



FINAL LAB REPORT

SGPP - McCaffrey

31800096

29-Jan-2018

Prepared by

SGS NORTH AMERICA

Prepared for

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Sample Summary

| <u>Client Sample ID</u> | <u>Lab Sample ID</u> | <u>Collected</u> | <u>Received</u> | <u>Matrix</u> |
|--------------------------|----------------------|------------------|------------------|----------------|
| SG1 - Influent - 180118 | 31800096001 | 01/18/2018 09:45 | 01/20/2018 11:20 | Drinking Water |
| SG1 - Midfluent - 180118 | 31800096002 | 01/18/2018 09:50 | 01/20/2018 11:20 | Drinking Water |
| SG1 - Effluent - 180118 | 31800096005 | 01/18/2018 10:00 | 01/20/2018 11:20 | Drinking Water |
| SG1 - FD01 - 180118 | 31800096006 | 01/18/2018 00:00 | 01/20/2018 11:20 | Drinking Water |
| SG1 - FTB01 - 180118 | 31800096007 | 01/18/2018 10:35 | 01/20/2018 11:20 | Drinking Water |
| SG1 - LTB01 - 180118 | 31800096008 | 01/18/2018 00:00 | 01/20/2018 11:20 | Drinking Water |

Case Narrative

Samples were received on January 20, 2018 via Fed Ex in good condition with a temperature of 3.5 °C. The collection times on the containers and COC for sample IDs SG1-FD01-180118 and SG1-LTB-180118 were missing. The samples were analysed for GenX via modified EPA method 537.1.

Surrogate recoveries were marginally below control limits for all samples and QC except for sample IDs SG1-Midfluent-180118 and SG1-FTB01-180118. The original prep batch for all samples had low recovery of 13C-GenX in the LCS. The entire batch was re-prepped and re-analyzed with LCS recovery of 13C-GenX at 69.5%.

lab QC (MB, LCS, MS and MSD) met all remaining established criteria.

Instrument QC (ICAL and CCVs) met all established criteria.

Laboratory Qualifiers

Report Definitions

| | |
|--------|--|
| DL | Method, Instrument, or Estimated Detection Limit per Analytical Method |
| CL | Control Limits for the recovery result of a parameter |
| LOQ | Reporting Limit |
| DF | Dilution Factor |
| RPD | Relative Percent Difference |
| LCS(D) | Laboratory Control Spike (Duplicate) |
| MS(D) | Matrix Spike (Duplicate) |
| MB | Method Blank |

Qualifier Definitions

| | |
|-----|---|
| * | Recovery or RPD outside of control limits |
| B | Analyte was detected in the Lab Method Blank at a level above the LOQ |
| U | Undetected (Reported as ND or < DL) |
| J | Estimated Concentration. |
| E | Amount detected is greater than the Upper Calibration Limit |
| TIC | Tentatively Identified Compound |
| ND | Not Detected |
| P | RPD > 40% between results of dual columns |
| D | Spike or surrogate was diluted out in order to achieve a parameter result within instrument calibration range |

Samples requiring manual integrations for various congeners and/or standards are marked and dated by the analyst. A code definition is provided below:

| | |
|----|--|
| M1 | Mis-identified peak |
| M2 | Software did not integrate peak |
| M3 | Incorrect baseline construction (i.e. not all of peak included; two peaks integrated as one) |
| M4 | Pattern integration required (i.e. DRO, GRO, PCB, Toxaphene and Technical Chlordane) |
| M5 | Other - Explained in case narrative |

Note Results pages that include a value for "Solids (%)" have been adjusted for moisture content.

Parameter Cross Reference

SURROGATE

| <u>PARAMETER</u> | <u>CASNO</u> | <u>FULL_NAME</u> |
|------------------|--------------|---|
| 13C-GenX | 13CGENX | 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3,heptafluoropropoxyC13)propanoic acid |

REGULAR

| <u>PARAMETER</u> | <u>CASNO</u> | <u>FULL_NAME</u> |
|------------------|--------------|--|
| HFPO-DA (GenX) | 13252-13-6 | 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoic acid |



SGS CERTIFICATIONS

| | |
|---|-------------------|
| Arkansas | 88-0682 |
| California (ELAP) | ELAP Cert #2914 |
| CLIA | 34D1013708 |
| Connecticut | PH-0258 |
| USDA Soil Permit | P330-17-00055 |
| DoD | 2726.01 |
| Florida (Primary NELAP) | E87634 |
| ISO 17025/IEC | 2726.01 |
| Louisiana DEQ | 4115 |
| Louisiana DOH | LA170030 |
| Maine | 2016028 |
| Massachusetts | M-NC919 |
| Minnesota (Primary NELAP For Method 23) | 1179213 |
| Mississippi | Reciprocity |
| Nebraska | NE-OS-33-17 |
| New Hampshire | 208317 |
| New Jersey | NC100 |
| New York | 11685 |
| North Carolina DEQ | 481 |
| North Dakota | R-197 |
| Oregon | NC200002 |
| Pennsylvania | 68-03675 |
| South Carolina | 99029002 |
| Texas | T104704260 |
| US Coast Guard | 16714/159.317/SGS |
| Virginia | 8914 |
| Washington | C913 |
| West Virginia | 293 |

Rev. 04-Aug-2017

Detectable Results Summary

*** No Detectable Results ***

GenX

Sample Data

Results of SG1 - Influent - 180118

Client Sample ID: **SG1 - Influent - 180118**
 Client Project ID: **SGPP - McCaffrey**
 Lab Sample ID: 31800096001-A
 Lab Project ID: 31800096

Collection Date: 01/18/2018 09:45
 Received Date: 01/20/2018 11:20
 Matrix: Drinking Water
 Solids (%):

Results by GenX

| <u>Parameter</u> | <u>Result</u> | <u>Qual</u> | <u>LOQ/CL</u> | <u>Units</u> | <u>DF</u> | <u>Date Analyzed</u> |
|-------------------|---------------|-------------|---------------|--------------|-----------|----------------------|
| HFPO-DA (GenX) | ND | | 10.2 | ng/L | 1 | 01/25/2018 22:37 |
| Surrogates | | | | | | |
| 13C-GenX | 62.4* | | 70.0-130 | % | 1 | 01/25/2018 22:37 |

Batch Information

Analytical Batch: **XLC1132**
 Analytical Method: **GenX**
 Instrument: **TQS1**
 Analyst: **ADM**

Prep Batch: **HXX2108**
 Prep Method: **GenX Prep**
 Prep Date/Time: **01/24/2018 09:17**
 Prep Initial Wt./Vol.: **244.09 mL**
 Prep Extract Vol: **1 mL**

Results of SG1 - Midfluent - 180118

Client Sample ID: **SG1 - Midfluent - 180118**
 Client Project ID: **SGPP - McCaffrey**
 Lab Sample ID: 31800096002-A
 Lab Project ID: 31800096

Collection Date: 01/18/2018 09:50
 Received Date: 01/20/2018 11:20
 Matrix: Drinking Water
 Solids (%):

Results by GenX

| <u>Parameter</u> | <u>Result</u> | <u>Qual</u> | <u>LOQ/CL</u> | <u>Units</u> | <u>DF</u> | <u>Date Analyzed</u> |
|-------------------|---------------|-------------|---------------|--------------|-----------|----------------------|
| HFPO-DA (GenX) | ND | | 9.65 | ng/L | 1 | 01/25/2018 23:07 |
| Surrogates | | | | | | |
| 13C-GenX | 74.2 | | 70.0-130 | % | 1 | 01/25/2018 23:07 |

Batch Information

Analytical Batch: **XLC1132**
 Analytical Method: **GenX**
 Instrument: **TQS1**
 Analyst: **ADM**

Prep Batch: **HXX2108**
 Prep Method: **GenX Prep**
 Prep Date/Time: **01/24/2018 09:17**
 Prep Initial Wt./Vol.: **259.14 mL**
 Prep Extract Vol: **1 mL**



Results of **SG1 - Effluent - 180118**

Client Sample ID: **SG1 - Effluent - 180118**
Client Project ID: **SGPP - McCaffrey**
Lab Sample ID: 31800096005-A
Lab Project ID: 31800096

Collection Date: 01/18/2018 10:00
Received Date: 01/20/2018 11:20
Matrix: Drinking Water
Solids (%):

Results by **GenX**

| <u>Parameter</u> | <u>Result</u> | <u>Qual</u> | <u>LOQ/CL</u> | <u>Units</u> | <u>DF</u> | <u>Date Analyzed</u> |
|-------------------|---------------|-------------|---------------|--------------|-----------|----------------------|
| HFPO-DA (GenX) | ND | | 9.74 | ng/L | 1 | 01/26/2018 0:39 |
| Surrogates | | | | | | |
| 13C-GenX | 67.3* | | 70.0-130 | % | 1 | 01/26/2018 0:39 |

Batch Information

Analytical Batch: **XLC1132**
Analytical Method: **GenX**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2108**
Prep Method: **GenX Prep**
Prep Date/Time: **01/24/2018 09:17**
Prep Initial Wt./Vol.: **256.69 mL**
Prep Extract Vol: **1 mL**

Results of SG1 - FD01 - 180118

Client Sample ID: **SG1 - FD01 - 180118**
 Client Project ID: **SGPP - McCaffrey**
 Lab Sample ID: 31800096006-A
 Lab Project ID: 31800096

Collection Date: 01/18/2018 00:00
 Received Date: 01/20/2018 11:20
 Matrix: Drinking Water
 Solids (%):

Results by GenX

| <u>Parameter</u> | <u>Result</u> | <u>Qual</u> | <u>LOQ/CL</u> | <u>Units</u> | <u>DF</u> | <u>Date Analyzed</u> |
|------------------|---------------|-------------|---------------|--------------|-----------|----------------------|
| HFPO-DA (GenX) | ND | | 9.64 | ng/L | 1 | 01/26/2018 1:10 |

Surrogates

| | | | | | | |
|----------|-------|--|----------|---|---|-----------------|
| 13C-GenX | 65.8* | | 70.0-130 | % | 1 | 01/26/2018 1:10 |
|----------|-------|--|----------|---|---|-----------------|

Batch Information

Analytical Batch: **XLC1132**
 Analytical Method: **GenX**
 Instrument: **TQS1**
 Analyst: **ADM**

Prep Batch: **HXX2108**
 Prep Method: **GenX Prep**
 Prep Date/Time: **01/24/2018 09:17**
 Prep Initial Wt./Vol.: **259.38 mL**
 Prep Extract Vol: **1 mL**



Results of SG1 - FTB01 - 180118

Client Sample ID: **SG1 - FTB01 - 180118**
Client Project ID: **SGPP - McCaffrey**
Lab Sample ID: 31800096007-A
Lab Project ID: 31800096

Collection Date: 01/18/2018 10:35
Received Date: 01/20/2018 11:20
Matrix: Drinking Water
Solids (%):

Results by GenX

| <u>Parameter</u> | <u>Result</u> | <u>Qual</u> | <u>LOQ/CL</u> | <u>Units</u> | <u>DF</u> | <u>Date Analyzed</u> |
|-------------------|---------------|-------------|---------------|--------------|-----------|----------------------|
| HFPO-DA (GenX) | ND | | 9.48 | ng/L | 1 | 01/26/2018 1:41 |
| Surrogates | | | | | | |
| 13C-GenX | 78.0 | | 70.0-130 | % | 1 | 01/26/2018 1:41 |

Batch Information

Analytical Batch: **XLC1132**
Analytical Method: **GenX**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2108**
Prep Method: **GenX Prep**
Prep Date/Time: **01/24/2018 09:17**
Prep Initial Wt./Vol.: **263.61 mL**
Prep Extract Vol: **1 mL**



Results of SG1 - LTB01 - 180118

Client Sample ID: **SG1 - LTB01 - 180118**
Client Project ID: **SGPP - McCaffrey**
Lab Sample ID: 31800096008-A
Lab Project ID: 31800096

Collection Date: 01/18/2018 00:00
Received Date: 01/20/2018 11:20
Matrix: Drinking Water
Solids (%):

Results by GenX

| <u>Parameter</u> | <u>Result</u> | <u>Qual</u> | <u>LOQ/CL</u> | <u>Units</u> | <u>DF</u> | <u>Date Analyzed</u> |
|------------------|---------------|-------------|---------------|--------------|-----------|----------------------|
| HFPO-DA (GenX) | ND | | 9.96 | ng/L | 1 | 01/26/2018 2:12 |

Surrogates

| | | | | | | |
|----------|-------|--|----------|---|---|-----------------|
| 13C-GenX | 66.2* | | 70.0-130 | % | 1 | 01/26/2018 2:12 |
|----------|-------|--|----------|---|---|-----------------|

Batch Information

Analytical Batch: **XLC1132**
Analytical Method: **GenX**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2108**
Prep Method: **GenX Prep**
Prep Date/Time: **01/24/2018 09:17**
Prep Initial Wt./Vol.: **251.14 mL**
Prep Extract Vol: **1 mL**



CHAIN OF CUSTODY | TRACE & SHALE

31800096

PROJECT INFO:

PROJECT: *SGPP - McCaffrey*

PO #: *14,4756*

QUOTE #:

SITE REF:

TURN AROUND TIME: *5 Days*

REPORT LEVEL: (see reverse) Level I Level II Level IV

SPECIAL DELIVERABLES: State of Origin:

EDD: *EQUS*

DoD:

Other:

SEND DOCUMENTATION / RESULTS TO:

COMPANY: *CT M&K Associates*

CONTACT: *Kirk Mahne*

ADDRESS: *50 Century Hill Dr, Latham, NY 12110*

PHONE: *518-786-7400*

EMAIL: *K.mahne@ctm&k.com*

INVOICE TO: (CHECK IF SAME)

COMPANY: CONTACT:

ADDRESS:

PHONE:

EMAIL:

SPECIAL INSTRUCTIONS / COMMENTS:

| PRESERVATIVE | | | | | | | | | | | |
|-------------------|--|--|--|--|--|--|--|--|--|--|--|
| Trizma | | | | | | | | | | | |
| ANALYSIS & METHOD | | | | | | | | | | | |
| GENX | | | | | | | | | | | |

| LAB ID | SAMPLE ID / DESCRIPTION | DATE | TIME | QC | | | TYPE (C, G) | MATRIX | CONT. QTY | GENX | REMARKS |
|--------|--------------------------------|----------------|-------------|----------|----------|-----|----------------|------------|--------------|----------|--------------------|
| | | | | MS | MSD | DUP | | | | | |
| | <i>SG1 - Inflow - 180118</i> | <i>1/18/18</i> | <i>0945</i> | | | | <i>G</i> | <i>EDW</i> | <i>2</i> | <i>X</i> | |
| | <i>SG2 - Midflow - 180118</i> | <i>1/18/18</i> | <i>0950</i> | <i>X</i> | <i>X</i> | | <i>G</i> | <i>DW</i> | <i>6</i> | <i>X</i> | |
| | <i>SG1 - Effluent - 180118</i> | <i>1/18/18</i> | <i>1000</i> | | | | <i>G</i> | <i>DW</i> | <i>2</i> | <i>X</i> | |
| | <i>SG1 - FDO1 - 180718</i> | <i>1/18/18</i> | <i>-</i> | | | | <i>G</i> | <i>DW</i> | <i>2</i> | <i>X</i> | |
| | <i>SG1 - FTB01 - 180118</i> | <i>1/18/18</i> | <i>1035</i> | | | | <i>G</i> | <i>RW</i> | <i>2</i> | <i>X</i> | <i>Rinse Water</i> |
| | <i>SG1 - LTB01 - 180118</i> | <i>1/18/18</i> | <i>-</i> | | | | <i>-</i> | <i>RW</i> | <i>2</i> | <i>X</i> | <i>Rinse water</i> |

| | | | | | | |
|------------------------------------|-------------------------|----------------------|------------------|---|-------------------------|-----------------------|
| COLLECTED/RELINQUISHED BY (1): | DATE: <i>1/18/18</i> | TIME: <i>1640</i> | RECEIVED BY: | RECEIVED BY LABORATORY: | DATE: <i>1/20/18</i> | TIME: <i>11:20</i> |
| RELINQUISHED BY (2): | DATE: | TIME: | RECEIVED BY: | COC SEAL: <input type="checkbox"/> INTACT <input type="checkbox"/> BROKEN <input type="checkbox"/> ABSENT | | |
| | | | | SAMPLE RECEIPT TEMP: °C <i>3.5</i> | | |
| | | | | CARRIER: <i>FedEx</i> | TRACKING #: | |
| | | | | NOTES: <i>7323 6256 7299</i> | | |

White - Retained by Lab
Yellow - Retained by Client

SGS ENVIRONMENTAL SERVICES

TRACE LABORATORY 5500 Business Drive Wilmington, NC 28405 910 350 1903 | 910 794 1613 www.sgs.com

SGS North America Inc.

