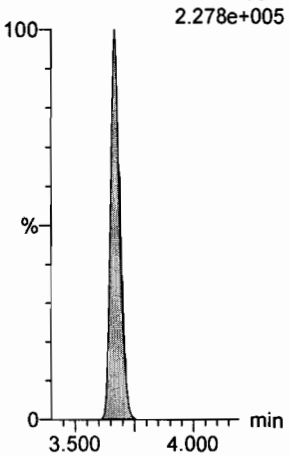
PFOSA



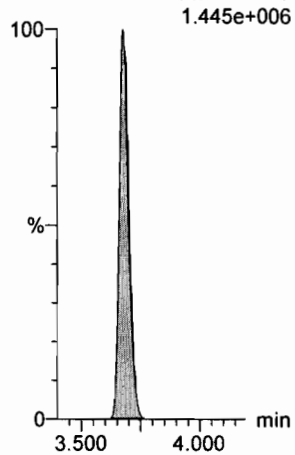
PFOS



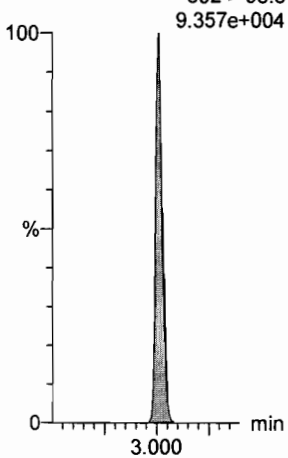
13C2-6:2 FTS



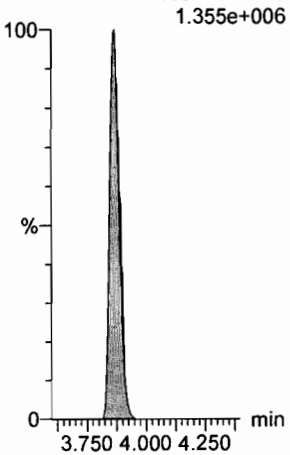
13C2-PFOA



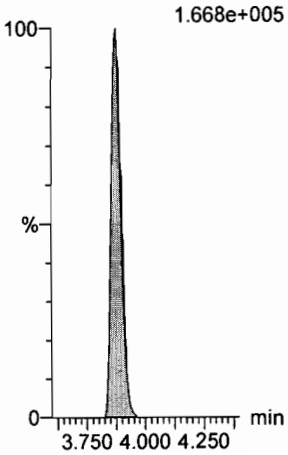
13C3-PFBS



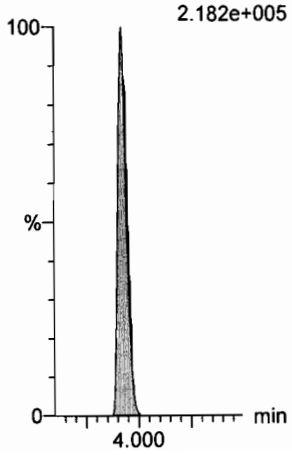
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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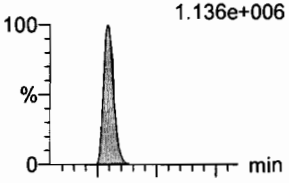
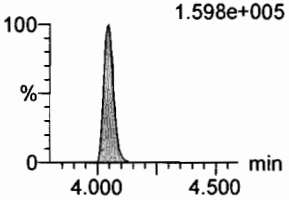
Last Altered: Saturday, August 12, 2017 16:30:34 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:30:50 Pacific Daylight Time

Name: 170811M2_28, Date: 11-Aug-2017, Time: 23:14:14, ID: ST170811M2-2 PFC CS3 17H1105, Description: PFC CS3 17H1105

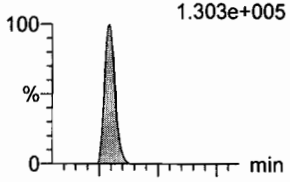
PFDA
F35:MRM of 2 channels,ES-
513 > 468.8
1.136e+006



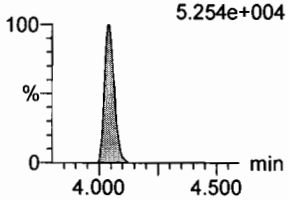
F35:MRM of 2 channels,ES-
513 > 219
1.598e+005



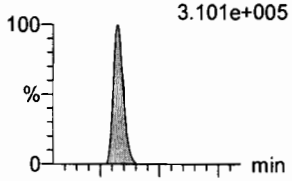
8:2 FTS
F40:MRM of 2 channels,ES-
527 > 506.9
1.303e+005



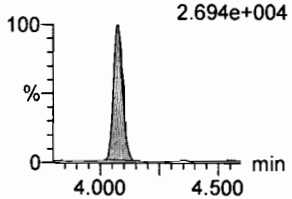
F40:MRM of 2 channels,ES-
527 > 80
5.254e+004



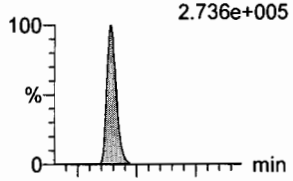
N-MeFOSAA
F45:MRM of 2 channels,ES-
570.1 > 419
3.101e+005



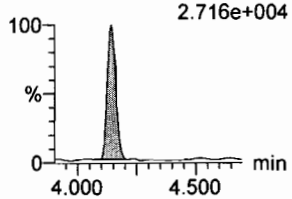
F45:MRM of 2 channels,ES-
570.1 > 483
2.694e+004



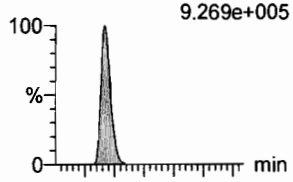
N-EtFOSAA
F48:MRM of 2 channels,ES-
584.2 > 419
2.736e+005



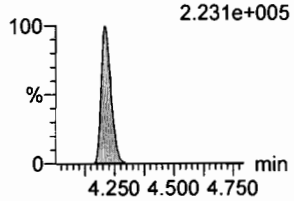
F48:MRM of 2 channels,ES-
584.2 > 483
2.716e+004



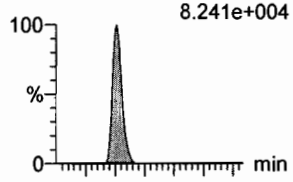
PFUnA
F43:MRM of 2 channels,ES-
562.9 > 518.9
9.269e+005



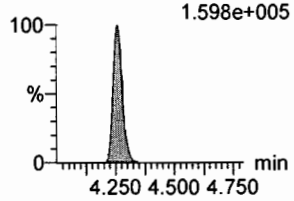
F43:MRM of 2 channels,ES-
562.9 > 269
2.231e+005



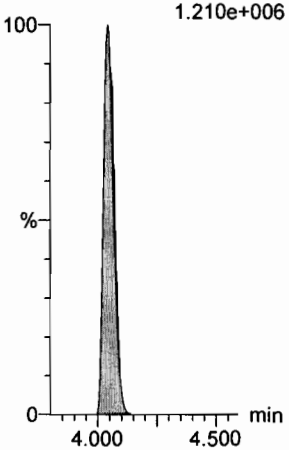
PFDS
F50:MRM of 2 channels,ES-
598.9 > 98.7
8.241e+004



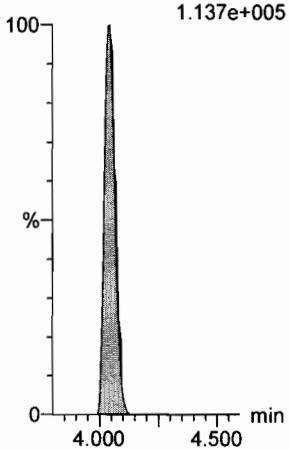
F50:MRM of 2 channels,ES-
598.9 > 80
1.598e+005



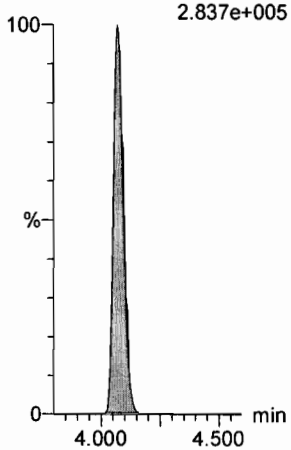
13C2-PFDA
F36:MRM of 1 channel,ES-
515.1 > 469.9
1.210e+006



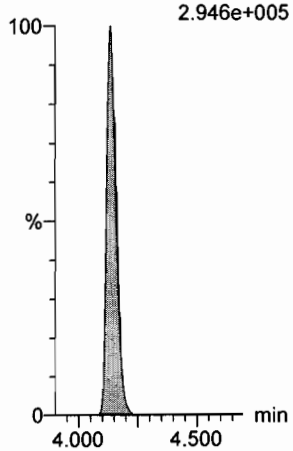
13C2-8:2 FTS
F41:MRM of 1 channel,ES-
529.1 > 508.7
1.137e+005



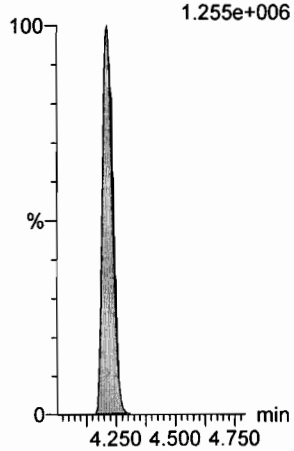
d3-N-MeFOSAA
F47:MRM of 1 channel,ES-
573.3 > 419
2.837e+005



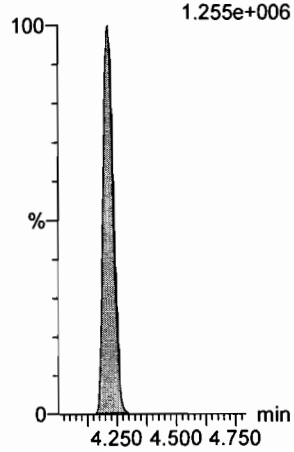
d5-N-EtFOSAA
F49:MRM of 1 channel,ES-
589.3 > 419
2.946e+005



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.255e+006



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.255e+006

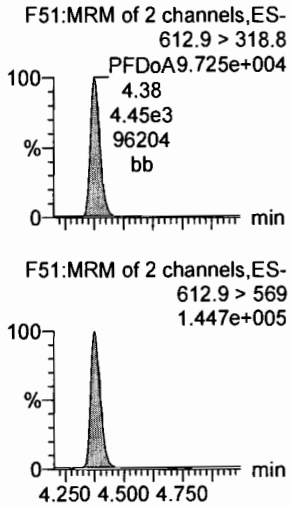


Dataset: U:\Q4.PRO\results\170811M2\170811M2-28.qld

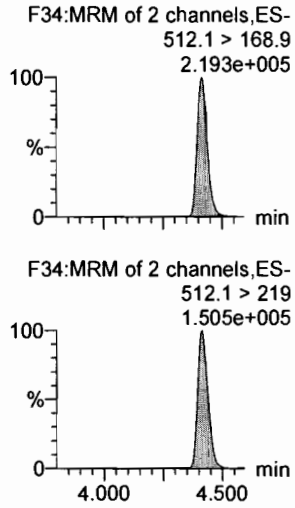
Last Altered: Saturday, August 12, 2017 16:30:34 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:30:50 Pacific Daylight Time

Name: 170811M2_28, Date: 11-Aug-2017, Time: 23:14:14, ID: ST170811M2-2 PFC CS3 17H1105, Description: PFC CS3 17H1105

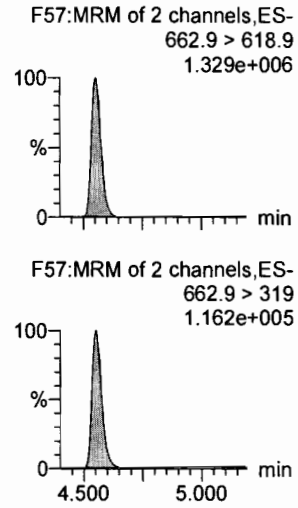
PFDoA



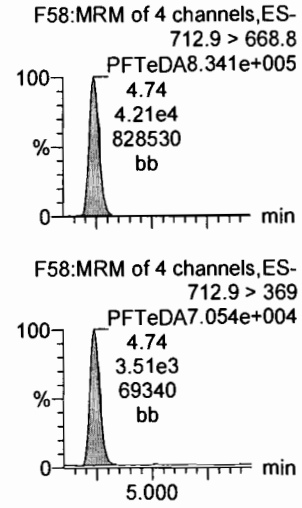
N-MeFOSA



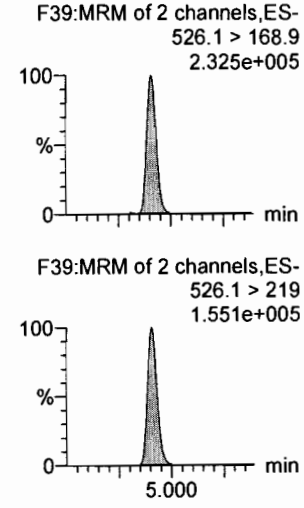
PFTrDA



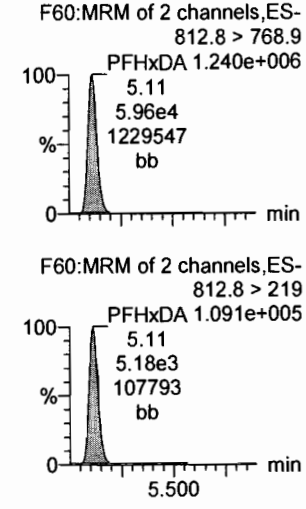
PFTeDA



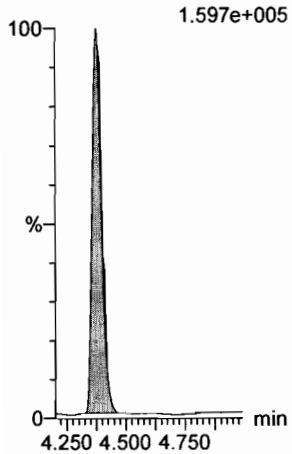
N-EtFOSA



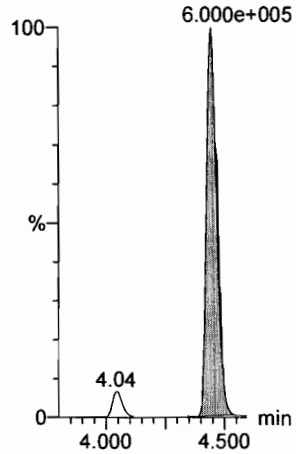
PFHxDA



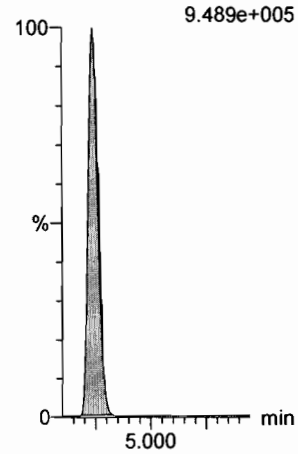
13C2-PFDoA



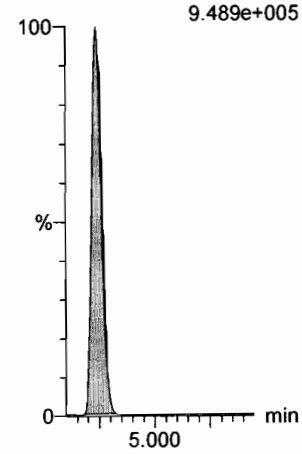
d3-N-MeFOSA



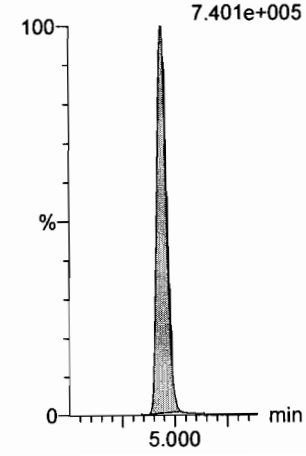
13C2-PFTeDA



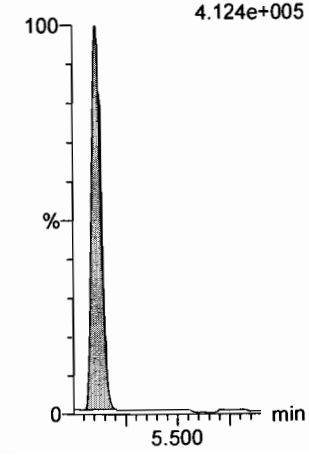
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



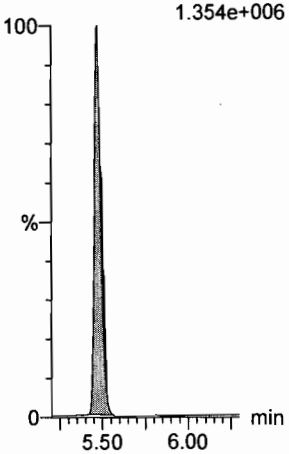
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170811M2\170811M2-28.qld

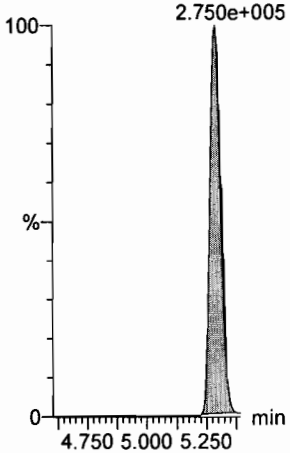
Last Altered: Saturday, August 12, 2017 16:30:34 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:30:50 Pacific Daylight Time

Name: 170811M2_28, Date: 11-Aug-2017, Time: 23:14:14, ID: ST170811M2-2 PFC CS3 17H1105, Description: PFC CS3 17H1105

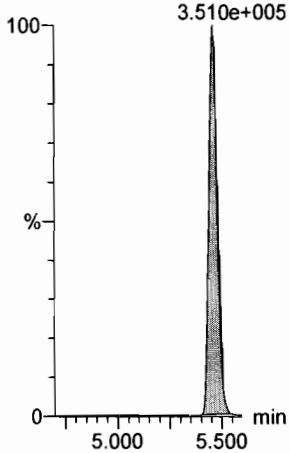
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
1.354e+006



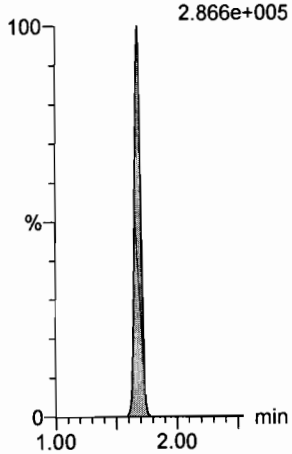
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
2.750e+005



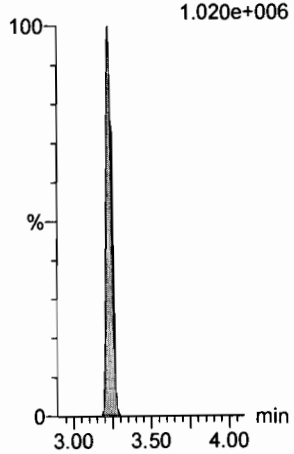
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
3.510e+005



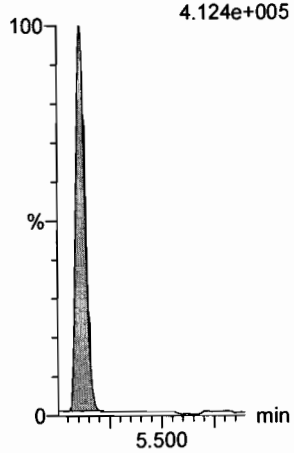
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.866e+005



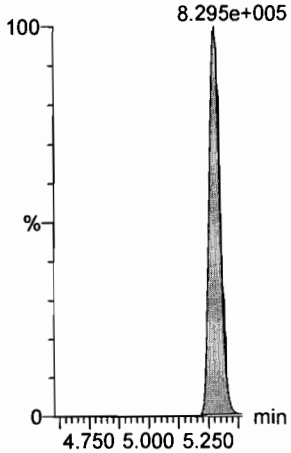
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
1.020e+006



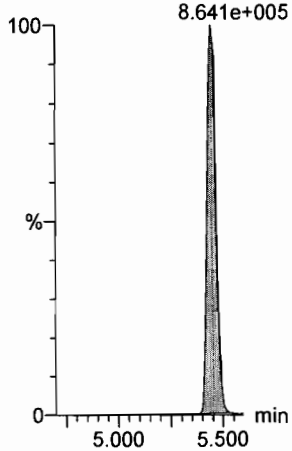
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.124e+005



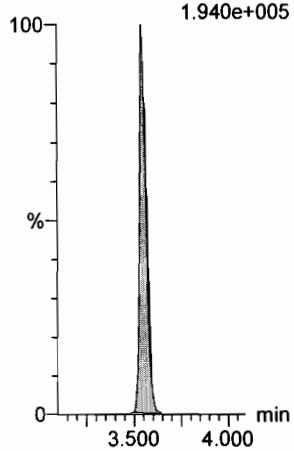
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
8.295e+005



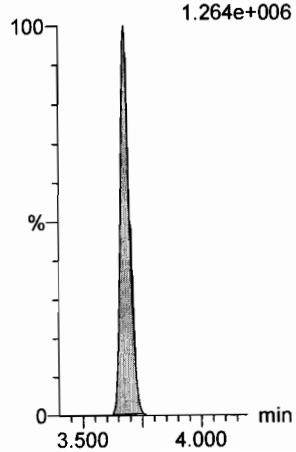
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
8.641e+005



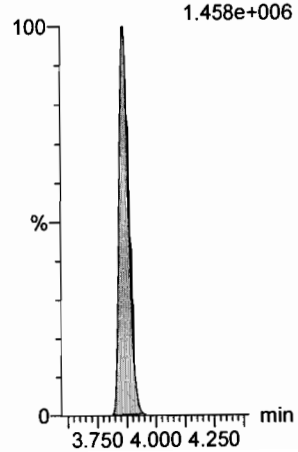
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.940e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.264e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.458e+006

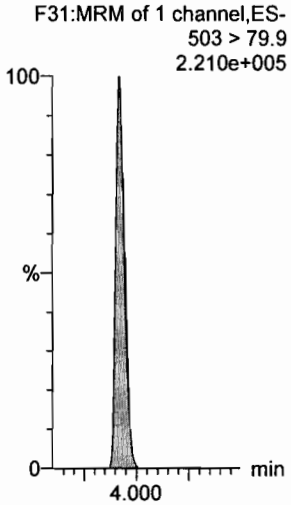


Dataset: U:\Q4.PRO\results\170811M2\170811M2-28.qld

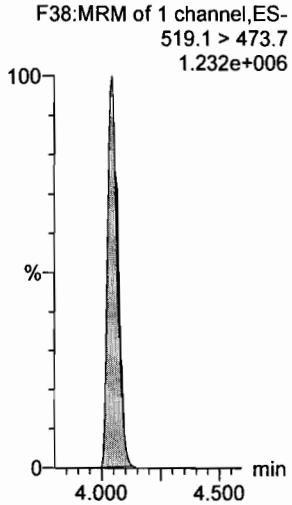
Last Altered: Saturday, August 12, 2017 16:30:34 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:30:50 Pacific Daylight Time

Name: 170811M2_28, Date: 11-Aug-2017, Time: 23:14:14, ID: ST170811M2-2 PFC CS3 17H1105, Description: PFC CS3 17H1105

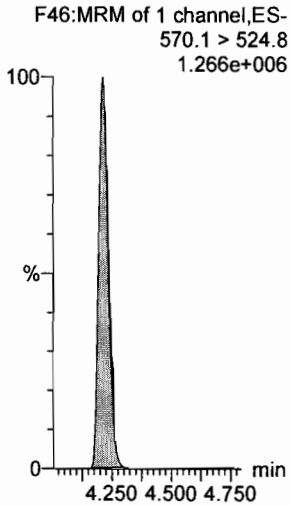
13C4-PFOS



13C6-PFDA



13C7-PFUnA



Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170811M2\170811M2-48.qld

Last Altered: Saturday, August 12, 2017 16:33:07 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:33:38 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 12 Aug 2017 16:32:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170811M2_48, Date: 12-Aug-2017, Time: 02:47:34, ID: ST170811M2-3 PFC CS3 17H1105, Description: PFC CS3 17H1105

	#	Name	Trace	Area	IS Resp	RRF	Wt./Vol.	RT	Conc.	%Rec
1	1	PFBA	213.0 > 168.8	14029.529	15510.837		1.000	1.67	10.31	103.08
2	2	PFPeA	263.1 > 218.9	23080.105	27862.479		1.000	2.82	10.85	108.52
3	3	PFBS	299 > 79.7	4818.214	3232.600		1.000	3.01	10.77	107.72
4	4	PFHxA	313.2 > 268.9	33951.340	12029.455		1.000	3.23	10.68	106.75
5	5	PFHpA	363 > 318.9	33054.715	33807.020		1.000	3.47	10.35	103.51
6	6	PFHxS	398.9 > 79.6	3926.995	2939.961		1.000	3.55	9.49	94.91
7	7	6:2 FTS	427.1 > 407	7838.814	9882.898		1.000	3.66	10.63	106.35
8	8	PFOA	413 > 368.7	51367.840	58097.859		1.000	3.67	11.12	111.18
9	9	PFHpS	448.9 > 98.8	4780.443	58097.859		1.000	3.73	12.98	129.81
10	10	PFNA	462.9 > 418.8	59033.160	66936.094		1.000	3.86	10.73	107.27
11	11	PFOSA	498.1 > 77.8	7044.110	8691.039		1.000	3.87	9.62	96.20
12	12	PFOS	499 > 79.9	8340.239	11358.666		1.000	3.92	8.64	86.39
13	13	PFDA	513 > 468.8	58808.563	66402.258		1.000	4.04	9.69	96.86
14	14	8:2 FTS	527 > 506.9	7625.231	7162.523		1.000	4.03	9.60	96.00
15	15	N-MeFOSAA	570.1 > 419	17177.838	14419.951		1.000	4.07	10.02	100.20
16	16	N-EtFOSAA	584.2 > 419	13930.135	14530.855		1.000	4.13	9.95	99.47
17	17	PFUnA	562.9 > 518.9	46867.766	64227.273		1.000	4.20	11.19	111.92
18	18	PFDS	598.9 > 98.7	4115.702	64227.273		1.000	4.25	9.69	96.92
19	19	PFDoA	612.9 > 318.8	5168.692	7172.454		1.000	4.37	10.76	107.58
20	20	N-MeFOSA	512.1 > 168.9	10402.812	31556.695		1.000	4.40	55.38	110.75
21	21	PFTrDA	662.9 > 618.9	61791.406	7172.454		1.000	4.55	10.62	106.23
22	22	PFTeDA	712.9 > 668.8	43152.910	46474.668		1.000	4.73	10.15	101.46
23	23	N-EtFOSA	526.1 > 168.9	12541.191	40407.148		1.000	4.90	52.51	105.02
24	24	PFHxDA	812.8 > 768.9	63237.594	22955.012		1.000	5.10	9.49	94.94
25	25	PFODA	912.8 > 868.8	59168.512	22955.012		1.000	5.46	10.06	100.60
26	26	N-MeFOSE	616.1 > 58.9	14587.908	43240.859		1.000	5.28	54.37	108.73
27	27	N-EtFOSE	630.1 > 58.9	16833.514	42992.617		1.000	5.46	55.31	110.63
28	28	13C3-PFBA	216.1 > 171.8	15510.837	17086.955	0.906	1.000	1.67	12.53	100.21
29	29	13C3-PFPeA	266 > 221.8	27862.479	39087.117	0.284	1.000	2.82	12.55	100.44
30	30	13C3-PFBS	302 > 98.8	3232.600	39087.117	0.033	1.000	3.01	12.58	100.62
31	31	13C2-PFHxA	315 > 269.8	12029.455	39087.117	0.304	1.000	3.22	5.07	101.36

70-130

50-150

DM
8/12/17

Dataset: U:\Q4.PRO\results\170811M2\170811M2-48.qld

Last Altered: Saturday, August 12, 2017 16:33:07 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:33:38 Pacific Daylight Time

Name: 170811M2_48, Date: 12-Aug-2017, Time: 02:47:34, ID: ST170811M2-3 PFC CS3 17H1105, Description: PFC CS3 17H1105

	#	Name	Trace	Area	IS Resp	RRF	Wt./Vol.	RT	Conc.	%Rec
32	32	13C4-PFHpA	367.2 > 321.8	33807.020	39087.117	0.384	1.000	3.47	11.26	90.08
33	33	18O2-PFHxS	403 > 102.6	2939.961	6977.785	0.417	1.000	3.54	12.63	101.01
34	34	13C2-6:2 FTS	429.1 > 408.9	9882.898	59013.652	0.202	1.000	3.67	10.38	83.02
35	35	13C2-PFOA	414.9 > 369.7	58097.859	59013.652	1.132	1.000	3.67	10.87	86.95
36	36	13C5-PFNA	468.2 > 422.9	66936.094	64745.363	0.946	1.000	3.86	13.66	109.27
37	37	13C8-PFOSA	506.1 > 77.7	8691.039	58339.313	0.119	1.000	3.86	15.59	124.75
38	38	13C8-PFOS	507 > 79.9	11358.666	10500.349	1.040	1.000	3.92	13.00	104.03
39	39	13C2-PFDA	515.1 > 469.9	66402.258	65570.867	0.971	1.000	4.04	13.04	104.32
40	40	13C2-8:2 FTS	529.1 > 508.7	7162.523	65570.867	0.140	1.000	4.03	9.73	77.87
41	41	d3-N-MeFOSAA	573.3 > 419	14419.951	58339.313	0.018	1.000	4.07	173.69	106.89
42	42	d5-N-EtFOSAA	589.3 > 419	14530.855	58339.313	0.018	1.000	4.13	170.78	105.09
43	43	13C2-PFUnA	565 > 519.8	64227.273	58339.313	1.085	1.000	4.20	12.68	101.45
44	44	13C2-PFDoA	615 > 569.7	7172.454	58339.313	0.123	1.000	4.37	12.48	99.85
45	45	d3-N-MeFOSA	515.2 > 168.9	31556.695	58339.313	0.043	1.000	4.44	156.27	104.18
46	46	13C2-PFTeDA	714.8 > 669.6	46474.668	58339.313	0.798	1.000	4.73	12.48	99.85
47	47	d5-N-ETFOSA	531.1 > 168.9	40407.148	58339.313	0.056	1.000	4.93	155.50	103.66
48	48	13C2-PFHxDA	815 > 769.7	22955.012	58339.313	0.926	1.000	5.10	5.31	106.18
49	49	d7-N-MeFOSE	623.1 > 58.9	43240.859	58339.313	0.059	1.000	5.27	155.86	103.91
50	50	d9-N-EtFOSE	639.2 > 58.8	42992.617	58339.313	0.059	1.000	5.44	154.87	103.25
51	51	13C4-PFBA	217 > 171.8	17086.955	17086.955	1.000	1.000	1.67	12.50	100.00
52	52	13C5-PFHxA	318 > 272.9	39087.117	39087.117	1.000	1.000	3.22	5.00	100.00
53	53	13C3-PFHxS	401.9 > 79.9	6977.785	6977.785	1.000	1.000	3.55	12.50	100.00
54	54	13C8-PFOA	421.3 > 376	59013.652	59013.652	1.000	1.000	3.67	12.50	100.00
55	55	13C9-PFNA	472.2 > 426.9	64745.363	64745.363	1.000	1.000	3.86	12.50	100.00
56	56	13C4-PFOS	503 > 79.9	10500.349	10500.349	1.000	1.000	3.91	12.50	100.00
57	57	13C6-PFDA	519.1 > 473.7	65570.867	65570.867	1.000	1.000	4.04	12.50	100.00
58	58	13C7-PFUnA	570.1 > 524.8	58339.313	58339.313	1.000	1.000	4.20	12.50	100.00

50-150

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
1	170811M2_1	---	IPA	IPA	1.0000	1:48	Blank
2	170811M2_2	X	ST170811M2-1 PFC CS0 17H1106	PFC CS0 17H1106	1.0000	1:1	Standard
3	170811M2_3	---	IPA	IPA	1.0000	1:48	Blank
4	170811M2_4	X	B7H0073-BS1 OPR 0.125	OPR	0.1250	1:3	Analyte
5	170811M2_5	X	B7H0074-BS1 OPR 0.125	OPR	0.1250	1:4	Analyte
6	170811M2_6	---	IPA	IPA	1.0000	1:48	Blank
7	170811M2_7	X	B7H0073-BLK1 Method Blank 0.125	Method Blank	0.1250	1:5	Analyte
8	170811M2_8	X	B7H0074-BLK1 Method Blank 0.125	Method Blank	0.1250	1:6	Analyte
9	170811M2_9	X	B7H0073-MS1 Matrix Spike 0.0005	Matrix Spike	0.0005	1:7	Analyte
10	170811M2_10	---	IPA	IPA	1.0000	1:48	Blank
11	170811M2_11	X	B7H0073-MSD1 Matrix Spike Dup 0.00139	Matrix Spike Dup	0.0014	1:8	Analyte
12	170811M2_12	---	IPA	IPA	1.0000	1:48	Blank
13	170811M2_13	X	B7H0074-MS1 Matrix Spike 0.125	Matrix Spike	0.1250	1:9	Analyte
14	170811M2_14	X	B7H0074-MSD1 Matrix Spike Dup 0.125	Matrix Spike Dup	0.1250	1:10	Analyte
15	170811M2_15	x	1700925-04RE2 I001MW52S-170724 0.00122	I001MW52S-170724	0.0012	1:11	Analyte
16	170811M2_16	---	IPA	IPA	1.0000	1:48	Blank
17	170811M2_17	x	1700925-05RE2 I001MW52X-170724 0.00133	I001MW52X-170724	0.0013	1:12	Analyte
18	170811M2_18	---	IPA	IPA	1.0000	1:48	Blank
19	170811M2_19	x	1700922-01RE1 MH-L103-20170721 0.10565	MH-L103-20170721	0.1056	1:14	Analyte
20	170811M2_20	x	1700922-02RE1 MH-N104-20170721 0.11025	MH-N104-20170721	0.1103	1:15	Analyte
21	170811M2_21	x	1700922-03RE1 Upstream-Culvert-109-20170721 0.1185	Upstream-Culvert-109-20170721	0.1185	1:16	Analyte
22	170811M2_22	x	1700922-04RE1 FRB03-20170721 0.11017	FRB03-20170721	0.1102	1:17	Analyte
23	170811M2_23	x	1700922-05RE1 RB08-20170720 0.11893	RB08-20170720	0.1189	1:18	Analyte
24	170811M2_24	---	1700922-06RE1 RB09-20170721 0.11676	RB09-20170721	0.1168	1:19	Analyte
25	170811M2_25	---	1700925-01RE1 I001BC43S-170724 0.12112	I001BC43S-170724	0.1211	1:20	Analyte
26	170811M2_26	---	1700925-02RE1 SB01-170724 0.12178	SB01-170724	0.1218	1:21	Analyte
27	170811M2_27	---	IPA	IPA	1.0000	1:48	Blank
28	170811M2_28	---	ST170811M2-2 PFC CS3 17H1105	PFC CS3 17H1105	1.0000	1:2	Standard
29	170811M2_29	---	IPA	IPA	1.0000	1:48	Blank
30	170811M2_30	---	1700925-03RE1 I001BC50S-170724 0.12135	I001BC50S-170724	0.1214	1:22	Analyte
31	170811M2_31	---	1700925-06RE1 EB01-170724 0.1185	EB01-170724	0.1185	1:23	Analyte
32	170811M2_32	---	1700929-01RE1 MATP01001 0.11834	MATP01001	0.1183	1:24	Analyte
33	170811M2_33	---	1700929-02RE1 MATP01002 0.1157	MATP01002	0.1157	1:25	Analyte
34	170811M2_34	---	1700938-01RE1 NORP08102 0.11844	NORP08102	0.1184	1:26	Analyte
35	170811M2_35	---	1700938-02RE1 NORP08103 0.12014	NORP08103	0.1201	1:27	Analyte
36	170811M2_36	---	1700938-03RE1 NORP08104 0.11247	NORP08104	0.1125	1:28	Analyte
37	170811M2_37	---	IPA	IPA	1.0000	1:48	Blank
38	170811M2_38	---	B7H0073-MS1@20X Matrix Spike 0.0005	Matrix Spike	0.0005	1:29	Analyte
39	170811M2_39	---	IPA	IPA	1.0000	1:48	Blank
40	170811M2_40	---	B7H0073-MSD1@20X Matrix Spike Dup 0.00139	Matrix Spike Dup	0.0014	1:30	Analyte

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
41	170811M2_41	---	IPA	IPA	1.0000	1:48	Blank
42	170811M2_42	---	1700925-04RE2@20X I001MW52S-170724 0.00122	I001MW52S-170724	0.0012	1:31	Analyte
43	170811M2_43	---	IPA	IPA	1.0000	1:48	Blank
44	170811M2_44	---	1700925-05RE2@20X I001MW52X-170724 0.00133	I001MW52X-170724	0.0013	1:32	Analyte
45	170811M2_45	---	IPA	IPA	1.0000	1:48	Blank
46	170811M2_46	---	1700958-15RE1@10X MATP05081 1.02	MATP05081	0.9982	2:26	Analyte
47	170811M2_47	---	IPA	IPA	1.0000	1:48	Blank
48	170811M2_48	---	ST170811M2-3 PFC CS3 17H1105	PFC CS3 17H1105	1.0000	1:2	Standard
49	170811M2_49	---	IPA	IPA	1.0000	1:48	Blank
50	170811M2_50	---	1701007-03 RI17-EB3-080317 0.26497	RI17-EB3-080317	0.2650	1:33	Analyte
51	170811M2_51	---	1701007-04 RI17-EB8-080317 0.26753	RI17-EB8-080317	0.2675	1:34	Analyte
52	170811M2_52	---	IPA	IPA	1.0000	1:48	Blank
53	170811M2_53	---	1700958-06RE1 MATP03050 1.22	MATP03050	1.0219	1:35	Analyte
54	170811M2_54	---	IPA	IPA	1.0000	1:48	Blank
55	170811M2_55	---	1700958-09RE1 MATP04060 1.27	MATP04060	1.0295	1:36	Analyte
56	170811M2_56	---	1700958-10RE1 MATP04061 1.27	MATP04061	1.0096	1:37	Analyte
57	170811M2_57	---	1700958-13RE1 MATP05079 1.1	MATP05079	1.0125	1:38	Analyte
58	170811M2_58	---	1700958-15RE1 MATP05081 1.02	MATP05081	0.9982	1:39	Analyte
59	170811M2_59	---	IPA	IPA	1.0000	1:48	Blank
60	170811M2_60	---	1700961-02 MATP05098 1	MATP05098	1.0000	1:40	Analyte
61	170811M2_61	---	1700961-03 MATP05099 1	MATP05099	1.0000	1:41	Analyte
62	170811M2_62	---	1700961-04 MATP05100 1	MATP05100	1.0000	1:42	Analyte
63	170811M2_63	---	IPA	IPA	1.0000	1:48	Blank
64	170811M2_64	---	ST170811M2-4 PFC CS0 17H1106	PFC CS0 17H1106	1.0000	1:1	Standard
65	170811M2_65	---	IPA	IPA	1.0000	1:48	Blank
66	170811M2_66	---	1700961-05 MATP05102 1	MATP05102	1.0000	1:43	Analyte
67	170811M2_67	---	1700961-06 MATP05103 1	MATP05103	1.0000	1:44	Analyte
68	170811M2_68	---	1700961-07 MATP04055 1	MATP04055	1.0000	1:45	Analyte
69	170811M2_69	---	1700961-08 MATP03041 1	MATP03041	1.0000	1:46	Analyte
70	170811M2_70	---	1700961-09 MATP04063 1	MATP04063	1.0000	1:47	Analyte
71	170811M2_71	---	1700961-11 MATP04065 1	MATP04065	1.0000	2:1	Analyte
72	170811M2_72	---	1700961-12 MATP04066 1	MATP04066	1.0000	2:2	Analyte
73	170811M2_73	X	1700960-03 MATP05084 0.125	MATP05084	0.1250	2:3	Analyte
74	170811M2_74	X	1700960-05 MATP05086 1	MATP05086	1.0000	2:4	Analyte
75	170811M2_75	---	1700960-10 MATP05091 1	MATP05091	1.0000	2:5	Analyte
76	170811M2_76	---	IPA 45 OM 8/17/17	IPA	1.0000	1:48	Blank
77	170811M2_77	X	ST170811M2-~~3~~ PFC CS3 17H1105	PFC CS3 17H1105	1.0000	1:2	Standard
78	170811M2_78	---	IPA OM 8/17/17	IPA	1.0000	1:48	Blank
79	170811M2_79	---	1700960-11 MATP05092 1	MATP05092	1.0000	2:6	Analyte
80	170811M2_80	---	IPA	IPA	1.0000	1:48	Blank

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
81	170811M2_81	X	1700960-04@5X MATP05085 1	MATP05085	1.0000	2:7	Analyte
82	170811M2_82	---	IPA	IPA	1.0000	1:48	Blank
83	170811M2_83	X	1700958-04 MATP03048 1	MATP03048	1.0000	2:8	Analyte
84	170811M2_84	---	IPA	IPA	1.0000	1:48	Blank
85	170811M2_85	X	1700958-04@20X MATP03048 1	MATP03048	1.0000	2:9	Analyte
86	170811M2_86	---	IPA	IPA	1.0000	1:48	Blank
87	170811M2_87	X	1700958-05@10X MATP03049 1	MATP03049	1.0000	2:10	Analyte
88	170811M2_88	---	IPA	IPA	1.0000	1:48	Blank
89	170811M2_89	X	1700958-05 MATP03049 1	MATP03049	1.0000	2:11	Analyte
90	170811M2_90	---	IPA	IPA	1.0000	1:48	Blank
91	170811M2_91	X	1700958-06 MATP03050 1	MATP03050	1.0000	2:12	Analyte
92	170811M2_92	---	IPA	IPA	1.0000	1:48	Blank
93	170811M2_93	X	1700958-06@5X MATP03050 1	MATP03050	1.0000	2:13	Analyte
94	170811M2_94	---	IPA	IPA	1.0000	1:48	Blank
95	170811M2_95	X	1700958-07 MATP03051 1	MATP03051	1.0000	2:14	Analyte
96	170811M2_96	---	1700958-09 MATP04060 1	MATP04060	1.0000	2:15	Analyte
97	170811M2_97	---	IPA	IPA	1.0000	1:48	Blank
98	170811M2_98	---	ST170811M2-6 PFC CS3 17H1105	PFC CS3 17H1105	1.0000	1:2	Standard
99	170811M2_99	---	IPA	IPA	1.0000	1:48	Blank
100	170811M2_100	---	1700958-13 MATP05079 1	MATP05079	1.0000	2:16	Analyte
101	170811M2_101	X	1700958-14 MATP05080 0.125	MATP05080	0.1250	2:17	Analyte
102	170811M2_102	---	1700958-15@10X MATP05081 1	MATP05081	1.0000	2:18	Analyte
103	170811M2_103	---	IPA	IPA	1.0000	1:48	Blank
104	170811M2_104	---	1700958-15 MATP05081 1	MATP05081	1.0000	2:19	Analyte
105	170811M2_105	---	IPA	IPA	1.0000	1:48	Blank
106	170811M2_106	X	1700959-04@5X MATP10119a 0.125	MATP10119a	0.1250	2:20	Analyte
107	170811M2_107	---	IPA	IPA	1.0000	1:48	Blank
108	170811M2_108	X	1700959-05@10X MATPXX132a 0.125	MATPXX132a	0.1250	2:21	Analyte
109	170811M2_109	---	IPA	IPA	1.0000	1:48	Blank
110	170811M2_110	X	1700959-06 MATPXX130a 0.125	MATPXX130a	0.1250	2:22	Analyte
111	170811M2_111	X	1700959-07@20X MATPXX126a 0.125	MATPXX126a	0.1250	2:23	Analyte
112	170811M2_112	---	IPA	IPA	1.0000	1:48	Blank
113	170811M2_113	---	1700961-10 MATP04064 0.125	MATP04064	0.1250	2:24	Analyte
114	170811M2_114	---	1700966-03 MW-13 0.125	MW-13	0.1250	2:25	Analyte
115	170811M2_115	---	IPA	IPA	1.0000	1:48	Blank
116	170811M2_116	---	ST170811M2-7 PFC CS3 17H1105	PFC CS3 17H1105	1.0000	1:2	Standard
117	170811M2_117	---	IPA	IPA	1.0000	1:48	Blank
118	170811M2_118	---	170811_BLUE	170811_BLUE	1.0000	2:28	Blank
119	170811M2_119	---	IPA	IPA	1.0000	1:48	Blank

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170811M2\170811M2-48.qld

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Printed: Saturday, August 12, 2017 16:33:25 Pacific Daylight Time

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Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

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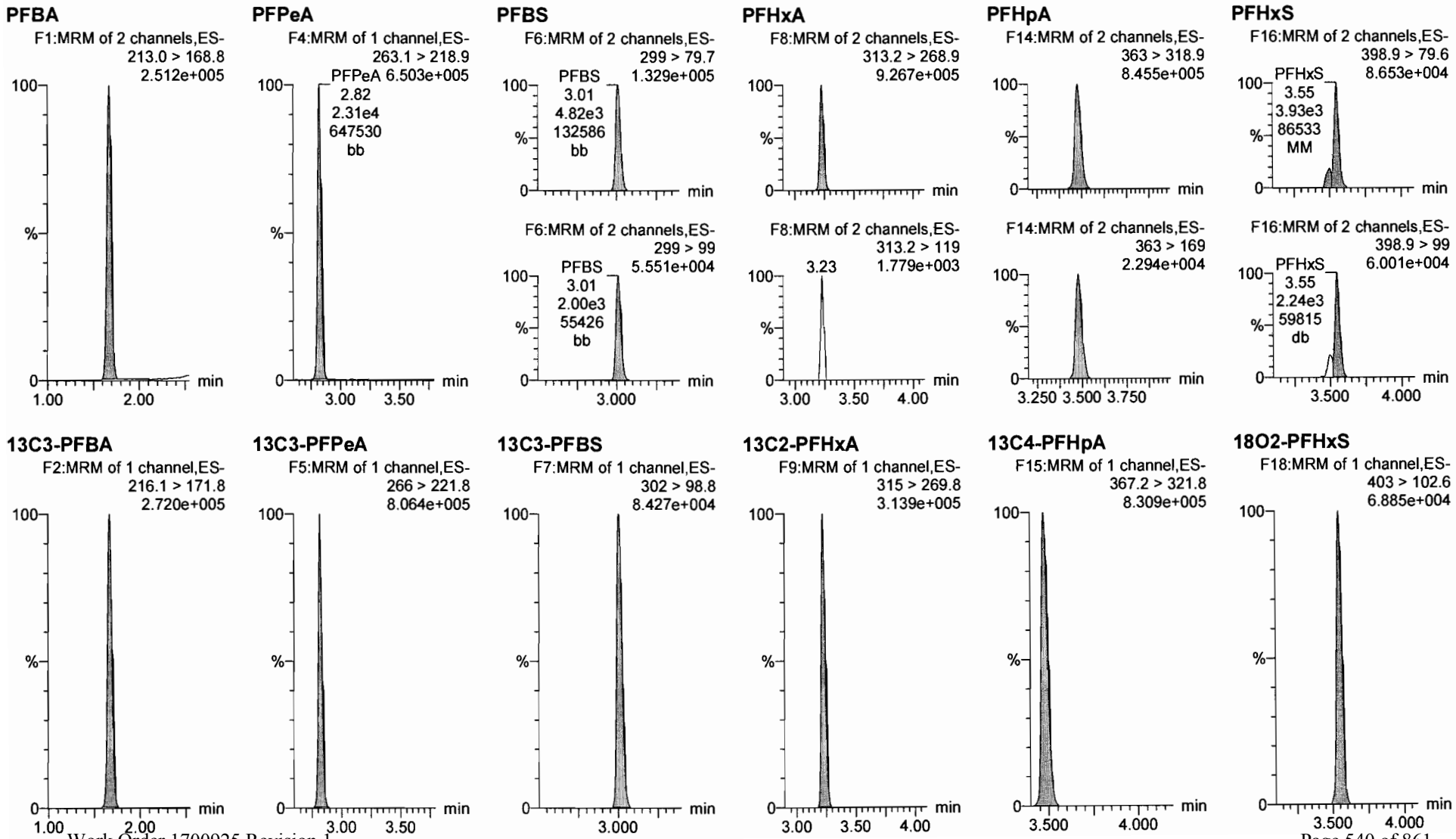

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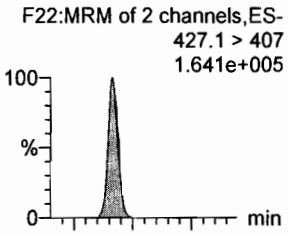
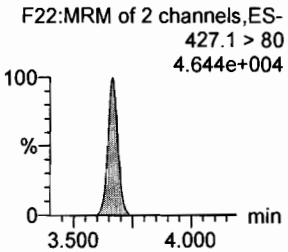
Last Altered: Saturday, August 12, 2017 16:33:07 Pacific Daylight Time
Printed: Saturday, August 12, 2017 16:33:25 Pacific Daylight Time

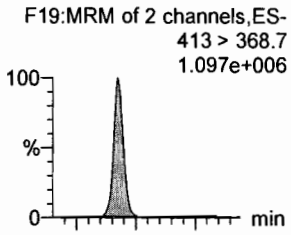
Name: 170811M2_48, Date: 12-Aug-2017, Time: 02:47:34, ID: ST170811M2-3 PFC CS3 17H1105, Description: PFC CS3 17H1105

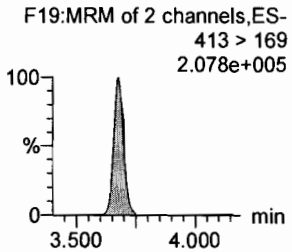
6:2 FTS





PFOA





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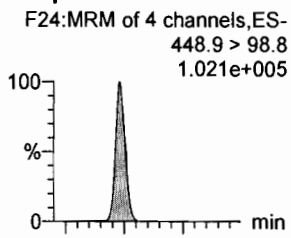

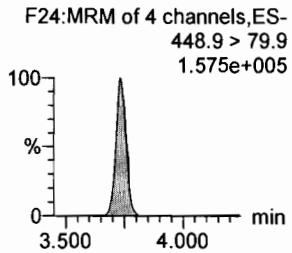

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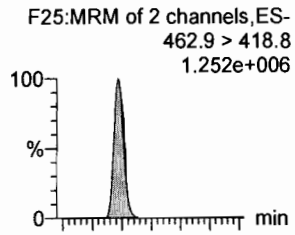

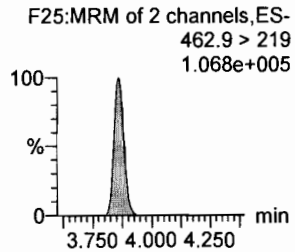

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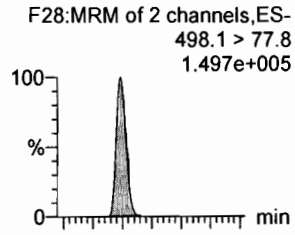

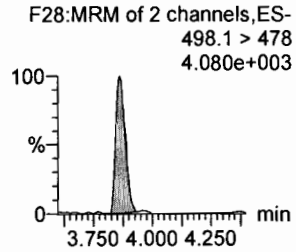

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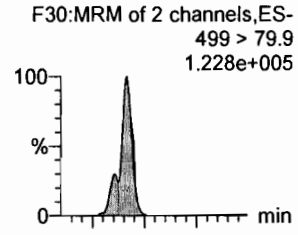
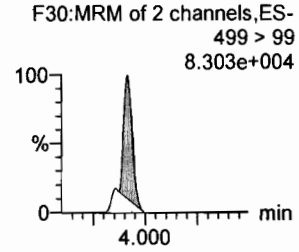
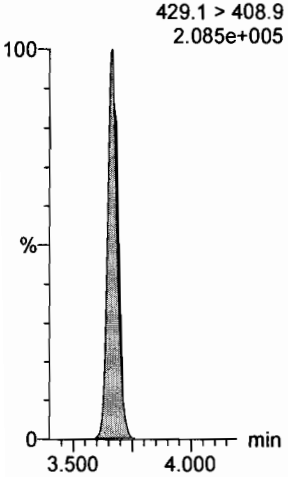
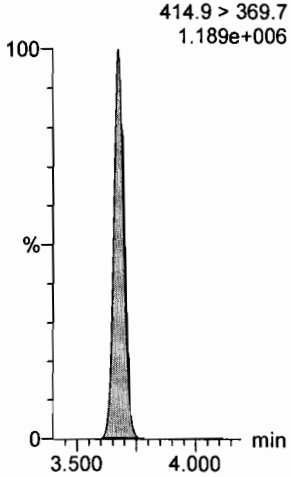




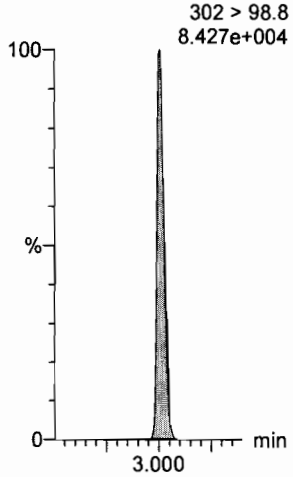
13C2-6:2 FTS



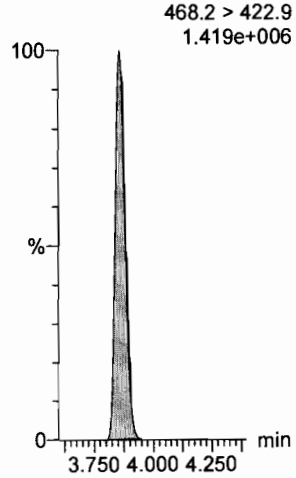
13C2-PFOA



13C3-PFBS



13C5-PFNA



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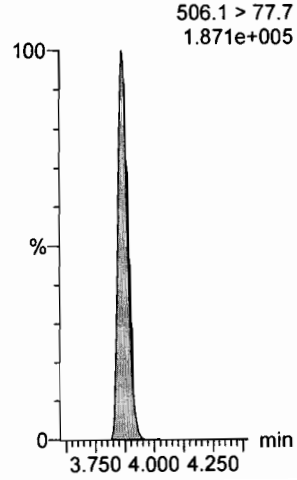

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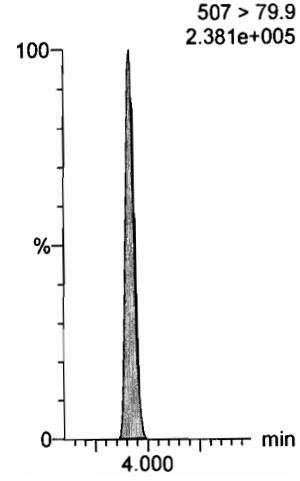

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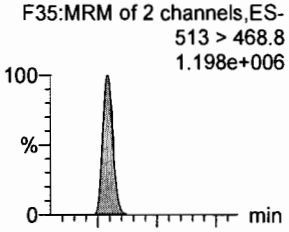
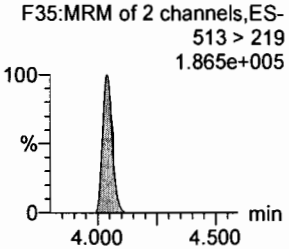
Printed: Saturday, August 12, 2017 16:33:25 Pacific Daylight Time

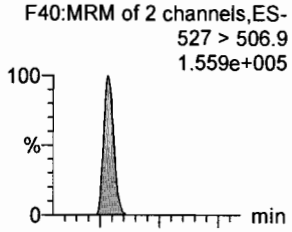
Name: 170811M2_48, Date: 12-Aug-2017, Time: 02:47:34, ID: ST170811M2-3 PFC CS3 17H1105, Description: PFC CS3 17H1105

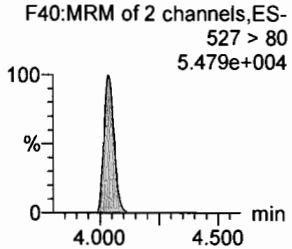
PFDA





8:2 FTS





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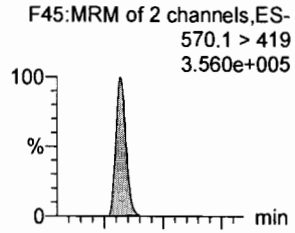

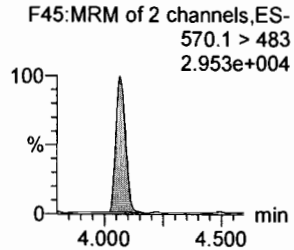

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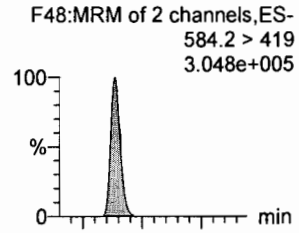
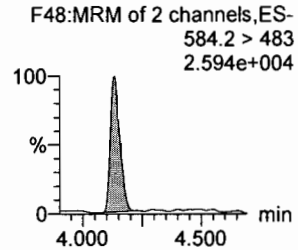
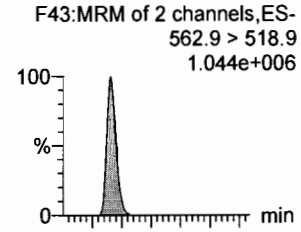
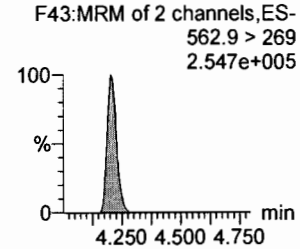




PFUnA





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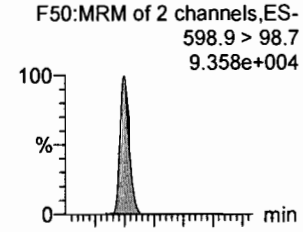

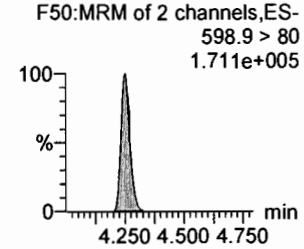

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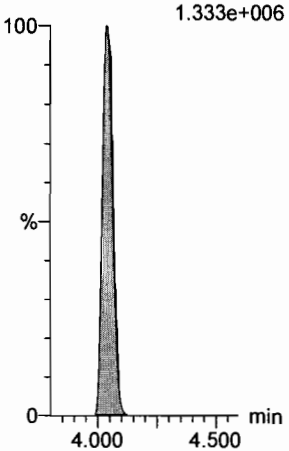
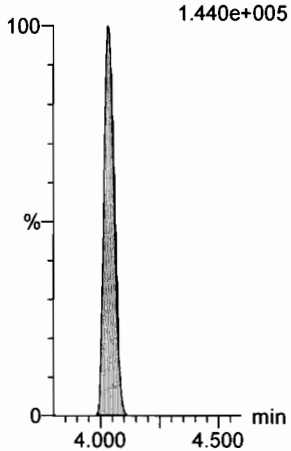
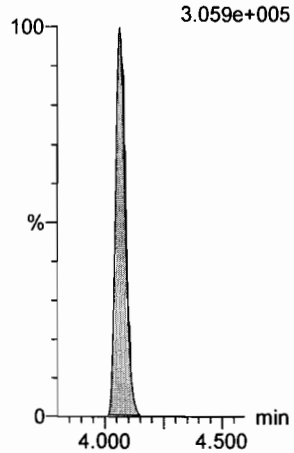


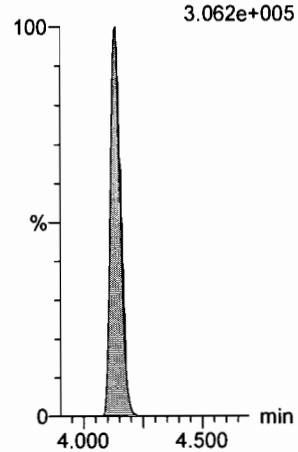
13C2-8:2 FTS



d3-N-MeFOSAA



d5-N-EtFOSAA



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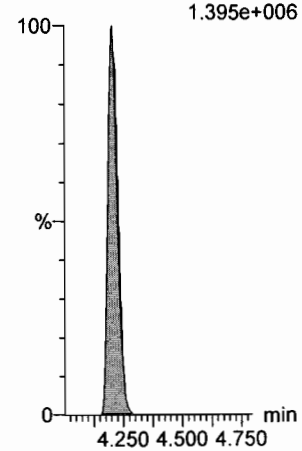

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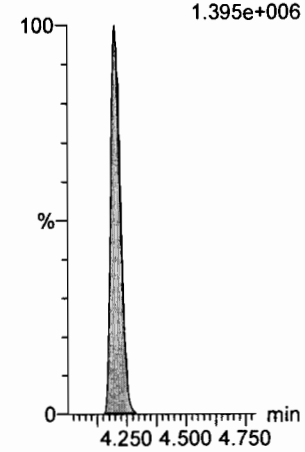

Vista Analytical Laboratory

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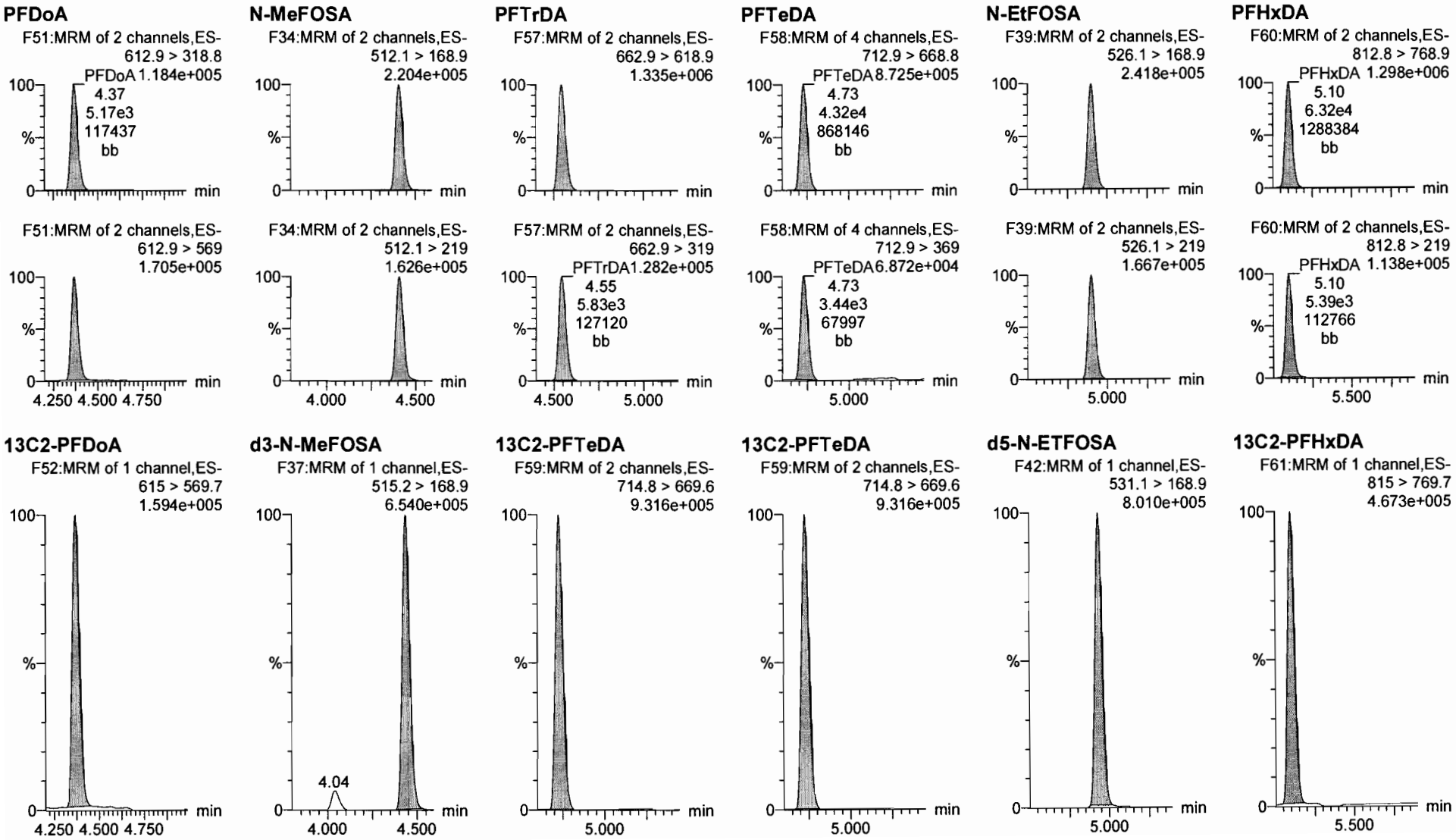

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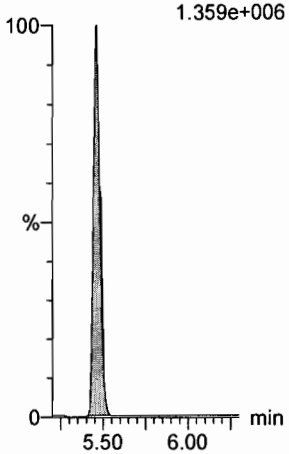
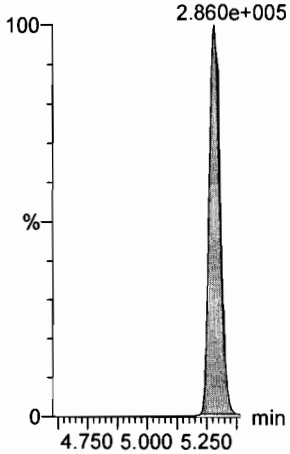
Printed: Saturday, August 12, 2017 16:33:25 Pacific Daylight Time

Name: 170811M2_48, Date: 12-Aug-2017, Time: 02:47:34, ID: ST170811M2-3 PFC CS3 17H1105, Description: PFC CS3 17H1105

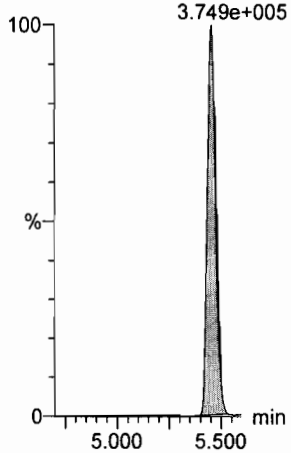
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
1.359e+006



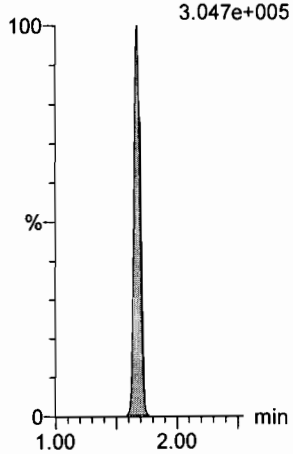
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
2.860e+005



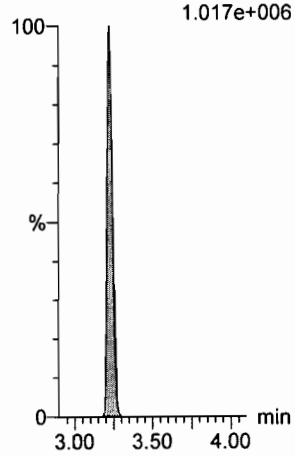
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
3.749e+005



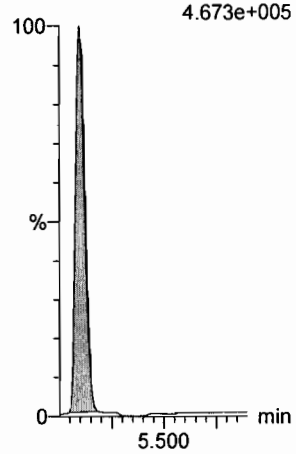
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
3.047e+005



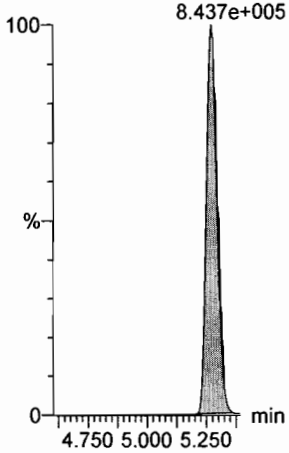
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
1.017e+006



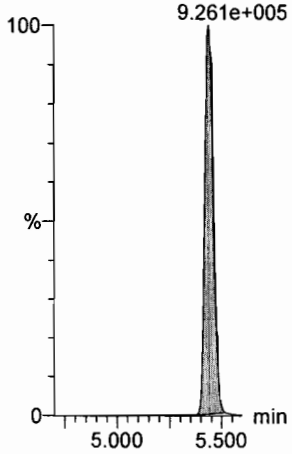
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.673e+005



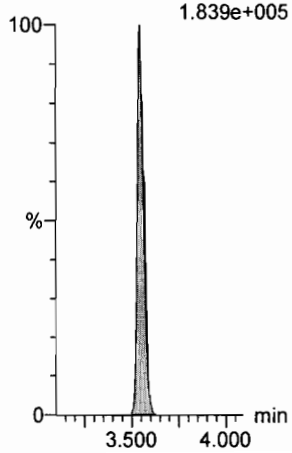
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
8.437e+005



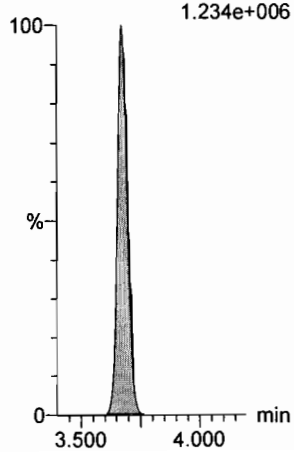
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
9.261e+005



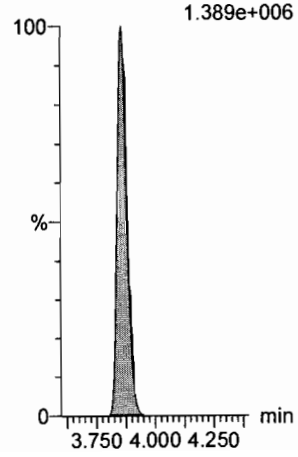
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.839e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.234e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.389e+006



Dataset: U:\Q4.PRO\results\170811M2\170811M2-48.qld

Last Altered: Saturday, August 12, 2017 16:33:07 Pacific Daylight Time
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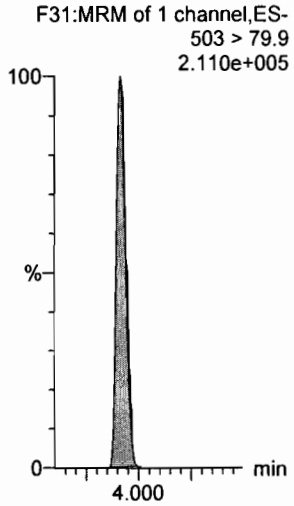
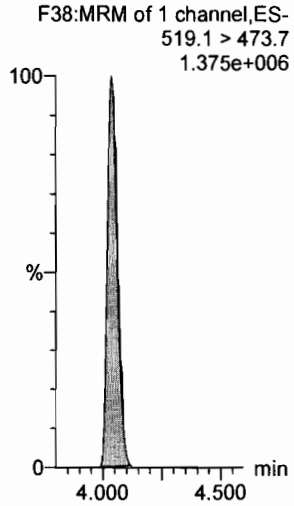
Name: 170811M2_48, Date: 12-Aug-2017, Time: 02:47:34, ID: ST170811M2-3 PFC CS3 17H1105, Description: PFC CS3 17H1105

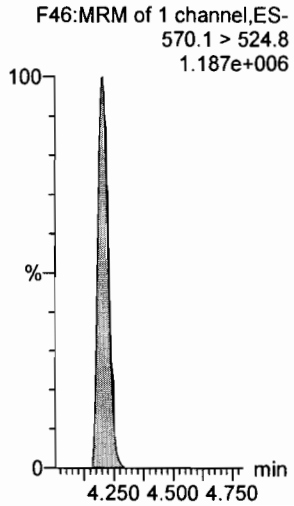
13C4-PFOS



13C6-PFDA



13C7-PFUnA



Dataset: U:\Q4.PRO\results\170812M1\RS AREAS.qld

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Printed: Sunday, August 13, 2017 13:46:36 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_RS=only.mdb 11 Aug 2017 12:16:30
Calibration: 13 Aug 2017 13:37:14

Name: 170812M1_6, Date: 12-Aug-2017, Time: 21:15:04, ID: ST170812M2-3 PFC CS0 17H1004, Description: PFC CS0 17H1004

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	ST170...	3.97e4	100.0	NO
2	2 13C3-PFHxS	ST170...	8.25e3	100.0	NO
3	3 13C8-PFOA	ST170...	6.18e4	100.0	NO
4	4 13C9-PFNA	ST170...	7.29e4	100.0	NO
5	5 13C4-PFOS	ST170...	9.74e3	100.0	NO
6	6 13C6-PFDA	ST170...	6.44e4	100.0	NO
7	7 13C7-PFUnA	ST170...	6.45e4	100.0	NO

Name: 170812M1_7, Date: 12-Aug-2017, Time: 21:26:20, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA			NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA	1.24e1	0.0	NO
7	7 13C7-PFUnA	IPA	4.32e1	0.1	NO

Name: 170812M1_8, Date: 12-Aug-2017, Time: 21:37:27, ID: 1700925-03RE1@20X I001BC50S-170724 0.12135, Description: I001BC50S-170724

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	1.55e3	3896.9	YES
2	2 13C3-PFHxS	17009...	2.96e2	3590.7	YES
3	3 13C8-PFOA	17009...	2.11e3	3416.3	YES
4	4 13C9-PFNA	17009...	2.22e3	3048.8	YES
5	5 13C4-PFOS	17009...	3.86e2	3967.7	YES
6	6 13C6-PFDA	17009...	2.30e3	3578.0	YES
7	7 13C7-PFUnA	17009...	1.89e3	2930.8	YES

Name: 170812M1_9, Date: 12-Aug-2017, Time: 21:48:28, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA			NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA			NO
7	7 13C7-PFUnA	IPA	2.28e1	0.0	NO

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Dataset: U:\Q4.PRO\results\170812M1\RS AREAS.qld

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Name: 170812M1_10, Date: 12-Aug-2017, Time: 21:59:22, ID: 1701007-03 RI17-EB3-080317 0.26497, Description: RI17-EB3-080317

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17010...	7.33e4	184.5	YES
2	2	13C3-PFHxS	17010...	1.16e4	141.1	NO
3	3	13C8-PFOA	17010...	6.23e4	100.9	NO
4	4	13C9-PFNA	17010...	7.34e4	100.7	NO
5	5	13C4-PFOS	17010...	1.15e4	118.3	NO
6	6	13C6-PFDA	17010...	7.22e4	112.1	NO
7	7	13C7-PFUnA	17010...	7.05e4	109.3	NO

Name: 170812M1_11, Date: 12-Aug-2017, Time: 22:10:01, ID: 1701007-04 RI17-EB8-080317 0.26753, Description: RI17-EB8-080317

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17010...	6.03e4	151.7	YES
2	2	13C3-PFHxS	17010...	9.76e3	118.3	NO
3	3	13C8-PFOA	17010...	4.95e4	80.0	NO
4	4	13C9-PFNA	17010...	5.55e4	76.1	NO
5	5	13C4-PFOS	17010...	8.99e3	92.3	NO
6	6	13C6-PFDA	17010...	5.89e4	91.4	NO
7	7	13C7-PFUnA	17010...	5.56e4	86.2	NO

Name: 170812M1_12, Date: 12-Aug-2017, Time: 22:20:39, ID: 1700922-06RE1 RB09-20170721 0.11676, Description: RB09-20170721

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.50e4	138.4	NO
2	2	13C3-PFHxS	17009...	8.96e3	108.5	NO
3	3	13C8-PFOA	17009...	4.45e4	72.0	NO
4	4	13C9-PFNA	17009...	5.19e4	71.2	NO
5	5	13C4-PFOS	17009...	8.37e3	86.0	NO
6	6	13C6-PFDA	17009...	4.93e4	76.5	NO
7	7	13C7-PFUnA	17009...	5.57e4	86.3	NO

Name: 170812M1_13, Date: 12-Aug-2017, Time: 22:31:26, ID: 1700925-01RE1 I001BC43S-170724 0.12112, Description: I001BC43S-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.95e4	149.8	NO
2	2	13C3-PFHxS	17009...	8.94e3	108.4	NO
3	3	13C8-PFOA	17009...	4.78e4	77.4	NO
4	4	13C9-PFNA	17009...	5.78e4	79.2	NO
5	5	13C4-PFOS	17009...	9.09e3	93.4	NO
6	6	13C6-PFDA	17009...	6.00e4	93.1	NO
7	7	13C7-PFUnA	17009...	5.17e4	80.1	NO

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Name: 170812M1_14, Date: 12-Aug-2017, Time: 22:42:12, ID: 1700925-02RE1 SB01-170724 0.12178, Description: SB01-170724

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	5.30e4	133.4	NO
2	2 13C3-PFHxS	17009...	8.21e3	99.5	NO
3	3 13C8-PFOA	17009...	4.22e4	68.3	NO
4	4 13C9-PFNA	17009...	4.89e4	67.1	NO
5	5 13C4-PFOS	17009...	7.60e3	78.1	NO
6	6 13C6-PFDA	17009...	4.55e4	70.6	NO
7	7 13C7-PFUnA	17009...	5.54e4	86.0	NO

Name: 170812M1_15, Date: 12-Aug-2017, Time: 22:52:50, ID: 1700925-03RE1 I001BC50S-170724 0.12135, Description: I001BC50S-170724

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	3.96e4	99.8	NO
2	2 13C3-PFHxS	17009...	4.55e3	55.1	NO
3	3 13C8-PFOA	17009...	2.90e4	47.0	YES
4	4 13C9-PFNA	17009...	3.97e4	54.5	NO
5	5 13C4-PFOS	17009...	6.54e3	67.2	NO
6	6 13C6-PFDA	17009...	4.12e4	63.9	NO
7	7 13C7-PFUnA	17009...	4.89e4	75.8	NO

Name: 170812M1_16, Date: 12-Aug-2017, Time: 23:03:29, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA			NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA			NO
7	7 13C7-PFUnA	IPA	9.11e0	0.0	NO

Name: 170812M1_17, Date: 12-Aug-2017, Time: 23:14:07, ID: 1700925-06RE1 EB01-170724 0.1185, Description: EB01-170724

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	5.04e4	126.8	NO
2	2 13C3-PFHxS	17009...	8.03e3	97.3	NO
3	3 13C8-PFOA	17009...	4.12e4	66.7	NO
4	4 13C9-PFNA	17009...	4.56e4	62.6	NO
5	5 13C4-PFOS	17009...	7.95e3	81.7	NO
6	6 13C6-PFDA	17009...	4.39e4	68.1	NO
7	7 13C7-PFUnA	17009...	4.64e4	71.9	NO

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Name: 170812M1_18, Date: 12-Aug-2017, Time: 23:24:46, ID: 1700929-01RE1 MATP01001 0.11834, Description: MATP01001

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.39e4	135.6	NO
2	2	13C3-PFHxS	17009...	8.34e3	101.0	NO
3	3	13C8-PFOA	17009...	4.70e4	76.0	NO
4	4	13C9-PFNA	17009...	4.60e4	63.0	NO
5	5	13C4-PFOS	17009...	8.75e3	89.9	NO
6	6	13C6-PFDA	17009...	4.86e4	75.5	NO
7	7	13C7-PFUnA	17009...	4.99e4	77.4	NO

Name: 170812M1_19, Date: 12-Aug-2017, Time: 23:35:24, ID: 1700929-02RE1 MATP01002 0.1157, Description: MATP01002

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.88e4	148.0	NO
2	2	13C3-PFHxS	17009...	9.53e3	115.5	NO
3	3	13C8-PFOA	17009...	5.00e4	81.0	NO
4	4	13C9-PFNA	17009...	5.86e4	80.5	NO
5	5	13C4-PFOS	17009...	9.61e3	98.7	NO
6	6	13C6-PFDA	17009...	4.68e4	72.7	NO
7	7	13C7-PFUnA	17009...	5.55e4	86.0	NO

Name: 170812M1_20, Date: 12-Aug-2017, Time: 23:46:11, ID: 1700938-01RE1 NORP08102 0.11844, Description: NORP08102

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	4.59e4	115.5	NO
2	2	13C3-PFHxS	17009...	7.37e3	89.4	NO
3	3	13C8-PFOA	17009...	4.08e4	66.1	NO
4	4	13C9-PFNA	17009...	4.97e4	68.2	NO
5	5	13C4-PFOS	17009...	7.29e3	74.8	NO
6	6	13C6-PFDA	17009...	4.15e4	64.4	NO
7	7	13C7-PFUnA	17009...	4.52e4	70.1	NO

Name: 170812M1_21, Date: 12-Aug-2017, Time: 23:56:49, ID: 1700938-02RE1 NORP08103 0.12014, Description: NORP08103

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.60e4	141.0	NO
2	2	13C3-PFHxS	17009...	8.72e3	105.7	NO
3	3	13C8-PFOA	17009...	4.55e4	73.7	NO
4	4	13C9-PFNA	17009...	4.32e4	59.2	NO
5	5	13C4-PFOS	17009...	8.56e3	87.9	NO
6	6	13C6-PFDA	17009...	4.41e4	68.5	NO
7	7	13C7-PFUnA	17009...	5.33e4	82.7	NO

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Name: 170812M1_22, Date: 13-Aug-2017, Time: 00:07:28, ID: 1700938-03RE1 NORP08104 0.11247, Description: NORP08104

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	4.65e4	117.1	NO
2	2	13C3-PFHxS	17009...	7.07e3	85.7	NO
3	3	13C8-PFOA	17009...	3.74e4	60.5	NO
4	4	13C9-PFNA	17009...	4.37e4	60.0	NO
5	5	13C4-PFOS	17009...	6.65e3	68.3	NO
6	6	13C6-PFDA	17009...	4.59e4	71.3	NO
7	7	13C7-PFUnA	17009...	3.76e4	58.3	NO

Name: 170812M1_23, Date: 13-Aug-2017, Time: 00:18:06, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA	6.71e0	0.0	NO
7	7	13C7-PFUnA	IPA	2.88e1	0.0	NO

Name: 170812M1_24, Date: 13-Aug-2017, Time: 00:28:44, ID: ST170812M1-4 PFC CS3 17H1203, Description: PFC CS3 17H1203

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	3.38e4	85.1	NO
2	2	13C3-PFHxS	ST170...	5.65e3	68.5	NO
3	3	13C8-PFOA	ST170...	4.97e4	80.4	NO
4	4	13C9-PFNA	ST170...	6.18e4	84.7	NO
5	5	13C4-PFOS	ST170...	9.33e3	95.8	NO
6	6	13C6-PFDA	ST170...	5.64e4	87.5	NO
7	7	13C7-PFUnA	ST170...	4.88e4	75.7	NO

Name: 170812M1_25, Date: 13-Aug-2017, Time: 00:39:31, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	3.84e1	0.1	NO

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Name: 170812M1_26, Date: 13-Aug-2017, Time: 02:41:36, ID: 1700925-04RE2 I001MW52S-170724 0.00122, Description: I001MW52S-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	9.57e4	240.9	YES
2	2	13C3-PFHxS	17009...	1.51e4	183.0	YES
3	3	13C8-PFOA	17009...	7.39e4	119.6	NO
4	4	13C9-PFNA	17009...	9.11e4	124.9	NO
5	5	13C4-PFOS	17009...	1.90e4	195.4	YES
6	6	13C6-PFDA	17009...	1.01e5	156.9	YES
7	7	13C7-PFUnA	17009...	8.97e4	139.1	NO

Name: 170812M1_27, Date: 13-Aug-2017, Time: 02:52:19, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.58e1	0.0	NO

Name: 170812M1_28, Date: 13-Aug-2017, Time: 03:02:57, ID: 1700925-05RE2 I001MW52X-170724 0.00133, Description: I001MW52X-170724

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	1.24e5	311.8	YES
2	2	13C3-PFHxS	17009...	1.63e4	197.6	YES
3	3	13C8-PFOA	17009...	8.63e4	139.6	NO
4	4	13C9-PFNA	17009...	1.17e5	161.2	YES
5	5	13C4-PFOS	17009...	2.05e4	210.6	YES
6	6	13C6-PFDA	17009...	1.22e5	189.7	YES
7	7	13C7-PFUnA	17009...	1.20e5	185.4	YES

Name: 170812M1_29, Date: 13-Aug-2017, Time: 03:13:44, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.11e1	0.0	NO

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Name: 170812M1_30, Date: 13-Aug-2017, Time: 03:24:30, ID: 1700958-06RE1@10X MATP03050 1.22, Description: MATP03050

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.77e3	17.0	YES
2	2	13C3-PFHxS	17009...	9.34e2	11.3	YES
3	3	13C8-PFOA	17009...	5.28e3	8.5	YES
4	4	13C9-PFNA	17009...	5.52e3	7.6	YES
5	5	13C4-PFOS	17009...	1.01e3	10.4	YES
6	6	13C6-PFDA	17009...	5.69e3	8.8	YES
7	7	13C7-PFUnA	17009...	5.15e3	8.0	YES

Name: 170812M1_31, Date: 13-Aug-2017, Time: 03:35:16, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

Name: 170812M1_32, Date: 13-Aug-2017, Time: 03:46:03, ID: 1700958-04 MATP03048 1, Description: MATP03048

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.56e4	139.8	NO
2	2	13C3-PFHxS	17009...	9.00e3	109.1	NO
3	3	13C8-PFOA	17009...	4.06e4	65.7	NO
4	4	13C9-PFNA	17009...	5.09e4	69.9	NO
5	5	13C4-PFOS	17009...	5.44e3	55.9	NO
6	6	13C6-PFDA	17009...	5.02e4	78.0	NO
7	7	13C7-PFUnA	17009...	4.78e4	74.1	NO

Name: 170812M1_33, Date: 13-Aug-2017, Time: 03:56:49, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	8.04e0	0.0	NO

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Name: 170812M1_34, Date: 13-Aug-2017, Time: 04:07:28, ID: 1700958-05 MATP03049 1, Description: MATP03049

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.68e4	142.9	NO
2	2	13C3-PFHxS	17009...	8.36e3	101.3	NO
3	3	13C8-PFOA	17009...	4.85e4	78.4	NO
4	4	13C9-PFNA	17009...	4.81e4	66.0	NO
5	5	13C4-PFOS	17009...	6.18e3	63.5	NO
6	6	13C6-PFDA	17009...	4.92e4	76.3	NO
7	7	13C7-PFUnA	17009...	4.70e4	72.9	NO

Name: 170812M1_35, Date: 13-Aug-2017, Time: 04:18:17, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

Name: 170812M1_36, Date: 13-Aug-2017, Time: 04:29:04, ID: 1700958-06 MATP03050 1, Description: MATP03050

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.10e4	153.6	YES
2	2	13C3-PFHxS	17009...	6.85e3	83.0	NO
3	3	13C8-PFOA	17009...	4.89e4	79.2	NO
4	4	13C9-PFNA	17009...	5.29e4	72.5	NO
5	5	13C4-PFOS	17009...	9.00e3	92.4	NO
6	6	13C6-PFDA	17009...	5.85e4	90.8	NO
7	7	13C7-PFUnA	17009...	5.60e4	86.8	NO

Name: 170812M1_37, Date: 13-Aug-2017, Time: 04:39:49, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.02e1	0.0	NO

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Name: 170812M1_38, Date: 13-Aug-2017, Time: 04:50:36, ID: 1700958-07 MATP03051 1, Description: MATP03051

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	17009...	6.40e4	161.1	YES
2	2 13C3-PFHxS	17009...	1.04e4	125.6	NO
3	3 13C8-PFOA	17009...	5.11e4	82.8	NO
4	4 13C9-PFNA	17009...	5.95e4	81.6	NO
5	5 13C4-PFOS	17009...	9.45e3	97.1	NO
6	6 13C6-PFDA	17009...	5.44e4	84.4	NO
7	7 13C7-PFUnA	17009...	5.34e4	82.7	NO

Name: 170812M1_39, Date: 13-Aug-2017, Time: 05:01:14, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA			NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA	8.07e0	0.0	NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA	5.95e0	0.0	NO
7	7 13C7-PFUnA	IPA	1.97e1	0.0	NO

Name: 170812M1_40, Date: 13-Aug-2017, Time: 05:11:52, ID: ST170812M1-5 PFC CS3 17H1203, Description: PFC CS3 17H1203

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	ST170...	3.54e4	89.0	NO
2	2 13C3-PFHxS	ST170...	5.81e3	70.4	NO
3	3 13C8-PFOA	ST170...	4.52e4	73.1	NO
4	4 13C9-PFNA	ST170...	6.45e4	88.5	NO
5	5 13C4-PFOS	ST170...	9.80e3	100.7	NO
6	6 13C6-PFDA	ST170...	5.52e4	85.7	NO
7	7 13C7-PFUnA	ST170...	6.13e4	95.1	NO

Name: 170812M1_41, Date: 13-Aug-2017, Time: 05:22:39, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C5-PFHxA	IPA	5.87e0	0.0	NO
2	2 13C3-PFHxS	IPA			NO
3	3 13C8-PFOA	IPA			NO
4	4 13C9-PFNA	IPA			NO
5	5 13C4-PFOS	IPA			NO
6	6 13C6-PFDA	IPA	5.76e0	0.0	NO
7	7 13C7-PFUnA	IPA			NO

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Name: 170812M1_42, Date: 13-Aug-2017, Time: 05:33:25, ID: 1700961-02 MATP05098 1, Description: MATP05098

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.45e4	137.3	NO
2	2	13C3-PFHxS	17009...	9.96e3	120.7	NO
3	3	13C8-PFOA	17009...	5.05e4	81.7	NO
4	4	13C9-PFNA	17009...	5.31e4	72.9	NO
5	5	13C4-PFOS	17009...	8.78e3	90.2	NO
6	6	13C6-PFDA	17009...	5.37e4	83.4	NO
7	7	13C7-PFUnA	17009...	5.68e4	88.0	NO

Name: 170812M1_43, Date: 13-Aug-2017, Time: 05:44:04, ID: 1700961-03 MATP05099 1, Description: MATP05099

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.64e4	141.9	NO
2	2	13C3-PFHxS	17009...	9.71e3	117.7	NO
3	3	13C8-PFOA	17009...	4.73e4	76.5	NO
4	4	13C9-PFNA	17009...	5.44e4	74.6	NO
5	5	13C4-PFOS	17009...	9.14e3	93.9	NO
6	6	13C6-PFDA	17009...	5.32e4	82.7	NO
7	7	13C7-PFUnA	17009...	5.58e4	86.6	NO

Name: 170812M1_44, Date: 13-Aug-2017, Time: 05:54:42, ID: 1700961-04 MATP05100 1, Description: MATP05100

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.25e4	157.2	YES
2	2	13C3-PFHxS	17009...	1.01e4	122.8	NO
3	3	13C8-PFOA	17009...	5.26e4	85.2	NO
4	4	13C9-PFNA	17009...	5.45e4	74.8	NO
5	5	13C4-PFOS	17009...	8.74e3	89.8	NO
6	6	13C6-PFDA	17009...	5.62e4	87.2	NO
7	7	13C7-PFUnA	17009...	5.68e4	88.0	NO

Name: 170812M1_45, Date: 13-Aug-2017, Time: 06:05:21, ID: 1700961-05 MATP05102 1, Description: MATP05102

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.47e4	162.9	YES
2	2	13C3-PFHxS	17009...	9.34e3	113.2	NO
3	3	13C8-PFOA	17009...	5.22e4	84.4	NO
4	4	13C9-PFNA	17009...	6.02e4	82.5	NO
5	5	13C4-PFOS	17009...	9.07e3	93.2	NO
6	6	13C6-PFDA	17009...	5.70e4	88.5	NO
7	7	13C7-PFUnA	17009...	5.72e4	88.7	NO

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Name: 170812M1_46, Date: 13-Aug-2017, Time: 06:15:59, ID: 1700961-06 MATP05103 1, Description: MATP05103

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.04e4	152.0	YES
2	2	13C3-PFHxS	17009...	1.02e4	123.4	NO
3	3	13C8-PFOA	17009...	4.62e4	74.8	NO
4	4	13C9-PFNA	17009...	5.92e4	81.3	NO
5	5	13C4-PFOS	17009...	9.12e3	93.7	NO
6	6	13C6-PFDA	17009...	5.20e4	80.7	NO
7	7	13C7-PFUnA	17009...	4.93e4	76.4	NO

Name: 170812M1_47, Date: 13-Aug-2017, Time: 06:26:45, ID: 1700961-07 MATP04055 1, Description: MATP04055

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.72e4	143.9	NO
2	2	13C3-PFHxS	17009...	9.73e3	118.0	NO
3	3	13C8-PFOA	17009...	4.87e4	78.8	NO
4	4	13C9-PFNA	17009...	5.31e4	72.9	NO
5	5	13C4-PFOS	17009...	8.63e3	88.6	NO
6	6	13C6-PFDA	17009...	5.55e4	86.2	NO
7	7	13C7-PFUnA	17009...	4.87e4	75.5	NO

Name: 170812M1_48, Date: 13-Aug-2017, Time: 06:37:33, ID: 1700961-08 MATP03041 1, Description: MATP03041

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.22e4	131.4	NO
2	2	13C3-PFHxS	17009...	8.84e3	107.2	NO
3	3	13C8-PFOA	17009...	4.61e4	74.5	NO
4	4	13C9-PFNA	17009...	4.79e4	65.7	NO
5	5	13C4-PFOS	17009...	7.66e3	78.6	NO
6	6	13C6-PFDA	17009...	4.69e4	72.7	NO
7	7	13C7-PFUnA	17009...	4.57e4	70.8	NO

Name: 170812M1_49, Date: 13-Aug-2017, Time: 06:48:19, ID: 1700961-09 MATP04063 1, Description: MATP04063

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.00e4	125.9	NO
2	2	13C3-PFHxS	17009...	8.41e3	101.9	NO
3	3	13C8-PFOA	17009...	4.41e4	71.4	NO
4	4	13C9-PFNA	17009...	4.71e4	64.7	NO
5	5	13C4-PFOS	17009...	8.14e3	83.6	NO
6	6	13C6-PFDA	17009...	4.46e4	69.3	NO
7	7	13C7-PFUnA	17009...	4.87e4	75.5	NO

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Name: 170812M1_50, Date: 13-Aug-2017, Time: 06:58:57, ID: 1700961-11 MATP04065 1, Description: MATP04065

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.18e4	155.7	YES
2	2	13C3-PFHxS	17009...	9.70e3	117.5	NO
3	3	13C8-PFOA	17009...	5.32e4	86.2	NO
4	4	13C9-PFNA	17009...	6.21e4	85.3	NO
5	5	13C4-PFOS	17009...	1.02e4	105.2	NO
6	6	13C6-PFDA	17009...	5.93e4	92.0	NO
7	7	13C7-PFUnA	17009...	5.20e4	80.6	NO

Name: 170812M1_51, Date: 13-Aug-2017, Time: 07:09:36, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA			NO

Name: 170812M1_52, Date: 13-Aug-2017, Time: 07:20:14, ID: ST170812M1-6 PFC CS3 17H1203, Description: PFC CS3 17H1203

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	3.56e4	89.5	NO
2	2	13C3-PFHxS	ST170...	6.16e3	74.6	NO
3	3	13C8-PFOA	ST170...	4.85e4	78.4	NO
4	4	13C9-PFNA	ST170...	6.40e4	87.8	NO
5	5	13C4-PFOS	ST170...	9.77e3	100.3	NO
6	6	13C6-PFDA	ST170...	6.08e4	94.5	NO
7	7	13C7-PFUnA	ST170...	6.14e4	95.3	NO

Name: 170812M1_53, Date: 13-Aug-2017, Time: 07:30:52, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA	6.85e0	0.0	NO
7	7	13C7-PFUnA	IPA	1.44e1	0.0	NO

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Name: 170812M1_54, Date: 13-Aug-2017, Time: 07:41:31, ID: 1700961-12 MATP04066 1, Description: MATP04066

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.42e4	136.5	NO
2	2	13C3-PFHxS	17009...	9.78e3	118.5	NO
3	3	13C8-PFOA	17009...	5.18e4	83.8	NO
4	4	13C9-PFNA	17009...	4.99e4	68.5	NO
5	5	13C4-PFOS	17009...	8.89e3	91.3	NO
6	6	13C6-PFDA	17009...	5.38e4	83.5	NO
7	7	13C7-PFUnA	17009...	5.33e4	82.6	NO

Name: 170812M1_55, Date: 13-Aug-2017, Time: 07:52:09, ID: 1700960-03 MATP05084 0.125, Description: MATP05084

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.65e4	167.5	YES
2	2	13C3-PFHxS	17009...	1.05e4	127.0	NO
3	3	13C8-PFOA	17009...	5.17e4	83.6	NO
4	4	13C9-PFNA	17009...	5.78e4	79.3	NO
5	5	13C4-PFOS	17009...	1.02e4	104.5	NO
6	6	13C6-PFDA	17009...	5.91e4	91.7	NO
7	7	13C7-PFUnA	17009...	5.27e4	81.7	NO

Name: 170812M1_56, Date: 13-Aug-2017, Time: 08:02:47, ID: 1700960-05 MATP05086 1, Description: MATP05086

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.17e4	155.3	YES
2	2	13C3-PFHxS	17009...	9.85e3	119.4	NO
3	3	13C8-PFOA	17009...	5.21e4	84.4	NO
4	4	13C9-PFNA	17009...	5.97e4	81.9	NO
5	5	13C4-PFOS	17009...	9.12e3	93.7	NO
6	6	13C6-PFDA	17009...	5.62e4	87.2	NO
7	7	13C7-PFUnA	17009...	5.32e4	82.5	NO

Name: 170812M1_57, Date: 13-Aug-2017, Time: 08:13:34, ID: 1700958-14 MATP05080 0.125, Description: MATP05080

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	6.20e4	156.1	YES
2	2	13C3-PFHxS	17009...	9.48e3	114.9	NO
3	3	13C8-PFOA	17009...	5.18e4	83.8	NO
4	4	13C9-PFNA	17009...	5.83e4	79.9	NO
5	5	13C4-PFOS	17009...	9.42e3	96.8	NO
6	6	13C6-PFDA	17009...	5.65e4	87.6	NO
7	7	13C7-PFUnA	17009...	5.50e4	85.3	NO

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Name: 170812M1_58, Date: 13-Aug-2017, Time: 08:24:12, ID: 1700959-06 MATPXX130a 0.125, Description: MATPXX130a

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	17009...	5.82e4	146.6	NO
2	2	13C3-PFHxS	17009...	9.78e3	118.6	NO
3	3	13C8-PFOA	17009...	4.76e4	77.1	NO
4	4	13C9-PFNA	17009...	5.61e4	77.0	NO
5	5	13C4-PFOS	17009...	8.87e3	91.1	NO
6	6	13C6-PFDA	17009...	5.56e4	86.3	NO
7	7	13C7-PFUnA	17009...	5.14e4	79.7	NO

Name: 170812M1_59, Date: 13-Aug-2017, Time: 08:34:50, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA			NO
7	7	13C7-PFUnA	IPA	1.30e1	0.0	NO

Name: 170812M1_60, Date: 13-Aug-2017, Time: 08:45:37, ID: ST170812M1-7 PFC CS3 17H1203, Description: PFC CS3 17H1203

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	ST170...	3.67e4	92.5	NO
2	2	13C3-PFHxS	ST170...	6.09e3	73.8	NO
3	3	13C8-PFOA	ST170...	4.89e4	79.1	NO
4	4	13C9-PFNA	ST170...	6.20e4	85.0	NO
5	5	13C4-PFOS	ST170...	9.97e3	102.4	NO
6	6	13C6-PFDA	ST170...	5.87e4	91.1	NO
7	7	13C7-PFUnA	ST170...	5.93e4	92.0	NO

Name: 170812M1_61, Date: 13-Aug-2017, Time: 08:56:43, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C5-PFHxA	IPA			NO
2	2	13C3-PFHxS	IPA			NO
3	3	13C8-PFOA	IPA			NO
4	4	13C9-PFNA	IPA			NO
5	5	13C4-PFOS	IPA			NO
6	6	13C6-PFDA	IPA	5.35e0	0.0	NO
7	7	13C7-PFUnA	IPA	7.98e0	0.0	NO

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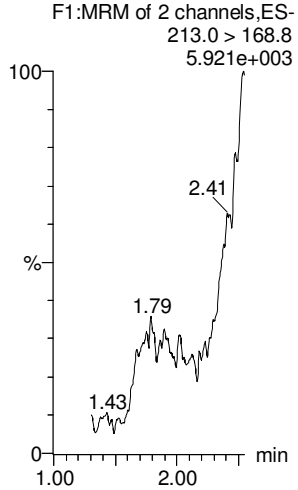
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 14 Aug 2017 15:12:43
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170812M1_5, Date: 12-Aug-2017, Time: 21:00:58, ID: IPA, Description: IPA

PFBA



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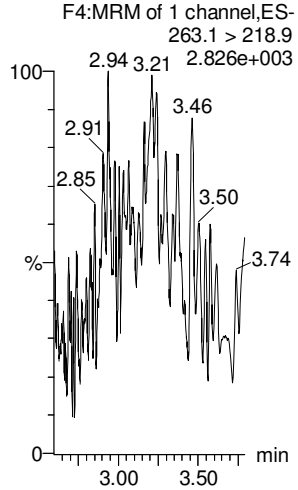

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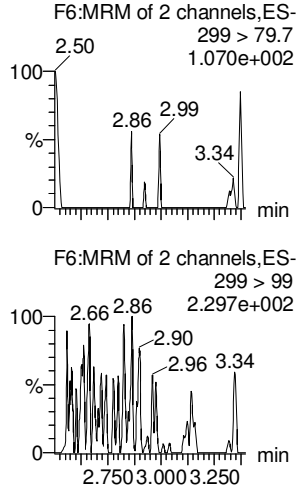

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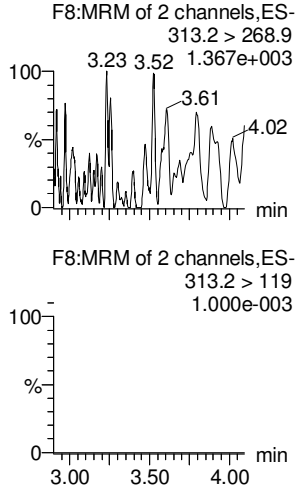

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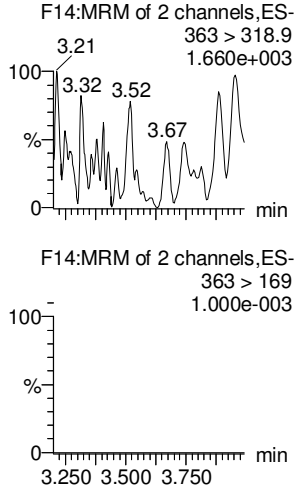

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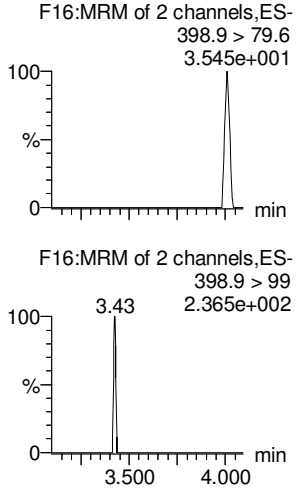
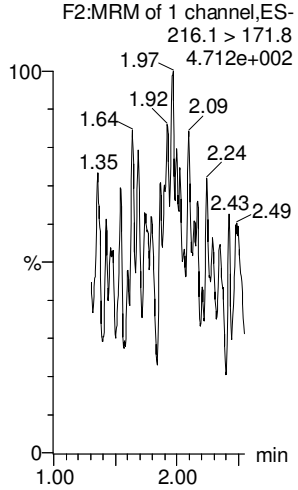


13C3-PFBA



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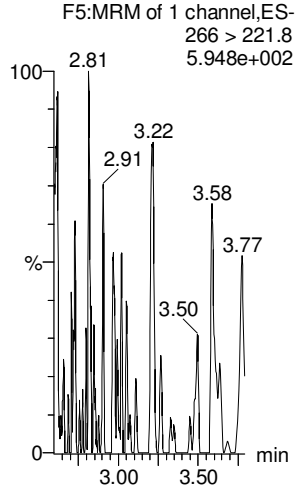

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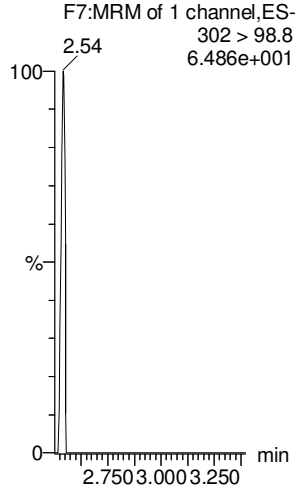

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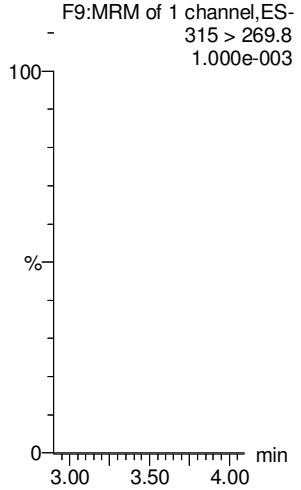

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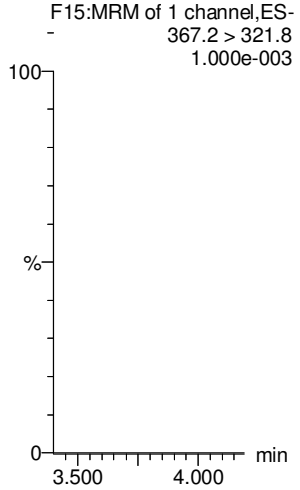

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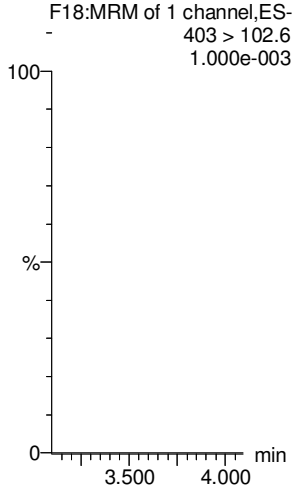

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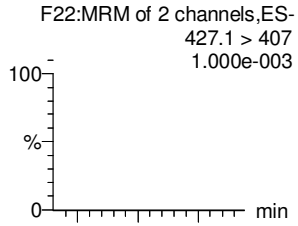
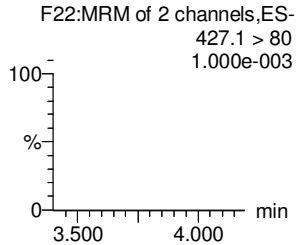
Printed: Thursday, August 17, 2017 15:05:27 Pacific Daylight Time

Name: 170812M1_5, Date: 12-Aug-2017, Time: 21:00:58, ID: IPA, Description: IPA

6:2 FTS





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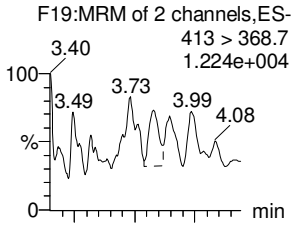

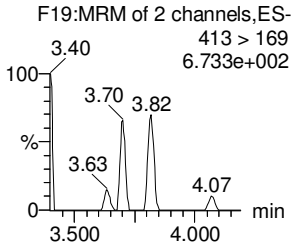

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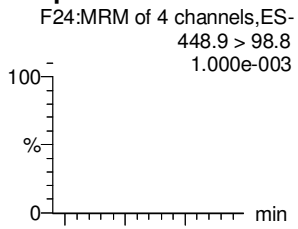

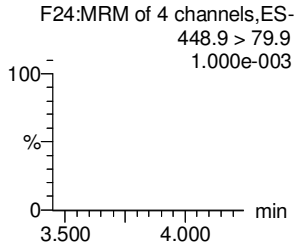

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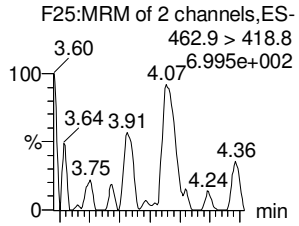

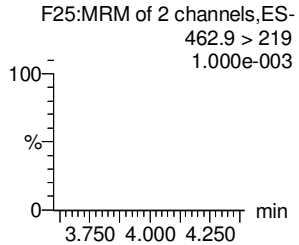

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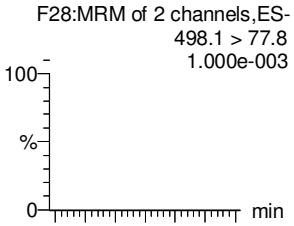

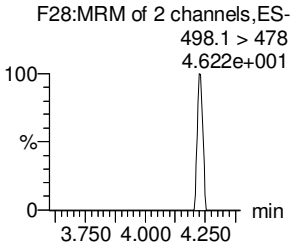

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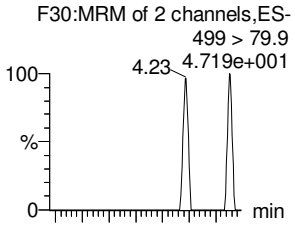

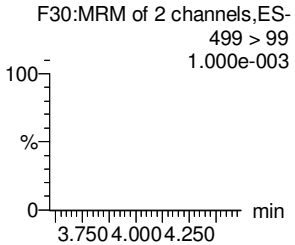

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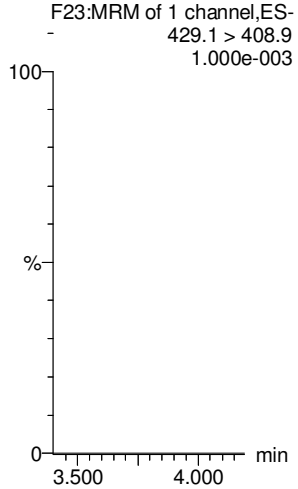

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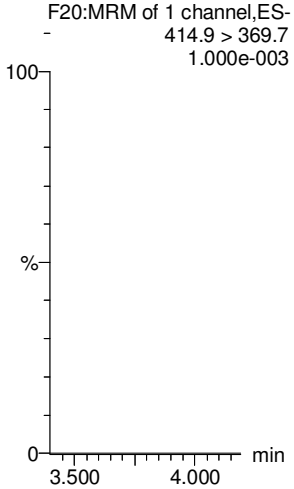

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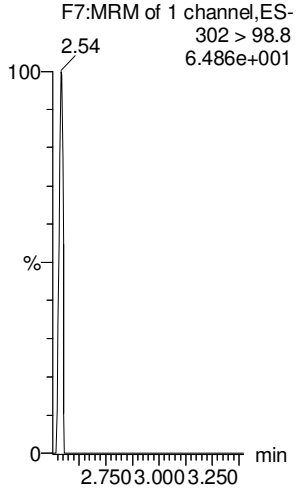

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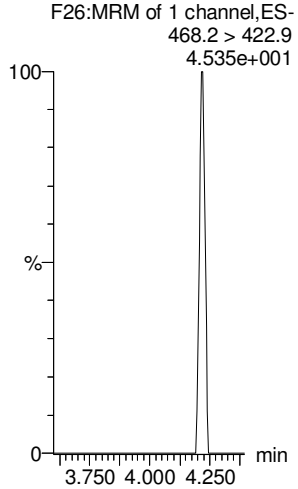

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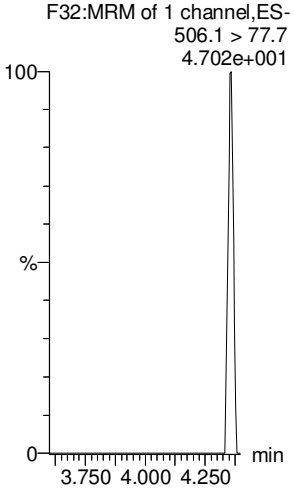

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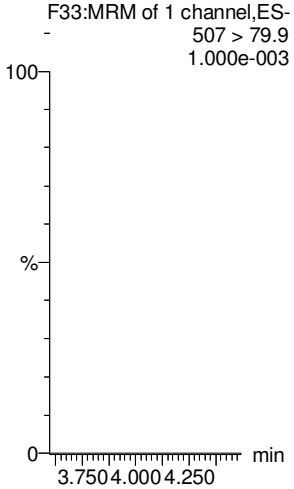

Vista Analytical Laboratory

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Name: 170812M1_5, Date: 12-Aug-2017, Time: 21:00:58, ID: IPA, Description: IPA

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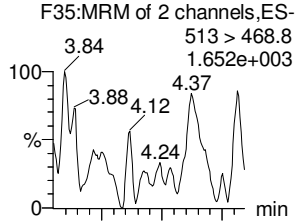
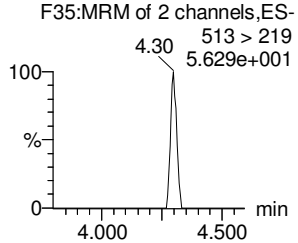
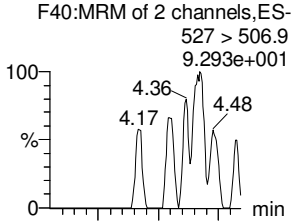
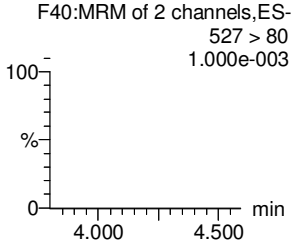




8:2 FTS





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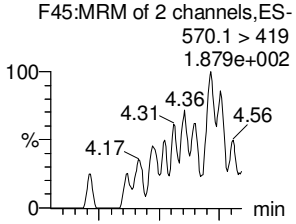

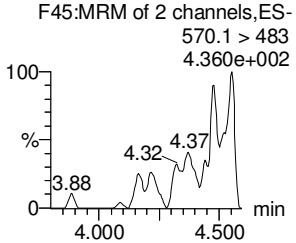

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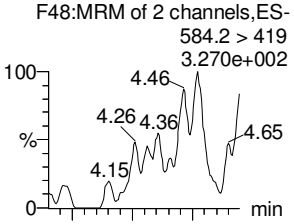

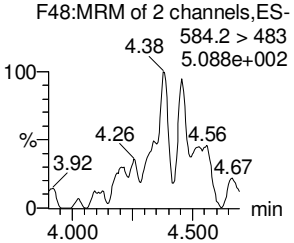

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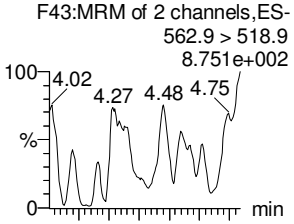

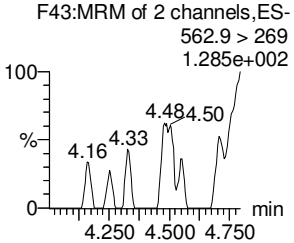

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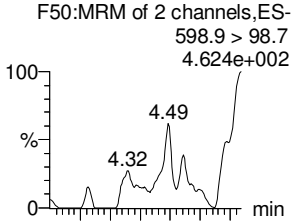

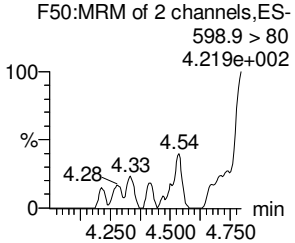

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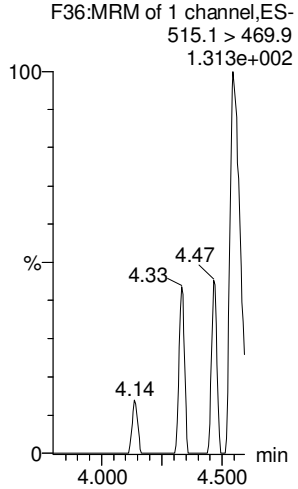

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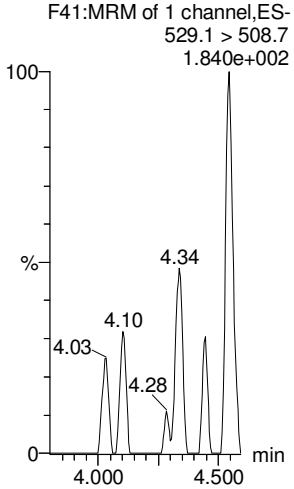

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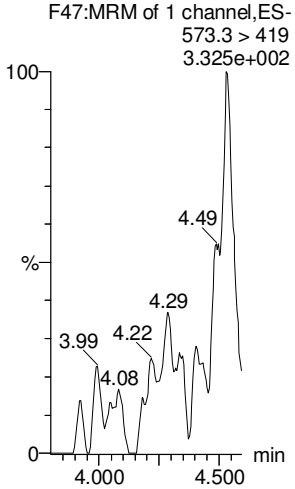

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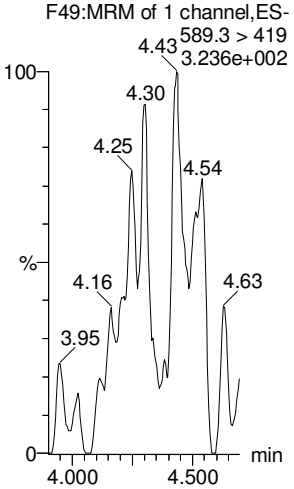

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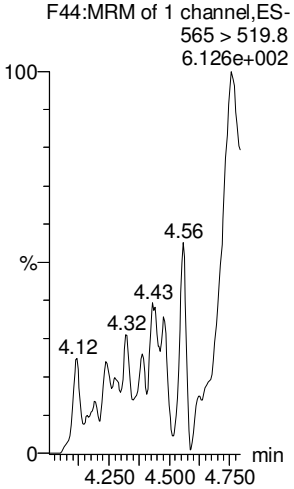

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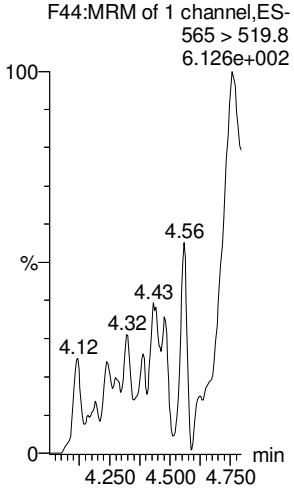

Vista Analytical Laboratory

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Name: 170812M1_5, Date: 12-Aug-2017, Time: 21:00:58, ID: IPA, Description: IPA

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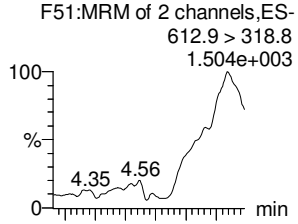

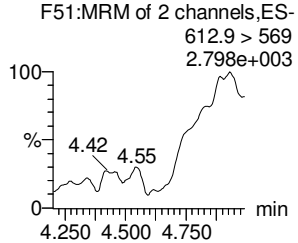

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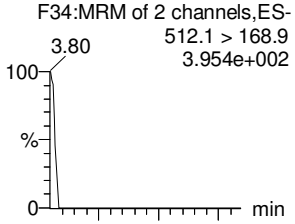

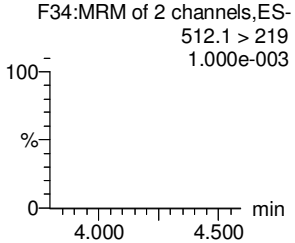

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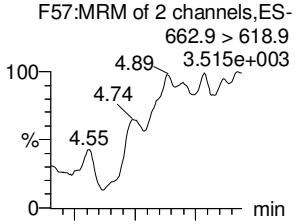

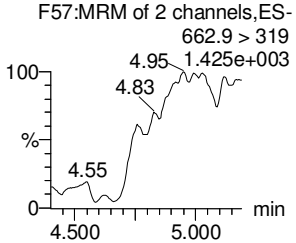

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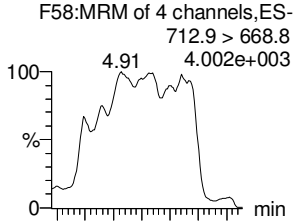

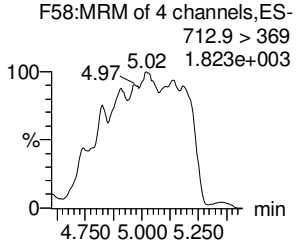

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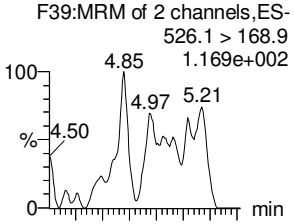

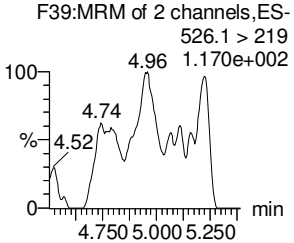

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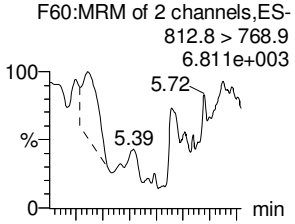
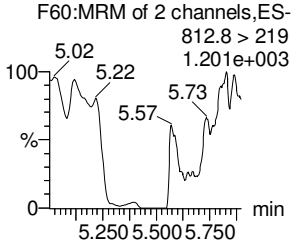
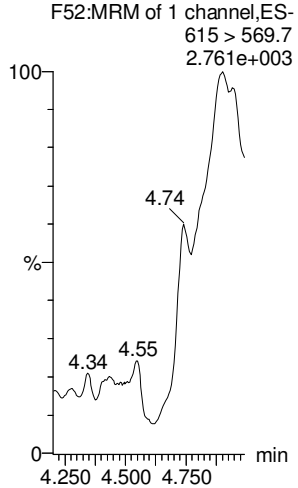
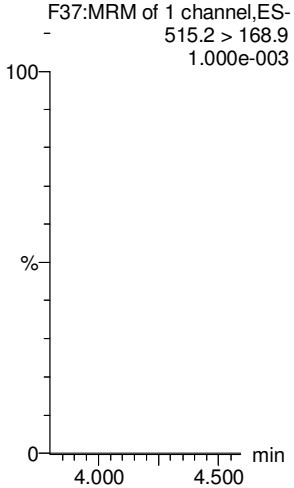




13C2-PFDoA



d3-N-MeFOSA



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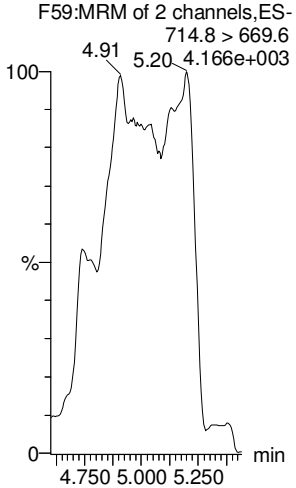

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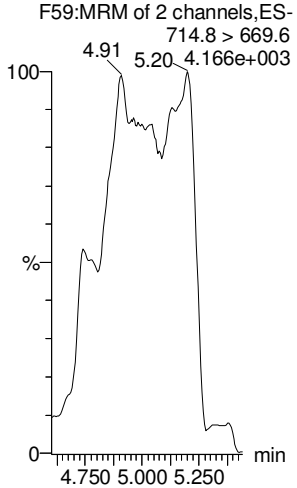

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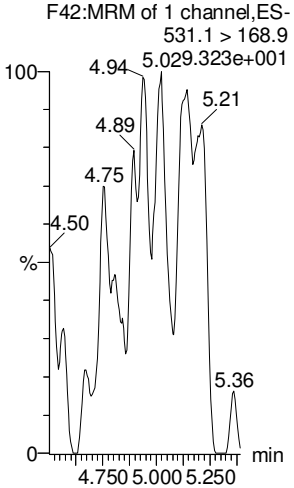

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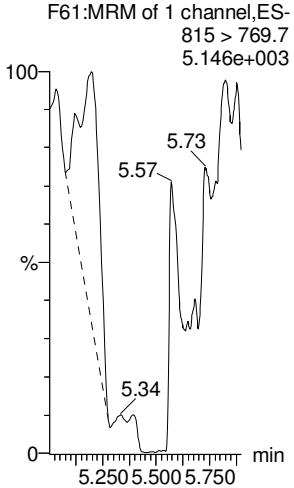

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170812M1\170812M1-5.qld

Last Altered: Thursday, August 17, 2017 15:05:23 Pacific Daylight Time
Printed: Thursday, August 17, 2017 15:05:27 Pacific Daylight Time

Name: 170812M1_5, Date: 12-Aug-2017, Time: 21:00:58, ID: IPA, Description: IPA

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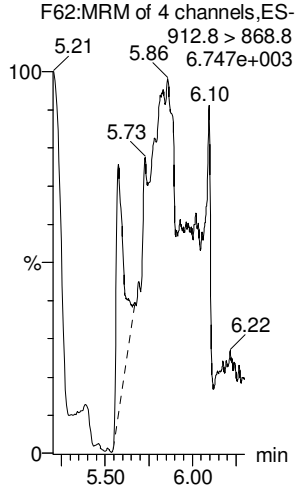

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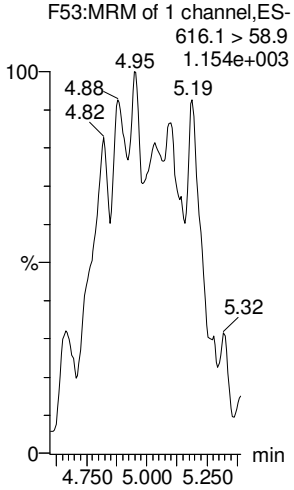

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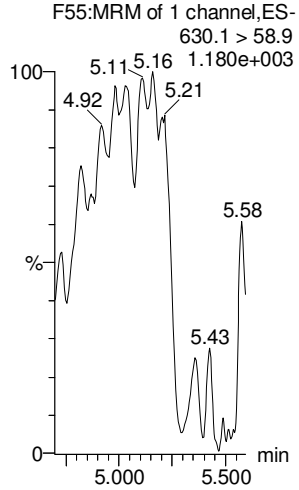

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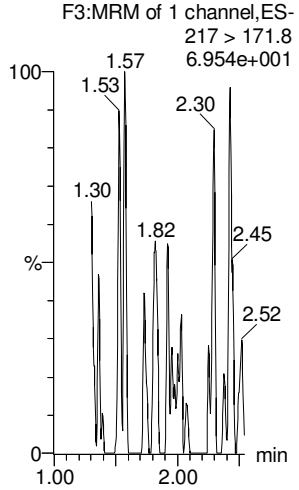

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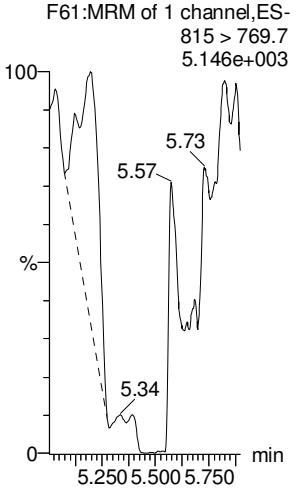

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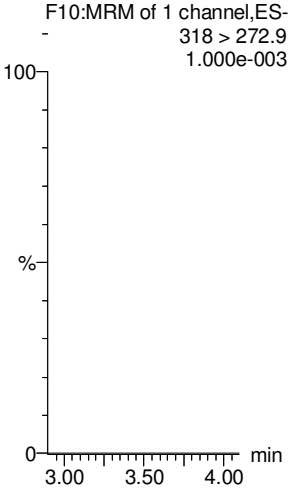

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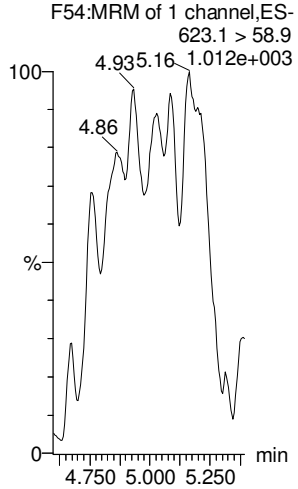

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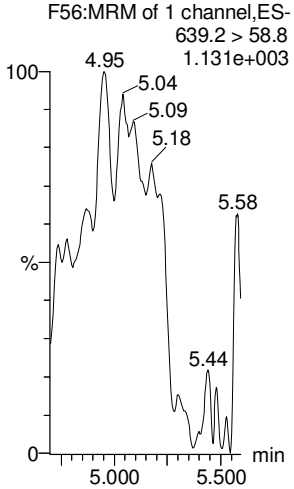

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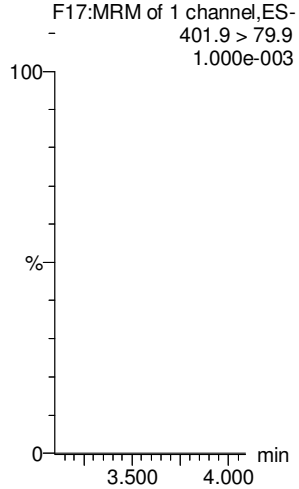

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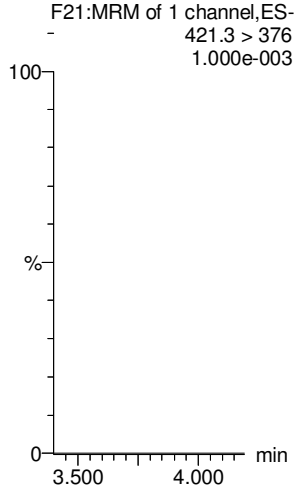

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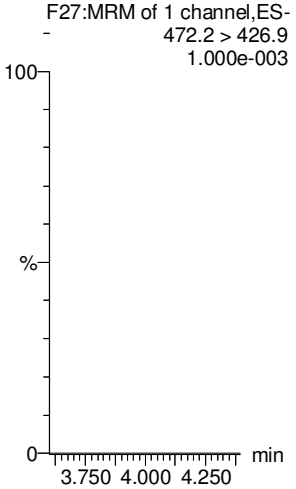

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Last Altered: Thursday, August 17, 2017 15:05:23 Pacific Daylight Time
Printed: Thursday, August 17, 2017 15:05:27 Pacific Daylight Time

Name: 170812M1_5, Date: 12-Aug-2017, Time: 21:00:58, ID: IPA, Description: IPA

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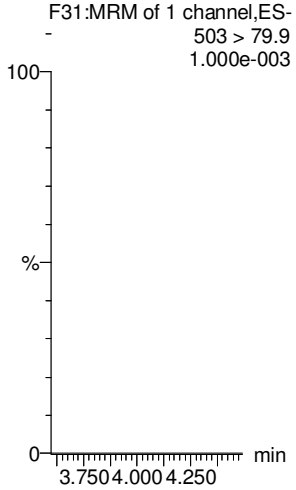

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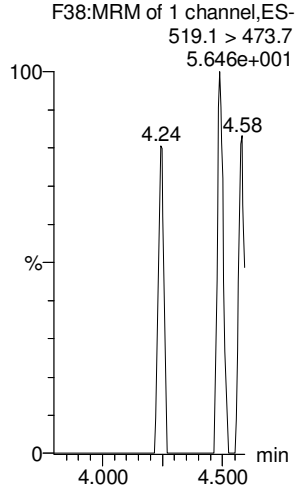
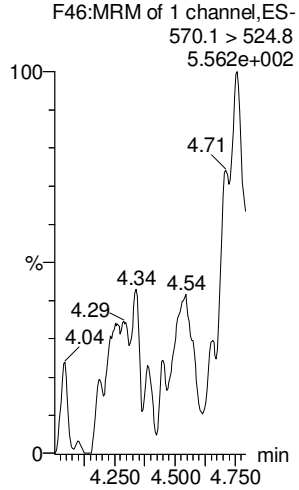


13C7-PFUnA



Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN945 SCN960**
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170812M1\170812M1-6.qld

Last Altered: Saturday, August 12, 2017 21:29:07 Pacific Daylight Time
Printed: Saturday, August 12, 2017 23:22:20 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 12 Aug 2017 16:32:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170812M1_6, Date: 12-Aug-2017, Time: 21:15:04, ID: ST170812M~~2~~1-3 PFC CS0 17H1004, Description: PFC CS~~-1~~0 17H1004
am 8/13/17 am 8/12/17

	#	Name	Trace	Area	IS Resp	RRF	Wt./Vol	RT	Conc.	%Rec	
1	1	PFBA	213.0 > 168.8	1540.873	15777.998		1.000	1.62	1.06	106.29	70-130
2	2	PFPeA	263.1 > 218.9	2300.206	27174.367		1.000	2.77	1.00	99.70	
3	3	PFBS	299 > 79.7	486.134	3201.523		1.000	2.96	1.00	100.28	
4	4	PFHxA	313.2 > 268.9	3836.175	12047.087		1.000	3.19	0.76	75.57	
5	5	PFHpA	363 > 318.9	4002.300	37267.613		1.000	3.44	0.73	72.72	
6	6	PFHxS	398.9 > 79.6	457.844	3474.531		1.000	3.51	1.00	99.64	
7	7	6:2 FTS	427.1 > 407	952.905	10726.671		1.000	3.64	1.12	111.81	
8	8	PFOA	413 > 368.7	6441.908	68048.711		1.000	3.65	1.05	105.25	
9	9	PFHpS	448.9 > 98.8	434.397	68048.711		1.000	3.71	0.92	91.56	
10	10	PFNA	462.9 > 418.8	6305.732	63361.531		1.000	3.82	0.75	74.56	
11	11	PFOSA	498.1 > 77.8	751.988	8060.722		1.000	3.83	1.08	108.08	
12	12	PFOS	499 > 79.9	1028.902	11346.654		1.000	3.88	1.10	109.75	
13	13	PFDA	513 > 468.8	5653.735	59466.797		1.000	4.00	0.95	94.87	
14	14	8:2 FTS	527 > 506.9	906.034	7743.150		1.000	4.00	1.03	103.30	
15	15	N-MeFOSAA	570.1 > 419	1766.390	14010.328		1.000	4.03	1.08	107.79	
16	16	N-EtFOSAA	584.2 > 419	1301.143	13514.883		1.000	4.10	0.96	95.94	
17	17	PFUnA	562.9 > 518.9	4635.136	68567.359		1.000	4.17	0.93	93.34	
18	18	PFDS	598.9 > 98.7	417.701	68567.359		1.000	4.21	0.79	79.08	
19	19	PFDoA	612.9 > 318.8	524.656	6811.589		1.000	4.33	1.10	110.06	
20	20	N-MeFOSA	512.1 > 168.9	928.515	28421.303		1.000	4.37	4.69	93.81	
21	21	PFTrDA	662.9 > 618.9	6860.336	6811.589		1.000	4.50	1.13	113.32	
22	22	PFTeDA	712.9 > 668.8	4464.719	46209.297		1.000	4.67	0.97	96.63	
23	23	N-EtFOSA	526.1 > 168.9	1198.725	36201.727		1.000	4.88	5.13	102.67	
24	24	PFHxDA	812.8 > 768.9	6904.029	21776.506		1.000	5.05	0.97	96.90	
25	25	PFODA	912.8 > 868.8	5714.539	21776.506		1.000	5.41	0.95	95.09	
26	26	N-MeFOSE	616.1 > 58.9	1479.077	39947.434		1.000	5.28	5.08	101.53	
27	27	N-EtFOSE	630.1 > 58.9	1551.381	37758.809		1.000	5.46	3.56	71.18	
28	28	13C3-PFBA	216.1 > 171.8	15777.998	17307.176	0.906	1.000	1.62	12.58	100.64	50-150
29	29	13C3-PFPeA	266 > 221.8	27174.367	39727.359	0.284	1.000	2.77	12.05	96.38	
30	30	13C3-PFBS	302 > 98.8	3201.523	39727.359	0.033	1.000	2.96	12.26	98.04	
31	31	13C2-PFHxA	315 > 269.8	12047.087	39727.359	0.304	1.000	3.19	4.99	99.87	

am 8/12/17

Dataset: U:\Q4.PRO\results\170812M1\170812M1-6.qld

Last Altered: Saturday, August 12, 2017 21:29:07 Pacific Daylight Time
Printed: Saturday, August 12, 2017 23:22:20 Pacific Daylight Time

Name: 170812M1_6, Date: 12-Aug-2017, Time: 21:15:04, ID: ST170812M2-3 PFC CS0 17H1004, Description: PFC CS-1 17H1004

	#	Name	Trace	Area	IS Resp	RRF	Wt./Vol	RT	Conc.	%Rec
32	32	13C4-PFHpA	367.2 > 321.8	37267.613	39727.359	0.384	1.000	3.44	12.21	97.70
33	33	18O2-PFHxS	403 > 102.6	3474.531	8251.067	0.417	1.000	3.52	12.62	100.95
34	34	13C2-6:2 FTS	429.1 > 408.9	10726.671	61792.875	0.202	1.000	3.63	10.76	86.05
35	35	13C2-PFOA	414.9 > 369.7	68048.711	61792.875	1.132	1.000	3.64	12.16	97.27
36	36	13C5-PFNA	468.2 > 422.9	63361.531	72887.953	0.946	1.000	3.82	11.49	91.88
37	37	13C8-PFOSA	506.1 > 77.7	8060.722	64489.223	0.119	1.000	3.83	13.08	104.67
38	38	13C8-PFOS	507 > 79.9	11346.654	9735.063	1.040	1.000	3.88	14.01	112.09
39	39	13C2-PFDA	515.1 > 469.9	59466.797	64413.094	0.971	1.000	4.00	11.89	95.10
40	40	13C2-8:2 FTS	529.1 > 508.7	7743.150	64413.094	0.140	1.000	4.00	10.71	85.69
41	41	d3-N-MeFOSAA	573.3 > 419	14010.328	64489.223	0.018	1.000	4.03	152.66	93.95
42	42	d5-N-EtFOSAA	589.3 > 419	13514.883	64489.223	0.018	1.000	4.10	143.69	88.42
43	43	13C2-PFUnA	565 > 519.8	68567.359	64489.223	1.085	1.000	4.17	12.25	97.98
44	44	13C2-PFDoA	615 > 569.7	6811.589	64489.223	0.123	1.000	4.33	10.72	85.78
45	45	d3-N-MeFOSA	515.2 > 168.9	28421.303	64489.223	0.043	1.000	4.40	127.32	84.88
46	46	13C2-PFTeDA	714.8 > 669.6	46209.297	64489.223	0.798	1.000	4.67	11.23	89.81
47	47	d5-N-ETFOSA	531.1 > 168.9	36201.727	64489.223	0.056	1.000	4.91	126.03	84.02
48	48	13C2-PFHxDA	815 > 769.7	21776.506	64489.223	0.926	1.000	5.05	4.56	91.12
49	49	d7-N-MeFOSE	623.1 > 58.9	39947.434	64489.223	0.059	1.000	5.27	130.26	86.84
50	50	d9-N-EtFOSE	639.2 > 58.8	37758.809	64489.223	0.059	1.000	5.44	123.04	82.03
51	51	13C4-PFBA	217 > 171.8	17307.176	17307.176	1.000	1.000	1.62	12.50	100.00
52	52	13C5-PFHxA	318 > 272.9	39727.359	39727.359	1.000	1.000	3.19	5.00	100.00
53	53	13C3-PFHxS	401.9 > 79.9	8251.067	8251.067	1.000	1.000	3.52	12.50	100.00
54	54	13C8-PFOA	421.3 > 376	61792.875	61792.875	1.000	1.000	3.64	12.50	100.00
55	55	13C9-PFNA	472.2 > 426.9	72887.953	72887.953	1.000	1.000	3.82	12.50	100.00
56	56	13C4-PFOS	503 > 79.9	9735.063	9735.063	1.000	1.000	3.88	12.50	100.00
57	57	13C6-PFDA	519.1 > 473.7	64413.094	64413.094	1.000	1.000	4.00	12.50	100.00
58	58	13C7-PFUnA	570.1 > 524.8	64489.223	64489.223	1.000	1.000	4.17	12.50	100.00

50-150

Sample List Report **MassLynx MassLynx V4.1 SCN945 SCN960**

Sample List: U:\Q4.PRO\SampleDB\170812M1.SPL
Last Modified: Saturday, August 12, 2017 21:05:19 Pacific Daylight Time
Printed: Saturday, August 12, 2017 22:47:35 Pacific Daylight Time

Page Position (1, 1)

(B) am 8/12/17

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1	170812M1_1	---	IPA (B)	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
2	170812M1_2	X	(A) ST170812M1-1 PFC CS-1 17H1202	PFC CS-1 17H1202	1.0000	1:1	Analyte	PFAS_IPA_8-10-17
3	170812M1_3	---	IPA (B)	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
4	170812M1_4	X	(A) ST170812M1-2 PFC CS-1 17H1003	PFC CS-1 17H1003	1.0000	1:1	Analyte	PFAS_IPA_8-10-17
5	170812M1_5	---	IPA (B)	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
6	170812M1_6	X	ST170812M1-3 PFC CS0 17H1004	PFC CS0 17H1004	1.0000	1:1	Analyte	PFAS_IPA_8-10-17
7	170812M1_7	---	IPA	IPA am 8/12/17	1.0000	1:48	Blank	PFAS_IPA_8-10-17
8	170812M1_8	---	1700925-03RE1@20X I001BC50S-170724 0.12135	I001BC50S-170724	0.1214	1:3	Analyte	PFAS_IPA_8-10-17
9	170812M1_9	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
10	170812M1_10	O	1701007-03 RI17-EB3-080317 0.26497	RI17-EB3-080317	0.2650	1:4	Analyte	PFAS_IPA_8-10-17
11	170812M1_11	O	1701007-04 RI17-EB8-080317 0.26753	RI17-EB8-080317	0.2675	1:5	Analyte	PFAS_IPA_8-10-17
12	170812M1_12	---	1700922-06RE1 RB09-20170721 0.11676	RB09-20170721	0.1168	1:6	Analyte	PFAS_IPA_8-10-17
13	170812M1_13	---	1700925-01RE1 I001BC43S-170724 0.12112	I001BC43S-170724	0.1211	1:7	Analyte	PFAS_IPA_8-10-17
14	170812M1_14	---	1700925-02RE1 SB01-170724 0.12178	SB01-170724	0.1218	1:8	Analyte	PFAS_IPA_8-10-17
15	170812M1_15	---	1700925-03RE1 I001BC50S-170724 0.12135	I001BC50S-170724	0.1214	1:9	Analyte	PFAS_IPA_8-10-17
16	170812M1_16	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
17	170812M1_17	---	1700925-06RE1 EB01-170724 0.1185	EB01-170724	0.1185	1:10	Analyte	PFAS_IPA_8-10-17
18	170812M1_18	---	1700929-01RE1 MATP01001 0.11834	MATP01001	0.1183	1:11	Analyte	PFAS_IPA_8-10-17
19	170812M1_19	---	1700929-02RE1 MATP01002 0.1157	MATP01002	0.1157	1:12	Analyte	PFAS_IPA_8-10-17
20	170812M1_20	---	1700938-01RE1 NORP08102 0.11844	NORP08102	0.1184	1:13	Analyte	PFAS_IPA_8-10-17
21	170812M1_21	---	1700938-02RE1 NORP08103 0.12014	NORP08103	0.1201	1:14	Analyte	PFAS_IPA_8-10-17
22	170812M1_22	---	1700938-03RE1 NORP08104 0.11247	NORP08104	0.1125	1:15	Analyte	PFAS_IPA_8-10-17
23	170812M1_23	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
24	170812M1_24	---	ST170812M1-4 PFC CS3 17H1203	PFC CS3 17H1203	1.0000	1:2	Standard	PFAS_IPA_8-10-17
25	170812M1_25	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
26	170812M1_26	---	1700925-04RE2 I001MW52S-170724 0.00122	I001MW52S-170724	0.0012	1:19	Analyte	PFAS_IPA_8-10-17
27	170812M1_27	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
28	170812M1_28	---	1700925-05RE2 I001MW52X-170724 0.00133	I001MW52X-170724	0.0013	1:20	Analyte	PFAS_IPA_8-10-17
29	170812M1_29	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
30	170812M1_30	---	1700958-06RE1@10X MATP03050 1.22	MATP03050	1.0219	1:22	Analyte	PFAS_IPA_8-10-17
31	170812M1_31	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
32	170812M1_32	XX	1700958-04 MATP03048 1	MATP03048	1.0000	1:23	Analyte	PFAS_IPA_8-10-17
33	170812M1_33	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
34	170812M1_34	XX	1700958-05 MATP03049 1	MATP03049	1.0000	1:24	Analyte	PFAS_IPA_8-10-17
35	170812M1_35	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
36	170812M1_36	XX	1700958-06 MATP03050 1	MATP03050	1.0000	1:25	Analyte	PFAS_IPA_8-10-17
37	170812M1_37	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
38	170812M1_38	O	1700958-07 MATP03051 1	MATP03051	1.0000	1:26	Analyte	PFAS_IPA_8-10-17
39	170812M1_39	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
40	170812M1_40	---	ST170812M1-5 PFC CS3 17H1203	PFC CS3 17H1203	1.0000	1:2	Standard	PFAS_IPA_8-10-17

(A) out of limit criteria. am 8/12/17 am 8/12/17

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type	MS File
41	170812M1_41	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
42	170812M1_42	X	1700961-02 MATP05098 1	MATP05098	1.0000	1:27	Analyte	PFAS_IPA_8-10-17
43	170812M1_43	X	1700961-03 MATP05099 1	MATP05099	1.0000	1:28	Analyte	PFAS_IPA_8-10-17
44	170812M1_44	X	1700961-04 MATP05100 1	MATP05100	1.0000	1:29	Analyte	PFAS_IPA_8-10-17
45	170812M1_45	X	1700961-05 MATP05102 1	MATP05102	1.0000	1:30	Analyte	PFAS_IPA_8-10-17
46	170812M1_46	X	1700961-06 MATP05103 1	MATP05103	1.0000	1:31	Analyte	PFAS_IPA_8-10-17
47	170812M1_47	X	1700961-07 MATP04055 1	MATP04055	1.0000	1:32	Analyte	PFAS_IPA_8-10-17
48	170812M1_48	X	1700961-08 MATP03041 1	MATP03041	1.0000	1:33	Analyte	PFAS_IPA_8-10-17
49	170812M1_49	X	1700961-09 MATP04063 1	MATP04063	1.0000	1:34	Analyte	PFAS_IPA_8-10-17
50	170812M1_50	X	1700961-11 MATP04065 1	MATP04065	1.0000	1:35	Analyte	PFAS_IPA_8-10-17
51	170812M1_51	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
52	170812M1_52	---	ST170812M1-6 PFC CS3 17H1203	PFC CS3 17H1203	1.0000	1:2	Standard	PFAS_IPA_8-10-17
53	170812M1_53	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
54	170812M1_54	X	1700961-12 MATP04066 1	MATP04066	1.0000	1:36	Analyte	PFAS_IPA_8-10-17
55	170812M1_55	O	1700960-03 MATP05084 0.125	MATP05084	0.1250	1:37	Analyte	PFAS_IPA_8-10-17
56	170812M1_56	O	1700960-05 MATP05086 1	MATP05086	1.0000	1:38	Analyte	PFAS_IPA_8-10-17
57	170812M1_57	O	1700958-14 MATP05080 0.125	MATP05080	0.1250	1:40	Analyte	PFAS_IPA_8-10-17
58	170812M1_58	XX	1700959-06 MATPXX130a 0.125	MATPXX130a	0.1250	1:41	Analyte	PFAS_IPA_8-10-17
59	170812M1_59	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
60	170812M1_60	---	ST170812M1-7 PFC CS3 17H1203	PFC CS3 17H1203	1.0000	1:2	Standard	PFAS_IPA_8-10-17
61	170812M1_61	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17

✓ DM 8/13/17

LC Calibration Standards Review Checklist Q4

			ION Ratio	Concentration	C-Cals Name	Sign Date	Correct I-Cal	Manual Integrations	NA
Calibration ID:	5717081241-3	L M H	NA ☐	☐	☐	☐	☐	☐	☐
Calibration ID:	-4	L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:	-5	L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:	-6	L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:	-7	L M H	☑	☐ (1)	☐	☐	☐	☐	☑
Calibration ID:		L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:		L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:		L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:		L M H	☐	☐	☐	☐	☐	☐	☐
Calibration ID:		L M H	☐	☐	☐	☐	☐	☐	☐

Full Mass Cal. Date: 6/21/17

Run Log Present: ☑

# of Samples per Sequence Checked: ☑

Reviewed By: KOL 8/14/17
Initials/Date

Comments:
(1) PFHpS out of limit criteria.

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170812M1\170812M1-6.qld

Last Altered: Saturday, August 12, 2017 21:29:07 Pacific Daylight Time
Printed: Saturday, August 12, 2017 23:22:10 Pacific Daylight Time

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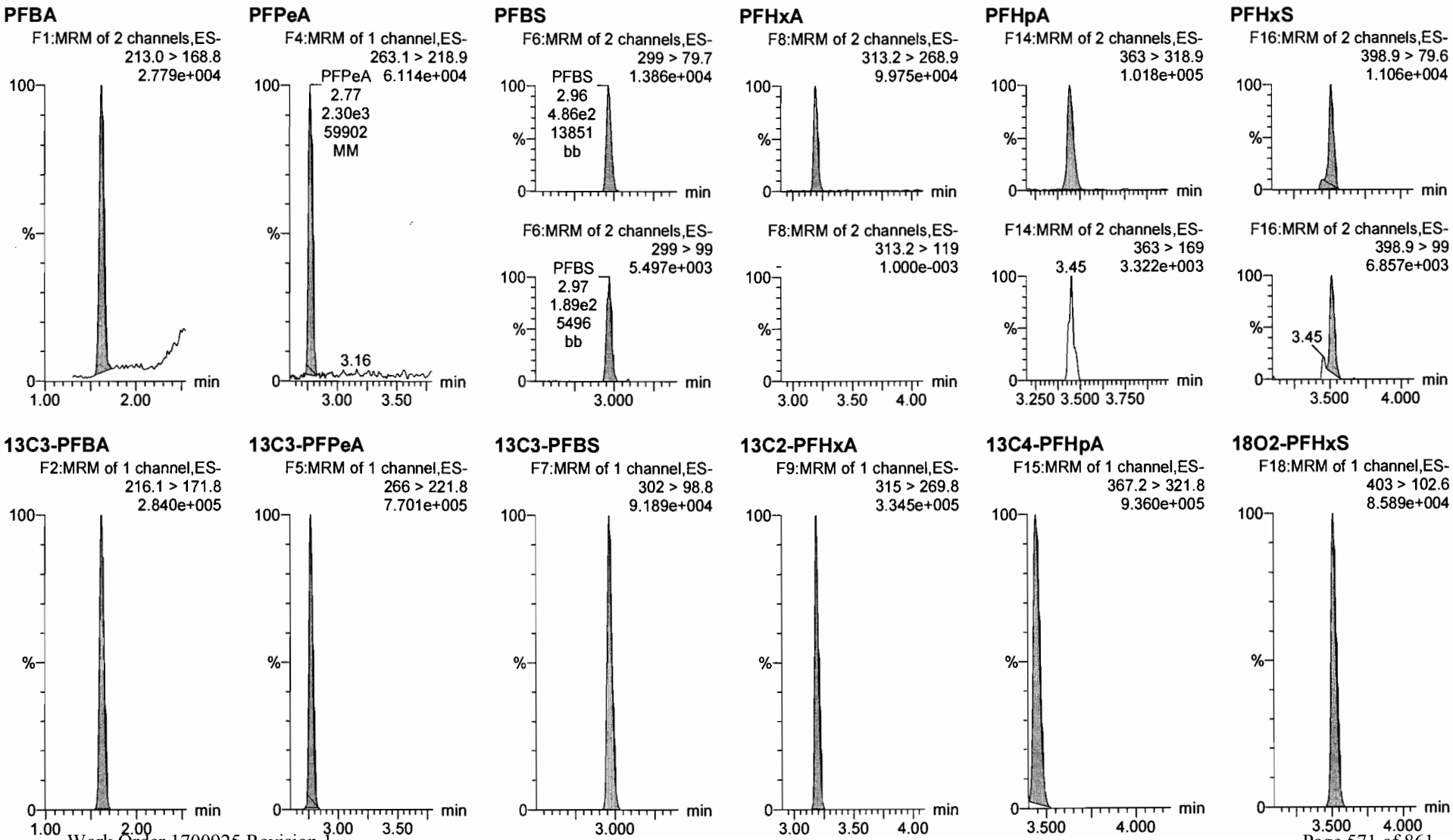
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170812M1_6, Date: 12-Aug-2017, Time: 21:15:04, ID: ST170812M2-3 PFC CS0 17H1004, Description: PFC CS-1 17H1004



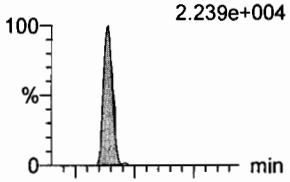
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170812M1\170812M1-6.qld

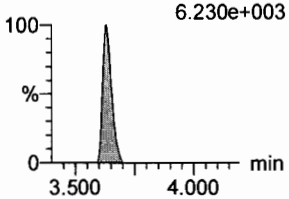
Last Altered: Saturday, August 12, 2017 21:29:07 Pacific Daylight Time
Printed: Saturday, August 12, 2017 23:22:10 Pacific Daylight Time

Name: 170812M1_6, Date: 12-Aug-2017, Time: 21:15:04, ID: ST170812M2-3 PFC CS0 17H1004, Description: PFC CS-1 17H1004

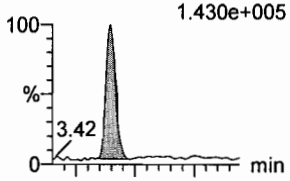
6:2 FTS
F22:MRM of 2 channels,ES-
427.1 > 407
2.239e+004



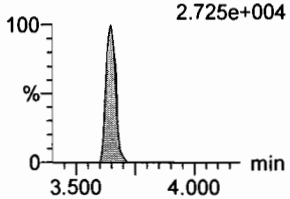
F22:MRM of 2 channels,ES-
427.1 > 80
6.230e+003



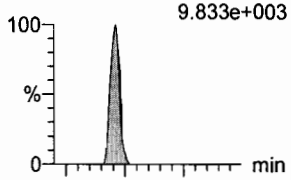
PFOA
F19:MRM of 2 channels,ES-
413 > 368.7
1.430e+005



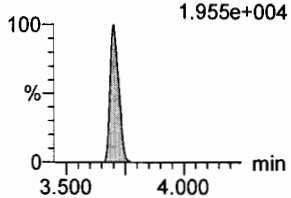
F19:MRM of 2 channels,ES-
413 > 169
2.725e+004



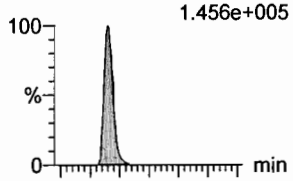
PFHpS
F24:MRM of 4 channels,ES-
448.9 > 98.8
9.833e+003



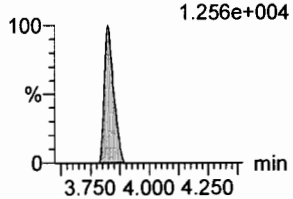
F24:MRM of 4 channels,ES-
448.9 > 79.9
1.955e+004



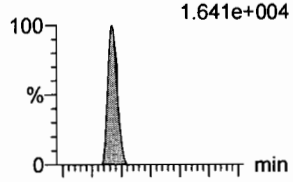
PFNA
F25:MRM of 2 channels,ES-
462.9 > 418.8
1.456e+005



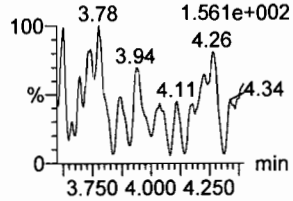
F25:MRM of 2 channels,ES-
462.9 > 219
1.256e+004



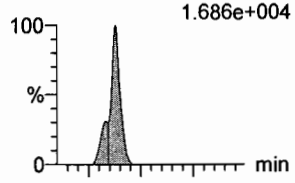
PFOSA
F28:MRM of 2 channels,ES-
498.1 > 77.8
1.641e+004



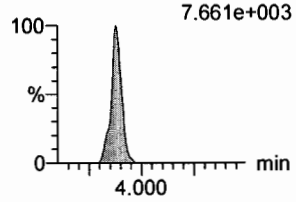
F28:MRM of 2 channels,ES-
498.1 > 478
1.561e+002



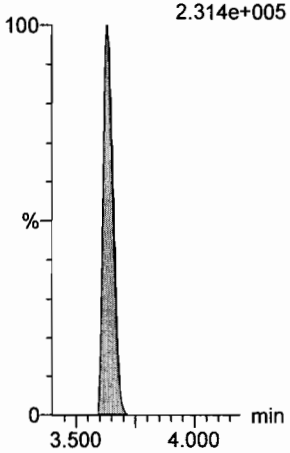
PFOS
F30:MRM of 2 channels,ES-
499 > 79.9
1.686e+004



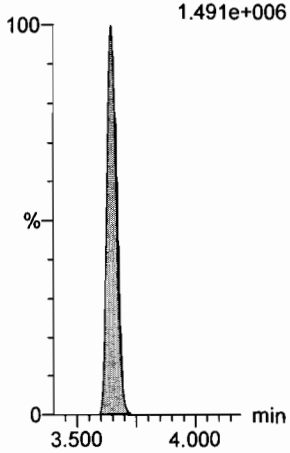
F30:MRM of 2 channels,ES-
499 > 99
7.661e+003



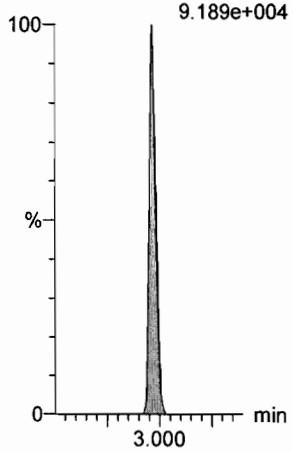
13C2-6:2 FTS
F23:MRM of 1 channel,ES-
429.1 > 408.9
2.314e+005



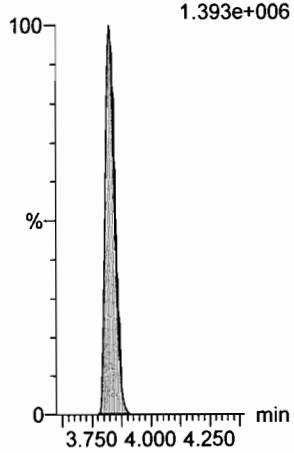
13C2-PFOA
F20:MRM of 1 channel,ES-
414.9 > 369.7
1.491e+006



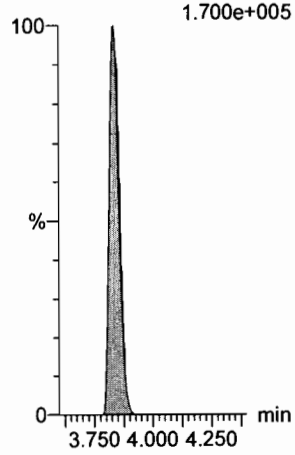
13C3-PFBS
F7:MRM of 1 channel,ES-
302 > 98.8
9.189e+004



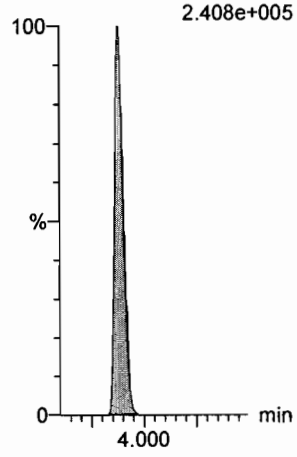
13C5-PFNA
F26:MRM of 1 channel,ES-
468.2 > 422.9
1.393e+006



13C8-PFOSA
F32:MRM of 1 channel,ES-
506.1 > 77.7
1.700e+005



13C8-PFOS
F33:MRM of 1 channel,ES-
507 > 79.9
2.408e+005



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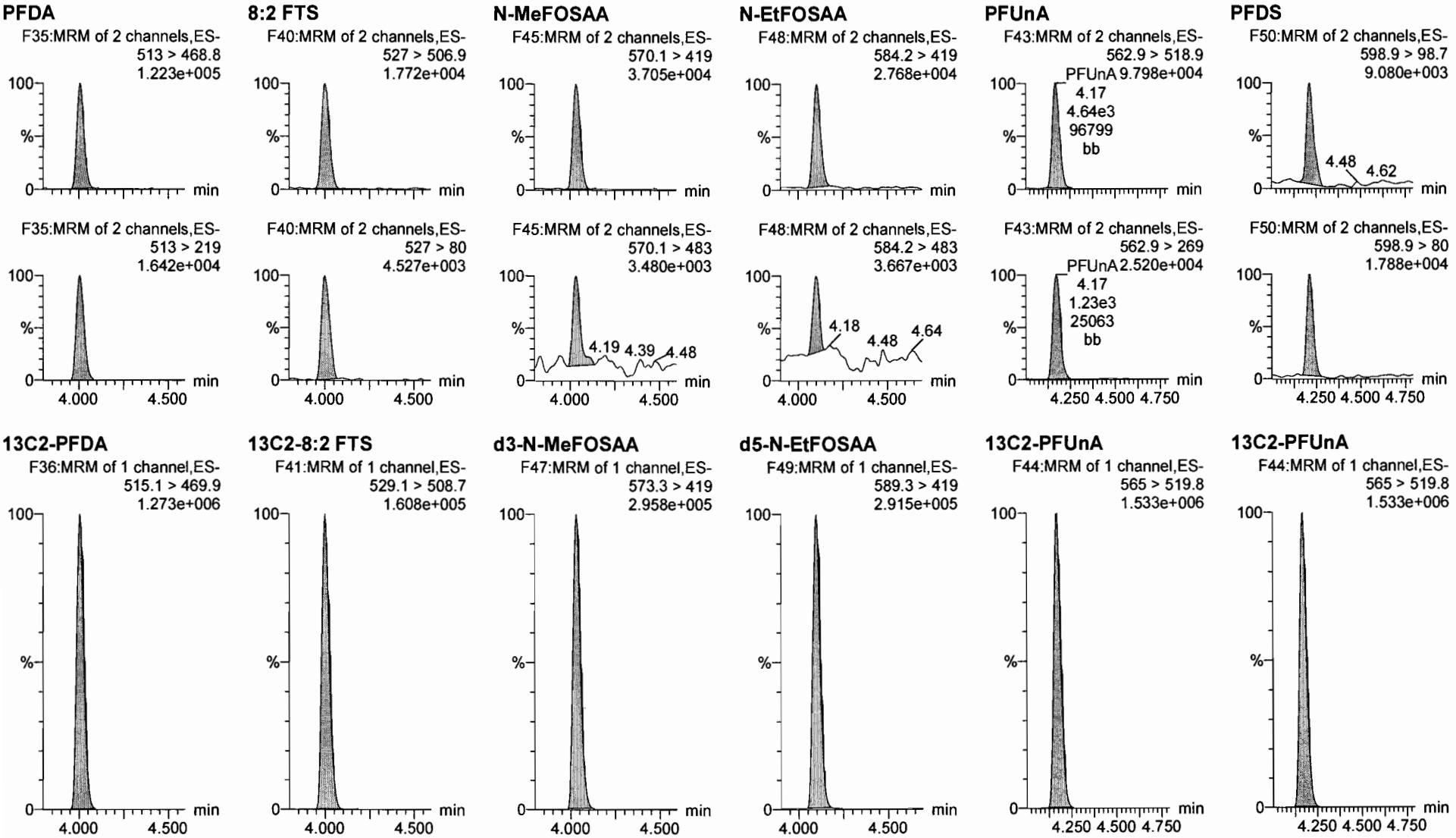
Printed: Saturday, August 12, 2017 23:22:10 Pacific Daylight Time

Name: 170812M1_6, Date: 12-Aug-2017, Time: 21:15:04, ID: ST170812M2-3 PFC CS0 17H1004, Description: PFC CS-1 17H1004



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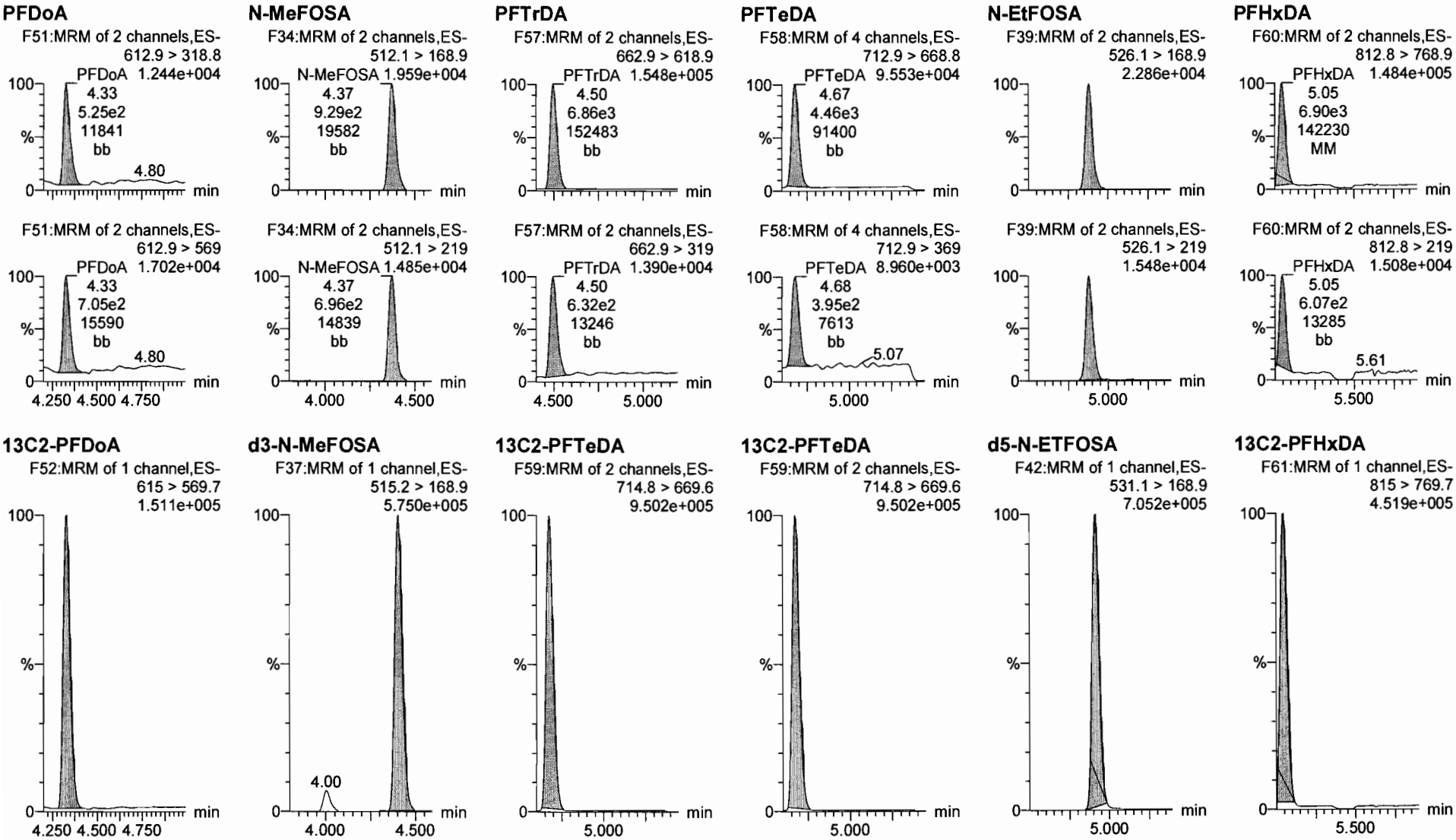

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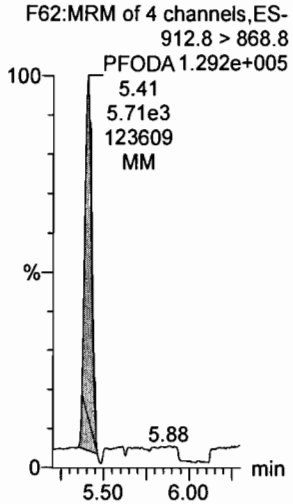
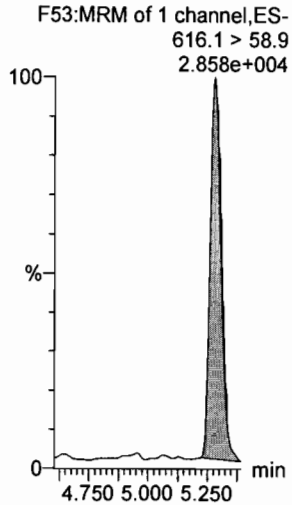
PFODA



N-MeFOSE



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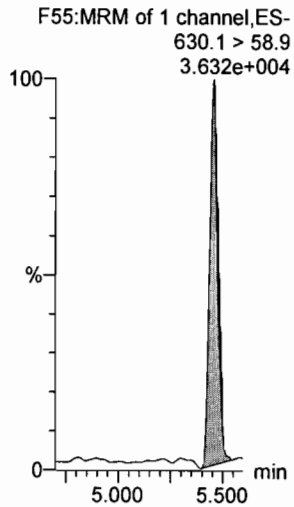
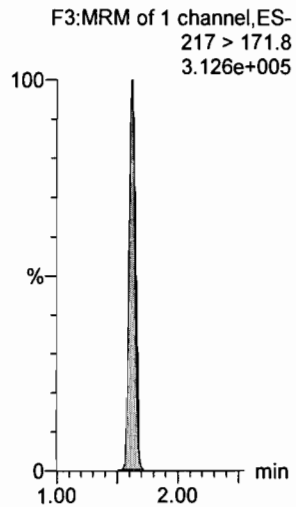
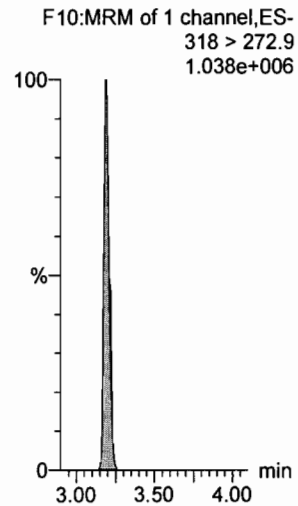


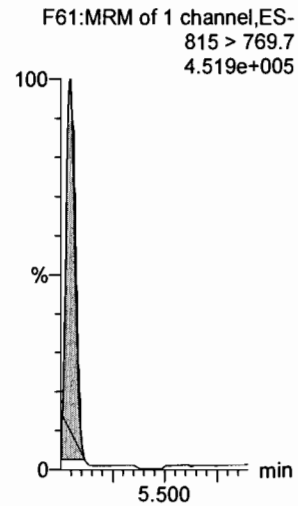
13C4-PFBA



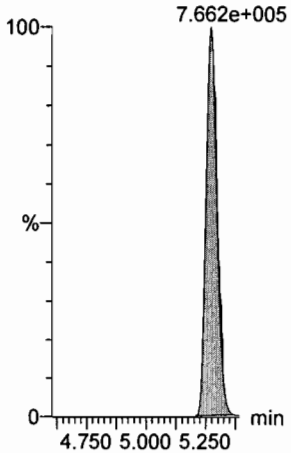
13C5-PFHxA



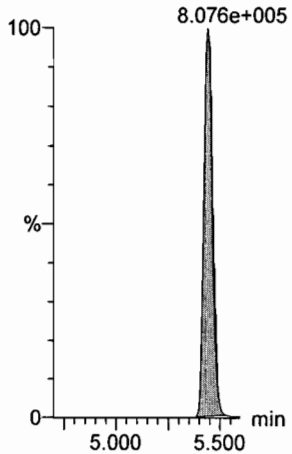
13C2-PFHxDA



d7-N-MeFOSE



d9-N-EtFOSE



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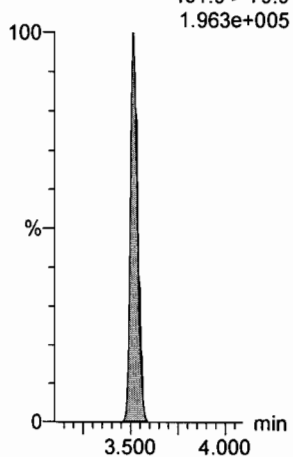

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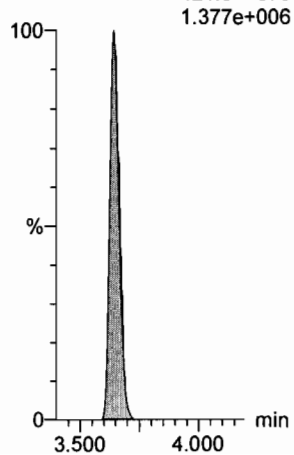

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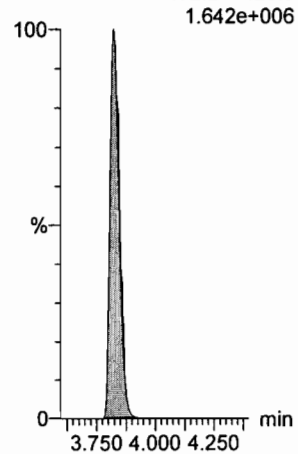

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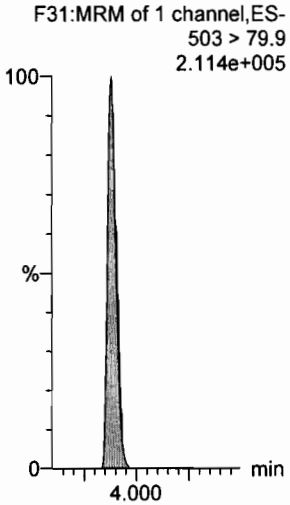
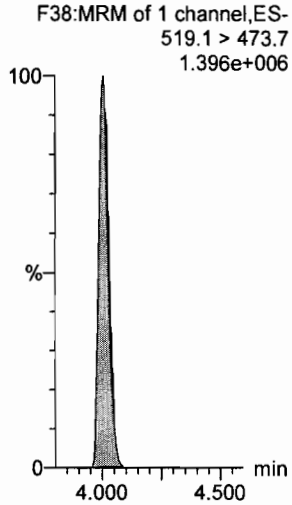
Printed: Saturday, August 12, 2017 23:22:10 Pacific Daylight Time

Name: 170812M1_6, Date: 12-Aug-2017, Time: 21:15:04, ID: ST170812M2-3 PFC CS0 17H1004, Description: PFC CS-1 17H1004

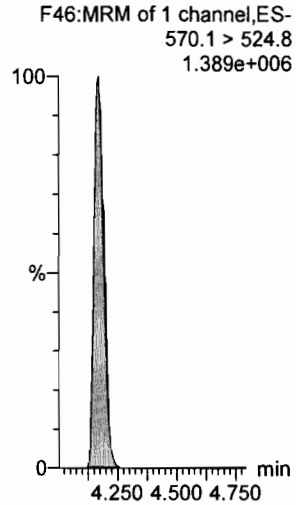
13C4-PFOS



13C6-PFDA



13C7-PFUnA



Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170812M1\170812M1-24.qld

Last Altered: Sunday, August 13, 2017 10:49:11 Pacific Daylight Time
Printed: Sunday, August 13, 2017 10:49:59 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 12 Aug 2017 16:32:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170812M1_24, Date: 13-Aug-2017, Time: 00:28:44, ID: ST170812M1-4 PFC CS3 17H1203, Description: PFC CS3 17H1203

	#	Name	Trace	Area	IS Resp	RRF	Wt./Vol	RT	Conc.	%Rec
1	1	PFBA	213.0 > 168.8	12473.136	14103.883		1.000	1.58	10.08	100.77
2	2	PFPeA	263.1 > 218.9	20017.848	23824.654		1.000	2.76	11.01	110.09
3	3	PFBS	299 > 79.7	4029.564	2836.782		1.000	2.96	10.26	102.61
4	4	PFHxA	313.2 > 268.9	30353.279	10485.248		1.000	3.18	10.96	109.62
5	5	PFHpA	363 > 318.9	29741.090	29308.854		1.000	3.43	10.76	107.61
6	6	PFHxS	398.9 > 79.6	3476.546	2386.415		1.000	3.50	10.35	103.48
7	7	6:2 FTS	427.1 > 407	7357.196	8669.472		1.000	3.62	11.40	113.99
8	8	PFOA	413 > 368.7	49599.016	59788.574		1.000	3.63	10.42	104.22
9	9	PFHpS	448.9 > 98.8	4526.573	59788.574		1.000	3.69	11.94	119.36
10	10	PFNA	462.9 > 418.8	48112.602	55538.336		1.000	3.81	10.53	105.28
11	11	PFOSA	498.1 > 77.8	5999.827	6945.439		1.000	3.82	10.26	102.55
12	12	PFOS	499 > 79.9	8023.778	9999.633		1.000	3.87	9.44	94.39
13	13	PFDA	513 > 468.8	53755.684	57429.871		1.000	3.99	10.24	102.43
14	14	8:2 FTS	527 > 506.9	6461.402	5786.105		1.000	3.99	10.09	100.86
15	15	N-MeFOSAA	570.1 > 419	14545.893	12207.475		1.000	4.02	10.02	100.23
16	16	N-EtFOSAA	584.2 > 419	11748.653	12150.356		1.000	4.09	10.03	100.33
17	17	PFUnA	562.9 > 518.9	36846.566	49978.043		1.000	4.16	11.31	113.09
18	18	PFDS	598.9 > 98.7	3716.366	49978.043		1.000	4.20	11.28	112.80
19	19	PFDoA	612.9 > 318.8	4041.949	6171.952		1.000	4.32	9.77	97.69
20	20	N-MeFOSA	512.1 > 168.9	8767.198	27394.416		1.000	4.35	53.73	107.47
21	21	PFTrDA	662.9 > 618.9	52435.055	6171.952		1.000	4.49	10.47	104.74
22	22	PFTeDA	712.9 > 668.8	34827.359	40337.039		1.000	4.66	9.42	94.25
23	23	N-EtFOSA	526.1 > 168.9	10627.233	35082.746		1.000	4.86	51.24	102.47
24	24	PFHxDA	812.8 > 768.9	51383.805	18849.570		1.000	5.03	9.39	93.92
25	25	PFODA	912.8 > 868.8	49137.895	18849.570		1.000	5.39	10.18	101.75
26	26	N-MeFOSE	616.1 > 58.9	12880.415	38766.516		1.000	5.29	53.53	107.06
27	27	N-EtFOSE	630.1 > 58.9	14709.775	37643.516		1.000	5.46	55.20	110.40
28	28	13C3-PFBA	216.1 > 171.8	14103.883	15268.114	0.906	1.000	1.58	12.75	101.98
29	29	13C3-PFPeA	266 > 221.8	23824.654	33805.117	0.284	1.000	2.76	12.41	99.30
30	30	13C3-PFBS	302 > 98.8	2836.782	33805.117	0.033	1.000	2.96	12.76	102.09
31	31	13C2-PFHxA	315 > 269.8	10485.248	33805.117	0.304	1.000	3.18	5.11	102.15

70-130

50-150

DM
9/14/17

Dataset: U:\Q4.PRO\results\170812M1\170812M1-24.qld

Last Altered: Sunday, August 13, 2017 10:49:11 Pacific Daylight Time
Printed: Sunday, August 13, 2017 10:49:59 Pacific Daylight Time

Name: 170812M1_24, Date: 13-Aug-2017, Time: 00:28:44, ID: ST170812M1-4 PFC CS3 17H1203, Description: PFC CS3 17H1203

	#	Name	Trace	Area	IS Resp	RRF	Wt./Vol	RT	Conc.	%Rec
32	32	13C4-PFHpA	367.2 > 321.8	29308.854	33805.117	0.384	1.000	3.44	11.29	90.29
33	33	18O2-PFHxS	403 > 102.6	2386.415	5653.597	0.417	1.000	3.51	12.65	101.19
34	34	13C2-6:2 FTS	429.1 > 408.9	8669.472	49694.109	0.202	1.000	3.63	10.81	86.48
35	35	13C2-PFOA	414.9 > 369.7	59788.574	49694.109	1.132	1.000	3.63	13.28	106.27
36	36	13C5-PFNA	468.2 > 422.9	55538.336	61772.305	0.946	1.000	3.81	11.88	95.03
37	37	13C8-PFOSA	506.1 > 77.7	6945.439	48820.270	0.119	1.000	3.82	14.89	119.13
38	38	13C8-PFOS	507 > 79.9	9999.633	9329.358	1.040	1.000	3.87	12.88	103.08
39	39	13C2-PFDA	515.1 > 469.9	57429.871	56378.426	0.971	1.000	3.99	13.12	104.93
40	40	13C2-8:2 FTS	529.1 > 508.7	5786.105	56378.426	0.140	1.000	3.98	9.15	73.16
41	41	d3-N-MeFOSAA	573.3 > 419	12207.475	48820.270	0.018	1.000	4.02	175.71	108.13
42	42	d5-N-EtFOSAA	589.3 > 419	12150.356	48820.270	0.018	1.000	4.09	170.64	105.01
43	43	13C2-PFUnA	565 > 519.8	49978.043	48820.270	1.085	1.000	4.16	11.79	94.34
44	44	13C2-PFDoA	615 > 569.7	6171.952	48820.270	0.123	1.000	4.32	12.83	102.67
45	45	d3-N-MeFOSA	515.2 > 168.9	27394.416	48820.270	0.043	1.000	4.38	162.11	108.07
46	46	13C2-PFTeDA	714.8 > 669.6	40337.039	48820.270	0.798	1.000	4.66	12.95	103.56
47	47	d5-N-ETFOSA	531.1 > 168.9	35082.746	48820.270	0.056	1.000	4.90	161.33	107.55
48	48	13C2-PFHxDA	815 > 769.7	18849.570	48820.270	0.926	1.000	5.03	5.21	104.19
49	49	d7-N-MeFOSE	623.1 > 58.9	38766.516	48820.270	0.059	1.000	5.28	166.98	111.32
50	50	d9-N-EtFOSE	639.2 > 58.8	37643.516	48820.270	0.059	1.000	5.44	162.04	108.03
51	51	13C4-PFBA	217 > 171.8	15268.114	15268.114	1.000	1.000	1.58	12.50	100.00
52	52	13C5-PFHxA	318 > 272.9	33805.117	33805.117	1.000	1.000	3.18	5.00	100.00
53	53	13C3-PFHxS	401.9 > 79.9	5653.597	5653.597	1.000	1.000	3.51	12.50	100.00
54	54	13C8-PFOA	421.3 > 376	49694.109	49694.109	1.000	1.000	3.63	12.50	100.00
55	55	13C9-PFNA	472.2 > 426.9	61772.305	61772.305	1.000	1.000	3.81	12.50	100.00
56	56	13C4-PFOS	503 > 79.9	9329.358	9329.358	1.000	1.000	3.87	12.50	100.00
57	57	13C6-PFDA	519.1 > 473.7	56378.426	56378.426	1.000	1.000	3.99	12.50	100.00
58	58	13C7-PFUnA	570.1 > 524.8	48820.270	48820.270	1.000	1.000	4.16	12.50	100.00

50-150

Sample List Report **MassLynx MassLynx V4.1 SCN945 SCN960**

Sample List: U:\Q4.PRO\SampleDB\170812M1.SPL
Last Modified: Saturday, August 12, 2017 21:05:19 Pacific Daylight Time
Printed: Saturday, August 12, 2017 22:47:35 Pacific Daylight Time

Page Position (1, 1)

(B) am 8/13/17

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2	170812M1_2	X	(A) ST170812M~~2~~1-1 PFC CS-1 17H1202	PFC CS-1 17H1202	1.0000	1:1	Analyte	PFAS_IPA_8-10-17
3	170812M1_3	---	IPA (B)	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
4	170812M1_4	X	(A) ST170812M~~2~~1-2 PFC CS-1 17H1003	PFC CS-1 17H1003	1.0000	1:1	Analyte	PFAS_IPA_8-10-17
5	170812M1_5	---	IPA (B)	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
6	170812M1_6	X	ST170812M~~2~~1-3 PFC CS0 17H1004	PFC CS~~7~~0 17H1004	1.0000	1:1	Analyte	PFAS_IPA_8-10-17
7	170812M1_7	---	IPA	IPA am 8/12/17	1.0000	1:48	Blank	PFAS_IPA_8-10-17
8	170812M1_8	---	1700925-03RE1@20X I001BC50S-170724 0.12135	I001BC50S-170724	0.1214	1:3	Analyte	PFAS_IPA_8-10-17
9	170812M1_9	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
10	170812M1_10	O	1701007-03 RI17-EB3-080317 0.26497	RI17-EB3-080317	0.2650	1:4	Analyte	PFAS_IPA_8-10-17
11	170812M1_11	O	1701007-04 RI17-EB8-080317 0.26753	RI17-EB8-080317	0.2675	1:5	Analyte	PFAS_IPA_8-10-17
12	170812M1_12	---	1700922-06RE1 RB09-20170721 0.11676	RB09-20170721	0.1168	1:6	Analyte	PFAS_IPA_8-10-17
13	170812M1_13	---	1700925-01RE1 I001BC43S-170724 0.12112	I001BC43S-170724	0.1211	1:7	Analyte	PFAS_IPA_8-10-17
14	170812M1_14	---	1700925-02RE1 SB01-170724 0.12178	SB01-170724	0.1218	1:8	Analyte	PFAS_IPA_8-10-17
15	170812M1_15	---	1700925-03RE1 I001BC50S-170724 0.12135	I001BC50S-170724	0.1214	1:9	Analyte	PFAS_IPA_8-10-17
16	170812M1_16	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
17	170812M1_17	---	1700925-06RE1 EB01-170724 0.1185	EB01-170724	0.1185	1:10	Analyte	PFAS_IPA_8-10-17
18	170812M1_18	---	1700929-01RE1 MATP01001 0.11834	MATP01001	0.1183	1:11	Analyte	PFAS_IPA_8-10-17
19	170812M1_19	---	1700929-02RE1 MATP01002 0.1157	MATP01002	0.1157	1:12	Analyte	PFAS_IPA_8-10-17
20	170812M1_20	---	1700938-01RE1 NORP08102 0.11844	NORP08102	0.1184	1:13	Analyte	PFAS_IPA_8-10-17
21	170812M1_21	---	1700938-02RE1 NORP08103 0.12014	NORP08103	0.1201	1:14	Analyte	PFAS_IPA_8-10-17
22	170812M1_22	---	1700938-03RE1 NORP08104 0.11247	NORP08104	0.1125	1:15	Analyte	PFAS_IPA_8-10-17
23	170812M1_23	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
24	170812M1_24	---	ST170812M1-4 PFC CS3 17H1203	PFC CS3 17H1203	1.0000	1:2	Standard	PFAS_IPA_8-10-17
25	170812M1_25	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
26	170812M1_26	---	1700925-04RE2 I001MW52S-170724 0.00122	I001MW52S-170724	0.0012	1:19	Analyte	PFAS_IPA_8-10-17
27	170812M1_27	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
28	170812M1_28	---	1700925-05RE2 I001MW52X-170724 0.00133	I001MW52X-170724	0.0013	1:20	Analyte	PFAS_IPA_8-10-17
29	170812M1_29	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
30	170812M1_30	---	1700958-06RE1@10X MATP03050 1.22	MATP03050	1.0219	1:22	Analyte	PFAS_IPA_8-10-17
31	170812M1_31	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
32	170812M1_32	XX	1700958-04 MATP03048 1	MATP03048	1.0000	1:23	Analyte	PFAS_IPA_8-10-17
33	170812M1_33	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
34	170812M1_34	XX	1700958-05 MATP03049 1	MATP03049	1.0000	1:24	Analyte	PFAS_IPA_8-10-17
35	170812M1_35	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
36	170812M1_36	XX	1700958-06 MATP03050 1	MATP03050	1.0000	1:25	Analyte	PFAS_IPA_8-10-17
37	170812M1_37	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
38	170812M1_38	O	1700958-07 MATP03051 1	MATP03051	1.0000	1:26	Analyte	PFAS_IPA_8-10-17
39	170812M1_39	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
40	170812M1_40	---	ST170812M1-5 PFC CS3 17H1203	PFC CS3 17H1203	1.0000	1:2	Standard	PFAS_IPA_8-10-17

(A) out of limit Revisions. am 8/12/17 am 8/12/17

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type	MS File
41	170812M1_41	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
42	170812M1_42	X	1700961-02 MATP05098 1	MATP05098	1.0000	1:27	Analyte	PFAS_IPA_8-10-17
43	170812M1_43	X	1700961-03 MATP05099 1	MATP05099	1.0000	1:28	Analyte	PFAS_IPA_8-10-17
44	170812M1_44	X	1700961-04 MATP05100 1	MATP05100	1.0000	1:29	Analyte	PFAS_IPA_8-10-17
45	170812M1_45	X	1700961-05 MATP05102 1	MATP05102	1.0000	1:30	Analyte	PFAS_IPA_8-10-17
46	170812M1_46	X	1700961-06 MATP05103 1	MATP05103	1.0000	1:31	Analyte	PFAS_IPA_8-10-17
47	170812M1_47	X	1700961-07 MATP04055 1	MATP04055	1.0000	1:32	Analyte	PFAS_IPA_8-10-17
48	170812M1_48	X	1700961-08 MATP03041 1	MATP03041	1.0000	1:33	Analyte	PFAS_IPA_8-10-17
49	170812M1_49	X	1700961-09 MATP04063 1	MATP04063	1.0000	1:34	Analyte	PFAS_IPA_8-10-17
50	170812M1_50	X	1700961-11 MATP04065 1	MATP04065	1.0000	1:35	Analyte	PFAS_IPA_8-10-17
51	170812M1_51	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
52	170812M1_52	---	ST170812M1-6 PFC CS3 17H1203	PFC CS3 17H1203	1.0000	1:2	Standard	PFAS_IPA_8-10-17
53	170812M1_53	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
54	170812M1_54	X	1700961-12 MATP04066 1	MATP04066	1.0000	1:36	Analyte	PFAS_IPA_8-10-17
55	170812M1_55	O	1700960-03 MATP05084 0.125	MATP05084	0.1250	1:37	Analyte	PFAS_IPA_8-10-17
56	170812M1_56	O	1700960-05 MATP05086 1	MATP05086	1.0000	1:38	Analyte	PFAS_IPA_8-10-17
57	170812M1_57	O	1700958-14 MATP05080 0.125	MATP05080	0.1250	1:40	Analyte	PFAS_IPA_8-10-17
58	170812M1_58	XX	1700959-06 MATPXX130a 0.125	MATPXX130a	0.1250	1:41	Analyte	PFAS_IPA_8-10-17
59	170812M1_59	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17
60	170812M1_60	---	ST170812M1-7 PFC CS3 17H1203	PFC CS3 17H1203	1.0000	1:2	Standard	PFAS_IPA_8-10-17
61	170812M1_61	---	IPA	IPA	1.0000	1:48	Blank	PFAS_IPA_8-10-17

✓ DM 8/13/7

Vista Analytical Laboratory

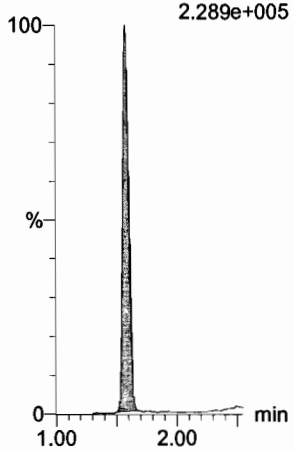
Dataset: U:\Q4.PRO\results\170812M1\170812M1-24.qld

Last Altered: Sunday, August 13, 2017 10:49:11 Pacific Daylight Time
Printed: Sunday, August 13, 2017 10:49:24 Pacific Daylight Time

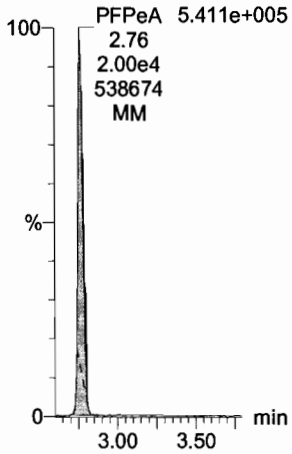
Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 12 Aug 2017 16:32:40
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170812M1_24, Date: 13-Aug-2017, Time: 00:28:44, ID: ST170812M1-4 PFC CS3 17H1203, Description: PFC CS3 17H1203

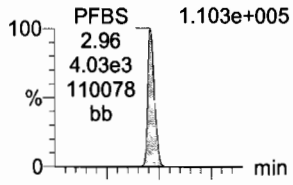
PFBA
F1:MRM of 2 channels,ES-
213.0 > 168.8
2.289e+005



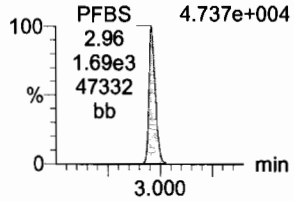
PFPeA
F4:MRM of 1 channel,ES-
263.1 > 218.9
PFPeA 5.411e+005



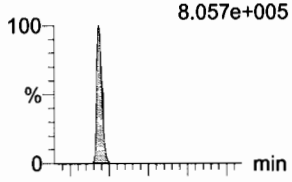
PFBS
F6:MRM of 2 channels,ES-
299 > 79.7
1.103e+005



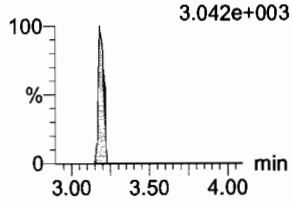
F6:MRM of 2 channels,ES-
299 > 99
4.737e+004



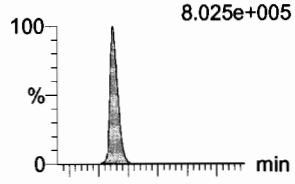
PFHxA
F8:MRM of 2 channels,ES-
313.2 > 268.9
8.057e+005



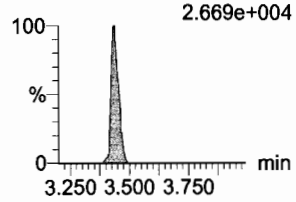
F8:MRM of 2 channels,ES-
313.2 > 119
3.042e+003



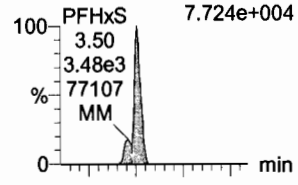
PFHpA
F14:MRM of 2 channels,ES-
363 > 318.9
8.025e+005



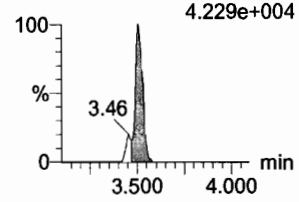
F14:MRM of 2 channels,ES-
363 > 169
2.669e+004



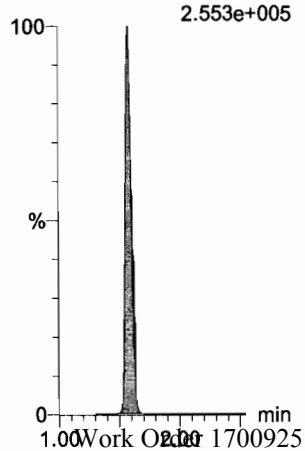
PFHxS
F16:MRM of 2 channels,ES-
398.9 > 79.6
7.724e+004



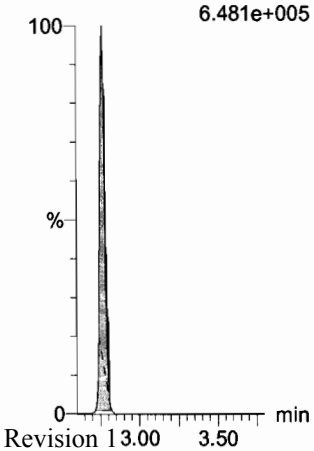
F16:MRM of 2 channels,ES-
398.9 > 99
4.229e+004



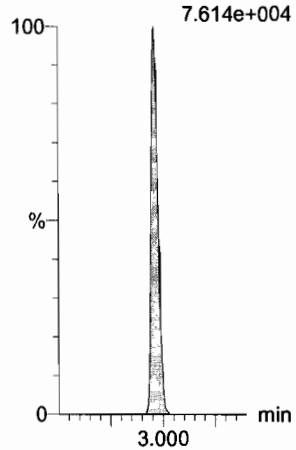
13C3-PFBA
F2:MRM of 1 channel,ES-
216.1 > 171.8
2.553e+005



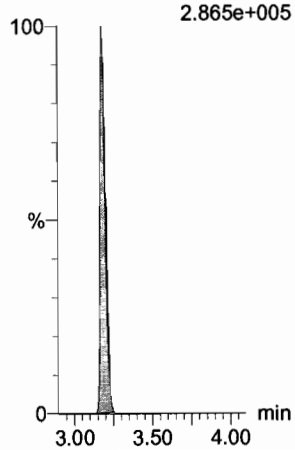
13C3-PFPeA
F5:MRM of 1 channel,ES-
266 > 221.8
6.481e+005



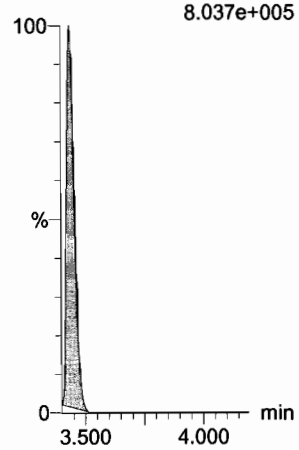
13C3-PFBS
F7:MRM of 1 channel,ES-
302 > 98.8
7.614e+004



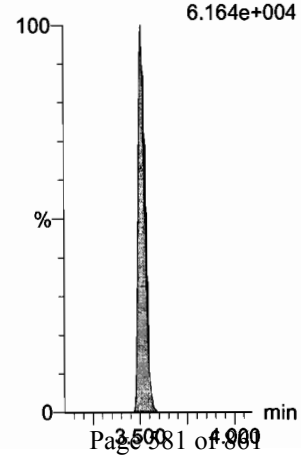
13C2-PFHxA
F9:MRM of 1 channel,ES-
315 > 269.8
2.865e+005



13C4-PFHpA
F15:MRM of 1 channel,ES-
367.2 > 321.8
8.037e+005



18O2-PFHxS
F18:MRM of 1 channel,ES-
403 > 102.6
6.164e+004



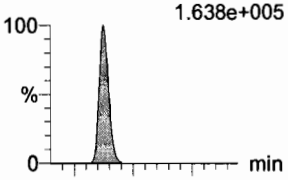
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170812M1\170812M1-24.qld

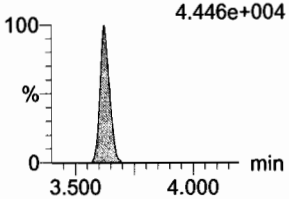
Last Altered: Sunday, August 13, 2017 10:49:11 Pacific Daylight Time
Printed: Sunday, August 13, 2017 10:49:24 Pacific Daylight Time

Name: 170812M1_24, Date: 13-Aug-2017, Time: 00:28:44, ID: ST170812M1-4 PFC CS3 17H1203, Description: PFC CS3 17H1203

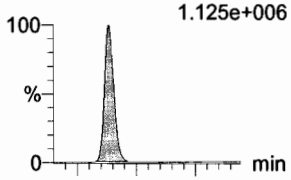
6:2 FTS
F22:MRM of 2 channels,ES-
427.1 > 407
1.638e+005



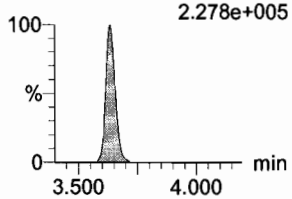
F22:MRM of 2 channels,ES-
427.1 > 80
4.446e+004



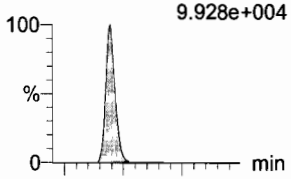
PFOA
F19:MRM of 2 channels,ES-
413 > 368.7
1.125e+006



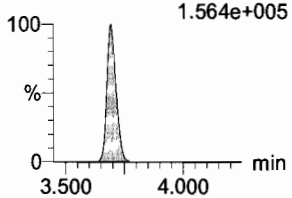
F19:MRM of 2 channels,ES-
413 > 169
2.278e+005



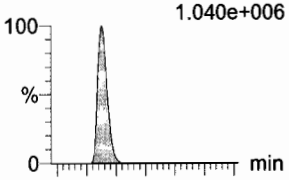
PFHpS
F24:MRM of 4 channels,ES-
448.9 > 98.8
9.928e+004



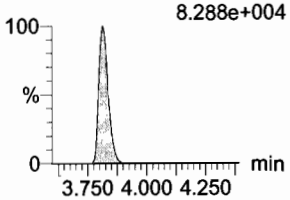
F24:MRM of 4 channels,ES-
448.9 > 79.9
1.564e+005



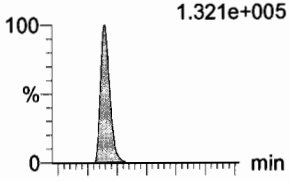
PFNA
F25:MRM of 2 channels,ES-
462.9 > 418.8
1.040e+006



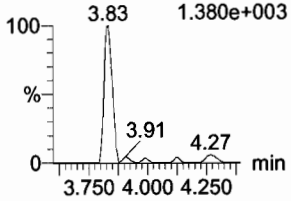
F25:MRM of 2 channels,ES-
462.9 > 219
8.288e+004



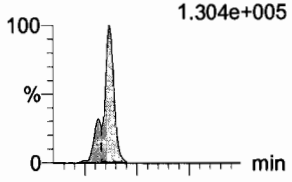
PFOSA
F28:MRM of 2 channels,ES-
498.1 > 77.8
1.321e+005



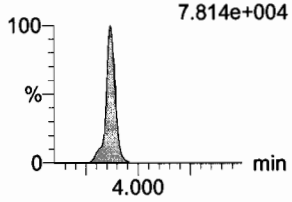
F28:MRM of 2 channels,ES-
498.1 > 478
1.380e+003



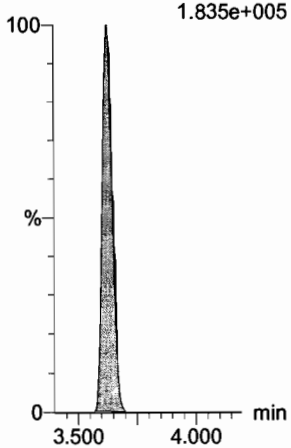
PFOS
F30:MRM of 2 channels,ES-
499 > 79.9
1.304e+005



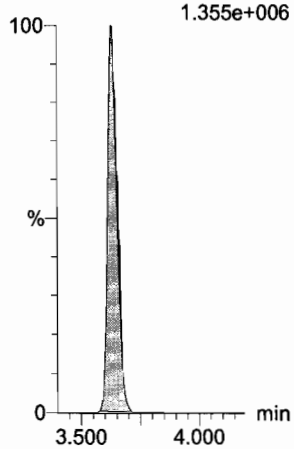
F30:MRM of 2 channels,ES-
499 > 99
7.814e+004



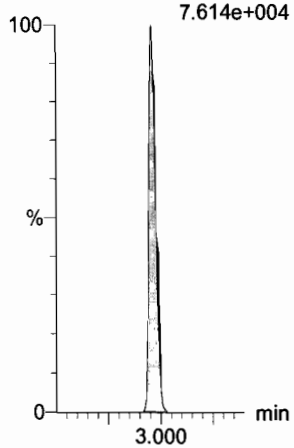
13C2-6:2 FTS
F23:MRM of 1 channel,ES-
429.1 > 408.9
1.835e+005



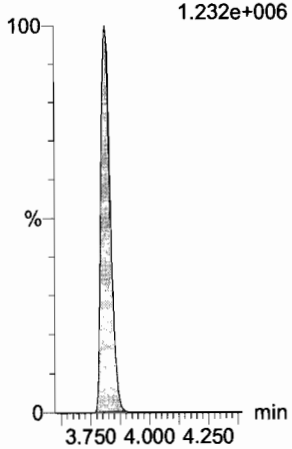
13C2-PFOA
F20:MRM of 1 channel,ES-
414.9 > 369.7
1.355e+006



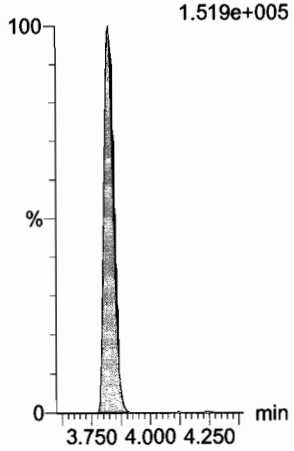
13C3-PFBS
F7:MRM of 1 channel,ES-
302 > 98.8
7.614e+004



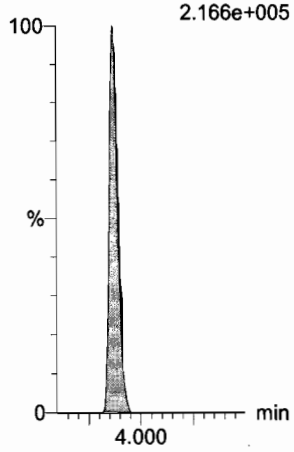
13C5-PFNA
F26:MRM of 1 channel,ES-
468.2 > 422.9
1.232e+006



13C8-PFOSA
F32:MRM of 1 channel,ES-
506.1 > 77.7
1.519e+005



13C8-PFOS
F33:MRM of 1 channel,ES-
507 > 79.9
2.166e+005



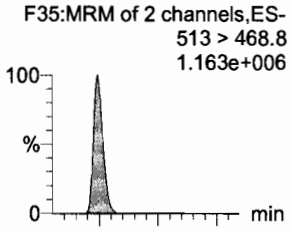
Vista Analytical Laboratory

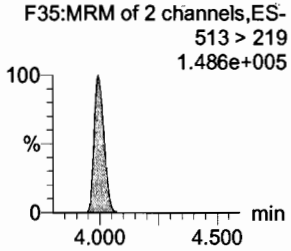
Dataset: U:\Q4.PRO\results\170812M1\170812M1-24.qld

Last Altered: Sunday, August 13, 2017 10:49:11 Pacific Daylight Time
Printed: Sunday, August 13, 2017 10:49:24 Pacific Daylight Time

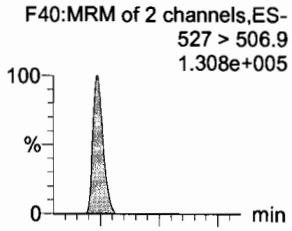
Name: 170812M1_24, Date: 13-Aug-2017, Time: 00:28:44, ID: ST170812M1-4 PFC CS3 17H1203, Description: PFC CS3 17H1203

