
Analytical Report

Fluorochemical Characterization of Water and Sediment Samples

Decatur Bakers Creek #2 – July 2003 (E03-0561)

Exygen Research Laboratory Report No. L34910 Revision 1

Testing Laboratory

Exygen Research
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Requester

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1 Introduction

Results are reported for the analysis of surface water and sediment samples received by Exygen Research (Exygen) from Pace Analytical. The Exygen study number assigned to the project is L34910.

Specific fluorochemical characterization by liquid chromatography / tandem mass spectrometry (LC/MS/MS) was requested for all samples. A total of 26 samples were received for analysis.

The samples were prepared and analyzed by LC/MS/MS for the following list of fluorochemicals:

- Table 1: Target Analysis

Compound Name	Acronym
Perfluorohexanesulfonate	C6 Sulfonate (PFHS)
Perfluorooctanesulfonate	C8 Sulfonate (PFOS)
Perfluorooctanoic Acid	C8 Acid (PFOA)
Perfluorooctanesulfonylamide	FOSA

The analytical methods used were originally developed for groundwater samples and were validated by Exygen. The validation protocol and results are on file with Exygen. Only the C8 Sulfonate, FOSA, and C8 Acid were included in the original method validation. It should be noted that the quality control elements included in this analysis demonstrate the applicability of the method to the additional analytes.

2 Sample Receipt

The samples were submitted in plastic containers. All samples were cooled to 4°C from time of collection to receipt at Exygen Research. Samples were stored at 4°C from receipt at Exygen Research until analysis. Samples were collected on 7/21/03 and 7/23/03. Chain-of-custody information is presented in Attachment C.

3 Holding Times

Field and laboratory spikes of these fluorochemicals have shown stability for periods greater than 90 days. Samples were analyzed within 30 days of receipt.

4 Methods - Analytical and Preparatory

4.1 LC/MS/MS

4.1.1 Sample Preparation for LC/MS/MS Analysis

Water samples were initially treated with 200 μ L of 250 mg/L sodium thiosulfate solution to remove residual chlorine. Solid phase extraction (SPE) was used to prepare the samples for LC/MS/MS analysis. A forty-milliliter portion of sample was used for analysis. The samples were transferred to a C_{18} SPE cartridge. The cartridge was eluted with 5 mL of 100% methanol. This treatment resulted in an eight-fold concentration of the diluted samples prior to analysis.

Sediment samples were first extracted into methanol (5 grams of sediment to 5 mL of methanol). The methanol extract was diluted to forty-milliliters and treated in the same manner as the water samples, using SPE.

4.1.2 Sample Analysis by LC/MS/MS

In HPLC, an aliquot of extract is injected and passed through a liquid-phase chromatographic column. Based on the affinity of the analyte for the stationary phase in the column relative to the liquid mobile phase, the analyte is retained for a characteristic amount of time. Following HPLC separation, ES/MS provides a rapid and accurate means for analyzing a wide range of organic compounds, including fluorochemicals. Electrospray is generally operated at relatively mild temperatures; molecules are ionized, fragmented, and detected. Ions characteristic of known fluorochemicals are observed and quantitated against standards.

A Hewlett-Packard HP1100 HPLC system coupled to a Micromass Ultima MS/MS was used to analyze the sample extracts. Analysis was performed using selected reaction monitoring (SRM). Samples extractions and analyses were performed between 7/31/03 and 8/13/03. Exact dates for extraction and analysis of each sample batch are given in the raw data. Raw analytical data is provided in Attachments D and E.

5 Analysis

5.1 Calibration

A 7-point calibration curve was analyzed at the beginning and end of the analytical sequence for the compounds of interest. The calibration points were prepared at 0, 25, 50, 100, 250, 500, and 1000 ng/L (ppt) for LC/MS/MS analysis. The instrument response versus the concentration was plotted for each point. Using linear regression with 1/x weighting, the slope, y-intercept and correlation coefficient (r) and coefficient of determination (r^2) were determined. A calibration curve is acceptable if $r \geq 0.985$ ($r^2 \geq 0.970$).

Calibration standards are prepared using the same SPE procedure used for samples.

Calibration check standards were analyzed periodically (every three to five sample injections) throughout the analysis sequence. Compliance is obtained if the standard analyte concentrations are within $\pm 20\%$ of the actual value.

All calibration criteria were met for this analysis.

5.2 Blanks

Extraction blanks were prepared and analyzed with every extraction batch of samples. The extraction blanks should not have any target analytes present at or above the concentration of the low-level calibration standard. For these samples, the extraction blanks were compliant.

Instrument blanks in the form of clean methanol solvent were also analyzed after every high-level calibration standard, and after known high-level samples. Again, the blanks should not have any target analytes present at or above the low-level calibration standard. For the samples presented here the instrument blanks are compliant.

5.3 Surrogates

Surrogate spikes are not a component of the LC/MS/MS analytical methods.

5.4 Matrix Spikes

Field matrix spikes were prepared at low and high levels for each sample for all compounds of interest. Single laboratory matrix spikes were also performed for each sample. Laboratory control spikes (see section 5.6) consisting of laboratory water spiked at the time of extraction were performed with each analytical set. Matrix spike recoveries are given in Attachment B. For sediment samples, recovery is calculated from the amount present in the sample extract. Please see Section 5.7 for additional discussion of matrix spike recoveries.

5.5 Duplicates

Field and laboratory duplicates were performed for each sample. The duplicate results are included with the sample results in Attachment A.

5.6 Laboratory Control Samples

For LC/MS/MS analyses, MilliQ water was spiked with all compounds with each extraction set. All recoveries for all compounds were between 70-130% in each LCS. Results are given along with the raw data in Attachment D.

5.7 Statement of Accuracy

Based on results of field spikes, laboratory spikes, field blank spikes, and laboratory control spikes, the analytical accuracy for all compounds is $\pm 30\%$. Exceptions for the water samples are as follows: BC2 SW-04 high spike (PFOA – 57%, PFOS – 62%, FOSA – 58%), BC2 SW-05 high spike (PFOA – 66%, FOSA – 40%), BC2 SW-06 high spike (FOSA – 60%), Outfall to River SW-25 (FOSA – 58%). Also, several low spike samples showed unacceptable recoveries in cases where the spiking concentration was comparable or below the inherent sample concentration. However, all laboratory control spikes, laboratory matrix spikes, and all other field spikes showed recoveries between 70% and 130% for all compounds.

The accuracy for the sediment samples is based upon laboratory spike recoveries, all of which were between 70% and 130% for all compounds.

6 Data Summary

Please see Attachment A for a detailed listing of the analytical results. Results are reported in parts per billion (ppb) (ng/mL) for the water samples. Sediment samples are also reported in units of parts per billion (ppb) (ng/g). Sediment results are reported on both an as-received and dry-weight basis.

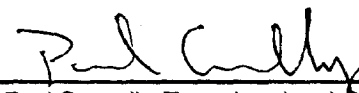
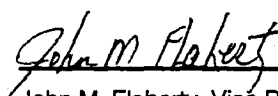
7 Data/Sample Retention

Samples are disposed of one month after the report is issued unless otherwise specified. All electronic data is archived on retrievable media and hard copy reports are stored in data folders maintained by Exygen.

8 Attachments

- 8.1 Attachment A: Results
- 8.2 Attachment B: Matrix Spike Recoveries
- 8.3 Attachment C: Chain of Custody
- 8.4 Attachment D: Raw Analytical Data (Surface Water Samples)
- 8.5 Attachment E: Raw Analytical Data (Sediment Samples)

9 Signatures

	8/28/23
Paul Connolly, Team Leader - LCMS	Date
	8/28/23
John M. Flaherty, Vice President	Date

Other Lab Members Contributing to Data

Karen Risha

SECTION A

Summary of PFOA, PFHS, PFOS and FOSA in Water Samples

Sample ID	Analyte Found (ng/mL)	
	C8 Acid PFOA	C6 Sulfonate PFHS
	Perfluorooctanoic Acid	Perfluorohexanesulfonate
BC2 SW-04	4.21	0.896
BC2 SW-04*	4.21	0.882
BC2 SW-04 Dup	2.54	0.571
BC2 SW-05	0.591	0.155
BC2 SW-05*	0.616	0.152
BC2 SW-05 Dup	1.56	0.377
BC2-SW-06	12.1	6.06
BC2-SW-06*	12.3	6.30
BC2-SW-06 Dup	11.6	5.87
Outfall to River SW-25	15.8	7.66
Outfall to River SW-25*	16.0	7.10
Outfall to River SW-25 Dup	14.4	6.77
Equipment Blank-Pump	ND	ND
Equipment Blank-Dredge	ND	ND
Field Control/Travel Blank	ND	ND

Sample ID	Analyte Found (ng/mL)	
	C8 Sulfonate PFOS	FOSA
	Perfluorooctanesulfonate	Perfluorooctanesulfonylamide
BC2 SW-04	11.5	1.39
BC2 SW-04*	11.5	1.37
BC2 SW-04 Dup	8.25	0.790
BC2 SW-05	1.67	0.146
BC2 SW-05*	1.54	0.150
BC2 SW-05 Dup	4.33	0.389
BC2-SW-06	26.1	2.43
BC2-SW-06*	26.7	2.30
BC2-SW-06 Dup	25.1	2.57
Outfall to River SW-25	31.2	3.26
Outfall to River SW-25*	31.5	3.18
Outfall to River SW-25 Dup	30.8	3.28
Equipment Blank-Pump	ND	ND
Equipment Blank-Dredge	ND	ND
Field Control/Travel Blank	ND	ND

ND=Not Detected=Response between 0 and 0.025 ng/mL

NQ=Not Quantifiable=Response between 0.025 ng/mL and LOQ (0.05 ng/mL)

*Laboratory Duplicate

STANDARD TERMS AND CONDITIONS

Services provided by Exygen Research are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

CONFIDENTIALITY—Exygen Research ("Exygen," "us," or "we") maintains the strictest confidentiality in all of our client interactions. If a signed confidentiality agreement is required, we will provide one. If a regulatory or legal body subpoenas information, the client will be notified promptly. The client agrees not to use Exygen's name and/or data in any manner that might cause harm to Exygen's reputation or business. Approval must be obtained, in writing, before Exygen's name can be published in any way.

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BILLING—All fees and charges are billed directly to the client requesting services. Exygen will not bill a third party without prior notification in writing, via a signed statement acknowledging and accepting responsibility for payment. Exygen will assume that the paperwork submitted with a sample describes the desired testing protocol. Any changes to the protocol must be submitted in writing. Please fax changes to Exygen marked, "URGENT" to your assigned representative. If changes are made after the originally requested testing has been initiated or completed, the client accepts responsibility for payment. Exygen will not be responsible for hold times that are missed due to such changes.

RUSH SERVICE—Exygen routinely offers expedited turnaround times on critical analyses. Rush analysis services are contingent upon availability and prearrangement with an authorized Exygen representative. A surcharge is usually added to the list fee if rush analysis is requested.

MINIMUM FEE—The minimum fee for commercial services is one hundred dollars (\$100).

SAMPLE COLLECTION/SUBMISSION—Client shall be responsible for proper collection, preservation, packing and packaging, and shipment of the sample(s) in accordance with applicable law and good commercial practice. Title and risk of loss with respect to submitted samples shall at all times remain with client prior to acceptance by an Exygen sample custodian. Exygen will initiate a chain-of-custody upon sample receipt unless the client includes one with the sample(s). By request, Exygen will provide chain-of-custody forms for client's use.

All samples submitted must be accompanied by: purchase order, or signed quotation; sample description, including sample type, source, time and date of collection; specific analyses requested; estimated concentration levels; requested report date; current billing address; and other relevant information.

Upon request, Exygen will provide and ship appropriate sample containers to clients. These containers will include the appropriate preservative if particular analyses require one. It is the responsibility of the client to handle these preserved containers safely, and using all appropriate safety precautions. Clients requesting overnight delivery of sample containers will be invoiced for freight. Exygen reserves the right to charge a fee for sample containers.

SAMPLE DISPOSAL—Exygen retains samples for one month after reporting results, then disposes of or returns the sample. Unless the client

requests that the sample(s) be returned, or prior arrangements have been made for long-term storage, Exygen shall dispose of the sample(s). Exygen shall charge a monthly fee for long-term storage. Samples found or suspected to contain hazardous waste, according to definitions in state and/or federal guidelines, will be returned to the client upon completion of the analysis. The cost of returning the sample(s) will be invoiced to the client. Exygen reserves the right to charge a disposal fee for the disposal of any and all samples unless returned by Exygen to client. Exygen shall, unless the nature and character of the sample dictates otherwise, store all samples under locked, temperature-controlled conditions. An internal chain-of-custody is maintained for each lot of samples received.

HAZARD COMMUNICATION—The client has the responsibility to inform the laboratory of any known or suspected hazardous characteristics of the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

QUALITY ASSURANCE—Exygen will perform services consistent with its Quality Assurance Standard Operating Procedures (SOPs), the terms of which are expressly incorporated herein by reference; provided, however, it shall be the exclusive responsibility of the client to confirm that Exygen's standard practices will meet the client's needs prior to placing an order for work. In the event client desires an alternative to these SOPs, such requests must be made in writing prior to sample submission and acceptance by Exygen.

ETHICS POLICY—Exygen Research strives to provide its clients with the highest quality data in the fastest realistic turnaround time. We balance the high standards of this goal by insisting that each employee also perform within the guidelines of the highest possible professional ethics. Each Exygen employee is required to sign a statement of personal and professional integrity.

SPECIAL REPORTS—Additional charges may be necessary for custom report formats.

LITIGATION—All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Exygen Research shall be invoiced by Exygen and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations, and for any and all other expenses associated with said litigation.

INDEMNIFICATION, LIABILITY, AND INSURANCE—Exygen agrees to indemnify, defend, and save the client, its officers, directors, employees, agents, and representatives harmless from all losses, expenses, demands, and claims made against the client, its officers, directors, employees, agents and representatives because of any personal injuries, death, or property damage to the extent caused by the negligence or willful misconduct of Exygen, its employees, agents, or representatives in connection with the performance of services under this agreement, except to the extent such losses, expenses, demands, or claims, occur as a result of the negligent or willful acts or omissions of the client, its officers, directors, employees, agents, and representatives; however, such indemnification and damages shall, in the aggregate, be limited to the amount equal to the lesser of (a) damages suffered by the client as the direct result thereof, or (b) the total amount paid to Exygen for the work herein covered. Exygen will, if requested by the client, furnish certificates of insurance from its carrier evidencing appropriate insurance coverage.

WARRANTY AND LIMITS OF LIABILITY—In accepting analytical work, Exygen guarantees the accuracy of the test results for the sample as submitted within the tolerances set forth in the SOPs. We disclaim any other warranties, expressed or implied by law. Exygen does not accept any legal responsibility for the purposes for which client uses the test results. Exygen will not accept any purchase order or any other order for work that includes conditions that vary from these Standard Conditions.

ACCEPTANCE OF PURCHASE ORDER—This Purchase Order becomes a binding agreement, subject to the specific terms and conditions stated herein, upon Exygen's commencement of work.

Sediment

Summary of PFOA, PFHS, PFOS and FOSA In Soil Samples

Sample ID	Analyte Found (ng/g, as received) <i>Wet wt.</i>	
	C8 Acid PFOA	C6 Sulfonate PFHS
	Perfluorooctanoic Acid	Perfluorohexanesulfonate
BC2 SED-04	3.02	0.566
BC2 SED-04*	2.14	0.413
BC2 SED-05	5.14	1.45
BC2 SED-05*	4.41	1.75
BC2-SED-06	14.2	2.46
BC2-SED-06*	13.6	2.61
Outfall to River SED-25	10.7	3.19
Outfall to River SED-25*	7.59	2.26
Outfall to River SED-25 Dup	17.7	4.98

Sample ID	Analyte Found (ng/g, as received)	
	C8 Sulfonate PFOS	FOSA
	Perfluorooctanesulfonate	Perfluorooctanesulfonylamide
BC2 SED-04	14.6	7.15
BC2 SED-04*	11.9	7.84
BC2 SED-05	22.8	7.86
BC2 SED-05*	25.0	12.1
BC2-SED-06	880	71.4
BC2-SED-06*	992	83.2
Outfall to River SED-25	107	28.0
Outfall to River SED-25*	72.1	23.5
Outfall to River SED-25 Dup	140	35.7

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NQ=Not Quantifiable=Response between 0.2 ng/g and LOQ (0.4 ng/g)

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Sediment
Summary of PFOA, PFHS, PFOS and FOSA in ~~Soil~~ Samples

Sample ID	Analyte Found (ng/g, dry weight)	
	C8 Acid PFOA	C6 Sulfonate PFHS
	Perfluorooctanoic Acid	Perfluorohexanesulfonate
BC2 SED-04	4.31	0.809
BC2 SED-04*	3.06	0.591
BC2 SED-05	7.39	2.09
BC2 SED-05*	6.34	2.51
BC2 SED-06	23.6	4.08
BC2 SED-06*	22.5	4.33
Outfall to River SED-25	16.9	5.05
Outfall to River SED-25*	12.0	3.57
Outfall to River SED-25 Dup	26.2	7.39

Sample ID	Analyte Found (ng/g, dry weight)	
	C8 Sulfonate PFOS	FOSA
	Perfluorooctanesulfonate	Perfluorooctanesulfonamide
BC2 SED-04	20.9	10.2
BC2 SED-04*	17.0	11.2
BC2 SED-05	32.8	11.3
BC2 SED-05*	36.0	17.4
BC2 SED-06	1460	118
BC2 SED-06*	1640	138
Outfall to River SED-25	169	44.3
Outfall to River SED-25*	114	37.2
Outfall to River SED-25 Dup	208	52.9

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requests that the sample(s) be returned, or prior arrangements have been made for long-term storage, Exygen shall dispose of the sample(s). Exygen shall charge a monthly fee for long-term storage. Samples found or suspected to contain hazardous waste, according to definitions in state or federal guidelines, will be returned to the client upon completion of the analysis. The cost of returning the sample(s) will be invoiced to the client. Exygen reserves the right to charge a disposal fee for the disposal of any and all samples unless returned by Exygen to client. Exygen shall, unless the nature and character of the sample dictates otherwise, store all samples under locked, temperature-controlled conditions. An internal chain-of-custody is maintained for each lot of samples received.

HAZARD COMMUNICATION—The client has the responsibility to inform the laboratory of any known or suspected hazardous characteristics of the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

QUALITY ASSURANCE—Exygen will perform services consistent with its Quality Assurance Standard Operating Procedures (SOPs), the terms of which are expressly incorporated herein by reference; provided, however, it shall be the exclusive responsibility of the client to confirm that Exygen's standard practices will meet the client's needs prior to placing an order for work. In the event client desires an alternative to these SOPs, such requests must be made in writing prior to sample submission and acceptance by Exygen.

ETHICS POLICY—Exygen Research strives to provide its clients with the highest quality data in the fastest realistic turnaround time. We balance the high standards of this goal by insisting that each employee also perform within the guidelines of the highest possible professional ethics. Each Exygen employee is required to sign a statement of personal and professional integrity.

SPECIAL REPORTS—Additional charges may be necessary for custom report formats.

LITIGATION—All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Exygen Research shall be invoiced by Exygen and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations, and for any and all other expenses associated with said litigation.

INDEMNIFICATION, LIABILITY, AND INSURANCE—Exygen agrees to indemnify, defend, and save the client, its officers, directors, employees, agents, and representatives harmless from all losses, expenses, demands, and claims made against the client, its officers, directors, employees, agents and representatives because of any personal injuries, death, or property damage to the extent caused by the negligence or willful misconduct of Exygen, its employees, agents, or representatives in connection with the performance of services under this agreement, except to the extent such losses, expenses, demands, or claims, occur as a result of the negligent or willful acts or omissions of the client, its officers, directors, employees, agents, and representatives; however, such indemnification and damages shall, in the aggregate, be limited to the amount equal to the lesser of (a) damages suffered by the client as the direct result thereof, or (b) the total amount paid to Exygen for the work herein covered. Exygen will, if requested by the client, furnish certificates of insurance from its carrier evidencing appropriate insurance coverage.

WARRANTY AND LIMITS OF LIABILITY—In accepting analytical work, Exygen guarantees the accuracy of the test results for the sample as submitted within the tolerances set forth in the SOPs. We disclaim any other warranties, expressed or implied by law. Exygen does not accept any legal responsibility for the purposes for which client uses the test results. Exygen will not accept any purchase order or any other order for work that includes conditions that vary from these Standard Conditions.

ACCEPTANCE OF PURCHASE ORDER—This Purchase Order becomes a binding agreement, subject to the specific terms and conditions stated herein, upon Exygen's commencement of work.

SECTION B

Recovery Summary for PFOA, PFHS, PFOS and FOSA in Water

Sample Description	C8 Acid PFOA				C6 Sulfonate PFHS			
	Amount Spiked (ng/mL)	Amt Found In Sample (ng/mL)	Amount Recovered (ng/mL)	Recovery (%)	Amount Spiked (ng/mL)	Amt Found In Sample (ng/mL)	Amount Recovered (ng/mL)	Recovery (%)
BC2 SW-04 Lab Spike	5	4.21	8.14	79	5	0.896	5.52	92
BC2 SW-04 Low Spike	0.1	4.21	2.76	-1450*	0.1	0.896	0.647	-249*
BC2 SW-04 High Spike	10	4.21	9.92	57	10	0.896	9.73	88
BC2 SW-05 Lab Spike	5	0.591	4.96	87	5	0.155	5.00	97
BC2 SW-05 Low Spike	0.1	0.591	2.17	1579*	0.1	0.155	0.607	452
BC2 SW-05 High Spike	10	0.591	7.21	66	10	0.155	9.58	94
BC2 SW-06 Lab Spike	5	12.1	17.8	114	5	6.06	11.8	115
BC2 SW-06 Low Spike	0.1	12.1	13.9	1800*	0.1	6.06	7.11	1050*
BC2 SW-06 High Spike	10	12.1	24.2	121	10	6.06	17.4	113
Outfall to River SW-25 Lab Spike	5	15.8	22.1	126	5	7.66	12.2	91
Outfall to River SW-25 Low Spike	0.1	15.8	15.0	-800*	0.1	7.66	6.64	-1020*
Outfall to River SW-25 High Spike	10	15.8	26.2	104	10	7.66	18.1	104
Field Control/Travel Blank Low Spike	0.1	ND	0.114	114	0.1	ND	0.119	119
Field Control/Travel Blank High Spike	10	ND	11.9	119	10	ND	10.8	108

Sample Description	C8 Sulfonate PFOS				FOSA			
	Amount Spiked (ng/mL)	Amt Found In Sample (ng/mL)	Amount Recovered (ng/mL)	Recovery (%)	Amount Spiked (ng/mL)	Amt Found In Sample (ng/mL)	Amount Recovered (ng/mL)	Recovery (%)
BC2 SW-04 Lab Spike	5	11.5	17.1	112	5	1.39	5.58	84
BC2 SW-04 Low Spike	0.1	11.5	6.89	-4610*	0.1	1.39	0.672	-718*
BC2 SW-04 High Spike	10	11.5	17.7	62	10	1.39	7.18	58
BC2 SW-05 Lab Spike	5	1.67	5.94	85	5	0.146	4.86	94
BC2 SW-05 Low Spike	0.1	1.67	5.37	3700*	0.1	0.146	0.498	352
BC2 SW-05 High Spike	10	1.67	12.8	111	10	0.146	4.14	40
BC2 SW-06 Lab Spike	25	26.1	49.8	95	5	2.43	7.18	95
BC2 SW-06 Low Spike	0.1	26.1	32.1	6000*	0.1	2.43	2.55	120*
BC2 SW-06 High Spike	10	26.1	43.9	178	10	2.43	8.44	80
Outfall to River SW-25 Lab Spike	50	31.2	80.9	99	5	3.26	7.97	94
Outfall to River SW-25 Low Spike	0.1	31.2	29.4	-1800*	0.1	3.26	2.66	-600*
Outfall to River SW-25 High Spike	10	31.2	41.2	100	10	3.26	9.02	58
Field Control/Travel Blank Low Spike	0.1	ND	0.109	109	0.1	ND	0.0898	90
Field Control/Travel Blank High Spike	10	ND	11.4	114	10	ND	11.9	119

ND=Not Detected=Response between 0 and 0.025 ng/mL

NQ=Not Quantifiable=Response between 0.025 ng/mL and LOQ (0.05 ng/mL)

*Sample residue significantly exceeds the spiking level; therefore, an accurate recovery cannot be calculated.

Recovery Summary for PFOA, PFHS, PFOS and FOSA in Soil

C8 Acid PFOA					C8 Sulfonate PFHS			
Sample Description	Amount Spiked (ng/g)	Amt Found in Sample (ng/g)	Amount Recovered (ng/g)	Recovery (%)	Amount Spiked (ng/g)	Amt Found in Sample (ng/g)	Amount Recovered (ng/g)	Recovery (%)
BC2 SED-04 Lab Spike	40	3.02	41.5	96	40	0.566	42.2	104
BC2 SED-05 Lab Spike	40	5.13	43.7	96	40	1.46	44.2	107
BC2 SED-06 Lab Spike	40	14.2	49.4	88	40	2.46	44.5	105
Outfall to River SED-25 Lab Spike	40	10.7	47.1	91	40	3.19	44.5	103

C8 Sulfonate PFOS					FOSA			
Sample Description	Amount Spiked (ng/g)	Amt Found in Sample (ng/g)	Amount Recovered (ng/g)	Recovery (%)	Amount Spiked (ng/g)	Amt Found in Sample (ng/g)	Amount Recovered (ng/g)	Recovery (%)
BC2 SED-04 Lab Spike	40	14.6	51.8	93	40	7.15	46.5	98
BC2 SED-05 Lab Spike	40	22.8	61.0	95	40	7.86	48.1	101
BC2 SW-06 Lab Spike	800	880	1720	105	800	71.4	650	72
Outfall to River SW-25 Lab Spike	40	107	153	114	40	28.0	59.0	77

Results reported on an as-received basis

SECTION C



CHAIN-OF-CUSTODY / Analytical Request Document

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

www.paceanalytical.com

Required Client Information: Section A

Company: 3M ET & SS

Report To: Mr. Jess S. Eldridge

Page: 1 of 2

715679

To Be Completed by Pace Analytical and Client

Section C

Client Information (Check quote/contract):
Requested Due Date: TAT:
Project Manager:
Project #: 3M Lab Project Number E03-0561
Profile #:

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) in calendar days:

Requested Analysis: See Attached Lab Request E03-0561

Section D Required Client Information:
Valid Matrix Codes:
Matrix: Code:
Sample IDs MUST BE UNIQUE
One character per box.
(A-Z, 0-9 / -)

ITEM #	SAMPLE ID	MATRIX	CODE	DATE COLLECTED	TIME COLLECTED	Containers	Preservatives	Remarks / Lab ID
1	BC2 SW-04	WATER	WT	7-21-03	1445	1	Unpreserved	L34910-1,2,3
2	BC2 SW-04	SOIL	SL	7-21-03	1445	1	Unpreserved	L34910-4
3	BC2 SED-04	WIPE	WP	7-23-03	1450	1	Unpreserved	L34910-5
4	BC2 SW-05	AIR	AR	7-21-03	1415	1	Unpreserved	L34910-6,7,8
5	BC2 SW-05	TISSUE	TS	7-21-03	1415	1	Unpreserved	L34910-9
6	BC2 SED-05	OTHER	OT	7-21-03	1415	1	Unpreserved	L34910-10
7	BC2 SED-06			7-23-03	1525	1	Unpreserved	L34910-11
8	BC2 SW-06			7-23-03	1525	1	Unpreserved	L34910-12,13
9	BC2 SW-06			7-23-03	1525	1	Unpreserved	L34910-15
10	OUTFALL TO RIVER SW-25			7-23-03	1415	1	Unpreserved	L34910-16,17,18
11	OUTFALL TO RIVER SW-25			7-23-03	1615	1	Unpreserved	L34910-19
12	OUTFALL TO RIVER SED-25			7-23-03	1615	1	Unpreserved	L34910-20

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
				J. S. Eldridge / Pace Analytical	7/24/03	1000	J. S. Eldridge / Pace Analytical	7/24/03	1030

SAMPLE CONDITION

Temp in °C: 1.1

Received on Ice: YN

Sealed Cooler: YN

Samples Intact: YN

Additional Comments: Station 05 = 0.11 mg/L chlorine
Station 04 = 0.08 mg/L chlorine
Station 06 = 0.12 mg/L chlorine
Station 25 = 0.07 mg/L chlorine

SAMPLER NAME AND SIGNATURE

PRINT Name of Sampler: J. S. Eldridge

SIGNATURE OF SAMPLER: J. S. Eldridge

DATE SIGNED: 7/23/03



CHAIN-OF-CUSTODY / Analytical Request Document

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

www.pacelabs.com

Required Client Information: Section B

Company: 3M ETS

Report to: Mr. Jess S. Eldridge

Page: 2 of 2

To Be Completed by Pace Analytical and Client Section C

639392

Quote Reference:

Address:

Copy To:

Invoice To:

P.O.:

Project Name: Bakers Creek #2
Sediment
Project Number: 530711

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) in calendar days.

Project #:
3M Lab Project Number E03-0561

Requested Analysis:

SEE ATTACHED LAB
Request E03-0561

Section D Required Client Information:

SAMPLE ID

One character per box.
(A-Z, 0-9, /, -)

Sample IDs MUST BE UNIQUE

Valid Matrix Codes 4
MATRIX CODE
WATER WT SL OL WP AR TS OT
SOIL WIFE AIR TISSUE OTHER

Preservatives

Unpreserved
H₂SO₄
HNO₃
HCl
NaOH
Na₂SO₄
Methanol
Other

DATE COLLECTED

mm / dd / yy

TIME COLLECTED

hr : mm : ss

Containers

Remarks / Lab ID

L34910-21

L34910-22, 23, 24

L34910-25

L34910-26

SHIPMENT METHOD

AIRBILL NO.

SHIPPING DATE

NO. OF COOLERS

ITEM NUMBER

RELINQUISHED BY / AFFILIATION

DATE

TIME

ACCEPTED BY / AFFILIATION

DATE

TIME

SAMPLE CONDITION

Temp in °C

Received on Ice Y/N

Sealed Cooler Y/N

Samples Intact Y/N

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

J. G. Hunter

SIGNATURE OF SAMPLER:

J. G. Hunter

DATE SIGNED (MM/DD/YY)

3/03

7/21/2003

1 of 3

3M ENVIRONMENTAL LABORATORY
Preliminary/Unauthorized Report

Project: E03-0561

Requester: Schnobrich, Dana M (223-1N-08)

Department: 530711

Project Number: 0022674449

Date Received: 6/26/2003

Project Description: Decatur Bakers Creek #2 Surface Water and Sediment

Comments:

Completion Date:

Project Lead: Jess S. Eldridge

Phone Number: 651-778-5233

Email Address: jseldridge@mmm.com

*Make NOTE of Rain All weather conditions
for past days on the project*

Project Results/Activity

Pace Field Sampling Event

3M Sample Number	Sampled Date	Sample Description			
E03-0561-49786	7/22/2003	BC2 SW-04			
<u>LAB</u>	<u>Analytical Method</u>	<u>Components</u>	<u>Result</u>	<u>RL</u>	<u>Qualifier</u>
EXYGEN	PFOS by ESMS	PFOS			
EXYGEN	PFHS	PFHS			
EXYGEN	FOSA	FOSA			
EXYGEN	PFOA	PFOA			
E03-0561-49787	7/22/2003	BC2 SW-04 DUP			
<u>LAB</u>	<u>Analytical Method</u>	<u>Components</u>	<u>Result</u>	<u>RL</u>	<u>Qualifier</u>
EXYGEN	PFOS by ESMS	PFOS			
EXYGEN	PFHS	PFHS			
EXYGEN	FOSA	FOSA			
EXYGEN	PFOA	PFOA			
E03-0561-49788	7/22/2003	BC2 SED-04			
<u>LAB</u>	<u>Analytical Method</u>	<u>Components</u>	<u>Result</u>	<u>RL</u>	<u>Qualifier</u>
EXYGEN	PFOS by ESMS	PFOS			
EXYGEN	PFHS	PFHS			
EXYGEN	FOSA	FOSA			
EXYGEN	PFOA	PFOA			
E03-0561-49789	7/22/2003	BC2 SW-05			
<u>LAB</u>	<u>Analytical Method</u>	<u>Components</u>	<u>Result</u>	<u>RL</u>	<u>Qualifier</u>
EXYGEN	PFOS by ESMS	PFOS			
EXYGEN	PFHS	PFHS			
EXYGEN	FOSA	FOSA			
EXYGEN	PFOA	PFOA			
E03-0561-49790	7/22/2003	BC2 SW-05 DUP			
<u>LAB</u>	<u>Analytical Method</u>	<u>Components</u>	<u>Result</u>	<u>RL</u>	<u>Qualifier</u>
EXYGEN	PFOS by ESMS	PFOS			
EXYGEN	PFHS	PFHS			
EXYGEN	FOSA	FOSA			
EXYGEN	PFOA	PFOA			
E03-0561-49791	7/22/2003	BC2 SED-05			
<u>LAB</u>	<u>Analytical Method</u>	<u>Components</u>	<u>Result</u>	<u>RL</u>	<u>Qualifier</u>
EXYGEN	PFOS by ESMS	PFOS			
EXYGEN	PFHS	PFHS			
EXYGEN	FOSA	FOSA			

7/21/2003

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3M ENVIRONMENTAL LABORATORY
Preliminary/Unauthorized Report

Project: E03-0561 (cont.)

<u>3M Sample Number</u>	<u>Sampled Date</u>	<u>Sample Description</u>			
E03-0561-49791 (cont.)	7/22/2003	BC2 SED-05			
<u>LAB</u>	<u>Analytical Method</u>	<u>Components</u>	<u>Result</u>	<u>RL</u>	<u>Qualifier</u>
EXYGEN	PFOA	PFOA			
E03-0561-49792	7/22/2003	BC2 SW-06			
<u>LAB</u>	<u>Analytical Method</u>	<u>Components</u>	<u>Result</u>	<u>RL</u>	<u>Qualifier</u>
EXYGEN	PFOS by ESMS	PFOS			
EXYGEN	PFHS	PFHS			
EXYGEN	FOSA	FOSA			
EXYGEN	PFOA	PFOA			
E03-0561-49793	7/22/2003	BC2 SW-06 DUP			
<u>LAB</u>	<u>Analytical Method</u>	<u>Components</u>	<u>Result</u>	<u>RL</u>	<u>Qualifier</u>
EXYGEN	PFOS by ESMS	PFOS			
EXYGEN	PFHS	PFHS			
EXYGEN	FOSA	FOSA			
EXYGEN	PFOA	PFOA			
E03-0561-49794	7/22/2003	BC2 SED-06			
<u>LAB</u>	<u>Analytical Method</u>	<u>Components</u>	<u>Result</u>	<u>RL</u>	<u>Qualifier</u>
EXYGEN	PFOS by ESMS	PFOS			
EXYGEN	PFHS	PFHS			
EXYGEN	FOSA	FOSA			
EXYGEN	PFOA	PFOA			
E03-0561-49795	7/22/2003	Outfall to River SW-25			
<u>LAB</u>	<u>Analytical Method</u>	<u>Components</u>	<u>Result</u>	<u>RL</u>	<u>Qualifier</u>
EXYGEN	PFOS by ESMS	PFOS			
EXYGEN	PFHS	PFHS			
EXYGEN	FOSA	FOSA			
EXYGEN	PFOA	PFOA			
E03-0561-49796	7/22/2003	Outfall to River SW-25 DUP			
<u>LAB</u>	<u>Analytical Method</u>	<u>Components</u>	<u>Result</u>	<u>RL</u>	<u>Qualifier</u>
EXYGEN	PFOS by ESMS	PFOS			
EXYGEN	PFHS	PFHS			
EXYGEN	FOSA	FOSA			
EXYGEN	PFOA	PFOA			
E03-0561-49797	7/22/2003	Outfall To River SED-25			
<u>LAB</u>	<u>Analytical Method</u>	<u>Components</u>	<u>Result</u>	<u>RL</u>	<u>Qualifier</u>
EXYGEN	PFOS by ESMS	PFOS			
EXYGEN	PFHS	PFHS			
EXYGEN	FOSA	FOSA			
EXYGEN	PFOA	PFOA			
E03-0561-49813	7/22/2003	Outfall to River SED-25 DUP			
<u>LAB</u>	<u>Analytical Method</u>	<u>Components</u>	<u>Result</u>	<u>RL</u>	<u>Qualifier</u>
EXYGEN	PFOS by ESMS	PFOS			
EXYGEN	PFHS	PFHS			
EXYGEN	FOSA	FOSA			
EXYGEN	PFOA	PFOA			

7/21/2003

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3M ENVIRONMENTAL LABORATORY
Preliminary/Unauthorized Report

Project: E03-0561 (cont.)

<u>3M Sample Number</u>	<u>Sampled Date</u>	<u>Sample Description</u>			
E03-0561-59479		Field Control/Travel Blank			
<u>LAB</u>	<u>Analytical Method</u>	<u>Components</u>	<u>Result</u>	<u>RL</u>	<u>Qualifier</u>
EXYGEN	PFOS by ESMS	PFOS			
EXYGEN	PFHS	PFHS			
EXYGEN	FOSA	FOSA			
EXYGEN	PFOA	PFOA			
E03-0561-59480		Equipment Blank - Pump			
<u>LAB</u>	<u>Analytical Method</u>	<u>Components</u>	<u>Result</u>	<u>RL</u>	<u>Qualifier</u>
EXYGEN	PFOS by ESMS	PFOS			
EXYGEN	PFHS	PFHS			
EXYGEN	FOSA	FOSA			
EXYGEN	PFOA	PFOA			
E03-0561-59481		Equipment Blank - Dredge			
<u>LAB</u>	<u>Analytical Method</u>	<u>Components</u>	<u>Result</u>	<u>RL</u>	<u>Qualifier</u>
EXYGEN	PFOS by ESMS	PFOS			
EXYGEN	PFHS	PFHS			
EXYGEN	FOSA	FOSA			
EXYGEN	PFOA	PFOA			



3058 Research Drive
State College, PA 16801

Phone: 800-281-3219
Fax: 814-272-1019

Laboratory Sample Log-in Sheet (Environmental)

Complete upon sample receipt:		
Client and/or Project Name	3M Environmental	
Method of Delivery	☐ Walk-in ☐ Pick-up ☐ UPS ☒ FedEx ☐ Air Borne Tracking #: 8415 8038 2496 ☐ Other (explain)	
Chain of Custody	Custody Seals: ☐ present, & ☐ intact / ☐ broken (explain) ☒ absent	Chain of Custody Record: ☒ present ☐ absent
Temperature Preservation	Thermometer ID: CC 277 Cooler ID: 0000140 Cooler temp: 1.7 °C Cooler ID: Cooler temp: °C Cooler ID: Cooler temp: °C Cooler ID: Cooler temp: °C	Samples Received: ☒ on ice ☐ in ice melt ☐ with ice pack ☐ none
Explanation		
Completed by	Signature: _____ Date (Time): 07/25/07 10:00	
Complete during sample log-in:		
LIMS Log-in #	L 34910	
Physical Condition	Samples intact? ☒ Yes ☐ No (explain)	
Chain of Custody	Samples received agree with COC record? ☒ Yes ☐ No (explain)	
Analysis Request	Analysis request clear? ☒ Yes ☐ No (explain)	
Preservation	Sample containers appropriate? ☐ Yes ☐ No (explain) Chemical preservation appropriate? ☐ Yes ☐ No (explain) Samples received within holding time? ☐ Yes ☐ No (explain) Sample volume/mass adequate? ☐ Yes ☐ No (explain)	
Explanation		
Completed by	Signature: _____ Date: 07/25/07 12:35	
Complete following resolution of any nonconformances:		
Client Contacted	☐ Yes Client: _____ Date (Time): _____ ☐ No	
Resolution		
Completed by	Signature: _____ Date: _____	

FedEx USA Airbill Express

Tracking Number 841556382430

1 From Date 7/24/03
Sender's Name J. Quah Hwei
Company PACE Analytical Services Inc.
Address 7800 Kinney Ave Suite 100
City Huntersville State NC ZIP 28078

2 Your Internal Billing Reference
3 To Recipient's Name Mr John Flaherty
Company Exygen Research
Address 3058 Research Drive
City State College PA ZIP 16801

4 Sender's Address
Address 3058 Research Drive
City State College PA ZIP 16801



0200

Recipient's Copy

4a Express Package Service
☒ FedEx Priority Overnight
☐ FedEx Standard Overnight
☐ FedEx First Overnight

4b Express Freight Service
☐ FedEx 2Day
☐ FedEx 3Day Freight
☐ FedEx 1Day Freight

5 Packaging
☐ FedEx Envelope
☐ FedEx Pak
☒ Other

6 Special Handling
☐ SATURDAY Delivery
☐ HOLD Saturday at FedEx Location
☐ HOLD Sunday at FedEx Location

7 Payment By
☒ Recipient
☐ Sender
☐ Third Party
☐ Credit Card
☐ Cash/Check

Total Packages 1
Total Weight 1.00
Total Declared Value \$.00
Total Charges \$.00

8 Release Signature
By signing you authorize the carrier to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.
Questions? Visit our Web site at fedex.com

446

LOGIN CHAIN OF CUSTODY REPORT (ln01)
Jul 28 2003, 07:54 am

Login Number: L34910
Account: 2046 3M ENVIRONMENTAL LABORATORY

Laboratory Sample Number	Client Sample Number	Collect Date	Receive Date	Due PR Date
L34910-1	BC2 SW-04	21-JUL-03	25-JUL-03	
SAMPLES KEPT IN D0000539.				
L34910-2	BC2 SW-04 LOW SPK (0.1 PPB)	21-JUL-03	25-JUL-03	
L34910-3	BC2 SW-04 HIGH SPK (10 PPB)	21-JUL-03	25-JUL-03	
L34910-4	BC2 SW-04 DUP	21-JUL-03	25-JUL-03	
L34910-5	BC2 SED-04	23-JUL-03	25-JUL-03	
SOIL	S PERC SOLID	Hold:01-AUG-03	d0000539	
L34910-6	BC2 SW-05	21-JUL-03	25-JUL-03	
L34910-7	BC2 SW-05 LOW SPK (0.1 PPB)	21-JUL-03	25-JUL-03	
L34910-8	BC2 SW-05 HIGH SPK (10 PPB)	21-JUL-03	25-JUL-03	
L34910-9	BC2 SW-05 DUP	21-JUL-03	25-JUL-03	
L34910-10	BC2 SED-05	21-JUL-03	25-JUL-03	
SOIL	S PERC SOLID	Hold:01-AUG-03	d0000539	
L34910-11	BC2 SED-06	23-JUL-03	25-JUL-03	
SOIL	S PERC SOLID	Hold:01-AUG-03	d0000539	
L34910-12	BC2 SW-06	23-JUL-03	25-JUL-03	
L34910-13	BC2 SW-06 LOW SPK (0.1 PPB)	23-JUL-03	25-JUL-03	
L34910-14	BC2 SW-06 HIGH SPK (10 PPB)	23-JUL-03	25-JUL-03	
L34910-15	BC2 SW-06 DUP	23-JUL-03	25-JUL-03	
L34910-16	OUTFALL TO RIVER SW-25	23-JUL-03	25-JUL-03	
L34910-17	OUTFALL TO RIVER SW-25	23-JUL-03	25-JUL-03	
COMPLETE ID READS OUTFALL TO RIVER SW-25 LOW SPK (0.1 PPB).				
L34910-18	OUTFALL TO RIVER SW-25	23-JUL-03	25-JUL-03	
COMPLETE ID READS OUTFALL TO RIVER SW-25 HIGH SPK (10 PPB).				
L34910-19	OUTFALL TO RIVER SW-25 DUP	23-JUL-03	25-JUL-03	

LOGIN CHAIN OF CUSTODY REPORT (ln01)
Jul 28 2003, 07:54 am

Login Number: L34910
Account: 2046 3M ENVIRONMENTAL LABORATORY

Laboratory Sample Number	Client Sample Number	Collect Date	Receive Date	Due PR Date
L34910-20 SOIL	OUTFALL TO RIVER SED-25 S PERC SOLID	23-JUL-03 Hold:01-AUG-03	25-JUL-03 d0000539	
L34910-21 SOIL	OUTFALL TO RIVER SED-25 DUP S PERC SOLID	23-JUL-03 Hold:01-AUG-03	25-JUL-03 d0000539	
L34910-22	FIELD CONTROL/TRAVEL BLANK	23-JUL-03	25-JUL-03	
L34910-23 COMPLETE ID READS	FIELD CONTROL/TRAVEL BLANK LOW FIELD CONTROL/TRAVEL BLANK LOW SPIKE (0.1 PPB).	23-JUL-03	25-JUL-03	
L34910-24 COMPLETE ID READS	FIELD CONTROL/TRAVEL BLANK FIELD CONTROL/TRAVEL BLANK HIGH SPIKE (10 PPB).	23-JUL-03	25-JUL-03	
L34910-25	EQUIPMENT BLANK-PUMP	21-JUL-03	25-JUL-03	
L34910-26	EQUIPMENT BLANK-DREDGE	23-JUL-03	25-JUL-03	

Signature: Scn

Date: 7/28/2003

SECTION D



3058 Research Drive
State College, PA 16801

Phone: 814-272-1039
Fax: 814-231-1580

NOTE TO FILE

Date: 08/26/03

Exygen Study # L34910

NOTE:

Throughout the raw data generated for study L34910 the 498 > 78 monitored transition (perfluorooctanesulfonylamide) was assigned the acronym PFOSA instead of FOSA. Any reference to PFOSA in the raw data is equivalent to FOSA.

Initials:

 08/26/03

RAW DATA REPORT

Sponsor Study No: NA
 Exygen Study No: L34910
 Analyte: PFOA
 Ions Monitored: 413 -> 369
 Site: Decatur Baker's Creek

Limit of Quantitation: 50 ppt
 Injection Volume: 15 µL
 Matrix: Water
 Sample Volume: 40.0 mL
 Final Volume: 5.0 mL

Set No: 073103A
 Analyst: Karen Riha
 Instrument Type: LC/MS/MS Unit # 6
 Extraction Date: 07/31/03
 Analyzed on: 08/01-02/03

Exygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)
XC072503-0	-	CS	073103A-1001	0	-	550	-	-	-
XC072503-1	-	CS	073103A-1002	25	-	8614	-	-	-
XC072503-2	-	CS	073103A-1003	50	-	16102	-	-	-
XC072503-3	-	CS	073103A-1004	100	-	29438	-	-	-
XC072503-4	-	CS	073103A-1005	250	-	66169	-	-	-
XC072503-5	-	CS	073103A-1006	500	-	142891	-	-	-
XC072503-6	-	CS	073103A-1007	1000	-	264459	-	-	-
Methanol Wash	-	C	073103A-1008	-	-	267	-	-	-
0106020 Control	-	C	073103A-1009	-	1	659	ND	-	-
0106020 Spk A	-	LCS	073103A-1010	-	1	14411	47.6	50	95
0106020 Spk B	-	LCS	073103A-1011	-	1	132909	452	500	90
L34910-1 Spk C	BC2 SW-04	LF	073103A-1012	-	10	239247	8140	5000	79^
L34910-6 Spk D	BC2 SW-05	LF	073103A-1013	-	10	145872	4960	5000	87
L34910-12 Spk E	BC2 SW-06	LF	073103A-1014	-	10	418651	*	5000	-
L34910-16 Spk F	Outfall to River SW-25	LF	073103A-1015	-	10	515606	*	5000	-
XC072503-1	-	CS	073103A-1016	25	-	6931	-	-	-
L34910-1	BC2 SW-04	S	073103A-1017	-	1	849301	*	-	-
L34910-1 Rep	BC2 SW-04	S	073103A-1018	-	1	826648	*	-	-
L34910-4	BC2 SW-04 Dup	S	073103A-1019	-	1	575640	*	-	-
L34910-2	BC2 SW-04 Low Spk	FF	073103A-1020	-	1	605630	*	100	-
L34910-3	BC2 SW-04 High Spk	FF	073103A-1021	-	100	29529	9920	10000	57^
XC072503-2	-	CS	073103A-1022	50	-	13780	-	-	-
L34910-6	BC2 SW-05	S	073103A-1023	-	1	173871	591	-	-
L34910-6 Rep	BC2 SW-05	S	073103A-1024	-	1	181075	616	-	-
L34910-9	BC2 SW-05 Dup	S	073103A-1025	-	1	355190	*	-	-
L34910-7	BC2 SW-05 Low Spk	FF	073103A-1026	-	1	521363	*	100	-
L34910-8	BC2 SW-05 High Spk	FF	073103A-1027	-	100	21596	7210	10000	66
XC072503-3	-	CS	073103A-1028	100	-	31758	-	-	-
L34910-12	BC2 SW-06	S	073103A-1029	-	1	2471389	*	-	-
L34910-12 Rep	BC2 SW-06	S	073103A-1030	-	1	2425189	*	-	-
L34910-15	BC2 SW-06 Dup	S	073103A-1031	-	1	2527002	*	-	-
L34910-13	BC2 SW-06 Low Spk	FF	073103A-1032	-	1	2849870	*	100	-
L34910-14	BC2 SW-06 High Spk	FF	073103A-1033	-	100	71294	24200	10000	121^
XC072503-4	-	CS	073103A-1034	250	-	75537	-	-	-
L34910-16	Outfall to River SW-25	S	073103A-1035	-	1	3072978	*	-	-
L34910-16 Rep	Outfall to River SW-25	S	073103A-1036	-	1	3276529	*	-	-
L34910-19	Outfall to River SW-25 Dup	S	073103A-1037	-	1	2758295	*	-	-
L34910-17	Outfall to River SW-25 Low Spk	FF	073103A-1038	-	1	3102823	*	100	-
L34910-18	Outfall to River SW-25 High Spk	FF	073103A-1039	-	100	77205	26200	10000	104^
XC072503-5	-	CS	073103A-1040	500	-	156964	-	-	-
L34910-25	Equipment Blank-Pump	S	073103A-1041	-	1	652	ND	-	-
L34910-26	Equipment Blank-Dredge	S	073103A-1042	-	1	940	ND	-	-
L34910-22	Field Control/Travel Blank	S	073103A-1043	-	1	808	ND	-	-
L34910-23	Field Control/Travel Blank Low Spk	FF	073103A-1044	-	1	34004	114	100	114
L34910-24	Field Control/Travel Blank High Spk	FF	073103A-1045	-	100	35258	11900	10000	119
XC071003-6	-	CS	073103A-1046	1000	-	322068	-	-	-

Analyte Found (ppt) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{[\text{analyte found (ppt)} - \text{analyte found in control (ppt)}] \times 100}{\text{amount added (ppt)}}$

Standard Curve: Linear (1/x weighted)

Intercept = 445.057

Slope = 293.343

Coef. Of Det. = 0.986042

CS = Calibration standard

C = Control sample

S = Sample

LF = Lab fortified sample

FF = Field fortified sample

LCS = Laboratory Control Spike

CK = Check Standard

ND = Not detected = Response between 0 and 25 ppt

NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by:

Handwritten signature and date: 08/07/03

*Sample was corrected using the data found in set 073103AR.

*Sample requires further dilution. See data set 073103AR

RAW DATA REPORT

Sponsor Study No:	NA	Limit of Quantitation:	50 ppt	Set No:	073103A
Oxygen Study No:	L34910	Injection Volume:	15 µL	Analyst:	Karen Risha
Analyte:	PFHS	Matrix:	Water	Instrument Type:	LC/MS/MS Unit # 6
Ions Monitored:	399 -> 80	Sample Volume:	40.0 mL	Extraction Date:	07/31/03
Site:	Decatur Baker's Creek	Final Volume:	5.0 mL	Analyzed on:	08/01-02/03

Oxygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)
XC072503-0	-	CS	073103A-1001	0	-	0	-	-	-
XC072503-1	-	CS	073103A-1002	25	-	1401	-	-	-
XC072503-2	-	CS	073103A-1003	50	-	2842	-	-	-
XC072503-3	-	CS	073103A-1004	100	-	5604	-	-	-
XC072503-4	-	CS	073103A-1005	250	-	13137	-	-	-
XC072503-5	-	CS	073103A-1006	500	-	26976	-	-	-
XC072503-6	-	CS	073103A-1007	1000	-	51345	-	-	-
Methanol Wash	-	C	073103A-1008	-	-	0	-	-	-
0106020 Control	-	C	073103A-1009	-	1	0	ND	-	-
0106020 Spk A	-	LCS	073103A-1010	-	1	2759	49.7	50	99
0106020 Spk B	-	LCS	073103A-1011	-	1	26598	473	500	95
L34910-1 Spk C	BC2 SW-04	LF	073103A-1012	-	10	30859	5520	5000	92
L34910-6 Spk D	BC2 SW-05	LF	073103A-1013	-	10	27946	5000	5000	97
L34910-12 Spk E	BC2 SW-06	LF	073103A-1014	-	10	55454	*	5000	-
L34910-16 Spk F	Outfall to River SW-25	LF	073103A-1015	-	10	60284	*	5000	-
XC072503-1	-	CS	073103A-1016	25	-	1444	-	-	-
L34910-1	BC2 SW-04	S	073103A-1017	-	1	50162	896	-	-
L34910-1 Rep	BC2 SW-04	S	073103A-1018	-	1	49342	882	-	-
L34910-4	BC2 SW-04 Dup	S	073103A-1019	-	1	31968	571	-	-
L34910-2	BC2 SW-04 Low Spk	FF	073103A-1020	-	1	36223	647	100	-249+
L34910-3	BC2 SW-04 High Spk	FF	073103A-1021	-	100	5426	9730	10000	88
XC072503-2	-	CS	073103A-1022	50	-	2420	-	-	-
L34910-6	BC2 SW-05	S	073103A-1023	-	1	8666	155	-	-
L34910-6 Rep	BC2 SW-05	S	073103A-1024	-	1	8505	152	-	-
L34910-9	BC2 SW-05 Dup	S	073103A-1025	-	1	21096	377	-	-
L34910-7	BC2 SW-05 Low Spk	FF	073103A-1026	-	1	33963	607	100	452
L34910-8	BC2 SW-05 High Spk	FF	073103A-1027	-	100	5342	9580	10000	94
XC072503-3	-	CS	073103A-1028	100	-	5959	-	-	-
L34910-12	BC2 SW-06	S	073103A-1029	-	1	259042	*	-	-
L34910-12 Rep	BC2 SW-06	S	073103A-1030	-	1	237649	*	-	-
L34910-15	BC2 SW-06 Dup	S	073103A-1031	-	1	245687	*	-	-
L34910-13	BC2 SW-06 Low Spk	FF	073103A-1032	-	1	275858	*	100	-
L34910-14	BC2 SW-06 High Spk	FF	073103A-1033	-	100	9718	17400	10000	113*
XC072503-4	-	CS	073103A-1034	250	-	14198	-	-	-
L34910-16	Outfall to River SW-25	S	073103A-1035	-	1	283517	*	-	-
L34910-16 Rep	Outfall to River SW-25	S	073103A-1036	-	1	302530	*	-	-
L34910-19	Outfall to River SW-25 Dup	S	073103A-1037	-	1	276429	*	-	-
L34910-17	Outfall to River SW-25 Low Spk	FF	073103A-1038	-	1	278698	*	100	-
L34910-18	Outfall to River SW-25 High Spk	FF	073103A-1039	-	100	10133	18100	10000	104*
XC072503-5	-	CS	073103A-1040	500	-	29038	-	-	-
L34910-25	Equipment Blank-Pump	S	073103A-1041	-	1	0	ND	-	-
L34910-26	Equipment Blank-Dredge	S	073103A-1042	-	1	0	ND	-	-
L34910-22	Field Control/Travel Blank	S	073103A-1043	-	1	0	ND	-	-
L34910-23	Field Control/Travel Blank Low Spk	FF	073103A-1044	-	1	6648	119	100	119
L34910-24	Field Control/Travel Blank High Spk	FF	073103A-1045	-	100	6002	10800	10000	108
XC071003-6	-	CS	073103A-1046	1000	-	60941	-	-	-

Analyte Found (ppt) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{[\text{analyte found (ppt)} - \text{analyte found in control (ppt)}] \times 100}{\text{amount added (ppt)}}$

Standard Curve : Linear (1/x weighted)

Intercept = -23.5660

Slope = 53.9970

Coef. Of Det. = 0.989093

CS = Calibration standard

LF = Lab fortified sample

C = Control sample

FF = Field fortified sample

S = Sample

LCS = Laboratory Control Spike

CK = Check Standard

ND = Not detected = Response between 0 and 25 ppt

NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by: HR, 08/07/03

*Sample was corrected using the data found in set 073103AR.

*Sample requires further dilution. See data set 073103AR.

+Sample residue significantly exceeds the spiking level; therefore, an accurate recovery cannot be calculated.

RAW DATA REPORT

Sponsor Study No: NA
 Oxygen Study No: L34910
 Analyte: PFOS
 Ions Monitored: 499 -> 99
 Site: Decatur Baker's Creek

Limit of Quantitation: 50 ppt
 Injection Volume: 15 µL
 Matrix: Water
 Sample Volume: 40.0 mL
 Final Volume: 5.0 mL

Set No: 073103A
 Analyst: Karen Risha
 Instrument Type: LC/MS/MS Unit # 6
 Extraction Date: 07/31/03
 Analyzed on: 08/01-02/03

Exygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)
XC072503-0	-	CS	073103A-1001	0	-	0	-	-	-
XC072503-1	-	CS	073103A-1002	25	-	971	-	-	-
XC072503-2	-	CS	073103A-1003	50	-	1963	-	-	-
XC072503-3	-	CS	073103A-1004	100	-	3040	-	-	-
XC072503-4	-	CS	073103A-1005	250	-	7518	-	-	-
XC072503-5	-	CS	073103A-1006	500	-	17228	-	-	-
XC072503-6	-	CS	073103A-1007	1000	-	32298	-	-	-
Methanol Wash	-	C	073103A-1008	-	-	0	-	-	-
0106020 Control	-	C	073103A-1009	-	1	0	ND	-	-
0106020 Spk A	-	LCS	073103A-1010	-	1	1673	50.4	50	101
0106020 Spk B	-	LCS	073103A-1011	-	1	15199	445	500	89
L34910-1 Spk C	BC2 SW-04	LF	073103A-1012	-	10	50011	*	5000	-
L34910-6 Spk D	BC2 SW-05	LF	073103A-1013	-	10	20296	5940	5000	85^
L34910-12 Spk E	BC2 SW-06	LF	073103A-1014	-	10	96754	*	5000	-
L34910-16 Spk F	Outfall to River SW-25	LF	073103A-1015	-	10	120697	*	5000	-
XC072503-1	-	CS	073103A-1016	25	-	954	-	-	-
L34910-1	BC2 SW-04	S	073103A-1017	-	1	280183	*	-	-
L34910-1 Rep	BC2 SW-04	S	073103A-1018	-	1	274170	*	-	-
L34910-4	BC2 SW-04 Dup	S	073103A-1019	-	1	211725	*	-	-
L34910-2	BC2 SW-04 Low Spk	FF	073103A-1020	-	1	191631	*	100	-
L34910-3	BC2 SW-04 High Spk	FF	073103A-1021	-	100	6016	17700	10000	62^^
XC072503-2	-	CS	073103A-1022	50	-	1656	-	-	-
L34910-6	BC2 SW-05	S	073103A-1023	-	1	44922	*	-	-
L34910-6 Rep	BC2 SW-05	S	073103A-1024	-	1	46036	*	-	-
L34910-9	BC2 SW-05 Dup	S	073103A-1025	-	1	112926	*	-	-
L34910-7	BC2 SW-05 Low Spk	FF	073103A-1026	-	1	149088	*	100	-
L34910-8	BC2 SW-05 High Spk	FF	073103A-1027	-	100	4333	12800	10000	111^
XC072503-3	-	CS	073103A-1028	100	-	3500	-	-	-
L34910-12	BC2 SW-06	S	073103A-1029	-	1	558236	*	-	-
L34910-12 Rep	BC2 SW-06	S	073103A-1030	-	1	571211	*	-	-
L34910-15	BC2 SW-06 Dup	S	073103A-1031	-	1	560118	*	-	-
L34910-13	BC2 SW-06 Low Spk	FF	073103A-1032	-	1	667186	*	100	-
L34910-14	BC2 SW-06 High Spk	FF	073103A-1033	-	100	14981	43900	10000	178^^
XC072503-4	-	CS	073103A-1034	250	-	8521	-	-	-
L34910-16	Outfall to River SW-25	S	073103A-1035	-	1	691166	*	-	-
L34910-16 Rep	Outfall to River SW-25	S	073103A-1036	-	1	707270	*	-	-
L34910-19	Outfall to River SW-25 Dup	S	073103A-1037	-	1	656533	*	-	-
L34910-17	Outfall to River SW-25 Low Spk	FF	073103A-1038	-	1	683659	*	100	-
L34910-18	Outfall to River SW-25 High Spk	FF	073103A-1039	-	100	14072	41200	10000	100^
XC072503-5	-	CS	073103A-1040	500	-	19341	-	-	-
L34910-25	Equipment Blank-Pump	S	073103A-1041	-	1	316	ND	-	-
L34910-26	Equipment Blank-Dredge	S	073103A-1042	-	1	0	ND	-	-
L34910-22	Field Control/Travel Blank	S	073103A-1043	-	1	0	ND	-	-
L34910-23	Field Control/Travel Blank Low Spk	FF	073103A-1044	-	1	3691	109	100	109
L34910-24	Field Control/Travel Blank High Spk	FF	073103A-1044	-	100	3853	11400	10000	114
XC071003-6	-	CS	073103A-1046	1000	-	35665	-	-	-

Recovery (%) = $\frac{[\text{analyte found (ppt)} - \text{analyte found in control (ppt)}] \times 100}{\text{amount added (ppt)}}$

Standard Curve: Linear (1/x weighted)
 Intercept = -56.2500
 Slope = 34.2805
 Coef. Of Det. = 0.992844

CS = Calibration standard
 C = Control sample
 S = Sample
 LF = Lab fortified sample
 FF = Field fortified sample
 LCS = Laboratory Control Spike

CK = Check Standard
 ND = Not detected = Response between 0 and 25 ppt
 NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by: *KR, 08/07/03*

^Sample was corrected using the data found in set 073103AR.
 ^^Sample was corrected using the data found in set 080603A.
 *Sample requires further dilution. See data set 073103AR.

RAW DATA REPORT

Sponsor Study No: NA
 Oxygen Study No: L34910
 Analyte: FOSA
 Ions Monitored: 498 -> 78
 Site: Decatur Baker's Creek

Limit of Quantitation: 50 ppt
 Injection Volume: 15 µL
 Matrix: Water
 Sample Volume: 40.0 mL
 Final Volume: 5.0 mL

Set No: 073103A
 Analyst: Karen Risha
 Instrument Type: LC/MS/MS Unit # 6
 Extraction Date: 07/31/03
 Analyzed on: 08/01-02/03

Oxygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)
XC072503-0	-	CS	073103A-1001	0	-	0	-	-	-
XC072503-1	-	CS	073103A-1002	25	-	3440	-	-	-
XC072503-2	-	CS	073103A-1003	50	-	6725	-	-	-
XC072503-3	-	CS	073103A-1004	100	-	13321	-	-	-
XC072503-4	-	CS	073103A-1005	250	-	31340	-	-	-
XC072503-5	-	CS	073103A-1006	500	-	65687	-	-	-
XC072503-6	-	CS	073103A-1007	1000	-	127765	-	-	-
Methanol Wash	-	C	073103A-1008	-	-	0	-	-	-
0106020 Control	-	C	073103A-1009	-	1	0	ND	-	-
0106020 Spk A	-	LCS	073103A-1010	-	1	6872	50.6	50	101
0106020 Spk B	-	LCS	073103A-1011	-	1	62898	468	500	94
L34910-1 Spk C	BC2 SW-04	LF	073103A-1012	-	10	74954	5580	5000	84^
L34910-6 Spk D	BC2 SW-05	LF	073103A-1013	-	10	65330	4860	5000	94
L34910-12 Spk E	BC2 SW-06	LF	073103A-1014	-	10	96556	7180	5000	95^
L34910-16 Spk F	Outfall to River SW-25	LF	073103A-1015	-	10	107094	7970	5000	94^
XC072503-1	-	CS	073103A-1016	25	-	3545	-	-	-
L34910-1	BC2 SW-04	S	073103A-1017	-	1	148109	*	-	-
L34910-1 Rep	BC2 SW-04	S	073103A-1018	-	1	143575	*	-	-
L34910-4	BC2 SW-04 Dup	S	073103A-1019	-	1	106161	790	-	-
L34910-2	BC2 SW-04 Low Spk	FF	073103A-1020	-	1	90364	672	100	-718^+
L34910-3	BC2 SW-04 High Spk	FF	073103A-1021	-	100	9716	7180	10000	58^
XC072503-2	-	CS	073103A-1022	50	-	6634	-	-	-
L34910-6	BC2 SW-05	S	073103A-1023	-	1	19717	146	-	-
L34910-6 Rep	BC2 SW-05	S	073103A-1024	-	1	20175	150	-	-
L34910-9	BC2 SW-05 Dup	S	073103A-1025	-	1	52363	389	-	-
L34910-7	BC2 SW-05 Low Spk	FF	073103A-1026	-	1	67031	498	100	352
L34910-8	BC2 SW-05 High Spk	FF	073103A-1027	-	100	5639	4140	10000	40
XC072503-3	-	CS	073103A-1028	100	-	13989	-	-	-
L34910-12	BC2 SW-06	S	073103A-1029	-	1	269867	*	-	-
L34910-12 Rep	BC2 SW-06	S	073103A-1030	-	1	263411	*	-	-
L34910-15	BC2 SW-06 Dup	S	073103A-1031	-	1	276134	*	-	-
L34910-13	BC2 SW-06 Low Spk	FF	073103A-1032	-	1	284082	*	100	-
L34910-14	BC2 SW-06 High Spk	FF	073103A-1033	-	100	11410	8440	10000	60^
XC072503-4	-	CS	073103A-1034	250	-	33866	-	-	-
L34910-16	Outfall to River SW-25	S	073103A-1035	-	1	358032	*	-	-
L34910-16 Rep	Outfall to River SW-25	S	073103A-1036	-	1	358872	*	-	-
L34910-19	Outfall to River SW-25 Dup	S	073103A-1037	-	1	369645	*	-	-
L34910-17	Outfall to River SW-25 Low Spk	FF	073103A-1038	-	1	311246	*	100	-
L34910-18	Outfall to River SW-25 High Spk	FF	073103A-1039	-	100	12191	9020	10000	58^
XC072503-5	-	CS	073103A-1040	500	-	72430	-	-	-
L34910-25	Equipment Blank-Pump	S	073103A-1041	-	1	0	ND	-	-
L34910-26	Equipment Blank-Dredge	S	073103A-1042	-	1	814	ND	-	-
L34910-22	Field Control/Travel Blank	S	073103A-1043	-	1	0	ND	-	-
L34910-23	Field Control/Travel Blank Low Spk	FF	073103A-1044	-	1	12140	89.8	100	90
L34910-24	Field Control/Travel Blank High Spk	FF	073103A-1045	-	100	16047	11900	10000	119
XC071003-6	-	CS	073103A-1046	1000	-	139302	-	-	-

Analyte Found (ppt) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{[\text{analyte found (ppt)} - \text{analyte found in control (ppt)}] \times 100}{\text{amount added (ppt)}}$

Standard Curve: Linear (1/x weighted)

Intercept = 78.1882

Slope = 134.313

Coef. Of Det. = 0.995963

CS = Calibration standard

C = Control sample

S = Sample

LF = Lab fortified sample

FF = Field fortified sample

LCS = Laboratory Control Spike

CK = Check Standard

ND = Not detected = Response between 0 and 25 ppt

NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by: *[Signature]* 08/29/03

^Sample was corrected using the data found in set 073103AR

*Sample requires further dilution. See data set 073103AR.

+Sample residue significantly exceeds the spiking level; therefore, an accurate recovery cannot be calculated.



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State College, PA 16801

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SAMPLE TRANSFER SHEET

Protocol Number: NA Exygen Study Number: L34910

Exygen Sample #	Sponsor Sample #	Exygen Sample #	Sponsor Sample #
~~L34910-1~~	BC2 SW-04	~~L34910-14~~	BC2 SW-06 High Spk
~~L34910-2~~	BC2 SW-04 Low Spk	~~L34910-15~~	BC2 SW-06 Dup
~~L34910-3~~	BC2 SW-04 High Spk	~~L34910-16~~	Outfall to River SW-25
~~L34910-4~~	BC2 SW-04 Dup	~~L34910-17~~	Outfall to River SW-25 Low Spk
~~L34910-5~~	BC2 SED-04	~~L34910-18~~	Outfall to River SW-25 High Spk
~~L34910-6~~	BC2 SW-05	~~L34910-19~~	Outfall to River SW-25 Dup
~~L34910-7~~	BC2 SW-05 Low Spk	~~L34910-20~~	Outfall to River SW-25 SED
~~L34910-8~~	BC2 SW-05 High Spk	~~L34910-21~~	Outfall to River SW-25 SED DUP
~~L34910-9~~	BC2 SW-05 Dup	~~L34910-22~~	Field Control/Travel Blank
~~L34910-10~~	BC2 SED-05	~~L34910-23~~	Field Control Low Spk
~~L34910-11~~	BC2 SED-06	~~L34910-24~~	Field Control High Spk
~~L34910-12~~	BC2 SW-06	~~L34910-25~~	Equipment Blank Pump
~~L34910-13~~	BC2 SW-06 Low Spk	~~L34910-26~~	Equipment Blank-Dredge

Karen Risha 7/31/03 0800

Requested By (Printed Name/Date/Time)

Samples removed from: 0000539 Box# — Shelf# —
Samples removed from: — Box# — Shelf# —

Samples transferred to the custody of Karen
✓ EC 7-31-03 0900
Sample Custodian Initials/Date/Time

Samples received from custodian; Samples moved to REF 32
QR 07/31/03 0900
Laboratory Personnel Initials/Date/Time

Samples removed from R 32
Samples returned to 0000539
ELR 8/8/03 0838
Sample Custodian Initials/Date/Time

Comments:

All Samples returned -

December 19, 2002/6



3058 Research Drive
State College, PA 16801

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Internal Chain of Custody/Fortification Sheet

Exygen Study Number: L34910

Matrix: Water

Sponsor Study/Protocol No: NA

The samples listed below were removed from refrigerator No. 32

Time 0910

Date 07/31/03

Initials CEE

CLIENT SAMPLE ID	EXYGEN ID NUMBER	VOLUME (mL)	FORTIFICATION (ng)
na	0106020 Control	40.0	-
na	0106020 Spk A	40.0	2.0
na	0106020 Spk B	40.0	20.0
BC2 SW-04	L34910-1 Spk C	40.0	200.0
BC2 SW-05	L34910-6 Spk D	40.0	200.0
BC2 SW-06	L34910-12 Spk E	40.0	200.0
Outfall to River SW-25	L34910-16 Spk F	40.0	200.0
BC2 SW-04	L34910-1	40.0	-
BC2 SW-04	L34910-1 Rep	40.0	-
BC2 SW-04 Dup	L34910-4	40.0	-
BC2 SW-04 Low Spk	L34910-2	40.0	-
BC2 SW-04 High Spk	L34910-3	40.0	-
BC2 SW-05	L34910-6	40.0	-
BC2 SW-05	L34910-6 Rep	40.0	-
BC2 SW-05 Dup	L34910-9	40.0	-
BC2 SW-05 Low Spk	L34910-7	40.0	-
BC2 SW-05 High Spk	L34910-8	40.0	-
BC2 SW-06	L34910-12	40.0	-
BC2 SW-06	L34910-12 Rep	40.0	-
BC2 SW-06 Dup	L34910-15	40.0	-
BC2 SW-06 Low Spk	L34910-13	40.0	-
BC2 SW-06 High Spk	L34910-14	40.0	-

	Spiking Solution Used	Volume Used for Spiking	Initial/Date
0106020 Spk A	F061103-2 (10 ng/mL)	200 µL (200 µL micropipet)	<u>CE</u> / 07/31/03
0106020 Spk B	F061103-1 (100 ng/mL)	200 µL (200 µL micropipet)	<u>CE</u> / 07/31/03
L34910-1 Spk C	F060203-2 (1000 ng/mL)	200 µL (200 µL micropipet)	<u>CE</u> / 07/31/03
L34910-6 Spk D	F060203-2 (1000 ng/mL)	200 µL (200 µL micropipet)	<u>CE</u> / 07/31/03
L34910-12 Spk E	F060203-2 (1000 ng/mL)	200 µL (200 µL micropipet)	<u>CE</u> / 07/31/03
L34910-16 Spk F	F060203-2 (1000 ng/mL)	200 µL (200 µL micropipet)	<u>CE</u> / 07/31/03

All samples were measured:

Time 1020

Date 07/31/03

Initials CEE

After measuring samples were returned to refrigerator No. 32

Time 1100

Date 07/31/03

Initials CEE

Comments: 200 µL of 250 mg/mL sodium thiosulfate was added to all samples before spiking. Initials/Date: CEE / 07/31/03

Analysis Summary:

Data Set: 073103A

Initials/Date: CE / 08/01/03

Data Set: 073103AP

Initials/Date: CE / 08/03/03

Data Set: 080603A

Initials/Date: CE / 08/06/03

Set extraction/analysis data verified by: gmF

Date: 8/18/03

July 26, 2001/6

SAMPLE EXTRACTION AND ANALYSIS TRACKING SHEET

EXYGEN STUDY NUMBER: L34910
MATRIX: Water

METHOD: ^{§§}
ANALYTES: PFHS, PFOS, PFOA and PFOSA

PROTOCOL NUMBER: NA

Client ID	Exygen ID	STEP 1	STEP 2	Dilutions (mL/mL)	STEP 3	Dilutions (mL/mL)	STEP 4	Reagents/ Materials	Lot #
na	0106020 Control			-		-		Methanol	4319318
na	0106020 Spk A			-		-		C18 SPE	W7345B3
na	0106020 Spk B			-		-		Type 1 Water	NA
BC2 SW-04	L34910-1 Spk C			0.1/1.0		0.1/1.0	↓	-	-
BC2 SW-05	L34910-6 Spk D			0.1/1.0		0.1/1.0		-	-
BC2 SW-06	L34910-12 Spk E			0.1/1.0		0.1/1.0		-	-
Outfall to River SW-25	L34910-16 Spk F			0.1/1.0		0.1/1.0		-	-
BC2 SW-04	L34910-1			-		-		-	-
BC2 SW-04	L34910-1 Rep			-		-		-	-
BC2 SW-04 Dup	L34910-4			-		-		-	-
BC2 SW-04 Low Spk	L34910-2			-		-		-	-
BC2 SW-04 High Spk	L34910-3			-		-		-	-
BC2 SW-05	L34910-6			0.1/1.0		0.1/1.0	↓	-	-
BC2 SW-05	L34910-6 Rep			-		-		-	-
BC2 SW-05 Dup	L34910-9			-		-		-	-
BC2 SW-05 Low Spk	L34910-7			-		-		-	-
BC2 SW-05 High Spk	L34910-8			-		-		-	-
BC2 SW-06	L34910-12			0.1/1.0		0.1/1.0	↓	-	-
BC2 SW-06	L34910-12 Rep			-		-		-	-
BC2 SW-06 Dup	L34910-15			-		-		-	-
BC2 SW-06 Low Spk	L34910-13			-		-		-	-
BC2 SW-06 High Spk	L34910-14			0.1/1.0		0.1/1.0	↓	-	-
*Initials/Date		CEE 07/21/03	CEE 07/31/03	CEE 07/31/03	CEE 08/01/03	CEE 08/01/03	CEE 08/01/03	Initials/Date	08/01/03

STEP 1: SPB column clean-up (omitting 40% wash)

STEP 2: Final volume to 5 mL collected in 15 mL polypropylene tubes

STEP 3: LC/MS/MS analysis

STEP 4: LC/MS/MS reanalysis.

*Initials and date under each step indicates the personnel that performed this step.

§§ Method of Analysis for the Determination of Perfluorooctane sulfonate (PFOS), Perfluorooctane sulfonylamide (PFOSA), and Perfluorooctanoate (PFOA) in Water

COMMENTS:

Final extracts stored in refrigerator 32 Initials: CEE Date: 07/31/03

July 19, 2001/4

① SAMPLE WAS DILUTED AND ADDITIONAL 10X FROM PREVIOUSLY DILUTED SAMPLE FOR A DF=100. P8/08/03/03
② SAMPLE WAS FRESHLY DILUTED 100X (0.1/10 mL/mL) FROM ORIGINAL EXTRACT + ANALYZED IN DATA SET 080603A. P8/08/06/03



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Internal Chain of Custody/Fortification Sheet

Exygen Study Number: L34910

Matrix: Water

Sponsor Study/Protocol No: NA

The samples listed below were removed from refrigerator No. 32

Time 0910

Date 07/31/03

Initials CEE

CLIENT SAMPLE ID	EXYGEN ID NUMBER	VOLUME (mL)	FORTIFICATION (ng)
Outfall to River SW-25	L34910-16	40.0	-
Outfall to River SW-25	L34910-16 Rep	40.0	-
Outfall to River SW-25 Dup	L34910-19	40.0	-
Outfall to River SW-25 Low Spk	L34910-17	40.0	-
Outfall to River SW-25 High Spk	L34910-18	40.0	-
Field Control/Travel Blank	L34910-22	40.0	-
Field Control/Travel Blank Low Spk	L34910-23	40.0	-
Field Control/Travel Blank High Spk	L34910-24	40.0	-
Equipment Blank-Pump	L34910-25	40.0	-
Equipment Blank-Dredge	L34910-26	40.0	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

	Spiking Solution Used	Volume Used for Spiking	Initial/Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

All samples were measured:

Time 1020

Date 07/31/03

Initials CEE

After measuring samples were returned to refrigerator No. 32

Time 1100

Date 07/31/03

Initials CEE

Comments: 200 µL of 250 mg/mL sodium thiosulfate was added to all samples before spiking. Initials/Date: CEE 5/31/03

Analysis Summary:

Data Set: 073103A

Initials/Date: CE / 08/01/03

Data Set: 073103AP

Initials/Date: CE / 08/03/03

Data Set: 080603A

Initials/Date: CE / 08/06/03

Set extraction/analysis data verified by: JMF

Date: 8/6/03
July 26, 2001/6

EXYGEN STUDY NUMBER: L34910

MATRIX: Water

PROTOCOL NUMBER: NA

METHOD:

ANALYTES: PFHS, PFOS, PFOA and PFOSA

STEP 1: SPE column clean-up (omitting 40% wash)
STEP 2: Final volume to 5 mL collected in 15 mL polypropylene tubes
STEP 3: LCMS/MS analysis
STEP 4: LCMS/MS reanalysis.

*Initials and date under each step indicates the personnel that performed this step.

Method of Analysis for the Determination of Perfluorooctane sulfonate (PFOS), Perfluorooctane sulfonylamide (PFOSA), and Perfluorooctanate (POAA) in Water

COMMENTS:

Final extracts stored in refrigerator 32 Initials: CEE Date: 07/31/03

July 19, 2001/4

Sample List: C:\MASSLYNX\Fluorochemicals.PRO\SampleDB\073103A Decatur BC.SPL
Printed: Fri Aug 01 08:36:23 2003

Exogen STUDY NO. L34910

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08/01/03

Vial	File Name	LIMS ID	Client ID	Sample Description	Matrix	Sample Type	Conc (ng/L)	Conc B	Conc C	Test ID	DF
1	41 073103A-1001	---	---	XC072503-0, 0 ng/L Standard	---	Standard	0	---	---	0	1
2	42 073103A-1002	---	---	XC072503-1, 25 ng/L Standard	---	Standard	25	---	---	0	1
3	43 073103A-1003	---	---	XC072503-2, 50 ng/L Standard	---	Standard	50	---	---	0	1
4	44 073103A-1004	---	---	XC072503-3, 100 ng/L Standard	---	Standard	100	---	---	0	1
5	45 073103A-1005	---	---	XC072503-4, 250 ng/L Standard	---	Standard	250	---	---	0	1
6	46 073103A-1006	---	---	XC072503-5, 500 ng/L Standard	---	Standard	500	---	---	0	1
7	47 073103A-1007	---	---	XC072503-6, 1000 ng/L Standard	---	Standard	1000	---	---	0	1
8	92 073103A-1008	---	---	Methanol Wash	---	Blank	---	---	---	0	1
9	51 073103A-1009	---	---	0106020 Control	---	Blank	---	---	---	0	1
10	52 073103A-1010	---	---	0106020 Spk A, 50 ng/L	---	QC	100	---	---	0	1
11	53 073103A-1011	---	---	0106020 Spk B, 500 ng/L	---	QC	500	---	---	0	1
12	54 073103A-1012	---	---	L34910-1 Spk C, 5000 ng/L, DF=10	---	QC	5000	---	---	0	10
13	55 073103A-1013	---	---	L34910-6 Spk D, 5000 ng/L, DF=10	---	QC	5000	---	---	0	10
14	56 073103A-1014	---	---	L34910-12 Spk E, 5000 ng/L, DF=10	---	QC	5000	---	---	0	10
15	57 073103A-1015	---	---	L34910-16 Spk F, 5000 ng/L, DF=10	---	QC	5000	---	---	0	10
16	42 073103A-1016	---	---	XC072503-1, 25 ng/L Standard	---	Standard	25	---	---	0	1
17	58 073103A-1017	---	---	L34910-1	---	Analyte	---	---	---	0	1
18	59 073103A-1018	---	---	L34910-1 Rep	---	Analyte	---	---	---	0	1
19	60 073103A-1019	---	---	L34910-4	---	Analyte	---	---	---	0	1
20	61 073103A-1020	---	---	L34910-2	---	QC	100	---	---	0	1
21	62 073103A-1021	---	---	L34910-3, DF=100	---	QC	10000	---	---	0	100
22	43 073103A-1022	---	---	XC072503-2, 50 ng/L Standard	---	Standard	50	---	---	0	1
23	63 073103A-1023	---	---	L34910-6	---	Analyte	---	---	---	0	1
24	64 073103A-1024	---	---	L34910-6 Rep	---	Analyte	---	---	---	0	1
25	65 073103A-1025	---	---	L34910-9	---	Analyte	---	---	---	0	1
26	66 073103A-1026	---	---	L34910-7	---	QC	100	---	---	0	1
27	67 073103A-1027	---	---	L34910-8, DF=100	---	QC	10000	---	---	0	100
28	44 073103A-1028	---	---	XC072503-3, 100 ng/L Standard	---	Standard	100	---	---	0	1
29	68 073103A-1029	---	---	L34910-12	---	Analyte	---	---	---	0	1
30	69 073103A-1030	---	---	L34910-12 Rep	---	Analyte	---	---	---	0	1
31	70 073103A-1031	---	---	L34910-15	---	Analyte	---	---	---	0	1
32	71 073103A-1032	---	---	L34910-13	---	QC	100	---	---	0	1
33	72 073103A-1033	---	---	L34910-14, DF=100	---	QC	10000	---	---	0	100
34	45 073103A-1034	---	---	XC072503-4, 250 ng/L Standard	---	Standard	250	---	---	0	1
35	73 073103A-1035	---	---	L34910-16	---	Analyte	---	---	---	0	1
36	74 073103A-1036	---	---	L34910-16 Rep	---	Analyte	---	---	---	0	1
37	75 073103A-1037	---	---	L34910-19	---	Analyte	---	---	---	0	1
38	76 073103A-1038	---	---	L34910-17	---	QC	100	---	---	0	1
39	77 073103A-1039	---	---	L34910-18, DF=100	---	QC	10000	---	---	0	100
40	46 073103A-1040	---	---	XC072503-5, 500 ng/L Standard	---	Standard	500	---	---	0	1
41	78 073103A-1041	---	---	L34910-25	---	Analyte	---	---	---	0	1
42	79 073103A-1042	---	---	L34910-28	---	Analyte	---	---	---	0	1
43	80 073103A-1043	---	---	L34910-22	---	Analyte	---	---	---	0	1
44	81 073103A-1044	---	---	L34910-23	---	QC	100	---	---	0	1

Masslynx - Sample List

Page 2

Sample List: C:\MASSLYNX\F\fluoroch\chemicals\PROISampleDB\073103A Decatur BC.SPL
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08/01/03

	MS Method	HPLC Method	MS Tune File	Inj. Volume
1	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
2	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
3	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
4	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
5	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
6	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
7	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
8	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
9	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
10	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
11	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
12	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
13	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
14	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
15	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
16	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
17	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
18	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
19	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
20	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
21	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
22	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
23	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
24	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
25	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
26	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
27	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
28	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
29	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
30	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
31	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
32	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
33	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
34	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
35	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
36	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
37	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
38	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
39	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
40	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
41	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
42	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
43	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
44	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15

Masslynx - Sample List

Sample List: C:\MASSLYNX\Fluorochemicals.PRO\SampleDB\073103A Decatur BC.SPL
 Printed: Fri Aug 01 08:36:23 2003

08/01/03

Exygen STUDY NO. L34910

Page 3

Page Position: (1, 2)

Vial	File Name	LIMS ID	Client ID	Sample Description	Matrix	Sample Type	Conc (ng/L)	Conc B	Conc C	Test ID	DF
45	82 073103A-1045	--	--	L34910-24, DF=100	--	QC	10000	--	--	0	100
46	47 073103A-1046	--	--	XC072503-6, 1000 ng/L Standard	--	Standard	1000	--	--	0	1

Masslynx - Sample List

Sample List: C:\MASSLYNX\Fluorochemicals.PRO\SampleDB\073103A Decatur BC.SPL
Printed: Fri Aug 01 08:36:23 2003

08/08/03

Exygen STUDY NO. 134910

Page 4

Page Position: (2, 2)

	MS Method	HPLC Method	MS Tune File	Inj. Volume
45	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
46	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15

LC/MS/MS SYSTEM AND OPERATING CONDITIONS

Sponsor Protocol No: NA

Exygen Study No: L34910

Instrument: Micromass Quattro Ultima (LC/MS/MS Unit #6)

Computer: COMPAQ Professional Workstation AP200

Software: Microsoft Windows NT: Version 4 Build 1381: Service Pack 5
Micromass Limited: MassLynx 3.4 Build 004

HPLC Equipment: Hewlett Packard (HP) Series 1100
HP Bin Pump HP Vacuum Degasser
HP Autosampler HP Column Oven

HPLC Column: Genesis C-8, 5 cm x 2.1 mm i.d. x 4 μ (Exygen ID: 74A)
(JONESCHROMATOGRAPHY: Part No. FK5962E)

Mobile Phase (A): 2 mM Ammonium Acetate in Type I Water
Mobile Phase (B): Methanol

Analyst: Karen Risha
Exygen Research
3058 Research Drive, State College, PA 16801
Phone: (814) 272-1039 FAX: (814) 231-1580

02/01/03

NOTE: The next 3 pages are computer generated printouts from the masslynx software program. The pages contain the instrument settings used for the analysis of this data set.

All Handwritten Peak ID's by:

02/03/03

Scanning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUDE\C6 C8 SULF C8 ACID PFOSA
Last Modified: Thu Jul 31 16:23:50 2003

Printed: Fri Aug 01 08:36:30 2003

8/01/03

Solvent Delay (mins) : 0.00

Analog Channel 4 : Unused

Function : 1 MRM of 4 Mass Pairs (ESP-)

Inter Channel Delay (Secs) : 0.03

Span (Daltons) : 0.00

Start Time (Mins) : 0.00

End Time (Mins) : 12.00

Repeats : 1

	Channel	Parent	Daughter	Dwell (Secs)	Coll Energy (eV)	Cone (V)
1		399.00	80.00	0.20	35	50
2		413.00	369.00	0.20	10	10
3		498.00	78.00	0.20	30	50
4		499.00	99.00	0.20	40	30

Method Report

Page 1

Method File:
Last Modified:

c:\masslynx\fluorochemicals.pro\acqddb\pfbs water
Friday, August 01, 2003 08:27:00

Printed:

Friday, August 01, 2003 08:36:39

08/01/03

HP1100 LC Pump Initial Conditions

Solvents

A%	90.0
B%	10.0
C%	0.0
D%	0.0

Flow (ml/min)	0.300
Stop Time (mins)	20.0
Min Pressure (bar)	0
Max Pressure (bar)	400
Oven Temperature Left(°C)	35.0
Oven Temperature Right(°C)	35.0

HP1100 LC Pump Gradient Timetable

The gradient Timetable contains 8 entries which are :

Time	A%	B%	C%	D%	Flow	Pressure
0.00	90.0	10.0	0.0	0.0	0.300	400
2.00	90.0	10.0	0.0	0.0	0.300	400
5.00	10.0	90.0	0.0	0.0	0.300	400
9.00	10.0	90.0	0.0	0.0	0.300	400
9.50	0.0	100.0	0.0	0.0	0.300	400
14.00	0.0	100.0	0.0	0.0	0.300	400
14.50	90.0	10.0	0.0	0.0	0.300	400
20.00	90.0	10.0	0.0	0.0	0.300	400

HP1100 LC Pump External Event Timetable

The Timetable contains 6 entries which are :

Time	Column Switch	Contact1	Contact2	Contact3	Contact4
Initial	Off	Off	Off	Off	Off
0.00	Off	On	Off	Off	Off
0.05	Off	Off	Off	Off	Off
0.10	Off	Off	On	Off	Off
11.90	Off	Off	Off	On	Off
12.00	Off	Off	Off	Off	Off

HP1100 Autosampler Initial Conditions

Draw Speed	200.0
Eject Speed (µl/min)	200
Draw Position (mm)	0.50
Stop Time (mins)	20.00
Injection Volume(µl)	15.0
Vial Number	69

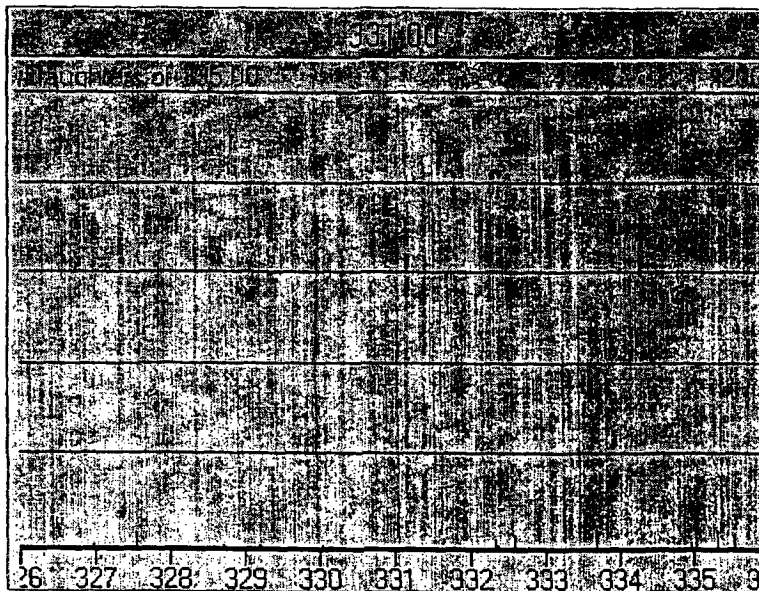
Tuning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUD\FLUOROCHEMS

Printed: Fri Aug 01 08:37:00 2003

10/08/01/03



Dau 395.00

SOURCE (ESP-)	Set	Rdbk	Analyser	Set	Rdbk
Capillary	3.00	-2.93	LM Res 1	14.0	
Cone	20	-21	HM Res 1	14.0	
Hexapole 1	0.0		IEnergy 1	1.0	
Aperture 1	0.0		Entrance	-2	12
Hexapole 2	0.0		Collision	15	14
Source Block Temp.	100	100	Exit	2	16
Desolvation Temp.	300	299	LM Res 2	14.0	
			HM Res 2	14.0	
			IEnergy 2	2.0	
			Multiplier	650	-648
Pressures	Rdbk		Gas Flows	Rdbk	
Analyser Vacuum	OFF		Cone Gas	131.4	
Gas Cell	3.4e-3		Desolvation	754.2	

Quantify Calibration Report

Page 1

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\073103A Decatur BC

Last modified: Sun Aug 03 07:12:46 2003

Printed: Sun Aug 03 07:19:26 2003

08/03/03 pages 1-4

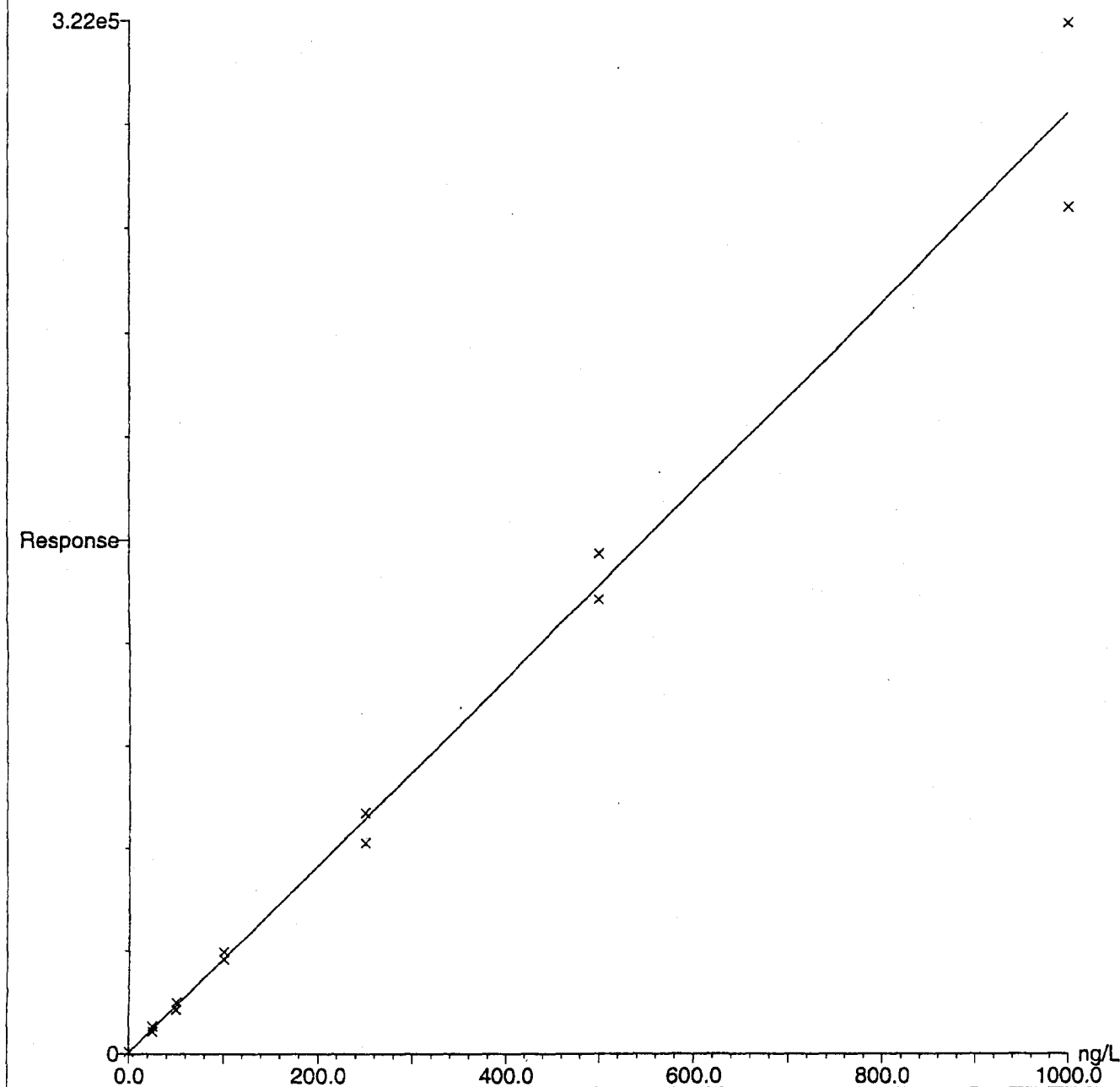
Compound 1 name: C8 Acid (PFOA)

Coefficient of Determination: 0.986042

Calibration curve: $293.343 * x + 445.057$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Calibration Report

Page 2

Study No.: I34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\073103A Decatur BC

Last modified: Sun Aug 03 07:12:46 2003

Printed: Sun Aug 03 07:19:26 2003

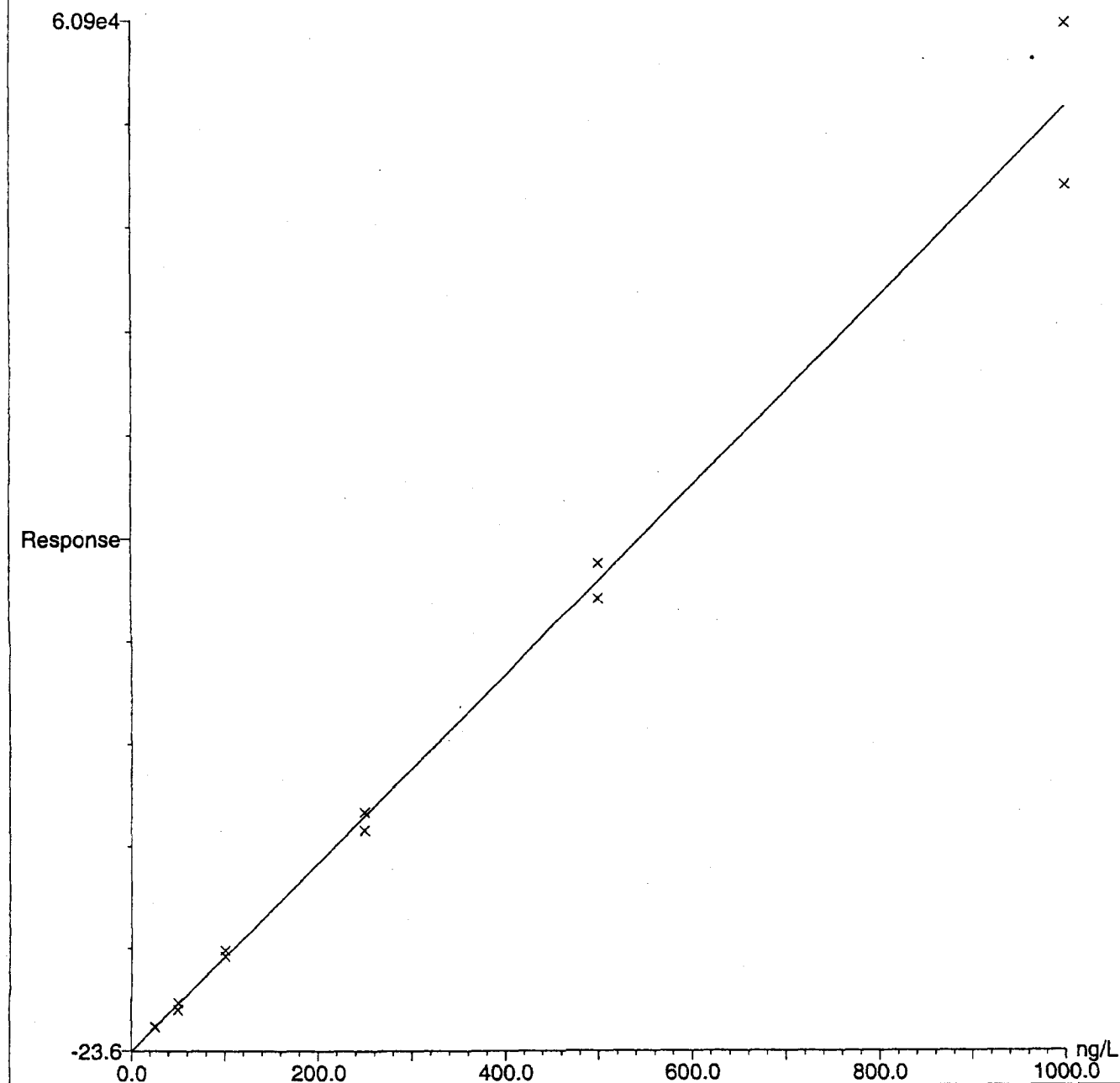
Compound 2 name: C6 Sulfonate (PFHS)

Coefficient of Determination: 0.989093

Calibration curve: $55.9970 * x + -23.5660$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Calibration Report

Page 3

Study No.: L34910, Set No.: 073103A, Ext.Date: 07/31/03, Analyst: K.Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\073103A Decatur BC

Last modified: Sun Aug 03 07:12:46 2003

Printed: Sun Aug 03 07:19:26 2003

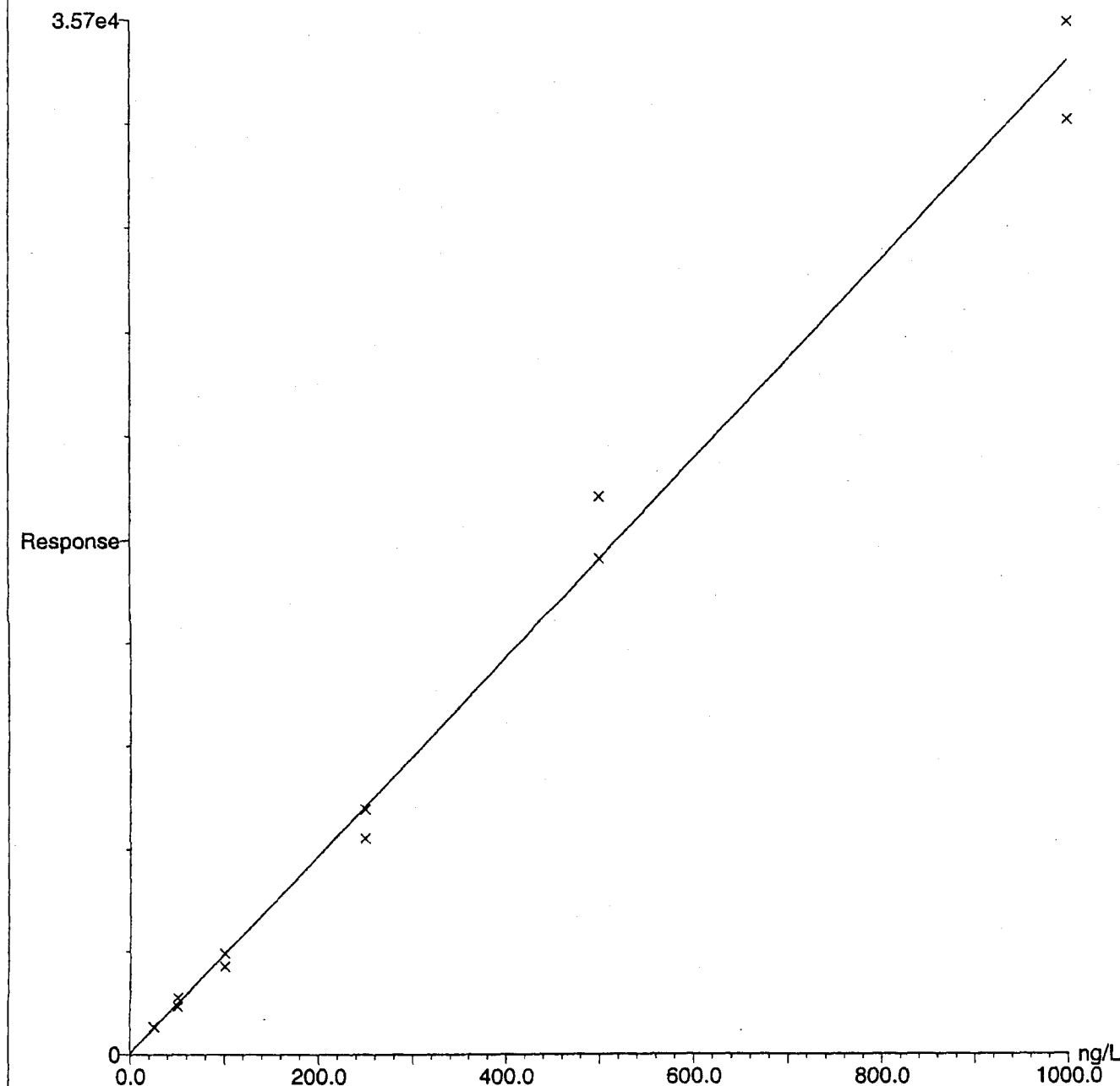
Compound 3 name: C8 Sulfonate (PFOS)

Coefficient of Determination: 0.992844

Calibration curve: $34.2805 * x + 56.2500$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Calibration Report

Page 4

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\073103A Decatur BC

Last modified: Sun Aug 03 07:12:46 2003

Printed: Sun Aug 03 07:19:26 2003

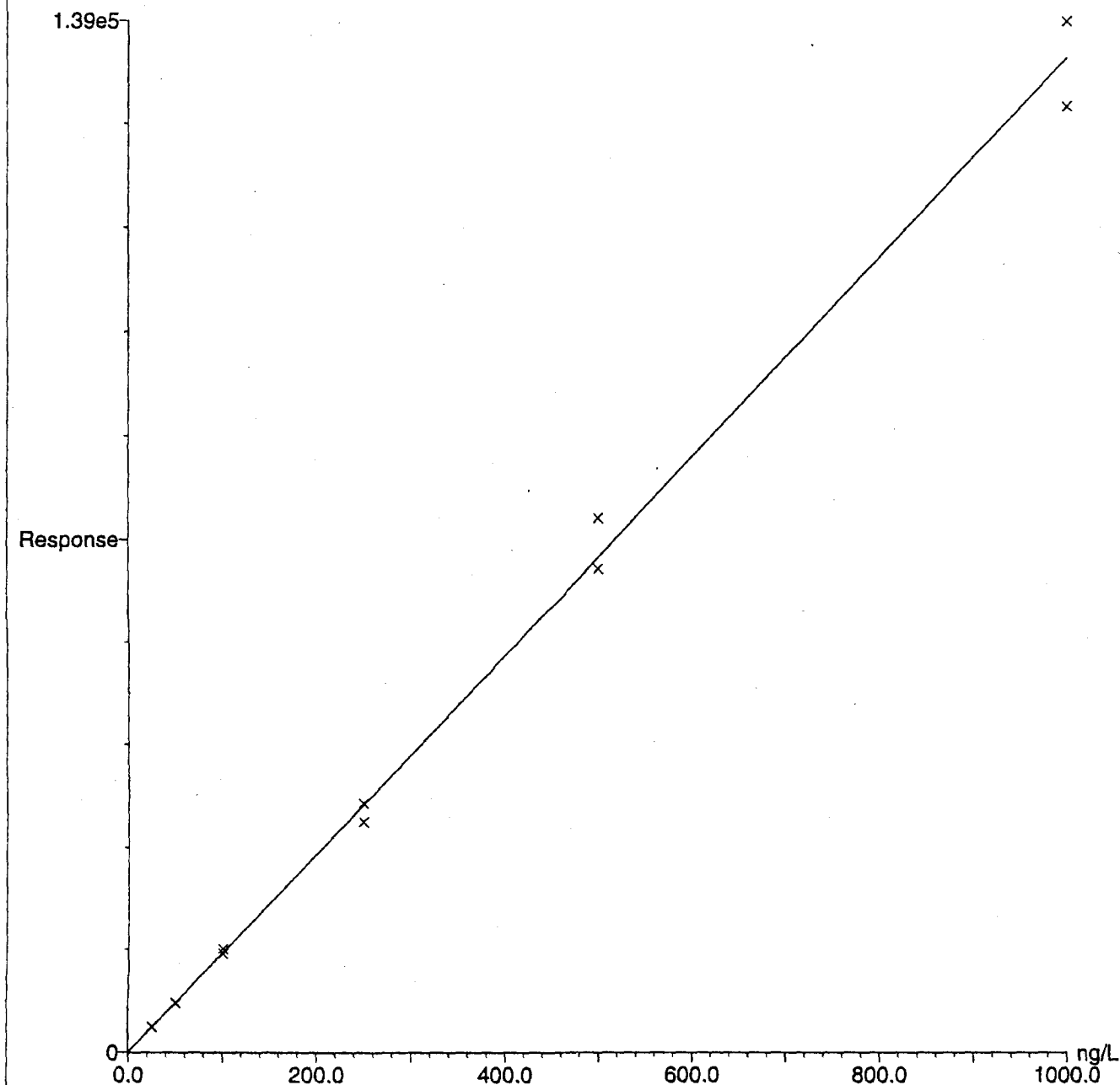
Compound 4 name: PFOSA

Coefficient of Determination: 0.995963

Calibration curve: $134.313 * x + 78.1882$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Sample Report

Page 1

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Initials

Date 08/03/03

Run# 073103A-1001 To 073103A-1046

Name: 073103A-1001

Text:

1: C8 Acid (PFOA)

XC072503-0, 0 ng/L Standard

01-Aug-2003 09:24:14

LC/MS/MS #6

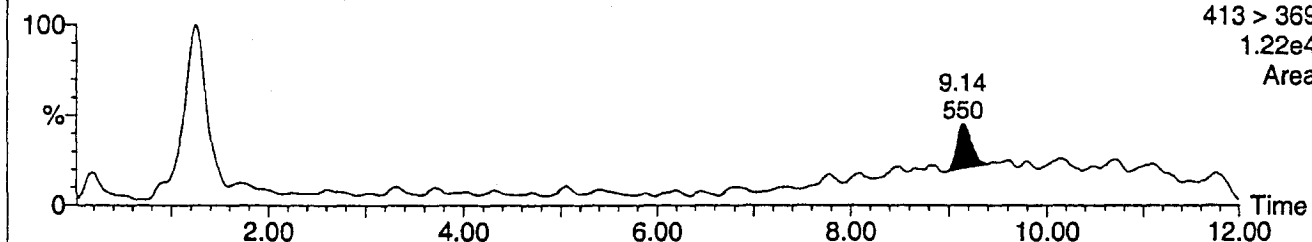
073103A-1001 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.22e4

Area



2: C6 Sulfonate (PFHS)

XC072503-0, 0 ng/L Standard

01-Aug-2003 09:24:14

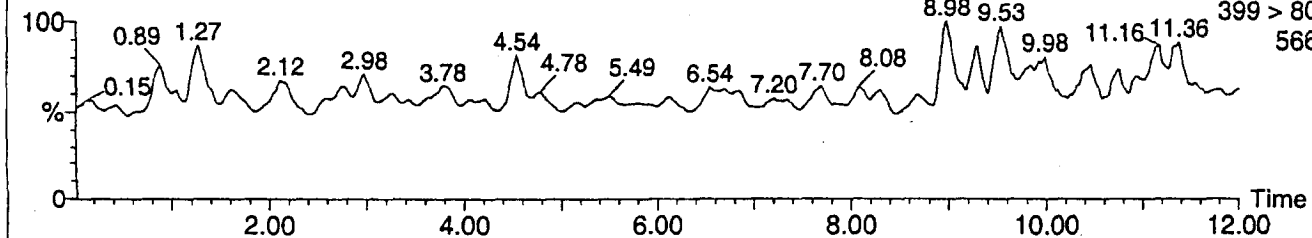
LC/MS/MS #6

073103A-1001 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

566



3: C8 Sulfonate (PFOS)

XC072503-0, 0 ng/L Standard

01-Aug-2003 09:24:14

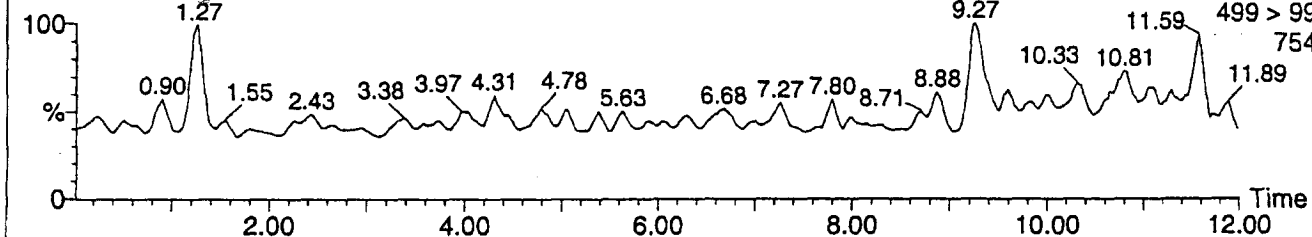
LC/MS/MS #6

073103A-1001 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

754



Quantify Sample Report

Page 2

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1001

Text:

4: PFOSA

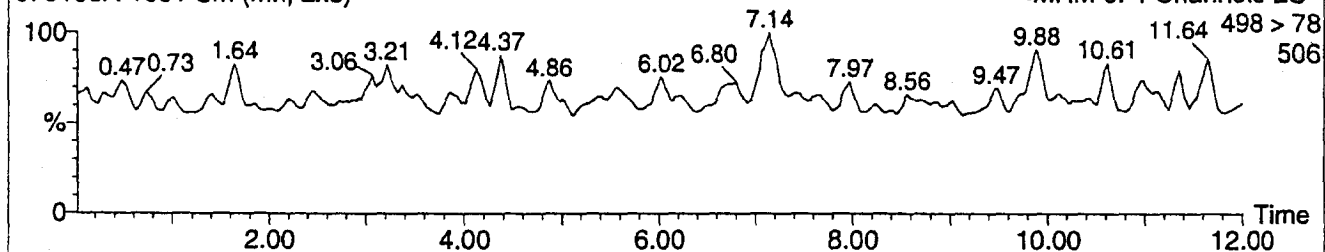
XC072503-0, 0 ng/L Standard

01-Aug-2003 09:24:14

LC/MS/MS #6

073103A-1001 Sm (Mn, 2x3)

MRM of 4 Channels ES-



Quantify Sample Report

Page 3

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1002

Text:

1: C8 Acid (PFOA)

XC072503-1, 25 ng/L Standard

01-Aug-2003 09:45:57

LC/MS/MS #6

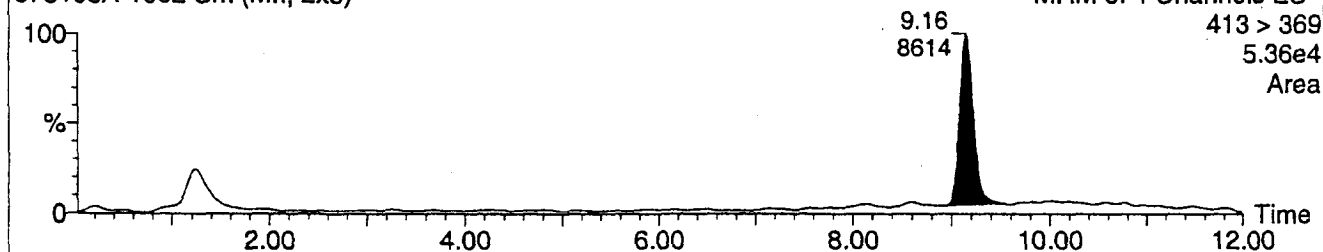
073103A-1002 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

5.36e4

Area



2: C6 Sulfonate (PFHS)

XC072503-1, 25 ng/L Standard

01-Aug-2003 09:45:57

LC/MS/MS #6

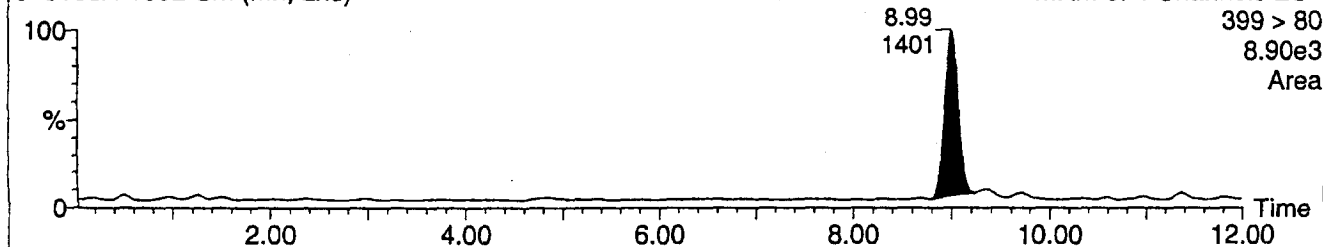
073103A-1002 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

8.90e3

Area



3: C8 Sulfonate (PFOS)

XC072503-1, 25 ng/L Standard

01-Aug-2003 09:45:57

LC/MS/MS #6

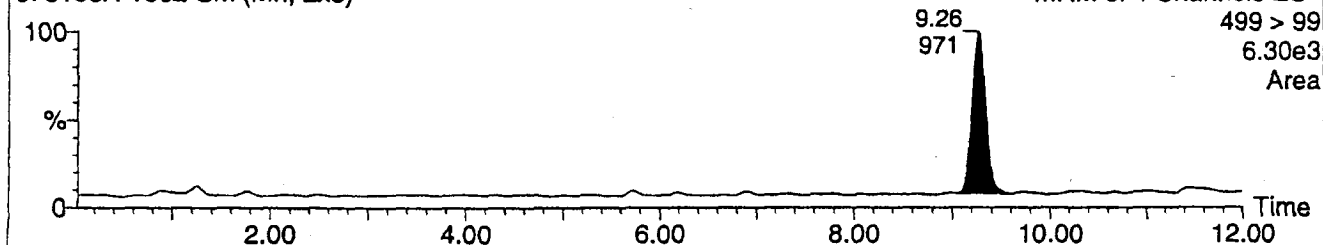
073103A-1002 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

6.30e3

Area



Quantify Sample Report

Page 4

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1002

Text:

4: PFOSA

XC072503-1, 25 ng/L Standard

01-Aug-2003 09:45:57

LC/MS/MS #6

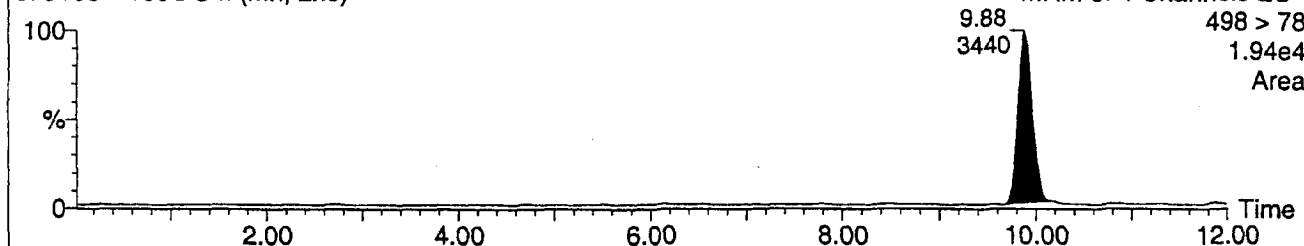
073103A-1002 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.94e4

Area



Quantify Sample Report

Page 5

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1003

Text:

1: C8 Acid (PFOA)

XC072503-2, 50 ng/L Standard

01-Aug-2003 10:07:44

LC/MS/MS #6

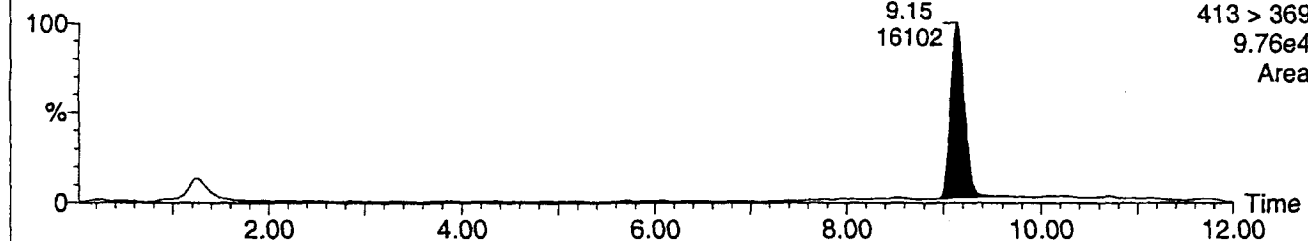
073103A-1003 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

9.76e4

Area



2: C6 Sulfonate (PFHS)

XC072503-2, 50 ng/L Standard

01-Aug-2003 10:07:44

LC/MS/MS #6

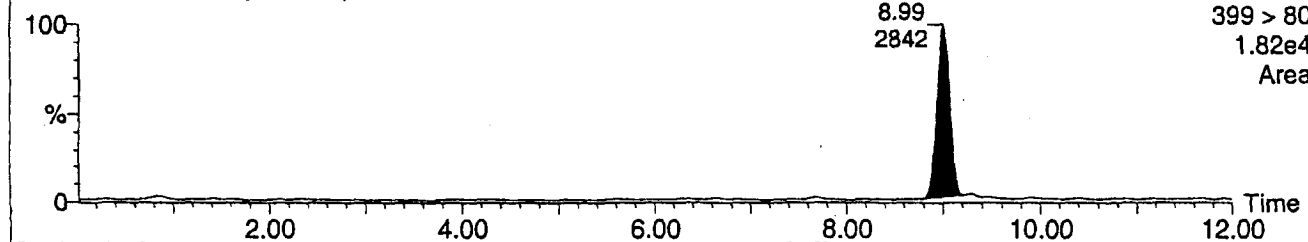
073103A-1003 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.82e4

Area



3: C8 Sulfonate (PFOS)

XC072503-2, 50 ng/L Standard

01-Aug-2003 10:07:44

LC/MS/MS #6

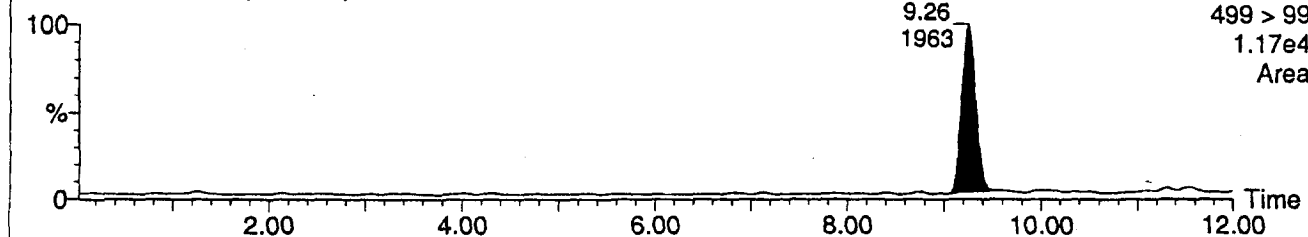
073103A-1003 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.17e4

Area



Quantify Sample Report

Page 6

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC
Last modified: Sun Aug 03 07:08:13 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1003

Text:

4: PFOSA

XC072503-2, 50 ng/L Standard

01-Aug-2003 10:07:44

LC/MS/MS #6

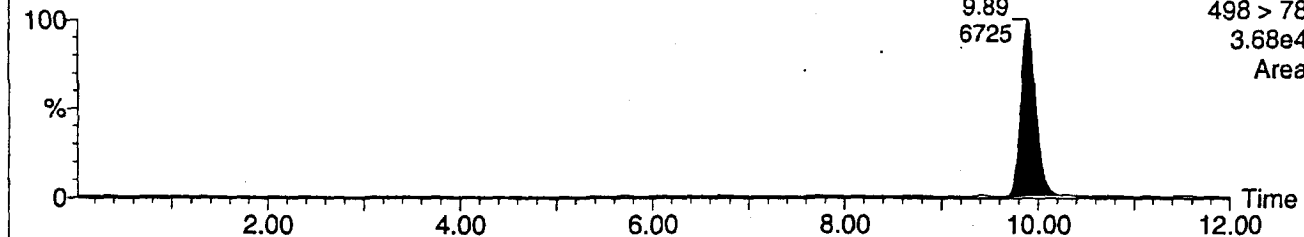
073103A-1003 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

3.68e4

Area



Quantify Sample Report

Page 7

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1004

Text:

1: C8 Acid (PFOA)

XC072503-3, 100 ng/L Standard

01-Aug-2003 10:29:31

LC/MS/MS #6

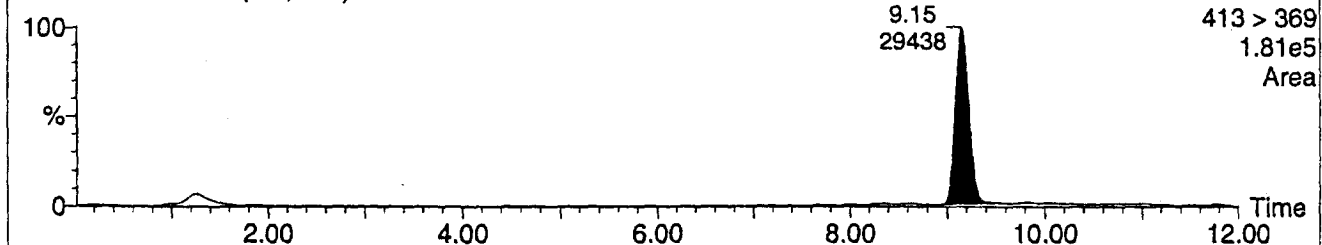
073103A-1004 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.81e5

Area



2: C6 Sulfonate (PFHS)

XC072503-3, 100 ng/L Standard

01-Aug-2003 10:29:31

LC/MS/MS #6

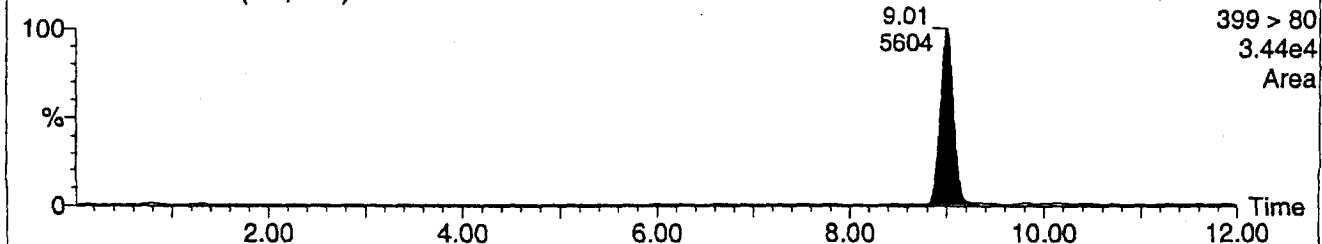
073103A-1004 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

3.44e4

Area



3: C8 Sulfonate (PFOS)

XC072503-3, 100 ng/L Standard

01-Aug-2003 10:29:31

LC/MS/MS #6

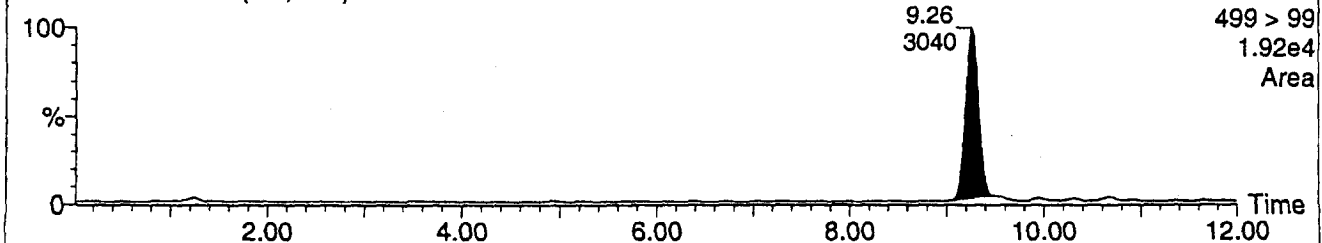
073103A-1004 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.92e4

Area



Quantify Sample Report

Page 8

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1004

Text:

4: PFOSA

XC072503-3, 100 ng/L Standard

01-Aug-2003 10:29:31

LC/MS/MS #6

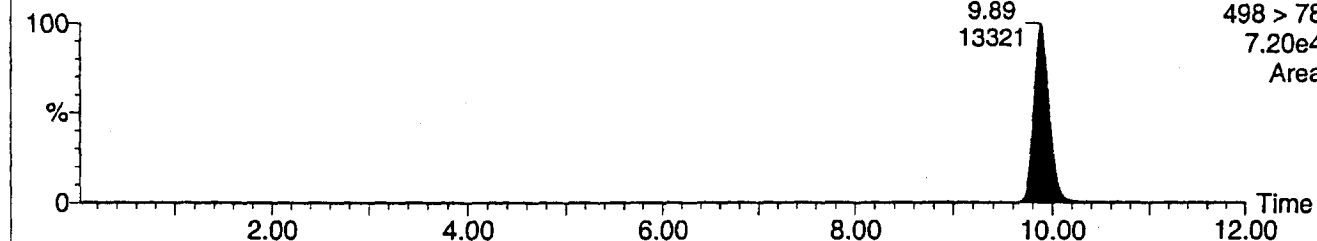
073103A-1004 Sm (Mn, 2x3)

MRM of 4 Channels ES-

9.89 498 > 78

13321 7.20e4

Area



Quantify Sample Report

Page 9

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1005

Text:

1: C8 Acid (PFOA)

XC072503-4, 250 ng/L Standard

01-Aug-2003 10:51:16

LC/MS/MS #6

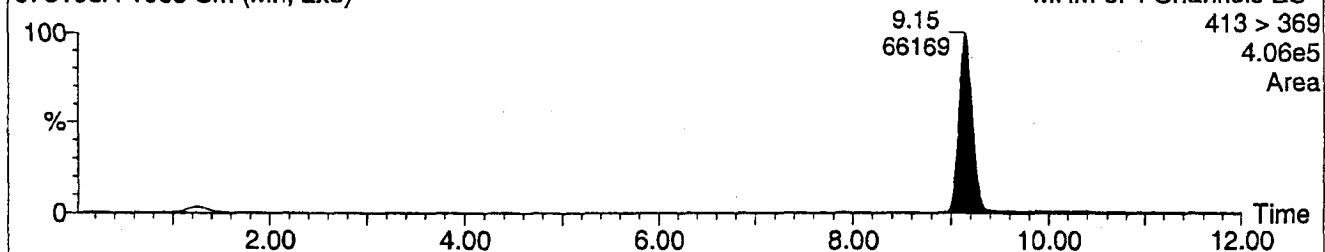
073103A-1005 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

4.06e5

Area



2: C6 Sulfonate (PFHS)

XC072503-4, 250 ng/L Standard

01-Aug-2003 10:51:16

LC/MS/MS #6

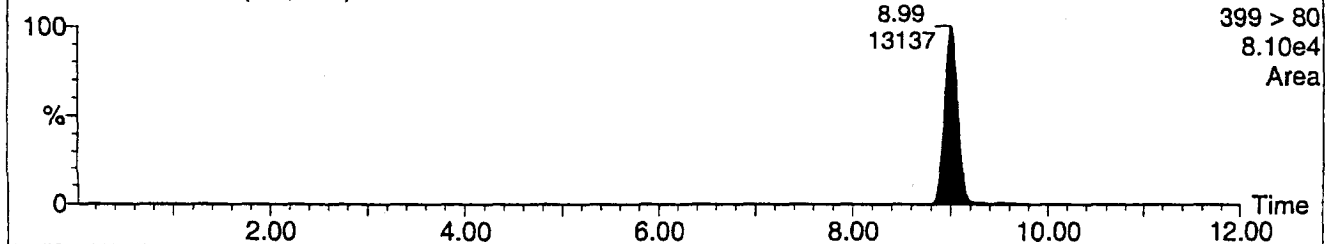
073103A-1005 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

8.10e4

Area



3: C8 Sulfonate (PFOS)

XC072503-4, 250 ng/L Standard

01-Aug-2003 10:51:16

LC/MS/MS #6

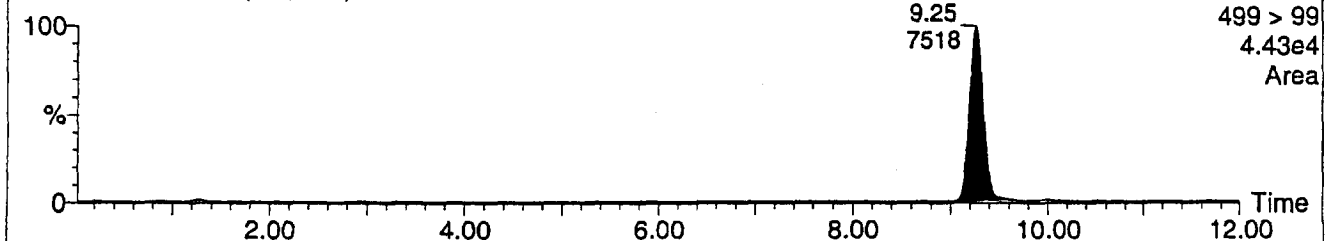
073103A-1005 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

4.43e4

Area



Quantify Sample Report

Page 10

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1005

Text:

4: PFOSA

XC072503-4, 250 ng/L Standard

01-Aug-2003 10:51:16

LC/MS/MS #6

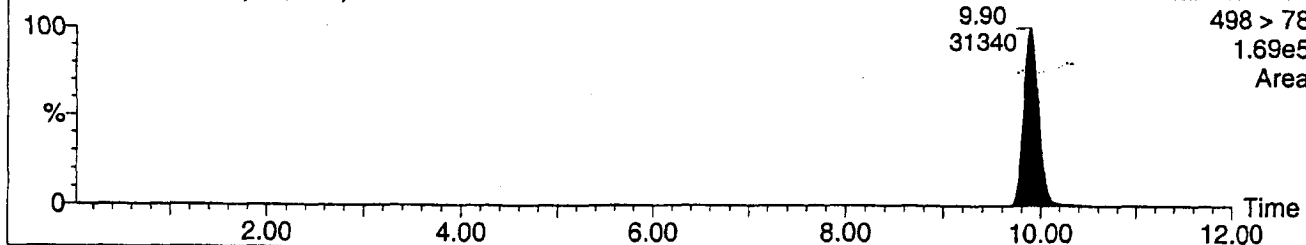
073103A-1005 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.69e5

Area



Quantify Sample Report

Page 11

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

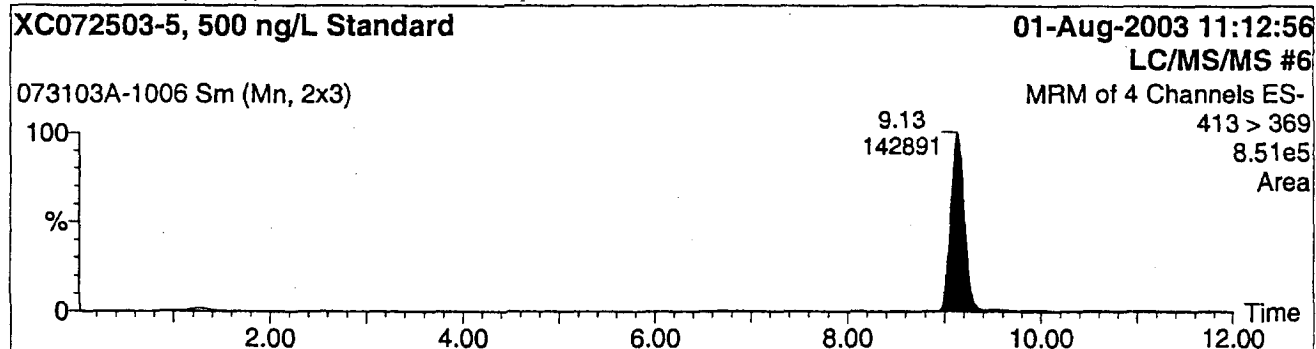
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC
Last modified: Sun Aug 03 07:08:13 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:19:29 2003

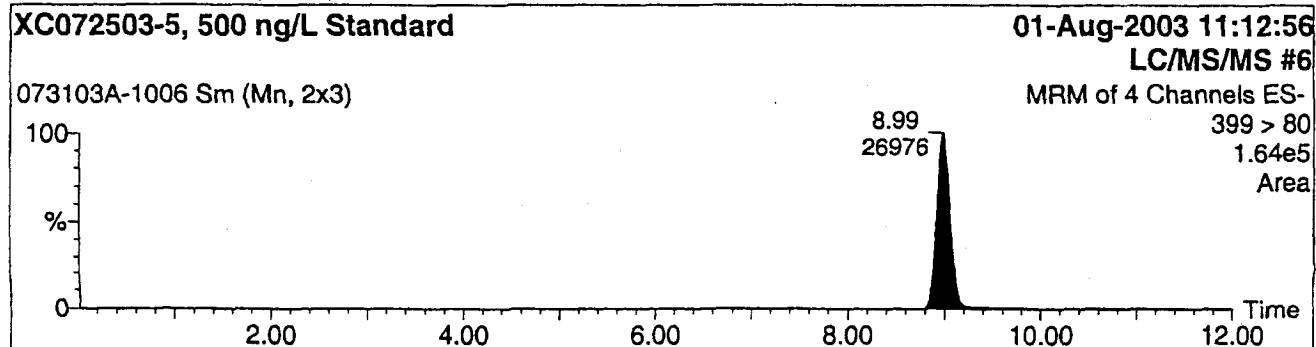
Name: 073103A-1006

Text:

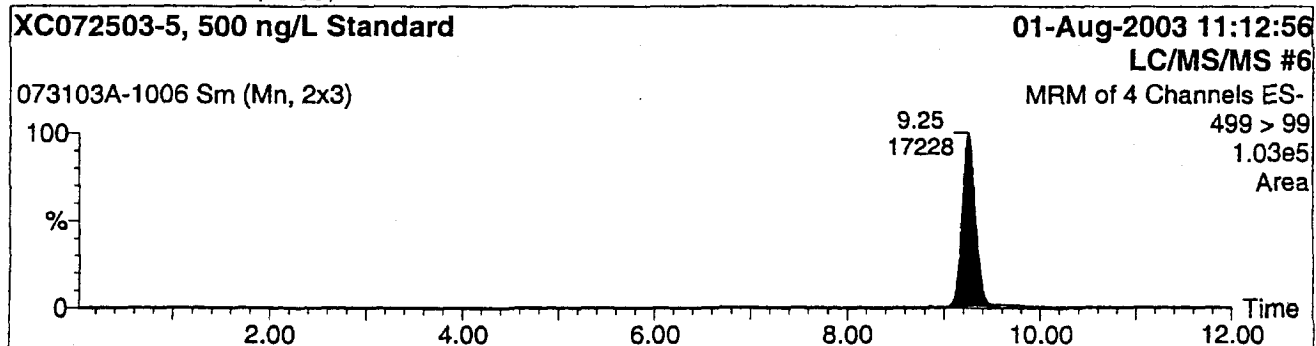
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 12

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1006

Text:

4: PFOSA

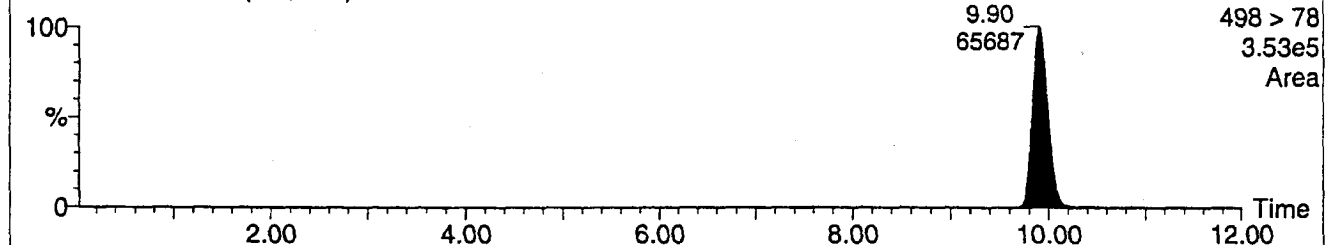
XC072503-5, 500 ng/L Standard

01-Aug-2003 11:12:56

LC/MS/MS #6

073103A-1006 Sm (Mn, 2x3)

MRM of 4 Channels ES-



Quantify Sample Report

Page 13

Study No.:L34910, Set No.:073103A, Ext.Date:07/31/03, Analyst:K.Risha

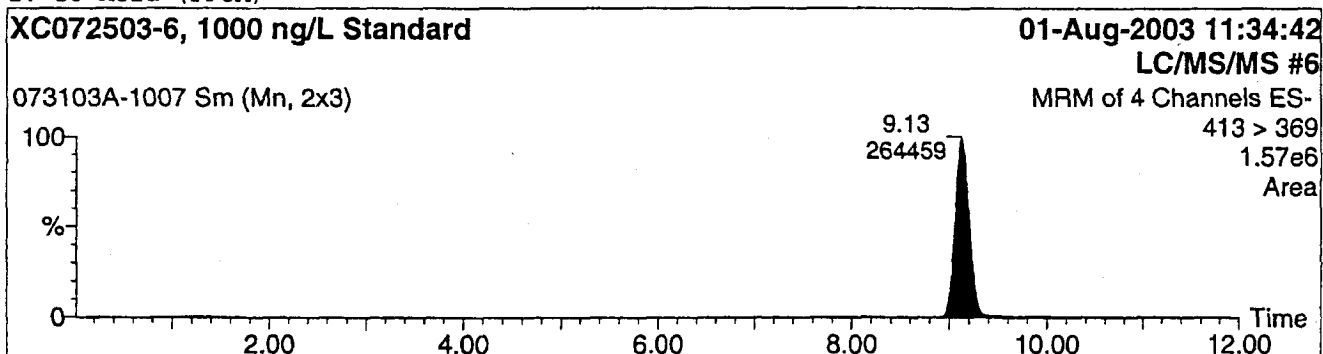
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC
Last modified: Sun Aug 03 07:08:13 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:19:29 2003

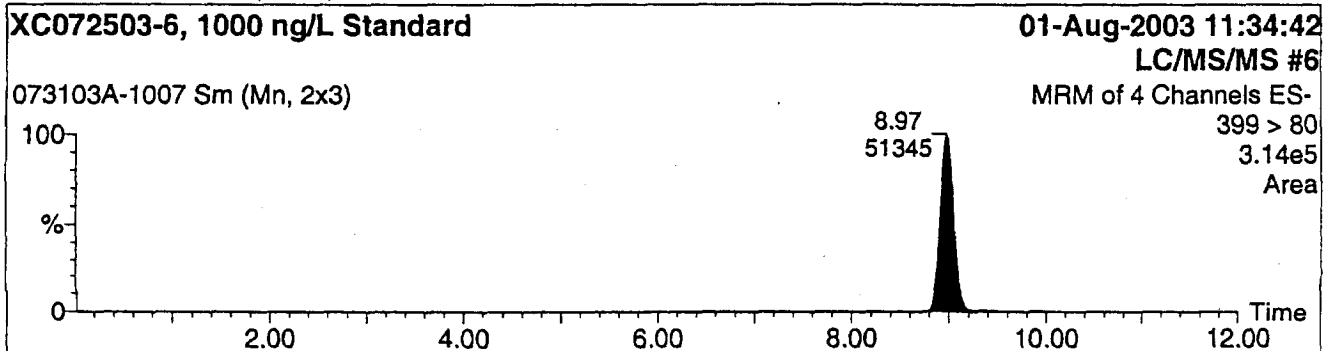
Name: 073103A-1007

Text:

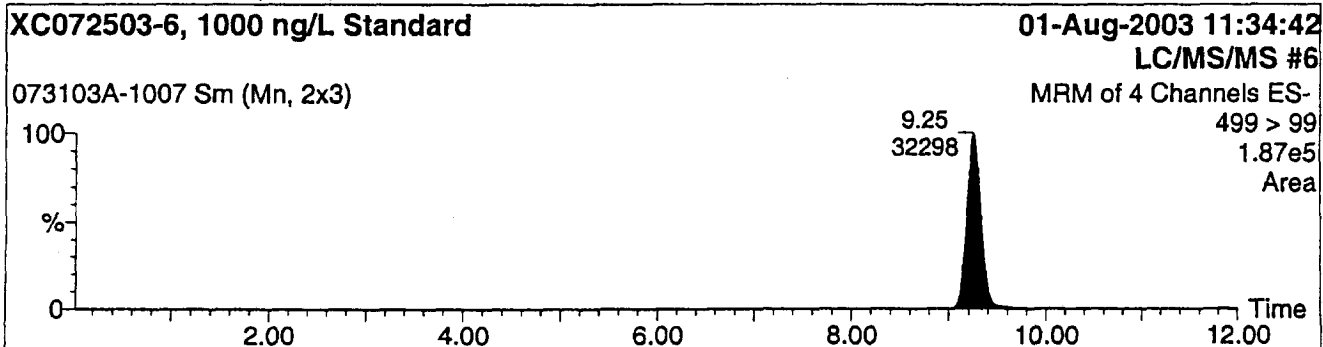
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 14

Study No.:L34910, Set No.:073103A, Ext.Date:07/31/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1007

Text:

4: PFOSA

XC072503-6, 1000 ng/L Standard

01-Aug-2003 11:34:42

LC/MS/MS #6

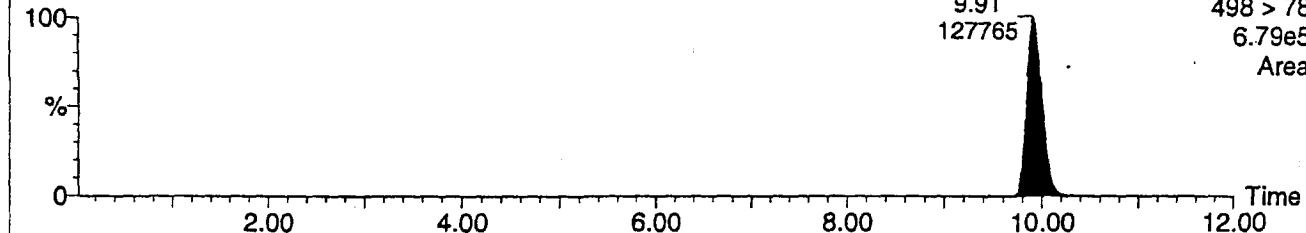
073103A-1007 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

6.79e5

Area



Quantify Sample Report

Page 15

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

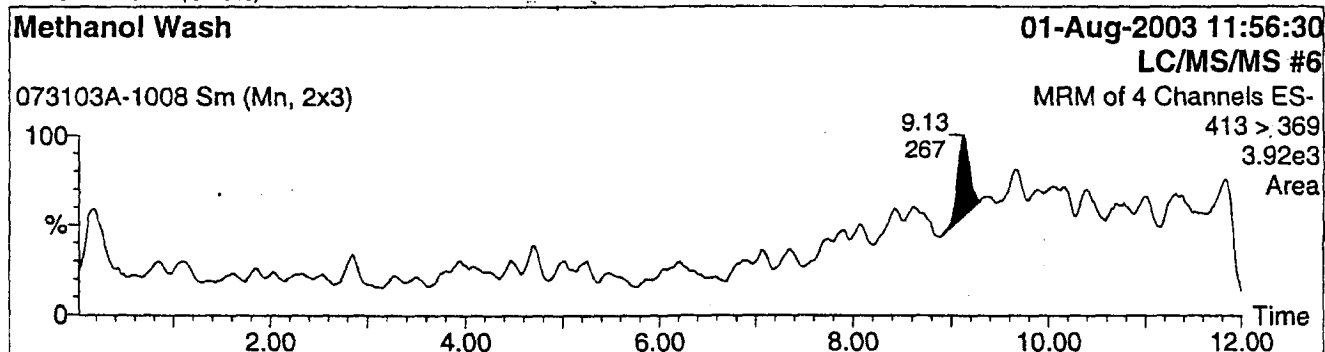
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC
Last modified: Sun Aug 03 07:08:13 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:19:29 2003