Sample Receipt Checklist (SRC)

Client: **C.T. Male Associates** Work Order No.: **31800096**

- | | | |
|-----|---|---|
| 1. | <input checked="" type="checkbox"/> Shipped <input type="checkbox"/> Hand Delivered | Notes: _____ _____ _____ |
| 2. | <input checked="" type="checkbox"/> COC Present on Receipt <input type="checkbox"/> No COC <input type="checkbox"/> Additional Transmittal Forms | _____ _____ _____ |
| 3. | <input checked="" type="checkbox"/> Custody Tape on Container <input type="checkbox"/> No Custody Tape | _____ _____ |
| 4. | <input checked="" type="checkbox"/> Samples Intact <input type="checkbox"/> Samples Broken / Leaking | _____ _____ |
| 5. | <input checked="" type="checkbox"/> Chilled on Receipt Actual Temp.(s) in °C: <u>3.5</u> <input type="checkbox"/> Ambient on Receipt <input type="checkbox"/> Walk-in on Ice; Coming down to temp. <input checked="" type="checkbox"/> Temperature Blank Present <input type="checkbox"/> WV samples-proxy not allowed | Thermometer ID#: <u>IR3-Probe</u> _____ _____ |
| 6. | <input checked="" type="checkbox"/> Sufficient Sample Submitted <input type="checkbox"/> Insufficient Sample Submitted | _____ _____ |
| 7. | <input type="checkbox"/> Chlorine absent <input type="checkbox"/> HNO3 < 2 <input type="checkbox"/> HCL < 2 <input checked="" type="checkbox"/> Additional Preservatives verified (see notes) | _____ _____ _____ <u>Trizma</u> _____ |
| 8. | <input checked="" type="checkbox"/> Received Within Holding Time <input type="checkbox"/> Not Received Within Holding Time | _____ _____ |
| 9. | <input type="checkbox"/> No Discrepancies Noted <input checked="" type="checkbox"/> Discrepancies Noted <input type="checkbox"/> NCDENR notified of Discrepancies* | _____ * _____ |
| 10. | <input type="checkbox"/> No Headspace present in VOC vials <input type="checkbox"/> Headspace present in VOC vials >6mm | <u>N/A</u> _____ |

Comments: _____

* = Samples -006 & -008 sample collection time on samples & COC missing.

Inspected and Logged in by: AMO
 Date: 1/22/2018

GenX

QC, Blanks Data

Batch Summary

Analytical Method: GenX

Prep Method: GenX Prep

Prep Batch: HXX2108

Prep Date: 01/24/2018 09:17

| <u>Client Sample ID</u> | <u>Lab Sample ID</u> | <u>Analysis Date</u> | <u>Analytical Batch</u> | <u>Instrument</u> | <u>Analyst</u> |
|-------------------------------|----------------------|----------------------|-------------------------|-------------------|----------------|
| MB for HBN 144149 [HXX/2108] | 216376 | 01/25/2018 21:35 | XLC1132 | TQS1 | ADM |
| LCS for HBN 144149 [HXX/2108] | 216377 | 01/25/2018 22:06 | XLC1132 | TQS1 | ADM |
| SG1 - Influent - 180118 | 31800096001 | 01/25/2018 22:37 | XLC1132 | TQS1 | ADM |
| SG1 - Midfluent - 180118 | 31800096002 | 01/25/2018 23:07 | XLC1132 | TQS1 | ADM |
| SG1 - Midfluent - 180118 MS | 31800096003 | 01/25/2018 23:38 | XLC1132 | TQS1 | ADM |
| SG1 - Midfluent - 180118 MSD | 31800096004 | 01/26/2018 00:09 | XLC1132 | TQS1 | ADM |
| SG1 - Effluent - 180118 | 31800096005 | 01/26/2018 00:39 | XLC1132 | TQS1 | ADM |
| SG1 - FD01 - 180118 | 31800096006 | 01/26/2018 01:10 | XLC1132 | TQS1 | ADM |
| SG1 - FTB01 - 180118 | 31800096007 | 01/26/2018 01:41 | XLC1132 | TQS1 | ADM |
| SG1 - LTB01 - 180118 | 31800096008 | 01/26/2018 02:12 | XLC1132 | TQS1 | ADM |
| SG1 - MW15 - 180118 MS | 31800097005 | 01/26/2018 05:16 | XLC1132 | TQS1 | ADM |
| SG1 - MW15 - 180118 MSD | 31800097006 | 01/26/2018 05:46 | XLC1132 | TQS1 | ADM |



Method Blank Summary Form 4

Blank ID: MB for HBN 144149 [HXX/2108]
Blank Lab ID: 216376
Prep Batch: HXX2108

Matrix: Water
Analysis Date/Time: 01/25/2018 21:35

Results by GenX

| <u>Client Sample ID</u> | <u>Lab Sample ID</u> | <u>Filename</u> | <u>Date Analyzed</u> | <u>Analyst</u> |
|-------------------------------|----------------------|-----------------|----------------------|----------------|
| LCS for HBN 144149 [HXX/2108] | 216377 | 1801250D19 | 01/25/2018 22:06 | ADM |
| SG1 - Influent - 180118 | 31800096001 | 1801250D20 | 01/25/2018 22:37 | ADM |
| SG1 - Midfluent - 180118 | 31800096002 | 1801250D21 | 01/25/2018 23:07 | ADM |
| SG1 - Midfluent - 180118 MS | 31800096003 | 1801250D22 | 01/25/2018 23:38 | ADM |
| SG1 - Midfluent - 180118 MSD | 31800096004 | 1801250D23 | 01/26/2018 00:09 | ADM |
| SG1 - Effluent - 180118 | 31800096005 | 1801250D24 | 01/26/2018 00:39 | ADM |
| SG1 - FD01 - 180118 | 31800096006 | 1801250D25 | 01/26/2018 01:10 | ADM |
| SG1 - FTB01 - 180118 | 31800096007 | 1801250D26 | 01/26/2018 01:41 | ADM |
| SG1 - LTB01 - 180118 | 31800096008 | 1801250D27 | 01/26/2018 02:12 | ADM |
| SG1 - MW15 - 180118 MS | 31800097005 | 1801250D33 | 01/26/2018 05:16 | ADM |
| SG1 - MW15 - 180118 MSD | 31800097006 | 1801250D34 | 01/26/2018 05:46 | ADM |

Method Blank

Blank ID: MB for HBN 144149 [HXX/2108]

Matrix: Water

Blank Lab ID: 216376

QC for Samples:

31800096001, 31800096002, 31800096005, 31800096006, 31800096007, 31800096008

Results by GenX

| <u>Parameter</u> | <u>Result</u> | <u>Qual</u> | <u>LOQ/CL</u> | <u>Units</u> | <u>DF</u> |
|-------------------|---------------|-------------|---------------|--------------|-----------|
| HFPO-DA (GenX) | ND | | 10.0 | ng/L | 1 |
| Surrogates | | | | | |
| 13C-GenX | 68.9* | | 70.0-130 | % | 1 |

Batch Information

Analytical Batch: XLC1132

Analytical Method: GenX

Instrument: TQS1

Analyst: ADM

Prep Batch: HXX2108

Prep Method: GenX Prep

Prep Date/Time: 1/24/2018 9:17:31AM

Prep Initial Wt./Vol.: 250 mL

Prep Extract Vol: 1 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 144149 [HXX/2108]

Blank Spike Lab ID: 216377

Date Analyzed: 01/25/2018 22:06

Matrix: Water

QC for Samples: 31800096001, 31800096002, 31800096005, 31800096006, 31800096007, 31800096008

Results by GenX

| Parameter | Blank Spike (ng/L) | | | CL |
|-------------------|--------------------|--------|--------------|----------|
| | Spike | Result | Rec (%) | |
| HFPO-DA (GenX) | 100 | 108 | 108 | 70.0-130 |
| Surrogates | | | | |
| 13C-GenX | | | 69.5* | 70.0-130 |

Batch Information

Analytical Batch: **XLC1132**

Analytical Method: **GenX**

Instrument: **TQS1**

Analyst: **ADM**

Prep Batch: **HXX2108**

Prep Method: **GenX Prep**

Prep Date/Time: **01/24/2018 09:17**

Spike Init Wt./Vol.: **250 mL** Extract Vol: **1 mL**

Dupe Init Wt./Vol.: Extract Vol:

Matrix Spike Summary

Original Sample ID: 31800096002 (SG1 - Midfluent - 180118) Analysis Date: 01/25/2018 23:07
 MS Sample ID: 31800096003 Analysis Date: 01/25/2018 23:38
 MSD Sample ID: 31800096004 Analysis Date: 01/26/2018 00:09
 Matrix: Drinking Water
 QC for Samples: 31800096001, 31800096002, 31800096005, 31800096006, 31800096007, 31800096008

Results by GenX

| Parameter | Sample | Matrix Spike (ng/L) | | | Spike Duplicate (ng/L) | | | CL | RPD (%) | RPD CL |
|-------------------|--------|---------------------|--------|---------|------------------------|--------|---------|----------|---------|--------|
| | | Spike | Result | Rec (%) | Spike | Result | Rec (%) | | | |
| HFPO-DA (GenX) | ND | 96.1 | 108 | 113 | 94.3 | 106 | 112 | 70.0-130 | 1.9 | 30.00 |
| Surrogates | | | | | | | | | | |
| 13C-GenX | | | | 69.1 * | | | 63 * | 70.0-130 | | |

Batch Information

Analytical Batch: **XLC1132** Prep Batch: **HXX2108**
 Analytical Method: **GenX** Prep Method: **GenX Prep**
 Instrument: **TQS1** Prep Date/Time: **01/24/2018 09:17**
 Analyst: **ADM** MS Init Wt./Vol.: **260.26 mL** Extract Vol.: **1 mL**
 MSD Init Wt./Vol.: **265.08 mL** Extract Vol.: **1 mL**

Internal Standard/Retention Time Window Summary

Analytical Batch: XLC1132 Analyst: ADM
 Analytical Date/Time: 1/26/2018 7:19:06AM
 Instrument: TQS1
 CCV Filename: 1801250D37

GenX

| | <u>IS 1</u> <u>Area</u> | <u>RT</u> | <u>IS 2</u> <u>Area</u> | <u>RT</u> | <u>IS 3</u> <u>Area</u> | <u>RT</u> |
|-------------|----------------------------|-----------|----------------------------|-----------|----------------------------|-----------|
| Initial Cal | 1277475 | 7.78 | | | | |
| Upper Limit | 1916213 | 8.78 | | | | |
| Lower Limit | 638738 | 6.78 | | | | |
| CCV | 1397335 | 7.78 | | | | |

| <u>Sample</u> | <u>Date/Time</u> | <u>Area</u> | <u>RT</u> | <u>Area</u> | <u>RT</u> | <u>Area</u> | <u>RT</u> |
|---------------|------------------|-------------|-----------|-------------|-----------|-------------|-----------|
| 216376 | 1/25/18 21:35 | 1587709 | 7.78 | | | | |
| 216377 | 1/25/18 22:06 | 1569160 | 7.79 | | | | |
| 31800096001 | 1/25/18 22:37 | 1374512 | 7.79 | | | | |
| 31800096002 | 1/25/18 23:07 | 1558270 | 7.78 | | | | |
| 31800096003 | 1/25/18 23:38 | 1601975 | 7.78 | | | | |
| 31800096004 | 1/26/18 0:09 | 1619480 | 7.79 | | | | |
| 31800096005 | 1/26/18 0:39 | 1608527 | 7.79 | | | | |
| 31800096006 | 1/26/18 1:10 | 1578769 | 7.78 | | | | |
| 31800096007 | 1/26/18 1:41 | 1544209 | 7.78 | | | | |
| 31800096008 | 1/26/18 2:12 | 1575984 | 7.79 | | | | |
| 31800097005 | 1/26/18 5:16 | 561408 | 7.78 | | | | |
| 31800097006 | 1/26/18 5:46 | 562547 | 7.77 | | | | |

IS1 = 13C4-PFOA
 IS2 =
 IS3 =

Surrogate Summary

Analytical Method: GenX
 Work Order: 31800096
 Matrix: Water

Analytical Batch: XLC1132

Results by GenX

| | <u>13C-GenX</u> |
|-------------------------------|-----------------|
| MB for HBN 144149 [HXX/2108] | 68.9* |
| LCS for HBN 144149 [HXX/2108] | 69.5* |
| SG1 - Influent - 180118 | 62.4* |
| SG1 - Midfluent - 180118 | 74.2 |
| SG1 - Midfluent - 180118 MS | 69.1* |
| SG1 - Midfluent - 180118 MSD | 63.0* |
| SG1 - Effluent - 180118 | 67.3* |
| SG1 - FD01 - 180118 | 65.8* |
| SG1 - FTB01 - 180118 | 78.0 |
| SG1 - LTB01 - 180118 | 66.2* |

Control Limits

13C-GenX

13C-GenX

70.0-130

Initial Calibration Summary

Calibration Batch: XLC1131
 ICAL Start: 1/25/2018 1:13:27PM
 ICAL End: 1/25/2018 4:17:44PM

Instrument: TQS1
 Analyst: ADM

GenX

Curve Summary

| <u>Parameter</u> | <u>Average RF/Slope</u> | <u>y-Intercept</u> | <u>2nd Order</u> | <u>Linear Term</u> | <u>Calibration Type</u> |
|------------------|-------------------------|--------------------|------------------|--------------------|-------------------------|
| HFPO-DA (GenX) | 7.60455 | | | 0.99339 | Linear |

Surrogates/ InternalStandards

| <u>Parameter</u> | <u>RESP LOW</u> | <u>RESP HIGH</u> | <u>RPD</u> | <u>QC</u> |
|------------------|-----------------|------------------|------------|-----------|
| 13C4-PFOA | 1234121 | 1313022 | 6.2 | |
| 13C-GenX | 460 | 520 | 12.3 | |

IS/SS RPD Limit: 20 %

Continuing Calibration

Analytical Batch: XLC1132
Instrument: TQS1
Filename: 1801250D17

QCID: CCV
Date Analyzed: 1/25/2018 9:04:58PM
Analyst: ADM
Units: ng/L

GenX

| <u>Parameter</u> | <u>Spike</u> | <u>Result</u> | <u>Rec (%)</u> | <u>CL</u> |
|------------------|--------------|---------------|----------------|--------------|
| HFPO-DA (GenX) | 25,000.00 | 24,700.00 | 98.7 | 75.00-125.00 |

Continuing Calibration

Analytical Batch: XLC1132
Instrument: TQS1
Filename: 1801250D28

QCID: CCV
Date Analyzed: 1/26/2018 2:42:45AM
Analyst: ADM
Units: ng/L

GenX

| <u>Parameter</u> | <u>Spike</u> | <u>Result</u> | <u>Rec (%)</u> | <u>CL</u> |
|------------------|--------------|---------------|----------------|--------------|
| HFPO-DA (GenX) | 25,000.00 | 23,900.00 | 95.8 | 75.00-125.00 |

GenX Sample Data

Dataset: C:\MassLynx\Default.pro\180125_2.qld



Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time
 Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Method: C:\MassLynx\TargetLynx.pro\Methdb\GenX.mdb 29 Oct 2017 20:51:24
 Calibration: C:\MassLynx\TargetLynx.pro\Curvedb\GenX_Cal_180125.cdb 25 Jan 2018 16:53:12

Name: 1801250D17, ID: CCV, Date: 25-Jan-2018, Time: 21:04:58, Description: CCV, Instrument: XEVO-TQS#WAA289, Job: ,
 User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | 6.17 | 4172.752 | 556.029 | 187.614 | bb | 24.7 | -1.3 |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.17 | 556.029 | 1404373.250 | 0.010 | bb | 25.4 | 1.5 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.80 | 1404373.250 | | 1404373.250 | bb | 27.5 | 9.9 |

Name: 1801250D18, ID: 216376, Date: 25-Jan-2018, Time: 21:35:38, Description: 216376, Instrument: XEVO-TQS#WAA289, Job: ,
 User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | | | 426.742 | | | | |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.16 | 426.742 | 1587708.875 | 0.007 | bb | 17.2 | -31.1 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.78 | 1587708.875 | | 1587708.875 | bb | 31.1 | 24.3 |

Name: 1801250D19, ID: 216377, Date: 25-Jan-2018, Time: 22:06:24, Description: 216377, Instrument: XEVO-TQS#WAA289, Job: ,
 User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | 6.16 | 3493.669 | 425.288 | 205.371 | bb | 27.0 | 8.0 |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.16 | 425.288 | 1569160.375 | 0.007 | bb | 17.4 | -30.5 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.79 | 1569160.375 | | 1569160.375 | bb | 30.7 | 22.8 |