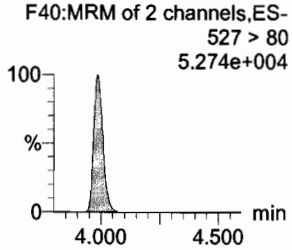
PFDA



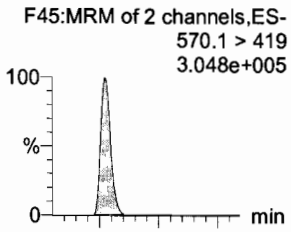


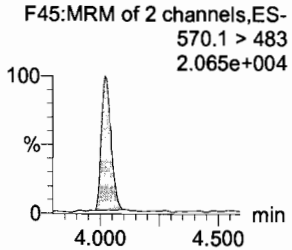
8:2 FTS



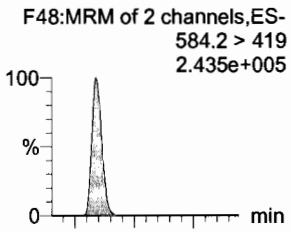


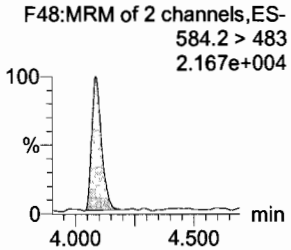
N-MeFOSAA



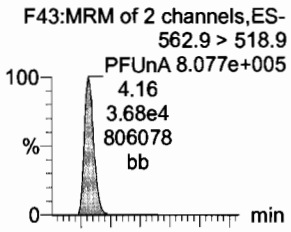


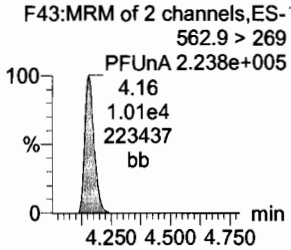
N-EtFOSAA



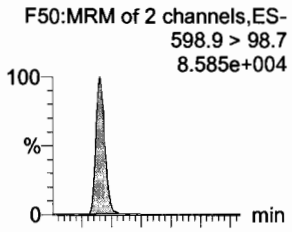


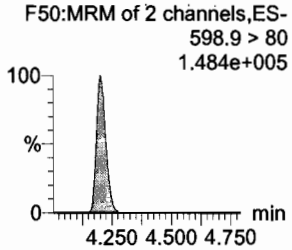
PFUnA



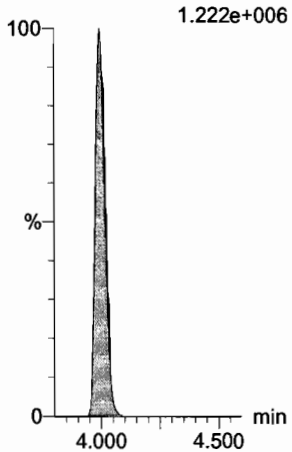


PFDS

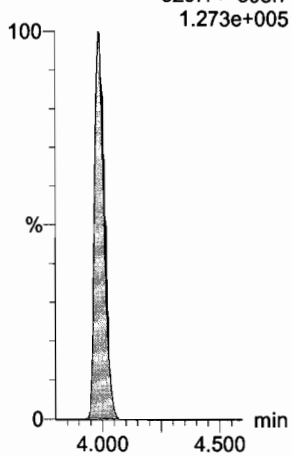




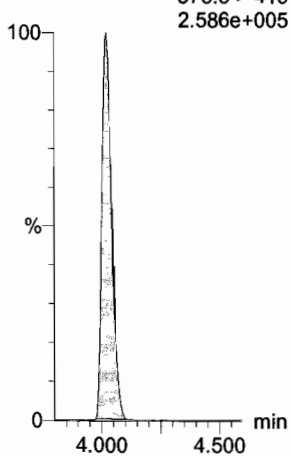
13C2-PFDA



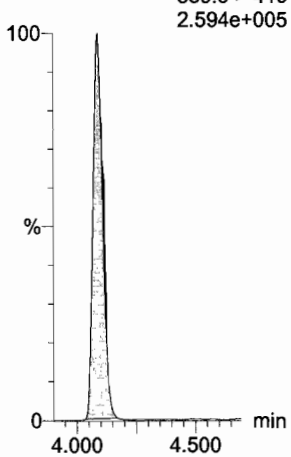
13C2-8:2 FTS



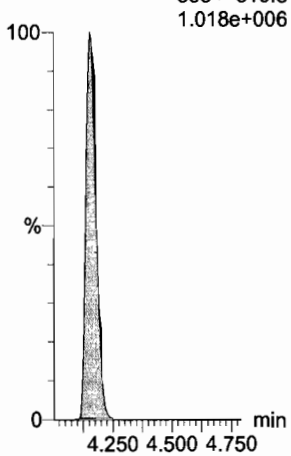
d3-N-MeFOSAA



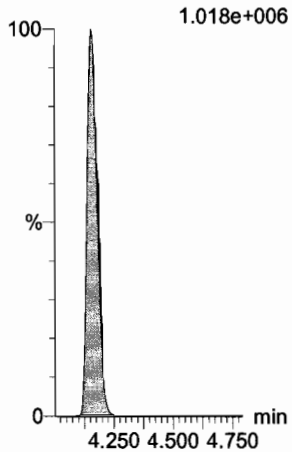
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



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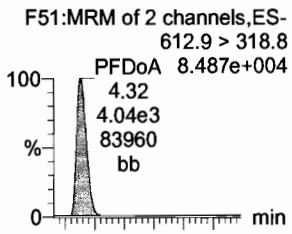
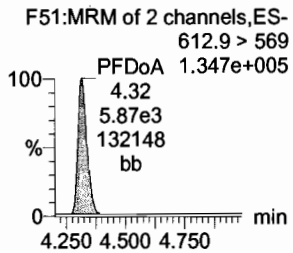
Dataset: U:\Q4.PRO\results\170812M1\170812M1-24.qld

Last Altered: Sunday, August 13, 2017 10:49:11 Pacific Daylight Time
Printed: Sunday, August 13, 2017 10:49:24 Pacific Daylight Time

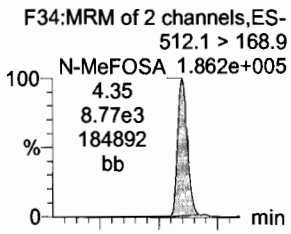
Name: 170812M1_24, Date: 13-Aug-2017, Time: 00:28:44, ID: ST170812M1-4 PFC CS3 17H1203, Description: PFC CS3 17H1203

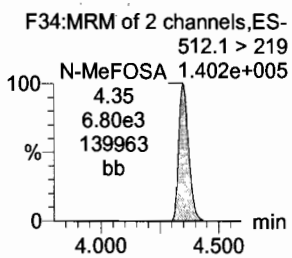
PFDoA



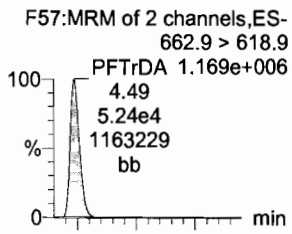


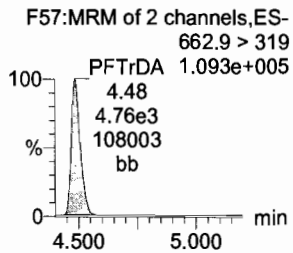
N-MeFOSA



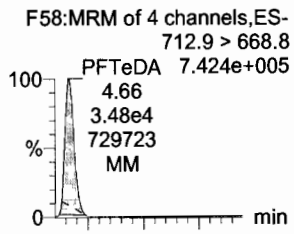


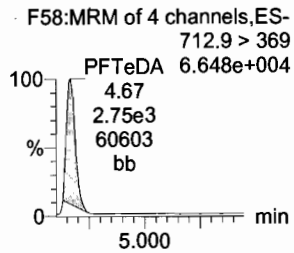
PFTrDA



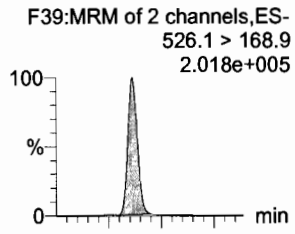


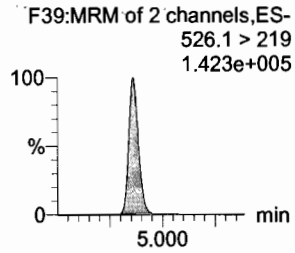
PFTeDA



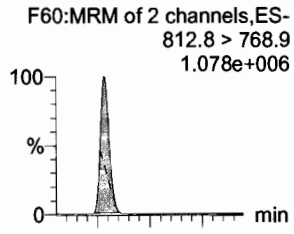


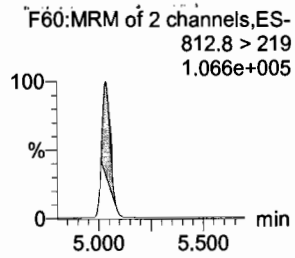
N-EtFOSA



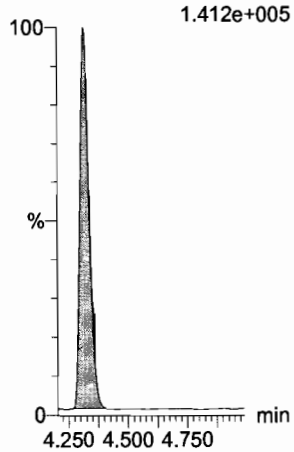


PFHxDA

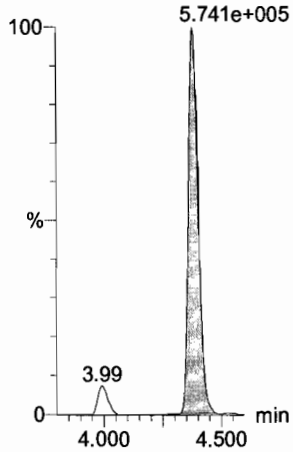




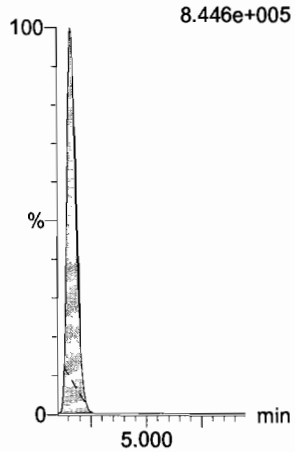
13C2-PFDoA



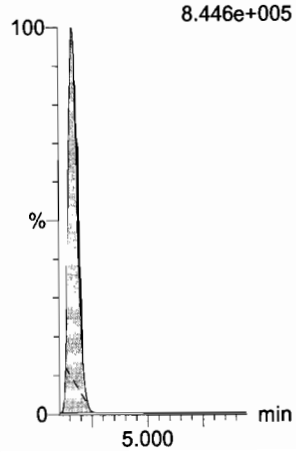
d3-N-MeFOSA



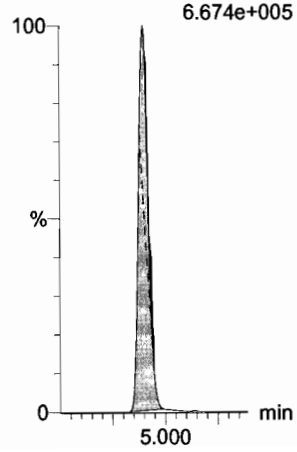
13C2-PFTeDA



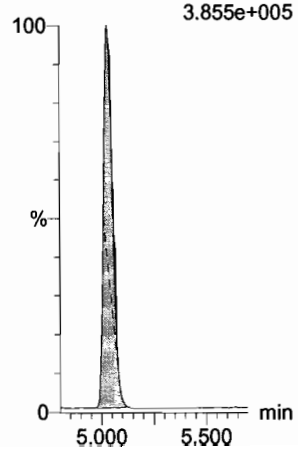
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



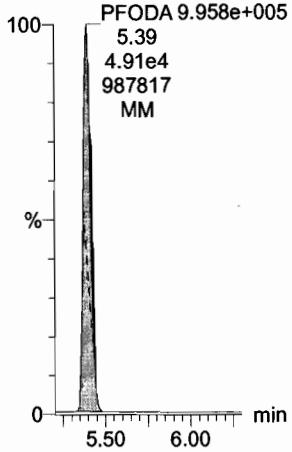
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170812M1\170812M1-24.qld

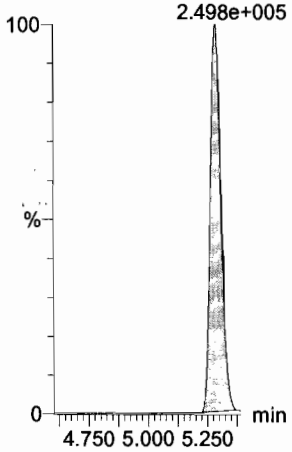
Last Altered: Sunday, August 13, 2017 10:49:11 Pacific Daylight Time
Printed: Sunday, August 13, 2017 10:49:24 Pacific Daylight Time

Name: 170812M1_24, Date: 13-Aug-2017, Time: 00:28:44, ID: ST170812M1-4 PFC CS3 17H1203, Description: PFC CS3 17H1203

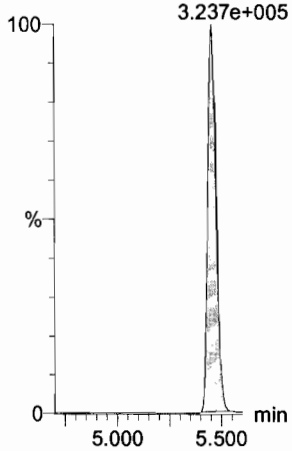
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
PFODA 9.958e+005
5.39
4.91e4
987817
MM



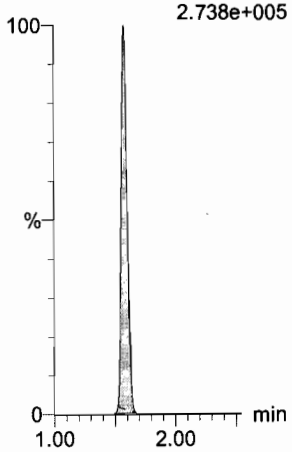
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
2.498e+005



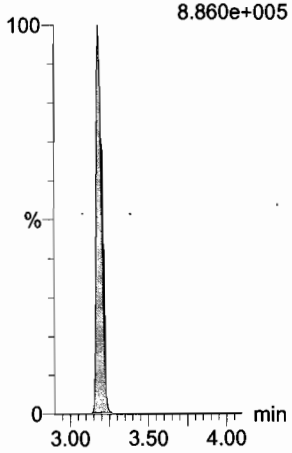
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
3.237e+005



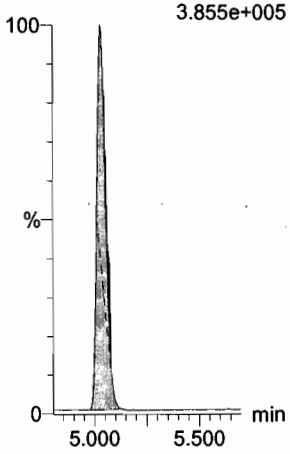
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.738e+005



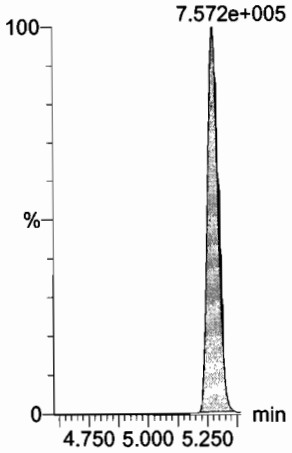
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
8.860e+005



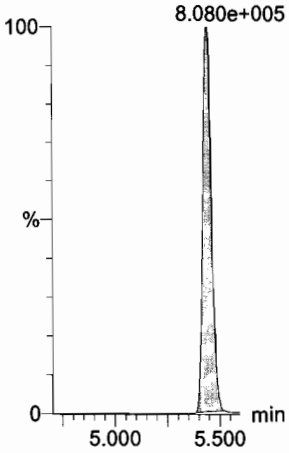
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
3.855e+005



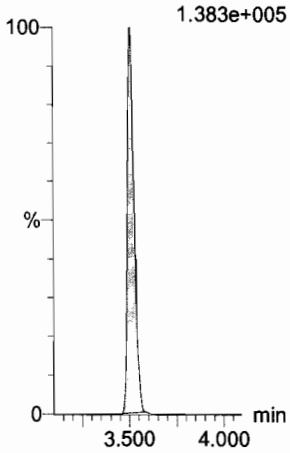
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
7.572e+005



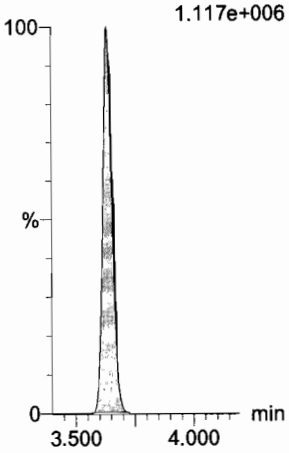
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
8.080e+005



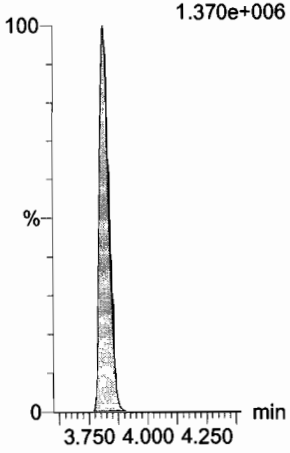
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.383e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.117e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.370e+006



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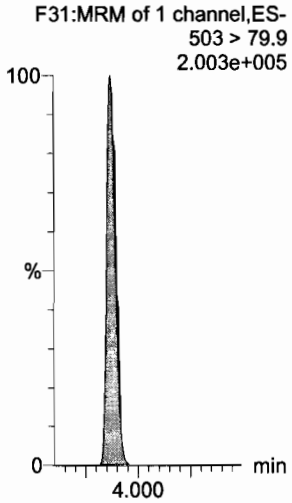
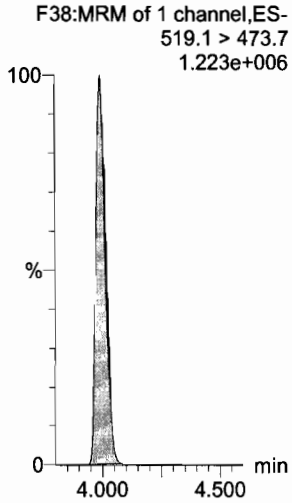
Last Altered: Sunday, August 13, 2017 10:49:11 Pacific Daylight Time
Printed: Sunday, August 13, 2017 10:49:24 Pacific Daylight Time

Name: 170812M1_24, Date: 13-Aug-2017, Time: 00:28:44, ID: ST170812M1-4 PFC CS3 17H1203, Description: PFC CS3 17H1203

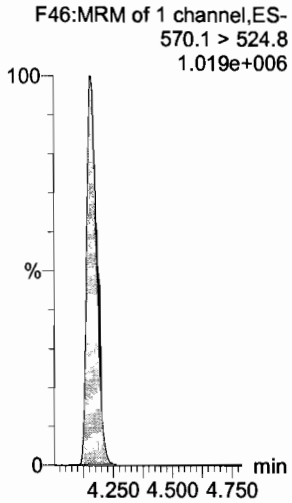
13C4-PFOS



13C6-PFDA



13C7-PFUnA



INITIAL CALIBRATION (ICAL)

INCLUDING ASSOCIATED

INITIAL CALIBRATION VERIFICATION (ICV) AND INSTRUMENT BLANK (IB)

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:16:34 Pacific Daylight Time

KEL 8/1/17

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 01 Aug 2017 09:55:07
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

AC 8/1/17

Compound name: PFBA
Coefficient of Determination: R^2 = 0.999898
Calibration curve: 6.26653e-005 * x^2 + 1.07835 * x + 0.0734459
Response type: Internal Std (Ref 28), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	1.41	411.114	13874.437	0.370	0.3	10.1	NO	1.000	NO	MM
2	2	170731M2_3	Standard	0.500	1.40	713.007	14032.984	0.635	0.5	4.2	NO	1.000	NO	bb
3	3	170731M2_4	Standard	1.000	1.39	1410.952	14534.191	1.213	1.1	5.7	NO	1.000	NO	bb
4	4	170731M2_5	Standard	2.000	1.41	2604.108	13825.355	2.354	2.1	5.8	NO	1.000	NO	bb
5	5	170731M2_6	Standard	5.000	1.40	6507.126	14375.643	5.658	5.2	3.5	NO	1.000	NO	bb
6	6	170731M2_7	Standard	10.000	1.40	12186.419	14275.662	10.671	9.8	-1.8	NO	1.000	NO	bb
7	7	170731M2_8	Standard	50.000	1.40	60399.383	13941.181	54.156	50.0	0.0	NO	1.000	NO	bb
8	8	170731M2_9	Standard	100.000	1.40	122688.352	14182.987	108.130	99.6	-0.4	NO	1.000	NO	bb
9	9	170731M2_10	Standard	250.000	1.41	444076.063	20278.131	273.741	250.1	0.1	NO	1.000	NO	bb

Compound name: PFPeA
Correlation coefficient: r = 0.999842, r^2 = 0.999685
Calibration curve: 0.95207 * x + 0.034134
Response type: Internal Std (Ref 29), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	2.69	567.060	28315.961	0.250	0.2	-9.2	NO	1.000	NO	MM
2	2	170731M2_3	Standard	0.500	2.69	1149.332	28971.373	0.496	0.5	-3.0	NO	1.000	NO	bb
3	3	170731M2_4	Standard	1.000	2.69	2381.328	29344.844	1.014	1.0	3.0	NO	1.000	NO	bb
4	4	170731M2_5	Standard	2.000	2.70	4632.085	27224.277	2.127	2.2	9.9	NO	1.000	NO	MM
5	5	170731M2_6	Standard	5.000	2.69	11287.421	28900.883	4.882	5.1	1.8	NO	1.000	NO	MM
6	6	170731M2_7	Standard	10.000	2.69	22284.025	28928.092	9.629	10.1	0.8	NO	1.000	NO	bb
7	7	170731M2_8	Standard	50.000	2.69	101931.336	27958.209	45.573	47.8	-4.3	NO	1.000	NO	MM
8	8	170731M2_9	Standard	100.000	2.70	209969.516	27418.373	95.725	100.5	0.5	NO	1.000	NO	MM
9	9	170731M2_10	Standard	250.000	2.70	777214.313	40599.961	239.290	251.3	0.5	NO	1.000	NO	MM

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:16:34 Pacific Daylight Time

Compound name: PFBS
Correlation coefficient: r = 0.999700, r^2 = 0.999400
Calibration curve: 1.88408 * x + 0.0670139
Response type: Internal Std (Ref 30), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	2.92	151.762	3567.166	0.532	0.2	-1.3	NO	0.999	NO	bb
2	2	170731M2_3	Standard	0.500	2.93	294.717	3674.875	1.002	0.5	-0.7	NO	0.999	NO	bb
3	3	170731M2_4	Standard	1.000	2.93	602.633	3756.884	2.005	1.0	2.9	NO	0.999	NO	bb
4	4	170731M2_5	Standard	2.000	2.93	1142.969	3453.801	4.137	2.2	8.0	NO	0.999	NO	bb
5	5	170731M2_6	Standard	5.000	2.92	2761.764	3669.754	9.407	5.0	-0.9	NO	0.999	NO	db
6	6	170731M2_7	Standard	10.000	2.93	5120.116	3495.072	18.312	9.7	-3.2	NO	0.999	NO	bb
7	7	170731M2_8	Standard	50.000	2.92	24305.621	3386.169	89.724	47.6	-4.8	NO	0.999	NO	bb
8	8	170731M2_9	Standard	100.000	2.93	49918.813	3369.060	185.210	98.3	-1.7	NO	0.999	NO	bb
9	9	170731M2_10	Standard	250.000	2.93	175245.609	4571.001	479.232	254.3	1.7	NO	0.999	NO	bb

Compound name: PFHxA
Correlation coefficient: r = 0.999770, r^2 = 0.999541
Calibration curve: 1.38743 * x + 0.151774
Response type: Internal Std (Ref 31), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	3.17	1105.240	13289.316	0.416	0.2	-23.9	NO	1.000	NO	bb
2	2	170731M2_3	Standard	0.500	3.17	2259.732	13996.411	0.807	0.5	-5.5	NO	1.000	NO	bb
3	3	170731M2_4	Standard	1.000	3.16	4555.615	13471.391	1.691	1.1	10.9	NO	1.000	NO	bb
4	4	170731M2_5	Standard	2.000	3.16	8364.676	13180.728	3.173	2.2	8.9	NO	1.000	NO	bb
5	5	170731M2_6	Standard	5.000	3.16	21557.746	14300.003	7.538	5.3	6.5	NO	1.000	NO	bb
6	6	170731M2_7	Standard	10.000	3.16	38887.297	13464.359	14.441	10.3	3.0	NO	1.000	NO	bb
7	7	170731M2_8	Standard	50.000	3.17	186053.391	13579.439	68.506	49.3	-1.5	NO	1.000	NO	bb
8	8	170731M2_9	Standard	100.000	3.16	370981.719	13004.882	142.632	102.7	2.7	NO	1.000	NO	bb
9	9	170731M2_10	Standard	250.000	3.16	1637628.125	23861.670	343.150	247.2	-1.1	NO	1.000	NO	bb

Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:16:34 Pacific Daylight Time

Compound name: PFHpA
Correlation coefficient: r = 0.999907, r^2 = 0.999814
Calibration curve: 1.19527 * x + 0.0770691
Response type: Internal Std (Ref 32), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	3.43	1188.512	42267.941	0.351	0.2	-8.2	NO	1.000	NO	bb
2	2	170731M2_3	Standard	0.500	3.43	2346.575	44035.770	0.666	0.5	-1.4	NO	1.000	NO	bb
3	3	170731M2_4	Standard	1.000	3.43	4665.274	47111.973	1.238	1.0	-2.9	NO	1.000	NO	bb
4	4	170731M2_5	Standard	2.000	3.43	8684.659	40041.188	2.711	2.2	10.2	NO	1.000	NO	bb
5	5	170731M2_6	Standard	5.000	3.43	22188.094	43531.445	6.371	5.3	5.3	NO	1.000	NO	bb
6	6	170731M2_7	Standard	10.000	3.43	39873.324	41835.402	11.914	9.9	-1.0	NO	1.000	NO	bb
7	7	170731M2_8	Standard	50.000	3.43	198036.984	42486.371	58.265	48.7	-2.6	NO	1.000	NO	bb
8	8	170731M2_9	Standard	100.000	3.43	391289.031	40762.777	119.990	100.3	0.3	NO	1.000	NO	bb
9	9	170731M2_10	Standard	250.000	3.43	1450839.000	60510.934	299.706	250.7	0.3	NO	1.000	NO	bb

Compound name: PFHxS
Correlation coefficient: r = 0.998411, r^2 = 0.996824
Calibration curve: 1.6806 * x + 0.0313148
Response type: Internal Std (Ref 33), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	3.50	136.913	4105.498	0.417	0.2	-8.2	NO	0.997	NO	MM
2	2	170731M2_3	Standard	0.500	3.51	320.409	4057.192	0.987	0.6	13.8	NO	0.997	NO	MM
3	3	170731M2_4	Standard	1.000	3.51	503.736	4402.638	1.430	0.8	-16.8	NO	0.997	NO	MM
4	4	170731M2_5	Standard	2.000	3.50	1217.100	3891.568	3.909	2.3	15.4	NO	0.997	NO	bb
5	5	170731M2_6	Standard	5.000	3.51	2734.810	3878.935	8.813	5.2	4.5	NO	0.997	NO	MM
6	6	170731M2_7	Standard	10.000	3.50	5376.990	3978.140	16.895	10.0	0.3	NO	0.997	NO	bb
7	7	170731M2_8	Standard	50.000	3.50	25163.787	3932.861	79.979	47.6	-4.9	NO	0.997	NO	db
8	8	170731M2_9	Standard	100.000	3.51	51344.988	4159.138	154.314	91.8	-8.2	NO	0.997	NO	db
9	9	170731M2_10	Standard	250.000	3.51	172302.625	4925.332	437.287	260.2	4.1	NO	0.997	NO	bb

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Compound name: 6:2 FTS
Coefficient of Determination: R^2 = 0.999797
Calibration curve: -0.00364043 * x^2 + 1.16681 * x + -0.0592153
Response type: Internal Std (Ref 34), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	3.63	177.680	9927.280	0.224	0.2	-2.9	NO	1.000	NO	bb
2	2	170731M2_3	Standard	0.500	3.63	478.991	10315.116	0.580	0.5	9.8	NO	1.000	NO	bb
3	3	170731M2_4	Standard	1.000	3.63	943.278	11541.119	1.022	0.9	-7.1	NO	1.000	NO	bb
4	4	170731M2_5	Standard	2.000	3.63	1822.126	10131.339	2.248	2.0	-0.5	NO	1.000	NO	bb
5	5	170731M2_6	Standard	5.000	3.62	4473.807	9593.972	5.829	5.1	2.6	NO	1.000	NO	bb
6	6	170731M2_7	Standard	10.000	3.62	8896.104	10116.732	10.992	9.8	-2.3	NO	1.000	NO	bb
7	7	170731M2_8	Standard	50.000	3.63	38899.715	9833.309	49.449	50.3	0.7	NO	1.000	NO	bb
8	8	170731M2_9	Standard	100.000	3.63	74054.742	11556.366	80.102	99.7	-0.3	NO	1.000	NO	bb
9	9	170731M2_10	Standard	250.000	3.63	204101.719	18952.229	134.616			NO	1.000	NO	bbXI

Compound name: PFOA
Correlation coefficient: r = 0.999910, r^2 = 0.999821
Calibration curve: 0.953928 * x + 0.14566
Response type: Internal Std (Ref 35), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	3.64	1648.688	63401.359	0.325	0.2	-24.8	NO	1.000	NO	MM
2	2	170731M2_3	Standard	0.500	3.64	3703.540	67191.539	0.689	0.6	13.9	NO	1.000	NO	bb
3	3	170731M2_4	Standard	1.000	3.63	6322.338	70281.578	1.124	1.0	2.6	NO	1.000	NO	bb
4	4	170731M2_5	Standard	2.000	3.63	11893.063	66790.375	2.226	2.2	9.0	NO	1.000	NO	bb
5	5	170731M2_6	Standard	5.000	3.64	25166.590	63977.652	4.917	5.0	0.0	NO	1.000	NO	bb
6	6	170731M2_7	Standard	10.000	3.64	51478.270	67944.383	9.471	9.8	-2.2	NO	1.000	NO	bb
7	7	170731M2_8	Standard	50.000	3.64	233790.078	59813.004	48.859	51.1	2.1	NO	1.000	NO	bb
8	8	170731M2_9	Standard	100.000	3.64	508100.156	66783.320	95.102	99.5	-0.5	NO	1.000	NO	bb
9	9	170731M2_10	Standard	250.000	3.64	1538457.125	80782.586	238.055	249.4	-0.2	NO	1.000	NO	bb

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Compound name: PFHpS
Correlation coefficient: r = 0.999006, r^2 = 0.998013
Calibration curve: 0.0861619 * x + 0.0071876
Response type: Internal Std (Ref 35), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	3.70	130.645	63401.359	0.026	0.2	-13.8	NO	0.998	NO	bb
2	2	170731M2_3	Standard	0.500	3.70	294.334	67191.539	0.055	0.6	10.4	NO	0.998	NO	bb
3	3	170731M2_4	Standard	1.000	3.69	538.985	70281.578	0.096	1.0	2.9	NO	0.998	NO	bb
4	4	170731M2_5	Standard	2.000	3.69	1018.044	66790.375	0.191	2.1	6.4	NO	0.998	NO	bb
5	5	170731M2_6	Standard	5.000	3.70	2421.679	63977.652	0.473	5.4	8.2	NO	0.998	NO	bb
6	6	170731M2_7	Standard	10.000	3.70	5311.248	67944.383	0.977	11.3	12.6	NO	0.998	NO	bb
7	7	170731M2_8	Standard	50.000	3.69	22461.885	59813.004	4.694	54.4	8.8	NO	0.998	NO	bb
8	8	170731M2_9	Standard	100.000	3.70	46378.051	66783.320	8.681	100.7	0.7	NO	0.998	NO	bb
9	9	170731M2_10	Standard	250.000	3.70	135410.438	80782.586	20.953	243.1	-2.8	NO	0.998	NO	bb

Compound name: PFNA
Correlation coefficient: r = 0.999697, r^2 = 0.999394
Calibration curve: 1.08541 * x + 0.0735739
Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	3.81	1389.836	54018.730	0.322	0.2	-8.6	NO	0.999	NO	bb
2	2	170731M2_3	Standard	0.500	3.82	3272.709	62262.660	0.657	0.5	7.5	NO	0.999	NO	bb
3	3	170731M2_4	Standard	1.000	3.81	5627.537	61609.746	1.142	1.0	-1.6	NO	0.999	NO	bb
4	4	170731M2_5	Standard	2.000	3.81	10519.000	57196.430	2.299	2.1	2.5	NO	0.999	NO	bb
5	5	170731M2_6	Standard	5.000	3.82	23937.521	55674.484	5.374	4.9	-2.3	NO	0.999	NO	bb
6	6	170731M2_7	Standard	10.000	3.82	53188.000	59478.996	11.178	10.2	2.3	NO	0.999	NO	bb
7	7	170731M2_8	Standard	50.000	3.81	232756.781	51828.512	56.136	51.7	3.3	NO	0.999	NO	bb
8	8	170731M2_9	Standard	100.000	3.81	446148.219	53481.383	104.277	96.0	-4.0	NO	0.999	NO	bb
9	9	170731M2_10	Standard	250.000	3.82	1433063.500	65426.449	273.793	252.2	0.9	NO	0.999	NO	bb

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Compound name: PFOSA
Correlation coefficient: r = 0.999883, r^2 = 0.999766
Calibration curve: 1.0734 * x + -0.0271184
Response type: Internal Std (Ref 37), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	3.83	130.593	6628.687	0.246	0.3	1.9	NO	1.000	NO	bb
2	2	170731M2_3	Standard	0.500	3.82	315.894	6757.332	0.584	0.6	13.9	NO	1.000	NO	bb
3	3	170731M2_4	Standard	1.000	3.83	559.472	7148.018	0.978	0.9	-6.3	NO	1.000	NO	bb
4	4	170731M2_5	Standard	2.000	3.83	1121.168	6732.580	2.082	2.0	-1.8	NO	1.000	NO	bb
5	5	170731M2_6	Standard	5.000	3.83	2778.576	6463.064	5.374	5.0	0.6	NO	1.000	NO	bb
6	6	170731M2_7	Standard	10.000	3.83	5384.216	6861.386	9.809	9.2	-8.4	NO	1.000	NO	bb
7	7	170731M2_8	Standard	50.000	3.83	24500.219	5762.874	53.142	49.5	-0.9	NO	1.000	NO	bb
8	8	170731M2_9	Standard	100.000	3.83	49243.563	5694.701	108.091	100.7	0.7	NO	1.000	NO	bb
9	9	170731M2_10	Standard	250.000	3.83	146323.297	6801.088	268.934	250.6	0.2	NO	1.000	NO	bb

Compound name: PFOS
Coefficient of Determination: R^2 = 0.999779
Calibration curve: 0.000313423 * x^2 + 1.01509 * x + 0.0486823
Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	3.86	262.377	9891.881	0.332	0.3	11.5	NO	1.000	NO	MM
2	2	170731M2_3	Standard	0.500	3.87	481.675	11460.590	0.525	0.5	-6.1	NO	1.000	NO	MM
3	3	170731M2_4	Standard	1.000	3.87	1088.575	11503.416	1.183	1.1	11.7	NO	1.000	NO	MM
4	4	170731M2_5	Standard	2.000	3.87	1856.085	10201.429	2.274	2.2	9.6	NO	1.000	NO	bb
5	5	170731M2_6	Standard	5.000	3.87	4259.738	10639.481	5.005	4.9	-2.5	NO	1.000	NO	bb
6	6	170731M2_7	Standard	10.000	3.87	9044.098	11768.862	9.606	9.4	-6.1	NO	1.000	NO	bb
7	7	170731M2_8	Standard	50.000	3.87	41100.910	9805.450	52.395	50.8	1.5	NO	1.000	NO	bb
8	8	170731M2_9	Standard	100.000	3.87	79111.719	9480.636	104.307	99.6	-0.4	NO	1.000	NO	bb
9	9	170731M2_10	Standard	250.000	3.87	250476.469	11450.712	273.429	250.0	0.0	NO	1.000	NO	bb

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Compound name: PFDA
Correlation coefficient: r = 0.999542, r^2 = 0.999084
Calibration curve: 1.19993 * x + 0.156566
Response type: Internal Std (Ref 39), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	3.98	1774.405	59781.418	0.371	0.2	-28.5	NO	0.999	NO	bb
2	2	170731M2_3	Standard	0.500	3.99	3704.363	61812.703	0.749	0.5	-1.2	NO	0.999	NO	bb
3	3	170731M2_4	Standard	1.000	3.99	7125.412	54053.125	1.648	1.2	24.3	NO	0.999	NO	bb
4	4	170731M2_5	Standard	2.000	3.98	11131.300	56405.016	2.467	1.9	-3.7	NO	0.999	NO	bb
5	5	170731M2_6	Standard	5.000	3.99	27851.160	53527.699	6.504	5.3	5.8	NO	0.999	NO	bb
6	6	170731M2_7	Standard	10.000	3.99	58244.602	58740.922	12.394	10.2	2.0	NO	0.999	NO	bb
7	7	170731M2_8	Standard	50.000	3.99	232759.141	46095.934	63.118	52.5	4.9	NO	0.999	NO	bb
8	8	170731M2_9	Standard	100.000	3.99	492152.594	53241.500	115.547	96.2	-3.8	NO	0.999	NO	bb
9	9	170731M2_10	Standard	250.000	3.99	1764954.750	73276.133	301.079	250.8	0.3	NO	0.999	NO	bb

Compound name: 8:2 FTS
Coefficient of Determination: R^2 = 0.999107
Calibration curve: -0.00477278 * x^2 + 1.45357 * x + 0.0233651
Response type: Internal Std (Ref 40), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	3.98	133.416	5442.396	0.306	0.2	-22.1	NO	0.999	NO	bb
2	2	170731M2_3	Standard	0.500	3.99	391.677	6198.728	0.790	0.5	5.6	NO	0.999	NO	bb
3	3	170731M2_4	Standard	1.000	3.98	911.492	7001.858	1.627	1.1	10.7	NO	0.999	NO	bb
4	4	170731M2_5	Standard	2.000	3.98	1614.354	5984.115	3.372	2.3	16.1	NO	0.999	NO	bb
5	5	170731M2_6	Standard	5.000	3.98	3426.112	6043.006	7.087	4.9	-1.2	NO	0.999	NO	bb
6	6	170731M2_7	Standard	10.000	3.98	7395.563	6710.449	13.776	9.8	-2.2	NO	0.999	NO	bb
7	7	170731M2_8	Standard	50.000	3.98	30902.635	6400.762	60.350	49.6	-0.9	NO	0.999	NO	bb
8	8	170731M2_9	Standard	100.000	3.98	58744.098	7501.545	97.887	100.5	0.5	NO	0.999	NO	bb
9	9	170731M2_10	Standard	250.000	3.98	165445.906	12670.185	163.224			NO	0.999	NO	bbXI

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Compound name: N-MeFOSAA
Coefficient of Determination: R^2 = 0.999795
Calibration curve: 0.00169243 * x^2 + 17.7214 * x + 0.975242
Response type: Internal Std (Ref 41), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	4.02	367.535	12318.428	4.848	0.2	-12.6	NO	1.000	NO	bb
2	2	170731M2_3	Standard	0.500	4.02	784.251	14049.963	9.071	0.5	-8.6	NO	1.000	NO	bb
3	3	170731M2_4	Standard	1.000	4.02	1656.366	13356.303	20.152	1.1	8.2	NO	1.000	NO	bb
4	4	170731M2_5	Standard	2.000	4.02	3233.362	13264.592	39.611	2.2	9.0	NO	1.000	NO	bb
5	5	170731M2_6	Standard	5.000	4.02	7035.678	12616.413	90.620	5.1	1.1	NO	1.000	NO	bb
6	6	170731M2_7	Standard	10.000	4.02	15347.673	13566.270	183.838	10.3	3.1	NO	1.000	NO	bb
7	7	170731M2_8	Standard	50.000	4.02	69404.688	12476.236	903.980	50.7	1.4	NO	1.000	NO	bb
8	8	170731M2_9	Standard	100.000	4.02	135373.609	12518.632	1757.238	98.2	-1.8	NO	1.000	NO	bb
9	9	170731M2_10	Standard	250.000	4.02	419427.906	14988.046	4547.426	250.6	0.2	NO	1.000	NO	bb

Compound name: N-EtFOSAA
Coefficient of Determination: R^2 = 0.999924
Calibration curve: -0.0019298 * x^2 + 15.4647 * x + -0.327453
Response type: Internal Std (Ref 42), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	4.10	276.167	11737.404	3.823	0.3	7.4	NO	1.000	NO	bb
2	2	170731M2_3	Standard	0.500	4.09	591.342	13698.948	7.015	0.5	-5.0	NO	1.000	NO	bb
3	3	170731M2_4	Standard	1.000	4.08	1153.289	13688.059	13.691	0.9	-9.3	NO	1.000	NO	bb
4	4	170731M2_5	Standard	2.000	4.08	2299.673	12896.733	28.976	1.9	-5.2	NO	1.000	NO	bb
5	5	170731M2_6	Standard	5.000	4.09	5664.419	11500.281	80.039	5.2	4.0	NO	1.000	NO	bb
6	6	170731M2_7	Standard	10.000	4.09	12266.051	12932.044	154.131	10.0	0.0	NO	1.000	NO	bb
7	7	170731M2_8	Standard	50.000	4.09	56522.008	12029.896	763.500	49.7	-0.6	NO	1.000	NO	bb
8	8	170731M2_9	Standard	100.000	4.09	117651.883	12470.056	1533.147	100.4	0.4	NO	1.000	NO	bb
9	9	170731M2_10	Standard	250.000	4.09	380863.594	16532.346	3743.591	249.9	-0.0	NO	1.000	NO	bb

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Compound name: PFUnA
Coefficient of Determination: R^2 = 0.997941
Calibration curve: -3.28617e-005 * x^2 + 0.757566 * x + 0.0881327
Response type: Internal Std (Ref 43), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	4.15	1143.224	54062.352	0.264	0.2	-7.0	NO	0.998	NO	MM
2	2	170731M2_3	Standard	0.500	4.16	2356.846	65699.883	0.448	0.5	-4.9	NO	0.998	NO	bb
3	3	170731M2_4	Standard	1.000	4.15	4520.437	60141.438	0.940	1.1	12.4	NO	0.998	NO	bb
4	4	170731M2_5	Standard	2.000	4.15	8631.595	62558.703	1.725	2.2	8.0	NO	0.998	NO	bb
5	5	170731M2_6	Standard	5.000	4.15	18829.459	63691.332	3.695	4.8	-4.7	NO	0.998	NO	bb
6	6	170731M2_7	Standard	10.000	4.16	38130.637	62353.184	7.644	10.0	-0.2	NO	0.998	NO	bb
7	7	170731M2_8	Standard	50.000	4.15	174377.125	63269.566	34.451	45.4	-9.1	NO	0.998	NO	bb
8	8	170731M2_9	Standard	100.000	4.15	337593.438	52677.117	80.109	106.1	6.1	NO	0.998	NO	bb
9	9	170731M2_10	Standard	250.000	4.16	1108908.375	74412.180	186.278	248.5	-0.6	NO	0.998	NO	bb

Compound name: PFDS
Coefficient of Determination: R^2 = 0.997578
Calibration curve: -4.11818e-005 * x^2 + 0.0811765 * x + -0.0032981
Response type: Internal Std (Ref 43), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	4.20	86.193	54062.352	0.020	0.3	14.5	NO	0.998	NO	MMX
2	2	170731M2_3	Standard	0.500	4.21	180.557	65699.883	0.034	0.5	-7.2	NO	0.998	NO	MM
3	3	170731M2_4	Standard	1.000	4.19	431.861	60141.438	0.090	1.1	14.7	NO	0.998	NO	MM
4	4	170731M2_5	Standard	2.000	4.19	842.372	62558.703	0.168	2.1	5.8	NO	0.998	NO	bb
5	5	170731M2_6	Standard	5.000	4.20	1836.227	63691.332	0.360	4.5	-10.2	NO	0.998	NO	bb
6	6	170731M2_7	Standard	10.000	4.20	4003.412	62353.184	0.803	10.0	-0.2	NO	0.998	NO	bb
7	7	170731M2_8	Standard	50.000	4.20	18296.340	63269.566	3.615	45.6	-8.7	NO	0.998	NO	bb
8	8	170731M2_9	Standard	100.000	4.20	34524.848	52677.117	8.193	106.7	6.7	NO	0.998	NO	bb
9	9	170731M2_10	Standard	250.000	4.20	104708.711	74412.180	17.589	247.9	-0.8	NO	0.998	NO	bb

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Compound name: PFDoA
Coefficient of Determination: R^2 = 0.999599
Calibration curve: -9.87083e-006 * x^2 + 0.940673 * x + 0.00742583
Response type: Internal Std (Ref 44), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	4.31	97.386	6100.251	0.200	0.2	-18.3	NO	1.000	NO	MM
2	2	170731M2_3	Standard	0.500	4.31	297.108	6198.730	0.599	0.6	25.8	NO	1.000	NO	MM
3	3	170731M2_4	Standard	1.000	4.32	486.738	6089.570	0.999	1.1	5.4	NO	1.000	NO	bb
4	4	170731M2_5	Standard	2.000	4.31	821.016	5996.160	1.712	1.8	-9.4	NO	1.000	NO	bb
5	5	170731M2_6	Standard	5.000	4.31	2199.727	5858.786	4.693	5.0	-0.4	NO	1.000	NO	bb
6	6	170731M2_7	Standard	10.000	4.31	4813.721	6554.075	9.181	9.8	-2.5	NO	1.000	NO	bb
7	7	170731M2_8	Standard	50.000	4.31	20853.395	5701.481	45.719	48.6	-2.8	NO	1.000	NO	bb
8	8	170731M2_9	Standard	100.000	4.31	46647.582	6062.306	96.184	102.4	2.4	NO	1.000	NO	bb
9	9	170731M2_10	Standard	250.000	4.31	145761.844	7788.229	233.946	249.3	-0.3	NO	1.000	NO	bb

Compound name: N-MeFOSA
Correlation coefficient: r = 0.998345, r^2 = 0.996693
Calibration curve: 1.00604 * x + 0.235716
Response type: Internal Std (Ref 45), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	1.250	4.35	171.072	22996.787	1.116	0.9	-30.0	NO	0.997	NO	MM
2	2	170731M2_3	Standard	2.500	4.34	482.139	25726.459	2.811	2.6	2.4	NO	0.997	NO	bb
3	3	170731M2_4	Standard	5.000	4.34	982.633	25550.789	5.769	5.5	10.0	NO	0.997	NO	bb
4	4	170731M2_5	Standard	10.000	4.34	1926.980	24786.727	11.661	11.4	13.6	NO	0.997	NO	bb
5	5	170731M2_6	Standard	25.000	4.34	4419.905	23582.914	28.113	27.7	10.8	NO	0.997	NO	bb
6	6	170731M2_7	Standard	50.000	4.35	8956.011	26155.398	51.362	50.8	1.6	NO	0.997	NO	db
7	7	170731M2_8	Standard	250.000	4.34	42345.395	23085.887	275.138	273.3	9.3	NO	0.997	NO	db
8	8	170731M2_9	Standard	500.000	4.35	84341.039	23835.992	530.759	527.3	5.5	NO	0.997	NO	bb
9	9	170731M2_10	Standard	1250.000	4.35	300837.125	37548.465	1201.795	1194.3	-4.5	NO	0.997	NO	bb

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Compound name: PFTrDA
Correlation coefficient: r = 0.999725, r^2 = 0.999450
Calibration curve: 10.3774 * x + 1.19316
Response type: Internal Std (Ref 44), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	4.48	1546.429	6100.251	3.169	0.2	-23.8	NO	0.999	NO	bb
2	2	170731M2_3	Standard	0.500	4.49	3084.918	6198.730	6.221	0.5	-3.1	NO	0.999	NO	bb
3	3	170731M2_4	Standard	1.000	4.49	6341.854	6089.570	13.018	1.1	13.9	NO	0.999	NO	bb
4	4	170731M2_5	Standard	2.000	4.48	11501.922	5996.160	23.978	2.2	9.8	NO	0.999	NO	bb
5	5	170731M2_6	Standard	5.000	4.48	25400.311	5858.786	54.193	5.1	2.1	NO	0.999	NO	bb
6	6	170731M2_7	Standard	10.000	4.49	54547.922	6554.075	104.034	9.9	-0.9	NO	0.999	NO	bb
7	7	170731M2_8	Standard	50.000	4.48	247945.563	5701.481	543.599	52.3	4.5	NO	0.999	NO	bb
8	8	170731M2_9	Standard	100.000	4.48	490967.313	6062.306	1012.336	97.4	-2.6	NO	0.999	NO	bb
9	9	170731M2_10	Standard	250.000	4.49	1617289.125	7788.229	2595.727	250.0	0.0	NO	0.999	NO	bb

Compound name: PFTeDA
Coefficient of Determination: R^2 = 0.999821
Calibration curve: -0.000206845 * x^2 + 1.07301 * x + 0.115151
Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	4.66	1070.982	38964.742	0.344	0.2	-14.8	NO	1.000	NO	bb
2	2	170731M2_3	Standard	0.500	4.66	2242.796	43108.695	0.650	0.5	-0.2	NO	1.000	NO	db
3	3	170731M2_4	Standard	1.000	4.66	4228.840	43416.883	1.218	1.0	2.8	NO	1.000	NO	bb
4	4	170731M2_5	Standard	2.000	4.66	8124.685	42363.957	2.397	2.1	6.4	NO	1.000	NO	bb
5	5	170731M2_6	Standard	5.000	4.66	18184.229	38970.395	5.833	5.3	6.7	NO	1.000	NO	bb
6	6	170731M2_7	Standard	10.000	4.66	36936.945	42258.219	10.926	10.1	0.9	NO	1.000	NO	bb
7	7	170731M2_8	Standard	50.000	4.66	166736.000	40066.441	52.019	48.8	-2.3	NO	1.000	NO	bb
8	8	170731M2_9	Standard	100.000	4.66	335759.844	39581.660	106.034	100.7	0.7	NO	1.000	NO	bb
9	9	170731M2_10	Standard	250.000	4.67	1095646.375	53624.324	255.399	250.0	-0.0	NO	1.000	NO	bb

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Compound name: N-EtFOSA
Correlation coefficient: r = 0.999415, r^2 = 0.998831
Calibration curve: 0.921854 * x + 0.382781
Response type: Internal Std (Ref 47), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	1.250	4.92	281.374	32355.941	1.304	1.0	-20.0	NO	0.999	NO	bb
2	2	170731M2_3	Standard	2.500	4.93	566.467	35601.133	2.387	2.2	-13.0	NO	0.999	NO	bb
3	3	170731M2_4	Standard	5.000	4.93	1233.600	34205.117	5.410	5.5	9.1	NO	0.999	NO	bb
4	4	170731M2_5	Standard	10.000	4.92	2359.483	33521.320	10.558	11.0	10.4	NO	0.999	NO	bb
5	5	170731M2_6	Standard	25.000	4.92	5411.886	32043.641	25.334	27.1	8.3	NO	0.999	NO	db
6	6	170731M2_7	Standard	50.000	4.93	10900.199	34405.922	47.522	51.1	2.3	NO	0.999	NO	bb
7	7	170731M2_8	Standard	250.000	4.92	50732.695	32776.059	232.179	251.4	0.6	NO	0.999	NO	db
8	8	170731M2_9	Standard	500.000	4.92	104693.227	32444.443	484.027	524.6	4.9	NO	0.999	NO	bb
9	9	170731M2_10	Standard	1250.000	4.93	373166.781	49761.906	1124.857	1219.8	-2.4	NO	0.999	NO	db

Compound name: PFHxDA
Coefficient of Determination: R^2 = 0.999687
Calibration curve: -0.000332417 * x^2 + 1.25821 * x + 0.243616
Response type: Internal Std (Ref 48), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	5.03	1832.064	18578.701	0.493	0.2	-20.7	NO	1.000	NO	bb
2	2	170731M2_3	Standard	0.500	5.03	3655.248	21305.383	0.858	0.5	-2.4	NO	1.000	NO	bd
3	3	170731M2_4	Standard	1.000	5.03	6457.158	21093.645	1.531	1.0	2.3	NO	1.000	NO	db
4	4	170731M2_5	Standard	2.000	5.03	12237.453	20624.443	2.967	2.2	8.3	NO	1.000	NO	bb
5	5	170731M2_6	Standard	5.000	5.03	27610.768	19494.348	7.082	5.4	8.9	NO	1.000	NO	bb
6	6	170731M2_7	Standard	10.000	5.03	55985.383	20781.805	13.470	10.5	5.4	NO	1.000	NO	bb
7	7	170731M2_8	Standard	50.000	5.03	245522.141	19811.059	61.966	49.7	-0.6	NO	1.000	NO	bb
8	8	170731M2_9	Standard	100.000	5.03	490538.219	20275.766	120.967	98.5	-1.5	NO	1.000	NO	bb
9	9	170731M2_10	Standard	250.000	5.04	1614512.375	27386.783	294.761	250.7	0.3	NO	1.000	NO	bb

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Compound name: PFODA
Correlation coefficient: r = 0.998537, r^2 = 0.997077
Calibration curve: 1.12504 * x + 0.153988
Response type: Internal Std (Ref 48), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	0.250	5.40	1427.299	18578.701	0.384	0.2	-18.2	NO	0.997	NO	bb
2	2	170731M2_3	Standard	0.500	5.40	3408.691	21305.383	0.800	0.6	14.8	NO	0.997	NO	MM
3	3	170731M2_4	Standard	1.000	5.40	5937.597	21093.645	1.407	1.1	11.4	NO	0.997	NO	bb
4	4	170731M2_5	Standard	2.000	5.40	11189.688	20624.443	2.713	2.3	13.7	NO	0.997	NO	bb
5	5	170731M2_6	Standard	5.000	5.40	25545.443	19494.348	6.552	5.7	13.7	NO	0.997	NO	bb
6	6	170731M2_7	Standard	10.000	5.40	53019.988	20781.805	12.756	11.2	12.0	NO	0.997	NO	bb
7	7	170731M2_8	Standard	50.000	5.40	239072.719	19811.059	60.338	53.5	7.0	NO	0.997	NO	bb
8	8	170731M2_9	Standard	100.000	5.40	476093.531	20275.766	117.405	104.2	4.2	NO	0.997	NO	bb
9	9	170731M2_10	Standard	250.000	5.40	1479649.750	27386.783	270.139	240.0	-4.0	NO	0.997	NO	bb

Compound name: N-MeFOSE
Correlation coefficient: r = 0.999653, r^2 = 0.999306
Calibration curve: 1.02661 * x + 0.421311
Response type: Internal Std (Ref 49), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	1.250	5.44	362.749	38065.852	1.429	1.0	-21.4	NO	0.999	NO	bb
2	2	170731M2_3	Standard	2.500	5.44	750.944	40818.066	2.760	2.3	-8.9	NO	0.999	NO	bb
3	3	170731M2_4	Standard	5.000	5.44	1644.402	40754.777	6.052	5.5	9.7	NO	0.999	NO	bb
4	4	170731M2_5	Standard	10.000	5.44	3091.344	39794.629	11.652	10.9	9.4	NO	0.999	NO	bb
5	5	170731M2_6	Standard	25.000	5.44	6838.694	38172.813	26.873	25.8	3.1	NO	0.999	NO	bb
6	6	170731M2_7	Standard	50.000	5.44	14673.296	40819.426	53.920	52.1	4.2	NO	0.999	NO	bb
7	7	170731M2_8	Standard	250.000	5.44	66914.719	37733.039	266.006	258.7	3.5	NO	0.999	NO	bb
8	8	170731M2_9	Standard	500.000	5.44	138132.109	39369.297	526.294	512.2	2.4	NO	0.999	NO	bb
9	9	170731M2_10	Standard	1250.000	5.45	499589.844	59556.500	1258.275	1225.2	-2.0	NO	0.999	NO	bb

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Compound name: N-EtFOSE
Correlation coefficient: r = 0.999481, r^2 = 0.998963
Calibration curve: 1.14913 * x + 1.24499
Response type: Internal Std (Ref 50), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	1.250	5.62	424.316	37434.258	1.700	0.4	-68.3	NO	0.999	NO	MMX
2	2	170731M2_3	Standard	2.500	5.62	1021.850	40953.574	3.743	2.2	-13.1	NO	0.999	NO	MM
3	3	170731M2_4	Standard	5.000	5.62	1868.327	40593.066	6.904	4.9	-1.5	NO	0.999	NO	bb
4	4	170731M2_5	Standard	10.000	5.62	3452.958	39083.969	13.252	10.4	4.5	NO	0.999	NO	bb
5	5	170731M2_6	Standard	25.000	5.62	7821.364	37934.445	30.927	25.8	3.3	NO	0.999	NO	bb
6	6	170731M2_7	Standard	50.000	5.62	16071.865	40396.703	59.678	50.8	1.7	NO	0.999	NO	bb
7	7	170731M2_8	Standard	250.000	5.62	74830.914	37673.949	297.942	258.2	3.3	NO	0.999	NO	bb
8	8	170731M2_9	Standard	500.000	5.62	156146.688	39004.324	600.498	521.5	4.3	NO	0.999	NO	bb
9	9	170731M2_10	Standard	1250.000	5.62	563632.000	60321.027	1401.581	1218.6	-2.5	NO	0.999	NO	bb

Compound name: 13C3-PFBA
Response Factor: 1.00566
RRF SD: 0.070969, Relative SD: 7.05699
Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	1.41	13874.437	13370.174	12.971	12.9	3.2	NO		NO	MM
2	2	170731M2_3	Standard	12.500	1.40	14032.984	14138.808	12.406	12.3	-1.3	NO		NO	bb
3	3	170731M2_4	Standard	12.500	1.40	14534.191	13876.813	13.092	13.0	4.1	NO		NO	bb
4	4	170731M2_5	Standard	12.500	1.40	13825.355	13352.213	12.943	12.9	3.0	NO		NO	bb
5	5	170731M2_6	Standard	12.500	1.40	14375.643	13996.207	12.839	12.8	2.1	NO		NO	bb
6	6	170731M2_7	Standard	12.500	1.40	14275.662	13824.148	12.908	12.8	2.7	NO		NO	bb
7	7	170731M2_8	Standard	12.500	1.40	13941.181	13506.435	12.902	12.8	2.6	NO		NO	bb
8	8	170731M2_9	Standard	12.500	1.40	14182.987	13834.986	12.814	12.7	1.9	NO		NO	bb
9	9	170731M2_10	Standard	12.500	1.41	20278.131	24706.939	10.259	10.2	-18.4	NO		NO	bb

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Compound name: 13C3-PFPeA
Response Factor: 0.275215
RRF SD: 0.0314917, Relative SD: 11.4426
Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	2.69	28315.961	38888.445	3.641	13.2	5.8	NO		NO	bb
2	2	170731M2_3	Standard	12.500	2.69	28971.373	39697.934	3.649	13.3	6.1	NO		NO	MM
3	3	170731M2_4	Standard	12.500	2.69	29344.844	39547.027	3.710	13.5	7.8	NO		NO	MM
4	4	170731M2_5	Standard	12.500	2.69	27224.277	39438.602	3.451	12.5	0.3	NO		NO	MM
5	5	170731M2_6	Standard	12.500	2.69	28900.883	42060.418	3.436	12.5	-0.1	NO		NO	MM
6	6	170731M2_7	Standard	12.500	2.69	28928.092	40025.766	3.614	13.1	5.0	NO		NO	bb
7	7	170731M2_8	Standard	12.500	2.69	27958.209	39102.801	3.575	13.0	3.9	NO		NO	MM
8	8	170731M2_9	Standard	12.500	2.69	27418.373	39589.105	3.463	12.6	0.7	NO		NO	MM
9	9	170731M2_10	Standard	12.500	2.70	40599.961	83770.414	2.423	8.8	-29.6	NO		NO	MM

Compound name: 13C3-PFBS
Response Factor: 0.0341202
RRF SD: 0.00479083, Relative SD: 14.041
Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	2.93	3567.166	38888.445	0.459	13.4	7.5	NO		NO	bb
2	2	170731M2_3	Standard	12.500	2.92	3674.875	39697.934	0.463	13.6	8.5	NO		NO	bb
3	3	170731M2_4	Standard	12.500	2.92	3756.884	39547.027	0.475	13.9	11.4	NO		NO	bb
4	4	170731M2_5	Standard	12.500	2.92	3453.801	39438.602	0.438	12.8	2.7	NO		NO	bb
5	5	170731M2_6	Standard	12.500	2.93	3669.754	42060.418	0.436	12.8	2.3	NO		NO	bb
6	6	170731M2_7	Standard	12.500	2.93	3495.072	40025.766	0.437	12.8	2.4	NO		NO	bb
7	7	170731M2_8	Standard	12.500	2.92	3386.169	39102.801	0.433	12.7	1.5	NO		NO	bb
8	8	170731M2_9	Standard	12.500	2.92	3369.060	39589.105	0.426	12.5	-0.2	NO		NO	bb
9	9	170731M2_10	Standard	12.500	2.93	4571.001	83770.414	0.273	8.0	-36.0	NO		NO	bb

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Compound name: 13C2-PFHxA
Response Factor: 0.334017
RRF SD: 0.0197264, Relative SD: 5.90582
Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	5.000	3.16	13289.316	38888.445	1.709	5.1	2.3	NO		NO	bb
2	2	170731M2_3	Standard	5.000	3.17	13996.411	39697.934	1.763	5.3	5.6	NO		NO	bb
3	3	170731M2_4	Standard	5.000	3.16	13471.391	39547.027	1.703	5.1	2.0	NO		NO	bb
4	4	170731M2_5	Standard	5.000	3.16	13180.728	39438.602	1.671	5.0	0.1	NO		NO	bb
5	5	170731M2_6	Standard	5.000	3.16	14300.003	42060.418	1.700	5.1	1.8	NO		NO	bb
6	6	170731M2_7	Standard	5.000	3.17	13464.359	40025.766	1.682	5.0	0.7	NO		NO	bb
7	7	170731M2_8	Standard	5.000	3.16	13579.439	39102.801	1.736	5.2	4.0	NO		NO	bb
8	8	170731M2_9	Standard	5.000	3.17	13004.882	39589.105	1.642	4.9	-1.7	NO		NO	bb
9	9	170731M2_10	Standard	5.000	3.16	23861.670	83770.414	1.424	4.3	-14.7	NO		NO	bb

Compound name: 13C4-PFHpA
Response Factor: 0.414287
RRF SD: 0.0516844, Relative SD: 12.4755
Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	3.43	42267.941	38888.445	5.435	13.1	4.9	NO		NO	bb
2	2	170731M2_3	Standard	12.500	3.43	44035.770	39697.934	5.546	13.4	7.1	NO		NO	bb
3	3	170731M2_4	Standard	12.500	3.43	47111.973	39547.027	5.956	14.4	15.0	NO		NO	bb
4	4	170731M2_5	Standard	12.500	3.43	40041.188	39438.602	5.076	12.3	-2.0	NO		NO	bb
5	5	170731M2_6	Standard	12.500	3.43	43531.445	42060.418	5.175	12.5	-0.1	NO		NO	bb
6	6	170731M2_7	Standard	12.500	3.43	41835.402	40025.766	5.226	12.6	0.9	NO		NO	bb
7	7	170731M2_8	Standard	12.500	3.43	42486.371	39102.801	5.433	13.1	4.9	NO		NO	bb
8	8	170731M2_9	Standard	12.500	3.44	40762.777	39589.105	5.148	12.4	-0.6	NO		NO	bb
9	9	170731M2_10	Standard	12.500	3.43	60510.934	83770.414	3.612	8.7	-30.3	NO		NO	bb

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Compound name: 18O2-PFHxS
Response Factor: 0.475307
RRF SD: 0.0429846, Relative SD: 9.04355
Response type: Internal Std (Ref 53), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	3.50	4105.498	8046.377	6.378	13.4	7.3	NO		NO	bb
2	2	170731M2_3	Standard	12.500	3.51	4057.192	8495.484	5.970	12.6	0.5	NO		NO	bb
3	3	170731M2_4	Standard	12.500	3.50	4402.638	8882.063	6.196	13.0	4.3	NO		NO	bb
4	4	170731M2_5	Standard	12.500	3.50	3891.568	8188.101	5.941	12.5	-0.0	NO		NO	bb
5	5	170731M2_6	Standard	12.500	3.50	3878.935	8591.091	5.644	11.9	-5.0	NO		NO	bb
6	6	170731M2_7	Standard	12.500	3.51	3978.140	8363.203	5.946	12.5	0.1	NO		NO	bb
7	7	170731M2_8	Standard	12.500	3.51	3932.861	7776.584	6.322	13.3	6.4	NO		NO	bb
8	8	170731M2_9	Standard	12.500	3.51	4159.138	8119.819	6.403	13.5	7.8	NO		NO	bb
9	9	170731M2_10	Standard	12.500	3.51	4925.332	13173.476	4.674	9.8	-21.3	NO		NO	bb

Compound name: 13C2-6:2 FTS
Response Factor: 0.213903
RRF SD: 0.0188493, Relative SD: 8.81207
Response type: Internal Std (Ref 54), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	3.63	9927.280	45613.742	2.720	12.7	1.7	NO		NO	bb
2	2	170731M2_3	Standard	12.500	3.63	10315.116	51389.625	2.509	11.7	-6.2	NO		NO	bb
3	3	170731M2_4	Standard	12.500	3.62	11541.119	54967.332	2.625	12.3	-1.8	NO		NO	bb
4	4	170731M2_5	Standard	12.500	3.62	10131.339	48131.012	2.631	12.3	-1.6	NO		NO	bb
5	5	170731M2_6	Standard	12.500	3.63	9593.972	48854.391	2.455	11.5	-8.2	NO		NO	bb
6	6	170731M2_7	Standard	12.500	3.63	10116.732	49711.629	2.544	11.9	-4.9	NO		NO	bb
7	7	170731M2_8	Standard	12.500	3.63	9833.309	49752.918	2.471	11.5	-7.6	NO		NO	bb
8	8	170731M2_9	Standard	12.500	3.63	11556.366	48614.910	2.971	13.9	11.1	NO		NO	bb
9	9	170731M2_10	Standard	12.500	3.63	18952.229	75486.695	3.138	14.7	17.4	NO		NO	bb

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Compound name: 13C2-PFOA
Response Factor: 1.29846
RRF SD: 0.105268, Relative SD: 8.10711
Response type: Internal Std (Ref 54), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	3.64	63401.359	45613.742	17.375	13.4	7.0	NO		NO	bb
2	2	170731M2_3	Standard	12.500	3.64	67191.539	51389.625	16.344	12.6	0.7	NO		NO	bb
3	3	170731M2_4	Standard	12.500	3.63	70281.578	54967.332	15.983	12.3	-1.5	NO		NO	bb
4	4	170731M2_5	Standard	12.500	3.63	66790.375	48131.012	17.346	13.4	6.9	NO		NO	bb
5	5	170731M2_6	Standard	12.500	3.64	63977.652	48854.391	16.369	12.6	0.9	NO		NO	bb
6	6	170731M2_7	Standard	12.500	3.64	67944.383	49711.629	17.085	13.2	5.3	NO		NO	bb
7	7	170731M2_8	Standard	12.500	3.64	59813.004	49752.918	15.028	11.6	-7.4	NO		NO	bb
8	8	170731M2_9	Standard	12.500	3.64	66783.320	48614.910	17.172	13.2	5.8	NO		NO	bb
9	9	170731M2_10	Standard	12.500	3.64	80782.586	75486.695	13.377	10.3	-17.6	NO		NO	bb

Compound name: 13C5-PFNA
Response Factor: 1.09418
RRF SD: 0.111771, Relative SD: 10.2151
Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	3.81	54018.730	48472.340	13.930	12.7	1.9	NO		NO	bb
2	2	170731M2_3	Standard	12.500	3.82	62262.660	53412.238	14.571	13.3	6.5	NO		NO	bb
3	3	170731M2_4	Standard	12.500	3.81	61609.746	53921.699	14.282	13.1	4.4	NO		NO	bb
4	4	170731M2_5	Standard	12.500	3.81	57196.430	54390.477	13.145	12.0	-3.9	NO		NO	bb
5	5	170731M2_6	Standard	12.500	3.82	55674.484	50780.711	13.705	12.5	0.2	NO		NO	bb
6	6	170731M2_7	Standard	12.500	3.81	59478.996	55837.012	13.315	12.2	-2.6	NO		NO	bb
7	7	170731M2_8	Standard	12.500	3.81	51828.512	44552.844	14.541	13.3	6.3	NO		NO	bb
8	8	170731M2_9	Standard	12.500	3.81	53481.383	43921.875	15.221	13.9	11.3	NO		NO	bb
9	9	170731M2_10	Standard	12.500	3.82	65426.449	78755.734	10.384	9.5	-24.1	NO		NO	bb

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Compound name: 13C8-PFOSA
Response Factor: 0.124457
RRF SD: 0.0171532, Relative SD: 13.7824
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	3.82	6628.687	46687.762	1.775	14.3	14.1	NO		NO	bb
2	2	170731M2_3	Standard	12.500	3.83	6757.332	55126.090	1.532	12.3	-1.5	NO		NO	bb
3	3	170731M2_4	Standard	12.500	3.82	7148.018	52064.938	1.716	13.8	10.3	NO		NO	bb
4	4	170731M2_5	Standard	12.500	3.82	6732.580	55069.406	1.528	12.3	-1.8	NO		NO	bb
5	5	170731M2_6	Standard	12.500	3.83	6463.064	48450.305	1.667	13.4	7.2	NO		NO	bb
6	6	170731M2_7	Standard	12.500	3.83	6861.386	50457.156	1.700	13.7	9.3	NO		NO	bb
7	7	170731M2_8	Standard	12.500	3.82	5762.874	52556.180	1.371	11.0	-11.9	NO		NO	bb
8	8	170731M2_9	Standard	12.500	3.83	5694.701	43779.801	1.626	13.1	4.5	NO		NO	bb
9	9	170731M2_10	Standard	12.500	3.83	6801.088	78259.594	1.086	8.7	-30.2	NO		NO	bb

Compound name: 13C8-PFOS
Response Factor: 1.15331
RRF SD: 0.0926176, Relative SD: 8.03062
Response type: Internal Std (Ref 56), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	3.87	9891.881	9416.050	13.132	11.4	-8.9	NO		NO	bb
2	2	170731M2_3	Standard	12.500	3.87	11460.590	9484.859	15.104	13.1	4.8	NO		NO	bb
3	3	170731M2_4	Standard	12.500	3.87	11503.416	9437.330	15.237	13.2	5.7	NO		NO	bb
4	4	170731M2_5	Standard	12.500	3.87	10201.429	8900.184	14.328	12.4	-0.6	NO		NO	bb
5	5	170731M2_6	Standard	12.500	3.87	10639.481	9014.546	14.753	12.8	2.3	NO		NO	bb
6	6	170731M2_7	Standard	12.500	3.87	11768.862	8997.038	16.351	14.2	13.4	NO		NO	bb
7	7	170731M2_8	Standard	12.500	3.87	9805.450	8503.210	14.414	12.5	-0.0	NO		NO	bd
8	8	170731M2_9	Standard	12.500	3.87	9480.636	8476.880	13.980	12.1	-3.0	NO		NO	bd
9	9	170731M2_10	Standard	12.500	3.87	11450.712	11498.018	12.449	10.8	-13.6	NO		NO	bd

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Compound name: 13C2-PFDA
Response Factor: 1.05862
RRF SD: 0.102606, Relative SD: 9.69247
Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	3.99	59781.418	48495.309	15.409	14.6	16.4	NO		NO	bb
2	2	170731M2_3	Standard	12.500	3.99	61812.703	59901.941	12.899	12.2	-2.5	NO		NO	bb
3	3	170731M2_4	Standard	12.500	3.99	54053.125	59169.184	11.419	10.8	-13.7	NO		NO	bb
4	4	170731M2_5	Standard	12.500	3.98	56405.016	50594.809	13.935	13.2	5.3	NO		NO	bb
5	5	170731M2_6	Standard	12.500	3.99	53527.699	46199.484	14.483	13.7	9.4	NO		NO	bb
6	6	170731M2_7	Standard	12.500	3.99	58740.922	55659.504	13.192	12.5	-0.3	NO		NO	bb
7	7	170731M2_8	Standard	12.500	3.99	46095.934	46843.121	12.301	11.6	-7.0	NO		NO	bb
8	8	170731M2_9	Standard	12.500	3.99	53241.500	48865.242	13.619	12.9	2.9	NO		NO	bb
9	9	170731M2_10	Standard	12.500	3.99	73276.133	77377.094	11.838	11.2	-10.5	NO		NO	bb

Compound name: 13C2-8:2 FTS
Response Factor: 0.128621
RRF SD: 0.0196887, Relative SD: 15.3075
Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	3.98	5442.396	48495.309	1.403	10.9	-12.7	NO		NO	bb
2	2	170731M2_3	Standard	12.500	3.98	6198.728	59901.941	1.294	10.1	-19.5	NO		NO	bb
3	3	170731M2_4	Standard	12.500	3.98	7001.858	59169.184	1.479	11.5	-8.0	NO		NO	bb
4	4	170731M2_5	Standard	12.500	3.98	5984.115	50594.809	1.478	11.5	-8.0	NO		NO	bb
5	5	170731M2_6	Standard	12.500	3.98	6043.006	46199.484	1.635	12.7	1.7	NO		NO	bb
6	6	170731M2_7	Standard	12.500	3.98	6710.449	55659.504	1.507	11.7	-6.3	NO		NO	bb
7	7	170731M2_8	Standard	12.500	3.98	6400.762	46843.121	1.708	13.3	6.2	NO		NO	bb
8	8	170731M2_9	Standard	12.500	3.98	7501.545	48865.242	1.919	14.9	19.4	NO		NO	bb
9	9	170731M2_10	Standard	12.500	3.98	12670.185	77377.094	2.047	15.9	27.3	NO		NO	bb

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Compound name: d3-N-MeFOSAA
Response Factor: 0.0193183
RRF SD: 0.00204703, Relative SD: 10.5963
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	162.500	4.02	12318.428	46687.762	3.298	170.7	5.1	NO		NO	bb
2	2	170731M2_3	Standard	162.500	4.02	14049.963	55126.090	3.186	164.9	1.5	NO		NO	bb
3	3	170731M2_4	Standard	162.500	4.02	13356.303	52064.938	3.207	166.0	2.1	NO		NO	bb
4	4	170731M2_5	Standard	162.500	4.01	13264.592	55069.406	3.011	155.9	-4.1	NO		NO	bb
5	5	170731M2_6	Standard	162.500	4.02	12616.413	48450.305	3.255	168.5	3.7	NO		NO	bb
6	6	170731M2_7	Standard	162.500	4.02	13566.270	50457.156	3.361	174.0	7.1	NO		NO	bb
7	7	170731M2_8	Standard	162.500	4.01	12476.236	52556.180	2.967	153.6	-5.5	NO		NO	bb
8	8	170731M2_9	Standard	162.500	4.02	12518.632	43779.801	3.574	185.0	13.9	NO		NO	bb
9	9	170731M2_10	Standard	162.500	4.02	14988.046	78259.594	2.394	123.9	-23.7	NO		NO	bb

Compound name: d5-N-EtFOSAA
Response Factor: 0.0189371
RRF SD: 0.00164292, Relative SD: 8.67569
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	162.500	4.08	11737.404	46687.762	3.143	165.9	2.1	NO		NO	bb
2	2	170731M2_3	Standard	162.500	4.08	13698.948	55126.090	3.106	164.0	0.9	NO		NO	bb
3	3	170731M2_4	Standard	162.500	4.08	13688.059	52064.938	3.286	173.5	6.8	NO		NO	bb
4	4	170731M2_5	Standard	162.500	4.08	12896.733	55069.406	2.927	154.6	-4.9	NO		NO	bb
5	5	170731M2_6	Standard	162.500	4.08	11500.281	48450.305	2.967	156.7	-3.6	NO		NO	bb
6	6	170731M2_7	Standard	162.500	4.08	12932.044	50457.156	3.204	169.2	4.1	NO		NO	bb
7	7	170731M2_8	Standard	162.500	4.08	12029.896	52556.180	2.861	151.1	-7.0	NO		NO	bb
8	8	170731M2_9	Standard	162.500	4.08	12470.056	43779.801	3.560	188.0	15.7	NO		NO	bb
9	9	170731M2_10	Standard	162.500	4.09	16532.346	78259.594	2.641	139.4	-14.2	NO		NO	bb

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Compound name: 13C2-PFUnA
Response Factor: 1.17213
RRF SD: 0.0984029, Relative SD: 8.39524
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	4.15	54062.352	46687.762	14.474	12.3	-1.2	NO		NO	bb
2	2	170731M2_3	Standard	12.500	4.15	65699.883	55126.090	14.898	12.7	1.7	NO		NO	bb
3	3	170731M2_4	Standard	12.500	4.15	60141.438	52064.938	14.439	12.3	-1.5	NO		NO	bb
4	4	170731M2_5	Standard	12.500	4.15	62558.703	55069.406	14.200	12.1	-3.1	NO		NO	bb
5	5	170731M2_6	Standard	12.500	4.15	63691.332	48450.305	16.432	14.0	12.2	NO		NO	bb
6	6	170731M2_7	Standard	12.500	4.16	62353.184	50457.156	15.447	13.2	5.4	NO		NO	bb
7	7	170731M2_8	Standard	12.500	4.15	63269.566	52556.180	15.048	12.8	2.7	NO		NO	bb
8	8	170731M2_9	Standard	12.500	4.15	52677.117	43779.801	15.040	12.8	2.7	NO		NO	bb
9	9	170731M2_10	Standard	12.500	4.16	74412.180	78259.594	11.885	10.1	-18.9	NO		NO	bb

Compound name: 13C2-PFDoA
Response Factor: 0.118471
RRF SD: 0.0126225, Relative SD: 10.6544
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	4.31	6100.251	46687.762	1.633	13.8	10.3	NO		NO	bb
2	2	170731M2_3	Standard	12.500	4.31	6198.730	55126.090	1.406	11.9	-5.1	NO		NO	bb
3	3	170731M2_4	Standard	12.500	4.31	6089.570	52064.938	1.462	12.3	-1.3	NO		NO	bb
4	4	170731M2_5	Standard	12.500	4.31	5996.160	55069.406	1.361	11.5	-8.1	NO		NO	bb
5	5	170731M2_6	Standard	12.500	4.31	5858.786	48450.305	1.512	12.8	2.1	NO		NO	bb
6	6	170731M2_7	Standard	12.500	4.31	6554.075	50457.156	1.624	13.7	9.6	NO		NO	bb
7	7	170731M2_8	Standard	12.500	4.31	5701.481	52556.180	1.356	11.4	-8.4	NO		NO	bb
8	8	170731M2_9	Standard	12.500	4.31	6062.306	43779.801	1.731	14.6	16.9	NO		NO	bb
9	9	170731M2_10	Standard	12.500	4.31	7788.229	78259.594	1.244	10.5	-16.0	NO		NO	bb

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Compound name: d3-N-MeFOSA
Response Factor: 0.0404511
RRF SD: 0.0027023, Relative SD: 6.68042
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	150.000	4.38	22996.787	46687.762	6.157	152.2	1.5	NO		NO	MM
2	2	170731M2_3	Standard	150.000	4.38	25726.459	55126.090	5.834	144.2	-3.9	NO		NO	bb
3	3	170731M2_4	Standard	150.000	4.38	25550.789	52064.938	6.134	151.6	1.1	NO		NO	bb
4	4	170731M2_5	Standard	150.000	4.38	24786.727	55069.406	5.626	139.1	-7.3	NO		NO	db
5	5	170731M2_6	Standard	150.000	4.38	23582.914	48450.305	6.084	150.4	0.3	NO		NO	bb
6	6	170731M2_7	Standard	150.000	4.38	26155.398	50457.156	6.480	160.2	6.8	NO		NO	bb
7	7	170731M2_8	Standard	150.000	4.38	23085.887	52556.180	5.491	135.7	-9.5	NO		NO	bb
8	8	170731M2_9	Standard	150.000	4.38	23835.992	43779.801	6.806	168.2	12.2	NO		NO	bb
9	9	170731M2_10	Standard	150.000	4.38	37548.465	78259.594	5.997	148.3	-1.2	NO		NO	bb

Compound name: 13C2-PFTeDA
Response Factor: 0.801476
RRF SD: 0.0616954, Relative SD: 7.69773
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	4.66	38964.742	46687.762	10.432	13.0	4.1	NO		NO	bb
2	2	170731M2_3	Standard	12.500	4.66	43108.695	55126.090	9.775	12.2	-2.4	NO		NO	bb
3	3	170731M2_4	Standard	12.500	4.66	43416.883	52064.938	10.424	13.0	4.0	NO		NO	bb
4	4	170731M2_5	Standard	12.500	4.66	42363.957	55069.406	9.616	12.0	-4.0	NO		NO	bb
5	5	170731M2_6	Standard	12.500	4.66	38970.395	48450.305	10.054	12.5	0.4	NO		NO	bb
6	6	170731M2_7	Standard	12.500	4.66	42258.219	50457.156	10.469	13.1	4.5	NO		NO	bb
7	7	170731M2_8	Standard	12.500	4.66	40066.441	52556.180	9.529	11.9	-4.9	NO		NO	bb
8	8	170731M2_9	Standard	12.500	4.66	39581.660	43779.801	11.301	14.1	12.8	NO		NO	bb
9	9	170731M2_10	Standard	12.500	4.66	53624.324	78259.594	8.565	10.7	-14.5	NO		NO	bb

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Compound name: d5-N-ETFOSA
Response Factor: 0.0550774
RRF SD: 0.0033443, Relative SD: 6.07201
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	150.000	4.97	32355.941	46687.762	8.663	157.3	4.9	NO		NO	bb
2	2	170731M2_3	Standard	150.000	4.97	35601.133	55126.090	8.073	146.6	-2.3	NO		NO	bb
3	3	170731M2_4	Standard	150.000	4.97	34205.117	52064.938	8.212	149.1	-0.6	NO		NO	bb
4	4	170731M2_5	Standard	150.000	4.97	33521.320	55069.406	7.609	138.1	-7.9	NO		NO	bb
5	5	170731M2_6	Standard	150.000	4.97	32043.641	48450.305	8.267	150.1	0.1	NO		NO	bb
6	6	170731M2_7	Standard	150.000	4.97	34405.922	50457.156	8.524	154.8	3.2	NO		NO	bb
7	7	170731M2_8	Standard	150.000	4.97	32776.059	52556.180	7.795	141.5	-5.6	NO		NO	bd
8	8	170731M2_9	Standard	150.000	4.97	32444.443	43779.801	9.264	168.2	12.1	NO		NO	bb
9	9	170731M2_10	Standard	150.000	4.98	49761.906	78259.594	7.948	144.3	-3.8	NO		NO	bb

Compound name: 13C2-PFHxDA
Response Factor: 0.991204
RRF SD: 0.0786595, Relative SD: 7.93575
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	5.000	5.03	18578.701	46687.762	4.974	5.0	0.4	NO		NO	bb
2	2	170731M2_3	Standard	5.000	5.03	21305.383	55126.090	4.831	4.9	-2.5	NO		NO	bb
3	3	170731M2_4	Standard	5.000	5.03	21093.645	52064.938	5.064	5.1	2.2	NO		NO	bb
4	4	170731M2_5	Standard	5.000	5.03	20624.443	55069.406	4.681	4.7	-5.5	NO		NO	bb
5	5	170731M2_6	Standard	5.000	5.03	19494.348	48450.305	5.029	5.1	1.5	NO		NO	bb
6	6	170731M2_7	Standard	5.000	5.03	20781.805	50457.156	5.148	5.2	3.9	NO		NO	bb
7	7	170731M2_8	Standard	5.000	5.03	19811.059	52556.180	4.712	4.8	-4.9	NO		NO	bb
8	8	170731M2_9	Standard	5.000	5.03	20275.766	43779.801	5.789	5.8	16.8	NO		NO	bb
9	9	170731M2_10	Standard	5.000	5.04	27386.783	78259.594	4.374	4.4	-11.7	NO		NO	bb

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Compound name: d7-N-MeFOSE
Response Factor: 0.0651506
RRF SD: 0.00469717, Relative SD: 7.20972
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	150.000	5.43	38065.852	46687.762	10.192	156.4	4.3	NO		NO	bb
2	2	170731M2_3	Standard	150.000	5.43	40818.066	55126.090	9.256	142.1	-5.3	NO		NO	bb
3	3	170731M2_4	Standard	150.000	5.43	40754.777	52064.938	9.785	150.2	0.1	NO		NO	bb
4	4	170731M2_5	Standard	150.000	5.43	39794.629	55069.406	9.033	138.6	-7.6	NO		NO	bb
5	5	170731M2_6	Standard	150.000	5.43	38172.813	48450.305	9.848	151.2	0.8	NO		NO	bb
6	6	170731M2_7	Standard	150.000	5.43	40819.426	50457.156	10.112	155.2	3.5	NO		NO	bb
7	7	170731M2_8	Standard	150.000	5.43	37733.039	52556.180	8.974	137.7	-8.2	NO		NO	bb
8	8	170731M2_9	Standard	150.000	5.43	39369.297	43779.801	11.241	172.5	15.0	NO		NO	bb
9	9	170731M2_10	Standard	150.000	5.43	59556.500	78259.594	9.513	146.0	-2.7	NO		NO	bb

Compound name: d9-N-EtFOSE
Response Factor: 0.0647796
RRF SD: 0.00452035, Relative SD: 6.97805
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	150.000	5.61	37434.258	46687.762	10.023	154.7	3.1	NO		NO	bb
2	2	170731M2_3	Standard	150.000	5.61	40953.574	55126.090	9.286	143.4	-4.4	NO		NO	bb
3	3	170731M2_4	Standard	150.000	5.61	40593.066	52064.938	9.746	150.4	0.3	NO		NO	bb
4	4	170731M2_5	Standard	150.000	5.61	39083.969	55069.406	8.872	136.9	-8.7	NO		NO	bb
5	5	170731M2_6	Standard	150.000	5.60	37934.445	48450.305	9.787	151.1	0.7	NO		NO	bb
6	6	170731M2_7	Standard	150.000	5.61	40396.703	50457.156	10.008	154.5	3.0	NO		NO	bb
7	7	170731M2_8	Standard	150.000	5.61	37673.949	52556.180	8.960	138.3	-7.8	NO		NO	bb
8	8	170731M2_9	Standard	150.000	5.60	39004.324	43779.801	11.137	171.9	14.6	NO		NO	bb
9	9	170731M2_10	Standard	150.000	5.61	60321.027	78259.594	9.635	148.7	-0.8	NO		NO	bb

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Compound name: 13C4-PFBA
Response Factor: 1
RRF SD: 3.92523e-017, Relative SD: 3.92523e-015
Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	1.40	13370.174	13370.174	12.500	12.5	0.0	NO		NO	bb
2	2	170731M2_3	Standard	12.500	1.40	14138.808	14138.808	12.500	12.5	0.0	NO		NO	bb
3	3	170731M2_4	Standard	12.500	1.40	13876.813	13876.813	12.500	12.5	0.0	NO		NO	bb
4	4	170731M2_5	Standard	12.500	1.40	13352.213	13352.213	12.500	12.5	0.0	NO		NO	bb
5	5	170731M2_6	Standard	12.500	1.40	13996.207	13996.207	12.500	12.5	0.0	NO		NO	bb
6	6	170731M2_7	Standard	12.500	1.40	13824.148	13824.148	12.500	12.5	0.0	NO		NO	bb
7	7	170731M2_8	Standard	12.500	1.40	13506.435	13506.435	12.500	12.5	0.0	NO		NO	bb
8	8	170731M2_9	Standard	12.500	1.40	13834.986	13834.986	12.500	12.5	0.0	NO		NO	bb
9	9	170731M2_10	Standard	12.500	1.41	24706.939	24706.939	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C5-PFHxA
Response Factor: 1
RRF SD: 0, Relative SD: 0
Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	5.000	3.16	38888.445	38888.445	5.000	5.0	0.0	NO		NO	bb
2	2	170731M2_3	Standard	5.000	3.17	39697.934	39697.934	5.000	5.0	0.0	NO		NO	bb
3	3	170731M2_4	Standard	5.000	3.16	39547.027	39547.027	5.000	5.0	0.0	NO		NO	bb
4	4	170731M2_5	Standard	5.000	3.16	39438.602	39438.602	5.000	5.0	0.0	NO		NO	bb
5	5	170731M2_6	Standard	5.000	3.17	42060.418	42060.418	5.000	5.0	0.0	NO		NO	bb
6	6	170731M2_7	Standard	5.000	3.17	40025.766	40025.766	5.000	5.0	0.0	NO		NO	bb
7	7	170731M2_8	Standard	5.000	3.16	39102.801	39102.801	5.000	5.0	0.0	NO		NO	bb
8	8	170731M2_9	Standard	5.000	3.16	39589.105	39589.105	5.000	5.0	0.0	NO		NO	bb
9	9	170731M2_10	Standard	5.000	3.16	83770.414	83770.414	5.000	5.0	0.0	NO		NO	bb

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Compound name: 13C3-PFHxS
Response Factor: 1
RRF SD: 1.30185e-016, Relative SD: 1.30185e-014
Response type: Internal Std (Ref 53), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	3.50	8046.377	8046.377	12.500	12.5	0.0	NO		NO	bb
2	2	170731M2_3	Standard	12.500	3.51	8495.484	8495.484	12.500	12.5	0.0	NO		NO	bb
3	3	170731M2_4	Standard	12.500	3.50	8882.063	8882.063	12.500	12.5	0.0	NO		NO	bb
4	4	170731M2_5	Standard	12.500	3.50	8188.101	8188.101	12.500	12.5	0.0	NO		NO	bb
5	5	170731M2_6	Standard	12.500	3.51	8591.091	8591.091	12.500	12.5	0.0	NO		NO	bb
6	6	170731M2_7	Standard	12.500	3.51	8363.203	8363.203	12.500	12.5	0.0	NO		NO	bb
7	7	170731M2_8	Standard	12.500	3.50	7776.584	7776.584	12.500	12.5	0.0	NO		NO	bb
8	8	170731M2_9	Standard	12.500	3.51	8119.819	8119.819	12.500	12.5	0.0	NO		NO	bb
9	9	170731M2_10	Standard	12.500	3.51	13173.476	13173.476	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C8-PFOA
Response Factor: 1
RRF SD: 0, Relative SD: 0
Response type: Internal Std (Ref 54), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	3.64	45613.742	45613.742	12.500	12.5	0.0	NO		NO	bb
2	2	170731M2_3	Standard	12.500	3.64	51389.625	51389.625	12.500	12.5	0.0	NO		NO	bb
3	3	170731M2_4	Standard	12.500	3.63	54967.332	54967.332	12.500	12.5	0.0	NO		NO	bb
4	4	170731M2_5	Standard	12.500	3.63	48131.012	48131.012	12.500	12.5	0.0	NO		NO	bb
5	5	170731M2_6	Standard	12.500	3.64	48854.391	48854.391	12.500	12.5	0.0	NO		NO	bb
6	6	170731M2_7	Standard	12.500	3.64	49711.629	49711.629	12.500	12.5	0.0	NO		NO	bb
7	7	170731M2_8	Standard	12.500	3.64	49752.918	49752.918	12.500	12.5	0.0	NO		NO	bb
8	8	170731M2_9	Standard	12.500	3.64	48614.910	48614.910	12.500	12.5	0.0	NO		NO	bb
9	9	170731M2_10	Standard	12.500	3.64	75486.695	75486.695	12.500	12.5	0.0	NO		NO	bb

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Compound name: 13C9-PFNA
Response Factor: 1
RRF SD: 3.92523e-017, Relative SD: 3.92523e-015
Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	3.81	48472.340	48472.340	12.500	12.5	0.0	NO		NO	bb
2	2	170731M2_3	Standard	12.500	3.82	53412.238	53412.238	12.500	12.5	0.0	NO		NO	bb
3	3	170731M2_4	Standard	12.500	3.81	53921.699	53921.699	12.500	12.5	0.0	NO		NO	bb
4	4	170731M2_5	Standard	12.500	3.81	54390.477	54390.477	12.500	12.5	0.0	NO		NO	bb
5	5	170731M2_6	Standard	12.500	3.82	50780.711	50780.711	12.500	12.5	0.0	NO		NO	bb
6	6	170731M2_7	Standard	12.500	3.82	55837.012	55837.012	12.500	12.5	0.0	NO		NO	bb
7	7	170731M2_8	Standard	12.500	3.82	44552.844	44552.844	12.500	12.5	0.0	NO		NO	bb
8	8	170731M2_9	Standard	12.500	3.81	43921.875	43921.875	12.500	12.5	0.0	NO		NO	bb
9	9	170731M2_10	Standard	12.500	3.82	78755.734	78755.734	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C4-PFOS
Response Factor: 1
RRF SD: 3.92523e-017, Relative SD: 3.92523e-015
Response type: Internal Std (Ref 56), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170731M2_2	Standard	12.500	3.87	9416.050	9416.050	12.500	12.5	0.0	NO		NO	bb
2	2	170731M2_3	Standard	12.500	3.87	9484.859	9484.859	12.500	12.5	0.0	NO		NO	bb
3	3	170731M2_4	Standard	12.500	3.87	9437.330	9437.330	12.500	12.5	0.0	NO		NO	bb
4	4	170731M2_5	Standard	12.500	3.87	8900.184	8900.184	12.500	12.5	0.0	NO		NO	bb
5	5	170731M2_6	Standard	12.500	3.87	9014.546	9014.546	12.500	12.5	0.0	NO		NO	bb
6	6	170731M2_7	Standard	12.500	3.87	8997.038	8997.038	12.500	12.5	0.0	NO		NO	bb
7	7	170731M2_8	Standard	12.500	3.87	8503.210	8503.210	12.500	12.5	0.0	NO		NO	bb
8	8	170731M2_9	Standard	12.500	3.87	8476.880	8476.880	12.500	12.5	0.0	NO		NO	bb
9	9	170731M2_10	Standard	12.500	3.87	11498.018	11498.018	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:16:34 Pacific Daylight Time

Compound name: 13C6-PFDA
Response Factor: 1
RRF SD: 7.85046e-017, Relative SD: 7.85046e-015
Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)
Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170731M2_2	Standard	12.500	3.99	48495.309	48495.309	12.500	12.5	0.0	NO		NO	bb
2	2 170731M2_3	Standard	12.500	3.99	59901.941	59901.941	12.500	12.5	0.0	NO		NO	bb
3	3 170731M2_4	Standard	12.500	3.99	59169.184	59169.184	12.500	12.5	0.0	NO		NO	bb
4	4 170731M2_5	Standard	12.500	3.98	50594.809	50594.809	12.500	12.5	0.0	NO		NO	bb
5	5 170731M2_6	Standard	12.500	3.99	46199.484	46199.484	12.500	12.5	0.0	NO		NO	bb
6	6 170731M2_7	Standard	12.500	3.99	55659.504	55659.504	12.500	12.5	0.0	NO		NO	bb
7	7 170731M2_8	Standard	12.500	3.99	46843.121	46843.121	12.500	12.5	0.0	NO		NO	bb
8	8 170731M2_9	Standard	12.500	3.99	48865.242	48865.242	12.500	12.5	0.0	NO		NO	bb
9	9 170731M2_10	Standard	12.500	3.99	77377.094	77377.094	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C7-PFUnA
Response Factor: 1
RRF SD: 8.77708e-017, Relative SD: 8.77708e-015
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170731M2_2	Standard	12.500	4.15	46687.762	46687.762	12.500	12.5	0.0	NO		NO	bb
2	2 170731M2_3	Standard	12.500	4.16	55126.090	55126.090	12.500	12.5	0.0	NO		NO	bb
3	3 170731M2_4	Standard	12.500	4.15	52064.938	52064.938	12.500	12.5	0.0	NO		NO	bb
4	4 170731M2_5	Standard	12.500	4.15	55069.406	55069.406	12.500	12.5	0.0	NO		NO	bb
5	5 170731M2_6	Standard	12.500	4.15	48450.305	48450.305	12.500	12.5	0.0	NO		NO	bb
6	6 170731M2_7	Standard	12.500	4.15	50457.156	50457.156	12.500	12.5	0.0	NO		NO	bb
7	7 170731M2_8	Standard	12.500	4.15	52556.180	52556.180	12.500	12.5	0.0	NO		NO	bb
8	8 170731M2_9	Standard	12.500	4.15	43779.801	43779.801	12.500	12.5	0.0	NO		NO	bb
9	9 170731M2_10	Standard	12.500	4.16	78259.594	78259.594	12.500	12.5	0.0	NO		NO	bb

Quantify Compound Summary Report **MassLynx MassLynx V4.1 SCN945 SCN960**
Vista Analytical Laboratory

Dataset: Untitled

Last Altered: Tuesday, August 01, 2017 10:20:34 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:21:31 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 01 Aug 2017 09:55:07
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	170731M2_1	IPA	01-Aug-17	00:29:09
2	170731M2_2	ST170731M2-1 PFC CS-2 17G3107	01-Aug-17	00:39:54
3	170731M2_3	ST170731M2-2 PFC CS-1 17G3108	01-Aug-17	00:50:40
4	170731M2_4	ST170731M2-3 PFC CS0 17G3109	01-Aug-17	01:01:18
5	170731M2_5	ST170731M2-4 PFC CS1 17G3110	01-Aug-17	01:12:05
6	170731M2_6	ST170731M2-5 PFC CS2 17G3111	01-Aug-17	01:22:43
7	170731M2_7	ST170731M2-6 PFC CS3 17G3105	01-Aug-17	01:33:30
8	170731M2_8	ST170731M2-7 PFC CS4 17G3112	01-Aug-17	01:44:08
9	170731M2_9	ST170731M2-8 PFC CS5 17G3113	01-Aug-17	01:54:46
10	170731M2_10	ST170731M2-9 PFC CS6 17G2801	01-Aug-17	02:05:40
11	170731M2_11	ST170731M2-10 PFC CS7 17G2802	01-Aug-17	02:16:49
12	170731M2_12	IPA	01-Aug-17	02:27:32
13	170731M2_13	SS170731M2-1 PFC SSS 17G3106	01-Aug-17	02:38:37
14	170731M2_14	IPA	01-Aug-17	02:49:24

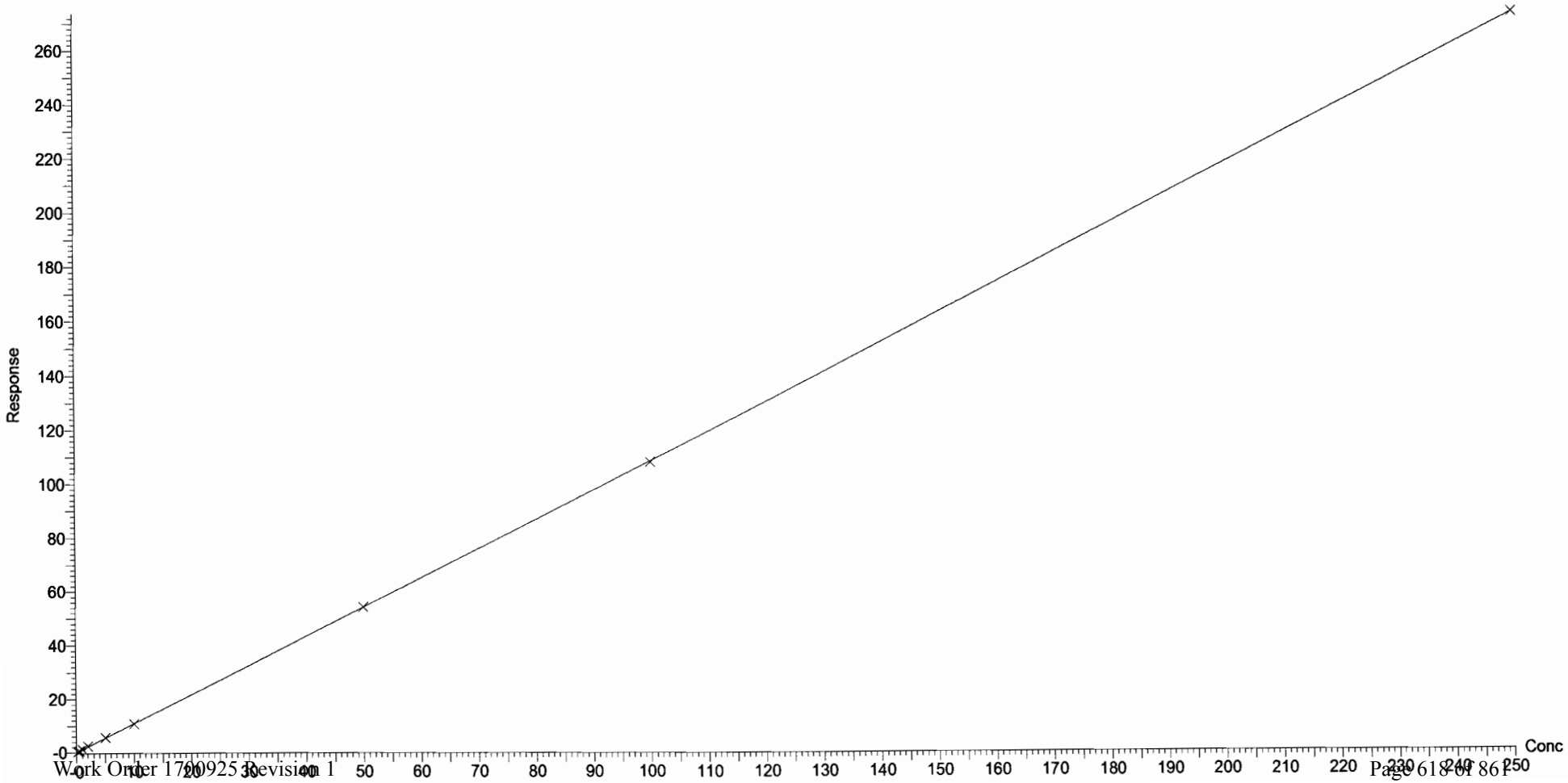
Vista Analytical Laboratory Q1

Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 01 Aug 2017 09:55:07
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

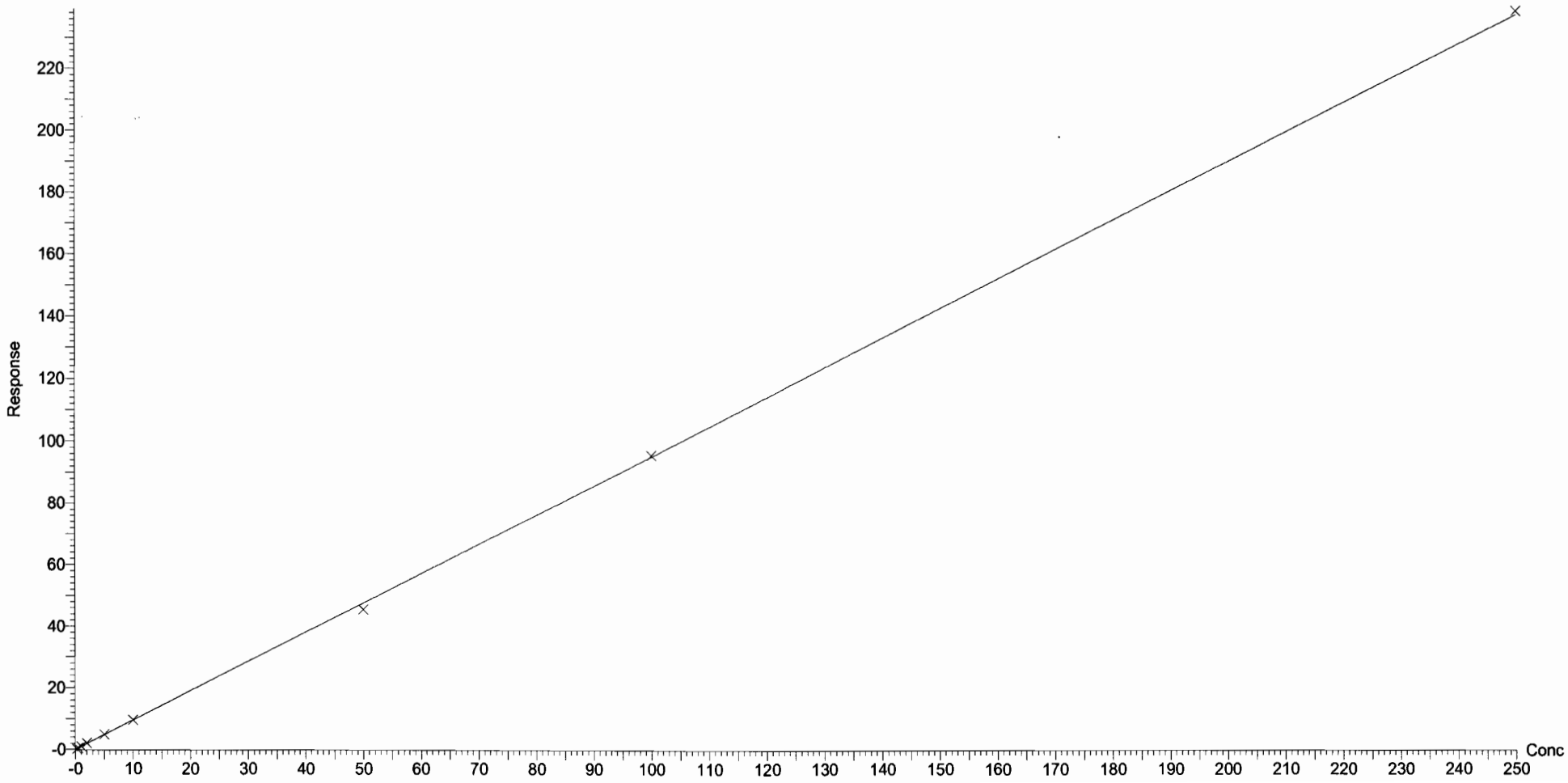
Compound name: PFBA
Coefficient of Determination: R^2 = 0.999898
Calibration curve: 6.26653e-005 * x^2 + 1.07835 * x + 0.0734459
Response type: Internal Std (Ref 28), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

Compound name: PFPeA
Correlation coefficient: r = 0.999842, r^2 = 0.999685
Calibration curve: 0.95207 * x + 0.034134
Response type: Internal Std (Ref 29), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

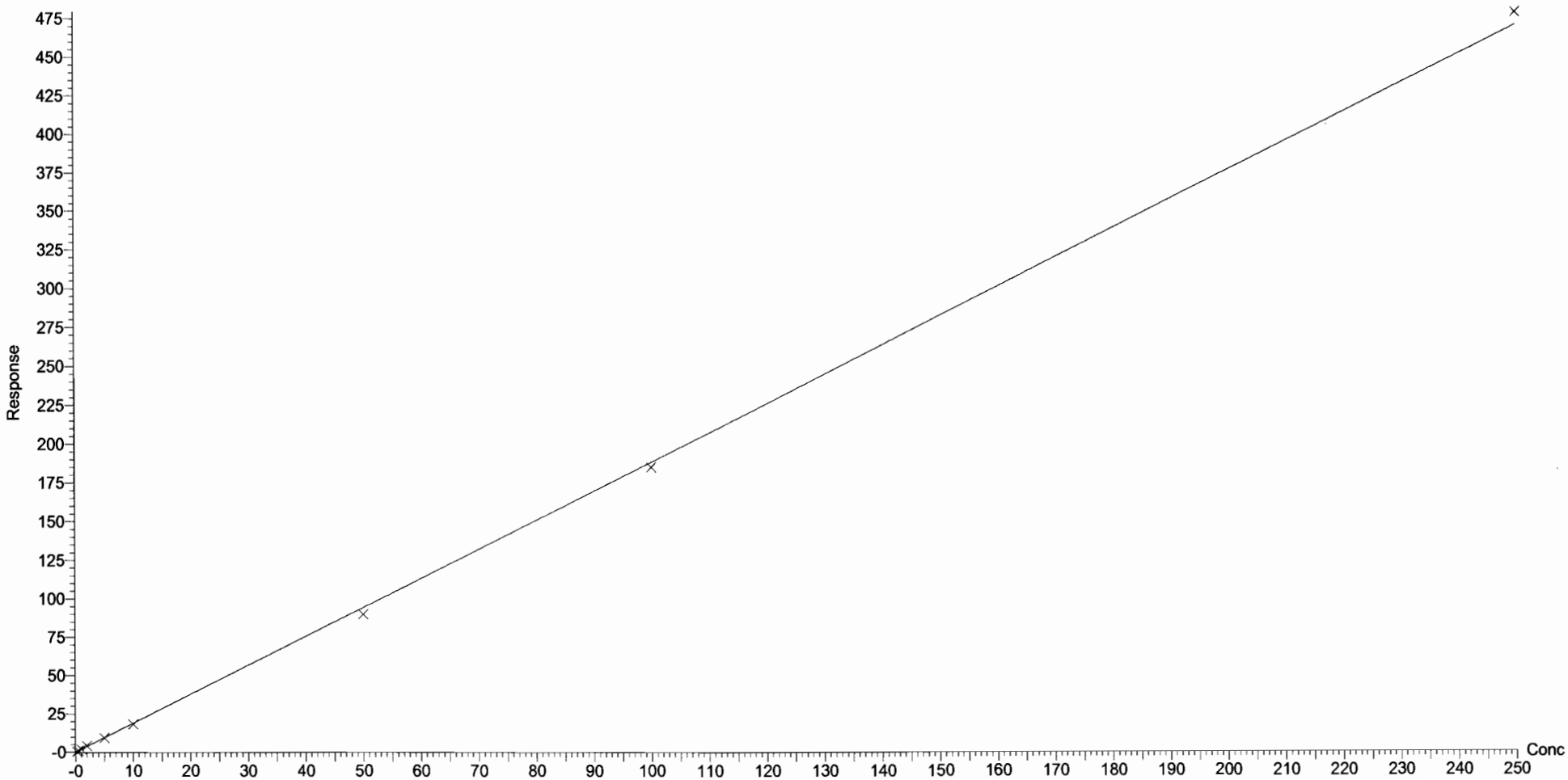


Vista Analytical Laboratory Q1

Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

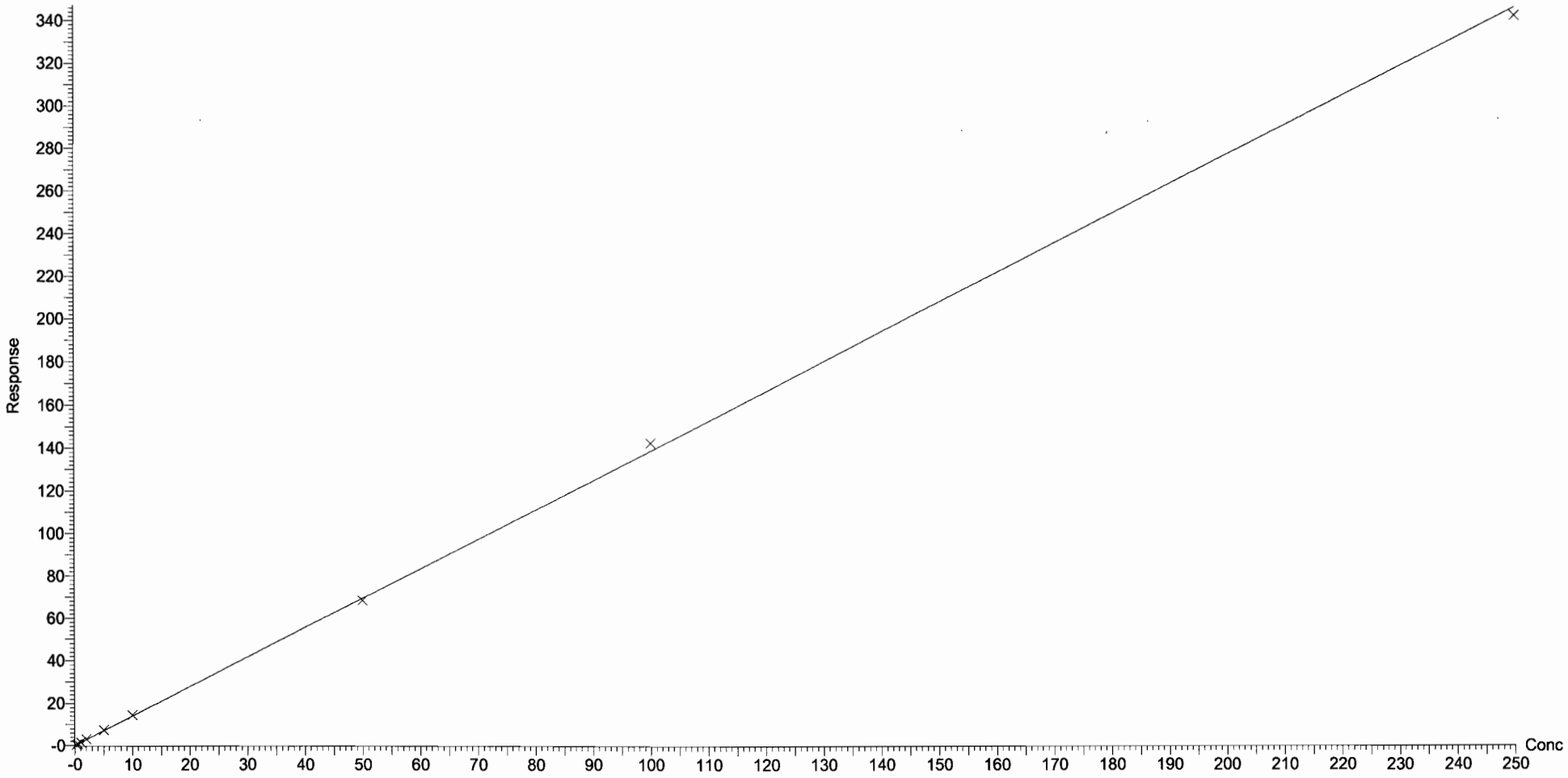
Compound name: PFBS
Correlation coefficient: r = 0.999700, r^2 = 0.999400
Calibration curve: 1.88408 * x + 0.0670139
Response type: Internal Std (Ref 30), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

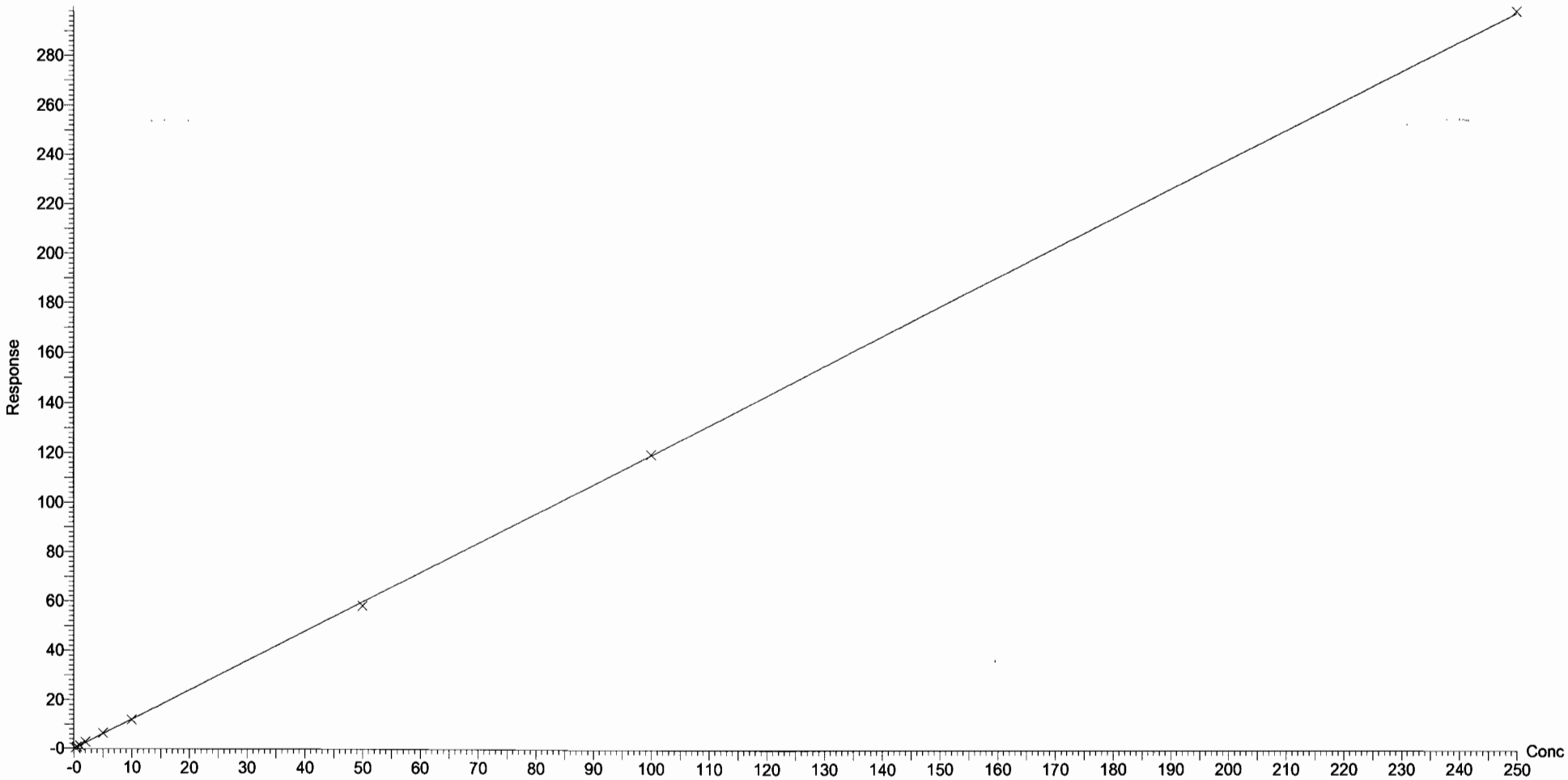
Compound name: PFHxA
Correlation coefficient: r = 0.999770, r^2 = 0.999541
Calibration curve: 1.38743 * x + 0.151774
Response type: Internal Std (Ref 31), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

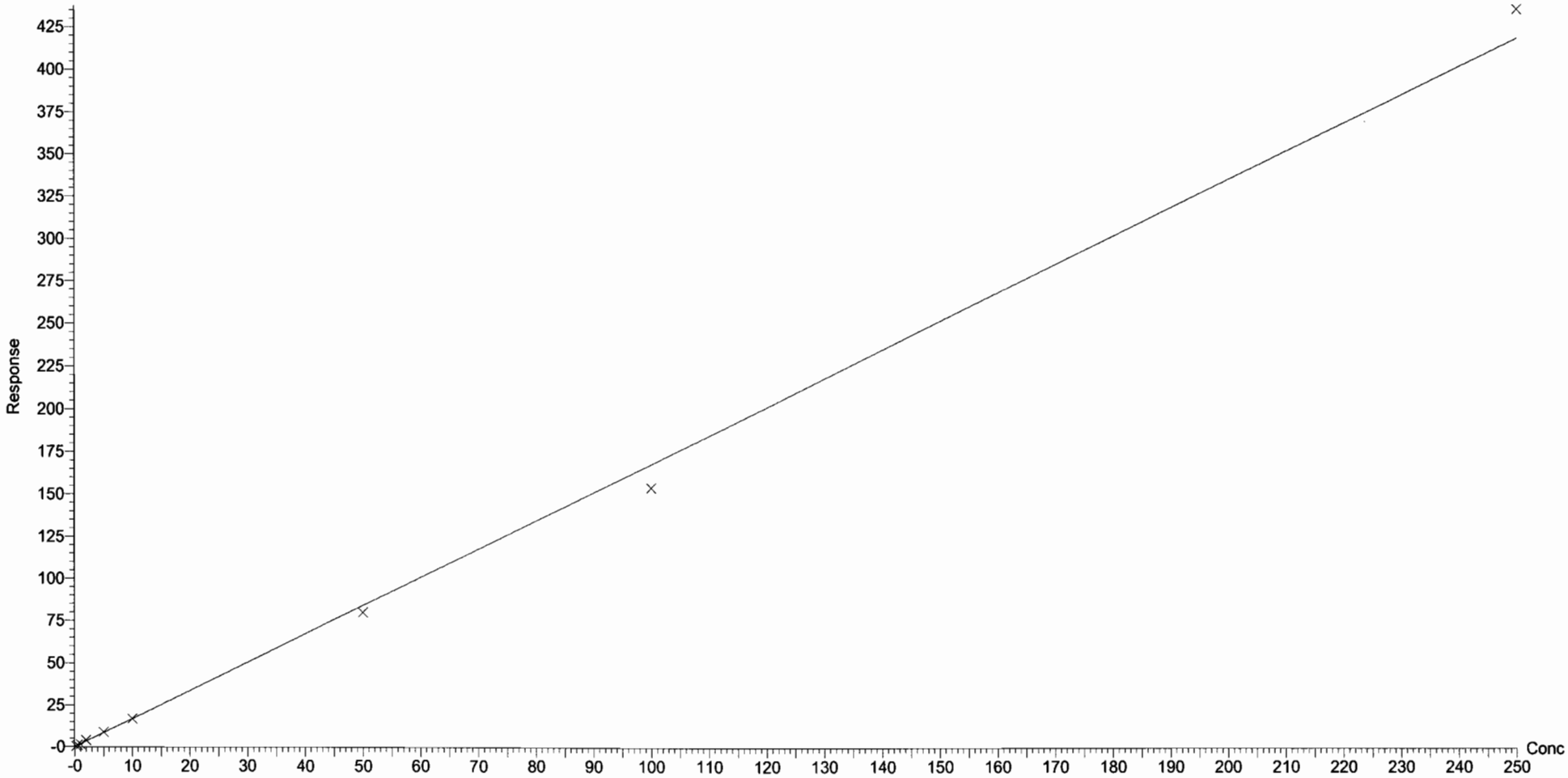
Compound name: PFHpA
Correlation coefficient: r = 0.999907, r^2 = 0.999814
Calibration curve: 1.19527 * x + 0.0770691
Response type: Internal Std (Ref 32), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

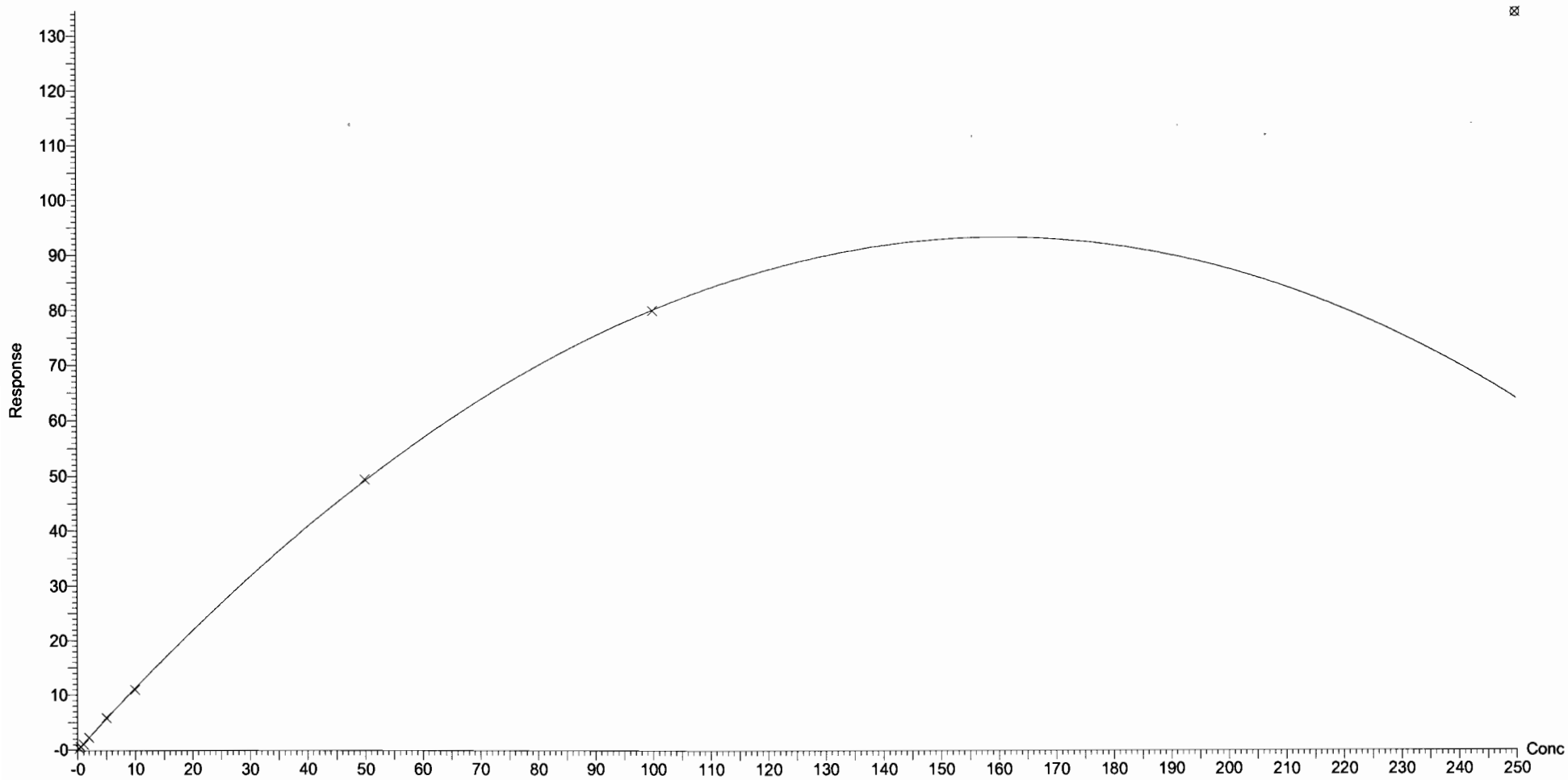
Compound name: PFHxS
Correlation coefficient: r = 0.998411, r^2 = 0.996824
Calibration curve: 1.6806 * x + 0.0313148
Response type: Internal Std (Ref 33), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

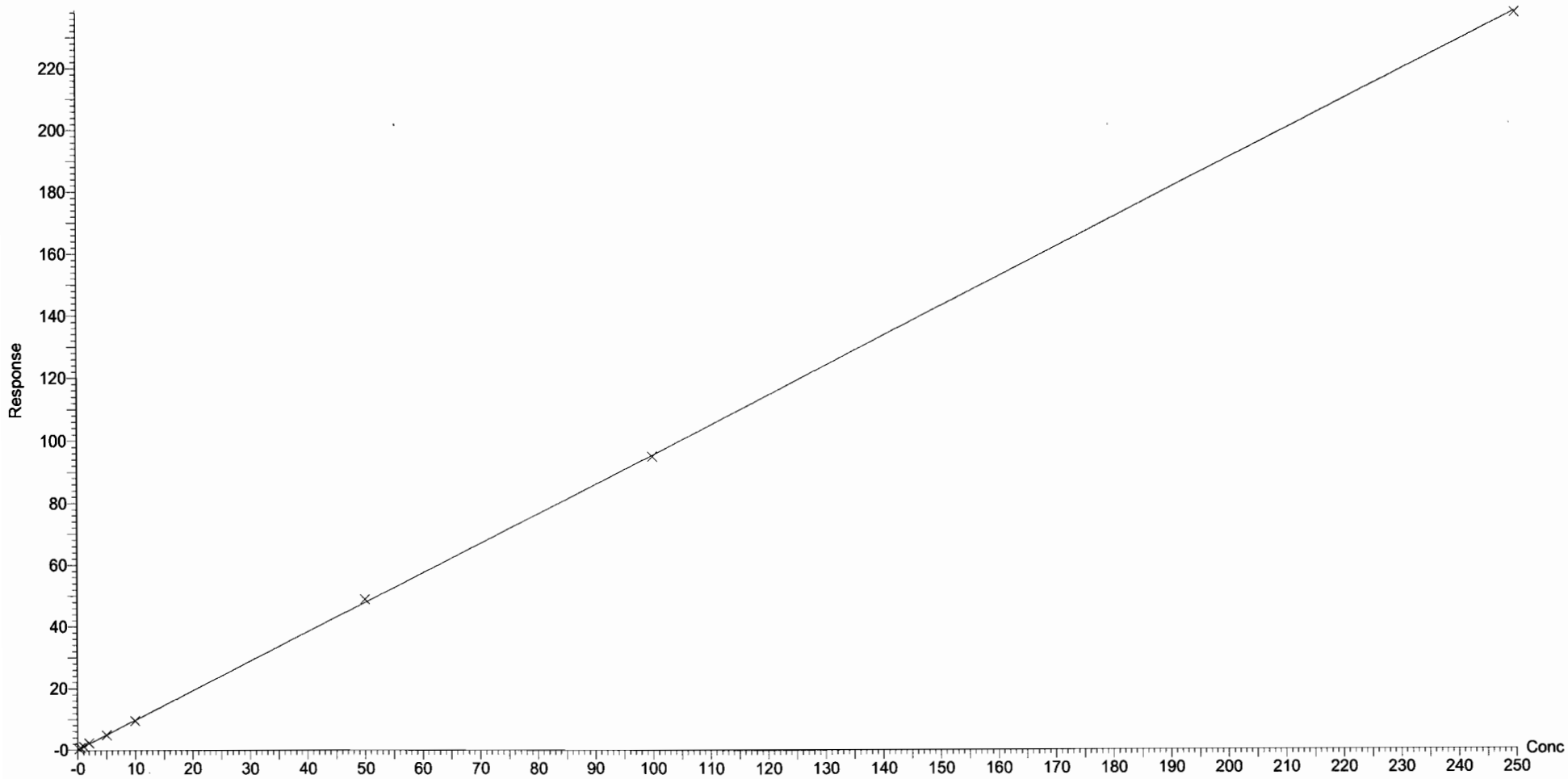
Compound name: 6:2 FTS
Coefficient of Determination: R^2 = 0.999797
Calibration curve: -0.00364043 * x^2 + 1.16681 * x + -0.0592153
Response type: Internal Std (Ref 34), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

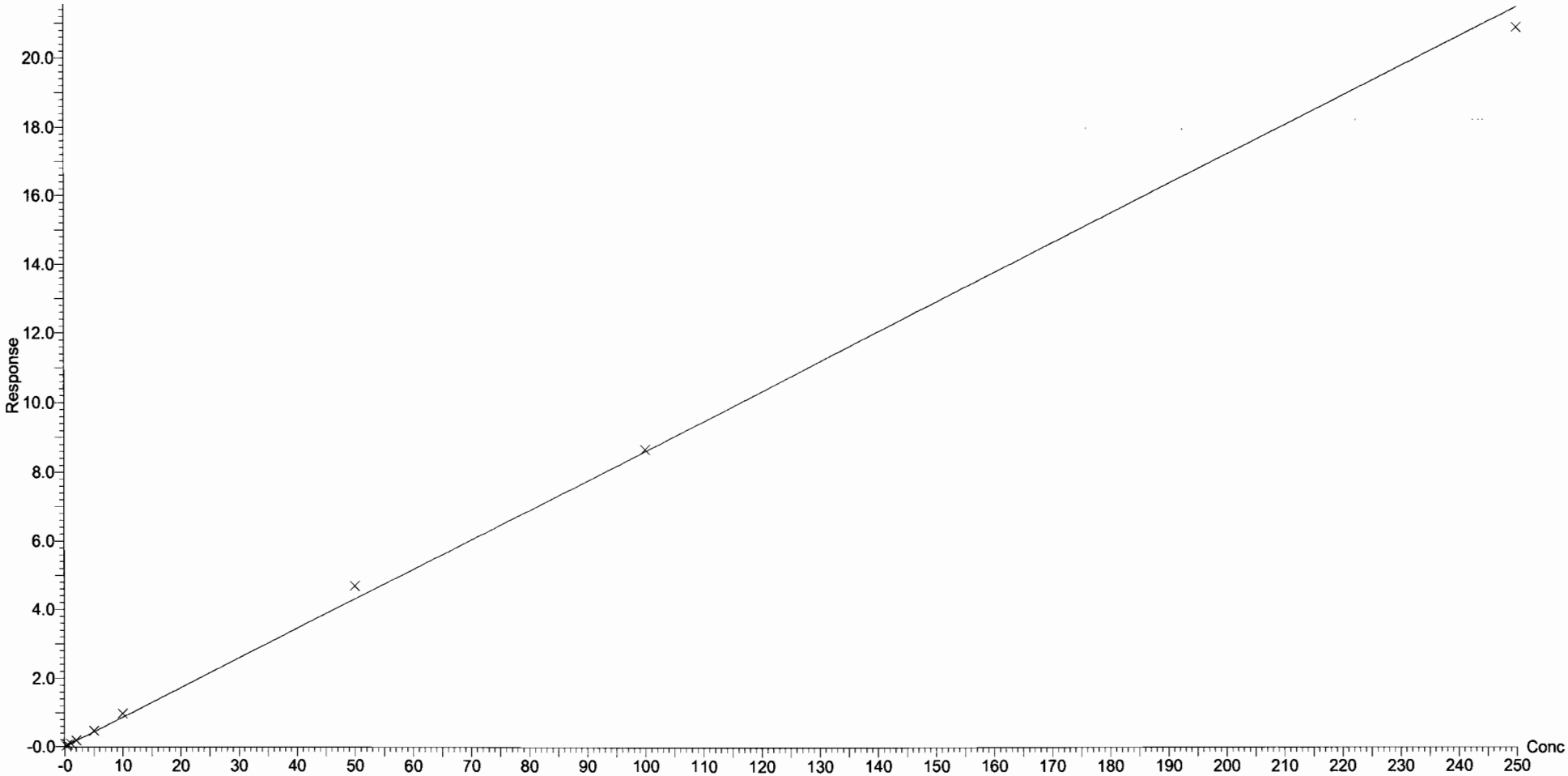
Compound name: PFOA
Correlation coefficient: r = 0.999910, r^2 = 0.999821
Calibration curve: 0.953928 * x + 0.14566
Response type: Internal Std (Ref 35), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

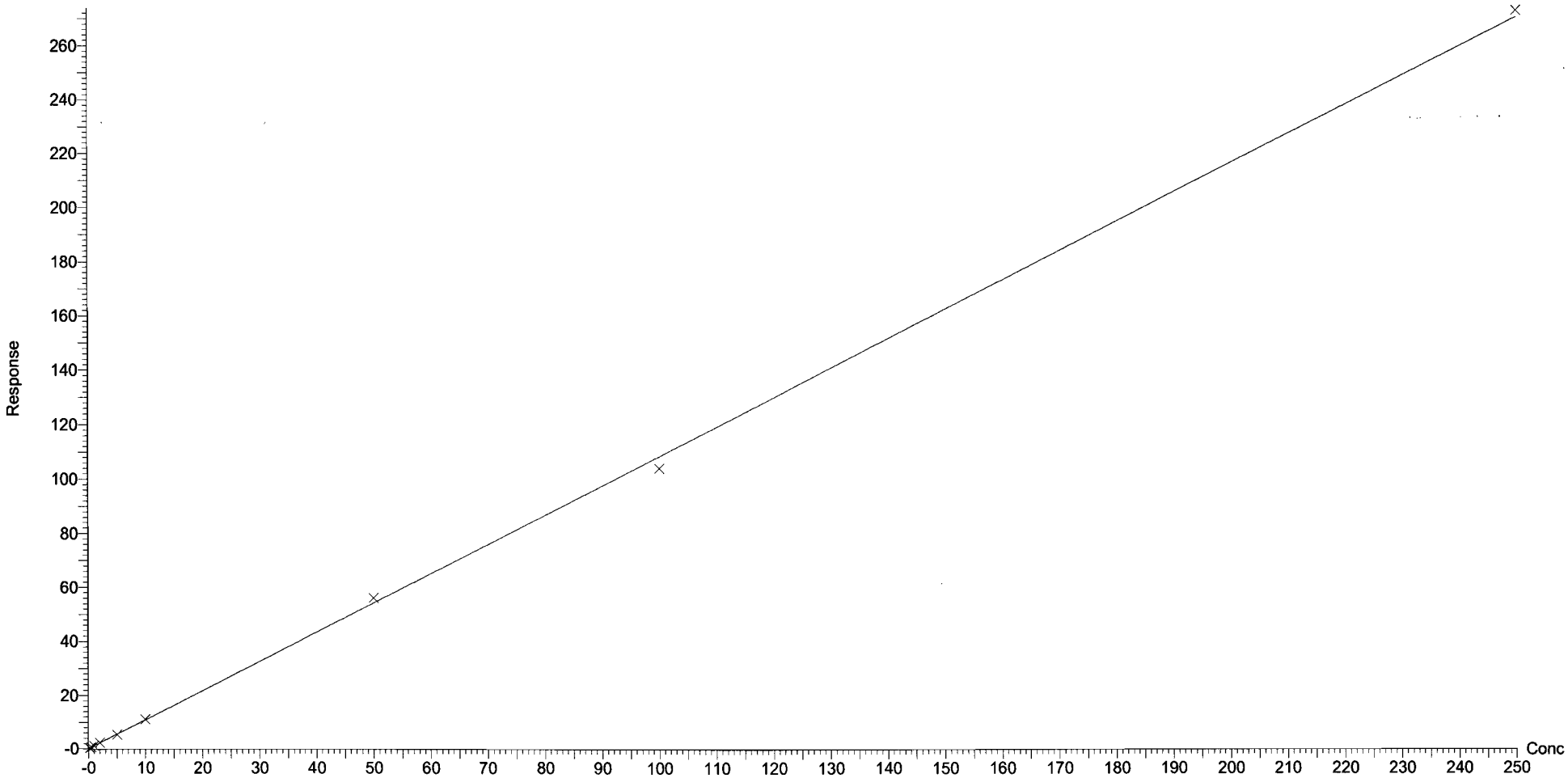
Compound name: PFHpS
Correlation coefficient: r = 0.999006, r^2 = 0.998013
Calibration curve: 0.0861619 * x + 0.0071876
Response type: Internal Std (Ref 35), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

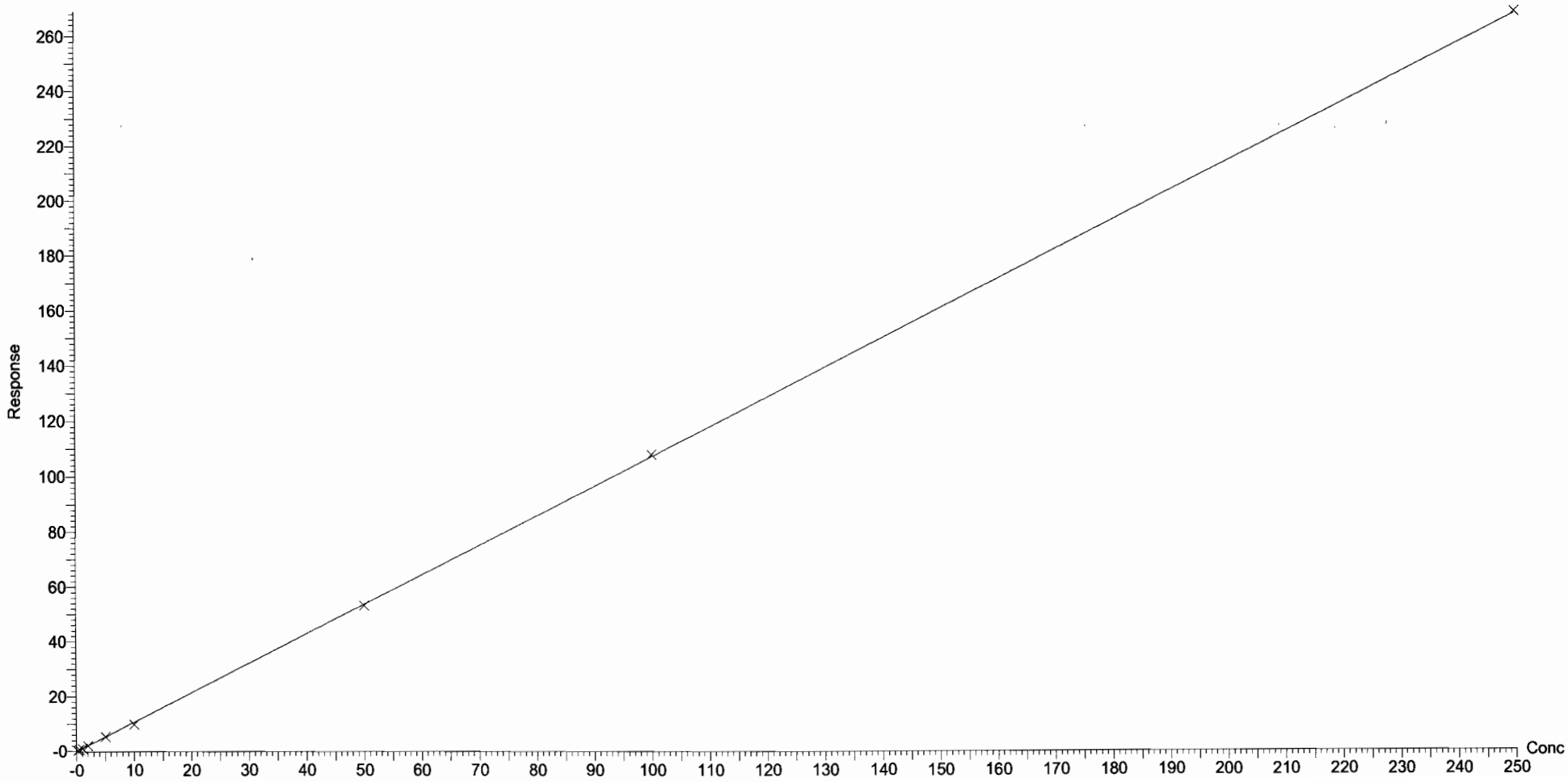
Compound name: PFNA
Correlation coefficient: r = 0.999697, r^2 = 0.999394
Calibration curve: 1.08541 * x + 0.0735739
Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

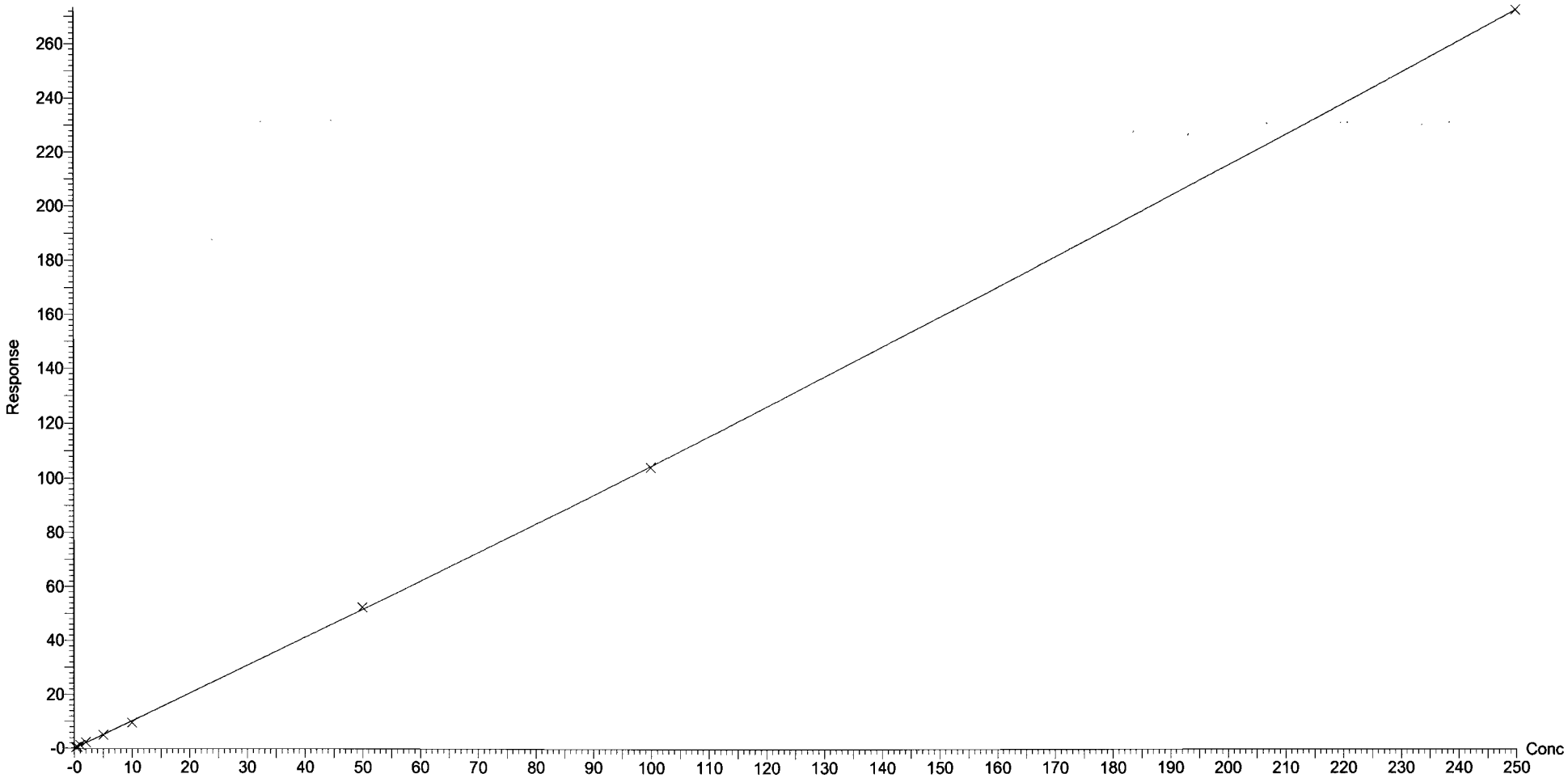
Compound name: PFOSA
Correlation coefficient: r = 0.999883, r^2 = 0.999766
Calibration curve: 1.0734 * x + -0.0271184
Response type: Internal Std (Ref 37), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

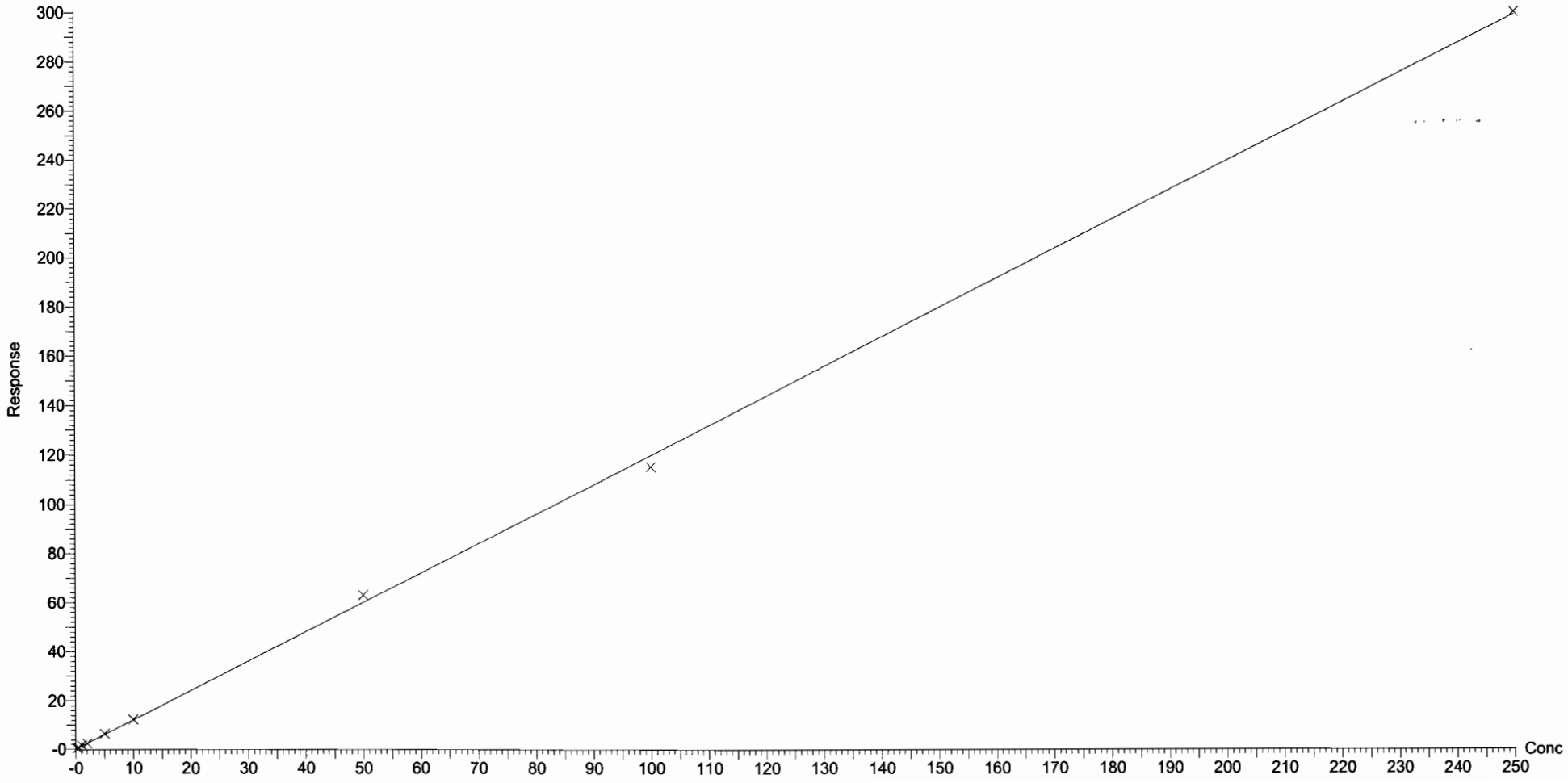
Compound name: PFOS
Coefficient of Determination: R^2 = 0.999779
Calibration curve: 0.000313423 * x^2 + 1.01509 * x + 0.0486823
Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

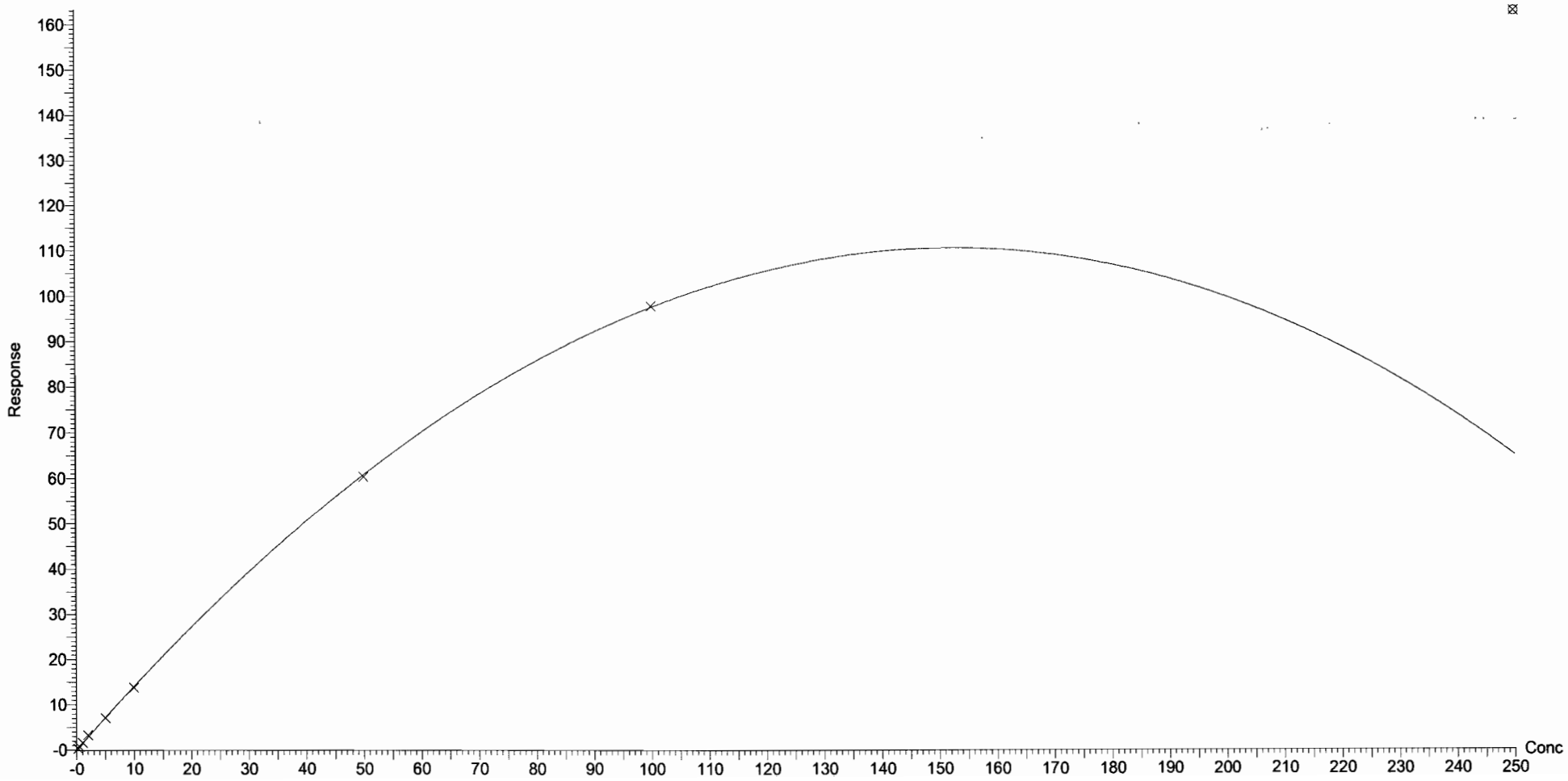
Compound name: PFDA
Correlation coefficient: r = 0.999542, r^2 = 0.999084
Calibration curve: 1.19993 * x + 0.156566
Response type: Internal Std (Ref 39), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

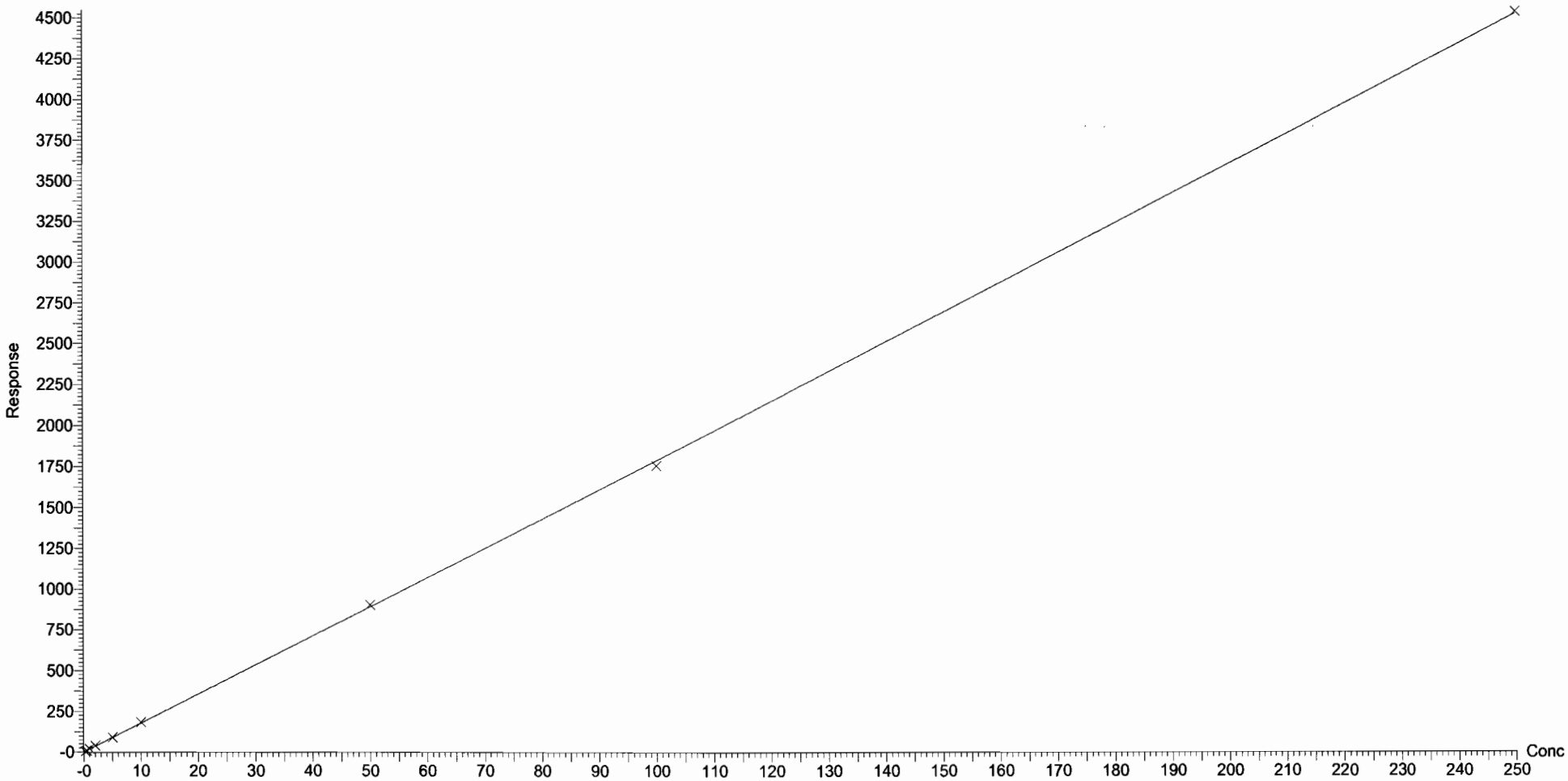
Compound name: 8:2 FTS
Coefficient of Determination: R^2 = 0.999107
Calibration curve: -0.00477278 * x^2 + 1.45357 * x + 0.0233651
Response type: Internal Std (Ref 40), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

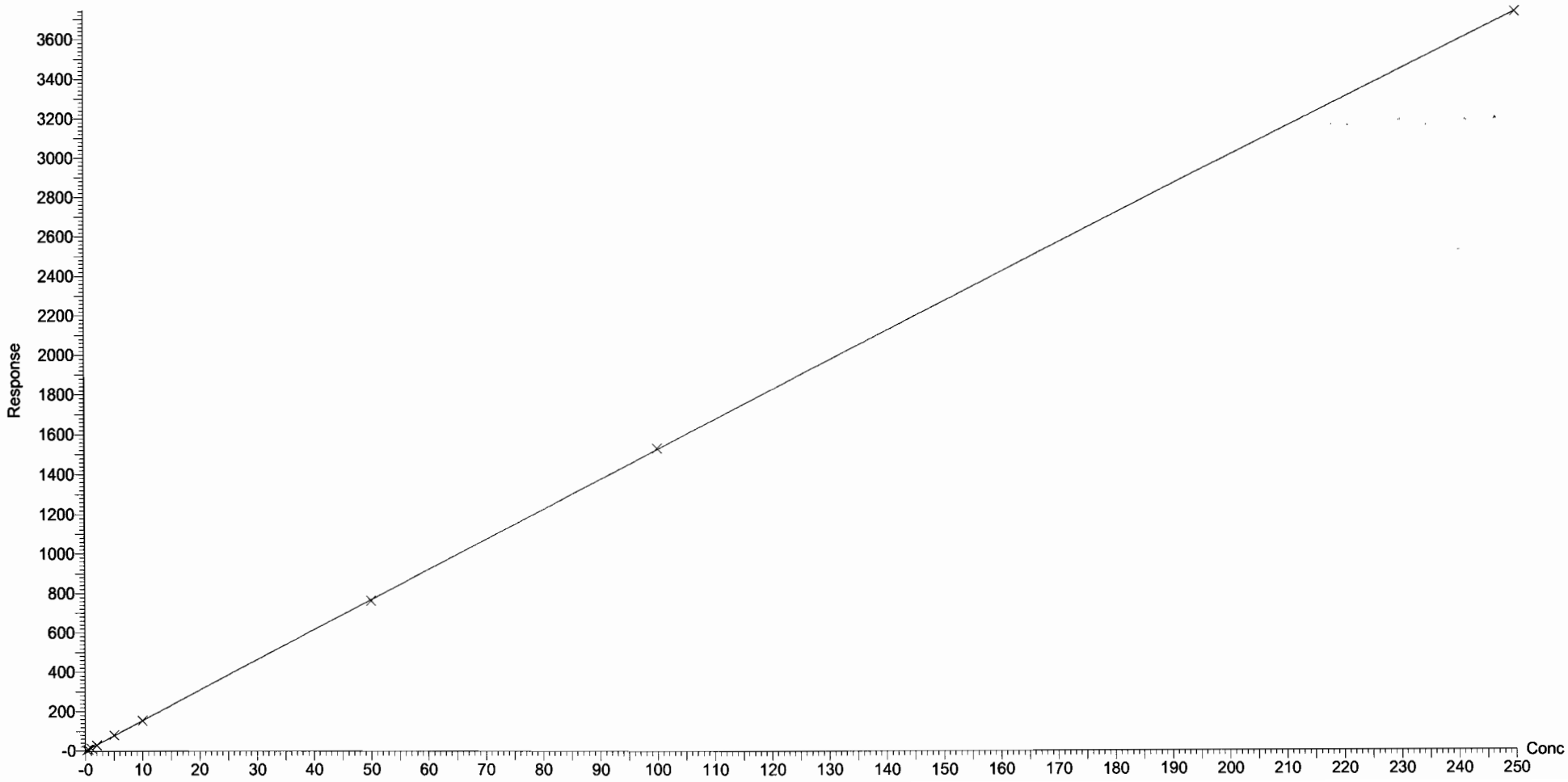
Compound name: N-MeFOSAA
Coefficient of Determination: R^2 = 0.999795
Calibration curve: 0.00169243 * x^2 + 17.7214 * x + 0.975242
Response type: Internal Std (Ref 41), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

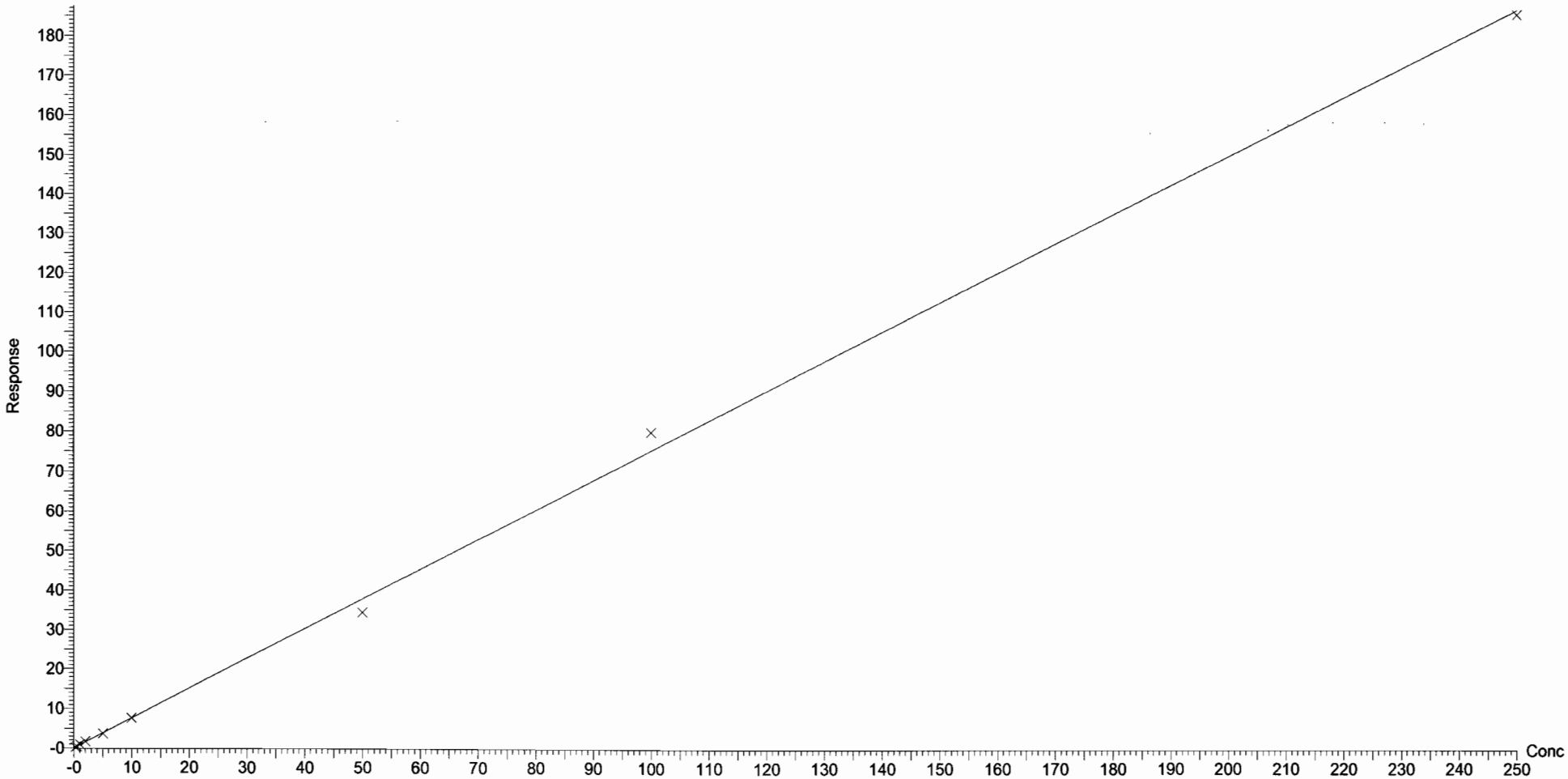
Compound name: N-EtFOSAA
Coefficient of Determination: R^2 = 0.999924
Calibration curve: -0.0019298 * x^2 + 15.4647 * x + -0.327453
Response type: Internal Std (Ref 42), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

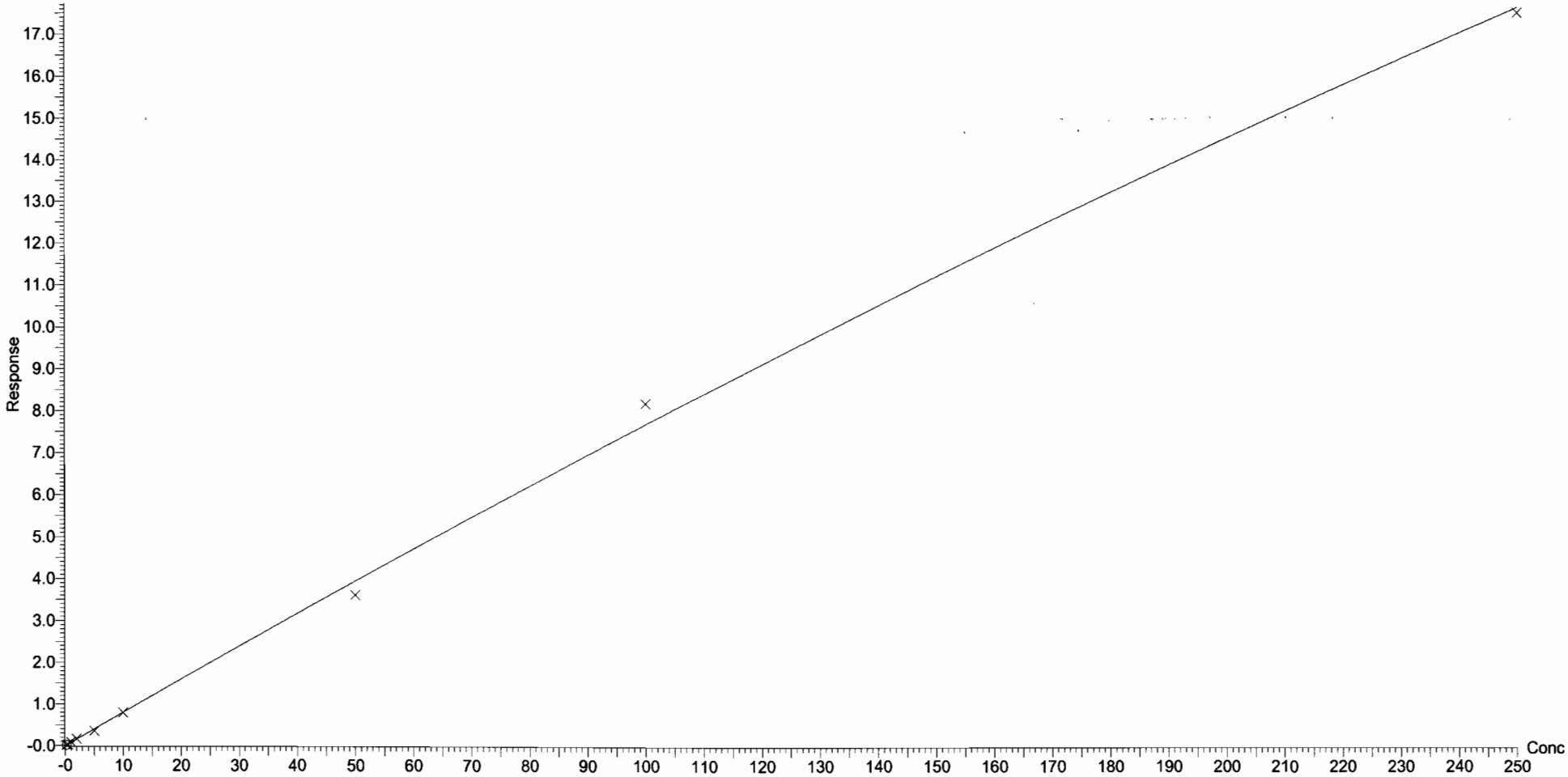
Compound name: PFUnA
Coefficient of Determination: R^2 = 0.997941
Calibration curve: -3.28617e-005 * x^2 + 0.757566 * x + 0.0881327
Response type: Internal Std (Ref 43), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

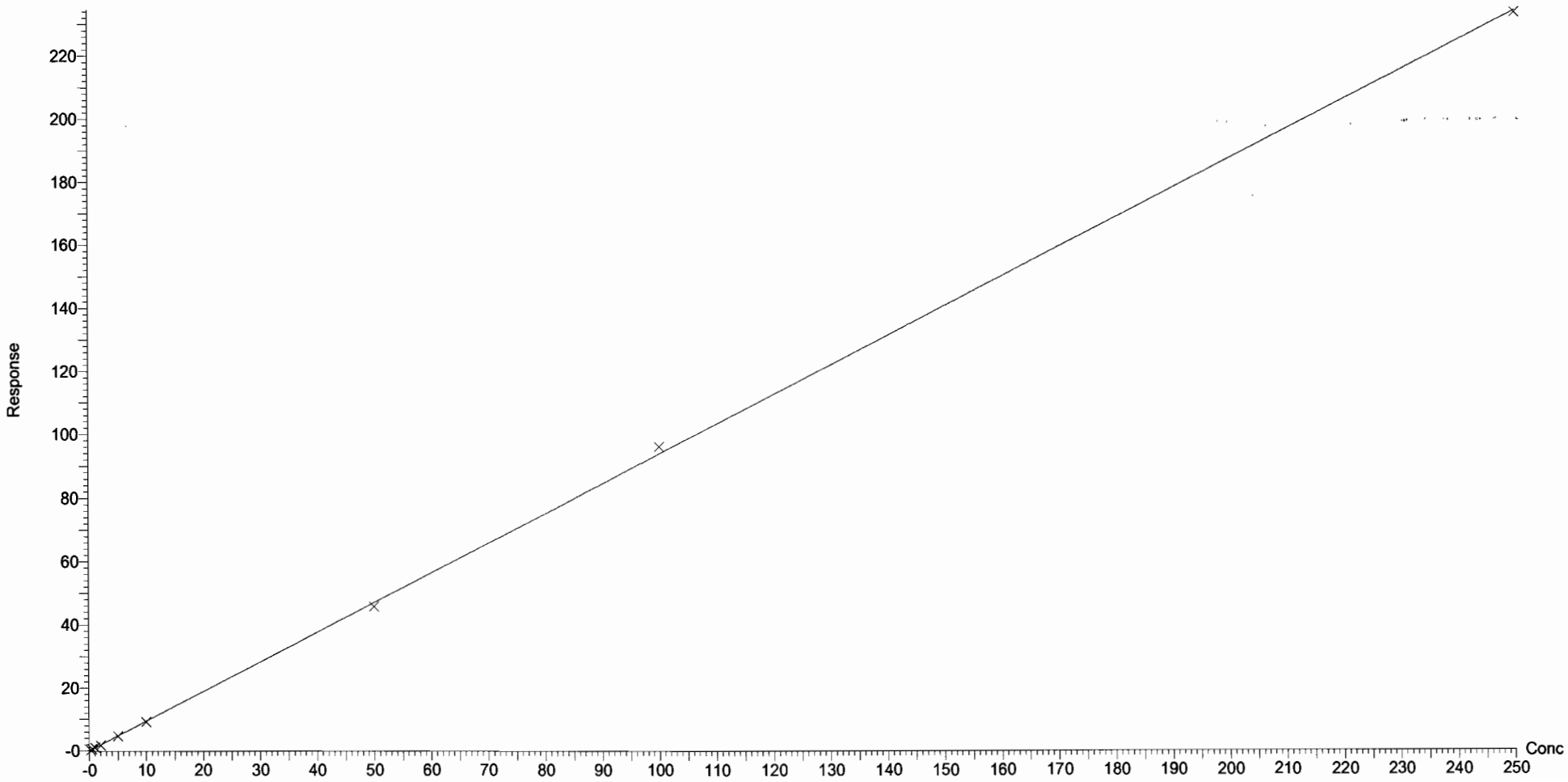
Compound name: PFDS
Coefficient of Determination: R^2 = 0.997578
Calibration curve: -4.11818e-005 * x^2 + 0.0811765 * x + -0.0032981
Response type: Internal Std (Ref 43), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

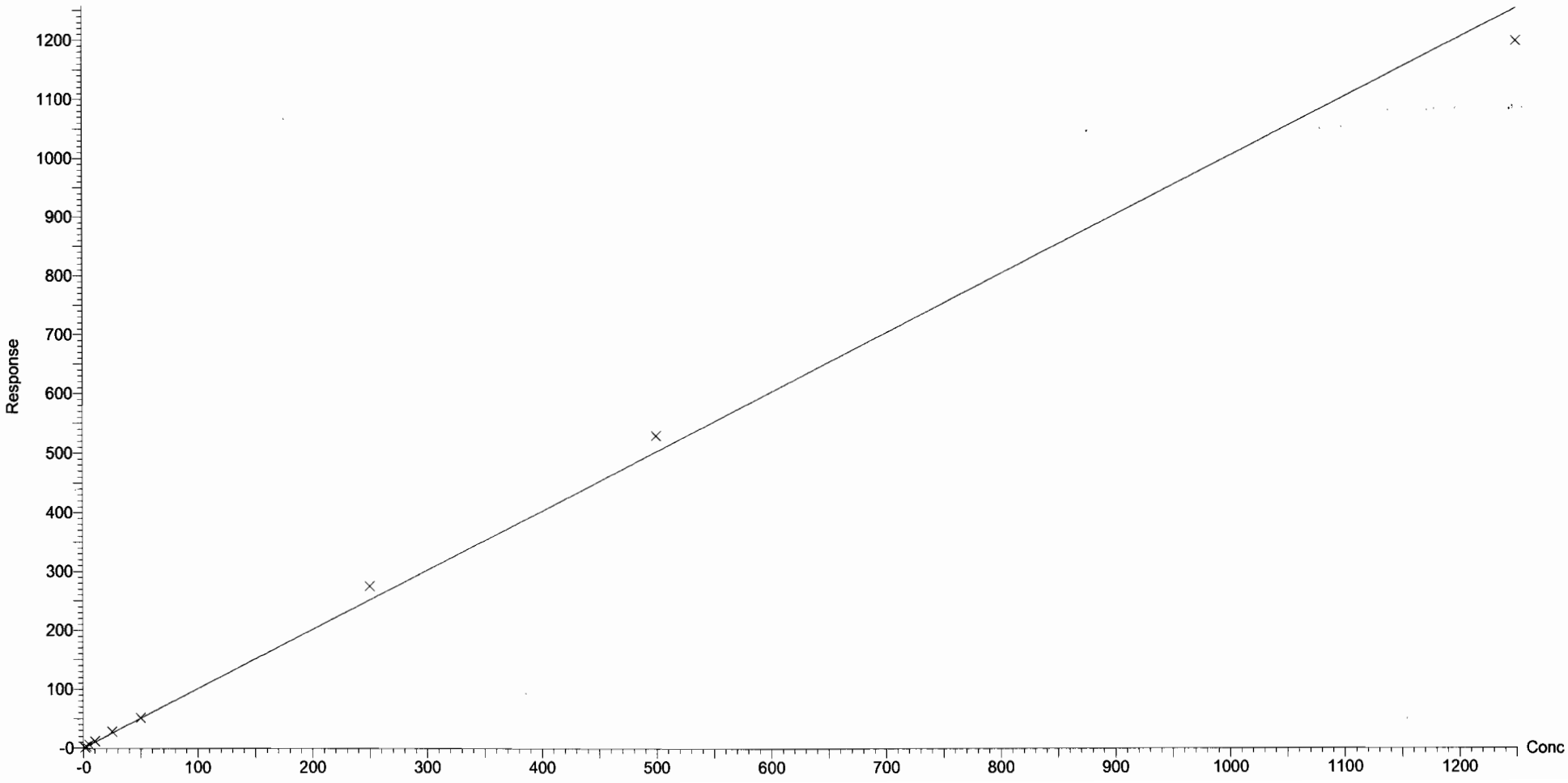
Compound name: PFDoA
Coefficient of Determination: R^2 = 0.999599
Calibration curve: -9.87083e-006 * x^2 + 0.940673 * x + 0.00742583
Response type: Internal Std (Ref 44), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

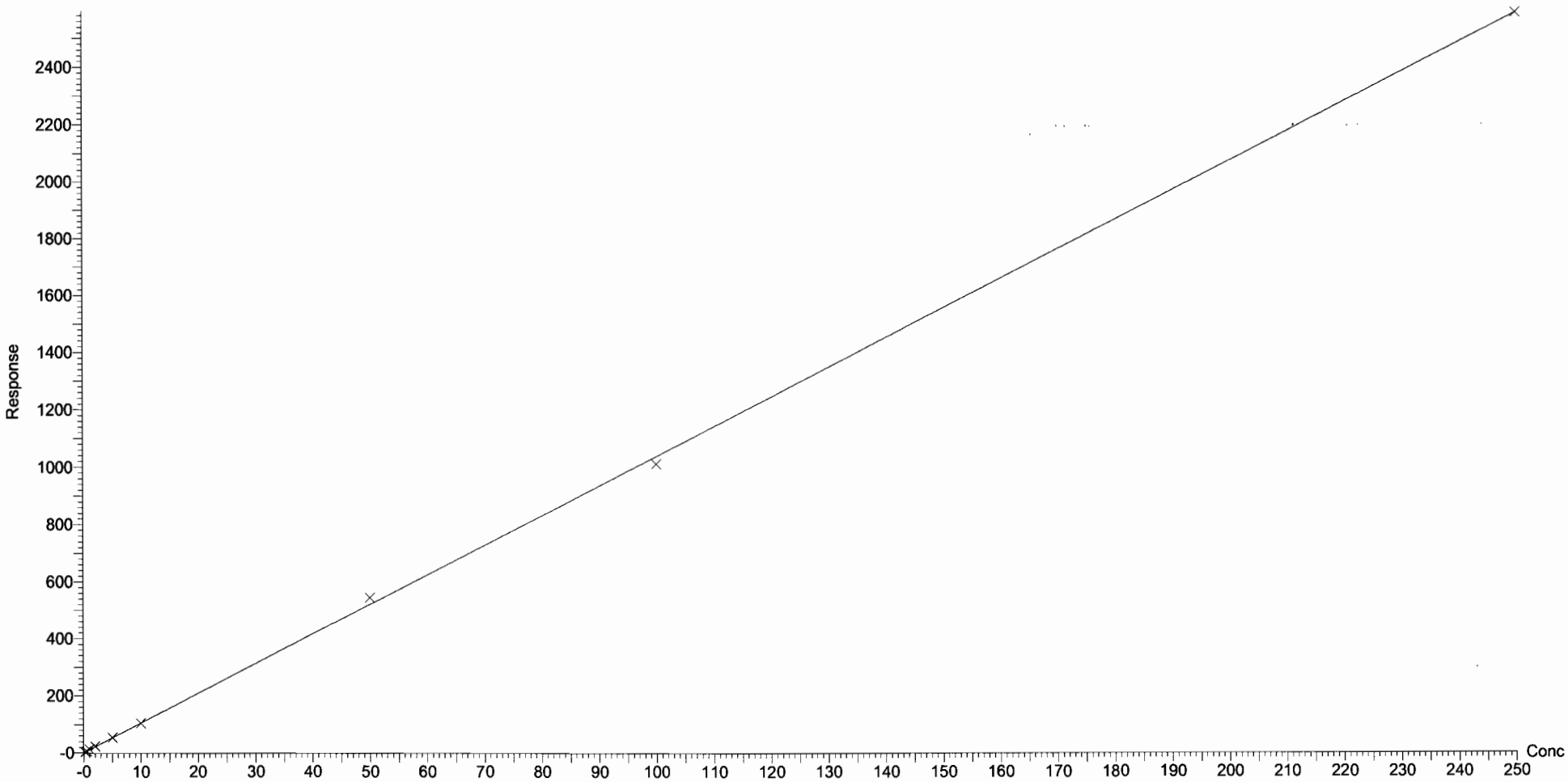
Compound name: N-MeFOSA
Correlation coefficient: r = 0.998345, r^2 = 0.996693
Calibration curve: 1.00604 * x + 0.235716
Response type: Internal Std (Ref 45), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

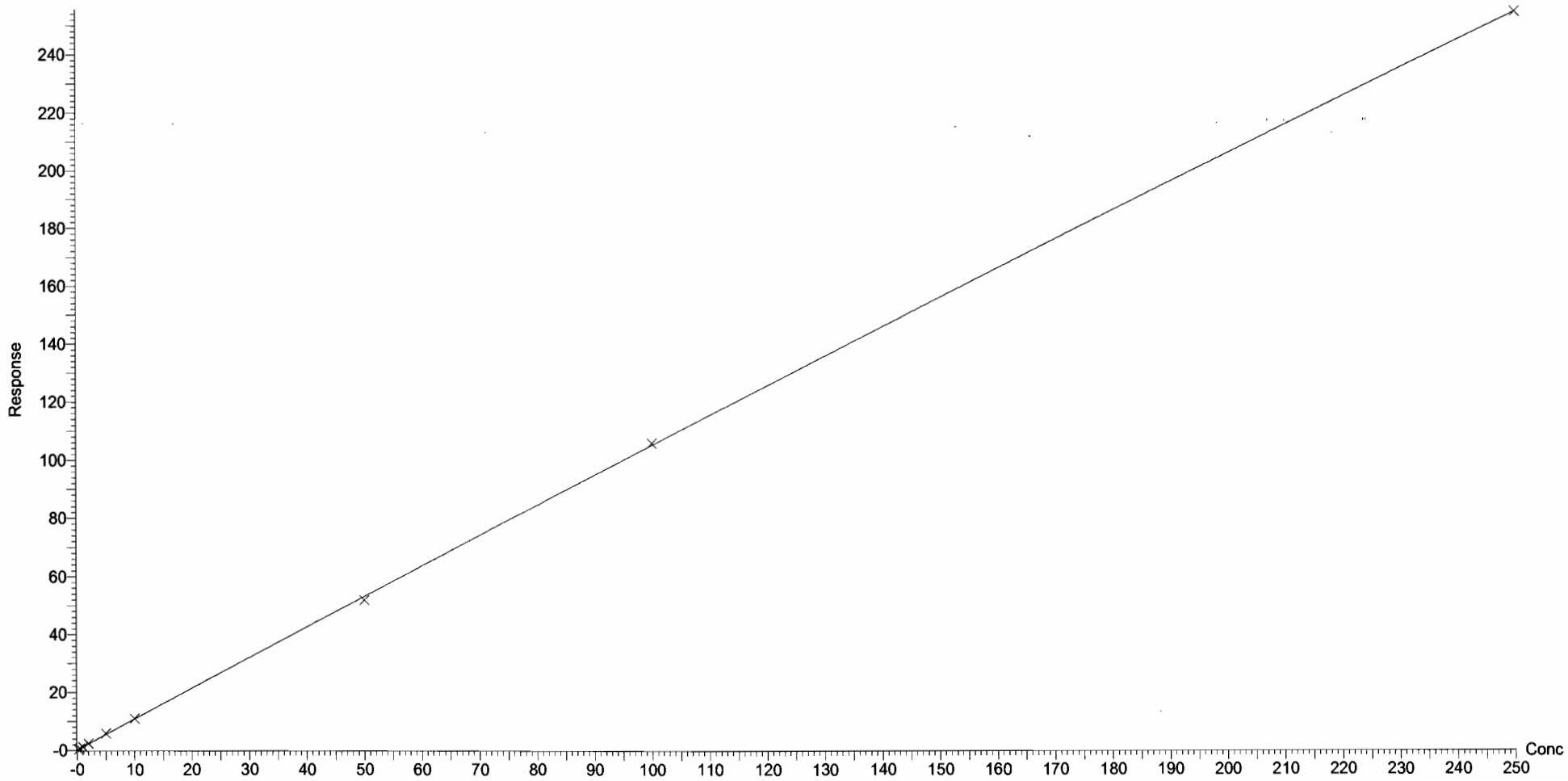
Compound name: PFTrDA
Correlation coefficient: r = 0.999725, r^2 = 0.999450
Calibration curve: 10.3774 * x + 1.19316
Response type: Internal Std (Ref 44), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

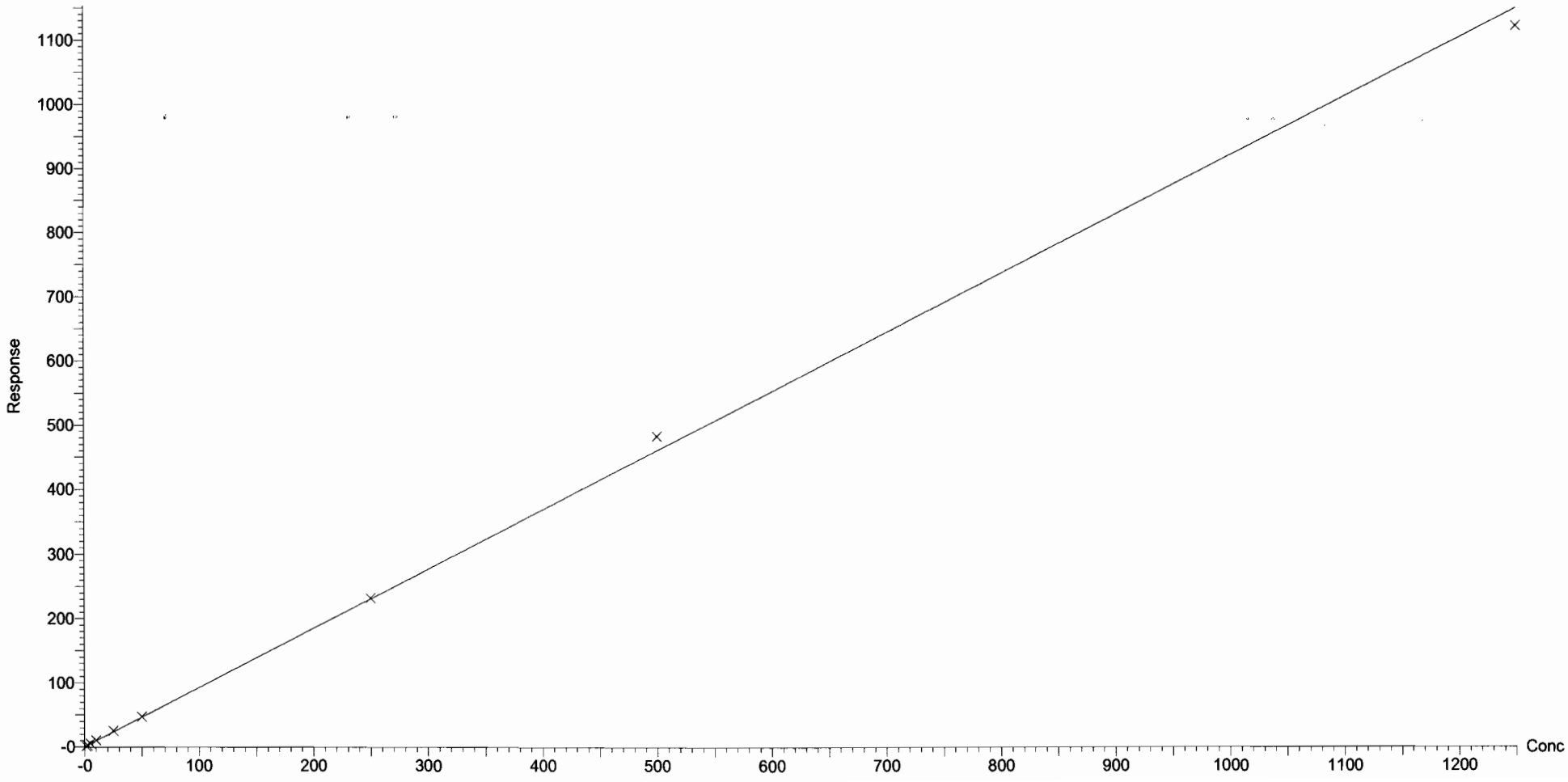
Compound name: PFTeDA
Coefficient of Determination: R^2 = 0.999821
Calibration curve: -0.000206845 * x^2 + 1.07301 * x + 0.115151
Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

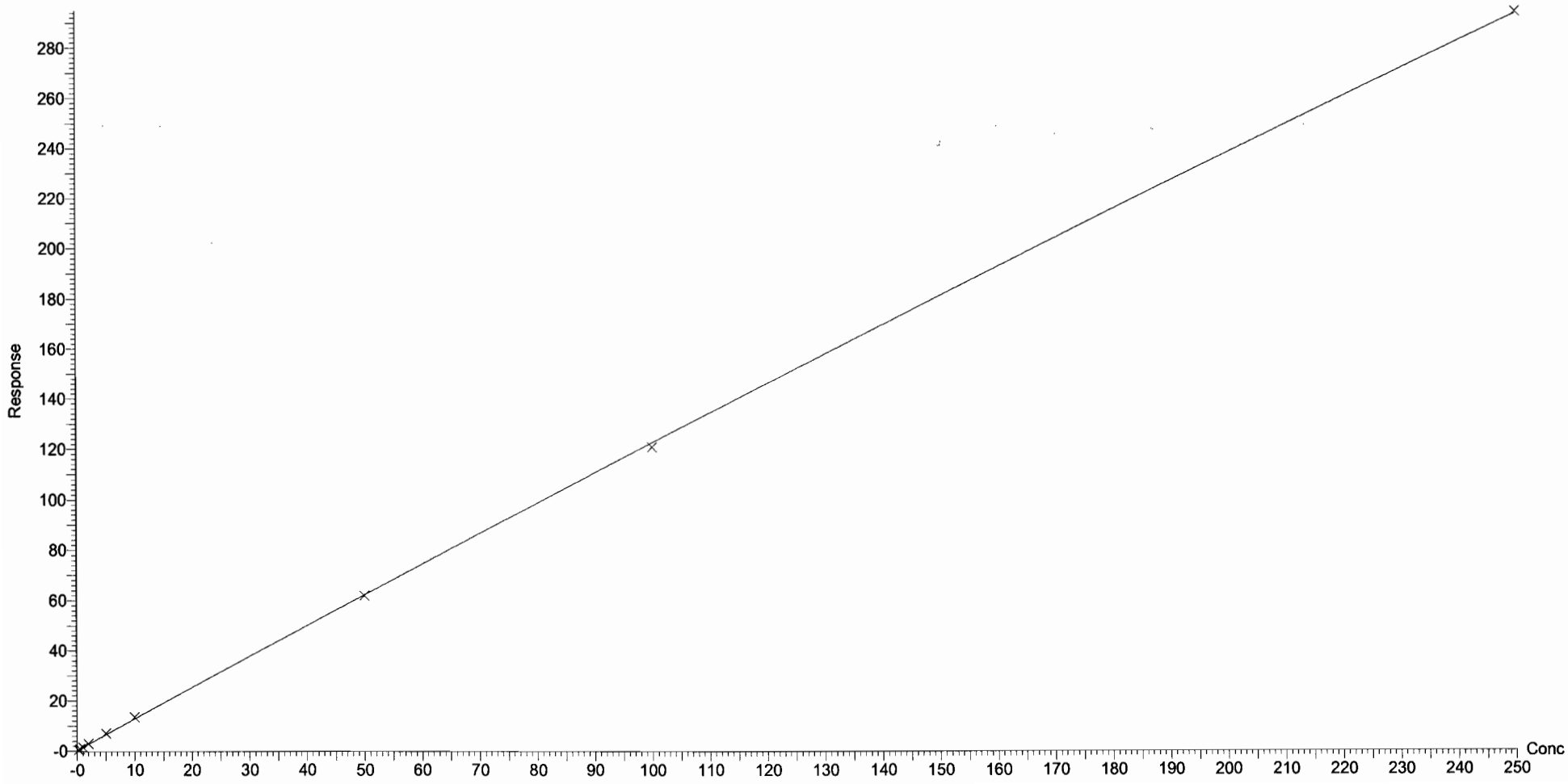
Compound name: N-EtFOSA
Correlation coefficient: r = 0.999415, r^2 = 0.998831
Calibration curve: 0.921854 * x + 0.382781
Response type: Internal Std (Ref 47), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

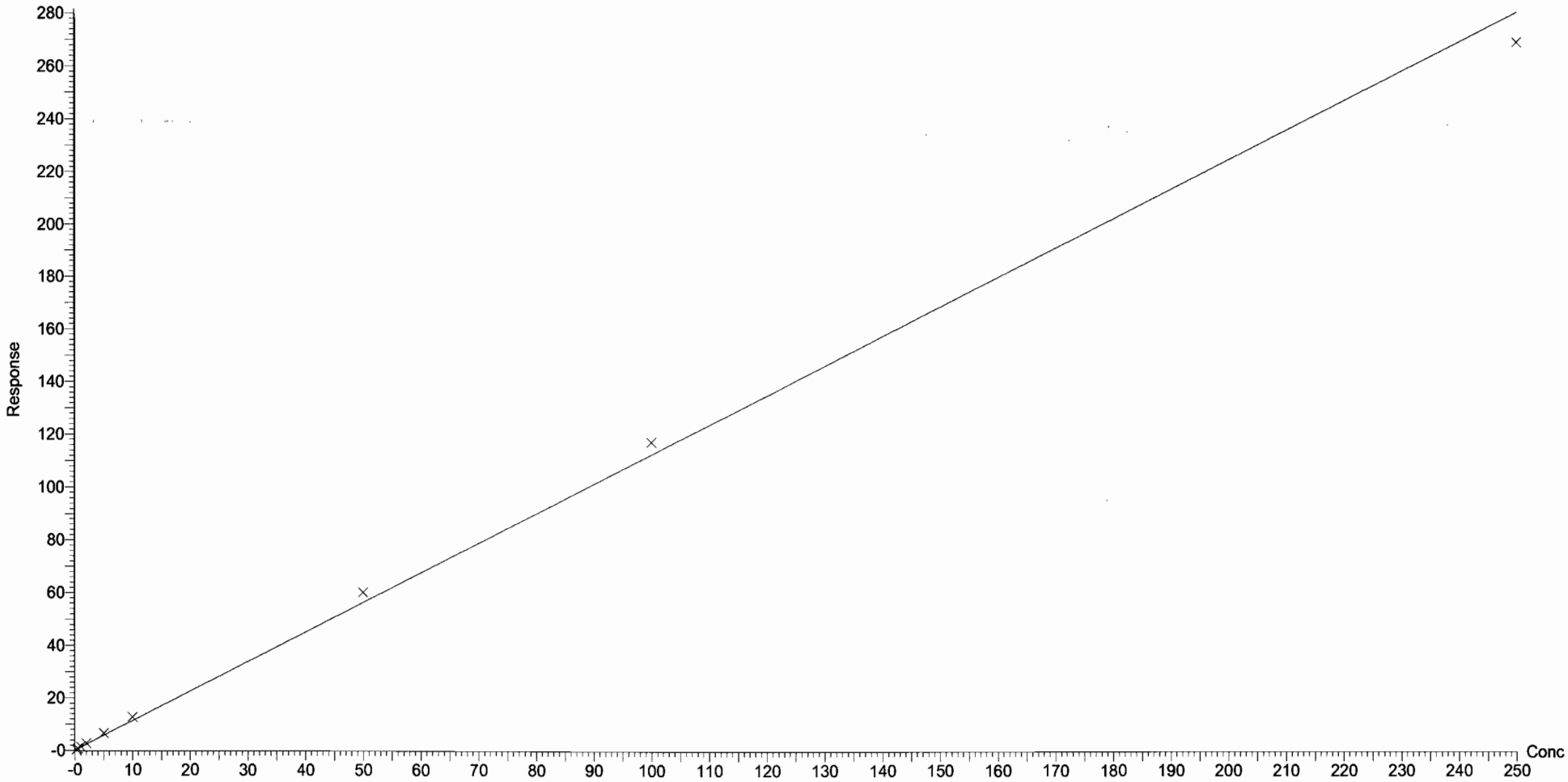
Compound name: PFHxDA
Coefficient of Determination: R^2 = 0.999687
Calibration curve: -0.000332417 * x^2 + 1.25821 * x + 0.243616
Response type: Internal Std (Ref 48), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

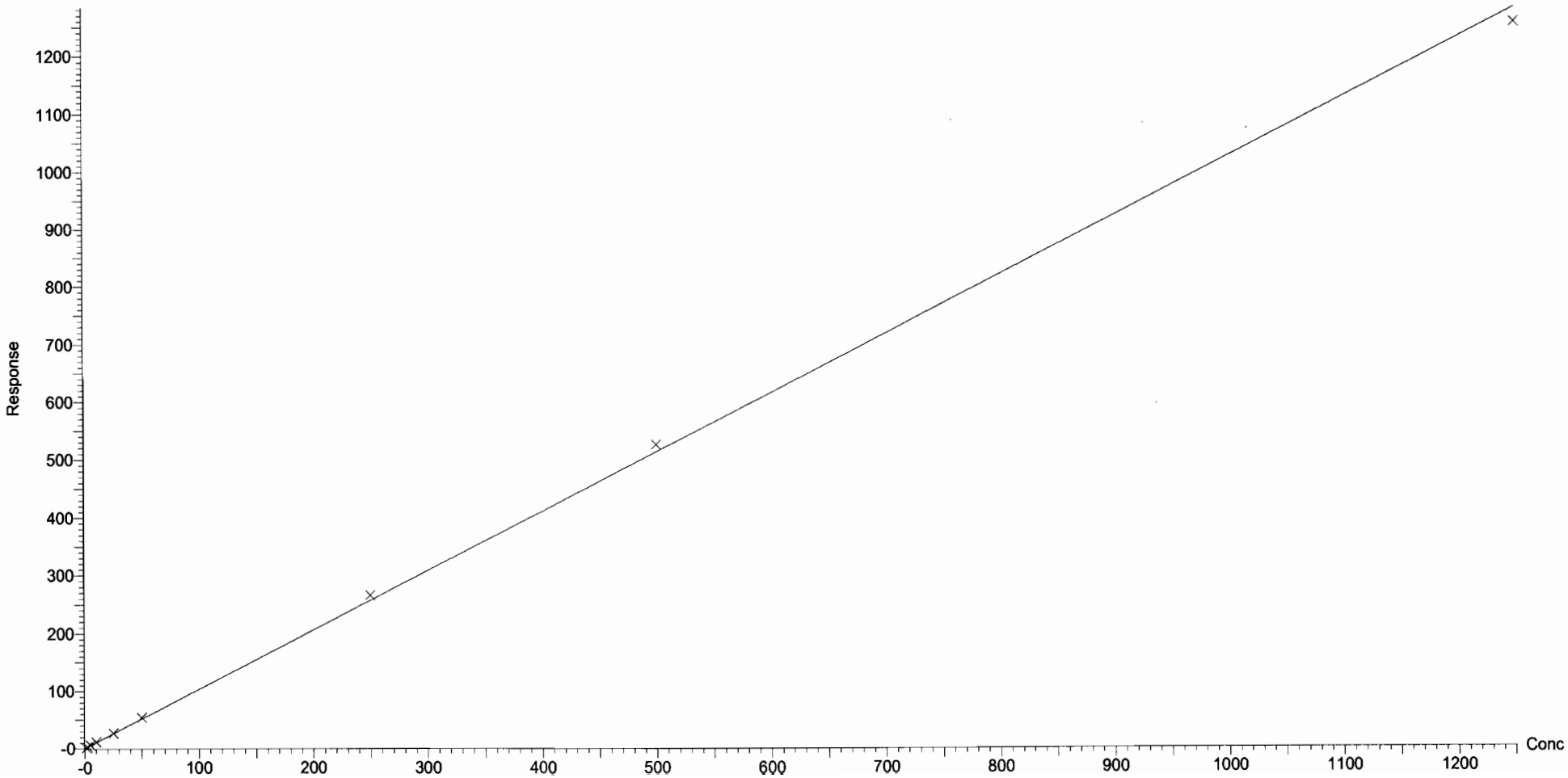
Compound name: PFODA
Correlation coefficient: r = 0.998537, r^2 = 0.997077
Calibration curve: 1.12504 * x + 0.153988
Response type: Internal Std (Ref 48), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

Compound name: N-MeFOSE
Correlation coefficient: r = 0.999653, r^2 = 0.999306
Calibration curve: 1.02661 * x + 0.421311
Response type: Internal Std (Ref 49), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

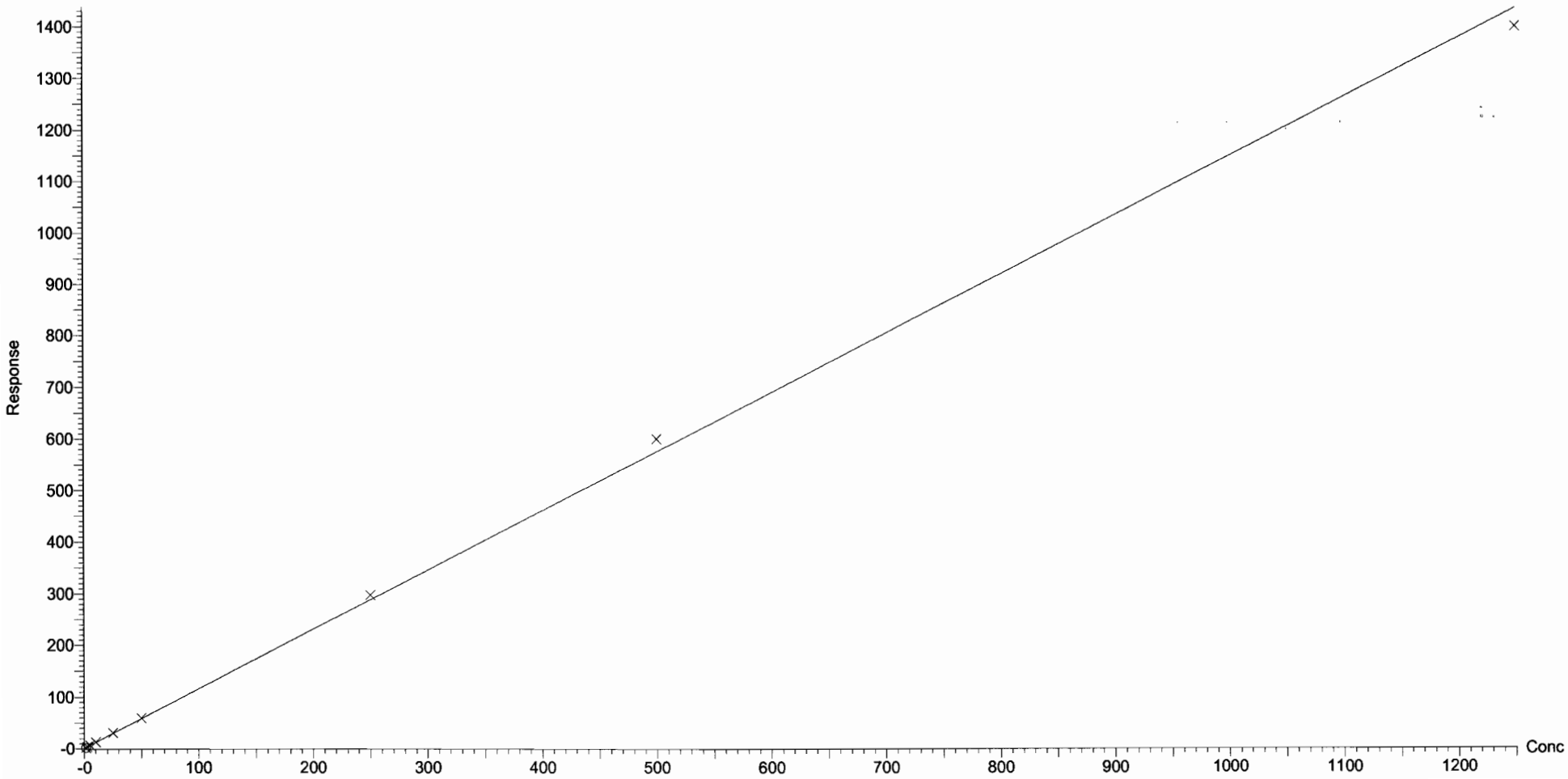


Vista Analytical Laboratory Q1

Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:14:31 Pacific Daylight Time

Compound name: N-EtFOSE
Correlation coefficient: r = 0.999481, r^2 = 0.998963
Calibration curve: 1.14913 * x + 1.24499
Response type: Internal Std (Ref 50), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Vista Analytical Laboratory

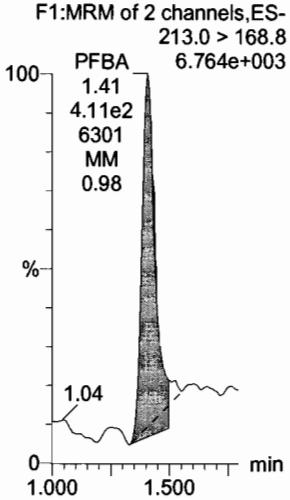
Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

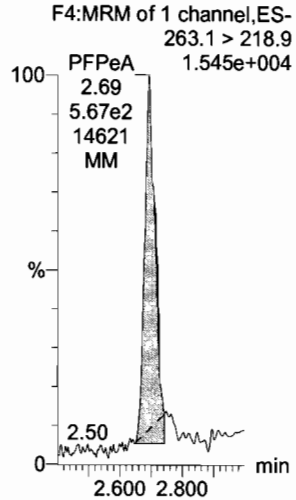
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 01 Aug 2017 09:55:07
Calibration: 01 Aug 2017 10:11:08

Name: 170731M2_2, Date: 01-Aug-2017, Time: 00:39:54, ID: ST170731M2-1 PFC CS-2 17G3107, Description: PFC CS-2 17G3107

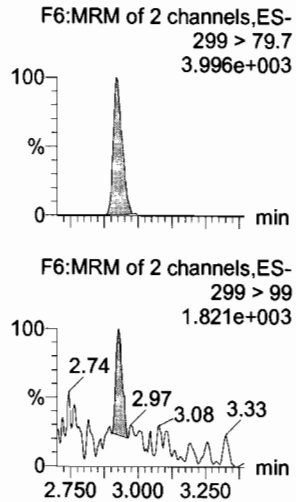
PFBA



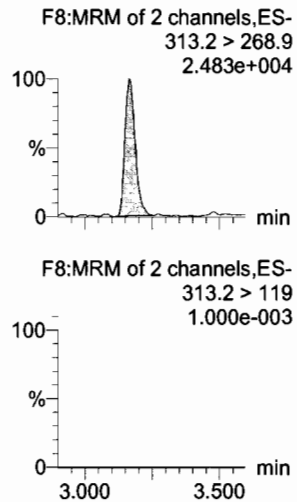
PFPeA



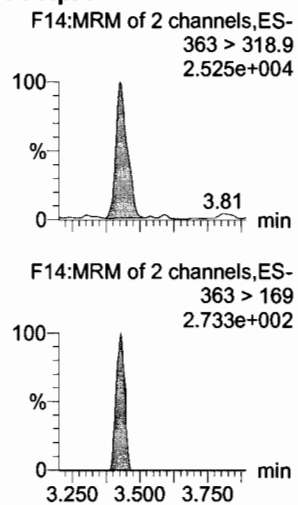
PFBS



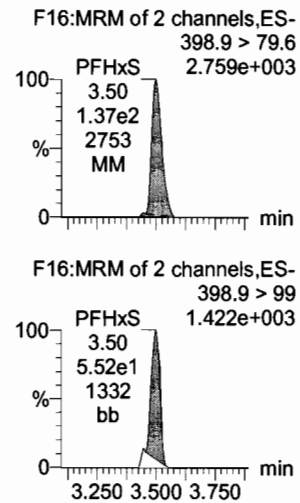
PFHxA



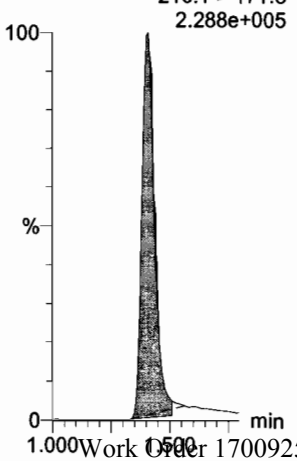
PFHpA



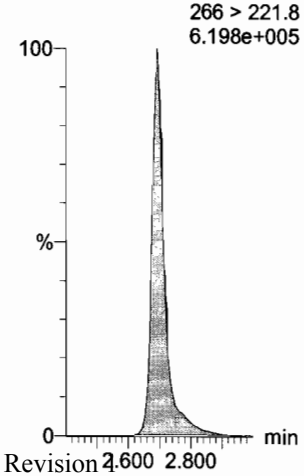
PFHxS



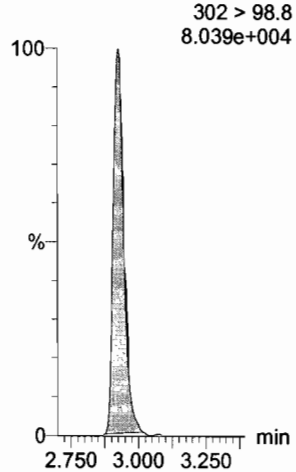
13C3-PFBA



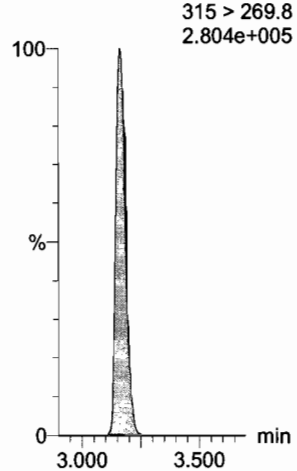
13C3-PFPeA



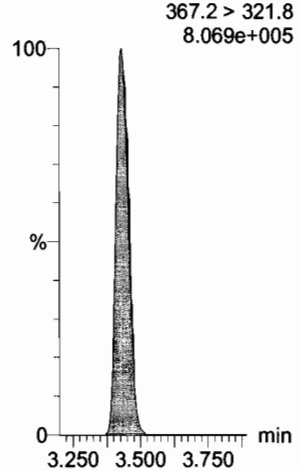
13C3-PFBS



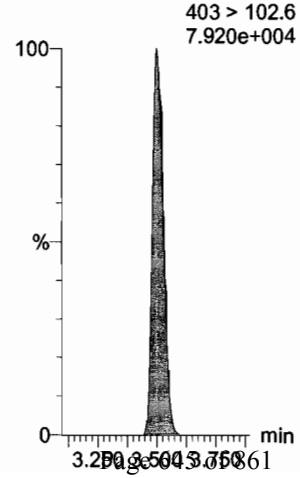
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS

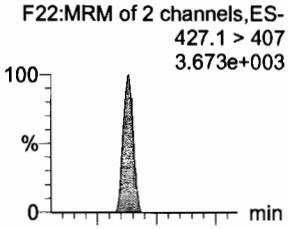


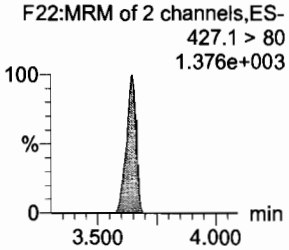
Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

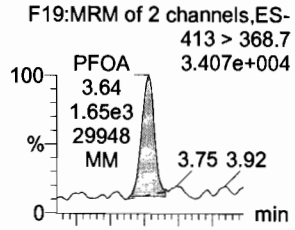
Name: 170731M2_2, Date: 01-Aug-2017, Time: 00:39:54, ID: ST170731M2-1 PFC CS-2 17G3107, Description: PFC CS-2 17G3107

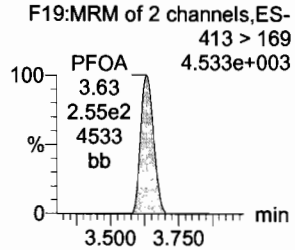
6:2 FTS



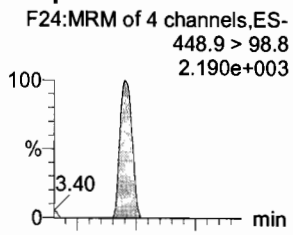


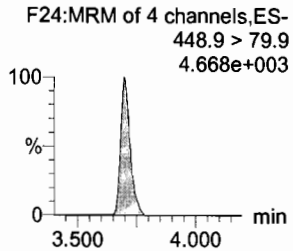
PFOA



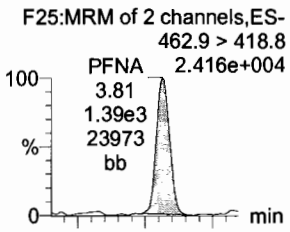


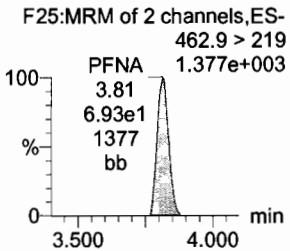
PFHpS



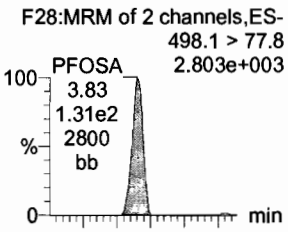


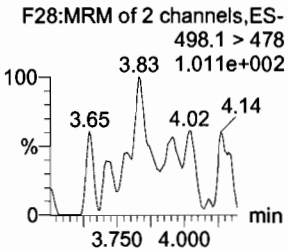
PFNA



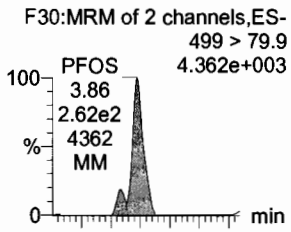


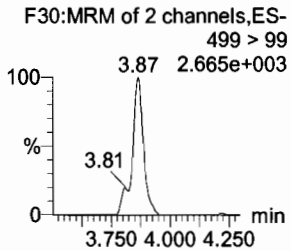
PFOSA



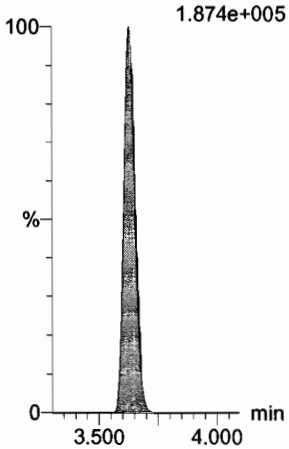


PFOS

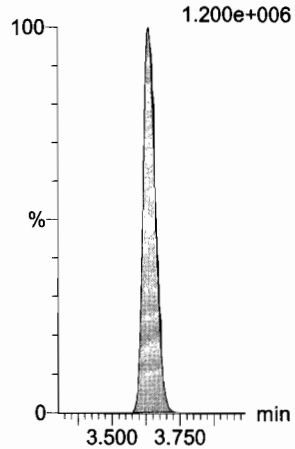




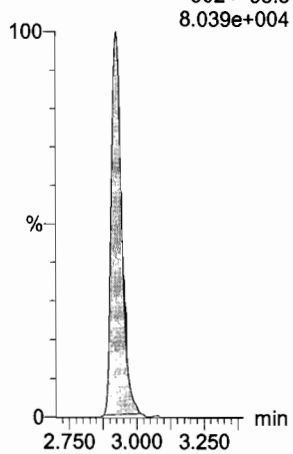
13C2-6:2 FTS



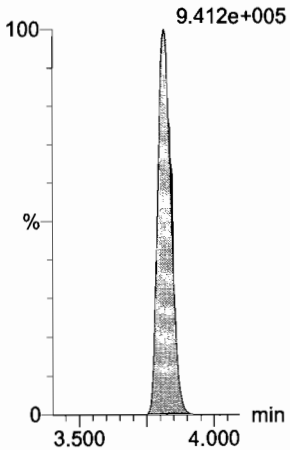
13C2-PFOA



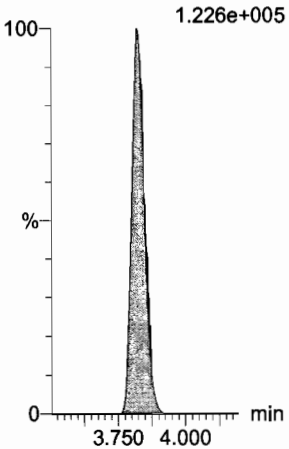
13C3-PFBS



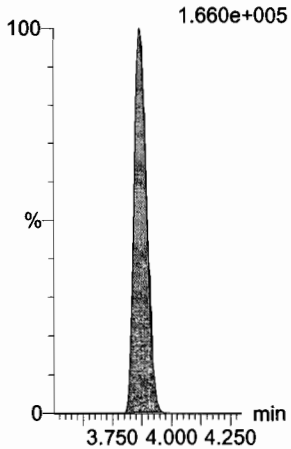
13C5-PFNA



13C8-PFOSA



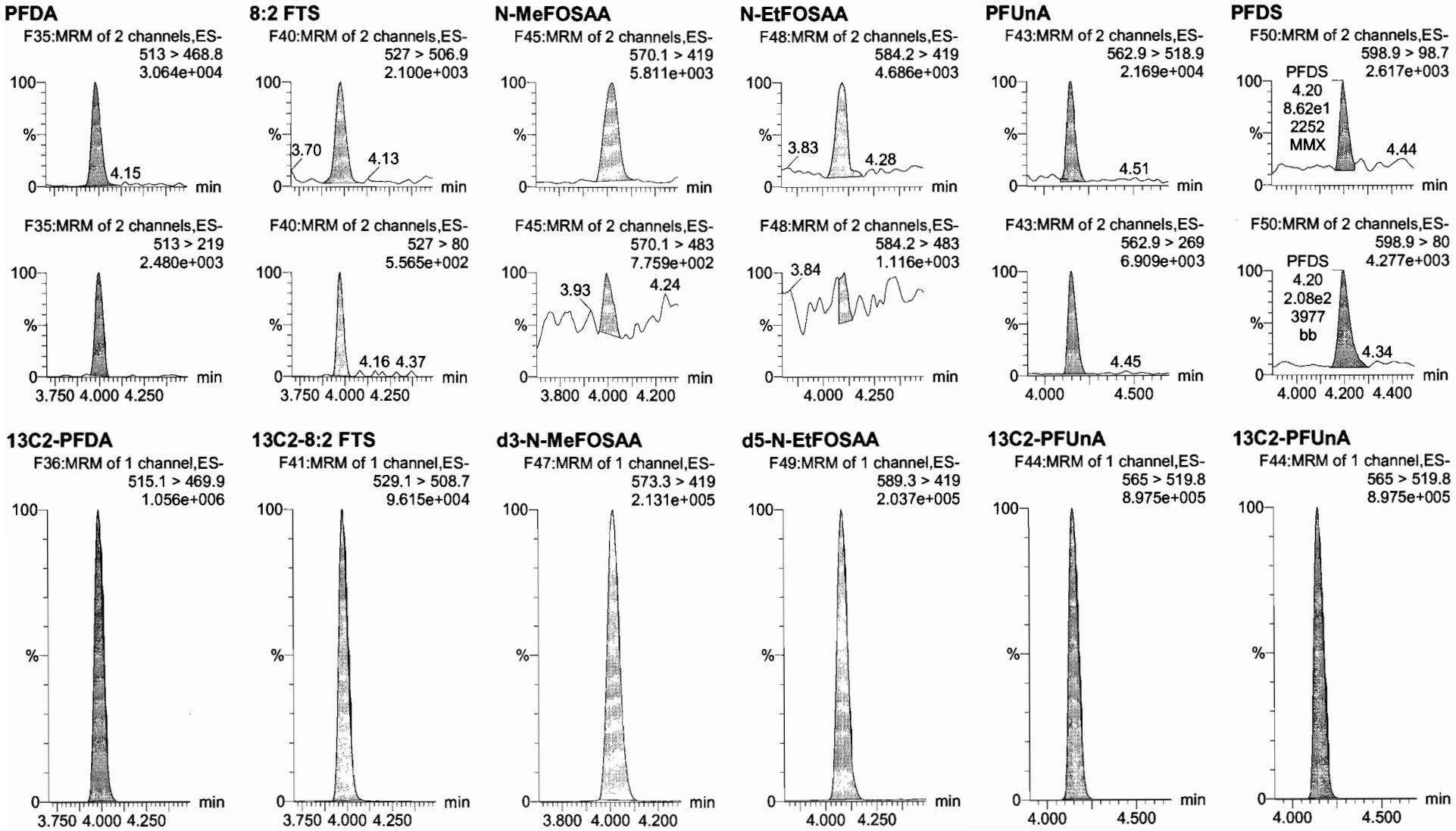
13C8-PFOS



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_2, Date: 01-Aug-2017, Time: 00:39:54, ID: ST170731M2-1 PFC CS-2 17G3107, Description: PFC CS-2 17G3107

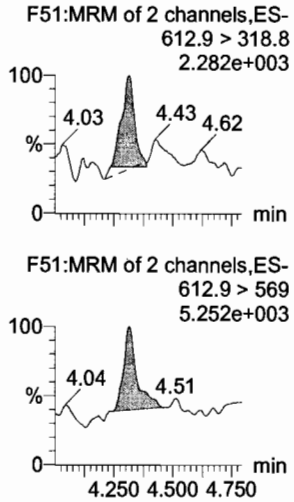


Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

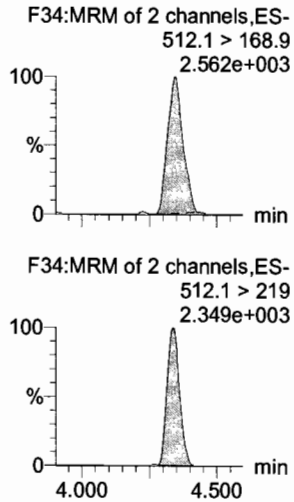
Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_2, Date: 01-Aug-2017, Time: 00:39:54, ID: ST170731M2-1 PFC CS-2 17G3107, Description: PFC CS-2 17G3107

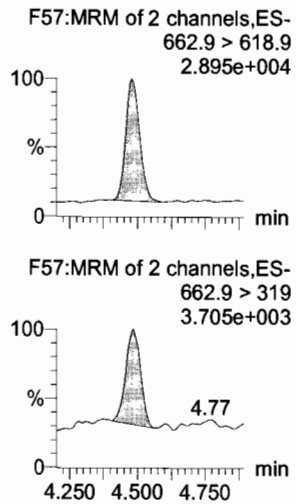
PFDoA



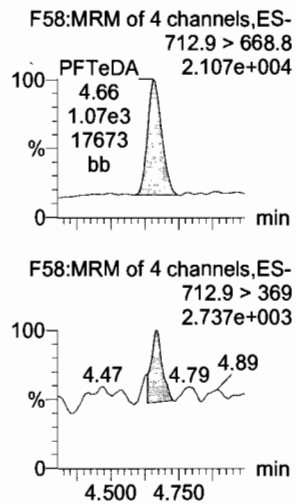
N-MeFOSA



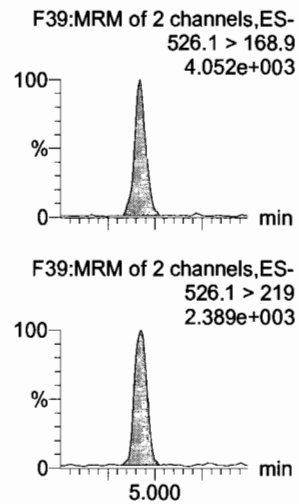
PFTrDA



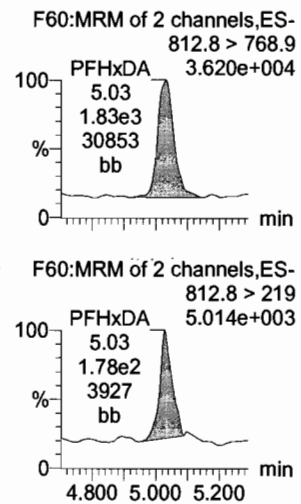
PFTeDA



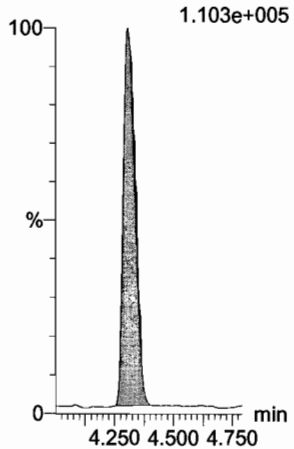
N-EtFOSA



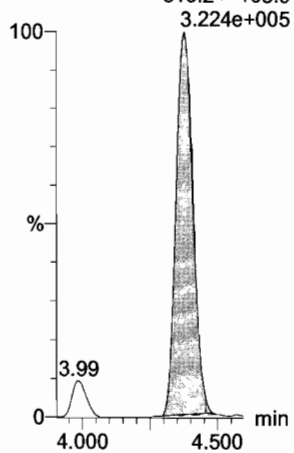
PFHxDA



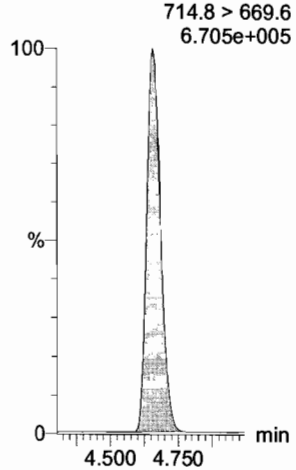
13C2-PFDoA



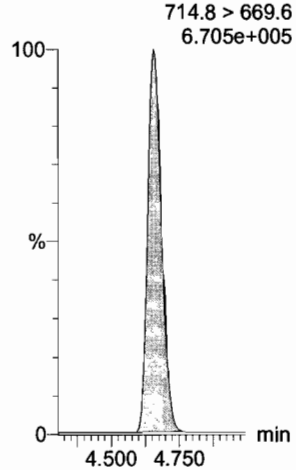
d3-N-MeFOSA



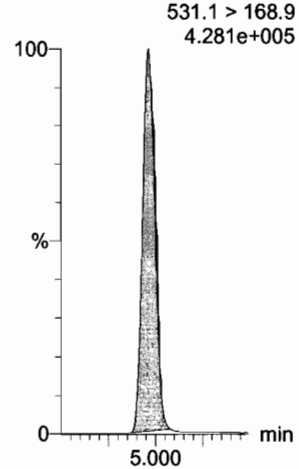
13C2-PFTeDA



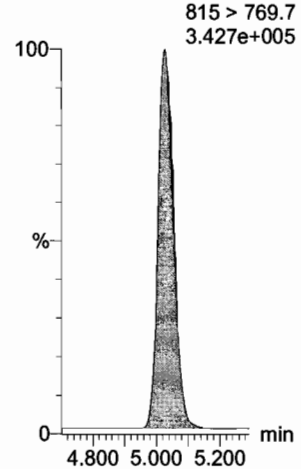
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



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Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
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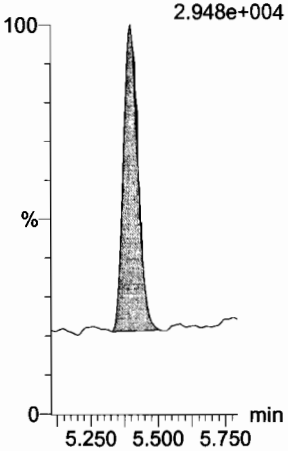
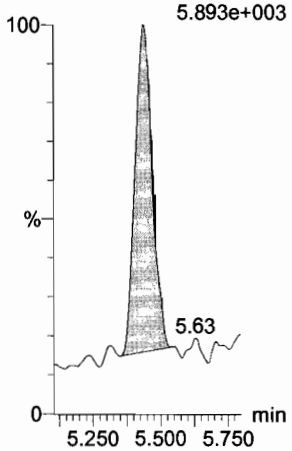
Name: 170731M2_2, Date: 01-Aug-2017, Time: 00:39:54, ID: ST170731M2-1 PFC CS-2 17G3107, Description: PFC CS-2 17G3107

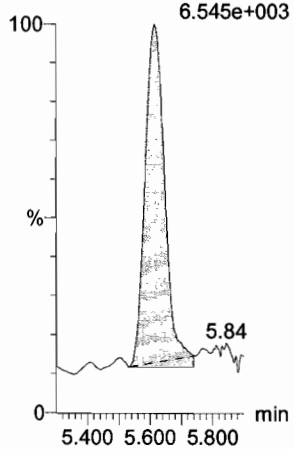
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
2.948e+004



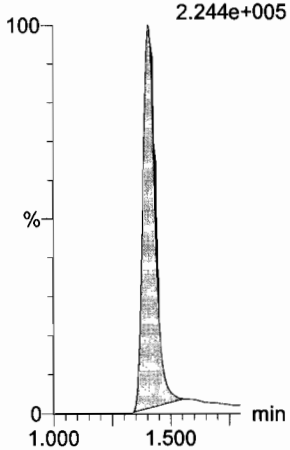
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
5.893e+003



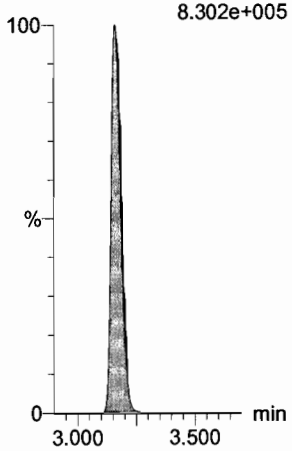
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
6.545e+003



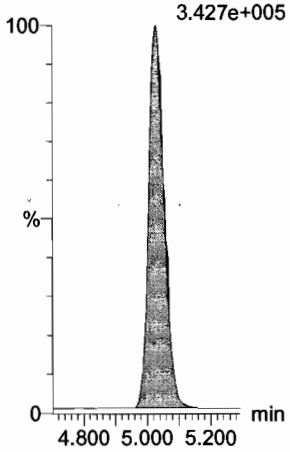
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.244e+005



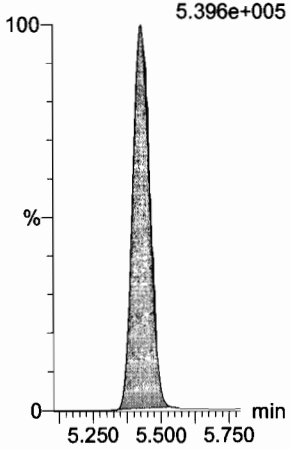
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
8.302e+005



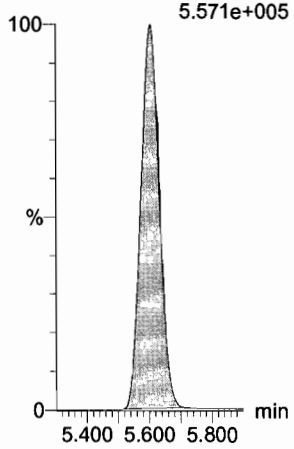
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
3.427e+005



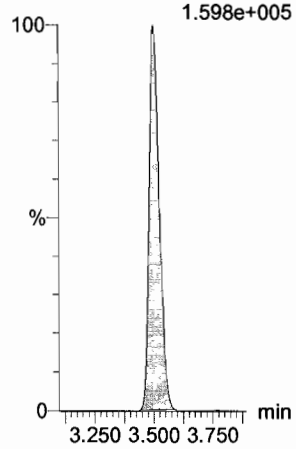
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
5.396e+005



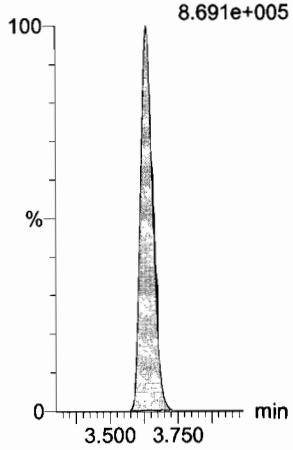
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
5.571e+005



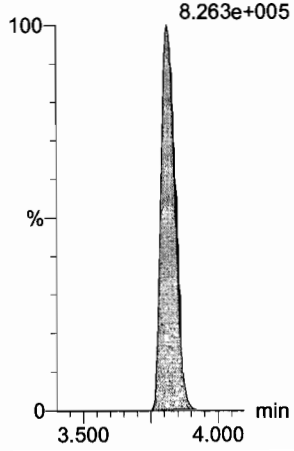
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.598e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
8.691e+005



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
8.263e+005



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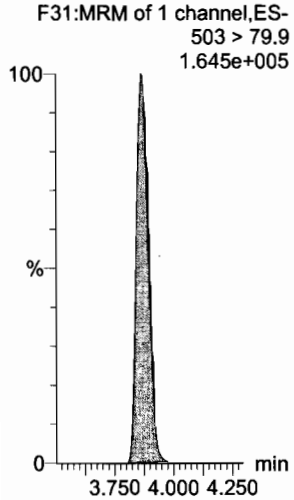
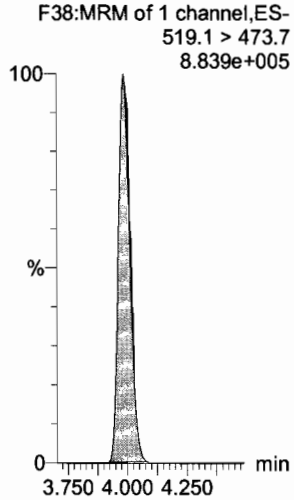
Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_2, Date: 01-Aug-2017, Time: 00:39:54, ID: ST170731M2-1 PFC CS-2 17G3107, Description: PFC CS-2 17G3107

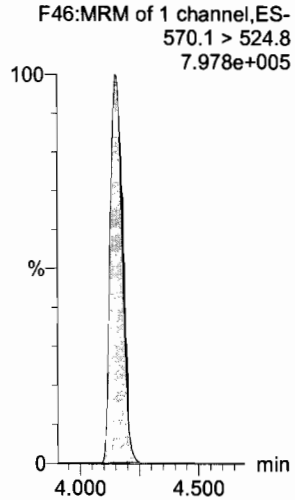
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
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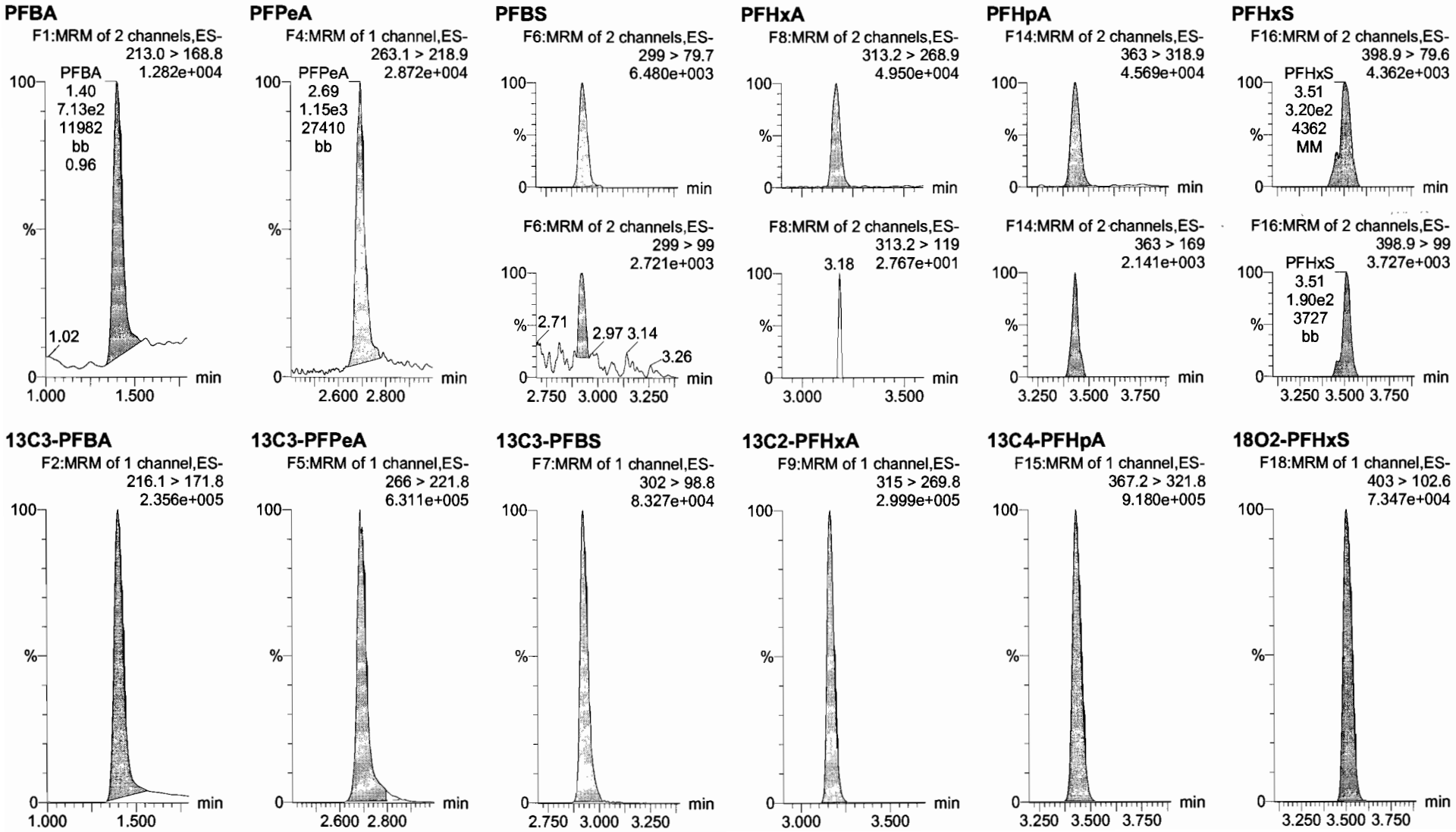
Name: 170731M2_3, Date: 01-Aug-2017, Time: 00:50:40, ID: ST170731M2-2 PFC CS-1 17G3108, Description: PFC CS-1 17G3108



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Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
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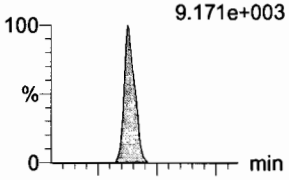
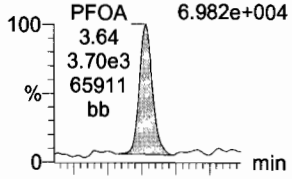
Name: 170731M2_3, Date: 01-Aug-2017, Time: 00:50:40, ID: ST170731M2-2 PFC CS-1 17G3108, Description: PFC CS-1 17G3108

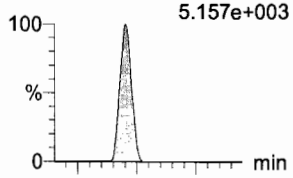
6:2 FTS
F22:MRM of 2 channels,ES-
427.1 > 407
9.171e+003



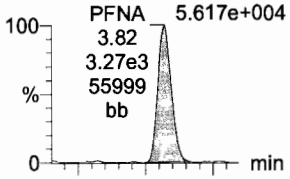
PFOA
F19:MRM of 2 channels,ES-
413 > 368.7
6.982e+004



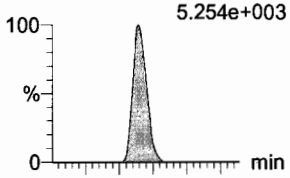
PFHpS
F24:MRM of 4 channels,ES-
448.9 > 98.8
5.157e+003



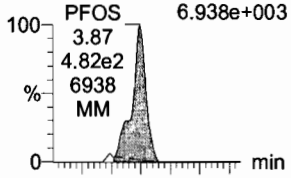
PFNA
F25:MRM of 2 channels,ES-
462.9 > 418.8
5.617e+004



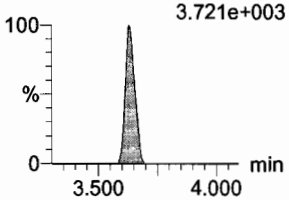
PFOSA
F28:MRM of 2 channels,ES-
498.1 > 77.8
5.254e+003



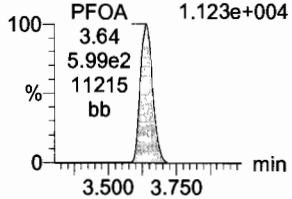
PFOS
F30:MRM of 2 channels,ES-
499 > 79.9
6.938e+003



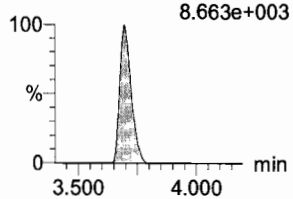
F22:MRM of 2 channels,ES-
427.1 > 80
3.721e+003



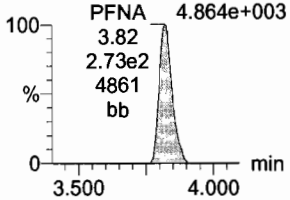
F19:MRM of 2 channels,ES-
413 > 169
1.123e+004



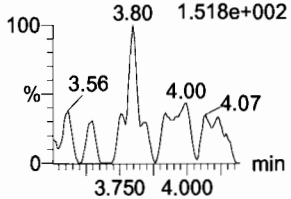
F24:MRM of 4 channels,ES-
448.9 > 79.9
8.663e+003



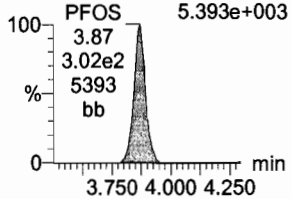
F25:MRM of 2 channels,ES-
462.9 > 219
4.864e+003



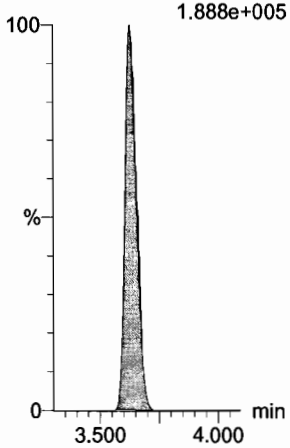
F28:MRM of 2 channels,ES-
498.1 > 478
1.518e+002



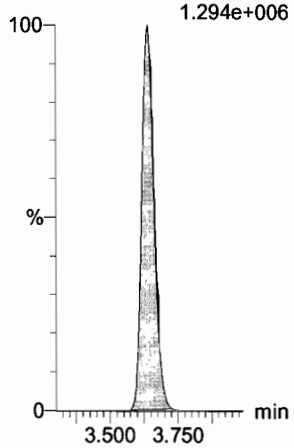
F30:MRM of 2 channels,ES-
499 > 99
5.393e+003



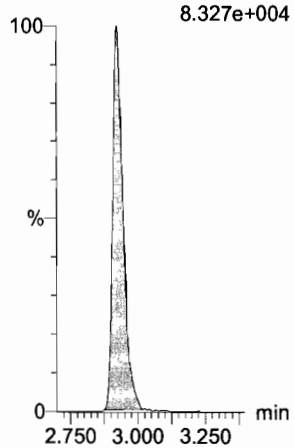
13C2-6:2 FTS
F23:MRM of 1 channel,ES-
429.1 > 408.9
1.888e+005



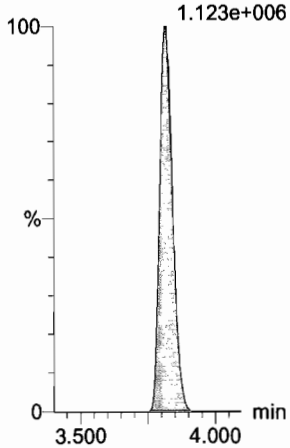
13C2-PFOA
F20:MRM of 1 channel,ES-
414.9 > 369.7
1.294e+006



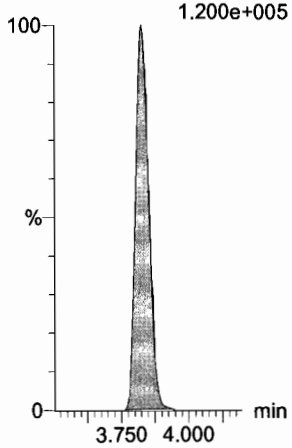
13C3-PFBS
F7:MRM of 1 channel,ES-
302 > 98.8
8.327e+004



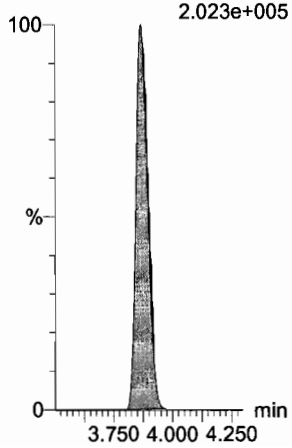
13C5-PFNA
F26:MRM of 1 channel,ES-
468.2 > 422.9
1.123e+006



13C8-PFOSA
F32:MRM of 1 channel,ES-
506.1 > 77.7
1.200e+005



13C8-PFOS
F33:MRM of 1 channel,ES-
507 > 79.9
2.023e+005



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Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
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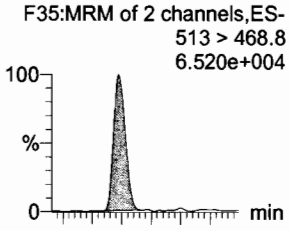
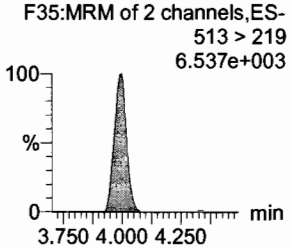
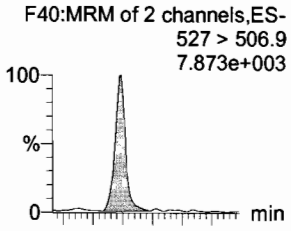
Name: 170731M2_3, Date: 01-Aug-2017, Time: 00:50:40, ID: ST170731M2-2 PFC CS-1 17G3108, Description: PFC CS-1 17G3108

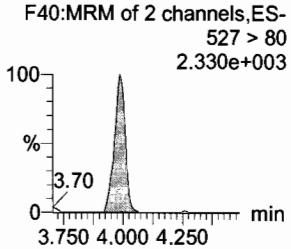
PFDA



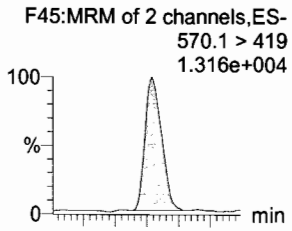


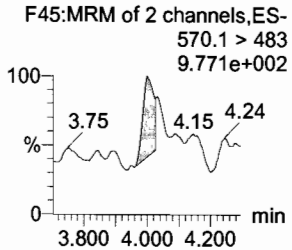
8:2 FTS





N-MeFOSAA





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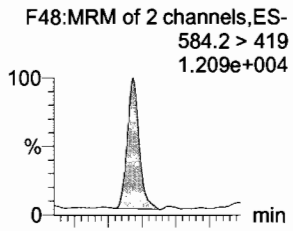
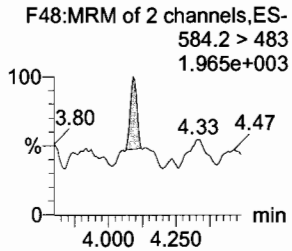
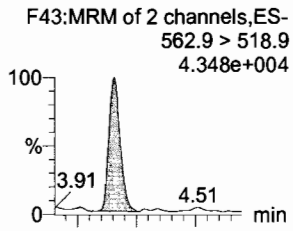
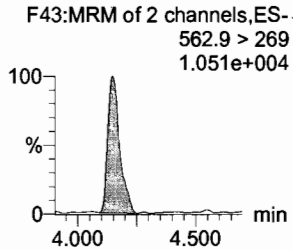


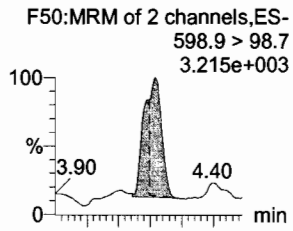


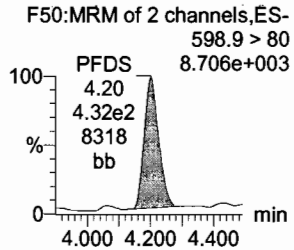
PFUnA



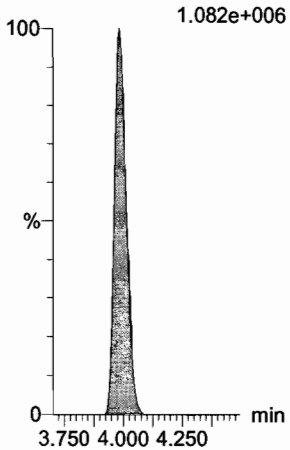


PFDS

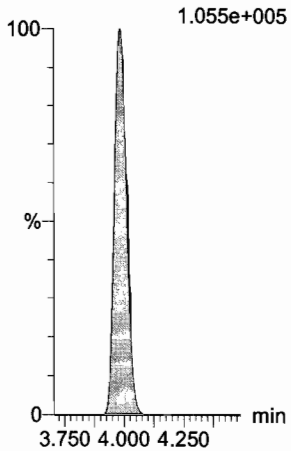




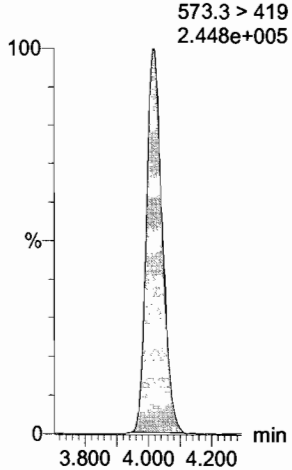
13C2-PFDA



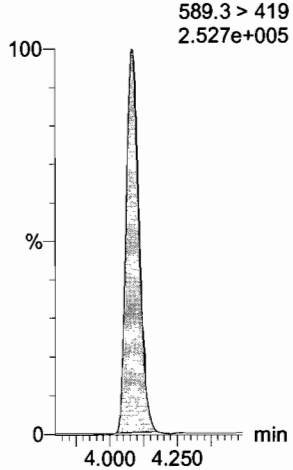
13C2-8:2 FTS



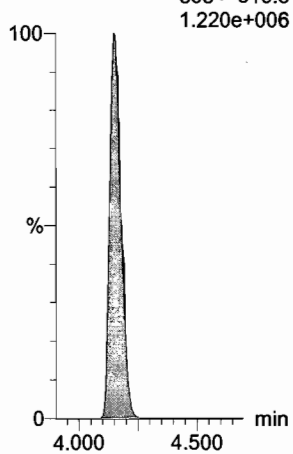
d3-N-MeFOSAA



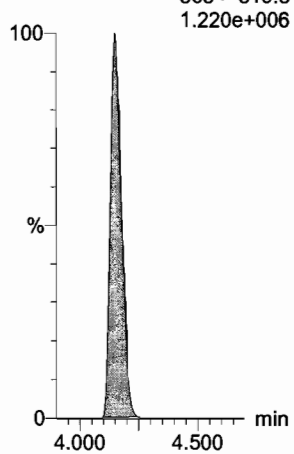
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



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Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
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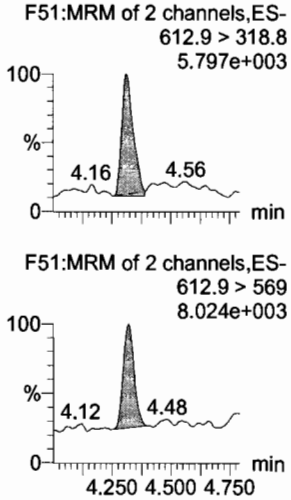
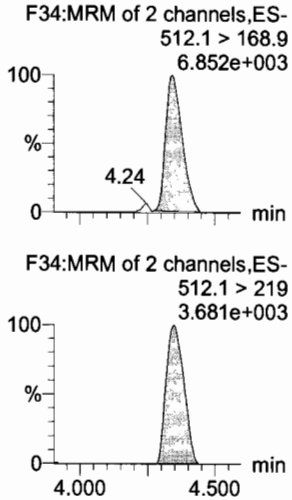
Name: 170731M2_3, Date: 01-Aug-2017, Time: 00:50:40, ID: ST170731M2-2 PFC CS-1 17G3108, Description: PFC CS-1 17G3108

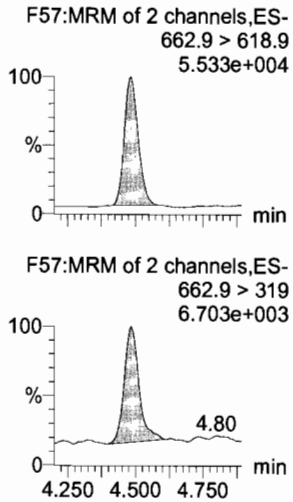
PFDoA



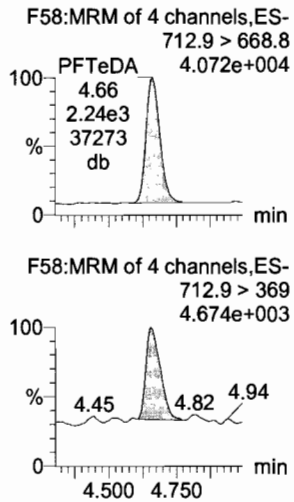
N-MeFOSA



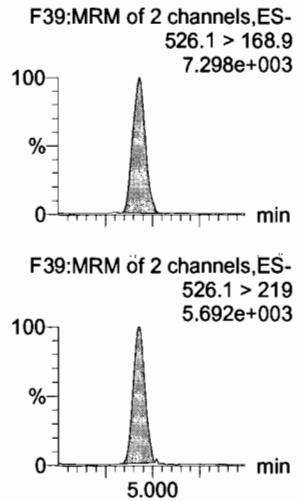
PFTrDA



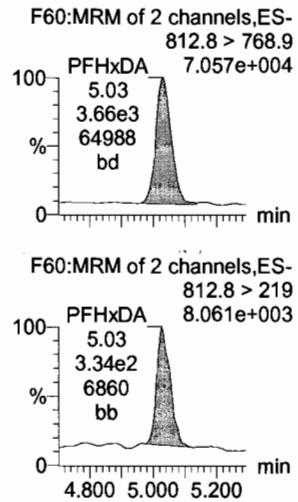
PFTeDA



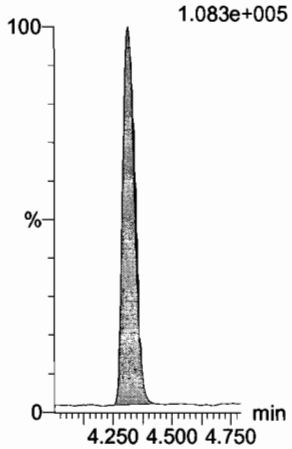
N-EtFOSA



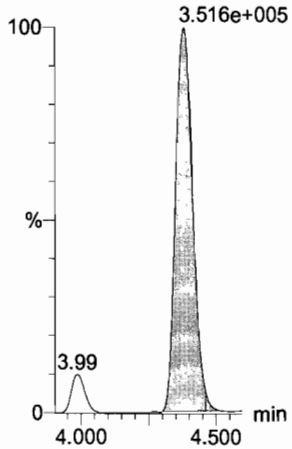
PFHxDA



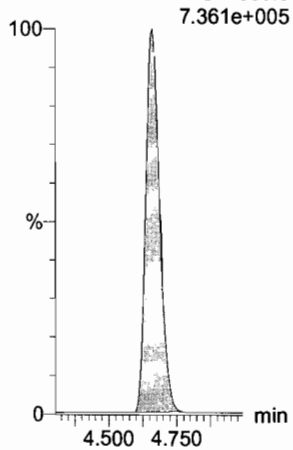
13C2-PFDoA



d3-N-MeFOSA



13C2-PFTeDA



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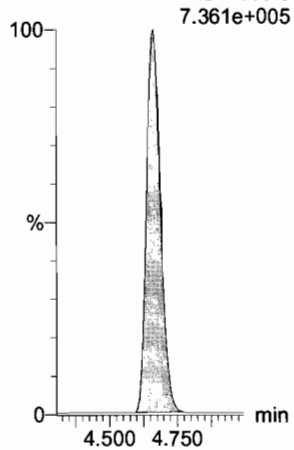
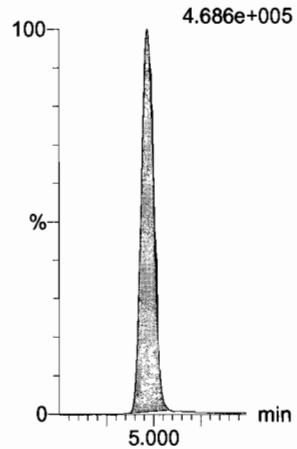
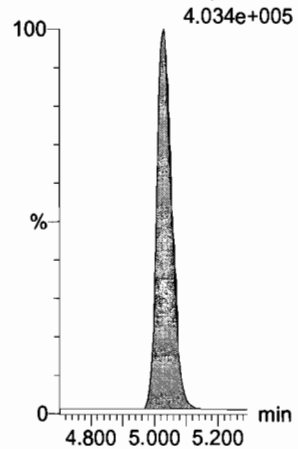


d5-N-ETFOSA



13C2-PFHxDA



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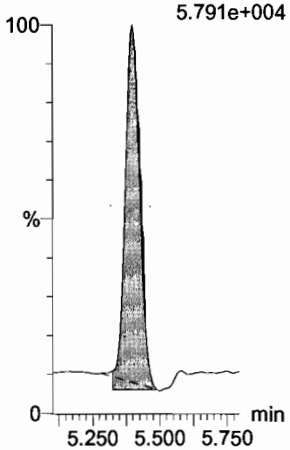
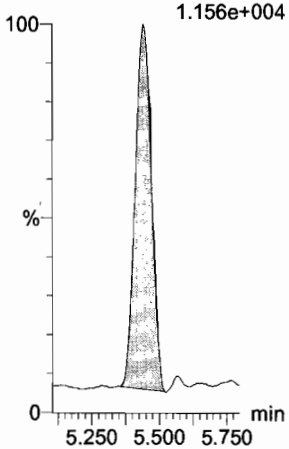
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_3, Date: 01-Aug-2017, Time: 00:50:40, ID: ST170731M2-2 PFC CS-1 17G3108, Description: PFC CS-1 17G3108

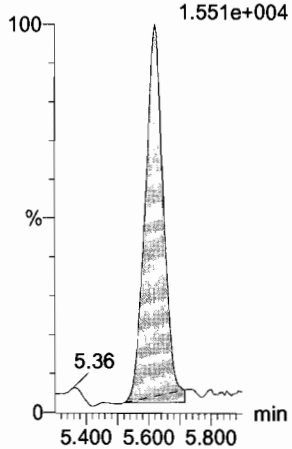
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
5.791e+004



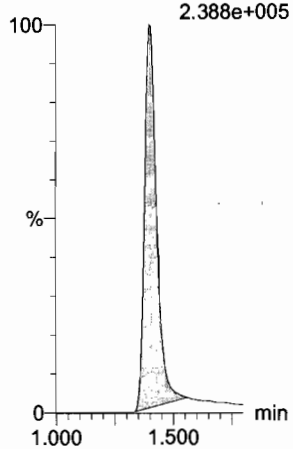
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
1.156e+004



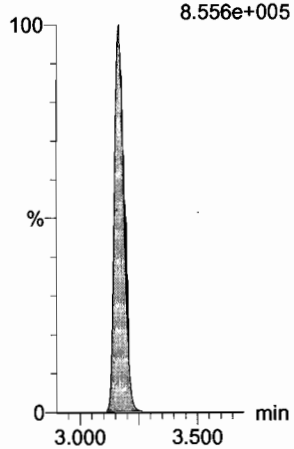
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
1.551e+004



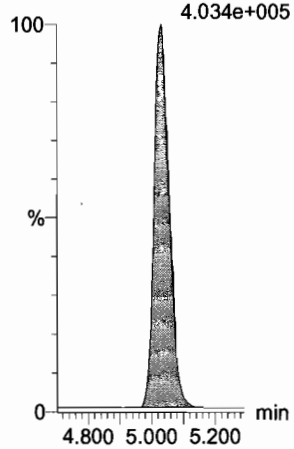
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.388e+005



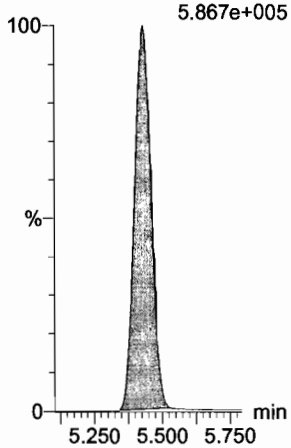
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
8.556e+005



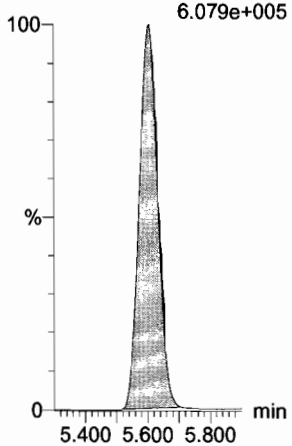
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.034e+005



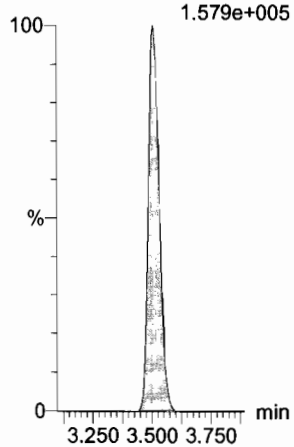
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
5.867e+005



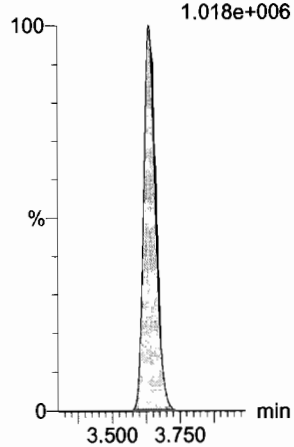
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
6.079e+005



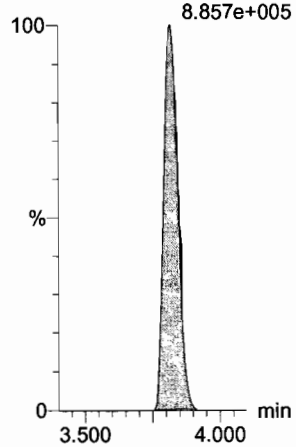
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.579e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.018e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
8.857e+005



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Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
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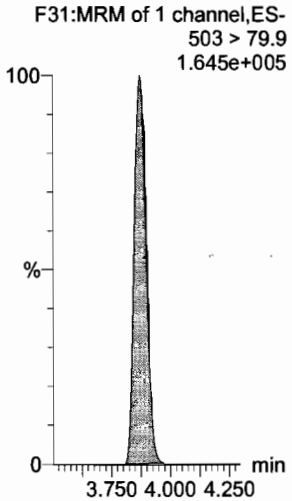
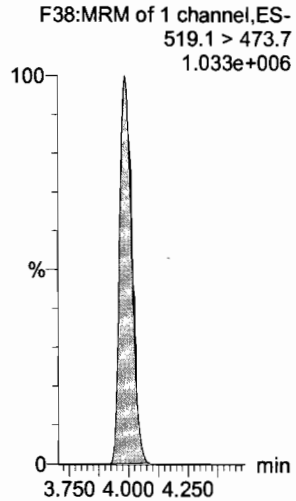
Name: 170731M2_3, Date: 01-Aug-2017, Time: 00:50:40, ID: ST170731M2-2 PFC CS-1 17G3108, Description: PFC CS-1 17G3108

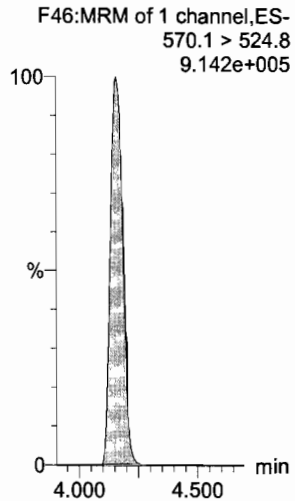
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
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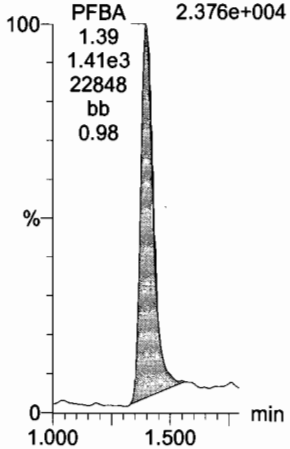
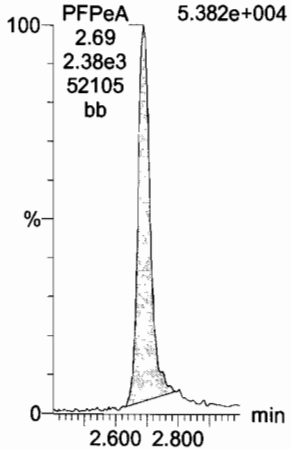
Name: 170731M2_4, Date: 01-Aug-2017, Time: 01:01:18, ID: ST170731M2-3 PFC CS0 17G3109, Description: PFC CS0 17G3109

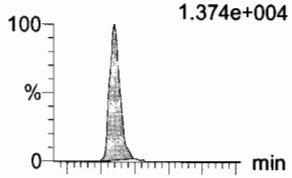
PFBA
F1:MRM of 2 channels,ES-
213.0 > 168.8
2.376e+004



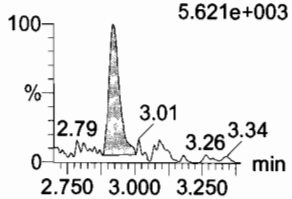
PFPeA
F4:MRM of 1 channel,ES-
263.1 > 218.9
5.382e+004



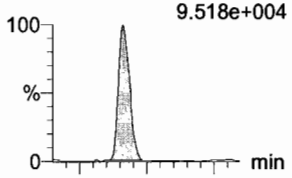
PFBS
F6:MRM of 2 channels,ES-
299 > 79.7
1.374e+004



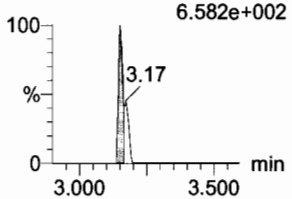
F6:MRM of 2 channels,ES-
299 > 99
5.621e+003



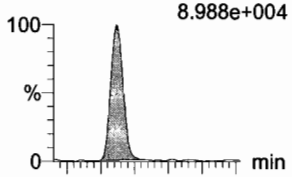
PFHxA
F8:MRM of 2 channels,ES-
313.2 > 268.9
9.518e+004



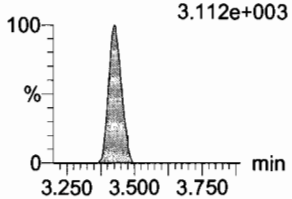
F8:MRM of 2 channels,ES-
313.2 > 119
6.582e+002



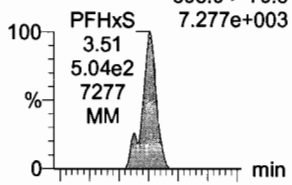
PFHpA
F14:MRM of 2 channels,ES-
363 > 318.9
8.988e+004



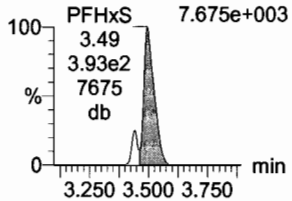
F14:MRM of 2 channels,ES-
363 > 169
3.112e+003



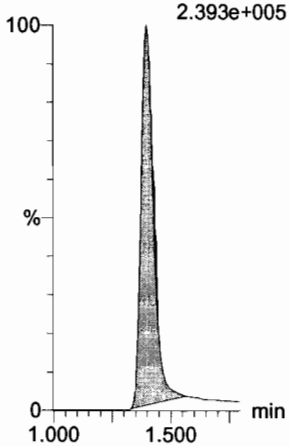
PFHxS
F16:MRM of 2 channels,ES-
398.9 > 79.6
7.277e+003



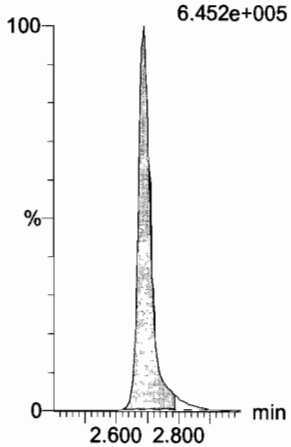
F16:MRM of 2 channels,ES-
398.9 > 99
7.675e+003



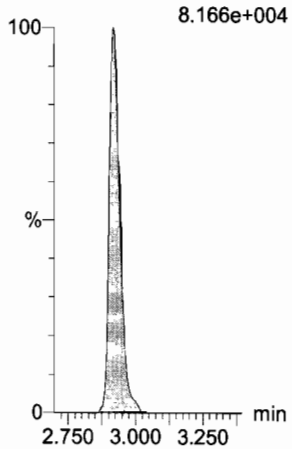
13C3-PFBA
F2:MRM of 1 channel,ES-
216.1 > 171.8
2.393e+005



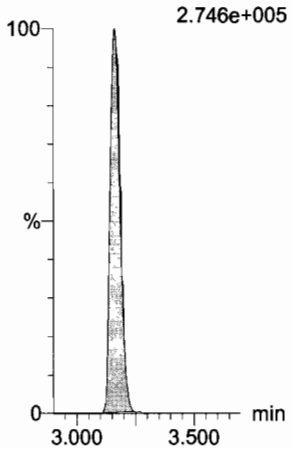
13C3-PFPeA
F5:MRM of 1 channel,ES-
266 > 221.8
6.452e+005



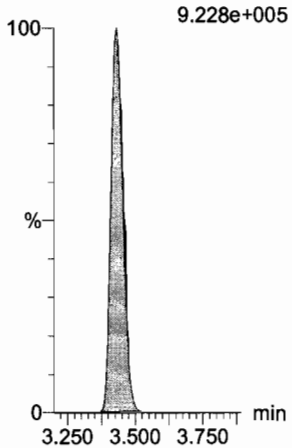
13C3-PFBS
F7:MRM of 1 channel,ES-
302 > 98.8
8.166e+004



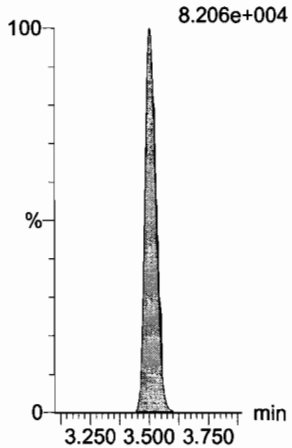
13C2-PFHxA
F9:MRM of 1 channel,ES-
315 > 269.8
2.746e+005



13C4-PFHpA
F15:MRM of 1 channel,ES-
367.2 > 321.8
9.228e+005



18O2-PFHxS
F18:MRM of 1 channel,ES-
403 > 102.6
8.206e+004



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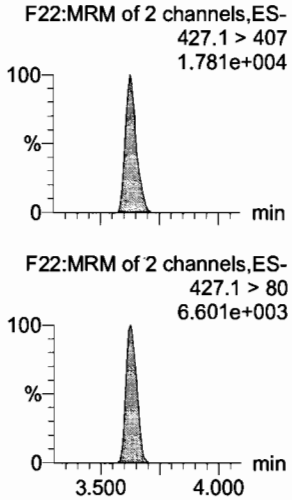
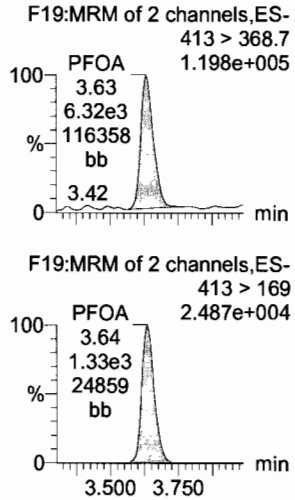
Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_4, Date: 01-Aug-2017, Time: 01:01:18, ID: ST170731M2-3 PFC CS0 17G3109, Description: PFC CS0 17G3109

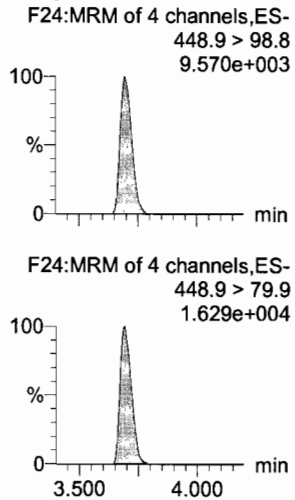
6:2 FTS



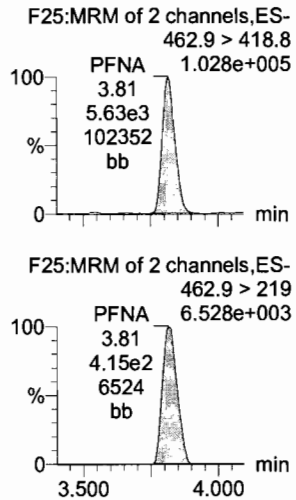
PFOA



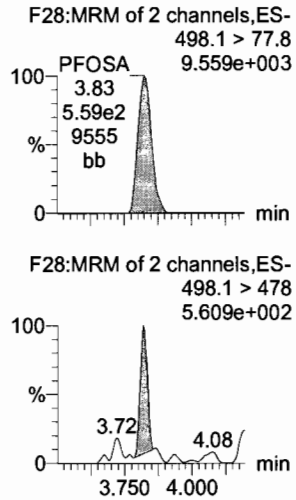
PFHpS



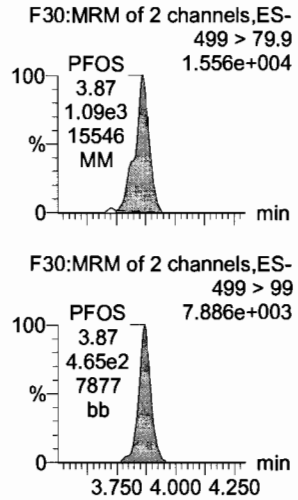
PFNA



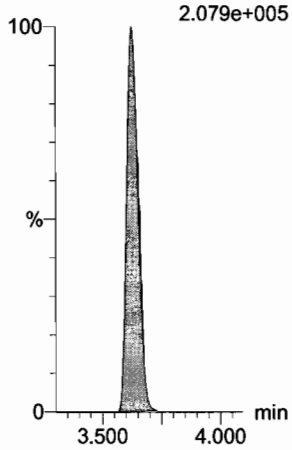
PFOSA



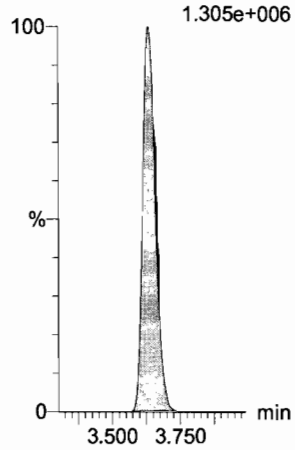
PFOS



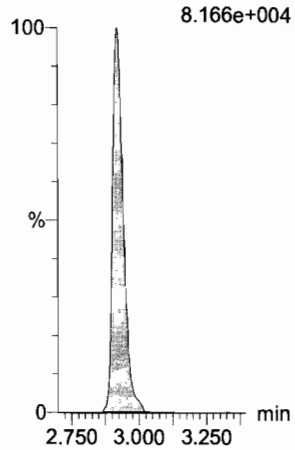
13C2-6:2 FTS



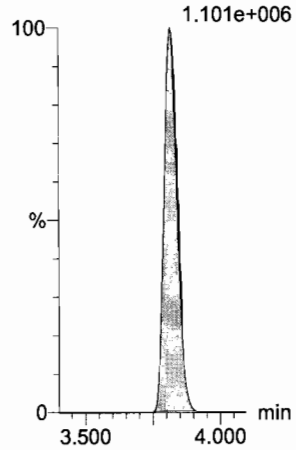
13C2-PFOA



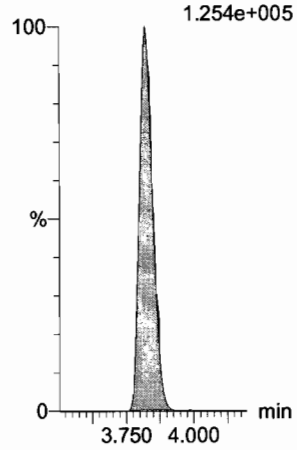
13C3-PFBS



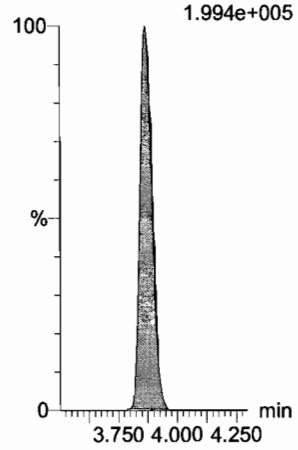
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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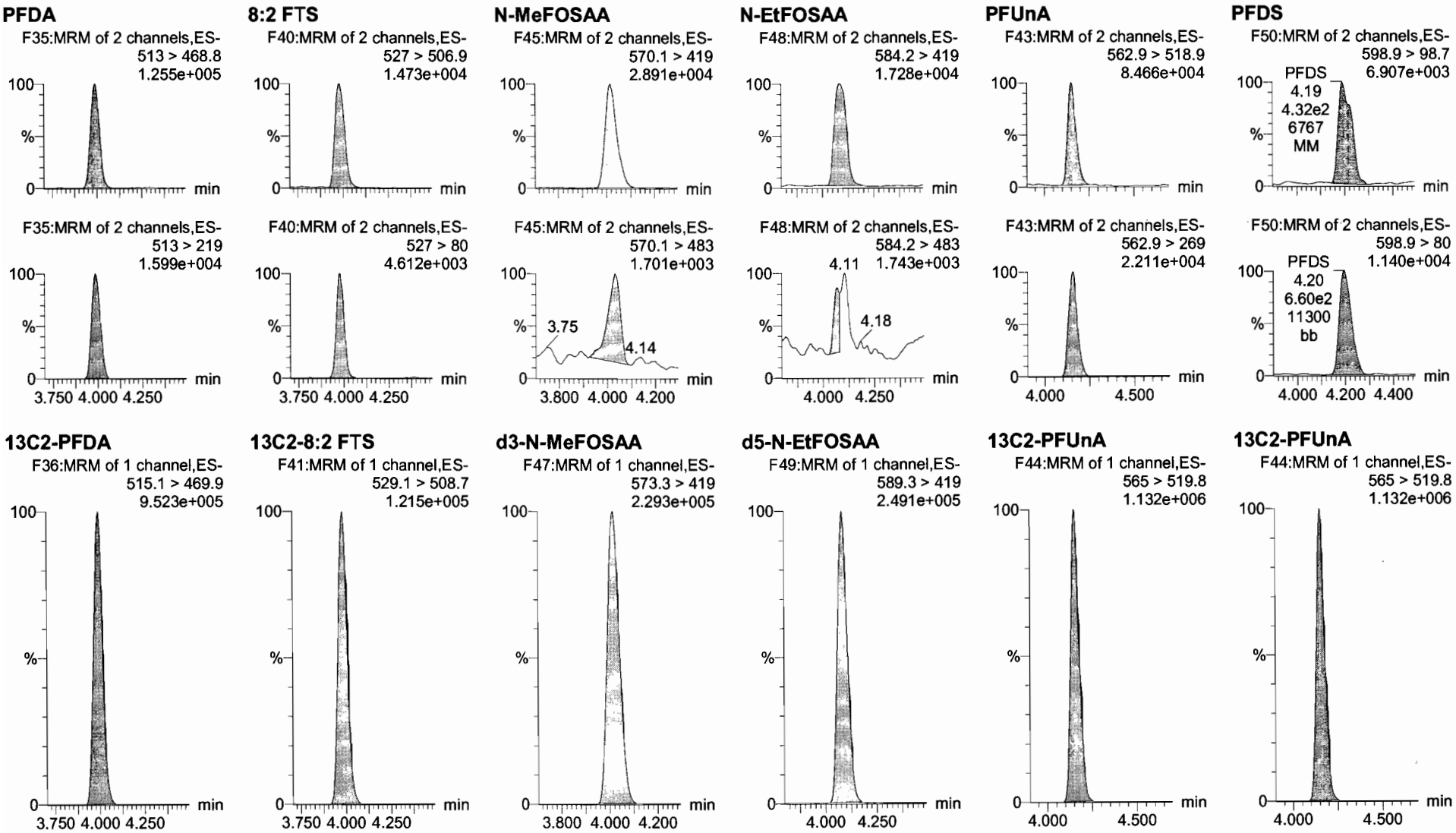
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_4, Date: 01-Aug-2017, Time: 01:01:18, ID: ST170731M2-3 PFC CS0 17G3109, Description: PFC CS0 17G3109



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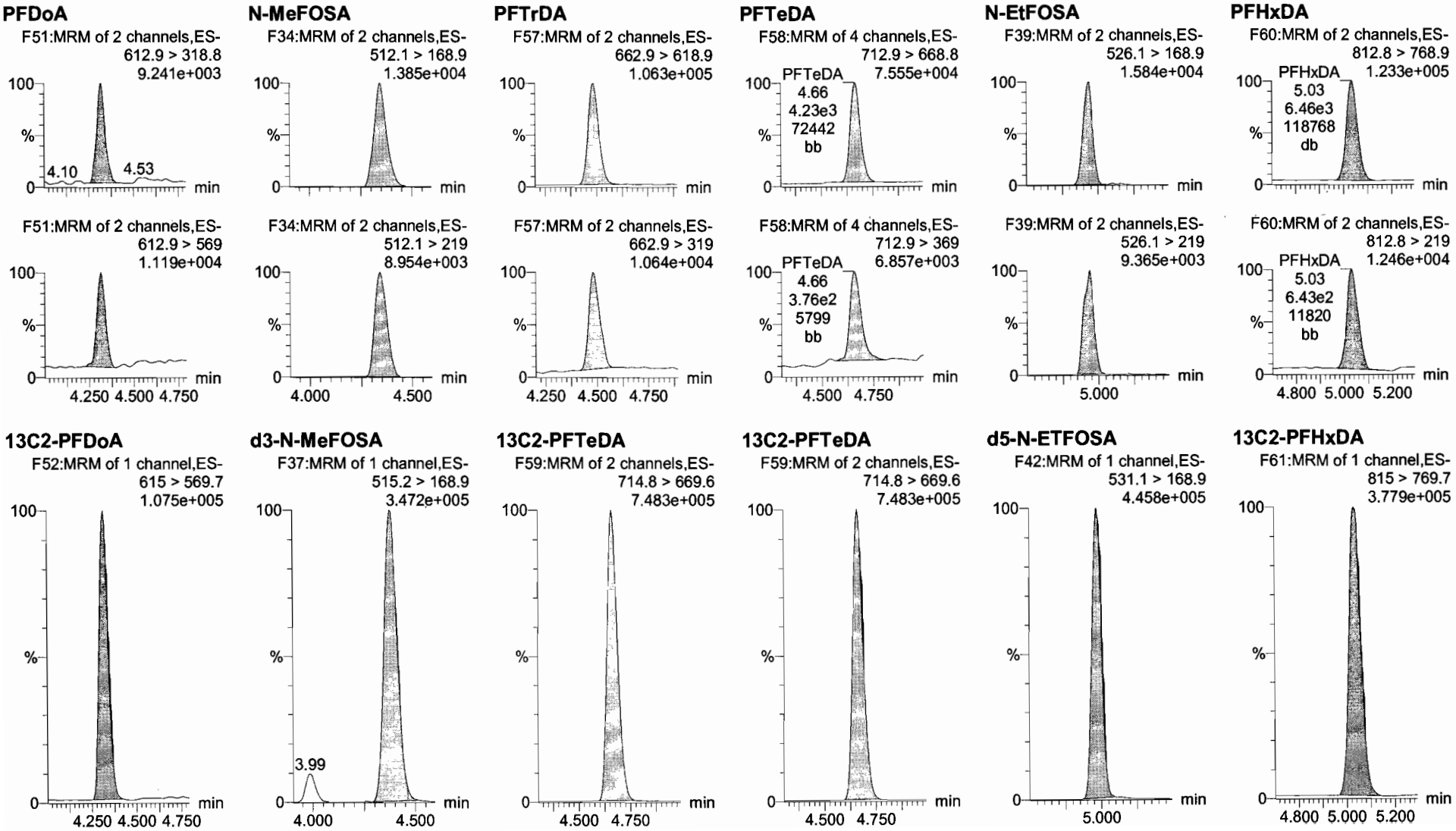
Name: 170731M2_4, Date: 01-Aug-2017, Time: 01:01:18, ID: ST170731M2-3 PFC CS0 17G3109, Description: PFC CS0 17G3109



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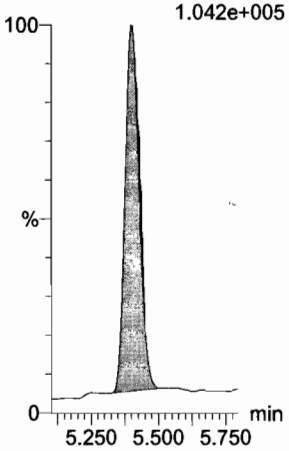
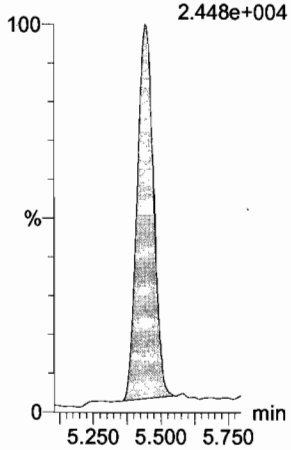
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_4, Date: 01-Aug-2017, Time: 01:01:18, ID: ST170731M2-3 PFC CS0 17G3109, Description: PFC CS0 17G3109

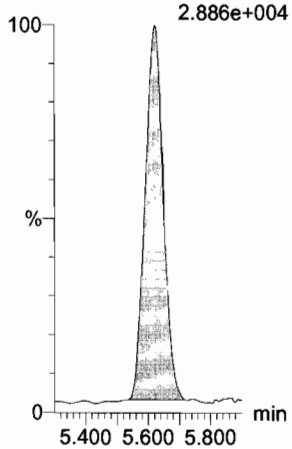
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
1.042e+005



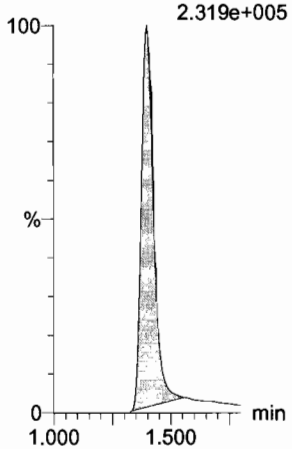
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
2.448e+004



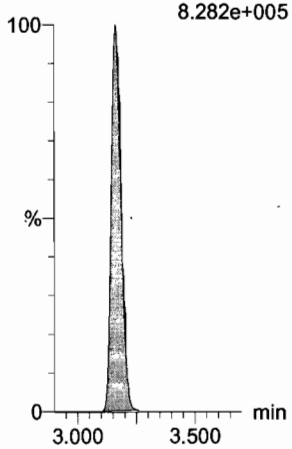
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
2.886e+004



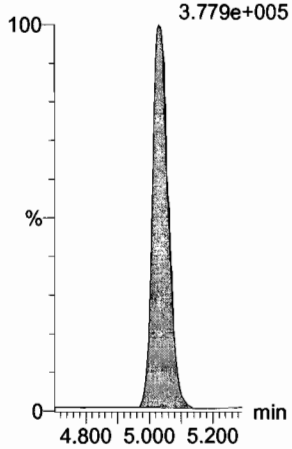
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.319e+005



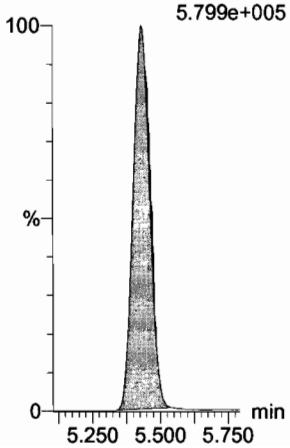
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
8.282e+005



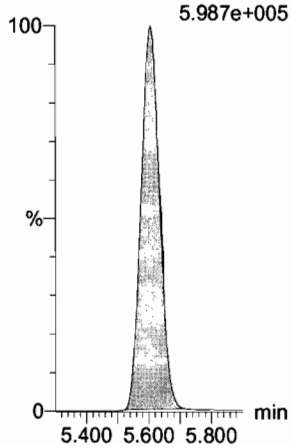
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
3.779e+005



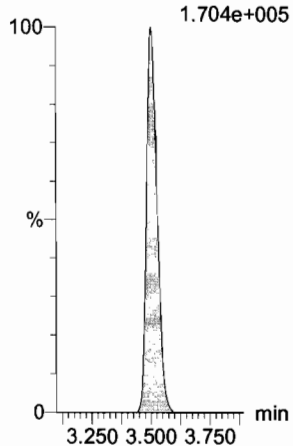
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
5.799e+005



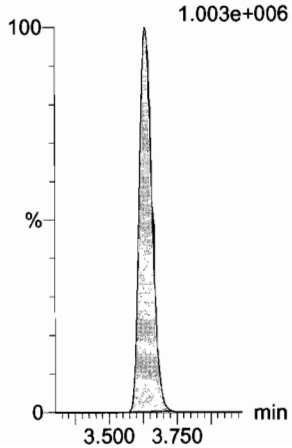
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
5.987e+005



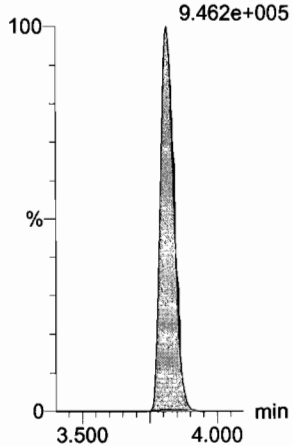
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.704e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.003e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
9.462e+005



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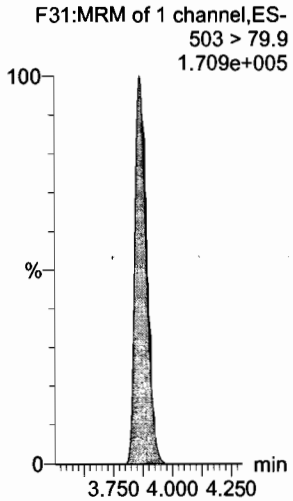
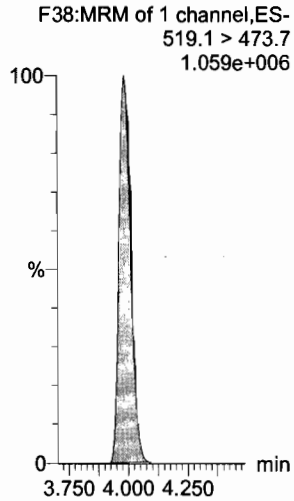
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_4, Date: 01-Aug-2017, Time: 01:01:18, ID: ST170731M2-3 PFC CS0 17G3109, Description: PFC CS0 17G3109

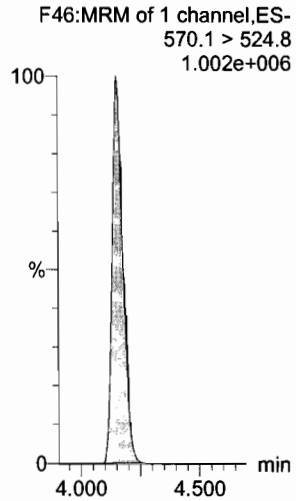
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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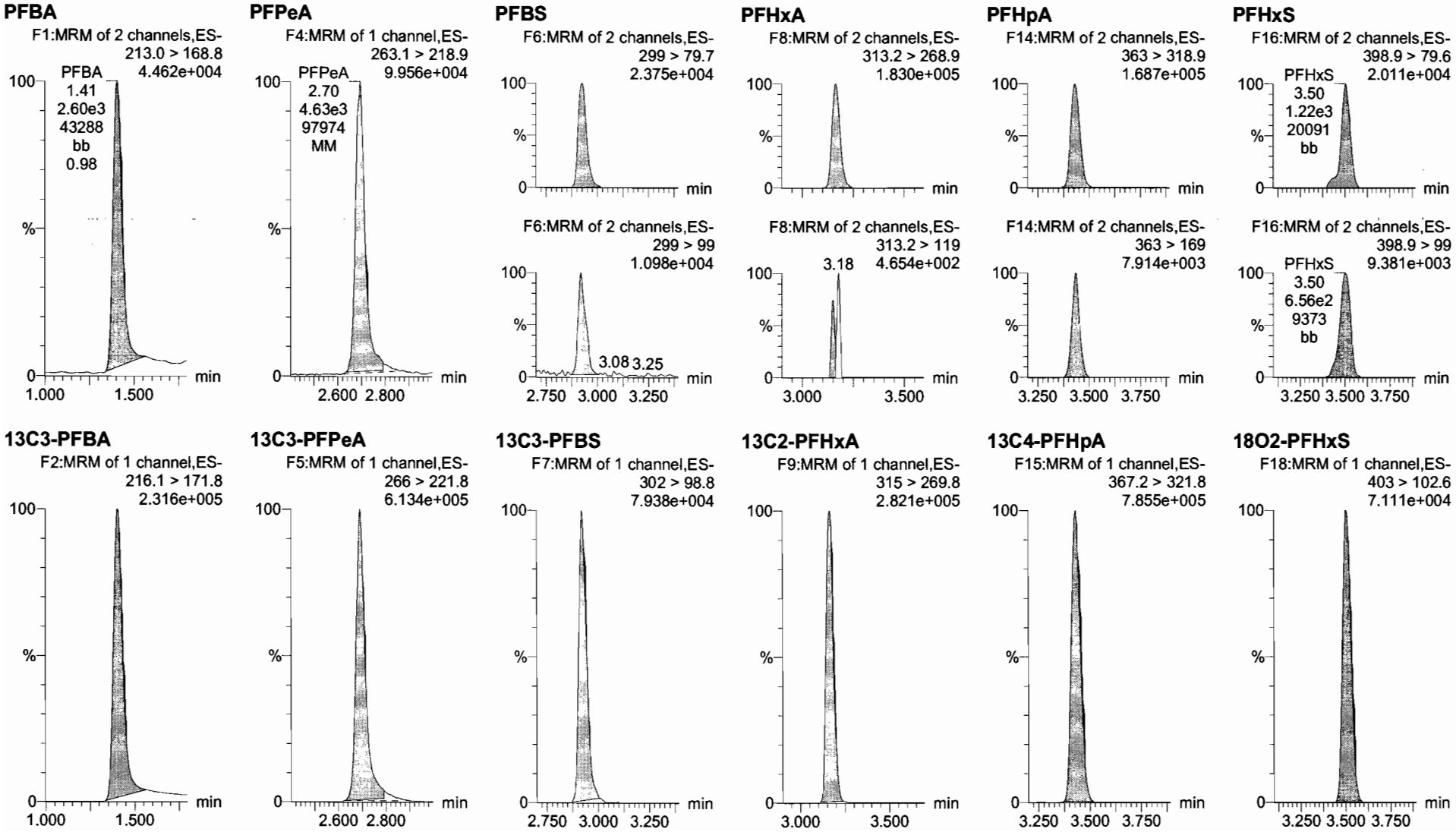
Name: 170731M2_5, Date: 01-Aug-2017, Time: 01:12:05, ID: ST170731M2-4 PFC CS1 17G3110, Description: PFC CS1 17G3110



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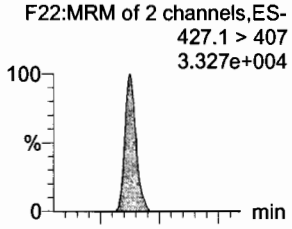
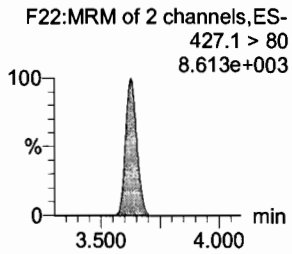
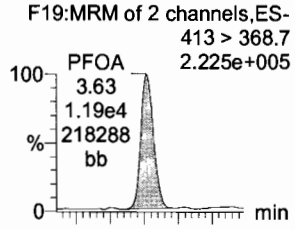
Name: 170731M2_5, Date: 01-Aug-2017, Time: 01:12:05, ID: ST170731M2-4 PFC CS1 17G3110, Description: PFC CS1 17G3110

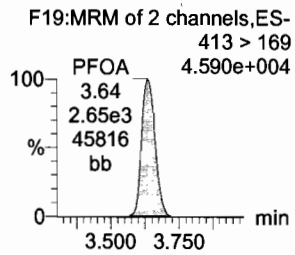
6:2 FTS



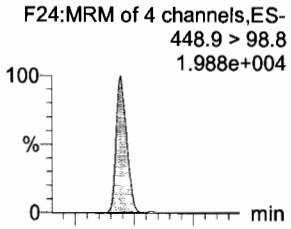


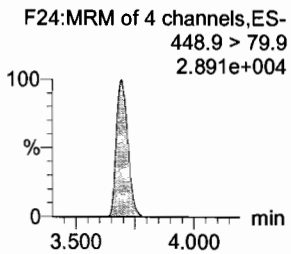
PFOA



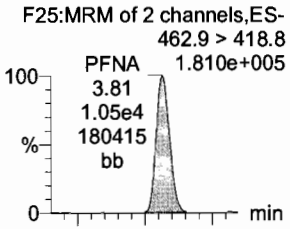


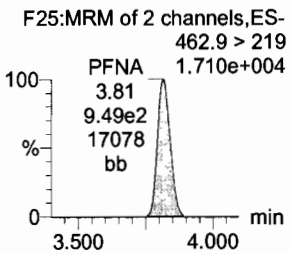
PFHpS



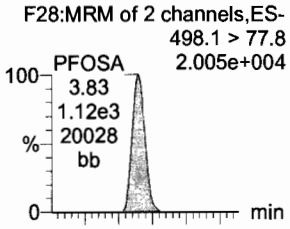


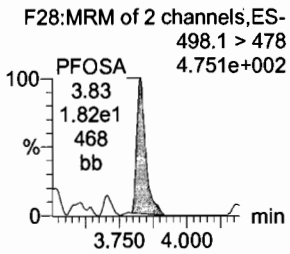
PFNA



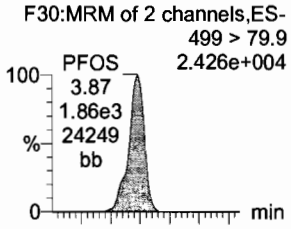


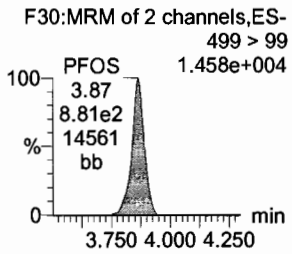
PFOSA



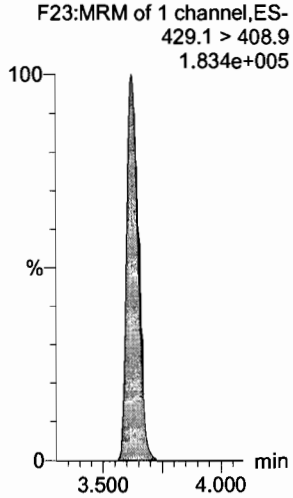


PFOS

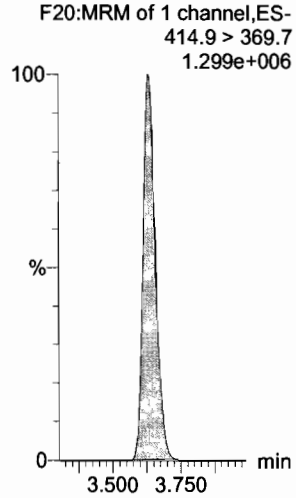




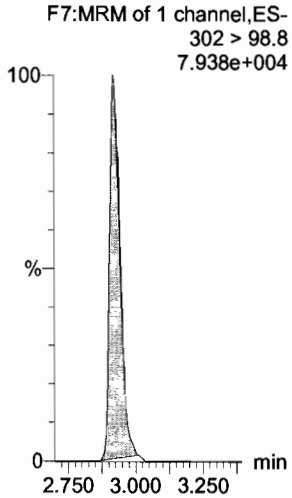
13C2-6:2 FTS



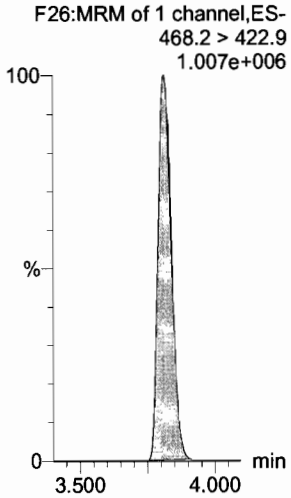
13C2-PFOA



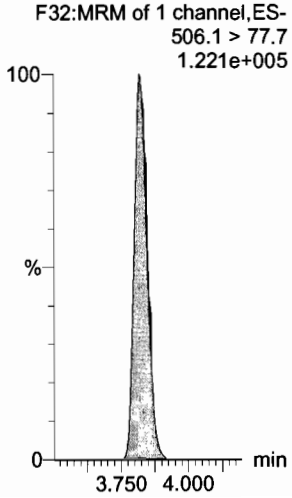
13C3-PFBS



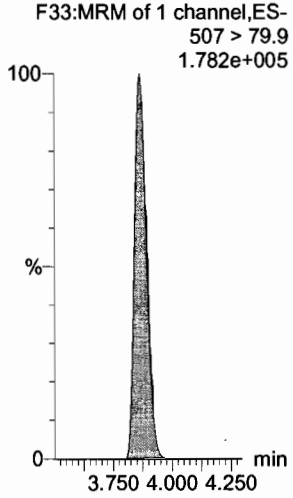
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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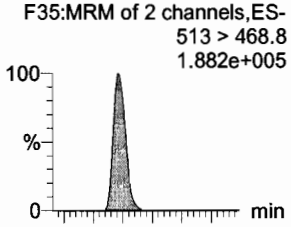
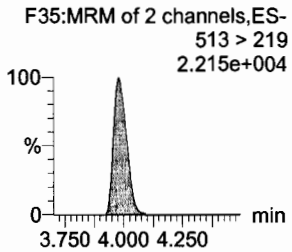
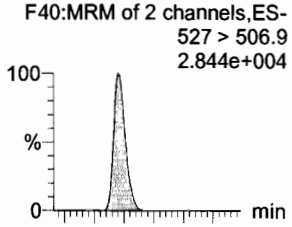
Name: 170731M2_5, Date: 01-Aug-2017, Time: 01:12:05, ID: ST170731M2-4 PFC CS1 17G3110, Description: PFC CS1 17G3110

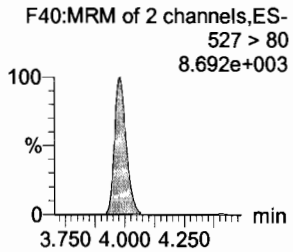
PFDA



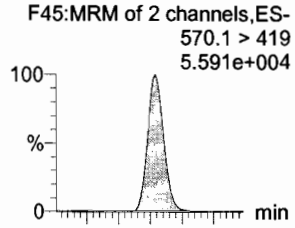


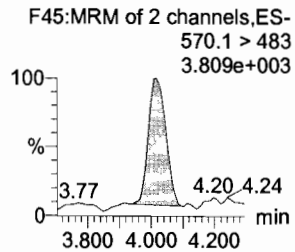
8:2 FTS



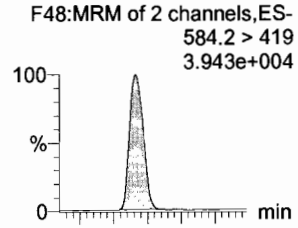


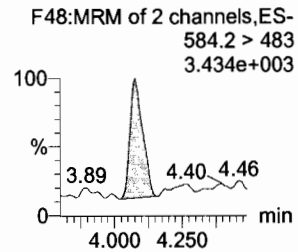
N-MeFOSAA



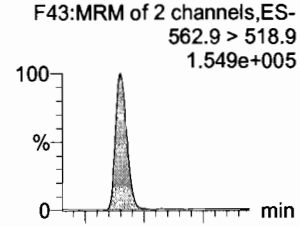


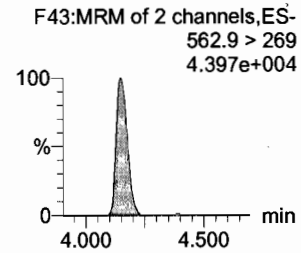
N-EtFOSAA



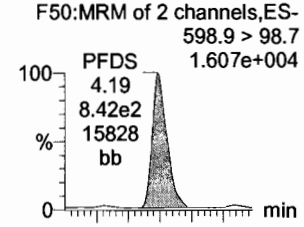


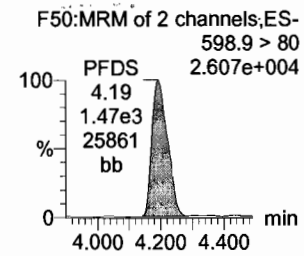
PFUnA



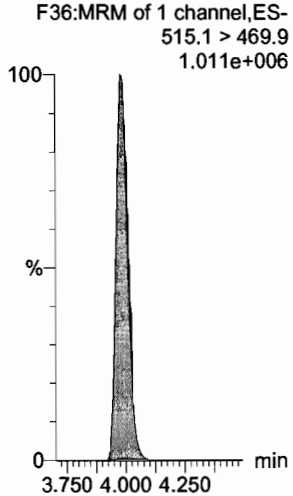


PFDS

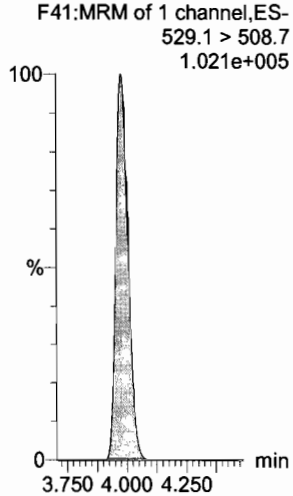




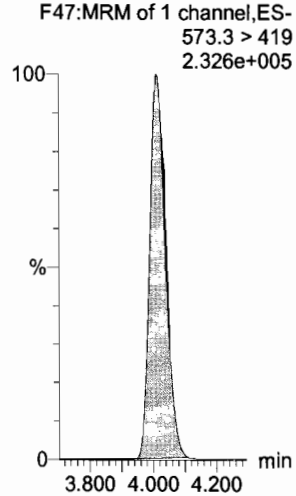
13C2-PFDA



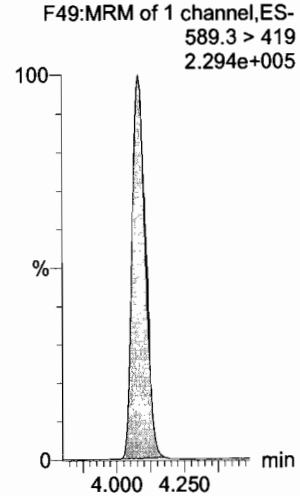
13C2-8:2 FTS



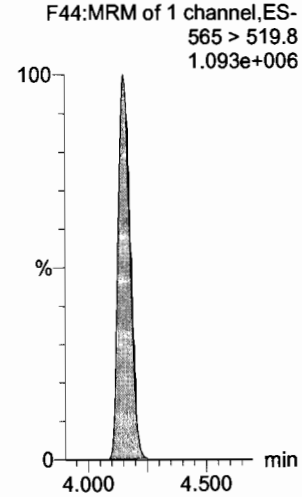
d3-N-MeFOSAA



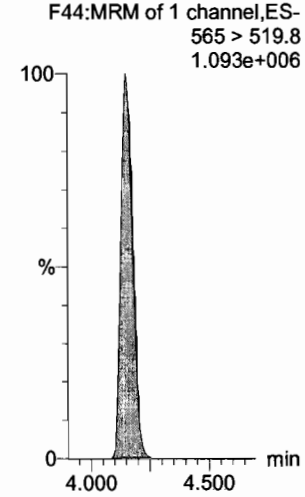
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



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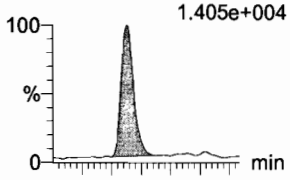
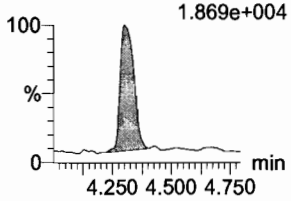
Name: 170731M2_5, Date: 01-Aug-2017, Time: 01:12:05, ID: ST170731M2-4 PFC CS1 17G3110, Description: PFC CS1 17G3110

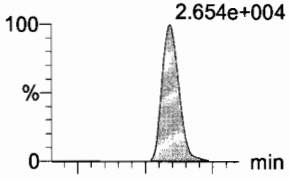
PFDoA
F51:MRM of 2 channels,ES-
612.9 > 318.8
1.405e+004



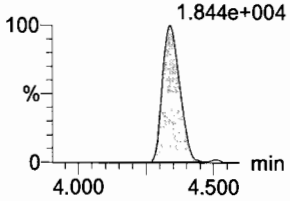
F51:MRM of 2 channels,ES-
612.9 > 569
1.869e+004



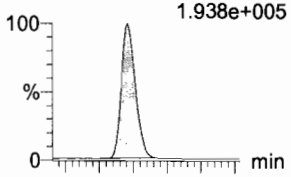
N-MeFOSA
F34:MRM of 2 channels,ES-
512.1 > 168.9
2.654e+004



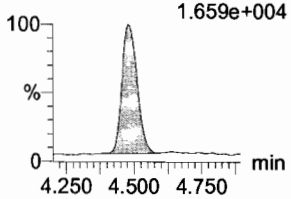
F34:MRM of 2 channels,ES-
512.1 > 219
1.844e+004



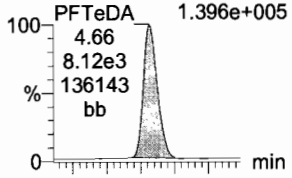
PFTrDA
F57:MRM of 2 channels,ES-
662.9 > 618.9
1.938e+005



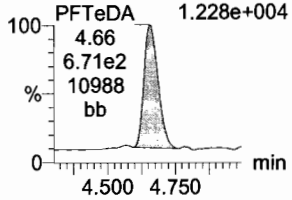
F57:MRM of 2 channels,ES-
662.9 > 319
1.659e+004



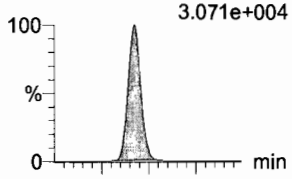
PFTeDA
F58:MRM of 4 channels,ES-
712.9 > 668.8
1.396e+005



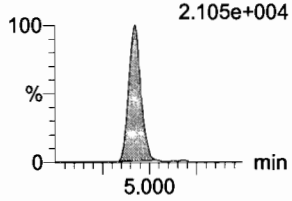
F58:MRM of 4 channels,ES-
712.9 > 369
1.228e+004



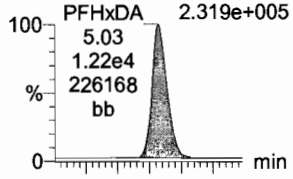
N-EtFOSA
F39:MRM of 2 channels,ES-
526.1 > 168.9
3.071e+004



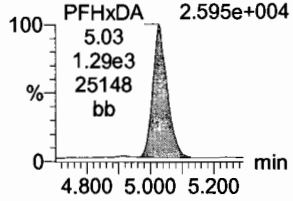
F39:MRM of 2 channels,ES-
526.1 > 219
2.105e+004



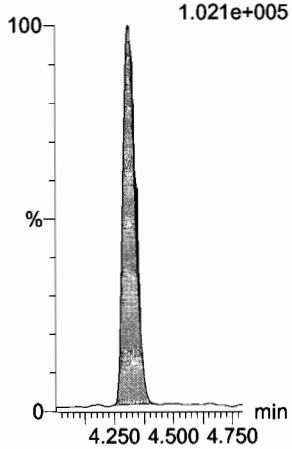
PFHxDA
F60:MRM of 2 channels,ES-
812.8 > 768.9
2.319e+005



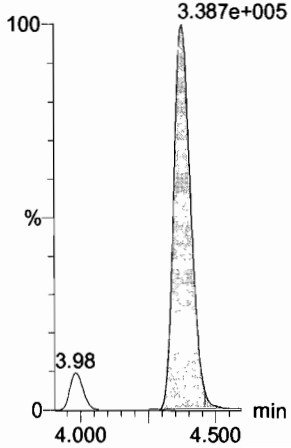
F60:MRM of 2 channels,ES-
812.8 > 219
2.595e+004



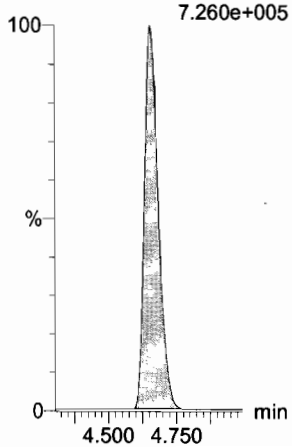
13C2-PFDoA
F52:MRM of 1 channel,ES-
615 > 569.7
1.021e+005



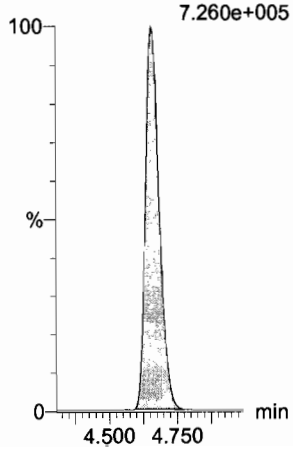
d3-N-MeFOSA
F37:MRM of 1 channel,ES-
515.2 > 168.9
3.387e+005



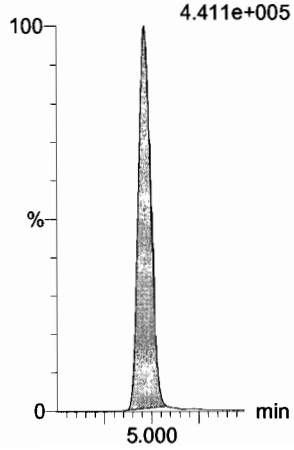
13C2-PFTeDA
F59:MRM of 2 channels,ES-
714.8 > 669.6
7.260e+005



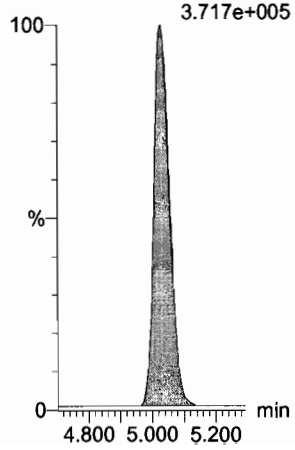
13C2-PFTeDA
F59:MRM of 2 channels,ES-
714.8 > 669.6
7.260e+005



d5-N-ETFOSA
F42:MRM of 1 channel,ES-
531.1 > 168.9
4.411e+005



13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
3.717e+005



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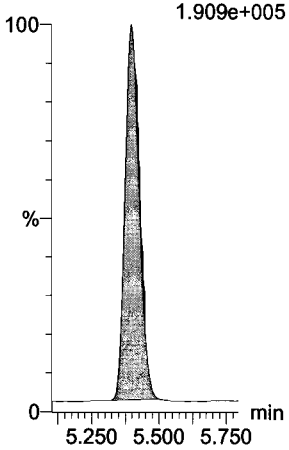
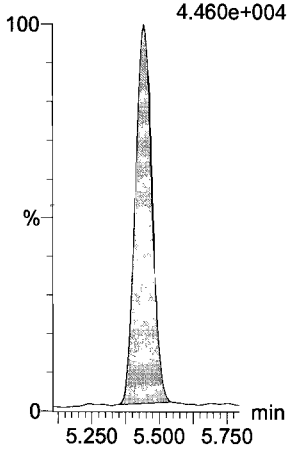
Name: 170731M2_5, Date: 01-Aug-2017, Time: 01:12:05, ID: ST170731M2-4 PFC CS1 17G3110, Description: PFC CS1 17G3110

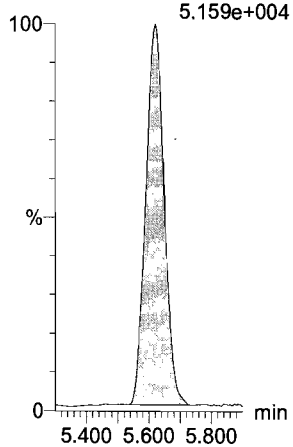
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
1.909e+005



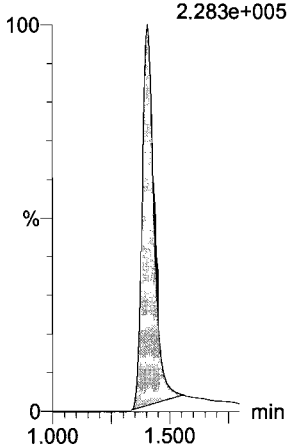
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
4.460e+004



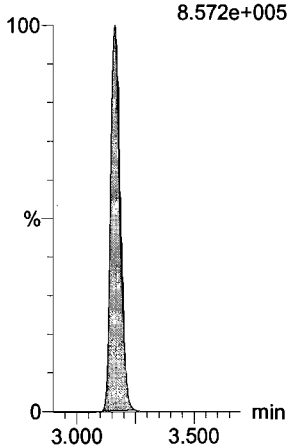
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
5.159e+004



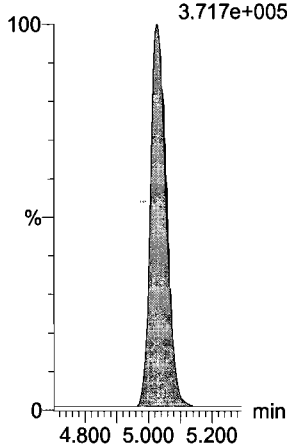
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.283e+005



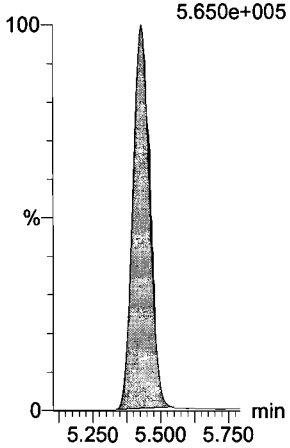
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
8.572e+005



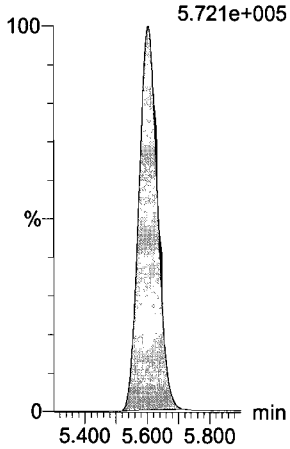
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
3.717e+005



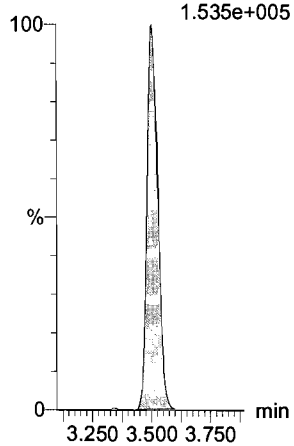
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
5.650e+005



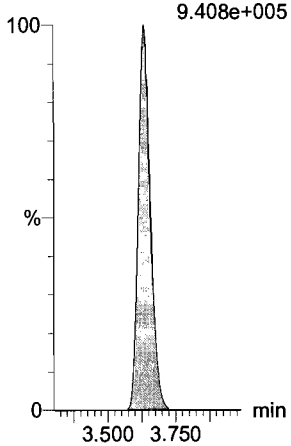
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
5.721e+005



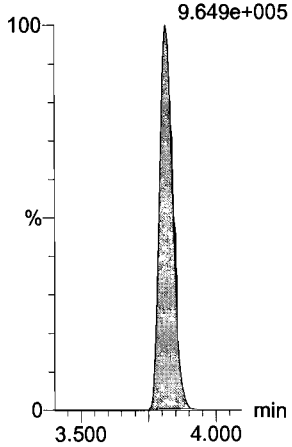
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.535e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
9.408e+005



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
9.649e+005



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Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
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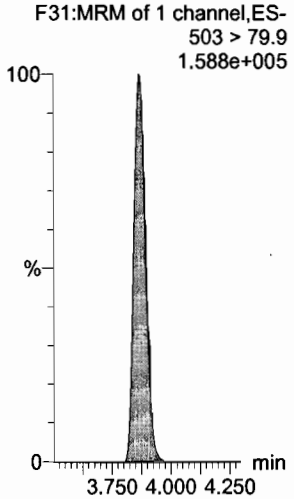
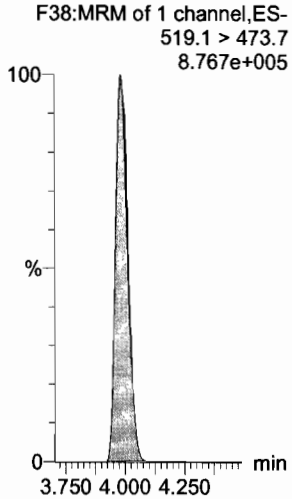
Name: 170731M2_5, Date: 01-Aug-2017, Time: 01:12:05, ID: ST170731M2-4 PFC CS1 17G3110, Description: PFC CS1 17G3110

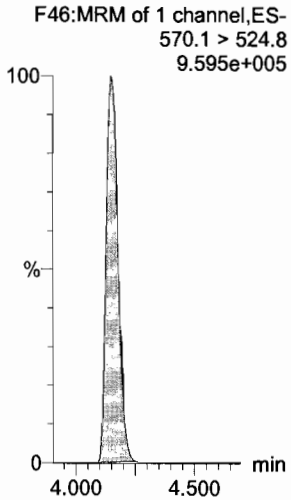
13C4-PFOS



13C6-PFDA



13C7-PFUnA

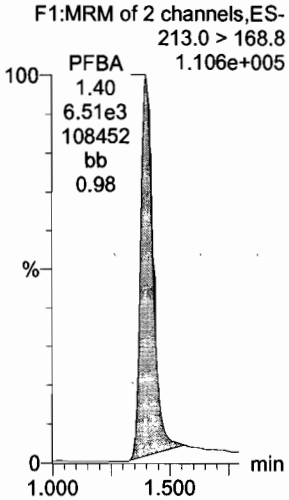


Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

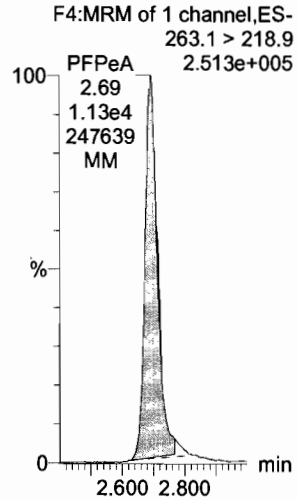
Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_6, Date: 01-Aug-2017, Time: 01:22:43, ID: ST170731M2-5 PFC CS2 17G3111, Description: PFC CS2 17G3111

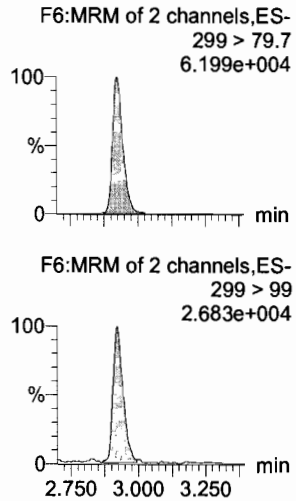
PFBA



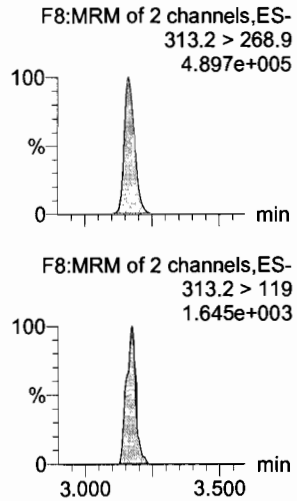
PFPeA



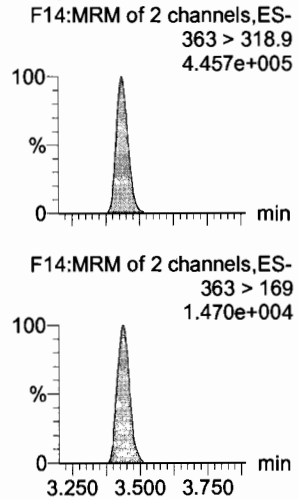
PFBS



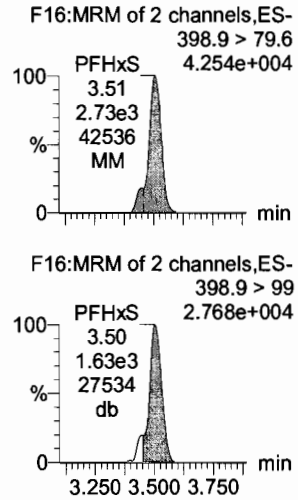
PFHxA



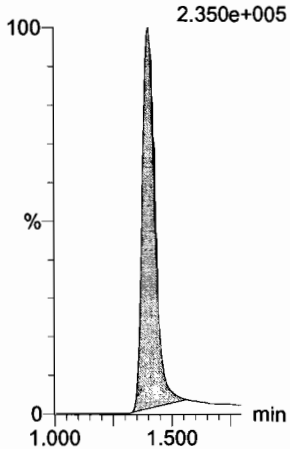
PFHpA



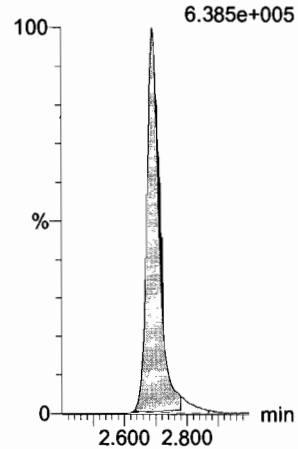
PFHxS



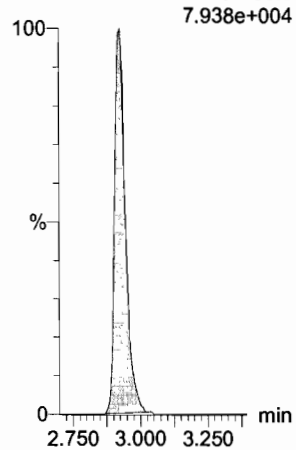
13C3-PFBA



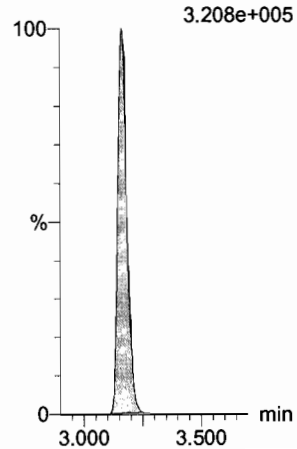
13C3-PFPeA



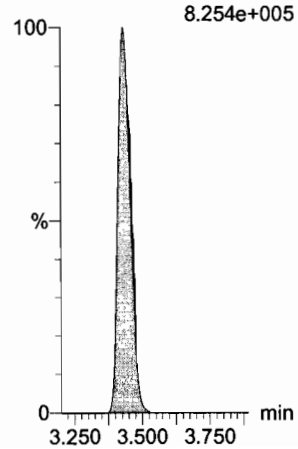
13C3-PFBS



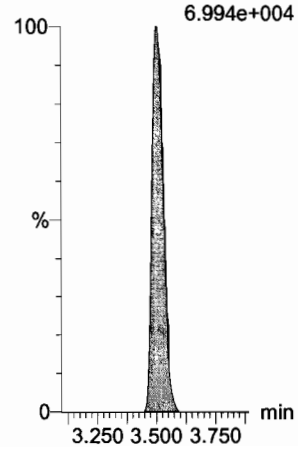
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
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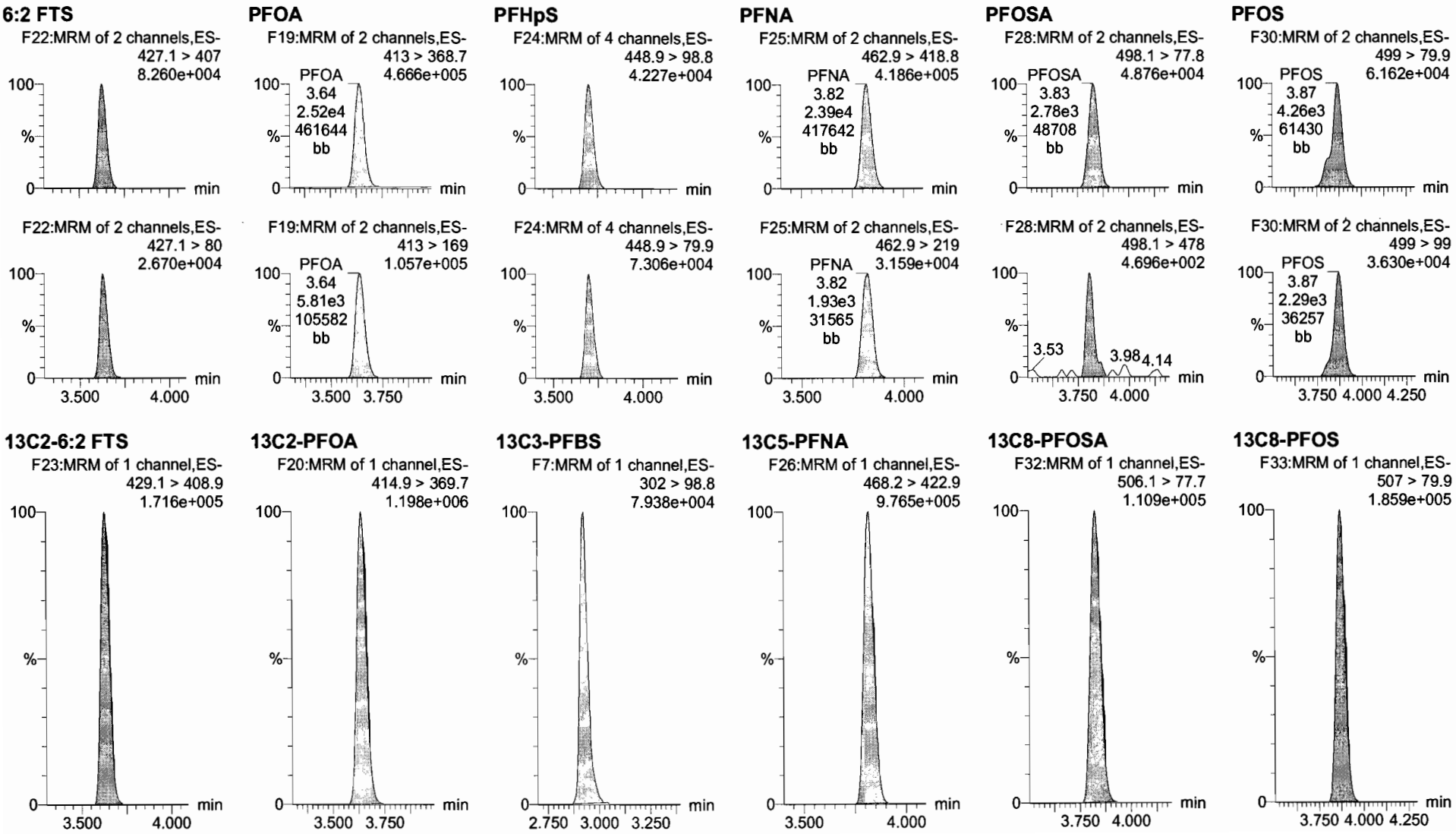
Name: 170731M2_6, Date: 01-Aug-2017, Time: 01:22:43, ID: ST170731M2-5 PFC CS2 17G3111, Description: PFC CS2 17G3111



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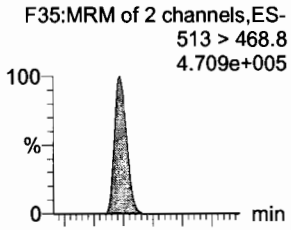
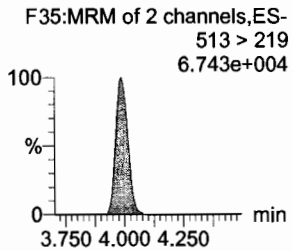
Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

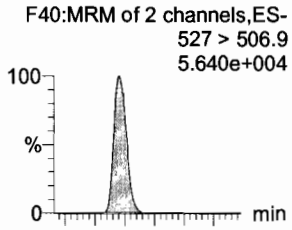
Name: 170731M2_6, Date: 01-Aug-2017, Time: 01:22:43, ID: ST170731M2-5 PFC CS2 17G3111, Description: PFC CS2 17G3111

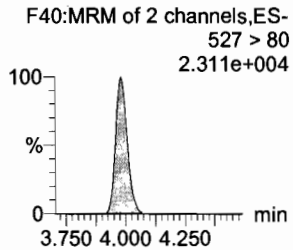
PFDA



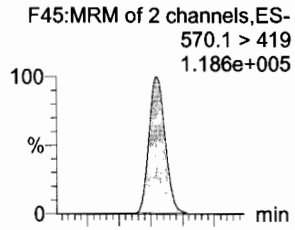


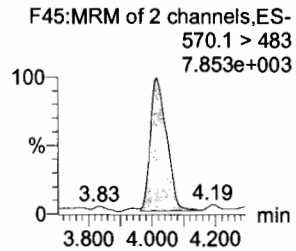
8:2 FTS



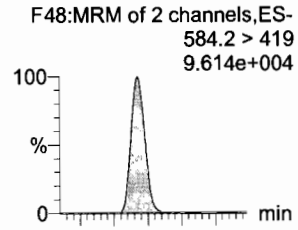


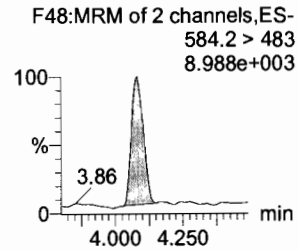
N-MeFOSAA



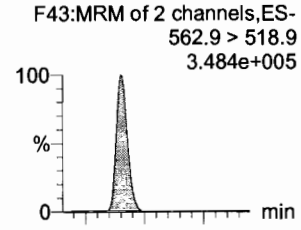


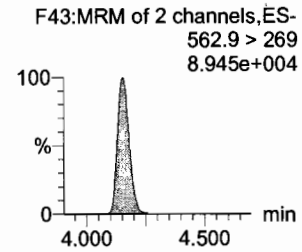
N-EtFOSAA



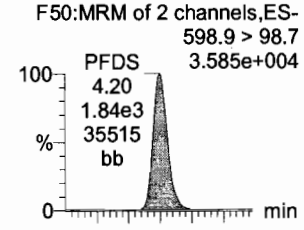


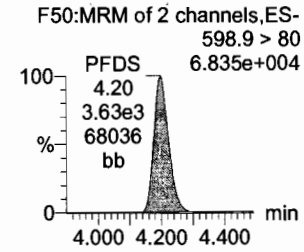
PFUnA



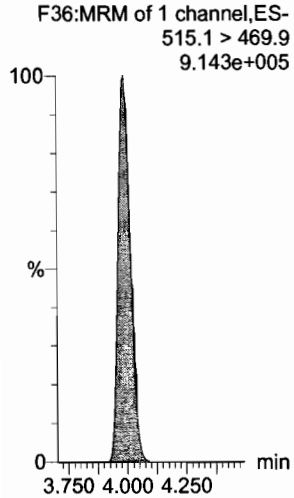


PFDS

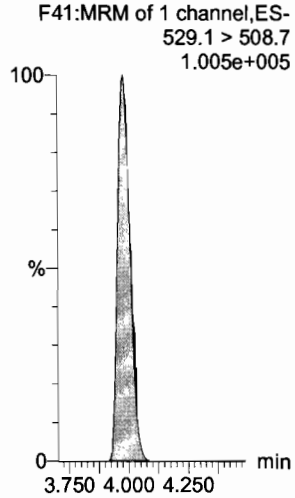




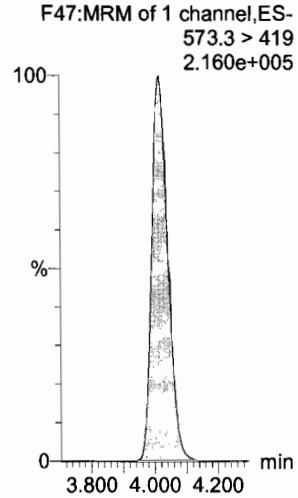
13C2-PFDA



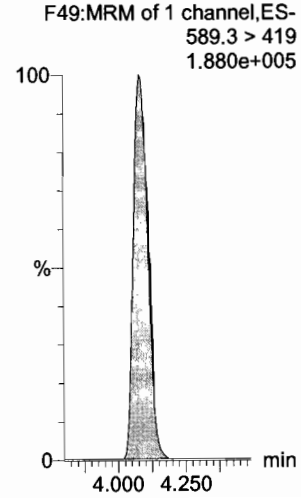
13C2-8:2 FTS



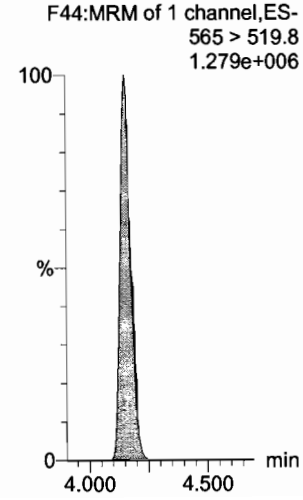
d3-N-MeFOSAA



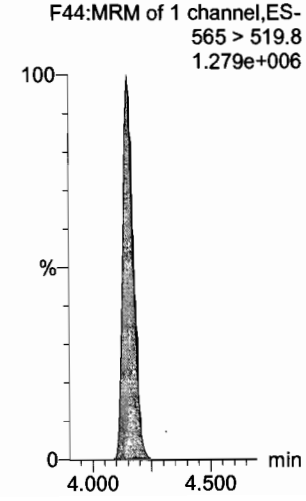
d5-N-EtFOSAA



13C2-PFUnA



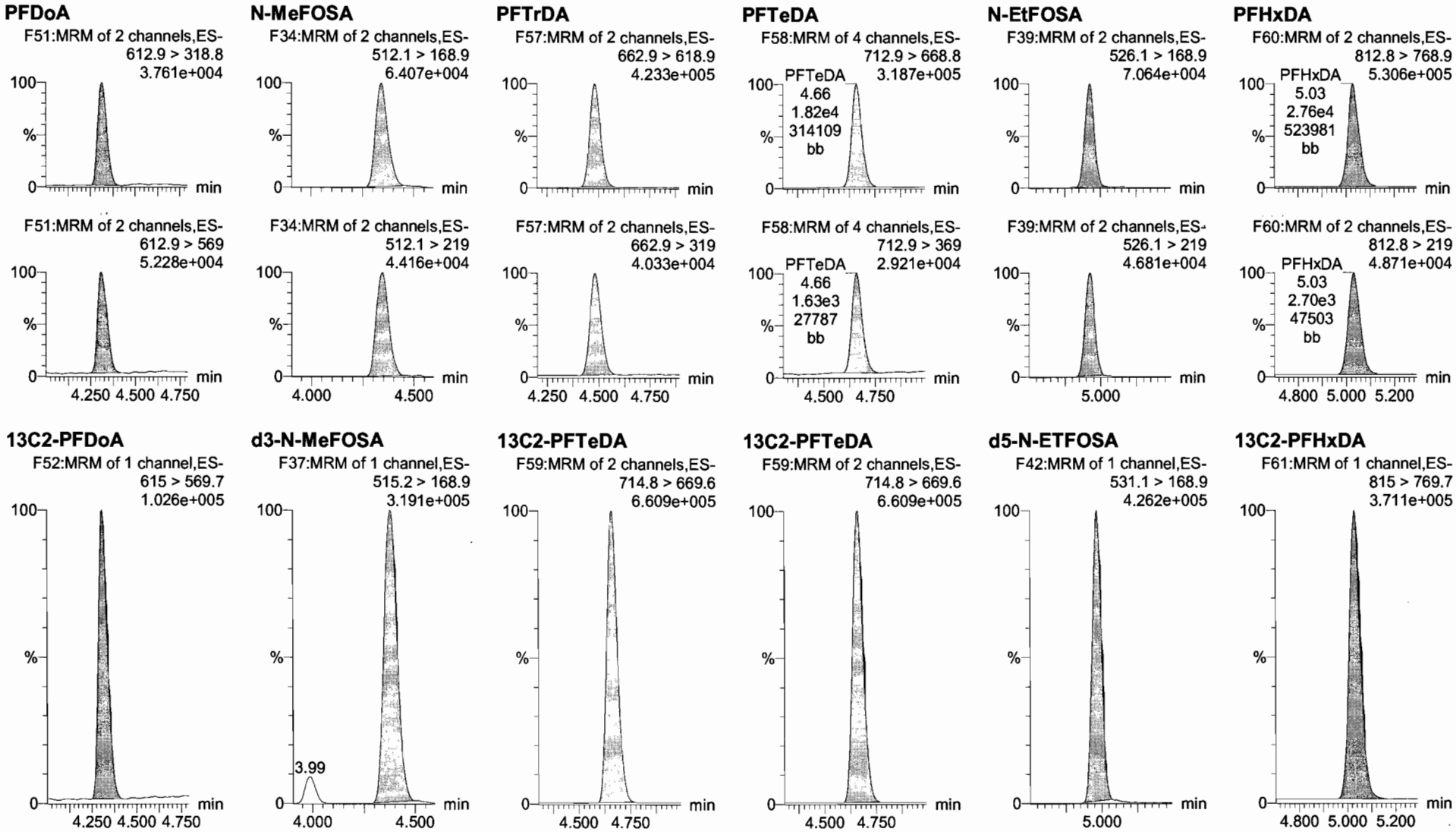
13C2-PFUnA



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_6, Date: 01-Aug-2017, Time: 01:22:43, ID: ST170731M2-5 PFC CS2 17G3111, Description: PFC CS2 17G3111



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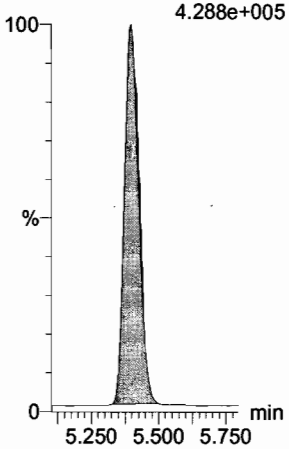
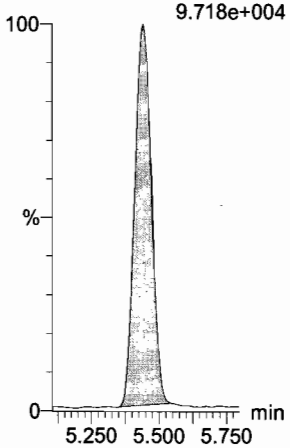
Name: 170731M2_6, Date: 01-Aug-2017, Time: 01:22:43, ID: ST170731M2-5 PFC CS2 17G3111, Description: PFC CS2 17G3111

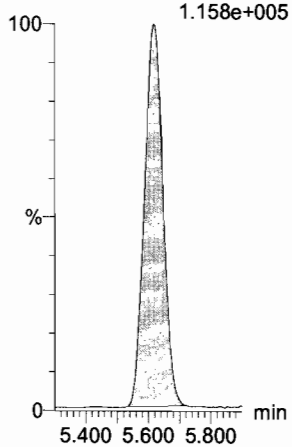
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
4.288e+005



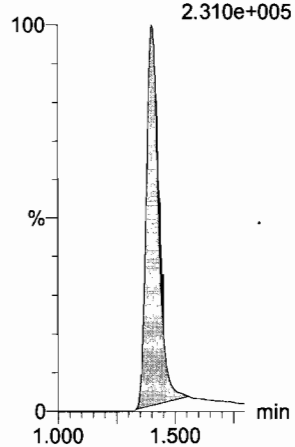
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
9.718e+004



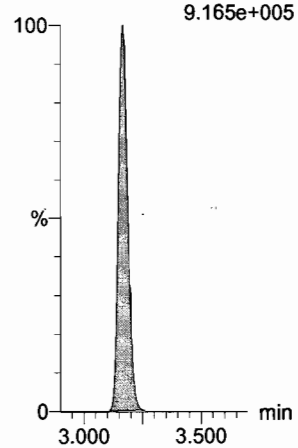
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
1.158e+005



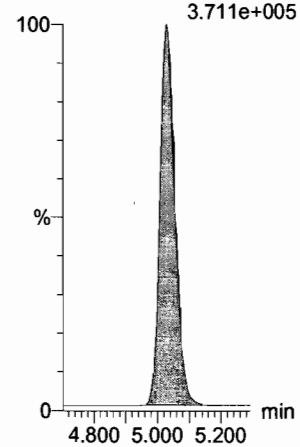
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.310e+005



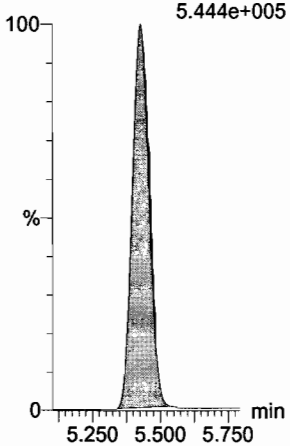
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
9.165e+005



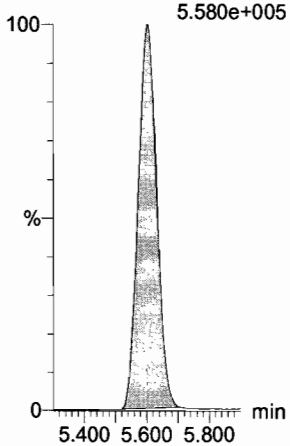
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
3.711e+005



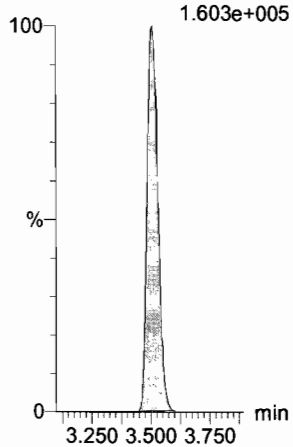
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
5.444e+005



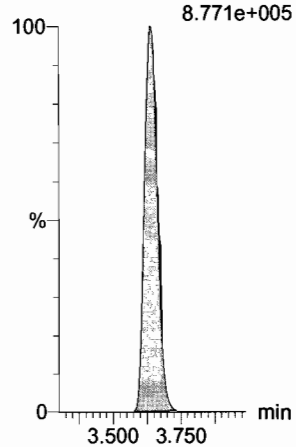
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
5.580e+005



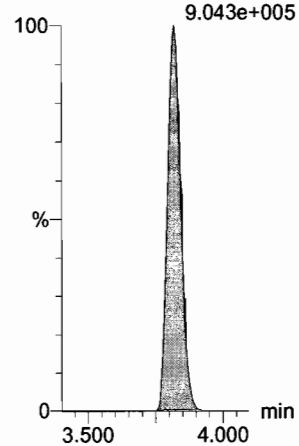
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.603e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
8.771e+005



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
9.043e+005



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
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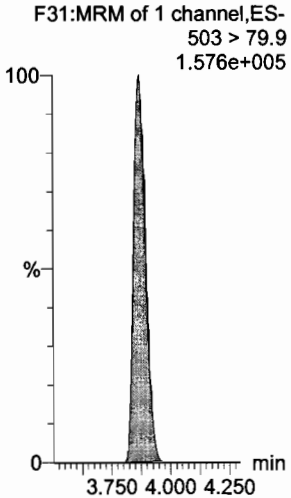
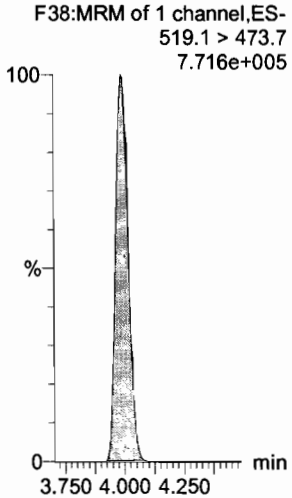
Name: 170731M2_6, Date: 01-Aug-2017, Time: 01:22:43, ID: ST170731M2-5 PFC CS2 17G3111, Description: PFC CS2 17G3111

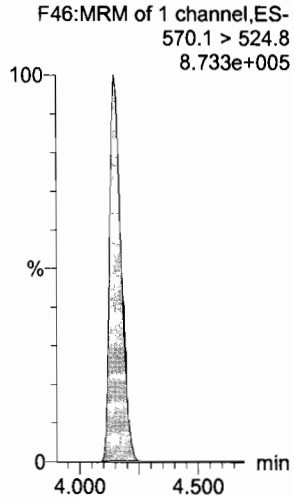
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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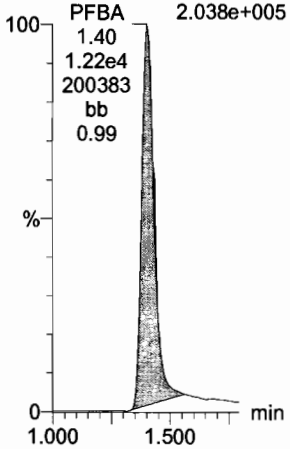
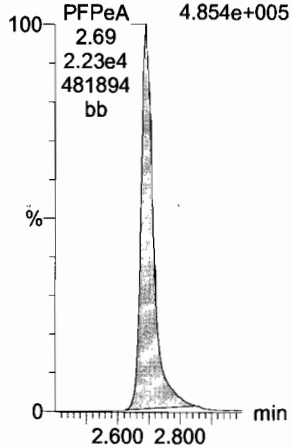
Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_7, Date: 01-Aug-2017, Time: 01:33:30, ID: ST170731M2-6 PFC CS3 17G3105, Description: PFC CS3 17G3105

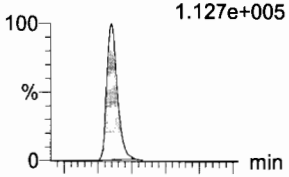
PFBA
F1:MRM of 2 channels,ES-
213.0 > 168.8
2.038e+005



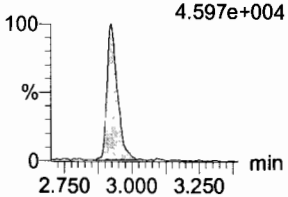
PFPeA
F4:MRM of 1 channel,ES-
263.1 > 218.9
4.854e+005



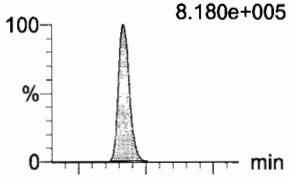
PFBS
F6:MRM of 2 channels,ES-
299 > 79.7
1.127e+005



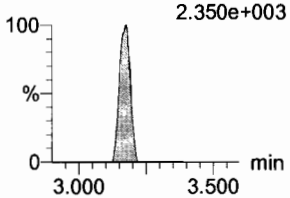
F6:MRM of 2 channels,ES-
299 > 99
4.597e+004



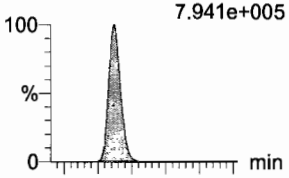
PFHxA
F8:MRM of 2 channels,ES-
313.2 > 268.9
8.180e+005



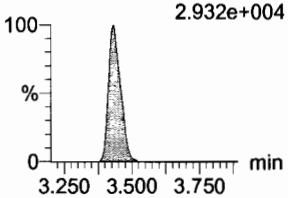
F8:MRM of 2 channels,ES-
313.2 > 119
2.350e+003



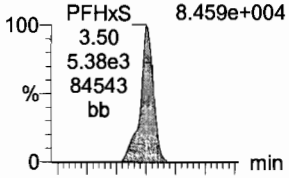
PFHpA
F14:MRM of 2 channels,ES-
363 > 318.9
7.941e+005



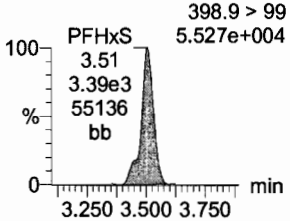
F14:MRM of 2 channels,ES-
363 > 169
2.932e+004



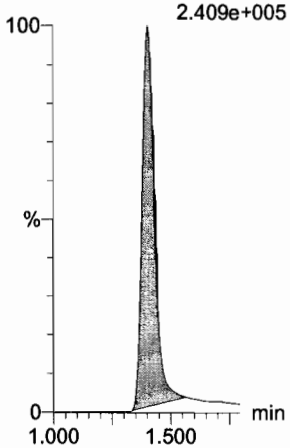
PFHxS
F16:MRM of 2 channels,ES-
398.9 > 79.6
8.459e+004



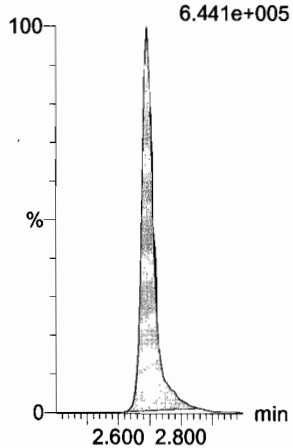
F16:MRM of 2 channels,ES-
398.9 > 99
5.527e+004



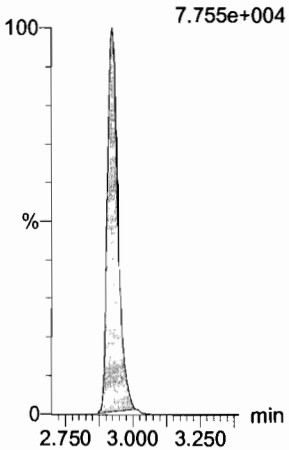
13C3-PFBA
F2:MRM of 1 channel,ES-
216.1 > 171.8
2.409e+005



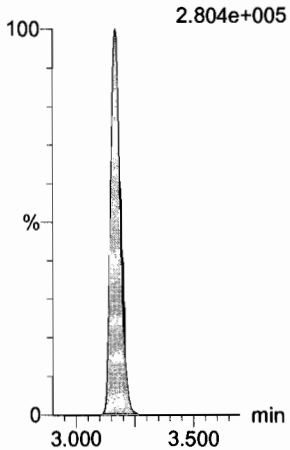
13C3-PFPeA
F5:MRM of 1 channel,ES-
266 > 221.8
6.441e+005



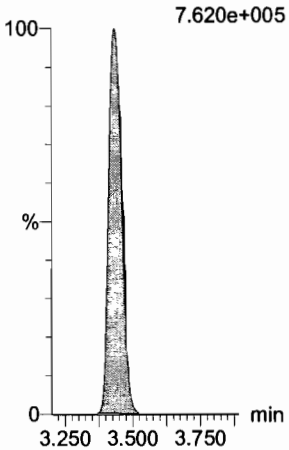
13C3-PFBS
F7:MRM of 1 channel,ES-
302 > 98.8
7.755e+004



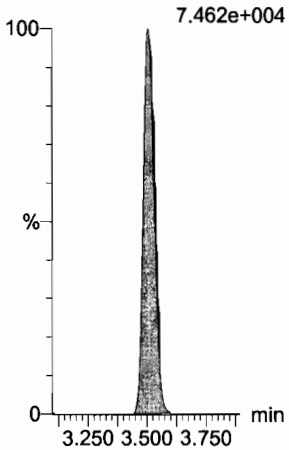
13C2-PFHxA
F9:MRM of 1 channel,ES-
315 > 269.8
2.804e+005



13C4-PFHpA
F15:MRM of 1 channel,ES-
367.2 > 321.8
7.620e+005



18O2-PFHxS
F18:MRM of 1 channel,ES-
403 > 102.6
7.462e+004



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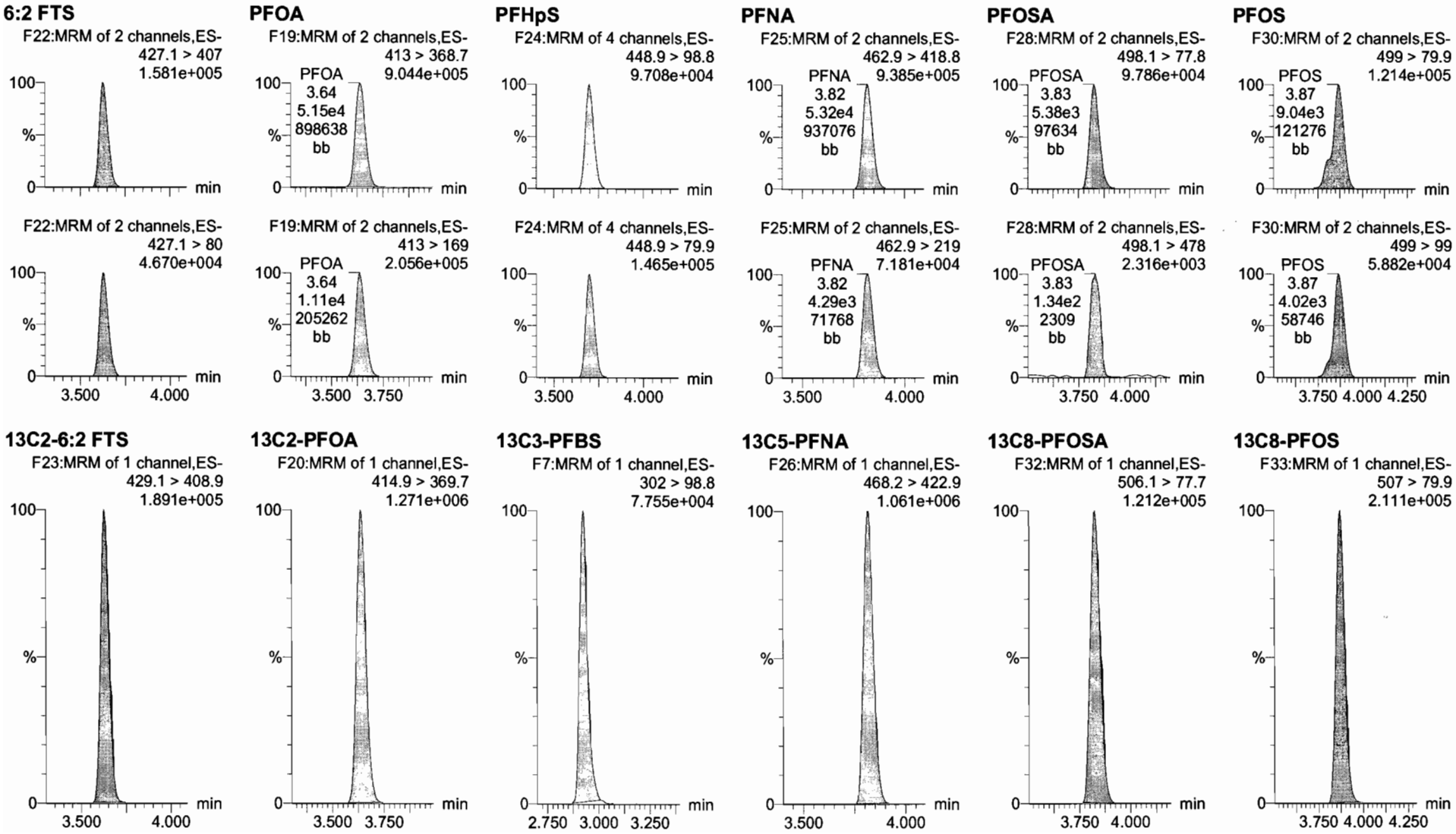
Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_7, Date: 01-Aug-2017, Time: 01:33:30, ID: ST170731M2-6 PFC CS3 17G3105, Description: PFC CS3 17G3105



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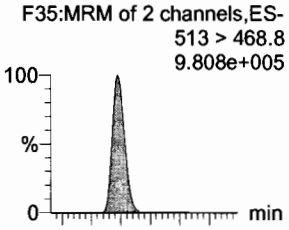
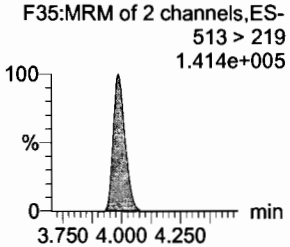
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

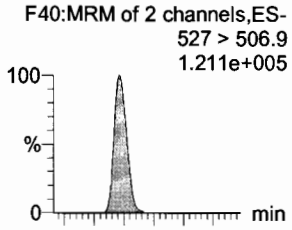
Name: 170731M2_7, Date: 01-Aug-2017, Time: 01:33:30, ID: ST170731M2-6 PFC CS3 17G3105, Description: PFC CS3 17G3105

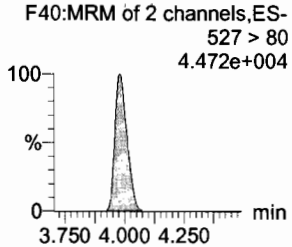
PFDA



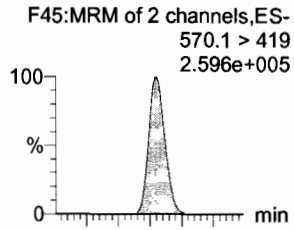


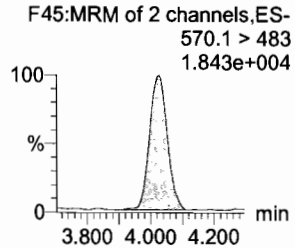
8:2 FTS



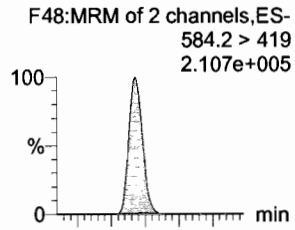


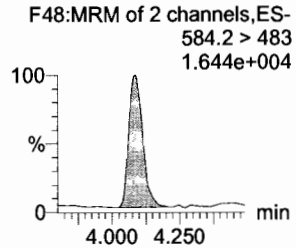
N-MeFOSAA



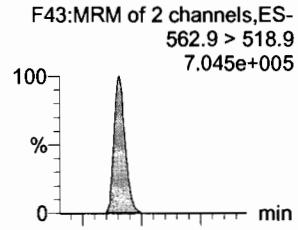


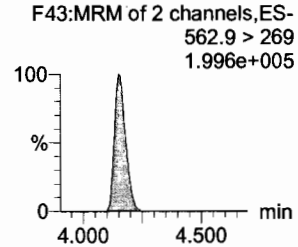
N-EtFOSAA



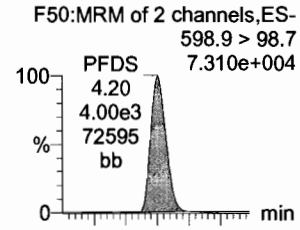


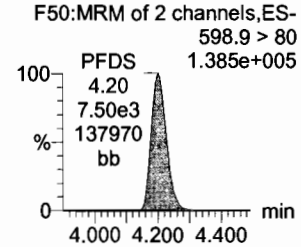
PFUnA



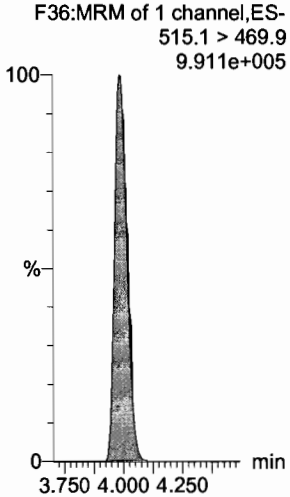


PFDS

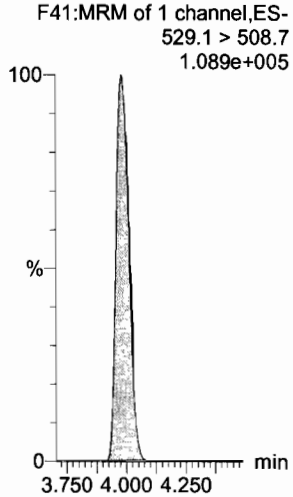




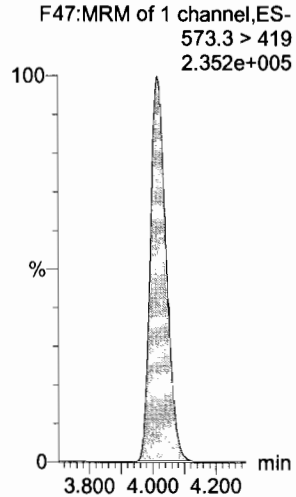
13C2-PFDA



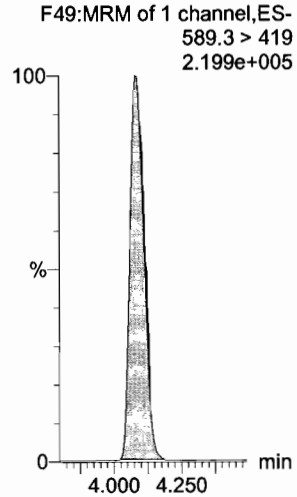
13C2-8:2 FTS



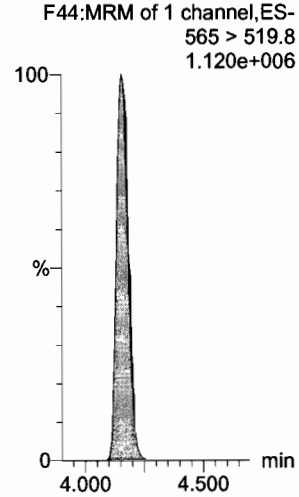
d3-N-MeFOSAA



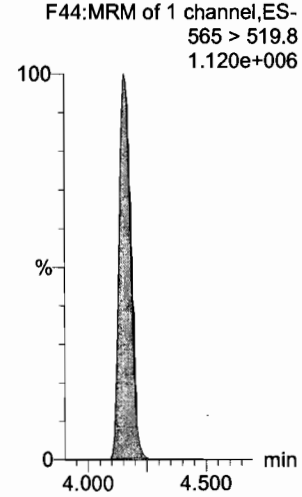
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



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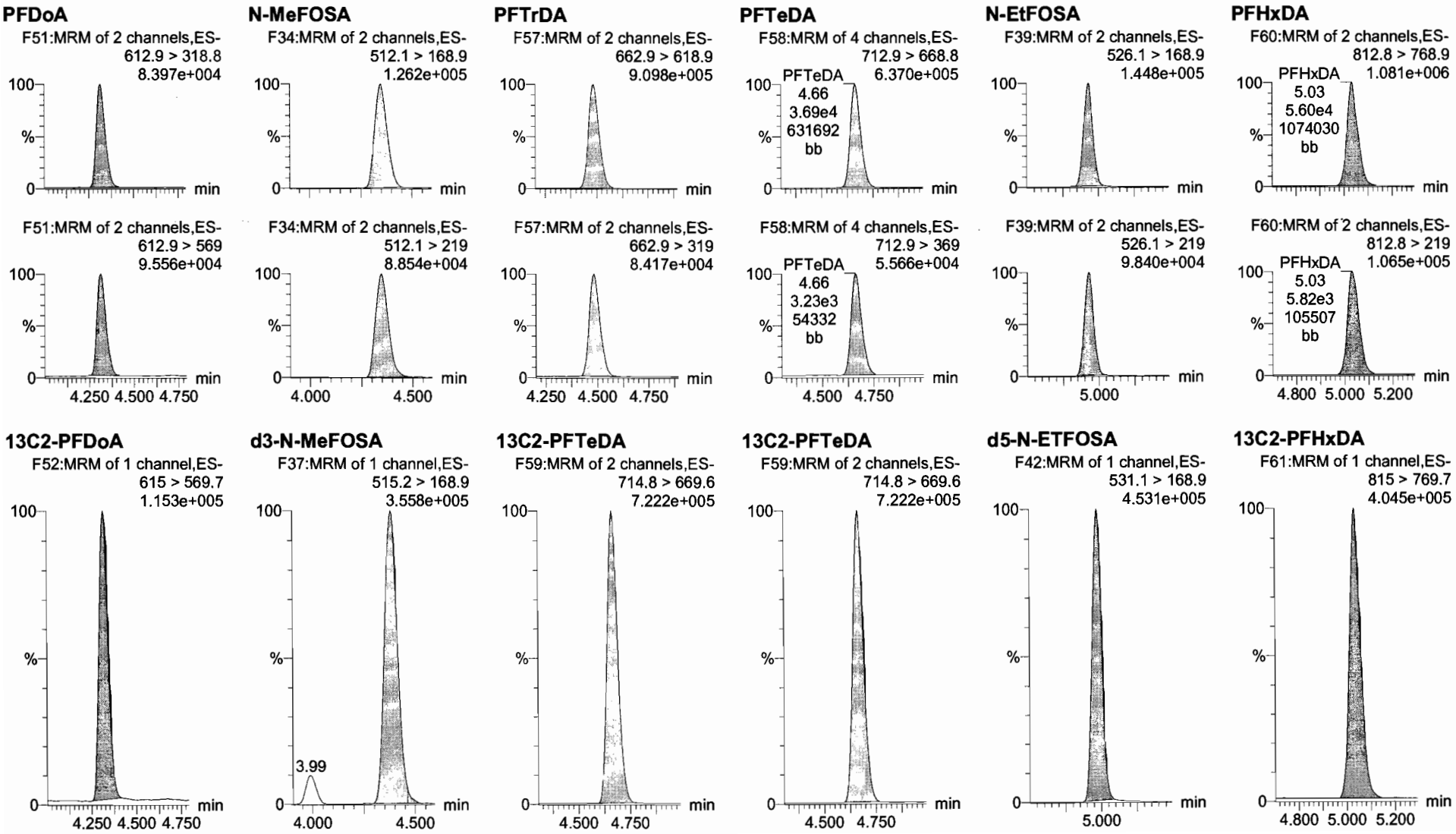
Name: 170731M2_7, Date: 01-Aug-2017, Time: 01:33:30, ID: ST170731M2-6 PFC CS3 17G3105, Description: PFC CS3 17G3105



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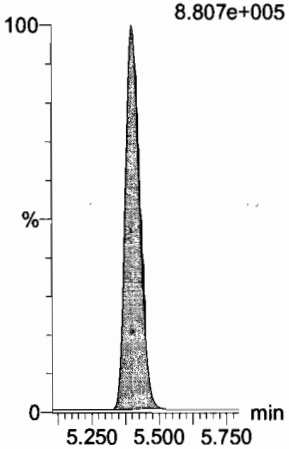
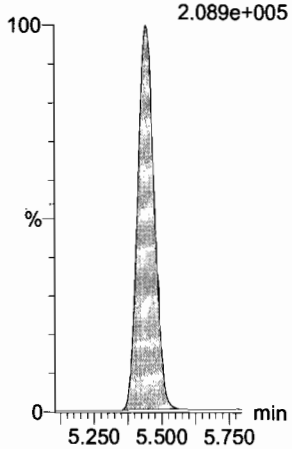
Name: 170731M2_7, Date: 01-Aug-2017, Time: 01:33:30, ID: ST170731M2-6 PFC CS3 17G3105, Description: PFC CS3 17G3105

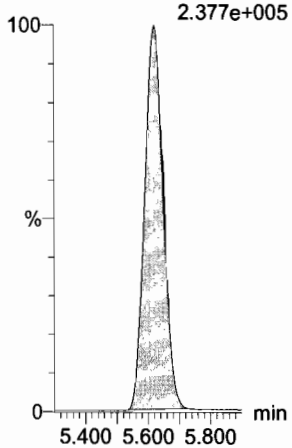
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
8.807e+005



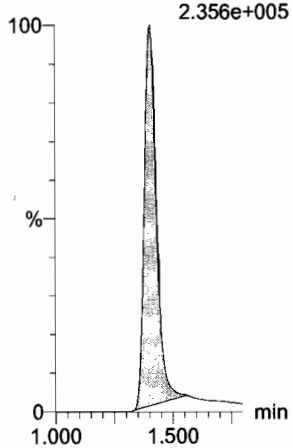
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
2.089e+005



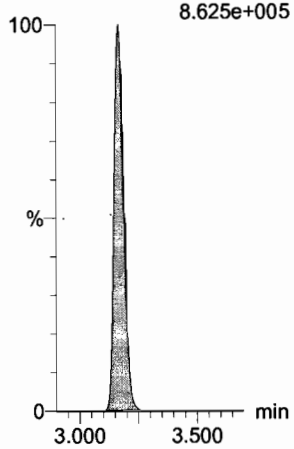
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
2.377e+005



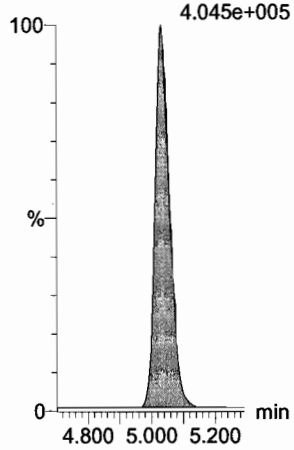
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.356e+005



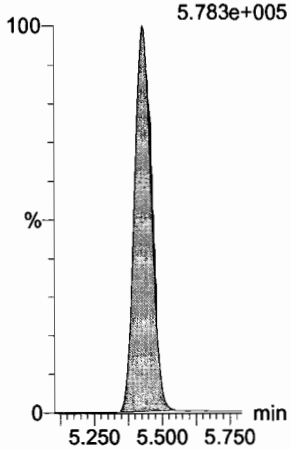
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
8.625e+005



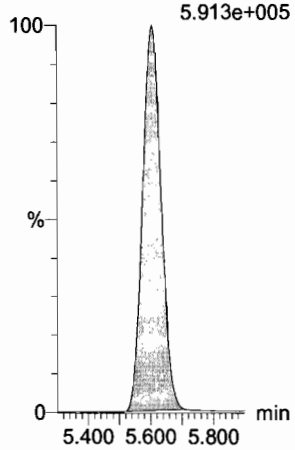
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.045e+005



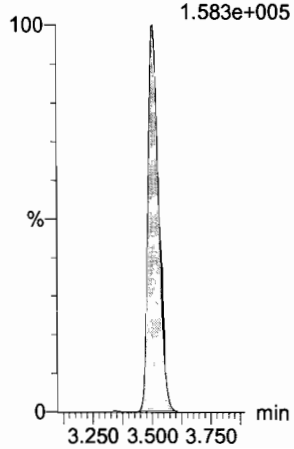
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
5.783e+005



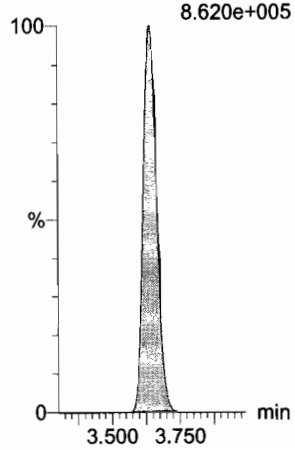
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
5.913e+005



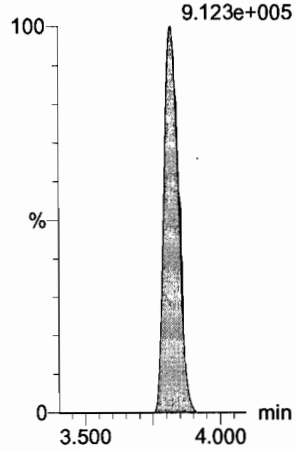
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.583e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
8.620e+005



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
9.123e+005



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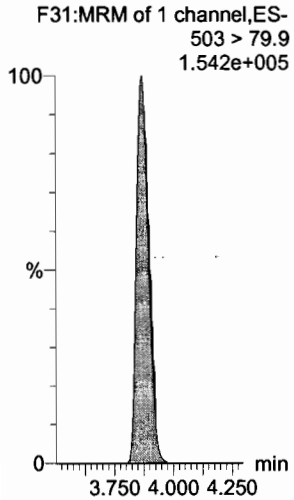
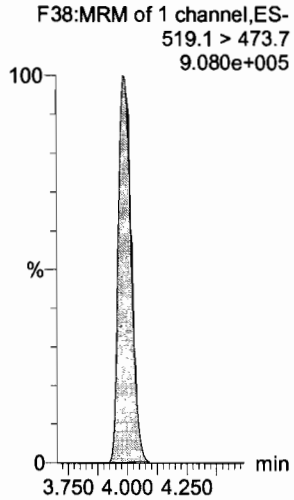
Name: 170731M2_7, Date: 01-Aug-2017, Time: 01:33:30, ID: ST170731M2-6 PFC CS3 17G3105, Description: PFC CS3 17G3105

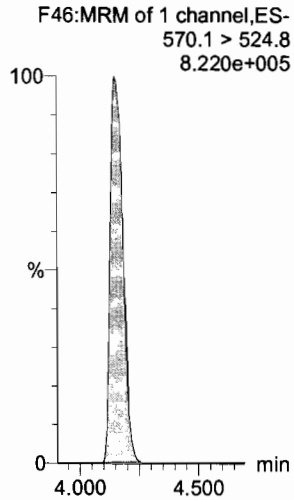
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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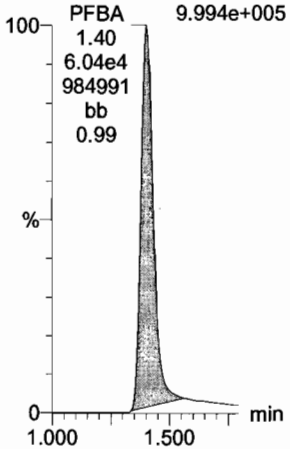
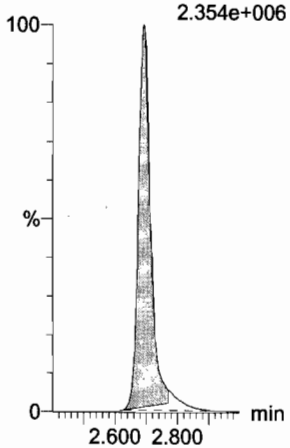
Name: 170731M2_8, Date: 01-Aug-2017, Time: 01:44:08, ID: ST170731M2-7 PFC CS4 17G3112, Description: PFC CS4 17G3112

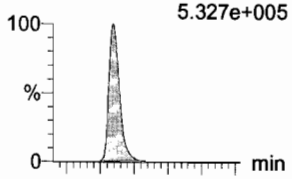
PFBA
F1:MRM of 2 channels,ES-
213.0 > 168.8
9.994e+005



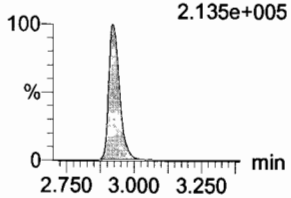
PFPeA
F4:MRM of 1 channel,ES-
263.1 > 218.9
2.354e+006



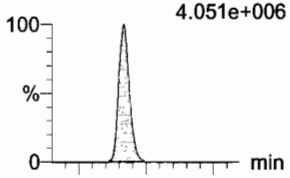
PFBS
F6:MRM of 2 channels,ES-
299 > 79.7
5.327e+005



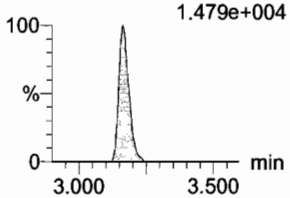
F6:MRM of 2 channels,ES-
299 > 99
2.135e+005



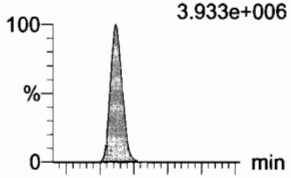
PFHxA
F8:MRM of 2 channels,ES-
313.2 > 268.9
4.051e+006



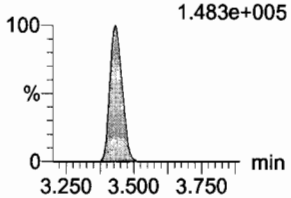
F8:MRM of 2 channels,ES-
313.2 > 119
1.479e+004



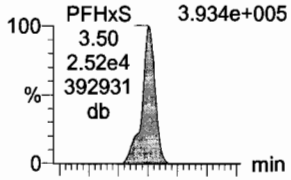
PFHpA
F14:MRM of 2 channels,ES-
363 > 318.9
3.933e+006



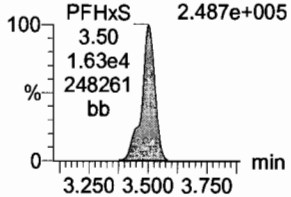
F14:MRM of 2 channels,ES-
363 > 169
1.483e+005



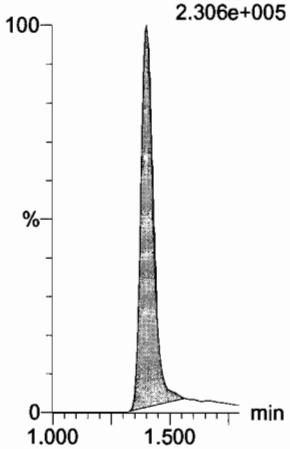
PFHxS
F16:MRM of 2 channels,ES-
398.9 > 79.6
3.934e+005



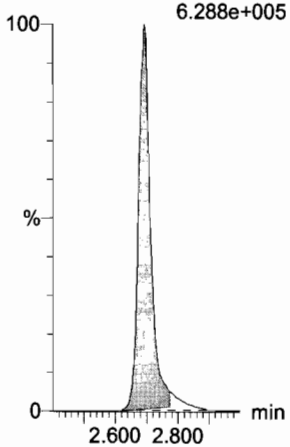
F16:MRM of 2 channels,ES-
398.9 > 99
2.487e+005



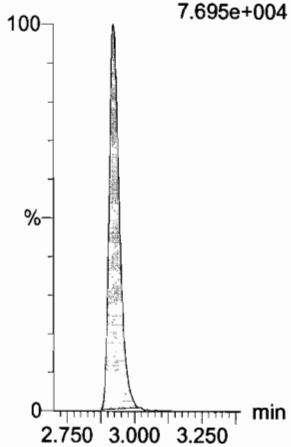
13C3-PFBA
F2:MRM of 1 channel,ES-
216.1 > 171.8
2.306e+005



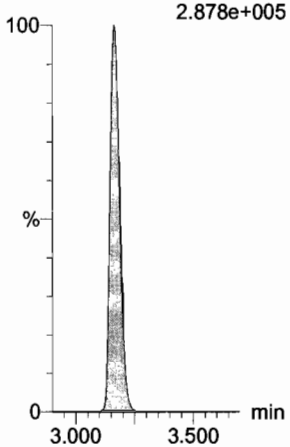
13C3-PFPeA
F5:MRM of 1 channel,ES-
266 > 221.8
6.288e+005



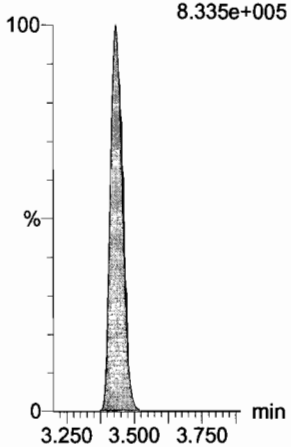
13C3-PFBS
F7:MRM of 1 channel,ES-
302 > 98.8
7.695e+004



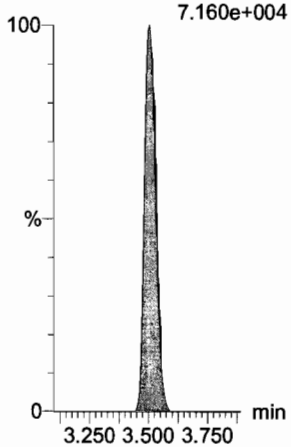
13C2-PFHxA
F9:MRM of 1 channel,ES-
315 > 269.8
2.878e+005



13C4-PFHpA
F15:MRM of 1 channel,ES-
367.2 > 321.8
8.335e+005



18O2-PFHxS
F18:MRM of 1 channel,ES-
403 > 102.6
7.160e+004



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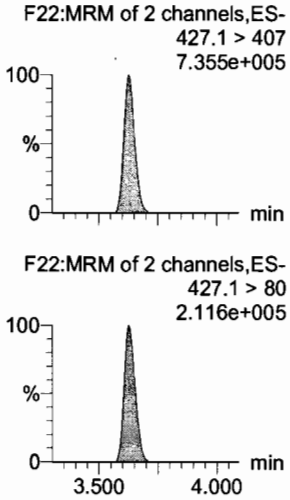
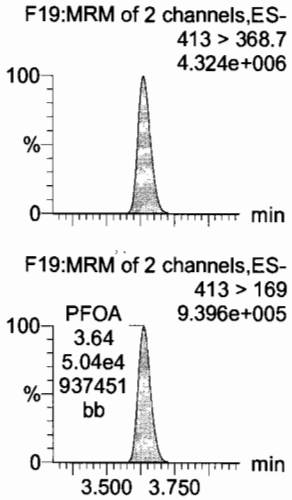
Name: 170731M2_8, Date: 01-Aug-2017, Time: 01:44:08, ID: ST170731M2-7 PFC CS4 17G3112, Description: PFC CS4 17G3112

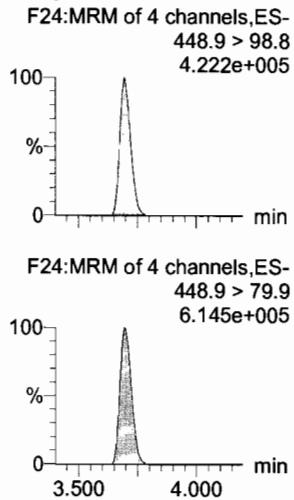
6:2 FTS



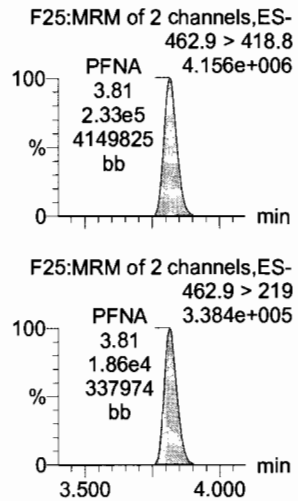
PFOA



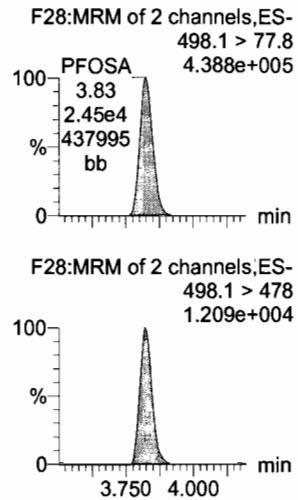
PFHpS



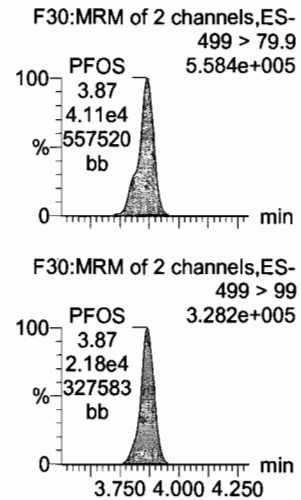
PFNA



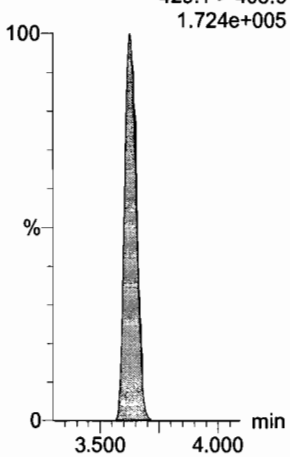
PFOSA



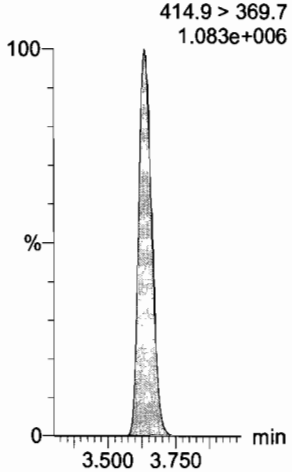
PFOS



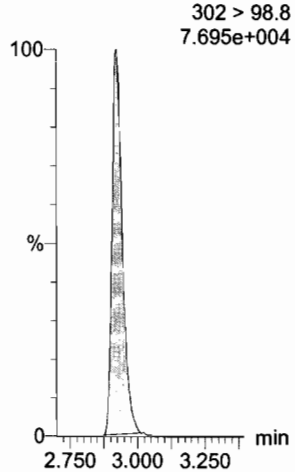
13C2-6:2 FTS



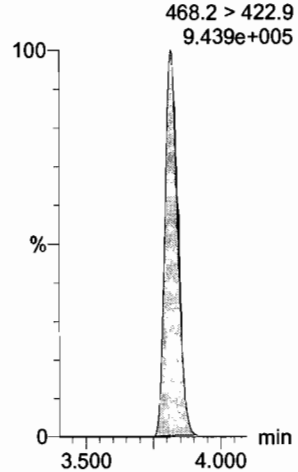
13C2-PFOA



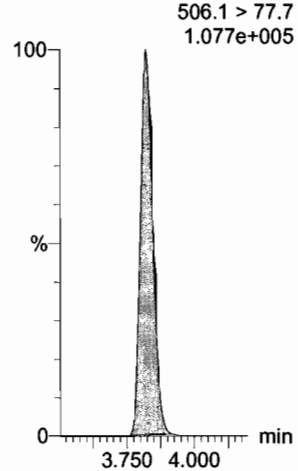
13C3-PFBS



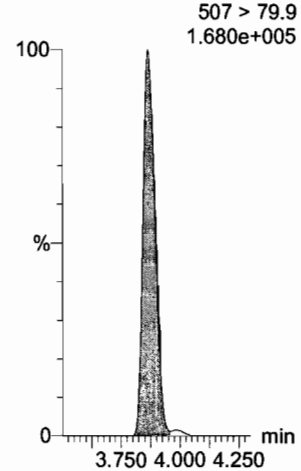
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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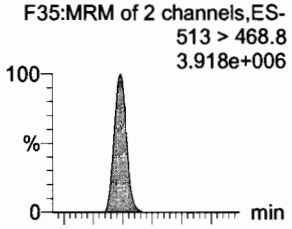
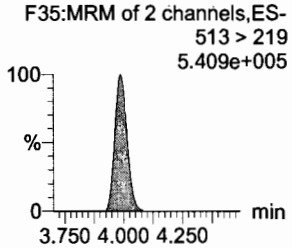
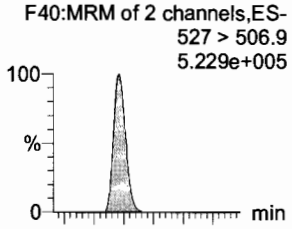
Name: 170731M2_8, Date: 01-Aug-2017, Time: 01:44:08, ID: ST170731M2-7 PFC CS4 17G3112, Description: PFC CS4 17G3112

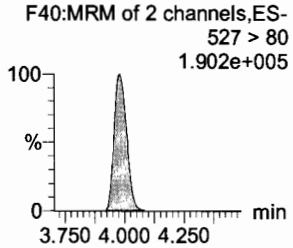
PFDA



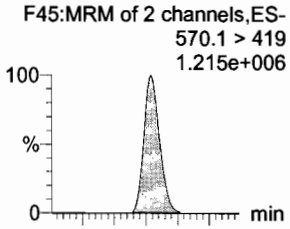


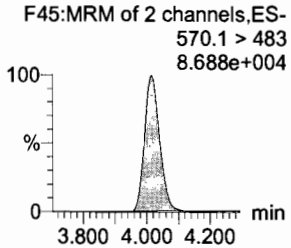
8:2 FTS



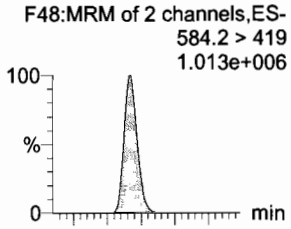


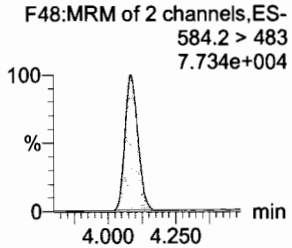
N-MeFOSAA



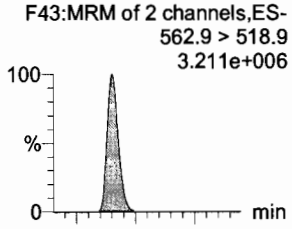


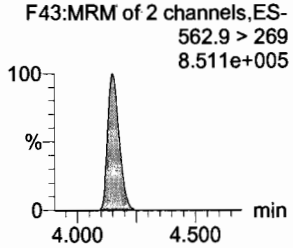
N-EtFOSAA



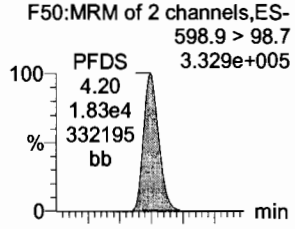


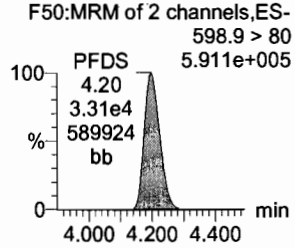
PFUnA



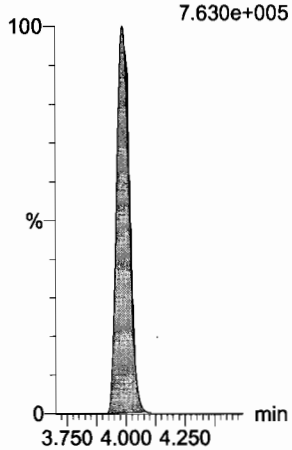


PFDS

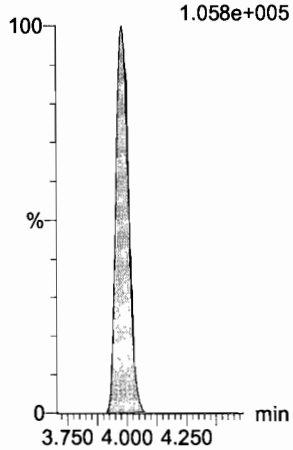




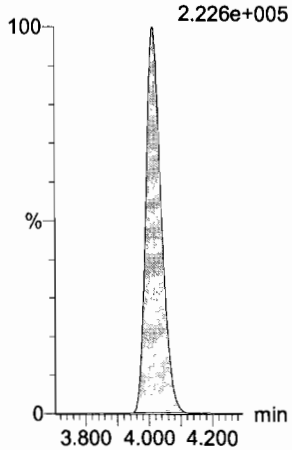
13C2-PFDA



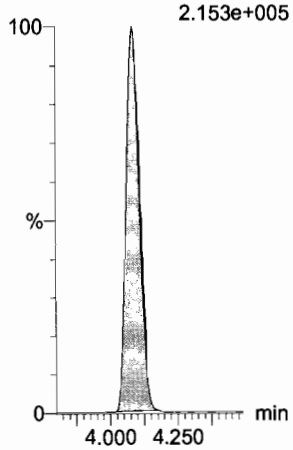
13C2-8:2 FTS



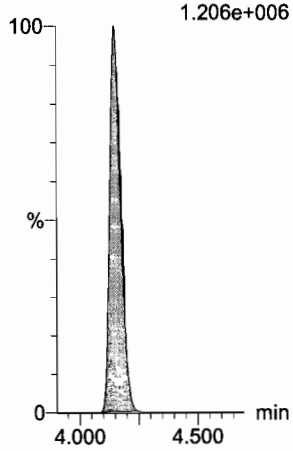
d3-N-MeFOSAA



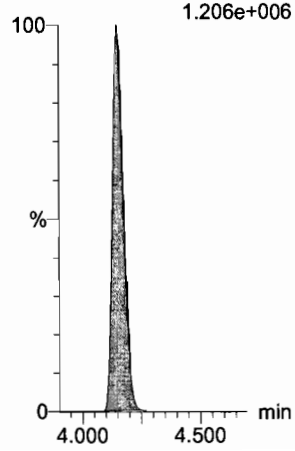
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



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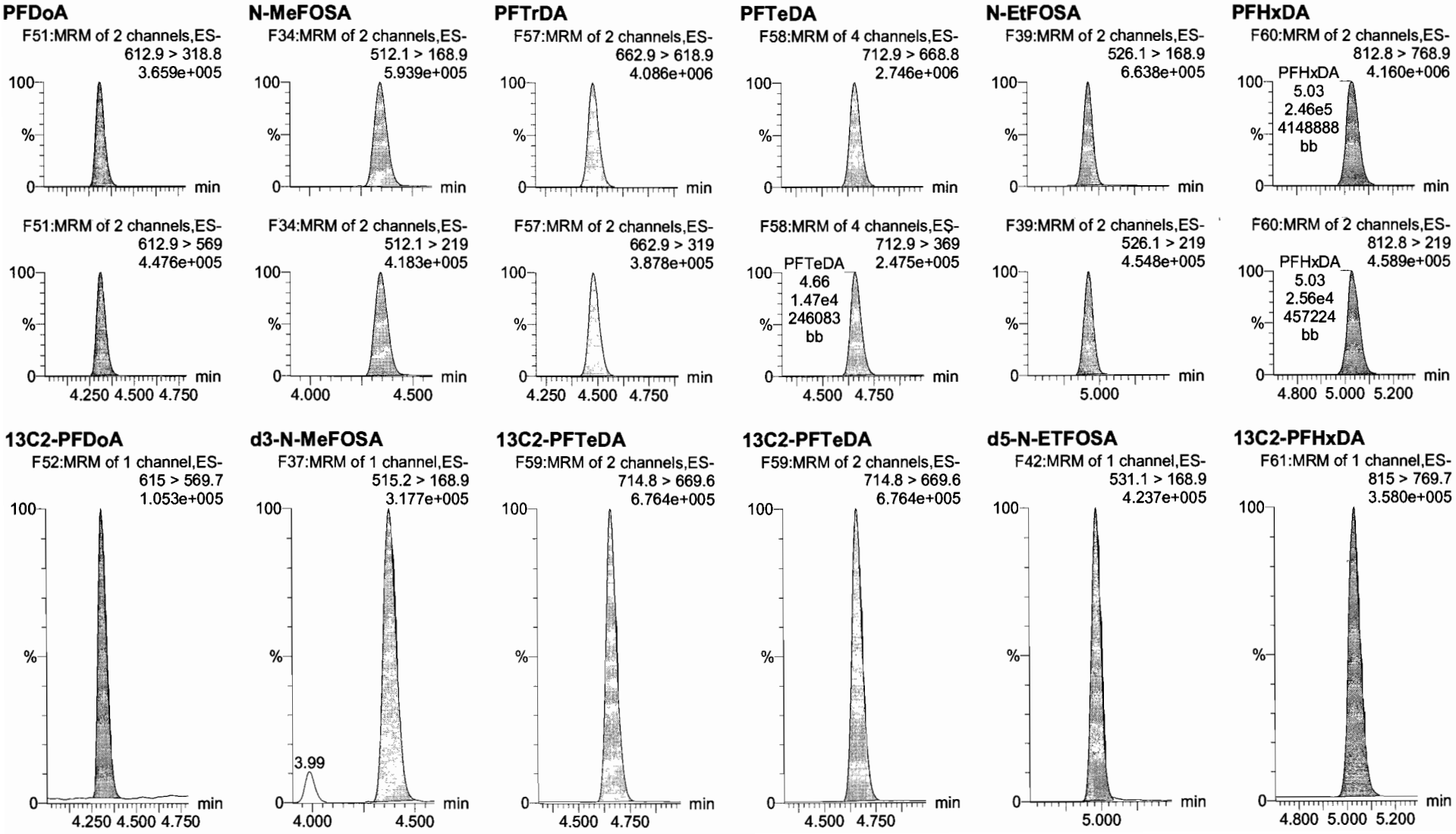
Name: 170731M2_8, Date: 01-Aug-2017, Time: 01:44:08, ID: ST170731M2-7 PFC CS4 17G3112, Description: PFC CS4 17G3112



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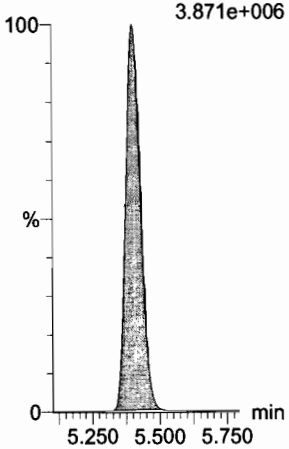
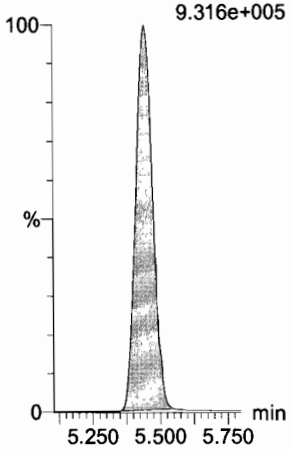
Name: 170731M2_8, Date: 01-Aug-2017, Time: 01:44:08, ID: ST170731M2-7 PFC CS4 17G3112, Description: PFC CS4 17G3112

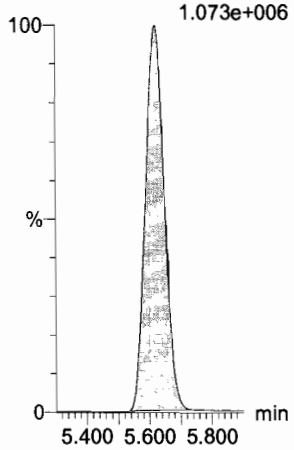
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
3.871e+006



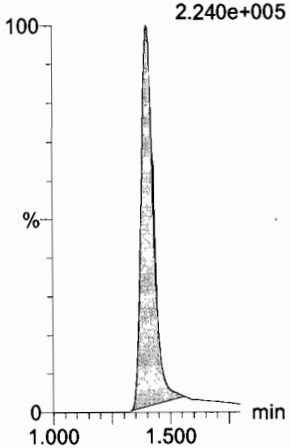
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
9.316e+005



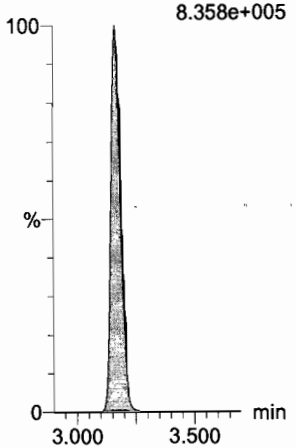
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
1.073e+006



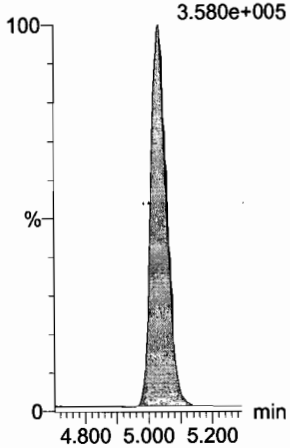
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.240e+005



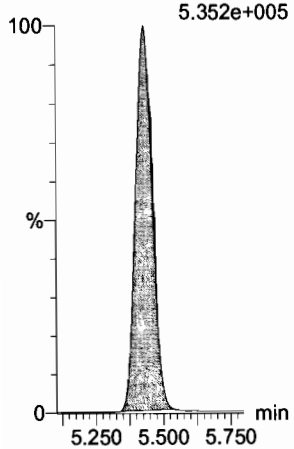
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
8.358e+005



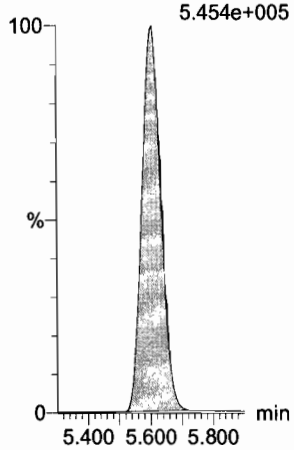
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
3.580e+005



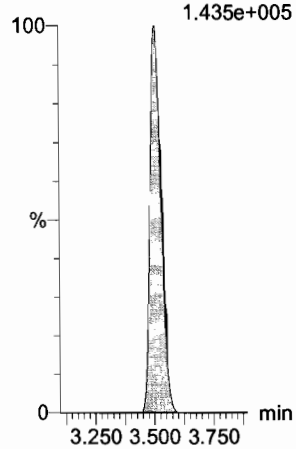
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
5.352e+005



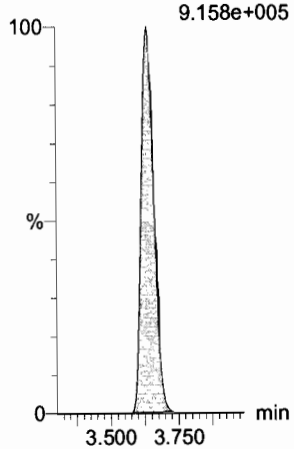
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
5.454e+005



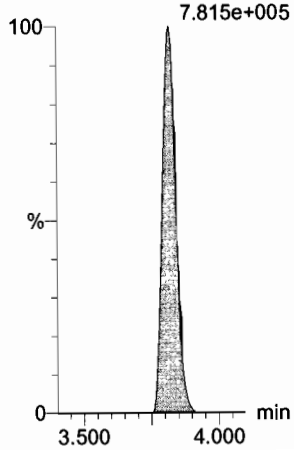
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.435e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
9.158e+005



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
7.815e+005



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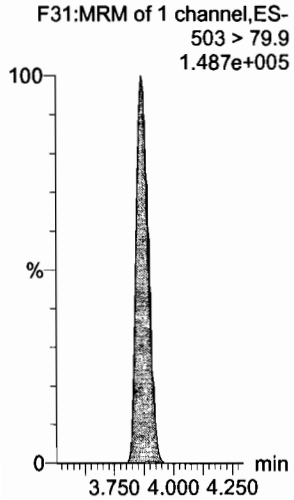
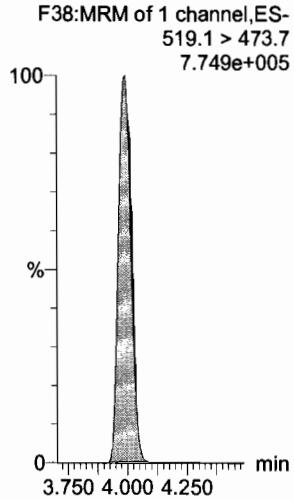
Name: 170731M2_8, Date: 01-Aug-2017, Time: 01:44:08, ID: ST170731M2-7 PFC CS4 17G3112, Description: PFC CS4 17G3112

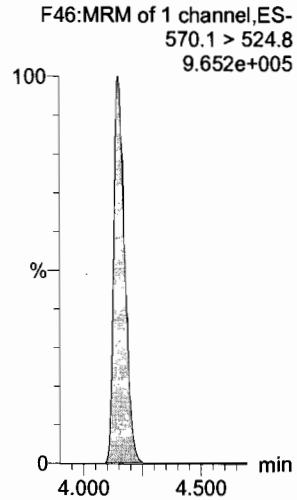
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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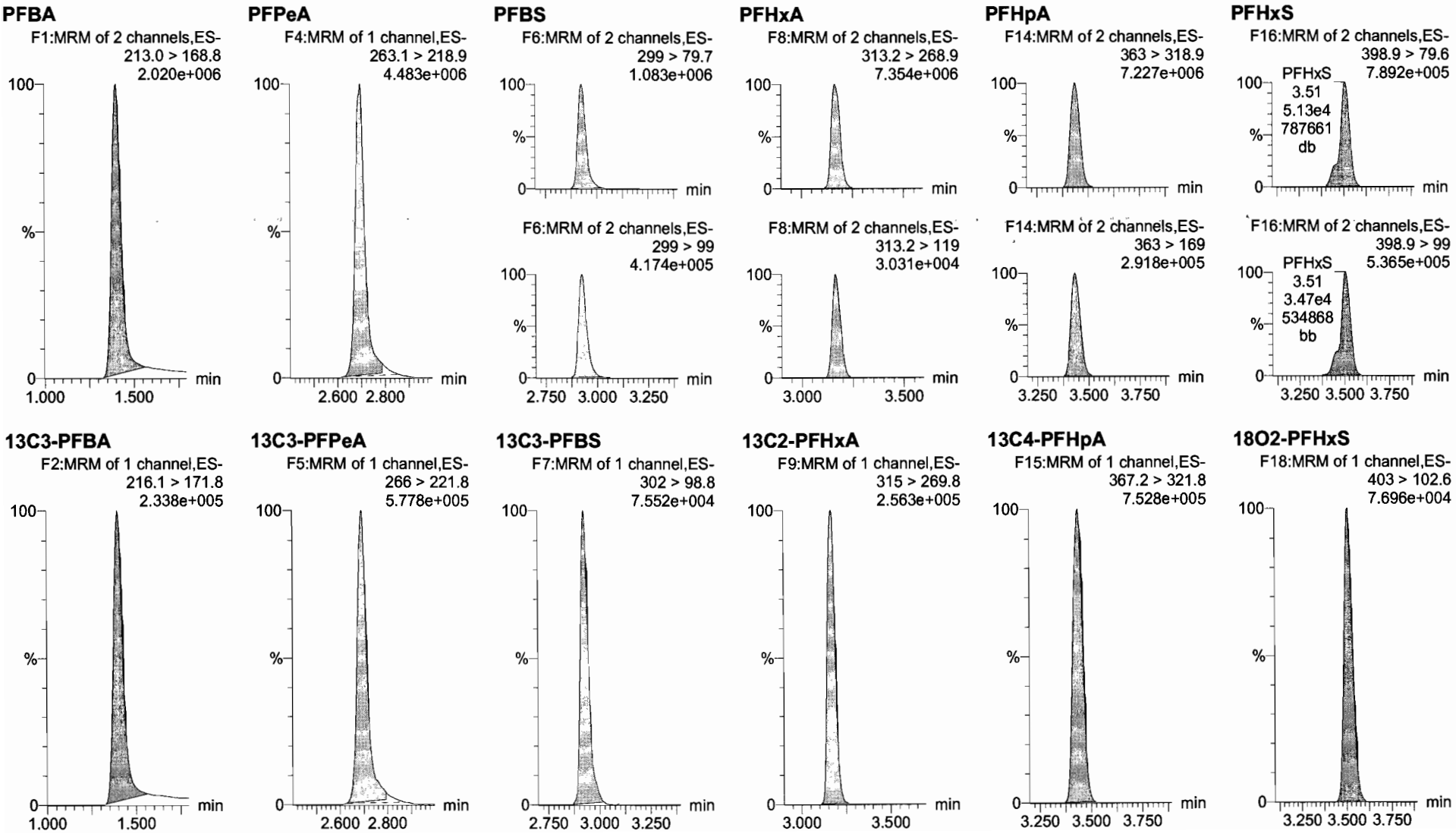
Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_9, Date: 01-Aug-2017, Time: 01:54:46, ID: ST170731M2-8 PFC CS5 17G3113, Description: PFC CS5 17G3113



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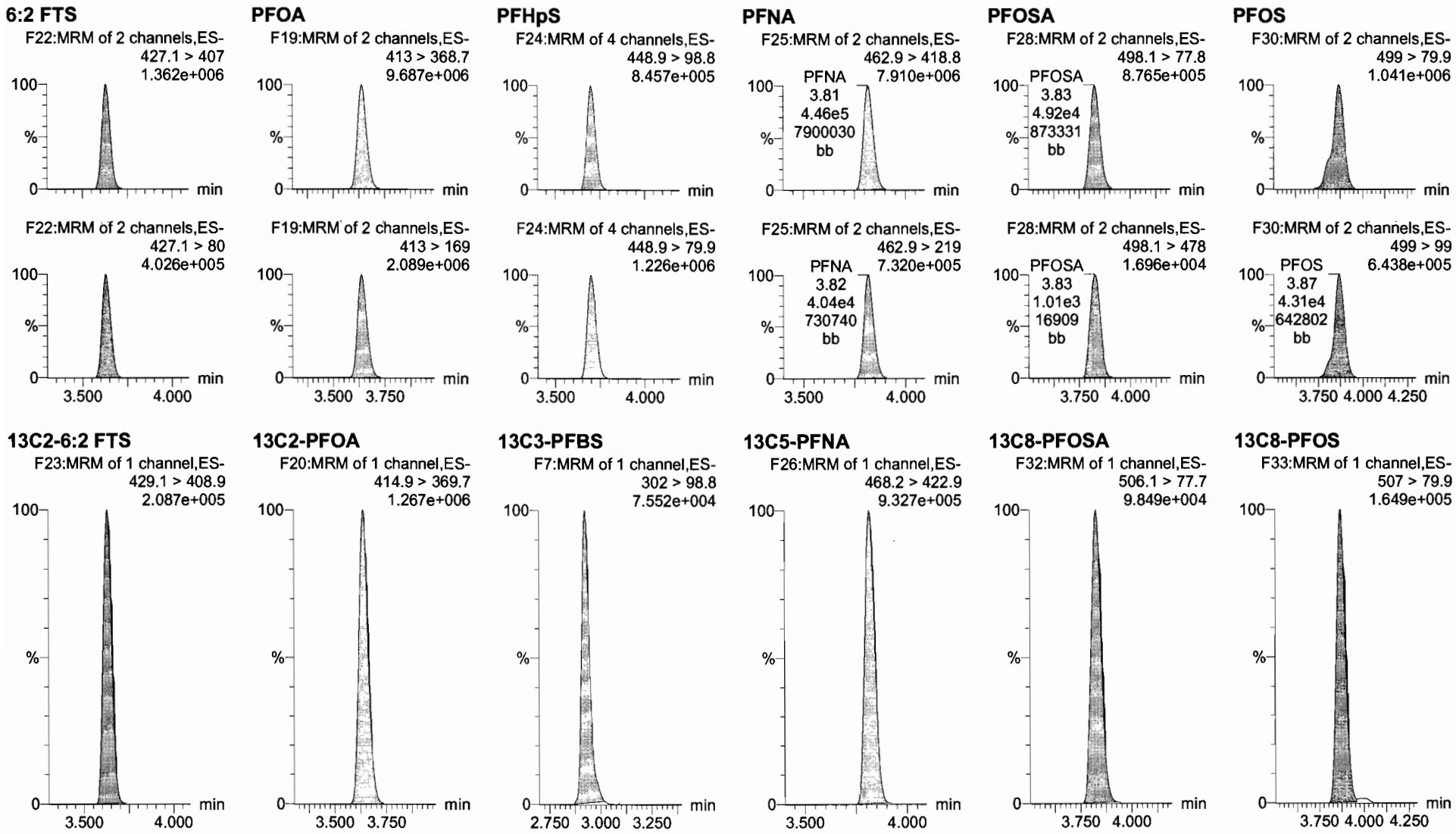
Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_9, Date: 01-Aug-2017, Time: 01:54:46, ID: ST170731M2-8 PFC CS5 17G3113, Description: PFC CS5 17G3113

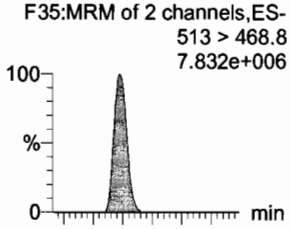


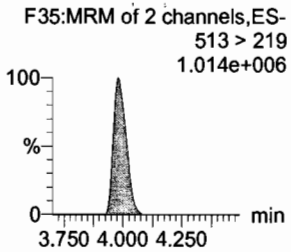
Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

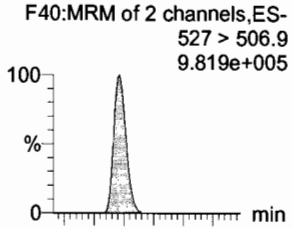
Name: 170731M2_9, Date: 01-Aug-2017, Time: 01:54:46, ID: ST170731M2-8 PFC CS5 17G3113, Description: PFC CS5 17G3113