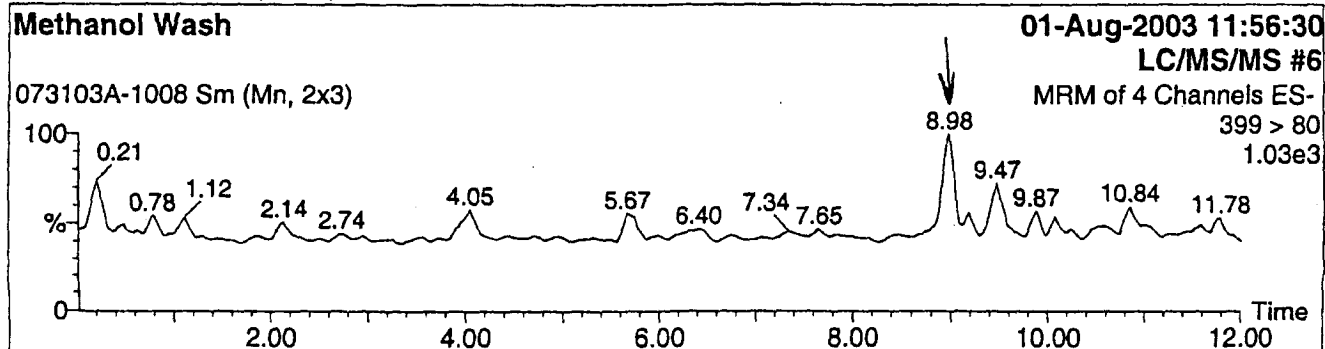
Name: 073103A-1008

Text:

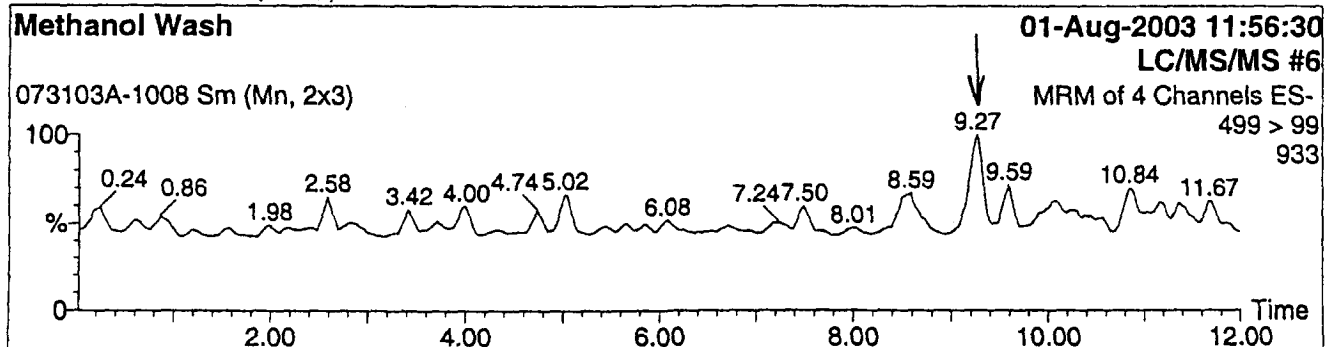
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 16

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC
Last modified: Sun Aug 03 07:08:13 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:19:29 2003

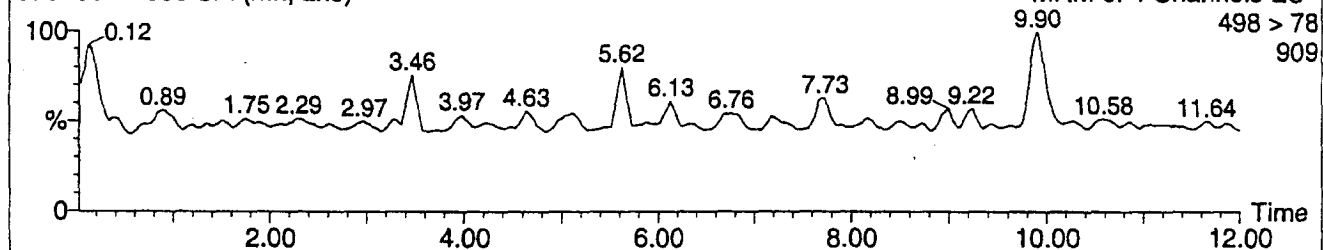
Name: 073103A-1008

Text:

4: PFOSA

Methanol Wash

073103A-1008 Sm (Mn, 2x3)



Quantify Sample Report

Page 17

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

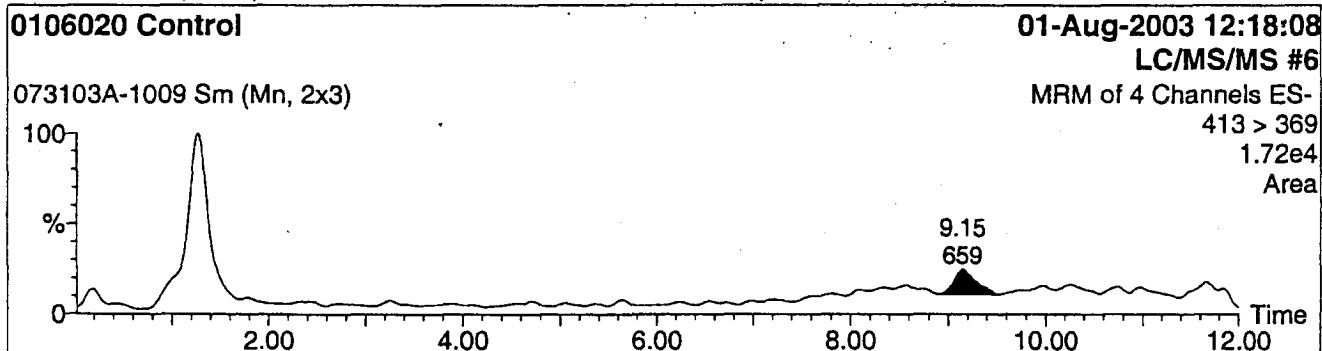
Job Code:

Printed: Sun Aug 03 07:19:29 2003

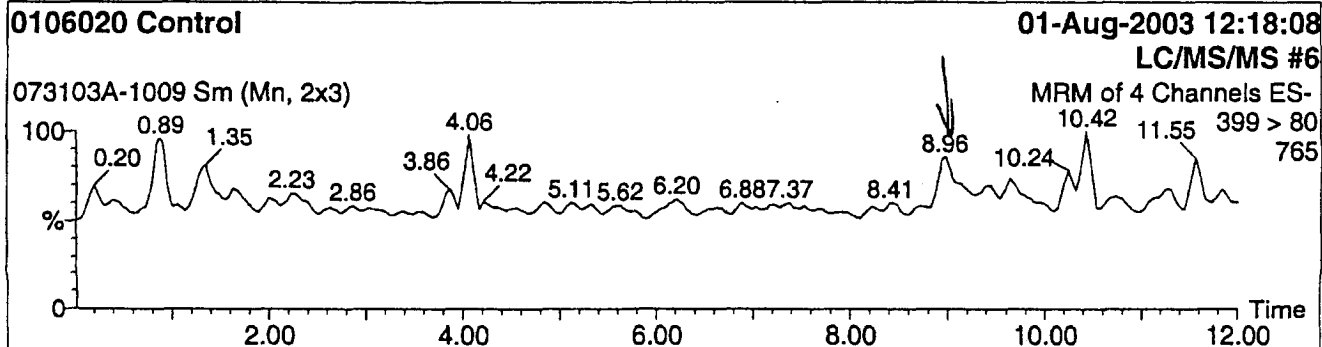
Name: 073103A-1009

Text:

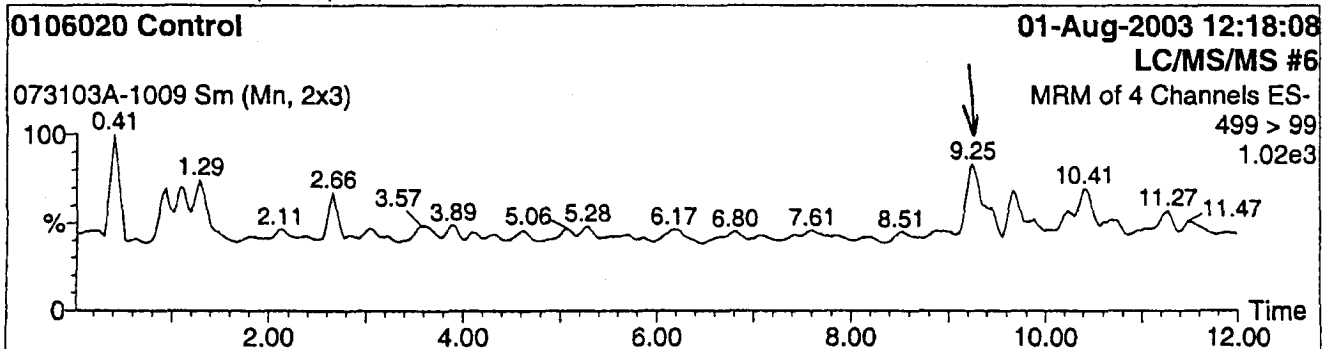
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 18

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1009

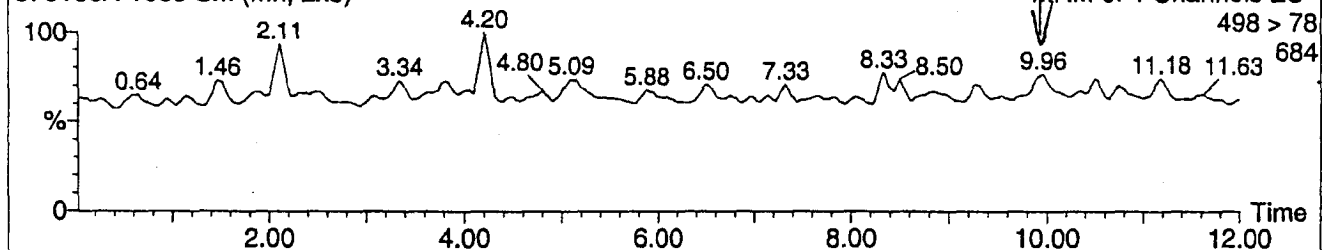
Text:

4: PFOSA

0106020 Control

01-Aug-2003 12:18:08

073103A-1009 Sm (Mn, 2x3)



Quantify Sample Report

Page 19

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

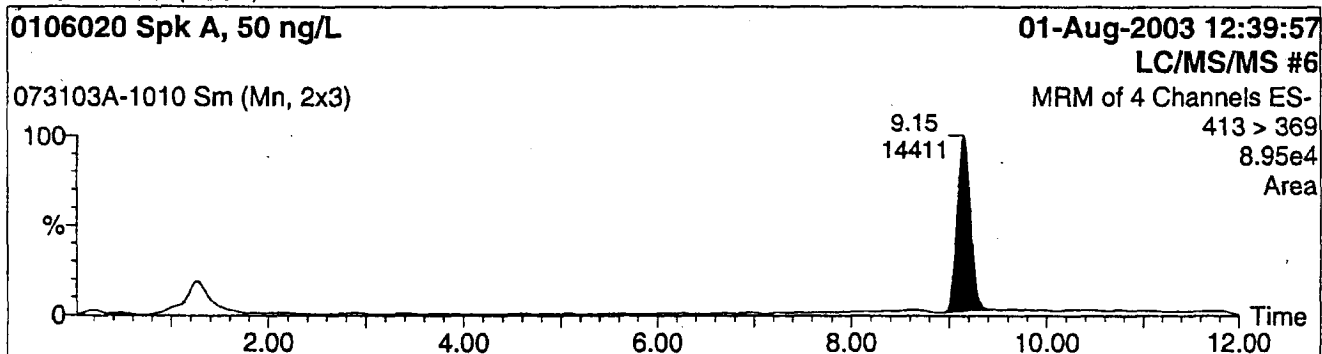
Job Code:

Printed: Sun Aug 03 07:19:29 2003

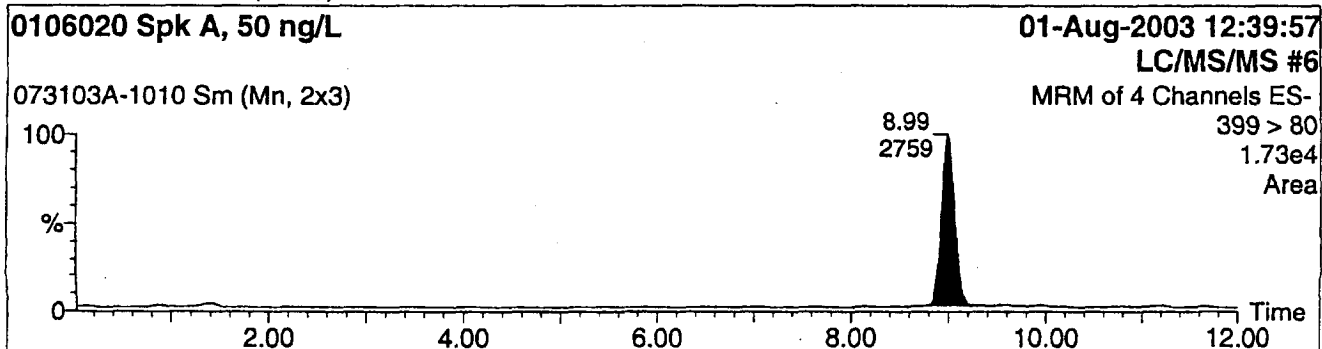
Name: 073103A-1010

Text:

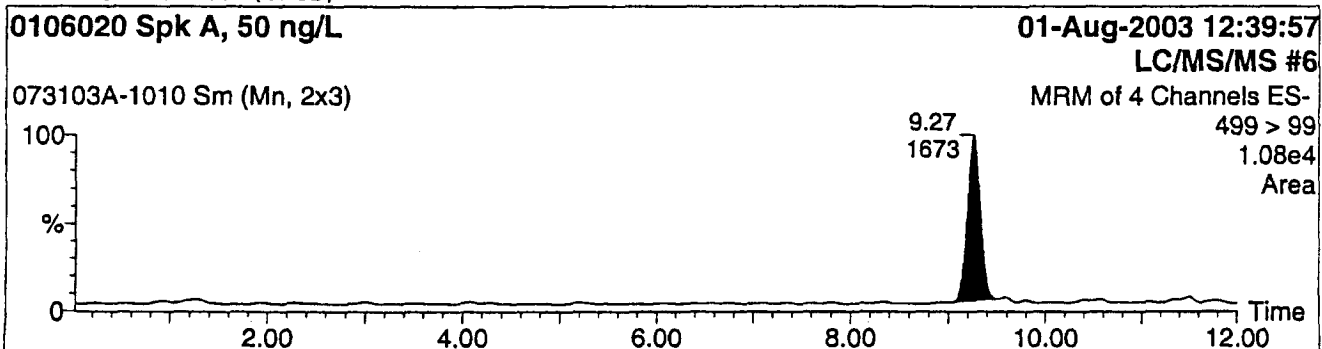
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 20

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1010

Text:

4: PFOSA

0106020 Spk A, 50 ng/L

01-Aug-2003 12:39:57

LC/MS/MS #6

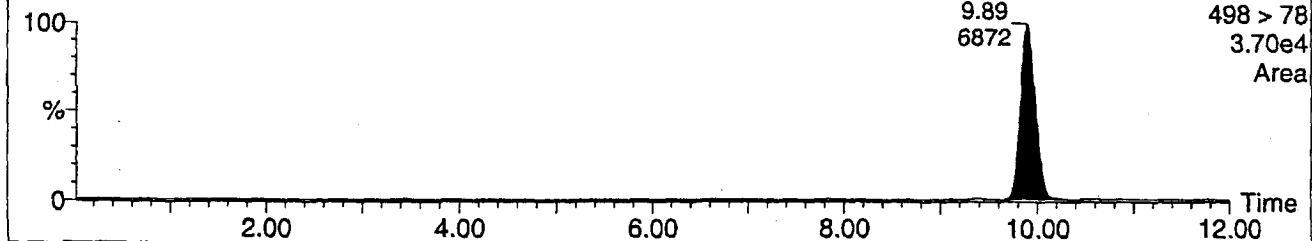
073103A-1010 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

3.70e4

Area



Quantify Sample Report

Page 21

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1011

Text:

1: C8 Acid (PFOA)

0106020 Spk B, 500 ng/L

01-Aug-2003 13:01:43

LC/MS/MS #6

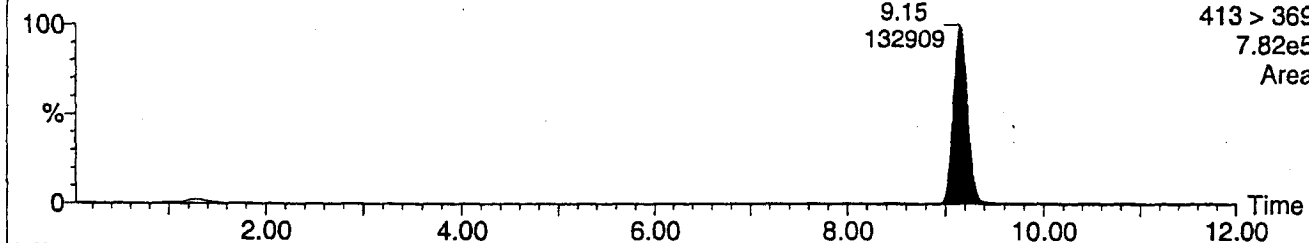
073103A-1011 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

7.82e5

Area



2: C6 Sulfonate (PFHS)

0106020 Spk B, 500 ng/L

01-Aug-2003 13:01:43

LC/MS/MS #6

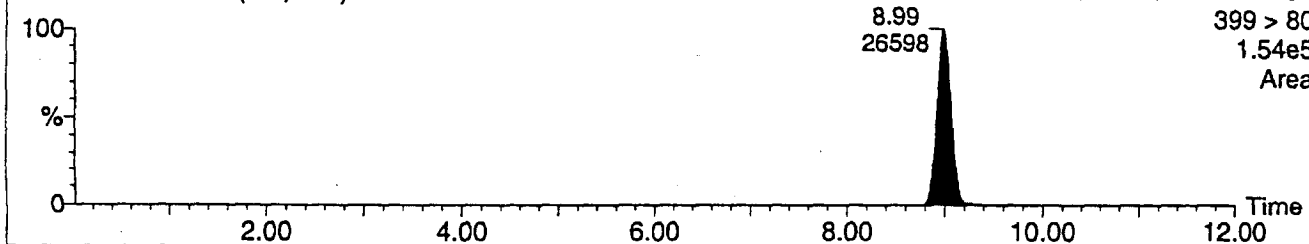
073103A-1011 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.54e5

Area



3: C8 Sulfonate (PFOS)

0106020 Spk B, 500 ng/L

01-Aug-2003 13:01:43

LC/MS/MS #6

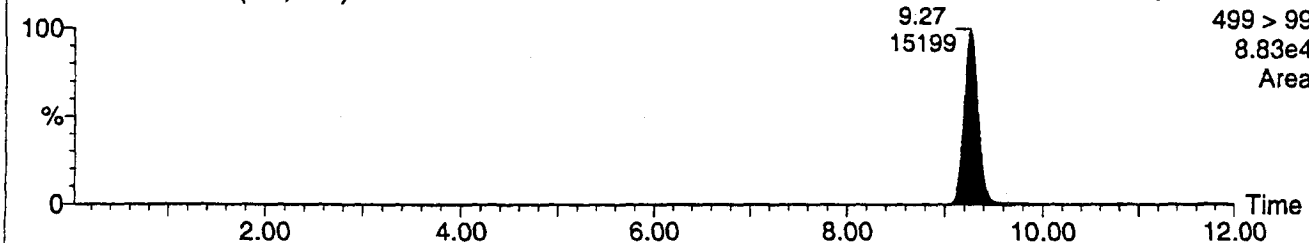
073103A-1011 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

8.83e4

Area



Quantify Sample Report

Page 22

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1011

Text:

4: PFOSA

0106020 Spk B, 500 ng/L

01-Aug-2003 13:01:43

LC/MS/MS #6

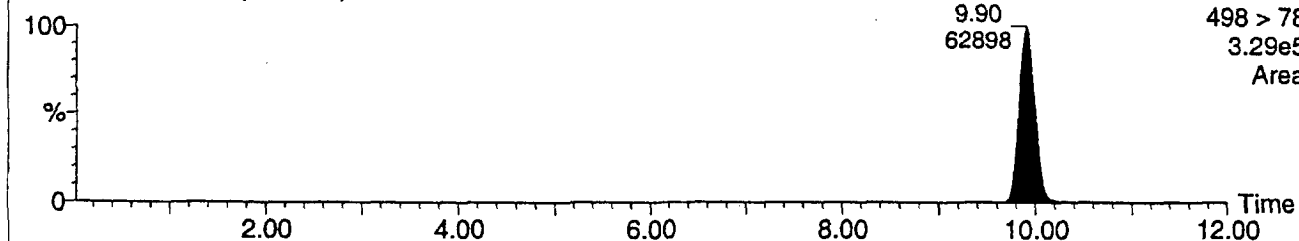
073103A-1011 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

3.29e5

Area



Quantify Sample Report

Page 23

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1012

Text:

1: C8 Acid (PFOA)

L34910-1 Spk C, 5000 ng/L, DF=10

01-Aug-2003 13:23:31

LC/MS/MS #6

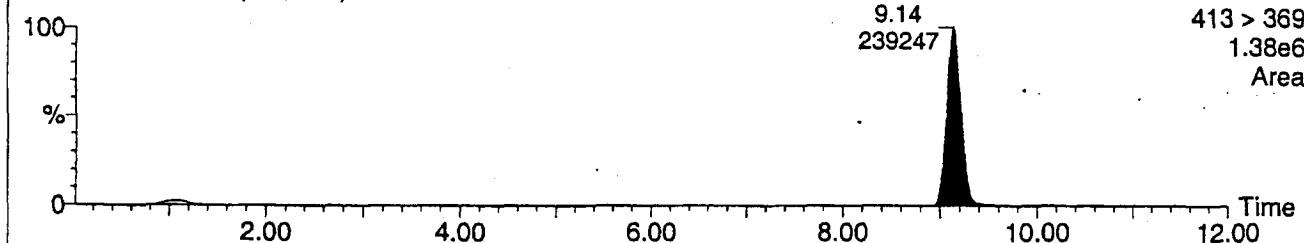
073103A-1012 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.38e6

Area



2: C6 Sulfonate (PFHS)

L34910-1 Spk C, 5000 ng/L, DF=10

01-Aug-2003 13:23:31

LC/MS/MS #6

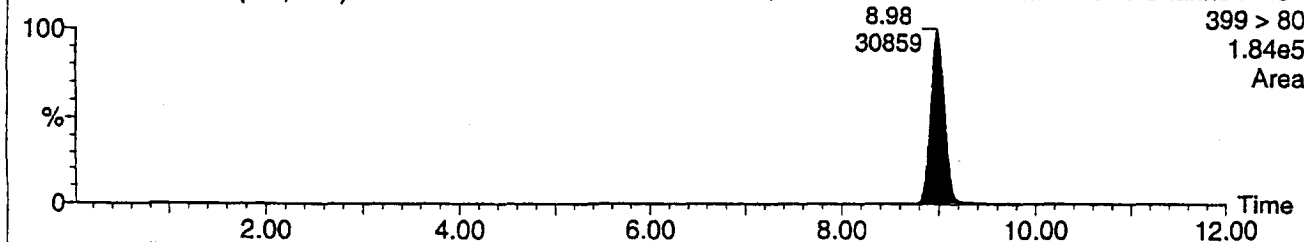
073103A-1012 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.84e5

Area



3: C8 Sulfonate (PFOS)

L34910-1 Spk C, 5000 ng/L, DF=10

01-Aug-2003 13:23:31

LC/MS/MS #6

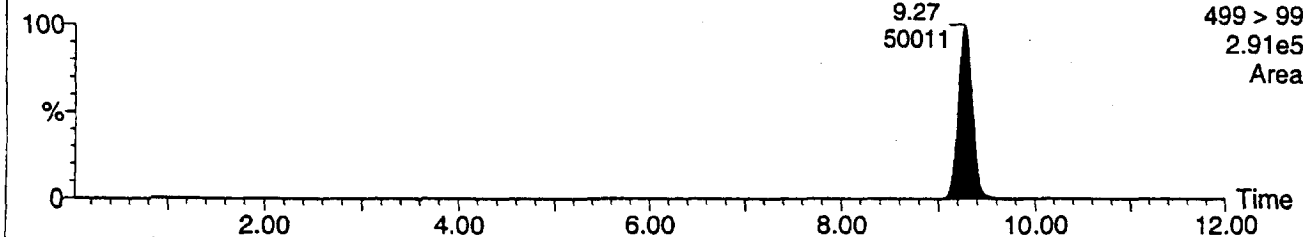
073103A-1012 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.91e5

Area



Quantify Sample Report

Page 24

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1012

Text:

4: PFOSA

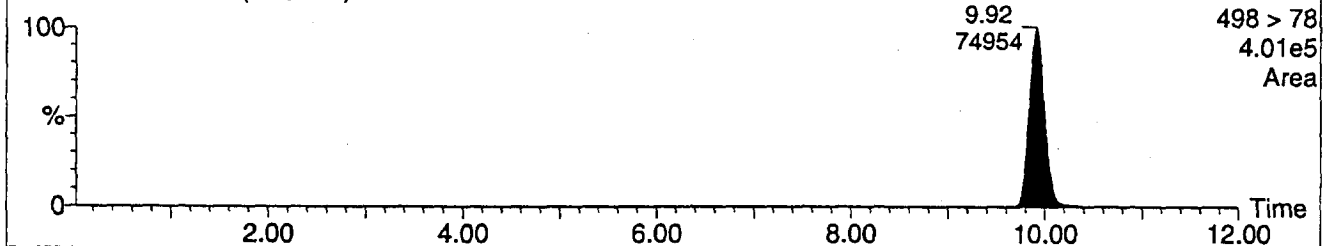
L34910-1 Spk C, 5000 ng/L, DF=10

01-Aug-2003 13:23:31

LC/MS/MS #6

073103A-1012 Sm (Mn, 2x3)

MRM of 4 Channels ES-



Quantify Sample Report

Page 25

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1013

Text:

1: C8 Acid (PFOA)

L34910-6 Spk D, 5000 ng/L, DF=10

01-Aug-2003 13:45:17

LC/MS/MS #6

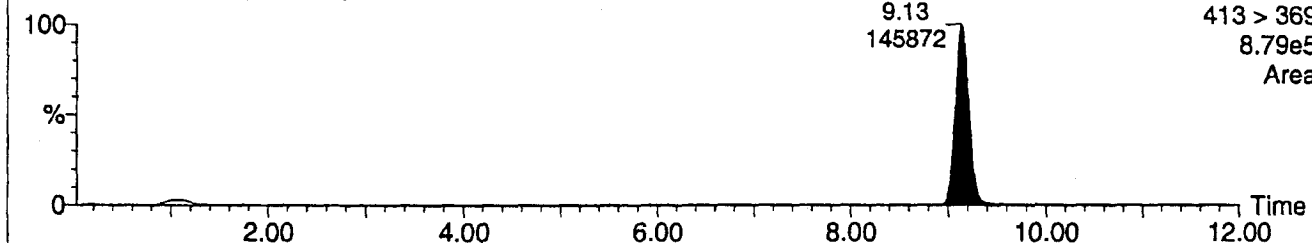
073103A-1013 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

8.79e5

Area



2: C6 Sulfonate (PFHS)

L34910-6 Spk D, 5000 ng/L, DF=10

01-Aug-2003 13:45:17

LC/MS/MS #6

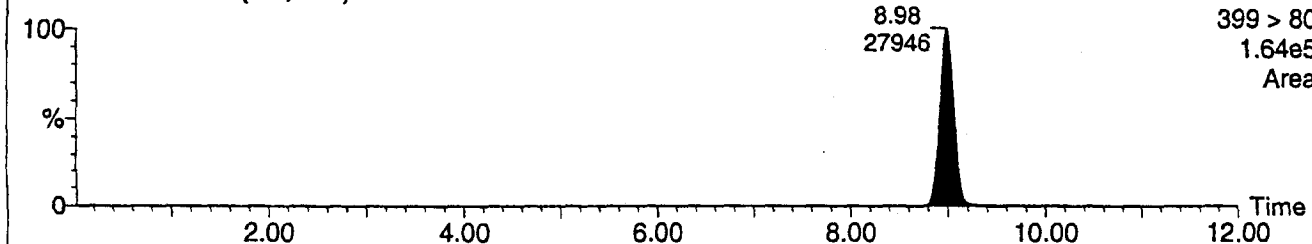
073103A-1013 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.64e5

Area



3: C8 Sulfonate (PFOS)

L34910-6 Spk D, 5000 ng/L, DF=10

01-Aug-2003 13:45:17

LC/MS/MS #6

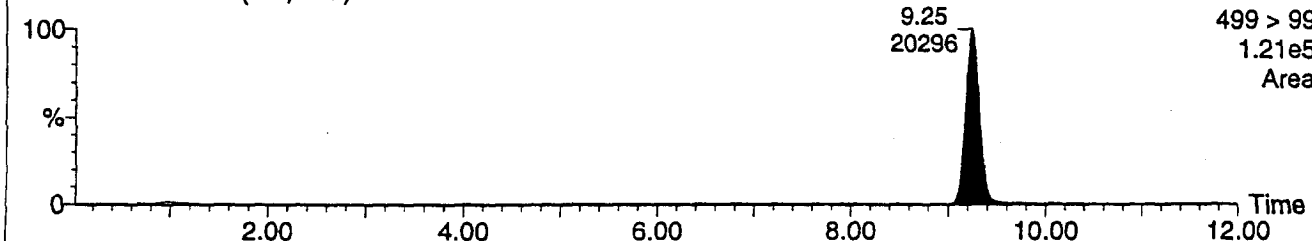
073103A-1013 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.21e5

Area



Quantify Sample Report

Page 26

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1013

Text:

4: PFOSA

L34910-6 Spk D, 5000 ng/L, DF=10

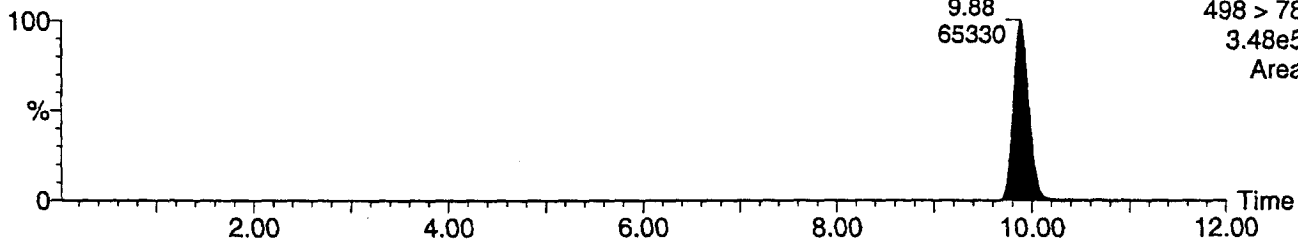
01-Aug-2003 13:45:17

LC/MS/MS #6

073103A-1013 Sm (Mn, 2x3)

MRM of 4 Channels ES-

9.88 498 > 78
65330 3.48e5
Area



Quantify Sample Report

Page 27

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1014

Text:

1: C8 Acid (PFOA)

L34910-12 Spk E, 5000 ng/L, DF=10

01-Aug-2003 14:07:06

LC/MS/MS #6

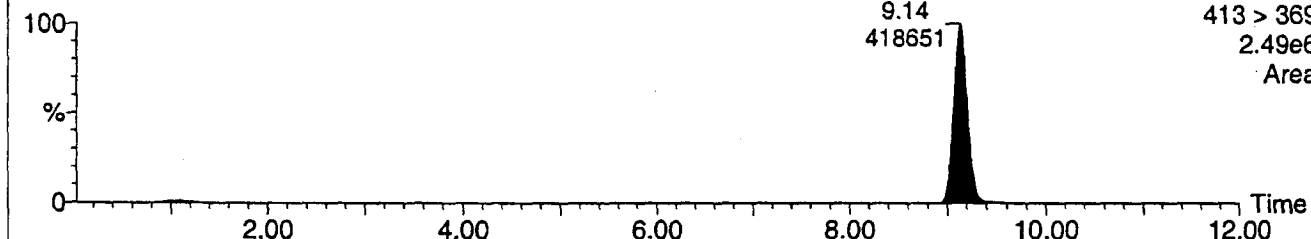
073103A-1014 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

2.49e6

Area



2: C6 Sulfonate (PFHS)

L34910-12 Spk E, 5000 ng/L, DF=10

01-Aug-2003 14:07:06

LC/MS/MS #6

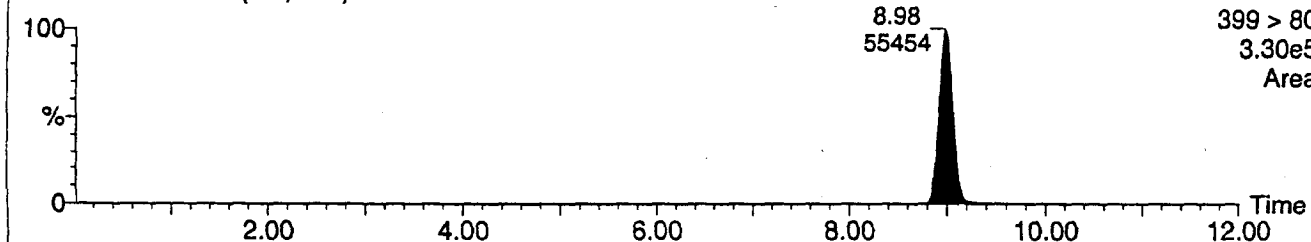
073103A-1014 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

3.30e5

Area



3: C8 Sulfonate (PFOS)

L34910-12 Spk E, 5000 ng/L, DF=10

01-Aug-2003 14:07:06

LC/MS/MS #6

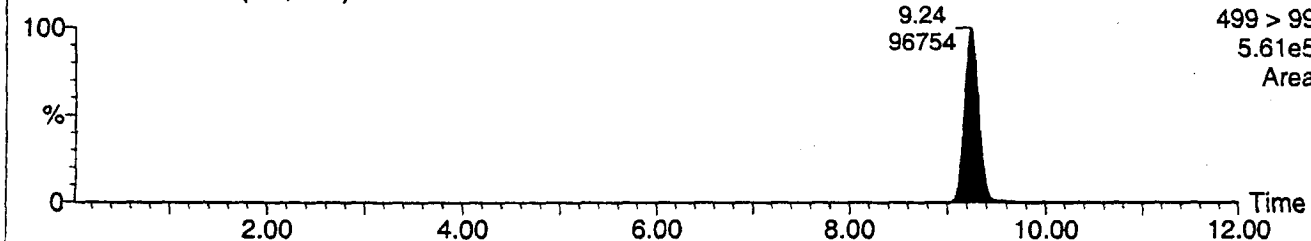
073103A-1014 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

5.61e5

Area



Quantify Sample Report

Page 28

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1014

Text:

4: PFOSA

L34910-12 Spk E, 5000 ng/L, DF=10

01-Aug-2003 14:07:06

LC/MS/MS #6

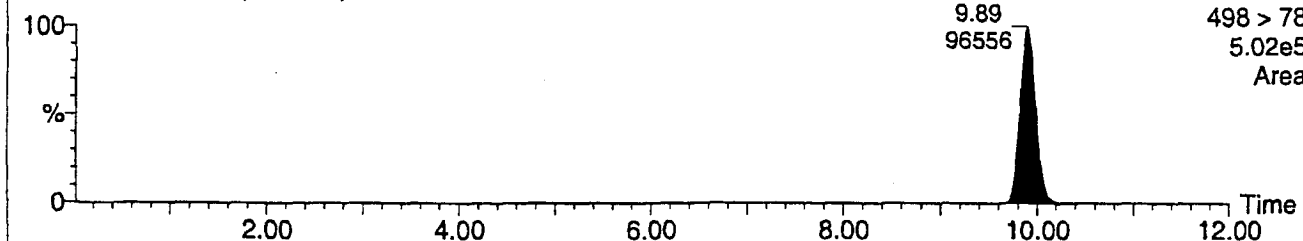
073103A-1014 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

5.02e5

Area



Quantify Sample Report

Page 29

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1015

Text:

1: C8 Acid (PFOA)

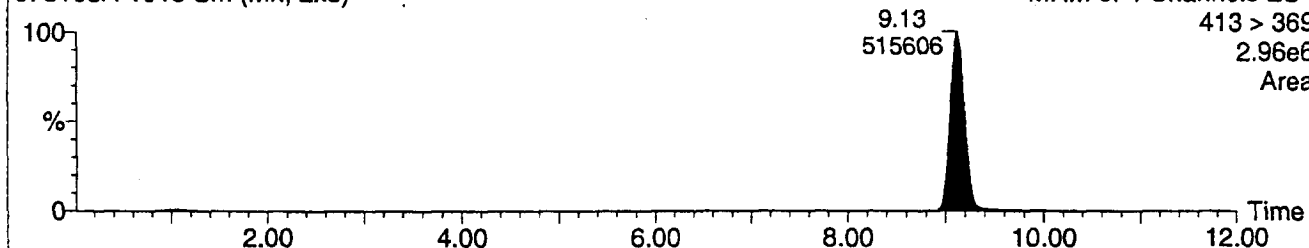
L34910-16 Spk F, 5000 ng/L, DF=10

01-Aug-2003 14:28:57

LC/MS/MS #6

073103A-1015 Sm (Mn, 2x3)

MRM of 4 Channels ES-



2: C6 Sulfonate (PFHS)

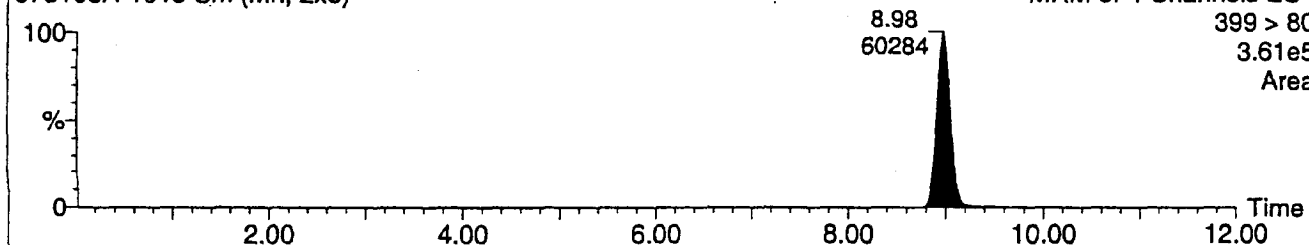
L34910-16 Spk F, 5000 ng/L, DF=10

01-Aug-2003 14:28:57

LC/MS/MS #6

073103A-1015 Sm (Mn, 2x3)

MRM of 4 Channels ES-



3: C8 Sulfonate (PFOS)

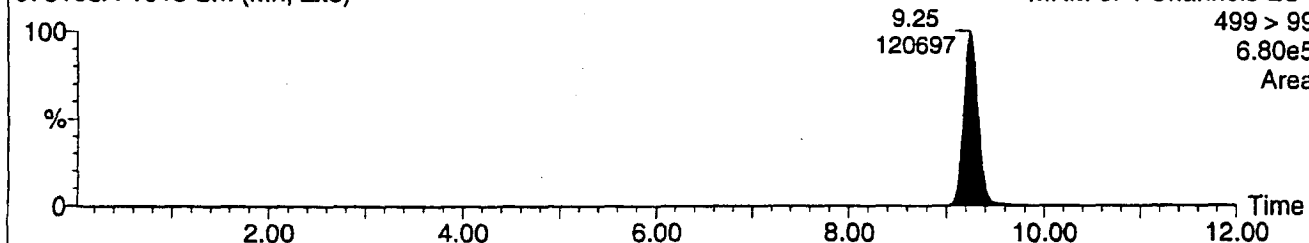
L34910-16 Spk F, 5000 ng/L, DF=10

01-Aug-2003 14:28:57

LC/MS/MS #6

073103A-1015 Sm (Mn, 2x3)

MRM of 4 Channels ES-



Quantify Sample Report

Page 30

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1015

Text:

4: PFOSA

L34910-16 Spk F, 5000 ng/L, DF=10

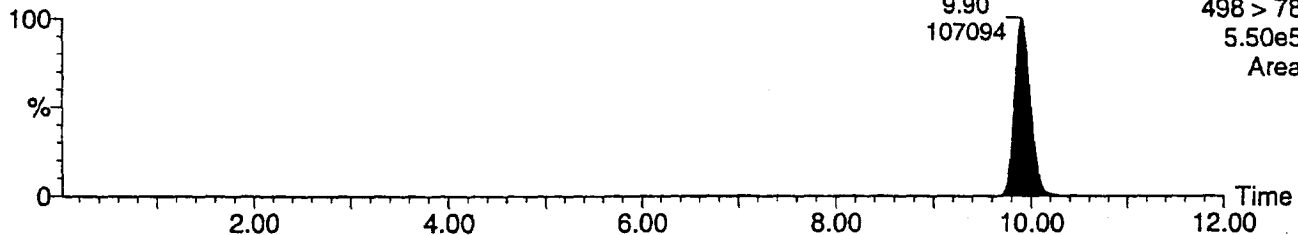
01-Aug-2003 14:28:57

LC/MS/MS #6

073103A-1015 Sm (Mn, 2x3)

MRM of 4 Channels ES-

9.90 498 > 78
107094 5.50e5
Area



Quantify Sample Report

Page 31

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1016

Text:

1: C8 Acid (PFOA)

XC072503-1, 25 ng/L Standard

01-Aug-2003 14:50:44

LC/MS/MS #6

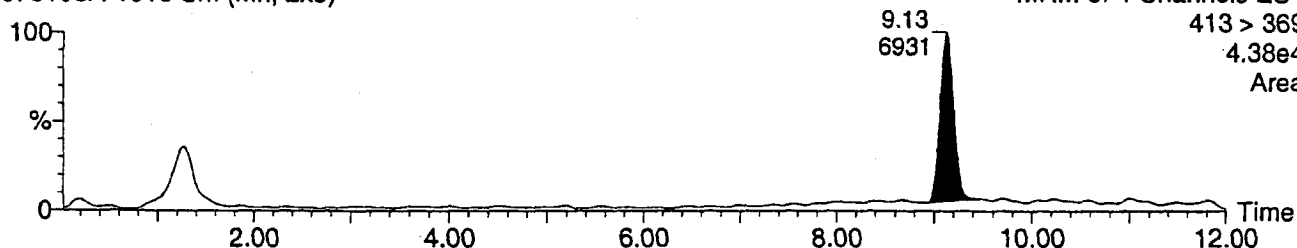
073103A-1016 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

4.38e4

Area



2: C6 Sulfonate (PFHS)

XC072503-1, 25 ng/L Standard

01-Aug-2003 14:50:44

LC/MS/MS #6

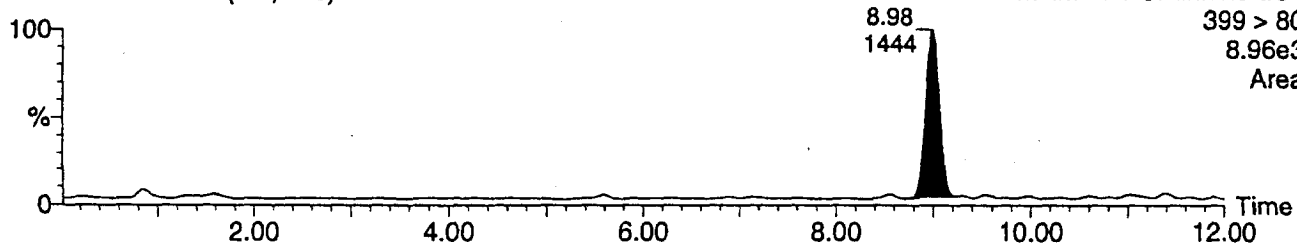
073103A-1016 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

8.96e3

Area



3: C8 Sulfonate (PFOS)

XC072503-1, 25 ng/L Standard

01-Aug-2003 14:50:44

LC/MS/MS #6

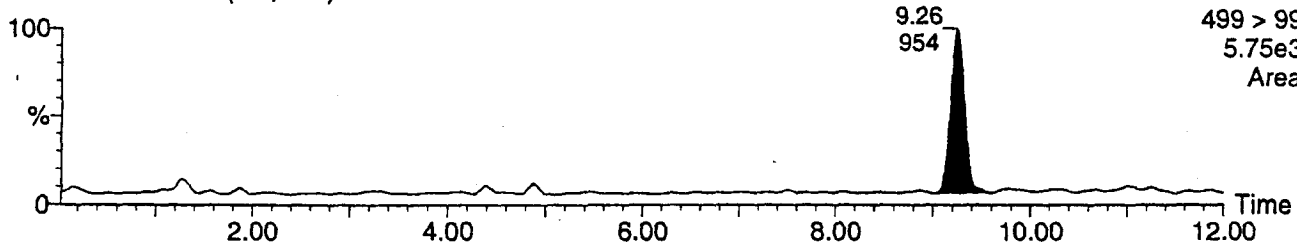
073103A-1016 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

5.75e3

Area



Quantify Sample Report

Page 32

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1016

Text:

4: PFOSA

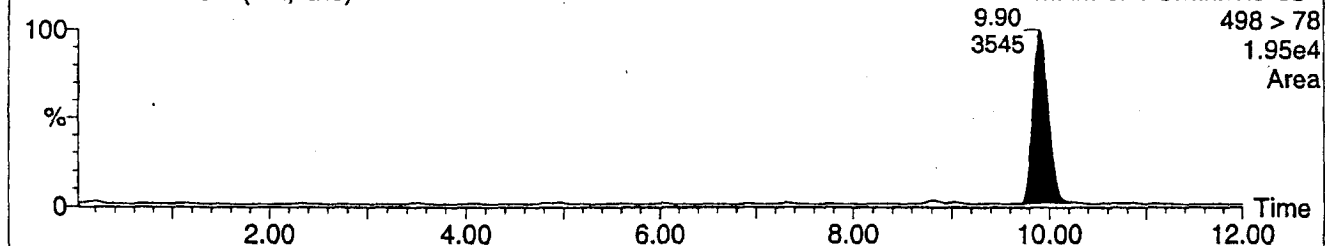
XC072503-1, 25 ng/L Standard

01-Aug-2003 14:50:44

LC/MS/MS #6

073103A-1016 Sm (Mn, 2x3)

MRM of 4 Channels ES-



Quantify Sample Report

Page 33

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

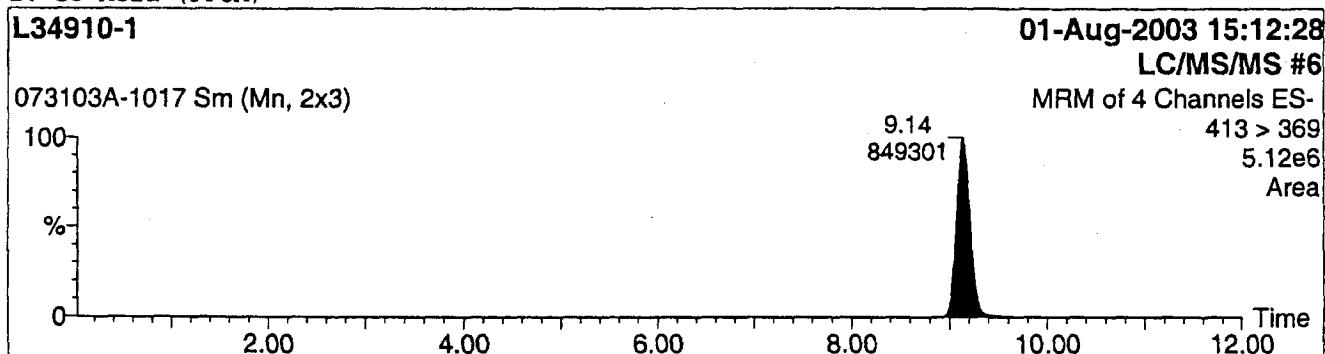
Job Code:

Printed: Sun Aug 03 07:19:29 2003

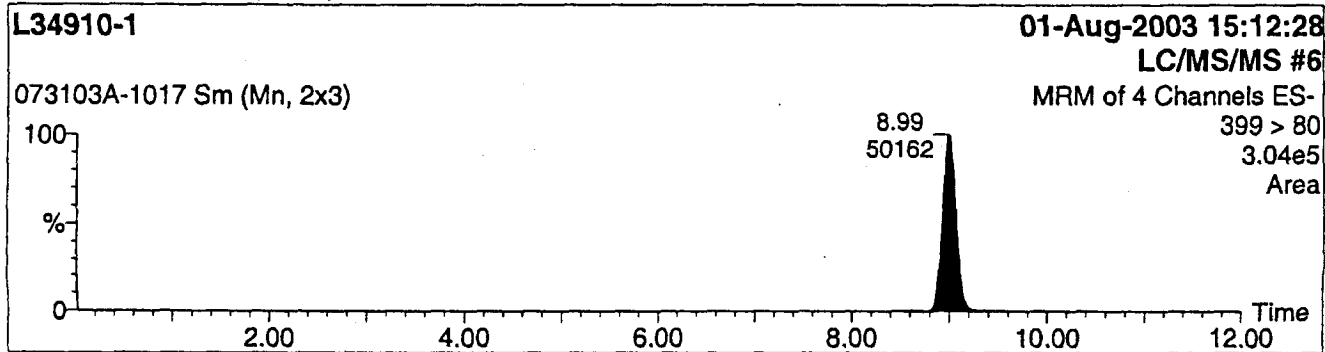
Name: 073103A-1017

Text:

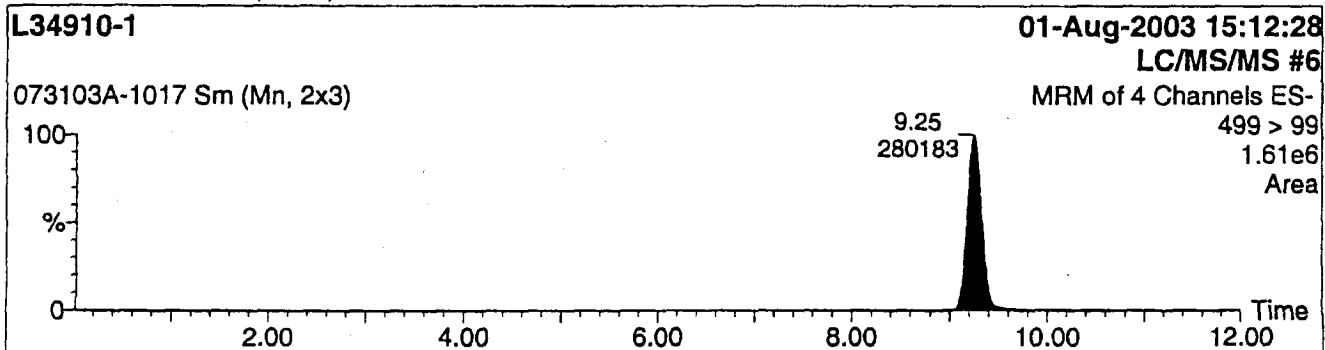
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 34

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1017

Text:

4: PFOSA

L34910-1

01-Aug-2003 15:12:28

LC/MS/MS #6

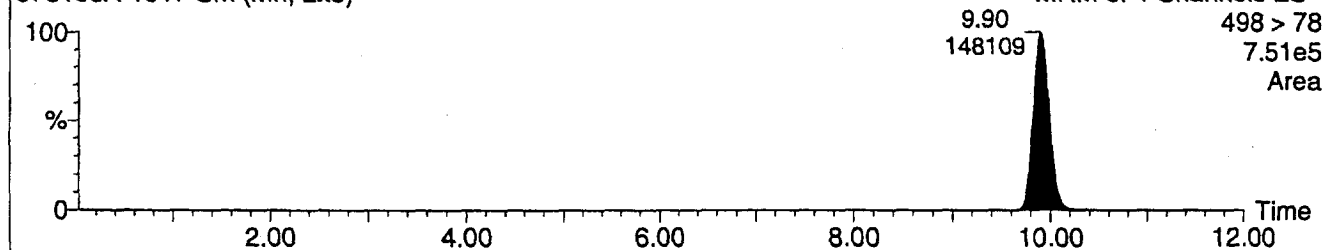
073103A-1017 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

7.51e5

Area



Quantify Sample Report

Page 35

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

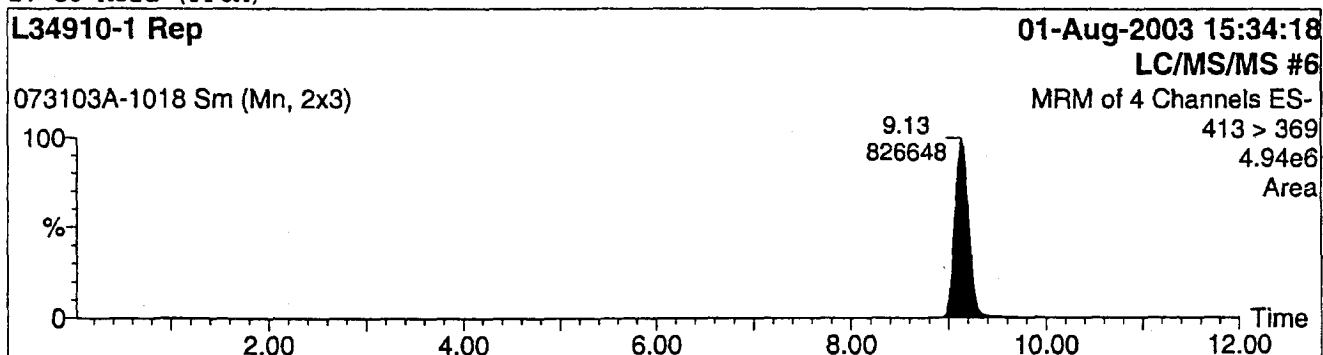
Job Code:

Printed: Sun Aug 03 07:19:29 2003

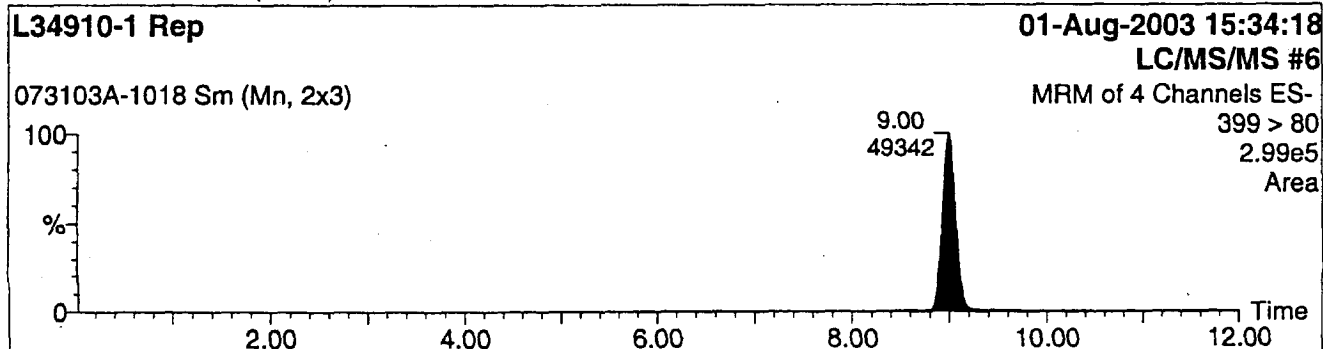
Name: 073103A-1018

Text:

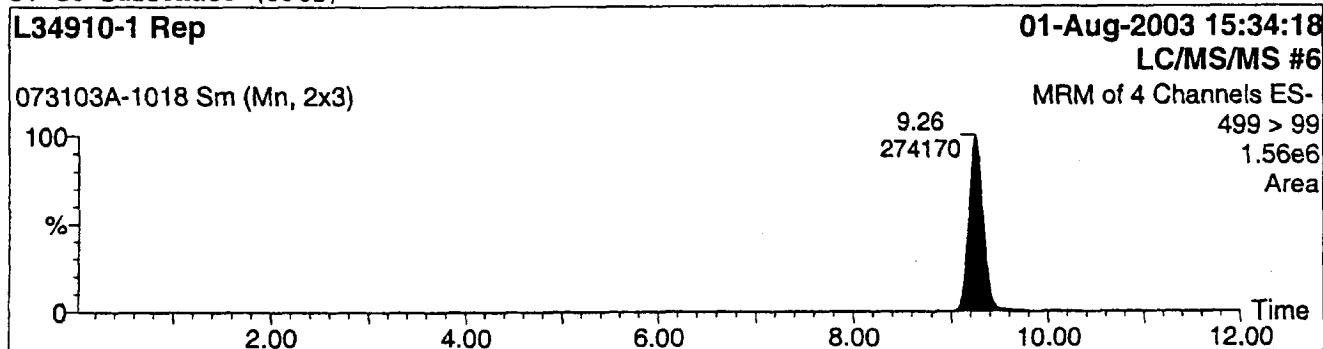
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 36

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

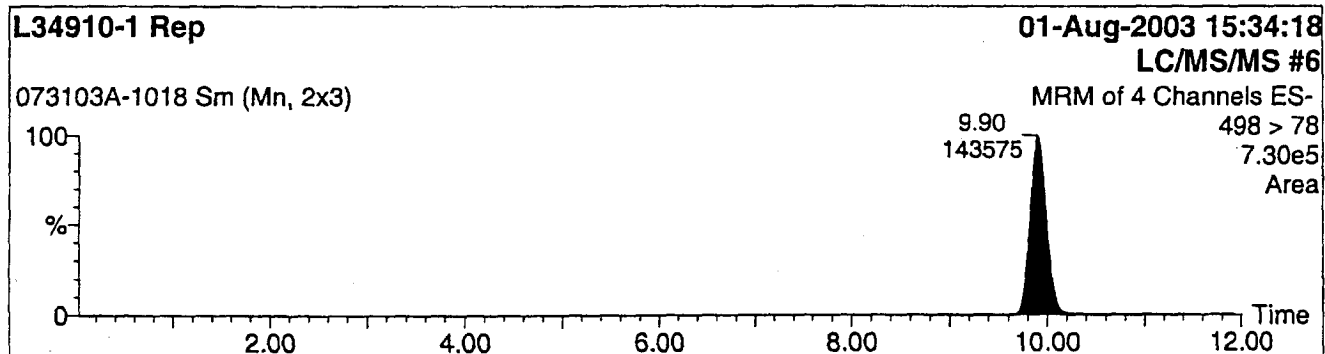
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1018

Text:

4: PFOSA



Quantify Sample Report

Page 37

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

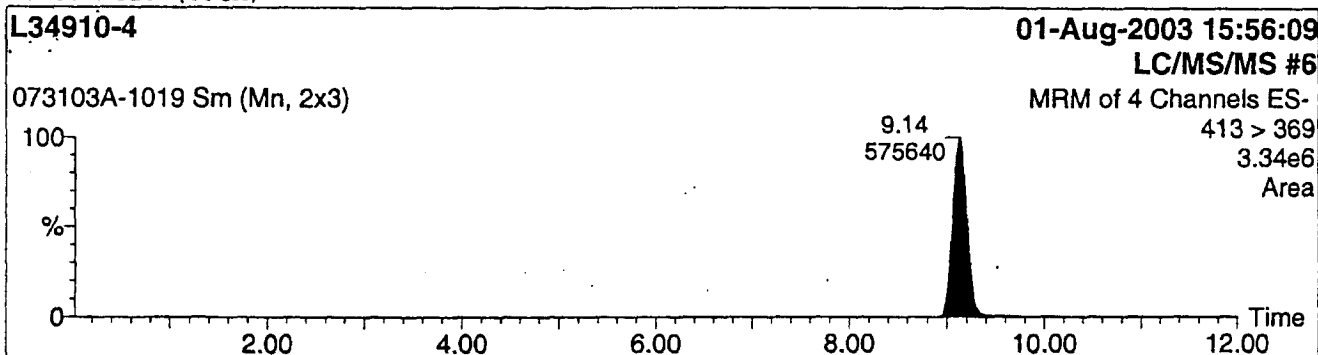
Job Code:

Printed: Sun Aug 03 07:19:29 2003

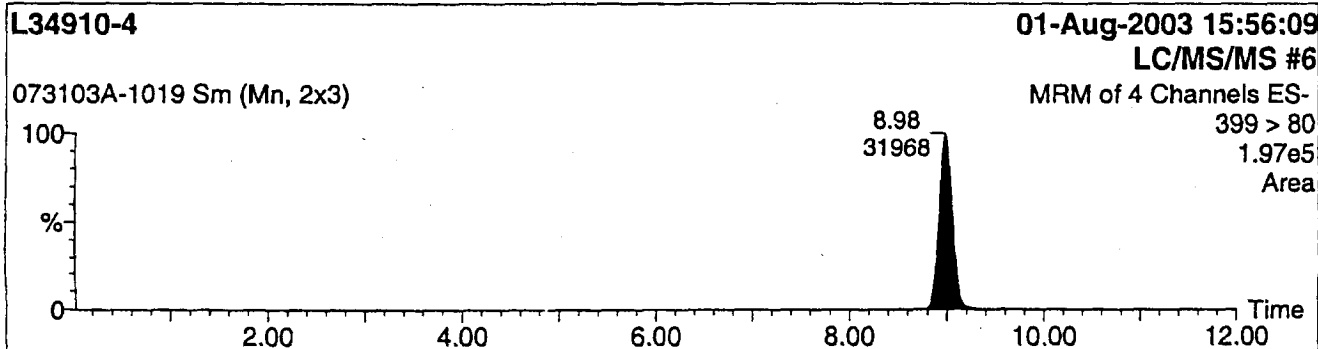
Name: 073103A-1019

Text:

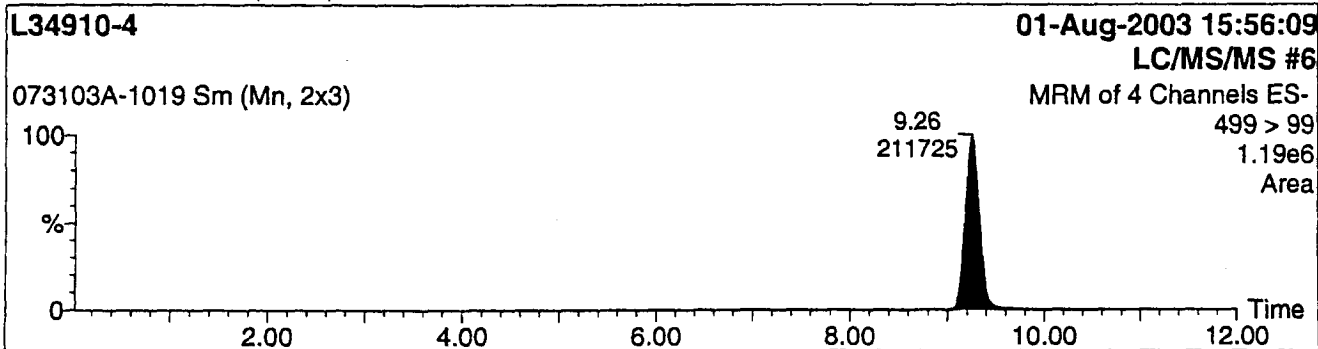
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 38

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

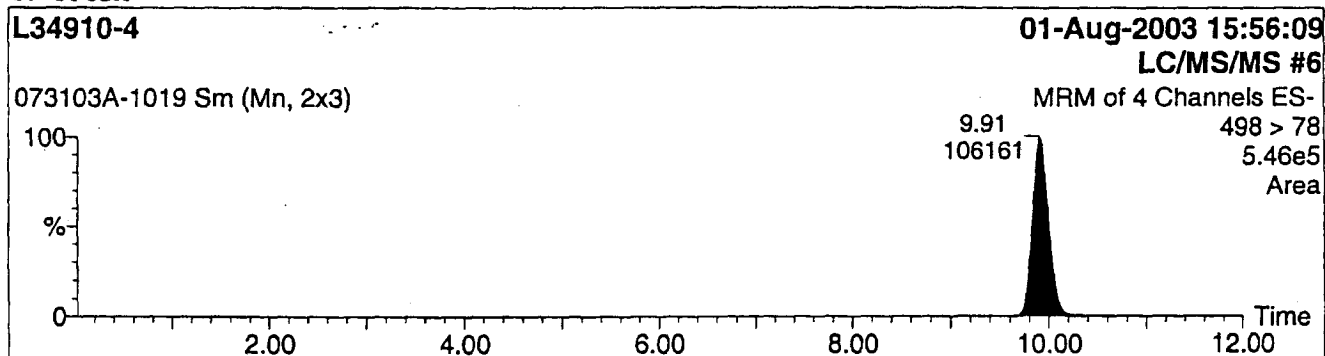
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1019

Text:

4: PFOSA



Quantify Sample Report

Page 39

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

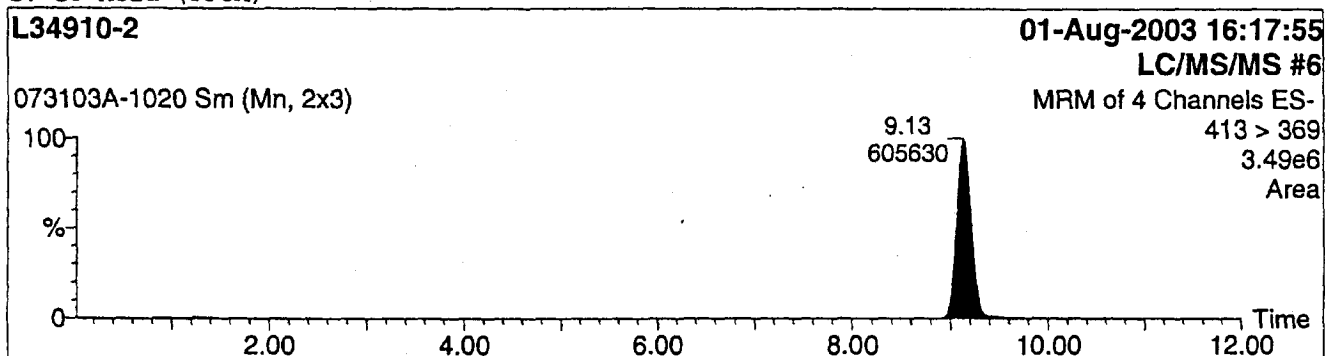
Job Code:

Printed: Sun Aug 03 07:19:29 2003

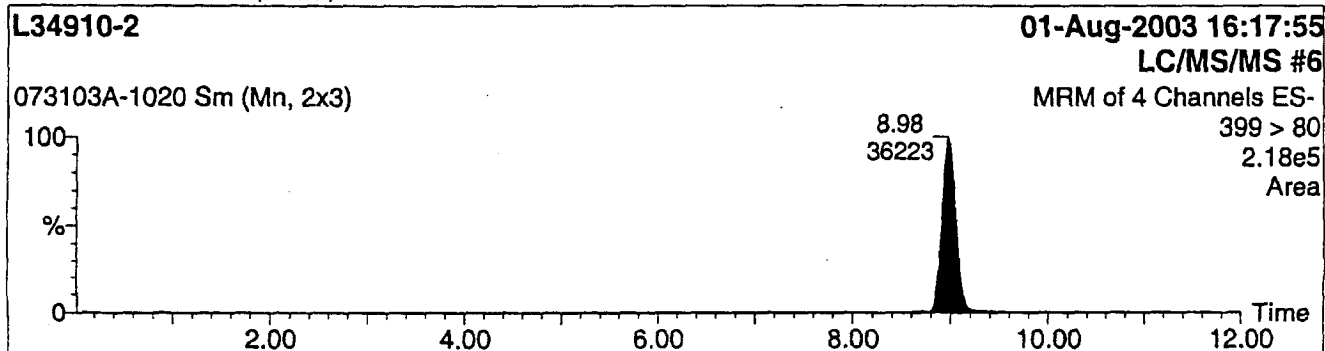
Name: 073103A-1020

Text:

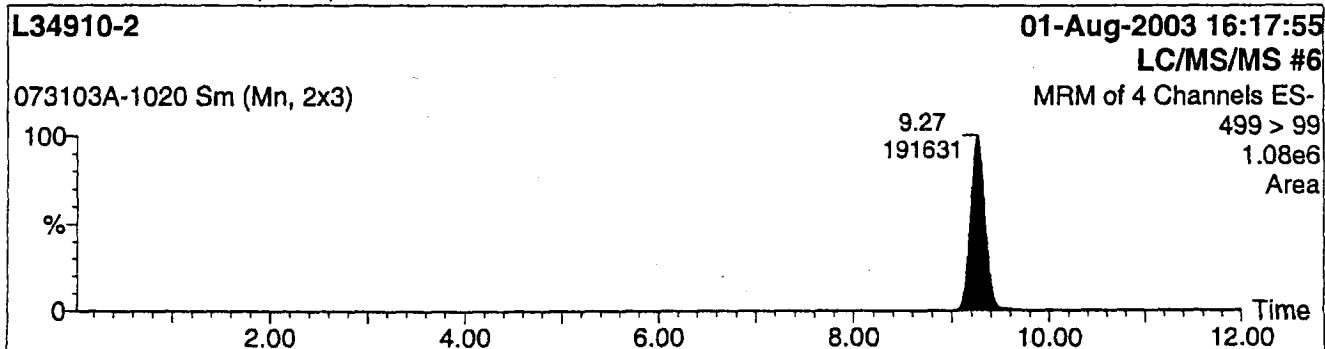
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 40

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

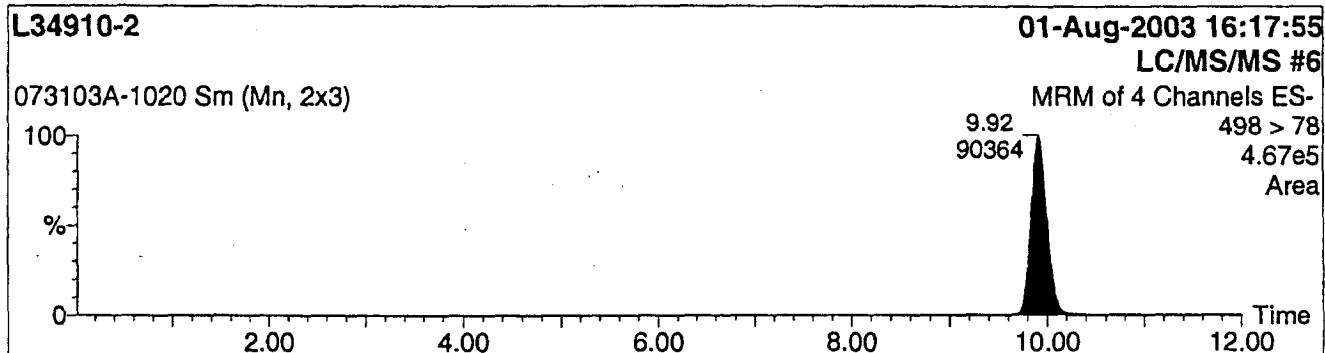
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1020

Text:

4: PFOSA



Quantify Sample Report

Page 41

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1021

Text:

1: C8 Acid (PFOA)

L34910-3, DF=100

01-Aug-2003 16:39:42

LC/MS/MS #6

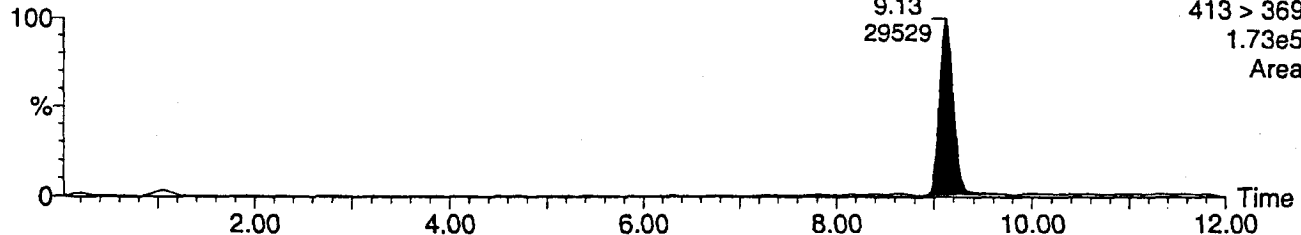
073103A-1021 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.73e5

Area



2: C6 Sulfonate (PFHS)

L34910-3, DF=100

01-Aug-2003 16:39:42

LC/MS/MS #6

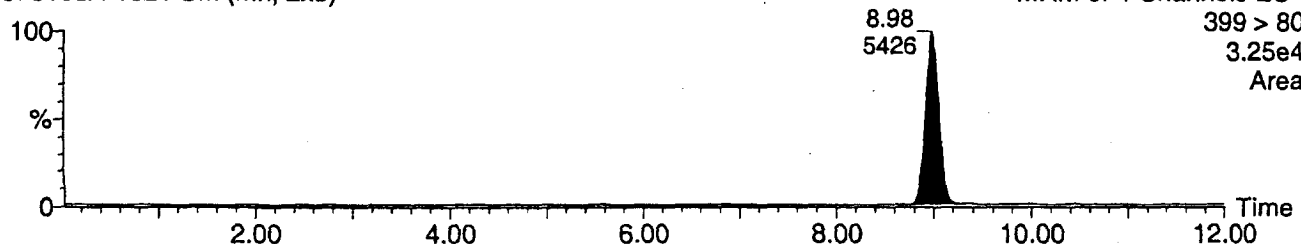
073103A-1021 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

3.25e4

Area



3: C8 Sulfonate (PFOS)

L34910-3, DF=100

01-Aug-2003 16:39:42

LC/MS/MS #6

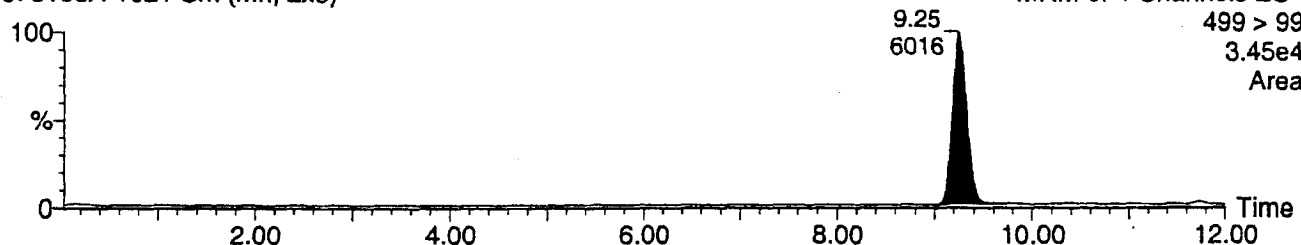
073103A-1021 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

3.45e4

Area



Quantify Sample Report

Page 42

Study No.:L34910, Set No.:073103A, Ext.Date:07/31/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

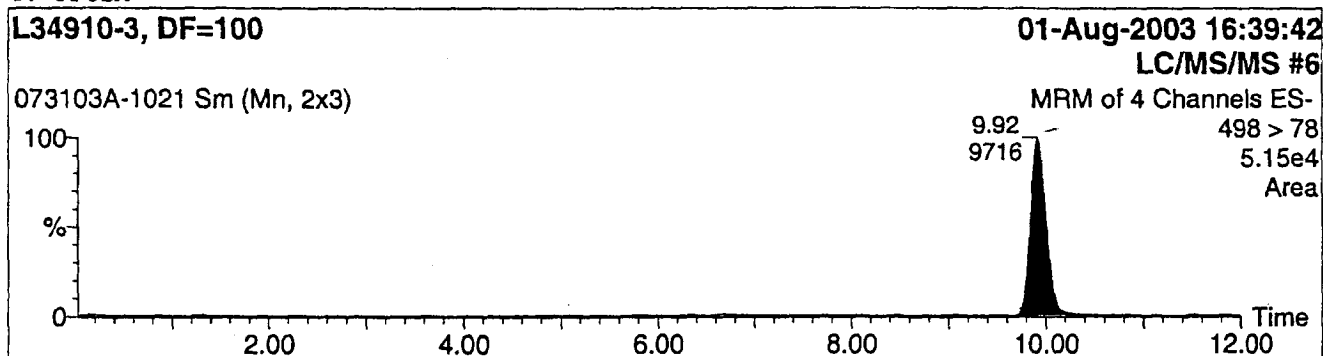
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1021

Text:

4: PFOSA



Quantify Sample Report

Page 43

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC
Last modified: Sun Aug 03 07:08:13 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1022

Text:

1: C8 Acid (PFOA)

XC072503-2, 50 ng/L Standard

01-Aug-2003 17:01:26

LC/MS/MS #6

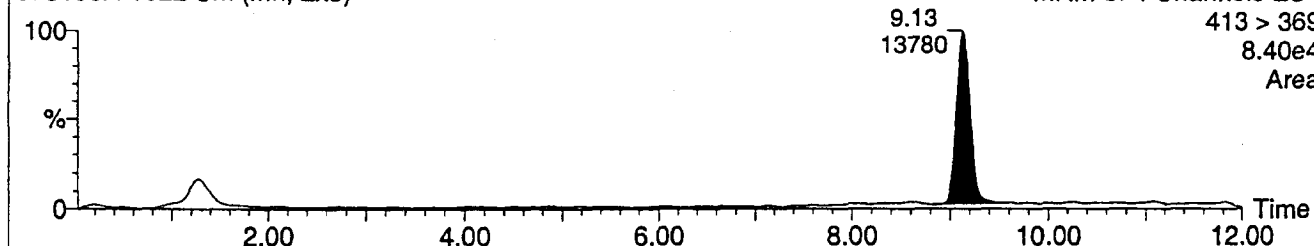
073103A-1022 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

8.40e4

Area



2: C6 Sulfonate (PFHS)

XC072503-2, 50 ng/L Standard

01-Aug-2003 17:01:26

LC/MS/MS #6

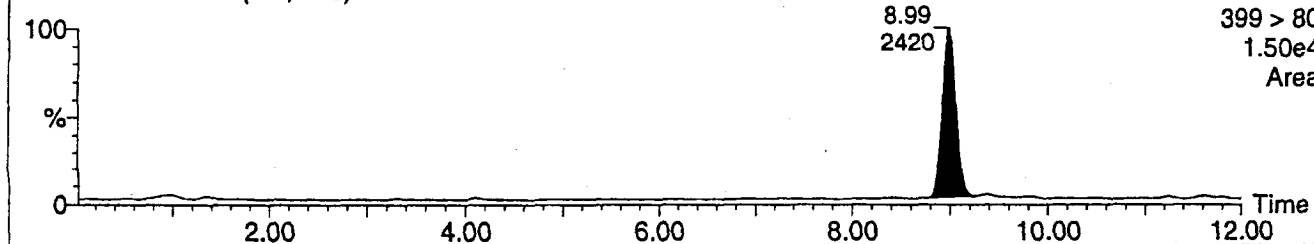
073103A-1022 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.50e4

Area



3: C8 Sulfonate (PFOS)

XC072503-2, 50 ng/L Standard

01-Aug-2003 17:01:26

LC/MS/MS #6

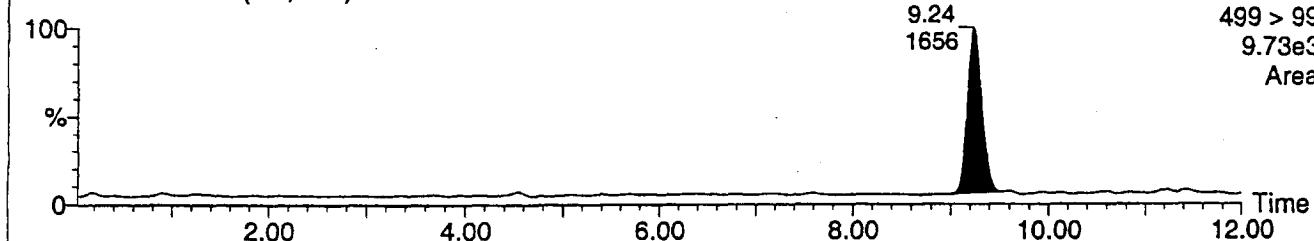
073103A-1022 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

9.73e3

Area



Quantify Sample Report

Page 44

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1022

Text:

4: PFOSA

XC072503-2, 50 ng/L Standard

01-Aug-2003 17:01:26

LC/MS/MS #6

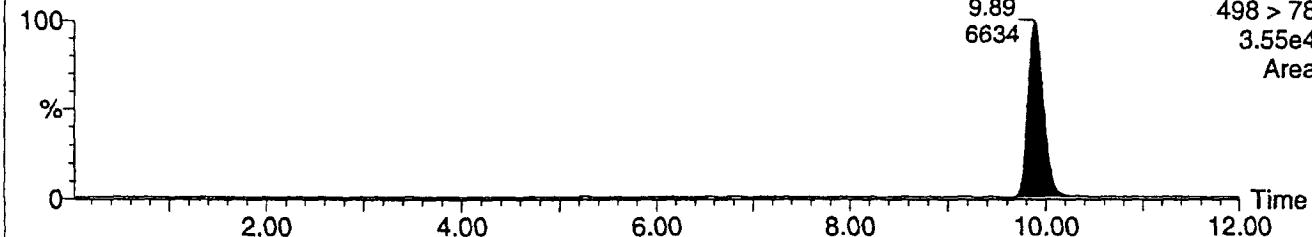
MRM of 4 Channels ES-

498 > 78

3.55e4

Area

073103A-1022 Sm (Mn, 2x3)



Quantify Sample Report

Page 45

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

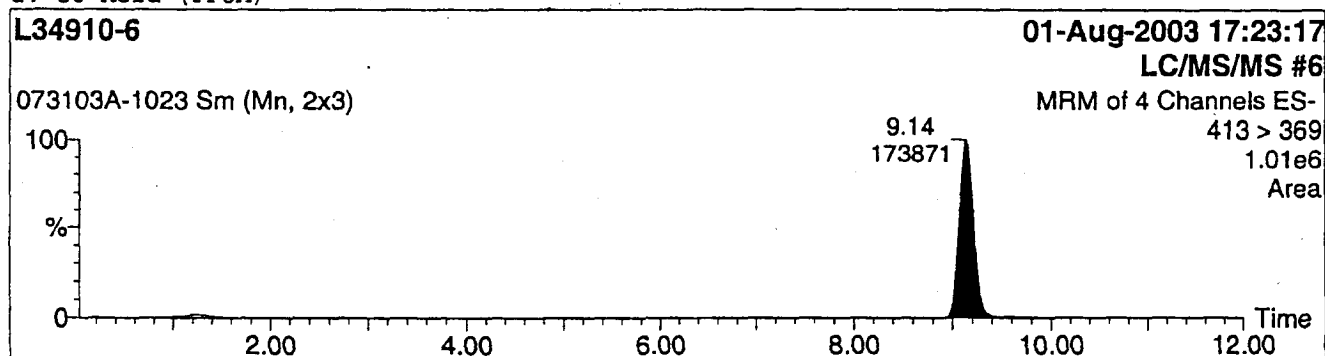
Job Code:

Printed: Sun Aug 03 07:19:29 2003

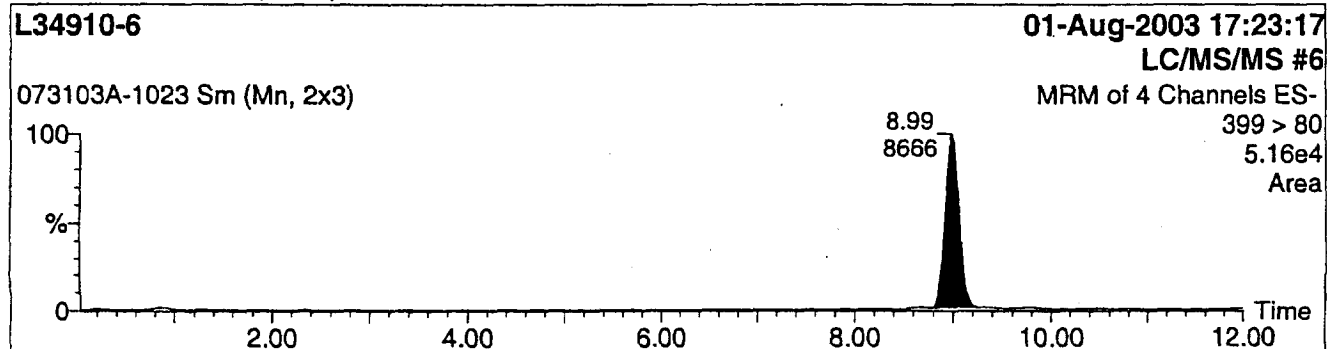
Name: 073103A-1023

Text:

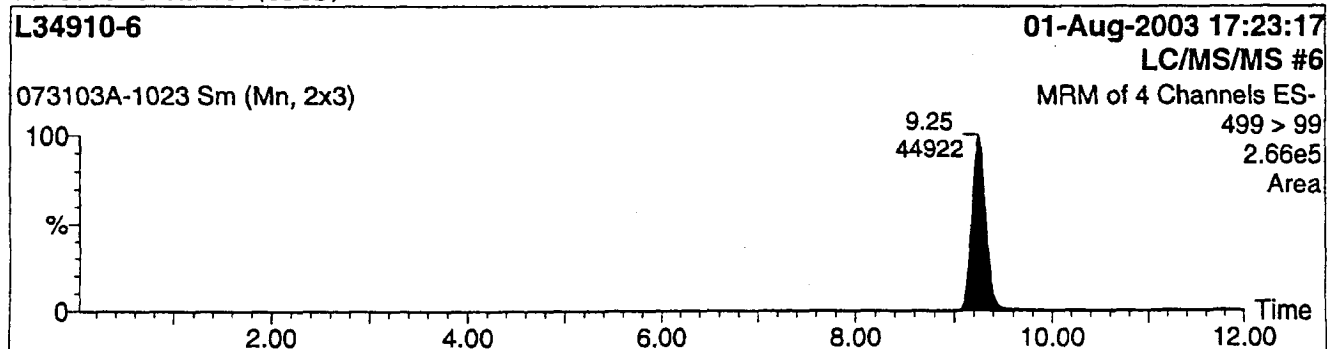
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 46

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

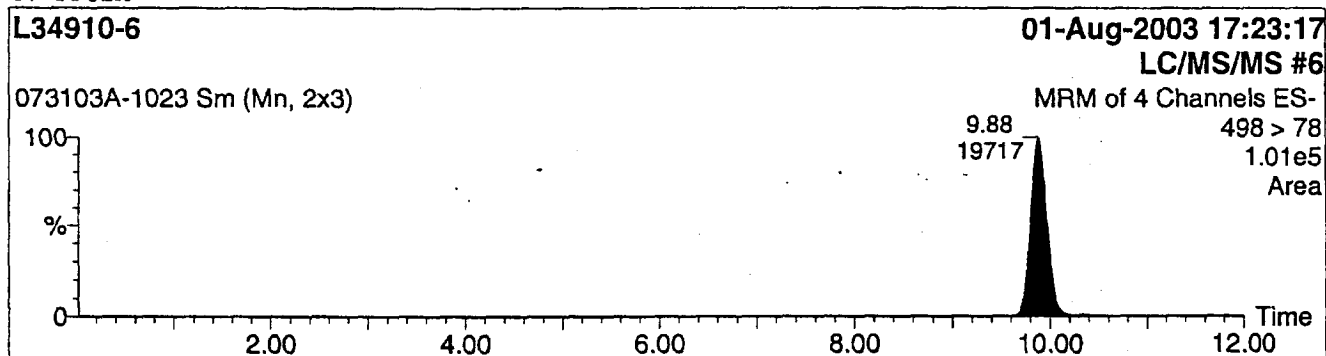
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1023

Text:

4: PFOSA



Quantify Sample Report

Page 47

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

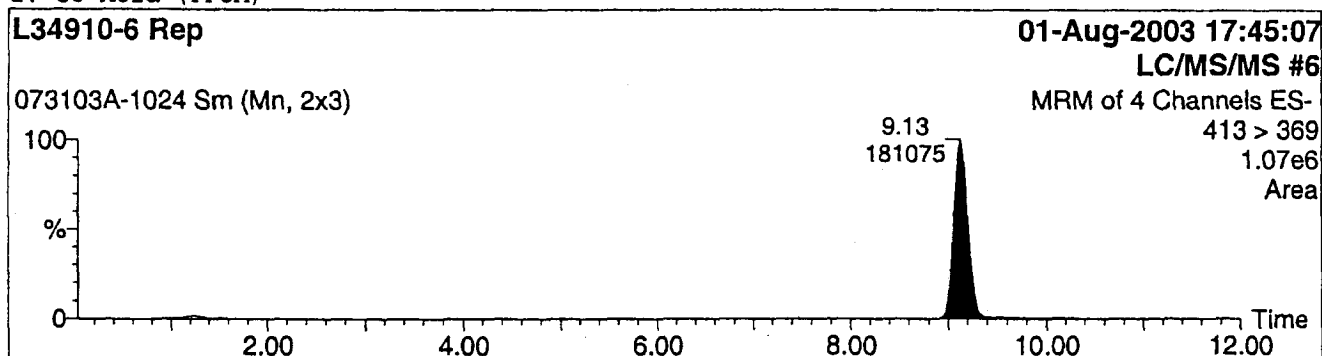
Job Code:

Printed: Sun Aug 03 07:19:29 2003

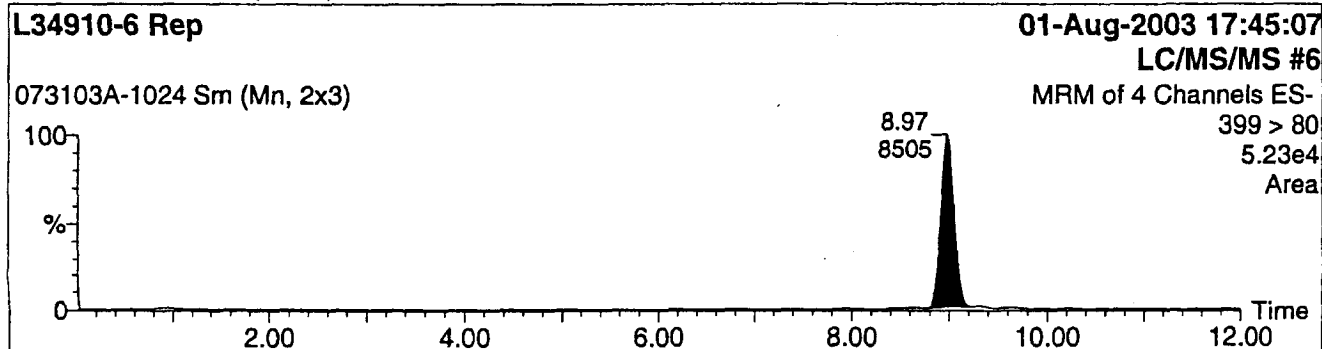
Name: 073103A-1024

Text:

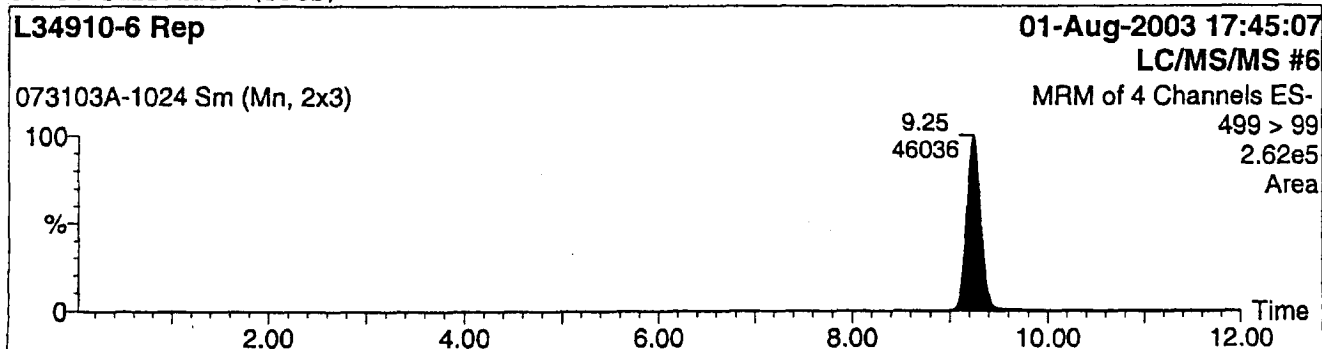
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 48

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

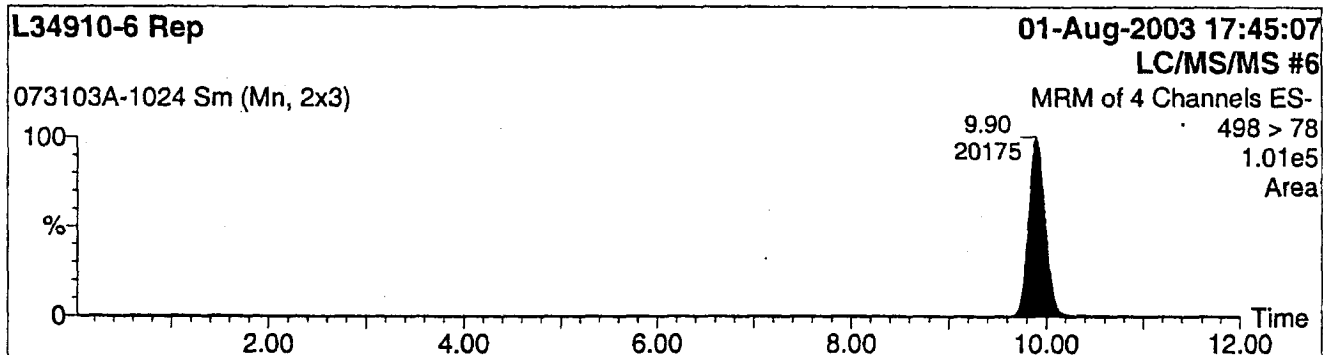
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1024

Text:

4: PFOSA



Quantify Sample Report

Page 49

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

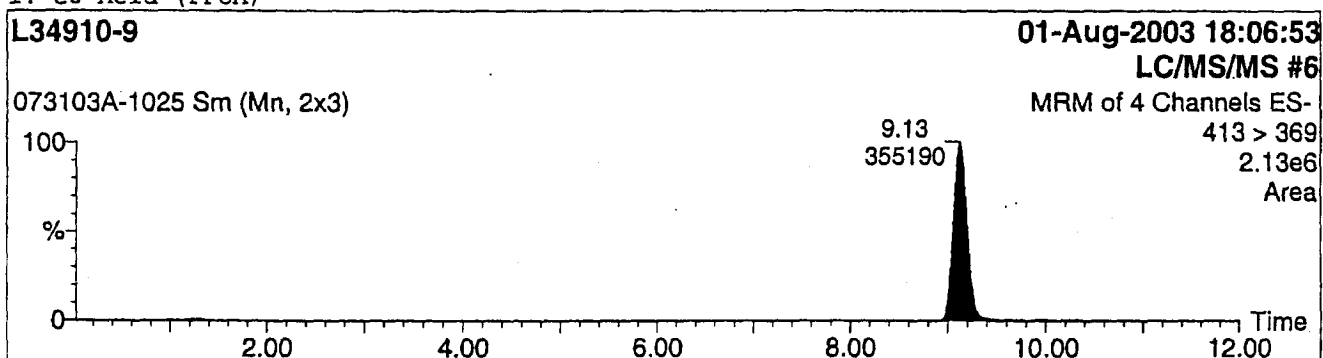
Job Code:

Printed: Sun Aug 03 07:19:29 2003

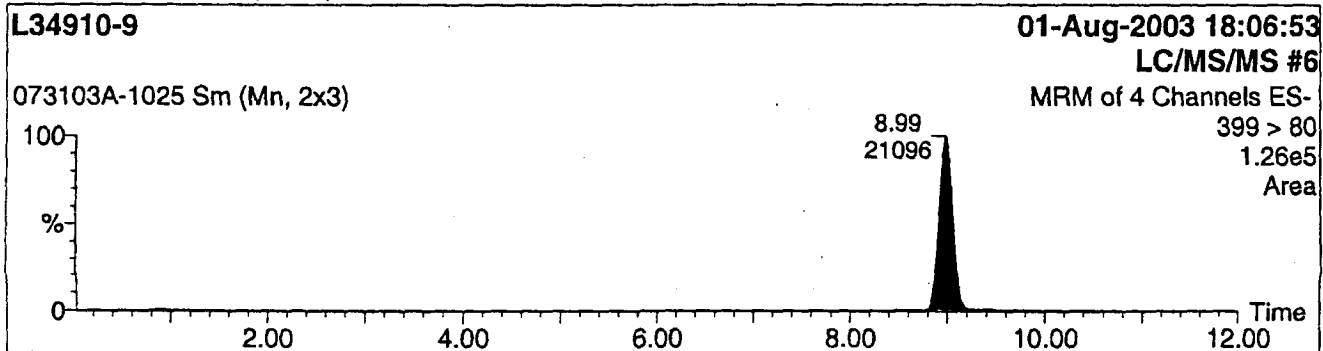
Name: 073103A-1025

Text:

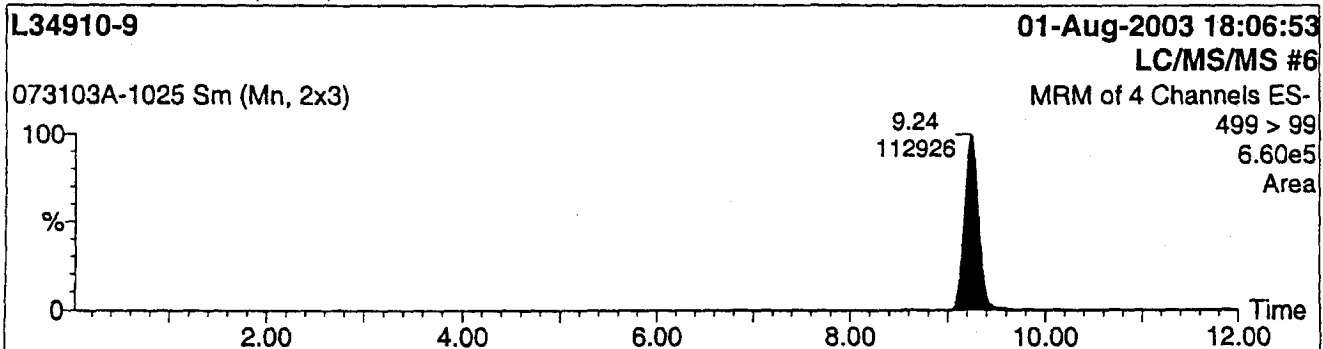
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 50

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

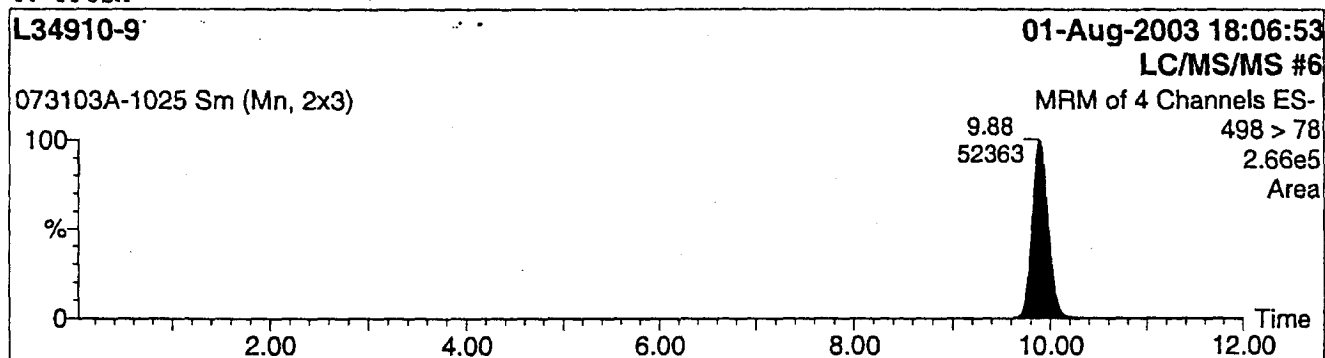
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1025

Text:

4: PFOSA



Quantify Sample Report

Page 51

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

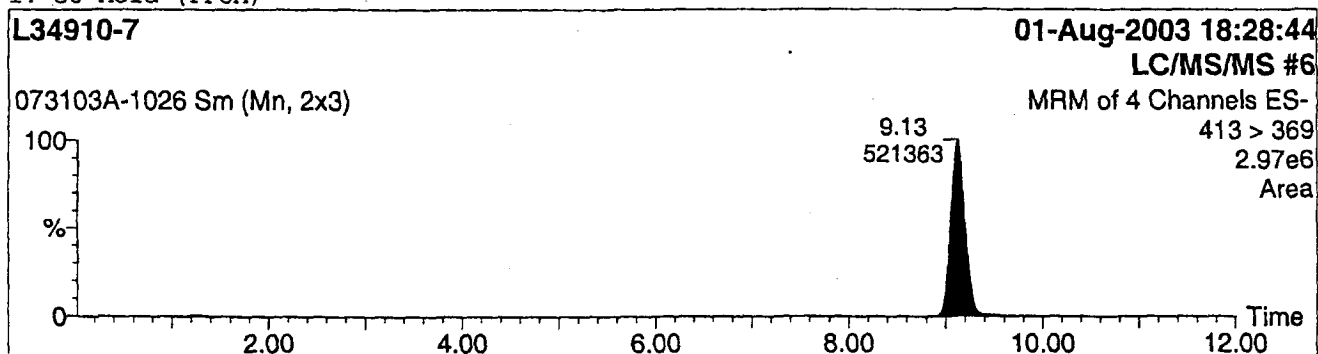
Job Code:

Printed: Sun Aug 03 07:19:29 2003

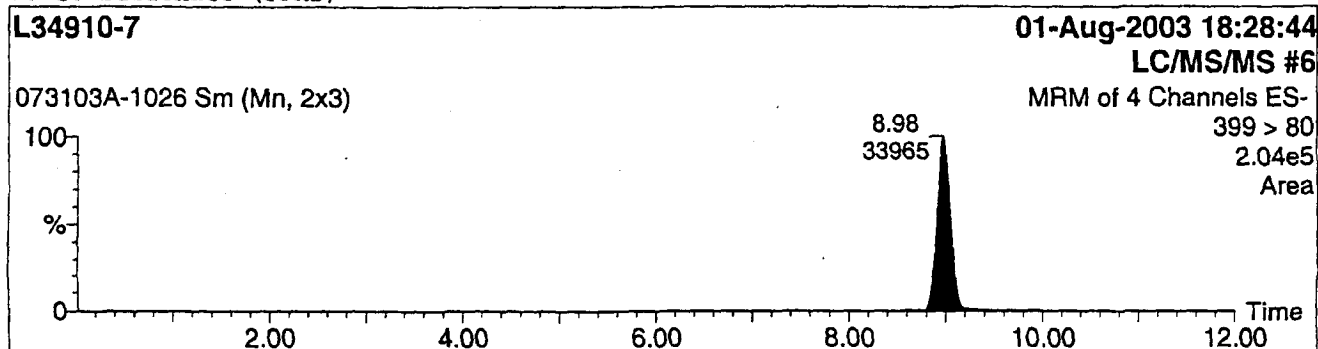
Name: 073103A-1026

Text:

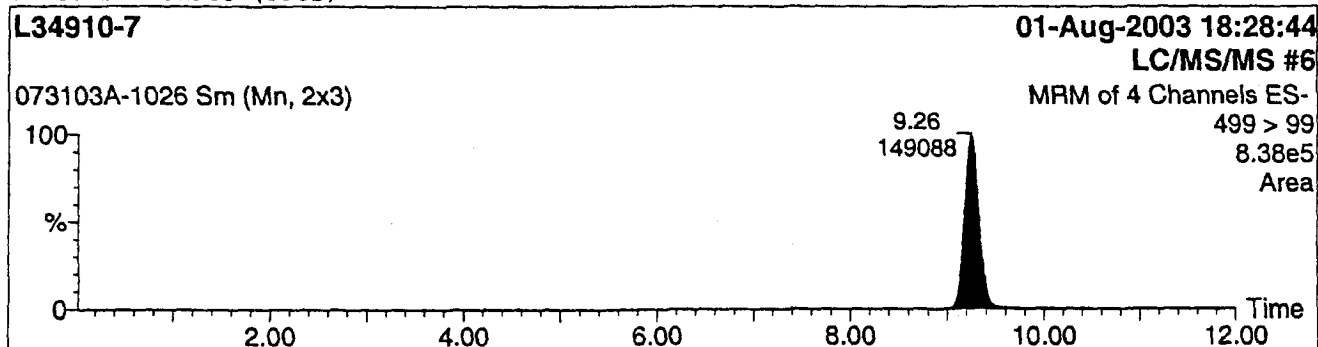
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 52

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

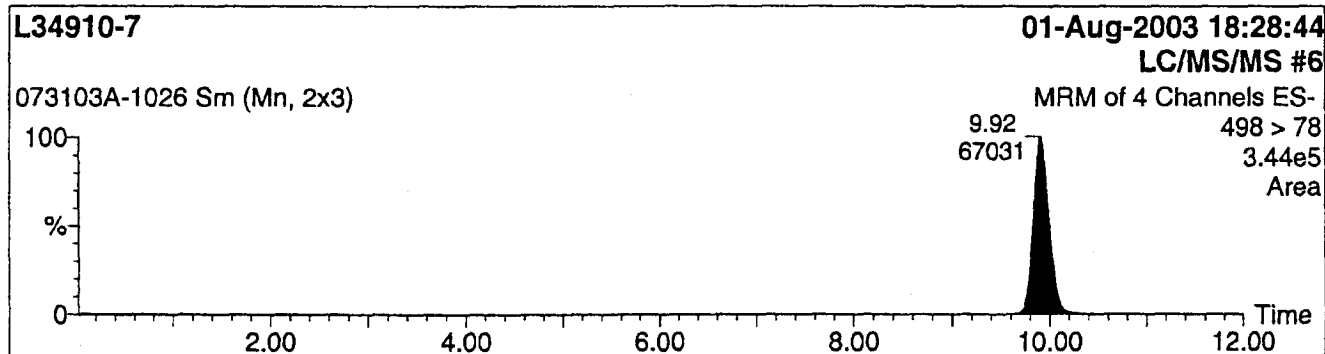
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1026

Text:

4: PFOSA



Quantify Sample Report

Page 53

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

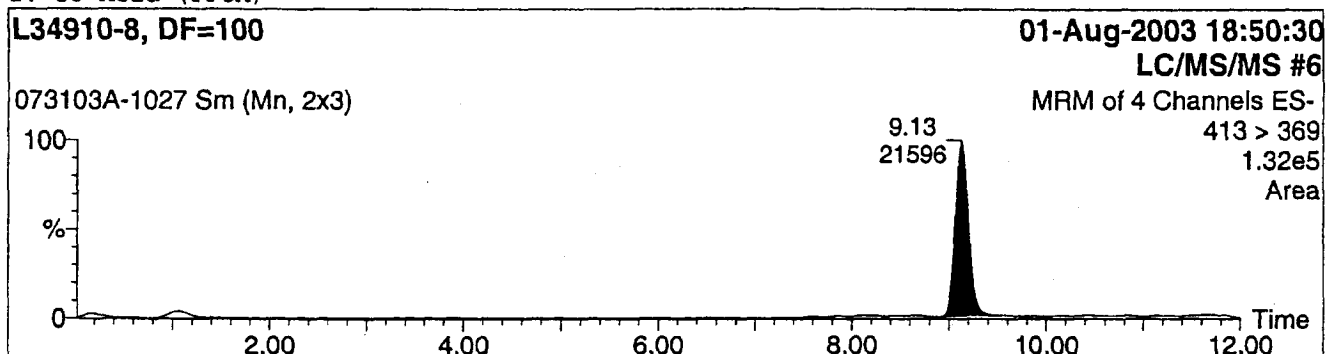
Job Code:

Printed: Sun Aug 03 07:19:29 2003

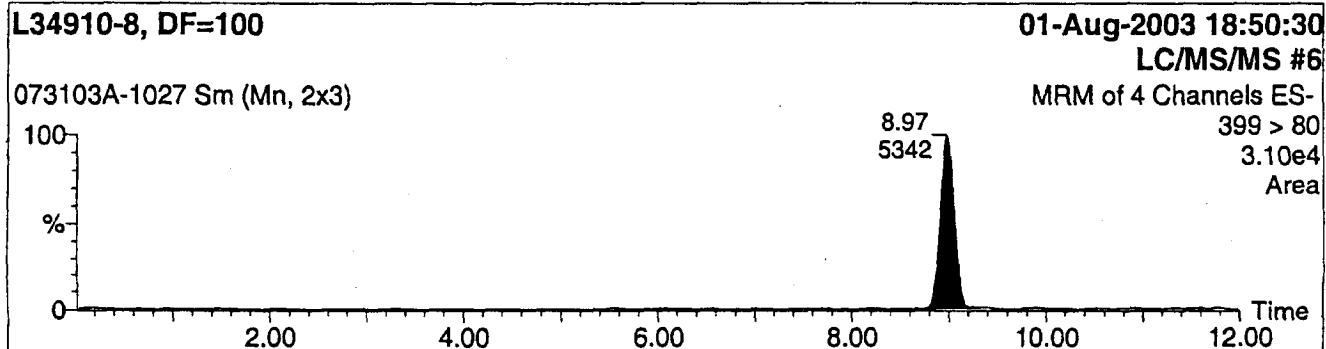
Name: 073103A-1027

Text:

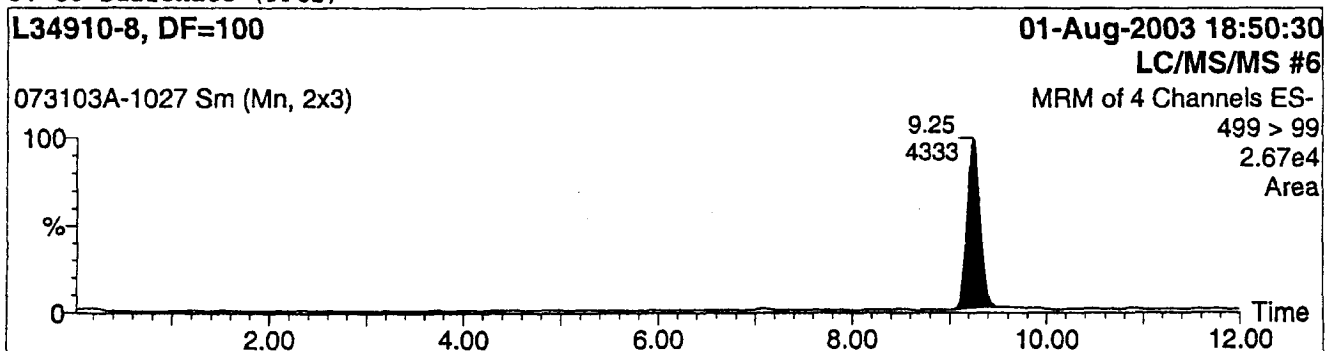
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 54

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1027

Text:

4: PFOSA

L34910-8, DF=100

01-Aug-2003 18:50:30

LC/MS/MS #6

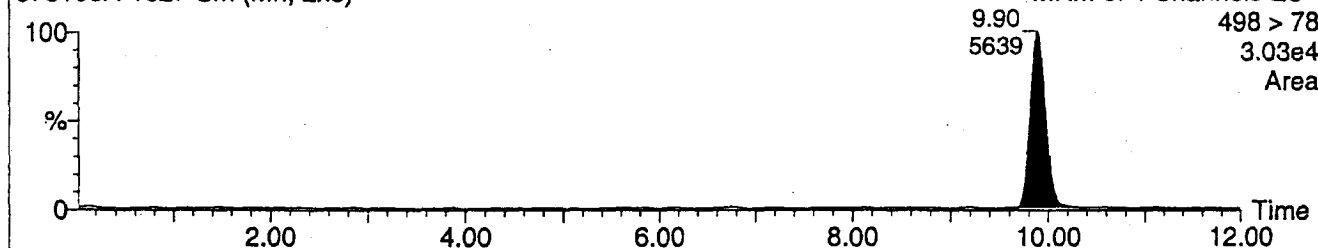
073103A-1027 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

3.03e4

Area



Quantify Sample Report

Page 55

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1028

Text:

1: C8 Acid (PFOA)

XC072503-3, 100 ng/L Standard

01-Aug-2003 19:12:20

LC/MS/MS #6

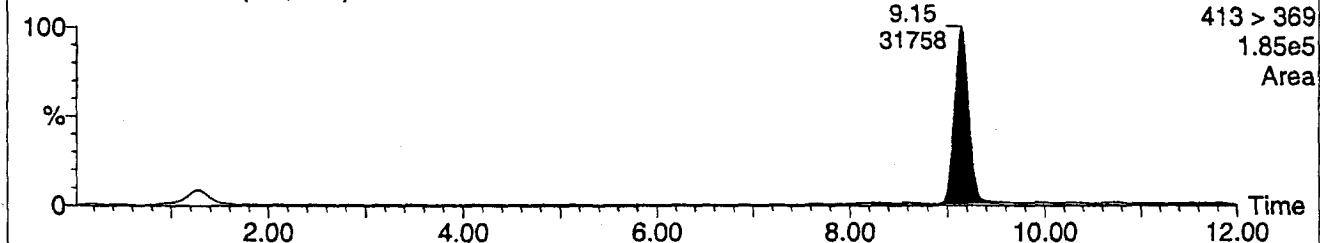
073103A-1028 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.85e5

Area



2: C6 Sulfonate (PFHS)

XC072503-3, 100 ng/L Standard

01-Aug-2003 19:12:20

LC/MS/MS #6

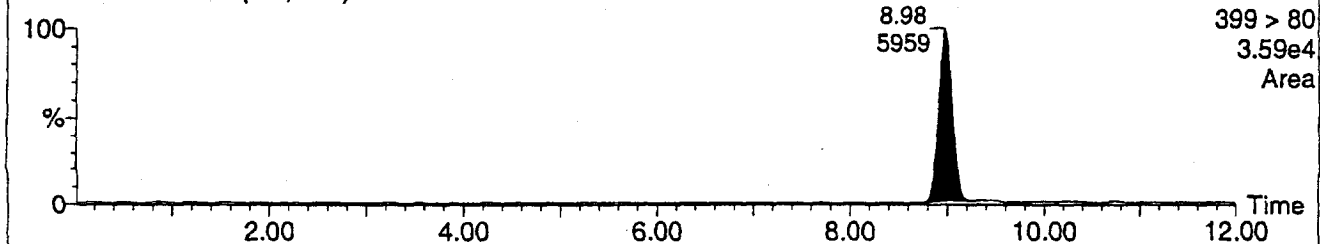
073103A-1028 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

3.59e4

Area



3: C8 Sulfonate (PFOS)

XC072503-3, 100 ng/L Standard

01-Aug-2003 19:12:20

LC/MS/MS #6

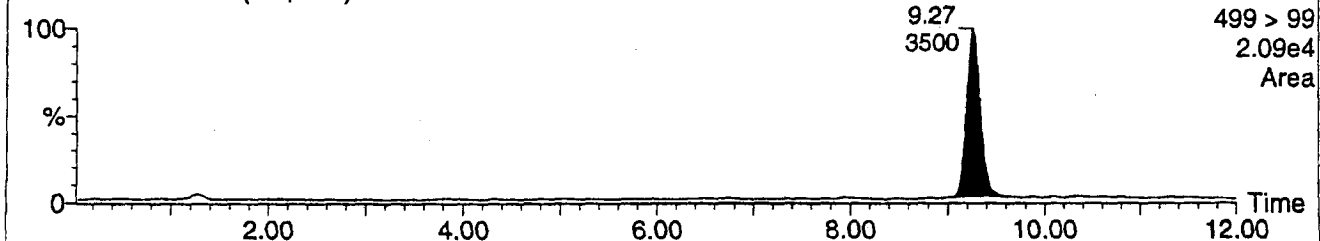
073103A-1028 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.09e4

Area



Quantify Sample Report

Page 56

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC
Last modified: Sun Aug 03 07:08:13 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1028

Text:

4: PFOSA

XC072503-3, 100 ng/L Standard

01-Aug-2003 19:12:20

LC/MS/MS #6

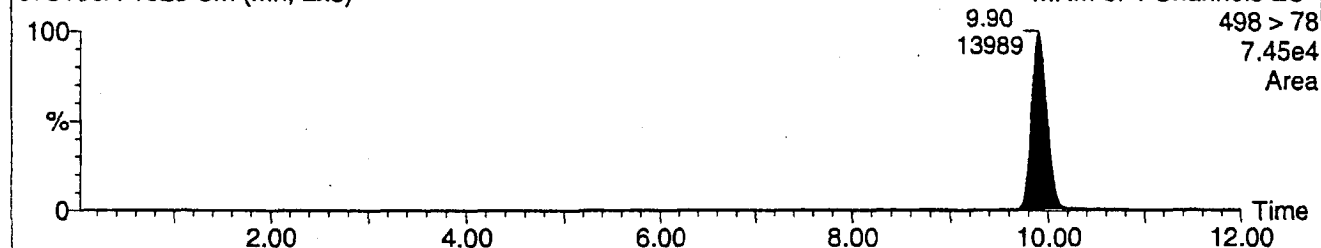
073103A-1028 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

7.45e4

Area



Quantify Sample Report

Page 57

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

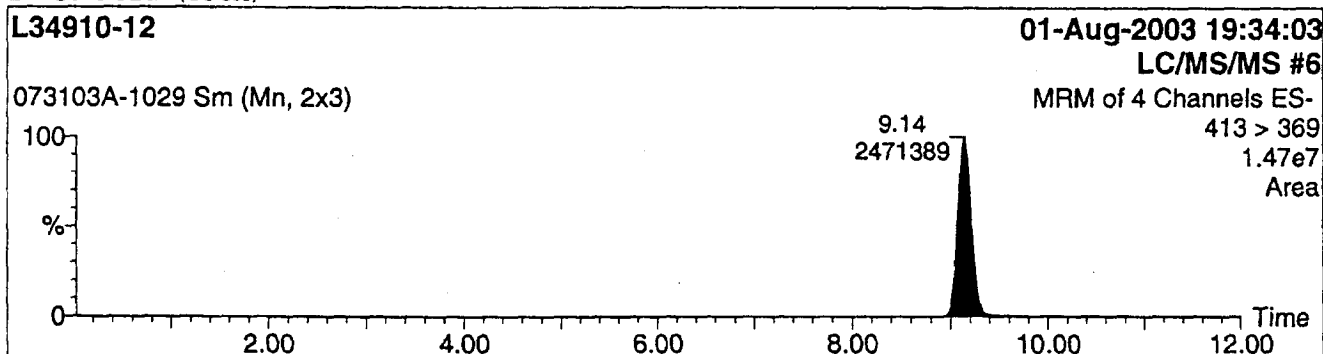
Job Code:

Printed: Sun Aug 03 07:19:29 2003

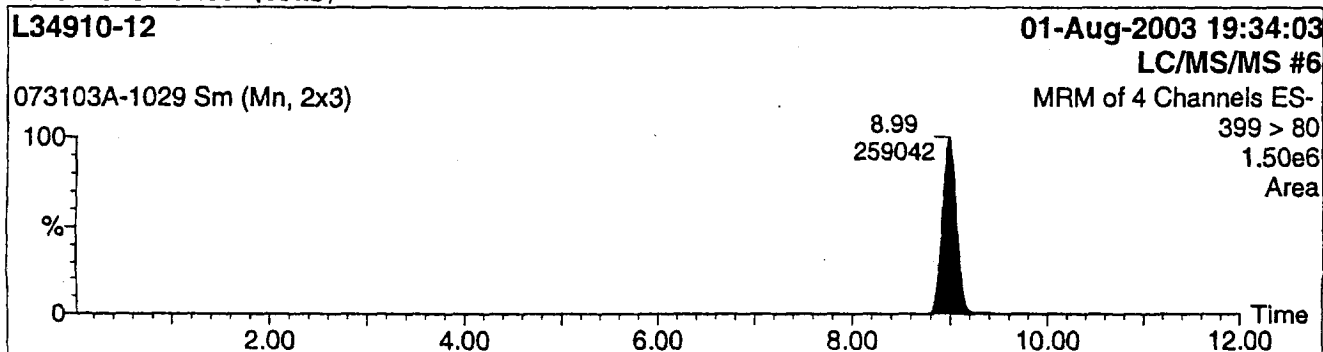
Name: 073103A-1029

Text:

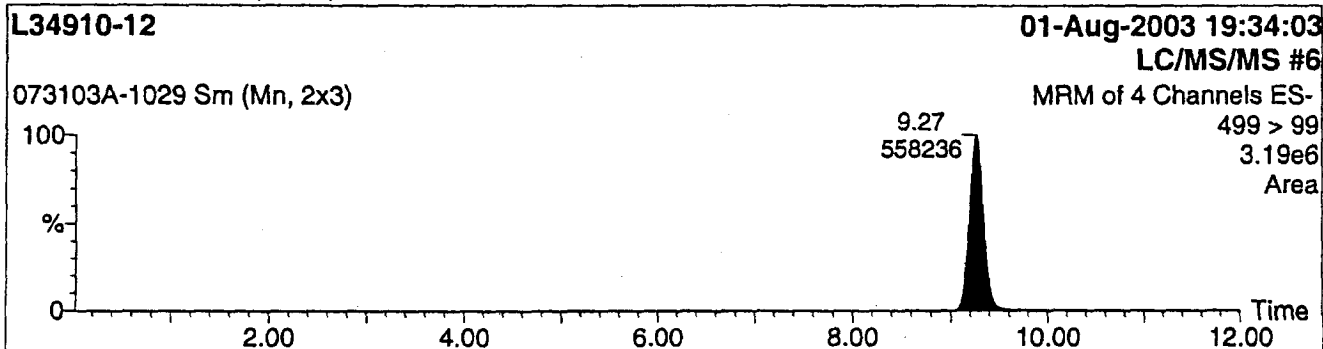
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 58

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1029

Text:

4: PFOSA

L34910-12

01-Aug-2003 19:34:03

LC/MS/MS #6

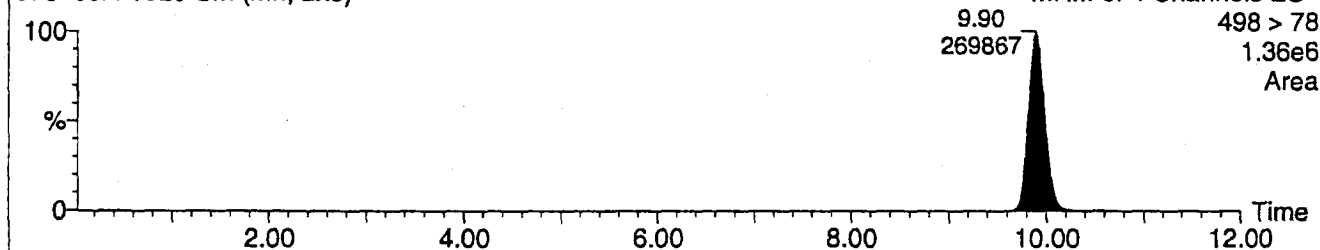
073103A-1029 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.36e6

Area



Quantify Sample Report

Page 59

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

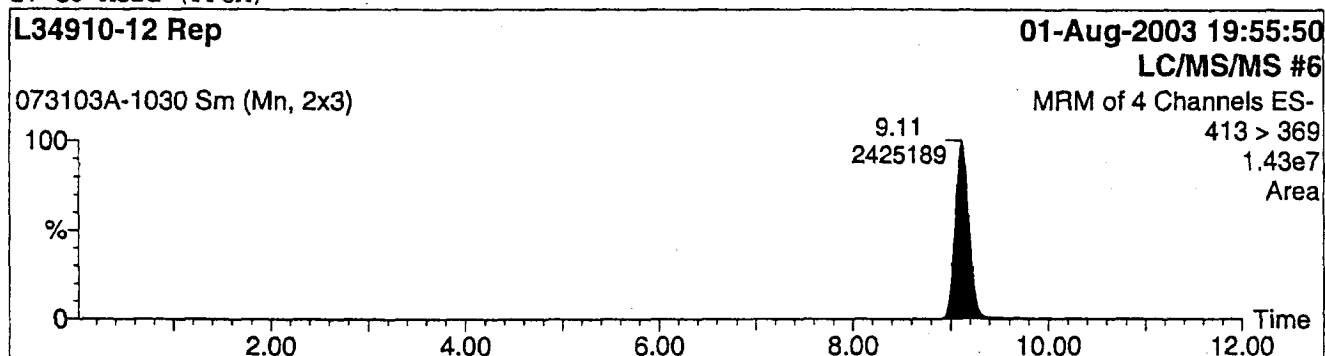
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC
Last modified: Sun Aug 03 07:08:13 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:19:29 2003

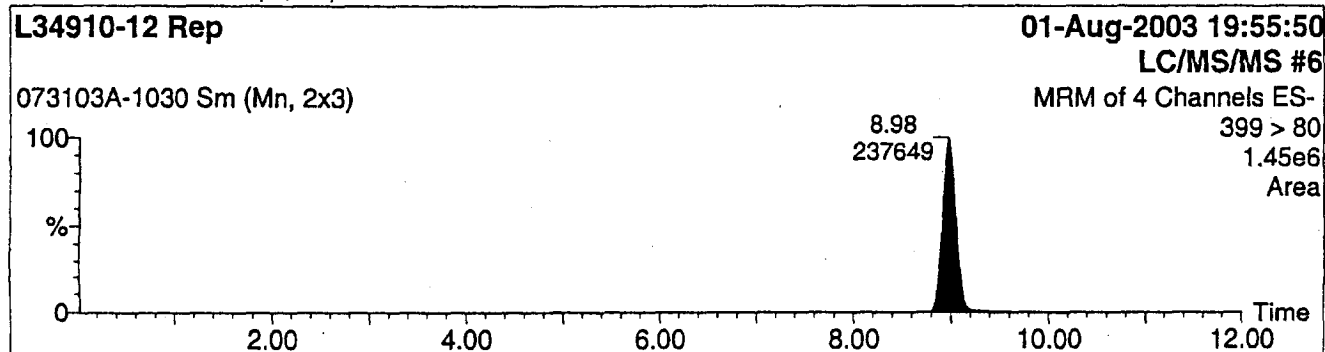
Name: 073103A-1030

Text:

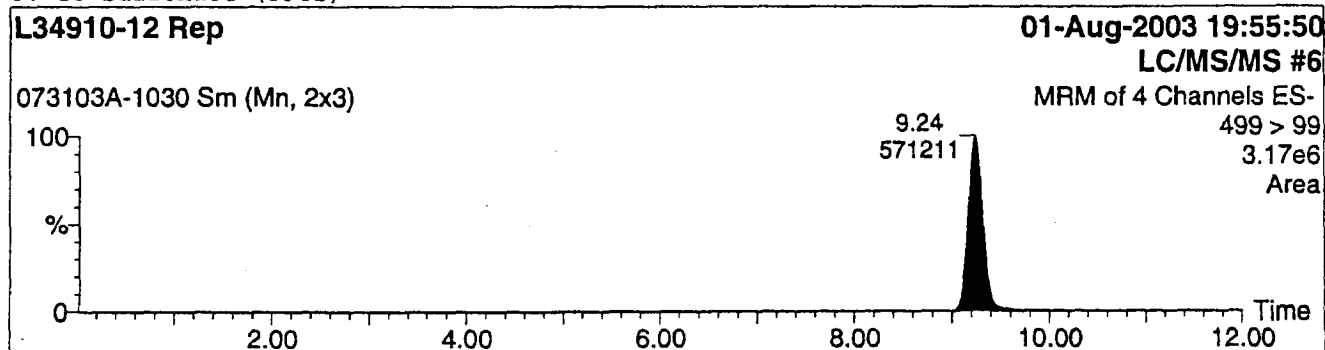
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 60

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

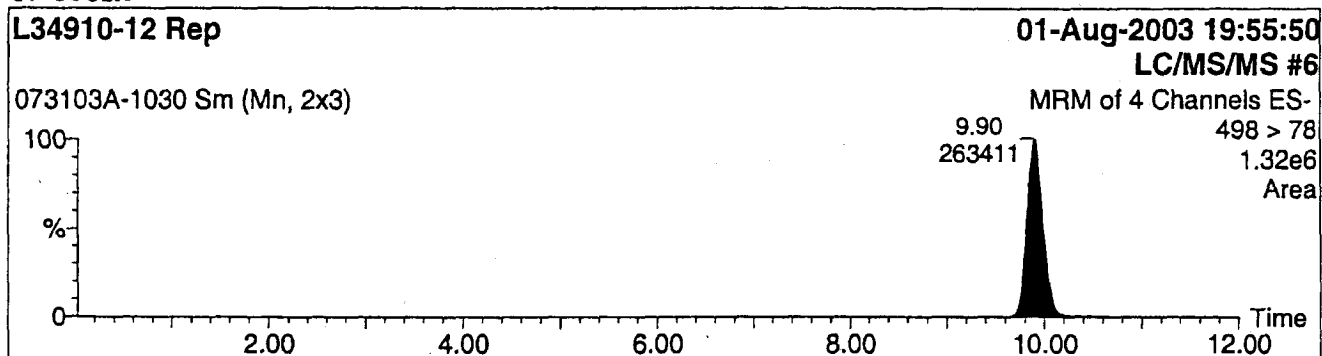
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1030

Text:

4: PFOSA



Quantify Sample Report

Page 61

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

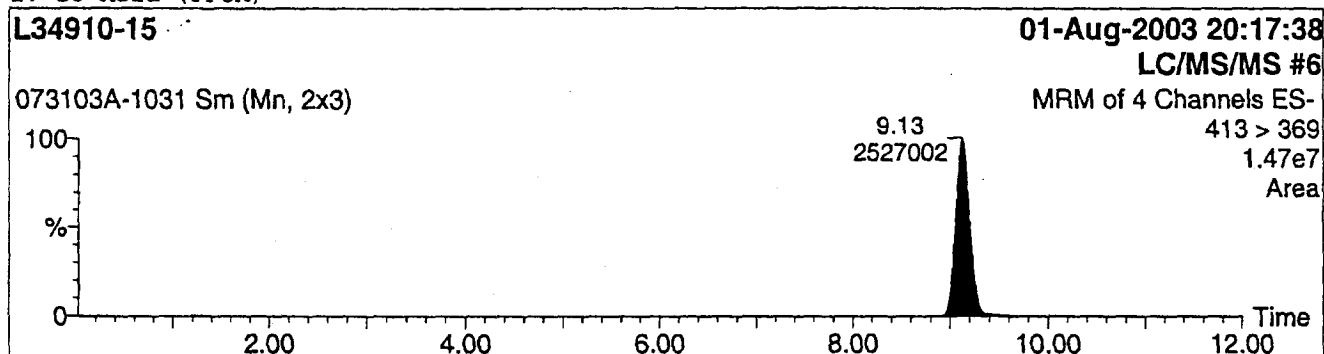
Job Code:

Printed: Sun Aug 03 07:19:29 2003

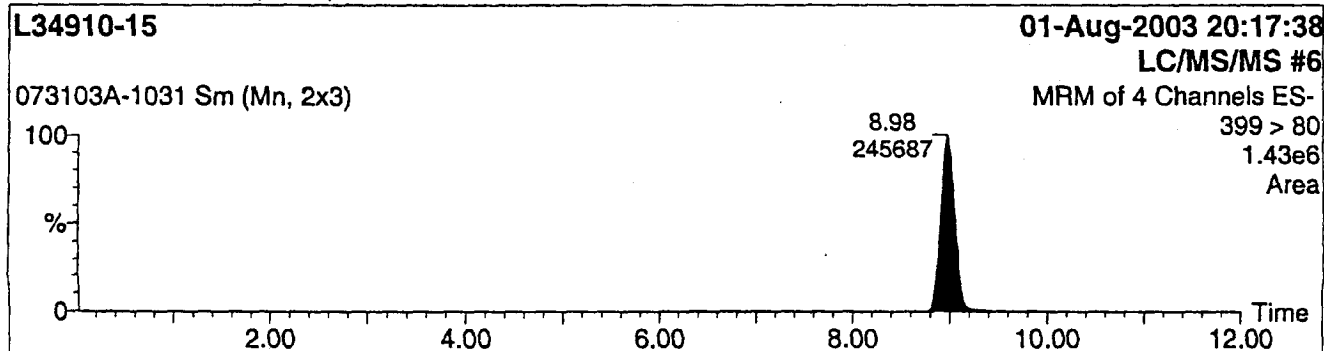
Name: 073103A-1031

Text:

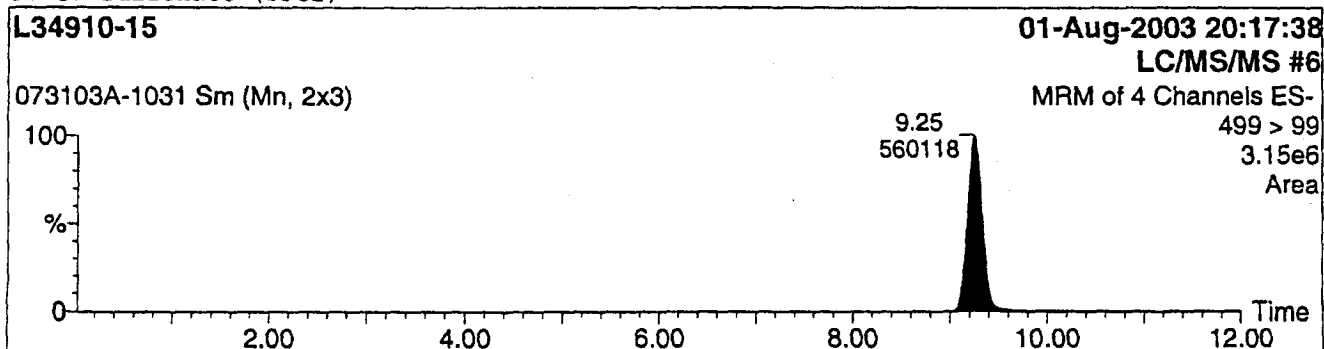
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 62

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

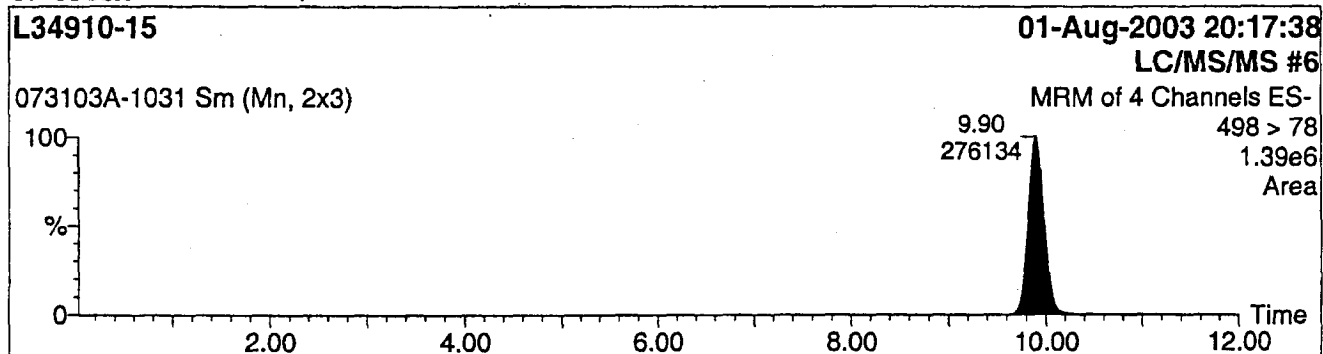
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1031

Text:

4: PFOSA



Quantify Sample Report

Page 63

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

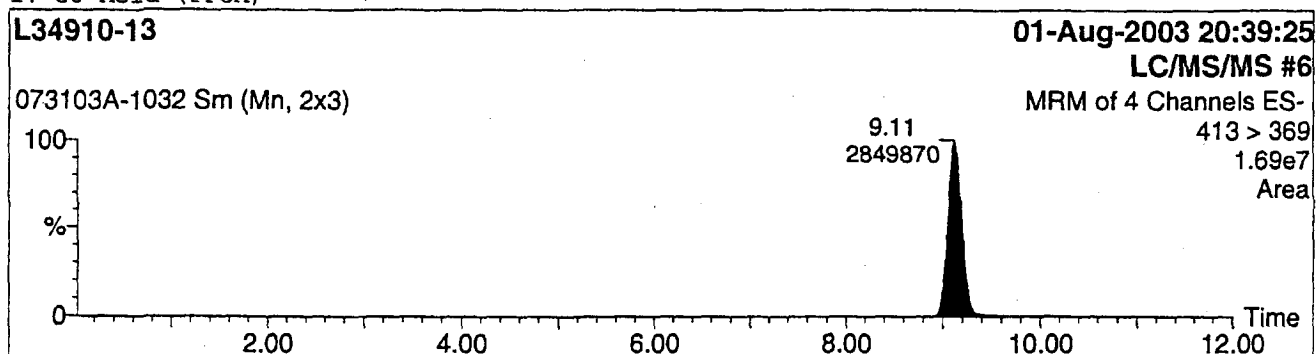
Job Code:

Printed: Sun Aug 03 07:19:29 2003

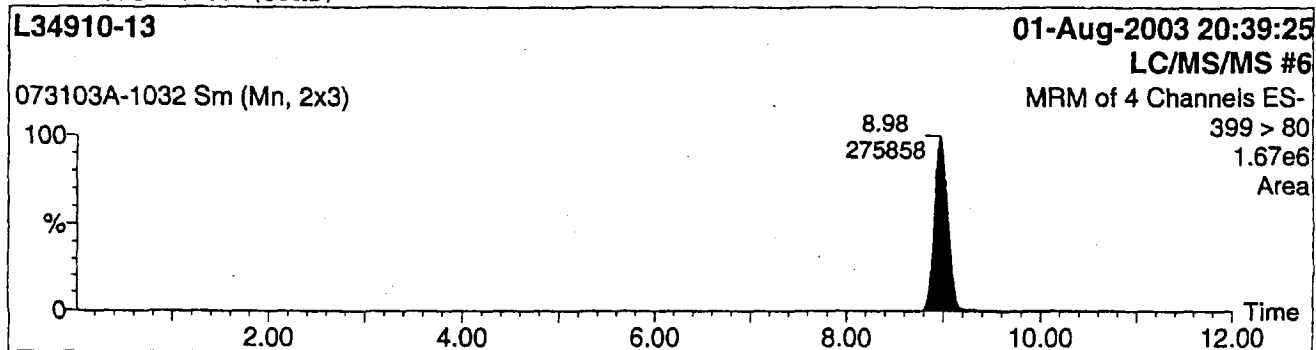
Name: 073103A-1032

Text:

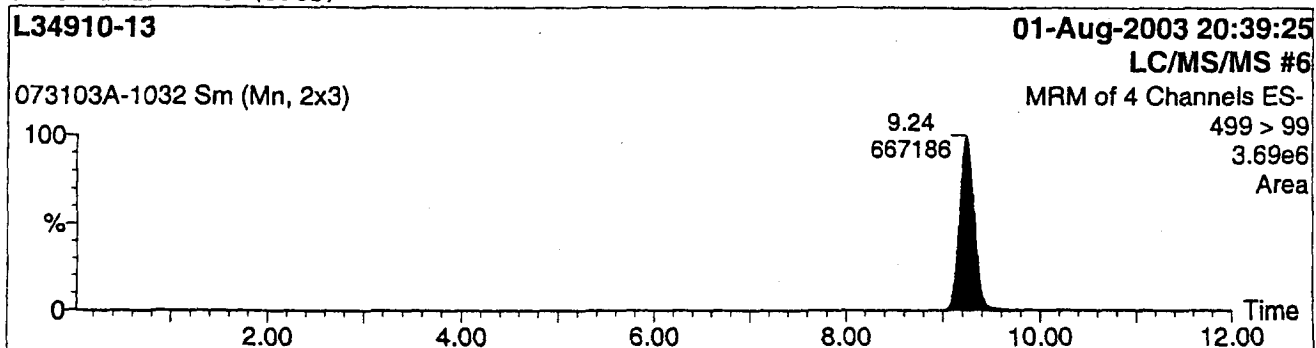
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 64

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

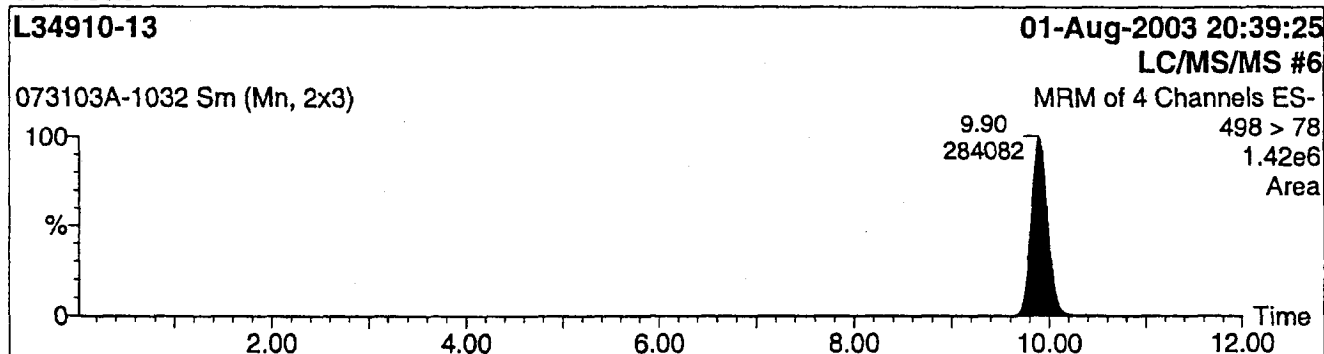
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1032

Text:

4: PFOSA



Quantify Sample Report

Page 65

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC
Last modified: Sun Aug 03 07:08:13 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1033

Text:

1: C8 Acid (PFOA)

L34910-14, DF=100

01-Aug-2003 21:00:58

LC/MS/MS #6

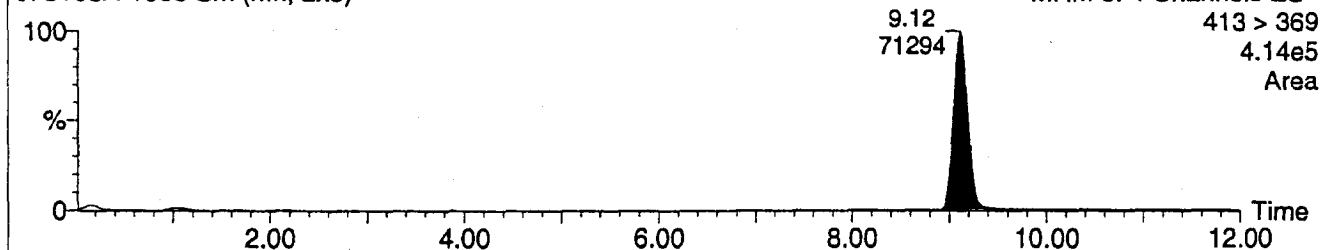
073103A-1033 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

4.14e5

Area



2: C6 Sulfonate (PFHS)

L34910-14, DF=100

01-Aug-2003 21:00:58

LC/MS/MS #6

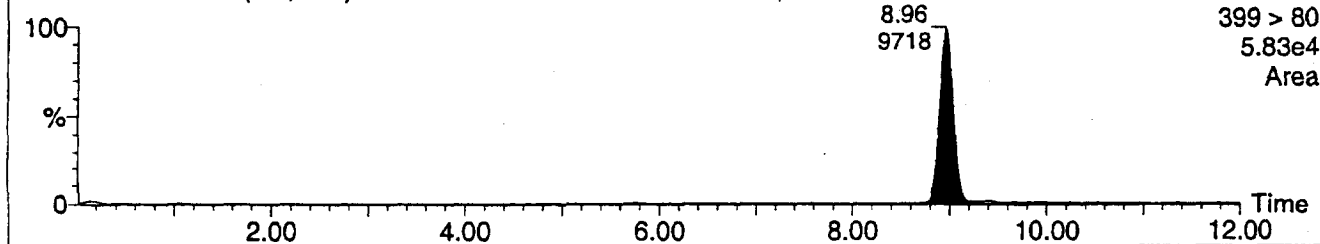
073103A-1033 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

5.83e4

Area



3: C8 Sulfonate (PFOS)

L34910-14, DF=100

01-Aug-2003 21:00:58

LC/MS/MS #6

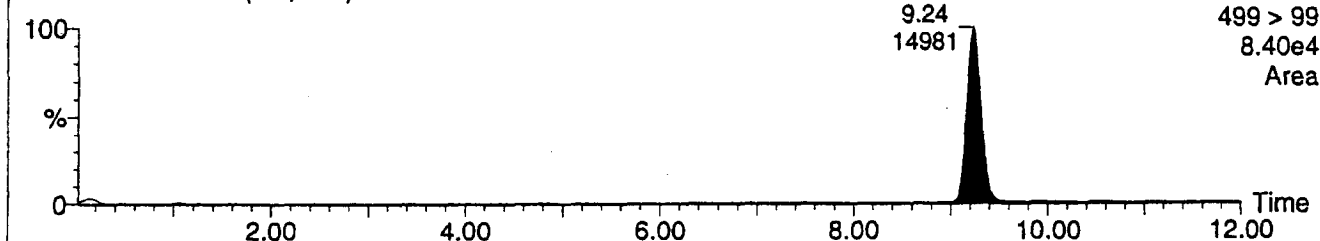
073103A-1033 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

8.40e4

Area



Quantify Sample Report

Page 66

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1033

Text:

4: PFOSA

L34910-14, DF=100

01-Aug-2003 21:00:58

LC/MS/MS #6

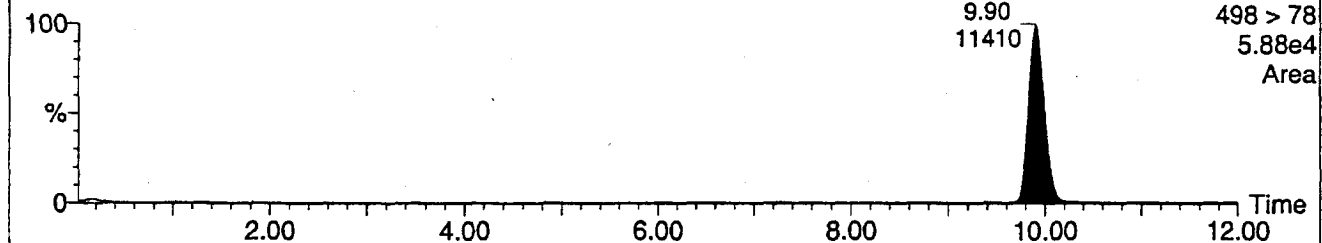
073103A-1033 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

5.88e4

Area



Quantify Sample Report

Page 67

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1034

Text:

1: C8 Acid (PFOA)