Name: 1801250D20, ID: 0096_1, Date: 25-Jan-2018, Time: 22:37:03, Description: 0096_1, Instrument: XEVO-TQS#WAA289, Job: ,
 User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | | | 334.617 | | | | |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.16 | 334.617 | 1374511.625 | 0.006 | bb | 15.6 | -37.6 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.79 | 1374511.625 | | 1374511.625 | bb | 26.9 | 7.6 |

Name: 1801250D21, ID: 0096_2, Date: 25-Jan-2018, Time: 23:07:42, Description: 0096_2, Instrument: XEVO-TQS#WAA289, Job: ,
 User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | | | 451.224 | | | | |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.16 | 451.224 | 1558270.375 | 0.007 | bb | 18.6 | -25.8 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.78 | 1558270.375 | | 1558270.375 | bb | 30.5 | 22.0 |

Name: 1801250D22, ID: 0096_3, Date: 25-Jan-2018, Time: 23:38:25, Description: 0096_3, Instrument: XEVO-TQS#WAA289, Job: ,
 User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | 6.16 | 3697.204 | 431.677 | 214.119 | bb | 28.2 | 12.6 |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.16 | 431.677 | 1601974.750 | 0.007 | bb | 17.3 | -30.9 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.78 | 1601974.750 | | 1601974.750 | bb | 31.4 | 25.4 |

Instrument: TQS1

Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time
 Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time



Name: 1801250D23, ID: 0096_4, Date: 26-Jan-2018, Time: 00:09:09, Description: 0096_4, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | 6.16 | 3402.843 | 398.202 | 213.638 | bb | 28.1 | 12.4 |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.16 | 398.202 | 1619480.250 | 0.006 | bb | 15.8 | -37.0 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.79 | 1619480.250 | | 1619480.250 | bb | 31.7 | 26.8 |

Name: 1801250D24, ID: 0096_5, Date: 26-Jan-2018, Time: 00:39:52, Description: 0096_5, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | | | 422.499 | | | | |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.17 | 422.499 | 1608526.625 | 0.007 | bb | 16.8 | -32.7 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.79 | 1608526.625 | | 1608526.625 | bb | 31.5 | 25.9 |

Name: 1801250D25, ID: 0096_6, Date: 26-Jan-2018, Time: 01:10:35, Description: 0096_6, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | | | 405.140 | | | | |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.16 | 405.140 | 1578768.750 | 0.006 | bb | 16.4 | -34.2 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.78 | 1578768.750 | | 1578768.750 | bb | 30.9 | 23.6 |

Name: 1801250D26, ID: 0096_7, Date: 26-Jan-2018, Time: 01:41:18, Description: 0096_7, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | | | 470.066 | | | | |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.16 | 470.066 | 1544208.625 | 0.008 | bb | 19.5 | -22.0 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.78 | 1544208.625 | | 1544208.625 | bb | 30.2 | 20.9 |

Name: 1801250D27, ID: 0096_8, Date: 26-Jan-2018, Time: 02:12:02, Description: 0096_8, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | | | 407.017 | | | | |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.16 | 407.017 | 1575984.000 | 0.006 | bb | 16.5 | -33.8 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.79 | 1575984.000 | | 1575984.000 | bb | 30.8 | 23.4 |

Name: 1801250D28, ID: CCV, Date: 26-Jan-2018, Time: 02:42:45, Description: CCV, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | 6.16 | 4211.455 | 578.126 | 182.117 | bb | 23.9 | -4.2 |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.17 | 578.126 | 1402130.250 | 0.010 | bb | 26.4 | 5.7 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.78 | 1402130.250 | | 1402130.250 | bb | 27.4 | 9.8 |

Instrument: TQS1

Dataset: C:\MassLynx\Default.pro\180125_2.qld



Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D29, ID: 0097_1, Date: 26-Jan-2018, Time: 03:13:28, Description: 0097_1, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | | | 360.744 | | | | |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.16 | 360.744 | 1130236.875 | 0.008 | bb | 20.4 | -18.2 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.78 | 1130236.875 | | 1130236.875 | bb | 22.1 | -11.5 |

Name: 1801250D30, ID: 0097_2, Date: 26-Jan-2018, Time: 03:44:13, Description: 0097_2, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|------------|------------|------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | | | 390.728 | | | | |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.16 | 390.728 | 620170.938 | 0.016 | bb | 40.4 | 61.4 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.78 | 620170.938 | | 620170.938 | bb | 12.1 | -51.5 |

Name: 1801250D31, ID: 0097_3, Date: 26-Jan-2018, Time: 04:14:48, Description: 0097_3, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|------------|------------|------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | | | 391.703 | | | | |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.17 | 391.703 | 542422.563 | 0.018 | bb | 46.3 | 85.0 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.78 | 542422.563 | | 542422.563 | bb | 10.6 | -57.5 |

Name: 1801250D32, ID: 0097_4, Date: 26-Jan-2018, Time: 04:45:30, Description: 0097_4, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|------------|------------|------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | | | 392.905 | | | | |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.16 | 392.905 | 550595.813 | 0.018 | bb | 45.7 | 82.9 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.78 | 550595.813 | | 550595.813 | bb | 10.8 | -56.9 |

Name: 1801250D33, ID: 0097_5, Date: 26-Jan-2018, Time: 05:16:13, Description: 0097_5, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|------------|------------|------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | 6.16 | 3176.781 | 403.504 | 196.825 | bb | 25.9 | 3.5 |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.16 | 403.504 | 561407.938 | 0.018 | bb | 46.0 | 84.2 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.78 | 561407.938 | | 561407.938 | bb | 11.0 | -56.1 |

Name: 1801250D34, ID: 0097_6, Date: 26-Jan-2018, Time: 05:46:56, Description: 0097_6, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|------------|------------|------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | 6.15 | 3052.655 | 346.388 | 220.320 | bb | 29.0 | 15.9 |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.16 | 346.388 | 562546.750 | 0.015 | bb | 39.4 | 57.8 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.77 | 562546.750 | | 562546.750 | bb | 11.0 | -56.0 |

Instrument: TQS1

Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D35, ID: 0097_7, Date: 26-Jan-2018, Time: 06:17:39, Description: 0097_7, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|------------|------------|------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | | | 391.811 | | | | |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.15 | 391.811 | 466908.906 | 0.021 | bb | 53.8 | 115.0 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.78 | 466908.906 | | 466908.906 | bb | 9.14 | -63.5 |

Name: 1801250D36, ID: 0097_8, Date: 26-Jan-2018, Time: 06:48:23, Description: 0097_8, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|-------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | | | 394.081 | | | | |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.15 | 394.081 | 1527914.500 | 0.006 | bb | 16.5 | -33.9 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.78 | 1527914.500 | | 1527914.500 | bb | 29.9 | 19.6 |

Name: 1801250D37, ID: CCV, Date: 26-Jan-2018, Time: 07:19:06, Description: CCV, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | 6.15 | 4009.491 | 508.946 | 196.951 | bb | 25.9 | 3.6 |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.15 | 508.946 | 1397335.000 | 0.009 | bb | 23.3 | -6.7 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.78 | 1397335.000 | | 1397335.000 | bb | 27.3 | 9.4 |

0097_5 $\frac{25.88 \times 1}{238.47} \times 1000 = 108.53$

Christina_Newkirk , 1/26/2018, 3:27:28 pm

Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Method: C:\MassLynx\TargetLynx.pro\Methdb\GenX.mdb 29 Oct 2017 20:51:24

Calibration: C:\MassLynx\TargetLynx.pro\Curvedb\GenX_Cal_180125.cdb 25 Jan 2018 16:53:12

Name: 1801250D17, ID: CCV, Date: 25-Jan-2018, Time: 21:04:58, Description: CCV, User: ADM, Job: , Lab:

Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

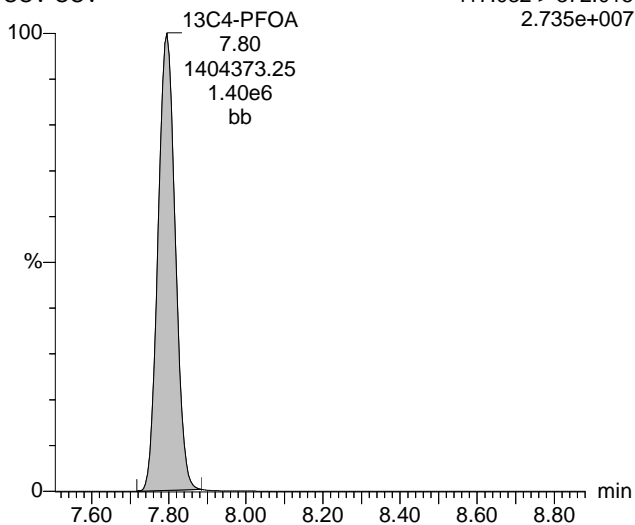
Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D17, ID: CCV, Date: 25-Jan-2018, Time: 21:04:58, Description: CCV, User: ADM, Job: , Lab:

13C4-PFOA

1801250D17 Smooth(Mn,2x2)
CCV CCV

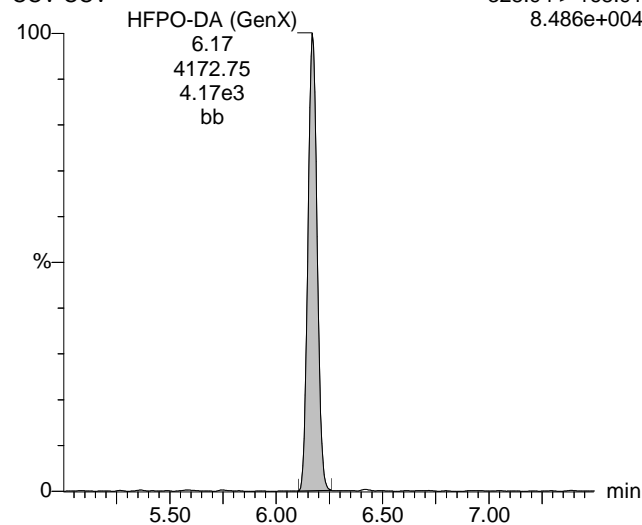
F3:MRM of 1 channel,ES-
417.032 > 372.015
2.735e+007



HFPO-DA (GenX)

1801250D17 Smooth(Mn,2x2)
CCV CCV

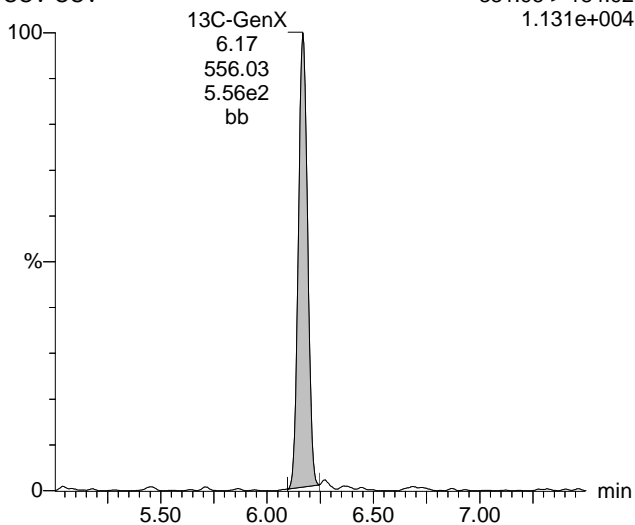
F1:MRM of 2 channels,ES-
328.94 > 168.91
8.486e+004



13C-GenX

1801250D17 Smooth(Mn,2x2)
CCV CCV

F2:MRM of 2 channels,ES-
331.95 > 184.92
1.131e+004



Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D18, ID: 216376, Date: 25-Jan-2018, Time: 21:35:38, Description: 216376, User: ADM, Job: , Lab:

Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

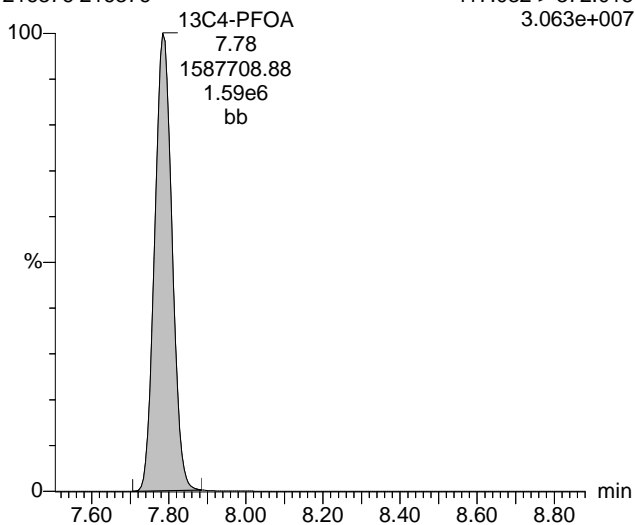
Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D18, ID: 216376, Date: 25-Jan-2018, Time: 21:35:38, Description: 216376, User: ADM, Job: , Lab:

13C4-PFOA

1801250D18 Smooth(Mn,2x2)
216376 216376

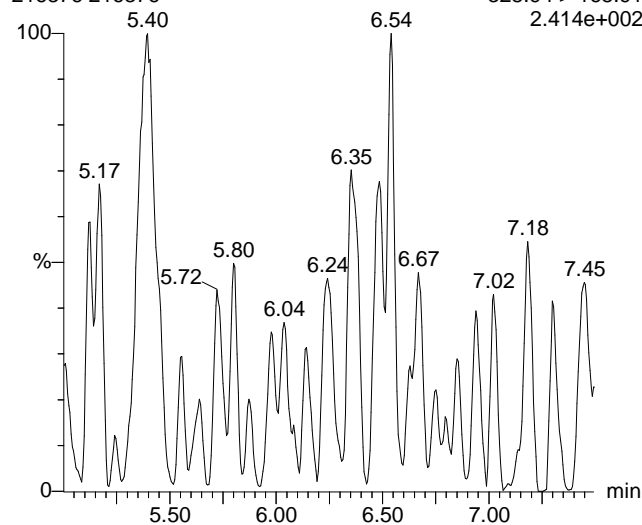
F3:MRM of 1 channel,ES-
417.032 > 372.015
3.063e+007



HFPO-DA (GenX)

1801250D18 Smooth(Mn,2x2)
216376 216376

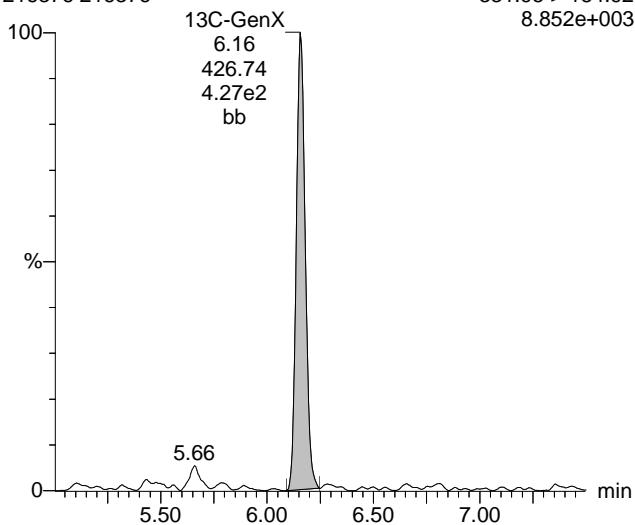
F1:MRM of 2 channels,ES-
328.94 > 168.91
2.414e+002



13C-GenX

1801250D18 Smooth(Mn,2x2)
216376 216376

F2:MRM of 2 channels,ES-
331.95 > 184.92
8.852e+003



Dataset: C:\MassLynx\Default.pro\180125_2.qld
Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time
Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D19, ID: 216377, Date: 25-Jan-2018, Time: 22:06:24, Description: 216377, User: ADM, Job: , Lab:

Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

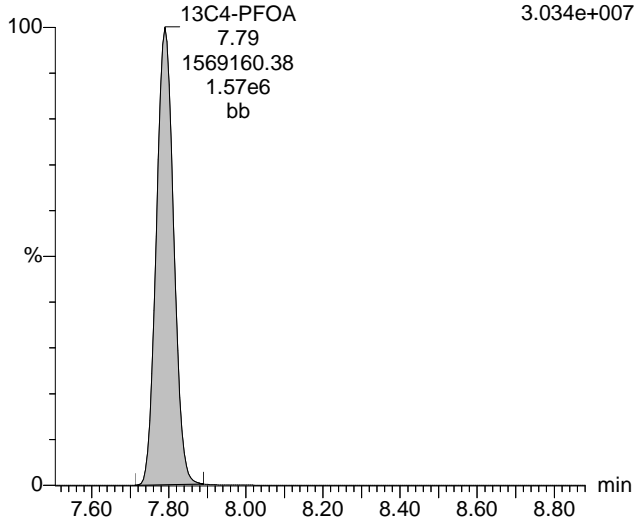
Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D19, ID: 216377, Date: 25-Jan-2018, Time: 22:06:24, Description: 216377, User: ADM, Job: , Lab:

13C4-PFOA

1801250D19 Smooth(Mn,2x2)
216377 216377

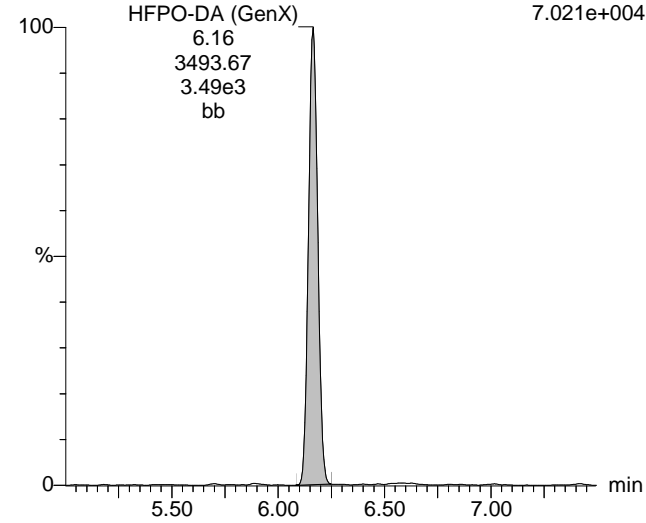
F3:MRM of 1 channel,ES-
417.032 > 372.015
3.034e+007



HFPO-DA (GenX)

1801250D19 Smooth(Mn,2x2)
216377 216377

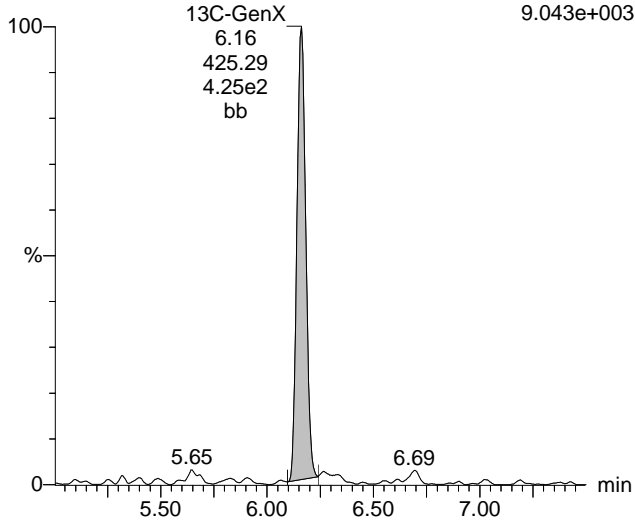
F1:MRM of 2 channels,ES-
328.94 > 168.91
7.021e+004



13C-GenX

1801250D19 Smooth(Mn,2x2)
216377 216377

F2:MRM of 2 channels,ES-
331.95 > 184.92
9.043e+003



Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D20, ID: 0096_1, Date: 25-Jan-2018, Time: 22:37:03, Description: 0096_1, User: ADM, Job: , Lab:

Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

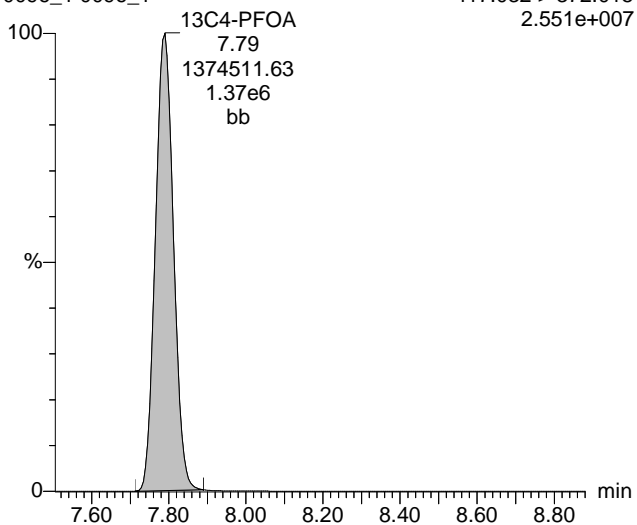
Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D20, ID: 0096_1, Date: 25-Jan-2018, Time: 22:37:03, Description: 0096_1, User: ADM, Job: , Lab:

13C4-PFOA

1801250D20 Smooth(Mn,2x2)
0096_1 0096_1

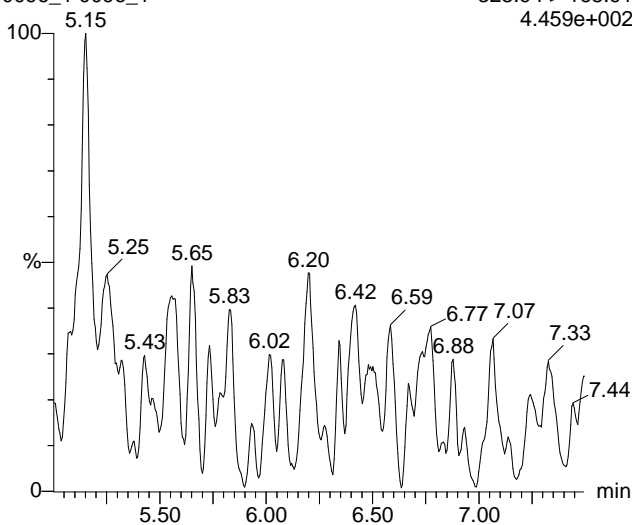
F3:MRM of 1 channel,ES-
417.032 > 372.015
2.551e+007



HFPO-DA (GenX)

1801250D20 Smooth(Mn,2x2)
0096_1 0096_1

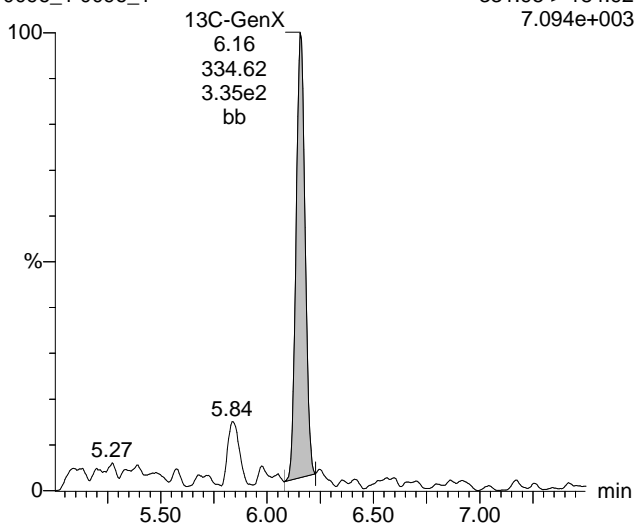
F1:MRM of 2 channels,ES-
328.94 > 168.91
4.459e+002



13C-GenX

1801250D20 Smooth(Mn,2x2)
0096_1 0096_1

F2:MRM of 2 channels,ES-
331.95 > 184.92
7.094e+003



Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D21, ID: 0096_2, Date: 25-Jan-2018, Time: 23:07:42, Description: 0096_2, User: ADM, Job: , Lab:

Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

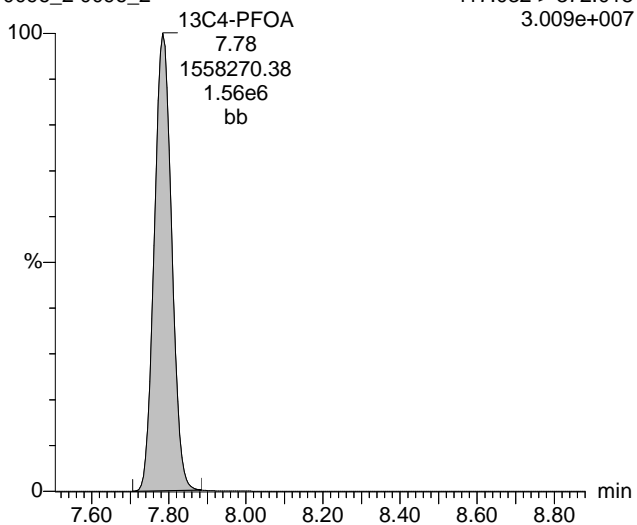
Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D21, ID: 0096_2, Date: 25-Jan-2018, Time: 23:07:42, Description: 0096_2, User: ADM, Job: , Lab:

13C4-PFOA

1801250D21 Smooth(Mn,2x2)
0096_2 0096_2

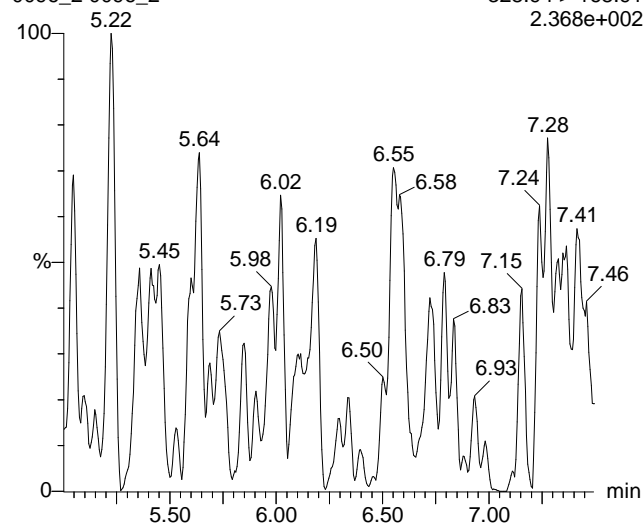
F3:MRM of 1 channel,ES-
417.032 > 372.015
3.009e+007



HFPO-DA (GenX)

1801250D21 Smooth(Mn,2x2)
0096_2 0096_2

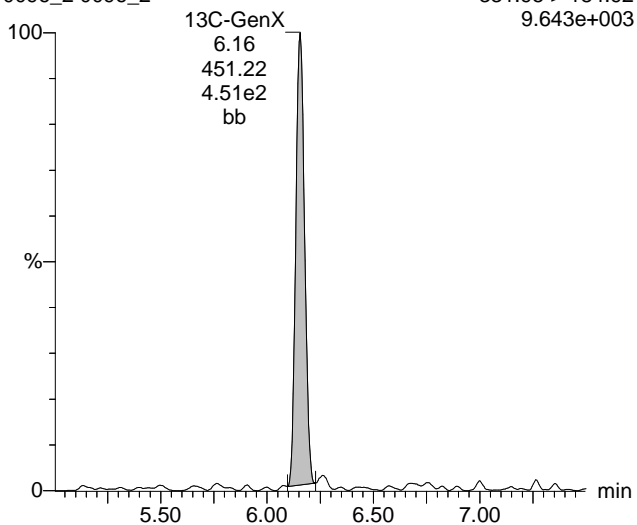
F1:MRM of 2 channels,ES-
328.94 > 168.91
2.368e+002



13C-GenX

1801250D21 Smooth(Mn,2x2)
0096_2 0096_2

F2:MRM of 2 channels,ES-
331.95 > 184.92
9.643e+003



Dataset: C:\MassLynx\Default.pro\180125_2.qld
Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time
Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D22, ID: 0096_3, Date: 25-Jan-2018, Time: 23:38:25, Description: 0096_3, User: ADM, Job: , Lab:

Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

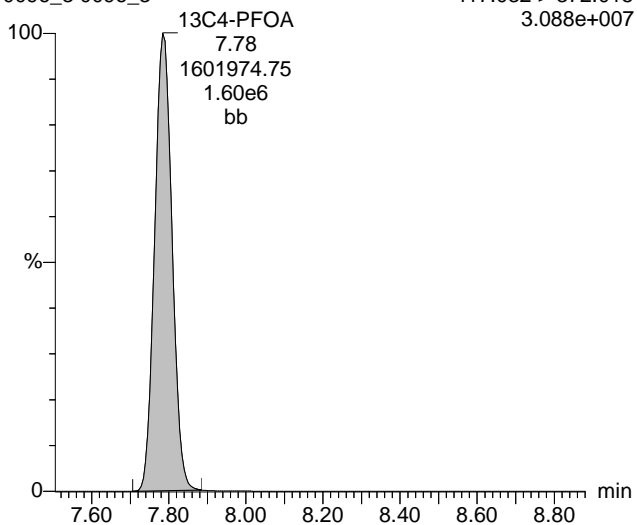
Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D22, ID: 0096_3, Date: 25-Jan-2018, Time: 23:38:25, Description: 0096_3, User: ADM, Job: , Lab:

13C4-PFOA

1801250D22 Smooth(Mn,2x2)
0096_3 0096_3

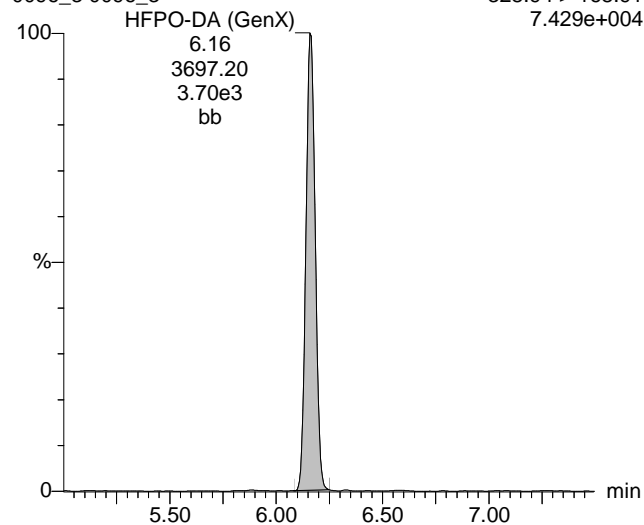
F3:MRM of 1 channel,ES-
417.032 > 372.015
3.088e+007



HFPO-DA (GenX)

1801250D22 Smooth(Mn,2x2)
0096_3 0096_3

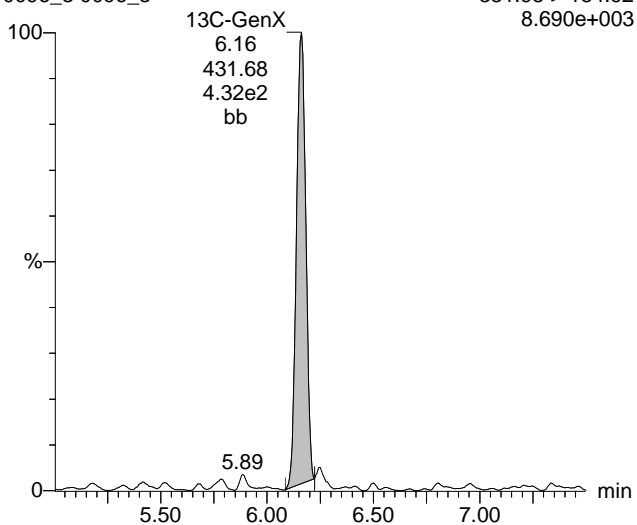
F1:MRM of 2 channels,ES-
328.94 > 168.91
7.429e+004



13C-GenX

1801250D22 Smooth(Mn,2x2)
0096_3 0096_3

F2:MRM of 2 channels,ES-
331.95 > 184.92
8.690e+003



Dataset: C:\MassLynx\Default.pro\180125_2.qld
Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time
Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D23, ID: 0096_4, Date: 26-Jan-2018, Time: 00:09:09, Description: 0096_4, User: ADM, Job: , Lab:

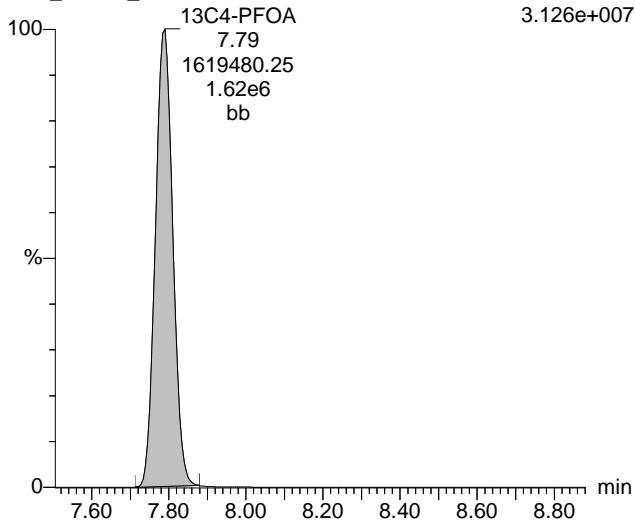
Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time
Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D23, ID: 0096_4, Date: 26-Jan-2018, Time: 00:09:09, Description: 0096_4, User: ADM, Job: , Lab:

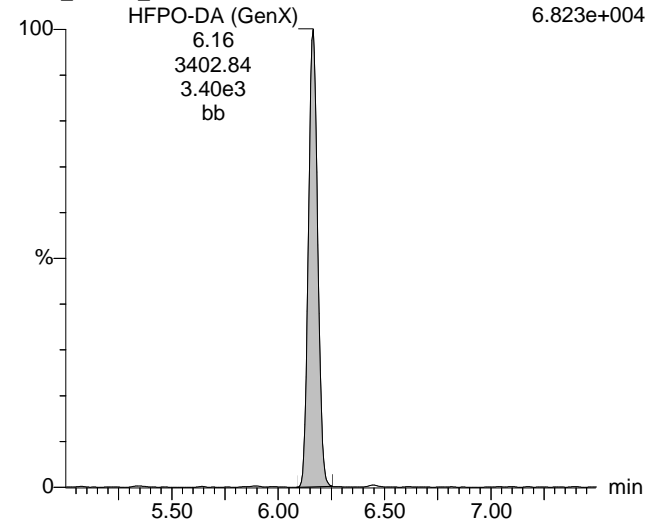
13C4-PFOA

1801250D23 Smooth(Mn,2x2) F3:MRM of 1 channel,ES-
0096_4 0096_4 417.032 > 372.015
3.126e+007



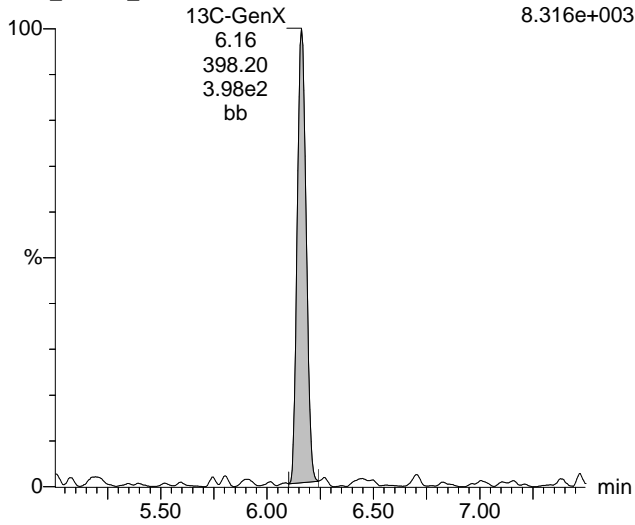
HFPO-DA (GenX)

1801250D23 Smooth(Mn,2x2) F1:MRM of 2 channels,ES-
0096_4 0096_4 328.94 > 168.91
6.823e+004



13C-GenX

1801250D23 Smooth(Mn,2x2) F2:MRM of 2 channels,ES-
0096_4 0096_4 331.95 > 184.92
8.316e+003



Dataset: C:\MassLynx\Default.pro\180125_2.qld
Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time
Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D24, ID: 0096_5, Date: 26-Jan-2018, Time: 00:39:52, Description: 0096_5, User: ADM, Job: , Lab:

Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

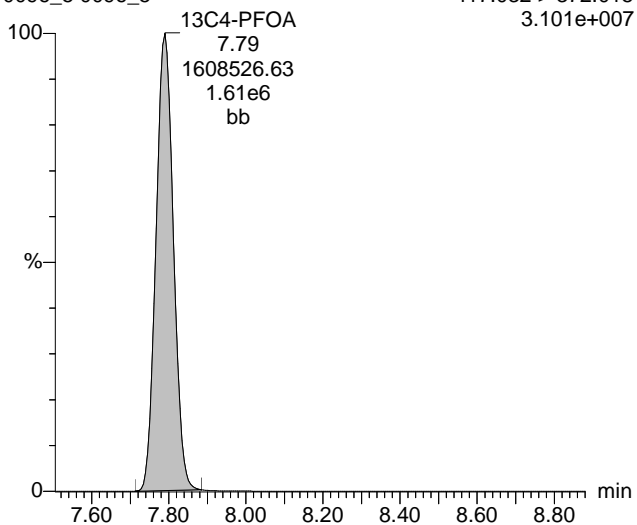
Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D24, ID: 0096_5, Date: 26-Jan-2018, Time: 00:39:52, Description: 0096_5, User: ADM, Job: , Lab:

13C4-PFOA

1801250D24 Smooth(Mn,2x2)
0096_5 0096_5

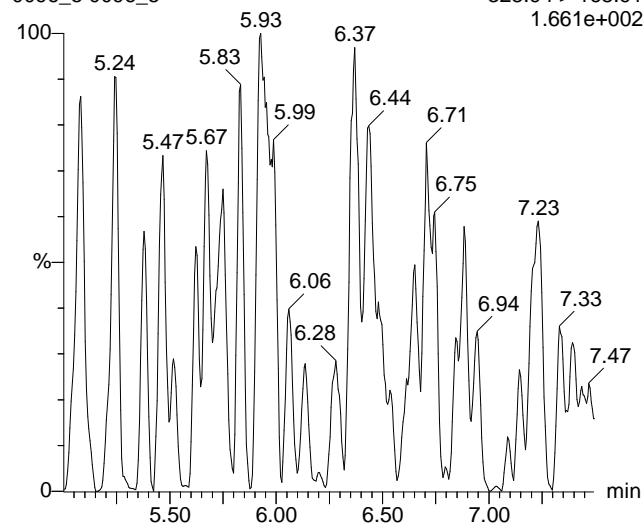
F3:MRM of 1 channel,ES-
417.032 > 372.015
3.101e+007



HFPO-DA (GenX)

1801250D24 Smooth(Mn,2x2)
0096_5 0096_5

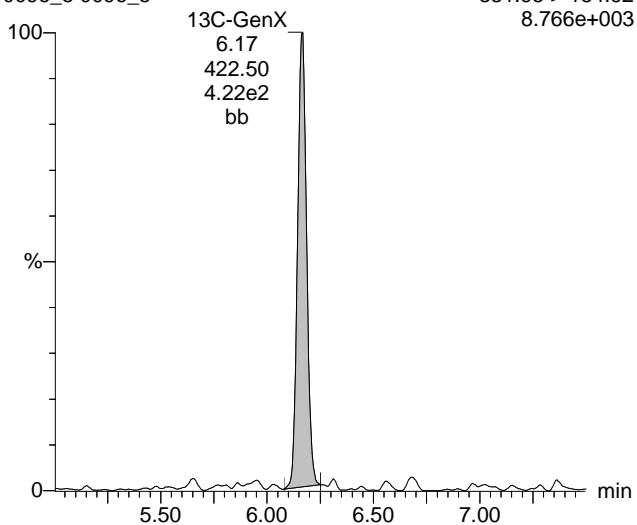
F1:MRM of 2 channels,ES-
328.94 > 168.91
1.661e+002



13C-GenX

1801250D24 Smooth(Mn,2x2)
0096_5 0096_5

F2:MRM of 2 channels,ES-
331.95 > 184.92
8.766e+003



Dataset: C:\MassLynx\Default.pro\180125_2.qld
Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time
Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D25, ID: 0096_6, Date: 26-Jan-2018, Time: 01:10:35, Description: 0096_6, User: ADM, Job: , Lab:

Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

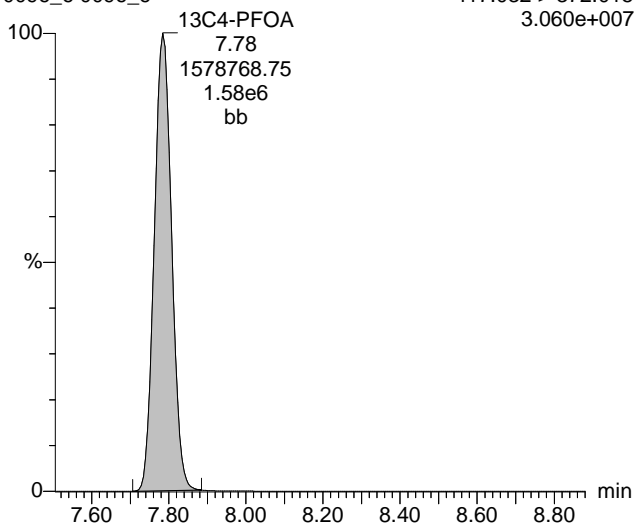
Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D25, ID: 0096_6, Date: 26-Jan-2018, Time: 01:10:35, Description: 0096_6, User: ADM, Job: , Lab:

13C4-PFOA

1801250D25 Smooth(Mn,2x2)
0096_6 0096_6

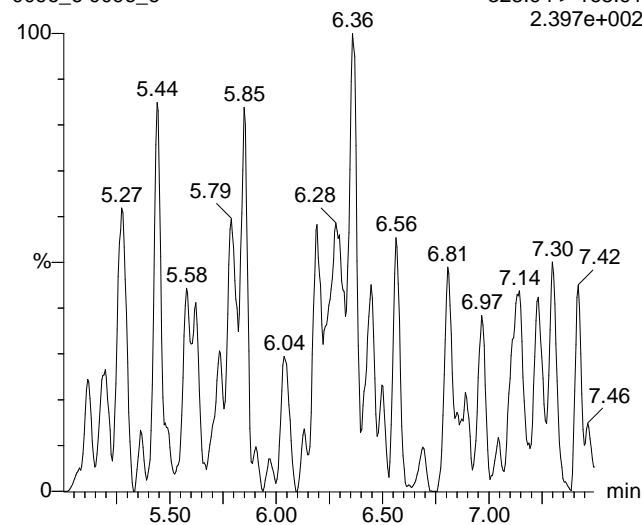
F3:MRM of 1 channel,ES-
417.032 > 372.015
3.060e+007



HFPO-DA (GenX)

1801250D25 Smooth(Mn,2x2)
0096_6 0096_6

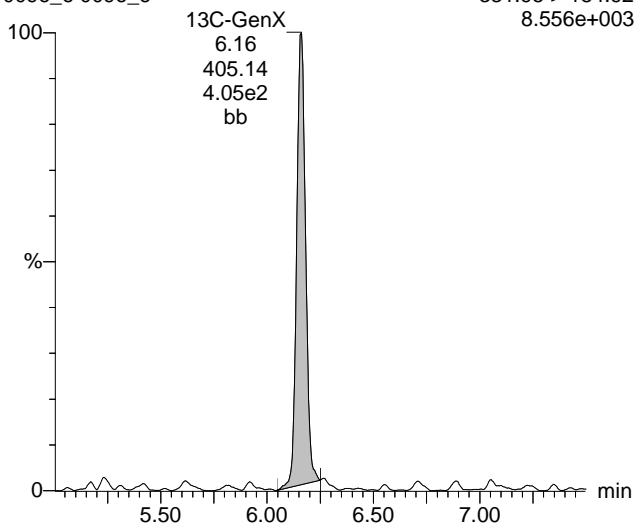
F1:MRM of 2 channels,ES-
328.94 > 168.91
2.397e+002



13C-GenX

1801250D25 Smooth(Mn,2x2)
0096_6 0096_6

F2:MRM of 2 channels,ES-
331.95 > 184.92
8.556e+003



Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D26, ID: 0096_7, Date: 26-Jan-2018, Time: 01:41:18, Description: 0096_7, User: ADM, Job: , Lab:

Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

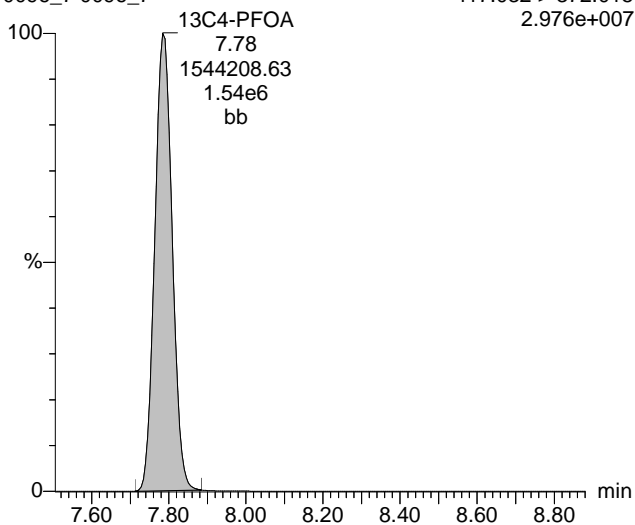
Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D26, ID: 0096_7, Date: 26-Jan-2018, Time: 01:41:18, Description: 0096_7, User: ADM, Job: , Lab:

13C4-PFOA

1801250D26 Smooth(Mn,2x2)
0096_7 0096_7

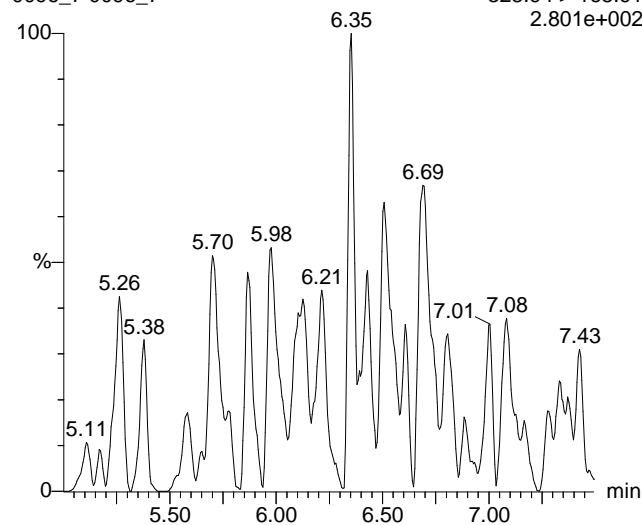
F3:MRM of 1 channel,ES-
417.032 > 372.015
2.976e+007



HFPO-DA (GenX)

1801250D26 Smooth(Mn,2x2)
0096_7 0096_7

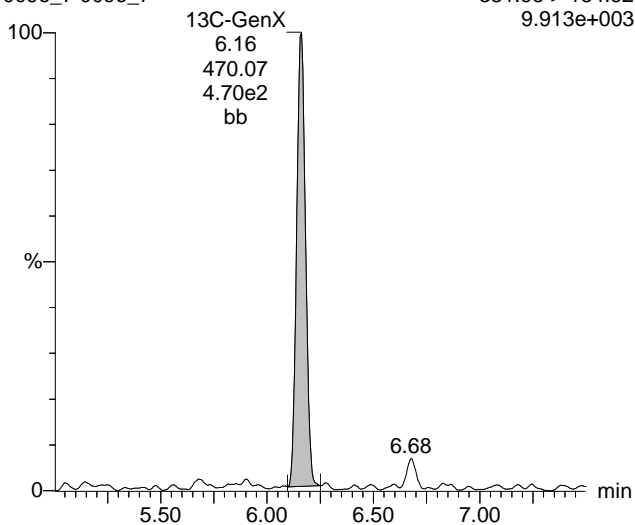
F1:MRM of 2 channels,ES-
328.94 > 168.91
2.801e+002



13C-GenX

1801250D26 Smooth(Mn,2x2)
0096_7 0096_7

F2:MRM of 2 channels,ES-
331.95 > 184.92
9.913e+003



Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D27, ID: 0096_8, Date: 26-Jan-2018, Time: 02:12:02, Description: 0096_8, User: ADM, Job: , Lab:

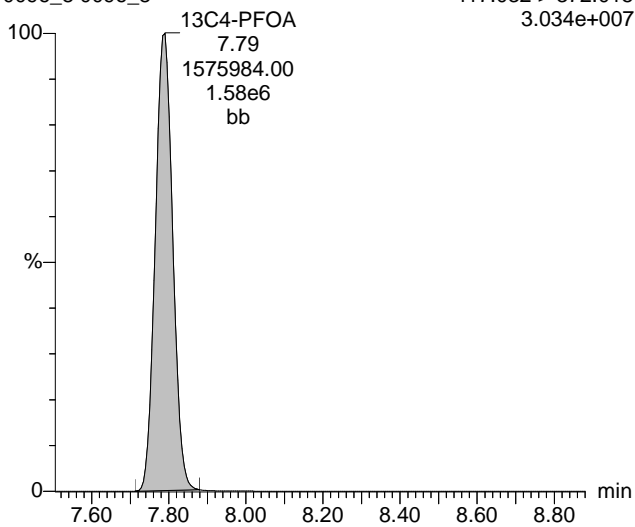
Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time
Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D27, ID: 0096_8, Date: 26-Jan-2018, Time: 02:12:02, Description: 0096_8, User: ADM, Job: , Lab:

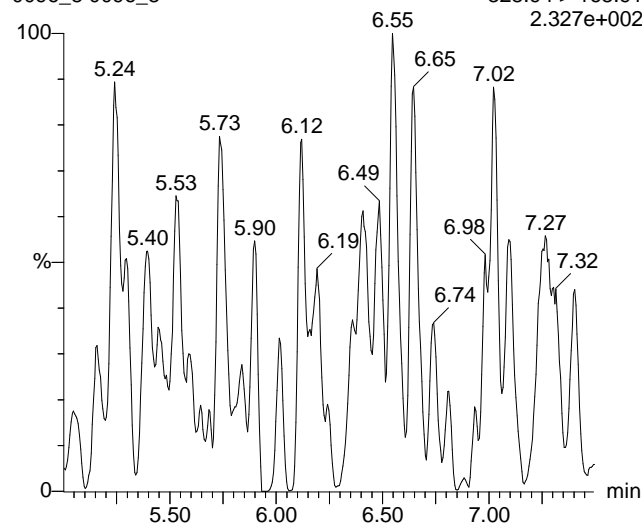
13C4-PFOA

1801250D27 Smooth(Mn,2x2) F3:MRM of 1 channel,ES-
0096_8 0096_8 417.032 > 372.015
3.034e+007



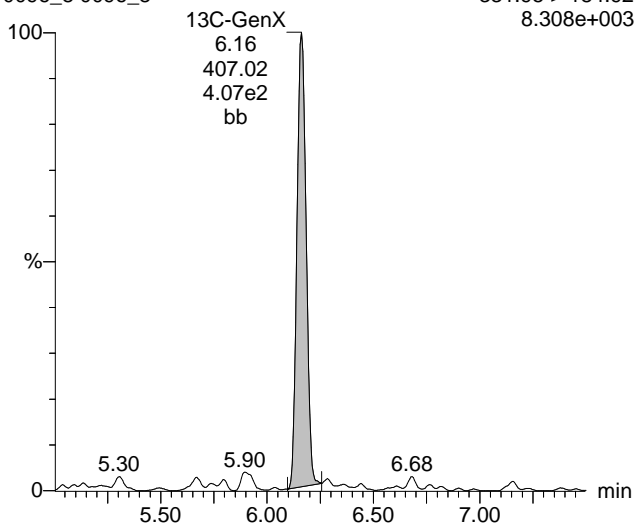
HFPO-DA (GenX)

1801250D27 Smooth(Mn,2x2) F1:MRM of 2 channels,ES-
0096_8 0096_8 328.94 > 168.91
2.327e+002



13C-GenX

1801250D27 Smooth(Mn,2x2) F2:MRM of 2 channels,ES-
0096_8 0096_8 331.95 > 184.92
8.308e+003



Dataset: C:\MassLynx\Default.pro\180125_2.qld

Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time

Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D28, ID: CCV, Date: 26-Jan-2018, Time: 02:42:45, Description: CCV, User: ADM, Job: , Lab:

Dataset: C:\MassLynx\Default.pro\180125_2.qld

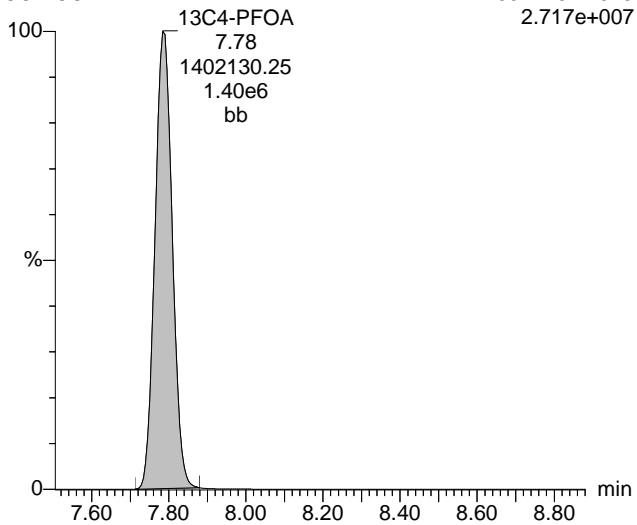
Last Altered: Friday, January 26, 2018 09:29:23 Eastern Standard Time
Printed: Friday, January 26, 2018 09:55:01 Eastern Standard Time

Name: 1801250D28, ID: CCV, Date: 26-Jan-2018, Time: 02:42:45, Description: CCV, User: ADM, Job: , Lab:

13C4-PFOA

1801250D28 Smooth(Mn,2x2)
CCV CCV

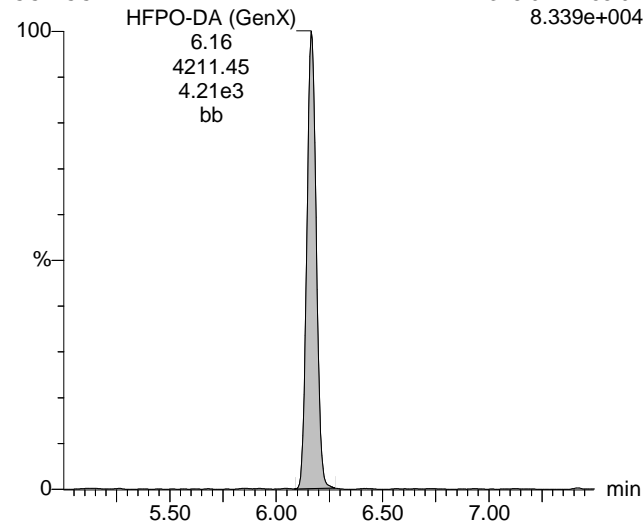
F3:MRM of 1 channel,ES-
417.032 > 372.015
2.717e+007



HFPO-DA (GenX)

1801250D28 Smooth(Mn,2x2)
CCV CCV

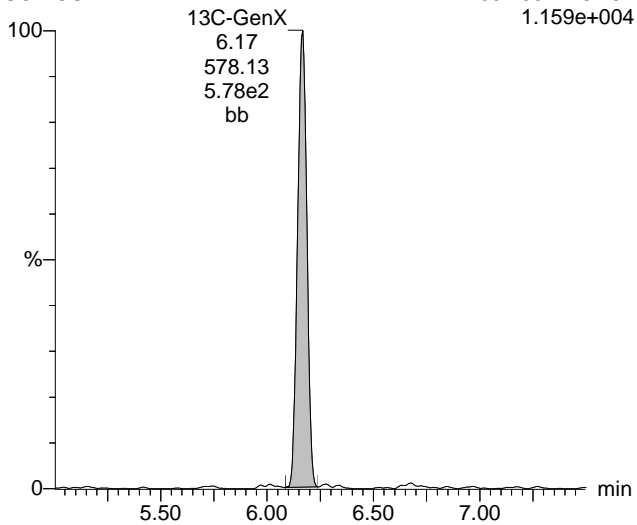
F1:MRM of 2 channels,ES-
328.94 > 168.91
8.339e+004



13C-GenX

1801250D28 Smooth(Mn,2x2)
CCV CCV

F2:MRM of 2 channels,ES-
331.95 > 184.92
1.159e+004



GenX

Initial Calibration Data

Dataset: C:\MassLynx\Default.pro\180125_GenX_Calibration.qld



Last Altered: Thursday, January 25, 2018 16:53:12 Eastern Standard Time
 Printed: Friday, January 26, 2018 09:11:23 Eastern Standard Time

Method: C:\MassLynx\TargetLynx.pro\Methdb\GenX.mdb 29 Oct 2017 20:51:24
 Calibration: C:\MassLynx\TargetLynx.pro\Curvedb\GenX_Cal_180125.cdb 25 Jan 2018 16:53:12

Name: 1801250D09, ID: ICAL1, Date: 25-Jan-2018, Time: 13:13:27, Description: ICAL1, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | 6.17 | 390.447 | 505.343 | 19.316 | bb | 2.54 | 1.6 |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.17 | 505.343 | 1271520.875 | 0.010 | MM | 25.5 | 1.8 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.80 | 1271520.875 | | 1271520.875 | bb | 24.9 | -0.5 |

Name: 1801250D10, ID: ICAL2, Date: 25-Jan-2018, Time: 13:44:06, Description: ICAL2, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | 6.17 | 808.837 | 480.859 | 42.052 | bb | 5.53 | 10.6 |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.17 | 480.859 | 1298592.000 | 0.009 | bb | 23.7 | -5.1 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.80 | 1298592.000 | | 1298592.000 | bb | 25.4 | 1.7 |

Name: 1801250D11, ID: ICAL3, Date: 25-Jan-2018, Time: 14:14:49, Description: ICAL3, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | 6.17 | 1627.646 | 459.952 | 88.468 | bb | 11.6 | 16.3 |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.17 | 459.952 | 1304384.875 | 0.009 | MM | 22.6 | -9.6 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.80 | 1304384.875 | | 1304384.875 | bb | 25.5 | 2.1 |

Name: 1801250D12, ID: ICAL4, Date: 25-Jan-2018, Time: 14:45:32, Description: ICAL4, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | 6.17 | 3225.133 | 513.189 | 157.112 | bb | 20.7 | 3.3 |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.17 | 513.189 | 1268821.250 | 0.010 | bb | 25.9 | 3.6 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.80 | 1268821.250 | | 1268821.250 | bb | 24.8 | -0.7 |

Name: 1801250D13, ID: ICAL5, Date: 25-Jan-2018, Time: 15:16:15, Description: ICAL5, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | 6.17 | 4666.224 | 489.535 | 238.299 | bb | 31.3 | 4.5 |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.17 | 489.535 | 1234121.250 | 0.010 | bb | 25.4 | 1.6 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.80 | 1234121.250 | | 1234121.250 | bb | 24.2 | -3.4 |

Name: 1801250D14, ID: ICAL6, Date: 25-Jan-2018, Time: 15:46:59, Description: ICAL6, Instrument: XEVO-TQS#WAA289, Job: , User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | 6.17 | 5921.119 | 520.267 | 284.523 | bb | 37.4 | -6.5 |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.17 | 520.267 | 1313022.125 | 0.010 | bb | 25.4 | 1.5 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.80 | 1313022.125 | | 1313022.125 | bb | 25.7 | 2.8 |

Instrument: TQS1

Dataset: C:\MassLynx\Default.pro\180125_GenX_Calibration.qld

Last Altered: Thursday, January 25, 2018 16:53:12 Eastern Standard Time

Printed: Friday, January 26, 2018 09:11:23 Eastern Standard Time

Name: 1801250D15, ID: ICAL7, Date: 25-Jan-2018, Time: 16:17:44, Description: ICAL7, Instrument: XEVO-TQS#WAA289, Job: ,
User: ADM

| | # Name | Trace | RT | Area | IS Area | Response | Primar... | ug/L | %Dev |
|---|------------------|-------------------|------|-------------|-------------|-------------|-----------|------|------|
| 1 | 1 HFPO-DA (GenX) | 328.94 > 168.91 | 6.17 | 7627.832 | 518.271 | 367.946 | bb | 48.4 | -3.2 |
| 2 | 2 13C-GenX | 331.95 > 184.92 | 6.17 | 518.271 | 1251865.375 | 0.010 | MM | 26.5 | 6.1 |
| 3 | 3 13C4-PFOA | 417.032 > 372.015 | 7.80 | 1251865.375 | | 1251865.375 | bb | 24.5 | -2.0 |

Instrument: TQS1

Dataset: C:\MassLynx\Default.pro\180125_GenX_Calibration.qld

Last Altered: Thursday, January 25, 2018 16:53:12 Eastern Standard Time

Printed: Friday, January 26, 2018 09:11:23 Eastern Standard Time

Method: C:\MassLynx\TargetLynx.pro\Methdb\GenX.mdb 29 Oct 2017 20:51:24

Calibration: C:\MassLynx\TargetLynx.pro\Curvedb\GenX_Cal_180125.cdb 25 Jan 2018 16:53:12

Name: 1801250D09, ID: ICAL1, Date: 25-Jan-2018, Time: 13:13:27, Description: ICAL1, User: ADM, Job: , Lab:

Dataset: C:\MassLynx\Default.pro\180125_GenX_Calibration.qld

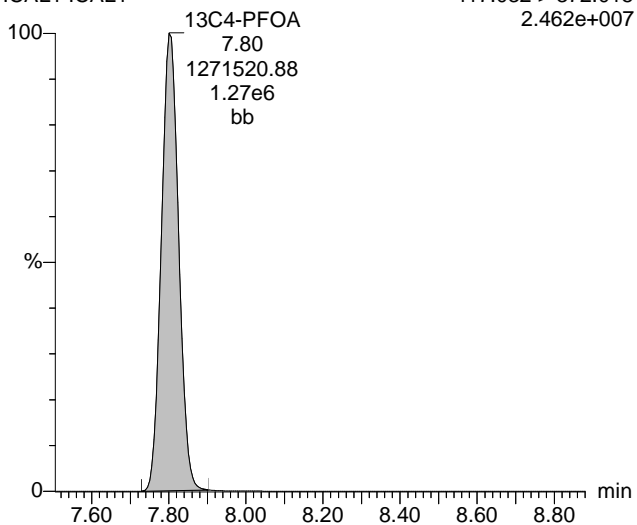
Last Altered: Thursday, January 25, 2018 16:53:12 Eastern Standard Time

Printed: Friday, January 26, 2018 09:11:23 Eastern Standard Time

Name: 180125D09, ID: ICAL1, Date: 25-Jan-2018, Time: 13:13:27, Description: ICAL1, User: ADM, Job: , Lab:

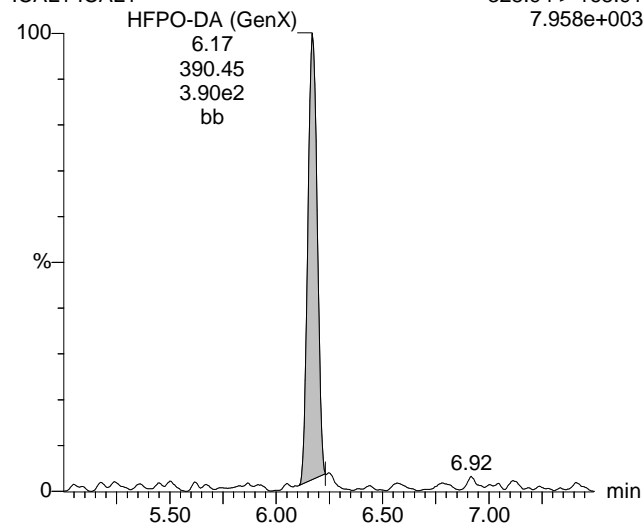
13C4-PFOA

180125D09 Smooth(Mn,2x2) F3:MRM of 1 channel,ES-
ICAL1 ICAL1 417.032 > 372.015
2.462e+007



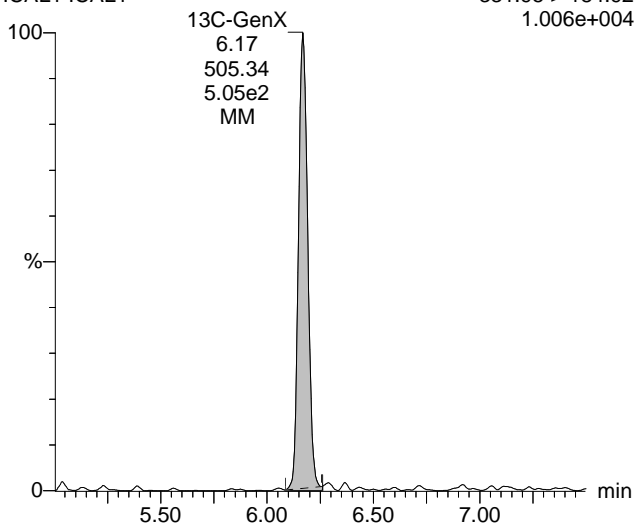
HFPO-DA (GenX)

180125D09 Smooth(Mn,2x2) F1:MRM of 2 channels,ES-
ICAL1 ICAL1 328.94 > 168.91
7.958e+003



13C-GenX

180125D09 Smooth(Mn,2x2) F2:MRM of 2 channels,ES-
ICAL1 ICAL1 331.95 > 184.92
1.006e+004



Dataset: C:\MassLynx\Default.pro\180125_GenX_Calibration.qld

Last Altered: Thursday, January 25, 2018 16:53:12 Eastern Standard Time

Printed: Friday, January 26, 2018 09:11:23 Eastern Standard Time

Name: 1801250D10, ID: ICAL2, Date: 25-Jan-2018, Time: 13:44:06, Description: ICAL2, User: ADM, Job: , Lab:

Dataset: C:\MassLynx\Default.pro\180125_GenX_Calibration.qld

Last Altered: Thursday, January 25, 2018 16:53:12 Eastern Standard Time

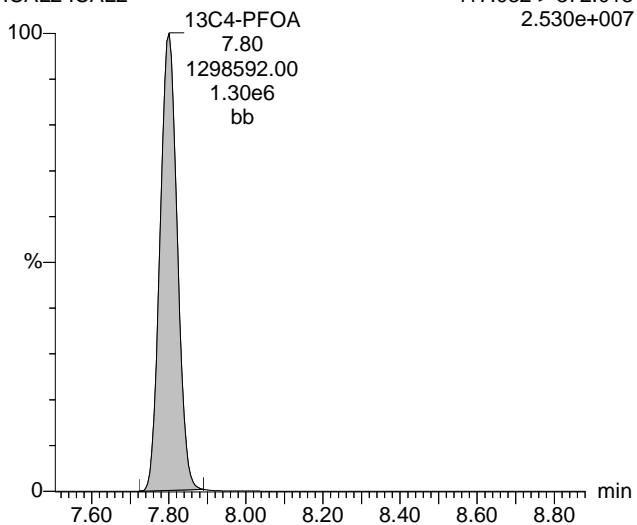
Printed: Friday, January 26, 2018 09:11:23 Eastern Standard Time

Name: 1801250D10, ID: ICAL2, Date: 25-Jan-2018, Time: 13:44:06, Description: ICAL2, User: ADM, Job: , Lab:

13C4-PFOA

1801250D10 Smooth(Mn,2x2)
ICAL2 ICAL2

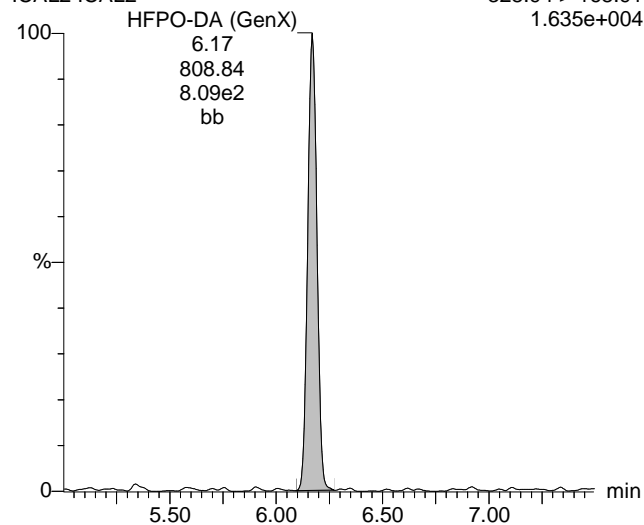
F3:MRM of 1 channel,ES-
417.032 > 372.015
2.530e+007



HFPO-DA (GenX)

1801250D10 Smooth(Mn,2x2)
ICAL2 ICAL2

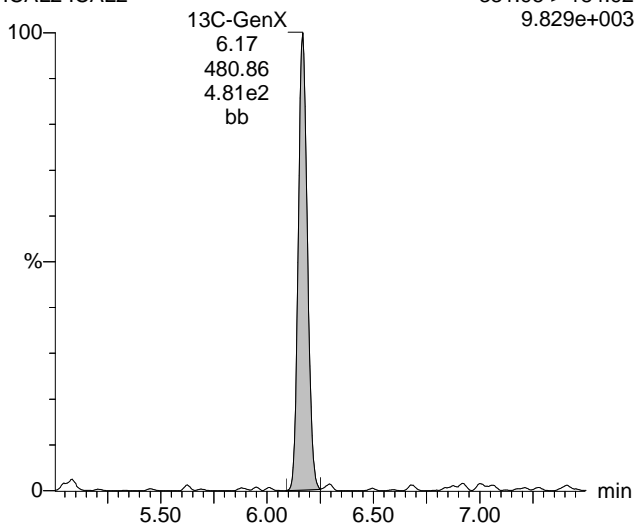
F1:MRM of 2 channels,ES-
328.94 > 168.91
1.635e+004



13C-GenX

1801250D10 Smooth(Mn,2x2)
ICAL2 ICAL2

F2:MRM of 2 channels,ES-
331.95 > 184.92
9.829e+003



Dataset: C:\MassLynx\Default.pro\180125_GenX_Calibration.qld

Last Altered: Thursday, January 25, 2018 16:53:12 Eastern Standard Time

Printed: Friday, January 26, 2018 09:11:23 Eastern Standard Time

Name: 1801250D11, ID: ICAL3, Date: 25-Jan-2018, Time: 14:14:49, Description: ICAL3, User: ADM, Job: , Lab:

Dataset: C:\MassLynx\Default.pro\180125_GenX_Calibration.qld

Last Altered: Thursday, January 25, 2018 16:53:12 Eastern Standard Time

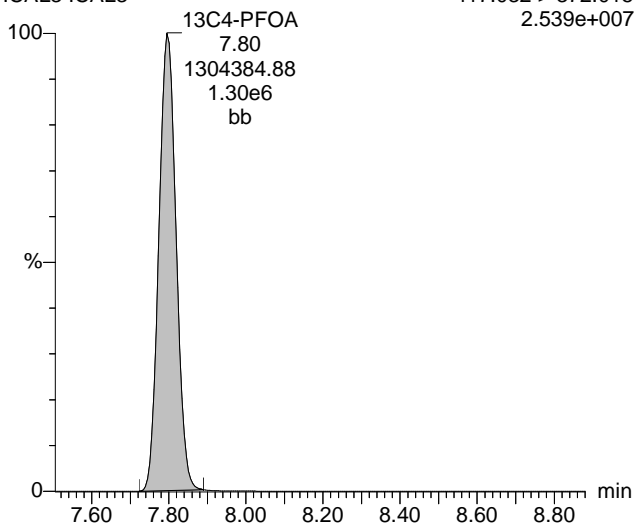
Printed: Friday, January 26, 2018 09:11:23 Eastern Standard Time

Name: 1801250D11, ID: ICAL3, Date: 25-Jan-2018, Time: 14:14:49, Description: ICAL3, User: ADM, Job: , Lab:

13C4-PFOA

1801250D11 Smooth(Mn,2x2)
ICAL3 ICAL3

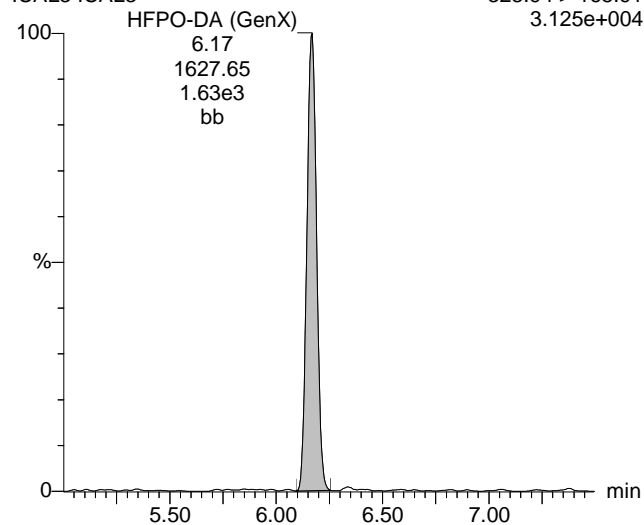
F3:MRM of 1 channel,ES-
417.032 > 372.015
2.539e+007



HFPO-DA (GenX)

1801250D11 Smooth(Mn,2x2)
ICAL3 ICAL3

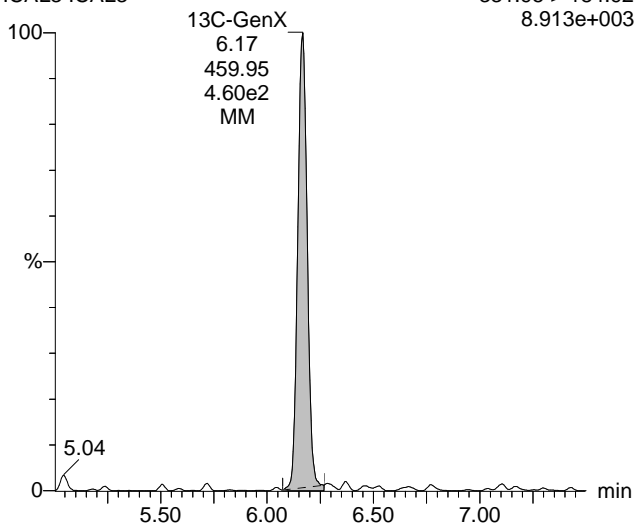
F1:MRM of 2 channels,ES-
328.94 > 168.91
3.125e+004



13C-GenX

1801250D11 Smooth(Mn,2x2)
ICAL3 ICAL3

F2:MRM of 2 channels,ES-
331.95 > 184.92
8.913e+003



Dataset: C:\MassLynx\Default.pro\180125_GenX_Calibration.qld

Last Altered: Thursday, January 25, 2018 16:53:12 Eastern Standard Time

Printed: Friday, January 26, 2018 09:11:23 Eastern Standard Time

Name: 1801250D12, ID: ICAL4, Date: 25-Jan-2018, Time: 14:45:32, Description: ICAL4, User: ADM, Job: , Lab:

Dataset: C:\MassLynx\Default.pro\180125_GenX_Calibration.qld

Last Altered: Thursday, January 25, 2018 16:53:12 Eastern Standard Time

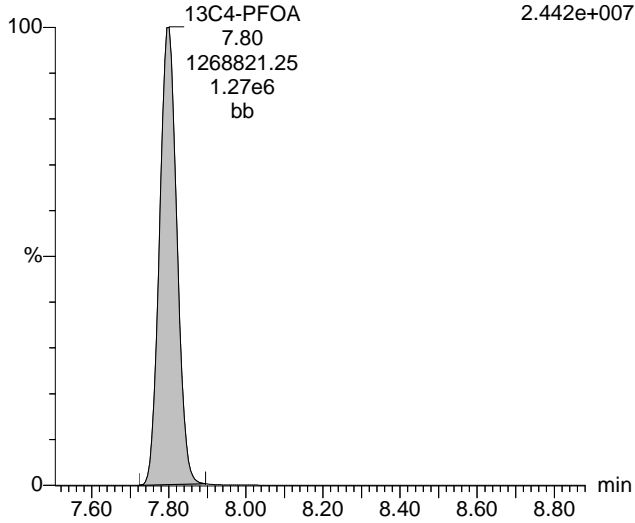
Printed: Friday, January 26, 2018 09:11:23 Eastern Standard Time

Name: 1801250D12, ID: ICAL4, Date: 25-Jan-2018, Time: 14:45:32, Description: ICAL4, User: ADM, Job: , Lab:

13C4-PFOA

1801250D12 Smooth(Mn,2x2)
ICAL4 ICAL4

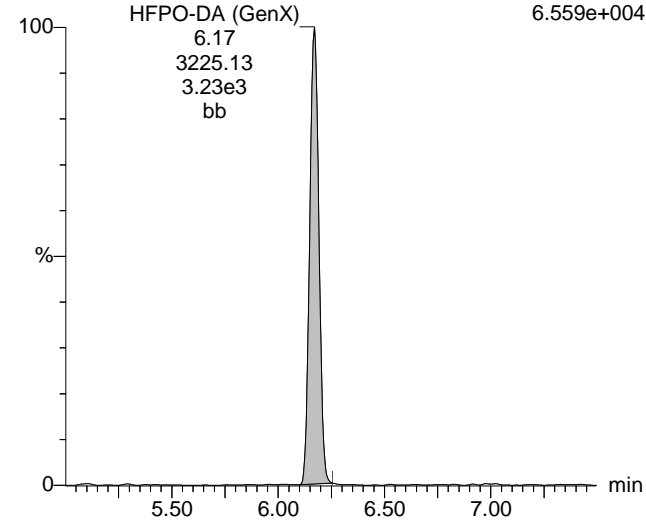
F3:MRM of 1 channel,ES-
417.032 > 372.015
2.442e+007



HFPO-DA (GenX)

1801250D12 Smooth(Mn,2x2)
ICAL4 ICAL4

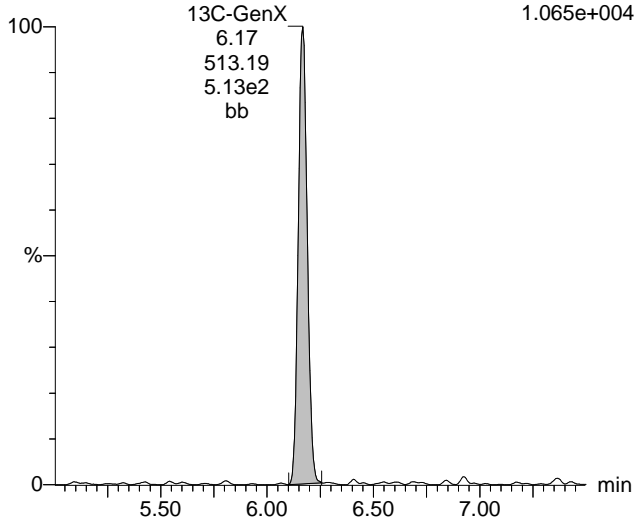
F1:MRM of 2 channels,ES-
328.94 > 168.91
6.559e+004



13C-GenX

1801250D12 Smooth(Mn,2x2)
ICAL4 ICAL4

F2:MRM of 2 channels,ES-
331.95 > 184.92
1.065e+004



Dataset: C:\MassLynx\Default.pro\180125_GenX_Calibration.qld

Last Altered: Thursday, January 25, 2018 16:53:12 Eastern Standard Time

Printed: Friday, January 26, 2018 09:11:23 Eastern Standard Time

Name: 1801250D13, ID: ICAL5, Date: 25-Jan-2018, Time: 15:16:15, Description: ICAL5, User: ADM, Job: , Lab:

Dataset: C:\MassLynx\Default.pro\180125_GenX_Calibration.qld

Last Altered: Thursday, January 25, 2018 16:53:12 Eastern Standard Time

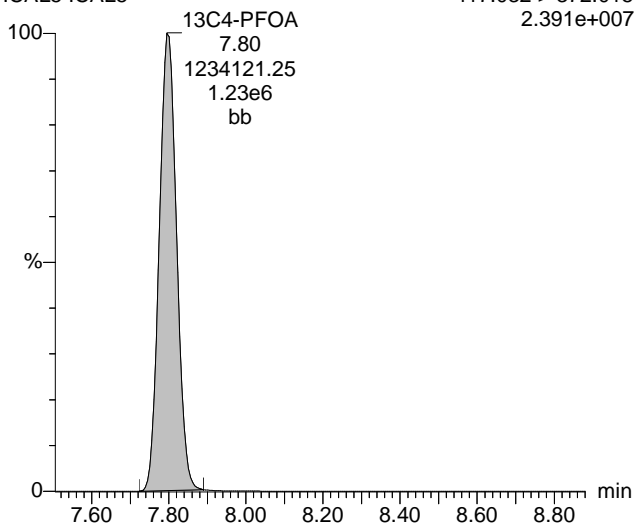
Printed: Friday, January 26, 2018 09:11:23 Eastern Standard Time

Name: 1801250D13, ID: ICAL5, Date: 25-Jan-2018, Time: 15:16:15, Description: ICAL5, User: ADM, Job: , Lab:

13C4-PFOA

1801250D13 Smooth(Mn,2x2)
ICAL5 ICAL5

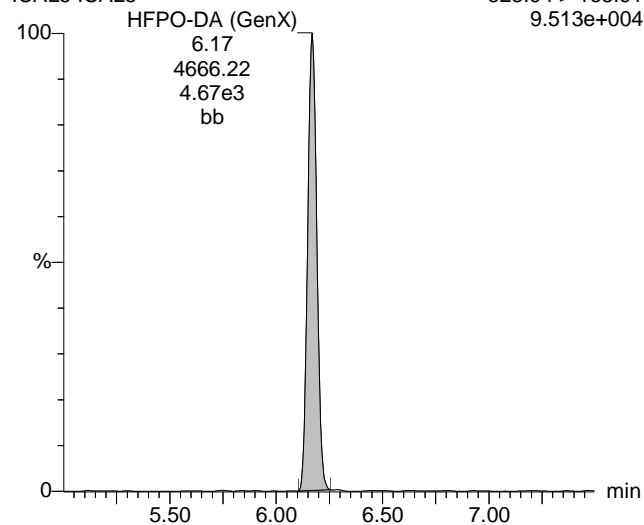
F3:MRM of 1 channel,ES-
417.032 > 372.015
2.391e+007



HFPO-DA (GenX)