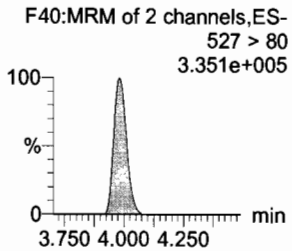
PFDA



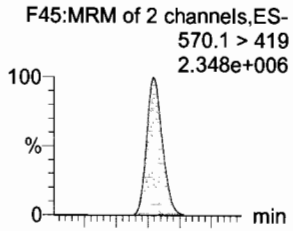


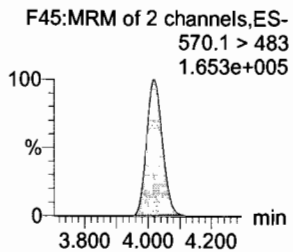
8:2 FTS



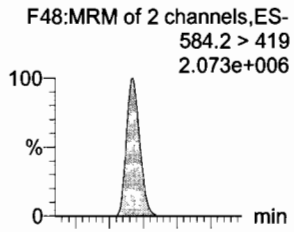


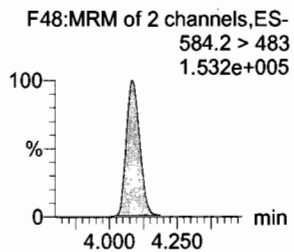
N-MeFOSAA



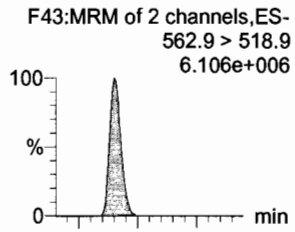


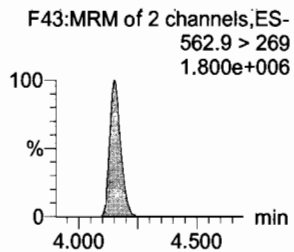
N-EtFOSAA



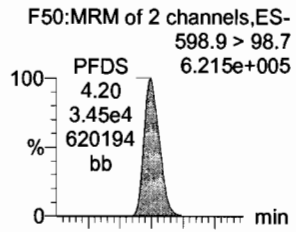


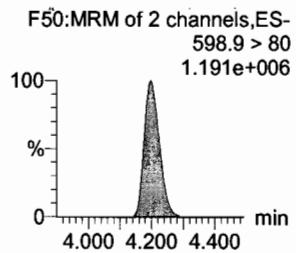
PFUnA



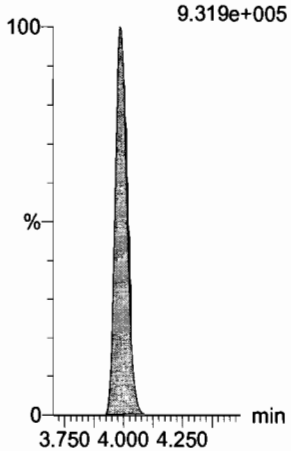


PFDS

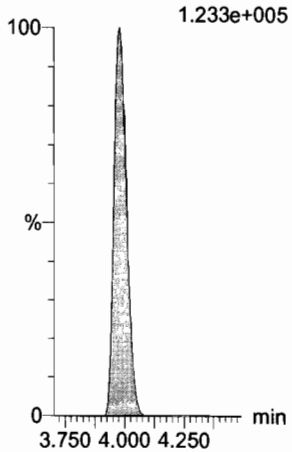




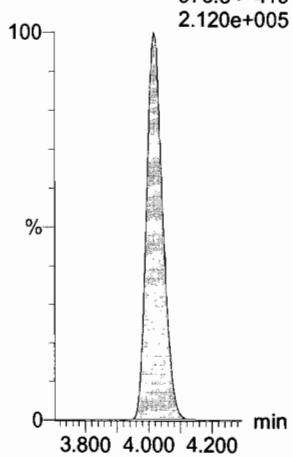
13C2-PFDA



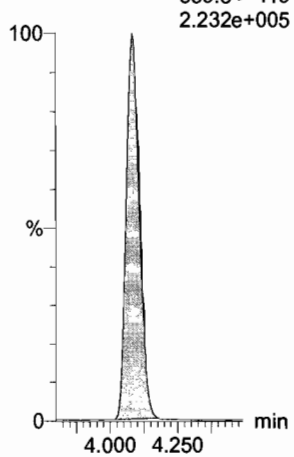
13C2-8:2 FTS



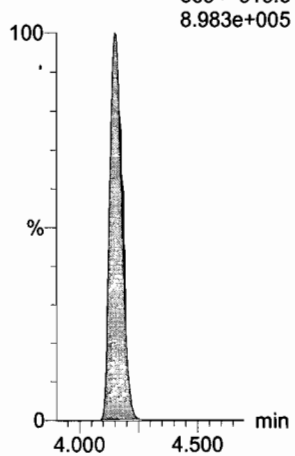
d3-N-MeFOSAA



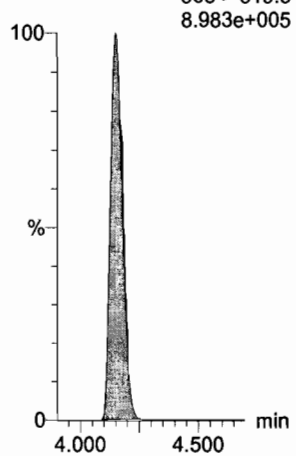
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



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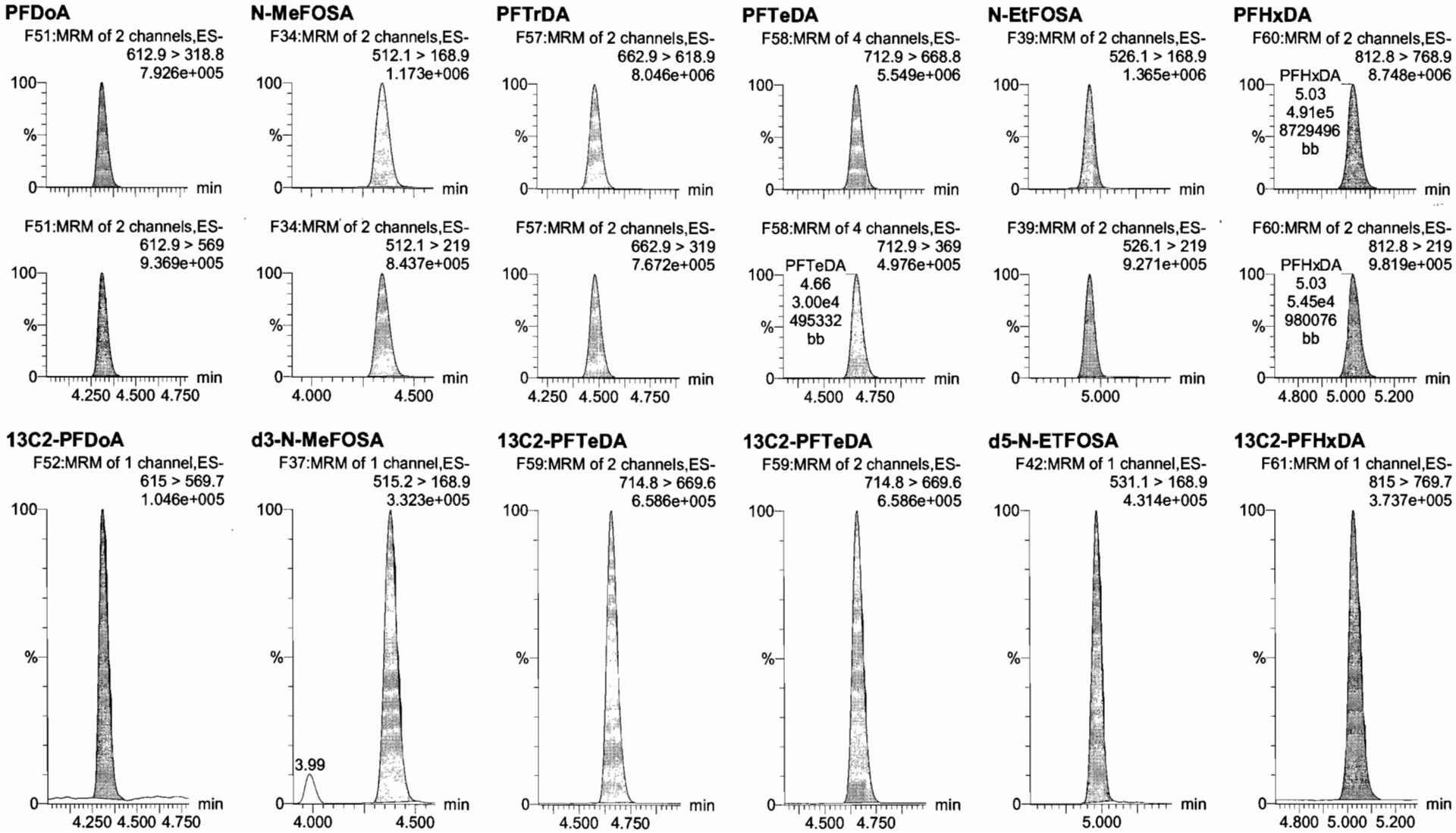
Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_9, Date: 01-Aug-2017, Time: 01:54:46, ID: ST170731M2-8 PFC CS5 17G3113, Description: PFC CS5 17G3113



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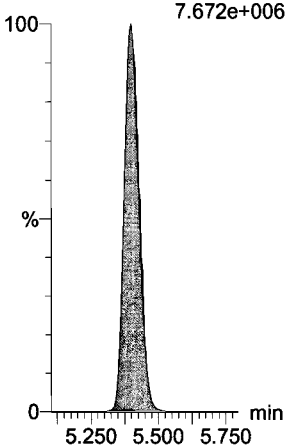
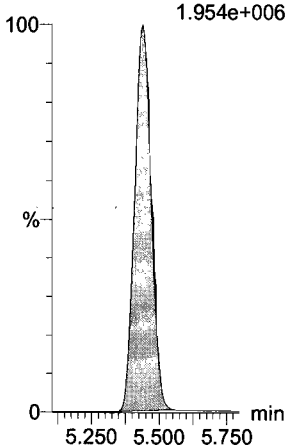
Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_9, Date: 01-Aug-2017, Time: 01:54:46, ID: ST170731M2-8 PFC CS5 17G3113, Description: PFC CS5 17G3113

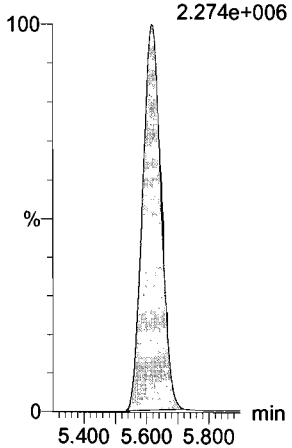
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
7.672e+006



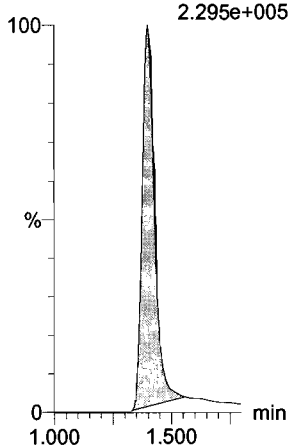
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
1.954e+006



N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
2.274e+006

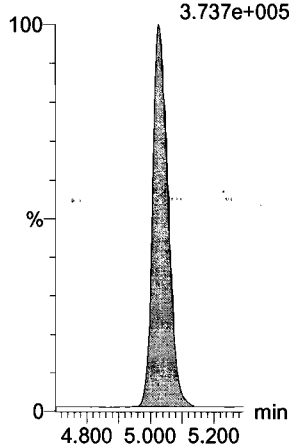


13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.295e+005

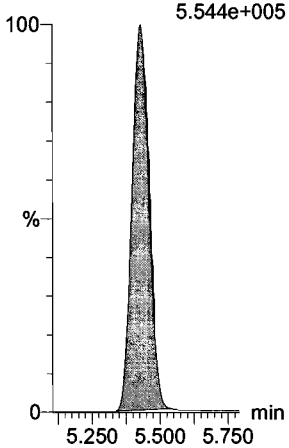


13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
8.447e+005

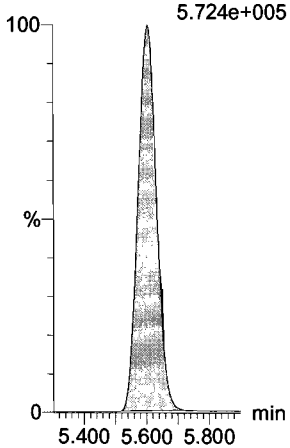
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
3.737e+005



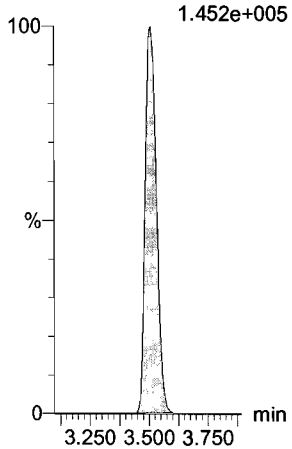
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
5.544e+005



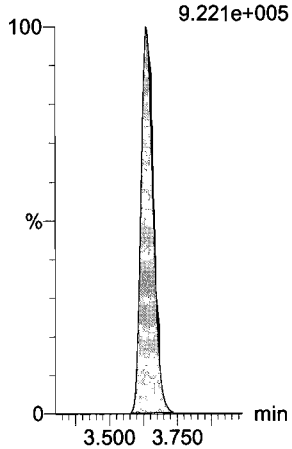
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
5.724e+005



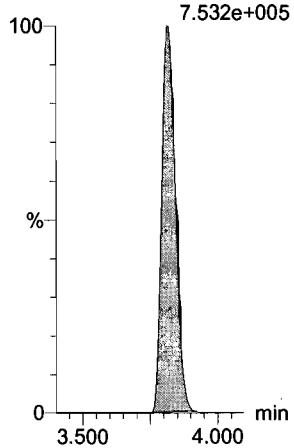
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.452e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
9.221e+005



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
7.532e+005



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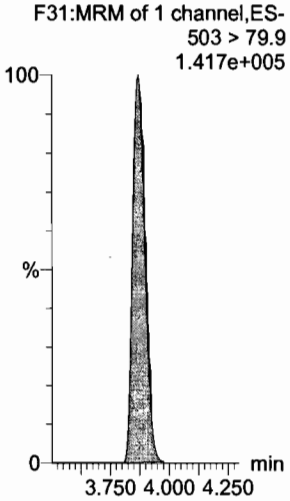
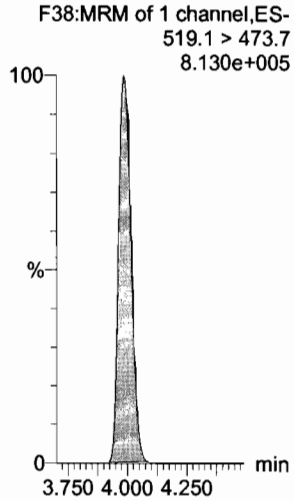
Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_9, Date: 01-Aug-2017, Time: 01:54:46, ID: ST170731M2-8 PFC CS5 17G3113, Description: PFC CS5 17G3113

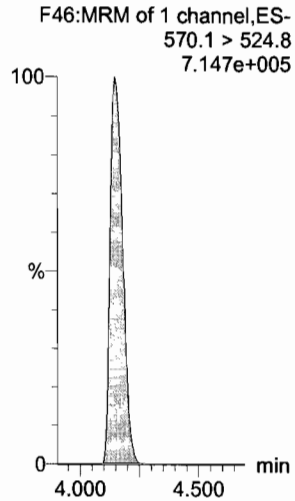
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
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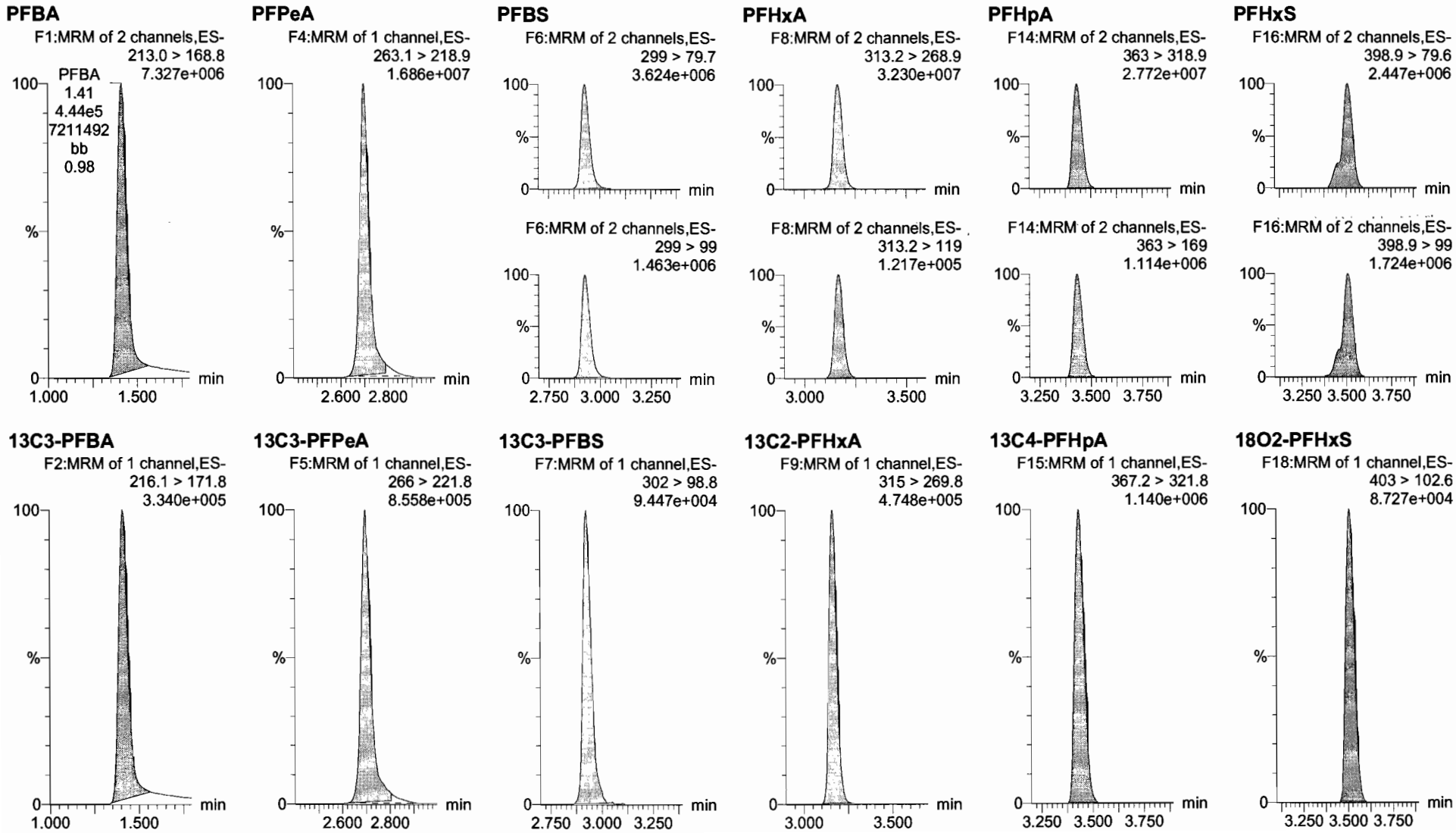
Name: 170731M2_10, Date: 01-Aug-2017, Time: 02:05:40, ID: ST170731M2-9 PFC CS6 17G2801, Description: PFC CS6 17G2801



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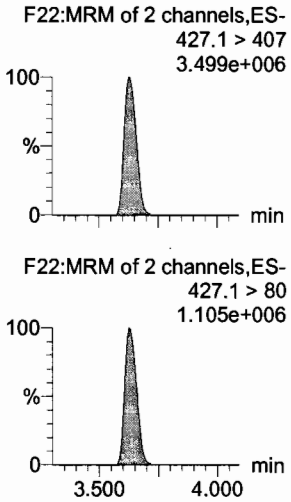
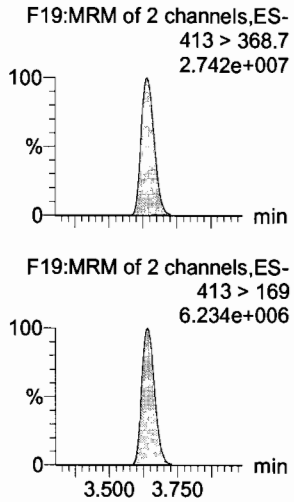
Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_10, Date: 01-Aug-2017, Time: 02:05:40, ID: ST170731M2-9 PFC CS6 17G2801, Description: PFC CS6 17G2801

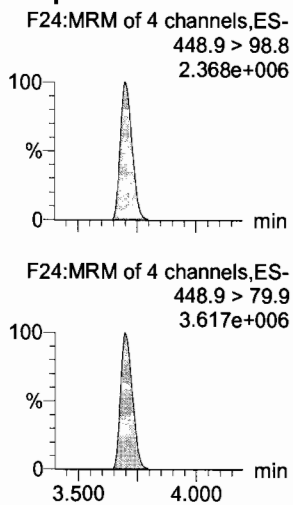
6:2 FTS



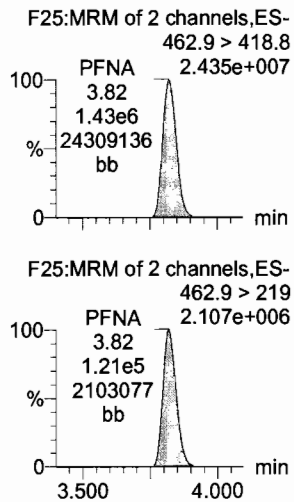
PFOA



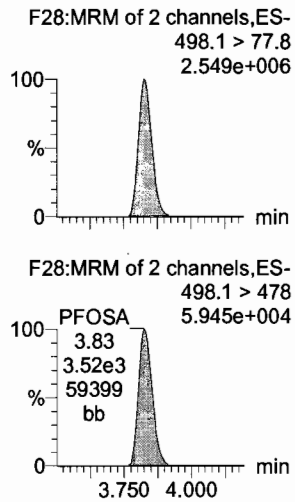
PFHpS



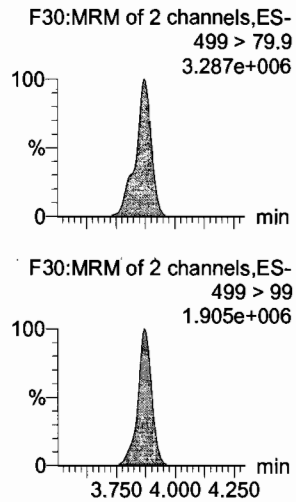
PFNA



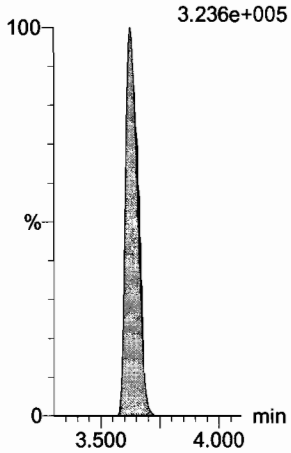
PFOSA



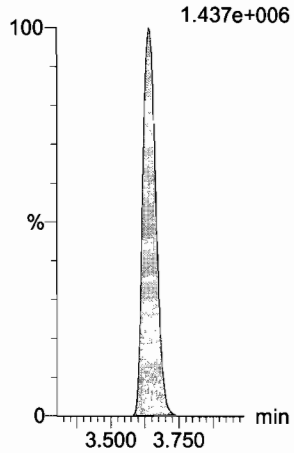
PFOS



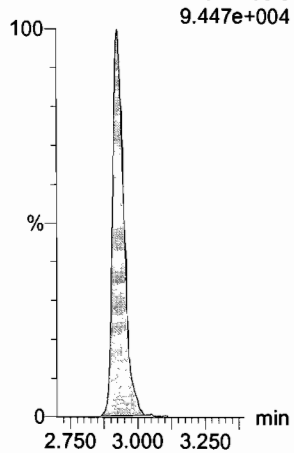
13C2-6:2 FTS



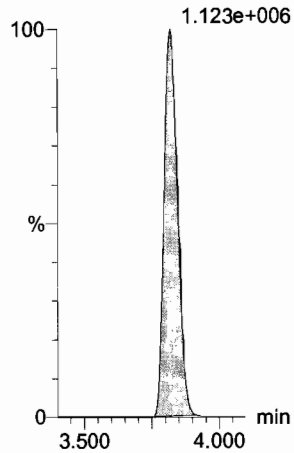
13C2-PFOA



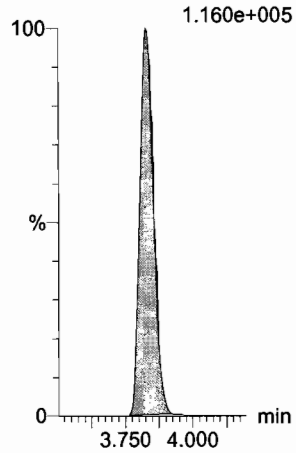
13C3-PFBS



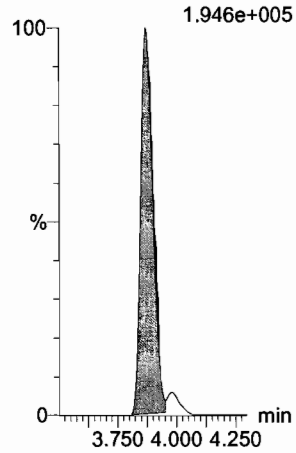
13C5-PFNA



13C8-PFOSA



13C8-PFOS

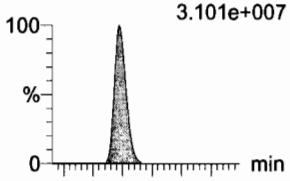


Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

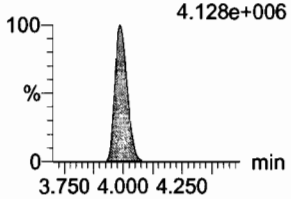
Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_10, Date: 01-Aug-2017, Time: 02:05:40, ID: ST170731M2-9 PFC CS6 17G2801, Description: PFC CS6 17G2801

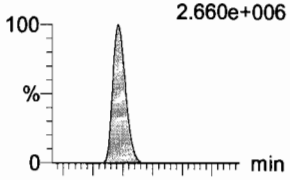
PFDA
F35:MRM of 2 channels,ES-
513 > 468.8
3.101e+007



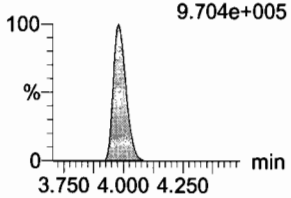
F35:MRM of 2 channels,ES-
513 > 219
4.128e+006



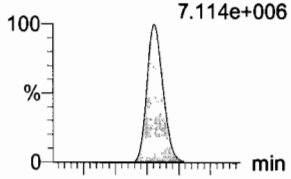
8:2 FTS
F40:MRM of 2 channels,ES-
527 > 506.9
2.660e+006



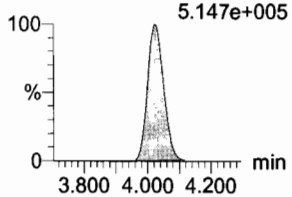
F40:MRM of 2 channels,ES-
527 > 80
9.704e+005



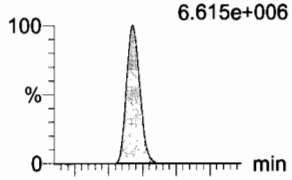
N-MeFOSAA
F45:MRM of 2 channels,ES-
570.1 > 419
7.114e+006



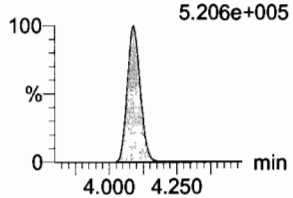
F45:MRM of 2 channels,ES-
570.1 > 483
5.147e+005



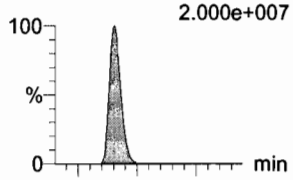
N-EtFOSAA
F48:MRM of 2 channels,ES-
584.2 > 419
6.615e+006



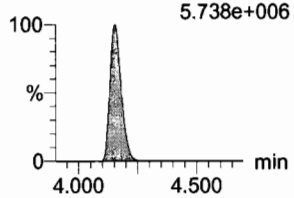
F48:MRM of 2 channels,ES-
584.2 > 483
5.206e+005



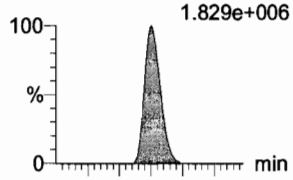
PFUnA
F43:MRM of 2 channels,ES-
562.9 > 518.9
2.000e+007



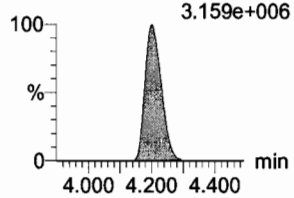
F43:MRM of 2 channels,ES-
562.9 > 269
5.738e+006



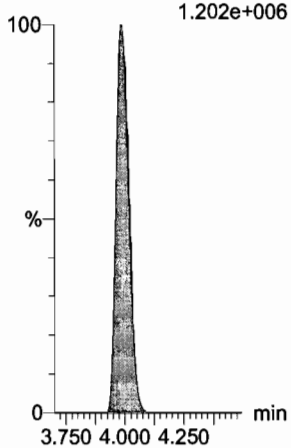
PFDS
F50:MRM of 2 channels,ES-
598.9 > 98.7
1.829e+006



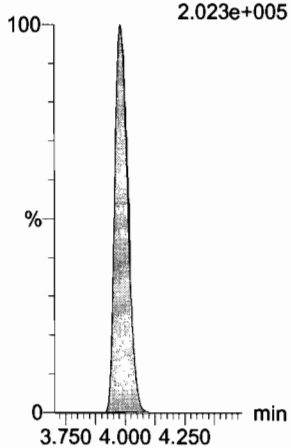
F50:MRM of 2 channels,ES-
598.9 > 80
3.159e+006



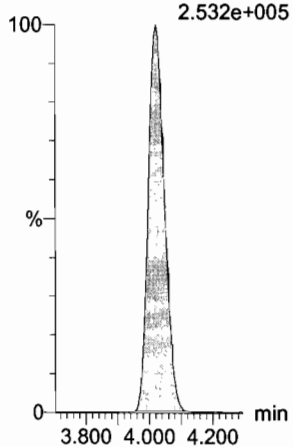
13C2-PFDA
F36:MRM of 1 channel,ES-
515.1 > 469.9
1.202e+006



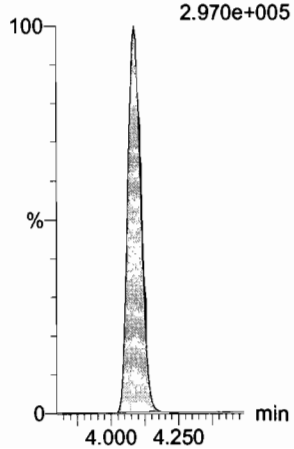
13C2-8:2 FTS
F41:MRM of 1 channel,ES-
529.1 > 508.7
2.023e+005



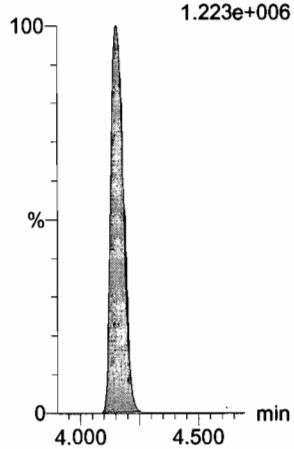
d3-N-MeFOSAA
F47:MRM of 1 channel,ES-
573.3 > 419
2.532e+005



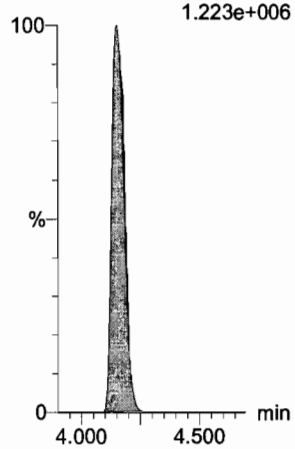
d5-N-EtFOSAA
F49:MRM of 1 channel,ES-
589.3 > 419
2.970e+005



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.223e+006



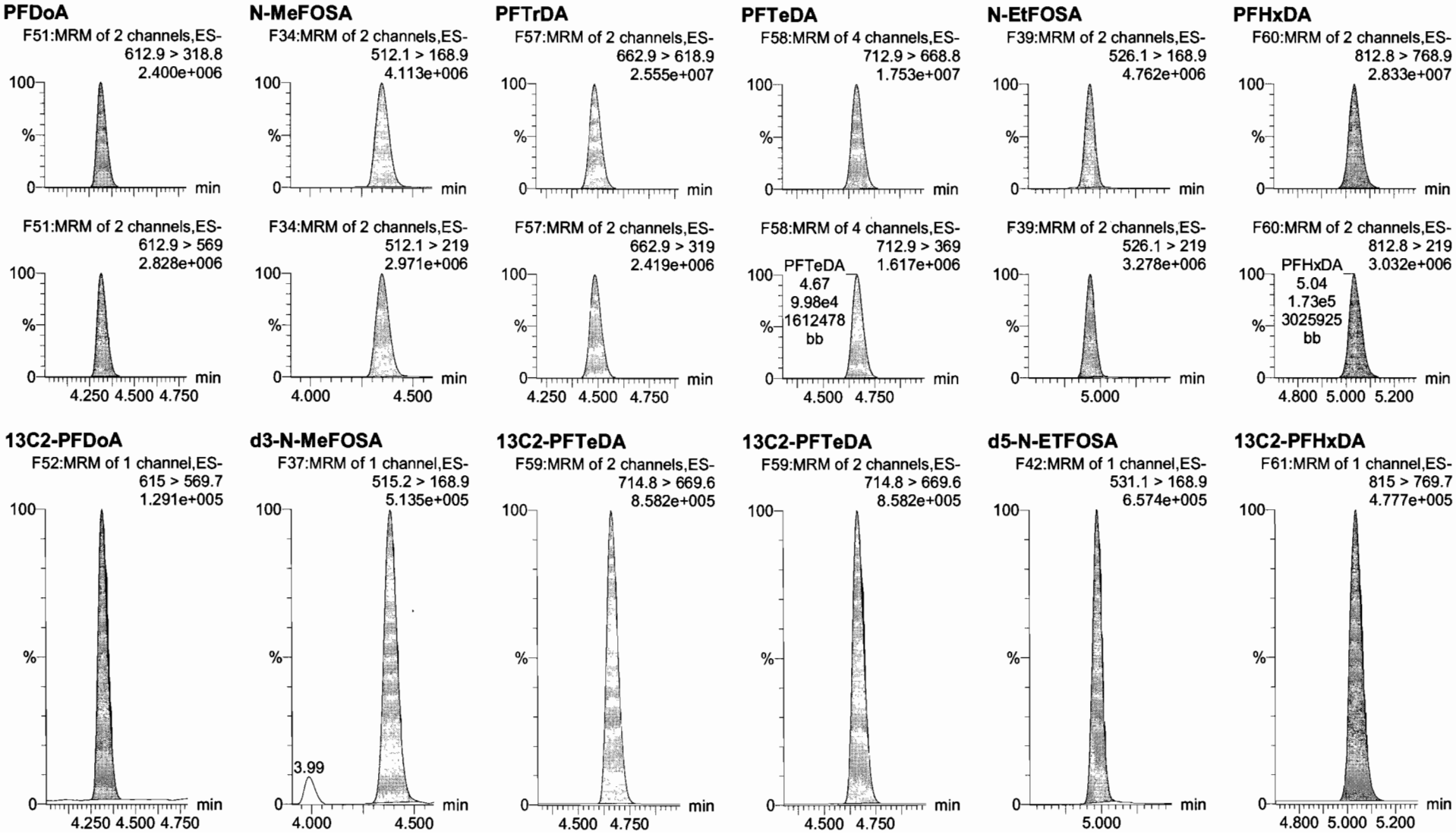
13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.223e+006



Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_10, Date: 01-Aug-2017, Time: 02:05:40, ID: ST170731M2-9 PFC CS6 17G2801, Description: PFC CS6 17G2801

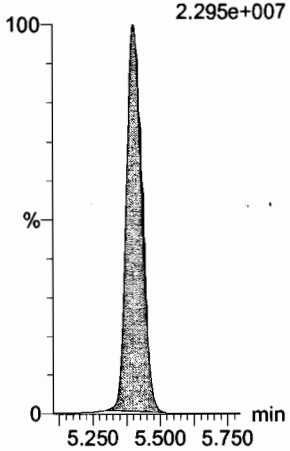


Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

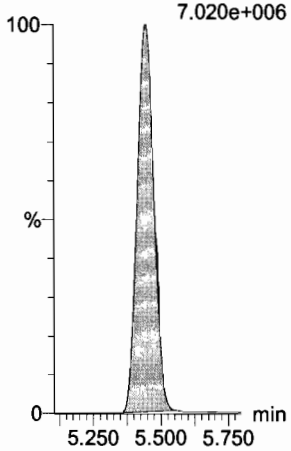
Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_10, Date: 01-Aug-2017, Time: 02:05:40, ID: ST170731M2-9 PFC CS6 17G2801, Description: PFC CS6 17G2801

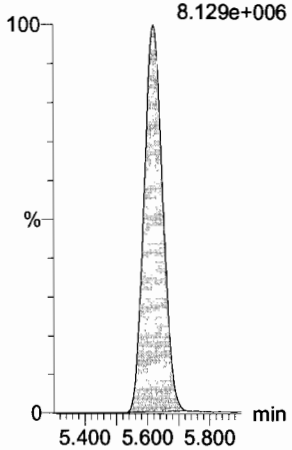
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
2.295e+007



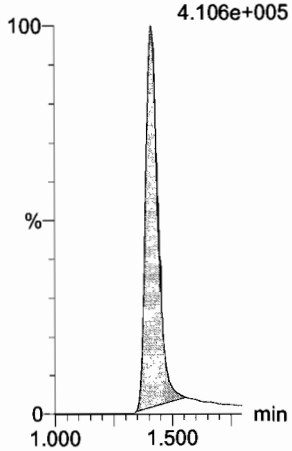
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
7.020e+006



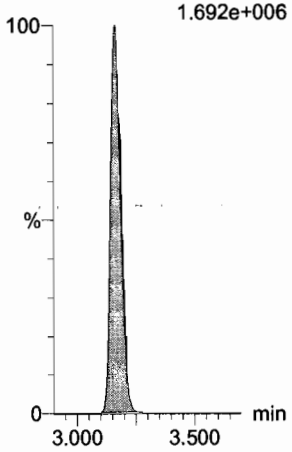
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
8.129e+006



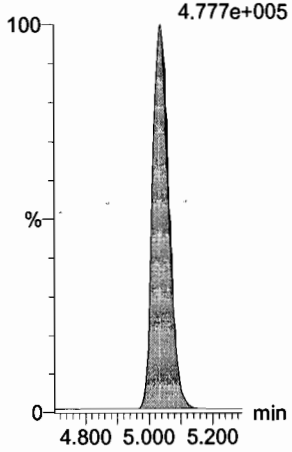
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
4.106e+005



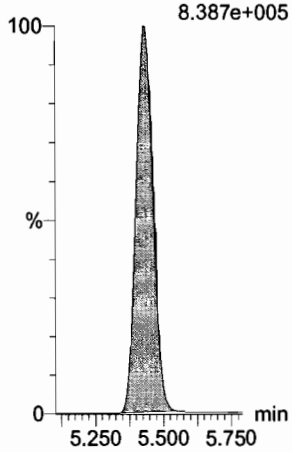
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
1.692e+006



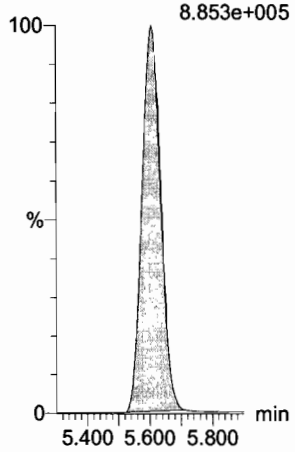
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.777e+005



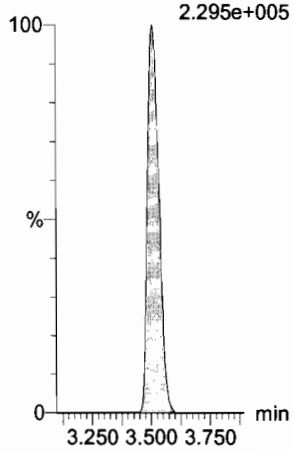
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
8.387e+005



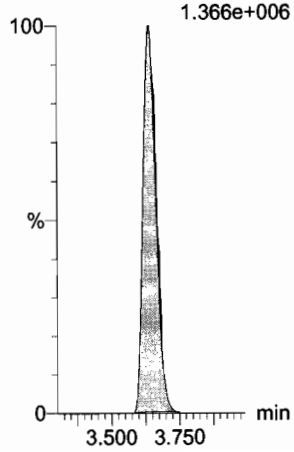
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
8.853e+005



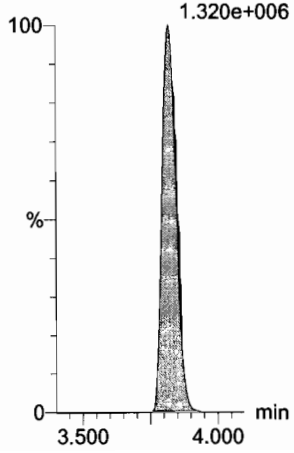
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
2.295e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.366e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.320e+006

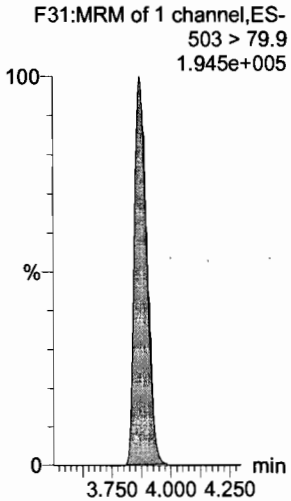


Dataset: U:\Q4.PRO\results\170731M2\170731M2-CRV.qld

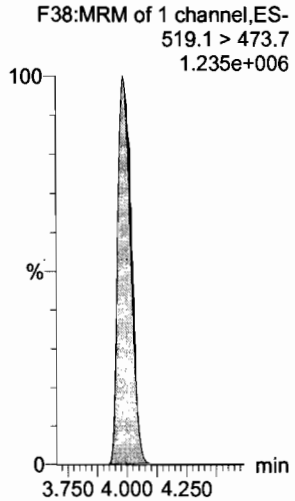
Last Altered: Tuesday, August 01, 2017 10:11:08 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:12:04 Pacific Daylight Time

Name: 170731M2_10, Date: 01-Aug-2017, Time: 02:05:40, ID: ST170731M2-9 PFC CS6 17G2801, Description: PFC CS6 17G2801

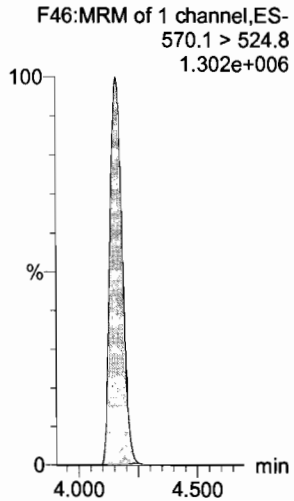
13C4-PFOS



13C6-PFDA



13C7-PFUnA



Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN945 SCN960**
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170731M2\170731M2-13.qld

Last Altered: Tuesday, August 01, 2017 10:24:48 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:25:30 Pacific Daylight Time

(A) Not included in SS.

AC 8/1/17

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 01 Aug 2017 09:55:07
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170731M2_13, Date: 01-Aug-2017, Time: 02:38:37, ID: SS170731M2-1 PFC SSS 17G3106, Description: PFC SSS 17G3106

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1	PFBA	213.0 > 168.8	1.17e4	1.36e4		1.41	1.40	10.7	9.89	98.9
2	2	PFPeA	263.1 > 218.9	2.16e4	2.96e4		2.77	2.70	9.11	9.54	95.4
3	3	PFBS	299 > 79.7	4.36e3	3.41e3		2.96	2.93	16.0	8.45	84.5
4	4	PFHxA	313.2 > 268.9	3.76e4	1.39e4		3.19	3.17	13.6	9.67	96.7
5	5	PFHpA	363 > 318.9	4.01e4	4.36e4		3.45	3.43	11.5	9.55	95.5
6	6	PFHxS	398.9 > 79.6	4.17e3	3.75e3		3.56	3.51	13.9	8.26	82.6
7	7	6:2 FTS	427.1 > 407	8.12e3	1.03e4		3.64	3.63	9.86	8.74	87.4
8	8	PFOA	413 > 368.7	5.00e4	6.49e4		3.65	3.64	9.63	9.94	99.4
9	9	PFHpS	448.9 > 98.8	4.25e3	6.49e4		3.71	3.70	0.818	9.42	94.2
10	10	PFNA	462.9 > 418.8	4.76e4	5.50e4		3.83	3.82	10.8	9.89	98.9
11	11	PFOSA	498.1 > 77.8	5.22e3	6.35e3		3.84	3.83	10.3	9.60	96.0
12	12	PFOS	499 > 79.9	7.20e3	1.06e4		3.89	3.87	8.48	8.29	82.9
13	13	PFDA	513 > 468.8	4.82e4	5.65e4		4.01	3.99	10.6	8.74	87.4
14	14	8:2 FTS	527 > 506.9	6.54e3	6.05e3		4.00	3.98	13.5	9.58	95.8
15	15	N-MeFOSAA	570.1 > 419	1.39e4	1.35e4		4.03	4.02	167	9.37	93.7
16	16	N-EtFOSAA	584.2 > 419	1.18e4	1.25e4		4.10	4.09	153	9.93	99.3
17	17	PFUnA	562.9 > 518.9	3.73e4	6.16e4		4.17	4.16	7.57	9.88	98.8
18	18	PFDS	598.9 > 98.7	3.30e3	6.16e4		4.22	4.20	0.669	8.31	83.1
19	19	PFDoA	612.9 > 318.8	4.17e3	6.21e3		4.34	4.31	8.40	8.92	89.2
20	20	N-MeFOSA	512.1 > 168.9		2.44e4		4.29				(A)
21	21	PFTrDA	662.9 > 618.9	4.94e4	6.21e3		4.50	4.49	99.5	9.48	94.8
22	22	PFTeDA	712.9 > 668.8	3.40e4	4.04e4		4.68	4.66	10.5	9.73	97.3
23	23	N-EtFOSA	526.1 > 168.9	5.15e0	3.29e4		4.87	4.93	0.0235		(A)
24	24	PFHxDA	812.8 > 768.9	5.23e2	1.96e4		5.06	5.03	0.133		
25	25	PFODA	912.8 > 868.8	3.08e2	1.96e4		5.43	5.40	0.0785		
26	26	N-MeFOSE	616.1 > 58.9	2.97e1	3.90e4		5.42	5.44	0.114		
27	27	N-EtFOSE	630.1 > 58.9		3.88e4		5.59				
28	28	13C3-PFBA	216.1 > 171.8	1.36e4	1.36e4	1.006	1.41	1.40	12.5	12.4	99.5
29	29	13C3-PFPeA	266 > 221.8	2.96e4	3.98e4	0.275	2.77	2.69	3.73	13.5	108.4
30	30	13C3-PFBS	302 > 98.8	3.41e3	3.98e4	0.034	2.96	2.92	0.428	12.6	100.4
31	31	13C2-PFHxA	315 > 269.8	1.39e4	3.98e4	0.334	3.19	3.17	1.74	5.22	104.3

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Dataset: U:\Q4.PRO\results\170731M2\170731M2-13.qld

Last Altered: Tuesday, August 01, 2017 10:24:48 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:25:30 Pacific Daylight Time

Name: 170731M2_13, Date: 01-Aug-2017, Time: 02:38:37, ID: SS170731M2-1 PFC SSS 17G3106, Description: PFC SSS 17G3106

	# Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	32 13C4-PFHpA	367.2 > 321.8	4.36e4	3.98e4	0.414	3.45	3.43	5.48	13.2	105.9
33	33 18O2-PFHxS	403 > 102.6	3.75e3	7.57e3	0.475	3.56	3.51	6.19	13.0	104.2
34	34 13C2-6:2 FTS	429.1 > 408.9	1.03e4	4.79e4	0.214	3.64	3.63	2.68	12.5	100.3
35	35 13C2-PFOA	414.9 > 369.7	6.49e4	4.79e4	1.298	3.65	3.64	16.9	13.0	104.2
36	36 13C5-PFNA	468.2 > 422.9	5.50e4	4.99e4	1.094	3.83	3.82	13.8	12.6	100.7
37	37 13C8-PFOSA	506.1 > 77.7	6.35e3	5.45e4	0.124	3.84	3.83	1.46	11.7	93.5
38	38 13C8-PFOS	507 > 79.9	1.06e4	8.57e3	1.153	3.89	3.87	15.5	13.4	107.4
39	39 13C2-PFDA	515.1 > 469.9	5.65e4	5.31e4	1.059	4.01	3.99	13.3	12.6	100.6
40	40 13C2-8:2 FTS	529.1 > 508.7	6.05e3	5.31e4	0.129	4.00	3.98	1.43	11.1	88.7
41	41 d3-N-MeFOSAA	573.3 > 419	1.35e4	5.45e4	0.019	4.03	4.02	3.09	160	98.5
42	42 d5-N-EtFOSAA	589.3 > 419	1.25e4	5.45e4	0.019	4.12	4.09	2.87	151	93.2
43	43 13C2-PFUnA	565 > 519.8	6.16e4	5.45e4	1.172	4.17	4.16	14.1	12.1	96.4
44	44 13C2-PFDoA	615 > 569.7	6.21e3	5.45e4	0.118	4.34	4.31	1.42	12.0	96.1
45	45 d3-N-MeFOSA	515.2 > 168.9	2.44e4	5.45e4	0.040	4.29	4.38	5.60	138	92.3
46	46 13C2-PFTeDA	714.8 > 669.6	4.04e4	5.45e4	0.801	4.68	4.66	9.26	11.6	92.5
47	47 d5-N-ETFOSA	531.1 > 168.9	3.29e4	5.45e4	0.055	5.01	4.97	7.55	137	91.4
48	48 13C2-PFHxDA	815 > 769.7	1.96e4	5.45e4	0.991	5.06	5.03	4.50	4.54	90.7
49	49 d7-N-MeFOSE	623.1 > 58.9	3.90e4	5.45e4	0.065	5.42	5.43	8.94	137	91.4
50	50 d9-N-EtFOSE	639.2 > 58.8	3.88e4	5.45e4	0.065	5.59	5.61	8.89	137	91.5
51	51 13C4-PFBA	217 > 171.8	1.36e4	1.36e4	1.000	1.41	1.40	12.5	12.5	100.0
52	52 13C5-PFHxA	318 > 272.9	3.98e4	3.98e4	1.000	3.19	3.17	5.00	5.00	100.0
53	53 13C3-PFHxS	401.9 > 79.9	7.57e3	7.57e3	1.000	3.56	3.51	12.5	12.5	100.0
54	54 13C8-PFOA	421.3 > 376	4.79e4	4.79e4	1.000	3.65	3.64	12.5	12.5	100.0
55	55 13C9-PFNA	472.2 > 426.9	4.99e4	4.99e4	1.000	3.83	3.82	12.5	12.5	100.0
56	56 13C4-PFOS	503 > 79.9	8.57e3	8.57e3	1.000	3.89	3.87	12.5	12.5	100.0
57	57 13C6-PFDA	519.1 > 473.7	5.31e4	5.31e4	1.000	4.01	3.99	12.5	12.5	100.0
58	58 13C7-PFUnA	570.1 > 524.8	5.45e4	5.45e4	1.000	4.17	4.16	12.5	12.5	100.0

Quantify Totals Report MassLynx MassLynx V4.1 SCN945 SCN960
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170731M2\170731M2-13.qld

Last Altered: Tuesday, August 01, 2017 10:24:48 Pacific Daylight Time
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Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 01 Aug 2017 09:55:07
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170731M2_13, Date: 01-Aug-2017, Time: 02:38:37, ID: SS170731M2-1 PFC SSS 17G3106, Description: PFC SSS 17G3106

Total PFBS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3 PFBS	299 > 79.7	2.93	4357.564	3405.490	15.995	bb	8.45

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6 PFHxS	398.9 > 79.6	3.51	4174.485	3749.125	13.918	MM	8.26

Total PFOA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8 PFOA	413 > 368.7	3.64	49957.527	64869.781	9.627	bb	9.94

Total PFOS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12 PFOS	499 > 79.9	3.87	7204.411	10619.089	8.480	bb	8.29

Total N-Me-FOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15 N-MeFOSAA	570.1 > 419	4.02	13886.400	13491.591	167.255	bb	9.37
2	63 Total N-Me-FOSAA	570.1 > 419	3.87	6.033	13491.591	0.073	bbl	
3	63 Total N-Me-FOSAA	570.1 > 419	3.76	12.109	13491.591	0.146	bbl	

Total N-EtFOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16 N-EtFOSAA	584.2 > 419	4.09	11783.439	12511.836	153.040	bb	9.93
2	64 Total N-EtFOSAA	584.2 > 419	4.33	9.825	12511.836	0.128	bb	0.0294

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170731M2\170731M2-13.qld

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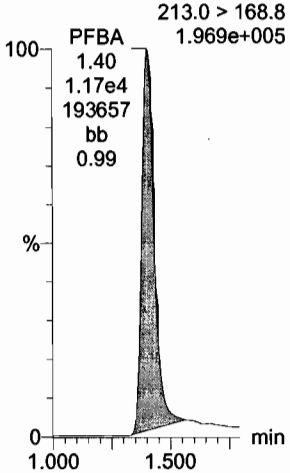
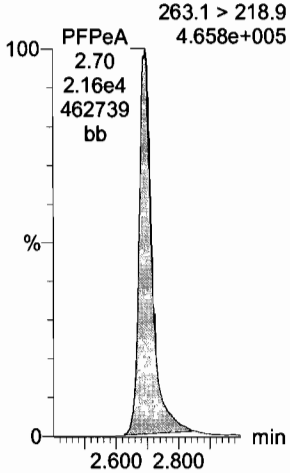
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 01 Aug 2017 09:55:07
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

Name: 170731M2_13, Date: 01-Aug-2017, Time: 02:38:37, ID: SS170731M2-1 PFC SSS 17G3106, Description: PFC SSS 17G3106

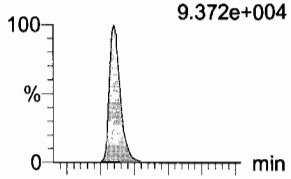
PFBA
F1:MRM of 2 channels,ES-
213.0 > 168.8
1.969e+005



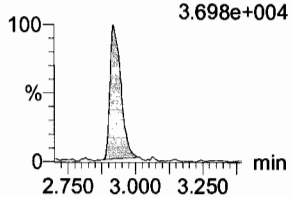
PFPeA
F4:MRM of 1 channel,ES-
263.1 > 218.9
4.658e+005



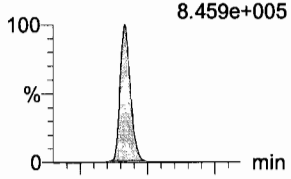
PFBS
F6:MRM of 2 channels,ES-
299 > 79.7
9.372e+004



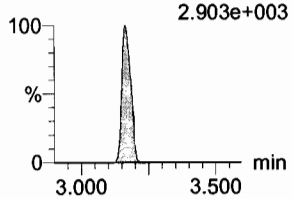
F6:MRM of 2 channels,ES-
299 > 99
3.698e+004



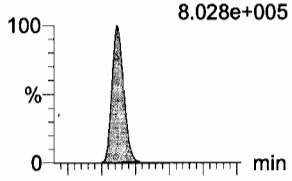
PFHxA
F8:MRM of 2 channels,ES-
313.2 > 268.9
8.459e+005



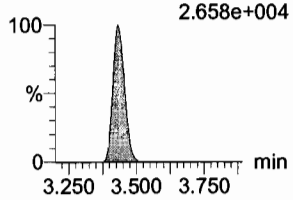
F8:MRM of 2 channels,ES-
313.2 > 119
2.903e+003



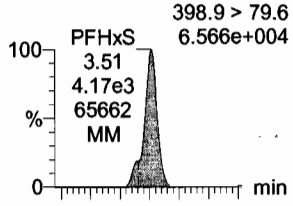
PFHpA
F14:MRM of 2 channels,ES-
363 > 318.9
8.028e+005



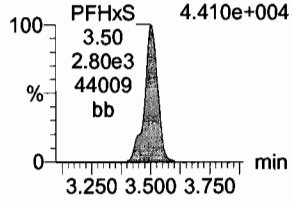
F14:MRM of 2 channels,ES-
363 > 169
2.658e+004



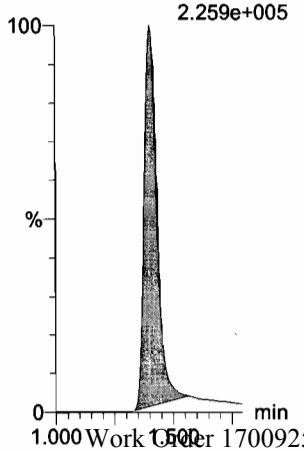
PFHxS
F16:MRM of 2 channels,ES-
398.9 > 79.6
6.566e+004



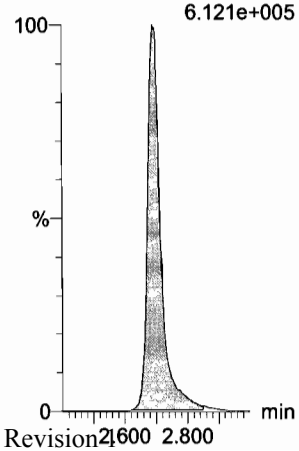
F16:MRM of 2 channels,ES-
398.9 > 99
4.410e+004



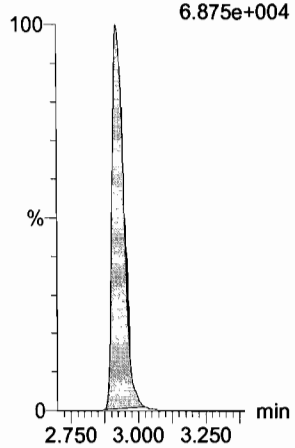
13C3-PFBA
F2:MRM of 1 channel,ES-
216.1 > 171.8
2.259e+005



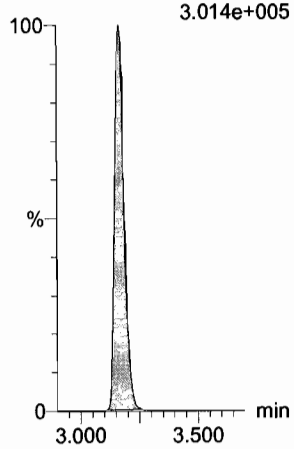
13C3-PFPeA
F5:MRM of 1 channel,ES-
266 > 221.8
6.121e+005



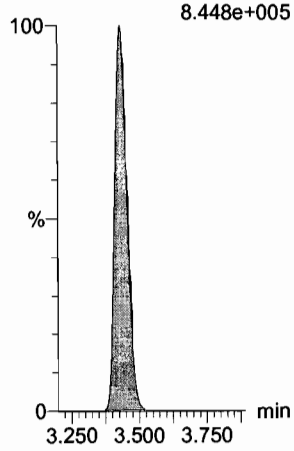
13C3-PFBS
F7:MRM of 1 channel,ES-
302 > 98.8
6.875e+004



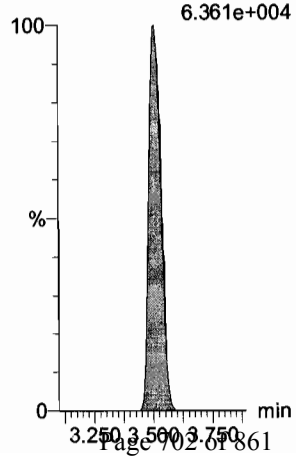
13C2-PFHxA
F9:MRM of 1 channel,ES-
315 > 269.8
3.014e+005



13C4-PFHpA
F15:MRM of 1 channel,ES-
367.2 > 321.8
8.448e+005



18O2-PFHxS
F18:MRM of 1 channel,ES-
403 > 102.6
6.361e+004



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Last Altered: Tuesday, August 01, 2017 10:24:48 Pacific Daylight Time
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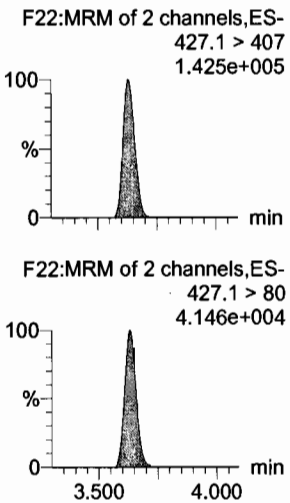
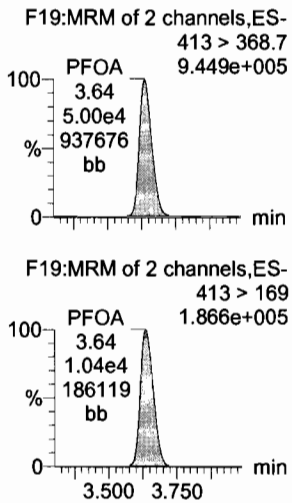
Name: 170731M2_13, Date: 01-Aug-2017, Time: 02:38:37, ID: SS170731M2-1 PFC SSS 17G3106, Description: PFC SSS 17G3106

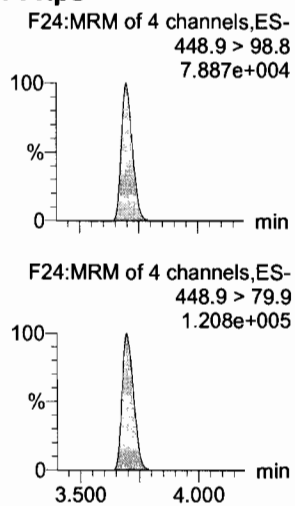
6:2 FTS



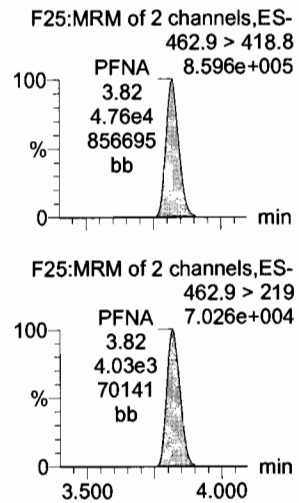
PFOA



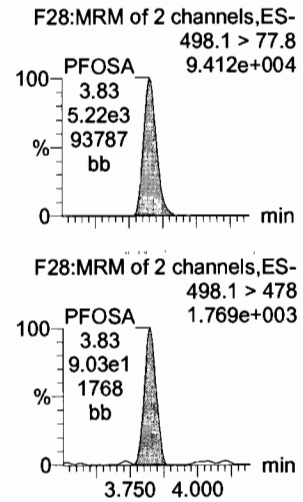
PFHpS



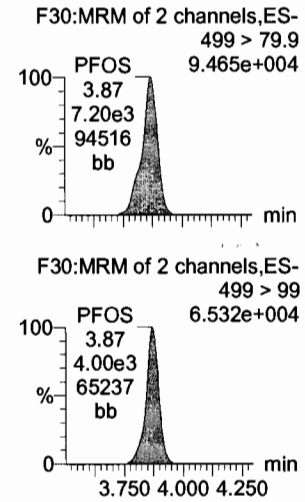
PFNA



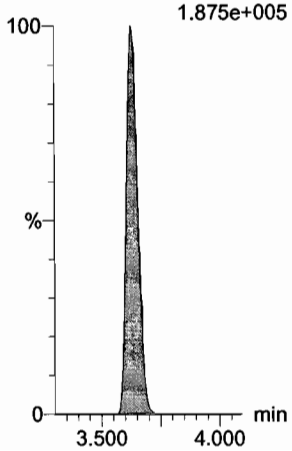
PFOSA



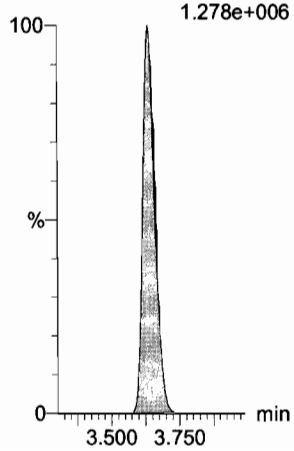
PFOS



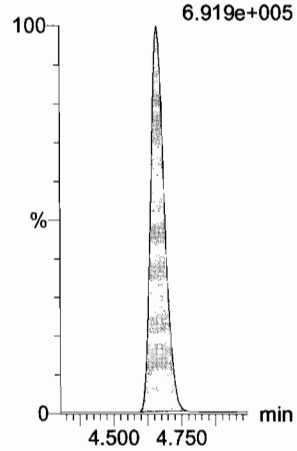
13C2-6:2 FTS



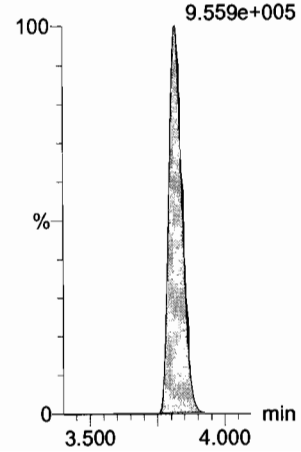
13C2-PFOA



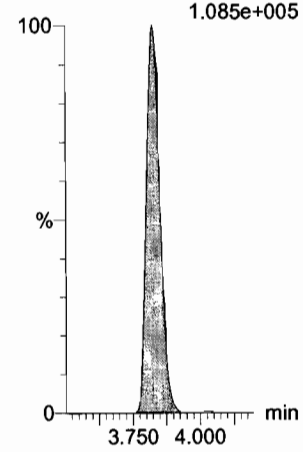
13C2-PFTeDA



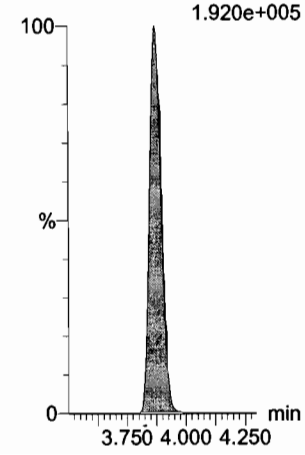
13C5-PFNA



13C8-PFOSA



13C8-PFOS



Dataset: U:\Q4.PRO\results\170731M2\170731M2-13.qld

Last Altered: Tuesday, August 01, 2017 10:24:48 Pacific Daylight Time
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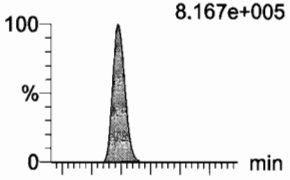
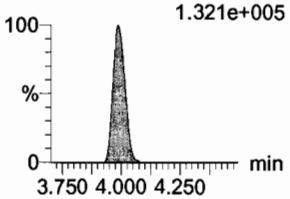
Name: 170731M2_13, Date: 01-Aug-2017, Time: 02:38:37, ID: SS170731M2-1 PFC SSS 17G3106, Description: PFC SSS 17G3106

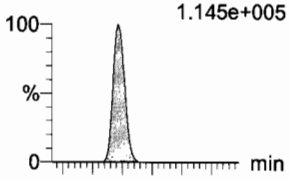
PFDA
F35:MRM of 2 channels,ES-
513 > 468.8
8.167e+005



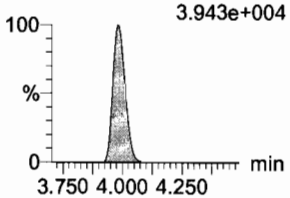
F35:MRM of 2 channels,ES-
513 > 219
1.321e+005



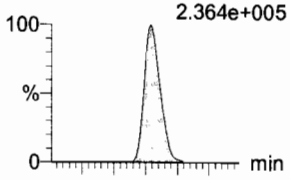
8:2 FTS
F40:MRM of 2 channels,ES-
527 > 506.9
1.145e+005



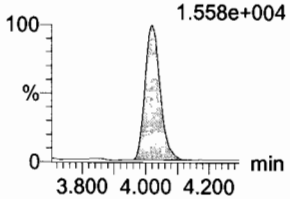
F40:MRM of 2 channels,ES-
527 > 80
3.943e+004



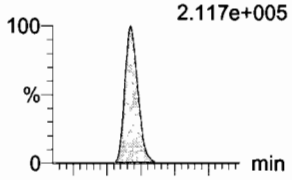
N-MeFOSAA
F45:MRM of 2 channels,ES-
570.1 > 419
2.364e+005



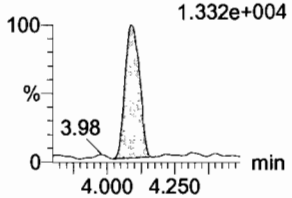
F45:MRM of 2 channels,ES-
570.1 > 483
1.558e+004



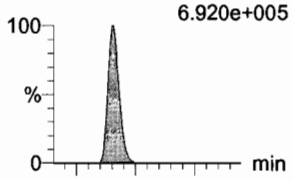
N-EtFOSAA
F48:MRM of 2 channels,ES-
584.2 > 419
2.117e+005



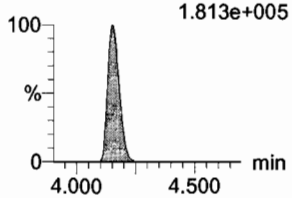
F48:MRM of 2 channels,ES-
584.2 > 483
1.332e+004



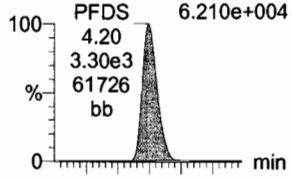
PFUnA
F43:MRM of 2 channels,ES-
562.9 > 518.9
6.920e+005



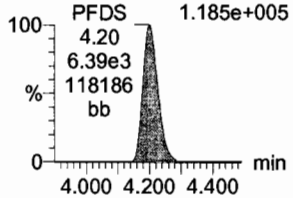
F43:MRM of 2 channels,ES-
562.9 > 269
1.813e+005



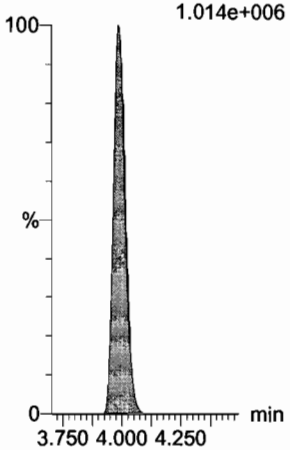
PFDS
F50:MRM of 2 channels,ES-
598.9 > 98.7
6.210e+004



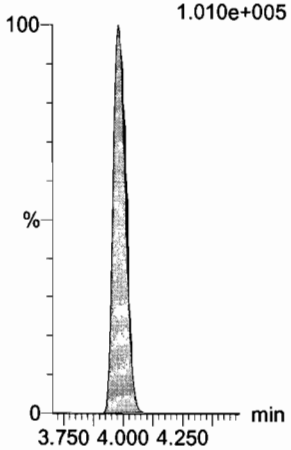
F50:MRM of 2 channels,ES-
598.9 > 80
1.185e+005



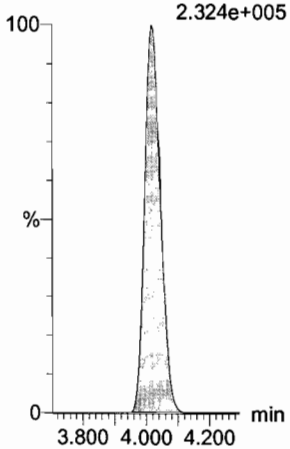
13C2-PFDA
F36:MRM of 1 channel,ES-
515.1 > 469.9
1.014e+006



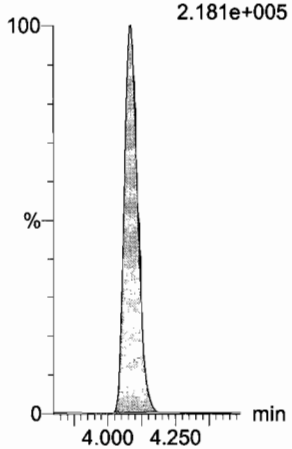
13C2-8:2 FTS
F41:MRM of 1 channel,ES-
529.1 > 508.7
1.010e+005



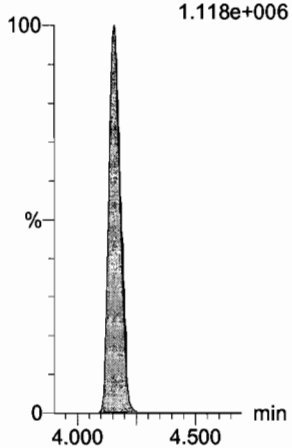
d3-N-MeFOSAA
F47:MRM of 1 channel,ES-
573.3 > 419
2.324e+005



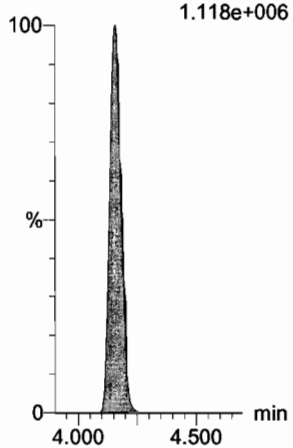
d5-N-EtFOSAA
F49:MRM of 1 channel,ES-
589.3 > 419
2.181e+005



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.118e+006



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.118e+006



Dataset: U:\Q4.PRO\results\170731M2\170731M2-13.qld

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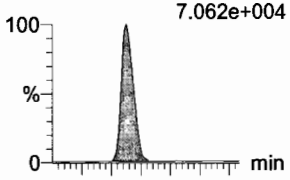
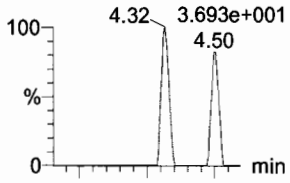
Name: 170731M2_13, Date: 01-Aug-2017, Time: 02:38:37, ID: SS170731M2-1 PFC SSS 17G3106, Description: PFC SSS 17G3106

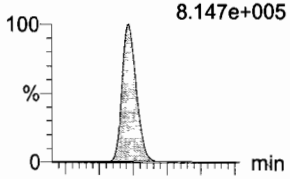
PFDoA
F51:MRM of 2 channels,ES-
612.9 > 318.8
7.062e+004



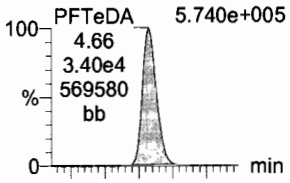
N-MeFOSA
F34:MRM of 2 channels,ES-
512.1 > 168.9
3.693e+001



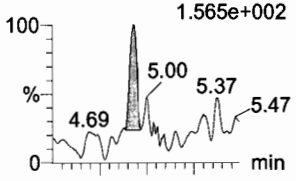
PFTrDA
F57:MRM of 2 channels,ES-
662.9 > 618.9
8.147e+005



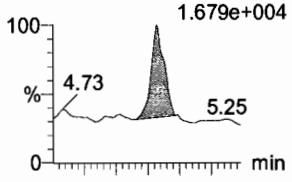
PFTeDA
F58:MRM of 4 channels,ES-
712.9 > 668.8
5.740e+005



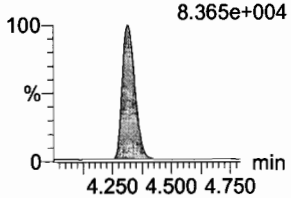
N-EtFOSA
F39:MRM of 2 channels,ES-
526.1 > 168.9
1.565e+002



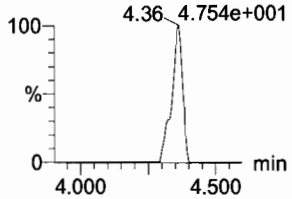
PFHxDA
F60:MRM of 2 channels,ES-
812.8 > 768.9
1.679e+004



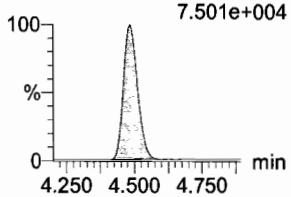
F51:MRM of 2 channels,ES-
612.9 > 569
8.365e+004



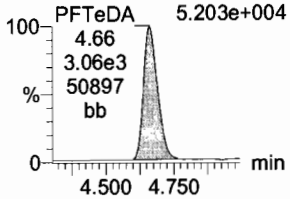
F34:MRM of 2 channels,ES-
512.1 > 219
4.754e+001



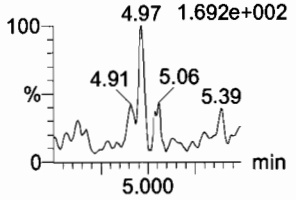
F57:MRM of 2 channels,ES-
662.9 > 319
7.501e+004



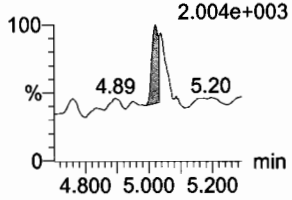
F58:MRM of 4 channels,ES-
712.9 > 369
5.203e+004



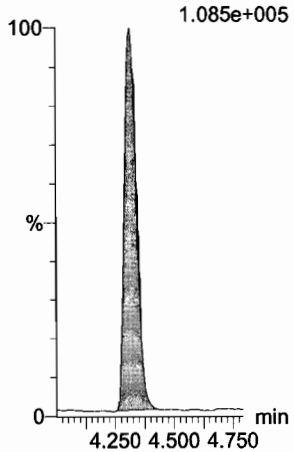
F39:MRM of 2 channels,ES-
526.1 > 219
1.692e+002



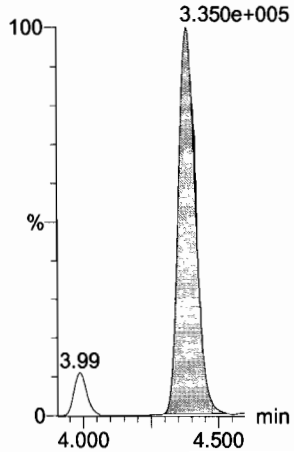
F60:MRM of 2 channels,ES-
812.8 > 219
2.004e+003



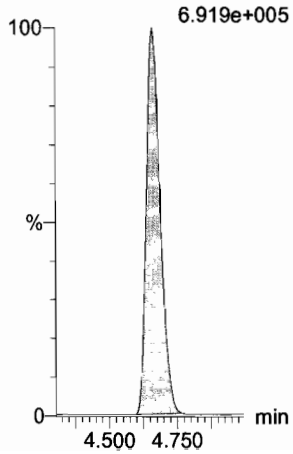
13C2-PFDoA
F52:MRM of 1 channel,ES-
615 > 569.7
1.085e+005



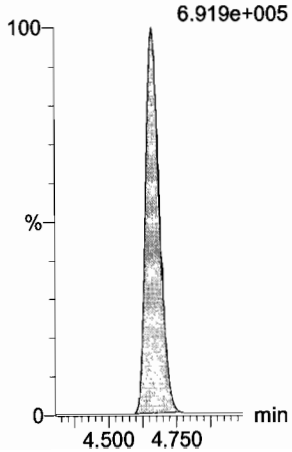
d3-N-MeFOSA
F37:MRM of 1 channel,ES-
515.2 > 168.9
3.350e+005



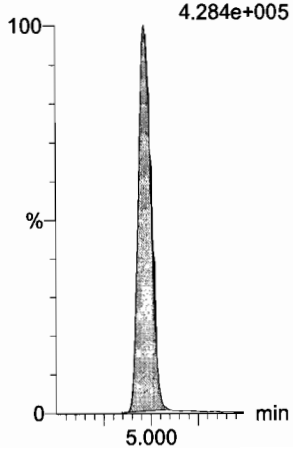
13C2-PFTeDA
F59:MRM of 2 channels,ES-
714.8 > 669.6
6.919e+005



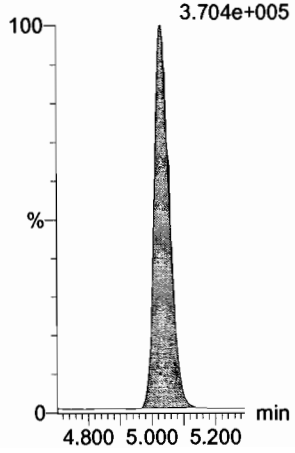
13C2-PFTeDA
F59:MRM of 2 channels,ES-
714.8 > 669.6
6.919e+005



d5-N-ETFOSA
F42:MRM of 1 channel,ES-
531.1 > 168.9
4.284e+005



13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
3.704e+005



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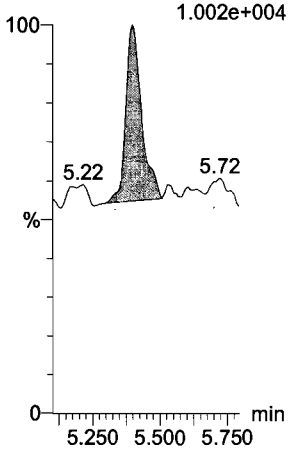
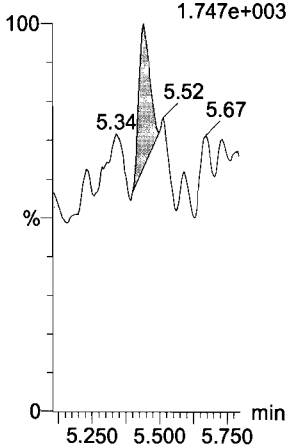
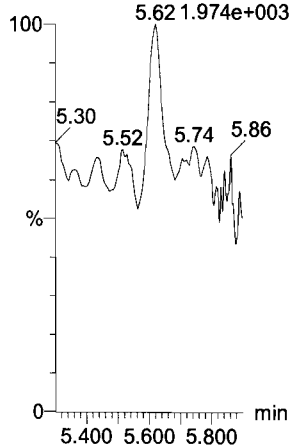
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
1.002e+004



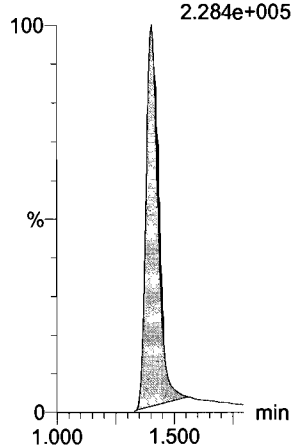
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
1.747e+003



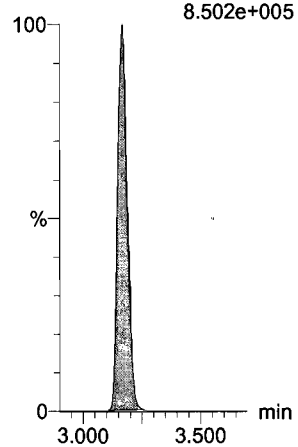
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
5.62 1.974e+003



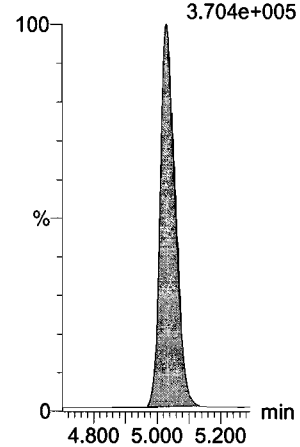
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.284e+005



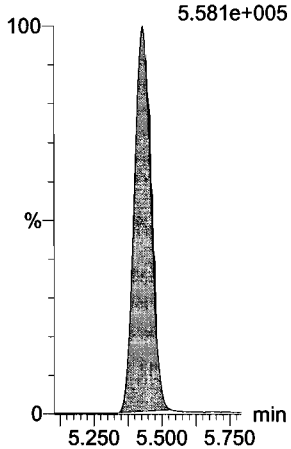
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
8.502e+005



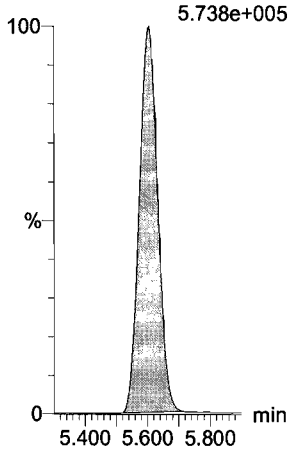
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
3.704e+005



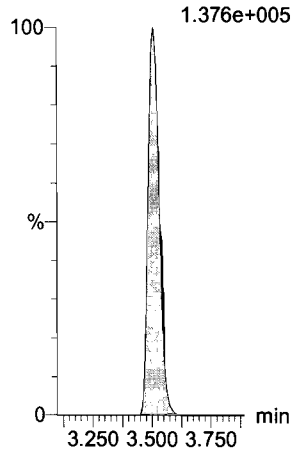
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
5.581e+005



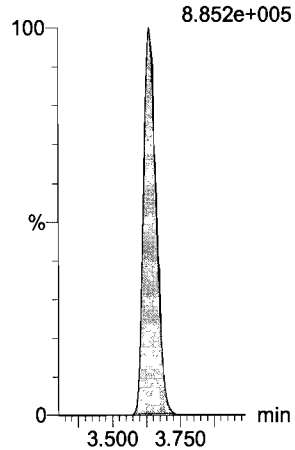
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
5.738e+005



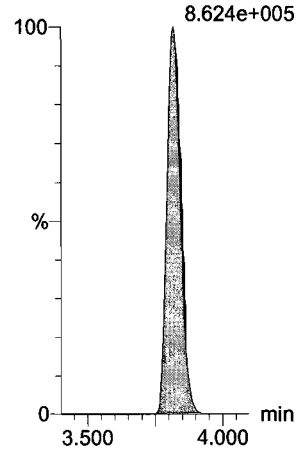
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.376e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
8.852e+005



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
8.624e+005



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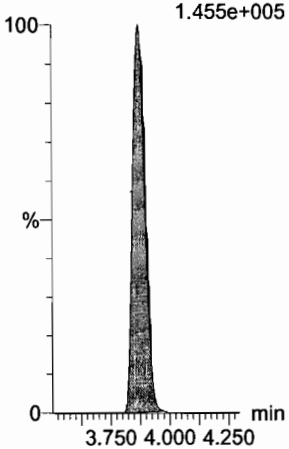
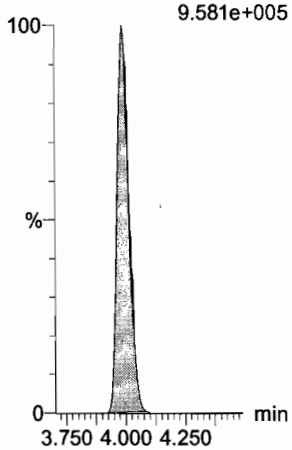
13C4-PFOS

F31:MRM of 1 channel,ES-
503 > 79.9
1.455e+005



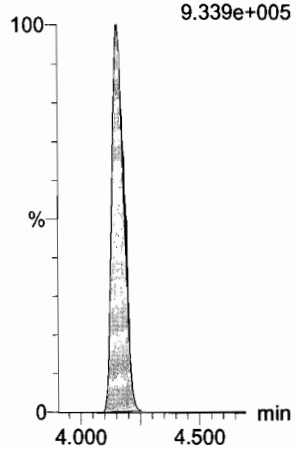
13C6-PFDA

F38:MRM of 1 channel,ES-
519.1 > 473.7
9.581e+005



13C7-PFUnA

F46:MRM of 1 channel,ES-
570.1 > 524.8
9.339e+005



Quantify Sample Report **MassLynx MassLynx V4.1 SCN945 SCN960**
Vista Analytical Laboratory

Dataset: Untitled

Last Altered: Tuesday, August 01, 2017 10:23:10 Pacific Daylight Time
Printed: Tuesday, August 01, 2017 10:23:20 Pacific Daylight Time

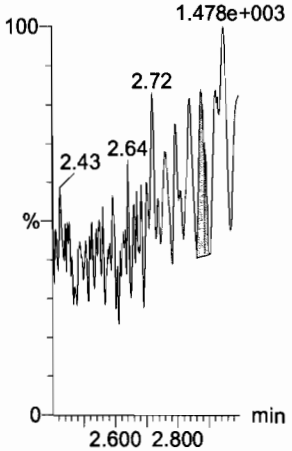
Inst. Blank
AC 8/1/17

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 01 Aug 2017 09:55:07
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-31-17-FULL.cdb 01 Aug 2017 10:11:08

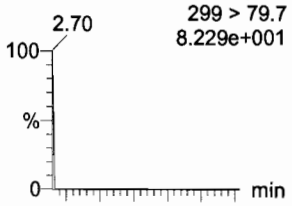
Name: 170731M2_12, Date: 01-Aug-2017, Time: 02:27:32, ID: IPA, Description: IPA

PFBA
F1:MRM of 2 channels,ES-
213.0 > 168.8
1.181e+003

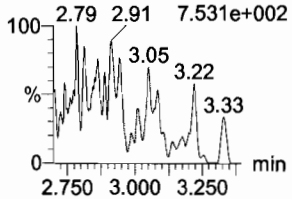
PFPeA
F4:MRM of 1 channel,ES-
263.1 > 218.9
1.478e+003



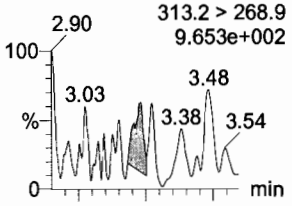
PFBS
F6:MRM of 2 channels,ES-
299 > 79.7
8.229e+001



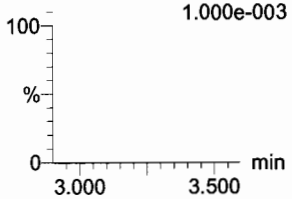
F6:MRM of 2 channels,ES-
299 > 99
7.531e+002



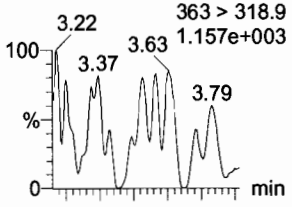
PFHxA
F8:MRM of 2 channels,ES-
313.2 > 268.9
9.653e+002



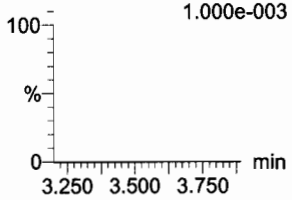
F8:MRM of 2 channels,ES-
313.2 > 119
1.000e-003



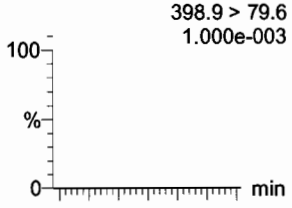
PFHpA
F14:MRM of 2 channels,ES-
363 > 318.9
1.157e+003



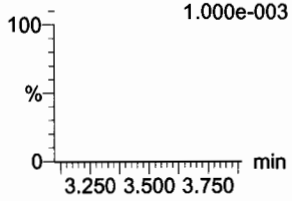
F14:MRM of 2 channels,ES-
363 > 169
1.000e-003



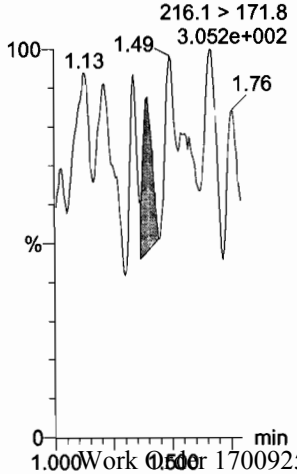
PFHxS
F16:MRM of 2 channels,ES-
398.9 > 79.6
1.000e-003



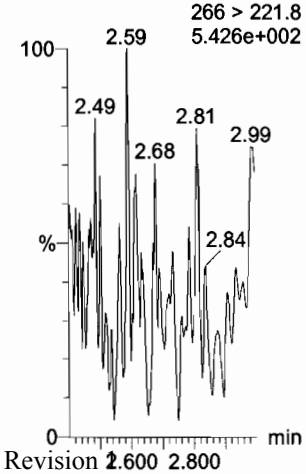
F16:MRM of 2 channels,ES-
398.9 > 99
1.000e-003



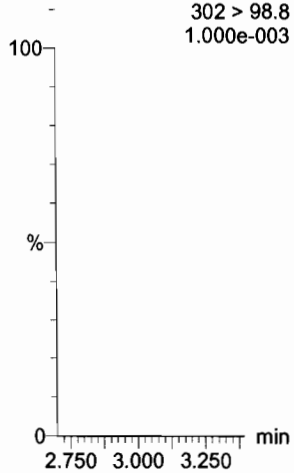
13C3-PFBA
F2:MRM of 1 channel,ES-
216.1 > 171.8
3.052e+002



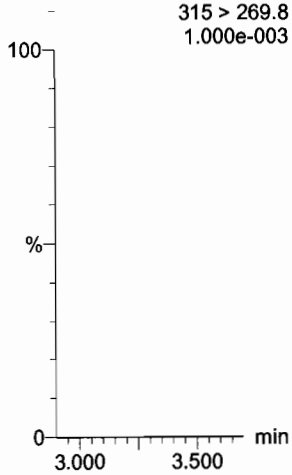
13C3-PFPeA
F5:MRM of 1 channel,ES-
266 > 221.8
5.426e+002



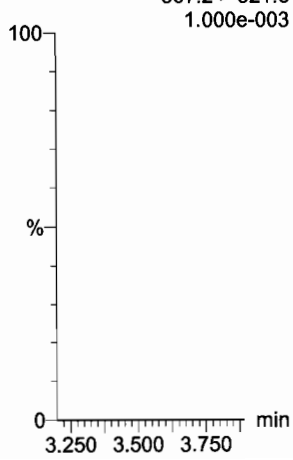
13C3-PFBS
F7:MRM of 1 channel,ES-
302 > 98.8
1.000e-003



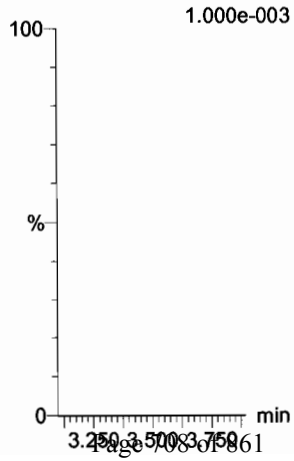
13C2-PFHxA
F9:MRM of 1 channel,ES-
315 > 269.8
1.000e-003



13C4-PFHpA
F15:MRM of 1 channel,ES-
367.2 > 321.8
1.000e-003



18O2-PFHxS
F18:MRM of 1 channel,ES-
403 > 102.6
1.000e-003



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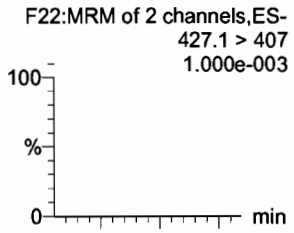
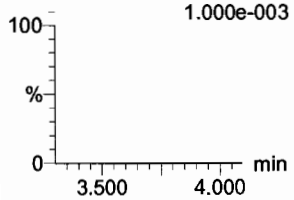
Printed: Tuesday, August 01, 2017 10:23:20 Pacific Daylight Time

Name: 170731M2_12, Date: 01-Aug-2017, Time: 02:27:32, ID: IPA, Description: IPA

6:2 FTS





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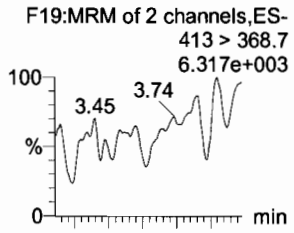

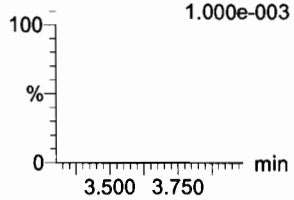

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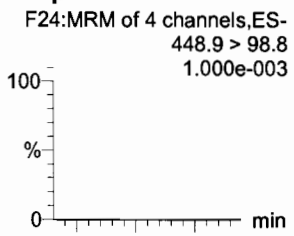

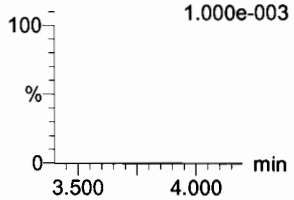

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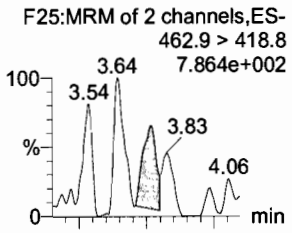

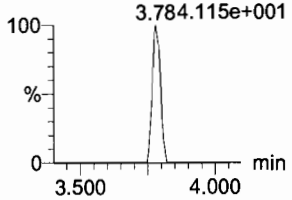

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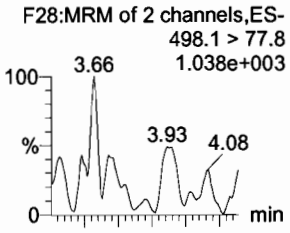

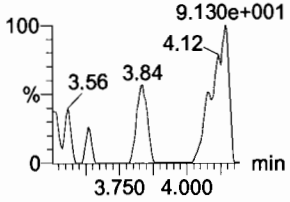

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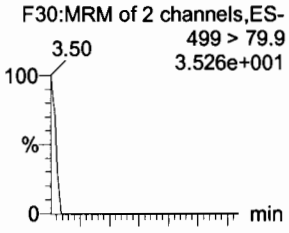

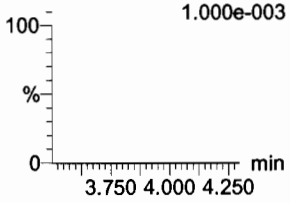

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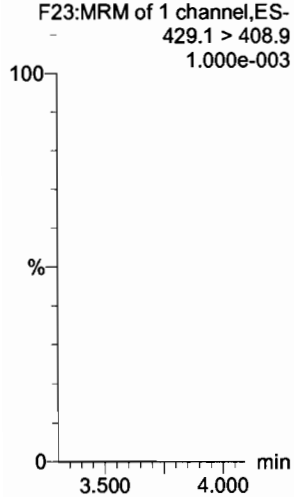
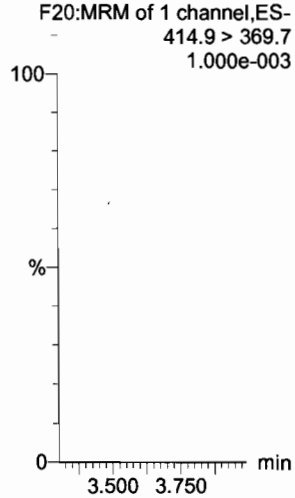


13C2-PFOA



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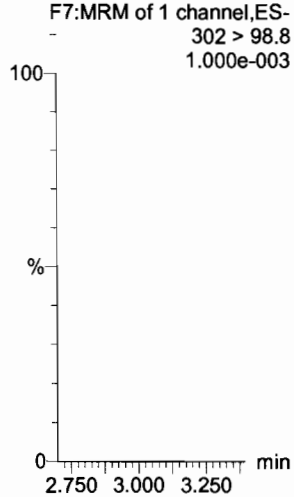
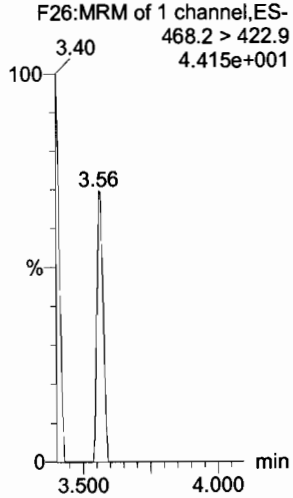
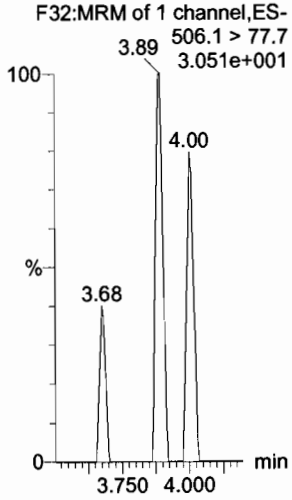


13C5-PFNA



13C8-PFOSA



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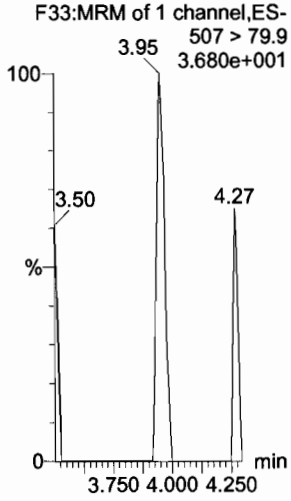

Vista Analytical Laboratory

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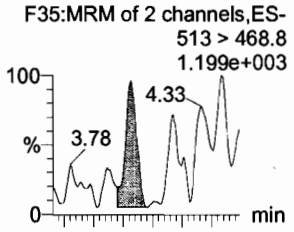
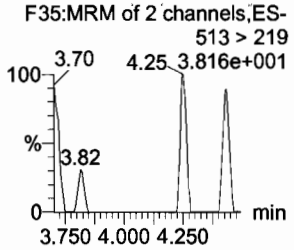
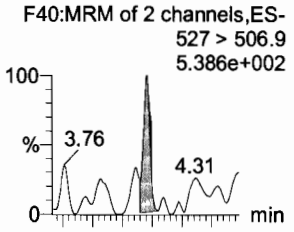
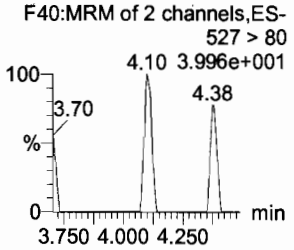




8:2 FTS





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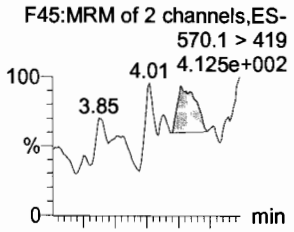

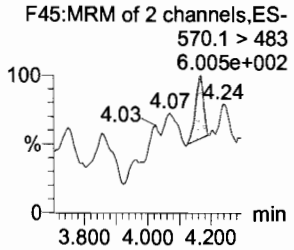

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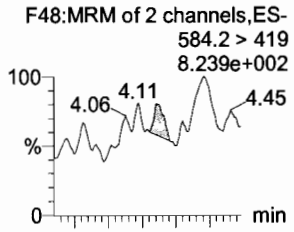

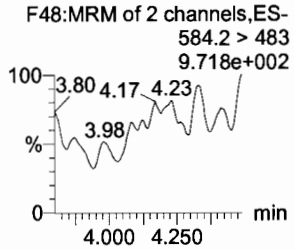

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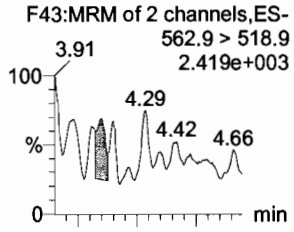

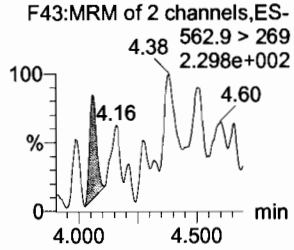

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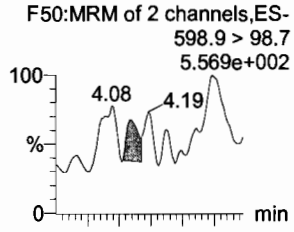

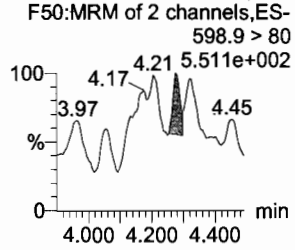

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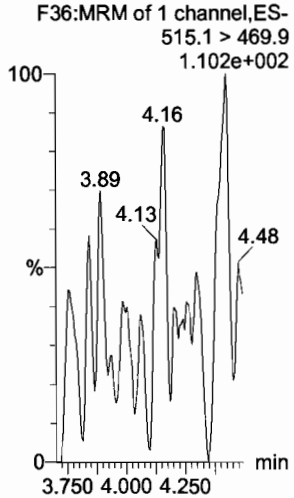
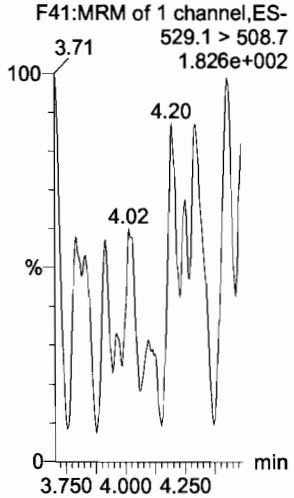
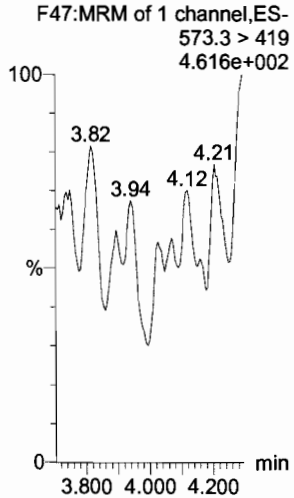


13C2-8:2 FTS



d3-N-MeFOSAA



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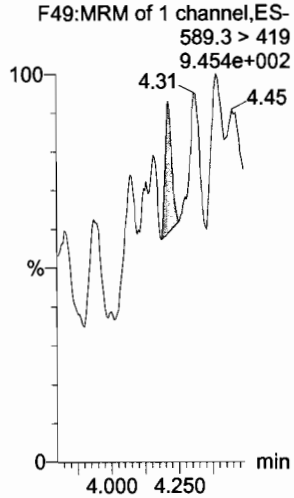

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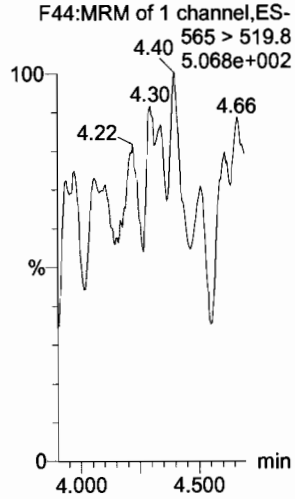

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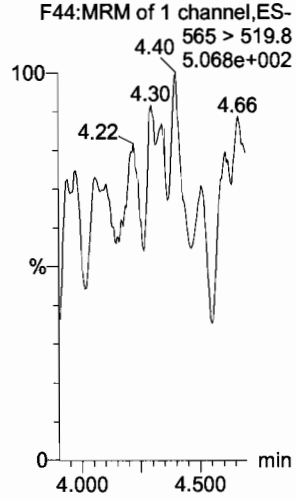

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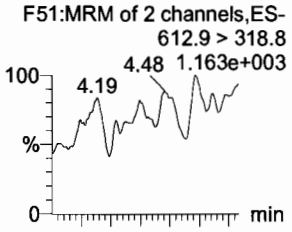
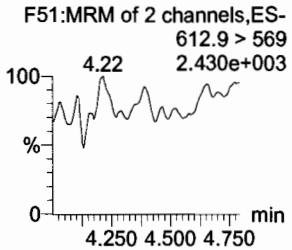
PFDoA





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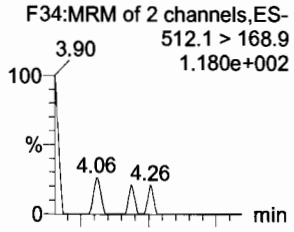

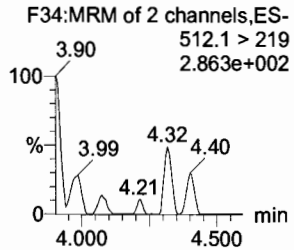

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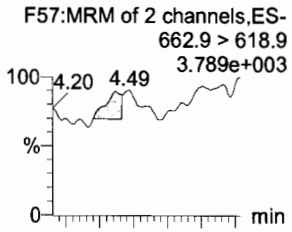

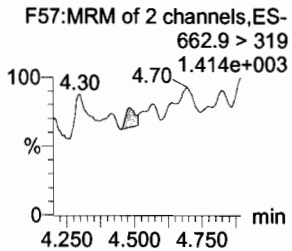

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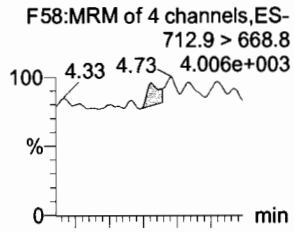

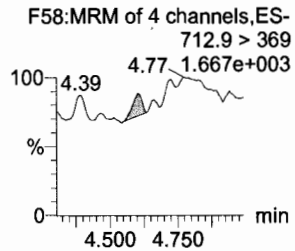

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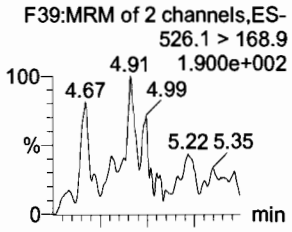

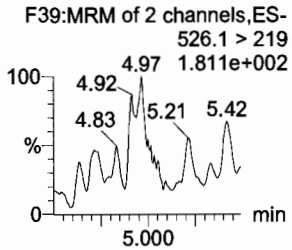

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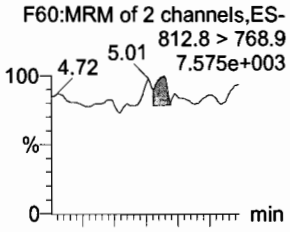

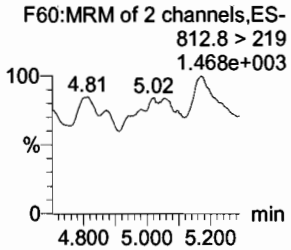

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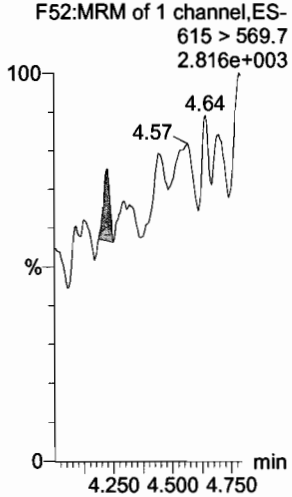

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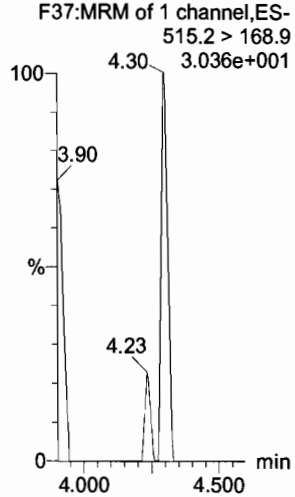

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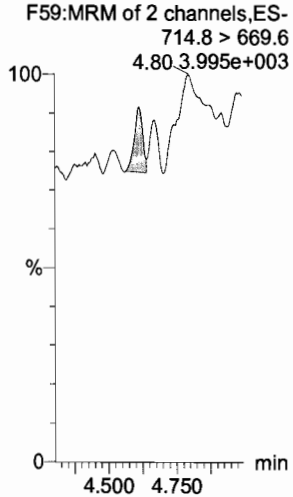

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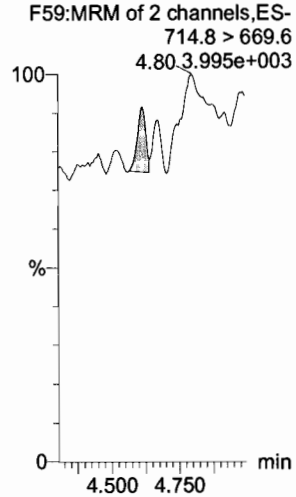

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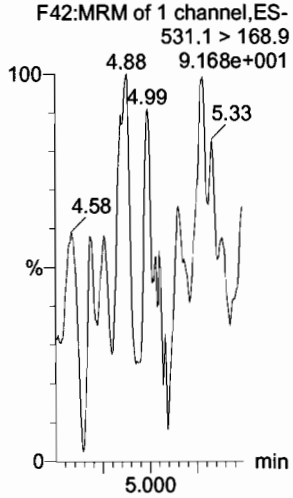
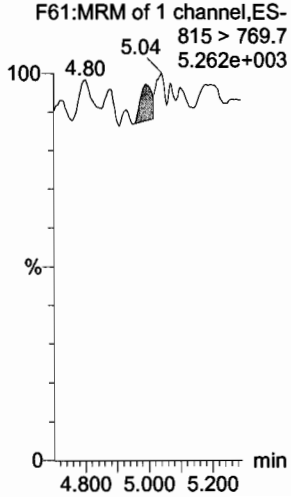


13C2-PFHxDA



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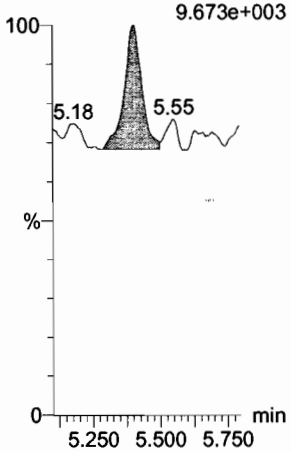
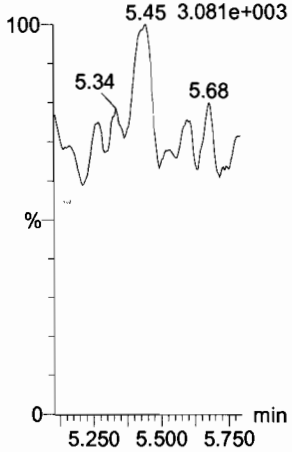
Printed: Tuesday, August 01, 2017 10:23:20 Pacific Daylight Time

Name: 170731M2_12, Date: 01-Aug-2017, Time: 02:27:32, ID: IPA, Description: IPA

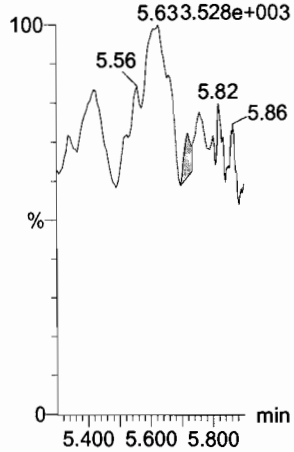
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
9.673e+003



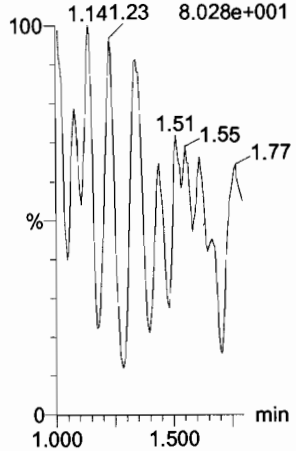
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
3.081e+003



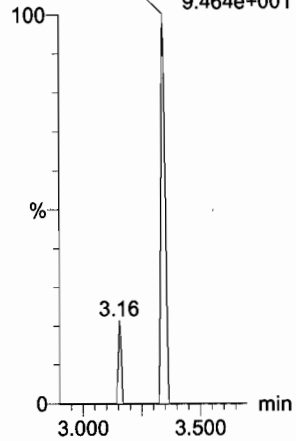
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
3.528e+003



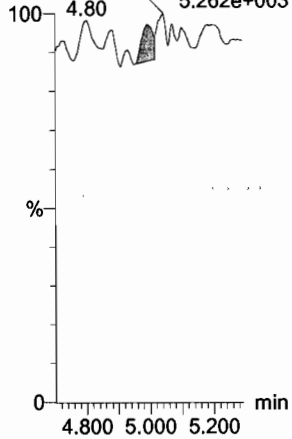
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
8.028e+001



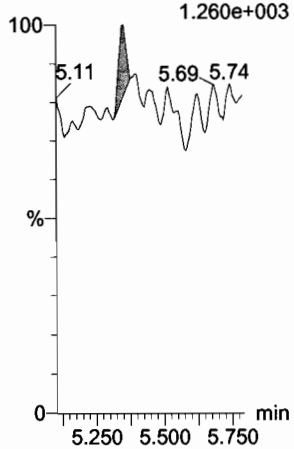
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
9.464e+001



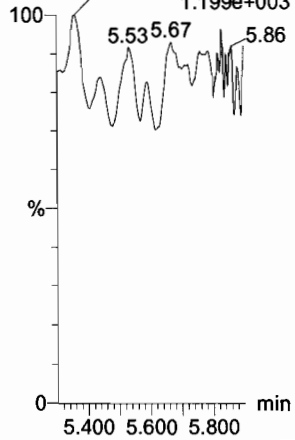
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
5.262e+003



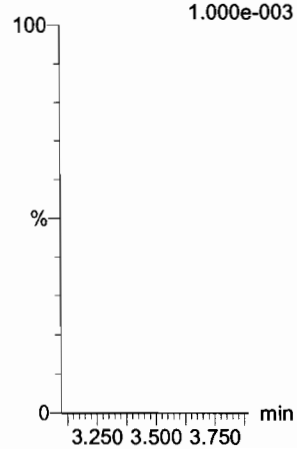
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
1.260e+003



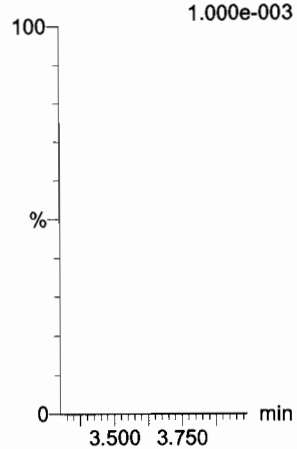
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
1.199e+003



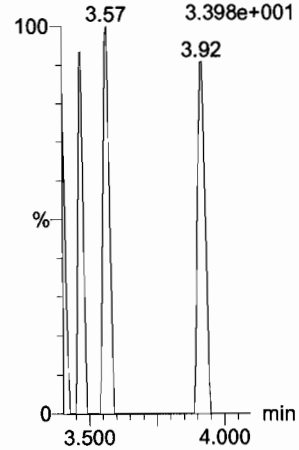
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.000e-003



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.000e-003



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
3.398e+001



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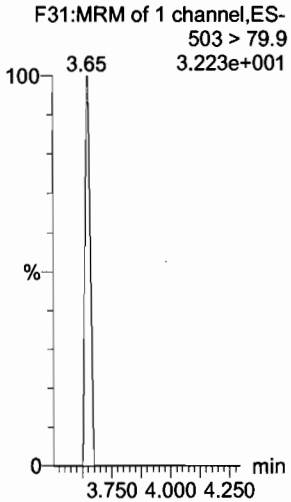
13C4-PFOS



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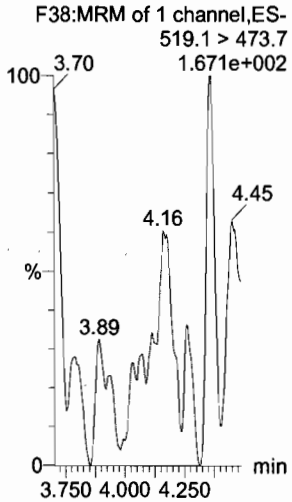
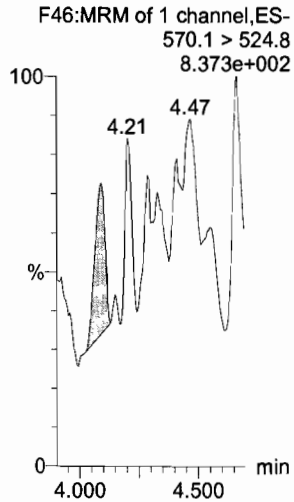


13C7-PFUnA



Quantify Sample Report **MassLynx MassLynx V4.1 SCN945 SCN960**
Vista Analytical Laboratory

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AC 8/1/17

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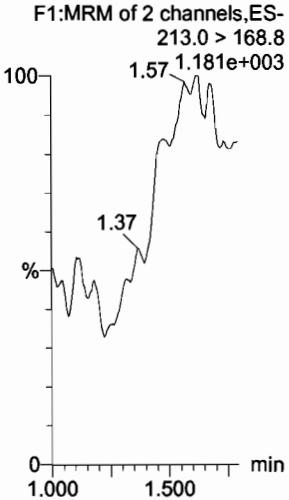

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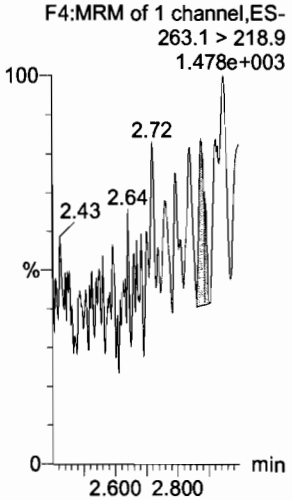

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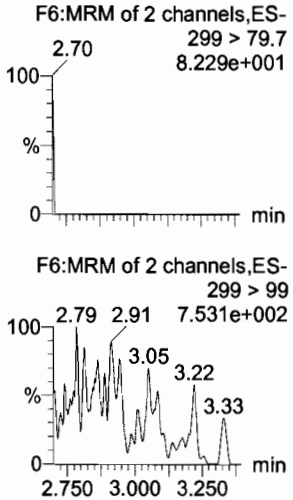

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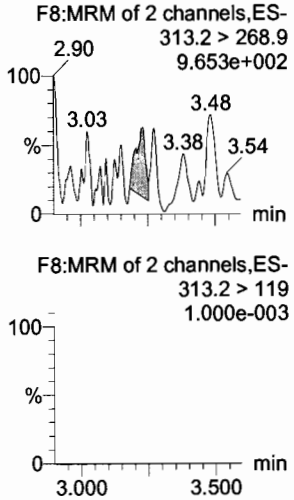

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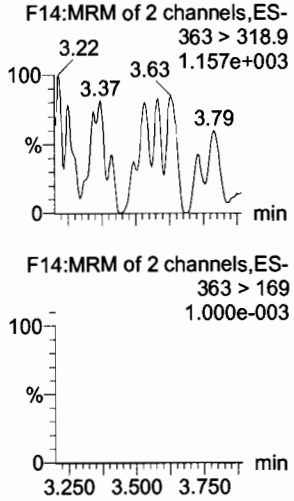

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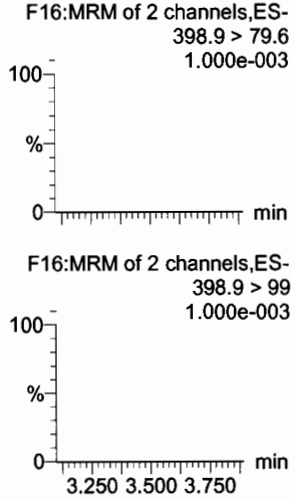

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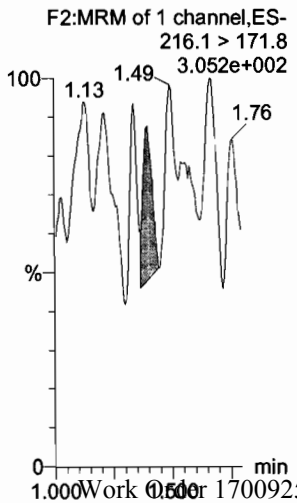

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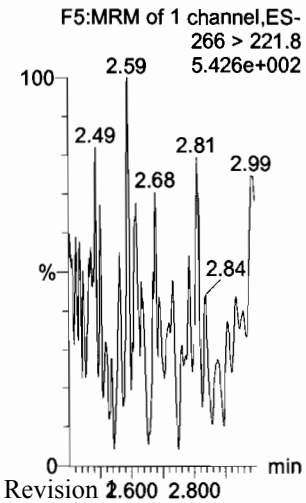

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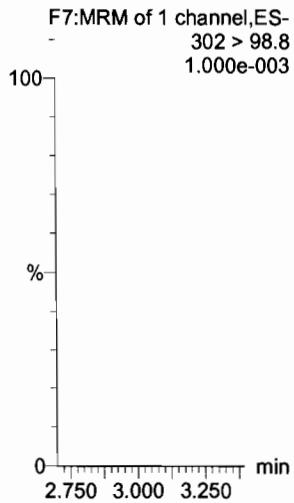

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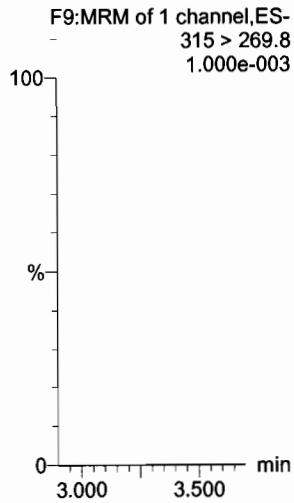

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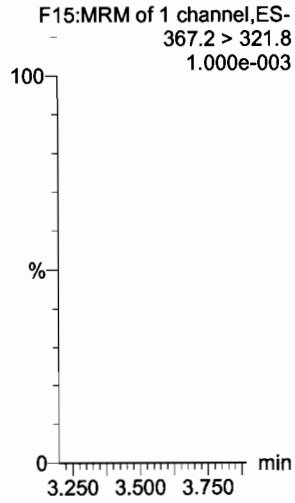

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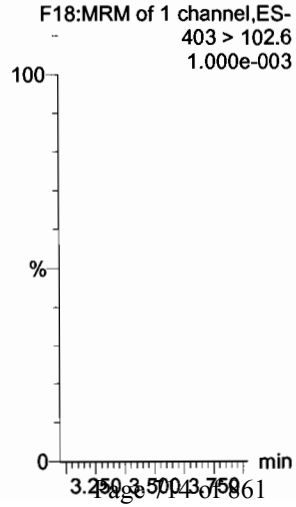

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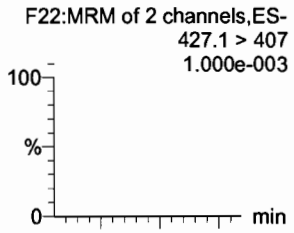
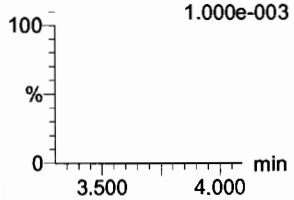
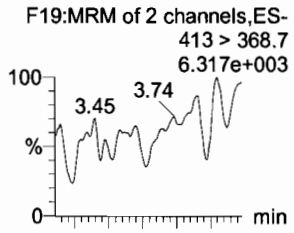
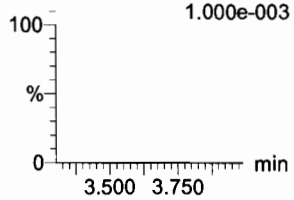
6:2 FTS





PFOA





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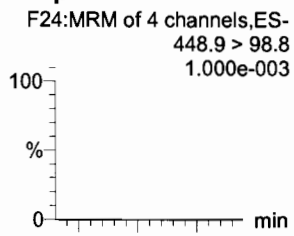

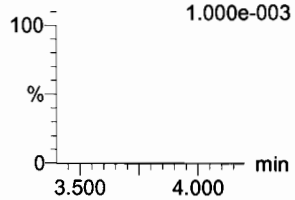

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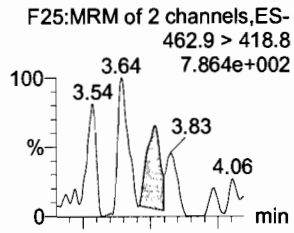

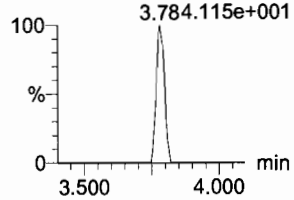

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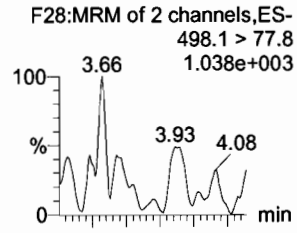
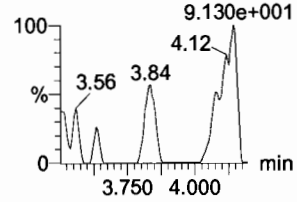
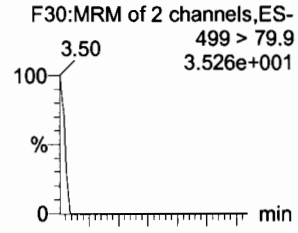
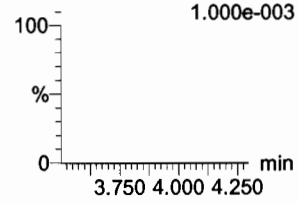


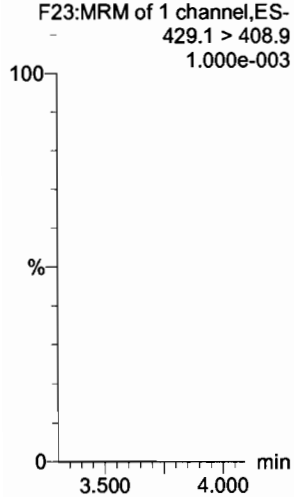


PFOS

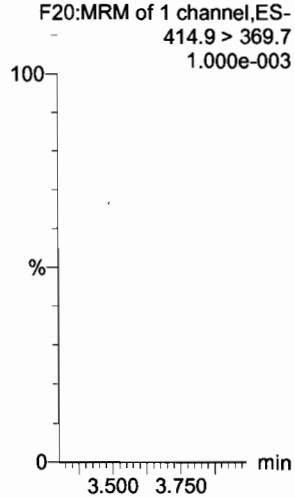




13C2-6:2 FTS



13C2-PFOA



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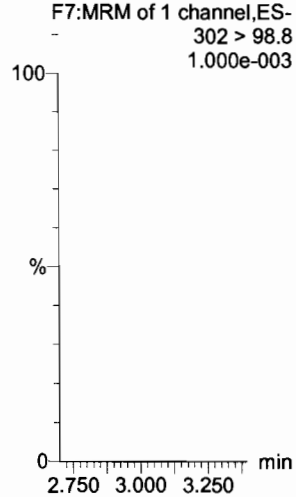

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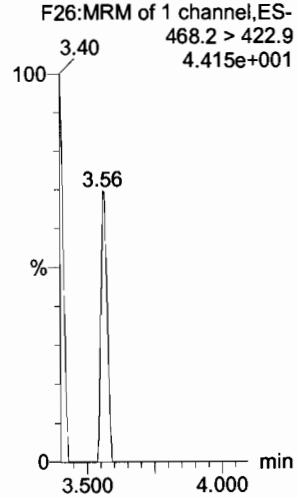

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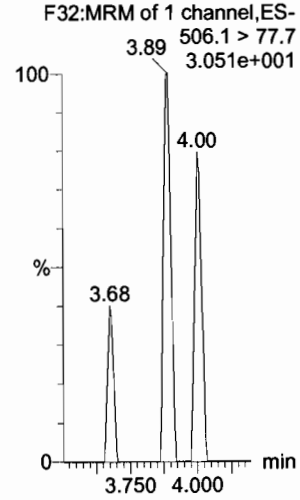

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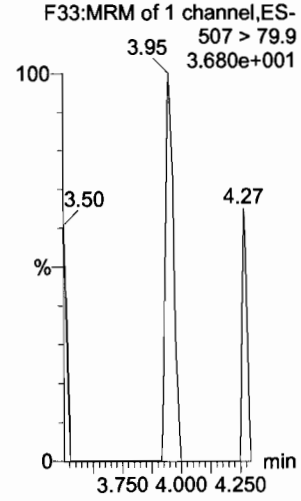

Vista Analytical Laboratory

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Name: 170731M2_12, Date: 01-Aug-2017, Time: 02:27:32, ID: IPA, Description: IPA

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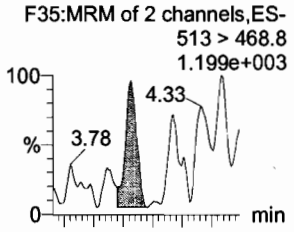
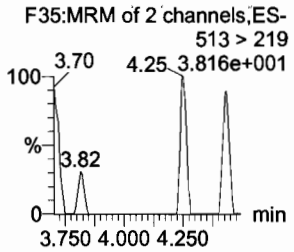
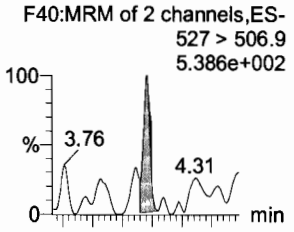
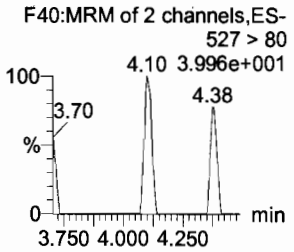




8:2 FTS





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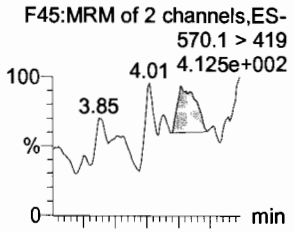

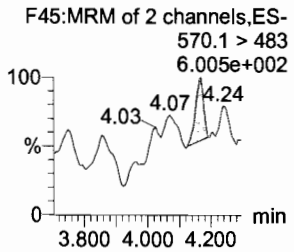

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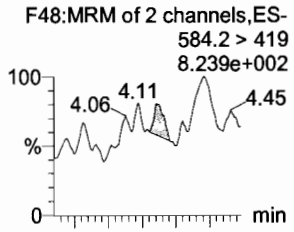

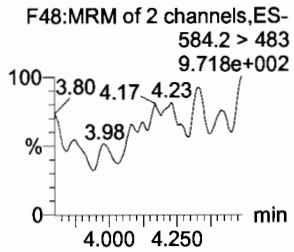

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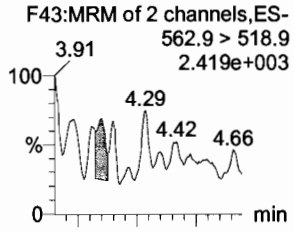

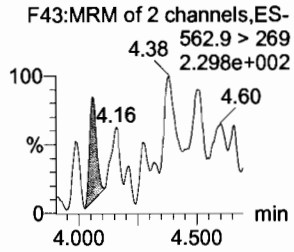

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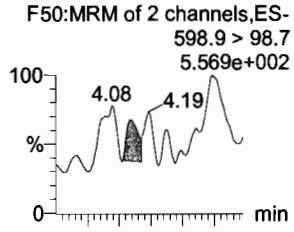

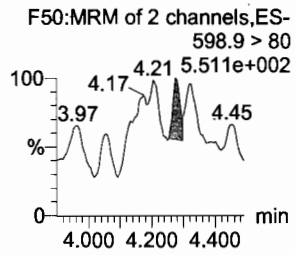

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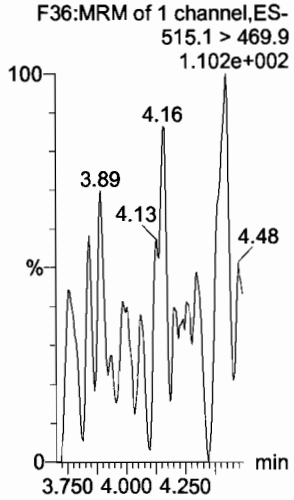
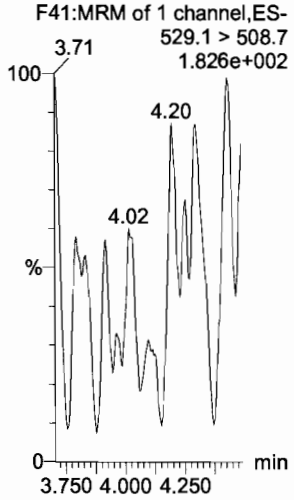


13C2-8:2 FTS



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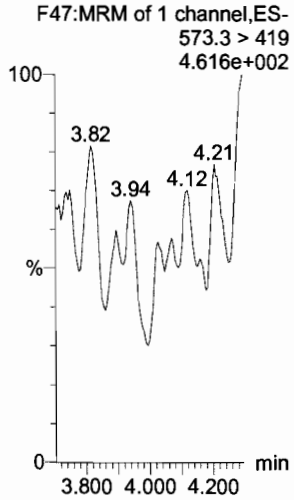
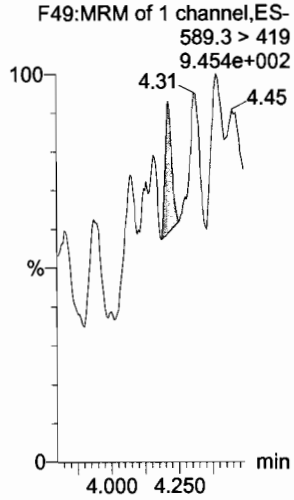


d5-N-EtFOSAA



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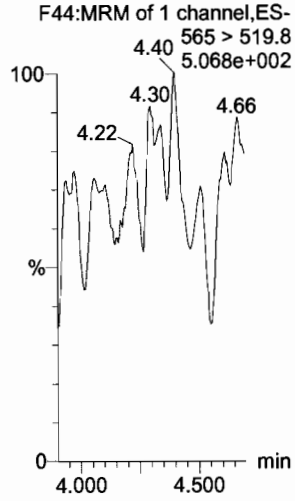

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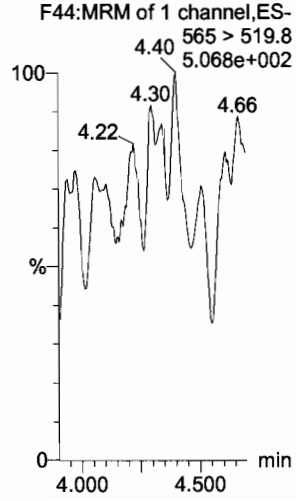

Vista Analytical Laboratory

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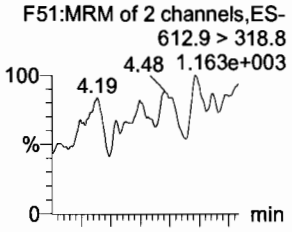

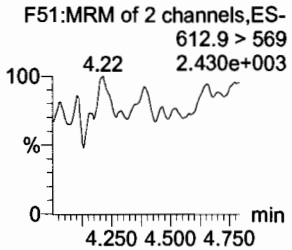

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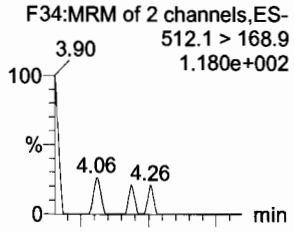

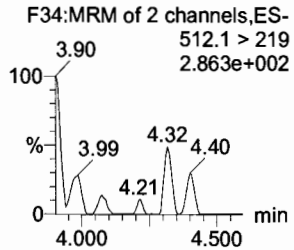

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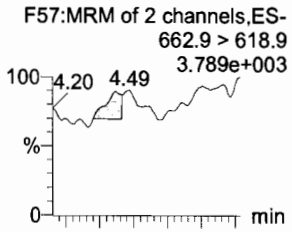

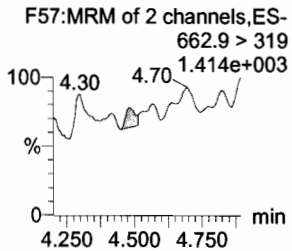

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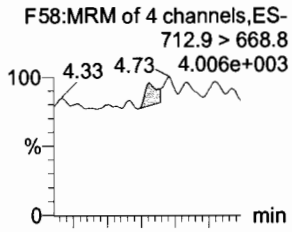

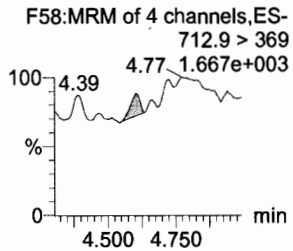

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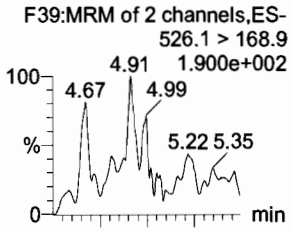

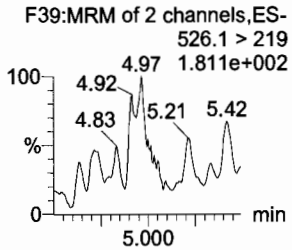

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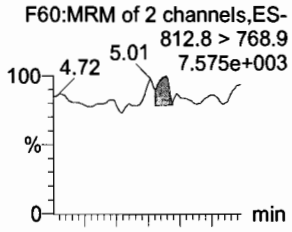

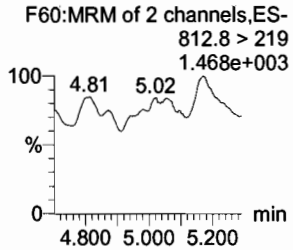

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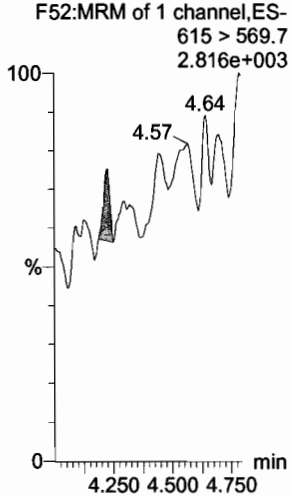

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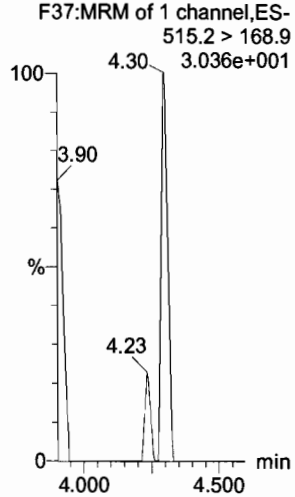

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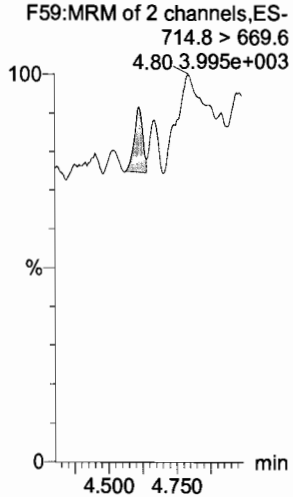

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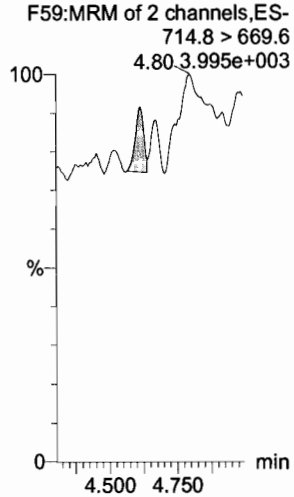

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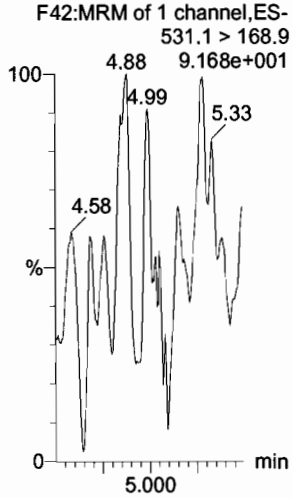

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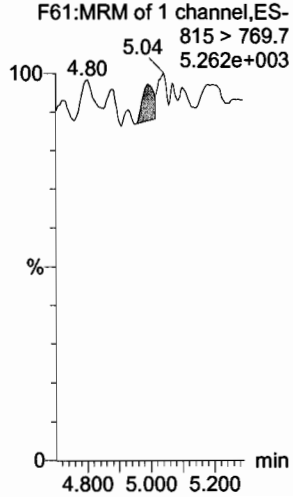

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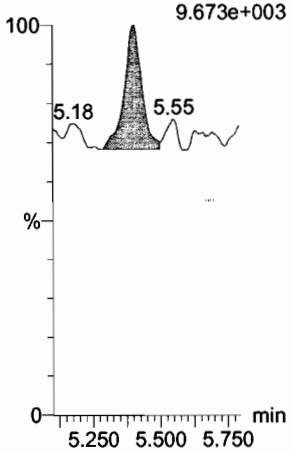
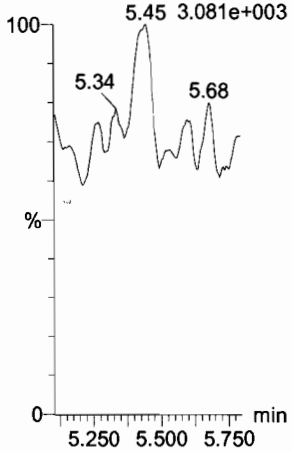
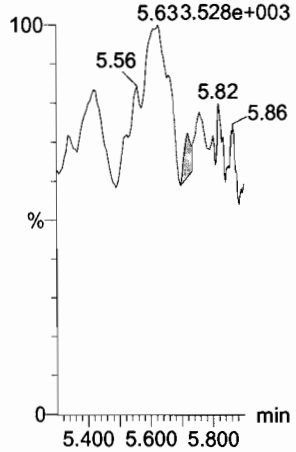
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
9.673e+003



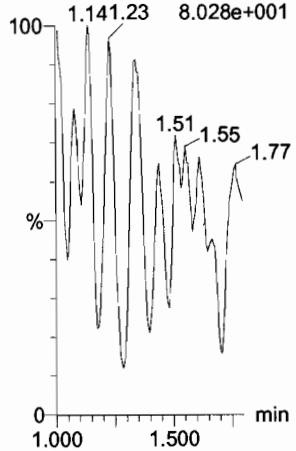
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
3.081e+003



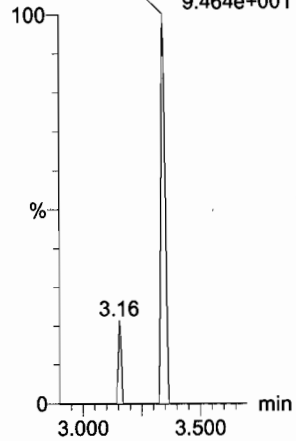
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
3.528e+003



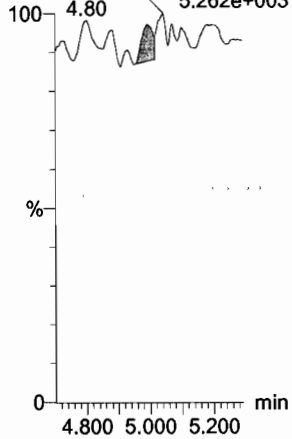
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
8.028e+001



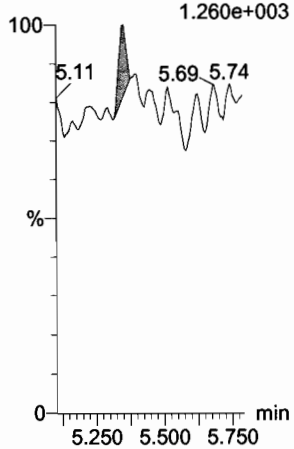
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
9.464e+001



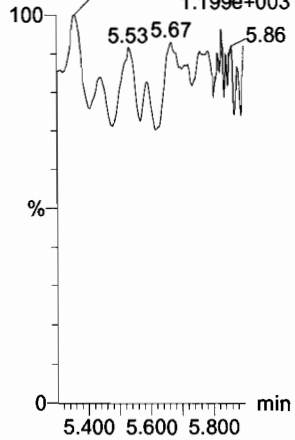
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
5.262e+003



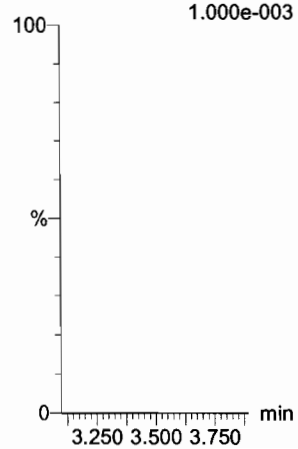
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
1.260e+003



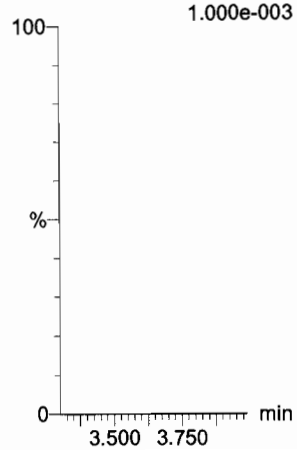
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
1.199e+003



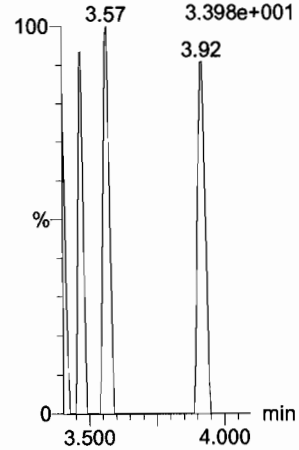
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.000e-003



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.000e-003



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
3.398e+001



Dataset: Untitled

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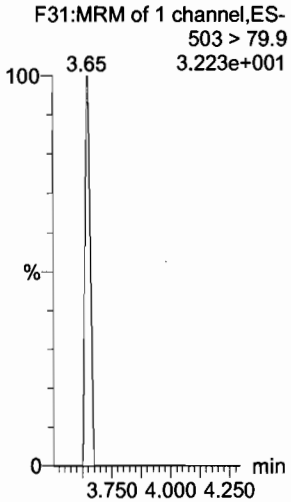
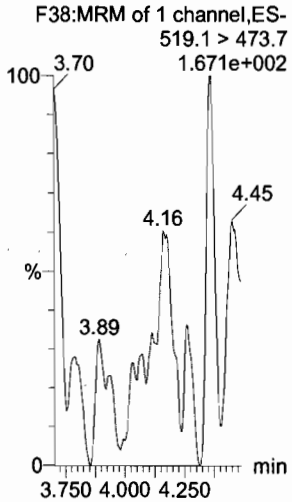
Name: 170731M2_12, Date: 01-Aug-2017, Time: 02:27:32, ID: IPA, Description: IPA

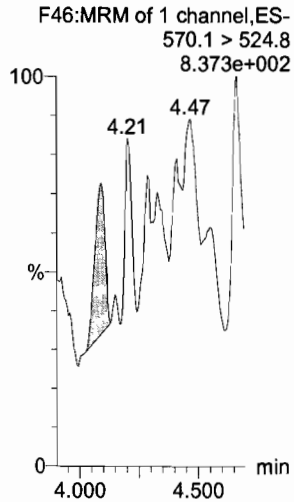
13C4-PFOS



13C6-PFDA



13C7-PFUnA



Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:31:51 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 08:55:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Compound name: PFBA
Coefficient of Determination: R^2 = 0.999558
Calibration curve: -0.000132012 * x^2 + 1.09237 * x + 0.0597566
Response type: Internal Std (Ref 28), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

8/11/17

AM 8/11/17

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	1.92	424.371	15542.773	0.341	0.3	3.1	NO	1.000	NO	bb
2	2	170810M2_3	Standard	0.500	1.92	754.429	15666.696	0.602	0.5	-0.7	NO	1.000	NO	bb
3	3	170810M2_4	Standard	1.000	1.92	1618.036	16473.561	1.228	1.1	6.9	NO	1.000	NO	bb
4	4	170810M2_5	Standard	2.000	1.92	2982.913	15767.530	2.365	2.1	5.5	NO	1.000	NO	bb
5	5	170810M2_6	Standard	5.000	1.91	7409.122	16464.104	5.625	5.1	2.0	NO	1.000	NO	bb
6	6	170810M2_7	Standard	10.000	1.91	14834.788	16369.950	11.328	10.3	3.3	NO	1.000	NO	bb
7	7	170810M2_8	Standard	50.000	1.92	71756.844	16361.661	54.821	50.4	0.9	NO	1.000	NO	bb
8	8	170810M2_9	Standard	100.000	1.91	168270.703	18859.416	111.530	103.3	3.3	NO	1.000	NO	bb
9	9	170810M2_10	Standard	250.000	1.91	386171.219	18778.650	257.055	242.4	-3.1	NO	1.000	NO	bb
10	10	170810M2_11	Standard	500.000	1.90	760893.688	18418.195	516.401	503.3	0.7	NO	1.000	NO	bb

Compound name: PFPeA
Correlation coefficient: r = 0.999003, r^2 = 0.998007
Calibration curve: 0.943317 * x + 0.117613
Response type: Internal Std (Ref 29), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	2.95	653.409	27880.619	0.293	0.2	-25.7	NO	0.998	NO	bb
2	2	170810M2_3	Standard	0.500	2.96	1172.739	28322.555	0.518	0.4	-15.2	NO	0.998	NO	bb
3	3	170810M2_4	Standard	1.000	2.95	2464.434	28875.371	1.067	1.0	0.6	NO	0.998	NO	bb
4	4	170810M2_5	Standard	2.000	2.95	4911.096	27712.795	2.215	2.2	11.2	NO	0.998	NO	bb
5	5	170810M2_6	Standard	5.000	2.95	12193.369	29315.059	5.199	5.4	7.7	NO	0.998	NO	bb
6	6	170810M2_7	Standard	10.000	2.96	24281.596	29802.102	10.185	10.7	6.7	NO	0.998	NO	bb
7	7	170810M2_8	Standard	50.000	2.95	116934.664	28667.293	50.988	53.9	7.9	NO	0.998	NO	bb
8	8	170810M2_9	Standard	100.000	2.95	277388.313	33506.395	103.483	109.6	9.6	NO	0.998	NO	bb
9	9	170810M2_10	Standard	250.000	2.94	605455.688	32021.633	236.346	250.4	0.2	NO	0.998	NO	bb

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Compound name: PFPeA

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
10	10	170810M2_11	Standard	500.000	2.94	1128645.625	30833.635	457.555	484.9	-3.0	NO	0.998	NO	bb

Compound name: PFBS
Correlation coefficient: r = 0.999068, r^2 = 0.998137
Calibration curve: 1.7128 * x + 0.180452
Response type: Internal Std (Ref 30), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	3.11	130.566	3242.905	0.503	0.2	-24.6	NO	0.998	NO	MM
2	2	170810M2_3	Standard	0.500	3.11	260.774	3291.404	0.990	0.5	-5.4	NO	0.998	NO	bb
3	3	170810M2_4	Standard	1.000	3.11	535.091	3435.015	1.947	1.0	3.1	NO	0.998	NO	bb
4	4	170810M2_5	Standard	2.000	3.12	1039.628	3373.359	3.852	2.1	7.2	NO	0.998	NO	bb
5	5	170810M2_6	Standard	5.000	3.12	2403.595	3305.415	9.090	5.2	4.0	NO	0.998	NO	bb
6	6	170810M2_7	Standard	10.000	3.12	5112.701	3622.048	17.644	10.2	2.0	NO	0.998	NO	bb
7	7	170810M2_8	Standard	50.000	3.11	25072.861	3433.760	91.273	53.2	6.4	NO	0.998	NO	bb
8	8	170810M2_9	Standard	100.000	3.11	56239.211	3757.638	187.083	109.1	9.1	NO	0.998	NO	bb
9	9	170810M2_10	Standard	250.000	3.10	124185.078	3568.171	435.045	253.9	1.6	NO	0.998	NO	bb
10	10	170810M2_11	Standard	500.000	3.10	218811.797	3303.260	828.015	483.3	-3.3	NO	0.998	NO	bb

Compound name: PFHxA
Correlation coefficient: r = 0.997990, r^2 = 0.995984
Calibration curve: 1.26213 * x + 0.638423
Response type: Internal Std (Ref 31), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	3.32	973.456	11232.063	0.433			NO	0.996	NO	bbX!
2	2	170810M2_3	Standard	0.500	3.32	1845.170	11474.060	0.804	0.1	-73.8	NO	0.996	NO	bbX
3	3	170810M2_4	Standard	1.000	3.33	3912.146	12197.214	1.604	0.8	-23.5	NO	0.996	NO	bb
4	4	170810M2_5	Standard	2.000	3.32	7263.097	12310.407	2.950	1.8	-8.4	NO	0.996	NO	bb
5	5	170810M2_6	Standard	5.000	3.32	18200.357	12691.323	7.170	5.2	3.5	NO	0.996	NO	bb
6	6	170810M2_7	Standard	10.000	3.32	36521.176	13114.998	13.923	10.5	5.3	NO	0.996	NO	bb
7	7	170810M2_8	Standard	50.000	3.32	177809.250	12075.982	73.621	57.8	15.6	NO	0.996	NO	bb

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Compound name: PFHxA

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
8	8	170810M2_9	Standard	100.000	3.31	393866.563	14098.515	139.684	110.2	10.2	NO	0.996	NO	bb
9	9	170810M2_10	Standard	250.000	3.30	896249.938	13890.280	322.618	255.1	2.0	NO	0.996	NO	bb
10	10	170810M2_11	Standard	500.000	3.30	1694936.625	14073.479	602.174	476.6	-4.7	NO	0.996	NO	bb

Compound name: PFHpA
Correlation coefficient: r = 0.998520, r^2 = 0.997041
Calibration curve: 1.13042 * x + 0.520352
Response type: Internal Std (Ref 32), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	3.57	1021.577	32744.631	0.390			NO	0.997	NO	bbXI
2	2	170810M2_3	Standard	0.500	3.57	2115.316	37927.195	0.697	0.2	-68.7	NO	0.997	NO	bbX
3	3	170810M2_4	Standard	1.000	3.58	4504.139	40517.414	1.390	0.8	-23.1	NO	0.997	NO	bb
4	4	170810M2_5	Standard	2.000	3.57	8848.725	40261.074	2.747	2.0	-1.5	NO	0.997	NO	bb
5	5	170810M2_6	Standard	5.000	3.57	20480.195	40307.914	6.351	5.2	3.2	NO	0.997	NO	bb
6	6	170810M2_7	Standard	10.000	3.57	39021.555	40487.199	12.047	10.2	2.0	NO	0.997	NO	bb
7	7	170810M2_8	Standard	50.000	3.57	204471.547	40139.113	63.676	55.9	11.7	NO	0.997	NO	bb
8	8	170810M2_9	Standard	100.000	3.56	439243.500	43301.590	126.798	111.7	11.7	NO	0.997	NO	bb
9	9	170810M2_10	Standard	250.000	3.55	986020.313	43919.035	280.636	247.8	-0.9	NO	0.997	NO	bb
10	10	170810M2_11	Standard	500.000	3.55	1853039.250	42249.473	548.243	484.5	-3.1	NO	0.997	NO	bb

Compound name: PFHxS
Coefficient of Determination: R^2 = 0.999727
Calibration curve: -0.00059344 * x^2 + 1.77788 * x + -0.123769
Response type: Internal Std (Ref 33), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	3.64	104.558	2973.079	0.440	0.3	26.8	NO	1.000	NO	MM
2	2	170810M2_3	Standard	0.500	3.66	147.156	3418.749	0.538	0.4	-25.5	NO	1.000	NO	MM
3	3	170810M2_4	Standard	1.000	3.65	505.877	3603.866	1.755	1.1	5.7	NO	1.000	NO	MM
4	4	170810M2_5	Standard	2.000	3.64	970.668	3657.688	3.317	1.9	-3.2	NO	1.000	NO	MM
5	5	170810M2_6	Standard	5.000	3.64	2611.106	3713.872	8.788	5.0	0.4	NO	1.000	NO	bb

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Compound name: PFHxS

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
6	6	170810M2_7	Standard	10.000	3.64	5130.715	3730.608	17.191	9.8	-2.3	NO	1.000	NO	MM
7	7	170810M2_8	Standard	50.000	3.64	24993.557	3648.731	85.624	49.0	-1.9	NO	1.000	NO	bb
8	8	170810M2_9	Standard	100.000	3.63	53419.980	3949.262	169.082	98.4	-1.6	NO	1.000	NO	MM
9	9	170810M2_10	Standard	250.000	3.63	117028.563	3521.197	415.443	255.5	2.2	NO	1.000	NO	db
10	10	170810M2_11	Standard	500.000	3.62	217790.609	3693.524	737.069	497.1	-0.6	NO	1.000	NO	db

Compound name: 6:2 FTS
Coefficient of Determination: R^2 = 0.998948
Calibration curve: -0.00172688 * x^2 + 0.945449 * x + 0.0555048
Response type: Internal Std (Ref 34), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	3.75	200.187	10827.486	0.231	0.2	-25.7	NO	0.999	NO	bb
2	2	170810M2_3	Standard	0.500	3.77	486.104	10909.211	0.557	0.5	6.2	NO	0.999	NO	bb
3	3	170810M2_4	Standard	1.000	3.77	883.831	10654.119	1.037	1.0	4.0	NO	0.999	NO	bb
4	4	170810M2_5	Standard	2.000	3.76	1608.501	10669.914	1.884	1.9	-2.9	NO	0.999	NO	bb
5	5	170810M2_6	Standard	5.000	3.77	4302.423	10053.431	5.349	5.7	13.2	NO	0.999	NO	bb
6	6	170810M2_7	Standard	10.000	3.77	8047.447	10016.485	10.043	10.8	7.8	NO	0.999	NO	bb
7	7	170810M2_8	Standard	50.000	3.76	39191.262	11428.154	42.867	49.8	-0.4	NO	0.999	NO	bb
8	8	170810M2_9	Standard	100.000	3.75	85670.922	14187.794	75.479	96.9	-3.1	NO	0.999	NO	bb
9	9	170810M2_10	Standard	250.000	3.74	179225.031	17337.529	129.218	261.9	4.7	NO	0.999	NO	bb
10	10	170810M2_11	Standard	500.000	3.74	272261.250	19594.984	173.680			NO	0.999	NO	bbXI

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Compound name: PFOA
Correlation coefficient: r = 0.999304, r^2 = 0.998608
Calibration curve: 0.980416 * x + 0.151461
Response type: Internal Std (Ref 35), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	3.78	1692.874	61642.953	0.343	0.2	-21.7	NO	0.999	NO	bb
2	2	170810M2_3	Standard	0.500	3.78	3289.689	67663.805	0.608	0.5	-6.9	NO	0.999	NO	bb
3	3	170810M2_4	Standard	1.000	3.78	6109.179	67625.266	1.129	1.0	-0.3	NO	0.999	NO	bb
4	4	170810M2_5	Standard	2.000	3.78	12862.762	69456.469	2.315	2.2	10.3	NO	0.999	NO	bb
5	5	170810M2_6	Standard	5.000	3.78	26522.385	61218.832	5.415	5.4	7.4	NO	0.999	NO	bb
6	6	170810M2_7	Standard	10.000	3.78	54100.707	64709.793	10.451	10.5	5.0	NO	0.999	NO	db
7	7	170810M2_8	Standard	50.000	3.78	248422.766	59761.141	51.962	52.8	5.7	NO	0.999	NO	bb
8	8	170810M2_9	Standard	100.000	3.77	559988.438	68978.094	101.479	103.4	3.4	NO	0.999	NO	bb
9	9	170810M2_10	Standard	250.000	3.76	1313767.500	68939.547	238.210	242.8	-2.9	NO	0.999	NO	bb
10	10	170810M2_11	Standard	500.000	3.75	2233816.250	64044.930	435.986	444.5	-11.1	NO	0.999	NO	bbX

Compound name: PFHpS
Correlation coefficient: r = 0.995991, r^2 = 0.991997
Calibration curve: 0.0786311 * x + 0.00779766
Response type: Internal Std (Ref 35), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	3.84	115.389	61642.953	0.023	0.2	-20.6	NO	0.992	NO	bb
2	2	170810M2_3	Standard	0.500	3.85	247.359	67663.805	0.046	0.5	-3.6	NO	0.992	NO	bb
3	3	170810M2_4	Standard	1.000	3.85	467.065	67625.266	0.086	1.0	-0.1	NO	0.992	NO	bb
4	4	170810M2_5	Standard	2.000	3.85	1021.924	69456.469	0.184	2.2	12.0	NO	0.992	NO	bb
5	5	170810M2_6	Standard	5.000	3.85	2169.387	61218.832	0.443	5.5	10.7	NO	0.992	NO	bb
6	6	170810M2_7	Standard	10.000	3.84	4681.044	64709.793	0.904	11.4	14.0	NO	0.992	NO	bb
7	7	170810M2_8	Standard	50.000	3.84	21604.721	59761.141	4.519	57.4	14.7	NO	0.992	NO	bb
8	8	170810M2_9	Standard	100.000	3.83	49713.887	68978.094	9.009	114.5	14.5	NO	0.992	NO	bb
9	9	170810M2_10	Standard	250.000	3.82	114797.594	68939.547	20.815	264.6	5.8	NO	0.992	NO	bb
10	10	170810M2_11	Standard	500.000	3.82	185939.734	64044.930	36.291	461.4	-7.7	NO	0.992	NO	bb

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Compound name: PFNA
Correlation coefficient: r = 0.998366, r^2 = 0.996735
Calibration curve: 0.979826 * x + 0.513479
Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	3.97	1700.456	62033.051	0.343			NO	0.997	NO	bbXI
2	2	170810M2_3	Standard	0.500	3.98	2793.827	56715.289	0.616	0.1	-79.1	NO	0.997	NO	bbX
3	3	170810M2_4	Standard	1.000	3.98	6302.374	60834.914	1.295	0.8	-20.2	NO	0.997	NO	bb
4	4	170810M2_5	Standard	2.000	3.97	11665.123	61086.734	2.387	1.9	-4.4	NO	0.997	NO	bb
5	5	170810M2_6	Standard	5.000	3.97	26210.676	58121.105	5.637	5.2	4.6	NO	0.997	NO	bb
6	6	170810M2_7	Standard	10.000	3.97	54617.367	63817.566	10.698	10.4	3.9	NO	0.997	NO	bb
7	7	170810M2_8	Standard	50.000	3.97	241126.203	57678.809	52.256	52.8	5.6	NO	0.997	NO	bb
8	8	170810M2_9	Standard	100.000	3.96	570147.125	64540.883	110.424	112.2	12.2	NO	0.997	NO	bb
9	9	170810M2_10	Standard	250.000	3.96	1276250.000	63239.992	252.263	256.9	2.8	NO	0.997	NO	bb
10	10	170810M2_11	Standard	500.000	3.95	2011288.625	53648.328	468.628	477.8	-4.4	NO	0.997	NO	bb

Compound name: PFOSA
Correlation coefficient: r = 0.999155, r^2 = 0.998311
Calibration curve: 1.04987 * x + 0.0313857
Response type: Internal Std (Ref 37), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	3.99	140.984	6459.227	0.273	0.2	-8.0	NO	0.998	NO	bb
2	2	170810M2_3	Standard	0.500	4.00	317.971	6795.560	0.585	0.5	5.4	NO	0.998	NO	bb
3	3	170810M2_4	Standard	1.000	3.99	679.323	7247.529	1.172	1.1	8.6	NO	0.998	NO	bb
4	4	170810M2_5	Standard	2.000	3.98	1225.911	6795.770	2.255	2.1	5.9	NO	0.998	NO	bb
5	5	170810M2_6	Standard	5.000	3.99	2957.377	7263.316	5.090	4.8	-3.6	NO	0.998	NO	bb
6	6	170810M2_7	Standard	10.000	3.99	6346.346	7321.714	10.835	10.3	2.9	NO	0.998	NO	bb
7	7	170810M2_8	Standard	50.000	3.98	29107.096	7239.874	50.255	47.8	-4.3	NO	0.998	NO	bb
8	8	170810M2_9	Standard	100.000	3.97	63806.832	8149.971	97.864	93.2	-6.8	NO	0.998	NO	bb
9	9	170810M2_10	Standard	250.000	3.96	141035.125	6965.660	253.090	241.0	-3.6	NO	0.998	NO	bb
10	10	170810M2_11	Standard	500.000	3.96	220683.688	5075.854	543.464	517.6	3.5	NO	0.998	NO	bb

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Compound name: PFOS
Coefficient of Determination: R^2 = 0.999791
Calibration curve: -0.000252174 * x^2 + 1.06922 * x + -0.0396957
Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	4.03	202.820	10626.669	0.239	0.3	4.1	NO	1.000	NO	MM
2	2	170810M2_3	Standard	0.500	4.04	413.253	11363.964	0.455	0.5	-7.5	NO	1.000	NO	MM
3	3	170810M2_4	Standard	1.000	4.03	862.786	10971.130	0.983	1.0	-4.3	NO	1.000	NO	MM
4	4	170810M2_5	Standard	2.000	4.03	1937.711	11205.850	2.161	2.1	3.0	NO	1.000	NO	MM
5	5	170810M2_6	Standard	5.000	4.03	4462.908	11041.968	5.052	4.8	-4.6	NO	1.000	NO	MM
6	6	170810M2_7	Standard	10.000	4.03	8765.405	11122.137	9.851	9.3	-7.3	NO	1.000	NO	MM
7	7	170810M2_8	Standard	50.000	4.03	43448.457	10002.095	54.299	51.4	2.9	NO	1.000	NO	MM
8	8	170810M2_9	Standard	100.000	4.02	95483.617	11632.687	102.603	98.3	-1.7	NO	1.000	NO	MM
9	9	170810M2_10	Standard	250.000	4.01	215446.594	10617.809	253.638	252.3	0.9	NO	1.000	NO	MM
10	10	170810M2_11	Standard	500.000	4.01	348312.906	9250.272	470.679	499.0	-0.2	NO	1.000	NO	MM

Compound name: PFDA
Correlation coefficient: r = 0.999612, r^2 = 0.999225
Calibration curve: 1.13105 * x + 0.115427
Response type: Internal Std (Ref 39), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	4.15	1467.511	55995.238	0.328	0.2	-25.0	NO	0.999	NO	bb
2	2	170810M2_3	Standard	0.500	4.16	2956.190	55977.539	0.660	0.5	-3.7	NO	0.999	NO	bb
3	3	170810M2_4	Standard	1.000	4.16	6754.155	58804.391	1.436	1.2	16.7	NO	0.999	NO	bb
4	4	170810M2_5	Standard	2.000	4.15	10501.298	50928.629	2.577	2.2	8.8	NO	0.999	NO	bb
5	5	170810M2_6	Standard	5.000	4.16	26044.916	56490.598	5.763	5.0	-0.1	NO	0.999	NO	bb
6	6	170810M2_7	Standard	10.000	4.16	53593.426	59644.734	11.232	9.8	-1.7	NO	0.999	NO	bb
7	7	170810M2_8	Standard	50.000	4.16	238216.063	50433.004	59.043	52.1	4.2	NO	0.999	NO	bb
8	8	170810M2_9	Standard	100.000	4.14	591185.688	63572.438	116.243	102.7	2.7	NO	0.999	NO	bb
9	9	170810M2_10	Standard	250.000	4.13	1293616.750	58295.023	277.386	245.1	-1.9	NO	0.999	NO	bb
10	10	170810M2_11	Standard	500.000	4.13	1924513.000	52405.832	459.041	405.8	-18.8	NO	0.999	NO	bbX

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Compound name: 8:2 FTS
Coefficient of Determination: R^2 = 0.997950
Calibration curve: -0.00480406 * x^2 + 1.4337 * x + -0.0133124
Response type: Internal Std (Ref 40), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	4.15	222.118	7665.451	0.362	0.3	4.9	NO	0.998	NO	bb
2	2	170810M2_3	Standard	0.500	4.16	397.530	7353.410	0.676	0.5	-3.7	NO	0.998	NO	bb
3	3	170810M2_4	Standard	1.000	4.15	986.639	7736.133	1.594	1.1	12.5	NO	0.998	NO	bb
4	4	170810M2_5	Standard	2.000	4.15	1700.260	7913.699	2.686	1.9	-5.3	NO	0.998	NO	bb
5	5	170810M2_6	Standard	5.000	4.15	3979.425	7743.167	6.424	4.6	-8.8	NO	0.998	NO	bb
6	6	170810M2_7	Standard	10.000	4.15	7871.591	7632.894	12.891	9.3	-7.1	NO	0.998	NO	bb
7	7	170810M2_8	Standard	50.000	4.15	36677.406	7336.241	62.494	53.0	6.0	NO	0.998	NO	bb
8	8	170810M2_9	Standard	100.000	4.14	73436.234	9762.668	94.027	97.3	-2.7	NO	0.998	NO	bb
9	9	170810M2_10	Standard	250.000	4.13	154924.188	11954.295	161.996			NO	0.998	NO	bbXI
10	10	170810M2_11	Standard	500.000	4.12	222765.531	13632.657	204.257			NO	0.998	NO	bbXI

Compound name: N-MeFOSAA
Coefficient of Determination: R^2 = 0.999893
Calibration curve: -0.00750568 * x^2 + 19.4398 * x + -0.45786
Response type: Internal Std (Ref 41), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	4.17	319.184	13096.980	3.960	0.2	-9.1	NO	1.000	NO	bb
2	2	170810M2_3	Standard	0.500	4.19	832.861	13619.695	9.937	0.5	7.0	NO	1.000	NO	bb
3	3	170810M2_4	Standard	1.000	4.19	1638.138	13420.139	19.836	1.0	4.4	NO	1.000	NO	bb
4	4	170810M2_5	Standard	2.000	4.18	3473.874	14342.013	39.360	2.0	2.5	NO	1.000	NO	bb
5	5	170810M2_6	Standard	5.000	4.18	7888.805	14009.009	91.508	4.7	-5.2	NO	1.000	NO	bb
6	6	170810M2_7	Standard	10.000	4.19	15596.266	13329.100	190.140	9.8	-1.6	NO	1.000	NO	bb
7	7	170810M2_8	Standard	50.000	4.18	74786.219	12505.077	971.826	51.0	2.0	NO	1.000	NO	bb
8	8	170810M2_9	Standard	100.000	4.17	166516.688	14369.895	1883.031	100.8	0.8	NO	1.000	NO	bb
9	9	170810M2_10	Standard	250.000	4.16	363121.188	13581.694	4344.612	247.1	-1.2	NO	1.000	NO	bb
10	10	170810M2_11	Standard	500.000	4.16	577726.813	11942.306	7861.179	501.5	0.3	NO	1.000	NO	bb

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Compound name: N-EtFOSAA
Coefficient of Determination: R^2 = 0.999638
Calibration curve: -0.00353476 * x^2 + 15.6313 * x + 0.651764
Response type: Internal Std (Ref 42), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	4.26	313.074	13212.761	3.850	0.2	-18.1	NO	1.000	NO	bb
2	2	170810M2_3	Standard	0.500	4.26	835.143	13188.293	10.290	0.6	23.3	NO	1.000	NO	bb
3	3	170810M2_4	Standard	1.000	4.26	1459.771	13739.960	17.264	1.1	6.3	NO	1.000	NO	bb
4	4	170810M2_5	Standard	2.000	4.25	2723.785	13472.679	32.853	2.1	3.0	NO	1.000	NO	bb
5	5	170810M2_6	Standard	5.000	4.25	6536.180	13386.724	79.342	5.0	0.8	NO	1.000	NO	bb
6	6	170810M2_7	Standard	10.000	4.25	13418.110	14147.375	154.123	9.8	-1.6	NO	1.000	NO	bb
7	7	170810M2_8	Standard	50.000	4.25	64230.766	13121.947	795.423	51.4	2.9	NO	1.000	NO	bb
8	8	170810M2_9	Standard	100.000	4.24	148325.734	15456.478	1559.406	102.1	2.1	NO	1.000	NO	bb
9	9	170810M2_10	Standard	250.000	4.23	327290.563	14790.417	3595.890	243.4	-2.6	NO	1.000	NO	bb
10	10	170810M2_11	Standard	500.000	4.23	562908.563	13123.576	6970.100	503.1	0.6	NO	1.000	NO	bb

Compound name: PFUnA
Coefficient of Determination: R^2 = 0.995537
Calibration curve: -0.000304422 * x^2 + 0.810482 * x + 0.0887281
Response type: Internal Std (Ref 43), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	4.33	1082.861	57444.809	0.236	0.2	-27.5	NO	0.996	NO	bb
2	2	170810M2_3	Standard	0.500	4.34	2396.822	62078.648	0.483	0.5	-2.8	NO	0.996	NO	bb
3	3	170810M2_4	Standard	1.000	4.34	4977.892	64503.668	0.965	1.1	8.1	NO	0.996	NO	bb
4	4	170810M2_5	Standard	2.000	4.33	9185.262	59270.816	1.937	2.3	14.1	NO	0.996	NO	bb
5	5	170810M2_6	Standard	5.000	4.33	21770.973	69700.664	3.904	4.7	-5.7	NO	0.996	NO	bb
6	6	170810M2_7	Standard	10.000	4.33	40820.391	61611.820	8.282	10.1	1.5	NO	0.996	NO	bb
7	7	170810M2_8	Standard	50.000	4.33	192810.016	52882.594	45.575	57.4	14.7	NO	0.996	NO	bb
8	8	170810M2_9	Standard	100.000	4.31	448601.406	68600.250	81.742	104.9	4.9	NO	0.996	NO	bb
9	9	170810M2_10	Standard	250.000	4.30	1001369.188	74813.570	167.311	225.4	-9.8	NO	0.996	NO	bb
10	10	170810M2_11	Standard	500.000	4.30	1654232.125	61521.715	336.107	513.7	2.7	NO	0.996	NO	bb

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Compound name: PFDS
Coefficient of Determination: R^2 = 0.992589
Calibration curve: -4.87611e-005 * x^2 + 0.0819404 * x + 0.0113831
Response type: Internal Std (Ref 43), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	4.38	50.134	57444.809	0.011			NO	0.993	NO	MMXI
2	2	170810M2_3	Standard	0.500	4.39	251.218	62078.648	0.051	0.5	-4.3	NO	0.993	NO	bb
3	3	170810M2_4	Standard	1.000	4.39	485.986	64503.668	0.094	1.0	1.1	NO	0.993	NO	bb
4	4	170810M2_5	Standard	2.000	4.38	806.569	59270.816	0.170	1.9	-3.0	NO	0.993	NO	bb
5	5	170810M2_6	Standard	5.000	4.38	2118.120	69700.664	0.380	4.5	-9.8	NO	0.993	NO	bb
6	6	170810M2_7	Standard	10.000	4.38	4130.849	61611.820	0.838	10.2	1.5	NO	0.993	NO	bb
7	7	170810M2_8	Standard	50.000	4.38	19476.701	52882.594	4.604	58.1	16.1	NO	0.993	NO	bb
8	8	170810M2_9	Standard	100.000	4.36	45542.465	68600.250	8.299	108.1	8.1	NO	0.993	NO	bb
9	9	170810M2_10	Standard	250.000	4.36	92623.195	74813.570	15.476	216.7	-13.3	NO	0.993	NO	bb
10	10	170810M2_11	Standard	500.000	4.35	145684.594	61521.715	29.600	525.3	5.1	NO	0.993	NO	bb

Compound name: PFDoA
Coefficient of Determination: R^2 = 0.999746
Calibration curve: -0.000238279 * x^2 + 0.835861 * x + 0.0431344
Response type: Internal Std (Ref 44), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	4.51	126.520	6520.931	0.243	0.2	-4.6	NO	1.000	NO	bb
2	2	170810M2_3	Standard	0.500	4.53	246.742	7169.665	0.430	0.5	-7.4	NO	1.000	NO	bb
3	3	170810M2_4	Standard	1.000	4.52	609.030	7950.386	0.958	1.1	9.4	NO	1.000	NO	bb
4	4	170810M2_5	Standard	2.000	4.51	1069.381	7572.749	1.765	2.1	3.1	NO	1.000	NO	bb
5	5	170810M2_6	Standard	5.000	4.51	2402.908	6676.272	4.499	5.3	6.8	NO	1.000	NO	bb
6	6	170810M2_7	Standard	10.000	4.51	4358.342	7074.396	7.701	9.2	-8.1	NO	1.000	NO	bb
7	7	170810M2_8	Standard	50.000	4.51	21732.080	6639.138	40.917	49.6	-0.8	NO	1.000	NO	bb
8	8	170810M2_9	Standard	100.000	4.49	51974.469	7805.791	83.231	102.5	2.5	NO	1.000	NO	bb
9	9	170810M2_10	Standard	250.000	4.48	109401.664	7118.316	192.113	247.2	-1.1	NO	1.000	NO	bb
10	10	170810M2_11	Standard	500.000	4.48	198369.359	6906.029	359.051	501.1	0.2	NO	1.000	NO	bb

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Compound name: N-MeFOSA
Correlation coefficient: r = 0.995786, r^2 = 0.991590
Calibration curve: 0.878916 * x + 0.777845
Response type: Internal Std (Ref 45), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	1.250	4.55	296.818	27716.932	1.606	0.9	-24.6	NO	0.992	NO	bb
2	2	170810M2_3	Standard	2.500	4.56	506.989	27527.555	2.763	2.3	-9.7	NO	0.992	NO	bb
3	3	170810M2_4	Standard	5.000	4.56	1040.113	27554.281	5.662	5.6	11.1	NO	0.992	NO	bb
4	4	170810M2_5	Standard	10.000	4.56	2132.267	27954.211	11.442	12.1	21.3	NO	0.992	NO	bb
5	5	170810M2_6	Standard	25.000	4.55	4991.766	26972.852	27.760	30.7	22.8	NO	0.992	NO	bb
6	6	170810M2_7	Standard	50.000	4.54	10478.551	29265.723	53.707	60.2	20.4	NO	0.992	NO	bb
7	7	170810M2_8	Standard	250.000	4.53	50625.969	29202.176	260.046	295.0	18.0	NO	0.992	NO	db
8	8	170810M2_9	Standard	500.000	4.51	118740.742	35066.203	507.928	577.0	15.4	NO	0.992	NO	bb
9	9	170810M2_10	Standard	1250.000	4.50	273392.375	36176.391	1133.581	1288.9	3.1	NO	0.992	NO	bb
10	10	170810M2_11	Standard	2500.000	4.50	473733.750	34819.609	2040.806	2321.1	-7.2	NO	0.992	NO	db

Compound name: PFTrDA
Correlation coefficient: r = 0.999754, r^2 = 0.999507
Calibration curve: 10.0213 * x + 1.2331
Response type: Internal Std (Ref 44), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	4.70	1808.306	6520.931	3.466	0.2	-10.9	NO	1.000	NO	MM
2	2	170810M2_3	Standard	0.500	4.71	3277.177	7169.665	5.714	0.4	-10.6	NO	1.000	NO	bb
3	3	170810M2_4	Standard	1.000	4.71	7157.351	7950.386	11.253	1.0	-0.0	NO	1.000	NO	bb
4	4	170810M2_5	Standard	2.000	4.70	13517.759	7572.749	22.313	2.1	5.2	NO	1.000	NO	bb
5	5	170810M2_6	Standard	5.000	4.70	29636.258	6676.272	55.488	5.4	8.3	NO	1.000	NO	bb
6	6	170810M2_7	Standard	10.000	4.70	60225.457	7074.396	106.414	10.5	5.0	NO	1.000	NO	bb
7	7	170810M2_8	Standard	50.000	4.70	275791.281	6639.138	519.253	51.7	3.4	NO	1.000	NO	bb
8	8	170810M2_9	Standard	100.000	4.68	633892.563	7805.791	1015.100	101.2	1.2	NO	1.000	NO	bb
9	9	170810M2_10	Standard	250.000	4.67	1405725.625	7118.316	2468.501	246.2	-1.5	NO	1.000	NO	bb
10	10	170810M2_11	Standard	500.000	4.67	2233990.500	6906.029	4043.551	403.4	-19.3	NO	1.000	NO	bbX

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Compound name: PFTeDA
Coefficient of Determination: R^2 = 0.999640
Calibration curve: -0.000533447 * x^2 + 1.13867 * x + 0.107998
Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	4.90	1296.794	43934.512	0.369	0.2	-8.3	NO	1.000	NO	bb
2	2	170810M2_3	Standard	0.500	4.91	2459.198	44478.961	0.691	0.5	2.4	NO	1.000	NO	bb
3	3	170810M2_4	Standard	1.000	4.91	4822.091	48823.219	1.235	1.0	-1.0	NO	1.000	NO	bb
4	4	170810M2_5	Standard	2.000	4.90	9330.564	47903.941	2.435	2.0	2.3	NO	1.000	NO	bb
5	5	170810M2_6	Standard	5.000	4.90	20629.588	43352.480	5.948	5.1	2.8	NO	1.000	NO	bb
6	6	170810M2_7	Standard	10.000	4.90	41831.395	45414.316	11.514	10.1	0.6	NO	1.000	NO	bb
7	7	170810M2_8	Standard	50.000	4.90	191464.297	43089.582	55.543	49.8	-0.3	NO	1.000	NO	bb
8	8	170810M2_9	Standard	100.000	4.87	448893.063	49984.359	112.258	103.5	3.5	NO	1.000	NO	bb
9	9	170810M2_10	Standard	250.000	4.87	983211.563	50076.543	245.427	243.1	-2.7	NO	1.000	NO	MM
10	10	170810M2_11	Standard	500.000	4.86	1620744.750	46214.285	438.378	503.8	0.8	NO	1.000	NO	MM

Compound name: N-EtFOSA
Correlation coefficient: r = 0.998278, r^2 = 0.996558
Calibration curve: 0.877827 * x + 0.460454
Response type: Internal Std (Ref 47), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	1.250	5.00	300.846	35807.328	1.260	0.9	-27.1	NO	0.997	NO	bb
2	2	170810M2_3	Standard	2.500	5.01	616.719	35651.246	2.595	2.4	-2.7	NO	0.997	NO	bb
3	3	170810M2_4	Standard	5.000	5.00	1224.420	36907.691	4.976	5.1	2.9	NO	0.997	NO	bb
4	4	170810M2_5	Standard	10.000	5.00	2355.630	37358.246	9.458	10.3	2.5	NO	0.997	NO	bb
5	5	170810M2_6	Standard	25.000	5.00	5722.799	34930.285	24.575	27.5	9.9	NO	0.997	NO	bb
6	6	170810M2_7	Standard	50.000	4.98	11801.225	38343.563	46.166	52.1	4.1	NO	0.997	NO	bb
7	7	170810M2_8	Standard	250.000	4.97	58068.348	36419.504	239.164	271.9	8.8	NO	0.997	NO	db
8	8	170810M2_9	Standard	500.000	4.95	136462.141	43820.121	467.122	531.6	6.3	NO	0.997	NO	db
9	9	170810M2_10	Standard	1250.000	4.94	323008.469	46286.176	1046.776	1191.9	-4.6	NO	0.997	NO	bb
10	10	170810M2_11	Standard	2500.000	4.94	574823.688	43106.852	2000.228	2278.1	-8.9	NO	0.997	NO	bbX

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Compound name: PFHxDA
Coefficient of Determination: R^2 = 0.999241
Calibration curve: -0.00134262 * x^2 + 1.44391 * x + 0.187386
Response type: Internal Std (Ref 48), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	5.29	2439.806	20425.877	0.597	0.3	13.6	NO	0.999	NO	bd
2	2	170810M2_3	Standard	0.500	5.30	3560.579	20498.971	0.868	0.5	-5.6	NO	0.999	NO	bb
3	3	170810M2_4	Standard	1.000	5.30	6815.783	21206.127	1.607	1.0	-1.6	NO	0.999	NO	bb
4	4	170810M2_5	Standard	2.000	5.29	13956.986	22826.240	3.057	2.0	-0.4	NO	0.999	NO	bb
5	5	170810M2_6	Standard	5.000	5.28	30517.473	20867.588	7.312	5.0	-0.9	NO	0.999	NO	bb
6	6	170810M2_7	Standard	10.000	5.29	57583.516	21425.330	13.438	9.3	-7.4	NO	0.999	NO	bb
7	7	170810M2_8	Standard	50.000	5.28	276492.656	19445.941	71.093	51.6	3.2	NO	0.999	NO	bb
8	8	170810M2_9	Standard	100.000	5.26	606868.313	23300.309	130.228	99.2	-0.8	NO	0.999	NO	MM
9	9	170810M2_10	Standard	250.000	5.25	897246.125	15976.768	280.797	254.6	1.9	NO	0.999	NO	bbX
10	10	170810M2_11	Standard	500.000	5.24	1213814.625	11401.953	532.284			NO	0.999	NO	bbXl

Compound name: PFODA
Correlation coefficient: r = 0.999467, r^2 = 0.998934
Calibration curve: 1.27081 * x + 0.103615
Response type: Internal Std (Ref 48), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	0.250	5.66	1714.516	20425.877	0.420	0.2	-0.5	NO	0.999	NO	bb
2	2	170810M2_3	Standard	0.500	5.66	3188.736	20498.971	0.778	0.5	6.1	NO	0.999	NO	bb
3	3	170810M2_4	Standard	1.000	5.66	6602.740	21206.127	1.557	1.1	14.4	NO	0.999	NO	bb
4	4	170810M2_5	Standard	2.000	5.66	12914.733	22826.240	2.829	2.1	7.2	NO	0.999	NO	bb
5	5	170810M2_6	Standard	5.000	5.66	27537.434	20867.588	6.598	5.1	2.2	NO	0.999	NO	bb
6	6	170810M2_7	Standard	10.000	5.66	56117.164	21425.330	13.096	10.2	2.2	NO	0.999	NO	bb
7	7	170810M2_8	Standard	50.000	5.65	255676.906	19445.941	65.740	51.6	3.3	NO	0.999	NO	bb
8	8	170810M2_9	Standard	100.000	5.62	579058.625	23300.309	124.260	97.7	-2.3	NO	0.999	NO	bb
9	9	170810M2_10	Standard	250.000	5.61	1368190.375	15976.768	428.181	336.9	34.7	NO	0.999	NO	bbX
10	10	170810M2_11	Standard	500.000	5.60	2323741.500	11401.953	1019.010	801.8	60.4	NO	0.999	NO	bbX

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Compound name: N-MeFOSE
Correlation coefficient: r = 0.998979, r^2 = 0.997958
Calibration curve: 0.913987 * x + 0.914175
Response type: Internal Std (Ref 49), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	1.250	5.28	449.666	37456.684	1.801	1.0	-22.4	NO	0.998	NO	bb
2	2	170810M2_3	Standard	2.500	5.29	709.438	37182.391	2.862	2.1	-14.8	NO	0.998	NO	bb
3	3	170810M2_4	Standard	5.000	5.29	1441.188	38748.840	5.579	5.1	2.1	NO	0.998	NO	bb
4	4	170810M2_5	Standard	10.000	5.28	2749.127	38784.367	10.632	10.6	6.3	NO	0.998	NO	bb
5	5	170810M2_6	Standard	25.000	5.28	6369.167	37768.906	25.295	26.7	6.7	NO	0.998	NO	bb
6	6	170810M2_7	Standard	50.000	5.28	13694.196	41681.102	49.282	52.9	5.8	NO	0.998	NO	bb
7	7	170810M2_8	Standard	250.000	5.28	68194.742	40391.512	253.252	276.1	10.4	NO	0.998	NO	bb
8	8	170810M2_9	Standard	500.000	5.26	159694.672	48233.188	496.633	542.4	8.5	NO	0.998	NO	bb
9	9	170810M2_10	Standard	1250.000	5.25	369344.906	48233.070	1148.626	1255.7	0.5	NO	0.998	NO	bb
10	10	170810M2_11	Standard	2500.000	5.25	687202.625	46562.453	2213.809	2421.1	-3.2	NO	0.998	NO	bb

Compound name: N-EtFOSE
Correlation coefficient: r = 0.998468, r^2 = 0.996938
Calibration curve: 1.01573 * x + 2.54785
Response type: Internal Std (Ref 50), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	1.250	5.45	431.103	36366.551	1.778			NO	0.997	NO	bbXI
2	2	170810M2_3	Standard	2.500	5.46	845.634	37921.910	3.345	0.8	-68.6	NO	0.997	NO	bbX
3	3	170810M2_4	Standard	5.000	5.46	1629.428	37938.703	6.442	3.8	-23.3	NO	0.997	NO	bb
4	4	170810M2_5	Standard	10.000	5.45	3162.947	39692.059	11.953	9.3	-7.4	NO	0.997	NO	bb
5	5	170810M2_6	Standard	25.000	5.45	7056.696	37298.547	28.379	25.4	1.7	NO	0.997	NO	bb
6	6	170810M2_7	Standard	50.000	5.45	15470.291	39826.883	58.266	54.9	9.7	NO	0.997	NO	bb
7	7	170810M2_8	Standard	250.000	5.45	75266.070	39464.043	286.081	279.1	11.7	NO	0.997	NO	bb
8	8	170810M2_9	Standard	500.000	5.43	181684.203	48142.445	566.083	554.8	11.0	NO	0.997	NO	bb
9	9	170810M2_10	Standard	1250.000	5.42	430891.406	50641.645	1276.296	1254.0	0.3	NO	0.997	NO	bb
10	10	170810M2_11	Standard	2500.000	5.42	790079.563	48390.172	2449.091	2408.7	-3.7	NO	0.997	NO	bb

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Compound name: 13C3-PFBA
Response Factor: 0.905828
RRF SD: 0.0122576, Relative SD: 1.35319
Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	1.91	15542.773	17253.230	11.261	12.4	-0.5	NO		NO	bb
2	2	170810M2_3	Standard	12.500	1.92	15666.696	17209.924	11.379	12.6	0.5	NO		NO	bb
3	3	170810M2_4	Standard	12.500	1.92	16473.561	17869.518	11.524	12.7	1.8	NO		NO	bb
4	4	170810M2_5	Standard	12.500	1.92	15767.530	17173.609	11.477	12.7	1.4	NO		NO	bb
5	5	170810M2_6	Standard	12.500	1.91	16464.104	18114.355	11.361	12.5	0.3	NO		NO	bb
6	6	170810M2_7	Standard	12.500	1.92	16369.950	18442.018	11.096	12.2	-2.0	NO		NO	bb
7	7	170810M2_8	Standard	12.500	1.92	16361.661	17753.158	11.520	12.7	1.7	NO		NO	bb
8	8	170810M2_9	Standard	12.500	1.91	18859.416	21098.885	11.173	12.3	-1.3	NO		NO	bb
9	9	170810M2_10	Standard	12.500	1.91	18778.650	20835.586	11.266	12.4	-0.5	NO		NO	bb
10	10	170810M2_11	Standard	12.500	1.90	18418.195	20606.902	11.172	12.3	-1.3	NO		NO	bb

Compound name: 13C3-PFPeA
Response Factor: 0.283893
RRF SD: 0.00573445, Relative SD: 2.01993
Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	2.95	27880.619	38245.879	3.645	12.8	2.7	NO		NO	bb
2	2	170810M2_3	Standard	12.500	2.95	28322.555	40090.316	3.532	12.4	-0.5	NO		NO	bb
3	3	170810M2_4	Standard	12.500	2.96	28875.371	41622.215	3.469	12.2	-2.3	NO		NO	bb
4	4	170810M2_5	Standard	12.500	2.95	27712.795	39798.098	3.482	12.3	-1.9	NO		NO	bb
5	5	170810M2_6	Standard	12.500	2.95	29315.059	41689.316	3.516	12.4	-0.9	NO		NO	bb
6	6	170810M2_7	Standard	12.500	2.95	29802.102	41735.027	3.570	12.6	0.6	NO		NO	bb
7	7	170810M2_8	Standard	12.500	2.95	28667.293	39240.863	3.653	12.9	2.9	NO		NO	bb
8	8	170810M2_9	Standard	12.500	2.94	33506.395	46120.840	3.632	12.8	2.4	NO		NO	bb
9	9	170810M2_10	Standard	12.500	2.94	32021.633	45642.266	3.508	12.4	-1.1	NO		NO	bb
10	10	170810M2_11	Standard	12.500	2.94	30833.635	44306.922	3.480	12.3	-1.9	NO		NO	bb

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Compound name: 13C3-PFBS
Response Factor: 0.0328786
RRF SD: 0.00161235, Relative SD: 4.90396
Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	3.11	3242.905	38245.879	0.424	12.9	3.2	NO		NO	bb
2	2	170810M2_3	Standard	12.500	3.11	3291.404	40090.316	0.410	12.5	-0.1	NO		NO	bb
3	3	170810M2_4	Standard	12.500	3.12	3435.015	41622.215	0.413	12.6	0.4	NO		NO	bb
4	4	170810M2_5	Standard	12.500	3.11	3373.359	39798.098	0.424	12.9	3.1	NO		NO	bb
5	5	170810M2_6	Standard	12.500	3.12	3305.415	41689.316	0.396	12.1	-3.5	NO		NO	bb
6	6	170810M2_7	Standard	12.500	3.12	3622.048	41735.027	0.434	13.2	5.6	NO		NO	bb
7	7	170810M2_8	Standard	12.500	3.12	3433.760	39240.863	0.438	13.3	6.5	NO		NO	bb
8	8	170810M2_9	Standard	12.500	3.11	3757.638	46120.840	0.407	12.4	-0.9	NO		NO	bb
9	9	170810M2_10	Standard	12.500	3.10	3568.171	45642.266	0.391	11.9	-4.9	NO		NO	bb
10	10	170810M2_11	Standard	12.500	3.10	3303.260	44306.922	0.373	11.3	-9.3	NO		NO	bb

Compound name: 13C2-PFHxA
Response Factor: 0.303632
RRF SD: 0.00987768, Relative SD: 3.25318
Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	5.000	3.32	11232.063	38245.879	1.468	4.8	-3.3	NO		NO	bb
2	2	170810M2_3	Standard	5.000	3.32	11474.060	40090.316	1.431	4.7	-5.7	NO		NO	bb
3	3	170810M2_4	Standard	5.000	3.33	12197.214	41622.215	1.465	4.8	-3.5	NO		NO	bb
4	4	170810M2_5	Standard	5.000	3.32	12310.407	39798.098	1.547	5.1	1.9	NO		NO	bb
5	5	170810M2_6	Standard	5.000	3.32	12691.323	41689.316	1.522	5.0	0.3	NO		NO	bb
6	6	170810M2_7	Standard	5.000	3.32	13114.998	41735.027	1.571	5.2	3.5	NO		NO	bb
7	7	170810M2_8	Standard	5.000	3.32	12075.982	39240.863	1.539	5.1	1.4	NO		NO	bb
8	8	170810M2_9	Standard	5.000	3.31	14098.515	46120.840	1.528	5.0	0.7	NO		NO	bb
9	9	170810M2_10	Standard	5.000	3.30	13890.280	45642.266	1.522	5.0	0.2	NO		NO	bb
10	10	170810M2_11	Standard	5.000	3.30	14073.479	44306.922	1.588	5.2	4.6	NO		NO	bb

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Compound name: 13C4-PFHpA
Response Factor: 0.384073
RRF SD: 0.0180967, Relative SD: 4.71177
Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	3.57	32744.631	38245.879	4.281	11.1	-10.8	NO		NO	bb
2	2	170810M2_3	Standard	12.500	3.58	37927.195	40090.316	4.730	12.3	-1.5	NO		NO	bb
3	3	170810M2_4	Standard	12.500	3.58	40517.414	41622.215	4.867	12.7	1.4	NO		NO	bb
4	4	170810M2_5	Standard	12.500	3.57	40261.074	39798.098	5.058	13.2	5.4	NO		NO	bb
5	5	170810M2_6	Standard	12.500	3.57	40307.914	41689.316	4.834	12.6	0.7	NO		NO	bb
6	6	170810M2_7	Standard	12.500	3.57	40487.199	41735.027	4.851	12.6	1.0	NO		NO	bb
7	7	170810M2_8	Standard	12.500	3.57	40139.113	39240.863	5.114	13.3	6.5	NO		NO	bb
8	8	170810M2_9	Standard	12.500	3.56	43301.590	46120.840	4.694	12.2	-2.2	NO		NO	bb
9	9	170810M2_10	Standard	12.500	3.55	43919.035	45642.266	4.811	12.5	0.2	NO		NO	bb
10	10	170810M2_11	Standard	12.500	3.55	42249.473	44306.922	4.768	12.4	-0.7	NO		NO	bb

Compound name: 18O2-PFHxS
Response Factor: 0.417122
RRF SD: 0.0140806, Relative SD: 3.37566
Response type: Internal Std (Ref 53), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	3.64	2973.079	7282.960	5.103	12.2	-2.1	NO		NO	bb
2	2	170810M2_3	Standard	12.500	3.65	3418.749	8095.660	5.279	12.7	1.2	NO		NO	bb
3	3	170810M2_4	Standard	12.500	3.65	3603.866	8554.390	5.266	12.6	1.0	NO		NO	bb
4	4	170810M2_5	Standard	12.500	3.64	3657.688	9118.271	5.014	12.0	-3.8	NO		NO	bb
5	5	170810M2_6	Standard	12.500	3.64	3713.872	8806.590	5.271	12.6	1.1	NO		NO	bb
6	6	170810M2_7	Standard	12.500	3.65	3730.608	8875.088	5.254	12.6	0.8	NO		NO	bb
7	7	170810M2_8	Standard	12.500	3.64	3648.731	8462.481	5.390	12.9	3.4	NO		NO	bb
8	8	170810M2_9	Standard	12.500	3.63	3949.262	9360.616	5.274	12.6	1.1	NO		NO	bb
9	9	170810M2_10	Standard	12.500	3.63	3521.197	9070.533	4.853	11.6	-6.9	NO		NO	bb
10	10	170810M2_11	Standard	12.500	3.62	3693.524	8491.929	5.437	13.0	4.3	NO		NO	bb

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Compound name: 13C2-6:2 FTS
Response Factor: 0.201722
RRF SD: 0.0340952, Relative SD: 16.9021
Response type: Internal Std (Ref 54), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	3.76	10827.486	54603.613	2.479	12.3	-1.7	NO		NO	bb
2	2	170810M2_3	Standard	12.500	3.77	10909.211	58987.684	2.312	11.5	-8.3	NO		NO	bb
3	3	170810M2_4	Standard	12.500	3.77	10654.119	60428.516	2.204	10.9	-12.6	NO		NO	bb
4	4	170810M2_5	Standard	12.500	3.77	10669.914	61095.281	2.183	10.8	-13.4	NO		NO	bb
5	5	170810M2_6	Standard	12.500	3.77	10053.431	56983.695	2.205	10.9	-12.5	NO		NO	bb
6	6	170810M2_7	Standard	12.500	3.77	10016.485	53819.109	2.326	11.5	-7.7	NO		NO	bb
7	7	170810M2_8	Standard	12.500	3.76	11428.154	52844.020	2.703	13.4	7.2	NO		NO	bb
8	8	170810M2_9	Standard	12.500	3.75	14187.794	63696.625	2.784	13.8	10.4	NO		NO	bb
9	9	170810M2_10	Standard	12.500	3.74	17337.529	61971.621	3.497	17.3	38.7	NO		NO	bb
10	10	170810M2_11	Standard	12.500	3.74	19594.984	53950.348	4.540	22.5	80.1	NO		NO	bbX

Compound name: 13C2-PFOA
Response Factor: 1.1322
RRF SD: 0.0401853, Relative SD: 3.54932
Response type: Internal Std (Ref 54), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	3.78	61642.953	54603.613	14.111	12.5	-0.3	NO		NO	bb
2	2	170810M2_3	Standard	12.500	3.79	67663.805	58987.684	14.339	12.7	1.3	NO		NO	bb
3	3	170810M2_4	Standard	12.500	3.79	67625.266	60428.516	13.989	12.4	-1.2	NO		NO	bb
4	4	170810M2_5	Standard	12.500	3.78	69456.469	61095.281	14.211	12.6	0.4	NO		NO	bb
5	5	170810M2_6	Standard	12.500	3.78	61218.832	56983.695	13.429	11.9	-5.1	NO		NO	bb
6	6	170810M2_7	Standard	12.500	3.78	64709.793	53819.109	15.029	13.3	6.2	NO		NO	bb
7	7	170810M2_8	Standard	12.500	3.78	59761.141	52844.020	14.136	12.5	-0.1	NO		NO	bb
8	8	170810M2_9	Standard	12.500	3.77	68978.094	63696.625	13.536	12.0	-4.4	NO		NO	bb
9	9	170810M2_10	Standard	12.500	3.76	68939.547	61971.621	13.905	12.3	-1.7	NO		NO	bb
10	10	170810M2_11	Standard	12.500	3.76	64044.930	53950.348	14.839	13.1	4.8	NO		NO	bb

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Compound name: 13C5-PFNA
Response Factor: 0.94609
RRF SD: 0.0460977, Relative SD: 4.87244
Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	3.97	62033.051	62822.277	12.343	13.0	4.4	NO		NO	bb
2	2	170810M2_3	Standard	12.500	3.98	56715.289	69006.492	10.274	10.9	-13.1	NO		NO	bb
3	3	170810M2_4	Standard	12.500	3.98	60834.914	64031.563	11.876	12.6	0.4	NO		NO	bb
4	4	170810M2_5	Standard	12.500	3.97	61086.734	63786.367	11.971	12.7	1.2	NO		NO	bb
5	5	170810M2_6	Standard	12.500	3.97	58121.105	59683.719	12.173	12.9	2.9	NO		NO	bb
6	6	170810M2_7	Standard	12.500	3.97	63817.566	67704.961	11.782	12.5	-0.4	NO		NO	bb
7	7	170810M2_8	Standard	12.500	3.97	57678.809	61617.066	11.701	12.4	-1.1	NO		NO	bb
8	8	170810M2_9	Standard	12.500	3.96	64540.883	67146.039	12.015	12.7	1.6	NO		NO	bb
9	9	170810M2_10	Standard	12.500	3.95	63239.992	65393.742	12.088	12.8	2.2	NO		NO	bb
10	10	170810M2_11	Standard	12.500	3.95	53648.328	55705.484	12.038	12.7	1.8	NO		NO	bb

Compound name: 13C8-PFOSA
Response Factor: 0.11942
RRF SD: 0.0160933, Relative SD: 13.4762
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	3.99	6459.227	56516.137	1.429	12.0	-4.3	NO		NO	bb
2	2	170810M2_3	Standard	12.500	3.99	6795.560	54058.969	1.571	13.2	5.3	NO		NO	bb
3	3	170810M2_4	Standard	12.500	3.99	7247.529	58876.535	1.539	12.9	3.1	NO		NO	bb
4	4	170810M2_5	Standard	12.500	3.98	6795.770	54908.402	1.547	13.0	3.6	NO		NO	bb
5	5	170810M2_6	Standard	12.500	3.99	7263.316	66408.094	1.367	11.4	-8.4	NO		NO	bb
6	6	170810M2_7	Standard	12.500	3.99	7321.714	50136.242	1.825	15.3	22.3	NO		NO	bb
7	7	170810M2_8	Standard	12.500	3.98	7239.874	55712.629	1.624	13.6	8.8	NO		NO	bb
8	8	170810M2_9	Standard	12.500	3.97	8149.971	65160.934	1.563	13.1	4.7	NO		NO	bb
9	9	170810M2_10	Standard	12.500	3.96	6965.660	61852.313	1.408	11.8	-5.7	NO		NO	bb
10	10	170810M2_11	Standard	12.500	3.96	5075.854	60220.047	1.054	8.8	-29.4	NO		NO	bb

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Compound name: 13C8-PFOS
Response Factor: 1.03984
RRF SD: 0.043134, Relative SD: 4.14815
Response type: Internal Std (Ref 56), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	4.03	10626.669	10014.264	13.264	12.8	2.0	NO		NO	bb
2	2	170810M2_3	Standard	12.500	4.04	11363.964	11495.998	12.356	11.9	-4.9	NO		NO	bb
3	3	170810M2_4	Standard	12.500	4.03	10971.130	10441.012	13.135	12.6	1.1	NO		NO	bb
4	4	170810M2_5	Standard	12.500	4.03	11205.850	10602.818	13.211	12.7	1.6	NO		NO	bb
5	5	170810M2_6	Standard	12.500	4.03	11041.968	10918.573	12.641	12.2	-2.7	NO		NO	bb
6	6	170810M2_7	Standard	12.500	4.03	11122.137	9895.137	14.050	13.5	8.1	NO		NO	bb
7	7	170810M2_8	Standard	12.500	4.03	10002.095	10000.603	12.502	12.0	-3.8	NO		NO	bb
8	8	170810M2_9	Standard	12.500	4.02	11632.687	11222.943	12.956	12.5	-0.3	NO		NO	bb
9	9	170810M2_10	Standard	12.500	4.01	10617.809	10708.807	12.394	11.9	-4.6	NO		NO	bd
10	10	170810M2_11	Standard	12.500	4.01	9250.272	8584.092	13.470	13.0	3.6	NO		NO	bd

Compound name: 13C2-PFDA
Response Factor: 0.970789
RRF SD: 0.0673883, Relative SD: 6.9416
Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	4.15	55995.238	62130.031	11.266	11.6	-7.2	NO		NO	bb
2	2	170810M2_3	Standard	12.500	4.16	55977.539	56889.133	12.300	12.7	1.4	NO		NO	bb
3	3	170810M2_4	Standard	12.500	4.16	58804.391	63530.797	11.570	11.9	-4.7	NO		NO	bb
4	4	170810M2_5	Standard	12.500	4.16	50928.629	56949.430	11.178	11.5	-7.9	NO		NO	bb
5	5	170810M2_6	Standard	12.500	4.16	56490.598	58825.063	12.004	12.4	-1.1	NO		NO	bb
6	6	170810M2_7	Standard	12.500	4.16	59644.734	57823.469	12.894	13.3	6.3	NO		NO	bb
7	7	170810M2_8	Standard	12.500	4.15	50433.004	53425.855	11.800	12.2	-2.8	NO		NO	bb
8	8	170810M2_9	Standard	12.500	4.14	63572.438	62756.719	12.662	13.0	4.3	NO		NO	bb
9	9	170810M2_10	Standard	12.500	4.13	58295.023	62057.383	11.742	12.1	-3.2	NO		NO	bb
10	10	170810M2_11	Standard	12.500	4.13	52405.832	47017.207	13.933	14.4	14.8	NO		NO	bb

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Compound name: 13C2-8:2 FTS
Response Factor: 0.140279
RRF SD: 0.0220172, Relative SD: 15.6953
Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	4.15	7665.451	62130.031	1.542	11.0	-12.0	NO		NO	bb
2	2	170810M2_3	Standard	12.500	4.16	7353.410	56889.133	1.616	11.5	-7.9	NO		NO	bb
3	3	170810M2_4	Standard	12.500	4.16	7736.133	63530.797	1.522	10.9	-13.2	NO		NO	bb
4	4	170810M2_5	Standard	12.500	4.15	7913.699	56949.430	1.737	12.4	-0.9	NO		NO	bb
5	5	170810M2_6	Standard	12.500	4.15	7743.167	58825.063	1.645	11.7	-6.2	NO		NO	bb
6	6	170810M2_7	Standard	12.500	4.15	7632.894	57823.469	1.650	11.8	-5.9	NO		NO	bb
7	7	170810M2_8	Standard	12.500	4.15	7336.241	53425.855	1.716	12.2	-2.1	NO		NO	bb
8	8	170810M2_9	Standard	12.500	4.14	9762.668	62756.719	1.945	13.9	10.9	NO		NO	bb
9	9	170810M2_10	Standard	12.500	4.12	11954.295	62057.383	2.408	17.2	37.3	NO		NO	bb
10	10	170810M2_11	Standard	12.500	4.12	13632.657	47017.207	3.624	25.8	106.7	NO		NO	bbX

Compound name: d3-N-MeFOSAA
Response Factor: 0.0177885
RRF SD: 0.00168688, Relative SD: 9.48297
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	162.500	4.18	13096.980	56516.137	2.897	162.8	0.2	NO		NO	bb
2	2	170810M2_3	Standard	162.500	4.19	13619.695	54058.969	3.149	177.0	8.9	NO		NO	bb
3	3	170810M2_4	Standard	162.500	4.19	13420.139	58876.535	2.849	160.2	-1.4	NO		NO	bb
4	4	170810M2_5	Standard	162.500	4.18	14342.013	54908.402	3.265	183.5	13.0	NO		NO	bb
5	5	170810M2_6	Standard	162.500	4.18	14009.009	66408.094	2.637	148.2	-8.8	NO		NO	bb
6	6	170810M2_7	Standard	162.500	4.18	13329.100	50136.242	3.323	186.8	15.0	NO		NO	bb
7	7	170810M2_8	Standard	162.500	4.18	12505.077	55712.629	2.806	157.7	-2.9	NO		NO	bb
8	8	170810M2_9	Standard	162.500	4.17	14369.895	65160.934	2.757	155.0	-4.6	NO		NO	bb
9	9	170810M2_10	Standard	162.500	4.16	13581.694	61852.313	2.745	154.3	-5.0	NO		NO	bb
10	10	170810M2_11	Standard	162.500	4.16	11942.306	60220.047	2.479	139.4	-14.2	NO		NO	bb