XC072503-4, 250 ng/L Standard

01-Aug-2003 21:22:34

LC/MS/MS #6

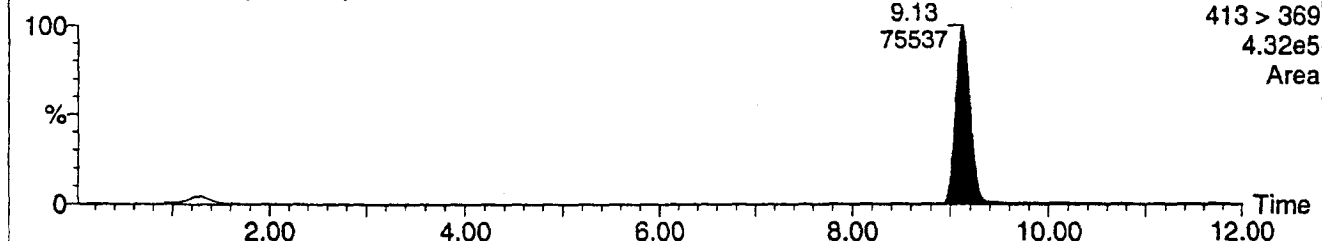
073103A-1034 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

4.32e5

Area



2: C6 Sulfonate (PFHS)

XC072503-4, 250 ng/L Standard

01-Aug-2003 21:22:34

LC/MS/MS #6

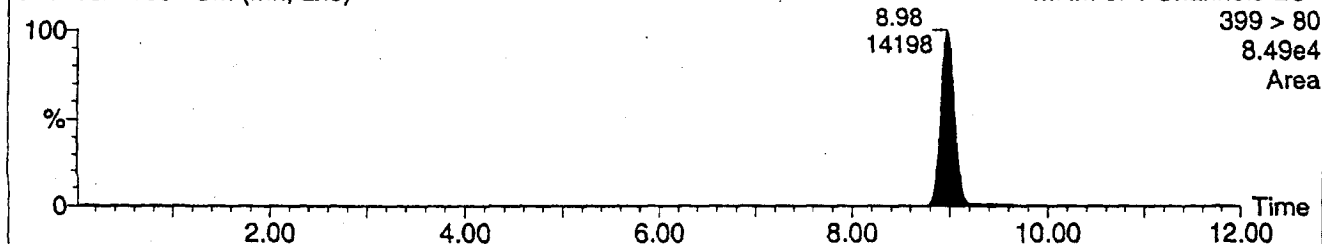
073103A-1034 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

8.49e4

Area



3: C8 Sulfonate (PFOS)

XC072503-4, 250 ng/L Standard

01-Aug-2003 21:22:34

LC/MS/MS #6

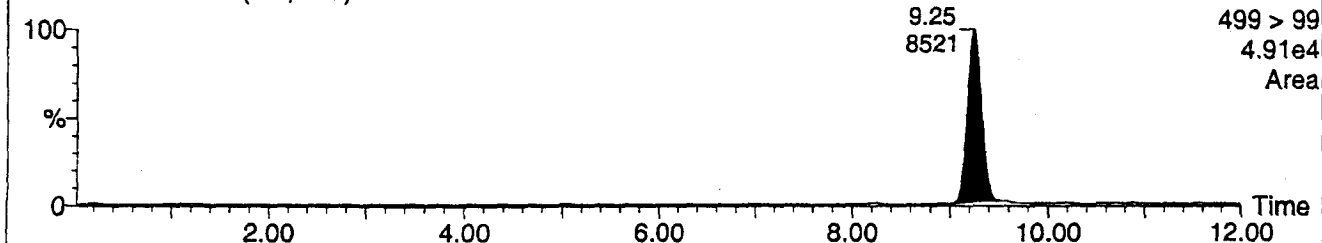
073103A-1034 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

4.91e4

Area



Quantify Sample Report

Page 68

Study No.: L34910, Set No.: 073103A, Ext.Date: 07/31/03, Analyst: K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1034

Text:

4: PFOSA

XC072503-4, 250 ng/L Standard

01-Aug-2003 21:22:34

LC/MS/MS #6

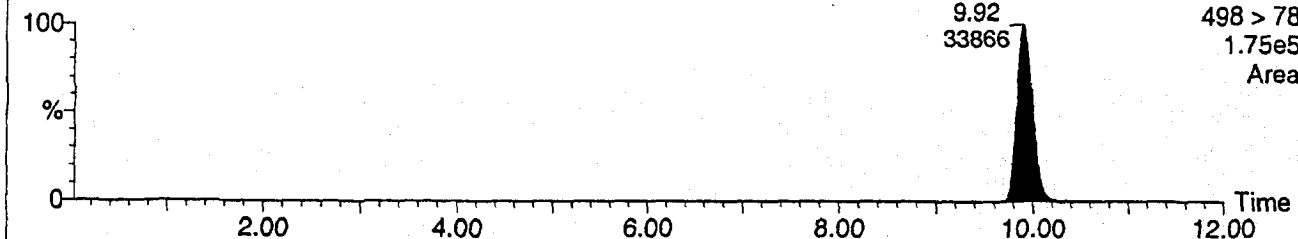
073103A-1034 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.75e5

Area



Quantify Sample Report

Page 69

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

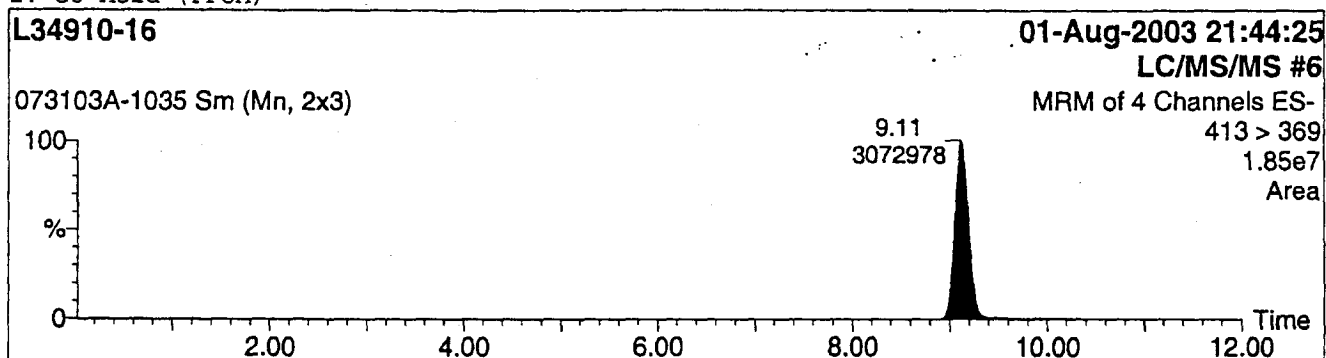
Job Code:

Printed: Sun Aug 03 07:19:29 2003

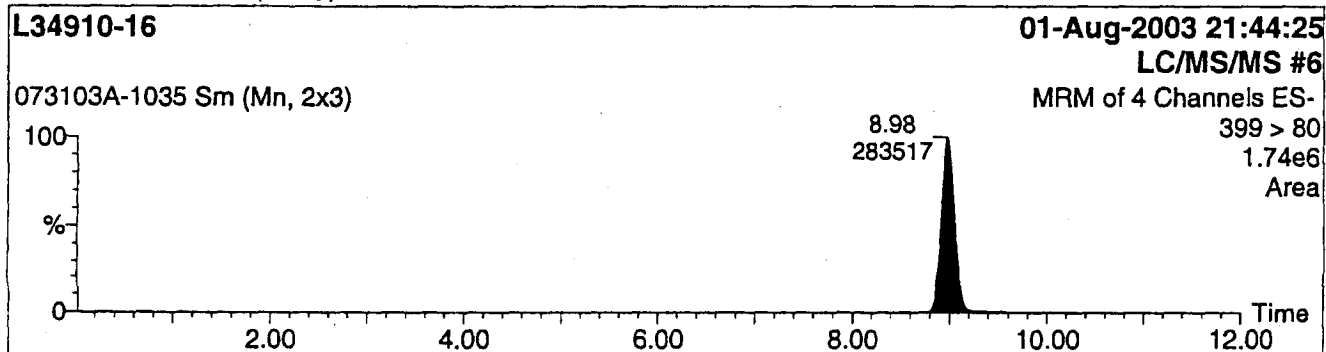
Name: 073103A-1035

Text:

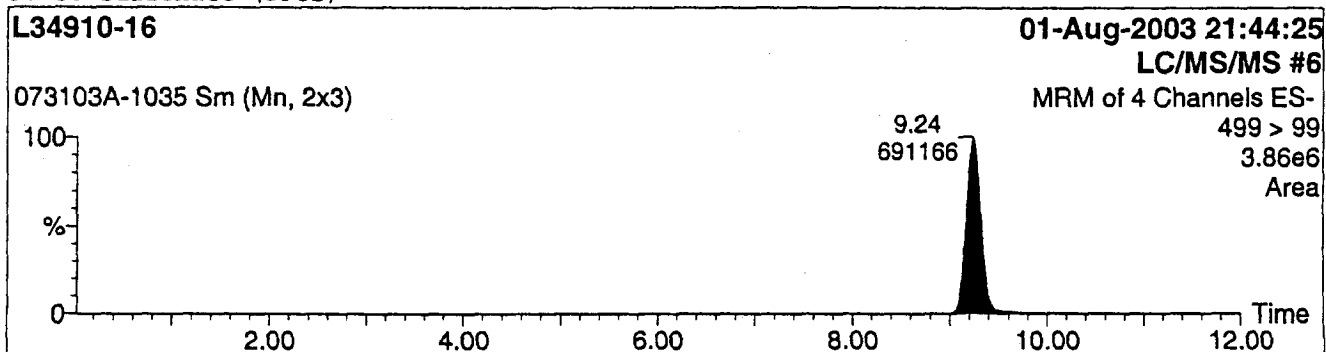
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 70

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1035

Text:

4: PFOSA

L34910-16

01-Aug-2003 21:44:25

LC/MS/MS #6

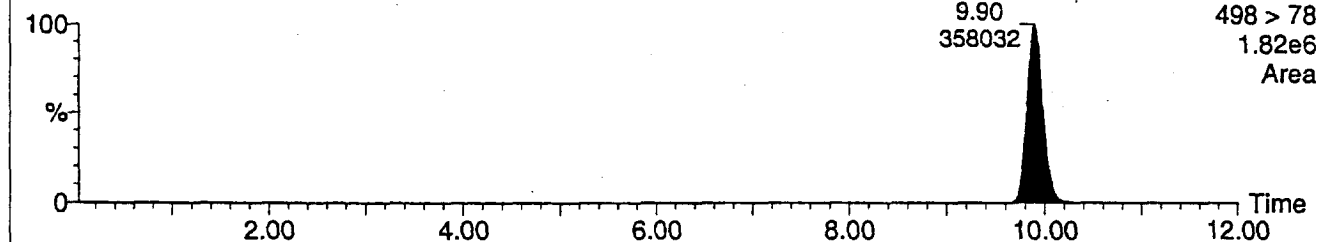
073103A-1035 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.82e6

Area



Quantify Sample Report

Page 71

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: F:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: F:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

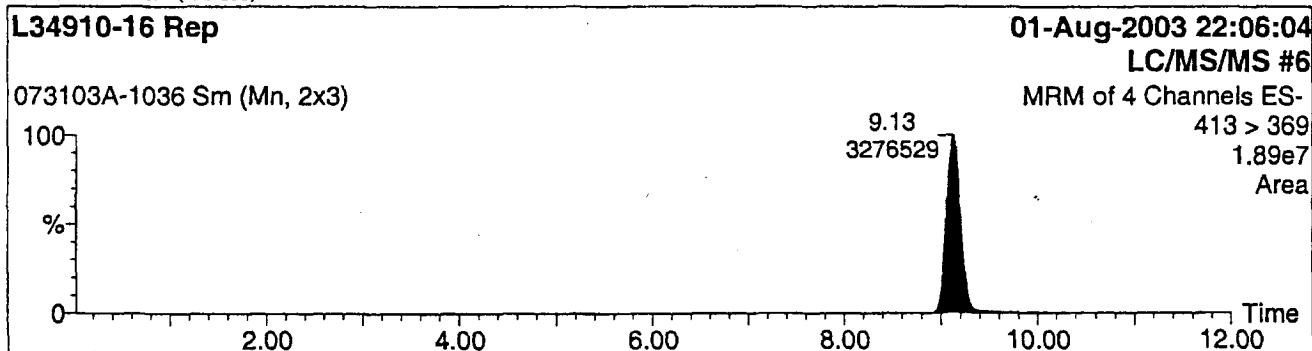
Job Code:

Printed: Sun Aug 03 07:19:29 2003

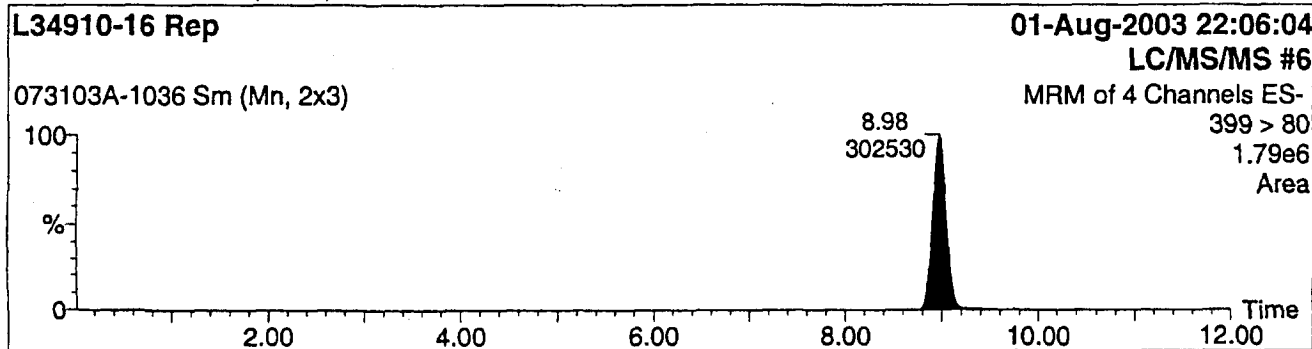
Name: 073103A-1036

Text:

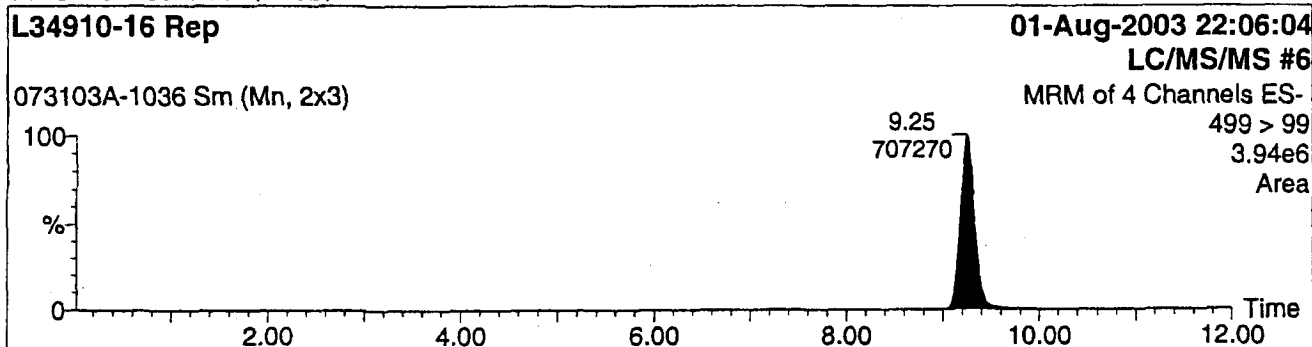
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 72

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

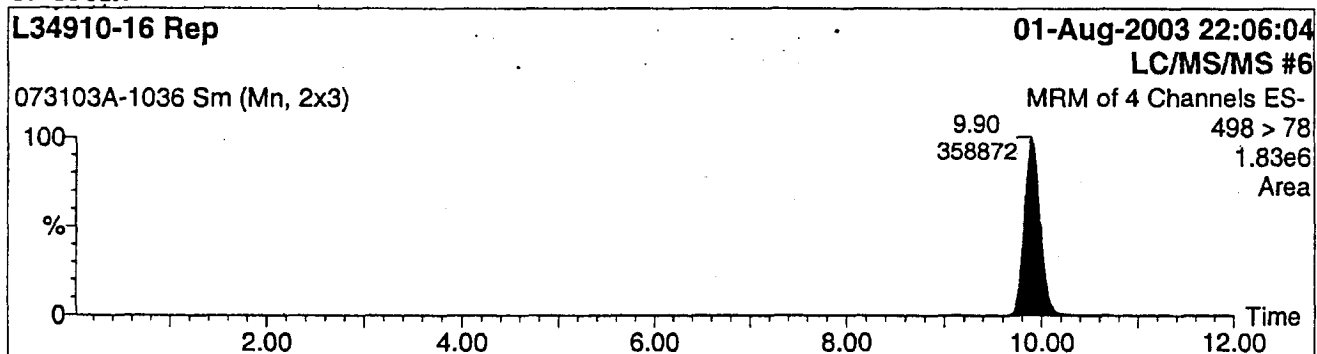
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1036

Text:

4: PFOSA



Quantify Sample Report

Page 73

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

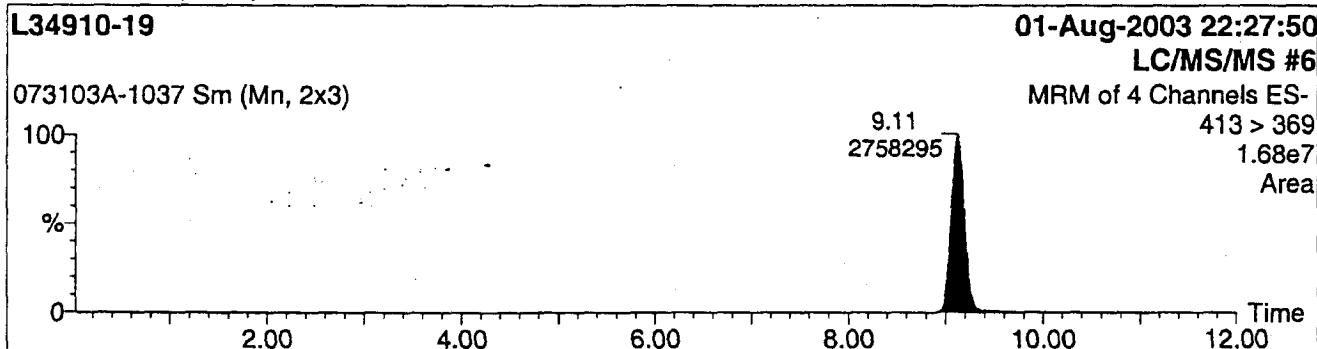
Job Code:

Printed: Sun Aug 03 07:19:29 2003

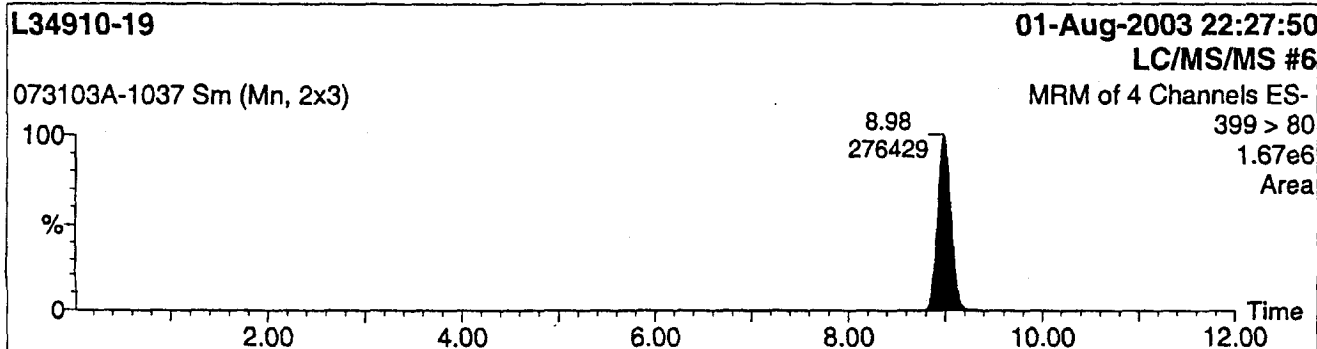
Name: 073103A-1037

Text:

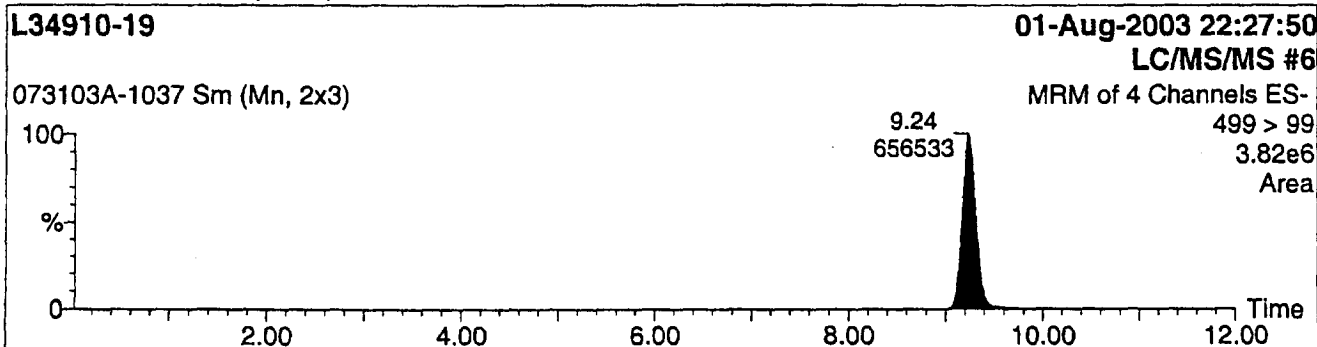
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 74

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

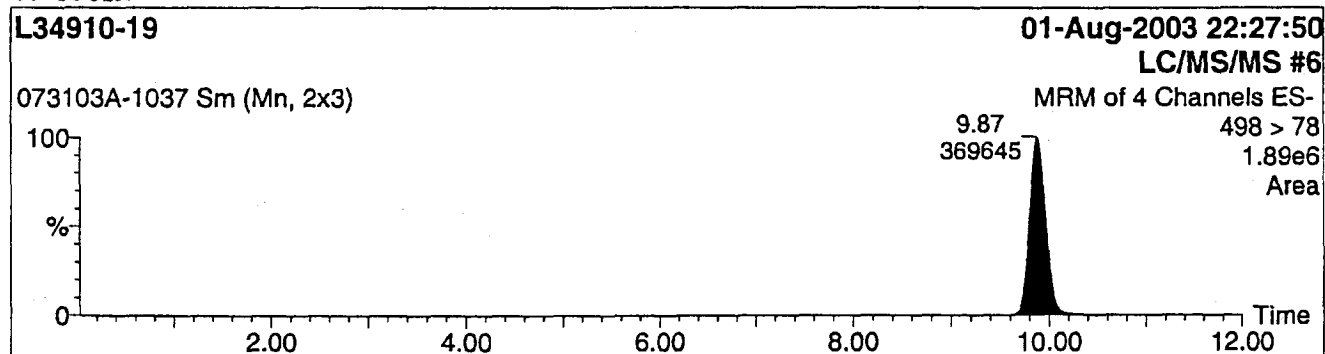
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1037

Text:

4: PFOSA



Quantify Sample Report

Page 75

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

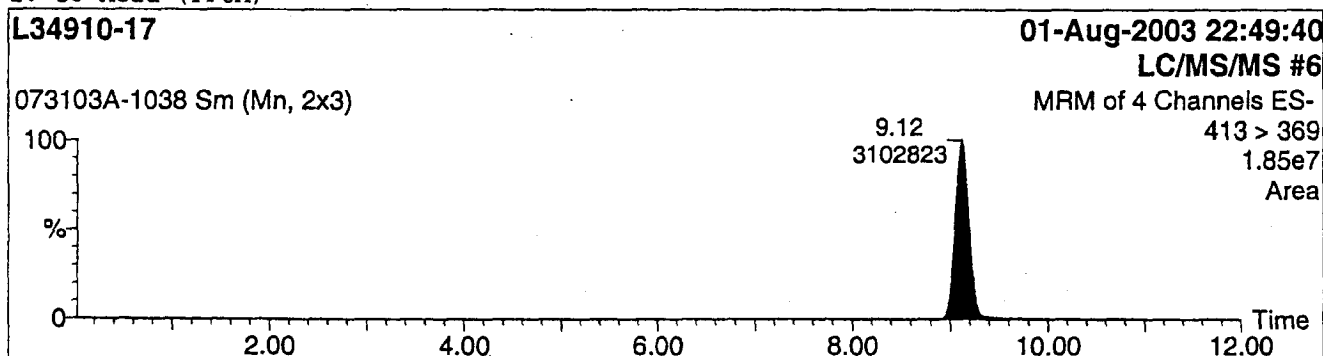
Job Code:

Printed: Sun Aug 03 07:19:29 2003

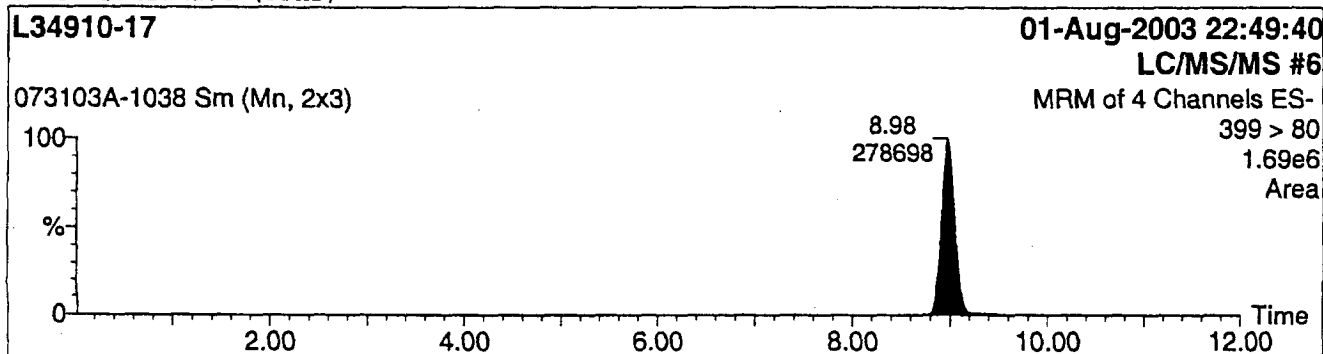
Name: 073103A-1038

Text:

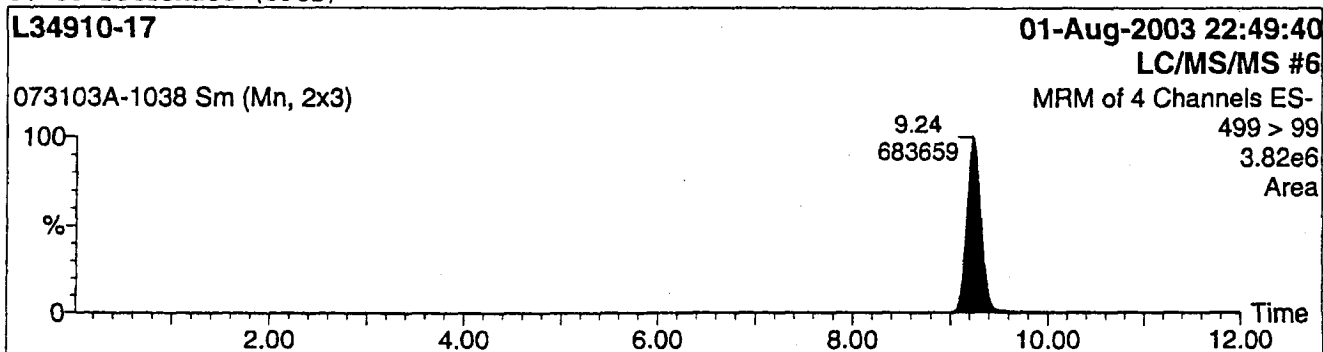
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 76

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1038

Text:

4: PFOSA

L34910-17

01-Aug-2003 22:49:40

LC/MS/MS #6

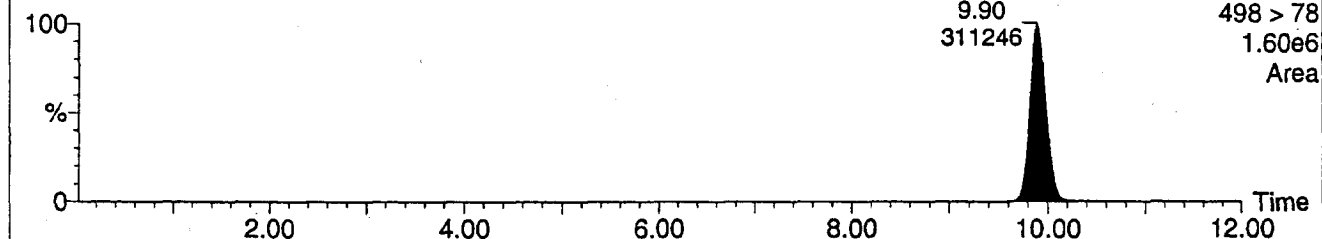
073103A-1038 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.60e6

Area



Quantify Sample Report

Page 77

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1039

Text:

1: C8 Acid (PFOA)

L34910-18, DF=100

01-Aug-2003 23:11:32

LC/MS/MS #6

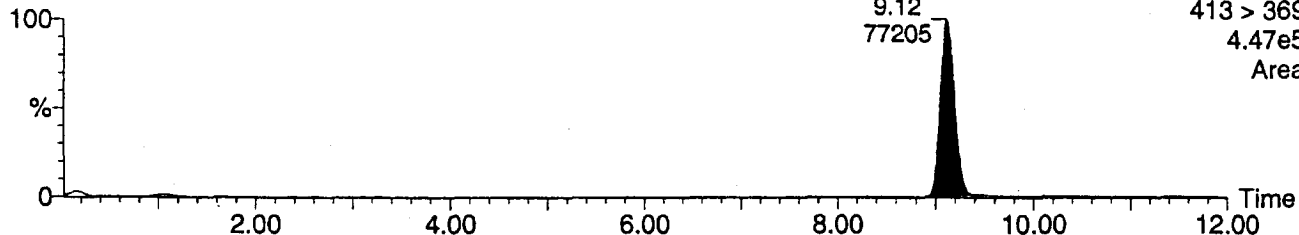
073103A-1039 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

4.47e5

Area



2: C6 Sulfonate (PFHS)

L34910-18, DF=100

01-Aug-2003 23:11:32

LC/MS/MS #6

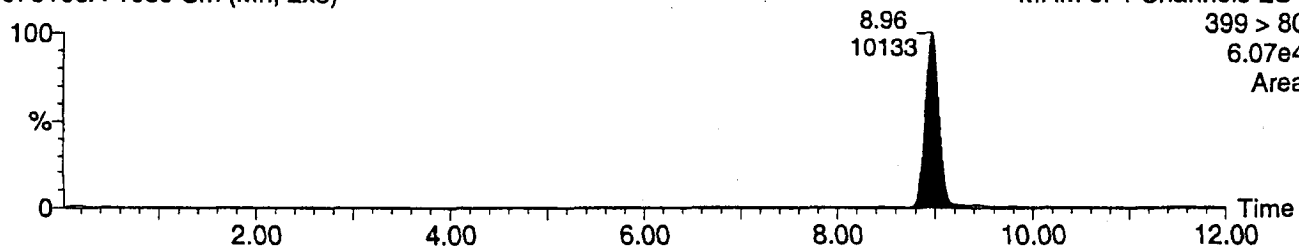
073103A-1039 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

6.07e4

Area



3: C8 Sulfonate (PFOS)

L34910-18, DF=100

01-Aug-2003 23:11:32

LC/MS/MS #6

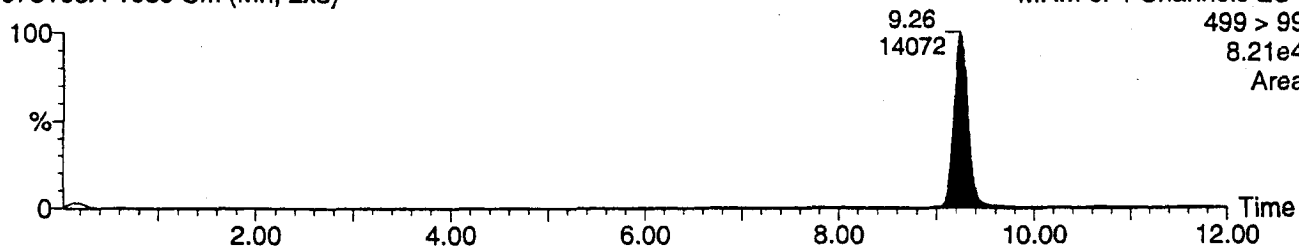
073103A-1039 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

8.21e4

Area



Quantify Sample Report

Page 78

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1039

Text:

4: PFOSA

L34910-18, DF=100

01-Aug-2003 23:11:32

LC/MS/MS #6

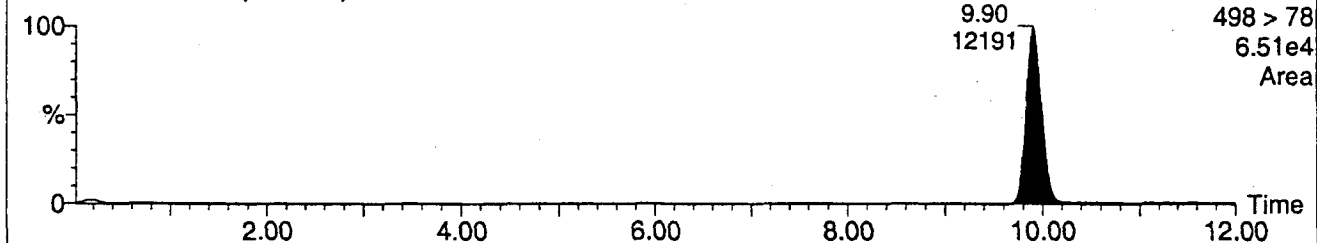
073103A-1039 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

6.51e4

Area



Quantify Sample Report

Page 79

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1040

Text:

1: C8 Acid (PFOA)

XC072503-5, 500 ng/L Standard

01-Aug-2003 23:33:24

LC/MS/MS #6

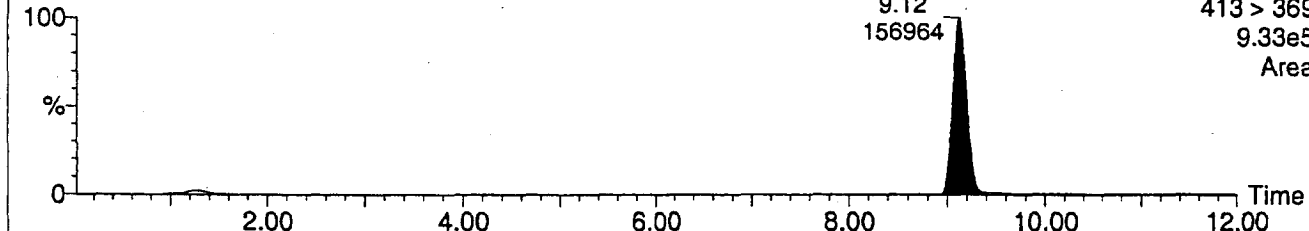
073103A-1040 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

9.33e5

Area



2: C6 Sulfonate (PFHS)

XC072503-5, 500 ng/L Standard

01-Aug-2003 23:33:24

LC/MS/MS #6

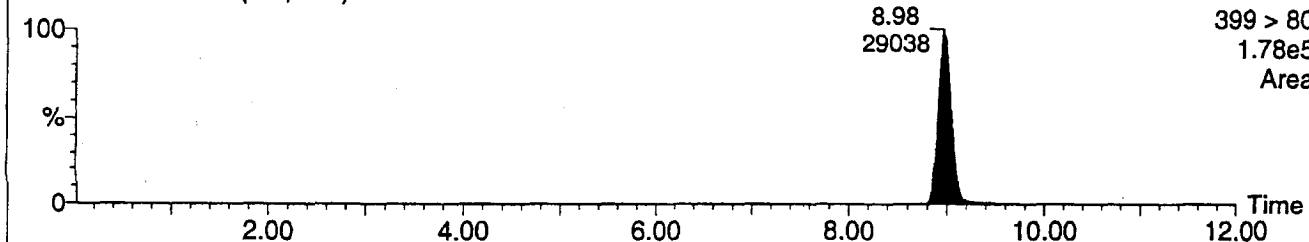
073103A-1040 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.78e5

Area



3: C8 Sulfonate (PFOS)

XC072503-5, 500 ng/L Standard

01-Aug-2003 23:33:24

LC/MS/MS #6

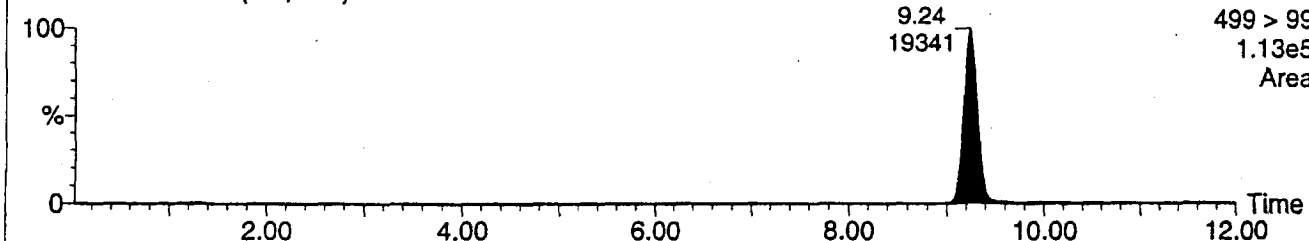
073103A-1040 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.13e5

Area



Quantify Sample Report

Page 80

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1040

Text:

4: PFOSA

XC072503-5, 500 ng/L Standard

01-Aug-2003 23:33:24

LC/MS/MS #6

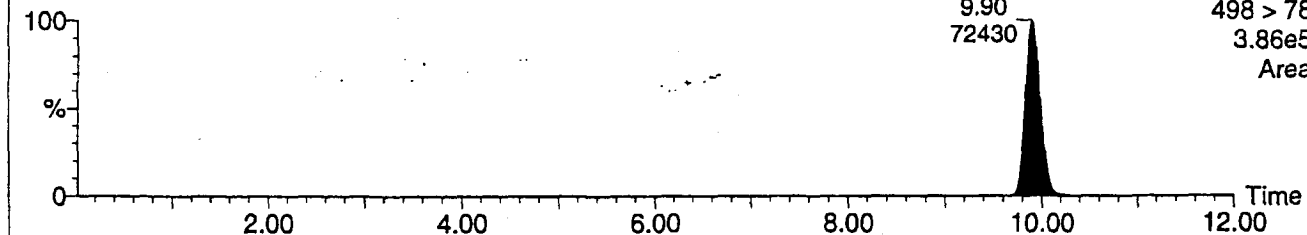
073103A-1040 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

3.86e5

Area



Quantify Sample Report

Page 81

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

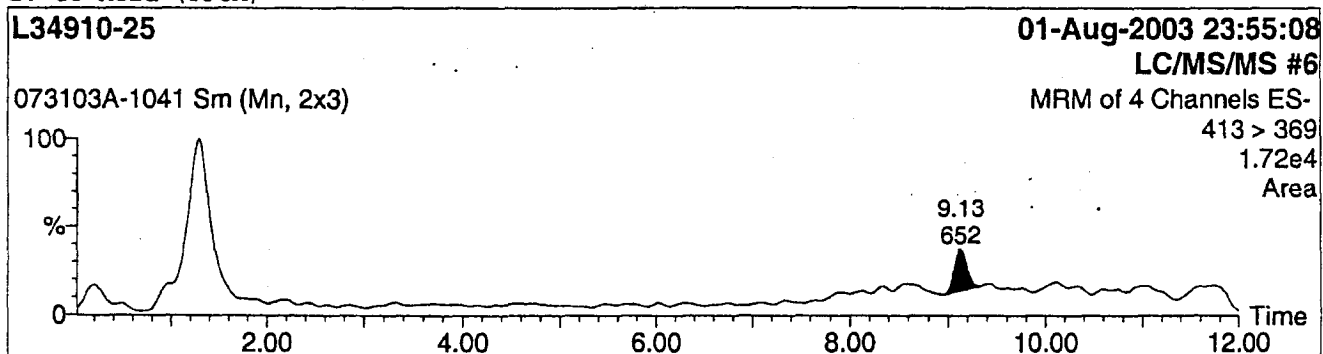
Job Code:

Printed: Sun Aug 03 07:19:29 2003

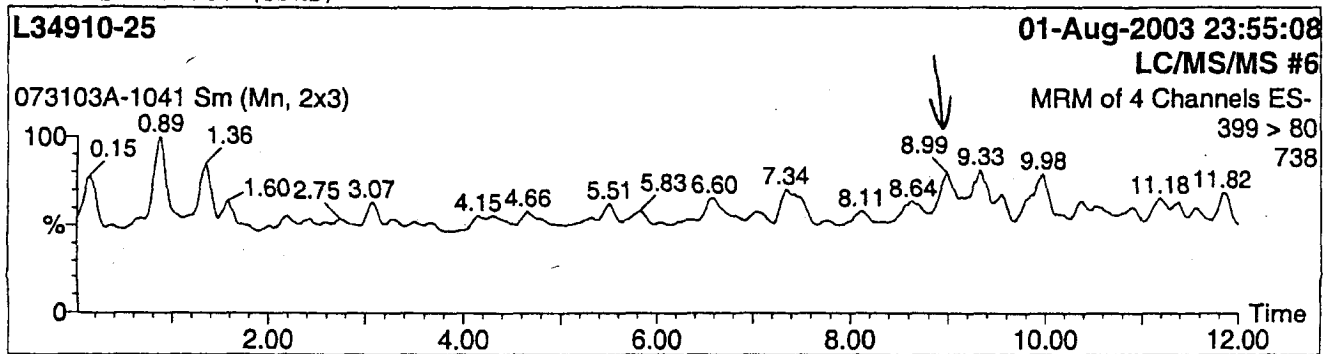
Name: 073103A-1041

Text:

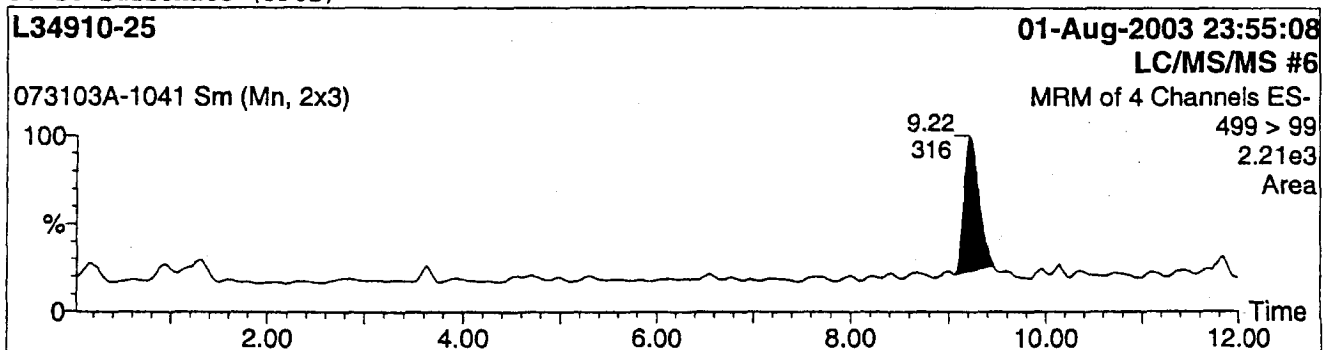
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 82

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

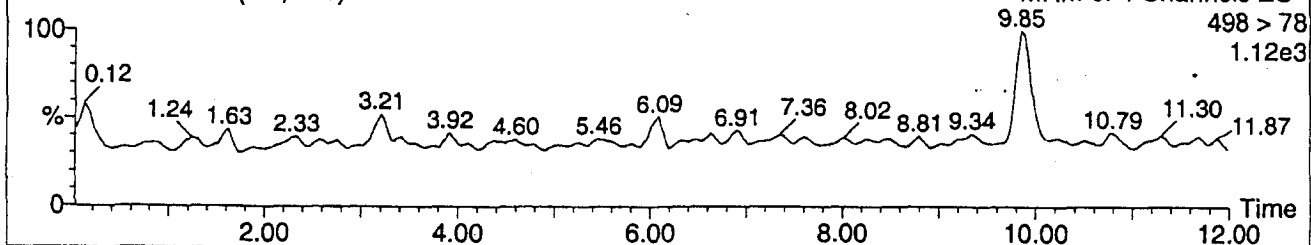
Name: 073103A-1041

Text:

4: PFOSA

L34910-25

073103A-1041 Sm (Mn, 2x3)



Quantify Sample Report

Page 83

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

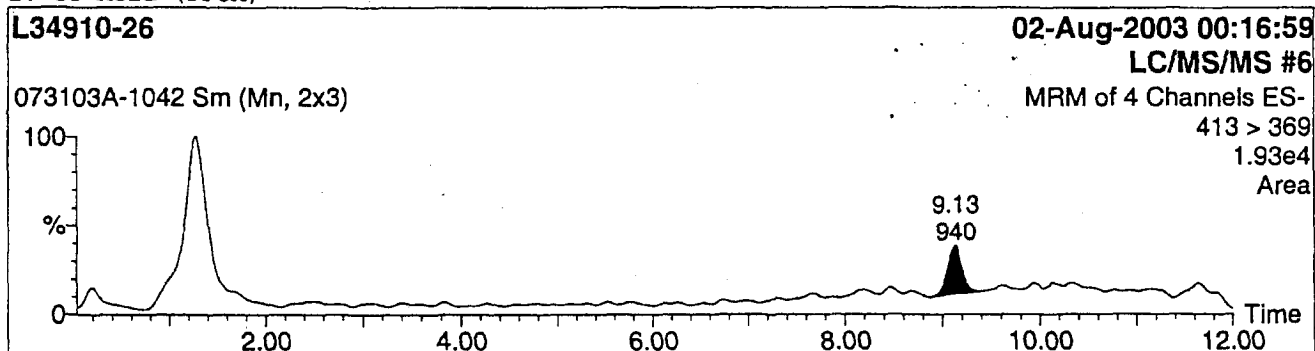
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC
Last modified: Sun Aug 03 07:08:13 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:19:29 2003

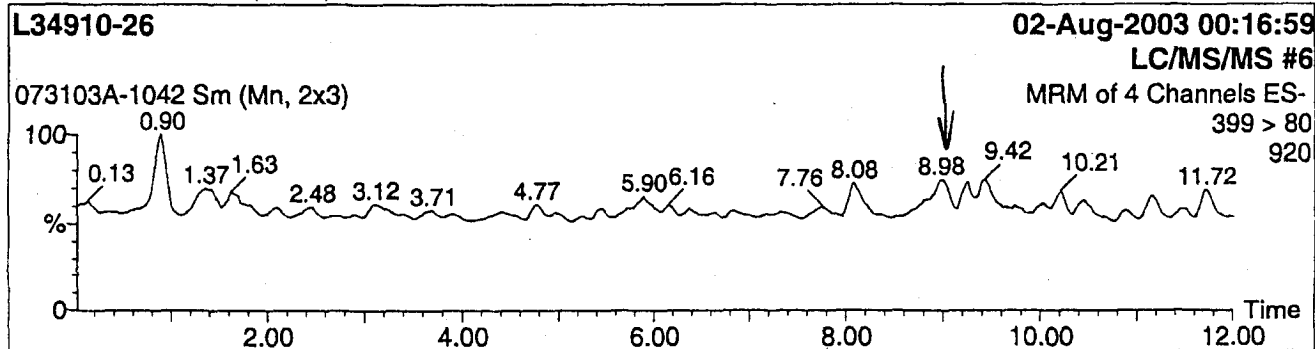
Name: 073103A-1042

Text:

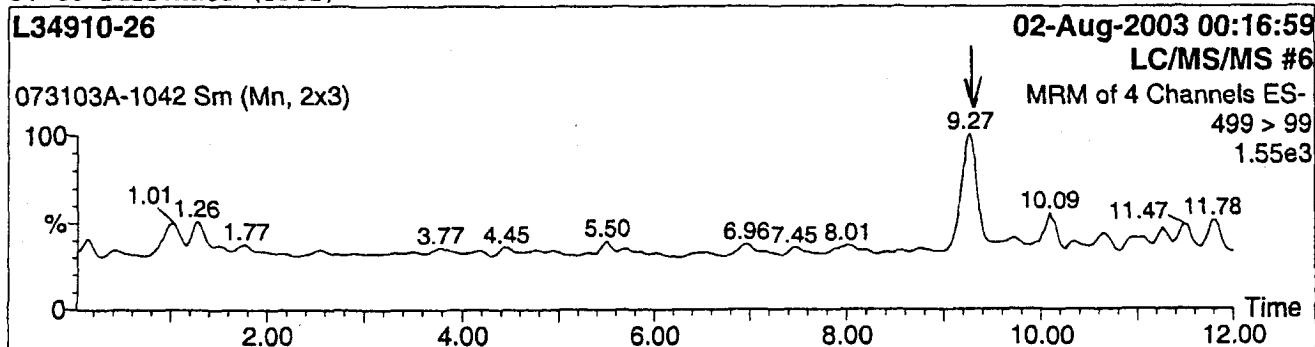
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 84

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

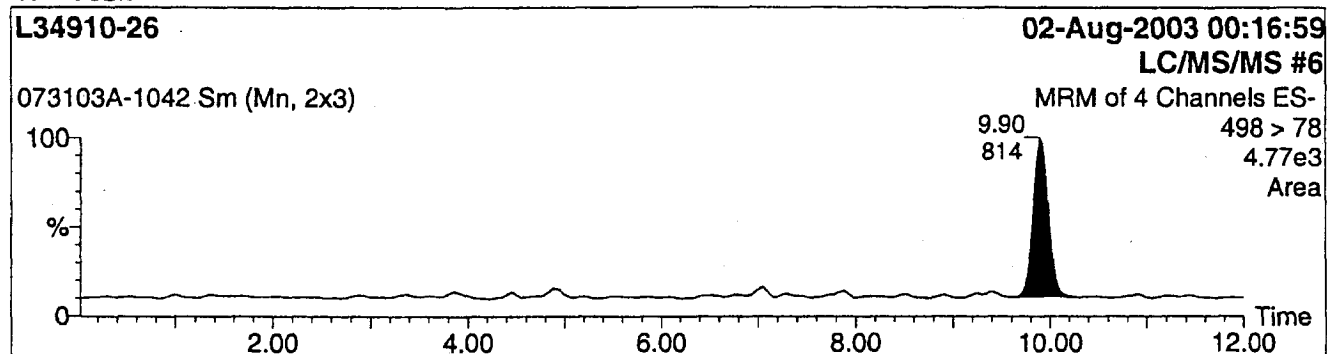
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1042

Text:

4: PFOSA



Quantify Sample Report

Page 85

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

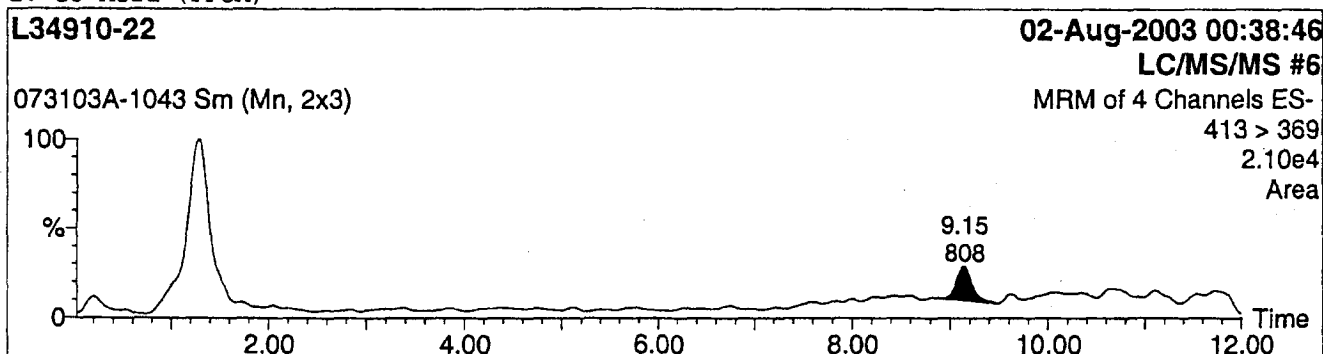
Job Code:

Printed: Sun Aug 03 07:19:29 2003

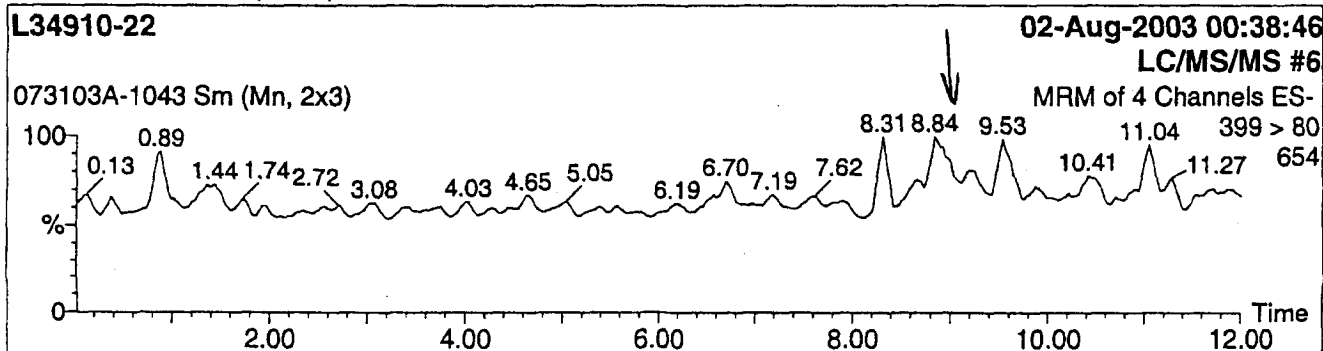
Name: 073103A-1043

Text:

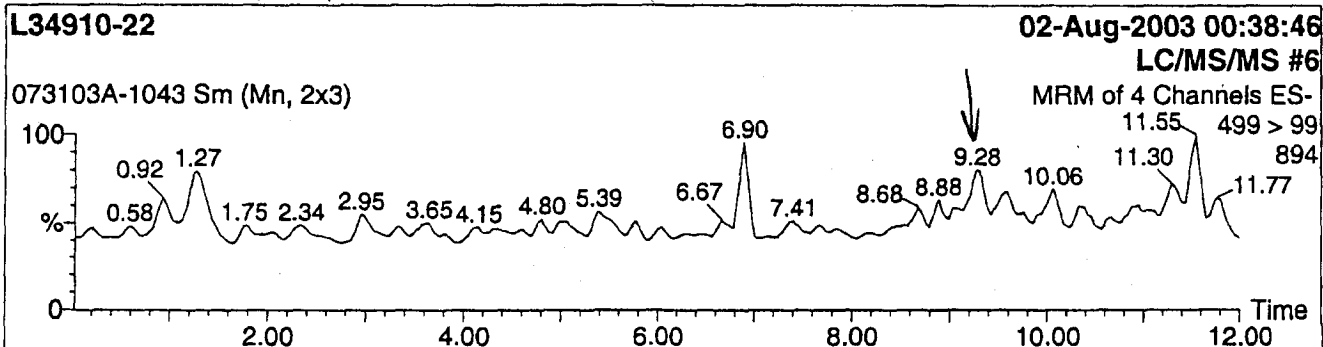
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 86

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

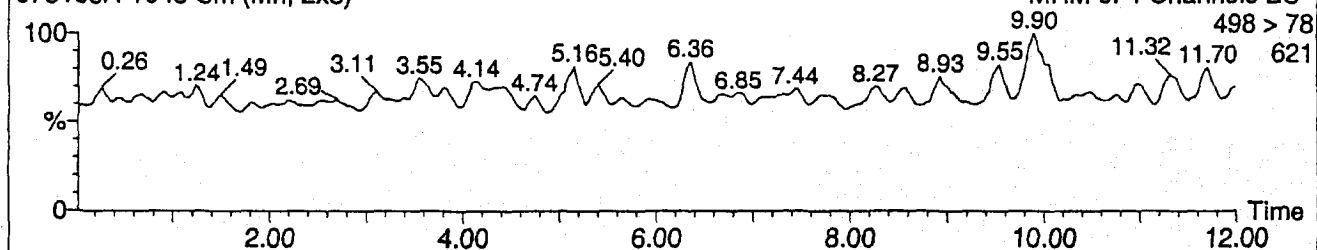
Name: 073103A-1043

Text:

4: PFOSA

L34910-22

073103A-1043 Sm (Mn, 2x3)



Quantify Sample Report

Page 87

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

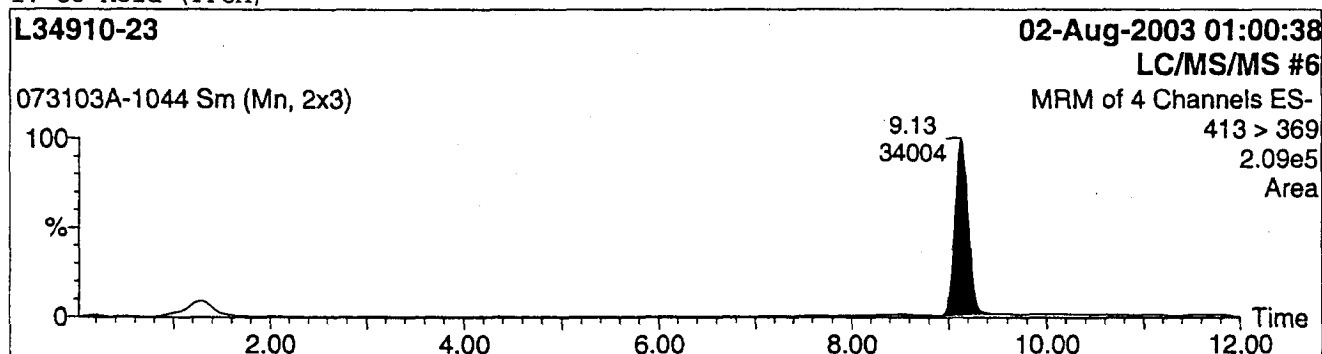
Job Code:

Printed: Sun Aug 03 07:19:29 2003

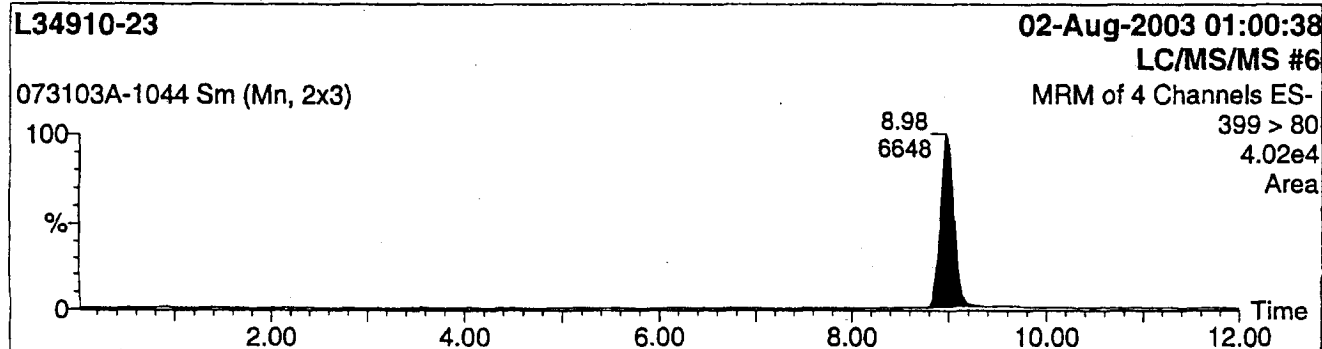
Name: 073103A-1044

Text:

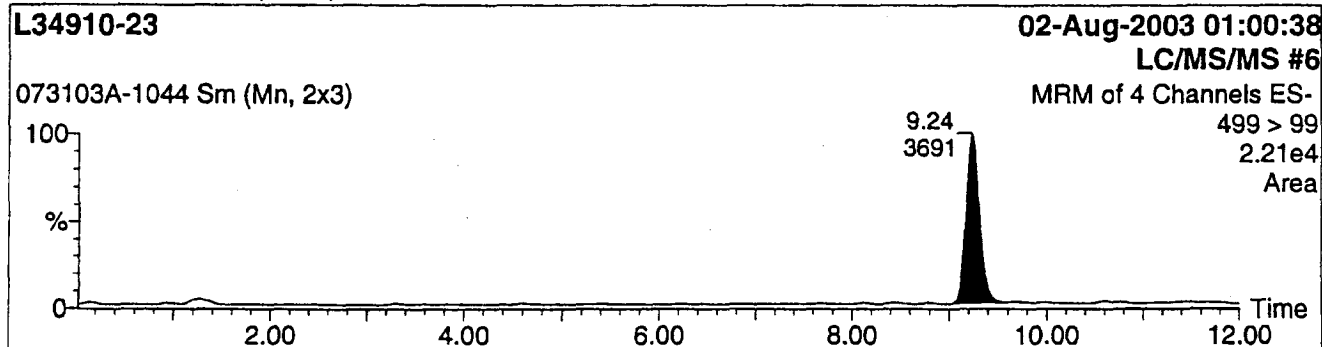
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 88

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

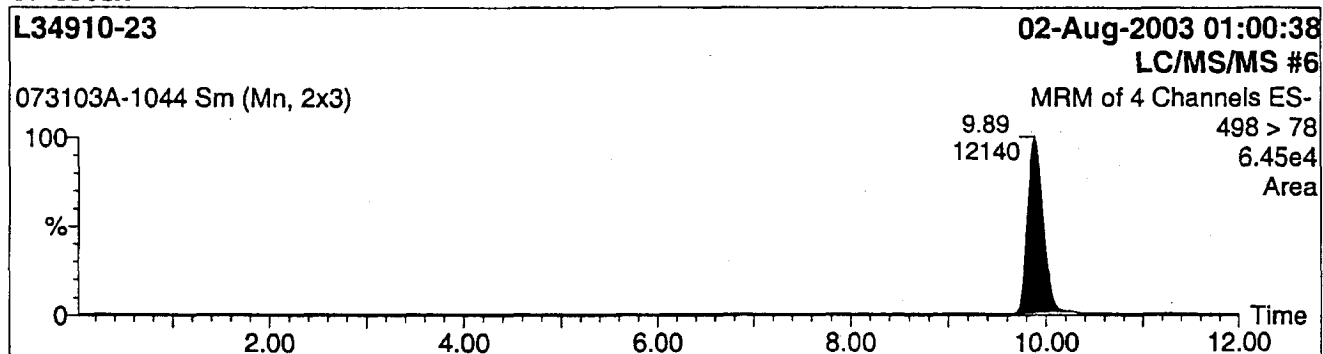
Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1044

Text:

4: PFOSA



Quantify Sample Report

Page 89

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1045

Text:

1: C8 Acid (PFOA)

L34910-24, DF=100

02-Aug-2003 01:22:10

LC/MS/MS #6

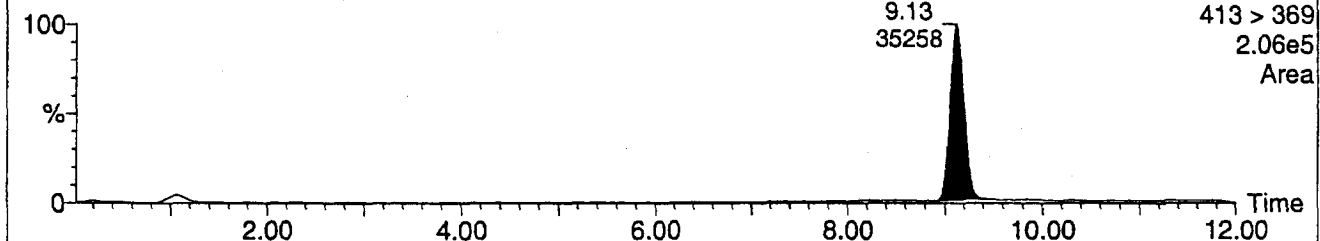
073103A-1045 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

2.06e5

Area



2: C6 Sulfonate (PFHS)

L34910-24, DF=100

02-Aug-2003 01:22:10

LC/MS/MS #6

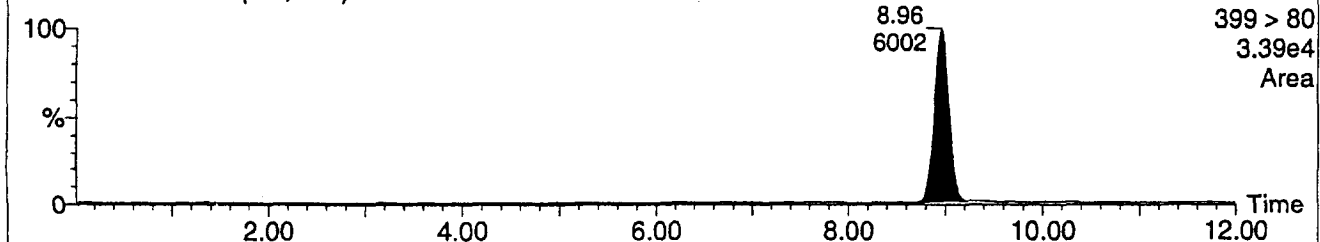
073103A-1045 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

3.39e4

Area



3: C8 Sulfonate (PFOS)

L34910-24, DF=100

02-Aug-2003 01:22:10

LC/MS/MS #6

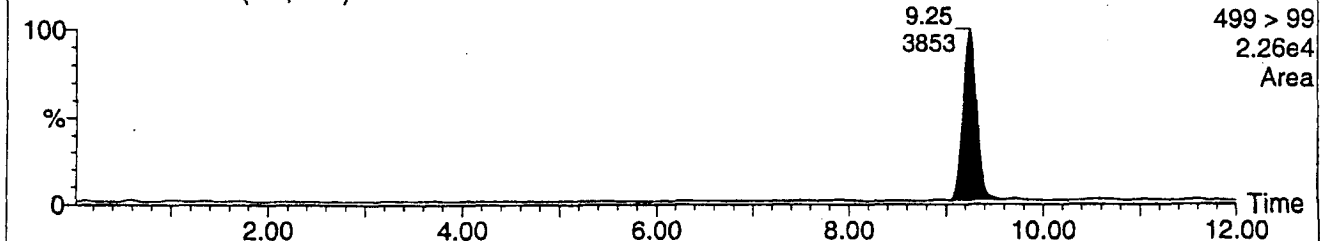
073103A-1045 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.26e4

Area



Quantify Sample Report

Page 90

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1045

Text:

4: PFOSA

L34910-24, DF=100

02-Aug-2003 01:22:10

LC/MS/MS #6

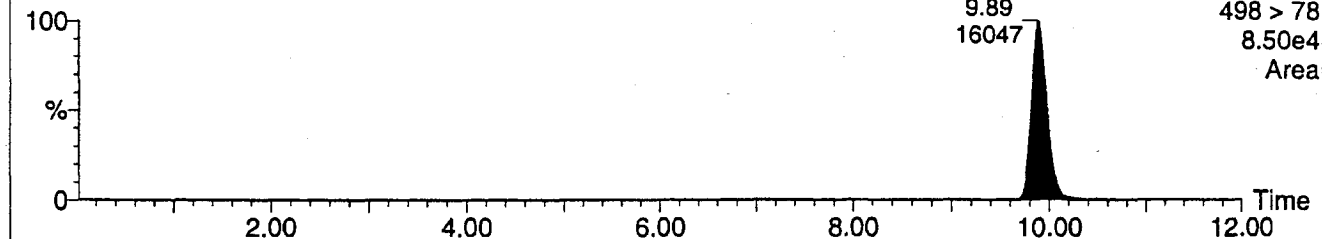
073103A-1045 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

8.50e4

Area



Quantify Sample Report

Page 91

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1046

Text:

1: C8 Acid (PFOA)

XC072503-6, 1000 ng/L Standard

02-Aug-2003 01:43:42

LC/MS/MS #6

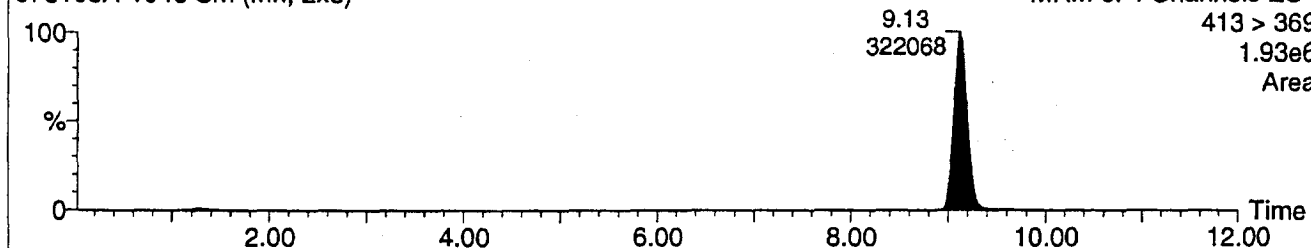
073103A-1046 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.93e6

Area



2: C6 Sulfonate (PFHS)

XC072503-6, 1000 ng/L Standard

02-Aug-2003 01:43:42

LC/MS/MS #6

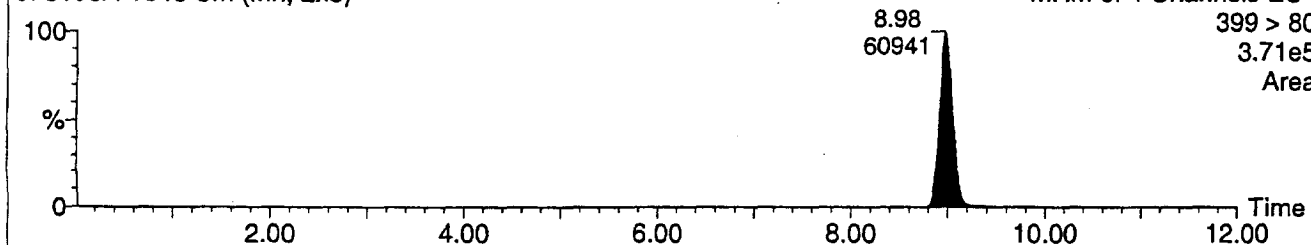
073103A-1046 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

3.71e5

Area



3: C8 Sulfonate (PFOS)

XC072503-6, 1000 ng/L Standard

02-Aug-2003 01:43:42

LC/MS/MS #6

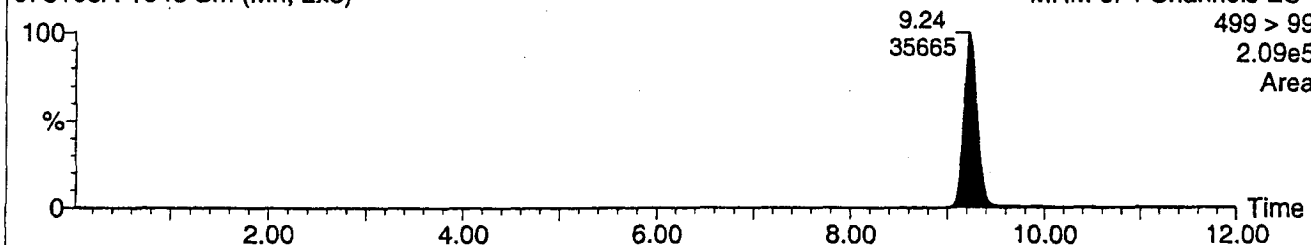
073103A-1046 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.09e5

Area



Quantify Sample Report

Page 92

Study No.: L34910, Set No.: 073103A, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103A Decatur BC

Last modified: Sun Aug 03 07:08:13 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:19:29 2003

Name: 073103A-1046

Text:

4: PFOSA

XC072503-6, 1000 ng/L Standard

02-Aug-2003 01:43:42

LC/MS/MS #6

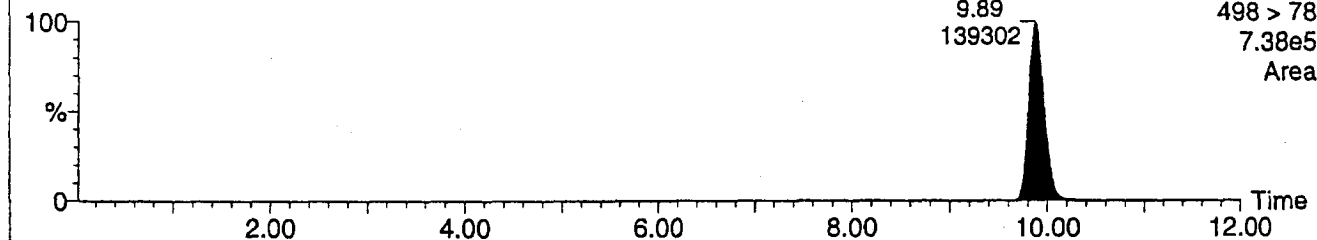
073103A-1046 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

7.38e5

Area



RAW DATA REPORT

Sponsor Study No:	NA	Limit of Quantitation:	50 ppt	Set No:	073103AR
Exygen Study No:	L34910	Injection Volume:	15 µL	Analyst:	Karen Risha
Analyte:	PFOA	Matrix:	Water	Instrument Type:	LC/MS/MS Unit # 6
Ions Monitored:	413 -> 369	Sample Volume:	40.0 mL	Extraction Date:	07/31/03
Site:	Decatur Baker's Creek	Final Volume:	5.0 mL	Analyzed on:	08/03-04/03

Exygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)
XC072503-0	-	CS	073103AR-101	0	-	794	-	-	-
XC072503-1	-	CS	073103AR-102	25	-	14221	-	-	-
XC072503-2	-	CS	073103AR-103	50	-	27994	-	-	-
XC072503-3	-	CS	073103AR-104	100	-	54680	-	-	-
XC072503-4	-	CS	073103AR-105	250	-	128556	-	-	-
XC072503-5	-	CS	073103AR-106	500	-	264862	-	-	-
XC072503-6	-	CS	073103AR-107	1000	-	516215	-	-	-
L34910-1 Spk C	BC2 SW-04	LF	073103AR-108	-	100	50564	**	5000	-
L34910-12 Spk E	BC2 SW-06	LF	073103AR-109	-	100	92540	17800	5000	114
L34910-16 Spk F	Outfall to River SW-25	LF	073103AR-110	-	100	114710	22100	5000	126
XC072503-1	-	CS	073103AR-111	25	-	14631	-	-	-
L34910-1	BC2 SW-04	S	073103AR-112	-	10	216041	4210	-	-
L34910-1 Rep	BC2 SW-04	S	073103AR-113	-	10	216268	4210	-	-
L34910-4	BC2 SW-04 Dup	S	073103AR-114	-	10	131415	2540	-	-
L34910-2	BC2 SW-04 Low Spk	FF	073103AR-115	-	10	142555	2760	100	-1450+
XC072503-2	-	CS	073103AR-116	50	-	29284	-	-	-
L34910-6	BC2 SW-05	S	073103AR-117	-	10	40498	**	-	-
L34910-6 Rep	BC2 SW-05	S	073103AR-118	-	10	39782	**	-	-
L34910-9	BC2 SW-05 Dup	S	073103AR-119	-	10	81652	1560	-	-
L34910-7	BC2 SW-05 Low Spk	FF	073103AR-120	-	10	112700	2170	100	1579^+
XC072503-3	-	CS	073103AR-121	100	-	55667	-	-	-
L34910-12	BC2 SW-06	S	073103AR-122	-	20	308911	12100	-	-
L34910-12 Rep	BC2 SW-06	S	073103AR-123	-	20	315651	12300	-	-
L34910-15	BC2 SW-06 Dup	S	073103AR-124	-	20	297735	11600	-	-
L34910-13	BC2 SW-06 Low Spk	FF	073103AR-125	-	20	354730	13900	100	1800+
XC072503-4	-	CS	073103AR-126	250	-	127797	-	-	-
L34910-16	Outfall to River SW-25	S	073103AR-127	-	100	82515	15800	-	-
L34910-16 Rep	Outfall to River SW-25	S	073103AR-128	-	100	83658	16000	-	-
L34910-19	Outfall to River SW-25 Dup	S	073103AR-129	-	100	75424	14400	-	-
L34910-17	Outfall to River SW-25 Low Spk	FF	073103AR-130	-	100	78536	15000	100	-800+
XC072503-5	-	CS	073103AR-131	500	-	271906	-	-	-
L34910-16	Outfall to River SW-25	S	073103AR-132	-	20	380900	**	-	-
L34910-16 Rep	Outfall to River SW-25	S	073103AR-133	-	20	391789	**	-	-
L34910-19	Outfall to River SW-25 Dup	S	073103AR-134	-	20	364595	**	-	-
L34910-17	Outfall to River SW-25 Low Spk	FF	073103AR-135	-	20	362898	**	100	-
XC071003-6	-	CS	073103AR-136	1000	-	477931	-	-	-

Analyte Found (ppt) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{[\text{analyte found (ppt)} - \text{analyte found in control (ppt)}] \times 100}{\text{amount added (ppt)}}$

Standard Curve: Linear (1/x weighted)

Intercept = 2202.17

Slope = 508.394

Coef. Of Det. = 0.996211

CS = Calibration standard

C = Control sample

S = Sample

LF = Lab fortified sample

FF = Field fortified sample

LCS = Laboratory Control Spike

CK = Check Standard

ND = Not detected = Response between 0 and 25 ppt

NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by:

KL, 08/07/03

**Sample was analyzed with several dilution factors in order to accommodate all compounds. The appropriate results are reported.

^Sample was corrected using the data found in set 073103A.

+Sample residue significantly exceeds the spiking level; therefore, an accurate recovery cannot be calculated.

RAW DATA REPORT

Sponsor Study No:	NA	Limit of Quantitation:	50 ppt	Set No:	073103AR
Oxygen Study No:	L34910	Injection Volume:	15 µL	Analyst:	Karen Risha
Analyte:	PFHS	Matrix:	Water	Instrument Type:	LC/MS/MS Unit # 6
Ions Monitored:	399 -> 80	Sample Volume:	40.0 mL	Extraction Date:	07/31/03
Site:	Decatur Baker's Creek	Final Volume:	5.0 mL	Analyzed on:	08/03-04/03

Exygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)
XC072503-0	-	CS	073103AR-101	0	-	0	-	-	-
XC072503-1	-	CS	073103AR-102	25	-	2074	-	-	-
XC072503-2	-	CS	073103AR-103	50	-	4718	-	-	-
XC072503-3	-	CS	073103AR-104	100	-	9231	-	-	-
XC072503-4	-	CS	073103AR-105	250	-	21488	-	-	-
XC072503-5	-	CS	073103AR-106	500	-	43819	-	-	-
XC072503-6	-	CS	073103AR-107	1000	-	87115	-	-	-
L34910-1 Spk C	BC2 SW-04	LF	073103AR-108	-	100	5566	**	5000	-
L34910-12 Spk E	BC2 SW-06	LF	073103AR-109	-	100	10314	11800	5000	115
L34910-16 Spk F	Outfall to River SW-25	LF	073103AR-110	-	100	10701	12200	5000	91
XC072503-1	-	CS	073103AR-111	25	-	2324	-	-	-
L34910-1	BC2 SW-04	S	073103AR-112	-	10	9381	**	-	-
L34910-1 Rep	BC2 SW-04	S	073103AR-113	-	10	10152	**	-	-
L34910-4	BC2 SW-04 Dup	S	073103AR-114	-	10	6122	**	-	-
L34910-2	BC2 SW-04 Low Spk	FF	073103AR-115	-	10	7036	**	100	-
XC072503-2	-	CS	073103AR-116	50	-	4266	-	-	-
L34910-6	BC2 SW-05	S	073103AR-117	-	10	1526	**	-	-
L34910-6 Rep	BC2 SW-05	S	073103AR-118	-	10	1565	**	-	-
L34910-9	BC2 SW-05 Dup	S	073103AR-119	-	10	3729	**	-	-
L34910-7	BC2 SW-05 Low Spk	FF	073103AR-120	-	10	6025	**	100	-
XC072503-3	-	CS	073103AR-121	100	-	9486	-	-	-
L34910-12	BC2 SW-06	S	073103AR-122	-	20	26169	6060	-	-
L34910-12 Rep	BC2 SW-06	S	073103AR-123	-	20	27209	6300	-	-
L34910-15	BC2 SW-06 Dup	S	073103AR-124	-	20	25364	5870	-	-
L34910-13	BC2 SW-06 Low Spk	FF	073103AR-125	-	20	30673	7110	100	1050+
XC072503-4	-	CS	073103AR-126	250	-	21551	-	-	-
L34910-16	Outfall to River SW-25	S	073103AR-127	-	100	6872	**	-	-
L34910-16 Rep	Outfall to River SW-25	S	073103AR-128	-	100	6261	**	-	-
L34910-19	Outfall to River SW-25 Dup	S	073103AR-129	-	100	6156	**	-	-
L34910-17	Outfall to River SW-25 Low Spk	FF	073103AR-130	-	100	6030	**	100	-
XC072503-5	-	CS	073103AR-131	500	-	45496	-	-	-
L34910-16	Outfall to River SW-25	S	073103AR-132	-	20	33004	7660	-	-
L34910-16 Rep	Outfall to River SW-25	S	073103AR-133	-	20	30633	7100	-	-
L34910-19	Outfall to River SW-25 Dup	S	073103AR-134	-	20	29219	6770	-	-
L34910-17	Outfall to River SW-25 Low Spk	FF	073103AR-135	-	20	28660	6640	100	-1020+
XC071003-6	-	CS	073103AR-136	1000	-	80818	-	-	-

Analyte Found (ppt) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{[\text{analyte found (ppt)} - \text{analyte found in control (ppt)}] \times 100}{\text{amount added (ppt)}}$

Standard Curve: Linear (1/x weighted)

Intercept = 218.845

Slope = 85.6521

Coef. Of Det. = 0.996560

CS = Calibration standard

C = Control sample

S = Sample

LF = Lab fortified sample

FF = Field fortified sample

LCS = Laboratory Control Spike

CK = Check Standard

ND = Not detected = Response between 0 and 25 ppt

NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by: *[Signature]* 08/07/03

**Sample was analyzed with several dilution factors in order to accommodate all compounds. The appropriate results are reported.

+Sample residue significantly exceeds the spiking level; therefore, an accurate recovery cannot be calculated.

RAW DATA REPORT

Sponsor Study No:	NA	Limit of Quantitation:	50 ppt	Set No:	073103AR
Oxygen Study No:	L34910	Injection Volume:	15 µL	Analyst:	Karen Risha
Analyte:	PFOS	Matrix:	Water	Instrument Type:	LC/MS/MS Unit # 6
Ions Monitored:	499 -> 99	Sample Volume:	40.0 mL	Extraction Date:	07/31/03
Site:	Decatur Baker's Creek	Final Volume:	5.0 mL	Analyzed on:	08/03-04/03

Oxygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)
XC072503-0	-	CS	073103AR-101	0	-	0	-	-	-
XC072503-1	-	CS	073103AR-102	25	-	1481	-	-	-
XC072503-2	-	CS	073103AR-103	50	-	2986	-	-	-
XC072503-3	-	CS	073103AR-104	100	-	5100	-	-	-
XC072503-4	-	CS	073103AR-105	250	-	13285	-	-	-
XC072503-5	-	CS	073103AR-106	500	-	28978	-	-	-
XC072503-6	-	CS	073103AR-107	1000	-	53617	-	-	-
L34910-1 Spk C	BC2 SW-04	LF	073103AR-108	-	100	9428	17100	5000	112^
L34910-12 Spk E	BC2 SW-06	LF	073103AR-109	-	100	17124	^^	5000	-
L34910-16 Spk F	Outfall to River SW-25	LF	073103AR-110	-	100	22403	^^	5000	-
XC072503-1	-	CS	073103AR-111	25	-	1473	-	-	-
L34910-1	BC2 SW-04	S	073103AR-112	-	10	61501	*	-	-
L34910-1 Rep	BC2 SW-04	S	073103AR-113	-	10	59888	*	-	-
L34910-4	BC2 SW-04 Dup	S	073103AR-114	-	10	44921	8250	-	-
L34910-2	BC2 SW-04 Low Spk	FF	073103AR-115	-	10	37560	6890	100	-4610^+
XC072503-2	-	CS	073103AR-116	50	-	2882	-	-	-
L34910-6	BC2 SW-05	S	073103AR-117	-	10	9224	1670	-	-
L34910-6 Rep	BC2 SW-05	S	073103AR-118	-	10	8484	1540	-	-
L34910-9	BC2 SW-05 Dup	S	073103AR-119	-	10	23649	4330	-	-
L34910-7	BC2 SW-05 Low Spk	FF	073103AR-120	-	10	29284	5370	100	3700+
XC072503-3	-	CS	073103AR-121	100	-	6004	-	-	-
L34910-12	BC2 SW-06	S	073103AR-122	-	20	64499	*	-	-
L34910-12 Rep	BC2 SW-06	S	073103AR-123	-	20	64047	*	-	-
L34910-15	BC2 SW-06 Dup	S	073103AR-124	-	20	64656	*	-	-
L34910-13	BC2 SW-06 Low Spk	FF	073103AR-125	-	20	77839	*	100	-
XC072503-4	-	CS	073103AR-126	250	-	13289	-	-	-
L34910-16	Outfall to River SW-25	S	073103AR-127	-	100	17094	31200	-	-
L34910-16 Rep	Outfall to River SW-25	S	073103AR-128	-	100	17264	31500	-	-
L34910-19	Outfall to River SW-25 Dup	S	073103AR-129	-	100	16861	30800	-	-
L34910-17	Outfall to River SW-25 Low Spk	FF	073103AR-130	-	100	16123	29400	100	-1800+
XC072503-5	-	CS	073103AR-131	500	-	28469	-	-	-
L34910-16	Outfall to River SW-25	S	073103AR-132	-	20	81862	**	-	-
L34910-16 Rep	Outfall to River SW-25	S	073103AR-133	-	20	84263	**	-	-
L34910-19	Outfall to River SW-25 Dup	S	073103AR-134	-	20	82201	**	-	-
L34910-17	Outfall to River SW-25 Low Spk	FF	073103AR-135	-	20	79698	**	100	-
XC071003-6	-	CS	073103AR-136	1000	-	53157	-	-	-

Analyte Found (ppt) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{[\text{analyte found (ppt)} - \text{analyte found in control (ppt)}] \times 100}{\text{amount added (ppt)}}$

Standard Curve : Linear (1/x weighted)

Intercept = 152.345

Slope = 54.2582

Coef. Of Det. = 0.998217

CS = Calibration standard

C = Control sample

S = Sample

LF = Lab fortified sample

FF = Field fortified sample

LCS = Laboratory Control Spike

CK = Check Standard

ND = Not detected = Response between 0 and 25 ppt

NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by: RR, 08/07/03

**Sample was analyzed with several dilution factors in order to accommodate all compounds. The appropriate results are reported.

^Sample was corrected using the data found in set 080603A

*Sample requires further dilution. See data set 080603A

^^Sample requires a higher spiking level. See data set 080603A.

+Sample residue significantly exceeds the spiking level; therefore, an accurate recovery cannot be calculated.

RAW DATA REPORT

Sponsor Study No: NA
 Exygen Study No: L34910
 Analyte: FOSA
 Ions Monitored: 498 -> 78
 Site: Decatur Baker's Creek

Limit of Quantitation: 50 ppt
 Injection Volume: 15 µL
 Matrix: Water
 Sample Volume: 40.0 mL
 Final Volume: 5.0 mL

Set No: 073103AR
 Analyst: Karen Risha
 Instrument Type: LC/MS/MS Unit # 6
 Extraction Date: 07/31/03
 Analyzed on: 08/03-04/03

Exygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)
XC072503-0	-	CS	073103AR-101	0	-	0	-	-	-
XC072503-1	-	CS	073103AR-102	25	-	5175	-	-	-
XC072503-2	-	CS	073103AR-103	50	-	10303	-	-	-
XC072503-3	-	CS	073103AR-104	100	-	20719	-	-	-
XC072503-4	-	CS	073103AR-105	250	-	48632	-	-	-
XC072503-5	-	CS	073103AR-106	500	-	104085	-	-	-
XC072503-6	-	CS	073103AR-107	1000	-	196920	-	-	-
L34910-1 Spk C	BC2 SW-04	LF	073103AR-108	-	100	13039	**	5000	-
L34910-12 Spk E	BC2 SW-06	LF	073103AR-109	-	100	16006	**	5000	-
L34910-16 Spk F	Outfall to River SW-25	LF	073103AR-110	-	100	18398	**	5000	-
XC072503-1	-	CS	073103AR-111	25	-	5382	-	-	-
L34910-1	BC2 SW-04	S	073103AR-112	-	10	27920	1390	-	-
L34910-1 Rep	BC2 SW-04	S	073103AR-113	-	10	27505	1370	-	-
L34910-4	BC2 SW-04 Dup	S	073103AR-114	-	10	20497	**	-	-
L34910-2	BC2 SW-04 Low Spk	FF	073103AR-115	-	10	16630	**	100	-
XC072503-2	-	CS	073103AR-116	50	-	10890	-	-	-
L34910-6	BC2 SW-05	S	073103AR-117	-	10	3460	**	-	-
L34910-6 Rep	BC2 SW-05	S	073103AR-118	-	10	3402	**	-	-
L34910-9	BC2 SW-05 Dup	S	073103AR-119	-	10	8876	**	-	-
L34910-7	BC2 SW-05 Low Spk	FF	073103AR-120	-	10	11595	**	100	-
XC072503-3	-	CS	073103AR-121	100	-	21221	-	-	-
L34910-12	BC2 SW-06	S	073103AR-122	-	20	24495	2430	-	-
L34910-12 Rep	BC2 SW-06	S	073103AR-123	-	20	23261	2300	-	-
L34910-15	BC2 SW-06 Dup	S	073103AR-124	-	20	25908	2570	-	-
L34910-13	BC2 SW-06 Low Spk	FF	073103AR-125	-	20	25736	2550	100	120
XC072503-4	-	CS	073103AR-126	250	-	49195	-	-	-
L34910-16	Outfall to River SW-25	S	073103AR-127	-	100	6718	**	-	-
L34910-16 Rep	Outfall to River SW-25	S	073103AR-128	-	100	6206	**	-	-
L34910-19	Outfall to River SW-25 Dup	S	073103AR-129	-	100	6506	**	-	-
L34910-17	Outfall to River SW-25 Low Spk	FF	073103AR-130	-	100	5831	**	100	-
XC072503-5	-	CS	073103AR-131	500	-	102292	-	-	-
L34910-16	Outfall to River SW-25	S	073103AR-132	-	20	32659	3260	-	-
L34910-16 Rep	Outfall to River SW-25	S	073103AR-133	-	20	31916	3180	-	-
L34910-19	Outfall to River SW-25 Dup	S	073103AR-134	-	20	32869	3280	-	-
L34910-17	Outfall to River SW-25 Low Spk	FF	073103AR-135	-	20	26767	2660	100	-600+
XC071003-6	-	CS	073103AR-136	1000	-	190680	-	-	-

Analyte Found (ppt) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{[\text{analyte found (ppt)} - \text{analyte found in control (ppt)}] \times 100}{\text{amount added (ppt)}}$

Standard Curve: Linear (1/x weighted)

Intercept = 611.080

Slope = 196.925

Coef. Of Det. = 0.998392

CS = Calibration standard
 C = Control sample
 S = Sample

LF = Lab fortified sample
 FF = Field fortified sample
 LCS = Laboratory Control Spike

CK = Check Standard

ND = Not detected = Response between 0 and 25 ppt

NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by: *HR*, 08/20/03

**Sample was analyzed with several dilution factors in order to accommodate all compounds. The appropriate results are reported.

+Sample residue significantly exceeds the spiking level; therefore, an accurate recovery cannot be calculated.

Sample List: C:\MASSLYNX\FI\fluorochemicals.PRO\SampleDB\073103AR Decatur BC.SPL
Printed: Sun Aug 03 08:19:25 2003

Exygen STUDY NO. L3491D

Page Position: (1, 1)

Vial	File Name	LIMS ID	Cilent ID	Sample Description	Matrix	Sample Type	Conc (ng/L)	Conc B	Conc C	Test ID	DF
1	41 073103AR-101	--	--	XC072503-0, 0 ng/L Standard	--	Standard	0	--	--	0	1
2	42 073103AR-102	--	--	XC072503-1, 25 ng/L Standard	--	Standard	25	--	--	0	1
3	43 073103AR-103	--	--	XC072503-2, 50 ng/L Standard	--	Standard	50	--	--	0	1
4	44 073103AR-104	--	--	XC072503-3, 100 ng/L Standard	--	Standard	100	--	--	0	1
5	45 073103AR-105	--	--	XC072503-4, 250 ng/L Standard	--	Standard	250	--	--	0	1
6	46 073103AR-106	--	--	XC072503-5, 500 ng/L Standard	--	Standard	500	--	--	0	1
7	47 073103AR-107	--	--	XC072503-6, 1000 ng/L Standard	--	Standard	1000	--	--	0	1
8	51 073103AR-108	--	--	L34910-1 Spk C, 5000 ng/L, DF=100	--	QC	5000	--	--	0	100
9	52 073103AR-109	--	--	L34910-12 Spk E, 5000 ng/L, DF=100	--	QC	5000	--	--	0	100
10	53 073103AR-110	--	--	L34910-16 Spk F, 5000 ng/L, DF=100	--	QC	5000	--	--	0	100
11	42 073103AR-111	--	--	XC072503-1, 25 ng/L Standard	--	Standard	25	--	--	0	1
12	54 073103AR-112	--	--	L34910-1, DF=10	--	Analyte	--	--	--	0	10
13	55 073103AR-113	--	--	L34910-1 Rep, DF=10	--	Analyte	--	--	--	0	10
14	56 073103AR-114	--	--	L34910-4, DF=10	--	Analyte	--	--	--	0	10
15	57 073103AR-115	--	--	L34910-2, DF=10	--	QC	100	--	--	0	10
16	43 073103AR-116	--	--	XC072503-2, 50 ng/L Standard	--	Standard	50	--	--	0	1
17	58 073103AR-117	--	--	L34910-6, DF=10	--	Analyte	--	--	--	0	10
18	59 073103AR-118	--	--	L34910-6 Rep, DF=10	--	Analyte	--	--	--	0	10
19	60 073103AR-119	--	--	L34910-9, DF=10	--	Analyte	--	--	--	0	10
20	61 073103AR-120	--	--	L34910-7, DF=10	--	QC	100	--	--	0	10
21	44 073103AR-121	--	--	XC072503-3, 100 ng/L Standard	--	Standard	100	--	--	0	1
22	62 073103AR-122	--	--	L34910-12, DF=20	--	Analyte	--	--	--	0	20
23	63 073103AR-123	--	--	L34910-12 Rep, DF=20	--	Analyte	--	--	--	0	20
24	64 073103AR-124	--	--	L34910-15, DF=20	--	Analyte	--	--	--	0	20
25	65 073103AR-125	--	--	L34910-13, DF=20	--	QC	100	--	--	0	20
26	45 073103AR-126	--	--	XC072503-4, 250 ng/L Standard	--	Standard	250	--	--	0	1
27	66 073103AR-127	--	--	L34910-16, DF=100	--	Analyte	--	--	--	0	100
28	67 073103AR-128	--	--	L34910-16 Rep, DF=100	--	Analyte	--	--	--	0	100
29	68 073103AR-129	--	--	L34910-19, DF=100	--	Analyte	--	--	--	0	100
30	69 073103AR-130	--	--	L34910-17, DF=100	--	QC	100	--	--	0	100
31	46 073103AR-131	--	--	XC072503-5, 500 ng/L Standard	--	Standard	500	--	--	0	1
32	70 073103AR-132	--	--	L34910-16, DF=20	--	Analyte	--	--	--	0	20
33	71 073103AR-133	--	--	L34910-16 Rep, DF=20	--	Analyte	--	--	--	0	20
34	72 073103AR-134	--	--	L34910-19, DF=20	--	Analyte	--	--	--	0	20
35	73 073103AR-135	--	--	L34910-17, DF=20	--	QC	100	--	--	0	20
36	47 073103AR-136	--	--	XC072503-6, 1000 ng/L Standard	--	Standard	1000	--	--	0	1

Masslynx - Sample List

Sample List: C:\MASSLYNX\F\Fluorochemicals.PRO\Sample\DB1073103AR Decatur BC.SPL
 Printed: Sun Aug 03 08:19:25 2003

Exygen STUDY NO. 134910

	MS Method	HPLC Method	MS Tune File	Inj. Volume
1	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
2	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
3	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
4	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
5	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
6	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
7	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
8	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
9	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
10	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
11	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
12	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
13	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
14	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
15	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
16	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
17	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
18	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
19	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
20	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
21	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
22	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
23	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
24	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
25	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
26	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
27	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
28	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
29	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
30	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
31	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
32	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
33	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
34	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
35	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15
36	C6 C8 SULF C8 ACID PFOSA	pfs water	Fluorochems	15

LC/MS/MS SYSTEM AND OPERATING CONDITIONS

Sponsor Protocol No: NA

Exygen Study No: L34910

Instrument: Micromass Quattro Ultima (LC/MS/MS Unit #6)

Computer: COMPAQ Professional Workstation AP200

Software: Microsoft Windows NT: Version 4 Build 1381: Service Pack 5
Micromass Limited: MassLynx 3.4 Build 004

HPLC Equipment: Hewlett Packard (HP) Series 1100
HP Bin Pump HP Vacuum Degasser
HP Autosampler HP Column Oven

HPLC Column: Genesis C-8, 5 cm x 2.1 mm i.d. x 4 μ (Exygen ID: 74A)
(JONESCHROMATOGRAPHY: Part No. FK5962E)

Mobile Phase (A): 2 mM Ammonium Acetate in Type I Water

Mobile Phase (B): Methanol

Analyst: Karen Risha
Exygen Research
3058 Research Drive, State College, PA 16801
Phone: (814) 272-1039 FAX: (814) 231-1580

Handwritten: 08/03/03

NOTE: The next 3 pages are computer generated printouts from the masslynx software program. The pages contain the instrument settings used for the analysis of this data set.

All Handwritten Peak ID's by: 08/06/03

Scanning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROchemicals.PRO\ACQUDE\C6 C8 SULF C8 ACID PFOSA
Last Modified: Thu Jul 31 16:23:50 2003

Printed: Sun Aug 03 08:20:40 2003

08/03/03

Solvent Delay (mins) : 0.00

Analog Channel 4 : Unused

Function : 1 MRM of 4 Mass Pairs (ESP-)

Inter Channel Delay (Secs) : 0.03

Span (Daltons) : 0.00

Start Time (Mins) : 0.00

End Time (Mins) : 12.00

Repeats : 1

	Channel	Parent	Daughter	Dwell (Secs)	Coll Energy (eV)	Cone (V)
1		399.00	80.00	0.20	35	50
2		413.00	369.00	0.20	10	10
3		498.00	78.00	0.20	30	50
4		499.00	99.00	0.20	40	30

Method Report

Page 1

Method File:
Last Modified:C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUDB\pfbs water
Sunday, August 03, 2003 08:06:07

Printed:

Sunday, August 03, 2003 08:20:45

16/08/03/03

HP1100 LC Pump Initial Conditions

Solvents

A%	90.0
B%	10.0
C%	0.0
D%	0.0

Flow (ml/min)	0.300
Stop Time (mins)	20.0
Min Pressure (bar)	0
Max Pressure (bar)	400
Oven Temperature Left (°C)	35.0
Oven Temperature Right (°C)	35.0

HP1100 LC Pump Gradient Timetable

The gradient Timetable contains 8 entries which are :

Time	A%	B%	C%	D%	Flow	Pressure
0.00	90.0	10.0	0.0	0.0	0.300	400
2.00	90.0	10.0	0.0	0.0	0.300	400
5.00	10.0	90.0	0.0	0.0	0.300	400
9.00	10.0	90.0	0.0	0.0	0.300	400
9.50	0.0	100.0	0.0	0.0	0.300	400
14.00	0.0	100.0	0.0	0.0	0.300	400
14.50	90.0	10.0	0.0	0.0	0.300	400
20.00	90.0	10.0	0.0	0.0	0.300	400

HP1100 LC Pump External Event Timetable

The Timetable contains 6 entries which are :

Time	Column Switch	Contact1	Contact2	Contact3	Contact4
Initial	Off	Off	Off	Off	Off
0.00	Off	On	Off	Off	Off
0.05	Off	Off	Off	Off	Off
0.10	Off	Off	On	Off	Off
11.90	Off	Off	Off	On	Off
12.00	Off	Off	Off	Off	Off

HP1100 Autosampler Initial Conditions

Draw Speed	200.0
Eject Speed (μl/min)	200
Draw Position (mm)	0.50
Stop Time (mins)	20.00
Injection Volume (μl)	15.0
Vial Number	27

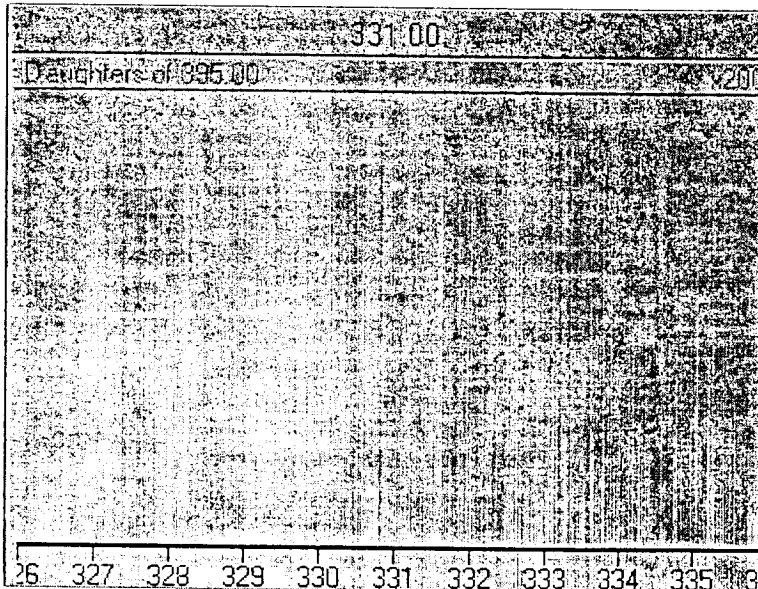
Tuning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUD\FLUOROCHEMS

Printed: Sun Aug 03 08:20:54 2003

6/20/03



Dau 395.00

SOURCE (ESP-)	Set	Rdbk	Analyser	Set	Rdbk
Capillary	3.00	-2.93	LM Res 1	14.0	
Cone	20	-15	HM Res 1	14.0	
Hexapole 1	0.0		IEnergy 1	1.0	
Aperture 1	0.0		Entrance	-2	8
Hexapole 2	0.0		Collision	15	9
Source Block Temp.	100	100	Exit	2	11
Desolvation Temp.	300	299	LM Res 2	14.0	
			HM Res 2	14.0	
			IEnergy 2	2.0	
			Multiplier	650	-647
Pressures	Rdbk		Gas Flows	Rdbk	
Analyser Vacuum	OFF		Cone Gas	135.1	
Gas Cell	4.2e-3		Desolvation	767.4	

Quantify Calibration Report

Page 1

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\073103AR Decatur BC

Last modified: Tue Aug 05 07:03:45 2003

Printed: Wed Aug 06 11:03:59 2003

BP 08/06/03 pages 1-4

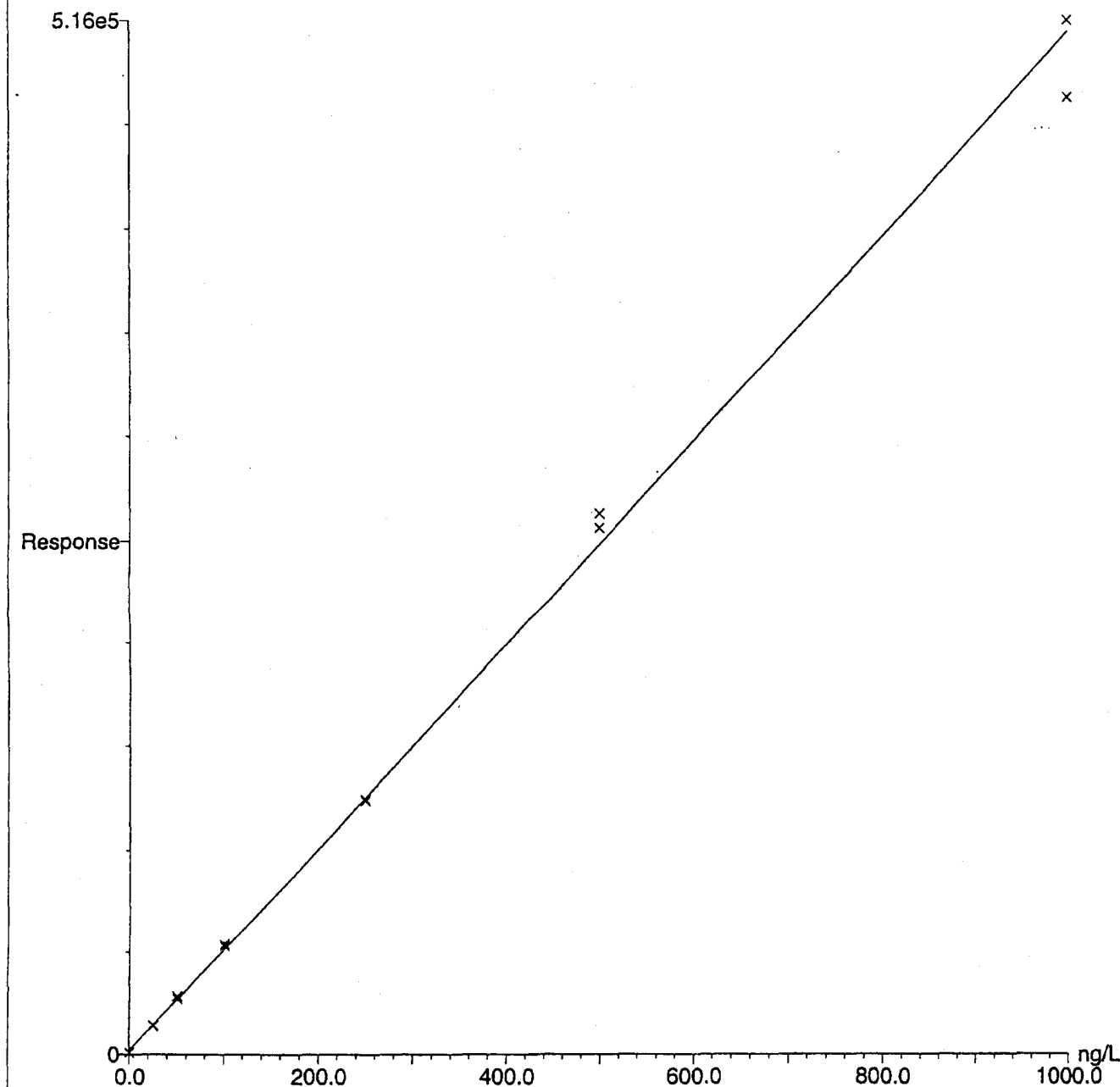
Compound 1 name: C8 Acid (PFOA)

Coefficient of Determination: 0.996211

Calibration curve: $508.394 * x + 2202.17$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Calibration Report

Page 2

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\073103AR Decatur BC

Last modified: Tue Aug 05 07:03:45 2003

Printed: Wed Aug 06 11:03:59 2003

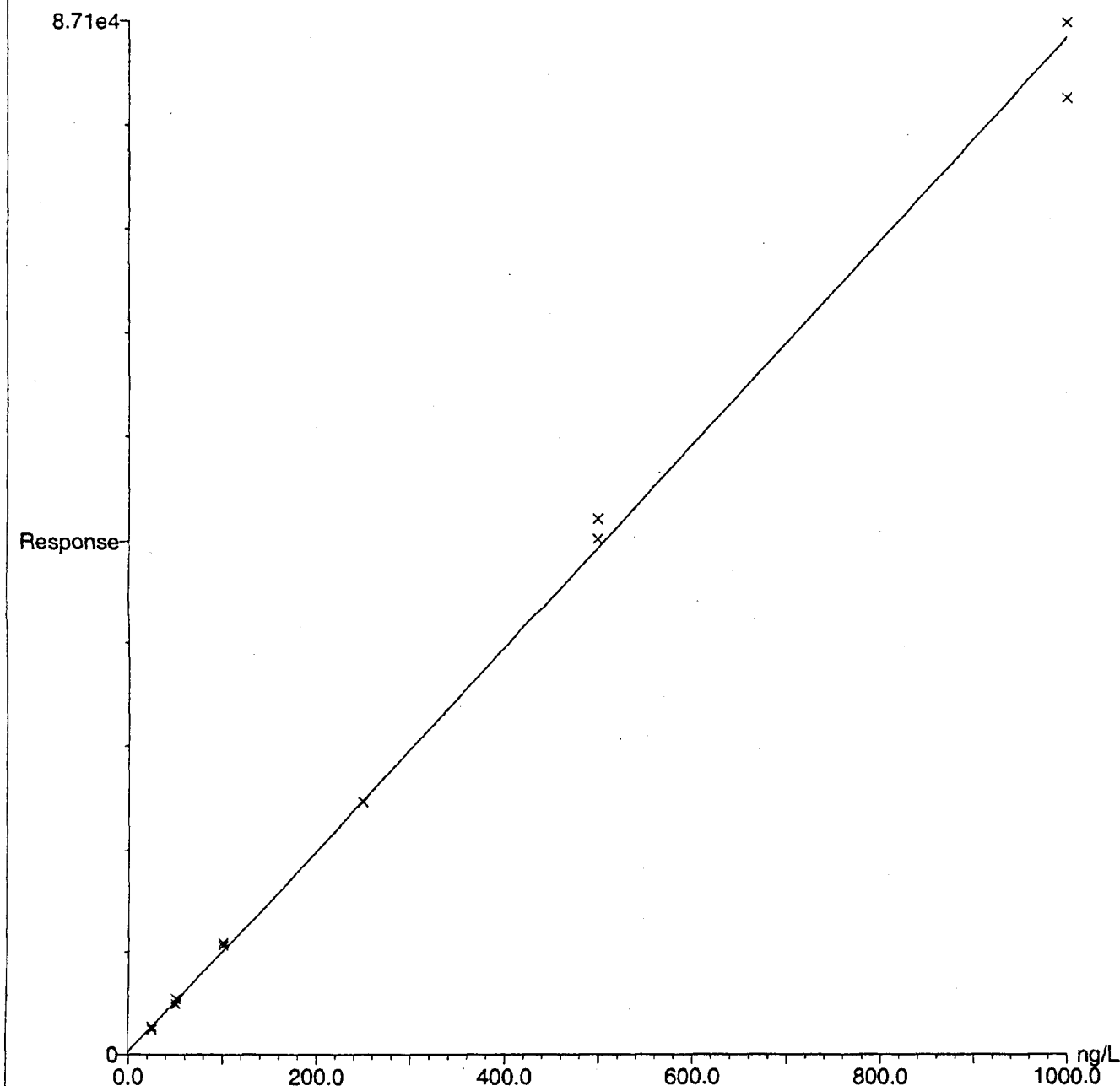
Compound 2 name: C6 Sulfonate (PFHS)

Coefficient of Determination: 0.996560

Calibration curve: $85.6521 * x + 218.845$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Calibration Report

Page 3

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\073103AR Decatur BC

Last modified: Tue Aug 05 07:03:45 2003

Printed: Wed Aug 06 11:03:59 2003

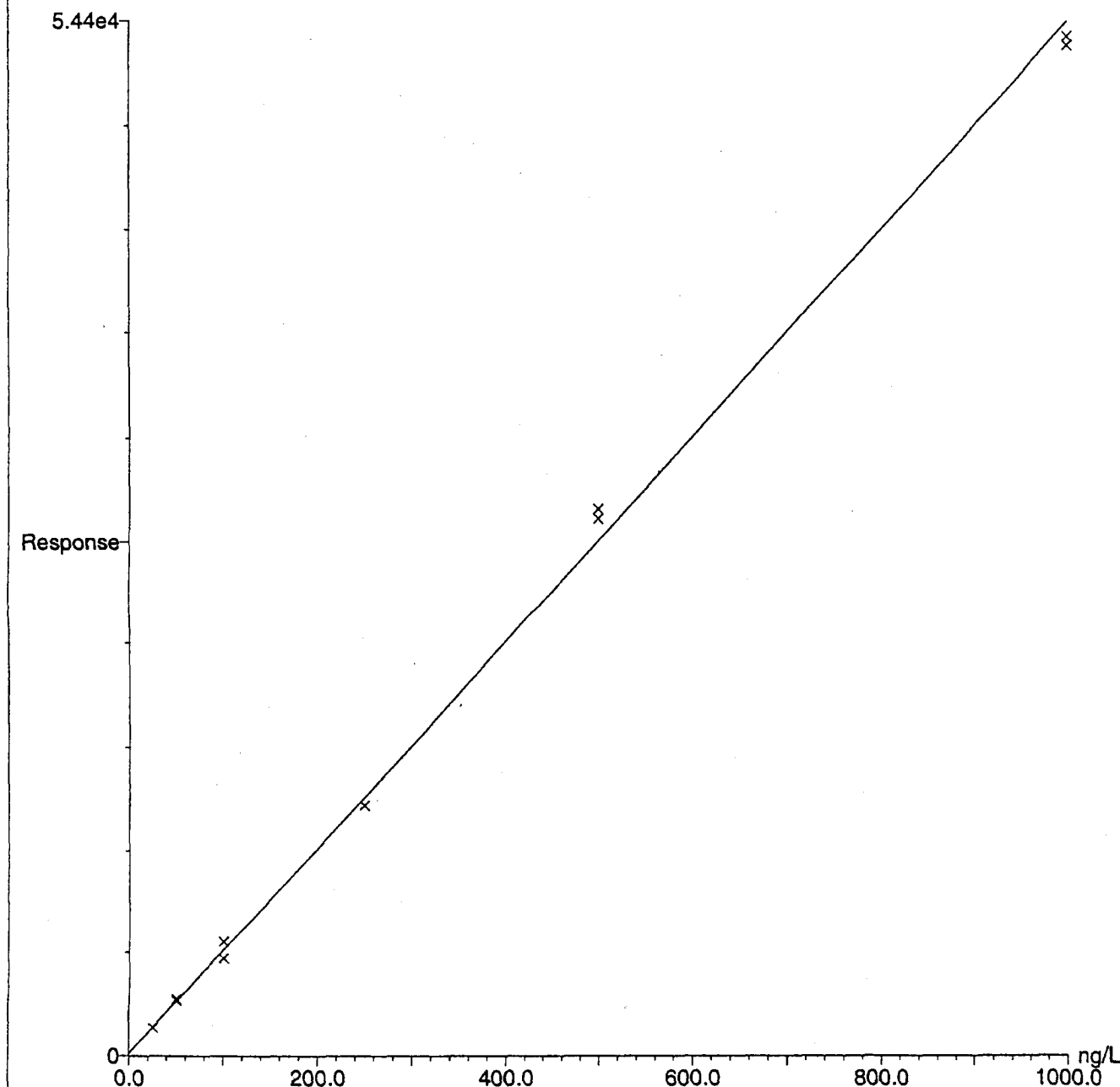
Compound 3 name: C8 Sulfonate (PFOS)

Coefficient of Determination: 0.998217

Calibration curve: $54.2582 \cdot x + 152.345$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Calibration Report

Page 4

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\073103AR Decatur BC

Last modified: Tue Aug 05 07:03:45 2003

Printed: Wed Aug 06 11:03:59 2003

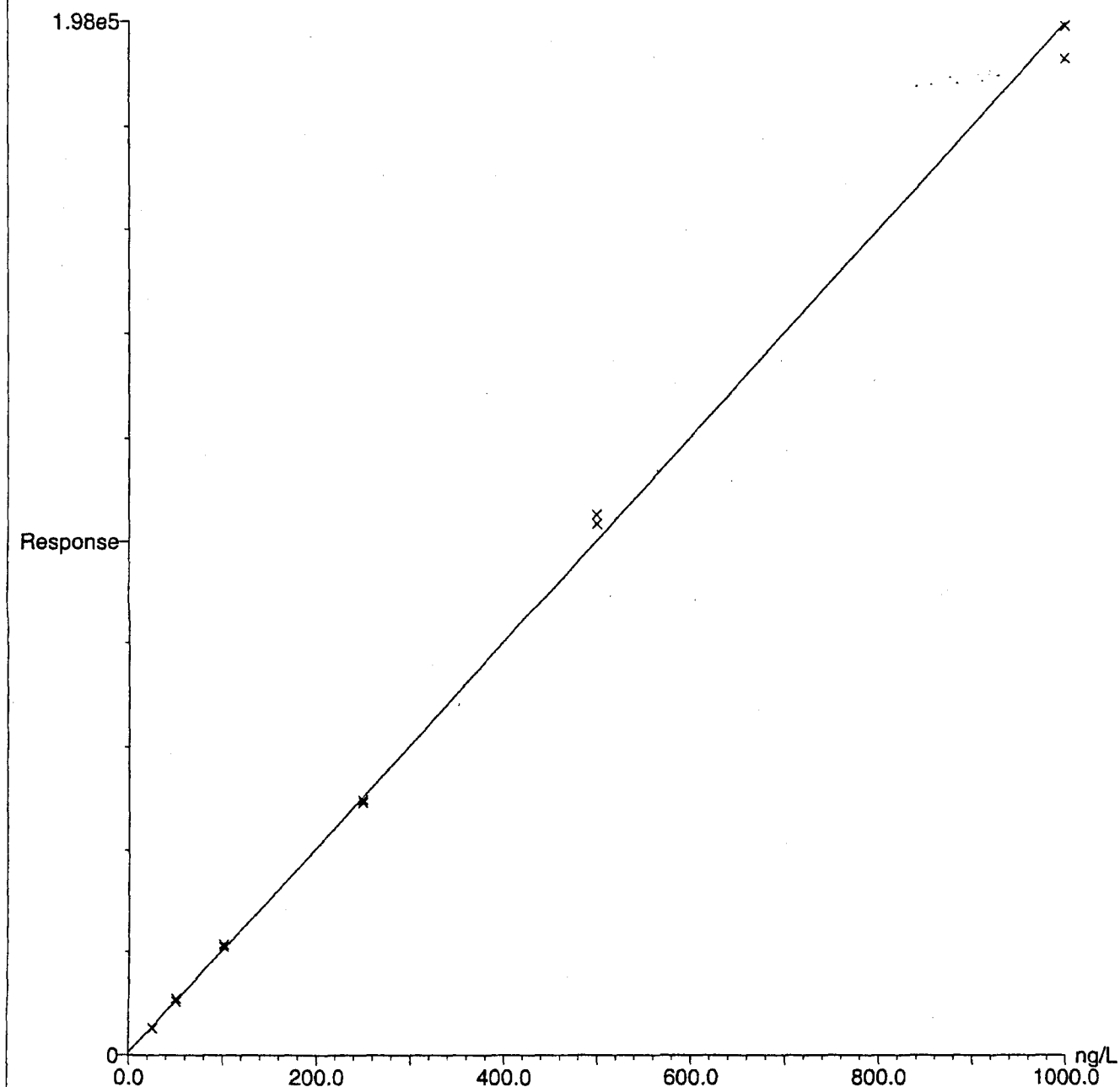
Compound 4 name: PFOSA

Coefficient of Determination: 0.998392

Calibration curve: $196.925 * x + 611.080$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Sample Report

Page 1

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Initials

Date 08/06/03

Run# 073103AR-101 To 073103AR-136

Name: 073103AR-101

Text:

1: C8 Acid (PFOA)

XC072503-0, 0 ng/L Standard

03-Aug-2003 19:10:54

LC/MS/MS #6

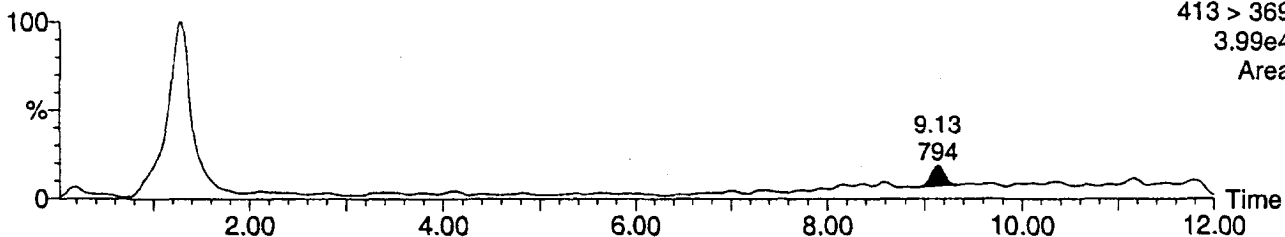
MRM of 4 Channels ES-

413 > 369

3.99e4

Area

073103AR-101 Sm (Mn, 2x3)



2: C6 Sulfonate (PFHS)

XC072503-0, 0 ng/L Standard

03-Aug-2003 19:10:54

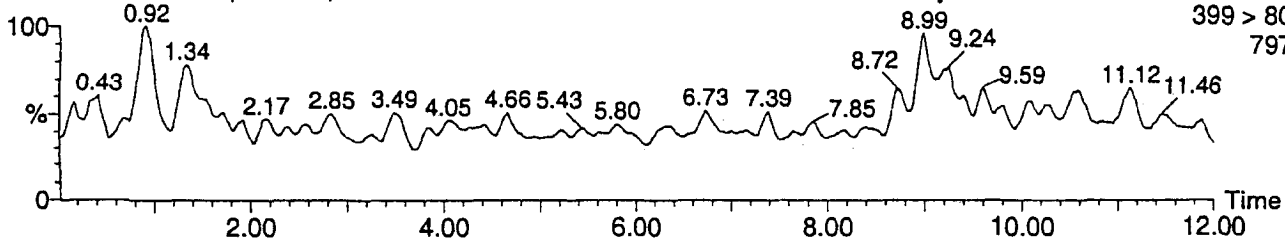
LC/MS/MS #6

MRM of 4 Channels ES-

399 > 80

797

073103AR-101 Sm (Mn, 2x3)



3: C8 Sulfonate (PFOS)

XC072503-0, 0 ng/L Standard

03-Aug-2003 19:10:54

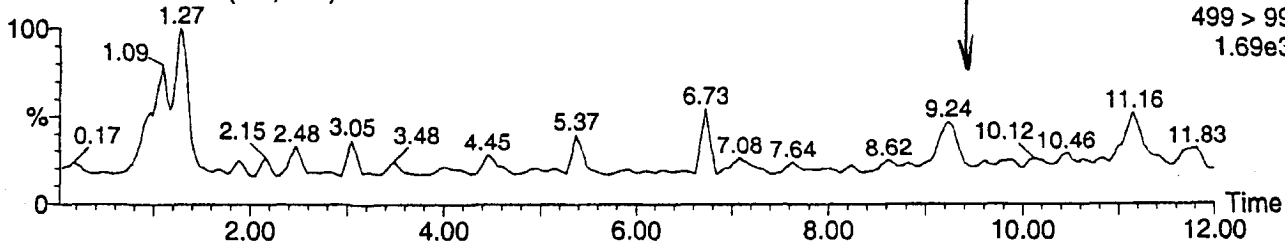
LC/MS/MS #6

MRM of 4 Channels ES-

499 > 99

1.69e3

073103AR-101 Sm (Mn, 2x3)



Quantify Sample Report

Page 2

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

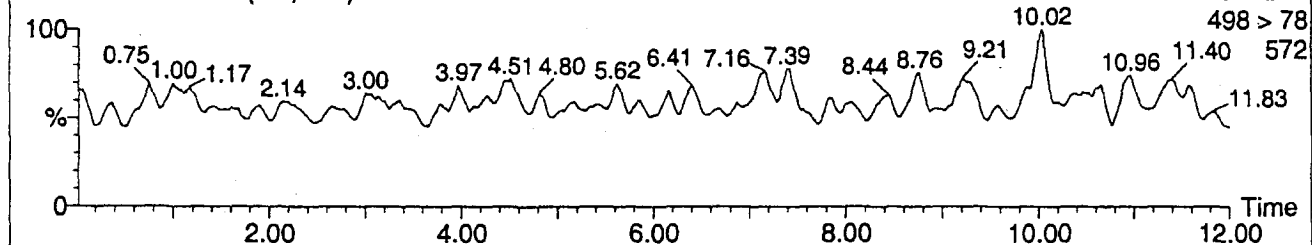
Name: 073103AR-101

Text:

4: PFOSA

XC072503-0, 0 ng/L Standard

073103AR-101 Sm (Mn, 2x3)



Quantify Sample Report

Page 3

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-102

Text:

1: C8 Acid (PFOA)

XC072503-1, 25 ng/L Standard

03-Aug-2003 19:32:33

LC/MS/MS #6

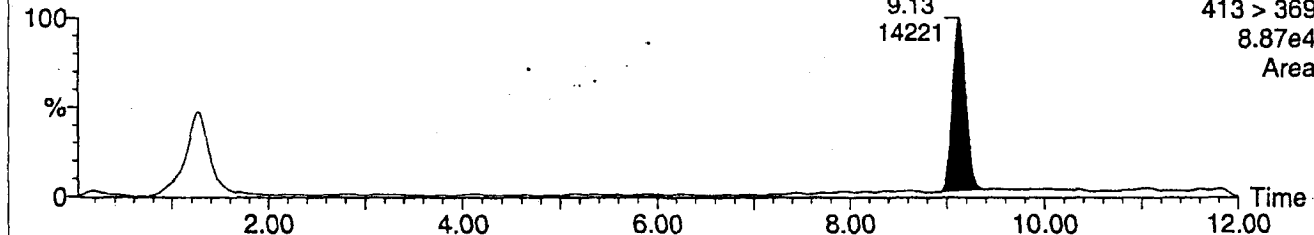
073103AR-102 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

8.87e4

Area



2: C6 Sulfonate (PFHS)

XC072503-1, 25 ng/L Standard

03-Aug-2003 19:32:33

LC/MS/MS #6

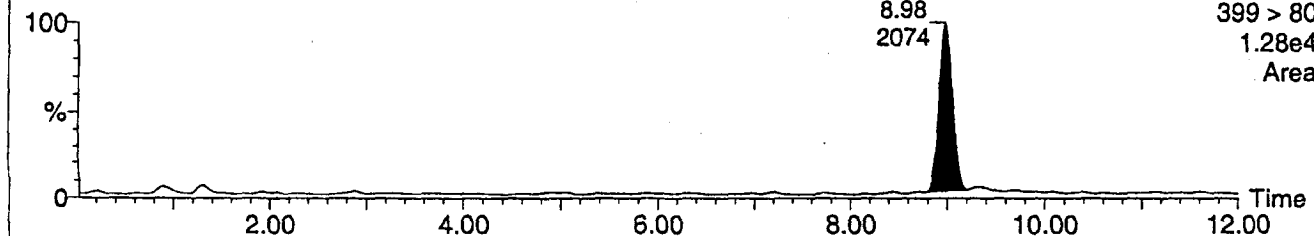
073103AR-102 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.28e4

Area



3: C8 Sulfonate (PFOS)

XC072503-1, 25 ng/L Standard

03-Aug-2003 19:32:33

LC/MS/MS #6

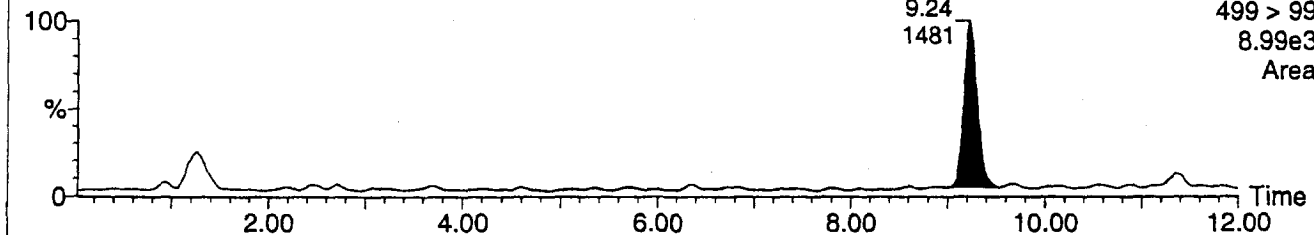
073103AR-102 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

8.99e3

Area



Quantify Sample Report

Page 4

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-102

Text:

4: PFOSA

XC072503-1, 25 ng/L Standard

03-Aug-2003 19:32:33

LC/MS/MS #6

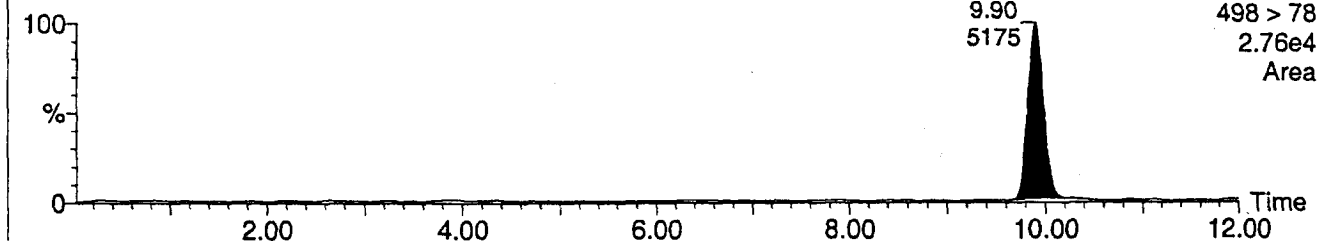
073103AR-102 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

2.76e4

Area



Quantify Sample Report

Page 5

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: F:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: F:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-103

Text:

1: C8 Acid (PFOA)

XC072503-2, 50 ng/L Standard

03-Aug-2003 19:54:17

LC/MS/MS #6

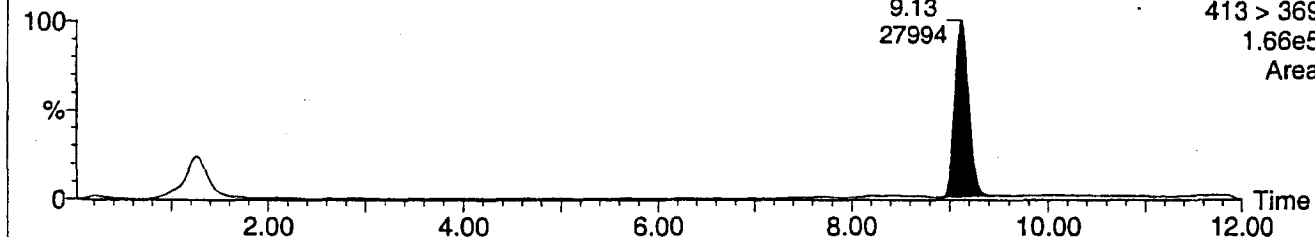
073103AR-103 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.66e5

Area



2: C6 Sulfonate (PFHS)

XC072503-2, 50 ng/L Standard

03-Aug-2003 19:54:17

LC/MS/MS #6

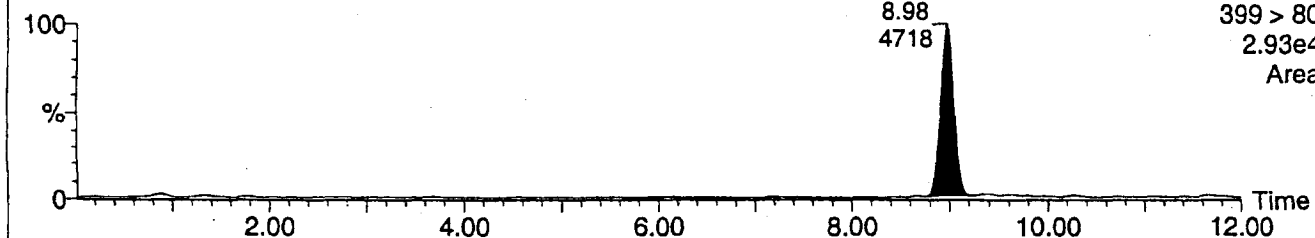
073103AR-103 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

2.93e4

Area



3: C8 Sulfonate (PFOS)

XC072503-2, 50 ng/L Standard

03-Aug-2003 19:54:17

LC/MS/MS #6

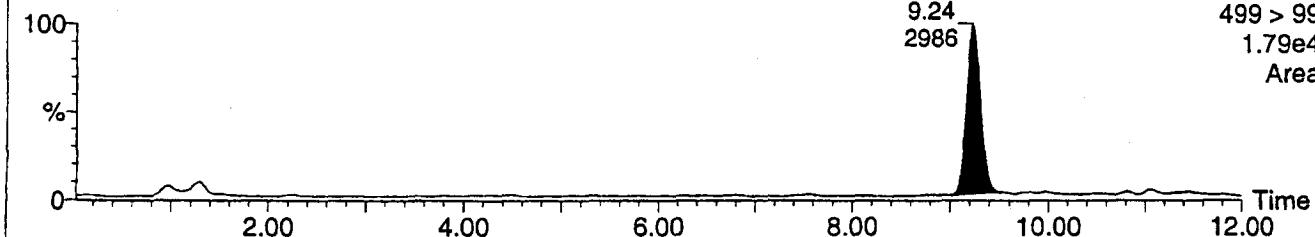
073103AR-103 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.79e4

Area



Quantify Sample Report

Page 6

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-103

Text:

4: PFOSA

XC072503-2, 50 ng/L Standard

03-Aug-2003 19:54:17

LC/MS/MS #6

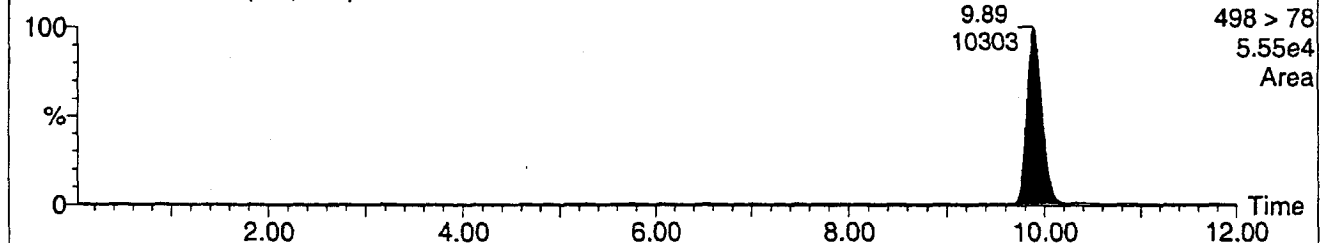
073103AR-103 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

5.55e4

Area



Quantify Sample Report

Page 7

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-104

Text:

1: C8 Acid (PFOA)

XC072503-3, 100 ng/L Standard

03-Aug-2003 20:16:01

LC/MS/MS #6

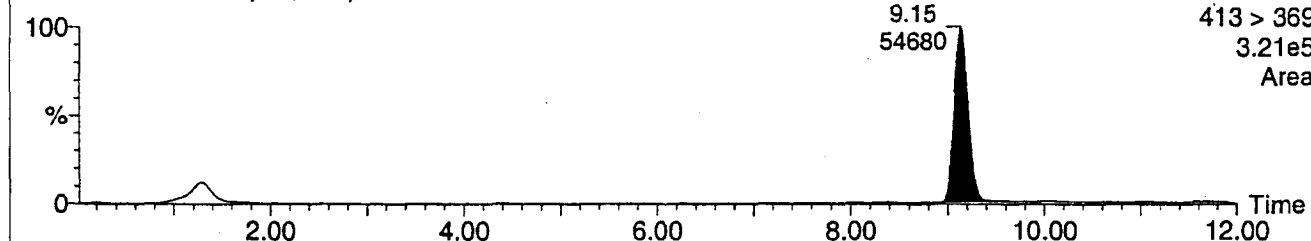
073103AR-104 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

3.21e5

Area



2: C6 Sulfonate (PFHS)

XC072503-3, 100 ng/L Standard

03-Aug-2003 20:16:01

LC/MS/MS #6

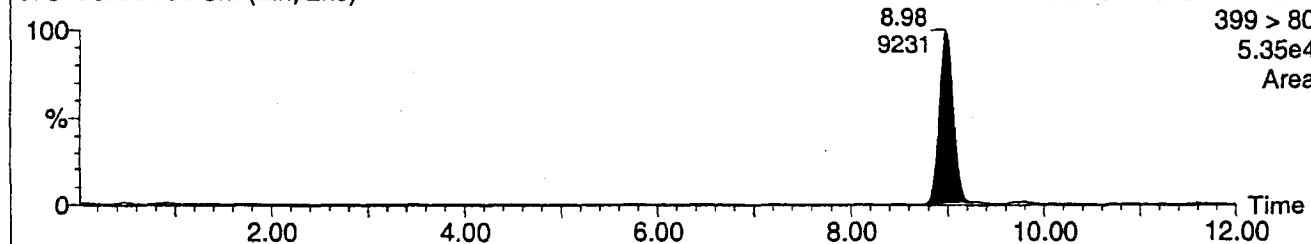
073103AR-104 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

5.35e4

Area



3: C8 Sulfonate (PFOS)

XC072503-3, 100 ng/L Standard

03-Aug-2003 20:16:01

LC/MS/MS #6

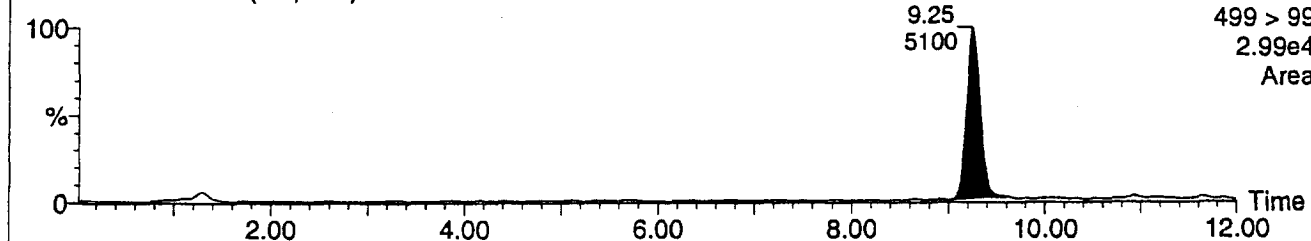
073103AR-104 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.99e4

Area



Quantify Sample Report

Page 8

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-104

Text:

4: PFOSA

XC072503-3, 100 ng/L Standard

03-Aug-2003 20:16:01

LC/MS/MS #6

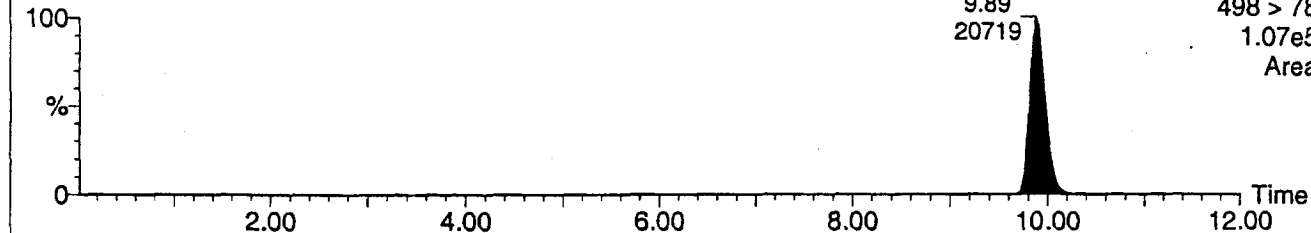
073103AR-104 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.07e5

Area



Quantify Sample Report

Page 9

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

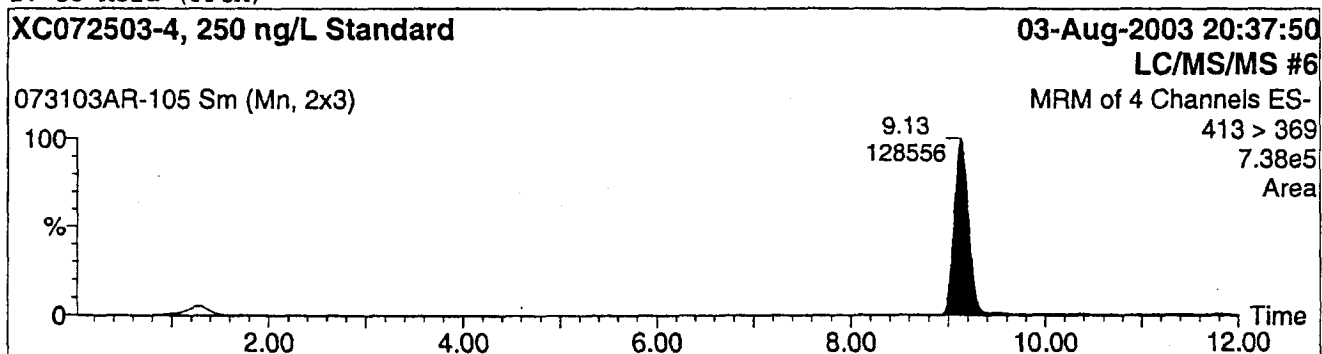
Job Code:

Printed: Wed Aug 06 11:04:02 2003

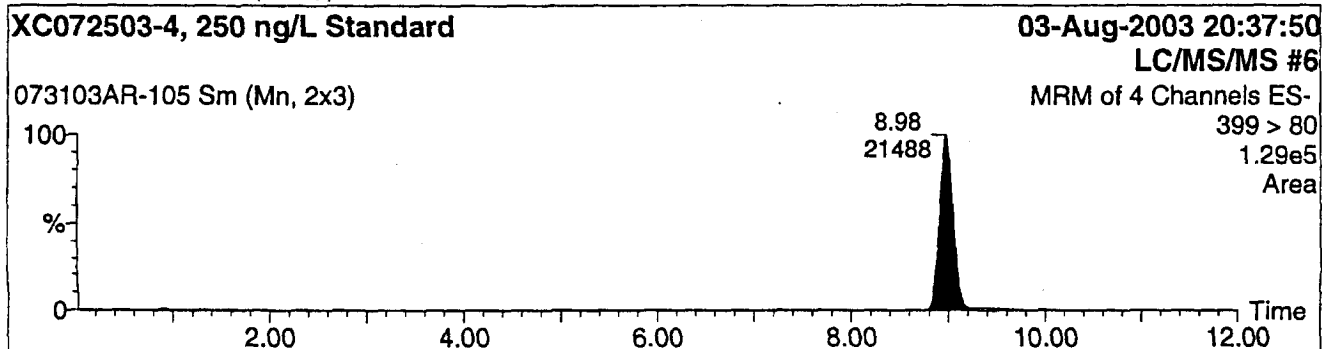
Name: 073103AR-105

Text:

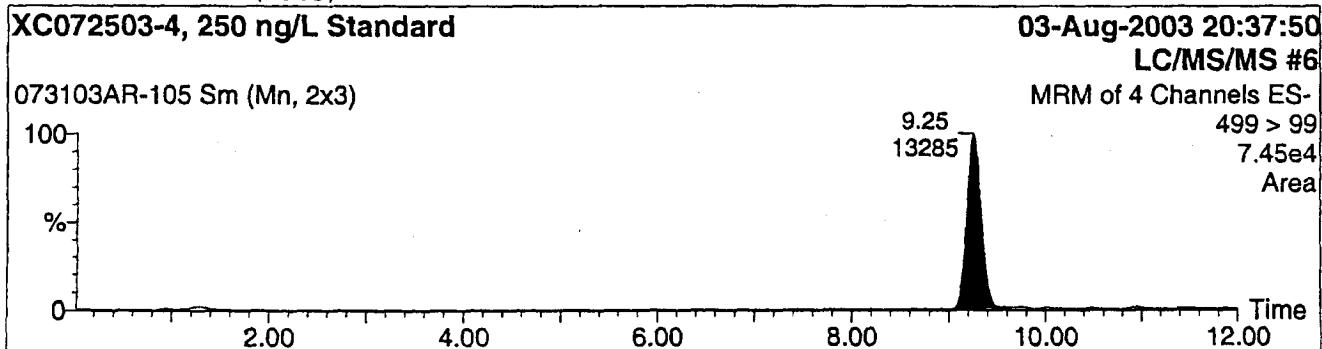
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 10

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-105

Text:

4: PFOSA

XC072503-4, 250 ng/L Standard

03-Aug-2003 20:37:50

LC/MS/MS #6

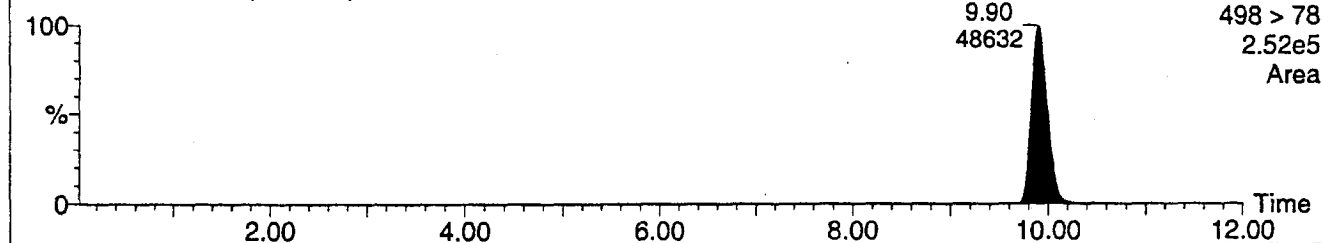
073103AR-105 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

2.52e5

Area



Quantify Sample Report

Page 11

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-106

Text:

1: C8 Acid (PFOA)

XC072503-5, 500 ng/L Standard

03-Aug-2003 20:59:39

LC/MS/MS #6

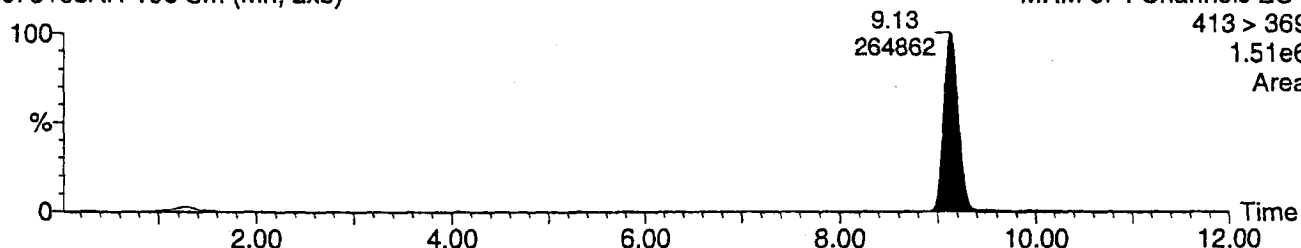
073103AR-106 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.51e6

Area



2: C6 Sulfonate (PFHS)