1801250D13 Smooth(Mn,2x2)
ICAL5 ICAL5

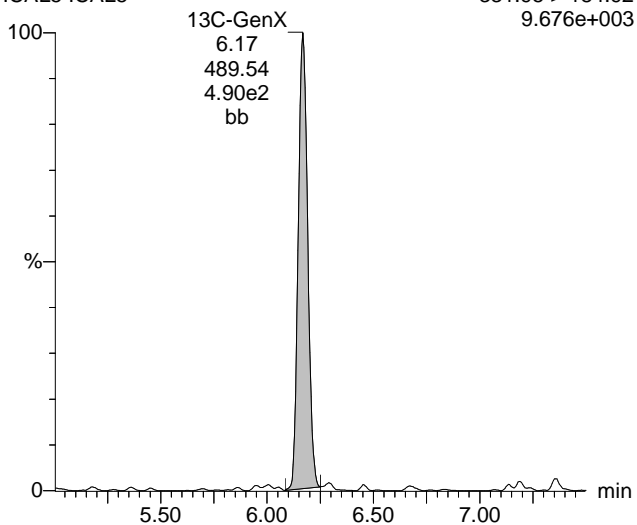
F1:MRM of 2 channels,ES-
328.94 > 168.91
9.513e+004



13C-GenX

1801250D13 Smooth(Mn,2x2)
ICAL5 ICAL5

F2:MRM of 2 channels,ES-
331.95 > 184.92
9.676e+003



Dataset: C:\MassLynx\Default.pro\180125_GenX_Calibration.qld

Last Altered: Thursday, January 25, 2018 16:53:12 Eastern Standard Time

Printed: Friday, January 26, 2018 09:11:23 Eastern Standard Time

Name: 1801250D14, ID: ICAL6, Date: 25-Jan-2018, Time: 15:46:59, Description: ICAL6, User: ADM, Job: , Lab:

Dataset: C:\MassLynx\Default.pro\180125_GenX_Calibration.qld

Last Altered: Thursday, January 25, 2018 16:53:12 Eastern Standard Time

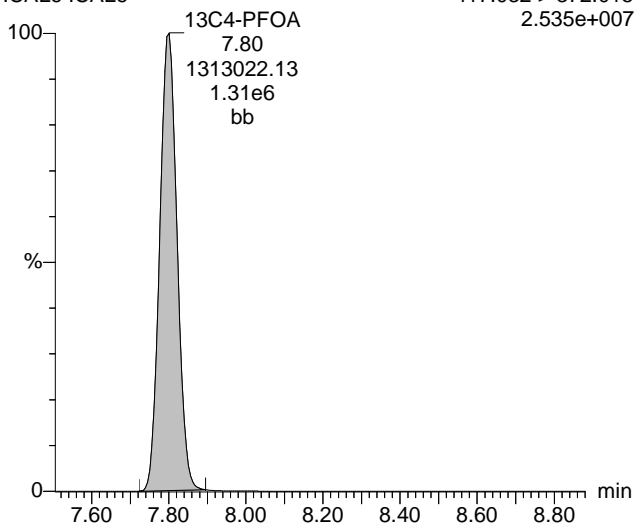
Printed: Friday, January 26, 2018 09:11:23 Eastern Standard Time

Name: 1801250D14, ID: ICAL6, Date: 25-Jan-2018, Time: 15:46:59, Description: ICAL6, User: ADM, Job: , Lab:

13C4-PFOA

1801250D14 Smooth(Mn,2x2)
ICAL6 ICAL6

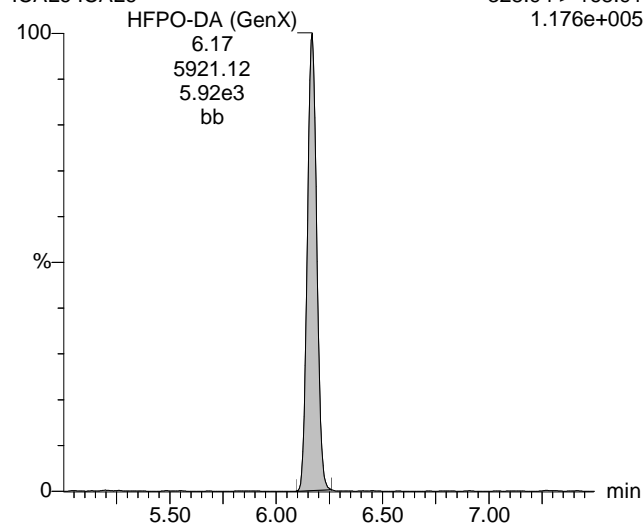
F3:MRM of 1 channel,ES-
417.032 > 372.015
2.535e+007



HFPO-DA (GenX)

1801250D14 Smooth(Mn,2x2)
ICAL6 ICAL6

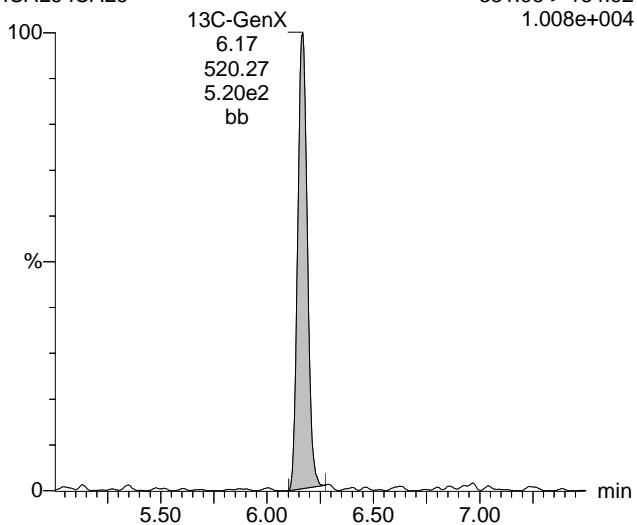
F1:MRM of 2 channels,ES-
328.94 > 168.91
1.176e+005



13C-GenX

1801250D14 Smooth(Mn,2x2)
ICAL6 ICAL6

F2:MRM of 2 channels,ES-
331.95 > 184.92
1.008e+004



Dataset: C:\MassLynx\Default.pro\180125_GenX_Calibration.qld

Last Altered: Thursday, January 25, 2018 16:53:12 Eastern Standard Time

Printed: Friday, January 26, 2018 09:11:23 Eastern Standard Time

Name: 1801250D15, ID: ICAL7, Date: 25-Jan-2018, Time: 16:17:44, Description: ICAL7, User: ADM, Job: , Lab:

Dataset: C:\MassLynx\Default.pro\180125_GenX_Calibration.qld

Last Altered: Thursday, January 25, 2018 16:53:12 Eastern Standard Time

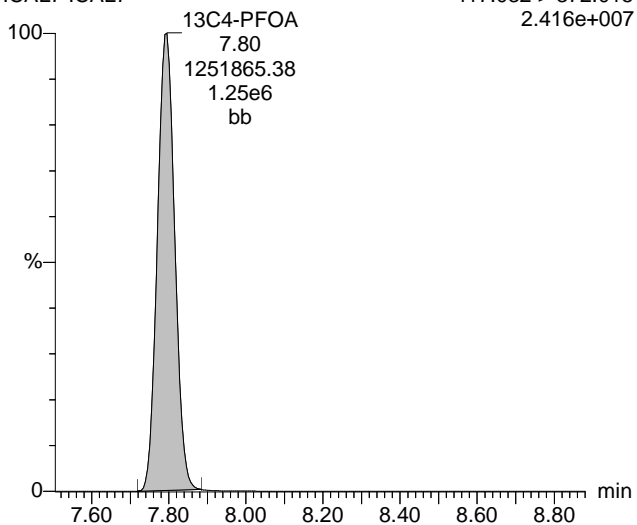
Printed: Friday, January 26, 2018 09:11:23 Eastern Standard Time

Name: 1801250D15, ID: ICAL7, Date: 25-Jan-2018, Time: 16:17:44, Description: ICAL7, User: ADM, Job: , Lab:

13C4-PFOA

1801250D15 Smooth(Mn,2x2)
ICAL7 ICAL7

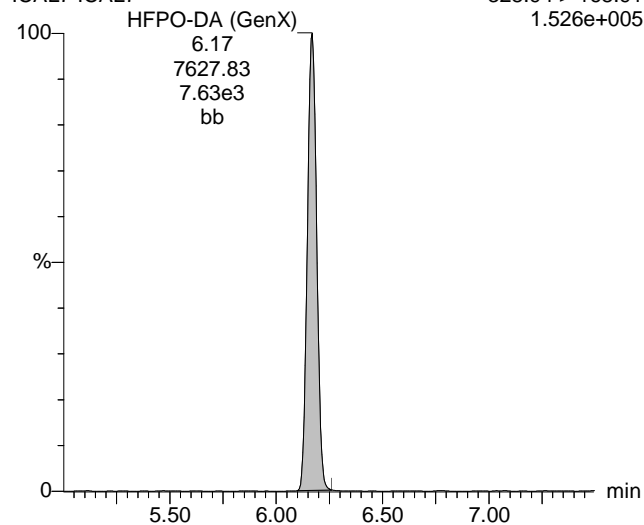
F3:MRM of 1 channel,ES-
417.032 > 372.015
2.416e+007



HFPO-DA (GenX)

1801250D15 Smooth(Mn,2x2)
ICAL7 ICAL7

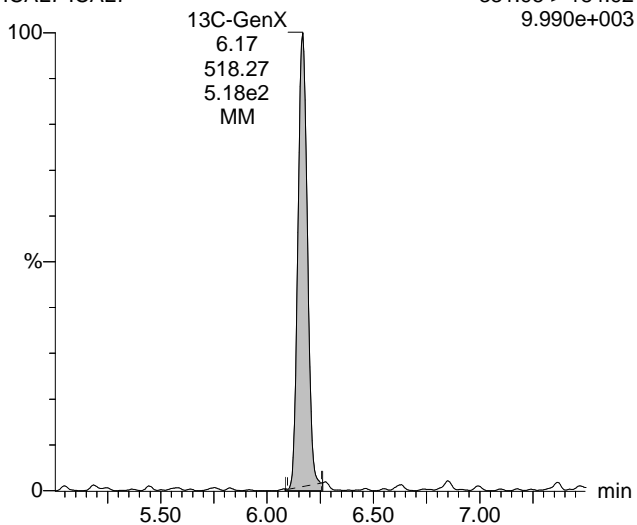
F1:MRM of 2 channels,ES-
328.94 > 168.91
1.526e+005



13C-GenX

1801250D15 Smooth(Mn,2x2)
ICAL7 ICAL7

F2:MRM of 2 channels,ES-
331.95 > 184.92
9.990e+003



GenX

Prep, Standard, Run Logs

RunLog TQS1
SGS North America

Method: GenX
 Matrix: Water
 Inst Batch: 180125

| Standards | |
|----------------|-----------------|
| ICAL Lot No. | <u>15-423-2</u> |
| CCV Lot No. | <u>N/A</u> |
| ICAL Batch ID: | <u>XLC1131</u> |

| File name | Sample ID / Dilution | Date / Time | Comments | RERUN | OPR | LIMS Batch |
|------------|----------------------|-------------|----------|-------|-----|------------|
| 1801250D09 | ICAL1 | 13:13:27 | | | | XLC1131 |
| 1801250D10 | ICAL2 | 13:44:06 | | | | XLC1131 |
| 1801250D11 | ICAL3 | 14:14:49 | | | | XLC1131 |
| 1801250D12 | ICAL4 | 14:45:32 | | | | XLC1131 |
| 1801250D13 | ICAL5 | 15:16:15 | | | | XLC1131 |
| 1801250D14 | ICAL6 | 15:46:59 | | | | XLC1131 |
| 1801250D15 | ICAL7 | 16:17:44 | | | | XLC1131 |
| | | | | | | |

Analyst: Allen_Martin , 1/26/2018, 9:23:35 am

Reveiwed by: CN



| Batch Information | | | Sample # | Initial vol/wt (ml, G) | Final Volume (µL) | Standards circle applicable | Comments |
|-------------------------------------|---------------------------|---|-------------|---------------------------|----------------------|--------------------------------|----------|
| Batch Number: | HXX2108 | | 216376 MB | 250 | 1000 | ES Ax JS | |
| Date / Time Extracted: | 1/24/2018 / 13:30 | | 216377 LCS | 250 | 1000 | ES Ax JS | |
| Method (circle one): | EPA 537 | <u>EPA 537mod</u> | 0096-1 | 268.54 24.45 | 1000 | ES Ax JS | |
| Matrix* (circle applicable): | <u>(NPW)</u> | DW S | 0096-2 | 284.03 24.89 | 1000 | ES Ax JS | |
| Analyst: | VS | | 0096-3 BMS | 285.16 24.90 | 1000 | ES Ax JS | |
| Balance ID: | 4 | | 0096-4 BMSD | 289.78 24.70 | 1000 | ES Ax JS | |
| Solvent / Reagents and Lot # | | | 0096-5 | 281.19 24.50 | 1000 | ES Ax JS | |
| Methanol: | Fisher 173205TF | | 0096-6 | 283.83 24.45 | 1000 | ES Ax JS | |
| LC/MS Grade Water: | Fisher 176035 | | 0096-7 | 287.86 24.25 | 1000 | ES Ax JS | |
| SPE Cartridge: HLB | 122A37199A | Conditioned <input checked="" type="checkbox"/> N | 0096-8 | 275.93 24.77 | 1000 | ES Ax JS | |
| Trizma 7.0: | SLBT4699 | | 0097-1 | 271.22 24.72 | 1000 | ES Ax JS | |
| Sodium acetate: | N/A | | 0097-2 | 281.41 24.45 | 1000 | ES Ax JS | |
| Acetic acid: | N/A | | 0097-3 | 272.72 24.59 | 1000 | ES Ax JS | |
| Ammonium hydroxide: | N/A | | 0097-4 | 267.36 24.43 | 1000 | ES Ax JS | |
| Other: <u>N/A</u> | N/A | | 0097-5 BMS | 263.11 24.64 | 1000 | ES Ax JS | |
| Standards (400 ppb) | Lot # | Amt. (µL) | 0097-6 BMSD | 262.74 24.57 | 1000 | ES Ax JS | |
| GenX ES working: | 15-423-1 | 25 | 0097-7 | 285.41 24.19 | 1000 | ES Ax JS | |
| GenX Ax working: | 15-423-2 | 25 | 0097-8 | 275.74 24.58 | 1000 | ES Ax JS | |
| GenX JS working: | 15-454-3 ⁴⁴⁷⁻¹ | 25 | | | | ES Ax JS | |
| Pipette ID: | INO-014 | | | | | ES Ax JS | |
| Spike Witness | | | | | | ES Ax JS | |
| Initials: <u>ADM</u> | Date: <u>1/24/2018</u> | Time: <u>11:55 Am</u> | | | | ES Ax JS | |

* NPW - non potable water; DW - drinking water; S - solid

Reviewed by: [Signature]

Date/Time: 01/25/2018 10:25 Am

CL VS
1-25-18

RunLog TQS1
SGS North America

Method: GenX
 Matrix: Water
 Inst Batch: 180125

| Standards | |
|----------------|-----------------|
| ICAL Lot No. | <u>15-423-2</u> |
| CCV Lot No. | <u>15-454-1</u> |
| ICAL Batch ID: | <u>XLC1131</u> |

| File name | Sample ID / Dilution | Date / Time | Comments | RERUN | OPR | LIMS Batch |
|------------|----------------------|-------------|----------|-------|-----|------------|
| 1801250D17 | CCV | 21:04:58 | | | | XLC1132 |
| 1801250D18 | 216376 | 21:35:38 | | | | XLC1132 |
| 1801250D19 | 216377 | 22:06:04 | | | | XLC1132 |
| 1801250D20 | 0096_1 | 22:37:03 | | | | XLC1132 |
| 1801250D21 | 0096_2 | 23:07:42 | | | | XLC1132 |
| 1801250D22 | 0096_3 | 23:38:25 | | | | XLC1132 |
| 1801250D23 | 0096_4 | 0:09:09 | | | | XLC1132 |
| 1801250D24 | 0096_5 | 0:39:52 | | | | XLC1132 |
| 1801250D25 | 0096_6 | 1:10:35 | | | | XLC1132 |
| 1801250D26 | 0096_7 | 1:41:18 | | | | XLC1132 |
| 1801250D27 | 0096_8 | 2:12:02 | | | | XLC1132 |
| 1801250D28 | CCV | 2:42:45 | | | | XLC1132 |
| 1801250D29 | 0097_1 | 3:13:28 | | | | XLC1132 |
| 1801250D30 | 0097_2 | 3:44:13 | | | | XLC1132 |
| 1801250D31 | 0097_3 | 4:14:48 | | | | XLC1132 |
| 1801250D32 | 0097_4 | 4:45:30 | | | | XLC1132 |
| 1801250D33 | 0097_5 | 5:16:13 | | | | XLC1132 |
| 1801250D34 | 0097_6 | 5:46:56 | | | | XLC1132 |
| 1801250D35 | 0097_7 | 6:17:39 | | | | XLC1132 |
| 1801250D36 | 0097_8 | 6:48:23 | | | | XLC1132 |
| 1801250D37 | CCV | 7:19:06 | | | | XLC1132 |

Analyst: Allen_Martin , 1/26/2018, 10:20:36 a