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Compound name: d5-N-EtFOSAA
Response Factor: 0.018231
RRF SD: 0.00158227, Relative SD: 8.67901
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	162.500	4.25	13212.761	56516.137	2.922	160.3	-1.4	NO		NO	bb
2	2	170810M2_3	Standard	162.500	4.26	13188.293	54058.969	3.050	167.3	2.9	NO		NO	bb
3	3	170810M2_4	Standard	162.500	4.26	13739.960	58876.535	2.917	160.0	-1.5	NO		NO	bb
4	4	170810M2_5	Standard	162.500	4.25	13472.679	54908.402	3.067	168.2	3.5	NO		NO	bb
5	5	170810M2_6	Standard	162.500	4.25	13386.724	66408.094	2.520	138.2	-14.9	NO		NO	bb
6	6	170810M2_7	Standard	162.500	4.25	14147.375	50136.242	3.527	193.5	19.1	NO		NO	bb
7	7	170810M2_8	Standard	162.500	4.25	13121.947	55712.629	2.944	161.5	-0.6	NO		NO	bb
8	8	170810M2_9	Standard	162.500	4.23	15456.478	65160.934	2.965	162.6	0.1	NO		NO	bb
9	9	170810M2_10	Standard	162.500	4.23	14790.417	61852.313	2.989	164.0	0.9	NO		NO	bb
10	10	170810M2_11	Standard	162.500	4.22	13123.576	60220.047	2.724	149.4	-8.0	NO		NO	bb

Compound name: 13C2-PFUnA
Response Factor: 1.08514
RRF SD: 0.0880815, Relative SD: 8.11704
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	4.33	57444.809	56516.137	12.705	11.7	-6.3	NO		NO	bb
2	2	170810M2_3	Standard	12.500	4.34	62078.648	54058.969	14.354	13.2	5.8	NO		NO	bb
3	3	170810M2_4	Standard	12.500	4.34	64503.668	58876.535	13.695	12.6	1.0	NO		NO	bb
4	4	170810M2_5	Standard	12.500	4.33	59270.816	54908.402	13.493	12.4	-0.5	NO		NO	bb
5	5	170810M2_6	Standard	12.500	4.32	69700.664	66408.094	13.120	12.1	-3.3	NO		NO	bb
6	6	170810M2_7	Standard	12.500	4.34	61611.820	50136.242	15.361	14.2	13.2	NO		NO	bb
7	7	170810M2_8	Standard	12.500	4.33	52882.594	55712.629	11.865	10.9	-12.5	NO		NO	bb
8	8	170810M2_9	Standard	12.500	4.32	68600.250	65160.934	13.160	12.1	-3.0	NO		NO	bb
9	9	170810M2_10	Standard	12.500	4.30	74813.570	61852.313	15.119	13.9	11.5	NO		NO	bb
10	10	170810M2_11	Standard	12.500	4.30	61521.715	60220.047	12.770	11.8	-5.9	NO		NO	bb

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Compound name: 13C2-PFDoA
Response Factor: 0.123132
RRF SD: 0.0129407, Relative SD: 10.5096
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	4.51	6520.931	56516.137	1.442	11.7	-6.3	NO		NO	bb
2	2	170810M2_3	Standard	12.500	4.52	7169.665	54058.969	1.658	13.5	7.7	NO		NO	bb
3	3	170810M2_4	Standard	12.500	4.52	7950.386	58876.535	1.688	13.7	9.7	NO		NO	bb
4	4	170810M2_5	Standard	12.500	4.51	7572.749	54908.402	1.724	14.0	12.0	NO		NO	bb
5	5	170810M2_6	Standard	12.500	4.51	6676.272	66408.094	1.257	10.2	-18.4	NO		NO	bb
6	6	170810M2_7	Standard	12.500	4.51	7074.396	50136.242	1.764	14.3	14.6	NO		NO	bb
7	7	170810M2_8	Standard	12.500	4.51	6639.138	55712.629	1.490	12.1	-3.2	NO		NO	bb
8	8	170810M2_9	Standard	12.500	4.49	7805.791	65160.934	1.497	12.2	-2.7	NO		NO	bb
9	9	170810M2_10	Standard	12.500	4.48	7118.316	61852.313	1.439	11.7	-6.5	NO		NO	bb
10	10	170810M2_11	Standard	12.500	4.48	6906.029	60220.047	1.433	11.6	-6.9	NO		NO	MM

Compound name: d3-N-MeFOSA
Response Factor: 0.0432669
RRF SD: 0.0047116, Relative SD: 10.8896
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	150.000	4.58	27716.932	56516.137	6.130	141.7	-5.5	NO		NO	bb
2	2	170810M2_3	Standard	150.000	4.59	27527.555	54058.969	6.365	147.1	-1.9	NO		NO	bb
3	3	170810M2_4	Standard	150.000	4.59	27554.281	58876.535	5.850	135.2	-9.9	NO		NO	bb
4	4	170810M2_5	Standard	150.000	4.58	27954.211	54908.402	6.364	147.1	-1.9	NO		NO	bb
5	5	170810M2_6	Standard	150.000	4.58	26972.852	66408.094	5.077	117.3	-21.8	NO		NO	bb
6	6	170810M2_7	Standard	150.000	4.57	29265.723	50136.242	7.297	168.6	12.4	NO		NO	bb
7	7	170810M2_8	Standard	150.000	4.55	29202.176	55712.629	6.552	151.4	1.0	NO		NO	bb
8	8	170810M2_9	Standard	150.000	4.54	35066.203	65160.934	6.727	155.5	3.6	NO		NO	bb
9	9	170810M2_10	Standard	150.000	4.53	36176.391	61852.313	7.311	169.0	12.7	NO		NO	bb
10	10	170810M2_11	Standard	150.000	4.53	34819.609	60220.047	7.228	167.0	11.4	NO		NO	bb

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Compound name: 13C2-PFTeDA
Response Factor: 0.797804
RRF SD: 0.0690308, Relative SD: 8.6526
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	4.90	43934.512	56516.137	9.717	12.2	-2.6	NO		NO	bb
2	2	170810M2_3	Standard	12.500	4.91	44478.961	54058.969	10.285	12.9	3.1	NO		NO	bb
3	3	170810M2_4	Standard	12.500	4.91	48823.219	58876.535	10.366	13.0	3.9	NO		NO	bb
4	4	170810M2_5	Standard	12.500	4.90	47903.941	54908.402	10.905	13.7	9.4	NO		NO	bb
5	5	170810M2_6	Standard	12.500	4.90	43352.480	66408.094	8.160	10.2	-18.2	NO		NO	bb
6	6	170810M2_7	Standard	12.500	4.90	45414.316	50136.242	11.323	14.2	13.5	NO		NO	bb
7	7	170810M2_8	Standard	12.500	4.90	43089.582	55712.629	9.668	12.1	-3.1	NO		NO	bb
8	8	170810M2_9	Standard	12.500	4.87	49984.359	65160.934	9.589	12.0	-3.8	NO		NO	bb
9	9	170810M2_10	Standard	12.500	4.86	50076.543	61852.313	10.120	12.7	1.5	NO		NO	MM
10	10	170810M2_11	Standard	12.500	4.86	46214.285	60220.047	9.593	12.0	-3.8	NO		NO	MM

Compound name: d5-N-ETFOSA
Response Factor: 0.0556786
RRF SD: 0.00566563, Relative SD: 10.1756
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	150.000	5.02	35807.328	56516.137	7.920	142.2	-5.2	NO		NO	bb
2	2	170810M2_3	Standard	150.000	5.03	35651.246	54058.969	8.244	148.1	-1.3	NO		NO	bb
3	3	170810M2_4	Standard	150.000	5.03	36907.691	58876.535	7.836	140.7	-6.2	NO		NO	bb
4	4	170810M2_5	Standard	150.000	5.03	37358.246	54908.402	8.505	152.7	1.8	NO		NO	bb
5	5	170810M2_6	Standard	150.000	5.02	34930.285	66408.094	6.575	118.1	-21.3	NO		NO	bb
6	6	170810M2_7	Standard	150.000	5.01	38343.563	50136.242	9.560	171.7	14.5	NO		NO	bb
7	7	170810M2_8	Standard	150.000	5.00	36419.504	55712.629	8.171	146.8	-2.2	NO		NO	bb
8	8	170810M2_9	Standard	150.000	4.98	43820.121	65160.934	8.406	151.0	0.7	NO		NO	bb
9	9	170810M2_10	Standard	150.000	4.97	46286.176	61852.313	9.354	168.0	12.0	NO		NO	bb
10	10	170810M2_11	Standard	150.000	4.97	43106.852	60220.047	8.948	160.7	7.1	NO		NO	bb

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Compound name: 13C2-PFHxDA
Response Factor: 0.92647
RRF SD: 0.0912877, Relative SD: 9.85328
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	5.000	5.29	20425.877	56516.137	4.518	4.9	-2.5	NO		NO	bb
2	2	170810M2_3	Standard	5.000	5.30	20498.971	54058.969	4.740	5.1	2.3	NO		NO	bb
3	3	170810M2_4	Standard	5.000	5.30	21206.127	58876.535	4.502	4.9	-2.8	NO		NO	bb
4	4	170810M2_5	Standard	5.000	5.29	22826.240	54908.402	5.196	5.6	12.2	NO		NO	bb
5	5	170810M2_6	Standard	5.000	5.28	20867.588	66408.094	3.928	4.2	-15.2	NO		NO	bb
6	6	170810M2_7	Standard	5.000	5.29	21425.330	50136.242	5.342	5.8	15.3	NO		NO	bb
7	7	170810M2_8	Standard	5.000	5.28	19445.941	55712.629	4.363	4.7	-5.8	NO		NO	bb
8	8	170810M2_9	Standard	5.000	5.26	23300.309	65160.934	4.470	4.8	-3.5	NO		NO	MM
9	9	170810M2_10	Standard	5.000	5.25	15976.768	61852.313	3.229	3.5	-30.3	NO		NO	bbX
10	10	170810M2_11	Standard	5.000	5.24	11401.953	60220.047	2.367	2.6	-48.9	NO		NO	bbX

Compound name: d7-N-MeFOSE
Response Factor: 0.0594448
RRF SD: 0.00621154, Relative SD: 10.4492
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	150.000	5.26	37456.684	56516.137	8.285	139.4	-7.1	NO		NO	bb
2	2	170810M2_3	Standard	150.000	5.28	37182.391	54058.969	8.598	144.6	-3.6	NO		NO	bb
3	3	170810M2_4	Standard	150.000	5.28	38748.840	58876.535	8.227	138.4	-7.7	NO		NO	bb
4	4	170810M2_5	Standard	150.000	5.27	38784.367	54908.402	8.829	148.5	-1.0	NO		NO	bb
5	5	170810M2_6	Standard	150.000	5.26	37768.906	66408.094	7.109	119.6	-20.3	NO		NO	bb
6	6	170810M2_7	Standard	150.000	5.27	41681.102	50136.242	10.392	174.8	16.5	NO		NO	bb
7	7	170810M2_8	Standard	150.000	5.26	40391.512	55712.629	9.062	152.5	1.6	NO		NO	bb
8	8	170810M2_9	Standard	150.000	5.25	48233.188	65160.934	9.253	155.7	3.8	NO		NO	bb
9	9	170810M2_10	Standard	150.000	5.24	48233.070	61852.313	9.748	164.0	9.3	NO		NO	bb
10	10	170810M2_11	Standard	150.000	5.24	46562.453	60220.047	9.665	162.6	8.4	NO		NO	bb

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Compound name: d9-N-EtFOSE
Response Factor: 0.0594811
RRF SD: 0.00676808, Relative SD: 11.3785
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	150.000	5.44	36366.551	56516.137	8.043	135.2	-9.8	NO		NO	bb
2	2	170810M2_3	Standard	150.000	5.45	37921.910	54058.969	8.769	147.4	-1.7	NO		NO	bb
3	3	170810M2_4	Standard	150.000	5.44	37938.703	58876.535	8.055	135.4	-9.7	NO		NO	bb
4	4	170810M2_5	Standard	150.000	5.44	39692.059	54908.402	9.036	151.9	1.3	NO		NO	bb
5	5	170810M2_6	Standard	150.000	5.44	37298.547	66408.094	7.021	118.0	-21.3	NO		NO	bb
6	6	170810M2_7	Standard	150.000	5.44	39826.883	50136.242	9.930	166.9	11.3	NO		NO	bb
7	7	170810M2_8	Standard	150.000	5.43	39464.043	55712.629	8.854	148.9	-0.8	NO		NO	bb
8	8	170810M2_9	Standard	150.000	5.42	48142.445	65160.934	9.235	155.3	3.5	NO		NO	bb
9	9	170810M2_10	Standard	150.000	5.41	50641.645	61852.313	10.234	172.1	14.7	NO		NO	bb
10	10	170810M2_11	Standard	150.000	5.41	48390.172	60220.047	10.044	168.9	12.6	NO		NO	bb

Compound name: 13C4-PFBA
Response Factor: 1
RRF SD: 7.40149e-017, Relative SD: 7.40149e-015
Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	1.91	17253.230	17253.230	12.500	12.5	0.0	NO		NO	bb
2	2	170810M2_3	Standard	12.500	1.92	17209.924	17209.924	12.500	12.5	0.0	NO		NO	bb
3	3	170810M2_4	Standard	12.500	1.92	17869.518	17869.518	12.500	12.5	0.0	NO		NO	bb
4	4	170810M2_5	Standard	12.500	1.91	17173.609	17173.609	12.500	12.5	0.0	NO		NO	bb
5	5	170810M2_6	Standard	12.500	1.91	18114.355	18114.355	12.500	12.5	0.0	NO		NO	bb
6	6	170810M2_7	Standard	12.500	1.91	18442.018	18442.018	12.500	12.5	0.0	NO		NO	bb
7	7	170810M2_8	Standard	12.500	1.92	17753.158	17753.158	12.500	12.5	0.0	NO		NO	bb
8	8	170810M2_9	Standard	12.500	1.91	21098.885	21098.885	12.500	12.5	0.0	NO		NO	bb
9	9	170810M2_10	Standard	12.500	1.90	20835.586	20835.586	12.500	12.5	0.0	NO		NO	bb
10	10	170810M2_11	Standard	12.500	1.90	20606.902	20606.902	12.500	12.5	0.0	NO		NO	bb

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Compound name: 13C5-PFHxA
Response Factor: 1
RRF SD: 0, Relative SD: 0
Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	5.000	3.32	38245.879	38245.879	5.000	5.0	0.0	NO		NO	bb
2	2	170810M2_3	Standard	5.000	3.32	40090.316	40090.316	5.000	5.0	0.0	NO		NO	bb
3	3	170810M2_4	Standard	5.000	3.32	41622.215	41622.215	5.000	5.0	0.0	NO		NO	bb
4	4	170810M2_5	Standard	5.000	3.32	39798.098	39798.098	5.000	5.0	0.0	NO		NO	bb
5	5	170810M2_6	Standard	5.000	3.32	41689.316	41689.316	5.000	5.0	0.0	NO		NO	bb
6	6	170810M2_7	Standard	5.000	3.32	41735.027	41735.027	5.000	5.0	0.0	NO		NO	bb
7	7	170810M2_8	Standard	5.000	3.32	39240.863	39240.863	5.000	5.0	0.0	NO		NO	bb
8	8	170810M2_9	Standard	5.000	3.31	46120.840	46120.840	5.000	5.0	0.0	NO		NO	bb
9	9	170810M2_10	Standard	5.000	3.30	45642.266	45642.266	5.000	5.0	0.0	NO		NO	bb
10	10	170810M2_11	Standard	5.000	3.30	44306.922	44306.922	5.000	5.0	0.0	NO		NO	bb

Compound name: 13C3-PFHxS
Response Factor: 1
RRF SD: 0, Relative SD: 0
Response type: Internal Std (Ref 53), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	3.65	7282.960	7282.960	12.500	12.5	0.0	NO		NO	bb
2	2	170810M2_3	Standard	12.500	3.65	8095.660	8095.660	12.500	12.5	0.0	NO		NO	bb
3	3	170810M2_4	Standard	12.500	3.65	8554.390	8554.390	12.500	12.5	0.0	NO		NO	bb
4	4	170810M2_5	Standard	12.500	3.64	9118.271	9118.271	12.500	12.5	0.0	NO		NO	bb
5	5	170810M2_6	Standard	12.500	3.64	8806.590	8806.590	12.500	12.5	0.0	NO		NO	bb
6	6	170810M2_7	Standard	12.500	3.64	8875.088	8875.088	12.500	12.5	0.0	NO		NO	bb
7	7	170810M2_8	Standard	12.500	3.64	8462.481	8462.481	12.500	12.5	0.0	NO		NO	bb
8	8	170810M2_9	Standard	12.500	3.63	9360.616	9360.616	12.500	12.5	0.0	NO		NO	bb
9	9	170810M2_10	Standard	12.500	3.63	9070.533	9070.533	12.500	12.5	0.0	NO		NO	bb
10	10	170810M2_11	Standard	12.500	3.62	8491.929	8491.929	12.500	12.5	0.0	NO		NO	bb

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Compound name: 13C8-PFOA
Response Factor: 1
RRF SD: 1.11022e-016, Relative SD: 1.11022e-014
Response type: Internal Std (Ref 54), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	3.78	54603.613	54603.613	12.500	12.5	0.0	NO		NO	bb
2	2	170810M2_3	Standard	12.500	3.78	58987.684	58987.684	12.500	12.5	0.0	NO		NO	bb
3	3	170810M2_4	Standard	12.500	3.79	60428.516	60428.516	12.500	12.5	0.0	NO		NO	bb
4	4	170810M2_5	Standard	12.500	3.78	61095.281	61095.281	12.500	12.5	0.0	NO		NO	bb
5	5	170810M2_6	Standard	12.500	3.78	56983.695	56983.695	12.500	12.5	0.0	NO		NO	bb
6	6	170810M2_7	Standard	12.500	3.78	53819.109	53819.109	12.500	12.5	0.0	NO		NO	bb
7	7	170810M2_8	Standard	12.500	3.78	52844.020	52844.020	12.500	12.5	0.0	NO		NO	bb
8	8	170810M2_9	Standard	12.500	3.76	63696.625	63696.625	12.500	12.5	0.0	NO		NO	bb
9	9	170810M2_10	Standard	12.500	3.76	61971.621	61971.621	12.500	12.5	0.0	NO		NO	bb
10	10	170810M2_11	Standard	12.500	3.76	53950.348	53950.348	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C9-PFNA
Response Factor: 1
RRF SD: 8.27511e-017, Relative SD: 8.27511e-015
Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	3.97	62822.277	62822.277	12.500	12.5	0.0	NO		NO	bb
2	2	170810M2_3	Standard	12.500	3.98	69006.492	69006.492	12.500	12.5	0.0	NO		NO	bb
3	3	170810M2_4	Standard	12.500	3.98	64031.563	64031.563	12.500	12.5	0.0	NO		NO	bb
4	4	170810M2_5	Standard	12.500	3.97	63786.367	63786.367	12.500	12.5	0.0	NO		NO	bb
5	5	170810M2_6	Standard	12.500	3.97	59683.719	59683.719	12.500	12.5	0.0	NO		NO	bb
6	6	170810M2_7	Standard	12.500	3.97	67704.961	67704.961	12.500	12.5	0.0	NO		NO	bb
7	7	170810M2_8	Standard	12.500	3.97	61617.066	61617.066	12.500	12.5	0.0	NO		NO	bb
8	8	170810M2_9	Standard	12.500	3.96	67146.039	67146.039	12.500	12.5	0.0	NO		NO	bb
9	9	170810M2_10	Standard	12.500	3.96	65393.742	65393.742	12.500	12.5	0.0	NO		NO	bb
10	10	170810M2_11	Standard	12.500	3.95	55705.484	55705.484	12.500	12.5	0.0	NO		NO	bb

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Compound name: 13C4-PFOS
Response Factor: 1
RRF SD: 0, Relative SD: 0
Response type: Internal Std (Ref 56), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	4.03	10014.264	10014.264	12.500	12.5	0.0	NO		NO	bb
2	2	170810M2_3	Standard	12.500	4.03	11495.998	11495.998	12.500	12.5	0.0	NO		NO	bb
3	3	170810M2_4	Standard	12.500	4.04	10441.012	10441.012	12.500	12.5	0.0	NO		NO	bb
4	4	170810M2_5	Standard	12.500	4.03	10602.818	10602.818	12.500	12.5	0.0	NO		NO	bb
5	5	170810M2_6	Standard	12.500	4.03	10918.573	10918.573	12.500	12.5	0.0	NO		NO	bb
6	6	170810M2_7	Standard	12.500	4.03	9895.137	9895.137	12.500	12.5	0.0	NO		NO	bb
7	7	170810M2_8	Standard	12.500	4.03	10000.603	10000.603	12.500	12.5	0.0	NO		NO	bb
8	8	170810M2_9	Standard	12.500	4.02	11222.943	11222.943	12.500	12.5	0.0	NO		NO	bb
9	9	170810M2_10	Standard	12.500	4.01	10708.807	10708.807	12.500	12.5	0.0	NO		NO	bb
10	10	170810M2_11	Standard	12.500	4.01	8584.092	8584.092	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C6-PFDA
Response Factor: 1
RRF SD: 8.27511e-017, Relative SD: 8.27511e-015
Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	4.16	62130.031	62130.031	12.500	12.5	0.0	NO		NO	bb
2	2	170810M2_3	Standard	12.500	4.16	56889.133	56889.133	12.500	12.5	0.0	NO		NO	bb
3	3	170810M2_4	Standard	12.500	4.16	63530.797	63530.797	12.500	12.5	0.0	NO		NO	bb
4	4	170810M2_5	Standard	12.500	4.16	56949.430	56949.430	12.500	12.5	0.0	NO		NO	bb
5	5	170810M2_6	Standard	12.500	4.16	58825.063	58825.063	12.500	12.5	0.0	NO		NO	bb
6	6	170810M2_7	Standard	12.500	4.16	57823.469	57823.469	12.500	12.5	0.0	NO		NO	bb
7	7	170810M2_8	Standard	12.500	4.15	53425.855	53425.855	12.500	12.5	0.0	NO		NO	bb
8	8	170810M2_9	Standard	12.500	4.14	62756.719	62756.719	12.500	12.5	0.0	NO		NO	bb
9	9	170810M2_10	Standard	12.500	4.13	62057.383	62057.383	12.500	12.5	0.0	NO		NO	bb
10	10	170810M2_11	Standard	12.500	4.13	47017.207	47017.207	12.500	12.5	0.0	NO		NO	bb

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Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:12:09 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:12:47 Pacific Daylight Time

Compound name: 13C7-PFUnA
Response Factor: 1
RRF SD: 3.70074e-017, Relative SD: 3.70074e-015
Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)
Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170810M2_2	Standard	12.500	4.33	56516.137	56516.137	12.500	12.5	0.0	NO		NO	bb
2	2	170810M2_3	Standard	12.500	4.34	54058.969	54058.969	12.500	12.5	0.0	NO		NO	bb
3	3	170810M2_4	Standard	12.500	4.34	58876.535	58876.535	12.500	12.5	0.0	NO		NO	bb
4	4	170810M2_5	Standard	12.500	4.34	54908.402	54908.402	12.500	12.5	0.0	NO		NO	bb
5	5	170810M2_6	Standard	12.500	4.33	66408.094	66408.094	12.500	12.5	0.0	NO		NO	bb
6	6	170810M2_7	Standard	12.500	4.33	50136.242	50136.242	12.500	12.5	0.0	NO		NO	bb
7	7	170810M2_8	Standard	12.500	4.32	55712.629	55712.629	12.500	12.5	0.0	NO		NO	bb
8	8	170810M2_9	Standard	12.500	4.31	65160.934	65160.934	12.500	12.5	0.0	NO		NO	bb
9	9	170810M2_10	Standard	12.500	4.30	61852.313	61852.313	12.500	12.5	0.0	NO		NO	bb
10	10	170810M2_11	Standard	12.500	4.30	60220.047	60220.047	12.500	12.5	0.0	NO		NO	bb

Sample List Report **MassLynx MassLynx V4.1 SCN945 SCN960**

Sample List: U:\Q4.PRO\SampleDB\170810M2.SPL
Last Modified: Thursday, August 10, 2017 20:07:32 Pacific Daylight Time
Printed: Thursday, August 10, 2017 20:46:13 Pacific Daylight Time

Page Position (1, 1)

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
1	170810M2_1	---	IPA	IPA	1.0000	1:48	Blank
2	170810M2_2	---	ST170810M2-1 PFC CS-2 17H1015	PFC CS-2 17H1015	1.0000	1:1	Standard
3	170810M2_3	---	ST170810M2-2 PFC CS-1 17H1003	PFC CS-1 17H1003	1.0000	1:2	Standard
4	170810M2_4	---	ST170810M2-3 PFC CS0 17H1004	PFC CS0 17H1004	1.0000	1:3	Standard
5	170810M2_5	---	ST170810M2-4 PFC CS1 17H1016	PFC CS1 17H1016	1.0000	1:4	Standard
6	170810M2_6	---	ST170810M2-5 PFC CS2 17H1017	PFC CS2 17H1017	1.0000	1:5	Standard
7	170810M2_7	---	ST170810M2-6 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Standard
8	170810M2_8	---	ST170810M2-7 PFC CS4 17H1018	PFC CS4 17H1018	1.0000	1:7	Standard
9	170810M2_9	---	ST170810M2-8 PFC CS5 17H1019	PFC CS5 17H1019	1.0000	1:8	Standard
10	170810M2_10	---	ST170810M2-9 PFC CS6 17H1013	PFC CS6 17H1013	1.0000	1:9	Standard
11	170810M2_11	---	ST170810M2-10 PFC CS7 17H1012	PFC CS7 17H1012	1.0000	1:10	Analyte
12	170810M2_12	---	IPA	IPA	1.0000	1:48	Blank
13	170810M2_13	---	SS170810M2-1 PFC SSS 17H1020	PFC SSS 17H1020	1.0000	1:11	Analyte
14	170810M2_14	---	IPA	IPA	1.0000	1:48	Blank
15	170810M2_15	O	1700946-05RE1 MATP05077 1.06	MATP05077	1.0233	1:12	Analyte
16	170810M2_16	---	IPA	IPA	1.0000	1:48	Blank
17	170810M2_17	O	1700946-05RE1@5X MATP05077 1.06	MATP05077	1.0233	1:13	Analyte
18	170810M2_18	---	IPA	IPA	1.0000	1:48	Blank
19	170810M2_19	X	B7H0026-BS1 OPR 1	OPR	1.0000	1:14	Analyte
20	170810M2_20	---	IPA	IPA	1.0000	1:48	Blank
21	170810M2_21	X	B7H0026-BLK1 Method Blank 1	Method Blank	1.0000	1:15	Analyte
22	170810M2_22	---	IPA	IPA	1.0000	1:48	Blank
23	170810M2_23	X	1700946-01 MATP05073 1	MATP05073	1.0000	1:16	Analyte
24	170810M2_24	X	1700946-02 MATP05074 1	MATP05074	1.0000	1:17	Analyte
25	170810M2_25	X	1700946-03 MATP05075 1	MATP05075	1.0000	1:18	Analyte
26	170810M2_26	---	1700946-05 MATP05077 1	MATP05077	1.0000	1:19	Analyte
27	170810M2_27	---	IPA	IPA	1.0000	1:48	Blank
28	170810M2_28	X	1700946-04 MATP05076 1	MATP05076	1.0000	1:20	Analyte
29	170810M2_29	---	IPA	IPA	1.0000	1:48	Blank
30	170810M2_30	---	1700946-05@10X MATP05077 1	MATP05077	1.0000	1:22	Analyte
31	170810M2_31	---	IPA	IPA	1.0000	1:48	Blank
32	170810M2_32	X	1700946-04@10X MATP05076 1	MATP05076	1.0000	1:23	Analyte
33	170810M2_33	---	IPA	IPA	1.0000	1:48	Blank
34	170810M2_34	---	B7H0037-BS1 OPR 0.125	OPR	0.2500	1:24	Analyte
35	170810M2_35	---	IPA	IPA	1.0000	1:48	Blank
36	170810M2_36	X	1701010-02@10X VEL-FOAM-080317 0.125	VEL-FOAM-080317	0.0065	1:25	Analyte
37	170810M2_37	---	IPA	IPA	1.0000	1:48	Blank
38	170810M2_38	---	ST170810M2-11 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Standard
39	170810M2_39	---	IPA	IPA	1.0000	1:48	Blank
40	170810M2_40	X	1701010-02 VEL-FOAM-080317 0.125	VEL-FOAM-080317	0.1250	1:26	Analyte

(A) Column was changed, new curve run due to slight shifts in RT. OM 8/11/17 OM 8/10/17

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
41	170810M2_41	---	IPA	IPA	1.0000	1:48	Blank
42	170810M2_42	---	B7H0060-BS1 OPR 2.5	OPR	2.5000	1:27	Analyte
43	170810M2_43	---	B7H0073-BS1 OPR 0.125	OPR	0.1250	1:28	Analyte
44	170810M2_44	---	B7H0074-BS1 OPR 0.125	OPR	0.1250	1:29	Analyte
45	170810M2_45	---	B7H0060-BLK1 Method Blank 2.5	Method Blank	2.5000	1:30	Analyte
46	170810M2_46	---	B7H0073-BLK1 Method Blank 0.125	Method Blank	0.1250	1:31	Analyte
47	170810M2_47	---	B7H0074-BLK1 Method Blank 0.125	Method Blank	0.1250	1:32	Analyte
48	170810M2_48	---	B7H0073-MS1 Matrix Spike 0.0005	Matrix Spike	0.0005	1:33	Analyte
49	170810M2_49	---	IPA	IPA	1.0000	1:48	Blank
50	170810M2_50	---	B7H0073-MSD1 Matrix Spike Dup 0.00139	Matrix Spike Dup	0.0014	1:34	Analyte
51	170810M2_51	---	IPA	IPA	1.0000	1:48	Blank
52	170810M2_52	---	B7H0074-MS1 Matrix Spike 0.125	Matrix Spike	0.1250	1:35	Analyte
53	170810M2_53	---	B7H0074-MSD1 Matrix Spike Dup 0.125	Matrix Spike Dup	0.1250	1:36	Analyte
54	170810M2_54	---	1700819-01RE1 QPFD-14 2.5	QPFD-14	2.5000	1:37	Analyte
55	170810M2_55	---	1700819-02RE1 QPFD-15 2.5	QPFD-15	2.5000	1:38	Analyte
56	170810M2_56	---	IPA	IPA	1.0000	1:48	Blank
57	170810M2_57	---	1700819-03RE1 QPFD-16 2.5	QPFD-16	2.5000	1:39	Analyte
58	170810M2_58	---	1700819-04RE1 QPFD-17 2	QPFD-17	2.0000	1:40	Analyte
59	170810M2_59	---	1700819-05RE1 QPFD-18 2.5	QPFD-18	2.5000	1:41	Analyte
60	170810M2_60	---	1700819-06RE1 QPFD-19 2.5	QPFD-19	2.5000	1:42	Analyte
61	170810M2_61	---	1700819-07RE1 QPFD-20 2.5	QPFD-20	2.5000	1:43	Analyte
62	170810M2_62	---	1700819-08RE1 QPFD-21 2.5	QPFD-21	2.5000	1:44	Analyte
63	170810M2_63	---	1700819-09RE1 QPFD-22 2.5	QPFD-22	2.5000	1:45	Analyte
64	170810M2_64	---	1700819-10RE1 QPFD-23 2.5	QPFD-23	2.5000	1:46	Analyte
65	170810M2_65	---	IPA	IPA	1.0000	1:48	Blank
66	170810M2_66	---	ST170810M2-12 PFC CS0 17H1004	PFC CS0 17H1004	1.0000	1:3	Standard
67	170810M2_67	---	IPA	IPA	1.0000	1:48	Blank
68	170810M2_68	---	1700819-11RE1 QPFD-24 2.5	QPFD-24	2.5000	1:47	Analyte
69	170810M2_69	---	1700819-12RE1 QPFD-25 2.5	QPFD-25	2.5000	2:1	Analyte
70	170810M2_70	---	1700819-13RE1 QPFD-26 2.5	QPFD-26	2.5000	2:2	Analyte
71	170810M2_71	---	1700925-04RE2 I001MW52S-170724 0.00122	I001MW52S-170724	0.0012	2:3	Analyte
72	170810M2_72	---	IPA	IPA	1.0000	1:48	Blank
73	170810M2_73	---	1700925-05RE2 I001MW52X-170724 0.00133	I001MW52X-170724	0.0013	2:4	Analyte
74	170810M2_74	---	IPA	IPA	1.0000	1:48	Blank
75	170810M2_75	---	1700922-01RE1 MH-L103-20170721 0.10565	MH-L103-20170721	0.1056	2:5	Analyte
76	170810M2_76	---	1700922-02RE1 MH-N104-20170721 0.11025	MH-N104-20170721	0.1103	2:6	Analyte
77	170810M2_77	---	1700922-03RE1 Upstream-Culvert-109-20170721 0.1185	Upstream-Culvert-109-20170721	0.1185	2:7	Analyte
78	170810M2_78	---	1700922-04RE1 FRB03-20170721 0.11017	FRB03-20170721	0.1102	2:8	Analyte
79	170810M2_79	---	1700922-05RE1 RB08-20170720 0.11893	RB08-20170720	0.1189	2:9	Analyte
80	170810M2_80	---	IPA	IPA	1.0000	1:48	Blank

	File Name	RS OK=X	Sample ID	File Text	User Divisor 1	Bottle	Sample Type
		am 8/4/17	(A) (B) am 8/4/17				
81	170810M2_81	X	ST170810M2-13 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Analyte
82	170810M2_82	---	IPA	IPA	1.0000	1:48	Blank
83	170810M2_83	---	(B) 1700922-06RE1 RB09-20170721 0.11676	RB09-20170721	0.1168	2:10	Analyte
84	170810M2_84	---	1700925-01RE1 I001BC43S-170724 0.12112	I001BC43S-170724	0.1211	2:11	Analyte
85	170810M2_85	---	1700925-02RE1 SB01-170724 0.12178	SB01-170724	0.1218	2:12	Analyte
86	170810M2_86	---	1700925-03RE1 I001BC50S-170724 0.12135	I001BC50S-170724	0.1214	2:13	Analyte
87	170810M2_87	---	1700925-06RE1 EB01-170724 0.1185	EB01-170724	0.1185	2:14	Analyte
88	170810M2_88	---	1700929-01RE1 MATP01001 0.11834	MATP01001	0.1183	2:15	Analyte
89	170810M2_89	---	1700929-02RE1 MATP01002 0.1157	MATP01002	0.1157	2:16	Analyte
90	170810M2_90	---	1700938-01RE1 NORP08102 0.11844	NORP08102	0.1184	2:17	Analyte
91	170810M2_91	---	1700938-02RE1 NORP08103 0.12014	NORP08103	0.1201	2:18	Analyte
92	170810M2_92	---	1700938-03RE1 NORP08104 0.11247	NORP08104	0.1125	2:19	Analyte
93	170810M2_93	---	IPA	IPA	1.0000	1:48	Blank
94	170810M2_94	---	ST170810M2-14 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Standard
95	170810M2_95	---	IPA	IPA	1.0000	1:48	Blank
96	170810M2_96	---	1700819-02RE1 QPFD-15 2.5 (2.5X)	QPFD-15	2.5000	1:21	Analyte
97	170810M2_97	---	IPA	IPA	1.0000	1:48	Blank
98	170810M2_98	---	B7H0073-MS1@20X Matrix Spike 0.0005	Matrix Spike	0.0005	2:20	Analyte
99	170810M2_99	---	IPA	IPA	1.0000	1:48	Blank
100	170810M2_100	---	B7H0073-MSD1@20X Matrix Spike Dup 0.00139	Matrix Spike Dup	0.0014	2:21	Analyte
101	170810M2_101	---	IPA	IPA	1.0000	1:48	Blank
102	170810M2_102	---	1700925-04RE2 I001MW52S-170724 0.00122	I001MW52S-170724	0.0012	2:22	Analyte
103	170810M2_103	---	IPA	IPA	1.0000	1:48	Blank
104	170810M2_104	---	1700925-05RE2 I001MW52X-170724 0.00133	I001MW52X-170724	0.0013	2:23	Analyte
105	170810M2_105	---	IPA	IPA	1.0000	1:48	Blank
106	170810M2_106	X	ST170810M2-15 PFC CS3 17H1005	PFC CS3 17H1005	1.0000	1:6	Analyte
107	170810M2_107	---	IPA	IPA	1.0000	1:48	Blank

(B) PFDoA, PFTrDA, PFTeDA, PFODA, & PFHxDA shifted out of window, samples not injected. am 8/4/17

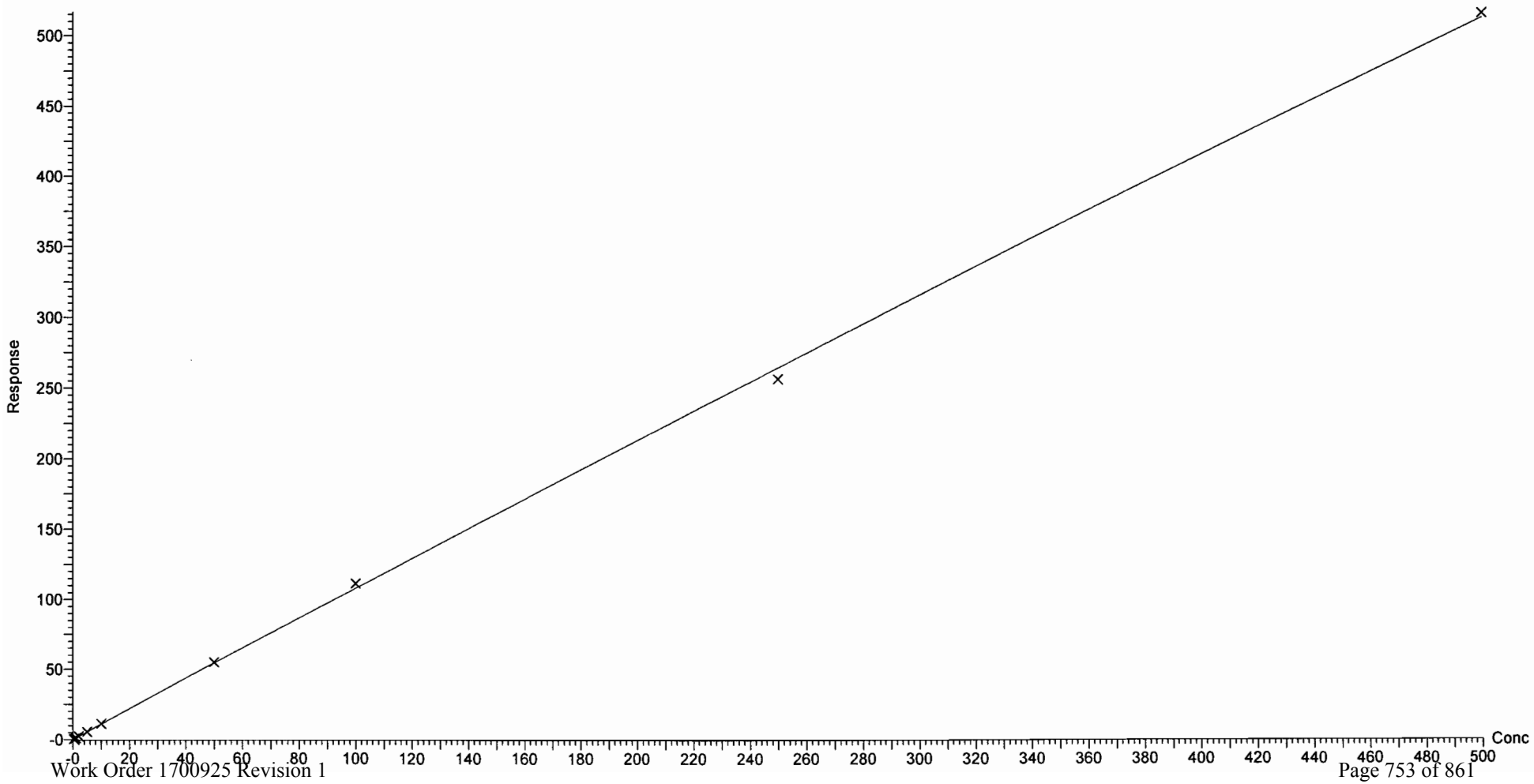
Vista Analytical Laboratory Q1

Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 08:55:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

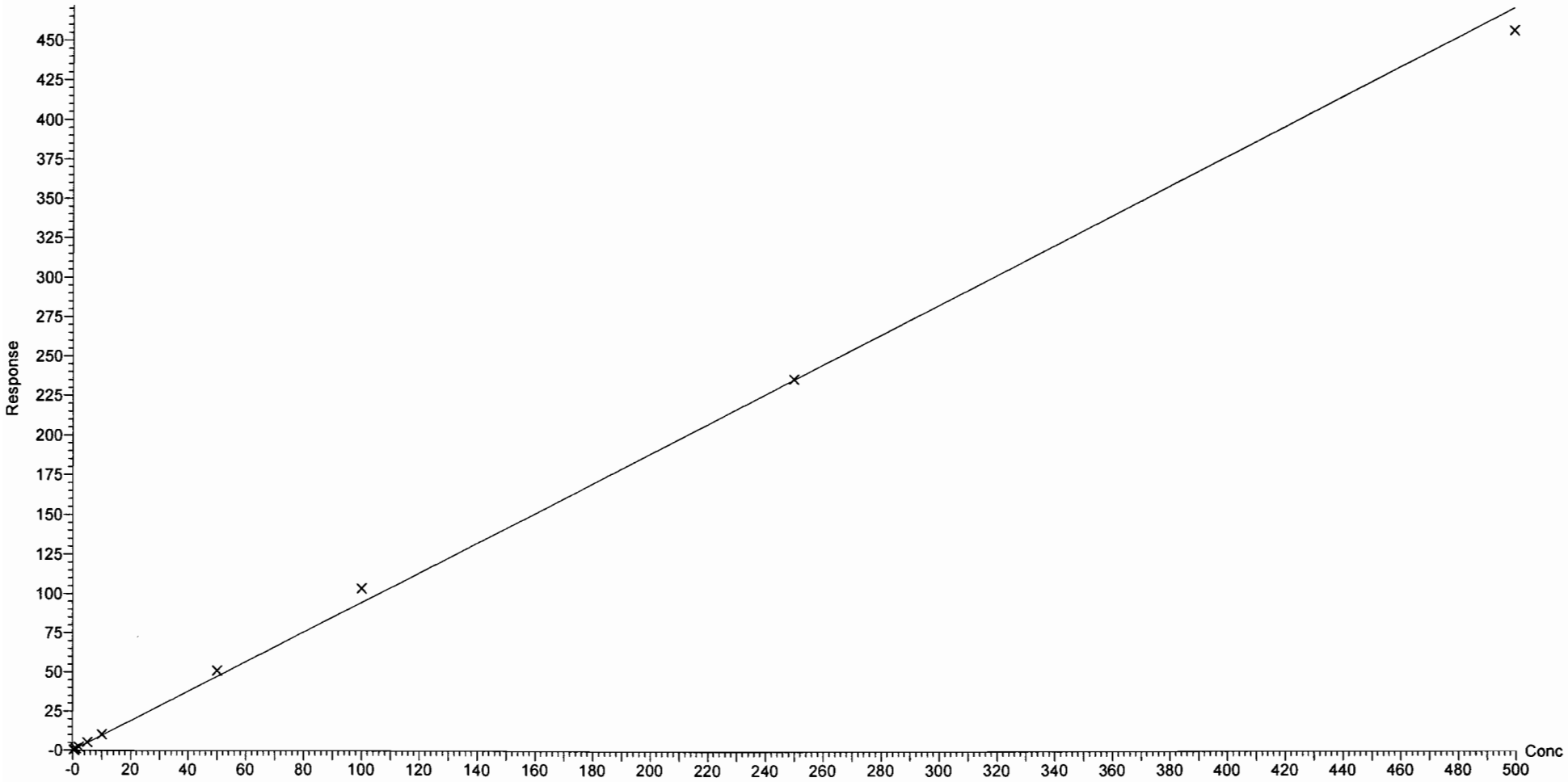
Compound name: PFBA
Coefficient of Determination: R^2 = 0.999558
Calibration curve: -0.000132012 * x^2 + 1.09237 * x + 0.0597566
Response type: Internal Std (Ref 28), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

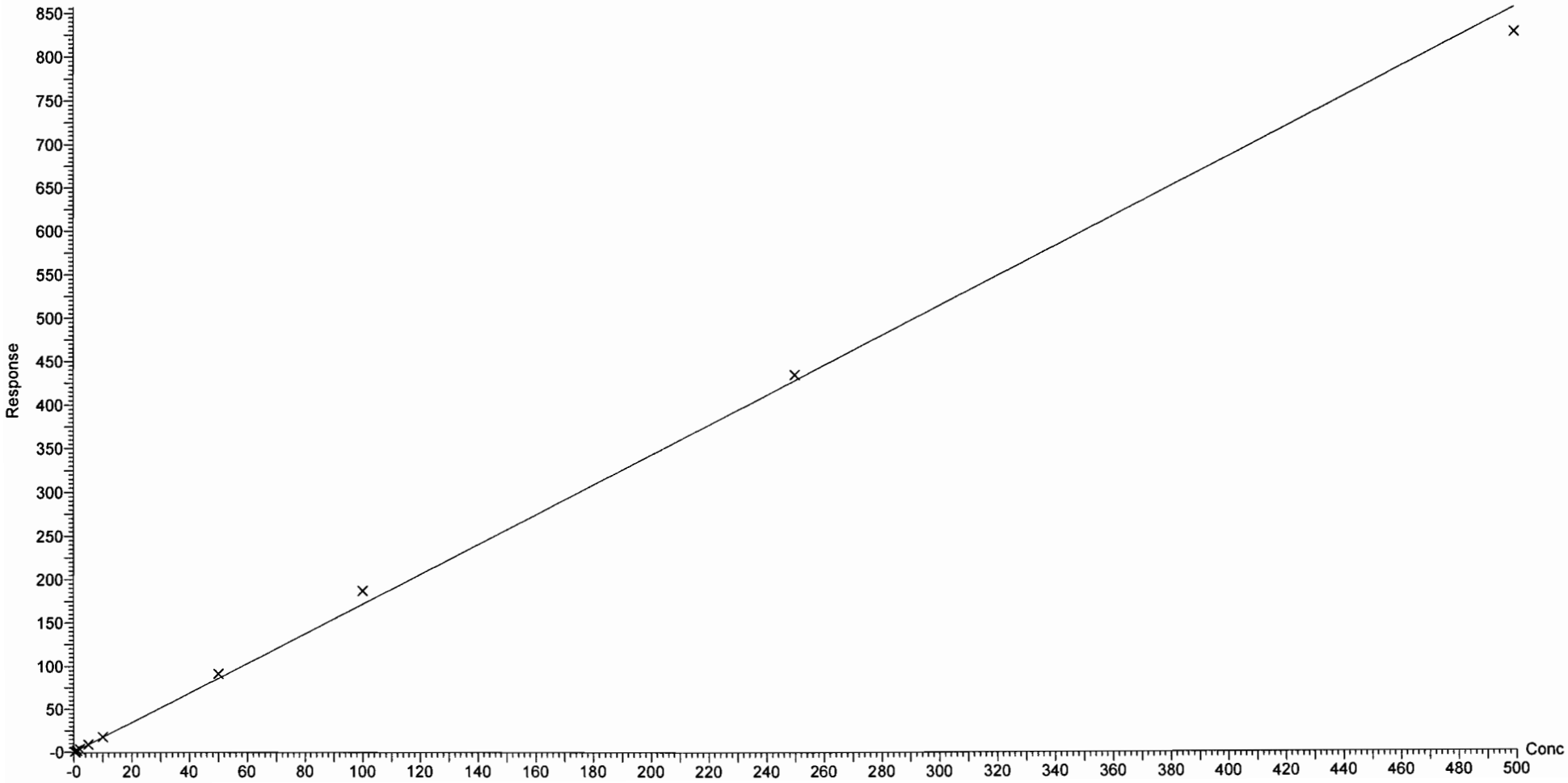
Compound name: PFPeA
Correlation coefficient: r = 0.999003, r^2 = 0.998007
Calibration curve: 0.943317 * x + 0.117613
Response type: Internal Std (Ref 29), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

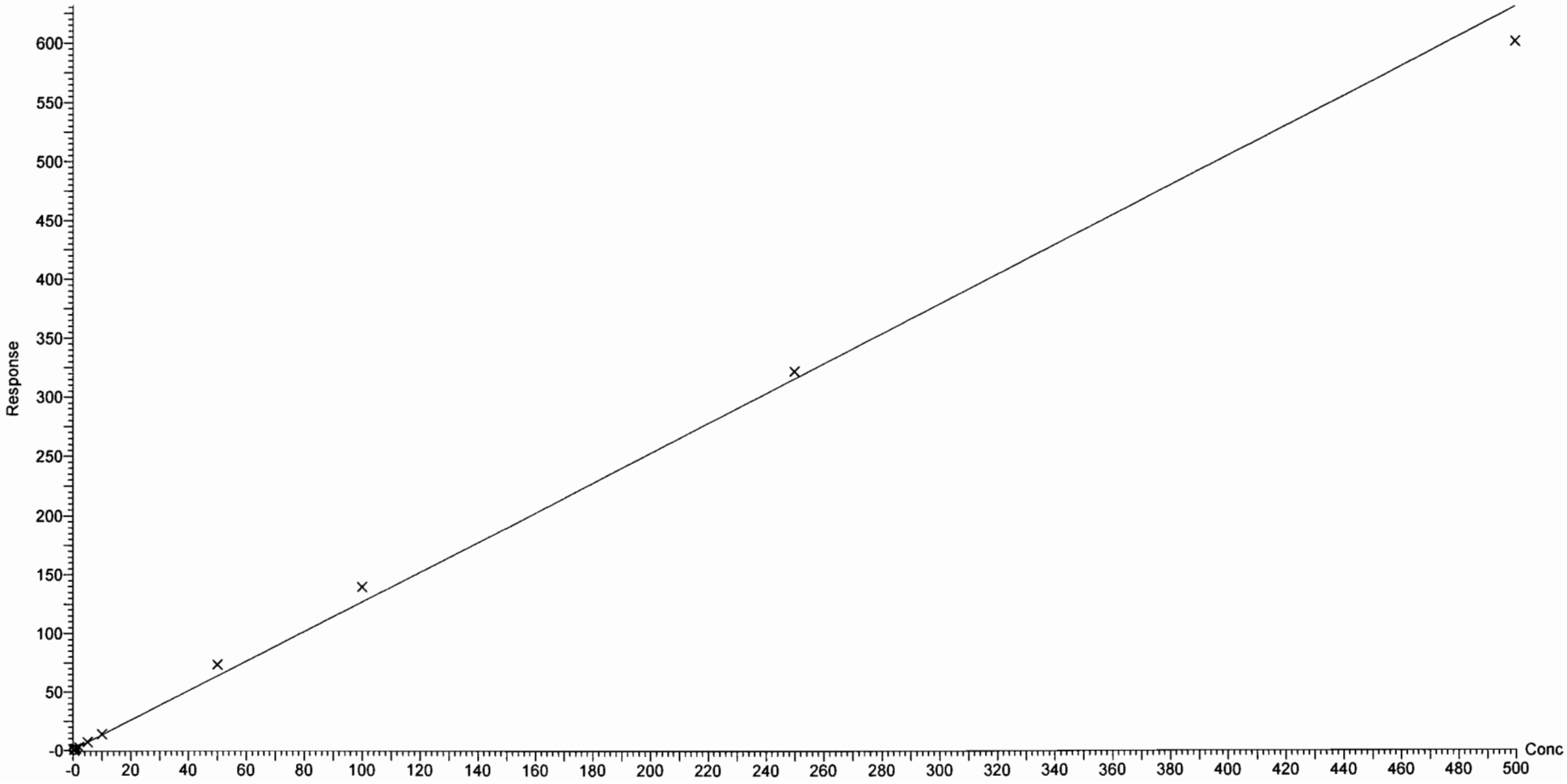
Compound name: PFBS
Correlation coefficient: r = 0.999068, r^2 = 0.998137
Calibration curve: 1.7128 * x + 0.180452
Response type: Internal Std (Ref 30), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

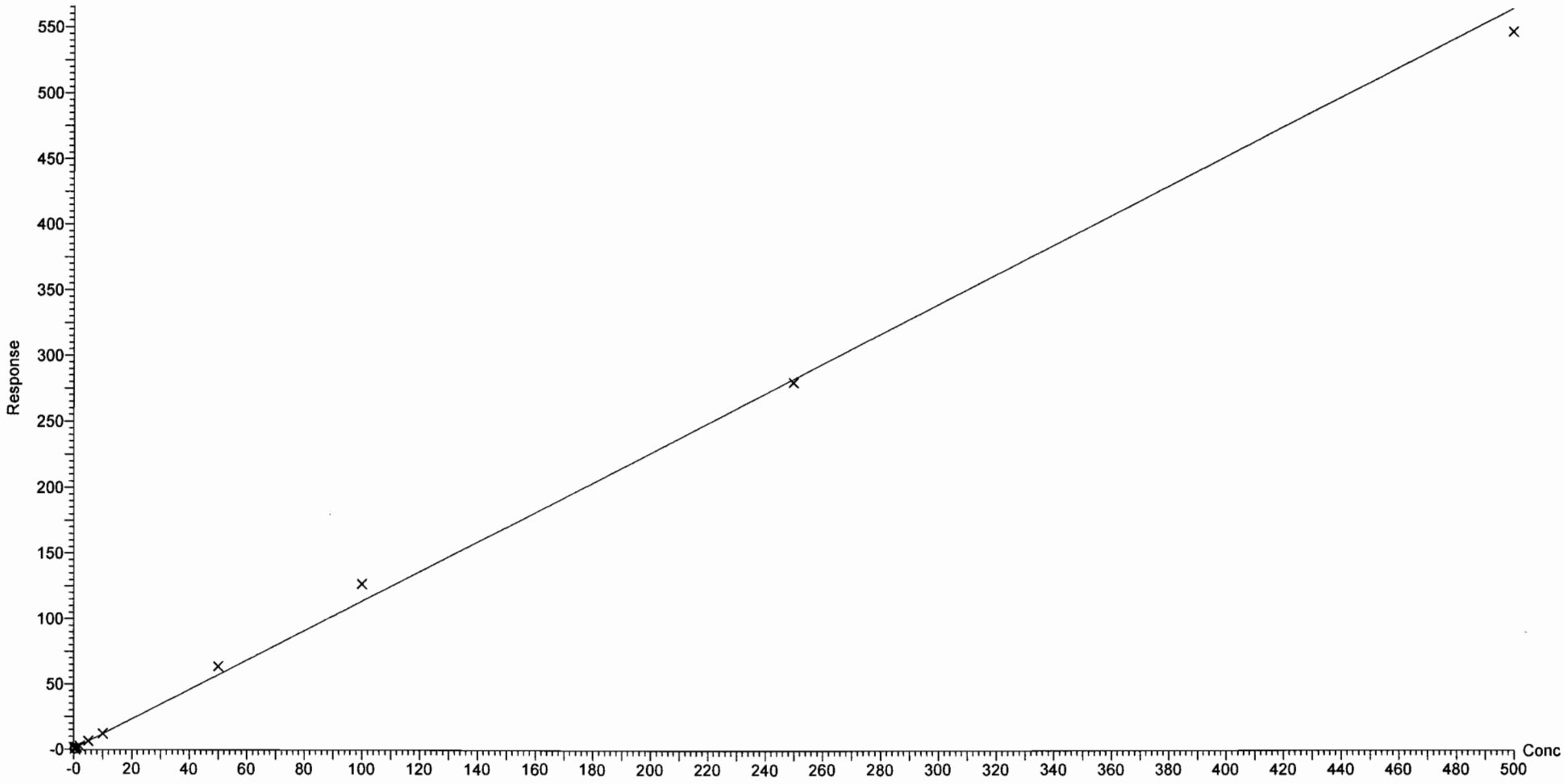
Compound name: PFHxA
Correlation coefficient: r = 0.997990, r^2 = 0.995984
Calibration curve: 1.26213 * x + 0.638423
Response type: Internal Std (Ref 31), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

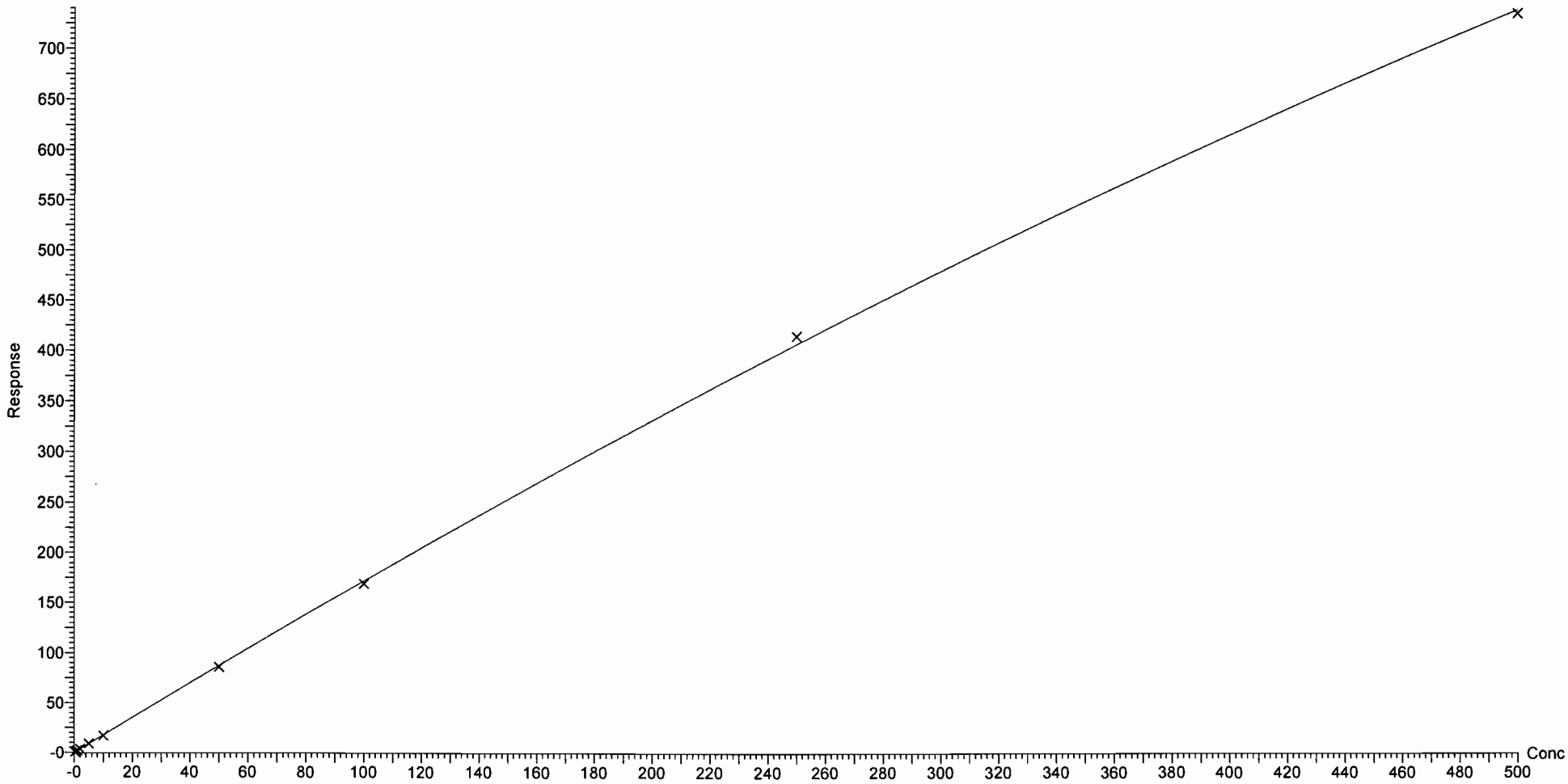
Compound name: PFHpA
Correlation coefficient: r = 0.998520, r^2 = 0.997041
Calibration curve: 1.13042 * x + 0.520352
Response type: Internal Std (Ref 32), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

Compound name: PFHxS
Coefficient of Determination: R^2 = 0.999727
Calibration curve: -0.00059344 * x^2 + 1.77788 * x + -0.123769
Response type: Internal Std (Ref 33), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

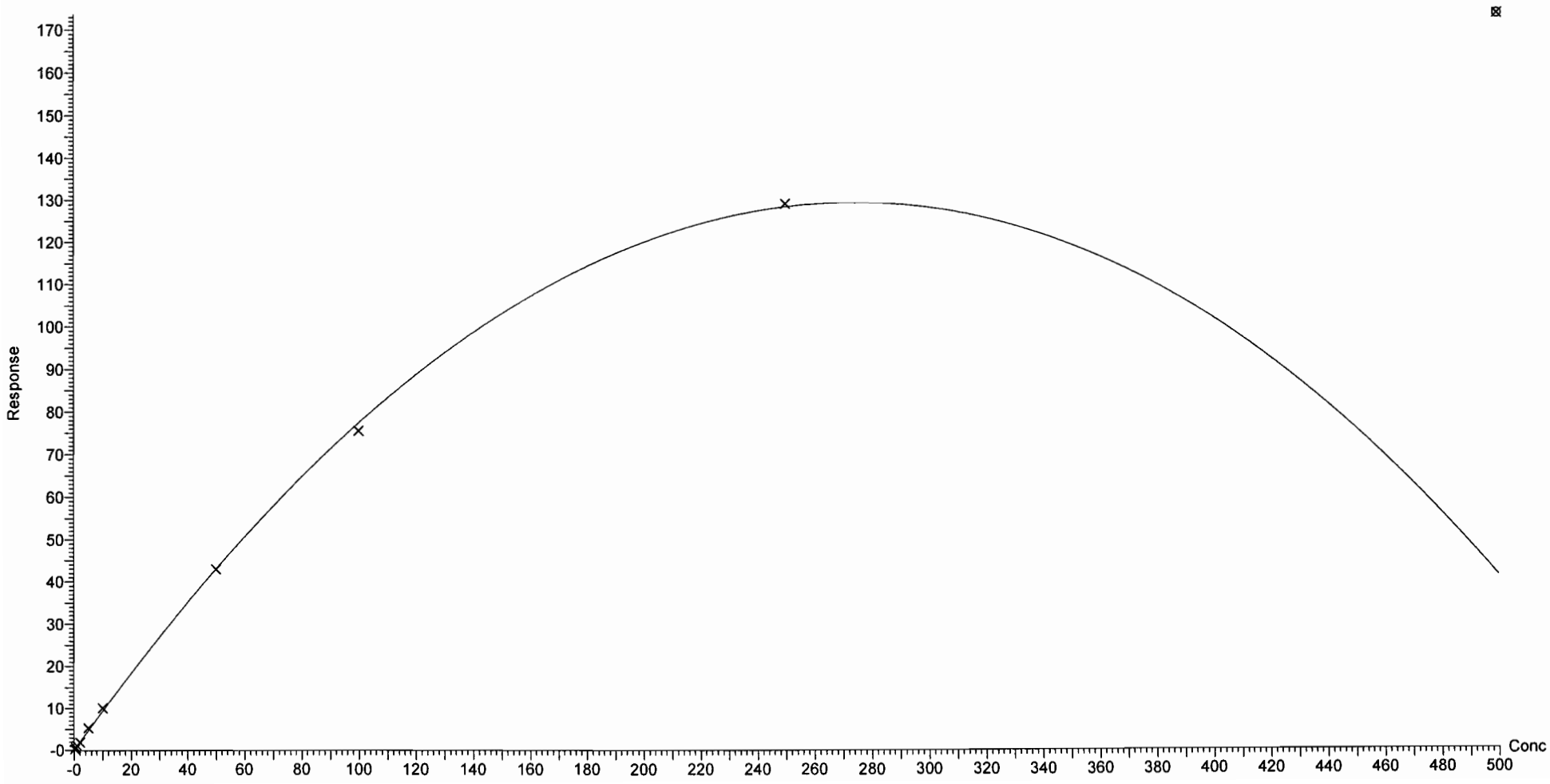


Vista Analytical Laboratory Q1

Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

Compound name: 6:2 FTS
Coefficient of Determination: R^2 = 0.998948
Calibration curve: -0.00172688 * x^2 + 0.945449 * x + 0.0555048
Response type: Internal Std (Ref 34), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

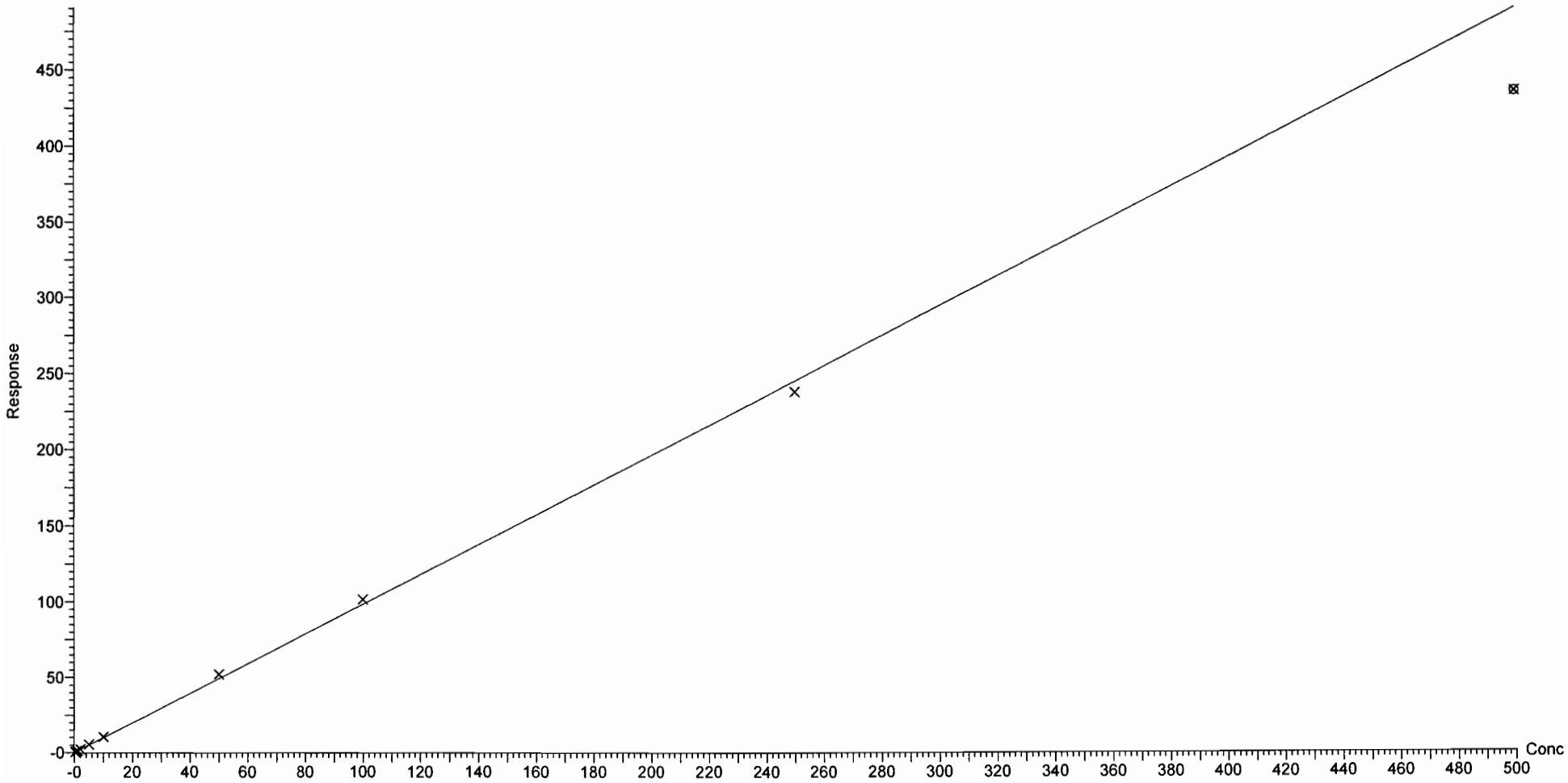


Vista Analytical Laboratory Q1

Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

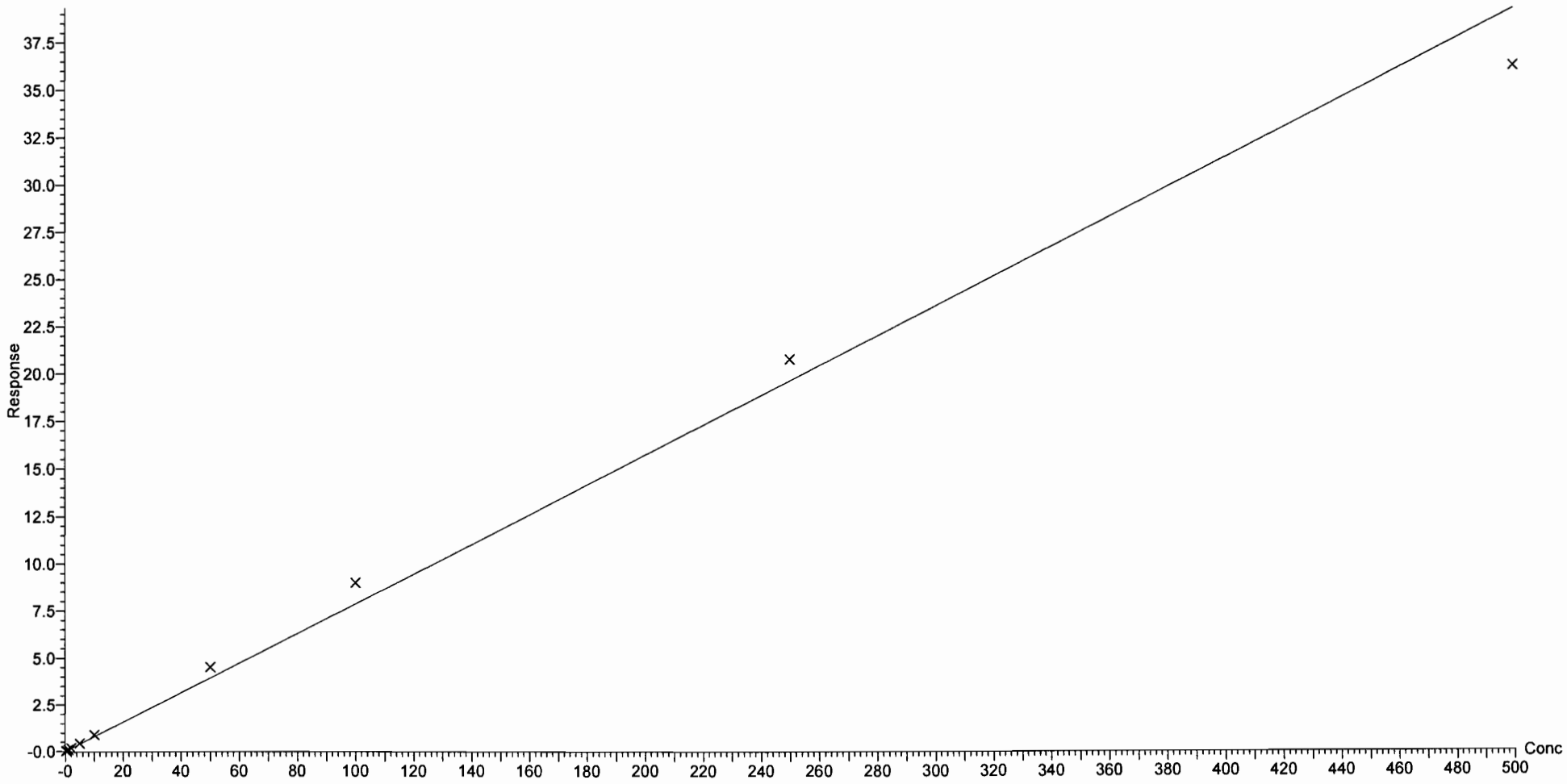
Compound name: PFOA
Correlation coefficient: r = 0.999304, r^2 = 0.998608
Calibration curve: 0.980416 * x + 0.151461
Response type: Internal Std (Ref 35), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

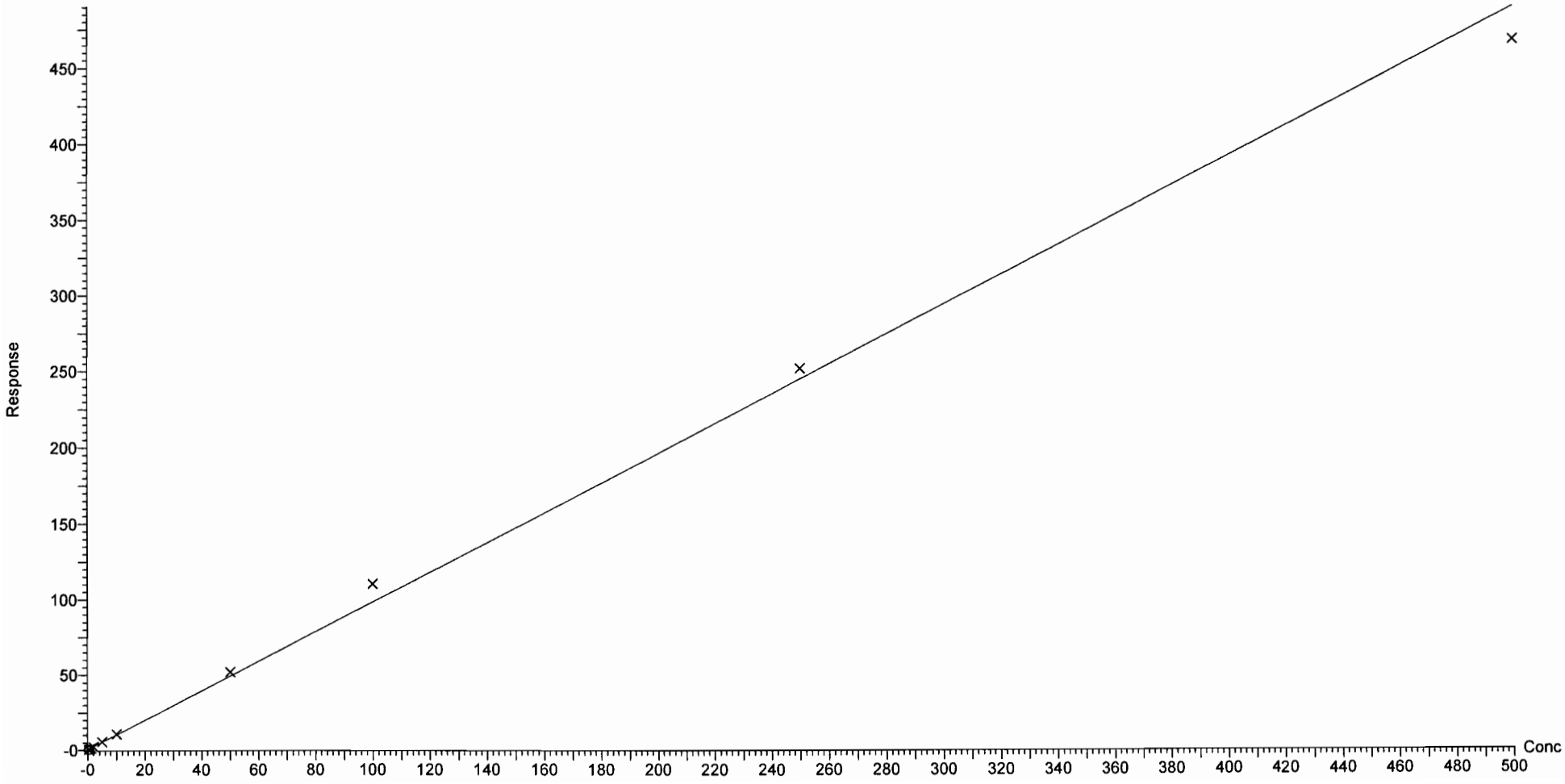
Compound name: PFHpS
Correlation coefficient: r = 0.995991, r^2 = 0.991997
Calibration curve: 0.0786311 * x + 0.00779766
Response type: Internal Std (Ref 35), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

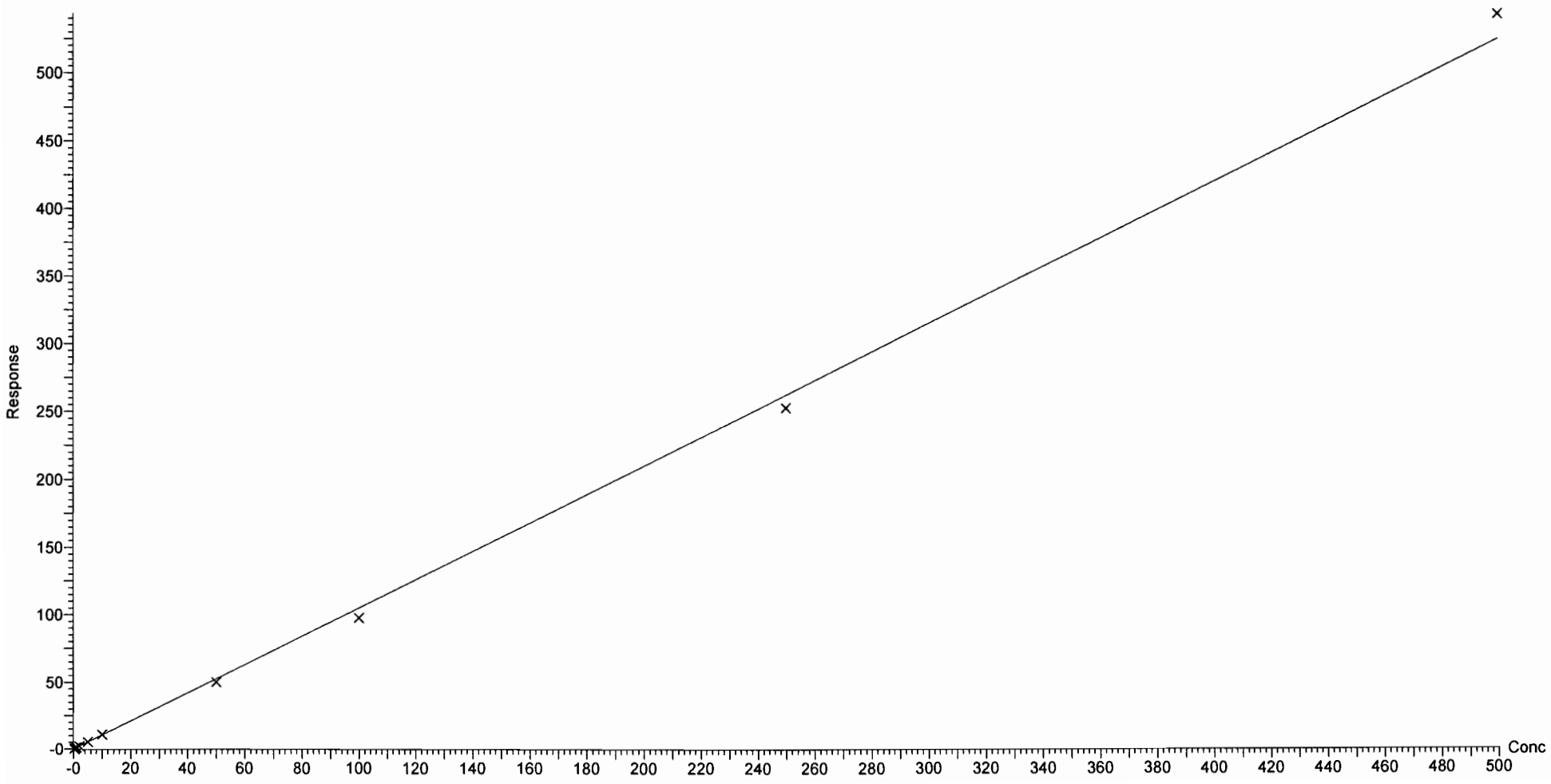
Compound name: PFNA
Correlation coefficient: r = 0.998366, r^2 = 0.996735
Calibration curve: 0.979826 * x + 0.513479
Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

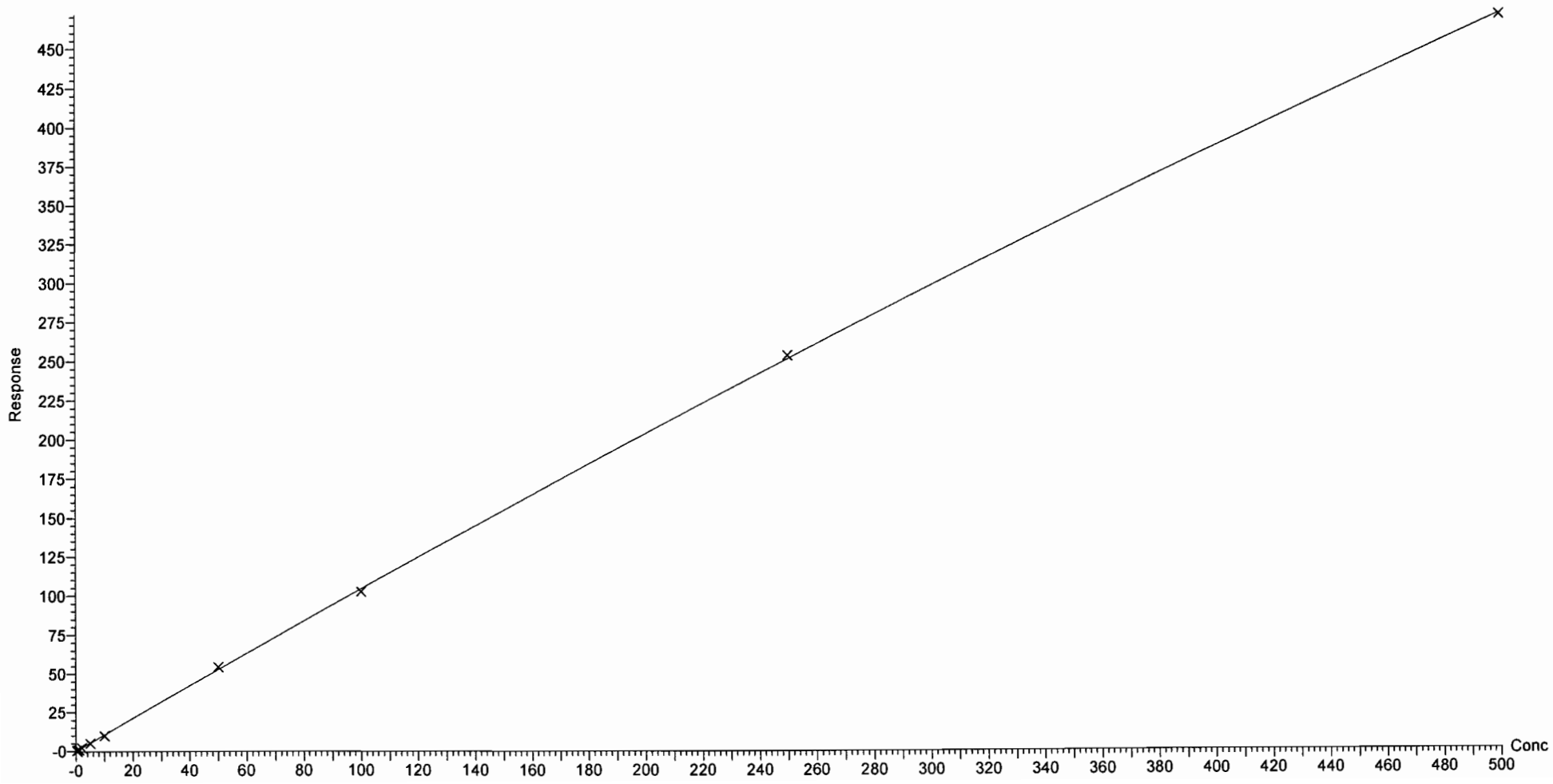
Compound name: PFOSA
Correlation coefficient: r = 0.999155, r^2 = 0.998311
Calibration curve: 1.04987 * x + 0.0313857
Response type: Internal Std (Ref 37), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

Compound name: PFOS
Coefficient of Determination: R^2 = 0.999791
Calibration curve: -0.000252174 * x^2 + 1.06922 * x + -0.0396957
Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

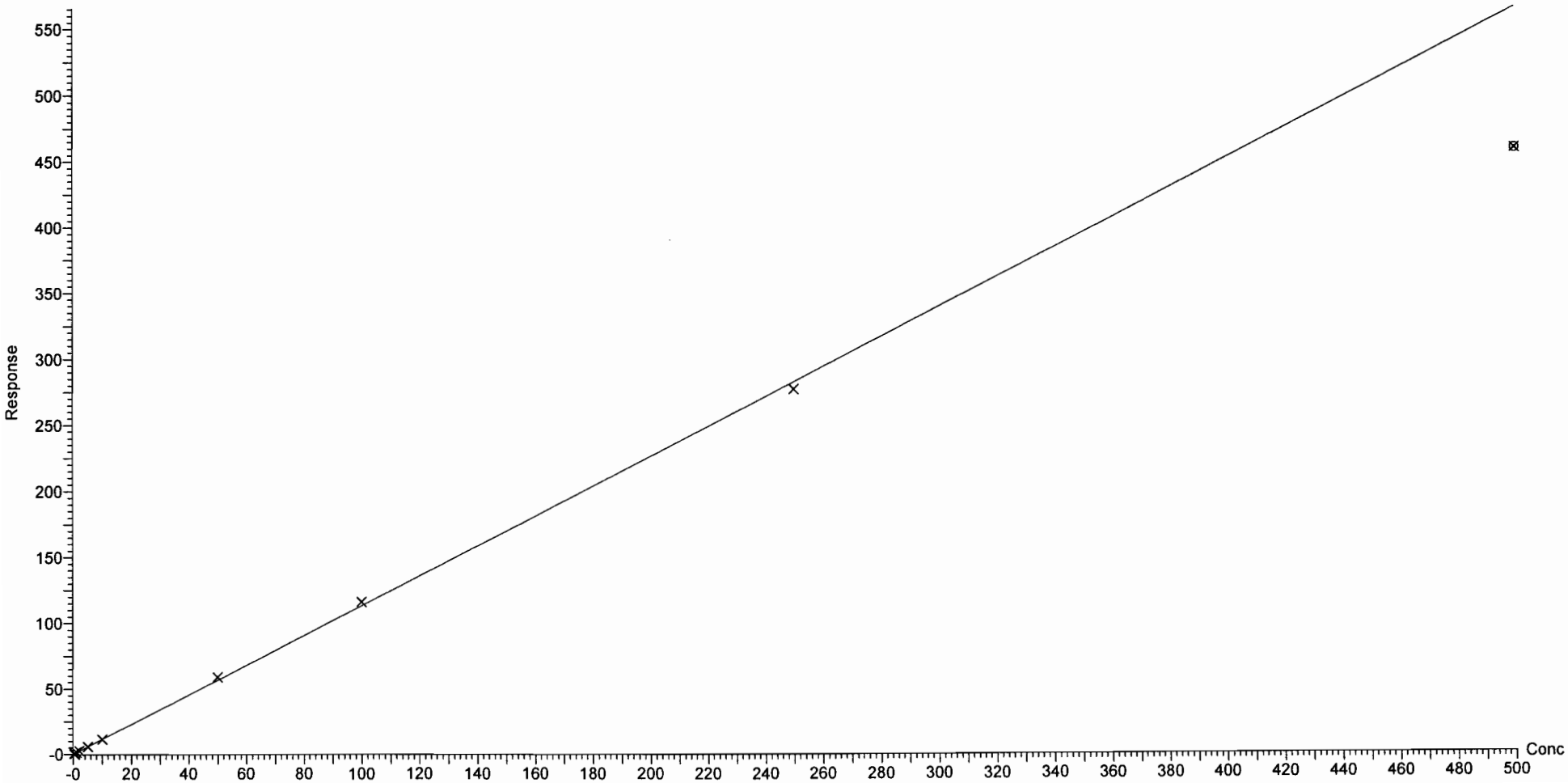


Vista Analytical Laboratory Q1

Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

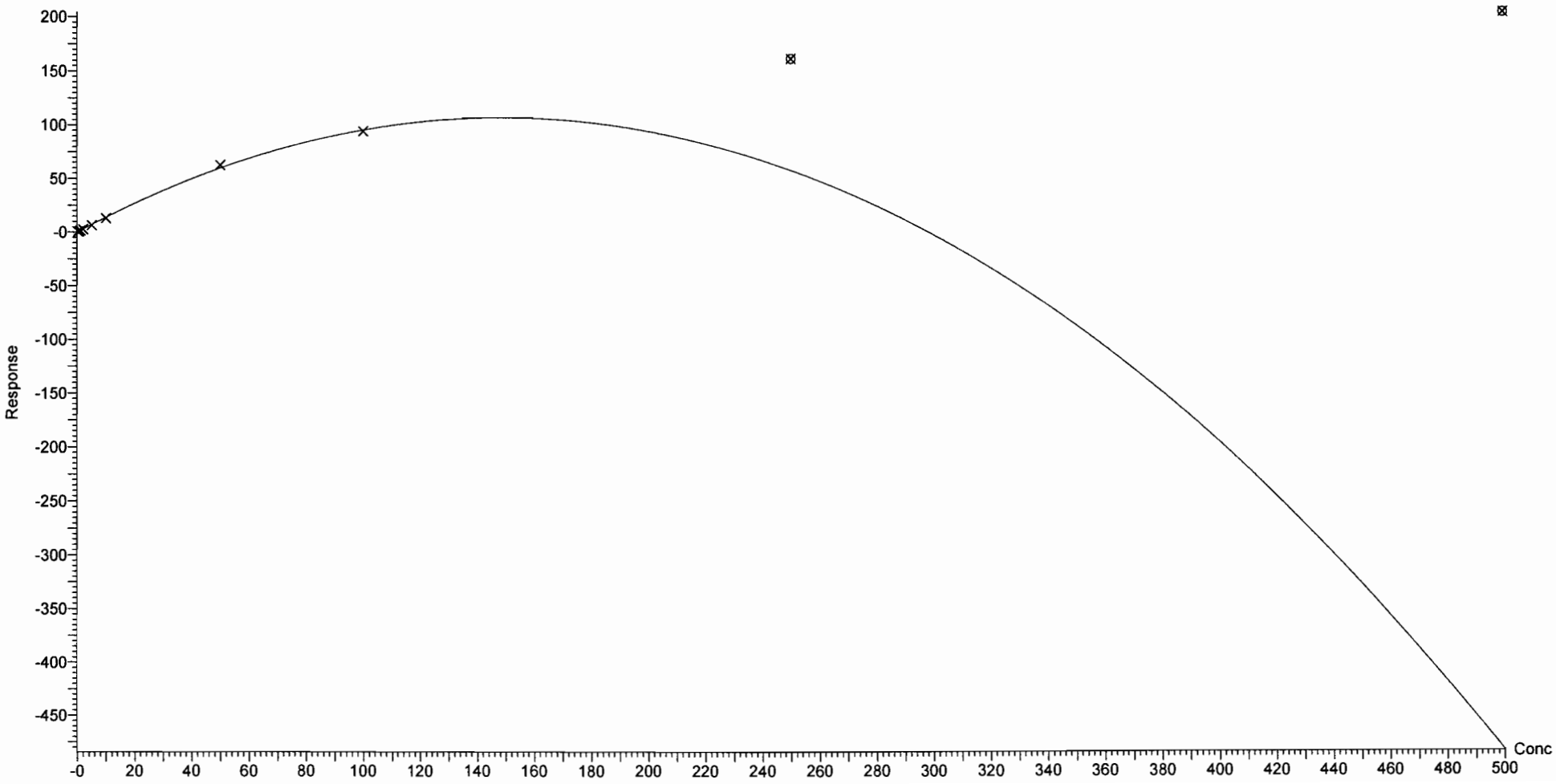
Compound name: PFDA
Correlation coefficient: r = 0.999612, r^2 = 0.999225
Calibration curve: 1.13105 * x + 0.115427
Response type: Internal Std (Ref 39), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

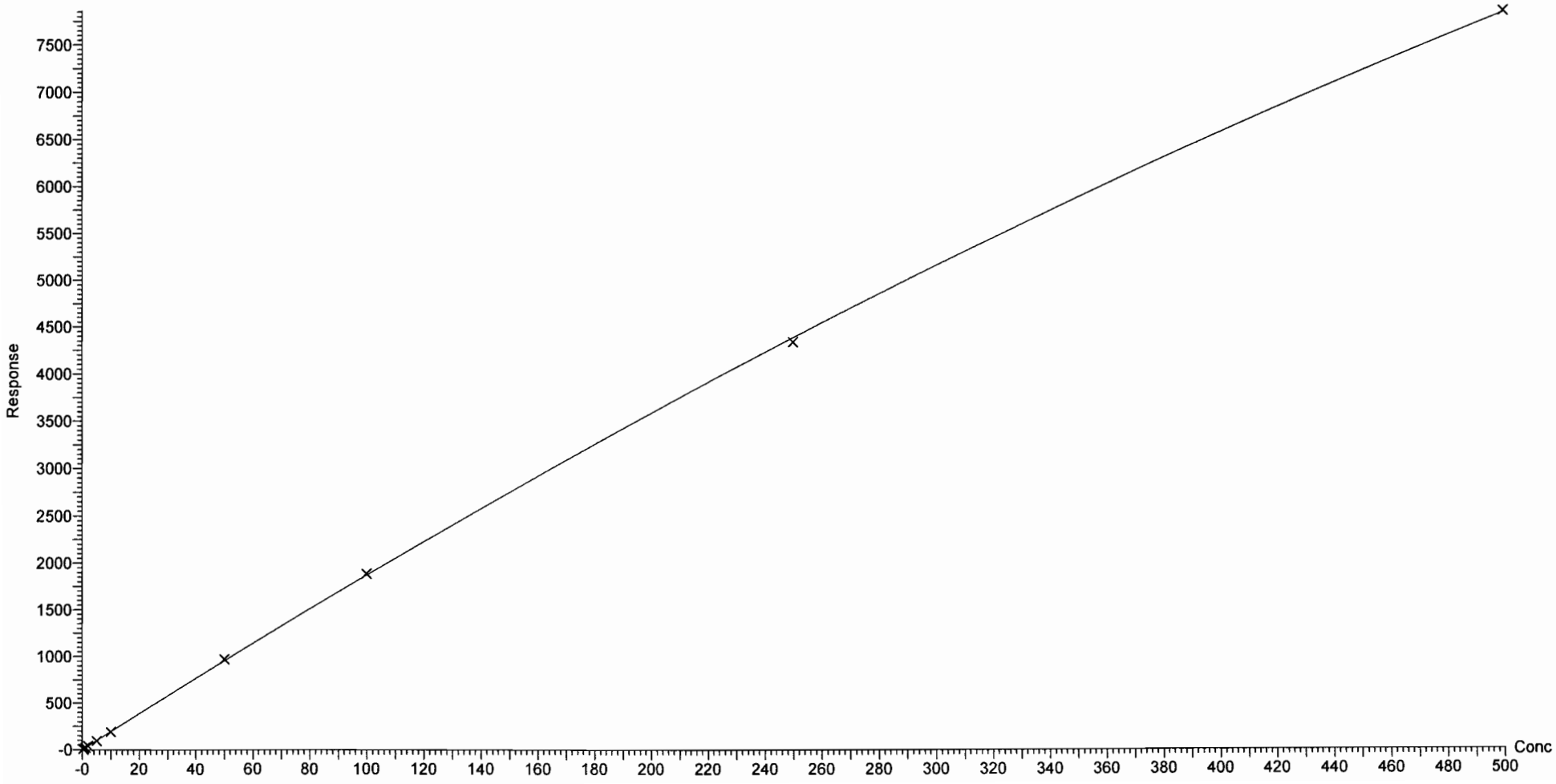
Compound name: 8:2 FTS
Coefficient of Determination: R^2 = 0.997950
Calibration curve: -0.00480406 * x^2 + 1.4337 * x + -0.0133124
Response type: Internal Std (Ref 40), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

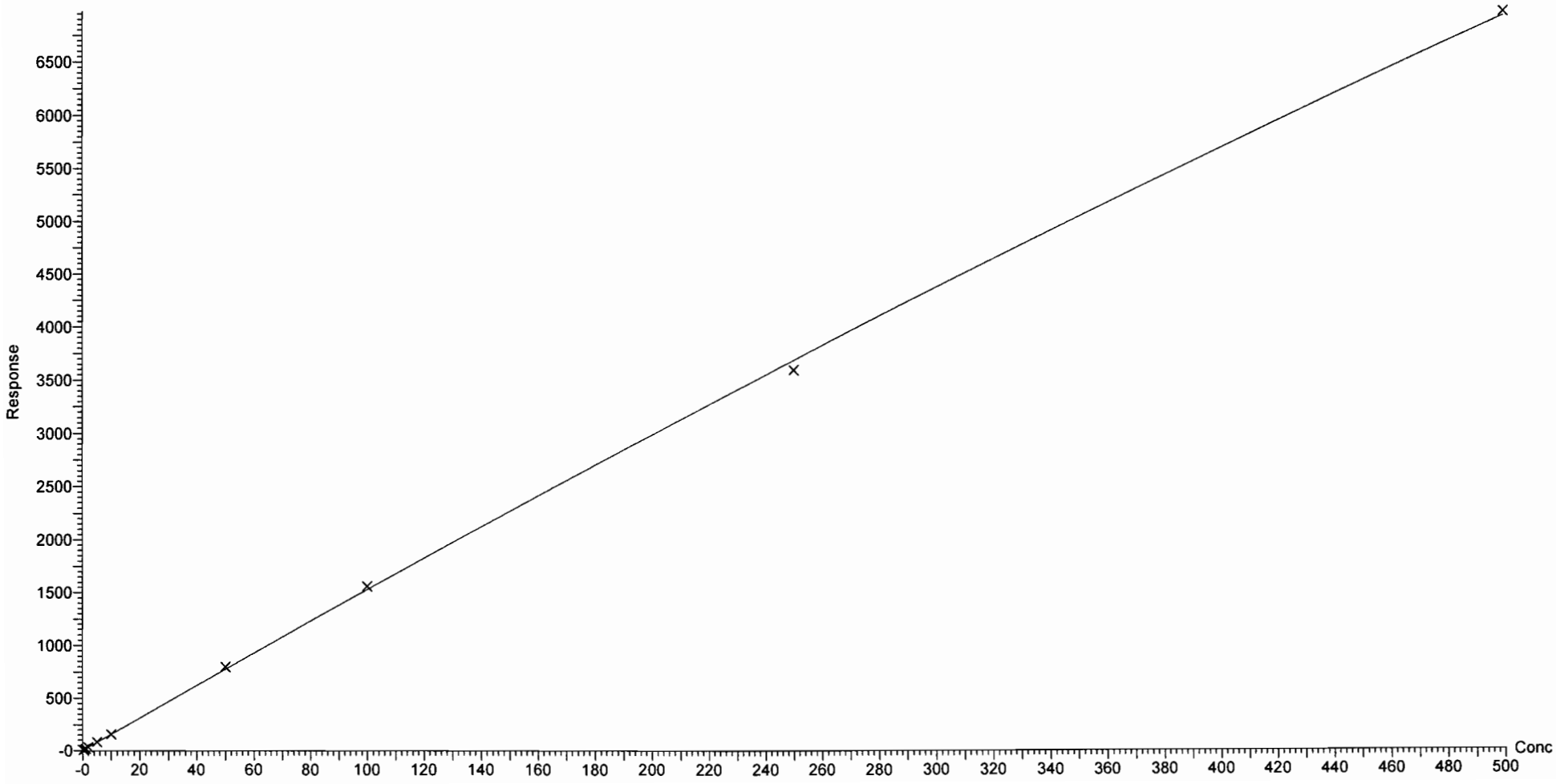
Compound name: N-MeFOSAA
Coefficient of Determination: R^2 = 0.999893
Calibration curve: -0.00750568 * x^2 + 19.4398 * x + -0.45786
Response type: Internal Std (Ref 41), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

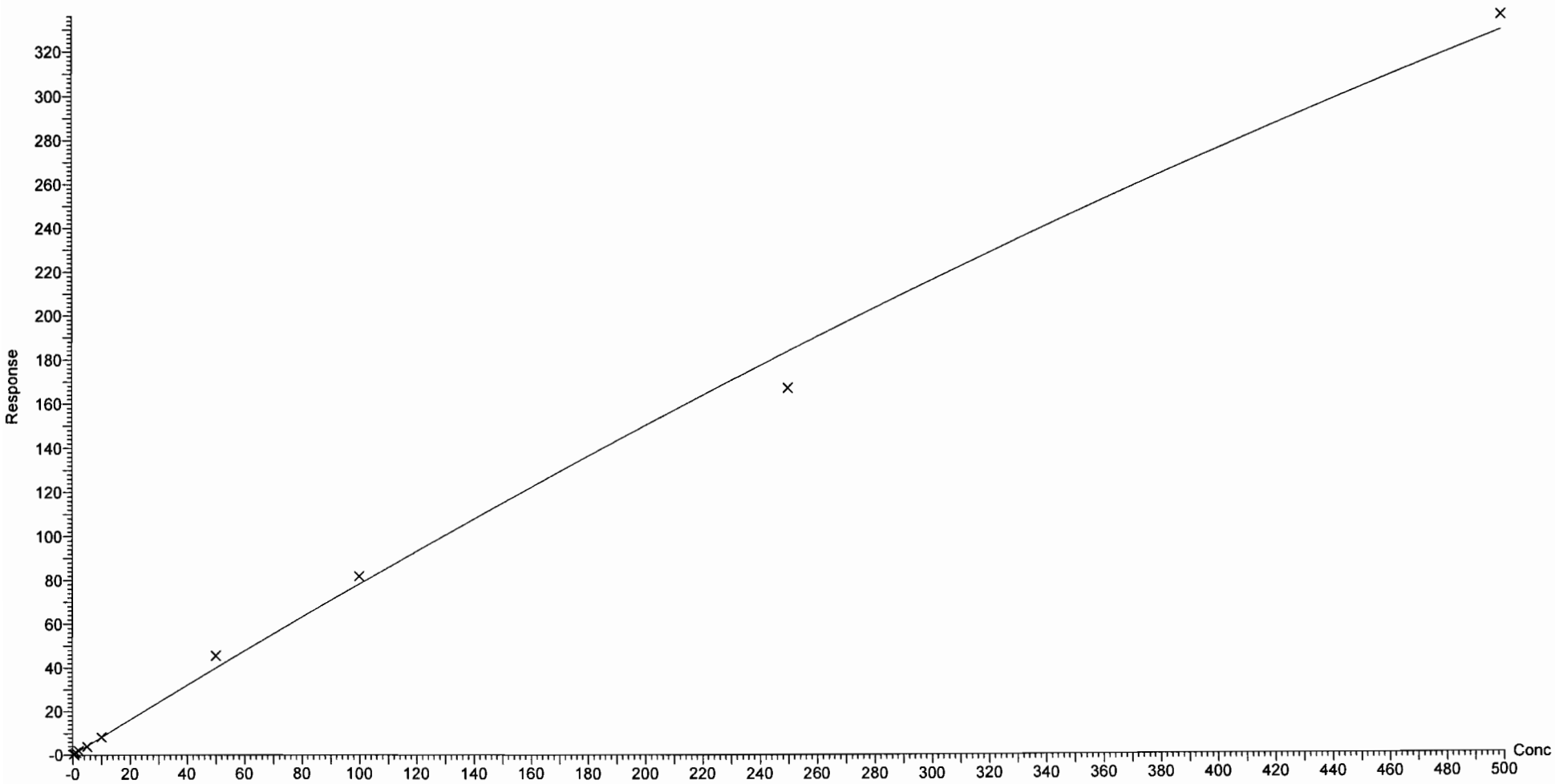
Compound name: N-EtFOSAA
Coefficient of Determination: R^2 = 0.999638
Calibration curve: -0.00353476 * x^2 + 15.6313 * x + 0.651764
Response type: Internal Std (Ref 42), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

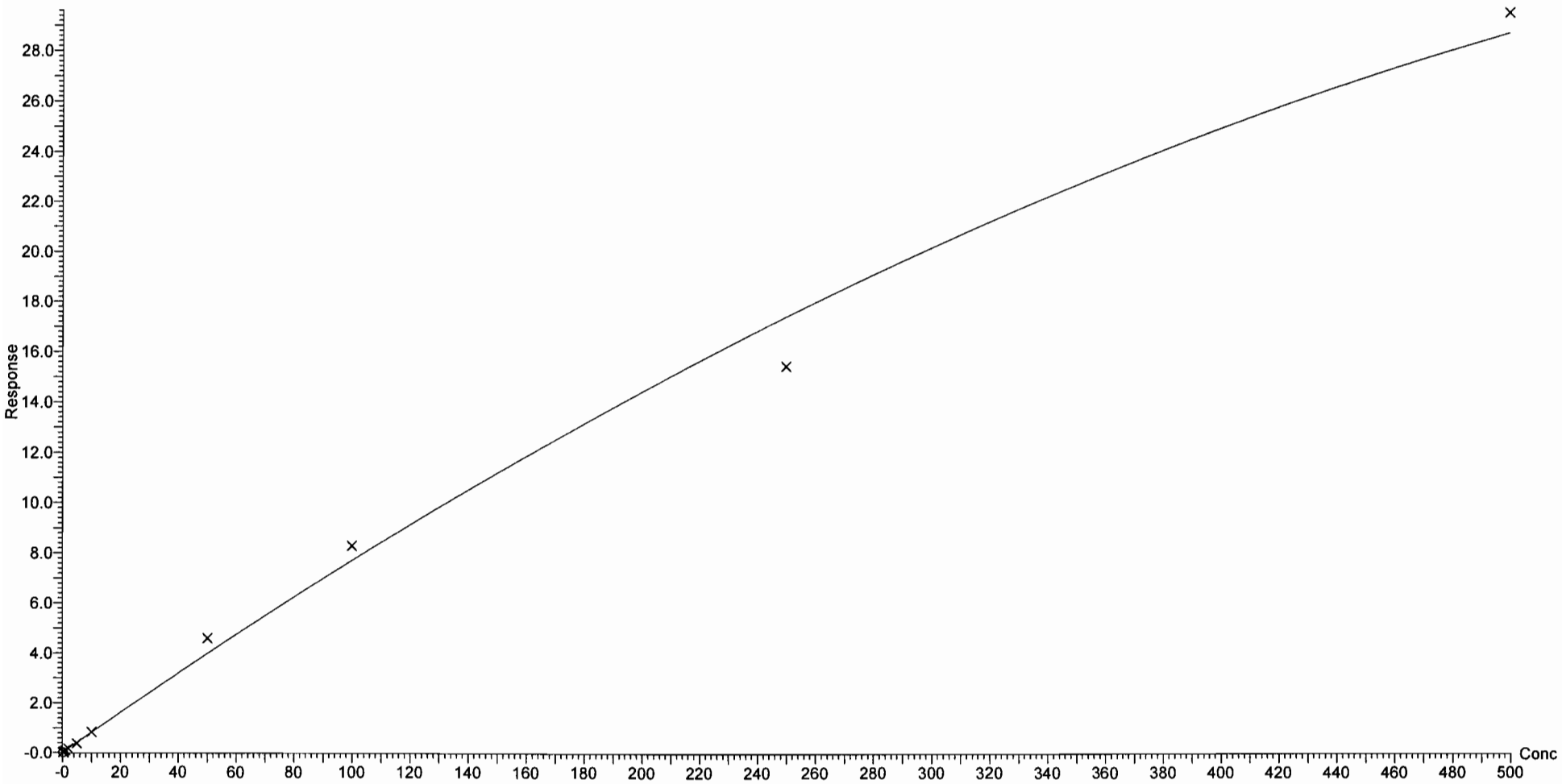
Compound name: PFUnA
Coefficient of Determination: R^2 = 0.995537
Calibration curve: -0.000304422 * x^2 + 0.810482 * x + 0.0887281
Response type: Internal Std (Ref 43), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

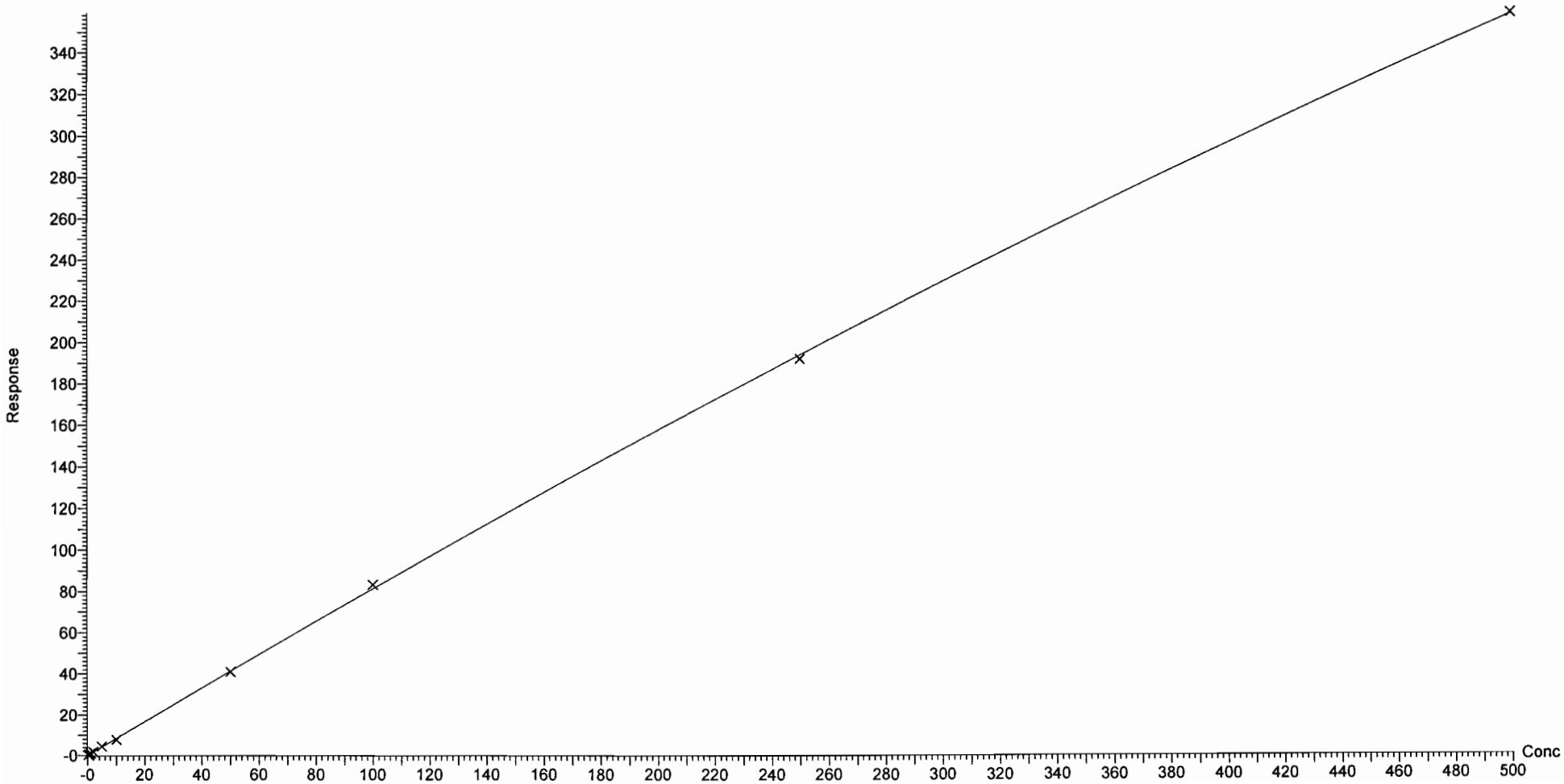
Compound name: PFDS
Coefficient of Determination: R^2 = 0.992589
Calibration curve: -4.87611e-005 * x^2 + 0.0819404 * x + 0.0113831
Response type: Internal Std (Ref 43), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

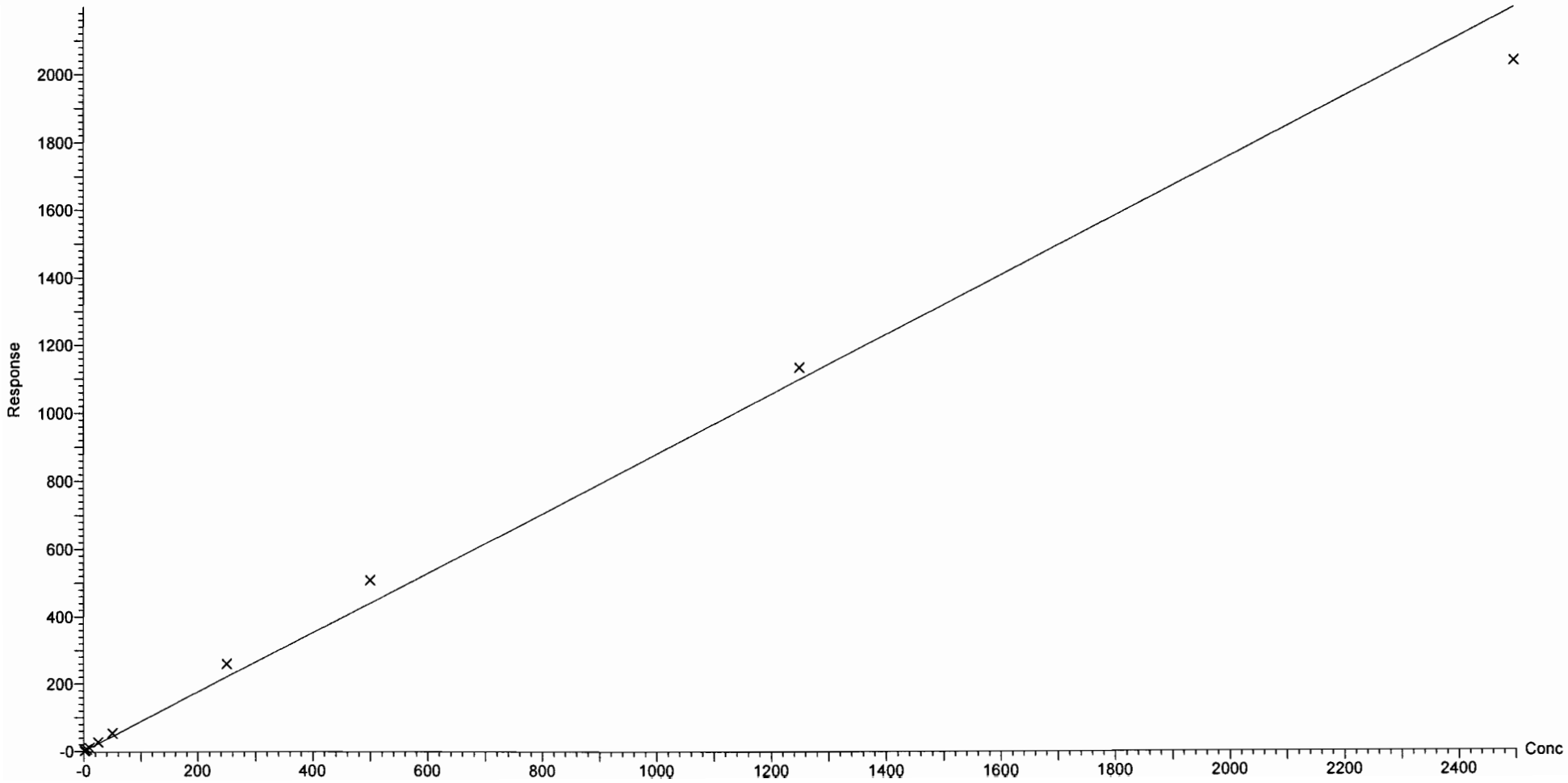
Compound name: PFDoA
Coefficient of Determination: R^2 = 0.999746
Calibration curve: -0.000238279 * x^2 + 0.835861 * x + 0.0431344
Response type: Internal Std (Ref 44), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

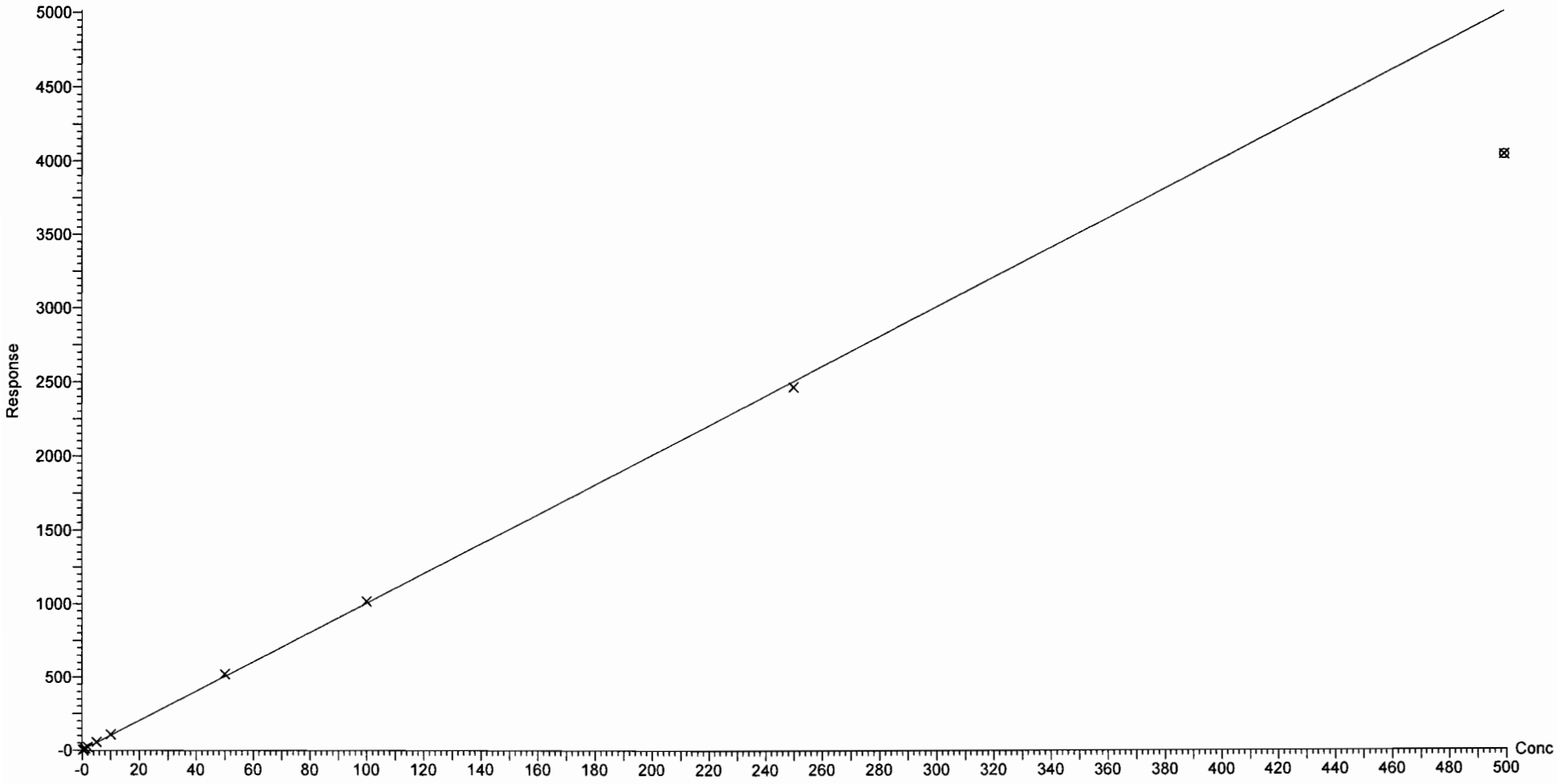
Compound name: N-MeFOSA
Correlation coefficient: r = 0.995786, r^2 = 0.991590
Calibration curve: 0.878916 * x + 0.777845
Response type: Internal Std (Ref 45), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

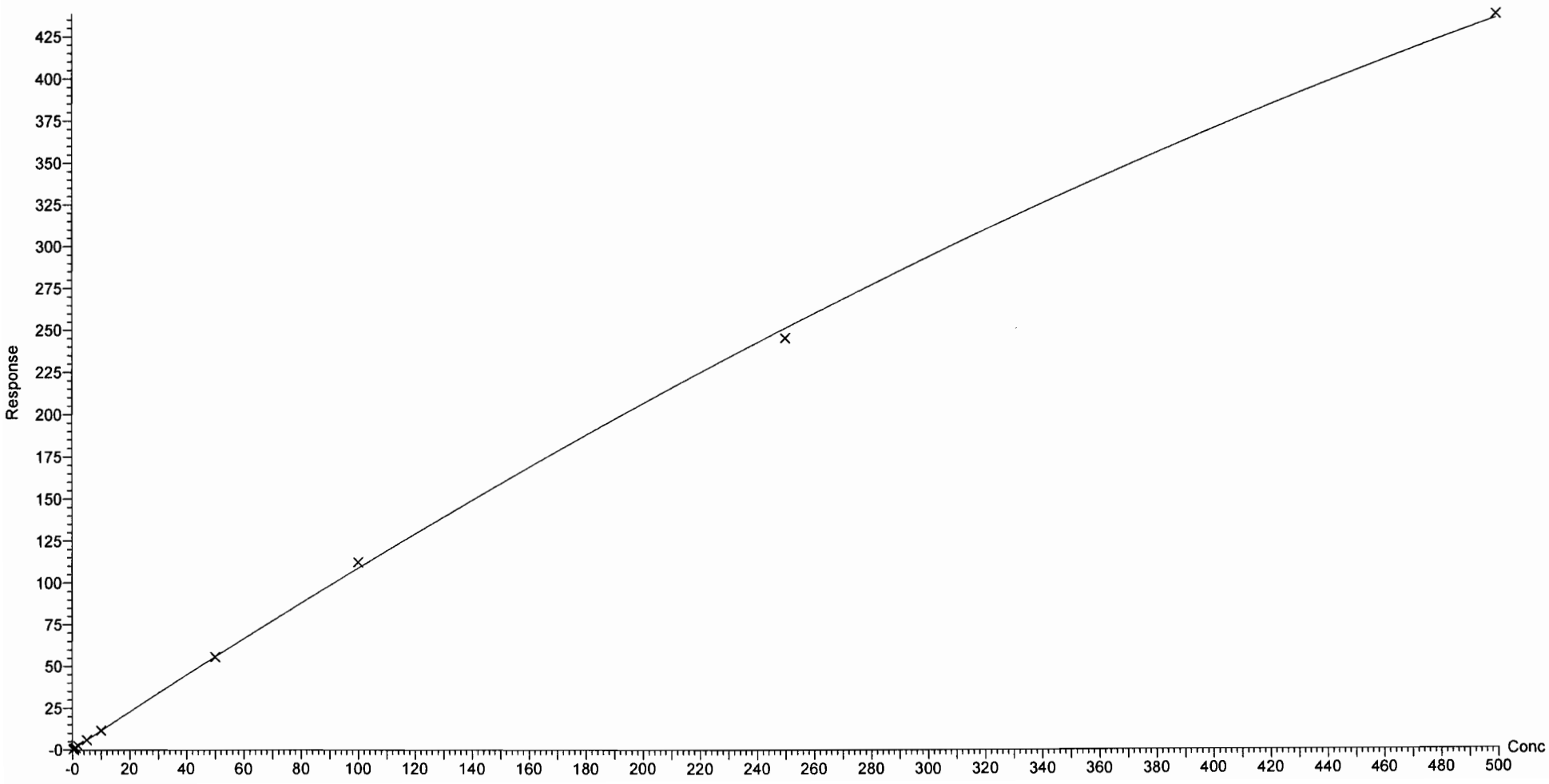
Compound name: PFTrDA
Correlation coefficient: r = 0.999754, r^2 = 0.999507
Calibration curve: 10.0213 * x + 1.2331
Response type: Internal Std (Ref 44), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

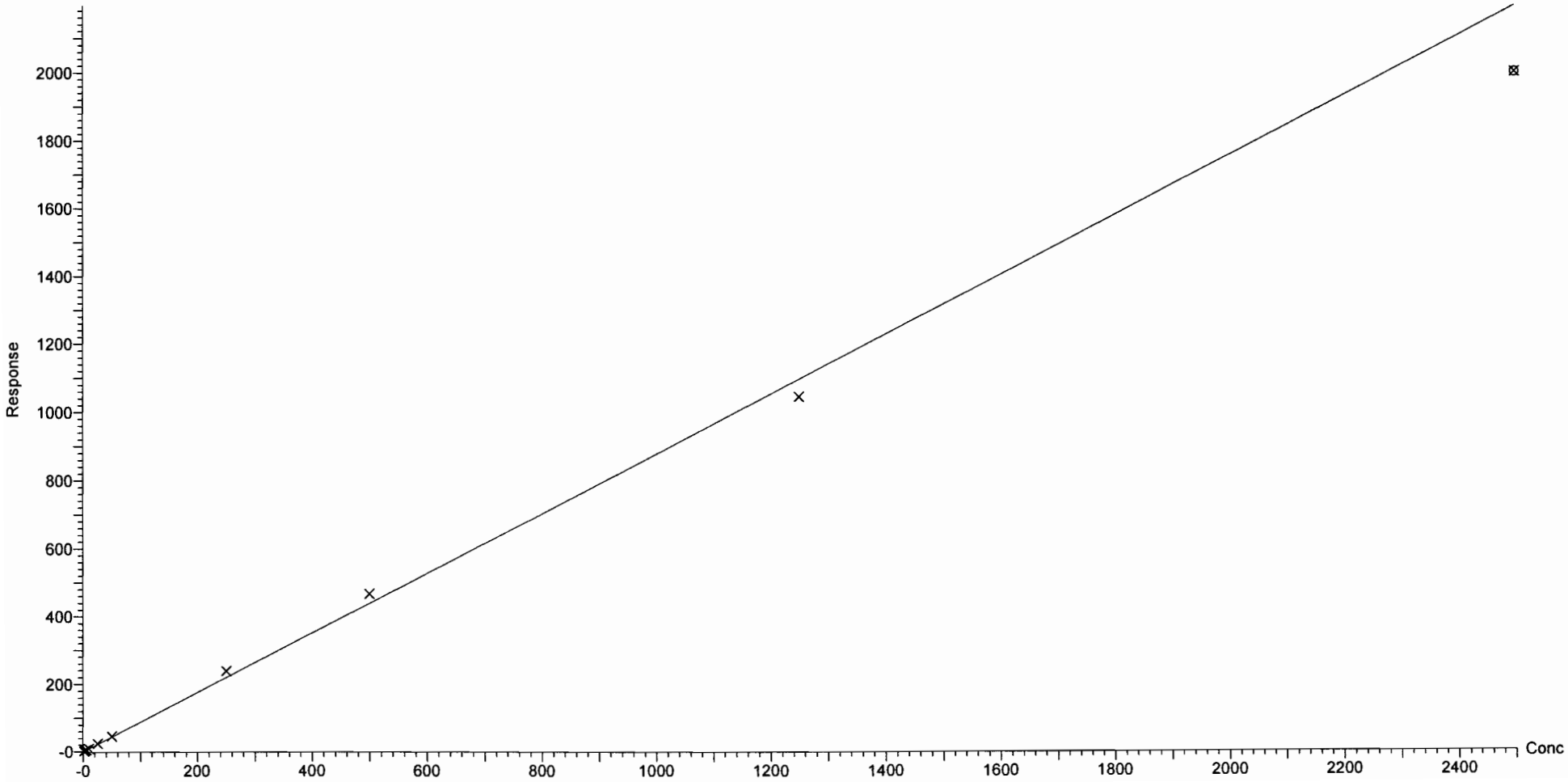
Compound name: PFTeDA
Coefficient of Determination: R^2 = 0.999640
Calibration curve: -0.000533447 * x^2 + 1.13867 * x + 0.107998
Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

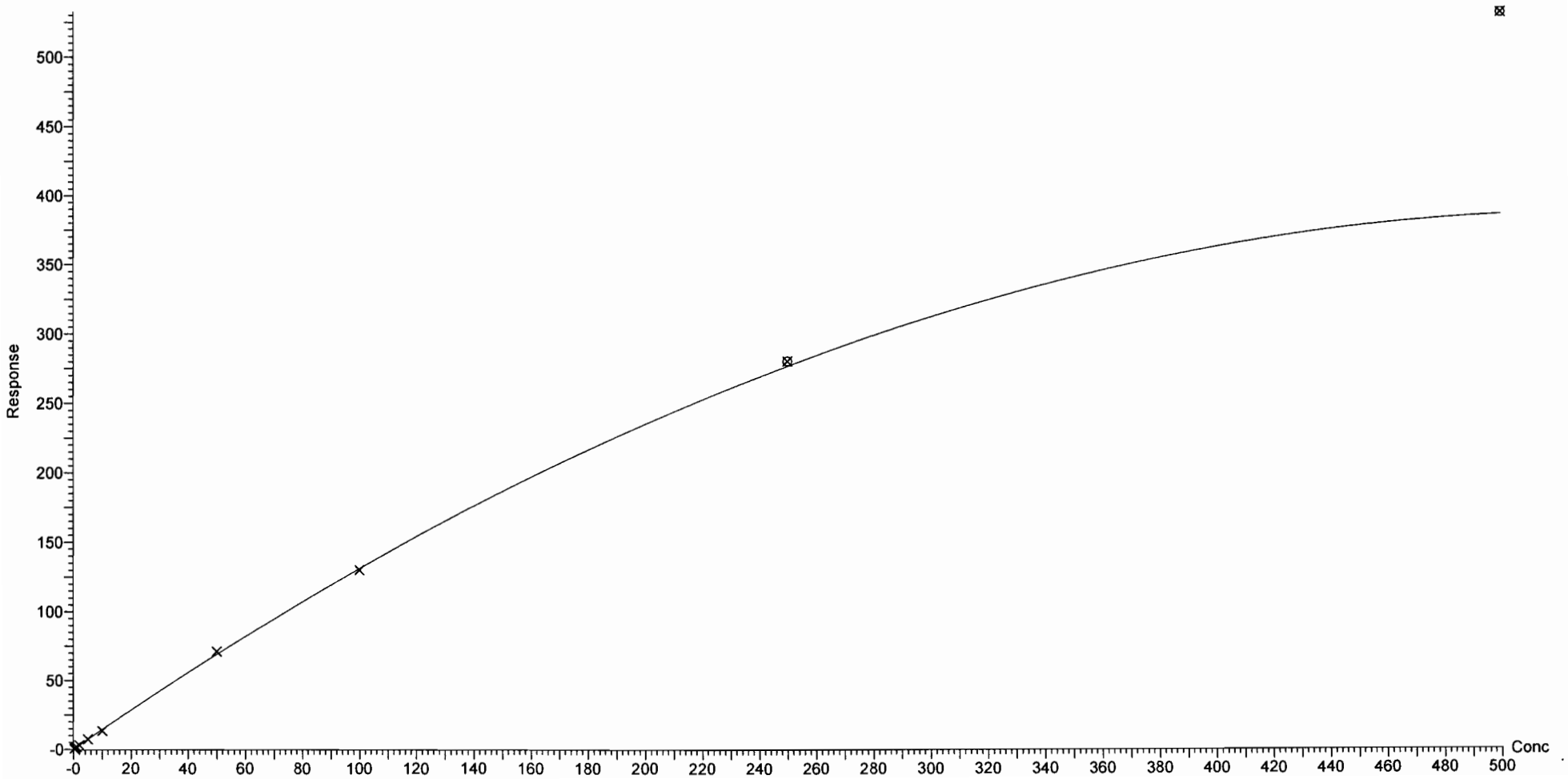
Compound name: N-EtFOSA
Correlation coefficient: r = 0.998278, r^2 = 0.996558
Calibration curve: 0.877827 * x + 0.460454
Response type: Internal Std (Ref 47), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

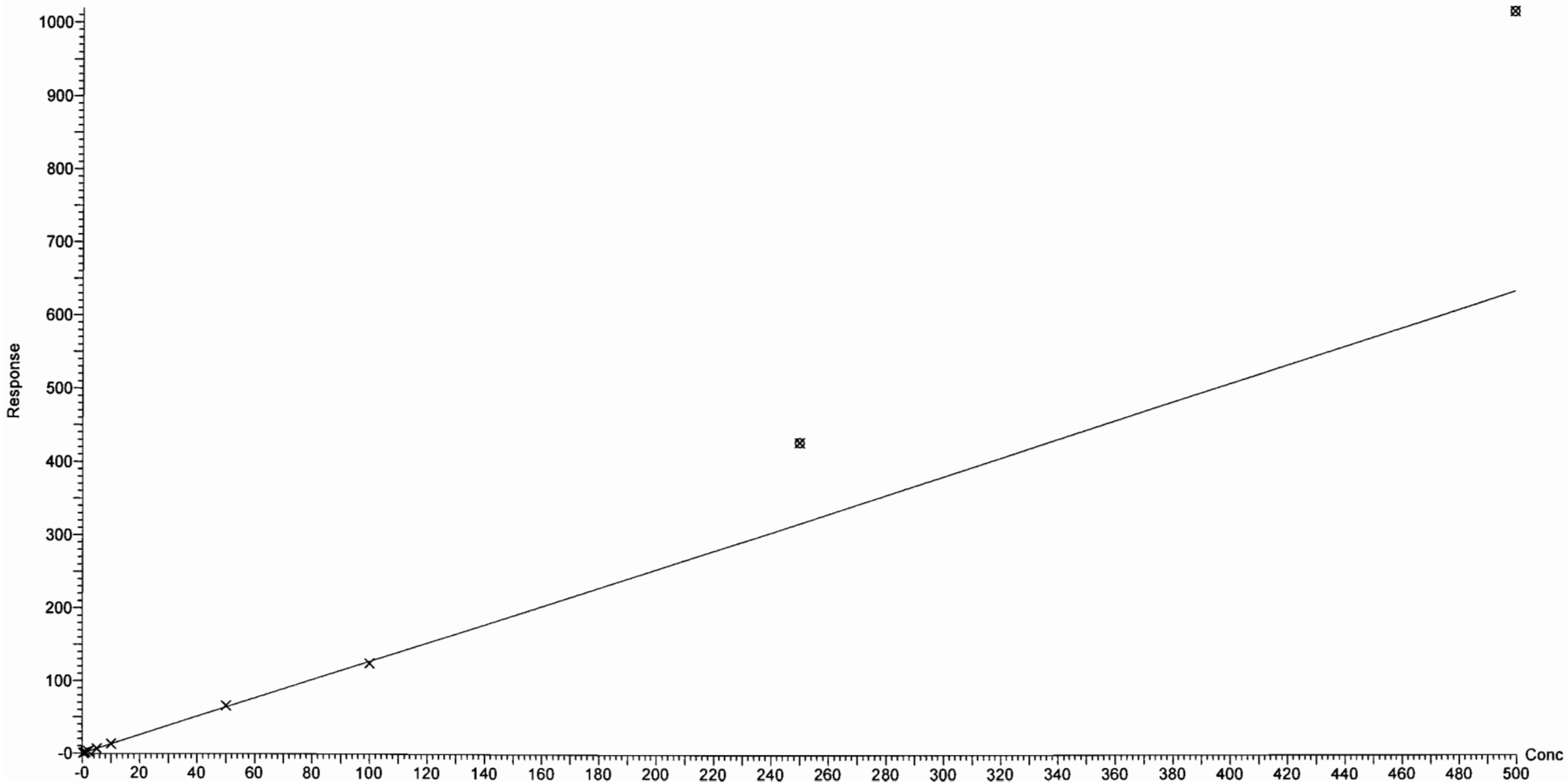
Compound name: PFHxDA
Coefficient of Determination: R^2 = 0.999241
Calibration curve: -0.00134262 * x^2 + 1.44391 * x + 0.187386
Response type: Internal Std (Ref 48), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

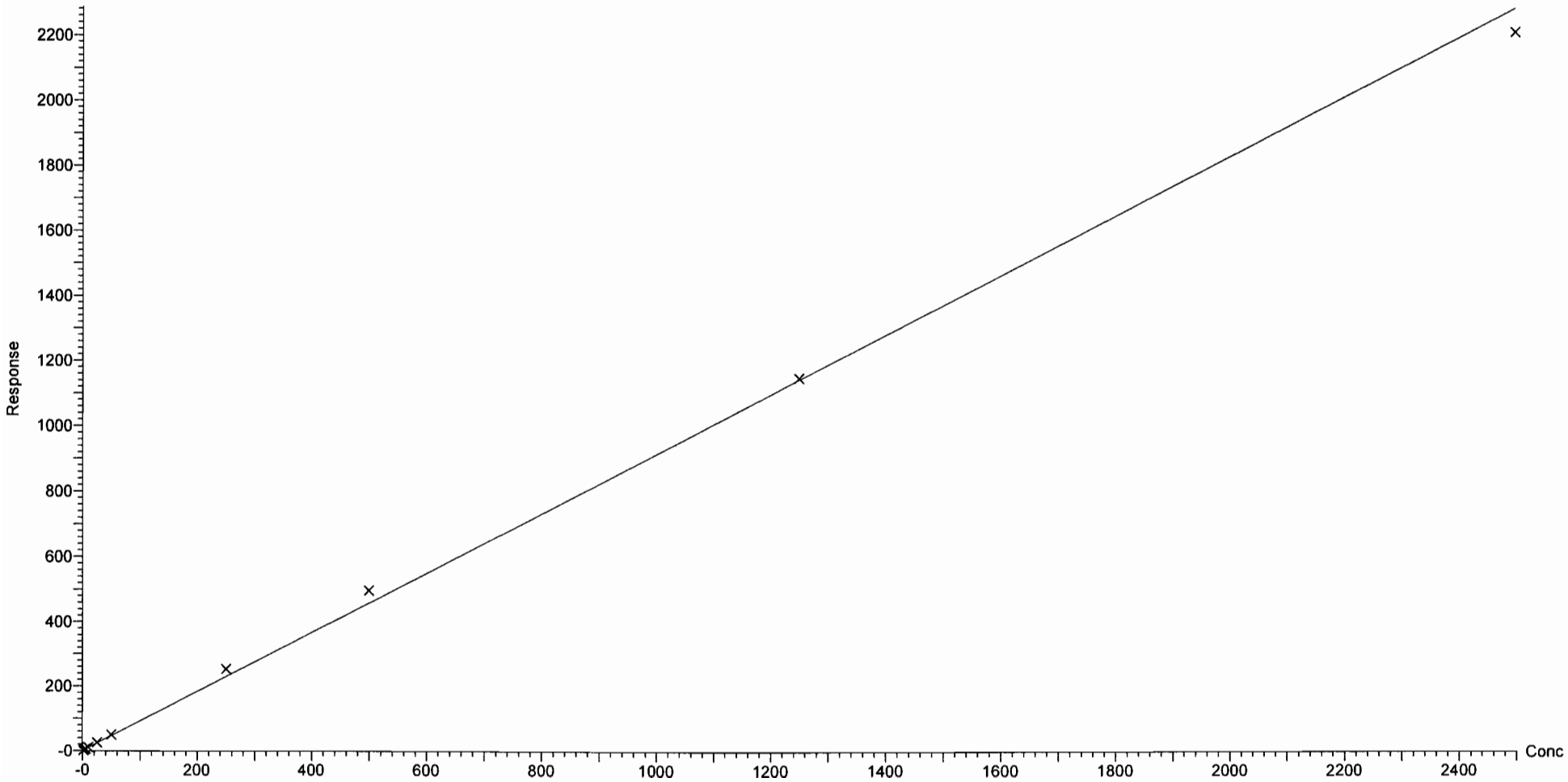
Compound name: PFODA
Correlation coefficient: r = 0.999467, r^2 = 0.998934
Calibration curve: 1.27081 * x + 0.103615
Response type: Internal Std (Ref 48), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

Compound name: N-MeFOSE
Correlation coefficient: r = 0.998979, r^2 = 0.997958
Calibration curve: 0.913987 * x + 0.914175
Response type: Internal Std (Ref 49), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



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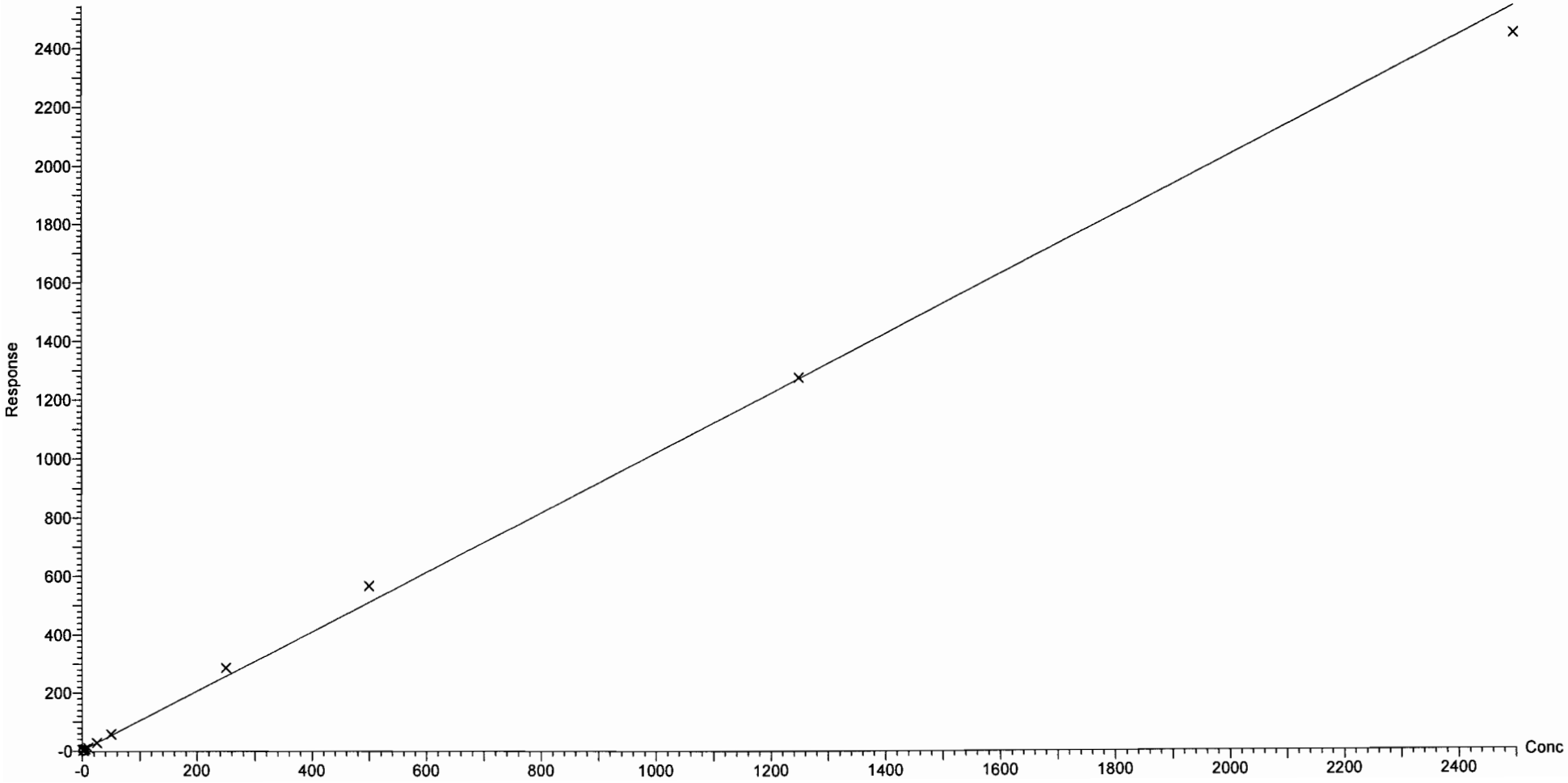
Last Altered: Friday, August 11, 2017 09:29:36 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:32:45 Pacific Daylight Time

Compound name: N-EtFOSE
Correlation coefficient: r = 0.998468, r^2 = 0.996938
Calibration curve: 1.01573 * x + 2.54785
Response type: Internal Std (Ref 50), Area * (IS Conc. / IS Area)
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

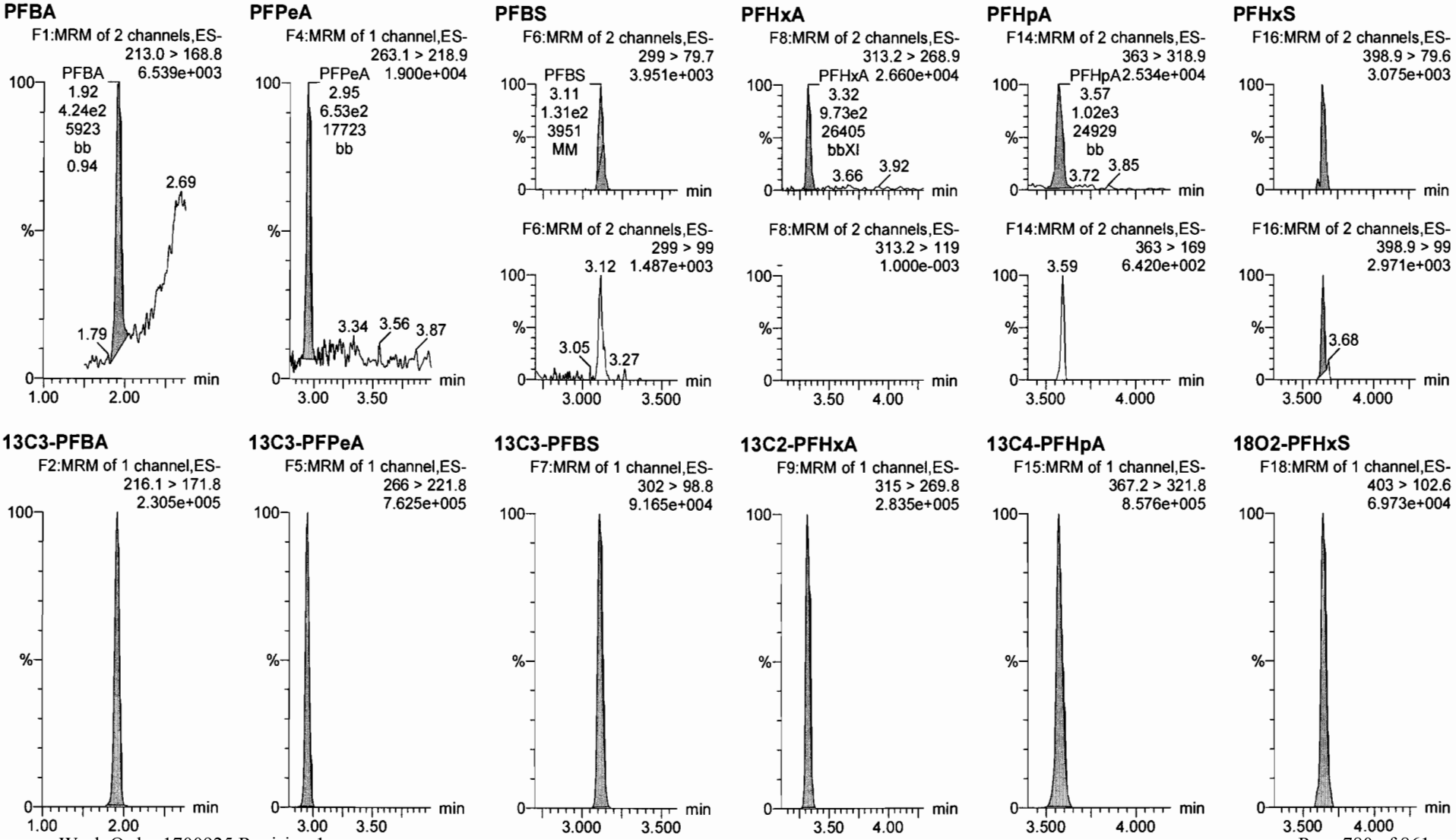


Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 08:55:25
Calibration: 11 Aug 2017 09:08:45

Name: 170810M2_2, Date: 10-Aug-2017, Time: 20:32:31, ID: ST170810M2-1 PFC CS-2 17H1015, Description: PFC CS-2 17H1015

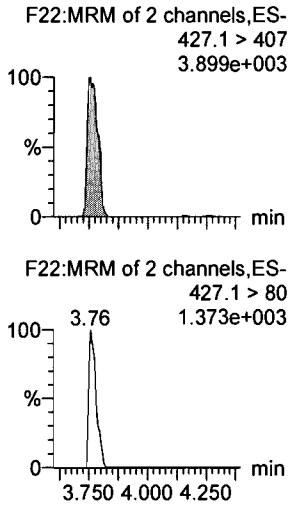


Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

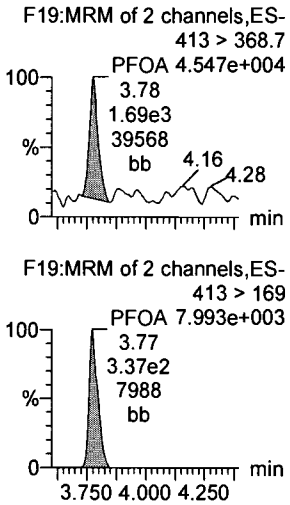
Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

Name: 170810M2_2, Date: 10-Aug-2017, Time: 20:32:31, ID: ST170810M2-1 PFC CS-2 17H1015, Description: PFC CS-2 17H1015

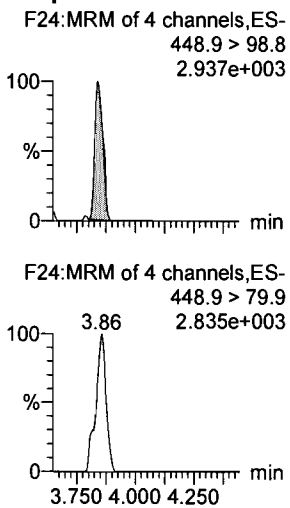
6:2 FTS



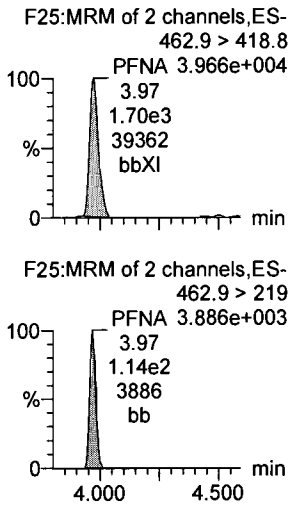
PFOA



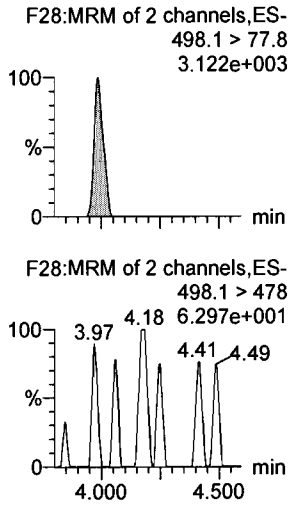
PFHpS



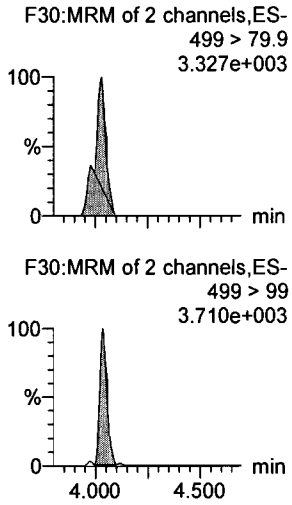
PFNA



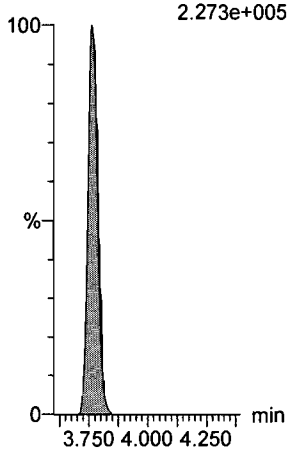
PFOSA



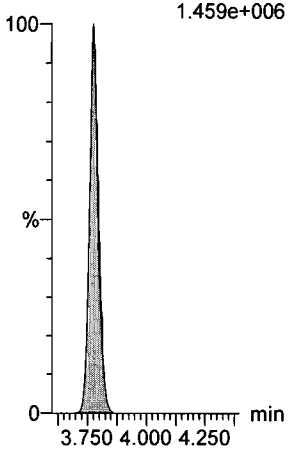
PFOS



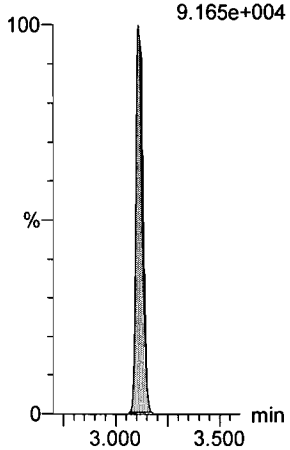
13C2-6:2 FTS



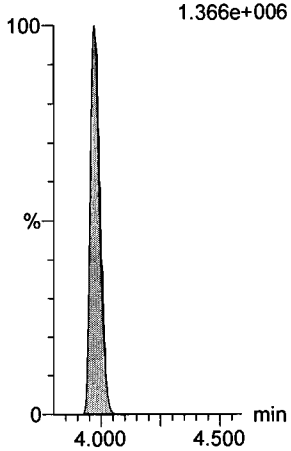
13C2-PFOA



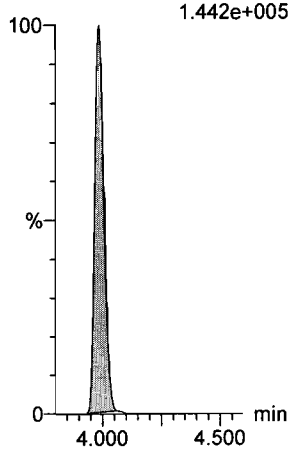
13C3-PFBS



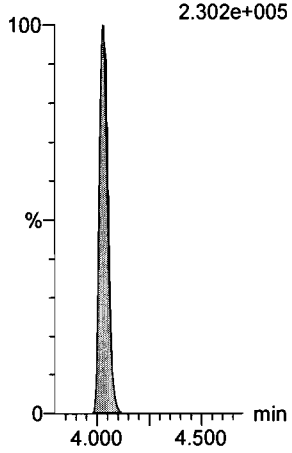
13C5-PFNA



13C8-PFOSA



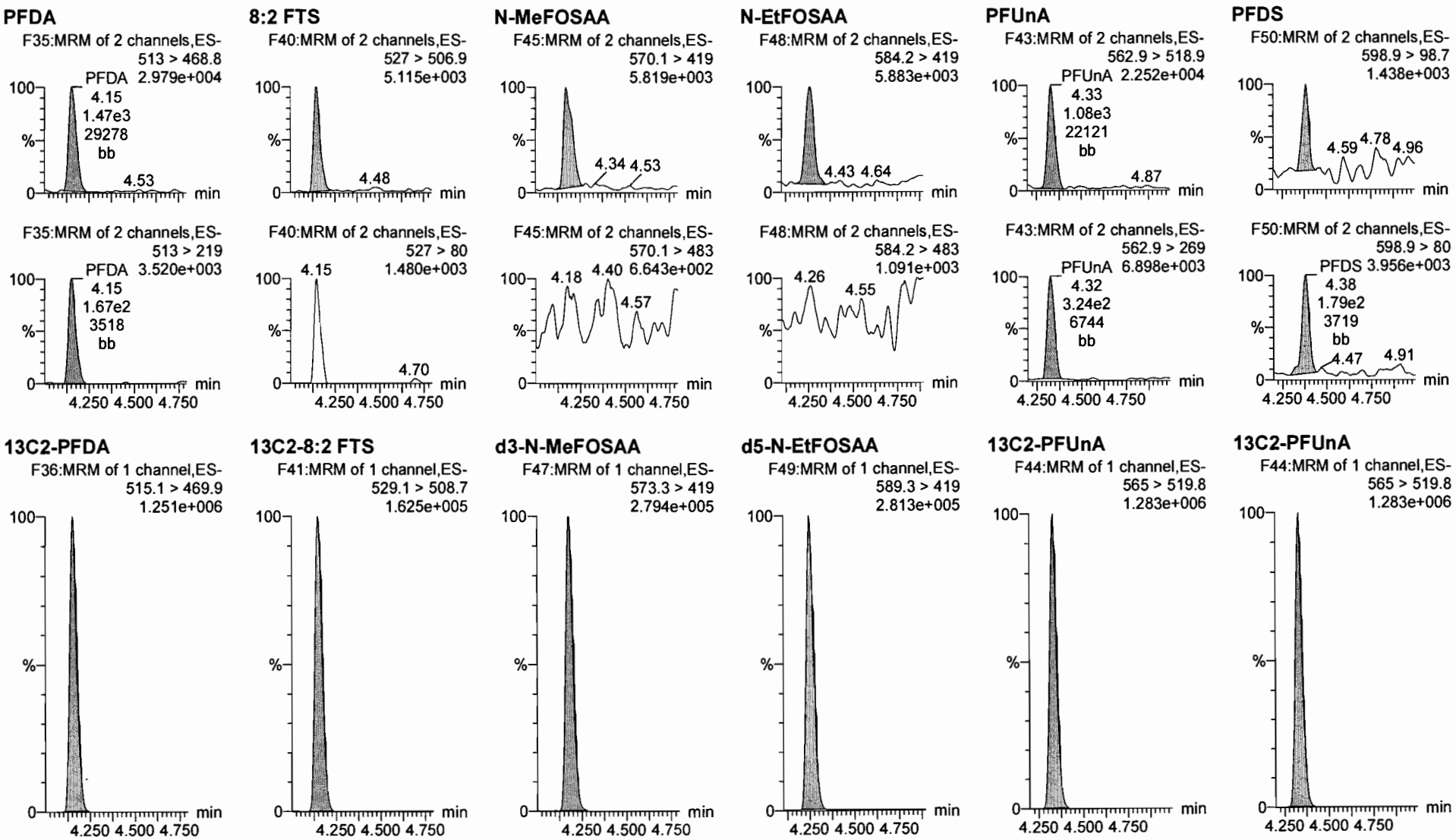
13C8-PFOS



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

Name: 170810M2_2, Date: 10-Aug-2017, Time: 20:32:31, ID: ST170810M2-1 PFC CS-2 17H1015, Description: PFC CS-2 17H1015



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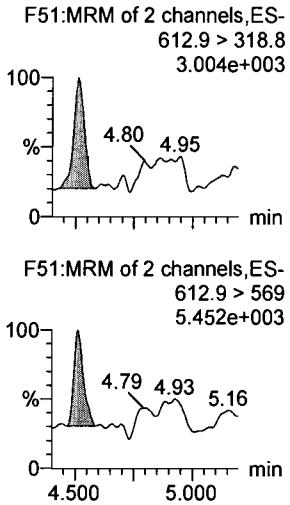
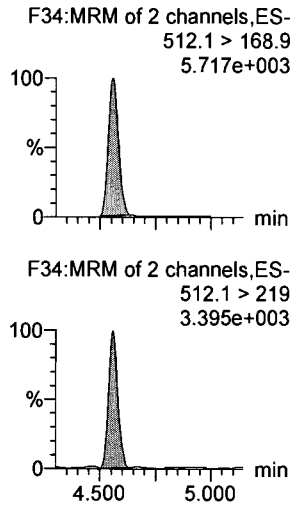
Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

Name: 170810M2_2, Date: 10-Aug-2017, Time: 20:32:31, ID: ST170810M2-1 PFC CS-2 17H1015, Description: PFC CS-2 17H1015

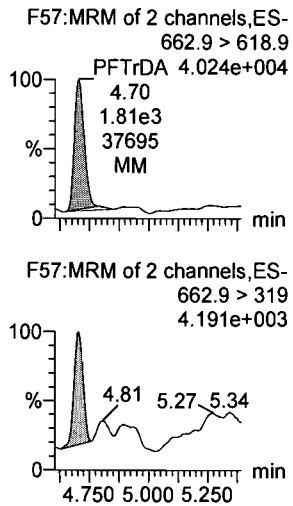
PFDoA



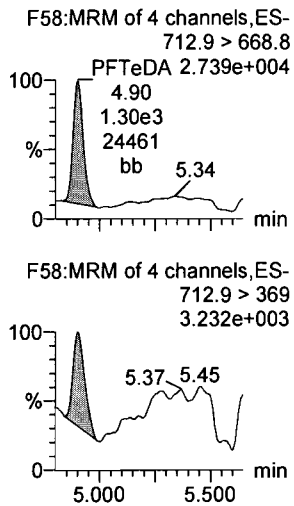
N-MeFOSA



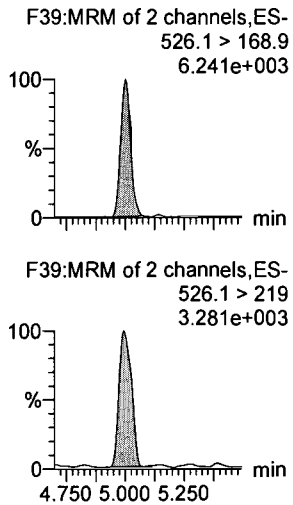
PFTrDA



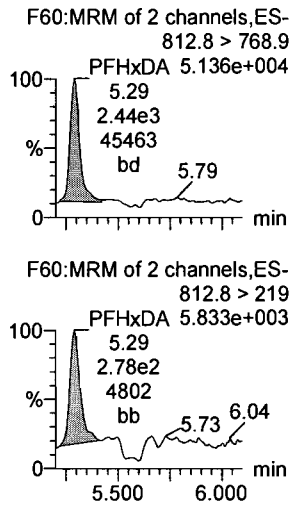
PFTeDA



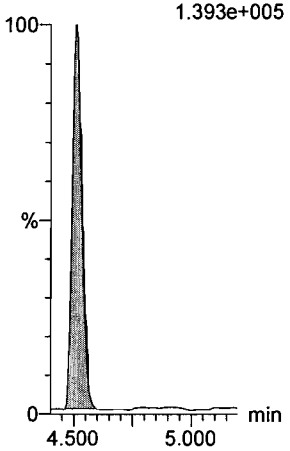
N-EtFOSA



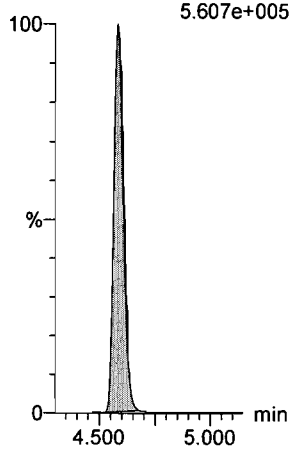
PFHxDA



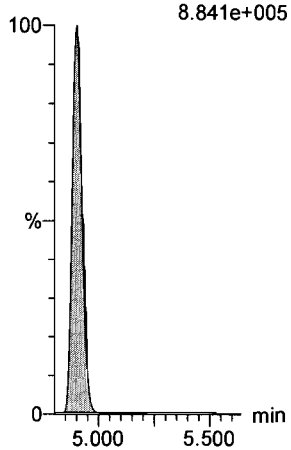
13C2-PFDoA



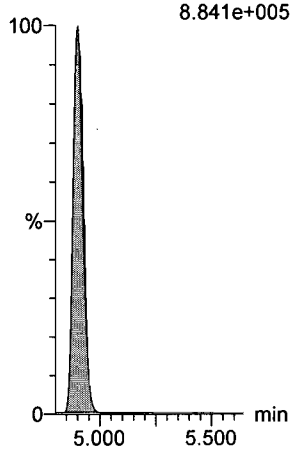
d3-N-MeFOSA



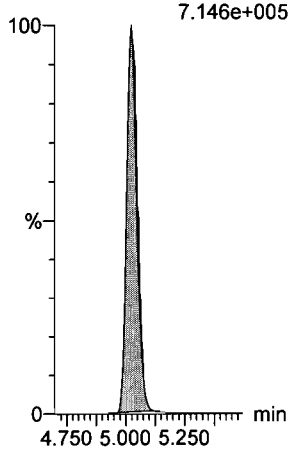
13C2-PFTeDA



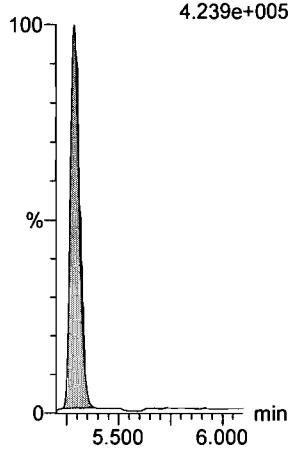
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
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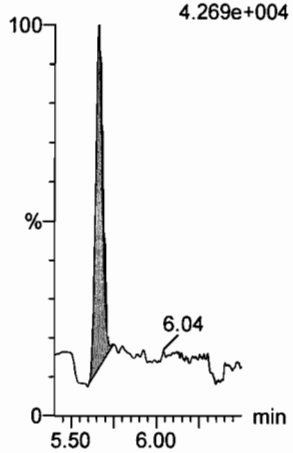
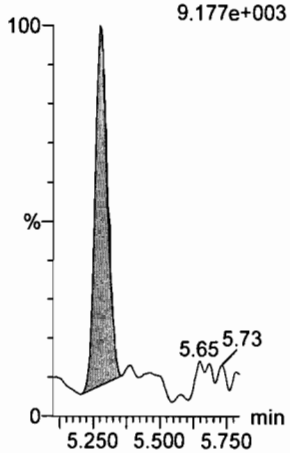
Name: 170810M2_2, Date: 10-Aug-2017, Time: 20:32:31, ID: ST170810M2-1 PFC CS-2 17H1015, Description: PFC CS-2 17H1015

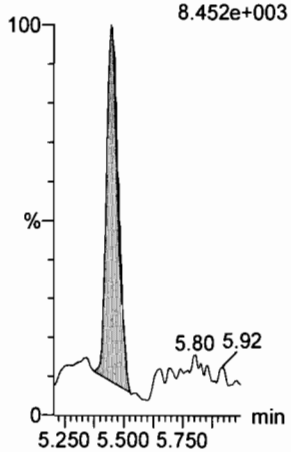
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
4.269e+004



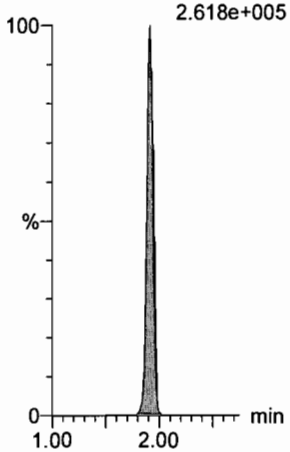
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
9.177e+003



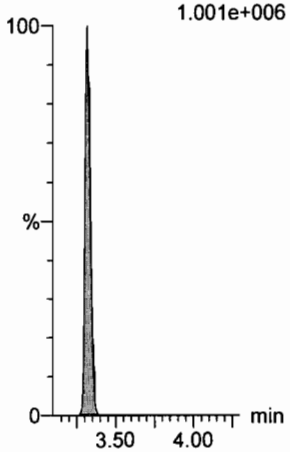
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
8.452e+003



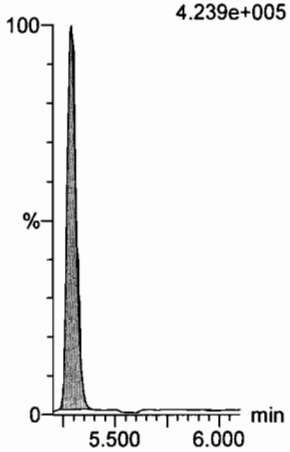
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.618e+005



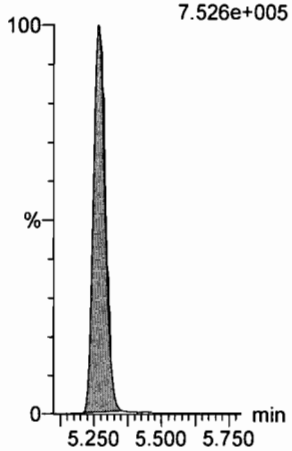
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
1.001e+006



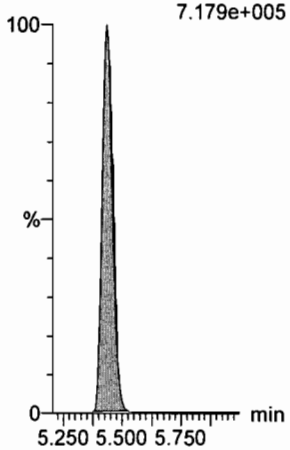
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.239e+005



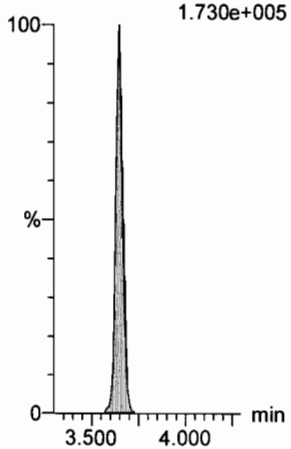
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
7.526e+005



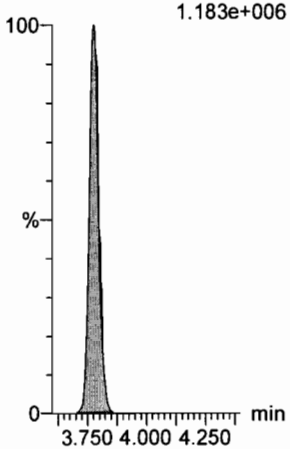
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
7.179e+005



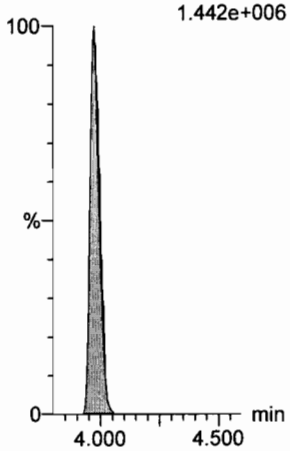
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.730e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.183e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.442e+006



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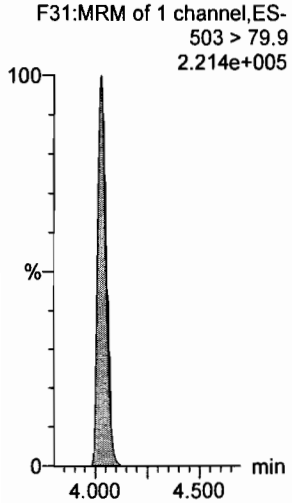
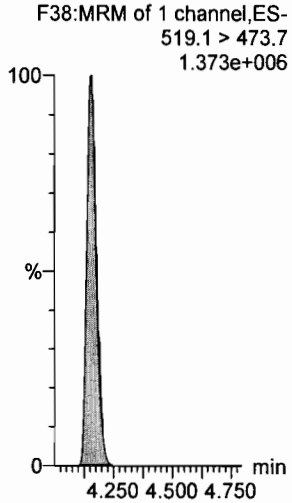
Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

Name: 170810M2_2, Date: 10-Aug-2017, Time: 20:32:31, ID: ST170810M2-1 PFC CS-2 17H1015, Description: PFC CS-2 17H1015

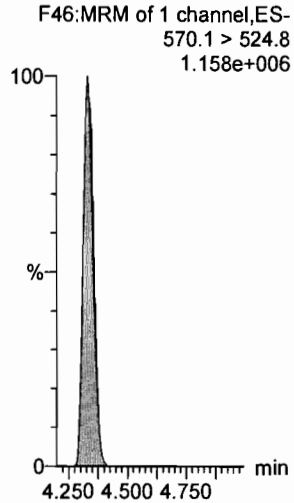
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
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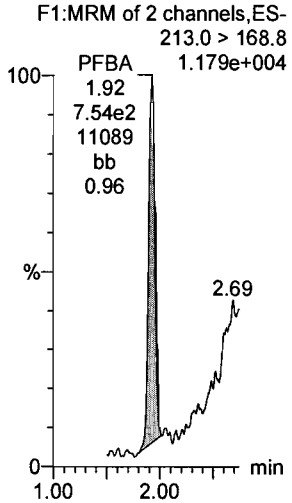
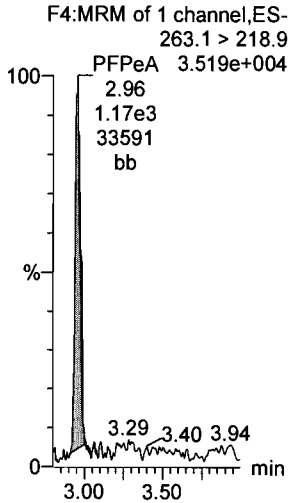
Name: 170810M2_3, Date: 10-Aug-2017, Time: 20:43:21, ID: ST170810M2-2 PFC CS-1 17H1003, Description: PFC CS-1 17H1003

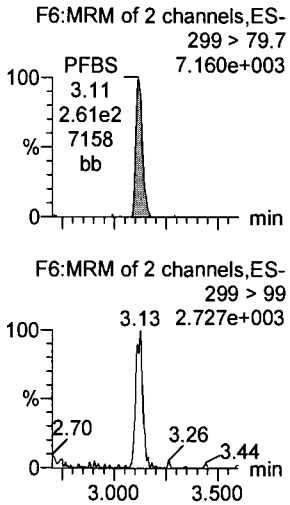
PFBA



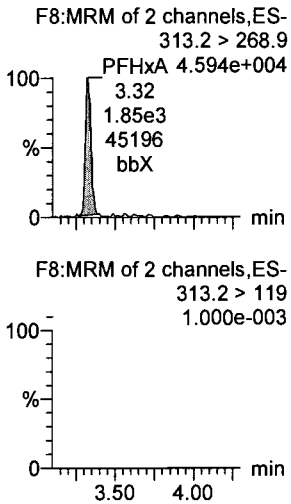
PFPeA



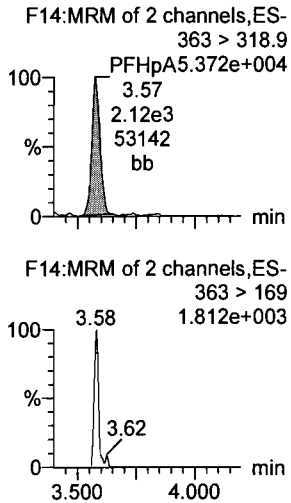
PFBS



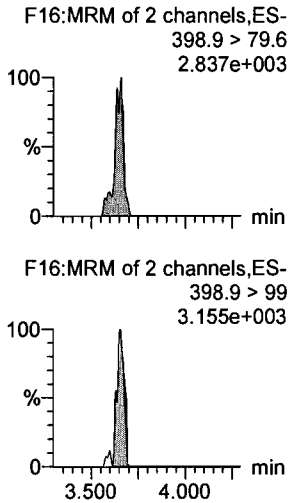
PFHxA



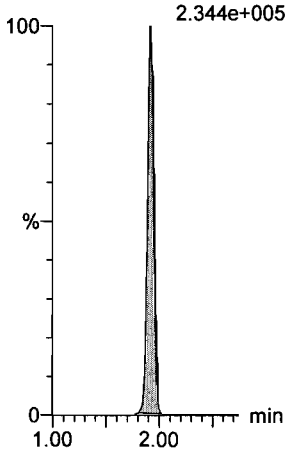
PFHpA



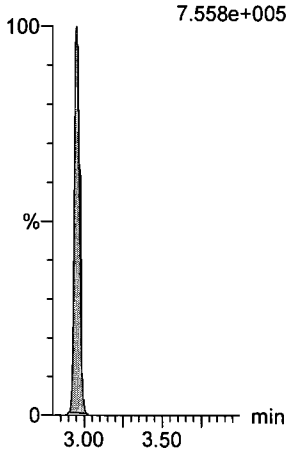
PFHxS



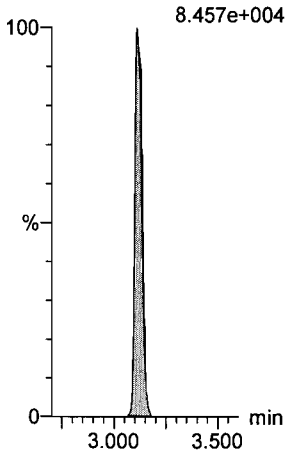
13C3-PFBA



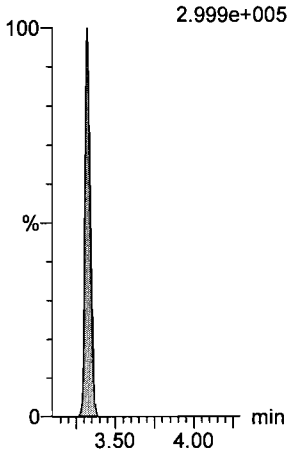
13C3-PFPeA



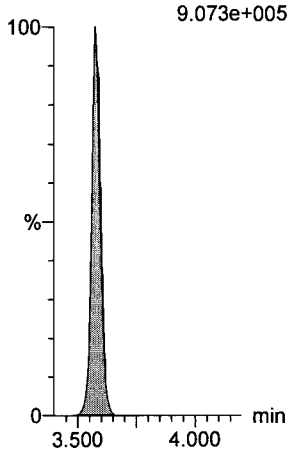
13C3-PFBS



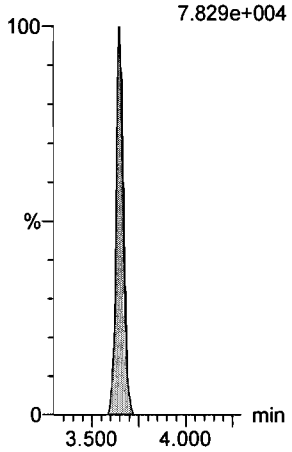
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



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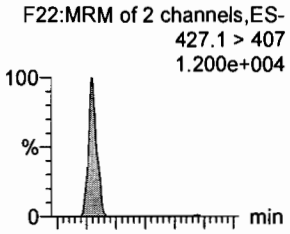
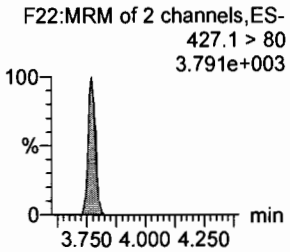
Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

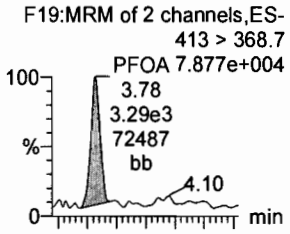
Name: 170810M2_3, Date: 10-Aug-2017, Time: 20:43:21, ID: ST170810M2-2 PFC CS-1 17H1003, Description: PFC CS-1 17H1003

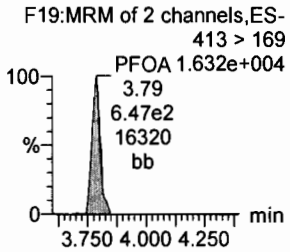
6:2 FTS



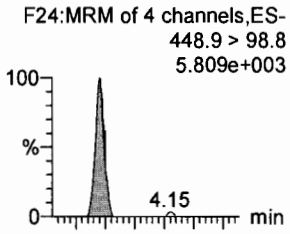


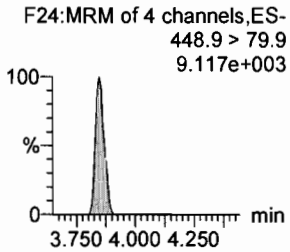
PFOA



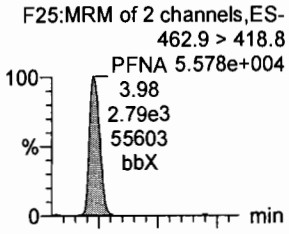


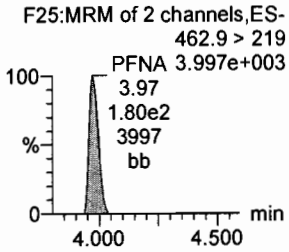
PFHpS



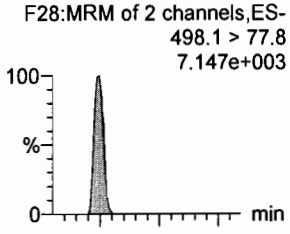


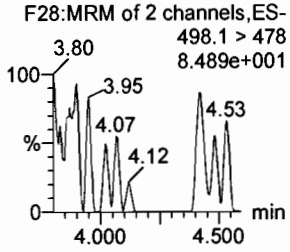
PFNA





PFOSA





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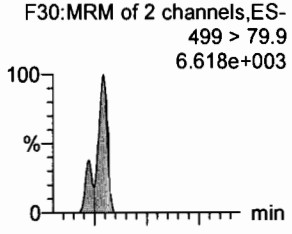
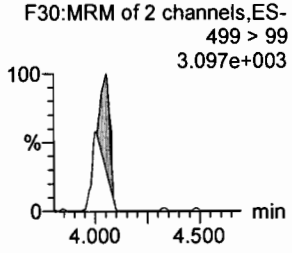
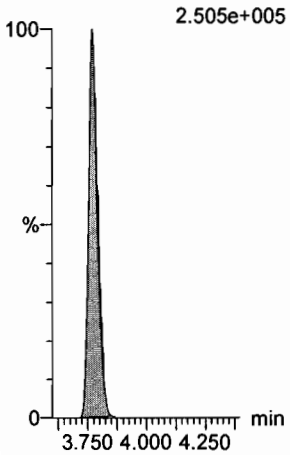
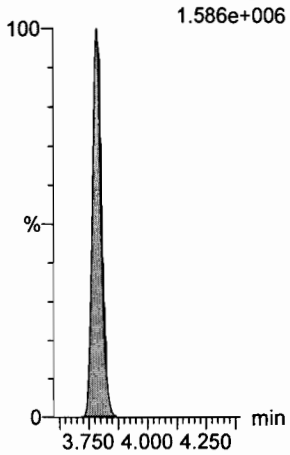




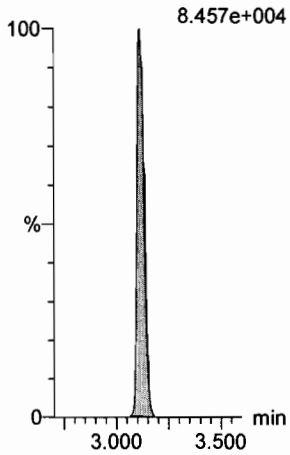
13C2-6:2 FTS



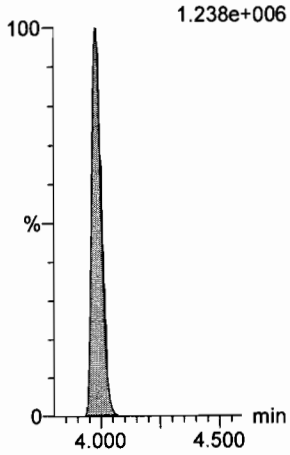
13C2-PFOA



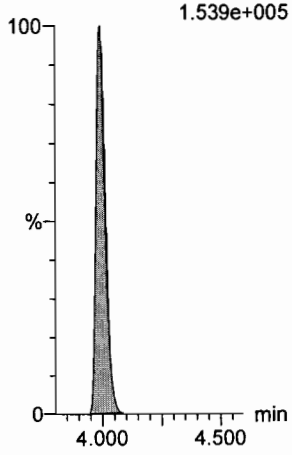
13C3-PFBS



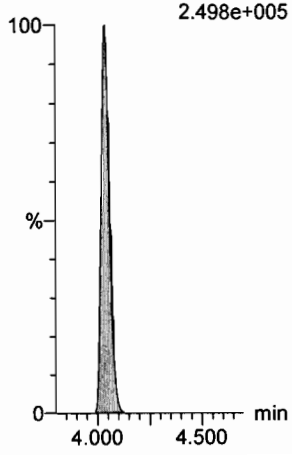
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

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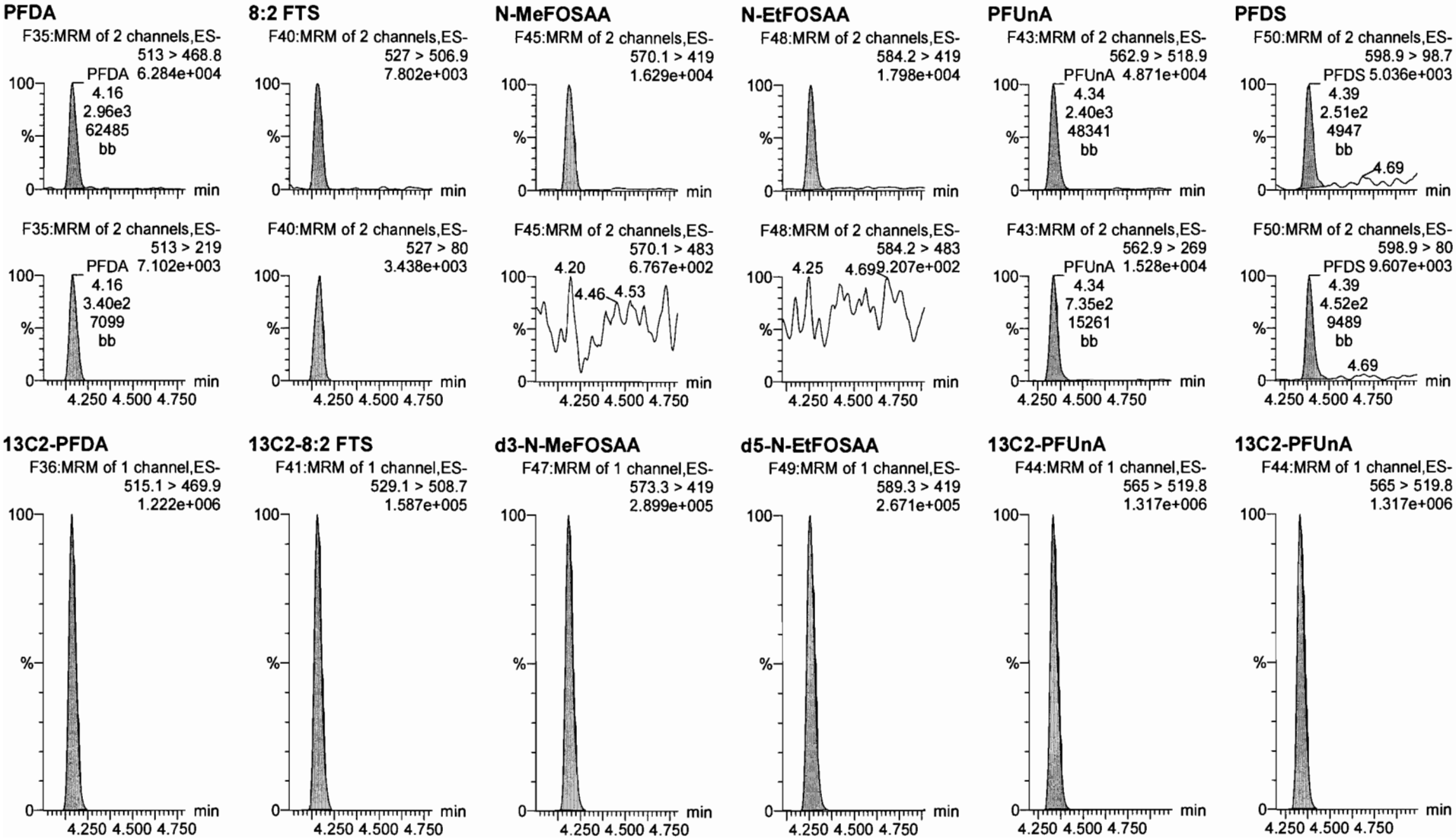

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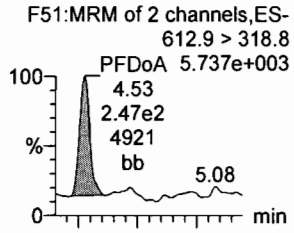
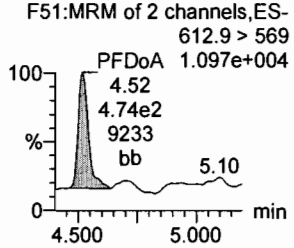
Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

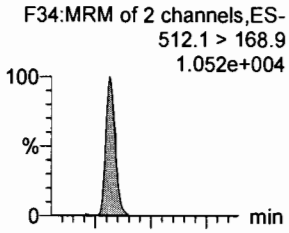
Name: 170810M2_3, Date: 10-Aug-2017, Time: 20:43:21, ID: ST170810M2-2 PFC CS-1 17H1003, Description: PFC CS-1 17H1003

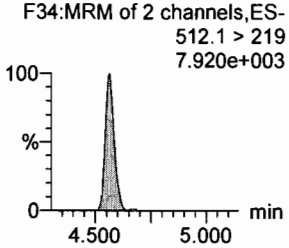
PFDoA



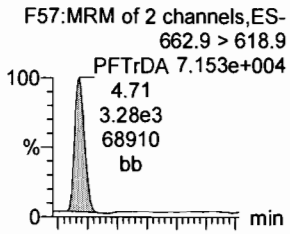


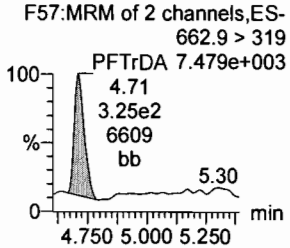
N-MeFOSA



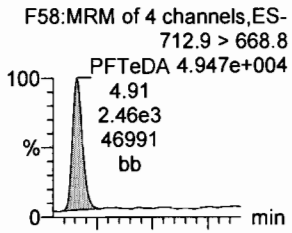


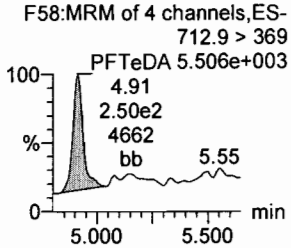
PFTrDA



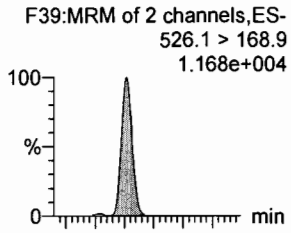


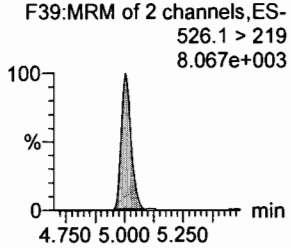
PFTeDA



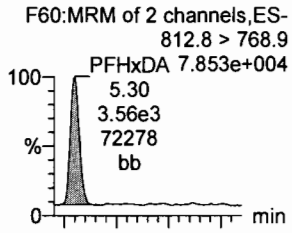


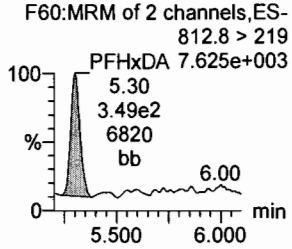
N-EtFOSA



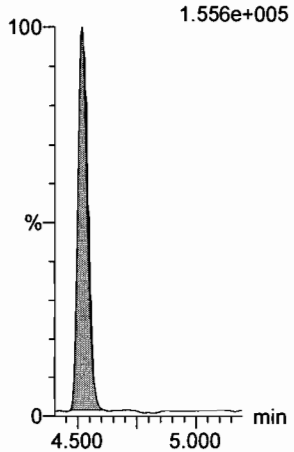


PFHxDA

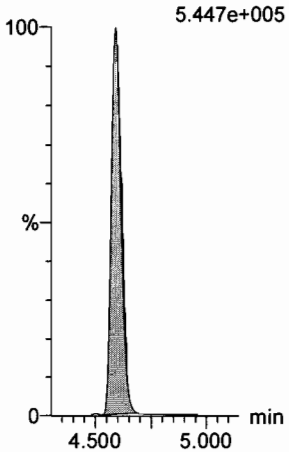




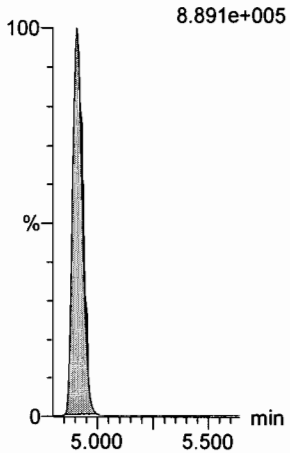
13C2-PFDoA



d3-N-MeFOSA



13C2-PFTeDA



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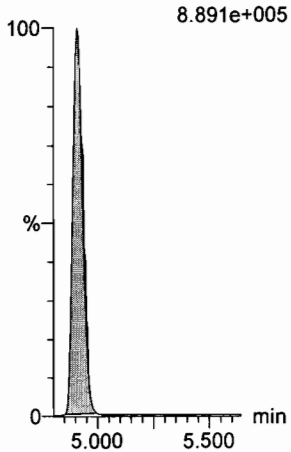
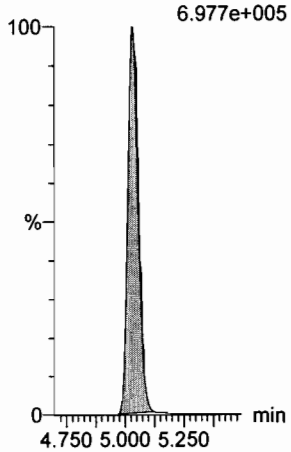
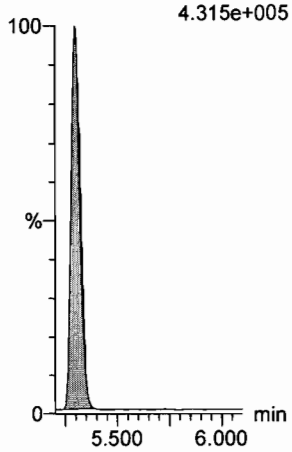


d5-N-ETFOSA



13C2-PFHxDA



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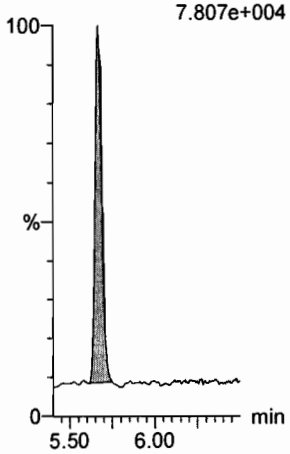
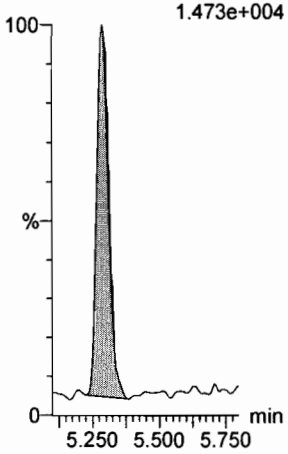
Name: 170810M2_3, Date: 10-Aug-2017, Time: 20:43:21, ID: ST170810M2-2 PFC CS-1 17H1003, Description: PFC CS-1 17H1003

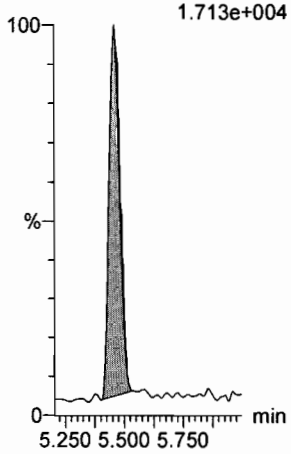
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
7.807e+004



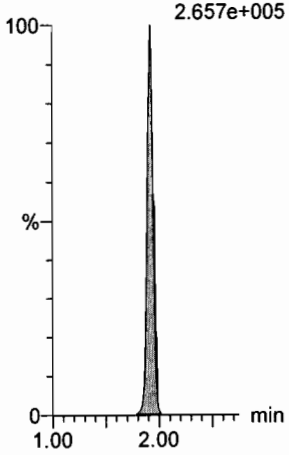
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
1.473e+004



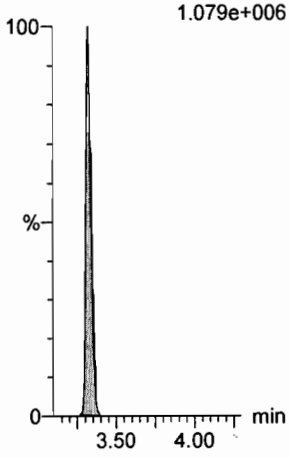
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
1.713e+004



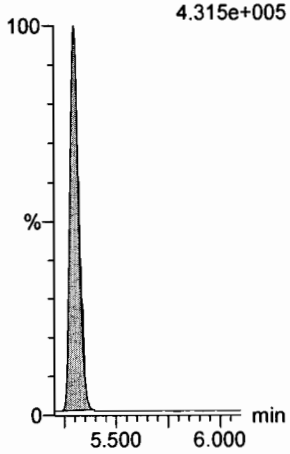
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.657e+005



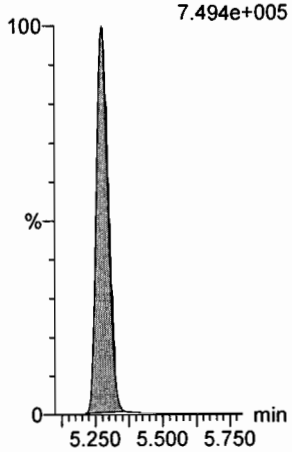
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
1.079e+006



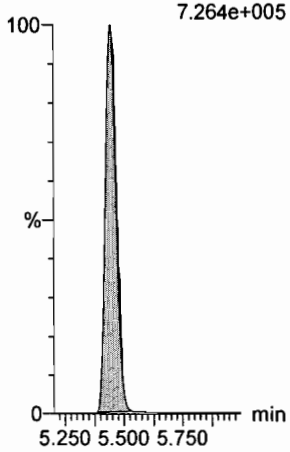
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.315e+005



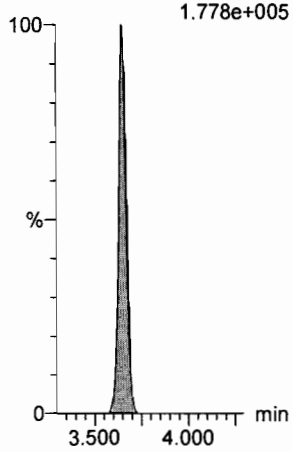
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
7.494e+005



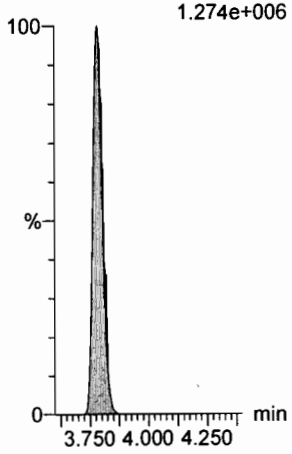
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
7.264e+005



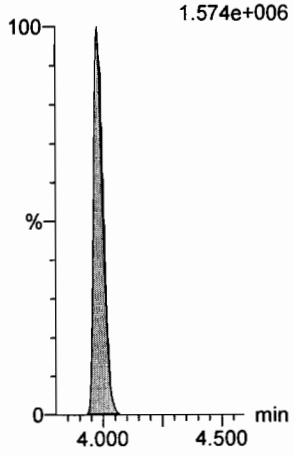
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.778e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.274e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.574e+006



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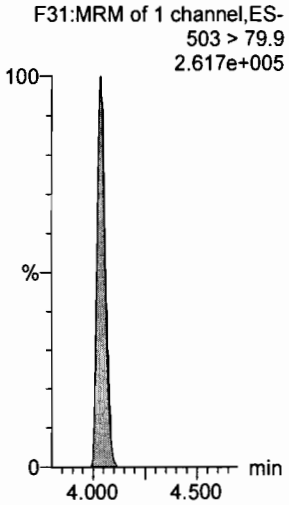
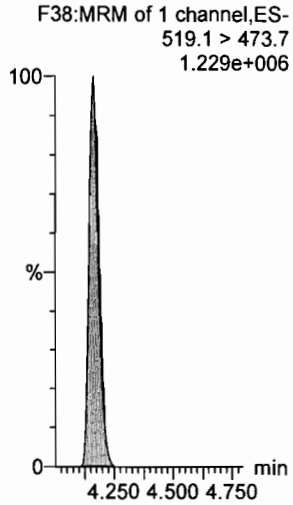
Name: 170810M2_3, Date: 10-Aug-2017, Time: 20:43:21, ID: ST170810M2-2 PFC CS-1 17H1003, Description: PFC CS-1 17H1003

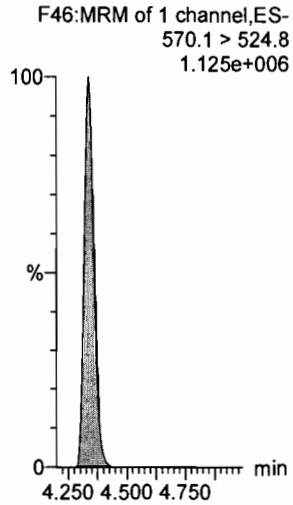
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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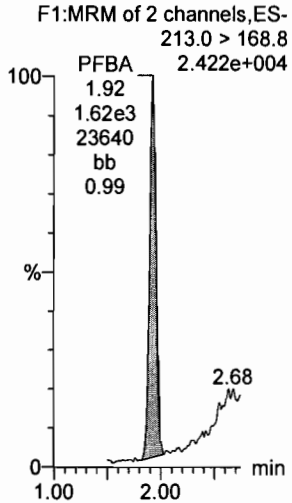
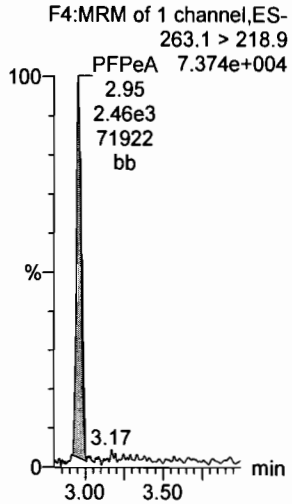
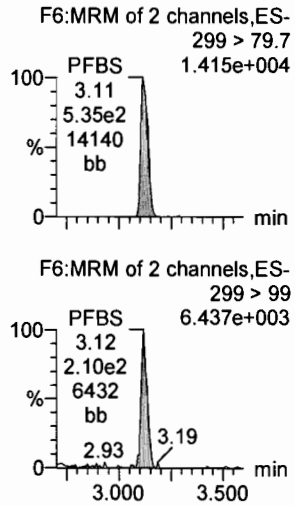
PFBA



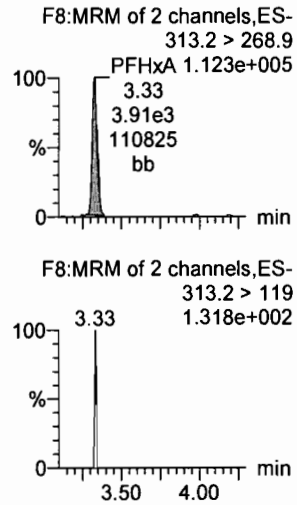
PFPeA



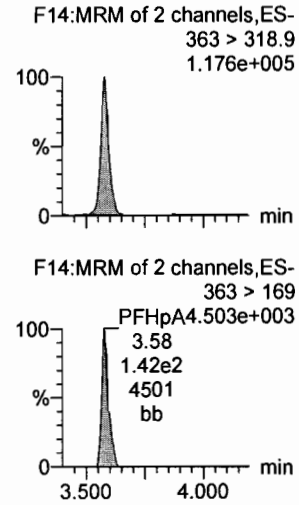
PFBS



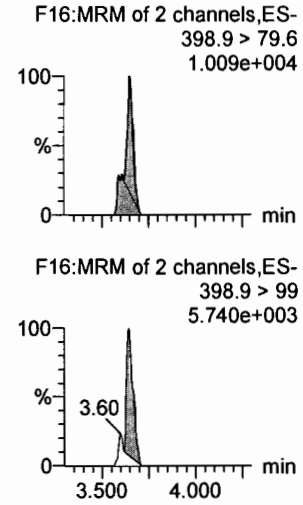
PFHxA



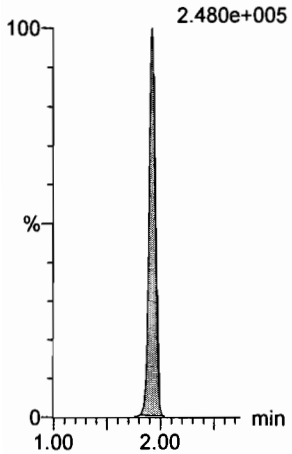
PFHpA



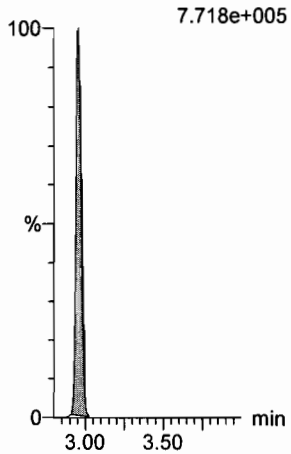
PFHxS



13C3-PFBA



13C3-PFPeA



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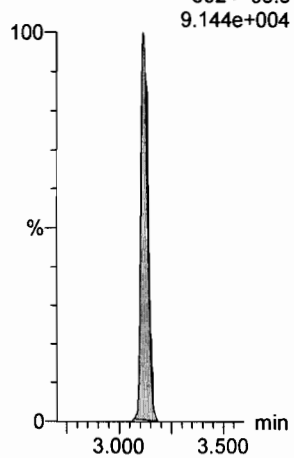
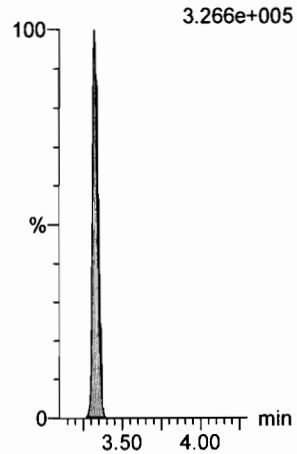
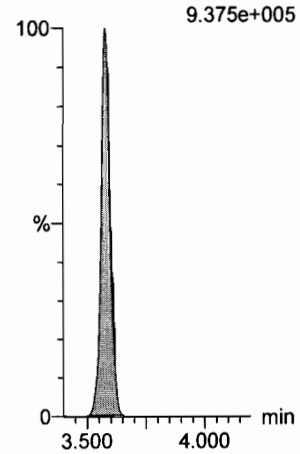


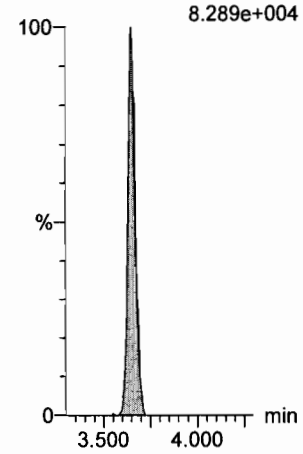
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