XC072503-5, 500 ng/L Standard

03-Aug-2003 20:59:39

LC/MS/MS #6

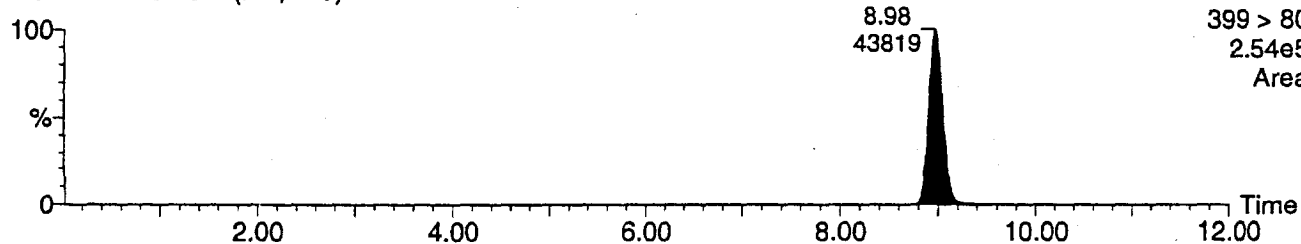
073103AR-106 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

2.54e5

Area



3: C8 Sulfonate (PFOS)

XC072503-5, 500 ng/L Standard

03-Aug-2003 20:59:39

LC/MS/MS #6

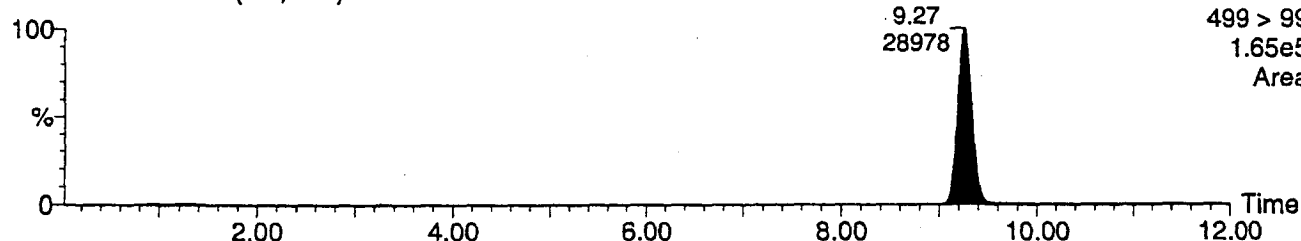
073103AR-106 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.65e5

Area



Quantify Sample Report

Page 12

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-106

Text:

4: PFOSA

XC072503-5, 500 ng/L Standard

03-Aug-2003 20:59:39

LC/MS/MS #6

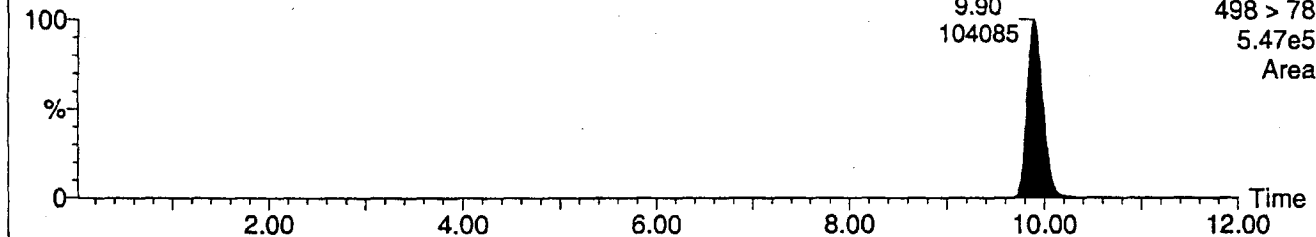
073103AR-106 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

5.47e5

Area



Quantify Sample Report

Page 13

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

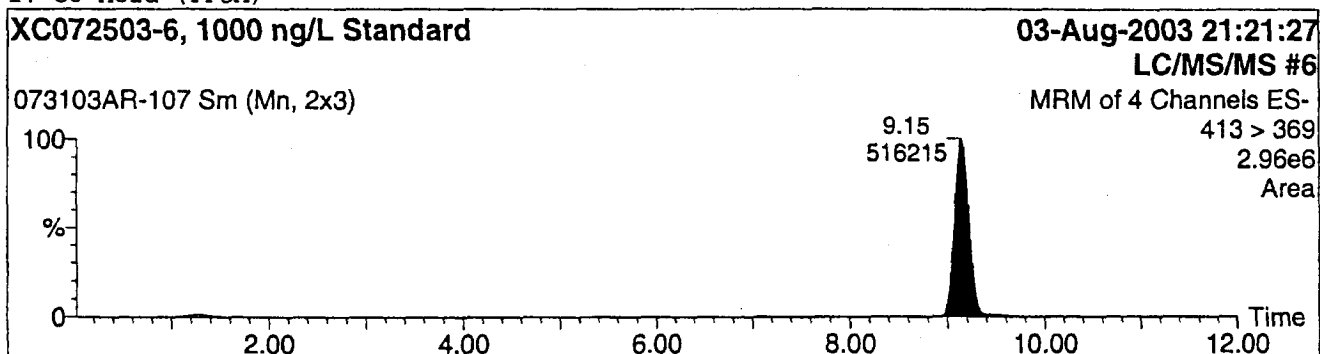
Job Code:

Printed: Wed Aug 06 11:04:02 2003

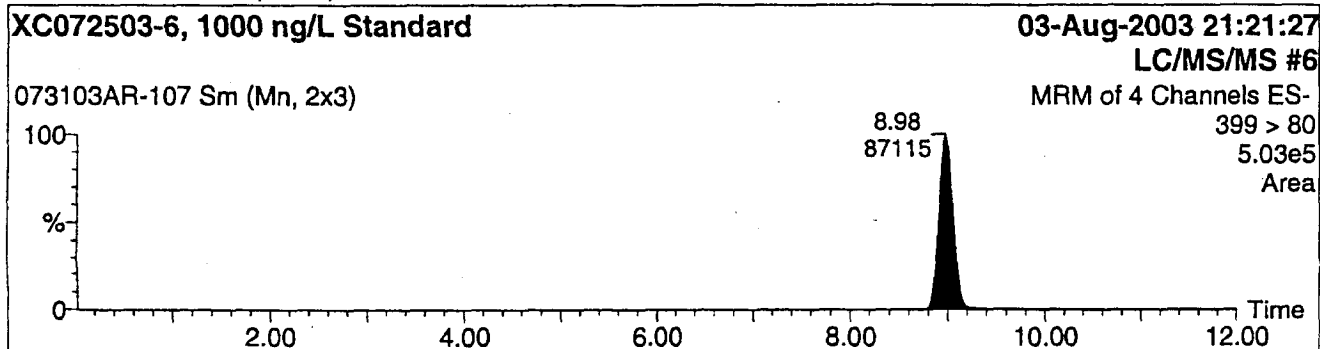
Name: 073103AR-107

Text:

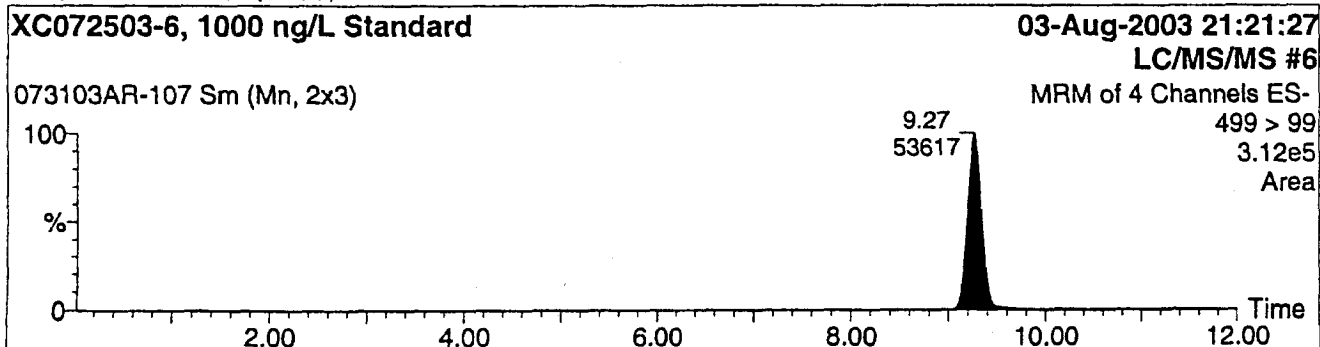
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 14

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-107

Text:

4: PFOSA

XC072503-6, 1000 ng/L Standard

03-Aug-2003 21:21:27

LC/MS/MS #6

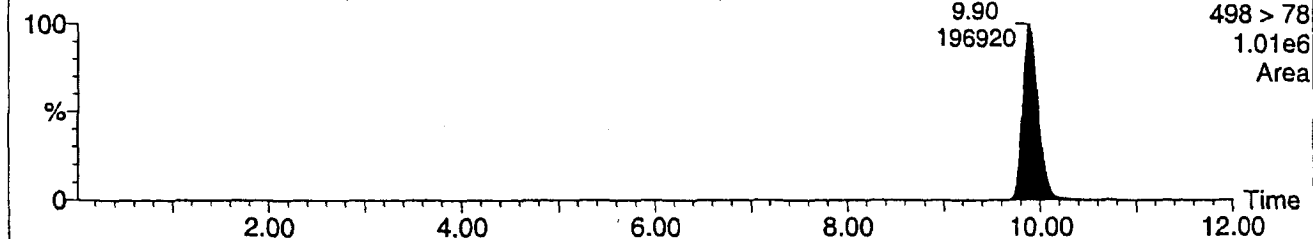
073103AR-107 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.01e6

Area



Quantify Sample Report

Page 15

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-108

Text:

1: C8 Acid (PFOA)

L34910-1 Spk C, 5000 ng/L, DF=100

03-Aug-2003 21:43:18

LC/MS/MS #6

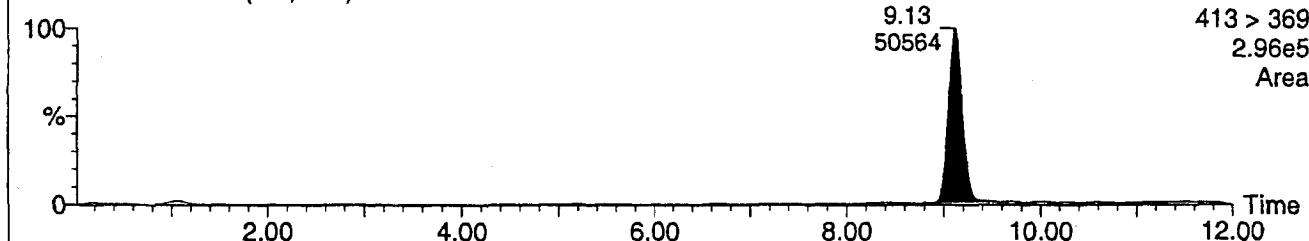
073103AR-108 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

2.96e5

Area



2: C6 Sulfonate (PFHS)

L34910-1 Spk C, 5000 ng/L, DF=100

03-Aug-2003 21:43:18

LC/MS/MS #6

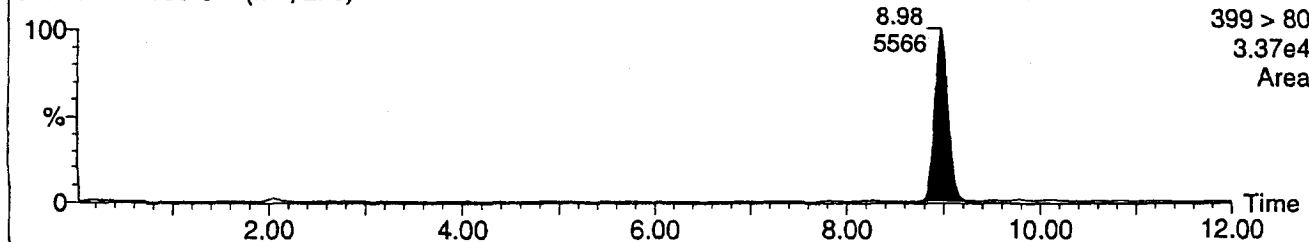
073103AR-108 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

3.37e4

Area



3: C8 Sulfonate (PFOS)

L34910-1 Spk C, 5000 ng/L, DF=100

03-Aug-2003 21:43:18

LC/MS/MS #6

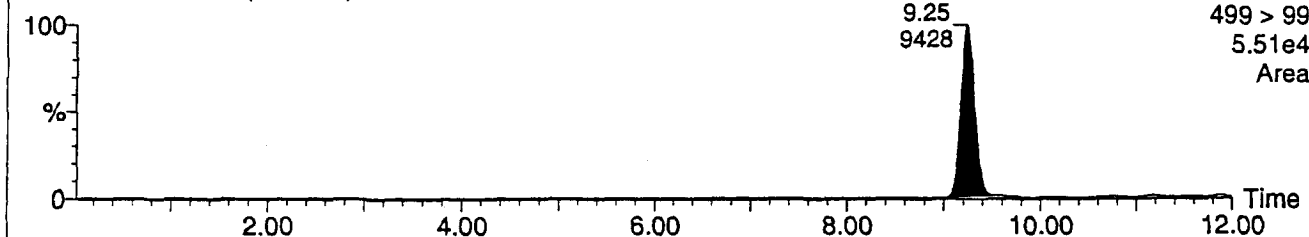
073103AR-108 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

5.51e4

Area



Quantify Sample Report

Page 16

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-108

Text:

4: PFOSA

L34910-1 Spk C, 5000 ng/L, DF=100

03-Aug-2003 21:43:18

LC/MS/MS #6

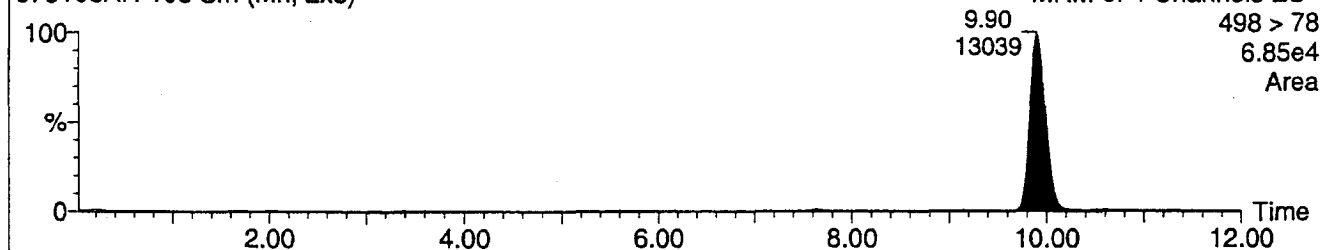
073103AR-108 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

6.85e4

Area



Quantify Sample Report

Page 17

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-109

Text:

1: C8 Acid (PFOA)

L34910-12 Spk E, 5000 ng/L, DF=100

03-Aug-2003 22:04:56

LC/MS/MS #6

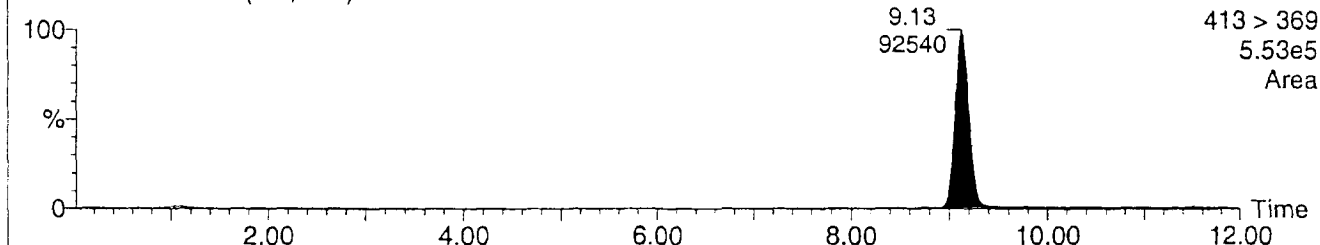
073103AR-109 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

5.53e5

Area



2: C6 Sulfonate (PFHS)

L34910-12 Spk E, 5000 ng/L, DF=100

03-Aug-2003 22:04:56

LC/MS/MS #6

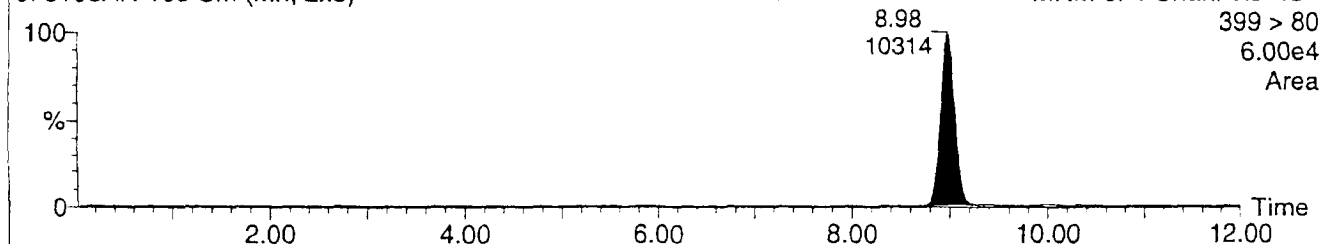
073103AR-109 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

6.00e4

Area



3: C8 Sulfonate (PFOS)

L34910-12 Spk E, 5000 ng/L, DF=100

03-Aug-2003 22:04:56

LC/MS/MS #6

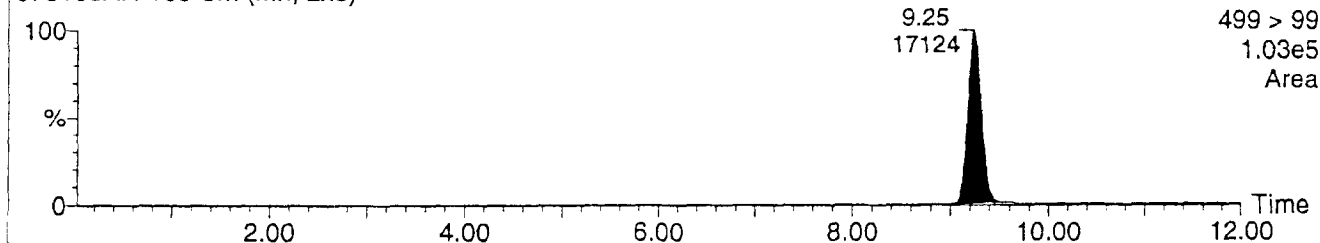
073103AR-109 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.03e5

Area



Quantify Sample Report

Page 18

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-109

Text:

4: PFOSA

L34910-12 Spk E, 5000 ng/L, DF=100

03-Aug-2003 22:04:56

LC/MS/MS #6

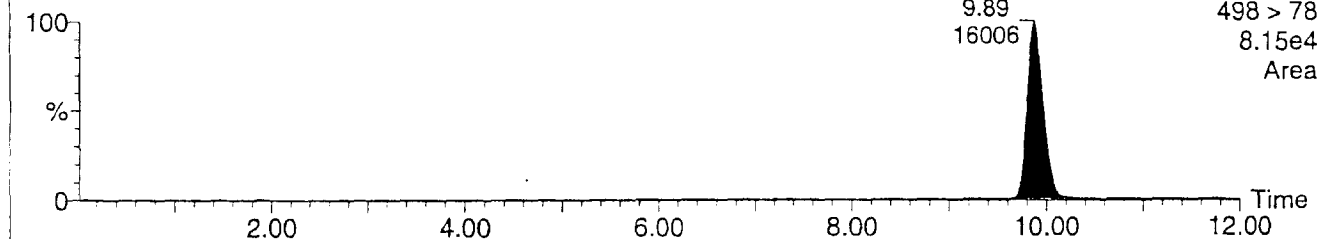
073103AR-109 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

8.15e4

Area



Quantify Sample Report

Page 19

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-110

Text:

1: C8 Acid (PFOA)

L34910-16 Spk F, 5000 ng/L, DF=100

03-Aug-2003 22:26:40

LC/MS/MS #6

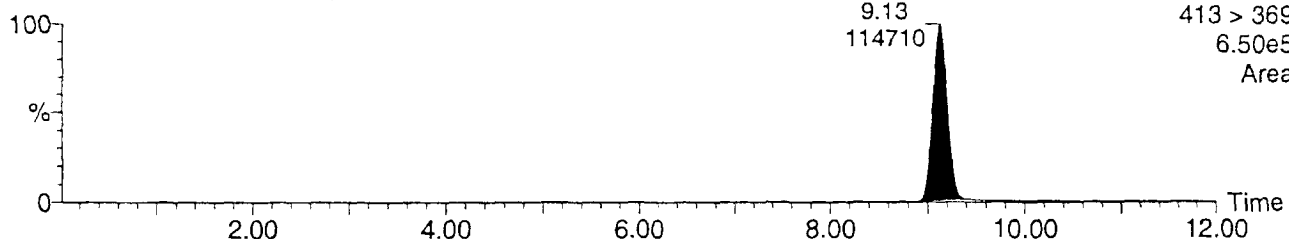
073103AR-110 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

6.50e5

Area



2: C6 Sulfonate (PFHS)

L34910-16 Spk F, 5000 ng/L, DF=100

03-Aug-2003 22:26:40

LC/MS/MS #6

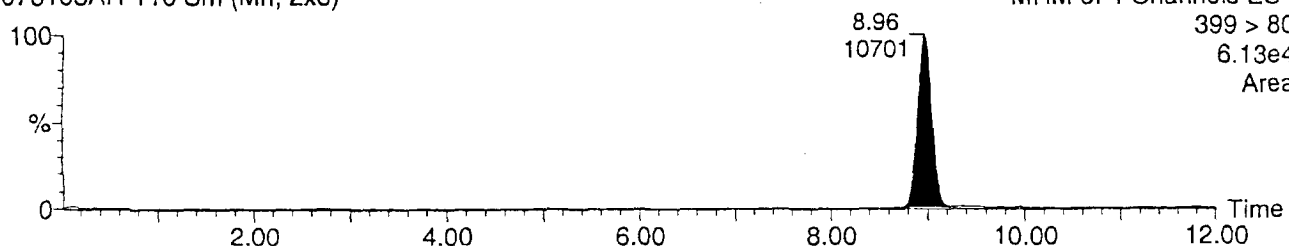
073103AR-110 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

6.13e4

Area



3: C8 Sulfonate (PFOS)

L34910-16 Spk F, 5000 ng/L, DF=100

03-Aug-2003 22:26:40

LC/MS/MS #6

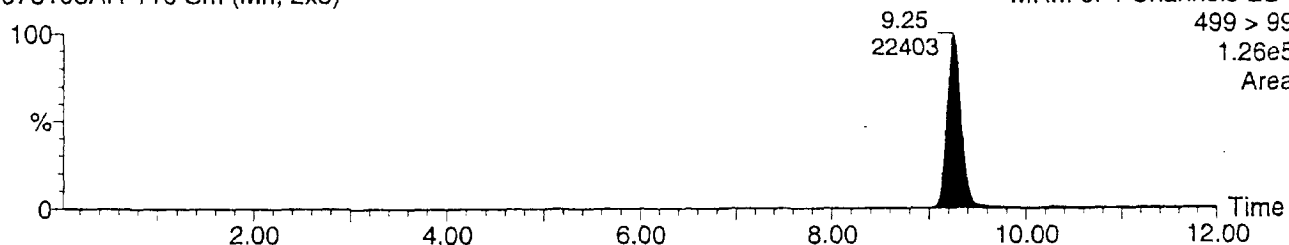
073103AR-110 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.26e5

Area



Quantify Sample Report

Page 20

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-110

Text:

4: PFOSA

L34910-16 Spk F, 5000 ng/L, DF=100

03-Aug-2003 22:26:40

LC/MS/MS #6

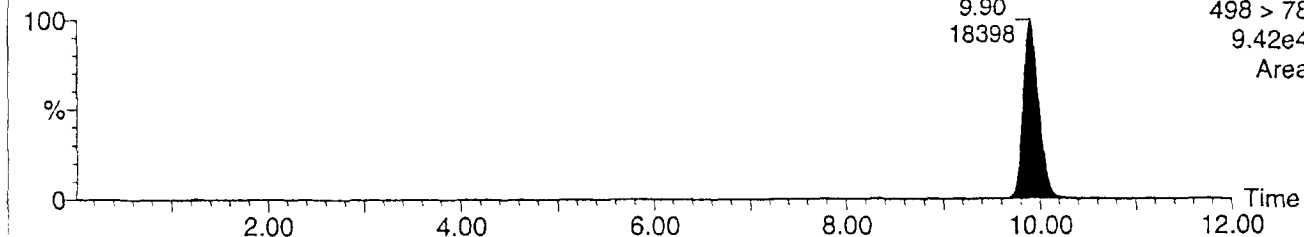
073103AR-110 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

9.42e4

Area



Quantify Sample Report

Page 21

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-111

Text:

1: C8 Acid (PFOA)

XC072503-1, 25 ng/L Standard

03-Aug-2003 22:48:23

LC/MS/MS #6

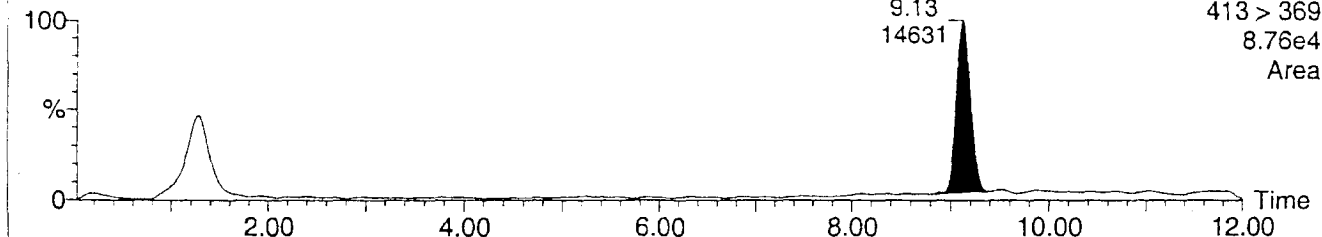
073103AR-111 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

8.76e4

Area



2: C6 Sulfonate (PFHS)

XC072503-1, 25 ng/L Standard

03-Aug-2003 22:48:23

LC/MS/MS #6

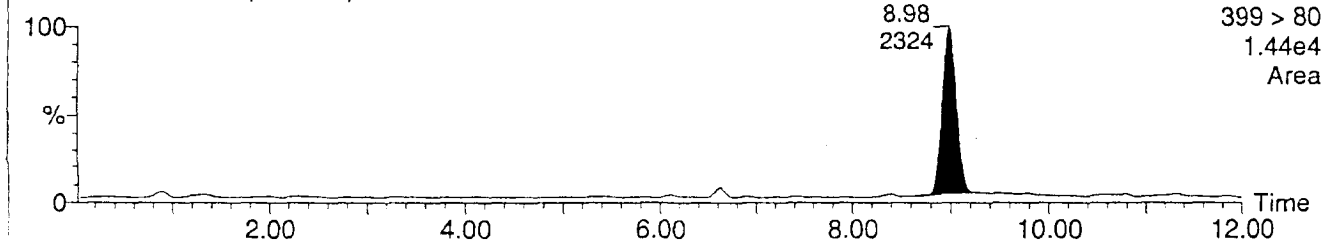
073103AR-111 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.44e4

Area



3: C8 Sulfonate (PFOS)

XC072503-1, 25 ng/L Standard

03-Aug-2003 22:48:23

LC/MS/MS #6

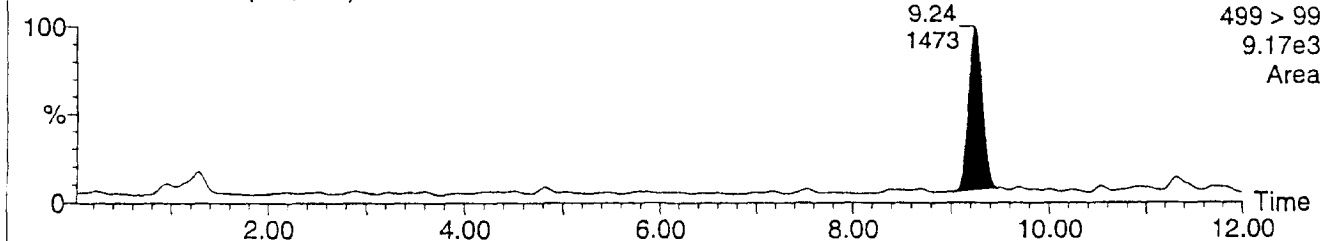
073103AR-111 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

9.17e3

Area



Quantify Sample Report

Page 22

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-111

Text:

4: PFOSA

XC072503-1, 25 ng/L Standard

03-Aug-2003 22:48:23

LC/MS/MS #6

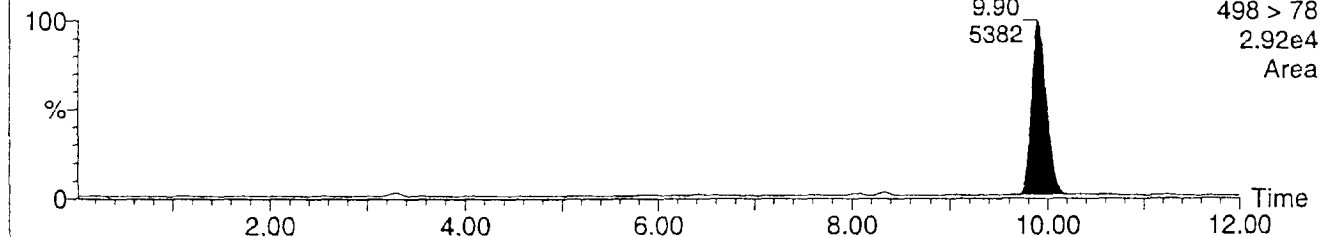
073103AR-111 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

2.92e4

Area



Quantify Sample Report

Page 23

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

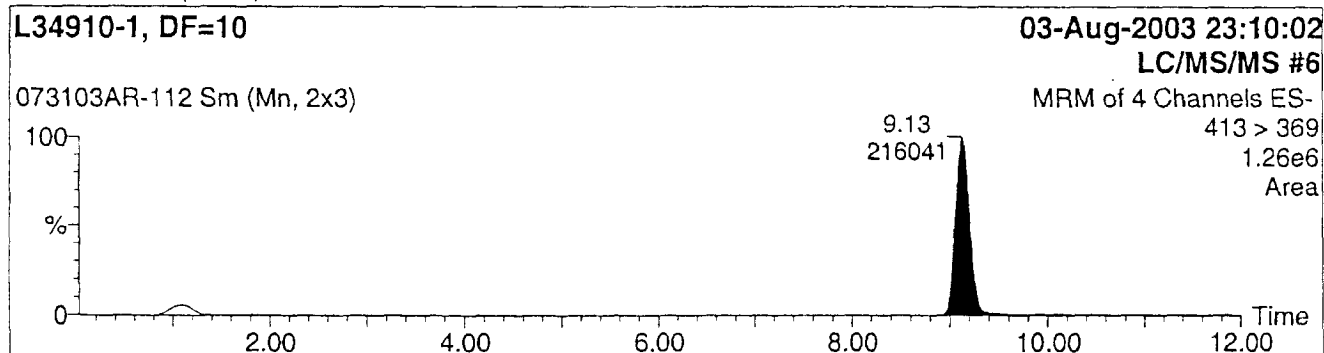
Job Code:

Printed: Wed Aug 06 11:04:02 2003

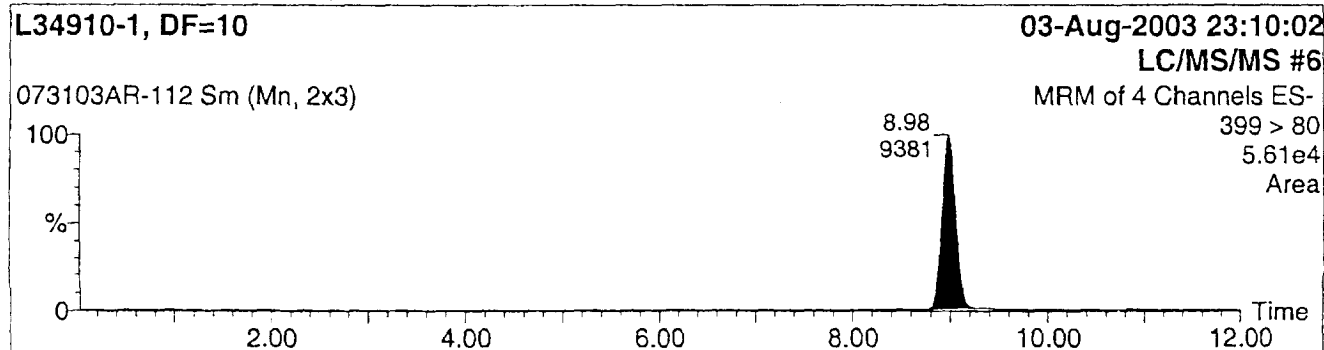
Name: 073103AR-112

Text:

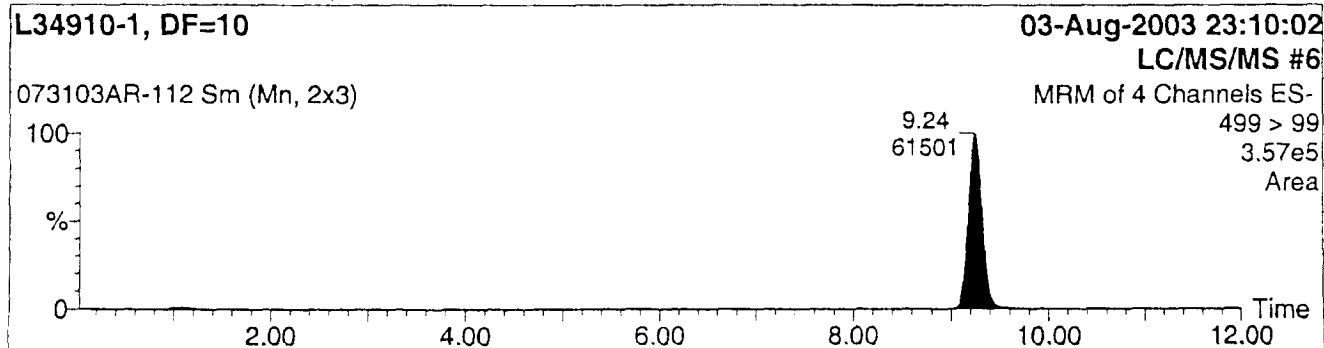
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 24

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-112

Text:

4: PFOSA

L34910-1, DF=10

03-Aug-2003 23:10:02

LC/MS/MS #6

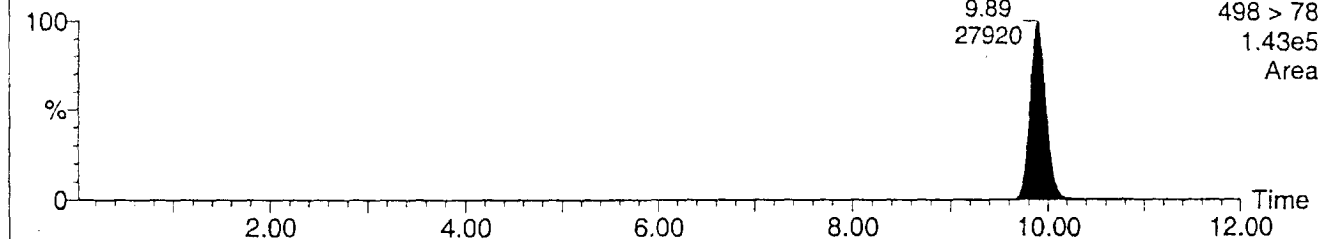
073103AR-112 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.43e5

Area



Quantify Sample Report

Page 25

Study No.: L34910, Set No.: 073103AR, Ext.Date: 07/31/03, Analyst: K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-113

Text:

1: C8 Acid (PFOA)

L34910-1 Rep, DF=10

03-Aug-2003 23:31:52

LC/MS/MS #6

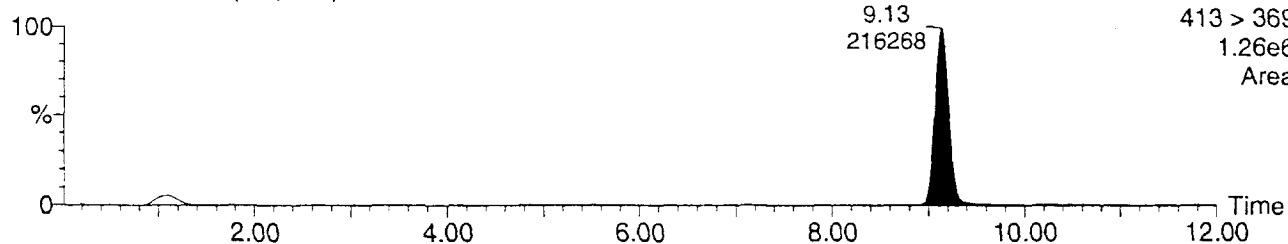
073103AR-113 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.26e6

Area



2: C6 Sulfonate (PFHS)

L34910-1 Rep, DF=10

03-Aug-2003 23:31:52

LC/MS/MS #6

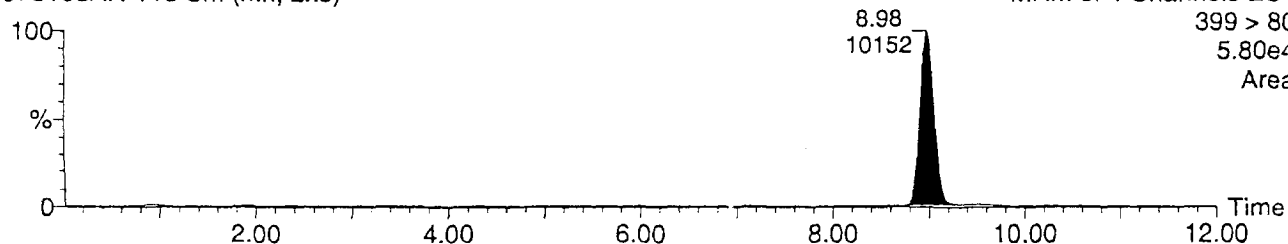
073103AR-113 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

5.80e4

Area



3: C8 Sulfonate (PFOS)

L34910-1 Rep, DF=10

03-Aug-2003 23:31:52

LC/MS/MS #6

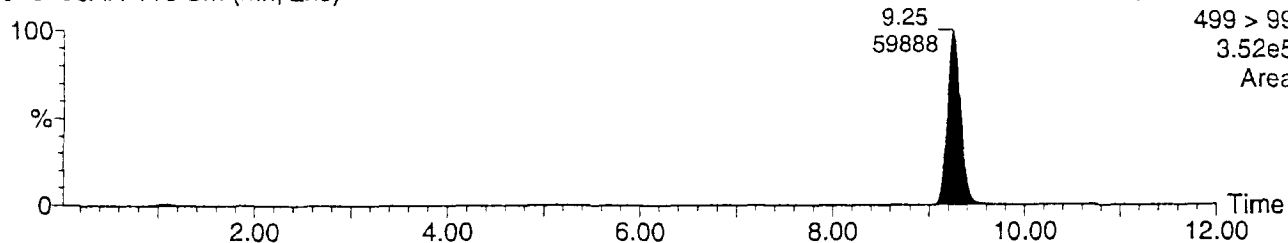
073103AR-113 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

3.52e5

Area



Quantify Sample Report

Page 26

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-113

Text:

4: PFOSA

L34910-1 Rep, DF=10

03-Aug-2003 23:31:52

LC/MS/MS #6

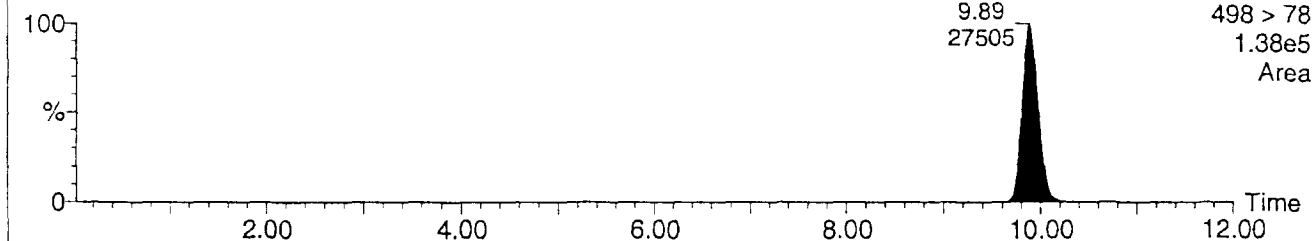
073103AR-113 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.38e5

Area



Quantify Sample Report

Page 27

Study No.: L34910, Set No.: 073103AR, Ext.Date: 07/31/03, Analyst: K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

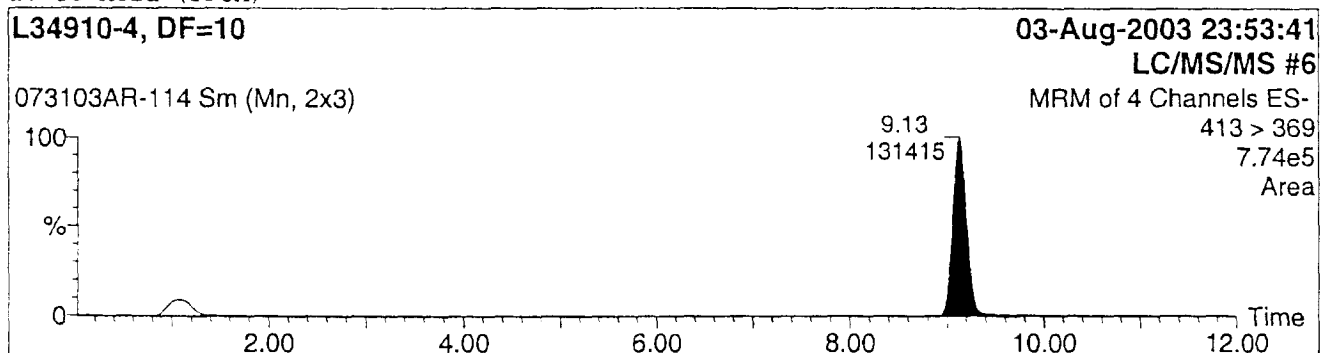
Job Code:

Printed: Wed Aug 06 11:04:02 2003

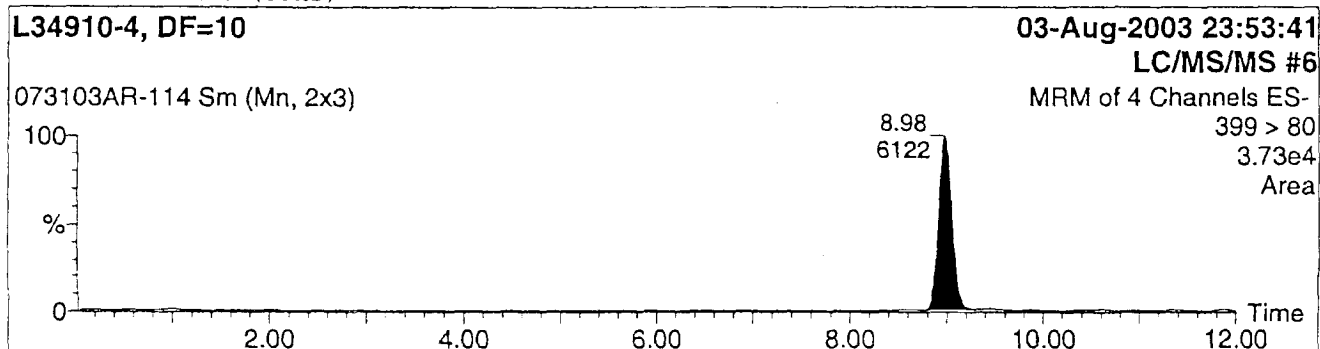
Name: 073103AR-114

Text:

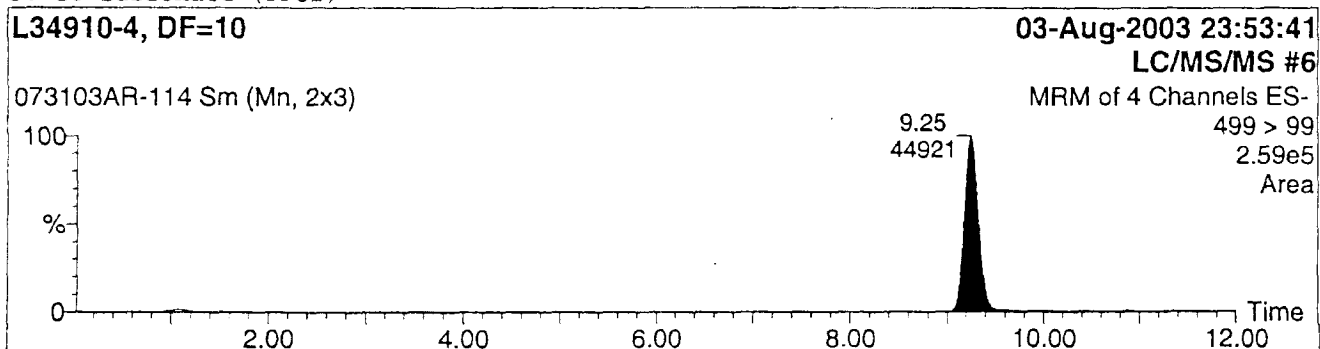
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 28

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

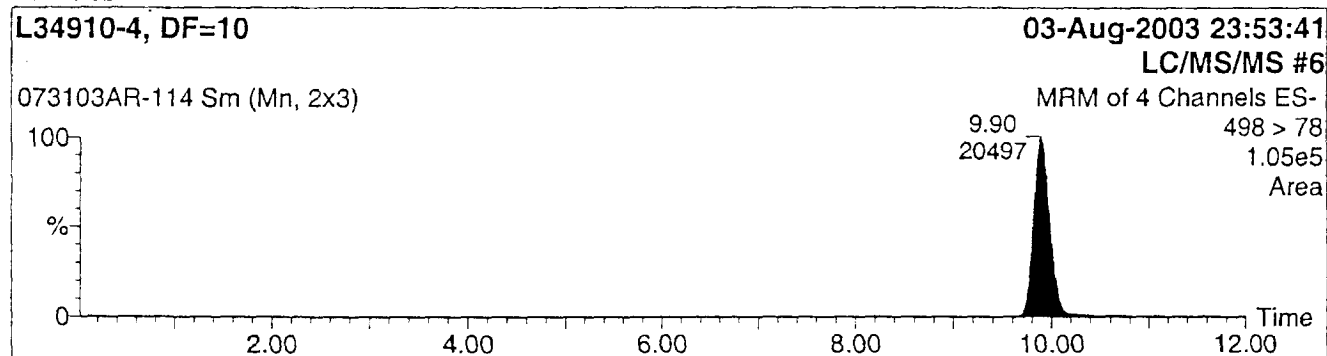
Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-114

Text:

4: PFOSA



Quantify Sample Report

Page 29

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

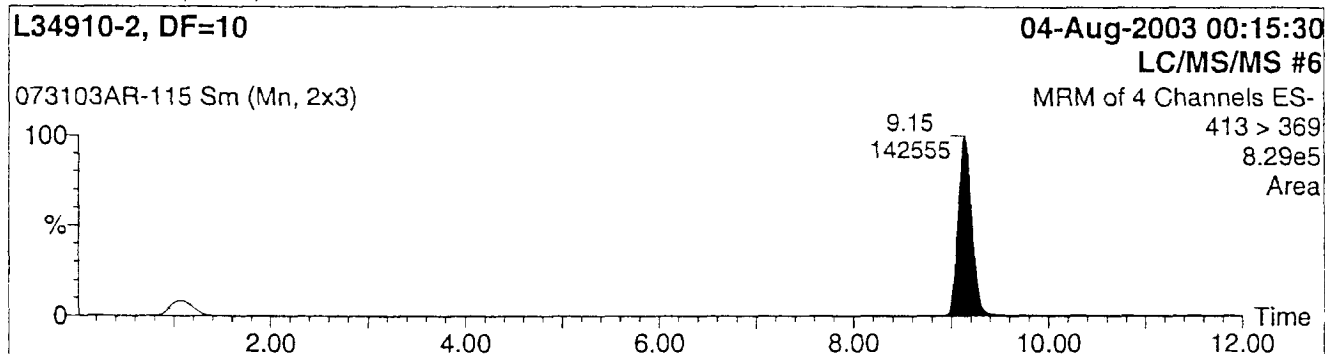
Job Code:

Printed: Wed Aug 06 11:04:02 2003

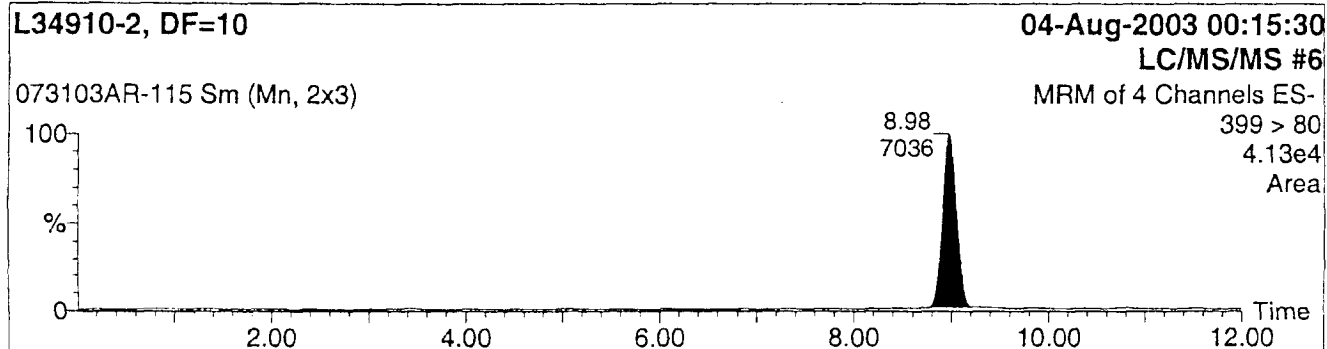
Name: 073103AR-115

Text:

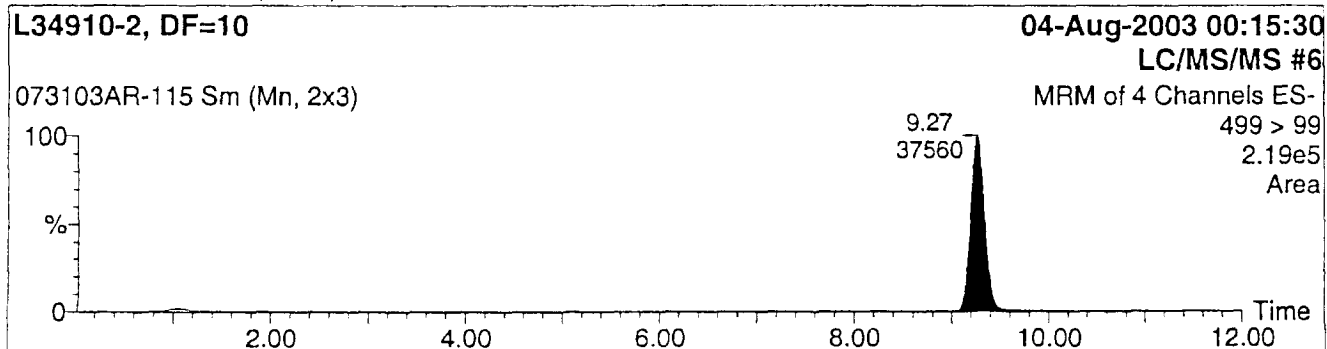
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 30

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC
Last modified: Tue Aug 05 06:59:53 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-115

Text:

4: PFOSA

L34910-2, DF=10

04-Aug-2003 00:15:30

LC/MS/MS #6

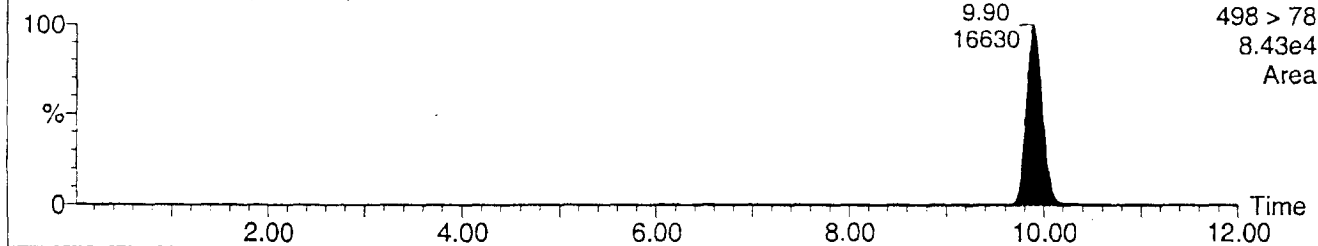
073103AR-115 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

8.43e4

Area



Quantify Sample Report

Page 31

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-116

Text:

1: C8 Acid (PFOA)

XC072503-2, 50 ng/L Standard

04-Aug-2003 00:37:19

LC/MS/MS #6

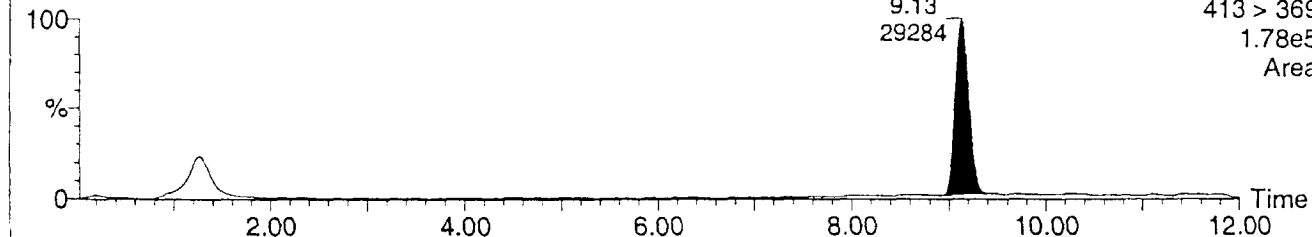
073103AR-116 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.78e5

Area



2: C6 Sulfonate (PFHS)

XC072503-2, 50 ng/L Standard

04-Aug-2003 00:37:19

LC/MS/MS #6

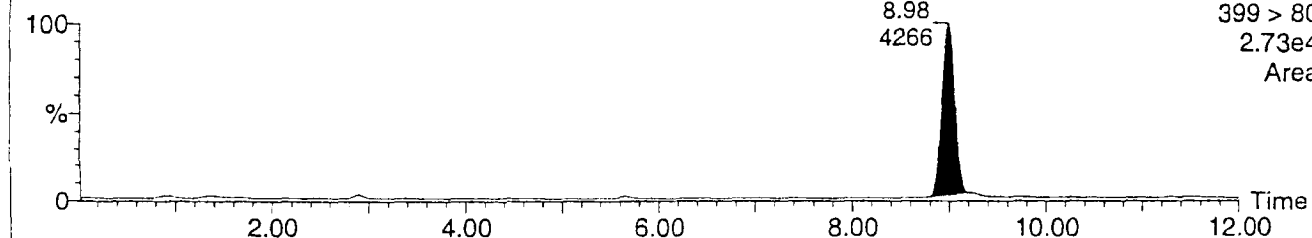
073103AR-116 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

2.73e4

Area



3: C8 Sulfonate (PFOS)

XC072503-2, 50 ng/L Standard

04-Aug-2003 00:37:19

LC/MS/MS #6

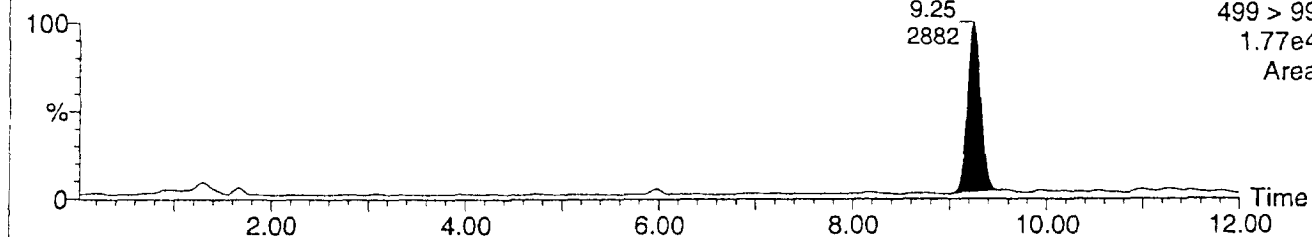
073103AR-116 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.77e4

Area



Quantify Sample Report

Page 32

Study No.:L34910, Set No.:073103AR, Ext.Date:07/31/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC
Last modified: Tue Aug 05 06:59:53 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-116

Text:

4: PFOSA

XC072503-2, 50 ng/L Standard

04-Aug-2003 00:37:19

LC/MS/MS #6

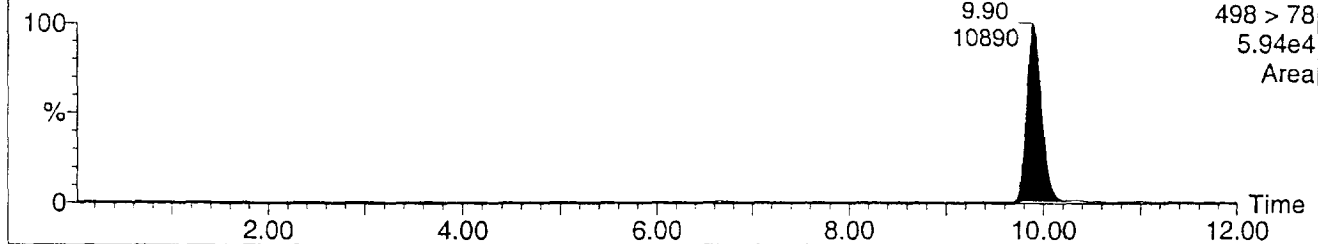
073103AR-116 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

5.94e4

Area



Quantify Sample Report

Page 33

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

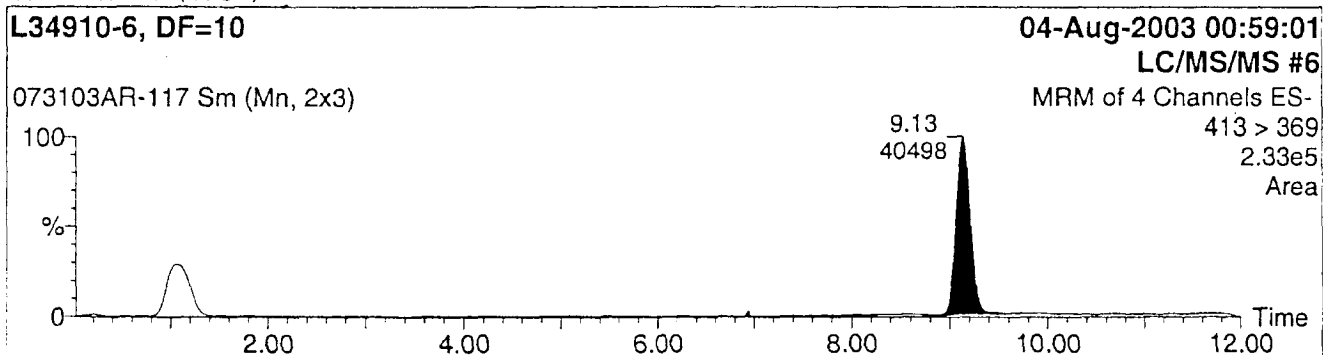
Job Code:

Printed: Wed Aug 06 11:04:02 2003

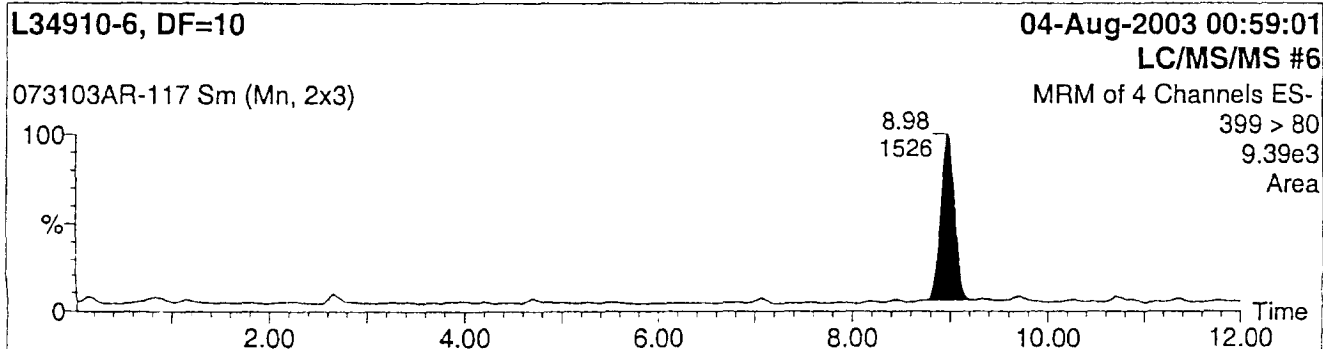
Name: 073103AR-117

Text:

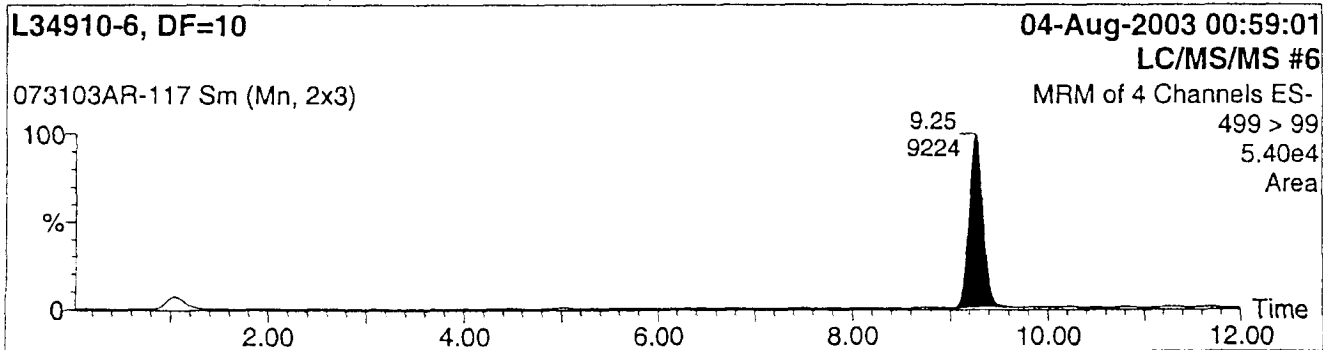
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 34

Study No.: L34910, Set No.: 073103AR, Ext.Date: 07/31/03, Analyst: K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-117

Text:

4: PFOSA

L34910-6, DF=10

04-Aug-2003 00:59:01

LC/MS/MS #6

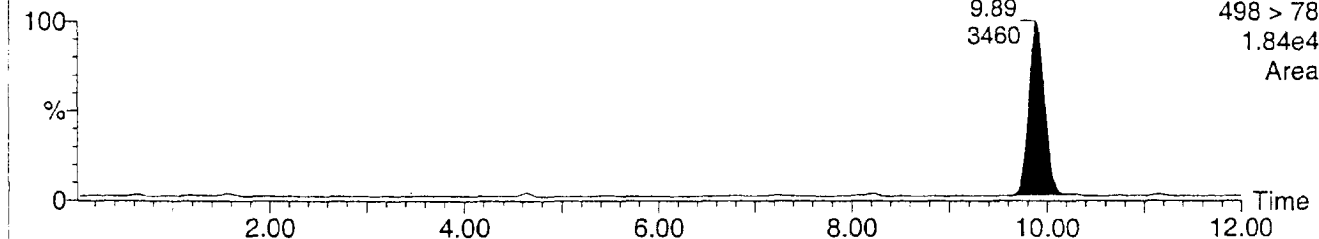
073103AR-117 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.84e4

Area



Quantify Sample Report

Page 35

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-118

Text:

1: C8 Acid (PFOA)

L34910-6 Rep, DF=10

04-Aug-2003 01:20:44

LC/MS/MS #6

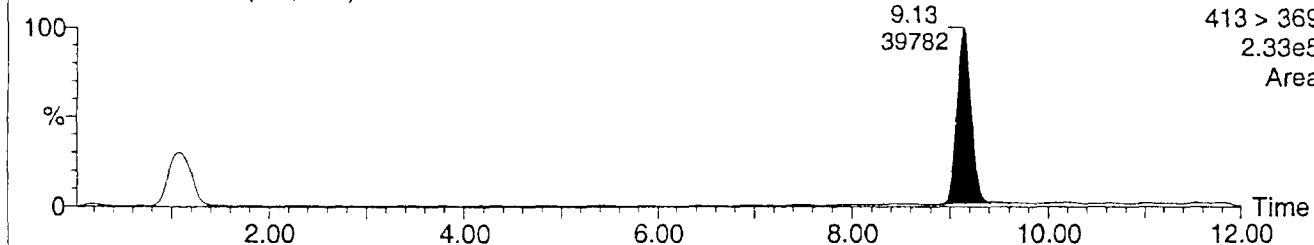
073103AR-118 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

2.33e5

Area



2: C6 Sulfonate (PFHS)

L34910-6 Rep, DF=10

04-Aug-2003 01:20:44

LC/MS/MS #6

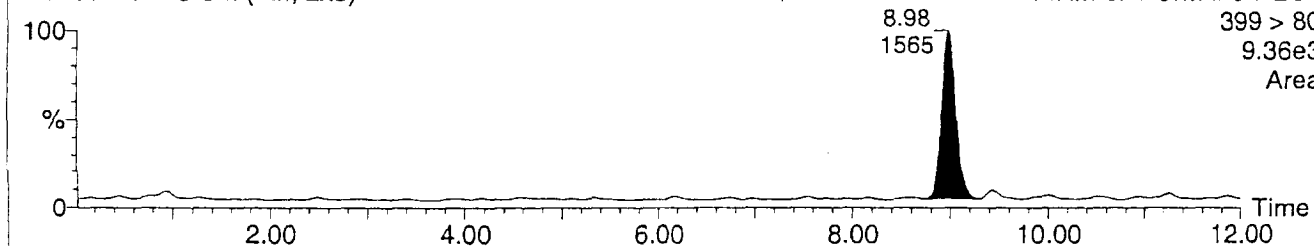
073103AR-118 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

9.36e3

Area



3: C8 Sulfonate (PFOS)

L34910-6 Rep, DF=10

04-Aug-2003 01:20:44

LC/MS/MS #6

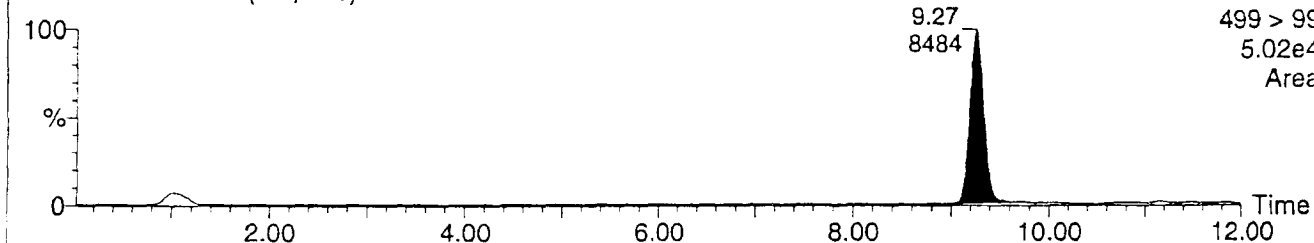
073103AR-118 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

5.02e4

Area



Quantify Sample Report

Page 36

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-118

Text:

4: PFOSA

L34910-6 Rep, DF=10

04-Aug-2003 01:20:44

LC/MS/MS #6

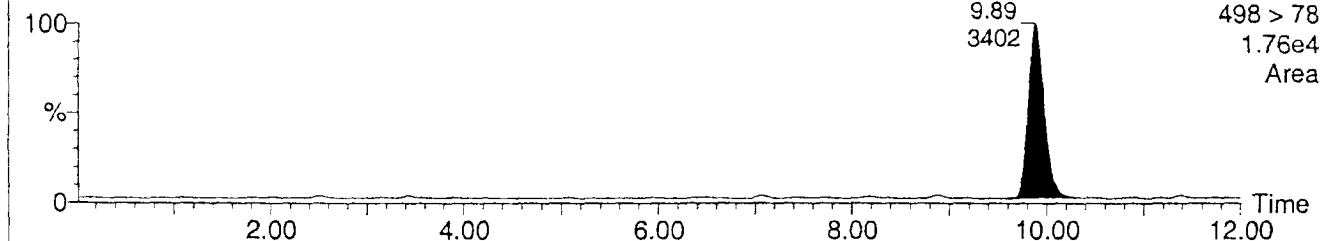
073103AR-118 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.76e4

Area



Quantify Sample Report

Page 37

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-119

Text:

1: C8 Acid (PFOA)

L34910-9, DF=10

04-Aug-2003 01:42:36

LC/MS/MS #6

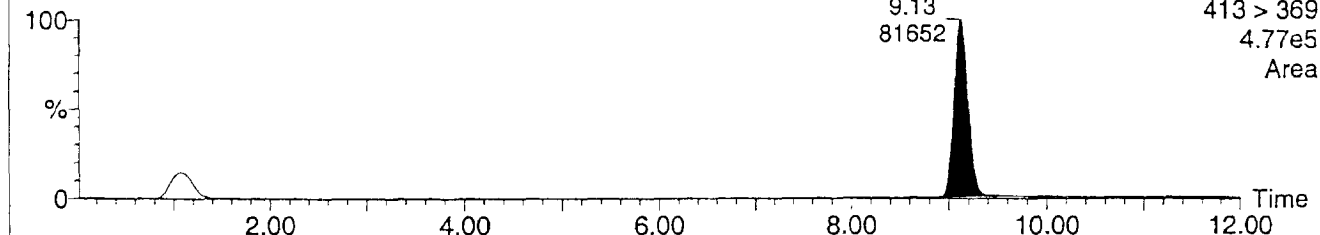
073103AR-119 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

4.77e5

Area



2: C6 Sulfonate (PFHS)

L34910-9, DF=10

04-Aug-2003 01:42:36

LC/MS/MS #6

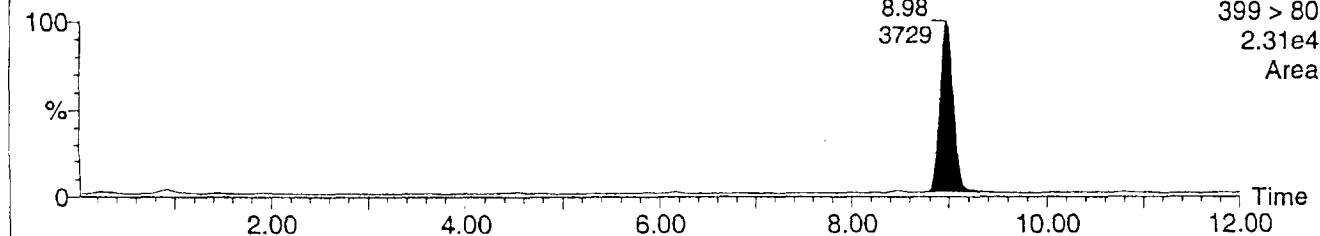
073103AR-119 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

2.31e4

Area



3: C8 Sulfonate (PFOS)

L34910-9, DF=10

04-Aug-2003 01:42:36

LC/MS/MS #6

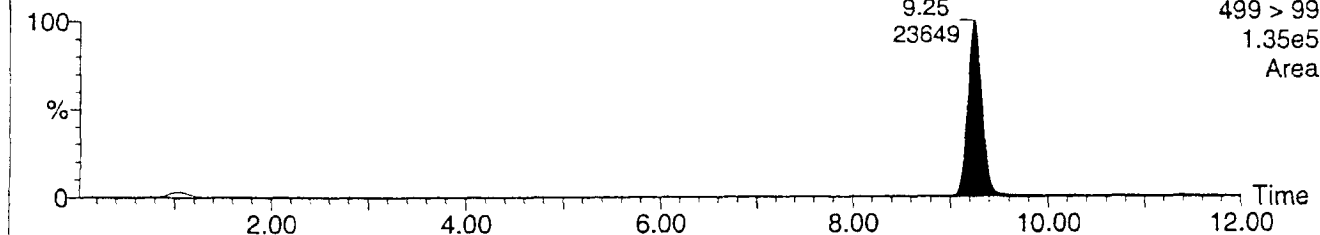
073103AR-119 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.35e5

Area



Quantify Sample Report

Page 38

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-119

Text:

4: PFOSA

L34910-9, DF=10

04-Aug-2003 01:42:36

LC/MS/MS #6

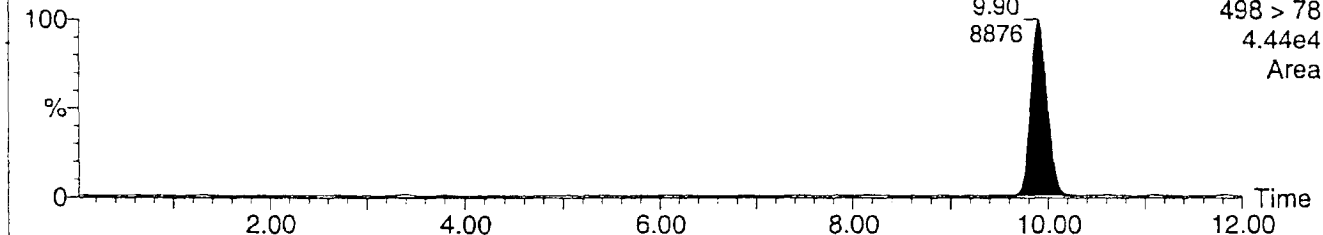
073103AR-119 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

4.44e4

Area



Quantify Sample Report

Page 39

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

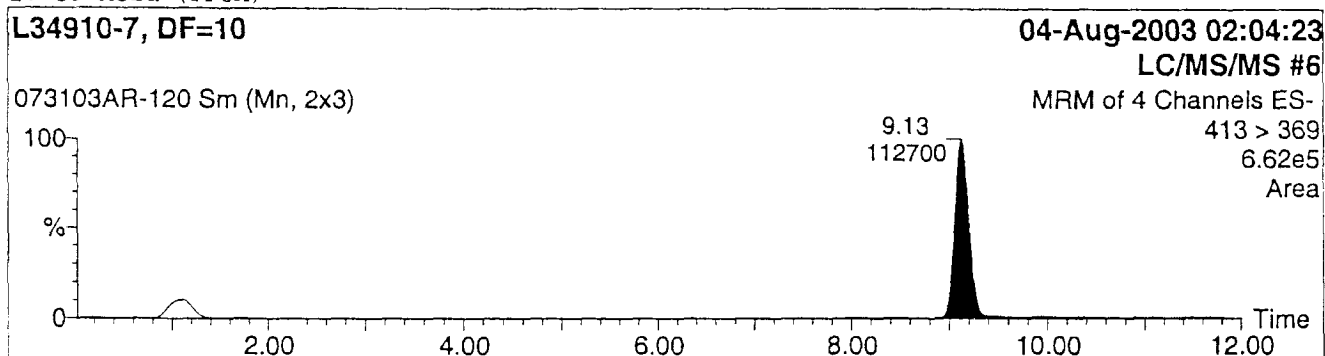
Job Code:

Printed: Wed Aug 06 11:04:02 2003

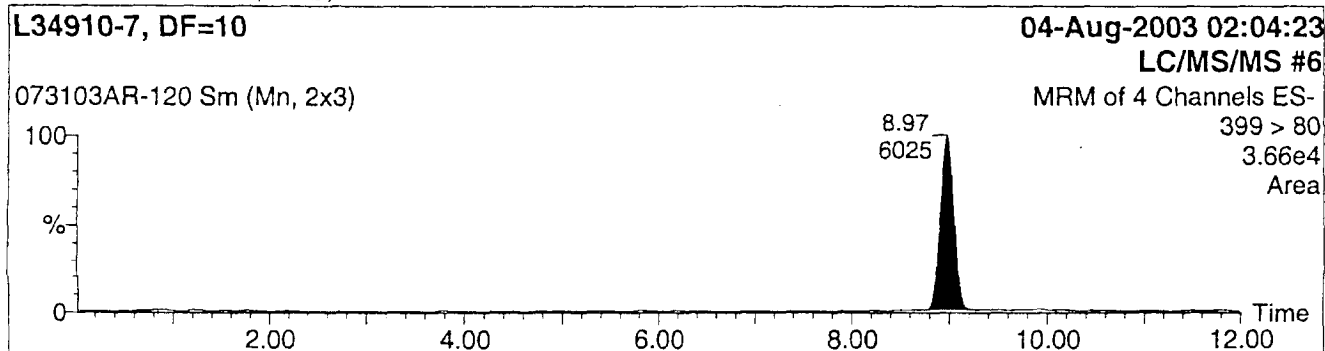
Name: 073103AR-120

Text:

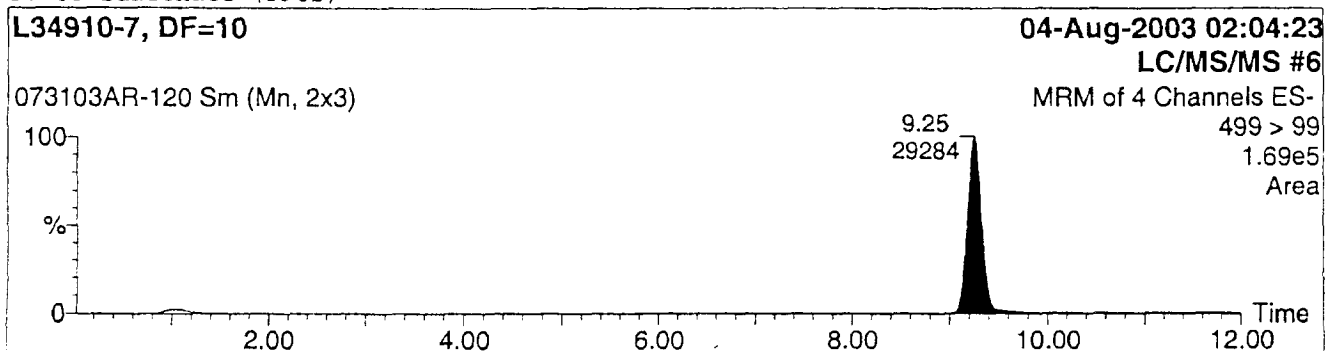
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 40

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-120

Text:

4: PFOSA

L34910-7, DF=10

04-Aug-2003 02:04:23

LC/MS/MS #6

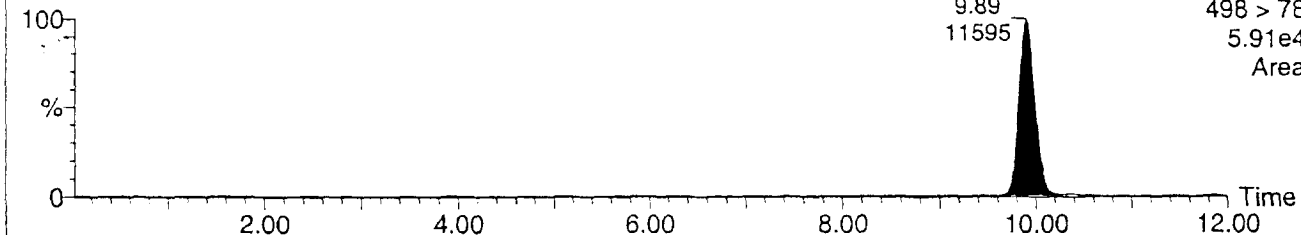
073103AR-120 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

5.91e4

Area



Quantify Sample Report

Page 41

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-121

Text:

1: C8 Acid (PFOA)

XC072503-3, 100 ng/L Standard

04-Aug-2003 02:26:03

LC/MS/MS #6

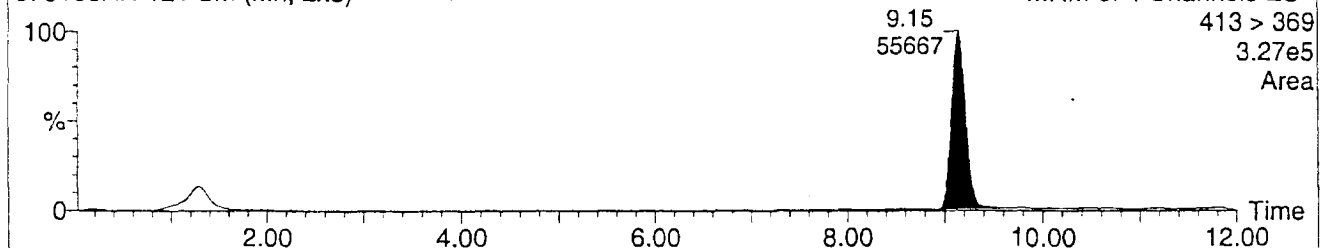
073103AR-121 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

3.27e5

Area



2: C6 Sulfonate (PFHS)

XC072503-3, 100 ng/L Standard

04-Aug-2003 02:26:03

LC/MS/MS #6

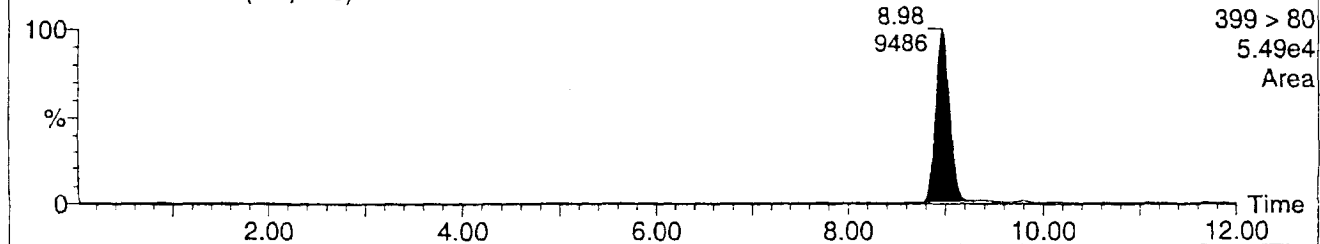
073103AR-121 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

5.49e4

Area



3: C8 Sulfonate (PFOS)

XC072503-3, 100 ng/L Standard

04-Aug-2003 02:26:03

LC/MS/MS #6

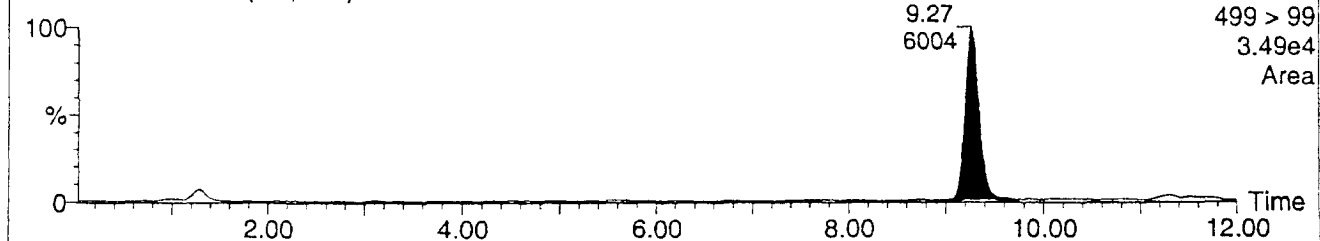
073103AR-121 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

3.49e4

Area



Quantify Sample Report

Page 42

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-121

Text:

4: PFOSA

XC072503-3, 100 ng/L Standard

04-Aug-2003 02:26:03

LC/MS/MS #6

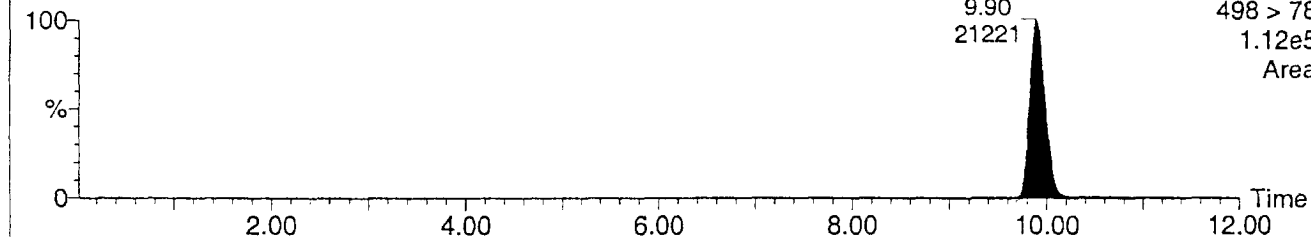
073103AR-121 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.12e5

Area



Quantify Sample Report

Page 43

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

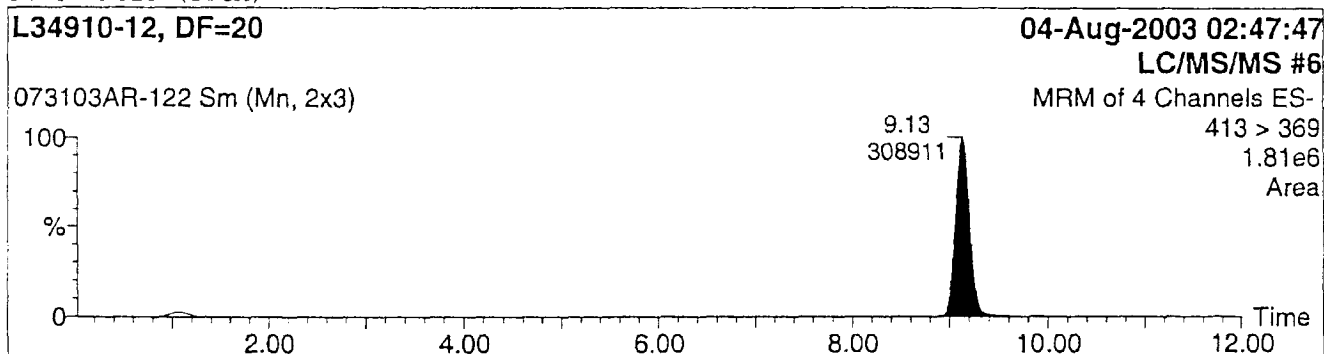
Job Code:

Printed: Wed Aug 06 11:04:02 2003

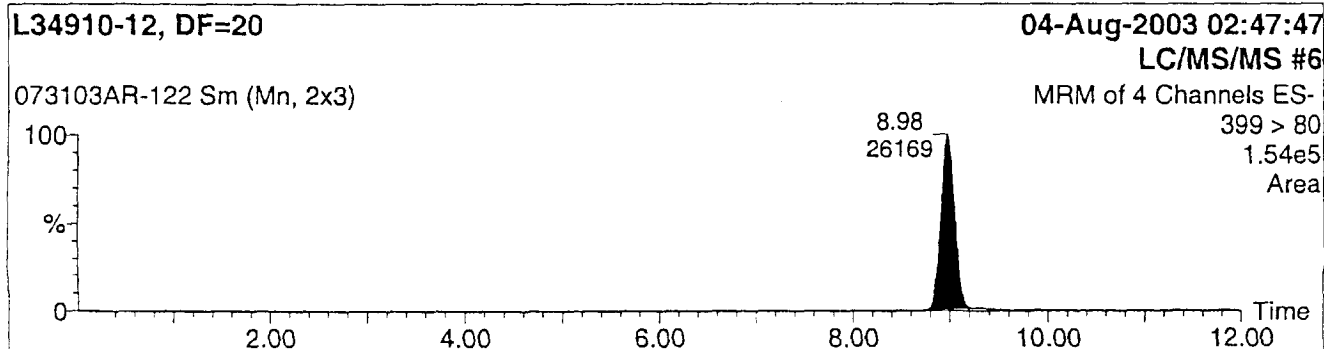
Name: 073103AR-122

Text:

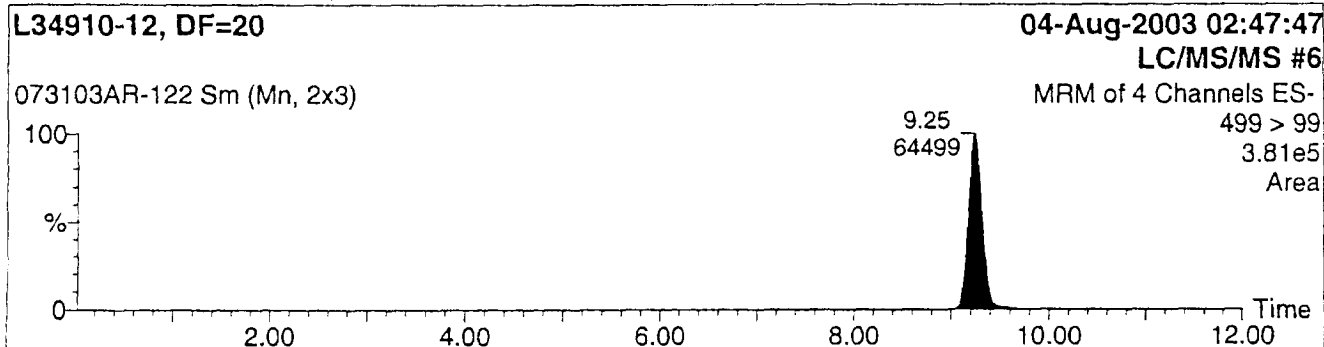
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 44

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-122

Text:

4: PFOSA

L34910-12, DF=20

04-Aug-2003 02:47:47

LC/MS/MS #6

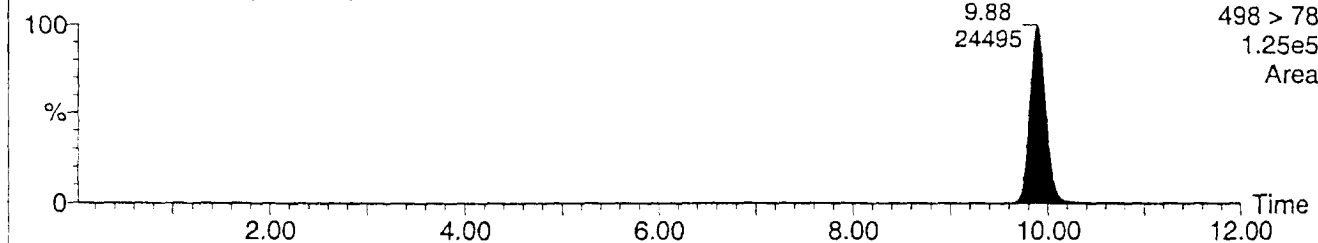
073103AR-122 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.25e5

Area



Quantify Sample Report

Page 45

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

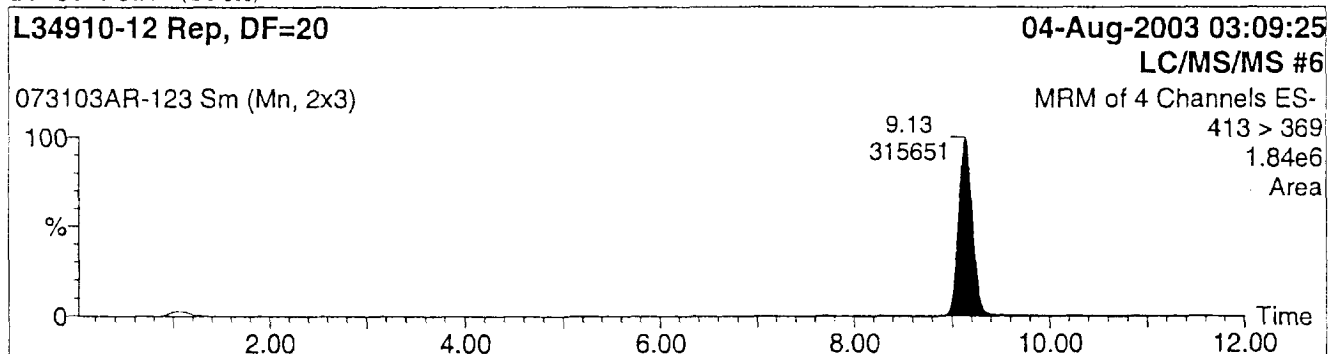
Job Code:

Printed: Wed Aug 06 11:04:02 2003

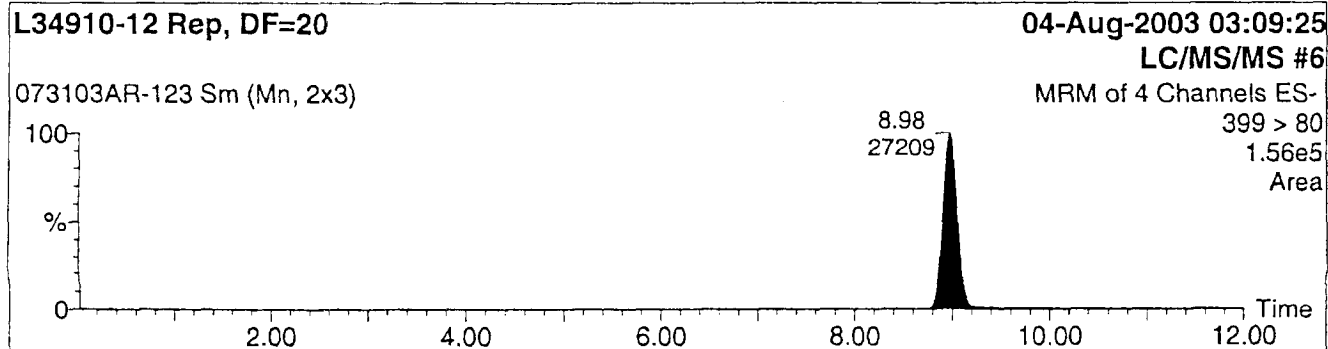
Name: 073103AR-123

Text:

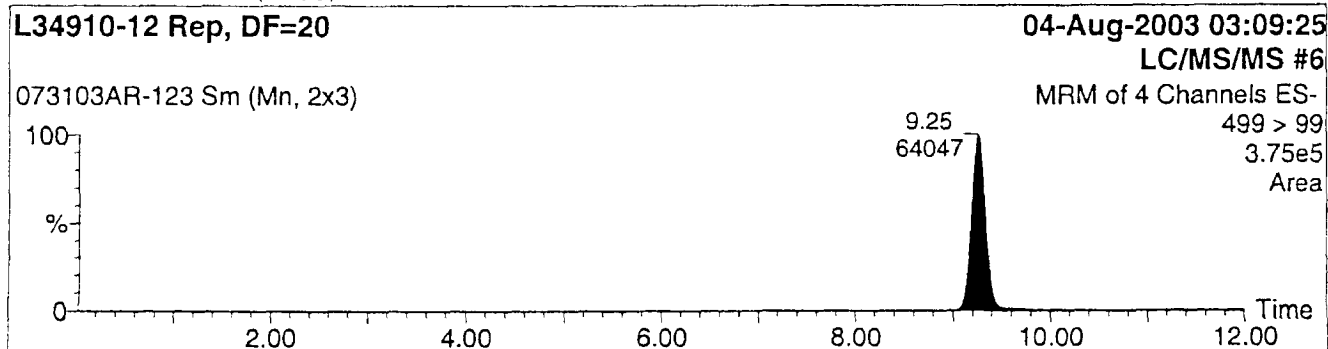
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 46

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-123

Text:

4: PFOSA

L34910-12 Rep, DF=20

04-Aug-2003 03:09:25

LC/MS/MS #6

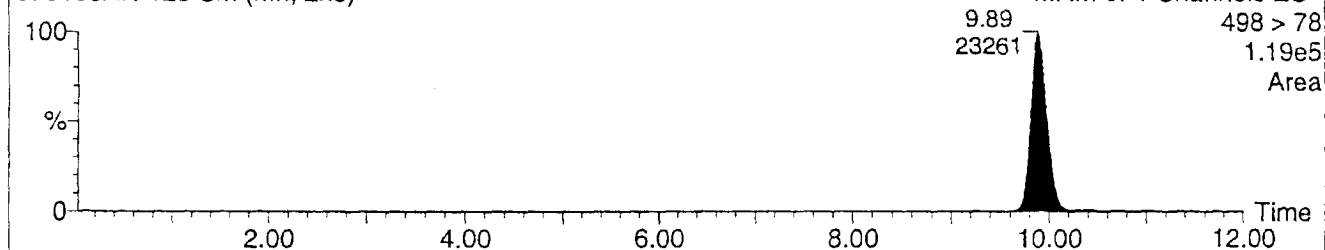
073103AR-123 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.19e5

Area



Quantify Sample Report

Page 47

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-124

Text:

1: C8 Acid (PFOA)

L34910-15, DF=20

04-Aug-2003 03:31:09

LC/MS/MS #6

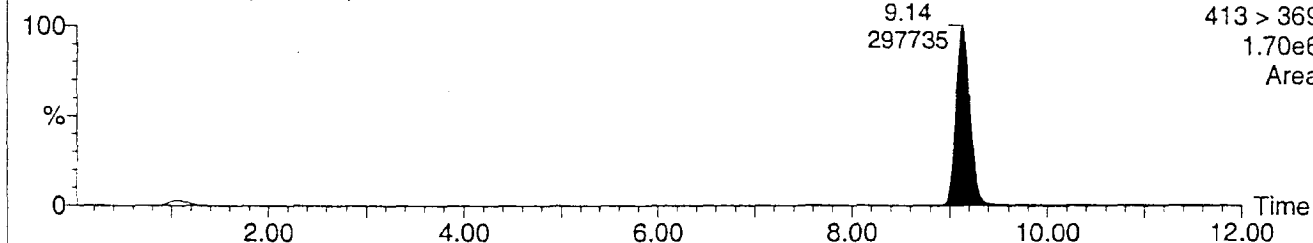
073103AR-124 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.70e6

Area



2: C6 Sulfonate (PFHS)

L34910-15, DF=20

04-Aug-2003 03:31:09

LC/MS/MS #6

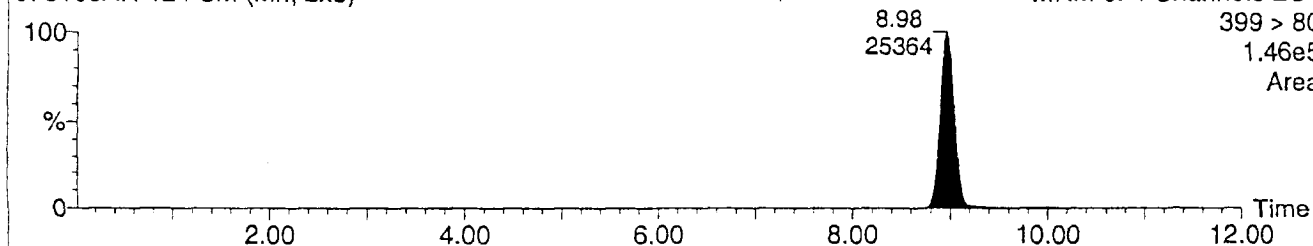
073103AR-124 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.46e5

Area



3: C8 Sulfonate (PFOS)

L34910-15, DF=20

04-Aug-2003 03:31:09

LC/MS/MS #6

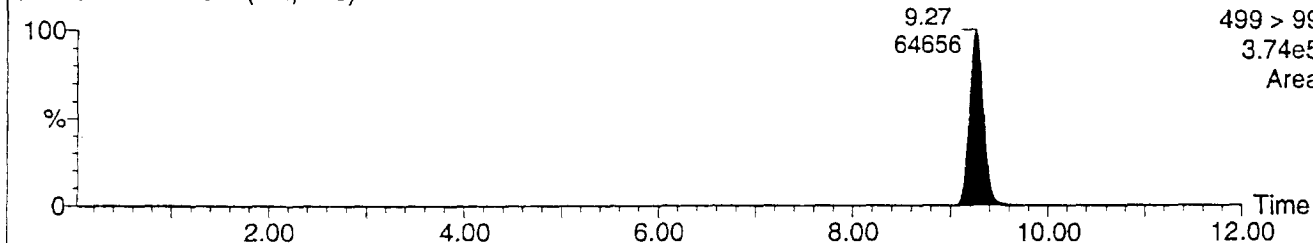
073103AR-124 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

3.74e5

Area



Quantify Sample Report

Page 48

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-124

Text:

4: PFOSA

L34910-15, DF=20

04-Aug-2003 03:31:09

LC/MS/MS #6

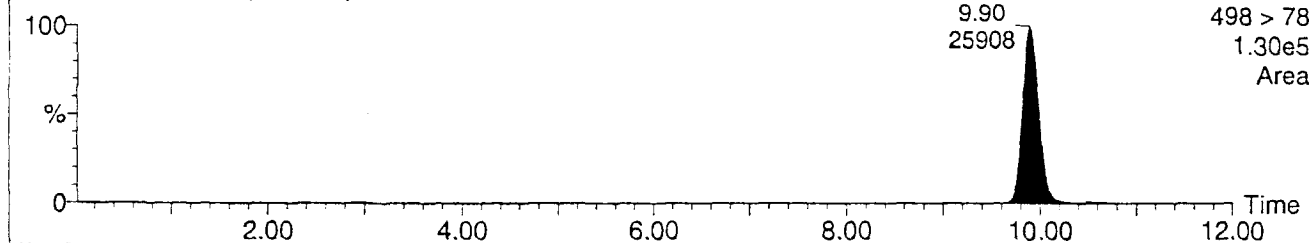
073103AR-124 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.30e5

Area



Quantify Sample Report

Page 49

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-125

Text:

1: C8 Acid (PFOA)

L34910-13, DF=20

04-Aug-2003 03:52:55

LC/MS/MS #6

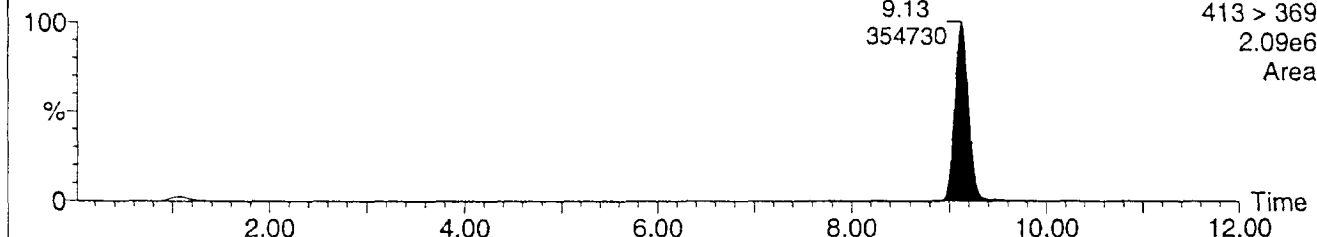
073103AR-125 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

2.09e6

Area



2: C6 Sulfonate (PFHS)

L34910-13, DF=20

04-Aug-2003 03:52:55

LC/MS/MS #6

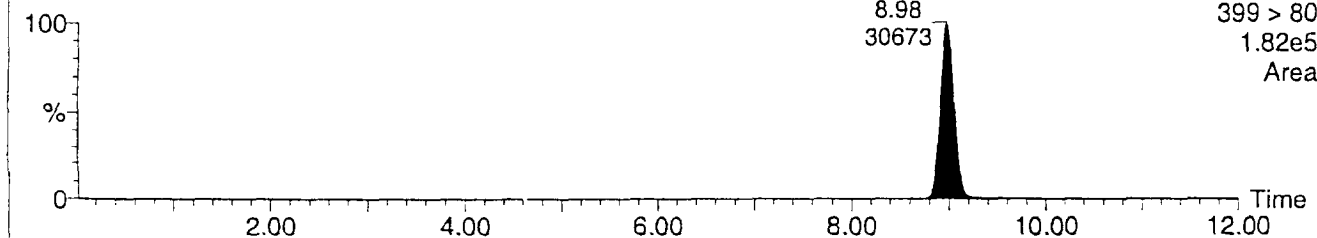
073103AR-125 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.82e5

Area



3: C8 Sulfonate (PFOS)

L34910-13, DF=20

04-Aug-2003 03:52:55

LC/MS/MS #6

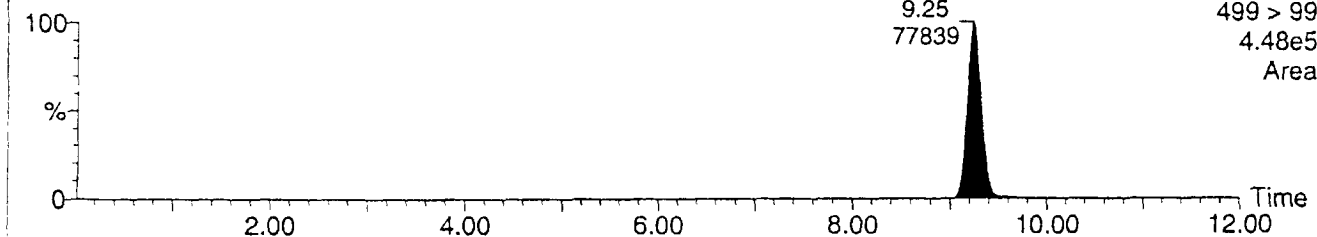
073103AR-125 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

4.48e5

Area



Quantify Sample Report

Page 50

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-125

Text:

4: PFOSA

L34910-13, DF=20

04-Aug-2003 03:52:55

LC/MS/MS #6

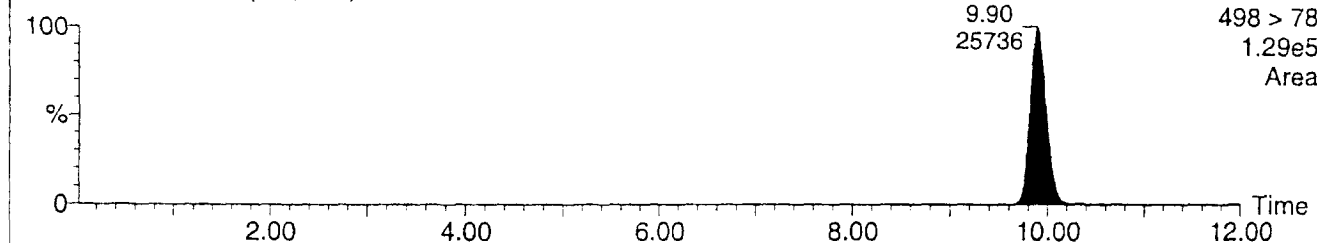
073103AR-125 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.29e5

Area



Quantify Sample Report

Page 51

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-126

Text:

1: C8 Acid (PFOA)

XC072503-4, 250 ng/L Standard

04-Aug-2003 04:14:42

LC/MS/MS #6

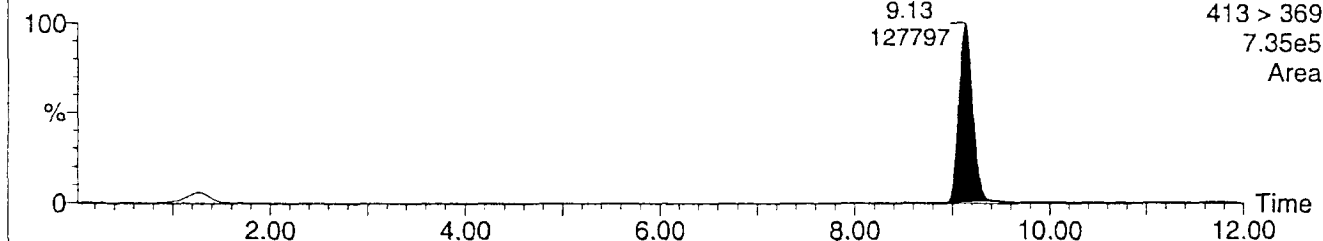
073103AR-126 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

7.35e5

Area



2: C6 Sulfonate (PFHS)

XC072503-4, 250 ng/L Standard

04-Aug-2003 04:14:42

LC/MS/MS #6

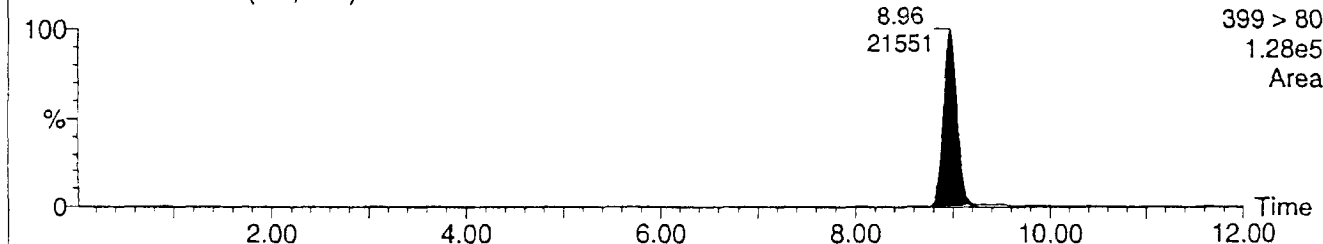
073103AR-126 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.28e5

Area



3: C8 Sulfonate (PFOS)

XC072503-4, 250 ng/L Standard

04-Aug-2003 04:14:42

LC/MS/MS #6

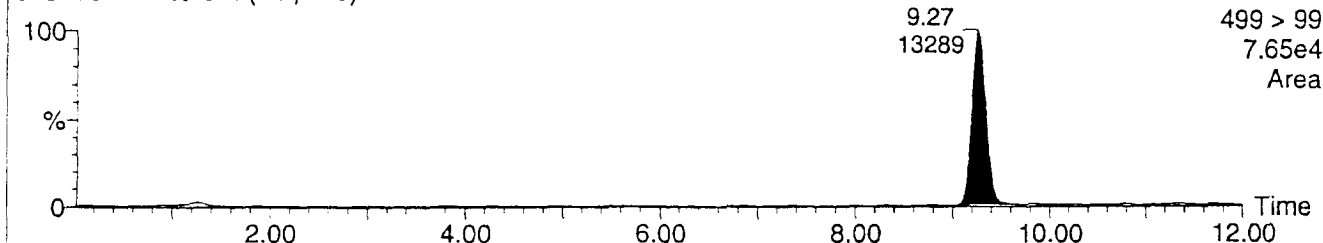
073103AR-126 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

7.65e4

Area



Quantify Sample Report

Page 52

Study No.:L34910, Set No.:073103AR, Ext.Date:07/31/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-126

Text:

4: PFOSA

XC072503-4, 250 ng/L Standard

04-Aug-2003 04:14:42

LC/MS/MS #6

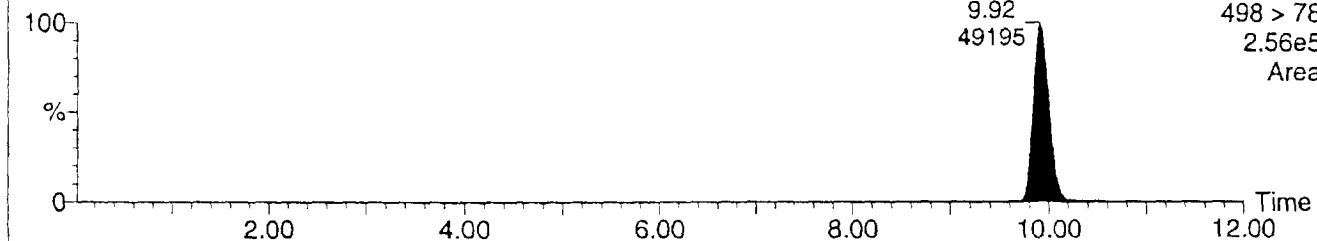
073103AR-126 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

2.56e5

Area



Quantify Sample Report

Page 53

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-127

Text:

1: C8 Acid (PFOA)

L34910-16, DF=100

04-Aug-2003 04:36:30

LC/MS/MS #6

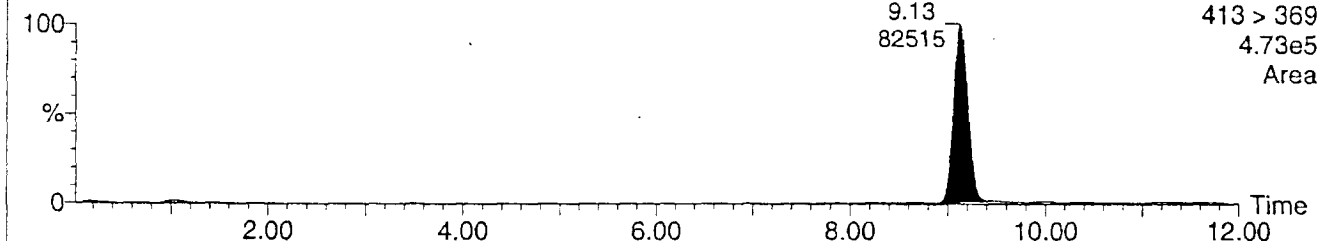
073103AR-127 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

4.73e5

Area



2: C6 Sulfonate (PFHS)

L34910-16, DF=100

04-Aug-2003 04:36:30

LC/MS/MS #6

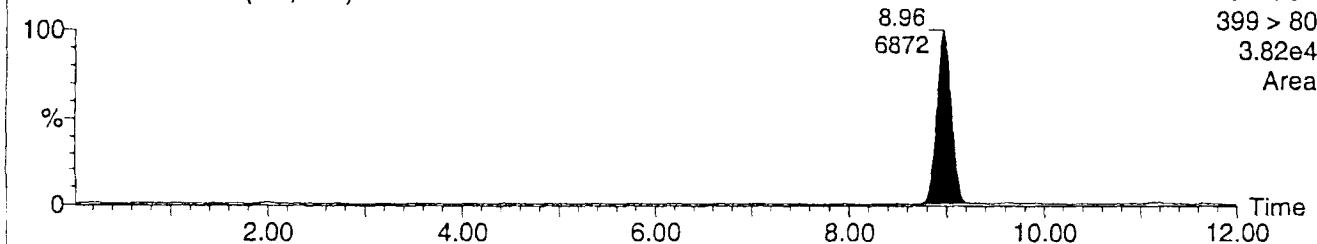
073103AR-127 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

3.82e4

Area



3: C8 Sulfonate (PFOS)

L34910-16, DF=100

04-Aug-2003 04:36:30

LC/MS/MS #6

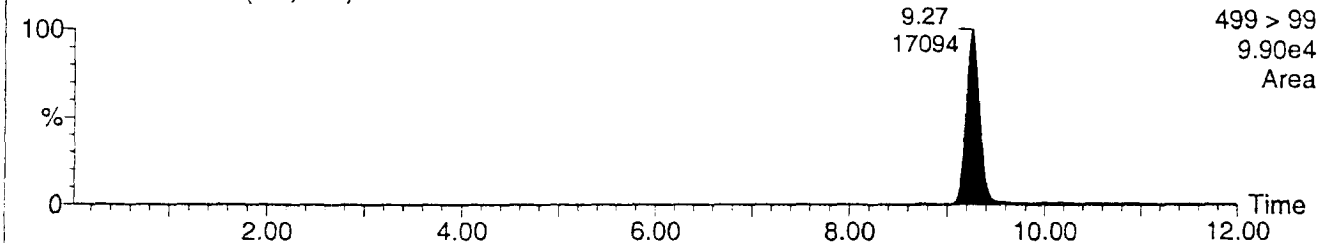
073103AR-127 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

9.90e4

Area



Quantify Sample Report

Page 54

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC
Last modified: Tue Aug 05 06:59:53 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-127

Text:

4: PFOSA

L34910-16, DF=100

04-Aug-2003 04:36:30

LC/MS/MS #6

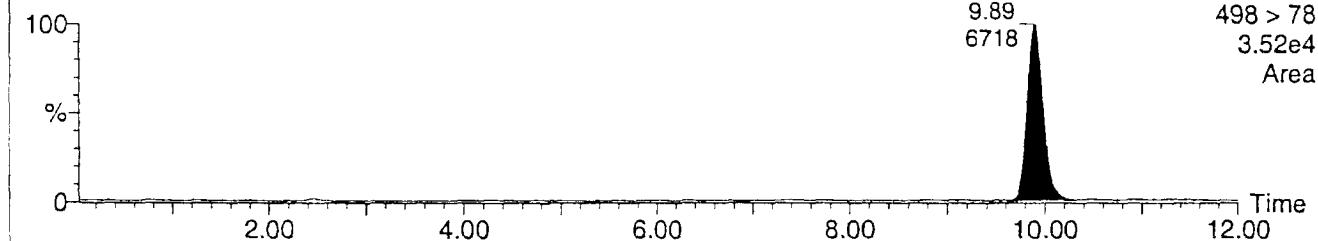
073103AR-127 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

3.52e4

Area



Quantify Sample Report

Page 55

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

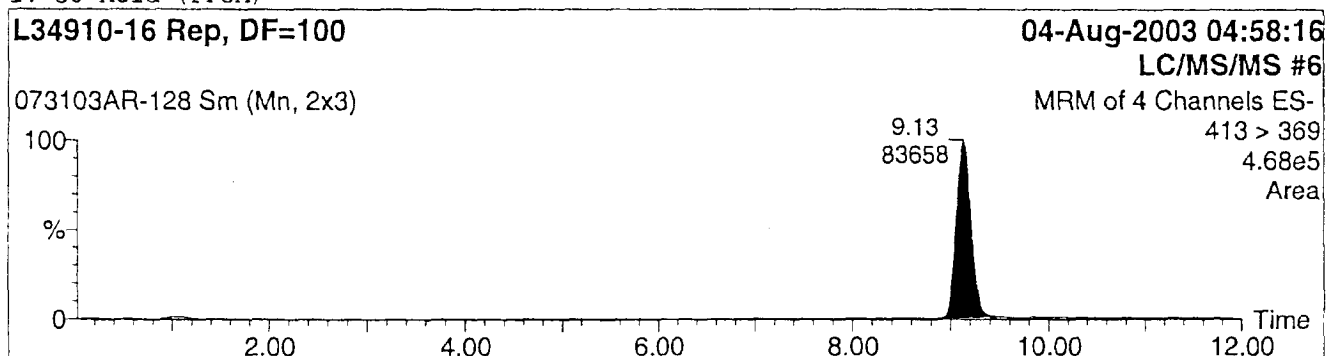
Job Code:

Printed: Wed Aug 06 11:04:02 2003

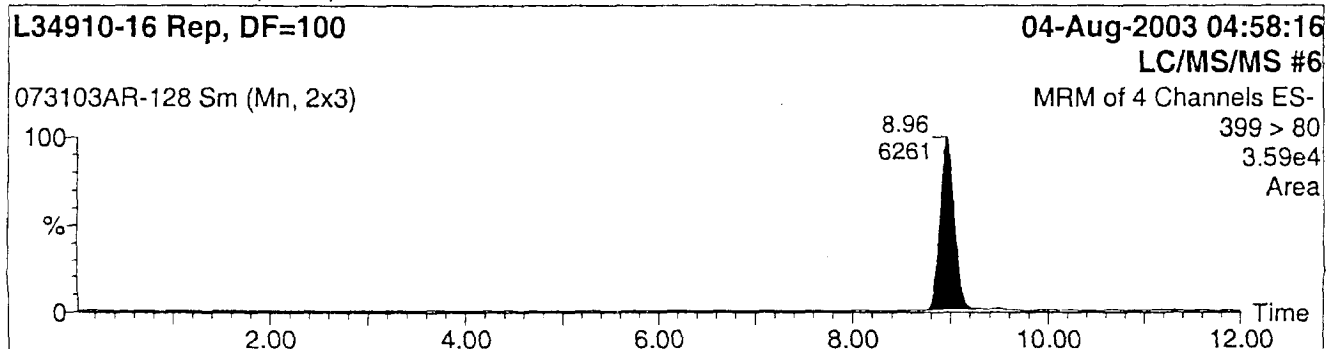
Name: 073103AR-128

Text:

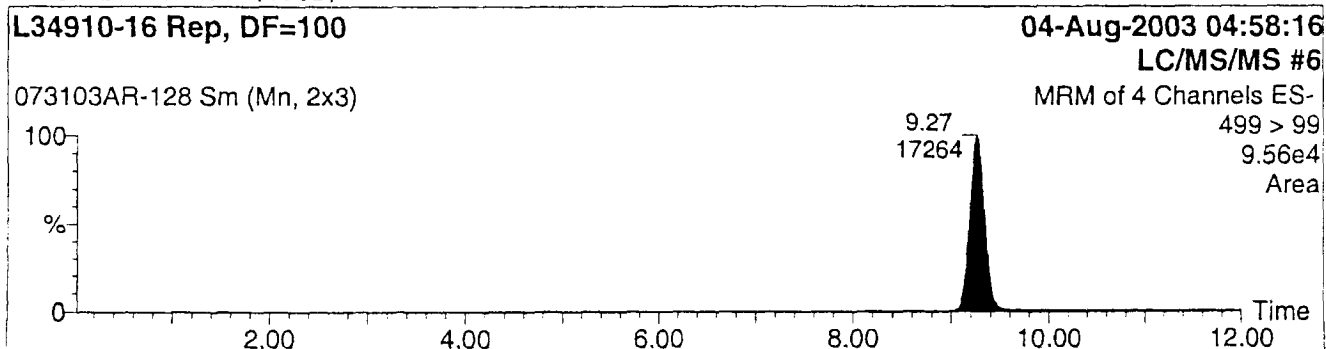
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 56

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-128

Text:

4: PFOSA

L34910-16 Rep, DF=100

04-Aug-2003 04:58:16

LC/MS/MS #6

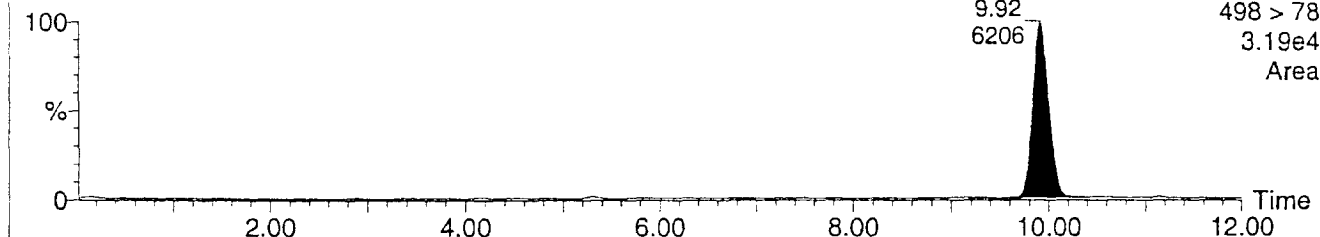
073103AR-128 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

3.19e4

Area



Quantify Sample Report

Page 57

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

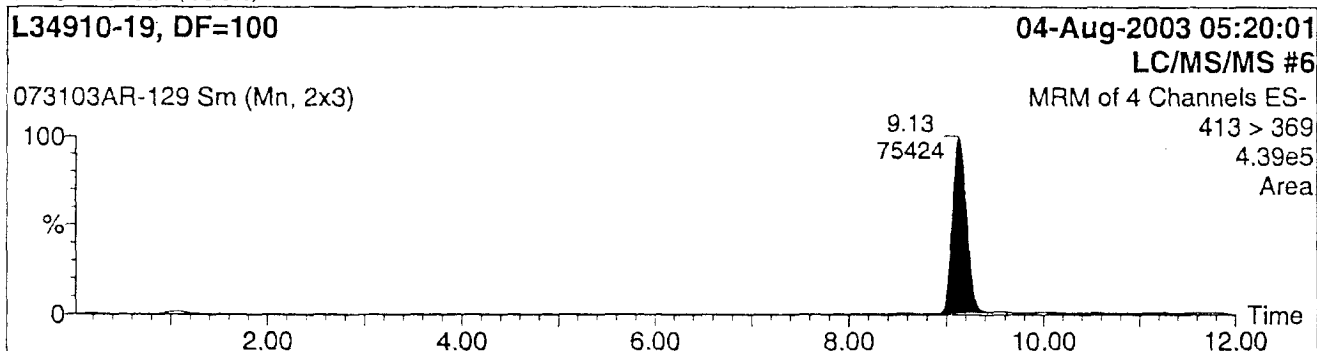
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC
Last modified: Tue Aug 05 06:59:53 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Wed Aug 06 11:04:02 2003

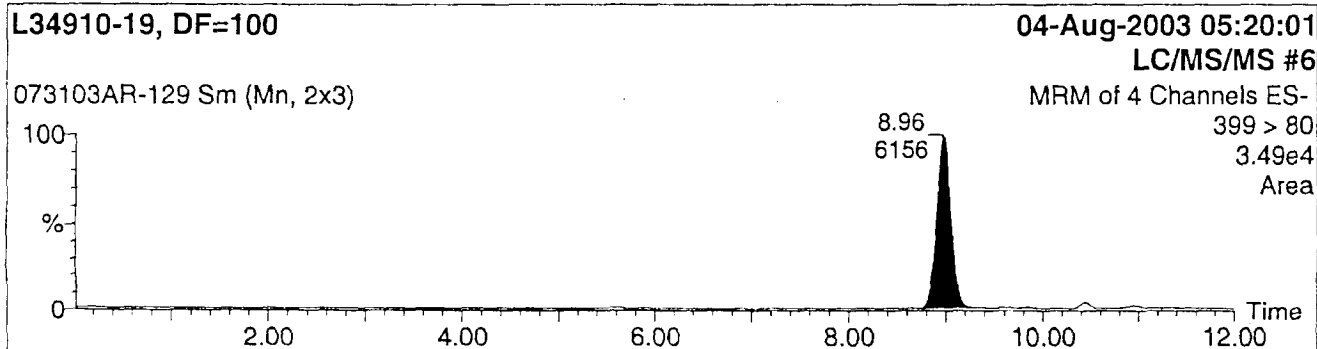
Name: 073103AR-129

Text:

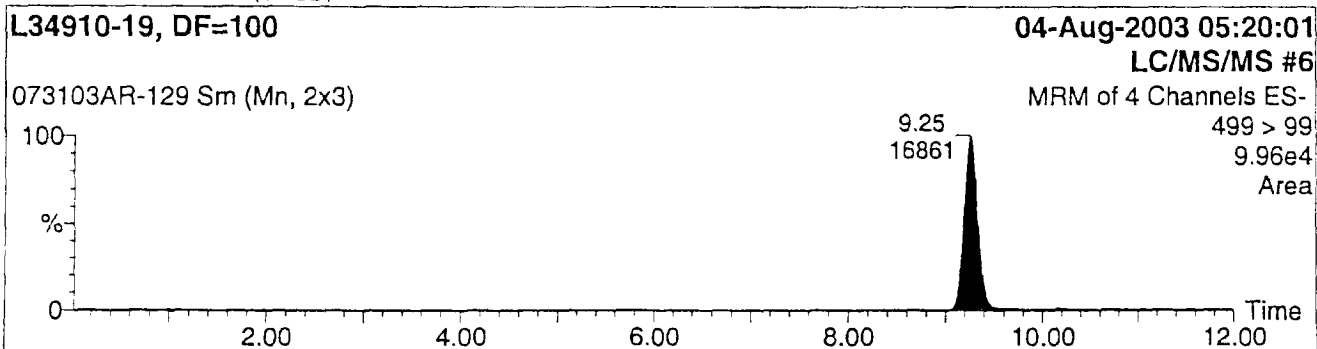
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 58

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

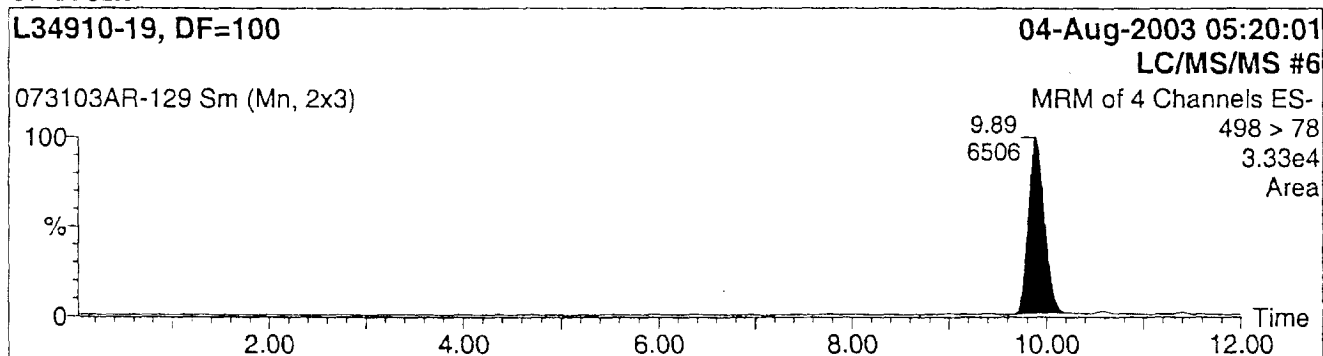
Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-129

Text:

4: PFOSA



Quantify Sample Report

Page 59

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-130

Text:

1: C8 Acid (PFOA)

L34910-17, DF=100

04-Aug-2003 05:41:49

LC/MS/MS #6

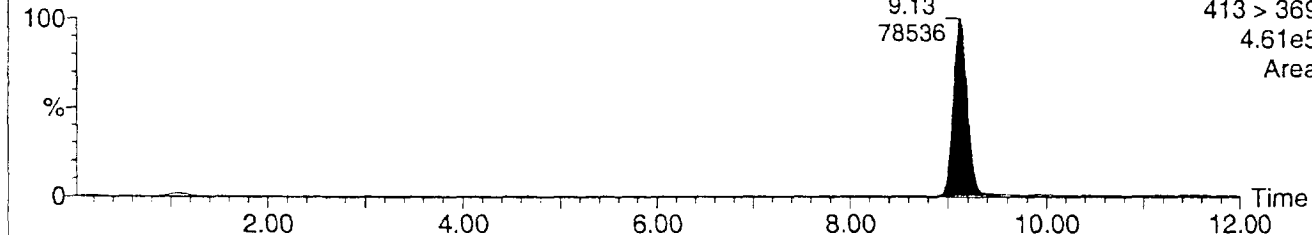
073103AR-130 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

4.61e5

Area



2: C6 Sulfonate (PFHS)

L34910-17, DF=100

04-Aug-2003 05:41:49

LC/MS/MS #6

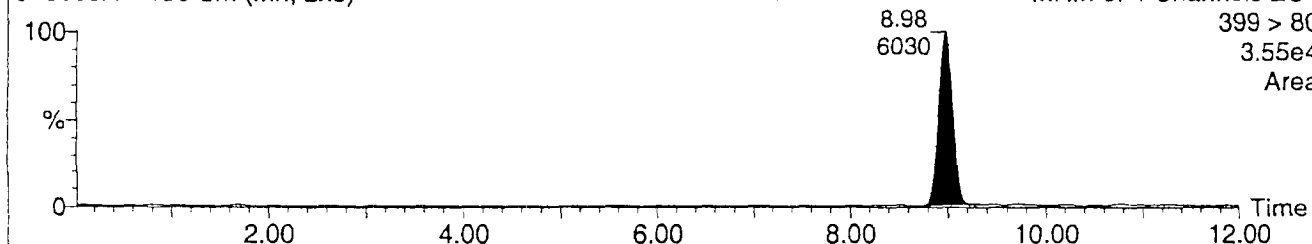
073103AR-130 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

3.55e4

Area



3: C8 Sulfonate (PFOS)

L34910-17, DF=100

04-Aug-2003 05:41:49

LC/MS/MS #6

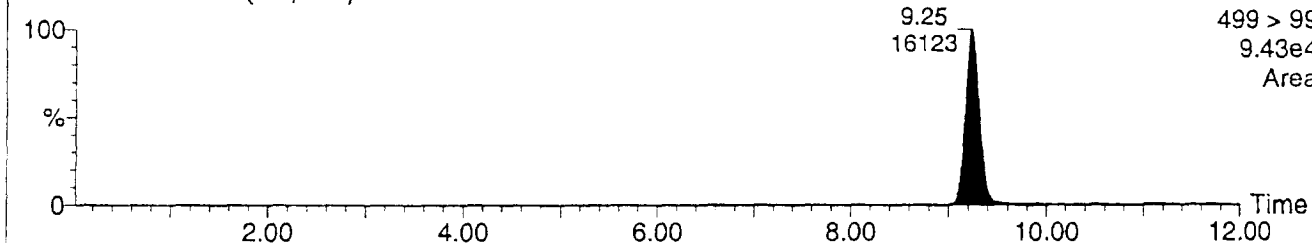
073103AR-130 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

9.43e4

Area



Quantify Sample Report

Page 60

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-130

Text:

4: PFOSA

L34910-17, DF=100

04-Aug-2003 05:41:49

LC/MS/MS #6

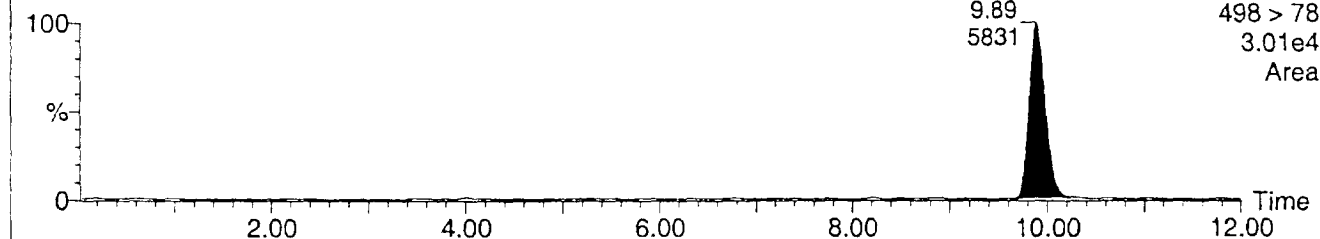
073103AR-130 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

3.01e4

Area



Quantify Sample Report

Page 61

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-131

Text:

1: C8 Acid (PFOA)

XC072503-5, 500 ng/L Standard

04-Aug-2003 06:03:36

LC/MS/MS #6

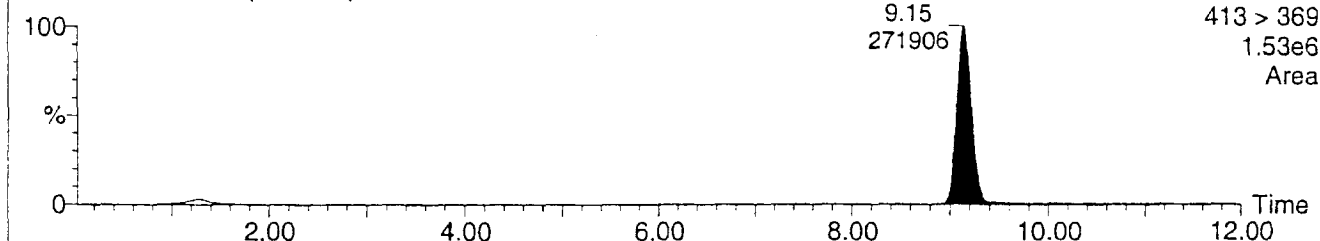
073103AR-131 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.53e6

Area



2: C6 Sulfonate (PFHS)

XC072503-5, 500 ng/L Standard

04-Aug-2003 06:03:36

LC/MS/MS #6

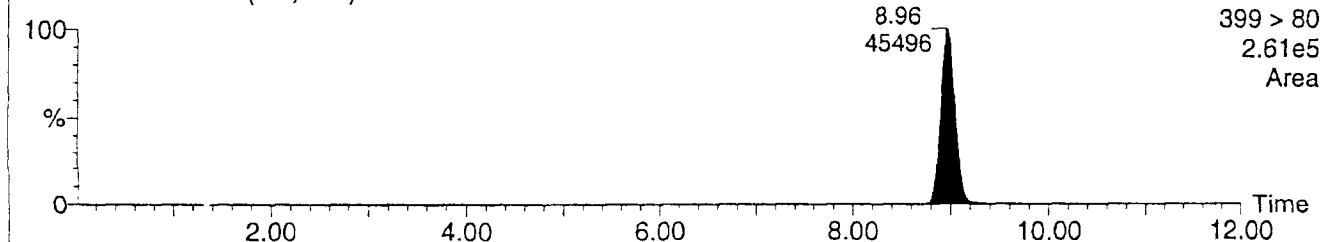
073103AR-131 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

2.61e5

Area



3: C8 Sulfonate (PFOS)

XC072503-5, 500 ng/L Standard

04-Aug-2003 06:03:36

LC/MS/MS #6

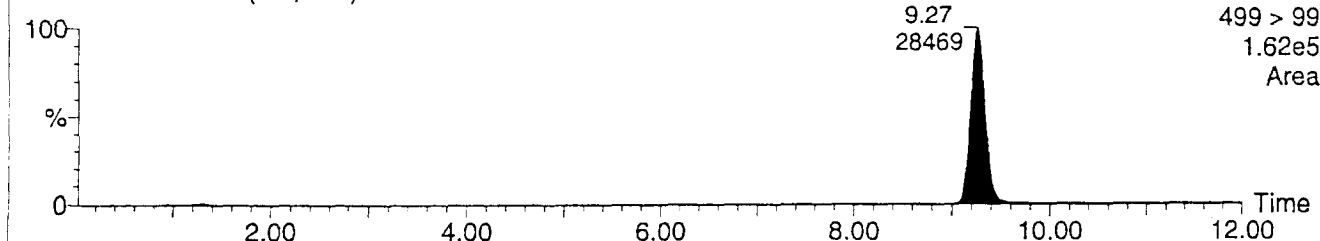
073103AR-131 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.62e5

Area



Quantify Sample Report

Page 62

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-131

Text:

4: PFOSA

XC072503-5, 500 ng/L Standard

04-Aug-2003 06:03:36

LC/MS/MS #6

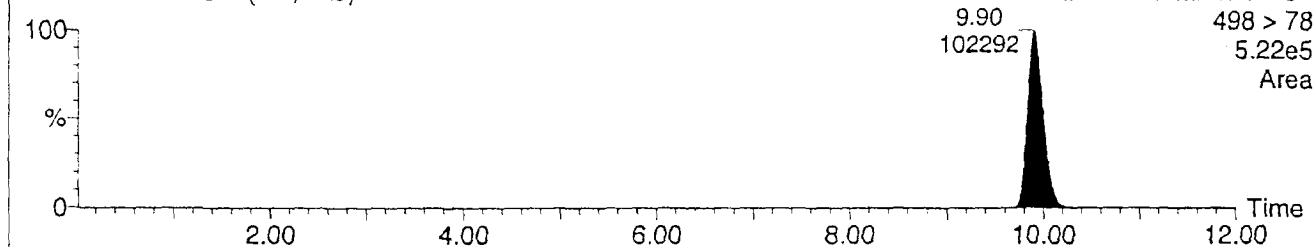
073103AR-131 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

5.22e5

Area



Quantify Sample Report

Page 63

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-132

Text:

1: C8 Acid (PFOA)

L34910-16, DF=20

04-Aug-2003 06:25:24

LC/MS/MS #6

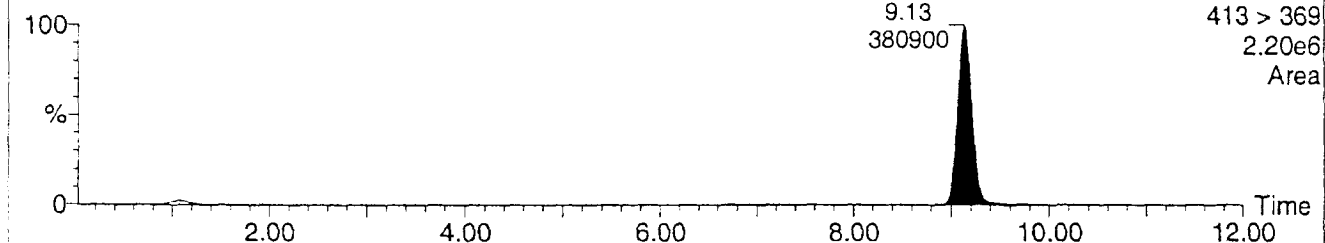
073103AR-132 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

2.20e6

Area



2: C6 Sulfonate (PFHS)

L34910-16, DF=20

04-Aug-2003 06:25:24

LC/MS/MS #6

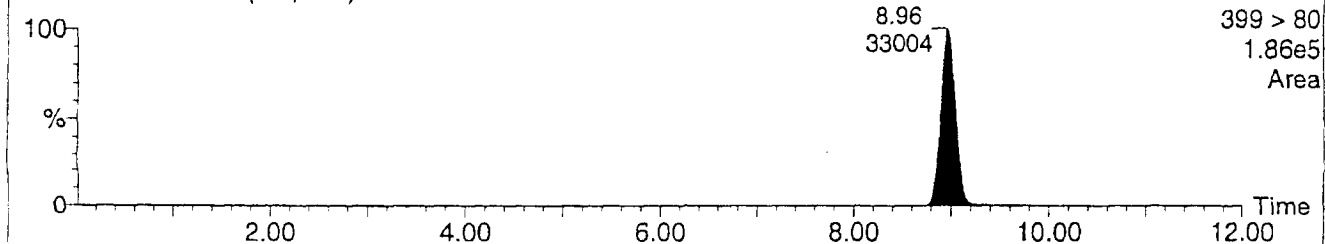
073103AR-132 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.86e5

Area



3: C8 Sulfonate (PFOS)

L34910-16, DF=20

04-Aug-2003 06:25:24

LC/MS/MS #6

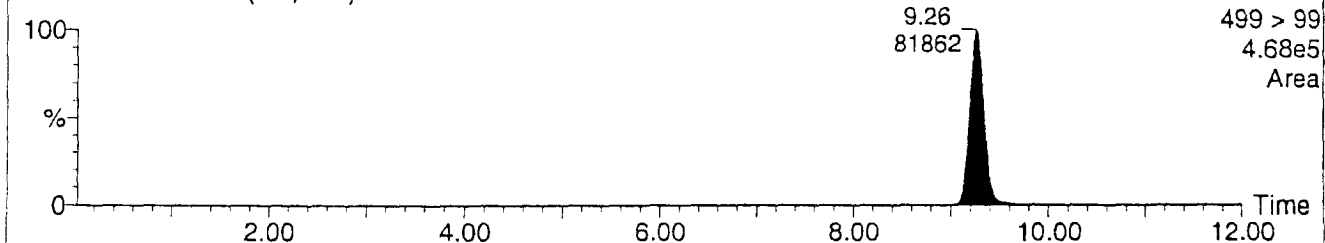
073103AR-132 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

4.68e5

Area



Quantify Sample Report

Page 64

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-132

Text:

4: PFOSA

L34910-16, DF=20

04-Aug-2003 06:25:24

LC/MS/MS #6

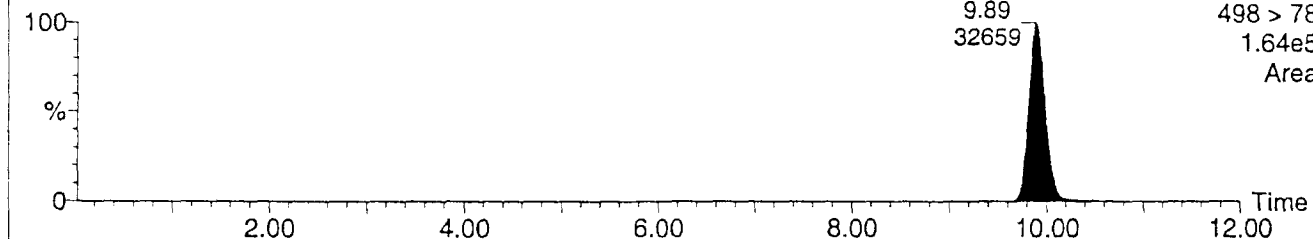
073103AR-132 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.64e5

Area



Quantify Sample Report

Page 65

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-133

Text:

1: C8 Acid (PFOA)

L34910-16 Rep, DF=20

04-Aug-2003 06:47:22

LC/MS/MS #6

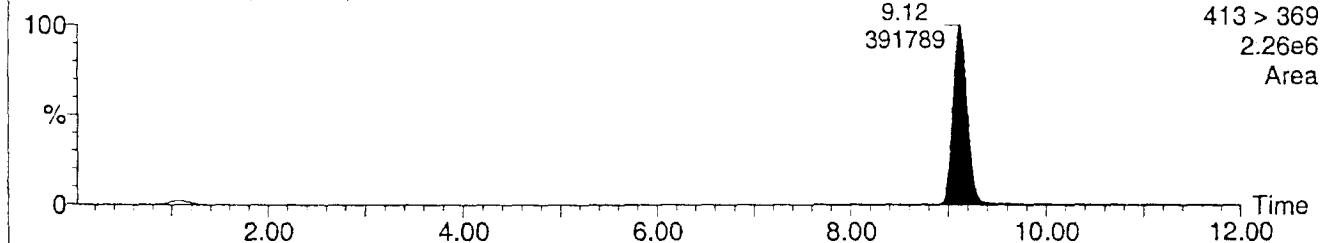
073103AR-133 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

2.26e6

Area



2: C6 Sulfonate (PFHS)

L34910-16 Rep, DF=20

04-Aug-2003 06:47:22

LC/MS/MS #6

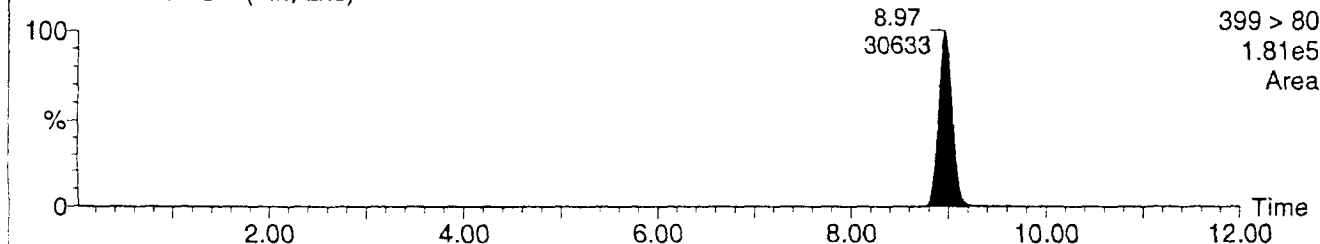
073103AR-133 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.81e5

Area



3: C8 Sulfonate (PFOS)

L34910-16 Rep, DF=20

04-Aug-2003 06:47:22

LC/MS/MS #6

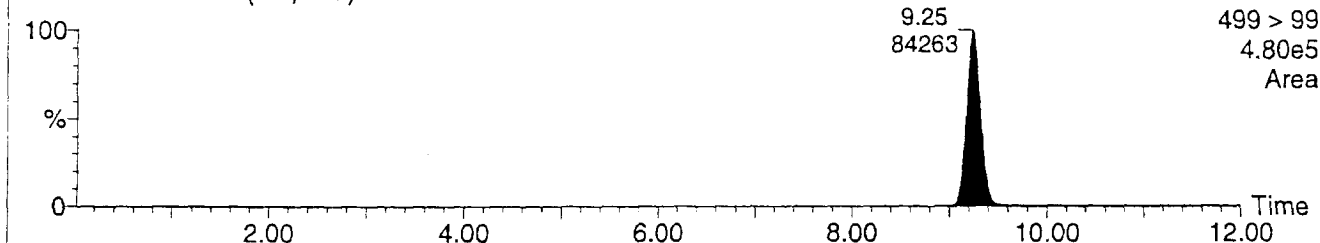
073103AR-133 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

4.80e5

Area



Quantify Sample Report

Page 66

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-133

Text:

4: PFOSA

L34910-16 Rep, DF=20

04-Aug-2003 06:47:22

LC/MS/MS #6

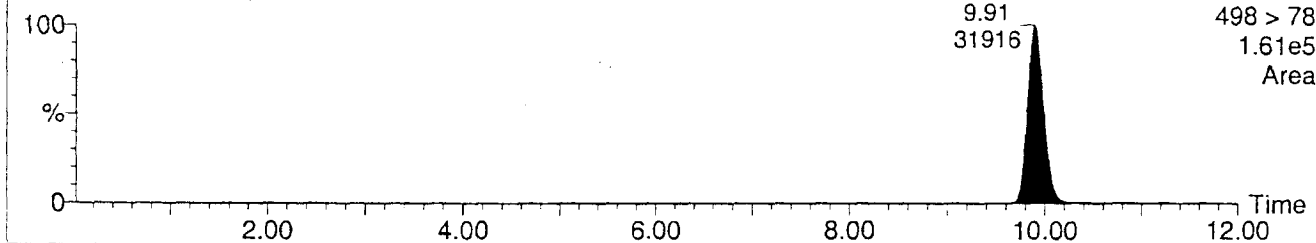
073103AR-133 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.61e5

Area



Quantify Sample Report

Page 67

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-134

Text:

1: C8 Acid (PFOA)

L34910-19, DF=20

04-Aug-2003 07:09:05

LC/MS/MS #6

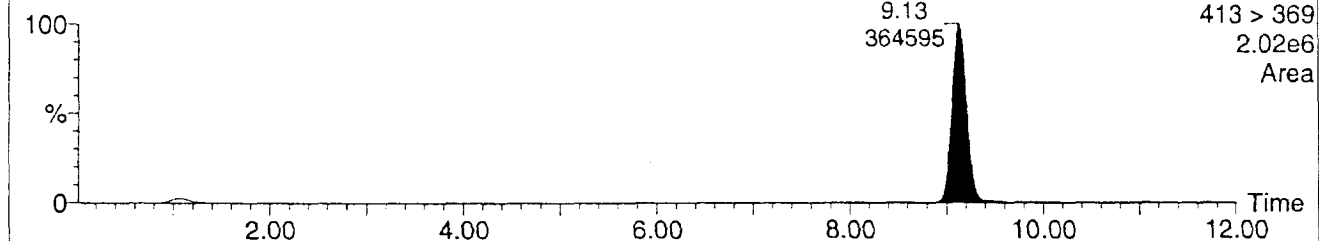
073103AR-134 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

2.02e6

Area



2: C6 Sulfonate (PFHS)

L34910-19, DF=20

04-Aug-2003 07:09:05

LC/MS/MS #6

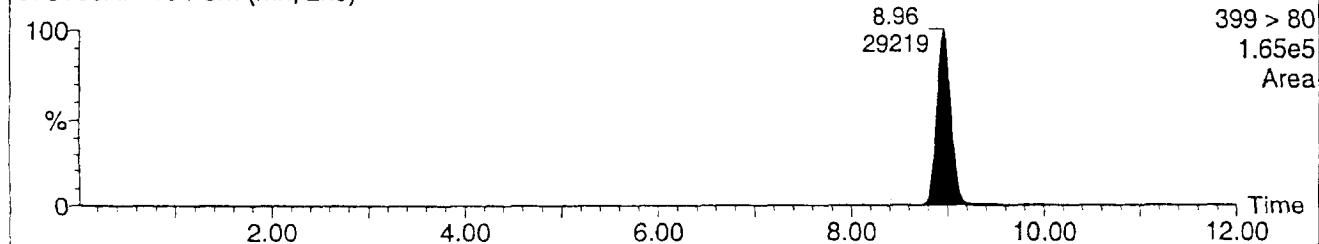
073103AR-134 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.65e5

Area



3: C8 Sulfonate (PFOS)

L34910-19, DF=20

04-Aug-2003 07:09:05

LC/MS/MS #6

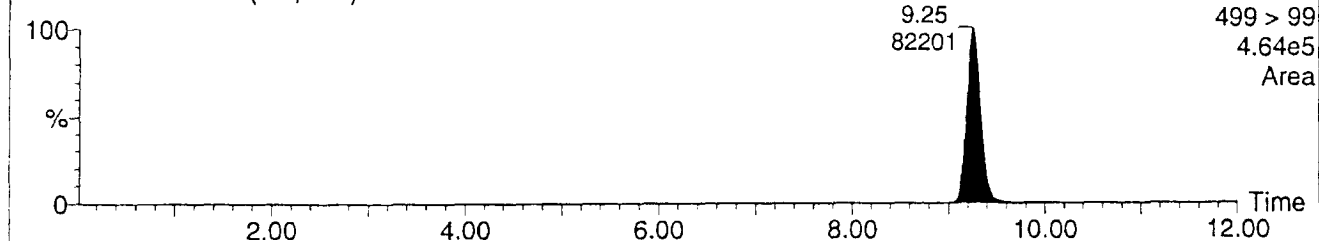
073103AR-134 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

4.64e5

Area



Quantify Sample Report

Page 68

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-134

Text:

4: PFOSA

L34910-19, DF=20

04-Aug-2003 07:09:05

LC/MS/MS #6

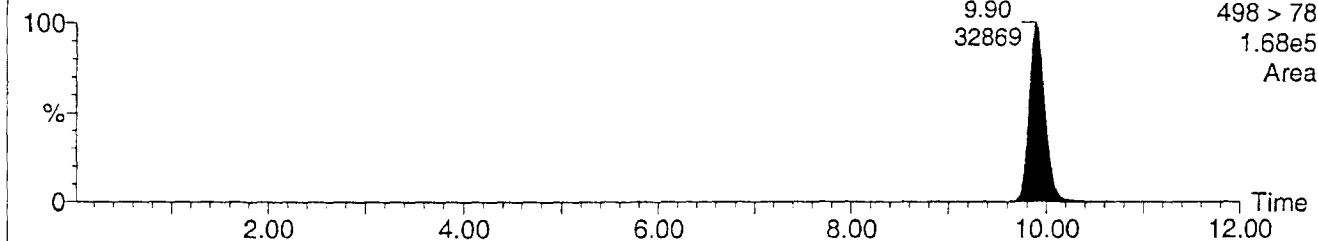
073103AR-134 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.68e5

Area



Quantify Sample Report

Page 69

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-135

Text:

1: C8 Acid (PFOA)

L34910-17, DF=20

04-Aug-2003 07:30:42

LC/MS/MS #6

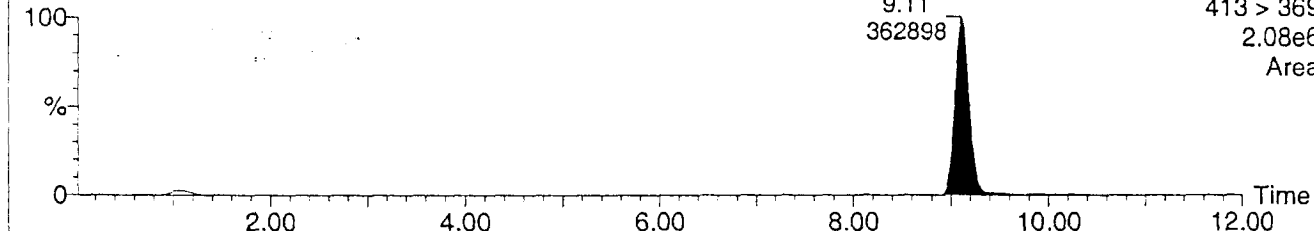
073103AR-135 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

2.08e6

Area



2: C6 Sulfonate (PFHS)

L34910-17, DF=20

04-Aug-2003 07:30:42

LC/MS/MS #6

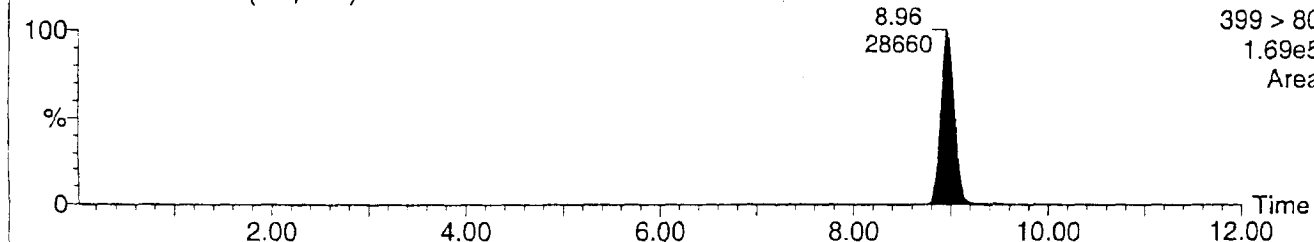
073103AR-135 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.69e5

Area



3: C8 Sulfonate (PFOS)

L34910-17, DF=20

04-Aug-2003 07:30:42

LC/MS/MS #6

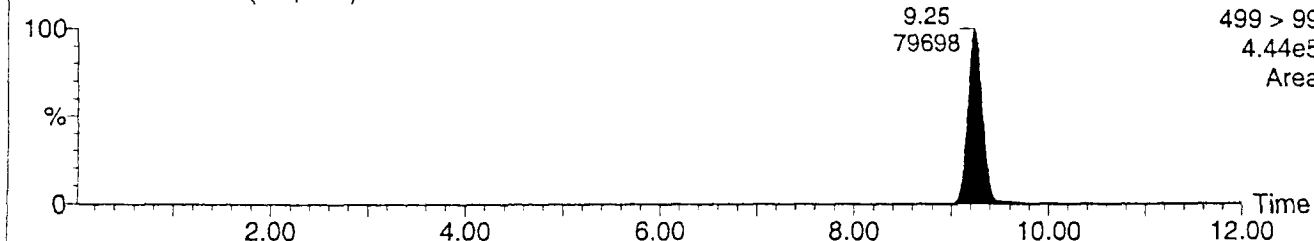
073103AR-135 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

4.44e5

Area



Quantify Sample Report

Page 70

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-135

Text:

4: PFOSA

L34910-17, DF=20

04-Aug-2003 07:30:42

LC/MS/MS #6

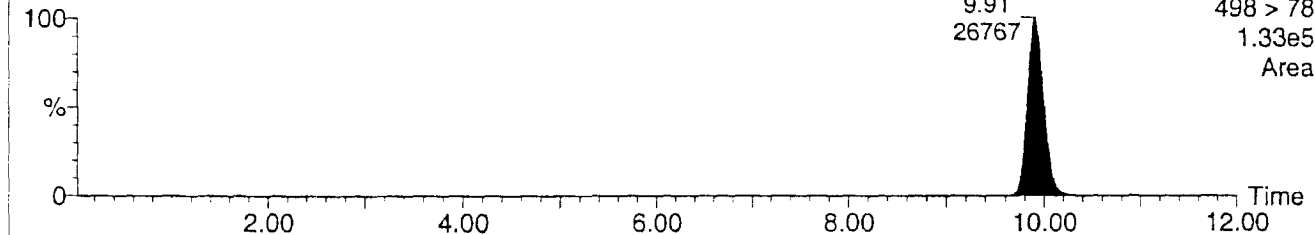
073103AR-135 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.33e5

Area



Quantify Sample Report

Page 71

Study No.:L34910, Set No.:073103AR, Ext.Date:07/31/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-136

Text:

1: C8 Acid (PFOA)

XC072503-6, 1000 ng/L Standard

04-Aug-2003 07:52:21

LC/MS/MS #6

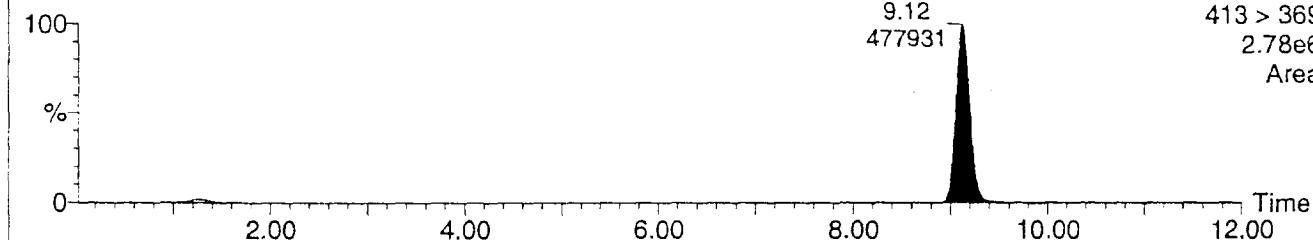
073103AR-136 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

2.78e6

Area



2: C6 Sulfonate (PFHS)

XC072503-6, 1000 ng/L Standard

04-Aug-2003 07:52:21

LC/MS/MS #6

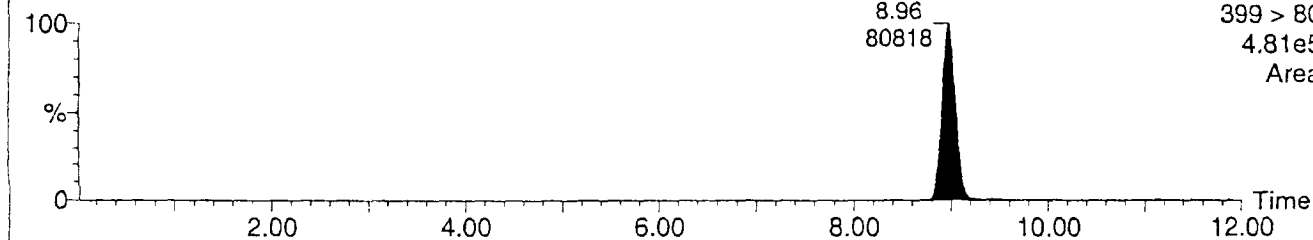
073103AR-136 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

4.81e5

Area



3: C8 Sulfonate (PFOS)

XC072503-6, 1000 ng/L Standard

04-Aug-2003 07:52:21

LC/MS/MS #6

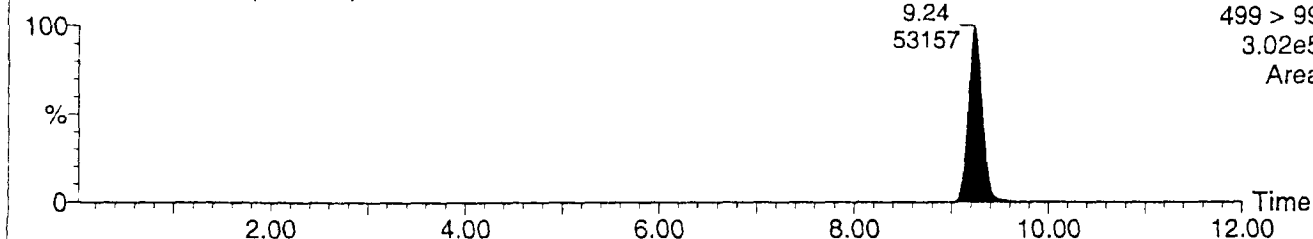
073103AR-136 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

3.02e5

Area



Quantify Sample Report

Page 72

Study No.: L34910, Set No.: 073103AR, Ext. Date: 07/31/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\073103AR Decatur BC

Last modified: Tue Aug 05 06:59:53 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Wed Aug 06 11:04:02 2003

Name: 073103AR-136

Text:

4: PFOSA

XC072503-6, 1000 ng/L Standard

04-Aug-2003 07:52:21

LC/MS/MS #6

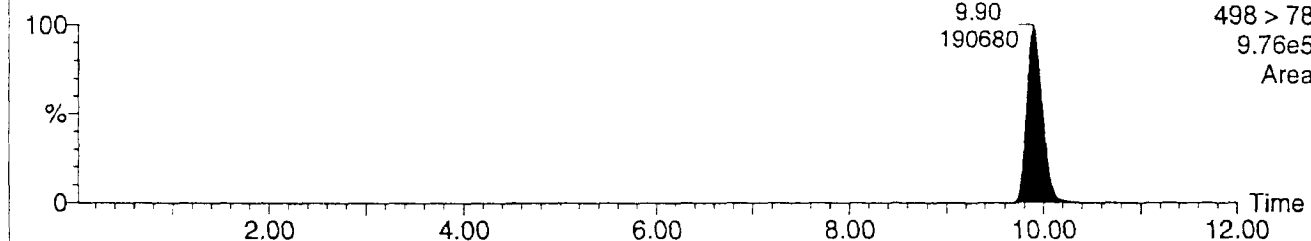
073103AR-136 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

9.76e5

Area



RAW DATA REPORT

Sponsor Study No:	NA	Limit of Quantitation:	50 ppt	Set No:	080603A
Exygen Study No:	L34910	Injection Volume:	15 µL	Analyst:	Karen Risha
Analyte:	PFOS	Matrix:	Water	Instrument Type:	LC/MS/MS Unit # 6
Ions Monitored:	499 -> 99	Sample Volume:	40.0 mL	Extraction Date:	07/31/03 & 08/06/03
Site:	Decatur Baker's Creek	Final Volume:	5.0 mL	Analyzed on:	08/06/03

Exygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)
XC072503-0	-	CS	080603A-1001	0	-	0	-	-	-
XC072503-1	-	CS	080603A-1002	25	-	1238	-	-	-
XC072503-2	-	CS	080603A-1003	50	-	2570	-	-	-
XC072503-3	-	CS	080603A-1004	100	-	4455	-	-	-
XC072503-4	-	CS	080603A-1005	250	-	10551	-	-	-
XC072503-5	-	CS	080603A-1006	500	-	22336	-	-	-
XC072503-6	-	CS	080603A-1007	1000	-	43039	-	-	-
0106020 Control	-	C	080603A-1008	-	1	0	ND	-	-
0106020 Spk A	-	LCS	080603A-1009	-	1	2436	51.3	50	103
0106020 Spk B	-	LCS	080603A-1010	-	1	21693	490	500	98
L34910-12 Spk E	BC2 SW-06	LF	080603A-1011	-	100	22031	49800	25000	95
L34910-16 Spk F	Outfall to River SW-25	LF	080603A-1012	-	200	18543	*	50000	-
L34910-16 Spk F	Outfall to River SW-25	LF	080603A-1013	-	100	35655	80900	50000	99
XC072503-1	-	CS	080603A-1014	25	-	1229	-	-	-
XC072503-2	-	CS	080603A-1015	50	-	2338	-	-	-
XC072503-3	-	CS	080603A-1016	100	-	4928	-	-	-
L34910-1	BC2 SW-04	S	080603A-1017	-	100	5243	11500	-	-
L34910-1 Rep	BC2 SW-04	S	080603A-1018	-	100	5235	11500	-	-
L34910-12	BC2 SW-06	S	080603A-1019	-	100	11612	26100	-	-
L34910-12 Rep	BC2 SW-06	S	080603A-1020	-	100	11877	26700	-	-
L34910-15	BC2 SW-06 Dup	S	080603A-1021	-	100	11205	25100	-	-
L34910-13	BC2 SW-06 Low Spk	FF	080603A-1022	-	100	14257	32100	100	6000+
XC072503-4	-	CS	080603A-1023	250	-	10803	-	-	-
XC072503-5	-	CS	080603A-1024	500	-	23323	-	-	-
XC071003-6	-	CS	080603A-1025	1000	-	44271	-	-	-

Analyte Found (ppt) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{\{\text{analyte found (ppt)} - \text{analyte found in control (ppt)}\} \times 100}{\text{amount added (ppt)}}$

Standard Curve : Linear (1/x weighted)

Intercept = 184.312

Slope = 43.8624

Coef. Of Det. = 0.998804

CS = Calibration standard

C = Control sample

S = Sample

LF = Lab fortified sample

FF = Field fortified sample

LCS = Laboratory Control Spike

CK = Check Standard

ND = Not detected = Response between 0 and 25 ppt

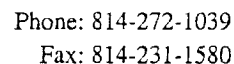
NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by:

BR 08/07/03

*Sample was analyzed with several dilution factors. The appropriate result is reported.