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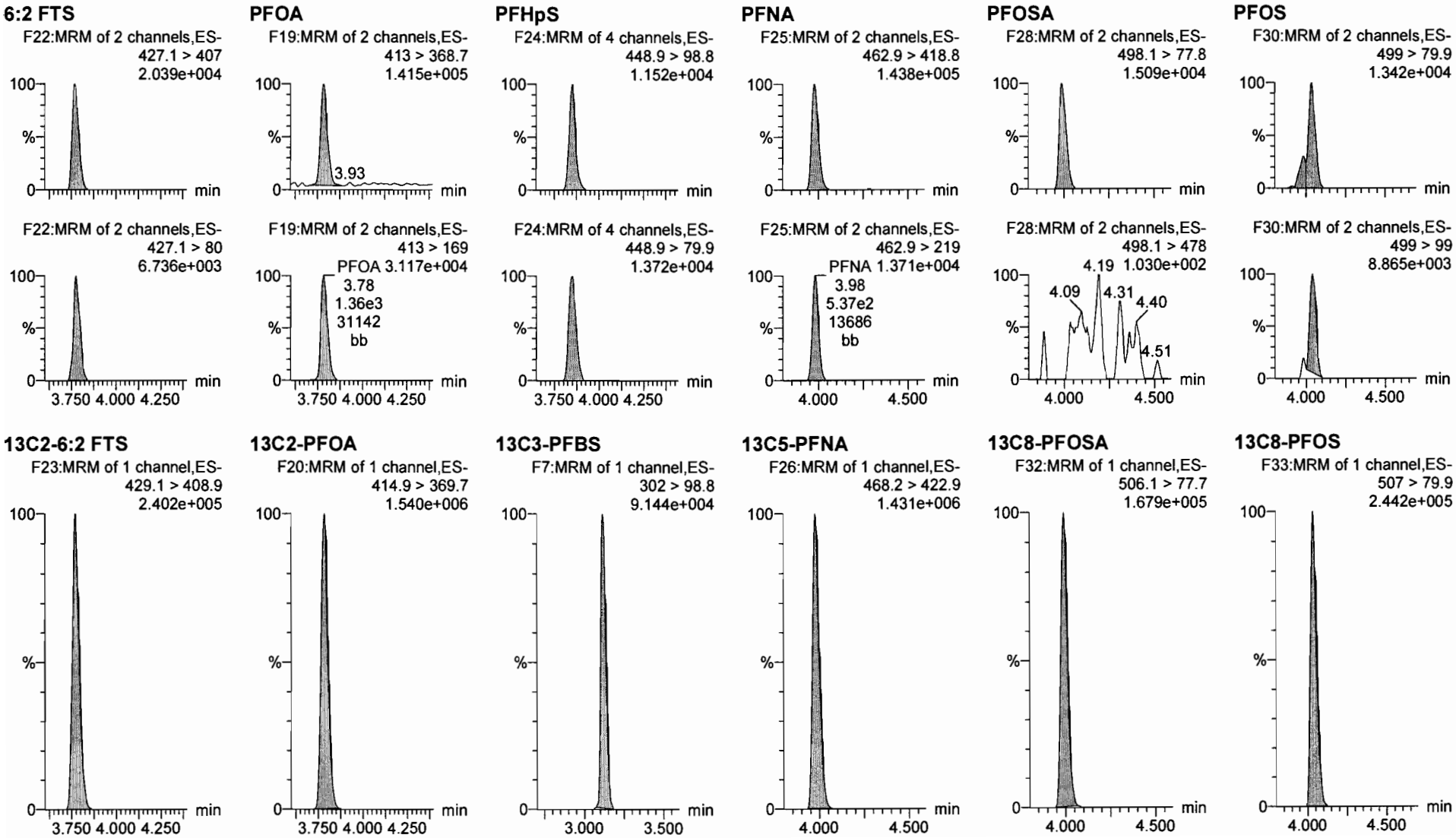
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

Name: 170810M2_4, Date: 10-Aug-2017, Time: 20:54:09, ID: ST170810M2-3 PFC CS0 17H1004, Description: PFC CS0 17H1004



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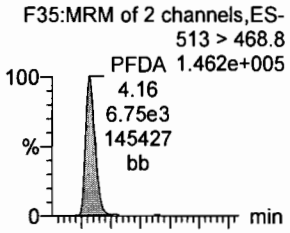
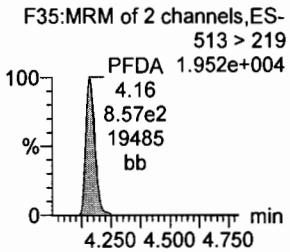
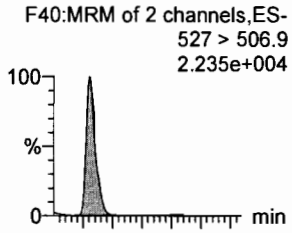
Name: 170810M2_4, Date: 10-Aug-2017, Time: 20:54:09, ID: ST170810M2-3 PFC CS0 17H1004, Description: PFC CS0 17H1004

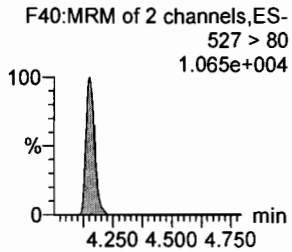
PFDA



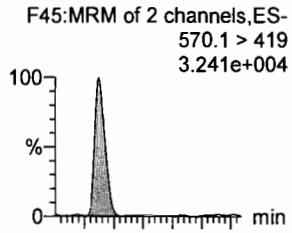


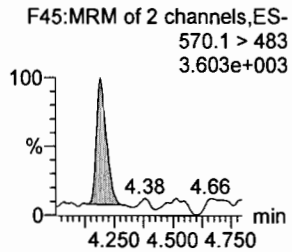
8:2 FTS





N-MeFOSAA





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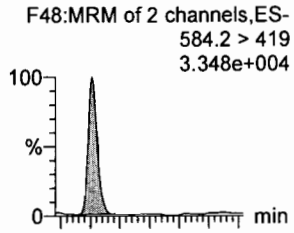
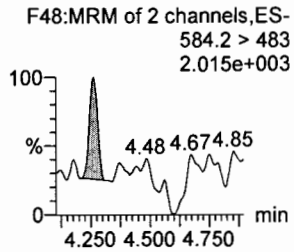
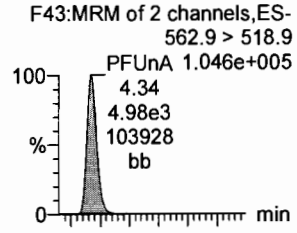
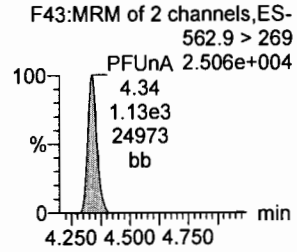


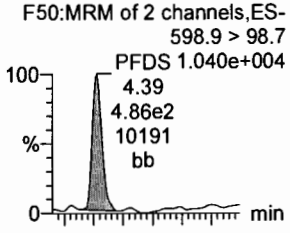


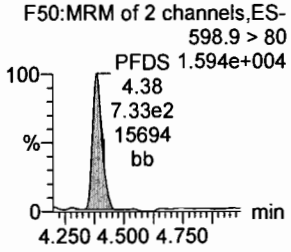
PFUnA



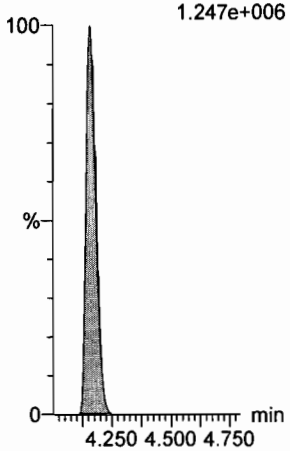


PFDS

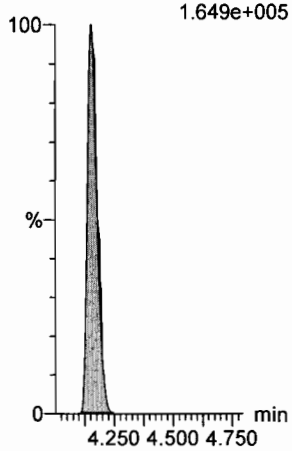




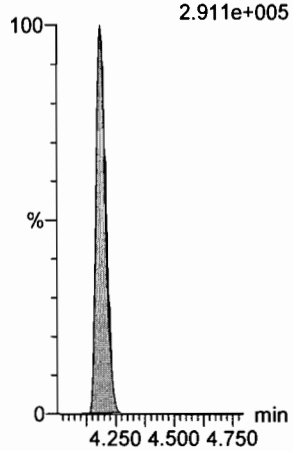
13C2-PFDA



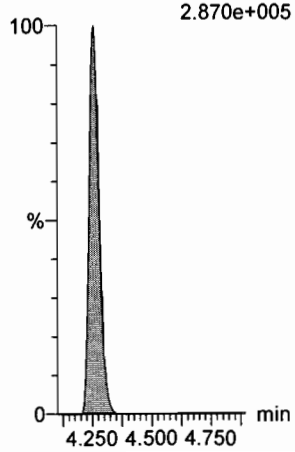
13C2-8:2 FTS



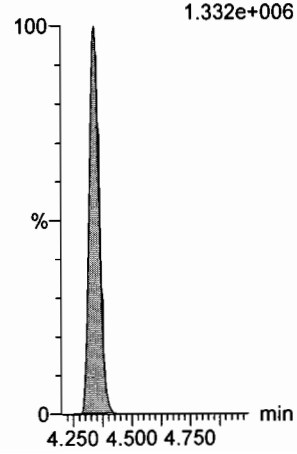
d3-N-MeFOSAA



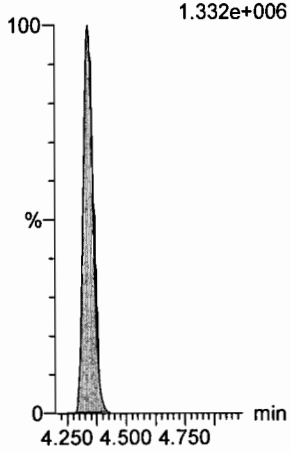
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



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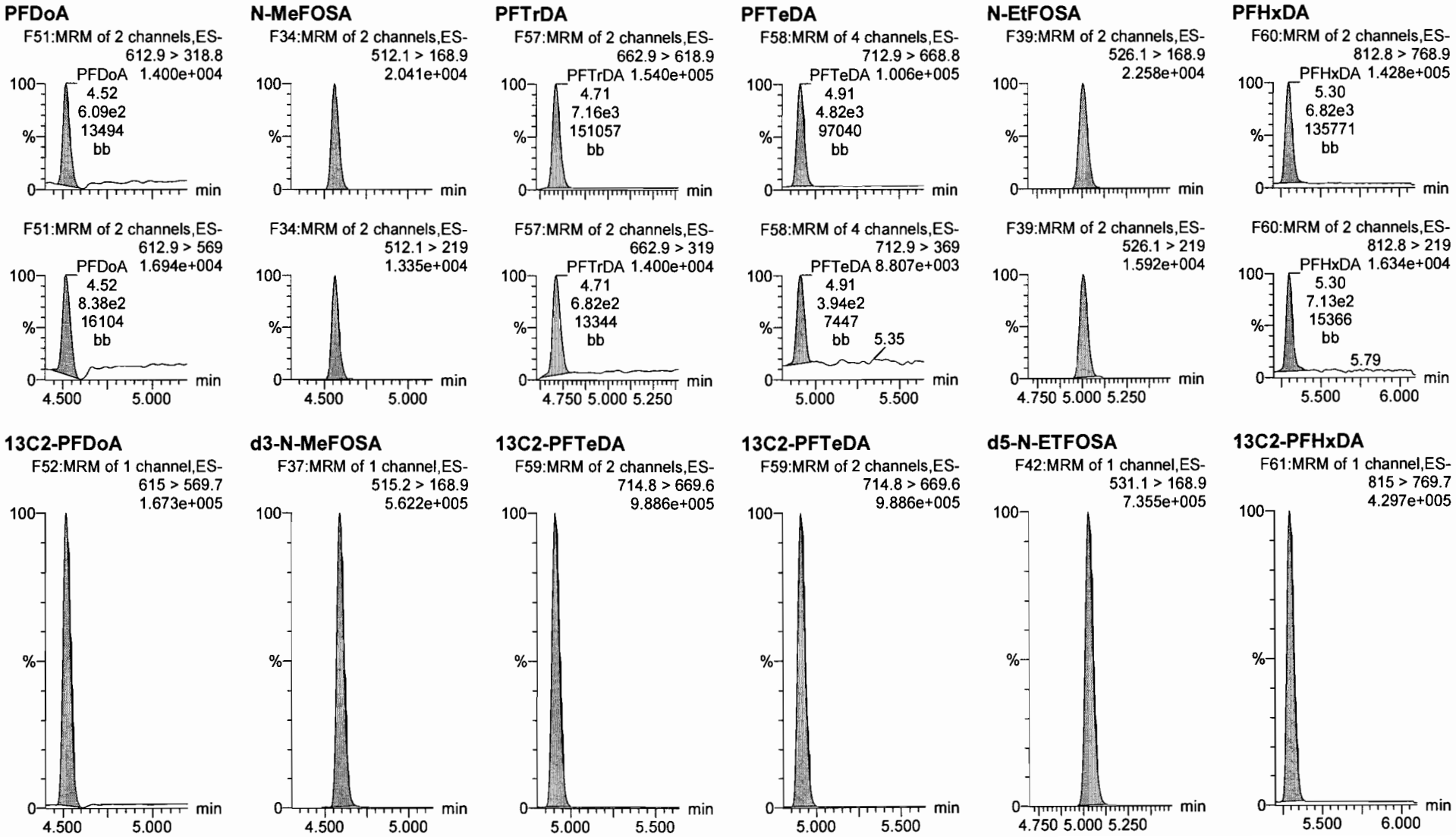
Name: 170810M2_4, Date: 10-Aug-2017, Time: 20:54:09, ID: ST170810M2-3 PFC CS0 17H1004, Description: PFC CS0 17H1004



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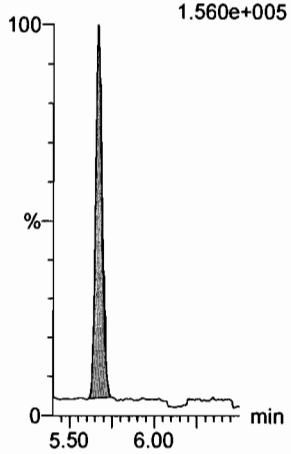
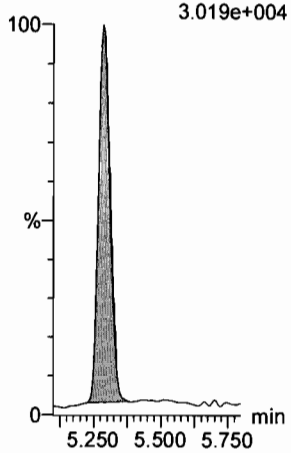
Name: 170810M2_4, Date: 10-Aug-2017, Time: 20:54:09, ID: ST170810M2-3 PFC CS0 17H1004, Description: PFC CS0 17H1004

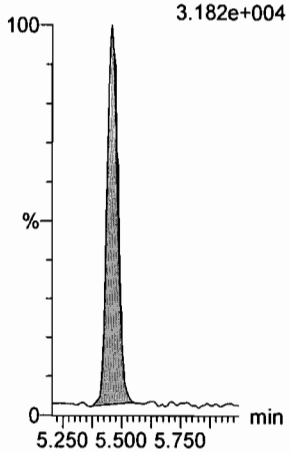
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
1.560e+005



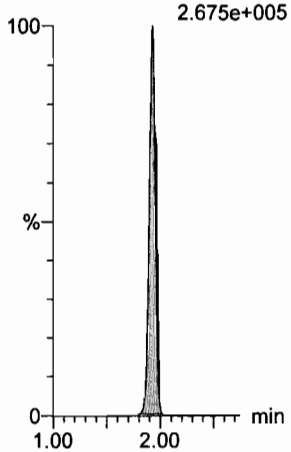
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
3.019e+004



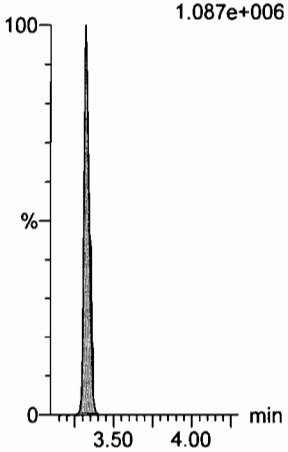
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
3.182e+004



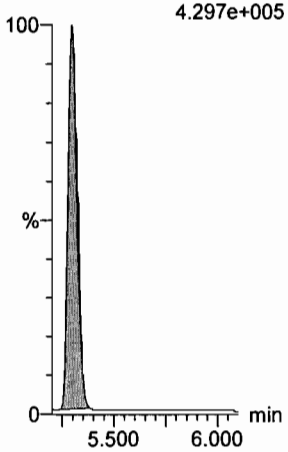
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.675e+005



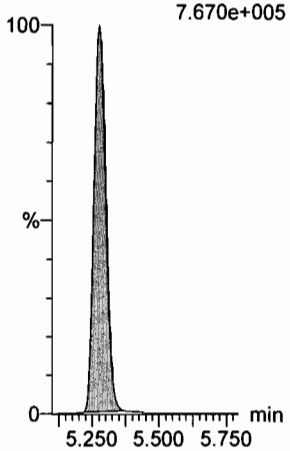
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
1.087e+006



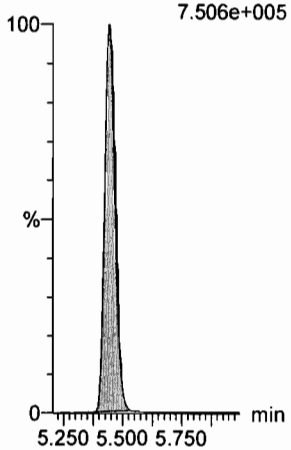
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.297e+005



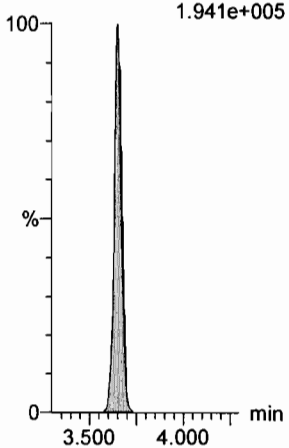
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
7.670e+005



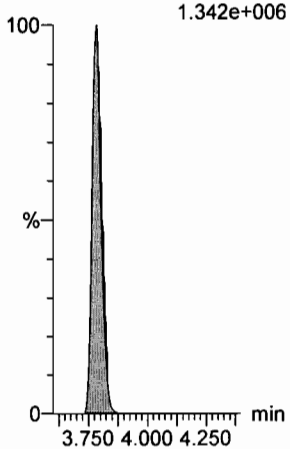
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
7.506e+005



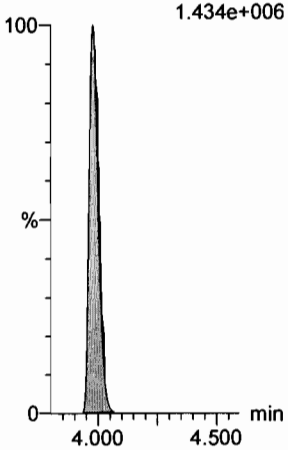
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.941e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.342e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.434e+006



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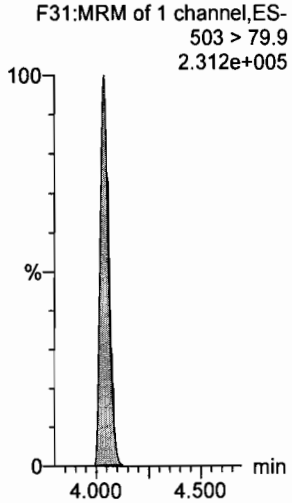
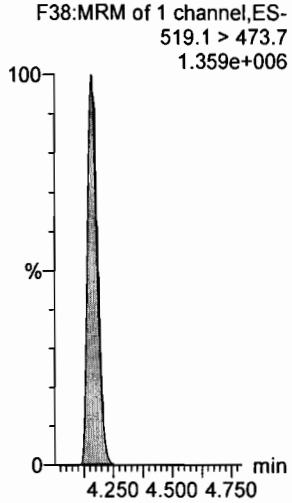
Name: 170810M2_4, Date: 10-Aug-2017, Time: 20:54:09, ID: ST170810M2-3 PFC CS0 17H1004, Description: PFC CS0 17H1004

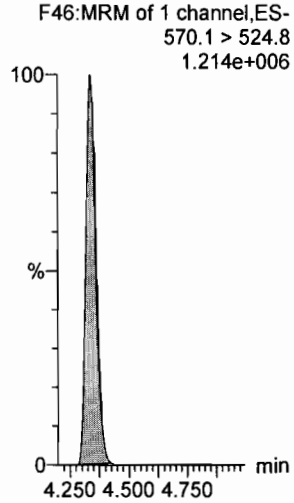
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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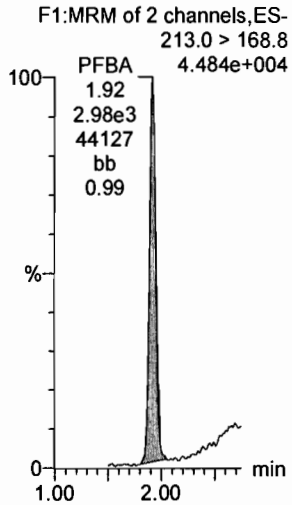
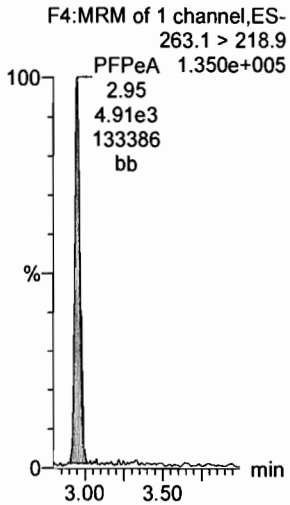
Name: 170810M2_5, Date: 10-Aug-2017, Time: 21:05:02, ID: ST170810M2-4 PFC CS1 17H1016, Description: PFC CS1 17H1016

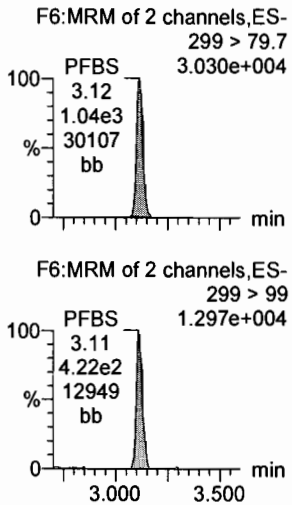
PFBA



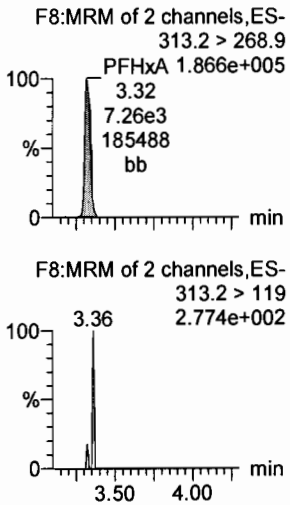
PFPeA



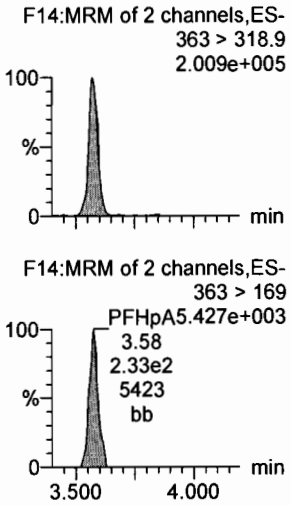
PFBS



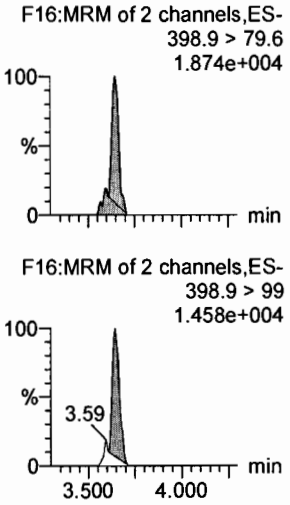
PFHxA



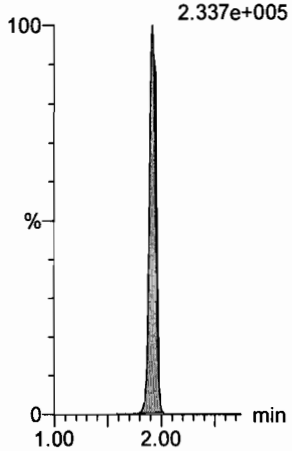
PFHpA



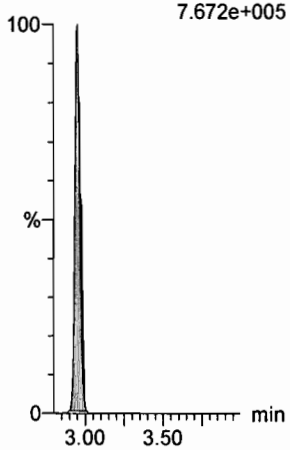
PFHxS



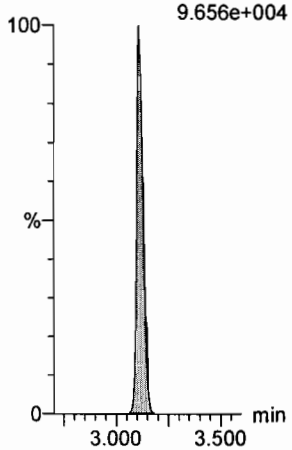
13C3-PFBA



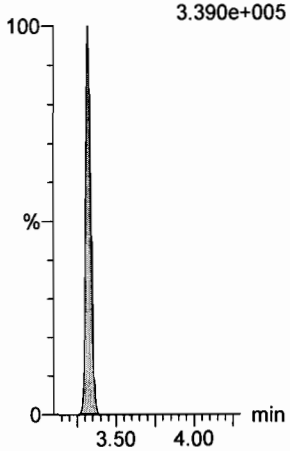
13C3-PFPeA



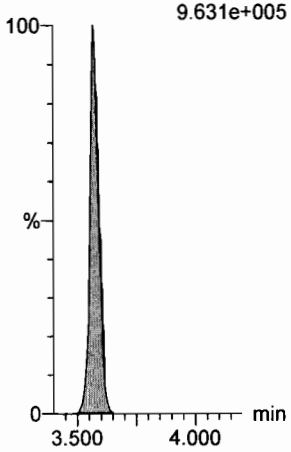
13C3-PFBS



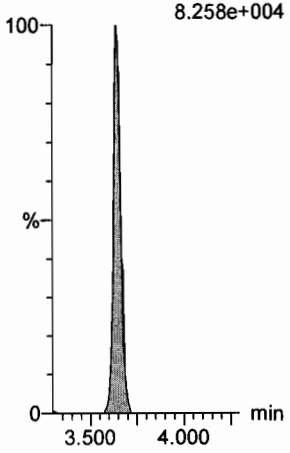
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



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Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
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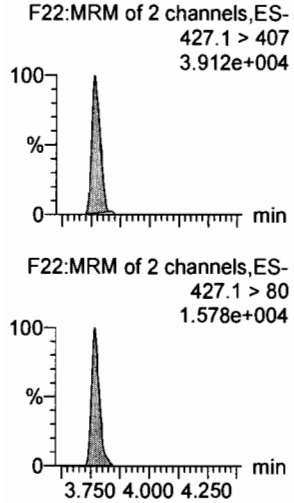
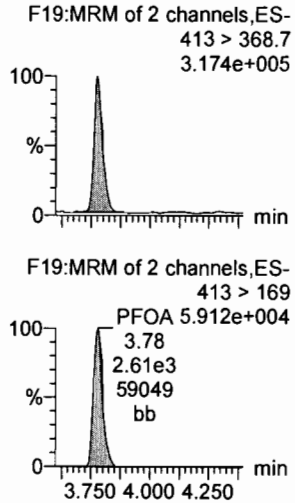
Name: 170810M2_5, Date: 10-Aug-2017, Time: 21:05:02, ID: ST170810M2-4 PFC CS1 17H1016, Description: PFC CS1 17H1016

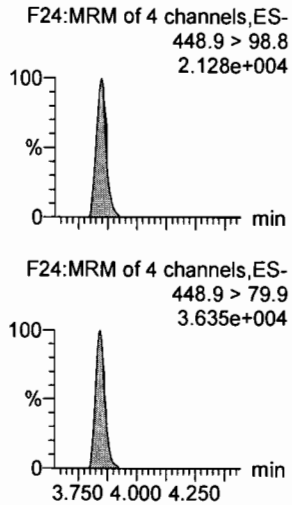
6:2 FTS



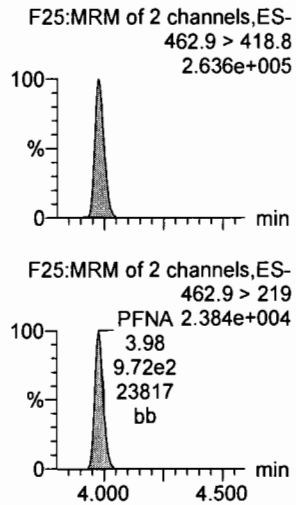
PFOA



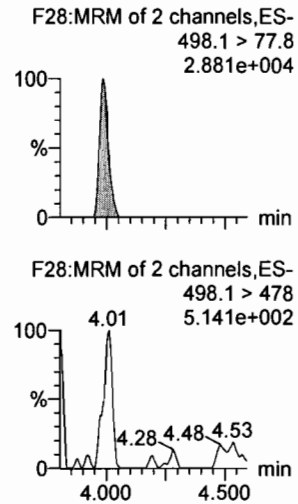
PFHpS



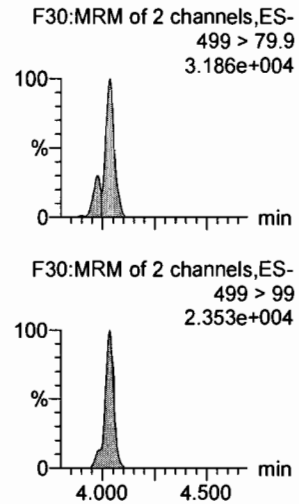
PFNA



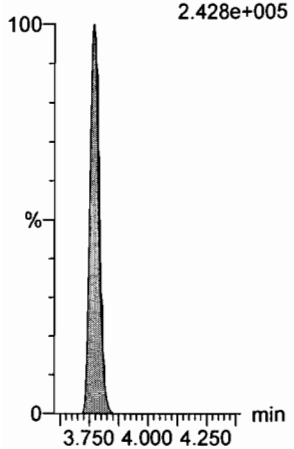
PFOSA



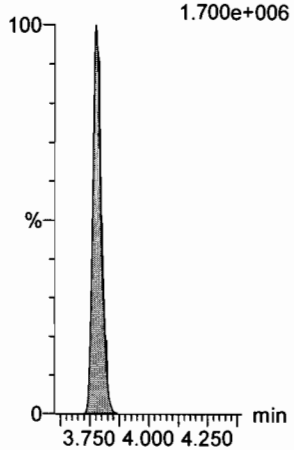
PFOS



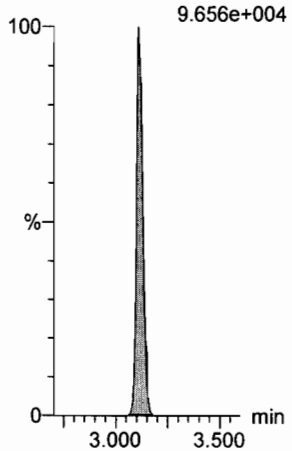
13C2-6:2 FTS



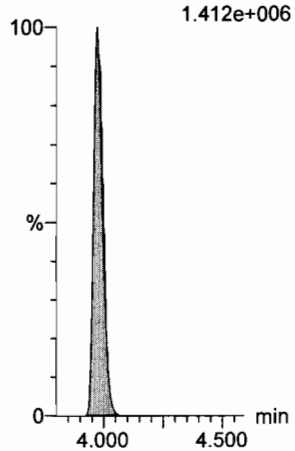
13C2-PFOA



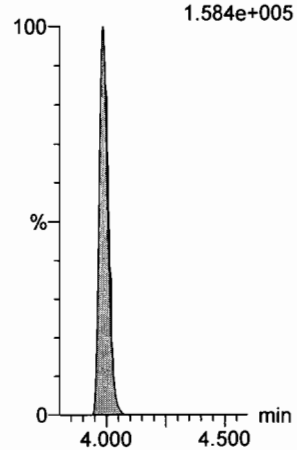
13C3-PFBS



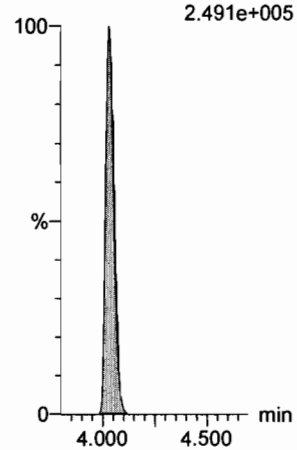
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
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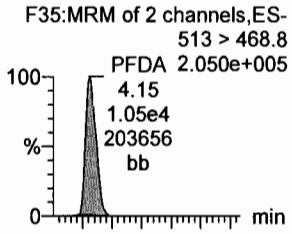
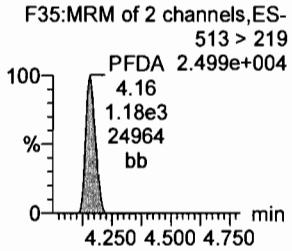
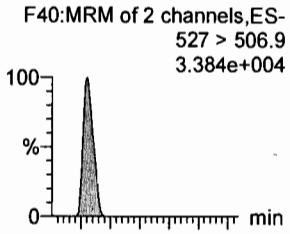
Name: 170810M2_5, Date: 10-Aug-2017, Time: 21:05:02, ID: ST170810M2-4 PFC CS1 17H1016, Description: PFC CS1 17H1016

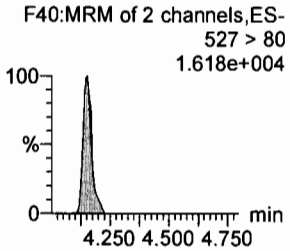
PFDA



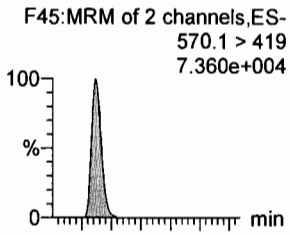


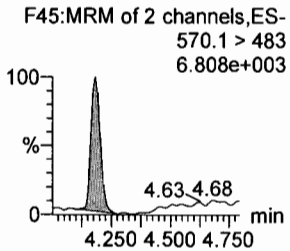
8:2 FTS



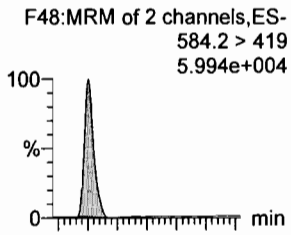


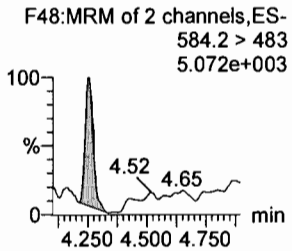
N-MeFOSAA



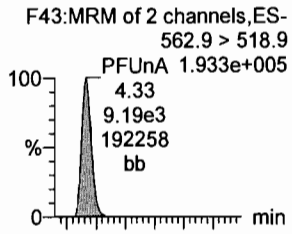


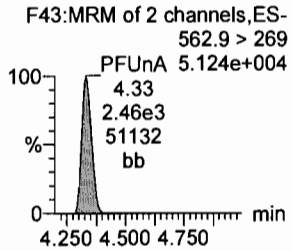
N-EtFOSAA



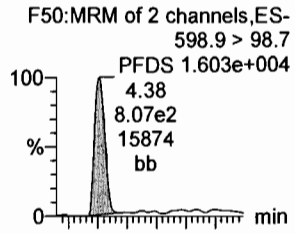


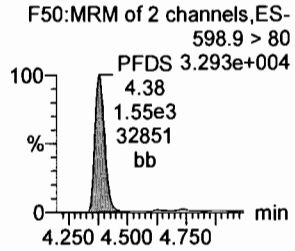
PFUnA



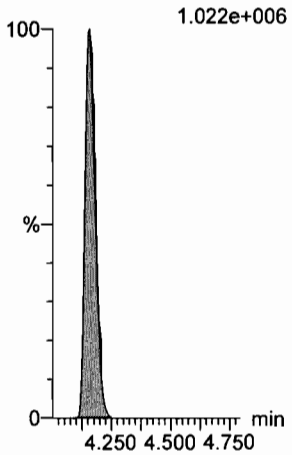


PFDS

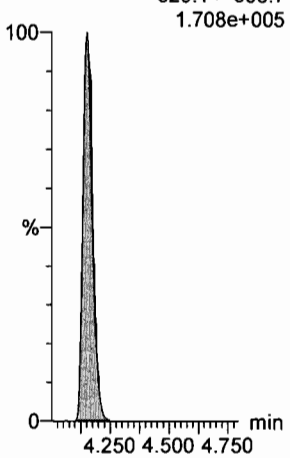




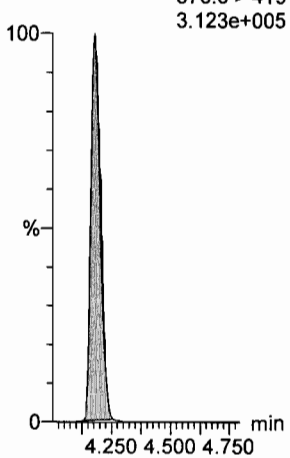
13C2-PFDA



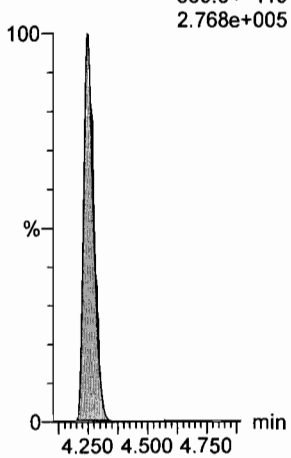
13C2-8:2 FTS



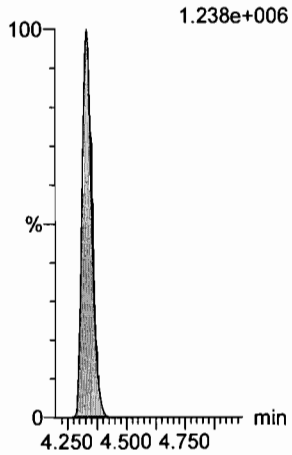
d3-N-MeFOSAA



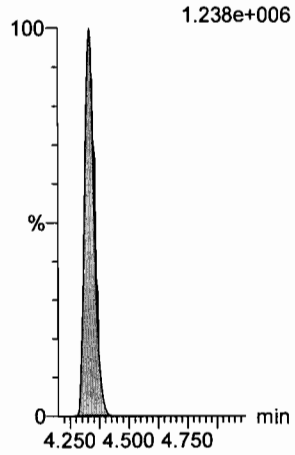
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



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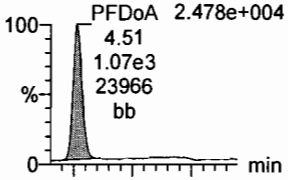
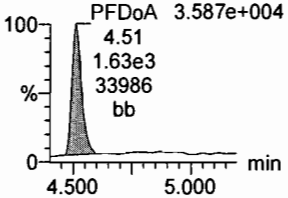
Name: 170810M2_5, Date: 10-Aug-2017, Time: 21:05:02, ID: ST170810M2-4 PFC CS1 17H1016, Description: PFC CS1 17H1016

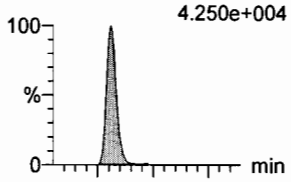
PFDoA
F51:MRM of 2 channels,ES-
612.9 > 318.8
PFDoA 2.478e+004
4.51
1.07e3
23966
bb



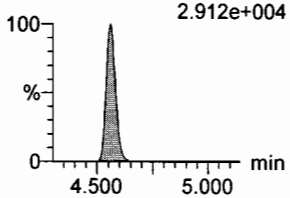
F51:MRM of 2 channels,ES-
612.9 > 569
PFDoA 3.587e+004
4.51
1.63e3
33986
bb



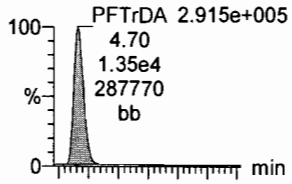
N-MeFOSA
F34:MRM of 2 channels,ES-
512.1 > 168.9
4.250e+004



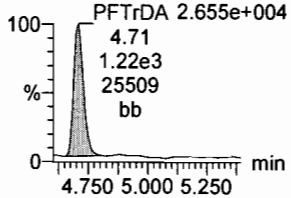
F34:MRM of 2 channels,ES-
512.1 > 219
2.912e+004



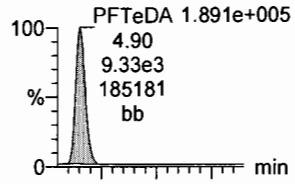
PFTrDA
F57:MRM of 2 channels,ES-
662.9 > 618.9
PFTrDA 2.915e+005
4.70
1.35e4
287770
bb



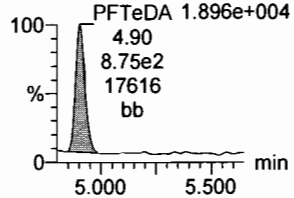
F57:MRM of 2 channels,ES-
662.9 > 319
PFTrDA 2.655e+004
4.71
1.22e3
25509
bb



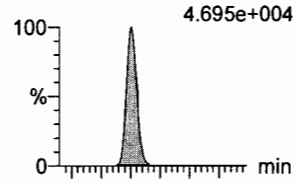
PFTeDA
F58:MRM of 4 channels,ES-
712.9 > 668.8
PFTeDA 1.891e+005
4.90
9.33e3
185181
bb



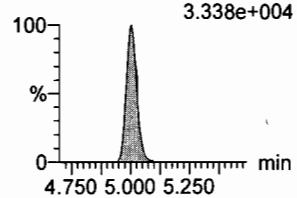
F58:MRM of 4 channels,ES-
712.9 > 369
PFTeDA 1.896e+004
4.90
8.75e2
17616
bb



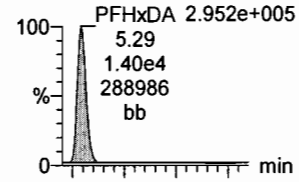
N-EtFOSA
F39:MRM of 2 channels,ES-
526.1 > 168.9
4.695e+004



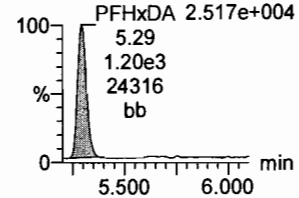
F39:MRM of 2 channels,ES-
526.1 > 219
3.338e+004



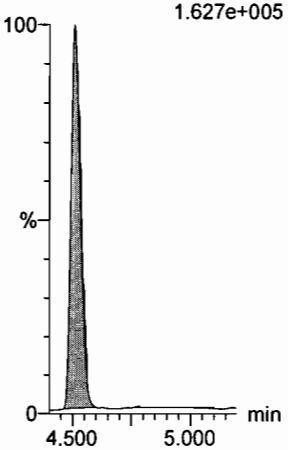
PFHxDA
F60:MRM of 2 channels,ES-
812.8 > 768.9
PFHxDA 2.952e+005
5.29
1.40e4
288986
bb



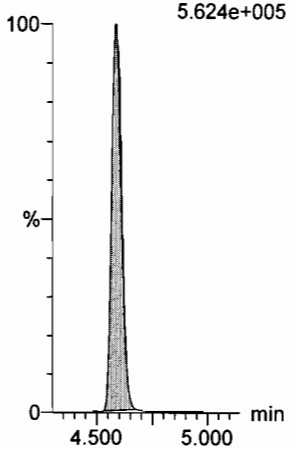
F60:MRM of 2 channels,ES-
812.8 > 219
PFHxDA 2.517e+004
5.29
1.20e3
24316
bb



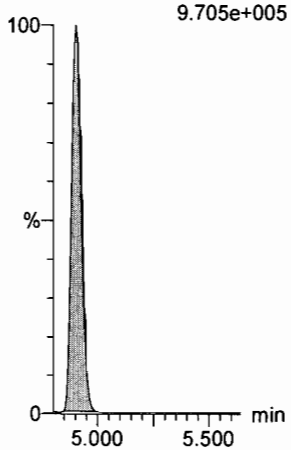
13C2-PFDoA
F52:MRM of 1 channel,ES-
615 > 569.7
1.627e+005



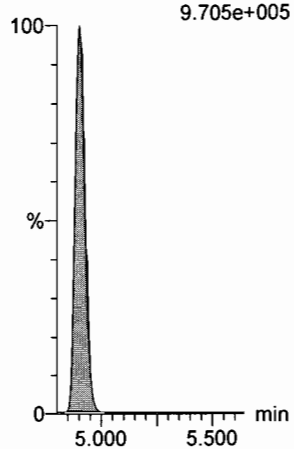
d3-N-MeFOSA
F37:MRM of 1 channel,ES-
515.2 > 168.9
5.624e+005



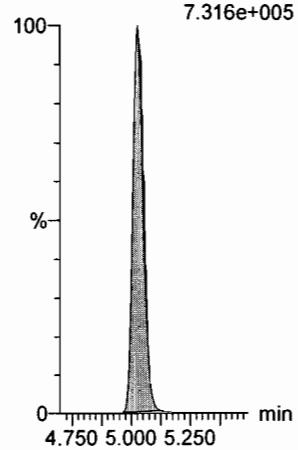
13C2-PFTeDA
F59:MRM of 2 channels,ES-
714.8 > 669.6
9.705e+005



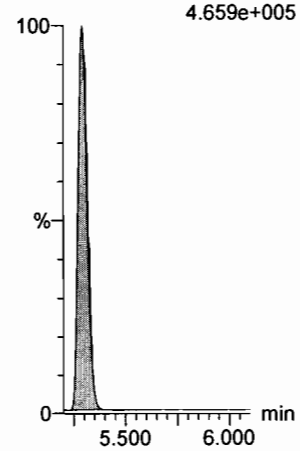
13C2-PFTeDA
F59:MRM of 2 channels,ES-
714.8 > 669.6
9.705e+005



d5-N-ETFOSA
F42:MRM of 1 channel,ES-
531.1 > 168.9
7.316e+005



13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.659e+005



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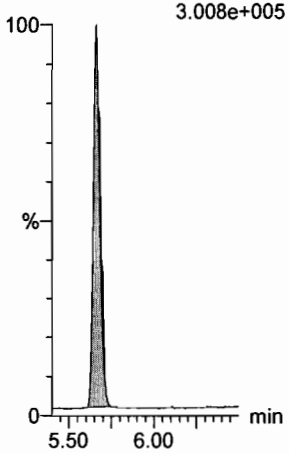
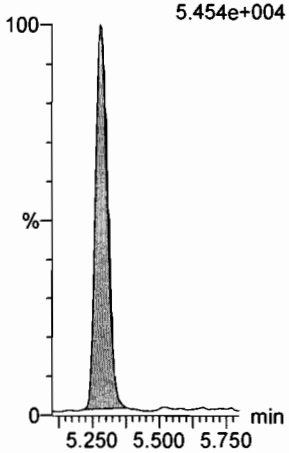
Name: 170810M2_5, Date: 10-Aug-2017, Time: 21:05:02, ID: ST170810M2-4 PFC CS1 17H1016, Description: PFC CS1 17H1016

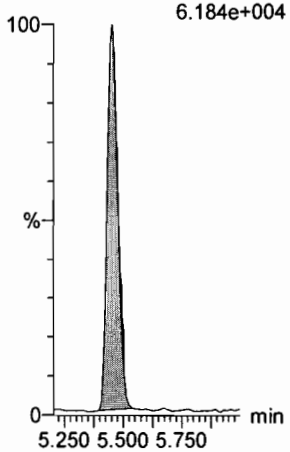
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
3.008e+005



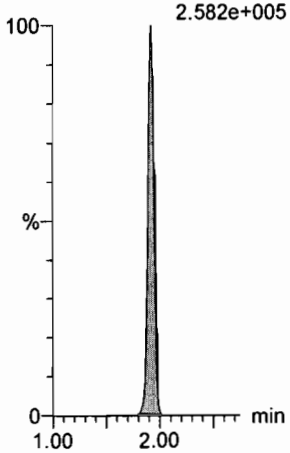
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
5.454e+004



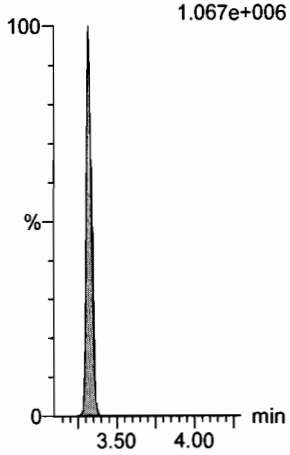
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
6.184e+004



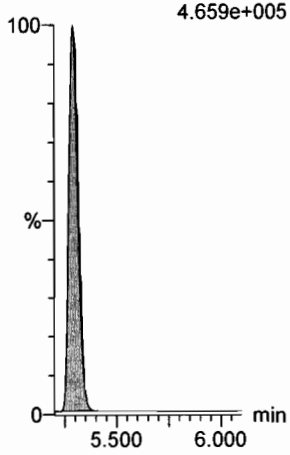
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.582e+005



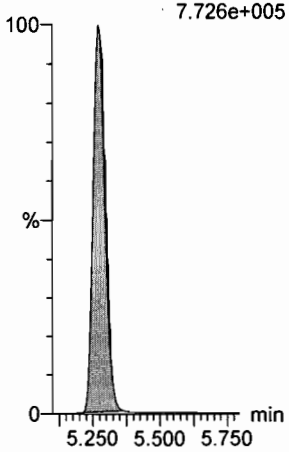
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
1.067e+006



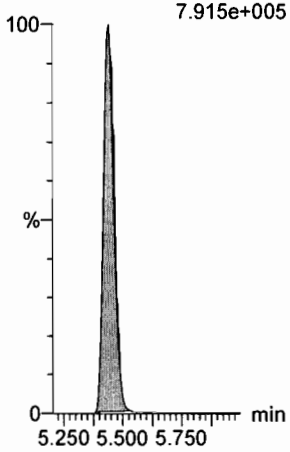
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.659e+005



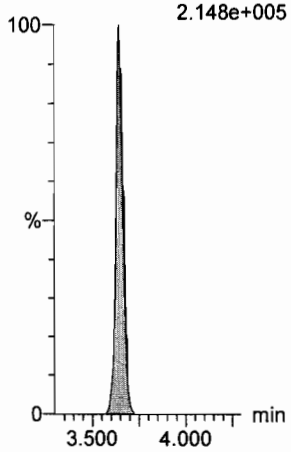
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
7.726e+005



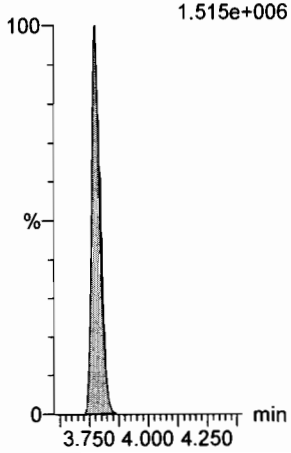
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
7.915e+005



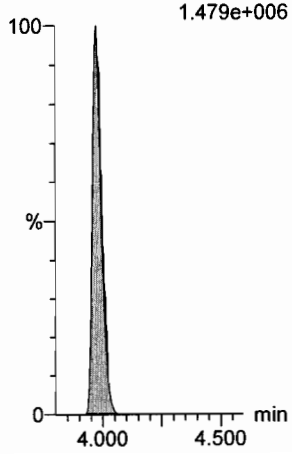
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
2.148e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.515e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.479e+006



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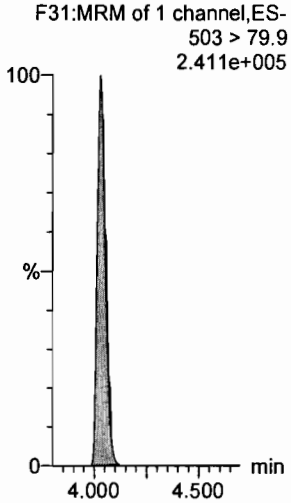
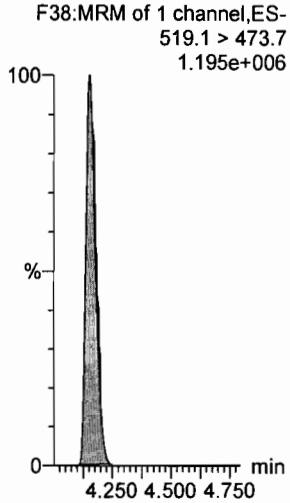
Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

Name: 170810M2_5, Date: 10-Aug-2017, Time: 21:05:02, ID: ST170810M2-4 PFC CS1 17H1016, Description: PFC CS1 17H1016

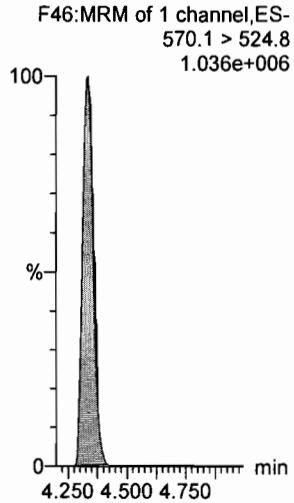
13C4-PFOS



13C6-PFDA



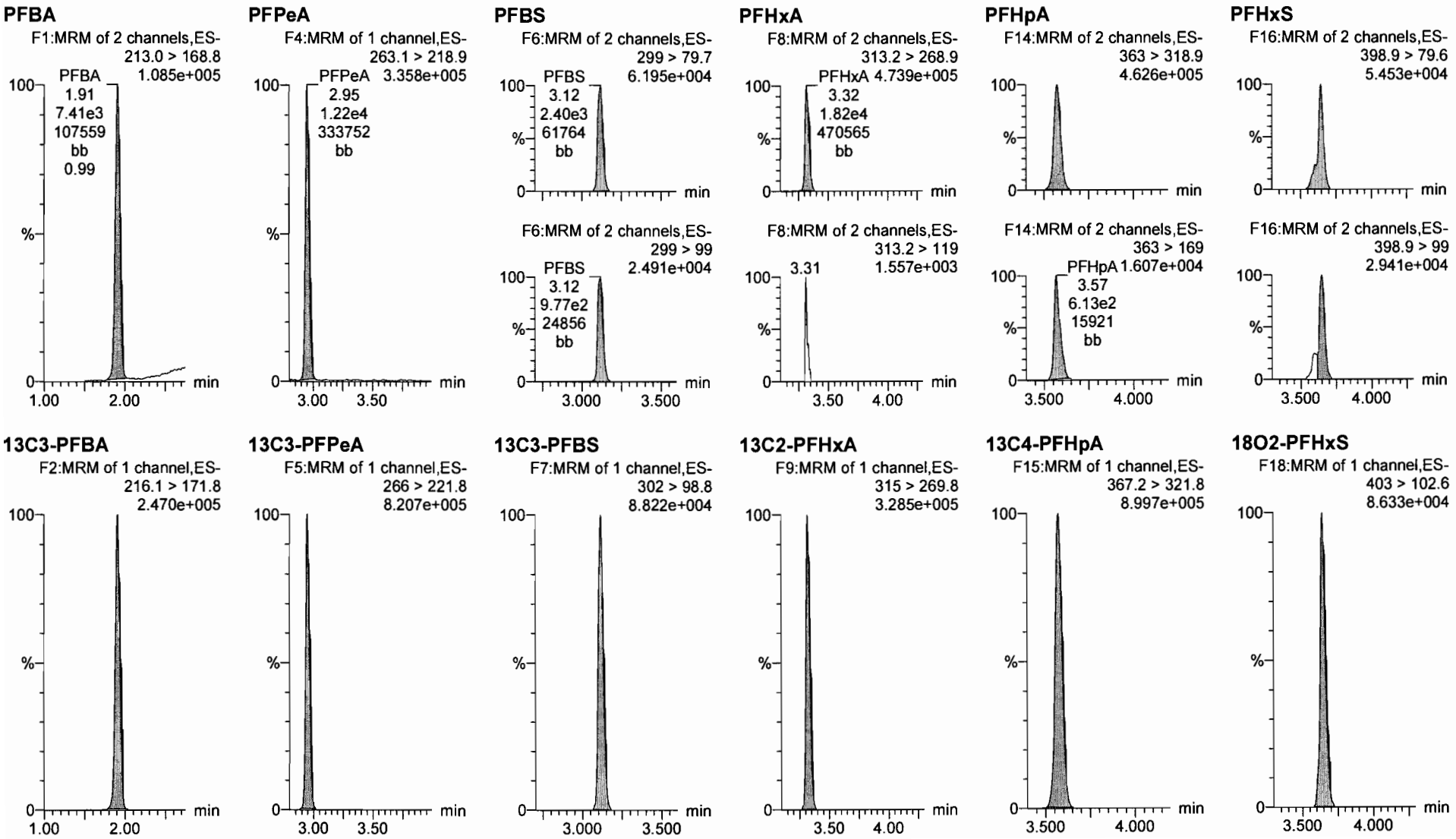
13C7-PFUnA



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

Name: 170810M2_6, Date: 10-Aug-2017, Time: 21:15:44, ID: ST170810M2-5 PFC CS2 17H1017, Description: PFC CS2 17H1017



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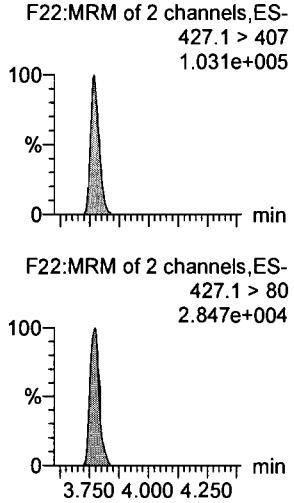
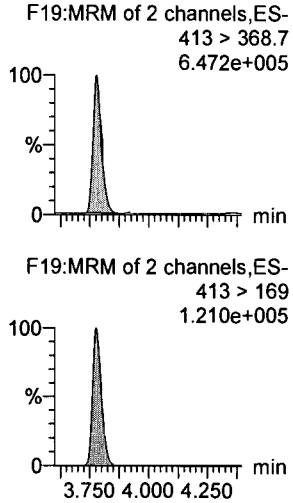
Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

Name: 170810M2_6, Date: 10-Aug-2017, Time: 21:15:44, ID: ST170810M2-5 PFC CS2 17H1017, Description: PFC CS2 17H1017

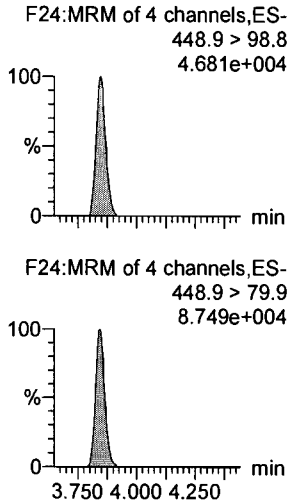
6:2 FTS



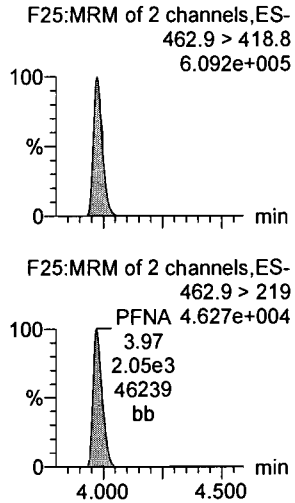
PFOA



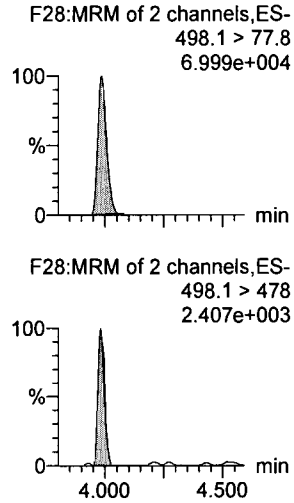
PFHpS



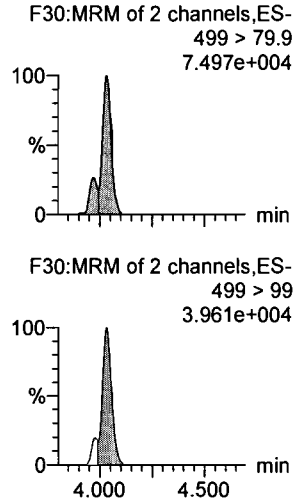
PFNA



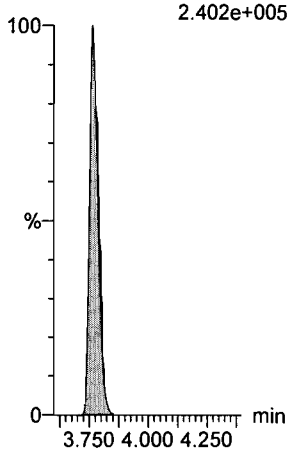
PFOSA



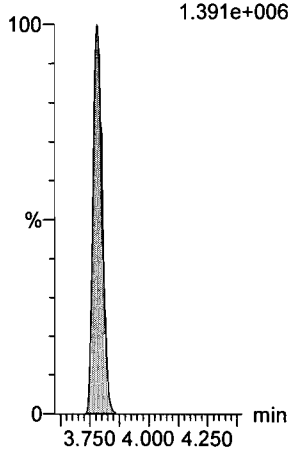
PFOS



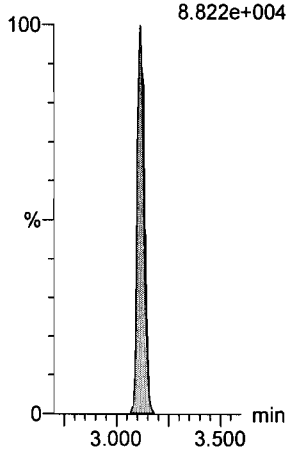
13C2-6:2 FTS



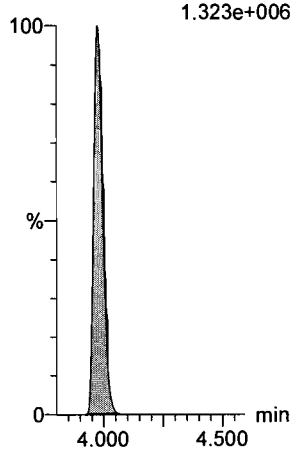
13C2-PFOA



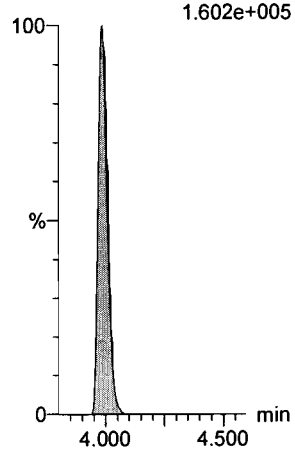
13C3-PFBS



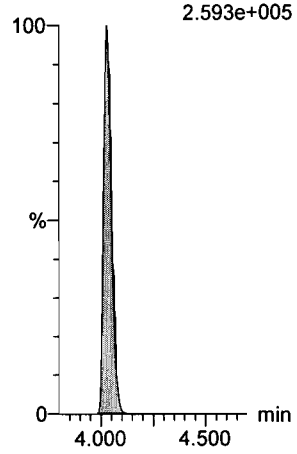
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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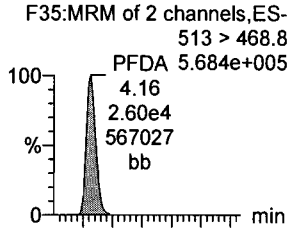
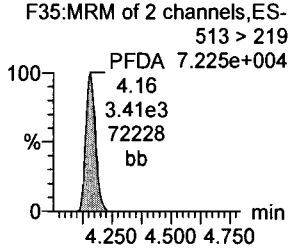
Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

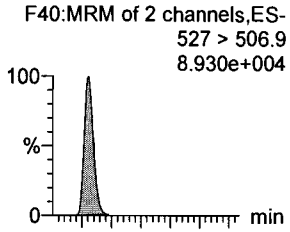
Name: 170810M2_6, Date: 10-Aug-2017, Time: 21:15:44, ID: ST170810M2-5 PFC CS2 17H1017, Description: PFC CS2 17H1017

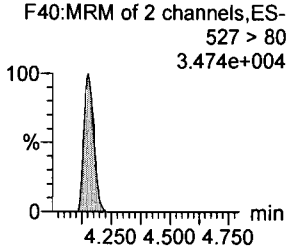
PFDA



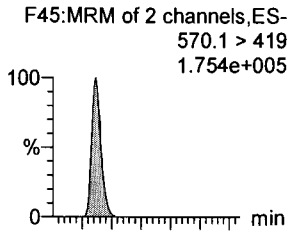


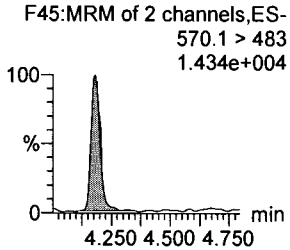
8:2 FTS



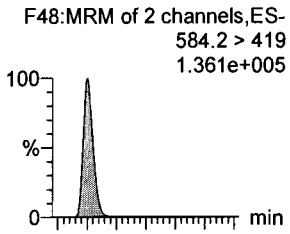


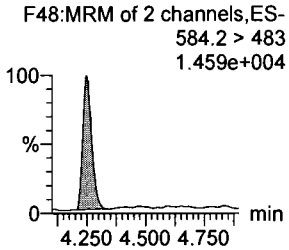
N-MeFOSAA



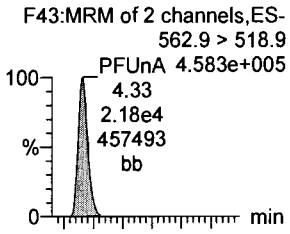


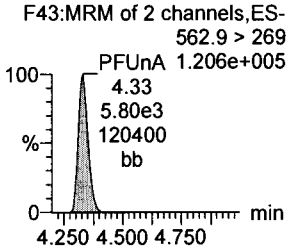
N-EtFOSAA



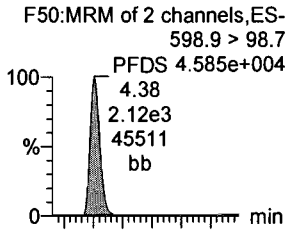


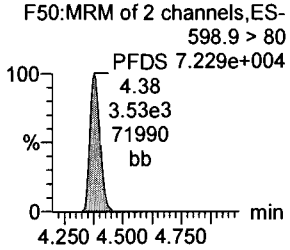
PFUnA



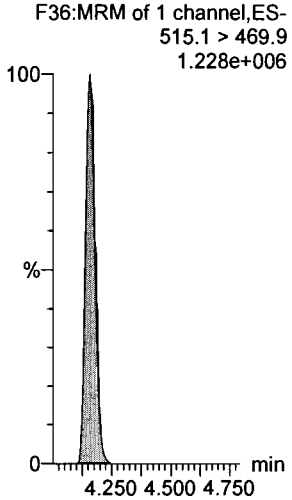


PFDS

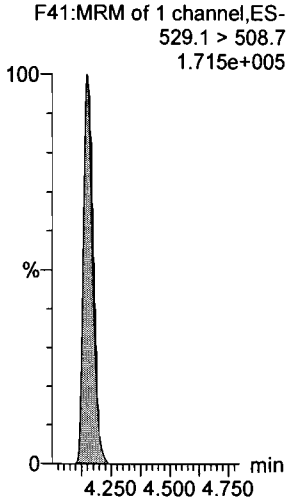




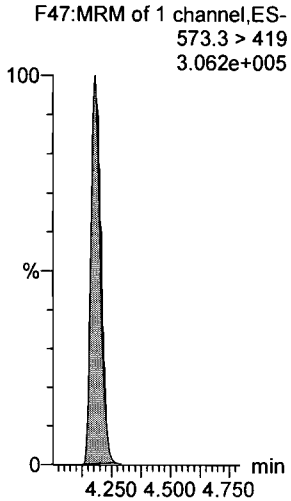
13C2-PFDA



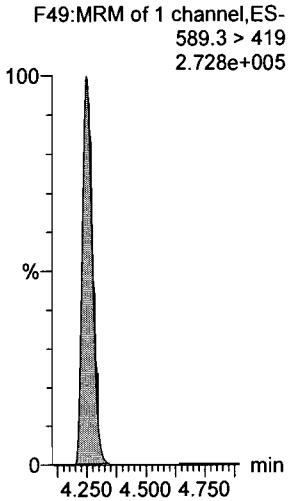
13C2-8:2 FTS



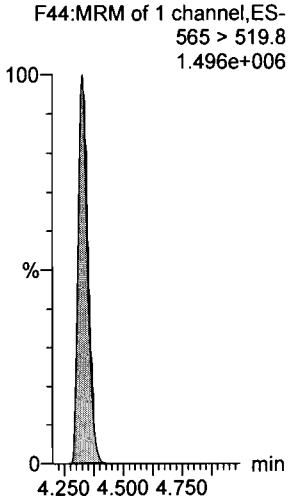
d3-N-MeFOSAA



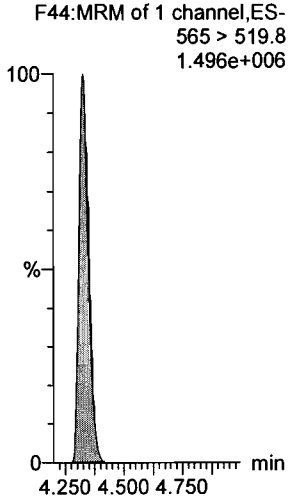
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



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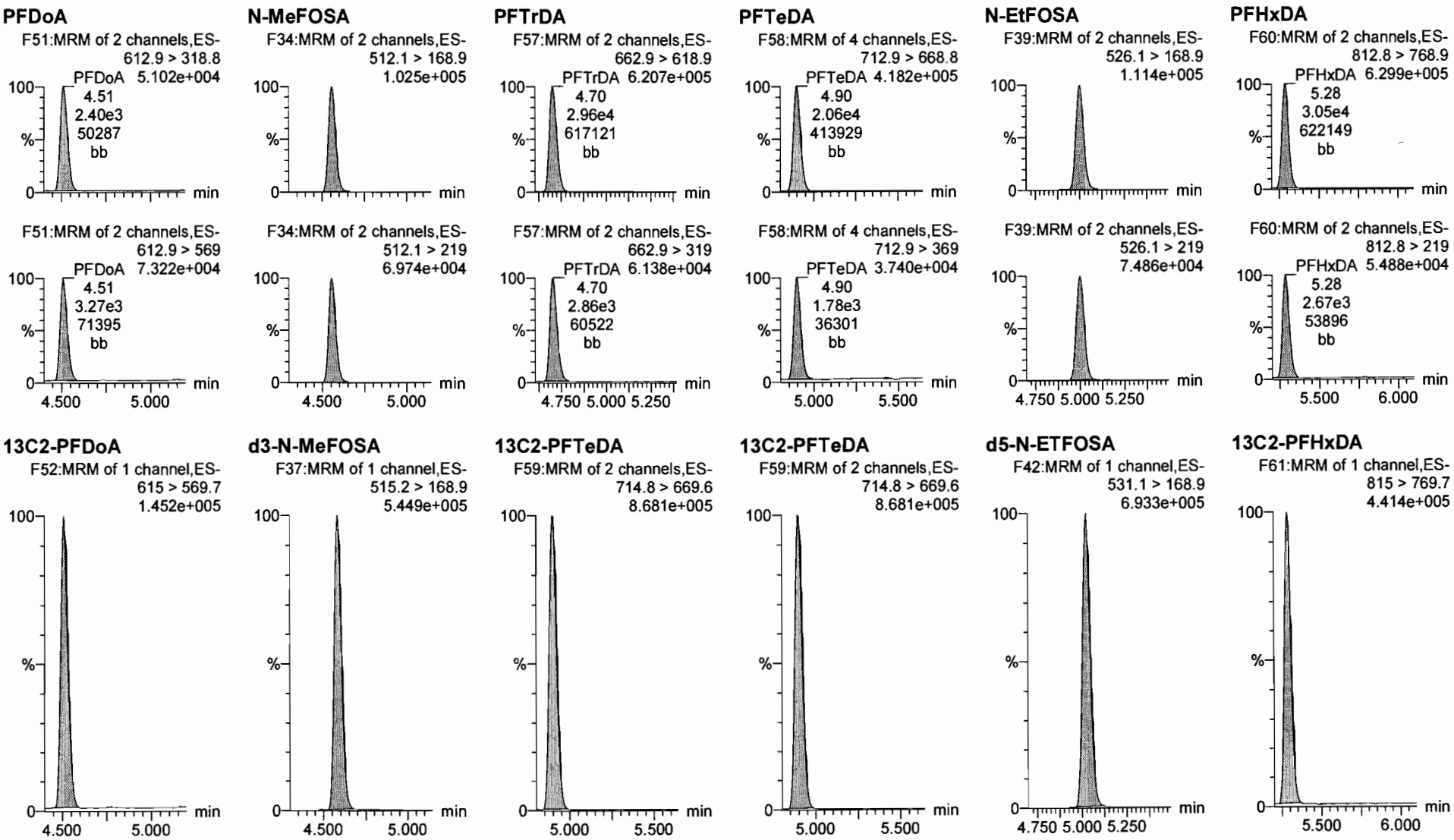
Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

Name: 170810M2_6, Date: 10-Aug-2017, Time: 21:15:44, ID: ST170810M2-5 PFC CS2 17H1017, Description: PFC CS2 17H1017



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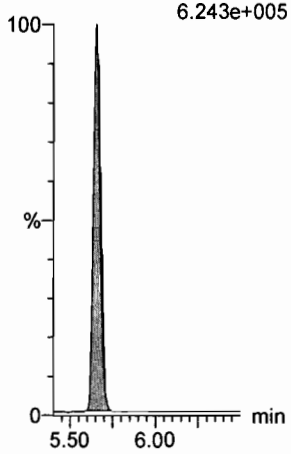
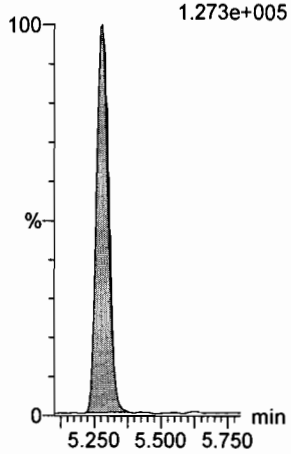
Name: 170810M2_6, Date: 10-Aug-2017, Time: 21:15:44, ID: ST170810M2-5 PFC CS2 17H1017, Description: PFC CS2 17H1017

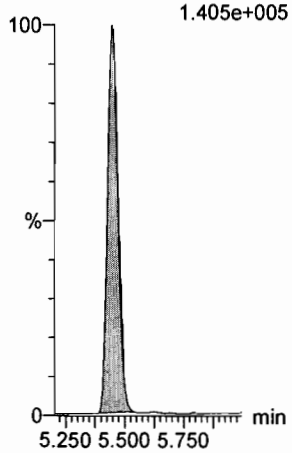
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
6.243e+005



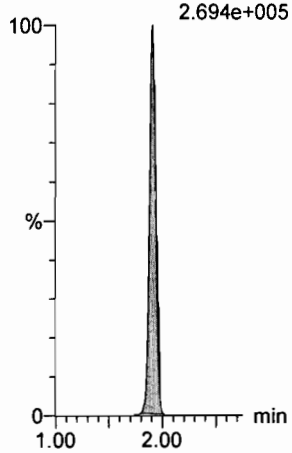
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
1.273e+005



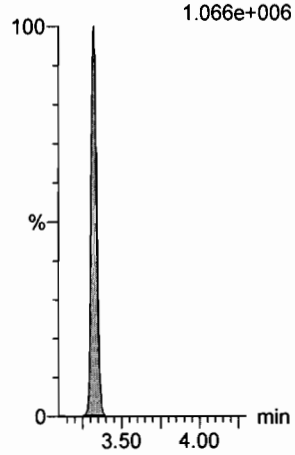
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
1.405e+005



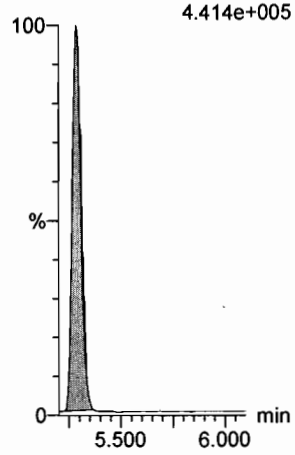
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.694e+005



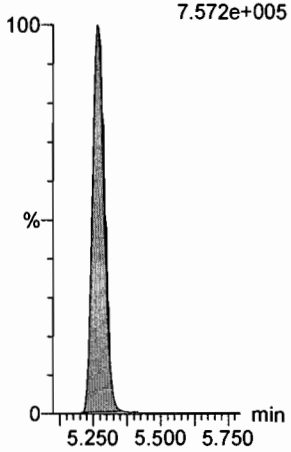
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
1.066e+006



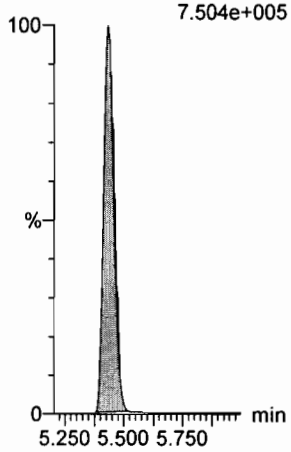
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.414e+005



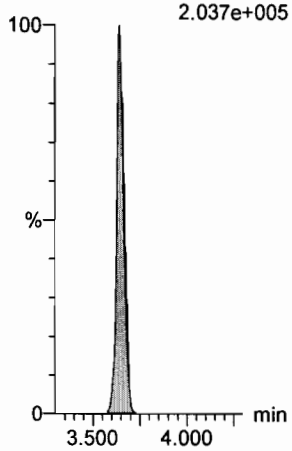
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
7.572e+005



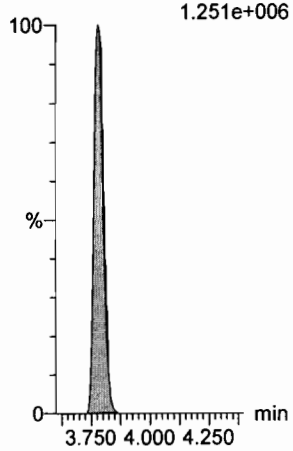
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
7.504e+005



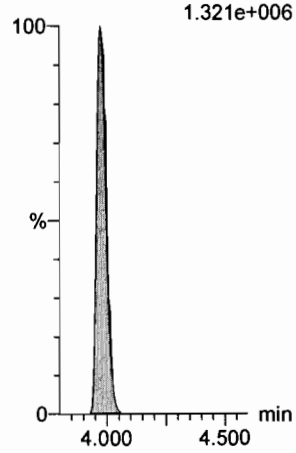
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
2.037e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.251e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.321e+006



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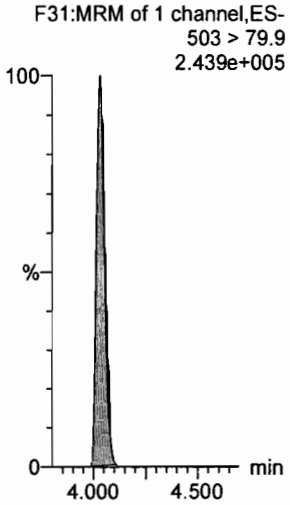
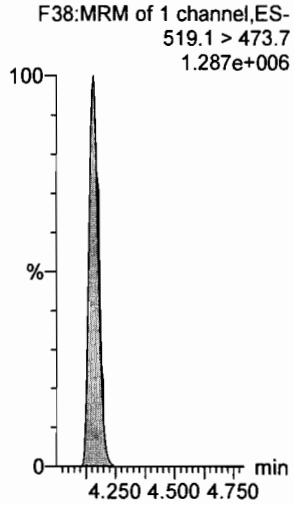
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

Name: 170810M2_6, Date: 10-Aug-2017, Time: 21:15:44, ID: ST170810M2-5 PFC CS2 17H1017, Description: PFC CS2 17H1017

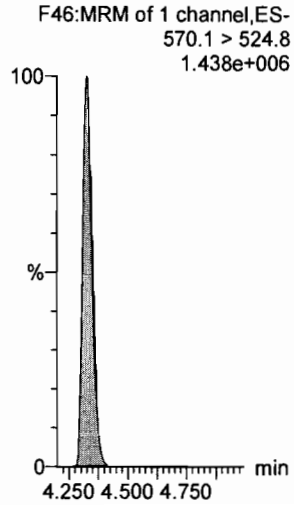
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
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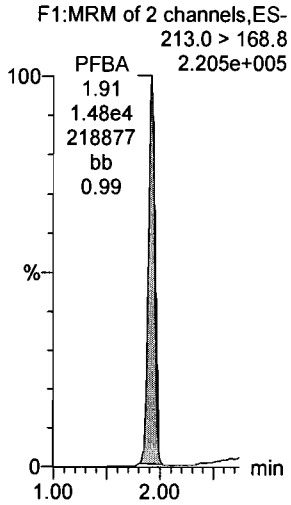
Name: 170810M2_7, Date: 10-Aug-2017, Time: 21:26:22, ID: ST170810M2-6 PFC CS3 17H1005, Description: PFC CS3 17H1005

PFBA



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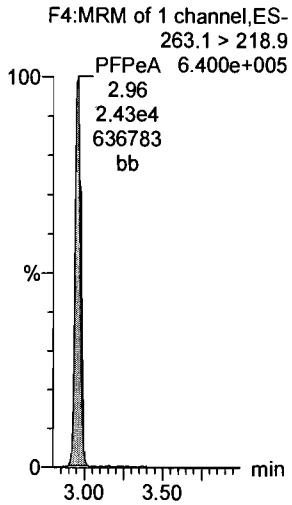

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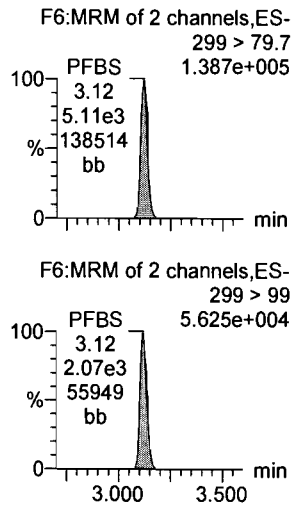
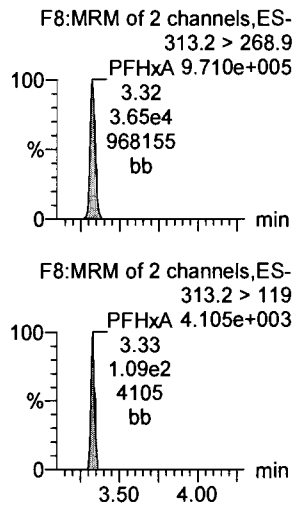


PFHxA



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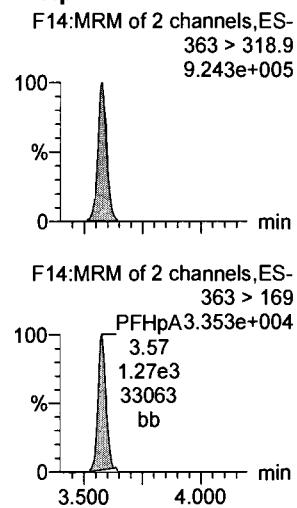

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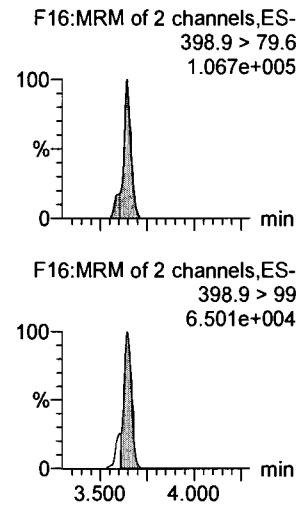

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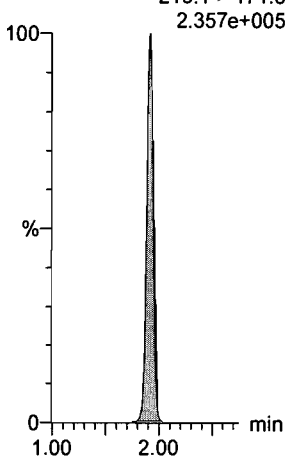

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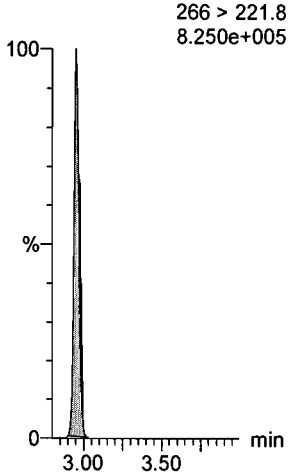
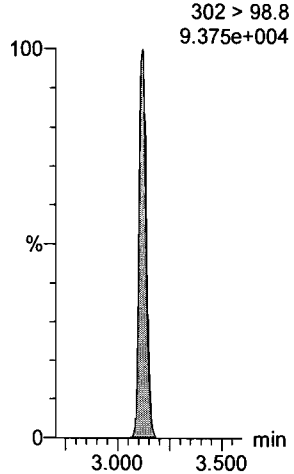
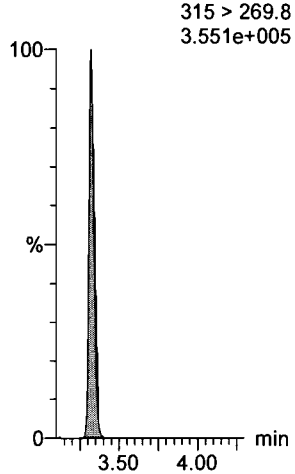


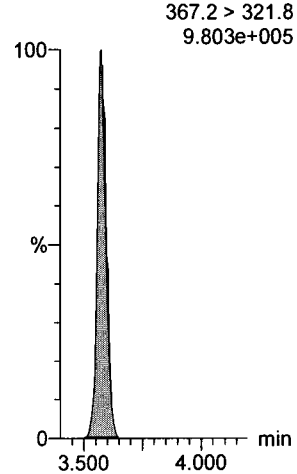
13C3-PFBS



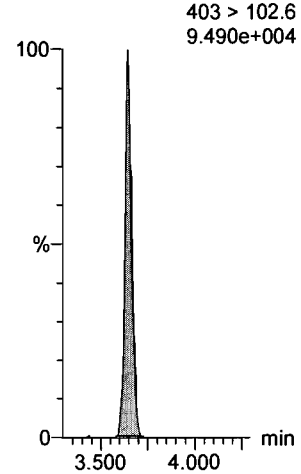
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



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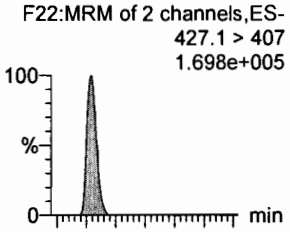
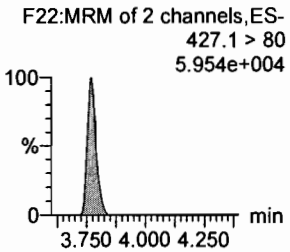
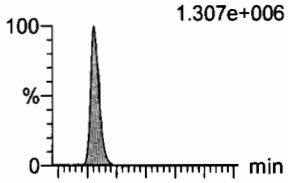
Name: 170810M2_7, Date: 10-Aug-2017, Time: 21:26:22, ID: ST170810M2-6 PFC CS3 17H1005, Description: PFC CS3 17H1005

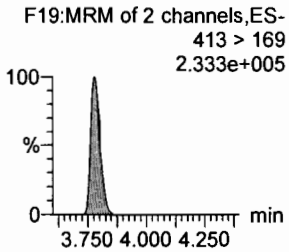
6:2 FTS



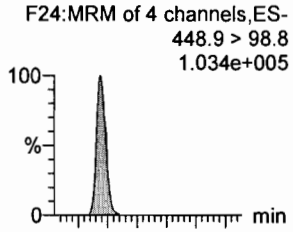


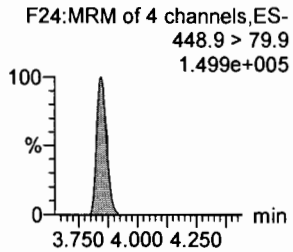
PFOA





PFHpS





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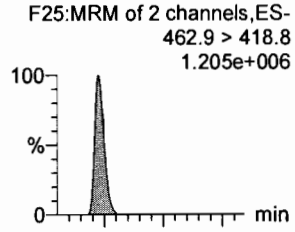
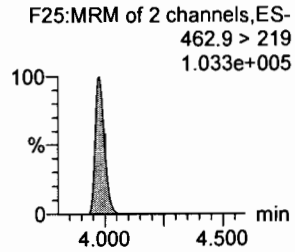
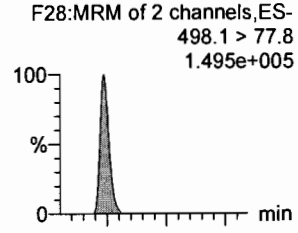
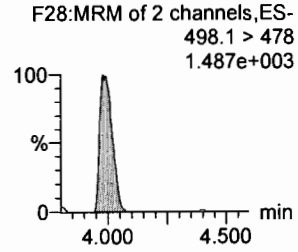


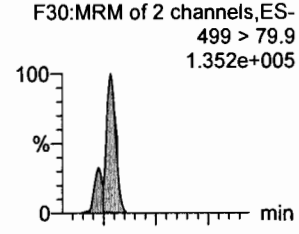


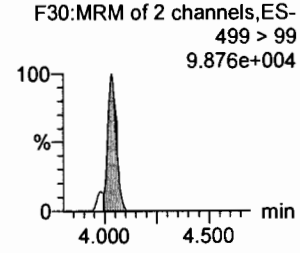
PFOSA



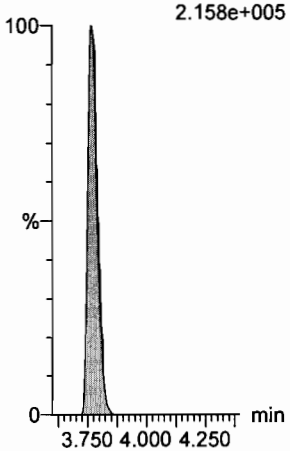


PFOS

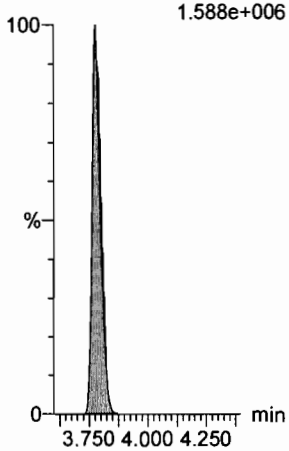




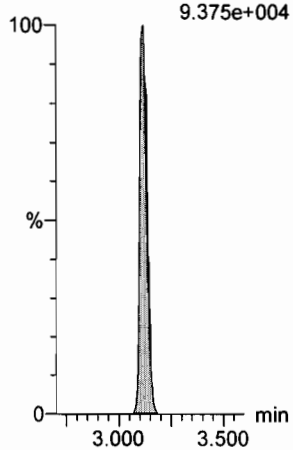
13C2-6:2 FTS



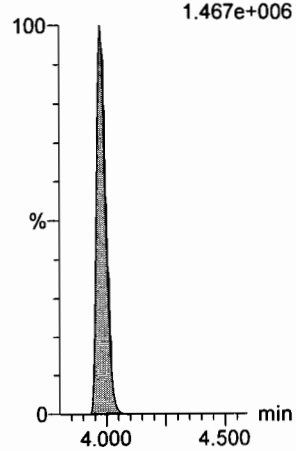
13C2-PFOA



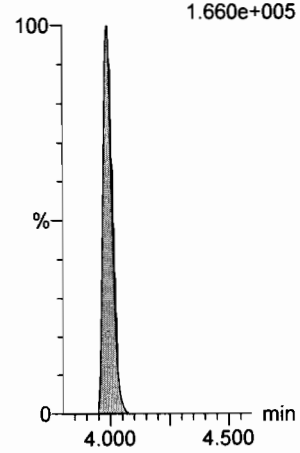
13C3-PFBS



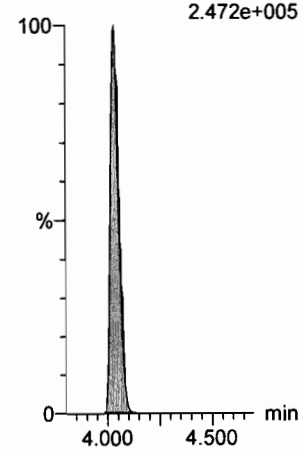
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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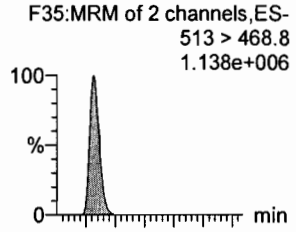
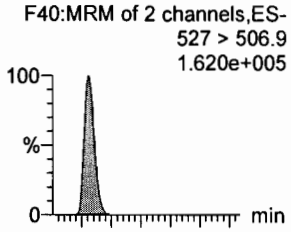
Name: 170810M2_7, Date: 10-Aug-2017, Time: 21:26:22, ID: ST170810M2-6 PFC CS3 17H1005, Description: PFC CS3 17H1005

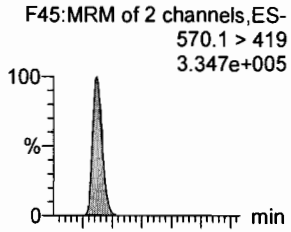
PFDA



8:2 FTS



N-MeFOSAA



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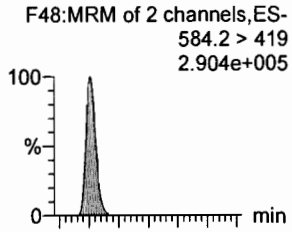
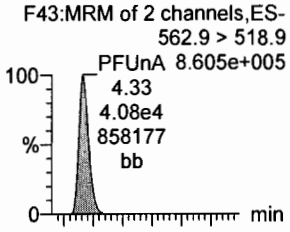


PFUnA



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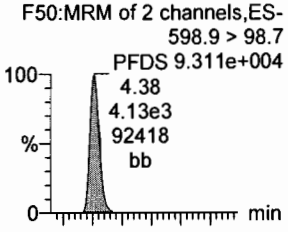
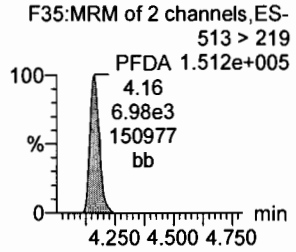
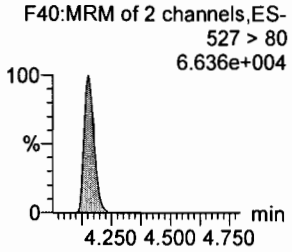
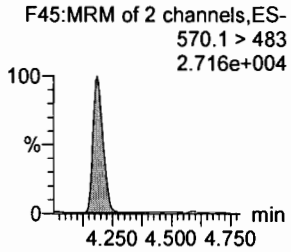
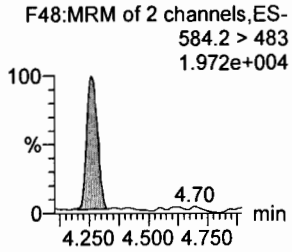
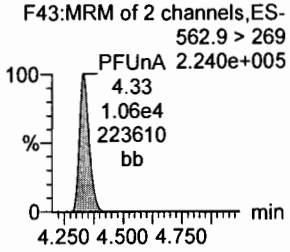


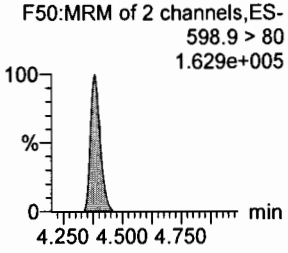




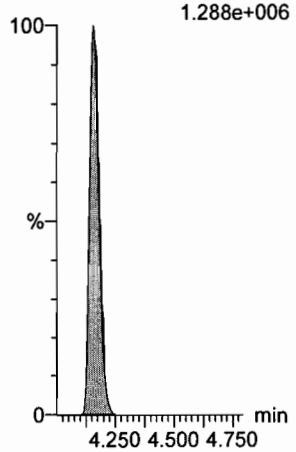




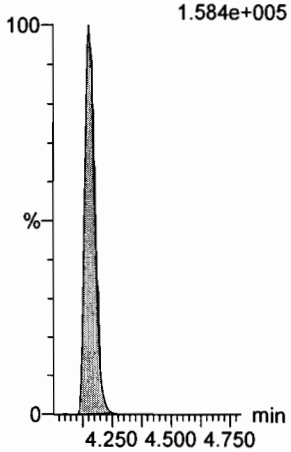




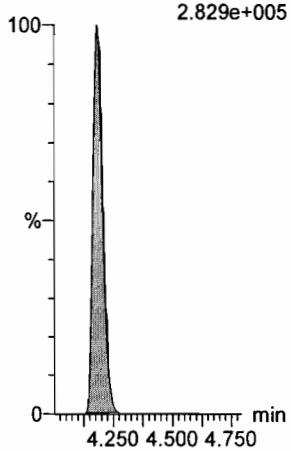
13C2-PFDA



13C2-8:2 FTS



d3-N-MeFOSAA



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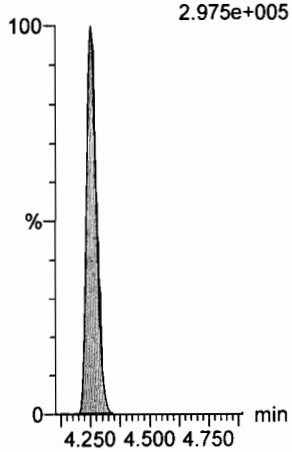
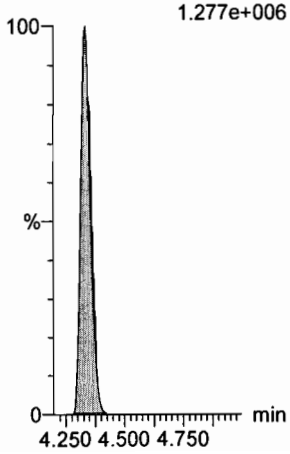


13C2-PFUnA



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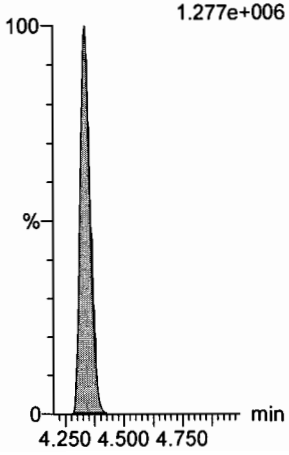

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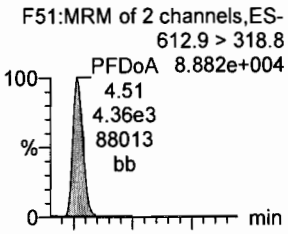
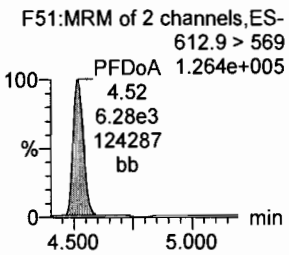
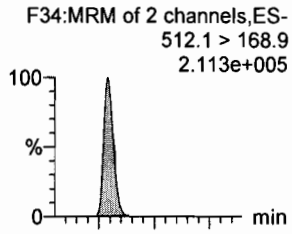
Name: 170810M2_7, Date: 10-Aug-2017, Time: 21:26:22, ID: ST170810M2-6 PFC CS3 17H1005, Description: PFC CS3 17H1005

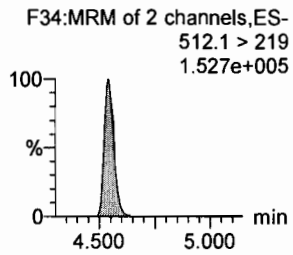
PFDoA



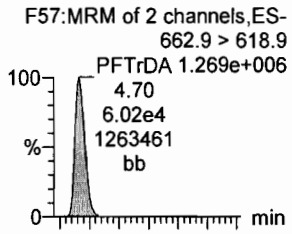


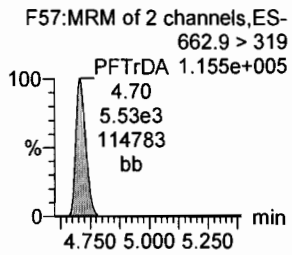
N-MeFOSA



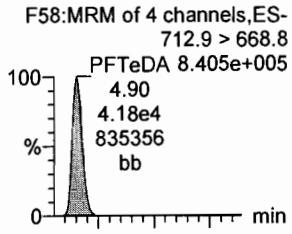


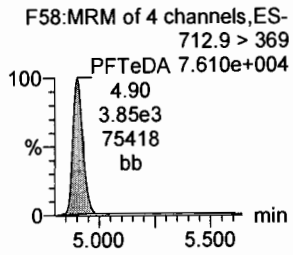
PFTrDA



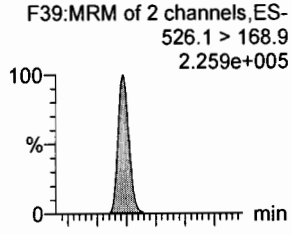


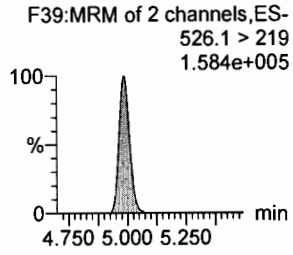
PFTeDA



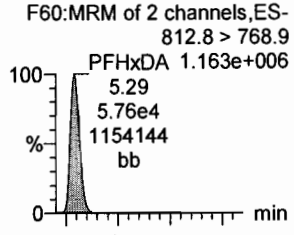


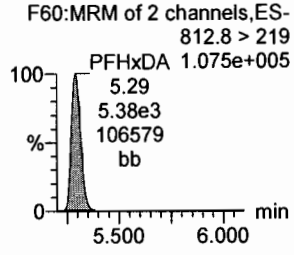
N-EtFOSA



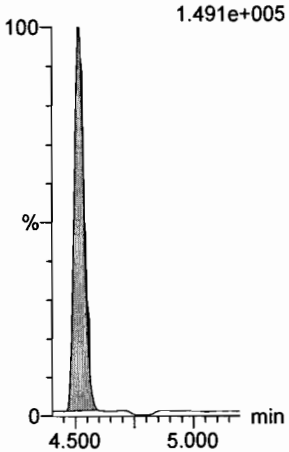


PFHxDA

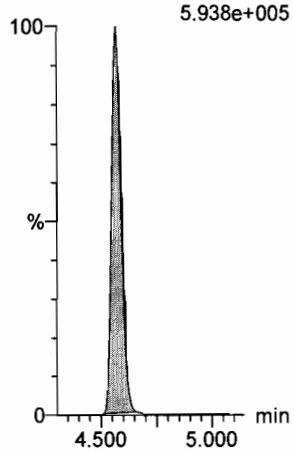




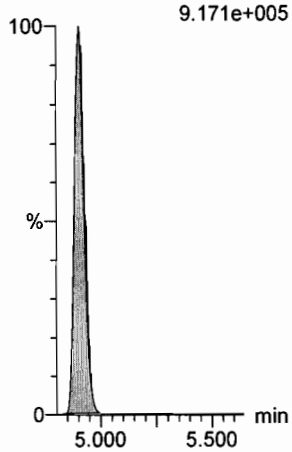
13C2-PFDoA



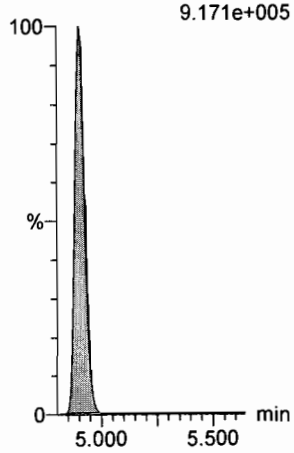
d3-N-MeFOSA



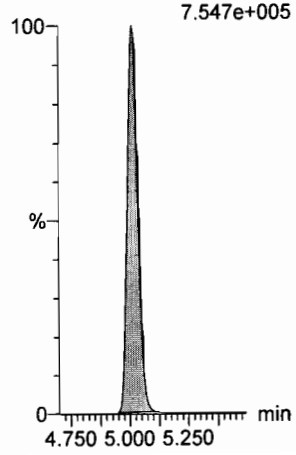
13C2-PFTeDA



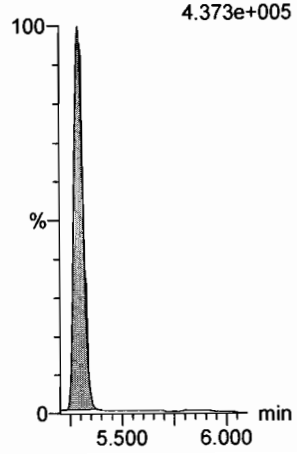
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



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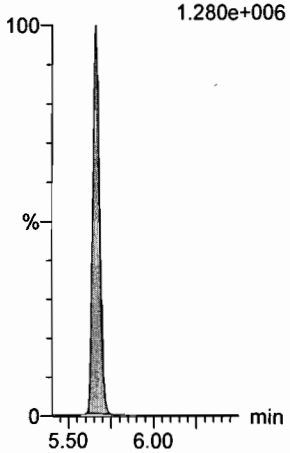
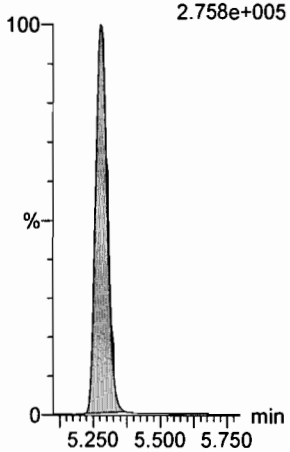
Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

Name: 170810M2_7, Date: 10-Aug-2017, Time: 21:26:22, ID: ST170810M2-6 PFC CS3 17H1005, Description: PFC CS3 17H1005

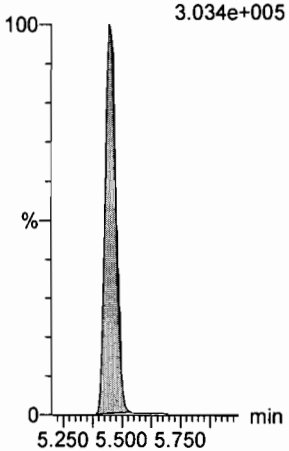
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
1.280e+006



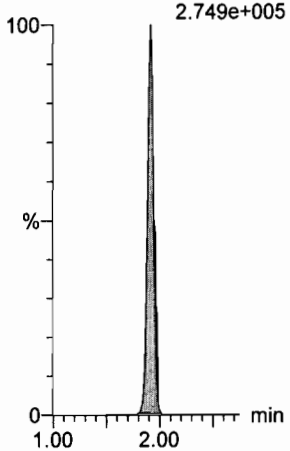
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
2.758e+005



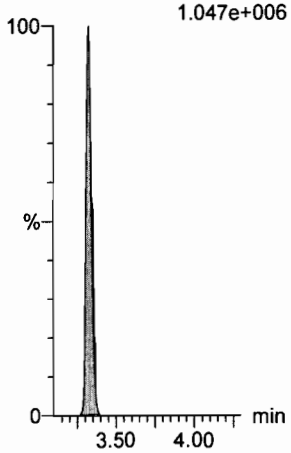
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
3.034e+005



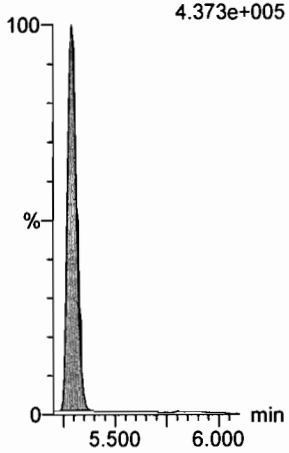
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.749e+005



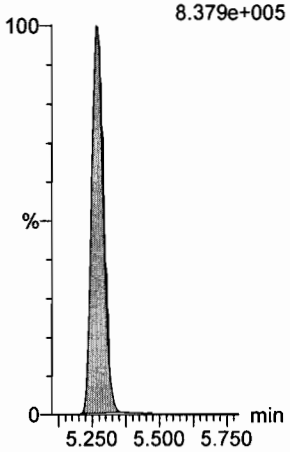
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
1.047e+006



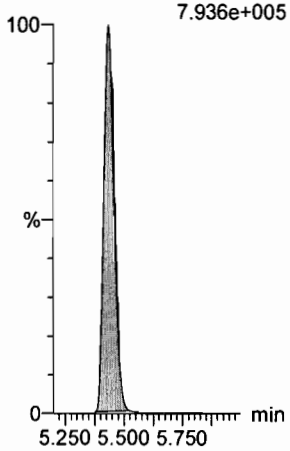
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.373e+005



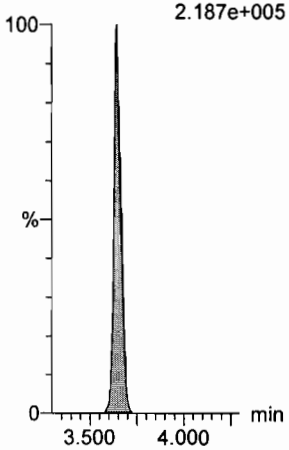
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
8.379e+005



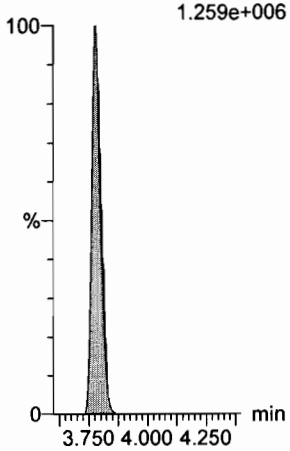
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
7.936e+005



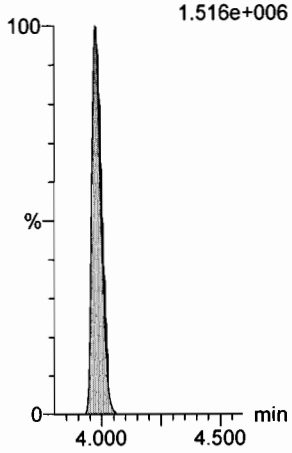
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
2.187e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.259e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.516e+006



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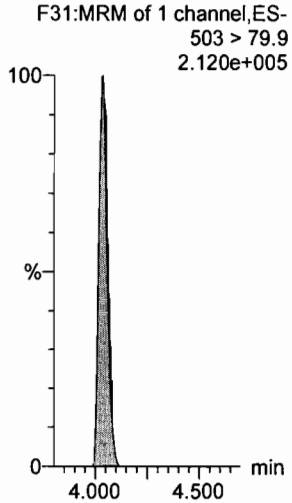
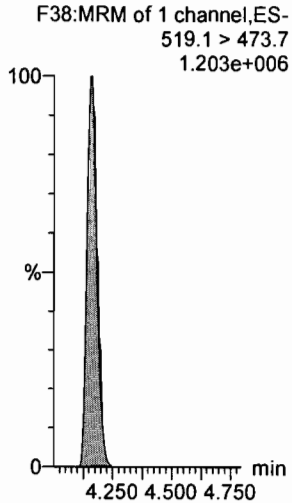
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

Name: 170810M2_7, Date: 10-Aug-2017, Time: 21:26:22, ID: ST170810M2-6 PFC CS3 17H1005, Description: PFC CS3 17H1005

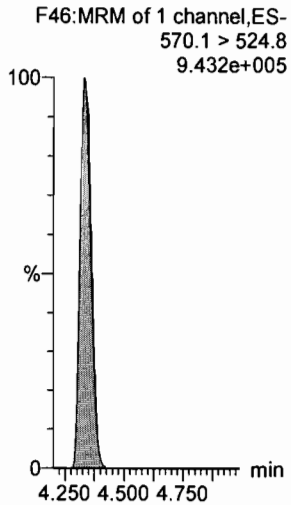
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
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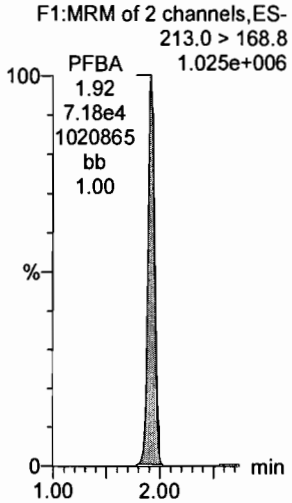
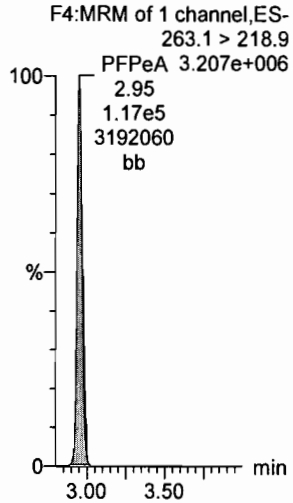
Name: 170810M2_8, Date: 10-Aug-2017, Time: 21:37:09, ID: ST170810M2-7 PFC CS4 17H1018, Description: PFC CS4 17H1018

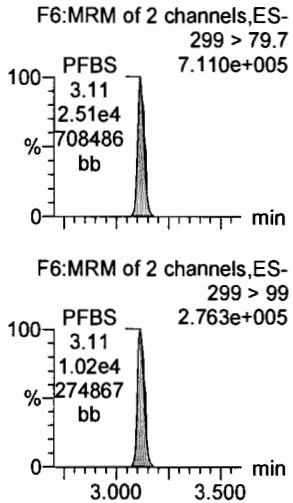
PFBA



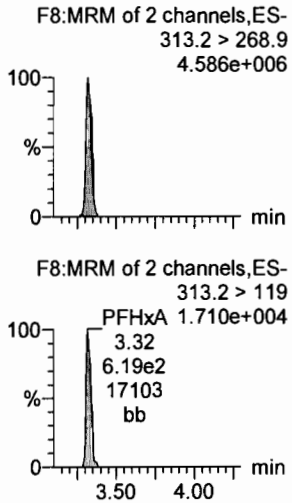
PFPeA



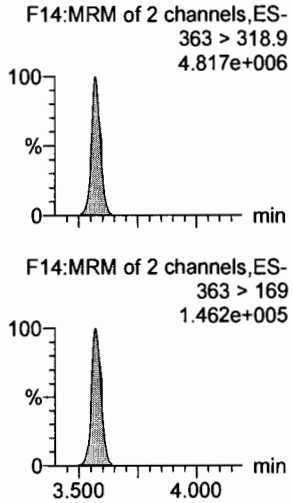
PFBS



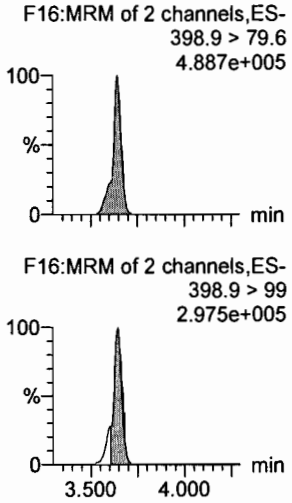
PFHxA



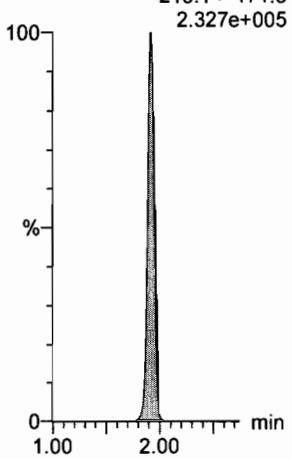
PFHpA



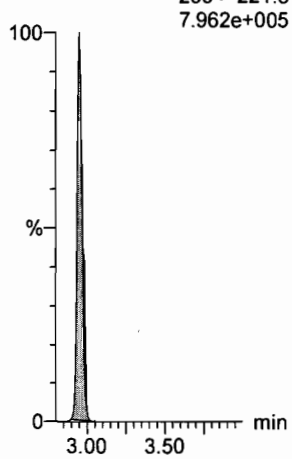
PFHxS



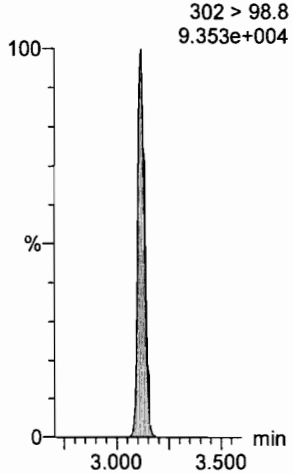
13C3-PFBA



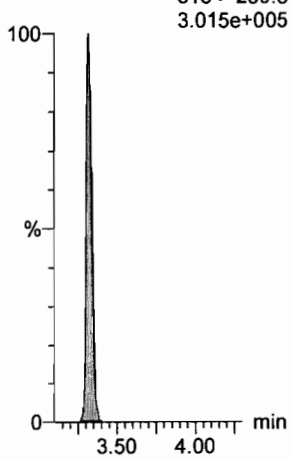
13C3-PFPeA



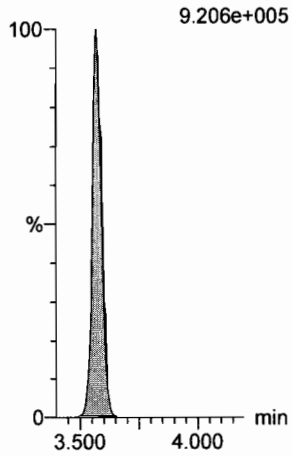
13C3-PFBS



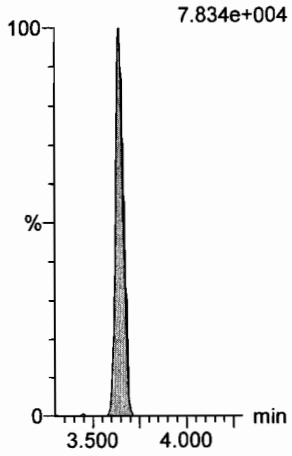
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



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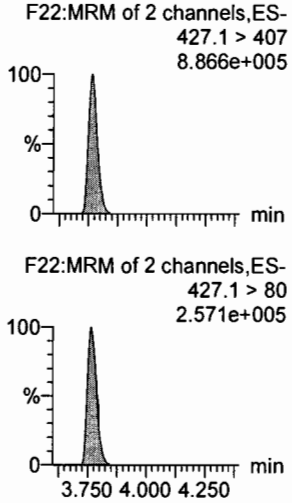
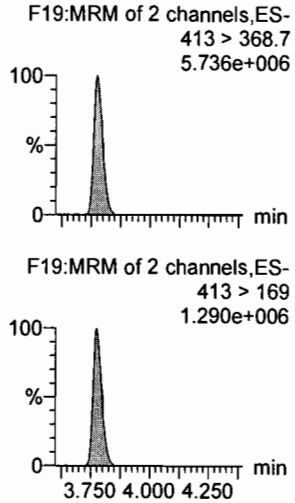
Name: 170810M2_8, Date: 10-Aug-2017, Time: 21:37:09, ID: ST170810M2-7 PFC CS4 17H1018, Description: PFC CS4 17H1018

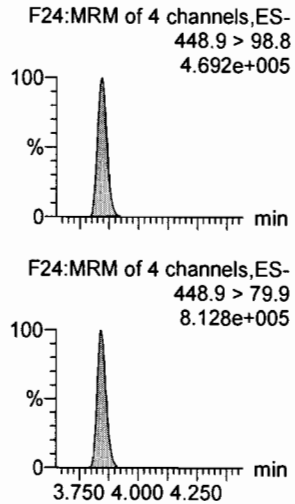
6:2 FTS



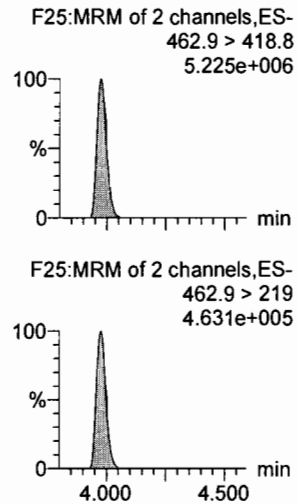
PFOA



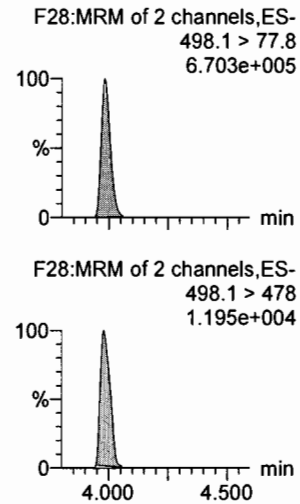
PFHpS



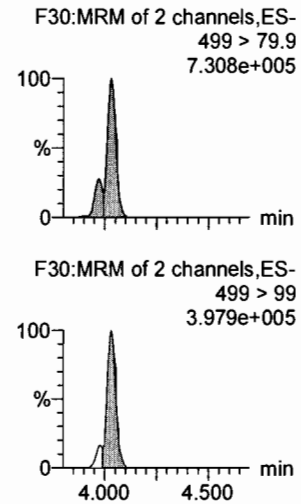
PFNA



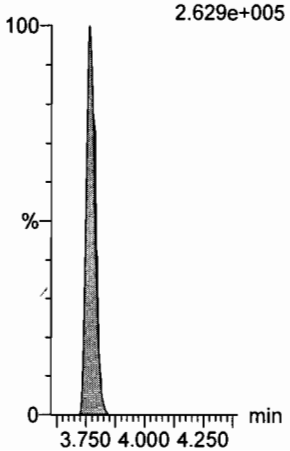
PFOSA



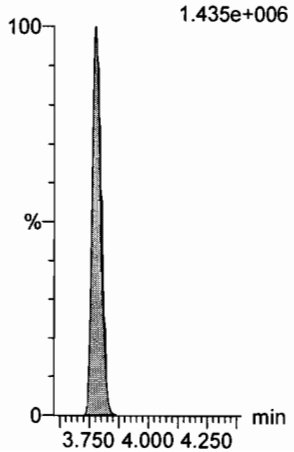
PFOS



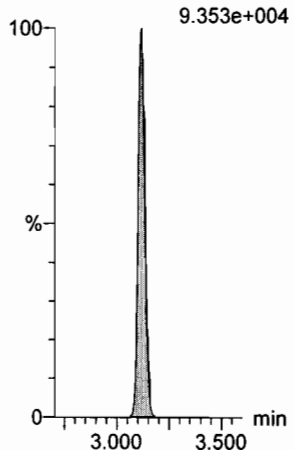
13C2-6:2 FTS



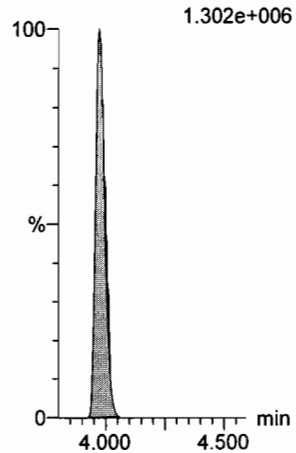
13C2-PFOA



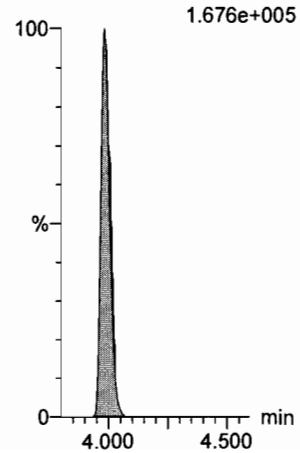
13C3-PFBS



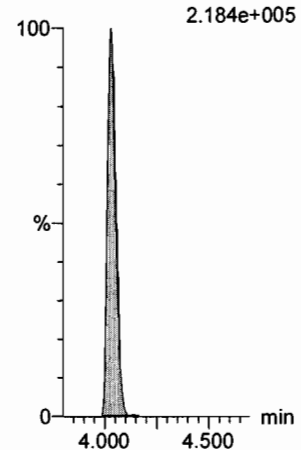
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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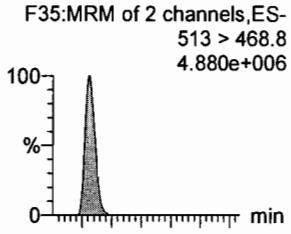
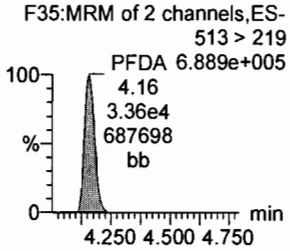
Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

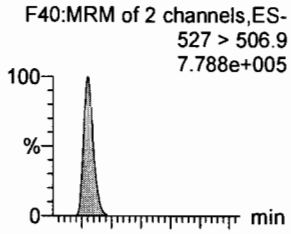
Name: 170810M2_8, Date: 10-Aug-2017, Time: 21:37:09, ID: ST170810M2-7 PFC CS4 17H1018, Description: PFC CS4 17H1018

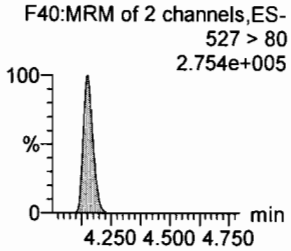
PFDA



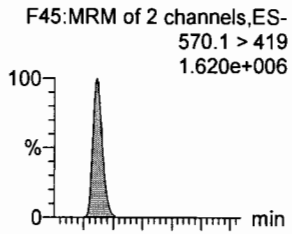


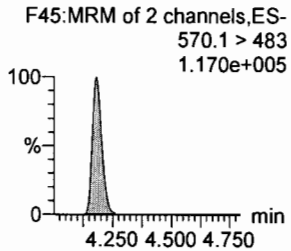
8:2 FTS





N-MeFOSAA





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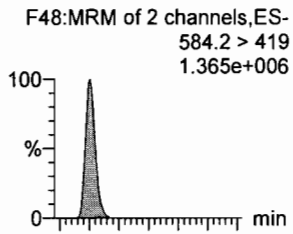
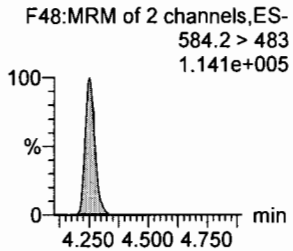
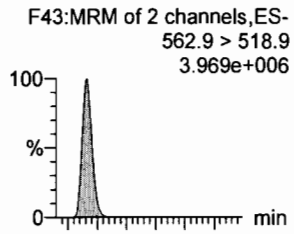
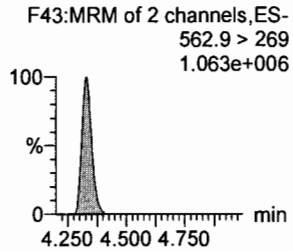


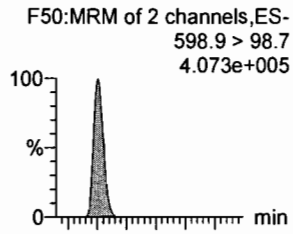


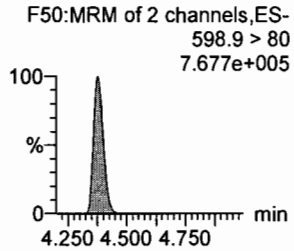
PFUnA



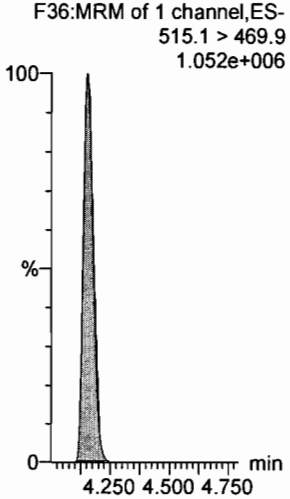


PFDS

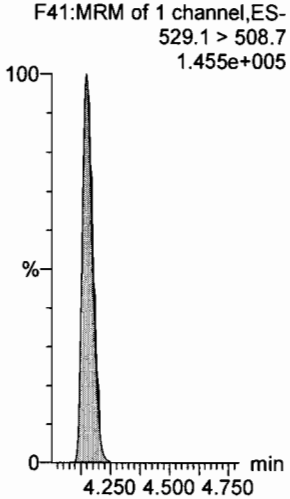




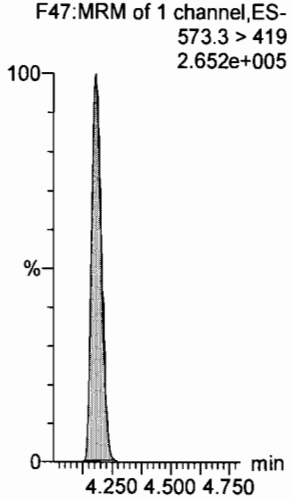
13C2-PFDA



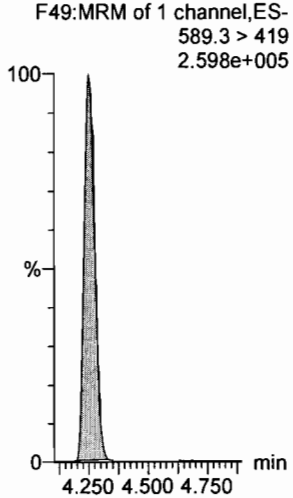
13C2-8:2 FTS



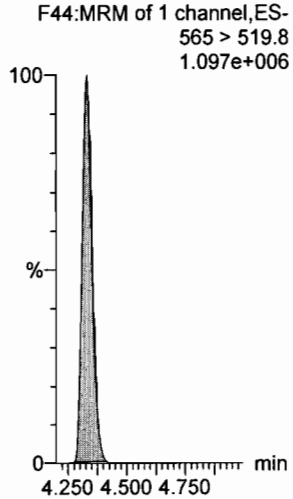
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFUnA



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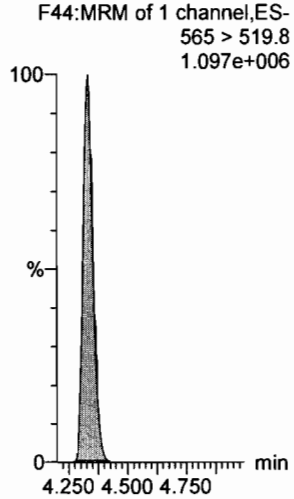

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Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
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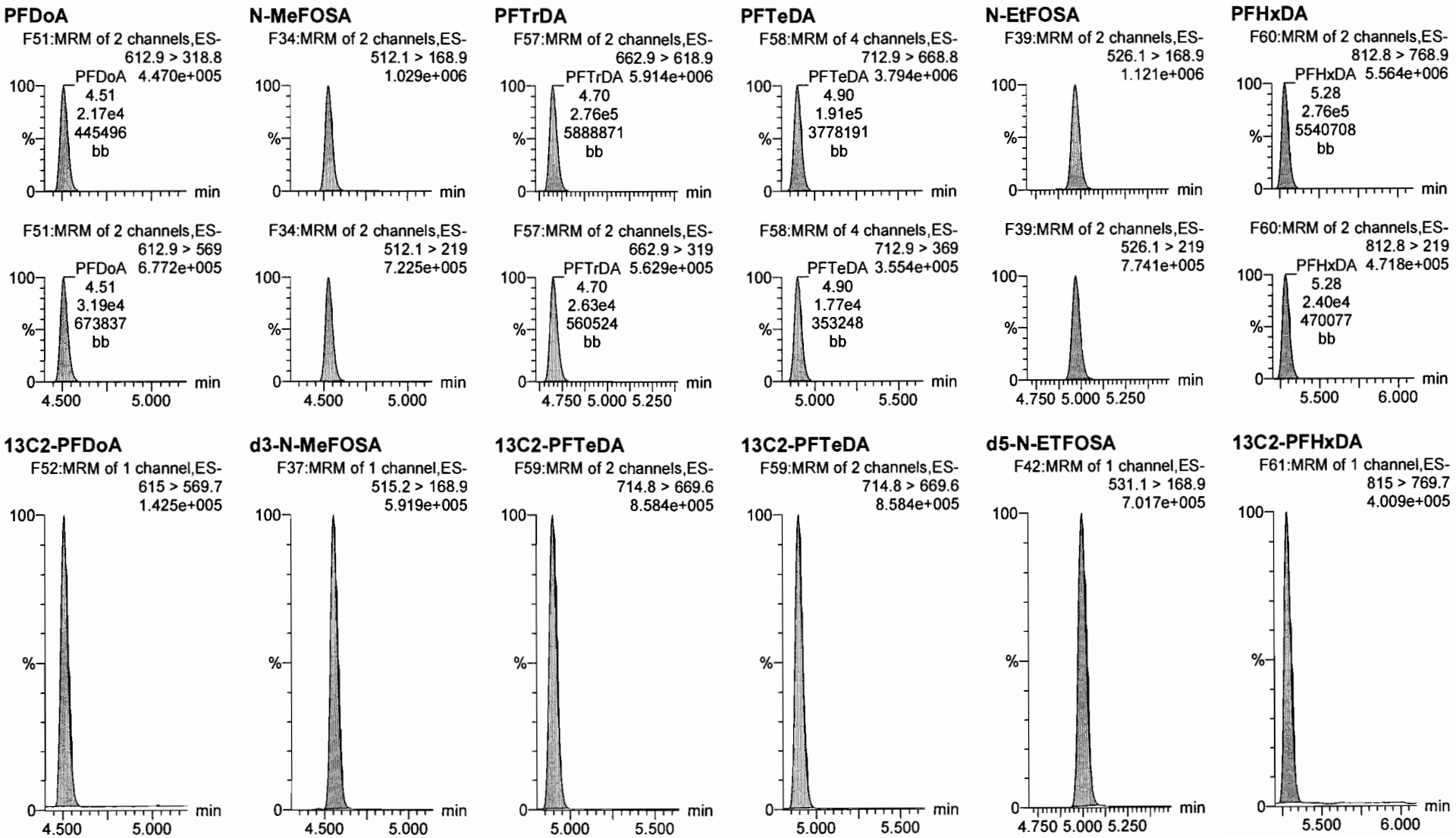
Name: 170810M2_8, Date: 10-Aug-2017, Time: 21:37:09, ID: ST170810M2-7 PFC CS4 17H1018, Description: PFC CS4 17H1018



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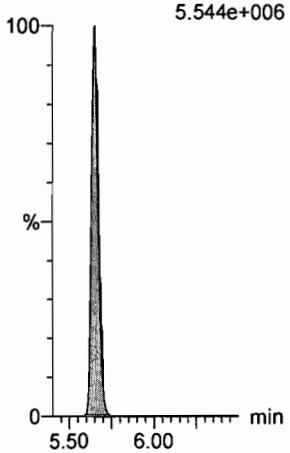
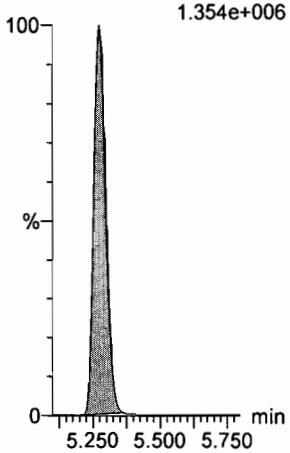
Name: 170810M2_8, Date: 10-Aug-2017, Time: 21:37:09, ID: ST170810M2-7 PFC CS4 17H1018, Description: PFC CS4 17H1018

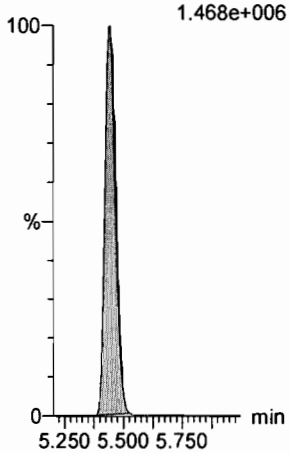
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
5.544e+006



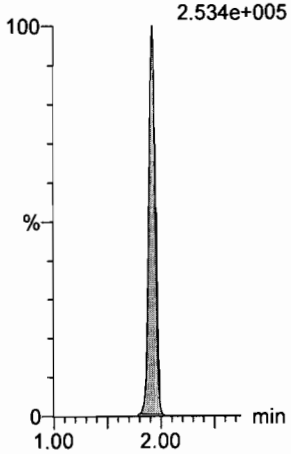
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
1.354e+006



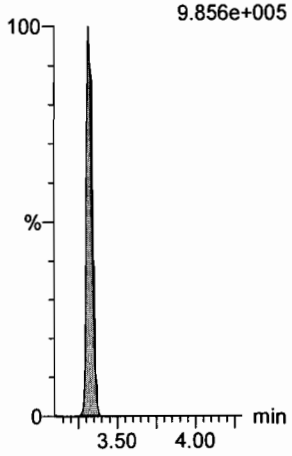
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
1.468e+006



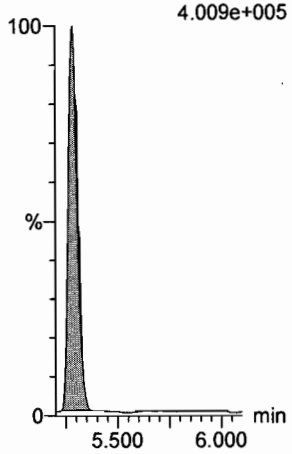
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.534e+005



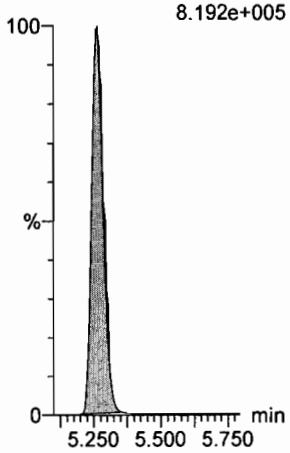
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
9.856e+005



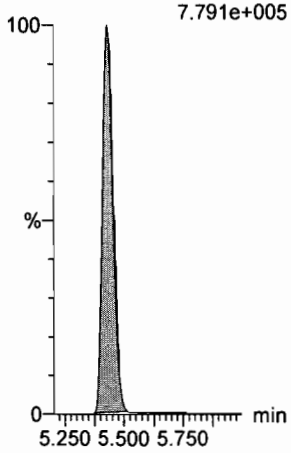
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.009e+005



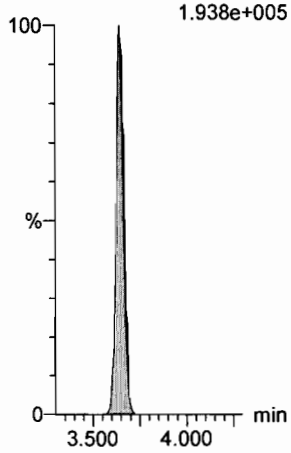
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
8.192e+005



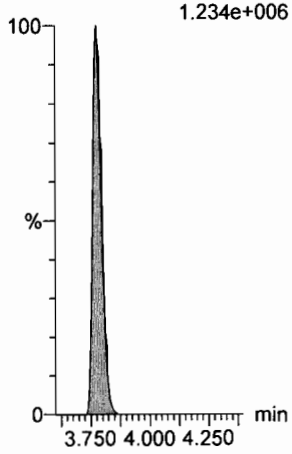
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
7.791e+005



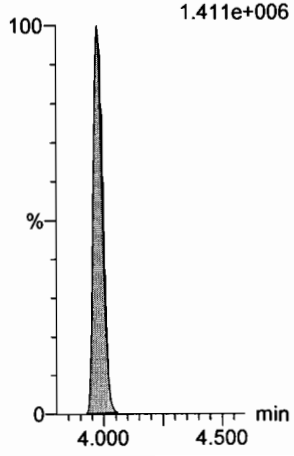
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.938e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.234e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.411e+006



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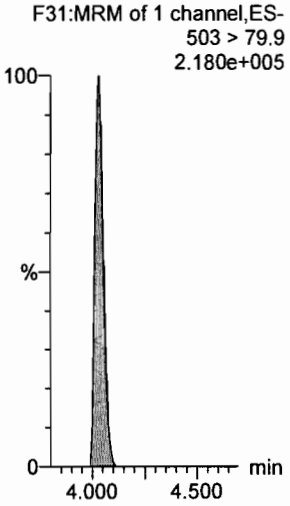
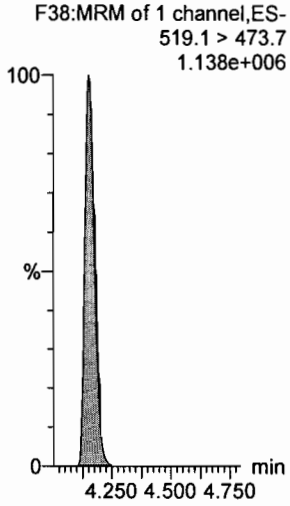
Name: 170810M2_8, Date: 10-Aug-2017, Time: 21:37:09, ID: ST170810M2-7 PFC CS4 17H1018, Description: PFC CS4 17H1018

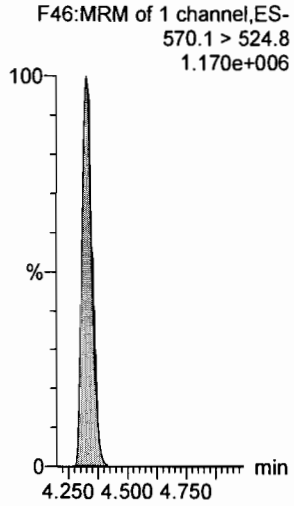
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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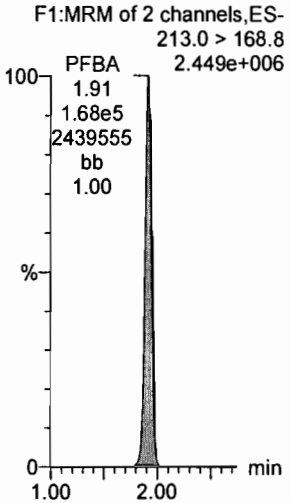
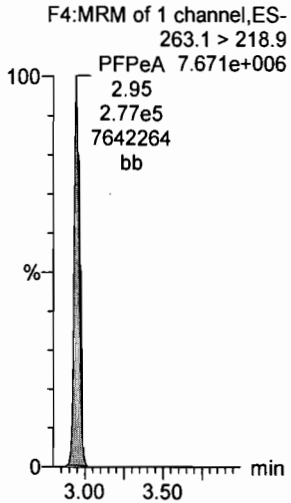
Name: 170810M2_9, Date: 10-Aug-2017, Time: 21:47:47, ID: ST170810M2-8 PFC CS5 17H1019, Description: PFC CS5 17H1019

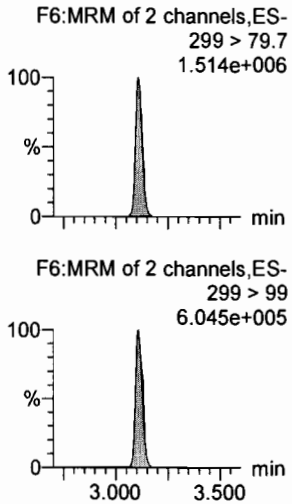
PFBA



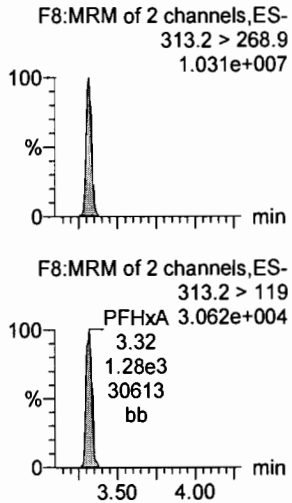
PFPeA



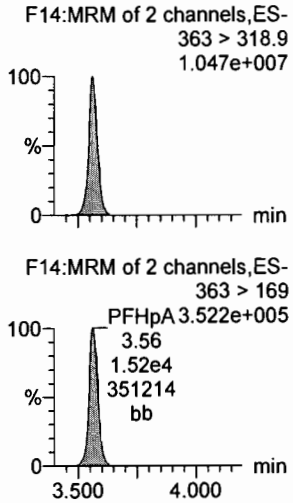
PFBS



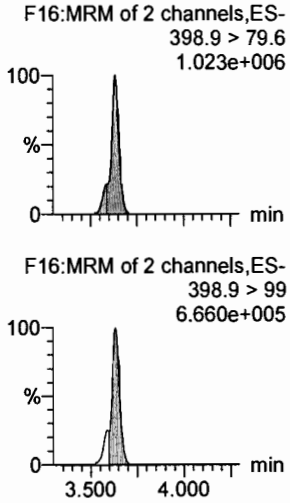
PFHxA



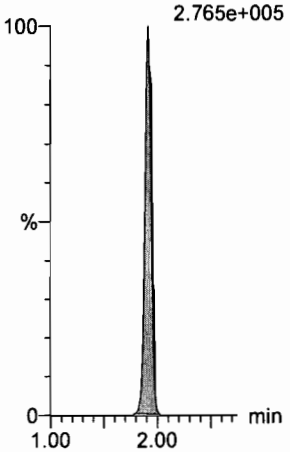
PFHpA



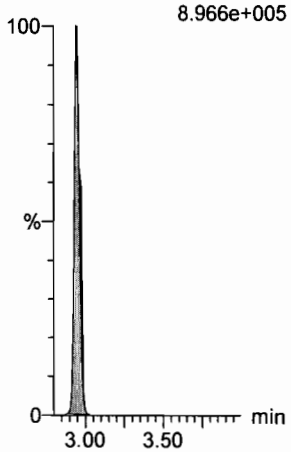
PFHxS



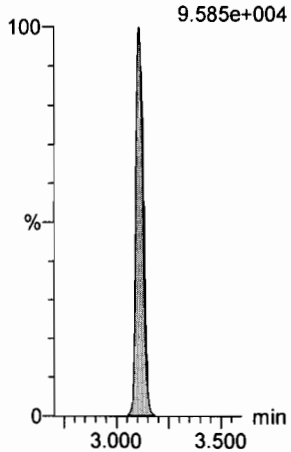
13C3-PFBA



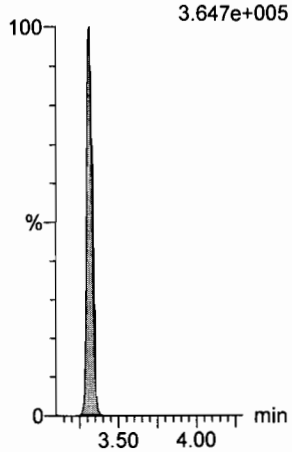
13C3-PFPeA



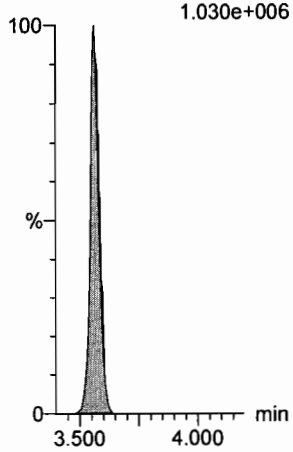
13C3-PFBS



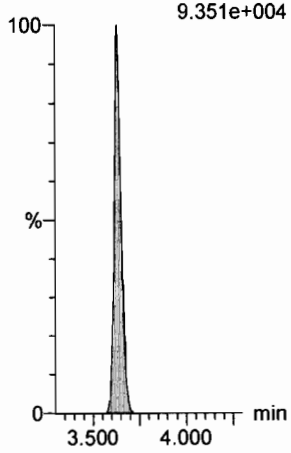
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



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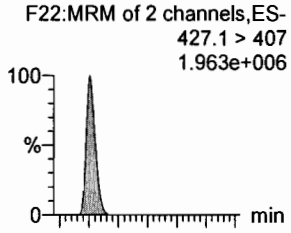
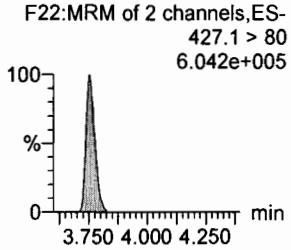
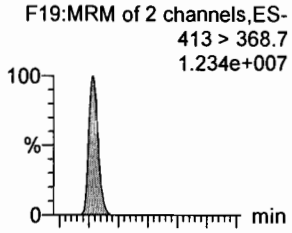
Name: 170810M2_9, Date: 10-Aug-2017, Time: 21:47:47, ID: ST170810M2-8 PFC CS5 17H1019, Description: PFC CS5 17H1019

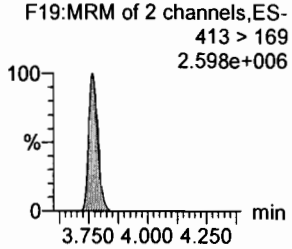
6:2 FTS



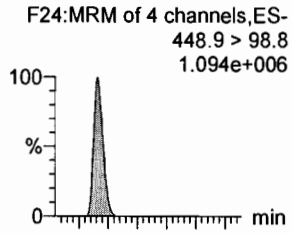


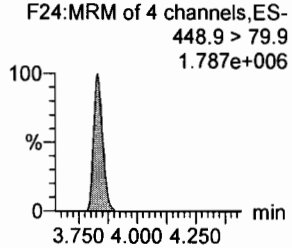
PFOA



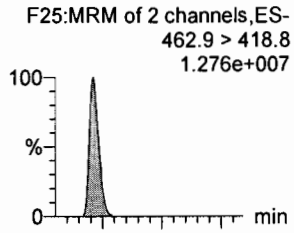


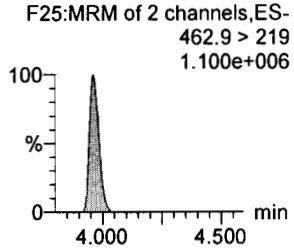
PFHpS



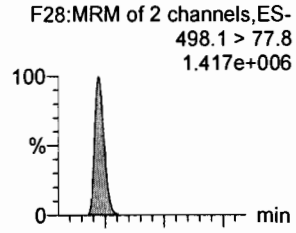


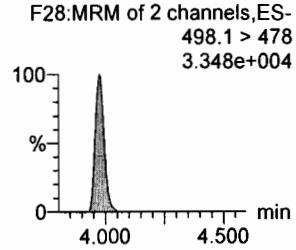
PFNA



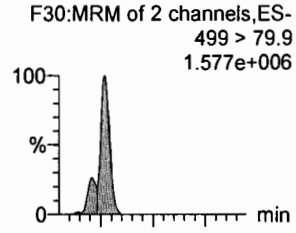


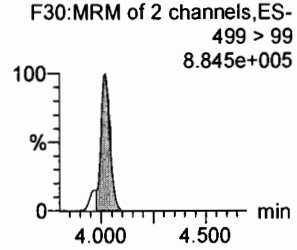
PFOSA



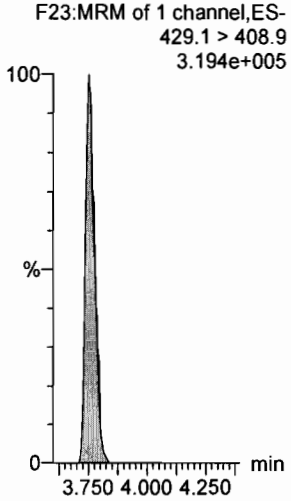


PFOS

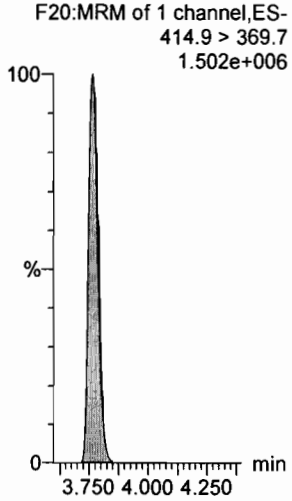




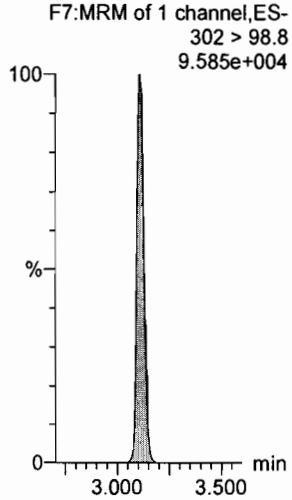
13C2-6:2 FTS



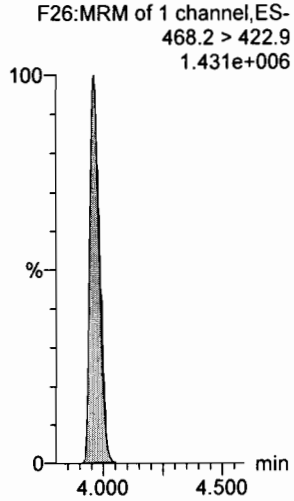
13C2-PFOA



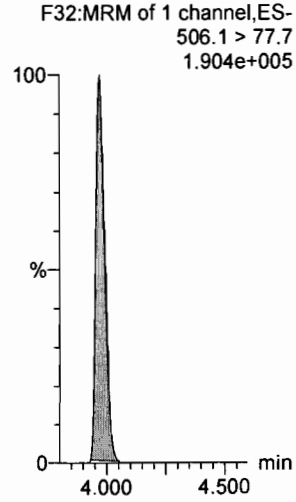
13C3-PFBS



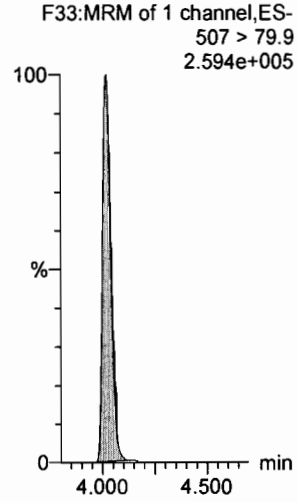
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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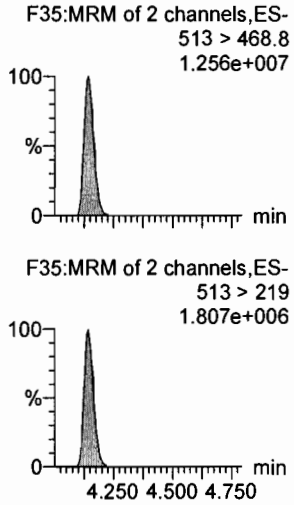
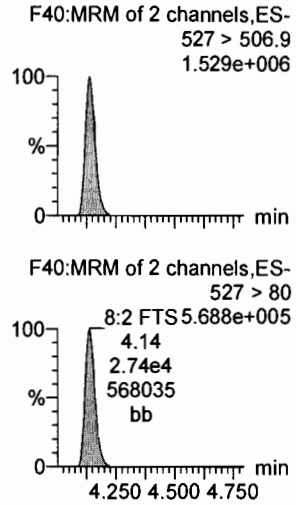
Name: 170810M2_9, Date: 10-Aug-2017, Time: 21:47:47, ID: ST170810M2-8 PFC CS5 17H1019, Description: PFC CS5 17H1019

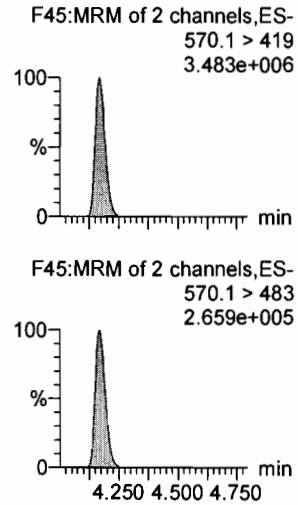
PFDA



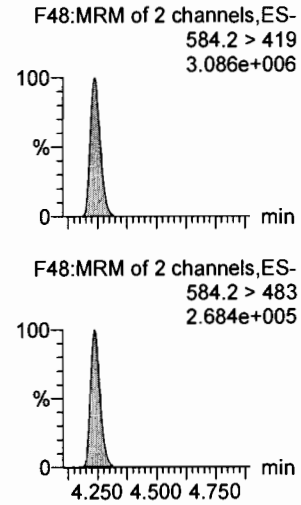
8:2 FTS



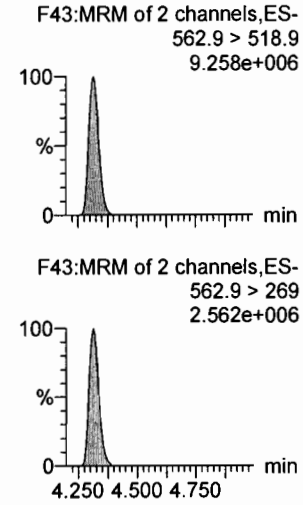
N-MeFOSAA



N-EtFOSAA



PFUnA



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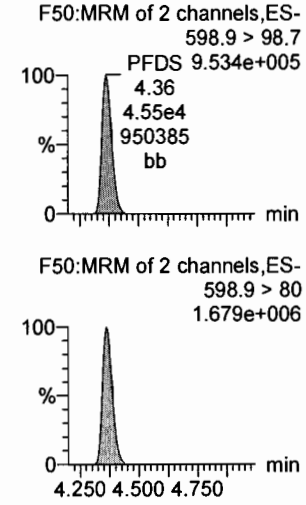
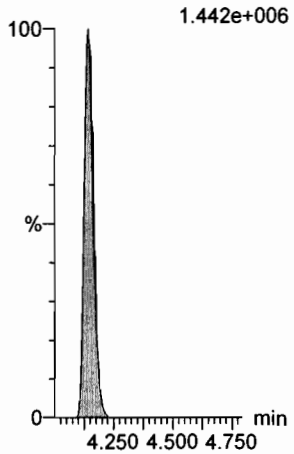
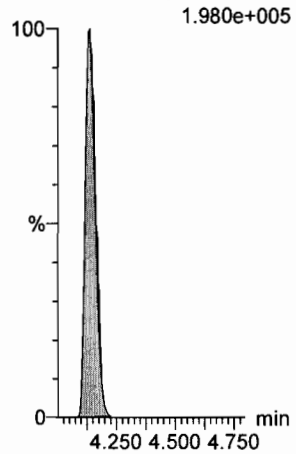


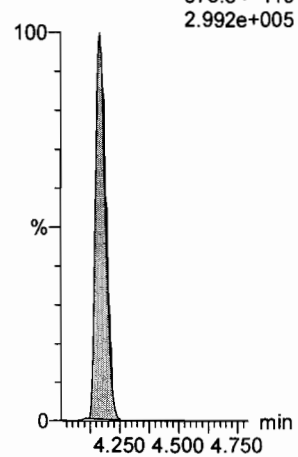
13C2-PFDA



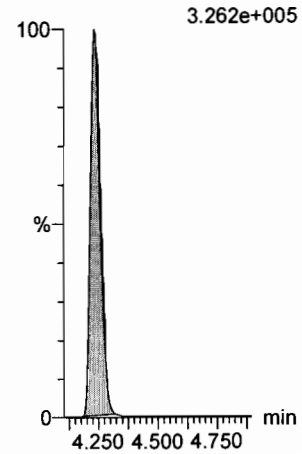
13C2-8:2 FTS



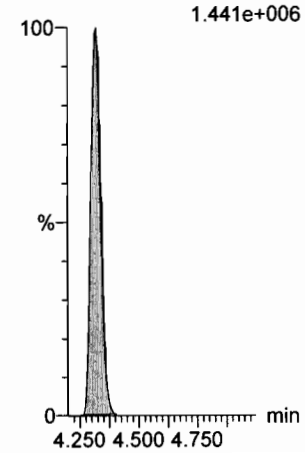
d3-N-MeFOSAA



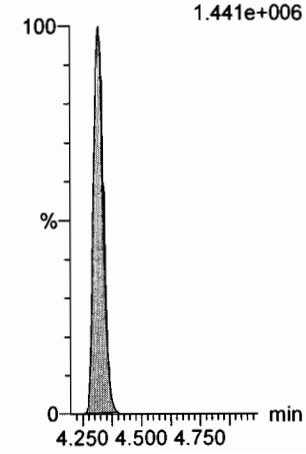
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



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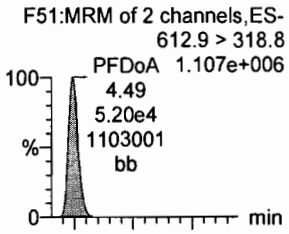
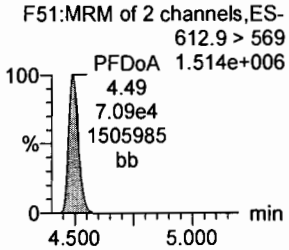
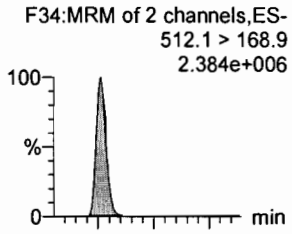
Name: 170810M2_9, Date: 10-Aug-2017, Time: 21:47:47, ID: ST170810M2-8 PFC CS5 17H1019, Description: PFC CS5 17H1019

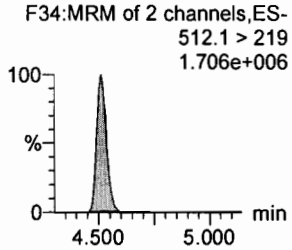
PFDoA



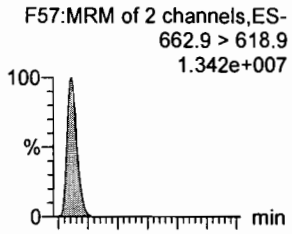


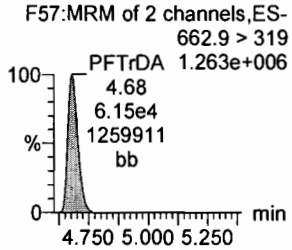
N-MeFOSA



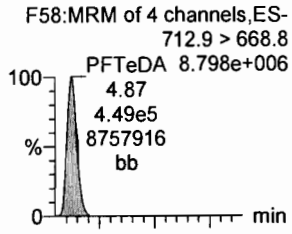


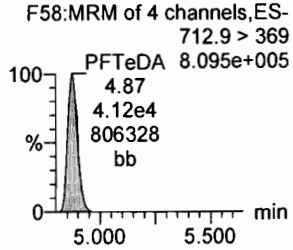
PFTrDA



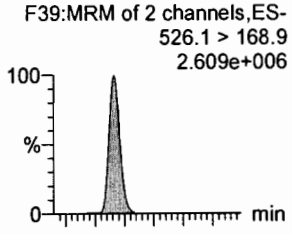


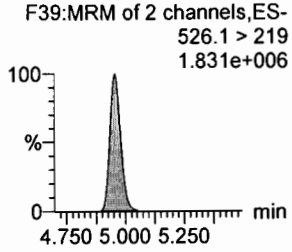
PFTeDA



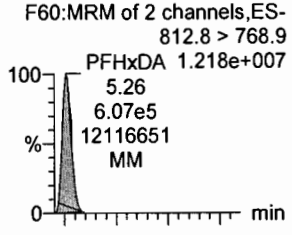


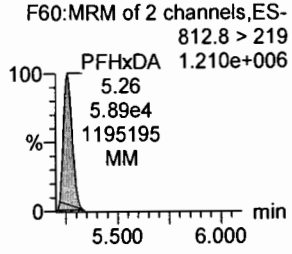
N-EtFOSA



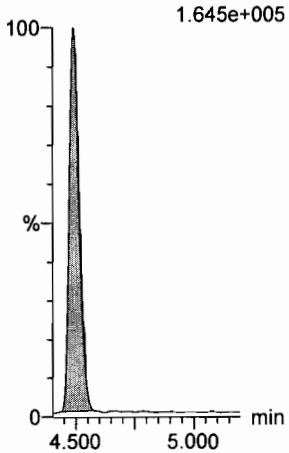


PFHxDA

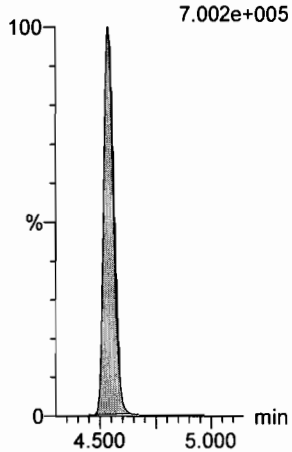




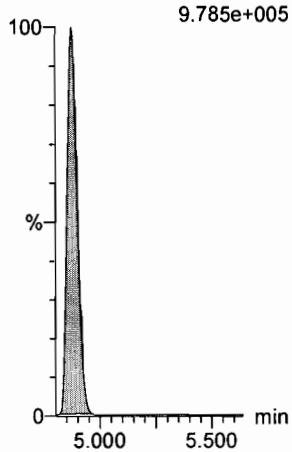
13C2-PFDoA



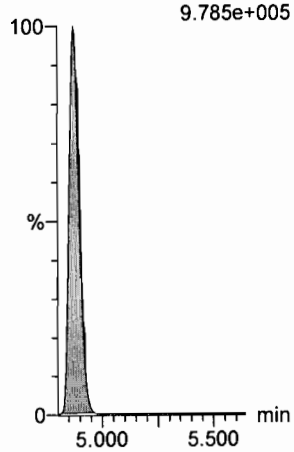
d3-N-MeFOSA



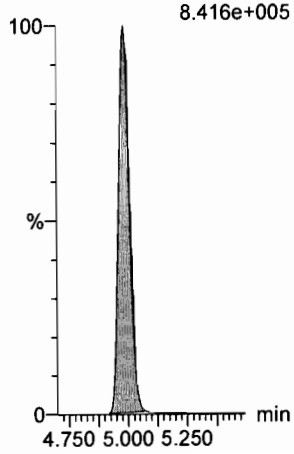
13C2-PFTeDA



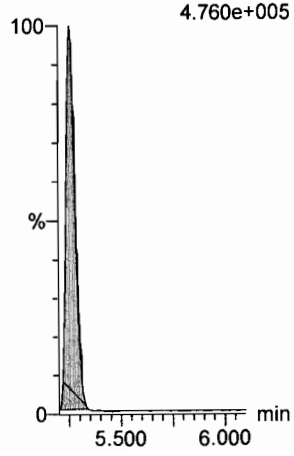
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



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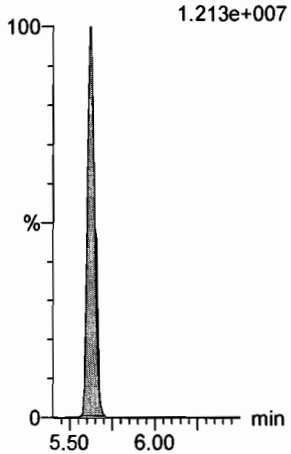
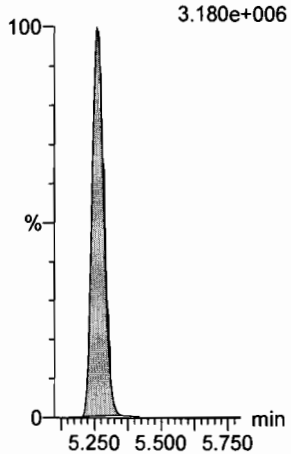
Name: 170810M2_9, Date: 10-Aug-2017, Time: 21:47:47, ID: ST170810M2-8 PFC CS5 17H1019, Description: PFC CS5 17H1019

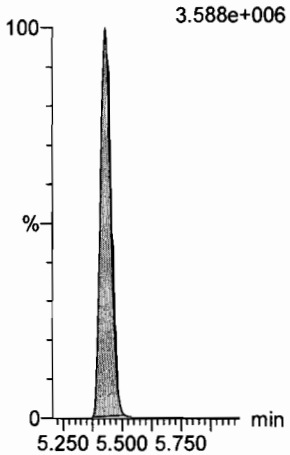
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
1.213e+007



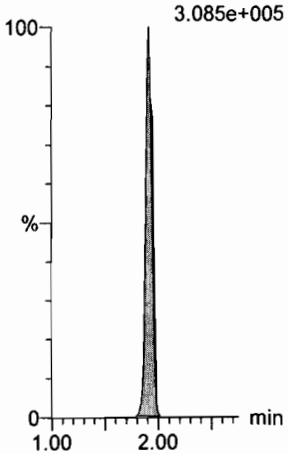
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
3.180e+006



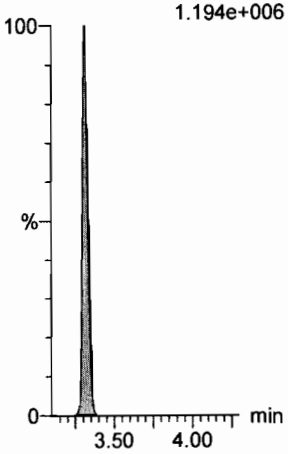
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
3.588e+006



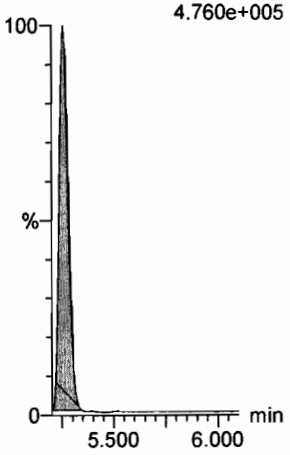
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
3.085e+005



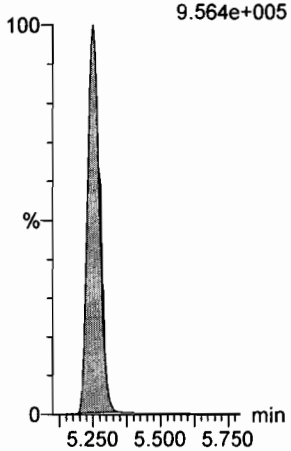
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
1.194e+006



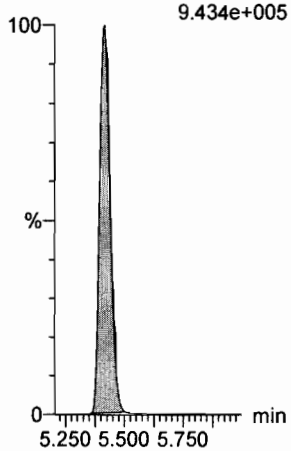
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.760e+005



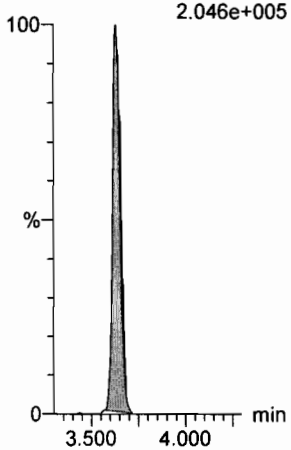
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
9.564e+005



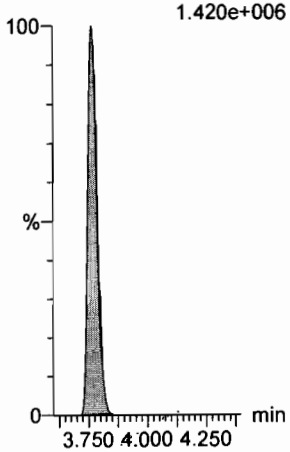
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
9.434e+005



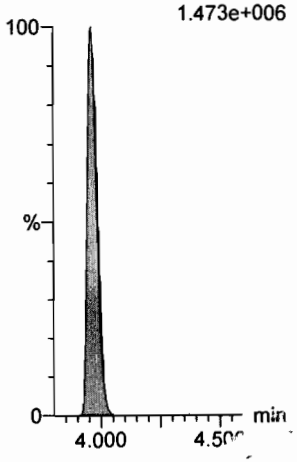
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
2.046e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.420e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.473e+006

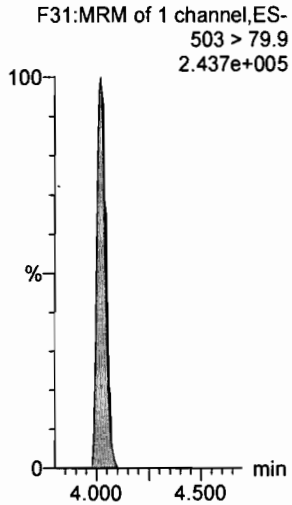


Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

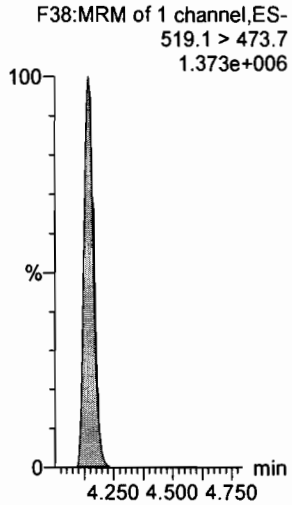
Last Altered: Friday, August 11, 2017 09:08:45 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:09:53 Pacific Daylight Time

Name: 170810M2_9, Date: 10-Aug-2017, Time: 21:47:47, ID: ST170810M2-8 PFC CS5 17H1019, Description: PFC CS5 17H1019

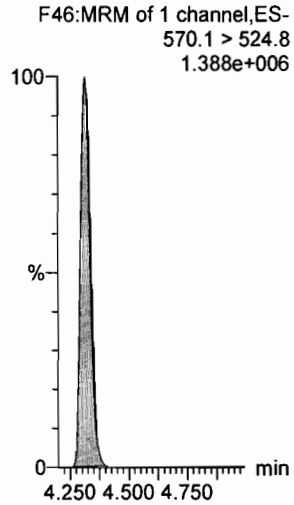
13C4-PFOS



13C6-PFDA



13C7-PFUnA



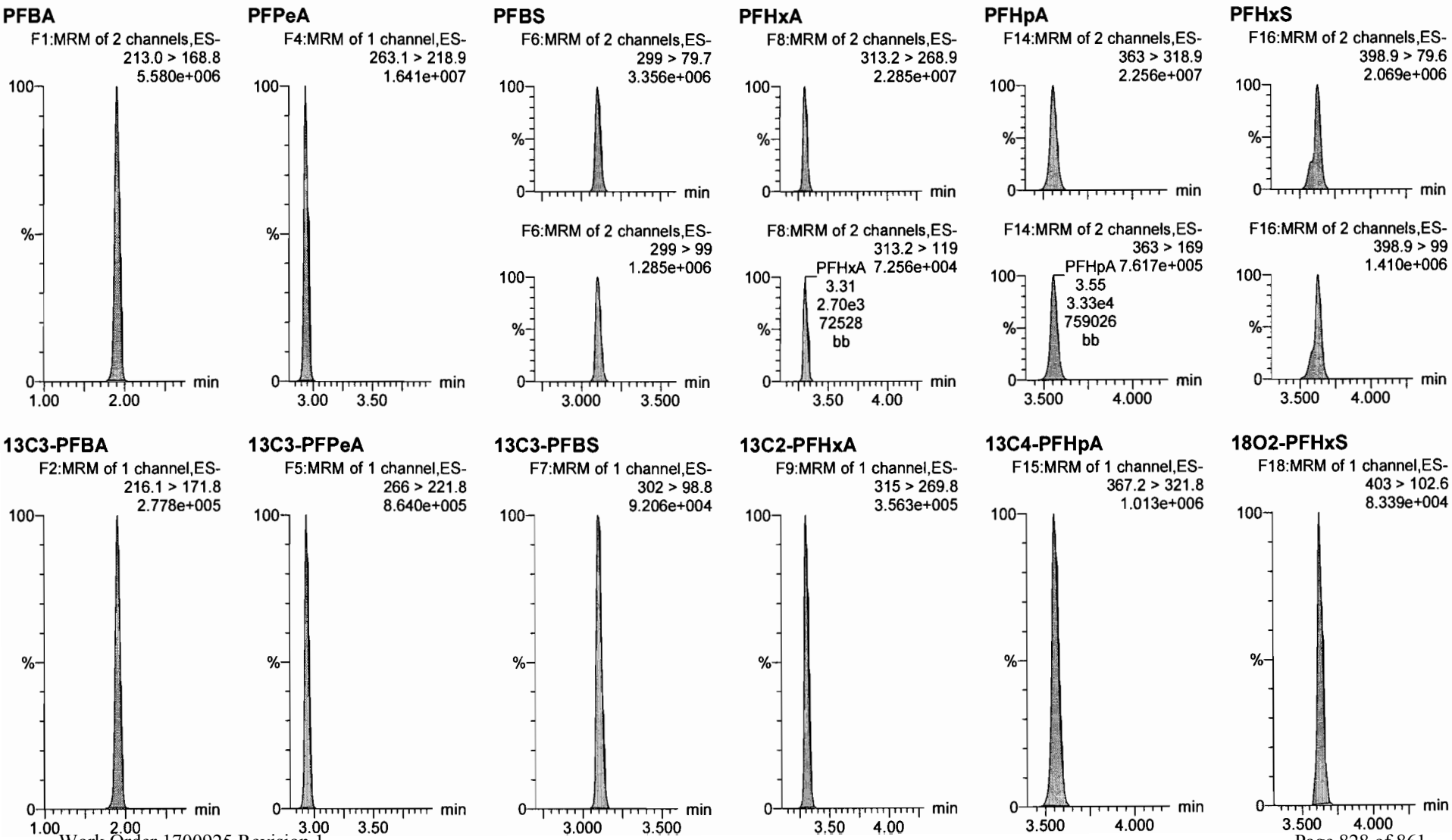
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:12:09 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:27:08 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 08:55:25
Calibration: 11 Aug 2017 09:12:09

Name: 170810M2_10, Date: 10-Aug-2017, Time: 21:58:34, ID: ST170810M2-9 PFC CS6 17H1013, Description: PFC CS6 17H1013

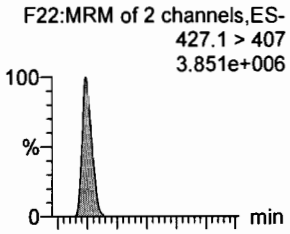


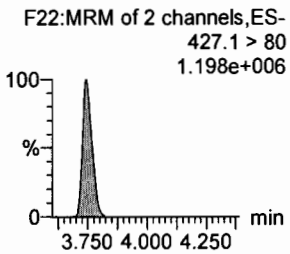
Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:12:09 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:27:08 Pacific Daylight Time

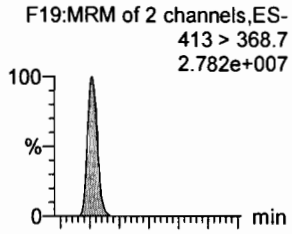
Name: 170810M2_10, Date: 10-Aug-2017, Time: 21:58:34, ID: ST170810M2-9 PFC CS6 17H1013, Description: PFC CS6 17H1013

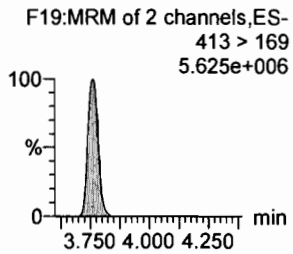
6:2 FTS



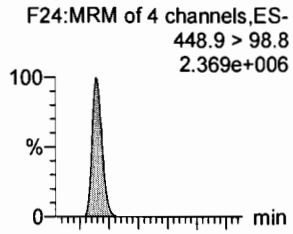


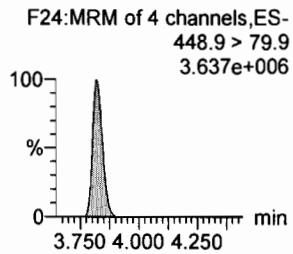
PFOA





PFHpS





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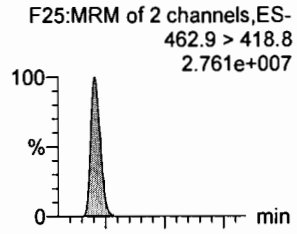
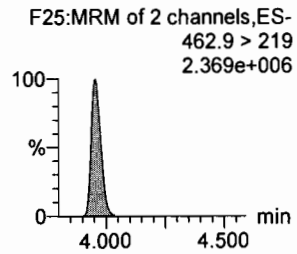
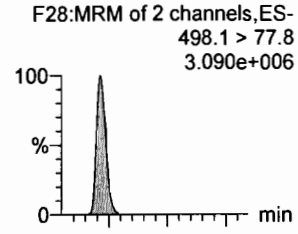
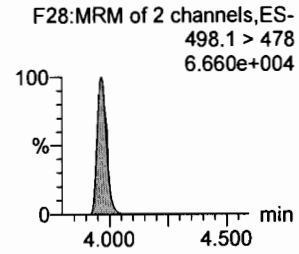


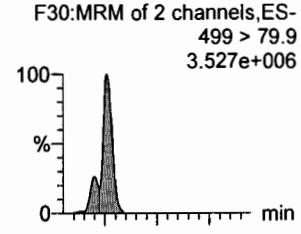


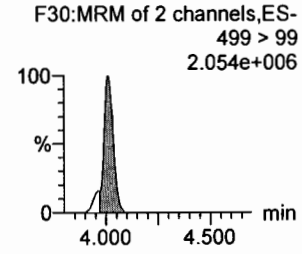
PFOSA



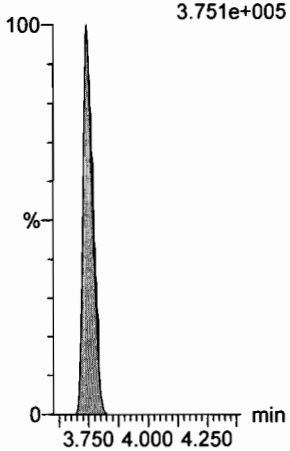


PFOS

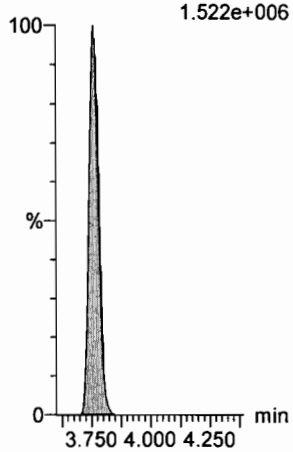




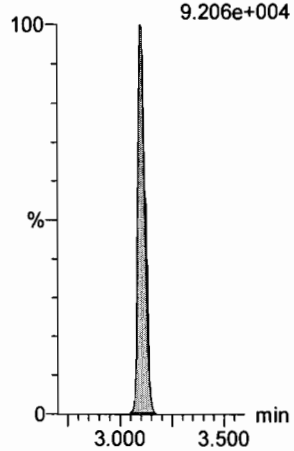
13C2-6:2 FTS



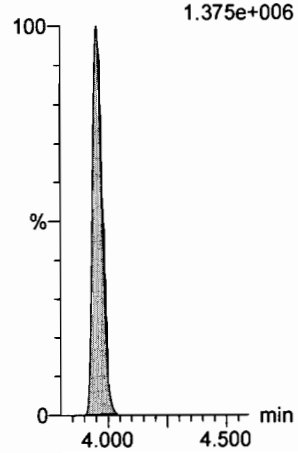
13C2-PFOA



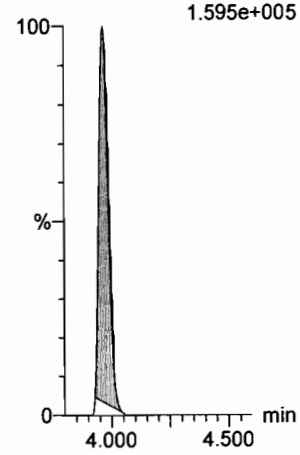
13C3-PFBS



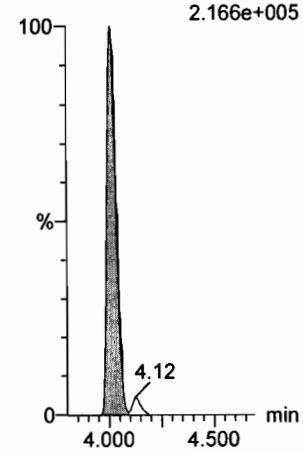
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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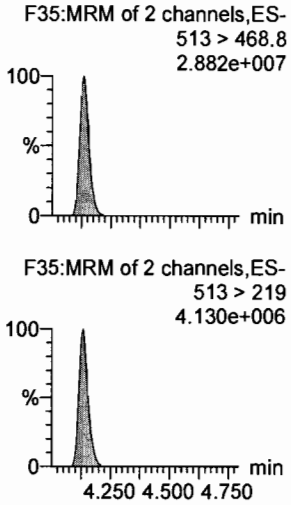
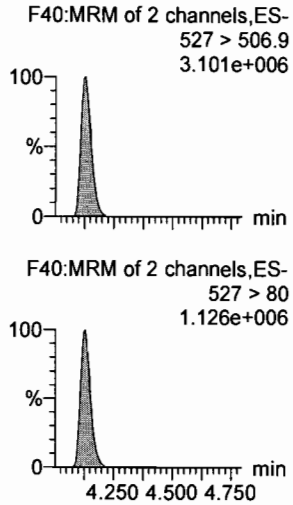
Last Altered: Friday, August 11, 2017 09:12:09 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:27:08 Pacific Daylight Time

Name: 170810M2_10, Date: 10-Aug-2017, Time: 21:58:34, ID: ST170810M2-9 PFC CS6 17H1013, Description: PFC CS6 17H1013

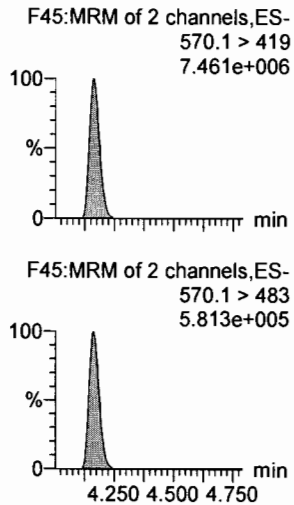
PFDA



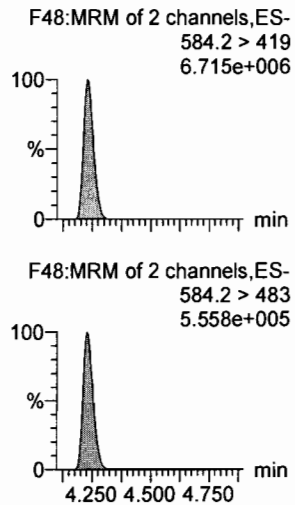
8:2 FTS



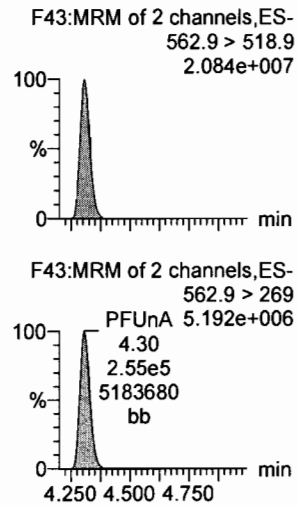
N-MeFOSAA



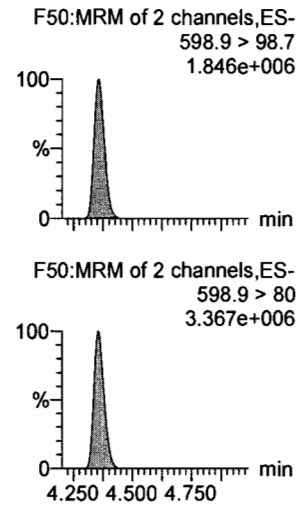
N-EtFOSAA



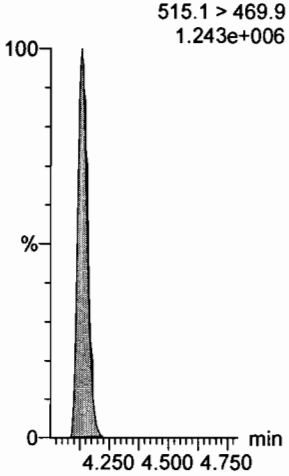
PFUnA



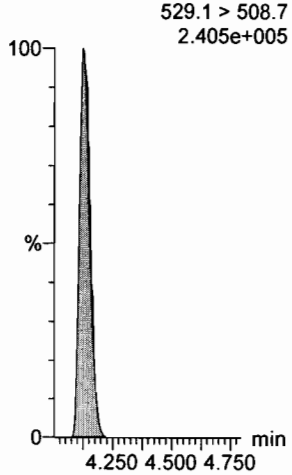
PFDS



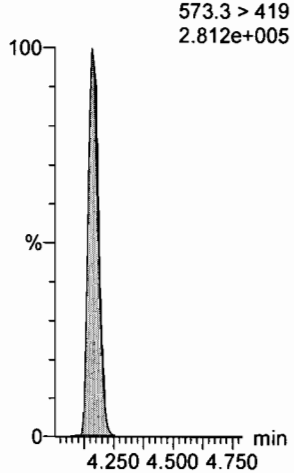
13C2-PFDA



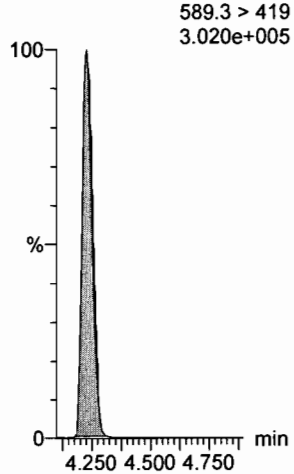
13C2-8:2 FTS



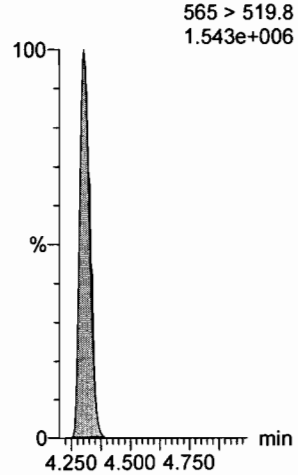
d3-N-MeFOSAA



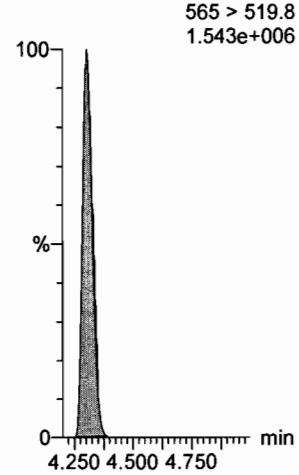
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



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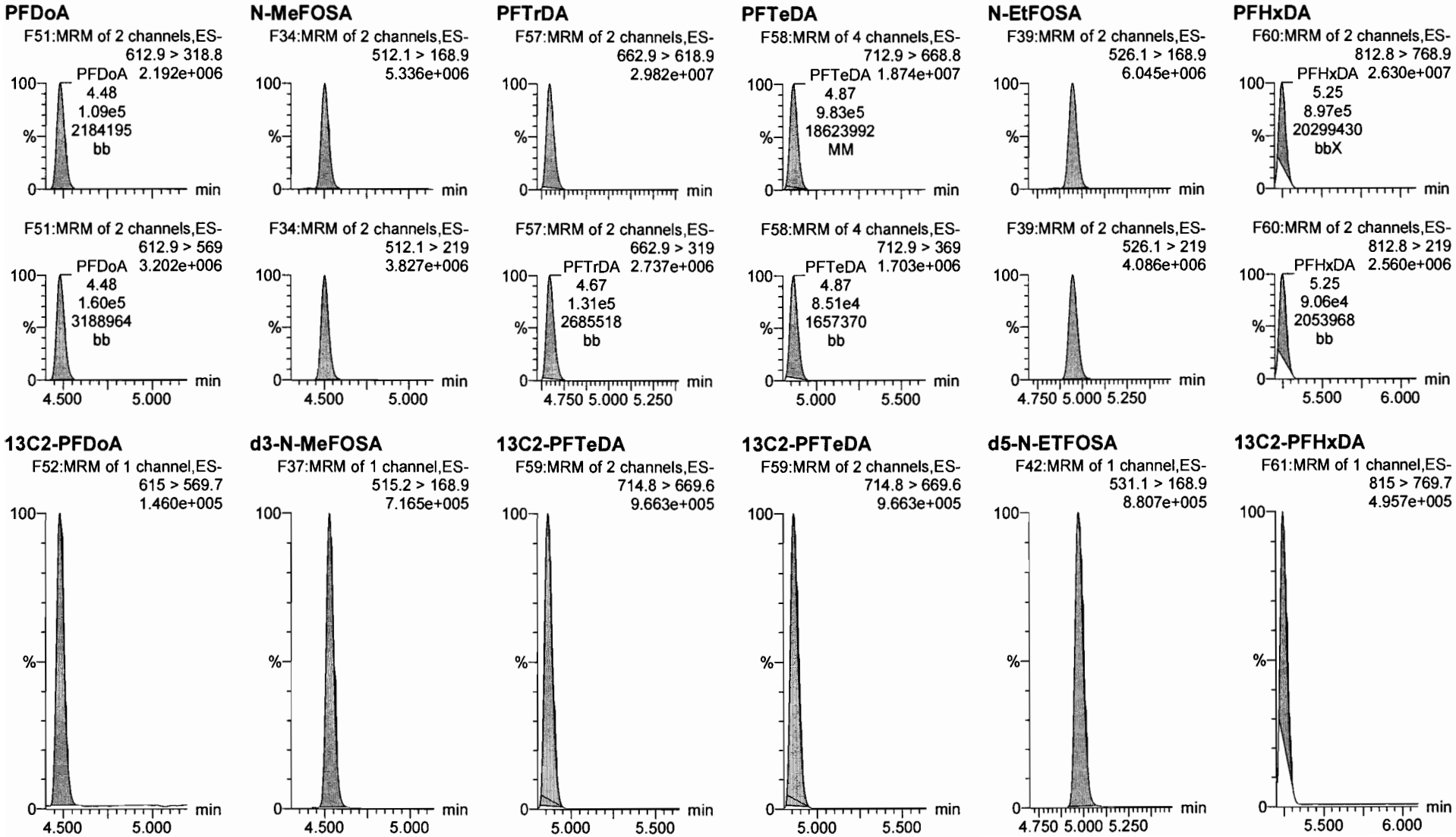
Printed: Friday, August 11, 2017 09:27:08 Pacific Daylight Time

Name: 170810M2_10, Date: 10-Aug-2017, Time: 21:58:34, ID: ST170810M2-9 PFC CS6 17H1013, Description: PFC CS6 17H1013



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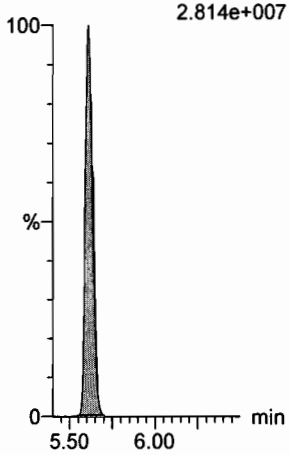
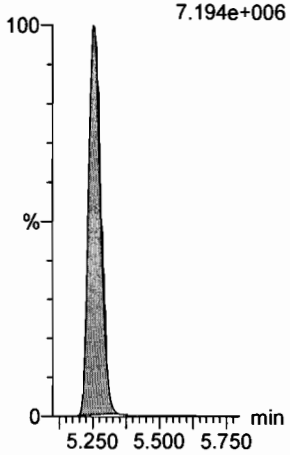
Name: 170810M2_10, Date: 10-Aug-2017, Time: 21:58:34, ID: ST170810M2-9 PFC CS6 17H1013, Description: PFC CS6 17H1013

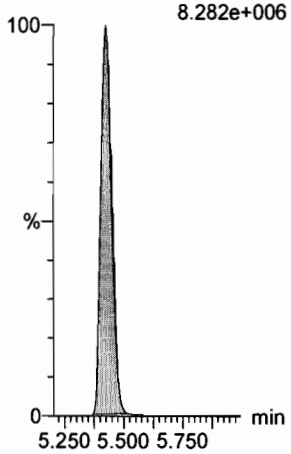
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
2.814e+007



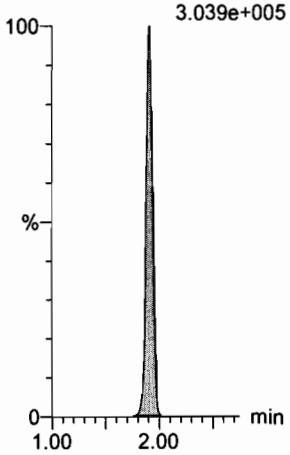
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
7.194e+006



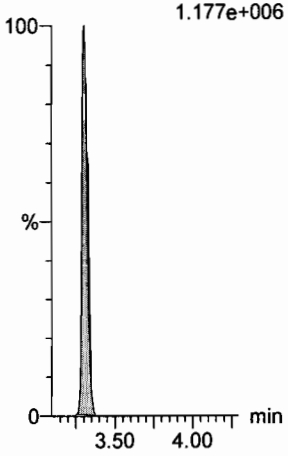
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
8.282e+006



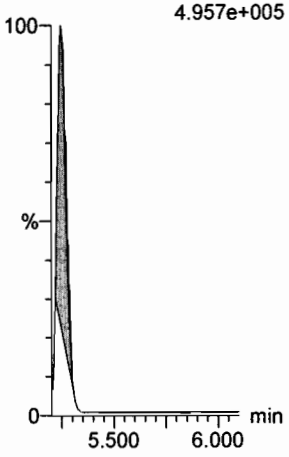
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
3.039e+005



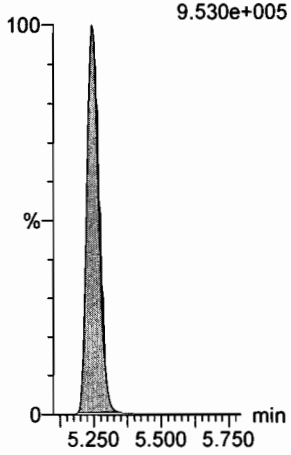
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
1.177e+006



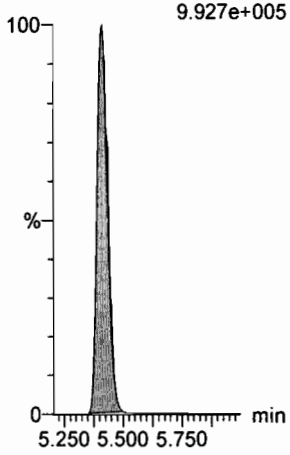
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.957e+005



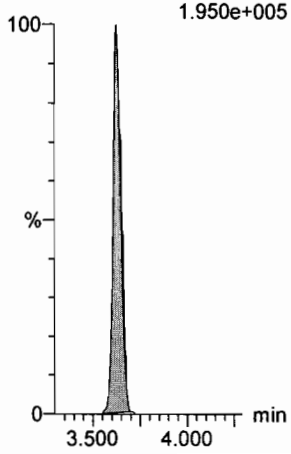
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
9.530e+005



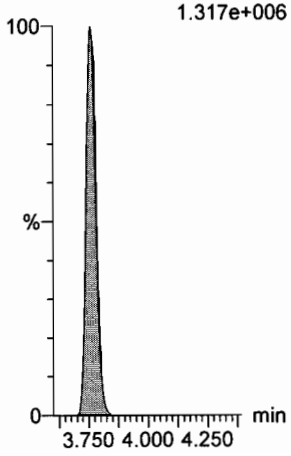
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
9.927e+005



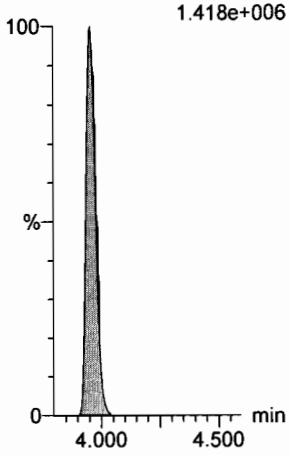
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.950e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.317e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.418e+006

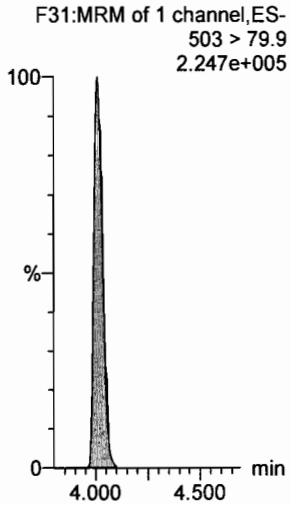


Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

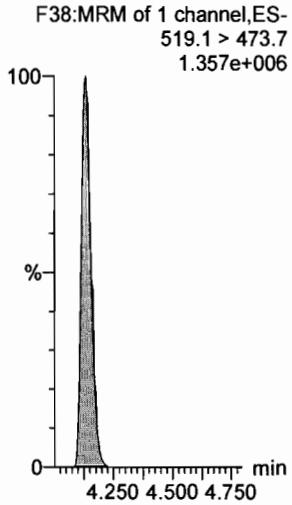
Last Altered: Friday, August 11, 2017 09:12:09 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:27:08 Pacific Daylight Time

Name: 170810M2_10, Date: 10-Aug-2017, Time: 21:58:34, ID: ST170810M2-9 PFC CS6 17H1013, Description: PFC CS6 17H1013

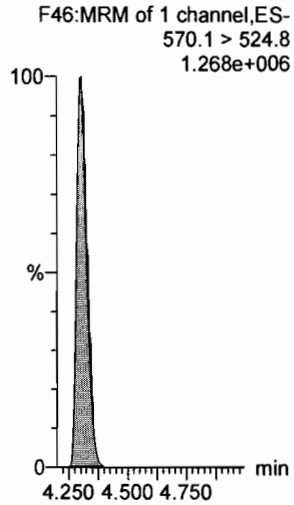
13C4-PFOS



13C6-PFDA



13C7-PFUnA



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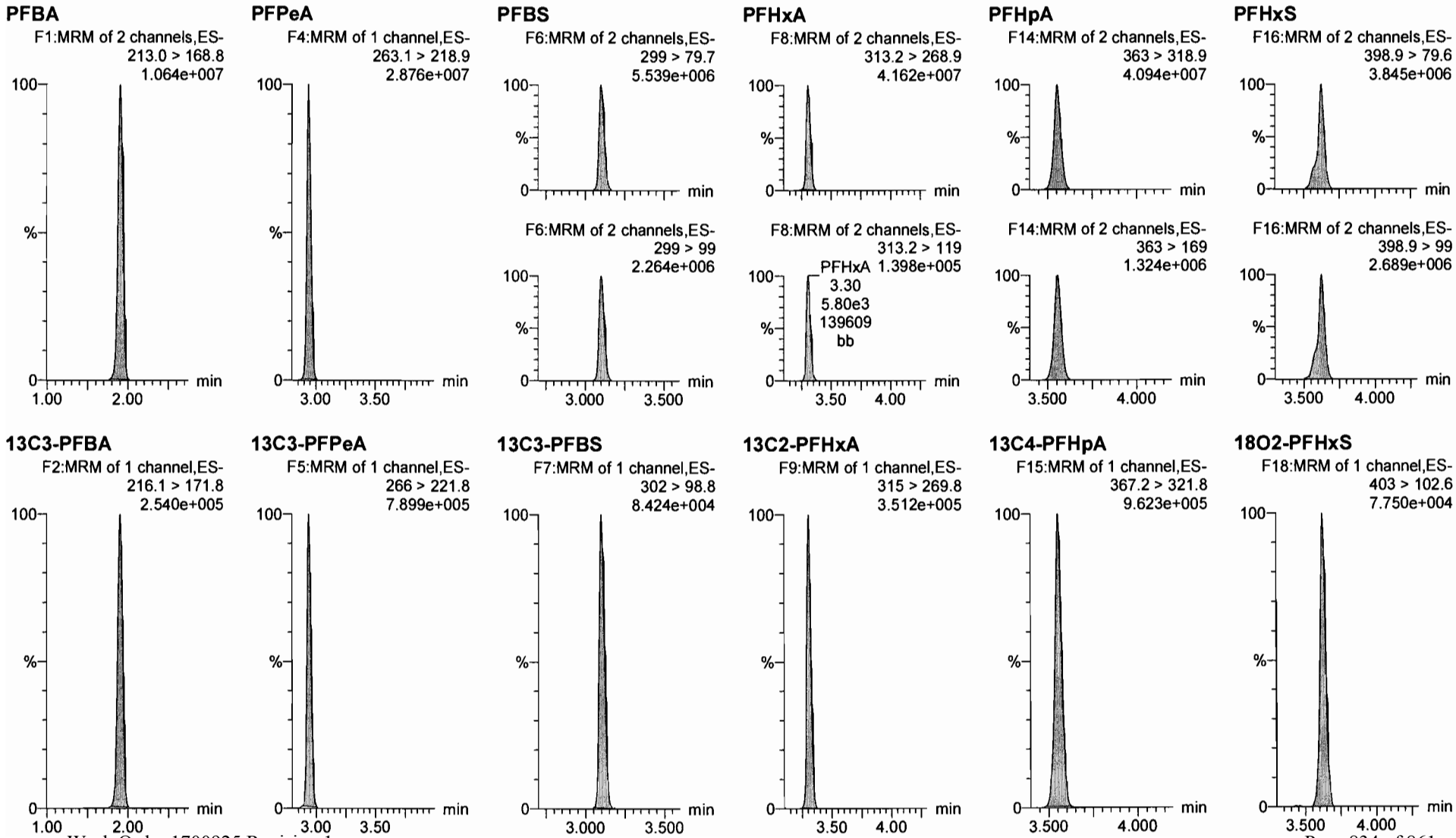
Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:12:09 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:27:16 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 08:55:25
Calibration: 11 Aug 2017 09:12:09

Name: 170810M2_11, Date: 10-Aug-2017, Time: 22:09:12, ID: ST170810M2-10 PFC CS7 17H1012, Description: PFC CS7 17H1012

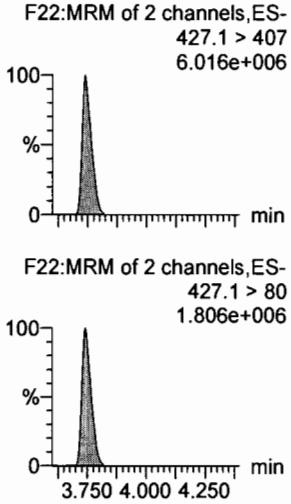


Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

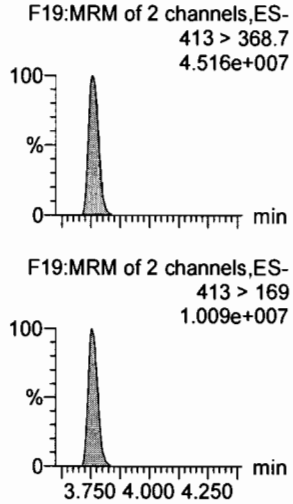
Last Altered: Friday, August 11, 2017 09:12:09 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:27:16 Pacific Daylight Time

Name: 170810M2_11, Date: 10-Aug-2017, Time: 22:09:12, ID: ST170810M2-10 PFC CS7 17H1012, Description: PFC CS7 17H1012

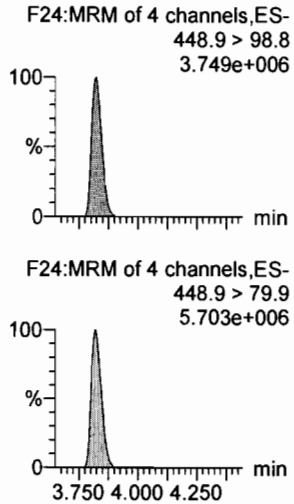
6:2 FTS



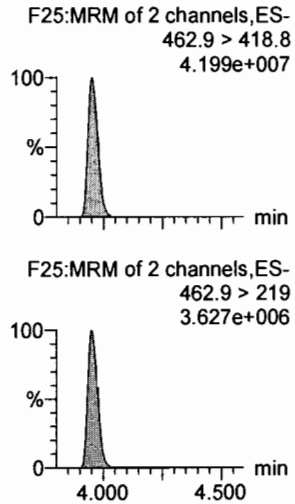
PFOA



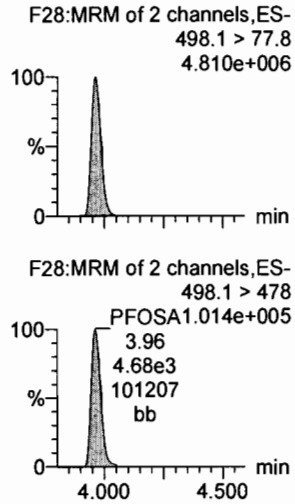
PFHpS



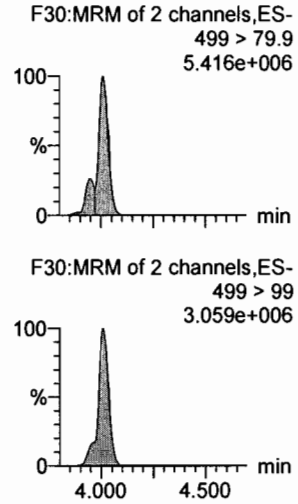
PFNA



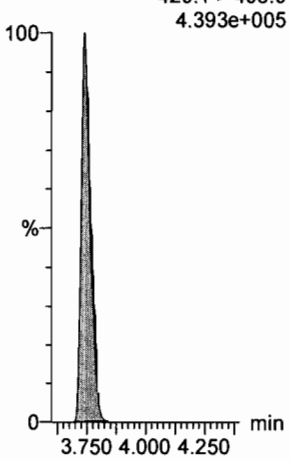
PFOSA



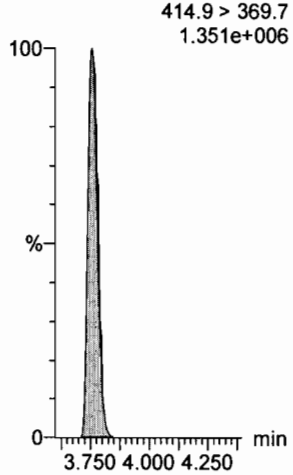
PFOS



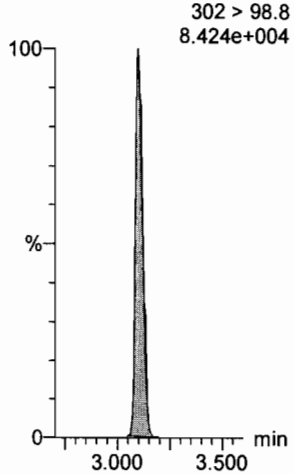
13C2-6:2 FTS



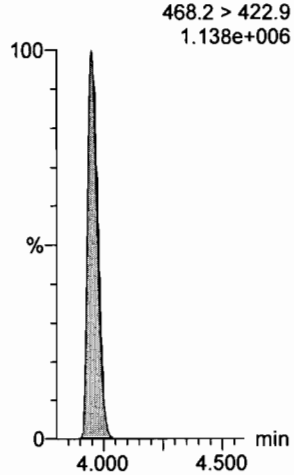
13C2-PFOA



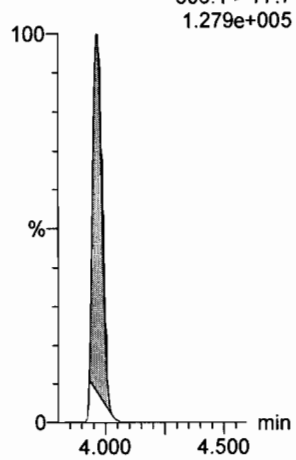
13C3-PFBS



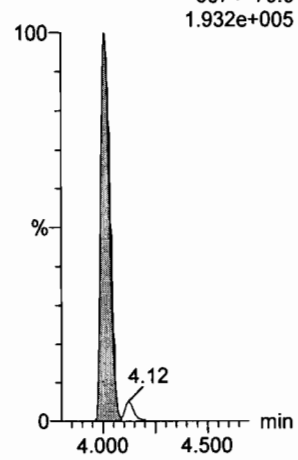
13C5-PFNA



13C8-PFOSA



13C8-PFOS



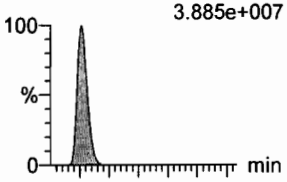
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