+Sample residue significantly exceeds the spiking level; therefore, an accurate recovery cannot be calculated.



Initials RG

July 26, 2001/6

SAMPLE EXTRACTION AND ANALYSIS TRACKING SHEET

EXYGEN STUDY NUMBER: L34910

MATRIX: Water

METHOD:

ANALYTES: PFIS, PFOS, PFOA and PFOSA

PROTOCOL NUMBER: NA

[illegible]

STEP 1: SPE column clean-up (omitting 40% wash)
STEP 2: Final volume to 5 mL, collected in 15 mL polycarbonate tubes

STEP 3: GC/MS/MS analysis

STEP 4: LC/MS/MS reanalysis.

*Initials and date under each step indicates the personnel that performed this step.

Method of Analysis for the Determination of Perfluorooctane sulfonamide (PFOSA), Perfluorooctane sulfonate (PFOS), and Perfluorooctanoate (POAA) in Water

COMMENTS:

Final extracts stored in refrigerator 32 Initials: bf Date: 08/06/03

July 19, 2001/4

Masslynx - Sample List

Sample List: C:\MASSLYNX\IFluorochemicals PRO\SampleDB\080603A Decatur BC.SPL
Printed: Wed Aug 06 13:15:20 2003

Exygen STUDY NO. L3491D

Page 1

Page Position: (1, 1)

L3491D
080603

Vial	File Name	LIMS ID	Client ID	Sample Description	Matrix	Sample Type	Conc (ng/mL)	Conc B	Conc C	Test ID	DF
1	41 080603A-1001	---	---	XC072503-0, 0 ng/L Standard	---	Standard	0	---	---	0	1
2	42 080603A-1002	---	---	XC072503-1, 25 ng/L Standard	---	Standard	25	---	---	0	1
3	43 080603A-1003	---	---	XC072503-2, 50 ng/L Standard	---	Standard	50	---	---	0	1
4	44 080603A-1004	---	---	XC072503-3, 100 ng/L Standard	---	Standard	100	---	---	0	1
5	45 080603A-1005	---	---	XC072503-4, 250 ng/L Standard	---	Standard	250	---	---	0	1
6	46 080603A-1006	---	---	XC072503-5, 500 ng/L Standard	---	Standard	500	---	---	0	1
7	47 080603A-1007	---	---	XC072503-6, 1000 ng/L Standard	---	Standard	1000	---	---	0	1
8	51 080603A-1008	---	---	0106020 Control	---	Blank	---	---	---	0	1
9	52 080603A-1009	---	---	0106020 Spk A, 50 ng/L	---	QC	100	---	---	0	1
10	53 080603A-1010	---	---	0106020 Spk B, 500 ng/L	---	QC	500	---	---	0	1
11	54 080603A-1011	---	---	L34910-12 Spk E, 25000 ng/L, DF=100	---	QC	25000	---	---	0	100
12	55 080603A-1012	---	---	L34910-16 Spk F, 50000 ng/L, DF=200	---	QC	50000	---	---	0	200
13	56 080603A-1013	---	---	L34910-16 Spk F, 50000 ng/L, DF=100	---	QC	50000	---	---	0	100
14	42 080603A-1014	---	---	XC072503-1, 25 ng/L Standard	---	Standard	25	---	---	0	1
15	43 080603A-1015	---	---	XC072503-2, 50 ng/L Standard	---	Standard	50	---	---	0	1
16	44 080603A-1016	---	---	XC072503-3, 100 ng/L Standard	---	Standard	100	---	---	0	1
17	57 080603A-1017	---	---	L34910-1, DF=100	---	Analyte	---	---	---	0	100
18	58 080603A-1018	---	---	L34910-1 Rep, DF=100	---	Analyte	---	---	---	0	100
19	59 080603A-1019	---	---	L34910-12, DF=100	---	Analyte	---	---	---	0	100
20	60 080603A-1020	---	---	L34910-12 Rep, DF=100	---	Analyte	---	---	---	0	100
21	61 080603A-1021	---	---	L34910-15, DF=100	---	Analyte	---	---	---	0	100
22	62 080603A-1022	---	---	L34910-13, DF=100	---	QC	100	---	---	0	100
23	45 080603A-1023	---	---	XC072503-4, 250 ng/L Standard	---	Standard	250	---	---	0	1
24	46 080603A-1024	---	---	XC072503-5, 500 ng/L Standard	---	Standard	500	---	---	0	1
25	47 080603A-1025	---	---	XC072503-6, 1000 ng/L Standard	---	Standard	1000	---	---	0	1

Masslynx - Sample List

Sample List: C:\MASSLYNX\F\fluorochemicals\PRO\Sample\DB\080603A Decatur BC.SPL
 Printed: Wed Aug 06 13:15:20 2003

Exygen STUDY NO. 134910

Page 2

Page Position: (2, 1)

	MS Method	HPLC Method	MS Tune File	Inj. Volume
1	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
2	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
3	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
4	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
5	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
6	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
7	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
8	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
9	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
10	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
11	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
12	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
13	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
14	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
15	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
16	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
17	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
18	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
19	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
20	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
21	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
22	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
23	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
24	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
25	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15

LC/MS/MS SYSTEM AND OPERATING CONDITIONS

Sponsor Protocol No: NA

Exygen Study No: L34910

Instrument: Micromass Quattro Ultima (LC/MS/MS Unit #6)

Computer: COMPAQ Professional Workstation AP200

Software: Microsoft Windows NT: Version 4 Build 1381: Service Pack 5
Micromass Limited: MassLynx 3.4 Build 004

HPLC Equipment: Hewlett Packard (HP) Series 1100
HP Bin Pump HP Vacuum Degasser
HP Autosampler HP Column Oven

HPLC Column: Genesis C-8, 5 cm x 2.1 mm i.d. x 4 μ (Exygen ID: 74A)
(JONESCHROMATOGRAPHY: Part No. FK5962E)

Mobile Phase (A): 2 mM Ammonium Acetate in Type I Water

Mobile Phase (B): Methanol

Analyst: Karen Risha
Exygen Research
3058 Research Drive, State College, PA 16801
Phone: (814) 272-1039 FAX: (814) 231-1580

KR 06/06/03

NOTE: The next 3 pages are computer generated printouts from the masslynx software program. The pages contain the instrument settings used for the analysis of this data set.

All Handwritten Peak ID's by: *KR 06/07/03*

Scanning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUDE\C6 C8 SULF C8 ACID PFOSA

Last Modified: Thu Jul 31 16:23:50 2003

Printed: Wed Aug 06 13:15:53 2003

Handwritten: 8/6/03

Solvent Delay (mins) : 0.00

Analog Channel 4 : Unused

Function : 1 MRM of 4 Mass Pairs (ESP-)

Inter Channel Delay (Secs) : 0.03

Span (Daltons) : 0.00

Start Time (Mins) : 0.00

End Time (Mins) : 12.00

Repeats : 1

	Channel	Parent	Daughter	Dwell (Secs)	Coll Energy (eV)	Cone (V)
1		399.00	80.00	0.20	35	50
2		413.00	369.00	0.20	10	10
3		498.00	78.00	0.20	30	50
4		499.00	99.00	0.20	40	30

Method Report

Page 1

Method File:
Last Modified:

C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUDB\pfhs water
Wednesday, August 06, 2003 13:15:26

Printed:

Wednesday, August 06, 2003 13:16:00

KJ08/06/03

HP1100 LC Pump Initial Conditions

Solvents

A%	90.0
B%	10.0
C%	0.0
D%	0.0

Flow (ml/min)	0.300
Stop Time (mins)	20.0
Min Pressure (bar)	0
Max Pressure (bar)	400
Oven Temperature Left (°C)	35.0
Oven Temperature Right (°C)	35.0

HP1100 LC Pump Gradient Timetable

The gradient Timetable contains 8 entries which are :

Time	A%	B%	C%	D%	Flow	Pressure
0.00	90.0	10.0	0.0	0.0	0.300	400
2.00	90.0	10.0	0.0	0.0	0.300	400
5.00	10.0	90.0	0.0	0.0	0.300	400
9.00	10.0	90.0	0.0	0.0	0.300	400
9.50	0.0	100.0	0.0	0.0	0.300	400
14.00	0.0	100.0	0.0	0.0	0.300	400
14.50	90.0	10.0	0.0	0.0	0.300	400
20.00	90.0	10.0	0.0	0.0	0.300	400

HP1100 LC Pump External Event Timetable

The Timetable contains 6 entries which are :

Time	Column Switch	Contact1	Contact2	Contact3	Contact4
Initial	Off	Off	Off	Off	Off
0.00	Off	On	Off	Off	Off
0.05	Off	Off	Off	Off	Off
0.10	Off	Off	On	Off	Off
11.90	Off	Off	Off	On	Off
12.00	Off	Off	Off	Off	Off

HP1100 Autosampler Initial Conditions

Draw Speed	200.0
Eject Speed (µl/min)	200
Draw Position (mm)	0.50
Stop Time (mins)	20.00
Injection Volume (µl)	15.0
Vial Number	82

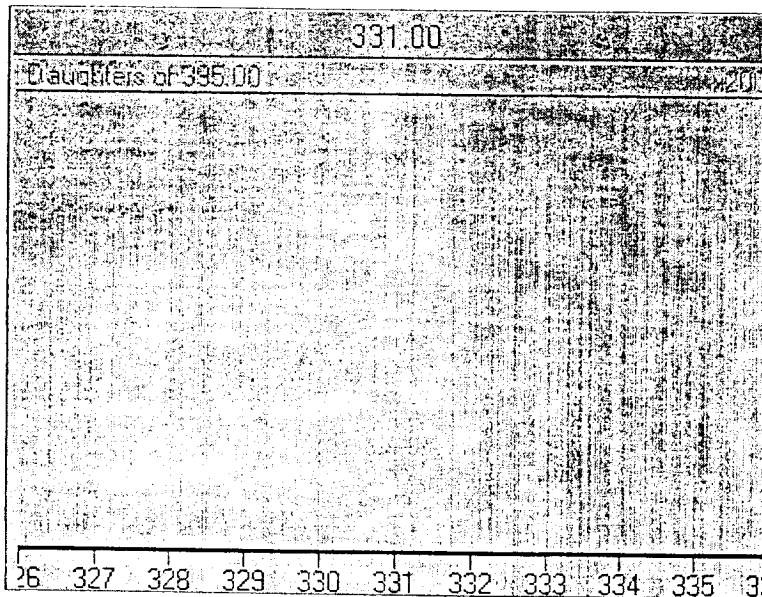
Tuning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQADB\FLUOROCHEMS

Printed: Wed Aug 06 13:19:13 2003

RF 08/06/03



Dau 395.00

SOURCE (ESP-)	Set	Rdbk	Analyser	Set	Rdbk
Capillary	3.00	-2.93	LM Res 1	14.0	
Cone	20	-43	HM Res 1	14.0	
Hexapole 1	0.0		IEnergy 1	1.0	
Aperture 1	0.0		Entrance	-2	24
Hexapole 2	0.0		Collision	15	29
Source Block Temp.	100	99	Exit	2	27
Desolvation Temp.	300	299	LM Res 2	14.0	
			HM Res 2	14.0	
			IEnergy 2	2.0	
			Multiplier	650	-646
Pressures	Rdbk		Gas Flows	Rdbk	
Analyser Vacuum	OFF		Cone Gas	132.1	
Gas Cell	4.0e-3		Desolvation	770.3	

Quantify Calibration Report

Page 1

Study No.: L34910, Set No.: 080603A, Ext. Date: 07/31 & 08/06/03, Analyst: K. Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\080603A Decatur BC

Last modified: Thu Aug 07 12:27:57 2003

Printed: Thu Aug 07 12:49:55 2003

08/07/03

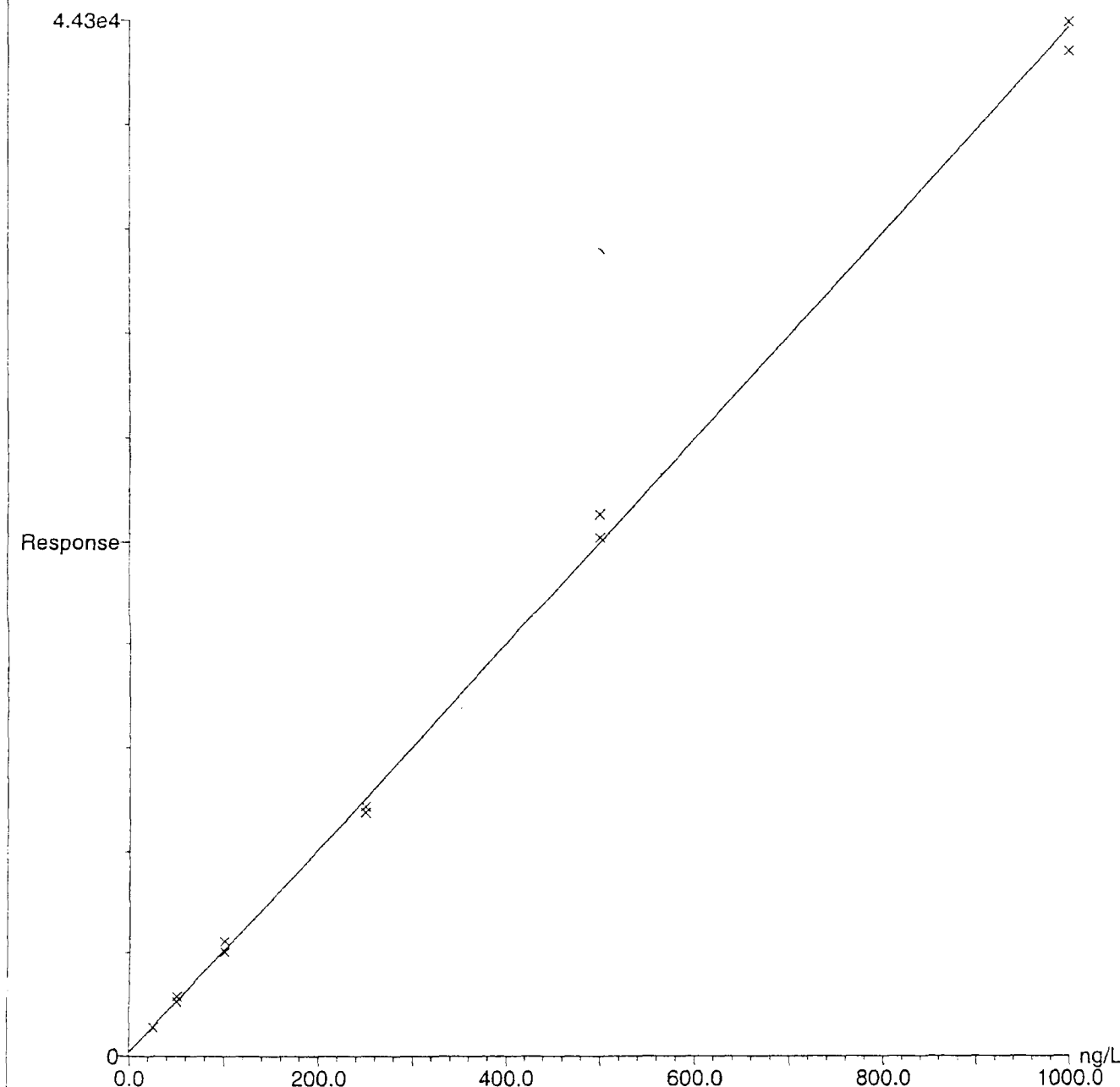
Compound 1 name: C8 Sulfonate (PFOS)

Coefficient of Determination: 0.998804

Calibration curve: $43.8624 * x + 184.312$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Sample Report

Page 1

Study No.: L34910, Set No.: 080603A, Ext. Date: 07/31 & 08/06/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Initials SR

Date 08/07/03

Run# 080603A-1001 To 080603A-1025

Name: 080603A-1001

Text:

1: C8 Sulfonate (PFOS)

XC072503-0, 0 ng/L Standard

06-Aug-2003 14:57:47

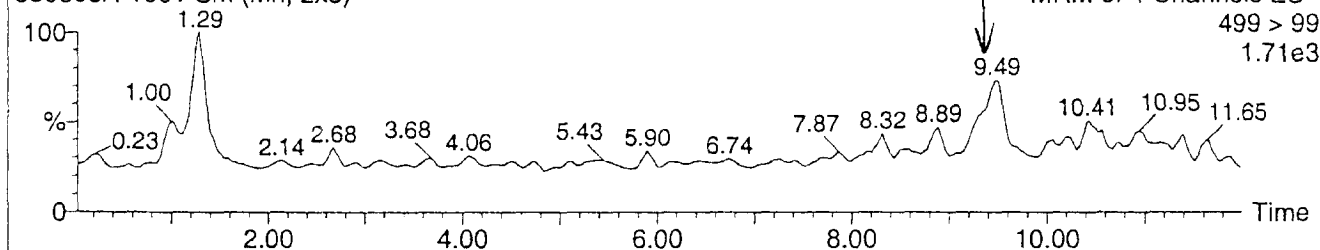
LC/MS/MS #6

080603A-1001 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.71e3



Quantify Sample Report

Page 2

Study No.: L34910, Set No.: 080603A, Ext. Date: 07/31 & 08/06/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1002

Text:

1: C8 Sulfonate (PFOS)

XC072503-1, 25 ng/L Standard

06-Aug-2003 15:19:26

LC/MS/MS #6

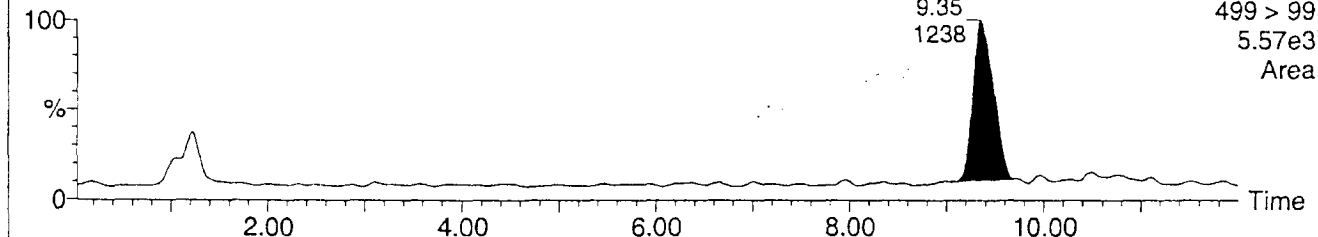
080603A-1002 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

5.57e3

Area



Quantify Sample Report

Page 3

Study No.:L34910, Set No.:080603A, Ext.Date:07/31 & 08/06/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1003

Text:

1: C8 Sulfonate (PFOS)

XC072503-2, 50 ng/L Standard

06-Aug-2003 15:41:07

LC/MS/MS #6

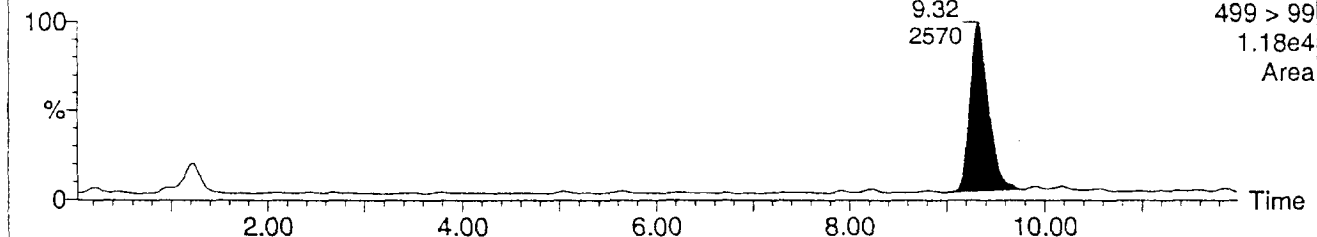
080603A-1003 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.18e4

Area



Quantify Sample Report

Page 4

Study No.: L34910, Set No.: 080603A, Ext. Date: 07/31 & 08/06/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1004

Text:

1: C8 Sulfonate (PFOS)

XC072503-3, 100 ng/L Standard

06-Aug-2003 16:02:51

LC/MS/MS #6

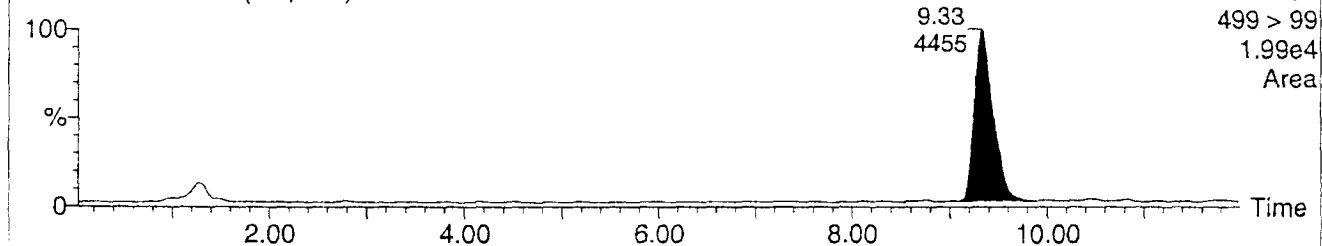
080603A-1004 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.99e4

Area



Quantify Sample Report

Page 5

Study No.:L34910, Set No.:080603A, Ext.Date:07/31 & 08/06/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1005

Text:

1: C8 Sulfonate (PFOS)

XC072503-4, 250 ng/L Standard

06-Aug-2003 16:24:39

LC/MS/MS #6

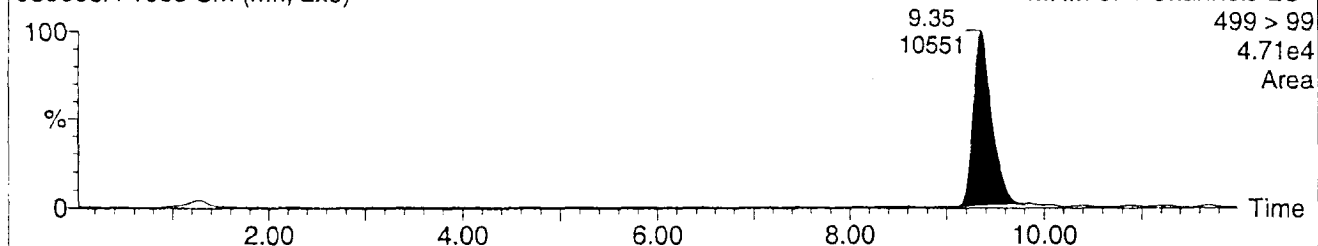
080603A-1005 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

4.71e4

Area



Quantify Sample Report

Page 6

Study No.:L34910, Set No.:080603A, Ext.Date:07/31 & 08/06/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1006

Text:

1: C8 Sulfonate (PFOS)

XC072503-5, 500 ng/L Standard

06-Aug-2003 16:46:17

LC/MS/MS #6

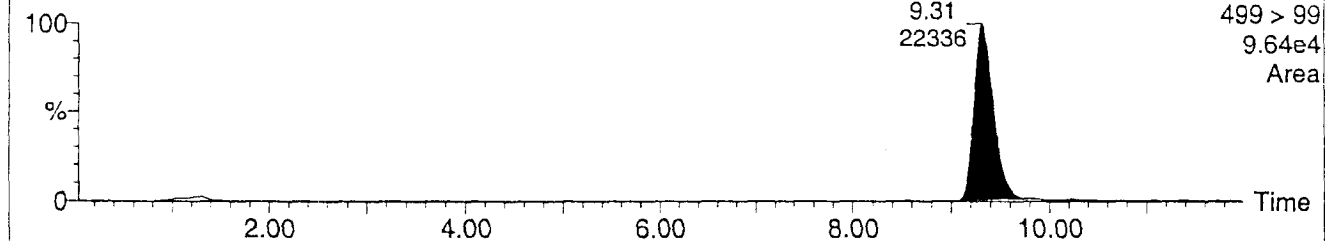
080603A-1006 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

9.64e4

Area



Quantify Sample Report

Page 7

Study No.:L34910, Set No.:080603A, Ext.Date:07/31 & 08/06/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1007

Text:

1: C8 Sulfonate (PFOS)

XC072503-6, 1000 ng/L Standard

06-Aug-2003 17:08:00

LC/MS/MS #6

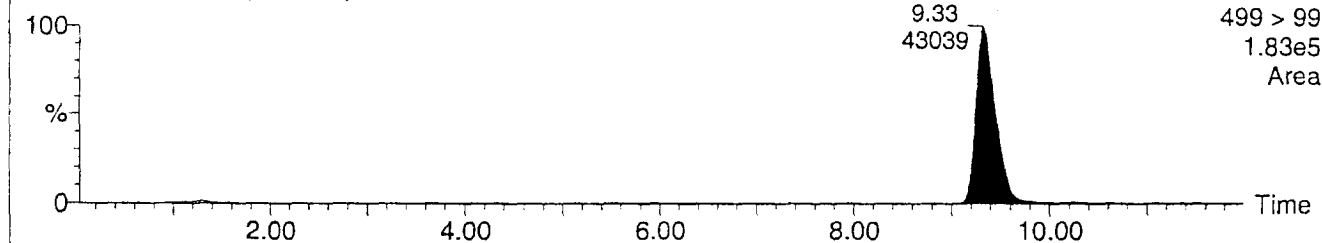
080603A-1007 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.83e5

Area



Quantify Sample Report

Page 8

Study No.: L34910, Set No.: 080603A, Ext. Date: 07/31 & 08/06/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

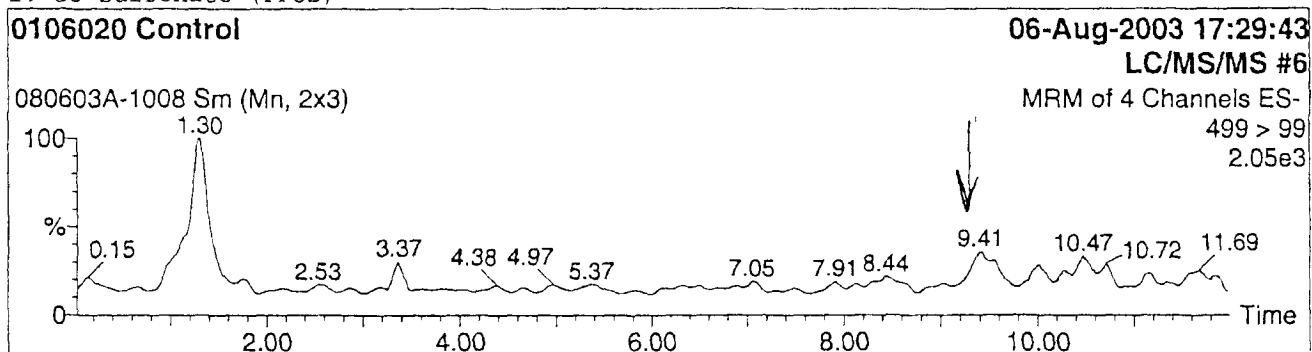
Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1008

Text:

1: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 9

Study No.: L34910, Set No.: 080603A, Ext. Date: 07/31 & 08/06/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1009

Text:

1: C8 Sulfonate (PFOS)

0106020 Spk A, 50 ng/L

06-Aug-2003 17:51:20

LC/MS/MS #6

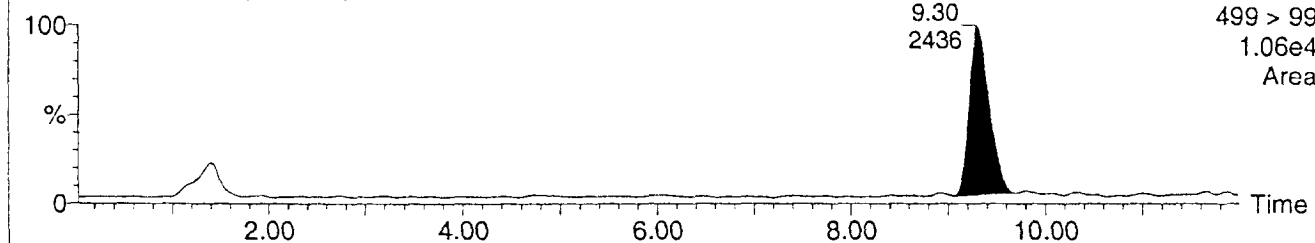
080603A-1009 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.06e4

Area



Quantify Sample Report

Page 10

Study No.: L34910, Set No.: 080603A, Ext. Date: 07/31 & 08/06/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1010

Text:

1: C8 Sulfonate (PFOS)

0106020 Spk B, 500 ng/L

06-Aug-2003 18:13:04

LC/MS/MS #6

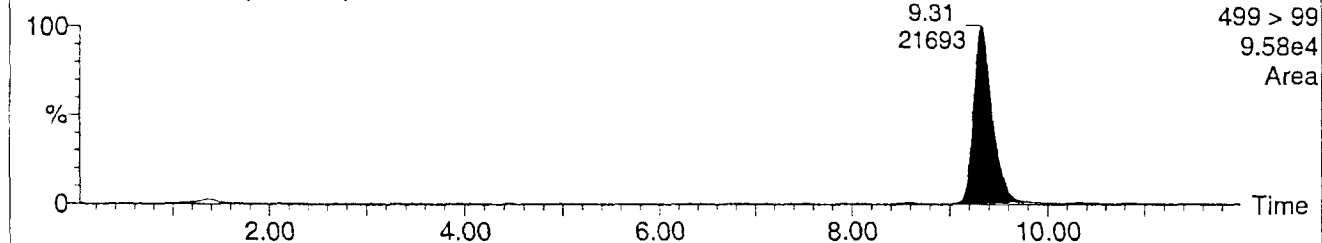
080603A-1010 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

9.58e4

Area



Quantify Sample Report

Page 11

Study No.: L34910, Set No.: 080603A, Ext. Date: 07/31 & 08/06/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1011

Text:

1: C8 Sulfonate (PFOS)

L34910-12 Spk E, 25000 ng/L, DF=100

06-Aug-2003 18:34:45

LC/MS/MS #6

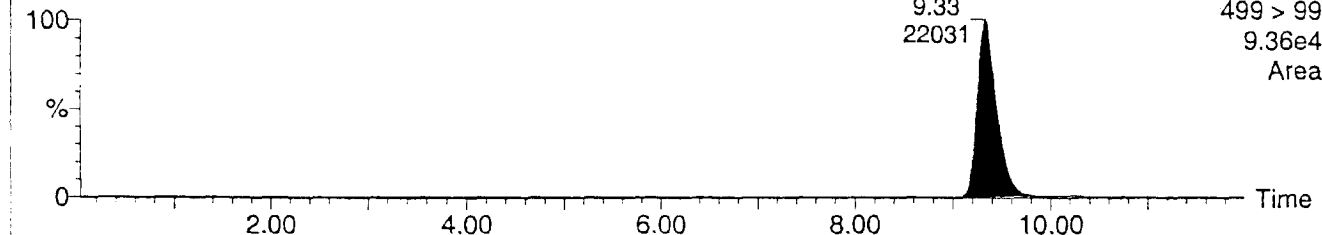
080603A-1011 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

9.36e4

Area



Quantify Sample Report

Page 12

Study No.: L34910, Set No.: 080603A, Ext. Date: 07/31 & 08/06/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1012

Text:

1: C8 Sulfonate (PFOS)

L34910-16 Spk F, 50000 ng/L, DF=200

06-Aug-2003 18:56:25

LC/MS/MS #6

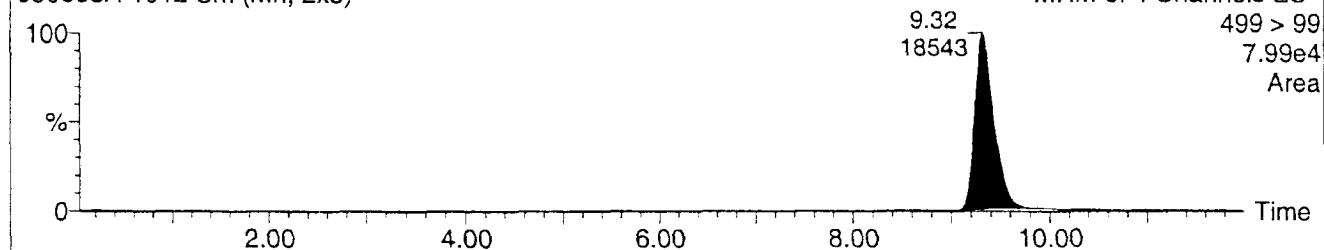
080603A-1012 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

7.99e4

Area



Quantify Sample Report

Page 13

Study No.: L34910, Set No.: 080603A, Ext. Date: 07/31 & 08/06/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1013

Text:

1: C8 Sulfonate (PFOS)

L34910-16 Spk F, 50000 ng/L, DF=100

06-Aug-2003 19:18:10

LC/MS/MS #6

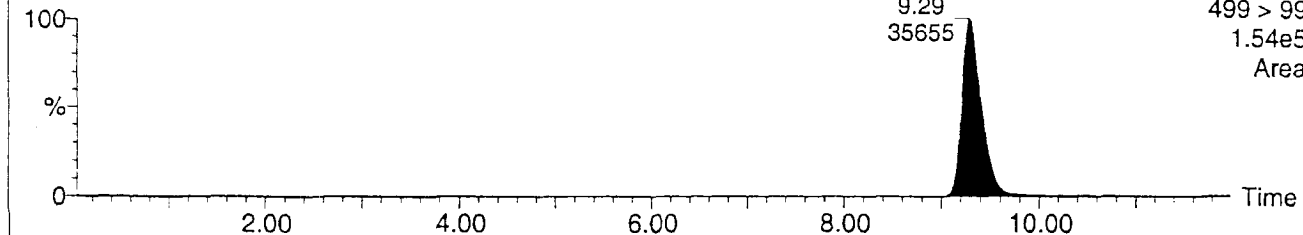
080603A-1013 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.54e5

Area



Quantify Sample Report

Page 14

Study No.:L34910, Set No.:080603A, Ext.Date:07/31 & 08/06/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1014

Text:

1: C8 Sulfonate (PFOS)

XC072503-1, 25 ng/L Standard

06-Aug-2003 19:39:56

LC/MS/MS #6

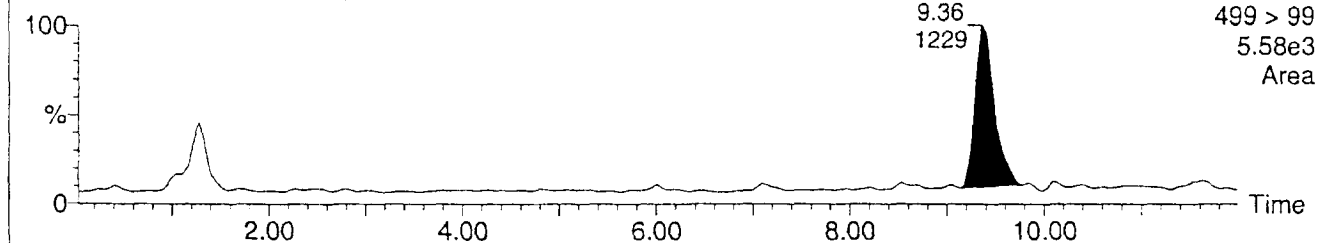
080603A-1014 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

5.58e3

Area



Quantify Sample Report

Page 15

Study No.: L34910, Set No.: 080603A, Ext. Date: 07/31 & 08/06/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1015

Text:

1: C8 Sulfonate (PFOS)

XC072503-2, 50 ng/L Standard

06-Aug-2003 20:01:40

LC/MS/MS #6

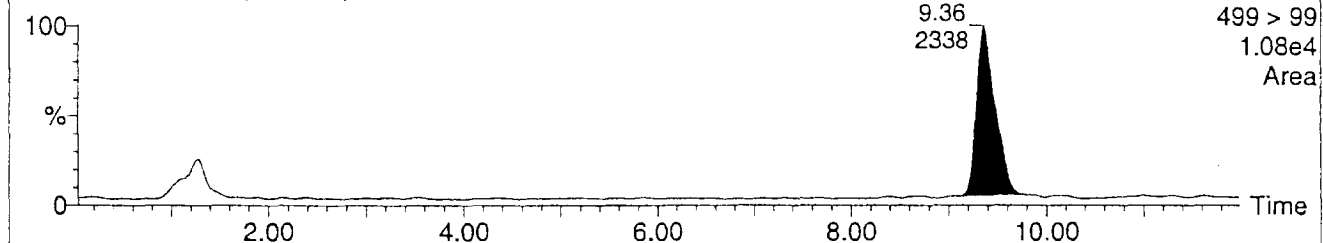
080603A-1015 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.08e4

Area



Quantify Sample Report

Page 16

Study No.:L34910, Set No.:080603A, Ext.Date:07/31 & 08/06/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1016

Text:

1: C8 Sulfonate (PFOS)

XC072503-3, 100 ng/L Standard

06-Aug-2003 20:23:22

LC/MS/MS #6

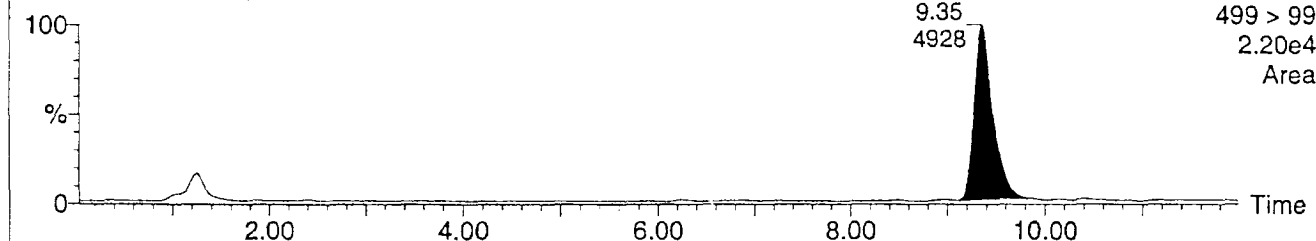
080603A-1016 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.20e4

Area



Quantify Sample Report

Page 17

Study No.: L34910, Set No.: 080603A, Ext. Date: 07/31 & 08/06/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1017

Text:

1: C8 Sulfonate (PFOS)

L34910-1, DF=100

06-Aug-2003 20:45:02

LC/MS/MS #6

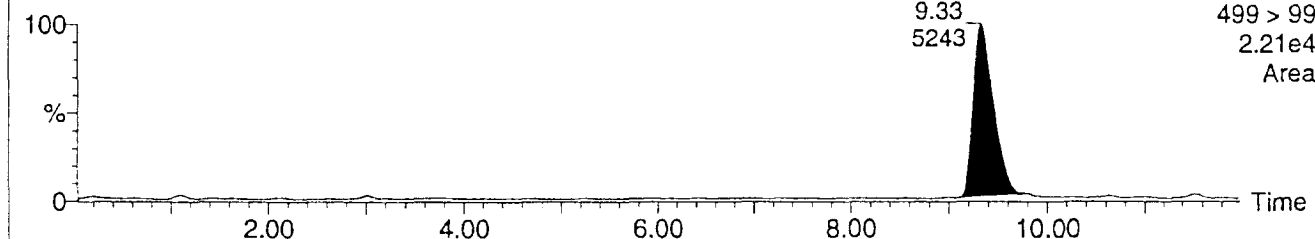
080603A-1017 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.21e4

Area



Quantify Sample Report

Page 18

Study No.: L34910, Set No.: 080603A, Ext. Date: 07/31 & 08/06/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1018

Text:

1: C8 Sulfonate (PFOS)

L34910-1 Rep, DF=100

06-Aug-2003 21:06:44

LC/MS/MS #6

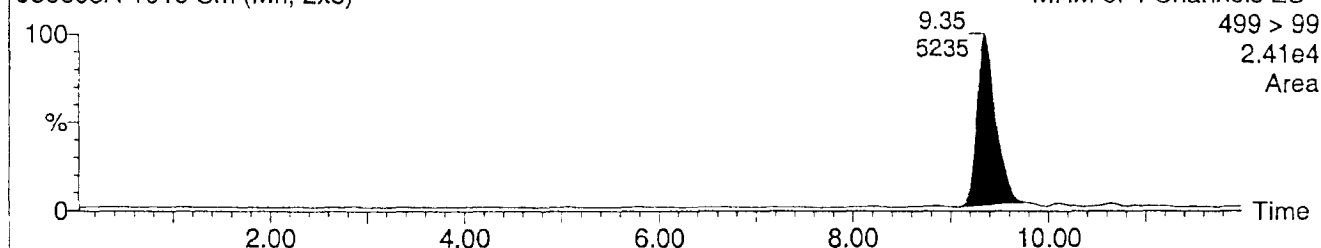
080603A-1018 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.41e4

Area



Quantify Sample Report

Page 19

Study No.: L34910, Set No.: 080603A, Ext. Date: 07/31 & 08/06/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1019

Text:

1: C8 Sulfonate (PFOS)

L34910-12, DF=100

06-Aug-2003 21:28:28

LC/MS/MS #6

080603A-1019 Sm (Mn, 2x3)

MRM of 4 Channels ES-

100
%
0

9.31
11612

499 > 99
5.04e4
Area

Time

2.00

4.00

6.00

8.00

10.00

Quantify Sample Report

Page 20

Study No.: L34910, Set No.: 080603A, Ext. Date: 07/31 & 08/06/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1020

Text:

1: C8 Sulfonate (PFOS)

L34910-12 Rep, DF=100

06-Aug-2003 21:50:16

LC/MS/MS #6

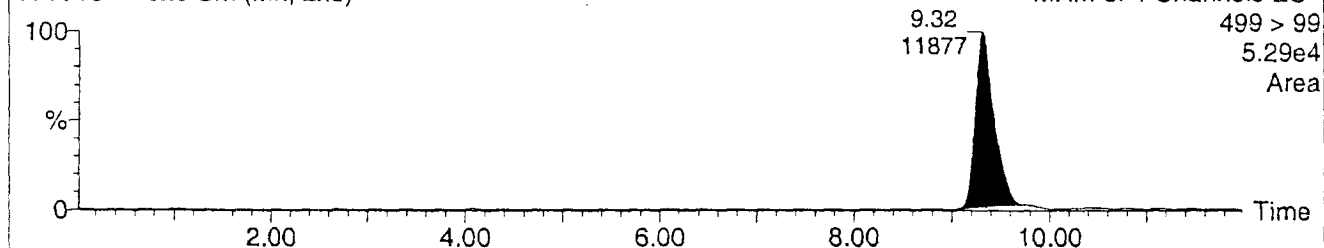
080603A-1020 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

5.29e4

Area



Quantify Sample Report

Page 21

Study No.: L34910, Set No.: 080603A, Ext.Date: 07/31 & 08/06/03, Analyst: K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1021

Text:

1: C8 Sulfonate (PFOS)

L34910-15, DF=100

06-Aug-2003 22:12:03

LC/MS/MS #6

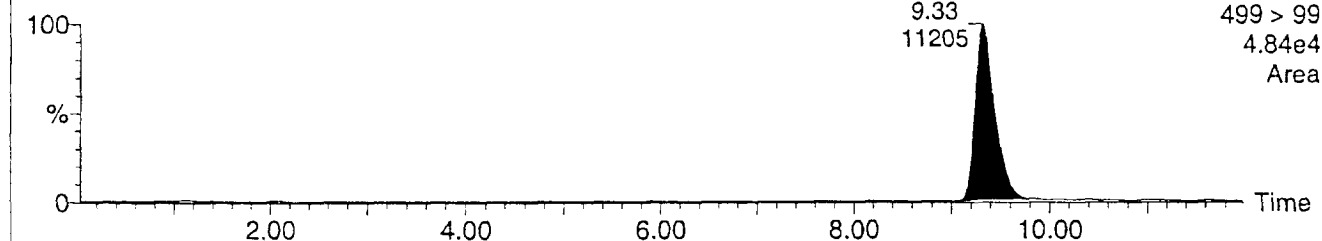
080603A-1021 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

4.84e4

Area



Quantify Sample Report

Page 22

Study No.:L34910, Set No.:080603A, Ext.Date:07/31 & 08/06/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1022

Text:

1: C8 Sulfonate (PFOS)

L34910-13, DF=100

06-Aug-2003 22:33:46

LC/MS/MS #6

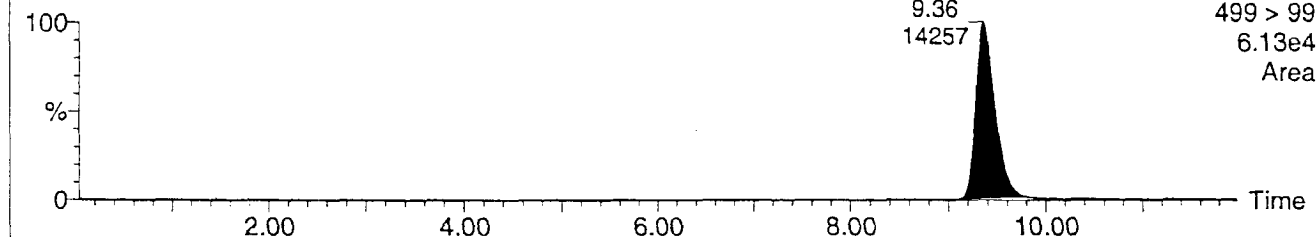
080603A-1022 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

6.13e4

Area



Quantify Sample Report

Page 23

Study No.:L34910, Set No.:080603A, Ext.Date:07/31 & 08/06/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1023

Text:

1: C8 Sulfonate (PFOS)

XC072503-4, 250 ng/L Standard

06-Aug-2003 22:55:27

LC/MS/MS #6

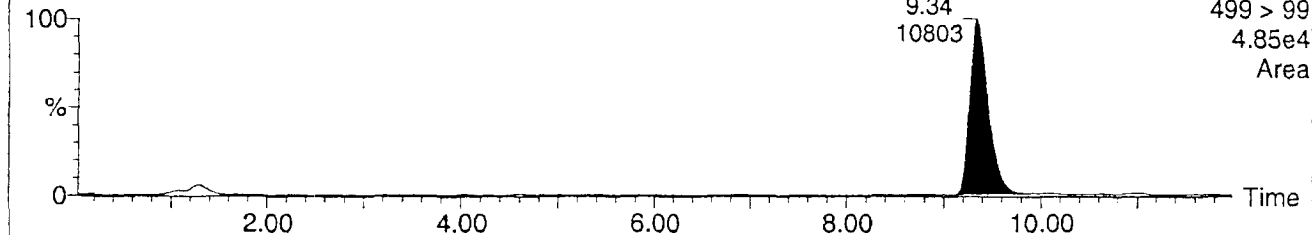
080603A-1023 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

4.85e4

Area



Quantify Sample Report

Page 24

Study No.: L34910, Set No.: 080603A, Ext.Date: 07/31 & 08/06/03, Analyst: K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1024

Text:

1: C8 Sulfonate (PFOS)

XC072503-5, 500 ng/L Standard

06-Aug-2003 23:17:07

LC/MS/MS #6

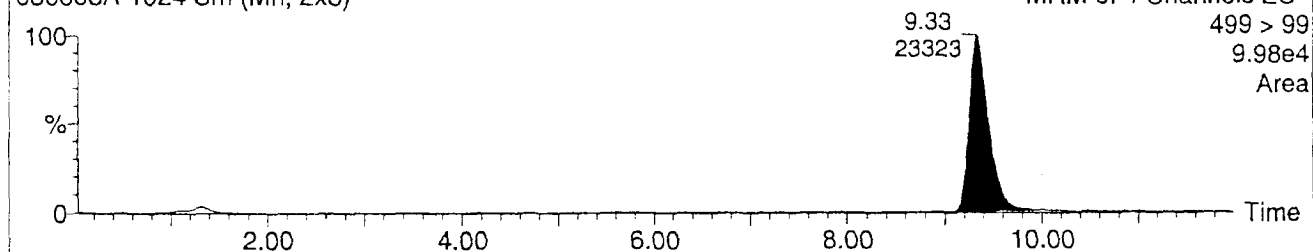
080603A-1024 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

9.98e4

Area



Quantify Sample Report

Page 25

Study No.: L34910, Set No.: 080603A, Ext. Date: 07/31 & 08/06/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080603A Decatur BC

Last modified: Thu Aug 07 08:12:08 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS only 080603

Last modified: Thu Aug 07 08:11:08 2003

Job Code:

Printed: Thu Aug 07 12:49:56 2003

Name: 080603A-1025

Text:

1: C8 Sulfonate (PFOS)

XC072503-6, 1000 ng/L Standard

06-Aug-2003 23:38:52

LC/MS/MS #6

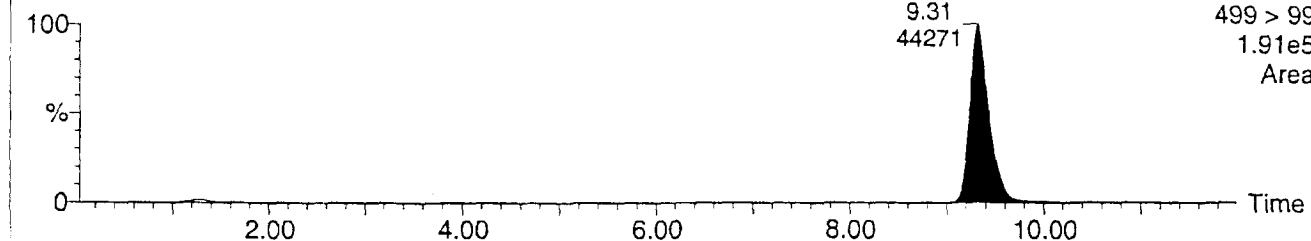
080603A-1025 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.91e5

Area



SECTION E

RAW DATA REPORT

Sponsor Study No: NA
 Exygen Study No: L34910
 Analyte: PFOA
 Ions Monitored: 413 -> 369
 Site: Decatur Baker's Creek

Limit of Quantitation: 50 ppt
 Injection Volume: 15 µL
 Matrix: Soil
 Sample Weight: 5.0 g
 Final Volume: 5.0 mL

Set No: 080103A
 Analyst: Karen Risha
 Instrument Type: LCMSMS #6
 Extraction Date: 08/01/03
 Analyzed on: 08/02/03

Exygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)	Analyte Found (ppb)	Total Solids (%)	Analyte Found (ppb) Dry Weight
XC072503-0	-	CS	080103A-2001	0	-	333	-	-	-	-	-	-
XC072503-1	-	CS	080103A-2002	25	-	9882	-	-	-	-	-	-
XC072503-2	-	CS	080103A-2003	50	-	17917	-	-	-	-	-	-
XC072503-3	-	CS	080103A-2004	100	-	34827	-	-	-	-	-	-
XC072503-4	-	CS	080103A-2005	250	-	78794	-	-	-	-	-	-
XC072503-5	-	CS	080103A-2006	500	-	171634	-	-	-	-	-	-
XC072503-6	-	CS	080103A-2007	1000	-	315768	-	-	-	-	-	-
Methanol Wash	-	C	080103A-2008	-	-	525	-	-	-	-	-	-
Reagent Blank	na	C	080103A-2009	-	1	518	ND	-	-	-	-	-
Reagent Spk A	na	LCS	080103A-2010	-	1	18939	55.3	50	111	-	-	-
Reagent Spk B	na	LCS	080103A-2011	-	1	163063	536	500	107	-	-	-
XC072503-1	-	CS	080103A-2012	25	-	9820	-	-	-	-	-	-
L34910-5 Spk C	BC2 SED-04	LF	080103A-2013	-	10	157971	5190	5000	96	-	-	-
L34910-10 Spk D	BC2 SED-05	LF	080103A-2014	-	10	166134	5460	5000	96	-	-	-
L34910-11 Spk E	BC2 SED-06	LF	080103A-2015	-	10	187666	6180	5000	88^	-	-	-
L34910-20 Spk F	Outfall to River SED-25	LF	080103A-2016	-	10	179090	5890	5000	91^	-	-	-
XC072503-2	-	CS	080103A-2017	50	-	18190	-	-	-	-	-	-
L34910-5	BC2 SED-04	S	080103A-2018	-	1	115451	377	-	-	3.02	69.96	4.31
L34910-5 Rep	BC2 SED-04	S	080103A-2019	-	1	82762	268	-	-	2.14	69.96	3.06
L34910-10	BC2 SED-05	S	080103A-2020	-	1	195055	642	-	-	5.14	69.54	7.39
L34910-10 Rep	BC2 SED-05	S	080103A-2021	-	1	167826	551	-	-	4.41	69.54	6.34
XC072503-3	-	CS	080103A-2022	100	-	33920	-	-	-	-	-	-
XC072503-4	-	CS	080103A-2023	250	-	79282	-	-	-	-	-	-
L34910-11	BC2 SED-06	S	080103A-2024	-	1	473416	*	-	-	-	60.41	-
L34910-11 Rep	BC2 SED-06	S	080103A-2025	-	1	463017	*	-	-	-	60.41	-
L34910-20	Outfall to River SED-25	S	080103A-2026	-	1	404209	*	-	-	-	63.27	-
L34910-20 Rep	Outfall to River SED-25	S	080103A-2027	-	1	301201	*	-	-	-	63.27	-
L34910-21	Outfall to River SED-25 Dup	S	080103A-2028	-	1	532619	*	-	-	-	67.43	-
XC072503-5	-	CS	080103A-2029	500	-	140009	-	-	-	-	-	-
XC072503-6	-	CS	080103A-2030	1000	-	273386	-	-	-	-	-	-

Analyte Found (ppt) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{(\text{analyte found (ppt)} - \text{analyte found in control (ppt)}) \times 100}{\text{amount added (ppt)}}$

Standard Curve: Linear (1/x weighted)

Intercept = 2344.75

Slope = 300.076

Coef. Of Det. = 0.988097

Analyte Found (ppb) = [analyte found (ppt) x volume extracted (0.04 L)] / sample weight (5 g)

Analyte Found (ppb) dry weight = analyte found (ppb) x (100% / total solids (%))

CS = Calibration standard

C = Control sample

S = Sample

LF = Lab fortified sample

FF = Field fortified sample

LCS = Laboratory Control Spike

CK = Check Standard

ND = Not detected = Response between 0 and 25 ppt

NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by: BL 08/07/03

*Sample requires dilution. See data set 080103AR.

^Sample was corrected using the data found in set 080103AR.

RAW DATA REPORT

Sponsor Study No: NA
 Exygen Study No: L34910
 Analyte: PFHS
 Ions Monitored: 399 -> 80
 Site: Decatur Baker's Creek

Limit of Quantitation: 50 ppt
 Injection Volume: 15 µL
 Matrix: Soil
 Sample Weight: 5.0 g
 Final Volume: 5.0 mL

Set No: 080103A
 Analyst: Karen Risha
 Instrument Type: LCMSMS #6
 Extraction Date: 08/01/03
 Analyzed on: 08/02/03

Exygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)	Analyte Found (ppb)	Total Solids (%)	Analyte Found (ppb) Dry Weight
XC072503-0	-	CS	080103A-2001	0	-	0	-	-	-	-	-	-
XC072503-1	-	CS	080103A-2002	25	-	1572	-	-	-	-	-	-
XC072503-2	-	CS	080103A-2003	50	-	3699	-	-	-	-	-	-
XC072503-3	-	CS	080103A-2004	100	-	6481	-	-	-	-	-	-
XC072503-4	-	CS	080103A-2005	250	-	15770	-	-	-	-	-	-
XC072503-5	-	CS	080103A-2006	500	-	31281	-	-	-	-	-	-
XC072503-6	-	CS	080103A-2007	1000	-	58308	-	-	-	-	-	-
Methanol Wash	-	C	080103A-2008	-	-	0	-	-	-	-	-	-
Reagent Blank	na	C	080103A-2009	-	1	0	ND	-	-	-	-	-
Reagent Spk A	na	LCS	080103A-2010	-	1	3457	52.0	50	104	-	-	-
Reagent Spk B	na	LCS	080103A-2011	-	1	31000	533	500	107	-	-	-
XC072503-1	-	CS	080103A-2012	25	-	1765	-	-	-	-	-	-
L34910-5 Spk C	BC2 SED-04	LF	080103A-2013	-	10	30746	5280	5000	104	-	-	-
L34910-10 Spk D	BC2 SED-05	LF	080103A-2014	-	10	32192	5530	5000	107	-	-	-
L34910-11 Spk E	BC2 SED-06	LF	080103A-2015	-	10	32334	5560	5000	105	-	-	-
L34910-20 Spk F	Outfall to River SED-25	LF	080103A-2016	-	10	32343	5560	5000	103	-	-	-
XC072503-2	-	CS	080103A-2017	50	-	3449	-	-	-	-	-	-
L34910-5	BC2 SED-04	S	080103A-2018	-	1	4534	70.8	-	-	0.57	69.96	0.809
L34910-5 Rep	BC2 SED-04	S	080103A-2019	-	1	3439	51.7	-	-	0.41	69.96	0.591
L34910-10	BC2 SED-05	S	080103A-2020	-	1	10896	182	-	-	1.45	69.54	2.09
L34910-10 Rep	BC2 SED-05	S	080103A-2021	-	1	12999	218	-	-	1.75	69.54	2.51
XC072503-3	-	CS	080103A-2022	100	-	6560	-	-	-	-	-	-
XC072503-4	-	CS	080103A-2023	250	-	14801	-	-	-	-	-	-
L34910-11	BC2 SED-06	S	080103A-2024	-	1	18133	308	-	-	2.46	60.41	4.08
L34910-11 Rep	BC2 SED-06	S	080103A-2025	-	1	19203	327	-	-	2.61	60.41	4.33
L34910-20	Outfall to River SED-25	S	080103A-2026	-	1	23354	399	-	-	3.19	63.27	5.05
L34910-20 Rep	Outfall to River SED-25	S	080103A-2027	-	1	16649	282	-	-	2.26	63.27	3.57
L34910-21	Outfall to River SED-25 Dup	S	080103A-2028	-	1	36172	623	-	-	4.98	67.43	7.39
XC072503-5	-	CS	080103A-2029	500	-	28497	-	-	-	-	-	-
XC072503-6	-	CS	080103A-2030	1000	-	54198	-	-	-	-	-	-

Analyte Found (ppt) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{[\text{analyte found (ppt)} - \text{analyte found in control (ppt)}] \times 100}{\text{amount added (ppt)}}$

Standard Curve: Linear (1/x weighted)

Intercept = 476.906

Slope = 57.3138

Coef. Of Det. = 0.995587

Analyte Found (ppb) = [analyte found (ppt) x volume extracted (0.04 L)] / sample weight (5 g)

Analyte Found (ppb) dry weight = analyte found (ppb) x (100% / total solids (%))

CS = Calibration standard

C = Control sample

S = Sample

LF = Lab fortified sample

FF = Field fortified sample

LCS = Laboratory Control Spike

CK = Check Standard

ND = Not detected = Response between 0 and 25 ppt

NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by:

08/07/03

RAW DATA REPORT

Sponsor Study No: NA
 Exygen Study No: L34910
 Analyte: PFOS
 Ions Monitored: 499 -> 99
 Site: Decatur Baker's Creek

Limit of Quantitation: 50 ppt
 Injection Volume: 15 µL
 Matrix: Soil
 Sample Weight: 5.0 g
 Final Volume: 5.0 mL

Set No: 080103A
 Analyst: Karen Risha
 Instrument Type: LCMSMS #6
 Extraction Date: 08/01/03
 Analyzed on: 08/02/03

Exygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)	Analyte Found (ppb)	Total Solids (%)	Analyte Found (ppb) Dry Weight
XC072503-0	-	CS	080103A-2001	0	-	0	-	-	-	-	-	-
XC072503-1	-	CS	080103A-2002	25	-	1018	-	-	-	-	-	-
XC072503-2	-	CS	080103A-2003	50	-	2072	-	-	-	-	-	-
XC072503-3	-	CS	080103A-2004	100	-	3701	-	-	-	-	-	-
XC072503-4	-	CS	080103A-2005	250	-	9370	-	-	-	-	-	-
XC072503-5	-	CS	080103A-2006	500	-	19171	-	-	-	-	-	-
XC072503-6	-	CS	080103A-2007	1000	-	37079	-	-	-	-	-	-
Methanol Wash	-	C	080103A-2008	-	-	0	-	-	-	-	-	-
Reagent Blank	na	C	080103A-2009	-	1	0	ND	-	-	-	-	-
Reagent Spk A	na	LCS	080103A-2010	-	1	2011	51.4	50	103	-	-	-
Reagent Spk B	na	LCS	080103A-2011	-	1	17583	496	500	99	-	-	-
XC072503-1	-	CS	080103A-2012	25	-	938	-	-	-	-	-	-
L34910-5 Spk C	BC2 SED-04	LF	080103A-2013	-	10	22878	6470	5000	93^	-	-	-
L34910-10 Spk D	BC2 SED-05	LF	080103A-2014	-	10	26935	7620	5000	95^	-	-	-
L34910-11 Spk E	BC2 SED-06	LF	080103A-2015	-	10	336383	*	5000	-	-	-	-
L34910-20 Spk F	Outfall to River SED-25	LF	080103A-2016	-	10	72248	*	5000	-	-	-	-
XC072503-2	-	CS	080103A-2017	50	-	2233	-	-	-	-	-	-
L34910-5	BC2 SED-04	S	080103A-2018	-	1	60613	*	-	-	-	69.96	-
L34910-5 Rep	BC2 SED-04	S	080103A-2019	-	1	51074	*	-	-	-	69.96	-
L34910-10	BC2 SED-05	S	080103A-2020	-	1	93844	*	-	-	-	69.54	-
L34910-10 Rep	BC2 SED-05	S	080103A-2021	-	1	106350	*	-	-	-	69.54	-
XC072503-3	-	CS	080103A-2022	100	-	3634	-	-	-	-	-	-
XC072503-4	-	CS	080103A-2023	250	-	8965	-	-	-	-	-	-
L34910-11	BC2 SED-06	S	080103A-2024	-	1	2354673	*	-	-	-	60.41	-
L34910-11 Rep	BC2 SED-06	S	080103A-2025	-	1	1794353	*	-	-	-	60.41	-
L34910-20	Outfall to River SED-25	S	080103A-2026	-	1	418516	*	-	-	-	63.27	-
L34910-20 Rep	Outfall to River SED-25	S	080103A-2027	-	1	287933	*	-	-	-	63.27	-
L34910-21	Outfall to River SED-25 Dup	S	080103A-2028	-	1	409821	*	-	-	-	67.43	-
XC072503-5	-	CS	080103A-2029	500	-	17108	-	-	-	-	-	-
XC072503-6	-	CS	080103A-2030	1000	-	32192	-	-	-	-	-	-

Analyte Found (ppt) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{[\text{analyte found (ppt)} - \text{analyte found in control (ppt)}] \times 100}{\text{amount added (ppt)}}$

Standard Curve: Linear (1/x weighted)

Intercept = 208.543

Slope = 35.0593

Coef. Of Det. = 0.990916

Analyte Found (ppb) = [analyte found (ppt) x volume extracted (0.04 L)] / sample weight (5 g)

Analyte Found (ppb) dry weight = analyte found (ppb) x (100% / total solids (%))

CS = Calibration standard

C = Control sample

S = Sample

LF = Lab fortified sample

FF = Field fortified sample

LCS = Laboratory Control Spike

CK = Check Standard

ND = Not detected = Response between 0 and 25 ppt

NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by: BL / 08/07/03

*Sample requires dilution. See data set 080103AR.

^Sample was corrected using the data found in set 080103AR.

RAW DATA REPORT

Sponsor Study No: NA
 Exygen Study No: L34910
 Analyte: FOSA
 Ions Monitored: 498 -> 78
 Site: Decatur Baker's Creek

Limit of Quantitation: 50 ppt
 Injection Volume: 15 µL
 Matrix: Soil
 Sample Weight: 5.0 g
 Final Volume: 5.0 mL

Set No: 080103A
 Analyst: Karen Risha
 Instrument Type: LCMSMS #6
 Extraction Date: 08/01/03
 Analyzed on: 08/02/03

Exygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)	Analyte Found (ppb)	Total Solids (%)	Analyte Found (ppb) Dry Weight
XC072503-0	-	CS	080103A-2001	0	-	0	-	-	-	-	-	-
XC072503-1	-	CS	080103A-2002	25	-	3995	-	-	-	-	-	-
XC072503-2	-	CS	080103A-2003	50	-	7728	-	-	-	-	-	-
XC072503-3	-	CS	080103A-2004	100	-	15082	-	-	-	-	-	-
XC072503-4	-	CS	080103A-2005	250	-	36693	-	-	-	-	-	-
XC072503-5	-	CS	080103A-2006	500	-	72894	-	-	-	-	-	-
XC072503-6	-	CS	080103A-2007	1000	-	137821	-	-	-	-	-	-
Methanol Wash	-	C	080103A-2008	-	-	0	-	-	-	-	-	-
Reagent Blank	na	C	080103A-2009	-	1	0	ND	-	-	-	-	-
Reagent Spk A	na	LCS	080103A-2010	-	1	6750	43.6	50	87	-	-	-
Reagent Spk B	na	LCS	080103A-2011	-	1	65424	477	500	95	-	-	-
XC072503-1	-	CS	080103A-2012	25	-	3817	-	-	-	-	-	-
L34910-5 Spk C	BC2 SED-04	LF	080103A-2013	-	10	79517	5810	5000	98	-	-	-
L34910-10 Spk D	BC2 SED-05	LF	080103A-2014	-	10	82212	6010	5000	101	-	-	-
L34910-11 Spk E	BC2 SED-06	LF	080103A-2015	-	10	155090	*	5000	-	-	-	-
L34910-20 Spk F	Outfall to River SED-25	LF	080103A-2016	-	10	100640	7370	5000	77^	-	-	-
XC072503-2	-	CS	080103A-2017	50	-	7957	-	-	-	-	-	-
L34910-5	BC2 SED-04	S	080103A-2018	-	1	121882	894	-	-	7.15	69.96	10.2
L34910-5 Rep	BC2 SED-04	S	080103A-2019	-	1	133583	981	-	-	7.84	69.96	11.2
L34910-10	BC2 SED-05	S	080103A-2020	-	1	133763	982	-	-	7.86	69.54	11.3
L34910-10 Rep	BC2 SED-05	S	080103A-2021	-	1	191201	*	-	-	-	69.54	-
XC072503-3	-	CS	080103A-2022	100	-	14698	-	-	-	-	-	-
XC072503-4	-	CS	080103A-2023	250	-	34282	-	-	-	-	-	-
L34910-11	BC2 SED-06	S	080103A-2024	-	1	1215533	*	-	-	-	60.41	-
L34910-11 Rep	BC2 SED-06	S	080103A-2025	-	1	929771	*	-	-	-	60.41	-
L34910-20	Outfall to River SED-25	S	080103A-2026	-	1	412369	*	-	-	-	63.27	-
L34910-20 Rep	Outfall to River SED-25	S	080103A-2027	-	1	346884	*	-	-	-	63.27	-
L34910-21	Outfall to River SED-25 Dup	S	080103A-2028	-	1	357273	*	-	-	-	67.43	-
XC072503-5	-	CS	080103A-2029	500	-	67231	-	-	-	-	-	-
XC072503-6	-	CS	080103A-2030	1000	-	129118	-	-	-	-	-	-

Analyte Found (ppt) = (peak area - intercept) / slope x DF
 Recovery (%) = $\frac{(\text{analyte found (ppt)} - \text{analyte found in control (ppt)}) \times 100}{\text{amount added (ppt)}}$

Standard Curve : Linear (1/x weighted)
 Intercept = 849.062
 Slope = 135.358
 Coef. Of Det. = 0.996863

Analyte Found (ppb) = [analyte found (ppt) x volume extracted (0.04 L)] / sample weight (5 g)
 Analyte Found (ppb) dry weight = analyte found (ppb) x (100% / total solids (%))

CS = Calibration standard
 C = Control sample
 S = Sample
 LF = Lab fortified sample
 FF = Field fortified sample
 LCS = Laboratory Control Spike

CK = Check Standard
 ND = Not detected = Response between 0 and 25 ppt
 NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by: *BR 10/20/03*

*Sample requires dilution. See data set 080103AR.
 ^Sample was corrected using the data found in set 080103AR.

Analysis: Solids Title: Send

ID	Result	Product	Matrix	DF	MDLxDF	CRDLxDF	Flags	Time Collect	Time Run	Client ID
L34905-21	100	PERC SOLID	SOLID	1	0.01	0	0	08-Jul-03 00:00	29-Jul-03 15:34	200874 X33238-32-21
L34905-22	100	PERC SOLID	SOLID	1	0.01	0	0	08-Jul-03 00:00	29-Jul-03 15:34	200875 X33238-32-22
L34905-23	100	PERC SOLID	SOLID	1	0.01	0	0	08-Jul-03 00:00	29-Jul-03 15:34	200876 X33238-32-23
L34905-24	100	PERC SOLID	SOLID	1	0.01	0	0	08-Jul-03 00:00	29-Jul-03 15:34	200877 X33238-32-24
L34905-25	100	PERC SOLID	SOLID	1	0.01	0	0	08-Jul-03 00:00	29-Jul-03 15:34	200878 X33238-32-25
L34905-26	100	PERC SOLID	SOLID	1	0.01	0	0	08-Jul-03 00:00	29-Jul-03 15:34	200879 X33238-32-26
L34905-27	100	PERC SOLID	SOLID	1	0.01	0	0	08-Jul-03 00:00	29-Jul-03 15:34	200880 X33238-32-27
L34905-28	100	PERC SOLID	SOLID	1	0.01	0	0	08-Jul-03 00:00	29-Jul-03 15:34	200881 X33238-32-28
L34905-29	100	PERC SOLID	SOLID	1	0.01	0	0	08-Jul-03 00:00	29-Jul-03 15:34	200882 X33238-32-29
L34905-30	100	PERC SOLID	SOLID	1	0.01	0	0	08-Jul-03 00:00	29-Jul-03 15:34	200883 X33238-32-30
L34910-5	69.96	PERC SOLID	SOLID	1	0.01	0	0	23-Jul-03 14:50	29-Jul-03 15:34	BC2 SED-04
L34910-10	69.54	PERC SOLID	SOLID	1	0.01	0	0	21-Jul-03 14:15	29-Jul-03 15:34	BC2 SED-05
L34910-11	60.41	PERC SOLID	SOLID	1	0.01	0	0	23-Jul-03 15:25	29-Jul-03 15:34	BC2 SED-06
L34910-20	63.27	PERC SOLID	SOLID	1	0.01	0	0	23-Jul-03 16:15	29-Jul-03 15:34	OUTFALL TO RIVER SED-25
L34910-21	67.43	PERC SOLID	SOLID	1	0.01	0	0	23-Jul-03 16:15	29-Jul-03 15:34	OUTFALL TO RIVER SED-25 DUP
L34921-1	81.19	PERC SOLID	SOLID	1	0.01	0	0	23-Jul-03 14:00	29-Jul-03 15:34	BASR7-23

Analyst Initials

Date and Time Data Acquired (ctrl+t)

AJH	AJH	AJH
29-Jul-03 15:34	29-Jul-03 16:06	30-Jul-03 08:34

[illegible]



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Fax: 814-231-1580

Internal Chain of Custody/Fortification Sheet

Exygen Study Number: L34910

Matrix: Soil

Sponsor Study/Protocol No: NA

The samples listed below were removed from refrigerator No. 3432 @ CEE 08/01/03

Time 1830

Date 08/01/03

Initials CEE

CLIENT SAMPLE ID	EXYGEN ID NUMBER	WEIGHT (g)	FORTIFICATION (ng)
na	Reagent Blank	-	-
na	Reagent Spk A	-	2.0
na	Reagent Spk B	-	20.0
BC2 SED-04	L34910-5 Spk C	5.0	200.0
BC2 SED-05	L34910-10 Spk D	5.0	200.0
BC2 SED-06	L34910-11 Spk E	5.0	200.0
Outfall to River SED-25	L34910-20 Spk F	5.0	200.0
BC2 SED-04	L34910-5	5.0	-
BC2 SED-04	L34910-5 Rep	5.0	-
BC2 SED-05	L34910-10	5.0	-
BC2 SED-05	L34910-10 Rep	5.0	-
BC2 SED-06	L34910-11	5.0	-
BC2 SED-06	L34910-11 Rep	5.0	-
Outfall to River SED-25	L34910-20	5.0	-
Outfall to River SED-25	L34910-20 Rep	5.0	-
Outfall to River SED-25 Dup	L34910-21	5.0	-
-	-	-	-
-	-	-	-
-	-	-	-

	Spiking Solution Used	Volume Used for Spiking	Initial/Date
Reagent Spk A	F061103-2 (10 ng/mL)	200 µL (200 µL micropipet)	<u>CEE</u> / 08/01/03
Reagent Spk B	F061103-1 (100 ng/mL)	200 µL (200 µL micropipet)	<u>CEE</u> / 08/01/03
L34910-5 Spk C	F060203-2 (1000 ng/mL)	200 µL (200 µL micropipet)	<u>CEE</u> / 08/01/03
L34910-10 Spk D	F060203-2 (1000 ng/mL)	200 µL (200 µL micropipet)	<u>CEE</u> / 08/01/03
L34910-11 Spk E	F060203-2 (1000 ng/mL)	200 µL (200 µL micropipet)	<u>CEE</u> / 08/01/03
L34910-20 Spk F	F060203-2 (1000 ng/mL)	200 µL (200 µL micropipet)	<u>CEE</u> / 08/01/03
-	-	-	-

All samples were weighed on balance No. 20

Time 0945

Date 08/01/03

Initials CEE

After weighing samples were returned to refrigerator No. 32

Time 1300

Date 08/01/03

Initials CEE

Comments: 200 µL of 250 mg/mL sodium thiosulfate was added to all samples before spiking. Initials/Date: CEE / 08/01/03

Analysis Summary:

Data Set: 080103A

Initials/Date: CEE / 08/01/03

Data Set: 080103AR

Initials/Date: CEE / 08/01/03

Data Set: -

Initials/Date: - / -

Set extraction/analysis data verified by: JMF

Date: 8/2/03

July 26, 2001/1

SAMPLE EXTRACTION AND ANALYSIS TRACKING SHEET

EXYGEN STUDY NUMBER: L34910

MATRIX: Soil

METHOD: ExM-023-014³³

ANALYTES: PFHS, PFOS, PFOA and PFOSA

PROTOCOL NUMBER: NA

Client ID	Exygen ID	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	Dilutions (mL/mL)	STEP 7	Dilutions (mL/mL)	STEP 8	Reagents/ Materials	Lot #
na	Reagent Blank											Methanol	4319318
na	Reagent Spk A											C18 SPE	W311281
na	Reagent Spk B											Type I Water	NA
BC2 SED-04	L34910-5 Spk C							0.1/1.0				Glass acrodisc	A41212341671
BC2 SED-05	L34910-10 Spk D							0.1/1.0					
BC2 SED-06	L34910-11 Spk E							0.1/1.0					
Outfall to River SED-25	L34910-20 Spk F							0.1/1.0					
BC2 SED-04	L34910-5												
BC2 SED-04	L34910-5 Rep												
BC2 SED-05	L34910-10												
BC2 SED-05	L34910-10 Rep											Initials/Date	CEE 08/01/03
BC2 SED-06	L34910-11												
BC2 SED-06	L34910-11 Rep												
Outfall to River SED-25	L34910-20												
Outfall to River SED-25	L34910-20 Rep												
Outfall to River SED-25 Day	L34910-21												
												HPLC	43087314
												Ammonium Acetate	V36159
												Type I water	NA
*Initials/Date		CEE 08/01/03	CEE 08/01/03	CEE 08/01/03	CEE 08/01/03	CEE 08/01/03	CEE 08/01/03	CEE 08/01/03	CEE 08/01/03	CEE 08/01/03	CEE 08/01/03	Initials/Date	CEE 08/01/03

STEP 1: Add 5mL of methanol and shake by hand for ~1 minute

STEP 2: Bring up to 40 mL with hypercarb filtered type 1 water

STEP 3: Centrifuge for 10 minutes at ~3000 rpm

STEP 4: Filter through glass acrodisc

STEP 5: SPE column clean up (omitting 40% wash)

STEP 6: Final volume to 5 mL collected in 15 mL polypropylene tubes

STEP 7: LC/MS/MS analysis

STEP 8: LC/MS/MS reanalysis.

*Initials and date under each step indicates the personnel that performed this step.

Method of Analysis for the Determination of Perfluorooctanesulfonate (PFOS) and Pentadecafluorooctanoic Acid (PFOA) in Soil

COMMENTS:

Final extracts stored in refrigerator 32 Initials: CEE Date: 08/01/03

July 19, 2001/4

① Samples did not inject until 08/02/03. Rf 08/03/03
② NF = 100% and 100% freshly diluted from original extract 10/08/03
③ ② Rf 08/01/03 SHOULD BE: 0.1/1.0, 0.1/1.0 NF = 10 and 100% 08/01/03

Sample List: C:\MASSLYNX\FI\fluorochemicals.PRO\SampleDB\080103A Decatur BC.SPL
Printed: Fri Aug 01 15:28:30 2003

Exogen STUDY NO. L34910

Page Position: (1, 1)

080103

Vial	File Name	LIMS ID	Client ID	Sample Description	Matrix	Sample Type	Conc (ng/L)	Conc B	Conc C	Test ID	DF
1	41 080103A-2001	---	---	XC072503-0, 0 ng/L Standard	---	Standard	0	---	---	0	1
2	42 080103A-2002	---	---	XC072503-1, 25 ng/L Standard	---	Standard	25	---	---	0	1
3	43 080103A-2003	---	---	XC072503-2, 50 ng/L Standard	---	Standard	50	---	---	0	1
4	44 080103A-2004	---	---	XC072503-3, 100 ng/L Standard	---	Standard	100	---	---	0	1
5	45 080103A-2005	---	---	XC072503-4, 250 ng/L Standard	---	Standard	250	---	---	0	1
6	46 080103A-2006	---	---	XC072503-5, 500 ng/L Standard	---	Standard	500	---	---	0	1
7	47 080103A-2007	---	---	XC072503-6, 1000 ng/L Standard	---	Standard	1000	---	---	0	1
8	92 080103A-2008	---	---	Methanol Wash	---	Blank	---	---	---	0	1
9	1 080103A-2009	---	---	Reagent Blank	---	Blank	---	---	---	0	1
10	2 080103A-2010	---	---	Reagent Spk A, 50 ng/L	---	QC	100	---	---	0	1
11	3 080103A-2011	---	---	Reagent Spk B, 500 ng/L	---	QC	500	---	---	0	1
12	42 080103A-2012	---	---	XC072503-1, 25 ng/L Standard	---	Standard	25	---	---	0	1
13	4 080103A-2013	---	---	L34910-5 Spk C, 5000 ng/L, DF=10	---	QC	5000	---	---	0	10
14	5 080103A-2014	---	---	L34910-10 Spk D, 5000 ng/L, DF=10	---	QC	5000	---	---	0	10
15	6 080103A-2015	---	---	L34910-11 Spk E, 5000 ng/L, DF=10	---	QC	5000	---	---	0	10
16	7 080103A-2016	---	---	L34910-20 Spk F, 5000 ng/L, DF=10	---	QC	5000	---	---	0	10
17	43 080103A-2017	---	---	XC072503-2, 50 ng/L Standard	---	Standard	50	---	---	0	1
18	8 080103A-2018	---	---	L34910-5	---	Analyte	---	---	---	0	1
19	9 080103A-2019	---	---	L34910-5 Rep	---	Analyte	---	---	---	0	1
20	10 080103A-2020	---	---	L34910-10	---	Analyte	---	---	---	0	1
21	11 080103A-2021	---	---	L34910-10 Rep	---	Analyte	---	---	---	0	1
22	44 080103A-2022	---	---	XC072503-3, 100 ng/L Standard	---	Standard	100	---	---	0	1
23	45 080103A-2023	---	---	XC072503-4, 250 ng/L Standard	---	Standard	250	---	---	0	1
24	12 080103A-2024	---	---	L34910-11	---	Analyte	---	---	---	0	1
25	13 080103A-2025	---	---	L34910-11 Rep	---	Analyte	---	---	---	0	1
26	14 080103A-2026	---	---	L34910-20	---	Analyte	---	---	---	0	1
27	15 080103A-2027	---	---	L34910-20 Rep	---	Analyte	---	---	---	0	1
28	16 080103A-2028	---	---	L34910-21	---	Analyte	---	---	---	0	1
29	46 080103A-2029	---	---	XC072503-5, 500 ng/L Standard	---	Standard	500	---	---	0	1
30	47 080103A-2030	---	---	XC072503-6, 1000 ng/L Standard	---	Standard	1000	---	---	0	1

Masslynx - Sample List

Page 2

Sample List: C:\MASSLYNX\Fluorochemicals\PROISampleDB\080103A Decatur BC.SPL
Printed: Fri Aug 01 15:28:30 2003Exygen STUDY NO. 134910

Page Position: (2, 1)

08/01/03

	MS Method	HPLC Method	MS Tune File	Inj. Volume
1	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
2	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
3	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
4	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
5	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
6	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
7	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
8	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
9	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
10	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
11	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
12	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
13	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
14	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
15	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
16	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
17	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
18	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
19	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
20	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
21	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
22	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
23	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
24	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
25	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
26	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
27	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
28	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
29	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15
30	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorocherns	15

LC/MS/MS SYSTEM AND OPERATING CONDITIONS

Sponsor Protocol No: NA

Exygen Study No: L34910

Instrument: Micromass Quattro Ultima (LC/MS/MS Unit #6)

Computer: COMPAQ Professional Workstation AP200

Software: Microsoft Windows NT: Version 4 Build 1381: Service Pack 5
Micromass Limited: MassLynx 3.4 Build 004

HPLC Equipment: Hewlett Packard (HP) Series 1100
HP Bin Pump HP Vacuum Degasser
HP Autosampler HP Column Oven

HPLC Column: Genesis C-8, 5 cm x 2.1 mm i.d. x 4 μ (Exygen ID: 74A)
(JONESCHROMATOGRAPHY: Part No. FK5962E)

Mobile Phase (A) : 2 mM Ammonium Acetate in Type I Water
Mobile Phase (B) : Methanol

Analyst: Karen Risha
Exygen Research
3058 Research Drive, State College, PA 16801
Phone: (814) 272-1039 FAX: (814) 231-1580

kg 08/01/03

NOTE: The next 3 pages are computer generated printouts from the masslynx software program. The pages contain the instrument settings used for the analysis of this data set.

All Handwritten Peak ID's by: *kg 08/03/03*

Scanning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUDE\C6 C8 SULF C8 ACID PFOSA
Last Modified: Thu Jul 31 16:23:50 2003

Printed: Fri Aug 01 15:29:10 2003

08/01/03

Solvent Delay (mins) : 0.00

Analog Channel 4 : Unused

Function : 1 MRM of 4 Mass Pairs (ESP-)

Inter Channel Delay (Secs) : 0.03

Span (Daltons) : 0.00

Start Time (Mins) : 0.00

End Time (Mins) : 12.00

Repeats : 1

	Channel	Parent	Daughter	Dwell (Secs)	Coll Energy (eV)	Cone (V)
1		399.00	80.00	0.20	35	50
2		413.00	369.00	0.20	10	10
3		498.00	78.00	0.20	30	50
4		499.00	99.00	0.20	40	30

Method Report

Page 1

Method File:
Last Modified:c:\masslynx\fluorochemicals.pro\acqddb\pfbs water
Friday, August 01, 2003 15:20:36

Printed:

Friday, August 01, 2003 15:29:16

pfbs 01/03

HP1100 LC Pump Initial Conditions

Solvents

A%	90.0
B%	10.0
C%	0.0
D%	0.0

Flow (ml/min)	0.300
Stop Time (mins)	20.0
Min Pressure (bar)	0
Max Pressure (bar)	400
Oven Temperature Left (°C)	35.0
Oven Temperature Right (°C)	35.0

HP1100 LC Pump Gradient Timetable

The gradient Timetable contains 8 entries which are :

Time	A%	B%	C%	D%	Flow	Pressure
0.00	90.0	10.0	0.0	0.0	0.300	400
2.00	90.0	10.0	0.0	0.0	0.300	400
5.00	10.0	90.0	0.0	0.0	0.300	400
9.00	10.0	90.0	0.0	0.0	0.300	400
9.50	0.0	100.0	0.0	0.0	0.300	400
14.00	0.0	100.0	0.0	0.0	0.300	400
14.50	90.0	10.0	0.0	0.0	0.300	400
20.00	90.0	10.0	0.0	0.0	0.300	400

HP1100 LC Pump External Event Timetable

The Timetable contains 6 entries which are :

Time	Column Switch	Contact1	Contact2	Contact3	Contact4
Initial	Off	Off	Off	Off	Off
0.00	Off	On	Off	Off	Off
0.05	Off	Off	Off	Off	Off
0.10	Off	Off	On	Off	Off
11.90	Off	Off	Off	On	Off
12.00	Off	Off	Off	Off	Off

HP1100 Autosampler Initial Conditions

Draw Speed	200.0
Eject Speed (µl/min)	200
Draw Position (mm)	0.50
Stop Time (mins)	20.00
Injection Volume (µl)	15.0
Vial Number	69

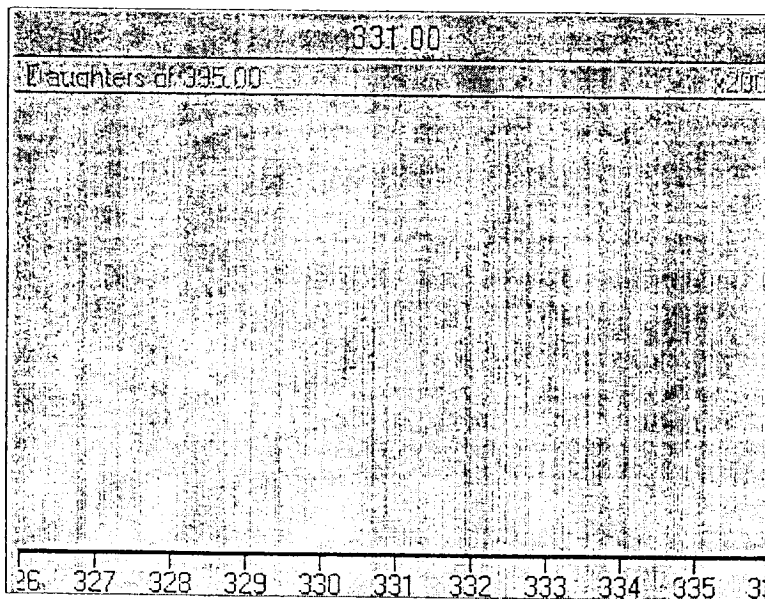
Tuning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQADB\FLUOROCHEMS

Printed: Fri Aug 01 15:29:30 2003

08/01/03



Dau 395.00

SOURCE (ESP-)	Set	Rdbk	Analyser	Set	Rdbk
Capillary	3.00	-2.93	LM Res 1	14.0	
Cone	20	-33	HM Res 1	14.0	
Hexapole 1	0.0		IEnergy 1	1.0	
Aperture 1	0.0		Entrance	-2	36
Hexapole 2	0.0		Collision	15	19
Source Block Temp.	100	100	Exit	2	40
Desolvation Temp.	300	299	LM Res 2	14.0	
			HM Res 2	14.0	
			IEnergy 2	2.0	
			Multiplier	650	-648
Pressures	Rdbk		Gas Flows	Rdbk	
Analyser Vacuum	OFF		Cone Gas	131.8	
Gas Cell	3.3e-3		Desolvation	751.3	

Quantify Calibration Report

Page 1

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\080103A Decatur BC

Last modified: Sun Aug 03 07:26:03 2003

Printed: Sun Aug 03 07:32:22 2003

RF 08/23/03 pages 1-4

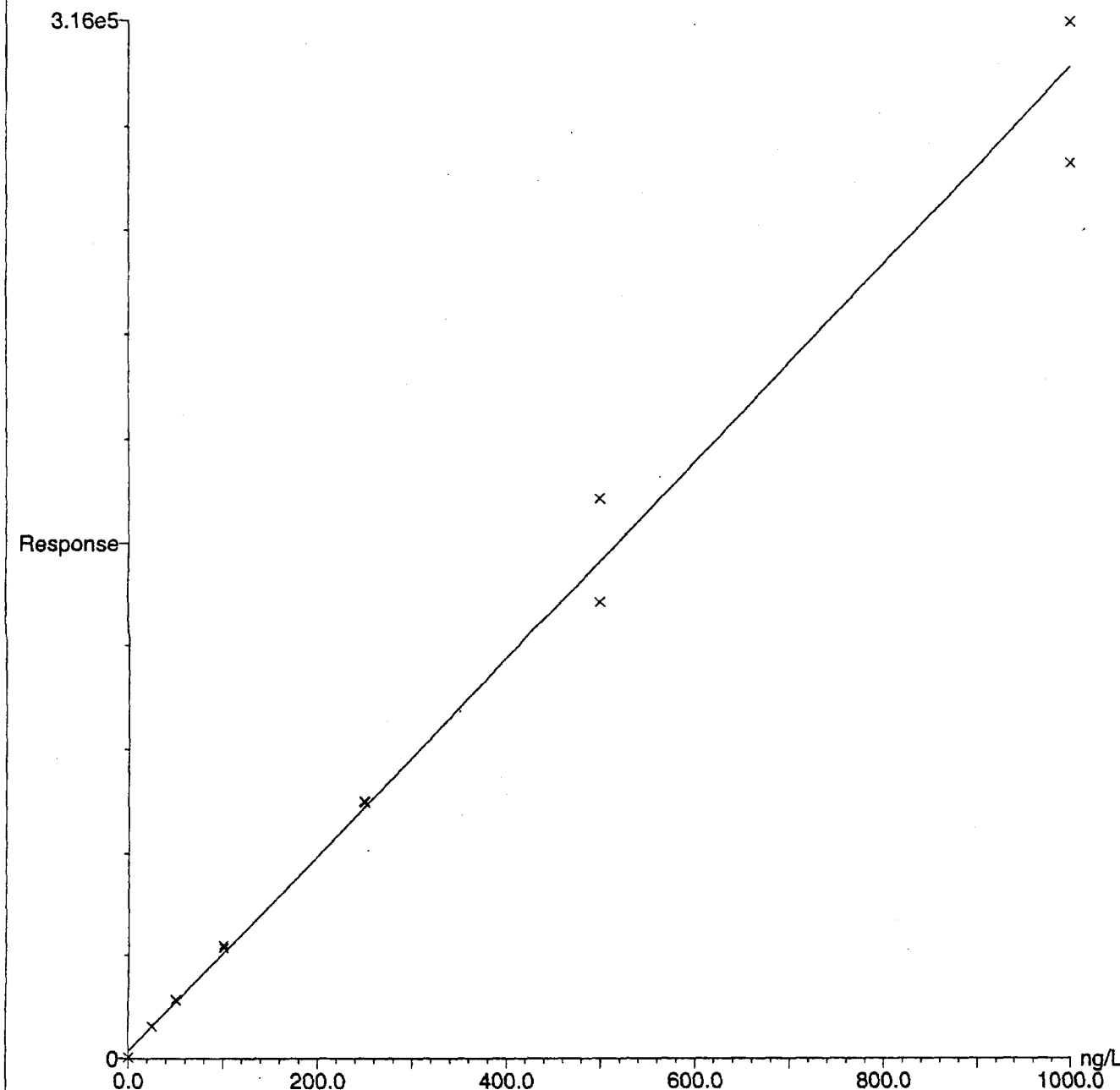
Compound 1 name: C8 Acid (PFOA)

Coefficient of Determination: 0.988097

Calibration curve: $300.076 * x + 2344.75$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Calibration Report

Page 2

Study No.:L34910, Set No.:080103A, Ext.Date:08/01/03, Analyst:K.Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\080103A Decatur BC

Last modified: Sun Aug 03 07:26:03 2003

Printed: Sun Aug 03 07:32:22 2003

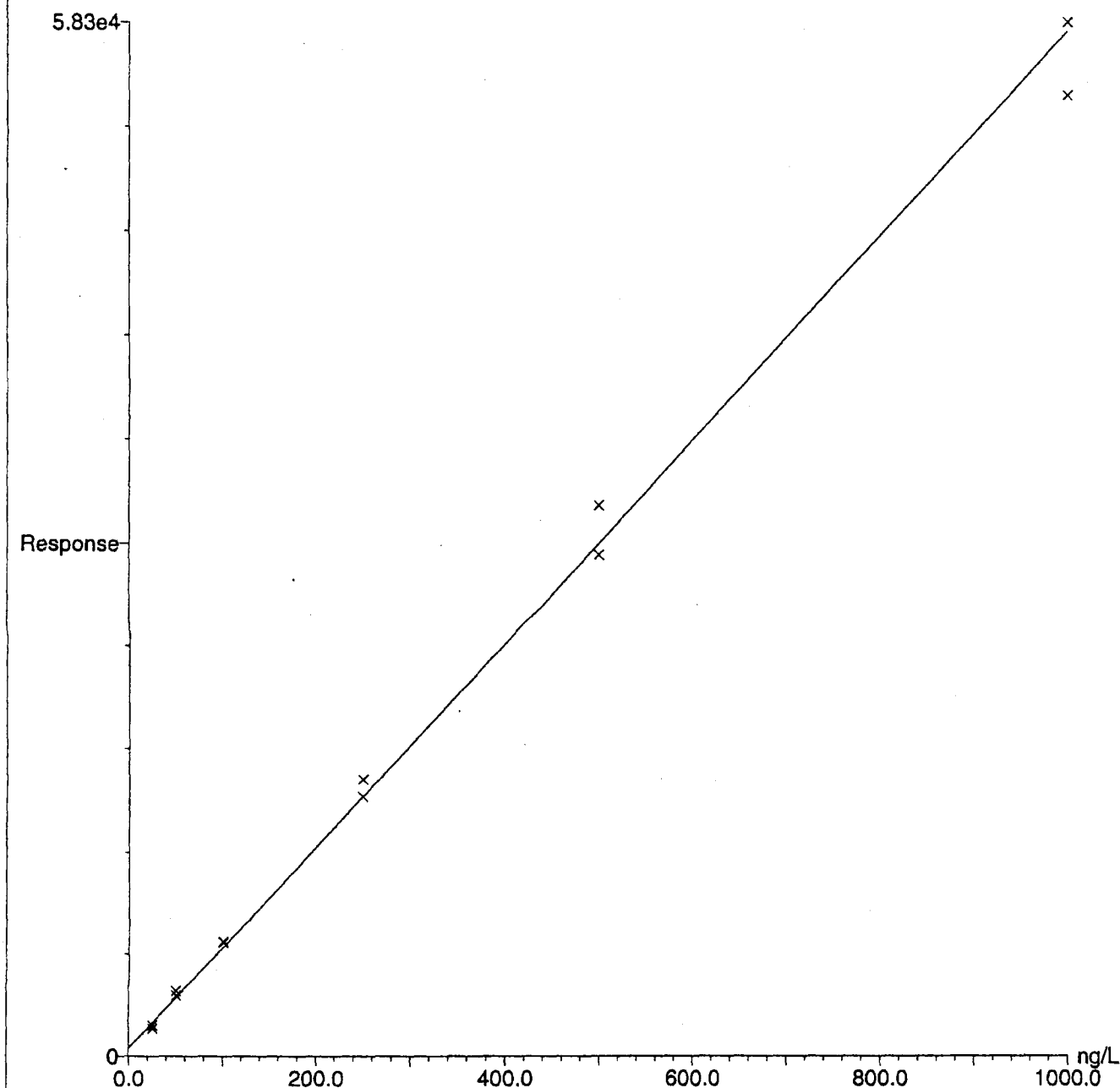
Compound 2 name: C6 Sulfonate (PFHS)

Coefficient of Determination: 0.995587

Calibration curve: $57.3138 * x + 476.906$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Calibration Report

Page 3

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Calibration: F:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\080103A Decatur BC

Last modified: Sun Aug 03 07:26:03 2003

Printed: Sun Aug 03 07:32:22 2003

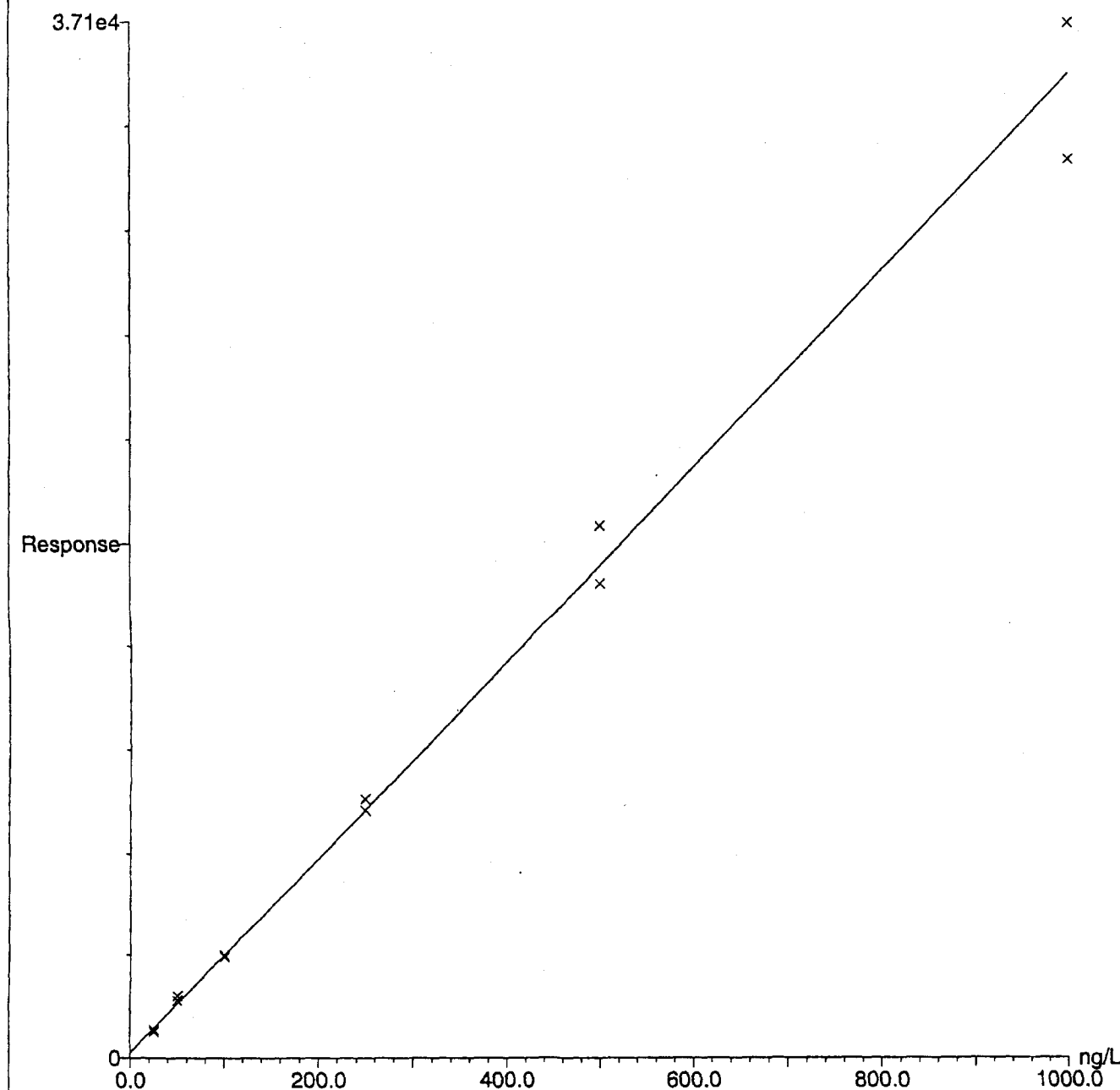
Compound 3 name: C8 Sulfonate (PFOS)

Coefficient of Determination: 0.990916

Calibration curve: $35.0593 * x + 208.543$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Calibration Report

Page 4

Study No.: I34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\080103A Decatur BC

Last modified: Sun Aug 03 07:26:03 2003

Printed: Sun Aug 03 07:32:22 2003

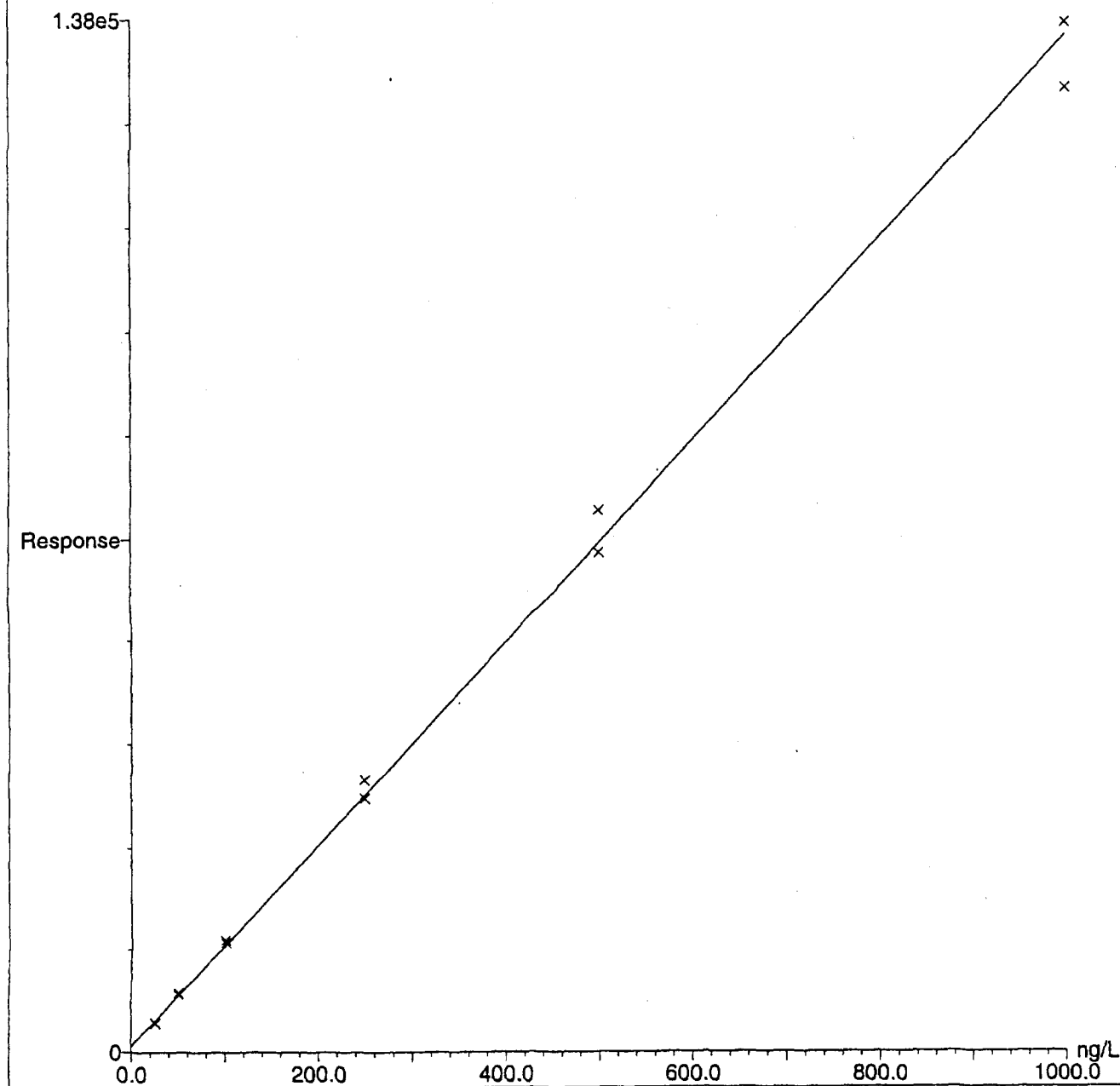
Compound 4 name: PFOSA

Coefficient of Determination: 0.996863

Calibration curve: $135.358 * x + 849.062$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Sample Report

Page 1

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: F:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: F:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Initials

Date 08/03/03

Run# 080103A-2001 To 080103A-2030

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2001

Text:

1: C8 Acid (PFOA)

XC072503-0, 0 ng/L Standard

02-Aug-2003 02:27:16

LC/MS/MS #6

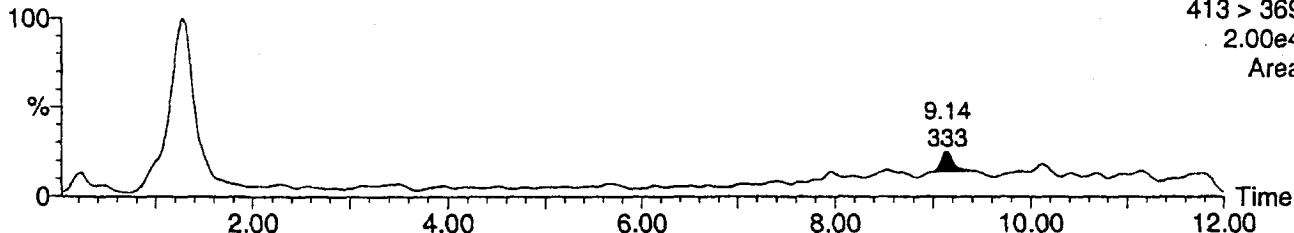
MRM of 4 Channels ES-

413 > 369

2.00e4

Area

080103A-2001 Sm (Mn, 2x3)



2: C6 Sulfonate (PFHS)

XC072503-0, 0 ng/L Standard

02-Aug-2003 02:27:16

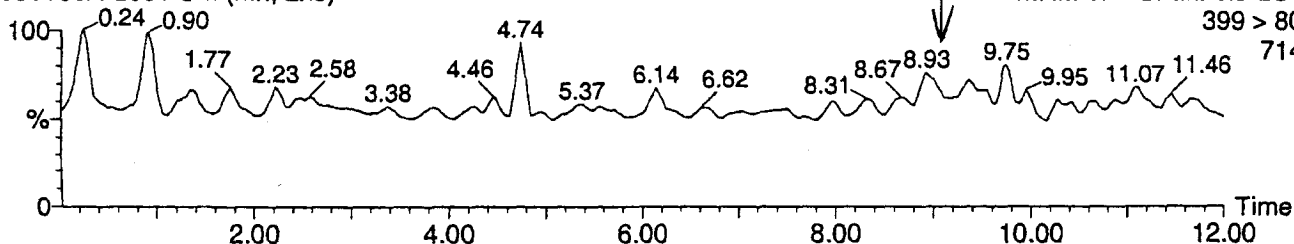
LC/MS/MS #6

MRM of 4 Channels ES-

399 > 80

714

080103A-2001 Sm (Mn, 2x3)



3: C8 Sulfonate (PFOS)

XC072503-0, 0 ng/L Standard

02-Aug-2003 02:27:16

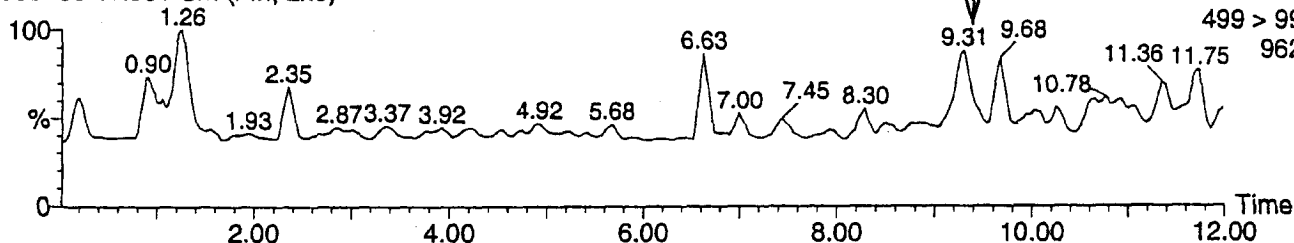
LC/MS/MS #6

MRM of 4 Channels ES-

499 > 99

962

080103A-2001 Sm (Mn, 2x3)



Quantify Sample Report

Page 2

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC
Last modified: Sun Aug 03 07:25:44 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:32:25 2003

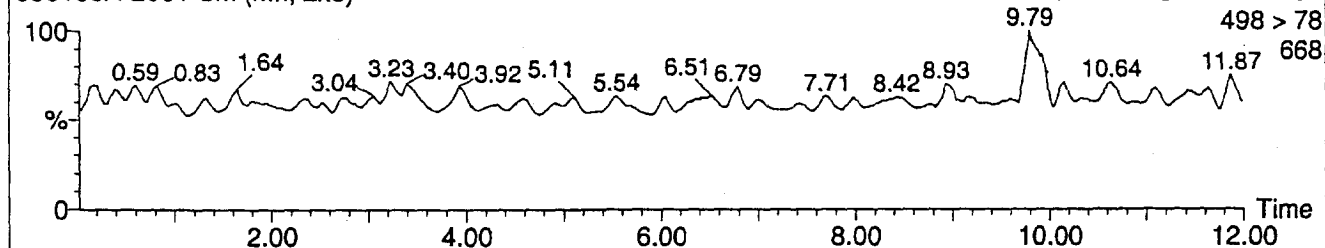
Name: 080103A-2001

Text:

4: PFOSA

XC072503-0, 0 ng/L Standard

080103A-2001 Sm (Mn, 2x3)



Quantify Sample Report

Page 3

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2002

Text:

1: C8 Acid (PFOA)

XC072503-1, 25 ng/L Standard

02-Aug-2003 02:49:05

LC/MS/MS #6

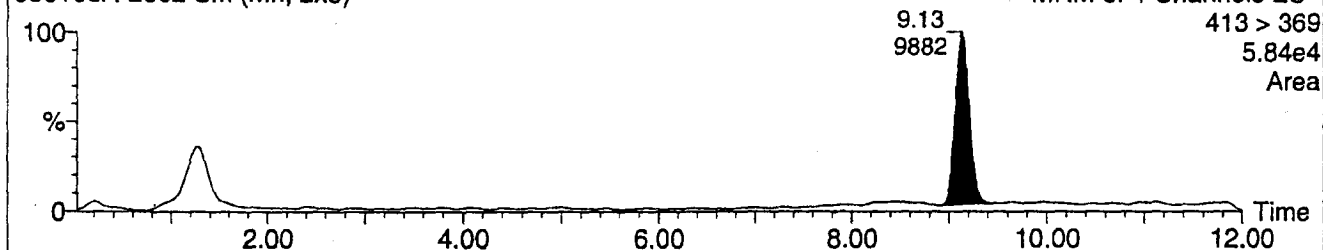
080103A-2002 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

5.84e4

Area



2: C6 Sulfonate (PFHS)

XC072503-1, 25 ng/L Standard

02-Aug-2003 02:49:05

LC/MS/MS #6

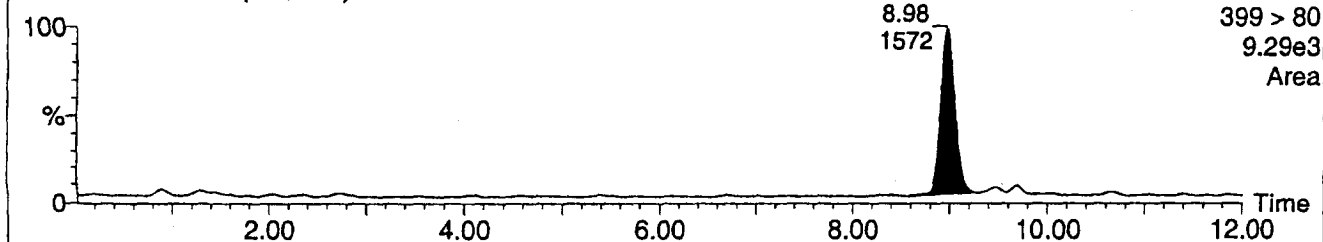
080103A-2002 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

9.29e3

Area



3: C8 Sulfonate (PFOS)

XC072503-1, 25 ng/L Standard

02-Aug-2003 02:49:05

LC/MS/MS #6

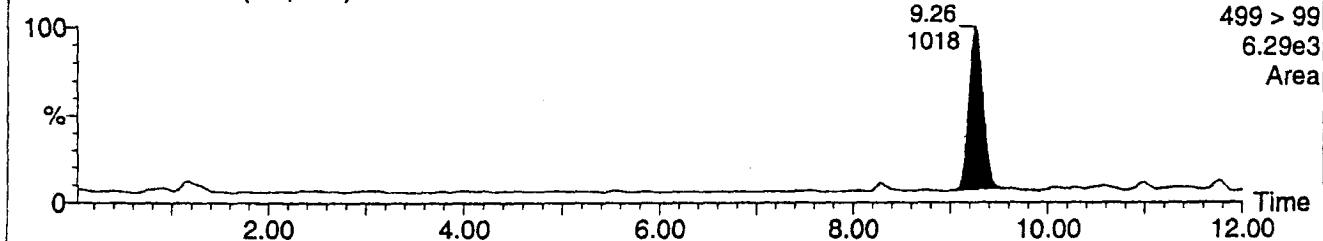
080103A-2002 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

6.29e3

Area



Quantify Sample Report

Page 4

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2002

Text:

4: PFOSA

XC072503-1, 25 ng/L Standard

02-Aug-2003 02:49:05

LC/MS/MS #6

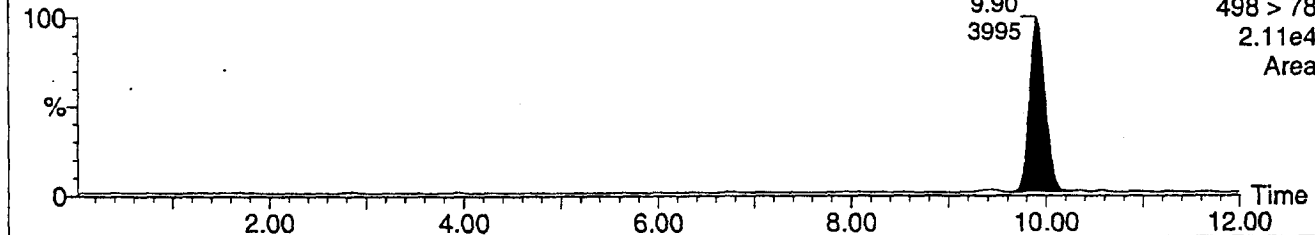
080103A-2002 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

2.11e4

Area



Quantify Sample Report

Page 5

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2003

Text:

1: C8 Acid (PFOA)

XC072503-2, 50 ng/L Standard

02-Aug-2003 03:10:44

LC/MS/MS #6

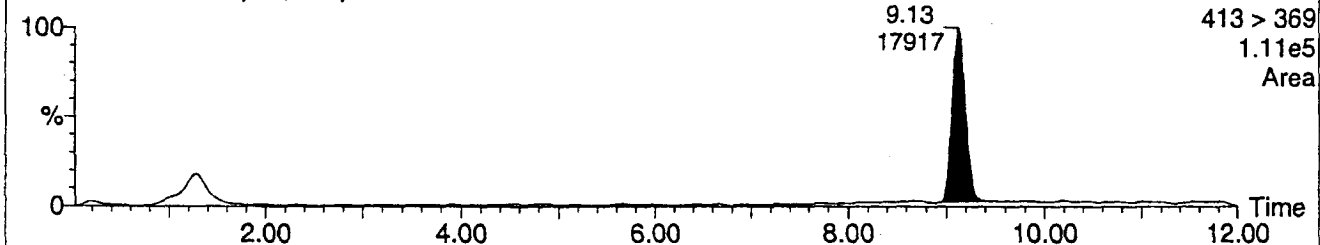
080103A-2003 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.11e5

Area



2: C6 Sulfonate (PFHS)

XC072503-2, 50 ng/L Standard

02-Aug-2003 03:10:44

LC/MS/MS #6

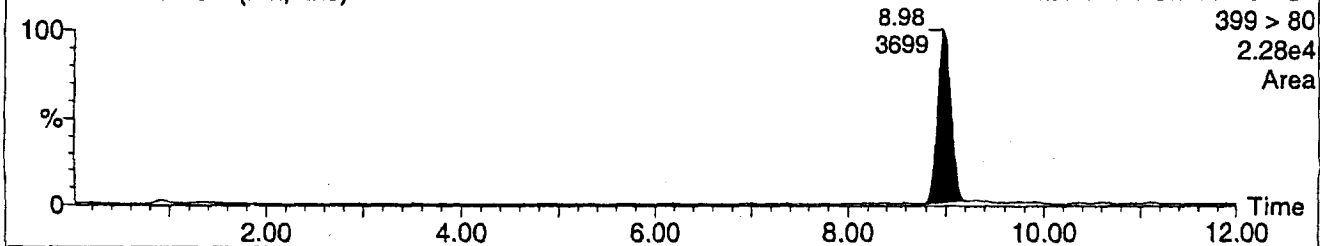
080103A-2003 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

2.28e4

Area



3: C8 Sulfonate (PFOS)

XC072503-2, 50 ng/L Standard

02-Aug-2003 03:10:44

LC/MS/MS #6

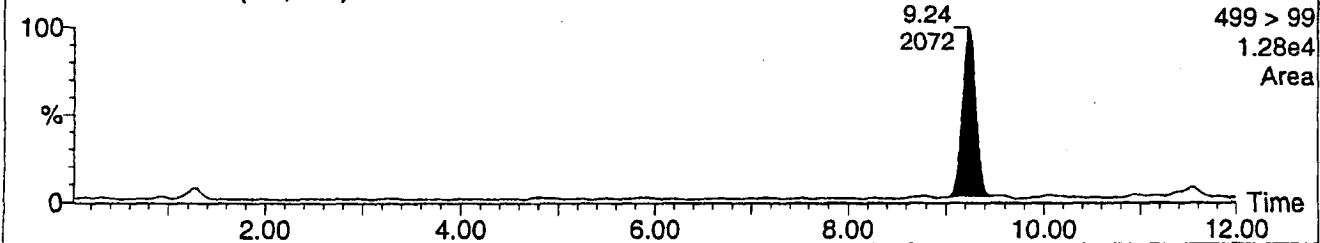
080103A-2003 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.28e4

Area



Quantify Sample Report

Page 6

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2003

Text:

4: PFOSA

XC072503-2, 50 ng/L Standard

02-Aug-2003 03:10:44

LC/MS/MS #6

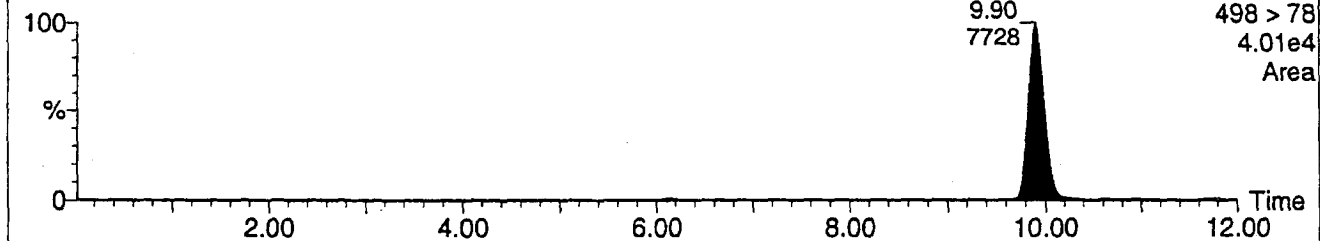
080103A-2003 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

4.01e4

Area



Quantify Sample Report

Page 7

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2004

Text:

1: C8 Acid (PFOA)

XC072503-3, 100 ng/L Standard

02-Aug-2003 03:32:27

LC/MS/MS #6

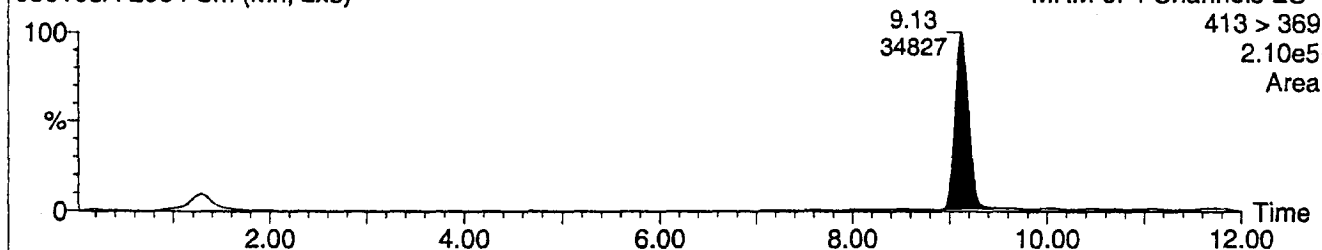
080103A-2004 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

2.10e5

Area



2: C6 Sulfonate (PFHS)

XC072503-3, 100 ng/L Standard

02-Aug-2003 03:32:27

LC/MS/MS #6

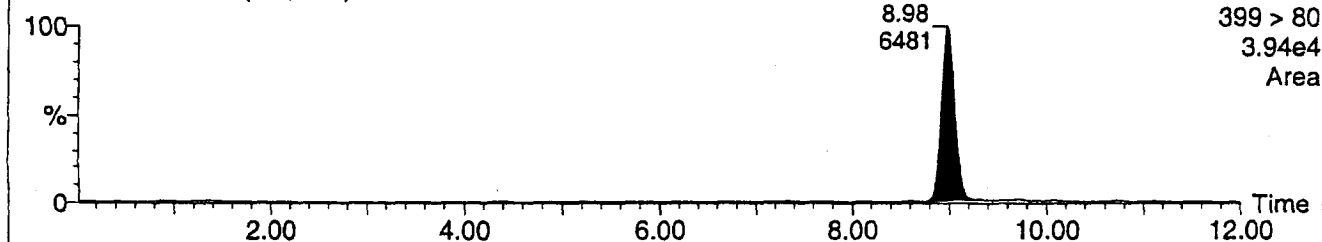
080103A-2004 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

3.94e4

Area



3: C8 Sulfonate (PFOS)

XC072503-3, 100 ng/L Standard

02-Aug-2003 03:32:27

LC/MS/MS #6

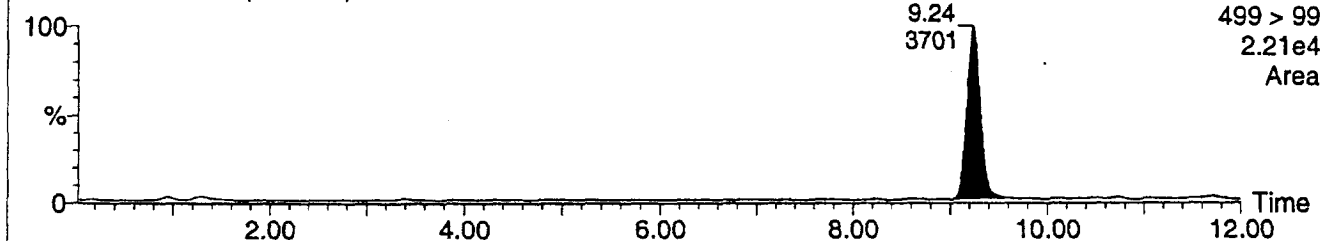
080103A-2004 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.21e4

Area



Quantify Sample Report

Page 8

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2004

Text:

4: PFOSA

XC072503-3, 100 ng/L Standard

02-Aug-2003 03:32:27

LC/MS/MS #6

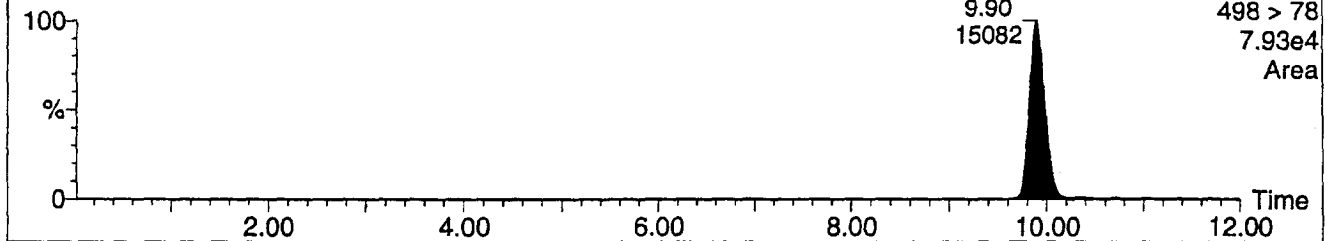
080103A-2004 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

7.93e4

Area



Quantify Sample Report

Page 9

Study No.:L34910, Set No.:080103A, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC
Last modified: Sun Aug 03 07:25:44 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2005

Text:

1: C8 Acid (PFOA)

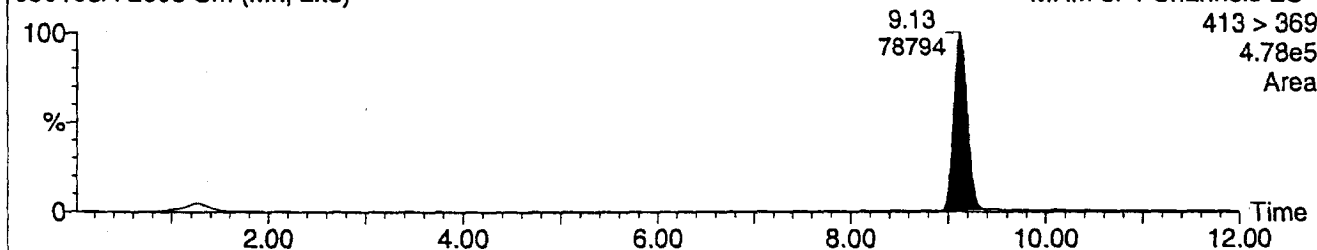
XC072503-4, 250 ng/L Standard

02-Aug-2003 03:54:13

LC/MS/MS #6

080103A-2005 Sm (Mn, 2x3)

MRM of 4 Channels ES-
413 > 369
4.78e5
Area



2: C6 Sulfonate (PFHS)

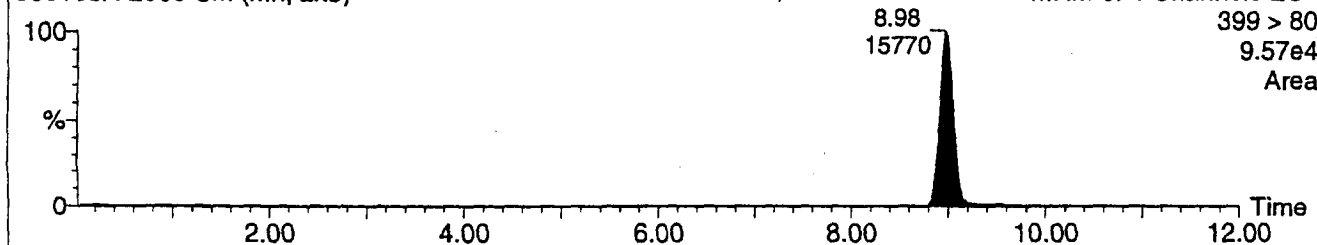
XC072503-4, 250 ng/L Standard

02-Aug-2003 03:54:13

LC/MS/MS #6

080103A-2005 Sm (Mn, 2x3)

MRM of 4 Channels ES-
399 > 80
9.57e4
Area



3: C8 Sulfonate (PFOS)

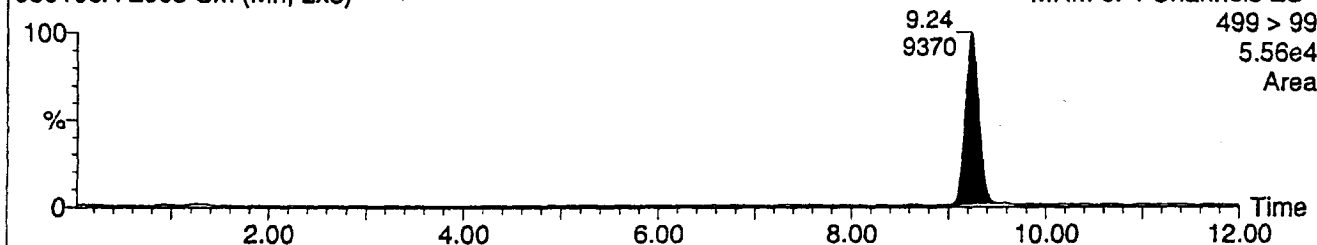
XC072503-4, 250 ng/L Standard

02-Aug-2003 03:54:13

LC/MS/MS #6

080103A-2005 Sm (Mn, 2x3)

MRM of 4 Channels ES-
499 > 99
5.56e4
Area



Quantify Sample Report

Page 10

Study No.:L34910, Set No.:080103A, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2005

Text:

4: PFOSA

XC072503-4, 250 ng/L Standard

02-Aug-2003 03:54:13

LC/MS/MS #6

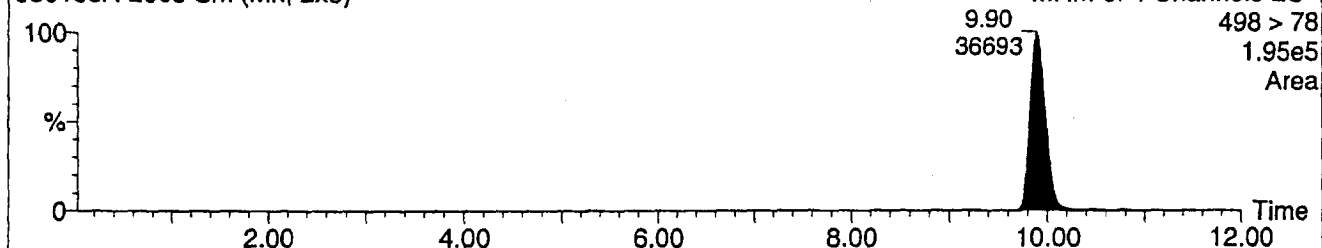
080103A-2005 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.95e5

Area



Quantify Sample Report

Page 11

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2006

Text:

1: C8 Acid (PFOA)

XC072503-5, 500 ng/L Standard

02-Aug-2003 04:15:54

LC/MS/MS #6

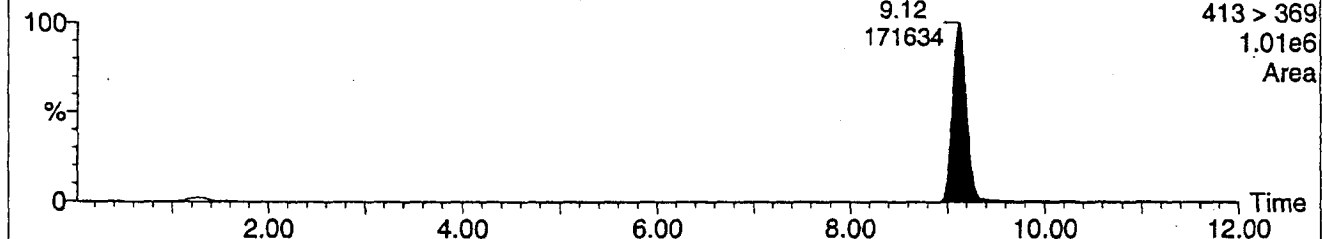
080103A-2006 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.01e6

Area



2: C6 Sulfonate (PFHS)

XC072503-5, 500 ng/L Standard

02-Aug-2003 04:15:54

LC/MS/MS #6

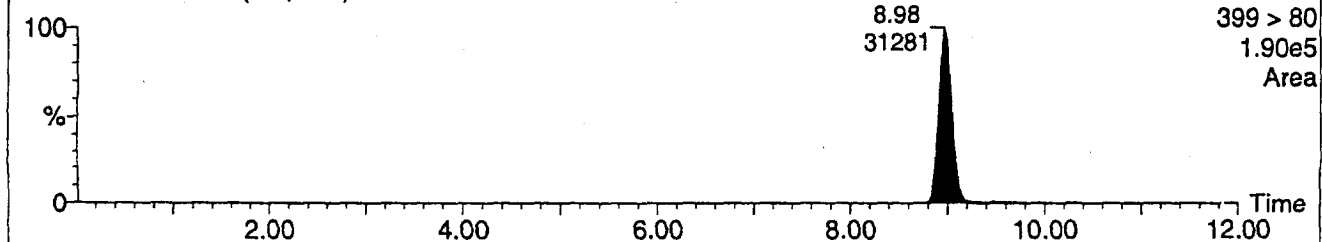
080103A-2006 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.90e5

Area



3: C8 Sulfonate (PFOS)

XC072503-5, 500 ng/L Standard

02-Aug-2003 04:15:54

LC/MS/MS #6

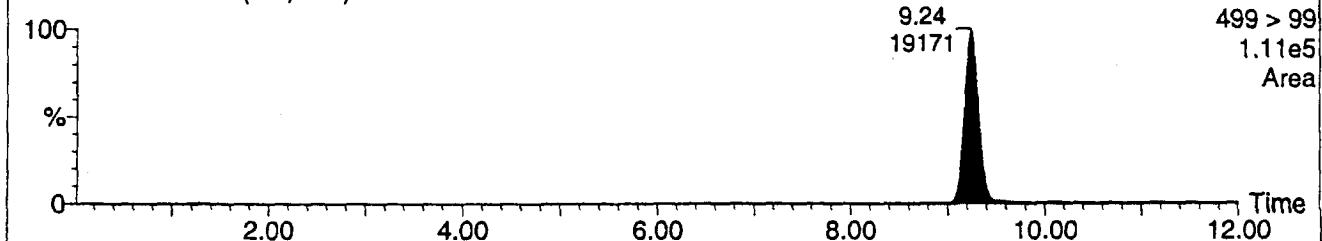
080103A-2006 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.11e5

Area



Quantify Sample Report

Page 12

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2006

Text:

4: PFOSA

XC072503-5, 500 ng/L Standard

02-Aug-2003 04:15:54

LC/MS/MS #6

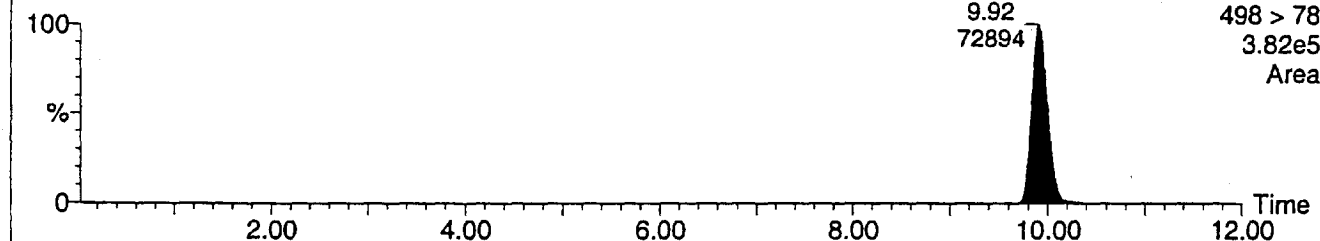
080103A-2006 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

3.82e5

Area



Quantify Sample Report

Page 13

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC
Last modified: Sun Aug 03 07:25:44 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2007

Text:

1: C8 Acid (PFOA)

XC072503-6, 1000 ng/L Standard

02-Aug-2003 04:37:34

LC/MS/MS #6

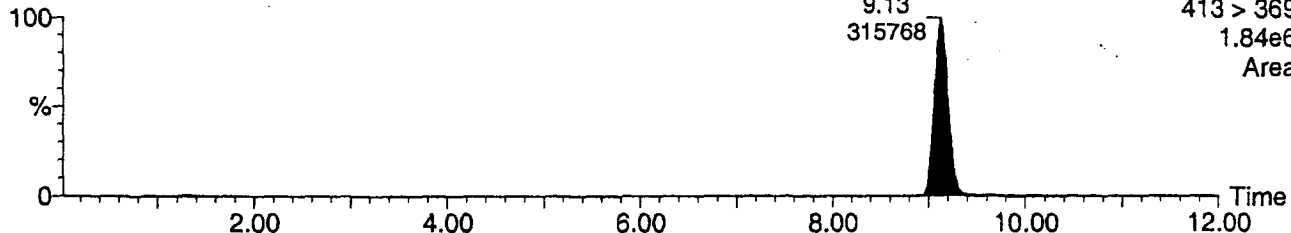
080103A-2007 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.84e6

Area



2: C6 Sulfonate (PFHS)

XC072503-6, 1000 ng/L Standard

02-Aug-2003 04:37:34

LC/MS/MS #6

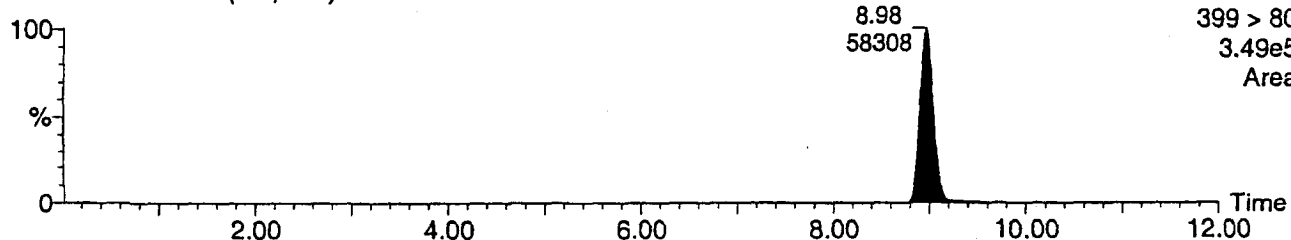
080103A-2007 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

3.49e5

Area



3: C8 Sulfonate (PFOS)

XC072503-6, 1000 ng/L Standard

02-Aug-2003 04:37:34

LC/MS/MS #6

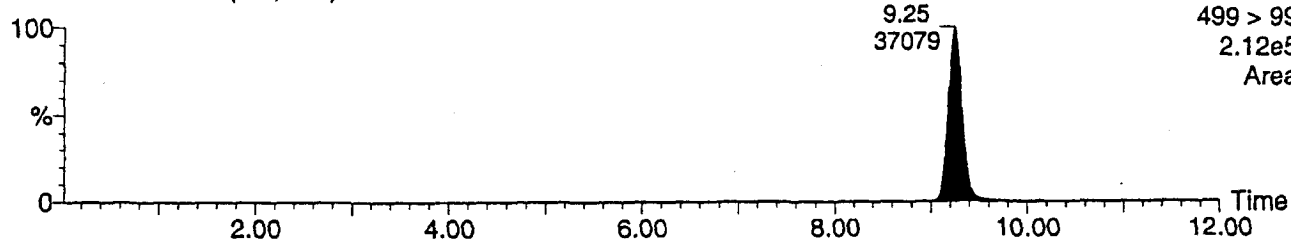
080103A-2007 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.12e5

Area



Quantify Sample Report

Page 14

Study No.:L34910, Set No.:080103A, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2007

Text:

4: PFOSA

XC072503-6, 1000 ng/L Standard

02-Aug-2003 04:37:34

LC/MS/MS #6

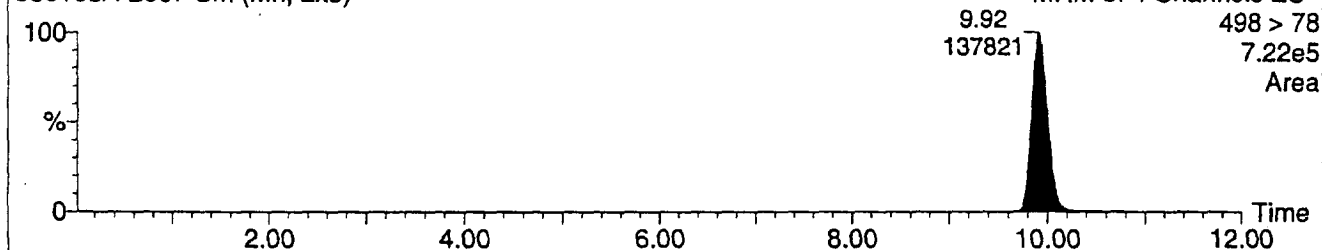
080103A-2007 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

7.22e5

Area



Quantify Sample Report

Page 15

Study No.: I34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

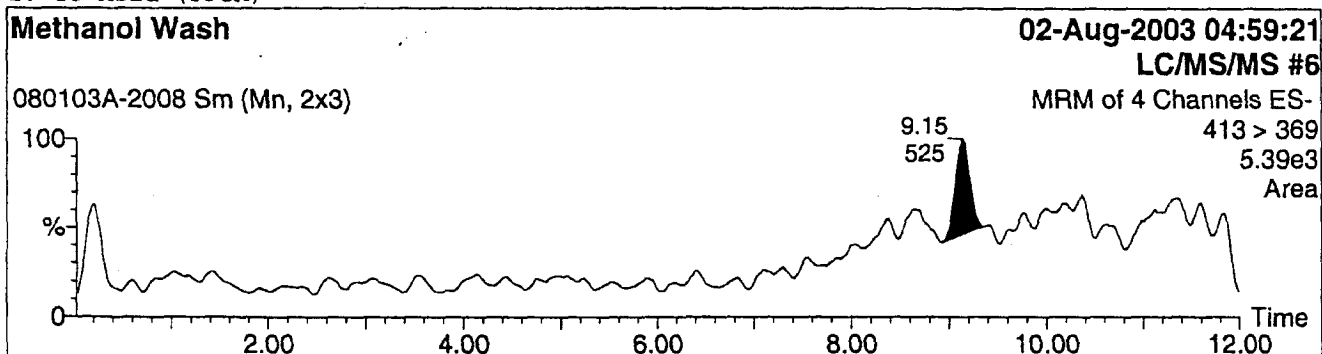
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC
 Last modified: Sun Aug 03 07:25:44 2003
 Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
 Last modified: Sun Aug 03 07:11:59 2003
 Job Code:

Printed: Sun Aug 03 07:32:25 2003

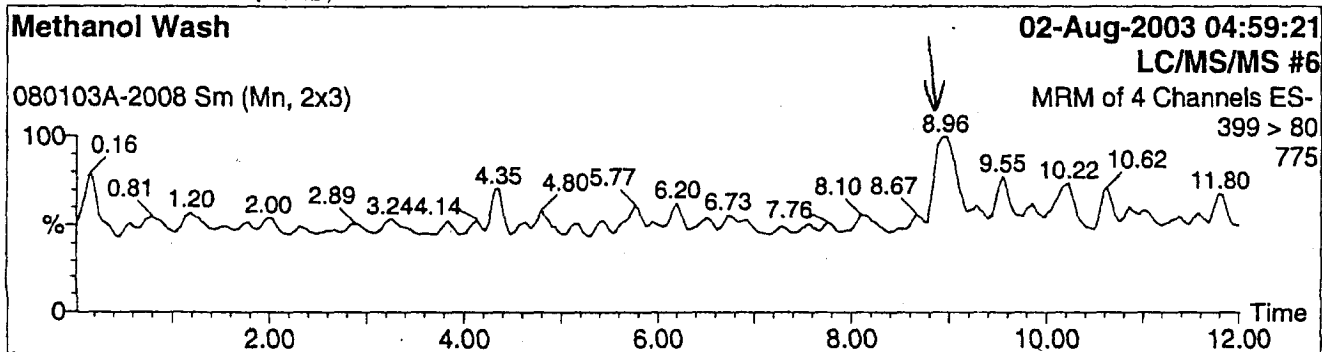
Name: 080103A-2008

Text:

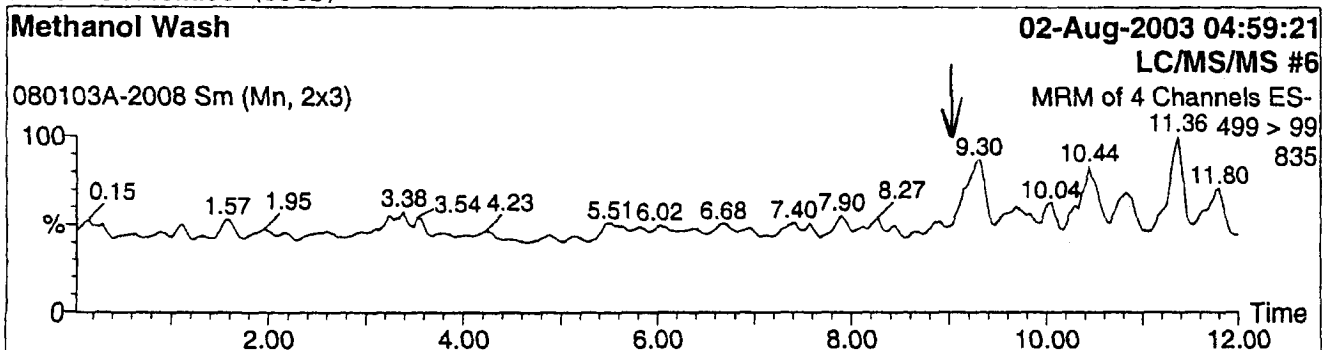
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 16

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

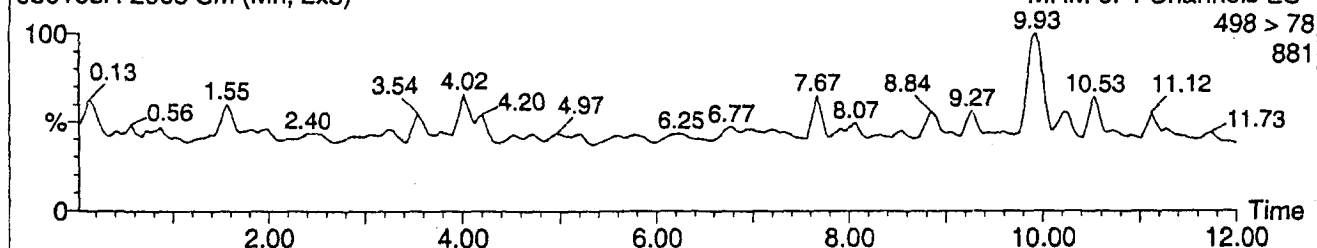
Name: 080103A-2008

Text:

4: PFOSA

Methanol Wash

080103A-2008 Sm (Mn, 2x3)



Quantify Sample Report

Page 17

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

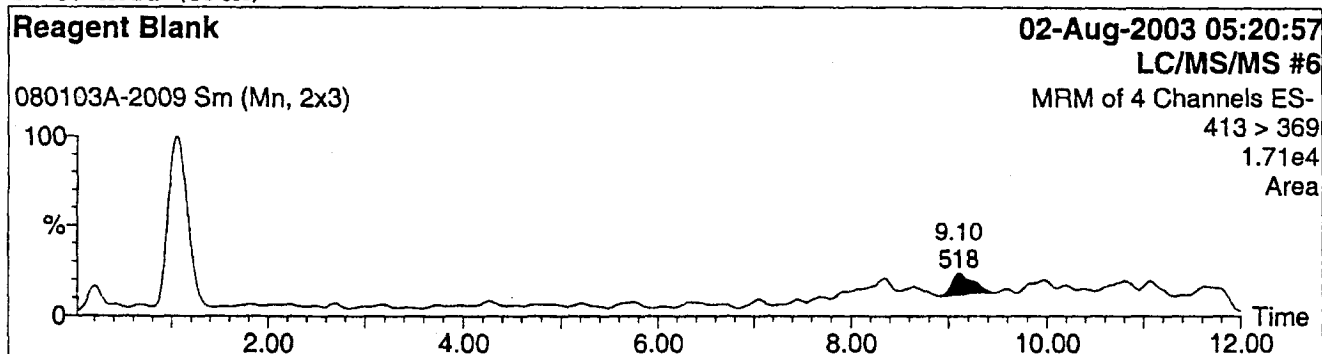
Job Code:

Printed: Sun Aug 03 07:32:25 2003

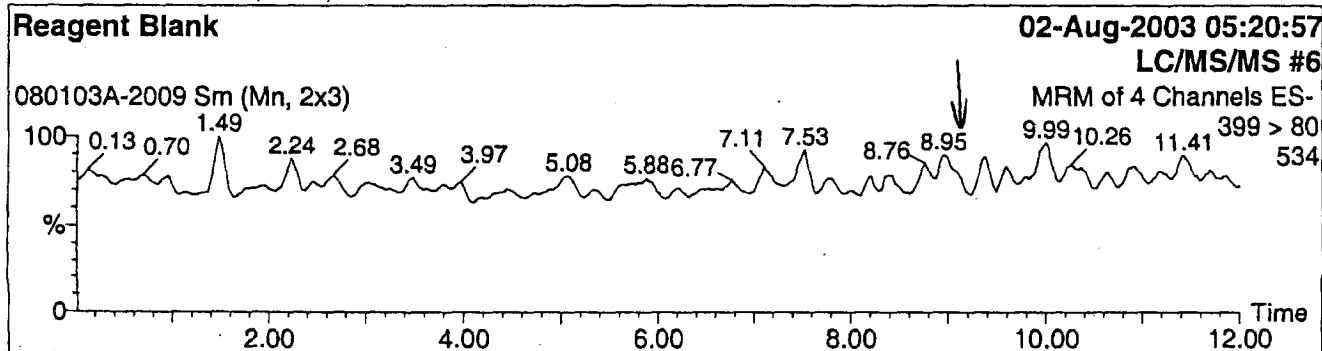
Name: 080103A-2009

Text:

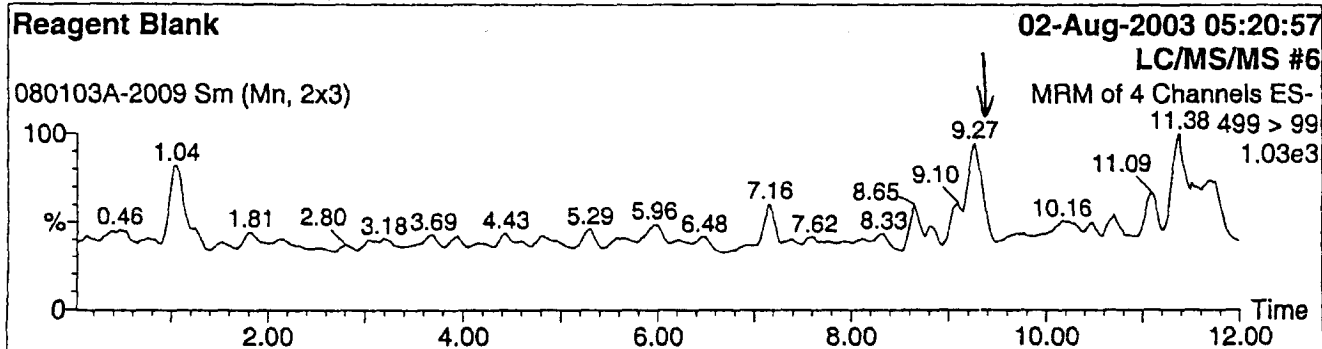
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 18

Study No.:L34910, Set No.:080103A, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

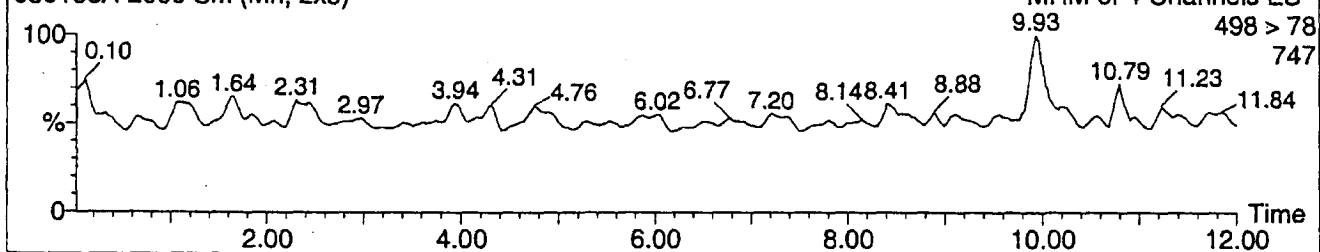
Name: 080103A-2009

Text:

4: PFOSA

Reagent Blank

080103A-2009 Sm (Mn, 2x3)



Quantify Sample Report

Page 19

Study No.:L34910, Set No.:080103A, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2010

Text:

1: C8 Acid (PFOA)

Reagent Spk A, 50 ng/L

02-Aug-2003 05:42:42

LC/MS/MS #6

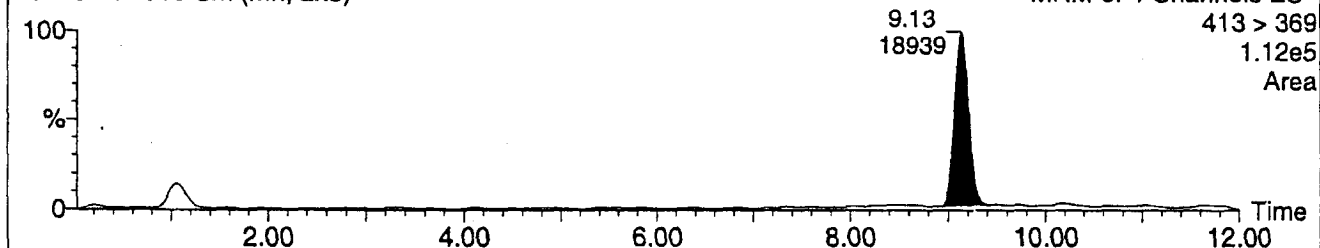
080103A-2010 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.12e5

Area



2: C6 Sulfonate (PFHS)

Reagent Spk A, 50 ng/L

02-Aug-2003 05:42:42

LC/MS/MS #6

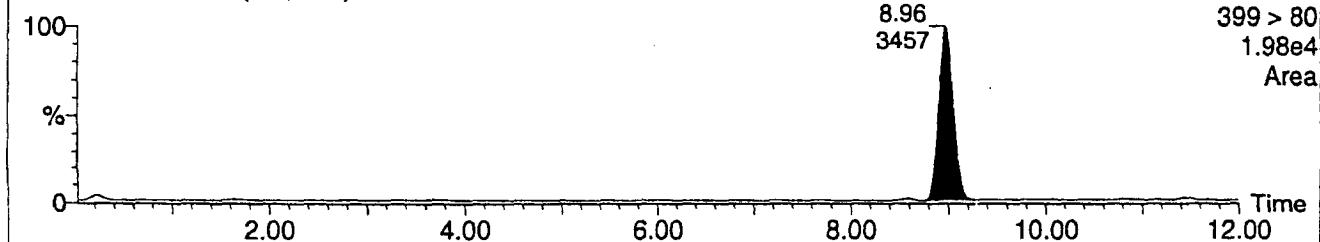
080103A-2010 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.98e4

Area



3: C8 Sulfonate (PFOS)

Reagent Spk A, 50 ng/L

02-Aug-2003 05:42:42

LC/MS/MS #6

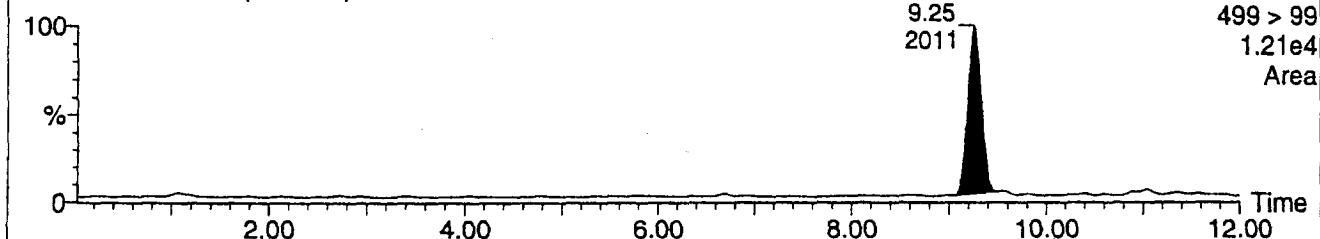
080103A-2010 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.21e4

Area



Quantify Sample Report

Page 20

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2010

Text:

4: PFOSA

Reagent Spk A, 50 ng/L

02-Aug-2003 05:42:42

LC/MS/MS #6

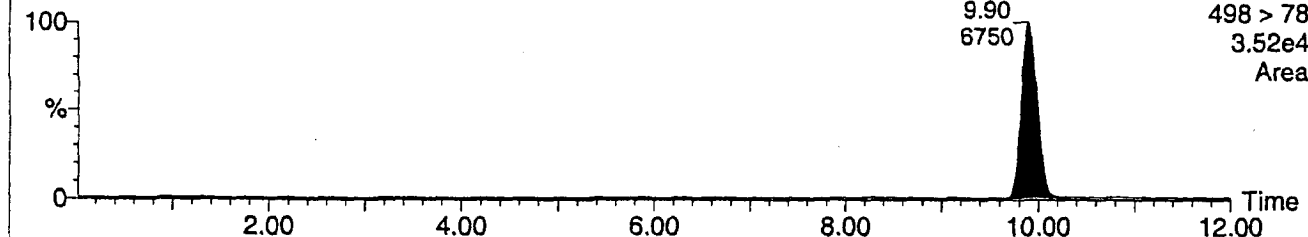
080103A-2010 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

3.52e4

Area



Quantify Sample Report

Page 21

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

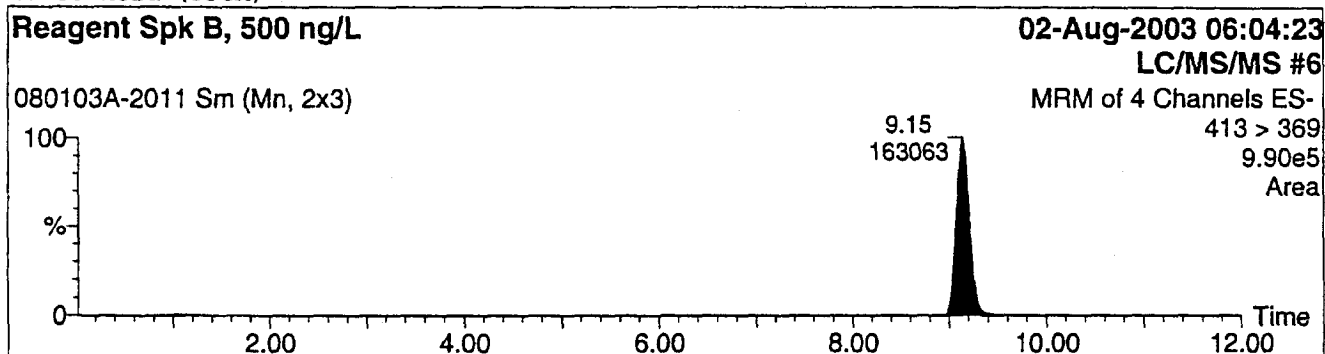
Job Code:

Printed: Sun Aug 03 07:32:25 2003

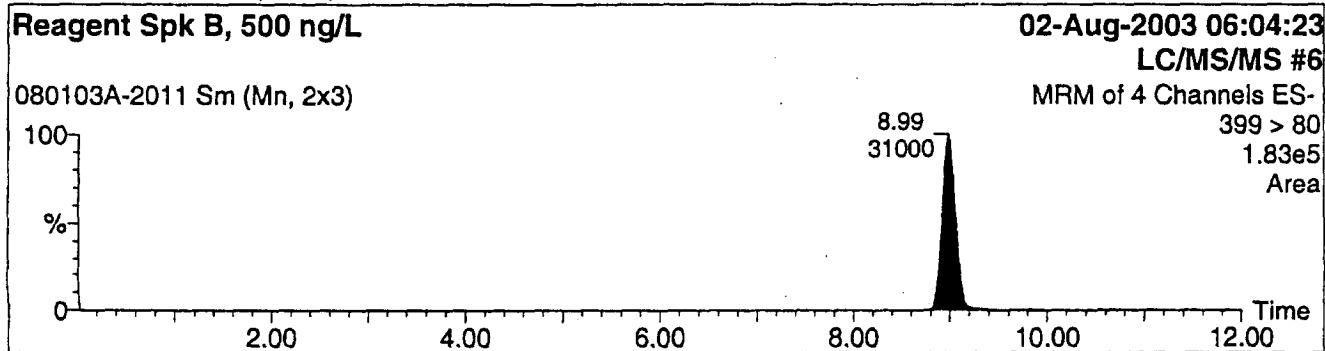
Name: 080103A-2011

Text:

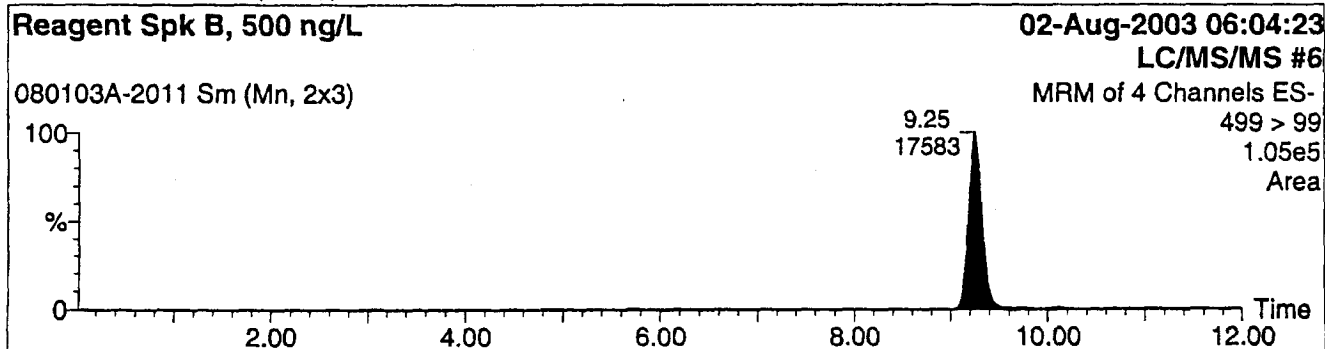
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 22

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

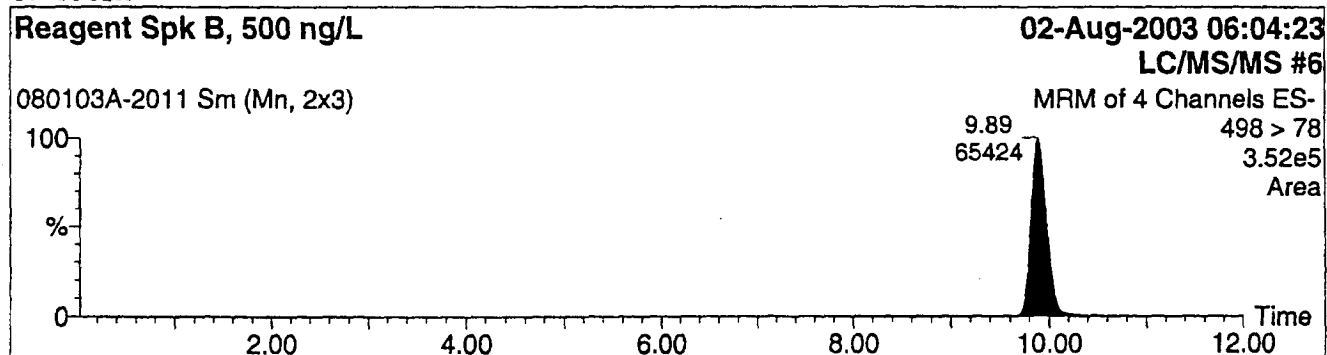
Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2011

Text:

4: PFOSA



Quantify Sample Report

Page 23

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2012

Text:

1: C8 Acid (PFOA)

XC072503-1, 25 ng/L Standard

02-Aug-2003 06:26:10

LC/MS/MS #6

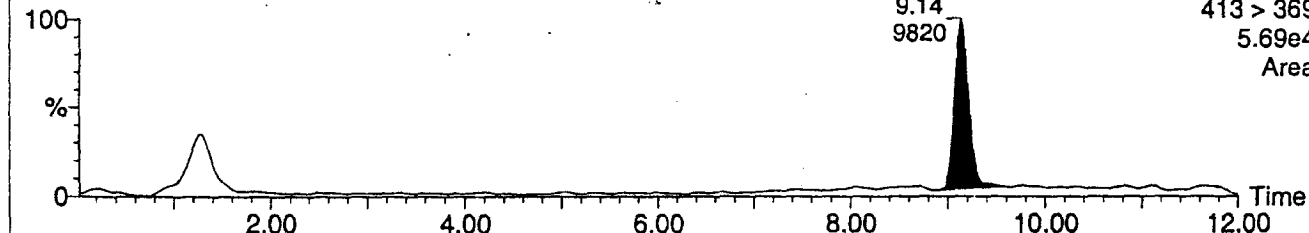
080103A-2012 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

5.69e4

Area



2: C6 Sulfonate (PFHS)

XC072503-1, 25 ng/L Standard

02-Aug-2003 06:26:10

LC/MS/MS #6

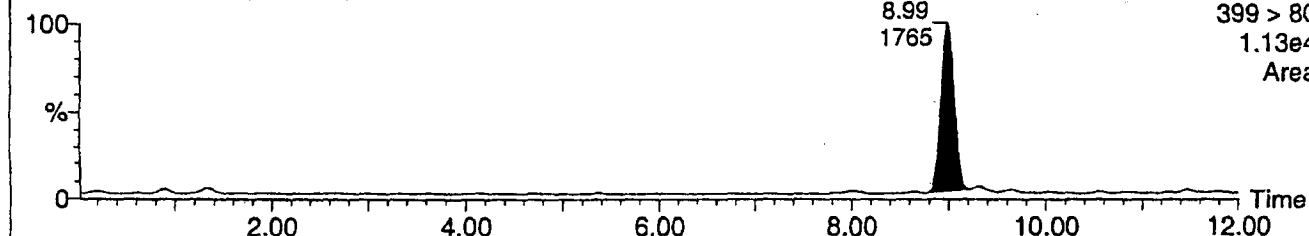
080103A-2012 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.13e4

Area



3: C8 Sulfonate (PFOS)

XC072503-1, 25 ng/L Standard

02-Aug-2003 06:26:10

LC/MS/MS #6

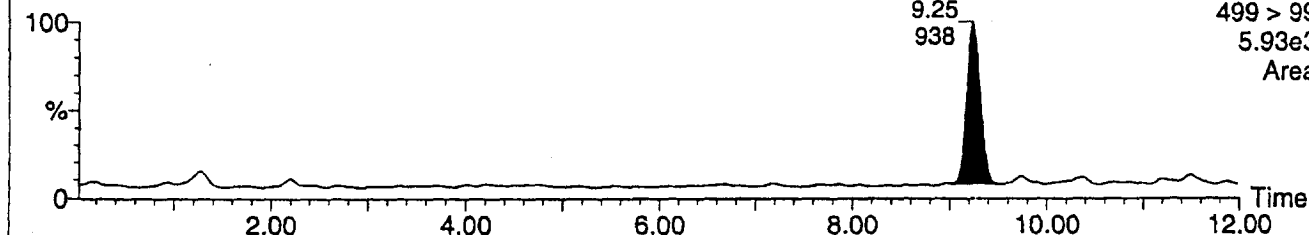
080103A-2012 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

5.93e3

Area



Quantify Sample Report

Page 24

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2012

Text:

4: PFOSA

XC072503-1, 25 ng/L Standard

02-Aug-2003 06:26:10

LC/MS/MS #6

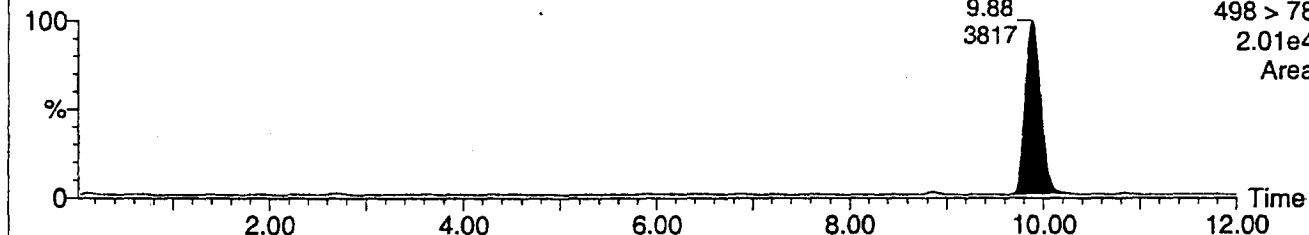
080103A-2012 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

2.01e4

Area



Quantify Sample Report

Page 25

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

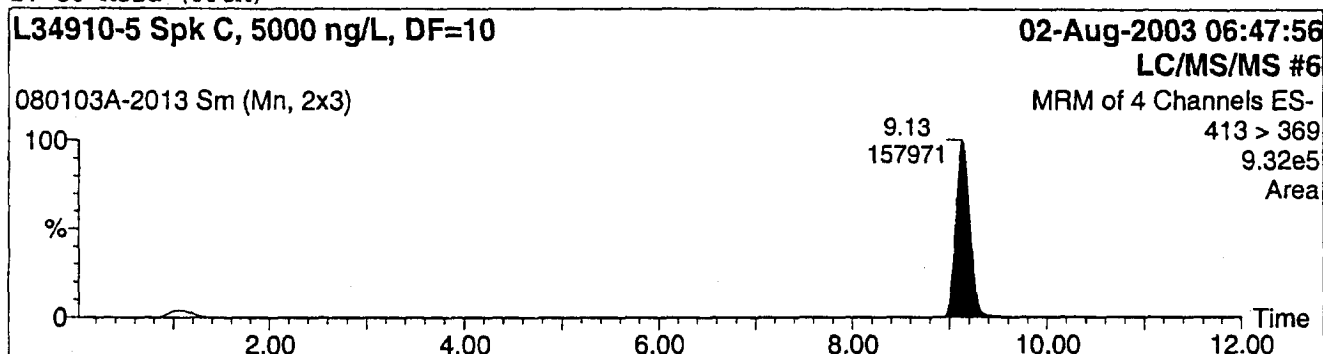
Job Code:

Printed: Sun Aug 03 07:32:25 2003

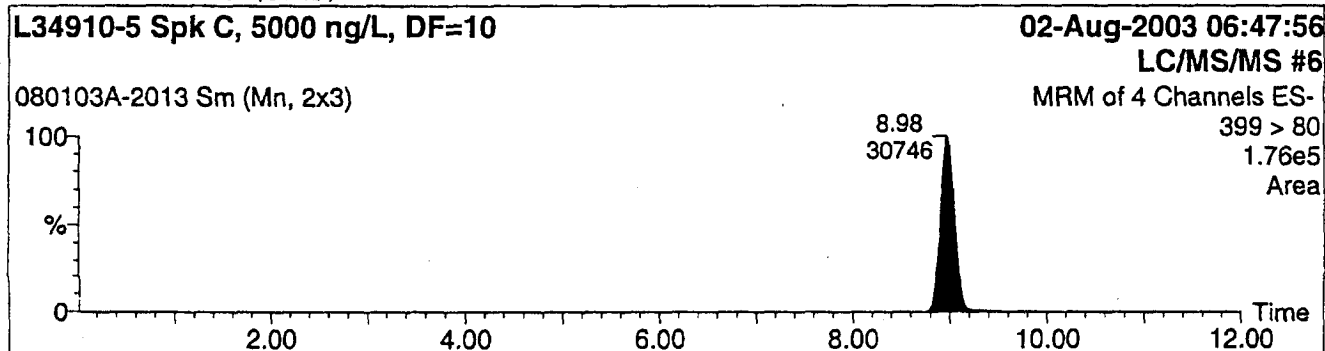
Name: 080103A-2013

Text:

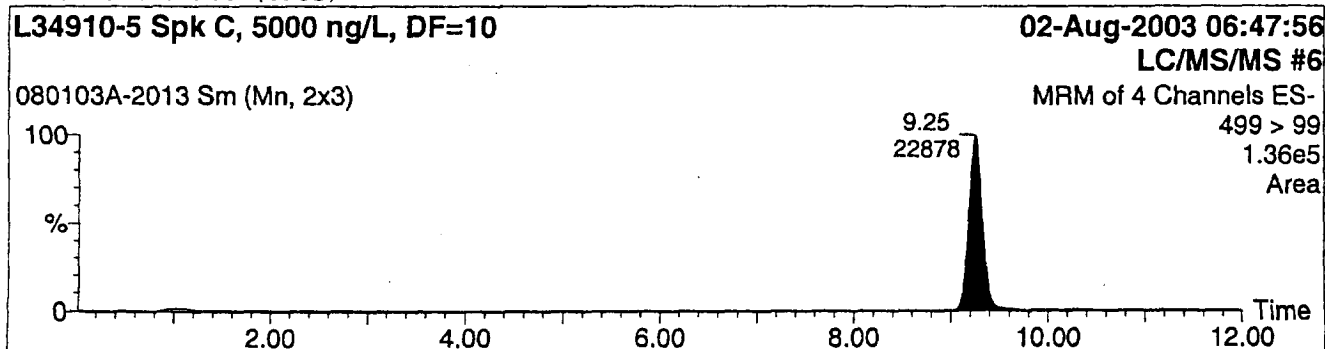
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 26

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2013

Text:

4: PFOSA

L34910-5 Spk C, 5000 ng/L, DF=10

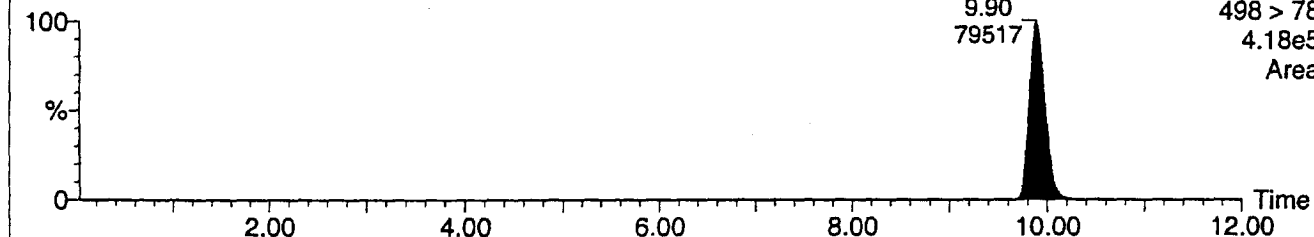
02-Aug-2003 06:47:56

LC/MS/MS #6

080103A-2013 Sm (Mn, 2x3)

MRM of 4 Channels ES-

9.90 498 > 78
79517 4.18e5
Area



Quantify Sample Report

Page 27

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2014

Text:

1: C8 Acid (PFOA)

L34910-10 Spk D, 5000 ng/L, DF=10

02-Aug-2003 07:09:35

LC/MS/MS #6

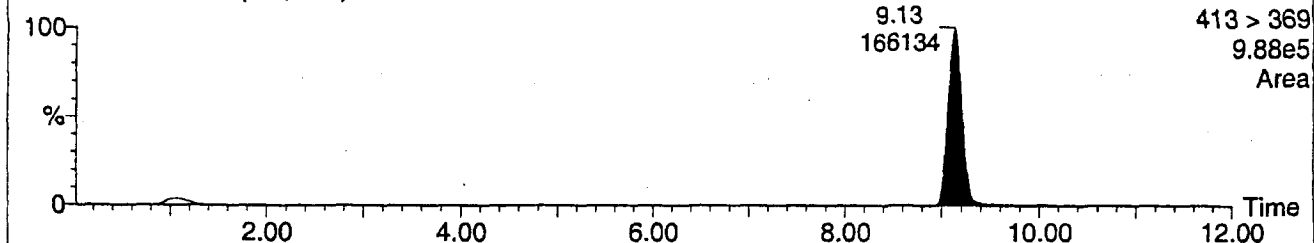
080103A-2014 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

9.88e5

Area



2: C6 Sulfonate (PFHS)

L34910-10 Spk D, 5000 ng/L, DF=10

02-Aug-2003 07:09:35

LC/MS/MS #6

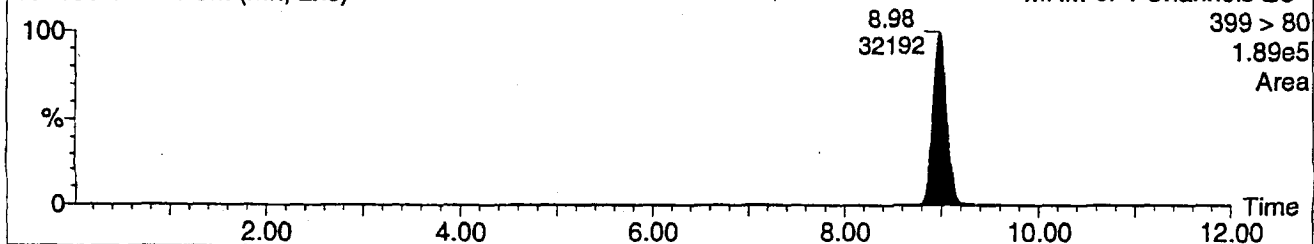
080103A-2014 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.89e5

Area



3: C8 Sulfonate (PFOS)

L34910-10 Spk D, 5000 ng/L, DF=10

02-Aug-2003 07:09:35

LC/MS/MS #6

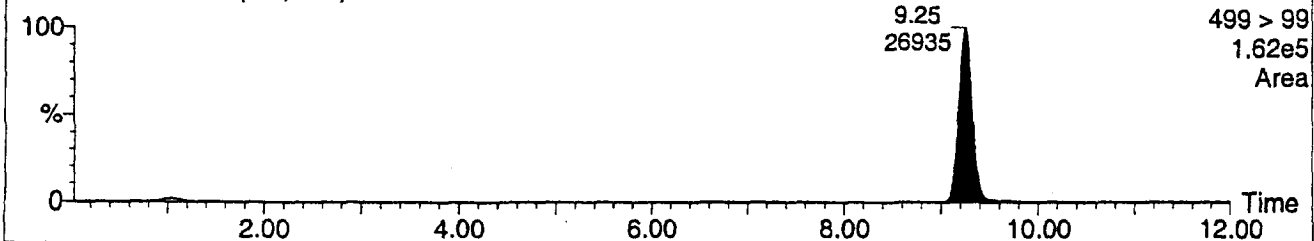
080103A-2014 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.62e5

Area



Quantify Sample Report

Page 28

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2014

Text:

4: PFOSA

L34910-10 Spk D, 5000 ng/L, DF=10

02-Aug-2003 07:09:35

LC/MS/MS #6

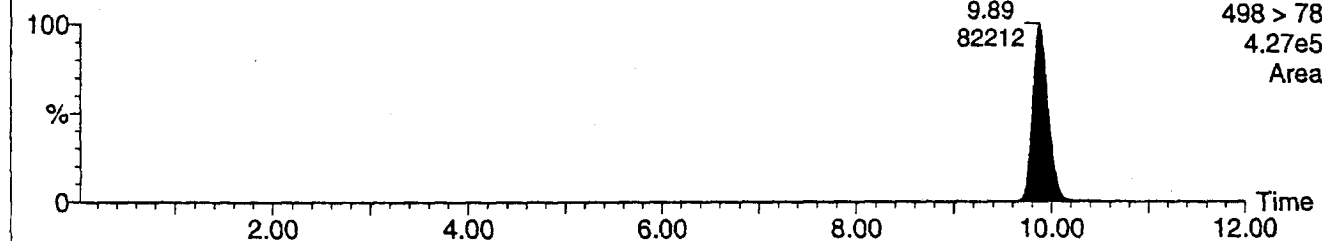
080103A-2014 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

4.27e5

Area



Quantify Sample Report

Page 29

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2015

Text:

1: C8 Acid (PFOA)

L34910-11 Spk E, 5000 ng/L, DF=10

02-Aug-2003 07:31:17

LC/MS/MS #6

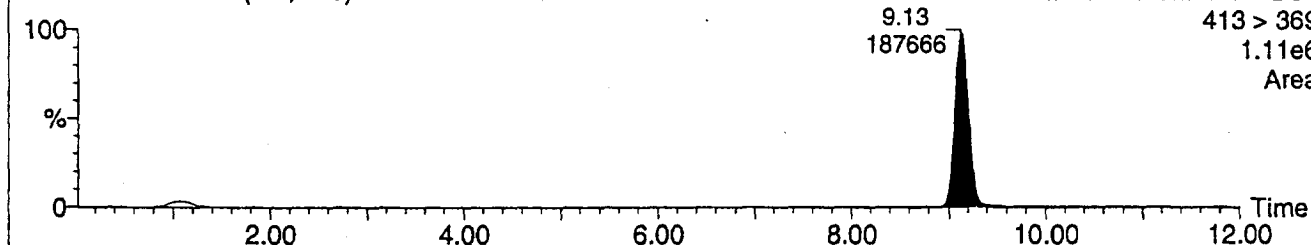
080103A-2015 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.11e6

Area



2: C6 Sulfonate (PFHS)

L34910-11 Spk E, 5000 ng/L, DF=10

02-Aug-2003 07:31:17

LC/MS/MS #6

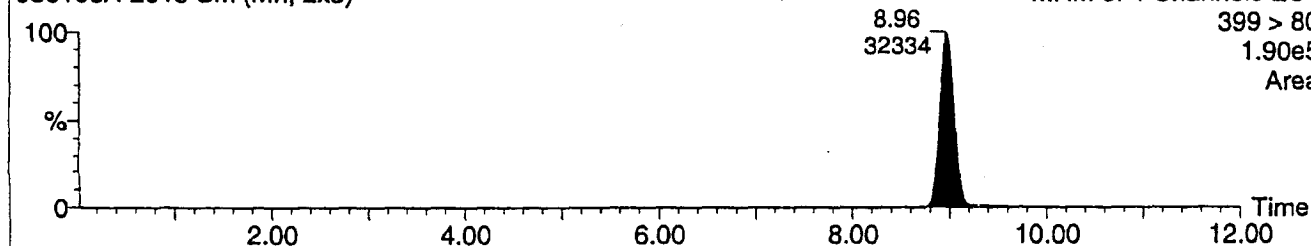
080103A-2015 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.90e5

Area



3: C8 Sulfonate (PFOS)

L34910-11 Spk E, 5000 ng/L, DF=10

02-Aug-2003 07:31:17

LC/MS/MS #6

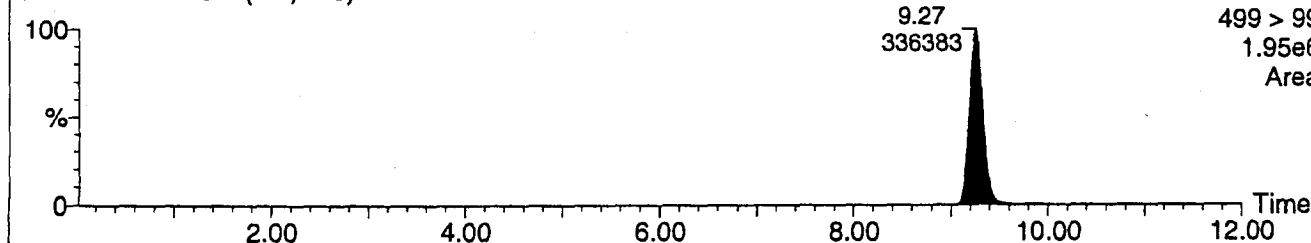
080103A-2015 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.95e6

Area



Quantify Sample Report

Page 30

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2015

Text:

4: PFOSA

L34910-11 Spk E, 5000 ng/L, DF=10

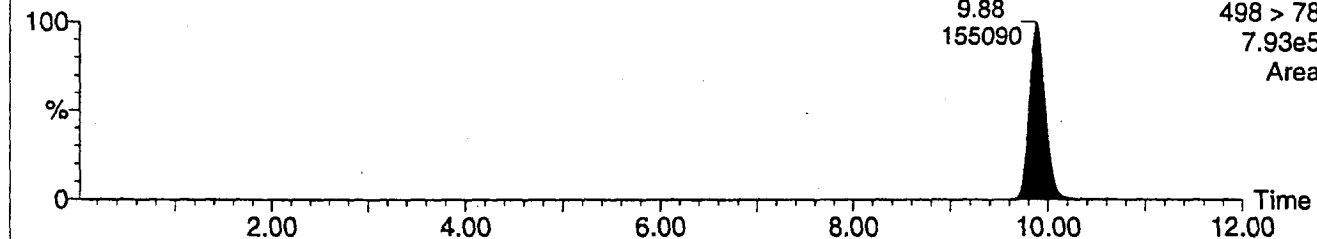
02-Aug-2003 07:31:17

LC/MS/MS #6

080103A-2015 Sm (Mn, 2x3)

MRM of 4 Channels ES-

9.88 498 > 78
155090 7.93e5
Area



Quantify Sample Report

Page 31

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2016

Text:

1: C8 Acid (PFOA)

L34910-20 Spk F, 5000 ng/L, DF=10

02-Aug-2003 07:52:54

LC/MS/MS #6

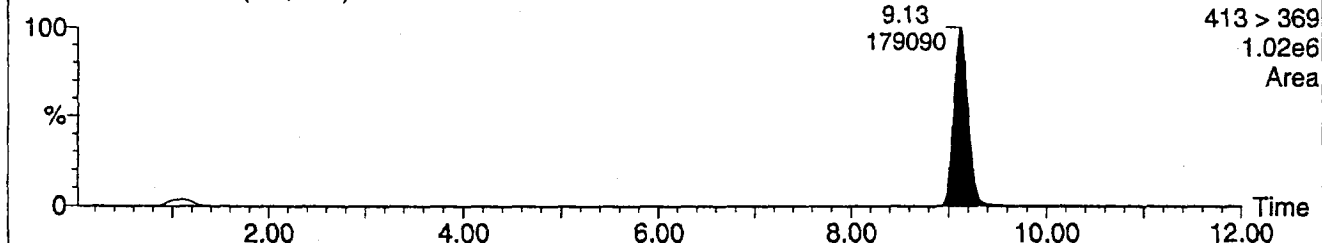
080103A-2016 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.02e6

Area



2: C6 Sulfonate (PFHS)

L34910-20 Spk F, 5000 ng/L, DF=10

02-Aug-2003 07:52:54

LC/MS/MS #6

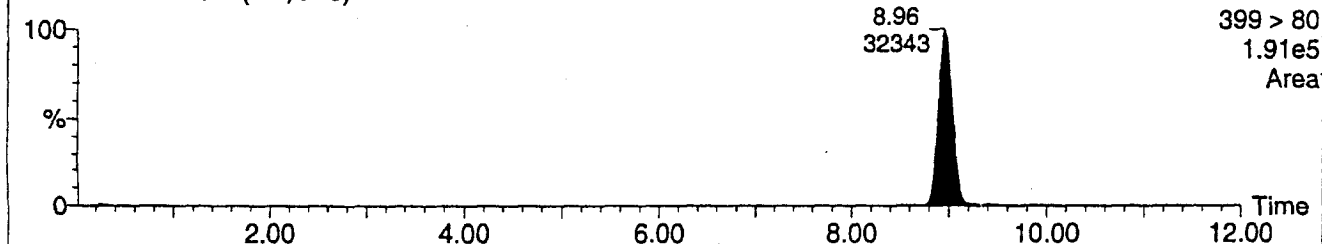
080103A-2016 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.91e5

Area



3: C8 Sulfonate (PFOS)

L34910-20 Spk F, 5000 ng/L, DF=10

02-Aug-2003 07:52:54

LC/MS/MS #6

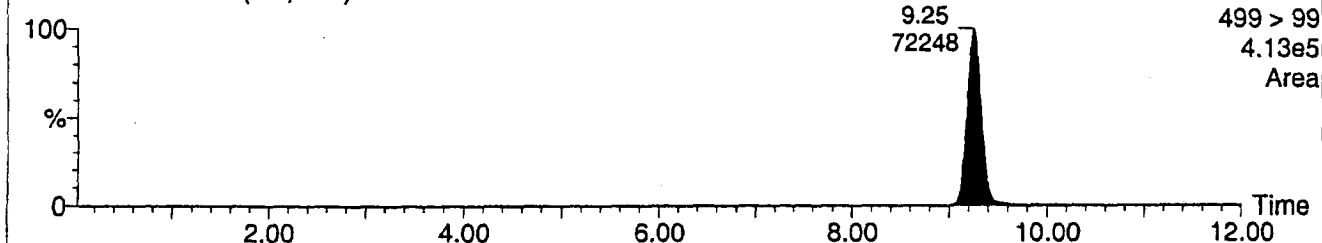
080103A-2016 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

4.13e5

Area



Quantify Sample Report

Page 32

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2016

Text:

4: PFOSA

L34910-20 Spk F, 5000 ng/L, DF=10

02-Aug-2003 07:52:54

LC/MS/MS #6

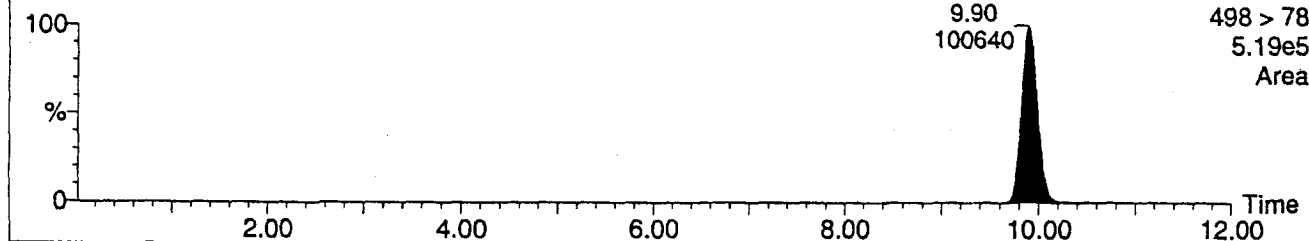
080103A-2016 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

5.19e5

Area



Quantify Sample Report

Page 33

Study No.:L34910, Set No.:080103A, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2017

Text:

1: C8 Acid (PFOA)

XC072503-2, 50 ng/L Standard

02-Aug-2003 08:14:41

LC/MS/MS #6

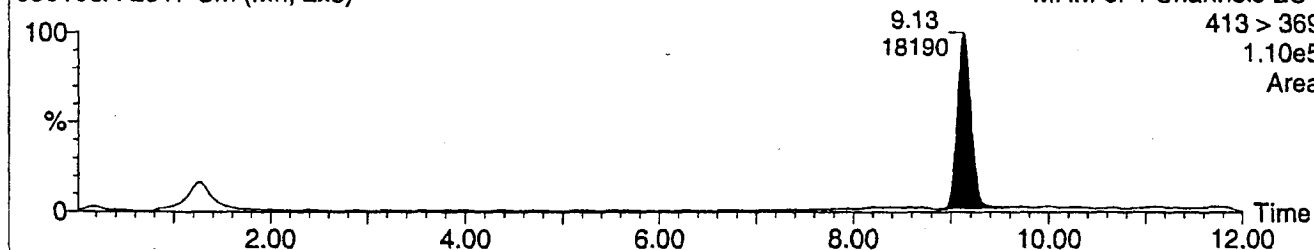
080103A-2017 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.10e5

Area



2: C6 Sulfonate (PFHS)

XC072503-2, 50 ng/L Standard

02-Aug-2003 08:14:41

LC/MS/MS #6

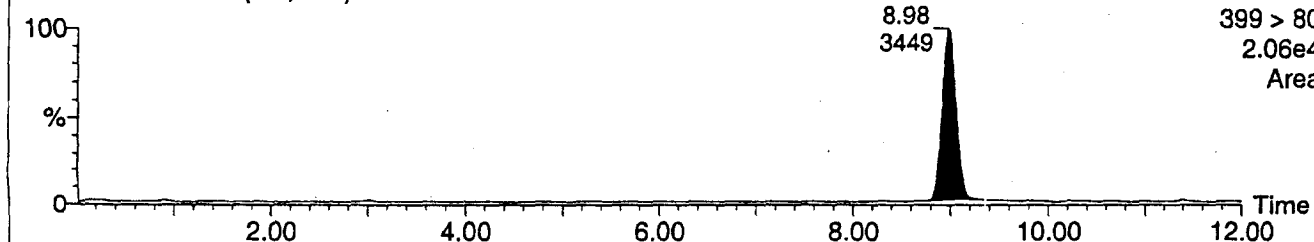
080103A-2017 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

2.06e4

Area



3: C8 Sulfonate (PFOS)

XC072503-2, 50 ng/L Standard

02-Aug-2003 08:14:41

LC/MS/MS #6

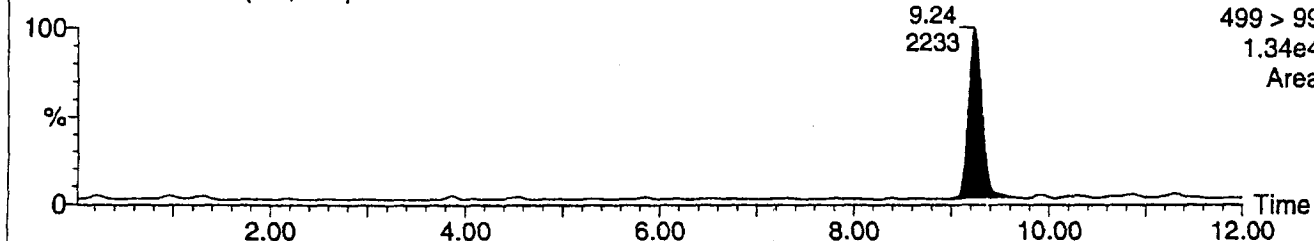
080103A-2017 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.34e4

Area



Quantify Sample Report

Page 34

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2017

Text:

4: PFOSA

XC072503-2, 50 ng/L Standard

02-Aug-2003 08:14:41

LC/MS/MS #6

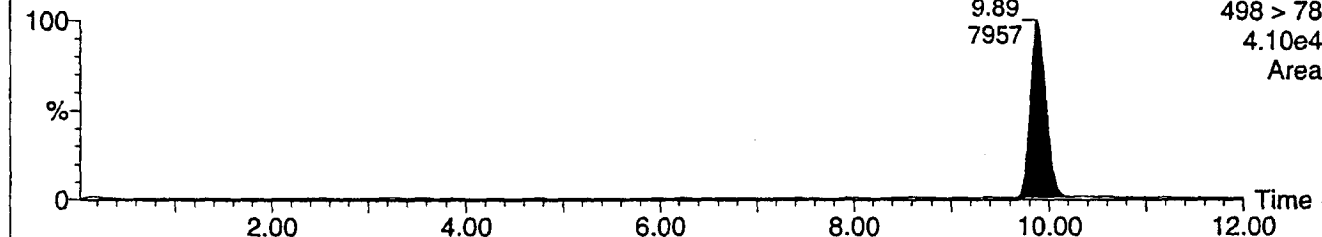
080103A-2017 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

4.10e4

Area



Quantify Sample Report

Page 35

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

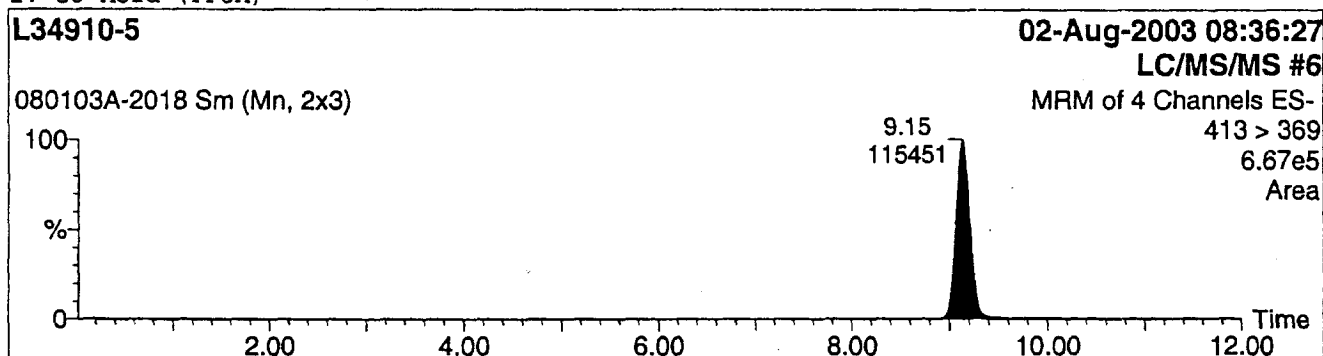
Job Code:

Printed: Sun Aug 03 07:32:25 2003

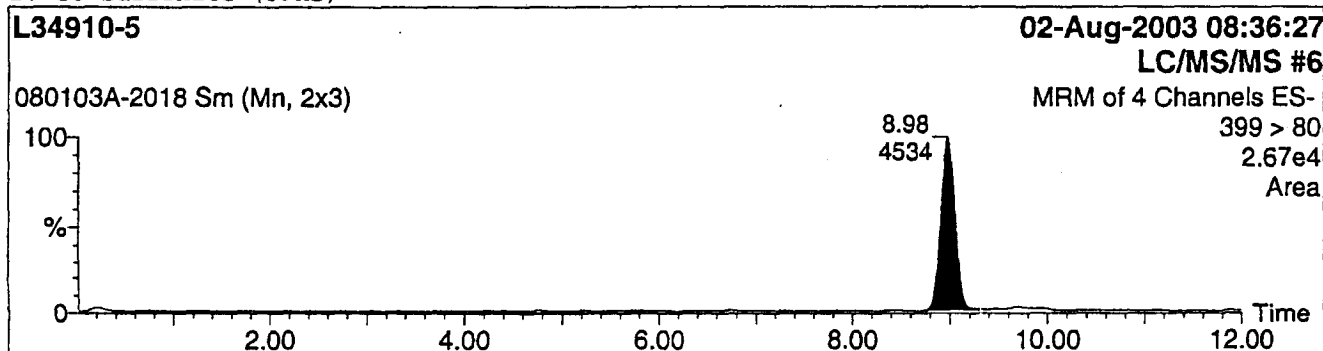
Name: 080103A-2018

Text:

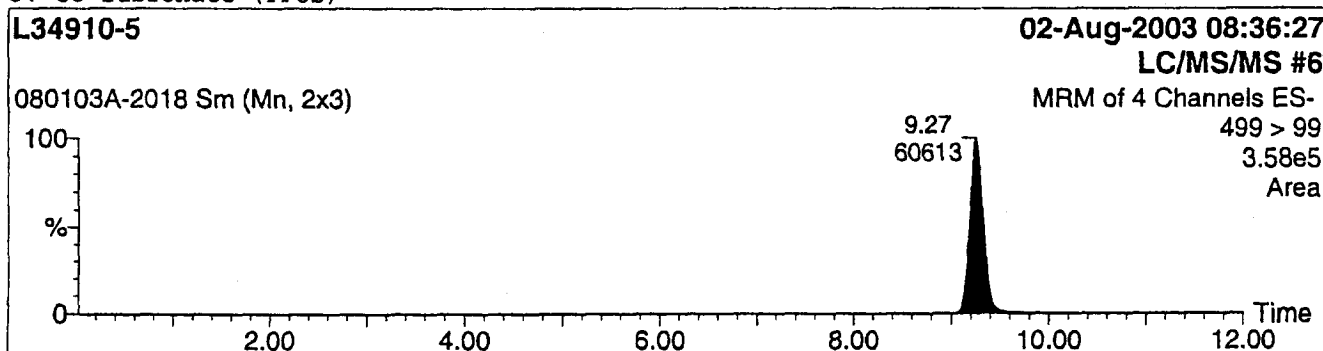
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 36

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2018

Text:

4: PFOSA

L34910-5

02-Aug-2003 08:36:27

LC/MS/MS #6

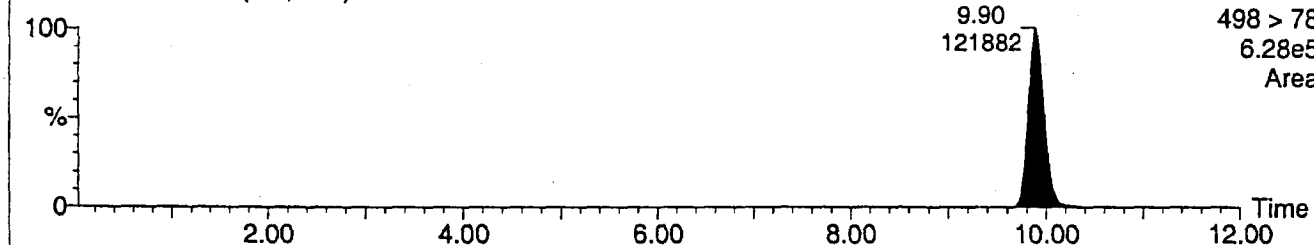
080103A-2018 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

6.28e5

Area



Quantify Sample Report

Page 37

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

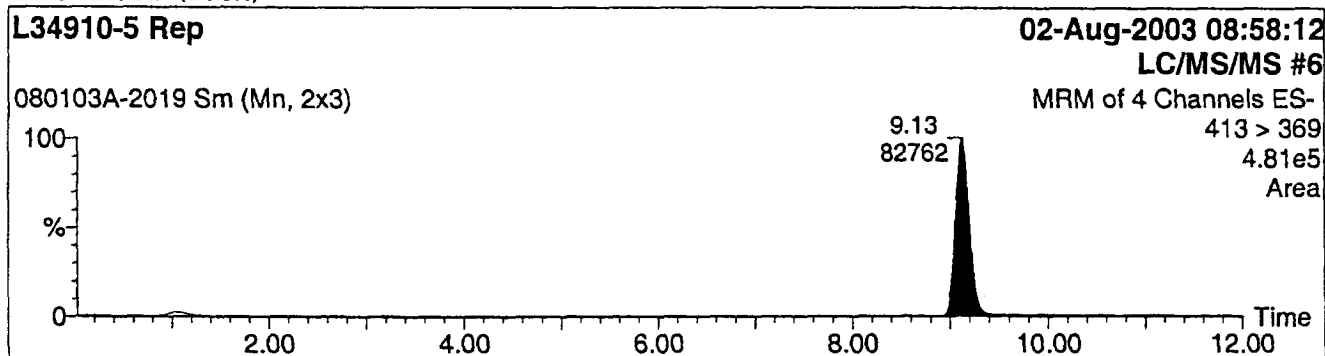
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC
Last modified: Sun Aug 03 07:25:44 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:32:25 2003

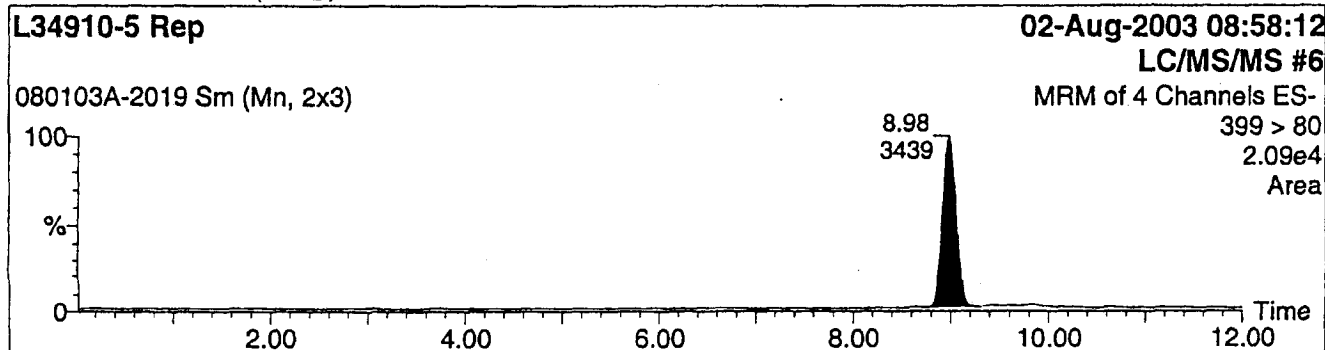
Name: 080103A-2019

Text:

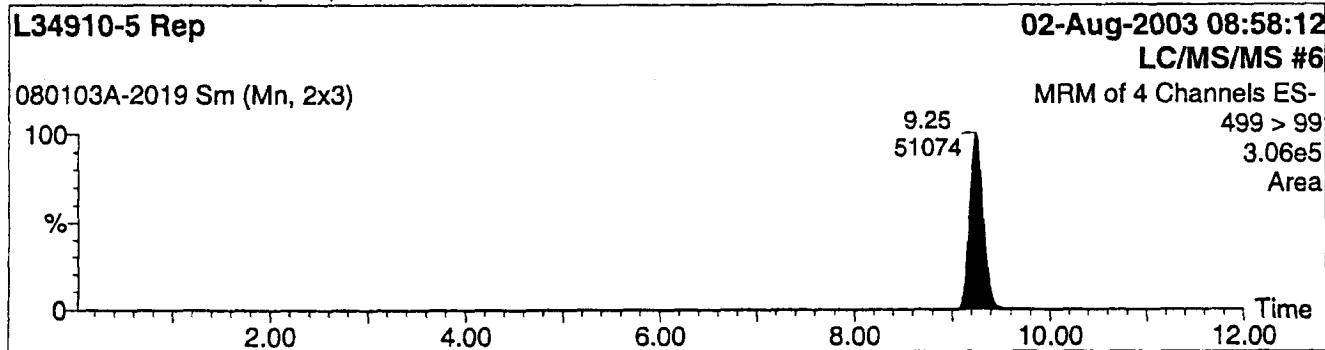
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 38

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

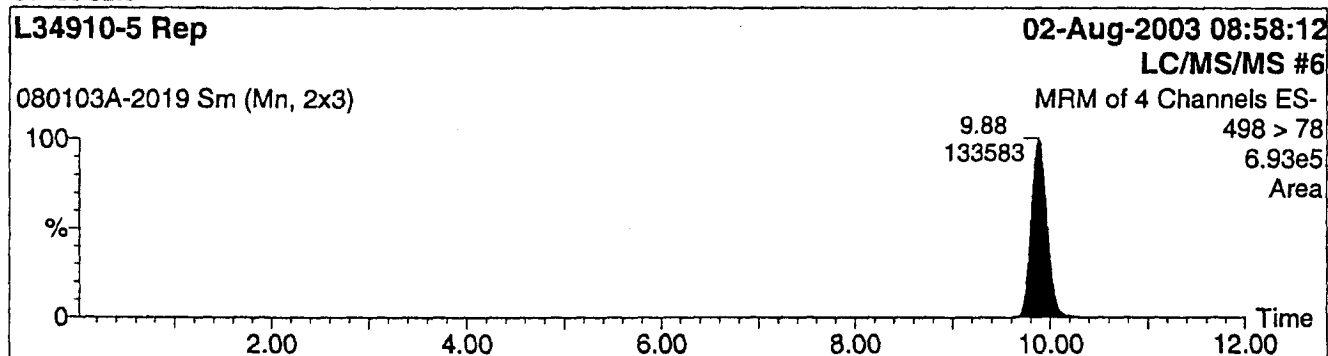
Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2019

Text:

4: PFOSA



Quantify Sample Report

Page 39

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

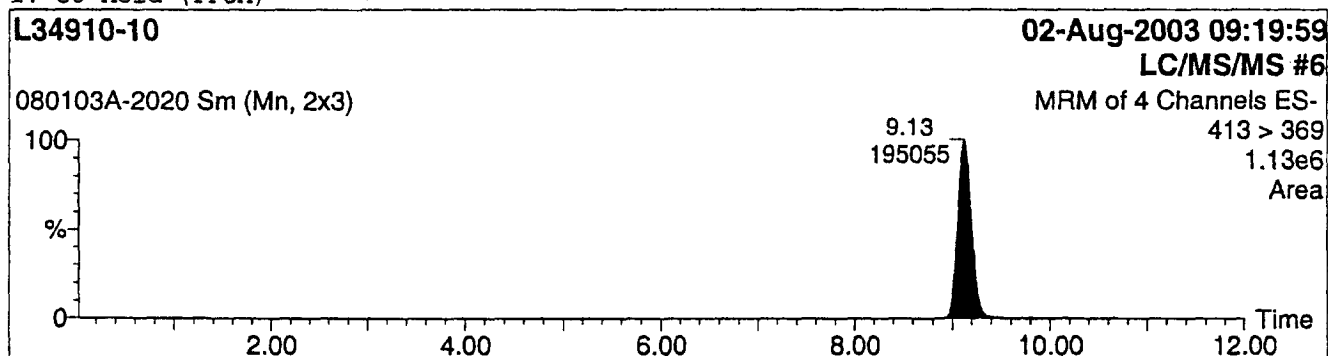
Job Code:

Printed: Sun Aug 03 07:32:25 2003

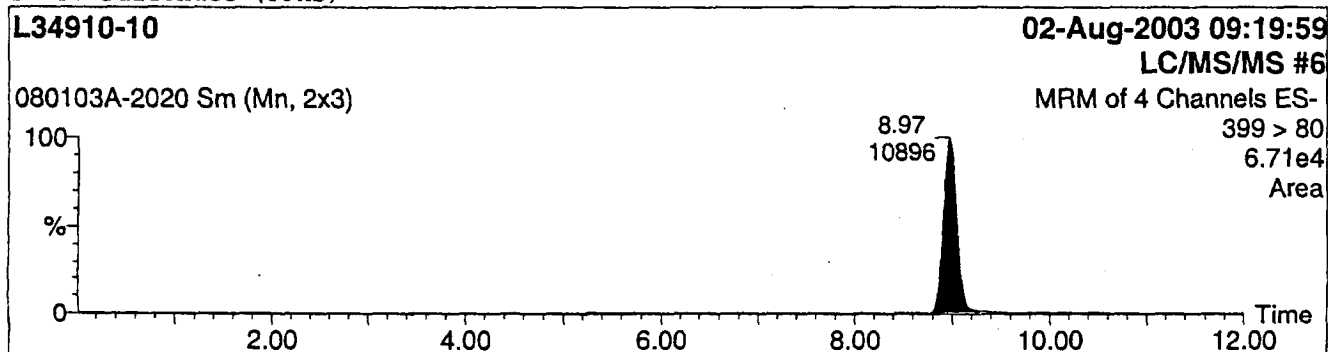
Name: 080103A-2020

Text:

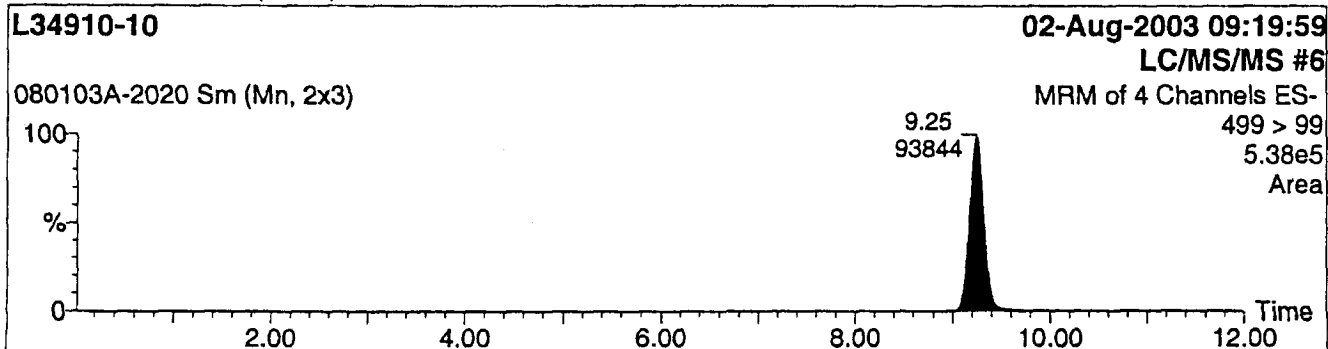
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 40

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

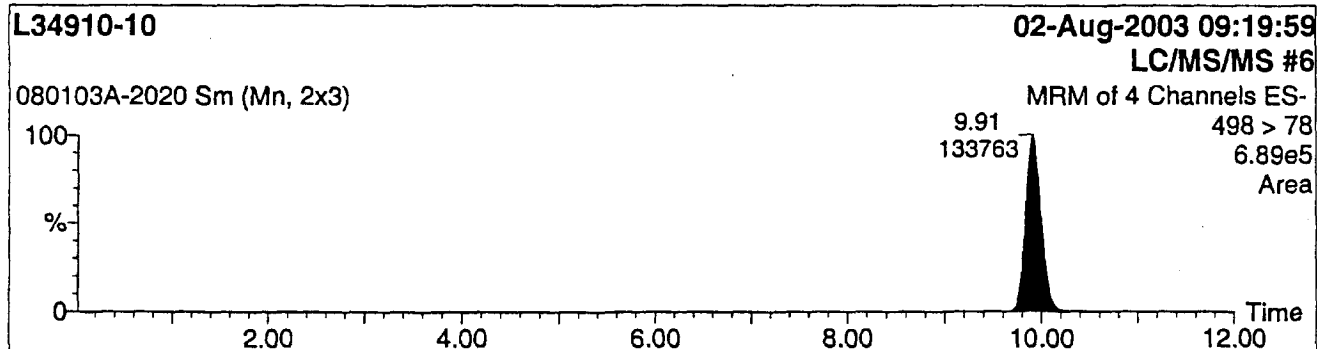
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC
Last modified: Sun Aug 03 07:25:44 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2020

Text:

4: PFOSA



Quantify Sample Report

Page 41

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

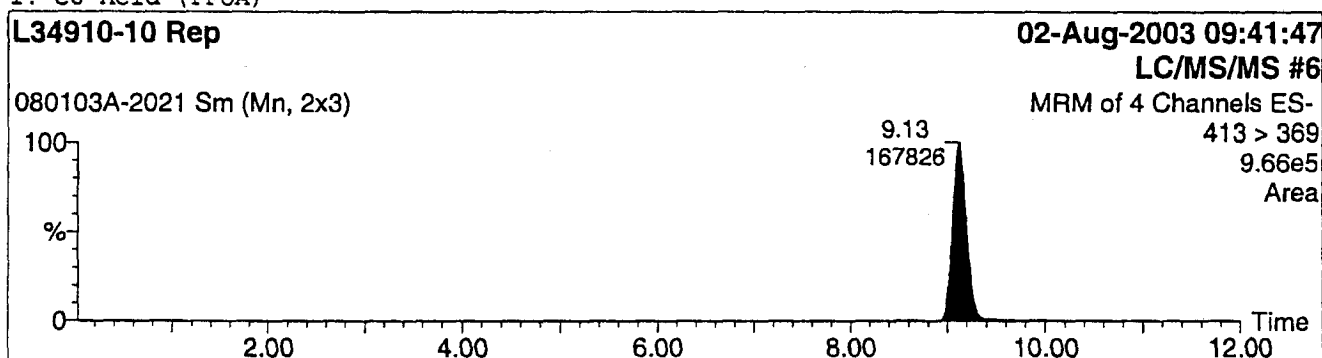
Job Code:

Printed: Sun Aug 03 07:32:25 2003

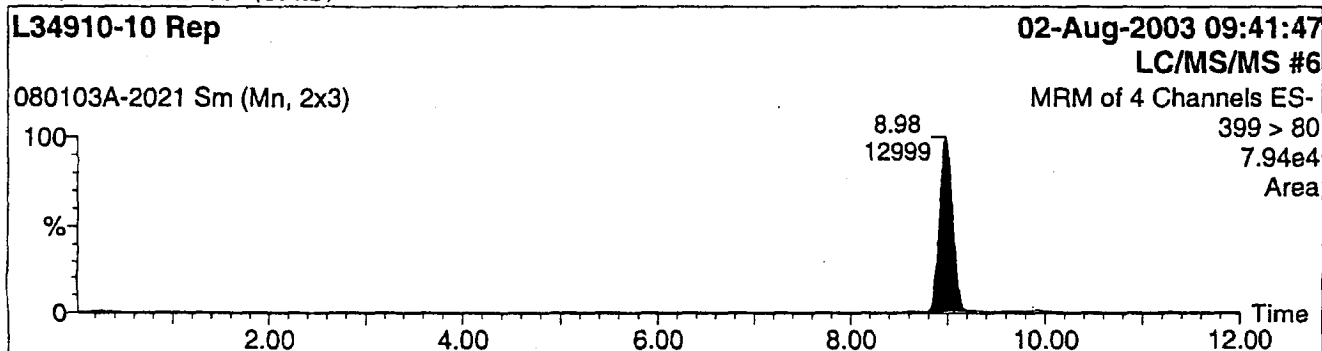
Name: 080103A-2021

Text:

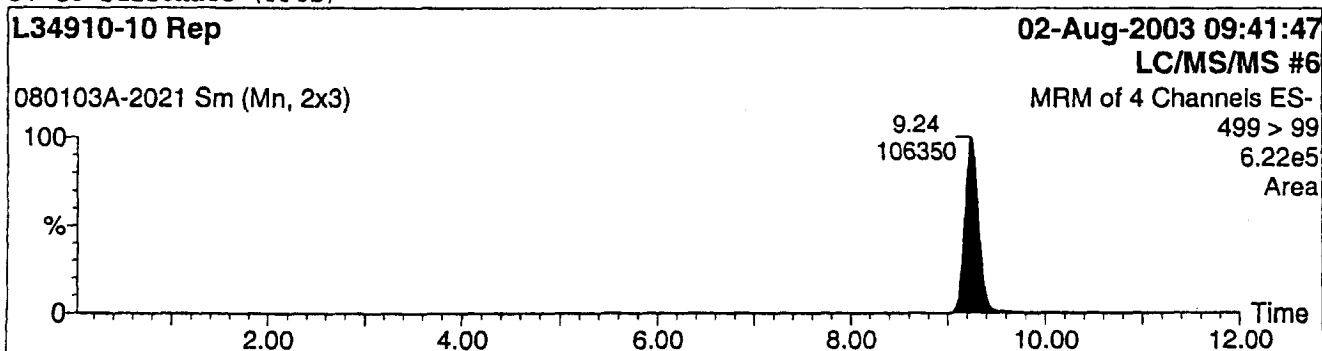
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 42

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

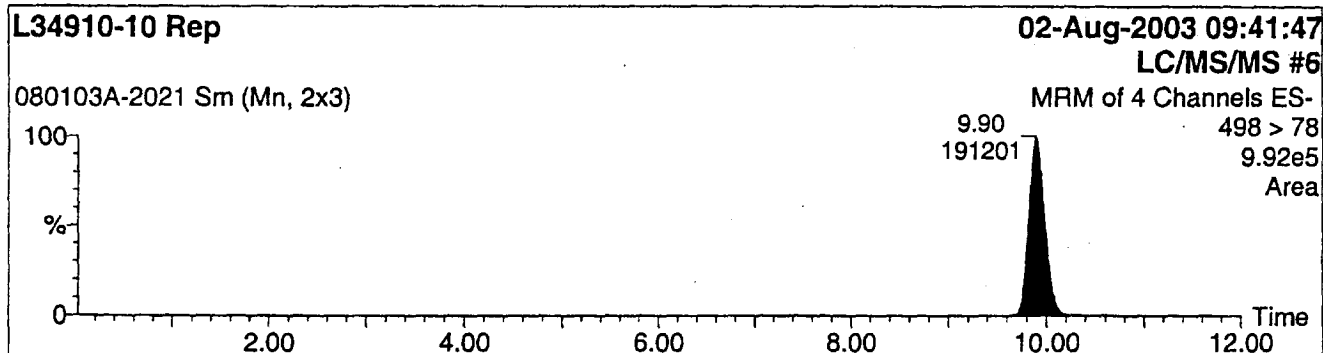
Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2021

Text:

4: PFOSA



Quantify Sample Report

Page 43

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC
Last modified: Sun Aug 03 07:25:44 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2022

Text:

1: C8 Acid (PFOA)

XC072503-3, 100 ng/L Standard

02-Aug-2003 10:03:27

LC/MS/MS #6

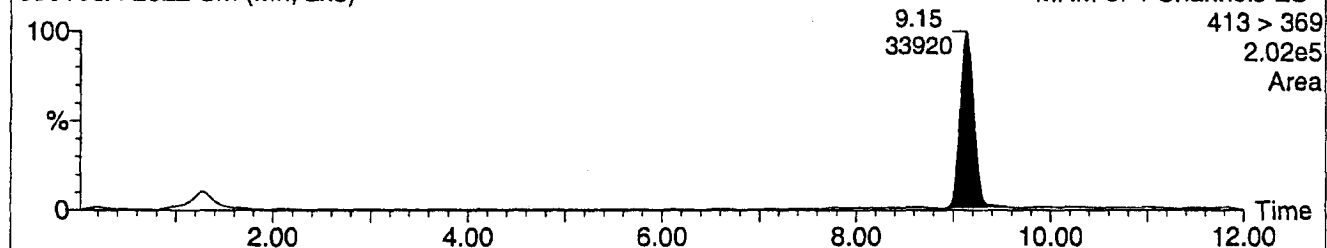
080103A-2022 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

2.02e5

Area



2: C6 Sulfonate (PFHS)

XC072503-3, 100 ng/L Standard

02-Aug-2003 10:03:27

LC/MS/MS #6

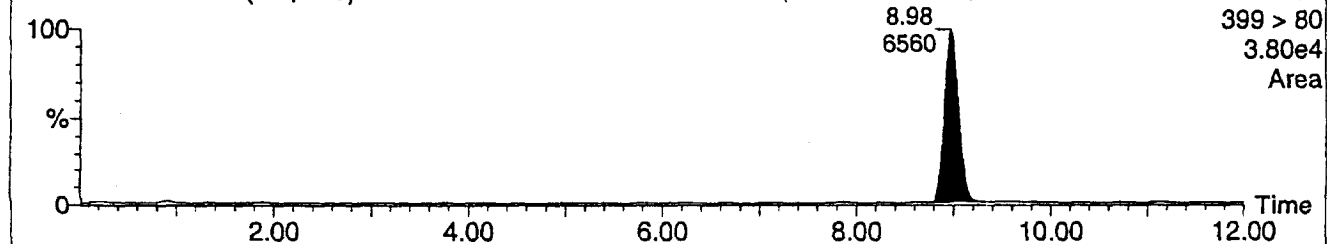
080103A-2022 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

3.80e4

Area



3: C8 Sulfonate (PFOS)

XC072503-3, 100 ng/L Standard

02-Aug-2003 10:03:27

LC/MS/MS #6

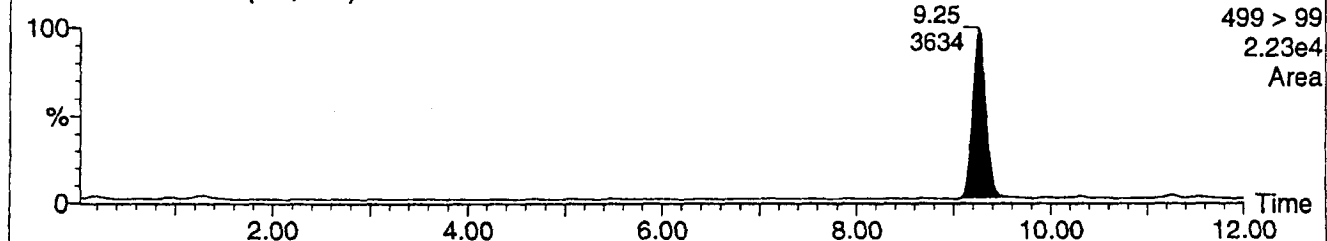
080103A-2022 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.23e4

Area



Quantify Sample Report

Page 44

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC
Last modified: Sun Aug 03 07:25:44 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2022

Text:

4: PFOSA

XC072503-3, 100 ng/L Standard

02-Aug-2003 10:03:27

LC/MS/MS #6

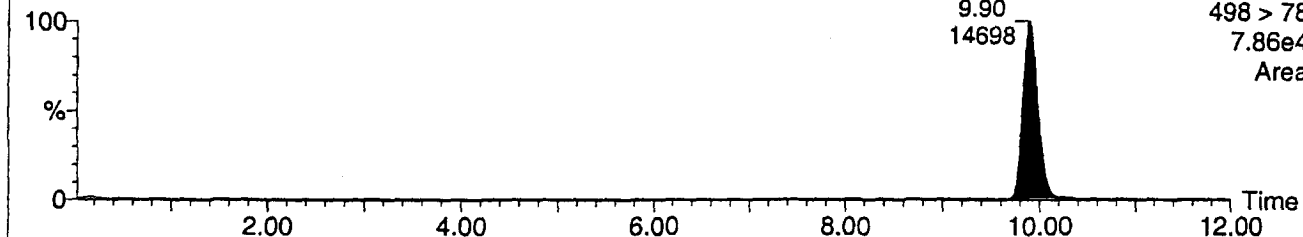
080103A-2022 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

7.86e4

Area



Quantify Sample Report

Page 45

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2023

Text:

1: C8 Acid (PFOA)

XC072503-4, 250 ng/L Standard

02-Aug-2003 10:25:10

LC/MS/MS #6

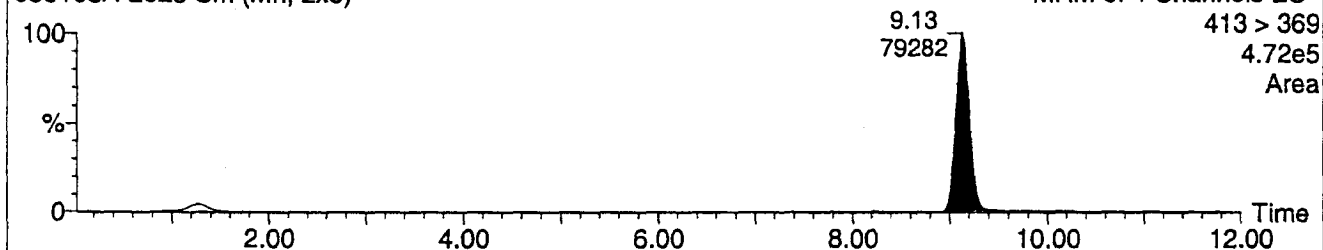
080103A-2023 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

4.72e5

Area



2: C6 Sulfonate (PFHS)

XC072503-4, 250 ng/L Standard

02-Aug-2003 10:25:10

LC/MS/MS #6

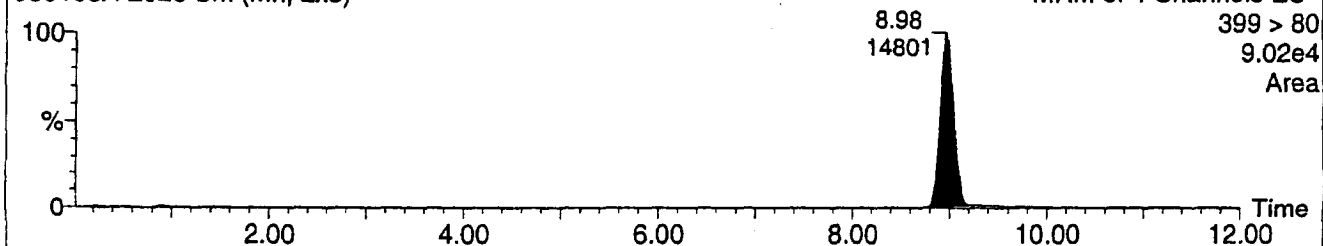
080103A-2023 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

9.02e4

Area



3: C8 Sulfonate (PFOS)

XC072503-4, 250 ng/L Standard

02-Aug-2003 10:25:10

LC/MS/MS #6

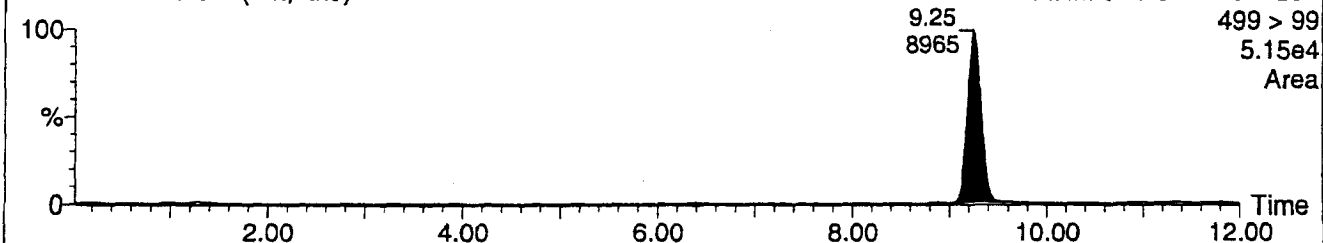
080103A-2023 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

5.15e4

Area



Quantify Sample Report

Page 46

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2023

Text:

4: PFOSA

XC072503-4, 250 ng/L Standard

02-Aug-2003 10:25:10

LC/MS/MS #6

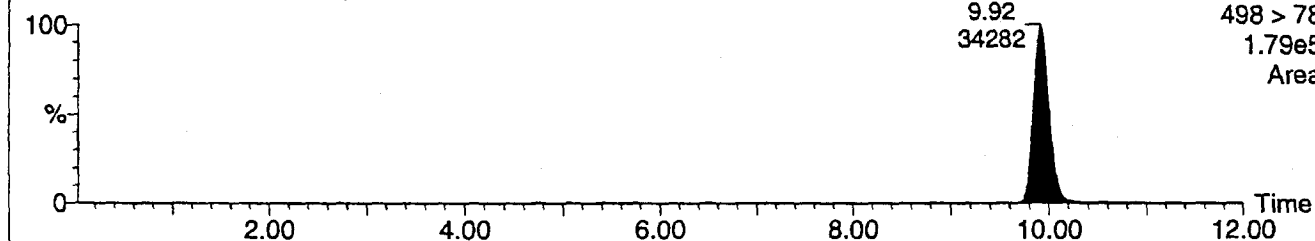
080103A-2023 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.79e5

Area



Quantify Sample Report

Page 47

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

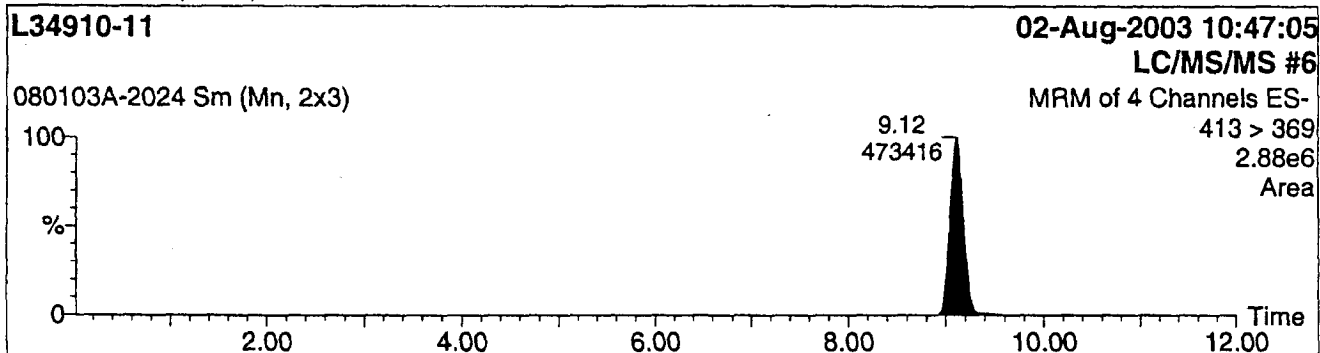
Job Code:

Printed: Sun Aug 03 07:32:25 2003

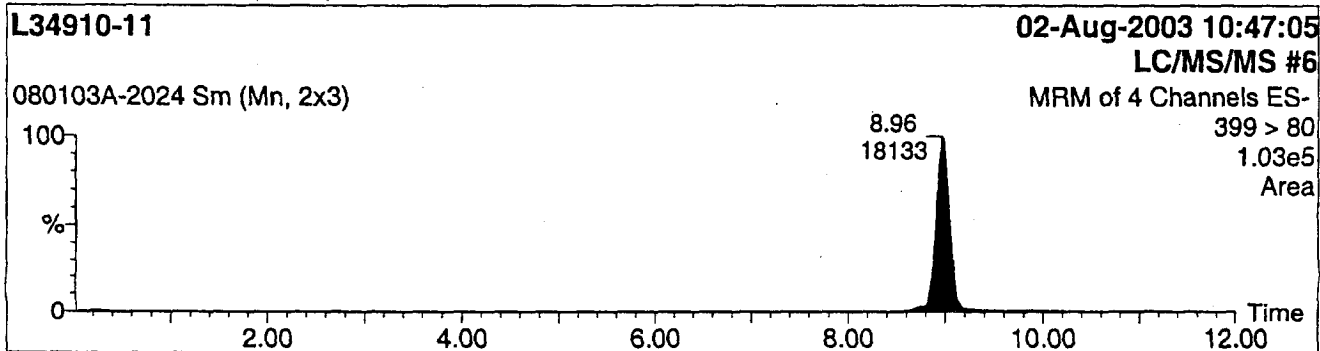
Name: 080103A-2024

Text:

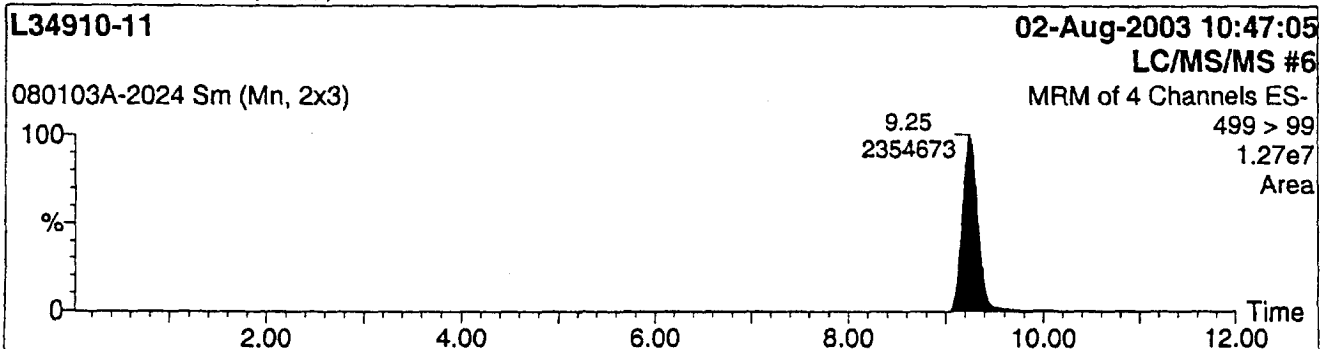
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 48

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

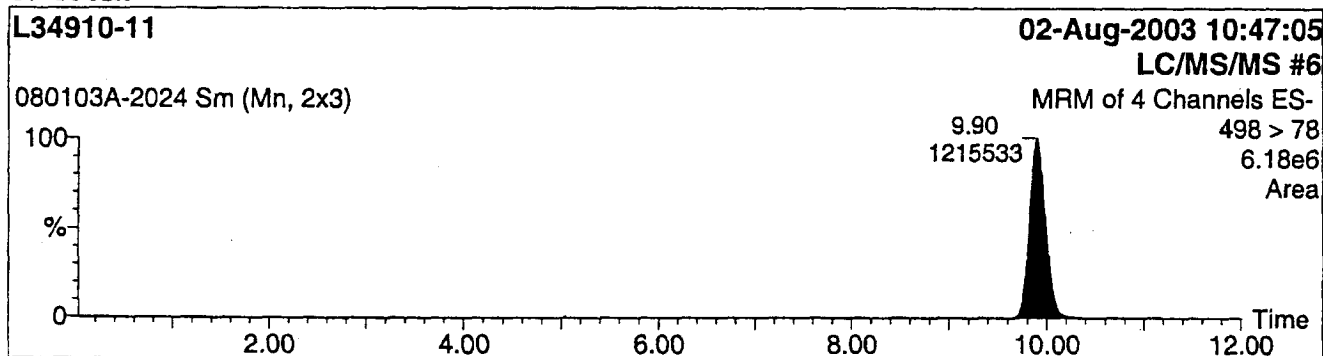
Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2024

Text:

4: PFOSA



Quantify Sample Report

Page 49

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

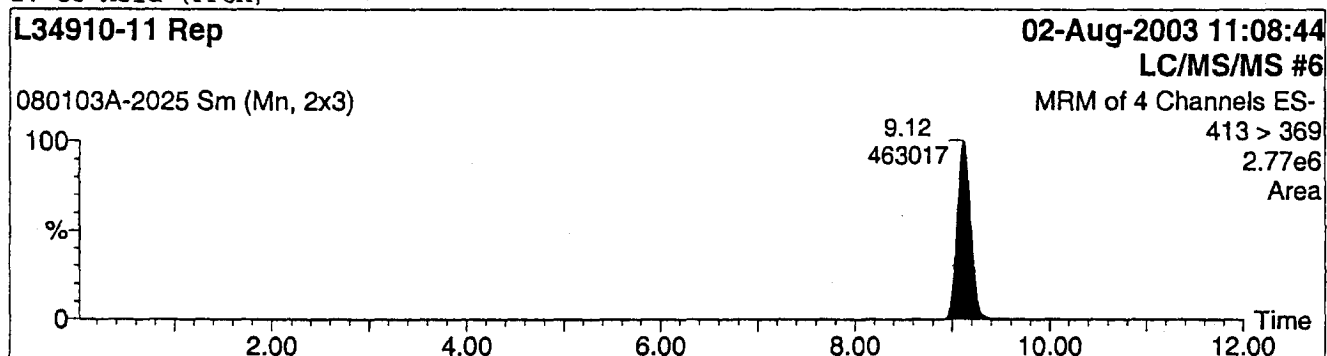
Job Code:

Printed: Sun Aug 03 07:32:25 2003

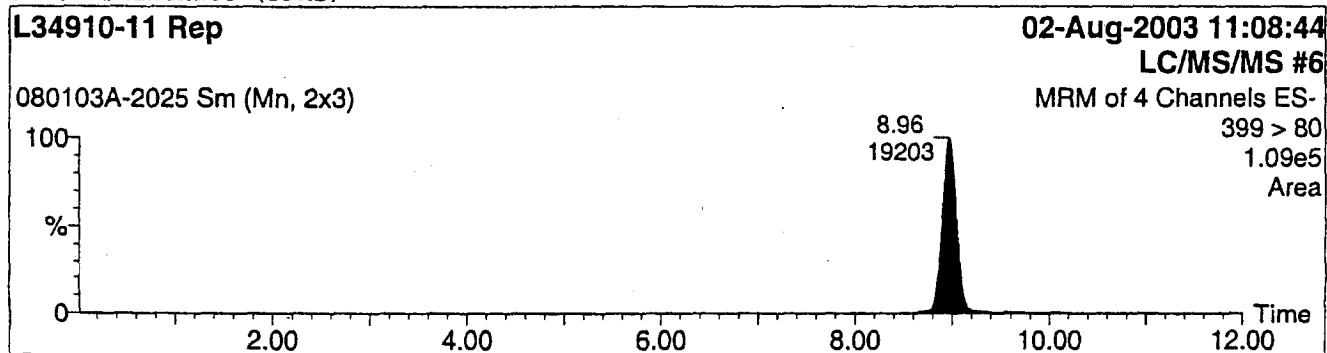
Name: 080103A-2025

Text:

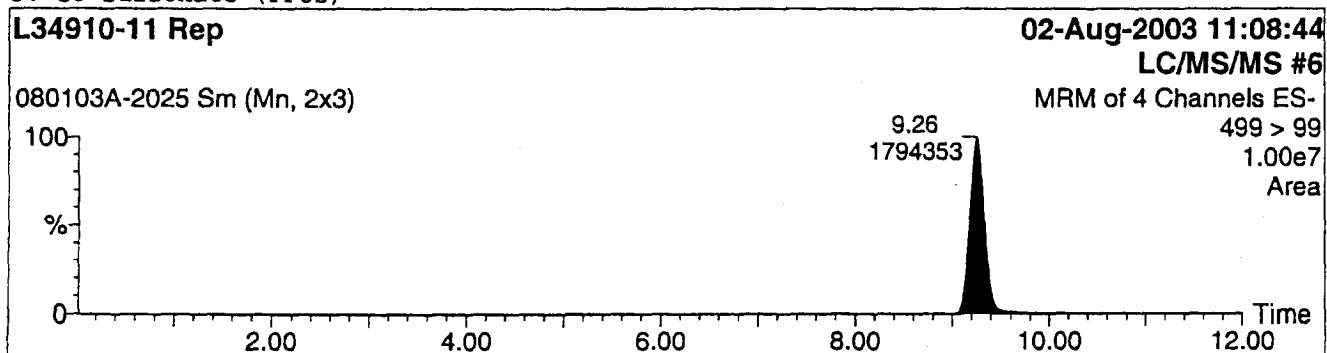
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 50

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

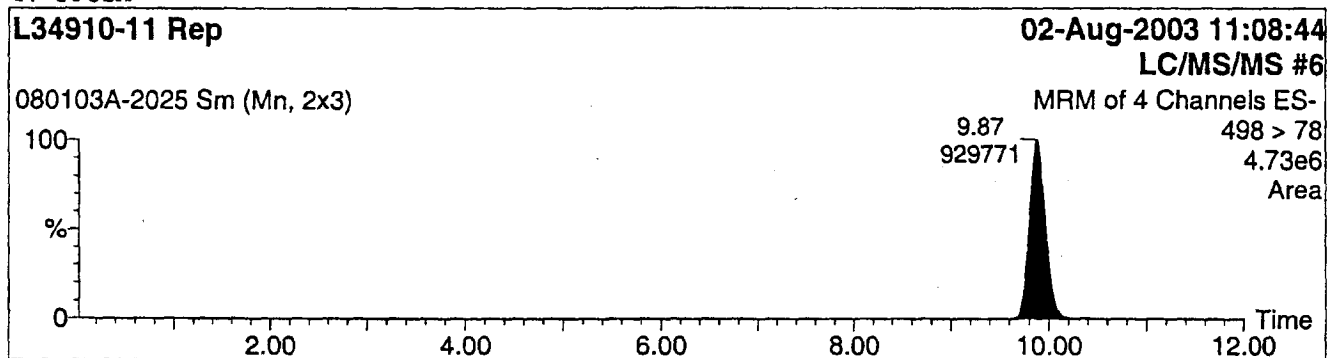
Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2025

Text:

4: PFOSA



Quantify Sample Report

Page 51

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

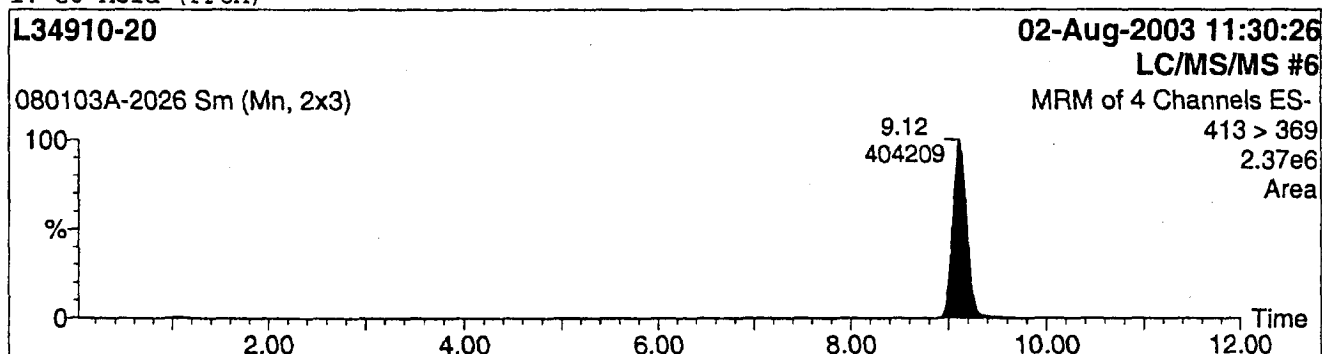
Job Code:

Printed: Sun Aug 03 07:32:25 2003

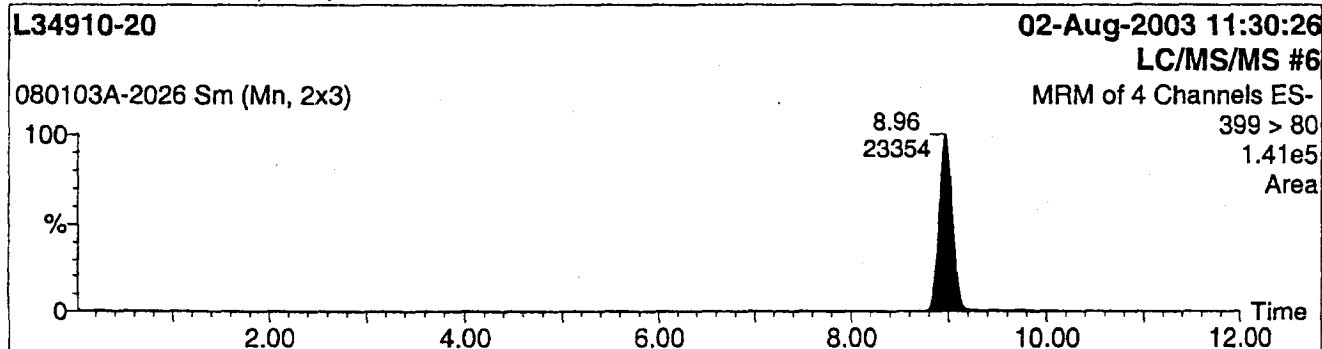
Name: 080103A-2026

Text:

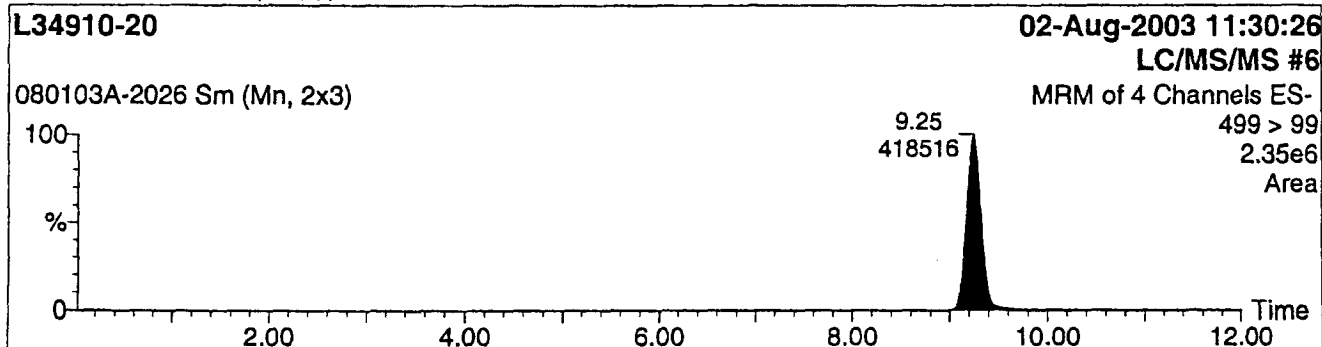
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 52

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2026

Text:

4: PFOSA

L34910-20

02-Aug-2003 11:30:26

LC/MS/MS #6

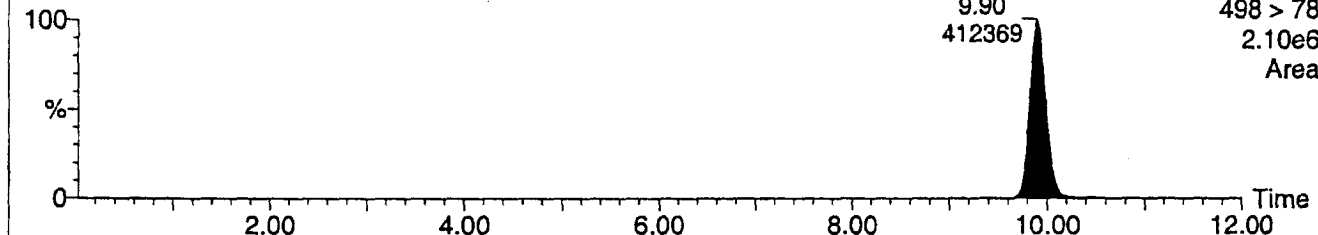
080103A-2026 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

2.10e6

Area



Quantify Sample Report

Page 53

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

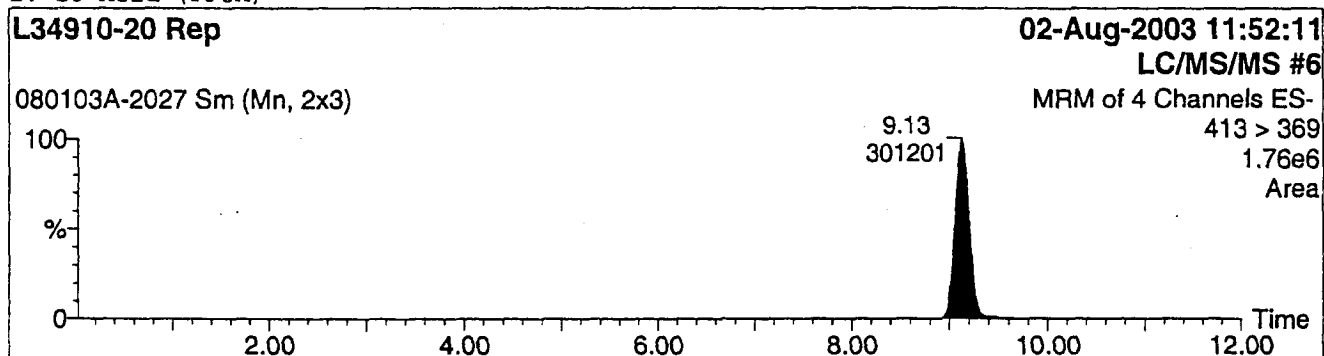
Job Code:

Printed: Sun Aug 03 07:32:25 2003

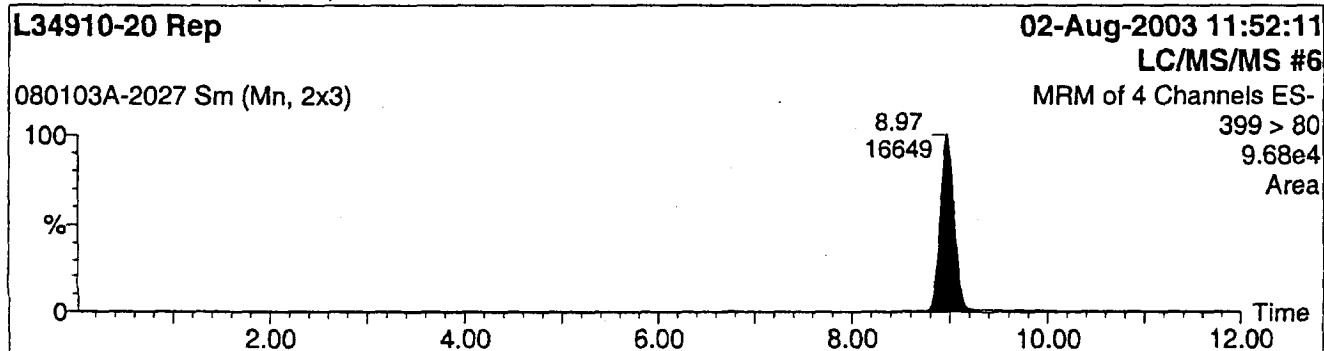
Name: 080103A-2027

Text:

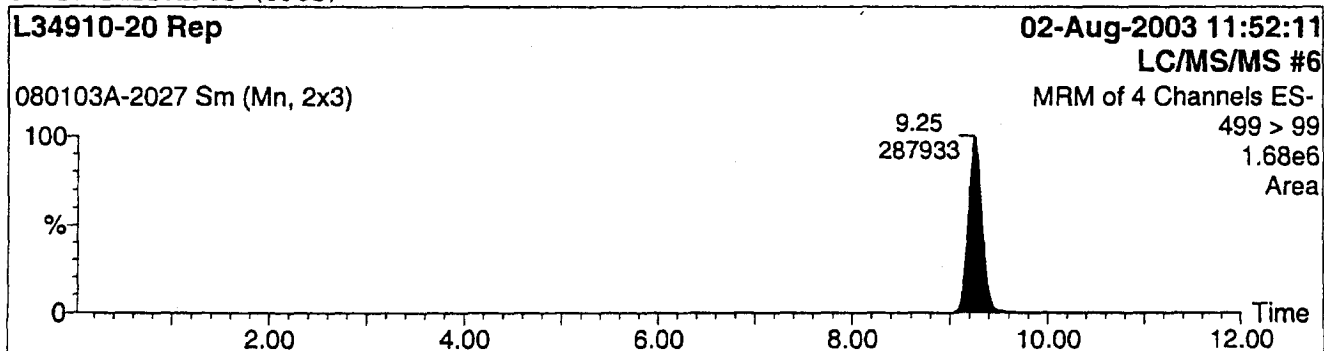
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 54

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

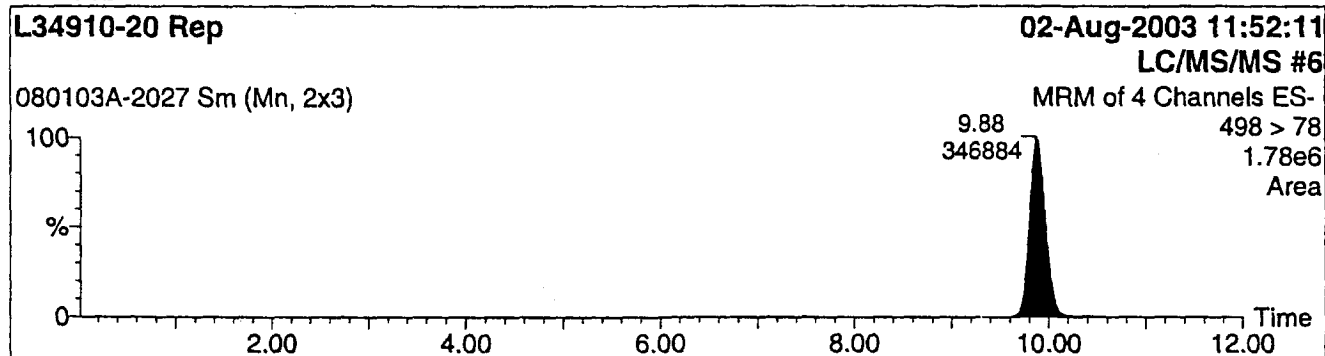
Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2027

Text:

4: PFOSA



Quantify Sample Report

Page 55

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

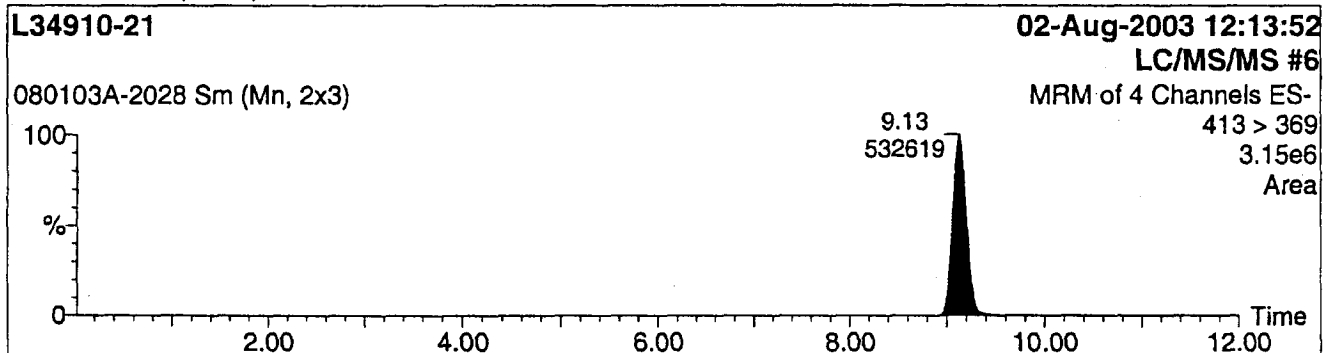
Job Code:

Printed: Sun Aug 03 07:32:25 2003

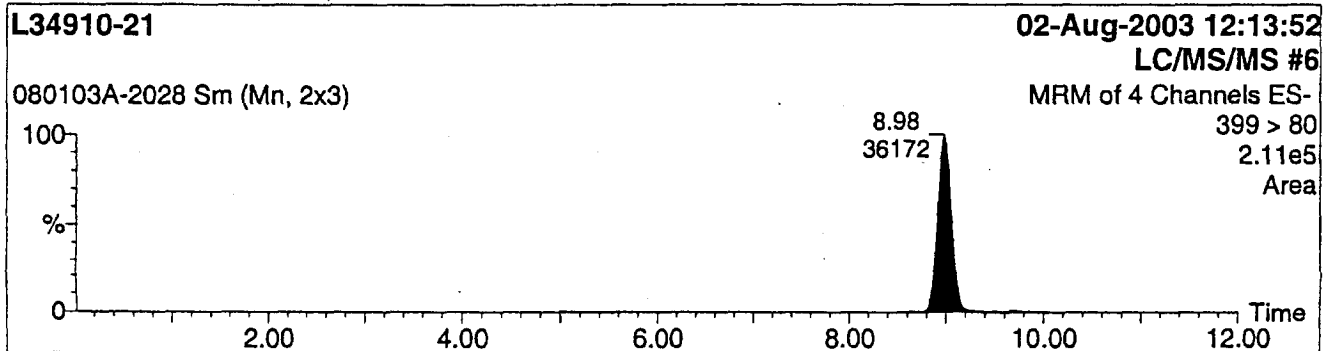
Name: 080103A-2028

Text:

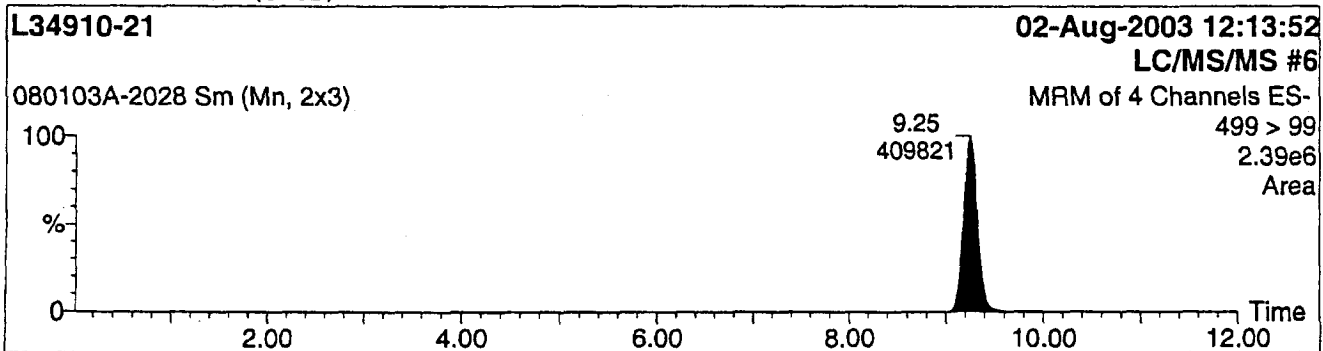
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 56

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

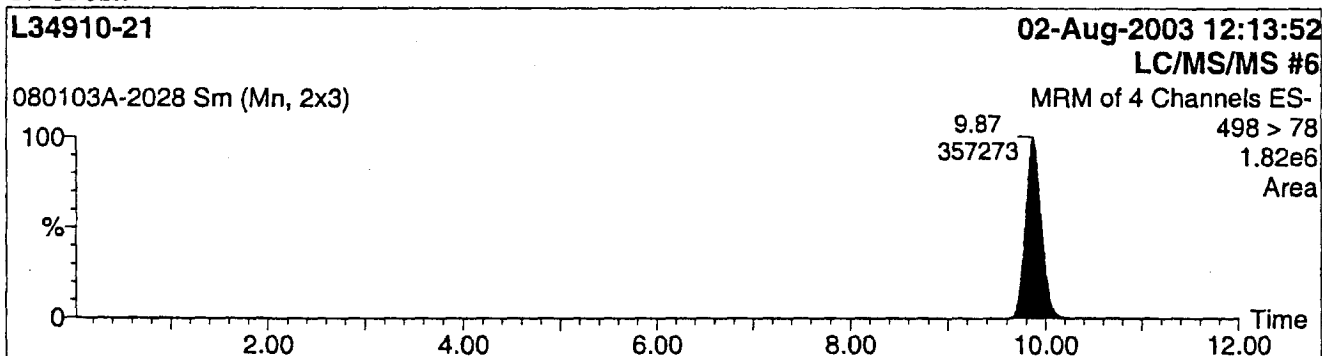
Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2028

Text:

4: PFOSA



Quantify Sample Report

Page 57

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2029

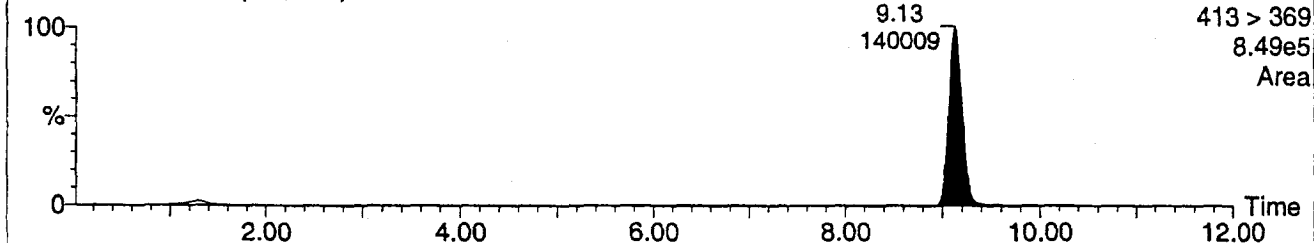
Text:

1: C8 Acid (PFOA)

XC072503-5, 500 ng/L Standard

02-Aug-2003 12:35:39

080103A-2029 Sm (Mn, 2x3)

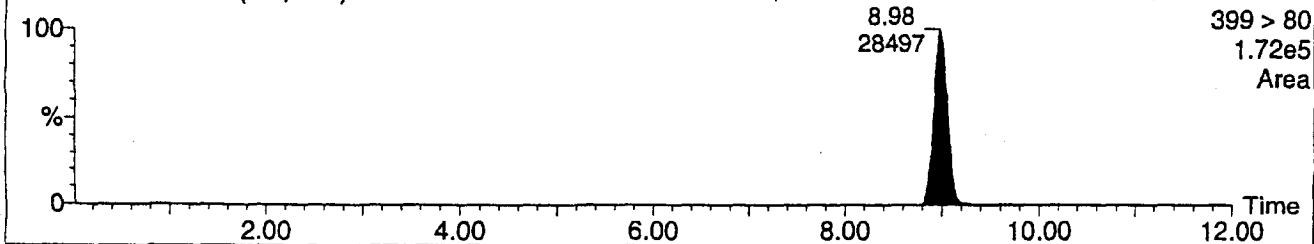


2: C6 Sulfonate (PFHS)

XC072503-5, 500 ng/L Standard

02-Aug-2003 12:35:39

080103A-2029 Sm (Mn, 2x3)

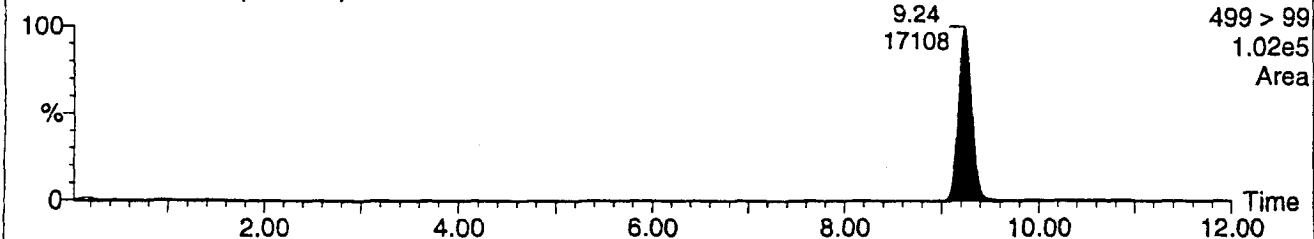


3: C8 Sulfonate (PFOS)

XC072503-5, 500 ng/L Standard

02-Aug-2003 12:35:39

080103A-2029 Sm (Mn, 2x3)



Quantify Sample Report

Page 58

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2029

Text:

4: PFOSA

XC072503-5, 500 ng/L Standard

02-Aug-2003 12:35:39

LC/MS/MS #6

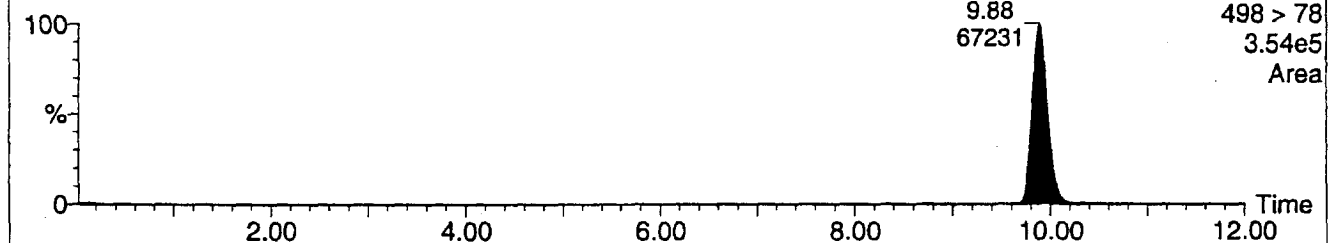
080103A-2029 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

3.54e5

Area



Quantify Sample Report

Page 59

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC
Last modified: Sun Aug 03 07:25:44 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2030

Text:

1: C8 Acid (PFOA)

XC072503-6, 1000 ng/L Standard

02-Aug-2003 12:57:26

LC/MS/MS #6

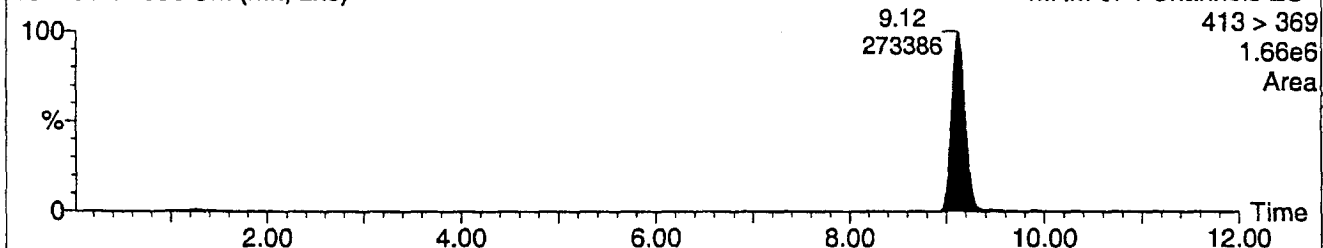
080103A-2030 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.66e6

Area



2: C6 Sulfonate (PFHS)

XC072503-6, 1000 ng/L Standard

02-Aug-2003 12:57:26

LC/MS/MS #6

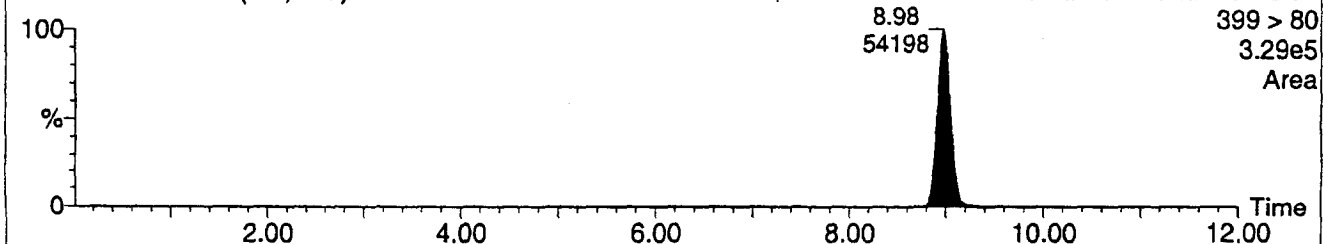
080103A-2030 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

3.29e5

Area



3: C8 Sulfonate (PFOS)

XC072503-6, 1000 ng/L Standard

02-Aug-2003 12:57:26

LC/MS/MS #6

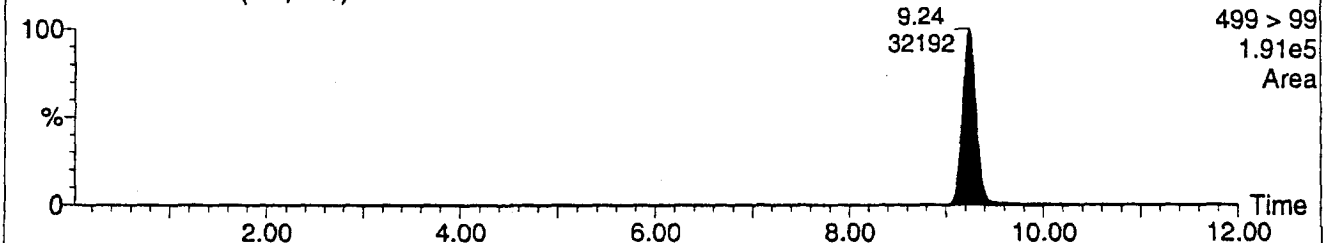
080103A-2030 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.91e5

Area



Quantify Sample Report

Page 60

Study No.: L34910, Set No.: 080103A, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103A Decatur BC

Last modified: Sun Aug 03 07:25:44 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Sun Aug 03 07:32:25 2003

Name: 080103A-2030

Text:

4: PFOSA

XC072503-6, 1000 ng/L Standard

02-Aug-2003 12:57:26

LC/MS/MS #6

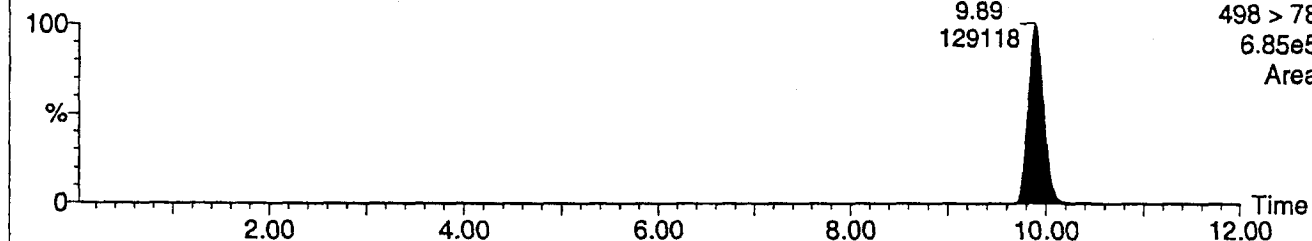
080103A-2030 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

6.85e5

Area



RAW DATA REPORT

Sponsor Study No: NA
 Exygen Study No: L34910
 Analyte: PFOA
 Ions Monitored: 413 -> 369
 Site: Decatur Baker's Creek

Limit of Quantitation: 50 ppt
 Injection Volume: 15 µL
 Matrix: Soil
 Sample Weight: 5.0 g
 Final Volume: 5.0 mL

Set No: 080103AR
 Analyst: Karen Risha
 Instrument Type: LCMSMS #6
 Extraction Date: 08/01/03
 Analyzed on: 08/04/03

Exygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)	Analyte Found (ppb)	Total Solids (%)	Analyte Found (ppb) Dry Weight
XC072503-0	-	CS	080103AR-301	0	-	672	-	-	-	-	-	-
XC072503-1	-	CS	080103AR-302	25	-	13717	-	-	-	-	-	-
XC072503-2	-	CS	080103AR-303	50	-	29040	-	-	-	-	-	-
XC072503-3	-	CS	080103AR-304	100	-	51582	-	-	-	-	-	-
XC072503-4	-	CS	080103AR-305	250	-	113798	-	-	-	-	-	-
XC072503-5	-	CS	080103AR-306	500	-	242355	-	-	-	-	-	-
XC072503-6	-	CS	080103AR-307	1000	-	469994	-	-	-	-	-	-
L34910-11 Spk E	BC2 SED-06	LF	080103AR-308	-	1000	3691	**	5000	-	-	-	-
L34910-11 Spk E	BC2 SED-06	LF	080103AR-309	-	100	29373	**	5000	-	-	-	-
L34910-20 Spk F	Outfall to River SED-25	LF	080103AR-310	-	100	28261	**	5000	-	-	-	-
L34910-5	BC2 SED-04	S	080103AR-311	-	10	18223	**	-	-	-	69.96	-
L34910-5 Rep	BC2 SED-04	S	080103AR-312	-	10	14512	**	-	-	-	69.96	-
L34910-10	BC2 SED-05	S	080103AR-313	-	10	32594	**	-	-	-	69.54	-
L34910-10 Rep	BC2 SED-05	S	080103AR-314	-	10	31062	**	-	-	-	69.54	-
XC072503-1	-	CS	080103AR-315	25	-	12807	-	-	-	-	-	-
XC072503-2	-	CS	080103AR-316	50	-	25414	-	-	-	-	-	-
L34910-11	BC2 SED-06	S	080103AR-317	-	100	9410	**	-	-	-	60.41	-
L34910-11 Rep	BC2 SED-06	S	080103AR-318	-	100	9587	**	-	-	-	60.41	-
L34910-11	BC2 SED-06	S	080103AR-319	-	10	80473	1780	-	-	14.24	60.41	23.6
L34910-11 Rep	BC2 SED-06	S	080103AR-320	-	10	76840	1700	-	-	13.60	60.41	22.5
L34910-20	Outfall to River SED-25	S	080103AR-321	-	100	7081	**	-	-	-	63.27	-
L34910-20 Rep	Outfall to River SED-25	S	080103AR-322	-	100	5379	**	-	-	-	63.27	-
XC072503-3	-	CS	080103AR-323	100	-	41160	-	-	-	-	-	-
XC072503-4	-	CS	080103AR-324	250	-	96206	-	-	-	-	-	-
L34910-20	Outfall to River SED-25	S	080103AR-325	-	10	61092	1340	-	-	10.72	63.27	16.9
L34910-20 Rep	Outfall to River SED-25	S	080103AR-326	-	10	44037	949	-	-	7.59	63.27	12.0
L34910-21	Outfall to River SED-25 Dup	S	080103AR-327	-	100	10169	*	-	-	-	67.43	-
L34910-21	Outfall to River SED-25 Dup	S	080103AR-328	-	10	99240	2210	-	-	17.68	67.43	26.2
XC072503-5	-	CS	080103AR-329	500	-	215048	-	-	-	-	-	-
XC072503-6	-	CS	080103AR-330	1000	-	406254	-	-	-	-	-	-

Analyte Found (ppt) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{[\text{analyte found (ppt)} - \text{analyte found in control (ppt)}] \times 100}{\text{amount added (ppt)}}$

Standard Curve: Linear (1/x weighted)

Intercept = 2443.00

Slope = 438.457

Coef. Of Det. = 0.990236

Analyte Found (ppb) = [analyte found (ppt) x volume extracted (0.04 L)] / sample weight (5 g)

Analyte Found (ppb) dry weight = analyte found (ppb) x (100% / total solids (%))

CS = Calibration standard

C = Control sample

S = Sample

LF = Lab fortified sample

FF = Field fortified sample

LCS = Laboratory Control Spike

CK = Check Standard

ND = Not detected = Response between 0 and 25 ppt

NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by:

Handwritten signature and date: 08/07/03

**Sample was analyzed with several dilution factors in order to accommodate all compounds. The appropriate results are reported.