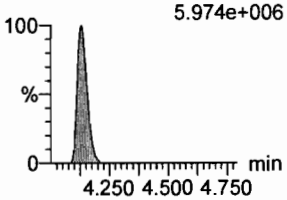
Last Altered: Friday, August 11, 2017 09:12:09 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:27:16 Pacific Daylight Time

Name: 170810M2_11, Date: 10-Aug-2017, Time: 22:09:12, ID: ST170810M2-10 PFC CS7 17H1012, Description: PFC CS7 17H1012

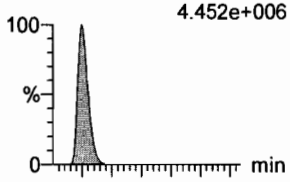
PFDA
F35:MRM of 2 channels,ES-
513 > 468.8
3.885e+007



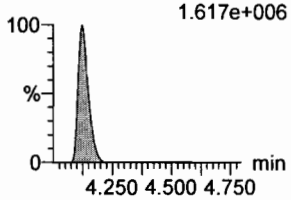
F35:MRM of 2 channels,ES-
513 > 219
5.974e+006



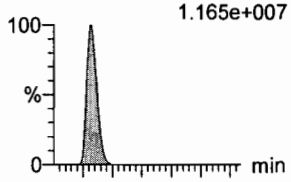
8:2 FTS
F40:MRM of 2 channels,ES-
527 > 506.9
4.452e+006



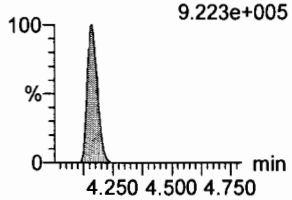
F40:MRM of 2 channels,ES-
527 > 80
1.617e+006



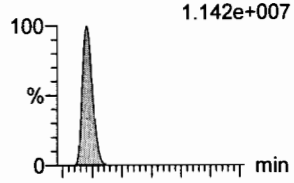
N-MeFOSAA
F45:MRM of 2 channels,ES-
570.1 > 419
1.165e+007



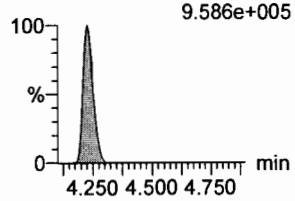
F45:MRM of 2 channels,ES-
570.1 > 483
9.223e+005



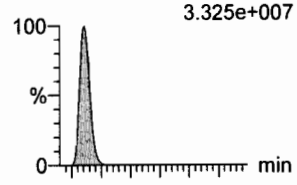
N-EtFOSAA
F48:MRM of 2 channels,ES-
584.2 > 419
1.142e+007



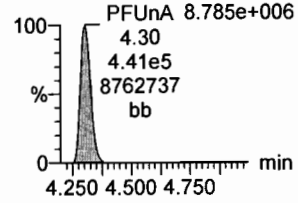
F48:MRM of 2 channels,ES-
584.2 > 483
9.586e+005



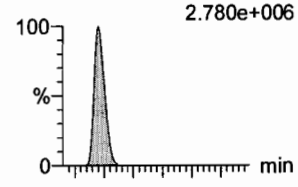
PFUnA
F43:MRM of 2 channels,ES-
562.9 > 518.9
3.325e+007



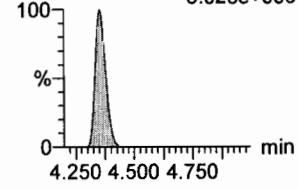
F43:MRM of 2 channels,ES-
562.9 > 269
PFUnA 8.785e+006
4.30
4.41e5
8762737
bb



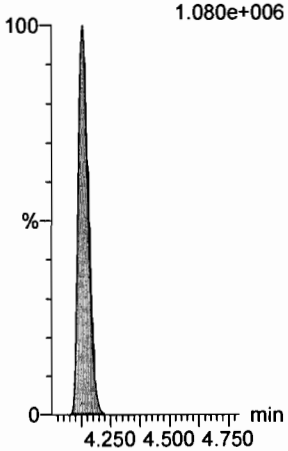
PFDS
F50:MRM of 2 channels,ES-
598.9 > 98.7
2.780e+006



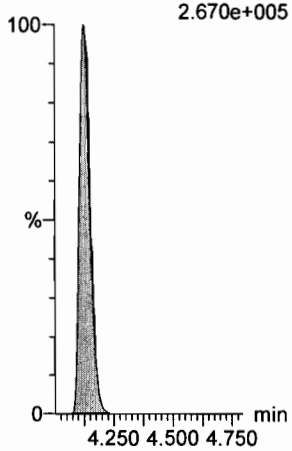
F50:MRM of 2 channels,ES-
598.9 > 80
5.023e+006



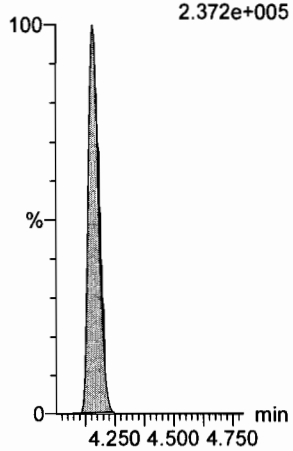
13C2-PFDA
F36:MRM of 1 channel,ES-
515.1 > 469.9
1.080e+006



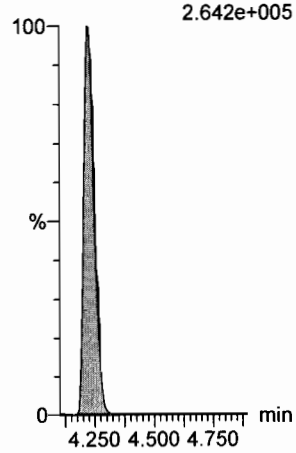
13C2-8:2 FTS
F41:MRM of 1 channel,ES-
529.1 > 508.7
2.670e+005



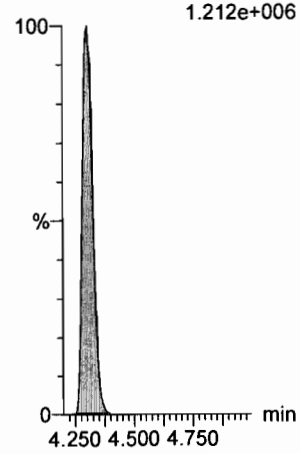
d3-N-MeFOSAA
F47:MRM of 1 channel,ES-
573.3 > 419
2.372e+005



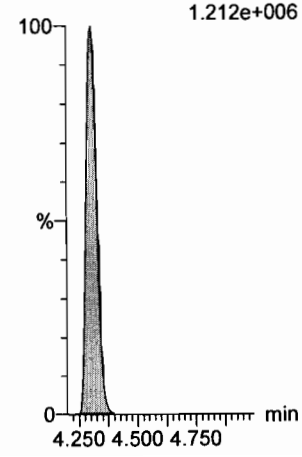
d5-N-EtFOSAA
F49:MRM of 1 channel,ES-
589.3 > 419
2.642e+005



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.212e+006



13C2-PFUnA
F44:MRM of 1 channel,ES-
565 > 519.8
1.212e+006



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Last Altered: Friday, August 11, 2017 09:12:09 Pacific Daylight Time
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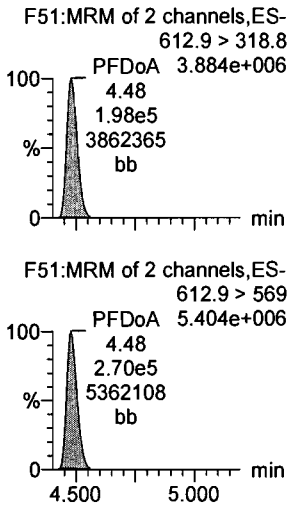
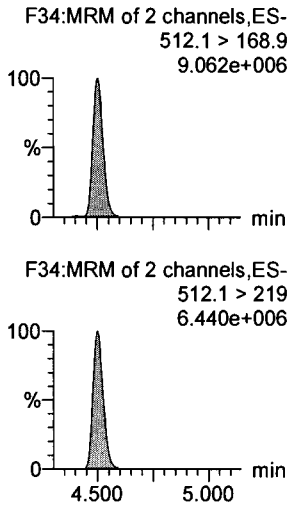
Name: 170810M2_11, Date: 10-Aug-2017, Time: 22:09:12, ID: ST170810M2-10 PFC CS7 17H1012, Description: PFC CS7 17H1012

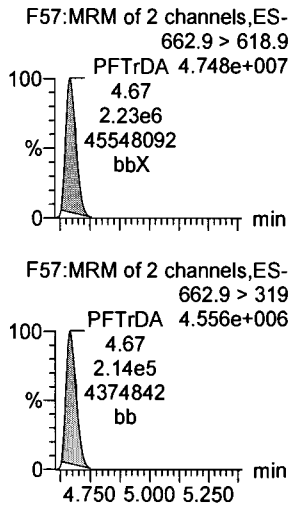
PFDoA



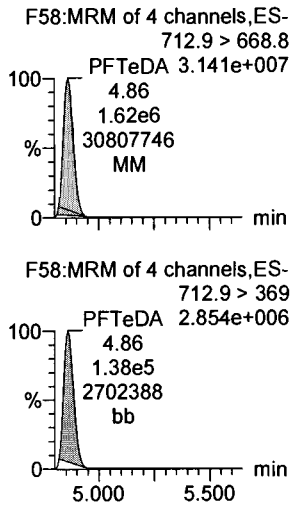
N-MeFOSA



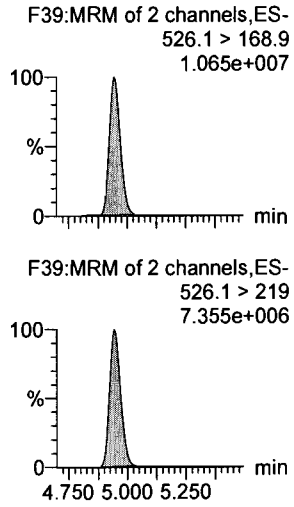
PFTrDA



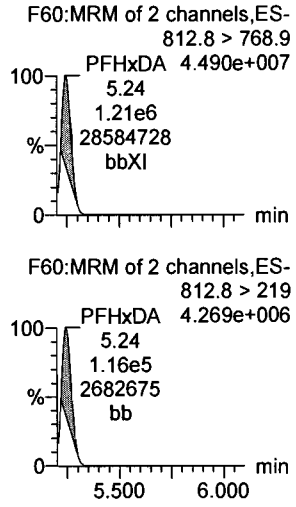
PFTeDA



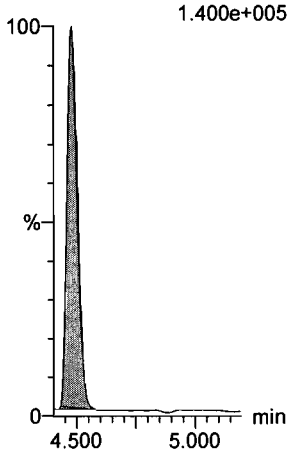
N-EtFOSA



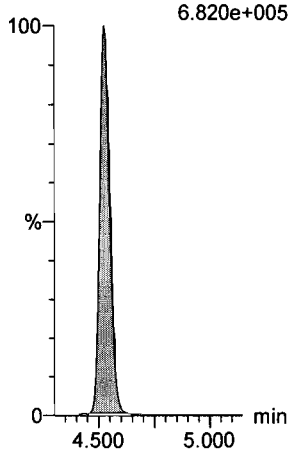
PFHxDA



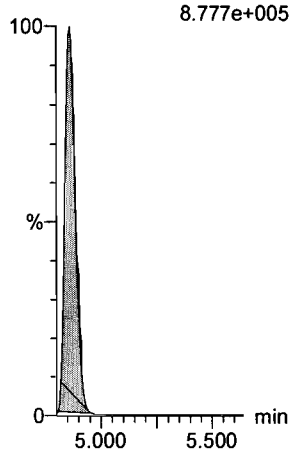
13C2-PFDoA



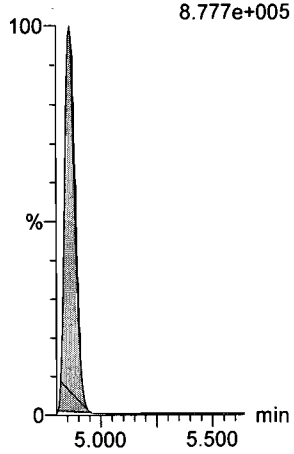
d3-N-MeFOSA



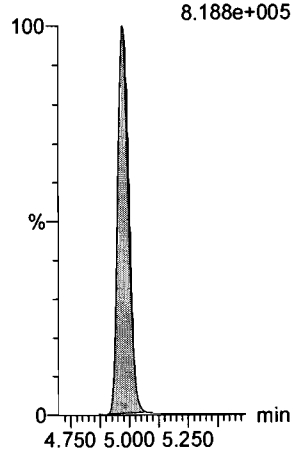
13C2-PFTeDA



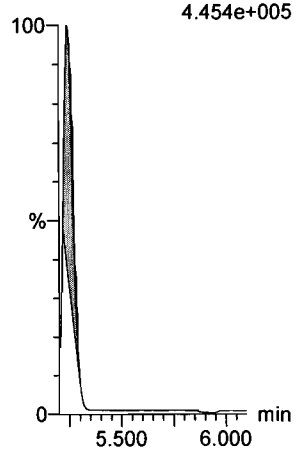
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

Last Altered: Friday, August 11, 2017 09:12:09 Pacific Daylight Time
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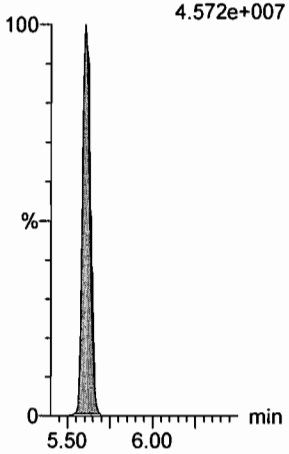
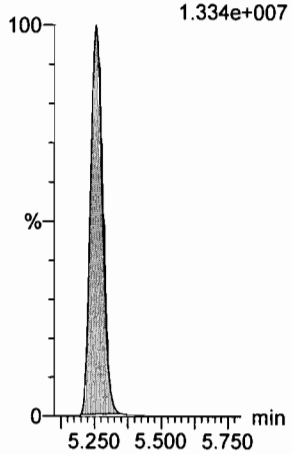
Name: 170810M2_11, Date: 10-Aug-2017, Time: 22:09:12, ID: ST170810M2-10 PFC CS7 17H1012, Description: PFC CS7 17H1012

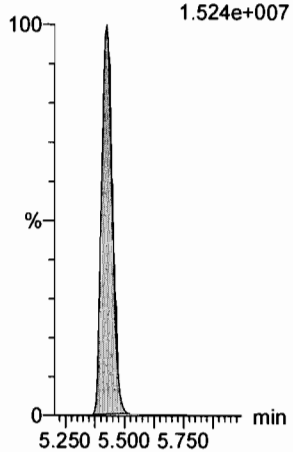
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
4.572e+007



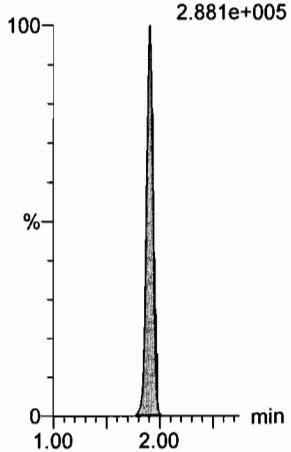
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
1.334e+007



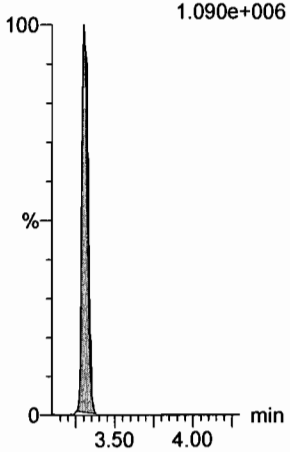
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
1.524e+007



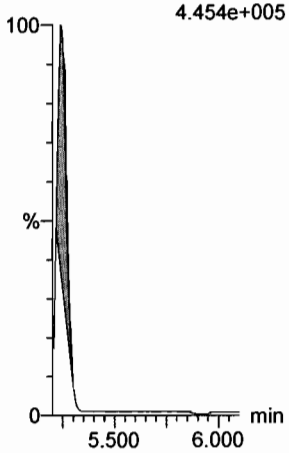
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.881e+005



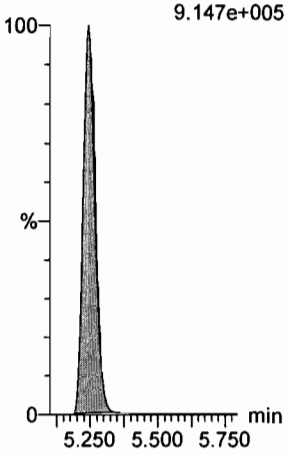
13C5-PFHxA
F10:MRM of 1 channel,ES-
318 > 272.9
1.090e+006



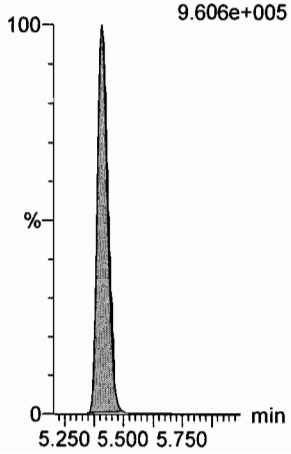
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.454e+005



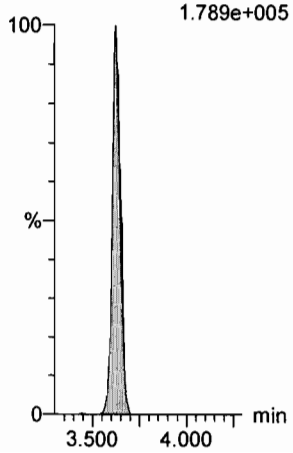
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
9.147e+005



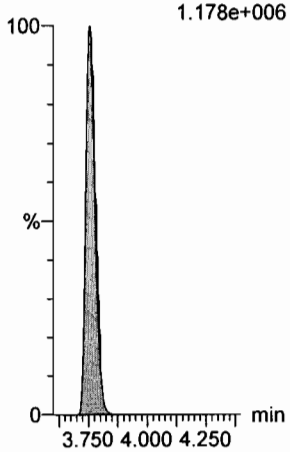
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
9.606e+005



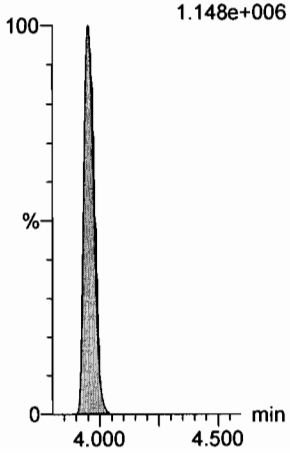
13C3-PFHxS
F17:MRM of 1 channel,ES-
401.9 > 79.9
1.789e+005



13C8-PFOA
F21:MRM of 1 channel,ES-
421.3 > 376
1.178e+006



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
1.148e+006

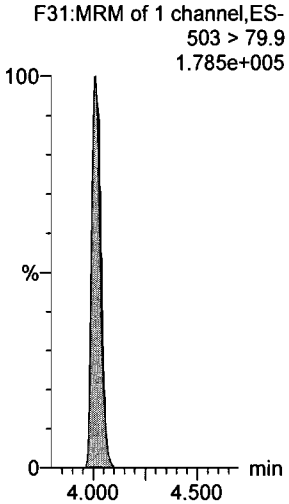


Dataset: U:\Q4.PRO\results\170810M1\170810M2-CRV.qld

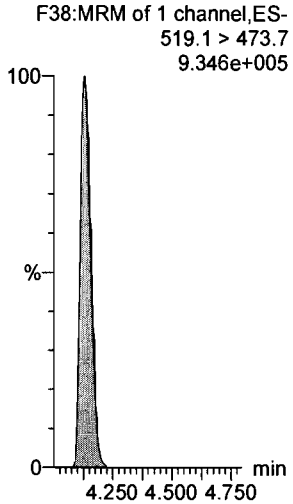
Last Altered: Friday, August 11, 2017 09:12:09 Pacific Daylight Time
Printed: Friday, August 11, 2017 09:27:16 Pacific Daylight Time

Name: 170810M2_11, Date: 10-Aug-2017, Time: 22:09:12, ID: ST170810M2-10 PFC CS7 17H1012, Description: PFC CS7 17H1012

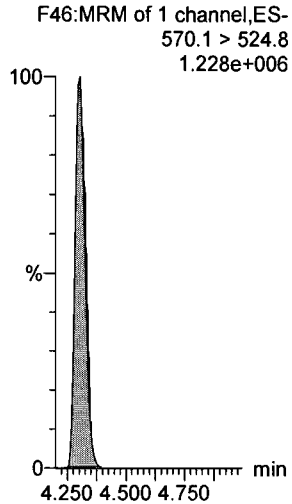
13C4-PFOS



13C6-PFDA



13C7-PFUnA



Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170810M1\170810M2-13.qld

Last Altered: Friday, August 11, 2017 10:32:47 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:35:02 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 08:55:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_13, Date: 10-Aug-2017, Time: 22:30:29, ID: ICV170810M2-1 PFC ICV 17H1020, Description: PFC ICV 17H1020

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1	PFBA	213.0 > 168.8	1.58e4	1.65e4		1.90	1.90	11.9	10.9	108.9
2	2	PFPeA	263.1 > 218.9	2.50e4	3.00e4		3.00	2.93	10.4	10.9	109.1
3	3	PFBS	299 > 79.7	4.94e3	3.50e3		3.16	3.10	17.6	10.2	102.0
4	4	PFHxA	313.2 > 268.9	3.88e4	1.21e4		3.35	3.30	16.1	12.2	122.4
5	5	PFHpA	363 > 318.9	4.45e4	4.43e4		3.61	3.55	12.6	10.7	106.6
6	6	PFHxS	398.9 > 79.6	5.19e3	3.78e3		3.65	3.62	17.2	9.76	97.6
7	7	6:2 FTS	427.1 > 407	8.64e3	1.08e4		3.80	3.74	10.0	10.7	107.4
8	8	PFOA	413 > 368.7	5.53e4	6.29e4		3.82	3.75	11.0	11.1	110.5
9	9	PFHpS	448.9 > 98.8	4.60e3	6.29e4		3.80	3.82	0.914	11.5	115.2
10	10	PFNA	462.9 > 418.8	5.12e4	5.49e4		4.02	3.95	11.7	11.4	113.9
11	11	PFOSA	498.1 > 77.8	6.91e3	7.39e3		4.05	3.96	11.7	11.1	111.0
12	12	PFOS	499 > 79.9	9.36e3	1.10e4		4.07	4.01	10.6	9.98	99.8
13	13	PFDA	513 > 468.8	5.63e4	5.29e4		4.21	4.13	13.3	11.7	116.5
14	14	8:2 FTS	527 > 506.9	9.04e3	7.56e3		4.20	4.12	14.9	10.8	108.3
15	15	N-MeFOSAA	570.1 > 419	1.62e4	1.27e4		4.23	4.16	208	10.8	107.7
16	16	N-EtFOSAA	584.2 > 419	1.43e4	1.37e4		4.30	4.23	170	10.8	108.4
17	17	PFUnA	562.9 > 518.9	4.38e4	6.22e4		4.38	4.30	8.80	10.8	107.9
18	18	PFDS	598.9 > 98.7	4.05e3	6.22e4		4.40	4.35	0.815	9.87	98.7
19	19	PFDoA	612.9 > 318.8	4.95e3	6.76e3		4.58	4.48	9.16	10.9	109.4
20	20	N-MeFOSA	512.1 > 168.9		3.08e4		4.56			(A)	
21	21	PFTrDA	662.9 > 618.9	6.41e4	6.76e3		4.78	4.66	118	11.7	117.0
22	22	PFTeDA	712.9 > 668.8	4.52e4	4.45e4		4.97	4.86	12.7	11.1	110.9
23	23	N-EtFOSA	526.1 > 168.9		3.80e4		5.03			(A)	
24	24	PFHxDA	812.8 > 768.9	2.74e2	2.09e4		5.37	5.24	0.0656		
25	25	PFODA	912.8 > 868.8	3.35e2	2.09e4		5.60	5.60	0.0800		
26	26	N-MeFOSE	616.1 > 58.9		4.35e4		5.30				
27	27	N-EtFOSE	630.1 > 58.9		4.17e4		5.40				
28	28	13C3-PFBA	216.1 > 171.8	1.65e4	1.87e4	0.906	1.90	1.90	11.1	12.2	97.6
29	29	13C3-PFPeA	266 > 221.8	3.00e4	4.18e4	0.284	2.99	2.94	3.59	12.6	101.1
30	30	13C3-PFBS	302 > 98.8	3.50e3	4.18e4	0.033	3.15	3.10	0.418	12.7	101.8
31	31	13C2-PFHxA	315 > 269.8	1.21e4	4.18e4	0.304	3.35	3.30	1.44	4.75	94.9

70-130

50-150

QM 8/11/17

(A) Not present in ICV standard. QM 8/11/17

Dataset: U:\Q4.PRO\results\170810M1\170810M2-13.qld

Last Altered: Friday, August 11, 2017 10:32:47 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:35:02 Pacific Daylight Time

Name: 170810M2_13, Date: 10-Aug-2017, Time: 22:30:29, ID: ICV170810M2-1 PFC ICV 17H1020, Description: PFC ICV 17H1020

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	32	13C4-PFHpA	367.2 > 321.8	4.43e4	4.18e4	0.384	3.61	3.55	5.29	13.8	110.2
33	33	18O2-PFHxS	403 > 102.6	3.78e3	8.56e3	0.417	3.68	3.62	5.52	13.2	105.8
34	34	13C2-6:2 FTS	429.1 > 408.9	1.08e4	6.07e4	0.202	3.80	3.75	2.22	11.0	88.1
35	35	13C2-PFOA	414.9 > 369.7	6.29e4	6.07e4	1.132	3.82	3.75	12.9	11.4	91.5
36	36	13C5-PFNA	468.2 > 422.9	5.49e4	6.37e4	0.946	4.02	3.95	10.8	11.4	91.0
37	37	13C8-PFOSA	506.1 > 77.7	7.39e3	6.42e4	0.119	4.08	3.96	1.44	12.0	96.4
38	38	13C8-PFOS	507 > 79.9	1.10e4	1.05e4	1.040	4.07	4.01	13.1	12.6	101.1
39	39	13C2-PFDA	515.1 > 469.9	5.29e4	5.81e4	0.971	4.21	4.13	11.4	11.7	93.9
40	40	13C2-8:2 FTS	529.1 > 508.7	7.56e3	5.81e4	0.140	4.20	4.12	1.63	11.6	92.8
41	41	d3-N-MeFOSAA	573.3 > 419	1.27e4	6.42e4	0.018	4.23	4.16	2.47	139	85.4
42	42	d5-N-EtFOSAA	589.3 > 419	1.37e4	6.42e4	0.018	4.30	4.22	2.67	146	90.1
43	43	13C2-PFUnA	565 > 519.8	6.22e4	6.42e4	1.085	4.38	4.30	12.1	11.1	89.2
44	44	13C2-PFDoA	615 > 569.7	6.76e3	6.42e4	0.123	4.58	4.48	1.32	10.7	85.5
45	45	d3-N-MeFOSA	515.2 > 168.9	3.08e4	6.42e4	0.043	4.56	4.53	5.99	138	92.3
46	46	13C2-PFTeDA	714.8 > 669.6	4.45e4	6.42e4	0.798	4.97	4.86	8.67	10.9	86.9
47	47	d5-N-ETFOSA	531.1 > 168.9	3.80e4	6.42e4	0.056	5.03	4.97	7.40	133	88.6
48	48	13C2-PFHxDA	815 > 769.7	2.09e4	6.42e4	0.926	5.37	5.24	4.07	4.40	87.9
49	49	d7-N-MeFOSE	623.1 > 58.9	4.35e4	6.42e4	0.059	5.30	5.24	8.46	142	94.9
50	50	d9-N-EtFOSE	639.2 > 58.8	4.17e4	6.42e4	0.059	5.40	5.41	8.12	137	91.1
51	51	13C4-PFBA	217 > 171.8	1.87e4	1.87e4	1.000	1.90	1.90	12.5	12.5	100.0
52	52	13C5-PFHxA	318 > 272.9	4.18e4	4.18e4	1.000	3.35	3.30	5.00	5.00	100.0
53	53	13C3-PFHxS	401.9 > 79.9	8.56e3	8.56e3	1.000	3.68	3.62	12.5	12.5	100.0
54	54	13C8-PFOA	421.3 > 376	6.07e4	6.07e4	1.000	3.82	3.76	12.5	12.5	100.0
55	55	13C9-PFNA	472.2 > 426.9	6.37e4	6.37e4	1.000	4.02	3.95	12.5	12.5	100.0
56	56	13C4-PFOS	503 > 79.9	1.05e4	1.05e4	1.000	4.07	4.01	12.5	12.5	100.0
57	57	13C6-PFDA	519.1 > 473.7	5.81e4	5.81e4	1.000	4.21	4.13	12.5	12.5	100.0
58	58	13C7-PFUnA	570.1 > 524.8	6.42e4	6.42e4	1.000	4.38	4.30	12.5	12.5	100.0

80-150

(B) out of window, not used. ah 8/11/17

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170810M1\170810M2-13.qld

Last Altered: Friday, August 11, 2017 10:32:47 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:35:02 Pacific Daylight Time

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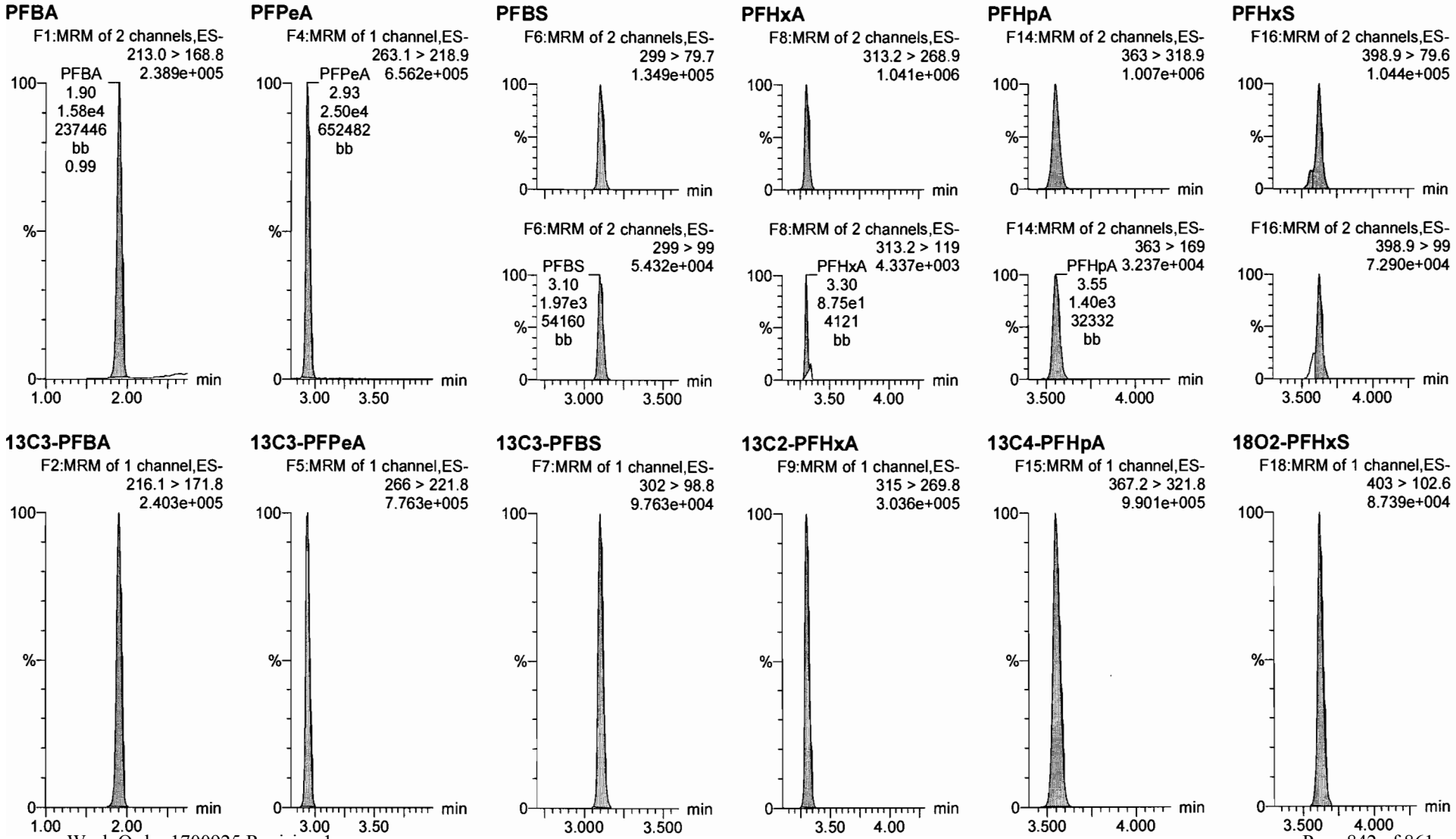
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_13, Date: 10-Aug-2017, Time: 22:30:29, ID: ICV170810M2-1 PFC ICV 17H1020, Description: PFC ICV 17H1020



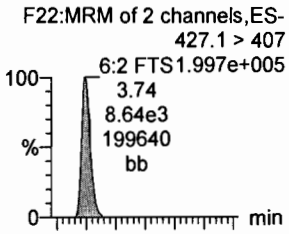
Vista Analytical Laboratory

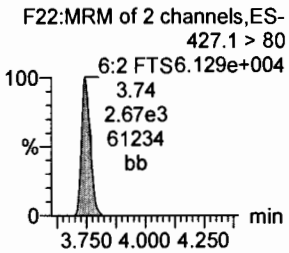
Dataset: U:\Q4.PRO\results\170810M1\170810M2-13.qld

Last Altered: Friday, August 11, 2017 10:32:47 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:35:02 Pacific Daylight Time

Name: 170810M2_13, Date: 10-Aug-2017, Time: 22:30:29, ID: ICV170810M2-1 PFC ICV 17H1020, Description: PFC ICV 17H1020

6:2 FTS





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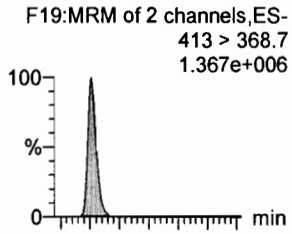
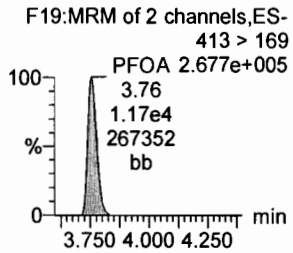
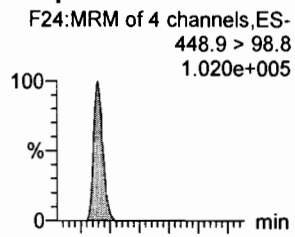
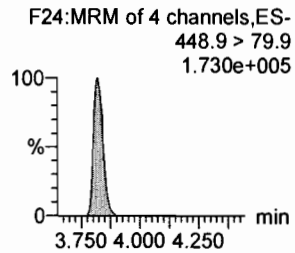




PFHpS





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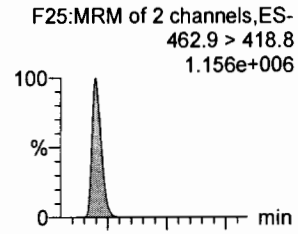
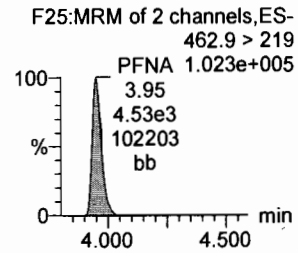
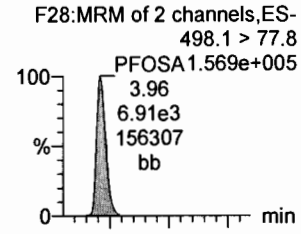
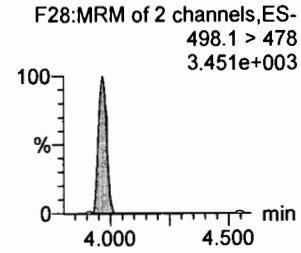




PFOSA





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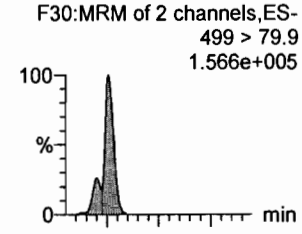
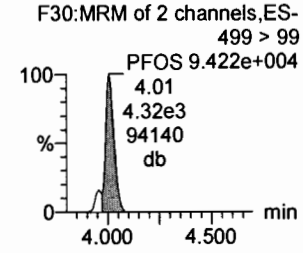
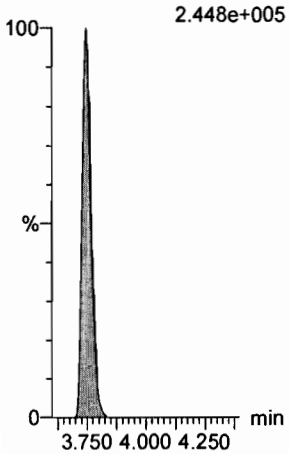
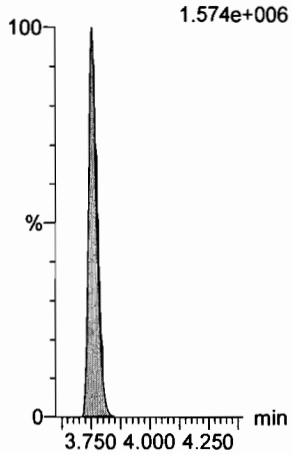




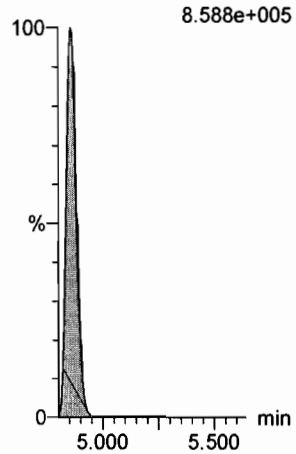
13C2-6:2 FTS



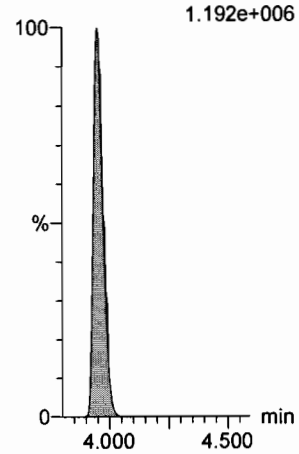
13C2-PFOA



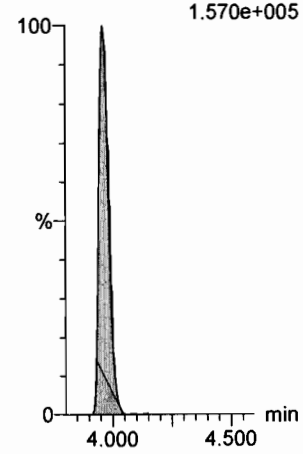
13C2-PFTeDA



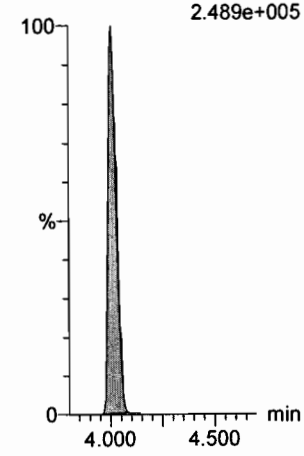
13C5-PFNA



13C8-PFOSA



13C8-PFOS



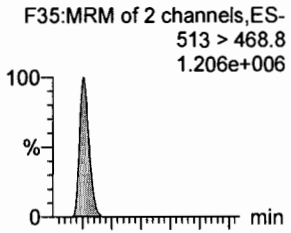
Vista Analytical Laboratory

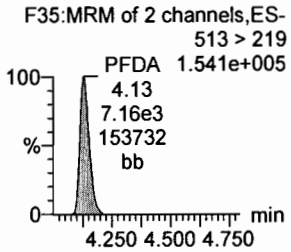
Dataset: U:\Q4.PRO\results\170810M1\170810M2-13.qld

Last Altered: Friday, August 11, 2017 10:32:47 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:35:02 Pacific Daylight Time

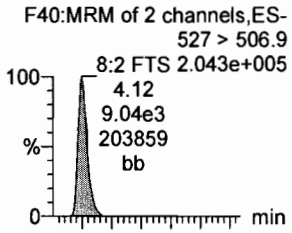
Name: 170810M2_13, Date: 10-Aug-2017, Time: 22:30:29, ID: ICV170810M2-1 PFC ICV 17H1020, Description: PFC ICV 17H1020

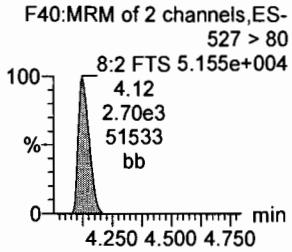
PFDA





8:2 FTS





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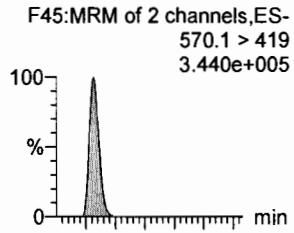

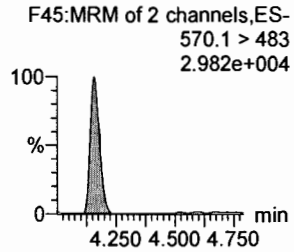

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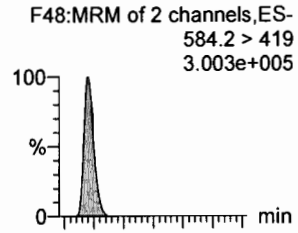

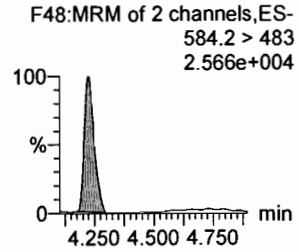

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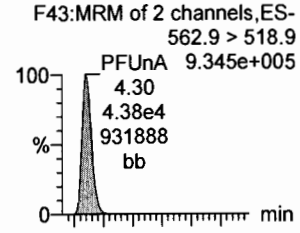

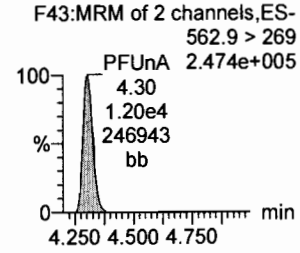

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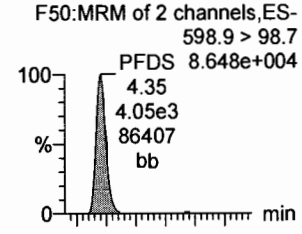
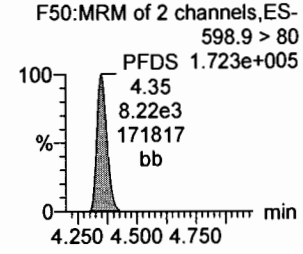
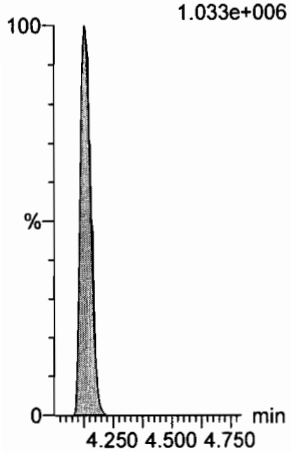
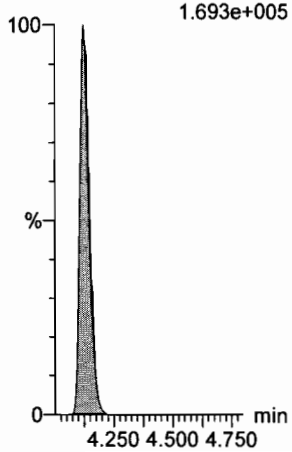




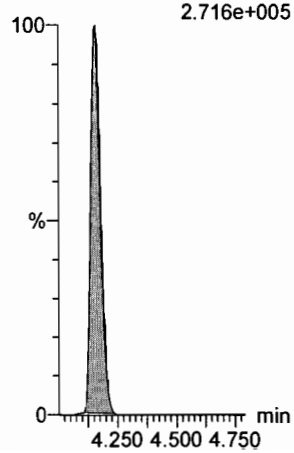
13C2-PFDA



13C2-8:2 FTS



d3-N-MeFOSAA



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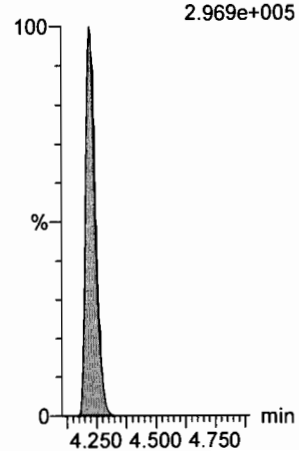

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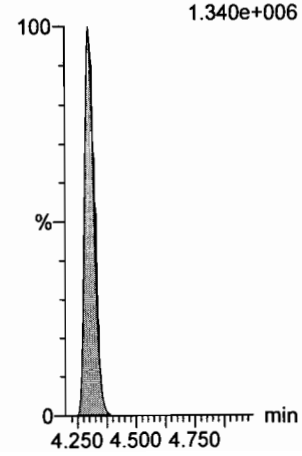

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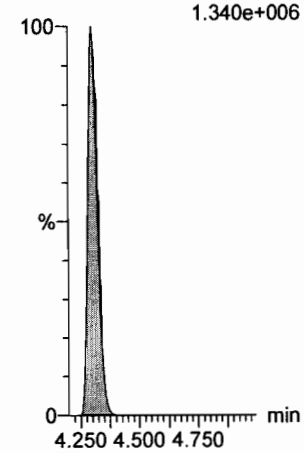

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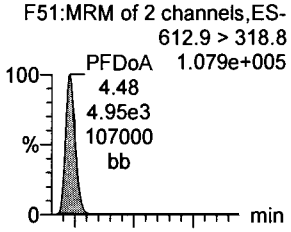
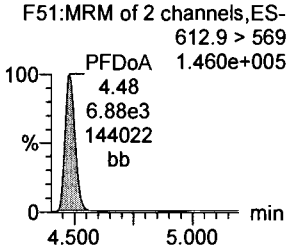
Last Altered: Friday, August 11, 2017 10:32:47 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:35:02 Pacific Daylight Time

Name: 170810M2_13, Date: 10-Aug-2017, Time: 22:30:29, ID: ICV170810M2-1 PFC ICV 17H1020, Description: PFC ICV 17H1020

PFDoA





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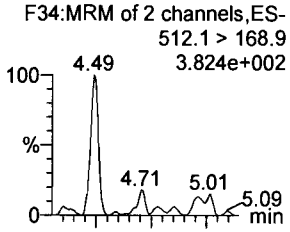

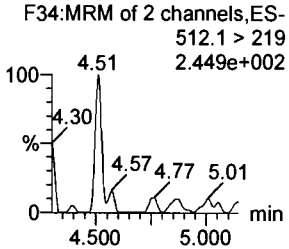

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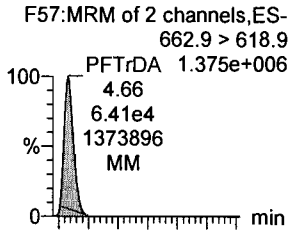

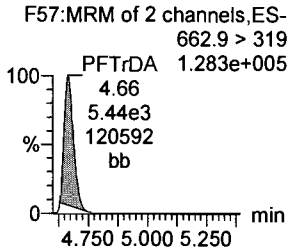

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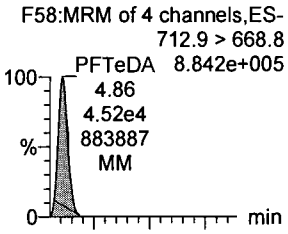

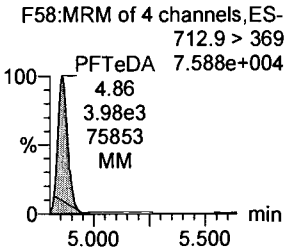

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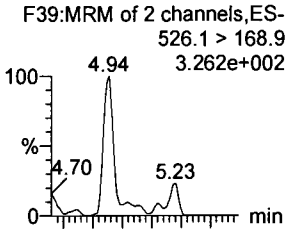

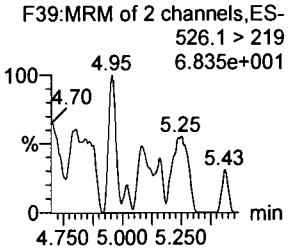

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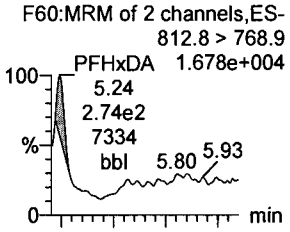
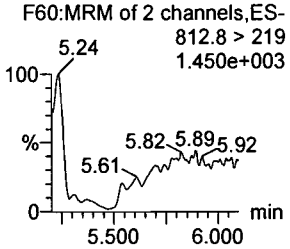
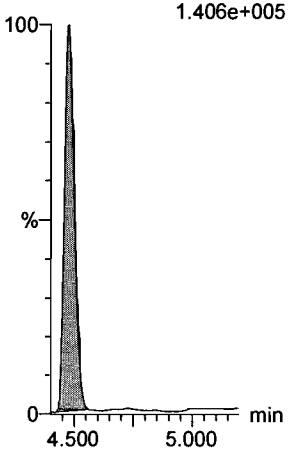
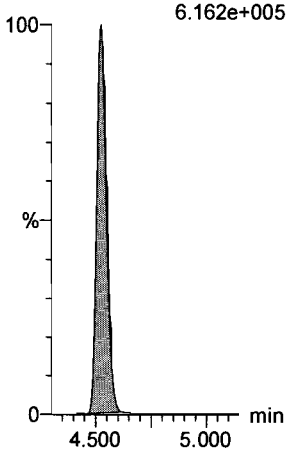




13C2-PFDoA



d3-N-MeFOSA



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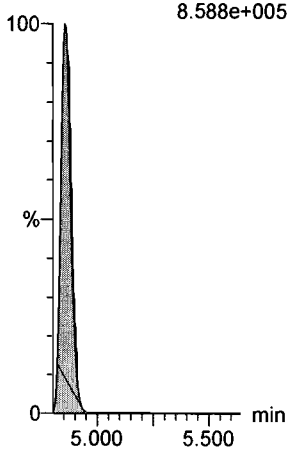

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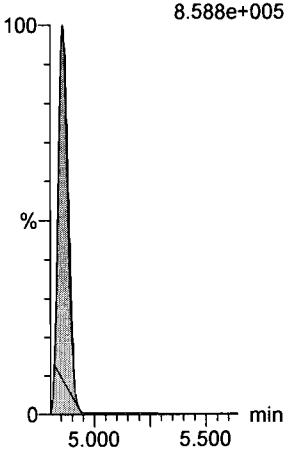
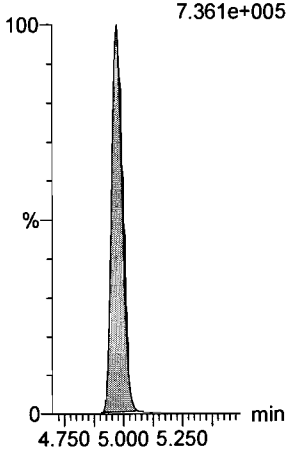


d5-N-ETFOSA



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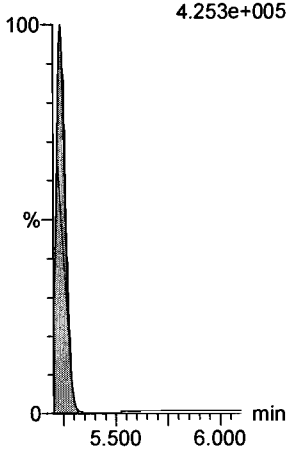

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Name: 170810M2_13, Date: 10-Aug-2017, Time: 22:30:29, ID: ICV170810M2-1 PFC ICV 17H1020, Description: PFC ICV 17H1020

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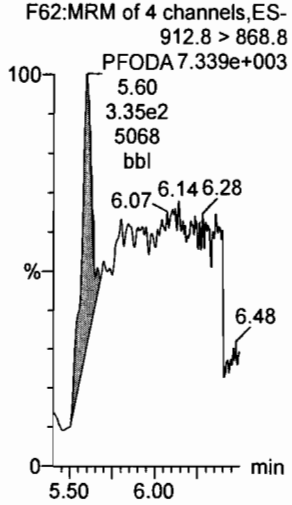

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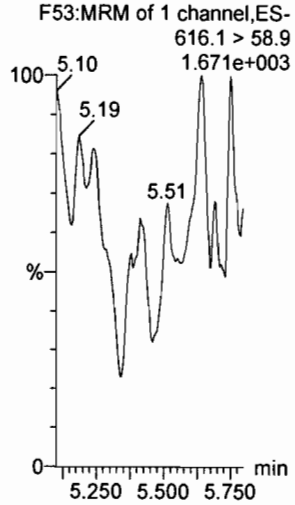

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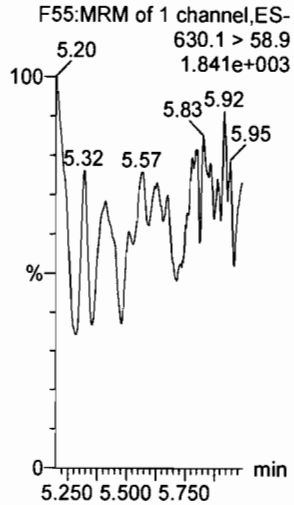

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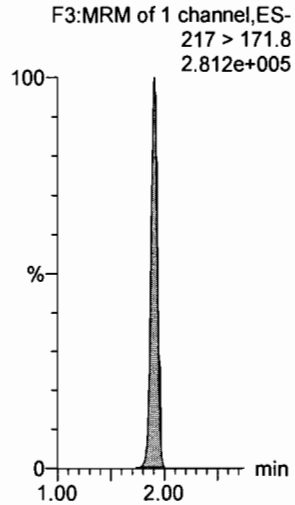

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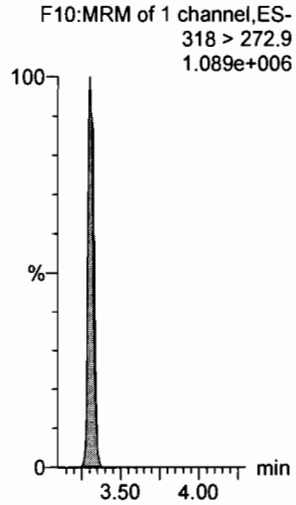

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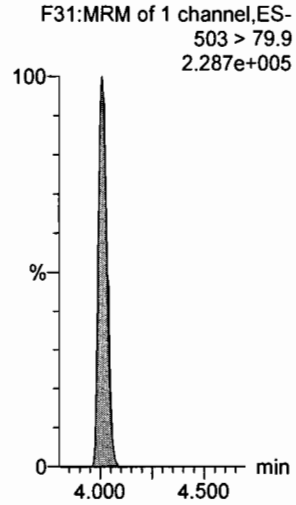

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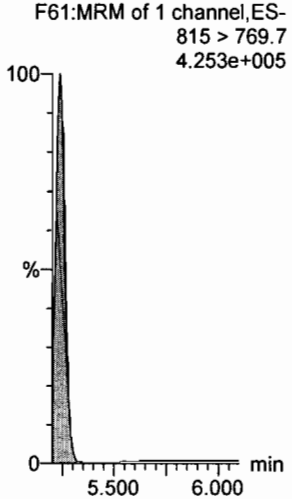
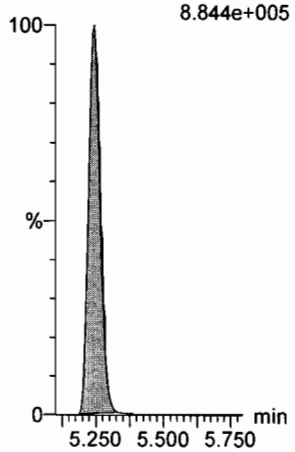
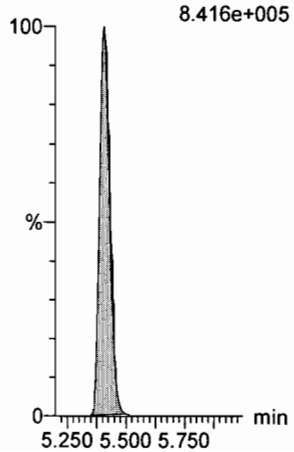


d7-N-MeFOSE



d9-N-EtFOSE



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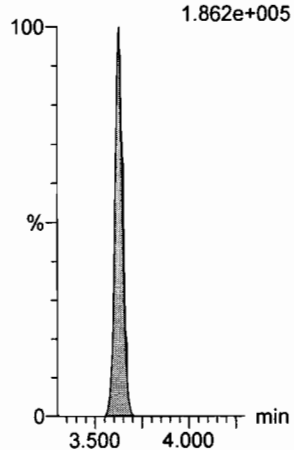

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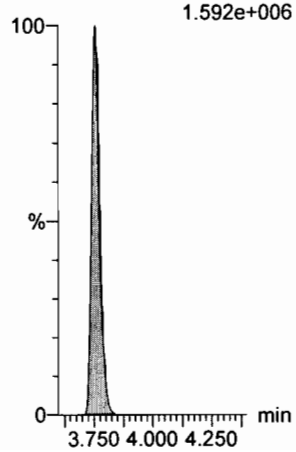

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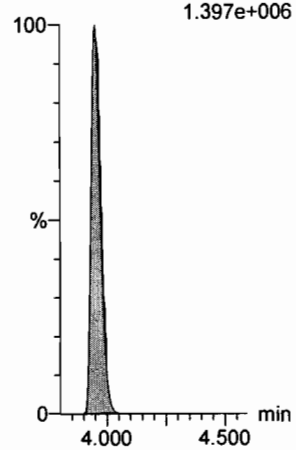

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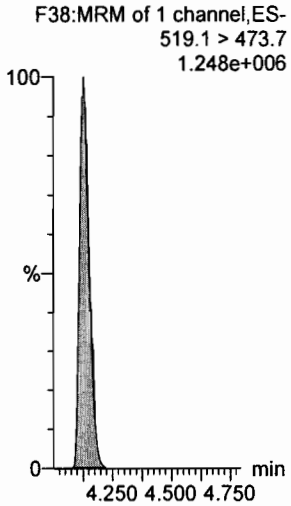
Name: 170810M2_13, Date: 10-Aug-2017, Time: 22:30:29, ID: ICV170810M2-1 PFC ICV 17H1020, Description: PFC ICV 17H1020

13C6-PFDA



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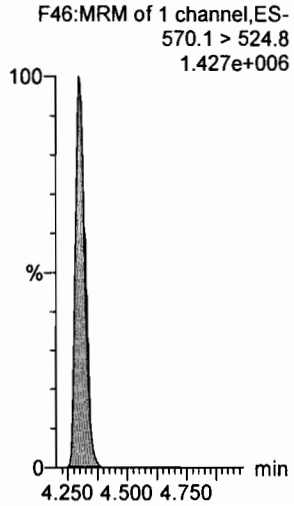

Vista Analytical Laboratory

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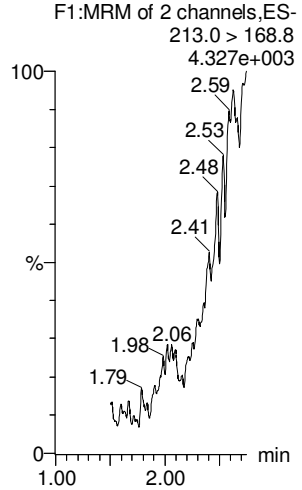
PFBA



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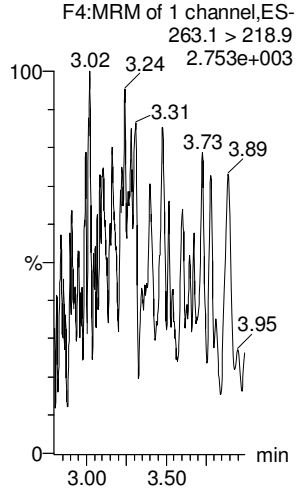

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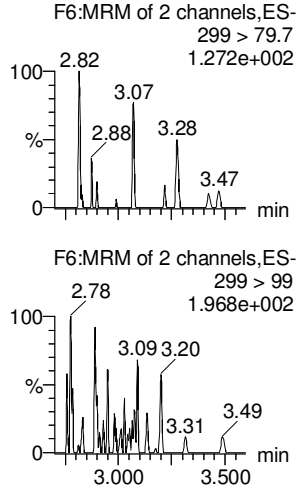

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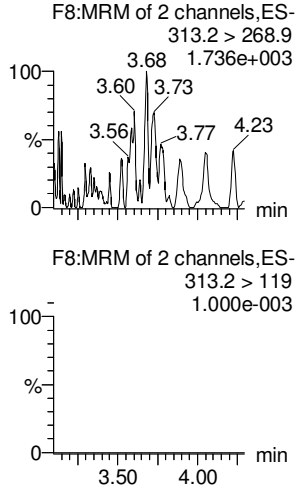

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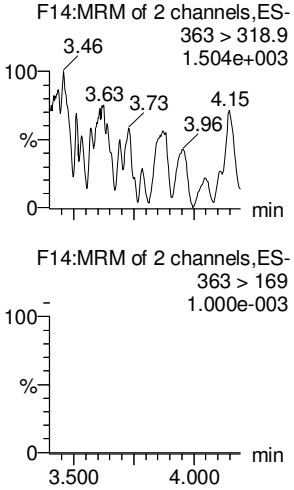

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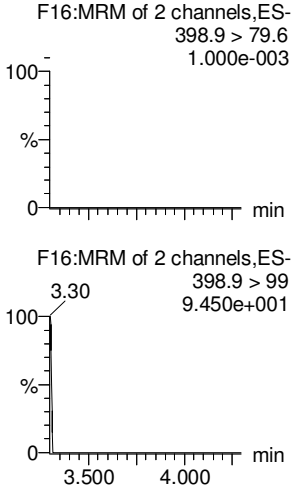

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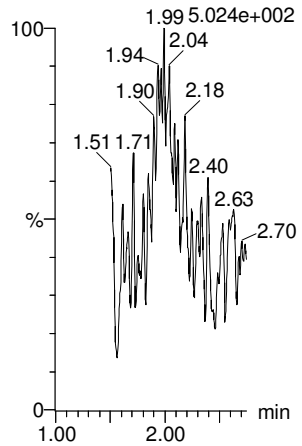
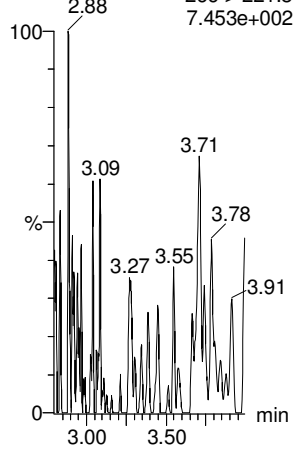


13C3-PFPeA



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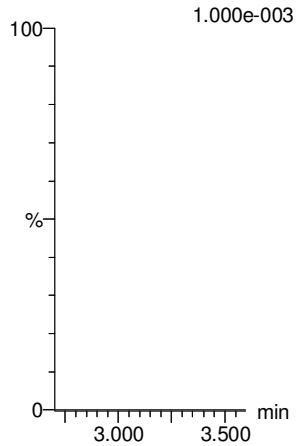

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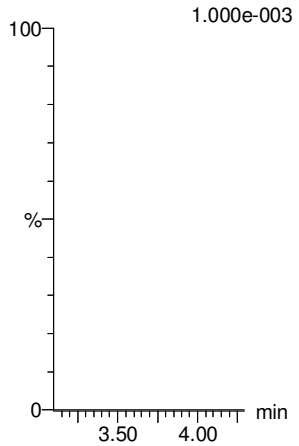

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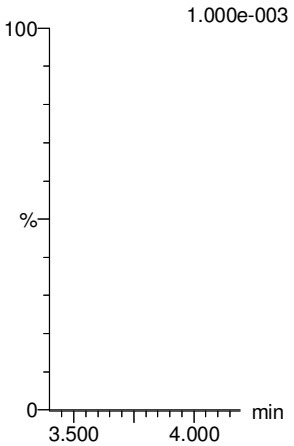

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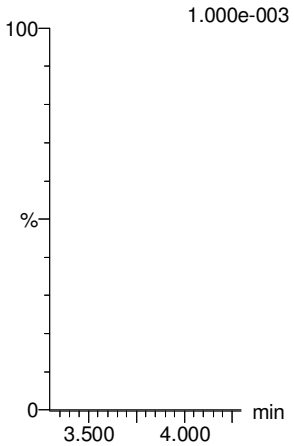

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Vista Analytical Laboratory

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Name: 170810M2_12, Date: 10-Aug-2017, Time: 22:19:51, ID: IPA, Description: IPA

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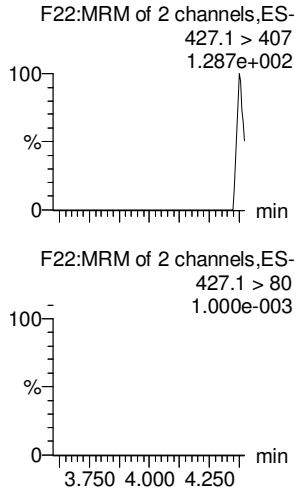

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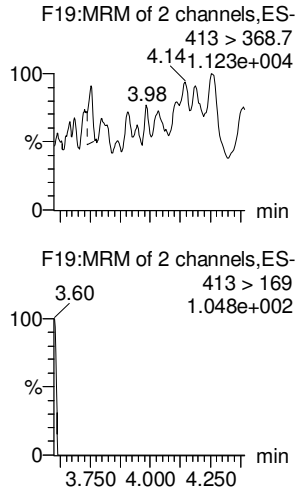

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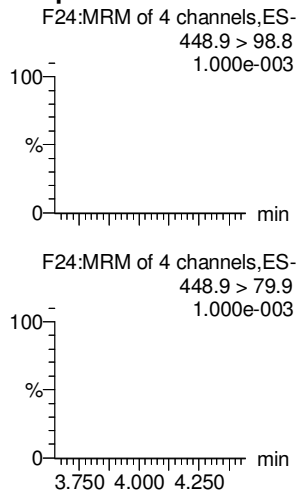

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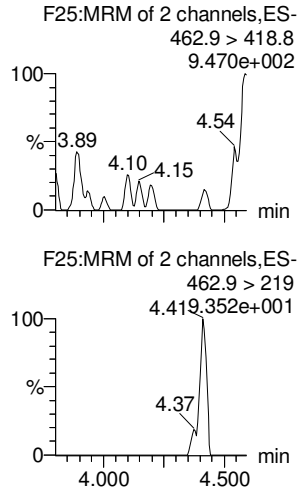

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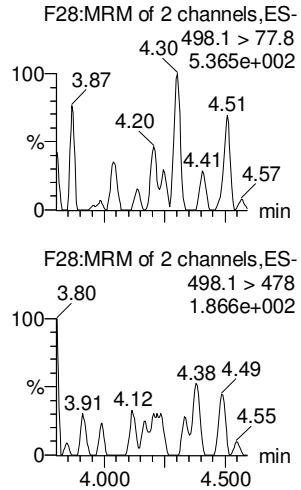

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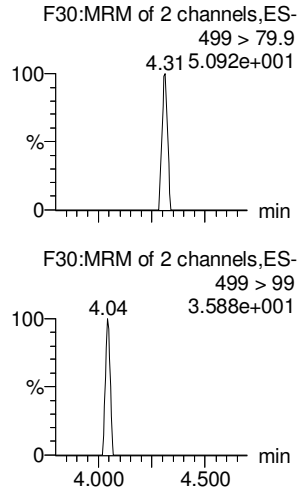

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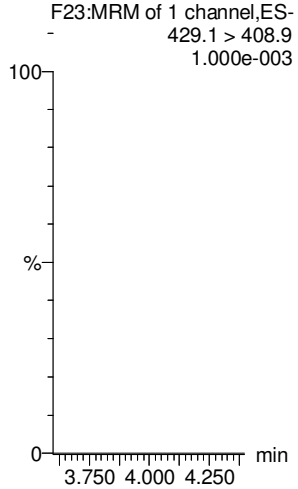

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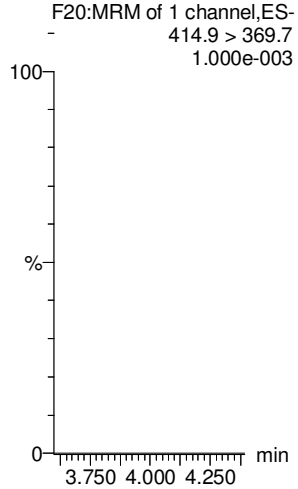

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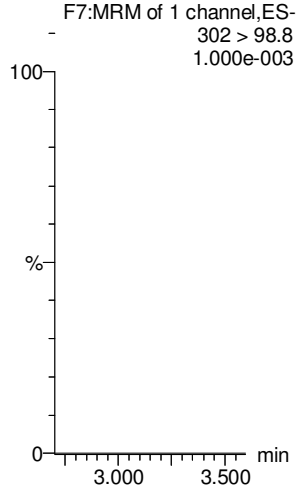

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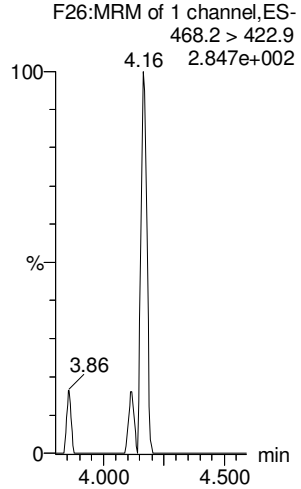

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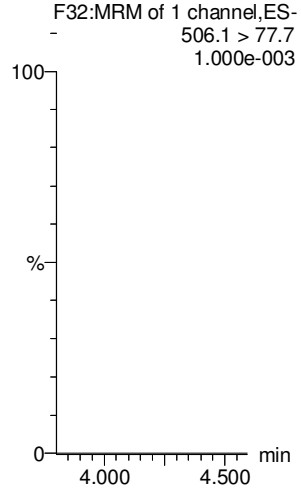

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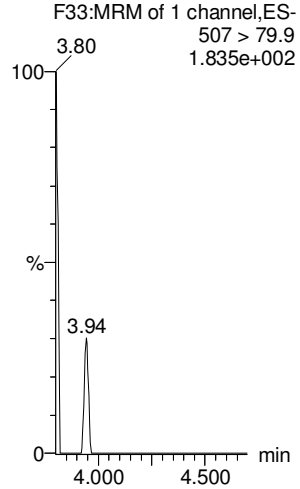

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Vista Analytical Laboratory

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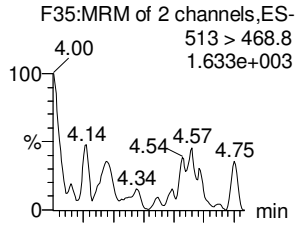
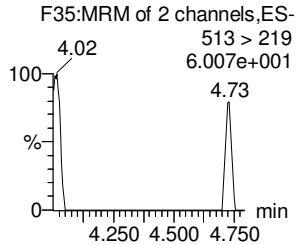
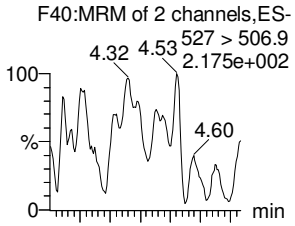
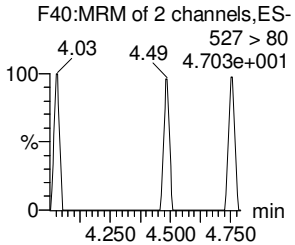




8:2 FTS





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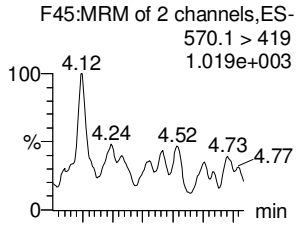

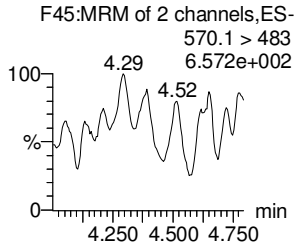

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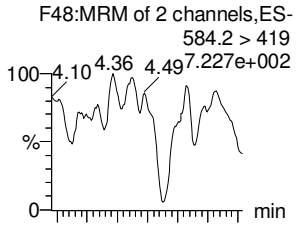

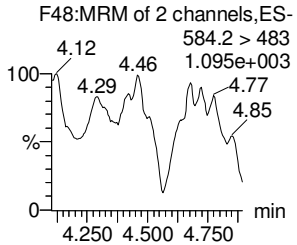

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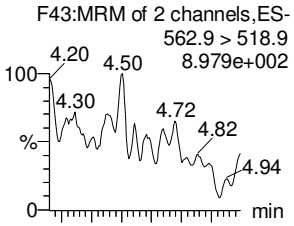

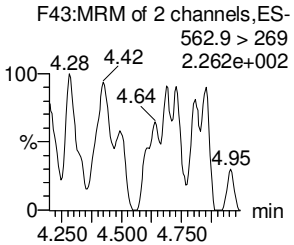

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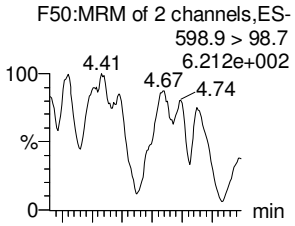

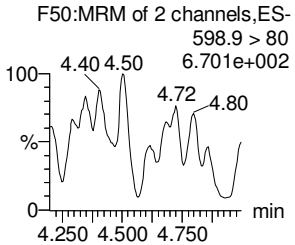

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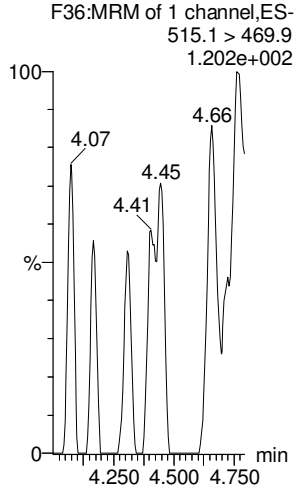
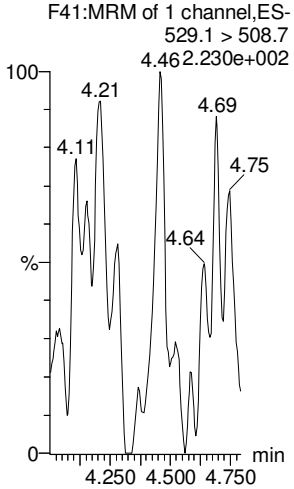


13C2-8:2 FTS



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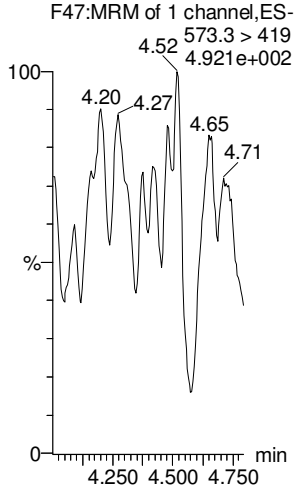

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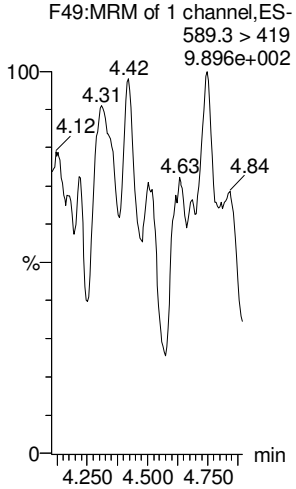

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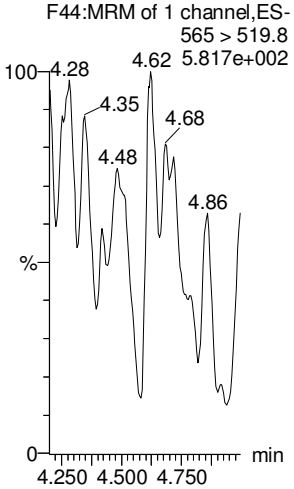

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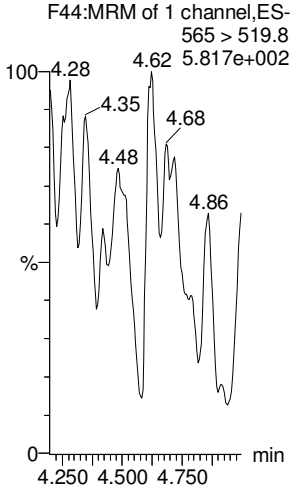

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Vista Analytical Laboratory

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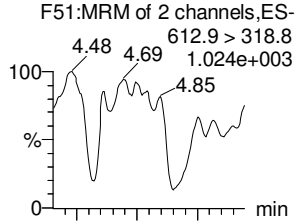

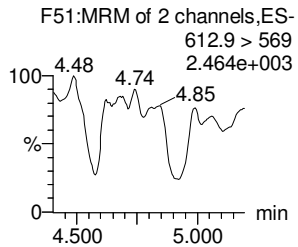

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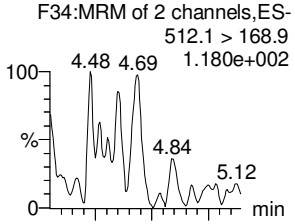

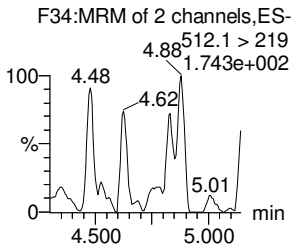

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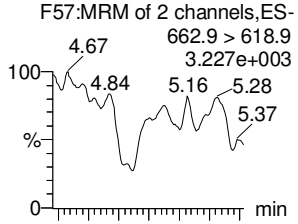

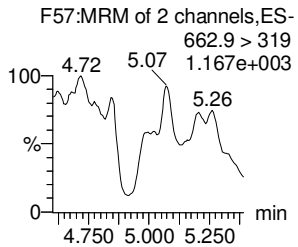

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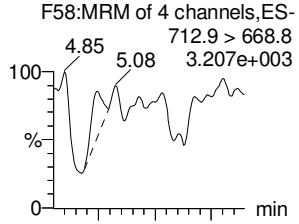

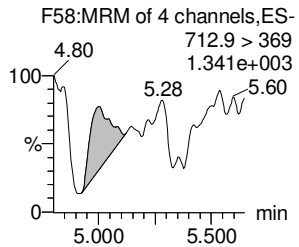

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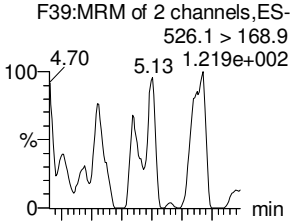

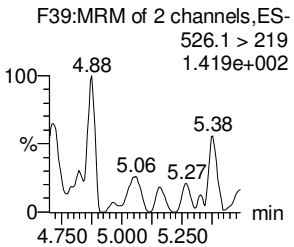

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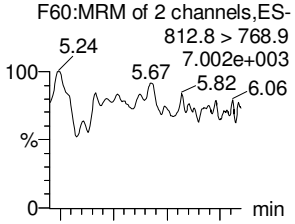

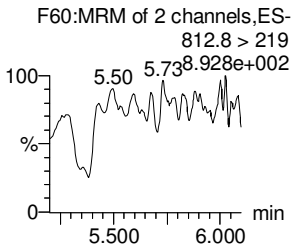

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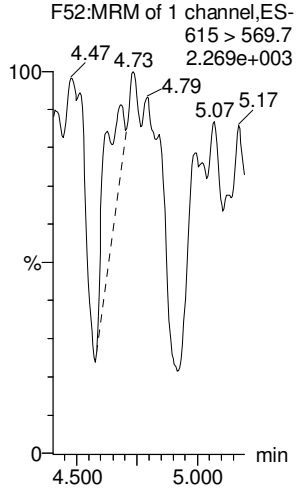

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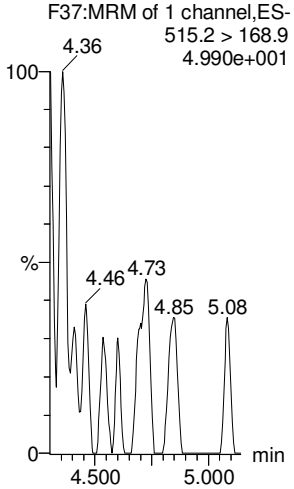

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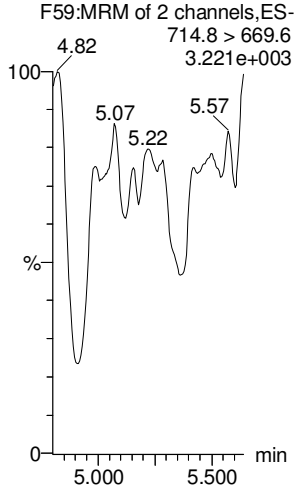

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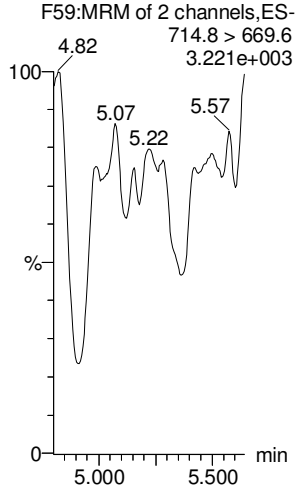

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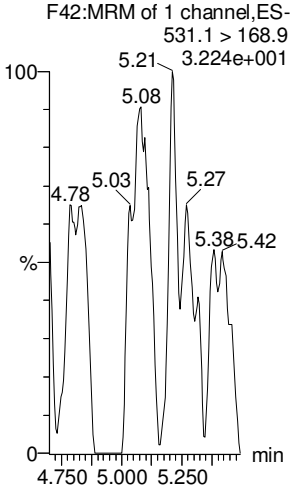

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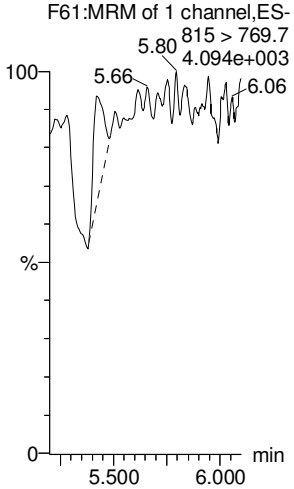

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Vista Analytical Laboratory

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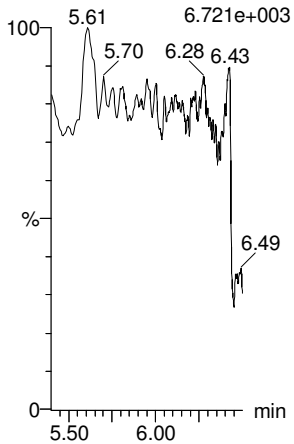
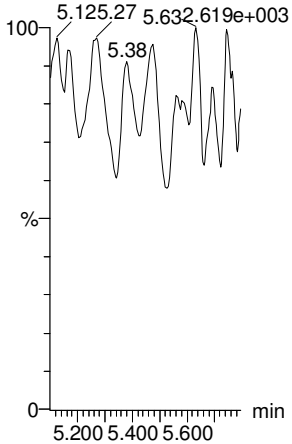
Name: 170810M2_12, Date: 10-Aug-2017, Time: 22:19:51, ID: IPA, Description: IPA

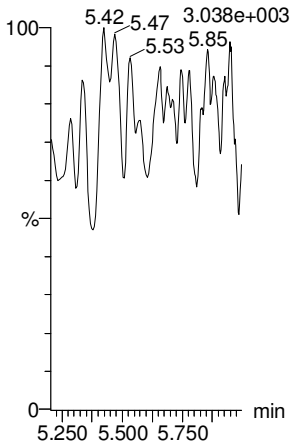
PFODA
F62:MRM of 4 channels,ES-
912.8 > 868.8
6.721e+003



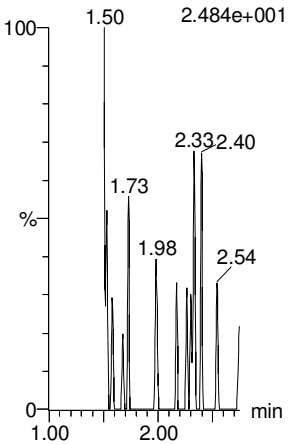
N-MeFOSE
F53:MRM of 1 channel,ES-
616.1 > 58.9
2.619e+003



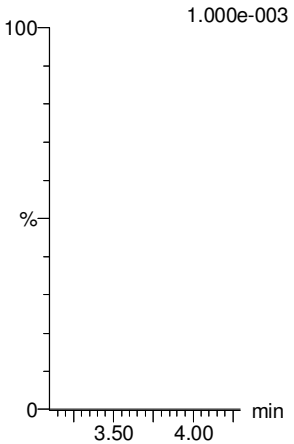
N-EtFOSE
F55:MRM of 1 channel,ES-
630.1 > 58.9
3.038e+003



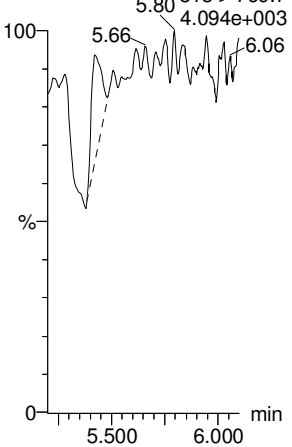
13C4-PFBA
F3:MRM of 1 channel,ES-
217 > 171.8
2.484e+001



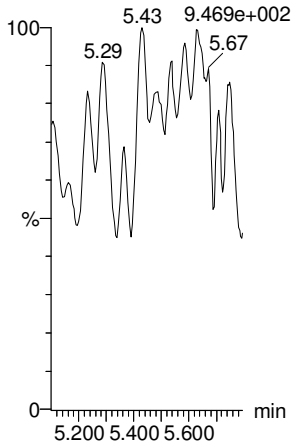
13C5-PFHxA
F10:MRM of 1 channel,ES-
-
318 > 272.9
1.000e-003



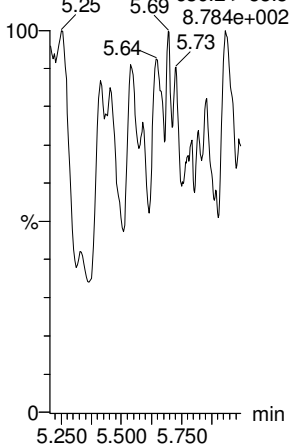
13C2-PFHxDA
F61:MRM of 1 channel,ES-
815 > 769.7
4.094e+003



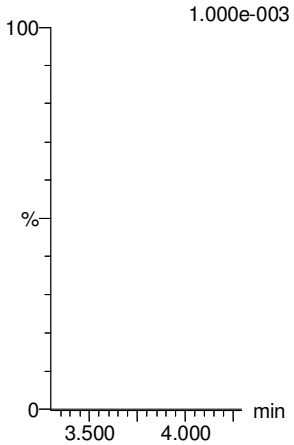
d7-N-MeFOSE
F54:MRM of 1 channel,ES-
623.1 > 58.9
9.469e+002



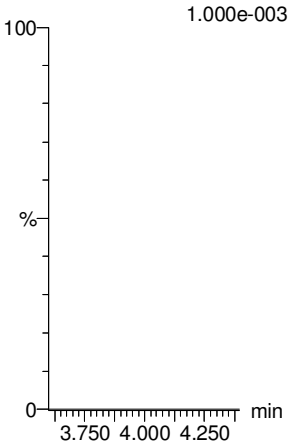
d9-N-EtFOSE
F56:MRM of 1 channel,ES-
639.2 > 58.8
8.784e+002



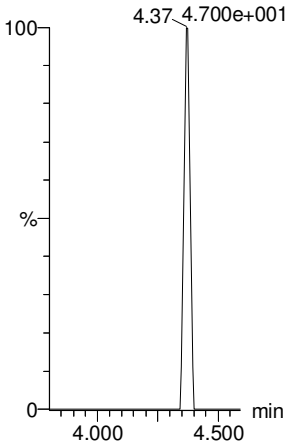
13C3-PFHxS
F17:MRM of 1 channel,ES-
-
401.9 > 79.9
1.000e-003



13C8-PFOA
F21:MRM of 1 channel,ES-
-
421.3 > 376
1.000e-003



13C9-PFNA
F27:MRM of 1 channel,ES-
472.2 > 426.9
4.700e+001



GM 8/11/17

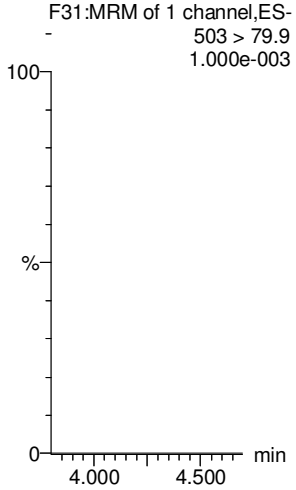
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170810M1\170810M2-12.qld

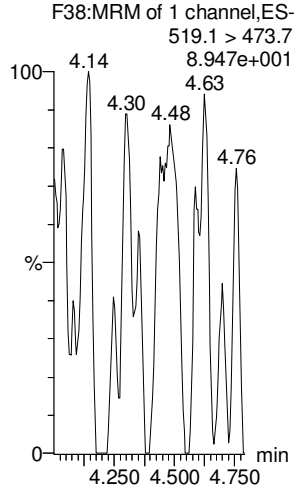
Last Altered: Friday, August 11, 2017 10:12:48 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:13:44 Pacific Daylight Time

Name: 170810M2_12, Date: 10-Aug-2017, Time: 22:19:51, ID: IPA, Description: IPA

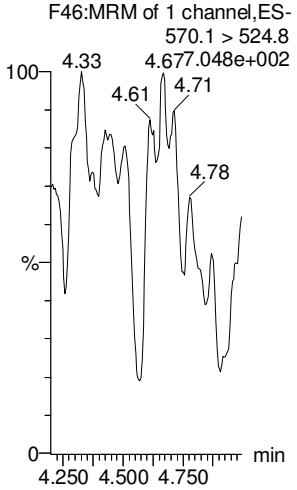
13C4-PFOS



13C6-PFDA



13C7-PFUnA



GM 8/11/17

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170810M1\170810M2-13.qld

Last Altered: Friday, August 11, 2017 10:32:47 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:35:02 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_8-10-17.mdb 11 Aug 2017 08:55:25
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_13, Date: 10-Aug-2017, Time: 22:30:29, ID: ICV170810M2-1 PFC ICV 17H1020, Description: PFC ICV 17H1020

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1	PFBA	213.0 > 168.8	1.58e4	1.65e4		1.90	1.90	11.9	10.9	108.9
2	2	PFPeA	263.1 > 218.9	2.50e4	3.00e4		3.00	2.93	10.4	10.9	109.1
3	3	PFBS	299 > 79.7	4.94e3	3.50e3		3.16	3.10	17.6	10.2	102.0
4	4	PFHxA	313.2 > 268.9	3.88e4	1.21e4		3.35	3.30	16.1	12.2	122.4
5	5	PFHpA	363 > 318.9	4.45e4	4.43e4		3.61	3.55	12.6	10.7	106.6
6	6	PFHxS	398.9 > 79.6	5.19e3	3.78e3		3.65	3.62	17.2	9.76	97.6
7	7	6:2 FTS	427.1 > 407	8.64e3	1.08e4		3.80	3.74	10.0	10.7	107.4
8	8	PFOA	413 > 368.7	5.53e4	6.29e4		3.82	3.75	11.0	11.1	110.5
9	9	PFHpS	448.9 > 98.8	4.60e3	6.29e4		3.80	3.82	0.914	11.5	115.2
10	10	PFNA	462.9 > 418.8	5.12e4	5.49e4		4.02	3.95	11.7	11.4	113.9
11	11	PFOSA	498.1 > 77.8	6.91e3	7.39e3		4.05	3.96	11.7	11.1	111.0
12	12	PFOS	499 > 79.9	9.36e3	1.10e4		4.07	4.01	10.6	9.98	99.8
13	13	PFDA	513 > 468.8	5.63e4	5.29e4		4.21	4.13	13.3	11.7	116.5
14	14	8:2 FTS	527 > 506.9	9.04e3	7.56e3		4.20	4.12	14.9	10.8	108.3
15	15	N-MeFOSAA	570.1 > 419	1.62e4	1.27e4		4.23	4.16	208	10.8	107.7
16	16	N-EtFOSAA	584.2 > 419	1.43e4	1.37e4		4.30	4.23	170	10.8	108.4
17	17	PFUnA	562.9 > 518.9	4.38e4	6.22e4		4.38	4.30	8.80	10.8	107.9
18	18	PFDS	598.9 > 98.7	4.05e3	6.22e4		4.40	4.35	0.815	9.87	98.7
19	19	PFDoA	612.9 > 318.8	4.95e3	6.76e3		4.58	4.48	9.16	10.9	109.4
20	20	N-MeFOSA	512.1 > 168.9		3.08e4		4.56			(A)	
21	21	PFTrDA	662.9 > 618.9	6.41e4	6.76e3		4.78	4.66	118	11.7	117.0
22	22	PFTeDA	712.9 > 668.8	4.52e4	4.45e4		4.97	4.86	12.7	11.1	110.9
23	23	N-EtFOSA	526.1 > 168.9		3.80e4		5.03			(A)	
24	24	PFHxDA	812.8 > 768.9	2.74e2	2.09e4		5.37	5.24	0.0656		
25	25	PFODA	912.8 > 868.8	3.35e2	2.09e4		5.60	5.60	0.0800		
26	26	N-MeFOSE	616.1 > 58.9		4.35e4		5.30				
27	27	N-EtFOSE	630.1 > 58.9		4.17e4		5.40				
28	28	13C3-PFBA	216.1 > 171.8	1.65e4	1.87e4	0.906	1.90	1.90	11.1	12.2	97.6
29	29	13C3-PFPeA	266 > 221.8	3.00e4	4.18e4	0.284	2.99	2.94	3.59	12.6	101.1
30	30	13C3-PFBS	302 > 98.8	3.50e3	4.18e4	0.033	3.15	3.10	0.418	12.7	101.8
31	31	13C2-PFHxA	315 > 269.8	1.21e4	4.18e4	0.304	3.35	3.30	1.44	4.75	94.9

70-130

50-150

DM 8/11/17

(A) Not present in ICV standard. DM 8/11/17

Dataset: U:\Q4.PRO\results\170810M1\170810M2-13.qld

Last Altered: Friday, August 11, 2017 10:32:47 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:35:02 Pacific Daylight Time

Name: 170810M2_13, Date: 10-Aug-2017, Time: 22:30:29, ID: ICV170810M2-1 PFC ICV 17H1020, Description: PFC ICV 17H1020

	#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	32	13C4-PFHpA	367.2 > 321.8	4.43e4	4.18e4	0.384	3.61	3.55	5.29	13.8	110.2
33	33	18O2-PFHxS	403 > 102.6	3.78e3	8.56e3	0.417	3.68	3.62	5.52	13.2	105.8
34	34	13C2-6:2 FTS	429.1 > 408.9	1.08e4	6.07e4	0.202	3.80	3.75	2.22	11.0	88.1
35	35	13C2-PFOA	414.9 > 369.7	6.29e4	6.07e4	1.132	3.82	3.75	12.9	11.4	91.5
36	36	13C5-PFNA	468.2 > 422.9	5.49e4	6.37e4	0.946	4.02	3.95	10.8	11.4	91.0
37	37	13C8-PFOSA	506.1 > 77.7	7.39e3	6.42e4	0.119	4.08	3.96	1.44	12.0	96.4
38	38	13C8-PFOS	507 > 79.9	1.10e4	1.05e4	1.040	4.07	4.01	13.1	12.6	101.1
39	39	13C2-PFDA	515.1 > 469.9	5.29e4	5.81e4	0.971	4.21	4.13	11.4	11.7	93.9
40	40	13C2-8:2 FTS	529.1 > 508.7	7.56e3	5.81e4	0.140	4.20	4.12	1.63	11.6	92.8
41	41	d3-N-MeFOSAA	573.3 > 419	1.27e4	6.42e4	0.018	4.23	4.16	2.47	139	85.4
42	42	d5-N-EtFOSAA	589.3 > 419	1.37e4	6.42e4	0.018	4.30	4.22	2.67	146	90.1
43	43	13C2-PFUnA	565 > 519.8	6.22e4	6.42e4	1.085	4.38	4.30	12.1	11.1	89.2
44	44	13C2-PFDoA	615 > 569.7	6.76e3	6.42e4	0.123	4.58	4.48	1.32	10.7	85.5
45	45	d3-N-MeFOSA	515.2 > 168.9	3.08e4	6.42e4	0.043	4.56	4.53	5.99	138	92.3
46	46	13C2-PFTeDA	714.8 > 669.6	4.45e4	6.42e4	0.798	4.97	4.86	8.67	10.9	86.9
47	47	d5-N-ETFOSA	531.1 > 168.9	3.80e4	6.42e4	0.056	5.03	4.97	7.40	133	88.6
48	48	13C2-PFHxDA	815 > 769.7	2.09e4	6.42e4	0.926	5.37	5.24	4.07	4.40	87.9
49	49	d7-N-MeFOSE	623.1 > 58.9	4.35e4	6.42e4	0.059	5.30	5.24	8.46	142	94.9
50	50	d9-N-EtFOSE	639.2 > 58.8	4.17e4	6.42e4	0.059	5.40	5.41	8.12	137	91.1
51	51	13C4-PFBA	217 > 171.8	1.87e4	1.87e4	1.000	1.90	1.90	12.5	12.5	100.0
52	52	13C5-PFHxA	318 > 272.9	4.18e4	4.18e4	1.000	3.35	3.30	5.00	5.00	100.0
53	53	13C3-PFHxS	401.9 > 79.9	8.56e3	8.56e3	1.000	3.68	3.62	12.5	12.5	100.0
54	54	13C8-PFOA	421.3 > 376	6.07e4	6.07e4	1.000	3.82	3.76	12.5	12.5	100.0
55	55	13C9-PFNA	472.2 > 426.9	6.37e4	6.37e4	1.000	4.02	3.95	12.5	12.5	100.0
56	56	13C4-PFOS	503 > 79.9	1.05e4	1.05e4	1.000	4.07	4.01	12.5	12.5	100.0
57	57	13C6-PFDA	519.1 > 473.7	5.81e4	5.81e4	1.000	4.21	4.13	12.5	12.5	100.0
58	58	13C7-PFUnA	570.1 > 524.8	6.42e4	6.42e4	1.000	4.38	4.30	12.5	12.5	100.0

80-150

(B) out of window, not used. ah 8/11/17

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170810M1\170810M2-13.qld

Last Altered: Friday, August 11, 2017 10:32:47 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:35:02 Pacific Daylight Time

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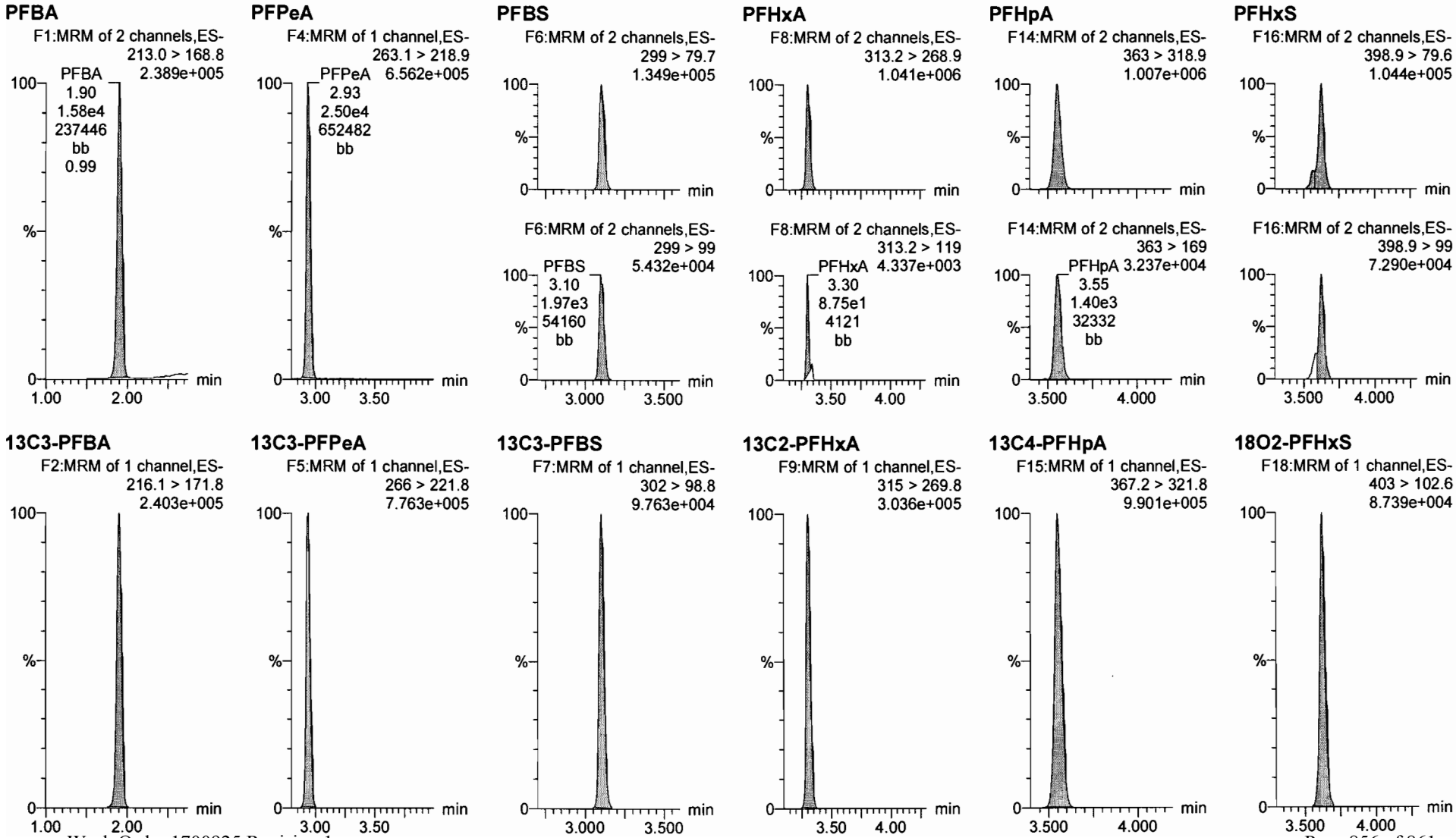
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_8-10-17-FULL.cdb 11 Aug 2017 09:29:36

Name: 170810M2_13, Date: 10-Aug-2017, Time: 22:30:29, ID: ICV170810M2-1 PFC ICV 17H1020, Description: PFC ICV 17H1020

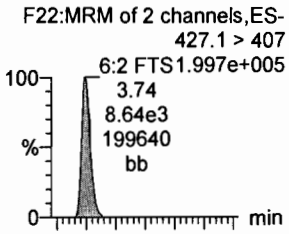


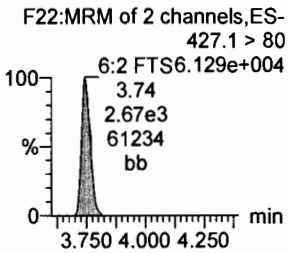
Dataset: U:\Q4.PRO\results\170810M1\170810M2-13.qld

Last Altered: Friday, August 11, 2017 10:32:47 Pacific Daylight Time
Printed: Friday, August 11, 2017 10:35:02 Pacific Daylight Time

Name: 170810M2_13, Date: 10-Aug-2017, Time: 22:30:29, ID: ICV170810M2-1 PFC ICV 17H1020, Description: PFC ICV 17H1020

6:2 FTS





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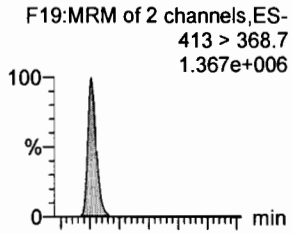
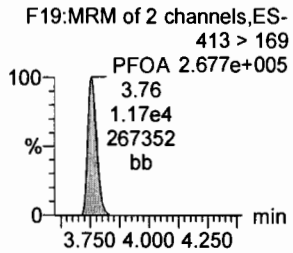
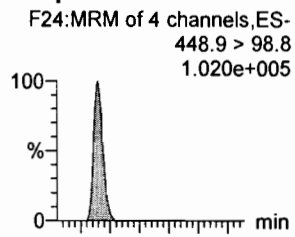
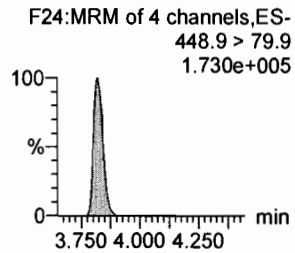




PFHpS





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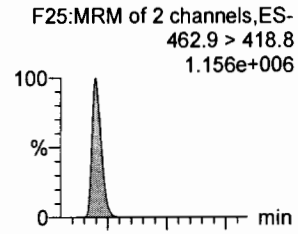
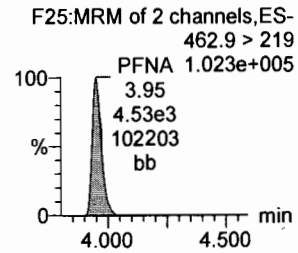
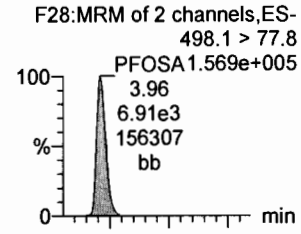
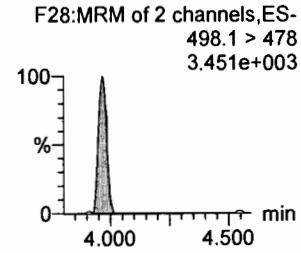


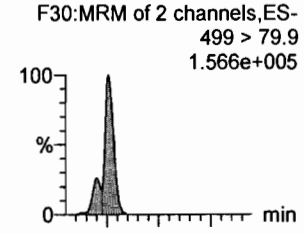


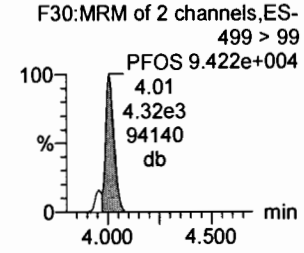
PFOSA



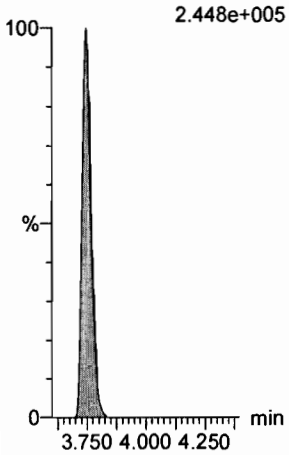


PFOS

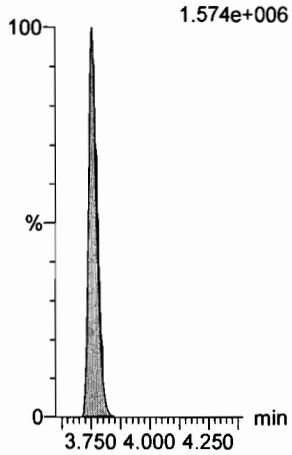




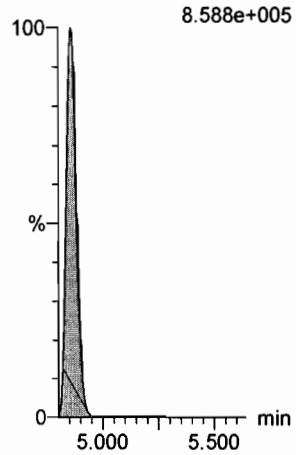
13C2-6:2 FTS



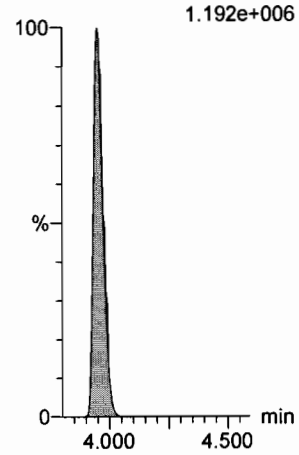
13C2-PFOA



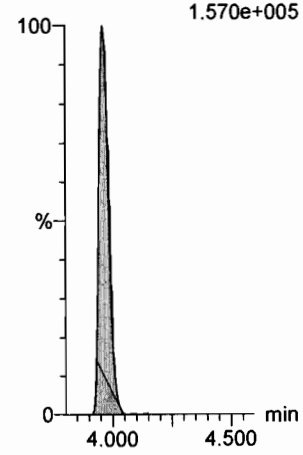
13C2-PFTeDA



13C5-PFNA



13C8-PFOSA



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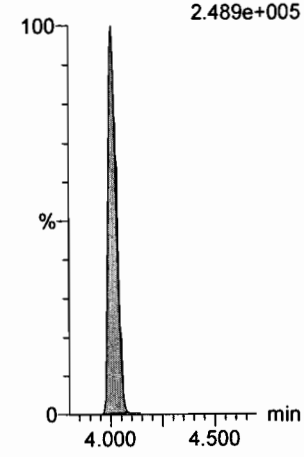

Vista Analytical Laboratory

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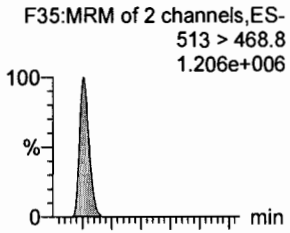
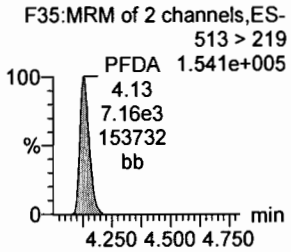
Printed: Friday, August 11, 2017 10:35:02 Pacific Daylight Time

Name: 170810M2_13, Date: 10-Aug-2017, Time: 22:30:29, ID: ICV170810M2-1 PFC ICV 17H1020, Description: PFC ICV 17H1020

PFDA





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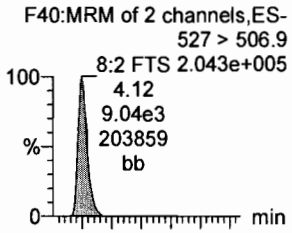

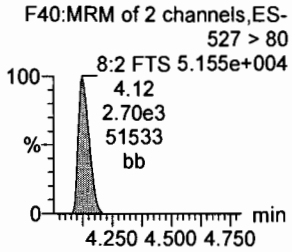

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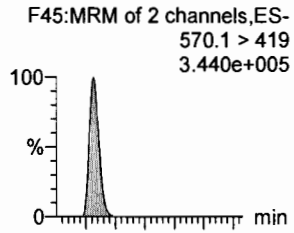

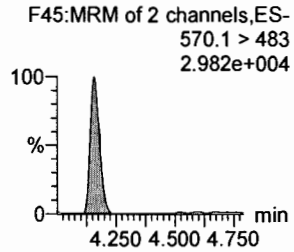

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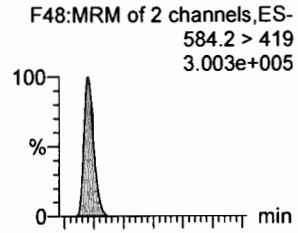

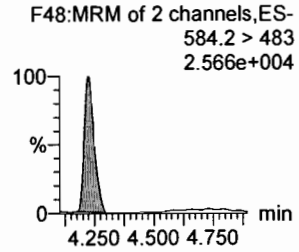

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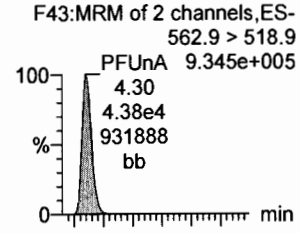

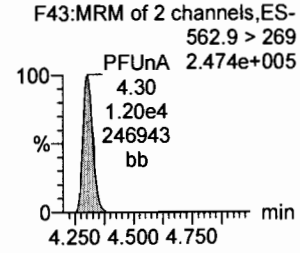

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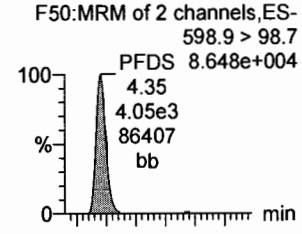

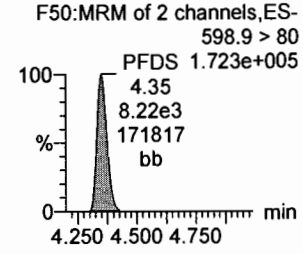

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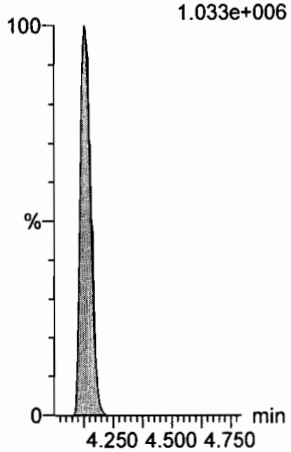

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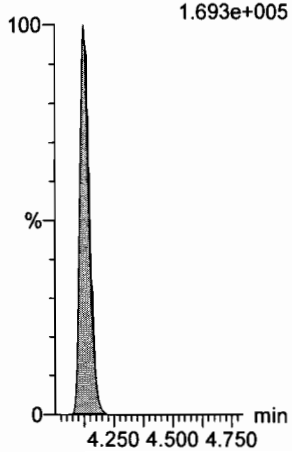

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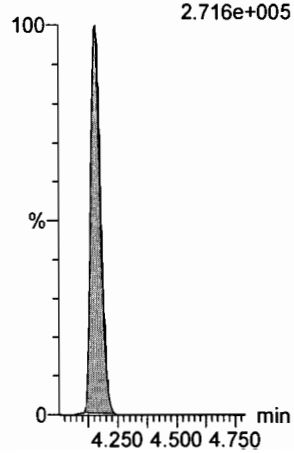

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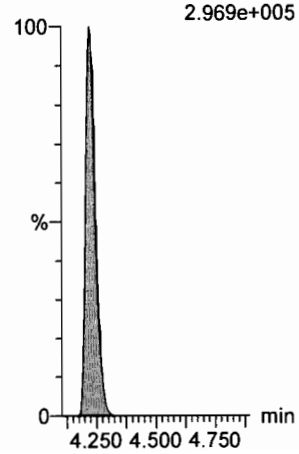

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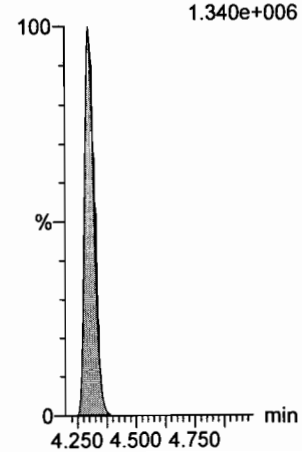

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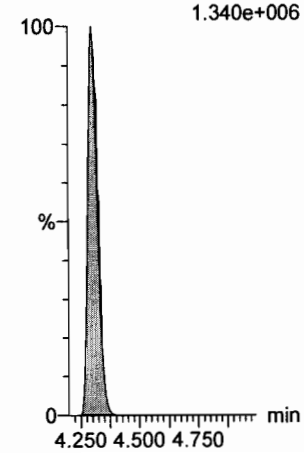

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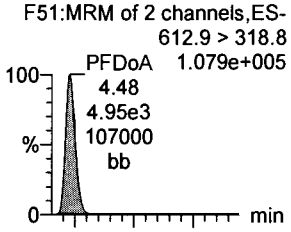

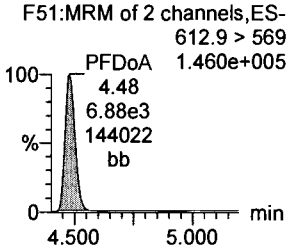

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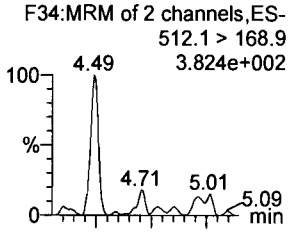

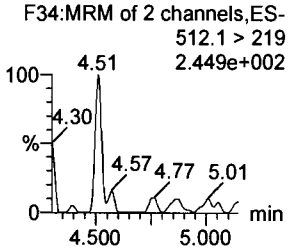

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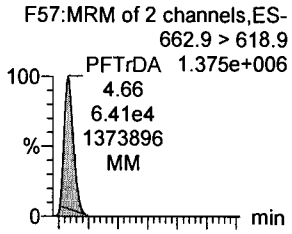

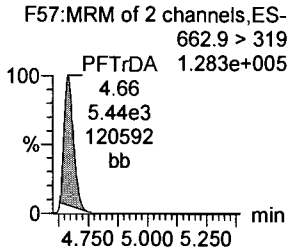

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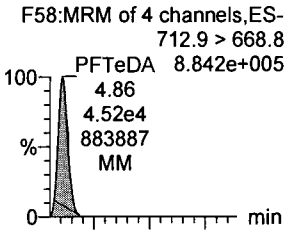

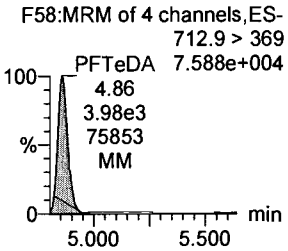

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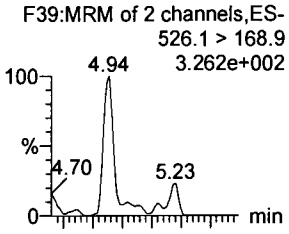

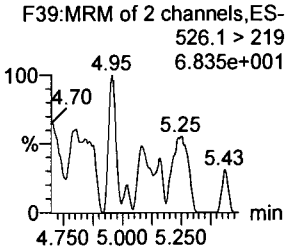

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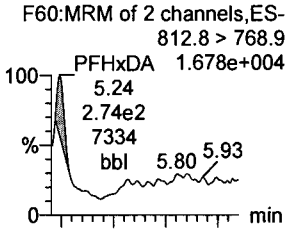

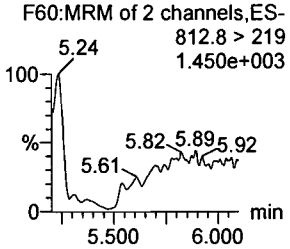

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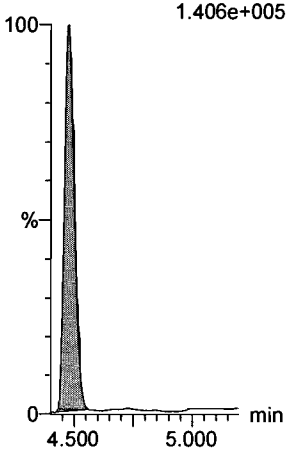

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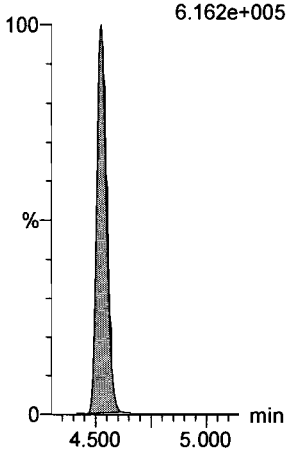

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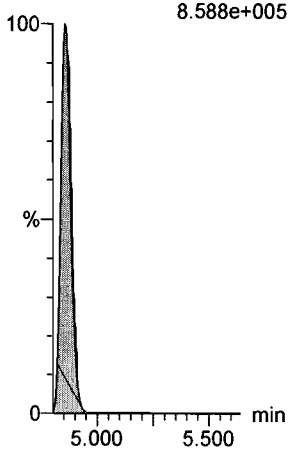

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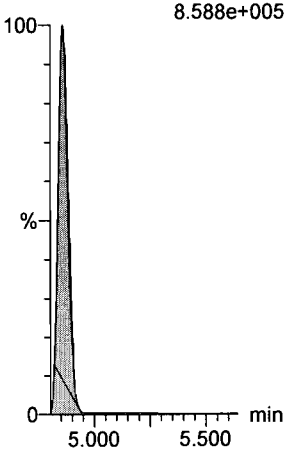

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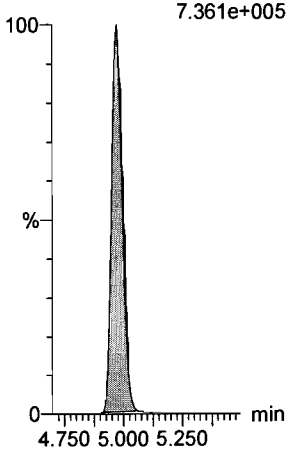

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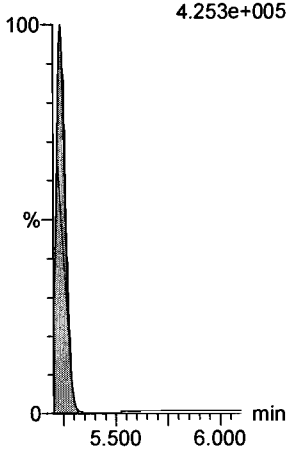

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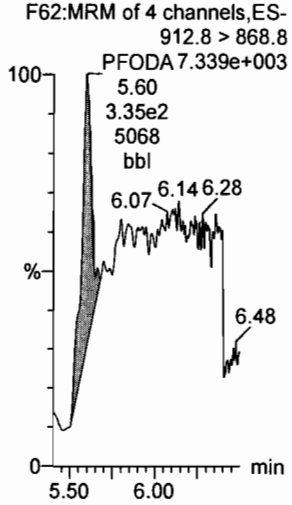

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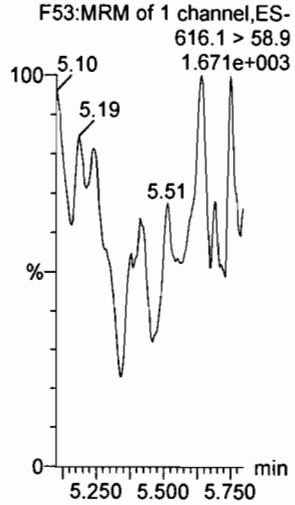

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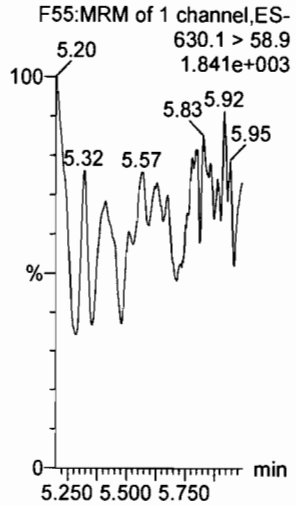

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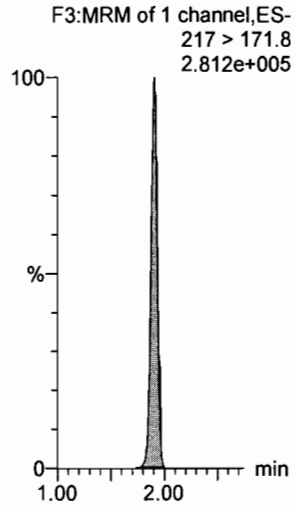

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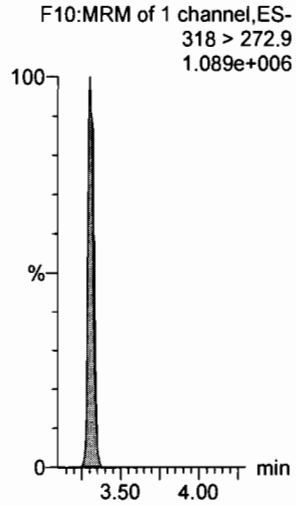

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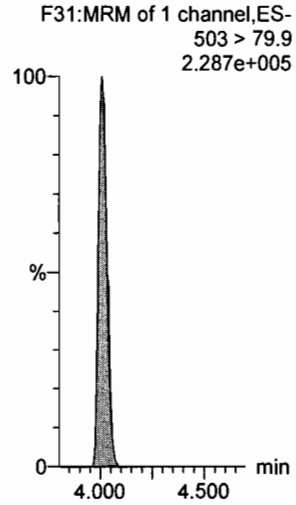

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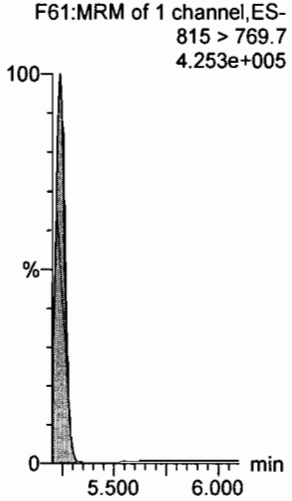

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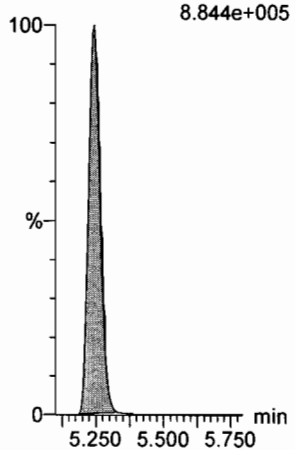

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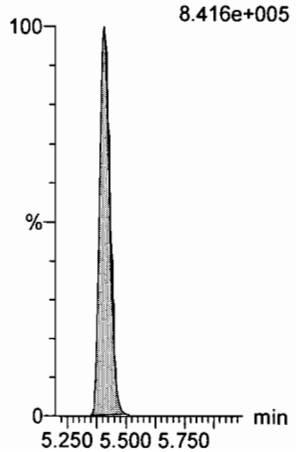

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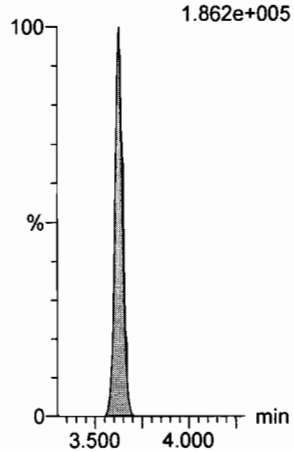

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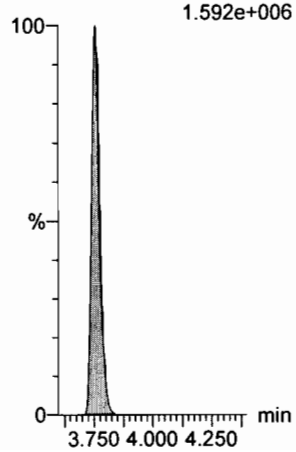

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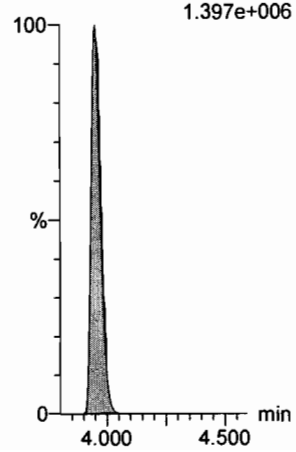

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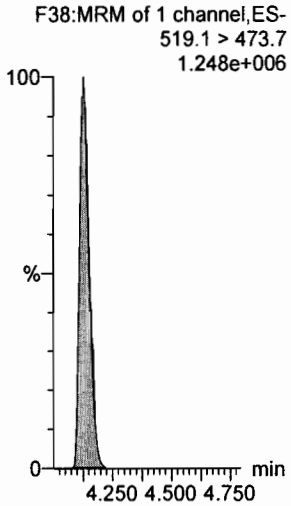

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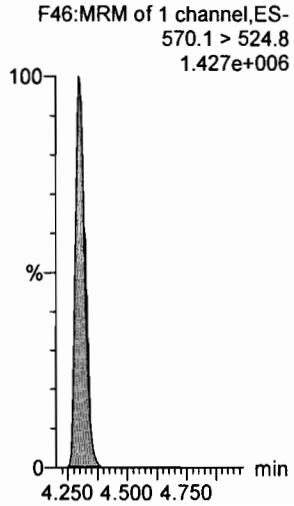

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Attachment 4
Investigation-Derived Waste Manifest

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Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CA9170090022
2. Page 1 of 1
3. Emergency Response Phone: (415) 743-4713
4. Manifest Tracking Number: 010648834 FLE

5. Generator's Name and Mailing Address
US NAVY BRAC, PMO-W (Tustin)
Attn: Douglas DeLong
1 Ave of the Palms, Suite 161
San Francisco, CA 94130-1817
Generator's Phone: (415) 743-4313

Generator's Site Address (if different than mailing address)
Caretaker Site Office, IR Site 1
USMC Air Station (Helicopter)
Tustin, CA 92710

6. Transporter 1 Company Name: BELSHIRE
U.S. EPA ID Number: CAR000183913

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Crosby & Overton
1630 W. 17th STREET
LONG BEACH, CA 90813
Facility's Phone: (562) 432-5445
U.S. EPA ID Number: CAD028409019

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. NA3082, Hazardous Waste, Liquid, N.O.S., (Selenium), 9, PG III	001	DM	45	G	D010	132	
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
ERG#: 171
Groundwater impacted with Selenium
WEAR ALL APPROPRIATE PROTECTIVE CLOTHING
BESI:285115
PROFILE # 104652
TU-10358
D1248997

FOLD LAST LINE AFTER SIDE OF MATERIAL TAB STICK

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: SCOTT KEHE
Signature: Scott Kehe
Month 08 Day 31 Year 17

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Thomas Buck
Signature:
Month 08 Day 31 Year 17
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H141 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Steve Phung
Signature:
Month 9 Day 1 Year 17

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

USMCAIRS
11060887

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Attachment 5
Investigation-Derived Waste Laboratory Analytical Report

(Included on CD)

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Date of Report: 08/08/2017

Kurt Myers

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Client Project:	[none]
BCL Project:	MCAS Tustin, OU 3, California
BCL Work Order:	1720372
Invoice ID:	B275537

Enclosed are the results of analyses for samples received by the laboratory on 7/25/2017. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Molly Meyers

Contact Person: Molly Meyers
Client Service Rep

Stuart Buttram
Technical Director

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CHAIN OF CUSTODY RECORD

DATE: 07/24/17
PAGE: 1 OF 1

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
(800) 878-4911

BC PM: Molly Meyers (661) 852-4250

LABORATORY CLIENT: MMEC Group
ADDRESS: 9210 Sky Park Court
CITY: San Diego, CA 92123
TEL: 858.300.4348
E-Mail: kurt.myers@amecfw.com
E-MAIL:

CLIENT PROJECT NAME / NUMBER: MCAS Tustin, ~~OU 1A/1B~~ OU3, California
PROJECT CONTACT: Kurt Myers
SAMPLER(S): (SIGNATURE) [signature]
P.O. NO.:
QUOTE NO.:
LAB USE ONLY: 1 7 2 0 3 72

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ 14 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
Standard TAT
Must analyze sample at NO dilution before diluting for TCE, if necessary.
PDF documents need to be searchable. Need NEDD/NIRIS EDDs.
1,2,3-TCP RL<0.5 ug/L

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	QC Level	VOCs ~~with 1,2,3-TCP~~ (EPA 8260B)	TPH-gas 8015B	TPH-diesel 8015B	CAT 22 metals, Hg	Oil & Grease 1664
1	IDW01-170724	72417	1400	W	10		X	X	X	X	X

CHK BY: [signature] DISTRIBUTION: SUB-OUT

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature] 072417 @ 14:30	[signature] 7.25.17	11:15	
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

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Chain of Custody and Cooler Receipt Form for 1720372 Page 2 of 2

BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 Of 1

Submission #: 17-20372

SHIPPING INFORMATION
Fed Ex ☑ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐ Box ☐
Other ☐ (Specify)_____

FREE LIQUID
YES ☐ NO ☐
W / S

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: .98 Container: Amber Thermometer ID: 208 Date/Time 7-25-17

Temperature: (A) 3.2 °C / (C) 3.6 °C Analyst Init 11:15

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr^{+6}										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz	F									
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A-E									
QT EPA 1664	GH									
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M	TN									
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:
Sample Numbering Completed By: GSD Date/Time: 7/25 1730
A = Actual / C = Corrected

Rev 21 05/23/2016
[S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC rev 20]

AmecFW and KMEA, Inc. 9210 Sky Park Court San Diego, CA 92123	**Reported:** 08/08/2017 16:40 Project: MCAS Tustin, OU 3, California Project Number: [none] Project Manager: Kurt Myers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1720372-01	**COC Number:**	---	**Receive Date:**	07/25/2017 11:15
	Project Number:	---	**Sampling Date:**	07/24/2017 14:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	1DW01-170724	**Lab Matrix:**	Water
	Sampled By:	Kelli Miller	**Sample Type:**	Water

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AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1720372-01 | **Client Sample Name:** 1DW01-170724, 7/24/2017 2:00:00PM, Kelli Miller

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.60	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	0.60	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
1,1-Dichloroethane	**1.1**	**ug/L**	**0.50**	**0.11**	**EPA-8260B**	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260B	ND		1
Styrene	**0.24**	**ug/L**	**0.50**	**0.068**	**EPA-8260B**	ND	**J**	1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	**0.49**	**ug/L**	**0.50**	**0.13**	**EPA-8260B**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Trichloroethene	**0.35**	**ug/L**	**0.50**	**0.085**	**EPA-8260B**	ND	**J**	1
1,2,3-Trichloropropane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1

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AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1720372-01 | **Client Sample Name:** 1DW01-170724, 7/24/2017 2:00:00PM, Kelli Miller

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acrolein	ND	ug/L	12	7.9	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
2-Chloroethyl vinyl ether	ND	ug/L	6.0	2.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	20	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	81 - 118 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.2	%	89 - 112 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	105	%	85 - 114 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	07/29/17	07/30/17 02:01	MGC	MS-V5	1	B[G2492

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AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Total Petroleum Hydrocarbons

BCL Sample ID: 1720372-01 | **Client Sample Name:** 1DW01-170724, 7/24/2017 2:00:00PM, Kelli Miller

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Gasoline	ND	ug/L	500	200	EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)	**110**	**ug/L**	**200**	**34**	**EPA-8015B/FFP**	ND	**J,A52**	1
Tetracosane (Surrogate)	58.8	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	07/31/17	08/03/17 19:57	AS1	GC-13	1	B[H0164

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AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

EPA Method 1664

BCL Sample ID: 1720372-01 | **Client Sample Name:** 1DW01-170724, 7/24/2017 2:00:00PM, Kelli Miller

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/L	5.0	0.86	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	08/07/17	08/07/17 07:50	MAM	MAN-SV	1	B[H0575

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AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Metals Analysis

BCL Sample ID: 1720372-01 | **Client Sample Name:** 1DW01-170724, 7/24/2017 2:00:00PM, Kelli Miller

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Antimony	ND	ug/L	1000	85	EPA-6010B	ND	A07	1
Total Arsenic	ND	ug/L	500	78	EPA-6010B	130	A07	1
Total Barium	**70**	**ug/L**	**100**	**35**	**EPA-6010B**	ND	**J,A07**	1
Total Beryllium	ND	ug/L	100	5.0	EPA-6010B	ND	A07	1
Total Cadmium	**12**	**ug/L**	**100**	**11**	**EPA-6010B**	ND	**J,A07**	1
Total Chromium	**16**	**ug/L**	**100**	**11**	**EPA-6010B**	ND	**J,A07**	1
Total Cobalt	ND	ug/L	500	13	EPA-6010B	ND	A07	1
Total Copper	**26**	**ug/L**	**100**	**11**	**EPA-6010B**	13	**J,A07**	1
Total Lead	ND	ug/L	500	40	EPA-6010B	ND	A07	1
Total Mercury	**0.085**	**ug/L**	**0.20**	**0.029**	**EPA-7470A**	ND	**J**	2
Total Molybdenum	**280**	**ug/L**	**500**	**12**	**EPA-6010B**	ND	**J,A07**	1
Total Nickel	**35**	**ug/L**	**100**	**20**	**EPA-6010B**	ND	**J,A07**	1
Total Selenium	**1200**	**ug/L**	**1000**	**150**	**EPA-6010B**	180	**A07**	1
Total Silver	ND	ug/L	100	19	EPA-6010B	ND	A07	1
Total Thallium	ND	ug/L	1000	240	EPA-6010B	ND	A07	1
Total Vanadium	**59**	**ug/L**	**100**	**22**	**EPA-6010B**	ND	**J,A07**	1
Total Zinc	**340**	**ug/L**	**500**	**23**	**EPA-6010B**	40	**J,A07**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	07/31/17	08/01/17 22:35	JRG	PE-OP2	10	B[G2603
2	EPA-7470A	08/02/17	08/02/17 15:01	MEV	CETAC2	1	B[H0172

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AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B[G2492						
Benzene	B[G2492-BLK1	ND	ug/L	0.50	0.083	
Bromodichloromethane	B[G2492-BLK1	ND	ug/L	0.50	0.14	
Bromoform	B[G2492-BLK1	ND	ug/L	0.60	0.27	
Bromomethane	B[G2492-BLK1	ND	ug/L	0.60	0.25	
Carbon tetrachloride	B[G2492-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	B[G2492-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	B[G2492-BLK1	ND	ug/L	0.50	0.14	
Chloroform	B[G2492-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	B[G2492-BLK1	ND	ug/L	0.50	0.14	
Dibromochloromethane	B[G2492-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromoethane	B[G2492-BLK1	ND	ug/L	0.50	0.16	
1,1-Dichloroethane	B[G2492-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	B[G2492-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	B[G2492-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	B[G2492-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	B[G2492-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	B[G2492-BLK1	ND	ug/L	0.50	0.13	
cis-1,3-Dichloropropene	B[G2492-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	B[G2492-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	B[G2492-BLK1	ND	ug/L	0.50	0.098	
Methylene chloride	B[G2492-BLK1	ND	ug/L	1.0	0.48	
Naphthalene	B[G2492-BLK1	ND	ug/L	0.50	0.36	
Styrene	B[G2492-BLK1	ND	ug/L	0.50	0.068	
1,1,2,2-Tetrachloroethane	B[G2492-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	B[G2492-BLK1	ND	ug/L	0.50	0.13	
Toluene	B[G2492-BLK1	ND	ug/L	0.50	0.093	
1,1,1-Trichloroethane	B[G2492-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	B[G2492-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	B[G2492-BLK1	ND	ug/L	0.50	0.085	
1,2,3-Trichloropropane	B[G2492-BLK1	ND	ug/L	0.50	0.24	
Vinyl chloride	B[G2492-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	B[G2492-BLK1	ND	ug/L	1.0	0.36	
Acetone	B[G2492-BLK1	ND	ug/L	10	4.6	
Acrolein	B[G2492-BLK1	ND	ug/L	12	7.9	

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AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B[G2492						
Acrylonitrile	B[G2492-BLK1	ND	ug/L	5.0	1.2	
2-Chloroethyl vinyl ether	B[G2492-BLK1	ND	ug/L	6.0	2.4	
2-Hexanone	B[G2492-BLK1	ND	ug/L	10	3.4	
Methyl ethyl ketone	B[G2492-BLK1	ND	ug/L	10	2.5	
Methyl isobutyl ketone	B[G2492-BLK1	ND	ug/L	10	2.1	
Vinyl acetate	B[G2492-BLK1	ND	ug/L	20	1.8	
1,2-Dichloroethane-d4 (Surrogate)	**B[G2492-BLK1**	**102**	%	**81 - 118 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**B[G2492-BLK1**	**98.5**	%	**89 - 112 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**B[G2492-BLK1**	**95.9**	%	**85 - 114 (LCL - UCL)**		

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AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: B[G2492										
Benzene	B[G2492-BS1	LCS	23.450	25.000	ug/L	93.8		79 - 120		
Bromodichloromethane	B[G2492-BS1	LCS	26.650	25.000	ug/L	107		79 - 125		
Bromoform	B[G2492-BS1	LCS	26.700	25.000	ug/L	107		66 - 130		
Bromomethane	B[G2492-BS1	LCS	23.700	25.000	ug/L	94.8		53 - 141		
Carbon tetrachloride	B[G2492-BS1	LCS	27.890	25.000	ug/L	112		72 - 136		
Chlorobenzene	B[G2492-BS1	LCS	23.060	25.000	ug/L	92.2		82 - 118		
Chloroethane	B[G2492-BS1	LCS	22.800	25.000	ug/L	91.2		60 - 138		
Chloroform	B[G2492-BS1	LCS	24.650	25.000	ug/L	98.6		79 - 124		
Chloromethane	B[G2492-BS1	LCS	22.860	25.000	ug/L	91.4		50 - 139		
Dibromochloromethane	B[G2492-BS1	LCS	27.040	25.000	ug/L	108		74 - 126		
1,2-Dibromoethane	B[G2492-BS1	LCS	25.030	25.000	ug/L	100		77 - 121		
1,1-Dichloroethane	B[G2492-BS1	LCS	23.890	25.000	ug/L	95.6		77 - 125		
1,2-Dichloroethane	B[G2492-BS1	LCS	24.380	25.000	ug/L	97.5		73 - 128		
1,1-Dichloroethene	B[G2492-BS1	LCS	27.090	25.000	ug/L	108		71 - 131		
cis-1,2-Dichloroethene	B[G2492-BS1	LCS	24.050	25.000	ug/L	96.2		78 - 123		
trans-1,2-Dichloroethene	B[G2492-BS1	LCS	25.810	25.000	ug/L	103		75 - 124		
1,2-Dichloropropane	B[G2492-BS1	LCS	23.610	25.000	ug/L	94.4		78 - 122		
cis-1,3-Dichloropropene	B[G2492-BS1	LCS	25.650	25.000	ug/L	103		75 - 124		
trans-1,3-Dichloropropene	B[G2492-BS1	LCS	27.110	25.000	ug/L	108		73 - 127		
Ethylbenzene	B[G2492-BS1	LCS	25.810	25.000	ug/L	103		79 - 121		
Methylene chloride	B[G2492-BS1	LCS	23.510	25.000	ug/L	94.0		74 - 124		
Naphthalene	B[G2492-BS1	LCS	23.150	25.000	ug/L	92.6		61 - 128		
Styrene	B[G2492-BS1	LCS	26.060	25.000	ug/L	104		78 - 123		
1,1,2,2-Tetrachloroethane	B[G2492-BS1	LCS	23.440	25.000	ug/L	93.8		71 - 121		
Tetrachloroethene	B[G2492-BS1	LCS	30.160	25.000	ug/L	121		74 - 129		
Toluene	B[G2492-BS1	LCS	26.310	25.000	ug/L	105		80 - 121		
1,1,1-Trichloroethane	B[G2492-BS1	LCS	26.750	25.000	ug/L	107		74 - 131		
1,1,2-Trichloroethane	B[G2492-BS1	LCS	23.900	25.000	ug/L	95.6		80 - 119		
Trichloroethene	B[G2492-BS1	LCS	26.850	25.000	ug/L	107		79 - 123		
1,2,3-Trichloropropane	B[G2492-BS1	LCS	24.380	25.000	ug/L	97.5		73 - 122		
Vinyl chloride	B[G2492-BS1	LCS	25.720	25.000	ug/L	103		58 - 137		
Total Xylenes	B[G2492-BS1	LCS	75.750	75.000	ug/L	101		79 - 121		
Acetone	B[G2492-BS1	LCS	276.25	320.00	ug/L	86.3		39 - 160		

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AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: B[G2492										
2-Hexanone	B[G2492-BS1	LCS	295.87	320.00	ug/L	92.5		57 - 139		
Methyl ethyl ketone	B[G2492-BS1	LCS	138.21	160.00	ug/L	86.4		56 - 143		
Methyl isobutyl ketone	B[G2492-BS1	LCS	145.83	160.00	ug/L	91.1		67 - 130		
Vinyl acetate	B[G2492-BS1	LCS	134.45	160.00	ug/L	84.0		54 - 146		
1,2-Dichloroethane-d4 (Surrogate)	B[G2492-BS1	LCS	10.170	10.000	ug/L	102		81 - 118		
Toluene-d8 (Surrogate)	B[G2492-BS1	LCS	9.9500	10.000	ug/L	99.5		89 - 112		
4-Bromofluorobenzene (Surrogate)	B[G2492-BS1	LCS	10.050	10.000	ug/L	100		85 - 114		

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San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: B[G2492	Used client sample: N										
Benzene	MS	1720405-16	0.11000	23.280	25.000	ug/L		92.7		79 - 120	
	MSD	1720405-16	0.11000	27.780	25.000	ug/L	17.6	111	30	79 - 120	
Bromodichloromethane	MS	1720405-16	ND	25.100	25.000	ug/L		100		79 - 125	
	MSD	1720405-16	ND	28.770	25.000	ug/L	13.6	115	30	79 - 125	
Bromoform	MS	1720405-16	ND	26.410	25.000	ug/L		106		66 - 130	
	MSD	1720405-16	ND	31.760	25.000	ug/L	18.4	127	30	66 - 130	
Bromomethane	MS	1720405-16	ND	22.660	25.000	ug/L		90.6		53 - 141	
	MSD	1720405-16	ND	29.170	25.000	ug/L	25.1	117	30	53 - 141	
Carbon tetrachloride	MS	1720405-16	ND	27.140	25.000	ug/L		109		72 - 136	
	MSD	1720405-16	ND	31.660	25.000	ug/L	15.4	127	30	72 - 136	
Chlorobenzene	MS	1720405-16	0.71000	23.830	25.000	ug/L		92.5		82 - 118	
	MSD	1720405-16	0.71000	27.560	25.000	ug/L	14.5	107	30	82 - 118	
Chloroethane	MS	1720405-16	ND	22.720	25.000	ug/L		90.9		60 - 138	
	MSD	1720405-16	ND	27.260	25.000	ug/L	18.2	109	30	60 - 138	
Chloroform	MS	1720405-16	ND	23.940	25.000	ug/L		95.8		79 - 124	
	MSD	1720405-16	ND	27.990	25.000	ug/L	15.6	112	30	79 - 124	
Chloromethane	MS	1720405-16	ND	20.220	25.000	ug/L		80.9		50 - 139	
	MSD	1720405-16	ND	25.270	25.000	ug/L	22.2	101	30	50 - 139	
Dibromochloromethane	MS	1720405-16	ND	26.730	25.000	ug/L		107		74 - 126	
	MSD	1720405-16	ND	29.750	25.000	ug/L	10.7	119	30	74 - 126	
1,2-Dibromoethane	MS	1720405-16	ND	24.310	25.000	ug/L		97.2		77 - 121	
	MSD	1720405-16	ND	27.710	25.000	ug/L	13.1	111	30	77 - 121	
1,1-Dichloroethane	MS	1720405-16	0.12000	23.890	25.000	ug/L		95.1		77 - 125	
	MSD	1720405-16	0.12000	27.870	25.000	ug/L	15.4	111	30	77 - 125	
1,2-Dichloroethane	MS	1720405-16	ND	23.520	25.000	ug/L		94.1		73 - 128	
	MSD	1720405-16	ND	27.660	25.000	ug/L	16.2	111	30	73 - 128	
1,1-Dichloroethene	MS	1720405-16	ND	26.530	25.000	ug/L		106		71 - 131	
	MSD	1720405-16	ND	30.880	25.000	ug/L	15.2	124	30	71 - 131	
cis-1,2-Dichloroethene	MS	1720405-16	6.1300	29.710	25.000	ug/L		94.3		78 - 123	
	MSD	1720405-16	6.1300	35.440	25.000	ug/L	17.6	117	30	78 - 123	
trans-1,2-Dichloroethene	MS	1720405-16	0.76000	25.540	25.000	ug/L		99.1		75 - 124	
	MSD	1720405-16	0.76000	30.850	25.000	ug/L	18.8	120	30	75 - 124	
1,2-Dichloropropane	MS	1720405-16	ND	22.830	25.000	ug/L		91.3		78 - 122	
	MSD	1720405-16	ND	26.720	25.000	ug/L	15.7	107	30	78 - 122	
cis-1,3-Dichloropropene	MS	1720405-16	ND	24.510	25.000	ug/L		98.0		75 - 124	
	MSD	1720405-16	ND	28.440	25.000	ug/L	14.8	114	30	75 - 124	

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AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: B[G2492	Used client sample: N										
trans-1,3-Dichloropropene	MS	1720405-16	ND	25.850	25.000	ug/L		103		73 - 127	
	MSD	1720405-16	ND	29.340	25.000	ug/L	12.6	117	30	73 - 127	
Ethylbenzene	MS	1720405-16	ND	25.420	25.000	ug/L		102		79 - 121	
	MSD	1720405-16	ND	29.520	25.000	ug/L	14.9	118	30	79 - 121	
Methylene chloride	MS	1720405-16	ND	22.520	25.000	ug/L		90.1		74 - 124	
	MSD	1720405-16	ND	27.300	25.000	ug/L	19.2	109	30	74 - 124	
Naphthalene	MS	1720405-16	ND	23.890	25.000	ug/L		95.6		61 - 128	
	MSD	1720405-16	ND	28.240	25.000	ug/L	16.7	113	30	61 - 128	
Styrene	MS	1720405-16	ND	25.710	25.000	ug/L		103		78 - 123	
	MSD	1720405-16	ND	29.930	25.000	ug/L	15.2	120	30	78 - 123	
1,1,2,2-Tetrachloroethane	MS	1720405-16	ND	23.570	25.000	ug/L		94.3		71 - 121	
	MSD	1720405-16	ND	26.850	25.000	ug/L	13.0	107	30	71 - 121	
Tetrachloroethene	MS	1720405-16	0.15000	27.420	25.000	ug/L		109		74 - 129	
	MSD	1720405-16	0.15000	31.110	25.000	ug/L	12.6	124	30	74 - 129	
Toluene	MS	1720405-16	ND	24.830	25.000	ug/L		99.3		80 - 121	
	MSD	1720405-16	ND	28.730	25.000	ug/L	14.6	115	30	80 - 121	
1,1,1-Trichloroethane	MS	1720405-16	ND	26.130	25.000	ug/L		105		74 - 131	
	MSD	1720405-16	ND	30.570	25.000	ug/L	15.7	122	30	74 - 131	
1,1,2-Trichloroethane	MS	1720405-16	ND	23.110	25.000	ug/L		92.4		80 - 119	
	MSD	1720405-16	ND	26.290	25.000	ug/L	12.9	105	30	80 - 119	
Trichloroethene	MS	1720405-16	0.45000	26.470	25.000	ug/L		104		79 - 123	
	MSD	1720405-16	0.45000	30.250	25.000	ug/L	13.3	119	30	79 - 123	
1,2,3-Trichloropropane	MS	1720405-16	ND	24.820	25.000	ug/L		99.3		73 - 122	
	MSD	1720405-16	ND	28.680	25.000	ug/L	14.4	115	30	73 - 122	
Vinyl chloride	MS	1720405-16	1.0600	24.110	25.000	ug/L		92.2		58 - 137	
	MSD	1720405-16	1.0600	30.090	25.000	ug/L	22.1	116	30	58 - 137	
Total Xylenes	MS	1720405-16	ND	75.230	75.000	ug/L		100		79 - 121	
	MSD	1720405-16	ND	87.090	75.000	ug/L	14.6	116	30	79 - 121	
Acetone	MS	1720405-16	ND	296.23	320.00	ug/L		92.6		39 - 160	
	MSD	1720405-16	ND	349.35	320.00	ug/L	16.5	109	30	39 - 160	
2-Hexanone	MS	1720405-16	ND	316.87	320.00	ug/L		99.0		57 - 139	
	MSD	1720405-16	ND	361.86	320.00	ug/L	13.3	113	30	57 - 139	
Methyl ethyl ketone	MS	1720405-16	ND	150.83	160.00	ug/L		94.3		56 - 143	
	MSD	1720405-16	ND	174.80	160.00	ug/L	14.7	109	30	56 - 143	
Methyl isobutyl ketone	MS	1720405-16	ND	161.75	160.00	ug/L		101		67 - 130	
	MSD	1720405-16	ND	184.18	160.00	ug/L	13.0	115	30	67 - 130	

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AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: B[G2492	Used client sample: N										
Vinyl acetate	MS	1720405-16	ND	151.29	160.00	ug/L		94.6		54 - 146	
	MSD	1720405-16	ND	180.99	160.00	ug/L	17.9	113	30	54 - 146	
1,2-Dichloroethane-d4 (Surrogate)	MS	1720405-16	ND	9.9300	10.000	ug/L		99.3		81 - 118	
	MSD	1720405-16	ND	9.8000	10.000	ug/L	1.3	98.0		81 - 118	
Toluene-d8 (Surrogate)	MS	1720405-16	ND	9.7500	10.000	ug/L		97.5		89 - 112	
	MSD	1720405-16	ND	9.6900	10.000	ug/L	0.6	96.9		89 - 112	
4-Bromofluorobenzene (Surrogate)	MS	1720405-16	ND	9.8900	10.000	ug/L		98.9		85 - 114	
	MSD	1720405-16	ND	9.9400	10.000	ug/L	0.5	99.4		85 - 114	

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AmecFW and KMEA, Inc. 9210 Sky Park Court San Diego, CA 92123	**Reported:** 08/08/2017 16:40 Project: MCAS Tustin, OU 3, California Project Number: [none] Project Manager: Kurt Myers

Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B[H0164						
TPH - Gasoline	B[H0164-BLK1	ND	ug/L	500	200	
TPH - Diesel (FFP)	B[H0164-BLK1	ND	ug/L	200	34	
Tetracosane (Surrogate)	**B[H0164-BLK1**	**82.0**	%	**37 - 134 (LCL - UCL)**		

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: B[H0164										
TPH - Diesel (FFP)	B[H0164-BS1	LCS	1923.0	2500.0	ug/L	76.9		36 - 132		
Tetracosane (Surrogate)	B[H0164-BS1	LCS	77.645	100.04	ug/L	77.6		37 - 134		

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AmecFW and KMEA, Inc.
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San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: B[H0164	Used client sample: N										
TPH - Diesel (FFP)	MS	1717894-82	ND	1855.6	2500.0	ug/L		74.2		36 - 132	
	MSD	1717894-82	ND	1839.1	2500.0	ug/L	0.9	73.6	30	36 - 132	
Tetracosane (Surrogate)	MS	1717894-82	ND	75.150	100.04	ug/L		75.1		37 - 134	
	MSD	1717894-82	ND	76.420	100.04	ug/L	1.7	76.4		37 - 134	

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AmecFW and KMEA, Inc. 9210 Sky Park Court San Diego, CA 92123	**Reported:** 08/08/2017 16:40 Project: MCAS Tustin, OU 3, California Project Number: [none] Project Manager: Kurt Myers

EPA Method 1664

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B[H0575						
Oil and Grease	B[H0575-BLK1	ND	mg/L	5.0	0.86	

AmecFW and KMEA, Inc. 9210 Sky Park Court San Diego, CA 92123	**Reported:** 08/08/2017 16:40 Project: MCAS Tustin, OU 3, California Project Number: [none] Project Manager: Kurt Myers

EPA Method 1664

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: B[H0575										
Oil and Grease	B[H0575-BS1	LCS	40.050	42.200	mg/L	94.9		78 - 114		

AmecFW and KMEA, Inc. 9210 Sky Park Court San Diego, CA 92123	**Reported:** 08/08/2017 16:40 Project: MCAS Tustin, OU 3, California Project Number: [none] Project Manager: Kurt Myers

EPA Method 1664

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: B[H0575	Used client sample: N										
Oil and Grease	DUP	1717894-50	ND	ND		mg/L			18		
	MS	1717894-50	ND	39.000	42.200	mg/L		92.4		78 - 114	
	MSD	1717894-50	ND	38.400	42.200	mg/L	1.6	91.0	18	78 - 114	

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San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B[G2603						
Total Antimony	B[G2603-BLK1	ND	ug/L	100	8.5	
Total Arsenic	**B[G2603-BLK1**	**12.736**	**ug/L**	**50**	**7.8**	**J**
Total Barium	B[G2603-BLK1	ND	ug/L	10	3.5	
Total Beryllium	B[G2603-BLK1	ND	ug/L	10	0.50	
Total Cadmium	B[G2603-BLK1	ND	ug/L	10	1.1	
Total Chromium	B[G2603-BLK1	ND	ug/L	10	1.1	
Total Cobalt	B[G2603-BLK1	ND	ug/L	50	1.3	
Total Copper	**B[G2603-BLK1**	**1.3279**	**ug/L**	**10**	**1.1**	**J**
Total Lead	B[G2603-BLK1	ND	ug/L	50	4.0	
Total Molybdenum	B[G2603-BLK1	ND	ug/L	50	1.2	
Total Nickel	B[G2603-BLK1	ND	ug/L	10	2.0	
Total Selenium	**B[G2603-BLK1**	**18.415**	**ug/L**	**100**	**15**	**J**
Total Silver	B[G2603-BLK1	ND	ug/L	10	1.9	
Total Thallium	B[G2603-BLK1	ND	ug/L	100	24	
Total Vanadium	B[G2603-BLK1	ND	ug/L	10	2.2	
Total Zinc	**B[G2603-BLK1**	**4.0373**	**ug/L**	**50**	**2.3**	**J**
QC Batch ID: B[H0172						
Total Mercury	B[H0172-BLK1	ND	ug/L	0.20	0.029	

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AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: B[G2603										
Total Antimony	B[G2603-BS1	LCS	412.60	400.00	ug/L	103		85 - 115		
Total Arsenic	B[G2603-BS1	LCS	213.06	200.00	ug/L	107		85 - 115		
Total Barium	B[G2603-BS1	LCS	440.34	400.00	ug/L	110		85 - 115		
Total Beryllium	B[G2603-BS1	LCS	222.41	200.00	ug/L	111		85 - 115		
Total Cadmium	B[G2603-BS1	LCS	209.61	200.00	ug/L	105		85 - 115		
Total Chromium	B[G2603-BS1	LCS	227.02	200.00	ug/L	114		85 - 115		
Total Cobalt	B[G2603-BS1	LCS	220.86	200.00	ug/L	110		85 - 115		
Total Copper	B[G2603-BS1	LCS	437.03	400.00	ug/L	109		85 - 115		
Total Lead	B[G2603-BS1	LCS	445.50	400.00	ug/L	111		85 - 115		
Total Molybdenum	B[G2603-BS1	LCS	210.81	200.00	ug/L	105		85 - 115		
Total Nickel	B[G2603-BS1	LCS	443.08	400.00	ug/L	111		85 - 115		
Total Selenium	B[G2603-BS1	LCS	173.80	200.00	ug/L	86.9		85 - 115		
Total Silver	B[G2603-BS1	LCS	106.51	100.00	ug/L	107		85 - 115		
Total Thallium	B[G2603-BS1	LCS	438.76	400.00	ug/L	110		85 - 115		
Total Vanadium	B[G2603-BS1	LCS	217.55	200.00	ug/L	109		85 - 115		
Total Zinc	B[G2603-BS1	LCS	561.57	500.00	ug/L	112		85 - 115		
QC Batch ID: B[H0172										
Total Mercury	B[H0172-BS1	LCS	0.95500	1.0000	ug/L	95.5		85 - 115		

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AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: B[G2603	Used client sample: N										
Total Antimony	DUP	1720313-05	ND	ND		ug/L			20		
	MS	1720313-05	ND	377.44	400.00	ug/L		94.4		75 - 125	
	MSD	1720313-05	ND	355.10	400.00	ug/L	6.1	88.8	20	75 - 125	
Total Arsenic	DUP	**1720313-05**	**12.943**	**31.262**		**ug/L**	**82.9**		**20**		**J,A02**
	MS	**1720313-05**	**12.943**	**221.97**	**200.00**	**ug/L**		**105**		**75 - 125**	
	MSD	**1720313-05**	**12.943**	**232.03**	**200.00**	**ug/L**	**4.4**	**110**	**20**	**75 - 125**	
Total Barium	DUP	1720313-05	440.97	431.86		ug/L	2.1		20		
	MS	1720313-05	440.97	820.47	400.00	ug/L		94.9		75 - 125	
	MSD	1720313-05	440.97	842.37	400.00	ug/L	2.6	100	20	75 - 125	
Total Beryllium	DUP	1720313-05	ND	ND		ug/L			20		
	MS	1720313-05	ND	207.42	200.00	ug/L		104		75 - 125	
	MSD	1720313-05	ND	211.84	200.00	ug/L	2.1	106	20	75 - 125	
Total Cadmium	DUP	1720313-05	ND	ND		ug/L			20		
	MS	1720313-05	ND	200.85	200.00	ug/L		100		75 - 125	
	MSD	1720313-05	ND	203.85	200.00	ug/L	1.5	102	20	75 - 125	
Total Chromium	DUP	1720313-05	1.4524	1.3487		ug/L	7.4		20		J
	MS	1720313-05	1.4524	213.37	200.00	ug/L		106		75 - 125	
	MSD	1720313-05	1.4524	215.95	200.00	ug/L	1.2	107	20	75 - 125	
Total Cobalt	DUP	1720313-05	46.237	44.981		ug/L	2.8		20		J
	MS	1720313-05	46.237	249.10	200.00	ug/L		101		75 - 125	
	MSD	1720313-05	46.237	251.23	200.00	ug/L	0.9	102	20	75 - 125	
Total Copper	DUP	**1720313-05**	**2.7077**	**1.6350**		**ug/L**	**49.4**		**20**		**J,A02**
	MS	**1720313-05**	**2.7077**	**421.88**	**400.00**	**ug/L**		**105**		**75 - 125**	
	MSD	**1720313-05**	**2.7077**	**421.39**	**400.00**	**ug/L**	**0.1**	**105**	**20**	**75 - 125**	
Total Lead	DUP	1720313-05	ND	ND		ug/L			20		
	MS	1720313-05	ND	422.39	400.00	ug/L		106		75 - 125	
	MSD	1720313-05	ND	418.38	400.00	ug/L	1.0	105	20	75 - 125	
Total Molybdenum	DUP	**1720313-05**	**11.079**	**5.3685**		**ug/L**	**69.4**		**20**		**J,A02**
	MS	**1720313-05**	**11.079**	**214.86**	**200.00**	**ug/L**		**102**		**75 - 125**	
	MSD	**1720313-05**	**11.079**	**210.39**	**200.00**	**ug/L**	**2.1**	**99.7**	**20**	**75 - 125**	
Total Nickel	DUP	1720313-05	37.934	37.512		ug/L	1.1		20		
	MS	1720313-05	37.934	445.81	400.00	ug/L		102		75 - 125	
	MSD	1720313-05	37.934	451.64	400.00	ug/L	1.3	103	20	75 - 125	
Total Selenium	DUP	**1720313-05**	**89.683**	**94.595**		**ug/L**	**5.3**		**20**		**J**
	MS	**1720313-05**	**89.683**	**213.11**	**200.00**	**ug/L**		**61.7**		**75 - 125**	**Q03**
	MSD	**1720313-05**	**89.683**	**257.43**	**200.00**	**ug/L**	**18.8**	**83.9**	**20**	**75 - 125**	
Total Silver	DUP	1720313-05	ND	ND		ug/L			20		
	MS	1720313-05	ND	102.46	100.00	ug/L		102		75 - 125	
	MSD	1720313-05	ND	102.63	100.00	ug/L	0.2	103	20	75 - 125	

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AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 08/08/2017 16:40
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: B[G2603	Used client sample: N										
Total Thallium	DUP	1720313-05	ND	ND		ug/L			20		
	MS	1720313-05	ND	390.65	400.00	ug/L		97.7		75 - 125	
	MSD	1720313-05	ND	391.50	400.00	ug/L	0.2	97.9	20	75 - 125	
Total Vanadium	DUP	1720313-05	7.5934	7.3278		ug/L	3.6		20		J
	MS	1720313-05	7.5934	214.16	200.00	ug/L		103		75 - 125	
	MSD	1720313-05	7.5934	215.19	200.00	ug/L	0.5	104	20	75 - 125	
Total Zinc	DUP	**1720313-05**	**7.2002**	**9.5229**		**ug/L**	**27.8**		**20**		**J,A02**
	MS	**1720313-05**	**7.2002**	**522.10**	**500.00**	**ug/L**		**103**		**75 - 125**	
	MSD	**1720313-05**	**7.2002**	**523.92**	**500.00**	**ug/L**	**0.3**	**103**	**20**	**75 - 125**	
QC Batch ID: B[H0172	Used client sample: N										
Total Mercury	DUP	1720361-01	ND	ND		ug/L			20		
	MS	1720361-01	ND	1.0700	1.0000	ug/L		107		70 - 130	
	MSD	1720361-01	ND	1.0850	1.0000	ug/L	1.4	108	20	70 - 130	

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AmecFW and KMEA, Inc. 9210 Sky Park Court San Diego, CA 92123	**Reported:** 08/08/2017 16:40 Project: MCAS Tustin, OU 3, California Project Number: [none] Project Manager: Kurt Myers

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A02	The difference between duplicate readings is less than the quantitation limit.
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
A52	Chromatogram not typical of diesel.
Q03	Matrix spike recovery(s) is(are) not within the control limits.

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BC LABORATORIES, INC.

Work Order Number: 1720372

Laboratory Documentation Requirements
For Data Validation of
Wet Chemistry Analysis

Prepared By

BC Laboratories

For AmecFW and KMEA, Inc.

MCAS Tustin, OU 3, California

All pages have been paginated and results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Certifications: CA ELAP #1186; NV #CA00014; AK UST101; OR ELAP #4032; DoD ELAP #66175

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Case Narrative

Analyses Requested: **1664 Oil & Grease**
Submission #: 17-20372

Instrument ID: MAN-SV
Volume(s): 1000ml/1000ml

Samples were received refrigerated to <6°C upon arrival at BC Laboratories, Inc. Samples were checked for preservation. Where applicable, sample preservation was adjusted in the laboratory.

Holding Time: All analyses and preparations took place within holding times.

Blanks: Method blank was prepared and analyzed at the required frequency. No detection of analytes of interest took place at or above the PQL.
Initial and continuing calibration blanks were analyzed at the required frequencies and on an as needed basis.

Laboratory Control Sample: Laboratory control sample analysis was performed at the required frequency. All parameters were within QC limits.

Matrix Spikes and Duplicates: Matrix spike analyses were performed at the required frequencies. All accuracy and precision requirements were met.

CHAIN OF CUSTODY RECORD

DATE: 07/24/17
PAGE: 1 OF 1

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
(800) 878-4911

BC PM: Molly Meyers (661) 852-4250

LABORATORY CLIENT: MMEC Group
ADDRESS: 9210 Sky Park Court
CITY: San Diego, CA 92123
TEL: 858.300.4348
E-Mail: kurt.myers@amecfw.com
E-MAIL:

CLIENT PROJECT NAME / NUMBER: MCAS Tustin, ~~OU 1A/1B,~~ OU3 California
PROJECT CONTACT: Kurt Myers
SAMPLER(S): (SIGNATURE) [signature]
P.O. NO.:
QUOTE NO.:
LAB USE ONLY: 1 7 2 0 3 7 2

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ 14 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
Standard TAT
Must analyze sample at NO dilution before diluting for TCE, if necessary.
PDF documents need to be searchable. Need NEDD/NIRIS EDDs.
1,2,3-TCP RL<0.5 ug/L

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#cont	QC Level	VOCs ~~with 1,2,3-TCP~~ (EPA 8260B)	TPH-gas 8015B	TPH-diesel 8015B	CAT22 metals, Hg	Oil & Grease 1664
1	IDW01-170724	72417	1400	W	10		X	X	X	X	X

CHK BY [signature] DISTRIBUTION INITIALS SUBCONTRACT

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature] 072417 @ 14:30	[signature] 7.25.17	11:15	
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Chain of Custody and Cooler Receipt Form for 1720372 Page 2 of 2

BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 Of 1

Submission #: 17-20372

SHIPPING INFORMATION
Fed Ex ☑ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐ Box ☐
Other ☐ (Specify)_____

FREE LIQUID
YES ☐ NO ☐
(W) / S

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: .98 Container: Amber Thermometer ID: 208 Date/Time 7-25-17

Temperature: (A) 3.2 °C / (C) 3.6 °C Analyst Init 11:15

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr^{+6}										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / (16oz)	F									
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A-E									
QT EPA 1664	GH									
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 505/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M	IJ									
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:
Sample Numbering Completed By: GSB Date/Time: 7/25 1730 Rev 21 05/23/2016
A = Actual / C = Corrected (S:\WPDocs\WordPerfect\LAB_DOCS\FORMS\SAMREC rev 20)

AmecFW and KMEA, Inc. 9210 Sky Park Court San Diego, CA 92123	Reported: 8/17/2017 12:48:31PM Project: MCAS Tustin, OU 3, California Project Number: [none] Project Manager: Kurt Myers

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG:	**1720372**
Class:	**WET**
Method:	**EPA-1664A HEM**

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:48:31PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

ANALYSES DATA PACKAGE COVER PAGE

EPA-1664A HEM

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California

Client Sample Id:	Lab Sample Id:
1DW01-170724	1720372-01

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been autorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: Sara Guron
Name: Sara Guron

Date: 08-17-2017
Title: QA/QC Manager

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:48:31PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

METHOD DETECTION AND REPORTING LIMITS

EPA-1664A HEM

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Instrument: MAN-SV

Analyte	MDL	PQL	Units
Oil and Grease	0.86	5	mg/L

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:48:31PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INORGANIC ANALYSIS DATA SHEET
EPA-1664A HEM

1DW01-170724

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Laboratory ID: 1720372-01
File ID:
Sampled: 07/24/17 14:00
Prepared: 08/07/17 07:50
Analyzed: 08/07/17 07:50
Solids: 0.00
Preparation: EPA 1664/HEM
Initial/Final: 1000 ml / 1000 ml
Batch: B[H0575
Sequence: 1713892
Calibration: UNASSIGNED
Instrument: MAN-SV

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
---	Oil and Grease	0.86	1	U	EPA-1664A HEM

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:48:31PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

PREPARATION BATCH SUMMARY

EPA-1664A HEM

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Batch: B[H0575 Batch Matrix: Water
Preparation: EPA 1664/HEM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
1DW01-170724	1720372-01		08/07/17 07:50	
Blank	B[H0575-BLK1		08/07/17 07:50	
LCS	B[H0575-BS1		08/07/17 07:50	
Duplicate	B[H0575-DUP1		08/07/17 07:50	
Matrix Spike	B[H0575-MS1		08/07/17 07:50	
Matrix Spike Dup	B[H0575-MSD1		08/07/17 07:50	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:48:31PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

METHOD BLANK DATA SHEET
EPA-1664A HEM

Laboratory:	BC Laboratories			SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW			Project:	MCAS Tustin, OU 3, California
Matrix:	Water	Laboratory ID:	B[H0575-BLK1	File ID:	
Prepared:	08/07/17 07:50	Preparation:	EPA 1664/HEM	Initial/Final:	1000 ml / 1000 ml
Analyzed:	08/07/17 07:50	Instrument:	MAN-SV		
Batch:	B[H0575	Sequence:	1713892	Calibration:	UNASSIGNED

CAS NO.	COMPOUND	CONC. (mg/L)	Q
---	Oil and Grease	0.86	U

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:48:31PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Duplicate

DUPLICATES
EPA-1664A HEM

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Matrix: Water
Batch: B[H0575
Preparation: EPA 1664/HEM
Source Sample Name: Duplicate

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Laboratory ID: B[H0575-DUP1
Lab Source ID: 1717894-50
Initial/Final: 1000 ml / 1000 ml
% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Oil and Grease	18	0.30000		ND				EPA-1664A HEM

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:48:31PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-1664A HEM

Matrix Spike

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[H0575
Laboratory ID: B[H0575-MS1
Preparation: EPA 1664/HEM
Initial/Final: 1000 ml / 1000 ml
Source Sample Number: 1717894-50

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC. #	QC LIMITS REC.
Oil and Grease	42.200	ND	39.000	92.4	78 - 114

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Oil and Grease	42.200	38.400	91.0	1.55	18	78 - 114

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:48:31PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

LCS RECOVERY
EPA-1664A HEM

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[H0575
Laboratory ID: B[H0575-BS1
Preparation: EPA 1664/HEM
Initial/Final: 1000 ml / 1000 ml

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC. #	QC LIMITS REC.
Oil and Grease	42.200	40.050	94.9	78 - 114

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:48:31PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-1664A HEM

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Sequence:	1713892	Instrument:	MAN-SV
Matrix:	Water	Calibration:	UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
LCS	B[H0575-BS1		08/07/17 07:50
Blank	B[H0575-BLK1		08/07/17 07:50
Duplicate	B[H0575-DUP1		08/07/17 07:50
Matrix Spike	B[H0575-MS1		08/07/17 07:50
Matrix Spike Dup	B[H0575-MSD1		08/07/17 07:50
1DW01-170724	1720372-01		08/07/17 07:50

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:48:31PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

HOLDING TIME SUMMARY
EPA-1664A HEM

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
1DW01-170724	07/24/17 14:00	07/25/17 11:15	08/07/17 07:50	14.00	28.00	08/07/17 07:50	14.00	28.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:48:31PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Notes and Definitions

B	Blank contamination. The analyte is greater than 1/2 the PQL/LOQ/CRQL in the associated method blank.
D	The reported value is from a dilution.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration.
J	The reported value is an estimated value. Results are between the MDL and PQL/LOQ/CRQL.
U	The analyte was not detected and is reported as less than the LOD/MDL or as defined by the client.

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BC LABORATORIES, INC.

Work Order Number: 1720372

Laboratory Documentation Requirements
For Data Validation of
GC Analysis

Prepared By

BC Laboratories

For AmecFW and KMEA, Inc.

MCAS Tustin, OU 3, California

All pages have been paginated and results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Certifications: CA ELAP #1186; NV #CA00014; AK UST101; OR ELAP #4032; DoD ELAP #66175

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Case Narrative

Analyses Requested: 8015B-FFP
Submission # 17-20372

Instrument ID: GC-2
Model: HP-5890

Column Types
Primary: ZB-5 15m x 0.25 mm x 0.25 Film Thickness µm

Detector: FID

Samples were received refrigerated to <6.0°C upon arrival at BC Laboratories, Inc. Samples were checked for preservation. Where applicable, sample preservation was adjusted in the laboratory.

Holding Time: All analyses and extractions took place within holding times.

Calibration: Initial calibration criteria were met. Frequency and accuracy criteria for initial calibration verification (ICV) were met. Frequency and accuracy criteria for continuing calibration verification (CCV) were met.

Blanks: Method blank was prepared and analyzed at the required frequency. No detection of analytes of interest took place at or above the PQL.
Initial and continuing calibration blanks were analyzed at the required frequencies and on an as needed basis.

Laboratory Control Sample: Laboratory control sample analysis was performed at the required frequency. All parameters were met.

Matrix Spikes and Duplicates: Matrix spike analyses were performed at the required frequencies. All accuracy and precision requirements were met.

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

CHAIN OF CUSTODY RECORD

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
(800) 878-4911

BC PM: Molly Meyers (661) 852-4250

DATE: 07/24/17
PAGE: 1 OF 1

LABORATORY CLIENT: MMEC Group
ADDRESS: 9210 Sky Park Court
CITY: San Diego, CA 92123
TEL: 858.300.4348
E-Mail: kurt.myers@amecfw.com
E-MAIL:

CLIENT PROJECT NAME / NUMBER: MCAS Tustin, ~~OU 1A/1B,~~ OU3 California
PROJECT CONTACT: Kurt Myers
SAMPLER(S): (SIGNATURE) [signature]
P.O. NO.:
QUOTE NO.:
LAB USE ONLY: 1 7 2 0 3 7 2

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ 14 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
Standard TAT
Must analyze sample at NO dilution before diluting for TCE, if necessary.
PDF documents need to be searchable. Need NEDD/NIRIS EDDs.
1,2,3-TCP RL<0.5 ug/L

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#cont	QC Level	VOCs ~~with 1,2,3-TCP~~ (EPA 8260B)	TPH-gas 8015B	TPH-diesel 8015B	CAT 22 metals, Hg	Oil & Grease 1664
1	IDW01-170724	72417	1400	W	10		X	X	X	X	X

CHK BY DISTRIBUTION [signature]

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature] 072417 @ 14:30	[signature] 7.25.17	11:15	
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Chain of Custody and Cooler Receipt Form for 1720372 Page 2 of 2

BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 Of 1

Submission #: 17-20372

SHIPPING INFORMATION
Fed Ex ☑ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐ Box ☐
Other ☐ (Specify)_____

FREE LIQUID
YES ☐ NO ☐
W / S

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: .98 Container: Amber Thermometer ID: 208 Date/Time 7-25-17

Temperature: (A) 3.2 °C / (C) 3.6 °C Analyst Init 11:15

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr+6										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz	F									
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	ABE									
QT EPA 1664	GH									
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 505/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M	DW									
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:
Sample Numbering Completed By: GSB Date/Time: 7/25 1730 Rev 21 05/23/2016
A = Actual / C = Corrected (S:\WPDocs\WordPerfect\LAB_DOCS\FORMS\SAMREC rev 20)

AmecFW and KMEA, Inc. 9210 Sky Park Court San Diego, CA 92123	Reported: 8/17/2017 12:50:05PM Project: MCAS Tustin, OU 3, California Project Number: [none] Project Manager: Kurt Myers

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG:	**1720372**
Class:	**GC**
Method:	**EPA-8015B/FFP**

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

ANALYSES DATA PACKAGE COVER PAGE

EPA-8015B/FFP

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California

Client Sample Id:	Lab Sample Id:
1DW01-170724	1720372-01

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been autorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: Sara Guron
Name: Sara Guron

Date: 08-17-2017
Title: QA/QC Manager

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

METHOD DETECTION AND REPORTING LIMITS

EPA-8015B/FFP

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Instrument: GC-13

Analyte	MDL	PQL	Units
TPH - Gasoline	200	500	ug/L
TPH - Diesel (FFP)	34	200	ug/L

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

ORGANIC ANALYSIS DATA SHEET
EPA-8015B/FFP

1DW01-170724

Laboratory:	BC Laboratories			SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW			Project:	MCAS Tustin, OU 3, California
Matrix:	Water	Laboratory ID:	1720372-01	File ID:	03AUG027.D
Sampled:	07/24/17 14:00	Prepared:	07/31/17 18:00	Analyzed:	08/03/17 19:57
Solids:		Preparation:	EPA 3510B	Initial/Final:	1000 ml / 5 ml
Batch:	B[H0164	Sequence:	1713929	Calibration:	1708010
Instrument:	GC-13				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
---	TPH - Gasoline	1	200	U
---	TPH - Diesel (FFP)	1	110	J

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Tetracosane (Surrogate)	100.04	58.810	58.8	37 - 134	

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

PREPARATION BATCH SUMMARY

EPA-8015B/FFP

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Batch: B[H0164
Batch Matrix: Water
Preparation: EPA 3510B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
1DW01-170724	1720372-01	03AUG027.D	07/31/17 18:00	gas,diesel
Blank	B[H0164-BLK1	03AUG024.D	07/31/17 18:00	
LCS	B[H0164-BS1	03AUG023.D	07/31/17 18:00	
Matrix Spike	B[H0164-MS1	03AUG025.D	07/31/17 18:00	
Matrix Spike Dup	B[H0164-MSD1	03AUG026.D	07/31/17 18:00	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

METHOD BLANK DATA SHEET
EPA-8015B/FFP

Laboratory:	BC Laboratories			SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW			Project:	MCAS Tustin, OU 3, California
Matrix:	Water	Laboratory ID:	B[H0164-BLK1	File ID:	03AUG024.D
Prepared:	07/31/17 18:00	Preparation:	EPA 3510B	Initial/Final:	1000 ml / 5 ml
Analyzed:	08/03/17 18:49	Instrument:	GC-13		
Batch:	B[H0164	Sequence:	1713929	Calibration:	1708010

CAS NO.	COMPOUND	CONC. (ug/L)	Q
---	TPH - Gasoline	200	U
---	TPH - Diesel (FFP)	34	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Tetracosane (Surrogate)	100.04	82.065	82.0	37 - 134	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8015B/FFP

Matrix Spike

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[H0164
Laboratory ID: B[H0164-MS1
Preparation: EPA 3510B
Initial/Final: 1000 ml / 5 ml
Source Sample Number: 1717894-82

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
TPH - Diesel (FFP)	2500.0	ND	1855.6	74.2	36 - 132

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
TPH - Diesel (FFP)	2500.0	1839.1	73.6	0.896	30	36 - 132

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

LCS RECOVERY
EPA-8015B/FFP

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[H0164
Laboratory ID: B[H0164-BS1
Preparation: EPA 3510B
Initial/Final: 1000 ml / 5 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
TPH - Diesel (FFP)	2500.0	1923.0	76.9	36 - 132

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-8015B/FFP

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Sequence:	1713929	Instrument:	GC-13
Matrix:	Water	Calibration:	1708010

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	1713929-CCV3	03AUG020.D	08/03/17 17:17
Calibration Check	1713929-CCV4	03AUG021.D	08/03/17 17:40
Calibration Blank	1713929-CCB3	03AUG022.D	08/03/17 18:03
LCS	B[H0164-BS1	03AUG023.D	08/03/17 18:26
Blank	B[H0164-BLK1	03AUG024.D	08/03/17 18:49
Matrix Spike	B[H0164-MS1	03AUG025.D	08/03/17 19:12
Matrix Spike Dup	B[H0164-MSD1	03AUG026.D	08/03/17 19:35
1DW01-170724	1720372-01	03AUG027.D	08/03/17 19:57
Calibration Check	1713929-CCV5	03AUG033.D	08/03/17 22:14
Calibration Check	1713929-CCV6	03AUG034.D	08/03/17 22:37
Calibration Blank	1713929-CCB4	03AUG035.D	08/03/17 23:00

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-8015B/FFP

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Sequence: 1713934
Instrument: GC-13
Matrix: Water
Calibration: 1708010

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	1713934-CAL6	17JUL068.D	07/18/17 13:01
Cal Standard	1713934-CAL5	17JUL069.D	07/18/17 13:53
Cal Standard	1713934-CAL4	17JUL070.D	07/18/17 14:39
Cal Standard	1713934-CAL3	17JUL071.D	07/18/17 15:16
Cal Standard	1713934-CAL2	17JUL072.D	07/18/17 15:38
Cal Standard	1713934-CAL1	17JUL073.D	07/18/17 16:13
Initial Cal Check	1713934-ICV1	17JUL074.D	07/18/17 16:35
Initial Cal Blank	1713934-ICB1	17JUL075.D	07/18/17 16:58
Cal Standard	1713934-CALC	02AUG027.D	08/03/17 01:54
Cal Standard	1713934-CALB	02AUG028.D	08/03/17 02:17
Cal Standard	1713934-CALA	02AUG029.D	08/03/17 02:40
Cal Standard	1713934-CAL9	02AUG030.D	08/03/17 03:02
Cal Standard	1713934-CAL8	02AUG031.D	08/03/17 03:25
Cal Standard	1713934-CAL7	02AUG032.D	08/03/17 03:48
Initial Cal Check	1713934-ICV2	02AUG033.D	08/03/17 04:11
Initial Cal Blank	1713934-ICB2	02AUG034.D	08/03/17 04:34

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8015B/FFP

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	GC-13	Calibration:	1708010
Lab File ID:	03AUG020.D	Calibration Date:	07/18/17 13:01
Sequence:	1713929	Injection Date:	08/03/17
Lab Sample ID:	1713929-CCV3	Injection Time:	17:17

	(1) CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
TPH - Diesel (FFP)	A	500000	483990	47.54919	46.02648		-3.2	15
TPH - Hydraulic Oil / Motor Oil	A	1000000	925680	37.47206	34.68705		-7.4	15
TPH - Motor Oil	A	1000000	925680	37.47206	34.68705		-7.4	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8015B/FFP

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	GC-13	Calibration:	1708010
Lab File ID:	03AUG021.D	Calibration Date:	07/18/17 13:01
Sequence:	1713929	Injection Date:	08/03/17
Lab Sample ID:	1713929-CCV4	Injection Time:	17:40

	(1) CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
TPH - Gasoline	A	500000	515280	23.61958	24.34116		3.1	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8015B/FFP

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	GC-13	Calibration:	1708010
Lab File ID:	03AUG033.D	Calibration Date:	07/18/17 13:01
Sequence:	1713929	Injection Date:	08/03/17
Lab Sample ID:	1713929-CCV5	Injection Time:	22:14

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
TPH - Diesel (FFP)	A	500000	484520	47.54919	46.077		-3.1	15
TPH - Hydraulic Oil / Motor Oil	A	1000000	924090	37.47206	34.62752		-7.6	15
TPH - Motor Oil	A	1000000	924090	37.47206	34.62752		-7.6	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8015B/FFP

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	GC-13	Calibration:	1708010
Lab File ID:	03AUG034.D	Calibration Date:	07/18/17 13:01
Sequence:	1713929	Injection Date:	08/03/17
Lab Sample ID:	1713929-CCV6	Injection Time:	22:37

	(1) CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
TPH - Gasoline	A	500000	503640	23.61958	23.7915		0.7	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8015B/FFP

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	GC-13	Calibration:	1708010
Lab File ID:	17JUL074.D	Calibration Date:	07/18/17 13:01
Sequence:	1713934	Injection Date:	07/18/17
Lab Sample ID:	1713934-ICV1	Injection Time:	16:35

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
TPH - Diesel (FFP)	A	500000	523120	47.54919	49.74764		4.6	15
TPH - Hydraulic Oil / Motor Oil	A	1000000	926080	37.47206	34.70218		-7.4	15
TPH - Motor Oil	A	1000000	926080	37.47206	34.70218		-7.4	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8015B/FFP

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	GC-13	Calibration:	1708010
Lab File ID:	02AUG033.D	Calibration Date:	07/18/17 13:01
Sequence:	1713934	Injection Date:	08/03/17
Lab Sample ID:	1713934-ICV2	Injection Time:	04:11

	(1) CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
TPH - Gasoline	A	500000	532300	23.61958	25.14538		6.5	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA-8015B/FFP

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Sequence: 1713929
Matrix: Water

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Instrument: GC-13
Calibration: 1708010

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (1713929-CCV3)			Lab File ID: 03AUG020.D		Analyzed: 08/03/17 17:17			
Tetracosane (Surrogate)	19000	92.6	85 - 115	9.28	9.313333	-0.0333	+/-1.0	
Calibration Blank (1713929-CCB3)			Lab File ID: 03AUG022.D		Analyzed: 08/03/17 18:03			
Tetracosane (Surrogate)			37 - 134		9.313333	Null Found	+/-1.0	
LCS (B[H0164-BS1)			Lab File ID: 03AUG023.D		Analyzed: 08/03/17 18:26			
Tetracosane (Surrogate)	100.04	77.6	37 - 134	9.27	9.313333	-0.0433	+/-1.0	
Blank (B[H0164-BLK1)			Lab File ID: 03AUG024.D		Analyzed: 08/03/17 18:49			
Tetracosane (Surrogate)	100.04	82.0	37 - 134	9.28	9.313333	-0.0333	+/-1.0	
Matrix Spike (B[H0164-MS1)			Lab File ID: 03AUG025.D		Analyzed: 08/03/17 19:12			
Tetracosane (Surrogate)	100.04	75.1	37 - 134	9.28	9.313333	-0.0333	+/-1.0	
Matrix Spike Dup (B[H0164-MSD1)			Lab File ID: 03AUG026.D		Analyzed: 08/03/17 19:35			
Tetracosane (Surrogate)	100.04	76.4	37 - 134	9.27	9.313333	-0.0433	+/-1.0	
1DW01-170724 (1720372-01)			Lab File ID: 03AUG027.D		Analyzed: 08/03/17 19:57			
Tetracosane (Surrogate)	100.04	58.8	37 - 134	9.27	9.313333	-0.0433	+/-1.0	
Calibration Check (1713929-CCV5)			Lab File ID: 03AUG033.D		Analyzed: 08/03/17 22:14			
Tetracosane (Surrogate)	19000	93.3	85 - 115	9.27	9.313333	-0.0433	+/-1.0	
Calibration Blank (1713929-CCB4)			Lab File ID: 03AUG035.D		Analyzed: 08/03/17 23:00			
Tetracosane (Surrogate)			37 - 134		9.313333	Null Found	+/-1.0	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA-8015B/FFP

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Sequence: 1713934
Instrument: GC-13
Matrix: Water
Calibration: 1708010

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Cal Standard (1713934-CAL6)			Lab File ID: 17JUL068.D		Analyzed: 07/18/17 13:01			
Tetracosane (Surrogate)	40000	91.3		9.3	9.313333	-0.0133	+/-1.0	
Cal Standard (1713934-CAL5)			Lab File ID: 17JUL069.D		Analyzed: 07/18/17 13:53			
Tetracosane (Surrogate)	30000	90.8		9.33	9.313333	0.0167	+/-1.0	
Cal Standard (1713934-CAL4)			Lab File ID: 17JUL070.D		Analyzed: 07/18/17 14:39			
Tetracosane (Surrogate)	20000	92.2		9.31	9.313333	-0.0033	+/-1.0	
Cal Standard (1713934-CAL3)			Lab File ID: 17JUL071.D		Analyzed: 07/18/17 15:16			
Tetracosane (Surrogate)	10000	93.9		9.3	9.313333	-0.0133	+/-1.0	
Cal Standard (1713934-CAL2)			Lab File ID: 17JUL072.D		Analyzed: 07/18/17 15:38			
Tetracosane (Surrogate)	5000.0	98.2		9.32	9.313333	0.0067	+/-1.0	
Cal Standard (1713934-CAL1)			Lab File ID: 17JUL073.D		Analyzed: 07/18/17 16:13			
Tetracosane (Surrogate)	2000.0	101		9.32	9.313333	0.0067	+/-1.0	
Initial Cal Check (1713934-ICV1)			Lab File ID: 17JUL074.D		Analyzed: 07/18/17 16:35			
Tetracosane (Surrogate)	20000	99.9	85 - 115	9.31	9.313333	-0.0033	+/-1.0	
Initial Cal Blank (1713934-ICB1)			Lab File ID: 17JUL075.D		Analyzed: 07/18/17 16:58			
Tetracosane (Surrogate)			37 - 134		9.313333	Null Found	+/-1.0	
Initial Cal Blank (1713934-ICB2)			Lab File ID: 02AUG034.D		Analyzed: 08/03/17 04:34			
Tetracosane (Surrogate)			37 - 134		9.313333	Null Found	+/-1.0	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION STANDARDS

EPA-8015B/FFP

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Sequence: 1713934
Calibration: 1708010

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Instrument: GC-13

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
7C09027	8015M Diesel/MOTOR OIL IC6	1713934-CAL6	17JUL068.D	07/18/17 13:01
7C09026	8015M Diesel/MOTOR OIL IC5	1713934-CAL5	17JUL069.D	07/18/17 13:53
7C09025	8015M Diesel/MOTOR OIL IC4	1713934-CAL4	17JUL070.D	07/18/17 14:39
7C09024	8015M Diesel/MOTOR OIL IC3	1713934-CAL3	17JUL071.D	07/18/17 15:16
7C09023	8015M Diesel/MOTOR OIL IC2	1713934-CAL2	17JUL072.D	07/18/17 15:38
7C09022	8015M Diesel/MOTOR OIL IC1	1713934-CAL1	17JUL073.D	07/18/17 16:13
6J12025	8015M FFP GASOLINE IC6	1713934-CALC	02AUG027.D	08/03/17 01:54
6J12024	8015M FFP GASOLINE IC5	1713934-CALB	02AUG028.D	08/03/17 02:17
6J12023	8015M FFP GASOLINE IC4	1713934-CALA	02AUG029.D	08/03/17 02:40
6J12022	8015M FFP GASOLINE IC3	1713934-CAL9	02AUG030.D	08/03/17 03:02
6J12021	8015M FFP GASOLINE IC2	1713934-CAL8	02AUG031.D	08/03/17 03:25
6J12020	8015M FFP GASOLINE IC1	1713934-CAL7	02AUG032.D	08/03/17 03:48

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA

EPA-8015B/FFP

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1708010
Instrument: GC-13
Matrix: Water
Calibration Date: 07/18/17 13:01

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
TPH - Gasoline												
TPH - Diesel (FFP)	40000	49.10902	200000	49.10527	400000	46.514	500000	46.75258	800000	45.73319	1000000	48.08106
TPH - Hydraulic Oil / Motor Oil	100000	~~45.92348~~	500000	40.31832	800000	36.51456	1000000	36.10748	1500000	37.09621	2000000	37.32373
TPH - Motor Oil	100000	~~45.92348~~	500000	40.31832	800000	36.51456	1000000	36.10748	1500000	37.09621	2000000	37.32373
Tetracosane (Surrogate)	2000	55.811	5000	54.4928	10000	52.0878	20000	51.1541	30000	50.37893	40000	50.65543

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA (Continued)

EPA-8015B/FFP

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1708010
Instrument: GC-13
Matrix: Water
Calibration Date: 07/18/17 13:01

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
TPH - Gasoline	40000	~~36.3386~~	200000	24.54585	400000	24.68177	500000	24.73776	800000	21.88153	1000000	22.251
TPH - Diesel (FFP)												
TPH - Hydraulic Oil / Motor Oil												
TPH - Motor Oil												
Tetracosane (Surrogate)												

AmecFW and KMEA, Inc.
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San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA (Continued)

EPA-8015B/FFP

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1708010
Instrument: GC-13
Matrix: Water
Calibration Date: 07/18/17 13:01

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
TPH - Gasoline	23.61958	6.036068	4.95	1.620865E-02			20	
TPH - Diesel (FFP)	47.54919	2.995168	7.99	1.243364E-02			20	
TPH - Hydraulic Oil / Motor Oil	37.47206	4.434173	10.5	0			20	
TPH - Motor Oil	37.47206	4.434172	10.5	0			20	
Tetracosane (Surrogate)	52.43001	4.246683	9.313333	0.130693			20	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

HOLDING TIME SUMMARY

EPA-8015B/FFP

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
1DW01-170724	07/24/17 14:00	07/25/17 11:15	07/31/17 18:00	7.00	7.00	08/03/17 19:57	3.00	40.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:50:05PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Notes and Definitions

B	Blank contamination. The analyte is greater than 1/2 the PQL/LOQ/CRQL in the associated method blank.
D	The reported value is from a dilution.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration.
J	The reported value is an estimated value. Results are between the MDL and PQL/LOQ/CRQL.
U	The analyte was not detected and is reported as less than the LOD/MDL or as defined by the client.

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BC LABORATORIES, INC.

Work Order Number: 1720372

Laboratory Documentation Requirements
For Data Validation of
Volatiles Analysis

Prepared By

BC Laboratories

For AmecFW and KMEA, Inc.

MCAS Tustin, OU 3, California

All pages have been paginated and results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Certifications: CA ELAP #1186; NV #CA00014; AK UST101; OR ELAP #4032; DoD ELAP #66175

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EPA-8260B

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Case Narrative

Analyses Requested: 8260
Submission Number: 17-20372

Instrument ID: MS-V5
Model: HP5973/GC6890

Column Type: Rxi R-624 Sil MS 30m x 0.25mm ID, 1.4µm film thickness.

Samples were received refrigerated to <6°C upon arrival at BC Laboratories, Inc. Samples were checked for preservation. Where applicable, sample preservation was adjusted in the laboratory.

Holding Time: All analyses and extractions took place within holding times.

Calibration: Initial calibration criteria were met. Frequency and accuracy criteria for initial calibration verification (ICV) were met. Frequency and accuracy criteria for continuing calibration verification (CCV) were met except the recoveries in 1713390-CCV1 for Bromomethane and Chloromethane and the recovery in 1713390-CCV4 for Acrolein were outside QC limits. Ending CCV criteria of fifty percent were met except the recovery in 1713390-CCV4 for Acrolein was outside QC limits. Any compounds that were flagged, but not required, were not noted here.

Blanks: Method blank was prepared and analyzed at the required frequency.
No detection of analytes of interest took place at or above the PQL.
Initial and continuing calibration blanks were analyzed at the required frequencies and on an as needed basis.

Laboratory Control Sample: Laboratory control sample analysis was performed at the required frequency. All parameters for the required compounds were within QC limits.

Matrix Spikes and Duplicates: Matrix spike analyses were performed at the required frequencies. All accuracy and precision requirements for the required compounds were met.

CHAIN OF CUSTODY RECORD

DATE: 07/24/17
PAGE: 1 OF 1

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
(800) 878-4911

BC PM: Molly Meyers (661) 852-4250

LABORATORY CLIENT: MMEC Group
ADDRESS: 9210 Sky Park Court
CITY: San Diego, CA 92123
TEL: 858.300.4348
E-Mail: kurt.myers@amecfw.com
E-MAIL:

CLIENT PROJECT NAME / NUMBER: MCAS Tustin, ~~OU 1A/1B,~~ OU3 California
PROJECT CONTACT: Kurt Myers
SAMPLER(S): (SIGNATURE) [signature]
P.O. NO.:
QUOTE NO.:
LAB USE ONLY: 1 7 2 0 3 7 2

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ 14 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
Standard TAT
Must analyze sample at NO dilution before diluting for TCE, if necessary.
PDF documents need to be searchable. Need NEDD/NIRIS EDDs.
1,2,3-TCP RL<0.5 ug/L

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#cont	QC Level	VOCs ~~with 1,2,3-TCP~~ (EPA 8260B)	TPH-gas 8015B	TPH-diesel 8015B	CAT 22 metals, Hg	Oil & Grease 1664
1	IDW01-170724	72417	1400	W	10		X	X	X	X	X

CHK BY DISTRIBUTION [signature] SUBCONTRACT

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature] 072417 @ 14:30	[signature] 7.25.17	11:15	
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Chain of Custody and Cooler Receipt Form for 1720372 Page 2 of 2

BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 Of 1

Submission #: 17-20372

SHIPPING INFORMATION
Fed Ex ☑ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐ Box ☐
Other ☐ (Specify)_____

FREE LIQUID
YES ☐ NO ☐
(W) / S

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: .98 Container: Amber Thermometer ID: 208 Date/Time 7-25-17

Temperature: (A) 3.2 °C / (C) 3.6 °C Analyst Init 11:15

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr+6										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / (16oz)	F									
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A-E									
QT EPA 1664	GH									
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 505/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M	IJ									
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:
Sample Numbering Completed By: GSB Date/Time: 7/25 1730 Rev 21 05/23/2016
A = Actual / C = Corrected (S:\WPDocs\WordPerfect\LAB_DOCS\FORMS\SAMREC rev 20)

AmecFW and KMEA, Inc. 9210 Sky Park Court San Diego, CA 92123	Reported: 8/17/2017 12:51:48PM Project: MCAS Tustin, OU 3, California Project Number: [none] Project Manager: Kurt Myers

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG:	**1720372**
Class:	**VOA**
Method:	**EPA-8260B**

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

ANALYSES DATA PACKAGE COVER PAGE

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California

Client Sample Id:	Lab Sample Id:
1DW01-170724	1720372-01

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been autorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: Sara Guron
Name: Sara Guron

Date: 08-17-2017
Title: QA/QC Manager

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

METHOD DETECTION AND REPORTING LIMITS

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Instrument: MS-V5

Analyte	MDL	PQL	Units
Benzene	0.083	0.50	ug/L
Bromobenzene	0.13	0.50	ug/L
Bromochloromethane	0.24	1.0	ug/L
Bromodichloromethane	0.14	0.50	ug/L
Bromoform	0.27	0.60	ug/L
Bromomethane	0.25	0.60	ug/L
n-Butylbenzene	0.11	0.50	ug/L
sec-Butylbenzene	0.15	0.50	ug/L
tert-Butylbenzene	0.13	0.50	ug/L
Carbon tetrachloride	0.18	0.50	ug/L
Chlorobenzene	0.093	0.50	ug/L
Chloroethane	0.14	0.50	ug/L
Chloroform	0.12	0.50	ug/L
Chloromethane	0.14	0.50	ug/L
2-Chlorotoluene	0.20	0.50	ug/L
4-Chlorotoluene	0.15	0.50	ug/L
Dibromochloromethane	0.13	0.50	ug/L
1,2-Dibromo-3-chloropropane	0.44	1.0	ug/L
1,2-Dibromoethane	0.16	0.50	ug/L
Dibromomethane	0.24	1.0	ug/L
1,2-Dichlorobenzene	0.072	0.50	ug/L
1,3-Dichlorobenzene	0.15	0.50	ug/L
1,4-Dichlorobenzene	0.062	0.50	ug/L
Dichlorodifluoromethane	0.099	0.50	ug/L
1,1-Dichloroethane	0.11	0.50	ug/L
1,2-Dichloroethane	0.17	0.50	ug/L
1,1-Dichloroethene	0.18	0.50	ug/L
cis-1,2-Dichloroethene	0.085	0.50	ug/L
trans-1,2-Dichloroethene	0.15	0.50	ug/L
1,2-Dichloropropane	0.13	0.50	ug/L

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

METHOD DETECTION AND REPORTING LIMITS

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Instrument: MS-V5

Analyte	MDL	PQL	Units
1,3-Dichloropropane	0.086	0.50	ug/L
2,2-Dichloropropane	0.13	0.50	ug/L
1,1-Dichloropropene	0.085	0.50	ug/L
cis-1,3-Dichloropropene	0.14	0.50	ug/L
trans-1,3-Dichloropropene	0.079	0.50	ug/L
Ethylbenzene	0.098	0.50	ug/L
Hexachlorobutadiene	0.17	0.50	ug/L
Isopropylbenzene	0.14	0.50	ug/L
p-Isopropyltoluene	0.12	0.50	ug/L
Methylene chloride	0.48	1.0	ug/L
Methyl t-butyl ether	0.11	0.50	ug/L
Naphthalene	0.36	0.50	ug/L
n-Propylbenzene	0.11	0.50	ug/L
Styrene	0.068	0.50	ug/L
1,1,1,2-Tetrachloroethane	0.18	0.50	ug/L
1,1,2,2-Tetrachloroethane	0.17	0.50	ug/L
Tetrachloroethene	0.13	0.50	ug/L
Toluene	0.093	0.50	ug/L
1,2,3-Trichlorobenzene	0.16	0.50	ug/L
1,2,4-Trichlorobenzene	0.19	0.50	ug/L
1,1,1-Trichloroethane	0.11	0.50	ug/L
1,1,2-Trichloroethane	0.16	0.50	ug/L
Trichloroethene	0.085	0.50	ug/L
Trichlorofluoromethane	0.13	0.50	ug/L
1,2,3-Trichloropropane	0.24	0.50	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane	0.15	0.50	ug/L
1,2,4-Trimethylbenzene	0.12	0.50	ug/L
1,3,5-Trimethylbenzene	0.12	0.50	ug/L
Vinyl chloride	0.12	0.50	ug/L
Total Xylenes	0.36	1.0	ug/L

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

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Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

METHOD DETECTION AND REPORTING LIMITS

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Instrument: MS-V5

Analyte	MDL	PQL	Units
Acetone	4.6	10	ug/L
Acetonitrile	5.5	10	ug/L
Acrolein	7.9	12	ug/L
Acrylonitrile	1.2	5.0	ug/L
Allyl chloride	0.80	5.0	ug/L
t-Amyl Methyl ether	0.25	0.50	ug/L
Benzyl chloride	0.60	1.0	ug/L
t-Butyl alcohol	9.4	12	ug/L
Carbon disulfide	0.38	1.0	ug/L
2-Chloroethyl vinyl ether	2.4	6.0	ug/L
Chloroprene	0.37	5.0	ug/L
Diisopropyl ether	0.23	0.50	ug/L
Ethyl t-butyl ether	0.18	0.50	ug/L
2-Hexanone	3.4	10	ug/L
Methyl ethyl ketone	2.5	10	ug/L
Methyl isobutyl ketone	2.1	10	ug/L
Vinyl acetate	1.8	20	ug/L

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

1DW01-170724

Laboratory:	BC Laboratories			SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW			Project:	MCAS Tustin, OU 3, California
Matrix:	Water	Laboratory ID:	1720372-01	File ID:	29JUL31.D
Sampled:	07/24/17 14:00	Prepared:	07/29/17 07:00	Analyzed:	07/30/17 02:01
Solids:		Preparation:	EPA 5030 Water MS	Initial/Final:	25 ml / 25 ml
Batch:	B[G2492	Sequence:	1713390	Calibration:	1707017
Instrument:	MS-V5				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-43-2	Benzene	1	0.083	U
75-27-4	Bromodichloromethane	1	0.14	U
75-25-2	Bromoform	1	0.27	U
74-83-9	Bromomethane	1	0.25	U
56-23-5	Carbon tetrachloride	1	0.18	U
108-90-7	Chlorobenzene	1	0.093	U
75-00-3	Chloroethane	1	0.14	U
67-66-3	Chloroform	1	0.12	U
74-87-3	Chloromethane	1	0.14	U
124-48-1	Dibromochloromethane	1	0.13	U
106-93-4	1,2-Dibromoethane	1	0.16	U
75-34-3	1,1-Dichloroethane	1	1.1	
107-06-2	1,2-Dichloroethane	1	0.17	U
75-35-4	1,1-Dichloroethene	1	0.18	U
156-59-2	cis-1,2-Dichloroethene	1	0.085	U
156-60-5	trans-1,2-Dichloroethene	1	0.15	U
78-87-5	1,2-Dichloropropane	1	0.13	U
10061-01-5	cis-1,3-Dichloropropene	1	0.14	U
10061-02-6	trans-1,3-Dichloropropene	1	0.079	U
100-41-4	Ethylbenzene	1	0.098	U
75-09-2	Methylene chloride	1	0.48	U
91-20-3	Naphthalene	1	0.36	U
100-42-5	Styrene	1	0.24	J
79-34-5	1,1,2,2-Tetrachloroethane	1	0.17	U
127-18-4	Tetrachloroethene	1	0.49	J
108-88-3	Toluene	1	0.093	U
71-55-6	1,1,1-Trichloroethane	1	0.11	U
79-00-5	1,1,2-Trichloroethane	1	0.16	U
79-01-6	Trichloroethene	1	0.35	J
96-18-4	1,2,3-Trichloropropane	1	0.24	U
75-01-4	Vinyl chloride	1	0.12	U
1330-20-7	Total Xylenes	1	0.36	U

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

1DW01-170724

Laboratory:	BC Laboratories			SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW			Project:	MCAS Tustin, OU 3, California
Matrix:	Water	Laboratory ID:	1720372-01	File ID:	29JUL31.D
Sampled:	07/24/17 14:00	Prepared:	07/29/17 07:00	Analyzed:	07/30/17 02:01
Solids:		Preparation:	EPA 5030 Water MS	Initial/Final:	25 ml / 25 ml
Batch:	B[G2492	Sequence:	1713390	Calibration:	1707017
Instrument:	MS-V5				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
67-64-1	Acetone	1	4.6	U
107-02-8	Acrolein	1	7.9	U
107-13-1	Acrylonitrile	1	1.2	U
110-75-8	2-Chloroethyl vinyl ether	1	2.4	U
591-78-6	2-Hexanone	1	3.4	U
78-93-3	Methyl ethyl ketone	1	2.5	U
108-10-1	Methyl isobutyl ketone	1	2.1	U
108-05-4	Vinyl acetate	1	1.8	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.720	107	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.8200	98.2	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	10.460	105	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	156355	6.58	158448	6.57	
Chlorobenzene-d5 (IS)	56824	9.62	62675	9.62	
1,4-Difluorobenzene (IS)	224797	7.38	236027	7.38	

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

PREPARATION BATCH SUMMARY

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Batch: B[G2492
Batch Matrix: Water
Preparation: EPA 5030 Water MS

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
1DW01-170724	1720372-01	29JUL31.D	07/29/17 07:00	
Blank	B[G2492-BLK1	29JUL01.D	07/29/17 07:00	
LCS	B[G2492-BS1	29JUL03.D	07/29/17 07:00	
Matrix Spike	B[G2492-MS1	29JUL04.D	07/29/17 07:00	
Matrix Spike Dup	B[G2492-MSD1	29JUL05.D	07/29/17 07:00	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

METHOD BLANK DATA SHEET
EPA-8260B

Laboratory:	BC Laboratories			SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW			Project:	MCAS Tustin, OU 3, California
Matrix:	Water	Laboratory ID:	B[G2492-BLK1	File ID:	29JUL01.D
Prepared:	07/29/17 07:00	Preparation:	EPA 5030 Water MS	Initial/Final:	25 ml / 25 ml
Analyzed:	07/29/17 14:32	Instrument:	MS-V5		
Batch:	B[G2492	Sequence:	1713390	Calibration:	1707017

CAS NO.	COMPOUND	CONC. (ug/L)	Q
71-43-2	Benzene	0.083	U
75-27-4	Bromodichloromethane	0.14	U
75-25-2	Bromoform	0.27	U
74-83-9	Bromomethane	0.25	U
56-23-5	Carbon tetrachloride	0.18	U
108-90-7	Chlorobenzene	0.093	U
75-00-3	Chloroethane	0.14	U
67-66-3	Chloroform	0.12	U
74-87-3	Chloromethane	0.14	U
124-48-1	Dibromochloromethane	0.13	U
106-93-4	1,2-Dibromoethane	0.16	U
75-34-3	1,1-Dichloroethane	0.11	U
107-06-2	1,2-Dichloroethane	0.17	U
75-35-4	1,1-Dichloroethene	0.18	U
156-59-2	cis-1,2-Dichloroethene	0.085	U
156-60-5	trans-1,2-Dichloroethene	0.15	U
78-87-5	1,2-Dichloropropane	0.13	U
10061-01-5	cis-1,3-Dichloropropene	0.14	U
10061-02-6	trans-1,3-Dichloropropene	0.079	U
100-41-4	Ethylbenzene	0.098	U
75-09-2	Methylene chloride	0.48	U
91-20-3	Naphthalene	0.36	U
100-42-5	Styrene	0.068	U
79-34-5	1,1,2,2-Tetrachloroethane	0.17	U

AmecFW and KMEA, Inc.
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San Diego, CA 92123

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Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

METHOD BLANK DATA SHEET
EPA-8260B

Laboratory:	BC Laboratories			SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW			Project:	MCAS Tustin, OU 3, California
Matrix:	Water	Laboratory ID:	B[G2492-BLK1	File ID:	29JUL01.D
Prepared:	07/29/17 07:00	Preparation:	EPA 5030 Water MS	Initial/Final:	25 ml / 25 ml
Analyzed:	07/29/17 14:32	Instrument:	MS-V5		
Batch:	B[G2492	Sequence:	1713390	Calibration:	1707017

CAS NO.	COMPOUND	CONC. (ug/L)	Q
127-18-4	Tetrachloroethene	0.13	U
108-88-3	Toluene	0.093	U
71-55-6	1,1,1-Trichloroethane	0.11	U
79-00-5	1,1,2-Trichloroethane	0.16	U
79-01-6	Trichloroethene	0.085	U
96-18-4	1,2,3-Trichloropropane	0.24	U
75-01-4	Vinyl chloride	0.12	U
1330-20-7	Total Xylenes	0.36	U
67-64-1	Acetone	4.6	U
107-02-8	Acrolein	7.9	U
107-13-1	Acrylonitrile	1.2	U
110-75-8	2-Chloroethyl vinyl ether	2.4	U
591-78-6	2-Hexanone	3.4	U
78-93-3	Methyl ethyl ketone	2.5	U
108-10-1	Methyl isobutyl ketone	2.1	U
108-05-4	Vinyl acetate	1.8	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.190	102	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.8500	98.5	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.5900	95.9	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	178938	6.58	162953	6.57	
Chlorobenzene-d5 (IS)	69768	9.61	64183	9.62	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

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Project Number: [none]
Project Manager: Kurt Myers

METHOD BLANK DATA SHEET
EPA-8260B

Laboratory:	BC Laboratories			SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW			Project:	MCAS Tustin, OU 3, California
Matrix:	Water	Laboratory ID:	B[G2492-BLK1	File ID:	29JUL01.D
Prepared:	07/29/17 07:00	Preparation:	EPA 5030 Water MS	Initial/Final:	25 ml / 25 ml
Analyzed:	07/29/17 14:32	Instrument:	MS-V5		
Batch:	B[G2492	Sequence:	1713390	Calibration:	1707017

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Difluorobenzene (IS)	261493	7.38	237313	7.38	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

Matrix Spike

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[G2492
Laboratory ID: B[G2492-MS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1720405-16

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
Benzene	25.000	0.11000	23.280	92.7	79 - 120
Bromobenzene	25.000	ND	26.050	104	80 - 120
Bromochloromethane	25.000	ND	22.720	90.9	78 - 123
Bromodichloromethane	25.000	ND	25.100	100	79 - 125
Bromoform	25.000	ND	26.410	106	66 - 130
Bromomethane	25.000	ND	22.660	90.6	53 - 141
n-Butylbenzene	25.000	ND	24.710	98.8	75 - 128
sec-Butylbenzene	25.000	ND	26.260	105	77 - 126
tert-Butylbenzene	25.000	ND	25.350	101	78 - 124
Carbon tetrachloride	25.000	ND	27.140	109	72 - 136
Chlorobenzene	25.000	0.71000	23.830	92.5	82 - 118
Chloroethane	25.000	ND	22.720	90.9	60 - 138
Chloroform	25.000	ND	23.940	95.8	79 - 124
Chloromethane	25.000	ND	20.220	80.9	50 - 139
2-Chlorotoluene	25.000	ND	23.710	94.8	79 - 122
4-Chlorotoluene	25.000	ND	23.560	94.2	78 - 122
Dibromochloromethane	25.000	ND	26.730	107	74 - 126
1,2-Dibromo-3-chloropropane	25.000	ND	23.100	92.4	62 - 128
1,2-Dibromoethane	25.000	ND	24.310	97.2	77 - 121
Dibromomethane	25.000	ND	24.620	98.5	79 - 123
1,2-Dichlorobenzene	25.000	1.3200	24.540	92.9	80 - 119
1,3-Dichlorobenzene	25.000	ND	24.710	98.8	80 - 119
1,4-Dichlorobenzene	25.000	0.20000	24.500	97.2	79 - 118
Dichlorodifluoromethane	25.000	ND	27.920	112	32 - 152
1,1-Dichloroethane	25.000	0.12000	23.890	95.1	77 - 125

AmecFW and KMEA, Inc.
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San Diego, CA 92123

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Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

Matrix Spike

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[G2492
Laboratory ID: B[G2492-MS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1720405-16

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
1,2-Dichloroethane	25.000	ND	23.520	94.1	73 - 128
1,1-Dichloroethene	25.000	ND	26.530	106	71 - 131
cis-1,2-Dichloroethene	25.000	6.1300	29.710	94.3	78 - 123
trans-1,2-Dichloroethene	25.000	0.76000	25.540	99.1	75 - 124
1,2-Dichloropropane	25.000	ND	22.830	91.3	78 - 122
1,3-Dichloropropane	25.000	ND	22.590	90.4	80 - 119
2,2-Dichloropropane	25.000	ND	26.500	106	60 - 139
1,1-Dichloropropene	25.000	ND	23.260	93.0	79 - 125
cis-1,3-Dichloropropene	25.000	ND	24.510	98.0	75 - 124
trans-1,3-Dichloropropene	25.000	ND	25.850	103	73 - 127
Ethylbenzene	25.000	ND	25.420	102	79 - 121
Hexachlorobutadiene	25.000	ND	26.660	107	66 - 134
Isopropylbenzene	25.000	ND	25.950	104	72 - 131
p-Isopropyltoluene	25.000	ND	26.570	106	77 - 127
Methylene chloride	25.000	ND	22.520	90.1	74 - 124
Methyl t-butyl ether	25.000	ND	23.170	92.7	71 - 124
Naphthalene	25.000	ND	23.890	95.6	61 - 128
n-Propylbenzene	25.000	ND	23.760	95.0	76 - 126
Styrene	25.000	ND	25.710	103	78 - 123
1,1,1,2-Tetrachloroethane	25.000	ND	27.560	110	78 - 124
1,1,2,2-Tetrachloroethane	25.000	ND	23.570	94.3	71 - 121
Tetrachloroethene	25.000	0.15000	27.420	109	74 - 129
Toluene	25.000	ND	24.830	99.3	80 - 121
1,2,3-Trichlorobenzene	25.000	ND	26.790	107	69 - 129
1,2,4-Trichlorobenzene	25.000	ND	26.540	106	69 - 130

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

Matrix Spike

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[G2492
Laboratory ID: B[G2492-MS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1720405-16

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
1,1,1-Trichloroethane	25.000	ND	26.130	105	74 - 131
1,1,2-Trichloroethane	25.000	ND	23.110	92.4	80 - 119
Trichloroethene	25.000	0.45000	26.470	104	79 - 123
Trichlorofluoromethane	25.000	ND	26.440	106	65 - 141
1,2,3-Trichloropropane	25.000	ND	24.820	99.3	73 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.000	ND	26.070	104	70 - 136
1,2,4-Trimethylbenzene	25.000	ND	24.730	98.9	76 - 124
1,3,5-Trimethylbenzene	25.000	ND	26.100	104	75 - 124
Vinyl chloride	25.000	1.0600	24.110	92.2	58 - 137
Total Xylenes	75.000	ND	75.230	100	79 - 121
Acetone	320.00	ND	296.23	92.6	39 - 160
Acetonitrile	160.00	ND	152.10	95.1	50 - 142
Allyl chloride	32.000	ND	30.780	96.2	68 - 130
t-Amyl Methyl ether	16.000	ND	14.380	89.9	68 - 128
Benzyl chloride	32.000	ND	37.000	116	42 - 138
t-Butyl alcohol	800.00	ND	804.64	101	68 - 129
Carbon disulfide	32.000	ND	30.350	94.8	64 - 133
Chloroprene	32.000	ND	31.640	98.9	65 - 135
Diisopropyl ether	16.000	ND	15.450	96.6	67 - 128
Ethyl t-butyl ether	16.000	ND	14.780	92.4	70 - 127
2-Hexanone	320.00	ND	316.87	99.0	57 - 139
Methyl ethyl ketone	160.00	ND	150.83	94.3	56 - 143
Methyl isobutyl ketone	160.00	ND	161.75	101	67 - 130
Vinyl acetate	160.00	ND	151.29	94.6	54 - 146

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

Matrix Spike Dup

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[G2492
Laboratory ID: B[G2492-MSD1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1720405-16

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzene	25.000	27.780	111	17.6	30	79 - 120
Bromobenzene	25.000	29.790	119	13.4	30	80 - 120
Bromochloromethane	25.000	27.880	112	20.4	30	78 - 123
Bromodichloromethane	25.000	28.770	115	13.6	30	79 - 125
Bromoform	25.000	31.760	127	18.4	30	66 - 130
Bromomethane	25.000	29.170	117	25.1	30	53 - 141
n-Butylbenzene	25.000	29.430	118	17.4	30	75 - 128
sec-Butylbenzene	25.000	30.650	123	15.4	30	77 - 126
tert-Butylbenzene	25.000	29.480	118	15.1	30	78 - 124
Carbon tetrachloride	25.000	31.660	127	15.4	30	72 - 136
Chlorobenzene	25.000	27.560	107	14.5	30	82 - 118
Chloroethane	25.000	27.260	109	18.2	30	60 - 138
Chloroform	25.000	27.990	112	15.6	30	79 - 124
Chloromethane	25.000	25.270	101	22.2	30	50 - 139
2-Chlorotoluene	25.000	27.360	109	14.3	30	79 - 122
4-Chlorotoluene	25.000	27.280	109	14.6	30	78 - 122
Dibromochloromethane	25.000	29.750	119	10.7	30	74 - 126
1,2-Dibromo-3-chloropropane	25.000	28.860	115	22.2	30	62 - 128
1,2-Dibromoethane	25.000	27.710	111	13.1	30	77 - 121
Dibromomethane	25.000	27.950	112	12.7	30	79 - 123
1,2-Dichlorobenzene	25.000	28.560	109	15.1	30	80 - 119
1,3-Dichlorobenzene	25.000	28.610	114	14.6	30	80 - 119
1,4-Dichlorobenzene	25.000	28.730	114	15.9	30	79 - 118
Dichlorodifluoromethane	25.000	32.240	129	14.4	30	32 - 152
1,1-Dichloroethane	25.000	27.870	111	15.4	30	77 - 125
1,2-Dichloroethane	25.000	27.660	111	16.2	30	73 - 128

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

Matrix Spike Dup

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[G2492
Laboratory ID: B[G2492-MSD1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1720405-16

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	25.000	30.880	124	15.2	30	71 - 131
cis-1,2-Dichloroethene	25.000	35.440	117	17.6	30	78 - 123
trans-1,2-Dichloroethene	25.000	30.850	120	18.8	30	75 - 124
1,2-Dichloropropane	25.000	26.720	107	15.7	30	78 - 122
1,3-Dichloropropane	25.000	26.290	105	15.1	30	80 - 119
2,2-Dichloropropane	25.000	30.720	123	14.8	30	60 - 139
1,1-Dichloropropene	25.000	27.460	110	16.6	30	79 - 125
cis-1,3-Dichloropropene	25.000	28.440	114	14.8	30	75 - 124
trans-1,3-Dichloropropene	25.000	29.340	117	12.6	30	73 - 127
Ethylbenzene	25.000	29.520	118	14.9	30	79 - 121
Hexachlorobutadiene	25.000	31.720	127	17.3	30	66 - 134
Isopropylbenzene	25.000	29.880	120	14.1	30	72 - 131
p-Isopropyltoluene	25.000	30.250	121	13.0	30	77 - 127
Methylene chloride	25.000	27.300	109	19.2	30	74 - 124
Methyl t-butyl ether	25.000	27.430	110	16.8	30	71 - 124
Naphthalene	25.000	28.240	113	16.7	30	61 - 128
n-Propylbenzene	25.000	27.650	111	15.1	30	76 - 126
Styrene	25.000	29.930	120	15.2	30	78 - 123
1,1,1,2-Tetrachloroethane	25.000	32.070	128 *	15.1	30	78 - 124
1,1,2,2-Tetrachloroethane	25.000	26.850	107	13.0	30	71 - 121
Tetrachloroethene	25.000	31.110	124	12.6	30	74 - 129
Toluene	25.000	28.730	115	14.6	30	80 - 121
1,2,3-Trichlorobenzene	25.000	30.880	124	14.2	30	69 - 129
1,2,4-Trichlorobenzene	25.000	32.000	128	18.7	30	69 - 130
1,1,1-Trichloroethane	25.000	30.570	122	15.7	30	74 - 131
1,1,2-Trichloroethane	25.000	26.290	105	12.9	30	80 - 119

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

Matrix Spike Dup

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[G2492
Laboratory ID: B[G2492-MSD1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1720405-16

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Trichloroethene	25.000	30.250	119	13.3	30	79 - 123
Trichlorofluoromethane	25.000	30.490	122	14.2	30	65 - 141
1,2,3-Trichloropropane	25.000	28.680	115	14.4	30	73 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.000	30.750	123	16.5	30	70 - 136
1,2,4-Trimethylbenzene	25.000	28.900	116	15.6	30	76 - 124
1,3,5-Trimethylbenzene	25.000	30.100	120	14.2	30	75 - 124
Vinyl chloride	25.000	30.090	116	22.1	30	58 - 137
Total Xylenes	75.000	87.090	116	14.6	30	79 - 121
Acetone	320.00	349.35	109	16.5	30	39 - 160
Acetonitrile	160.00	187.73	117	21.0	30	50 - 142
Allyl chloride	32.000	38.500	120	22.3	30	68 - 130
t-Amyl Methyl ether	16.000	17.440	109	19.2	30	68 - 128
Benzyl chloride	32.000	44.900	140 *	19.3	30	42 - 138
t-Butyl alcohol	800.00	958.89	120	17.5	30	68 - 129
Carbon disulfide	32.000	38.350	120	23.3	30	64 - 133
Chloroprene	32.000	39.250	123	21.5	30	65 - 135
Diisopropyl ether	16.000	18.850	118	19.8	30	67 - 128
Ethyl t-butyl ether	16.000	17.980	112	19.5	30	70 - 127
2-Hexanone	320.00	361.86	113	13.3	30	57 - 139
Methyl ethyl ketone	160.00	174.80	109	14.7	30	56 - 143
Methyl isobutyl ketone	160.00	184.18	115	13.0	30	67 - 130
Vinyl acetate	160.00	180.99	113	17.9	30	54 - 146

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

LCS RECOVERY
EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[G2492
Laboratory ID: B[G2492-BS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Benzene	25.000	23.450	93.8	79 - 120
Bromobenzene	25.000	26.050	104	80 - 120
Bromochloromethane	25.000	24.680	98.7	78 - 123
Bromodichloromethane	25.000	26.650	107	79 - 125
Bromoform	25.000	26.700	107	66 - 130
Bromomethane	25.000	23.700	94.8	53 - 141
n-Butylbenzene	25.000	25.630	103	75 - 128
sec-Butylbenzene	25.000	27.070	108	77 - 126
tert-Butylbenzene	25.000	26.100	104	78 - 124
Carbon tetrachloride	25.000	27.890	112	72 - 136
Chlorobenzene	25.000	23.060	92.2	82 - 118
Chloroethane	25.000	22.800	91.2	60 - 138
Chloroform	25.000	24.650	98.6	79 - 124
Chloromethane	25.000	22.860	91.4	50 - 139
2-Chlorotoluene	25.000	24.050	96.2	79 - 122
4-Chlorotoluene	25.000	24.180	96.7	78 - 122
Dibromochloromethane	25.000	27.040	108	74 - 126
1,2-Dibromo-3-chloropropane	25.000	22.740	91.0	62 - 128
1,2-Dibromoethane	25.000	25.030	100	77 - 121
Dibromomethane	25.000	25.080	100	79 - 123
1,2-Dichlorobenzene	25.000	23.900	95.6	80 - 119
1,3-Dichlorobenzene	25.000	24.660	98.6	80 - 119
1,4-Dichlorobenzene	25.000	24.430	97.7	79 - 118
Dichlorodifluoromethane	25.000	28.460	114	32 - 152

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

LCS RECOVERY
EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[G2492
Laboratory ID: B[G2492-BS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,1-Dichloroethane	25.000	23.890	95.6	77 - 125
1,2-Dichloroethane	25.000	24.380	97.5	73 - 128
1,1-Dichloroethene	25.000	27.090	108	71 - 131
cis-1,2-Dichloroethene	25.000	24.050	96.2	78 - 123
trans-1,2-Dichloroethene	25.000	25.810	103	75 - 124
1,2-Dichloropropane	25.000	23.610	94.4	78 - 122
1,3-Dichloropropane	25.000	23.420	93.7	80 - 119
2,2-Dichloropropane	25.000	26.970	108	60 - 139
1,1-Dichloropropene	25.000	23.970	95.9	79 - 125
cis-1,3-Dichloropropene	25.000	25.650	103	75 - 124
trans-1,3-Dichloropropene	25.000	27.110	108	73 - 127
Ethylbenzene	25.000	25.810	103	79 - 121
Hexachlorobutadiene	25.000	27.840	111	66 - 134
Isopropylbenzene	25.000	26.440	106	72 - 131
p-Isopropyltoluene	25.000	26.920	108	77 - 127
Methylene chloride	25.000	23.510	94.0	74 - 124
Methyl t-butyl ether	25.000	23.320	93.3	71 - 124
Naphthalene	25.000	23.150	92.6	61 - 128
n-Propylbenzene	25.000	24.470	97.9	76 - 126
Styrene	25.000	26.060	104	78 - 123
1,1,1,2-Tetrachloroethane	25.000	27.420	110	78 - 124
1,1,2,2-Tetrachloroethane	25.000	23.440	93.8	71 - 121
Tetrachloroethene	25.000	30.160	121	74 - 129
Toluene	25.000	26.310	105	80 - 121

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

LCS RECOVERY
EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[G2492
Laboratory ID: B[G2492-BS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,2,3-Trichlorobenzene	25.000	26.400	106	69 - 129
1,2,4-Trichlorobenzene	25.000	27.460	110	69 - 130
1,1,1-Trichloroethane	25.000	26.750	107	74 - 131
1,1,2-Trichloroethane	25.000	23.900	95.6	80 - 119
Trichloroethene	25.000	26.850	107	79 - 123
Trichlorofluoromethane	25.000	26.950	108	65 - 141
1,2,3-Trichloropropane	25.000	24.380	97.5	73 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.000	26.620	106	70 - 136
1,2,4-Trimethylbenzene	25.000	25.210	101	76 - 124
1,3,5-Trimethylbenzene	25.000	26.700	107	75 - 124
Vinyl chloride	25.000	25.720	103	58 - 137
Total Xylenes	75.000	75.750	101	79 - 121
Acetone	320.00	276.25	86.3	39 - 160
Acetonitrile	160.00	139.88	87.4	50 - 142
Allyl chloride	32.000	28.880	90.2	68 - 130
t-Amyl Methyl ether	16.000	12.810	80.1	68 - 128
Benzyl chloride	32.000	33.860	106	42 - 138
t-Butyl alcohol	800.00	697.65	87.2	68 - 129
Carbon disulfide	32.000	28.580	89.3	64 - 133
Chloroprene	32.000	30.810	96.3	65 - 135
Diisopropyl ether	16.000	13.370	83.6	67 - 128
Ethyl t-butyl ether	16.000	13.180	82.4	70 - 127
2-Hexanone	320.00	295.87	92.5	57 - 139
Methyl ethyl ketone	160.00	138.21	86.4	56 - 143

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

LCS RECOVERY
EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[G2492
Laboratory ID: B[G2492-BS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Methyl isobutyl ketone	160.00	145.83	91.1	67 - 130
Vinyl acetate	160.00	134.45	84.0	54 - 146

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Sequence: 1712752
Instrument: MS-V5
Matrix: Water
Calibration: 1707017

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	1712752-TUN2	17JUL49.D	07/17/17 23:37
Cal Standard	1712752-CALD	17JUL50.D	07/18/17 00:00
Cal Standard	1712752-CALE	17JUL51.D	07/18/17 00:23
Cal Standard	1712752-CALF	17JUL52.D	07/18/17 00:46
Cal Standard	1712752-CALG	17JUL53.D	07/18/17 01:09
Cal Standard	1712752-CALH	17JUL54.D	07/18/17 01:32
Cal Standard	1712752-CALI	17JUL55.D	07/18/17 01:55
MS Tune	1712752-TUN1	20JUL02.D	07/20/17 08:09
Cal Standard	1712752-CAL1	20JUL03.D	07/20/17 08:32
Cal Standard	1712752-CAL2	20JUL05.D	07/20/17 09:18
Cal Standard	1712752-CAL3	20JUL06.D	07/20/17 09:42
Cal Standard	1712752-CAL4	20JUL07.D	07/20/17 10:05
Cal Standard	1712752-CAL5	20JUL08.D	07/20/17 10:28
Cal Standard	1712752-CAL6	20JUL09.D	07/20/17 10:51
Cal Standard	1712752-CAL7	20JUL15.D	07/20/17 13:09
Cal Standard	1712752-CAL8	20JUL17.D	07/20/17 13:55
Cal Standard	1712752-CAL9	20JUL18.D	07/20/17 14:18
Cal Standard	1712752-CALA	20JUL19.D	07/20/17 14:41
Cal Standard	1712752-CALB	20JUL20.D	07/20/17 15:04
Cal Standard	1712752-CALC	20JUL21.D	07/20/17 15:27

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Sequence: 1713390
Instrument: MS-V5
Matrix: Water
Calibration: 1707017

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1713390-ICV1	20JUL12.D	07/20/17 12:00
Initial Cal Blank	1713390-ICB1	20JUL14.D	07/20/17 12:46
Initial Cal Check	1713390-ICV2	20JUL24.D	07/20/17 16:36
Initial Cal Blank	1713390-ICB2	20JUL26.D	07/20/17 17:22
MS Tune	1713390-TUN1	28JUL62.D	07/29/17 06:53
Calibration Check	1713390-CCV1	28JUL63.D	07/29/17 07:16
Calibration Check	1713390-CCV2	28JUL64.D	07/29/17 07:39
Calibration Blank	1713390-CCB1	28JUL65.D	07/29/17 08:02
Blank	B[G2492-BLK1	29JUL01.D	07/29/17 14:32
LCS	B[G2492-BS1	29JUL03.D	07/29/17 15:18
Matrix Spike	B[G2492-MS1	29JUL04.D	07/29/17 15:41
Matrix Spike Dup	B[G2492-MSD1	29JUL05.D	07/29/17 16:04
MS Tune	1713390-TUN2	29JUL12.D	07/29/17 18:45
Calibration Check	1713390-CCV3	29JUL13.D	07/29/17 19:08
Calibration Check	1713390-CCV4	29JUL14.D	07/29/17 19:31
Calibration Blank	1713390-CCB2	29JUL15.D	07/29/17 19:54
1DW01-170724	1720372-01	29JUL31.D	07/30/17 02:01
MS Tune	1713390-TUN3	29JUL42.D	07/30/17 06:14
Calibration Check	1713390-CCV5	29JUL43.D	07/30/17 06:36
Calibration Check	1713390-CCV6	29JUL44.D	07/30/17 06:59
Calibration Blank	1713390-CCB3	29JUL45.D	07/30/17 07:22

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Lab File ID:	20JUL02.D	Injection Date:	07/20/17
Instrument ID:	MS-V5	Injection Time:	08:09
Sequence:	1712752	Lab Sample ID:	1712752-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	20.8	PASS
Mass 75	30 - 60% of Mass 95	40.3	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	8.2	PASS
Mass 173	Less than 2% of Mass 174	0	PASS
Mass 174	50 - 100% of Mass 95	53.7	PASS
Mass 175	5 - 9% of Mass 174	6.24	PASS
Mass 176	95 - 101% of Mass 174	98.1	PASS
Mass 177	5 - 9% of Mass 176	8.19	PASS

AmecFW and KMEA, Inc.
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Project Number: [none]
Project Manager: Kurt Myers

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Lab File ID:	17JUL49.D	Injection Date:	07/17/17
Instrument ID:	MS-V5	Injection Time:	23:37
Sequence:	1712752	Lab Sample ID:	1712752-TUN2

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	19.3	PASS
Mass 75	30 - 60% of Mass 95	38.6	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	7.2	PASS
Mass 173	Less than 2% of Mass 174	0.531	PASS
Mass 174	50 - 100% of Mass 95	72.4	PASS
Mass 175	5 - 9% of Mass 174	7.55	PASS
Mass 176	95 - 101% of Mass 174	96.6	PASS
Mass 177	5 - 9% of Mass 176	6.03	PASS

AmecFW and KMEA, Inc.
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Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Lab File ID:	28JUL62.D	Injection Date:	07/29/17
Instrument ID:	MS-V5	Injection Time:	06:53
Sequence:	1713390	Lab Sample ID:	1713390-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	19.6	PASS
Mass 75	30 - 60% of Mass 95	44.7	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	6.7	PASS
Mass 173	Less than 2% of Mass 174	0	PASS
Mass 174	50 - 100% of Mass 95	71.9	PASS
Mass 175	5 - 9% of Mass 174	7.47	PASS
Mass 176	95 - 101% of Mass 174	99.4	PASS
Mass 177	5 - 9% of Mass 176	5.41	PASS

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Project Manager: Kurt Myers

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Lab File ID:	29JUL12.D	Injection Date:	07/29/17
Instrument ID:	MS-V5	Injection Time:	18:45
Sequence:	1713390	Lab Sample ID:	1713390-TUN2

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	16.8	PASS
Mass 75	30 - 60% of Mass 95	40.1	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	7.09	PASS
Mass 173	Less than 2% of Mass 174	0.759	PASS
Mass 174	50 - 100% of Mass 95	86.6	PASS
Mass 175	5 - 9% of Mass 174	8.86	PASS
Mass 176	95 - 101% of Mass 174	97	PASS
Mass 177	5 - 9% of Mass 176	5.33	PASS

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Project Number: [none]
Project Manager: Kurt Myers

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Lab File ID:	29JUL42.D	Injection Date:	07/30/17
Instrument ID:	MS-V5	Injection Time:	06:14
Sequence:	1713390	Lab Sample ID:	1713390-TUN3

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	24.7	PASS
Mass 75	30 - 60% of Mass 95	42.9	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	5.99	PASS
Mass 173	Less than 2% of Mass 174	0	PASS
Mass 174	50 - 100% of Mass 95	71.3	PASS
Mass 175	5 - 9% of Mass 174	8.38	PASS
Mass 176	95 - 101% of Mass 174	99.2	PASS
Mass 177	5 - 9% of Mass 176	5.76	PASS

AmecFW and KMEA, Inc.
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San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	20JUL12.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/20/17
Lab Sample ID:	1713390-ICV1	Injection Time:	12:00

	(1) CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	24.890	2.047739	2.039122		-0.4	20
Bromobenzene	A	25.000	25.230	1.167814	1.17861		0.9	20
Bromochloromethane	A	25.000	24.530	0.1664346	0.1632807		-1.9	20
Bromodichloromethane	A	25.000	25.280	0.2878825	0.2911282		1.1	20
Bromoform	A	25.000	26.740	0.245463	0.2625679	0.1	7.0	20
Bromomethane	A	25.000	25.110	0.406522	0.4083079		0.4	20
n-Butylbenzene	A	25.000	26.100	4.798501	5.009032		4.4	20
sec-Butylbenzene	A	25.000	26.640	6.314385	6.729672		6.6	20
tert-Butylbenzene	A	25.000	25.400	4.660614	4.735605		1.6	20
Carbon tetrachloride	A	25.000	25.480	0.449341	0.457984		1.9	20
Chlorobenzene	A	25.000	23.360	3.316137	3.09848	0.3	-6.6	20
Chloroethane	A	25.000	24.110	0.5145747	0.4963064		-3.6	20
Chloroform	A	25.000	24.930	0.7571101	0.7548645		-0.3	20
Chloromethane	A	25.000	21.800	0.9407238	0.8204025	0.1	-12.8	20
2-Chlorotoluene	A	25.000	24.160	4.677137	4.5199		-3.4	20
4-Chlorotoluene	A	25.000	24.370	4.223867	4.117292		-2.5	20
Dibromochloromethane	A	25.000	26.550	0.1504286	0.1597323		6.2	20
1,2-Dibromo-3-chloropropane	A	25.000	28.170	7.330085E-02	0.0826084		12.7	20
1,2-Dibromoethane	A	25.000	26.200	0.1293784	0.1355752		4.8	20
Dibromomethane	A	25.000	26.740	9.576412E-02	0.1024155		6.9	20
1,2-Dichlorobenzene	A	25.000	24.020	2.15653	2.071804		-3.9	20
1,3-Dichlorobenzene	A	25.000	24.340	2.49992	2.433885		-2.6	20
1,4-Dichlorobenzene	A	25.000	24.380	2.443238	2.382478		-2.5	20

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Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	20JUL12.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/20/17
Lab Sample ID:	1713390-ICV1	Injection Time:	12:00

COMPOUND	(1) CAL TYPE	CONC. (ug/L) STD	CONC. (ug/L) CCV	RESPONSE FACTOR ICAL	RESPONSE FACTOR CCV	RESPONSE FACTOR MIN (#)	% DIFF / DRIFT (2) CCV	% DIFF / DRIFT (2) LIMIT (#)
Dichlorodifluoromethane	A	25.000	26.330	0.4975939	0.5240701		5.3	20
1,1-Dichloroethane	A	25.000	25.490	1.070106	1.090882	0.1	1.9	20
1,2-Dichloroethane	A	25.000	24.460	0.4067953	0.3979766		-2.2	20
1,1-Dichloroethene	A	25.000	25.940	0.8069668	0.8371807		3.7	20
cis-1,2-Dichloroethene	A	25.000	25.330	0.5222008	0.5290657		1.3	20
trans-1,2-Dichloroethene	A	25.000	26.540	0.5009588	0.5318602		6.2	20
1,2-Dichloropropane	A	25.000	24.220	0.379403	0.3675628		-3.1	20
1,3-Dichloropropane	A	25.000	23.670	0.2528371	0.2393712		-5.3	20
2,2-Dichloropropane	A	25.000	25.930	0.602219	0.6245229		3.7	20
1,1-Dichloropropene	A	25.000	24.420	0.6845791	0.6686965		-2.3	20
cis-1,3-Dichloropropene	A	25.000	26.090	0.3594295	0.375053		4.3	20
trans-1,3-Dichloropropene	A	25.000	26.130	0.2346113	0.2452383		4.5	20
Ethylbenzene	A	25.000	25.810	1.948304	2.0114		3.2	20
Hexachlorobutadiene	A	25.000	25.210	0.86466	0.872002		0.8	20
Isopropylbenzene	A	25.000	26.250	5.700983	5.985719		5.0	20
p-Isopropyltoluene	A	25.000	26.690	5.149437	5.497681		6.8	20
Methylene chloride	A	25.000	24.890	0.4314876	0.4296029		-0.4	20
Methyl t-butyl ether	A	25.000	25.570	0.603852	0.6175321		2.3	20
Naphthalene	A	25.000	26.500	1.569043	1.6633		6.0	20
n-Propylbenzene	A	25.000	24.270	7.403456	7.187232		-2.9	20
Styrene	A	25.000	26.450	3.356924	3.551577		5.8	20
1,1,1,2-Tetrachloroethane	A	25.000	26.860	0.8160317	0.8766748		7.4	20
1,1,2,2-Tetrachloroethane	A	25.000	25.920	0.5437402	0.5638488	0.3	3.7	20

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Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	20JUL12.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/20/17
Lab Sample ID:	1713390-ICV1	Injection Time:	12:00

	(1) CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	25.470	0.3290699	0.3353122		1.9	20
Toluene	A	25.000	24.960	0.8662846	0.8648716		-0.2	20
1,2,3-Trichlorobenzene	A	25.000	26.670	1.048181	1.118245		6.7	20
1,2,4-Trichlorobenzene	A	25.000	27.060	1.248966	1.351767		8.2	20
1,1,1-Trichloroethane	A	25.000	25.790	0.6553918	0.6760837		3.2	20
1,1,2-Trichloroethane	A	25.000	25.220	0.1556498	0.1570429		0.9	20
Trichloroethene	A	25.000	25.390	0.3434012	0.3487116		1.5	20
Trichlorofluoromethane	A	25.000	25.570	0.6158835	0.6299322		2.3	20
1,2,3-Trichloropropane	A	25.000	25.960	0.1156016	0.1200231		3.8	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	26.470	0.4228091	0.4476203		5.9	20
1,2,4-Trimethylbenzene	A	25.000	26.050	4.672745	4.868982		4.2	20
1,3,5-Trimethylbenzene	A	25.000	27.000	4.717828	5.09494		8.0	20
Vinyl chloride	A	25.000	24.480	0.7494116	0.7337211		-2.1	20
Total Xylenes	A	75.000	76.780	2.323025	2.378206		2.4	20
p- & m-Xylenes	A	50.000	51.130	2.383338	2.437307		2.3	20
o-Xylene	A	25.000	25.650	2.2024	2.260003		2.6	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AmecFW and KMEA, Inc.
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Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	20JUL24.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/20/17
Lab Sample ID:	1713390-ICV2	Injection Time:	16:36

	(1)CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	311.29	4.120558E-02	4.008438E-02		-2.7	20
Acetonitrile	A	160.00	156.48	1.962376E-02	1.919169E-02		-2.2	20
Acrolein	A	200.00	192.76	1.822349E-02	1.756349E-02		-3.6	20
Acrylonitrile	A	80.000	79.220	6.794017E-02	0.0672776		-1.0	20
Allyl chloride	A	32.000	30.910	1.003175	0.9689626		-3.4	20
t-Amyl Methyl ether	A	16.000	15.740	0.6727663	0.6619595		-1.6	20
Benzyl chloride	L	32.000	28.550	0.5754497	0.592096		-10.8	20
t-Butyl alcohol	A	800.00	778.65	0.0118311	1.151529E-02		-2.7	20
Carbon disulfide	A	32.000	30.220	1.516116	1.431992		-5.5	20
Chloroprene	A	32.000	29.870	1.054363	0.9841485		-6.7	20
trans-1,4-Dichloro-2-butene	A	80.000	79.090	0.1052838	0.1040847		-1.1	20
Diisopropyl ether	A	16.000	15.560	0.3736986	0.3634691		-2.7	20
Ethanol	A	4000.0	3929.6	1.803136E-03	1.771401E-03		-1.8	20
Ethyl methacrylate	A	80.000	75.790	0.1707978	0.1618078		-5.3	20
Ethyl t-butyl ether	A	16.000	14.950	1.222825	1.142353		-6.6	20
2-Hexanone	A	320.00	300.02	7.579232E-02	7.106038E-02		-6.2	20
Isobutanol	A	400.00	438.87	5.666875E-03	6.217617E-03		9.7	20
Methacrylonitrile	A	160.00	152.91	0.0669583	6.399131E-02		-4.4	20
Methyl ethyl ketone	A	160.00	150.32	7.316144E-02	6.873728E-02		-6.0	20
Methyl iodide	A	32.000	34.400	0.5894983	0.6336396		7.5	20
Methyl isobutyl ketone	A	160.00	150.81	0.1118834	0.1054587		-5.7	20
Methyl methacrylate	A	80.000	76.810	7.466178E-02	7.168095E-02		-4.0	20
Propionitrile	A	400.00	390.39	2.456186E-02	2.397151E-02		-2.4	20

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Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	20JUL24.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/20/17
Lab Sample ID:	1713390-ICV2	Injection Time:	16:36

	(1) CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Vinyl acetate	A	160.00	149.46	0.5836509	0.5452114		-6.6	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

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Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	28JUL63.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/29/17
Lab Sample ID:	1713390-CCV1	Injection Time:	07:16

	(1)CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
Benzene	A	25.000	21.580	2.047739	1.767726		-13.7	20	
Bromobenzene	A	25.000	24.790	1.167814	1.15821		-0.8	20	
Bromochloromethane	A	25.000	21.920	0.1664346	0.1459563		-12.3	20	
Bromodichloromethane	A	25.000	25.160	0.2878825	0.2897317		0.6	20	
Bromoform	A	25.000	25.790	0.245463	0.2532095	0.1	3.2	20	
Bromomethane	A	25.000	14.600	0.406522	0.2374641		-41.6	20	*
n-Butylbenzene	A	25.000	23.790	4.798501	4.565414		-4.9	20	
sec-Butylbenzene	A	25.000	26.130	6.314385	6.598611		4.5	20	
tert-Butylbenzene	A	25.000	25.120	4.660614	4.683275		0.5	20	
Carbon tetrachloride	A	25.000	24.160	0.449341	0.4341551		-3.4	20	
Chlorobenzene	A	25.000	23.870	3.316137	3.166848	0.3	-4.5	20	
Chloroethane	A	25.000	20.800	0.5145747	0.42817		-16.8	20	
Chloroform	A	25.000	22.250	0.7571101	0.6739		-11.0	20	
Chloromethane	A	25.000	19.610	0.9407238	0.7378277	0.1	-21.6	20	*
2-Chlorotoluene	A	25.000	24.930	4.677137	4.664883		-0.3	20	
4-Chlorotoluene	A	25.000	25.000	4.223867	4.223433		-0.01	20	
Dibromochloromethane	A	25.000	25.910	0.1504286	0.1559277		3.7	20	
1,2-Dibromo-3-chloropropane	A	25.000	23.500	7.330085E-02	6.890953E-02		-6.0	20	
1,2-Dibromoethane	A	25.000	23.170	0.1293784	0.1199178		-7.3	20	
Dibromomethane	A	25.000	23.840	9.576412E-02	9.133575E-02		-4.6	20	
1,2-Dichlorobenzene	A	25.000	25.490	2.15653	2.198707		2.0	20	
1,3-Dichlorobenzene	A	25.000	26.110	2.49992	2.611285		4.5	20	
1,4-Dichlorobenzene	A	25.000	25.720	2.443238	2.513311		2.9	20	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	28JUL63.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/29/17
Lab Sample ID:	1713390-CCV1	Injection Time:	07:16

	(1) CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
Dichlorodifluoromethane	A	25.000	21.490	0.4975939	0.4277497		-14.0	20	
1,1-Dichloroethane	A	25.000	21.960	1.070106	0.9400835	0.1	-12.2	20	
1,2-Dichloroethane	A	25.000	23.080	0.4067953	0.3755844		-7.7	20	
1,1-Dichloroethene	A	25.000	22.810	0.8069668	0.7361917		-8.8	20	
cis-1,2-Dichloroethene	A	25.000	21.670	0.5222008	0.4526071		-13.3	20	
trans-1,2-Dichloroethene	A	25.000	21.930	0.5009588	0.4395145		-12.3	20	
1,2-Dichloropropane	A	25.000	23.260	0.379403	0.3529318		-7.0	20	
1,3-Dichloropropane	A	25.000	22.730	0.2528371	0.2298874		-9.1	20	
2,2-Dichloropropane	A	25.000	16.800	0.602219	0.4047885		-32.8	20	*
1,1-Dichloropropene	A	25.000	22.300	0.6845791	0.6105503		-10.8	20	
cis-1,3-Dichloropropene	A	25.000	23.100	0.3594295	0.3321101		-7.6	20	
trans-1,3-Dichloropropene	A	25.000	24.170	0.2346113	0.2268202		-3.3	20	
Ethylbenzene	A	25.000	24.810	1.948304	1.93342		-0.8	20	
Hexachlorobutadiene	A	25.000	27.520	0.86466	0.9518281		10.1	20	
Isopropylbenzene	A	25.000	25.370	5.700983	5.784768		1.5	20	
p-Isopropyltoluene	A	25.000	25.540	5.149437	5.260143		2.1	20	
Methylene chloride	A	25.000	22.470	0.4314876	0.387834		-10.1	20	
Methyl t-butyl ether	A	25.000	20.780	0.603852	0.5018659		-16.9	20	
Naphthalene	A	25.000	22.690	1.569043	1.424075		-9.2	20	
n-Propylbenzene	A	25.000	23.980	7.403456	7.100845		-4.1	20	
Styrene	A	25.000	25.050	3.356924	3.363668		0.2	20	
1,1,1,2-Tetrachloroethane	A	25.000	27.260	0.8160317	0.8898494		9.0	20	
1,1,2,2-Tetrachloroethane	A	25.000	21.300	0.5437402	0.4633136	0.3	-14.8	20	

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Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	28JUL63.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/29/17
Lab Sample ID:	1713390-CCV1	Injection Time:	07:16

	(1)CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	25.990	0.3290699	0.3421246		4.0	20
Toluene	A	25.000	24.550	0.8662846	0.8507023		-1.8	20
1,2,3-Trichlorobenzene	A	25.000	24.130	1.048181	1.011875		-3.5	20
1,2,4-Trichlorobenzene	A	25.000	24.140	1.248966	1.20593		-3.4	20
1,1,1-Trichloroethane	A	25.000	23.380	0.6553918	0.6130413		-6.5	20
1,1,2-Trichloroethane	A	25.000	23.410	0.1556498	0.1457587		-6.4	20
Trichloroethene	A	25.000	27.430	0.3434012	0.3767544		9.7	20
Trichlorofluoromethane	A	25.000	24.320	0.6158835	0.5990339		-2.7	20
1,2,3-Trichloropropane	A	25.000	25.160	0.1156016	0.1163402		0.6	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	22.550	0.4228091	0.3814548		-9.8	20
1,2,4-Trimethylbenzene	A	25.000	24.700	4.672745	4.616477		-1.2	20
1,3,5-Trimethylbenzene	A	25.000	25.700	4.717828	4.84899		2.8	20
Vinyl chloride	A	25.000	22.300	0.7494116	0.6685646		-10.8	20
Total Xylenes	A	75.000	74.190	2.323025	2.297861		-1.1	20
p- & m-Xylenes	A	50.000	49.480	2.383338	2.358586		-1.0	20
o-Xylene	A	25.000	24.710	2.2024	2.176413		-1.2	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	28JUL64.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/29/17
Lab Sample ID:	1713390-CCV2	Injection Time:	07:39

	(1)CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
Acetone	A	320.00	313.90	4.120558E-02	0.0404204		-1.9	20	
Acetonitrile	A	160.00	149.30	1.962376E-02	1.831165E-02		-6.7	20	
Acrolein	A	200.00	206.33	1.822349E-02	0.0187999		3.2	20	
Acrylonitrile	A	80.000	75.620	6.794017E-02	6.421637E-02		-5.5	20	
Allyl chloride	A	32.000	31.500	1.003175	0.9875835		-1.6	20	
t-Amyl Methyl ether	A	16.000	14.910	0.6727663	0.6270481		-6.8	20	
Benzyl chloride	L	32.000	32.790	0.5754497	0.6891963		2.5	20	
t-Butyl alcohol	A	800.00	752.07	0.0118311	0.0111223		-6.0	20	
Carbon disulfide	A	32.000	29.960	1.516116	1.419572		-6.4	20	
Chloroprene	A	32.000	31.980	1.054363	1.053582		-0.07	20	
trans-1,4-Dichloro-2-butene	A	80.000	78.070	0.1052838	0.1027492		-2.4	20	
Diisopropyl ether	A	16.000	14.540	0.3736986	0.339657		-9.1	20	
Ethanol	A	4000.0	3882.3	1.803136E-03	1.750075E-03		-2.9	20	
Ethyl methacrylate	A	80.000	77.770	0.1707978	0.1660407		-2.8	20	
Ethyl t-butyl ether	A	16.000	14.500	1.222825	1.107915		-9.4	20	
2-Hexanone	A	320.00	311.20	7.579232E-02	7.370817E-02		-2.7	20	
Isobutanol	A	400.00	435.44	5.666875E-03	6.168957E-03		8.9	20	
Methacrylonitrile	A	160.00	144.53	0.0669583	6.048485E-02		-9.7	20	
Methyl ethyl ketone	A	160.00	145.96	7.316144E-02	6.674202E-02		-8.8	20	
Methyl iodide	A	32.000	20.120	0.5894983	0.3707338		-37.1	20	*
Methyl isobutyl ketone	A	160.00	156.52	0.1118834	0.1094501		-2.2	20	
Methyl methacrylate	A	80.000	75.640	7.466178E-02	7.059348E-02		-5.4	20	
Propionitrile	A	400.00	376.60	2.456186E-02	2.312507E-02		-5.8	20	

AmecFW and KMEA, Inc.
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Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	28JUL64.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/29/17
Lab Sample ID:	1713390-CCV2	Injection Time:	07:39

	(1) CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Vinyl acetate	A	160.00	152.81	0.5836509	0.55741		-4.5	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	29JUL13.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/29/17
Lab Sample ID:	1713390-CCV3	Injection Time:	19:08

COMPOUND	(1) CAL TYPE	CONC. (ug/L) STD	CONC. (ug/L) CCV	RESPONSE FACTOR ICAL	RESPONSE FACTOR CCV	RESPONSE FACTOR MIN (#)	% DIFF / DRIFT (2) CCV	% DIFF / DRIFT (2) LIMIT (#)
Benzene	A	25.000	23.510	2.047739	1.925468		-6.0	20
Bromobenzene	A	25.000	25.610	1.167814	1.196459		2.5	20
Bromochloromethane	A	25.000	24.350	0.1664346	0.1621029		-2.6	20
Bromodichloromethane	A	25.000	26.380	0.2878825	0.3038005		5.5	20
Bromoform	A	25.000	27.700	0.245463	0.2720094	0.1	10.8	20
Bromomethane	A	25.000	20.360	0.406522	0.3310686		-18.6	20
n-Butylbenzene	A	25.000	25.030	4.798501	4.803651		0.1	20
sec-Butylbenzene	A	25.000	26.440	6.314385	6.67833		5.8	20
tert-Butylbenzene	A	25.000	25.320	4.660614	4.720588		1.3	20
Carbon tetrachloride	A	25.000	26.510	0.449341	0.4764873		6.0	20
Chlorobenzene	A	25.000	24.610	3.316137	3.263916	0.3	-1.6	20
Chloroethane	A	25.000	23.150	0.5145747	0.4765006		-7.4	20
Chloroform	A	25.000	24.070	0.7571101	0.7290623		-3.7	20
Chloromethane	A	25.000	21.330	0.9407238	0.802653	0.1	-14.7	20
2-Chlorotoluene	A	25.000	25.420	4.677137	4.755445		1.7	20
4-Chlorotoluene	A	25.000	25.660	4.223867	4.335711		2.6	20
Dibromochloromethane	A	25.000	27.810	0.1504286	0.167347		11.2	20
1,2-Dibromo-3-chloropropane	A	25.000	25.450	7.330085E-02	7.461046E-02		1.8	20
1,2-Dibromoethane	A	25.000	25.800	0.1293784	0.1335152		3.2	20
Dibromomethane	A	25.000	26.650	9.576412E-02	0.1020684		6.6	20
1,2-Dichlorobenzene	A	25.000	26.580	2.15653	2.2929		6.3	20
1,3-Dichlorobenzene	A	25.000	26.840	2.49992	2.683762		7.4	20
1,4-Dichlorobenzene	A	25.000	26.770	2.443238	2.616157		7.1	20

AmecFW and KMEA, Inc.
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Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	29JUL13.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/29/17
Lab Sample ID:	1713390-CCV3	Injection Time:	19:08

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	22.830	0.4975939	0.4543621		-8.7	20
1,1-Dichloroethane	A	25.000	24.400	1.070106	1.044386	0.1	-2.4	20
1,2-Dichloroethane	A	25.000	25.660	0.4067953	0.4174814		2.6	20
1,1-Dichloroethene	A	25.000	24.560	0.8069668	0.792836		-1.8	20
cis-1,2-Dichloroethene	A	25.000	23.560	0.5222008	0.4920288		-5.8	20
trans-1,2-Dichloroethene	A	25.000	23.960	0.5009588	0.4801081		-4.2	20
1,2-Dichloropropane	A	25.000	24.490	0.379403	0.3716313		-2.0	20
1,3-Dichloropropane	A	25.000	24.440	0.2528371	0.2472014		-2.2	20
2,2-Dichloropropane	A	25.000	24.750	0.602219	0.5962685		-1.0	20
1,1-Dichloropropene	A	25.000	24.320	0.6845791	0.6660813		-2.7	20
cis-1,3-Dichloropropene	A	25.000	26.500	0.3594295	0.3810343		6.0	20
trans-1,3-Dichloropropene	A	25.000	27.550	0.2346113	0.2585744		10.2	20
Ethylbenzene	A	25.000	24.990	1.948304	1.94736		-0.05	20
Hexachlorobutadiene	A	25.000	27.970	0.86466	0.9674309		11.9	20
Isopropylbenzene	A	25.000	25.750	5.700983	5.872212		3.0	20
p-Isopropyltoluene	A	25.000	26.130	5.149437	5.381946		4.5	20
Methylene chloride	A	25.000	23.250	0.4314876	0.401249		-7.0	20
Methyl t-butyl ether	A	25.000	23.350	0.603852	0.5640362		-6.6	20
Naphthalene	A	25.000	24.660	1.569043	1.547683		-1.4	20
n-Propylbenzene	A	25.000	24.120	7.403456	7.143616		-3.5	20
Styrene	A	25.000	25.610	3.356924	3.438473		2.4	20
1,1,1,2-Tetrachloroethane	A	25.000	27.360	0.8160317	0.8932096		9.5	20
1,1,2,2-Tetrachloroethane	A	25.000	24.740	0.5437402	0.5380329	0.3	-1.0	20

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	29JUL13.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/29/17
Lab Sample ID:	1713390-CCV3	Injection Time:	19:08

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	26.800	0.3290699	0.3527796		7.2	20
Toluene	A	25.000	25.740	0.8662846	0.8920847		3.0	20
1,2,3-Trichlorobenzene	A	25.000	26.380	1.048181	1.106182		5.5	20
1,2,4-Trichlorobenzene	A	25.000	26.060	1.248966	1.302167		4.3	20
1,1,1-Trichloroethane	A	25.000	26.050	0.6553918	0.6828873		4.2	20
1,1,2-Trichloroethane	A	25.000	25.370	0.1556498	0.1579774		1.5	20
Trichloroethene	A	25.000	27.130	0.3434012	0.3726847		8.5	20
Trichlorofluoromethane	A	25.000	26.240	0.6158835	0.6464053		5.0	20
1,2,3-Trichloropropane	A	25.000	27.430	0.1156016	0.1268559		9.7	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	24.990	0.4228091	0.4227011		-0.03	20
1,2,4-Trimethylbenzene	A	25.000	25.280	4.672745	4.724814		1.1	20
1,3,5-Trimethylbenzene	A	25.000	26.350	4.717828	4.973225		5.4	20
Vinyl chloride	A	25.000	24.020	0.7494116	0.7198875		-3.9	20
Total Xylenes	A	75.000	74.820	2.323025	2.317054		-0.3	20
p- & m-Xylenes	A	50.000	49.740	2.383338	2.37086		-0.5	20
o-Xylene	A	25.000	25.080	2.2024	2.209442		0.3	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	29JUL14.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/29/17
Lab Sample ID:	1713390-CCV4	Injection Time:	19:31

	(1)CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	371.47	4.120558E-02	4.783352E-02		16.1	20
Acetonitrile	A	160.00	180.69	1.962376E-02	2.216184E-02		12.9	20
Acrolein	A	200.00	306.27	1.822349E-02	2.790632E-02		53.1	20 *
Acrylonitrile	A	80.000	87.570	6.794017E-02	7.436904E-02		9.5	20
Allyl chloride	A	32.000	33.010	1.003175	1.034853		3.2	20
t-Amyl Methyl ether	A	16.000	17.290	0.6727663	0.7268828		8.0	20
Benzyl chloride	L	32.000	32.550	0.5754497	0.6836308		1.7	20
t-Butyl alcohol	A	800.00	927.82	0.0118311	1.372138E-02		16.0	20
Carbon disulfide	A	32.000	31.260	1.516116	1.480866		-2.3	20
Chloroprene	A	32.000	33.490	1.054363	1.103507		4.7	20
trans-1,4-Dichloro-2-butene	A	80.000	100.86	0.1052838	0.1327383		26.1	20 *
Diisopropyl ether	A	16.000	15.720	0.3736986	0.3672617		-1.7	20
Ethanol	A	4000.0	4883.3	1.803136E-03	2.201322E-03		22.1	20 *
Ethyl methacrylate	A	80.000	88.980	0.1707978	0.1899761		11.2	20
Ethyl t-butyl ether	A	16.000	16.970	1.222825	1.296979		6.1	20
2-Hexanone	A	320.00	365.64	7.579232E-02	8.660172E-02		14.3	20
Isobutanol	A	400.00	539.24	5.666875E-03	7.639573E-03		34.8	20 *
Methacrylonitrile	A	160.00	168.57	0.0669583	7.054325E-02		5.4	20
Methyl ethyl ketone	A	160.00	177.10	7.316144E-02	8.098083E-02		10.7	20
Methyl iodide	A	32.000	18.880	0.5894983	0.3478054		-41.0	20 *
Methyl isobutyl ketone	A	160.00	183.55	0.1118834	0.1283534		14.7	20
Methyl methacrylate	A	80.000	90.540	7.466178E-02	8.449669E-02		13.2	20
Propionitrile	A	400.00	446.01	2.456186E-02	2.738738E-02		11.5	20

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	29JUL14.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/29/17
Lab Sample ID:	1713390-CCV4	Injection Time:	19:31

	(1) CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Vinyl acetate	A	160.00	145.78	0.5836509	0.5317928		-8.9	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	29JUL43.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/30/17
Lab Sample ID:	1713390-CCV5	Injection Time:	06:36

COMPOUND	(1) CAL TYPE	CONC. (ug/L) STD	CONC. (ug/L) CCV	RESPONSE FACTOR ICAL	RESPONSE FACTOR CCV	RESPONSE FACTOR MIN (#)	% DIFF / DRIFT (2) CCV	% DIFF / DRIFT (2) LIMIT (#)	
Benzene	A	25.000	27.560	2.047739	2.257275		10.2	20	
Bromobenzene	A	25.000	28.950	1.167814	1.352482		15.8	20	
Bromochloromethane	A	25.000	28.150	0.1664346	0.1874049		12.6	20	
Bromodichloromethane	A	25.000	30.190	0.2878825	0.3475987		20.7	20	*
Bromoform	A	25.000	29.340	0.245463	0.288108	0.1	17.4	20	
Bromomethane	A	25.000	15.270	0.406522	0.2483747		-38.9	20	*
n-Butylbenzene	A	25.000	28.870	4.798501	5.541284		15.5	20	
sec-Butylbenzene	A	25.000	30.500	6.314385	7.703664		22.0	20	*
tert-Butylbenzene	A	25.000	29.180	4.660614	5.439898		16.7	20	
Carbon tetrachloride	A	25.000	31.380	0.449341	0.5640401		25.5	20	*
Chlorobenzene	A	25.000	28.190	3.316137	3.739783	0.3	12.8	20	
Chloroethane	A	25.000	26.980	0.5145747	0.5552736		7.9	20	
Chloroform	A	25.000	28.530	0.7571101	0.8639873		14.1	20	
Chloromethane	A	25.000	24.100	0.9407238	0.9067853	0.1	-3.6	20	
2-Chlorotoluene	A	25.000	29.460	4.677137	5.51245		17.9	20	
4-Chlorotoluene	A	25.000	29.440	4.223867	4.973957		17.8	20	
Dibromochloromethane	A	25.000	31.030	0.1504286	0.1867033		24.1	20	*
1,2-Dibromo-3-chloropropane	A	25.000	26.350	7.330085E-02	7.727037E-02		5.4	20	
1,2-Dibromoethane	A	25.000	28.030	0.1293784	0.1450337		12.1	20	
Dibromomethane	A	25.000	28.810	9.576412E-02	0.1103662		15.2	20	
1,2-Dichlorobenzene	A	25.000	29.360	2.15653	2.532431		17.4	20	
1,3-Dichlorobenzene	A	25.000	30.200	2.49992	3.019674		20.8	20	*
1,4-Dichlorobenzene	A	25.000	30.650	2.443238	2.995886		22.6	20	*

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Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	29JUL43.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/30/17
Lab Sample ID:	1713390-CCV5	Injection Time:	06:36

COMPOUND	(1) CAL TYPE	CONC. (ug/L) STD	CONC. (ug/L) CCV	RESPONSE FACTOR ICAL	RESPONSE FACTOR CCV	RESPONSE FACTOR MIN (#)	% DIFF / DRIFT (2) CCV	% DIFF / DRIFT (2) LIMIT (#)	
Dichlorodifluoromethane	A	25.000	34.860	0.4975939	0.6937786		39.4	20	*
1,1-Dichloroethane	A	25.000	27.670	1.070106	1.184434	0.1	10.7	20	
1,2-Dichloroethane	A	25.000	29.650	0.4067953	0.482445		18.6	20	
1,1-Dichloroethene	A	25.000	29.790	0.8069668	0.9614636		19.1	20	
cis-1,2-Dichloroethene	A	25.000	27.770	0.5222008	0.5801351		11.1	20	
trans-1,2-Dichloroethene	A	25.000	28.150	0.5009588	0.564171		12.6	20	
1,2-Dichloropropane	A	25.000	27.650	0.379403	0.4196421		10.6	20	
1,3-Dichloropropane	A	25.000	27.970	0.2528371	0.2828984		11.9	20	
2,2-Dichloropropane	A	25.000	31.270	0.602219	0.7532838		25.1	20	*
1,1-Dichloropropene	A	25.000	28.160	0.6845791	0.7710359		12.6	20	
cis-1,3-Dichloropropene	A	25.000	28.720	0.3594295	0.4129284		14.9	20	
trans-1,3-Dichloropropene	A	25.000	30.270	0.2346113	0.2840594		21.1	20	*
Ethylbenzene	A	25.000	29.260	1.948304	2.280148		17.0	20	
Hexachlorobutadiene	A	25.000	31.620	0.86466	1.093629		26.5	20	*
Isopropylbenzene	A	25.000	29.970	5.700983	6.834307		19.9	20	
p-Isopropyltoluene	A	25.000	30.440	5.149437	6.27061		21.8	20	*
Methylene chloride	A	25.000	26.560	0.4314876	0.4583906		6.2	20	
Methyl t-butyl ether	A	25.000	26.450	0.603852	0.6388331		5.8	20	
Naphthalene	A	25.000	24.680	1.569043	1.548776		-1.3	20	
n-Propylbenzene	A	25.000	28.020	7.403456	8.298254		12.1	20	
Styrene	A	25.000	29.900	3.356924	4.014945		19.6	20	
1,1,1,2-Tetrachloroethane	A	25.000	31.640	0.8160317	1.032907		26.6	20	*
1,1,2,2-Tetrachloroethane	A	25.000	27.460	0.5437402	0.5973365	0.3	9.9	20	

AmecFW and KMEA, Inc.
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Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	29JUL43.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/30/17
Lab Sample ID:	1713390-CCV5	Injection Time:	06:36

COMPOUND	(1) CAL TYPE	CONC. (ug/L) STD	CONC. (ug/L) CCV	RESPONSE FACTOR ICAL	RESPONSE FACTOR CCV	RESPONSE FACTOR MIN (#)	% DIFF / DRIFT (2) CCV	% DIFF / DRIFT (2) LIMIT (#)
Tetrachloroethene	A	25.000	34.820	0.3290699	0.4582841		39.3	20 *
Toluene	A	25.000	29.730	0.8662846	1.03024		18.9	20
1,2,3-Trichlorobenzene	A	25.000	25.740	1.048181	1.079105		3.0	20
1,2,4-Trichlorobenzene	A	25.000	27.520	1.248966	1.374986		10.1	20
1,1,1-Trichloroethane	A	25.000	30.480	0.6553918	0.7990752		21.9	20 *
1,1,2-Trichloroethane	A	25.000	27.830	0.1556498	0.1732905		11.3	20
Trichloroethene	A	25.000	30.830	0.3434012	0.4234606		23.3	20 *
Trichlorofluoromethane	A	25.000	31.710	0.6158835	0.7812937		26.9	20 *
1,2,3-Trichloropropane	A	25.000	31.520	0.1156016	0.1457717		26.1	20 *
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	30.250	0.4228091	0.5116096		21.0	20 *
1,2,4-Trimethylbenzene	A	25.000	29.020	4.672745	5.423376		16.1	20
1,3,5-Trimethylbenzene	A	25.000	30.410	4.717828	5.738687		21.6	20 *
Vinyl chloride	A	25.000	27.930	0.7494116	0.8370972		11.7	20
Total Xylenes	A	75.000	86.850	2.323025	2.689946		15.8	20
p- & m-Xylenes	A	50.000	57.830	2.383338	2.756733		15.7	20
o-Xylene	A	25.000	29.020	2.2024	2.556372		16.1	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	29JUL44.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/30/17
Lab Sample ID:	1713390-CCV6	Injection Time:	06:59

COMPOUND	(1) CAL TYPE	CONC. (ug/L) STD	CONC. (ug/L) CCV	RESPONSE FACTOR ICAL	RESPONSE FACTOR CCV	RESPONSE FACTOR MIN (#)	% DIFF / DRIFT (2) CCV	% DIFF / DRIFT (2) LIMIT (#)	
Acetone	A	320.00	302.16	4.120558E-02	3.890852E-02		-5.6	20	
Acetonitrile	A	160.00	149.40	1.962376E-02	1.832334E-02		-6.6	20	
Acrolein	A	200.00	243.76	1.822349E-02	2.221092E-02		21.9	20	*
Acrylonitrile	A	80.000	73.390	6.794017E-02	6.232372E-02		-8.3	20	
Allyl chloride	A	32.000	29.700	1.003175	0.9309227		-7.2	20	
t-Amyl Methyl ether	A	16.000	14.230	0.6727663	0.5981782		-11.1	20	
Benzyl chloride	L	32.000	31.460	0.5754497	0.6585815		-1.7	20	
t-Butyl alcohol	A	800.00	776.47	0.0118311	0.0114831		-2.9	20	
Carbon disulfide	A	32.000	28.610	1.516116	1.355633		-10.6	20	
Chloroprene	A	32.000	30.820	1.054363	1.015441		-3.7	20	
trans-1,4-Dichloro-2-butene	A	80.000	49.120	0.1052838	6.463849E-02		-38.6	20	*
Diisopropyl ether	A	16.000	14.150	0.3736986	0.3305849		-11.5	20	
Ethanol	A	4000.0	3888.4	1.803136E-03	1.752823E-03		-2.8	20	
Ethyl methacrylate	A	80.000	73.850	0.1707978	0.1576598		-7.7	20	
Ethyl t-butyl ether	A	16.000	14.370	1.222825	1.097996		-10.2	20	
2-Hexanone	A	320.00	308.77	7.579232E-02	7.313156E-02		-3.5	20	
Isobutanol	A	400.00	438.12	5.666875E-03	6.206877E-03		9.5	20	
Methacrylonitrile	A	160.00	142.02	0.0669583	5.943329E-02		-11.2	20	
Methyl ethyl ketone	A	160.00	143.00	7.316144E-02	6.538726E-02		-10.6	20	
Methyl iodide	A	32.000	14.510	0.5894983	0.2672526		-54.7	20	*
Methyl isobutyl ketone	A	160.00	153.86	0.1118834	0.1075918		-3.8	20	
Methyl methacrylate	A	80.000	74.930	7.466178E-02	6.993055E-02		-6.3	20	
Propionitrile	A	400.00	382.04	2.456186E-02	2.345924E-02		-4.5	20	

AmecFW and KMEA, Inc.
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San Diego, CA 92123

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Project Number: [none]
Project Manager: Kurt Myers

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Instrument ID:	MS-V5	Calibration:	1707017
Lab File ID:	29JUL44.D	Calibration Date:	07/18/17 00:46
Sequence:	1713390	Injection Date:	07/30/17
Lab Sample ID:	1713390-CCV6	Injection Time:	06:59

	(1) CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Vinyl acetate	A	160.00	149.55	0.5836509	0.5455153		-6.5	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

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9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Sequence: 1712752
Instrument: MS-V5
Matrix: Water
Calibration: 1707017

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Cal Standard (1712752-CAL1)			Lab File ID: 20JUL03.D		Analyzed: 07/20/17 08:32			
1,2-Dichloroethane-d4 (Surrogate)	10.000	101		6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.6		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	96.8		10.35	10.34333	0.0067	+/-1.0	
Cal Standard (1712752-CAL2)			Lab File ID: 20JUL05.D		Analyzed: 07/20/17 09:18			
1,2-Dichloroethane-d4 (Surrogate)	10.000	101		6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	99.8		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	101		10.34	10.34333	-0.0033	+/-1.0	
Cal Standard (1712752-CAL3)			Lab File ID: 20JUL06.D		Analyzed: 07/20/17 09:42			
1,2-Dichloroethane-d4 (Surrogate)	10.000	98.6		6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.9		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	101		10.34	10.34333	-0.0033	+/-1.0	
Cal Standard (1712752-CAL4)			Lab File ID: 20JUL07.D		Analyzed: 07/20/17 10:05			
1,2-Dichloroethane-d4 (Surrogate)	10.000	98.9		6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	101		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	103		10.34	10.34333	-0.0033	+/-1.0	
Cal Standard (1712752-CAL5)			Lab File ID: 20JUL08.D		Analyzed: 07/20/17 10:28			
1,2-Dichloroethane-d4 (Surrogate)	10.000	94.0		6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	100		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	101		10.34	10.34333	-0.0033	+/-1.0	
Cal Standard (1712752-CAL6)			Lab File ID: 20JUL09.D		Analyzed: 07/20/17 10:51			
1,2-Dichloroethane-d4 (Surrogate)	10.000	92.4		6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	100		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	102		10.35	10.34333	0.0067	+/-1.0	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Sequence: 1713390
Instrument: MS-V5
Matrix: Water
Calibration: 1707017

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (1713390-ICV1)			Lab File ID: 20JUL12.D		Analyzed: 07/20/17 12:00			
1,2-Dichloroethane-d4 (Surrogate)	10.000	100	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.4	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	104	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Initial Cal Blank (1713390-ICB1)			Lab File ID: 20JUL14.D		Analyzed: 07/20/17 12:46			
1,2-Dichloroethane-d4 (Surrogate)	10.000	106	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.6	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.2	85 - 114	10.35	10.34333	0.0067	+/-1.0	
Calibration Check (1713390-CCV1)			Lab File ID: 28JUL63.D		Analyzed: 07/29/17 07:16			
1,2-Dichloroethane-d4 (Surrogate)	10.000	93.7	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	100	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	94.8	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Calibration Blank (1713390-CCB1)			Lab File ID: 28JUL65.D		Analyzed: 07/29/17 08:02			
1,2-Dichloroethane-d4 (Surrogate)	10.000	105	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.7	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	91.0	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Blank (B[G2492-BLK1)			Lab File ID: 29JUL01.D		Analyzed: 07/29/17 14:32			
1,2-Dichloroethane-d4 (Surrogate)	10.000	102	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.5	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	95.9	85 - 114	10.35	10.34333	0.0067	+/-1.0	
LCS (B[G2492-BS1)			Lab File ID: 29JUL03.D		Analyzed: 07/29/17 15:18			
1,2-Dichloroethane-d4 (Surrogate)	10.000	102	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	99.5	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	100	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Matrix Spike (B[G2492-MS1)			Lab File ID: 29JUL04.D		Analyzed: 07/29/17 15:41			
1,2-Dichloroethane-d4 (Surrogate)	10.000	99.3	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.5	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	98.9	85 - 114	10.34	10.34333	-0.0033	+/-1.0	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Sequence: 1713390
Instrument: MS-V5
Matrix: Water
Calibration: 1707017

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Matrix Spike Dup (B[G2492-MSD1)			Lab File ID: 29JUL05.D		Analyzed: 07/29/17 16:04			
1,2-Dichloroethane-d4 (Surrogate)	10.000	98.0	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.9	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.4	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Calibration Check (1713390-CCV3)			Lab File ID: 29JUL13.D		Analyzed: 07/29/17 19:08			
1,2-Dichloroethane-d4 (Surrogate)	10.000	96.2	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	100	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	98.0	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Calibration Blank (1713390-CCB2)			Lab File ID: 29JUL15.D		Analyzed: 07/29/17 19:54			
1,2-Dichloroethane-d4 (Surrogate)	10.000	99.4	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.9	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.8	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
1DW01-170724 (1720372-01)			Lab File ID: 29JUL31.D		Analyzed: 07/30/17 02:01			
1,2-Dichloroethane-d4 (Surrogate)	10.000	107	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.2	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	105	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Calibration Check (1713390-CCV5)			Lab File ID: 29JUL43.D		Analyzed: 07/30/17 06:36			
1,2-Dichloroethane-d4 (Surrogate)	10.000	101	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.8	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	94.3	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Calibration Blank (1713390-CCB3)			Lab File ID: 29JUL45.D		Analyzed: 07/30/17 07:22			
1,2-Dichloroethane-d4 (Surrogate)	10.000	103	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	99.0	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	96.3	85 - 114	10.34	10.34333	-0.0033	+/-1.0	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INTERNAL STANDARD AREA AND RT SUMMARY
EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Sequence: 1712752
Instrument: MS-V5
Matrix: Water
Calibration: 1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (1712752-CALD)			Lab File ID: 17JUL50.D			Analyzed: 07/18/17 00:00			
Pentafluorobenzene (IS)	203330	6.57	187618	6.58	108	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CALE)			Lab File ID: 17JUL51.D			Analyzed: 07/18/17 00:23			
Pentafluorobenzene (IS)	203353	6.57	187618	6.58	108	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CALF)			Lab File ID: 17JUL52.D			Analyzed: 07/18/17 00:46			
Pentafluorobenzene (IS)	209806	6.57	187618	6.58	112	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CALG)			Lab File ID: 17JUL53.D			Analyzed: 07/18/17 01:09			
Pentafluorobenzene (IS)	214428	6.57	187618	6.58	114	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CALH)			Lab File ID: 17JUL54.D			Analyzed: 07/18/17 01:32			
Pentafluorobenzene (IS)	210761	6.57	187618	6.58	112	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CALI)			Lab File ID: 17JUL55.D			Analyzed: 07/18/17 01:55			
Pentafluorobenzene (IS)	228564	6.57	187618	6.58	122	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CAL1)			Lab File ID: 20JUL03.D			Analyzed: 07/20/17 08:32			
Pentafluorobenzene (IS)	217011	6.57	187618	6.58	116	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	90897	9.61	72968	9.61	125	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	336200	7.38	281102	7.38	120	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL2)			Lab File ID: 20JUL05.D			Analyzed: 07/20/17 09:18			
Pentafluorobenzene (IS)	219386	6.58	187618	6.58	117	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	89283	9.61	72968	9.61	122	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	341653	7.38	281102	7.38	122	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL3)			Lab File ID: 20JUL06.D			Analyzed: 07/20/17 09:42			
Pentafluorobenzene (IS)	160100	6.58	187618	6.58	85	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	66101	9.62	72968	9.61	91	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	249503	7.38	281102	7.38	89	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL4)			Lab File ID: 20JUL07.D			Analyzed: 07/20/17 10:05			
Pentafluorobenzene (IS)	187618	6.58	187618	6.58	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	72968	9.61	72968	9.61	100	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	281102	7.38	281102	7.38	100	50 - 200	0.0000	+/-0.50	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INTERNAL STANDARD AREA AND RT SUMMARY
EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Sequence: 1712752
Instrument: MS-V5
Matrix: Water
Calibration: 1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (1712752-CAL5)			Lab File ID: 20JUL08.D			Analyzed: 07/20/17 10:28			
Pentafluorobenzene (IS)	185328	6.58	187618	6.58	99	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	75612	9.62	72968	9.61	104	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	283937	7.38	281102	7.38	101	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL6)			Lab File ID: 20JUL09.D			Analyzed: 07/20/17 10:51			
Pentafluorobenzene (IS)	190235	6.57	187618	6.58	101	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	79131	9.61	72968	9.61	108	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	291095	7.38	281102	7.38	104	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL7)			Lab File ID: 20JUL15.D			Analyzed: 07/20/17 13:09			
Pentafluorobenzene (IS)	185398	6.57	187618	6.58	99	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	74464	9.62	72968	9.61	102	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	284772	7.38	281102	7.38	101	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL8)			Lab File ID: 20JUL17.D			Analyzed: 07/20/17 13:55			
Pentafluorobenzene (IS)	181609	6.57	187618	6.58	97	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	74489	9.61	72968	9.61	102	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	282158	7.38	281102	7.38	100	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL9)			Lab File ID: 20JUL18.D			Analyzed: 07/20/17 14:18			
Pentafluorobenzene (IS)	177625	6.58	187618	6.58	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	69283	9.62	72968	9.61	95	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	272450	7.38	281102	7.38	97	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CALA)			Lab File ID: 20JUL19.D			Analyzed: 07/20/17 14:41			
Pentafluorobenzene (IS)	178179	6.58	187618	6.58	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	71971	9.61	72968	9.61	99	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	269523	7.38	281102	7.38	96	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CALB)			Lab File ID: 20JUL20.D			Analyzed: 07/20/17 15:04			
Pentafluorobenzene (IS)	174621	6.57	187618	6.58	93	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	69099	9.62	72968	9.61	95	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	263233	7.38	281102	7.38	94	50 - 200	0.0000	+/-0.50	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INTERNAL STANDARD AREA AND RT SUMMARY
EPA-8260B

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Sequence:	1712752	Instrument:	MS-V5
Matrix:	Water	Calibration:	1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (1712752-CALC)			Lab File ID: 20JUL21.D			Analyzed: 07/20/17 15:27			
Pentafluorobenzene (IS)	191859	6.57	187618	6.58	102	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	76272	9.62	72968	9.61	105	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	287684	7.38	281102	7.38	102	50 - 200	0.0000	+/-0.50	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INTERNAL STANDARD AREA AND RT SUMMARY
EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Sequence: 1713390
Instrument: MS-V5
Matrix: Water
Calibration: 1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (1713390-ICV1)			Lab File ID: 20JUL12.D			Analyzed: 07/20/17 12:00			
Pentafluorobenzene (IS)	184644	6.58	187618	6.58	98	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	74559	9.62	72968	9.61	102	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	285117	7.38	281102	7.38	101	50 - 200	0.0000	+/-0.50	
Initial Cal Blank (1713390-ICB1)			Lab File ID: 20JUL14.D			Analyzed: 07/20/17 12:46			
Pentafluorobenzene (IS)	181261	6.57	184644	6.58	98	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	73863	9.61	74559	9.62	99	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	281231	7.38	285117	7.38	99	50 - 200	0.0000	+/-0.50	
Initial Cal Check (1713390-ICV2)			Lab File ID: 20JUL24.D			Analyzed: 07/20/17 16:36			
Pentafluorobenzene (IS)	179876	6.58	187618	6.58	96	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	74706	9.62	72968	9.61	102	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	278423	7.38	281102	7.38	99	50 - 200	0.0000	+/-0.50	
Initial Cal Blank (1713390-ICB2)			Lab File ID: 20JUL26.D			Analyzed: 07/20/17 17:22			
Pentafluorobenzene (IS)	171673	6.57	179876	6.58	95	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	71809	9.62	74706	9.62	96	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	268403	7.38	278423	7.38	96	50 - 200	0.0000	+/-0.50	
Calibration Check (1713390-CCV1)			Lab File ID: 28JUL63.D			Analyzed: 07/29/17 07:16			
Pentafluorobenzene (IS)	167483	6.58	187618	6.58	89	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	62331	9.62	72968	9.61	85	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	235658	7.38	281102	7.38	84	50 - 200	0.0000	+/-0.50	
Calibration Check (1713390-CCV2)			Lab File ID: 28JUL64.D			Analyzed: 07/29/17 07:39			
Pentafluorobenzene (IS)	162953	6.57	187618	6.58	87	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	64183	9.62	72968	9.61	88	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	237313	7.38	281102	7.38	84	50 - 200	0.0000	+/-0.50	
Calibration Blank (1713390-CCB1)			Lab File ID: 28JUL65.D			Analyzed: 07/29/17 08:02			
Pentafluorobenzene (IS)	155536	6.57	162953	6.57	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	64189	9.61	64183	9.62	100	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	236490	7.38	237313	7.38	100	50 - 200	0.0000	+/-0.50	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INTERNAL STANDARD AREA AND RT SUMMARY
EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Sequence: 1713390
Instrument: MS-V5
Matrix: Water
Calibration: 1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (B[G2492-BLK1)			Lab File ID: 29JUL01.D			Analyzed: 07/29/17 14:32			
Pentafluorobenzene (IS)	178938	6.58	162953	6.57	110	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	69768	9.61	64183	9.62	109	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	261493	7.38	237313	7.38	110	50 - 200	0.0000	+/-0.50	
LCS (B[G2492-BS1)			Lab File ID: 29JUL03.D			Analyzed: 07/29/17 15:18			
Pentafluorobenzene (IS)	180069	6.57	162953	6.57	111	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	71879	9.62	64183	9.62	112	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	262924	7.38	237313	7.38	111	50 - 200	0.0000	+/-0.50	
Matrix Spike (B[G2492-MS1)			Lab File ID: 29JUL04.D			Analyzed: 07/29/17 15:41			
Pentafluorobenzene (IS)	184494	6.57	162953	6.57	113	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	72474	9.62	64183	9.62	113	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	272333	7.38	237313	7.38	115	50 - 200	0.0000	+/-0.50	
Matrix Spike Dup (B[G2492-MSD1)			Lab File ID: 29JUL05.D			Analyzed: 07/29/17 16:04			
Pentafluorobenzene (IS)	160305	6.58	162953	6.57	98	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	63881	9.61	64183	9.62	100	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	245137	7.38	237313	7.38	103	50 - 200	0.0000	+/-0.50	
Calibration Check (1713390-CCV3)			Lab File ID: 29JUL13.D			Analyzed: 07/29/17 19:08			
Pentafluorobenzene (IS)	180626	6.57	187618	6.58	96	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	72971	9.62	72968	9.61	100	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	263149	7.38	281102	7.38	94	50 - 200	0.0000	+/-0.50	
Calibration Check (1713390-CCV4)			Lab File ID: 29JUL14.D			Analyzed: 07/29/17 19:31			
Pentafluorobenzene (IS)	158448	6.57	187618	6.58	84	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	62675	9.62	72968	9.61	86	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	236027	7.38	281102	7.38	84	50 - 200	0.0000	+/-0.50	
Calibration Blank (1713390-CCB2)			Lab File ID: 29JUL15.D			Analyzed: 07/29/17 19:54			
Pentafluorobenzene (IS)	188729	6.57	158448	6.57	119	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	71584	9.62	62675	9.62	114	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	271364	7.38	236027	7.38	115	50 - 200	0.0000	+/-0.50	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INTERNAL STANDARD AREA AND RT SUMMARY
EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Sequence: 1713390
Instrument: MS-V5
Matrix: Water
Calibration: 1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
1DW01-170724 (1720372-01)			Lab File ID: 29JUL31.D			Analyzed: 07/30/17 02:01			
Pentafluorobenzene (IS)	156355	6.58	158448	6.57	99	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	56824	9.62	62675	9.62	91	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	224797	7.38	236027	7.38	95	50 - 200	0.0000	+/-0.50	
Calibration Check (1713390-CCV5)			Lab File ID: 29JUL43.D			Analyzed: 07/30/17 06:36			
Pentafluorobenzene (IS)	149661	6.57	187618	6.58	80	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	59847	9.61	72968	9.61	82	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	220506	7.38	281102	7.38	78	50 - 200	0.0000	+/-0.50	
Calibration Check (1713390-CCV6)			Lab File ID: 29JUL44.D			Analyzed: 07/30/17 06:59			
Pentafluorobenzene (IS)	177980	6.57	187618	6.58	95	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	68974	9.62	72968	9.61	95	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	260201	7.38	281102	7.38	93	50 - 200	0.0000	+/-0.50	
Calibration Blank (1713390-CCB3)			Lab File ID: 29JUL45.D			Analyzed: 07/30/17 07:22			
Pentafluorobenzene (IS)	172680	6.57	177980	6.57	97	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	67070	9.62	68974	9.62	97	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	253784	7.38	260201	7.38	98	50 - 200	0.0000	+/-0.50	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION STANDARDS

EPA-8260B

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Sequence: 1712752
Calibration: 1707017

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Instrument: MS-V5

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
7F24002	8260 V5 BFB 50NG	1712752-TUN2	17JUL49.D	07/17/17 23:37
7G20063	8260 V5 1712752 TPPH IC1	1712752-CALD	17JUL50.D	07/18/17 00:00
7G20064	8260 V5 1712752 TPPH IC2	1712752-CALE	17JUL51.D	07/18/17 00:23
7G20065	8260 V5 1712752 TPPH IC3	1712752-CALF	17JUL52.D	07/18/17 00:46
7G20066	8260 V5 1712752 TPPH IC4	1712752-CALG	17JUL53.D	07/18/17 01:09
7G20067	8260 V5 1712752 TPPH IC5	1712752-CALH	17JUL54.D	07/18/17 01:32
7G20068	8260 V5 1712752 TPPH IC6	1712752-CALI	17JUL55.D	07/18/17 01:55
7F24002	8260 V5 BFB 50NG	1712752-TUN1	20JUL02.D	07/20/17 08:09
7G20044	8260 V5 1712752 IC1	1712752-CAL1	20JUL03.D	07/20/17 08:32
7G20045	8260 V5 1712752 IC2	1712752-CAL2	20JUL05.D	07/20/17 09:18
7G20046	8260 V5 1712752 IC3	1712752-CAL3	20JUL06.D	07/20/17 09:42
7G20047	8260 V5 1712752 IC4	1712752-CAL4	20JUL07.D	07/20/17 10:05
7G20048	8260 V5 1712752 IC5	1712752-CAL5	20JUL08.D	07/20/17 10:28
7G20049	8260 V5 1712752 IC6	1712752-CAL6	20JUL09.D	07/20/17 10:51
7G20056	8260 V5 1712752 XIC1	1712752-CAL7	20JUL15.D	07/20/17 13:09
7G20057	8260 V5 1712752 XIC2	1712752-CAL8	20JUL17.D	07/20/17 13:55
7G20058	8260 V5 1712752 XIC3	1712752-CAL9	20JUL18.D	07/20/17 14:18
7G20059	8260 V5 1712752 XIC4	1712752-CALA	20JUL19.D	07/20/17 14:41
7G20060	8260 V5 1712752 XIC5	1712752-CALB	20JUL20.D	07/20/17 15:04
7G20061	8260 V5 1712752 XIC6	1712752-CALC	20JUL21.D	07/20/17 15:27

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA
EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Benzene	0.5	2.205326	1	2.188152	10	2.178289	25	1.917287	50	1.970505	100	1.826874
Bromobenzene	0.5	1.219182	1	1.216805	10	1.171389	25	1.141355	50	1.141528	100	1.116624
Bromochloromethane	0.5	0.1707748	1	0.1767661	10	0.1705309	25	0.1543114	50	0.1624719	100	0.1637527
Bromodichloromethane	0.5	0.2888162	1	0.2612885	10	0.2951588	25	0.2850666	50	0.2984239	100	0.2985407
Bromoform	0.5	0.2057274	1	0.2048542	10	0.237243	25	0.2574389	50	0.2735148	100	0.2939998
Bromomethane	0.5	0.4056016	1	0.4036265	10	0.4194379	25	0.3840293	50	0.4138878	100	0.4125492
n-Butylbenzene	0.5	5.079156	1	5.143868	10	5.21983	25	4.812707	50	4.647704	100	3.887741
sec-Butylbenzene	0.5	6.710012	1	6.711804	10	7.08428	25	6.565459	50	6.055303	100	4.759451
tert-Butylbenzene	0.5	4.756373	1	4.697087	10	4.878822	25	4.997994	50	4.368193	100	4.265216
Carbon tetrachloride	0.5	0.4114077	1	0.4033074	10	0.4811493	25	0.4442985	50	0.4811005	100	0.4747828
Chlorobenzene	0.5	3.718715	1	3.505819	10	3.379041	25	3.237474	50	3.173113	100	2.882659
Chloroethane	0.5	0.5656856	1	0.5508556	10	0.5391568	25	0.46994	50	0.4862093	100	0.4756012
Chloroform	0.5	0.7884393	1	0.8118567	10	0.7797252	25	0.7046062	50	0.7411616	100	0.7168718
Chloromethane	0.5	1.10575	1	0.9995168	10	0.9853529	25	0.8464923	50	0.8754543	100	0.8317765
2-Chlorotoluene	0.5	4.687283	1	5.164477	10	5.044175	25	4.655328	50	4.583238	100	3.928318
4-Chlorotoluene	0.5	4.382323	1	4.481816	10	4.64285	25	4.255438	50	4.026009	100	3.554765
Dibromochloromethane	0.5	0.1380726	1	0.1181608	10	0.1512567	25	0.1562949	50	0.1665531	100	0.1722335
1,2-Dibromo-3-chloropropane	0.5		1	6.507398E-02	10	6.963586E-02	25	7.759018E-02	50	7.440618E-02	100	7.979806E-02
1,2-Dibromoethane	0.5	0.1390244	1	0.1129216	10	0.1365675	25	0.1245114	50	0.1307515	100	0.1324942
Dibromomethane	0.5	8.863772E-02	1	0.0959453	10	0.103105	25	9.070871E-02	50	0.0977421	100	9.844587E-02
1,2-Dichlorobenzene	0.5	2.246939	1	2.140833	10	2.244323	25	2.128007	50	2.159181	100	2.0199
1,3-Dichlorobenzene	0.5	2.530337	1	2.604527	10	2.703227	25	2.506085	50	2.452092	100	2.203254
1,4-Dichlorobenzene	0.5	2.395899	1	2.476843	10	2.57751	25	2.471593	50	2.453264	100	2.28432
Dichlorodifluoromethane	0.5	0.4018229	1	0.4651619	10	0.5834478	25	0.4982614	50	0.527767	100	0.5091024
1,1-Dichloroethane	0.5	1.128238	1	1.080744	10	1.129469	25	1.011244	50	1.063002	100	1.007938

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA
EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,2-Dichloroethane	0.5	0.3840358	1	0.4451059	10	0.4391068	25	0.3850974	50	0.4008601	100	0.3865656
1,1-Dichloroethene	0.5	0.7938768	1	0.8264429	10	0.8811618	25	0.7704058	50	0.8053397	100	0.7645738
cis-1,2-Dichloroethene	0.5	0.5379451	1	0.5619319	10	0.5358463	25	0.4858169	50	0.5074463	100	0.5042185
trans-1,2-Dichloroethene	0.5	0.5264249	1	0.5006701	10	0.5310431	25	0.4693174	50	0.4927404	100	0.4855568
Total 1,2-Dichloroethene	1	0.532185	2	0.531301	20	0.5334447	50	0.4775672	100	0.5000933	200	0.4948876
1,2-Dichloropropane	0.5	0.3746579	1	0.39104	10	0.3895945	25	0.3719575	50	0.37968	100	0.369488
1,3-Dichloropropane	0.5	0.2577037	1	0.2665863	10	0.2493798	25	0.2444977	50	0.2531674	100	0.2456878
2,2-Dichloropropane	0.5	0.5992323	1	0.5587868	10	0.64	25	0.578	50	0.6240741	100	0.613221
1,1-Dichloropropene	0.5	0.685956	1	0.7289435	10	0.7278951	25	0.6364805	50	0.6776871	100	0.6505123
cis-1,3-Dichloropropene	0.5	0.3328971	1	0.3317694	10	0.3690938	25	0.3615001	50	0.3821143	100	0.3792023
trans-1,3-Dichloropropene	0.5	0.1857228	1	0.2073449	10	0.2445983	25	0.2456873	50	0.260574	100	0.2637407
Total 1,3-Dichloropropene	1	0.2593099	2	0.2695571	20	0.306846	50	0.3035937	100	0.3213442	200	0.3214715
Ethylbenzene	0.5	1.933397	1	2.1032	10	2.063766	25	1.930792	50	1.927625	100	1.731043
Hexachlorobutadiene	0.5	0.9727494	1	0.8039604	10	0.8502897	25	0.8577897	50	0.8736814	100	0.8294891
Isopropylbenzene	0.5	6.01384	1	6.197708	10	6.294564	25	5.807965	50	5.443937	100	4.447883
p-Isopropyltoluene	0.5	5.675215	1	5.416149	10	5.722833	25	5.274992	50	4.860035	100	3.9474
Methylene chloride	0.5	~~0.6828225~~	1	0.4693098	10	0.4590943	25	0.4047202	50	0.4129435	100	0.4113701
Methyl t-butyl ether	0.5	0.5949007	1	0.621872	10	0.627589	25	0.5721711	50	0.6097697	100	0.5968097
Naphthalene	0.5	1.449333	1	1.295095	10	1.630989	25	1.613008	50	1.707123	100	1.718713
n-Propylbenzene	0.5	7.843163	1	7.570982	10	7.957535	25	7.067525	50	6.578078	100	~~5.048542~~
Styrene	0.5	3.322662	1	3.513659	10	3.615951	25	3.422815	50	3.346784	100	2.919674
1,1,1,2-Tetrachloroethane	0.5	0.7348977	1	0.7534469	10	0.8415455	25	0.8637923	50	0.8877083	100	0.8147995
1,1,2,2-Tetrachloroethane	0.5	0.4990264	1	0.5452326	10	0.5402339	25	0.5664291	50	0.5528699	100	0.5586496
Tetrachloroethene	0.5	0.3402142	1	0.3382379	10	0.3457113	25	0.312086	50	0.3232717	100	0.3148982
Toluene	0.5	0.9042237	1	0.868103	10	0.9403254	25	0.8511615	50	0.847993	100	0.7859008
1,2,3-Trichlorobenzene	0.5	1.097286	1	0.9971663	10	1.056308	25	1.020776	50	1.070089	100	1.047459

AmecFW and KMEA, Inc.
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San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA
EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,2,4-Trichlorobenzene	0.5	1.251086	1	1.203365	10	1.227546	25	1.250998	50	1.293432	100	1.267368
1,1,1-Trichloroethane	0.5	0.6254982	1	0.6510899	10	0.6849219	25	0.6308968	50	0.6766241	100	0.6633196
1,1,2-Trichloroethane	0.5	0.1444973	1	0.1708459	10	0.1625271	25	0.1509673	50	0.1515498	100	0.1535111
Trichloroethene	0.5	0.3308745	1	0.3413405	10	0.3603684	25	0.3346927	50	0.3492275	100	0.3439039
Trichlorofluoromethane	0.5	0.5650405	1	0.6137128	10	0.6705809	25	0.6016331	50	0.629348	100	0.6149857
1,2,3-Trichloropropane	0.5	~~0.0503867~~	1	9.329884E-02	10	0.1102858	25	0.1262033	50	0.1224488	100	0.1257712
1,1,2-Trichloro-1,2,2-trifluoroethan	0.5	0.3727	1	0.3929148	10	0.477208	25	0.4199171	50	0.4389687	100	0.435146
1,2,4-Trimethylbenzene	0.5	4.913914	1	5.052026	10	5.080891	25	4.637967	50	4.517373	100	3.8343
1,3,5-Trimethylbenzene	0.5	4.969581	1	4.782097	10	5.249436	25	4.834843	50	4.626234	100	3.844775
Vinyl chloride	0.5	0.7736935	1	0.7846444	10	0.7935103	25	0.7054398	50	0.7348614	100	0.7043199
Total Xylenes	1.5	2.506427	3	2.392803	30	2.534773	75	2.325878	150	2.240477	300	1.937794
Total Trihalomethanes	2	8333	4	8151	40	6297.45	100	6876.23	200	7251.58	400	7416.965
Acetone												
Acetonitrile												
Acrolein												
Acrylonitrile												
Allyl chloride												
t-Amyl Alcohol												
t-Amyl Methyl ether												
Benzyl chloride												
t-Butyl alcohol												
Carbon disulfide												
2-Chloroethyl vinyl ether	2	9.159726E-02	4	9.464281E-02	40	0.1049256	100	0.0975998	200	0.1009555	400	9.820488E-02
Chloroprene												
Chlorotrifluoroethene												
Cyclohexane												

AmecFW and KMEA, Inc.
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San Diego, CA 92123

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Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA
EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Cyclohexanone												
trans-1,4-Dichloro-2-butene												
1,2-Dichlorotrifluoroethane												
2,2-Dichloro-1,1,1-trifluoroethane												
Diethyl ether												
Diisopropyl ether												
1,4-Dioxane												
Ethanol												
Ethyl Amyl Ketone												
Ethyl methacrylate												
Ethyl t-butyl ether												
Hexachloroethane	0.5	0.5014467	1	0.4756785	10	0.6755117	25	0.7837627	50	0.8954399	100	0.9270817
Hexane												
2-Hexanone												
Isobutanol												
Isopropyl alcohol												
Methacrylonitrile												
Methyl acetate												
Methylcyclohexane												
Methyl ethyl ketone												
5-Methyl-3-heptanone												
Methyl iodide												
Methyl isobutyl ketone												
Methyl methacrylate												
Pentachloroethane												
Propionitrile												

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA
EPA-8260B

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Calibration: 1707017
Matrix: Water

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Instrument: MS-V5
Calibration Date: 07/18/17 00:46

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Tetrahydrofuran												
Vinyl acetate												
p- & m-Xylenes	1	2.665545	2	2.484628	20	2.59251	50	2.358552	100	2.274933	200	1.923861
o-Xylene	0.5	2.188191	1	2.209155	10	2.419298	25	2.260531	50	2.171565	100	1.965659
Total Purgeable Petroleum Hydroc												
1,2-Dichloroethane-d4 (Surrogate)	10	0.3012474	10	0.3018151	10	0.2951343	10	0.2961709	10	0.2815387	10	0.2765317
Toluene-d8 (Surrogate)	10	1.220306	10	1.23463	10	1.223885	10	1.247597	10	1.242184	10	1.240574
4-Bromofluorobenzene (Surrogate)	10	1.433469	10	1.499199	10	1.502352	10	1.520913	10	1.496218	10	1.506919

AmecFW and KMEA, Inc.
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San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Benzene												
Bromobenzene												
Bromochloromethane												
Bromodichloromethane												
Bromoform												
Bromomethane												
n-Butylbenzene												
sec-Butylbenzene												
tert-Butylbenzene												
Carbon tetrachloride												
Chlorobenzene												
Chloroethane												
Chloroform												
Chloromethane												
2-Chlorotoluene												
4-Chlorotoluene												
Dibromochloromethane												
1,2-Dibromo-3-chloropropane												
1,2-Dibromoethane												
Dibromomethane												
1,2-Dichlorobenzene												
1,3-Dichlorobenzene												
1,4-Dichlorobenzene												
Dichlorodifluoromethane												
1,1-Dichloroethane												

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,2-Dichloroethane												
1,1-Dichloroethene												
cis-1,2-Dichloroethene												
trans-1,2-Dichloroethene												
Total 1,2-Dichloroethene												
1,2-Dichloropropane												
1,3-Dichloropropane												
2,2-Dichloropropane												
1,1-Dichloropropene												
cis-1,3-Dichloropropene												
trans-1,3-Dichloropropene												
Total 1,3-Dichloropropene												
Ethylbenzene												
Hexachlorobutadiene												
Isopropylbenzene												
p-Isopropyltoluene												
Methylene chloride												
Methyl t-butyl ether												
Naphthalene												
n-Propylbenzene												
Styrene												
1,1,1,2-Tetrachloroethane												
1,1,2,2-Tetrachloroethane												
Tetrachloroethene												
Toluene												

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,2,3-Trichlorobenzene												
1,2,4-Trichlorobenzene												
1,1,1-Trichloroethane												
1,1,2-Trichloroethane												
Trichloroethene												
Trichlorofluoromethane												
1,2,3-Trichloropropane												
1,1,2-Trichloro-1,2,2-trifluoroethan												
1,2,4-Trimethylbenzene												
1,3,5-Trimethylbenzene												
Vinyl chloride												
Total Xylenes												
Total Trihalomethanes												
Acetone	16	~~5.913292E-02~~	64	4.599338E-02	160	4.103835E-02	320	4.031304E-02	480	4.108004E-02	800	3.760307E-02
Acetonitrile	8	~~2.695552E-02~~	32	1.960255E-02	80	1.920197E-02	160	2.144367E-02	240	2.002026E-02	400	1.785035E-02
Acrolein	10	1.972513E-02	40	1.667181E-02	100	1.701337E-02	200	1.765107E-02	320	1.949597E-02	500	1.878359E-02
Acrylonitrile	4	6.941822E-02	16	6.623777E-02	40	0.0658311	80	7.210025E-02	128	6.893948E-02	200	6.511422E-02
Allyl chloride	1.6	1.050814	6.4	1.041274	16	0.9506615	32	1.007182	48	1.029587	80	0.9395298
t-Amyl Alcohol	50	8.032449E-03	800	9.524721E-03	1250	9.905137E-03	2500	9.740474E-03	5000	1.046225E-02	10000	9.871505E-03
t-Amyl Methyl ether	0.8	0.7471763	3.2	0.6725988	8	0.6496974	16	0.6548471	24	0.6800442	40	0.6322338
Benzyl chloride	1.6	0.4382151	6.4	0.4365577	16	0.5300994	32	0.633176	48	0.70099	80	0.7136597
t-Butyl alcohol	40	1.143621E-02	160	1.211876E-02	400	1.136453E-02	800	1.229585E-02	1200	1.204151E-02	2000	1.172973E-02
Carbon disulfide	1.6	1.612511	6.4	1.590032	16	1.436133	32	1.534608	48	1.516942	80	1.40647
2-Chloroethyl vinyl ether												
Chloroprene	1.6	1.071512	6.4	1.112796	16	1.008223	32	1.07318	48	1.076242	80	0.9842234

AmecFW and KMEA, Inc.
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San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Chlorotrifluoroethene	0.5		8		12.5		25		50		100	
Cyclohexane	0.5	1.482325	8	1.263236	12.5	1.329052	25	1.267676	50	1.334388	100	1.175706
Cyclohexanone	20	6.358106E-02	80	6.628495E-02	200	6.822814E-02	400	6.908269E-02	640	7.092473E-02	1000	5.899832E-02
trans-1,4-Dichloro-2-butene	4	~~8.074372E-02~~	16	8.737028E-02	40	9.320468E-02	80	0.1065481	120	0.123592	200	0.1157037
1,2-Dichlorotrifluoroethane	0.5	0.6859837	8	0.6588055	12.5	0.6793278	25	0.638394	50	0.676567	100	0.6141745
2,2-Dichloro-1,1,1-trifluoroethane	0.5	0.9083162	8	0.9597198	12.5	0.9983099	25	0.9543751	50	0.985508	100	0.8832252
Diethyl ether	0.5	0.2111134	8	0.2536562	12.5	0.2639223	25	0.2561604	50	0.2694052	100	0.246137
Diisopropyl ether	0.8	0.4214582	3.2	0.3704387	8	0.3696763	16	0.3639739	24	0.3752221	40	0.3414226
1,4-Dioxane	100	9.86052E-04	400	8.876232E-04	1000	8.434942E-04	2000	9.681734E-04	3200	8.77229E-04	5000	8.925488E-04
Ethanol	200	1.798563E-03	800	0.0016678	2000	1.751246E-03	4000	1.971753E-03	6400	1.840862E-03	10000	1.78859E-03
Ethyl Amyl Ketone	0.5	0.3451332	8	0.3841675	12.5	0.397604	25	0.4054744	50	0.4408544	100	0.4016782
Ethyl methacrylate	4	0.1854642	16	0.167105	40	0.168185	80	0.1715498	120	0.174425	200	0.1580578
Ethyl t-butyl ether	0.8	1.363755	3.2	1.239683	8	1.201105	16	1.195171	24	1.20526	40	1.131976
Hexachloroethane												
Hexane	0.5	0.4991424	8	0.6434221	12.5	0.6767831	25	0.6679351	50	0.7140733	100	0.6554412
2-Hexanone	16	8.885617E-02	64	7.654621E-02	160	7.424711E-02	320	7.624129E-02	480	7.405345E-02	800	0.0648097
Isobutanol	20	4.592822E-03	80	5.358352E-03	200	5.606193E-03	400	6.207101E-03	640	6.227684E-03	1000	0.0060091
Isopropyl alcohol	40	6.806977E-03	160	8.425725E-03	400	8.390992E-03	800	9.223449E-03	1280	8.736689E-03	2000	8.285694E-03
Methacrylonitrile	8	7.891132E-02	32	6.557701E-02	80	0.0643209	160	6.549839E-02	240	6.559205E-02	400	6.185011E-02
Methyl acetate	5	0.1224393	80	0.1260496	125	0.1300511	250	0.123479	500	0.1292004	1000	0.1133594
Methylcyclohexane	0.5	0.535165	8	0.6134506	12.5	0.6454469	25	0.6244736	50	0.6667758	100	0.5818325
Methyl ethyl ketone	8	8.272069E-02	32	0.0760769	80	0.071924	160	7.022643E-02	240	7.220876E-02	400	6.581187E-02
5-Methyl-3-heptanone	1	0.4077138	16	0.4610412	25	0.5059596	50	0.4652818	100	0.4843645	200	0.4239197
Methyl iodide	1.6	0.538234	6.4	0.5614139	16	0.5443807	32	0.6237074	48	0.6434877	80	0.6257662
Methyl isobutyl ketone	8	0.128875	32	0.1125832	80	0.108463	160	0.1101708	240	0.111068	400	0.1001404

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Methyl methacrylate	4	8.296988E-02	16	7.179267E-02	40	7.090842E-02	80	7.345802E-02	120	0.0766102	200	7.223151E-02
Pentachloroethane	0.8	0.4131191	3.2	0.3821454	8	0.3937293	16	0.3502018	24	0.4275086	40	0.4334585
Propionitrile	20	2.373542E-02	80	2.597889E-02	200	2.474398E-02	400	2.572553E-02	640	2.474225E-02	1000	2.244508E-02
Tetrahydrofuran	16	5.489204E-02	64	5.170965E-02	160	0.0475095	320	0.0481561	480	4.794157E-02	800	4.440709E-02
Vinyl acetate	8	0.691573	32	0.6018218	80	0.5827319	160	0.5569901	240	0.5691374	400	0.499651
p- & m-Xylenes												
o-Xylene												
Total Purgeable Petroleum Hydroca												
1,2-Dichloroethane-d4 (Surrogate)												
Toluene-d8 (Surrogate)												
4-Bromofluorobenzene (Surrogate)												

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Benzene												
Bromobenzene												
Bromochloromethane												
Bromodichloromethane												
Bromoform												
Bromomethane												
n-Butylbenzene												
sec-Butylbenzene												
tert-Butylbenzene												
Carbon tetrachloride												
Chlorobenzene												
Chloroethane												
Chloroform												
Chloromethane												
2-Chlorotoluene												
4-Chlorotoluene												
Dibromochloromethane												
1,2-Dibromo-3-chloropropane												
1,2-Dibromoethane												
Dibromomethane												
1,2-Dichlorobenzene												
1,3-Dichlorobenzene												
1,4-Dichlorobenzene												
Dichlorodifluoromethane												

AmecFW and KMEA, Inc.
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San Diego, CA 92123

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Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,1-Dichloroethane												
1,2-Dichloroethane												
1,1-Dichloroethene												
cis-1,2-Dichloroethene												
trans-1,2-Dichloroethene												
Total 1,2-Dichloroethene												
1,2-Dichloropropane												
1,3-Dichloropropane												
2,2-Dichloropropane												
1,1-Dichloropropene												
cis-1,3-Dichloropropene												
trans-1,3-Dichloropropene												
Total 1,3-Dichloropropene												
Ethylbenzene												
Hexachlorobutadiene												
Isopropylbenzene												
p-Isopropyltoluene												
Methylene chloride												
Methyl t-butyl ether												
Naphthalene												
n-Propylbenzene												
Styrene												
1,1,1,2-Tetrachloroethane												
1,1,2,2-Tetrachloroethane												
Tetrachloroethene												

AmecFW and KMEA, Inc.
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San Diego, CA 92123

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Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Toluene												
1,2,3-Trichlorobenzene												
1,2,4-Trichlorobenzene												
1,1,1-Trichloroethane												
1,1,2-Trichloroethane												
Trichloroethene												
Trichlorofluoromethane												
1,2,3-Trichloropropane												
1,1,2-Trichloro-1,2,2-trifluoroethan												
1,2,4-Trimethylbenzene												
1,3,5-Trimethylbenzene												
Vinyl chloride												
Total Xylenes												
Total Trihalomethanes												
Acetone												
Acetonitrile												
Acrolein												
Acrylonitrile												
Allyl chloride												
t-Amyl Alcohol												
t-Amyl Methyl ether												
Benzyl chloride												
t-Butyl alcohol												
Carbon disulfide												
2-Chloroethyl vinyl ether												

AmecFW and KMEA, Inc.
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San Diego, CA 92123

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Project: MCAS Tustin, OU 3, California
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Project Manager: Kurt Myers

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Chloroprene												
Chlorotrifluoroethene												
Cyclohexane												
Cyclohexanone												
trans-1,4-Dichloro-2-butene												
1,2-Dichlorotrifluoroethane												
2,2-Dichloro-1,1,1-trifluoroethane												
Diethyl ether												
Diisopropyl ether												
1,4-Dioxane												
Ethanol												
Ethyl Amyl Ketone												
Ethyl methacrylate												
Ethyl t-butyl ether												
Hexachloroethane												
Hexane												
2-Hexanone												
Isobutanol												
Isopropyl alcohol												
Methacrylonitrile												
Methyl acetate												
Methylcyclohexane												
Methyl ethyl ketone												
5-Methyl-3-heptanone												
Methyl iodide												

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San Diego, CA 92123

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Project: MCAS Tustin, OU 3, California
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Project Manager: Kurt Myers

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Methyl isobutyl ketone												
Methyl methacrylate												
Pentachloroethane												
Propionitrile												
Tetrahydrofuran												
Vinyl acetate												
p- & m-Xylenes												
o-Xylene												
Total Purgeable Petroleum Hydroc	50	3.26912	500	3.855426	1000	3.833188	1500	3.697965	2000	3.767286	2500	3.469848
1,2-Dichloroethane-d4 (Surrogate)												
Toluene-d8 (Surrogate)												
4-Bromofluorobenzene (Surrogate)												

AmecFW and KMEA, Inc.
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San Diego, CA 92123

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Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Benzene	2.047739	7.975319	6.936667	7.509294E-02			15	
Bromobenzene	1.167814	3.645673	10.44	2.779896E-03			15	
Bromochloromethane	0.1664346	4.747927	6.175	8.897551E-02			15	
Bromodichloromethane	0.2878825	4.896981	8.051667	0.0545546			15	
Bromoform	0.245463	14.7808	10.15333	4.894263E-02			SPCC (0.10)	
Bromomethane	0.406522	3.057725	2.436667	0.2126912			15	
n-Butylbenzene	4.798501	10.32777	11.19667	4.432301E-02			15	
sec-Butylbenzene	6.314385	13.16495	10.89	1.492901E-02			15	
tert-Butylbenzene	4.660614	6.172505	10.76167	3.643903E-02			15	
Carbon tetrachloride	0.449341	7.868999	6.71	1.409485E-02			15	
Chlorobenzene	3.316137	8.703972	9.636667	5.028739E-02			SPCC (0.30)	
Chloroethane	0.5145747	8.175335	2.566667	0.2020673			15	
Chloroform	0.7571101	5.641054	6.323333	8.020835E-02			CCC (20)	
Chloromethane	0.9407238	11.41846	1.948333	0.209787			SPCC (0.10)	
2-Chlorotoluene	4.677137	9.281955	10.54	8.602669E-03			15	
4-Chlorotoluene	4.223867	9.200021	10.61	1.653803E-02			15	
Dibromochloromethane	0.1504286	13.17659	9.235	5.969866E-02			15	
1,2-Dibromo-3-chloropropane	7.330085E-02	8.155469	11.664	4.802395E-02			15	
1,2-Dibromoethane	0.1293784	7.339435	9.32	1.632331E-02			15	
Dibromomethane	9.576412E-02	5.552506	7.905	6.711508E-02			15	
1,2-Dichlorobenzene	2.15653	3.913674	11.23833	3.489351E-02			15	
1,3-Dichlorobenzene	2.49992	6.777549	10.97833	3.290541E-02			15	
1,4-Dichlorobenzene	2.443238	3.991734	11.03	1.470375E-02			15	
Dichlorodifluoromethane	0.4975939	12.26991	1.76	8.063699E-03			15	
1,1-Dichloroethane	1.070106	5.014371	5.05	1.556668E-02			SPCC (0.10)	
1,2-Dichloroethane	0.4067953	6.904985	6.998333	5.804784E-02			15	

AmecFW and KMEA, Inc.
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San Diego, CA 92123

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Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,1-Dichloroethene	0.8069668	5.313301	3.515	0.1557692			CCC (20)	
cis-1,2-Dichloroethene	0.5222008	5.332765	5.821667	7.057926E-02			15	
trans-1,2-Dichloroethene	0.5009588	4.773832	4.501667	0.0902417			15	
Total 1,2-Dichloroethene	0.5115798	4.674194	5.821667	7.057926E-02			15	
1,2-Dichloropropane	0.379403	2.403017	7.831667	0.0524673			CCC (20)	
1,3-Dichloropropane	0.2528371	3.287487	9.078333	4.054708E-02			15	
2,2-Dichloropropane	0.602219	4.985956	5.83	6.523725E-03			15	
1,1-Dichloropropene	0.6845791	5.607404	6.72	9.471379E-02			15	
cis-1,3-Dichloropropene	0.3594295	6.186595	8.398333	4.271731E-02			15	
trans-1,3-Dichloropropene	0.2346113	13.31409	8.82	1.724867E-02			15	
Total 1,3-Dichloropropene	0.2970204	8.91472	8.82	1.724867E-02			15	
Ethylbenzene	1.948304	6.711166	9.69	2.086988E-02			CCC (20)	
Hexachlorobutadiene	0.86466	6.731708	12.17167	3.249952E-02			15	
Isopropylbenzene	5.700983	12.01191	10.23	0.0167001			15	
p-Isopropyltoluene	5.149437	12.94217	10.97	1.272075E-02			15	
Methylene chloride	0.4314876	7.008245	4.15	2.617728E-02			15	
Methyl t-butyl ether	0.603852	3.358593	4.483333	0.1145828			15	
Naphthalene	1.569043	10.53489	12.26	1.714861E-02			15	
n-Propylbenzene	7.403456	7.766669	10.476	5.149431E-02			15	
Styrene	3.356924	7.155197	10.02	0.0198293			15	
1,1,1,2-Tetrachloroethane	0.8160317	7.468304	9.69	2.086988E-02			15	
1,1,2,2-Tetrachloroethane	0.5437402	4.378707	10.40833	0.0365974			SPCC (0.30)	
Tetrachloroethene	0.3290699	4.314963	9.03	1.545367E-02			15	
Toluene	0.8662846	6.097255	8.65	1.331998E-02			CCC (20)	
1,2,3-Trichlorobenzene	1.048181	3.389568	12.38	1.070383E-02			15	
1,2,4-Trichlorobenzene	1.248966	2.496908	12.11	2.449746E-02			15	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,1,1-Trichloroethane	0.6553918	3.673248	6.526667	7.946589E-02			15	
1,1,2-Trichloroethane	0.1556498	6.06719	8.963333	5.878091E-02			15	
Trichloroethene	0.3434012	3.079274	7.601667	5.324327E-02			15	
Trichlorofluoromethane	0.6158835	5.608974	2.866667	0.1807154			15	
1,2,3-Trichloropropane	0.1156016	12.14427	10.45	1.965805E-02			15	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.4228091	8.712896	3.531667	0.1142314			15	
1,2,4-Trimethylbenzene	4.672745	10.02384	10.79167	4.231581E-02			15	
1,3,5-Trimethylbenzene	4.717828	10.09625	10.57167	3.709394E-02			15	
Vinyl chloride	0.7494116	5.322207	2.07	5.801038E-03			CCC (20)	
Total Xylenes	2.323025	9.403007	10.01	9.924553E-03			15	
Total Trihalomethanes	7387.704	10.38989	10.15333	4.894263E-02			15	
Acetone	4.120558E-02	7.355169	3.554	0.1542441			15	
Acetonitrile	1.962376E-02	6.640588	3.908	0.1133817			15	
Acrolein	1.822349E-02	7.107257	3.39	2.140274E-03			15	
Acrylonitrile	6.794017E-02	3.939644	4.435	0.1236041			15	
Allyl chloride	1.003175	4.726935	3.98	1.761732E-02			15	
t-Amyl Alcohol	9.589422E-03	8.589473	6.96	9.150358E-02			15	
t-Amyl Methyl ether	0.6727663	5.977467	7.081667	5.899898E-02			15	
Benzyl chloride	0.5754497	21.75697	11.09	1.526915E-02	0.99878		0.99	
t-Butyl alcohol	0.0118311	3.22277	4.273333	0.2423085			15	
Carbon disulfide	1.516116	5.400329	3.79	0.013191			15	
2-Chloroethyl vinyl ether	9.798764E-02	4.768539	8.275	6.513453E-02			15	
Chloroprene	1.054363	4.56629	5.141667	8.153481E-02			15	
Chlorotrifluoroethene							15	
Cyclohexane	1.308731	7.841383	6.611667	5.923215E-02			15	
Cyclohexanone	6.618331E-02	6.533008	10.29167	4.271745E-02			15	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
trans-1,4-Dichloro-2-butene	0.1052838	14.34315	10.426	5.090708E-02			15	
1,2-Dichlorotrifluoroethane	0.6588754	4.230009	3.296667	0.1557001			15	
2,2-Dichloro-1,1,1-trifluoroethane	0.9482424	4.689324	3.386667	0.1519809			15	
Diethyl ether	0.2500657	8.290032	3.22	2.123135E-02			15	
Diisopropyl ether	0.3736986	7.025495	5.096667	0.1006095			15	
1,4-Dioxane	9.091868E-04	6.11724	7.891667	5.151265E-02			15	
Ethanol	1.803136E-03	5.606357	3.081667	0.5201438			15	
Ethyl Amyl Ketone	0.3958186	7.879599	10.75167	3.756474E-02			15	
Ethyl methacrylate	0.1707978	5.312147	8.848334	4.928121E-02			15	
Ethyl t-butyl ether	1.222825	6.328552	5.583333	9.166626E-02			15	
Hexachloroethane	0.7098202	27.21178	11.4	3.753579E-03	0.99925		0.99	
Hexane	0.6427995	11.57174	4.855	0.1138465			15	
2-Hexanone	7.579232E-02	10.17669	9.091667	4.757151E-02			15	
Isobutanol	5.666875E-03	11.0932	6.84	9.249917E-02			15	
Isopropyl alcohol	8.311588E-03	9.768502	3.746667	0.3235285			15	
Methacrylonitrile	0.0669583	9.006243	6.12	1.277828E-02			15	
Methyl acetate	0.1240965	4.884847	3.965	0.1388816			15	
Methylcyclohexane	0.6111907	7.704348	7.806667	6.510089E-02			15	
Methyl ethyl ketone	7.316144E-02	7.850683	5.796667	9.151477E-02			15	
5-Methyl-3-heptanone	0.4580468	8.020127	10.43167	3.686923E-02			15	
Methyl iodide	0.5894983	7.903214	3.7	1.260276E-02			15	
Methyl isobutyl ketone	0.1118834	8.407287	8.5	0			15	
Methyl methacrylate	7.466178E-02	6.064135	7.871667	5.057399E-02			15	
Pentachloroethane	0.4000271	7.814724	10.79333	5.134563E-02			15	
Propionitrile	2.456186E-02	5.336931	5.881667	0.0697539			15	
Tetrahydrofuran	4.910266E-02	7.462978	6.186667	8.404824E-02			15	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Calibration: 1707017
Instrument: MS-V5
Matrix: Water
Calibration Date: 07/18/17 00:46

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Vinyl acetate	0.5836509	10.82416	5.053333	0.1030703			15	
p- & m-Xylenes	2.383338	11.21367	9.77	1.748639E-02			15	
o-Xylene	2.2024	6.662899	10.01	9.924553E-03			15	
Total Purgeable Petroleum Hydrocarbons	3.648805	6.360727	9.568334	4.958059			15	
1,2-Dichloroethane-d4 (Surrogate)	0.292073	3.616111	6.916667	7.506552E-02			15	
Toluene-d8 (Surrogate)	1.234863	0.8727884	8.6	4.975675E-03			15	
4-Bromofluorobenzene (Surrogate)	1.493178	2.042971	10.34333	4.926945E-02			15	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

HOLDING TIME SUMMARY

EPA-8260B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
1DW01-170724	07/24/17 14:00	07/25/17 11:15	07/29/17 07:00	6.00	14.00	07/30/17 02:01	6.00	14.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:51:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Notes and Definitions

B	Blank contamination. The analyte is greater than 1/2 the PQL/LOQ/CRQL in the associated method blank.
D	The reported value is from a dilution.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration.
J	The reported value is an estimated value. Results are between the MDL and PQL/LOQ/CRQL.
U	The analyte was not detected and is reported as less than the LOD/MDL or as defined by the client.

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BC LABORATORIES, INC.

Work Order Number: 1720372

Laboratory Documentation Requirements

For Data Validation of

Mercury Analysis
Metals Analysis (using ppb units)

Prepared By

BC Laboratories

For AmecFW and KMEA, Inc.

MCAS Tustin, OU 3, California

All pages have been paginated and results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Certifications: CA ELAP #1186; NV #CA00014; AK UST101; OR ELAP #4032; DoD ELAP #66175

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Case Narrative

Analyses Requested: Metals
Submission Number: 17-20372

Method 7470A
Instrument ID: CETAC2
Sample Volume(s): 20ml
Digest Volume(s): 50ml

Method 6010-PPB
Instrument ID: PE Optima 4300DV (PE-OP2)
Sample Volume(s): 50ml
Digest Volume(s): 50ml

Samples were received refrigerated to <6°C upon arrival at BC Laboratories, Inc. Samples were checked for preservation. Where applicable, sample preservation was adjusted in the laboratory.

Holding Time: All analyses and preparations took place within holding times.

Calibration: An initial calibration criterion was met. Frequency and accuracy criteria for initial calibration verification and continuing calibration verifications were met.

Blanks: Method blank was prepared and analyzed at the required frequency. No detection of analytes of interest took place at or above the PQL. EPA Method 6010B-PPB batch ID B[G2603-BLK1 a trace detection of Total Arsenic, Total Copper, Total Selenium and Total Zinc were noted in the method blank. Initial and continuing calibration blanks were analyzed at the required frequencies and on an as needed basis.

Laboratory Control Sample: Laboratory control sample analysis was performed at the required frequency. All parameters were within QC limits.

Matrix Spikes and Duplicates: Matrix spike analyses were performed at the required frequencies. Accuracy and precision requirements were met, except the matrix spike recovery for Total Selenium was outside QC limits.

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

CHAIN OF CUSTODY RECORD

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
(800) 878-4911

BC PM: Molly Meyers (661) 852-4250

DATE: 07/24/17
PAGE: 1 OF 1

LABORATORY CLIENT: MMEC Group
ADDRESS: 9210 Sky Park Court
CITY: San Diego, CA 92123
TEL: 858.300.4348
E-Mail: kurt.myers@amecfw.com
E-MAIL:

CLIENT PROJECT NAME / NUMBER: MCAS Tustin, ~~OU 1A/1B,~~ OU3 California
PROJECT CONTACT: Kurt Myers
SAMPLER(S): (SIGNATURE) [signature]
P.O. NO.:
QUOTE NO.:
LAB USE ONLY: 1 7 - 2 0 3 7 2

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ 14 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
Standard TAT
Must analyze sample at NO dilution before diluting for TCE, if necessary.
PDF documents need to be searchable. Need NEDD/NIRIS EDDs.
1,2,3-TCP RL<0.5 ug/L

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#cont	QC Level	VOCs ~~with 1,2,3-TCP~~ (EPA 8260B)	TPH-gas 8015B	TPH-diesel 8015B	CAT 22 metals, Hg	O/G & Grease 1664
1	IDW01-170724	72417	1400	W	10		X	X	X	X	X

CHK BY [signature] DISTRIBUTION INITIALS SUBCOUT

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature] 072417 @ 14:30	[signature] 7.25.17	7:15	
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Chain of Custody and Cooler Receipt Form for 1720372 Page 2 of 2

BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 Of 1

Submission #: 17-20372

SHIPPING INFORMATION
Fed Ex ☒ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)_____

FREE LIQUID
YES ☐ NO ☐
(W) / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: .98 Container: Amber Thermometer ID: 208 Date/Time 7-25-17

Temperature: (A) 3.2 °C / (C) 3.6 °C Analyst Init 11:15

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr+6										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz	F									
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A-E									
QT EPA 1664	GH									
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 505/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M	IJ									
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:
Sample Numbering Completed By: GSB Date/Time: 7/25 1730 Rev 21 05/23/2016
A = Actual / C = Corrected (S:\WPDocs\WordPerfect\LAB_DOCS\FORMS\SAMREC rev 20)

AmecFW and KMEA, Inc. 9210 Sky Park Court San Diego, CA 92123	Reported: 8/17/2017 12:53:48PM Project: MCAS Tustin, OU 3, California Project Number: [none] Project Manager: Kurt Myers

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG:	**1720372**
Class:	**HG**
Method:	**EPA-7470A**

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

ANALYSES DATA PACKAGE COVER PAGE

EPA-7470A

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California

Client Sample Id:	Lab Sample Id:
1DW01-170724	1720372-01

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been autorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: Sara Guron
Name: Sara Guron

Date: 08-17-2017
Title: QA/QC Manager

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

METHOD DETECTION AND REPORTING LIMITS

EPA-7470A

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Instrument: CETAC2

Analyte	MDL	PQL	Units
Total Mercury	0.029	0.2	ug/L

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INORGANIC ANALYSIS DATA SHEET
EPA-7470A

1DW01-170724

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Laboratory ID: 1720372-01
File ID: 080217 R2 W-037
Sampled: 07/24/17 14:00
Prepared: 08/02/17 09:41
Analyzed: 08/02/17 15:01
Solids: 0.00
Preparation: EPA 7470A
Initial/Final: 20 ml / 50 ml
Batch: B[H0172
Sequence: 1713673
Calibration: UNASSIGNED
Instrument: CETAC2

CAS NO.	Analyte	Concentration (ug/L)	Dilution Factor	Q	Method
7439-97-6	Total Mercury	0.085	1	J	EPA-7470A

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

PREPARATION BATCH SUMMARY

EPA-7470A

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Batch: B[H0172 Batch Matrix: Water
Preparation: EPA 7470A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
1DW01-170724	1720372-01	080217 R2 W-037	08/02/17 09:41	
Blank	B[H0172-BLK1	080217 R2 W-030	08/02/17 08:30	
LCS	B[H0172-BS1	080217 R2 W-031	08/02/17 08:30	
Duplicate	B[H0172-DUP1	080217 R2 W-033	08/02/17 08:30	
Matrix Spike	B[H0172-MS1	080217 R2 W-034	08/02/17 08:30	
Matrix Spike Dup	B[H0172-MSD1	080217 R2 W-035	08/02/17 08:30	
Post Spike	B[H0172-PS1	080217 R2 W-036	08/02/17 08:30	[Spk] 20ml->50ml; 25ml->25ml; Spiked 24.9ml

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

METHOD BLANK DATA SHEET
EPA-7470A

Laboratory:	BC Laboratories			SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW			Project:	MCAS Tustin, OU 3, California
Matrix:	Water	Laboratory ID:	B[H0172-BLK1	File ID:	080217 R2 W-030
Prepared:	08/02/17 08:30	Preparation:	EPA 7470A	Initial/Final:	20 ml / 50 ml
Analyzed:	08/02/17 14:46	Instrument:	CETAC2		
Batch:	B[H0172	Sequence:	1713673	Calibration:	UNASSIGNED

CAS NO.	COMPOUND	CONC. (ug/L)	Q
7439-97-6	Total Mercury	0.029	U

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Duplicate

DUPLICATES

EPA-7470A

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Matrix: Water
Batch: B[H0172
Preparation: EPA 7470A
Source Sample Name: Duplicate

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Laboratory ID: B[H0172-DUP1
Lab Source ID: 1720361-01
Initial/Final: 20 ml / 50 ml
% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (ug/L)	C	DUPLICATE CONCENTRATION (ug/L)	C	RPD %	Q	METHOD
Total Mercury	20	0.017500		ND				EPA-7470A

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-7470A

Matrix Spike

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[H0172
Laboratory ID: B[H0172-MS1
Preparation: EPA 7470A
Initial/Final: 20 ml / 50 ml
Source Sample Number: 1720361-01

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
Total Mercury	1.0000	ND	1.0700	107	70 - 130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Total Mercury	1.0000	1.0850	108	1.39	20	70 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

LCS RECOVERY
EPA-7470A

Laboratory:	BC Laboratories	SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW	Project:	MCAS Tustin, OU 3, California
Matrix:	Water		
Batch:	B[H0172	Laboratory ID:	B[H0172-BS1
Preparation:	EPA 7470A	Initial/Final:	20 ml / 50 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Total Mercury	1.0000	0.95500	95.5	85 - 115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-7470A

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Sequence: 1713673
Instrument: CETAC2
Matrix: Water
Calibration: UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1713673-ICV1	080217 R2 W-008	08/02/17 13:56
Initial Cal Blank	1713673-ICB1	080217 R2 W-009	08/02/17 13:58
Calibration Check	1713673-CCV1	080217 R2 W-021	08/02/17 14:27
Calibration Blank	1713673-CCB1	080217 R2 W-022	08/02/17 14:29
Calibration Check	1713673-CCV2	080217 R2 W-028	08/02/17 14:42
Calibration Blank	1713673-CCB2	080217 R2 W-029	08/02/17 14:44
Blank	B[H0172-BLK1	080217 R2 W-030	08/02/17 14:46
LCS	B[H0172-BS1	080217 R2 W-031	08/02/17 14:48
Duplicate	B[H0172-DUP1	080217 R2 W-033	08/02/17 14:53
Matrix Spike	B[H0172-MS1	080217 R2 W-034	08/02/17 14:55
Matrix Spike Dup	B[H0172-MSD1	080217 R2 W-035	08/02/17 14:57
Post Spike	B[H0172-PS1	080217 R2 W-036	08/02/17 14:59
1DW01-170724	1720372-01	080217 R2 W-037	08/02/17 15:01
Calibration Check	1713673-CCV3	080217 R2 W-040	08/02/17 15:08
Calibration Blank	1713673-CCB3	080217 R2 W-041	08/02/17 15:10
Calibration Check	1713673-CCV4	080217 R2 W-048	08/02/17 15:25
Calibration Blank	1713673-CCB4	080217 R2 W-049	08/02/17 15:27

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

BLANKS
EPA-7470A

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Instrument ID: CETAC2
Project: MCAS Tustin, OU 3, California
Sequence: 1713673
Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	PQL	Units	C	Method
1713673-ICB1	Total Mercury	0.0000	0.080	ug/L		EPA-7470A
1713673-CCB1	Total Mercury	0.0060000	0.080	ug/L		EPA-7470A
1713673-CCB2	Total Mercury	-0.0010000	0.080	ug/L		EPA-7470A
1713673-CCB3	Total Mercury	-0.0030000	0.080	ug/L		EPA-7470A
1713673-CCB4	Total Mercury	0.0000	0.080	ug/L		EPA-7470A

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL AND CONTINUING CALIBRATION CHECK

EPA-7470A

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Instrument ID: CETAC2
Control Limt: +/- 10.00%

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Calibration: UNASSIGNED
Sequence: 1713673

Lab Sample ID	Analyte	True	Found	%R	Units	Method
1713673-ICV1	Total Mercury	0.40000	0.39500	98.8	ug/L	EPA-7470A
1713673-CCV1	Total Mercury	0.40000	0.40800	102	ug/L	EPA-7470A
1713673-CCV2	Total Mercury	0.40000	0.41400	104	ug/L	EPA-7470A
1713673-CCV3	Total Mercury	0.40000	0.41400	104	ug/L	EPA-7470A
1713673-CCV4	Total Mercury	0.40000	0.41500	104	ug/L	EPA-7470A

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

POST DIGEST SPIKE SAMPLE RECOVERY

EPA-7470A

Post Spike

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Laboratory ID: B[H0172-PS1
Batch: B[H0172
Lab Source ID: 1720361-01
Preparation: EPA 7470A
Initial/Final: 9.96 ml / 25 ml
Source Sample Name: Post Spike
% Solids:

Analyte	Control Limit %R	Spike Sample Result (SSR) (ug/L)	Sample Result (SR) (ug/L)	Spike Added (SA) (ug/L)	%R
Total Mercury	85 - 115	0.41400	0.0069720	0.40000	102

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

HOLDING TIME SUMMARY

EPA-7470A

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
1DW01-170724	07/24/17 14:00	07/25/17 11:15	08/02/17 09:41	9.00	28.00	08/02/17 15:01	9.00	28.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.

AmecFW and KMEA, Inc. 9210 Sky Park Court San Diego, CA 92123	Reported: 8/17/2017 12:53:48PM Project: MCAS Tustin, OU 3, California Project Number: [none] Project Manager: Kurt Myers

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG:	**1720372**
Class:	**METALS-PPB**
Method:	**EPA-6010B**

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

ANALYSES DATA PACKAGE COVER PAGE

EPA-6010B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California

Client Sample Id:	Lab Sample Id:
1DW01-170724	1720372-01

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been autorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: Sara Guron
Name: Sara Guron

Date: 08-17-2017
Title: QA/QC Manager

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

METHOD DETECTION AND REPORTING LIMITS

EPA-6010B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Instrument: PE-OP2

Analyte	MDL	PQL	Units
Total Antimony	8.5	100	ug/L
Total Arsenic	7.8	50	ug/L
Total Barium	3.5	10	ug/L
Total Beryllium	0.5	10	ug/L
Total Cadmium	1.1	10	ug/L
Total Chromium	1.1	10	ug/L
Total Cobalt	1.3	50	ug/L
Total Copper	1.1	10	ug/L
Total Lead	4	50	ug/L
Total Molybdenum	1.2	50	ug/L
Total Nickel	2	10	ug/L
Total Selenium	15	100	ug/L
Total Silver	1.9	10	ug/L
Total Thallium	24	100	ug/L
Total Vanadium	2.2	10	ug/L
Total Zinc	2.3	50	ug/L

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INORGANIC ANALYSIS DATA SHEET
EPA-6010B

1DW01-170724

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Laboratory ID: 1720372-01
File ID: PE2_170801-244
Sampled: 07/24/17 14:00
Prepared: 07/31/17 09:30
Analyzed: 08/01/17 22:35
Solids: 0.00
Preparation: EPA 3010A
Initial/Final: 50 ml / 50 ml
Batch: B[G2603
Sequence: 1713636
Calibration: UNASSIGNED
Instrument: PE-OP2

CAS NO.	Analyte	Concentration (ug/L)	Dilution Factor	Q	Method
7440-36-0	Total Antimony	85	10	UD	EPA-6010B
7440-38-2	Total Arsenic	78	10	UD	EPA-6010B
7440-39-3	Total Barium	70	10	JD	EPA-6010B
7440-41-7	Total Beryllium	5.0	10	UD	EPA-6010B
7440-43-9	Total Cadmium	12	10	JD	EPA-6010B
7440-47-3	Total Chromium	16	10	JD	EPA-6010B
7440-48-4	Total Cobalt	13	10	UD	EPA-6010B
7440-50-8	Total Copper	26	10	JD	EPA-6010B
7439-92-1	Total Lead	40	10	UD	EPA-6010B
7439-98-7	Total Molybdenum	280	10	JD	EPA-6010B
7440-02-0	Total Nickel	35	10	JD	EPA-6010B
7782-49-2	Total Selenium	1200	10	D	EPA-6010B
7440-22-4	Total Silver	19	10	UD	EPA-6010B
7440-28-0	Total Thallium	240	10	UD	EPA-6010B
7440-62-2	Total Vanadium	59	10	JD	EPA-6010B
7440-66-6	Total Zinc	340	10	JD	EPA-6010B

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

PREPARATION BATCH SUMMARY

EPA-6010B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Batch: B[G2603
Batch Matrix: Water
Preparation: EPA 3010A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
1DW01-170724	1720372-01	PE2_170801-244	07/31/17 09:30	
Blank	B[G2603-BLK1	PE2_170801-196	07/31/17 09:30	
LCS	B[G2603-BS1	PE2_170801-205	07/31/17 09:30	
Duplicate	B[G2603-DUP1	PE2_170801-207	07/31/17 09:30	
Matrix Spike	B[G2603-MS1	PE2_170801-209	07/31/17 09:30	
Matrix Spike Dup	B[G2603-MSD1	PE2_170801-210	07/31/17 09:30	
Post Spike	B[G2603-PS1	PE2_170801-211	07/31/17 09:30	

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

METHOD BLANK DATA SHEET
EPA-6010B

Laboratory:	BC Laboratories			SDG:	1720372
Client:	AmecFW and KMEA, Inc. $AMFW			Project:	MCAS Tustin, OU 3, California
Matrix:	Water	Laboratory ID:	B[G2603-BLK1	File ID:	PE2_170801-196
Prepared:	07/31/17 09:30	Preparation:	EPA 3010A	Initial/Final:	50 ml / 50 ml
Analyzed:	08/01/17 20:59	Instrument:	PE-OP2		
Batch:	B[G2603	Sequence:	1713636	Calibration:	UNASSIGNED

CAS NO.	COMPOUND	CONC. (ug/L)	Q
7440-36-0	Total Antimony	8.5	U
7440-38-2	Total Arsenic	12.736	J
7440-39-3	Total Barium	3.5	U
7440-41-7	Total Beryllium	0.50	U
7440-43-9	Total Cadmium	1.1	U
7440-47-3	Total Chromium	1.1	U
7440-48-4	Total Cobalt	1.3	U
7440-50-8	Total Copper	1.3279	J
7439-92-1	Total Lead	4.0	U
7439-98-7	Total Molybdenum	1.2	U
7440-02-0	Total Nickel	2.0	U
7782-49-2	Total Selenium	18.415	J
7440-22-4	Total Silver	1.9	U
7440-28-0	Total Thallium	24	U
7440-62-2	Total Vanadium	2.2	U
7440-66-6	Total Zinc	4.0373	J

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

Duplicate

DUPLICATES
EPA-6010B

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Matrix: Water
Batch: B[G2603
Preparation: EPA 3010A
Source Sample Name: Duplicate

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Laboratory ID: B[G2603-DUP1
Lab Source ID: 1720313-05
Initial/Final: 50 ml / 50 ml
% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (ug/L)	C	DUPLICATE CONCENTRATION (ug/L)	C	RPD %	Q	METHOD
Total Antimony	20	-47.345		ND				EPA-6010B
Total Arsenic	20	12.943		31.262		82.9		EPA-6010B
Total Barium	20	440.97		431.86		2.09		EPA-6010B
Total Beryllium	20	-0.46210		ND				EPA-6010B
Total Cadmium	20	0.13240		ND				EPA-6010B
Total Chromium	20	1.4524		1.3487		7.40		EPA-6010B
Total Cobalt	20	46.237		44.981		2.75		EPA-6010B
Total Copper	20	2.7077		1.6350		49.4		EPA-6010B
Total Lead	20	-5.4865		ND				EPA-6010B
Total Molybdenum	20	11.079		5.3685		69.4		EPA-6010B
Total Nickel	20	37.934		37.512		1.12		EPA-6010B
Total Selenium	20	89.683		94.595		5.33		EPA-6010B
Total Silver	20	-0.26277		ND				EPA-6010B
Total Thallium	20	-33.276		ND				EPA-6010B
Total Vanadium	20	7.5934		7.3278		3.56		EPA-6010B
Total Zinc	20	7.2002		9.5229		27.8		EPA-6010B

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-6010B

Matrix Spike

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[G2603
Laboratory ID: B[G2603-MS1
Preparation: EPA 3010A
Initial/Final: 50 ml / 50 ml
Source Sample Number: 1720313-05

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
Total Antimony	400.00	ND	377.44	94.4	75 - 125
Total Arsenic	200.00	12.943	221.97	105	75 - 125
Total Barium	400.00	440.97	820.47	94.9	75 - 125
Total Beryllium	200.00	ND	207.42	104	75 - 125
Total Cadmium	200.00	ND	200.85	100	75 - 125
Total Chromium	200.00	1.4524	213.37	106	75 - 125
Total Cobalt	200.00	46.237	249.10	101	75 - 125
Total Copper	400.00	2.7077	421.88	105	75 - 125
Total Lead	400.00	ND	422.39	106	75 - 125
Total Molybdenum	200.00	11.079	214.86	102	75 - 125
Total Nickel	400.00	37.934	445.81	102	75 - 125
Total Selenium	200.00	89.683	213.11	61.7 *	75 - 125
Total Silver	100.00	ND	102.46	102	75 - 125
Total Thallium	400.00	ND	390.65	97.7	75 - 125
Total Vanadium	200.00	7.5934	214.16	103	75 - 125
Total Zinc	500.00	7.2002	522.10	103	75 - 125

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Total Antimony	400.00	355.10	88.8	6.10	20	75 - 125
Total Arsenic	200.00	232.03	110	4.43	20	75 - 125
Total Barium	400.00	842.37	100	2.63	20	75 - 125
Total Beryllium	200.00	211.84	106	2.11	20	75 - 125
Total Cadmium	200.00	203.85	102	1.48	20	75 - 125
Total Chromium	200.00	215.95	107	1.20	20	75 - 125

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-6010B

Matrix Spike Dup

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[G2603
Laboratory ID: B[G2603-MSD1
Preparation: EPA 3010A
Initial/Final: 50 ml / 50 ml
Source Sample Number: 1720313-05

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Total Cobalt	200.00	251.23	102	0.852	20	75 - 125
Total Copper	400.00	421.39	105	0.116	20	75 - 125
Total Lead	400.00	418.38	105	0.954	20	75 - 125
Total Molybdenum	200.00	210.39	99.7	2.10	20	75 - 125
Total Nickel	400.00	451.64	103	1.30	20	75 - 125
Total Selenium	200.00	257.43	83.9	18.8	20	75 - 125
Total Silver	100.00	102.63	103	0.172	20	75 - 125
Total Thallium	400.00	391.50	97.9	0.218	20	75 - 125
Total Vanadium	200.00	215.19	104	0.480	20	75 - 125
Total Zinc	500.00	523.92	103	0.348	20	75 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

LCS RECOVERY
EPA-6010B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Matrix: Water
Batch: B[G2603
Laboratory ID: B[G2603-BS1
Preparation: EPA 3010A
Initial/Final: 50 ml / 50 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Total Antimony	400.00	412.60	103	85 - 115
Total Arsenic	200.00	213.06	107	85 - 115
Total Barium	400.00	440.34	110	85 - 115
Total Beryllium	200.00	222.41	111	85 - 115
Total Cadmium	200.00	209.61	105	85 - 115
Total Chromium	200.00	227.02	114	85 - 115
Total Cobalt	200.00	220.86	110	85 - 115
Total Copper	400.00	437.03	109	85 - 115
Total Lead	400.00	445.50	111	85 - 115
Total Molybdenum	200.00	210.81	105	85 - 115
Total Nickel	400.00	443.08	111	85 - 115
Total Selenium	200.00	173.80	86.9	85 - 115
Total Silver	100.00	106.51	107	85 - 115
Total Thallium	400.00	438.76	110	85 - 115
Total Vanadium	200.00	217.55	109	85 - 115
Total Zinc	500.00	561.57	112	85 - 115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-6010B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Project: MCAS Tustin, OU 3, California
Sequence: 1713636
Instrument: PE-OP2
Matrix: Water
Calibration: UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1713636-ICV1	PE2_170801-012	08/01/17 11:01
Initial Cal Blank	1713636-ICB1	PE2_170801-013	08/01/17 11:03
MRL Check	1713636-CRL1	PE2_170801-014	08/01/17 11:12
Interference Check A	1713636-IFA1	PE2_170801-150	08/01/17 17:29
Interference Check B	1713636-IFB1	PE2_170801-151	08/01/17 17:32
Calibration Check	1713636-CCV1	PE2_170801-158	08/01/17 19:12
Calibration Blank	1713636-CCB1	PE2_170801-160	08/01/17 19:17
Calibration Check	1713636-CCV2	PE2_170801-193	08/01/17 20:53
Calibration Blank	1713636-CCB2	PE2_170801-194	08/01/17 20:55
Blank	B[G2603-BLK1	PE2_170801-196	08/01/17 20:59
Calibration Check	1713636-CCV3	PE2_170801-202	08/01/17 21:11
Calibration Blank	1713636-CCB3	PE2_170801-204	08/01/17 21:15
LCS	B[G2603-BS1	PE2_170801-205	08/01/17 21:17
Duplicate	B[G2603-DUP1	PE2_170801-207	08/01/17 21:21
Matrix Spike	B[G2603-MS1	PE2_170801-209	08/01/17 21:25
Matrix Spike Dup	B[G2603-MSD1	PE2_170801-210	08/01/17 21:27
Post Spike	B[G2603-PS1	PE2_170801-211	08/01/17 21:29
Calibration Check	1713636-CCV4	PE2_170801-215	08/01/17 21:37
Calibration Blank	1713636-CCB4	PE2_170801-217	08/01/17 21:41
Calibration Check	1713636-CCV5	PE2_170801-228	08/01/17 22:03
Calibration Blank	1713636-CCB5	PE2_170801-229	08/01/17 22:05
Calibration Check	1713636-CCV6	PE2_170801-240	08/01/17 22:27
Calibration Blank	1713636-CCB6	PE2_170801-241	08/01/17 22:29
1DW01-170724	1720372-01	PE2_170801-244	08/01/17 22:35
Calibration Check	1713636-CCV7	PE2_170801-255	08/01/17 23:03
Calibration Blank	1713636-CCB7	PE2_170801-256	08/01/17 23:05

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

BLANKS
EPA-6010B

Laboratory: BC Laboratories
SDG: 1720372
Client: AmecFW and KMEA, Inc. $AMFW
Instrument ID: PE-OP2
Project: MCAS Tustin, OU 3, California
Sequence: 1713636
Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	PQL	Units	C	Method
1713636-ICB1	Total Antimony	0.0052225	0.10	mg/L		EPA-6010B
	Total Arsenic	0.0090654	0.050	mg/L		EPA-6010B
	Total Barium	0.00013558	0.010	mg/L		EPA-6010B
	Total Beryllium	0.00012171	0.010	mg/L		EPA-6010B
	Total Cadmium	0.00036355	0.010	mg/L		EPA-6010B
	Total Chromium	-0.00017868	0.010	mg/L		EPA-6010B
	Total Cobalt	-0.00012588	0.050	mg/L		EPA-6010B
	Total Copper	0.00032641	0.010	mg/L		EPA-6010B
	Total Lead	0.0026876	0.050	mg/L		EPA-6010B
	Total Molybdenum	0.0074055	0.050	mg/L		EPA-6010B
	Total Nickel	-0.00016397	0.010	mg/L		EPA-6010B
	Total Selenium	-0.0034559	0.10	mg/L		EPA-6010B
	Total Silver	-0.0000027641	0.010	mg/L		EPA-6010B
	Total Thallium	0.00055324	0.10	mg/L		EPA-6010B
	Total Vanadium	-0.00042041	0.010	mg/L		EPA-6010B
	Total Zinc	0.00097553	0.050	mg/L		EPA-6010B
1713636-CCB1	Total Antimony	0.0038535	0.10	mg/L		EPA-6010B
	Total Arsenic	0.0036106	0.050	mg/L		EPA-6010B
	Total Barium	-0.00030641	0.010	mg/L		EPA-6010B
	Total Beryllium	-0.00036596	0.010	mg/L		EPA-6010B
	Total Cadmium	-0.000042799	0.010	mg/L		EPA-6010B
	Total Chromium	-0.00034806	0.010	mg/L		EPA-6010B
	Total Cobalt	-0.000062171	0.050	mg/L		EPA-6010B
	Total Copper	0.00039600	0.010	mg/L		EPA-6010B
	Total Lead	-0.0011093	0.050	mg/L		EPA-6010B
	Total Molybdenum	0.0010852	0.050	mg/L		EPA-6010B
	Total Nickel	-0.000012497	0.010	mg/L		EPA-6010B

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

BLANKS
EPA-6010B

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Instrument ID: PE-OP2
Sequence: 1713636

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	PQL	Units	C	Method
1713636-CCB1	Total Selenium	0.0049336	0.10	mg/L		EPA-6010B
	Total Silver	-0.000049579	0.010	mg/L		EPA-6010B
	Total Thallium	0.0046480	0.10	mg/L		EPA-6010B
	Total Vanadium	-0.00040681	0.010	mg/L		EPA-6010B
	Total Zinc	0.0012956	0.050	mg/L		EPA-6010B
1713636-CCB2	Total Antimony	0.0040646	0.10	mg/L		EPA-6010B
	Total Arsenic	0.00077093	0.050	mg/L		EPA-6010B
	Total Barium	0.000018862	0.010	mg/L		EPA-6010B
	Total Beryllium	-0.000080911	0.010	mg/L		EPA-6010B
	Total Cadmium	0.000098457	0.010	mg/L		EPA-6010B
	Total Chromium	0.000049524	0.010	mg/L		EPA-6010B
	Total Cobalt	-0.00028448	0.050	mg/L		EPA-6010B
	Total Copper	0.0011987	0.010	mg/L		EPA-6010B
	Total Lead	-0.00039486	0.050	mg/L		EPA-6010B
	Total Molybdenum	0.0024460	0.050	mg/L		EPA-6010B
	Total Nickel	-0.00037294	0.010	mg/L		EPA-6010B
	Total Selenium	-0.0059017	0.10	mg/L		EPA-6010B
	Total Silver	0.000098456	0.010	mg/L		EPA-6010B
	Total Thallium	0.00093370	0.10	mg/L		EPA-6010B
	Total Vanadium	-0.00054259	0.010	mg/L		EPA-6010B
	Total Zinc	0.0016748	0.050	mg/L		EPA-6010B
1713636-CCB3	Total Antimony	0.0013848	0.10	mg/L		EPA-6010B
	Total Arsenic	-0.0013873	0.050	mg/L		EPA-6010B
	Total Barium	0.00022186	0.010	mg/L		EPA-6010B
	Total Beryllium	-0.00035941	0.010	mg/L		EPA-6010B
	Total Cadmium	0.000062420	0.010	mg/L		EPA-6010B
	Total Chromium	-0.00046556	0.010	mg/L		EPA-6010B

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

BLANKS
EPA-6010B

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Instrument ID: PE-OP2
Sequence: 1713636

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	PQL	Units	C	Method
1713636-CCB3	Total Cobalt	-0.000097964	0.050	mg/L		EPA-6010B
	Total Copper	0.00069527	0.010	mg/L		EPA-6010B
	Total Lead	0.0020153	0.050	mg/L		EPA-6010B
	Total Molybdenum	0.0013952	0.050	mg/L		EPA-6010B
	Total Nickel	-0.00060647	0.010	mg/L		EPA-6010B
	Total Selenium	0.013779	0.10	mg/L		EPA-6010B
	Total Silver	0.00019237	0.010	mg/L		EPA-6010B
	Total Thallium	0.0012030	0.10	mg/L		EPA-6010B
	Total Vanadium	-0.00035425	0.010	mg/L		EPA-6010B
	Total Zinc	0.0011877	0.050	mg/L		EPA-6010B
1713636-CCB4	Total Antimony	-0.0014644	0.10	mg/L		EPA-6010B
	Total Arsenic	0.022033	0.050	mg/L		EPA-6010B
	Total Barium	-0.0010594	0.010	mg/L		EPA-6010B
	Total Beryllium	-0.000066010	0.010	mg/L		EPA-6010B
	Total Cadmium	-0.00057120	0.010	mg/L		EPA-6010B
	Total Chromium	-0.00011265	0.010	mg/L		EPA-6010B
	Total Cobalt	-0.0000080444	0.050	mg/L		EPA-6010B
	Total Copper	0.00065999	0.010	mg/L		EPA-6010B
	Total Lead	0.0014780	0.050	mg/L		EPA-6010B
	Total Molybdenum	0.00018330	0.050	mg/L		EPA-6010B
	Total Nickel	-0.00072666	0.010	mg/L		EPA-6010B
	Total Selenium	0.026243	0.10	mg/L		EPA-6010B
	Total Silver	0.00060178	0.010	mg/L		EPA-6010B
	Total Thallium	0.00095736	0.10	mg/L		EPA-6010B
	Total Vanadium	-0.00091568	0.010	mg/L		EPA-6010B
	Total Zinc	0.0011354	0.050	mg/L		EPA-6010B
1713636-CCB5	Total Antimony	0.0090334	0.10	mg/L		EPA-6010B

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

BLANKS
EPA-6010B

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Instrument ID: PE-OP2
Sequence: 1713636

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	PQL	Units	C	Method
1713636-CCB5	Total Arsenic	0.0025197	0.050	mg/L		EPA-6010B
	Total Barium	0.00018154	0.010	mg/L		EPA-6010B
	Total Beryllium	0.000062823	0.010	mg/L		EPA-6010B
	Total Cadmium	0.00041010	0.010	mg/L		EPA-6010B
	Total Chromium	0.00013446	0.010	mg/L		EPA-6010B
	Total Cobalt	-0.00041434	0.050	mg/L		EPA-6010B
	Total Copper	0.0011010	0.010	mg/L		EPA-6010B
	Total Lead	0.0010539	0.050	mg/L		EPA-6010B
	Total Molybdenum	0.0034872	0.050	mg/L		EPA-6010B
	Total Nickel	0.000040301	0.010	mg/L		EPA-6010B
	Total Selenium	0.0023143	0.10	mg/L		EPA-6010B
	Total Silver	-0.00067593	0.010	mg/L		EPA-6010B
	Total Thallium	-0.0011793	0.10	mg/L		EPA-6010B
	Total Vanadium	0.00045691	0.010	mg/L		EPA-6010B
	Total Zinc	0.00069467	0.050	mg/L		EPA-6010B
1713636-CCB6	Total Antimony	0.0045311	0.10	mg/L		EPA-6010B
	Total Arsenic	0.0033190	0.050	mg/L		EPA-6010B
	Total Barium	0.00048218	0.010	mg/L		EPA-6010B
	Total Beryllium	-0.000050631	0.010	mg/L		EPA-6010B
	Total Cadmium	-0.0000027469	0.010	mg/L		EPA-6010B
	Total Chromium	-0.00016852	0.010	mg/L		EPA-6010B
	Total Cobalt	-0.00047152	0.050	mg/L		EPA-6010B
	Total Copper	-0.000014852	0.010	mg/L		EPA-6010B
	Total Lead	0.00048677	0.050	mg/L		EPA-6010B
	Total Molybdenum	0.0075516	0.050	mg/L		EPA-6010B
	Total Nickel	-0.0010924	0.010	mg/L		EPA-6010B
	Total Selenium	-0.0059814	0.10	mg/L		EPA-6010B

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

BLANKS
EPA-6010B

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Instrument ID: PE-OP2
Sequence: 1713636

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	PQL	Units	C	Method
1713636-CCB6	Total Silver	0.00027147	0.010	mg/L		EPA-6010B
	Total Thallium	0.0040769	0.10	mg/L		EPA-6010B
	Total Vanadium	-0.00029848	0.010	mg/L		EPA-6010B
	Total Zinc	0.0011960	0.050	mg/L		EPA-6010B
1713636-CCB7	Total Antimony	-0.0038342	0.10	mg/L		EPA-6010B
	Total Arsenic	-0.0055352	0.050	mg/L		EPA-6010B
	Total Barium	-0.000092581	0.010	mg/L		EPA-6010B
	Total Beryllium	0.000043829	0.010	mg/L		EPA-6010B
	Total Cadmium	0.00022594	0.010	mg/L		EPA-6010B
	Total Chromium	-0.00025306	0.010	mg/L		EPA-6010B
	Total Cobalt	-0.00066869	0.050	mg/L		EPA-6010B
	Total Copper	0.00088689	0.010	mg/L		EPA-6010B
	Total Lead	0.0016378	0.050	mg/L		EPA-6010B
	Total Molybdenum	0.0038221	0.050	mg/L		EPA-6010B
	Total Nickel	-0.0010598	0.010	mg/L		EPA-6010B
	Total Selenium	0.0074130	0.10	mg/L		EPA-6010B
	Total Silver	0.00055868	0.010	mg/L		EPA-6010B
	Total Thallium	0.0013238	0.10	mg/L		EPA-6010B
	Total Vanadium	-0.0025548	0.010	mg/L		EPA-6010B
	Total Zinc	0.00041737	0.050	mg/L		EPA-6010B

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL AND CONTINUING CALIBRATION CHECK

EPA-6010B

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Instrument ID: PE-OP2
Control Limt: +/- 10.00%

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Calibration: UNASSIGNED
Sequence: 1713636

Lab Sample ID	Analyte	True	Found	%R	Units	Method
1713636-ICV1	Total Antimony	0.50000	0.50724	101	mg/L	EPA-6010B
	Total Arsenic	0.50000	0.50235	100	mg/L	EPA-6010B
	Total Barium	2.5000	2.4807	99.2	mg/L	EPA-6010B
	Total Beryllium	0.50000	0.51797	104	mg/L	EPA-6010B
	Total Cadmium	2.5000	2.5235	101	mg/L	EPA-6010B
	Total Chromium	0.50000	0.51187	102	mg/L	EPA-6010B
	Total Cobalt	0.50000	0.51250	103	mg/L	EPA-6010B
	Total Copper	0.50000	0.48563	97.1	mg/L	EPA-6010B
	Total Lead	0.50000	0.50034	100	mg/L	EPA-6010B
	Total Molybdenum	2.5000	2.4946	99.8	mg/L	EPA-6010B
	Total Nickel	0.50000	0.51151	102	mg/L	EPA-6010B
	Total Selenium	0.50000	0.49234	98.5	mg/L	EPA-6010B
	Total Silver	0.25000	0.25053	100	mg/L	EPA-6010B
	Total Thallium	0.50000	0.49885	99.8	mg/L	EPA-6010B
	Total Vanadium	0.50000	0.50907	102	mg/L	EPA-6010B
	Total Zinc	2.5000	2.5541	102	mg/L	EPA-6010B
1713636-CCV1	Total Antimony	0.50000	0.54344	109	mg/L	EPA-6010B
	Total Arsenic	0.50000	0.54059	108	mg/L	EPA-6010B
	Total Barium	2.5000	2.6511	106	mg/L	EPA-6010B
	Total Beryllium	0.50000	0.54957	110	mg/L	EPA-6010B
	Total Cadmium	2.5000	2.6916	108	mg/L	EPA-6010B
	Total Chromium	0.50000	0.54504	109	mg/L	EPA-6010B
	Total Cobalt	0.50000	0.55125	110	mg/L	EPA-6010B
	Total Copper	0.50000	0.53158	106	mg/L	EPA-6010B
	Total Lead	0.50000	0.55010	110	mg/L	EPA-6010B
	Total Molybdenum	2.5000	2.7048	108	mg/L	EPA-6010B
	Total Nickel	0.50000	0.55220	110	mg/L	EPA-6010B
	Total Silver	0.25000	0.26841	107	mg/L	EPA-6010B
	Total Thallium	0.50000	0.54701	109	mg/L	EPA-6010B
	Total Vanadium	0.50000	0.53753	108	mg/L	EPA-6010B
	Total Zinc	2.5000	2.7447	110	mg/L	EPA-6010B

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL AND CONTINUING CALIBRATION CHECK

EPA-6010B

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Instrument ID: PE-OP2
Control Limt: +/- 10.00%

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Calibration: UNASSIGNED
Sequence: 1713636

Lab Sample ID	Analyte	True	Found	%R	Units	Method
1713636-CCV2	Total Antimony	0.50000	0.51058	102	mg/L	EPA-6010B
	Total Arsenic	0.50000	0.52139	104	mg/L	EPA-6010B
	Total Barium	2.5000	2.5411	102	mg/L	EPA-6010B
	Total Beryllium	0.50000	0.53042	106	mg/L	EPA-6010B
	Total Cadmium	2.5000	2.6234	105	mg/L	EPA-6010B
	Total Chromium	0.50000	0.54225	108	mg/L	EPA-6010B
	Total Cobalt	0.50000	0.53347	107	mg/L	EPA-6010B
	Total Copper	0.50000	0.53349	107	mg/L	EPA-6010B
	Total Lead	0.50000	0.54506	109	mg/L	EPA-6010B
	Total Molybdenum	2.5000	2.5794	103	mg/L	EPA-6010B
	Total Nickel	0.50000	0.54322	109	mg/L	EPA-6010B
	Total Selenium	0.50000	0.52993	106	mg/L	EPA-6010B
	Total Silver	0.25000	0.26174	105	mg/L	EPA-6010B
	Total Thallium	0.50000	0.52854	106	mg/L	EPA-6010B
	Total Vanadium	0.50000	0.51361	103	mg/L	EPA-6010B
	Total Zinc	2.5000	2.7053	108	mg/L	EPA-6010B
1713636-CCV3	Total Antimony	0.50000	0.50855	102	mg/L	EPA-6010B
	Total Arsenic	0.50000	0.52212	104	mg/L	EPA-6010B
	Total Barium	2.5000	2.4822	99.3	mg/L	EPA-6010B
	Total Beryllium	0.50000	0.52618	105	mg/L	EPA-6010B
	Total Cadmium	2.5000	2.5822	103	mg/L	EPA-6010B
	Total Chromium	0.50000	0.52762	106	mg/L	EPA-6010B
	Total Cobalt	0.50000	0.51969	104	mg/L	EPA-6010B
	Total Copper	0.50000	0.53129	106	mg/L	EPA-6010B
	Total Lead	0.50000	0.52023	104	mg/L	EPA-6010B
	Total Molybdenum	2.5000	2.5070	100	mg/L	EPA-6010B
	Total Nickel	0.50000	0.52875	106	mg/L	EPA-6010B
	Total Selenium	0.50000	0.49135	98.3	mg/L	EPA-6010B
	Total Silver	0.25000	0.25952	104	mg/L	EPA-6010B
	Total Thallium	0.50000	0.52061	104	mg/L	EPA-6010B
	Total Vanadium	0.50000	0.50844	102	mg/L	EPA-6010B

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL AND CONTINUING CALIBRATION CHECK

EPA-6010B

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Instrument ID: PE-OP2
Control Limt: +/- 10.00%

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Calibration: UNASSIGNED
Sequence: 1713636

Lab Sample ID	Analyte	True	Found	%R	Units	Method
1713636-CCV3	Total Zinc	2.5000	2.6380	106	mg/L	EPA-6010B
1713636-CCV4	Total Antimony	0.50000	0.51471	103	mg/L	EPA-6010B
	Total Arsenic	0.50000	0.52841	106	mg/L	EPA-6010B
	Total Barium	2.5000	2.4957	99.8	mg/L	EPA-6010B
	Total Beryllium	0.50000	0.51514	103	mg/L	EPA-6010B
	Total Cadmium	2.5000	2.5826	103	mg/L	EPA-6010B
	Total Chromium	0.50000	0.52989	106	mg/L	EPA-6010B
	Total Cobalt	0.50000	0.51647	103	mg/L	EPA-6010B
	Total Copper	0.50000	0.52877	106	mg/L	EPA-6010B
	Total Lead	0.50000	0.51961	104	mg/L	EPA-6010B
	Total Molybdenum	2.5000	2.5056	100	mg/L	EPA-6010B
	Total Nickel	0.50000	0.52447	105	mg/L	EPA-6010B
	Total Selenium	0.50000	0.53563	107	mg/L	EPA-6010B
	Total Silver	0.25000	0.25973	104	mg/L	EPA-6010B
	Total Thallium	0.50000	0.51793	104	mg/L	EPA-6010B
	Total Vanadium	0.50000	0.50947	102	mg/L	EPA-6010B
	Total Zinc	2.5000	2.6380	106	mg/L	EPA-6010B
1713636-CCV5	Total Antimony	0.50000	0.51844	104	mg/L	EPA-6010B
	Total Arsenic	0.50000	0.52576	105	mg/L	EPA-6010B
	Total Barium	2.5000	2.5755	103	mg/L	EPA-6010B
	Total Beryllium	0.50000	0.52355	105	mg/L	EPA-6010B
	Total Cadmium	2.5000	2.5394	102	mg/L	EPA-6010B
	Total Chromium	0.50000	0.51909	104	mg/L	EPA-6010B
	Total Cobalt	0.50000	0.52421	105	mg/L	EPA-6010B
	Total Copper	0.50000	0.51910	104	mg/L	EPA-6010B
	Total Lead	0.50000	0.52499	105	mg/L	EPA-6010B
	Total Molybdenum	2.5000	2.5373	101	mg/L	EPA-6010B
	Total Nickel	0.50000	0.53553	107	mg/L	EPA-6010B
	Total Selenium	0.50000	0.53553	107	mg/L	EPA-6010B
	Total Silver	0.25000	0.25491	102	mg/L	EPA-6010B
	Total Thallium	0.50000	0.51785	104	mg/L	EPA-6010B

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL AND CONTINUING CALIBRATION CHECK

EPA-6010B

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Instrument ID: PE-OP2
Control Limt: +/- 10.00%

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Calibration: UNASSIGNED
Sequence: 1713636

Lab Sample ID	Analyte	True	Found	%R	Units	Method
1713636-CCV5	Total Vanadium	0.50000	0.50211	100	mg/L	EPA-6010B
	Total Zinc	2.5000	2.5943	104	mg/L	EPA-6010B
1713636-CCV6	Total Antimony	0.50000	0.51858	104	mg/L	EPA-6010B
	Total Arsenic	0.50000	0.53404	107	mg/L	EPA-6010B
	Total Barium	2.5000	2.5639	103	mg/L	EPA-6010B
	Total Beryllium	0.50000	0.52898	106	mg/L	EPA-6010B
	Total Cadmium	2.5000	2.6431	106	mg/L	EPA-6010B
	Total Chromium	0.50000	0.54264	109	mg/L	EPA-6010B
	Total Cobalt	0.50000	0.52969	106	mg/L	EPA-6010B
	Total Copper	0.50000	0.53659	107	mg/L	EPA-6010B
	Total Lead	0.50000	0.53326	107	mg/L	EPA-6010B
	Total Molybdenum	2.5000	2.5962	104	mg/L	EPA-6010B
	Total Nickel	0.50000	0.53842	108	mg/L	EPA-6010B
	Total Selenium	0.50000	0.53484	107	mg/L	EPA-6010B
	Total Silver	0.25000	0.26542	106	mg/L	EPA-6010B
	Total Thallium	0.50000	0.52869	106	mg/L	EPA-6010B
	Total Vanadium	0.50000	0.52795	106	mg/L	EPA-6010B
	Total Zinc	2.5000	2.7169	109	mg/L	EPA-6010B
1713636-CCV7	Total Antimony	0.50000	0.51810	104	mg/L	EPA-6010B
	Total Arsenic	0.50000	0.53385	107	mg/L	EPA-6010B
	Total Barium	2.5000	2.6044	104	mg/L	EPA-6010B
	Total Beryllium	0.50000	0.52585	105	mg/L	EPA-6010B
	Total Cadmium	2.5000	2.5519	102	mg/L	EPA-6010B
	Total Chromium	0.50000	0.51922	104	mg/L	EPA-6010B
	Total Cobalt	0.50000	0.52751	106	mg/L	EPA-6010B
	Total Copper	0.50000	0.51437	103	mg/L	EPA-6010B
	Total Lead	0.50000	0.53217	106	mg/L	EPA-6010B
	Total Molybdenum	2.5000	2.5837	103	mg/L	EPA-6010B
	Total Nickel	0.50000	0.53287	107	mg/L	EPA-6010B
	Total Selenium	0.50000	0.51189	102	mg/L	EPA-6010B
	Total Silver	0.25000	0.25661	103	mg/L	EPA-6010B

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

INITIAL AND CONTINUING CALIBRATION CHECK

EPA-6010B

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Instrument ID: PE-OP2
Control Limt: +/- 10.00%

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Calibration: UNASSIGNED
Sequence: 1713636

Lab Sample ID	Analyte	True	Found	%R	Units	Method
1713636-CCV7	Total Thallium	0.50000	0.53551	107	mg/L	EPA-6010B
	Total Vanadium	0.50000	0.51279	103	mg/L	EPA-6010B
	Total Zinc	2.5000	2.6180	105	mg/L	EPA-6010B

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

POST DIGEST SPIKE SAMPLE RECOVERY

EPA-6010B

Post Spike

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Matrix: Water
Batch: B[G2603
Preparation: EPA 3010A

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Laboratory ID: B[G2603-PS1
Lab Source ID: 1720313-05
Initial/Final: 9.8 ml / 10 ml

Source Sample Name: Post Spike
% Solids:

Analyte	Control Limit %R	Spike Sample Result (SSR) (mg/L)	Sample Result (SR) (mg/L)	Spike Added (SA) (mg/L)	%R
Total Antimony	75 - 125	0.34953	-0.046398	0.40000	87.4
Total Arsenic	75 - 125	0.21055	0.012684	0.20000	98.9
Total Barium	75 - 125	0.83502	0.43215	0.40000	101
Total Beryllium	75 - 125	0.20816	-0.00045286	0.20000	104
Total Cadmium	75 - 125	0.20099	0.00012976	0.20000	100
Total Chromium	75 - 125	0.21384	0.0014233	0.20000	106
Total Cobalt	75 - 125	0.24976	0.045312	0.20000	102
Total Copper	75 - 125	0.41590	0.0026535	0.40000	103
Total Lead	75 - 125	0.40906	-0.0053767	0.40000	102
Total Molybdenum	75 - 125	0.20982	0.010857	0.20000	99.5
Total Nickel	75 - 125	0.44524	0.037176	0.40000	102
Total Selenium	75 - 125	0.26586	0.087889	0.20000	89.0
Total Silver	75 - 125	0.10126	-0.00025752	0.10000	101
Total Thallium	75 - 125	0.39220	-0.032610	0.40000	98.0
Total Vanadium	75 - 125	0.21044	0.0074415	0.20000	102
Total Zinc	75 - 125	0.51730	0.0070562	0.50000	102

* Values outside of QC limits

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

ICP INTERFERENCE CHECK SAMPLE

EPA-6010B

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Instrument ID: PE-OP2
Sequence: 1713636

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Calibration: UNASSIGNED

Lab Sample ID	Analyte	True	Found	%R	Units
1713636-IFA1	Total Antimony	0.0000	0.0024359		mg/L
	Total Arsenic	0.0000	-0.0013720		mg/L
	Total Barium	0.0000	0.0040014		mg/L
	Total Beryllium	0.0000	0.000070358		mg/L
	Total Cadmium	0.0000	0.000052836		mg/L
	Total Chromium	0.0000	-0.00049470		mg/L
	Total Cobalt	0.0000	0.0052330		mg/L
	Total Copper	0.0000	-0.0015812		mg/L
	Total Lead	0.0000	-0.0048880		mg/L
	Total Molybdenum	0.0000	0.015380		mg/L
	Total Nickel	0.0000	0.0062433		mg/L
	Total Selenium	0.0000	0.018155		mg/L
	Total Silver	0.0000	0.00056914		mg/L
	Total Thallium	0.0000	-0.0049735		mg/L
	Total Vanadium	0.0000	-0.0011914		mg/L
	Total Zinc	0.0000	-0.0084023		mg/L
1713636-IFB1	Total Antimony		-0.013659		mg/L
	Total Arsenic		-0.0077888		mg/L
	Total Barium	0.50000	0.49	98.9	ug/L
	Total Beryllium	0.50000	0.51	102	ug/L
	Total Cadmium	1.0000	1.03	103	ug/L
	Total Chromium	0.50000	0.50	99.0	ug/L
	Total Cobalt	0.50000	0.49	97.1	ug/L

AmecFW and KMEA, Inc.
9210 Sky Park Court
San Diego, CA 92123

Reported: 8/17/2017 12:53:48PM
Project: MCAS Tustin, OU 3, California
Project Number: [none]
Project Manager: Kurt Myers

ICP INTERFERENCE CHECK SAMPLE

EPA-6010B

Laboratory: BC Laboratories
Client: AmecFW and KMEA, Inc. $AMFW
Instrument ID: PE-OP2
Sequence: 1713636

SDG: 1720372
Project: MCAS Tustin, OU 3, California
Calibration: UNASSIGNED

Lab Sample ID	Analyte	True	Found	%R	Units
1713636-IFB1	Total Copper	0.50000	0.51	102	ug/L
	Total Lead	1.0000	0.97	97.2	ug/L
	Total Molybdenum		0.016328		mg/L
	Total Nickel	1.0000	0.96	95.8	ug/L
	Total Selenium		0.0074381		mg/L
	Total Silver	1.0000	1.06	106	ug/L
	Total Thallium		-0.00054000		mg/L
	Total Vanadium	0.50000	0.50	100	ug/L
	Total Zinc	1.0000	0.96	95.6	ug/L

* Values outside of QC limits

Raw Data From Instrument PE-OP2

Raw Data - Calibration Standards

User canceled analysis.

==========

Analysis Begun

Start Time: 8/1/2017 10:28:06 AM **Plasma On Time: 8/1/2017 8:32:55 AM**
Logged In Analyst: bcl **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N2080801Autosampler Model: AS-93plus

Sample Information File: C:\pe\bcl\Sample Information\PE2_170801.sif
Batch ID:
Results Data Set: PE2_170801
Results Library: C:\pe\bcl\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 6**
Sample ID: Calib Blank @7G10014 **Date Collected: 8/1/2017 10:28:06 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: Calib Blank @7G10014

Analyte	Back Pressure	Flow
All	242.0 kPa	0.65 L/min

Mean Data: Calib Blank @7G10014

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 357.253	1290778.0	14306.65	1.11%	100.0	%
Sc 357.253 (R)	61196.6	1018.54	1.66%	100.0	%
Ag 328.068†	57.4	99.34	173.06%	[0.00]	mg/L
Al 308.215 (R)†	39.9	6.33	15.87%	[0.00]	mg/L
As 188.979†	-2.7	4.97	184.50%	[0.00]	mg/L
B 249.677†	35.3	22.21	62.96%	[0.00]	mg/L
Ba 233.527 (R)†	-23.6	1.14	4.82%	[0.00]	mg/L
Be 313.107 †	25140.5	395.68	1.57%	[0.00]	mg/L
Ca 315.887 (R)†	-241.4	7.20	2.98%	[0.00]	mg/L
Cd 228.802 †	89.6	5.77	6.44%	[0.00]	mg/L
Co 228.616†	-124.4	6.02	4.84%	[0.00]	mg/L
Cr 267.716†	2.7	4.23	158.55%	[0.00]	mg/L
Cu 324.752†	-947.0	46.22	4.88%	[0.00]	mg/L
Fe 238.204 (R)†	-42.9	3.73	8.69%	[0.00]	mg/L
K 766.490 (R)†	-251.0	95.28	37.96%	[0.00]	mg/L
Li 670.784 (R)†	-1346.0	184.70	13.72%	[0.00]	mg/L
Mg 279.077 (R)†	-54.7	8.42	15.39%	[0.00]	mg/L
Mn 257.610 (R)†	-100.2	6.81	6.80%	[0.00]	mg/L
Mo 202.031†	3.9	1.20	30.52%	[0.00]	mg/L
Na 589.592 (R)†	-19.8	84.11	423.91%	[0.00]	mg/L
Ni 231.604†	-16.2	5.66	34.96%	[0.00]	mg/L
Pb 220.353†	2.4	2.29	93.71%	[0.00]	mg/L
Sb 206.836†	15.1	4.14	27.40%	[0.00]	mg/L
Se 196.026†	-0.9	4.80	560.09%	[0.00]	mg/L
Si 251.611 (R)†	159.7	5.46	3.42%	[0.00]	mg/L
Sn 189.927†	-1.5	2.99	194.64%	[0.00]	mg/L
Sr 421.552 (R)†	43.5	66.44	152.85%	[0.00]	mg/L
Ti 334.940 (R)†	-19.4	40.88	210.97%	[0.00]	mg/L
Tl 190.801†	-0.9	1.95	218.45%	[0.00]	mg/L
V 292.402†	57.1	100.59	176.03%	[0.00]	mg/L
Zn 206.200 †	-42.9	5.69	13.26%	[0.00]	mg/L
Mg 285.213†	147.1	5.06	3.44%	[0.00]	mg/L

User canceled analysis.

==========

Analysis Begun

Start Time: 8/1/2017 10:48:43 AM **Plasma On Time: 8/1/2017 8:32:55 AM**
Logged In Analyst: bcl **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N2080801 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\bcl\Sample Information\PE2_170801.sif
Batch ID:
Results Data Set: PE2_170801
Results Library: C:\pe\bcl\Results\Results.mdb

==========

Sequence No.: 2 **Autosampler Location: 9**
Sample ID: Calib Std 3 @7G11069 **Date Collected: 8/1/2017 10:48:43 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: Calib Std 3 @7G11069

Analyte	Back Pressure	Flow
All	242.0 kPa	0.65 L/min

Mean Data: Calib Std 3 @7G11069

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 357.253	1362597.4	28367.26	2.08%	105.6	%
Sc 357.253 (R)	65835.3	1073.22	1.63%	107.6	%
Ag 328.068†	84257.2	1213.13	1.44%	[0.5]	mg/L
Al 308.215 (R)†	100787.5	409.47	0.41%	[100]	mg/L
As 188.979†	316.6	4.64	1.46%	[1]	mg/L
B 249.677†	91038.4	1094.52	1.20%	[5]	mg/L
Ba 233.527 (R)†	9528.1	34.57	0.36%	[5]	mg/L
Be 313.107 †	3678215.8	11755.00	0.32%	[1]	mg/L
Ca 315.887 (R)†	586979.3	15690.29	2.67%	[100]	mg/L
Cd 228.802 †	102959.4	1227.77	1.19%	[5]	mg/L
Co 228.616†	16916.6	183.18	1.08%	[1]	mg/L
Cr 267.716†	18839.0	207.13	1.10%	[1]	mg/L
Cu 324.752†	203160.5	2454.48	1.21%	[1]	mg/L
Fe 238.204 (R)†	20164.6	100.33	0.50%	[20]	mg/L
K 766.490 (R)†	197430.8	5064.74	2.57%	[100]	mg/L
Li 670.784 (R)†	477537.0	12585.08	2.64%	[5]	mg/L
Mg 279.077 (R)†	66029.1	193.87	0.29%	[100]	mg/L
Mn 257.610 (R)†	103037.0	563.55	0.55%	[5]	mg/L
Mo 202.031†	6678.1	141.94	2.13%	[5]	mg/L
Na 589.592 (R)†	710270.1	18325.32	2.58%	[100]	mg/L
Ni 231.604†	5186.5	116.63	2.25%	[1]	mg/L
Pb 220.353†	1189.0	27.58	2.32%	[1]	mg/L
Sb 206.836†	658.3	13.23	2.01%	[1]	mg/L
Se 196.026†	292.0	11.16	3.82%	[1]	mg/L
Si 251.611 (R)†	6559.5	71.26	1.09%	[5]	mg/L
Sn 189.927†	477.5	11.31	2.37%	[1]	mg/L
Sr 421.552 (R)†	1512067.5	39489.80	2.61%	[5]	mg/L
Ti 334.940 (R)†	168837.2	4412.78	2.61%	[5]	mg/L
Tl 190.801†	332.9	5.27	1.58%	[1]	mg/L
V 292.402†	56425.0	724.90	1.28%	[1]	mg/L
Zn 206.200 †	34626.7	489.37	1.41%	[5]	mg/L
Mg 285.213†	96462.7	344.84	0.36%	[100]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	1	Lin, Calc Int	0.0	168500	0.00000	1.000000	
Al 308.215 (R)	1	Lin, Calc Int	0.0	1008	0.00000	1.000000	
As 188.979	1	Lin, Calc Int	0.0	316.6	0.00000	1.000000	
B 249.677	1	Lin, Calc Int	0.0	18210	0.00000	1.000000	
Ba 233.527 (R)	1	Lin, Calc Int	0.0	1906	0.00000	1.000000	
Be 313.107	1	Lin, Calc Int	0.0	3678000	0.00000	1.000000	
Ca 315.887 (R)	1	Lin, Calc Int	0.0	5870	0.00000	1.000000	

Cd 228.802	1	Lin, Calc Int	0.0	20590	0.00000	1.000000
Co 228.616	1	Lin, Calc Int	0.0	16920	0.00000	1.000000
Cr 267.716	1	Lin, Calc Int	0.0	18840	0.00000	1.000000
Cu 324.752	1	Lin, Calc Int	0.0	203200	0.00000	1.000000
Fe 238.204 (R)	1	Lin, Calc Int	0.0	1008	0.00000	1.000000
K 766.490 (R)	1	Lin, Calc Int	-0.0	1974	0.00000	1.000000
Li 670.784 (R)	1	Lin, Calc Int	0.0	95510	0.00000	1.000000
Mg 279.077 (R)	1	Lin, Calc Int	0.0	660.3	0.00000	1.000000
Mn 257.610 (R)	1	Lin, Calc Int	0.0	20610	0.00000	1.000000
Mo 202.031	1	Lin, Calc Int	0.0	1336	0.00000	1.000000
Na 589.592 (R)	1	Lin, Calc Int	0.0	7103	0.00000	1.000000
Ni 231.604	1	Lin, Calc Int	0.0	5187	0.00000	1.000000
Pb 220.353	1	Lin, Calc Int	0.0	1189	0.00000	1.000000
Sb 206.836	1	Lin, Calc Int	0.0	658.3	0.00000	1.000000
Se 196.026	1	Lin, Calc Int	0.0	292.0	0.00000	1.000000
Si 251.611 (R)	1	Lin, Calc Int	0.0	1312	0.00000	1.000000
Sn 189.927	1	Lin, Calc Int	0.0	477.5	0.00000	1.000000
Sr 421.552 (R)	1	Lin, Calc Int	-0.0	302400	0.00000	1.000000
Ti 334.940 (R)	1	Lin, Calc Int	0.0	33770	0.00000	1.000000
Tl 190.801	1	Lin, Calc Int	0.0	332.9	0.00000	1.000000
V 292.402	1	Lin, Calc Int	0.0	56420	0.00000	1.000000
Zn 206.200	1	Lin, Calc Int	0.0	6925	0.00000	1.000000
Mg 285.213	1	Lin, Calc Int	0.0	964.6	0.00000	1.000000

User canceled analysis.

==========

Analysis Begun

Start Time: 8/1/2017 7:10:00 PM **Plasma On Time: 8/1/2017 2:33:02 PM**
Logged In Analyst: bcl **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N2080801 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\bcl\Sample Information\PE2_170801.sif
Batch ID:
Results Data Set: PE2_170801
Results Library: C:\pe\bcl\Results\Results.mdb

==========

Sequence No.: 2 **Autosampler Location: 9**
Sample ID: Calib Std 3 @7G11069 **Date Collected: 8/1/2017 7:10:00 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: Calib Std 3 @7G11069

Analyte	Back Pressure	Flow
All	257.0 kPa	0.65 L/min

Mean Data: Calib Std 3 @7G11069

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 357.253	1406201.0	6542.88	0.47%	108.9	%
Sc 357.253 (R)	69341.3	1094.65	1.58%	113.3	%
Ag 328.068†	81325.6	1489.61	1.83%	[0.5]	mg/L
Al 308.215 (R)†	96794.6	703.89	0.73%	[100]	mg/L
As 188.979†	295.9	7.42	2.51%	[1]	mg/L
B 249.677†	88154.9	1901.64	2.16%	[5]	mg/L
Ba 233.527 (R)†	9224.5	181.89	1.97%	[5]	mg/L
Be 313.107 †	3581202.7	25356.01	0.71%	[1]	mg/L
Ca 315.887 (R)†	562473.8	3969.32	0.71%	[100]	mg/L
Cd 228.802 †	100761.4	1630.49	1.62%	[5]	mg/L
Co 228.616†	16676.7	210.23	1.26%	[1]	mg/L
Cr 267.716†	18226.4	282.26	1.55%	[1]	mg/L
Cu 324.752†	193783.8	4055.48	2.09%	[1]	mg/L
Fe 238.204 (R)†	20154.5	388.03	1.93%	[20]	mg/L
K 766.490 (R)†	190188.3	1351.31	0.71%	[100]	mg/L
Li 670.784 (R)†	449191.7	3328.37	0.74%	[5]	mg/L
Mg 279.077 (R)†	63816.4	461.86	0.72%	[100]	mg/L
Mn 257.610 (R)†	99128.3	893.11	0.90%	[5]	mg/L
Mo 202.031†	6457.8	37.59	0.58%	[5]	mg/L
Na 589.592 (R)†	724269.5	6016.37	0.83%	[100]	mg/L
Ni 231.604†	4996.0	17.63	0.35%	[1]	mg/L
Pb 220.353†	1144.2	5.41	0.47%	[1]	mg/L
Sb 206.836†	644.8	3.65	0.57%	[1]	mg/L
Se 196.026†	284.9	14.00	4.91%	[1]	mg/L
Si 251.611 (R)†	6302.9	136.09	2.16%	[5]	mg/L
Sn 189.927†	456.3	1.88	0.41%	[1]	mg/L
Sr 421.552 (R)†	1432128.7	10780.18	0.75%	[5]	mg/L
Ti 334.940 (R)†	160124.1	1135.02	0.71%	[5]	mg/L
Tl 190.801†	322.7	1.91	0.59%	[1]	mg/L
V 292.402†	54442.1	867.16	1.59%	[1]	mg/L
Zn 206.200 †	34025.0	439.37	1.29%	[5]	mg/L
Mg 285.213†	92188.6	656.32	0.71%	[100]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	1	Lin, Calc Int	0.0	162700	0.00000	1.000000	
Al 308.215 (R)	1	Lin, Calc Int	0.0	967.9	0.00000	1.000000	
As 188.979	1	Lin, Calc Int	0.0	295.9	0.00000	1.000000	
B 249.677	1	Lin, Calc Int	0.0	17630	0.00000	1.000000	
Ba 233.527 (R)	1	Lin, Calc Int	0.0	1845	0.00000	1.000000	
Be 313.107	1	Lin, Calc Int	0.0	3581000	0.00000	1.000000	
Ca 315.887 (R)	1	Lin, Calc Int	0.0	5625	0.00000	1.000000	

Cd 228.802	1	Lin, Calc Int	0.0	20150	0.00000	1.000000
Co 228.616	1	Lin, Calc Int	0.0	16680	0.00000	1.000000
Cr 267.716	1	Lin, Calc Int	0.0	18230	0.00000	1.000000
Cu 324.752	1	Lin, Calc Int	0.0	193800	0.00000	1.000000
Fe 238.204 (R)	1	Lin, Calc Int	0.0	1008	0.00000	1.000000
K 766.490 (R)	1	Lin, Calc Int	0.0	1902	0.00000	1.000000
Li 670.784 (R)	1	Lin, Calc Int	-0.0	89840	0.00000	1.000000
Mg 279.077 (R)	1	Lin, Calc Int	0.0	638.2	0.00000	1.000000
Mn 257.610 (R)	1	Lin, Calc Int	0.0	19830	0.00000	1.000000
Mo 202.031	1	Lin, Calc Int	0.0	1292	0.00000	1.000000
Na 589.592 (R)	1	Lin, Calc Int	0.0	7243	0.00000	1.000000
Ni 231.604	1	Lin, Calc Int	0.0	4996	0.00000	1.000000
Pb 220.353	1	Lin, Calc Int	0.0	1144	0.00000	1.000000
Sb 206.836	1	Lin, Calc Int	0.0	644.8	0.00000	1.000000
Se 196.026	1	Lin, Calc Int	0.0	284.9	0.00000	1.000000
Si 251.611 (R)	1	Lin, Calc Int	0.0	1261	0.00000	1.000000
Sn 189.927	1	Lin, Calc Int	0.0	456.3	0.00000	1.000000
Sr 421.552 (R)	1	Lin, Calc Int	0.0	286400	0.00000	1.000000
Ti 334.940 (R)	1	Lin, Calc Int	0.0	32020	0.00000	1.000000
Tl 190.801	1	Lin, Calc Int	0.0	322.7	0.00000	1.000000
V 292.402	1	Lin, Calc Int	0.0	54440	0.00000	1.000000
Zn 206.200	1	Lin, Calc Int	0.0	6805	0.00000	1.000000
Mg 285.213	1	Lin, Calc Int	0.0	921.9	0.00000	1.000000

AmecFW and KMEA, Inc. 9210 Sky Park Court San Diego, CA 92123	Reported: 8/17/2017 12:53:48PM Project: MCAS Tustin, OU 3, California Project Number: [none] Project Manager: Kurt Myers

Notes and Definitions

B	Blank contamination. The analyte is greater than 1/2 the PQL/LOQ/CRQL in the associated method blank.
D	The reported value is from a dilution.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration.
J	The reported value is an estimated value. Results are between the MDL and PQL/LOQ/CRQL.
U	The analyte was not detected and is reported as less than the LOD/MDL or as defined by the client.

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Attachment 6
Data Validation Report
(Included on CD)

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LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

KMEA
9210 Sky Park Court, Suite 220
San Diego, CA 92123
ATTN: Kelly Kwok

August 28, 2017

SUBJECT: MCAS Tustin, Data Validation

Dear Ms. Kwok,

Enclosed is the final validation report for the fraction listed below. This SDG was received on August 23 , 2017. Attachment 1 is a summary of the samples that were reviewed for analysis.

LDC Project # 39320:

SDG #	**Fraction**
1700925	Perfluorinated Alkyl Acids

The data validation was performed under Stage 2B & 4 validation guidelines. The analyses were validated using the following documents and variances, as applicable to each method:

- Final Sampling and Analysis Plan for Per- and Poly-Fluoroalkyl Substances Sampling for Groundwater Remedial Action at Operable Unit 3 Installation Restoration Program Site 1, Marine Corps Air Station Tustin, California, July 2017
- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories, Version 5.0, July 2013
- USEPA, Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, August 2014

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng
Project Manager/Senior Chemist

861 pages-SF

Attachment 1

90/10 (client select) **EDD**

LDC #39320 (KMEA San Diego, CA / MCAS Tustin)

LDC	SDG#	DATE REC'D	(2) DATE DUE	PFAs (537)																																			
Matrix:	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	1700925	08/23/17	09/07/17	3	0																																		
A	1700925	08/23/17	09/07/17	1	0																																		
Total	T/PG			4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4

Shaded cells indicate Level IV validation (all other cells are Level III review). These sample counts do not include DL, RE, MS, MSD, or DUP's.

V:\LOGIN\KMEA\39320ST.wpd

LDC Report# 39320A96

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: MCAS Tustin

LDC Report Date: September 18, 2017

Parameters: Perfluorinated Alkyl Acids

Validation Level: Stage 2B & 4

Laboratory: Vista Analytical Laboratory

Sample Delivery Group (SDG): 1700925

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
I001BC43S-170724**	1700925-01**	Water	07/24/17
I001BC50S-170724	1700925-03	Water	07/24/17
I001MW52S-170724	1700925-04	Water	07/24/17
I001MW52X-170724	1700925-05	Water	07/24/17
I001MW52S-170724MS	1700925-04MS	Water	07/24/17
I001MW52S-170724MSD	1700925-04MSD	Water	07/24/17

**Indicates sample underwent Stage 4 validation

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Sampling and Analysis Plan for Per- and Poly-Fluoroalkyl Substances Sampling for Groundwater Remedial Action at Operable Unit 3 Installation Restoration Program Site 1, Marine Corps Air Station Tustin, California (July 2017), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.0 (July 2013), and a modified outline of the USEPA National Functional Guidelines (NFG) for Superfund Organic Methods Data Review (August 2014). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Perfluorinated Alkyl Acids by Environmental Protection Agency (EPA) Method 537

All sample results were subjected to Stage 2B data validation, which comprises an evaluation of quality control (QC) summary results. Samples appended with a double asterisk on the cover page were subjected to Stage 4 data validation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.

U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).

UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.

R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met with the following exceptions:

Sample	Compound	Total Days From Sample Collection Until Extraction	Required Holding Time (in Days) From Sample Collection Until Extraction	Flag	A or P
I001MW52S-170724 I001MW52X-170724	PFBS PFHxA PFHpA PFHxS PFOA PFOS	17	14	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
I001BC43S-170724** I001BC50S-170724	PFOA	17	14	J (all detects)	A

II. LC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

III. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method.

For compounds where average relative response factors (RRFs) were utilized, the percent relative standard deviations (%RSD) were less than or equal to 20.0%.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r2) were greater than or equal to 0.990.

For each calibration point, the percent differences (%D) of its true value were less than or equal to 30.0% for all compounds.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 25.0%.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 25.0% with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
08/11/17	PFHpA	-29.7	I001MW52S-170724 I001MW52X-170724	J (all detects)	P

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks with the following exceptions:

Blank ID	Extraction Date	Compound	Concentration	Associated Samples
B7H0073-BLK1	08/10/17	PFHxS PFOS	1.82 ng/L 0.896 ng/L	I001MW52S-170724 I001MW52X-170724

Sample concentrations were compared to concentrations detected in the laboratory blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated laboratory blanks.

VI. Field Blanks

Sample EB01-170724 was identified as an equipment blank. No contaminants were found.

Sample SB01-170724 was identified as a source blank. No contaminants were found with the following exceptions:

Blank ID	Collection Date	Compound	Concentration	Associated Samples
SB01-170724	07/24/17	PFHxS	2.13 ng/L	I001BC43S-170724** I001BC50S-170724 I001MW52S-170724 I001MW52X-170724

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks.

VII. Surrogates

Surrogates were not required by the method.

VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) and relative percent differences (RPD) were not within the QC limits. No data were qualified for MS/MSD samples analyzed greater than or equal to a 5X dilution and or 4X the spiked concentration.

IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

X. Field Duplicates

Samples I001MW52S-170724 and I001MW52X-170724 were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

Compound	Concentration (ng/L)		RPD (Limits)	Difference (Limits)	Flag	A or P
	I001MW52S-170724	I001MW52X-170724				
PFBS	66700	61700	8 (≤30)	-	-	-
PFHxA	286000	278000	3 (≤30)	-	-	-
PFHpA	42600	37500	13 (≤30)	-	-	-
PFHxS	468000	357000	27 (≤30)	-	-	-
PFOA	743000	637000	15 (≤30)	-	-	-
PFOS	26900	18100	39 (≤30)	-	J (all detects)	A
PFNA	695	698	0 (≤30)	-	-	-
PFDA	13.7	18.0	-	4.3 (≤8.52)	-	-

XI. Internal Standards

All internal standard recoveries (%R) were within QC limits with the following exceptions:

Sample	Internal Standards	%R (Limits)	Affected Compound	Flag	A or P
I001BC43S-170724**	13C3-PFBS	170 (50-150)	PFBS	J (all detects)	P

Sample	Internal Standards	%R (Limits)	Affected Compound	Flag	A or P
I001BC50S-170724	13C3-PFBS	164 (50-150)	PFBS	J (all detects)	P

XII. Compound Quantitation

All compound quantitations met validation criteria for samples which underwent Stage 4 validation.

The laboratory limit of quantitation (LOQ), limit of detection (LOD), and detection limit (DL) are higher than the QAPP LOQ, LOD, and DL.

Raw data were not reviewed for Stage 2B validation.

XIII. Target Compound Identifications

All target compound identifications met validation criteria for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2B validation.

XIV. System Performance

The system performance was acceptable for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2B validation.

XV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to technical holding time, continuing calibration %D, field duplicate RPD, and internal standard %R, data were qualified as estimated in four samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

MCAS Tustin
Perfluorinated Alkyl Acids - Data Qualification Summary - SDG 1700925

Sample	Compound	Flag	A or P	Reason
I001MW52S-170724 I001MW52X-170724	PFBS PFHxA PFHpA PFHxS PFOA PFOS	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Technical holding times
I001BC43S-170724** I001BC50S-170724	PFOA	J (all detects)	A	Technical holding times
I001MW52S-170724 I001MW52X-170724	PFHpA	J (all detects)	P	Continuing calibration (%D)
I001MW52S-170724 I001MW52X-170724	PFOS	J (all detects)	A	Field duplicates (RPD)
I001BC43S-170724** I001BC50S-170724	PFBS	J (all detects)	P	Internal standards (%R)

MCAS Tustin
Perfluorinated Alkyl Acids - Laboratory Blank Data Qualification Summary - SDG 1700925

No Sample Data Qualified in this SDG

MCAS Tustin
Perfluorinated Alkyl Acids - Field Blank Data Qualification Summary - SDG 1700925

No Sample Data Qualified in this SDG

LDC #: 39320A96

SDG #: 1700925

Laboratory: Vista Analytical Laboratory

VALIDATION COMPLETENESS WORKSHEET

Stage 2B/4

Date: 8/24/17

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: LC/MS Perfluorinated Alkyl Acids (EPA Method 537)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A SW	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A A	RSD ≤ 20%, r² IEV ≤ 25%
IV.	Continuing calibration	SW	CCV ≤ 25%
V.	Laboratory Blanks	SW	
VI.	Field blanks	SW	SB = 2, EB = 6
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates	SW	
IX.	Laboratory control samples	A	OPR
X.	Field duplicates	SW	D = 4+5
XI.	Internal standards	SW	
XII.	Compound quantitation RL/LOQ/LODs	SW	Not reviewed for Stage 2B validation.
XIII.	Target compound identification	A	Not reviewed for Stage 2B validation.
XIV.	System performance	A	Not reviewed for Stage 2B validation.
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

** Indicates sample was underwent Stage 4 review

	Client ID	Lab ID	Matrix	Date
1	I001BC43S-170724**	1700925-01**	Water	07/24/17
~~2~~	~~SB01-170724~~	~~1700925-02~~	~~Water~~	~~07/24/17~~
3	I001BC50S-170724	1700925-03	Water	07/24/17
4	I001MW52S-170724	1700925-04	Water	07/24/17
5	I001MW52X-170724	1700925-05	Water	07/24/17
~~6~~	~~EB01-170724~~	~~1700925-06~~	~~Water~~	~~07/24/17~~
7	I001MW52S-170724MS	1700925-04MS	Water	07/24/17
8	I001MW52S-170724MSD	1700925-04MSD	Water	07/24/17
9				
10				

Notes:

	BTF0121-BK1						
	BTH00T4-BK1						
	BTH00T3-BK1						

LDC #: 39320A96

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: 9
2nd Reviewer: JG

Method: LCMS (EPA Method 537)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?		✓		
Was cooler temperature criteria met?	✓			
II. LC/MS Instrument performance check				
Were the instrument performance reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit criteria of ≥ 0.990?	✓			
Were all analytes within 70-130% or percent differences (%D) ≤ ~~30~~ 20% of their true value for each calibration standard	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	✓			
Were all percent differences (%D) ≤ ~~30~~ 25%?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) of the continuing calibration ≤ ~~30~~ 25%?		✓		
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Field blanks				
Were field blanks identified in this SDG?	✓			
Were target compounds detected in the field blanks?	✓			
VIII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
IX. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 39320A96

VALIDATION FINDINGS CHECKLIST

Reviewer: Q
2nd Reviewer: JVR

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?.	✓			
XI. Internal standards				
Were internal standard area counts within ± 50% of the associated calibration standard?		✓		
XII. Compound quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET COMPOUND WORKSHEET

METHOD: PFOS/PFOAs

A. Perfluorohexanoic acid (PFHxA)				
B. Perfluoroheptanoic acid (PFHpA)				
C. Perfluorooctanoic acid (PFOA)				
D. Perfluorononanoic acid (PFNA)				
E. Perfluorodecanoic acid (PFDA)				
F. Perfluoroundecanoic acid (PFUnA)				
G. Perfluorododecanoic acid (PFDoA)				
H. Perfluorotridecanoic acid (PFTriA)				
I. Perfluorotetradecanoic acid (PFTeA)				
J. Perfluorobutanesulfonic acid (PFBS)				
K. Perfluorohexanesulfonic acid (PFHxS)				
L. Perfluoroheptanesulfonic acid (PFHpS)				
M. Perfluorooctanesulfonic acid (PFOS)				
N.Perfluorodecanesulfonic acid (PFDS)				
O. Perfluorooctane Sulfonamide (FOSA)				
P. Perfluorobutanoic acid (PFBA)				
Q. Perfluoropentanoic acis (PFPeA)				
R. 6:2FTS				
S. 8:2FTS				

LDC #: 39320A96

VALIDATION FINDINGS WORKSHEET
Technical Holding Times

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: JVG

All circled dates have exceeded the technical holding times.
Y N N/A Were all cooler temperatures within validation criteria?

METHOD: __GC__ HPLC

Sample ID	Matrix	Preserved	Sampling Date	Extraction date	Analysis date	Total # of Days	Qualifier
4-5 (dets)	W		7-24-17	8-10-17		18 17	~~UJ/A~~ *
~~E3~~ 1, 3. ↓	W		↓	↓		20 17	~~UJ/A~~ **
* qual PFBS, PFHxA, PFHpA, PFHxS, PFOA, PFOS							
** qual PFOA only							

TECHNICAL HOLDING TIME CRITERIA

VOLATILES:
- Water unpreserved: Aromatic within 7 days, non-aromatic within 14 days of sample collection.
- Water preserved: Both within 14 days of sample collection.
- Soils: Both within 14 days of sample collection.

EXTRACTABLES:
- Water: Extracted within 7 days, analyzed within 40 days.
- Soil: Extracted within 14 days, analyzed within 40 days.

LDC #39320A96

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: 9
2nd Reviewer: JZ

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed after every 10 injections for each instrument?

Y N N/A Were all continuing calibration percent differences (%D) ≤~~30 %?~~ >25% ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤~~30.0%~~) >25%	Finding RRF (Limit:)	Associated Samples	Qualifications
	8/1/12	IT0810M2_66	PFHpA	-29.7		4-5 (dets)	J/UJ/P
	8/1/12	IT0811M2.2	PFHxA	-27.0		~~BK~~, ~~4-5~~	J/UJ/P

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LDC #: 39320596

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: 9
2nd Reviewer: JVB

METHOD: ___ GC ✓ HPLC MS

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Level IV/D Only

Y N N/A (Gasoline and aromatics only)Was a method blank analyzed with each 24 hour batch?
Y N N/A Was a method blank analyzed for each analytical / extraction batch of ≤20 samples?

Blank extraction date: 8/10/17 **Blank analysis date:** 8/11/17 **Associated samples:** 4-5
Conc. units: ng/L

Compound	Blank ID	Sample Identification						
BT	0073-BK1							
PFHxS	1.82							
PFOS	0.896							

Blank extraction date: 7/31/17 **Blank analysis date:** 8/9/17 **Associated samples:** None
Conc. units: ng/L

Compound	Blank ID	Sample Identification						
BT	0121-BK1							
PFOA	4.35							

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 39328/96

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: [illegible]
2nd Reviewer: JR

METHOD: GC/LC/MS

Y N N/A Field blanks were identified in this SDG.
Y N N/A Were target compounds detected in the field blanks?

Blank units: NS/L **Associated sample units:** NS/L
Sampling date: TRIP
Field blank type: (circle one) Field Blank / Rinsate / Other: SB Associated Samples: 1, 3-5

Compound	Blank ID	Sample Identification								
	2									
PFHxS	2.13									

Blank units:_____ **Associated sample units:**_____
Sampling date:_____
Field blank type: (circle one) Field Blank / Rinsate / Other:_____ Associated Samples:_____

Compound	Blank ID	Sample Identification								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with compound concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

LDC #: 39330A96

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates/Duplicates

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: JNG

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) or duplicate sample analyzed for each matrix in this SDG?
Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?
Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?
Y N N/A Were all duplicate sample relative percent differences (RPD) or differences within QC limits?

#	Date	MS/MSD/DUP ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		7/8	~~PFNA~~	134 (70-130)	149 (70-130)		4	No Qual
			others	%R and	RPD out			>4x SA and DF
								~~AA~~

V:\Validation Worksheets\PFOS-537M\MS_DUP_LCMS.wpd

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LDC#: 39322X96

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: 9
2nd Reviewer: JB

METHOD: PFCs (Method 537 mod)

Compound	Concentration (ng/L)		(≤30) RPD	Difference	Limits	Qual
	4	5				
PFBS	66700	61700	8			
PFHxA	286000	278000	3			
PFHpA	42600	37500	13			
PFHxS	468000	357000	27			
PFOA	743000	637000	15			
PFOS	26900	18100	39			Not=A
PFNA	695	698				
PFDA	13.7	18.0		4.3	≤8.52	

LDC #: 39372A96

VALIDATION FINDINGS WORKSHEET
Internal Standards

Page: 1 of 1
Reviewer: 9
2nd Reviewer: NB

METHOD: LC/MS PFCs

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all internal standard area counts within 50-150% limits?

Y N N/A Were the retention times of the internal standards within +/- 30 seconds of the retention times of the associated calibration standard?

#	Date	Sample ID	Internal Standard	Area (Limits)	RT (Limits)	Qualifications
		1 (dets)	13C3-PFBS	170 (50-150)		~~J/UJ/R~~ (PFBS)
		3 (dets)	↓	164 ↓		↓ (PFBS)

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LDC #: 39320A96

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: PG
2nd Reviewer: JM

METHOD: __ GC ✓ HPLC/MS

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	Finding	Associated Samples	Qualifications
	All	The laboratory limit of quantitation (LOQ), limit of detection (LOD) and detection limit (DL) are higher than the QAPP LOQ, LOD and		Text
		DL		

Comments: See sample calculation verification worksheet for recalculations

LDC#: 39320A96

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: Q
2nd Reviewer: SVB

Method: LC/MS/MS PFCs

Calibration Date	System	Compound	Standard	(Y) Response	(X) Concentration
8/1/2017	Q4	PFBS	0	0.5318012	0.25
			s1	1.0024725	0.50
			s2	2.005095	1.00
			s3	4.1366337	2.00
			s4	9.4071825	5.00
			s5	18.311911	10.00
			s6	89.723891	50.00
			s7	185.21046	100.00
			s8	479.232035	250.00

Regression Output		*Reported*
Constant	*-1.167746*	*0.067014*
Std Err of Y Est		
R Squared	*0.999710*	*0.999400*
Degrees of Freedom		
X Coefficient(s)	*1.910618*	*1.884080*
Std Err of Coef.		
Correlation Coefficient	*0.999855*	
Coefficient of Determination (r^2)	*0.999710*	*0.999400*

LDC#: 39320A96

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer:
2nd Reviewer: JVG

Method: LC/MS/MS PFCs

Calibration Date	System	Compound	Standard	(Y) Response	(X) Concentration
8/10/2017	Q4	PFOA	0	0.3432812	0.25
			s1	0.6077262	0.50
			s2	1.1292337	1.00
			s3	2.3148962	2.00
			s4	5.4154862	5.00
			s5	10.4506410	10.00
			s6	51.9616012	50.00
			s7	101.479398	100.00
			s8	238.210062	250.00
			s9	435.986160	500.00

Regression Output		*Reported*
Constant	*3.674614*	*0.151461*
Std Err of Y Est		
R Squared	*0.997662*	*0.998608*
Degrees of Freedom		
X Coefficient(s)	*0.882887*	*0.980416*
Std Err of Coef.		
Correlation Coefficient	*0.998830*	
Coefficient of Determination (r^2)	*0.997662*	*0.998608*

LDC #: 39320A96

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: 9
2nd Reviewer: NG

METHOD: GC ✓ HPLC/MS

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	IT0802ML2	8/2/IT	PFBS	1.0	1.02	1.02	2.0	1.82
2	IT0803ML2	8/4/IT	↓	10.0	9.45	9.44	5.5	5.6
3	IT0811ML2	8/11/IT	PFOA	1.0	1.02	1.02	2.36	2.36
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 39332A96

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: 9
2nd Reviewer: JVG

METHOD: ___ GC ✓ HPLC MS

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added

RPD =(((SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 2/3

Compound	Spike Added (ug/L)		Sample Conc. (ug/L)	Spike Sample Concentration (ug/L)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
PFNA	86.6	84.3	695			134		149		10.6	

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 39330A96

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: Q
2nd Reviewer: JVB

METHOD: __ GC ✓ HPLC / MB

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA

RPD = I SSCLCS - SSCLCSD I * 2/(SSCLCS + SSCLCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: ~~PFNA~~ BT6012/BS1

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
~~PFNA~~ PFBS	80.0	NA	73.8	NA	92.3	92.3				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 39320496

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ___ GC ✓ HPLC / MS

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. 1 Compound Name PFBS

Concentration = $\frac{(4.63e3 \times 12.5)(1)}{(4.05e3)(0.121)}$

= 62.4 ug/L

#	Sample ID	Compound	Reported Concentrations (ug/L)	Recalculated Results Concentrations ( )	Qualifications
	1	PFBS	62.4		

Comments: _____

SAMPCALew.wpd

LDC #: 39320

EDD POPULATION COMPLETENESS WORKSHEET

Date: 8/28
Page: 1 of 1
2nd Reviewer: BA

The LDC job number listed above was entered by JE.

	EDD Process		Comments/Action
I.	EDD Completeness	-	
Ia.	- All methods present?	Y	
Ib.	- All samples present/match report?	Y	
Ic.	- All reported analytes present?	Y	
Id.	- 10% or 100% verification of EDD?	Y	
II.	EDD Preparation/Entry	-	
IIa.	- Carryover U/J?	—	
IIb.	- Reason Codes used? If so, note which codes.	Y	client
IIc.	- Additional Information (QC Level, Validator, Validated Y/N, etc.)	Y	
III.	Reasonableness Checks	-	
IIIa.	- Do all qualified ND results have ND qualifier (e.g. UJ)?	Y	
IIIb.	- Do all qualified detect results have detect qualifier (e.g. J)?	Y	
IIIc.	- If reason codes are used, do all qualified results have reason code field populated, and vice versa?	Y	
IIId.	-Does the detect flag require changing for blank qualifier? If so, are all U results marked ND?	+	
IIIe.	- Do blank concentrations in report match EDD where data was qualified due to blank contamination?	—	
IIIf.	- Were multiple results reported due to dilutions/reanalysis? If so, were results qualified appropriately?	+	
IIIg.	-Are there any discrepancies between the data packet and the EDD?	N	

Notes: *see discrepancy sheet

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