RAW DATA REPORT

Sponsor Study No: NA
 Exygen Study No: L34910
 Analyte: PFOS
 Ions Monitored: 499 -> 99
 Site: Decatur Baker's Creek

Limit of Quantitation: 50 ppt
 Injection Volume: 15 µL
 Matrix: Soil
 Sample Weight: 5.0 g
 Final Volume: 5.0 mL

Set No: 080103AR
 Analyst: Karen Risha
 Instrument Type: LCMSMS #6
 Extraction Date: 08/01/03
 Analyzed on: 08/04/03

Exygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)	Analyte Found (ppb)	Total Solids (%)	Analyte Found (ppb) Dry Weight
XC072503-0	-	CS	080103AR-301	0	-	0	-	-	-	-	-	-
XC072503-1	-	CS	080103AR-302	25	-	1442	-	-	-	-	-	-
XC072503-2	-	CS	080103AR-303	50	-	3003	-	-	-	-	-	-
XC072503-3	-	CS	080103AR-304	100	-	5613	-	-	-	-	-	-
XC072503-4	-	CS	080103AR-305	250	-	11976	-	-	-	-	-	-
XC072503-5	-	CS	080103AR-306	500	-	25896	-	-	-	-	-	-
XC072503-6	-	CS	080103AR-307	1000	-	51730	-	-	-	-	-	-
L34910-11 Spk E	BC2 SED-06	LF	080103AR-308	-	1000	5387	^^	5000	-	-	-	-
L34910-11 Spk E	BC2 SED-06	LF	080103AR-309	-	100	51842	**	5000	-	-	-	-
L34910-20 Spk F	Outfall to River SED-25	LF	080103AR-310	-	100	9506	19100	5000	114	-	-	-
L34910-5	BC2 SED-04	S	080103AR-311	-	10	9121	1830	-	-	14.64	69.96	20.9
L34910-5 Rep	BC2 SED-04	S	080103AR-312	-	10	7449	1490	-	-	11.92	69.96	17.0
L34910-10	BC2 SED-05	S	080103AR-313	-	10	14012	2850	-	-	22.80	69.54	32.8
L34910-10 Rep	BC2 SED-05	S	080103AR-314	-	10	15401	3130	-	-	25.04	69.54	36.0
XC072503-1	-	CS	080103AR-315	25	-	1301	-	-	-	-	-	-
XC072503-2	-	CS	080103AR-316	50	-	2860	-	-	-	-	-	-
L34910-11	BC2 SED-06	S	080103AR-317	-	100	66379	^^	-	-	-	60.41	-
L34910-11 Rep	BC2 SED-06	S	080103AR-318	-	100	48518	^^	-	-	-	60.41	-
L34910-11	BC2 SED-06	S	080103AR-319	-	10	526238	**	-	-	-	60.41	-
L34910-11 Rep	BC2 SED-06	S	080103AR-320	-	10	390663	**	-	-	-	60.41	-
L34910-20	Outfall to River SED-25	S	080103AR-321	-	100	6714	13400	-	-	107.20	63.27	169
L34910-20 Rep	Outfall to River SED-25	S	080103AR-322	-	100	4609	9010	-	-	72.08	63.27	114
XC072503-3	-	CS	080103AR-323	100	-	4445	-	-	-	-	-	-
XC072503-4	-	CS	080103AR-324	250	-	11649	-	-	-	-	-	-
L34910-20	Outfall to River SED-25	S	080103AR-325	-	10	65108	**	-	-	-	63.27	-
L34910-20 Rep	Outfall to River SED-25	S	080103AR-326	-	10	45122	**	-	-	-	63.27	-
L34910-21	Outfall to River SED-25 Dup	S	080103AR-327	-	100	8701	17500	-	-	140.00	67.43	208
L34910-21	Outfall to River SED-25 Dup	S	080103AR-328	-	10	80003	**	-	-	-	67.43	-
XC072503-5	-	CS	080103AR-329	500	-	24473	-	-	-	-	-	-
XC072503-6	-	CS	080103AR-330	1000	-	44784	-	-	-	-	-	-

Analyte Found (ppt) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{[\text{analyte found (ppt)} - \text{analyte found in control (ppt)}] \times 100}{\text{amount added (ppt)}}$

Standard Curve: Linear (1/x weighted)

Intercept = 254.789

Slope = 48.3413

Coef. Of Det. = 0.991571

Analyte Found (ppb) = [analyte found (ppt) x volume extracted (0.04 L)] / sample weight (5 g)

Analyte Found (ppb) dry weight = analyte found (ppb) x (100% / total solids (%))

CS = Calibration standard

C = Control sample

S = Sample

LF = Lab fortified sample

FF = Field fortified sample

LCS = Laboratory Control Spike

CK = Check Standard

ND = Not detected = Response between 0 and 25 ppt

NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by: *KR*, 08/07/03

**Sample was analyzed with several dilution factors in order to accommodate all compounds. The appropriate results are reported.

^^Sample requires reextraction. See data set 080603B.

RAW DATA REPORT

Sponsor Study No: NA
 Exygen Study No: L34910
 Analyte: FOSA
 Ions Monitored: 498 -> 78
 Site: Decatur Baker's Creek

Limit of Quantitation: 50 ppt
 Injection Volume: 15 µL
 Matrix: Soil
 Sample Weight: 5.0 g
 Final Volume: 5.0 mL

Set No: 080103AR
 Analyst: Karen Risha
 Instrument Type: LCMSMS #6
 Extraction Date: 08/01/03
 Analyzed on: 08/04/03

Exygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)	Analyte Found (ppb)	Total Solids (%)	Analyte Found (ppb) Dry Weight
XC072503-0	-	CS	080103AR-301	0	-	0	-	-	-	-	-	-
XC072503-1	-	CS	080103AR-302	25	-	5040	-	-	-	-	-	-
XC072503-2	-	CS	080103AR-303	50	-	10269	-	-	-	-	-	-
XC072503-3	-	CS	080103AR-304	100	-	19684	-	-	-	-	-	-
XC072503-4	-	CS	080103AR-305	250	-	45565	-	-	-	-	-	-
XC072503-5	-	CS	080103AR-306	500	-	93155	-	-	-	-	-	-
XC072503-6	-	CS	080103AR-307	1000	-	179184	-	-	-	-	-	-
L34910-11 Spk E	BC2 SED-06	LF	080103AR-308	-	1000	2308	**	5000	-	-	-	-
L34910-11 Spk E	BC2 SED-06	LF	080103AR-309	-	100	21870	^^	5000	-	-	-	-
L34910-20 Spk F	Outfall to River SED-25	LF	080103AR-310	-	100	13524	**	5000	-	-	-	-
L34910-5	BC2 SED-04	S	080103AR-311	-	10	16680	**	-	-	-	69.96	-
L34910-5 Rep	BC2 SED-04	S	080103AR-312	-	10	18189	**	-	-	-	69.96	-
L34910-10	BC2 SED-05	S	080103AR-313	-	10	19503	**	-	-	-	69.54	-
L34910-10 Rep	BC2 SED-05	S	080103AR-314	-	10	26862	1510	-	-	12.08	69.54	17.4
XC072503-1	-	CS	080103AR-315	25	-	4380	-	-	-	-	-	-
XC072503-2	-	CS	080103AR-316	50	-	8991	-	-	-	-	-	-
L34910-11	BC2 SED-06	S	080103AR-317	-	100	21988	^^	-	-	-	60.41	-
L34910-11 Rep	BC2 SED-06	S	080103AR-318	-	100	16805	^^	-	-	-	60.41	-
L34910-11	BC2 SED-06	S	080103AR-319	-	10	200293	**	-	-	-	60.41	-
L34910-11 Rep	BC2 SED-06	S	080103AR-320	-	10	150384	**	-	-	-	60.41	-
L34910-20	Outfall to River SED-25	S	080103AR-321	-	100	6516	**	-	-	-	63.27	-
L34910-20 Rep	Outfall to River SED-25	S	080103AR-322	-	100	5371	**	-	-	-	63.27	-
XC072503-3	-	CS	080103AR-323	100	-	17628	-	-	-	-	-	-
XC072503-4	-	CS	080103AR-324	250	-	40103	-	-	-	-	-	-
L34910-20	Outfall to River SED-25	S	080103AR-325	-	10	61447	3500	-	-	28.00	63.27	44.3
L34910-20 Rep	Outfall to River SED-25	S	080103AR-326	-	10	51717	2940	-	-	23.52	63.27	37.2
L34910-21	Outfall to River SED-25 Dup	S	080103AR-327	-	100	9119	**	-	-	-	67.43	-
L34910-21	Outfall to River SED-25 Dup	S	080103AR-328	-	10	78207	4460	-	-	35.68	67.43	52.9
XC072503-5	-	CS	080103AR-329	500	-	86063	-	-	-	-	-	-
XC072503-6	-	CS	080103AR-330	1000	-	167421	-	-	-	-	-	-

Analyte Found (ppt) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{[\text{analyte found (ppt)} - \text{analyte found in control (ppt)}] \times 100}{\text{amount added (ppt)}}$

Standard Curve: Linear (1/x weighted)

Intercept = 610.451

Slope = 174.067

Coef. Of Det. = 0.996985

Analyte Found (ppb) = [analyte found (ppt) x volume extracted (0.04 L)] / sample weight (5 g)

Analyte Found (ppb) dry weight = analyte found (ppb) x (100% / total solids (%))

CS = Calibration standard

LF = Lab fortified sample

CK = Check Standard

C = Control sample

FF = Field fortified sample

ND = Not detected = Response between 0 and 25 ppt

S = Sample

LCS = Laboratory Control Spike

NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by:

[Signature] 08/28/03

**Sample was analyzed with several dilution factors in order to accommodate all compounds. The appropriate results are reported.

^^Sample requires reextraction. See data set 080603B.

Masslynx - Sample List

Sample List: C:\MASSLYNX\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC.SPL
Printed: Mon Aug 04 07:47:05 2003

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Page 1

Exogen STUDY NO. L34910

8/20/03

Vial	File Name	LIMS ID	Client ID	Sample Description	Matrix	Sample Type	Conc (ng/L)	Conc B	Conc C	Test ID	DF
1	080103AR-301	--	--	XC072503-0, 0 ng/L Standard	---	Standard	0	--	--	0	1
2	080103AR-302	--	--	XC072503-1, 25 ng/L Standard	---	Standard	25	--	--	0	1
3	080103AR-303	--	--	XC072503-2, 50 ng/L Standard	---	Standard	50	--	--	0	1
4	080103AR-304	--	--	XC072503-3, 100 ng/L Standard	---	Standard	100	--	--	0	1
5	080103AR-305	--	--	XC072503-4, 250 ng/L Standard	---	Standard	250	--	--	0	1
6	080103AR-306	--	--	XC072503-5, 500 ng/L Standard	---	Standard	500	--	--	0	1
7	080103AR-307	--	--	XC072503-6, 1000 ng/L Standard	---	Standard	1000	--	--	0	1
8	080103AR-308	--	--	L34910-11 Spk E, 5000 ng/L, DF=1000	---	QC	5000	--	--	0	1000
9	080103AR-309	--	--	L34910-11 Spk E, 5000 ng/L, DF=100	---	QC	5000	--	--	0	100
10	080103AR-310	--	--	L34910-20 Spk F, 5000 ng/L, DF=100	---	QC	5000	--	--	0	100
11	080103AR-311	--	--	L34910-5, DF=10	---	Analyte	--	--	--	0	10
12	080103AR-312	--	--	L34910-5 Rep, DF=10	---	Analyte	--	--	--	0	10
13	080103AR-313	--	--	L34910-10, DF=10	---	Analyte	--	--	--	0	10
14	080103AR-314	--	--	L34910-10 Rep, DF=10	---	Analyte	--	--	--	0	10
15	080103AR-315	--	--	XC072503-1, 25 ng/L Standard	---	Standard	25	--	--	0	1
16	080103AR-316	--	--	XC072503-2, 50 ng/L Standard	---	Standard	50	--	--	0	1
17	080103AR-317	--	--	L34910-11, DF=100	---	Analyte	--	--	--	0	100
18	080103AR-318	--	--	L34910-11 Rep, DF=100	---	Analyte	--	--	--	0	100
19	080103AR-319	--	--	L34910-11, DF=10	---	Analyte	--	--	--	0	10
20	080103AR-320	--	--	L34910-11 Rep, DF=10	---	Analyte	--	--	--	0	10
21	080103AR-321	--	--	L34910-20, DF=100	---	Analyte	--	--	--	0	100
22	080103AR-322	--	--	L34910-20 Rep, DF=100	---	Analyte	--	--	--	0	100
23	080103AR-323	--	--	XC072503-3, 100 ng/L Standard	---	Standard	100	--	--	0	1
24	080103AR-324	--	--	XC072503-4, 250 ng/L Standard	---	Standard	250	--	--	0	1
25	080103AR-325	--	--	L34910-20, DF=10	---	Analyte	--	--	--	0	10
26	080103AR-326	--	--	L34910-20 Rep, DF=10	---	Analyte	--	--	--	0	10
27	080103AR-327	--	--	L34910-21, DF=100	---	Analyte	--	--	--	0	100
28	080103AR-328	--	--	L34910-21, DF=10	---	Analyte	--	--	--	0	10
29	080103AR-329	--	--	XC072503-5, 500 ng/L Standard	---	Standard	500	--	--	0	1
30	080103AR-330	--	--	XC072503-6, 1000 ng/L Standard	---	Standard	1000	--	--	0	1

Masslynx - Sample List

Sample List: C:\MASSLYNX\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC.SPL
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Exygen STUDY NO. 134910

Page 2

Page Position: (2, 1)

08/08/04/03

	MS Method	HPLC Method	MS Tune File	Inj. Volume
1	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
2	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
3	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
4	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
5	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
6	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
7	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
8	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
9	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
10	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
11	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
12	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
13	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
14	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
15	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
16	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
17	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
18	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
19	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
20	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
21	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
22	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
23	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
24	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
25	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
26	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
27	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
28	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
29	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
30	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15

LC/MS/MS SYSTEM AND OPERATING CONDITIONS

Sponsor Protocol No: NA

Exygen Study No: L34910

Instrument: Micromass Quattro Ultima (LC/MS/MS Unit #6)

Computer: COMPAQ Professional Workstation AP200

Software: Microsoft Windows NT: Version 4 Build 1381: Service Pack 5
Micromass Limited: MassLynx 3.4 Build 004

HPLC Equipment: Hewlett Packard (HP) Series 1100
HP Bin Pump HP Vacuum Degasser
HP Autosampler HP Column Oven

HPLC Column: Genesis C-8, 5 cm x 2.1 mm i.d. x 4 μ (Exygen ID: 74A)
(JONESCHROMATOGRAPHY: Part No. FK5962E)

Mobile Phase (A): 2 mM Ammonium Acetate in Type I Water
Mobile Phase (B): Methanol

Analyst: Karen Risha
Exygen Research
3058 Research Drive, State College, PA 16801
Phone: (814) 272-1039 FAX: (814) 231-1580

KR 08/04/03

NOTE: The next 3 pages are computer generated printouts from the masslynx software program. The pages contain the instrument settings used for the analysis of this data set.

All Handwritten Peak ID's by: *KR 08/05/03*

Scanning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUDB\C6 C8 SULF C8 ACID PFOSA

Last Modified: Thu Jul 31 16:23:50 2003

Printed: Mon Aug 04 07:47:13 2003

2f 08/04/03

Solvent Delay (mins) : 0.00

Analog Channel 4 : Unused

Function : 1 MRM of 4 Mass Pairs (ESP-)

Inter Channel Delay (Secs) : 0.03

Span (Daltons) : 0.00

Start Time (Mins) : 0.00

End Time (Mins) : 12.00

Repeats : 1

	Channel	Parent	Daughter	Dwell (Secs)	Coll Energy (eV)	Cone (V)
1		399.00	80.00	0.20	35	50
2		413.00	369.00	0.20	10	10
3		498.00	78.00	0.20	30	50
4		499.00	99.00	0.20	40	30

Method Report

Page 1

Method File:
Last Modified:

C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUDE\pfbs water
Monday, August 04, 2003 07:38:50

Printed:

Monday, August 04, 2003 07:47:18

bf 08/04/03

HP1100 LC Pump Initial Conditions

Solvents

A%	90.0
B%	10.0
C%	0.0
D%	0.0

Flow (ml/min)	0.300
Stop Time (mins)	20.0
Min Pressure (bar)	0
Max Pressure (bar)	400
Oven Temperature Left (°C)	35.0
Oven Temperature Right (°C)	35.0

HP1100 LC Pump Gradient Timetable

The gradient Timetable contains 8 entries which are :

Time	A%	B%	C%	D%	Flow	Pressure
0.00	90.0	10.0	0.0	0.0	0.300	400
2.00	90.0	10.0	0.0	0.0	0.300	400
5.00	10.0	90.0	0.0	0.0	0.300	400
9.00	10.0	90.0	0.0	0.0	0.300	400
9.50	0.0	100.0	0.0	0.0	0.300	400
14.00	0.0	100.0	0.0	0.0	0.300	400
14.50	90.0	10.0	0.0	0.0	0.300	400
20.00	90.0	10.0	0.0	0.0	0.300	400

HP1100 LC Pump External Event Timetable

The Timetable contains 6 entries which are :

Time	Column Switch	Contact1	Contact2	Contact3	Contact4
Initial	Off	Off	Off	Off	Off
0.00	Off	On	Off	Off	Off
0.05	Off	Off	Off	Off	Off
0.10	Off	Off	On	Off	Off
11.90	Off	Off	Off	On	Off
12.00	Off	Off	Off	Off	Off

HP1100 Autosampler Initial Conditions

Draw Speed	200.0
Eject Speed (µl/min)	200
Draw Position (mm)	0.50
Stop Time (mins)	20.00
Injection Volume (µl)	15.0
Vial Number	27

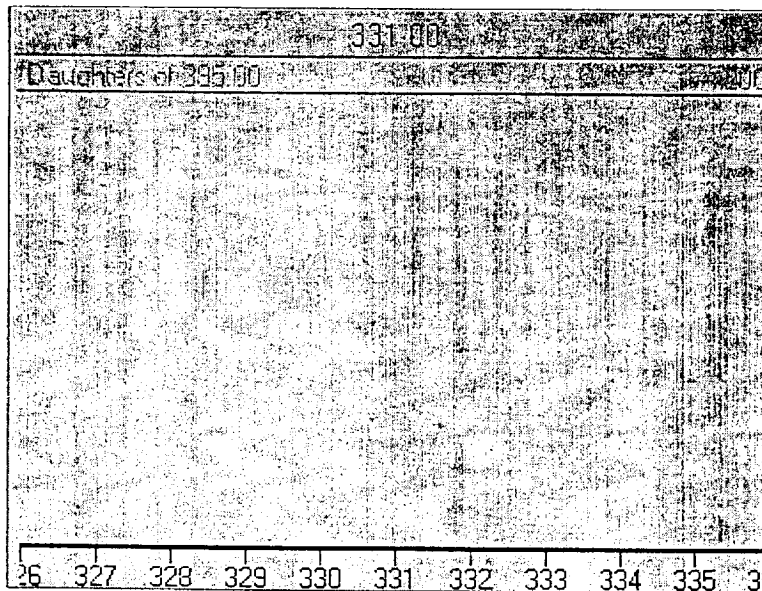
Tuning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUDB\FLUOROCHEMS

Printed: Mon Aug 04 07:47:28 2003

Kf 08/04/03



Dau 395.00

SOURCE (ESP-)	Set	Rdbk	Analyser	Set	Rdbk
Capillary	3.00	-2.93	LM Res 1	14.0	
Cone	20	-16	HM Res 1	14.0	
Hexapole 1	0.0		IEnergy 1	1.0	
Aperture 1	0.0		Entrance	-2	11
Hexapole 2	0.0		Collision	15	21
Source Block Temp.	100	100	Exit	2	14
Desolvation Temp.	300	299	LM Res 2	14.0	
			HM Res 2	14.0	
			IEnergy 2	2.0	
			Multiplier	650	-647
Pressures	Rdbk		Gas Flows	Rdbk	
Analyser Vacuum	OFF		Cone Gas	134.7	
Gas Cell	3.6e-3		Desolvation	765.9	

Quantify Calibration Report

Page 1

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:30:00 2003

Printed: Tue Aug 05 07:31:58 2003

of 08/05/03 pages 1-34 @ 12/08/03

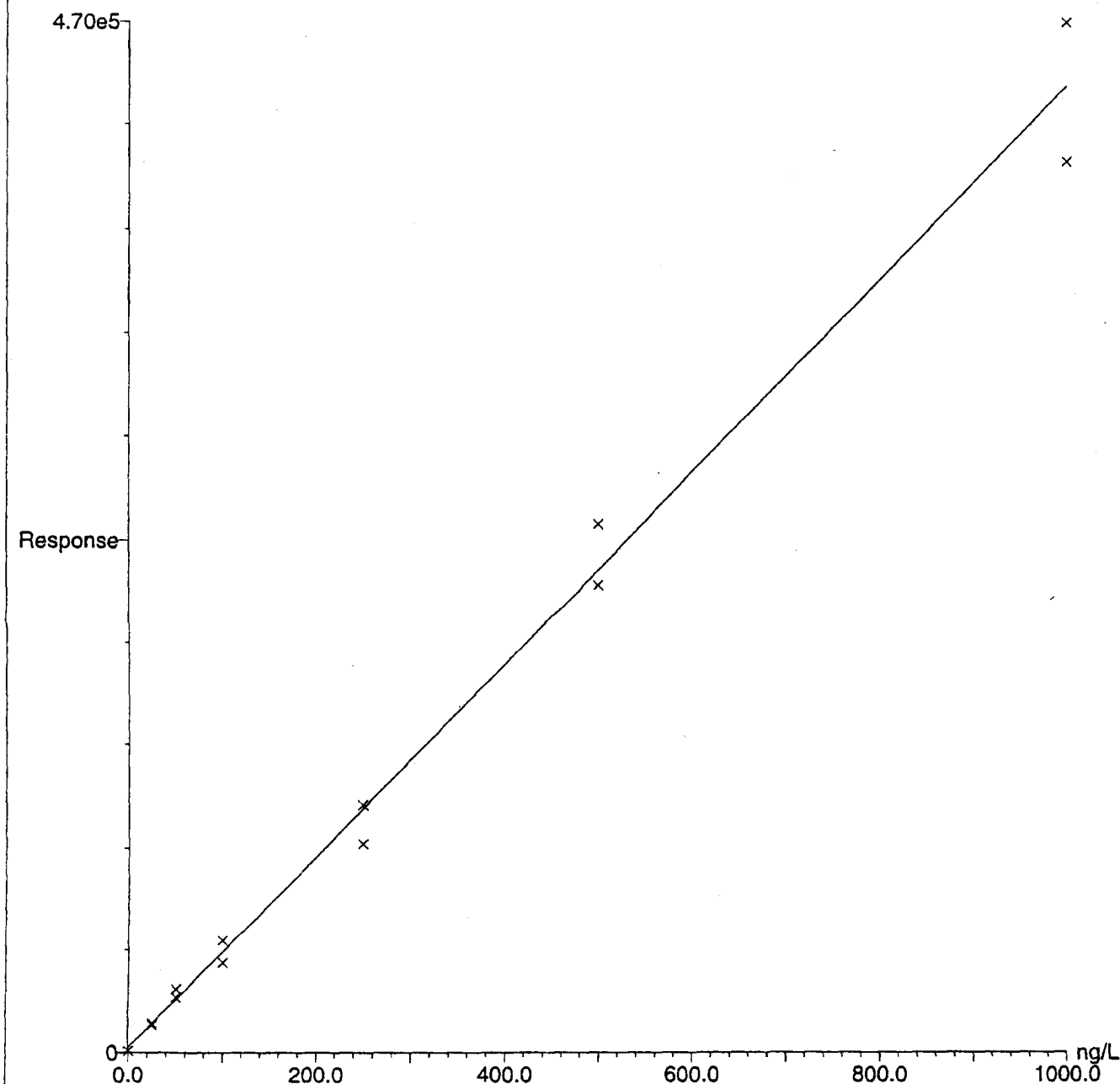
Compound 1 name: C8 Acid (PFOA)

Coefficient of Determination: 0.990236

Calibration curve: $438.457 * x + 2443.00$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Calibration Report

Page 2

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:30:00 2003

Printed: Tue Aug 05 07:31:58 2003

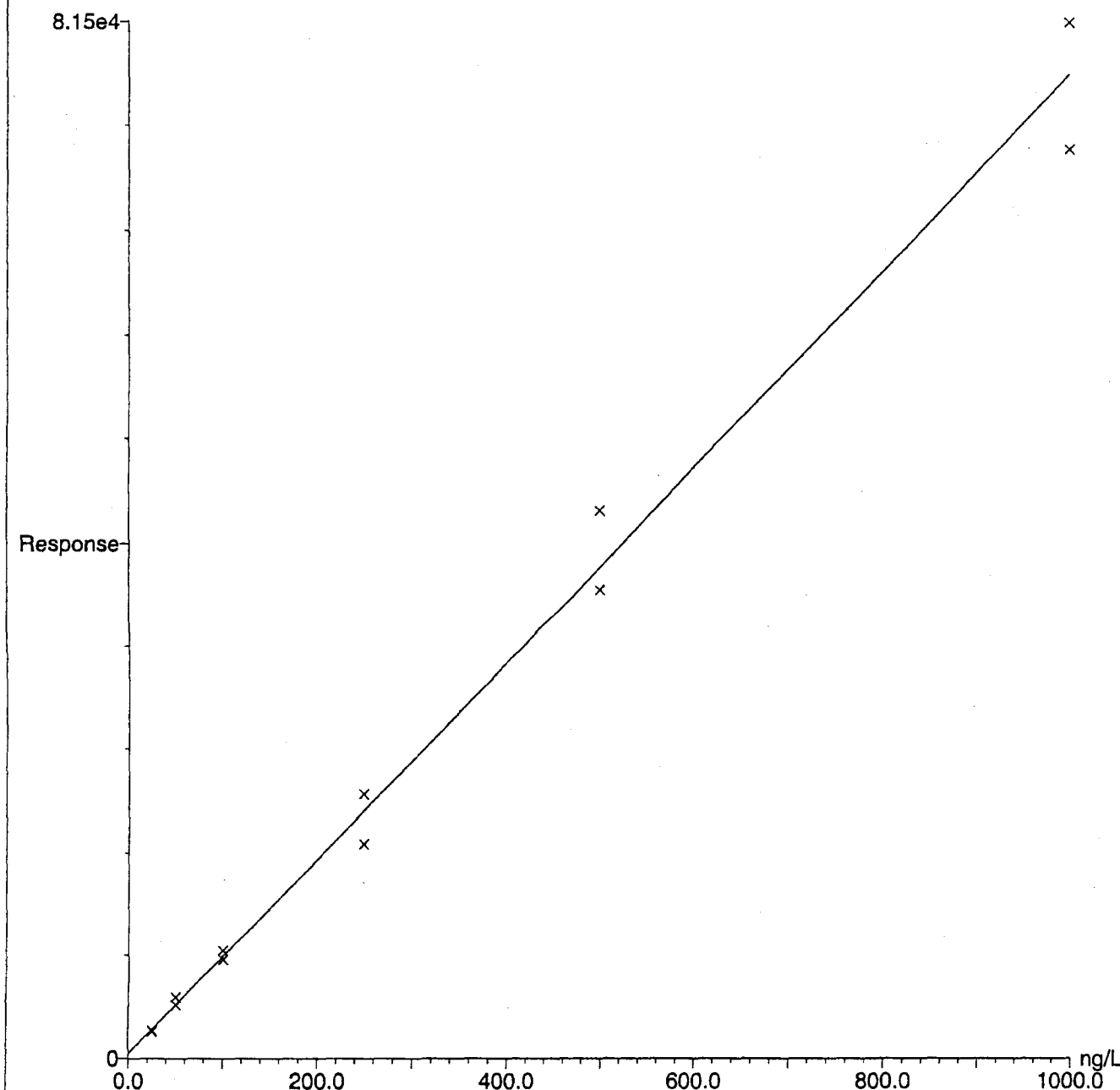
Compound 2 name: C6 Sulfonate (PFHS)

Coefficient of Determination: 0.990051

Calibration curve: $77.0647 * x + 374.700$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Calibration Report

Page 3

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:30:00 2003

Printed: Tue Aug 05 07:31:58 2003

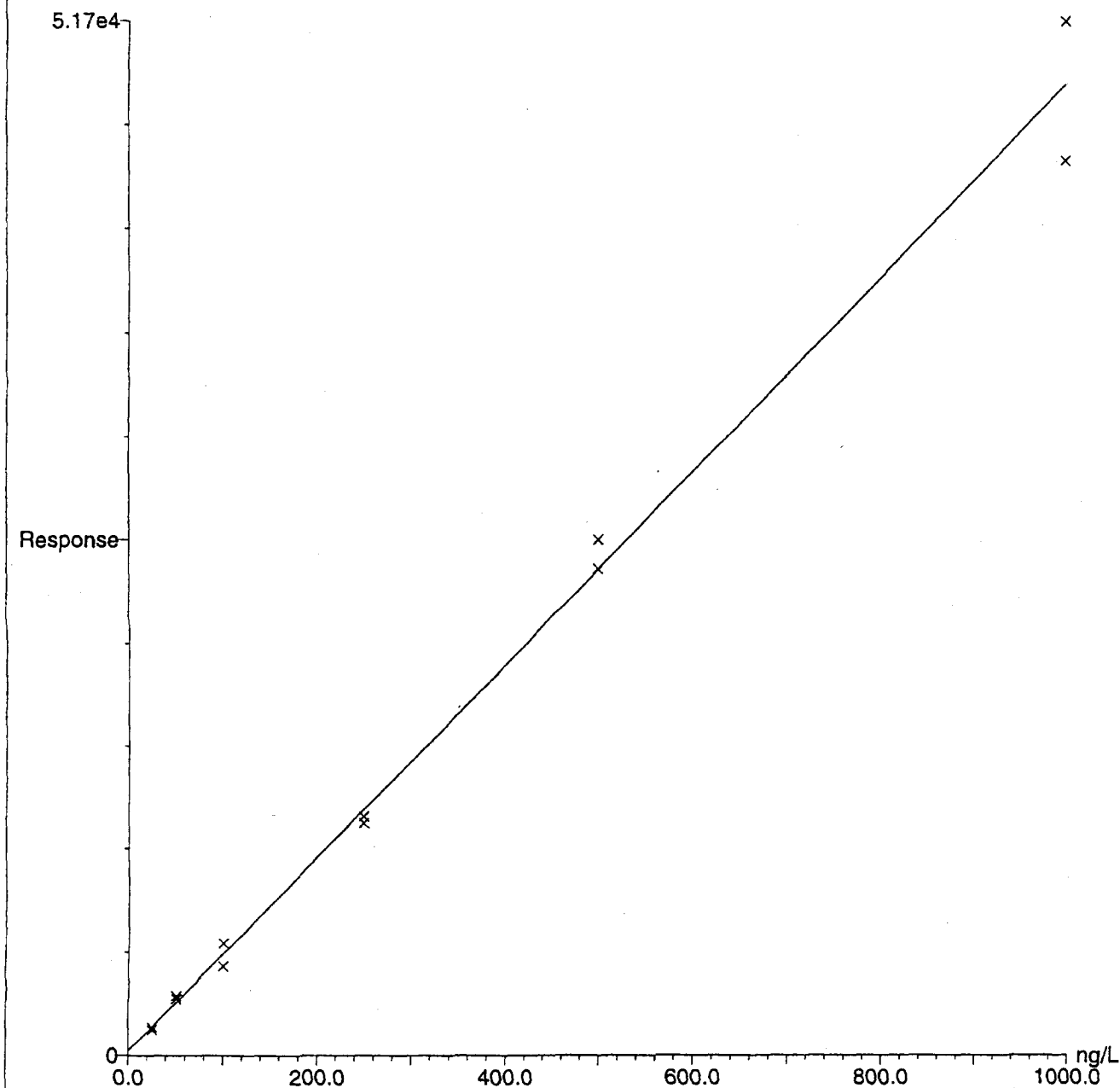
Compound 3 name: C8 Sulfonate (PFOS)

Coefficient of Determination: 0.991571

Calibration curve: $48.3413 * x + 254.789$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Calibration Report

Page 4

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:30:00 2003

Printed: Tue Aug 05 07:31:58 2003

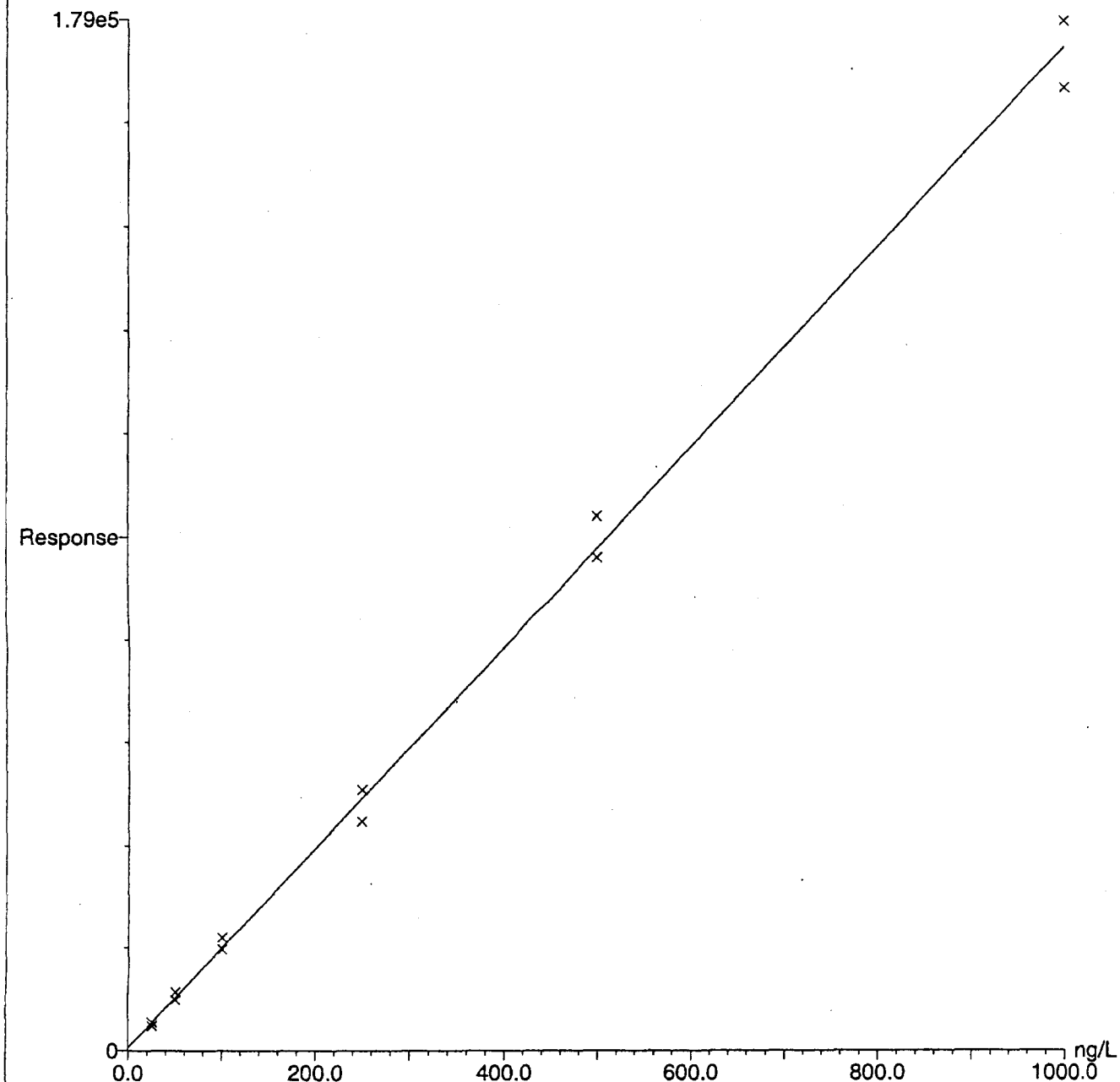
Compound 4 name: PFOSA

Coefficient of Determination: 0.996985

Calibration curve: $174.067 * x + 610.451$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Sample Report

Page 1

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Initials *KL*

Date 08/05/03

Run# 080103AR-301 To 080103AR-330

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-301

Text:

1: C8 Acid (PFOA)

XC072503-0, 0 ng/L Standard

04-Aug-2003 08:35:50

LC/MS/MS #6

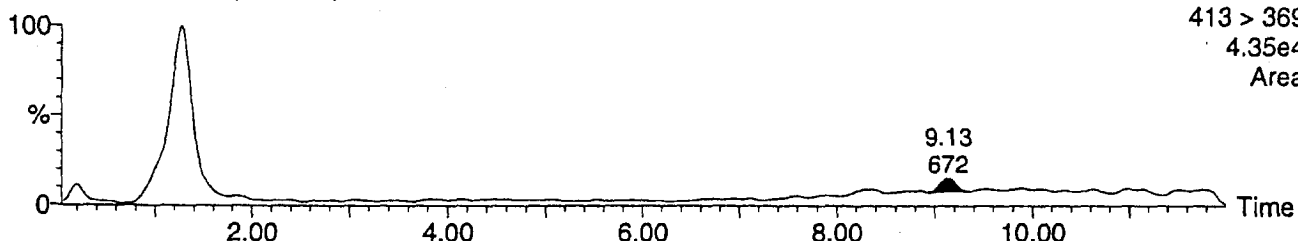
MRM of 4 Channels ES-

413 > 369

4.35e4

Area

080103AR-301 Sm (Mn, 2x3)



2: C6 Sulfonate (PFHS)

XC072503-0, 0 ng/L Standard

04-Aug-2003 08:35:50

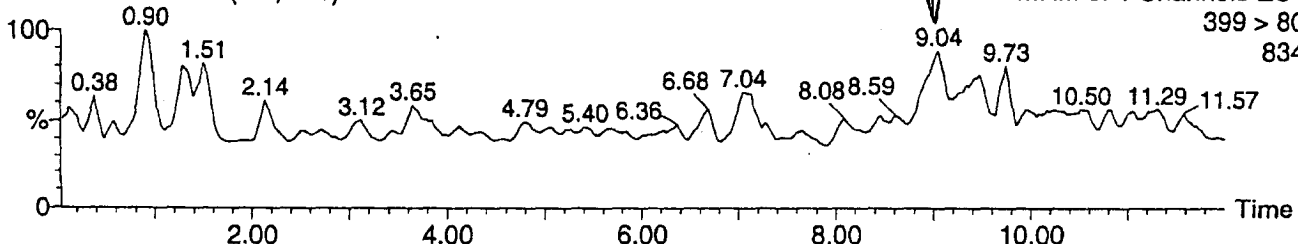
LC/MS/MS #6

MRM of 4 Channels ES-

399 > 80

834

080103AR-301 Sm (Mn, 2x3)



3: C8 Sulfonate (PFOS)

XC072503-0, 0 ng/L Standard

04-Aug-2003 08:35:50

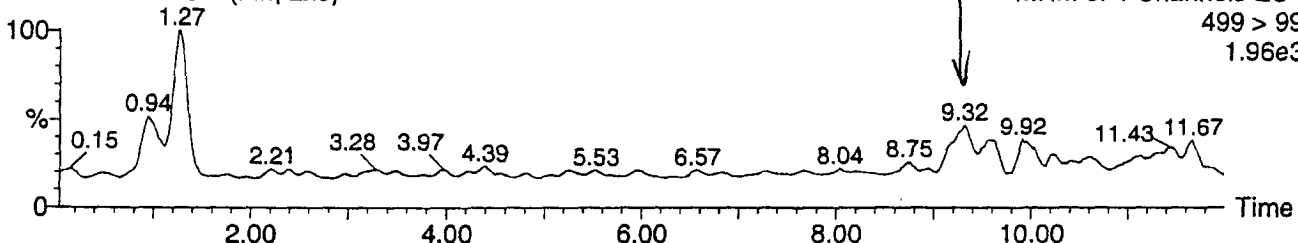
LC/MS/MS #6

MRM of 4 Channels ES-

499 > 99

1.96e3

080103AR-301 Sm (Mn, 2x3)



Quantify Sample Report

Page 2

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

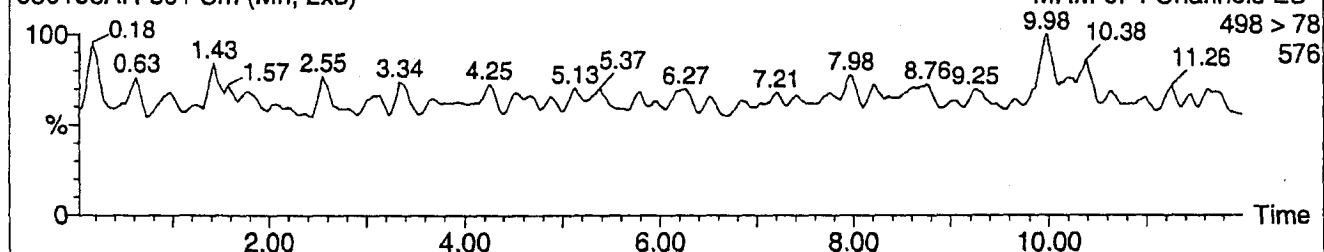
Name: 080103AR-301

Text:

4: PFOSA

XC072503-0, 0 ng/L Standard

080103AR-301 Sm (Mn, 2x3)



Quantify Sample Report

Page 3

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-302

Text:

1: C8 Acid (PFOA)

XC072503-1, 25 ng/L Standard

04-Aug-2003 08:57:29

LC/MS/MS #6

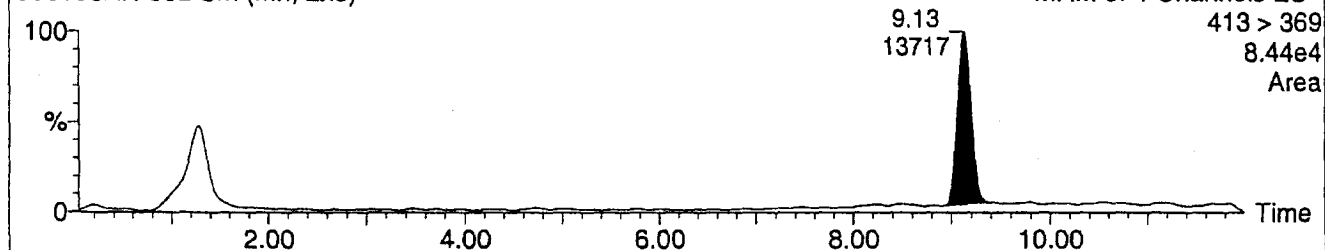
080103AR-302 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

8.44e4

Area



2: C6 Sulfonate (PFHS)

XC072503-1, 25 ng/L Standard

04-Aug-2003 08:57:29

LC/MS/MS #6

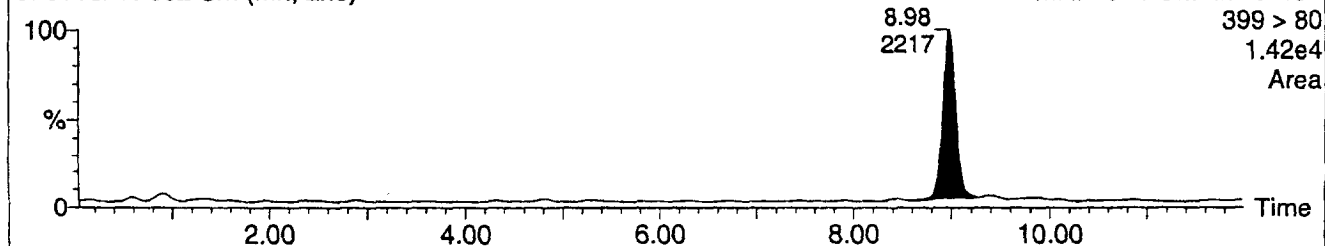
080103AR-302 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.42e4

Area



3: C8 Sulfonate (PFOS)

XC072503-1, 25 ng/L Standard

04-Aug-2003 08:57:29

LC/MS/MS #6

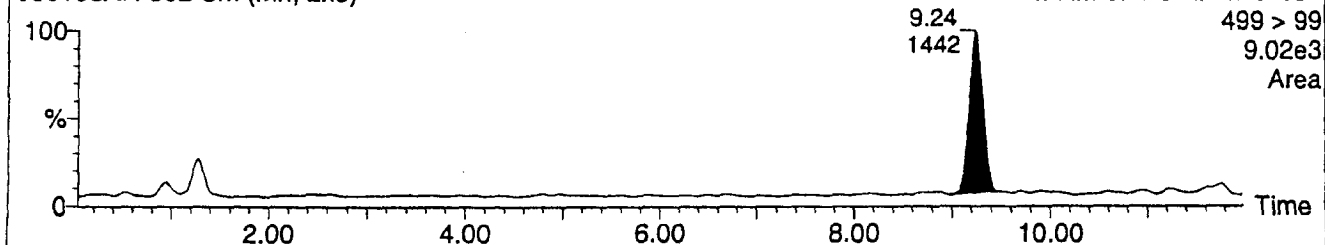
080103AR-302 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

9.02e3

Area



Quantify Sample Report

Page 4

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-302

Text:

4: PFOSA

XC072503-1, 25 ng/L Standard

04-Aug-2003 08:57:29

LC/MS/MS #6

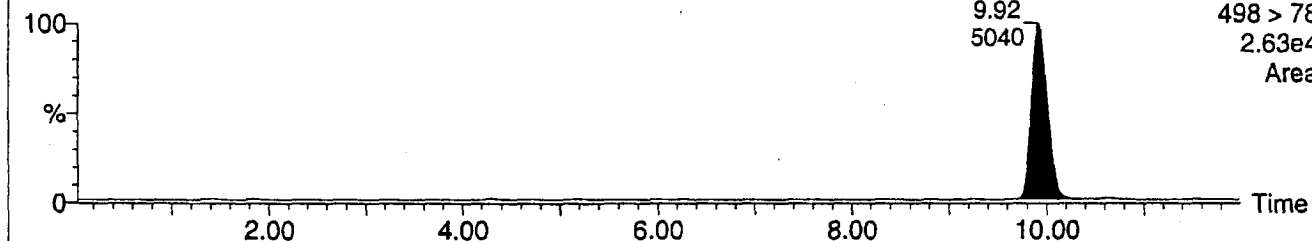
080103AR-302 Sm (Mn, 2x3)

MRM of 4 Channels ES-

9.92 498 > 78

5040 2.63e4

Area



Quantify Sample Report

Page 5

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

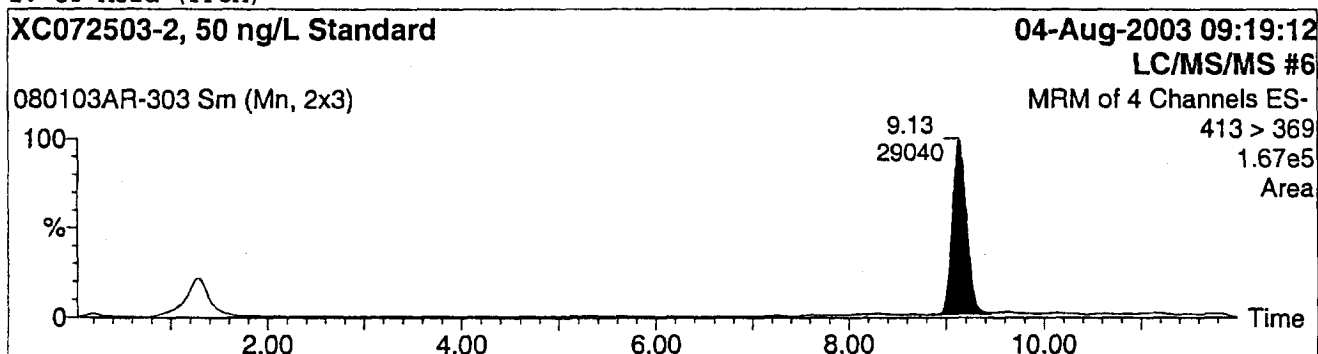
Job Code:

Printed: Tue Aug 05 07:32:01 2003

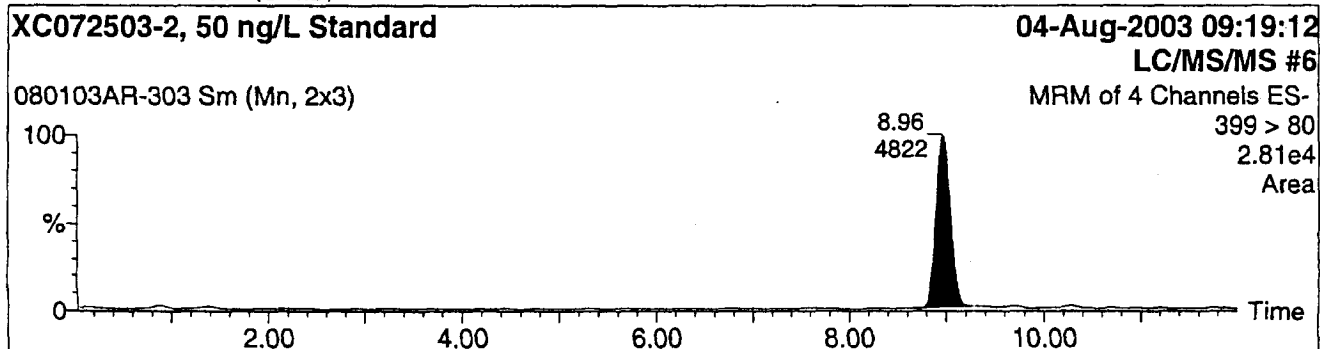
Name: 080103AR-303

Text:

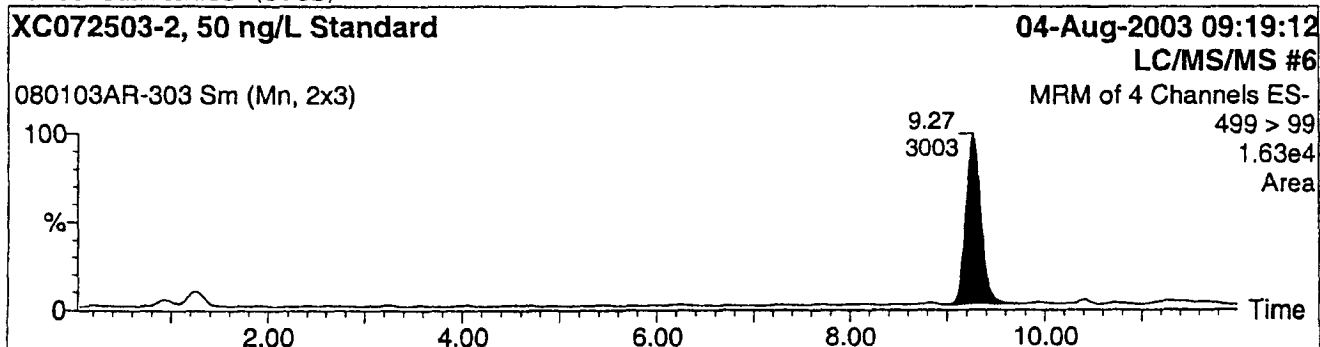
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 6

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-303

Text:

4: PFOSA

XC072503-2, 50 ng/L Standard

04-Aug-2003 09:19:12

LC/MS/MS #6

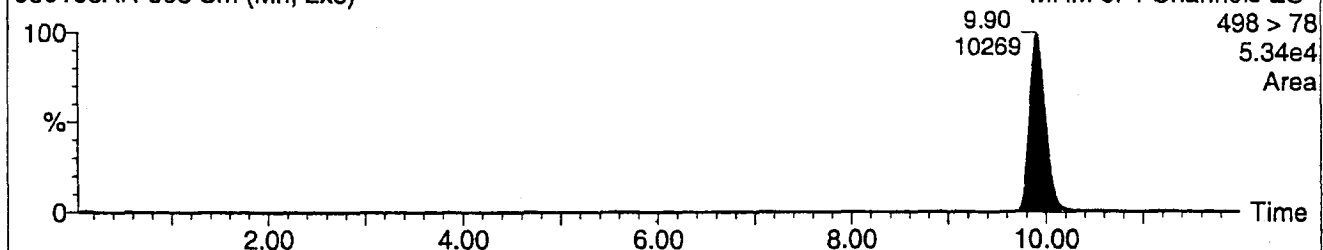
080103AR-303 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

5.34e4

Area



Quantify Sample Report

Page 7

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-304

Text:

1: C8 Acid (PFOA)

XC072503-3, 100 ng/L Standard

04-Aug-2003 09:41:00

LC/MS/MS #6

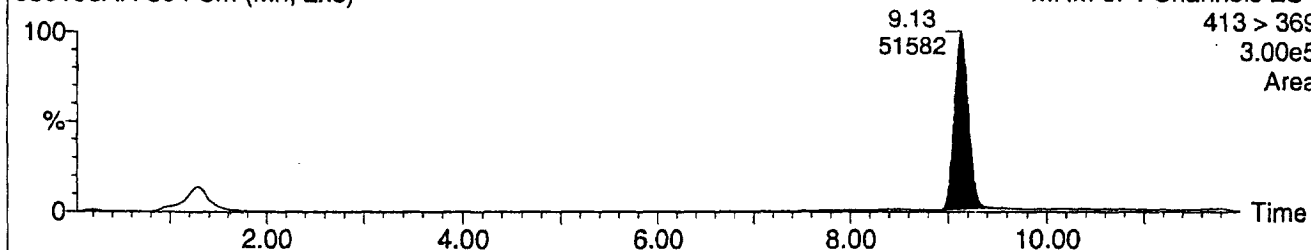
080103AR-304 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

3.00e5

Area



2: C6 Sulfonate (PFHS)

XC072503-3, 100 ng/L Standard

04-Aug-2003 09:41:00

LC/MS/MS #6

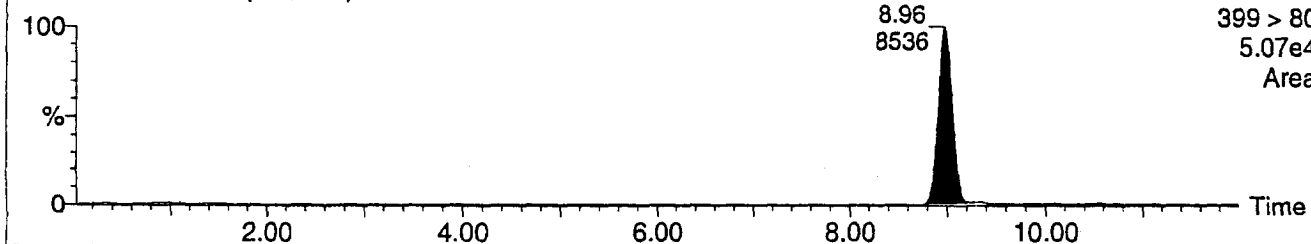
080103AR-304 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

5.07e4

Area



3: C8 Sulfonate (PFOS)

XC072503-3, 100 ng/L Standard

04-Aug-2003 09:41:00

LC/MS/MS #6

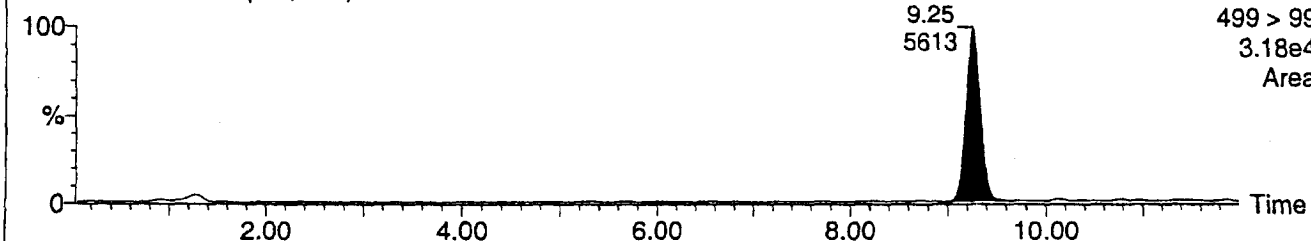
080103AR-304 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

3.18e4

Area



Quantify Sample Report

Page 8

Study No.: I34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-304

Text:

4: PFOSA

XC072503-3, 100 ng/L Standard

04-Aug-2003 09:41:00

LC/MS/MS #6

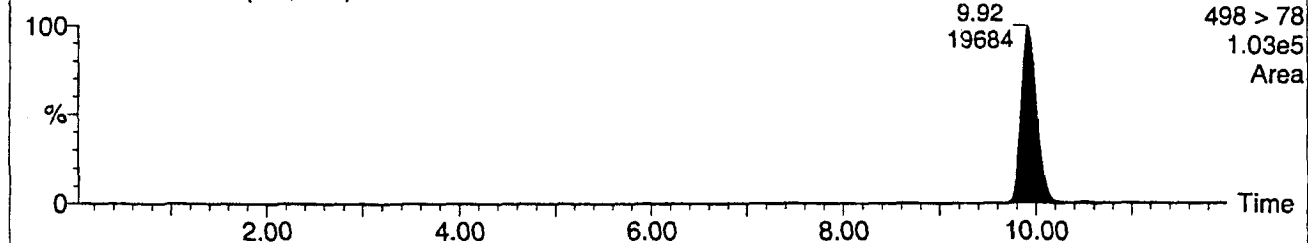
080103AR-304 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.03e5

Area



Quantify Sample Report

Page 9

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-305

Text:

1: C8 Acid (PFOA)

XC072503-4, 250 ng/L Standard

04-Aug-2003 10:02:40

LC/MS/MS #6

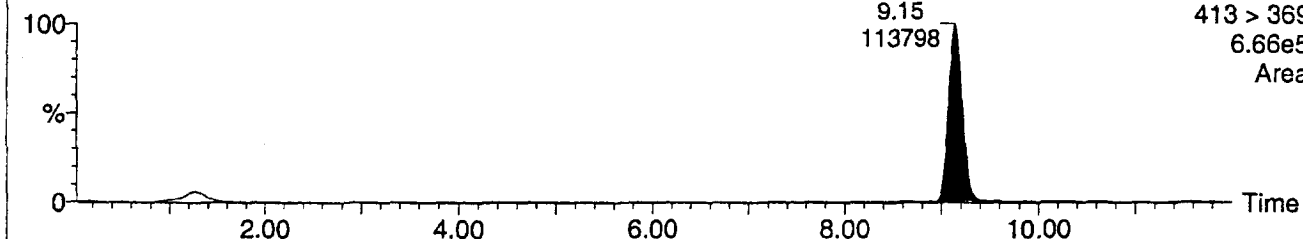
080103AR-305 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

6.66e5

Area



2: C6 Sulfonate (PFHS)

XC072503-4, 250 ng/L Standard

04-Aug-2003 10:02:40

LC/MS/MS #6

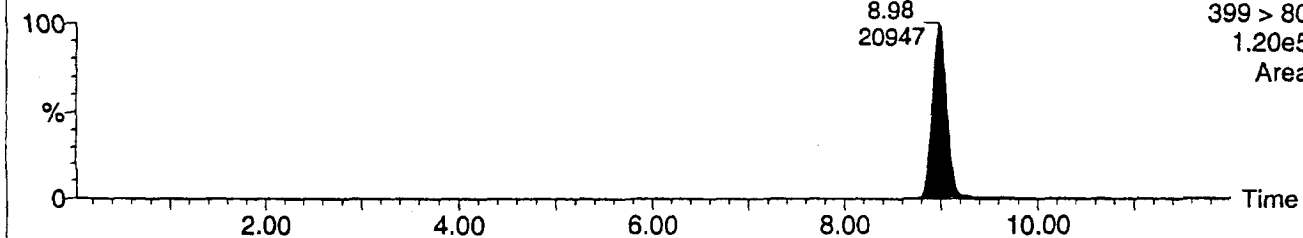
080103AR-305 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.20e5

Area



3: C8 Sulfonate (PFOS)

XC072503-4, 250 ng/L Standard

04-Aug-2003 10:02:40

LC/MS/MS #6

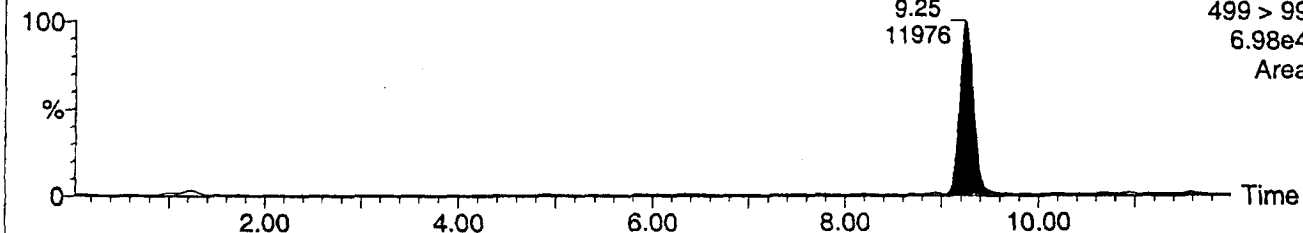
080103AR-305 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

6.98e4

Area



Quantify Sample Report

Page 10

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-305

Text:

4: PFOSA

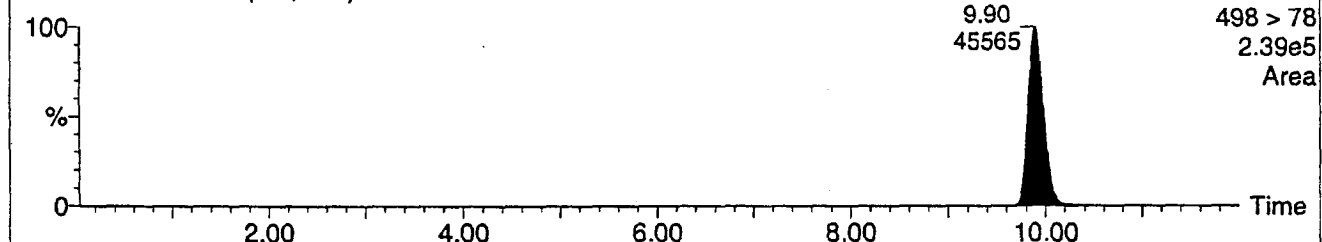
XC072503-4, 250 ng/L Standard

04-Aug-2003 10:02:40

LC/MS/MS #6

080103AR-305 Sm (Mn, 2x3)

MRM of 4 Channels ES-



Quantify Sample Report

Page 11

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-306

Text:

1: C8 Acid (PFOA)

XC072503-5, 500 ng/L Standard

04-Aug-2003 10:24:22

LC/MS/MS #6

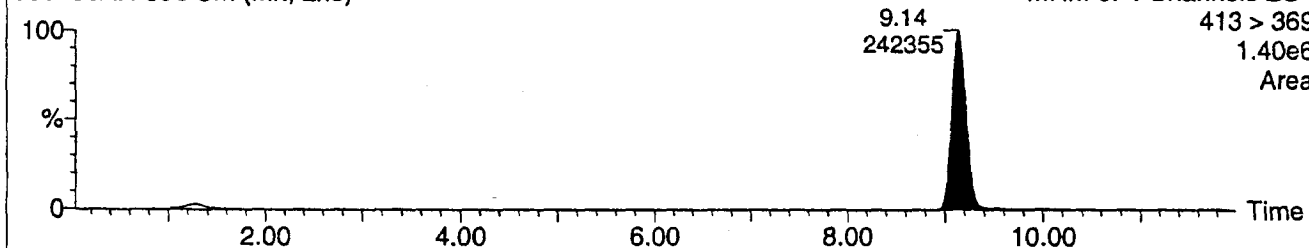
080103AR-306 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.40e6

Area



2: C6 Sulfonate (PFHS)

XC072503-5, 500 ng/L Standard

04-Aug-2003 10:24:22

LC/MS/MS #6

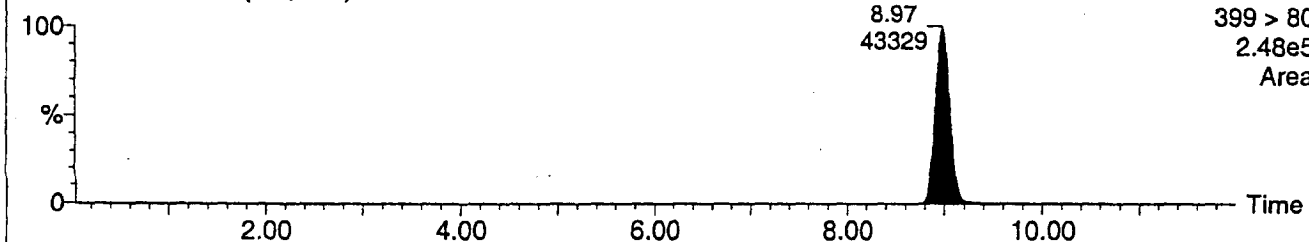
080103AR-306 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

2.48e5

Area



3: C8 Sulfonate (PFOS)

XC072503-5, 500 ng/L Standard

04-Aug-2003 10:24:22

LC/MS/MS #6

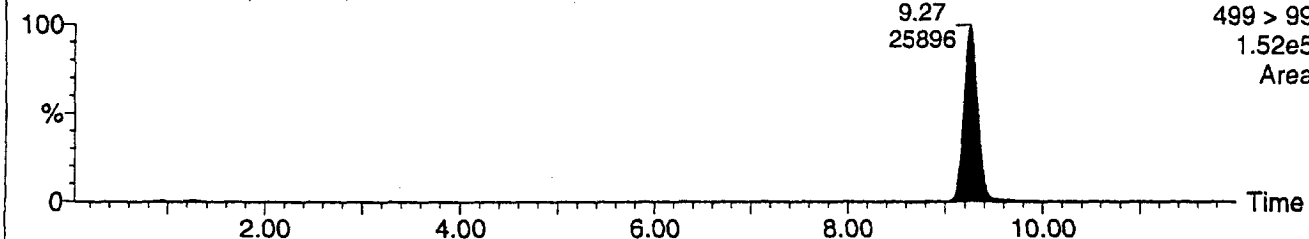
080103AR-306 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.52e5

Area



Quantify Sample Report

Page 12

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-306

Text:

4: PFOSA

XC072503-5, 500 ng/L Standard

04-Aug-2003 10:24:22

LC/MS/MS #6

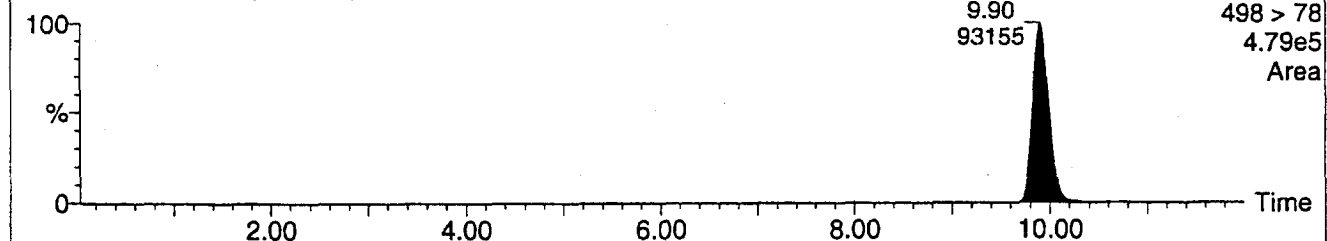
080103AR-306 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

4.79e5

Area



Quantify Sample Report

Page 13

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-307

Text:

1: C8 Acid (PFOA)

XC072503-6, 1000 ng/L Standard

04-Aug-2003 10:46:08

LC/MS/MS #6

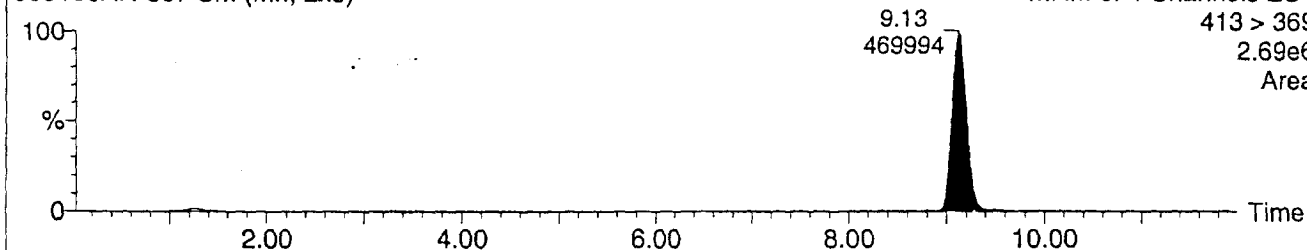
080103AR-307 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

2.69e6

Area



2: C6 Sulfonate (PFHS)

XC072503-6, 1000 ng/L Standard

04-Aug-2003 10:46:08

LC/MS/MS #6

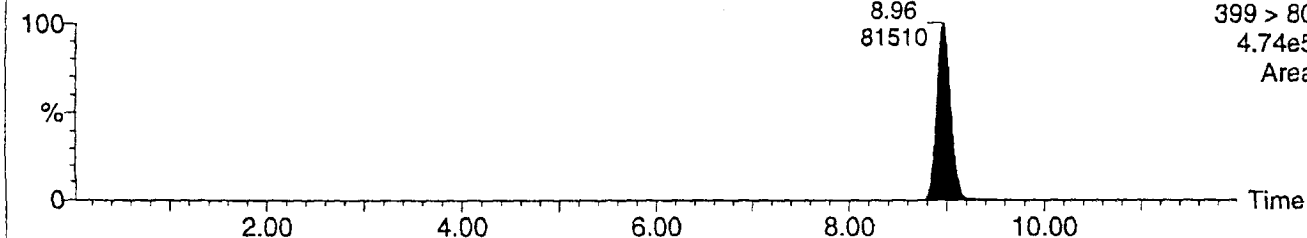
080103AR-307 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

4.74e5

Area



3: C8 Sulfonate (PFOS)

XC072503-6, 1000 ng/L Standard

04-Aug-2003 10:46:08

LC/MS/MS #6

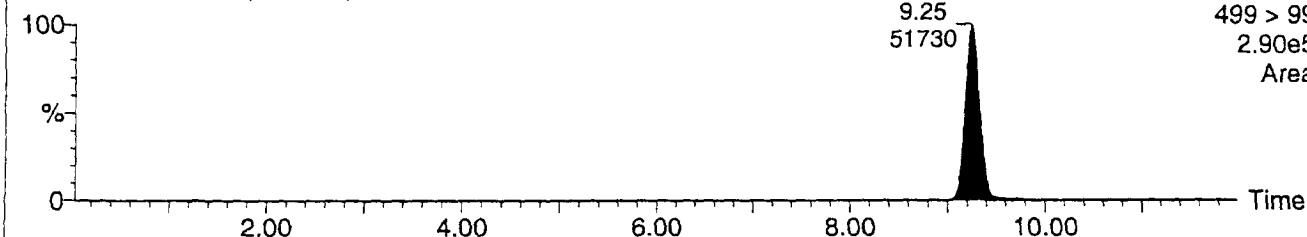
080103AR-307 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.90e5

Area



Quantify Sample Report

Page 14

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-307

Text:

4: PFOSA

XC072503-6, 1000 ng/L Standard

04-Aug-2003 10:46:08

LC/MS/MS #6

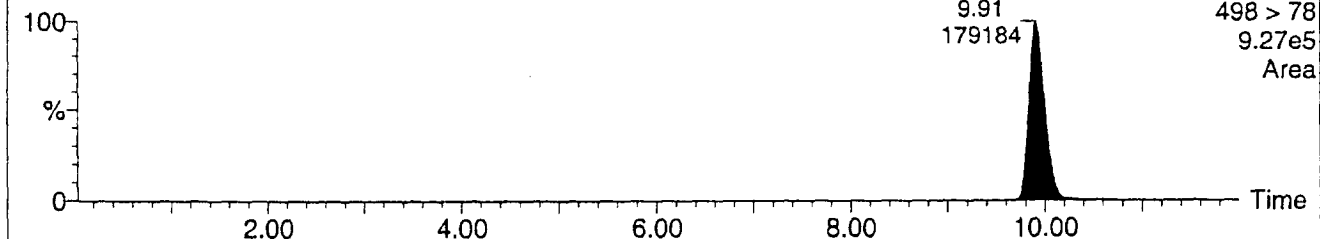
080103AR-307 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

9.27e5

Area



Quantify Sample Report

Page 15

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-308

Text:

1: C8 Acid (PFOA)

L34910-11 Spk E, 5000 ng/L, DF=1000

04-Aug-2003 11:07:51

LC/MS/MS #6

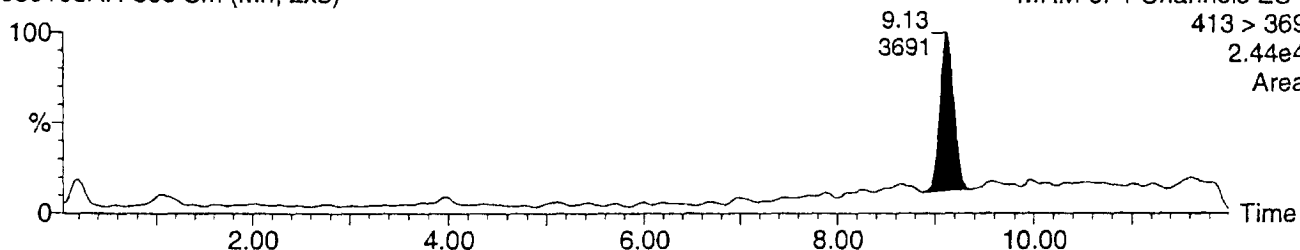
080103AR-308 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

2.44e4

Area



2: C6 Sulfonate (PFHS)

L34910-11 Spk E, 5000 ng/L, DF=1000

04-Aug-2003 11:07:51

LC/MS/MS #6

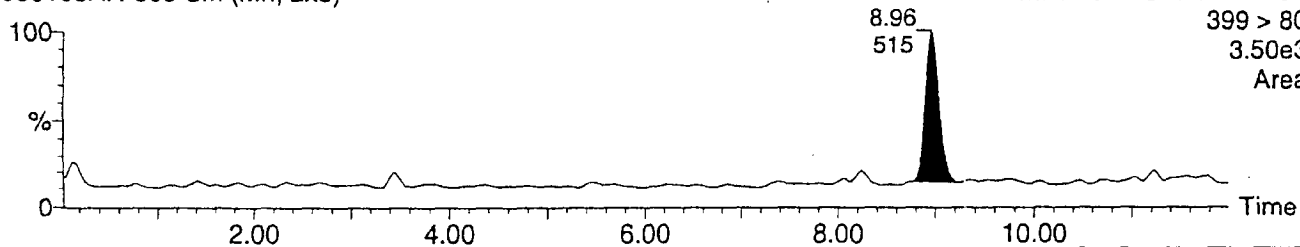
080103AR-308 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

3.50e3

Area



3: C8 Sulfonate (PFOS)

L34910-11 Spk E, 5000 ng/L, DF=1000

04-Aug-2003 11:07:51

LC/MS/MS #6

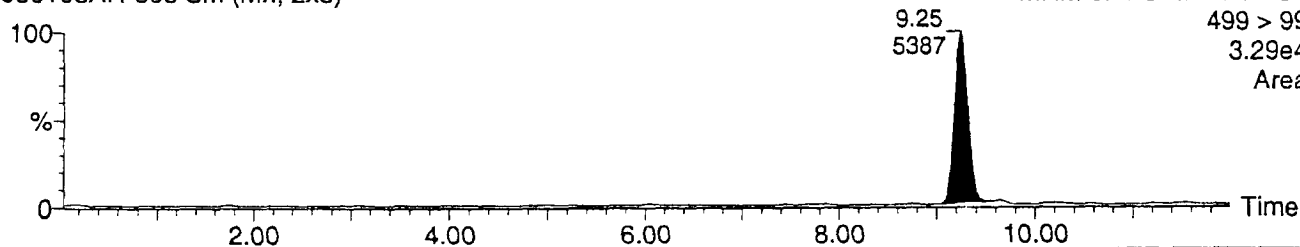
080103AR-308 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

3.29e4

Area



Quantify Sample Report

Page 16

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-308

Text:

4: PFOSA

L34910-11 Spk E, 5000 ng/L, DF=1000

04-Aug-2003 11:07:51

LC/MS/MS #6

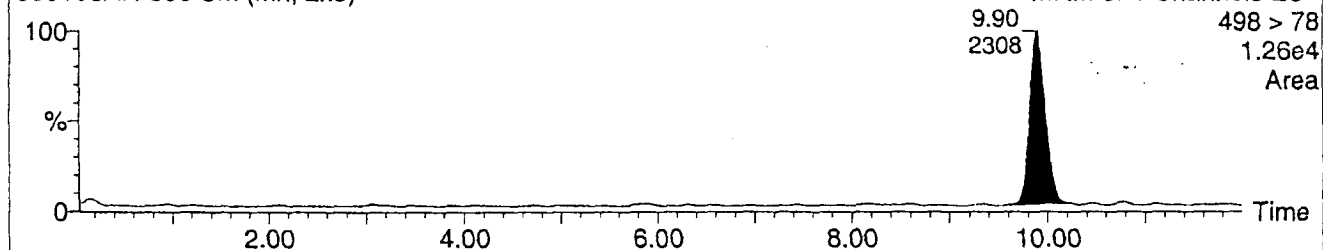
080103AR-308 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.26e4

Area



Quantify Sample Report

Page 17

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-309

Text:

1: C8 Acid (PFOA)

L34910-11 Spk E, 5000 ng/L, DF=100

04-Aug-2003 11:29:36

LC/MS/MS #6

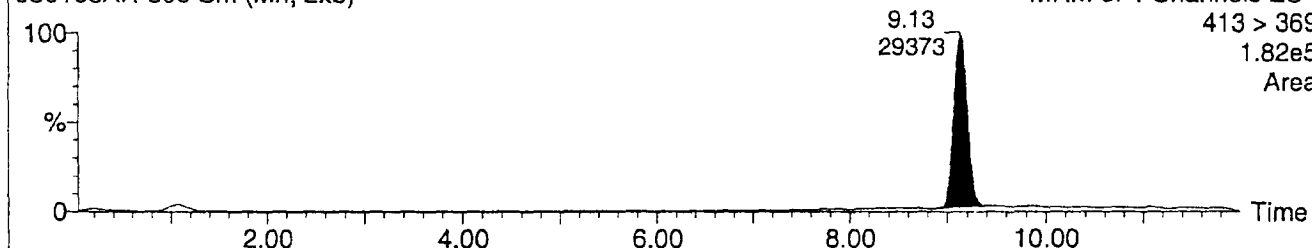
080103AR-309 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.82e5

Area



2: C6 Sulfonate (PFHS)

L34910-11 Spk E, 5000 ng/L, DF=100

04-Aug-2003 11:29:36

LC/MS/MS #6

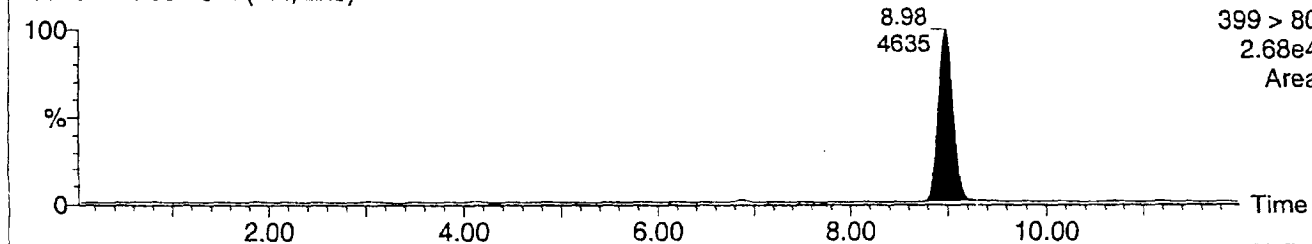
080103AR-309 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

2.68e4

Area



3: C8 Sulfonate (PFOS)

L34910-11 Spk E, 5000 ng/L, DF=100

04-Aug-2003 11:29:36

LC/MS/MS #6

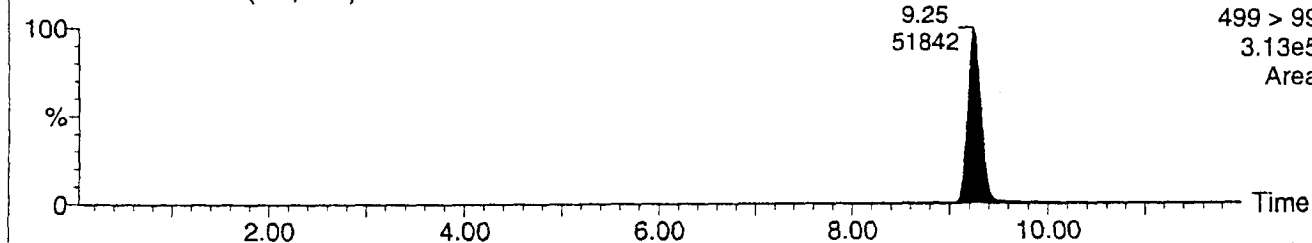
080103AR-309 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

3.13e5

Area



Quantify Sample Report

Page 18

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-309

Text:

4: PFOSA

L34910-11 Spk E, 5000 ng/L, DF=100

04-Aug-2003 11:29:36

LC/MS/MS #6

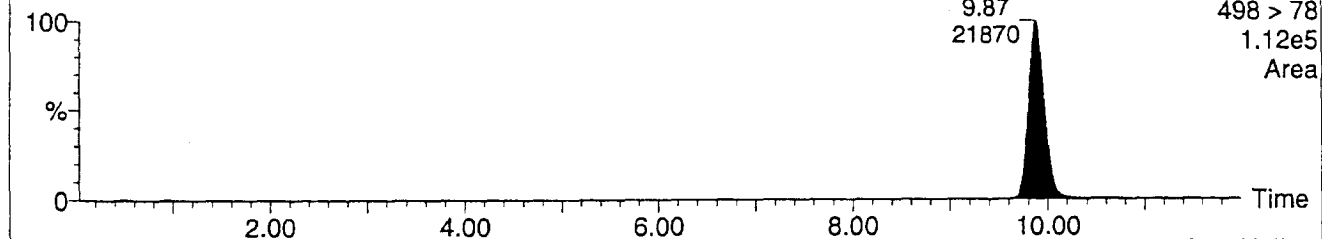
080103AR-309 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.12e5

Area



Quantify Sample Report

Page 19

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-310

Text:

1: C8 Acid (PFOA)

L34910-20 Spk F, 5000 ng/L, DF=100

04-Aug-2003 11:51:14

LC/MS/MS #6

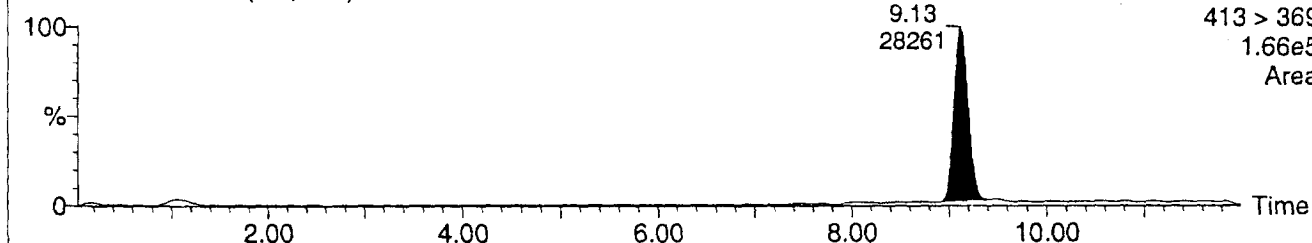
080103AR-310 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.66e5

Area



2: C6 Sulfonate (PFHS)

L34910-20 Spk F, 5000 ng/L, DF=100

04-Aug-2003 11:51:14

LC/MS/MS #6

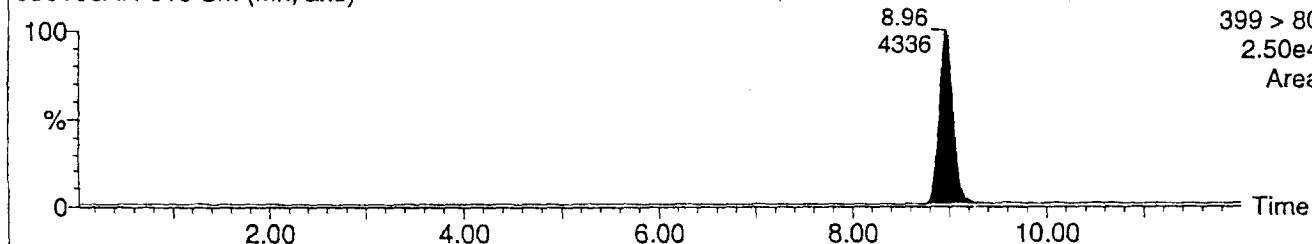
080103AR-310 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

2.50e4

Area



3: C8 Sulfonate (PFOS)

L34910-20 Spk F, 5000 ng/L, DF=100

04-Aug-2003 11:51:14

LC/MS/MS #6

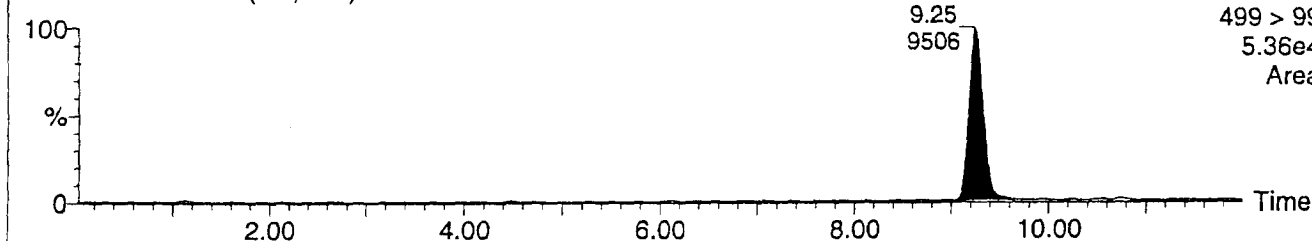
080103AR-310 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

5.36e4

Area



Quantify Sample Report

Page 20

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-310

Text:

4: PFOSA

L34910-20 Spk F, 5000 ng/L, DF=100

04-Aug-2003 11:51:14

LC/MS/MS #6

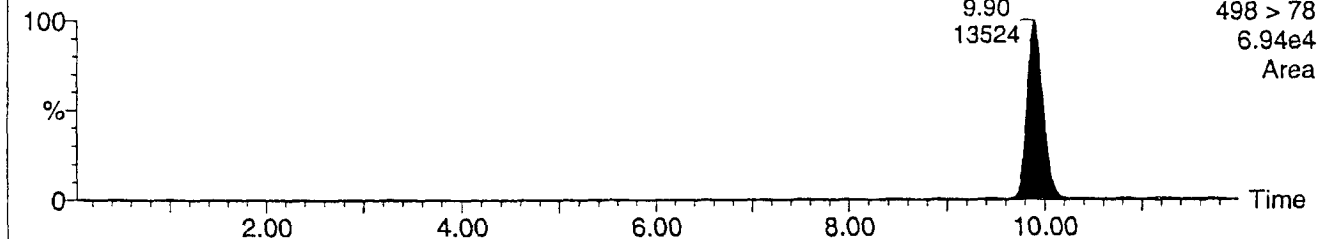
080103AR-310 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

6.94e4

Area



Quantify Sample Report

Page 21

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-311

Text:

1: C8 Acid (PFOA)

L34910-5, DF=10

04-Aug-2003 12:12:52

LC/MS/MS #6

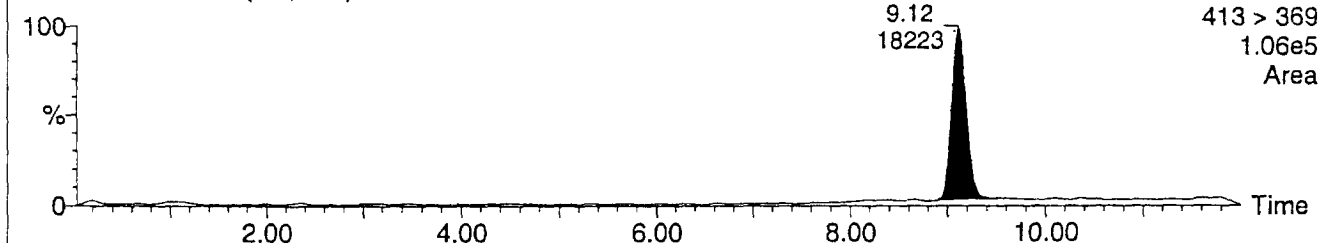
080103AR-311 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.06e5

Area



2: C6 Sulfonate (PFHS)

L34910-5, DF=10

04-Aug-2003 12:12:52

LC/MS/MS #6

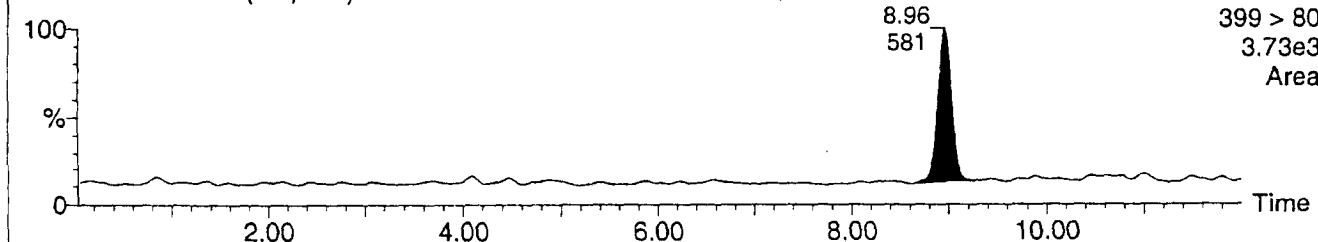
080103AR-311 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

3.73e3

Area



3: C8 Sulfonate (PFOS)

L34910-5, DF=10

04-Aug-2003 12:12:52

LC/MS/MS #6

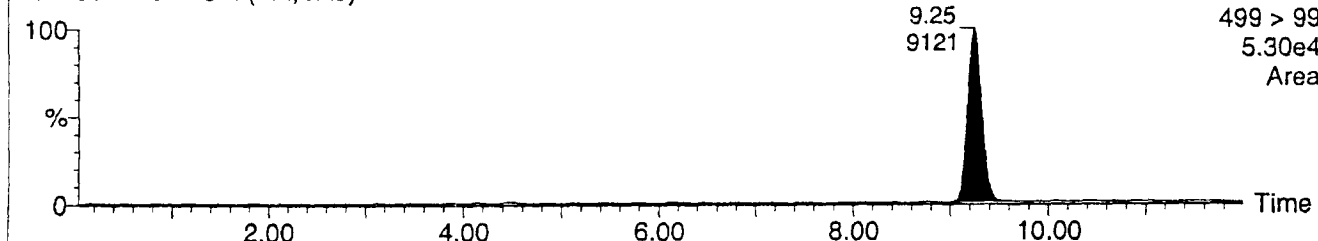
080103AR-311 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

5.30e4

Area



Quantify Sample Report

Page 22

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

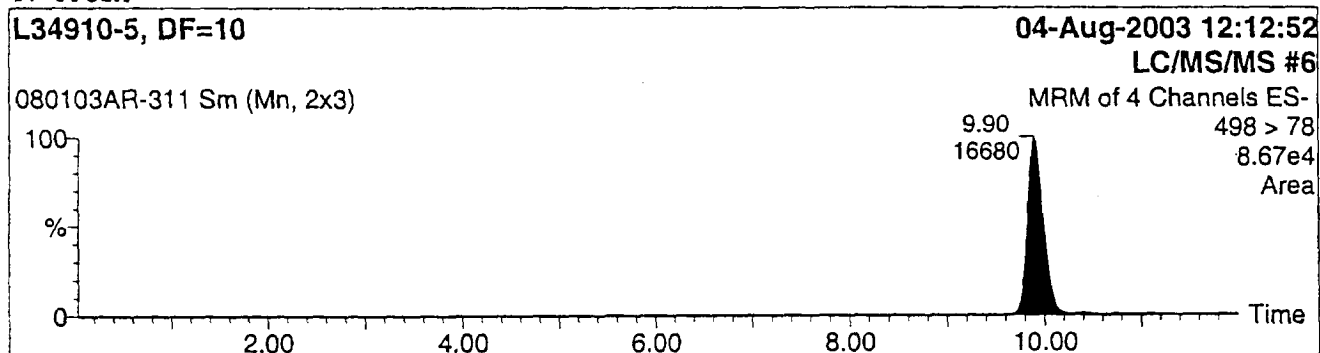
Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-311

Text:

4: PFOSA



Quantify Sample Report

Page 23

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

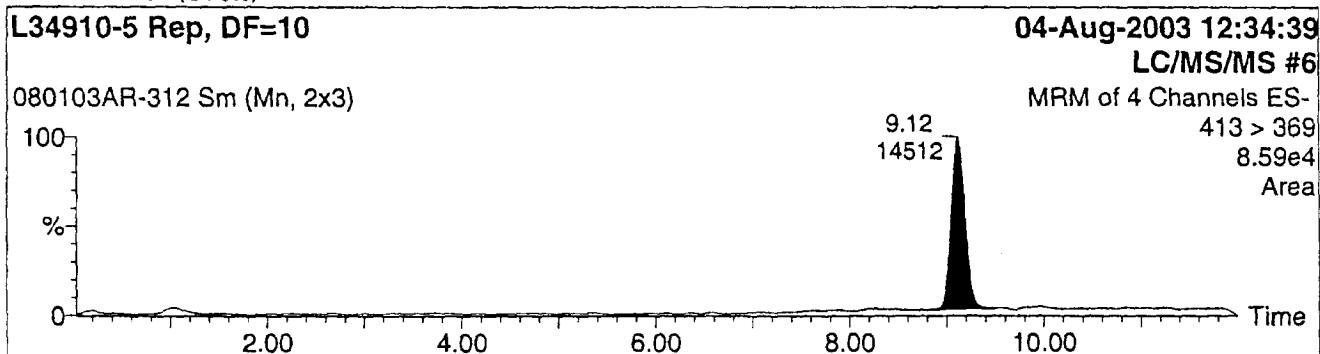
Job Code:

Printed: Tue Aug 05 07:32:01 2003

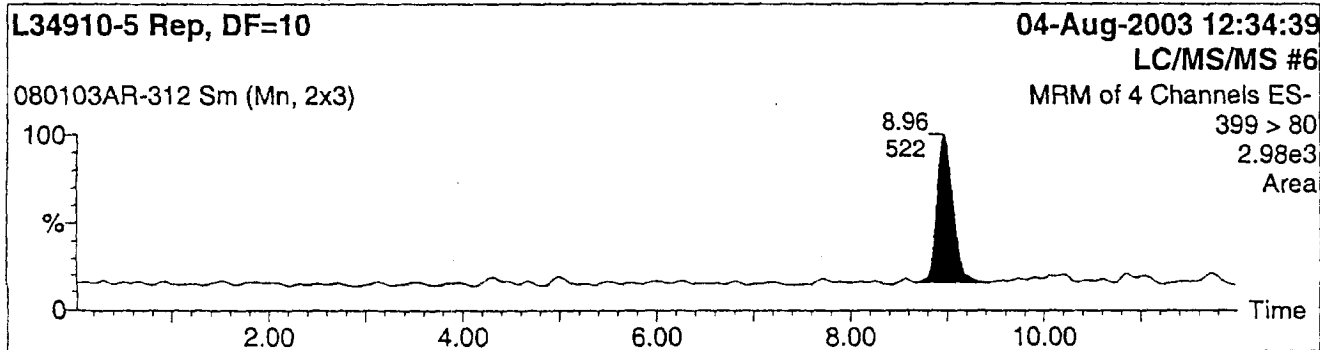
Name: 080103AR-312

Text:

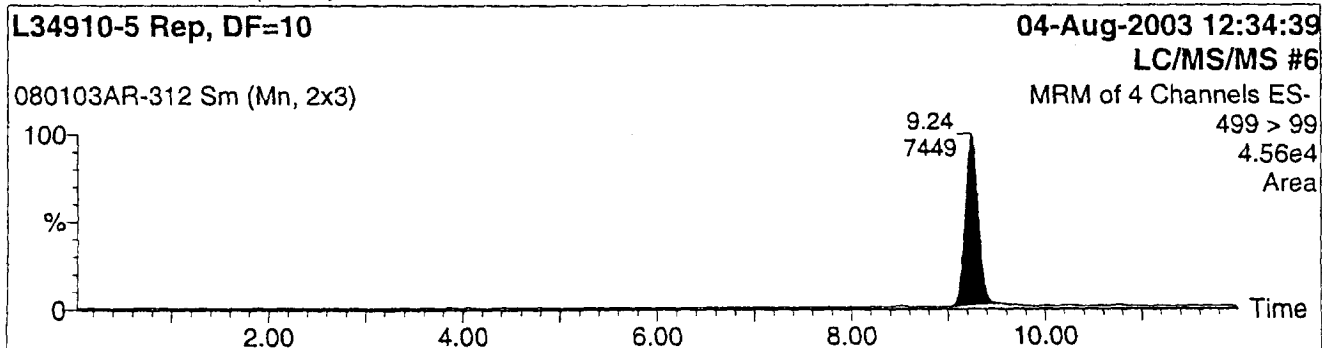
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 24

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-312

Text:

4: PFOSA

L34910-5 Rep, DF=10

04-Aug-2003 12:34:39

LC/MS/MS #6

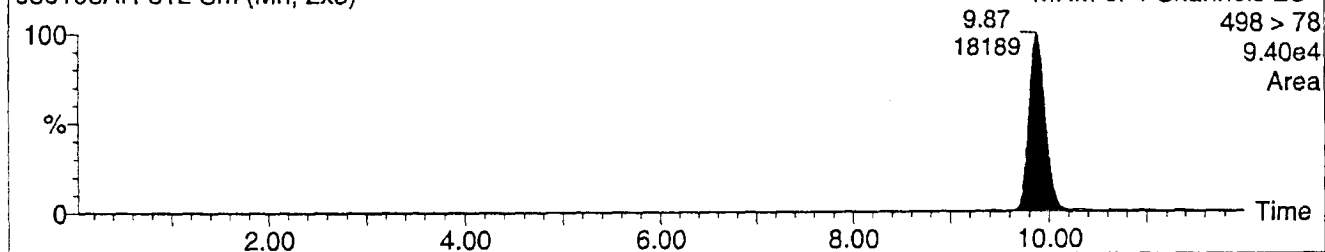
080103AR-312 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

9.40e4

Area



Quantify Sample Report

Page 25

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-313

Text:

1: C8 Acid (PFOA)

L34910-10, DF=10

04-Aug-2003 12:56:21

LC/MS/MS #6

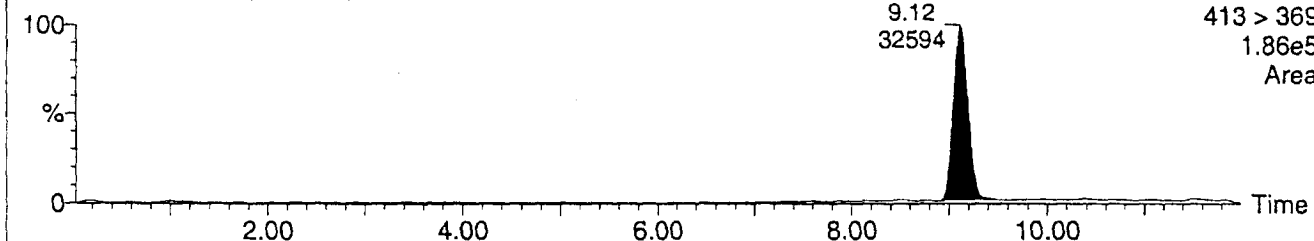
080103AR-313 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.86e5

Area



2: C6 Sulfonate (PFHS)

L34910-10, DF=10

04-Aug-2003 12:56:21

LC/MS/MS #6

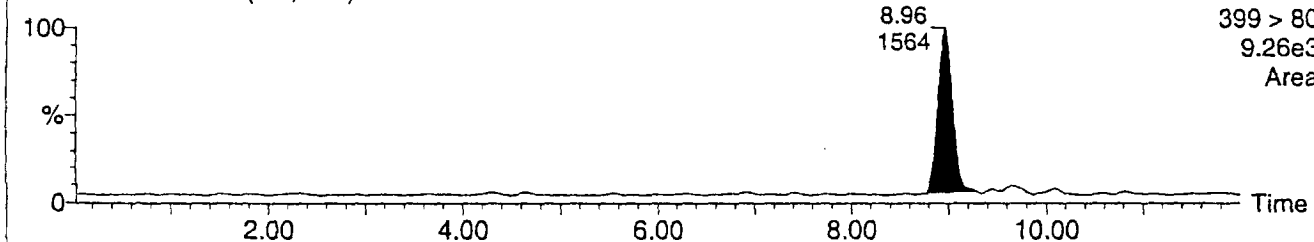
080103AR-313 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

9.26e3

Area



3: C8 Sulfonate (PFOS)

L34910-10, DF=10

04-Aug-2003 12:56:21

LC/MS/MS #6

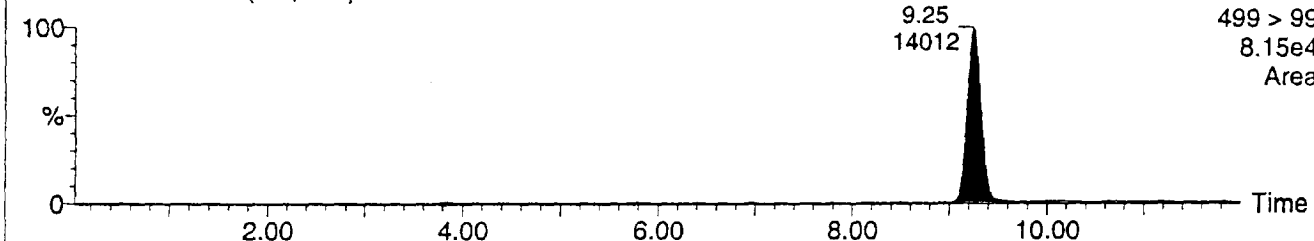
080103AR-313 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

8.15e4

Area



Quantify Sample Report

Page 26

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-313

Text:

4: PFOSA

L34910-10, DF=10

04-Aug-2003 12:56:21

LC/MS/MS #6

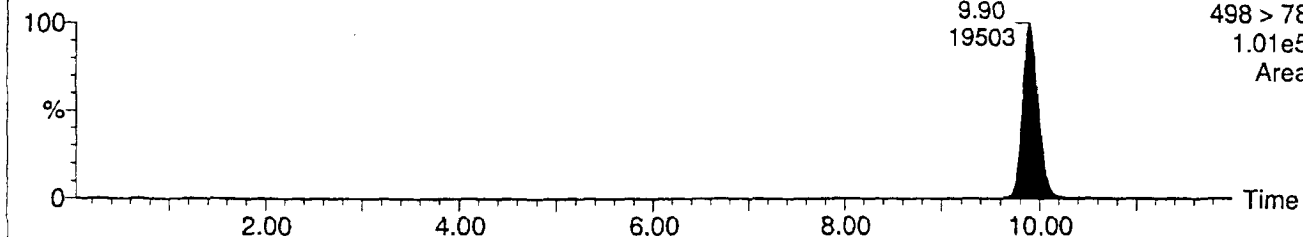
080103AR-313 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.01e5

Area



Quantify Sample Report

Page 27

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC
Last modified: Tue Aug 05 07:24:43 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-314

Text:

1: C8 Acid (PFOA)

L34910-10 Rep, DF=10

04-Aug-2003 13:18:10

LC/MS/MS #6

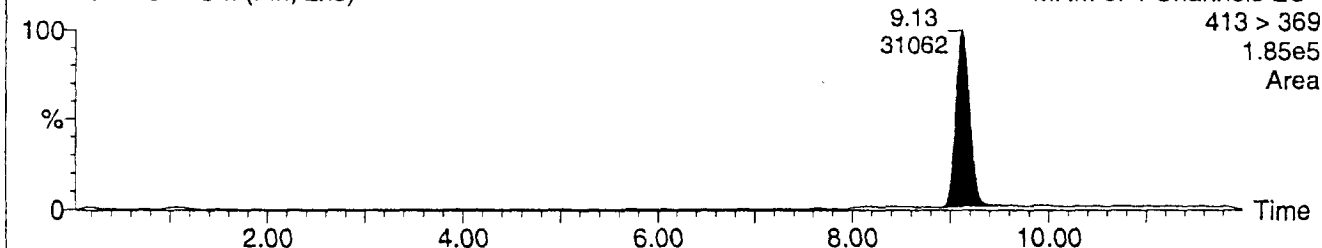
080103AR-314 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.85e5

Area



2: C6 Sulfonate (PFHS)

L34910-10 Rep, DF=10

04-Aug-2003 13:18:10

LC/MS/MS #6

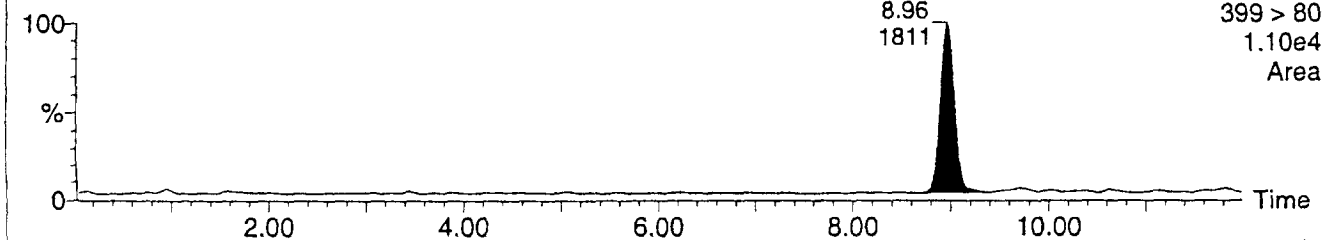
080103AR-314 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.10e4

Area



3: C8 Sulfonate (PFOS)

L34910-10 Rep, DF=10

04-Aug-2003 13:18:10

LC/MS/MS #6

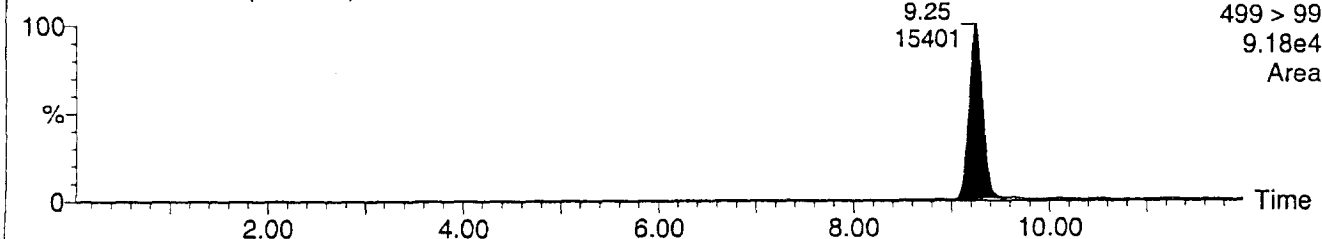
080103AR-314 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

9.18e4

Area



Quantify Sample Report

Page 28

Study No.: L34910, Set No.: 080103AR, Ext.Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-314

Text:

4: PFOSA

L34910-10 Rep, DF=10

04-Aug-2003 13:18:10

LC/MS/MS #6

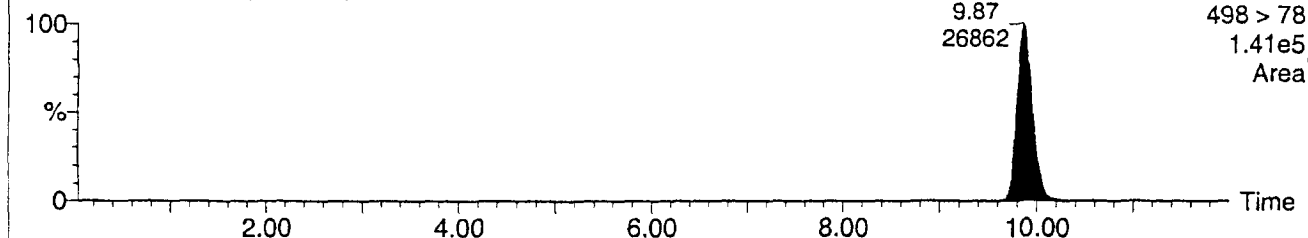
080103AR-314 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.41e5

Area



Quantify Sample Report

Page 29

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-315

Text:

1: C8 Acid (PFOA)

XC072503-1, 25 ng/L Standard

04-Aug-2003 13:39:58

LC/MS/MS #6

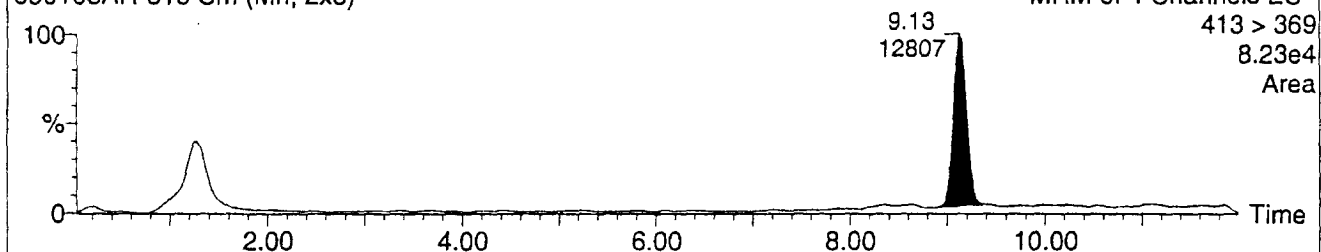
080103AR-315 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

8.23e4

Area



2: C6 Sulfonate (PFHS)

XC072503-1, 25 ng/L Standard

04-Aug-2003 13:39:58

LC/MS/MS #6

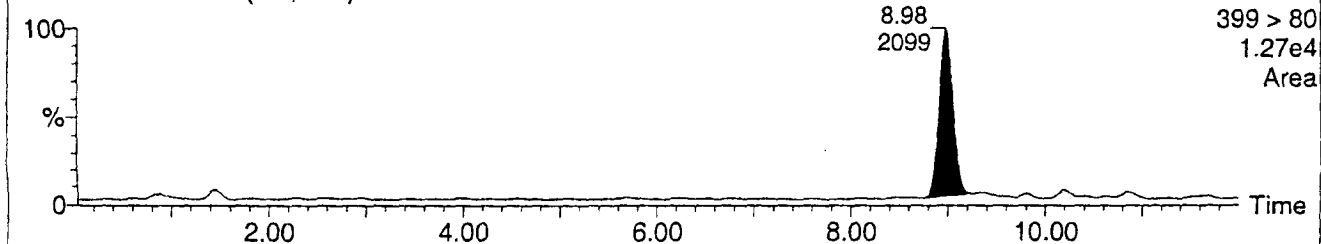
080103AR-315 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.27e4

Area



3: C8 Sulfonate (PFOS)

XC072503-1, 25 ng/L Standard

04-Aug-2003 13:39:58

LC/MS/MS #6

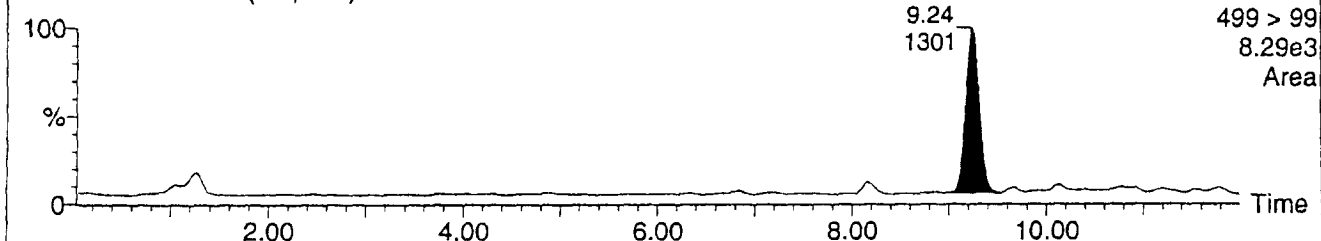
080103AR-315 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

8.29e3

Area



Quantify Sample Report

Page 30

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC
Last modified: Tue Aug 05 07:24:43 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-315

Text:

4: PFOSA

XC072503-1, 25 ng/L Standard

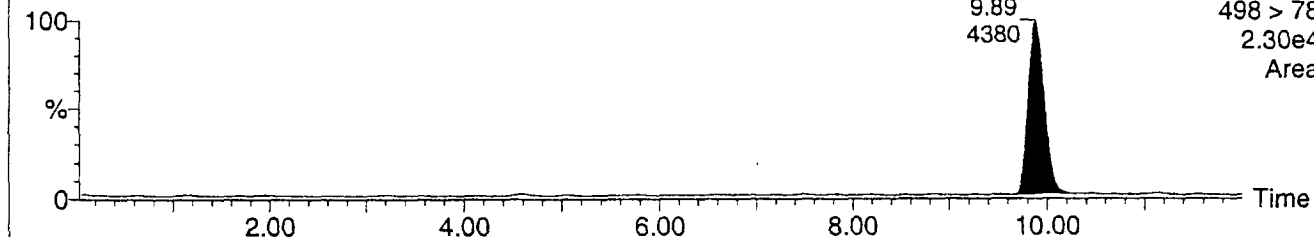
04-Aug-2003 13:39:58

LC/MS/MS #6

080103AR-315 Sm (Mn, 2x3)

MRM of 4 Channels ES-

9.89 4380 498 > 78
2.30e4
Area



Quantify Sample Report

Page 31

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC
Last modified: Tue Aug 05 07:24:43 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-316

Text:

1: C8 Acid (PFOA)

XC072503-2, 50 ng/L Standard

04-Aug-2003 14:01:43

LC/MS/MS #6

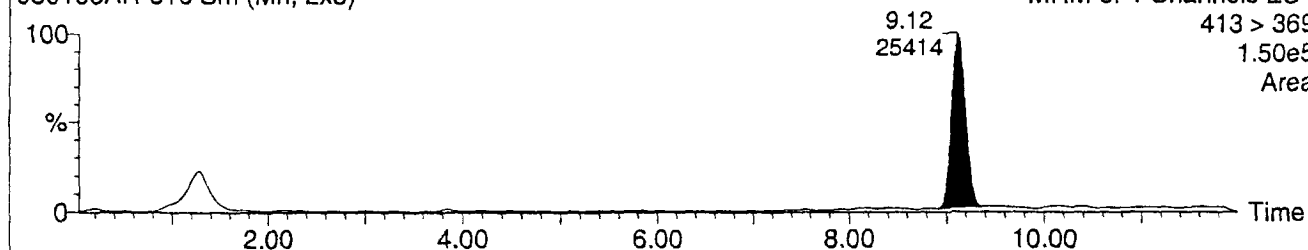
080103AR-316 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.50e5

Area



2: C6 Sulfonate (PFHS)

XC072503-2, 50 ng/L Standard

04-Aug-2003 14:01:43

LC/MS/MS #6

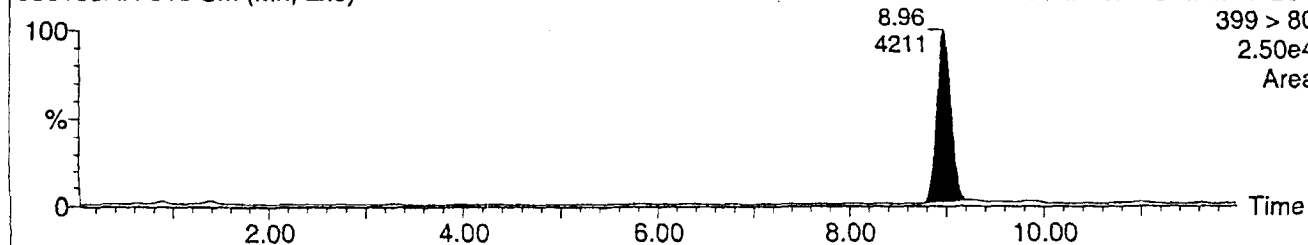
080103AR-316 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

2.50e4

Area



3: C8 Sulfonate (PFOS)

XC072503-2, 50 ng/L Standard

04-Aug-2003 14:01:43

LC/MS/MS #6

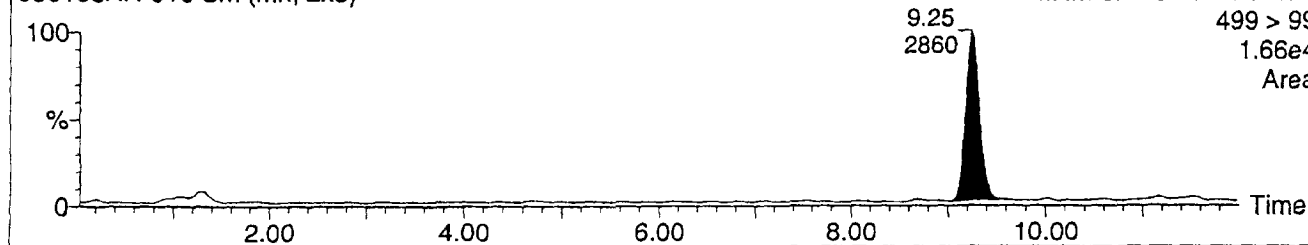
080103AR-316 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.66e4

Area



Quantify Sample Report

Page 32

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-316

Text:

4: PFOSA

XC072503-2, 50 ng/L Standard

04-Aug-2003 14:01:43

LC/MS/MS #6

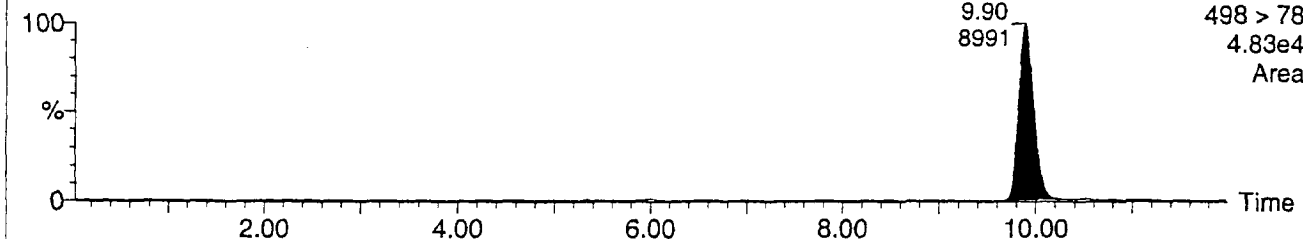
080103AR-316 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

4.83e4

Area



Quantify Sample Report

Page 33

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-317

Text:

1: C8 Acid (PFOA)

L34910-11, DF=100

04-Aug-2003 14:23:27

LC/MS/MS #6

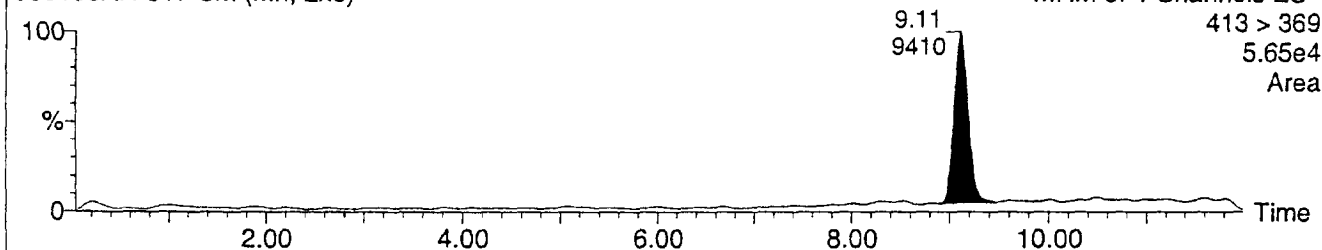
080103AR-317 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

5.65e4

Area



2: C6 Sulfonate (PFHS)

L34910-11, DF=100

04-Aug-2003 14:23:27

LC/MS/MS #6

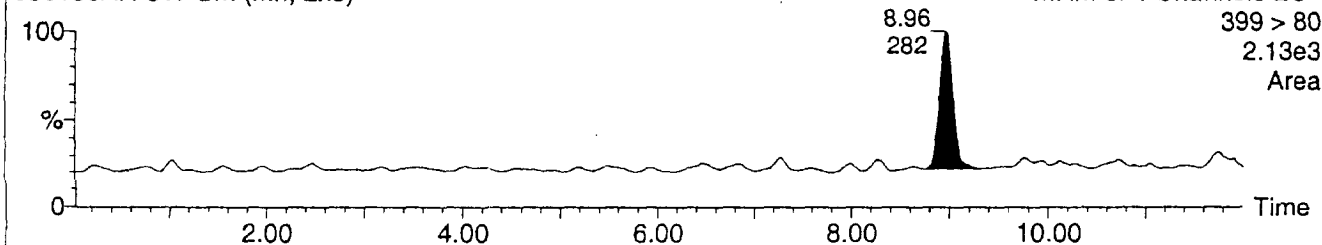
080103AR-317 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

2.13e3

Area



3: C8 Sulfonate (PFOS)

L34910-11, DF=100

04-Aug-2003 14:23:27

LC/MS/MS #6

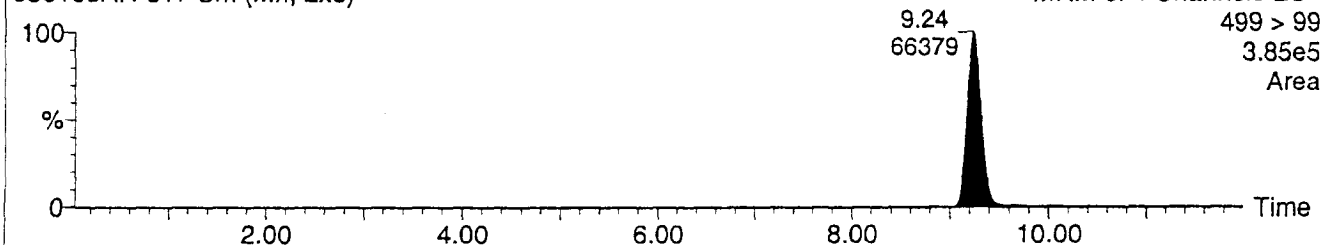
080103AR-317 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

3.85e5

Area



Quantify Sample Report

Page 34

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-317

Text:

4: PFOSA

L34910-11, DF=100

04-Aug-2003 14:23:27

LC/MS/MS #6

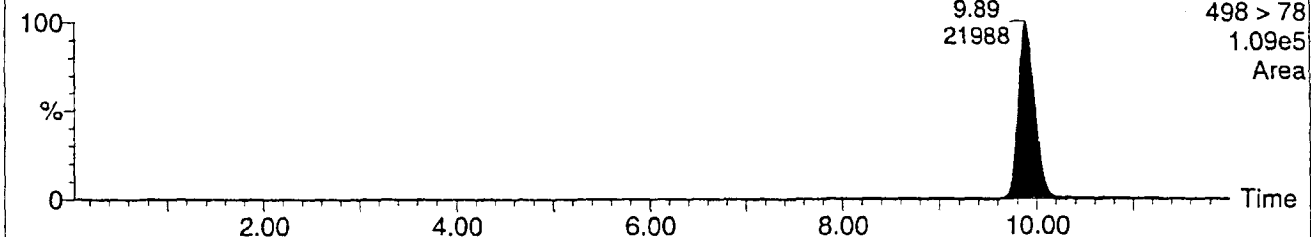
080103AR-317 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.09e5

Area



Quantify Sample Report

Page 35

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-318

Text:

1: C8 Acid (PFOA)

L34910-11 Rep, DF=100

04-Aug-2003 14:45:17

LC/MS/MS #6

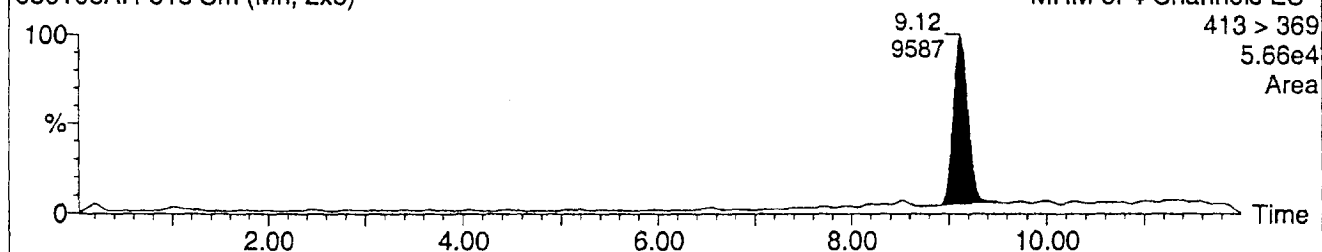
080103AR-318 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

5.66e4

Area



2: C6 Sulfonate (PFHS)

L34910-11 Rep, DF=100

04-Aug-2003 14:45:17

LC/MS/MS #6

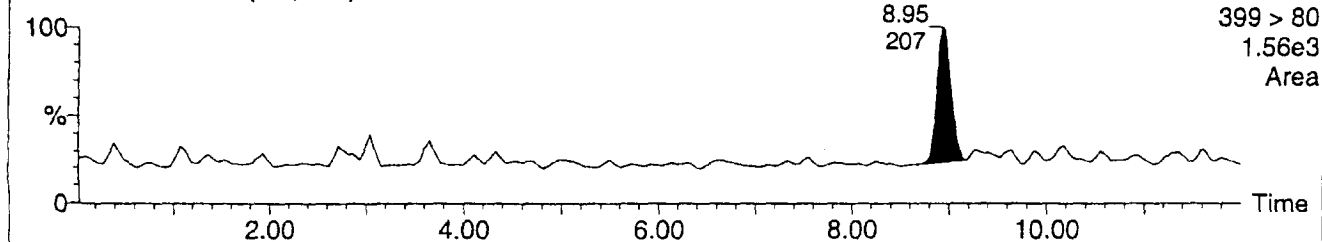
080103AR-318 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.56e3

Area



3: C8 Sulfonate (PFOS)

L34910-11 Rep, DF=100

04-Aug-2003 14:45:17

LC/MS/MS #6

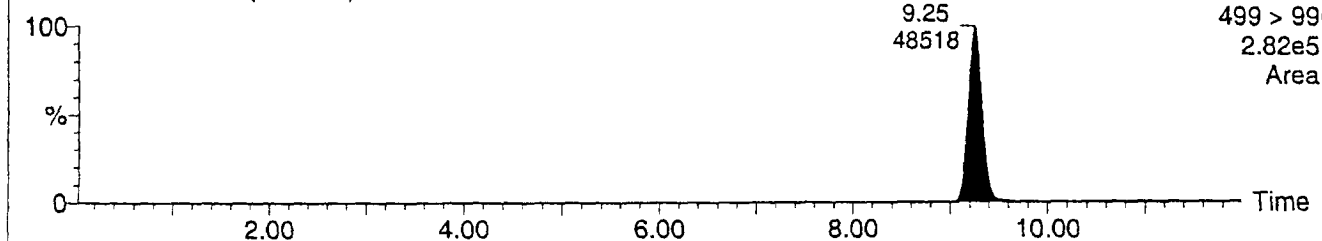
080103AR-318 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.82e5

Area



Quantify Sample Report

Page 36

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-318

Text:

4: PFOSA

L34910-11 Rep, DF=100

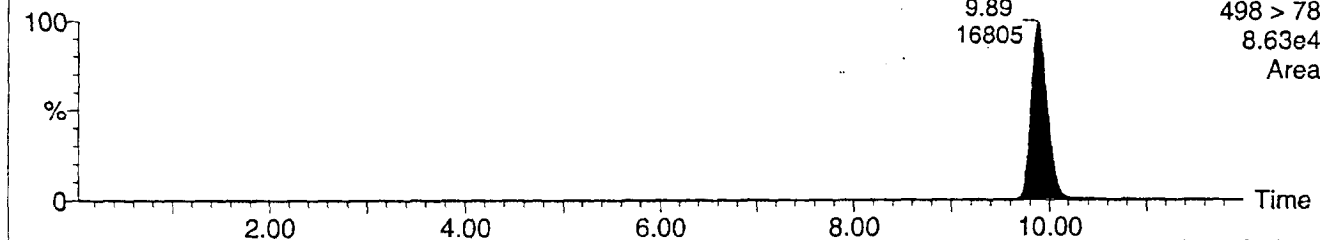
04-Aug-2003 14:45:17

LC/MS/MS #6

080103AR-318 Sm (Mn, 2x3)

MRM of 4 Channels ES-

9.89 498 > 78
16805 8.63e4
Area



Quantify Sample Report

Page 37

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-319

Text:

1: C8 Acid (PFOA)

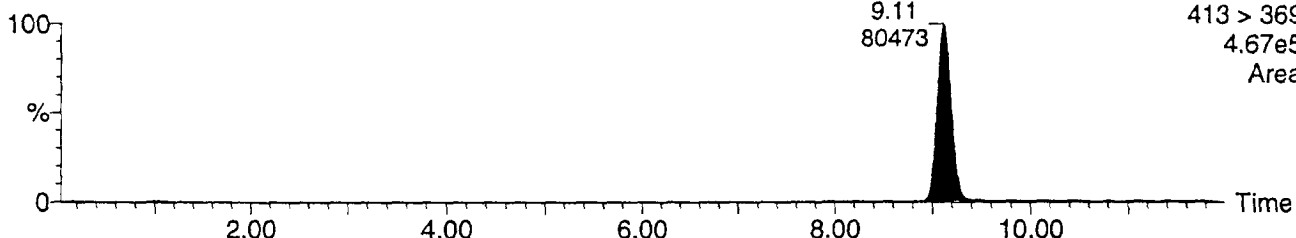
L34910-11, DF=10

04-Aug-2003 15:07:04

LC/MS/MS #6

080103AR-319 Sm (Mn, 2x3)

MRM of 4 Channels ES-



2: C6 Sulfonate (PFHS)

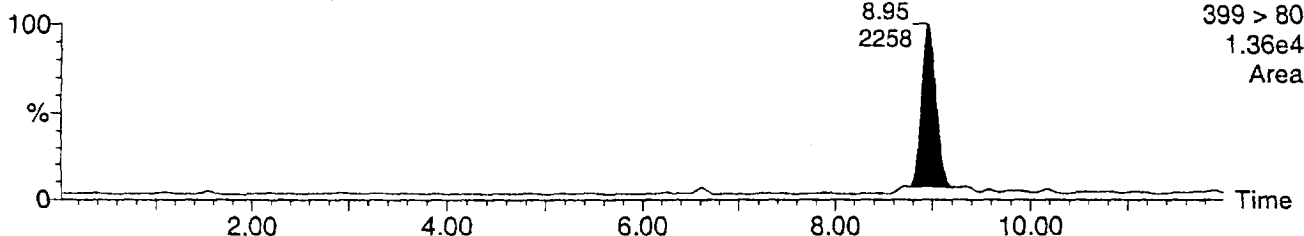
L34910-11, DF=10

04-Aug-2003 15:07:04

LC/MS/MS #6

080103AR-319 Sm (Mn, 2x3)

MRM of 4 Channels ES-



3: C8 Sulfonate (PFOS)

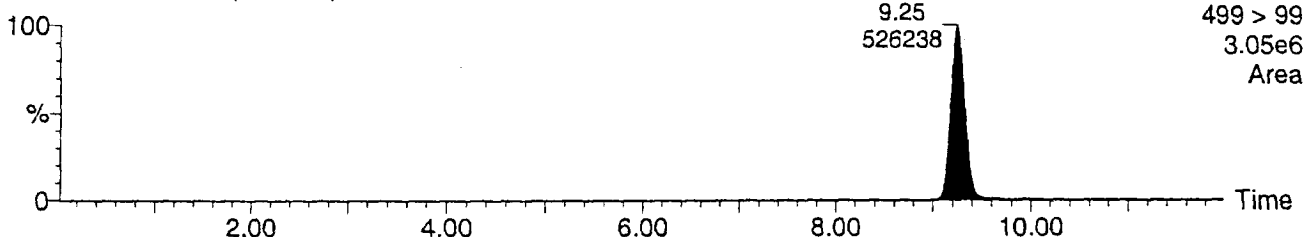
L34910-11, DF=10

04-Aug-2003 15:07:04

LC/MS/MS #6

080103AR-319 Sm (Mn, 2x3)

MRM of 4 Channels ES-



Quantify Sample Report

Page 38

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-319

Text:

4: PFOSA

L34910-11, DF=10

04-Aug-2003 15:07:04

LC/MS/MS #6

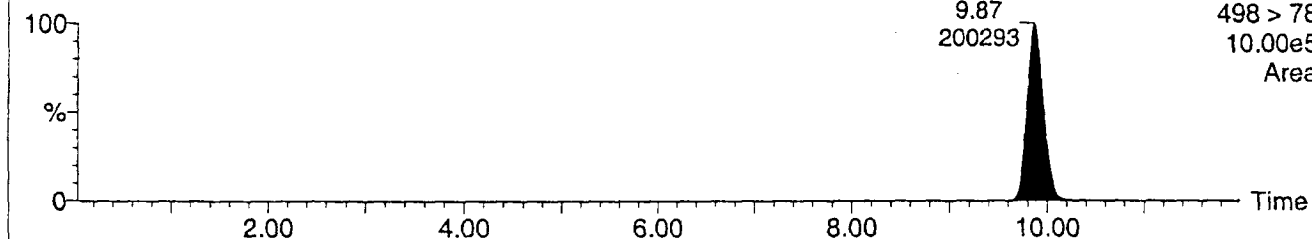
080103AR-319 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

10.00e5

Area



Quantify Sample Report

Page 39

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

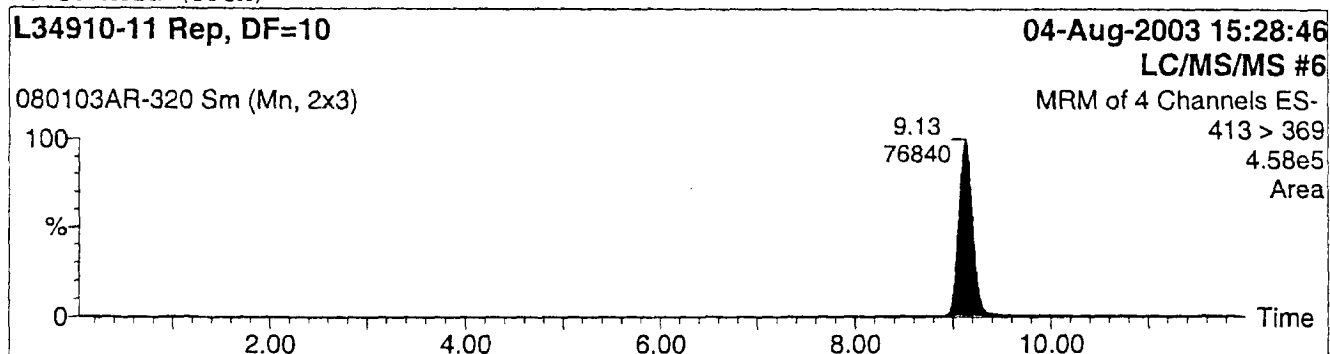
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC
Last modified: Tue Aug 05 07:24:43 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Tue Aug 05 07:32:01 2003

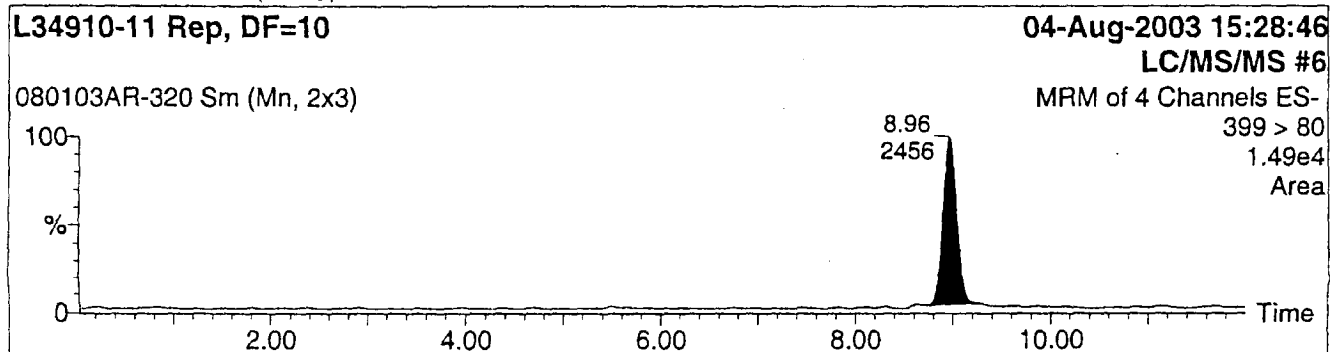
Name: 080103AR-320

Text:

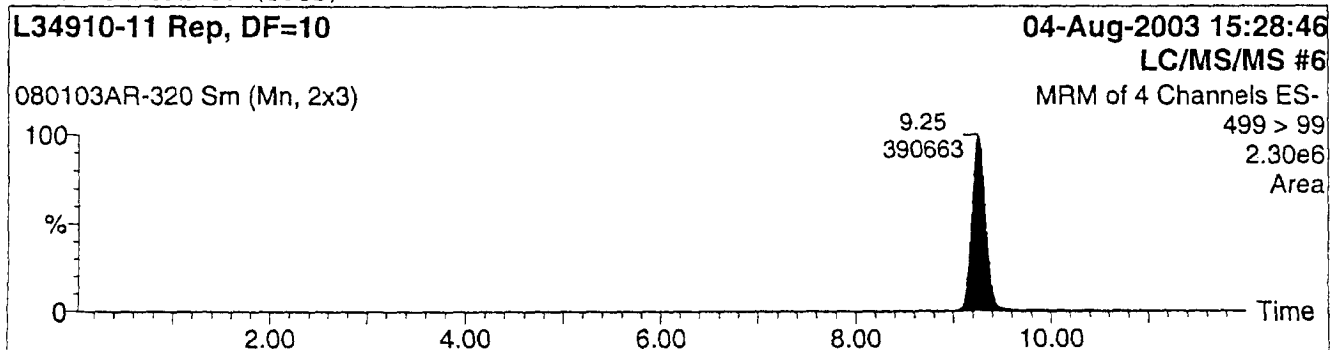
1: C8 Acid (PFOA)



2: C6 Sulfonate (PFHS)



3: C8 Sulfonate (PFOS)



Quantify Sample Report

Page 40

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-320

Text:

4: PFOSA

L34910-11 Rep, DF=10

04-Aug-2003 15:28:46

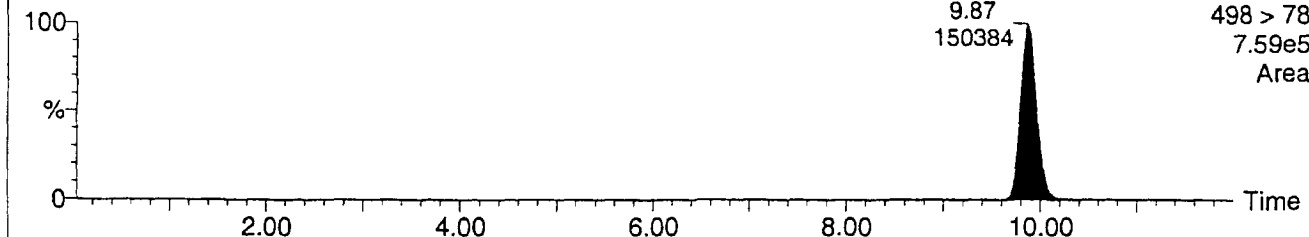
LC/MS/MS #6

080103AR-320 Sm (Mn, 2x3)

MRM of 4 Channels ES-

9.87 150384 498 > 78

7.59e5
Area



Quantify Sample Report

Page 41

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-321

Text:

1: C8 Acid (PFOA)

L34910-20, DF=100

04-Aug-2003 15:50:25

LC/MS/MS #6

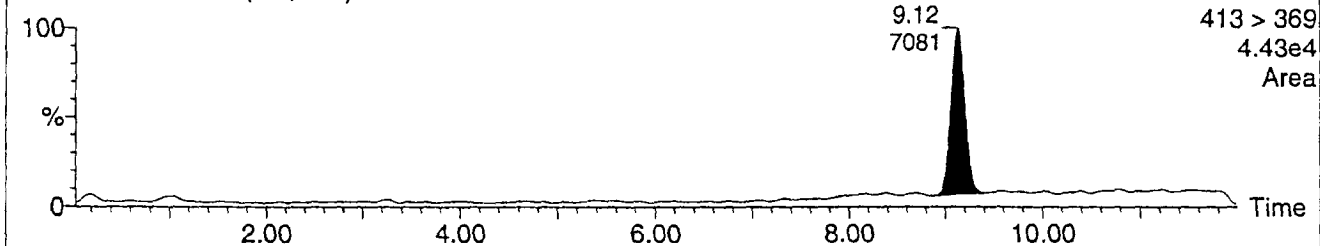
080103AR-321 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

4.43e4

Area



2: C6 Sulfonate (PFHS)

L34910-20, DF=100

04-Aug-2003 15:50:25

LC/MS/MS #6

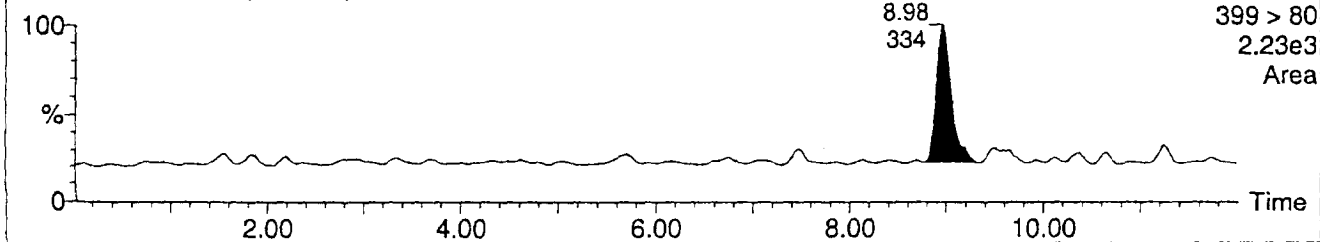
080103AR-321 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

2.23e3

Area



3: C8 Sulfonate (PFOS)

L34910-20, DF=100

04-Aug-2003 15:50:25

LC/MS/MS #6

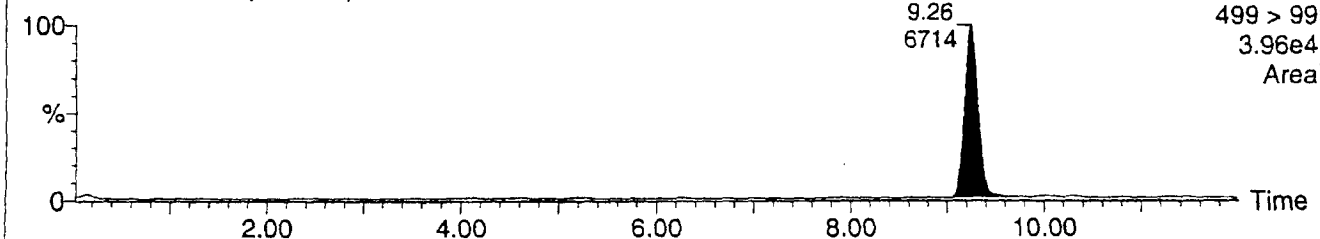
080103AR-321 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

3.96e4

Area



Quantify Sample Report

Page 42

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-321

Text:

4: PFOSA

L34910-20, DF=100

04-Aug-2003 15:50:25

LC/MS/MS #6

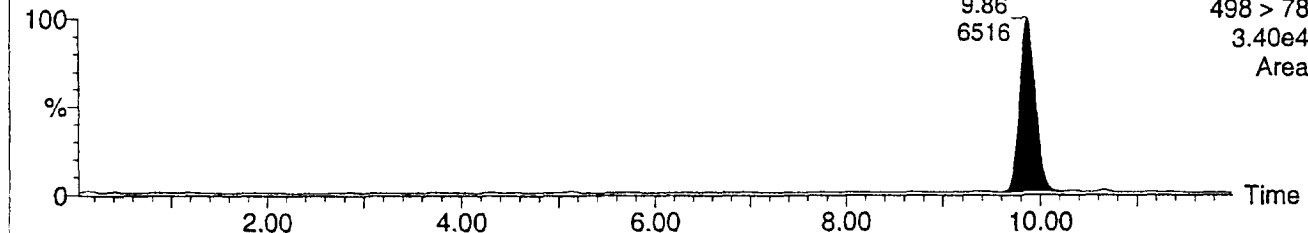
080103AR-321 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

3.40e4

Area



Quantify Sample Report

Page 43

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-322

Text:

1: C8 Acid (PFOA)

L34910-20 Rep, DF=100

04-Aug-2003 16:12:07

LC/MS/MS #6

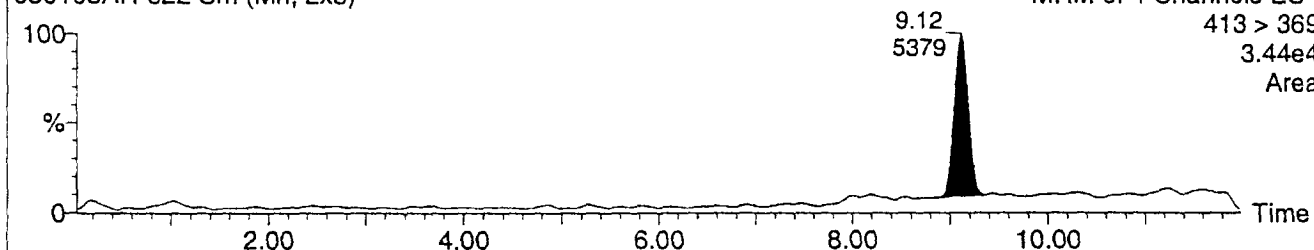
080103AR-322 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

3.44e4

Area



2: C6 Sulfonate (PFHS)

L34910-20 Rep, DF=100

04-Aug-2003 16:12:07

LC/MS/MS #6

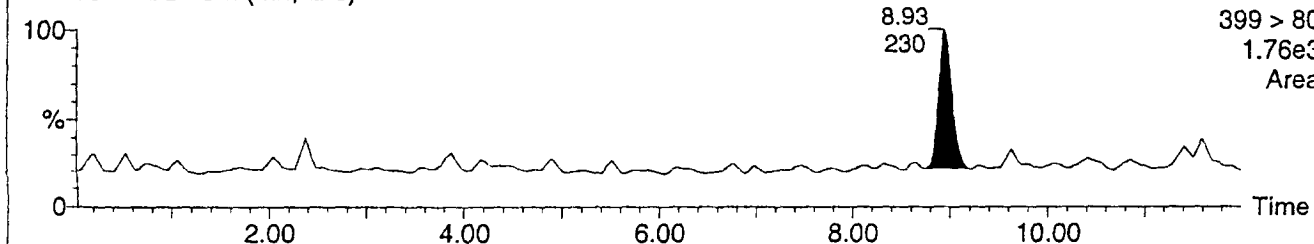
080103AR-322 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.76e3

Area



3: C8 Sulfonate (PFOS)

L34910-20 Rep, DF=100

04-Aug-2003 16:12:07

LC/MS/MS #6

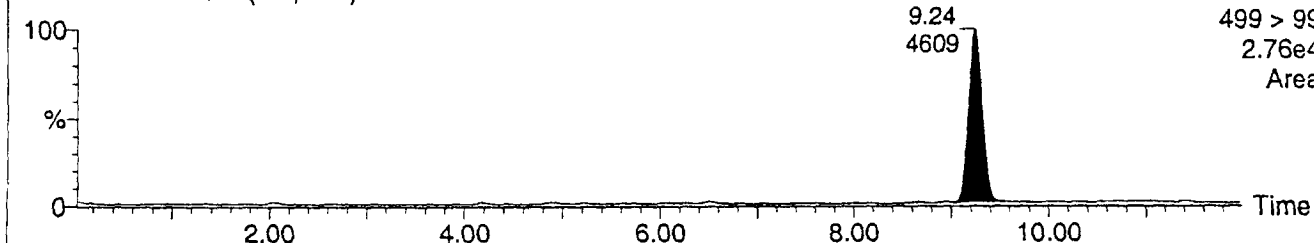
080103AR-322 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.76e4

Area



Quantify Sample Report

Page 44

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-322

Text:

4: PFOSA

L34910-20 Rep, DF=100

04-Aug-2003 16:12:07

LC/MS/MS #6

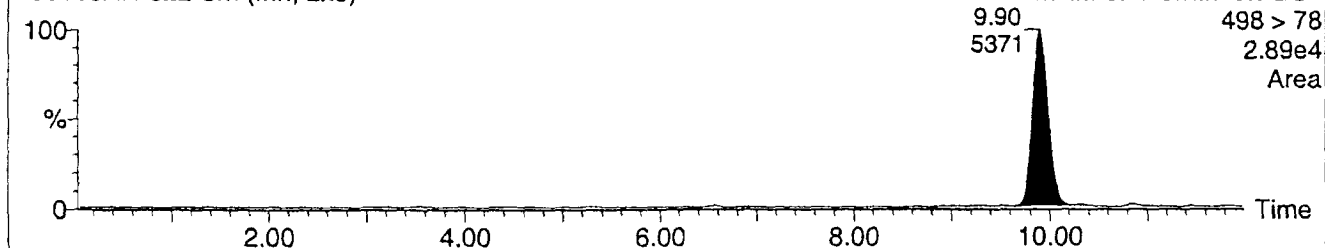
080103AR-322 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

2.89e4

Area



Quantify Sample Report

Page 45

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-323

Text:

1: C8 Acid (PFOA)

XC072503-3, 100 ng/L Standard

04-Aug-2003 16:33:50

LC/MS/MS #6

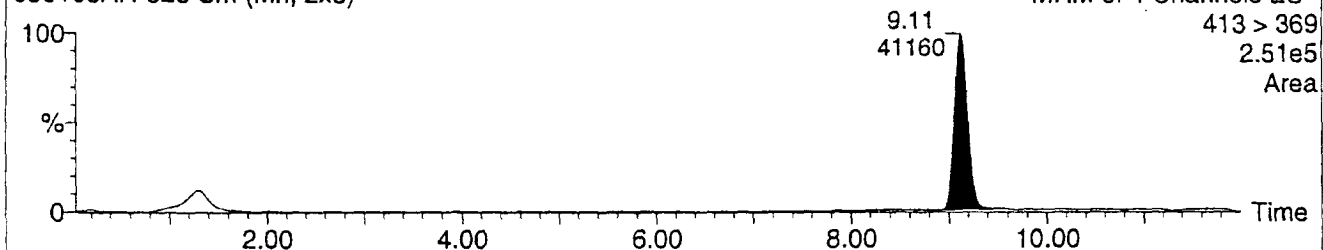
080103AR-323 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

2.51e5

Area



2: C6 Sulfonate (PFHS)

XC072503-3, 100 ng/L Standard

04-Aug-2003 16:33:50

LC/MS/MS #6

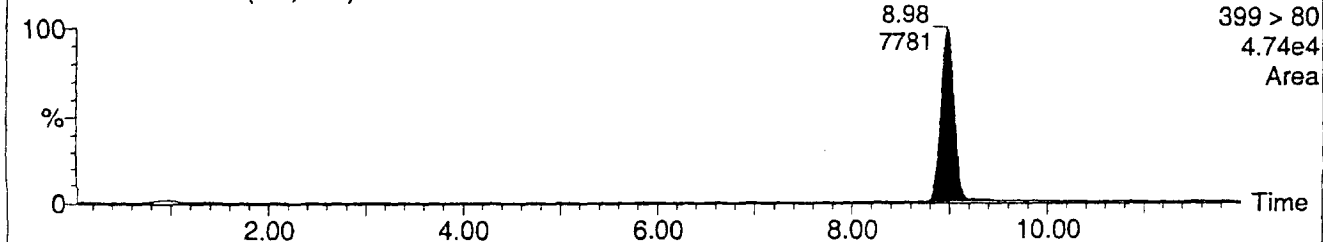
080103AR-323 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

4.74e4

Area



3: C8 Sulfonate (PFOS)

XC072503-3, 100 ng/L Standard

04-Aug-2003 16:33:50

LC/MS/MS #6

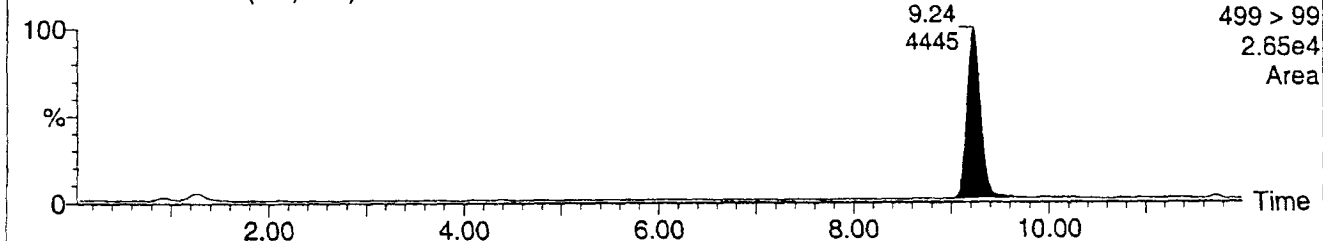
080103AR-323 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.65e4

Area



Quantify Sample Report

Page 46

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-323

Text:

4: PFOSA

XC072503-3, 100 ng/L Standard

04-Aug-2003 16:33:50

LC/MS/MS #6

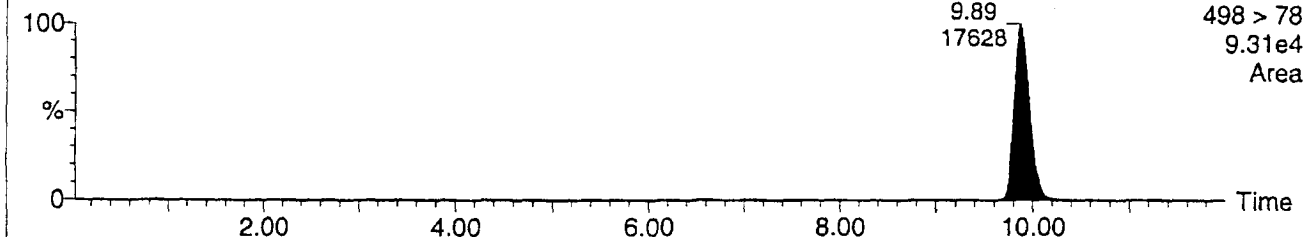
080103AR-323 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

9.31e4

Area



Quantify Sample Report

Page 47

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-324

Text:

1: C8 Acid (PFOA)

XC072503-4, 250 ng/L Standard

04-Aug-2003 16:55:35

LC/MS/MS #6

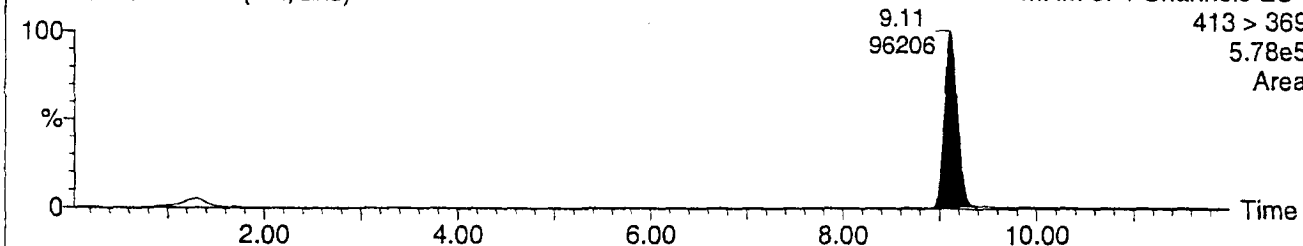
080103AR-324 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

5.78e5

Area



2: C6 Sulfonate (PFHS)

XC072503-4, 250 ng/L Standard

04-Aug-2003 16:55:35

LC/MS/MS #6

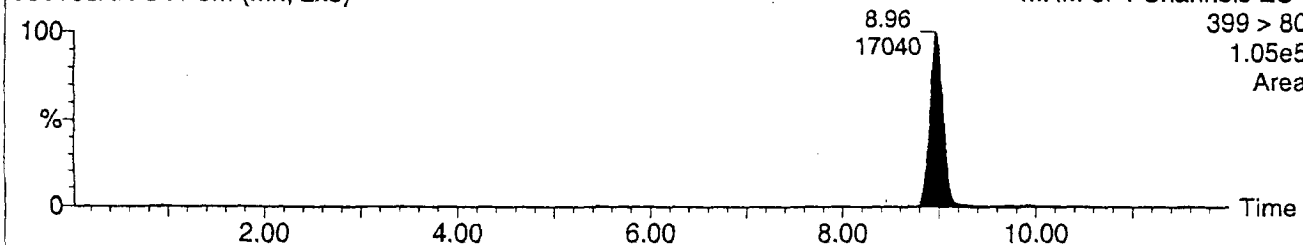
080103AR-324 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.05e5

Area



3: C8 Sulfonate (PFOS)

XC072503-4, 250 ng/L Standard

04-Aug-2003 16:55:35

LC/MS/MS #6

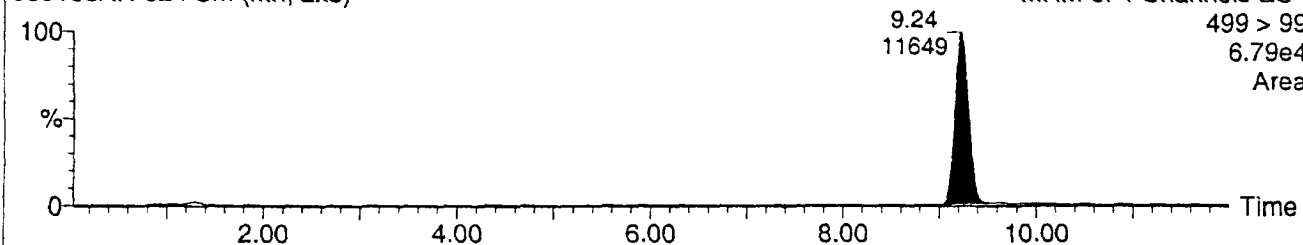
080103AR-324 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

6.79e4

Area



Quantify Sample Report

Page 48

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-324

Text:

4: PFOSA

XC072503-4, 250 ng/L Standard

04-Aug-2003 16:55:35

LC/MS/MS #6

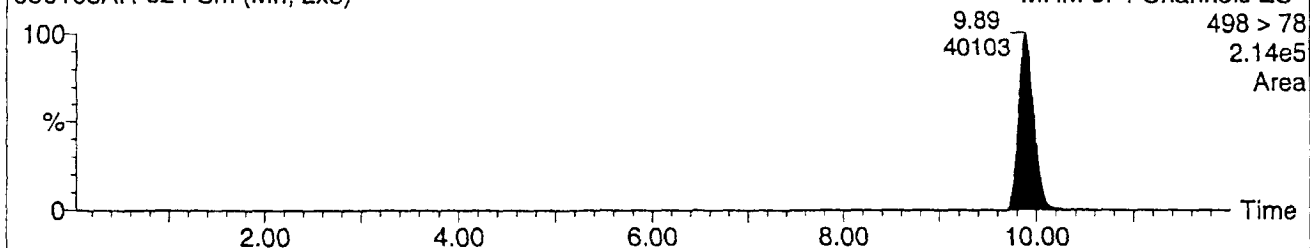
080103AR-324 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

2.14e5

Area



Quantify Sample Report

Page 49

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC
Last modified: Tue Aug 05 07:24:43 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-325

Text:

1: C8 Acid (PFOA)

L34910-20, DF=10

04-Aug-2003 17:17:20

LC/MS/MS #6

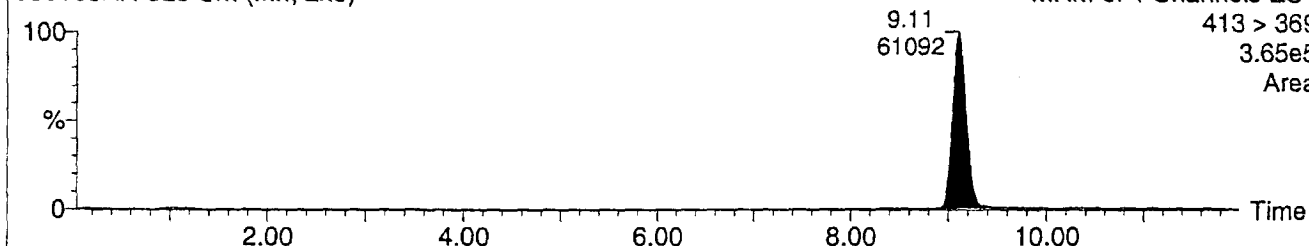
080103AR-325 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

3.65e5

Area



2: C6 Sulfonate (PFHS)

L34910-20, DF=10

04-Aug-2003 17:17:20

LC/MS/MS #6

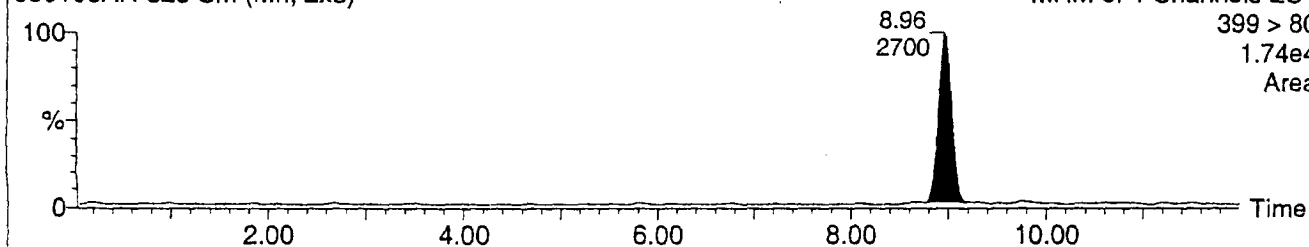
080103AR-325 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.74e4

Area



3: C8 Sulfonate (PFOS)

L34910-20, DF=10

04-Aug-2003 17:17:20

LC/MS/MS #6

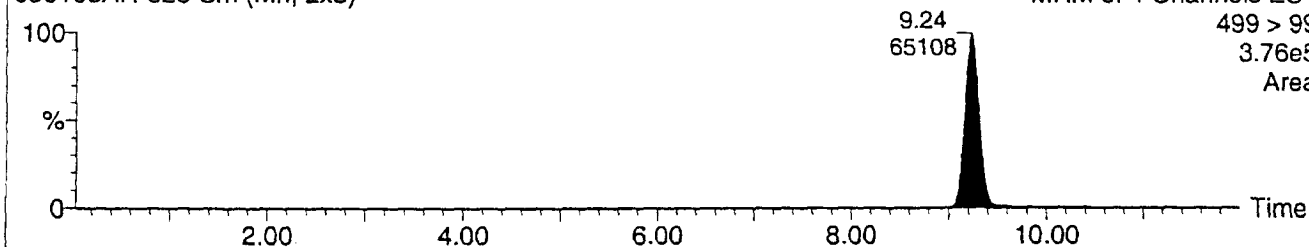
080103AR-325 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

3.76e5

Area



Quantify Sample Report

Page 50

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-325

Text:

4: PFOSA

L34910-20, DF=10

04-Aug-2003 17:17:20

LC/MS/MS #6

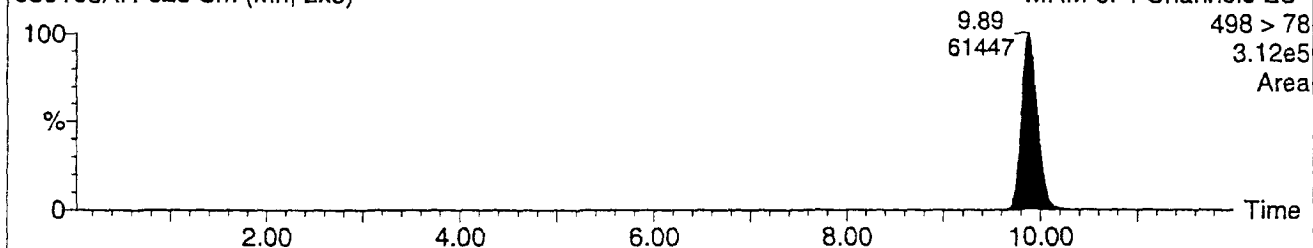
080103AR-325 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

3.12e5

Area



Quantify Sample Report

Page 51

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-326

Text:

1: C8 Acid (PFOA)

L34910-20 Rep, DF=10

04-Aug-2003 17:39:07

LC/MS/MS #6

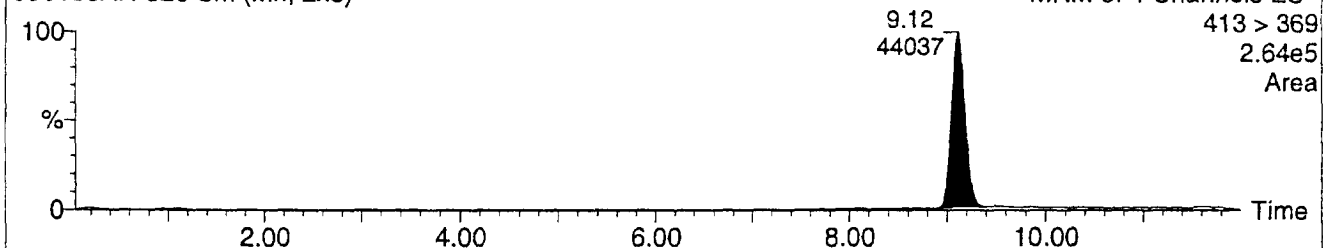
080103AR-326 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

2.64e5

Area



2: C6 Sulfonate (PFHS)

L34910-20 Rep, DF=10

04-Aug-2003 17:39:07

LC/MS/MS #6

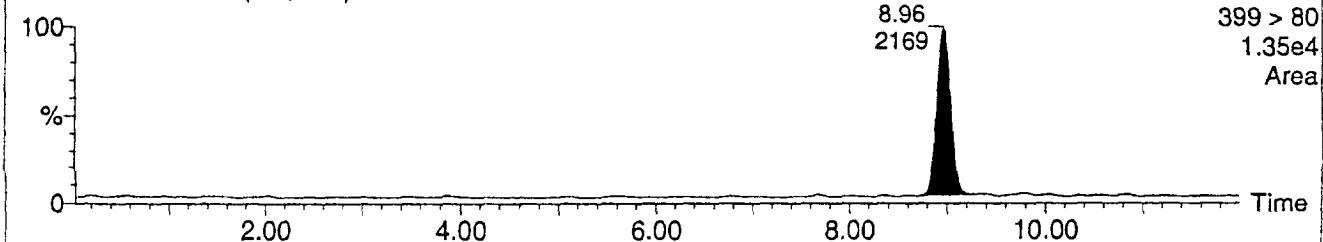
080103AR-326 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

1.35e4

Area



3: C8 Sulfonate (PFOS)

L34910-20 Rep, DF=10

04-Aug-2003 17:39:07

LC/MS/MS #6

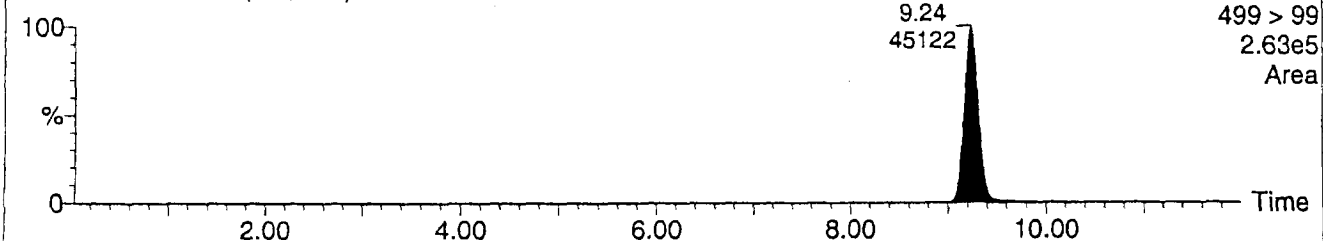
080103AR-326 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.63e5

Area



Quantify Sample Report

Page 52

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-326

Text:

4: PFOSA

L34910-20 Rep, DF=10

04-Aug-2003 17:39:07

LC/MS/MS #6

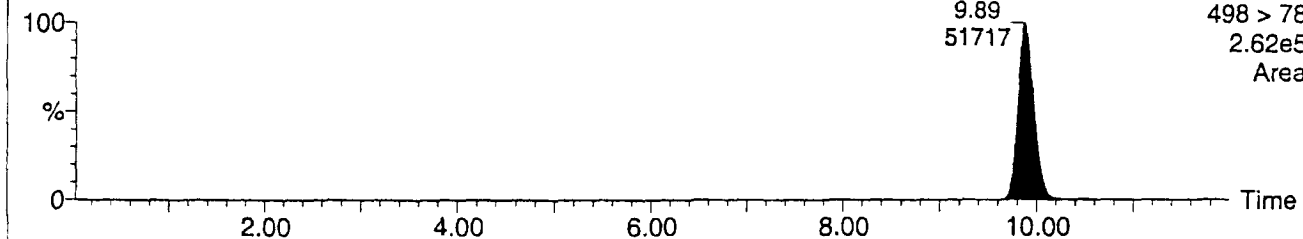
080103AR-326 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

2.62e5

Area



Quantify Sample Report

Page 53

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-327

Text:

1: C8 Acid (PFOA)

L34910-21, DF=100

04-Aug-2003 18:00:47

LC/MS/MS #6

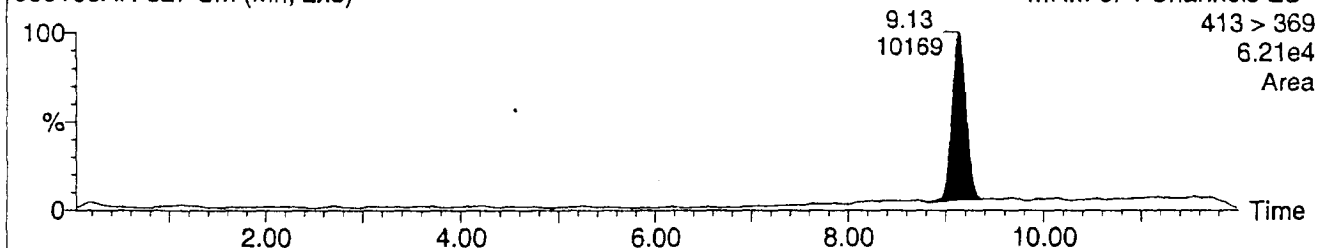
080103AR-327 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

6.21e4

Area



2: C6 Sulfonate (PFHS)

L34910-21, DF=100

04-Aug-2003 18:00:47

LC/MS/MS #6

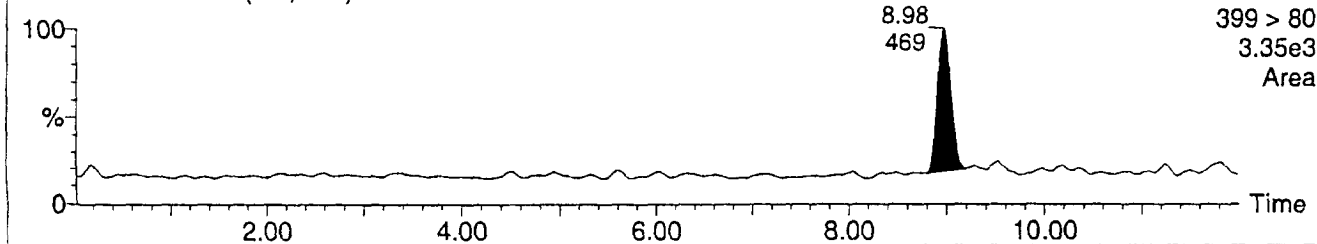
080103AR-327 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

3.35e3

Area



3: C8 Sulfonate (PFOS)

L34910-21, DF=100

04-Aug-2003 18:00:47

LC/MS/MS #6

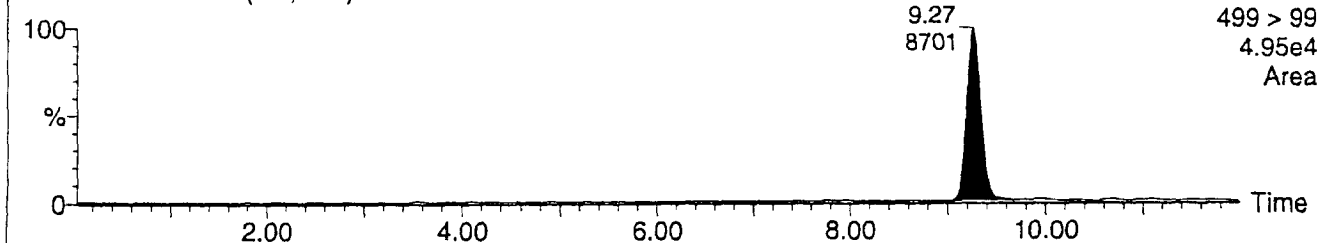
080103AR-327 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

4.95e4

Area



Quantify Sample Report

Page 54

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-327

Text:

4: PFOSA

L34910-21, DF=100

04-Aug-2003 18:00:47

LC/MS/MS #6

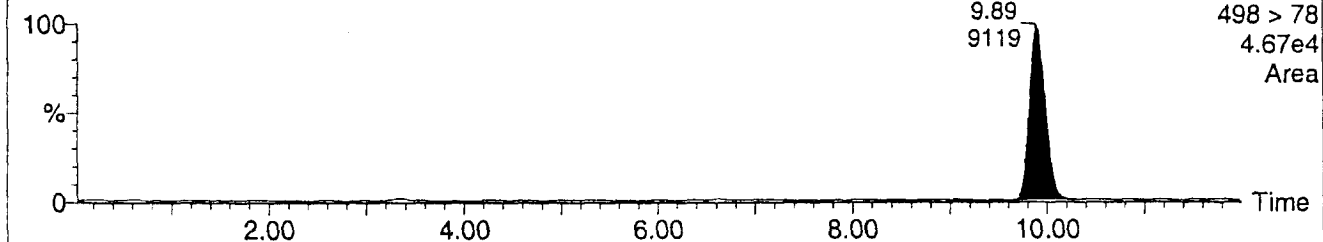
080103AR-327 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

4.67e4

Area



Quantify Sample Report

Page 55

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-328

Text:

1: C8 Acid (PFOA)

L34910-21, DF=10

04-Aug-2003 18:22:28

LC/MS/MS #6

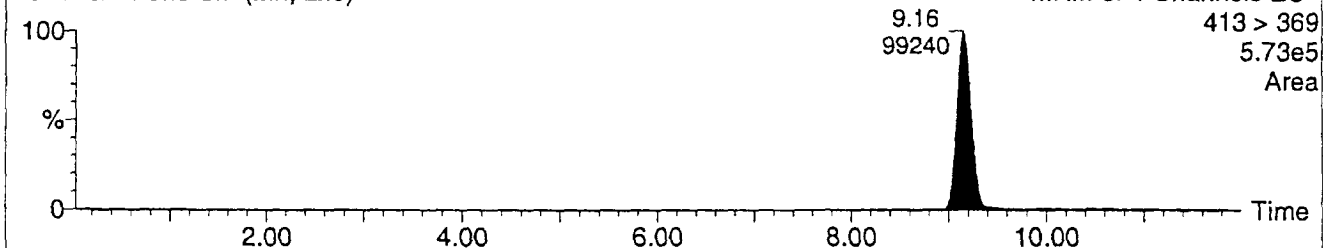
080103AR-328 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

5.73e5

Area



2: C6 Sulfonate (PFHS)

L34910-21, DF=10

04-Aug-2003 18:22:28

LC/MS/MS #6

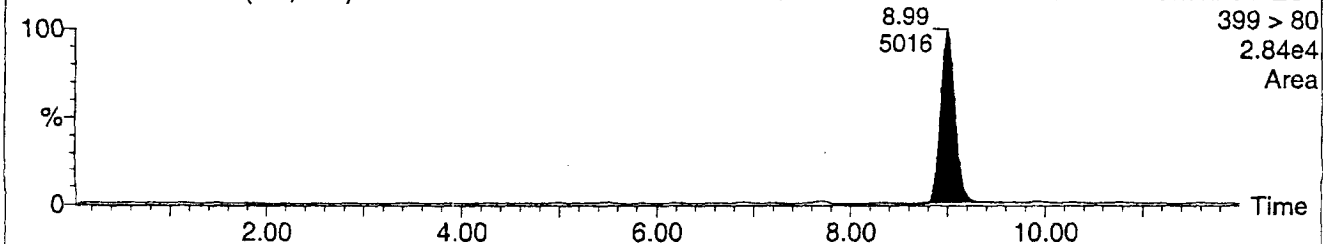
080103AR-328 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

2.84e4

Area



3: C8 Sulfonate (PFOS)

L34910-21, DF=10

04-Aug-2003 18:22:28

LC/MS/MS #6

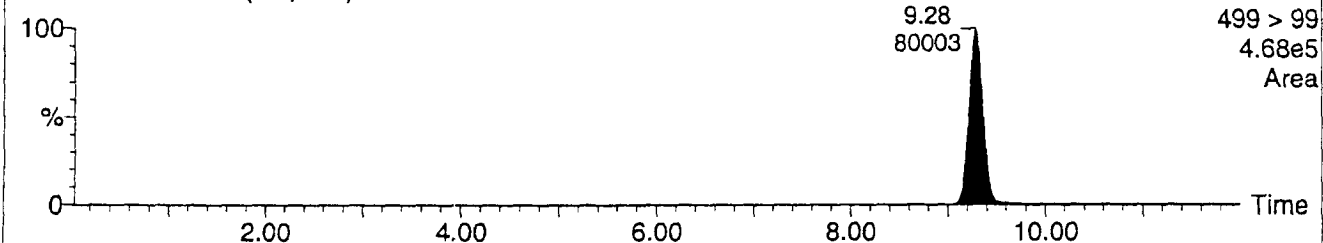
080103AR-328 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

4.68e5

Area



Quantify Sample Report

Page 56

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-328

Text:

4: PFOSA

L34910-21, DF=10

04-Aug-2003 18:22:28

LC/MS/MS #6

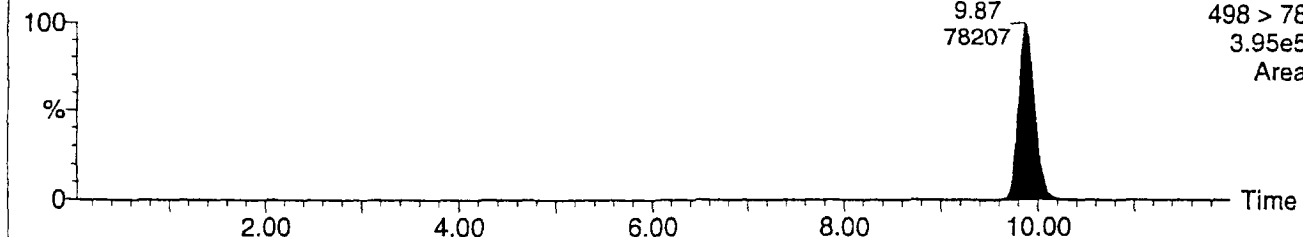
080103AR-328 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

3.95e5

Area



Quantify Sample Report

Page 57

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-329

Text:

1: C8 Acid (PFOA)

XC072503-5, 500 ng/L Standard

04-Aug-2003 18:44:11

LC/MS/MS #6

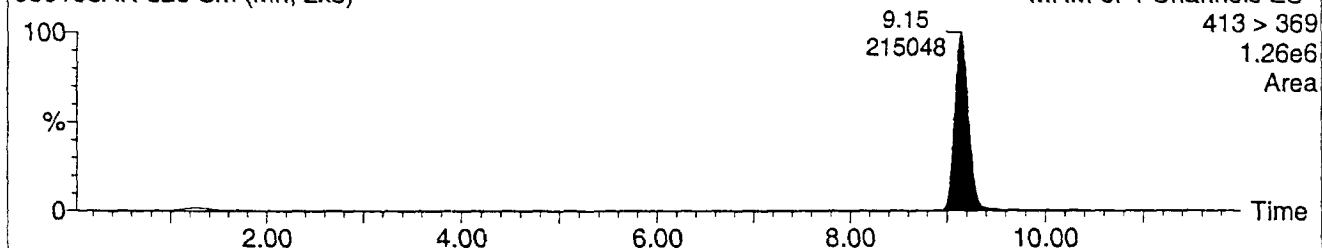
080103AR-329 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

1.26e6

Area



2: C6 Sulfonate (PFHS)

XC072503-5, 500 ng/L Standard

04-Aug-2003 18:44:11

LC/MS/MS #6

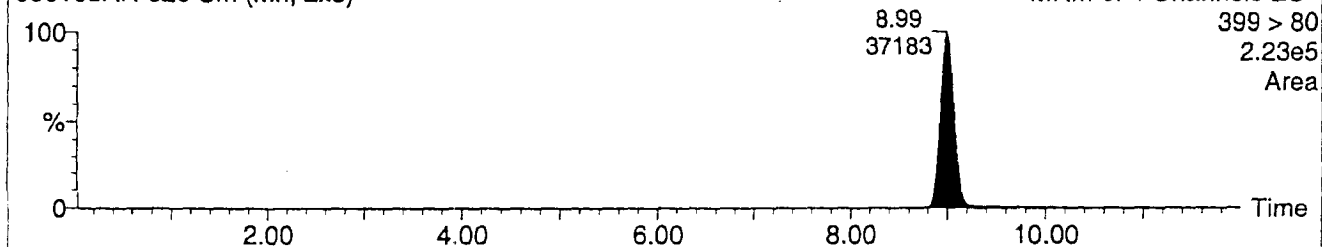
080103AR-329 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

2.23e5

Area



3: C8 Sulfonate (PFOS)

XC072503-5, 500 ng/L Standard

04-Aug-2003 18:44:11

LC/MS/MS #6

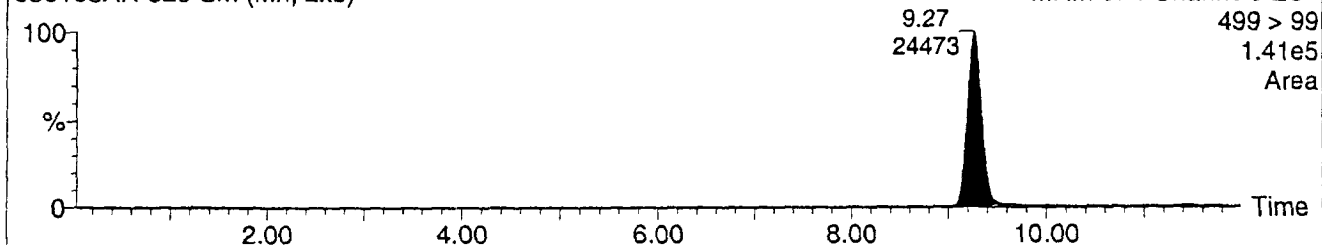
080103AR-329 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

1.41e5

Area



Quantify Sample Report

Page 58

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-329

Text:

4: PFOSA

XC072503-5, 500 ng/L Standard

04-Aug-2003 18:44:11

LC/MS/MS #6

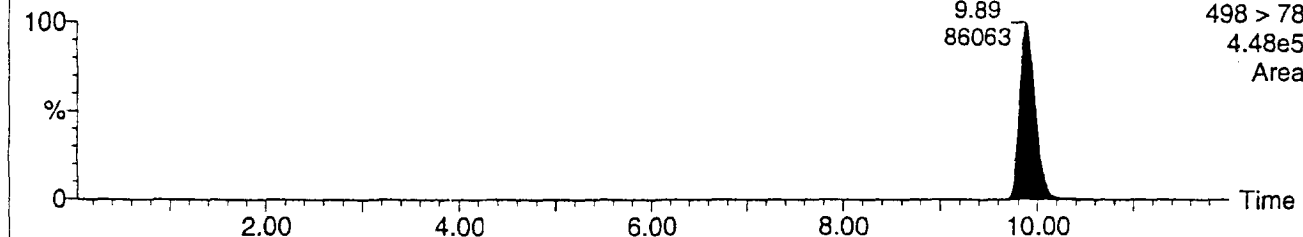
080103AR-329 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

4.48e5

Area



Quantify Sample Report

Page 59

Study No.: L34910, Set No.: 080103AR, Ext. Date: 08/01/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS5\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC
Last modified: Tue Aug 05 07:24:43 2003
Method: P:\Data\LCMSMS5\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103
Last modified: Sun Aug 03 07:11:59 2003
Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-330

Text:

1: C8 Acid (PFOA)

XC072503-6, 1000 ng/L Standard

04-Aug-2003 19:05:53

LC/MS/MS #6

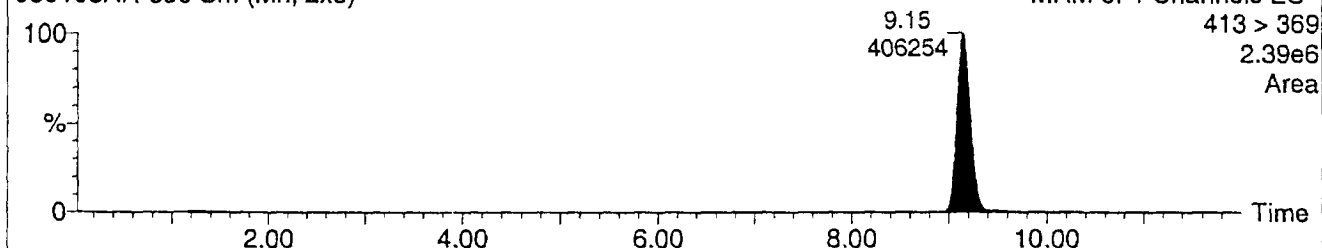
080103AR-330 Sm (Mn, 2x3)

MRM of 4 Channels ES-

413 > 369

2.39e6

Area



2: C6 Sulfonate (PFHS)

XC072503-6, 1000 ng/L Standard

04-Aug-2003 19:05:53

LC/MS/MS #6

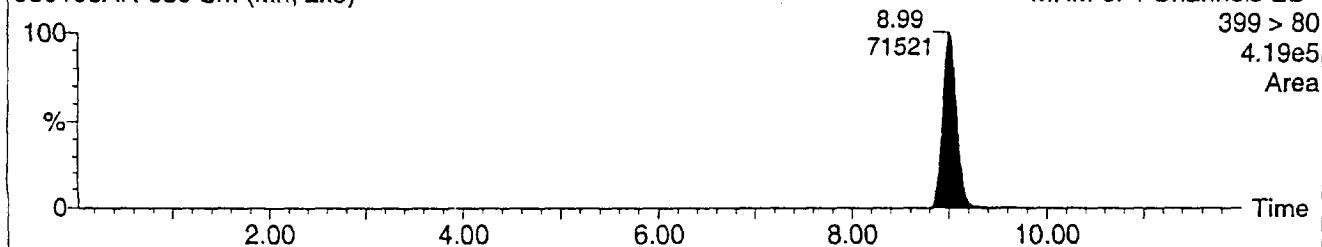
080103AR-330 Sm (Mn, 2x3)

MRM of 4 Channels ES-

399 > 80

4.19e5

Area



3: C8 Sulfonate (PFOS)

XC072503-6, 1000 ng/L Standard

04-Aug-2003 19:05:53

LC/MS/MS #6

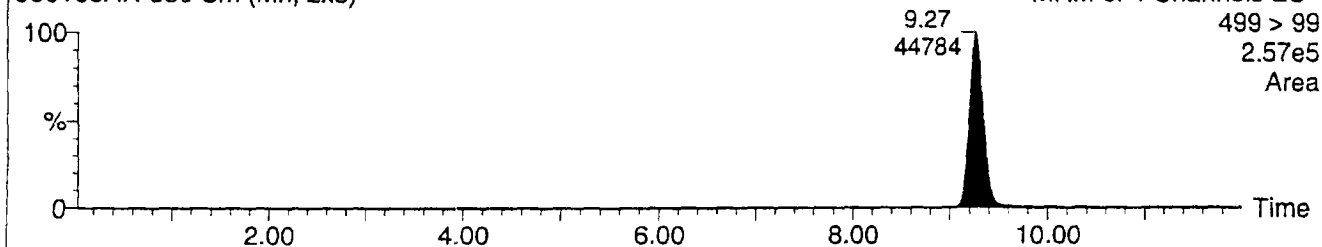
080103AR-330 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.57e5

Area



Quantify Sample Report

Page 60

Study No.:L34910, Set No.:080103AR, Ext.Date:08/01/03, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\080103AR Decatur BC

Last modified: Tue Aug 05 07:24:43 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\Decatur BC 080103

Last modified: Sun Aug 03 07:11:59 2003

Job Code:

Printed: Tue Aug 05 07:32:01 2003

Name: 080103AR-330

Text:

4: PFOSA

XC072503-6, 1000 ng/L Standard

04-Aug-2003 19:05:53

LC/MS/MS #6

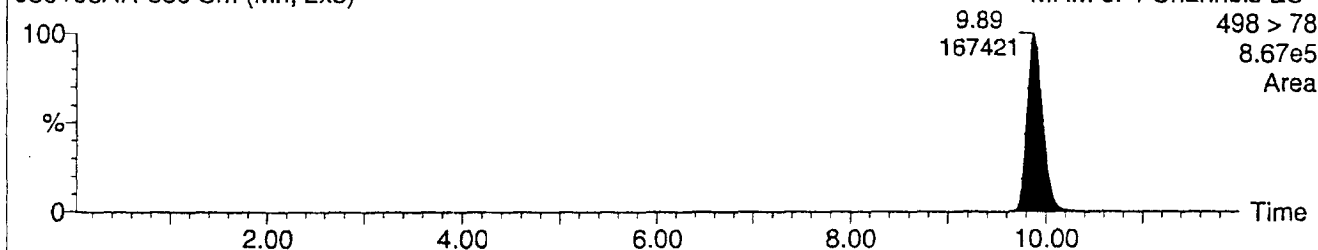
080103AR-330 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

8.67e5

Area



RAW DATA REPORT

Sponsor Study No: NA
 Oxygen Study No: L34910
 Analyte: PFOS
 Ions Monitored: 499 -> 99
 Site: Decatur Baker's Creek

Limit of Quantitation: 50 ppt
 Injection Volume: 15 µL
 Matrix: Soil
 Sample Weight: 5.0 g
 Final Volume: 50 mL

Set No: 081203A
 Analyst: Karen Risha
 Instrument Type: LCMSMS #6
 Extraction Date: 08/12/03
 Analyzed on: 08/13/03

Oxygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)	Analyte Found (ppb)	Total Solids (%)	Analyte Found (ppb) Dry Weight
XC081103-0	-	CS	081203A-3001	0	-	0	-	-	-	-	-	-
XC081103-1	-	CS	081203A-3002	25	-	909	-	-	-	-	-	-
XC081103-2	-	CS	081203A-3003	50	-	1896	-	-	-	-	-	-
XC081103-3	-	CS	081203A-3004	100	-	3803	-	-	-	-	-	-
XC081103-4	-	CS	081203A-3005	250	-	9700	-	-	-	-	-	-
XC081103-5	-	CS	081203A-3006	500	-	19165	-	-	-	-	-	-
XC081103-6	-	CS	081203A-3007	1000	-	39020	-	-	-	-	-	-
Methanol Wash	-	C	081203A-3008	-	-	0	-	-	-	-	-	-
Reagent Blank	na	C	081203A-3009	-	1	0	ND	-	-	-	-	-
Reagent Spk A	na	LCS	081203A-3010	-	1	1963	49.2	50	98	-	-	-
Reagent Spk B	na	LCS	081203A-3011	-	1	21166	533	500	107	-	-	-
L34910-11 Spk E	BC2 SED-06	LF	081203A-3012	-	1000	8541	215000	100000	105	-	-	-
L34910-11 Spk E	BC2 SED-06	LF	081203A-3013	-	100	91234	*	100000	-	-	-	-
XC081103-1	-	CS	081203A-3014	25	-	954	-	-	-	-	-	-
XC081103-2	-	CS	081203A-3015	50	-	2208	-	-	-	-	-	-
XC081103-3	-	CS	081203A-3016	100	-	4213	-	-	-	-	-	-
L34910-11	BC2 SED-06	S	081203A-3017	-	1000	4378	110000	-	-	880.00	60.41	1460
L34910-11 Rep	BC2 SED-06	S	081203A-3018	-	1000	4935	124000	-	-	992.00	60.41	1640
L34910-11	BC2 SED-06	S	081203A-3019	-	100	42296	*	-	-	-	60.41	-
L34910-11 Rep	BC2 SED-06	S	081203A-3020	-	100	48356	*	-	-	-	60.41	-
XC081103-4	-	CS	081203A-3021	250	-	11039	-	-	-	-	-	-
XC081103-5	-	CS	081203A-3022	500	-	20668	-	-	-	-	-	-
XC081103-6	-	CS	081203A-3023	1000	-	39291	-	-	-	-	-	-

Analyte Found (ppt) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{(\text{analyte found (ppt)} - \text{analyte found in control (ppt)}) \times 100}{\text{amount added (ppt)}}$

Standard Curve: Linear (1/x weighted)

Intercept = 10.4732

Slope = 39.6727

Coef. Of Det. = 0.998540

Analyte Found (ppb) = [analyte found (ppt) x volume extracted (0.04 L)] / sample weight (5 g)

Analyte Found (ppb) dry weight = analyte found (ppb) x (100% / total solids (%))

CS = Calibration standard

C = Control sample

S = Sample

LF = Lab fortified sample

FF = Field fortified sample

LCS = Laboratory Control Spike

CK = Check Standard

ND = Not detected = Response between 0 and 25 ppt

NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by: *PR*, 08/18/03

*Dilution was for PFOSA.

RAW DATA REPORT

Sponsor Study No: NA
 Exygen Study No: L34910
 Analyte: FOSA
 Ions Monitored: 498 -> 78
 Site: Decatur Baker's Creek

Limit of Quantitation: 50 ppt
 Injection Volume: 15 µL
 Matrix: Soil
 Sample Weight: 5.0 g
 Final Volume: 5.0 mL

Set No: 081203A
 Analyst: Karen Risha
 Instrument Type: LCMSMS #6
 Extraction Date: 08/12/03
 Analyzed on: 08/13/03

Exygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ppt)	Dilution Factor	Peak Area	Analyte Found (ppt)	Amount Added (ppt)	Recovery (%)	Analyte Found (ppb)	Total Solids (%)	Analyte Found (ppb) Dry Weight
XC081103-0	-	CS	081203A-3001	0	-	0	-	-	-	-	-	-
XC081103-1	-	CS	081203A-3002	25	-	3547	-	-	-	-	-	-
XC081103-2	-	CS	081203A-3003	50	-	7692	-	-	-	-	-	-
XC081103-3	-	CS	081203A-3004	100	-	15522	-	-	-	-	-	-
XC081103-4	-	CS	081203A-3005	250	-	39080	-	-	-	-	-	-
XC081103-5	-	CS	081203A-3006	500	-	73905	-	-	-	-	-	-
XC081103-6	-	CS	081203A-3007	1000	-	145023	-	-	-	-	-	-
Methanol Wash	-	C	081203A-3008	-	-	0	-	-	-	-	-	-
Reagent Blank	na	C	081203A-3009	-	1	0	ND	-	-	-	-	-
Reagent Spk A	na	LCS	081203A-3010	-	1	7255	45.5	50	91	-	-	-
Reagent Spk B	na	LCS	081203A-3011	-	1	72614	481	500	96	-	-	-
L34910-11 Spk E	BC2 SED-06	LF	081203A-3012	-	1000	11415	*	100000	-	-	-	-
L34910-11 Spk E	BC2 SED-06	LF	081203A-3013	-	100	122331	81200	100000	72	-	-	-
XC081103-1	-	CS	081203A-3014	25	-	4230	-	-	-	-	-	-
XC081103-2	-	CS	081203A-3015	50	-	8197	-	-	-	-	-	-
XC081103-3	-	CS	081203A-3016	100	-	16248	-	-	-	-	-	-
L34910-11	BC2 SED-06	S	081203A-3017	-	1000	1446	*	-	-	-	60.41	-
L34910-11 Rep	BC2 SED-06	S	081203A-3018	-	1000	1737	*	-	-	-	60.41	-
L34910-11	BC2 SED-06	S	081203A-3019	-	100	13834	8930	-	-	71.44	60.41	118
L34910-11 Rep	BC2 SED-06	S	081203A-3020	-	100	16015	10400	-	-	83.20	60.41	138
XC081103-4	-	CS	081203A-3021	250	-	41122	-	-	-	-	-	-
XC081103-5	-	CS	081203A-3022	500	-	78848	-	-	-	-	-	-
XC081103-6	-	CS	081203A-3023	1000	-	149443	-	-	-	-	-	-

Analyte Found (ppt) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{[\text{analyte found (ppt)} - \text{analyte found in control (ppt)}] \times 100}{\text{amount added (ppt)}}$

Standard Curve: Linear (1/x weighted)

Intercept = 434.455

Slope = 150.037

Coef. Of Det. = 0.998129

Analyte Found (ppb) = [analyte found (ppt) x volume extracted (0.04 L)] / sample weight (5 g)

Analyte Found (ppb) dry weight = analyte found (ppb) x (100% / total solids (%))

CS = Calibration standard

C = Control sample

S = Sample

LF = Lab fortified sample

FF = Field fortified sample

LCS = Laboratory Control Spike

CK = Check Standard

ND = Not detected = Response between 0 and 25 ppt

NQ = Not quantifiable = Response between 25 ppt and LOQ (50 ppt)

Spreadsheet prepared by:

KR, 08/28/03

*Dilution was for PFOS



3058 Research Drive
State College, PA 16801

Phone: 814-272-1039
Fax: 814-231-1580

SAMPLE TRANSFER SHEET

Protocol Number: NA Exygen Study Number: L34910

Exygen Sample #	Sponsor Sample #	Exygen Sample #	Sponsor Sample #
L34910-11	BC2 SED-06	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Karen Risha 08/11/03 1400

Requested By (Printed Name/Date/Time)

Samples removed from: Doc 539 Box# - Shelf# -
Samples removed from: - Box# - Shelf# -

Samples transferred to the custody of Karen Risha
✓ K 8-11-03 1420
Sample Custodian Initials/Date/Time

Samples received from custodian; Samples moved to Ref-32
bf 08/11/03 1426
Laboratory Personnel Initials/Date/Time

Samples removed from Ref-32
Samples returned to Doc 539
✓ K 8-19-03 1050
Sample Custodian Initials/Date/Time



3058 Research Drive
State College, PA 16801

Phone: 814-272-1039
Fax: 814-231-1580

Internal Chain of Custody/Fortification Sheet

Exygen Study Number: L34910

Matrix: Soil

Sponsor Study/Protocol No: NA

The samples listed below were removed from refrigerator No. 32

Time 0815

Date 08/12/03

Initials CEE

CLIENT SAMPLE ID	EXYGEN ID NUMBER	WEIGHT (g)	FORTIFICATION (ng)
na	Reagent Blank	-	-
na	Reagent Spk A	-	2.0
na	Reagent Spk B	-	20.0
BC2 SED-06	L34910-11 Spk E	5.0	4000.0
BC2 SED-06	L34910-11	5.0	-
BC2 SED-06	L34910-11 Rep	5.0	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

	Spiking Solution Used	Volume Used for Spiking	Initial/Date
Reagent Spk A	F061103-2 (10 ng/mL)	200 µL (200 µL micropipet)	<u>KR</u> 10/12/03
Reagent Spk B	F061103-1 (100 ng/mL)	200 µL (200 µL micropipet)	<u>KR</u> 10/12/03
L34910-11 Spk E	F060203-1 (10000 ng/mL)	400 µL (200 µL micropipet)	<u>KR</u> 10/12/03
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

All samples were weighed on balance No. 20

Time 0920

Date 08/12/03

Initials CEE

After weighing samples were returned to refrigerator No. 32

Time 1420

Date 08/12/03

Initials CEE

Comments: 200 µL of 250 mg/mL sodium thiosulfate was added to all samples before spiking. Initials/Date: CEE/08/12/03

Analysis Summary:

Data Set: 081203A

Initials/Date: KR/08/13/03

Data Set: -

Initials/Date: -/-

Data Set: -

Initials/Date: -/-

Set extraction/analysis data verified by: gmf

Date: 8/15/03

July 26, 2001/1

SAMPLE EXTRACTION AND ANALYSIS TRACKING SHEET

EXYGEN STUDY NUMBER: L34910

METHOD: ExM-023-014 ^{SS}

PROTOCOL NUMBER: NA

MATRIX: Soil

ANALYTES: PFHS, PFOS, PFOA and PFOSA

[illegible]

STEP 1: Add 5mL of methanol and shake by hand for ~1 minute

STEP 2: Bring up to 40 mL with hypcarb filtered type I water

STEP 3: Centrifuge for 10 minutes at ~3000 rpm

STEP 4: Filter through glass acrodisc

STEP 5: SPE column clean up (omitting 40% wash)

STEP 6: Final volume to 5 mL collected in 15 mL polypropylene tubes

STEP 7: LC/MS/MS analysis

STEP 8: LC/MS/MS reanalysis.

*Initials and date under each step indicates the personnel that performed this step.

Method of Analysis for the Determination of Perfluorooctanesulfonate (PFOS) and Pentadecafluorooctanoic Acid (PFOA) in Soil

COMMENTS:

Final extracts stored in refrigerator 32 Initials: CEE Date: 08/17/03

July 19, 2001/4

Matrix: Type I Water^
Sample Vol: 40 mL

STANDARD EXPIRATION DATE: 8/25/03

Masslynx - Sample List

Sample List: C:\MASS\LYNX\Fluorochemicals.PRO\SampleD81081203A Decatur BC.SPL
Printed: Wed Aug 13 08:36:59 2003

08/13/03

Exygen STUDY NO: J34910

Page 1

Page Position: (1, 1)

Vial	File Name	LIMS ID	Client ID	Sample Description	Matrix	Sample Type	Conc (ng/L)	Conc B	Conc C	Test ID	DF
1	081203A-3001	---	---	XC081103-0, 0 ng/L Standard	---	Standard	0	---	---	0	1
2	081203A-3002	---	---	XC081103-1, 25 ng/L Standard	---	Standard	25	---	---	0	1
3	081203A-3003	---	---	XC081103-2, 50 ng/L Standard	---	Standard	50	---	---	0	1
4	081203A-3004	---	---	XC081103-3, 100 ng/L Standard	---	Standard	100	---	---	0	1
5	081203A-3005	---	---	XC081103-4, 250 ng/L Standard	---	Standard	250	---	---	0	1
6	081203A-3006	---	---	XC081103-5, 500 ng/L Standard	---	Standard	500	---	---	0	1
7	081203A-3007	---	---	XC081103-6, 1000 ng/L Standard	---	Standard	1000	---	---	0	1
8	081203A-3008	---	---	Methanol Wash	---	Blank	---	---	---	0	1
9	081203A-3009	---	---	Reagent Blank	---	Blank	---	---	---	0	1
10	081203A-3010	---	---	Reagent Spk A, 50 ng/L	---	QC	50	---	---	0	1
11	081203A-3011	---	---	Reagent Spk B, 500 ng/L	---	QC	500	---	---	0	1
12	081203A-3012	---	---	L34910-11 Spk E, 100000 ng/L, DF=1000	---	QC	100000	---	---	0	1000
13	081203A-3013	---	---	L34910-11 Spk E, 100000 ng/L, DF=100	---	QC	100000	---	---	0	100
14	081203A-3014	---	---	XC081103-1, 25 ng/L Standard	---	Standard	25	---	---	0	1
15	081203A-3015	---	---	XC081103-2, 50 ng/L Standard	---	Standard	50	---	---	0	1
16	081203A-3016	---	---	XC081103-3, 100 ng/L Standard	---	Standard	100	---	---	0	1
17	081203A-3017	---	---	L34910-11, DF=1000	---	Analyte	---	---	---	0	1000
18	081203A-3018	---	---	L34910-11 Rep, DF=100	---	Analyte	---	---	---	0	1000
19	081203A-3019	---	---	L34910-11 Rep, DF=100	---	Analyte	---	---	---	0	100
20	081203A-3020	---	---	XC081103-4, 250 ng/L Standard	---	Analyte	---	---	---	0	100
21	081203A-3021	---	---	XC081103-5, 500 ng/L Standard	---	Standard	250	---	---	0	1
22	081203A-3022	---	---	XC081103-6, 1000 ng/L Standard	---	Standard	500	---	---	0	1
23	081203A-3023	---	---		---	Standard	1000	---	---	0	1

Masslynx - Sample List

Page 2

Sample List: C:\MASSLYNX\Fluorochemicals.PRO\SampleDB\081203A Decatur BC.SPL
Printed: Wed Aug 13 09:36:59 2003

Exygen STUDY NO: 134910

Page Position: (2, 1)

08/13/03

	MS Method	HPLC Method	MS Tune File	Inj. Volume
1	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
2	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
3	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
4	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
5	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
6	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
7	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
8	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
9	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
10	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
11	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
12	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
13	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
14	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
15	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
16	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
17	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
18	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
19	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
20	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
21	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
22	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15
23	C6 C8 SULF C8 ACID PFOSA	pfbs water	Fluorochems	15

LC/MS/MS SYSTEM AND OPERATING CONDITIONS

Sponsor Protocol No: NA

Exygen Study No: L34910

Instrument: Micromass Quattro Ultima (LC/MS/MS Unit #6)

Computer: COMPAQ Professional Workstation AP200

Software: Microsoft Windows NT: Version 4 Build 1381: Service Pack 5
Micromass Limited: MassLynx 3.4 Build 004

HPLC Equipment: Hewlett Packard (HP) Series 1100
HP Bin Pump HP Vacuum Degasser
HP Autosampler HP Column Oven

HPLC Column: Genesis C-8, 5 cm x 2.1 mm i.d. x 4 μ (Exygen ID: 74A)
(JONESCHROMATOGRAPHY: Part No. FK5962E)

Mobile Phase (A) : 2 mM Ammonium Acetate in Type I Water
Mobile Phase (B) : Methanol

Analyst: Karen Risha
Exygen Research
3058 Research Drive, State College, PA 16801
Phone: (814) 272-1039 FAX: (814) 231-1580

BR 08/13/03

NOTE: The next 3 pages are computer generated printouts from the masslynx software program. The pages contain the instrument settings used for the analysis of this data set.

All Handwritten Peak ID's by:

BR 08/18/03

Scanning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUDB\C6 C8 SULF C8 ACID PFOSA
Last Modified: Thu Jul 31 16:23:50 2003

Printed: Wed Aug 13 09:37:33 2003

12/08/13/03

Solvent Delay (mins) : 0.00

Analog Channel 4 : Unused

Function : 1 MRM of 4 Mass Pairs (ESP-)

Inter Channel Delay (Secs) : 0.03

Span (Daltons) : 0.00

Start Time (Mins) : 0.00

End Time (Mins) : 12.00

Repeats : 1

	Channel	Parent	Daughter	Dwell (Secs)	Coll Energy (eV)	Cone (V)
1		399.00	80.00	0.20	35	50
2		413.00	369.00	0.20	10	10
3		498.00	78.00	0.20	30	50
4		499.00	99.00	0.20	40	30

Method Report

Page 1

Method File:
Last Modified:C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUDE\pfbs water
Wednesday, August 13, 2003 09:25:46

Printed:

Wednesday, August 13, 2003 09:37:56

08/13/03

HP1100 LC Pump Initial Conditions

Solvents

A%	90.0
B%	10.0
C%	0.0
D%	0.0

Flow (ml/min)	0.300
Stop Time (mins)	20.0
Min Pressure (bar)	0
Max Pressure (bar)	400
Oven Temperature Left (°C)	35.0
Oven Temperature Right (°C)	35.0

HP1100 LC Pump Gradient Timetable

The gradient Timetable contains 8 entries which are :

Time	A%	B%	C%	D%	Flow	Pressure
0.00	90.0	10.0	0.0	0.0	0.300	400
2.00	90.0	10.0	0.0	0.0	0.300	400
5.00	10.0	90.0	0.0	0.0	0.300	400
9.00	10.0	90.0	0.0	0.0	0.300	400
9.50	0.0	100.0	0.0	0.0	0.300	400
14.00	0.0	100.0	0.0	0.0	0.300	400
14.50	90.0	10.0	0.0	0.0	0.300	400
20.00	90.0	10.0	0.0	0.0	0.300	400

HP1100 LC Pump External Event Timetable

The Timetable contains 6 entries which are :

Time	Column Switch	Contact1	Contact2	Contact3	Contact4
Initial	Off	Off	Off	Off	Off
0.00	Off	On	Off	Off	Off
0.05	Off	Off	Off	Off	Off
0.10	Off	Off	On	Off	Off
11.90	Off	Off	Off	On	Off
12.00	Off	Off	Off	Off	Off

HP1100 Autosampler Initial Conditions

Draw Speed	200.0
Eject Speed (µl/min)	200
Draw Position (mm)	0.50
Stop Time (mins)	20.00
Injection Volume (µl)	15.0
Vial Number	47

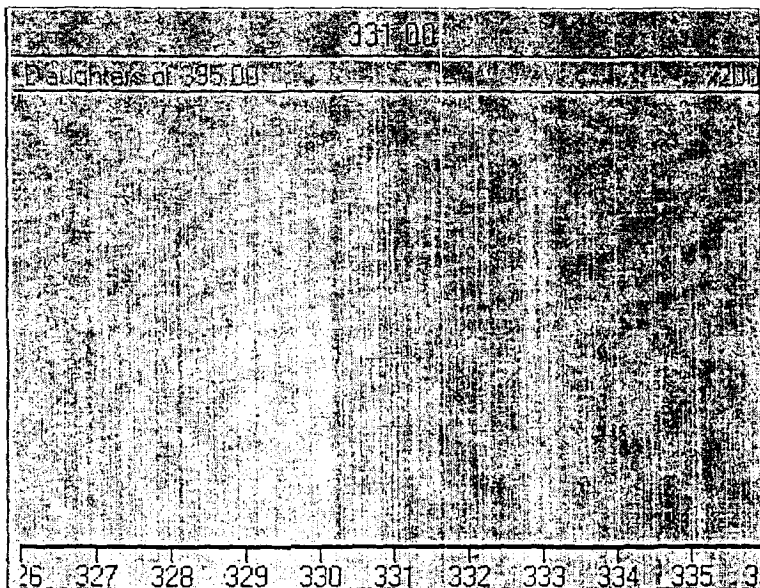
Tuning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUD\FLUOROCHEMS

Printed: Wed Aug 13 09:37:50 2003

12/08/13/03



Daughter of 395.00

SOURCE (ESP-)	Set	Rdbk	Analyser	Set	Rdbk
Capillary	3.00	-2.93	LM Res 1	14.0	
Cone	20	-42	HM Res 1	14.0	
Hexapole 1	0.0		IEnergy 1	1.0	
Aperture 1	0.0		Entrance	-2	26
Hexapole 2	0.0		Collision	15	38
Source Block Temp.	100	100	Exit	2	29
Desolvation Temp.	300	299	LM Res 2	14.0	
			HM Res 2	14.0	
			IEnergy 2	2.0	
			Multiplier	650	-648

Pressures	Rdbk	Gas Flows	Rdbk
Analyser Vacuum	OFF	Cone Gas	132.1
Gas Cell	3.5e-3	Desolvation	755.7

Quantify Calibration Report

Page 1

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\081203A Decatur BC

Last modified: Mon Aug 18 10:47:18 2003

Printed: Mon Aug 18 10:50:24 2003

bf 08/18/03 pages 1-2

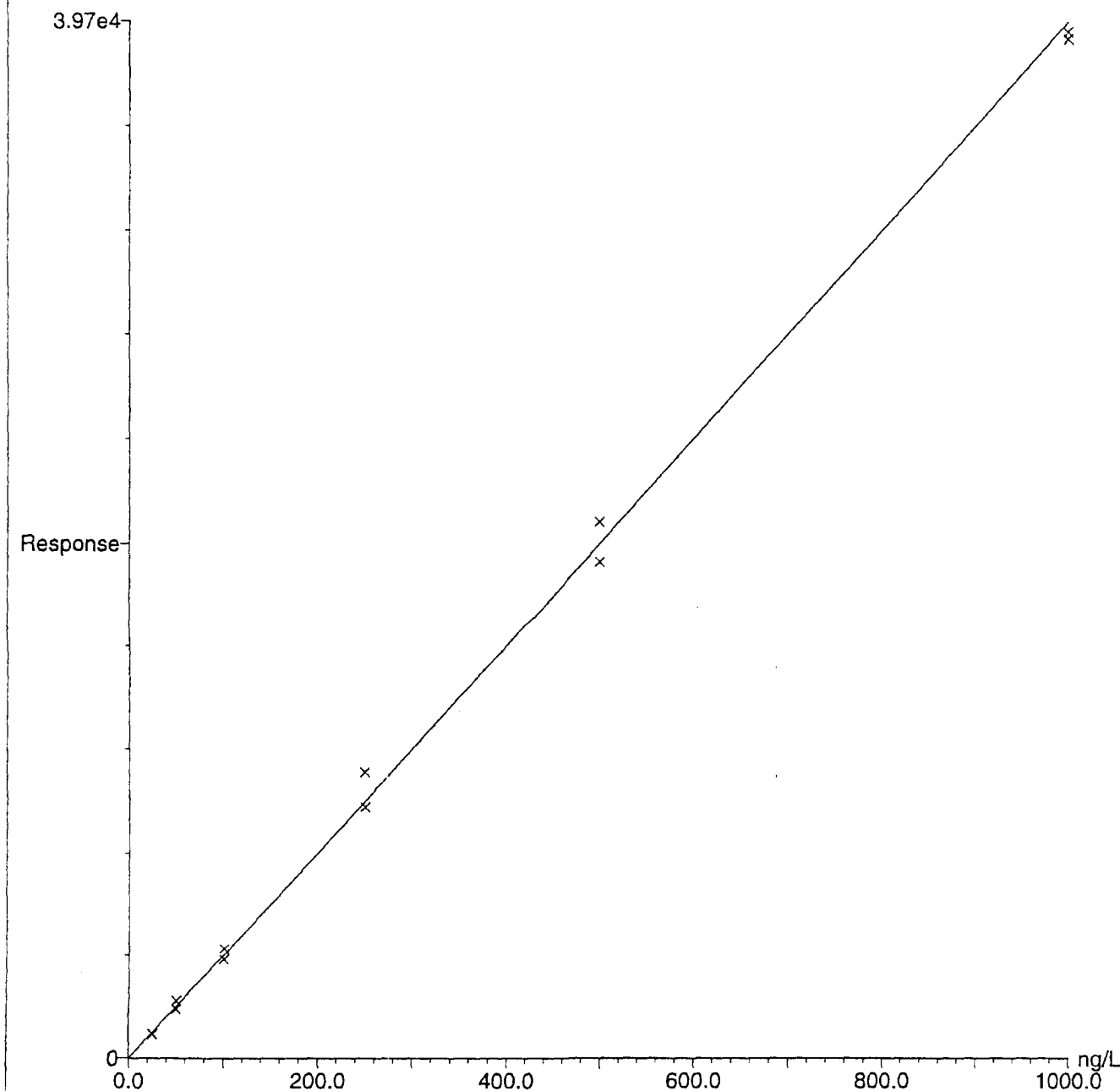
Compound 1 name: C8 Sulfonate (PFOS)

Coefficient of Determination: 0.998540

Calibration curve: $39.6727 * x + 10.4732$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Calibration Report

Page 2

Study No.:L34910, Set No.:081203A, Ext.Date:08/12/03, Analyst:K.Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\081203A Decatur BC

Last modified: Mon Aug 18 10:47:18 2003

Printed: Mon Aug 18 10:50:24 2003

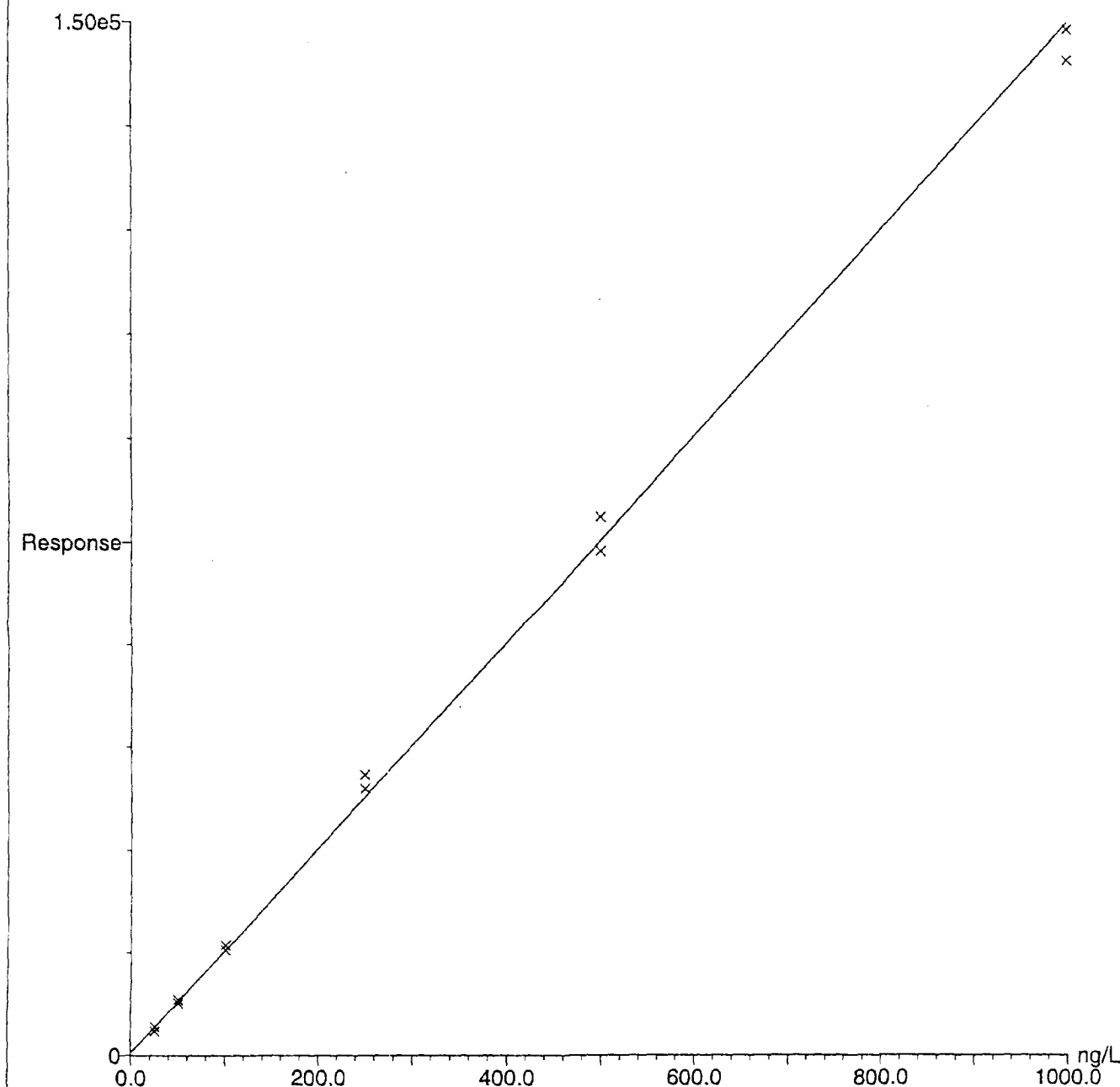
Compound 2 name: PFOSA

Coefficient of Determination: 0.998129

Calibration curve: $150.037 * x + 434.455$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Sample Report

Page 1

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

Initials BR
Date 08/18/03
Run# 081203A-3001 To 081203A-3023

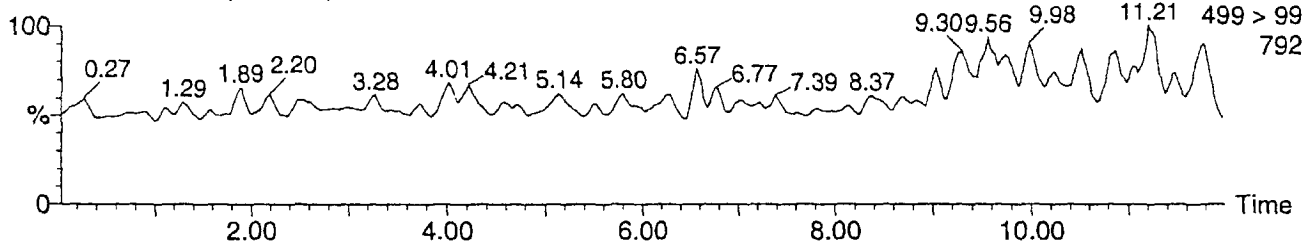
Name: 081203A-3001

Text:

1: C8 Sulfonate (PFOS)

XC081103-0, 0 ng/L Standard

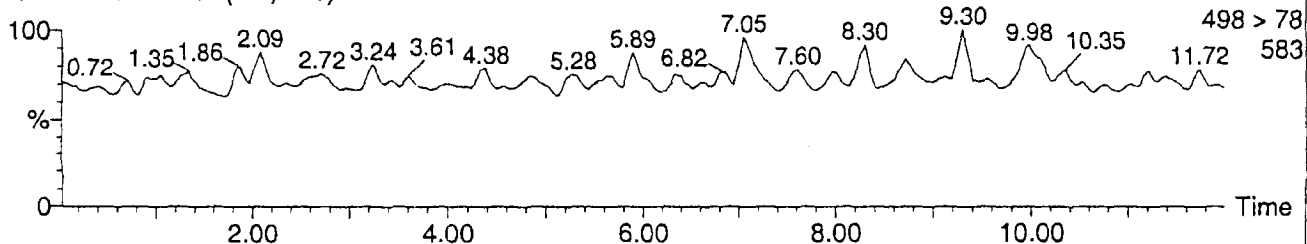
081203A-3001 Sm (Mn, 2x3)



2: PFOSA

XC081103-0, 0 ng/L Standard

081203A-3001 Sm (Mn, 2x3)



Quantify Sample Report

Page 2

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC

Last modified: Mon Aug 18 10:47:09 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103

Last modified: Mon Aug 11 09:49:08 2003

Job Code:

Printed: Mon Aug 18 10:50:26 2003

Name: 081203A-3002

Text:

1: C8 Sulfonate (PFOS)

XC081103-1, 25 ng/L Standard

13-Aug-2003 15:05:11

LC/MS/MS #6

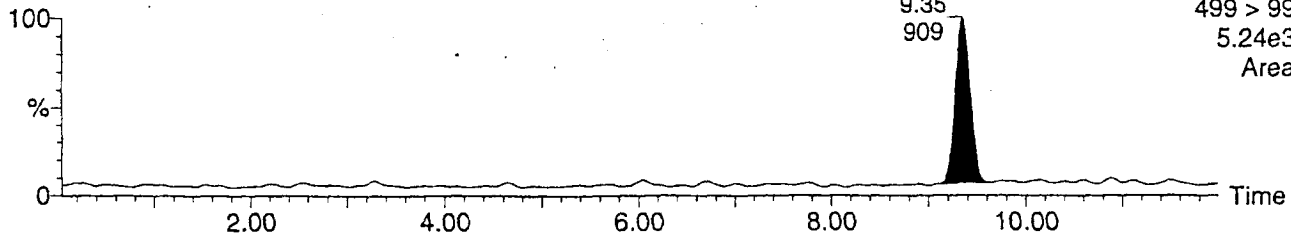
081203A-3002 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

5.24e3

Area



2: PFOSA

XC081103-1, 25 ng/L Standard

13-Aug-2003 15:05:11

LC/MS/MS #6

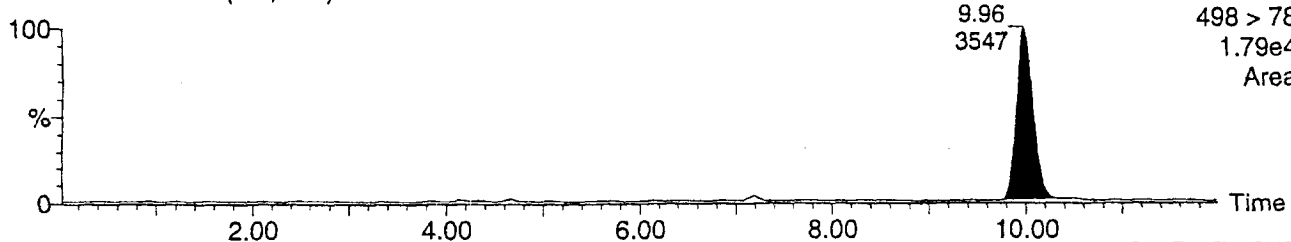
081203A-3002 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.79e4

Area



Quantify Sample Report

Page 3

Study No.:L34910, Set No.:081203A, Ext.Date:08/12/03, Analyst:K.Risha

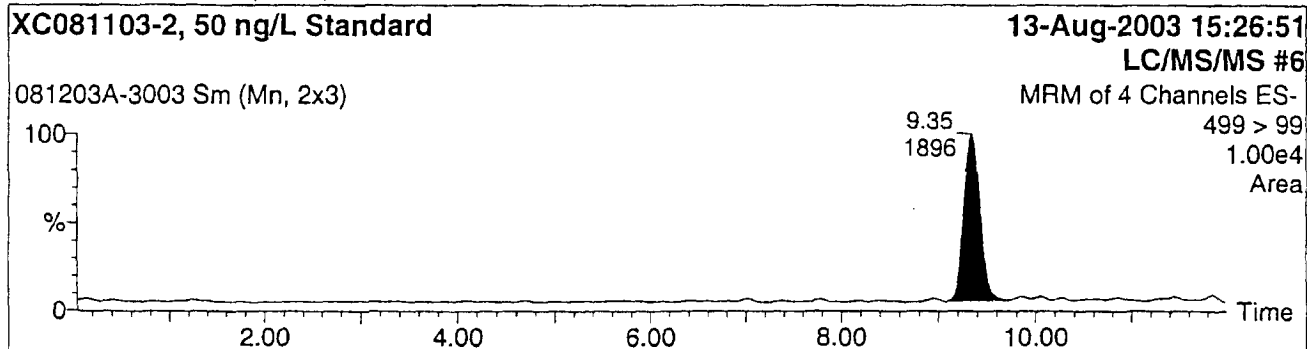
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

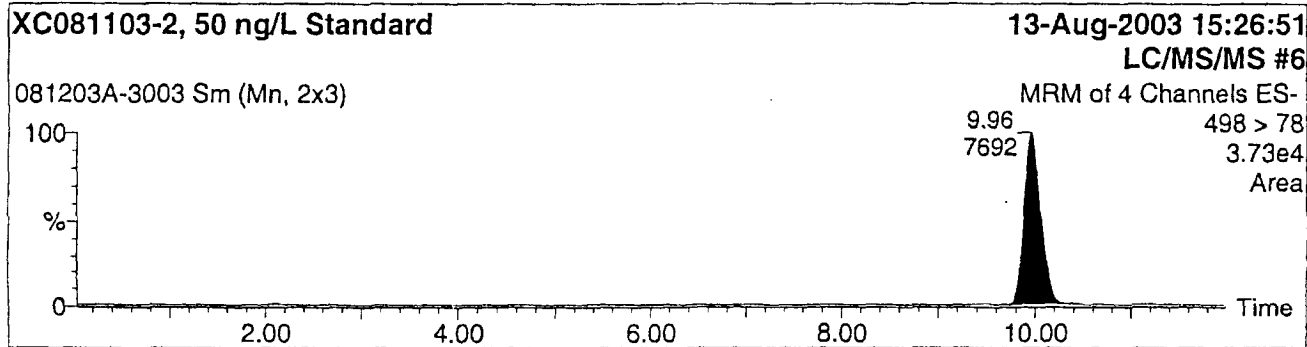
Name: 081203A-3003

Text:

1: C8 Sulfonate (PFOS)



2: PFOSA



Quantify Sample Report

Page 4

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

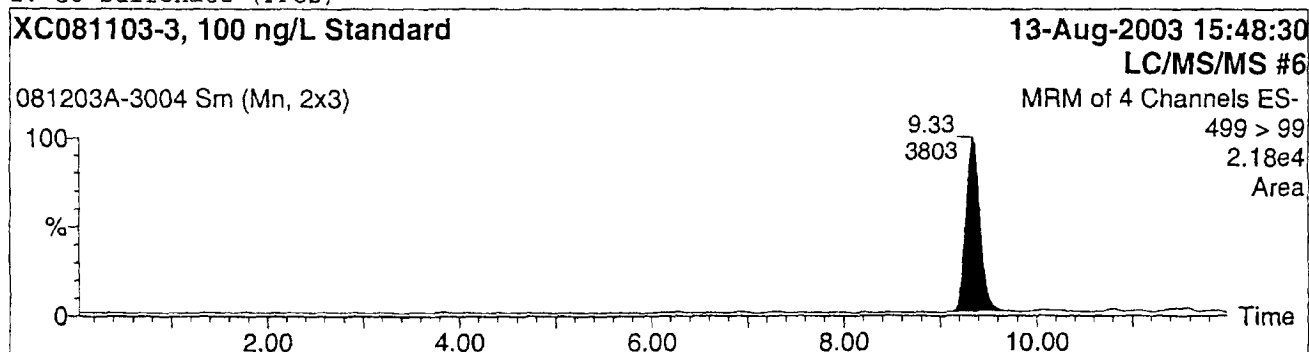
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

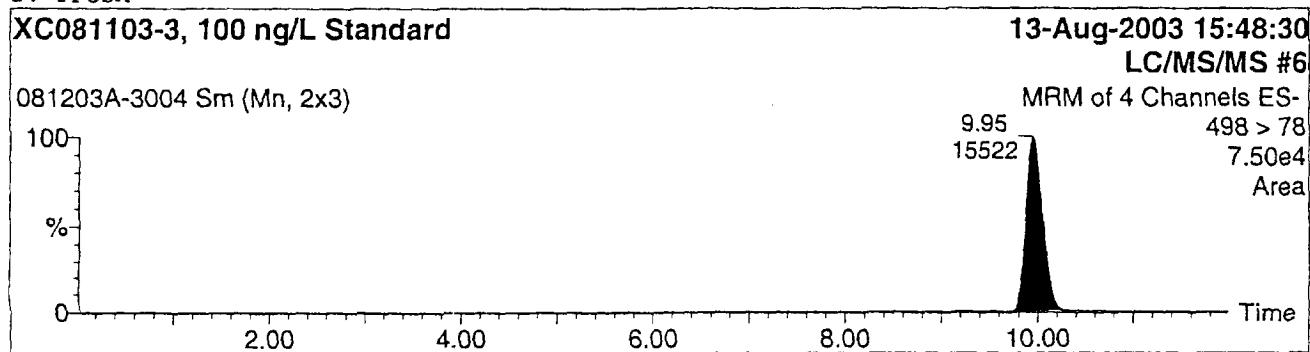
Name: 081203A-3004

Text:

1: C8 Sulfonate (PFOS)



2: PFOSA



Quantify Sample Report

Page 5

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

Name: 081203A-3005

Text:

1: C8 Sulfonate (PFOS)

XC081103-4, 250 ng/L Standard

13-Aug-2003 16:10:15

LC/MS/MS #6

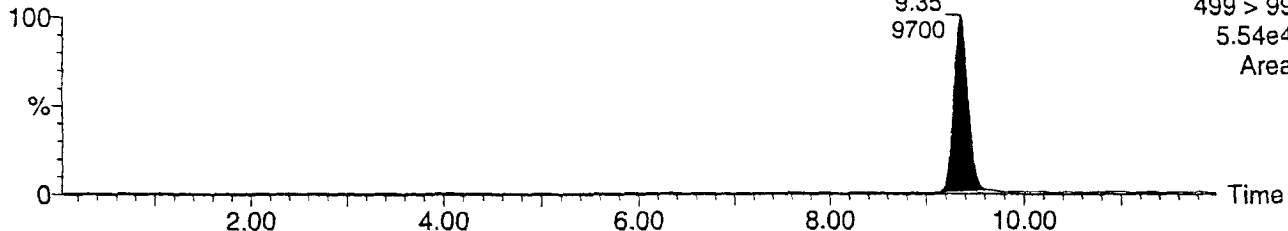
081203A-3005 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

5.54e4

Area



2: PFOSA

XC081103-4, 250 ng/L Standard

13-Aug-2003 16:10:15

LC/MS/MS #6

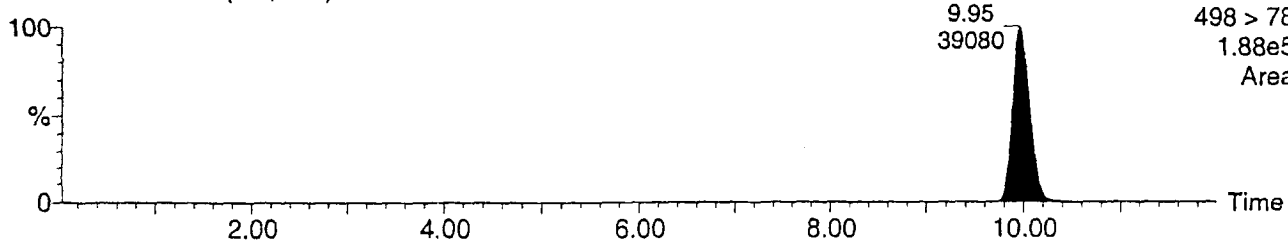
081203A-3005 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

1.88e5

Area



Quantify Sample Report

Page 6

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

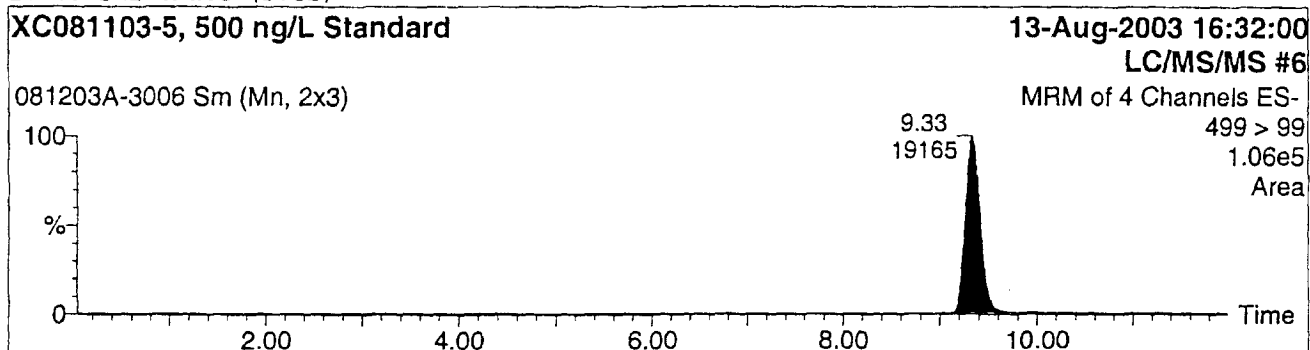
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

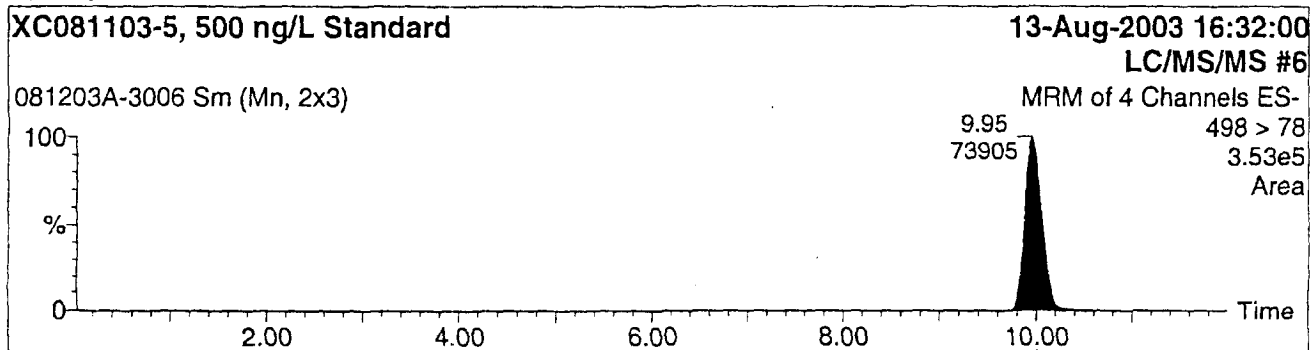
Name: 081203A-3006

Text:

1: C8 Sulfonate (PFOS)



2: PFOSA



Quantify Sample Report

Page 7

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

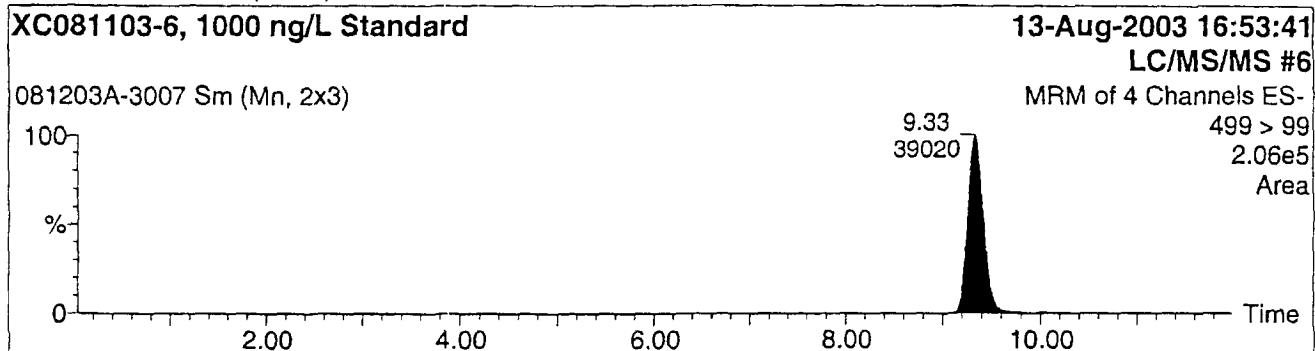
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

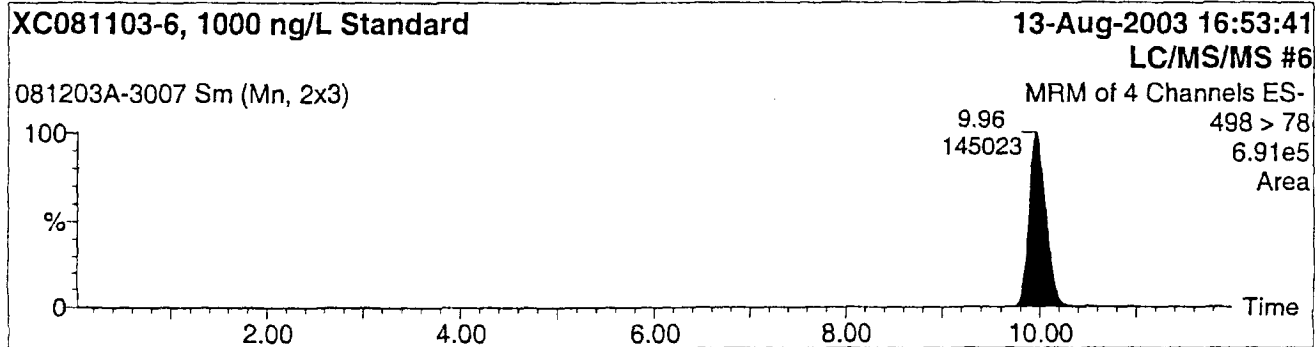
Name: 081203A-3007

Text:

1: C8 Sulfonate (PFOS)



2: PFOSA



Quantify Sample Report

Page 8

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

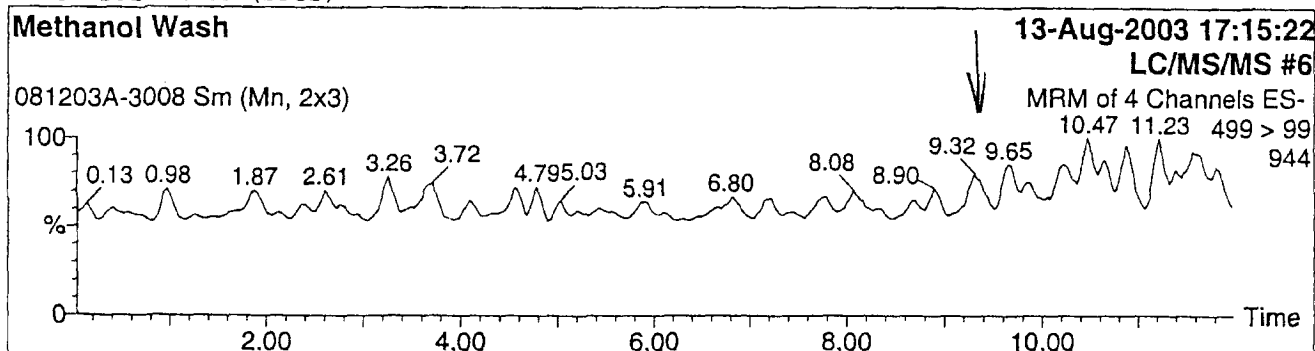
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

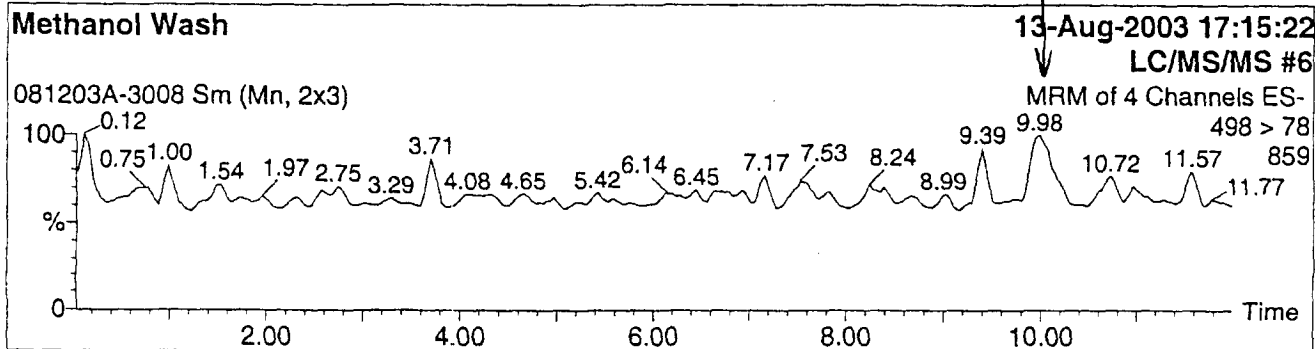
Name: 081203A-3008

Text:

1: C8 Sulfonate (PFOS)



2: PFOSA



Quantify Sample Report

Page 9

Study No.:L34910, Set No.:081203A, Ext.Date:08/12/03, Analyst:K.Risha

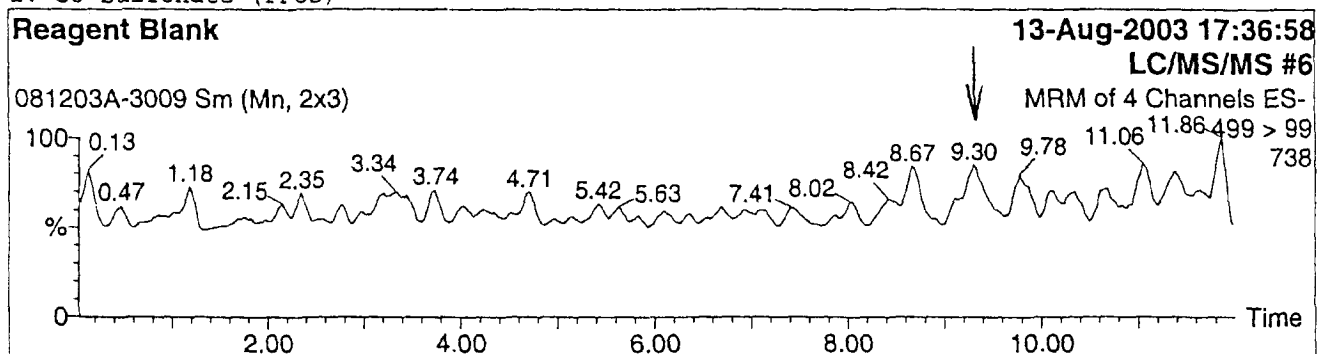
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

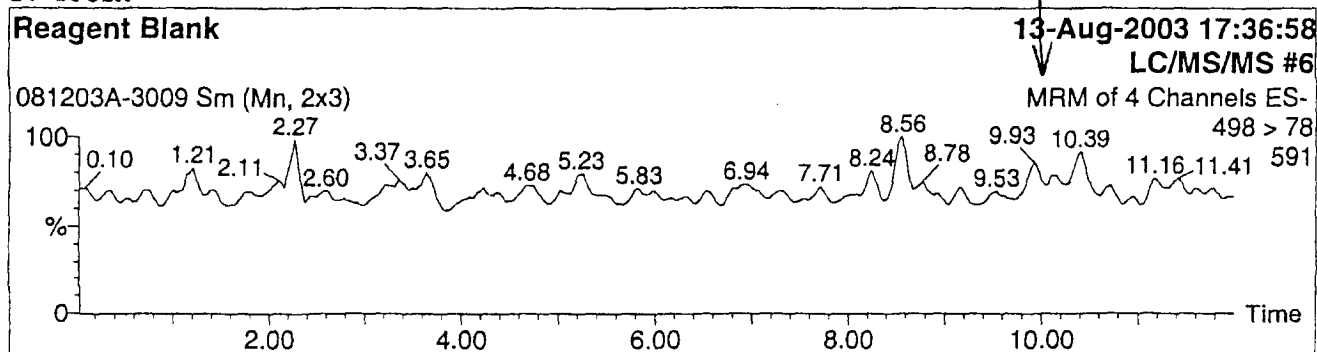
Name: 081203A-3009

Text:

1: C8 Sulfonate (PFOS)



2: PFOSA



Quantify Sample Report

Page 10

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

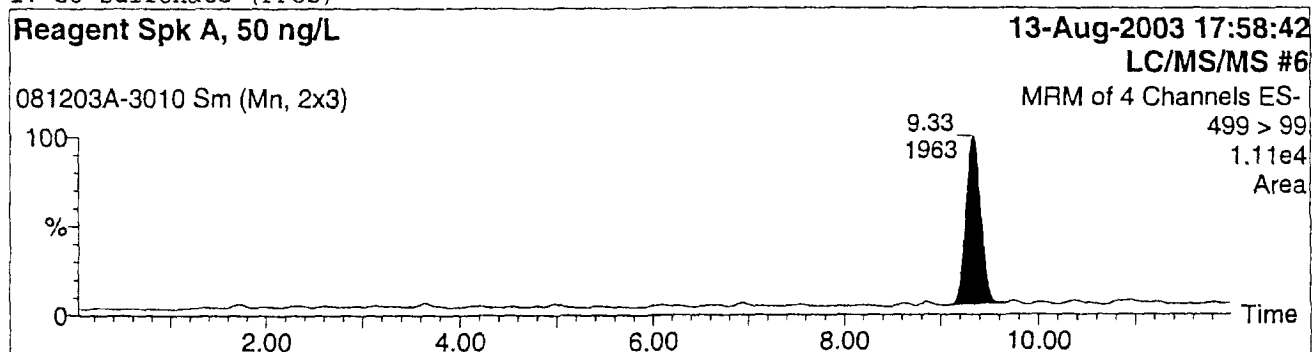
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

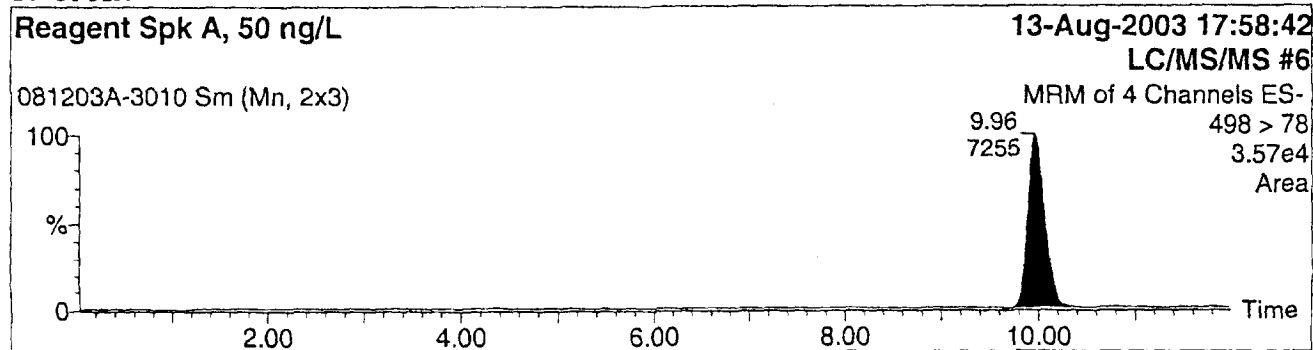
Name: 081203A-3010

Text:

1: C8 Sulfonate (PFOS)



2: PFOSA



Quantify Sample Report

Page 11

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

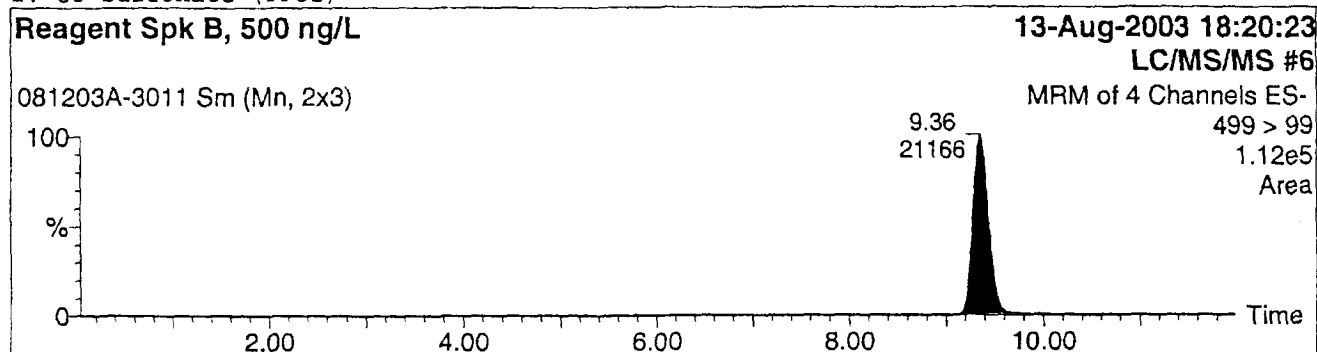
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

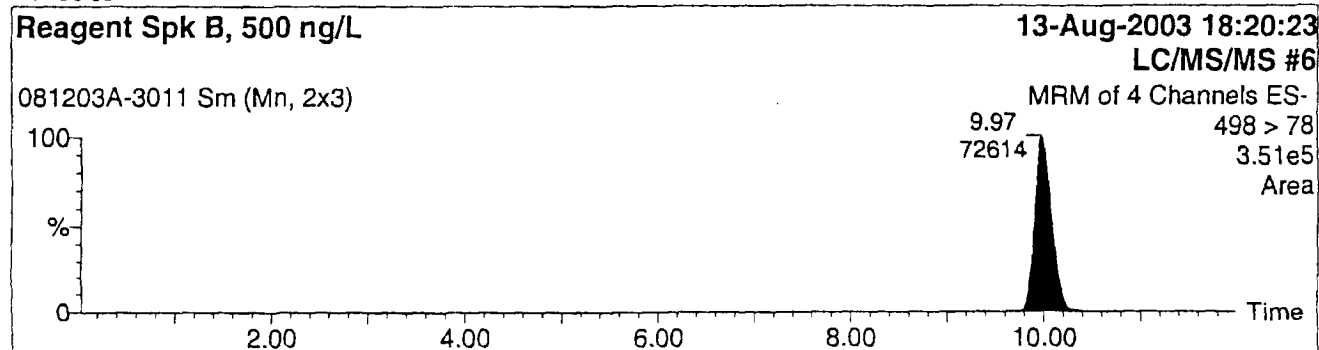
Name: 081203A-3011

Text:

1: C8 Sulfonate (PFOS)



2: PFOSA



Quantify Sample Report

Page 12

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

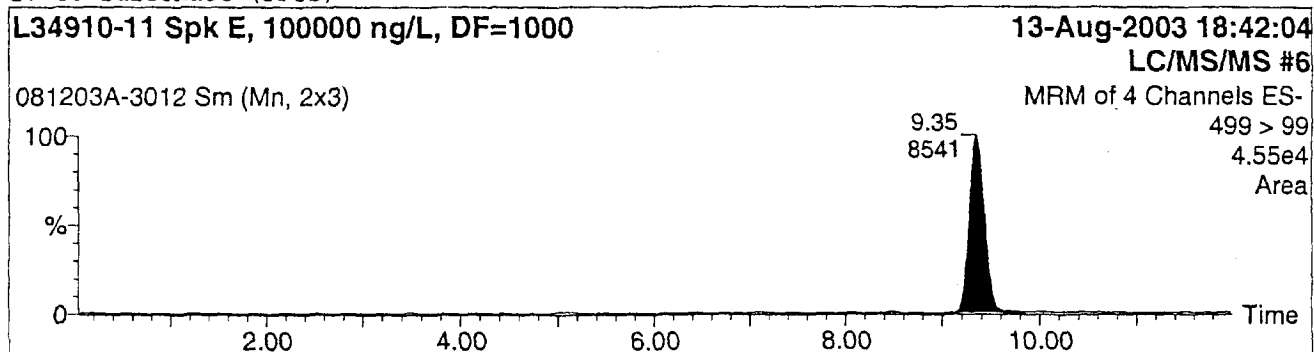
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

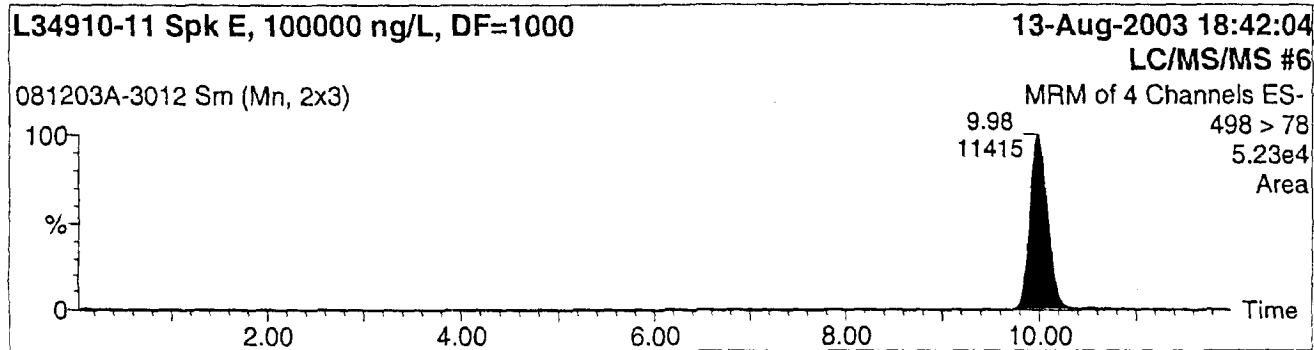
Name: 081203A-3012

Text:

1: C8 Sulfonate (PFOS)



2: PFOSA



Quantify Sample Report

Page 13

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

Name: 081203A-3013

Text:

1: C8 Sulfonate (PFOS)

L34910-11 Spk E, 100000 ng/L, DF=100

13-Aug-2003 19:03:40

LC/MS/MS #6

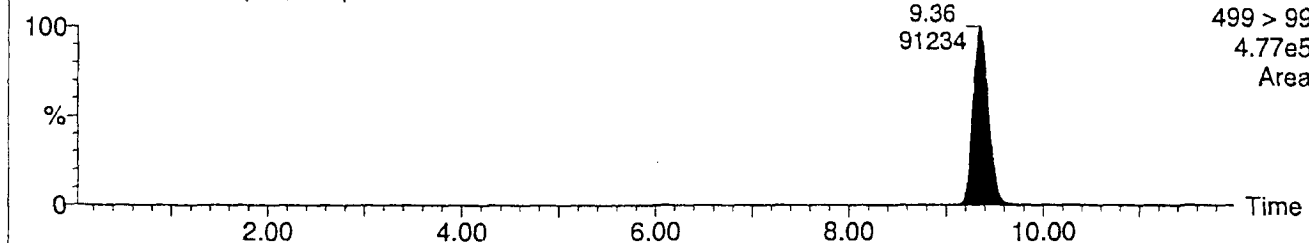
081203A-3013 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

4.77e5

Area



2: PFOSA

L34910-11 Spk E, 100000 ng/L, DF=100

13-Aug-2003 19:03:40

LC/MS/MS #6

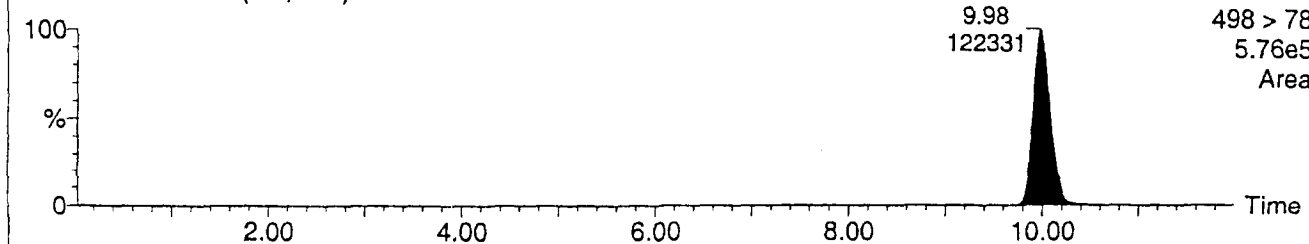
081203A-3013 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

5.76e5

Area



Quantify Sample Report

Page 14

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

Name: 081203A-3014

Text:

1: C8 Sulfonate (PFOS)

XC081103-1, 25 ng/L Standard

13-Aug-2003 19:25:25

LC/MS/MS #6

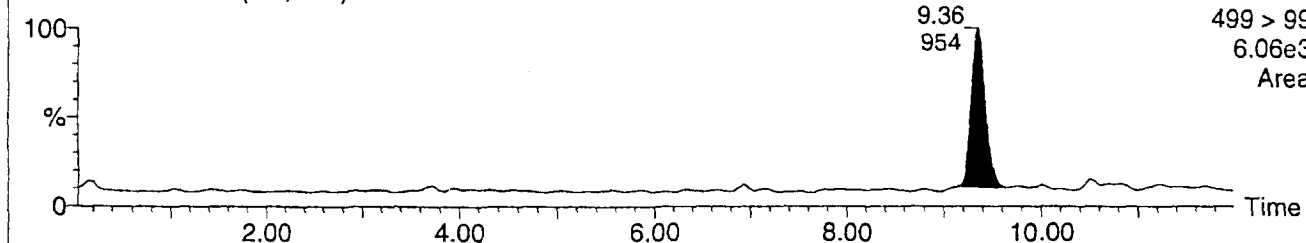
081203A-3014 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

6.06e3

Area



2: PFOSA

XC081103-1, 25 ng/L Standard

13-Aug-2003 19:25:25

LC/MS/MS #6

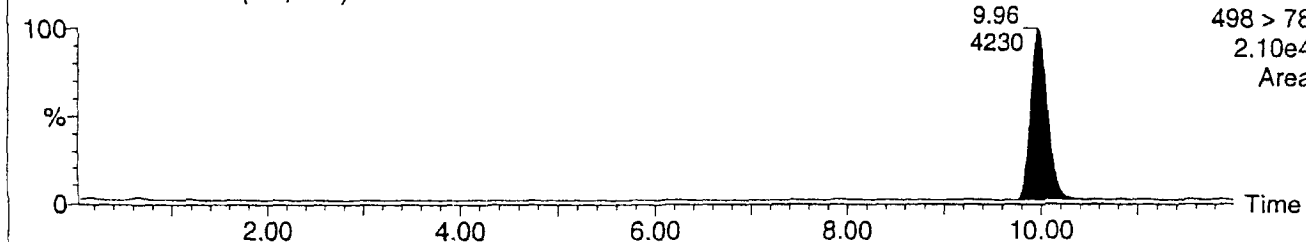
081203A-3014 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

2.10e4

Area



Quantify Sample Report

Page 15

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

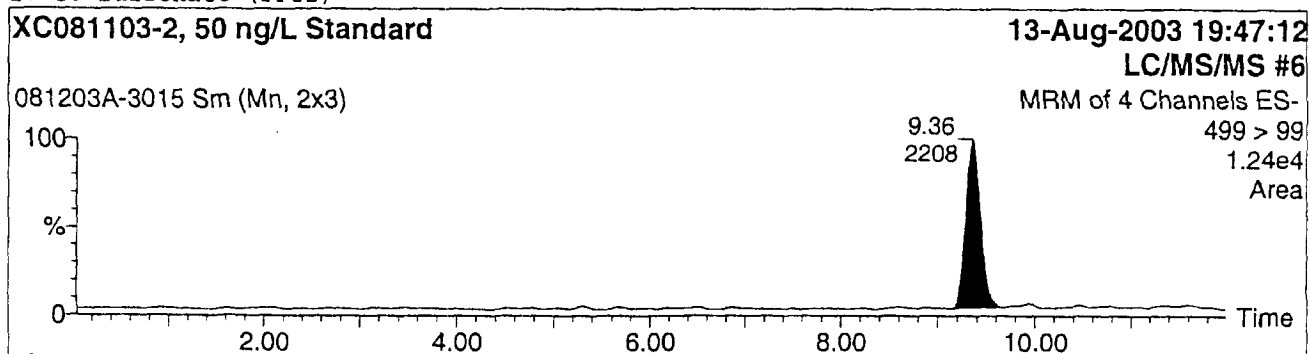
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

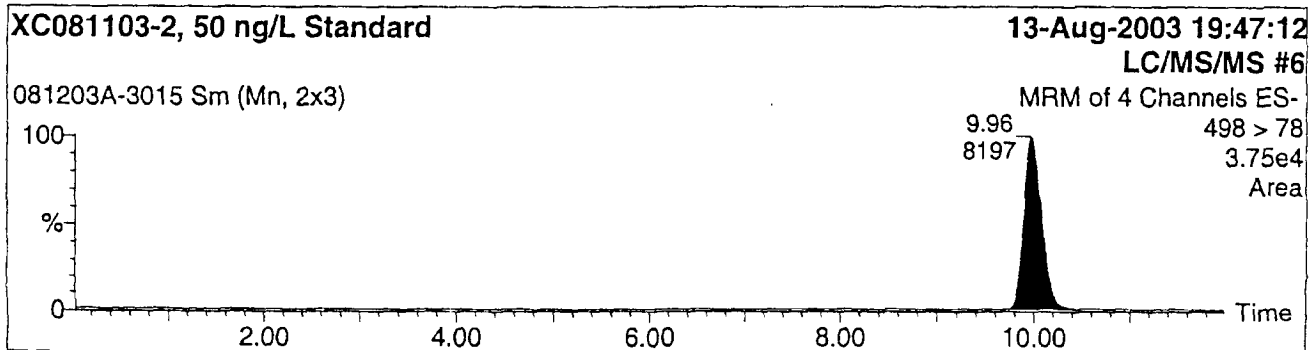
Name: 081203A-3015

Text:

1: C8 Sulfonate (PFOS)



2: PFOSA



Quantify Sample Report

Page 16

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC

Last modified: Mon Aug 18 10:47:09 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103

Last modified: Mon Aug 11 09:49:08 2003

Job Code:

Printed: Mon Aug 18 10:50:26 2003

Name: 081203A-3016

Text:

1: C8 Sulfonate (PFOS)

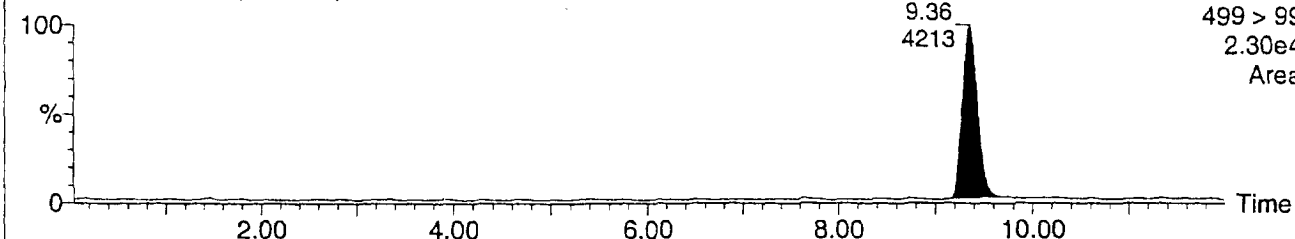
XC081103-3, 100 ng/L Standard

13-Aug-2003 20:08:51

LC/MS/MS #6

081203A-3016 Sm (Mn, 2x3)

MRM of 4 Channels ES-



2: PFOSA

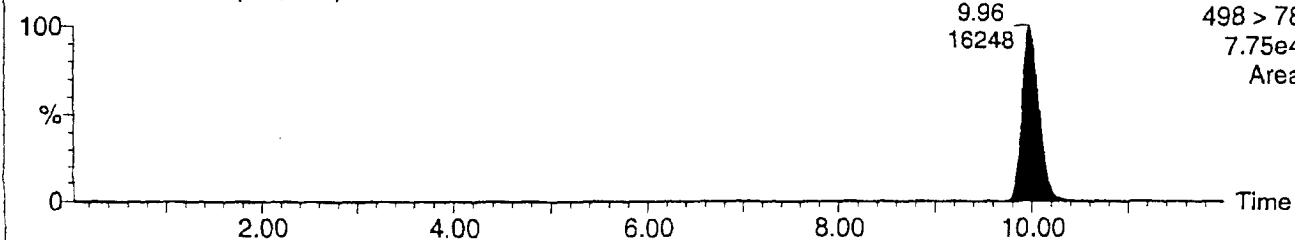
XC081103-3, 100 ng/L Standard

13-Aug-2003 20:08:51

LC/MS/MS #6

081203A-3016 Sm (Mn, 2x3)

MRM of 4 Channels ES-



Quantify Sample Report

Page 17

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC

Last modified: Mon Aug 18 10:47:09 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103

Last modified: Mon Aug 11 09:49:08 2003

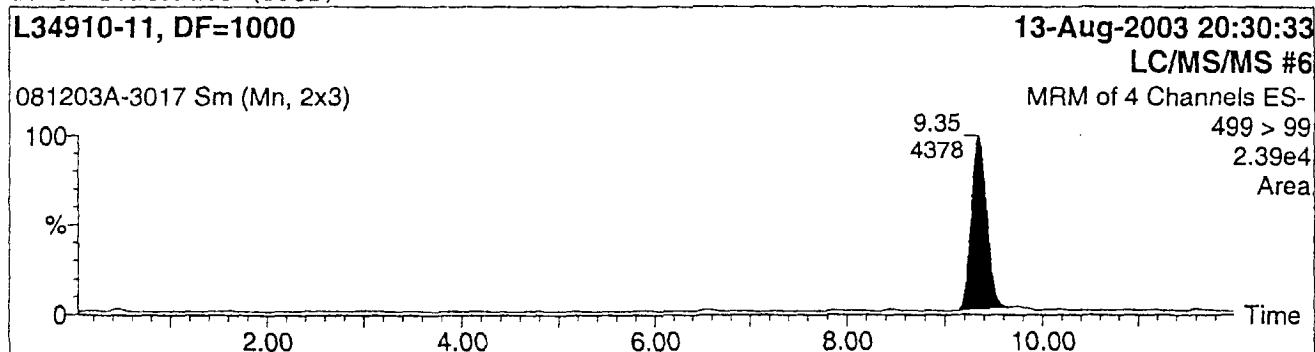
Job Code:

Printed: Mon Aug 18 10:50:26 2003

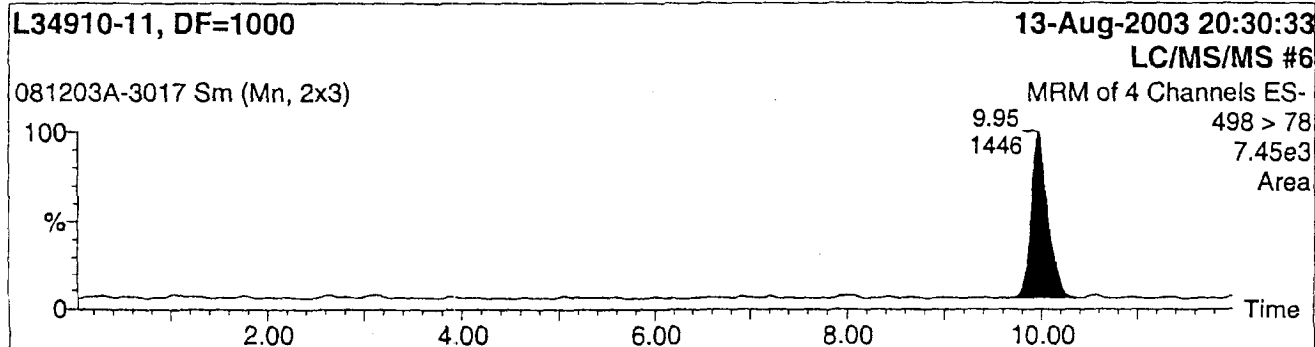
Name: 081203A-3017

Text:

1: C8 Sulfonate (PFOS)



2: PFOSA



Quantify Sample Report

Page 18

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC

Last modified: Mon Aug 18 10:47:09 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103

Last modified: Mon Aug 11 09:49:08 2003

Job Code:

Printed: Mon Aug 18 10:50:26 2003

Name: 081203A-3018

Text:

1: C8 Sulfonate (PFOS)

L34910-11 Rep, DF=1000

13-Aug-2003 20:52:12

LC/MS/MS #6

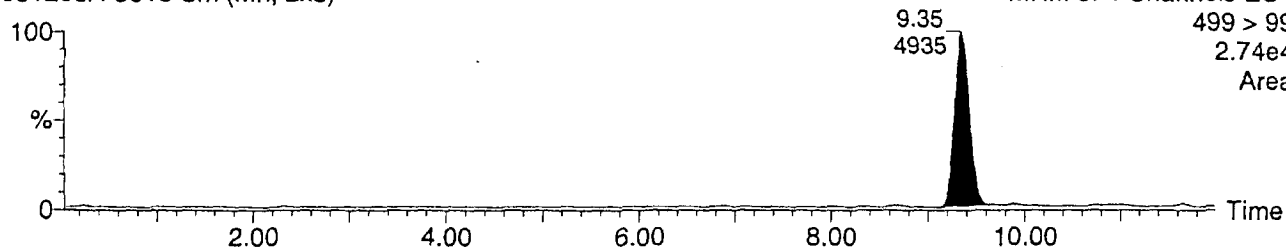
081203A-3018 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.74e4

Area



2: PFOSA

L34910-11 Rep, DF=1000

13-Aug-2003 20:52:12

LC/MS/MS #6

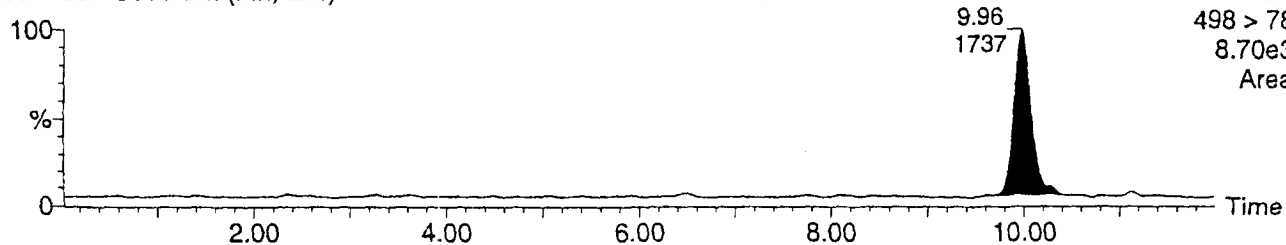
081203A-3018 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

8.70e3

Area



Quantify Sample Report

Page 19

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

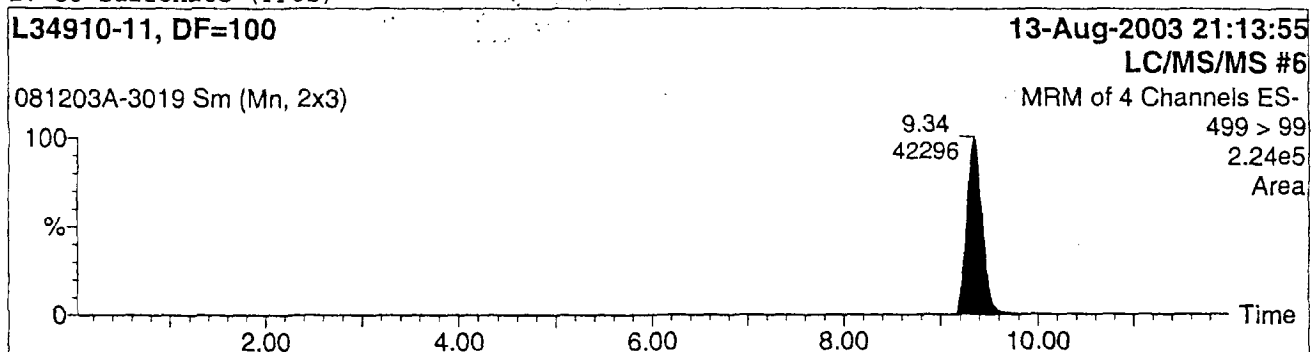
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

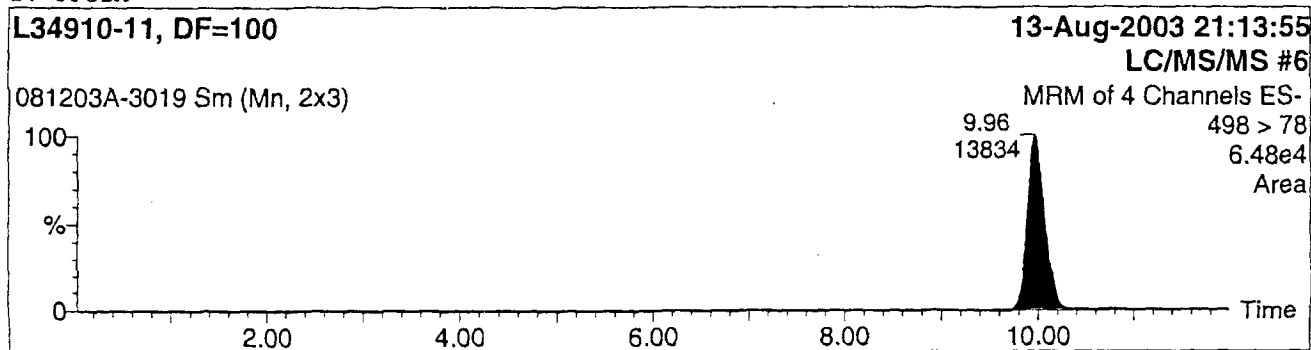
Name: 081203A-3019

Text:

1: C8 Sulfonate (PFOS)



2: PFOSA



Quantify Sample Report

Page 20

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC

Last modified: Mon Aug 18 10:47:09 2003

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103

Last modified: Mon Aug 11 09:49:08 2003

Job Code:

Printed: Mon Aug 18 10:50:26 2003

Name: 081203A-3020

Text:

1: C8 Sulfonate (PFOS)

L34910-11 Rep, DF=100

13-Aug-2003 21:35:42

LC/MS/MS #6

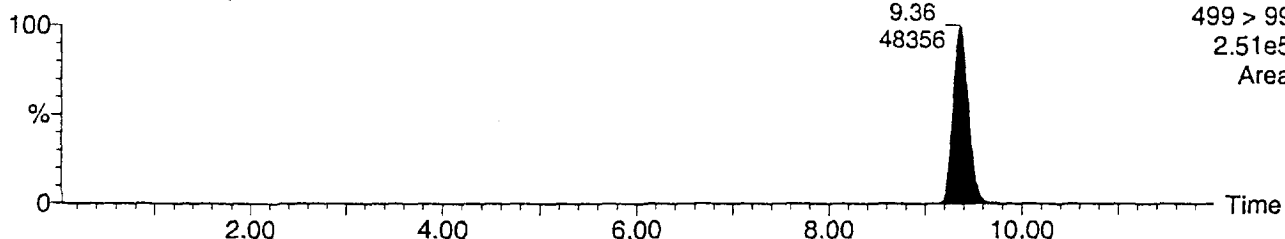
081203A-3020 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.51e5

Area



2: PFOSA

L34910-11 Rep, DF=100

13-Aug-2003 21:35:42

LC/MS/MS #6

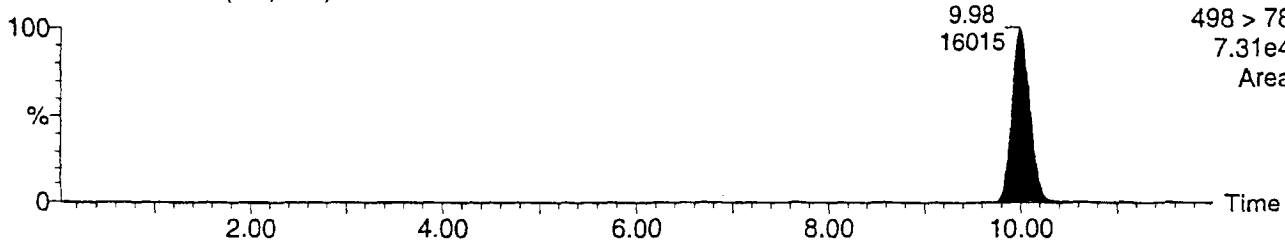
081203A-3020 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

7.31e4

Area



Quantify Sample Report

Page 21

Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

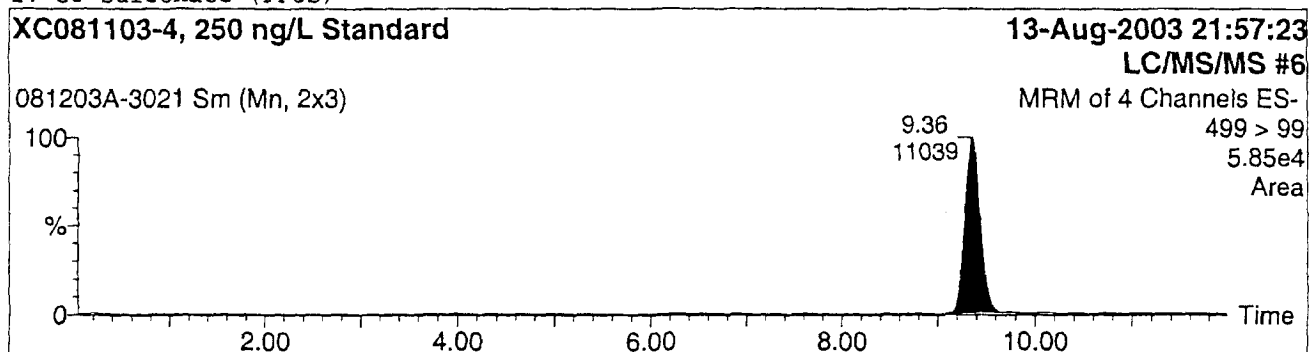
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

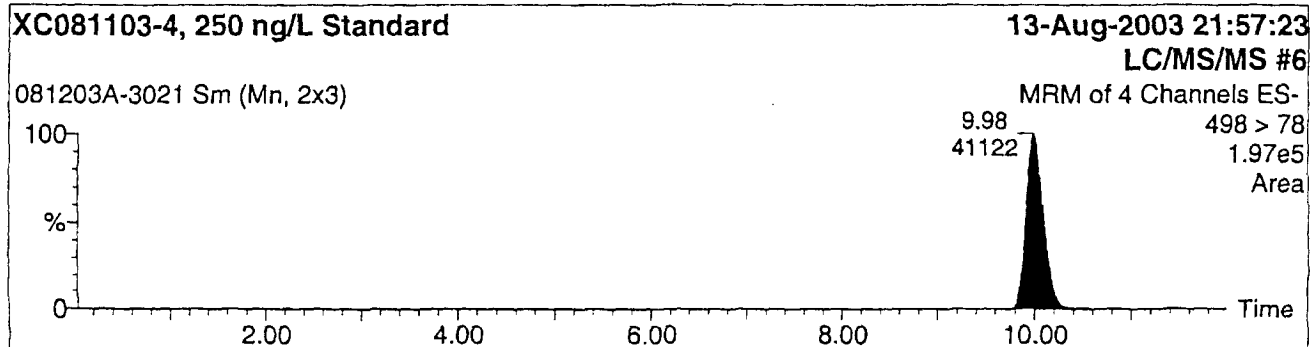
Name: 081203A-3021

Text:

1: C8 Sulfonate (PFOS)



2: PFOSA



Quantify Sample Report

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Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

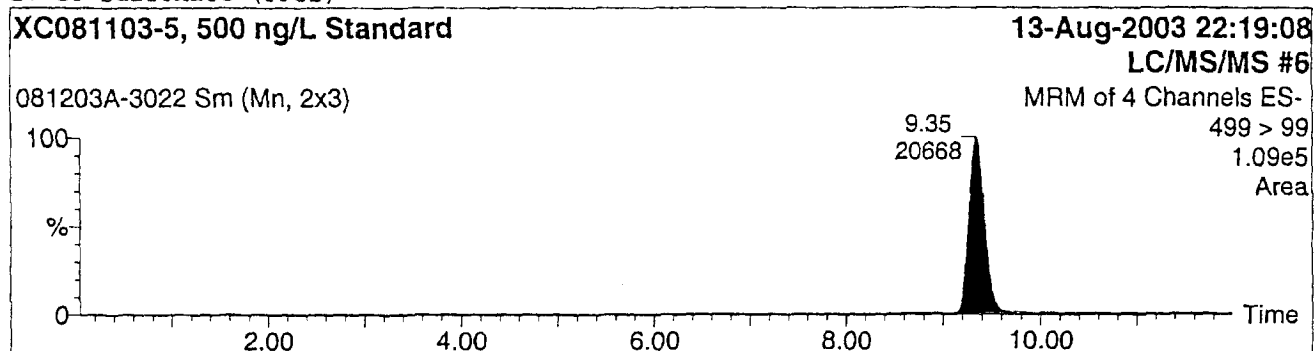
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

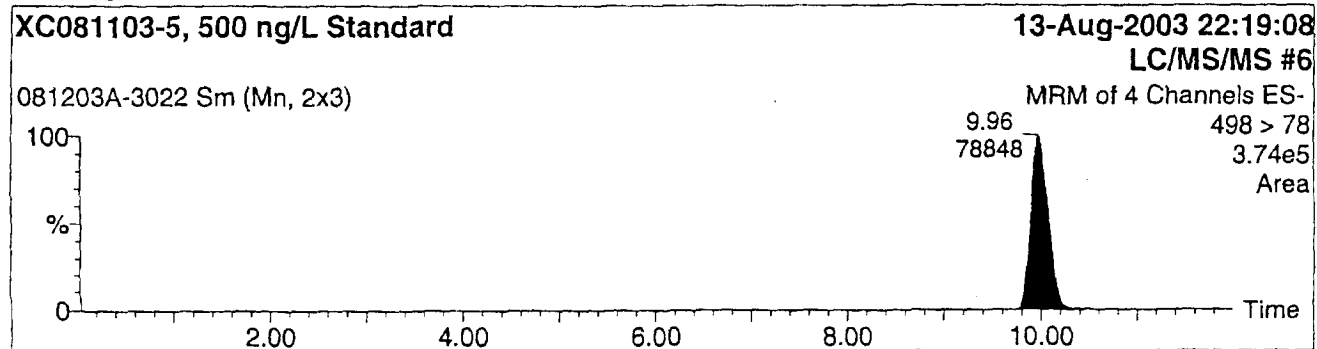
Name: 081203A-3022

Text:

1: C8 Sulfonate (PFOS)



2: PFOSA



Quantify Sample Report

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Study No.: L34910, Set No.: 081203A, Ext. Date: 08/12/03, Analyst: K. Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\081203A Decatur BC
Last modified: Mon Aug 18 10:47:09 2003
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOS and PFOSA 081103
Last modified: Mon Aug 11 09:49:08 2003
Job Code:

Printed: Mon Aug 18 10:50:26 2003

Name: 081203A-3023

Text:

1: C8 Sulfonate (PFOS)

XC081103-6, 1000 ng/L Standard

13-Aug-2003 22:40:47

LC/MS/MS #6

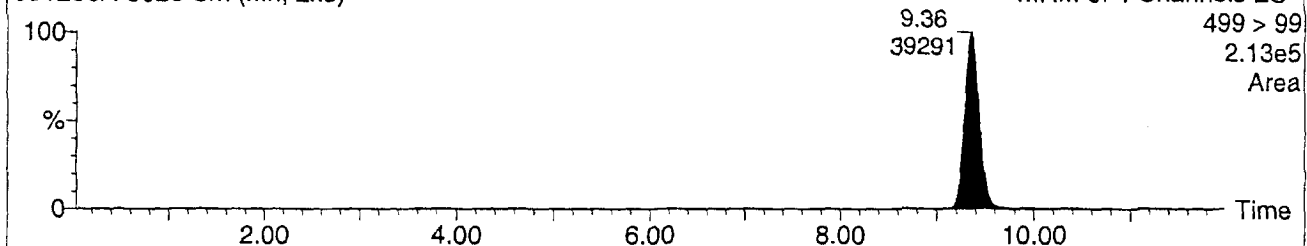
081203A-3023 Sm (Mn, 2x3)

MRM of 4 Channels ES-

499 > 99

2.13e5

Area



2: PFOSA

XC081103-6, 1000 ng/L Standard

13-Aug-2003 22:40:47

LC/MS/MS #6

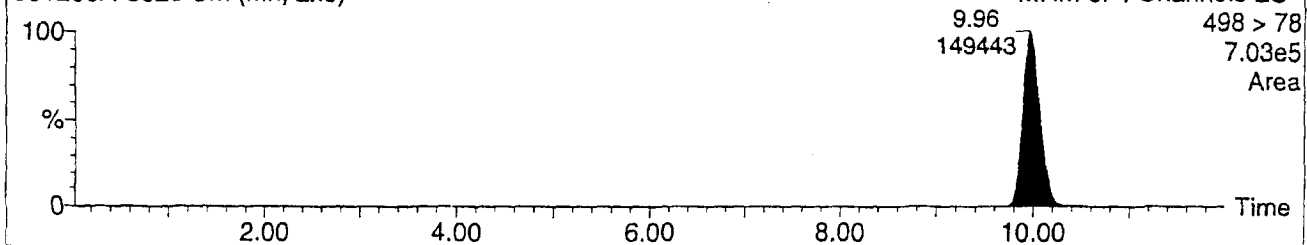
081203A-3023 Sm (Mn, 2x3)

MRM of 4 Channels ES-

498 > 78

7.03e5

Area



9/19/2003

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3M ENVIRONMENTAL LABORATORY Final Report

Project: E03-0561

Requester: Schnobrich, Dana M (223-1N-08)

Department: 530711

Project Number: 0022674449

Date Received: 6/26/2003

Project Description: Decatur Bakers Creek #2 Surface Water and Sediment

Comments:

Completion Date: 9/2/2003

Project Lead: Jess S. Eldridge

Phone Number: 651-778-5233

Email Address: jseldridge@mmm.com

Statement of Accuracy: Based on results of field spikes, laboratory spikes, field blank spikes, and laboratory control spikes, the analytical accuracy for all compounds is $\pm 30\%$. Exceptions for the water samples are as follows: BC2 SW-04 high spike (PFOA - 57%, PFOS - 62%, FOSA - 58%), BC2 SW-05 high spike (PFOA - 66%, FOSA - 40%), BC2 SW-06 high spike (FOSA - 60%), Outfall to River SW-25 (FOSA - 58%). Also, several low spike samples showed unacceptable recoveries in cases where the spiking concentration was comparable or below the inherent sample concentration. However, all laboratory control spikes, laboratory matrix spikes, and all other field spikes showed recoveries between 70% and 130% for all compounds.

The accuracy for the sediment samples is based upon laboratory spike recoveries, all of which were between 70% and 130% for all compounds.

Sediment sample results are reported as received. Results reported as dry weight are available in the Exygen report.

REVISED REPORT: Due to schedule changes, the original sample dates entered were revised to reflect the actual collection dates.
BGJ-Pace-9/19/03

Project Results/Activity

Pace Field Sampling Event - Complete

3M Sample Number	Sampled Date	Sample Description			
E03-0561-49786	7/21/2003	BC2 SW-04			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	PFOS by ESMS	PFOS	11.5 ng/mL	0.05	
EXYGEN	PFHS	PFHS	0.896 ng/mL	0.05	
EXYGEN	FOSA	FOSA	1.39 ng/mL	0.05	
EXYGEN	PFOA	PFOA	4.21 ng/mL	0.05	
E03-0561-49787	9/21/2003	BC2 SW-04 DUP			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	PFOS by ESMS	PFOS	8.25 ng/mL	0.05	
EXYGEN	PFHS	PFHS	0.571 ng/mL	0.05	
EXYGEN	FOSA	FOSA	0.790 ng/mL	0.05	
EXYGEN	PFOA	PFOA	2.54 ng/mL	0.05	
E03-0561-49788	7/23/2003	BC2 SED-04			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	PFOS by ESMS	PFOS	14.6 ng/g	0.4	
EXYGEN	PFHS	PFHS	0.566 ng/g	0.4	
EXYGEN	FOSA	FOSA	7.15 ng/g	0.4	
EXYGEN	PFOA	PFOA	3.02 ng/g	0.4	
E03-0561-49789	7/21/2003	BC2 SW-05			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	PFOS by ESMS	PFOS	1.67 ng/mL	0.05	
EXYGEN	PFHS	PFHS	0.155 ng/mL	0.05	

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3M ENVIRONMENTAL LABORATORY
Final Report

Project: E03-0561 (cont.)

3M Sample Number	Sampled Date	Sample Description			
E03-0561-49789 (cont.)	7/21/2003	BC2 SW-05			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	FOSA	FOSA	0.146 ng/mL	0.05	
EXYGEN	PFOA	PFOA	0.591 ng/mL	0.05	
E03-0561-49790	7/21/2003	BC2 SW-05 DUP			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	PFOS by ESMS	PFOS	4.33 ng/mL	0.05	
EXYGEN	PFHS	PFHS	0.377 ng/mL	0.05	
EXYGEN	FOSA	FOSA	0.389 ng/mL	0.05	
EXYGEN	PFOA	PFOA	1.56 ng/mL	0.05	
E03-0561-49791	7/21/2003	BC2 SED-05			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	PFOS by ESMS	PFOS	22.8 ng/g	0.4	
EXYGEN	PFHS	PFHS	1.45 ng/g	0.4	
EXYGEN	FOSA	FOSA	7.86 ng/g	0.4	
EXYGEN	PFOA	PFOA	5.14 ng/g	0.4	
E03-0561-49792	7/23/2003	BC2 SW-06			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	PFOS by ESMS	PFOS	26.1 ng/mL	0.05	
EXYGEN	PFHS	PFHS	6.06 ng/mL	0.05	
EXYGEN	FOSA	FOSA	2.43 ng/mL	0.05	
EXYGEN	PFOA	PFOA	12.1 ng/mL	0.05	
E03-0561-49793	7/23/2003	BC2 SW-06 DUP			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	PFOS by ESMS	PFOS	25.1 ng/mL	0.05	
EXYGEN	PFHS	PFHS	5.87 ng/mL	0.05	
EXYGEN	FOSA	FOSA	2.57 ng/mL	0.05	
EXYGEN	PFOA	PFOA	11.6 ng/mL	0.05	
E03-0561-49794	7/23/2003	BC2 SED-06			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	PFOS by ESMS	PFOS	880 ng/g	0.4	
EXYGEN	PFHS	PFHS	2.46 ng/g	0.4	
EXYGEN	FOSA	FOSA	71.4 ng/g	0.4	
EXYGEN	PFOA	PFOA	14.2 ng/g	0.4	
E03-0561-49795	7/23/2003	Outfall to River SW-25			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	PFOS by ESMS	PFOS	31.2 ng/mL	0.05	
EXYGEN	PFHS	PFHS	7.66 ng/mL	0.05	
EXYGEN	FOSA	FOSA	3.26 ng/mL	0.05	
EXYGEN	PFOA	PFOA	15.8 ng/mL	0.05	
E03-0561-49796	7/23/2003	Outfall to River SW-25 DUP			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	PFOS by ESMS	PFOS	30.8 ng/mL	0.05	
EXYGEN	PFHS	PFHS	6.77 ng/mL	0.05	
EXYGEN	FOSA	FOSA	3.28 ng/mL	0.05	

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3M ENVIRONMENTAL LABORATORY
Final Report

Project: E03-0561 (cont.)

3M Sample Number	Sampled Date	Sample Description			
E03-0561-49796 (cont.)	7/23/2003	Outfall to River SW-25 DUP			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	PFOA	PFOA	14.4 ng/mL	0.05	
E03-0561-49797	7/23/2003	Outfall To River SED-25			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	PFOS by ESMS	PFOS	107 ng/g	0.4	
EXYGEN	PFHS	PFHS	3.19 ng/g	0.4	
EXYGEN	FOSA	FOSA	28.0 ng/g	0.4	
EXYGEN	PFOA	PFOA	10.7 ng/g	0.4	
E03-0561-49813	7/23/2003	Outfall to River SED-25 DUP			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	PFOS by ESMS	PFOS	140 ng/g	0.4	
EXYGEN	PFHS	PFHS	4.98 ng/g	0.4	
EXYGEN	FOSA	FOSA	35.7 ng/g	0.4	
EXYGEN	PFOA	PFOA	17.7 ng/g	0.4	
E03-0561-59479	7/21/2003	Field Control/Travel Blank			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	PFOS by ESMS	PFOS	ND ng/mL	0.05	
EXYGEN	PFHS	PFHS	ND ng/mL	0.05	
EXYGEN	FOSA	FOSA	ND ng/mL	0.05	
EXYGEN	PFOA	PFOA	ND ng/mL	0.05	
E03-0561-59480	7/21/2003	Equipment Blank - Pump			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	PFOS by ESMS	PFOS	ND ng/mL	0.05	
EXYGEN	PFHS	PFHS	ND ng/mL	0.05	
EXYGEN	FOSA	FOSA	ND ng/mL	0.05	
EXYGEN	PFOA	PFOA	ND ng/mL	0.05	
E03-0561-59481	7/21/2003	Equipment Blank - Dredge			
LAB	Analytical Method	Components	Result	RL	Qualifier
EXYGEN	PFOS by ESMS	PFOS	ND ng/mL	0.05	
EXYGEN	PFHS	PFHS	ND ng/mL	0.05	
EXYGEN	FOSA	FOSA	ND ng/mL	0.05	
EXYGEN	PFOA	PFOA	ND ng/mL	0.05	

Project Lead Review:

TSE/rms

Date:

9/19/03